REMEDIAL INVESTIGATION REPORT

GEM CLEANERS SITE
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NEW YORK 11570

NYSDEC Site No. 130082
Work Assignment No. D007620-36

Submitted to:
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1.0 INTRODUCTION

This report presents the results of the Remedial Investigation (RI) for the Gem Cleaners Site located at 84 North Village Avenue, Rockville Centre, New York 11570 (referred to as the "Site"). The RI was completed in accordance with the New York State Department of Environmental Conservation (NYSDEC or the "Department") Division of Environmental Remediation (DER) Work Assignment (WA) No. D007620-36 Notice to Proceed dated May 1, 2017, the NYSDEC-approved Scope of Work dated January 17, 2018 and NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation.

The Gem Cleaners Site has been assigned NYSDEC Site No. 130082 and is located on North Village Avenue approximately 175 feet north of Washington Street (refer to *Figure 1* for the location of the Gem Cleaners building). The Gem Cleaners building consists of a one-story building with a basement and encompasses a portion of a 0.2-acre parcel. The remainder of the parcel is improved with a two-story building with a basement adjacent to the south side of the Gem Cleaners building, a driveway south of the two-story building, and a parking lot with a two-car detached garage west and southwest of the Gem Cleaners building. The Gem Cleaners building was formerly occupied by a dry cleaner, between at least 1994 and 2006, and is currently vacant. The Site Investigation Area associated with the Gem Cleaners Site encompasses the Gem Cleaners building and adjacent and nearby commercial properties and a residential property southwest of the Gem Cleaners building.

Previous investigations associated with the Gem Cleaners Site indicate the primary contaminant of concern (COC) at the Site is tetrachloroethene (PCE), primarily in groundwater. Additionally, PCE was identified in subsurface soil in one location (beneath the exterior drain inlet west of the Gem Cleaners building). The impacted soils were excavated and transported off-Site for disposal in 1997. In May 2017, the Department issued an RI/Feasibility Study (FS) work assignment to TRC Engineers, Inc. (TRC) to further characterize soil and groundwater at and associated with the Gem Cleaners Site. The scope of the RI also included vapor intrusion sampling in the Gem Cleaners building and in three structures near the Gem Cleaners building, collection and laboratory analysis of sediment and water from a drain inlet and sump in the basement of the Gem Cleaners building, and laboratory analysis of samples of tracer dye, used during a previous investigation, in the Gem Cleaners building. The RI field investigation activities were implemented between March 2018 and March 2019.

2.0 SITE DESCRIPTION AND HISTORY

2.1 Site Location and Setting

The Gem Cleaners building was constructed circa 1951 and consists of a one-story building with a basement. The building encompasses a portion of a 0.2-acre parcel and the remainder of the parcel is improved with a two-story building with a basement adjacent to the south side of the Gem Cleaners building (Promise Nails and Spa), a driveway south of the two-story building, and a parking lot with a two-car detached garage west and southwest of the Gem Cleaners building. The Site Investigation Area includes the Gem Cleaners building at 82 North Village Avenue and the area bounded by a public parking lot to the west, Washington Street to the south, North Village Avenue to the east, and a parking lot north of the Site building. Additional features and buildings in the Site Investigation Area include a one-story commercial building with multiple tenants north of the Gem Cleaners Site at 86 to 96 North Village Avenue and landscaped areas/walkways west of the one-story commercial building, a two-story building with a first floor commercial tenant (Promise Nails and Spa) and a second floor residential apartment under renovation adjacent to and south of the Gem Cleaners building at 82 North Village Avenue, a one-story commercial building (Georgette & Co. Hair Salon) at 78 North Village Avenue and a two story commercial building at 70 to 76 North Village Avenue both further south of the Gem Cleaners building, and a two-story residential building southwest of the Gem Cleaners Site at 23 Washington Street. As noted above, west and southwest of the Gem Cleaners building there is a two-car detached garage and a parking lot for the south-adjacent nail salon. The Site Investigation Area is located in a moderately developed urban area primarily consisting of low-rise commercial, residential, and institutional buildings. A Site Location Map is presented in *Figure 1* and current features in the Site Investigation Area are shown on *Figure 2*.

2.2 Current and Historic Site Uses

The Gem Cleaners building is currently vacant and consists of a one-story structure with a basement. According to the Village of Rockville Centre Department of Public Works Amended Building Zoning Map, the Gem Cleaners Site is zoned for business (B-C).

The Gem Cleaners building historically operated as a dry cleaner and tailor shop (Gem Cleaners) between at least 1994 and 2006. The exact dates of operation and use of the Site building prior to the operation as a dry cleaner are unknown. During operation, Gem Cleaners reportedly used early generation dry cleaning equipment including a washer, drier, cooker, sniffer, filters, air compressor, press, spotting board and vacuum system. With the exception of the vacuum system and air compressor, which were located in the southwest corner of the basement, the equipment was located on the first floor. All dry-cleaning equipment has been removed from the building. A small diameter floor drain, which was reportedly connected to a waste sink in the basement, was located on the first floor along with a conventional washing machine (also reportedly

connected to the basement waste sink). Based on prior reports, Gem Cleaners used up to 200 gallons of PCE per year.

The basement of the Gem Cleaners building contains two inactive boilers (i.e., new boiler and old boiler), a boiler feedwater tank and condenser, two inactive 275-gallon fuel oil aboveground storage tanks (ASTs), a waste sink, and a sump. A storage area, containing approximately five empty 55-gallon drums is located in the northwest portion of the basement (refer to Section 4.4). Additionally, there is a 5 foot by 5 foot by 8-inch deep depression (5' by 5' depression) in the basement floor near the old boiler and there is a floor drain (stairwell drain) located at the bottom of the exterior basement stairwell on the west side of the Gem Cleaners building. The drain is connected to a 5-gallon bucket (drain inlet) below the basement floor of the Gem Cleaners building via a pipe that runs under the exterior basement door saddle. The layout of the basement of the Gem Cleaners building is presented on *Figure 3B.* A photographic log, identifying relevant Site and building features, is presented as *Appendix A.*

The sump reportedly received boiler condensate and was fitted with a sump pump and hose that discharged to the waste sink. The purpose of the 5' by 5' depression in the concrete floor is unknown, but it appears to be associated with the old boiler (possibly remnants of a former equipment pad or a cut-out for equipment clearance), based on its proximity to the old boiler and associated piping. The bottom of the 5' by 5' depression is primarily concrete; however, the central portion of depression was cracked, and a portion of the concrete can be removed, which permitted sampling of soil beneath the depression (refer to Section 4.5.3). Additional information regarding the building features and layout and historic Site use is presented in Section 3.0.

3.0 PREVIOUS INVESTIGATIONS

Presented in this section are summaries of the results of previous investigations conducted for the Gem Cleaners Site. The prior reports associated with the Gem Cleaners Site described below include a Phase II Environmental Subsurface Investigation (ESI) Report prepared by Energy & Environmental Analysts, Inc. (EEA) in 1997, a Site Assessment & Remediation Report prepared by P.W. Grosser Consulting Engineer & Hydrogeologist, P.C., (PWGC) in 1997, a Preliminary Site Characterization Report prepared by O'Brien & Gere Engineers, Inc. (OBG) in 2006 and a Phase II Subsurface Investigation Report prepared by General Consolidated Industries, Inc. (GCI) in 2018.

3.1 Summary of Prior Reports

3.1.1 *Phase II Environmental Subsurface Investigation - EEA*

A Phase II ESI was conducted by EEA between 1994 and 1995 following the completion of a Phase I Environmental Site Assessment (ESA). The scope of the Phase II ESI included the advancement of a soil boring through a dry well located in the parking area southwest of the Gem Cleaners building and collection of soil samples at discrete intervals; installation of four monitoring wells (one upgradient and two downgradient of the dry well and one downgradient of the sump in the basement of the Site building); and three rounds of groundwater sampling. At the time of the Phase II ESI, the Site was occupied by Gem Cleaners, a dry cleaning facility which used PCE according to information in the Phase II Environmental Subsurface Investigation Report.

The results of the Phase II ESI identified PCE in one soil sample collected from 2 to 4 feet below ground surface (bgs) in the boring advanced through the dry well) at a concentration of 7 micrograms per kilogram (µg/kg), which was below the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Recommended Soil Cleanup Objective (SCO) of 1,400 µg/kg (the applicable criteria at the time of the sampling) and is below the Unrestricted Use SCO of 1,300 µg/kg and the Commercial Use SCO of 150,000 µg/kg. PCE was not detected in deeper soil samples selected for analysis from the boring advanced through the dry well (i.e., soil samples collected from 8 to 10 feet bgs, 13 to 15 feet bgs and 18 to 20 feet bgs). Groundwater was encountered at approximately 19 feet bgs in the soil boring advanced through the dry well. The results of the analysis of soil samples collected during the Phase II ESI are provided on Table 1 of the Phase II ESI Report (refer to *Appendix B)* and historic soil sampling results for PCE are shown on *Figure 4* of this RI Report.

PCE was detected in one monitoring well (MW-1A) located south of the exterior stairwell drain inlet, at concentrations above the Class GA Value of 5 micrograms per liter (µg/L) during each sampling event. The concentrations of PCE detected in MW-1A ranged from 26 to 56 µg/L. With the exception of one compound, 1,1,2-dichlchloroethene, detected in MW-1A at a concentration of 47 µg/L (above the Class GA Value of 5

µg/L) during the September 1994 sampling event, there were no other compounds detected above Class GA Values, and the results of analysis of the groundwater samples collected from the remaining monitoring wells during each sampling event were below Class GA Values. The results of the analysis of groundwater samples collected during the Phase II ESI are provided on Table 2 of the Phase II ESI Report (refer to *Appendix B)* and historic groundwater sampling results for PCE are shown on *Figure 5* of this RI Report.

3.1.2 *Site Assessment & Remediation Report - PWGC*

PWGC prepared a Site Assessment & Remediation Report in 1997 to document the findings of a Site inspection, and investigation and remediation consisting of excavation of the soil below the exterior stairwell adjacent to and west of the Gem Cleaners building. The objective of the Site inspection was to evaluate the potential for an on-Site source area that may have contributed to groundwater contamination.

PWGC completed the inspection of the Gem Cleaners Site building in January 1997. The inspection focused on the operations of the facility and the generation of liquid waste. Based on the findings of the Site inspection, PWGC concluded that the exterior stairwell drain inlet, which historically received waste from the Site's vacuum system vent, was likely the potential source of groundwater contamination. Note that based on the results of the RI, there does not appear to be an existing significant source of chlorinated volatile organic compounds (VOCs) impacting the Site Investigation Area. Additionally, since wastewater was reportedly disposed of in the toilet on the ground floor, dye testing was performed by PWGC to document discharge to the sanitary sewer. As part of the dye testing, water soluble tablets were placed in the toilet and the manhole in the sidewalk east of the building was inspected. PWGC noted the presence of the dye in the manhole.

PWGC collected a soil sample from 12 to 18 inches below the bottom of the exterior stairwell drain inlet for analysis for PCE, trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE), and vinyl chloride. PCE, TCE, and 1,2-DCE were detected in the soil samples above the TAGM 4046 Recommended Soil Cleanup Objectives and Unrestricted Use SCOs but below the Commercial Use SCOs. Vinyl chloride was not detected above the reporting limit. A soil boring was advanced through the exterior drain inlet and PCE-impacted soil was identified beneath the drain to approximately 8 feet bgs. The drain inlet at the bottom of the exterior stairwell was removed and surrounding impacted soil was excavated to approximately 8.5 feet bgs and transported to LWD, Inc. of Calvert City, Kentucky for disposal. The excavation was backfilled with clean sand and a new drain inlet was installed to prevent flooding. The location of the exterior stairwell and drain are shown on *Figure 3B*.

After implementation of the remedial action, PWGC concluded that the potential source of elevated PCE in groundwater had been removed; and therefore, the concentrations of PCE in MW-1A were expected to return to background levels through natural attenuation. There was no additional investigation recommended by PWGC.

3.1.3 *Preliminary Site Characterization – Gem Cleaners - OBG*

O'Brien & Gere Engineers, Inc. completed a Preliminary Site Characterization (PSC) for the Gem Cleaners Site in 2006. The scope of the PSC consisted of advancement of eight soil borings in the parking area southwest of the Gem Cleaners building to a maximum depth of 44 feet bgs (where refusal was encountered), submittal of nine soil samples for laboratory analysis, collection for laboratory analysis of 15 groundwater samples from the eight borings using a discrete screen point groundwater sampler, collection of a soil and water sample from the dry well (DW-1) in the parking lot for laboratory analysis, and collection of groundwater samples from two existing monitoring wells (MW-1B[1] and MW-2). Soil and groundwater samples and the water sample collected from the dry well were analyzed for VOCs. Note that existing monitoring wells MW-1A and MW-3 could not be found during the PSC.

VOCs were not detected at concentrations above the TAGM 4046 Recommended Soil Cleanup Objectives, Unrestricted Use SCOs or Commercial Use SCOs in the soil samples. PCE was detected in groundwater at three locations above the Class GA Value of 5 µg/L, at concentrations ranging from 11.2 to 313 µg/L. Cis-1,2-dichloroethene was detected in groundwater at one location at a concentration of 5.11 µg/L, which is above the Class GA Value of 5 µg/L. The highest concentrations of PCE and 1,2-DCE were detected in the groundwater sample collected at a depth of 21 feet bgs from SB-6/GWS-6 located in the southwest corner of the parking lot, southwest of the Gem Cleaners building. In deeper samples, collected at depths of 34 feet and 44 feet bgs from SB-6/GWS-6, concentrations of PCE and cis-1,2-DCE were lower. There were no other VOCs detected in groundwater at concentrations above the Class GA Values and VOCs were not detected above Class GA Values in the water sample collected from the dry well. Groundwater flow direction could not be calculated during the performance of the PSC due to the limited number of permanent monitoring wells in the Site Investigation Area, however, the reported direction of regional groundwater flow was from north to south. The results of the analysis of soil and groundwater samples collected during the PSC are shown on Tables 1 and 2 of the PSC Report included in *Appendix B.* Groundwater sampling results above Class GA Values are shown on Figure 3 of the PSC Report (refer to *Appendix B)* and historic soil and groundwater sampling results for PCE are shown on *Figures 4* and *5* of this RI Report.

[1] Note that the PSC Report indicates groundwater samples were collected from monitoring well MW-1A (a shallow well); however, based on the reported total depth of the well (60 feet bgs), groundwater samples were likely collected from monitoring well MW-1B.

3.1.4 *Phase II Subsurface Investigation Report - GCI*

A Phase II Subsurface Investigation was conducted by GCI on February 7 and 8, 2018. The scope of the Phase II Subsurface Investigation included the performance of dye tests to confirm the discharge points of several drains in the Site building; the collection of soil samples from the dry well in the parking lot, the exterior stairwell floor drain, the sump, and from beneath the bottom slab of the 5' by 5' depression in the basement of the Gem Cleaners building ("Boiler Pit"); and collection of one groundwater sample from one existing well (MW-2). The soil samples were submitted to Long Island Analytical Laboratories for analysis for VOCs, semivolatile organic compounds (SVOCs), and metals and the groundwater sample collected from MW-2 was submitted to Long Island Analytical Laboratories for analysis for VOCs.

Dye testing was completed by mixing a fluorescent tracer dye with water and introducing the solution to the interior drain points. The results of the dye test indicate the following:

- Interior discharge points of the Site building (including bathrooms in the Site building and the wastewater sink located in the basement) were confirmed to discharge to the municipal sewer system located on North Village Avenue.

- The drywell located in the parking lot is a leaching structure, and also contains a 6-inch diameter overflow pipe. The overflow pipe leads to the western property line and discharges to the adjacent parking lot.

- The floor drain located at the base of the exterior stairwell on the west side of the Site building is a leaching structure. The drain contains a pipe which traverses under the door saddle to a 5-gallon bucket, below the building basement floor, acting as an interior floor drain. A photograph of the exterior stairwell drain and interior drain inlet is presented below:

- The sump and 5' by 5' depression located in the basement of the Site building were inspected and found to each be non-leaching structures.

The results of analysis of the soil samples collected during the Phase II Subsurface Investigation revealed that with the exception of acetone detected in the soil samples collected from the floor drain located at the bottom of the exterior staircase on the west side of the Gem Cleaners building and in the drywell, there were no VOCs detected above the Unrestricted Use SCOs. In the soil sample collected from the drywell located in the parking lot, two metals (lead and zinc), and two SVOCs (benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene) were detected at concentrations above the Unrestricted Use SCOs, but below the Commercial Use SCOs. In the soil sample collected from the floor drain located at the bottom of the exterior staircase on the west side of the Gem Cleaners building, five SVOCs (benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) and four (4) metals (chromium[2], copper, lead, and zinc) were detected at concentrations above the Unrestricted Use SCOs; however, only one SVOC, benzo(a)pyrene, was detected marginally above the Commercial Use SCO. In the soil sample collected from the sump located in the basement of the Site building, six metals (chromium[2], copper, lead, manganese, nickel, and zinc) were detected at concentrations above the Unrestricted Use SCOs and one metal (copper) was detected above the Commercial Use SCO. Finally, in the soil sample collected from beneath the bottom slab of the 5' by 5' depression in the basement of the Gem Cleaners building ("Boiler Pit"), one metal (zinc) was detected at a concentration above the Unrestricted Use SCO, but below the Commercial Use SCO.

[2] Based on the SCO for trivalent chromium.

No VOCs were detected in the groundwater sample from MW-2 at concentrations above laboratory reporting limits. GCI concluded that based on the analytical data, the drywell, exterior stairwell floor drain, 5' by 5' depression, and sump have been impacted and will require remediation.

4.0 REMEDIAL INVESTIGATION SCOPE AND METHODS

The RI field activities described in this section were completed by TRC between March 2018 and March 2019. The RI was completed in accordance with the NYSDEC DER WA No. D007620-36 Notice to Proceed dated May 1, 2017, the NYSDEC-approved Scope of Work dated January 17, 2018, and DER-10, Technical Guidance for Site Investigation and Remediation. The project included adherence to a Health and Safety Plan (HASP), a Community Air Monitoring Plan (CAMP), a Field Activities Plan (FAP), and a Quality Assurance Project Plan (QAPP) for sample collection and analysis and validation of laboratory data.

4.1 Remedial Investigation Scope

The RI field activities consisted of:

- Implementation of a CAMP, which included real-time monitoring for VOCs and particulates at the downwind perimeter of the work area during intrusive work.
- An inspection of the storage area and 55-gallon drums in the closet in the northwest portion of the basement of the Gem Cleaners building.
- A utility survey using geophysical techniques at proposed sub-slab vapor sampling locations, soil boring and monitoring well locations prior to the start of intrusive work. Note that a sidewalk opening permit was obtained from the Village of Rockville Centre prior to the start of intrusive work.
- Advancement, using a direct-push drill rig, of three soil borings in the basement of the Site building (MW-103, MW-104, and MW-105); one soil boring at through bottom of the exterior stairwell, directly south of the drain inlet (MW-102); and one soil boring in the parking lot directly south of the dry well (SB-101). Soil samples were collected continuously during advancement of the direct push borings and 11 soil samples were selected for laboratory analysis from the direct-push soil borings.
- Installation of 10 shallow overburden groundwater monitoring wells (MW-101 through MW-110), one intermediate depth monitoring well (MW-109M), and three deep overburden groundwater monitoring wells (MW-101D, MW-107D, and MW-110D). The groundwater monitoring wells were installed using a track-mounted hollow-stem auger drill rig, with the exception of monitoring wells MW-102 through MW-105, which were installed using a vacuum excavator. During well installation soil samples were collected continuously from the boreholes for each of the deep and intermediate-depth wells and from the boreholes for MW-106 and MW-108, and a total of 12 soil samples were selected for laboratory analysis.
- Collection and laboratory analysis of one sediment sample from the sump located in the basement of the Gem Cleaners building and one soil sample from beneath the bottom slab of the 5’ by 5’ depression in the basement of the Gem Cleaners building.

- Collection and laboratory analysis of one sediment sample from the bottom of the drain inlet located in the western portion of the Gem Cleaners building basement, adjacent to MW-103. Additionally, two rounds of samples of the standing liquid in the drain inlet were collected for laboratory analysis.
- Development of the 14 newly installed groundwater monitoring wells.
- Collection and analysis of two rounds of groundwater samples. During the first round, groundwater samples were collected from the 14 newly installed shallow, intermediate-depth and deep monitoring wells and three existing monitoring wells[3]. The second round consisted of the collection and analysis of groundwater samples from 12 groundwater monitoring wells. All 17 monitoring wells were gauged during each groundwater sampling event to obtain data for preparation of groundwater surface elevation contour maps.
- Collection and laboratory analysis of two samples of tracer dye previously utilized in the Gem Cleaners building.
- Vapor intrusion sampling in the Gem Cleaners building and in three adjacent/nearby structures in the Site Investigation Area. Two sets of co-located sub-slab vapor and indoor air samples were collected in the Gem Cleaners building and one set of co-located sub-slab vapor and indoor air samples was collected in each of the three adjacent/nearby structures. An additional indoor air sample was also collected on the first floor of the building located directly south of the Gem Cleaners building. Additionally, one outdoor ambient air sample was collected for laboratory analysis.
- A survey of physical features, known utilities, and property boundaries. Additionally, the locations and elevations (ground surface and top of well casing) of the existing and new monitoring wells and the locations and ground surface elevations of the interior and exterior drain inlets and the dry well were surveyed.
- Purge water, decontamination fluids and soil cuttings were containerized in 55-gallon drums for transport and off-Site disposal by Innovative Recycling Technologies, Inc. (IRT).

The sampling locations are shown on *Figures 3A* and *3B*. The scope of the field activities and methods are described further below.

[3] Groundwater samples were collected from existing monitoring wells MW-1B, MW-2, and MW-3. Monitoring well MW-1A could not be found during the RI and was likely destroyed/damaged.

4.2 Implementation of CAMP

TRC implemented a CAMP during investigation activities. The CAMP was implemented in accordance with NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 1A - Generic Community Air Monitoring Plan. A DustTRAK™ II aerosol monitor and a photoionization detector (PID) were positioned at the downwind location of the work area. The CAMP was implemented during advancement of soil borings and monitoring well installation, but not during vapor intrusion sampling or monitoring well development or sampling. The purpose of the CAMP was to monitor air downwind of the work area for potential impacts associated with the investigation activities. There were no exceedances of the CAMP action levels during the performance of the RI. The CAMP results are provided in *Appendix C.*

4.3 Utility Survey

A geophysical survey was performed on March 19, 2018 by Nova Geophysical Services (Nova) of Douglaston, New York, under subcontract to TRC, to verify that proposed monitoring well and soil boring locations, and sub-slab vapor sample locations in the Gem Cleaners building were clear of subsurface structures and utilities. After access was granted for vapor intrusion sampling in three adjacent/nearby structures in the Site Investigation Area, an additional geophysical survey was performed on March 28, 2018 by Nova, under subcontract to TRC, to verify that proposed sub-slab vapor sample locations were clear of subsurface structures and utilities. The geophysical survey equipment consisted of a Noggin 250 MHz ground-penetrating radar (GPR) unit and a utility locator (3M DYNATL). The location of each proposed monitoring well, soil boring and sub-slab vapor sampling point was screened using the GPR unit and the utility locator. Sample locations were established in areas that did not conflict with subsurface structures or utilities. Generally, adjustment from the proposed sampling locations was not required. The Geophysical Survey Report is provided as *Appendix D*.

4.4 Inspection of Storage Area

The storage area in the northwest portion of the basement of the Gem Cleaners building was inspected as part of the RI. Approximately five 55-gallon drums, which appeared to be empty, were identified in the storage area. The majority of the drums were rusted with perforations and several of the drums were missing lids. The historic contents of the majority of the drums could not be confirmed since the labels were not legible; however, the label on one drum indicated that the former contents were boiler-related fluids. Staining was identified on the concrete floor; however, there was no evidence of significant cracks in the concrete floor slab or floor drains in the vicinity of the drums; therefore, further investigation in this area was not warranted.

4.5 Soil and Sediment Sampling

4.5.1 *Direct-Push Soil Sampling*

Subsurface soil sampling was conducted on March 19 and March 20, 2018 to further characterize soil in the Site Investigation Area. Land, Air, Water Environmental Services, Inc. (LAWES) was retained as a subcontractor by TRC for drilling services. Direct-push methods were used to retrieve soil samples at boring locations where access was limited (at locations MW-102 through MW-105) and at the soil boring location south of the dry well in the parking lot (SB-101). Soil samples were collected continuously from the ground surface to the termination depth of each boring using dedicated sampling equipment. Each soil sample was visually examined and screened for VOCs with a PID equipped with an 11.7 eV lamp. Geologic descriptions of the soil samples collected and field screening results were recorded on soil boring log forms. Soil boring logs, including the PID responses for each sample, are presented in *Appendix E*. Refer to *Figures 3A* and *3B* for direct-push sampling locations.

The proposed scope of work included selection from each boring of one soil sample from the interval exhibiting the most evidence of potential impacts (based on field screening) and one soil sample from the first underlying apparent clean interval for laboratory analysis. Evidence of potential contamination (i.e., elevated PID readings, staining, and odor) was identified in one soil boring, MW-103, from 10 to 14 feet below the top of the floor slab (btos); therefore, one soil sample was selected from the most impacted interval from this boring (from 12 to 14 feet btos) and the apparent underlying clean interval (from 15 to 17 feet btos). Note also selected for analysis was a third soil sample from MW-103, collected directly below the invert of the adjacent drainage structure (from 3 to 5 feet btos).

Since there was no evidence of potential contamination identified in the remaining direct-push borings, generally one soil sample from 0 to 2 feet below the basement slab/ground surface and a second soil sample from the two-foot interval directly above groundwater were selected for analysis. The exception to this was borings adjacent to the drainage structures (SB-101 and MW-102). At these locations, the samples collected directly below the inverts of the drainage structures were the shallowest samples selected from each boring for laboratory analysis.

The completion depth of each direct-push boring, depths at which groundwater was encountered, depths of samples selected for laboratory analysis, PID screening results, and the laboratory analyses performed on the selected sample intervals are summarized in the table below.

Summary of Direct-Push Boring Depths, Depths to Groundwater, Depths of Soil Samples Selected for Analysis, PID Screening Results and Soil Sample Analytical Plan

Soil Boring Identification Number	Boring Depth (feet bgs/btos*)	Depth of Saturated Soil Encountered During Sampling (feet bgs/btos*)	Depth of Sample Interval Selected for Analysis (feet bgs/btos*)	Max. PID Reading (ppm)	TCL VOCs+10 including 1,4-Dioxane
SB-101	18.5	17.5	3-5	0.0	X
			15.5-17.5	0.5	X
MW-102	11.25	11	3-5	0.0	X
			9-11	0.0	X
MW-103	18	9.75	3-5	0.1	X
			12-14	350	X
			15-17	1.2	X
MW-104	10.5	8.75	0.5-2.5	0.0	X
			7-9	0.0	X
MW-105	11.25	9	0.5-2.25	0.0	X
			7-9	0.0	X

Notes:

Btos – Below top of slab
Bgs – Below ground surface
ppm – Parts per million
TCL – Target Compound List
VOCs – Volatile Organic Compounds

The soil samples were collected in accordance with NYSDEC/USEPA protocols, containerized in laboratory supplied jars, labeled, sealed, entered onto a chain-of-custody and placed in chilled coolers for shipment to TestAmerica, in Edison, New Jersey.

Following drilling activities, locations MW-102 through MW-105 were converted into permanent monitoring wells as described in Section 4.6. At soil boring location SB-101, drill cuttings were returned to the borehole, the borehole was filled with clean sand to grade, and the ground surface was restored (i.e., patched with asphalt).

Drill cuttings generated during sampling activities were containerized in 55-gallon drums and staged on-Site. Investigation derived waste (IDW) disposal is discussed in Section 4.13.

4.5.2 *Hollow-Stem Auger Soil Sampling*

Hollow-stem auger drilling was conducted between March 21, 2018 and April 14, 2018. AARCO Environmental Services, Corp. (AARCO) was retained as a subcontractor to TRC for drilling services. Hollow-stem auger drilling methods were used to advance borings for well installation and collect soil samples. Soil samples were collected continuously from the ground surface to the termination depth of each deep/intermediate depth boring and the borings for shallow wells MW-106 and MW-108 using split-spoon samplers[4]. The proposed scope of work included the advancement of the boreholes for the shallow wells to approximately 10 feet below the groundwater surface, and advancement of the boreholes for the deep wells[5] to the top of a clay layer (originally estimated to be between 55 and 80 feet bgs). However, a clay layer was encountered only in the boreholes for MW-109M, from 36 to 40 feet bgs, and MW-110D, from 70 to 81 feet bgs. Therefore, the boreholes for MW-109M and MW-110D were advanced to approximately 41 feet and 81 feet bgs, respectively. The boreholes for the remaining deep wells, MW-101D and MW-107D, were advanced to a maximum depth of 101 feet bgs following consultation with the NYSDEC.

Each soil sample was visually examined and screened for VOCs with a PID equipped with an 11.7 eV lamp. Geologic descriptions of the soil samples collected and field screening results were recorded on soil boring log forms. No evidence of potential contamination (i.e., elevated PID readings, staining, or odor) was identified in the soil borings. Soil boring logs, including the PID responses for each sample, are provided in *Appendix E*.

Since apparent impacted soils were not identified in any soil boring, generally one shallow soil sample from the one to two-foot interval directly above groundwater was selected for laboratory analysis. Additionally, a second soil sample from the two-foot interval directly above the clay layer (if identified) or the soil sample from the terminal depth of the soil boring were selected for analysis. The completion depth of each boring, depths at which groundwater was encountered, depths of samples selected for laboratory analysis, PID screening results, and the laboratory analyses performed on the selected sample intervals are summarized in the table below.

[4] Note that a deep monitoring well was initially proposed at monitoring well location MW-108; however, since the existing adjacent well (MW-1B) was constructed to approximately 60 feet bgs a shallow well was installed at this location.

[5] A deep monitoring well was initially proposed at well location MW-109M; however, due to the apparent clay layer identified from 36 to 40 feet bgs, an intermediate-depth well was installed at this location.

Summary of Boring Depths, Depths to Groundwater, Depths of Soil Samples Selected for Analysis, PID Screening Results and Soil Sample Analytical Plan

Soil Boring Identification Number	Boring Completion Depth (feet bgs)	Depth of Saturated Soil (feet bgs)	Depth of Sample Interval Selected for Analysis (feet bgs)	Max. PID Reading (ppm)	TCL VOCs+10 including 1,4-Dioxane
MW-101	27	17	NA	NA	NA
MW-101D	100	16	14-15	0.0	X
			99.2-100	0.0	X
MW-106	27	17	15-17	0.0	X
MW-107	27	17	NA	NA	NA
MW-107D	101	17	15-17	0.0	X
			97-99	0.0	X
MW-108	60.5	17	15-17	0.0	X
			59-60.5	0.0	X
MW-109	27	18	NA	NA	NA
MW-109M	41	17	15-17	0.0	X
			33-35	0.0	X
MW-110	27	16	NA	NA	X
MW-110D	81	17	15-17	0.0	X
			69-70	0.0	X

Notes:

bgs – Below ground surface
NA – Not Applicable
ppm – Parts per million
VOCs – Volatile Organic Compounds
TCL – Target Compound List

The soil samples were collected in accordance with NYSDEC/USEPA protocols, containerized in laboratory supplied jars, labeled, sealed, entered onto a chain-of-custody and placed in chilled coolers for shipment to TestAmerica, in Edison, New Jersey.

Following drilling activities, soil boring locations were converted into permanent monitoring wells as described in Section 4.6. Drill cuttings generated during boring activities were containerized in 55-gallon drums and staged on Site. IDW disposal is discussed in Section 4.13.

4.5.3 *Grab Soil/Sediment Sampling*

On April 26, 2018, TRC collected one sediment sample (TRC-Sump(SO)) from within the sump located in the basement of the Gem Cleaners building and one soil sample (TRC-SO-101(SO)) from beneath the bottom slab of the 5' by 5' depression in the basement of the Gem Cleaners building (refer to *Figure 3B)*. Since a small portion of the floor slab in the depression was cracked and the concrete could be removed to expose the underlying soil, use of a jackhammer or heavy equipment was not required to collect the soil sample. The sediment and soil samples were collected as "grab" type samples using dedicated sampling equipment. Note that the sump has a solid bottom and the grab sample (TRC-Sump(SO)) consisted of dark brown silty sediment from the bottom of the sump. Soil from beneath the bottom of the slab of the 5' by 5' depression consisted of yellow-gold fine to medium sand. There was no odor, staining, or elevated PID readings identified in the sediment/soil samples. The samples were analyzed for TCL VOCs+10 including 1,4-dioxane. The locations of the soil/sediment samples collected during the RI are presented on *Figure 3B.* Refer to Section 5.3 for a discussion of the results of analyses of the soil/sediment samples.

The sediment/soil samples were collected in accordance with NYSDEC/USEPA protocols, containerized in laboratory supplied jars, labeled, sealed, entered onto a chain-of-custody and placed in chilled coolers for shipment to TestAmerica, in Edison, New Jersey.

4.6 Monitoring Well Installation and Development

Ten two-inch diameter shallow overburden groundwater monitoring wells (MW-101 through MW-110), one intermediate-depth groundwater monitoring well (MW-109M), and three two-inch diameter deep groundwater monitoring wells (MW-101D, MW-107D, and MW-110D) were installed between March 22 and April 17, 2018 (refer to *Figures 3A* and *3B)*. AARCO was retained as a subcontractor by TRC to install the groundwater monitoring wells using a vacuum excavator or 4.25-inch inside diameter hollow stem augers.

Intermediate-Depth and Deep Overburden Wells

Two deep overburden wells (MW-101D and MW-107D) were completed at approximately 97 and 98 feet bgs, one deep overburden well (MW-110D) was completed at 70 feet bgs, and the intermediate-depth overburden monitoring well, MW-109M, was completed at 36 feet bgs. The two-inch diameter intermediate-depth and deep monitoring wells were constructed with 10-foot screen lengths.

As described above, during installation of MW-109M a clay layer was encountered from approximately 36 to 40 feet bgs. Additionally, a clay layer was encountered during installation of MW-110D from 70 to 81 feet bgs. Clay layers were not encountered during the installation of the remaining deep monitoring wells or during installation of any shallow wells. Monitoring wells MW-109M and MW-110D were screened from 10 feet above the top of the clay layer to the top of the clay layer.

Shallow Overburden Wells

The shallow monitoring wells (MW-101, MW-102, MW-103, MW-104, MW-105, MW-106, MW-107, MW-108, MW-109, and MW-110) were completed at approximately 14.5 to 27 feet bgs/btos. The two-inch diameter shallow overburden monitoring wells were constructed with 10 or 15-foot screen lengths. The approximately upper five feet of screen was installed above the water table, where feasible.

As noted above, each shallow, intermediate-depth and deep monitoring well was constructed with 2-inch diameter PVC casing and 10 to 15-foot length PVC well screens. A clean silica sand pack was installed in the annular space around each monitoring well screen and extended approximately two-feet above the top of each well screen. A two-foot thick hydrated bentonite seal was placed above the sand pack and the remaining annular space was filled with bentonite/cement grout to approximately one-foot below the ground surface (to allow for placement of the concrete collar). Monitoring well construction logs for the new monitoring wells are presented in *Appendix E*.

Following installation, the fourteen newly installed groundwater monitoring wells were developed using standard surging and pumping techniques, using dedicated tubing and a submersible pump. Depth to groundwater was measured using an oil/water interface probe prior to well development activities. Conductivity, pH, oxidation-reduction potential (ORP), turbidity, temperature, and dissolved oxygen (DO) were monitored using a Horiba™ water quality meter during well development. Light non-aqueous phase liquid (LNAPL) and evidence of contamination (sheens, odors, etc.) were not observed during development of the monitoring wells. Development water was containerized for off-site disposal.

4.7 Groundwater Sampling and Gauging

Groundwater samples were collected from the 17 monitoring wells (three existing monitoring wells and fourteen newly installed monitoring wells) in April 2018. Prior to the start of field activities, the 17 monitoring wells were gauged.

Prior to purging, a PID was used to screen the head space of each monitoring well. The monitoring wells were purged utilizing a submersible pump or a peristaltic pump and dedicated tubing connected to a Horiba groundwater parameter meter with a flow-through cell for monitoring water quality parameters. Low-flow purging rates were used to minimize suspension of particulate matter in the well. Field parameters, including temperature, conductivity, pH, ORP, turbidity and DO were recorded prior to and during purging and sample collection. Groundwater samples were collected after field parameters stabilized within targeted ranges. Groundwater samples were submitted for analysis for TCL VOCs+10 including 1,4-dioxane (via USEPA Method 8270 with selective ion monitoring) and per- and polyfluoroalkyl substances (PFAS).

Supplemental groundwater samples were collected from 12 groundwater monitoring wells in July 2018 following review of the April 2018 groundwater sampling results. Prior to the start of field activities, the water levels in all 17 monitoring wells were gauged.

Groundwater samples were collected in July 2018 using the same methods as the April 2018 sampling event, described above. Groundwater samples collected from monitoring wells MW-101, MW-102, MW-103, MW-104, MW-105, MW-106, MW-107, MW-108, MW-109, MW-109M and MW-110 were analyzed for TCL VOCs +10 TICs and samples collected from MW-101, MW-104, MW-107, MW-108, MW-109 and MW-109M were additionally analyzed for natural attenuation parameters including alkalinity, sulfate, total dissolved solids, and total organic carbon. Additionally, groundwater samples collected from monitoring wells MW-104, MW-105, MW-107, MW-108, MW-109, MW-109M and MW-2 were analyzed for PFAS.

A summary of the total depth of each monitoring well, the approximate screen interval depths, maximum PID readings recorded at each well head prior to purging, and laboratory analyses performed on the groundwater samples is presented in the table below. Groundwater sampling logs are presented in *Appendix F*.

Summary of Depths of Monitoring Wells, Monitoring Well Screened Interval Depths, Head Space Maximum PID Readings, and Groundwater Sample Analytical Plan

Monitoring Well Identification Number	Total Depth of Well (feet bgs)	Approximate Depth of Screened Interval (feet bgs)	Maximum PID Reading Prior to Purging – April 2018 (ppm)	TCL VOCs+ 10 including 1,4-dioxane and PFAS (April 2018)	TCL VOCs+ 10 (July 2018)	Natural Attenuation Parameters[1] (July 2018)	PFAS (July 2018)
MW-1B	60	50 - 60	10.6	X			
MW-2	26	Unknown[2]	0.3	X			X
MW-3	24	14 – 24	0.0	X			
MW-101	27	12 - 27	21.9	X	X	X	
MW-101D	97	87 - 97	59.2	X			
MW-102	15	5 - 15	5.5	X	X		
MW-103	15	5 - 15	11.1	X	X		
MW-104	14.5	4.5 – 14.5	1.3	X	X	X	X
MW-105	14.5	4.5 – 14.5	3.0	X	X		X
MW-106	27	12 - 27	13.5	X	X		
MW-107	27	12 – 27	11.1	X	X	X	X
MW-107D	98	88 - 98	11.4	X			
MW-108	27	12 - 27	13.1	X	X	X	X
MW-109	27	12 - 27	22.7	X	X	X	X

Summary of Depths of Monitoring Wells, Monitoring Well Screened Interval Depths, Head Space Maximum PID Readings, and Groundwater Sample Analytical Plan							
Monitoring Well Identification Number	**Total Depth of Well (feet bgs)**	**Approximate Depth of Screened Interval (feet bgs)**	**Maximum PID Reading Prior to Purging – April 2018 (ppm)**	**TCL VOCs+ 10 including 1,4-dioxane and PFAS (April 2018)**	**TCL VOCs+ 10 (July 2018)**	**Natural Attenuation Parameters[1] (July 2018)**	**PFAS (July 2018)**
MW-109M	36	26 - 36	13.9	X	X	X	X
MW-110	27	12 - 27	13.4	X	X		
MW-110D	70	60 - 70	35.7	X			

Notes:
bgs – below ground surface
ppm – parts per million
[1] – July 2018 natural attenuation parameters include alkalinity, sulfate, total dissolved solids, and total organic carbon.
[2] – Monitoring well MW-2 was installed in 1995 and the well construction log was not included in prior reports.

Groundwater samples were collected in accordance with NYSDEC/USEPA protocols, containerized in laboratory supplied jars, labeled, sealed, and placed in chilled coolers for shipment to TestAmerica. Standard chain-of-custody procedures were followed. Purge water was containerized for off-site disposal.

4.8 Drain Inlet Sampling

As part of the RI, the drain inlet within the Gem Cleaners building (adjacent to and north of monitoring well MW-103), was further investigated. Based on prior investigations, the stairwell drain located at the bottom of the exterior staircase on the west side of the Site building is a leaching structure. The drain contains a pipe which traverses under the door saddle to a 5-gallon bucket (drain inlet), below the Gem Cleaners building basement floor, acting as an interior floor drain. Standing water was identified in the drain inlet in March 2018 at the start of the RI field activities. Samples of the sediment at the bottom of the drain inlet and standing water were collected for laboratory analysis as described below. Note that additional drainage structures in the Site Investigation Area, including the dry well in the parking lot and the stairwell drain (adjacent to MW-102) were previously investigated and based on the results of the sampling and/or completed remediation additional soil or water sampling in connection with these structures was not warranted.

Sediment Sampling

On March 20, 2018, TRC purged the standing water within the drain inlet located in the western portion of the basement adjacent to MW-103. The standing water appeared to have a green tint potentially due to previous dye testing. Following purging, TRC collected a sediment sample (TRC-Drain-02(SO)) from the bottom of the drain inlet (approximately 15 inches btos). The sediment sample was collected as a "grab" type sample using dedicated sampling equipment. Sediment consisted of black fines and organics and there was

a sanitary/sewer odor identified in the sediment sample. The sample was analyzed for TCL VOCs +10 including 1,4-dioxane.

Water Sampling

On April 25, 2018, standing liquid was observed within the drain inlet located in the western portion of the basement adjacent to MW-103. Similar to the March 20, 2018 sampling event described above, the standing water appeared to have a green tint potentially due to previous dye testing. At the request of the NYSDEC, one sample of the standing liquid in the drain inlet was collected and analyzed for TCL VOCs+10 including 1,4-dioxane and PFAS. Additionally, again on July 23, 2018, standing liquid was observed within the drain inlet and at the request of the NYSDEC, an additional sample of the standing liquid was collected and analyzed for PFAS.

The sediment and water samples were collected in accordance with NYSDEC/USEPA protocols, containerized in laboratory supplied jars, labeled, sealed, entered onto a chain-of-custody and placed in chilled coolers for shipment to TestAmerica, in Edison, New Jersey.

4.9 Tracer Dye Sampling

Since the standing water in the drain inlet appeared to have a green tint potentially due to previous dye testing completed by GCI in 2018, samples of the tracer dye previously utilized at the Site were analyzed to determine if the dye was a potential source of PFAS detected in the standing liquid within the drain inlet. Two separate dyes including the Eco-Clean Water Tracing Dye and Bright Dyes Tracer Dye Tablet, which were reportedly used at the Gem Cleaners site in 2018, were each mixed and diluted in accordance with the manufacturer's guidelines with potable water in a clean high-density polyethylene lined bucket. The solutions were transferred to laboratory supplied bottles, packaged in a cooler with ice, and submitted to TestAmerica in Sacramento, CA under standard chain-of-custody procedures for analysis for PFAS.

4.10 Vapor Intrusion Sampling

Sub-slab vapor and indoor air samples were collected between March 28 and 29, 2018 in the Gem Cleaners building and three nearby/adjacent structures as follows: a two-story building with a first-floor commercial tenant (Promise Nails and Spa); a commercial building (Georgette & Co. Hair Salon) located at 78 North Village Avenue; and a residential building located at 23 Washington Street. In addition, one indoor air sample was collected on the first floor of Promise Nails and Spa. Note that following consultation with NYSDEC, an indoor air sample was not collected in the second floor residential space at 82 North Village Avenue (above Promise Nails and Spa) as requested by NYSDOH since the second floor was vacant and under renovation. Additionally, one ambient air sample was collected to determine outdoor air background concentrations.

Vapor intrusion sampling in the commercial building north of the Gem Cleaners Site building (86 to 90 North Village Avenue) and in the commercial building south of the Site (76 North Village Avenue) was additionally proposed; however, access to these structures was not granted by the property owners. Sub-slab vapor and indoor air samples were collected in accordance with NYSDOH protocols. A NYSDOH Indoor Air Quality Questionnaire and Building Inventory form were completed for each structure and are presented in *Appendix G* of this RI Report. The results of the vapor intrusion sampling are provided in Section 5.7 of this RI Report.

4.10.1 *Sub-Slab Vapor Sampling*

Penetrations for sub-slab vapor samples were created using a hammer drill. Each sub-slab vapor sample was collected approximately 0.5 feet below the bottom of the lowest level floor slab in each structure by installing Teflon® tubing in the penetration and sealing the annular space with sand and bentonite at the surface. In each structure, the lowest floor slab consisted of concrete.

Prior to sampling, a tracer gas test was performed (using helium gas) at each sub-slab vapor sample location to confirm minimal infiltration of indoor ambient air to the sub-slab vapor sampling train. The adequacy of each seal was tested using a 5-gallon bucket placed over the sample probe, sealed from the ambient air using bentonite. Helium tracer gas was then pumped into the bucket. The above grade end of the tubing, which is the sample collection point, was then attached to a helium gas detector. The adequacy of the seal was verified by confirming a concentration of helium of less than 10 percent. After an adequate seal was confirmed, each temporary sub-slab vapor point was purged to evacuate three volumes of soil vapor. Purged air was screened for VOCs using a parts per billion (ppb) PID. There were no elevated PID readings detected during purging.

Sub-slab vapor samples were collected in laboratory supplied 6-liter "batch-certified" SUMMA canisters. Immediately after opening each SUMMA canister, the initial vacuum (inches of mercury) was recorded on the chain-of-custody. The samples from Promise Nails and Spa (82 North Village Avenue) and the residential building (23 Washington Street) were collected for a 24-hour duration. All other samples were collected for an 8-hour duration. Following the duration of the sampling period, a final vacuum reading (inches of mercury) was recorded on the chain-of-custody and each SUMMA canister was closed. Following collection, the sub-slab vapor samples were labeled, sealed and shipped to TestAmerica for analysis for VOCs by USEPA Method TO-15. Standard chain-of-custody procedures were followed.

4.10.2 *Indoor Air Sampling*

A pre-sampling building inspection of each structure was performed in accordance with the NYSDOH Vapor Intrusion Guidance Document. During the inspections, a PID was utilized to screen indoor air for the presence of organic vapors, and interferences from stored materials or existing operations. Background PID readings above 0 ppb were identified in Georgette & Co. Hair Salon (up to 443 ppb) located at 78 North Village Avenue (sample location SV/IA-105), however, there were no interfering conditions identified (i.e., odors,

open containers). Elevated background PID readings were identified in Promise Nails and Spa located at 82 North Village Avenue (location of SV/IA-104 and IA-108). Specifically, a PID reading of 700 ppb was recorded in the basement (at sample location SV/IA-104) and a PID reading of 5,200 ppb was recorded at sample location IA-108 on the first floor (in a storage/employee work room). There were no cleaning products/open containers of chemical identified in the vicinity of the sample locations. The elevated readings are likely attributable to activities associated with the renovation of the second floor residence, and activities associated with the active nail salon (note – a maximum PID reading of 9,000 ppb was recorded in the first floor nail salon).

Additionally, the portions of each structure in direct contact with the subsurface were inspected for cracks, penetrations and other potential preferential pathways for vapor intrusion, such as floor drains and sumps. A drain inlet and sump were identified in the Gem Cleaners building, as documented above. There were no preferential pathways for vapor intrusion noted in the remaining structures.

Six indoor air samples were collected utilizing 6-liter "batch-certified" SUMMA canisters. The samples collected in the residential building located at 23 Washington Street and the commercial building located at 82 North Village Avenue (Promise Nails and Spa) were collected for a 24-hour duration. The remaining samples were collected for an 8-hour duration. The indoor air samples were collected concurrently with and adjacent to the sub-slab vapor samples, except for the indoor air sample collected on the first floor of the 82 North Village Avenue (Promise Nails and Spa) commercial building (a sub-slab vapor sample was not collected adjacent to this indoor air sample). Indoor air samples were collected at a height of approximately 3 to 5 feet above floor surface, to simulate a typical breathing zone. Immediately after opening each SUMMA canister, the initial vacuum (inches of mercury) was recorded on the chain-of-custody. Following the duration of the sampling period, a final vacuum reading (inches of mercury) was recorded on the chain-of-custody and each SUMMA canister was closed. The chain of custody forms are included with the laboratory analytical data reports presented in *Appendix H.*

Following collection, the indoor air samples were labeled, sealed and shipped to TestAmerica for analysis for VOCs by USEPA Method TO-15. Standard chain-of-custody procedures were followed.

4.10.3 *Ambient Air Sampling*

One ambient air sample was collected on March 28, 2018 to determine outdoor air background concentrations. The ambient air sample was collected near the southwestern corner of the Gem Cleaners building at 84 North Village Avenue, at a height of 3 to 5 feet above ground surface utilizing a 6-liter "batch-certified" SUMMA canister. The sample was collected for approximately 8 hours. Immediately after opening the SUMMA canister, the initial vacuum (inches of mercury) was recorded on the chain-of-custody. After approximately 8 hours, a final vacuum reading (inches of mercury) was recorded on the chain-of-custody and the SUMMA canister was

closed. Following collection, the ambient air sample was labeled, sealed and shipped to TestAmerica for analysis for VOCs by USEPA Method TO-15. Standard chain-of-custody procedures were followed.

4.11 Site Survey

Perfect Point Land Surveying (Perfect Point), a New York State licensed surveyor, under contract with TRC, completed a survey of physical features, property boundaries, and known utilities at the Site Investigation Area on April 17, 2018. The survey included locations and elevations (ground surface and top of PVC casing) of the existing and new monitoring wells. Additionally, the Site survey included the locations and elevations of the exterior stairwell drain, interior drain inlet and 5' by 5' depression in the Gem Cleaners building. The survey map prepared by Perfect Point is in *Appendix I.*

Presented in the table below are the elevations of the groundwater monitoring well casings, ground surface elevations, depths to water, and calculated groundwater surface elevations, based on measurements collected in April and July 2018.

Summary of Monitoring Well Tops of Casings and Adjacent Surface Elevations, Depth to Water Measurements, and Groundwater Surface Elevations

Monitoring Well Identification Number	Ground Surface Elevation (feet)	Top of Riser Elevation (feet)	Depth to Water (feet below top of riser) April 2018	Groundwater Surface Elevation (feet) April 2018	Depth to Water (feet below top of riser) July 2018	Groundwater Surface Elevation (feet) July 2018
MW-1B	25.90	25.61	16.70	8.91	17.98	7.63
MW-2	26.41	26.07	16.67	9.4	17.32	8.75
MW-3	22.37	22.09	12.78	9.31	13.35	8.74
MW-101	25.46	25.18	15.28	9.9	15.87	9.31
MW-101D	25.46	24.86	15.73	9.13	17.32	7.54
MW-102	18.24	18.03	8.72	9.31	9.25	8.78
MW-103	18.25	17.95	8.82	9.13	9.22	8.73
MW-104	18.27	17.8	8.37	9.43	9.00	8.8
MW-105	18.29	18.07	8.55	9.52	9.22	8.85
MW-106	25.83	25.55	16.02	9.53	16.68	8.87
MW-107	25.56	25.56	16.18	9.38	16.82	8.74
MW-107D	25.82	25.35	16.12	9.23	17.67	7.68
MW-108	25.84	25.63	16.32	9.31	16.91	8.72
MW-109	25.85	25.04	15.87	9.17	16.48	8.56
MW-109M	25.86	25.58	16.46	9.12	17.14	8.44
MW-110	25.08	24.64	15.15	9.49	15.8	8.84
MW-110D	25.04	24.29	15.96	8.33	17.16	7.13

Based on gauging of the monitoring wells:

- In April 2018, groundwater surface elevations in the shallow monitoring wells ranged from approximately 9.13 feet in monitoring well MW-103 (located in the western side of the Gem Cleaners building) to 9.9 feet in monitoring well MW-101 (located in the sidewalk along North Village Avenue). Groundwater surface elevations in the intermediate-depth and deep monitoring wells ranged from approximately 8.33 feet in monitoring well MW-110D (located in the sidewalk along Washington Street) to 9.23 feet in MW-107D (located west of the commercial building at 82 North Village Avenue).

- In July 2018, the groundwater surface elevations in the shallow monitoring wells ranged from approximately 8.56 feet in monitoring well MW-109 (located in parking lot west of the Gem Cleaners building) to 9.31 feet in monitoring well MW-101. Groundwater surface elevations in the intermediate-depth and deep monitoring wells ranged from approximately 7.13 feet in monitoring well MW-110D to 8.44 in MW-109M.

4.12 Quality Assurance and Quality Control

Eight quality control samples were submitted for laboratory analysis. The quality control samples consisted of two soil matrix spike and matrix spike duplicates (MS/MSDs), two groundwater MS/MSDs, four trip blanks, and four equipment blank samples. In accordance with the NYSDEC guidance, one equipment blank was collected daily during each sampling event. MS/MSDs were collected by alternately filling sample bottles from the source being sampled. MS/MSDs were collected at a minimum frequency of one per twenty investigation samples per matrix (soil and groundwater) per analytical parameter. Equipment blank samples were collected for analysis for PFAS and VOCs at a frequency of one per sample batch submitted to the laboratory. Trip blanks were submitted to the laboratory at a frequency of one per cooler which contained groundwater samples to be analyzed for VOCs.

Soil MS/MSD samples were analyzed for TCL VOCs+10 including 1,4-dioxane. Groundwater MS/MD samples and equipment blank samples were analyzed for TCL VOCs+10 and for PFAS; and samples submitted for analysis in April 2018 were additionally analyzed for 1,4-dioxane via USEPA Method 8270 with selective ion monitoring. Trip blanks were analyzed for TCL VOCs+10 including 1,4-dioxane. Low-level VOCs, including m&p-xylenes, o-xylene, ethylbenzene and 2-butanone, were detected in the trip blank samples submitted to the laboratory on July 23 and 24, 2018; however, these compounds were not detected in the groundwater samples. The quality control samples were collected and containerized in accordance with NYSDEC/USEPA protocols, in laboratory supplied containers, labeled, sealed, and placed in a chilled cooler for shipment to TestAmerica. Standard chain-of-custody procedures were followed.

4.13 Investigation Derived Waste (IDW)

IDW generated during the investigation included soil from drilling activities, and wastewater from well development, well purging, and decontamination of sampling equipment. The IDW was placed in U.S. Department of Transportation (DOT) approved 55-gallon drums and transported as non-DOT regulated material by IRT for disposal off-Site. The soil and wastewater drums were transported to Republic Environmental Systems, LLC in Hatfield, Pennsylvania. The signed waste disposal manifest forms are included in *Appendix J.*

5.0 DISCUSSION OF RESULTS

This section presents a discussion of the results of the RI. The results of laboratory analyses are summarized in *Tables 1* through *6*. The results of validation of the laboratory analytical data are summarized in the Data Usability Summary Reports (DUSRs). The data validation was performed in accordance with NYSDEC requirements, including the requirements for development of DUSRs listed in Appendix 2B of DER-10, Technical Guidance for Site Investigation and Remediation. The complete Analytical Services Protocol (ASP) Laboratory Analytical Data Reports and DUSRs are included in *Appendices H* and *K*, respectively. Additionally, electronic data deliverable packages have been uploaded to the NYSDEC EQuIS database.

5.1 Site Geology and Hydrogeology

Based on the information gathered during the RI and previous investigations, the subsurface geology consists primarily of intermixed layers of sand and silty sand extending to a maximum depth of approximately 100 feet bgs (MW-101D and MW-107D). A clay layer was encountered in two borings advanced during the RI, MW-109M and MW-110D, at depths ranging from approximately 36 to 40 feet in MW-109M and from approximately 70 to 81 feet in MW-110D. Bedrock was not encountered during the RI drilling program or during prior Site investigations but is expected to be at depths greater than 700 feet bgs. Bedrock was not encountered to the terminal depth (approximately 562 feet bgs) during installation of a well owned by the Village of Rockville Centre (Well No. N-9792) located approximately 1,200 feet east of the Site near Maple Avenue. Boring logs are presented in *Appendix E* and cross-sections A-A' and B-B' (*Figures 6A and 6B*) show the geology in the Site Investigation Area based on the boring logs completed for the RI.

According to the Surficial Geology Map of New York – Lower Hudson Sheet (1989), the material underlying the Site Investigation Area is classified as outwash sand and gravel. The material is described as: coarse to fine gravel with sand, proglacial fluvial deposition, well round and stratified, generally finer texture away from the ice border with a variable thickness (2 – 20 meters). According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), subsurface soils in the Site Investigation Area are classified as Urban Land. According to the Bedrock Geology Map of New York State – Lower Hudson (1970, reprinted 1995), bedrock underlying the Site and surrounding area is classified as Monmouth Group, Matawan Group, and Magothy Formation of the Upper Cretaceous age.

During the April 2018 sampling event, groundwater surface elevations in the shallow monitoring wells ranged from approximately 9.13 feet in monitoring well MW-103 (located on the western side of the Gem Cleaners Site building) to 9.9 feet in monitoring well MW-101 (located in the sidewalk along North Village Avenue). Groundwater surface elevations in the intermediate-depth and deep monitoring wells ranged from approximately 8.33 feet in monitoring well MW-110D (located in the sidewalk along Washington Street) to

9.23 feet in MW-107D (located west of the commercial building at 82 North Village Avenue). The apparent predominant groundwater flow direction in shallow overburden was towards the west-southwest in April 2018. The inferred predominant groundwater flow direction in deep overburden was towards the south in April 2018.

During the July 2018 sampling event, groundwater surface elevations in the shallow monitoring wells ranged from approximately 8.56 feet in monitoring well MW-109 (located in parking lot west of the Gem Cleaners Site building) to 9.31 feet in monitoring well MW-101. Groundwater surface elevations in the intermediate-depth and deep monitoring wells ranged from approximately 7.13 feet in monitoring well MW-110D to 8.44 in MW-109M. The inferred predominant groundwater flow direction in shallow overburden was towards the west-southwest in July 2018, which is consistent with the results of the April 2018 gauging event. The inferred predominant groundwater flow direction in deep overburden was towards the south in July 2018, which is also consistent with the results of the April 2018 gauging event. Groundwater surface elevation measurements and inferred groundwater surface elevation contours, based on measurements in April and July 2018, are shown on *Figures 7* through *10*.

5.2 Applicable Regulatory Standards and Guidance

This subsection identifies the regulatory standards and guidelines used to evaluate the results of the analyses of soil/sediment, groundwater/water, indoor air and sub-slab vapor samples. The standards and guidelines used to evaluate the data associated with each specific media are described individually below.

5.2.1 *Soil Cleanup Objectives*

Soil and sediment sampling results were evaluated by comparison to the Unrestricted Use Soil Cleanup Objectives (SCOs) in Table 375-6.8(a) of 6 NYCRR 375 and Commercial Use and Industrial Use SCOs in Table 375-6.8(b) of 6 NYCRR 375.

5.2.2 *Groundwater Quality Standards and Guidance Values*

Groundwater and water sampling results were evaluated by comparison to NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Standards and Guidance Values ("Class GA Values"). Additionally, groundwater samples and samples collected from the drain inlet in the Gem Cleaners building were analyzed for PFAS as requested by the NYSDEC. There are no Class GA Values for PFAS or other New York State standards, criteria, or guidance values (SCGs) for PFAS in groundwater. Therefore, the results of analysis for PFAS of the groundwater and water samples were compared to the New York State Drinking Water Quality Council recommended maximum contaminant levels (MCLs) of 10 nanograms per liter (ng/L) for perfluorooctanoic acid (PFOA) and 10 ng/L for perfluorooctanesulfonic acid (PFOS).

5.2.3 *Indoor Air and Sub-Slab Vapor*

The results of analyses of the indoor air samples were compared to the Air Guideline Values (AGVs) in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (SVI Guidance Document). Additionally, the sub-slab vapor and indoor air sampling results were compared to the Decision Matrices in the SVI Guidance Document. The results of the analyses of the sub-slab vapor, indoor air, and ambient air samples are described in Section 5.7.

5.3 Soil and Sediment Sampling

Field observations recorded during direct-push, hollow-stem auger, and grab soil sampling are discussed in Sections 4.5, 4.6 and 5.1. Summaries of the results of the analyses of the soil samples are presented in *Table 1*. The complete laboratory reports are presented in *Appendix H. Figures 3A* and *3B* show the soil sampling and soil boring locations. A review of the results of the analyses of the soil samples is presented below.

5.3.1 *VOCs in Subsurface Soil*

Twenty-three subsurface soil samples selected from five direct-push soil borings (SB-101 and MW-102 through MW-105) and six borings advanced via hollow-stem auger (MW-101D, MW-106, MW-107D, MW-108, MW-109M, and MW-110D) were analyzed for TCL VOCs+10. There were no VOCs detected at concentrations exceeding the Unrestricted Use SCOs (the most stringent SCOs). The complete results of the analyses of subsurface soil samples for VOCs are presented in *Table 1*.

5.3.2 *VOCs in Grab Soil/Sediment Samples*

One sediment sample was collected from the bottom of the sump located in the basement (TRC-Sump(SO)) and one soil sample was collected from beneath the bottom slab of the 5' by 5' depression in the basement (TRC-SO-101(SO)). There were no VOCs detected at concentrations exceeding the Unrestricted Use SCOs. The complete results of the analyses of soil/sediment samples for VOCs are presented in *Table 1*.

5.4 Groundwater Sampling

Field observations recorded during groundwater sampling are discussed in Sections 4.7 and 5.1. Summaries of the results of the analyses of the groundwater samples are presented in *Tables 2* through *4*. The complete laboratory analytical data reports are presented in *Appendix H. Figure 11* presents a summary of the results of the analyses of the groundwater samples for VOCs. *Figure 12* presents a summary of the results of the analyses of the groundwater samples for PFOA and PFOS. A discussion of the results of the analyses of the groundwater samples is presented below. Groundwater samples collected in April and July 2018 were labeled with the prefix "GC" (Gem Cleaners) and the suffix "WG" (groundwater) in accordance with the QAPP.

5.4.1 *VOCs in Groundwater*

April 2018

The groundwater samples collected from 17 monitoring wells in April 2018 were analyzed for TCL VOCs. The results of analysis for the 10 tentatively identified compounds (TICs) detected at the highest concentrations were also reported. PCE was detected at concentrations above the Class GA Value of 5 µg/L in four (4) groundwater samples. Presented in the table below is a summary of the concentrations of PCE detected above the Class GA Value. The complete results of the analyses for VOCs of the groundwater samples are presented in *Table 2*. In addition, a summary of the results of analysis of the groundwater samples for VOCs is shown on *Figure 11*.

VOC Detected Above Class GA Values in Groundwater
April 2018

Groundwater Sample Identification No. / **Units**	**GC-MW-107 (WG)** / **µg/L**	**GC-MW-108 (WG)** / **µg/L**	**GC-MW-109 (WG)** / **µg/L**	**GC-MW-109M (WG)** / **µg/L**	**Class GA Value** / **µg/L**
Tetrachloroethene (PCE)	**8.8**	**35**	**12**	**52**	5

Notes:
µg/L – Micrograms per liter

July 2018

Groundwater samples collected from 11 monitoring wells in July 2018 were analyzed for TCL VOCs+10. PCE was the only VOC detected at concentrations above Class GA Value in the July 2018 groundwater samples. Presented in the table below is a summary of the concentrations of PCE detected above the Class GA Value. The complete results of the analyses for VOCs of the groundwater samples are presented in *Table 2*. In addition, a summary of the results of analysis of the groundwater samples for VOCs is shown on *Figure 11*.

VOC Detected Above Class GA Values in Groundwater
July 2018

Groundwater Sample Identification No. / **Units**	**GC-MW-107 (WG)** / **µg/L**	**GC-MW-108 (WG)** / **µg/L**	**GC-MW-109M (WG)** / **µg/L**	**Class GA Value** / **µg/L**
Tetrachloroethene (PCE)	**9.2**	**6.0**	**16**	5

Notes:
µg/L – Micrograms per liter

PCE was not detected at a concentration above the Class GA Value in any of the deep groundwater monitoring wells during the RI.

5.4.2 *PFAS in Groundwater*

April 2018

Groundwater samples collected from 17 monitoring wells in April 2018 were analyzed for PFAS. PFOA was detected above the recommended MCL (10 ng/L) in all groundwater samples at concentrations between 14 and 64 ng/L and PFOS was detected above the recommended MCL (10 ng/L) in 11 of the 17 groundwater samples at concentrations between 12 and 22 ng/L. The complete results of the analyses of groundwater for PFAS are presented in *Table 3.* In addition, the groundwater sampling results for PFOA and PFOS are summarized on *Figure 12*.

July 2018

Groundwater samples collected from seven monitoring wells in July 2018 were analyzed for PFAS. PFOA was detected above the recommended MCL (10 ng/L) in all groundwater samples at concentrations between 24 and 43 ng/L and PFOS was detected above the recommended MCL (10 ng/L) in all groundwater samples at concentrations between 13 and 23 ng/L. The complete results of the analyses of groundwater for PFAS are presented in *Table 3.* In addition, the groundwater sampling results for PFOA and PFOS are summarized on *Figure 12*.

5.4.3 *Natural Attenuation Parameters in Groundwater*

Groundwater samples collected from six (6) monitoring wells in July 2018 were analyzed for natural attenuation parameters, including alkalinity, sulfate, total dissolved solids, and total organic carbon. The range of results for the natural attenuation parameters are as follows: alkalinity: 40.3 to 67.7 mg/L; sulfate: 10.3 mg/L to 22 mg/L; total dissolved solids: 300 to 908 mg/L; and total organic carbon: 0.35 to 0.86 mg/L. The complete results of the analyses of groundwater for natural attenuation parameters are presented in *Table 4.*

5.5 Drain Inlet Sampling

5.5.1 *VOCs in Sediment*

The sample of sediment collected in April 2018 from the drain inlet located in the western portion of the basement adjacent to monitoring well MW-103 was analyzed for TCL VOCs+10 including 1,4-dioxane. Two VOCs, acetone and 2-butanone, which are common laboratory contaminants, were detected at concentrations above Unrestricted Use SCOs but below Commercial and Industrial Use SCOs. No other VOCs were detected

in the sediment sample at concentrations above the Unrestricted Use SCOs. The complete results of the analyses for VOCs of the sediment sample are presented in *Table 1*.

5.5.2 *VOCs in Standing Liquid*

The sample of standing liquid collected in April 2018 from the drain inlet located in the western portion of the basement adjacent to MW-103 was analyzed for TCL VOCs+10 including 1,4-dioxane. There were no VOCs detected at concentrations exceeding the Class GA Values. The complete results of the analyses for VOCs of the sample of standing liquid are presented in *Table 2*.

5.5.3 *PFAS in Standing Liquid*

April 2018

The sample of standing liquid collected in April 2018 from the drain inlet located in the western portion of the basement adjacent to MW-103 was analyzed for PFAS. PFOA was detected at a concentration of 100 ng/L and PFOS was detected at a concentration of 130 ng/L , which are above the recommended MCL of 10 ng/L. The complete results of the analyses of the sample of standing liquid for PFAS are presented in *Table 3*. In addition, the standing liquid sampling results for PFOA and PFOS are summarized on *Figure 12*.

July 2018

A sample of the standing liquid in the drain located in the western portion of the basement was collected again in July 2018 and analyzed for PFAS. PFOA was detected at a concentration of 210 ng/L and PFOS was detected at a concentration of 230 ng/L, which are above the recommended MCL of 10 ng/L. The complete results of the analyses of the sample of standing liquid for PFAS are presented in *Table 3*. In addition, the standing liquid sampling results for PFOA and PFOS are summarized on *Figure 12*.

5.6 Tracer Dye Sampling

Samples of the tracer dye previously used at the Site during implementation of the Phase II Subsurface Investigation completed in 2018 by GCI were analyzed for PFAS. The results of the analysis revealed that PFAS were either not detected or detected at estimated concentrations below the reporting limits. Based on the results, it appears that the tracer dye is not a source of PFAS detected in the standing water in the drain inlet in the Gem Cleaners building basement. The complete results of the analyses for PFAS of the tracer dye samples are presented in *Table 6*.

5.7 Vapor Intrusion Sampling

Field observations recorded during collection of sub-slab vapor, indoor air, and ambient air samples are discussed in Section 4.10. A summary of the results of the analyses of the sub-slab vapor, indoor air, and ambient air samples is presented in *Table 5*. The complete laboratory analytical data reports are presented in *Appendix H*. *Figure 3A* shows the locations of the four (4) structures sampled during the vapor intrusion assessment, and the ambient air sample location. The results of the sub-slab vapor, indoor air, and ambient air sampling are discussed below.

5.7.1 *VOCs in Sub-Slab Vapor, Indoor Air, and Ambient Air Samples*

As discussed in Section 4.10, co-located sub-slab vapor and indoor air samples were collected in the Gem Cleaners building and in three adjacent/nearby structures in March 2018 as follows: a two-story building with first floor commercial tenant (Promise Nails and Spa) and second floor apartment located at 82 North Village Avenue, a commercial building (Georgette & Co. Hair Salon) located at 78 North Village Avenue, and a residential building located at 23 Washington Street. One additional indoor air sample was collected on the first floor of Promise Nails and Spa. Note that following consultation with NYSDEC, an indoor air sample was not collected from the second floor residential space at 82 North Village Avenue (above Promise Nails and Spa) since the second floor was under renovation. One ambient air sample was collected in the parking lot, south of the two-car garage adjacent to the Gem Cleaners building. The sub-slab vapor, indoor air and ambient air samples collected at each location were submitted for analysis for VOCs. The sub-slab vapor and indoor air sampling results were compared to the Decision Matrices in the SVI Guidance Document.

The primary contaminant of concern (COC) at the Site Investigation Area is PCE. A brief discussion of the sampling results for this COC is presented below.

- PCE was detected in sub-slab vapor at concentrations of 99 micrograms per cubic meter (µg/m³) in SV-102 and 170 µg/m³ in SV-103 collected in the basement of the Gem Cleaners building; at a concentration of 100 µg/m³ in SV-104 collected in the basement of Promise Nails Salon and Spa; and at a concentration of 43 µg/m³ in SV-105 collected in the basement of Georgette & Co. Hair Salon. PCE was not detected in the sub-slab vapor sample (SV-106) collected in the basement of the residential building.
- PCE was detected in each indoor air sample at concentrations between 0.37 µg/m³ (IA-105) and 1.1 µg/m³ (IA-108).
- PCE was detected at an estimated concentration of 0.17 µg/m³ in the ambient air sample.

There were no compounds detected in indoor air at a concentration above the NYSDOH AGVs. Elevated concentrations of acetone were detected in indoor air in Georgette & Co. Hair Salon (IA-105) and Promise

Nails and Spa (IA-104 and IA-108), which can be attributed to business operations based on the chemical inventory completed prior to the sampling event.

Additionally, mixed xylenes (i.e., m-, p-, and o-xylene) and ethylbenzene were detected in the sub-slab vapor and indoor air samples collected in the Gem Cleaners building, Promise Nails and Spa and Georgette Hair & Co. Nail Salon, and in the indoor air sample collected in the residential building. Detected concentrations were generally higher in the sub-slab vapor samples than the indoor air samples and the concentrations in indoor air are within the range of published background levels. Xylenes and ethylbenzene were not detected in groundwater and were either not detected or detected at low levels (below the Unrestricted Use SCOs) in the soil samples collected in the Site Investigation Area. Considering that xylenes and ethylbenzene are found in common household and commercial products, including cleaning products, plastics, paints and coatings, adhesives, fragrances, etc., it is likely that the presence of these compounds in the sub-slab vapor and indoor air samples is related to background concentrations from household and/or commercial products and/or a non-Site related source.

The results of analyses of sub-slab vapor and indoor air samples were evaluated with respect to the updated May 2017 NYSDOH Decision Matrices. The guidance from the matrices indicates that no further action is recommended for the Gem Cleaners Site building, Georgette & Co. Hair Salon and the residential building. Based on the concentration of carbon tetrachloride detected in the indoor air sample collected in the basement of the Promise Nails and Spa building (1.3 µg/m³) the recommended action is "identify source(s) and resample or mitigate". Since carbon tetrachloride was not detected in the sub-slab vapor sample collected beneath this structure, the indications are that carbon tetrachloride detected in the indoor air sample may be attributable to indoor and/or outdoor air sources rather than soil vapor intrusion.

5.8 Data Usability

The results of the data validation are summarized in Data Usability Summary Reports (DUSRs). The DUSRs are provided in *Appendix K* and include a discussion on each qualified result, the potential bias and the effects on data usability. The results of the analyses of soil, groundwater, sediment and water samples collected from the drain inlet, and the vapor intrusion data were found to be valid and usable for decision-making purposes. Results of the analysis of the tracer dye samples for PFAS were not validated. Note that low-level VOCs, including m&p-xylenes, o-xylene, ethylbenzene and 2-butanone, were detected in the trip blank samples submitted to the laboratory on July 23 and 24, 2018; however, these compounds were not detected in the groundwater samples.

6.0 QUALITATIVE EXPOSURE ASSESSMENT

An exposure pathway consists of five elements: (1) a contaminant source, (2) a contaminant release, and transport mechanism, (3) a point of exposure, (4) a route of exposure, and (5) a receptor population. An exposure pathway is complete when all five elements of an exposure pathway are complete.

Based on the findings of the RI and prior investigations by others, the principal compound of concern in the Site Investigation Area has been identified as PCE, primarily in groundwater. During prior investigations, PCE was additionally detected at elevated concentrations in subsurface soil beneath the exterior stairwell drain (west of the Gem Cleaners building); however, the impacted soils were excavated and transported off-Site for disposal, a new drain was installed, and the area was backfilled with clean sand in 1997. Additionally, PFAS were detected in groundwater and in the standing liquid in the interior drain inlet in the western portion of the basement of the Gem Cleaners building. A qualitative assessment was prepared to evaluate and document the potential for exposure to Site-related contaminants.

Dermal contact, ingestion of soil or groundwater, or inhalation of vapors or dust represent the potential routes of exposure. Potential receptors include construction workers during demolition and redevelopment, future on-Site occupants and visitors, future on-Site maintenance workers, and off-Site residents.

Considering the current conditions at the Site, the following exposure pathways are considered incomplete:

- **Groundwater ingestion:** Use of groundwater in the area of the Site is prohibited as a source of potable water; therefore, this exposure pathway is not complete for potential on-Site and off-Site visitors, building occupants and residents.
- **Soil dermal contact by Site visitors, building occupants and off-Site residents:** The majority of the Site and surrounding area is covered by buildings, asphalt pavement or landscaped areas, thereby minimizing the potential for exposure of occupants to the subsurface soil.
- **Inhalation of vapors by Site visitors, building occupants and off-Site residents:** Site contaminants of concern were detected in soil vapor and/or indoor air; however, based on comparison to the updated May 2017 NYSDOH Decision Matrices, vapor intrusion is not a concern in the four structures sampled. Note that non-Site related contaminants, including xylenes and ethylbenzene, were detected in sub-slab vapor and/or indoor air in the four structures sampled; however, there is no known source of these compounds in soil and groundwater and considering ethylbenzene, o-xylene and m,p-xylenes were not detected in groundwater and were either not detected or detected at low levels below the Unrestricted Use SCOs in soil in the Site Investigation Area, the presence of these compounds in sub-slab vapor and indoor air may be attributed to background concentrations and/or a non-Site related source.

The following exposure pathways are considered potentially complete:

- **Dermal contact with soil by construction workers and maintenance workers:** Potential future construction and maintenance activities (e.g., utility repairs) could result in contact with Site impacted soil (i.e., historic sampling results showed limited SVOCs and metals above Unrestricted Use and/or Commercial Use SCOs in subsurface soil).
- **Dermal contact with groundwater or drain inlet liquid by construction workers and maintenance workers:** The groundwater table is at depths greater than 8 feet below the top of the basement slab (in the Gem Cleaners building) or 15 feet below ground surface in the Site Investigation Area, therefore contact with groundwater is generally unlikely. The potential for exposure of workers to contaminated groundwater via contact exists if soil excavation is required at depths below the water table. Additionally, there is potential for exposure to contaminated standing water in the drain inlet in the Gem Cleaners building.
- **Inhalation of dust by construction workers and maintenance workers:** Potential future construction and maintenance activities (e.g., utility repairs) could result in the generation of and exposure to impacted dust (i.e., historic sampling results showed limited SVOCs and metals above Unrestricted Use and/or Commercial Use SCOs in subsurface soil).

7.0 CONCEPTUAL SITE MODEL

The following conceptual site model explains the nature and extent of the contaminants known to be present at the Site, the dominant fate and transport characteristics, potential exposure pathways, and potential impacts to receptors. The urban Site is not located in close proximity to a surface water body, wetland, or other ecologically significant area.

Based on the results of the RI and prior investigations, the primary contaminant of concern at the Site is PCE in groundwater. Additionally, PFAS was detected in groundwater samples collected across the Site and in the standing liquid in the drain inlet in the basement of the Gem Cleaners building adjacent to MW-103.

PCE was not detected in the soil or sediment samples collected in the Site Investigation Area; however, physical evidence of contamination (staining, odor and elevated PID readings) was identified in one soil boring, MW-103, at depths from approximately 10 to 14 feet below the top of the basement slab in the Gem Cleaners building. Analysis of soil samples collected from MW-103 did not reveal impacts. However, historic sampling results showed limited SVOCs and metals above Unrestricted Use and/or Commercial Use SCOs in subsurface soil. Under current conditions, exposure to subsurface soil is not likely since the building is unoccupied and there are no exposed soil areas. Potential exposure could occur during soil disturbing activities (e.g., utility maintenance, or future redevelopment); however, the frequency and duration of exposure is expected to be low and would be mitigated by appropriate health and safety procedures.

PCE was detected in shallow groundwater at concentrations above Class GA Values. However, there does not appear to be a remaining on-Site source that would warrant remediation based on the detected maximum concentrations and considering that PCE was not detected in soil samples at concentrations above the Unrestricted Use SCOs. Further, the soil beneath the exterior stairwell drain (potential source of VOCs in groundwater) was remediated in 1997. Additionally, of note is that the July 2018 groundwater sampling results show only slight exceedances of the Class GA Value for PCE in the shallow monitoring wells downgradient of the Gem Cleaners building and PCE was not detected above the Class GA Value in the shallow wells furthest downgradient from the Gem Cleaners building (MW-109 and MW-110). The highest concentrations of PCE was detected in MW-109M (52 µg/L in April 2018 [later decreasing to 16 µg/L in July 2018]). MW-109M is screened between 10 and 20 feet below the water table and partially extends into an apparent fine grained silty/clay layer, and, therefore, the conditions found in the adjacent shallow well (MW-109) are more representative of shallow groundwater (compared to MW-109M, which is partially screened in a more stagnant [i.e., less permeable] portion of the formation). Additionally, in April 2018, PCE concentrations showed a decrease in the downgradient direction from 35 µg/L in MW-108 to 12 µg/L in MW-109, and in July 2018, the concentration of PCE showed a decrease from 6 µg/L in MW-108 to 3.1 µg/L in MW-109. Therefore, it is expected that reductions in PCE concentration continue further downgradient, to the southwest of MW-109, and the potential for migration of elevated concentrations of PCE in groundwater beyond the Site Investigation Area is considered low. PCE was not detected at a concentration above the Class GA Value in any of the deep groundwater monitoring wells during the RI.

Additionally, PFOA and PFOS were detected in groundwater at concentrations above the recommended MCL; however, the concentrations of PFOA and PFOS in groundwater were relatively consistent across the Site during both sampling events which is an indication that the PFAS concentrations may be representative of background concentrations in the area of the Site. Elevated concentrations of PFOA and PFOS were detected in the standing liquid in the drain inlet adjacent to MW-103; however, it is unlikely that the drain inlet is the source of PFAS in groundwater since the ratios of specific PFAS (i.e., PFOA/PFBA) are different. The higher concentrations of the more mobile PFBA in the drain inlet sample versus the groundwater is a strong indication that the PFAS identified in the drain inlet sample are not impacting the groundwater. Further, concentrations of PFOA and PFOS detected in the groundwater sample collected from MW-103, the monitoring well closest to the drain inlet, are not higher than the concentrations detected in monitoring wells further from the drain inlet.

Groundwater was encountered at depths greater than 8 feet below the top of the basement slab (in the Gem Cleaners building) or 15 feet below ground surface in the Site Investigation Area, therefore contact with groundwater is generally unlikely, minimizing the potential for exposure to groundwater at the Site. Groundwater at the Site is not utilized for potable or non-potable purposes and ingestion and absorption of contaminated groundwater do not represent significant potential exposure pathways. There is a potential for exposure to contaminated groundwater during redevelopment and any associated dewatering activities; however, the frequency and duration of potential exposure to contaminated groundwater is expected to be low and would be mitigated by appropriate health and safety procedures. There is potential for exposure to contaminated standing water in the drain inlet in the Gem Cleaners building; however, currently the potential for exposure is minimal since the building is unoccupied.

The results of indoor air sampling in the Gem Cleaners building and the three nearby and adjacent structures did not exceed NYSDOH AGVs. Based on comparison of the vapor intrusion sampling results to the NYSDOH Vapor Intrusion Matrices, no further action is recommended for the Gem Cleaners Site building, Georgette & Co. Hair Salon, and the residential building. Further action (i.e., identifying the source(s) and resampling or mitigation) is recommended to address carbon tetrachloride in the indoor air sample collected in the basement of the Promise Nails and Spa building. Xylenes and ethylbenzene were detected in indoor air and/or sub-slab vapor samples in the Gem Cleaners building, Georgette & Co. Hair Salon, and the Promise Nails and Spa and in the indoor air sample collected in the residential building; however, these compounds were not detected in groundwater and were either not detected or detected at low levels below the Unrestricted Use SCOs in soil in the Site Investigation Area. Further, concentrations of xylenes and ethylbenzene detected in indoor air are within the range of published background levels. As a result, the presence of these compounds in sub-slab vapor and indoor air may be attributed to background concentrations (e.g., from household and/or commercial products) and/or a non-Site related source.

8.0 SUMMARY OF FINDINGS

The RI was completed in accordance with the NYSDEC DER WA No. D007620-36 Notice to Proceed dated May 1, 2017, the NYSDEC-approved Scope of Work dated January 17, 2018, and DER-10, Technical Guidance for Site Investigation and Remediation. A summary of the important findings is presented below.

8.1 Soil and Sediment Sampling Results

Twenty-three subsurface soil samples collected during advancement of borings were submitted for laboratory analysis. Additionally, one sediment sample collected from bottom of the sump located in the Gem Cleaners building basement, one soil sample collected from beneath the bottom slab of the 5' by 5' depression in basement, and one sediment sample collected from the bottom of the drain inlet located in the western portion of the basement were submitted for laboratory analysis. All samples were analyzed for TCL VOCs+10 including 1,4-dioxane. In the sediment sample collected from the bottom of the drain inlet, two VOCs (acetone and 2-butanone) were detected at concentrations above Unrestricted Use SCOs but below Commercial and Industrial Use SCOs. These compounds are common laboratory contaminants and are not COCs associated with the Gem Cleaners Site. There were no VOCs detected in the remaining soil and sediment samples at concentrations exceeding the Unrestricted Use SCOs. Based on the above, and that physical evidence of contamination was identified in only one soil boring (in MW-103 from 10 to 14 feet btos), it can be concluded that subsurface soil contamination at the Site is limited.

8.2 Groundwater Gauging Results and VOCs in Groundwater

Below is a summary of the findings from RI groundwater gauging and sampling events completed in April and July 2018. The groundwater sampling results for VOCs are presented in *Table 2.* Compounds detected at concentrations above the Class GA Values are shown on *Figure 11.*

Groundwater Gauging and Sampling Results – Deep Monitoring Wells

The results of the gauging events completed in April and July 2018 indicated that the predominant groundwater flow direction in the deep overburden was towards the south. One upgradient deep monitoring well (MW-101D) and two downgradient deep monitoring wells (MW-107D and MW-110D) were installed during the RI and sampled in April 2018, for analysis for VOCs. Additionally, a groundwater sample was collected from an existing deep well (MW-1B) for analysis for VOCs in April 2018. Since there were no VOCs detected at concentrations above the Class GA Values in the deep monitoring wells MW-1B, MW-101D, MW-107D and MW-110D, collection of a second round of groundwater samples in July 2018 from these wells was not warranted.

Groundwater Gauging and Sampling Results – Shallow and Intermediate-Depth Monitoring Wells

The results of the gauging events completed in April and July 2018 indicate the inferred predominant groundwater flow direction in the shallow overburden was generally towards the west-southwest.

Key findings from the results of the sampling are presented below.

- During the April 2018 sampling event, PCE was detected above Class GA Values in four monitoring wells (MW-107, -108, -109, and -109M) at concentrations ranging from 8.8 to 52 µg/L, and during the July 2018 sampling event, PCE was detected above Class GA Values in three monitoring wells (MW-107, MW-108, and MW-109M) at concentrations ranging from 6 to 16 µg/L. Each of the wells with PCE at a concentration above the Class GA Value are located in the parking lot directly south and southwest of the Gem Cleaners building.

- The highest concentrations of PCE in the April and July 2018 groundwater samples were detected in monitoring well MW-109M (52 µg/L in April 2018 and 16 µg/L in July 2018). MW-109M is screened between 10 and 20 feet below the water table and partially extends into an apparent fine grained silty/clay layer. Fine-grained soils (fine sand and clayey silt) were identified in samples recovered from the lower half of the well screen interval, in contrast to sandy soils that extend from the water table to the fine-grained unit. In monitoring well MW-109, which is screened within the sand unit above the fine-grained unit, PCE was detected at a concentration of 12 µg/L in April 2018 and a concentration of 3.1 µg/L in July 2018. The conditions found in MW-109M may be more representative of groundwater quality directly above the lower permeability layer found in the shallow aquifer south and southwest of the Gem Cleaners building (i.e., not representative of conditions in the sandy upper part of the aquifer).

- The July 2018 groundwater sampling results show only slight exceedances of the Class GA Value for PCE in the monitoring wells downgradient of the Gem Cleaners building. Specifically, PCE was detected above the Class GA Value of 5 µg/L in two shallow wells, MW-107 at a concentration of 9.2 µg/L and MW-108 at a concentration of 6 µg/L, and in one intermediate-depth monitoring well, MW-109M at a concentration of 16 µg/L. PCE was not detected above the Class GA Value in the shallow wells furthest downgradient from the Gem Cleaners building (MW-109 and MW-110).

- Water quality parameter measurements collected during sampling of monitoring wells in April and July 2018 showed positive ORP values, which is not favorable for degradation of PCE. Breakdown products of PCE (i.e., TCE, cis-1,2-DCE, and vinyl chloride) were not detected in groundwater during the RI.

- The results of sampling for natural attenuation parameters were relatively consistent among the six wells sampled. Concentrations of sulfate ranged between 10.3 and 22 mg/L and concentrations of total organic carbon (TOC) ranged between 0.35 and 0.86 mg/L, which are not favorable for the degradation of PCE.

8.3 PFAS in Groundwater and Standing Water from Drain Inlet

Groundwater and the standing liquid in the drain inlet adjacent to MW-103 were sampled on two occasions and analyzed for PFAS over the course of the RI. Below is a summary of the key findings of the PFAS sampling. The sampling results are presented in *Table 3* and are shown on *Figure 12.*

During the April 2018 sampling event, PFOA was detected above the recommended MCL (10 ng/L) in all groundwater samples at concentrations between 14 and 64 ng/L and PFOS was detected above the recommended MCL (10 ng/L) in 11 of the 17 groundwater samples at concentrations between 12 and 22 ng/L. During the July 2018 sampling event, PFOA was detected above the recommended MCL in all groundwater samples at concentrations between 24 and 43 ng/L and PFOS was detected above the recommended MCL (10 ng/L) in all groundwater samples at concentrations between 13 and 23 ng/L. Additionally, PFOA was detected in the standing water in the drain inlet in the basement of the Gem Cleaners building at concentrations of 100 ng/L in April 2018 and 210 ng/L in July 2018; and PFOS was detected in the standing water in the drain inlet at concentrations of 130 ng/L in April 2018 and 230 ng/L in July 2018. Although the standing liquid was tinted green during both sampling events, apparently due to tracer dye previously utilized at the Site, the results of the analysis of the tracer dye samples revealed that PFOA and PFOS were either not detected or detected at estimated concentrations below the reporting limits.

Based on the review of the PFAS data, the compounds detected in the drain inlet samples have a different fingerprint than compounds detected in groundwater. Specifically, PFBA was detected at higher concentrations than PFOA in the drain inlet samples in comparison to the ratio of PFBA to PFOA detected in groundwater. If the drain inlet was the source of PFAS in groundwater, the PFOA/PFBA ratio would be similar or decrease between the drain sample and the groundwater samples since PFBA is more soluble/mobile than PFOA and would migrate at a faster rate into groundwater in comparison to PFOA. It is unlikely that the drain inlet is the source of PFAS in groundwater since the PFOA/PFBA ratio in groundwater is higher in comparison to the PFOA/PFBA ratio in the drain sample. Further, concentrations of PFOA and PFOS detected in the groundwater sample collected from MW-103, the monitoring well closest to the drain inlet, are not higher than the concentrations detected in monitoring wells further from the drain inlet. Concentrations of PFAS detected in the liquid in the drain inlet may be associated with cleaning solutions or floor coatings utilized in the Gem Cleaners building.

The concentrations and mixture of PFAS in groundwater were relatively consistent across the Site during both sampling events which is an indication that the PFAS concentrations may be representative of background concentrations in the area of the Site.

8.4 Vapor Intrusion

Co-located sub-slab vapor and indoor air samples were collected from four structures located in the Site Investigation Area, including the Gem Cleaners Site building. One additional indoor air sample was collected on the first floor of one structure (Promise Nails and Spa), and one ambient air sample was collected during the vapor intrusion sampling. Results of the analyses of the indoor air samples were compared to the AGVs in the NYSDOH Vapor Intrusion Guidance Document. There were no VOCs detected in indoor air at concentrations above the NYSDOH AGVs.

Xylenes and ethylbenzene were detected in sub-slab vapor and/or indoor air in the Gem Cleaners building, Promise Nails and Spa, residential building, and Georgette Hair & Co. Nail Salon. In the residential building, ethylbenzene, o-xylene and m,p-xylenes were detected in the indoor air sample at estimated concentrations below the reporting limits and were not detected in the sub-slab vapor sample. The highest concentrations of these compounds in sub-slab vapor and indoor air were detected in the Promise Nails and Spa. The concentrations of xylenes and ethylbenzene detected in indoor air in the Site Investigation Area are within the range of published background levels. There is no known source of the elevated concentrations of these compounds in groundwater and soil since ethylbenzene, o-xylene and m,p-xylenes were not detected in groundwater and were either not detected or detected at low levels below the Unrestricted Use SCOs in the soil samples collected in the Site Investigation Area; however, considering that the highest concentrations of these compounds were detected in the Promise Nails and Spa building, it is unlikely that Gem Cleaners is the source.

The results of analyses of the sub-slab vapor and indoor air samples were also evaluated with respect to the matrices in the NYSDOH Vapor Intrusion Guidance Document. The comparison to the matrices indicates that no further action is recommended for the Gem Cleaners building (84 North Village Avenue), Georgette & Co. Hair Salon (78 North Village Avenue), and the residential building (23 Washington Street). Further action including identifying the source(s) and resampling or mitigation is recommended to address carbon tetrachloride in the indoor air sample collected from the basement of the Promise Nails and Spa building. Since carbon tetrachloride was not detected in the sub-slab vapor sample collected beneath the structure, the indications are that carbon tetrachloride detected in the indoor air sample may be attributable to indoor and/or outdoor air sources rather than vapor intrusion. The results indicate that vapor intrusion is not a concern in the four structures.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of the RI was to further characterize soil and groundwater at and associated with the Gem Cleaners Site. The scope of the RI also included vapor intrusion sampling in the Gem Cleaners building and in three off-site structures near the Gem Cleaners building; and collection and laboratory analysis of sediment and water from a drain inlet and sump in the basement of the Gem Cleaners building. The RI field investigation activities were implemented between March 2018 and March 2019. The following conclusions and recommendations are based on the findings of the RI, as well as information obtained from prior investigations at the Site.

CONCLUSIONS

- **Surface and Subsurface Characteristics:** Based on the information gathered during the RI and previous investigations, the subsurface geology consists primarily of intermixed layers of sand and silty sand extending to a maximum depth of approximately 100 feet bgs. A clay layer was encountered in two borings advanced during the RI at depths ranging from approximately 36 to 40 feet and from approximately 70 to 81 feet. Bedrock is expected to be at depths greater than 700 feet bgs. The results of the gauging events completed in April and July 2018 indicated that in the Site Investigation Area, groundwater surface elevations in the shallow monitoring wells varied from approximately 8.56 to 9.9 feet and the inferred predominant groundwater flow direction in the shallow overburden was generally towards the west-southwest.
- **Contaminants of Concern**: The primary contaminant of concern for the Site was identified as PCE. PCE was detected in shallow and intermediate-depth groundwater downgradient of the Gem Cleaners building at concentrations of up to 52 µg/L. PCE was not detected at a concentration above the Class GA Value in any of the deep groundwater monitoring wells during the RI. Also note that PCE was not detected at elevated concentrations in soil samples collected at the Site and based on comparison to the matrices in the SVI Guidance Document, vapor intrusion is not a concern in the four structures sampled. PFAS were detected in groundwater and in the standing liquid in the drain inlet in the Gem Cleaners building at concentrations above the recommended MCL.
- **Extent of Contamination:** As stated above, PCE was not detected in subsurface soil at concentrations above the Unrestricted Use SCO during the RI. During prior investigations, PCE was detected at elevated concentrations in subsurface soil at one location, the exterior stairwell drain; however, in 1997 the drain was remediated and soil containing elevated PCE was excavated and disposed of off-Site. PCE was detected in groundwater in wells directly south and southwest of the Gem Cleaners building, which is consistent with inferred predominant shallow groundwater flow direction (generally towards the west-southwest). PCE was not detected at elevated concentrations

in deep groundwater monitoring wells MW-1B, MW-101D, MW-107D and MW-110D. The results of the analysis of natural attenuation parameters indicates that the conditions in the Site Investigation area are not favorable for the degradation of PCE. However, indications are that elevated concentrations of PCE in groundwater are likely not migrating beyond the Site Investigation Area.

- **Contaminant Sources:** Based on the findings of the RI, PCE detected in groundwater in the Site Investigation Area is likely attributable to historic dry cleaner operations. A prior investigation concluded that the exterior stairwell drain inlet, which historically received waste from the Gem Cleaners vacuum system vent, was likely the potential source of groundwater contamination. Based on the results of the RI, there does not appear to be an existing significant source of chlorinated volatile organic compounds (VOCs) impacting the Site Investigation Area. There is no known source of the PFAS detected in the sample collected from the standing water in the drain inlet; however, it is unlikely that the drain inlet is the source of PFAS in groundwater since the compounds detected in the drain inlet samples have a different fingerprint than compounds detected in groundwater and the concentrations of PFAS detected in the monitoring well closest to the drain inlet are consistent with the concentrations of PFAS detected in monitoring wells throughout the Site Investigation Area. PFAS concentrations in groundwater may be representative of background concentrations in the area of the Site.
- **Exposure Pathways:** The qualitative human health exposure assessment indicates that the exposure pathways for groundwater ingestion by Site occupants are incomplete. However, there is a potential for exposure pathways to become complete based on possible dermal contact with soil or groundwater, or inhalation of dust, if construction or maintenance activities occur at the Site. Additionally, there is potential for exposure to contaminated standing liquid in the drain inlet in the Gem Cleaners building; however, the building is currently unoccupied. Potential exposure to contaminated standing liquid in the drain inlet may be reduced by disposing of the standing water and closure/decommissioning of the drainage structure.

RECOMMENDATIONS

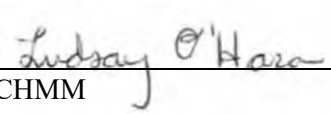
Based on the results of the RI, there does not appear to be an existing significant source of chlorinated VOCs impacting the Site Investigation Area. Closure of the drainage structure in the basement of the Gem Cleaners building, to eliminate the potential for exposure to PFAS, and periodic monitoring of groundwater for VOCs should be considered as well as implementation of institutional controls to minimize the potential for exposure to groundwater and subsurface soil.

10.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

TRC Engineers, Inc. (TRC) completed a Remedial Investigation (RI) for the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER). The focus of the RI was impacts from the Gem Cleaners Site located in Rockville Centre, New York. The RI was performed in accordance with the Work Assignment No. D007620-36 Notice to Proceed dated December May 1, 2017, and the Department-approved Scope of Work dated January 17, 2018.

TRC Engineers, Inc.

Prepared By:
Emily Ebert
Project Manager

Prepared By: 
Lindsay O'Hara, CHMM
Senior Project Manager

I, David S. Glass, certify that I am currently a New York State registered professional engineer and that this Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

David S. Glass, P.E., P.G.
Vice President

11.0 REFERENCES

- 6 NYCRR 375, Remedial Program Requirements.
- 6 NYCRR 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.
- Bedrock Geologic Map of New York, Lower Hudson Sheet, New York State Museum, 1970, reprinted 1995.
- Energy & Environmental Analysts, Inc. (EAA), Phase II Environmental Subsurface Investigation, 84 North Village Avenue, Rockville Centre, New York, May 1995.
- General Consolidated Industries, Inc. (GCI), Phase II Subsurface Investigation of 84 North Village Avenue, Rockville Centre, New York, February 2018.
- New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER)-10, Technical Guidance for Site Investigation and Remediation, May 2010.
- NYSDEC Division of Environmental Remediation (DER) Bureau of Program Management Work Assignment (WA) Notice to Proceed, May 1, 2017.
- New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.
- O'Brien & Gere Engineers, Inc., Draft Preliminary Site Characterization, Gem Cleaners, 84 North Village Avenue, Rockville Centre, New York, October 6, 2006.
- P.W. Grosser Consulting Engineer & Hydrogeologist, P.C. (PWGC), Site Assessment & Remediation Report, Gem Cleaners, 84 N. Village, Rockville Centre, NY, August 21, 1997.
- Surficial Geologic Map of New York, Lower Hudson Sheet, New York State Museum, 1970.
- TRC Engineers, Inc. Standby Engineering Contract Work Assignment (WA) No. D007620-19, NYSDEC-approved Scope of Work dated January 17, 2018.
- TRC Engineers, Inc., "Data Usability Summary Reports (DUSRs) for Gem Cleaners, NYSDEC Site No. 130082", May 2018, June 2018, and August 2018.

TABLES

Table 1
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Soil/Sediment for Volatile Organic Compounds

			SAMPLE NAME	GC-SB-101(SO)-3-5		GC-SB-101(SO)-15.5-17.5		GC-MW-101D(SO)-14-15		GC-MW-101D(SO)-99.2-100		GC-MW-102(SO)-3-5		GC-MW-102(SO)-9-11		GC-MW-103(SO)-3-5		GC-MW-103(SO)-12-14	
			LABORATORY SAMPLE ID	460-152211-1		460-152211-2		460-153682-1		460-153878-1		460-152211-3		460-152211-4		460-152211-5		460-152331-1	
			SAMPLE DEPTH (FT BTOS OR FT BGS)	3 - 5 FT BGS		15.5 - 17.5 FT BGS		14 - 15 FT BGS		99.2 - 100 FT BGS		3 - 5 FT BGS		9 - 11 FT BGS		3 - 5 FT BTOS		12 - 14 FT BTOS	
			SAMPLING DATE	3/19/2018		3/19/2018		4/9/2018		4/11/2018		3/19/2018		3/19/2018		3/19/2018		3/20/2018	
			SAMPLE MATRIX	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			UNITS	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Industrial Use SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	1,000	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,1,2-Trichloroethane	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,1-Dichloroethane	0.27	240	480	0.00092	UJ	0.00095	UJ	0.00093	U	0.00095	U	0.00092	UJ	0.00097	UJ	0.00092	UJ	0.0010	U
1,1-Dichloroethene	0.33	500	1,000	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,2-Dichlorobenzene	1.1	500	1,000	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,2-Dichloroethane	0.02	30	60	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,2-Dichloropropane	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,3-Dichlorobenzene	2.4	280	560	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,4-Dichlorobenzene	1.8	130	250	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
1,4-Dioxane	0.1	130	250	0.018	UJ	0.019	UJ	0.019	U	0.019	U	0.018	UJ	0.019	UJ	0.018	UJ	0.020	U
2-Butanone (MEK)	0.12	NC	NC	0.0046	UJ	0.0023	J	0.0047	UJ	0.0028	J	0.0046	UJ	0.0021	J	0.003	J	0.0022	J
2-Hexanone	NC	NC	NC	0.0046	U	0.0047	UJ	0.0047	U	0.0047	U	0.0046	U	0.0048	U	0.0046	UJ	0.0051	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.0046	U	0.0047	UJ	0.0047	U	0.0047	U	0.0046	U	0.0048	U	0.0046	UJ	0.0051	U
Acetone	0.05	500	1,000	0.022		0.034	J-	0.0047	UJ	0.017		0.0092		0.015		0.032	J+	0.018	
Benzene	0.06	44	89	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Bromoform	NC	NC	NC	0.00092	U	0.00095	U	0.00093	UJ	0.00095	UJ	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Bromomethane	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Carbon disulfide	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.00057	J
Carbon tetrachloride	0.76	22	44	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Chlorobenzene	1.1	500	1,000	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Chlorobromomethane	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Chlorodibromomethane	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Chloroethane	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Chloroform	0.37	350	700	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Chloromethane	NC	NC	NC	0.00092	UJ	0.00095	UJ	0.00093	U	0.00095	U	0.00092	UJ	0.00097	UJ	0.00092	UJ	0.0010	U
cis-1,2-Dichloroethene	0.25	500	1,000	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
cis-1,3-Dichloropropene	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Cyclohexane	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Dichlorobromomethane	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Dichlorodifluoromethane	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	UJ	0.00095	UJ	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Ethylbenzene	1	390	780	0.00029	J	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Ethylene Dibromide	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Isopropylbenzene	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Methyl acetate	NC	NC	NC	0.0046	UJ	0.0047	UJ	0.0047	U	0.0047	U	0.0046	UJ	0.0048	UJ	0.0046	UJ	0.0051	U
Methyl tert-butyl ether	0.93	500	1,000	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Methylcyclohexane	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Methylene Chloride	0.05	500	1,000	0.00043	J	0.0024		0.00093	U	0.00023	J	0.00033	J	0.00099		0.0065	J+	0.00045	U
m-Xylene & p-Xylene[(1)]	0.26	500	1,000	0.0012		0.00039	J	0.00031	J	0.00088	J	0.00032	J	0.00036	J	0.00073	J	0.00035	J
o-Xylene[(1)]	0.26	500	1,000	0.00037	J	0.00015	J	0.00093	U	0.00030	J	0.00012	J	0.00017	J	0.00031	J	0.00016	J
Styrene	NC	NC	NC	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Tetrachloroethene	1.3	150	300	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00083	J	0.0042		0.00092	UJ	0.00022	J
Toluene	0.7	500	1,000	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
trans-1,2-Dichloroethene	0.19	500	1,000	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
trans-1,3-Dichloropropene	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Trichloroethene	0.47	200	400	0.00092	U	0.00095	UJ	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Trichlorofluoromethane	NC	NC	NC	0.00092	U	0.00095	U	0.00093	U	0.00095	U	0.00092	U	0.00097	U	0.00092	UJ	0.0010	U
Vinyl chloride	0.02	13	27	0.00092	UJ	0.00095	UJ	0.00093	U	0.00095	U	0.00092	UJ	0.00097	UJ	0.00092	UJ	0.0010	U
Total TICs	NC	NC	NC	ND		0.00011	J	ND		ND		0.0082	JN	0.017	JN	0.007	JN	3.61	JN

Notes:
mg/kg - milligrams per kilogram (dry weight).
B - Compound was found in the blank and sample.
BGS - Below ground surface
BTOS - Below top of floor slab
FT - Feet
H - Sample was prepared or analyzed beyond the specified holding time
ID - Identification
N - Indicates the presumptive evidence of a compound
J - Estimated value
J- - The result is an estimated quantity, but the result may be biased low.
J+ - The result is an estimated quantity, but the result may be biased high.
NC - No criterion
ND - Not detected
NYSDEC - New York State Department of Environmental Conservation
Q - Qualifier
RL - Reporting Limit
SCO - Soil Cleanup Objective
TICs - Tentatively Identified Compounds
U - Compound was not detected at specified quantitation limit
Bold text and green shading indicates result above Unrestricted Use SCO
(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 1
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Soil/Sediment for Volatile Organic Compounds

			SAMPLE NAME	GC-MW-103(SO)-15-17		GC-MW-104(SO)-0.5-2.5		GC-MW-104(SO)-7-9		GC-MW-105(SO)-0.5-2.5		GC-MW-105(SO)-7-9		GC-MW-106(SO)-15-17		GC-MW-107D(SO)-15-17		GC-MW-107D(SO)-97-99	
			LABORATORY SAMPLE ID	460-152331-2		460-152331-3		460-152331-4		460-152331-5		460-152331-6		460-153163-1		460-152604-2		460-153022-1	
			SAMPLE DEPTH (FT BTOS OR FT BGS)	15 - 17 FT BTOS		0.5 - 2.5 FT BTOS		7 - 9 FT BTOS		0.5 - 2.5 FT BTOS		7 - 9 FT BTOS		15 - 17 FT BGS		15 - 17 FT BGS		97 - 99 FT BGS	
			SAMPLING DATE	3/20/2018		3/20/2018		3/20/2018		3/20/2018		3/20/2018		4/3/2018		3/26/2018		3/29/2018	
			SAMPLE MATRIX	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			UNITS	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Industrial Use SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	1,000	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,1,2-Trichloroethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,1-Dichloroethane	0.27	240	480	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,1-Dichloroethene	0.33	500	1,000	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	UJ	0.00092	U
1,2-Dichlorobenzene	1.1	500	1,000	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,2-Dichloroethane	0.02	30	60	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,2-Dichloropropane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,3-Dichlorobenzene	2.4	280	560	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,4-Dichlorobenzene	1.8	130	250	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
1,4-Dioxane	0.1	130	250	0.022	U	0.021	U	0.018	U	0.018	U	0.019	U	0.019	U	0.019	U	0.018	U
2-Butanone (MEK)	0.12	NC	NC	0.0056	U	0.0027	J	0.0028	J	0.0022	J	0.0029	J	0.0022	J	0.0048	U	0.0015	J
2-Hexanone	NC	NC	NC	0.0056	U	0.0051	U	0.0046	U	0.0046	U	0.0048	U	0.0048	U	0.0048	UJ	0.0046	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.0056	U	0.0051	U	0.0046	U	0.0046	U	0.0048	U	0.0048	U	0.0048	UJ	0.0046	U
Acetone	0.05	500	1,000	0.022		0.030		0.031		0.019		0.029		0.031		0.050		0.016	
Benzene	0.06	44	89	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Bromoform	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Bromomethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Carbon disulfide	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Carbon tetrachloride	0.76	22	44	0.0011	UJ	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Chlorobenzene	1.1	500	1,000	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Chlorobromomethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Chlorodibromomethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Chloroethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Chloroform	0.37	350	700	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Chloromethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
cis-1,2-Dichloroethene	0.25	500	1,000	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
cis-1,3-Dichloropropene	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Cyclohexane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Dichlorobromomethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Dichlorodifluoromethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	UJ
Ethylbenzene	1	390	780	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Ethylene Dibromide	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Isopropylbenzene	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Methyl acetate	NC	NC	NC	0.0056	U	0.0051	U	0.0046	U	0.0046	U	0.0048	U	0.0048	U	0.0048	U	0.0046	U
Methyl tert-butyl ether	0.93	500	1,000	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Methylcyclohexane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Methylene Chloride	0.05	500	1,000	0.0011		0.0010	U	0.00023	J	0.00028	U	0.00022	U	0.00029	J	0.0042		0.00026	U
m-Xylene & p-Xylene[1]	0.26	500	1,000	0.00046	J	0.00030	J	0.00041	J	0.00038	J	0.00053	J	0.00038	J	0.00027	J	0.00043	J
o-Xylene[1]	0.26	500	1,000	0.00024	J	0.00017	J	0.00021	J	0.00019	J	0.00023	J	0.00020	J	0.00011	J	0.00014	J
Styrene	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Tetrachloroethene	1.3	150	300	0.0011	U	0.00021	J	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Toluene	0.7	500	1,000	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
trans-1,2-Dichloroethene	0.19	500	1,000	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
trans-1,3-Dichloropropene	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Trichloroethene	0.47	200	400	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Trichlorofluoromethane	NC	NC	NC	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Vinyl chloride	0.02	13	27	0.0011	U	0.0010	U	0.00091	U	0.00092	U	0.00096	U	0.00096	U	0.00096	U	0.00092	U
Total TICs	NC	NC	NC	0.0182	J	ND		ND		ND		ND		ND		0.0088	J	ND	

Notes:
mg/kg - milligrams per kilogram (dry weight).
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Bold text and green shading indicates result above Unrestricted Use SCO
(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 1
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Soil/Sediment for Volatile Organic Compounds

			SAMPLE NAME	**GC-MW-108(SO)-15-17**		**GC-MW-108(SO)-33-35**		**GC-MW-108(SO)-59-60.5**		**GC-MW-109M(SO)-15-17**		**GC-MW-109M(SO)-33-35**		**GC-MW-110D(SO)-15-17**		**GE-MW-110D(SO)-(69-70)**		**GC-Drain-02(SO)**		**GC-SO-101(SO)**		**GC-Sump(SO)**	
			LABORATORY SAMPLE ID	460-153163-2		460-153254-1		460-153254-2		460-153018-1		460-153082-1		460-153389-1		460-153515-1		460-152331-7		460-154849-1		460-154849-2	
			SAMPLE DEPTH (FT BTOS OR FT BGS)	15 - 17 FT BGS		33 - 35 FT BGS		59 - 60.5 FT BGS		15-17 BGS		33 - 35 FT BGS		15 - 17 FT BGS		69 - 70 FT BGS		1 FT BTOS		1 FT BTOS		1 FT BTOS	
			SAMPLING DATE	4/3/2018		4/4/2018		4/4/2018		4/3/2018		4/2/2018		4/5/2018		4/6/2018		3/20/2018		4/26/2018		4/26/2018	
			SAMPLE MATRIX	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil/Sediment		Soil/Sediment		Soil/Sediment	
			UNITS	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Industrial Use SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	1,000	0.0010	U	0.0010	UJ	0.00056	UJ	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	UJ	0.0035	U	0.00092	U	0.030	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,1,2-Trichloroethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,1-Dichloroethane	0.27	240	480	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,1-Dichloroethene	0.33	500	1,000	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,2-Dichlorobenzene	1.1	500	1,000	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,2-Dichloroethane	0.02	30	60	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,2-Dichloropropane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,3-Dichlorobenzene	2.4	280	560	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,4-Dichlorobenzene	1.8	130	250	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
1,4-Dioxane	0.1	130	250	0.020	U	0.020	U	0.011	U	0.013	UJ	0.020	U	0.017	U	0.014	U	0.070	UJ	0.018	U	0.60	U
2-Butanone (MEK)	0.12	NC	NC	0.0024	J	0.0021	J	0.0016	J	0.0032	UJ	0.0026	J	0.0020	J	0.0034	UJ	**0.18**		0.0046	U	0.15	U
2-Hexanone	NC	NC	NC	0.0051	U	0.0051	U	0.0028	U	0.0032	UJ	0.0050	U	0.0042	U	0.0034	U	0.018	U	0.0046	U	0.15	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.0051	U	0.0051	U	0.0028	U	0.0032	UJ	0.0050	U	0.0042	U	0.0034	U	0.0037	J	0.0046	U	0.15	U
Acetone	0.05	500	1,000	0.041		0.040		0.020		0.018	J-	0.036		0.018	J	0.0045	U	**0.80**		0.0046	U	0.15	U
Benzene	0.06	44	89	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Bromoform	NC	NC	NC	0.0010	UJ	0.0010	UJ	0.00056	UJ	0.00063	UJ	0.0010	UJ	0.00085	U	0.00068	UJ	0.0035	U	0.00092	U	0.030	U
Bromomethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Carbon disulfide	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0087		0.00092	U	0.030	U
Carbon tetrachloride	0.76	22	44	0.0010	UJ	0.0010	UJ	0.00056	UJ	0.00063	UJ	0.0010	UJ	0.00085	U	0.00068	UJ	0.0035	U	0.00092	U	0.030	U
Chlorobenzene	1.1	500	1,000	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Chlorobromomethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Chlorodibromomethane	NC	NC	NC	0.0010	UJ	0.0010	U	0.00056	U	0.00063	UJ	0.0010	UJ	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Chloroethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Chloroform	0.37	350	700	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Chloromethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
cis-1,2-Dichloroethene	0.25	500	1,000	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.011		0.00092	U	0.030	U
cis-1,3-Dichloropropene	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Cyclohexane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Dichlorobromomethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Dichlorodifluoromethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	UJ	0.030	UJ
Ethylbenzene	1	390	780	0.0010	U	0.0010	U	0.00056	U	0.00025	J	0.0010	U	0.00085	U	0.00068	U	0.00075	J	0.00092	U	0.030	U
Ethylene Dibromide	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Isopropylbenzene	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Methyl acetate	NC	NC	NC	0.0051	UJ	0.0051	UJ	0.0028	UJ	0.0032	UJ	0.0050	UJ	0.0042	U	0.0034	U	0.018	U	0.0046	U	0.15	U
Methyl tert-butyl ether	0.93	500	1,000	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Methylcyclohexane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00035	J	0.0010	U	0.00085	U	0.00068	U	0.00083	J	0.00092	U	0.030	U
Methylene Chloride	0.05	500	1,000	0.00024	J	0.00086	J	0.00027	J	0.00023	J	0.0020		0.00024	U	0.00065	J	0.0035	U	0.00054	J	0.020	J
m-Xylene & p-Xylene[(1)]	0.26	500	1,000	0.00040	J	0.00044	J	0.00020	J	0.00087	J-	0.00030	J	0.00019	J	0.00021	J	0.0019	J	0.00018	J	0.022	J
o-Xylene[(1)]	0.26	500	1,000	0.00015	J	0.00017	J	0.000080	J	0.00035	J	0.00015	J	0.00085	U	0.000094	J	0.00075	J	0.00092	U	0.0099	J
Styrene	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Tetrachloroethene	1.3	150	300	0.0010	U	0.014		0.00056	U	0.00063	UJ	0.0014		0.00085	U	0.00068	U	0.0011	J	0.00092	U	0.030	U
Toluene	0.7	500	1,000	0.0010	U	0.0010	U	0.00056	U	0.00048	J	0.0010	U	0.00085	U	0.00068	U	0.0028	J	0.00092	U	0.030	U
trans-1,2-Dichloroethene	0.19	500	1,000	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
trans-1,3-Dichloropropene	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Trichloroethene	0.47	200	400	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.00015	J	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Trichlorofluoromethane	NC	NC	NC	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Vinyl chloride	0.02	13	27	0.0010	U	0.0010	U	0.00056	U	0.00063	UJ	0.0010	U	0.00085	U	0.00068	U	0.0035	U	0.00092	U	0.030	U
Total TICs	NC	NC	NC	ND		ND		ND		ND		0.1352		ND		ND		0.369	JN	ND		ND	

Notes:
mg/kg - milligrams per kilogram (dry weight).
B - Compound was found in the blank and sample.
BGS - Below ground surface
BTOS - Below top of floor slab
FT - Feet
H - Sample was prepared or analyzed beyond the specified holding time
ID - Identification
N - Indicates the presumptive evidence of a compound
J - Estimated value
J- - The result is an estimated quantity, but the result may be biased low.
J+ - The result is an estimated quantity, but the result may be biased high.
NC - No criterion
ND - Not detected
NYSDEC - New York State Department of Environmental Conservation
Q - Qualifier
RL - Reporting Limit
SCO - Soil Cleanup Objective
TICs - Tentatively Identified Compounds
U - Compound was not detected at specified quantitation limit
Bold text and green shading indicates result above Unrestricted Use SCO
(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 2
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Volatile Organic Compounds

Sample Name:		GC-MW-DRAIN(WG)		GC-MW-101(WG)				GC-MW-101D(WG)		GC-MW-102(WG)				GC-MW-103(WG)			
Lab Sample ID:		460-154781-8		460-154925-4		460-161054-1		160-154925-5		460-154925-1		460-161054-2		460-154781-5		460-161054-3	
Sample Date:		4/25/2018		4/26/2018		7/23/2018		4/27/2018		4/26/2018		7/23/2018		4/25/2018		7/23/2018	
Sample Matrix:		W		GW		GW		GW		GW		GW		GW		GW	
Units:		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**Class GA Value* (µg/L)**	Result		Result		Result		Result		Result		Result		Result		Result	
1,1,1-Trichloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2,2-Tetrachloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloro- 1,2,2-trifluoroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloroethane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,4-Trichlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromo-3-chloropropane	0.04	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	UJ	1.0	U	1.0	U	1.0	U
1,2-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloroethane	0.6	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloropropane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dioxane	NC	0.2	U	0.21	U	50	UJ	0.21	U	0.21	U	50	UJ	0.21	U	50	UJ
2-Butanone (MEK)	50	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
2-Hexanone	50	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	UJ	5.0	U
4-Methyl-2-pentanone	NC	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Acetone	50	5.0	U	2.1	U	5.0	U	3.6	U	2.3	U	5.0	U	5.0	U	5.0	U
Benzene	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromoform	50	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	UJ	1.0	U	1.0	U	1.0	U
Bromomethane	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
Carbon disulfide	60	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Carbon tetrachloride	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U
Chlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorobromomethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorodibromomethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U

Table 2
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Volatile Organic Compounds

Sample Name:		GC-MW-DRAIN(WG)		GC-MW-101(WG)				GC-MW-101D(WG)		GC-MW-102(WG)				GC-MW-103(WG)			
Lab Sample ID:		460-154781-8		460-154925-4		460-161054-1		160-154925-5		460-154925-1		460-161054-2		460-154781-5		460-161054-3	
Sample Date:		4/25/2018		4/26/2018		7/23/2018		4/27/2018		4/26/2018		7/23/2018		4/25/2018		7/23/2018	
Sample Matrix:		W		GW		GW		GW		GW		GW		GW		GW	
Units:		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**Class GA Value* (µg/L)**	Result		Result		Result		Result		Result		Result		Result		Result	
Chloroethane	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U
Chloroform	7	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	0.35	J	1.0	U	1.0	U
Chloromethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U
cis-1,2-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,3-Dichloropropene	0.4[(a)]	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Cyclohexane	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dibromochloromethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dichlorodifluoromethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U
Ethylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Ethylene Dibromide (1,2-Dibromoethane)	0.0006	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methyl acetate	NC	5.0	U	5.0	U	5.0	U	5.0	UJ	5.0	U	5.0	UJ	5.0	U	5.0	UJ
Methyl tert-butyl ether	10	1.0	U	1.0	U	1.0	U	0.18	J	1.0	U	1.0	U	1.0	U	1.0	U
Methylcyclohexane	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methylene chloride	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
m-Xylene & p-Xylene [(b)]	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
o-Xylene[(b)]	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Styrene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Tetrachloroethene	5	0.14	J	0.22	J	1.0	U	1.0	U	1.4		1.3		1.2		1.0	
Toluene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,2-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,3-Dichloropropene	0.4[(a)]	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichlorofluoromethane	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U
Vinyl chloride	2	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U
Total Concentration	NC	0.14		0.22		0		0.18		1.4		1.65		1.2		1.0	
TICs	NC	ND		ND		ND		ND		ND		ND		ND		ND	

Notes:
µg/L - micrograms per liter
ID - Identification
J - Estimated value
NC - No criterion
ND - Not detected
U - Compound was not detected at specified quantitation limit
TICs - Tentatively Identified Compounds
Bold text and green shading indicates result above Class GA Value
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water

(a) 0.4 µg/L applies to the sum of cis- and trans-1,3-dichloropropene
(b) There is no Standard or Guidance Value for total xylenes. The Standard for o-xylene, m-xylene, and p-xylene is 5 µg/L

Table 2
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Volatile Organic Compounds

Sample Name:		GC-MW-104(WG)				GC-MW-105(WG)				GC-MW-106(WG)				GC-MW-107(WG)				GC-MW-107D(WG)	
Lab Sample ID:		460-154781-6		460-161054-4		460-154781-7		460-161054-5		460-154925-6		460-161054-6		460-154781-1		460-161178-1		460-154781-2	
Sample Date:		4/25/2018		7/23/2018		4/25/2018		7/23/2018		4/26/2018		7/23/2018		4/25/2018		7/24/2018		4/25/2018	
Sample Matrix:		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Units:		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**Class GA Value* (µg/L)**	Result		Result		Result		Result		Result		Result		Result		Result		Result	
1,1,1-Trichloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2,2-Tetrachloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloro- 1,2,2-trifluoroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloroethane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,4-Trichlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromo-3-chloropropane	0.04	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloroethane	0.6	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloropropane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dioxane	NC	0.21	U	50	UJ	0.2	U	50	UJ	0.21	U	50	UJ	0.20	U	50	U	0.21	U
2-Butanone (MEK)	50	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
2-Hexanone	50	5.0	UJ	5.0	U	5.0	UJ	5.0	U	5.0	U	5.0	U	5.0	UJ	5.0	U	5.0	UJ
4-Methyl-2-pentanone	NC	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Acetone	50	5.0	U	5.0	U	5.0	U	5.0	U	2.8	U	5.0	U	5.0	U	5.0	U	5.0	U
Benzene	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromoform	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U
Bromomethane	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
Carbon disulfide	60	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Carbon tetrachloride	5	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ
Chlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorobromomethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorodibromomethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U

Table 2
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Volatile Organic Compounds

Sample Name:		GC-MW-104(WG)				GC-MW-105(WG)				GC-MW-106(WG)				GC-MW-107(WG)				GC-MW-107D(WG)	
Lab Sample ID:		460-154781-6		460-161054-4		460-154781-7		460-161054-5		460-154925-6		460-161054-6		460-154781-1		460-161178-1		460-154781-2	
Sample Date:		4/25/2018		7/23/2018		4/25/2018		7/23/2018		4/26/2018		7/23/2018		4/25/2018		7/24/2018		4/25/2018	
Sample Matrix:		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Units:		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**Class GA Value* (µg/L)**	Result		Result		Result		Result		Result		Result		Result		Result		Result	
Chloroethane	5	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ
Chloroform	7	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloromethane	5	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ
cis-1,2-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,3-Dichloropropene	0.4[(a)]	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Cyclohexane	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dibromochloromethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dichlorodifluoromethane	5	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ
Ethylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Ethylene Dibromide (1,2-Dibromoethane)	0.0006	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methyl acetate	NC	5.0	U	5.0	UJ	5.0	U	5.0	UJ	5.0	U	5.0	UJ	5.0	U	5.0	U	5.0	U
Methyl tert-butyl ether	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	0.20	J
Methylcyclohexane	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methylene chloride	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
m-Xylene & p-Xylene [(b)]	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
o-Xylene[(b)]	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Styrene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Tetrachloroethene	5	0.34	J	0.36	J	1.0	U	1.0	U	1.0	U	1.0	U	**8.8**		**9.2**		1.0	U
Toluene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,2-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,3-Dichloropropene	0.4[(a)]	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichlorofluoromethane	5	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ
Vinyl chloride	2	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ
Total Concentration	NC	0.34		0.36		0		0		0		0		8.8		9.2		0.2	
TICs	NC	ND		ND		ND		ND		ND		ND		ND		ND		ND	

Notes:
µg/L - micrograms per liter
ID - Identification
J - Estimated value
NC - No criterion
ND - Not detected
U - Compound was not detected at specified quantitation limit
TICs - Tentatively Identified Compounds
Bold text and green shading indicates result above Class GA Value
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water

(a) 0.4 µg/L applies to the sum of cis- and trans-1,3-dichloropropene
(b) There is no Standard or Guidance Value for total xylenes. The Standard for o-xylene, m-xylene, and p-xylene is 5 µg/L

Table 2
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Volatile Organic Compounds

Sample Name:		GC-MW-108(WG)				GC-MW-109(WG)				GC-MW-109M(WG)				GC-MW-110(WG)				GC-MW-110D(WG)	
Lab Sample ID:		460-154781-3		460-161178-2		460-154925-2		460-161178-3		460-154925-3		460-161178-4		460-154925-10		460-161178-5		460-154925-11	
Sample Date:		4/25/2018		7/24/2018		4/26/2018		7/24/2018		4/26/2018		7/24/2018		4/26/2018		7/24/2018		4/26/2018	
Sample Matrix:		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Units:		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**Class GA Value* (µg/L)**	Result		Result		Result		Result		Result		Result		Result		Result		Result	
1,1,1-Trichloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2,2-Tetrachloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloro- 1,2,2-trifluoroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloroethane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,4-Trichlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromo-3-chloropropane	0.04	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	UJ
1,2-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloroethane	0.6	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloropropane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dioxane	NC	0.20	U	50	U	0.21	U	50	U	0.21	U	50	U	0.21	U	50	U	0.21	U
2-Butanone (MEK)	50	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
2-Hexanone	50	5.0	UJ	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
4-Methyl-2-pentanone	NC	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Acetone	50	5.0	U	5.0	U	1.6	U	5.0	U	2.4	U	5.0	U	2.3	U	5.0	U	5.0	U
Benzene	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromoform	50	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U
Bromomethane	5	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	UJ
Carbon disulfide	60	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Carbon tetrachloride	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorobromomethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorodibromomethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U

Table 2
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Volatile Organic Compounds

Sample Name:		GC-MW-108(WG)				GC-MW-109(WG)				GC-MW-109M(WG)				GC-MW-110(WG)				GC-MW-110D(WG)	
Lab Sample ID:		460-154781-3		460-161178-2		460-154925-2		460-161178-3		460-154925-3		460-161178-4		460-154925-10		460-161178-5		460-154925-11	
Sample Date:		4/25/2018		7/24/2018		4/26/2018		7/24/2018		4/26/2018		7/24/2018		4/26/2018		7/24/2018		4/26/2018	
Sample Matrix:		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Units:		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**Class GA Value* (µg/L)**	Result		Result		Result		Result		Result		Result		Result		Result		Result	
Chloroethane	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroform	7	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloromethane	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,2-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,3-Dichloropropene	0.4[(a)]	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Cyclohexane	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dibromochloromethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dichlorodifluoromethane	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Ethylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Ethylene Dibromide (1,2-Dibromoethane)	0.0006	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methyl acetate	NC	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Methyl tert-butyl ether	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methylcyclohexane	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methylene chloride	5	1.0	U	1.0	U	1.0	U	1.0	U	0.24	J	1.0	U	1.0	U	1.0	U	1.0	U
m-Xylene & p-Xylene [(b)]	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
o-Xylene[(b)]	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Styrene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Tetrachloroethene	5	**35**		**6.0**		**12**		3.1		**52**		**16**		1.0	U	1.0	U	1.0	U
Toluene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,2-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,3-Dichloropropene	0.4[(a)]	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichlorofluoromethane	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Vinyl chloride	2	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Total Concentration	NC	35		6.0		12		3.1		52.24		16		0		0		0	
TICs	NC	ND		ND		ND		ND		ND		ND		ND		ND		ND	

Notes:
µg/L - micrograms per liter
ID - Identification
J - Estimated value
NC - No criterion
ND - Not detected
U - Compound was not detected at specified quantitation limit
TICs - Tentatively Identified Compounds
Bold text and green shading indicates result above Class GA Value
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water

(a) 0.4 µg/L applies to the sum of cis- and trans-1,3-dichloropropene
(b) There is no Standard or Guidance Value for total xylenes. The Standard for o-xylene, m-xylene, and p-xylene is 5 µg/L

Table 2
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Volatile Organic Compounds

Sample Name:		GC-MW-1B		GC-MW-2		GC-MW-3		GC-TB-20180425		GC-TB-20180426		GC-TB (20180723)		GC-TB (07242018)		GC-EQUIPMENT BLANK		GC-EQUIPMENT BLANK-2		GC-EQUIPMENT BLANK(072318)		GC-EQUIPMENT BLANK(072418)	
Lab Sample ID:		460-154781-4		460-154925-12		460-154925-7		460-154781-10		460-154925-8		460-161054-8		460-161178-7		460-154781-9		460-154925-9		460-161054-8		460-161178-6	
Sample Date:		4/25/2018		4/26/2018		4/26/2018		4/25/2018		4/26/2018		7/23/2018		7/24/2018		4/25/2018		4/26/2018		7/23/2018		7/24/2018	
Sample Matrix:		GW		GW		GW		DI Water		DI Water		DI Water		DI Water		DI Water		DI Water		DI Water		DI Water	
Units:		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**Class GA Value* (µg/L)**	Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result	
1,1,1-Trichloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2,2-Tetrachloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloro- 1,2,2-trifluoroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2-Trichloroethane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,3-Trichlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,4-Trichlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromo-3-chloropropane	0.04	1.0	U	1.0	UJ	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U
1,2-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloroethane	0.6	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloropropane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,3-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dioxane	NC	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	50	UJ	50	U	0.2	U	0.2	U	50	UJ	50	U
2-Butanone (MEK)	50	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	16		16	J	5.0	U	5.0	U	11		10	
2-Hexanone	50	5.0	UJ	5.0	U	5.0	U	5.0	UJ	5.0	U	5.0	U	5.0	UJ	5.0	UJ	5.0	U	5.0	U	5.0	U
4-Methyl-2-pentanone	NC	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Acetone	50	5.0	U	5.0	U	2.6	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	2.9	J	5.0	U	5.0	U
Benzene	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromoform	50	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	UJ	1.0	U	1.0	U
Bromomethane	5	1.0	UJ	1.0	U	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	U	1.0	UJ	1.0	UJ	1.0	UJ	1.0	U
Carbon disulfide	60	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Carbon tetrachloride	5	1.0	UJ	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	UJ	1.0	UJ	1.0	U	1.0	U	1.0	U
Chlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorobromomethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chlorodibromomethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U

Table 2
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Volatile Organic Compounds

Sample Name:		GC-MW-1B		GC-MW-2		GC-MW-3		GC-TB-20180425		GC-TB-20180426		GC-TB (20180723)		GC-TB (07242018)		GC-EQUIPMENT BLANK		GC-EQUIPMENT BLANK-2		GC-EQUIPMENT BLANK(072318)		GC-EQUIPMENT BLANK(072418)	
Lab Sample ID:		460-154781-4		460-154925-12		460-154925-7		460-154781-10		460-154925-8		460-161054-8		460-161178-7		460-154781-9		460-154925-9		460-161054-8		460-161178-6	
Sample Date:		4/25/2018		4/26/2018		4/26/2018		4/25/2018		4/26/2018		7/23/2018		7/24/2018		4/25/2018		4/26/2018		7/23/2018		7/24/2018	
Sample Matrix:		GW		GW		GW		DI Water		DI Water		DI Water		DI Water		DI Water		DI Water		DI Water		DI Water	
Units:		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**Class GA Value* (µg/L)**	Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result	
Chloroethane	5	1.0	UJ	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U
Chloroform	7	0.46	J	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloromethane	5	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	UJ	1.0	UJ	1.0	U	1.0	U	1.0	U
cis-1,2-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,3-Dichloropropene	0.4[a]	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Cyclohexane	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dibromochloromethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dichlorodifluoromethane	5	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	UJ	1.0	UJ	1.0	U	1.0	U	1.0	U
Ethylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	0.48	J	0.43	J	1.0	U	1.0	U	0.44	J	0.49	J
Ethylene Dibromide (1,2-Dibromoethane)	0.0006	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methyl acetate	NC	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	UJ	5.0	UJ	5.0	U	5.0	U	5.0	UJ	5.0	U
Methyl tert-butyl ether	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methylcyclohexane	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methylene chloride	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	0.59	J	0.60	J	0.84	J	1.0	U	0.67	J	0.54	J
m-Xylene & p-Xylene [b]	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.8		2.0		1.0	U	1.0	U	1.9		1.9	
o-Xylene[b]	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	0.79	J	0.81	J	1.0	U	1.0	U	0.80	J	0.77	J
Styrene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Tetrachloroethene	5	0.13	J	0.14	J	0.39	J	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Toluene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	0.33	J	1.0	U	1.0	U	1.0	U
trans-1,2-Dichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,3-Dichloropropene	0.4[a]	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichloroethene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Trichlorofluoromethane	5	1.0	UJ	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U
Vinyl chloride	2	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U	1.0	U	1.0	U
Total Concentration	NC	0.59		0.14		0.39		0		0		19.66		19.84		1.17		2.9		14.81		13.7	
TICs	NC	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	

Notes:
µg/L - micrograms per liter
ID - Identification
J - Estimated value
NC - No criterion
ND - Not detected
U - Compound was not detected at specified quantitation limit
TICs - Tentatively Identified Compounds
Bold text and green shading indicates result above Class GA Value
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water

(a) 0.4 µg/L applies to the sum of cis- and trans-1,3-dichloropropene
(b) There is no Standard or Guidance Value for total xylenes. The Standard for o-xylene, m-xylene, and p-xylene is 5 µg/L

Table 3
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Per- and Polyfluoroalkyl Substances

Sample Name:		GC-MW-DRAIN(WG)				GC-MW-101(WG)		GC-MW-101D(WG)		GC-MW-102(WG)		GC-MW-103(WG)		GC-MW-104(WG)				GC-MW-105(WG)				GC-MW-106(WG)	
Laboratory Sample ID:		320-38611-8		320-41405-5		320-38630-4		320-38630-5		320-38630-1		320-38611-5		320-38611-6		320-41405-1		320-38611-7		320-41405-2		320-38630-6	
Sample Date:		4/25/2018		7/23/2018		4/26/2018		4/26/2018		4/26/2018		4/25/2018		4/25/2018		7/23/2018		4/25/2018		7/23/2018		4/26/2018	
Sample Matrix:		W		W		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Units:		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L	
Per- and Polyfluoroalkyl Substances (PFAS)	**NewYork State Drinking Water Council Recommended MCL (ng/L)**	Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result	
6:2FTS	NC	18	UJ	6.2	J	19	UJ	20	UJ	20	UJ	19	UJ	18	UJ	2.3	J	26	B	4.1	J	20	UJ
8:2FTS	NC	20	U	170	U	20	U	20	U	21	U	18	U	18	U	18	U	18	U	24	U	20	U
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NC	13	J	11	J	20	U	20	U	21	U	18	U	18	U	18	U	18	U	24	U	20	U
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NC	27		28	J	20	U	20	U	21	U	18	U	18	U	18	U	18	U	24	U	20	U
Perfluorobutanesulfonic acid (PFBS)	NC	3.6	J	11	J	3.2		1.6	J	20		30		11		7.1		6.9		11		6	
Perfluorobutanoic acid (PFBA)	NC	120		180	J	4.6		4.7		3.1		4.0		12		8.9		8.8		11		9.6	
Perfluorodecanesulfonic acid (PFDS)	NC	2.0	U	17	U	2.0	U	2.0	U	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	2.4	U	2.0	U
Perfluorodecanoic acid (PFDA)	NC	20		28	J	1.2	J	2.0	U	1.7	J	1.6	J	1.6	J	1.3	J	1.5	J	1.4	J	1.4	J
Perfluorododecanoic acid (PFDoA)	NC	2.2		3.0	J	2.0	U	2.0	U	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	2.4	U	2.0	U
Perfluoroheptanesulfonic Acid (PFHpS)	NC	1.3	J	7.1	J	0.29	J	0.31	J	0.4	J	0.29	J	0.47	J	0.46	J	0.45	J	0.74	J	0.34	J
Perfluoroheptanoic acid (PFHpA)	NC	26		37	J	5.1		4.7		4.8		6.6		19		7.5		14		9.5		8.8	
Perfluorohexanesulfonic acid (PFHxS)	NC	5.4		11	J	2.0		4.2		2.1	U	2.3		6.5		2		5.1		2.4	U	2.5	
Perfluorohexanoic acid (PFHxA)	NC	22		36	J	5.5		5.7		6.2		8.2		24		14		14		16		13	
Perfluorononanoic acid (PFNA)	NC	14		14	J	2.1		0.53	J	2.8		1.8		1.9		1.9		2.4		2.5		2.0	
Perfluorooctane Sulfonamide (FOSA)	NC	21		12	J	2.0	U	2.0	U	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	2.4	U	2.0	U
Perfluorooctanesulfonic acid (PFOS)	10	**130**		**230**		**12**		5.4		**22**		**18**		**16**		**13**		**16**		**14**		**12**	
Perfluorooctanoic acid (PFOA)	10	**100**	**J**	**210**	**J**	**14**	**J**	**14**	**J**	**16**	**J**	**15**	**J**	**28**	**J**	**28**		**31**	**J**	**38**		**25**	**J**
Perfluoropentanoic acid (PFPeA)	NC	9.3		12	J	5.0		5.2		6.8		10		22		13		15		19		15	
Perfluorotetradecanoic acid (PFTeA)	NC	0.75	J	0.85	J	2.0	U	2.0	U	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	2.4	U	2.0	U
Perfluorotridecanoic Acid (PFTriA)	NC	2.0	U	1.7	UJ	2.0	U	2.0	U	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	2.4	U	2.0	U
Perfluoroundecanoic acid (PFUnA)	NC	3.6		17	U	2.0	U	2.0	U	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	2.4	U	2.0	U

Notes:
ng/L - nanograms per liter
ID - Identification
J - Estimated value
MCL - Maximum Contaminant Level
NC - No criterion
ND - Not detected
U - Compound was not detected at specified quantitation limit.
Bold text and green shading indicates result above the recommended MCL
* - The NewYork State Drinking Water Council has recommended an MCL of 10 ng/L for PFOA and PFOS (individual concentrations).

Table 3
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Per- and Polyfluoroalkyl Substances

		GC-MW-107(WG)				GC-MW-107D(WG)		GC-MW-108(WG)				GC-MW-109(WG)				GC-MW-109M(WG)				GC-MW-110(WG)		GC-MW-110D(WG)	
Sample Name:																							
Laboratory Sample ID:		320-38611-1		320-41460-1		320-38611-2		320-38611-3		320-41460-2		320-38630-2		320-41460-3		320-38630-3		320-41460-4		320-38630-8		320-38630-9	
Sample Date:		4/25/2018		7/24/2018		4/25/2018		4/25/2018		7/24/2018		4/26/2018		7/24/2018		4/26/2018		7/24/2018		4/26/2018		4/26/2018	
Sample Matrix:		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Units:		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L	
Per- and Polyfluoroalkyl Substances (PFAS)	**NewYork State Drinking Water Council Recommended MCL (ng/L)**	Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result	
6:2FTS	NC	18	UJ	19	U	19	UJ	18	UJ	18	U	20	UJ	19	U	20	UJ	3.4	J	19	UJ	19	UJ
8:2FTS	NC	19	U	19	U	20	U	17	U	18	U	20	U	19	U	20	U	18	U	20	U	21	U
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NC	19	U	19	U	20	U	17	U	18	U	20	U	19	U	20	U	18	U	20	U	21	U
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NC	19	U	19	U	20	U	17	U	18	U	20	U	19	U	20	U	18	U	20	U	21	U
Perfluorobutanesulfonic acid (PFBS)	NC	8		6.7		1.4	J	5.5		5.5		6.4		6.7		5.5		5.9		7.4		3.8	
Perfluorobutanoic acid (PFBA)	NC	10		2.2		5.3		7.6		7.0		9		7.5		7.8		9.2		8.7		5.3	
Perfluorodecanesulfonic acid (PFDS)	NC	1.9	U	1.9	U	2.0	U	1.7	U	1.8	U	2.0	U	1.9	U	3.9		1.8	U	2.0	U	2.1	U
Perfluorodecanoic acid (PFDA)	NC	2.8		1.9	J	0.6	J	1.9		1.7	J	6.5		5.3		4.0		3.2		2.4		0.39	J
Perfluorododecanoic acid (PFDoA)	NC	1.9	U	1.9	U	2.0	U	1.7	U	1.8	U	2.0	U	1.9	U	2.0	U	1.8	U	2.0	U	2.1	U
Perfluoroheptanesulfonic Acid (PFHpS)	NC	0.39	J	0.56	J	0.43	J	0.35	J	0.55	J	0.7	J	0.5	J	0.45	J	0.44	J	0.33	J	0.47	J
Perfluoroheptanoic acid (PFHpA)	NC	11		8.2		6.5		9.7		8.2		16		9.3		8.9		10		8		5.8	
Perfluorohexanesulfonic acid (PFHxS)	NC	2.5		2.3		5.2		2.0		2.2		2.0		2.2		2.1		2.2		2.0	U	4.3	
Perfluorohexanoic acid (PFHxA)	NC	15		13		8.3		16		13		14		9.9		12		14		18		6.8	
Perfluorononanoic acid (PFNA)	NC	5		2.5		0.61	J	2.7		2.3		7.2		9.2		3.4		3.6		3.0		1.2	J
Perfluorooctane Sulfonamide (FOSA)	NC	1.9	U	1.9	U	2.0	U	1.7	U	1.8	U	2.0	U	1.9	U	2.0	U	1.8	U	2.0	U	2.1	U
Perfluorooctanesulfonic acid (PFOS)	10	**15**		**14**		5.4		**15**		**14**		**18**		**20**		**14**		**14**		9.4		10	
Perfluorooctanoic acid (PFOA)	10	**28**	**J**	**29**		**14**	**J**	**27**	**J**	**24**		**64**	**J**	**43**		**31**	**J**	**30**		**29**	**J**	**21**	**J**
Perfluoropentanoic acid (PFPeA)	NC	12		17		7.5		17		16		11		8.8		12		17		19		6.1	
Perfluorotetradecanoic acid (PFTeA)	NC	1.9	U	0.86	J	2.0	U	1.7	U	0.35	J	2.0	U	1.9	U	2.0	U	1.8	U	0.46	J	2.1	U
Perfluorotridecanoic Acid (PFTriA)	NC	1.9	U	1.9	U	2.0	U	1.7	U	1.8	U	2.0	U	1.9	U	2.0	U	1.8	U	2.0	U	2.1	U
Perfluoroundecanoic acid (PFUnA)	NC	1.9	U	1.9	U	2.0	U	1.7	U	1.8	U	2.0	U	1.9	U	2.0	U	1.8	U	2.0	U	2.1	U

Notes:
ng/L - nanograms per liter
ID - Identification
J - Estimated value
MCL - Maximum Contaminant Level
NC - No criterion
ND - Not detected
U - Compound was not detected at specified quantitation limit.
Bold text and green shading indicates result above the recommended MCL
* - The NewYork State Drinking Water Council has recommended an MCL of 10 ng/L for PFOA and PFOS (individual concentrations).

Table 3
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater/Water for Per- and Polyfluoroalkyl Substances

Sample Name:		GC-MW-1B		GC-MW-2				GC-MW-3		GC-EQUIPMENT BLANK		GC-EQUIPMENT BLANK-2		GC-EQUIPMENT BLANK (072318)		GC-EQUIPMENT BLANK (072418)	
Laboratory Sample ID:		320-38611-4		320-38630-10		320-41405-4		320-38630-7		320-38611-9		320-38630-11		320-41405-3		320-41460-5	
Sample Date:		4/25/2018		4/26/2018		7/23/2018		4/26/2018		4/25/2018		4/26/2018		7/23/2018		7/24/2018	
Sample Matrix:		GW		GW		GW		GW		W		W		W		W	
Units:		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L	
Per- and Polyfluoroalkyl Substances (PFAS)	**NewYork State Drinking Water Council Recommended MCL (ng/L)**	Result		Result		Result		Result		Result		Result		Result		Result	
6:2FTS	NC	18	UJ	19	UJ	2.5	J	21	UJ	2.3	J	20	UJ	17	U	18	U
8:2FTS	NC	18	U	20	U	17	U	20	U	17	U	20	U	17	U	18	U
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NC	18	U	20	U	17	U	20	U	17	U	20	U	17	U	18	U
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NC	18	U	20	U	17	U	20	U	17	U	20	U	17	U	18	U
Perfluorobutanesulfonic acid (PFBS)	NC	4.3		7.8		5.1		5.3		1.7	U	2.0	U	1.7	U	1.8	U
Perfluorobutanoic acid (PFBA)	NC	5.8		9.9		7		11		1.7	U	2.0	U	0.3	UJ	0.55	J
Perfluorodecanesulfonic acid (PFDS)	NC	1.8	U	2.0	U	1.7	U	2.0	U	1.7	U	2.0	U	1.7	U	1.8	U
Perfluorodecanoic acid (PFDA)	NC	1.8	U	0.47	J	0.59	J	2.8		1.7	U	2.0	U	1.7	U	1.8	U
Perfluorododecanoic acid (PFDoA)	NC	1.8	U	2.0	U	1.7	U	2.0	U	1.7	U	2.0	U	1.7	U	1.8	U
Perfluoroheptanesulfonic Acid (PFHpS)	NC	0.45	J	0.68	J	0.47	J	2.0	U	1.7	U	2.0	U	1.7	U	1.8	U
Perfluoroheptanoic acid (PFHpA)	NC	7.3		13		7.8		14		1.7	U	2.0	U	1.7	U	1.8	U
Perfluorohexanesulfonic acid (PFHxS)	NC	3.3		3.3		1.7	U	2.0	U	1.7	U	2.0	U	1.7	U	1.8	U
Perfluorohexanoic acid (PFHxA)	NC	7		20		13		19		1.7	U	2.0	U	1.7	U	1.8	U
Perfluorononanoic acid (PFNA)	NC	1.2	J	2.8		3.9		3.8		1.7	U	2.0	U	1.7	U	1.8	U
Perfluorooctane Sulfonamide (FOSA)	NC	1.8	U	2.0	U	1.7	U	2.0	U	1.7	U	2.0	U	1.7	U	1.8	U
Perfluorooctanesulfonic acid (PFOS)	10	7.9		**15**		**23**		9.8		1.7	U	2.0	U	1.7	U	1.8	U
Perfluorooctanoic acid (PFOA)	10	**21**	**J**	**27**	**J**	**27**		**24**	**J**	1.8	UJ	2.0	UJ	1.7	U	1.8	U
Perfluoropentanoic acid (PFPeA)	NC	6.2		19		13		22		1.7	U	2.0	U	1.7	U	1.8	U
Perfluorotetradecanoic acid (PFTeA)	NC	1.8	U	2.0	U	1.7	U	2.0	U	1.7	U	2.0	U	1.7	U	1.8	U
Perfluorotridecanoic Acid (PFTriA)	NC	1.8	U	2.0	U	1.7	U	2.0	U	1.7	U	2.0	U	1.7	U	1.8	U
Perfluoroundecanoic acid (PFUnA)	NC	1.8	U	2.0	U	1.7	U	2.0	U	1.7	U	2.0	U	1.7	U	1.8	U

Notes:
ng/L - nanograms per liter
ID - Identification
J - Estimated value
MCL - Maximum Contaminant Level
NC - No criterion
ND - Not detected
U - Compound was not detected at specified quantitation limit.
Bold text and green shading indicates result above the recommended MCL
* - The NewYork State Drinking Water Council has recommended an MCL of 10 ng/L for PFOA and PFOS (individual concentrations).

Table 4
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Groundwater for Natural Attenuation Parameters

Sample Name:	GC-MW-101(WG)		GC-MW-104(WG)		GC-MW-107(WG)		GC-MW-108(WG)		GC-MW-109(WG)		GC-MW-109M(WG)	
Lab Sample ID:	460-161054-1		460-161054-4		460-161178-1		460-161178-2		460-161178-3		460-161178-4	
Sample Date:	7/23/2018		7/23/2018		7/24/2018		7/24/2018		7/24/2018		7/24/2018	
Sample Matrix	GW		GW		GW		GW		GW		GW	
Units:	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
PARAMETERS	Result		Result		Result		Result		Result		Result	
Total Organic Carbon	**0.35**	**J**	**0.56**	**J**	**0.86**	**J**	**0.78**	**J**	**0.74**	**J**	**0.43**	**J**
Sulfate	**10.3**		**11.7**		**14.9**		**22.0**		**16.9**		**15.6**	
Bicarbonate Alkalinity as $CaCO_3$	**40.3**		**67.7**		**64.4**		**66.3**		**56.8**		**47.8**	
Total Dissolved Solids	**300**		**758**		**598**		**904**		**908**		**746**	

Notes:
mg/L - milligrams per liter
ID - Identification
J - Estimated Value
U - Compound was not detected at specified quantitation limit
Values in **bold** text indicate the compound was detected

Table 5
New York State Department of Environmental Conservation
Gem Cleaners Remedial Investigation
Rockville Centre, New York
Summary of Vapor Intrusion Sampling Results

Sample Location ID:		Gem Cleaners Building								Promise Nails and Spa						Georgette & Co. Hair Salon				Residential Building				Driveway	
Sample Name:		GC-SV-102 (AS)		GC-IA-102 (AS)		GC-SV-103 (AS)		GC-IA-103 (AS)		GC-SV-104 (AS)		GC-IA-104 (AS)		GC-IA-108 (AS)		GC-SV-105 (AS)(1)		GC-IA-105 (AS)		GC-SV-106 (AS)		GC-IA-106 (AS)(1)		GC-AA-01 (AS)	
Laboratory Sample ID:		200-42918-3		200-42918-2		200-42918-5		200-42918-4		200-42918-8		200-42918-9		200-42918-10		200-42918-7		200-42918-6		200-42918-12		200-42918-11		200-42918-1	
Sample Date:		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018	
Sample Matrix:		Sub-Slab Vapor		Indoor Air		Sub-Slab Vapor		Indoor Air		Sub-Slab Vapor		Indoor Air		Indoor Air		Sub-Slab Vapor		Indoor Air		Sub-Slab Vapor		Indoor Air		Ambient Air	
Units:		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDOH AGV (µg/m^3)**	Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result	
1,1,1-Trichloroethane	NS	5.5	U	1.1	U	5.5	U	1.1	U	5.5	U	1.1	U	1.1	U	11	U	1.1	U	6.5	U	1.1	U	1.1	U
1,1,2,2-Tetrachloroethane	NS	6.9	U	1.4	U	6.9	U	1.4	U	6.9	U	1.4	U	1.4	U	14	U	1.4	U	8.2	U	1.4	U	1.4	U
1,1,2-Trichloroethane	NS	5.5	U	1.1	U	9.2		1.1	U	17		1.1	U	1.1	U	23	J D	1.1	U	6.5	U	1.1	U	1.1	U
1,1-Dichloroethane	NS	4.0	U	0.81	U	4.0	U	0.81	U	4.0	U	0.81	U	0.81	U	8.1	U	0.81	U	4.9	U	0.81	U	0.81	U
1,1-Dichloroethene	NS	4.0	U	0.79	U	4.0	U	0.79	U	4.0	U	0.79	U	0.79	U	7.9	U	0.79	U	4.8	U	0.79	U	0.79	U
1,2,4-Trichlorobenzene	NS	19	U	3.7	U	19	U	3.7	U	19	U	3.7	U	3.7	U	37	U	3.7	U	22	U	3.7	U	3.7	U
1,2,4-Trimethylbenzene	NS	4.9	U	0.48	J	4.9	U	0.33	J	4.9	U	1.9		1.4		9.9	U	0.51	J	5.9	U	0.98	U	0.34	J
1,2-Dibromoethane	NS	7.7	U	1.5	U	7.7	U	1.5	U	7.7	U	1.5	U	1.5	U	15	U	1.5	U	9.2	U	1.5	U	1.5	U
1,2-Dichlorobenzene	NS	6.0	U	1.2	U	6.0	U	1.2	U	6.0	U	1.2	U	1.2	U	12	U	1.2	U	7.2	U	1.2	U	1.2	U
1,2-Dichloroethane	NS	4.0	U	0.81	U	4.0	U	0.81	U	4.0	U	0.81	U	0.81	U	8.1	U	0.27	J	4.9	U	0.81	U	0.81	U
1,2-Dichloroethene, Total	NS	7.9	U	1.6	U	7.9	U	1.6	U	7.9	U	1.6	U	1.6	U	16	U	1.6	U	9.5	U	0.25	J	1.6	U
1,2-Dichloropropane	NS	4.6	U	0.92	U	4.6	U	0.92	U	4.6	U	0.92	U	0.92	U	9.3	U	0.92	U	5.5	U	0.92	U	0.92	U
1,2-Dichlorotetrafluoroethane	NS	7.0	U	1.4	U	7.0	U	1.4	U	7.0	U	1.4	U	1.4	U	14	U	1.4	U	8.4	U	1.4	U	1.4	U
1,3,5-Trimethylbenzene	NS	4.9	U	0.98	U	4.9	U	0.98	U	4.9	U	0.49	J	0.42	J	9.9	U	0.98	U	5.9	U	0.98	U	0.98	U
1,3-Butadiene	NS	2.2	U	0.13	J	2.2	U	0.11	J	2.2	U	0.44	U	0.44	U	4.4	U	0.44	U	2.7	U	0.44	U	0.44	U
1,3-Dichlorobenzene	NS	6.0	U	1.2	U	6.0	U	1.2	U	6.0	U	1.2	U	1.2	U	12	U	1.2	U	7.2	U	1.2	U	1.2	U
1,4-Dichlorobenzene	NS	6.0	U	1.2	U	6.0	U	1.2	U	6.0	U	1.2	U	1.2	U	12	U	1.2	U	7.2	U	1.2	U	1.2	U
1,4-Dioxane	NS	90	U	18	U	90	U	18	U	90	U	18	U	18	U	180	U	18	U	110	U	18	U	18	U
2,2,4-Trimethylpentane	NS	4.7	U	1.1		4.7	U	1.0		4.7	U	1.0		1.1		9.4	U	1.4		5.6	U	0.71	J	1.1	
2-Chlorotoluene	NS	5.2	U	1.0	U	5.2	U	1.0	U	5.2	U	1.0	U	1.0	U	10	U	1.0	U	6.2	U	1.0	U	1.0	U
3-Chloropropene	NS	7.8	U	1.6	U	7.8	U	1.6	U	7.8	U	1.6	U	1.6	U	16	U	1.6	U	9.4	U	1.6	U	1.6	U
4-Ethyltoluene	NS	4.9	U	0.98	U	4.9	U	0.98	U	4.9	U	1.0		0.82	J	9.9	U	0.98	U	5.9	U	0.98	U	0.98	U
4-Isopropyltoluene	NS	5.5	U	1.1	U	5.5	U	1.1	U	5.5	U	1.1	U	2.2		11	U	1.1	U	6.6	U	1.1	U	1.1	U
Acetone	NS	170		80		69		76		370		2,900		19,000	D	2,800		7,200		1,900		160		3.7	J
Benzene	NS	3.2	U	0.82		1.3	J	0.80		1.5	J	1.0		1.1		6.4	U	1.1		3.8	U	0.86	J D	0.80	
Benzyl chloride	NS	5.2	U	1.0	U	5.2	U	1.0	U	5.2	U	1.0	U	1.3		10	U	1.0	U	6.2	U	1.0	U	1.0	U
Bromodichloromethane	NS	6.7	U	1.3	U	6.7	U	1.3	U	6.7	U	1.3	U	1.3	U	13	U	1.3	U	8.0	U	1.3	U	1.3	U
Bromoethene(Vinyl Bromide)	NS	4.4	U	0.87	U	4.4	U	0.87	U	4.4	U	0.87	U	0.87	U	8.8	U	0.87	U	5.2	U	0.87	U	0.87	U
Bromoform	NS	10	U	2.1	U	10	U	2.1	U	10	U	2.1	U	2.1	U	21	U	2.1	U	12	U	2.1	U	2.1	U
Bromomethane	NS	3.9	U	0.78	U	3.9	U	0.78	U	3.9	U	0.78	U	0.78	U	7.8	U	0.78	U	4.7	U	0.78	U	0.78	U
Carbon disulfide	NS	7.8	U	1.6	U	7.8	U	1.6	U	5.1	J	1.6	U	1.3	J	16	U	1.6	U	9.3	U	29	D	1.6	U
Carbon tetrachloride	NS	1.3	U	0.34		1.3	U	0.35		1.3	U	1.3		0.25	U	2.5	U	0.67		1.5	U	0.40		0.34	
Chlorobenzene	NS	4.6	U	0.92	U	4.6	U	0.92	U	4.6	U	0.92	U	0.92	U	9.2	U	0.92	U	5.5	U	0.92	U	0.92	U
Chloroethane	NS	6.6	U	1.3	U	6.6	U	1.3	U	6.6	U	1.3	U	1.3	U	13	U	0.80	J	7.9	U	1.3	U	1.3	U
Chloroform	NS	4.4	J	0.98	U	9.5		0.98	U	2.2	J	0.63	J	11		7.3	J D	7.4		5.9	U	0.16	J	0.98	U
Chloromethane	NS	5.2	U	0.55	J	5.2	U	0.88	J	5.2	U	0.82	J	1.2		10	U	1.0	U	6.2	U	1.0	J D	0.81	J
cis-1,2-Dichloroethene	NS	4.0	U	0.79	U	4.0	U	0.79	U	4.0	U	0.79	U	0.79	U	7.9	U	0.79	U	4.8	U	0.26	J	0.79	U
cis-1,3-Dichloropropene	NS	4.5	U	0.91	U	4.5	U	0.91	U	4.5	U	0.91	U	0.91	U	9.1	U	0.91	U	5.4	U	0.91	U	0.91	U
Cumene	NS	4.9	U	0.98	U	4.9	U	0.98	U	3.9	J	0.98	U	0.98	U	9.9	U	0.98	U	5.9	U	0.98	U	0.98	U
Cyclohexane	NS	3.4	U	0.25	J	3.4	U	0.19	J	3.4	U	0.28	J	0.53	J	6.9	U	0.49	J	4.1	U	0.18	J	0.16	J
Dibromochloromethane	NS	8.5	U	1.7	U	8.5	U	1.7	U	8.5	U	1.7	U	1.7	U	17	U	1.7	U	10	U	1.7	U	1.7	U
Dichlorodifluoromethane	NS	12	U	1.5	J	12	U	1.7	J	12	U	1.9	J	2.2	J	25	U	1.8	J	15	U	2.4	J D	1.6	J
Ethylbenzene	NS	4.3	U	0.96		52		0.52	J	390		5.4		4.3		94	D	2.3		5.2	U	0.26	J	0.29	J

Table 5
New York State Department of Environmental Conservation
Gem Cleaners Remedial Investigation
Rockville Centre, New York
Summary of Vapor Intrusion Sampling Results

Sample Location ID:		Gem Cleaners Building								Promise Nails and Spa						Georgette & Co. Hair Salon				Residential Building				Driveway	
Sample Name:		GC-SV-102 (AS)		GC-IA-102 (AS)		GC-SV-103 (AS)		GC-IA-103 (AS)		GC-SV-104 (AS)		GC-IA-104 (AS)		GC-IA-108 (AS)		GC-SV-105 (AS)(1)		GC-IA-105 (AS)		GC-SV-106 (AS)		GC-IA-106 (AS)(1)		GC-AA-01 (AS)	
Laboratory Sample ID:		200-42918-3		200-42918-2		200-42918-5		200-42918-4		200-42918-8		200-42918-9		200-42918-10		200-42918-7		200-42918-6		200-42918-12		200-42918-11		200-42918-1	
Sample Date:		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018		3/28/2018	
Sample Matrix:		Sub-Slab Vapor		Indoor Air		Sub-Slab Vapor		Indoor Air		Sub-Slab Vapor		Indoor Air		Indoor Air		Sub-Slab Vapor		Indoor Air		Sub-Slab Vapor		Indoor Air		Ambient Air	
Units:		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDOH AGV (µg/m³)**	Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result	
Freon 22	NS	8.8	U	0.75	J	8.8	U	0.97	J	8.8	U	1.8	U	1.1	J	18	U	1.8	U	11	U	1.8	U	0.79	J
Freon TF	NS	7.7	U	0.51	J	7.7	U	0.44	J	7.7	U	0.54	J	0.57	J	15	U	0.46	J	9.2	U	0.45	J	0.47	J
Hexachlorobutadiene	NS	11	U	2.1	U	11	U	2.1	U	11	U	2.1	U	2.1	U	21	U	2.1	U	13	U	2.1	U	2.1	U
Isopropyl alcohol	NS	61	U	3.8	J	61	U	3.6	J	36	U	1,000	U	1,400	J	120	U	48		74	U	12	J D	0.97	J
m,p-Xylene	NS	4.0	J	3.6		100		1.9	J	1,100		27		21		320	D	9.0		13	U	0.87	J D	0.98	J
Methyl Butyl Ketone (2-Hexanone)	NS	10	U	2.0	U	10	U	0.57	J	10	U	2.0	U	2.0	U	21	U	2.0	U	12	U	0.39	J	2.0	U
Methyl Ethyl Ketone	NS	20		6.4		11		6.4		17		130		200	J	12	J D	2.9		5.5	J	15	D	0.50	J
Methyl isobutyl ketone	NS	10	U	2.0	U	10	U	0.27	J	10	U	2.0	U	2.0	U	21	U	2.0	U	12	U	0.79	J D	2.0	U
Methyl methacrylate	NS	10	U	2.0	U	10	U	2.0	U	10	U	2.0	U	2.0	U	21	U	2.0	U	12	U	2.0	U	2.0	U
Methyl tert-butyl ether	NS	3.6	U	0.72	U	3.6	U	0.72	U	3.6	U	0.72	U	0.72	U	7.2	U	0.72	U	4.3	U	0.72	U	0.72	U
Methylene Chloride	60	8.7	U	1.1	J	8.7	U	0.98	J	8.7	U	0.74	J	2.1		15	J D	4.8		7.9	J	2.5		0.87	J
Naphthalene	NS	13	U	2.6	U	13	U	2.6	U	13	U	2.6	U	2.6	U	26	U	2.6	U	16	U	2.6	U	2.6	U
n-Butane	NS	5.8	J	5.8		31		3.4		190		12		14		16	J D	27		7.1	U	5.7	D	1.8	
n-Butylbenzene	NS	5.5	U	1.1	U	5.5	U	1.1	U	5.5	U	1.1	U	1.1	U	11	U	1.1	U	6.6	U	1.1	U	1.1	U
n-Heptane	NS	3.5	J	0.77	J	8.5		0.83		18		4.3		22		25	J D	10		4.9	U	0.55	J	0.40	J
n-Hexane	NS	3.5	U	0.93		4.1		0.71		7.4		0.59	J	0.92		11	J D	1.8		3.6	J	0.66	J	0.72	
n-Propylbenzene	NS	4.9	U	0.98	U	4.9	U	0.98	U	4.9	U	0.98	U	0.98	U	9.9	U	0.98	U	5.9	U	0.98	U	0.98	U
sec-Butylbenzene	NS	5.5	U	1.1	U	5.5	U	1.1	U	5.5	U	1.1	U	1.1	U	11	U	1.1	U	6.6	U	1.1	U	1.1	U
Styrene	NS	4.3	U	0.85	U	4.3	U	0.85	U	4.3	U	0.85	U	0.85	U	8.5	U	0.85	U	5.1	U	0.85	U	0.85	U
tert-Butyl alcohol	NS	41	J	15	U	110		15	U	320		4.9	J	10	J	440	J D	15	U	120		15	U	15	U
tert-Butylbenzene	NS	5.5	U	1.1	U	5.5	U	1.1	U	5.5	U	1.1	U	1.1	U	11	U	1.1	U	6.6	U	1.1	U	1.1	U
Tetrachloroethene (PCE)	30	99		0.71		170		0.63		100		0.66		1.1		43	D	0.37		1.6	U	0.42		0.17	J
Tetrahydrofuran	NS	74	U	51		74	U	40		38	J	840	J	950	J	150	U	15	U	88	U	9.3	J	15	U
Toluene	NS	16		1.9		32		1.8		52		4.4		19		62	D	7.1		3.3	J	1.5		1.5	
trans-1,2-Dichloroethene	NS	4.0	U	0.79	U	4.0	U	0.79	U	1.5	J	0.79	U	0.79	U	7.9	U	0.79	U	4.8	U	0.79	U	0.79	U
trans-1,3-Dichloropropene	NS	4.5	U	0.91	U	4.5	U	0.91	U	4.5	U	0.91	U	0.91	U	9.1	U	0.91	U	5.4	U	0.91	U	0.91	U
Trichloroethene (TCE)	2	1.1	U	0.21	U	2.0		0.21	U	2.0		0.21	U	0.63		1.7	J D	0.21	U	1.3	U	0.76	D	0.21	U
Trichlorofluoromethane	NS	5.6	U	1.1		5.6	U	1.0	J	5.6	U	1.1		1.2		11	U	1.0	J	6.7	U	1.1	J D	1.0	J
Vinyl chloride	NS	2.6	U	0.51	U	2.6	U	0.51	U	2.6	U	0.51	U	0.51	U	5.1	U	0.51	U	3.1	U	0.51	U	0.51	U
Xylene (total)	NS	4.0	J	4.7		140		2.5	J	1,400		35		28		430	D	12		18	U	1.1	J	1.3	J
Xylene, o-	NS	4.3	U	1.1		34		0.62	J	330		8.2		6.5		110	D	2.5		5.2	U	0.30	J	0.30	J

Notes:
µg/m³ = micrograms per cubic meter
B - Compound also detected in laboratory blank sample.
D - Sample results obtained through dilution of original sample.
ID - Identification
J - Estimated value.
NS - No standard
NYSDOH AGV - New York State Department of Health Air Guideline Value
U - Compound was not detected at specified quantitation limit.
NYSDOH Soil Vapor Intrusion Matrices apply to compounds on shaded rows (Matrix A - Blue, Matrix B - Yellow, Matrix C - Green)
(1) - Multiple dilutions performed on sample; highest concentration is listed.

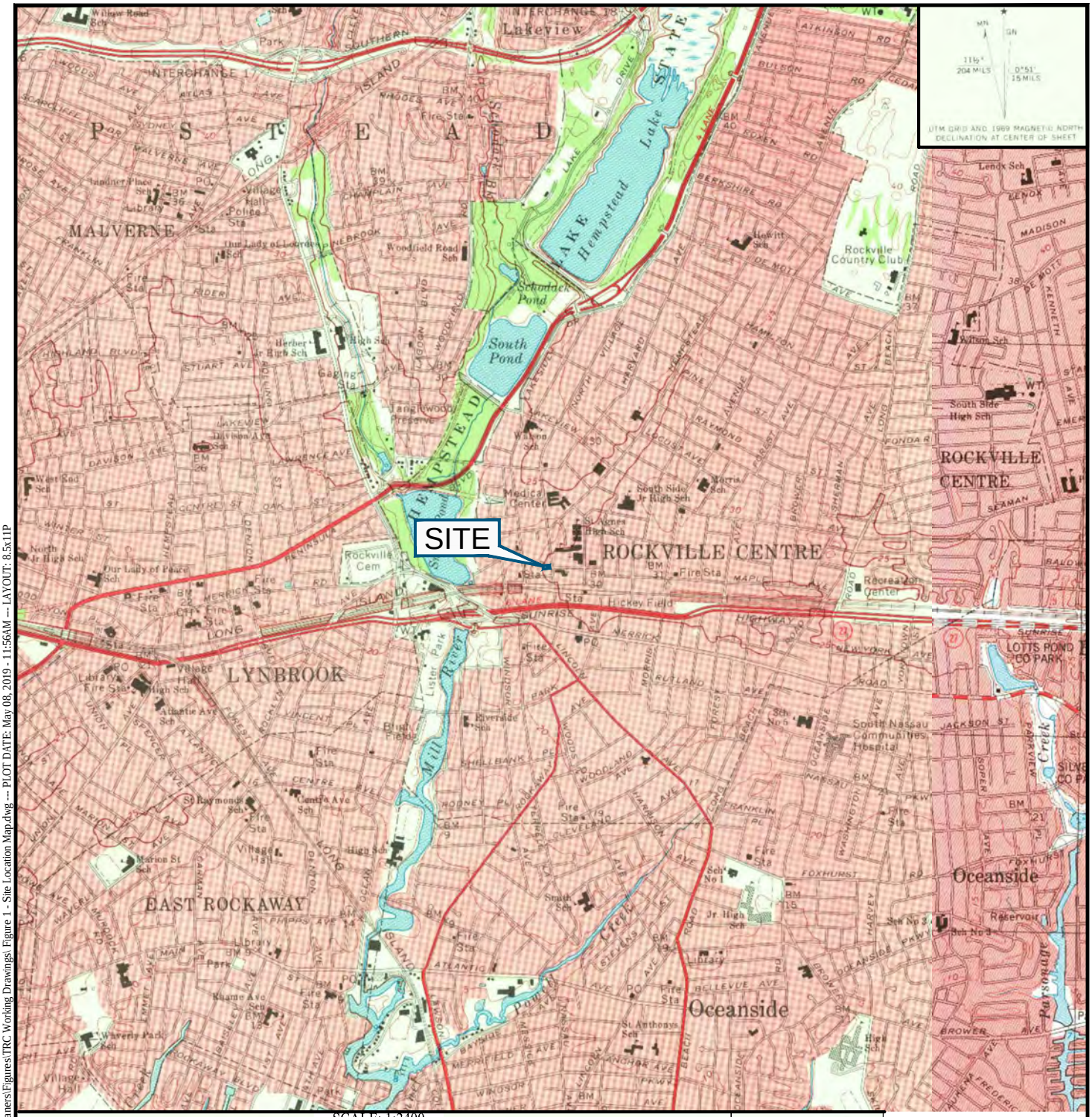
Table 6
New York State Department of Environmental Conservation
Gem Cleaners Site - 84 North Village Avenue, Rockville Centre, New York
Summary of Results of Analysis of Dye Testing Samples for Per- and Polyfluoroalkyl Substances

	Sample Name:	GC-DYE-TABLET(WZ)		GC-DYE-LIQUID(WZ)	
	Laboratory Sample ID:	320-48096-1		320-48096-2	
	Sample Date:	3/4/2019		3/4/2019	
	Sample Matrix:	Water		Water	
	Units:	ng/L		ng/L	
Per- and Polyfluoroalkyl Substances (PFAS)	NewYork State Drinking Water Council Recommended MCL (ng/L)*	**Result**		**Result**	
6:2 FTS	NC	17	U	18	U
8:2 FTS	NC	17	U	18	U
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NC	17	U	18	U
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NC	17	U	18	U
Perfluorobutanesulfonic acid (PFBS)	NC	0.40	J	0.38	J
Perfluorobutanoic acid (PFBA)	NC	1.4	J	3.5	U G
Perfluorodecanesulfonic acid (PFDS)	NC	1.7	U	1.8	U
Perfluorodecanoic acid (PFDA)	NC	1.7	U	1.8	U
Perfluorododecanoic acid (PFDoA)	NC	1.7	U	1.8	U
Perfluoroheptanesulfonic Acid (PFHpS)	NC	1.7	U	1.8	U
Perfluoroheptanoic acid (PFHpA)	NC	0.57	J	0.52	J I
Perfluorohexanesulfonic acid (PFHxS)	NC	0.49	J B	0.45	J B
Perfluorohexanoic acid (PFHxA)	NC	0.75	J I	0.71	J
Perfluorononanoic acid (PFNA)	NC	1.7	U	1.8	U
Perfluorooctanesulfonamide (FOSA)	NC	1.7	U	1.8	U
Perfluorooctanesulfonic acid (PFOS)	10	0.63	J	1.8	U
Perfluorooctanoic acid (PFOA)	10	1.2	J B	1.2	J B
Perfluoropentanoic acid (PFPeA)	NC	0.62	J	3.5	U G
Perfluorotetradecanoic acid (PFTeA)	NC	0.28	J B	0.29	J B
Perfluorotridecanoic acid (PFTriA)	NC	1.7	U	1.8	U
Perfluoroundecanoic acid (PFUnA)	NC	1.7	U	1.8	U

Notes:
Ng/L - Nanograms per liter
B : Compound was found in the blank and sample
I : Value is estimated maximum possible concentration.
ID - Identification.
G : The reported quantitation limit was raised due to an exhibited elevated noise or matrix interference.
J - Estimated value.
MCL - Maximum Contaminant Leve
NC - No criterion.
ND - Not detected.
U - Compound was not detected at specified quantitation limit

* - The NewYork State Drinking Water Council has recommended an MCL of 10 ng/L for PFOA and PFOS (individual concentrations).

FIGURES



SCALE: 1:2400

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER

QUADRANGLE LOCATION

MAP OBTAINED THROUGH USE OF TERRAIN NAVIGATOR PRO SOFTWARE.

MAP INCLUDES INFORMATION FROM THE FOLLOWING MAP SHEET(S):
TP,LYNBROOK, NY, 7.5-MINUTE, DATED 1969
E, FREEPORT, NY, 7.5-MINUTE, DATED 1994

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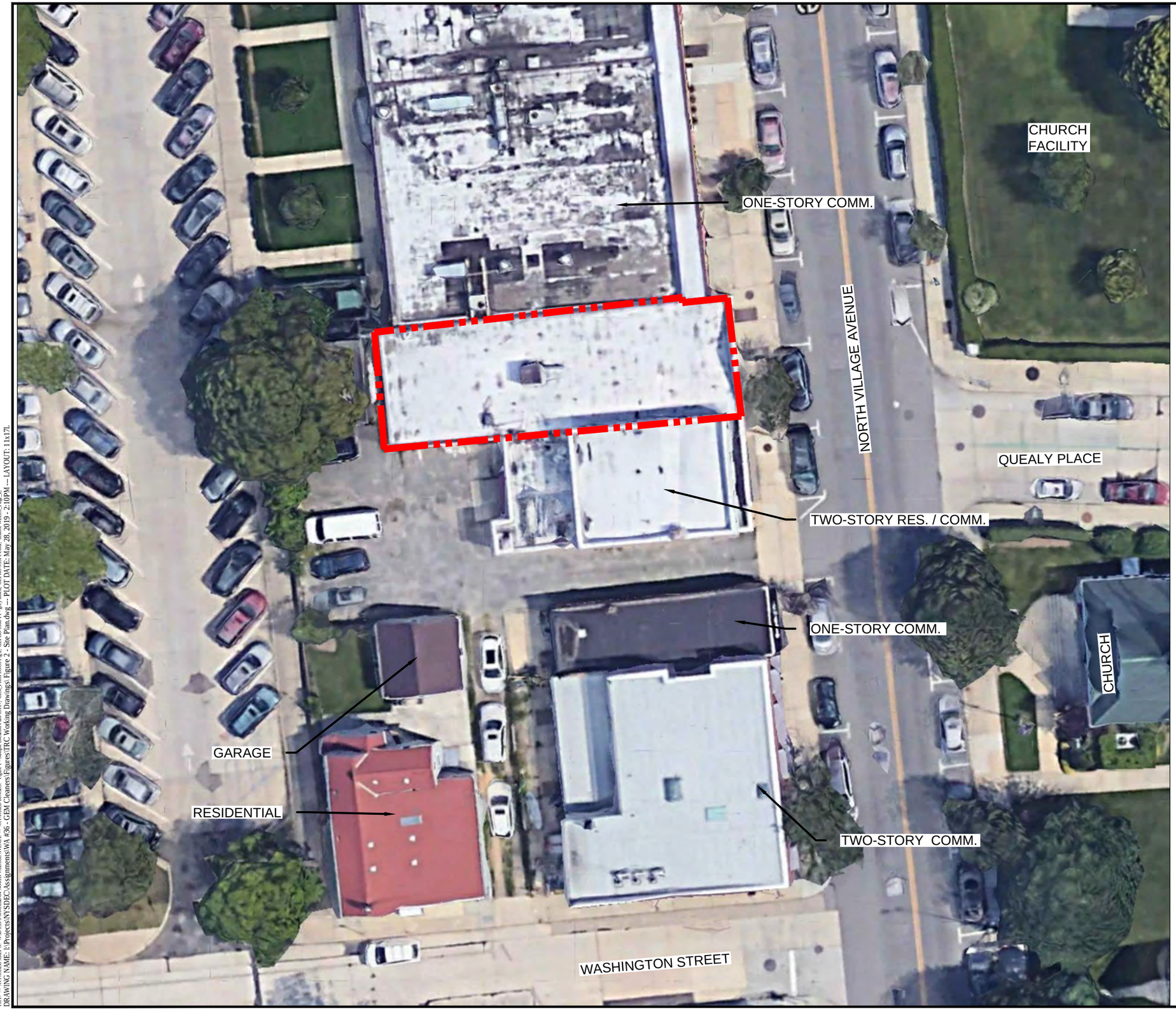
PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	E. EBERT
APPROVED BY:	L. O'HARA
DATE:	JUNE 2019
PROJ. NO.:	279191
FILE:	Figure 1 - Site Location Map.dwg

FIGURE 1

8.5x11 --- ATTACHED IMAGES: NY_Freeport_137214_1994_24000; NY_Lynbrook_130B3_1969_24000;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\ Figure 1 - Site Location Map.dwg --- PLOT DATE: May 08, 2019 - 11:56AM --- LAYOUT: 8.5x11P



LEGEND (SYMBOLS NOT TO SCALE):

GEM CLEANERS BUILDING

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. AERIAL IMAGE BACKGROUND SOURCE FROM GOOGLE EARTH PRO DATED SEPTEMBER 17, 2017.

0 30' 60'

SCALE: 1" = 30'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
SITE PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 2**
DATE:	JUNE 2019		

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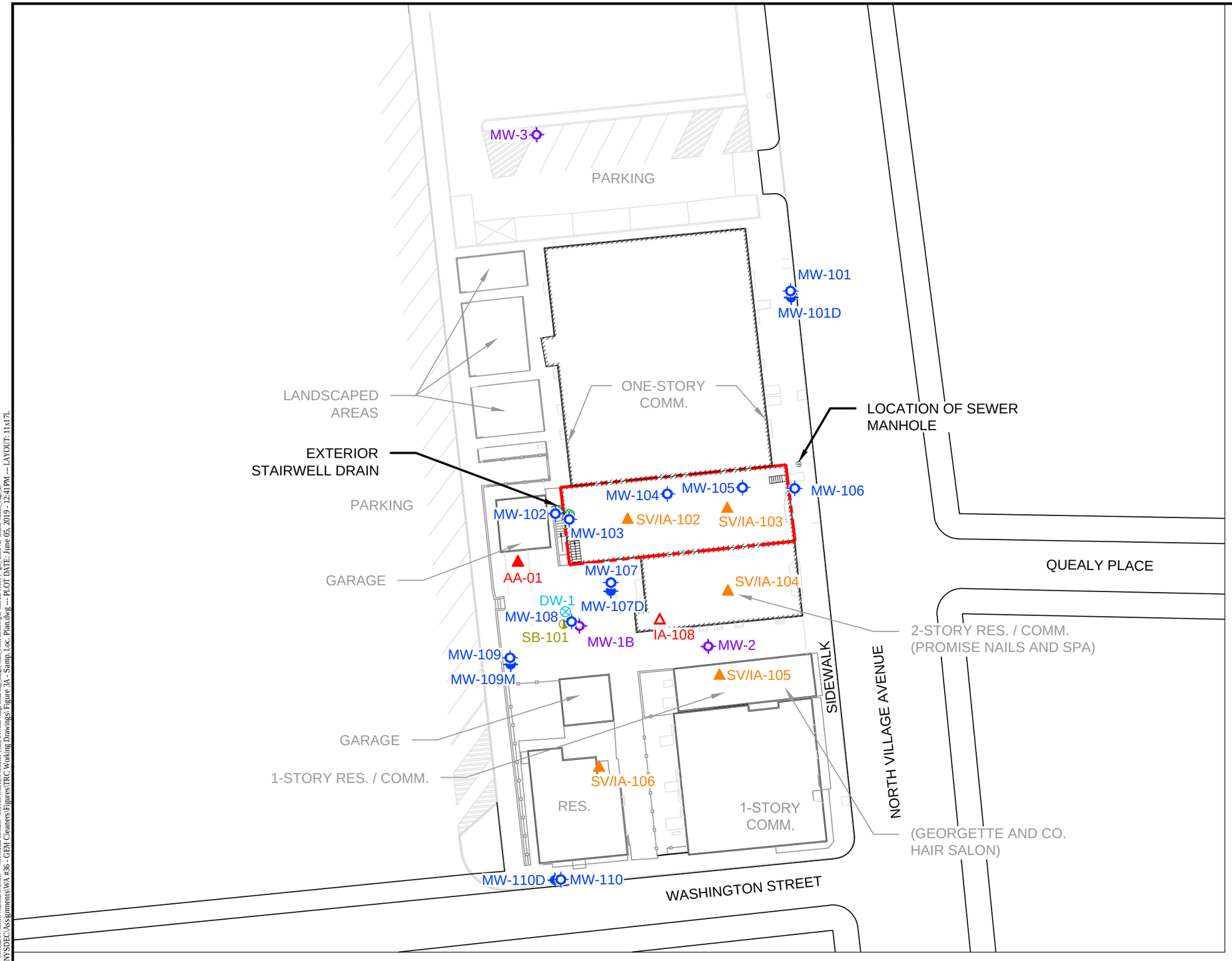
New York, NY 10018
Phone: 212.221.7822
www.TRCcompanies.com

FILE NO.: Figure 2 - Site Plan.dwg

11x17 -- ATTACHED XREFS: N:\8-153-1\Mxrecad-04 NORTH VILLAGE AVENUE -- ATTACHED IMAGES: Figure 1 - Sample Location Plan-11x17; GEM_PROPLOCS Fig 2; GEPRO-1000 FT - grey toned; GEPRO-955FT-color; historic WELLS_Page_2;
DRAWING NAME: J:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 2 - Site Plan.dwg -- PLOT DATE: May 28, 2019 - 2:10PM -- LAYOUT: 11x17L



SCALE: 1" = 40'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DRAIN INLET
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- SB-XXX — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- MW-X — EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW-XXX — SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- MW-XXXD/M — SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- SV/IA-XXX — SUB-SLAB VAPOR / INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- IA-XXX — INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- AA-XX — AMBIENT AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. SEDIMENT, STANDING WATER, AND GRAB SOIL SAMPLE LOCATIONS ARE NOT SHOWN ON THIS FIGURE. REFER TO FIGURE 3B FOR THESE SAMPLE LOCATIONS.
4. VAPOR INTRUSION SAMPLING IN THE ONE-STORY COMMERCIAL BUILDING NORTH OF THE GEM CLEANERS SITE BUILDING AND IN THE ONE-STORY COMMERCIAL BUILDING SOUTH OF THE SITE AT THE NORTHWEST CORNER OF NORTH VILLAGE AVENUE AND WASHINGTON STREET WAS PROPOSED; HOWEVER, ACCESS TO THESE STRUCTURES WAS NOT GRANTED BY THE PROPERTY OWNERS.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
SAMPLING LOCATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 3A**
DATE:	JUNE 2019		

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FILE NO.: Figure 3A - Samp. Loc. Plan.dwg

11x17 -- ATTACHED XREFS: N 38-153-1\Wrexal-04 NORTH VILLAGE AVENUE -- ATTACHED IMAGES: 06-L18 FIGURE 3 MARKUP (ME); 84 North Village Road map_image; GEM_PROPLOGS Fig 2; GEPRO-1000 FT - geo xsteel V2; histsoc WELLS_Page_2;
DRAWING NAME: I:\Projects\NYSDEC Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 3A - Samp. Loc. Plan.dwg -- PLOT DATE: June 05, 2019 - 12:41PM -- LAYOUT: 11x17L

ONE-STORY COMM.

EXTERIOR STAIRWELL DRAIN
APPROXIMATE REMEDIATION AREA
(COMPLETED 1997)

5' X 5' DEPRESSION
8" DEEP

2 - 275-GALLON ASTs
(INACTIVE)

SEWER
MANHOLE

NORTH VILLAGE AVENUE

FEEDWATER TANK

WASTE
SINK

CONDENSER

SUMP

NEW BOILER

OLD
BOILER

MW-105

MW-106

MW-104

STORAGE

SO-101

SV/IA-103

SV/IA-102

DRAIN-02

DRAIN

MW-102

MW-103

SIDEWALK

MW-107

MW-107D

IA-108

SV/IA-104

TWO-STORY
RES./ COMM.

DW-1

MW-108

SB-101

MW-1B

0 10' 20'

SCALE: 1" = 10'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- DRAIN INLET
- AST — ABOVEGROUND STORAGE TANK
- COMM. — COMMERCIAL
- RES. — RESIDENTIAL
- SB-XXX — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- MW-X — EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW-XXX — SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- MW-XXXD/M — SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- SV/IA-XXX — SUB-SLAB VAPOR / INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- IA-XXX — INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- GRAB SOIL SAMPLE LOCATION
- SEDIMENT SAMPLE LOCATION
- STANDING WATER SAMPLE LOCATION

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
BASEMENT FLOOR PLAN AND SAMPLE LOCATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 3B**
DATE:	JUNE 2019		

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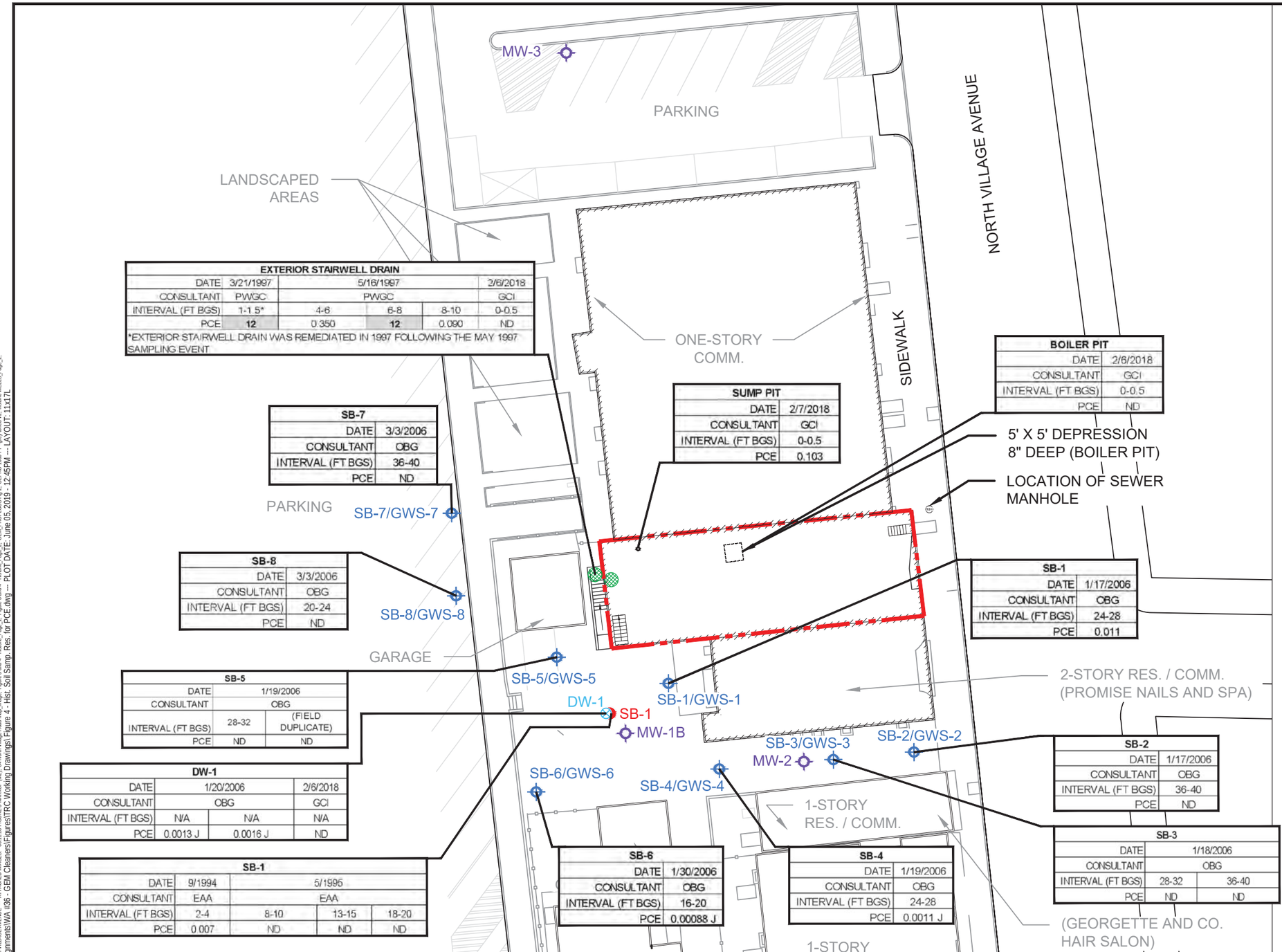
FILE NO.: Figure 3B - Basement Floor Plan & Sample Location Plan.dwg

11x17 -- ATTACHED XREFS: N: R-1/53-1-3/Wetmat/84 NORTH VILLAGE AVENUE -- ATTACHED IMAGES: 84 North Village Road map_image; GEM_PROPLOCS Fig 2; GEPRO-1000 FT - grey toned; historic WELLS_Page_2;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\ Figure 3B - Basement Floor Plan & Sample Location Plan.dwg -- PLOT DATE: June 03, 2019 - 6:34PM -- LAYOUT: 11x17L



LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DRAIN INLET
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- SB-1 — SOIL BORING LOCATION AND IDENTIFICATION NUMBER (INSTALLED BY EEA IN SEPTEMBER 1994 AND APRIL 1995)
- SB-X/GWS-X — SOIL BORING AND TEMPORARY WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED BY O'BRIEN & GERE IN 2006)
- MW-X — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED BY EAA CIRCA 1994)

Comparison Criteria			
VOLATILE ORGANIC COMPOUND (VOC)	Unrestricted Use SCO (mg/kg)	TAGM 4046 Recommended SCO (mg/kg)	Commercial Use SCO (mg/kg)
TETRACHLOROETHENE (PCE)	1.3	1.4	150

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. HISTORIC SOIL BORING AND LOCATIONS ARE APPROXIMATE. THE SOIL SAMPLE COLLECTED FROM THE EXTERIOR STAIRWELL DRAIN ON 3/21/1997 WAS COLLECTED 1-1.5 FEET BELOW THE BOTTOM OF THE STRUCTURE.
3. SAMPLES COLLECTED PRIOR TO 2010 WERE COMPARED TO THE NYSDEC TECHNICAL AND ADMINISTRATIVE GUIDANCE MEMORANDUM (TAGM) 4046 RECOMMENDED SOIL CLEANUP OBJECTIVES (THE APPLICABLE CRITERIA AT THE TIME OF THE SAMPLING).
4. BOLD AND SHADED RESULTS ARE ABOVE NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE FOR PCE.
5. ND = NON-DETECT
6. J = ESTIMATED VALUE

NOTES (CONTINUED):

7. SAMPLES COLLECTED FROM EXTERIOR STAIRWELL DRAIN, SUMP PIT, AND BOILER PIT BY GCI IN 2018 ARE ASSUMED TO HAVE BEEN COLLECTED 0-0.5 FEET BELOW THE STRUCTURE SINCE SAMPLE DEPTHS WERE NOT PROVIDED IN THE 2018 GCI SUBSURFACE INVESTIGATON REPORT.
8. OBG = O'BRIEN & GERE, PWGC = P.W. GROSSER CONSULTING, EEA = ENERGY & ENVIRONMENTAL ANALYSTS, INC., GCI = GENERAL CONSOLIDATED INDUSTRIES, INC.
9. ALL RESULTS ARE IN MILLIGRAMS PER KILOGRAM (mg/kg).
10. FT BGS = FEET BELOW GROUND SURFACE
11. N/A = NOT AVAILABLE. INFORMATION REGARDING THE DRYWELL SAMPLE DEPTH INTERVALS WAS NOT AVAILABLE.

0 30' 60'

SCALE: 1" = 30'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
HISTORIC SOIL SAMPLING RESULTS FOR PCE

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		
DATE:	JUNE 2019		

FIGURE 4

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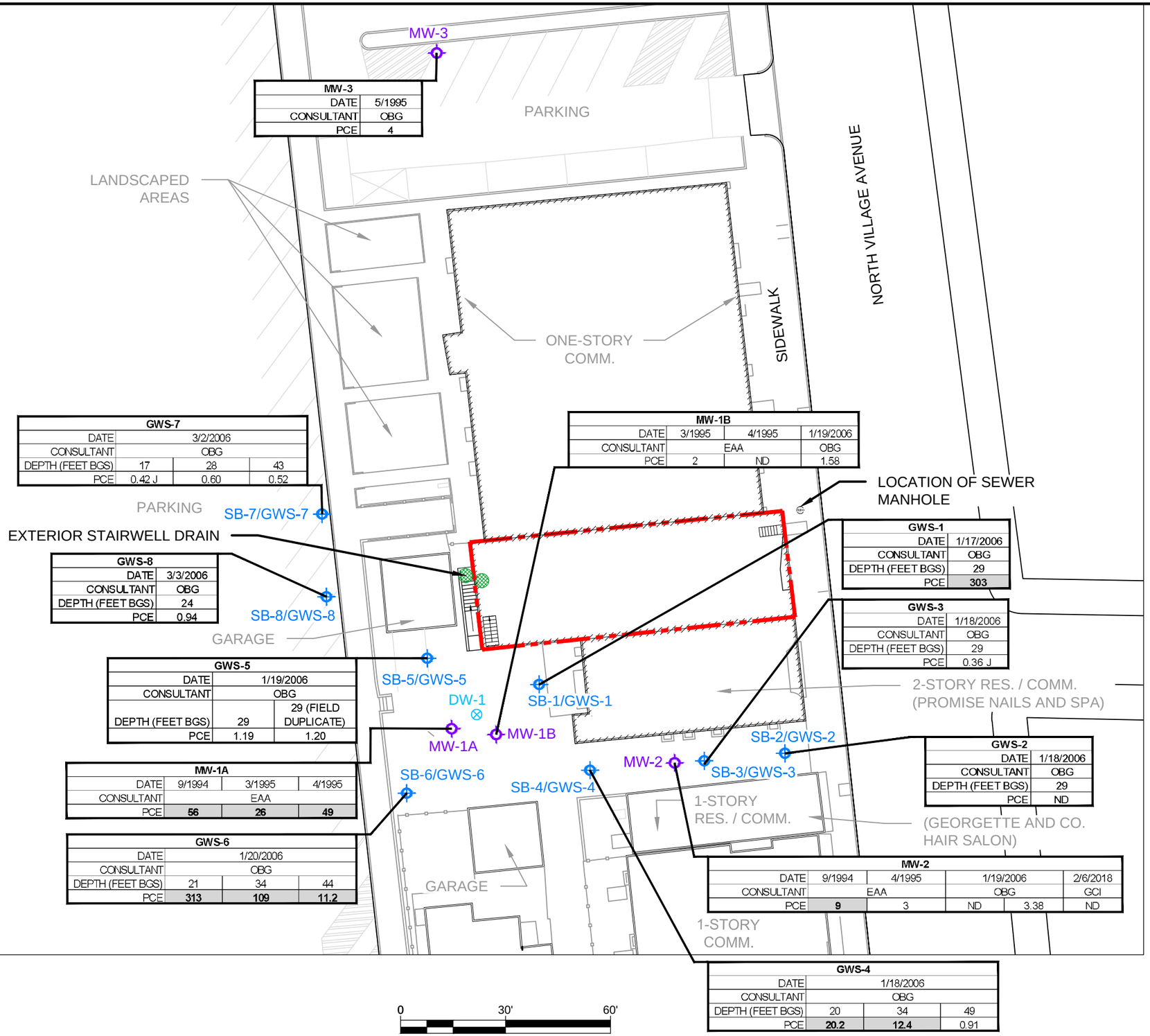
FILE NO.: Figure 4 - Hist. Soil Samp. Res. for PCE.dwg

11x17 --- ATTACHED XREFS: N:\86-153-1-Wilmar\84 NORTH VILLAGE AVENUE -- ATTACHED IMAGES: 06.11.18 FIGURE 3 MARKUP (ME); 84 North Village Road map_image; Figure 3 and 4 - Historic_Page_1; Figure 3 and 4 - Historic_Page_2; GEM_PROPLOCS Fig 2; GEPRO-1000 FT - grey toned V2; historic WELLS_Page_2;
DRAWING NAME: I:\Projects\NY\SDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 4 - Hist. Soil Samp. Res. for PCE.dwg --- PLOT DATE: June 05, 2019 - 12:45PM --- LAYOUT: 11x17L



MW-3	
DATE	5/1995
CONSULTANT	OBG
PCE	4

GWS-7			
DATE	3/2/2006		
CONSULTANT	OBG		
DEPTH (FEET BGS)	17	28	43
PCE	0.42 J	0.60	0.52

GWS-8	
DATE	3/3/2006
CONSULTANT	OBG
DEPTH (FEET BGS)	24
PCE	0.94

GWS-5		
DATE	1/19/2006	
CONSULTANT	OBG	
DEPTH (FEET BGS)	29	29 (FIELD DUPLICATE)
PCE	1.19	1.20

MW-1A			
DATE	9/1994	3/1995	4/1995
CONSULTANT		EAA	
PCE	**56**	**26**	**49**

GWS-6			
DATE	1/20/2006		
CONSULTANT	OBG		
DEPTH (FEET BGS)	21	34	44
PCE	**313**	**109**	**11.2**

MW-1B				
DATE	3/1995	4/1995	1/19/2006	
CONSULTANT	EAA		OBG	
PCE	2	ND	1.58	

GWS-1	
DATE	1/17/2006
CONSULTANT	OBG
DEPTH (FEET BGS)	29
PCE	**303**

GWS-3	
DATE	1/18/2006
CONSULTANT	OBG
DEPTH (FEET BGS)	29
PCE	0.36 J

GWS-2	
DATE	1/18/2006
CONSULTANT	OBG
DEPTH (FEET BGS)	29
PCE	ND

MW-2					
DATE	9/1994	4/1995	1/19/2006		2/6/2018
CONSULTANT	EAA		OBG		GCI
PCE	**9**	3	ND	3.38	ND

GWS-4			
DATE	1/18/2006		
CONSULTANT	OBG		
DEPTH (FEET BGS)	20	34	49
PCE	**20.2**	**12.4**	0.91

SCALE: 1" = 30'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DRAIN INLET
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- SB-X/GWS-X — SOIL BORING AND TEMPORARY WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED BY O'BRIEN & GERE IN 2006)
- MW-X — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED BY EAA CIRCA 1994) NOTE: MW-1A COULD NOT BE FOUND DURING THE 2006 PRELIMINARY SITE CHARACTERIZATION

COMPARISON CRITERIA CLASS GA VALUE	
VOC	**(µg/L)**
TETRACHLOROETHENE (PCE)	5

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. BOLD AND SHADED RESULTS ARE ABOVE CLASS GA VALUE.
3. THE OBG PRELIMINARY SITE CHARACTERIZATION REPORT (2006) INDICATES GROUNDWATER SAMPLES WERE COLLECTED FROM MW-1A (A SHALLOW WELL); HOWEVER, BASED ON THE REPORTED TOTAL DEPTH OF THE WELL (60 FEET BGS) THE GROUNDWATER SAMPLES WERE LIKELY COLLECTED FROM MW-1B. ACCORDINGLY, THIS FIGURE DISPLAYS THE DATA AS COLLECTED FROM MW-1B.
4. ND = NON-DETECT
5. VOC = VOLATILE ORGANIC COMPOUND
6. FEET BGS = FEET BELOW GROUND SURFACE
7. ALL RESULTS ARE IN MICROGRAMS PER LITER (µg/L).
8. OBG = O'BRIEN & GERE, PWGC = P.W. GROSSER CONSULTING, EEA = ENERGY & ENVIRONMENTAL ANALYSTS, INC., GCI = GENERAL CONSOLIDATED INDUSTRIES, INC.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
HISTORIC GROUNDWATER SAMPLING RESULTS FOR PCE

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 5**
DATE:	JUNE 2019		

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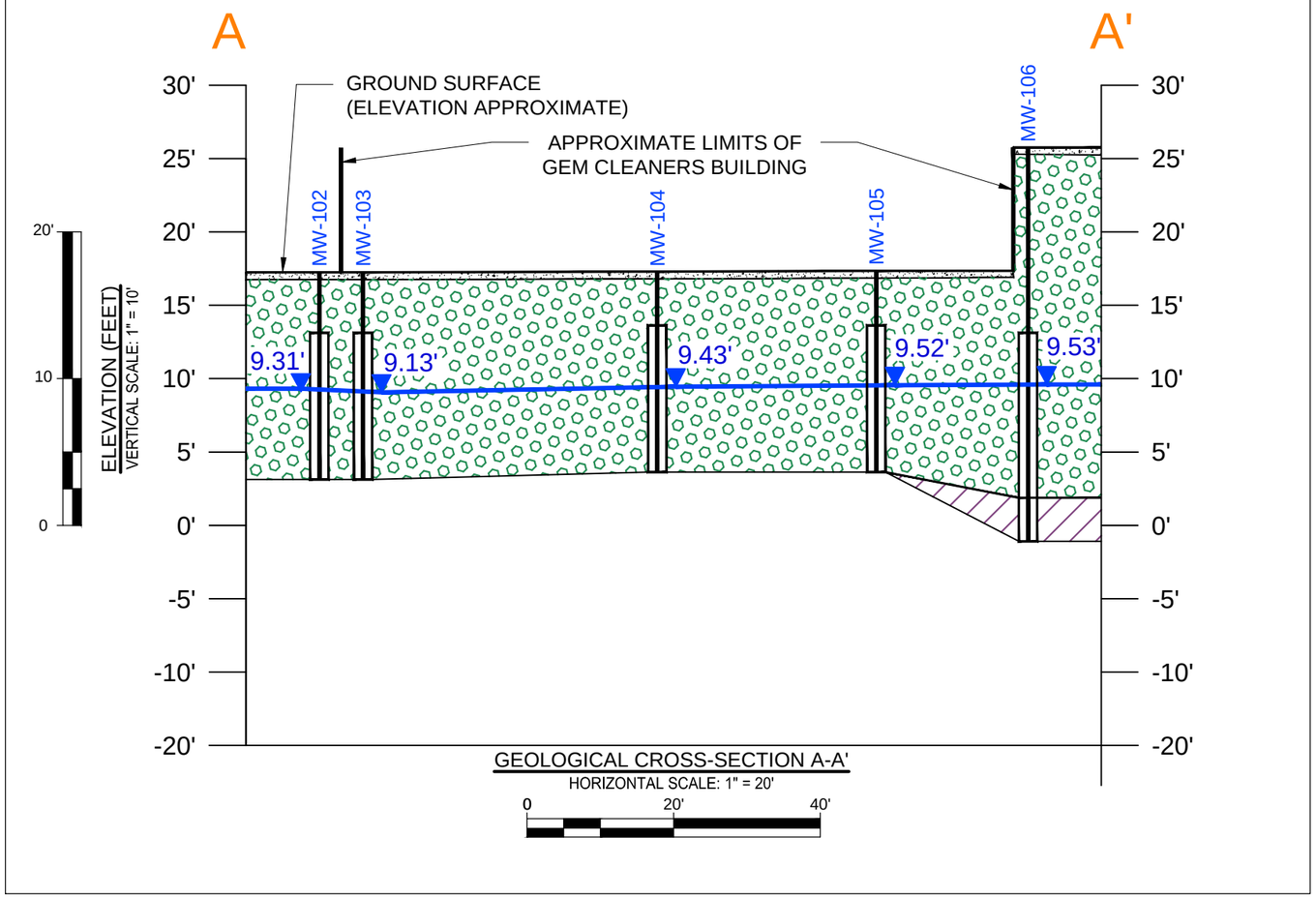
FILE NO.: Figure 5 - Hist. GW Samp. Res. for PCE.dwg

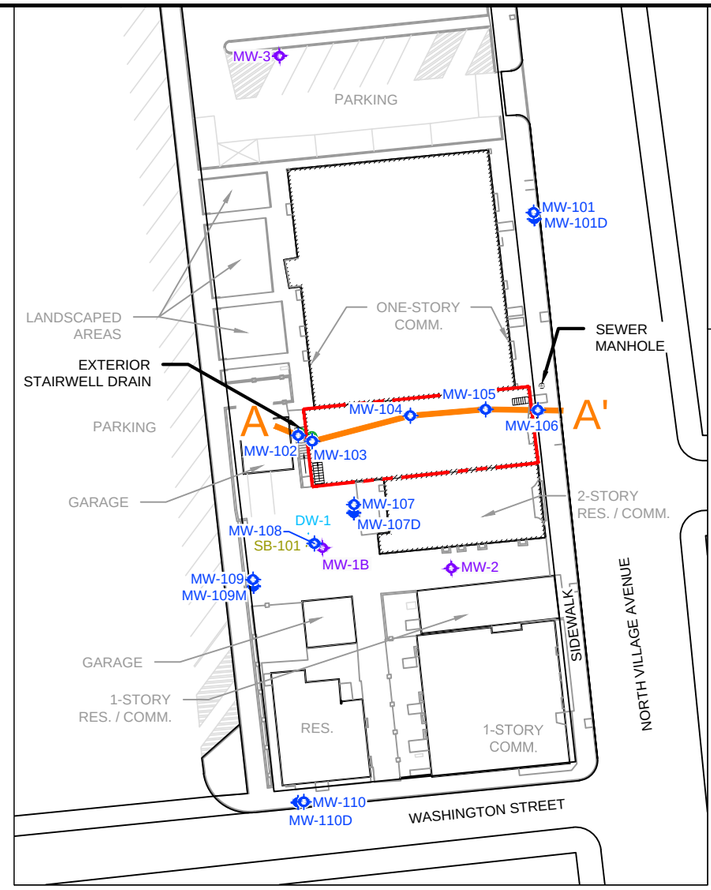
11x17 — ATTACHED XREFS: N:\B-153-1\MWetsak\84 NORTH VILLAGE AVENUE — ATTACHED IMAGES: 06.11.18 FIGURE 3 MARKUP (ME); 84 North Village Road map_image - Figure 3 and 4 - Historic_Page_1; Figure 3 and 4 - Historic_Page_2; GEM_PROPLOCS Fig 2; GEPR0-1000 FT - grey toned V2; historic WELLS_Page_2;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 5 - Hist. GW Samp. Res. for PCE.dwg — PLOT DATE: June 05, 2019 - 12:57PM — LAYOUT: 11x17L



GEOLOGICAL CROSS-SECTION A-A'

HORIZONTAL SCALE: 1" = 20'

0 20' 40'



TRANSECT LOCATION MAP

0 60' 120'

SCALE: 1" = 60'

LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DRAIN INLET
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- SB-XXX — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- MW-X — EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW-XXX — SOILBORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- MW-XXXD/M — SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- GEOLOGICAL CROSS-SECTION TRANSECT
- 9.31' — INFERRED GROUNDWATER SURFACE ELEVATION AND ELEVATION MEASUREMENT (SHALLOW WELLS - APRIL 2018)
- MONITORING WELL SCREEN
- CONCRETE
- SILT AND SAND
- SAND

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. DRAIN INLETS NOT SHOWN IN CROSS-SECTION.

SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
GEOLOGICAL CROSS-SECTION A-A'

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 6A**
DATE:	JUNE 2019		

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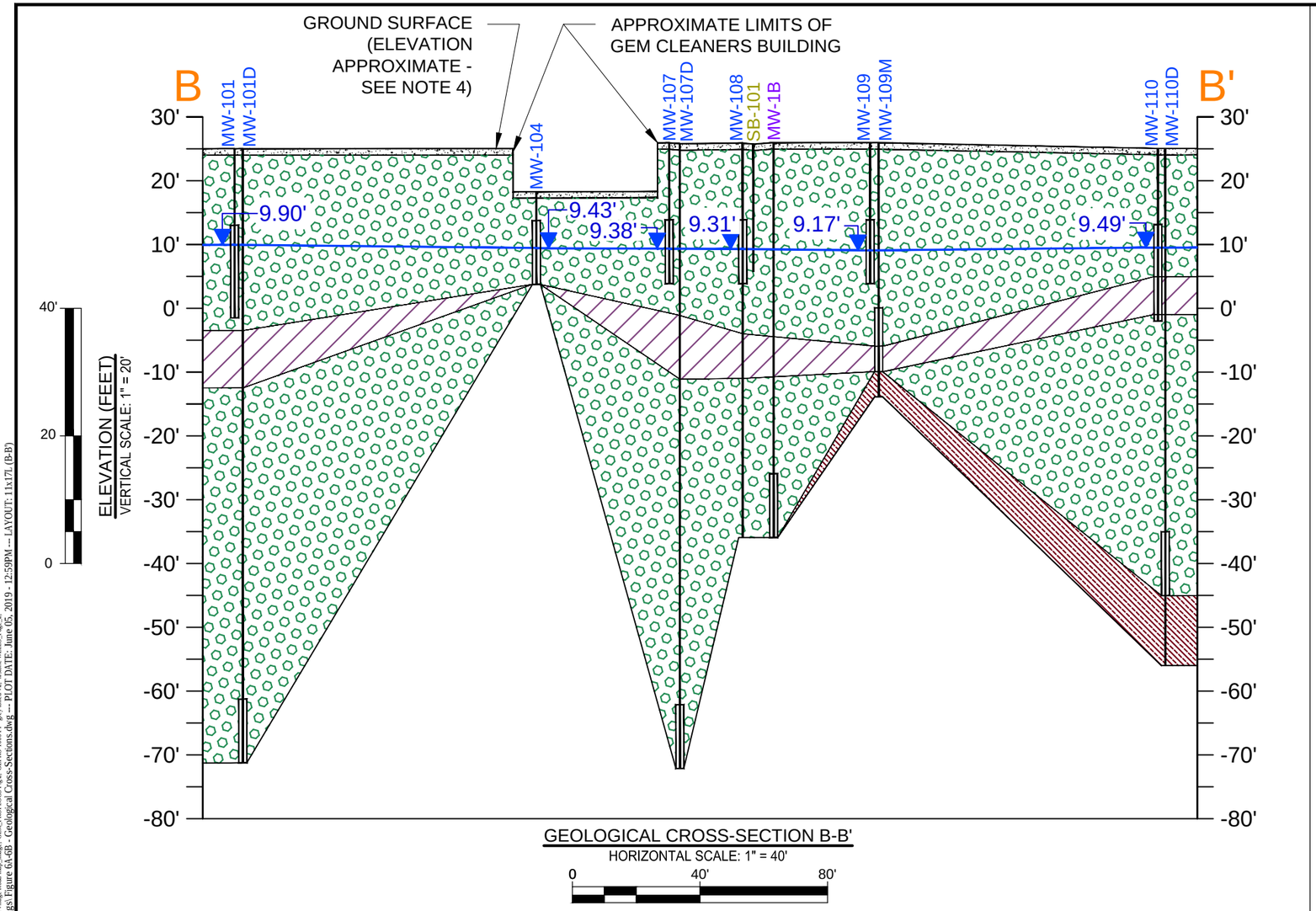
FILE NO.: Figure 6A-6B - Geological Cross-Sections.dwg

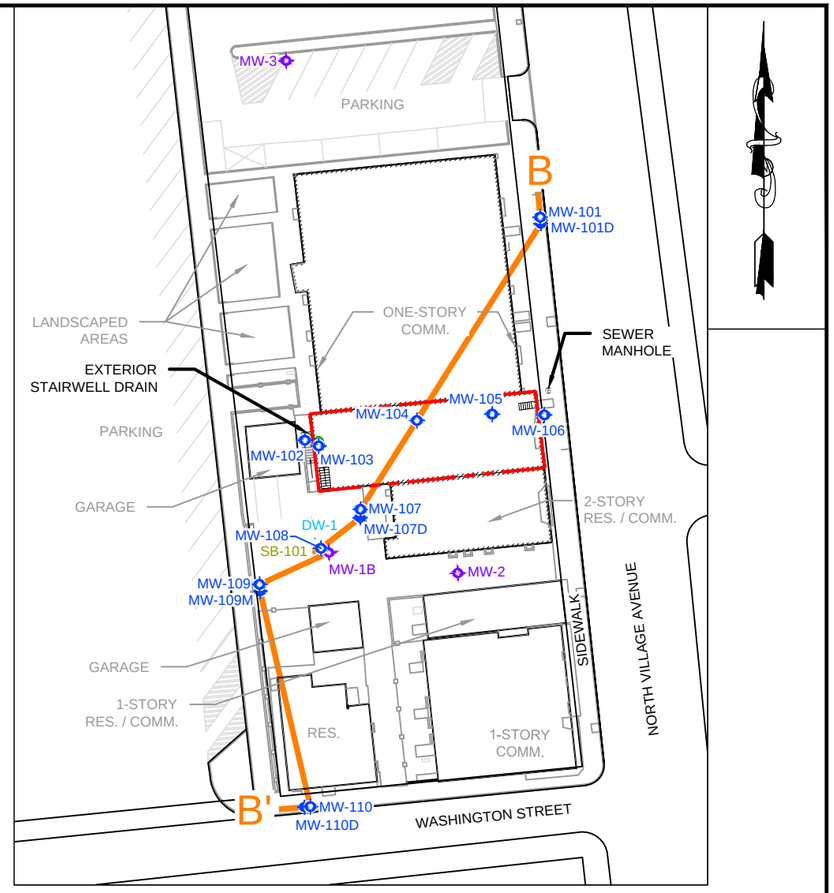
11x17 -- ATTACHED XREFS: N-38-153-1-MWestall-84 NORTH VILLAGE AVENUE -- ATTACHED IMAGES: 06-11-18 FIGURE 3 MARKUP (ME)- 84 North Village Road map_image; GEM_PROPLOGS Fig 2; GEPRO-1000 FT - grey toned V2; Isaac WELLS, Page 2;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\ Figure 6A-6B - Geological Cross-Sections.dwg --- PLOT DATE: June 03, 2019 - 6:55PM --- LAYOUT: 11x17L (A-A')



GEOLOGICAL CROSS-SECTION B-B'

HORIZONTAL SCALE: 1" = 40'

0 40' 80'



TRANSECT LOCATION MAP

0 60' 120'

SCALE: 1" = 60'

LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DRAIN INLET
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- SB-XXX — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- MW-X — EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW-XXX — SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- MW-XXXD/M — SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- GEOLOGICAL CROSS-SECTION TRANSECT
- 9.31' — INFERRED GROUNDWATER SURFACE ELEVATION AND ELEVATION MEASUREMENT (SHALLOW WELLS - APRIL 2018)
- MONITORING WELL SCREEN
- CONCRETE / ASPHALT
- CLAY
- SILT AND SAND
- SAND

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. ELEVATIONS OF LOWEST LEVEL FLOOR SLABS OF ADJACENT BUILDINGS ARE NOT KNOWN.

SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
GEOLOGICAL CROSS-SECTION B-B'

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 6B**
DATE:	JUNE 2019		

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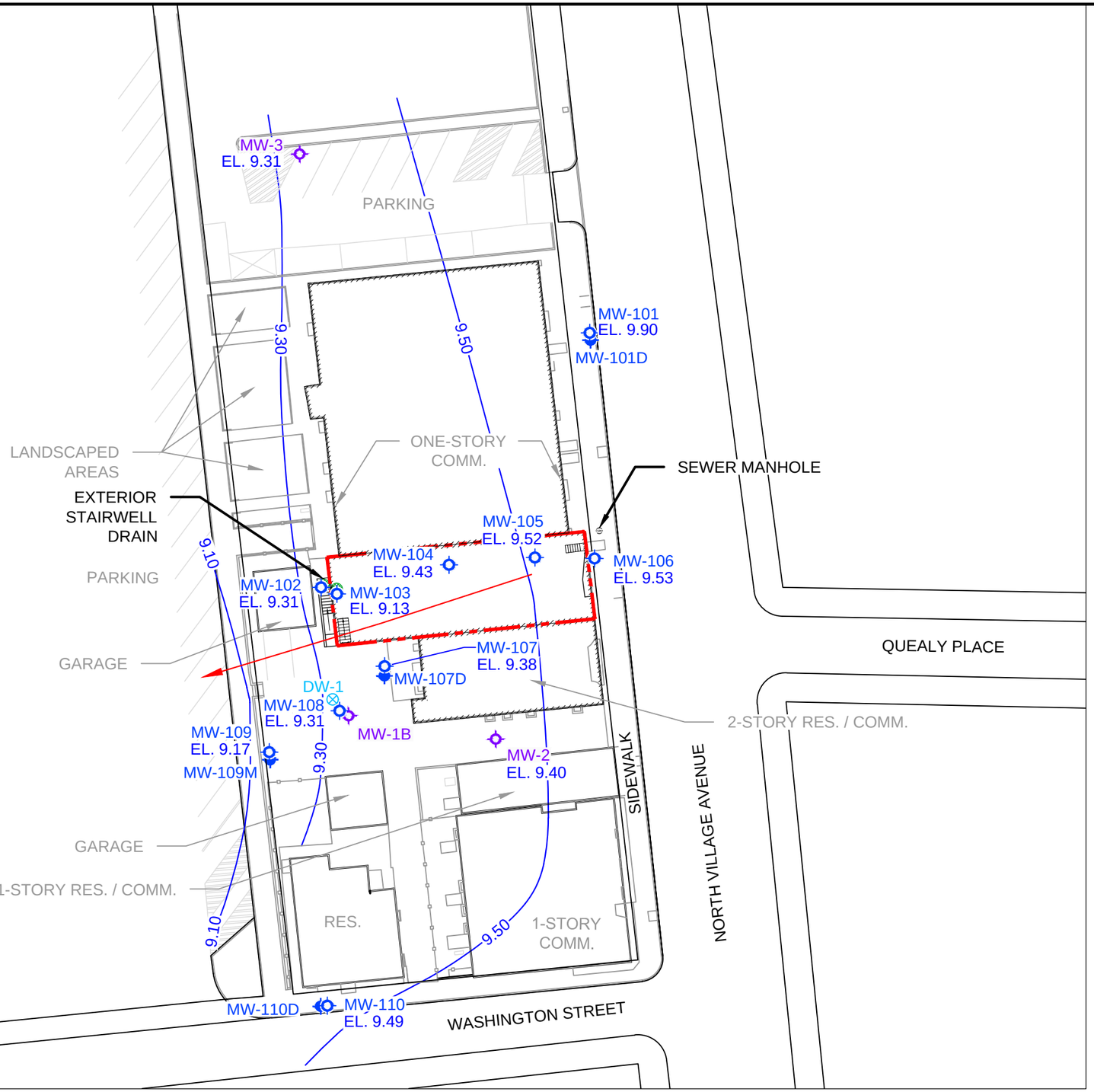
FILE NO.: Figure 6A-6B - Geological Cross-Sections.dwg

11x17 -- ATTACHED XREFS: N:\8-153-1-M\wena\84 NORTH VILLAGE AVENUE -- ATTACHED IMAGES: 06\11\18 FIGURE 3 MARKUP (ME); 84 North Village Road map_image; GEM_PROPLOCS Fig 2; GEPRD-1000 FT - grey toned V2; historic WELLS; Page_2;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\ Figure 6A-6B - Geological Cross-Sections.dwg --- PLOT DATE: June 05, 2019 - 12:59PM --- LAYOUT: 11x17L (B-B')



SCALE: 1" = 40'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

	GEM CLEANERS BUILDING
DW-1	DRYWELL LOCATION AND IDENTIFICATION NUMBER
	DRAIN INLET
COMM.	COMMERCIAL
RES.	RESIDENTIAL
MW-X	EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
MW-XXX	SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
MW-XXXD/M	SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
EL. 8.91	GROUNDWATER SURFACE ELEVATION (IN FEET)
9.10	INFERRED GROUNDWATER SURFACE ELEVATION CONTOUR (IN FEET)
	INFERRED GROUNDWATER FLOW DIRECTION

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988.
4. MEASUREMENT FOR MONITORING WELL MW-103 WAS NOT USED IN GENERATING GROUNDWATER SURFACE ELEVATION CONTOURS.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE: **GROUNDWATER SURFACE ELEVATION CONTOUR MAP - SHALLOW OVERBURDEN (APRIL 2018)**

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L.O'HARA		**FIGURE 7**
DATE:	JUNE 2019		

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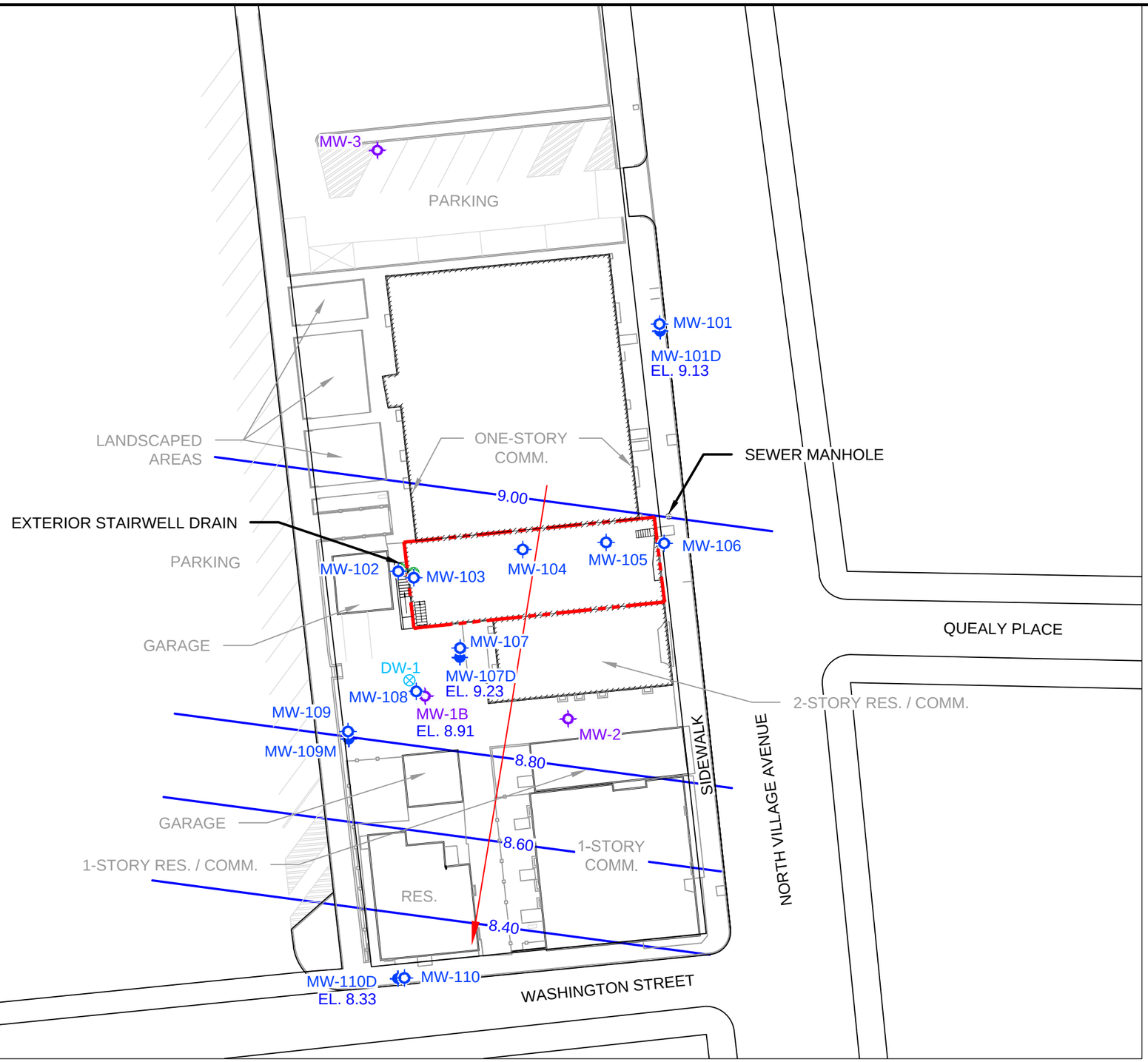
FILE NO.: Figure 7 - GW Surf. El. Cont. Map - Shallow OB (April 2018).dwg

11x17 -- USER: lidelgado -- ATTACHED XREFS: X:\JOBS\3-1\Mineola\84 NORTH VILLAGE AVENUE, Shallow GW (0.2 Ft. Intervals) (ACAD R2 -- ATTACHED IMAGES: 06-11 EFIGURE 3 MARKUP.JPEG, 84 North Village Road map_image; GEM_PROPLOCS.Jpg 2; GEPRO-1000 FT - grey toned V2; Instone WELLS_Page_2;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 7 - GW Surf. El. Cont. Map - Shallow OB (April 2018).dwg -- PLOT DATE: June 03, 2019 - 7:15PM -- LAYOUT: 11x17L
Version: 2017-10-21



SCALE: 1" = 40'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

	GEM CLEANERS BUILDING
DW-1	DRYWELL LOCATION AND IDENTIFICATION NUMBER
	DRAIN INLET
COMM.	COMMERCIAL
RES.	RESIDENTIAL
MW-X	EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
MW-XXX	SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
MW-XXXD/M	SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
EL. 8.91	GROUNDWATER SURFACE ELEVATION (IN FEET)
9.20	INFERRED GROUNDWATER SURFACE ELEVATION CONTOUR (IN FEET)
	INFERRED GROUNDWATER FLOW DIRECTION

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988.
4. MEASUREMENT FOR MONITORING WELL MW-107D WAS NOT USED IN GENERATING GROUNDWATER SURFACE ELEVATION CONTOURS.
5. DUE TO THE LIMITED DATA SET AND LOCATIONS OF THE DEEP MONITORING WELLS, THERE IS LIMITED CERTAINTY REGARDING THE GROUNDWATER SURFACE ELEVATION CONTOURS SHOWN ON THIS FIGURE.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE: **GROUNDWATER SURFACE ELEVATION CONTOUR MAP - DEEP OVERBURDEN (APRIL 2018)**

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 8**
DATE:	JUNE 2019		

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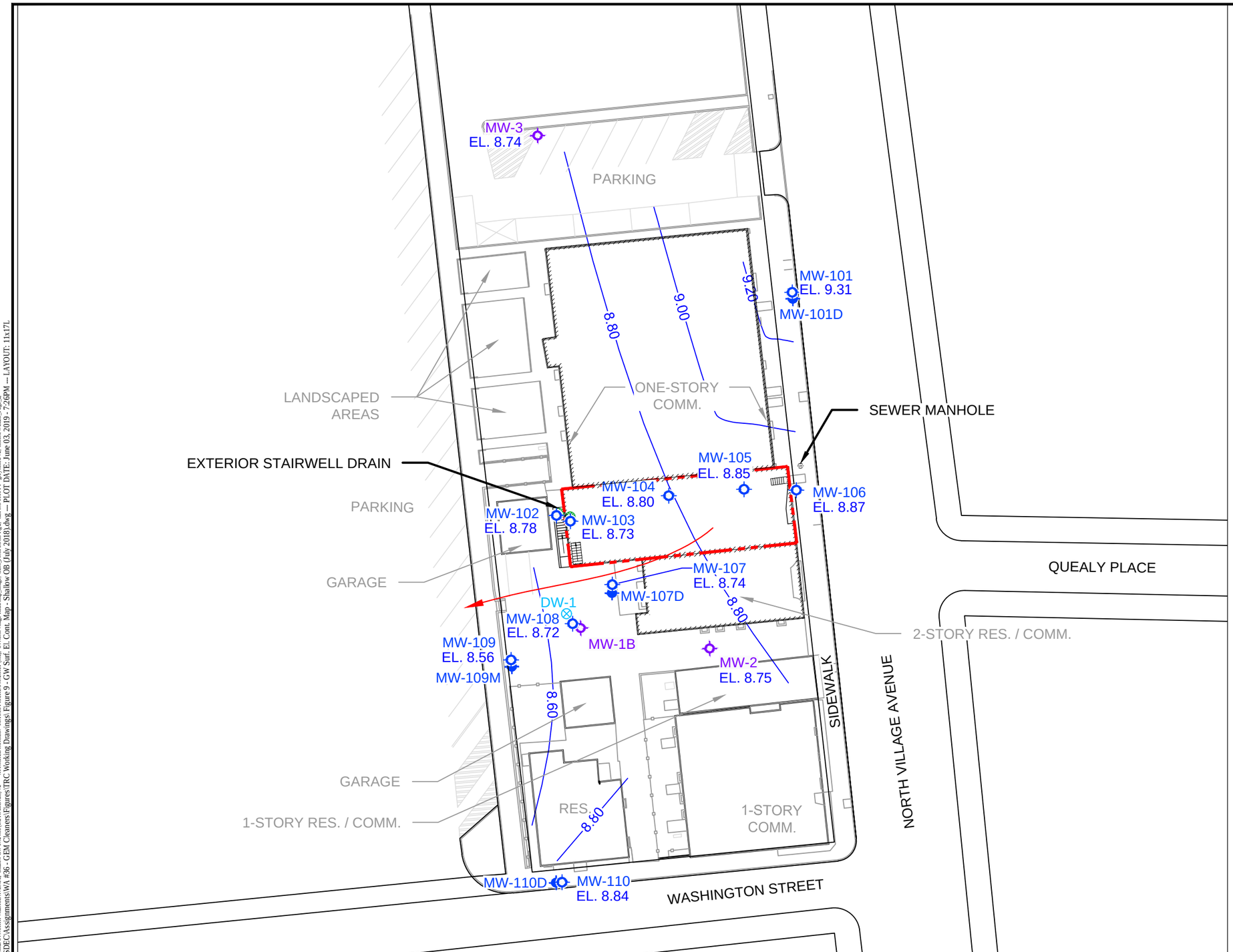
FILE NO.: Figure 8 - GW Surf. El. Cont. Map - Deep OB (April 2018).dwg

11:17 -- ATTACHED SHEETS: N:\B-153-1\Mxrsrd\84 NORTH VILLAGE AVENUE, Shallow GW (0.2 ft. Intervals) ACAD --- ATTACHED IMAGES: 84 North Village Road map_image; GEM PROPOCS Fig 2; GEPR8-1000 FT_gpw insert 02; Interior WELLS_Page_2;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA # 86 - GEM Cleaners\Figures\TRC Working Drawings\Figure 8 - GW Surf. El. Cont. Map - Deep OB (April 2018).dwg --- PLOT DATE: June 03, 2019 - 7:22PM --- LAYOUT: 11x17L



SCALE: 1" = 40'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

	GEM CLEANERS BUILDING
DW-1	DRYWELL LOCATION AND IDENTIFICATION NUMBER
	DRAIN INLET
COMM.	COMMERCIAL
RES.	RESIDENTIAL
MW-X	EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
MW-XXX	SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
MW-XXXD/M	SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
EL. 9.31	GROUNDWATER SURFACE ELEVATION (IN FEET)
9.30	INFERRED GROUNDWATER SURFACE ELEVATION CONTOUR (IN FEET)
	INFERRED GROUNDWATER FLOW DIRECTION

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE: **GROUNDWATER SURFACE ELEVATION CONTOUR MAP - SHALLOW OVERBURDEN (JULY 2018)**

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 9**
DATE:	JUNE 2019		

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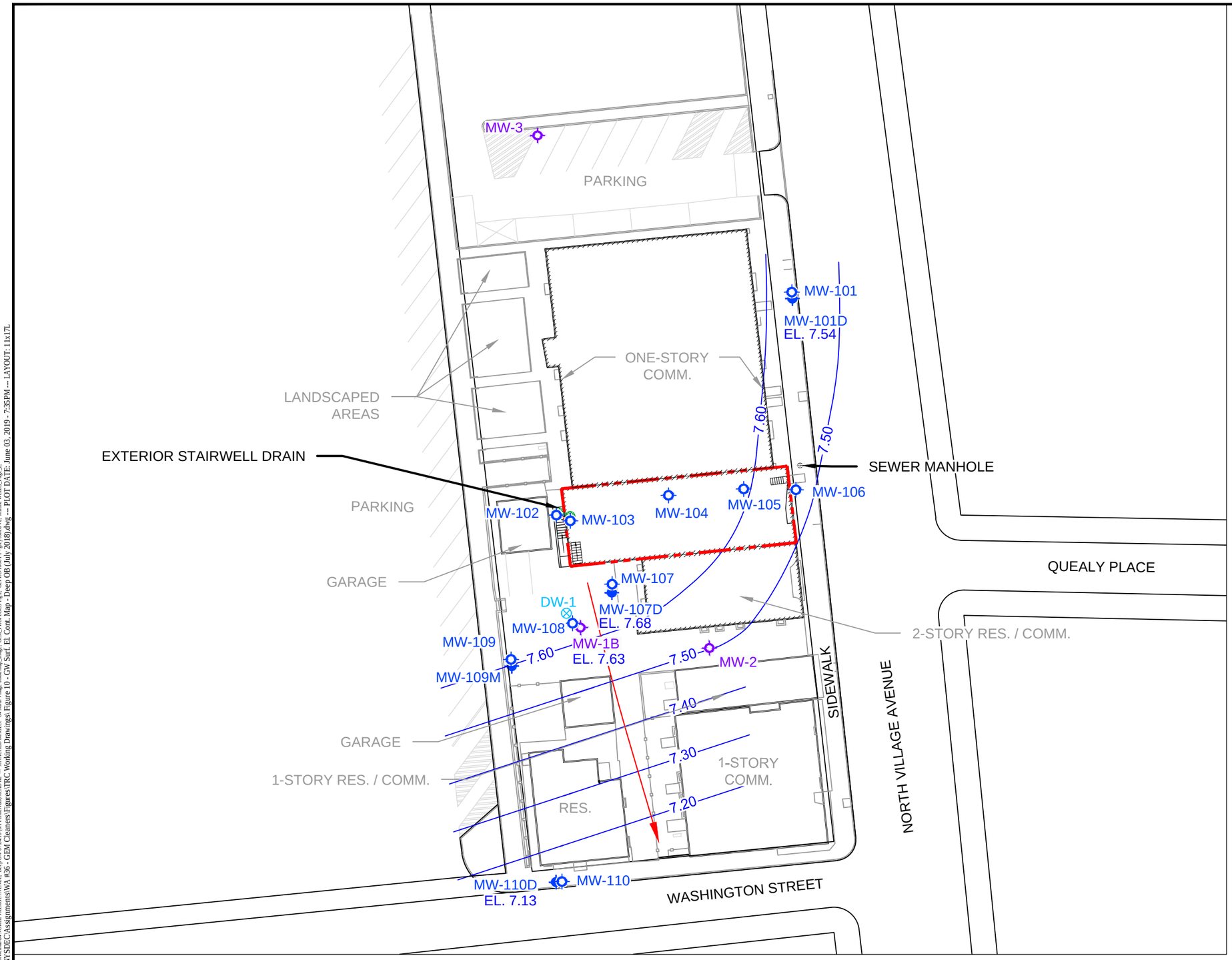
FILE NO.: Figure 9 - GW Surf. El. Cont. Map - Shallow OB (July 2018).dwg

11x17 -- ATTACHED XREFS: -- N:\86-153-1\Mxrefs\84 NORTH VILLAGE AVENUE, Shallow GW (FC241810).2.Pt_layers.dwg(V2 -- ATTACHED IMAGES: 06.11.18 FIGURE 3 MARKUP.JPEG, 84 North Village Road map_image, GEM_PROFOCUS Fig 2, GEPRO1000 FT - gpsviewed V2, Iconic WH15, Page_2, 2019).dwg -- PLOT DATE: / June 03, 2019 - 7:26PM -- LAYOUT: 11x17L
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 9 - GW Surf. El. Cont. Map - Shallow OB (July 2019).dwg



SCALE: 1" = 40'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- DRAIN INLET
- COMM. — COMMERCIAL
- RES. — RESIDENTIAL
- MW-X — EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW-XXX — SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- MW-XXXD/M — SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- EL. 7.68 — GROUNDWATER SURFACE ELEVATION (IN FEET)
- 7.50 — INFERRED GROUNDWATER SURFACE ELEVATION CONTOUR (IN FEET)
- INFERRED GROUNDWATER FLOW DIRECTION

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988.
4. DUE TO THE LIMITED DATA SET AND LOCATIONS OF THE DEEP MONITORING WELLS, THERE IS LIMITED CERTAINTY REGARDING THE GROUNDWATER SURFACE ELEVATION CONTOURS SHOWN ON THIS FIGURE.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE: **GROUNDWATER SURFACE ELEVATION CONTOUR MAP - DEEP OVERBURDEN (JULY 2018)**

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 10**
DATE:	JUNE 2019		

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FILE NO.: Figure 10 - GW Surf. El. Cont. Map - Deep OB (July 2018).dwg

DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC - Working Drawings\Figure 10 - GW Surf. El. Cont. Map - Deep OB (July 2018).dwg — PLOT DATE: June 03, 2019 - 7:35PM — LAYOUT: 11x17L
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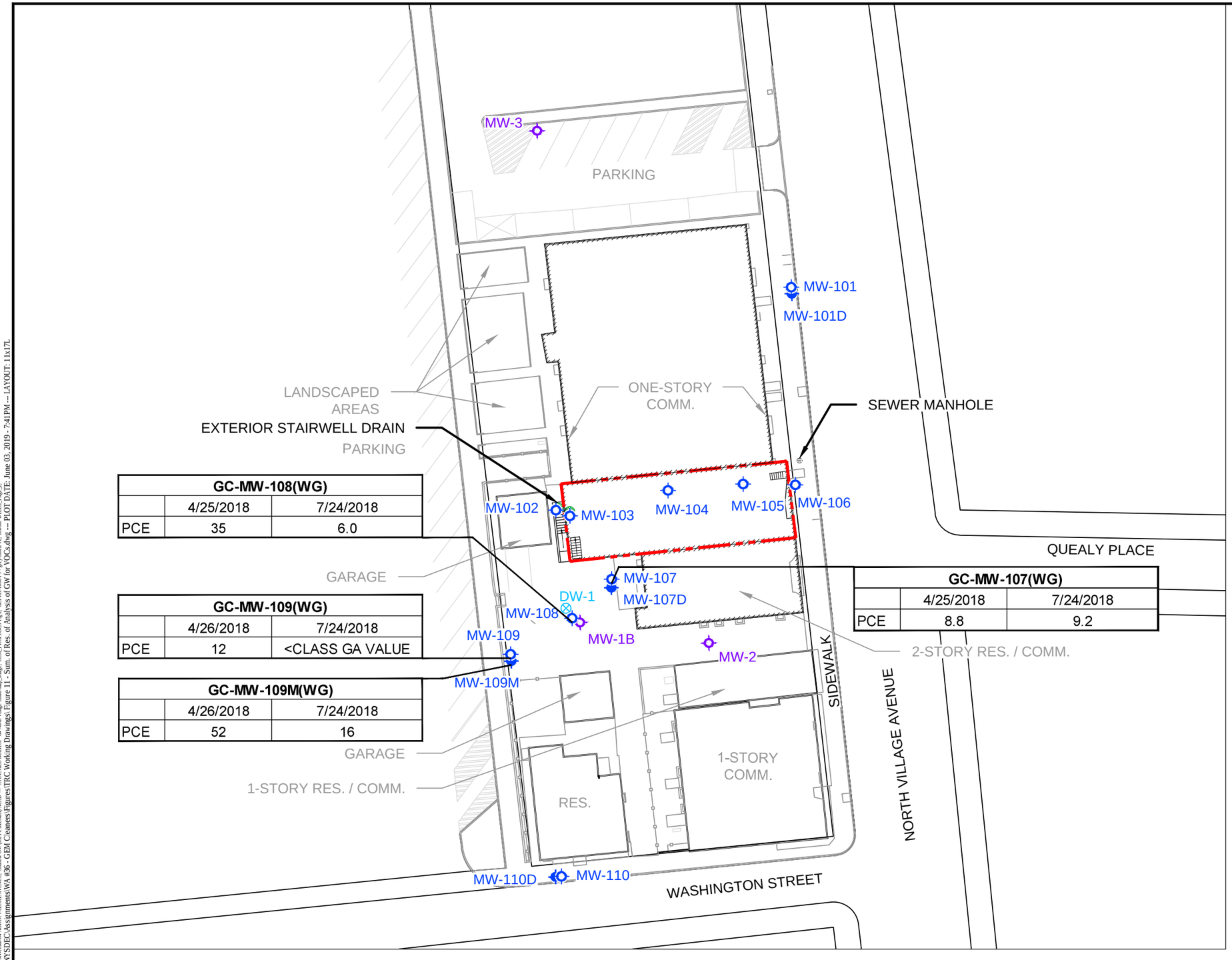
1 in 17 — ATTACHED PREFIX: ; w 36-153.1-HWorld-84 NORTH VILLAGE AVENUE, Dwg\GW\7-24-18 (6) Fulmer-wb1 ACAD 82 — ATTACHED IMAGES: 84 North Village Road.jpg; Image; GEM_PROPOSES Fig 2; ; (EPSG:10017 - grey issued 92; Boston WELLS, Page 2;



GC-MW-108(WG)		
	4/25/2018	7/24/2018
PCE	35	6.0

GC-MW-109(WG)		
	4/26/2018	7/24/2018
PCE	12	<CLASS GA VALUE

GC-MW-109M(WG)		
	4/26/2018	7/24/2018
PCE	52	16

GC-MW-107(WG)		
	4/25/2018	7/24/2018
PCE	8.8	9.2

SCALE: 1" = 40'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- DRAIN INLET
- COMM. — COMMERCIAL
- RES. — RESIDENTIAL
- MW-X — EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW-XXX — SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- MW-XXXD/M — SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)

COMPARISON CRITERIA	
	CLASS GA VALUE
VOC	(µg/L)
TETRACHLOROETHENE (PCE)	5

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. ALL RESULTS ARE IN MICROGRAMS PER LITER (µg/L).
4. ONLY RESULTS ABOVE NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER (CLASS GA VALUES) ARE SHOWN.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER FOR VOCs

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 11**
DATE:	JUNE 2019		

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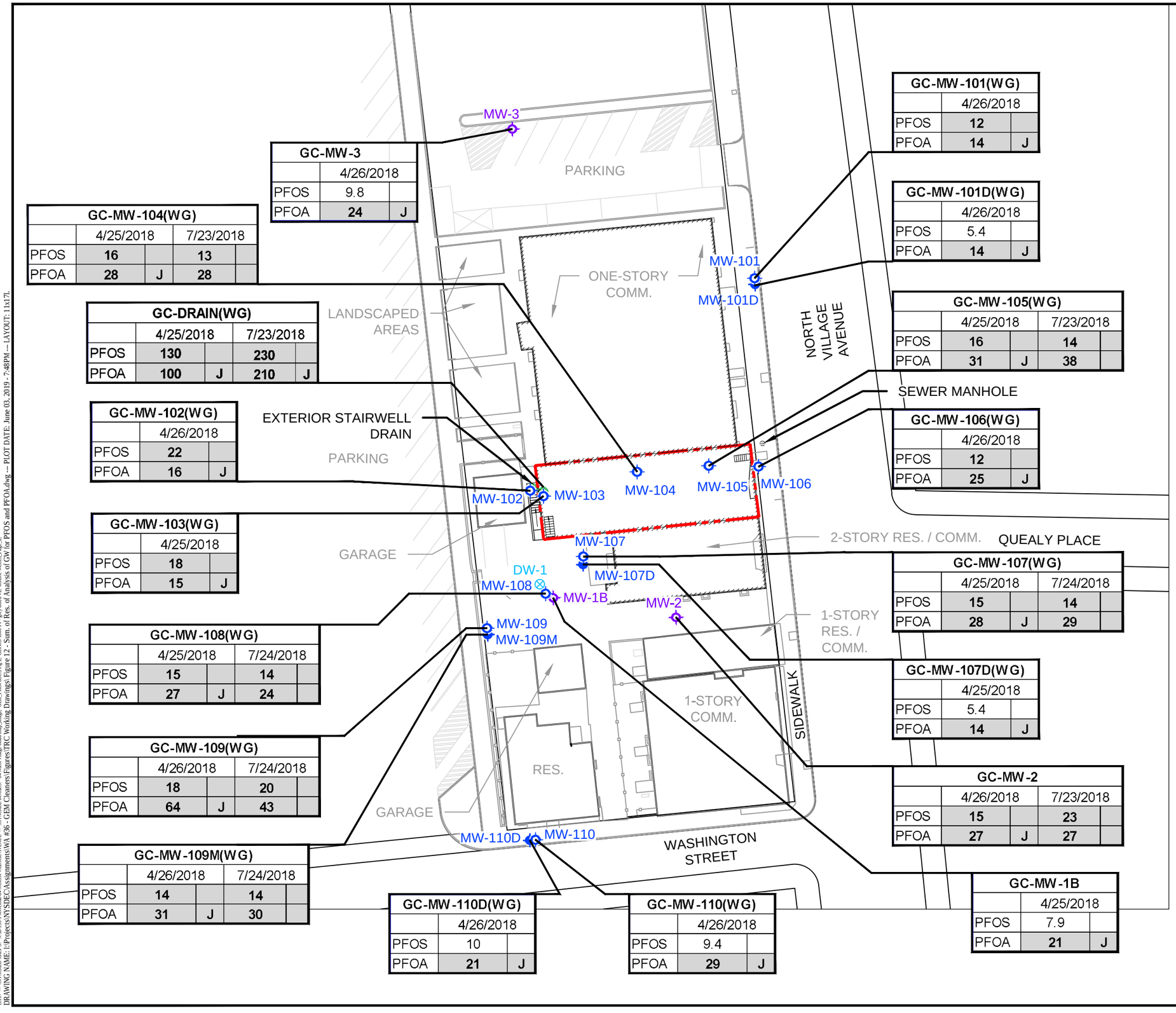
New York, NY 10018
Phone: 212.221.7822
www.TRCcompanies.com

FILE NO.: Figure 11 - Sum. of Res. of Analysis of GW for VOCs.dwg

11x17 — ATTACHED XREFS: N-38-153-1-bWoena-84 NORTH VILLAGE AVENUE, Shallow GW (0.2 Ft. Intervals).ACAD — ATTACHED IMAGES: 84 North Village Road map_image-, GEM_PROPOCS Fig-2, GEPRO-1000 FT - grey toned V2; historic WELLS_Page_2;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 11 - Sum. of Res. of Analysis of GW for VOCs.dwg — PLOT DATE: June 03, 2019 - 7:41PM — LAYOUT: 11x17L



GC-MW-3		
	4/26/2018	
PFOS	9.8	
PFOA	**24**	**J**

GC-MW-104(WG)				
	4/25/2018		7/23/2018	
PFOS	**16**		**13**	
PFOA	**28**	**J**	**28**	

GC-DRAIN(WG)				
	4/25/2018		7/23/2018	
PFOS	**130**		**230**	
PFOA	**100**	**J**	**210**	**J**

GC-MW-102(WG)		
	4/26/2018	
PFOS	**22**	
PFOA	**16**	**J**

GC-MW-103(WG)		
	4/25/2018	
PFOS	**18**	
PFOA	**15**	**J**

GC-MW-108(WG)				
	4/25/2018		7/24/2018	
PFOS	**15**		**14**	
PFOA	**27**	**J**	**24**	

GC-MW-109(WG)				
	4/26/2018		7/24/2018	
PFOS	**18**		**20**	
PFOA	**64**	**J**	**43**	

GC-MW-109M(WG)				
	4/26/2018		7/24/2018	
PFOS	**14**		**14**	
PFOA	**31**	**J**	**30**	

GC-MW-110D(WG)		
	4/26/2018	
PFOS	10	
PFOA	**21**	**J**

GC-MW-110(WG)		
	4/26/2018	
PFOS	9.4	
PFOA	**29**	**J**

GC-MW-1B		
	4/25/2018	
PFOS	7.9	
PFOA	**21**	**J**

GC-MW-2				
	4/26/2018		7/23/2018	
PFOS	**15**		**23**	
PFOA	**27**	**J**	**27**	

GC-MW-107D(WG)		
	4/25/2018	
PFOS	5.4	
PFOA	**14**	**J**

GC-MW-107(WG)				
	4/25/2018		7/24/2018	
PFOS	**15**		**14**	
PFOA	**28**	**J**	**29**	

GC-MW-106(WG)		
	4/26/2018	
PFOS	**12**	
PFOA	**25**	**J**

GC-MW-105(WG)				
	4/25/2018		7/23/2018	
PFOS	**16**		**14**	
PFOA	**31**	**J**	**38**	

GC-MW-101D(WG)		
	4/26/2018	
PFOS	5.4	
PFOA	**14**	**J**

GC-MW-101(WG)		
	4/26/2018	
PFOS	**12**	
PFOA	**14**	**J**

LEGEND (SYMBOLS NOT TO SCALE):

- GEM CLEANERS BUILDING
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- DRAIN INLET
- COMM. — COMMERCIAL
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- MW-X — EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW-XXX — SOIL BORING AND SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)
- MW-XXXD — SOIL BORING AND DEEP / INTERMEDIATE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH/APRIL 2018)

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
2. DRAIN INLET, DRY WELL, SOIL BORING AND MONITORING WELL LOCATIONS SURVEYED BY PERFECT POINT LAND SURVEYING ON APRIL 17, 2018.
3. ALL RESULTS ARE IN NANOGRAMS PER LITER (ng/L).
4. J - ESTIMATED VALUE
5. PFOS - PERFLUOROOCTANESULFONIC ACID
6. PFOA - PERFLUOROOCTANOIC ACID
7. BOLD AND SHADED RESULTS ARE ABOVE NYSDEC RECOMMENDED MAXIMUM CONTAMINANT LEVEL (MCL) OF 10 ng/L FOR PFOA AND PFOS (INDIVIDUAL CONCENTRATIONS).
8. GROUNDWATER SAMPLES WERE NOT COLLECTED FOR ANALYSIS FOR PFOS AND PFOA FROM THE FOLLOWING MONITORING WELLS IN JULY 2018: MW-1B, MW-3, MW-101, MW-101D, MW-102, MW-103, MW-106, MW-107D, MW-110, AND MW-110D.

0 40' 80'

SCALE: 1" = 40'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE: **SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER AND WATER FOR PFOS AND PFOA**

DRAWN BY:	H. DELGADO	PROJ NO.:	279191
CHECKED BY:	E. EBERT		
APPROVED BY:	L. O'HARA		**FIGURE 12**
DATE:	JUNE 2019		

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FILE NO.: Figure 12 - Sum. of Res. of Analysis of GW for PFOS and PFOA.dwg

DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 12 - Sum. of Res. of Analysis of GW for PFOS and PFOA.dwg -- PLOT DATE: June 02, 2019 - 7:48PM -- LAYOUT: 11x17L
11x17 -- ATTACHED REFS: -- x'ref-153-1-HWood-84 NORTH VILLAGE AVENUE -- ATTACHED IMAGES: -84 North Village Road map_image; GEM_PROPOCS Fig 2; GEMS-1000 FT; .gpw saved V2; Issues: WELLS; Page_2

APPENDIX A
PHOTOGRAPH LOG

Appendix A
Photograph Log

Photo 1: First floor of Gem Cleaner's Site building.

Photo 2: Basement of Gem Cleaner's Site building.

Photo 3: Storage area and 55-gallon drums in the closet in northwestern portion of the basement.

Photo 4: 5' x 5' depression in the floor slab noted in the basement of the Gem Cleaners building.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
279191	J. Robinson, E. Ebert, and L. O'Hara	1 of 4	NYSDEC	Gem Cleaners 84 North Village Avenue Rockville Centre, NY	TRC

Appendix A
Photograph Log

Photo 5: Empty drum located in storage area in northwest portion of the basement of the Gem Cleaners building.

Photo 6: Sump pit in basement of the Gem Cleaners building.

Photo 7: Green-tinted standing water within the drain located in the western portion of the Gem Cleaners basement, adjacent to MW-103.

Photo 8: Exterior stairwell drain located at the bottom of the exterior stairwell west of the Gem Cleaners building.

Appendix A
Photograph Log

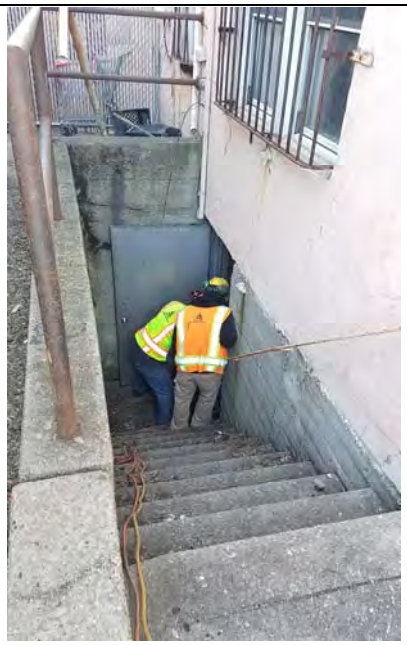


Photo 9: Exterior stairwell to Gem Cleaners basement.

Photo 10: Installation of MW-108.

Photo 11: Installation of MW-103.

Photo 12: Installation of MW-107.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
279191	J. Robinson, E. Ebert, and L. O'Hara	3 of 4	NYSDEC	Gem Cleaners 84 North Village Avenue Rockville Centre, NY	TRC

Appendix A
Photograph Log

Photo 13: Exclusion area and containerized drill cuttings near MW-109M/MW-109.

Photo 14: Installation of MW-110D/MW-110.

APPENDIX B
PREVIOUS REPORTS
(ON CD)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

TRANSMITTAL SLIP

TO Hayden Brewster, EIS	DATE 5/25/00
FROM Bob Stewart, Region 1	
RE: SA & Remediation Report 8/97	

I have attached one copy of the report that you requested on Gem Cleaners.

Bob

FOR ACTION AS INDICATED:

- ☐ Please Handle
- ☐ For Your Information
- ☐ Comments
- ☐ Approval/Signature
- ☐ File
- ☐ Return to me by _____
- ☐ Prepare Reply for _____ Signature
- ☒ For your files

P.W. GROSSER CONSULTING QUALITY PROFESSIONALISM SERVICE ENGINEER & HYDROGEOLOGIST, P.C.

August 21, 1997

Chris Lafemina
NYSDEC
SUNY, Bldg. 40
Stony Brook, New York 11790-2356

Re: Site Assessment & Remediation Report
Gem Cleaners
84 N. Village Ave.
Rockville Centre, NY

Dear Mr. LaFemina

Enclosed is a copy of the document *Site Assessment & Remediation Report for the Property at 84 North Village Avenue, Rockville Centre, New York, August, 1997.*

The report documents the findings of a site inspection, investigation and identification of a potential source of groundwater contamination at the site. After successful remediation of the potential source area, it is believed that no further action is warranted and referral of the site for the NYSDEC Registry of Inactive Hazardous Waste Sites is not appropriate.

We request that your Department acknowledge receipt of the enclosed and your concurrence that this concludes our clients obligations with respect to environmental action at the site.

Should you have any questions or require further information, please do not hesitate to contact this office.

Very truly yours
P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P.C.

James P. Rhodes

James P. Rhodes, C.P.G.
Sr. Hydrogeologist

AUG 22

JPR:jpr

cc: Mr. George Brauch w/encl.
Mike Tone, Esq. w/encl
Norman Sarnoff, Esq. w/encl.

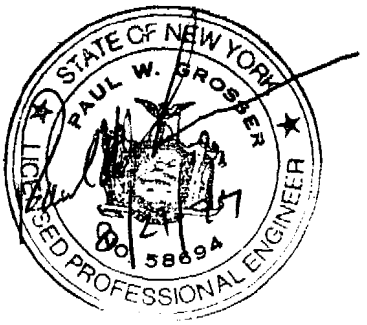
f:\shared\pwg\gbr\corespnd\ltransmi

P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, P.C.

SITE ASSESSMENT & REMEDIATION REPORT FOR THE PROPERTY LOCATED AT 84 NORTH VILLAGE AVENUE

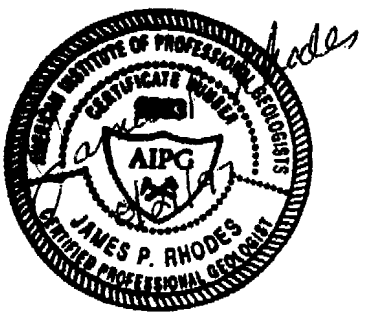
ROCKVILLE CENTRE, NEW YORK

130052



Prepared for: *Mr. George Brauch*
For Submittal To The
New York State Department of Environmental Conservation
Region I

Prepared by: *P.W. Grosser Consulting Engineer & Hydrogeologist, P.C.*



AUGUST 1997

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SECTION		PAGE NUMBER
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2.0	SITE BACKGROUND	1
3.0	SITE INSPECTION	3
4.0	INITIAL SAMPLING OF EXTERIOR STAIRWELL DRAIN	6
5.0	SOIL BORING RESULTS	7
6.0	REMEDIATION OF EXTERIOR STAIRWELL DRAIN	8
7.0	SOIL DISPOSAL	10
8.0	SUMMARY & CONCLUSIONS	10

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2	Building's First Floor Layout Plan	3
3	Building's Basement Layout Plan	4

PHOTOGRAPHS: IMMEDIATELY FOLLOWING THE REPORT

APPENDIX A: EEA'S MAY, 1995 PHASE II REPORT

APPENDIX B: LABORATORY REPORTS

APPENDIX C: HAZARDOUS WASTE MANIFEST

1.0 INTRODUCTION

P.W. Grosser Consulting Engineer & Hydrogeologist, P.C. (PWGC) has prepared this report to document the findings of a site inspection, investigation and remediation of an exterior stairwell drain at the property located at 84 North Village Avenue, Rockville Centre, New York. The property is currently occupied by a dry cleaning facility known as Gem Cleaners. The objective of the site inspection was to evaluate the potential for the existence of on-site source areas that may be contributing to groundwater contamination detected beneath the site. The findings of the inspection led to the sampling of bottom deposits within a small diameter exterior stairwell drain located adjacent to the basement door in the rear of the facility. After initial sample results indicated concentrations of tetrachloroethene (PCE) above New York State Department of Environmental Conservation (NYSDEC) soil cleanup objectives contained in their Technical and Administrative Guidance Memorandum (TAGM HWR-94-4046), a boring was performed through the drain to define the vertical extent of contamination. Subsequently, the drain was excavated and impacted soils above TAGM soil cleanup objectives were removed and properly disposed. The former drain was backfilled with clean material and a new structure was constructed.

After the identification and successful remediation of the potential source area, no further work at the site is warranted and referral of the site for the NYSDEC Registry of Inactive Hazardous Waste Sites is not appropriate. The basis of these conclusions are set forth below.

2.0 SITE BACKGROUND

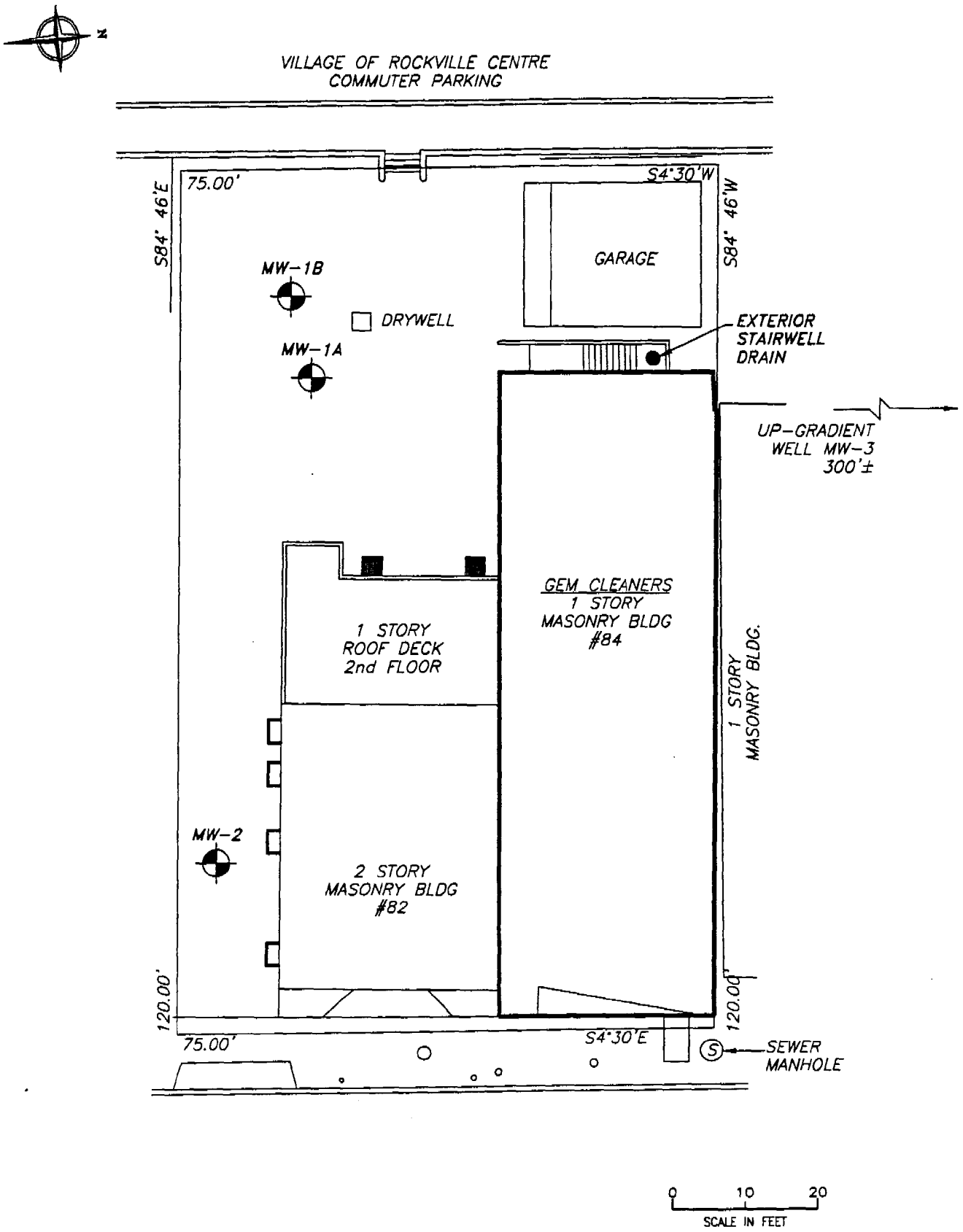
Energy & Environmental Analysts, Inc. (EEA) conducted a Phase I Environmental Site Assessment at the facility in July, 1994. The Phase I identified the use of the site as a dry cleaning facility, which uses and stores chemical products. The main chemical noted in use, as in most dry cleaning facilities, was PCE. Also noted during the Phase I was the existence of a floor drain on the first floor of the subject building, a sump pit in the basement for the discharge of boiler condensate, and an exterior drainage structure located in the paved parking area behind the facility. EEA indicated that a pipe was noted within the exterior structure from an unknown source.

Based on the information obtained during the Phase I, EEA performed a Phase II Environmental Subsurface Investigation. Phase II work was completed in May, 1995. The scope of work for the Phase II included a soil boring conducted through the exterior drainage structure. Multiple soil samples were collected from within the structure and analyzed from various depths (2-4', 8-10', 13 -15', and 18-20') to provide a vertical profile of soil quality. Depth to water beneath the site is approximately 18 feet below grade. In addition, a total of four groundwater monitoring wells (three water table and one deep) were installed and sampled. One well was located approximately 300 feet north (up-gradient) of the site, two wells (one water table and one deep) were installed directly down-gradient from the exterior drainage structure, and one well was located down-gradient of the sump pit located in the basement of the subject building. Since no water table elevation contours are presented in EEA's report, it is assumed EEA used regional groundwater flow patterns to determine up-gradient and down-gradient positions relative to the site (see Figure 1).

The results of the Phase II investigation indicated that PCE was detected at 7 ug/kg, well below the NYSDEC TAGM soil cleanup objective, in the 0-2' foot soil sample collected within the exterior drainage structure. PCE was below detectable levels in subsequent soil samples collected within the structure. The results of the groundwater samples collected from the monitoring wells indicated relatively low concentrations of PCE in the groundwater beneath the property, in addition to well MW-3 installed up-gradient of the site. The highest concentrations of PCE were detected in water table monitoring well MW-1A (26 ug/l -56 ug/l), which is located adjacent to the exterior drainage structure (see Figure 1).

EEA's report, detailing the above findings was submitted to the NYSDEC for their review. The report recommendations indicated that no additional testing or remediation would likely be required as PCE concentrations in MW-1A would diminish over time to background levels. A copy of EEA's May, 1995 Phase II report is included in Appendix A.

Subsequently, the NYSDEC contacted the property owner and indicated that in order for the NYSDEC to consider a "no action" position, the potential for additional source areas needed to be



P.W. Grosser Consulting Engineer & Hydrogeologist, P.C. An Affiliate of Kellogsense & Grosser Consulting Engineers, P.C. 100 South Main Street, Suite 202, Phn: (516) 568-0333 — Seaville, N.Y. 11762, Fx: (516) 568-4705 Prepared for: Gem Cleaners Project No: GBR9701 — Date: 8/14/97	SITE PLAN GEM CLEANERS 84 N. Village Ave. Rockville Centre, N.Y.	Figure No: 1

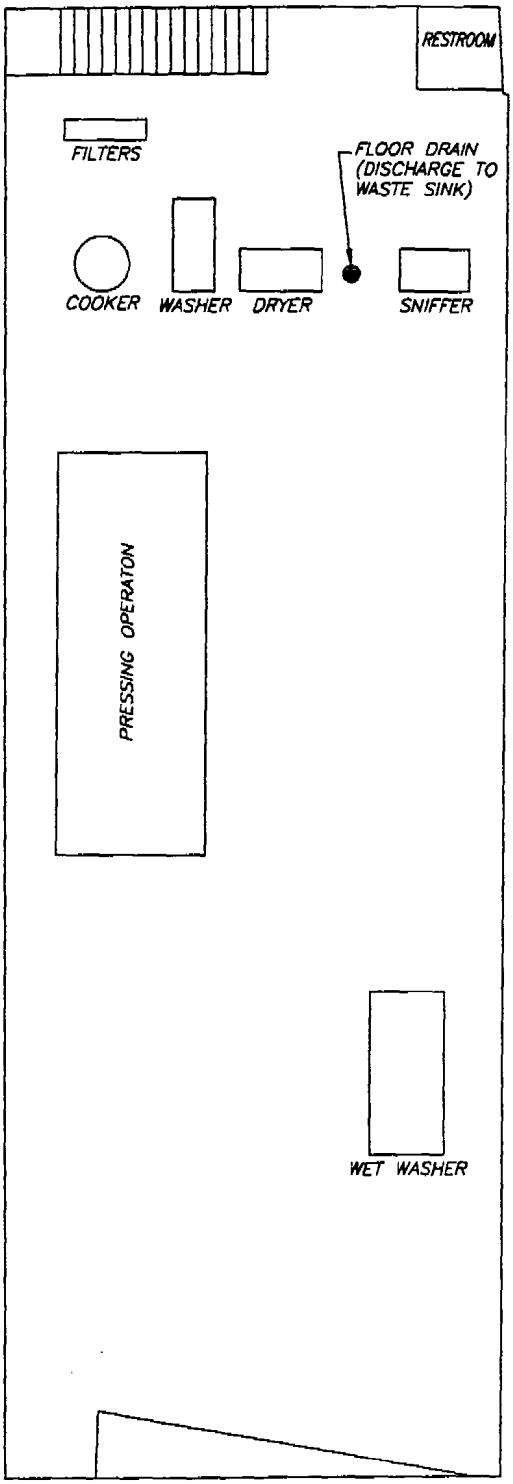
evaluated. After an initial site inspection was conducted, Mr. Lafemina of the NYSDEC was contacted by this office to discuss an appropriate scope of work related to the this project. The initial inspection revealed an additional potential source area to be an exterior basement stairwell drain. Mr. Lefemina informally indicated in a January 27, 1997 telephone conversation that a detailed discussion of the site inspection results and the sampling of the stairwell drain would be sufficient to satisfied the Department's requirements.

3.0 SITE INSPECTION

The initial site inspection was conducted on January 22, 1997 and focused on the current operations of the facility and the generation of liquid waste. During the site inspection, it was noted that early generation (transfer machine) equipment is still being utilized and the facility consumes approximately 200 gallons of PCE per year. Early generation machines do not employ many of the waste reduction and recovery technologies that are inherent in the later generation equipment, such as refrigerator condensers. Therefore, these operations tend to use more PCE throughout the year and generate greater volumes of liquid waste. Equipment used during the process includes the following; a Washex washing machine, Solve Miser dryer, Sniff-O-Miser sniffer, Filter King filters, Per Corporation cooker, and Remi-Dri vacuum system. With the exception of the vacuum system, the dry cleaning equipment is utilized on the first floor of the subject building. Figure 2 shows a general layout of the first floor.

As part of the process, PCE is stored at the base of the washer. Prior to washing, the PCE is pumped through the filters, which are designed to remove fatty acids, water and migrant dyes from the PCE. To further remove impurities from the PCE, the PCE is routed to the cooker every other day. The employee at the site indicated that both the muck generated by the cooking process and the spent filters are placed in 30 gallon drums and disposed of by Saftey Kleen. Saftey Kleen drums were observed at the site.

Once the washing operation is complete and the PCE drained, the clothes are transferred to the dryer. The sniffer is connected to both the washer and dryer and is designed to capture vapors from these



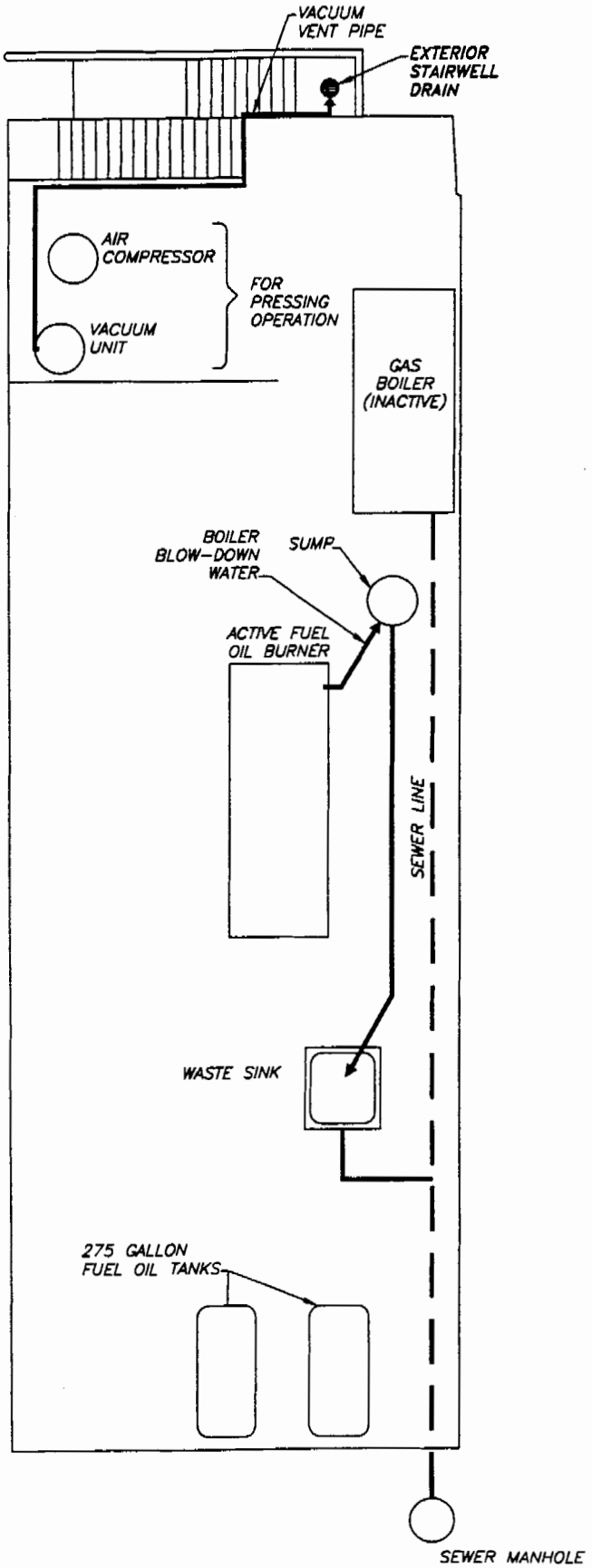
FIRST FLOOR PLAN
N.T.S.

P.W. Grosser Consulting Engineer & Hydrogeologist, P.C. An Affiliate of Kleagerles & Grosser Consulting Engineers, P.C. 100 South Main Street, Suite 202 Bayville, N.Y. 11709 PH: (516) 628-8300 Fx: (516) 628-8705 Prepared for: Gem Cleaners Project No: GBR9701 Date: 8/14/97	FIRST FLOOR PLAN GEM CLEANERS 84 N. Village Ave. Rockville Centre, N.Y.	Figure No: 2

processes. Captured liquids and condensed vapors processed by the sniffer are separated into PCE/ water and are contained in pans located at the base of the unit. The employee indicated that the PCE is reused and the water is disposed of in the buildings toilet. Coolant water generated by the dryer is also disposed of in this manner. Also noted on the first floor of the building was a small diameter floor drain, located immediately adjacent to the dryer (see Figure 2). This floor drain, originally discussed in EEA's Phase I, was clogged at the time of inspection. However, tracing of the piping appeared to be associated with the floor drain, discharge to a waste sink located in the basement of the facility.

Figure 3 shows the general layout of the basement. As described in EEA's Phase I report, a sump pit is located off the northwest corner of the active fuel oil fired boiler. The sump pit consists of a pre-fabricated metal receptacle fitted into the basement floor which is currently receiving boiler condensate. No piping was noted in the sump pit and probing with a steel bar revealed it contained a solid bottom. The sump did contain a float activated sump pump, which turns on the pump when liquids reach a designated level. The sump pump discharged, via flex hose, to the waste sink also located in the basement. Numerous other pipes were also routed to the waste sink. One appeared to be from the floor drain located on the first floor, while another appeared to be an abandoned washing machine used for typical wet cleaning also located on the first floor.

The vacuum unit and associated equipment are located in the southwest corner of the basement. The system is designed to pull vapor and residual water from the press and spotting board operations located on the first floor. This vapor and water contains PCE released from the clothes. Water collected during the process is drained through the bottom of the unit when the system is shut down, while the vapor is typically released through a vent routed to the outside of the building. The vacuum vent at Gem Cleaners, constructed of PVC, was routed along the basement's west wall and horizontally out through a hole cut in the wooden basement door. Since the vent pipe was not routed vertically up, small quantities of water drawn into the system are released. The majority of liquid appeared to drain on the inside of the basement door, where a six inch concrete curb exists preventing water from entering or leaving the basement. Some liquid did appear to drain on the outside of the



BASEMENT FLOOR PLAN
N.T.S.

P.W. Grosser Consulting Engineer & Hydrogeologist, P.C.
An Affiliate of Kasogenes & Grosser Consulting Engineers, P.C.
100 South Main Street, Suite 202 Bayville, N.Y. 11709
ph: (516) 628-8000 Fx: (516) 628-8705

Prepared for: Gem Cleaners

Project No: GBR9701 Date: 8/14/97

BASEMENT FLOOR PLAN
GEM CLEANERS

84 N. Village Ave.
Rockville Centre, N.Y.

Figure No: 3

door to the exterior stairwell, where a small diameter drain (approximately 6 inches) is located. This stairwell drain is located directly up-gradient (north) of monitoring well MW-1A. Additional liquid generated by the vacuum system is drained at the base of the unit and contained in a small pail. The employee at the facility indicated that this liquid was also disposed of in the building's toilet. The operator was made aware of the condition of the vacuum system vent and has since extended it vertically up to the roof and capped it with a "T", thereby, eliminating the discharge.

Since the employee working at the facility indicated that waste water generated at the facility was disposed of in the buildings's toilet, dye testing was performed to document discharge to the municipal sanitary sewer. This area of Nassau County is located in sewered District 2. Sanitary sewer connections began as early as 1953 in this District. Dye testing was performed by placing water soluble dye tablets in the facilities toilet and inducing flow. The closest access to the municipal sewer system is located in the sidewalk (via a steel manhole cover) directly in front of the building. This manhole cover was opened and the dye placed in the facilities toilet was observed. In addition, since it was observed that the sump pit and likely the floor drain discharges to the waste sink, this structure was dye tested. A 5 gallon mixture of dye and potable water was placed in the waste sink and observed in the municipal sewer system. After unclogging of the floor drain located on the first floor, discharge to the waste sink was confirmed.

The site inspection also included a survey of the area surrounding the building. The area around the site is almost entirely paved, with the exception of the exterior drainage structure identified by EEA, several basement window boxes associated with the adjacent building, and a small patch of exposed soil located along the western side of the garage (see Figure 1). The property appeared to be filled, as grade of a Village of Rockville Centre Parking lot adjacent to the site was approximately 3 feet lower.

The cover of the exterior drainage structure was removed so that the structure could be inspected. The structure was approximately four feet in diameter, with depth to bottom sediments estimated to be 3 feet. Unlike the observations made in the EEA report, no piping was noted within the structure.

Additionally, the detached garage located directly behind the Gem Cleaners building was inspected for floor drains and no structures were noted.

The results of the site inspection only identified the exterior stairwell drain as a potential source of groundwater contamination. Though waste water containing PCE is generated at the site, it appears most of it is discharged to the municipal sanitary sewer via the facilities toilet. The sump pit and floor drain identified by EEA both discharge to the waste sink, which was also confirmed to discharge to the sewer system.

The stairwell drain is subject to discharge of small quantities of liquid from the vacuum system. In addition, this drain represents the most likely receptacle for inadvertent manual discharge of waste water. Therefore, the sampling of bottom deposits within this structure was performed.

4.0 INITIAL SAMPLING OF EXTERIOR STAIRWELL DRAIN

A sample of bottom deposits within the exterior stairwell drain was collected on March 21, 1997, by a representative of PWGC. The sample was collected using a stainless steel hand auger that was properly decontaminated prior to use with a non-phosphate detergent scrub and distilled water rinse. To document the effectiveness of decontamination procedures, a rinsate field blank from the hand auger was also collected.

The sample was collected from 12 to 18 inches below the bottom of the drain. Upon collection, the appropriate laboratory supplied glassware was immediately filled with sample material, while the remaining portion was placed in a baggie for headspace screening with a photoionizatrion detector (PID). A PID response of greater than 200 calibration gas equilvalents (cge) was noted. The sample was delivered to Ecotest Laboratories, Inc. (Ecotest), a New York State Certified laboratory and analyzed for PCE, trichloroethylene (TCE), 1,2 dichloroethene (DCE), and vinyl chloride by EPA Method 8010. These compounds represent the contaminant of concern and its common associated breakdown products.

The analytical results for the initial sample were as follows:

Parameter	Concentration(ug/kg)	TAGM Soil Cleanup Objective (ug/kg)
PCE	12,000	1,400
TCE	2,600	700
DCE	4,400	300
Vinyl Chloride	BDL	200

As shown above, PCE, TCE and DCE were detected in excess of their respective TAGM soil cleanup objectives. Compounds analyzed for were below detectable levels in the field blank sample. Analytical results for the initial sampling are contained in Appendix B.

5.0 SOIL BORING RESULTS

A soil boring through the exterior stairwell drain was conducted on May 16, 1997. The objectives of the soil boring were to vertically define the extent of PCE impacted soil within the exterior stairwell drain and to document soil conditions above the water table, prior to remediation. The boring was performed by Advanced Cleanup Technologies, Inc., Farmindale , N.Y., under the field observation of a representative of PWGC.

The borings were advanced using a remote hydraulically driven probing unit capable of collecting soil samples at discreet depths. Soil samples were collected utilizing a 1 1/4-inch diameter by 2 foot long sampling tube lined with a dedicated acetate liner. Continuous soil samples were collected from two feet below the bottom of the drain to the water table, which was encountered at 10.5 feet below the surface of the structure. Upon retrieval, the sample was immediately screened for VOC's through a slit cut in the acetate liner. The section of the core exhibiting the highest PID response was then transferred to appropriate laboratory supplied glassware. A soil boring log, containing soil descriptions and PID response is shown on Table 1.

A total of three samples (4'-6', 6'-8', and 8'-10') were retained from the soil boring for laboratory

TABLE 1

Exterior Stairwell Drain- Soil Boring Log

Gem Cleaners

84 North Village Avenue, Rockville Centre, N.Y.

Depth ft.	Rec. ft.	PID cge	Odor	Visual Description/Comments
2-4	0	NA	NA	No Recovery- sample moist and too soft
4-6A	.25	25	yes	Black medium sands and muck, wet. Rock blocked sampler. Not enough recovery for sample analysis.
4-6B*	2	5	no	Brown medium sands, trace gravel
6-8*	1.5	37	yes	Brown medium sands, some gray staining near top of sample.
8-10*	1.5	2	no	Brown medium sands, trace gravel. Sample dry at the top, moist towards the bottom.
10-12	2	0	no	Brown fine to medium sands, trace gravel. Entire sample saturated.

* = Sample Submitted for laboratory analysis.
PID response was taken directly from the acetate liners.

analysis. No recovery was obtained from the 2'-4' sample interval as the material near the top of the drain was moist and extremely soft. The 4'-6' sample was collected off-center, near the side of the drain, due to a small cobble encountered at this depth. However, the results of this sample can be used to represent soil quality near the sides of the structure. The bottom portion of the 8'-10' sample interval was slightly moist, indicating the bottom of the sample was in close proximity to the water table. To confirm the depth of the water table, a sample from the 10' -12' depth was collected. The sample was completely saturated, confirming the existence of the water table within the 10'-10.5' foot depth range. Since this sample was saturated and not representative of soil conditions above the water table, it was not retained for laboratory analysis. The samples were delivered to Ecotest and analyzed for PCE, TCE, DCE, and vinyl chloride by EPA Method 8010.

Table 2 contains the compounds quantified in the samples collected at the above referenced depths (copies of the analytical results are included in Appendix B). Compounds quantified in these samples are compared to their respective soil clean-up objectives. As presented in Table 1, PCE and TCE in the 4'-6' sample were detected below their TAGM soil cleanup objectives indicating the contamination is primarily confined to the center of the structure. The PCE concentration in the 6'-8' foot sample was the same as in the initial sample however, concentrations of TCE and DCE were an order of magnitude lower. As can be seen in Table 1, the concentrations of PCE and TCE drop well below their respective soil cleanup objectives, directly above the water table. As noted on the soil boring log, the 8'-10' sample interval represents the first depth at which no staining of the soils were noted. Prior to this depth, black staining was noted within the first six feet, which lessened to greyish in the 6'-8' sample interval.

6.0 REMEDIATION OF EXTERIOR STAIRWELL DRAIN

Initial sampling of the stairwell drain and soil boring results, indicate that remediation of the structure down to 8 feet is appropriate to remove the potential source of groundwater contamination at the site. Remediation of the structure was performed on July 31, 1997 by Trade-Winds Environmental Restoration Inc.(Trade-Winds), under the field observation of a representative of PWGC.

TABLE 2
Gem Cleaners
84 N. Village Ave., Rockville Centre, New York
Soil Boring Sample Results

Parameter EPA Method 8010 (ug/kg)	4'-6'B^ Depth	6'-8' Depth	8'-10' Depth	TAGM* Clean-up Objective
PCE	350	**12,000**	90	1,400
TCE	11	270	10	700
DCE	BDL	100	BDL	300
Vinyl Chloride	BDL	BDL	BDL	200

Notes:

BDL = Below Detectable Levels

^ - Sample was collected off-center towards the side of the drain.

* = New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum, Revised 1/24/94 (HWR-94-4046).

The scope of the remediation included the excavation of the existing drain and impacted soil to 8 feet below grade, documented as exceeding TAGM soil cleanup objectives. The previously collected 8-10 foot soil boring sample is considered the "clean" endpoint. This information, along with soil removal methods were presented to the NYSDEC in a June 11, 1997 letter, prior to initiating remediation. The NYSDEC, through informal conversation, indicated that the scope of work presented was adequate to address the concerns documented at the site.

Prior to the removal of impacted soil, the drain and the majority of surrounding concrete making up the stairwell floor were removed. Once the concrete was removed, it was apparent the drain was of block construction. The diameter of the drain ranged from 2.0 feet near the surface to 1.5 feet at approximately 3.0 feet below grade, where the blocks were supported by native soil.

The soil within the blocks were removed using a trailer mounted Vector, which utilizes a vacuum to extract soil and is equipped to discharge directly into drums. After removing the soil within the drain, the majority of blocks were removed to facilitate the placement of a 5 foot section of 2 foot diameter, 3/4 inch thick PVC well screen. Soils immediately adjacent to the outside of the former blocks were excavated to remove material potentially impacted through the blocks. Therefore, the top portion of the excavation was approximately 3 feet wide.

Starting at 3 feet below grade, the well screen was advanced within the excavation to prevent collapse and undermining of the adjacent structure. Soils within the excavation were removed, in a two foot diameter down to 8.5 feet below grade. An additional 1.5 feet of material was excavated in the center of the well screen to provide a greater level of confidence of clean out and at approximately 10 feet soils remained dry. However, following setting of the well screen, water was visible seeping into the deepest portion of the excavation. Additionally, remaining soils within the top 3 feet and bottom 3 feet of the excavation were screened for VOC's with a PID, and no reponse was noted. A total of six 55-gallon drums of soil were removed during remediation procedures.

After removal of the soil was complete, the well screen and excavation was backfilled with clean sand

and on a the following day a new drain was constructed to prevent flooding. New concrete was poured around the drain to secure it into place. Photos depicting the remediation of the drain, newly installed drain, and rerouted PVC vacuum vent, immediately follow this report.

7.0 SOIL DISPOSAL

During remediation of the stairwell drain, impacted soils were placed directly into DOT certified 55-gallon drums. A total of six 55-gallon drums were generated from the clean out. Due to the nature of the waste, the soils were handled as hazardous to be destroyed by incineration. Soil disposal was coordinated by Trade-Winds. The soils were transported by Bechem Transport, Inc. (USEPA ID # CYD982191942) and the designated disposal facility is LWD, Inc., Calvert City KY, (USEPA ID # KYD088438817). The generator copy of the hazardous waste manifests is contained in Appendix C. A signed copy of the manifest by the disposal facility and certificate of destruction will be forwarded upon receipt.

8.0 SUMMARY & CONCLUSIONS

A Phase II investigation performed by EEA as a follow-up to their Phase I Site Assessment performed at the subject site, documented relatively low concentrations of PCE in the groundwater beneath, as well as up-gradient of the site. The highest concentrations of PCE were detected in water table monitoring well MW-1A (26 ug/l -56 ug/l), located adjacent to an exterior drywell believed by EEA to be the most likely source of groundwater contamination. However, results of soil samples collected within the structure indicated that PCE was only detected at 7 ug/kg in the 0-2' foot soil sample. PCE was below detectable levels in subsequent deeper soil samples collected within the structure down to the water table.

A detailed site inspection was performed by PWGC to evaluate the potential for the existence of other on-site source areas that may be contributing to groundwater contamination detected beneath the site. The site inspection focused on the current operations of the facility and the generation of liquid waste. The results of the site inspection indicated that liquid waste is currently being discharged via the toilet or waste sink to the municipal sewer system as documented through dye testing. The floor drain and

basement sump identified as concerns by EEA, were documented as discharging to the waste sink which discharges to the sanitary sewer rather than to the exterior drywell sampled as part of their investigation.

During the site inspection, an exterior basement stairwell drain located directly outside the basement door, was identified as a potentially receiving discharge of waste water containing PCE. The drain is located up-gradient relative to monitoring well MW-1A. During the time of the inspection, the drain was documented as receiving waste from the site's vacuum system vent and also represents the most likely structure to receive inadvertent manual disposal of waste water. Subsequently, the vent was re-routed directly to the roof of the building and capped with a "T" to prevent discharge.

Through sampling of the stairwell drain, impacted soils (in excess of TAGM soil cleanup objectives) were documented as existing to 8 feet beneath the surface of the drain, which was approximately 2 feet above the current water table at the drain's location. Subsequently, the impacted soil was removed and properly disposed.

Though the stairwell drain may have contributed to the low levels of PCE documented in the MW-1A, up-gradient sources apparently exist as documented by the detection of PCE in a well up-gradient of the site. Though up-gradient concentrations were lower, the well was installed approximately 300 feet away and on-site well MW-1A may be installed in a more contaminated portion of the plume. However, if the soils within the drain did contribute to groundwater contamination, they have effectively been removed, and concentrations in the well will return to background levels through natural attenuation.

Therefore, no further work in relation to the site is warranted and that the site should not be referred to the NYSDEC list of Inactive Hazardous Waste Sites in any Classification form. This is based on the following:

- EEA sampled the only drywell located on the property and eliminated the structure as a

potential source of groundwater contamination.

- A detailed site inspection only identified an exterior stairwell drain as potentially being an alternate on-site source of contamination.

- The stairwell drain was confirmed to be impacted by PCE and subsequently, effectively remediated.

- Only relatively low levels of PCE were documented in on-site wells, while also being detected in an up-gradient well.

- If the impacted soil with the stairwell drain contributed to groundwater contamination in the past, the concentrations should lessen to background levels through natural attenuation within a short period of time.

PHOTOS

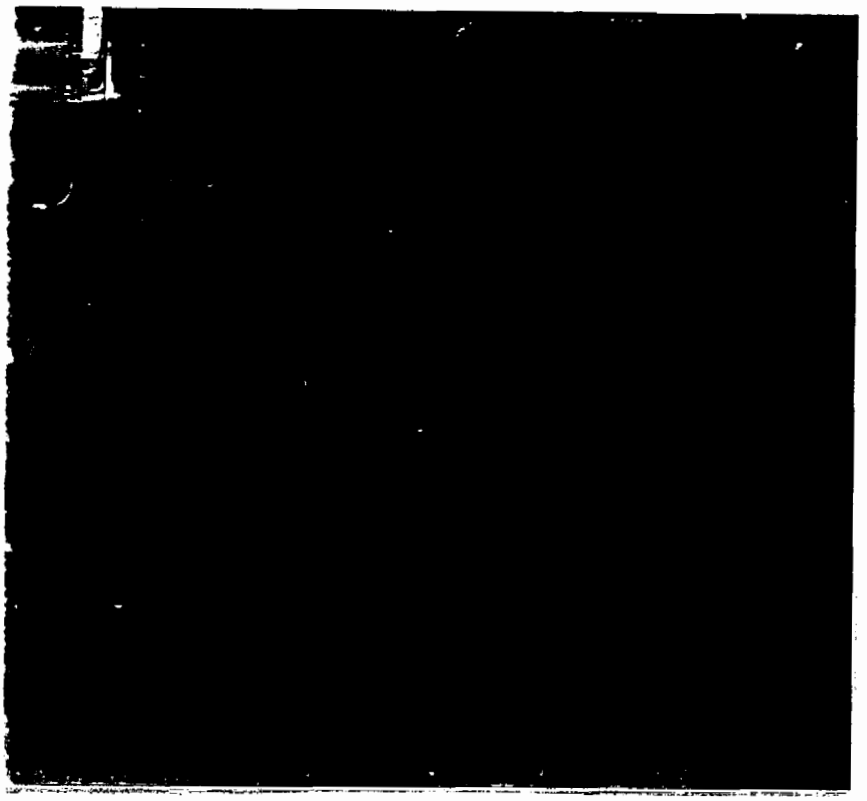
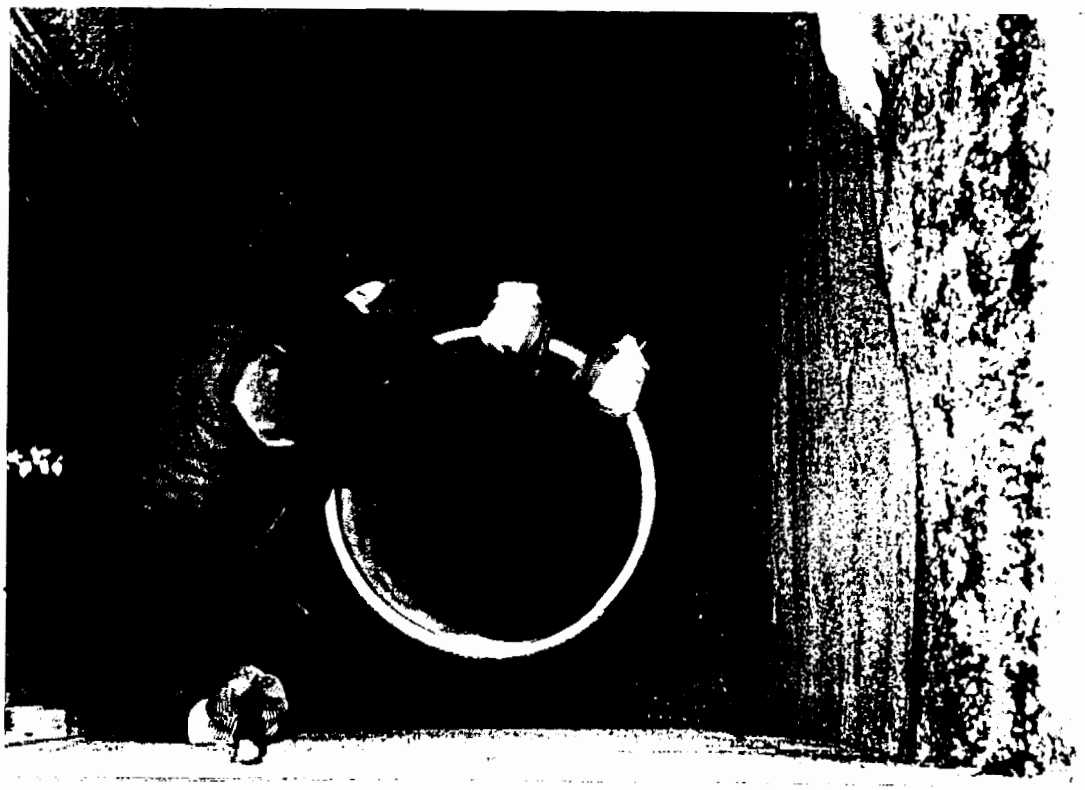


Photo # 1: **Stairwell drain conditions, prior to remediation.**



Photo# 2: **Installing 2' diameter well screen in excavation for support.**

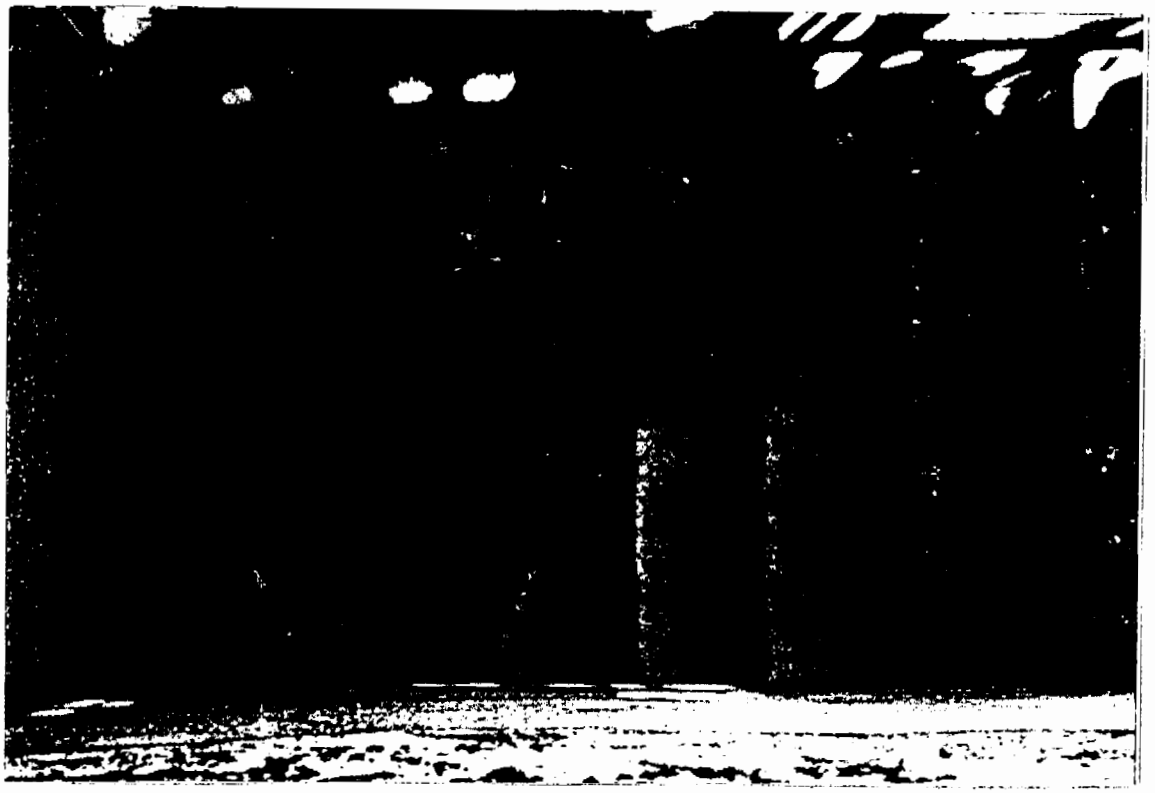


Photo #3: **Excavated stairwell drain with installed well screen.**

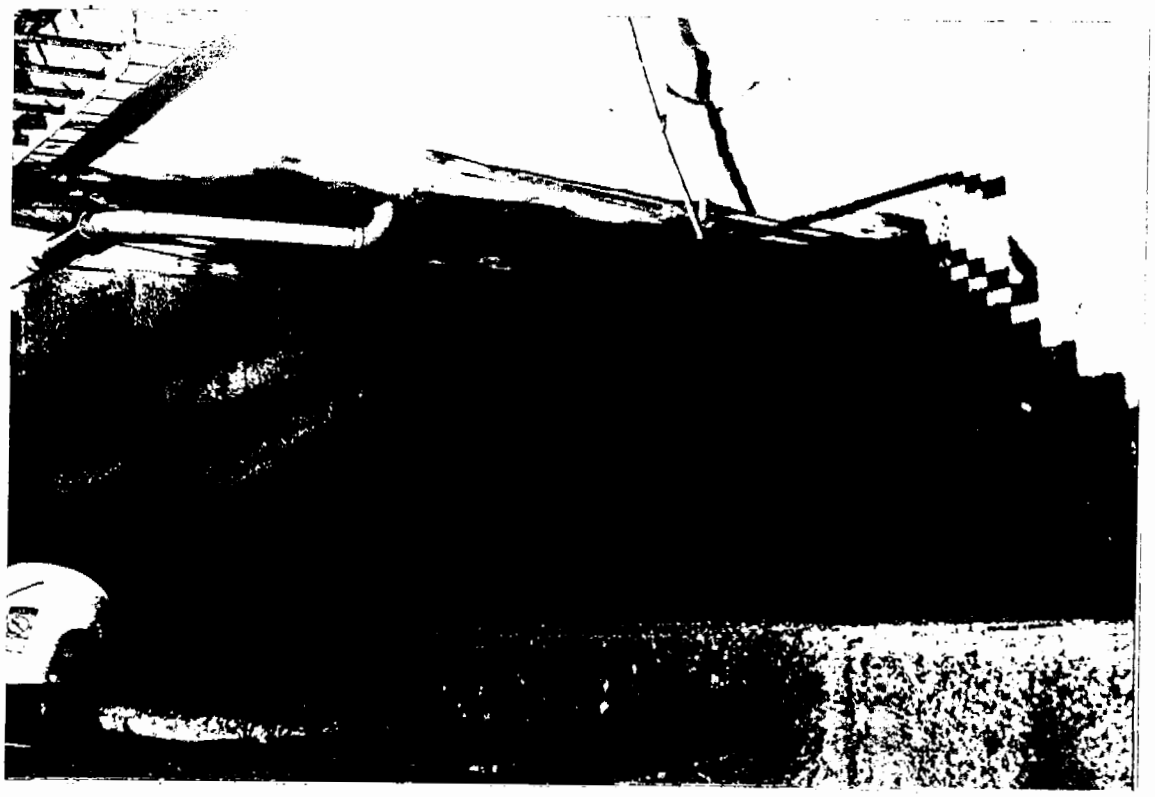


Photo #4: **Backfilling stairwell drain.**

Photo #5: Completed new construction of stairwell drain.

Photo # 6: Rerouted vacuum system vent.

APPENDIX A

Plaza II

EEA Inc.

Energy & Environmental Analysts, Inc.

55 HILTON AVENUE • GARDEN CITY, NEW YORK 11530

PHASE II ENVIRONMENTAL SUBSURFACE INVESTIGATION PROPERTY LOCATED AT 84 NORTH VILLAGE AVENUE ROCKVILLE CENTRE, NEW YORK

Prepared for:

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MAY 1995

Project: 95706

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Laboratory Data Sheets
Chain-of-Custody Record
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PHASE II ENVIRONMENTAL SUBSURFACE INVESTIGATION
GEM CLEANERS
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NEW YORK

INTRODUCTION

EEA, Inc. has completed a Phase II Environmental Subsurface Investigation of the property located at 84 North Village Avenue, Rockville Centre, New York. A Phase I Environmental Site Assessment (ESA-94196) was also completed by EEA for this property in July 1994.

EEA's research into the history of site use indicates that the property had been occupied by Gem Cleaners, which operates a dry cleaning facility and tailor shop. This operation uses and stores significant amounts of toxic and hazardous materials and chemical products, and generates toxic or hazardous wastes. Various aboveground and belowground tanks, drums, and containers containing a variety of materials, such as Tetrachloroethene (PCE) were noted.

One floor drain was noted on the first floor of the subject building. In addition, a sump pit was noted in the basement of the subject building. This pit appears to be used for the discharge of boiler condensate.

One exterior drainage structure (possibly a drywell or leaching pool) was observed in the rear paved section of the property. In addition, a pipe was noted extending inside this drainage structure from an unknown source, possibly from drains within the building.

From the information gathered during EEA's Phase I investigation, the following Phase II Scope of Work was developed and performed at the subject property.

SCOPE OF WORK

- Collect several soil samples within the rear drywell structure at various depth intervals above the water table. The samples were analyzed for volatile organic chemicals including Perchloroethylene (PCE), using United States Environmental Protection Agency (USEPA) Method 8010.

- Construct and sample a total of four (4) groundwater monitoring wells. Two wells (MW-1A and MW-1B) are located adjacent to the exterior drainage structure, and monitor groundwater quality in shallow and deep groundwater environments. Monitoring Well MW-2 is located

downgradient of the sump pit which is found in the building's basement. An upgradient monitoring well (MW-4) was placed approximately 300 feet north of the property in the Village of Rockville Centre parking field.

- The groundwater collected from the monitoring wells was analyzed for volatile organic chemicals which include Tetrachloroethene (PCE) using USEPA Method 8010.

- Soil Sampling Protocol

The soil borings were performed by continuous split spoon sampling. Soil samples were obtained every two feet. Each split spoon sample was screened in the field by utilizing an OVA portable gas analyzer. The sample exhibiting the highest non-methane organic vapor reading was sent to the laboratory for analysis, as stated above.

- Groundwater Sampling

The groundwater samples were obtained by installing a permanent monitoring well. The water samples were obtained by placing a 2-inch ID PVC casing in a 6-inch augered hole at each location. The PVC screen was installed above the level of the perched groundwater.

The wells were developed on the same day, drilled, and hand bailed until visually free of suspended materials or sediments. A dedicated teflon bailer was used for each well. The groundwater samples were sent to the laboratory for the stated analyses.

- Laboratory Testing

New York State Department of Environmental Conservation (NYSDEC) approved laboratories were used for all laboratory analyses. The laboratory operates a Quality Assurance/Quality Control (QA/QC) program that consists of proper laboratory practices (including the required chain-of-custody), an internal quality control program, and external quality control audits by New York State.

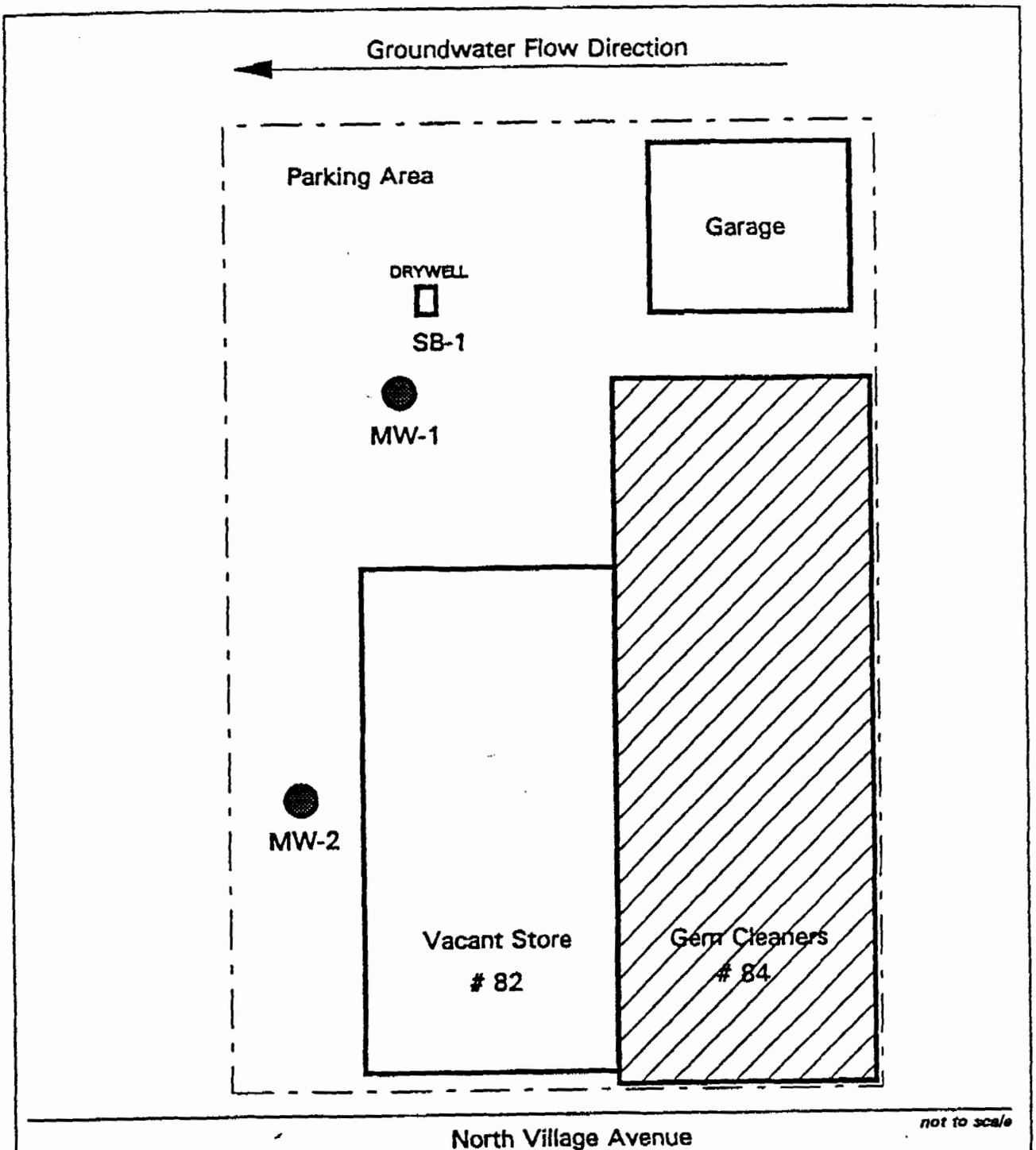
All work performed was completed following United States Environmental Protection Agency (Region II) and NYSDEC protocols and guidelines.

- Field Decontamination

To avoid contamination and cross-contamination of samples, all sampling equipment was cleaned prior to collection of each sample. All sampling equipment was decontaminated using the attached decontamination procedure.

RESULTS OF LABORATORY ANALYSES

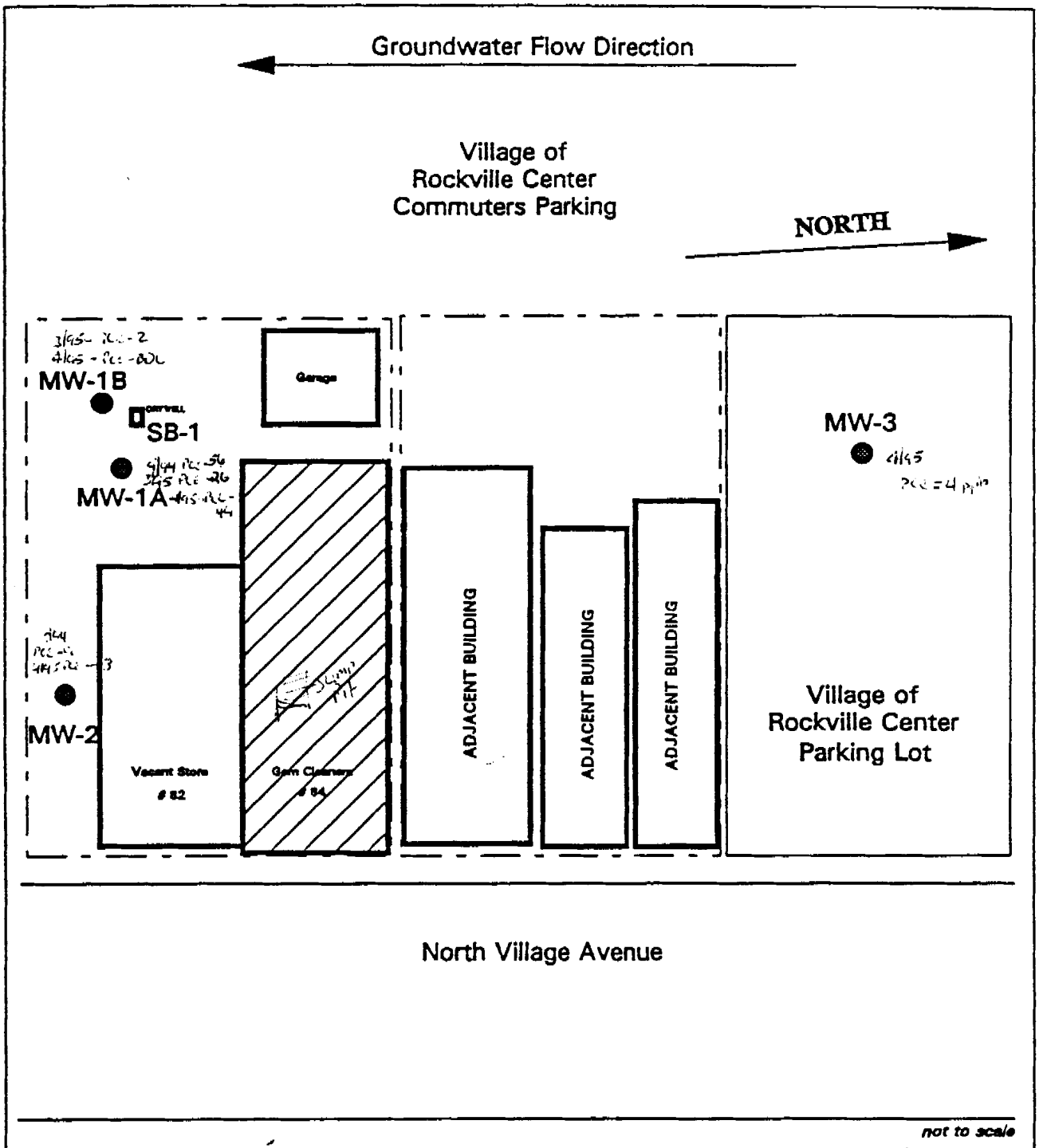
The results of soil and groundwater samples were prepared by EcoTest Laboratories, Inc. (New York State certified laboratory). The tables below present a summary of the results. The chain-of-custody records, as well as the analytical laboratory data sheets, are presented in the Appendix to this report. The sample collection locations are shown on Figures 1 and 2.



- *Gem Cleaners*
  84 North Village Avenue
  Rockville Centre, New York

Sample Collection Locations

Figure 1



- *Gem Cleaners*
  84 North Village Avenue
  Rockville Centre, New York

Sample Collection Locations

Figure 2

TABLE 1

RESULTS ORGANIC CHEMICAL COMPOUNDS (SOILS)
EPA METHOD 8010

	Sample Collection Location and Depth				NYSDEC[1] Recommended Cleanup Objectives (TAGM)
	September 1994	April 1995			
	SB-1 2-4 ft	SB-1A 8-10 ft	SB-1B 13-15 ft	SB-1C 18-20 ft	
Chloromethane	<5	<5	<5	<5	1,900
Vinyl Chloride	<5	<5	<5	<5	200
Bromomethane	<5	<5	<5	<5	NA
Chloroethane	<5	29	23	<5	1,900
Trichlorofluomethane	<10	<10	<10	<10	NA
1,1 Dichloroethene	<5	<5	<5	<5	400
Methylene Chloride	<5	<5	<5	<5	100
t-1,2-Dichloroethene	<5	<5	<5	<5	300
1,1 Dichloroethane	<5	<5	<5	<5	200
Chloroform	<5	<5	<5	<5	300
111 Trichloroethane	<5	<5	<5	<5	800
Carbon Tetrachloride	<5	<5	<5	<5	600
Dichlorodifluomethane	<10	<10	<10	<10	NA
1,2 Dichloroethane	<5	<5	<5	<5	100
Trichloroethene	<5	<5	<5	<5	700
1,2 Dichloropropane	<5	<5	<5	<5	300
Bromodichloromethane	<5	<5	<5	<5	NA
2chloroethvinylether	<10	<10	<10	<10	NA
t-1,3 Dichloropropene	<10	<10	<10	<10	NA
c 13 Dichloropropene	<10	<10	<10	<10	NA
112 Trichloroethane	<10	<10	<10	<10	NA
Tetrachloroethene	7	<5	<5	<5	1,400
Chlorodibromomethane	<5	<5	<5	<5	NA
Chlorobenzene	<5	<5	<5	<5	1,700

TABLE 1 - Continued

RESULTS ORGANIC CHEMICAL COMPOUNDS
EPA METHODS 8010

Analytical Parameters (µg/kg)	Sample Collection Location and Depth				NYSDEC[1] Recommended Cleanup Objectives (TAGM)
	September 1994	April 1995			
	SB-1 2-4 ft	SB-1A 8-10 ft	SB-1B 13-15 ft	SB-1C 18-20 ft	
Bromoform	<10	<10	<10	<10	NA
1122Tetrachloroethane	<10	<10	<10	<10	600
m Dichlorobenzene	<10	<10	<5	<10	7,900
p Dichlorobenzene	<10	<10	<5	<10	1,600
o Dichlorobenzene	<10	<10	<5	<10	8,500

µg/kg - presented in parts per billion, micrograms per kilogram
NA - Not available, no guideline has been established at this time.

1 New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) Recommended Soil Cleanup Objectives January 24, 1994 (Revised).

TABLE 2

RESULTS ORGANIC CHEMICAL COMPOUNDS
EPA METHOD 601 (GROUNDWATER)

	Sample Collection Location and Depth								
Analytical Parameters (µg/kg)	Sept. 1994 MW-1A	Sept. 1994 MW-2	March 1995 MW-1A	March 1995 MW-1B	April 1995 MW-1A	April 1995 MW-1B	April 1995 MW-2	April 1995 MW-3	NYSDEC[1] Groundwater Standards (TAGM)
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	NA
Vinyl Chloride	<1	<1	<1	<1	<1	<1	<1	<1	2
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	NA
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	50
Trichlorofluomethane	<2	<2	<2	<2	<1	<1	<1	<1	NA
1,1 Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	5
Methylene Chloride	<1	<1	<1	<1	<1	<1	<1	<1	5
t-1,2-Dichloroethene	47	<1	<1	<1	<1	<1	<1	<1	5
1,1 Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	5
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	7
111 Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	5
Carbon Tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	5
Dichlorofluomethane	<2	<2	<2	<2	<1	<1	<1	<1	NA
1,2 Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	5
Trichloroethene	5	<1	<1	<1	<1	<1	<1	<1	5
1,2 Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	NA
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	50
2chloroethvinylether	<2	<2	<2	<2	<1	<1	<1	<1	NA
t-1,3 Dichloropropene	<2	<2	<2	<2	<1	<1	<1	<1	NA
c 13 Dichloropropene	<2	<2	<2	<2	<1	<1	<1	<1	5
112 Trichloroethane	<2	<2	<2	<2	<1	<1	<1	<1	NA
Tetrachloroethene	56	9	26	2	49	<1	3	4	5
Chlorodibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	NA
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	5
Bromoform	<2	<2	<2	<2	<1	<1	<1	<1	NA
1122Tetrachloroethane	<2	<2	<2	<2	<1	<1	<1	<1	5

TABLE 2 - Continued

RESULTS ORGANIC CHEMICAL COMPOUNDS
EPA METHOD 8240 PLUS LIBRARY SEARCH (GROUNDWATER)

	Sample Collection Location and Depth								
Analytical Parameters (µg/kg)	Sept. 1994 MW-1A	Sept. 1994 MW-2	March 1995 MW-1A	March 1995 MW-1B	April 1995 MW-1A	April 1995 MW-1B	April 1995 MW-2	April 1995 MW-3	NYSDEC[1] Groundwater Standards (TAGM)
m Dichlorobenzene	<2	<2	<2	<2	<1	<1	<1	<1	4.7
p Dichlorobenzene	<2	<2	<2	<2	<1	<1	<1	<1	5
o Dichlorobenzene	<2	<2	<2	<2	<1	<1	<1	<1	5

µg/kg - presented in parts per billion, micrograms per kilogram
NA - Not available, no guideline has been established
ND - Not detected above method detection limits

[1] New York State Department of Environmental Conservation, Technical and Administrative Guidance Memorandum (TAGM)

DISCUSSION OF FINDINGS AND CONCLUSIONS

Rear Drywell Structure

Results of soil sampling within this drywell structure show low concentration levels of Tetrachloroethene (PCE) (7µg/kg) in the soil sample collected in September 1994. Subsequent sampling conducted in April 1995 at depth ranges of 8 to 10 feet, 13 to 15 feet, and 18 to 20 feet did not detect PCE in any of the samples tested. Table 1 shows a summary of the laboratory results.

Groundwater Monitoring Wells

Four permanent groundwater monitoring wells were installed on the subject property in locations upgradient and downgradient of the subject building. Table 2 shows a summary of the laboratory results.

Results of groundwater testing show a low concentration of PCE in MW-1A. This well monitors the water table in the vicinity of the drywell. MW-1B, which monitors the deeper groundwater environment, did not show any detectable concentrations of PCE.

Upgradient Monitor Well (MW-3) and sidegradient Monitor Well (MW-2) did show low concentrations of PCE; however, the concentrations are below NYSDEC Groundwater Standards (5 µg/L).

From the information collected during this investigation, there is no indication of soil contamination present in the drywell sampled. Low levels of PCE exist in the shallow groundwater, but not in the deeper zone. This indicates that significant contamination of the groundwater has not occurred from operations at this property. Low concentrations of PCE were also found in groundwater upgradient and sidegradient of the property, and is likely derived from another off-site source.

RECOMMENDATIONS

No additional testing or remediation is anticipated to be required. It is expected that, over time, the concentration of PCE in MW-1A will diminish to background levels.

SAMPLING METHODOLOGY

a. Soil Borings

At each on-site sampling location, soil samples were obtained by utilizing a steel, 24-inch, split spoon sampler, which was driven through the subsurface levels ahead of a hollow stem (6-inch) auger, which bores into the soil to the desired sampling depth. The split-spoon sampler was driven through the top two feet of soil to obtain the surface sample, which was composted and placed in the properly refrigerated containers.

The auger then bored down to a depth of two feet. A split-spoon sampler was then inserted in the hollow stem and driven to a depth of four feet to obtain the first intermediate sample. Next, the auger bore down to four feet and the split-spoon sampler driven to six feet, to obtain the second intermediate sample. This procedure was repeated until the end of the boring.

An organic vapor analysis (OVA) was performed on all soil samples using a Thermo Environmental 580 B Photoionization Detector with headspace adaptor. The sample producing the highest organic vapor reading was sent to the laboratory for analysis.

b. Ground Water Monitor Wells

The water samples were obtained by installing a 2-inch ID PVC casing in a 6-inch augured hole. The PVC screen was installed with the top two feet above the level of the ground water. The total screen length was 10 feet. The well screen slot size was 0.10. A filter pack of sand was placed in the annular space around the screens and extended above the screen.

The well was developed on the same day, drilled, and hand bailed until visually free of suspected materials or sediments. A dedicated teflon bailer was used for each well.

c. Quality Assurance and Control

To avoid contamination and cross-contamination of samples, all sampling equipment was cleaned before each sample was collected. The split-spoon and hollow-stem auger were first steam cleaned. The following procedures were followed:

Step 1: Steam clean equipment.

Step 2: Scrub with a bristle brush using a non-phosphate detergent (such as Alconox) in hot tap water.

Step 3: Rinse with hot tap water.

Step 4: Rinse twice with deionized water.

Step 5: Air dry.

Step 6: Rinse twice with deionized water.

Step 7: Air dry.

Step 8: Keep in clean unused aluminum foil.

This decontamination procedure was used for all borings.

A chain-of-custody record is kept at all times with the samples. This record documents sample collection date/time and collector. The sample possession record begins at sample collection and ends at delivery to the laboratory.

APPENDIX

LABORATORY DATA SHEETS,
CHAIN-OF-CUSTODY RECORD, and
SOIL BORING LOGS

ENERGY AND ENVIRONMENTAL ANALYSTS

55 HILTON AVENUE, GARDEN CITY, NEW YORK

SOIL BORING AND MONITOR WELL REPORT

DATE 4-24-95 | SHEET 1 OF 1

CLIENT: Gem Cleaners | BORING NO: SB-1

PROJECT LOCATION: 84 N. Village Ave Rockville Centre | PROJECT NO: 9506

REMARKS: Soil boring through parking area drainage structure

DRILLING CONTRACTOR: TSDT, Inc. | LOGGED BY: RE | DRILLER: PR

EQUIPMENT	SOIL SAMPLER	AUGER	MONITOR WELL SPECIFICATIONS			DRILL RIG DRILL METHOD
			CASING	SCREEN	COVER	
TYPE	SPLIT SPOON	HSA	—	—	—	Mobil B-50 HSA
SIZE	STD 2	3¼"				

SURFACE ELEVATION: — | SURFACE CONDITIONS: Asphalt Around cover

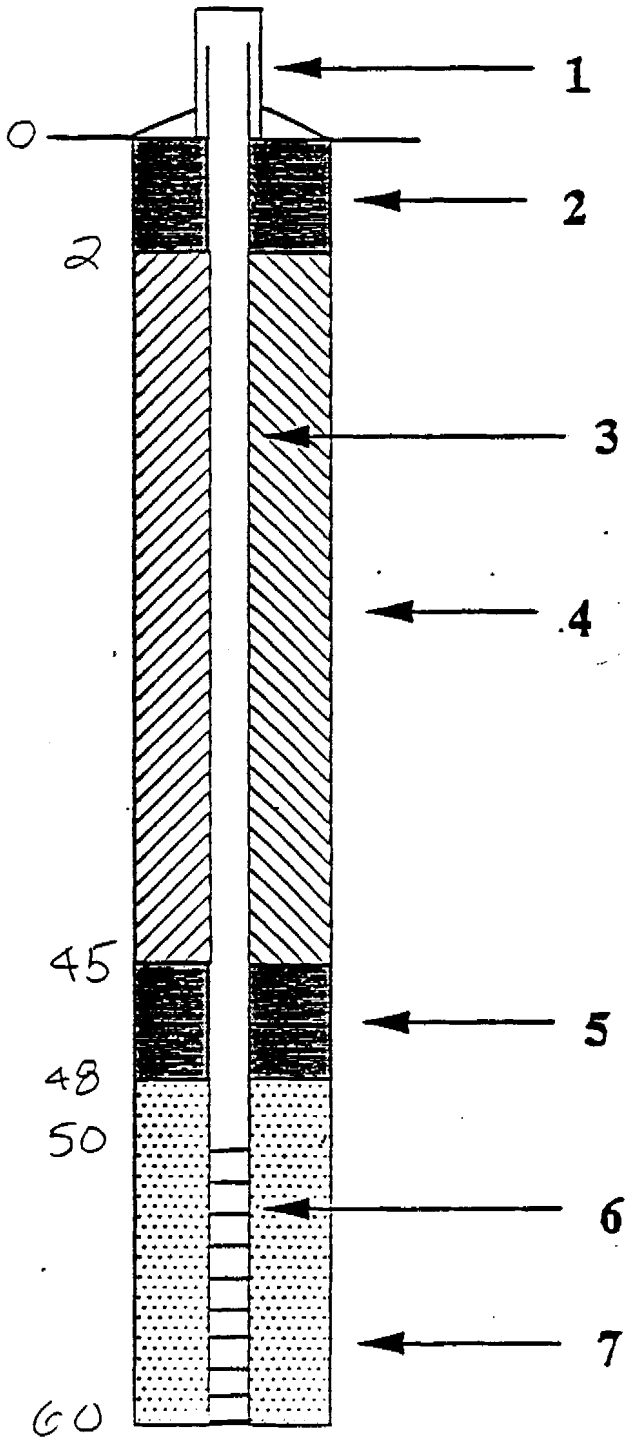
WATER LEVEL:

DEPTH	OVA READINGS	SAMPLE INFORMATION NUMBER	DEPTH	MOISTURE	STRATA	SOIL DESCRIPTION & OBSERVATIONS
0						OPEN DRAIN STRUCTURE
5					6	
	0	S-1	6-8	dry		FINE TAN/YW SAND tr gravel
10	0	S-2	8-10	dry		
	0	S-3	10-12	dry		
15	0	S-4	12-13	dry		
	0	S-5	13-15	moist		
	0	S-6	18-20	wet	19 WT	
20						EOB @ 20ft

MONITOR WELL CONSTRUCTION SPECIFICATION
ENERGY AND ENVIROMENTAL ANALYSTS, INC.

JOB NUMBER : 95706

WELL IDENTIFICATION : MW-13



DATE: 3/13/95
HYDROGEOLOGIST: N. Recchia
DRILLING CONTRACTOR: TSDT

1. PROTECTIVE CASING (YES) NO
2. CONCRETE SEAL YES (NO)
3. RISER PIPE TYPE: PVC
   LENGTH: 50 FT
   DIAMETER: 2 FT IN
4. TYPE OF BACKFILL: NATURAL
   HOW INSTALLED BACKFILLED
5. TYPE OF LOWER SEAL: Bentonite
6. SCREEN TYPE: PVC
   SLOTTED LENGTH: 10 FT
   SLOT SIZE; 0.1
7. TYPE OF BACKFILL: NATURAL

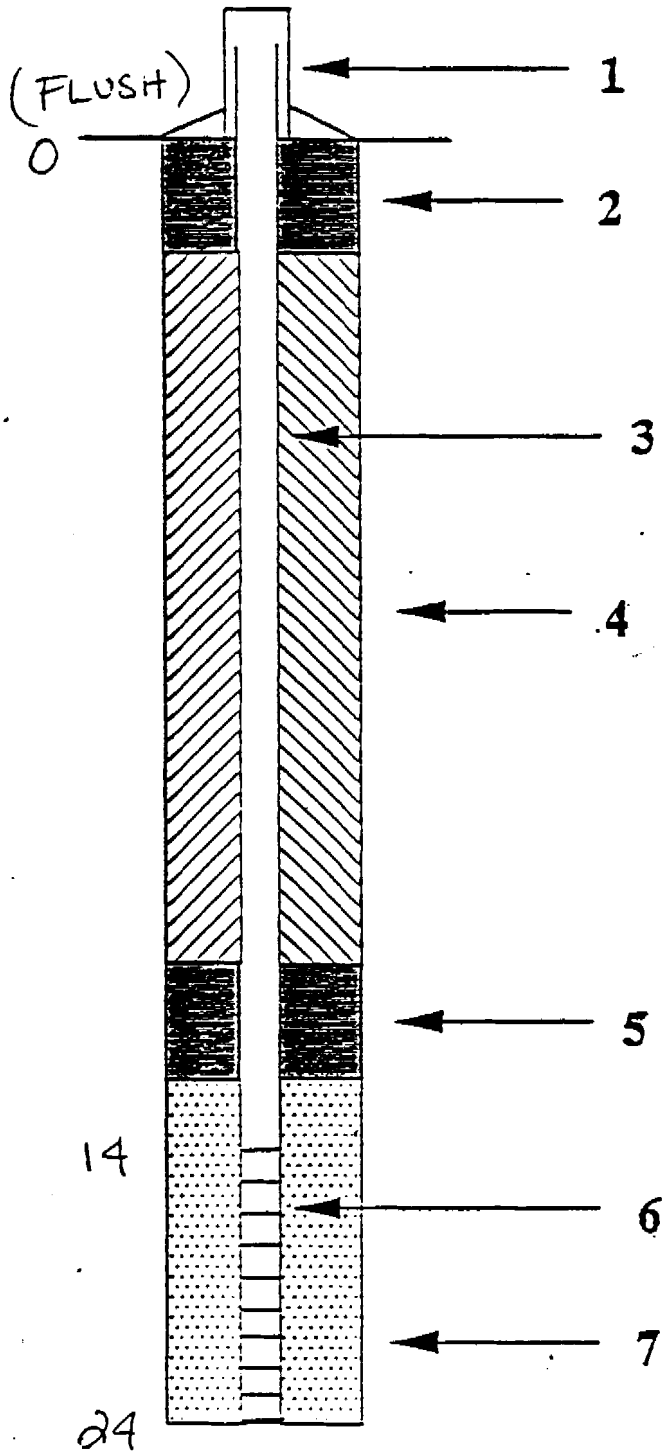
COMMENTS;
Deeper zone monitoring

WATER LEVEL CHECKS :

DATE	DEPTH	REMARKS
3/21/95	13.60	EOC
4/24/95	13.7	SAMP

MONITOR WELL CONSTRUCTION SPECIFICATION
ENERGY AND ENVIROMENTAL ANALYSTS, INC.

JOB NUMBER : 95706 WELL IDENTIFICATION : MW-3



DATE: 4/24/95
HYDROGEOLOGIST : N. Recchia
DRILLING CONTRACTOR : TSDT

1. PROTECTIVE CASING (YES) NO
2. CONCRETE SEAL (YES) NO
3. RISER PIPE TYPE : PVC
   LENGTH : 14 FT
   DIAMETER : 2 ~~FT~~ IN
4. TYPE OF BACKFILL : BACKFILL
   HOW INSTALLED BACKFILLED
5. TYPE OF LOWER SEAL : BENTONITE
6. SCREEN TYPE : PVC
   SLOTTED LENGTH : 10 FT
   SLOT SIZE ; 0.10
7. TYPE OF BACKFILL :
   SILICA SAND

COMMENTS ;
UPGRADIENT MW
RC PARKING LOT

WATER LEVEL CHECKS :

DATE	DEPTH	REMARKS
4/24	14.5	EOC

EEA, Inc.

Groundwater Sampling Data Sheet

Project Name: Gem Cleaners Project No.: 95706

Sampler Name: D. Recchia Sample ID No.: MW-1B

Date: 3/21/95 Time: 1130

Well pipe diameter: 2 inches

Depth to well bottom: 60 ft[1]

Depth to water surface: 18.60 ft[1]

Total volume: 7.38 gallons

Purge volume: 10.4 gallons

Purge method: B-K Pump & Bailer

Depth to water after purging: 18.75 ft[1]

Water temperature: 11 °C

Conductivity: 650 umhos

pH: 5.93

Color: clear

Turbidity: <50 NTUs

Recharge: (circle) slow (normal) fast

Odors: (circle) yes (no) OVA/Pid reading 0 ppm

Additional comments:

Deep zone well

[1] below measuring point

ENERGY AND ENVIRONMENTAL ANALYSTS, INC.

55 HILTON AVENUE, GARDEN CITY, NEW YORK 516-746-4400 212-227-3200

CHAIN OF CUSTODY RECORD

PROJECT NO. 94125 PROJECT NAME EEA-94125

LABORATORY NAME Ecotest Laboratories

SAMPLE ID #	DATE	TIME	SAMPLE LOCATION	NUMBER SAMPLE CONTAINERS	EPA 601 *	EPA 602 *	EPA 8020	TPHC	EPA 8270 (PAH)	SAMPLE DESCRIPTION
MW-1	9/1/94	0820	MW-1	2	✓					GROUNDWATER
SB-1	9/1/94	1000	SB-1 2-4 ft	1		✓				SOIL
MW-2	9/1/94	1130	MW-2	2	✓					GROUNDWATER
DW-1	9/1/94	1350	DW-1 1-3 ft	2			✓	✓		SOIL
CP-1	9/1/94	1410	CP-1 0-2 ft.	2				✓	✓	SOIL
DW-2	9/1/94	1420	DW-2 1-3 ft	2			✓	✓		SOIL
CP-2	9/1/94	1440	CP-2 0-2 ft	2				✓	✓	SOIL
CP-3	9/1/94	1500	CP-3 0-2 ft	2				✓	✓	SOIL

ANALYSIS

SHIPPED VIA: hand delivered by EEA

REMARKS

* specifically Tetrachloroethene (PERC)

RELINQUISHED BY:	DATE	TIME	COMPANY
N. Recchia	9/1/94	1545	EEA, Inc.
RECEIVED BY:	DATE	TIME	COMPANY
[signature]	9/1/94	[illegible]	[illegible]

SAMPLER (SIGNATURE) [signature] N. Recchia

CO ■ EST LABORATORIES, INC. - ENVIRONMENTAL TESTING
377 Sheffield Avenue, North Babylon, New York 11703
(516) 422-5777 • FAX (516) 422-5770

CHAIN OF CUSTODY RECORD

Client: EEA, Inc.
Address: 55 Hilton Ave
Garden City NY
Phone: 746-4400 FAX: 746-4432
Person receiving report: N. Recchia
Sampled by: AR
Source: EEA
Job No.: EEA 95706

* 2 Week Turnaround

MATRIX (Soil, Water, etc.)	COLLECTED DATE	COLLECTED TIME	SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	TYPE & NUMBER OF CONTAINERS: EPA 8210	EPA 601	REMARKS-TESTS REQUIRED, SPECIAL TURNAROUND, SPECIAL Q.C. etc
SOIL	4/3/95	1130	SB-1A 8-10 ft	1	✓		
SOIL	4/3/95	1200	SB-1B 13-15 ft	1	✓		
SOIL	4/3/95	1230	SB-1C 18-20 ft	1	✓		
WATER	4/3/95	1230	MW-1B	2		✓	
WATER	4/3/95	1300	MW-1A	2		✓	
WATER	4/3/95	1330	MW-2	2		✓	
WATER	4/3/95	1400	MW-3	2		✓	

Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)
Representing:	4/3/95 1450	YES NO NA	Representing:	Representing:		YES NO NA	Representing:
Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)
Representing:		YES NO NA	Representing:	Representing:		YES NO NA	Representing:

...CO... ...EST ...BO...TOR..., IN... EI...ION...NTA... ...ES...
377 Sheffield Avenue, North Babylon, New York 11703
(516) 422-5777 • FAX (516) 422-5770

CHAIN OF CUSTODY RECORD

Client: EEA, Inc.
Address: 55 Hilton Ave
Garden City NY 11530
Phone: 746-4400 FAX: 746-4432
Person receiving report: N. Recchia
Sampled by: JR
Source: Gem Cleaners
Job No.: EEA 95706

MATRIX (Soil, Water, etc.)	COLLECTED DATE	COLLECTED TIME	SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	TYPE & NUMBER OF CONTAINERS: 40 ml VOA	REMARKS–TESTS REQUIRED, SPECIAL TURNAROUND, SPECIAL Q.C. etc
WATER	3/21/95	1040	MW-1A	2	✓	USEPA 601
WATER	3/21/95	1130	MW-1B	2	✓	USEPA 601
~~WATER~~	~~3/21/95~~	~~1200~~	~~MW-2~~	~~2~~	~~✓~~	~~USEA 601~~

Relinquished by: (Signature) / Representing:	DATE/TIME	SEAL INTACT? YES NO NA	Received by: (Signature) / Representing:	Relinquished by: (Signature) / Representing:	DATE/TIME	SEAL INTACT? YES NO NA	Received by: (Signature) / Representing:
Nicholas Recchia / EEA	3/21/95 1330	YES NO NA				YES NO NA	
Relinquished by: (Signature) / Representing:	DATE/TIME	SEAL INTACT? YES NO NA	Received by: (Signature) / Representing:	Relinquished by: (Signature) / Representing:	DATE/TIME	SEAL INTACT? YES NO NA	Received by: (Signature) / Representing:

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C951198/1 03/30/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: Gem Cleaners, EEA 95706
COLLECTED BY: Client DATE COL'D:03/21/95 RECEIVED:03/21/95

SAMPLE: Water sample, MW-1A, 10:40 am

ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1
Bromomethane	ug/L	1
Dichlordifluomethane	ug/L	<2
Vinyl Chloride	ug/L	<1
Chloroethane	ug/L	<1
Methylene Chloride	ug/L	<1
Trichlorofluomethane	ug/L	<2
1,1 Dichloroethene	ug/L	<1
1,1 Dichloroethane	ug/L	<1
1,2 Dichloroethene	ug/L	<1
Chloroform	ug/L	<1
1,2 Dichloroethane	ug/L	<1
111 Trichloroethane	ug/L	<1
Carbon Tetrachloride	ug/L	<1
Bromodichloromethane	ug/L	<1
1,2 Dichloropropane	ug/L	<1
t-1,3Dichloropropene	ug/L	<2
Trichloroethylene	ug/L	<1
Chlorodibromomethane	ug/L	<1
112 Trichloroethane	ug/L	<2
c 13 Dichloropropene	ug/L	<2
2chloroethvinylether	ug/L	<2
Bromoform	ug/L	<2
1122Tetrachloroethan	ug/L	<2
Tetrachloroethene	ug/L	26

ANALYTICAL PARAMETERS		
Chlorobenzene	ug/L	<1
1,3 Dichlorobenzene	ug/L	<2
1,2 Dichlorobenzene	ug/L	<2
1,4 Dichlorobenzene	ug/L	<2

cc:

REMARKS:

DIRECTOR

rn= 5693 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C951198/1 03/30/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: Gem Cleaners, EEA 95706
COLLECTED BY: Client DATE COL'D:03/21/95 RECEIVED:03/21/95

SAMPLE: Water sample, MW-1B, 11:30 am

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1	Chlorobenzene	ug/L	<1
Bromomethane	ug/L	<1	1,3 Dichlorobenzene	ug/L	<2
Dichlordifluomethane	ug/L	<2	1,2 Dichlorobenzene	ug/L	<2
Vinyl Chloride	ug/L	<1	1,4 Dichlorobenzene	ug/L	<2
Chloroethane	ug/L	<1			
Methylene Chloride	ug/L	<1			
Trichlorofluomethane	ug/L	<2			
1,1 Dichloroethene	ug/L	<1			
1,1 Dichloroethane	ug/L	<1			
1,2 Dichloroethene	ug/L	<1			
Chloroform	ug/L	<1			
1,2 Dichloroethane	ug/L	<1			
111 Trichloroethane	ug/L	<1			
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
t-1,3Dichloropropene	ug/L	<2			
Trichloroethylene	ug/L	<1			
Chlorodibromomethane	ug/L	<1			
112 Trichloroethane	ug/L	<2			
c 13 Dichloropropene	ug/L	<2			
2chloroethvinylether	ug/L	<2			
Bromoform	ug/L	<2			
1122Tetrachloroethan	ug/L	<2			
Tetrachloroethene	ug/L	2			

cc:

REMARKS:

DIRECTOR

rn= 5694 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C951734/1 05/09/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA 95706
COLLECTED BY: Client DATE COL'D:04/24/95 RECEIVED:04/24/95

SAMPLE: Soil sample, SB-1A, 8-10 ft., 11:30 am

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Chloromethane	ug/Kg	<5	Chlorobenzene	ug/Kg	<5
Bromomethane	ug/Kg	<5	1,3 Dichlorobenzene	ug/Kg	<10
Dichlordifluomethane	ug/Kg	<10	1,2 Dichlorobenzene	ug/Kg	<10
Vinyl Chloride	ug/Kg	<5	1,4 Dichlorobenzene	ug/Kg	<10
Chloroethane	ug/Kg	29			
Methylene Chloride	ug/Kg	<5			
Trichlorofluomethane	ug/Kg	<10			
1,1 Dichloroethene	ug/Kg	<5			
1,1 Dichloroethane	ug/Kg	<5			
1,2 Dichloroethene	ug/Kg	<5			
Chloroform	ug/Kg	<5			
1,2 Dichloroethane	ug/Kg	<5			
111 Trichloroethane	ug/Kg	<5			
Carbon Tetrachloride	ug/Kg	<5			
Bromodichloromethane	ug/Kg	<5			
1,2 Dichloropropane	ug/Kg	<5			
t-1,3Dichloropropene	ug/Kg	<10			
Trichloroethylene	ug/Kg	<5			
Chlorodibromomethane	ug/Kg	<5			
112 Trichloroethane	ug/Kg	<10			
c 13 Dichloropropene	ug/Kg	<10			
2chloroethvinylether	ug/Kg	<10			
Bromoform	ug/Kg	<10			
1122Tetrachloroethan	ug/Kg	<10			
Tetrachloroethene	ug/Kg	<5			

cc:

REMARKS:

DIRECTOR

rn= 8714 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C951734/2 05/09/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA 95706
COLLECTED BY: Client DATE COL'D:04/24/95 RECEIVED:04/24/95

SAMPLE: Soil sample, SB-1B, 13-15 ft., 12:00 pm

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Chloromethane	ug/Kg	<5	Chlorobenzene	ug/Kg	<5
Bromomethane	ug/Kg	<5	1,3 Dichlorobenzene	ug/Kg	<5
Dichlordifluomethane	ug/Kg	<10	1,2 Dichlorobenzene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5	1,4 Dichlorobenzene	ug/Kg	<5
Chloroethane	ug/Kg	23			
Methylene Chloride	ug/Kg	<5			
Trichlorofluomethane	ug/Kg	<10			
1,1 Dichloroethene	ug/Kg	<5			
1,1 Dichloroethane	ug/Kg	<5			
1,2 Dichloroethene	ug/Kg	<5			
Chloroform	ug/Kg	<5			
1,2 Dichloroethane	ug/Kg	<5			
111 Trichloroethane	ug/Kg	<5			
Carbon Tetrachloride	ug/Kg	<5			
Bromodichloromethane	ug/Kg	<5			
1,2 Dichloropropane	ug/Kg	<5			
t-1,3Dichloropropene	ug/Kg	<10			
Trichloroethylene	ug/Kg	<5			
Chlorodibromomethane	ug/Kg	<5			
112 Trichloroethane	ug/Kg	<10			
c 13 Dichloropropene	ug/Kg	<10			
2chloroethvinylether	ug/Kg	<10			
Bromoform	ug/Kg	<10			
1122Tetrachloroethan	ug/Kg	<10			
Tetrachloroethene	ug/Kg	<5			

cc:

REMARKS:

DIRECTOR

rn= 8715 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C951734/3 05/09/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA 95706
COLLECTED BY: Client DATE COL'D:04/24/95 RECEIVED:04/24/95

SAMPLE: Soil sample, SB-1C, 18-20 ft., 12:30 pm

ANALYTICAL PARAMETERS		
Chloromethane	ug/Kg	<5
Bromomethane	ug/Kg	<5
Dichlordifluomethane	ug/Kg	<10
Vinyl Chloride	ug/Kg	<5
Chloroethane	ug/Kg	<5
Methylene Chloride	ug/Kg	<5
Trichlorofluomethane	ug/Kg	<10
1,1 Dichloroethene	ug/Kg	<5
1,1 Dichloroethane	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5
Chloroform	ug/Kg	<5
1,2 Dichloroethane	ug/Kg	<5
111 Trichloroethane	ug/Kg	<5
Carbon Tetrachloride	ug/Kg	<5
Bromodichloromethane	ug/Kg	<5
1,2 Dichloropropane	ug/Kg	<5
t-1,3Dichloropropene	ug/Kg	<10
Trichloroethylene	ug/Kg	<5
Chlorodibromomethane	ug/Kg	<5
112 Trichloroethane	ug/Kg	<10
c 13 Dichloropropene	ug/Kg	<10
2chloroethvinylether	ug/Kg	<10
Bromoform	ug/Kg	<10
1122Tetrachloroethan	ug/Kg	<10
Tetrachloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS		
Chlorobenzene	ug/Kg	<5
1,3 Dichlorobenzene	ug/Kg	<10
1,2 Dichlorobenzene	ug/Kg	<10
1,4 Dichlorobenzene	ug/Kg	<10

cc:

REMARKS:

DIRECTOR

rn= 8716 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C951734/5 05/09/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA 95706
COLLECTED BY: Client DATE COL'D:04/24/95 RECEIVED:04/24/95

SAMPLE: Water sample, MW-1A, 13:00 pm

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1	Chlorobenzene	ug/L	<1
Bromomethane	ug/L	<1	1,3 Dichlorobenzene	ug/L	<1
Dichlordifluomethane	ug/L	<1	1,2 Dichlorobenzene	ug/L	<1
Vinyl Chloride	ug/L	<1	1,4 Dichlorobenzene	ug/L	<1
Chloroethane	ug/L	<1			
Methylene Chloride	ug/L	<1			
Trichlorofluomethane	ug/L	<1			
1,1 Dichloroethene	ug/L	<1			
1,1 Dichloroethane	ug/L	<1			
1,2 Dichloroethene	ug/L	<1			
Chloroform	ug/L	<1			
1,2 Dichloroethane	ug/L	<1			
111 Trichloroethane	ug/L	<1			
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
t-1,3Dichloropropene	ug/L	<1			
Trichloroethylene	ug/L	<1			
Chlorodibromomethane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
c 13 Dichloropropene	ug/L	<1			
2chloroethvinylether	ug/L	<1			
Bromoform	ug/L	<1			
1122Tetrachloroethan	ug/L	<1			
Tetrachloroethene	ug/L	49			

cc:

REMARKS:

DIRECTOR

rn= 8718 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C951734/4 05/09/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA 95706
COLLECTED BY: Client DATE COL'D:04/24/95 RECEIVED:04/24/95

SAMPLE: Water sample, MW-1B, 12:30 pm

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1	Chlorobenzene	ug/L	<1
Bromomethane	ug/L	<1	1,3 Dichlorobenzene	ug/L	<1
Dichlordifluomethane	ug/L	<1	1,2 Dichlorobenzene	ug/L	<1
Vinyl Chloride	ug/L	<1	1,4 Dichlorobenzene	ug/L	<1
Chloroethane	ug/L	<1			
Methylene Chloride	ug/L	<1			
Trichlorofluomethane	ug/L	<1			
1,1 Dichloroethene	ug/L	<1			
1,1 Dichloroethane	ug/L	<1			
1,2 Dichloroethene	ug/L	<1			
Chloroform	ug/L	<1			
1,2 Dichloroethane	ug/L	<1			
111 Trichloroethane	ug/L	<1			
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
t-1,3Dichloropropene	ug/L	<1			
Trichloroethylene	ug/L	<1			
Chlorodibromomethane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
c 13 Dichloropropene	ug/L	<1			
2chloroethvinylether	ug/L	<1			
Bromoform	ug/L	<1			
1122Tetrachloroethan	ug/L	<1			
Tetrachloroethene	ug/L	<1			

cc:

REMARKS:

DIRECTOR

rn= 8717 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C951734/6 05/09/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA 95706
COLLECTED BY: Client DATE COL'D:04/24/95 RECEIVED:04/24/95

SAMPLE: Water sample, MW-2, 13:30 pm

ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1
Bromomethane	ug/L	<1
Dichlordifluomethane	ug/L	<1
Vinyl Chloride	ug/L	<1
Chloroethane	ug/L	<1
Methylene Chloride	ug/L	<1
Trichlorofluomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1
1,1 Dichloroethane	ug/L	<1
1,2 Dichloroethene	ug/L	<1
Chloroform	ug/L	<1
1,2 Dichloroethane	ug/L	<1
111 Trichloroethane	ug/L	<1
Carbon Tetrachloride	ug/L	<1
Bromodichloromethane	ug/L	<1
1,2 Dichloropropane	ug/L	<1
t-1,3Dichloropropene	ug/L	<1
Trichloroethylene	ug/L	<1
Chlorodibromomethane	ug/L	<1
112 Trichloroethane	ug/L	<1
c 13 Dichloropropene	ug/L	<1
2chloroethvinylether	ug/L	<1
Bromoform	ug/L	<1
1122Tetrachloroethan	ug/L	<1
Tetrachloroethene	ug/L	3

ANALYTICAL PARAMETERS		
Chlorobenzene	ug/L	<1
1,3 Dichlorobenzene	ug/L	<1
1,2 Dichlorobenzene	ug/L	<1
1,4 Dichlorobenzene	ug/L	<1

cc:

REMARKS:

DIRECTOR

rn= 8719 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. ••N. BABYLON, N.Y. 11703 ••(516) 422-5777 ••FAX (516) 422-5770

LAB NO.C951734/7 05/09/95

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA 95706
COLLECTED BY: Client DATE COL'D:04/24/95 RECEIVED:04/24/95

SAMPLE: Water sample, MW-3, 14:00 pm

ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1
Bromomethane	ug/L	<1
Dichlordifluomethane	ug/L	<1
Vinyl Chloride	ug/L	<1
Chloroethane	ug/L	<1
Methylene Chloride	ug/L	<1
Trichlorofluomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1
1,1 Dichloroethane	ug/L	<1
1,2 Dichloroethene	ug/L	<1
Chloroform	ug/L	<1
1,2 Dichloroethane	ug/L	<1
111 Trichloroethane	ug/L	<1
Carbon Tetrachloride	ug/L	<1
Bromodichloromethane	ug/L	<1
1,2 Dichloropropane	ug/L	<1
t-1,3Dichloropropene	ug/L	<1
Trichloroethylene	ug/L	<1
Chlorodibromomethane	ug/L	<1
112 Trichloroethane	ug/L	<1
c 13 Dichloropropene	ug/L	<1
2chloroethvinylether	ug/L	<1
Bromoform	ug/L	<1
1122Tetrachloroethan	ug/L	<1
Tetrachloroethene	ug/L	4

ANALYTICAL PARAMETERS		
Chlorobenzene	ug/L	<1
1,3 Dichlorobenzene	ug/L	<1
1,2 Dichlorobenzene	ug/L	<1
1,4 Dichlorobenzene	ug/L	<1

cc:

REMARKS:

DIRECTOR

rn= 8720 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C943887/2 09/16/94

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA-94725
COLLECTED BY: Client DATE COL'D:09/01/94 RECEIVED:09/01/94

SAMPLE: Soil sample, SB-1, 2-4 ft., 10:00 am

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Chloromethane	ug/Kg	<5	Chlorobenzene	ug/Kg	<5
Bromomethane	ug/Kg	<5	1,3 Dichlorobenzene	ug/Kg	<10
Dichlordifluomethane	ug/Kg	<10	1,2 Dichlorobenzene	ug/Kg	<10
Vinyl Chloride	ug/Kg	<5	1,4 Dichlorobenzene	ug/Kg	<10
Chloroethane	ug/Kg	<5			
Methylene Chloride	ug/Kg	<5			
Trichlorofluomethane	ug/Kg	<10			
1,1 Dichloroethene	ug/Kg	<5			
1,1 Dichloroethane	ug/Kg	<5			
1,2 Dichloroethene	ug/Kg	<5			
Chloroform	ug/Kg	<5			
1,2 Dichloroethane	ug/Kg	<5			
111 Trichloroethane	ug/Kg	<5			
Carbon Tetrachloride	ug/Kg	<5			
Bromodichloromethane	ug/Kg	<5			
1,2 Dichloropropane	ug/Kg	<5			
t-1,3Dichloropropene	ug/Kg	<10			
Trichloroethylene	ug/Kg	<5			
Chlorodibromomethane	ug/Kg	<5			
112 Trichloroethane	ug/Kg	<10			
c 13 Dichloropropene	ug/Kg	<10			
2chloroethvinylether	ug/Kg	<10			
Bromoform	ug/Kg	<10			
1122Tetrachloroethan	ug/Kg	<10			
Tetrachloroethene	ug/Kg	7			

cc:

REMARKS:

DIRECTOR

rn= 19253 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C943887/1 09/16/94

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA-94725
COLLECTED BY: Client DATE COL'D:09/01/94 RECEIVED:09/01/94

SAMPLE: Water sample, MW-1, 09:30 am

ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1
Bromomethane	ug/L	<1
Dichlordifluomethane	ug/L	<2
Vinyl Chloride	ug/L	<1
Chloroethane	ug/L	<1
Methyiene Chloride	ug/L	<1
Trichlorofluomethane	ug/L	<2
1,1 Dichloroethene	ug/L	<1
1,1 Dichloroethane	ug/L	<1
1,2 Dichloroethene	ug/L	47
Chloroform	ug/L	<1
1,2 Dichloroethane	ug/L	<1
111 Trichloroethane	ug/L	<1
Carbon Tetrachloride	ug/L	<1
Bromodichloromethane	ug/L	<1
1,2 Dichloropropane	ug/L	<1
t-1,3Dichloropropene	ug/L	<2
Trichloroethylene	ug/L	5
Chlorodibromomethane	ug/L	<1
112 Trichloroethane	ug/L	<2
c 13 Dichloropropene	ug/L	<2
2chloroethvinylether	ug/L	<2
Bromoform	ug/L	<2
1122Tetrachloroethan	ug/L	<2
Tetrachloroethene	ug/L	56

ANALYTICAL PARAMETERS		
Chlorobenzene	ug/L	<1
1,3 Dichlorobenzene	ug/L	<2
1,2 Dichlorobenzene	ug/L	<2
1,4 Dichlorobenzene	ug/L	<2

cc:

REMARKS:

DIRECTOR

rn= 19252 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C943887/3 09/16/94

Energy & Environmental Analysts, Inc.
55 Hilton Avenue
Garden City, NY 11530
ATTN: Nicholas Recchia

SOURCE OF SAMPLE: EEA-94725
COLLECTED BY: Client DATE COL'D:09/01/94 RECEIVED:09/01/94

SAMPLE: Water sample, MW-2, 11:30 am

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1	Chlorobenzene	ug/L	<1
Bromomethane	ug/L	<1	1,3 Dichlorobenzene	ug/L	<2
Dichlordifluomethane	ug/L	<2	1,2 Dichlorobenzene	ug/L	<2
Vinyl Chloride	ug/L	<1	1,4 Dichlorobenzene	ug/L	<2
Chloroethane	ug/L	<1			
Methylene Chloride	ug/L	<1			
Trichlorofluomethane	ug/L	<2			
1,1 Dichloroethene	ug/L	<1			
1,1 Dichloroethane	ug/L	<1			
1,2 Dichloroethene	ug/L	<1			
Chloroform	ug/L	<1			
1,2 Dichloroethane	ug/L	<1			
111 Trichloroethane	ug/L	<1			
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
t-1,3Dichloropropene	ug/L	<2			
Trichloroethylene	ug/L	<1			
Chlorodibromomethane	ug/L	<1			
112 Trichloroethane	ug/L	<2			
c 13 Dichloropropene	ug/L	<2			
2chloroethvinylether	ug/L	<2			
Bromoform	ug/L	<2			
1122Tetrachloroethan	ug/L	<2			
Tetrachloroethene	ug/L	9			

cc:

REMARKS:

DIRECTOR

rn= 19254 NYSDOH ID# 10320

APPENDIX B

ECO TEST LABORATORIES, INC. • ENVIRONMENTAL TESTING
17 Sheffield Avenue, North Babylon, New York 11703
(516) 422-5777 • FAX (516) 422-5770

CHAIN OF CUSTODY RECORD

ent: P.W. GROSSER
dress: 100 SOUTH MAIN STREET
ITE 202 SAYVILLE NY 11782
one: 589-6353 FAX: 589-8705
rson receiving report: JIM RHODES
mpled by: ALISON
urce: GBE9701 GEM CLEANERS
o No.: GBE9701

MATRIX (Soil, Water, etc.)	COLLECTED DATE	COLLECTED TIME	SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	TYPE & NUMBER OF CONTAINERS: 40ml VOA	40ml VOA	REMARKS–TESTS REQUIRED, SPECIAL TURNAROUND, SPECIAL Q.C. etc.
SOIL	3/21	10:25	STAIRWELL STORM DRAIN	2	2		PCE, TCE, DCE, VINYL CHLORIDE
WATER	3/21	10:15	FIELD BLANK	2	#2		PCE, TCE, DCE, VINYL CHLORIDE

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C971271/1 04/03/97

P.W. Grosser Consulting
100 South Main Street, Suite 202
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Gem Cleaners, GBR9701
COLLECTED BY: Client DATE COL'D:03/21/97 RECEIVED:03/21/97

SAMPLE: Soil sample, Stairwell storm drain, 1025

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Tetrachloroethene	ug/Kg	12000	
Trichloroethylene	ug/Kg	2600	
1,2 Dichloroethene	ug/Kg	4400	
Vinyl Chloride	ug/Kg	<50	
% Solids		64	

cc:

REMARKS:

DIRECTOR

rn= 8565 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C971271/2 04/03/97

P.W. Grosser Consulting
100 South Main Street, Suite 202
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Gem Cleaners, GBR9701
COLLECTED BY: Client DATE COL'D:03/21/97 RECEIVED:03/21/97

SAMPLE: Water sample, Field Blank, 1015

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Tetrachloroethene	ug/L	<1	
Trichloroethylene	ug/L	<1	
1,2 Dichloroethene	ug/L	<1	
Vinyl Chloride	ug/L	<1	

cc:

REMARKS:

DIRECTOR

rn= 8566 NYSDOH ID# 10320

ECO TEST LABORATORIES, INC. • ENVIRONMENTAL TESTING
377 Sheffield Avenue, North Babylon, New York 11703
(516) 422-5777 • FAX (516) 422-5770

CHAIN OF CUSTODY RECORD

Client: P.W. Grosser
Address: 100 S. Main Suite 202
Phone: 584-6350 FAX: 584-8705
Person receiving report: Jim Rhodes
Sampled by: Scott Pam
Source: 84 Village Ave
Job No.: GBR-9701

Hold all
OUT, 11 Notified

MATRIX (Soil, Water, etc.)	COLLECTED DATE	COLLECTED TIME	SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	TYPE & NUMBER OF CONTAINERS: 1 oz Soil VOA glass	TYPE & NUMBER OF CONTAINERS: glass w/ Teflon septa VOA	TYPE & NUMBER OF CONTAINERS:	REMARKS–TESTS REQUIRED, SPECIAL TURNAROUND, SPECIAL Q.C. etc
soil	5/16/00	12:00	2-4	1	1		HOLD	* Method 8010 (PCE, DCE, TCE, and Vinyl Chloride)
		11:10	4-6				HOLD	
		11:10	4-6				ANALYZE	
		11:15	6-8				ANALYZE	
		11:20	8-10				ANALYZE	
		11:30	10-12				HOLD	
water	5/16/00	12:00	GW	2	2		HOLD	

Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)
Representing: PWG	5/16/00 14:30	YES NO (NA)	Representing:	Representing:		YES NO NA	Representing:
Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)
Representing:		YES NO NA	Representing:	Representing:		YES NO NA	Representing:

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C972114/3 06/10/97

P.W. Grosser Consulting
100 South Main Street, Suite 202
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: 84 Village Avenue, #GBR-9701
COLLECTED BY: Client DATE COL'D:05/16/97 RECEIVED:05/16/97

SAMPLE: Soil sample, 4-6B ft., 11:40 am

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Tetrachloroethene	ug/Kg	350	
Trichloroethylene	ug/Kg	11	
1,2 Dichloroethene	ug/Kg	<5	
Vinyl Chloride	ug/Kg	<5	
% Solids		96	

cc:

REMARKS:

DIRECTOR

rn= 13792 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C972114/4 06/10/97

P.W. Grosser Consulting
100 South Main Street, Suite 202
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: 84 Village Avenue, #GBR-9701
COLLECTED BY: Client DATE COL'D:05/16/97 RECEIVED:05/16/97

SAMPLE: Soil sample, 6-8 ft., 11:15 am

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Tetrachloroethene	ug/Kg	12000	
Trichloroethylene	ug/Kg	270	
1,2 Dichloroethene	ug/Kg	100	
Vinyl Chloride	ug/Kg	<5	
% Solids		93	

cc:

REMARKS:

DIRECTOR

rn= 13793 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C972114/5 06/10/97

P.W. Grosser Consulting
100 South Main Street, Suite 202
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: 84 Village Avenue, #GBR-9701
COLLECTED BY: Client DATE COL'D:05/16/97 RECEIVED:05/16/97

SAMPLE: Soil sample, 8-10 ft., 11:20 am

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Tetrachloroethene	ug/Kg	90	
Trichloroethylene	ug/Kg	10	
1,2 Dichloroethene	ug/Kg	<5	
Vinyl Chloride	ug/Kg	<5	
% Solids		91	

cc:

REMARKS:

DIRECTOR

rn= 13794 NYSDOH ID# 10320

APPENDIX C

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

Please print or type. Do not Staple. P.O. Box 12820, Albany, New York 12212 Form Approved. OMB No. 2050-0039. Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD013160585 / 06629
2. Page 1 of 1 — Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address:
Gem Cleaners
84 North Village Road
Rockville Centre, NY 11570

4. Generator's Phone (516) 766-3445

A. State Manifest Document No.: NYB 842762 7
B. Generator's ID: Same
C. State Transporter's ID:
D. Transporter's Phone (203 562-1280

5. Transporter 1 (Company Name): Bechem Transport, Inc.
6. US EPA ID Number: CTD982191942
E. State Transporter's ID:
F. Transporter's Phone:

7. Transporter 2 (Company Name):
8. US EPA ID Number:
G. State Facility's ID:

9. Designated Facility Name and Site Address:
LWD, Inc.
Highway 1523, PO Box 327
Calvert City, KY 42029

10. US EPA ID Number: KYD088438817
H. Facility's Phone: (502) 395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Hazardous Waste Solids, N.O.S., (Tetrachloroethylene)(F001) 9, NA3077, PG III ERG# 171	X06	DM	30000	P	EPA F001 / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a Tetrachloroethylene
b
c
d

K. Handling Codes for Wastes Listed Above
a B
b
c
d

15. Special Handling Instructions and Additional Information: Emergency Contact: Trade Winds 516-755-4000
11a)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations
If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford

Printed/Typed Name	Signature	Mo	Day	Year
Stanley Swetnick (agent)		08	07	97

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo	Day	Year
David Gerace		08	07	97

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Mo.	Day	Year

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 842762 7

COPY 3–Disposer State–mailed by generator

DRAFT

October 6, 2006

Kerry Maloney
Environmental Engineer
Division of Environmental Remediation
Bureau A
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Re: Preliminary Site Characterization –
Gem Cleaners
84 North Village Avenue
Rockville Centre, New York
Site No. 1-30-082

File: 10653/36447 #5

Dear Ms. Maloney:

This letter report serves to summarize the Preliminary Site Characterization (PSC) activities conducted at the Gem Cleaners site located at 84 North Village Avenue, Rockville Centre, New York. Refer to Figure 1 for the site location.

Site Description

Gem Cleaners is an active dry cleaning facility, which has used and stored chemicals on site. The main chemical used is tetrachloroethene, also known as perchloroethylene or PCE. The facility is located on an approximately 0.25-acre lot in a one-story masonry building. A two-story frame and stucco building is attached to the south side of the building. Refer to Figure 2. The site has one dry well (DW-1) and two existing monitoring wells (MW-1A and MW-2), located in the paved lot and driveway south of the building. From previous site assessment reports provided by NYSDEC, there are two additional monitoring wells, MW-1B (located in the proximity of MW-1A and DW-1) and MW-3 (located approximately 300 ft north of the site). However, MW-1B and MW-3 could not be located during the PSC activities.

The site borders North Village Avenue on the east and a municipal parking lot on the west. Neighboring buildings border the site on the north and south.

Previous Investigations/History

Energy & Environmental Analysts, Inc. (EEA) completed a Phase I Environmental Assessment in July 1994 at the site. In May 1995, EEA also conducted a Phase II Environmental Subsurface Investigation which included a soil boring through the dry well and the installation and sampling of four groundwater monitoring wells. Refer to Attachment 1. PCE was present in all four monitoring wells, ranging from 2 micrograms/liter (µg/L) to 56 µg/L in MW-1A.

In August 1997, P.W. Grosser Consulting conducted additional activities at the site and prepared a Site Assessment and Remediation Report. Refer to Attachment 1. Dye testing was performed to confirm the discharge of interior drains to the municipal sewer system. A vent pipe, which discharged small amounts of PCE/water condensate into a stairwell drain, was also identified and relocated to the roof. The stairwell drain, located on the west side of the building, was investigated and the soil was sampled. PCE levels were observed in the soil (6 to 8 ft) at 12,000 µg/Kg, which is well above the TAGM Soil Cleanup Objectives of 1,400 µg/Kg. The drain area was excavated to 8 ft below grade (the identified cleanup endpoint), a new drain was installed, and the excavation was backfilled.

Site Geology and Hydrology

The site appears to be filled, as the grade of the Village of Rockville Center parking lot near the site is approximately 3 feet lower. The site is underlain by the Upper Glacial Aquifer. This unit, which underlies most of Long Island, is composed of glacial outwash (unconsolidated mixture of sand and gravel) deposited during the Pleistocene ice ages. The Upper Glacial Aquifer has an average thickness of approximately 100 feet in the vicinity of the site. As indicated during previous drilling events, there is fine sand with trace of gravel to 20 feet below grade.

The Upper Glacial Aquifer is an unconfined aquifer recharging from rainfall that falls on Long Island. The water table is highest along the center of the island. This is also where the greatest rainfall occurs. Groundwater tends to flow from recharge areas in the center of the island to discharge areas along the north and south shores. At the site, depth to groundwater is approximately 19 feet below grade. The estimated average hydraulic conductivity of the Upper Glacial Aquifer is 270 feet/day horizontally and 27 ft/day vertically. The ground water flow direction could not be calculated due to the limited number of monitoring wells at the site. However, in the Phase II Environmental Subsurface Investigation Report, dated May 1995 and prepared by EEA, the regional ground water flow pattern was reportedly from north to south.

Field Activities

Field activities consisting of soil borings, subsurface soil sampling, ground water sampling, and residual sampling were performed on-site from January 17 through January 20, January 30, and March 2 through March 3, 2006. Environmental Probing Investigations, Inc. (EPI) located in Cream Ridge, New Jersey, performed the drilling activities. A representative from YEC located in Valley Cottage, New York provided the drilling oversight and sample collection.

Soil borings were conducted at eight locations (SB-1 through SB-8) as shown on Figures 2 and 3. For borings located outside the property (SB-7/GWS-7 and SB-8/GWS-8), the Village of Rockville was contacted and a permit was obtained prior to drilling.

The borings were performed using a Geoprobe® direct push probe (6600 unit). The scope of the PSC was to advance the borings to 90 feet or refusal. None of the borings were advanced to 90 ft due to subsurface conditions. Refusal occurred at depths presented in Table A below. Four-foot long core samples were retrieved from the borings and screened via a headspace method using a photo ionization detector (PID). Refer to boring logs in Attachment 2. Soil samples with the highest PID reading were collected and submitted for analysis. The PID readings ranged from non-detect to 34.8 ppm. The depths and PID readings for the soil samples collected are presented in Table A below. At SB-3, two soil samples were collected and submitted for analysis. In addition to the soil samples, a residual sample was

collected from the dry well (DW-1). Duplicate samples were also collected and submitted for analysis for SB-5 and DW-1.

Table A: *Depth to refusal, depth of soil samples, and PID readings.*

Location	Depth to Refusal (ft)	Depth of Soil Samples (ft)	PID Reading (ppm)
SB-1	44	24-28	17.8
SB-2	40	36-40	7.4
SB-3	40	28-32 & 36-40	5.0 & 5.3
SB-4	40	24-28	3.7
SB-5	40	28-32 (plus field duplicate at 28-32 ft)	34.8
SB-6	40	16-20	6.6
SB-7	40	36-40	6.1
SB-8	36	20-24	2.0

Groundwater samples were collected from each of the eight boring locations (GWS-1 through GWS-8). The samples were collected using the Geoprobe® discrete screen point groundwater sampling method. Groundwater samples were collected at the depths presented in Table B below. In addition, water samples were collected from the dry well (DW-1) and the existing monitoring wells (MW-1A and MW-2) on site.

Table B: *Depth of groundwater samples.*

Location	Depth to Groundwater Samples (ft)
GWS-1	29
GWS -2	29
GWS -3	29
GWS -4	20, 34, &49
GWS -5	29 (plus field duplicate at 29 ft)
GWS -6	21, 34, &44
GWS -7	17, 28, &43
GWS -8	24
MW – 1A	59
MW - 2	20

Following the boring and sampling activities YEC performed an instrument survey of the site that included the sample locations, dry well, monitoring wells, and other prominent structures.

The soil samples and the groundwater samples along with matrix spike/matrix spike duplicate (MS/MSD) samples, and equipment blank samples were sent via overnight delivery to Life Science Laboratories in Syracuse, New York for analysis. The samples were analyzed for volatile organic compounds.

Analytical Results

Data Quality

The samples were analyzed for volatile organic compounds according to the Standby QAPP and project specific DER-10 QAPP using USEPA Method 8260B.

The analytical data packages from Life Science Laboratories were validated by an independent data validation contractor, Nancy Potak of Greensboro, Vermont, and the results were reported in a data

usability summary report (DUSR). Refer to Attachment 3 (separately bound). The validated soil and residual analytical results are summarized in Table 1. The validated groundwater analytical results are summarized in Table 2.

The data quality for soil, residual and groundwater were generally acceptable for intended uses. The DUSR noted that there were problems with the system monitoring and internal standard recoveries in the initial analysis of the residual samples from DW-1. The samples were reanalyzed and the data from the reanalysis were not significantly different. As recommended by the validator, the data from the original analysis was used for reporting, as presented in Table 1. In addition, the DUSR noted that there was minor acetone and methylene chloride contamination in the method and storage blanks, and the data is flagged by the "B" data qualifier in Table 1.

Minor acetone and methylene chloride contamination was also found in the trip blanks for the groundwater samples. In three groundwater samples, GWS-1(29), GWS-6(21), GWS-6(34), the samples had to be reanalyzed due to the high concentrations of PCE exceeding instrument calibration range. As recommended by the validator, the data for this compound was reported from the diluted analysis.

Data Evaluation
The analytical results were compared to the following New York State screening values:

- Soil and residual results are compared to applicable screening values provided in TAGM #4046, 1994.
- Groundwater results are compared to applicable screening values provided in TOGS 1.1.1, 1998.

The validated analytical results for the soil, residual and groundwater samples are summarized in Tables 1 and 2. In addition, the analytical results, which exceed the applicable screening values, are highlighted with boxes in the tables and presented on Figure 3.

For the soil and residual samples, no compounds exceeded their applicable screening values. Compounds that were detected include acetone, 2-butanone, toluene, and PCE as shown in Table 1.

For the groundwater samples, only PCE and cis-1,2-dichloroethene exceeded their applicable screening values. This occurred at three locations as shown below in Table C. Other compounds that were detected included trichlorofluoromethane, acetone, carbon disulfide, methylene chloride, methyl tert-butyl ether, 2-butanone, chloroform, benzene, trichloroethene, toluene, ethylbenzene, xylenes and 1,2,4-trichlorobenzene as shown in Table 2. PCE was present in GWS-1, 3, 4, 5, 6, 7, and 8, MW-1A and MW-2.

Table C: *Groundwater samples with compounds that exceed their applicable screening values.*

Compound	Screening Values	GWS-1 (29')	GWS-4 (20')	GWS-4 (34')	GWS-6 (21')	GWS-6 (34')	GWS-6 (44')
cis-1,2-dichloroethene	5	ND	ND	ND	5.11	ND	ND
PCE	5	303	20.2	12.4	313	109	11.2

ND = Not detected. Concentrations are in µg/L.

Summary

PCE was the contaminant of concern based on the site history. Based on the analytical results of the soil and residual samples collected during the PSC, no compounds exceeded their applicable screening values.

Several volatile organic compounds were present in the ground water, however, only PCE and cis-1,2-dichloroethene exceeded the applicable screening values. This occurred at three locations (GWS-1, GWS-4 and GWS-6) with PCE concentrations ranging from 11.2 to 303 µg/L.

If you have any questions or comments regarding this information, please contact me at (315) 437-6100, extension 2258.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Marc J. Dent, P.E.
Managing Engineer

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TABLE 1
Gem Cleaners Site
Soil and Residual Sample Results

Compounds	CAS No.	NYSDEC TAGM Recommended Soil Cleanup Objective[1]	Sample ID Depth Interval Sample Type Date Sampled	SB-1 24'-28' Soil 1/17/06	SB-2 36'-40' Soil 1/17/06	SB-3 28'-32' Soil 1/18/06	SB-3 36'-40' Soil 1/18/06	SB-4 24'-28' Soil 1/19/06	SB-5 28'-32' Soil 1/19/06	SB-5 FD (X-1) 28'-32' Soil 1/19/06	SB-6 16'-20' Soil 1/30/06	SB-7 36'-40' Soil 3/3/06	SB-8 20'-24' Soil 3/3/06	DW-1 Residual 1/20/06	DW-1 FD (X-4) Residual 1/20/06
Volatile Organic Compounds[2] (µg/kg)															
Dichlorodifluoromethane	75-71-8	NA		0.10 U	0.09 U	0.10 U	0.09 U	0.10 U	0.09 U	0.09 U	0.10 U	0.09 U	0.10 U	0.12 UJ	0.11 UJ
Chloromethane	74-87-3	NA		0.48 U	0.44 U	0.46 U	0.44 U	0.47 U	0.44 U	0.44 U	0.47 U	0.36 U	0.39 U	0.55 UJ	0.51 UJ
Vinyl chloride	75-01-4	200		0.10 U	0.09 U	0.10 U	0.09 U	0.10 U	0.09 U	0.09 U	0.10 U	0.15 U	0.17 U	0.12 UJ	0.11 UJ
Bromomethane	74-83-9	NA		0.38 U	0.35 U	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.37 U	0.15 U	0.17 U	0.43 UJ	0.40 UJ
Chloroethane	75-00-3	1,900		0.37 U	0.34 U	0.35 U	0.33 U	0.36 U	0.34 U	0.34 U	0.36 U	0.29 U	0.32 U	0.42 UJ	0.39 UJ
Trichlorofluoromethane	75-69-4	NA		0.10 U	0.09 U	0.10 U	0.09 U	0.10 U	0.09 U	0.09 U	0.10 U	0.09 U	0.10 U	0.12 UJ	0.11 UJ
1,1-Dichloroethene	75-35-4	400		0.18 U	0.16 U	0.17 U	0.16 U	0.17 U	0.16 U	0.16 U	0.17 U	0.17 U	0.19 U	0.20 UJ	0.19 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	6,000		0.13 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.13 U	0.14 U	0.14 UJ	0.13 UJ
Acetone	67-64-1	200		10 UJB	12 UJB	12 UJB	12 UJB	12 UJB	12 UJB	12 UJB	12 UJB	5.0 J	0.38 U	21 UJB	34 JB
Carbon disulfide	75-15-0	2,700		0.08 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.09 U	0.10 U	0.09 UJ	0.08 UJ
Methyl acetate	79-20-9	NA		0.46 UJ	0.42 UJ	0.43 UJ	0.41 UJ	0.45 UJ	0.42 UJ	0.42 UJ	0.45 UJ	0.17 U	0.19 U	0.52 UJ	0.48 UJ
Methylene chloride	75-09-2	100		0.51 U	0.47 U	0.48 U	0.46 U	0.50 U	0.46 U	0.46 U	0.50 U	0.69 U	0.76 U	0.58 UJ	0.73 JB
trans-1,2-Dichloroethene	156-60-5	300		0.13 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.14 U	0.15 U	0.14 UJ	0.13 UJ
Methyl tert-butyl ether	1634-04-4	NA		0.09 UJ	0.08 UJ	0.08 UJ	0.08 UJ	0.09 UJ	0.08 UJ	0.08 UJ	0.09 UJ	0.15 U	0.17 U	0.10 UJ	0.09 UJ
1,1-Dichloroethane	75-34-3	200		0.13 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.09 U	0.10 U	0.14 UJ	0.13 UJ
cis-1,2-Dichloroethene	156-59-2	NA		0.14 U	0.13 U	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.14 U	0.18 U	0.20 U	0.16 UJ	0.15 UJ
2-Butanone	78-93-3	300		0.18 U	0.16 U	0.17 U	0.16 U	0.17 U	0.16 U	0.16 U	0.17 U	0.48 U	0.53 U	4.1 J	7.0 J
Chloroform	67-66-3	300		0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.08 U	0.09 U	0.06 UJ	0.05 UJ
1,1,1-Trichloroethane	71-55-6	800		0.13 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.16 U	0.18 U	0.14 UJ	0.13 UJ
Cyclohexane	110-82-7	NA		0.52 UJ	0.48 UJ	0.49 UJ	0.47 UJ	0.51 UJ	0.47 UJ	0.48 UJ	0.51 UJ	0.21 U	0.23 U	0.59 UJ	0.55 UJ
Carbon tetrachloride	56-23-5	600		0.14 U	0.13 U	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.14 U	0.14 U	0.15 U	0.16 UJ	0.15 UJ
Benzene	71-43-2	600		0.11 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U	0.10 U	0.11 U	0.06 U	0.06 U	0.13 UJ	0.12 UJ
1,2-Dichloroethane	107-06-2	100		0.13 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.13 U	0.14 U	0.14 UJ	0.13 UJ
Trichloroethene	79-01-6	700		0.14 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.14 UJ	0.13 UJ	0.13 UJ	0.14 UJ	0.14 U	0.15 U	0.16 UJ	0.15 UJ
Methylcyclohexane	108-87-2	NA		0.16 U	0.15 U	0.16 U	0.15 U	0.16 U	0.15 U	0.15 U	0.16 U	0.21 U	0.23 U	0.19 UJ	0.18 UJ
1,2-Dichloropropane	78-87-5	NA		0.10 UJ	0.09 UJ	0.10 UJ	0.09 UJ	0.10 UJ	0.09 UJ	0.09 UJ	0.10 UJ	0.25 U	0.28 U	0.12 UJ	0.11 UJ
Bromodichloromethane	75-27-4	NA		0.10 U	0.09 U	0.10 U	0.09 U	0.10 U	0.09 U	0.09 U	0.10 U	0.07 U	0.08 U	0.12 UJ	0.11 UJ
cis-1,3-Dichloropropene	10061-01-5	NA		0.11 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U	0.10 U	0.11 U	0.10 U	0.11 U	0.13 UJ	0.12 UJ
4-Methyl-2-pentanone	108-10-1	1,000		0.30 U	0.28 U	0.29 U	0.28 U	0.30 U	0.28 U	0.28 U	0.30 U	0.37 U	0.41 U	0.35 UJ	0.32 UJ
Toluene	108-88-3	1,500		0.15 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.15 UJ	0.14 UJ	0.14 UJ	0.15 UJ	0.06 U	0.06 U	1.4 J	0.89 J
trans-1,3-Dichloropropene	10061-02-6	NA		0.11 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U	0.10 U	0.11 U	0.17 U	0.19 U	0.13 UJ	0.12 UJ
1,1,2-Trichloroethane	79-00-5	NA		0.14 U	0.13 U	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.14 U	0.29 U	0.32 U	0.16 UJ	0.15 UJ
Tetrachloroethene	127-18-4	1,400		**11**	0.16 U	0.17 U	0.16 U	1.1 J	0.16 U	0.16 U	0.88 J	0.13 U	0.14 U	1.3 J	1.6 J
2-Hexanone	591-78-6	NA		0.28 U	0.26 U	0.27 U	0.25 U	0.27 U	0.25 U	0.26 U	0.27 U	0.44 U	0.48 U	0.32 UJ	0.30 UJ
Dibromochloromethane	124-48-1	NA		0.16 U	0.15 U	0.16 U	0.15 U	0.16 U	0.15 U	0.15 U	0.16 U	0.08 U	0.09 U	0.19 UJ	0.18 UJ
1,2-Dibromoethane	106-93-4	NA		0.11 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U	0.10 U	0.11 U	0.09 U	0.10 U	0.13 UJ	0.12 UJ
Chlorobenzene	108-90-7	1,700		0.11 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U	0.10 U	0.11 U	0.08 U	0.09 U	0.13 UJ	0.12 UJ
Ethylbenzene	100-41-4	5,500		0.13 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.17 U	0.14 UJ	0.13 UJ
Xylenes	1330-20-7	1,200		0.23 U	0.21 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.22 U	0.20 U	0.22 U	0.26 UJ	0.24 UJ
Styrene	100-42-5	NA		0.13 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.14 U	0.15 U	0.14 UJ	0.13 UJ
Bromoform	75-25-2	NA		0.08 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.20 U	0.22 U	0.09 UJ	0.08 UJ
Isopropylbenzene	98-82-8	NA		0.10 U	0.09 U	0.10 U	0.09 U	0.10 U	0.09 U	0.09 U	0.10 U	0.06 U	0.06 U	0.12 UJ	0.11 UJ
1,1,2,2-Tetrachloroethane	79-34-5	600		0.20 U	0.19 U	0.19 U	0.18 U	0.20 U	0.19 U	0.19 U	0.20 U	0.16 U	0.18 U	0.23 UJ	0.22 UJ
1,3-Dichlorobenzene	541-73-1	1,600		0.13 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.13 U	0.14 U	0.14 UJ	0.13 UJ
1,4-Dichlorobenzene	106-46-7	8,500		0.16 U	0.15 U	0.16 U	0.15 U	0.16 U	0.15 U	0.15 U	0.16 U	0.07 U	0.08 U	0.19 UJ	0.18 UJ
1,2-Dichlorobenzene	95-50-1	7,900		0.11 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U	0.10 U	0.11 U	0.07 U	0.08 U	0.13 UJ	0.12 UJ
1,2-Dibromo-3-chloropropane	96-12-8	NA		0.51 UJ	0.47 UJ	0.48 UJ	0.46 UJ	0.50 UJ	0.46 UJ	0.46 UJ	0.50 UJ	0.36 U	0.39 U	0.58 UJ	0.54 UJ
1,2,4-Trichlorobenzene	120-82-1	3,400		0.43 U	0.40 U	0.41 U	0.39 U	0.42 U	0.39 U	0.39 U	0.42 U	0.38 U	0.42 U	0.49 UJ	0.46 UJ

Notes:

Analytical Data Qualifiers:

B = Detected in method blank at concentrations less than contract required detection limit (CRDL)

J = Estimated

U = Not detected at or above method detection limit (MDL) or practical quantitation limit (PQL)

FD = Field Duplicate

NA = Not Available

[ ] = Exceeds Screening Value

[1] Table 3 of NYSDEC Division of Environmental Remediation Technical and Administrative Guidance Memorandum (TAGM) #4046, ***Determination of Soil Cleanup Objectives and Cleanup Levels***, January 1994.

[2] Non-detect limits are MDLs.

TABLE 2
Gem Cleaners Site
Ground Water Sample Results

Compounds	CAS No.	NYSDEC TOGS 1.1.1 Allowable Concentration[1]	Sample ID / Depth Interval / Date Sampled	GWS-1 29' 1/17/06	GWS-2 29' 1/18/06	GWS-3 29' 1/18/06	GWS-4 20' 1/18/06	GWS-4 34' 1/18/06	GWS-4 49' 1/18/06	GWS-5 29' 1/19/06	GWS-5 FD (X-2) 29' 1/19/06	GWS-6 21' 1/20/06	GWS-6 34' 1/20/06	GWS-6 44' 1/20/06
Volatile Organic Compounds[2] (µg/L)														
Dichlorodifluoromethane	75-71-8	5		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Chloromethane	74-87-3	5		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Vinyl chloride	75-01-4	2		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Bromomethane	74-83-9	5		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chloroethane	75-00-3	5		0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Trichlorofluoromethane	75-69-4	5		0.14 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,1-Dichloroethene	75-35-4	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Acetone	67-64-1	50		0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Carbon disulfide	75-15-0	60 [3]		0.03 U	0.38 J	0.33 J	**0.65**	0.19 J	**0.85**	0.35 J	0.37 J	0.42 J	**0.69**	**0.83**
Methyl acetate	79-20-9	NA		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Methylene chloride	75-09-2	5		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
trans-1,2-Dichloroethene	156-60-5	5		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Methyl tert-butyl ether	1634-04-4	10 [3]		0.22 J	0.03 U	0.03 U	0.03 U	**1.21**	0.03 U	0.14 J	0.14 J	0.03 U	0.20 J	0.03 U
1,1-Dichloroethane	75-34-3	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
cis-1,2-Dichloroethene	156-59-2	5		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**5.11**	0.04 U	0.04 U
2-Butanone	78-93-3	50		0.68 U	1.05 J	1.04 J	0.68 U	0.68 U	2.37 J	0.68 U	1.18 J	0.68 U	1.66 J	1.12 J
Chloroform	67-66-3	7		0.26 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.69**	**0.59**	0.39 J	0.10 J	0.02 U
1,1,1-Trichloroethane	71-55-6	5		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Cyclohexane	110-82-7	NA		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Carbon tetrachloride	56-23-5	5		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Benzene	71-43-2	1		0.02 U	0.11 J	0.14 J	0.13 J	0.02 U	0.32 J	0.11 J	0.12 J	0.02 U	0.21 J	0.17 J
1,2-Dichloroethane	107-06-2	0.6		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Trichloroethene	79-01-6	5		0.12 J	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**1.65**	0.29 J	0.03 U
Methylcyclohexane	108-87-2	NA		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,2-Dichloropropane	78-87-5	1.0		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Bromodichloromethane	75-27-4	50		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
cis-1,3-Dichloropropene	10061-01-5	0.4 [4]		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
4-Methyl-2-pentanone	108-10-1	NA		1.20 U	1.20 U	1.20 U	1.2 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U
Toluene	108-88-3	5		0.02 U	0.40 J	**0.61**	**0.77**	0.40 J	**0.63**	**0.60**	**0.56**	0.46 J	**0.55**	**0.63**
trans-1,3-Dichloropropene	10061-02-6	0.4 [4]		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,1,2-Trichloroethane	79-00-5	1		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Tetrachloroethene	127-18-4	5		**303**	0.05 U	0.36 J	**20.2**	**12.4**	**0.91**	**1.19**	**1.20**	**313**	**109**	**11.2**
2-Hexanone	591-78-6	50		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Dibromochloromethane	124-48-1	50		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dibromoethane	106-93-4	6E-04		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Chlorobenzene	108-90-7	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	100-41-4	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.14 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes	1330-20-7	5 [5]		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.14 J	0.11 J	0.10 J	0.04 U	0.04 U	0.04 U
Styrene	100-42-5	930		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Bromoform	75-25-2	50		0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Isopropylbenzene	98-82-8	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,1,2,2-Tetrachloroethane	79-34-5	5		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,3-Dichlorobenzene	541-73-1	3		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,4-Dichlorobenzene	106-46-7	3		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,2-Dichlorobenzene	95-50-1	3		0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04		0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2,4-Trichlorobenzene	120-82-1	5		0.19 J	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

Notes:

Analytical Data Qualifiers:

B = Detected in method blank at concentrations less than contract required detection limit (CRDL)

J = Estimated

U = Not detected at or above method detection limit (MDL) or practical quantitation limit (PQL)

FD = Field Duplicate

NA = Not Available

[ ] = Exceeds Screening Value

[1] Table 5 of NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, ***Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*** , June 1998.

[2] Non-detect limits are MDLs.

[3] TOGS April 2000 Addendum.

[4] The TOGS value is for the sum of cis-1,3-Dichloropropene and trans-1,3-Dichloropropene.

[5] The TOGS value for total xylenes is assumed to be equal to the TOGS value for 1,2-xylene, 1,3-xylene, or 1,4-xylene.

TABLE 2
Gem Cleaners Site
Ground Water Sample Results

Compounds	CAS No.	NYSDEC TOGS 1.1.1 Allowable Concentration[1]	Sample ID Depth Interval Date Sampled	GWS-7 17' 3/2/06	GWS-7 28' 3/2/06	GWS-7 43' 3/2/06	GWS-8 24' 3/3/06	MW-1A 59' 1/19/06	MW-2 20' 1/19/06	MW-2 FD (X-3) 20' 1/19/06
Volatile Organic Compounds[2] (µg/L)										
Dichlorodifluoromethane	75-71-8	5		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Chloromethane	74-87-3	5		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Vinyl chloride	75-01-4	2		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Bromomethane	74-83-9	5		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chloroethane	75-00-3	5		0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Trichlorofluoromethane	75-69-4	5		0.02 U	0.18 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,1-Dichloroethene	75-35-4	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Acetone	67-64-1	50		2.54 J	1.73 J	0.23 U	1.01 J	0.23 U	0.23 U	0.23 U
Carbon disulfide	75-15-0	60 [3]		**0.55**	0.19 J	**1.02**	0.03 U	0.03 U	0.03 U	0.03 U
Methyl acetate	79-20-9	NA		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Methylene chloride	75-09-2	5		0.09 U	0.09 U	0.21 J	0.09 U	0.09 U	0.09 U	0.09 U
trans-1,2-Dichloroethene	156-60-5	5		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Methyl tert-butyl ether	1634-04-4	10 [3]		0.03 U	0.03 U	0.03 U	0.03 U	0.19 J	0.03 U	0.03 U
1,1-Dichloroethane	75-34-3	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
cis-1,2-Dichloroethene	156-59-2	5		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
2-Butanone	78-93-3	50		0.68 U	0.68 U	1.02 J	0.68 U	0.68 U	0.68 U	0.68 U
Chloroform	67-66-3	7		0.02 U	0.02 U	0.02 U	0.02 U	0.14 J	0.02 U	0.02 U
1,1,1-Trichloroethane	71-55-6	5		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Cyclohexane	110-82-7	NA		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Carbon tetrachloride	56-23-5	5		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Benzene	71-43-2	1		0.18 J	0.02 U	0.18 J	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dichloroethane	107-06-2	0.6		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Trichloroethene	79-01-6	5		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Methylcyclohexane	108-87-2	NA		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,2-Dichloropropane	78-87-5	1.0		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Bromodichloromethane	75-27-4	50		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
cis-1,3-Dichloropropene	10061-01-5	0.4 [4]		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
4-Methyl-2-pentanone	108-10-1	NA		0.28 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U
Toluene	108-88-3	5		0.28 J	0.19 J	0.30 J	0.27 J	0.02 U	0.02 U	0.02 U
trans-1,3-Dichloropropene	10061-02-6	0.4 [4]		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,1,2-Trichloroethane	79-00-5	1		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Tetrachloroethene	127-18-4	5		0.42 J	**0.60**	**0.52**	**0.94**	**1.58**	0.05 U	**3.38**
2-Hexanone	591-78-6	50		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Dibromochloromethane	124-48-1	50		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dibromoethane	106-93-4	6E-04		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Chlorobenzene	108-90-7	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	100-41-4	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes	1330-20-7	5 [5]		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Styrene	100-42-5	930		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Bromoform	75-25-2	50		0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Isopropylbenzene	98-82-8	5		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,1,2,2-Tetrachloroethane	79-34-5	5		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,3-Dichlorobenzene	541-73-1	3		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,4-Dichlorobenzene	106-46-7	3		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
1,2-Dichlorobenzene	95-50-1	3		0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04		0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2,4-Trichlorobenzene	120-82-1	5		0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

Notes:

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- B = Detected in method blank at concentrations less than contract required detection limit (CRDL)
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[5] The TOGS value for total xylenes is assumed to be equal to the TOGS value for 1,2-xylene, 1,3-xylene, or 1,4

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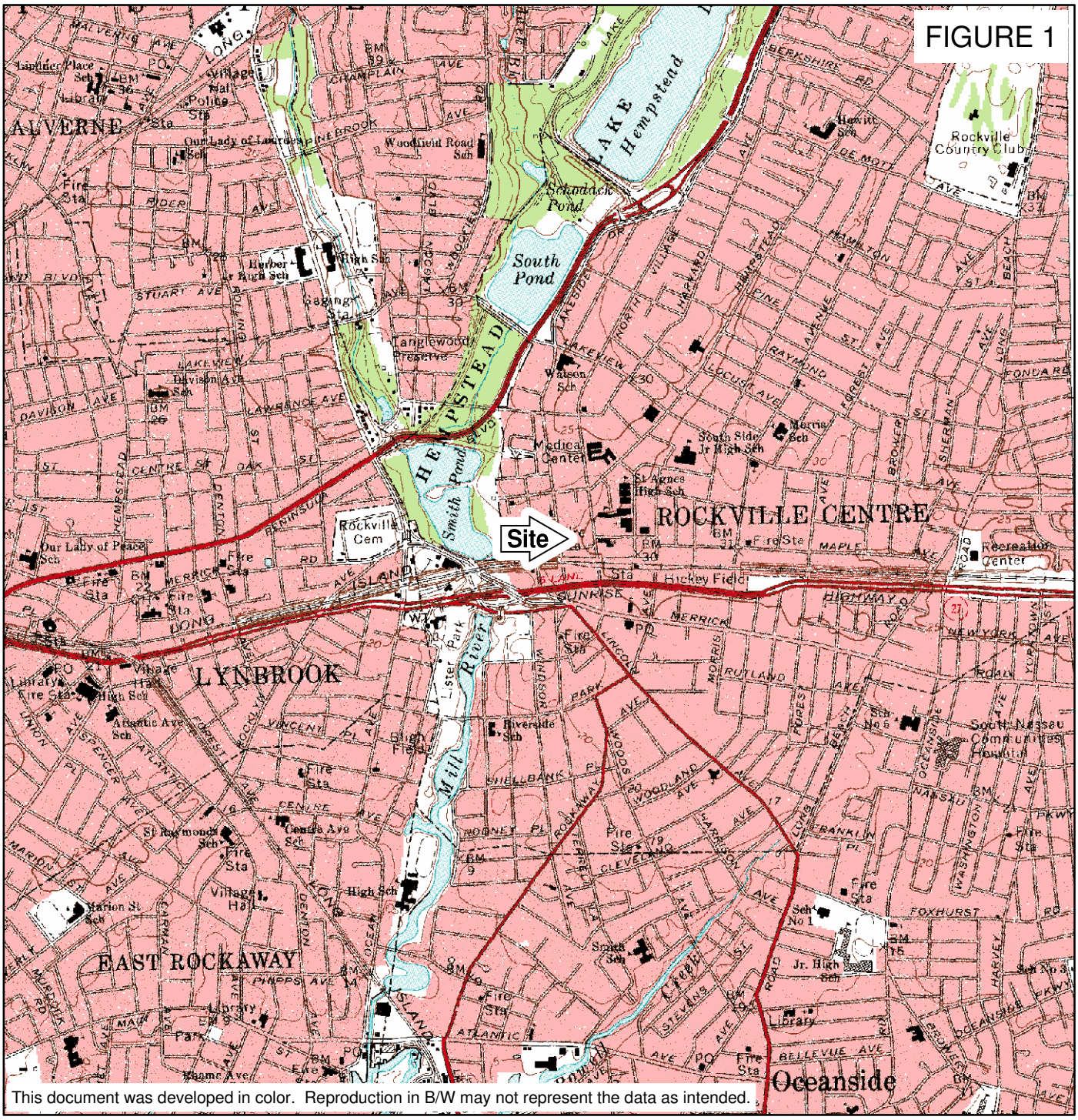
PLOT DATE: 08/09/06 DIV. 732 JPS

FIGURE 1



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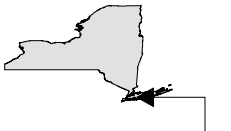
ADAPTED FROM: LYNBROOK, NEW YORK USGS QUADRANGLE.



QUADRANGLE LOCATION

GEM CLEANERS
SITE ID # 1-30-082
ROCKVILLE CENTRE, NEW YORK

SITE LOCATION

0 1,000 2,000 4,000 6,000 8,000

Feet

1:24,000

10653/36447
AUGUST 2006

O'BRIEN & GERE

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PLOT DATE: 09/25/06 DIV. 70 NJW

FIGURE 2

LEGEND

- EXISTING MONITORING WELL
- DRYWELL
- SOIL/GROUND WATER SAMPLE LOCATION

GEM CLEANERS
SITE ID # 1-30-082
ROCKVILLE CENTRE,
NEW YORK

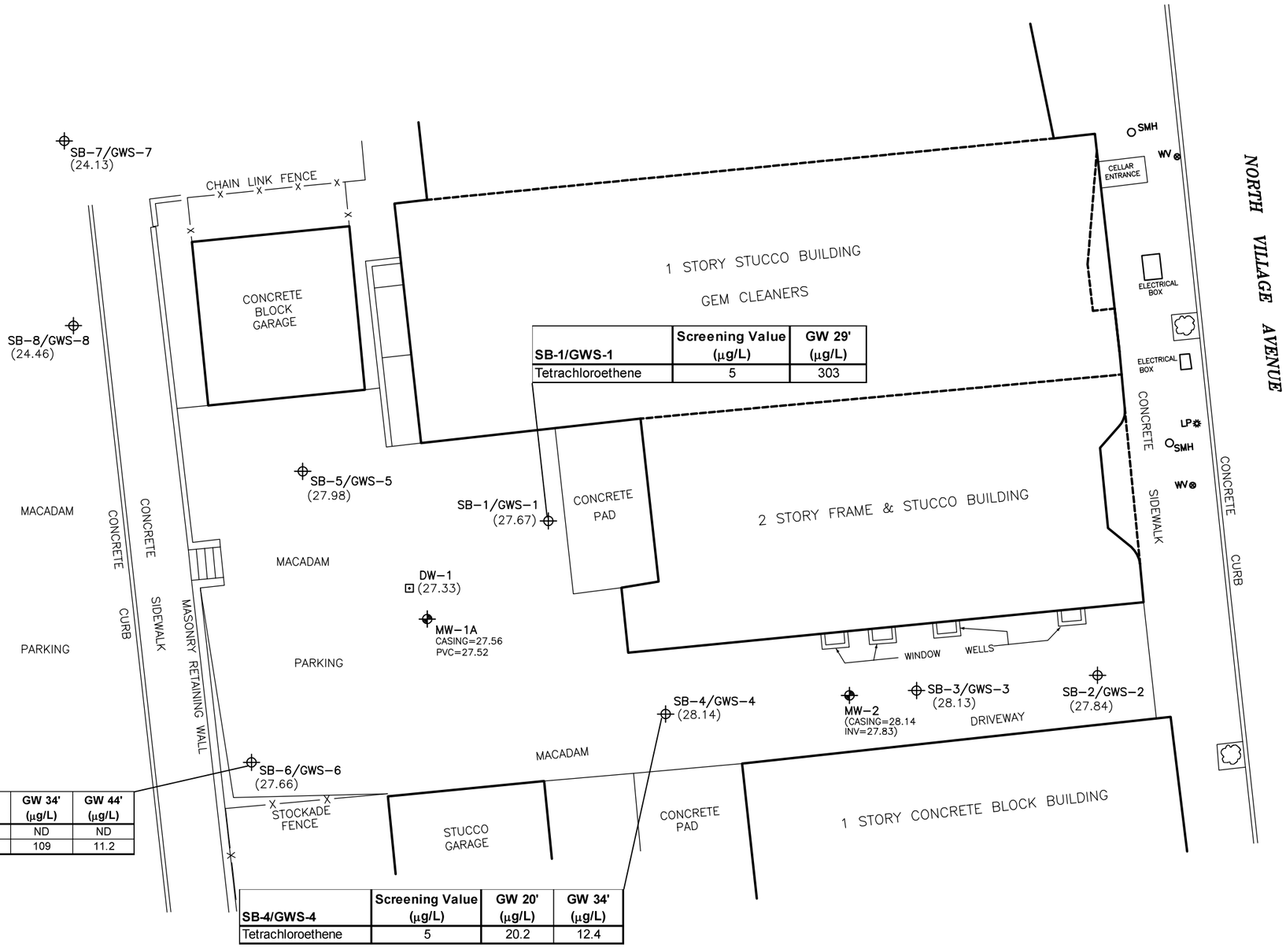
SAMPLE LOCATIONS

0 12.5 25 50
Feet

AUGUST 2006
10653.36447

O'BRIEN & GERE ENGINEERS, INC.

FIGURE 3



SB-1/GWS-1	Screening Value (µg/L)	GW 29' (µg/L)
Tetrachloroethene	5	303

SB-6/GWS-6	Screening Value (µg/L)	GW 21' (µg/L)	GW 34' (µg/L)	GW 44' (µg/L)
cis-1,2-Dichloroethene	5	5.11	ND	ND
Tetrachloroethene	5	313	109	11.2

SB-4/GWS-4	Screening Value (µg/L)	GW 20' (µg/L)	GW 34' (µg/L)
Tetrachloroethene	5	20.2	12.4

NOTES:

1. ALL SOIL AND RESIDUAL SAMPLE ANALYTICAL RESULTS WERE BELOW SCREENING VALVES.
2. DATE OF FIELD SURVEY: MARCH 3, 2006, BY YEC, INC., VALLEY COTTAGE, NEW YORK
3. HORIZONTAL DATUM: NAD 83 FROM GPS OBSERVATIONS
4. VERTICAL DATUM: NGVD 1929 FROM GPS OBSERVATIONS (TO CONVERT TO NAVD 1988 SUBTRACT 0.60)
5. ND= NOT DETECTED IN SAMPLE
   FD= FIELD DUPLICATE

LEGEND

- MW — MONITORING WELL (W/ELEVATIONS)
- SB — SOIL BORING (W/ELEVATION)
- DW — DRYWELL (W/ELEVATIONS)
- SMH — SEWER MANHOLE
- WV — WATER VALVE
- LP — LIGHT POLE
- TREE

GEM CLEANERS
SITE ID#1-30-082
ROCKVILLE CENTRE, NY

SAMPLE LOCATIONS AND ANALYTICAL RESULTS ABOVE SCREENING VALUES

FILE NO. 10653.36447.001
AUGUST 2006

O'BRIEN & GERE

2006 © O'Brien & Gere Engineers, Inc.

Yec, Inc.
612 Corporate Way
Valley Cottage, NY 10989

Tel # (845) 268-3203
Fax # (845) 268-5313

Boring Log

Project: GEM	Client: O'Brien & Gere	Page _1_ of _4_			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-1	Total Depth: 44'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/17/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
1	S-1		4/3	Asphalt 10"		PID= 0.0 PPM Dry loose non-plastic Fill
				Tan to Brown (cm) Sand, trace (mf) rounded gravel 1'6"	SP	
2				Brown (m) Sand		
3					SW	
4				4'		
5	S-2		4/4	Brown to Orange (mf) Sand		PID= 0.7 PPM Dry loose non-plastic Fill
6						
7					SW	
8						
9	S-3		4/4			PID= 0.0 PPM Dry loose non-plastic Fill
10						
11						
12				White to Tan (cmf) Sand 11'6"	SP	Native @ 11'6"

Yec, Inc.
612 Corporate Way
Valley Cottage, NY 10989

Tel # (845) 268-3203
Fax # (845) 268-5313

Boring Log

Project: GEM	Client: O'Brien & Gere	Page 2 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
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Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/17/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
13						PID = 0.0 PPM Dry loose non-plastic
				13' Brown to Orange (mf) Sand,		
14	S-4		4/4		SP	
15						
16				16' Brown to Orange (cmf) Sand, some (cmf) Sub-rounded gravel 16'6"	SP	PID = 0.8 PPM Dry loose non-plastic
17				Brown to Orange (cmf) Sand, trace (mf) Sub-rounded gravel		
18	S-5		4/4		SP	
19				19' ▽		Wet @ 19'
				19'6" Red and Orange (cmf) Sand		
20				20' White to Tan (f) Sand	SP	PID = 13.0 PPM Saturated moderately Compact non-plastic
21						
22	S-6		4/3		SW	
23				23'3" Brown to Red Sandy (cmf) Gravel		
24				23'9" White to Tan (f) Sand	GP SW	

Yec, Inc.
612 Corporate Way
Valley Cottage, NY 10989

Tel # (845) 268-3203
Fax # (845) 268-5313

Boring Log

Project: GEM	Client: O'Brien & Gere	Page _3_ of _4_			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-1	Total Depth: 44'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/17/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
25						PID = 17.8 PPM wet moderately compact non-plastic
26	S-7		4/3			
27						
28				Brown silty Gravel (fill) 27'6" / White to Tan (f) Sand 27'9" / Brown to Black (f) Sand 27'10"	GM / SW / SW	PID = 0.4 PPM wet compact non-plastic
29	S-8		4/3	Brown (mf) Sand 28'6"	SW	
30				Brown clayey (f) sand 29'6"	SW	moderately compact Plastic
31					SC	
32				Brown clayey silt 31'6" / 32'	ML	
33				Brown (f) Sand		PID = 0.5 PPM Saturated moderately compact non-Plastic
34	S-9		4/2.5		SW	wet
35						
36				Brown clayey (f) Sand 35'6"	SC	wet Plastic

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 4 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-1	Total Depth: 44'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/17/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
37	S-10		4/3	Brown (cmf) Sand, trace Sub-angular to Sub-rounded gravel 36'	SP	PID = 2.1 PPM Wet moderately compact non-plastic
38						
39						
40						
41	S-11		4/2			PID = 3.8 PPM Saturated loose non-plastic
42				White to Tan (mf) Sand,		
43					SP	
44						
45				End of boring		
46						
47						
48						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 1 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-2	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/17/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
1				Asphalt 10"		PID = 0.0 PPM Dry loose non-plastic Fill
2	S-1		4/2	Brown (m) Sand	SW	
3				Brown to Orange (mf) Sand, Trace sub-rounded (fin) gravel	SP	
4						
5				Brown to Orange (mf) Sand		PID = 1.8 PPM Dry loose non-plastic Fill
6	S-2		4/3.5			
7					SW	
8						
9						PID = 2.1 PPM Dry loose non-plastic
10	S-3		4/4			
11				White to Tan (f) Sand		Native @ 10'6"
12					SW	

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 2 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-2	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/17/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
13						PID = 0.0 PPM
14	S-4		4/3.5			Dry loose non-Plastic
15				14'6" White to Brown (mf) Sand, some (cmf) sub-rounded gravel	SP	
16				15'9" Brown (mf) Sand 16'	SP	
17	S-5		4/4	Gray (c) Sand, And (cmf) Gravel 16'3" Brown (cmf) Sand, some (cmf) Sub-rounded gravel 17'6"	GP SP	PID = 1.5 PPM Dry loose non-plastic
18				Brown to Orange (mf) Sand 18'	SP	
19				Brown (cmf) Sand, Some (mf) rounded gravel ▽ 19'	SP	Wet @ 19'
20				Brown (m) Sandy (cmf) Gravel		
21					GP	PID = 1.7 PPM Saturated loose non-Plastic
22	S-6		4/3	22' Brown (f) Sand		
23					SW	Moderately Compact
24						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 3 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-2	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/17/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
25				Brown to Orange (f) Sand		PID = 2.4 PPM Saturated moderately Compact non-Plastic
26	S-7		4/3		SW	
27				Orange to Red (f) Sand 26'9" 27'	SW	
				Gray (f) Sand 27'6"	SW	
28				Brown sandy (mf) Gravel 28'	GW	
29				Brown to Orange (f) Sand		PID = 2.1 PPM Wet moderately compact non-Plastic
30	S-8		4/4		SW	
31				Brown Sandy clay 30'		Plastic
32					ML	
33				Brown (f) Sand 32'		PID = 4.1 PPM Wet moderately compact non-Plastic
34	S-9		4/4		SW	
35				Brown clayey (f) Sand 34'		
36					SC	

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 4 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-2	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/17/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
37	S-10		4/4	36'3" Brown (mf) Sand	SP	PID = 7.4 PPM Saturated Moderately compact non-plastic
38				38'6" Orange to Red (mf) Sand 38'9"	SP	
39				Brown (mf) Sand, some (mf) sub-angular to rounded gravel	SP	
40				40' End of boring		
41						
42						
43						
44						
45						
46						
47						
48						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page _1_ of _4_			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-3	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/18/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
1				Asphalt 10"		PID = 1.5 PPM Dry loose non-plastic Fill
				Brown (mf) Sand 1'6"	SW	
2	S-1		4/3.5	Brown to Orange (mf) Sand		
3					SW	
4				4'		
5				Orange to Brown (mf) Sand		PID = 1.2 PPM Dry loose non-plastic Fill
6	S-2		4/4			
7					SW	
8						
9						PID = 2.0 PPM Dry loose non-plastic
10	S-3		4/3			
11				11'		
				White to Tan (mf) Sand		Native Soil @ 11'
12					SP	

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 2 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-3	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/18/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
13	S-4		4/4	White to Tan (mf) Sand, Some (mf) rounded gravel	SP	PID = 2.6 PPM Dry loose non-plastic
14				13'8"		
15				Orange to Brown (mf) Sand, some (mf) rounded gravel	SP	
16				16'		
17	S-5		4/3	Orange to Brown (f) Sand	SW	PID = 4.0 PPM Dry loose non-Plastic
18						
19				▽ 19'		Wet @ 19'
20				Brown Sandy (cmf) Gravel	GP	PID = 0.9 PPM
21	S-6		4/3	20'6" White to Tan (f) Sand	SW	Saturated moderately compact non-plastic
22						
23						Compact
24						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page _3_ of _4_			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-3	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/18/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
25				24'9"		PID = 3.3 PPM
				Orange to Red (f) Sand 25'	SW	Wet
				White to Orange (f) Sand		Compact
26	S-7		4/4			Non-Plastic
					SW	
27						
28				27'9"		
				Brown Sandy (m-f) Gravel 28'	GW	
				White to Tan (c) Sand, And (m-f) rounded Gravel	GW	PID = 5.0 PPM
				White to Tan (f) Sand	SW	Wet
29				29'9		Compact
				Red (f) Sand 29'	SW	Non-Plastic
	S-8		4/4	White to Tan (f) Sand		
30					SW	
				30'4"		
				Brown Clayey Silt		
31					ML	Plastic
				32'		
32						
				Brown (f) Sand, Some Silt		PID = 4.3 PPM
33						Wet
			4/4			Non-Plastic
	S-9					Compact
34					SM	
35				35'6"		
				Brown Clayey Silt 35'9"	ML	
36				Brown (f) Sand, Some Silt	SW	

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 4 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-3	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/18/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
37			4/1	Brown (f) Sand		PID = 5.3 PPM wet Compact non-Plastic
38	S-10				SW	
39						
40						
				End of boring		
41						
42						
43						
44						
45						
46						
47						
48						

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Project: GEM	Client: O'Brien & Gere	Page 1 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-4	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/19/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
1				Asphalt 10"		PID = 1.2 PPM
				Brown (m) Sand		Dry
2	S-1		4/2			loose
					SW	non-plastic
3						Fill
				3'6"		
4				Brown (vmf) Sand, Some (mf) Sub-angular to rounded gravel 4'	SP	
5				Brown to Orange (mf) Sand	SP	PID = 2.0 PPM Dry loose non-plastic
6	S-2		4/3	6' White to Brown (mf) Sand		Native Soil @ 6'
7					SP	
8				8'		
9				Brown (mf) Sand 9'	SP	PID = 2.8 PPM Dry loose non-plastic
				Brown to Red (mf) Sand 9'3"	SP	
10	S-3		4/4	Brown (mf) Sand		
11					SP	
				11'6		
12				White to Tan (mf) Sand	SP	

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 2 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-4	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/19/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
13	S-4		4/3	White to Brown (cmf) Sand, Some (cmf) rounded gravel	GP	PID = 2.1 PPM Dry loose
14						
15				Orange to Brown (mf) Sand, Some (cmf) rounded gravel	GP	
16						
17	S-5		4/2	Brown to Orange (cmf) Sand, Some (mf) rounded gravel 16'		PID = 2.2 PPM Moist loose Non-plastic
18					GP	Moist @ 18'
19				▽		wet @ 19'
20						
21	S-6		4/2.5	White to Tan (f) Sand	SW	PID = 1.8 PPM Saturated
				White to Tan (f) Sand, Some (cmf) gravel	SP	moderately, compact Non-plastic
22				White to Tan (f) Sand		
23					SW	
24						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 3 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-4	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/19/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
				Brown (mf) sub-rounded to rounded Gravel	GW	PID = 3.7 PPM
25				White to Tan (f) Sand, trace (cmf) rounded gravel		Wet Compact non-Plastic
26	S-7		4/3		SP	
27						
28				Rust to Brown Silty (cmf) Gravel	GM	
29						* Shoe lost no recovery
30	S-8		4/0			
31						
32				32'		
33				Brown (f) Sand		PID = 3.1 PPM wet moderately compact non-Plastic
34	S-9		4/4		SW	
35				35'6"		
36				Brown clayey (f) Sand	SC	Plastic

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 4 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-4	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/19/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
37	S-10		4/4	37' Brown (cmf) Sand, And Silt 37'6"	SM	PID= 0.9 Saturated Moderately Compact Non-Plastic
38				Brown (cmf) Sand		Wet loose non-plastic
39					SP	
40						
41				End of boring		
42						
43						
44						
45						
46						
47						
48						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 1 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-5	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/19/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
1	S-1		4/3	Asphalt 10"		PID = 14.9 PPM Dry loose non-plastic Fill
2				Brown (mf) Sand 2'	SW	
3				Brown (mf) Sand, Some (cmf) sub-angular to sub-rounded gravel		
4						
5	S-2		4/2		SP	PID = 34.3 PPM Dry loose non-plastic Fill
6						
7						
8				8'		
9	S-3		4/4	Brown (cmf) Sand	SP	PID = 31.9 PPM Dry loose non-plastic
10						
11				11'6"		Native Soil @ 11'6"
12				White to Brown (mf) Sand	SP	

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 2 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-5	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/19/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
13	S-4		4/2.5	White to Tan (mf) Sand	SP	PID = 31.8 PPM Dry loose non-plastic
15				White, to Tan, (cmf) Sand, Some (mf) sub-rounded gravel	SP	
17	S-5		4/3	Brown to Orange (cmf) Sand, Some (cmf) sub-rounded gravel	GP	PID = 34.4 PPM moist loose non-plastic
18				White to Tan (cmf) Sand, Some (cm) gravel	GP	
19				White to Tan (f) Sand ▽		wet @ 18'6" Compact
21	S-6		4/4		SW	PID = 31.1 PPM Saturated Compact non-plastic
23						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 3 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-5	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/19/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
25						PID = 18.8 PPM Wet Compact non-plastic
26	S-7		4/.2			
27				27'		
28				Orange to Brown (f) Sand, some (cmf) rounded gravel 28'	SP	
29				White to Gray (f) Sand		PID = 34.8 PPM Wet Compact non-plastic
30	S-8		4/3	30'	SW	
31				Brown (f) Sand		
32				31'6" Brown sandy clay 32'	SW SC	Plastic
33				Brown silty clay		PID = 10.0 PPM Wet Compact Plastic
34	S-9		4/4	34'	CL	
35				Brown (f) Sand, trace (cmf) rounded gravel	SP	Saturated Compact non-plastic
36						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 4 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-5	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Lauren	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/19/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
				36'6"		PID = 7.5 PPM
37				Gray clayey sand	SC	wet moderately compact Plastic
38	S-10		4/4	Gray (f) Sand	SW	
39				Brown (cmf) Sand, trace rounded gravel	SP	
40						
				End of boring		
41						
42						
43						
44						
45						
46						
47						
48						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 1 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-6	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/30/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
1	S-1		4/2	Asphalt 10"		PID = 1.5 PPM
				Brown (cm) Sand 1'6"	SW	Dry loose non-plastic Fill
2				Brown to Orange (cmf) Sand		
3					SP	
4						
5	S-2		4/3	5'		PID = 3.7 PPM Dry loose non-plastic
				Brown to Red (cm) Sand		
6					SP	
7				7'		
				Brown to Orange (cm) Sand		
8					SW	PID = 2.9 PPM Dry loose non-plastic Native Soil @ 10'
9	S-3		4/3			
10				10'		
				White to Brown (mf) Sand		
11					SP	
				11'6"		
12				White to Tan (f) Sand	SW	

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Project: GEM	Client: O'Brien & Gere	Page 2 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-6	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/30/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
				12'5"		PID = 2.3 PPM
13				Brown (mf) Sand		Dry non-plastic loose
14	S-4		4/3.5		SP	
15				14'10" Gray (cmf) Sand 15'	SP	moist
				Brown (cm) Sand, Some (cmf) rounded gravel		
16					SP	Dry PID = 6.6 PPM
17				17'		loose non-plastic
				White to Tan (f) Sand		
18	S-5		4/2	— — — — — ▽		wet @ 18'
19					SW	
20						
21						PID = 2.7 PPM Saturated moderately compact non-plastic
22	S-6		4/3			
23						
24						

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Project: GEM	Client: O'Brien & Gere	Page 3 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-6	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/30/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
25						PID = 5.0 PPM wet moderately compact non-plastic
26	S-7		4/3			
27						
28				27'6" Brown (f) Sand 27'8" Brown (f) Sand, some (cmf) rounded Gravel 28'	SW SP	
29	S-8		4/3	White to Orange (mf) Sand 28'3" Brown (f) Sand	SP SW	PID = 2.5 PPM loose wet non-plastic
30						
31				31'3" Brown (f) Sandy clay		
32					SC	moderately compact Plastic
33	S-9		4/4	32'6" Brown (f) Sand with interbedded clay lenses		PID = 4.5 PPM wet moderately compact non-plastic
34					SC	
35				35'6"		
36				Gray (f) Sandy clay	SW	Plastic

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Fax # (845) 268-5313

Boring Log

Project: GEM	Client: O'Brien & Gere	Page 4 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-6	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 1/30/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
37						PID = 6.1 PPM
						Wet
						moderately compact
						Plastic
38	S-10		4/4	Brown to Rust (mf) Sand 37'10" 38'	SP	
				Brown (cmf) Sand		
39					SP	Compact
						non-plastic
40						
				End of boring		
41						
42						
43						
44						
45						
46						
47						
48						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 1 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-7	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 3/2/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
1				Concrete 10"		PID = 4.5 ppm
2	S-1		4/2	Brown (M) Sand		Dry loose non-plastic Fill
3						
4						
5					SW	PID = 0.0 ppm
6	S-2		4/3			Dry loose non-plastic Fill
7						
8				7'9"		
9				Brown (cm) Sand, some (cm) Sub-rounded gravel		PID = 2.6 ppm
10	S-3		4/3		SP	Dry loose non-plastic Native Soil @ 8'
11						
12						

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Boring Log

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Project: GEM	Client: O'Brien & Gere	Page 2 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-7	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 3/2/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
13				▽ 12'6" Brown (cm) Sandy Gravel	SP	PID = 0.0 PPM Wet @ 12'6 loose non-plastic
14	S-4		4/3	13'6" Tan (f) Sand		compact non-plastic
15						
16						
17	S-5		4/1		SW	PID = 2.7 PPM wet compact non-plastic
18						
19						
20						
21	S-6		4/2.5	21' Brown Sandy Gravel (m-f) 21'3"	GP	PID = 1.2 PPM wet compact non-plastic
22				Tan (f) Sand 22'6"	SW	
23				Brown silty (f) Sand	ML	low-plastic
24						

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Project: GEM	Client: O'Brien & Gere	Page 3 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-7	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 3/2/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
				24'6"		PID = 1.4 PPM
25				Tan to Brown (f) Sand		Wet moderately compact low-plastic
26	S-7		4/2		SW	non-plastic
27				27'		
				Tan to Orange (f) Sand		
28						non-plastic
					SW	PID = 2.2 PPM
29						moist compact Plastic
			4/3			
30	S-8			Brown silty clay	CL	tight clay
				Gray (f) silty clay	CL	
31				Gray (f) Sand		
					SW	moist compact non-Plastic
32						
				Gray clayey (f) Sand		PID = 5.4 PPM
33					SC	Wet compact Plastic
				Gray (f) Sand		
34	S-9		4/3		SW	non-plastic
35						
				Tan and Red (f) Sand		
36					SW	compact non-plastic

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 4 of 4			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-7	Total Depth: 40'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 3/2/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
37				Brown (mf) Sand, some (cm) Sub-rounded gravel		PID = 6.1 PPM Wet loose non-plastic
38	S-10		4/3		SP	
39						
40						
41				End of boring		
42						
43						
44						
45						
46						
47						
48						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 1 of 3			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-8	Total Depth: 36'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 3/3/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
1				Concrete 10"		PID = 0.9 PPM Dry loose non-plastic Fill
2	S-1		4/2.5	Brown (M) Sand		
3						
4					SW	
5						PID = 0.6 PPM Dry loose non-plastic Fill
6	S-2		4/2			
7						
8						
9				Brown (cmf) Sand	SP	PID = 0.9 PPM Dry loose non-plastic Native Soil @ 8'
10	S-3		4/3.5	Brown (cmf) Sand, some rounded (cm) gravel	SP	
11				Brown (cmf) Sand	SP	
12						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page 2 of 3			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-8	Total Depth: 36'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 3/3/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
13						PID = 0.4 PPM Wet @ 13' loose non-plastic
14	S-4		4/4	13' ▽ Tan to White Sandy (Lmf) rounded Gravel	SP	
15						
16				15'6" White to Tan (f) Sand		compact PID = 0.9 PPM wet compact non-plastic
17						
18	S-5		4/3		SW	
19						
20						
21						PID = 2.0 PPM wet compact non-plastic
22	S-6		4/3.5	22' Orange (f) Sand 22'3"	SW	
23				White to Tan (f) Sand	SW	
24						

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Boring Log

Project: GEM	Client: O'Brien & Gere	Page _3_ of _3_			Sketch:
Location: Rockville Centre, NY	Job Number:				
Boring: SB-8	Total Depth: 36'				
Drilling Co. EPI		Sample	Core	Casing	
Driller: Tony Pressimone	Type	4'			
Drilling Method: Direct Push	DIA.	2"			
Date: 3/3/2006	Weight				
Inspector: Dan Simpson	Fall				

Depth (ft)	Sample	Blow Count	Penetration/ Recovery	Geologic Descripton	Class USCS	Remarks
25						PID = 1.7 PPM
						wet
						loose
						non-plastic
26	S-7		4/2		SW	
27						
				27'6"		
28				Brown Sandy silt		PID = 0.7 PPM
						moist
						compact
29					ML	low-plastic
30	S-8		4/4			
				30'6"		
31				Gray Sandy Silt	ML	
				31'		
				Brown to Orange (f) Sand		
32					SW	
				32'		
				Gray (f) Sand	SW	PID = 0.0 PPM
33				Gray Sandy Silt		wet
						moderately compact
						low-plastic
34	S-9		4/4		ML	
35						
				35'6"		
36				Gray (f) Sand 35'9"	SW	non-plastic
				Brown (cmf) Sand	SP	

End of boring

PHASE II SUBSURFACE INVESTIGATION

84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NEW YORK 11570

GCI Project No. 2017199

Prepared For:

Law Office of Roy A. List
109 Newbridge Road
Hicksville, New York 11801

Field Subsurface Investigation Dates: February 6 and 7, 2018

Report Date: February 28, 2018

Prepared by:

General Consolidated Industries, Inc. (GCI)
Environmental and Engineering Consultants
1092 Motor Parkway
Hauppauge, New York 11788-5228

EXECUTIVE SUMMARY

A Phase I Environmental Site Assessment (ESA) report, dated February 22, 2018, was prepared for the subject site by GCI. The Phase II Subsurface Investigation was conducted in order to address the Recognized Environmental Conditions (RECs) as noted in the Phase I ESA. The RECs addressed by the Phase II investigation activities are summarized as follows:

- Confirmation of the municipal sewer connection to the on-site drainage structures.
- Possible impact to the one (1) on-site leaching drywell.
- Possible impact to the subsurface soils from historical site operations.
- Possible impact to the groundwater from the historical site operations.

Dye Testing / Line Tracing

It was confirmed that the interior discharge points of the subject building are currently discharging to municipal sewer system located in North Village Avenue. These discharge points include the bathrooms of the buildings and the wastewater sink located in the basement of the former dry cleaner space.

There is one (1) leaching drywell located in the rear / west parking lot. The drywell is a leaching structure, but has a 6" diameter overflow pipe which leads to the western property line and discharges to the adjacent rail road parking lot.

There is one (1) floor drain located in the base of the rear stairs on the west side of the subject building. The floor drain is a leaching structure. The drain also has a pipe running under the saddle of the door to a buried five (5) gallon bucket which was acting as an interior floor drain.

There is a boiler pit located in the basement of 84 North Village Avenue, the former Gem Cleaners space. The exact use was not known, but it appears to be associated with a former boiler based on the proximity to the former feed and return lines for the fuel oil UST. The boiler pit was inspected and found to be non-leaching, but not water tight. The pit was constructed of concrete blocks and concrete.

There is a sump pit located in the basement of 84 North Village Avenue, the former Gem Cleaners space. The exact use was not known, but it appears to be a sump for former boiler or former mechanical equipment. The sump pit was inspected and found to be non-leaching, but not water tight. The pit was constructed of concrete block and concrete.

Drywell System Sampling

There is one (1) storm water leaching drywell located at the rear / west parking area. The drywell was accessed, inspected and sampled. The drywell was noted to be either partially filled in and/or have a large build up of sediment. A representative of the soil within drywell DW-1 was obtained at the bottom invert level. Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from drywell DW-1 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) "Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results for the sample obtained from drywell DW-1 indicated that there were no elevated VOCs, SVOCs or metals detected above the NYS DEC Commercial SCOs. There were two (2) metals, one (1) VOC, and two (2) SVOCs detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, drywell DW-1 has been slightly impacted and will require remediation. In addition, the overflow pipe within the drywell appears to be an illegal discharge to a neighboring parcel and should be removed.

Stairwell Floor Drain System Sampling

There is one (1) floor drain located in the base of the rear stairs on the west side of the subject building. The drain was accessed, inspected and sampled. A representative of the soil within floor drain FD-1 was obtained. Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from floor drain FD-1 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) "Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results for the sample obtained from floor drain FD-1 indicated that there were no elevated VOCs or metals detected above the NYS DEC Commercial SCOs. There was one (1) SVOC detected above the NYS DEC Commercial SCOs. There were four (4) metals, one (1) VOC, and five (5) SVOCs detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the stairwell floor drain FD-1 has been impacted and will require remediation. In addition, the pipe within the drain leading to the interior buried five (5) gallon bucket appears to be an illegal discharge and should be removed.

Basement Boiler Pit System Sampling

There is one (1) boiler pit located in the basement of the subject building. A soil boring was installed through the concrete floor of the pit. The boiler pit was accessed, inspected and sampled. A representative of the soil from below the boiler pit was obtained. Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from boiler pit would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) "Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results for the sample obtained from the boiler pit indicated that there were no elevated VOCs, SVOCs, or metals detected above the NYS DEC Commercial SCOs. There was one (1) metal detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the boiler pit has been slightly impacted and will require limited remediation of the shallow subsurface soils directly below the pit area.

Basement Sump Pit System Sampling

There is one (1) sump pit located in the basement of the subject building. A soil boring was installed through the concrete floor of the pit. The sump pit was accessed, inspected and sampled. A representative of the soil from below the sump pit was obtained. Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from boiler pit would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) "Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results for the sample obtained from the sump pit indicated that there were no elevated VOCs or SVOCs detected above the NYS DEC Commercial SCOs. There was one (1) metal detected above the NYS DEC Commercial SCOs. There were six (6) metals detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the sump pit has been impacted and will require remediation of the shallow subsurface soils directly below the pit area.

Groundwater Sampling

There are two (2) groundwater monitoring wells located on the south and west side of the subject site. The wells were accessed and sampled. Groundwater was encountered at 18 feet below grade. Based upon the field data collected, as well as the visual inspection of the samples, it was determined that the groundwater sample from the down-gradient well to the south MW-2 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260. The results of the analysis were compared to the standards listed in the New York State Department of Environmental Conservation (NYS DEC) "Water Quality Regulations - Surface Water and Groundwater Classifications and Standards NYCRR Title 6, Chapter X, Parts 700-706."

The analytical results for the groundwater sample obtained from the monitoring well MW-2 indicated that there were no elevated VOCs detected above the NYS DEC standards. Based upon the analytical data, the groundwater has not been impacted.

The work conducted satisfies Recognized Environmental Condition (REC) No. 1 of the Phase I Environmental Site Assessment (ESA) report, February 22, 2018.

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REPORT SPECIFICATIONS

Copies and circulation of this report are as follows:

Two (2)	Original bound reports and one (1) electronic copy of the report via electronic mail to Mr. Roy A. List, Esq. and Mr. Gary Goldtsein.
One (1)	Bound original report in the confidential client file at General Consolidated Industries, Inc. (GCI).
One (1)	Copy on security protected computer disk at General Consolidated Industries, Inc. (GCI).

This report is prepared for the exclusive use of parties noted above and is considered private and strictly confidential. General Consolidated Industries, Inc. (GCI) shall not release this report or any of the findings of this report to any person or agency except with the authorization of the principal parties noted above.

1.0 INTRODUCTION

General Consolidated Industries, Inc. (GCI) has been retained to prepare a Phase II Subsurface Investigation for the subject site located at 84 North Village Avenue, Rockville Centre, Incorporated Village of Rockville Centre, Nassau County, Long Island, New York, identified on the tax map as Section 38, Block 153, Lot 49.

The subject property is depicted on Figure 1.0 - Subject Site Location Map.

This investigation is predicated upon the findings of the Phase I Environmental Site Assessment (ESA) report, dated February 22, 20198, prepared for the subject site by GCI.

1.1 Objectives / Methodology

The objectives of this investigation as well as the methods employed during the field activities are summarized as follows:

1. To perform a series of dye tests on the interior drainage points. An approved biodegradable fluorescent dye was mixed with water and introduced in to the interior drainage points. The on-site sanitary system and subsurface drainage structures, were subsequently inspected for the presence of the dye.

2. To collect representative soil samples from the active on-site drywell system, as well as the other UICs, in order to characterize the subsurface soil. The soil samples were visually inspected for the presence of contamination, as well as being field screened with the photo-ionization detector (PID). All field data was recorded. A representative soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) “Division of Environmental Remediation 6 NYCRR Part 375".

3. To collect representative groundwater samples in order to assess the groundwater at the subject site. The depth to groundwater at the subject site is estimated to be approximately eighteen (18) feet below grade. One (1) groundwater sample from MW-2 was submitted to the laboratory for analysis of Part 375 VOCs utilizing EPA Method 8260. The results of the analysis were compared to the standards listed in the New York State Department of Environmental Conservation (NYS DEC) “Water Quality Regulations - Surface Water and Groundwater Classifications and Standards NYCRR Title 6, Chapter X, Parts 700-706."

The locations of the above noted concerns are depicted on Figure 6.0 - Site Diagram.

The scope of work was designed in accordance with all applicable regulatory and industry standards regarding subsurface investigations. The scope of work performed at the site will provide the necessary information to determine whether or not there has been an impact to the subject property as a result of the operations conducted at the site.

Conclusions and recommendations are submitted based on the careful consideration of the results of the above work. Recommendations are formulated with respect for maintaining the collateral value of the property. This report is intended to assess the threat to human health or collateral value of the property.

The accuracy of presenting the findings of this investigation was considered of paramount importance during the formulation of this report. The report's accuracy is limited to the information available from interviews, records, files and plans released by the property owner and/or his representatives and/or the respective regulatory agencies, their attorneys and information officers. The above mentioned parties interest in issues presented herein is unknown to GCI.

GCI expressly reserves its common law copyright and other property rights in this report. This report is not to be reproduced, changed or copied in any form or manner whatsoever, nor is it to be assigned to any third party without first obtaining the express written permission and consent of GCI.

Tom P. Smyth
President
General Consolidated Industries, Inc.

2.0 SITE CHARACTERIZATION

2.1 Site Description

The subject site is a single lot parcel, which is presently improved by a two (2) story commercial and residential building, with a detached garage and a basement. The first floor consists of a vacant space to the north, which was previously occupied by "Gem Cleaners". The first floor also consists of a nail salon space to the south. The second floor consists of a three (3) bedroom residential apartment, with a kitchen and a bathroom. The basement spaces are unfinished and utilized for storage.

The first floor tenant space to the north was previously occupied by "Gem Cleaners"; specifically as a dry cleaning operation. The operation used and stored dry cleaning chemicals on site.

The Nassau County Tax Assessor reported that the building was constructed in 1951. The site measures 0.2617 acres. The building measures 9,024 square feet.

2.2 Site Hydrology and Geology

Surface Water Characteristics

A majority of the site is covered by the subject building and paved driveways/parking areas. The surface topography at the site is nearly level throughout. Storm water runoff is directed to the on-site drywells. The up-gradient drainage area within 1,000 feet of the subject site is improved with residential houses.

Groundwater Characteristics

The subject site is in the Upper Glacial aquifer. The Upper Glacial consists of Pleistocene moraine and outwash deposits. The water table is located primarily in the glacial aquifer which underlies a majority of Long Island. In general, the upper glacial is thickest near the north shore and eastern Nassau County. Hydraulic conductivity is greatest along the southern part of the island, where the outwash deposits consist mainly of well draining coarse sand and gravel.

Fresh groundwater originates in the form of precipitation, which on Long Island, averages approximately 44 inches per year. This precipitation will infiltrate into the subsurface and act as the sole recharge mechanism for replenishing water in the upper glacial aquifer system. Under the present conditions of infiltration, groundwater is recharging at a rate of approximately 350 billion gallons of water per year. The Upper Glacial has been designated a sole source aquifer by the US EPA, and as such is protected by US EPA mandated remediation legislation.

According to groundwater contour maps provided by the Nassau County Department of Public Works (NCDPW) and the United States Geological Survey (USGS), groundwater is located at approximately eighteen (18) feet below ground surface at the subject site. Groundwater generally flows south in the area of the subject site.

Groundwater beneath the site is classified as GA, as per the New York State Department of Environmental Conservation (NYS DEC) "Water Quality Regulations - Surface Water and Groundwater Classifications and Standards". This classification is assigned to all of the groundwater of New York State. The best usage of class GA groundwater is as a source of potable water supply. Class GA groundwater are fresh groundwater.

Geological Characteristics

According to a soil survey of Nassau County, Long Island, New York, the subject site is located in the Atlantic Coastal Plain physiographic province which is characterized by low hills of unconsolidated sands, gravel and silt. According to Franke (1972), regionally, the subsurface deposits consist of the Upper Glacial deposits that are characterized by southward sloping deposits of sand, gravel and silt. The Upper Glacial deposits have a maximum thickness of 600 feet. They are underlain by the Magothy, Raritan and Lloyd Formations. The Gardiners clay and the Jameco gravel separate the Upper Glacial deposits and the Magothy Formation along the south west portion of Long Island.

3.0 SUBSURFACE INVESTIGATION

The Phase II Subsurface Investigation activities were conducted at the subject site on February 6 and 7, 2018. The following sections summarize the work conducted, the field observations and data collected, as well as any other pertinent site information which may have been obtained during the performance of the investigative activities.

3.1 Dye Testing / Line Tracing

There are typical sinks located within the bathrooms of the building. There is a waste water sink located in the basment. There is a floor drain at the rear stairwell. The interior discharge points within the subject building were dye tested utilizing an approved biodegradable dye in order to determine the respective discharge locations. The dye tablets were mixed with water and introduced to the interior discharge points. The municipal sewer system was subsequently inspected for the presence of the tracer dye.

It was confirmed that the interior discharge points of the subject building are currently discharging to municipal sewer system located in North Village Avenue. These discharge points include the bathrooms of the buildings and the wastewater sink located in the basement of the former dry cleaner space.

There is one (1) leaching drywell located in the rear / west parking lot. The drywell is a leaching structure, but has a 6" diameter overflow pipe which leads to the western property line and discharges to the adjacent rail road parking lot.

There is one (1) floor drain located in the base of the rear stairs on the west side of the subject building. The floor drain is a leaching structure. The drain also has a pipe running under the saddle of the door to a buried five (5) gallon bucket which was acting as an interior floor drain.

There is a boiler pit located in the basement of 84 North Village Avenue, the former Gem Cleaners space. The exact use was not known, but it appears to be associated with a former boiler based on the proximity to the former feed and return lines for the fuel oil UST. The boiler pit was inspected and found to be non-leaching, but not water tight. The pit was constructed of concrete blocks and concrete.

There is a sump pit located in the basement of 84 North Village Avenue, the former Gem Cleaners space. The exact use was not known, but it appears to be a sump for former boiler or former mechanical equipment. The sump pit was inspected and found to be non-leaching, but not water tight. The pit was constructed of concrete block and concrete.

The location of the relevant site features are depicted on Figure 6.0 - Site Diagram.

3.2 Drywell System Characterization

There is one (1) storm water leaching drywell located at the rear / west parking area. The drywell was accessed, inspected and sampled. The drywell was noted to be either partially filled in and/or have a large build up of sediment.

The manhole cover for the drywell located at grade was removed so as to allow for an interior inspection of the structure. A decontaminated stainless steel hand auger was utilized to retrieve representative soil samples from the bottom invert level of the drywell. A representative of the soil within drywell DW-1 was obtained at the bottom invert level.

Please note that there may be buried overflow drywells associated with the primary drywells at the subject site. Piping was visible within the drywell which may connect to a buried drywell. The information contained in this report is based on the building systems which were readily visible during the site inspection, as well as information obtained from interviews and records researched. A thorough inspection of the interior of the drywells would need to be conducted via confined space entry in order to confirm the presence of additional associated overflow leaching pools and/or additional piping.

The samples were visually inspected for evidence of possible contamination, such as staining, sheen, product, etc. In addition, the collected samples were field screened with a Perkin-Elmer Model 2020 PID for the presence of VOCs. A representative portion of the collected sample is stored in an air-tight medium and agitated for a period of sixty (60) seconds in order to allow for volatilization of any organic vapors which may be present in the samples. A positive air flow sampling probe is then inserted into the medium and the PID readings are recorded. The results are reported in parts per million (ppm).

Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from drywell DW-1 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) “Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results are summarized in Section 4.1. The location of the relevant site features are depicted on Figure 6.0 - Site Diagram.

TABLE 1 Drywell System Field Data					
Sample Location	**Depth to Bottom Sediment**	**Liquid Volume Depth**	**Construction**	**Sample Lithology**	**PID Reading**
DW-1	3' 0"	N/A (dry)	- Slotted cover. - Flat concrete slab under the cover. - Five (5) foot diameter. - Leaching side rings. - Natural earth bottom.	Brown and black coarse sand andsediment. No odor or staining noted.	0.0 ppm

3.3 UIC Assessment

Stairwell Floor Drain

There is one (1) floor drain located in the base of the rear stairs on the west side of the subject building. The floor drain is a leaching structure. The drain also has a pipe running under the saddle of the door to a buried five (5) gallon bucket which was acting as an interior floor drain.

The drain was accessed, inspected and sampled. A representative of the soil within floor drain FD-1 was obtained.

The samples were visually inspected for evidence of possible contamination, such as staining, sheen, product, etc. In addition, the collected samples were field screened with a Perkin-Elmer Model 2020 PID for the presence of VOCs. A representative portion of the collected sample is stored in an air-tight medium and agitated for a period of sixty (60) seconds in order to allow for volatilization of any organic vapors which may be present in the samples. A positive air flow sampling probe is then inserted into the medium and the PID readings are recorded. The results are reported in parts per million (ppm).

Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from floor drain FD-1 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) “Division of Environmental Remediation 6 NYCRR Part 375".

Basement Boiler Pit

There is a boiler pit located in the basement of 84 North Village Avenue, the former Gem Cleaners space. The exact use was not known, but it appears to be associated with a former boiler based on the proximity to the former feed and return lines for the fuel oil UST. The boiler pit was inspected and found to be non-leaching, but not water tight. The pit was constructed of concrete blocks and concrete.

A soil boring was installed through the concrete floor of the pit. The boiler pit was accessed, inspected and sampled. A representative of the soil from below the boiler pit was obtained.

The samples were visually inspected for evidence of possible contamination, such as staining, sheen, product, etc. In addition, the collected samples were field screened with a Perkin-Elmer Model 2020 PID for the presence of VOCs. A representative portion of the collected sample is stored in an air-tight medium and agitated for a period of sixty (60) seconds in order to allow for volatilization of any organic vapors which may be present in the samples. A positive air flow sampling probe is then inserted into the medium and the PID readings are recorded. The results are reported in parts per million (ppm).

Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from boiler pit would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) "Division of Environmental Remediation 6 NYCRR Part 375".

Basement Sump Pit

There is a sump pit located in the basement of 84 North Village Avenue, the former Gem Cleaners space. The exact use was not known, but it appears to be a sump for former boiler or former mechanical equipment. The sump pit was inspected and found to be non-leaching, but not water tight. The pit was constructed of concrete block and concrete.

A soil boring was installed through the concrete floor of the pit. The sump pit was accessed, inspected and sampled.

The samples were visually inspected for evidence of possible contamination, such as staining, sheen, product, etc. In addition, the collected samples were field screened with a Perkin-Elmer Model 2020 PID for the presence of VOCs. A representative portion of the collected sample is stored in an air-tight medium and agitated for a period of sixty (60) seconds in order to allow for volatilization of any organic vapors which may be present in the samples. A positive air flow sampling probe is then inserted into the medium and the PID readings are recorded. The results are reported in parts per million (ppm).

Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from boiler pit would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) "Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results are summarized in Section 4.2. The location of the relevant site features are depicted on Figure 6.0 - Site Diagram.

3.4 Groundwater Assessment

There are two (2) groundwater monitoring wells located on the south and west side of the subject site. The wells were accessed and sampled. Groundwater was encountered at 18 feet below grade.

The groundwater samples were obtained via a disposable sampler. The collected groundwater samples were field screened for any evidence of contamination such as odors and/or sheening. The samples were also be physically inspected for any evidence of contamination such as odors or staining. All field screening results and boring logs were recorded.

Based upon the field data collected, as well as the visual inspection of the samples, it was determined that the groundwater sample from the down-gradient well to the south MW-2 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260. The results of the analysis were compared to the standards listed in the New York State Department of Environmental Conservation (NYS DEC) "Water Quality Regulations - Surface Water and Groundwater Classifications and Standards NYCRR Title 6, Chapter X, Parts 700-706."

The analytical results are summarized in Section 4.3. The location of the relevant site features are depicted on Figure 6.0 - Site Diagram.

3.5 Quality Assurance and Control

To avoid contamination and cross-contamination of soil samples, all sampling equipment was cleaned before each sample was collected. The following procedures were followed in decontaminating the sampling equipment:

- Scrub all parts with a bristle brush using Alconox detergent and water.
- Rinse with water.
- Let all equipment air dry.
- Rinse with water and let air dry.

A chain-of-custody record is kept for the samples at all times. This record documents the location, sampler, time and date of each sample.

4.0 ANALYTICAL RESULTS

All samples were immediately stored on ice and delivered to a National Environmental Laboratory Approval Program (NELAP) certified laboratory for analysis. The laboratory chosen for this investigation was Long Island Analytical Laboratories Inc., which is located in Holbrook, Long Island, New York. The NELAP certification number for the laboratory is NY01273.

4.1 Drywell System Analytical Data

The analytical results for the soil samples obtained were compared to the NYS DEC Restricted Use Soil Cleanup Objectives (SCO) - Protection of Groundwater listed in the NYS DEC "Division of Environmental Remediation 6 NYCRR Part 375".

DW-2

The analytical results for the sample obtained from drywell DW-1 indicated that there were no elevated VOCs, SVOCs or metals detected above the NYS DEC Commercial SCOs. There were two (2) metals, one (1) VOC, and two (2) SVOCs detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, drywell DW-1 has been slightly impacted and will require remediation. In addition, the overflow pipe within the drywell appear to be an illegal discharge to a neighboring parcel and should be removed.

Complete laboratory analytical reports and chain of custody forms are included with this report as Appendix A - Laboratory Analytical Results.

4.2 UIC Analytical Data

The analytical results for the soil samples obtained were compared to the NYS DEC Restricted Use Soil Cleanup Objectives (SCO) - Protection of Groundwater listed in the NYS DEC "Division of Environmental Remediation 6 NYCRR Part 375".

Stairwell Floor Drain

The analytical results for the sample obtained from floor drain FD-1 indicated that there were no elevated VOCs or metals detected above the NYS DEC Commercial SCOs. There was one (1) SVOC detected above the NYS DEC Commercial SCOs. There were four (4) metals, one (1) VOC, and five (5) SVOCs detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the stairwell floor drain FD-1 has been impacted and will require remediation. In addition, the pipe within the drain leading to the interior buried five (5) gallon bucket appears to be an illegal discharge and should be removed.

Basement Boiler Pit

The analytical results for the sample obtained from the boiler pit indicated that there were no elevated VOCs, SVOCs, or metals detected above the NYS DEC Commercial SCOs. There was one (1) metal detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the boiler pit has been slightly impacted and will require limited remediation of the shallow subsurface soils directly below the pit area.

Basement Sump Pit

The analytical results for the sample obtained from the sump pit indicated that there were no elevated VOCs or SVOCs detected above the NYS DEC Commercial SCOs. There was one (1) metal detected above the NYS DEC Commercial SCOs. There were six (6) metals detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the sump pit has been impacted and will require remediation of the shallow subsurface soils directly below the pit area.

Complete laboratory analytical reports and chain of custody forms are included with this report as Appendix A - Laboratory Analytical Results.

4.3 Groundwater Analytical Data

The analytical results for the groundwater samples obtained were compared to the standards listed in the New York State Department of Environmental Conservation (NYS DEC) “Water Quality Regulations - Surface Water and Groundwater Classifications and Standards NYCRR Title 6, Chapter X, Parts 700-706."

MW-2

he analytical results for the groundwater sample obtained from the monitoring well MW-2 indicated that there were no elevated VOCs detected above the NYS DEC standards. Based upon the analytical data, the groundwater has not been impacted.

Complete laboratory analytical reports and chain of custody forms are included with this report as Appendix A - Laboratory Analytical Results.

5.0 CONCLUSIONS and RECOMMENDATIONS

5.1 Conclusions

Based on the completion of the expanded Phase II Subsurface Investigation of the subject site, GCI provides the following conclusions:

A Phase I Environmental Site Assessment (ESA) report, dated February 22, 2018, was prepared for the subject site by GCI. The Phase II Subsurface Investigation was conducted in order to address the Recognized Environmental Conditions (RECs) as noted in the Phase I ESA. The RECs addressed by the Phase II investigation activities are summarized as follows:

- Confirmation of the municipal sewer connection to the on-site drainage structures.
- Possible impact to the one (1) on-site leaching drywell.
- Possible impact to the subsurface soils from historical site operations.
- Possible impact to the groundwater from the historical site operations.

Dye Testing / Line Tracing

It was confirmed that the interior discharge points of the subject building are currently discharging to municipal sewer system located in North Village Avenue. These discharge points include the bathrooms of the buildings and the wastewater sink located in the basement of the former dry cleaner space.

There is one (1) leaching drywell located in the rear / west parking lot. The drywell is a leaching structure, but has a 6" diameter overflow pipe which leads to the western property line and discharges to the adjacent rail road parking lot.

There is one (1) floor drain located in the base of the rear stairs on the west side of the subject building. The floor drain is a leaching structure. The drain also has a pipe running under the saddle of the door to a buried five (5) gallon bucket which was acting as an interior floor drain.

There is a boiler pit located in the basement of 84 North Village Avenue, the former Gem Cleaners space. The exact use was not known, but it appears to be associated with a former boiler based on the proximity to the former feed and return lines for the fuel oil UST. The boiler pit was inspected and found to be non-leaching, but not water tight. The pit was constructed of concrete blocks and concrete.

There is a sump pit located in the basement of 84 North Village Avenue, the former Gem Cleaners space. The exact use was not known, but it appears to be a sump for former boiler or former mechanical equipment. The sump pit was inspected and found to be non-leaching, but not water tight. The pit was constructed of concrete block and concrete.

Drywell System Sampling

There is one (1) storm water leaching drywell located at the rear / west parking area. The drywell was accessed, inspected and sampled. The drywell was noted to be either partially filled in and/or have a large build up of sediment. A representative of the soil within drywell DW-1 was obtained at the bottom invert level. Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from drywell DW-1 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) “Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results for the sample obtained from drywell DW-1 indicated that there were no elevated VOCs, SVOCs or metals detected above the NYS DEC Commercial SCOs. There were two (2) metals, one (1) VOC, and two (2) SVOCs detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, drywell DW-1 has been slightly impacted and will require remediation. In addition, the overflow pipe within the drywell appear to be an illegal discharge to a neighboring parcel and should be removed.

Stairwell Floor Drain System Sampling

There is one (1) floor drain located in the base of the rear stairs on the west side of the subject building. The drain was accessed, inspected and sampled. A representative of the soil within floor drain FD-1 was obtained. Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from floor drain FD-1 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) “Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results for the sample obtained from floor drain FD-1 indicated that there were no elevated VOCs or metals detected above the NYS DEC Commercial SCOs. There was one (1) SVOC detected above the NYS DEC Commercial SCOs. There were four (4) metals, one (1) VOC, and five (5) SVOCs detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the stairwell floor drain FD-1 has been impacted and will require remediation. In addition, the pipe within the drain leading to the interior buried five (5) gallon bucket appears to be an illegal discharge and should be removed.

Basement Boiler Pit System Sampling

There is one (1) boiler pit located in the basement of the subject building. A soil boring was installed through the concrete floor of the pit. The boiler pit was accessed, inspected and sampled. A representative of the soil from below the boiler pit was obtained. Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from boiler pit would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270, and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) "Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results for the sample obtained from the boiler pit indicated that there were no elevated VOCs, SVOCs, or metals detected above the NYS DEC Commercial SCOs. There was one (1) metal detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the boiler pit has been slightly impacted and will require limited remediation of the shallow subsurface soils directly below the pit area.

Basement Sump Pit System Sampling

There is one (1) sump pit located in the basement of the subject building. A soil boring was installed through the concrete floor of the pit. The sump pit was accessed, inspected and sampled. A representative of the soil from below the sump pit was obtained. Based upon the field data collected, as well as the visual inspection of the sample, it was determined that the soil sample obtained from boiler pit would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260, Part 375 SVOCs via EPA 8270,

and for Part 375 metals via EPA Method 6010. The results of the analysis were reviewed and compared to the Soil Cleanup Objectives (SCOs) listed in the New York State Department of Environmental Conservation (NYS DEC) "Division of Environmental Remediation 6 NYCRR Part 375".

The analytical results for the sample obtained from the sump pit indicated that there were no elevated VOCs or SVOCs detected above the NYS DEC Commercial SCOs. There was one (1) metal detected above the NYS DEC Commercial SCOs. There were six (6) metals detected above the NYS DEC Unrestricted SCOs.

Based upon the analytical data, the sump pit has been impacted and will require remediation of the shallow subsurface soils directly below the pit area.

Groundwater Sampling

There are two (2) groundwater monitoring wells located on the south and west side of the subject site. The wells were accessed and sampled. Groundwater was encountered at 18 feet below grade. Based upon the field data collected, as well as the visual inspection of the samples, it was determined that the groundwater sample from the down-gradient well to the south MW-2 would be submitted to the laboratory for analysis. The soil sample was submitted to the laboratory for analysis of Part 375 VOCs via EPA Method 8260. The results of the analysis were compared to the standards listed in the New York State Department of Environmental Conservation (NYS DEC) "Water Quality Regulations - Surface Water and Groundwater Classifications and Standards NYCRR Title 6, Chapter X, Parts 700-706."

The analytical results for the groundwater sample obtained from the monitoring well MW-2 indicated that there were no elevated VOCs detected above the NYS DEC standards. Based upon the analytical data, the groundwater has not been impacted.

The work conducted satisfies Recognized Environmental Condition (REC) No. 1 of the Phase I Environmental Site Assessment (ESA) report, February 22, 2018.

5.2 Recommendations

Based on the above conclusions, the following actions are recommended:

1. **Drywell System and UIC Remediation**

   The analytical results for the samples obtained from the one (1) drywells DW-1, as well as the stairwell floor drain, the boiler pit, and the sump pit indicated that there were elevated levels detected above the NYS DEC SCOs. Based upon the analytical data, these four (4) structures have been impacted and will require remediation. As part of the remediation, the overflow pipe within the drywell appears to be an illegal discharge to a neighboring parcel and should be removed. In addition, the pipe within the drain leading to the interior buried five (5) gallon bucket appears to be an illegal discharge and should be removed.

   The structures represent Class 5D-2 Underground Injection Wells (UIWs), and as such are subject to the requirements of the United States Environmental Protection Agency (US EPA) Underground Injection Control (UIC) program. The US EPA administers the UIC program as mandated by Part C of the Safe Drinking Water Act (SDWA), 42 U.S.C. Section 300 f. The US EPA administers the UIC program as mandated by Part C of the Safe Drinking Water Act (SDWA), 42 U.S.C. Section 300 f. Section 1422 of the SDWA, 42 U.S.C. Section 300 h-1, requires that the US EPA administer the UIC program in areas that do not have state approved programs, as is the case for Nassau County, Long Island, New York. The US EPA administers the UIC program in conjunction with the Nassau County Department of Health (NCDH).

   Upon successful remediation of the subject site, end-point samples will be obtained and analyzed. A Remedial Action Report (RAR) / closure report will be submitted to the NCDH and the US EPA.

Limitations

The purpose of this investigation was to identify potential sources of contamination. The findings and conclusions set forth in this report are based upon information that was available to GCI, during its inspection of the property and after review of selected records and documents. If new information becomes available concerning the property after this date, or if the property is used in a manner other than that which is identified in this report, the findings and conclusions contained herein may have to be modified. Additionally, while this investigation was performed in accordance with good commercial and customary practice and generally accepted protocols within the consulting industry, GCI can not guarantee that the property is completely free of hazardous substances or other materials or conditions that could subject the owner and/or operator to potential liability. Future events and/or investigation could change the findings stated herein. Should additional investigations encounter differing conditions, sections of this report may require modification.

The preceding Environmental Assessment is subject to the following conditions and to such other conditions and limiting conditions as are set forth in the report.

1. GCI assumes no responsibility for hidden or latent conditions or misrepresentation by the property owner, his/her representatives, public information officials or any authority consulted in connection with the compilation of this report.

2. This report is prepared for the sole and explicit purpose for assessing the potential liability with respect to the presence of hazardous materials that may pose a potential health or environmental threat and for evaluating collateral risk associated with the same. This report is not intended to have any direct bearing on the value of the property.

3. The Environmental Assessment is for the sole use of the principal parties. No disclosure or reproduction shall be made of the preceding report without the prior written consent of GCI.

4. GCI or any representative of GCI is not required to give testimony with reference to the opinions expressed herein without prior written arrangement.

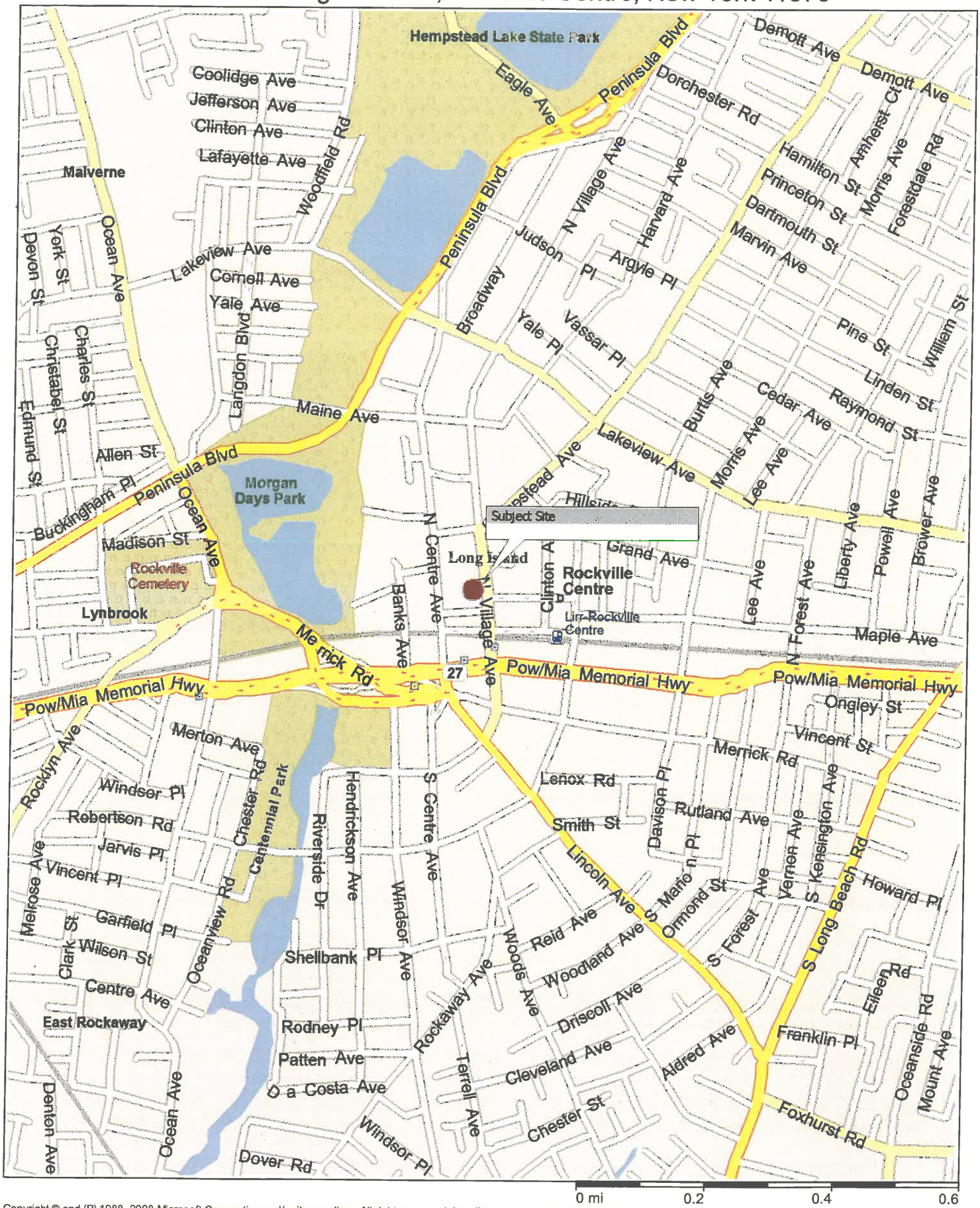
Disclaimer

This report is for the use by the client as a guide in determining the possible presence of toxic materials on the subject property at the time of the inspection. This report is based on the review of historic records (which may be incomplete), relating to past occupants, and upon a visual inspection of the surrounding properties at the time of inspection, and makes no determinations with respect to portions of the surrounding properties which were not inspected.

Any and all liability on the part of GCI shall be limited solely to the cost of this environmental assessment. GCI shall have no liability for any damages, whether consequential, compensatory, punitive, or special, arising out of, incidental to, or as a result of, this assessment and report. GCI shall have no liability for any cleanup and/or response costs, or any other incidental, or consequential, punitive, or special costs arising out of, incidental to, or as a result of any action against the client brought by any federal, state, or local government agency. GCI assumes no liability for the use of this assessment and report by any person or entity other than the client for whom it has been prepared.

SUBJECT SITE LOCATION MAP

84 North Village Avenue, Rockville Centre, New York 11570



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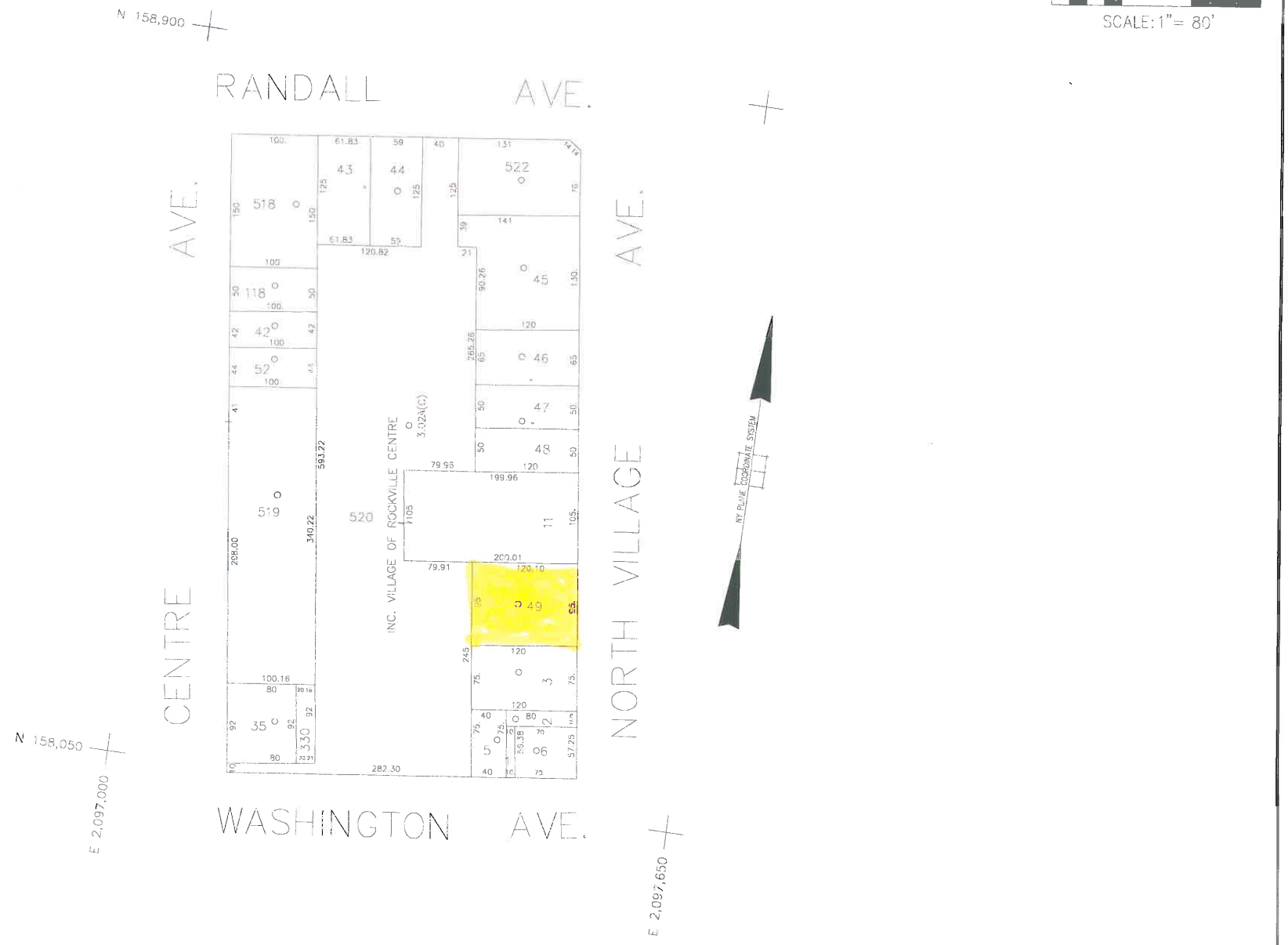
SUBJECT SITE TAX ASSESSOR MAP

COPYRIGHT 1998 NASSAU COUNTY

80' 40' 0' 80' 160'

SCALE: 1" = 80'



LEGEND

COUNTY LINE	
TOWN LINE	
VILLAGE LINE	
SCHOOL DISTRICT LINE	
PROPERTY LINE	
SPECIAL DISTRICT LINE	
BLOCK LINE	
LOCATOR POINT	
TAX MAP PARCEL NO.	246
CALCULATED ACREAGE	754(C)
DEED ACREAGE	1758
SCALED DIMENSION	327(S)
DEED DIMENSION	185.69
REFERENCE MAPS MAP NO.	

	DIST		DIST
POLICE		FIRE PROTECTION	
WATER		SANITARY	
LIGHTING		REFUSE & GARBAGE	
LIBRARY		REFUSE DISPOSAL	
FIRE		SEWAGE COLLECTION	

SPECIAL DISTRICTS

	DIST		DIST
PUBLIC PARKING		DRAINAGE	
SEWER		FIRE HYDRANT RENTAL	
Nassau County Sewage Disposal District #2	202	GARBAGE	
PARK		ESCALATOR	
IMPROVEMENT		WATER POLLUTION CONTROL	
SIDEWALK		Town, County, College, Police HQ	1

CODE	SPECIAL	DISTRICT	WITHIN
401	1	202	

CODE	SPECIAL	DISTRICT	WITHIN

CODE	SPECIAL	DISTRICT	WITHIN

MUNICIPALITIES

TOWN OF:	
HEMPSTEAD	
NORTH HEMPSTEAD	
OYSTER BAY	
CITY OF:	
GLEN COVE	
LONG BEACH	
VILLAGE OF:	
SCHOOL DISTRICT	
Rockville Centre	21

Nassau County Department of Assessment

Charles O'Shea, Chairman

Land & Tax Map

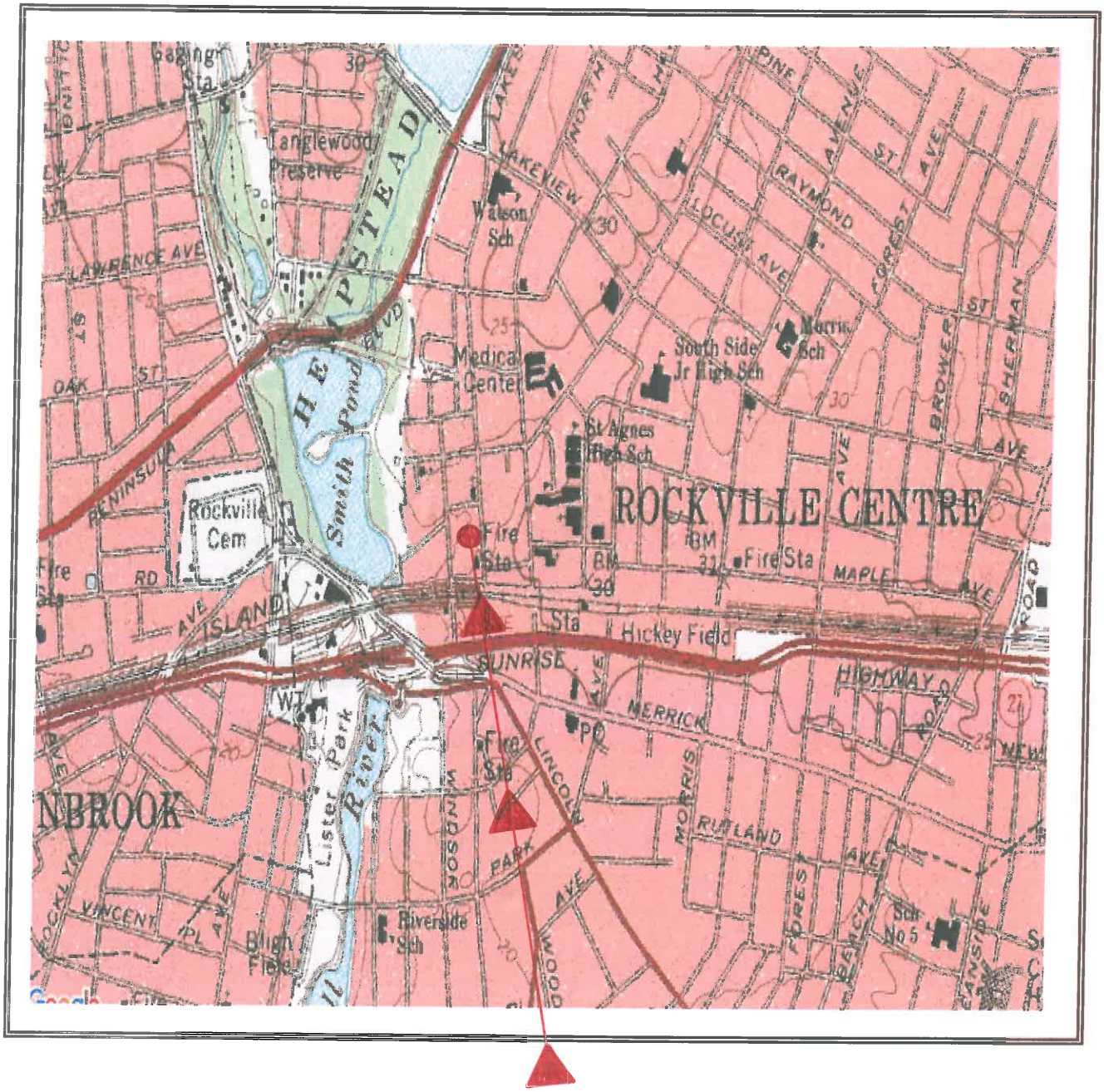
Map Last Revised: September 11 2002

SEC. 38

BLK. 153

SHEET 1 OF 1

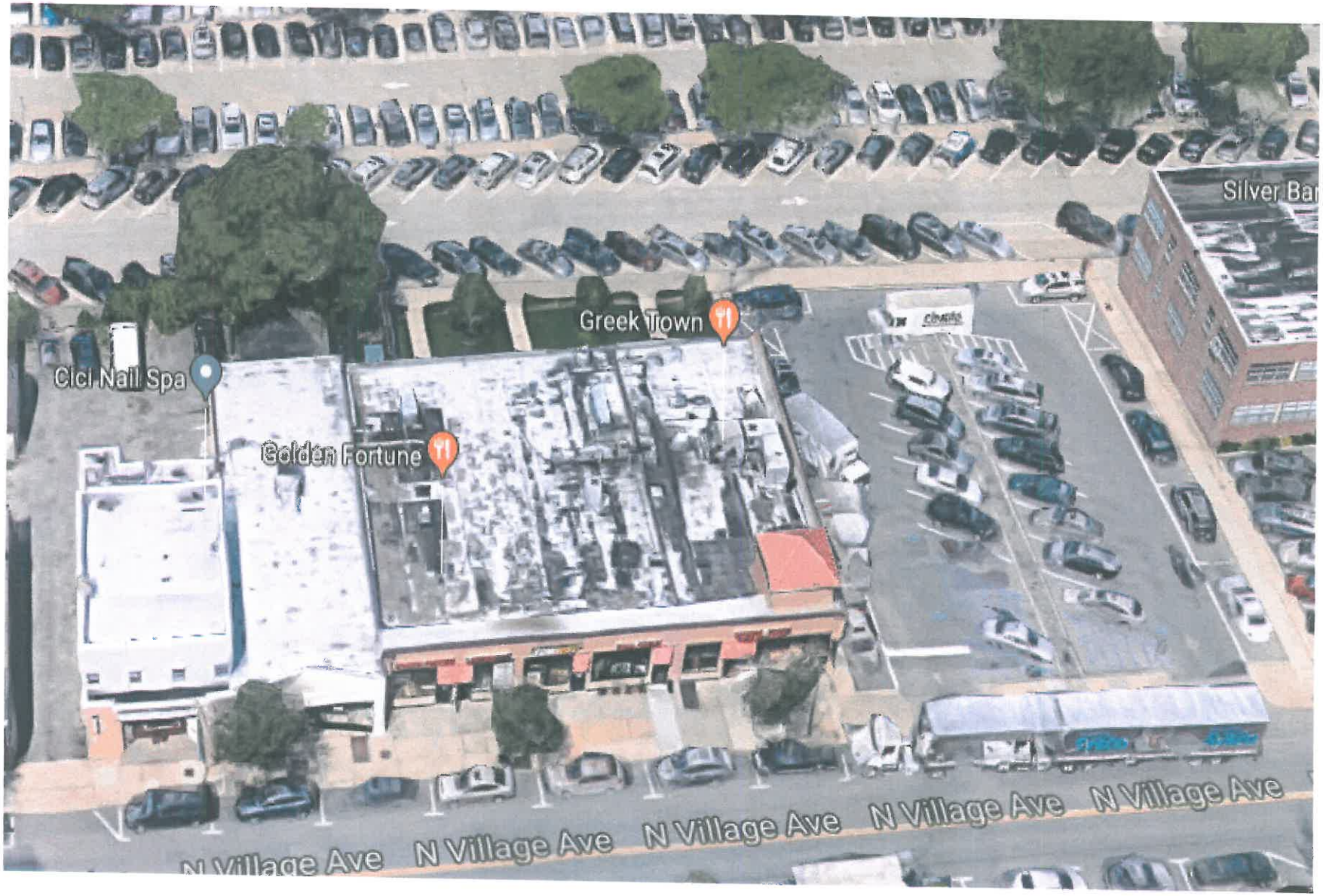
U.S.G.S. 7.5 MINUTE TOPOGRAPHIC MAP



U.S.G.S. 7.5 MINUTE TOPOGRAPHIC MAP

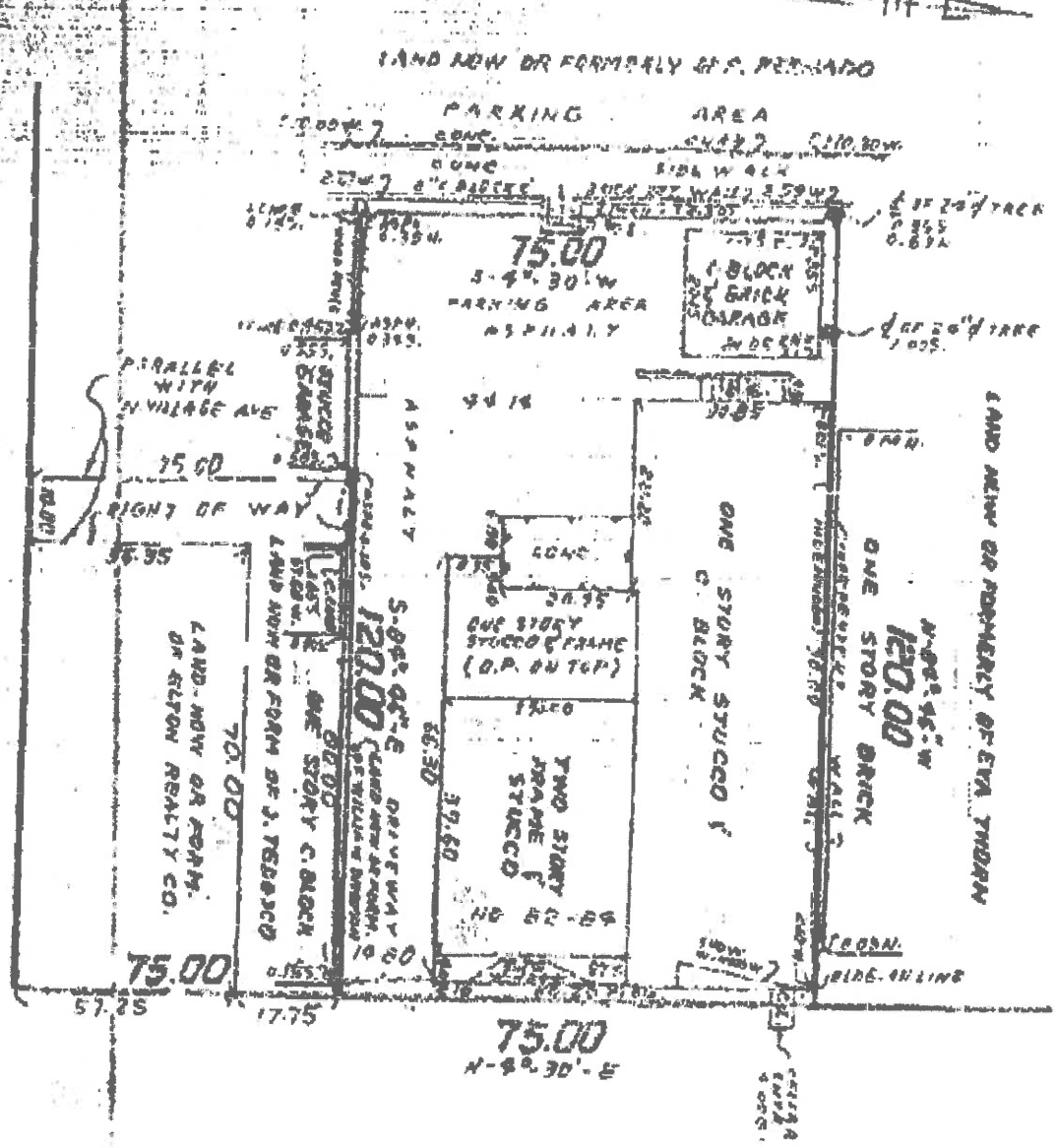
84 North Village Avenue
Rockville Centre, New York 11570

SUBJECT SITE AERIAL OVERVIEW



84 North Village Avenue
Rockville Centre, New York 11570

SUBJECT SITE SURVEY



N. VILLAGE AVENUE

SCALE 30 FEET TO AN INCH

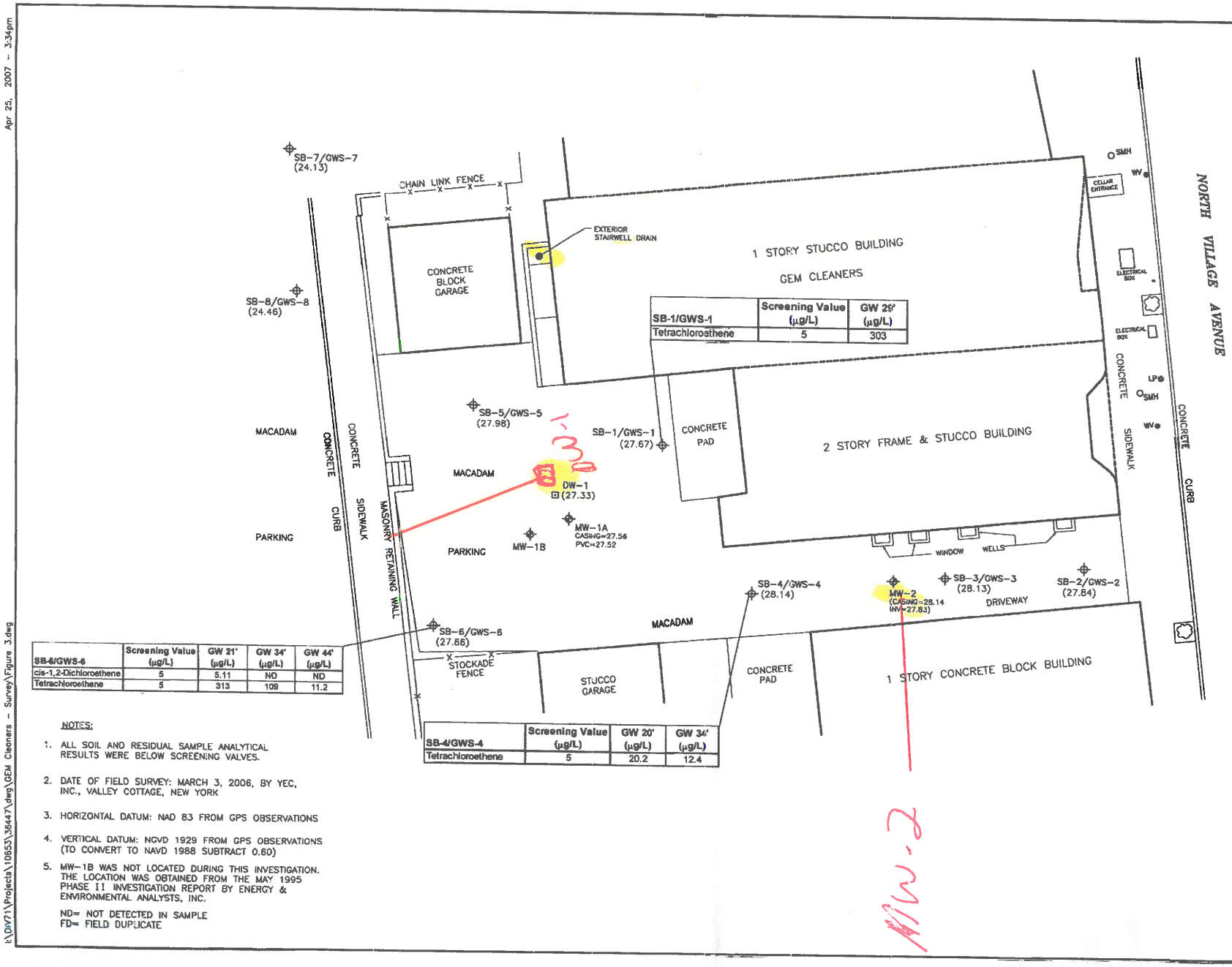
OCTOBER 29, 19

JOSEPH [illegible] COLETTI

ORDERED BY:
CHI ABSTRACT
COMMONWEALTH LAND
INSURANCE COMPANY
CHI KWUN YAM
LI YING YAM

SITE DIAGRAM

FIGURE 3



SB-1/GWS-1	Screening Value (µg/L)	GW 29' (µg/L)
Tetrachloroethene	5	303

SB-6/GWS-6	Screening Value (µg/L)	GW 21' (µg/L)	GW 34' (µg/L)	GW 44' (µg/L)
cis-1,2-Dichloroethene	5	5.11	ND	ND
Tetrachloroethene	5	313	109	11.2

SB-4/GWS-4	Screening Value (µg/L)	GW 20' (µg/L)	GW 34' (µg/L)
Tetrachloroethene	5	20.2	12.4

LEGEND

- MW — MONITORING WELL (W/ELEVATIONS)
- SB — SOIL BORING (W/ELEVATION)
- DW — DRYWELL (W/ELEVATIONS)
- SMH — SEWER MANHOLE
- WV — WATER VALVE
- LP — LIGHT POLE
- TREE

GEM CLEANERS
SITE ID#1-30-082
ROCKVILLE CENTRE, NY

SAMPLE LOCATIONS AND ANALYTICAL RESULTS ABOVE SCREENING VALUES

NOTES:

1. ALL SOIL AND RESIDUAL SAMPLE ANALYTICAL RESULTS WERE BELOW SCREENING VALVES.
2. DATE OF FIELD SURVEY: MARCH 3, 2006, BY YEC, INC., VALLEY COTTAGE, NEW YORK
3. HORIZONTAL DATUM: NAD 83 FROM GPS OBSERVATIONS
4. VERTICAL DATUM: NGVD 1929 FROM GPS OBSERVATIONS (TO CONVERT TO NAVD 1988 SUBTRACT 0.60)
5. MW-1B WAS NOT LOCATED DURING THIS INVESTIGATION. THE LOCATION WAS OBTAINED FROM THE MAY 1995 PHASE II INVESTIGATION REPORT BY ENERGY & ENVIRONMENTAL ANALYSTS, INC.

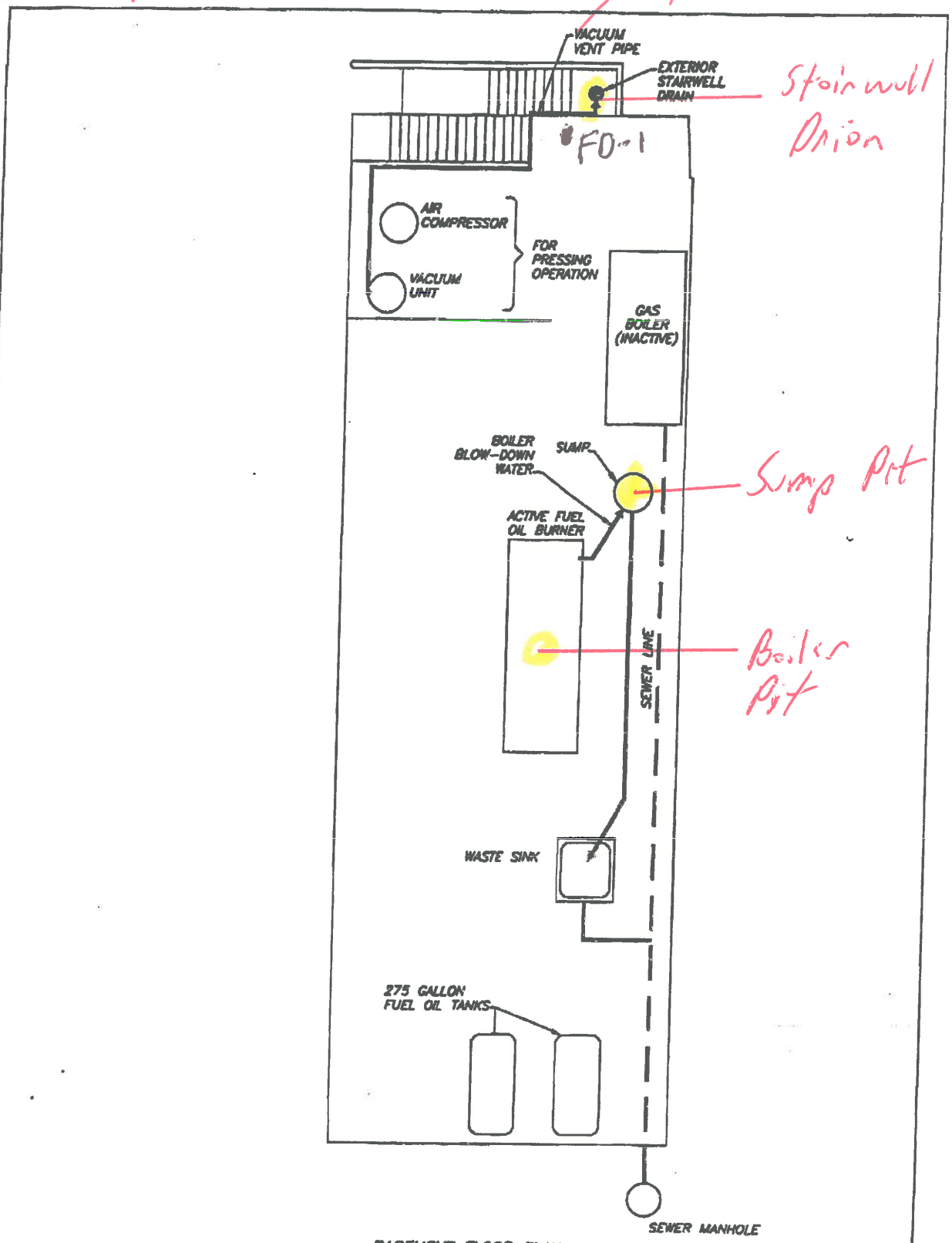
ND= NOT DETECTED IN SAMPLE
FD= FIELD DUPLICATE

FILE NO. 10653.36447.001
AUGUST 2006

O'BRIEN & GERE

Apr 25, 2007 - 3:34pm
K:\DW71\Projects\10653\36447\dwg\GEM Cleaners - Survey\Figure 3.dwg

84 N. Basement Layout



BASEMENT FLOOR PLAN
N.T.S.

P.W. Grosser Consulting Engineer & Hydrogeologist, P.C.

Prepared for: Gem Cleaners

Project No: GBR9701 Date: 8/14/97

BASEMENT FLOOR PLAN
GEM CLEANERS
84 N. Village Ave.
Rockville Centre, N.Y.

Figure No. 3

LABORATORY ANALYTICAL RESULTS

LONG ISLAND ANALYTICAL LABORATORIES INC.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"

Laboratory Report

NYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 8020623

February 12, 2018

GCI
Tom Smyth
1092 Motor Parkway
Hauppauge, NY 11788

Re: 84 N. Village Ave. Rockville Centre

Dear Tom Smyth,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on February 06, 2018. Long Island Analytical laboratories analyzed the samples on February 12, 2018 for the following:

SAMPLE ID	ANALYSIS
DW-1	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
Stairwell Drain	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
Boiler Pit	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals

Samples received at 1.0 ° C

5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.

Michael Veraldi - Laboratory Director

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 11:00	Sample ID: DW-1
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-01 % Solid:81.35
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	12.3	<12.3	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	12.3	<12.3	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	12.3	<12.3	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	12.3	<12.3	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	307	<307	ug/kg dry	5.L, 3.A
1,2-Dichloroethane	107-06-2	12.3	<12.3	ug/kg dry	5.L, 3.A
1,3,5-Trimethylbenzene	108-67-8	12.3	<12.3	ug/kg dry	5.L, 3.A
1,3-Dichlorobenzene	541-73-1	307	<307	ug/kg dry	5.L, 3.A
1,4-Dichlorobenzene	106-46-7	307	<307	ug/kg dry	5.L, 3.A
1,4-Dioxane	123-91-1	61.5	<61.5	ug/kg dry	5.L, 3.A
Acetone	67-64-1	49.2	167	ug/kg dry	3.E, 5.L, 4.N
Benzene	71-43-2	12.3	<12.3	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	12.3	<12.3	ug/kg dry	5.L, 3.A
Chlorobenzene	108-90-7	12.3	<12.3	ug/kg dry	5.L, 3.A
Chloroform	67-66-3	12.3	<12.3	ug/kg dry	5.L, 3.A
cis-1,2-Dichloroethylene	156-59-2	12.3	<12.3	ug/kg dry	5.L, 3.A
Ethylbenzene	100-41-4	12.3	<12.3	ug/kg dry	5.L, 3.A
m,p-Xylenes	108-38-3/106-42-3	24.6	<24.6	ug/kg dry	5.L, 3.A
Methyl Ethyl Ketone (2-Butanone)	78-93-3	24.6	<24.6	ug/kg dry	5.L, 3.A
Methylene Chloride	75-09-2	12.3	<12.3	ug/kg dry	5.L, 3.A
Methyl-tert-Butyl Ether	1634-04-4	12.3	<12.3	ug/kg dry	5.L, 3.A
n-Butylbenzene	104-51-8	307	<307	ug/kg dry	5.L, 3.A
n-Propylbenzene	103-65-1	12.3	<12.3	ug/kg dry	5.L, 3.A
o-Xylene	95-47-6	12.3	<12.3	ug/kg dry	5.L, 3.A
sec-Butylbenzene	135-98-8	12.3	<12.3	ug/kg dry	5.L, 3.A
tert-Butylbenzene	98-06-6	12.3	<12.3	ug/kg dry	5.L, 3.A
Tetrachloroethylene	127-18-4	12.3	<12.3	ug/kg dry	5.L, 3.A
Toluene	108-88-3	12.3	<12.3	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	12.3	<12.3	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	12.3	<12.3	ug/kg dry	3.A, 4.N, 5.L

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 11:00	Sample ID: DW-1
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-01 % Solid:81.35
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	12.3	<12.3	ug/kg dry	5.L, 3.A

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	114	74.4-131	
4-Bromofluorobenzene	460-00-4	118	82.3-134	
Dibromofluoromethane	1868-53-7	106	79.4-122	
Toluene-d8	2037-26-5	118	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	50	50-200	
1,4-Difluorobenzene	540-36-3	77	50-200	
Chlorobenzene-d5	3114-55-4	58	50-200	
Pentafluorobenzene	363-72-4	80	50-200	

Date Prepared: 02/07/2018

Preparation Method: EPA 5035A-H

Date Analyzed: 02/07/2018

Analytical Method: EPA 8260 C

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 11:00	Sample ID: DW-1
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-01 % Solid:81.35
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	184	<184	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	184	<184	ug/kg dry	
Acenaphthene	83-32-9	184	<184	ug/kg dry	
Acenaphthylene	208-96-8	184	<184	ug/kg dry	
Anthracene	120-12-7	184	<184	ug/kg dry	
Benzo(a)anthracene	56-55-3	184	673	ug/kg dry	
Benzo(a)pyrene	50-32-8	184	910	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	184	1250	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	184	758	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	184	404	ug/kg dry	
Chrysene	218-01-9	184	780	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	184	<184	ug/kg dry	
Dibenzofuran	132-64-9	184	<184	ug/kg dry	
Fluoranthene	206-44-0	184	1710	ug/kg dry	
Fluorene	86-73-7	184	<184	ug/kg dry	
Hexachlorobenzene	118-74-1	184	<184	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	184	660	ug/kg dry	
Naphthalene	91-20-3	184	<184	ug/kg dry	
Pentachlorophenol	87-86-5	184	<184	ug/kg dry	
Phenanthrene	85-01-8	184	782	ug/kg dry	
Phenol	108-95-2	184	<184	ug/kg dry	
Pyrene	129-00-0	184	1410	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	63	18.04-120.2	
2-Fluorobiphenyl	321-60-8	58	34.39-110.73	
2-Fluorophenol	367-12-4	61	22.98-107.57	
Nitrobenzene-d5	4165-60-0	62	31-118.25	
Phenol-d6	13127-88-3	65	35.55-111.39	
Terphenyl-d14	1718-51-0	60	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	76	50-200	

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 11:00	Sample ID: DW-1
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-01 % Solid:81.35
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	77	50-200	
Chrysene-d12	1719-03-5	69	50-200	
Naphthalene-d8	1146-65-2	76	50-200	
Perylene-d12	1520-96-3	74	50-200	
Phenanthrene-d10	1517-22-2	75	50-200	

Date Prepared: 02/08/2018

Preparation Method: EPA 3545 A

Date Analyzed: 02/09/2018

Analytical Method: EPA 8270 D

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 11:00	Sample ID: DW-1
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-01 % Solid:81.35
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	02/08/2018	EPA 6010 C	1.89	2.34	mg/kg dry	
Barium	02/08/2018	EPA 6010 C	1.89	139	mg/kg dry	
Beryllium	02/08/2018	EPA 6010 C	1.89	<1.89	mg/kg dry	
Cadmium	02/08/2018	EPA 6010 C	1.89	<1.89	mg/kg dry	
Chromium	02/08/2018	EPA 6010 C	1.89	21.9	mg/kg dry	
Copper	02/08/2018	EPA 6010 C	1.89	46.0	mg/kg dry	
Lead	02/08/2018	EPA 6010 C	1.89	120	mg/kg dry	
Manganese	02/08/2018	EPA 6010 C	1.89	158	mg/kg dry	
Nickel	02/08/2018	EPA 6010 C	1.89	14.2	mg/kg dry	
Selenium	02/08/2018	EPA 6010 C	1.89	<1.89	mg/kg dry	
Silver	02/08/2018	EPA 6010 C	1.89	<1.89	mg/kg dry	
Zinc	02/08/2018	EPA 6010 C	1.89	293	mg/kg dry	

Date Prepared: 02/07/2018 Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	02/08/2018	EPA 7196 A	0.570	<0.570	mg/kg dry	

Date Prepared: 02/08/2018 Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	02/08/2018	EPA 7471 B	0.02	0.03	mg/kg dry	

Date Prepared: 02/07/2018 Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	02/12/2018	EPA 9014	0.25	<0.25	mg/kg dry	

Date Prepared: 02/08/2018 Preparation Method: Distillation Prep

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 12:00	Sample ID: Stairwell Drain
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-02 % Solid:47.50
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	21.1	<21.1	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	21.1	<21.1	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	21.1	<21.1	ug/kg dry	5.L, 3.A
1,2,4-Trimethylbenzene	95-63-6	21.1	<21.1	ug/kg dry	5.L, 3.A
1,2-Dichlorobenzene	95-50-1	105	<105	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	21.1	<21.1	ug/kg dry	5.L, 3.A
1,3,5-Trimethylbenzene	108-67-8	21.1	<21.1	ug/kg dry	5.L, 3.A
1,3-Dichlorobenzene	541-73-1	105	<105	ug/kg dry	5.L, 3.A
1,4-Dichlorobenzene	106-46-7	105	<105	ug/kg dry	5.L, 3.A
1,4-Dioxane	123-91-1	105	<105	ug/kg dry	5.L, 3.A
Acetone	67-64-1	84.2	199	ug/kg dry	5.L, 3.E, 4.N
Benzene	71-43-2	21.1	<21.1	ug/kg dry	5.L, 3.A
Carbon Tetrachloride	56-23-5	21.1	<21.1	ug/kg dry	5.L, 3.A
Chlorobenzene	108-90-7	21.1	<21.1	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	21.1	<21.1	ug/kg dry	5.L, 3.A
cis-1,2-Dichloroethylene	156-59-2	21.1	<21.1	ug/kg dry	5.L, 3.A
Ethylbenzene	100-41-4	21.1	<21.1	ug/kg dry	5.L, 3.A
m,p-Xylenes	108-38-3/106-42-3	42.1	<42.1	ug/kg dry	5.L, 3.A
Methyl Ethyl Ketone (2-Butanone)	78-93-3	42.1	<42.1	ug/kg dry	5.L, 3.A
Methylene Chloride	75-09-2	21.1	<21.1	ug/kg dry	5.L, 3.A
Methyl-tert-Butyl Ether	1634-04-4	21.1	<21.1	ug/kg dry	5.L, 3.A
n-Butylbenzene	104-51-8	105	<105	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	21.1	<21.1	ug/kg dry	5.L, 3.A
o-Xylene	95-47-6	21.1	<21.1	ug/kg dry	5.L, 3.A
sec-Butylbenzene	135-98-8	21.1	<21.1	ug/kg dry	5.L, 3.A
tert-Butylbenzene	98-06-6	21.1	<21.1	ug/kg dry	5.L, 3.A
Tetrachloroethylene	127-18-4	21.1	<21.1	ug/kg dry	5.L, 3.A
Toluene	108-88-3	21.1	<21.1	ug/kg dry	5.L, 3.A
trans-1,2-Dichloroethylene	156-60-5	21.1	<21.1	ug/kg dry	5.L, 3.A
Trichloroethylene	79-01-6	21.1	<21.1	ug/kg dry	3.A, 5.L, 4.N

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 12:00	Sample ID: Stairwell Drain
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-02 % Solid:47.50
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	21.1	<21.1	ug/kg dry	5.L, 3.A

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	109	74.4-131	
4-Bromofluorobenzene	460-00-4	127	82.3-134	
Dibromofluoromethane	1868-53-7	104	79.4-122	
Toluene-d8	2037-26-5	111	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	52	50-200	
1,4-Difluorobenzene	540-36-3	81	50-200	
Chlorobenzene-d5	3114-55-4	68	50-200	
Pentafluorobenzene	363-72-4	83	50-200	

Date Prepared: 02/07/2018

Preparation Method: EPA 5035A-H

Date Analyzed: 02/07/2018

Analytical Method: EPA 8260 C

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 12:00	Sample ID: Stairwell Drain
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-02 % Solid:47.50
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	316	<316	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	316	<316	ug/kg dry	
Acenaphthene	83-32-9	316	<316	ug/kg dry	
Acenaphthylene	208-96-8	316	<316	ug/kg dry	
Anthracene	120-12-7	316	<316	ug/kg dry	
Benzo(a)anthracene	56-55-3	316	823	ug/kg dry	
Benzo(a)pyrene	50-32-8	316	1210	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	316	1890	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	316	1030	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	316	531	ug/kg dry	
Chrysene	218-01-9	316	1290	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	316	348	ug/kg dry	
Dibenzofuran	132-64-9	316	<316	ug/kg dry	
Fluoranthene	206-44-0	316	2410	ug/kg dry	
Fluorene	86-73-7	316	<316	ug/kg dry	
Hexachlorobenzene	118-74-1	316	<316	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	316	884	ug/kg dry	
Naphthalene	91-20-3	316	<316	ug/kg dry	
Pentachlorophenol	87-86-5	316	<316	ug/kg dry	
Phenanthrene	85-01-8	316	966	ug/kg dry	
Phenol	108-95-2	316	<316	ug/kg dry	
Pyrene	129-00-0	316	2010	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	61	18.04-120.2	
2-Fluorobiphenyl	321-60-8	53	34.39-110.73	
2-Fluorophenol	367-12-4	54	22.98-107.57	
Nitrobenzene-d5	4165-60-0	60	31-118.25	
Phenol-d6	13127-88-3	59	35.55-111.39	
Terphenyl-d14	1718-51-0	58	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	67	50-200	

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 12:00	Sample ID: Stairwell Drain
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-02 % Solid:47.50
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	69	50-200	
Chrysene-d12	1719-03-5	64	50-200	
Naphthalene-d8	1146-65-2	69	50-200	
Perylene-d12	1520-96-3	70	50-200	
Phenanthrene-d10	1517-22-2	67	50-200	

Date Prepared: 02/08/2018

Preparation Method: EPA 3545 A

Date Analyzed: 02/09/2018

Analytical Method: EPA 8270 D

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 12:00	Sample ID: Stairwell Drain
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-02 % Solid:47.50
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	02/08/2018	EPA 6010 C	31.0	<31.0	mg/kg dry	3.E
Barium	02/08/2018	EPA 6010 C	31.0	245	mg/kg dry	3.E
Beryllium	02/08/2018	EPA 6010 C	31.0	<31.0	mg/kg dry	3.E
Cadmium	02/08/2018	EPA 6010 C	31.0	<31.0	mg/kg dry	3.E
Chromium	02/08/2018	EPA 6010 C	31.0	44.0	mg/kg dry	3.E
Copper	02/08/2018	EPA 6010 C	31.0	229	mg/kg dry	3.E
Lead	02/08/2018	EPA 6010 C	31.0	916	mg/kg dry	3.E
Manganese	02/08/2018	EPA 6010 C	31.0	376	mg/kg dry	3.E
Nickel	02/08/2018	EPA 6010 C	31.0	<31.0	mg/kg dry	3.E
Selenium	02/08/2018	EPA 6010 C	31.0	<31.0	mg/kg dry	3.E
Silver	02/08/2018	EPA 6010 C	31.0	<31.0	mg/kg dry	3.E
Zinc	02/08/2018	EPA 6010 C	31.0	1230	mg/kg dry	3.E

Date Prepared: 02/07/2018 Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	02/08/2018	EPA 7196 A	8.95	<8.95	mg/kg dry	3.A

Date Prepared: 02/08/2018 Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	02/08/2018	EPA 7471 B	0.04	0.16	mg/kg dry	

Date Prepared: 02/07/2018 Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	02/12/2018	EPA 9014	0.42	<0.42	mg/kg dry	

Date Prepared: 02/08/2018 Preparation Method: Distillation Prep

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 13:30	Sample ID: Boiler Pit
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-03 % Solid:99.57
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	10.0	<10.0	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	10.0	<10.0	ug/kg dry	5.L, 3.A
1,1-Dichloroethylene	75-35-4	10.0	<10.0	ug/kg dry	5.L, 3.A
1,2,4-Trimethylbenzene	95-63-6	10.0	<10.0	ug/kg dry	5.L, 3.A
1,2-Dichlorobenzene	95-50-1	10.0	<10.0	ug/kg dry	5.L, 3.A
1,2-Dichloroethane	107-06-2	10.0	<10.0	ug/kg dry	5.L, 3.A
1,3,5-Trimethylbenzene	108-67-8	10.0	<10.0	ug/kg dry	5.L, 3.A
1,3-Dichlorobenzene	541-73-1	10.0	<10.0	ug/kg dry	5.L, 3.A
1,4-Dichlorobenzene	106-46-7	10.0	<10.0	ug/kg dry	5.L, 3.A
1,4-Dioxane	123-91-1	50.2	<50.2	ug/kg dry	5.L, 3.A
Acetone	67-64-1	40.2	<40.2	ug/kg dry	5.L, 3.A, 4.J, 4.N
Benzene	71-43-2	10.0	<10.0	ug/kg dry	5.L, 3.A
Carbon Tetrachloride	56-23-5	10.0	<10.0	ug/kg dry	5.L, 3.A
Chlorobenzene	108-90-7	10.0	<10.0	ug/kg dry	5.L, 3.A
Chloroform	67-66-3	10.0	<10.0	ug/kg dry	5.L, 3.A
cis-1,2-Dichloroethylene	156-59-2	10.0	<10.0	ug/kg dry	5.L, 3.A
Ethylbenzene	100-41-4	10.0	<10.0	ug/kg dry	5.L, 3.A
m,p-Xylenes	108-38-3/106-42-3	20.1	<20.1	ug/kg dry	5.L, 3.A
Methyl Ethyl Ketone (2-Butanone)	78-93-3	20.1	<20.1	ug/kg dry	5.L, 3.A
Methylene Chloride	75-09-2	10.0	<10.0	ug/kg dry	5.L, 3.A
Methyl-tert-Butyl Ether	1634-04-4	10.0	<10.0	ug/kg dry	5.L, 3.A
n-Butylbenzene	104-51-8	10.0	<10.0	ug/kg dry	5.L, 3.A
n-Propylbenzene	103-65-1	10.0	<10.0	ug/kg dry	5.L, 3.A
o-Xylene	95-47-6	10.0	<10.0	ug/kg dry	5.L, 3.A
sec-Butylbenzene	135-98-8	10.0	<10.0	ug/kg dry	5.L, 3.A
tert-Butylbenzene	98-06-6	10.0	<10.0	ug/kg dry	5.L, 3.A
Tetrachloroethylene	127-18-4	10.0	<10.0	ug/kg dry	5.L, 3.A
Toluene	108-88-3	10.0	<10.0	ug/kg dry	5.L, 3.A
trans-1,2-Dichloroethylene	156-60-5	10.0	<10.0	ug/kg dry	5.L, 3.A
Trichloroethylene	79-01-6	10.0	<10.0	ug/kg dry	3.A, 4.N, 5.L

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 13:30	Sample ID: Boiler Pit
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-03 % Solid:99.57
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	10.0	<10.0	ug/kg dry	5.L, 3.A

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	106	74.4-131	
4-Bromofluorobenzene	460-00-4	109	82.3-134	
Dibromofluoromethane	1868-53-7	106	79.4-122	
Toluene-d8	2037-26-5	98	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	70	50-200	
1,4-Difluorobenzene	540-36-3	80	50-200	
Chlorobenzene-d5	3114-55-4	81	50-200	
Pentafluorobenzene	363-72-4	79	50-200	

Date Prepared: 02/07/2018

Preparation Method: EPA 5035A-H

Date Analyzed: 02/07/2018

Analytical Method: EPA 8260 C

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 13:30	Sample ID: Boiler Pit
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-03 % Solid:99.57
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	151	<151	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	151	<151	ug/kg dry	
Acenaphthene	83-32-9	151	<151	ug/kg dry	
Acenaphthylene	208-96-8	151	<151	ug/kg dry	
Anthracene	120-12-7	151	<151	ug/kg dry	
Benzo(a)anthracene	56-55-3	151	<151	ug/kg dry	
Benzo(a)pyrene	50-32-8	151	<151	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	151	<151	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	151	<151	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	151	<151	ug/kg dry	
Chrysene	218-01-9	151	<151	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	151	<151	ug/kg dry	
Dibenzofuran	132-64-9	151	<151	ug/kg dry	
Fluoranthene	206-44-0	151	<151	ug/kg dry	
Fluorene	86-73-7	151	<151	ug/kg dry	
Hexachlorobenzene	118-74-1	151	<151	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	151	<151	ug/kg dry	
Naphthalene	91-20-3	151	<151	ug/kg dry	
Pentachlorophenol	87-86-5	151	<151	ug/kg dry	
Phenanthrene	85-01-8	151	<151	ug/kg dry	
Phenol	108-95-2	151	<151	ug/kg dry	
Pyrene	129-00-0	151	<151	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	41	18.04-120.2	
2-Fluorobiphenyl	321-60-8	64	34.39-110.73	
2-Fluorophenol	367-12-4	61	22.98-107.57	
Nitrobenzene-d5	4165-60-0	72	31-118.25	
Phenol-d6	13127-88-3	68	35.55-111.39	
Terphenyl-d14	1718-51-0	70	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	73	50-200	

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 13:30	Sample ID: Boiler Pit
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-03 % Solid:99.57
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	75	50-200	
Chrysene-d12	1719-03-5	70	50-200	
Naphthalene-d8	1146-65-2	75	50-200	
Perylene-d12	1520-96-3	75	50-200	
Phenanthrene-d10	1517-22-2	75	50-200	

Date Prepared: 02/08/2018

Preparation Method: EPA 3545 A

Date Analyzed: 02/09/2018

Analytical Method: EPA 8270 D

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 13:30	Sample ID: Boiler Pit
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020623-03 % Solid:99.57
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	02/08/2018	EPA 6010 C	1.67	2.17	mg/kg dry	
Barium	02/08/2018	EPA 6010 C	1.66	25.9	mg/kg dry	
Beryllium	02/08/2018	EPA 6010 C	1.67	<1.67	mg/kg dry	
Cadmium	02/08/2018	EPA 6010 C	1.66	<1.66	mg/kg dry	
Chromium	02/08/2018	EPA 6010 C	1.67	6.67	mg/kg dry	
Copper	02/08/2018	EPA 6010 C	1.67	26.3	mg/kg dry	
Lead	02/08/2018	EPA 6010 C	1.67	20.3	mg/kg dry	
Manganese	02/08/2018	EPA 6010 C	1.67	112	mg/kg dry	
Nickel	02/08/2018	EPA 6010 C	1.67	7.15	mg/kg dry	
Selenium	02/08/2018	EPA 6010 C	1.67	<1.67	mg/kg dry	
Silver	02/08/2018	EPA 6010 C	1.67	<1.67	mg/kg dry	
Zinc	02/08/2018	EPA 6010 C	1.67	164	mg/kg dry	4.G

Date Prepared: 02/07/2018 Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	02/08/2018	EPA 7196 A	0.500	<0.500	mg/kg dry	

Date Prepared: 02/08/2018 Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	02/08/2018	EPA 7471 B	0.02	0.05	mg/kg dry	

Date Prepared: 02/07/2018 Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	02/12/2018	EPA 9014	0.20	<0.20	mg/kg dry	

Date Prepared: 02/08/2018 Preparation Method: Distillation Prep

Data Qualifiers Key Reference:

3.A	Reporting limit raised due to matrix interfernce.
3.E	Compound reported at a dilution factor.
4.G	Spike recovery out of range due to matrix interference.
4.J	Continuing Calibration Verification (CCV) quality control levels failed low, values are considered to be estimated.
4.N	LCS recovery was below QC acceptance limit.
5.L	Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.
MDL	Minimum Detection Limit
LOQ	Limit of Quantitation

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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS: GCI
1092 Motor Parkway
Hauppauge N.Y. 11788

CONTACT: T. Smyth
PHONE: 851-1800
EMAIL:

PROJECT LOCATION:
84 N. Village Ave Rockville Centre

SAMPLER (SIGNATURE): Tim Smyth
SAMPLER NAME (PRINT): Tim Smyth

SAMPLE(S) SEALED: YES / NO
CORRECT CONTAINER(S): YES / NO

8020623

SAMPLES RECEIVED AT: 1.0 °C

TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month. Tendering of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms

LABORATORY ID # (For Laboratory Use Only)	MATRIX	TYPE	pH	RES. CHLORINE	PRES.	DATE	TIME	SAMPLE # / LOCATION	ANALYSIS REQUIRED: Part 375 VOC	Part 375 SVOC	Part 375 Metals	# OF CONTAINERS
1. 8020623-01	S	C			1	2-6-18	11:00 AM	DW-1	X	X	X	2
2. -02	S	C			1	↓	12:00 pm	Stairwell Drain	X	X	X	2
3. -03	S	C			1	↓	1:30 pm	Boiler Pit	X	X	X	2
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												

MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WIPE; PC=PAINT CHIPS; BM= BULK MATERIAL, O=OIL, WW=WASTE WATER
TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON
PRES: (1) ICE; (2) HCL; (3) H_2SO_4; (4) NAOH; (5) $NA_2S_3O_3$; (6) HNO_3; (7) OTHER

TURNAROUND REQUIRED: ☐ NORMAL ☑ STAT BY 2/12/18

COMMENTS / INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY (SIGNATURE)	DATE / TIME	PRINTED NAME
Tim Smyth	2-6-18 17:00	Tim Smyth			
RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE 2-6-18 TIME 17:00	PRINTED NAME Kelley Kavanaugh

WHITE - OFFICE / CANARY - CLIENT

LONG ISLAND ANALYTICAL LABORATORIES INC.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"

Laboratory Report

NYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 8020753

February 12, 2018

GCI
Tom Smyth
1092 Motor Parkway
Hauppauge, NY 11788

Re: 84 N. Village Ave Rockville Centre

Dear Tom Smyth,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on February 07, 2018. Long Island Analytical laboratories analyzed the samples on February 12, 2018 for the following:

SAMPLE ID	ANALYSIS
Sump Pit	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals

Samples received at 1.1 ° C

5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.

Michael Veraldi - Laboratory Director

Client: GCI	Client ID: 84 N. Village Ave Rockville Centre
Date (Time) Collected: 02/07/2018 13:30	Sample ID: Sump Pit
Date (Time) Received: 02/07/2018 16:10	Laboratory ID: 8020753-01 % Solid:90.37
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	55.3	<55.3	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	55.3	<55.3	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	55.3	<55.3	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	55.3	<55.3	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	55.3	<55.3	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	55.3	<55.3	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	55.3	<55.3	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	55.3	<55.3	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	55.3	<55.3	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	277	<277	ug/kg dry	3.A, 5.L
Acetone	67-64-1	221	<221	ug/kg dry	3.A, 4.N, 5.L
Benzene	71-43-2	55.3	<55.3	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	55.3	<55.3	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	55.3	<55.3	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	55.3	<55.3	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	55.3	<55.3	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	55.3	<55.3	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	111	<111	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	111	<111	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	55.3	<55.3	ug/kg dry	3.A, 5.L
Methyl-tert-Butyl Ether	1634-04-4	55.3	<55.3	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	55.3	<55.3	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	55.3	<55.3	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	55.3	<55.3	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	55.3	<55.3	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	55.3	<55.3	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	55.3	103	ug/kg dry	3.E, 5.L
Toluene	108-88-3	55.3	<55.3	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	55.3	<55.3	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	55.3	<55.3	ug/kg dry	3.A, 4.N, 5.L

Client: GCI	Client ID: 84 N. Village Ave Rockville Centre
Date (Time) Collected: 02/07/2018 13:30	Sample ID: Sump Pit
Date (Time) Received: 02/07/2018 16:10	Laboratory ID: 8020753-01 % Solid:90.37
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	55.3	<55.3	ug/kg dry	3.A, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	106	74.4-131	
4-Bromofluorobenzene	460-00-4	118	82.3-134	
Dibromofluoromethane	1868-53-7	107	79.4-122	
Toluene-d8	2037-26-5	102	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	66	50-200	
1,4-Difluorobenzene	540-36-3	89	50-200	
Chlorobenzene-d5	3114-55-4	89	50-200	
Pentafluorobenzene	363-72-4	88	50-200	

Date Prepared: 02/09/2018

Preparation Method: EPA 5035A-H

Date Analyzed: 02/09/2018

Analytical Method: EPA 8260 C

Client: GCI	Client ID: 84 N. Village Ave Rockville Centre
Date (Time) Collected: 02/07/2018 13:30	Sample ID: Sump Pit
Date (Time) Received: 02/07/2018 16:10	Laboratory ID: 8020753-01 % Solid:90.37
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	166	<166	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	166	<166	ug/kg dry	
Acenaphthene	83-32-9	166	<166	ug/kg dry	
Acenaphthylene	208-96-8	166	<166	ug/kg dry	
Anthracene	120-12-7	166	<166	ug/kg dry	
Benzo(a)anthracene	56-55-3	166	<166	ug/kg dry	
Benzo(a)pyrene	50-32-8	166	<166	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	166	<166	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	166	<166	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	166	<166	ug/kg dry	
Chrysene	218-01-9	166	<166	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	166	<166	ug/kg dry	
Dibenzofuran	132-64-9	166	<166	ug/kg dry	
Fluoranthene	206-44-0	166	<166	ug/kg dry	
Fluorene	86-73-7	166	<166	ug/kg dry	
Hexachlorobenzene	118-74-1	166	<166	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	166	<166	ug/kg dry	
Naphthalene	91-20-3	166	<166	ug/kg dry	
Pentachlorophenol	87-86-5	166	<166	ug/kg dry	
Phenanthrene	85-01-8	166	<166	ug/kg dry	
Phenol	108-95-2	166	<166	ug/kg dry	
Pyrene	129-00-0	166	<166	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	61	18.04-120.2	
2-Fluorobiphenyl	321-60-8	65	34.39-110.73	
2-Fluorophenol	367-12-4	60	22.98-107.57	
Nitrobenzene-d5	4165-60-0	71	31-118.25	
Phenol-d6	13127-88-3	68	35.55-111.39	
Terphenyl-d14	1718-51-0	69	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	73	50-200	

Client: GCI	Client ID: 84 N. Village Ave Rockville Centre
Date (Time) Collected: 02/07/2018 13:30	Sample ID: Sump Pit
Date (Time) Received: 02/07/2018 16:10	Laboratory ID: 8020753-01 % Solid:90.37
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	77	50-200	
Chrysene-d12	1719-03-5	72	50-200	
Naphthalene-d8	1146-65-2	75	50-200	
Perylene-d12	1520-96-3	76	50-200	
Phenanthrene-d10	1517-22-2	74	50-200	

Date Prepared: 02/08/2018

Preparation Method: EPA 3545 A

Date Analyzed: 02/09/2018

Analytical Method: EPA 8270 D

Client: GCI	Client ID: 84 N. Village Ave Rockville Centre
Date (Time) Collected: 02/07/2018 13:30	Sample ID: Sump Pit
Date (Time) Received: 02/07/2018 16:10	Laboratory ID: 8020753-01 % Solid:90.37
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	02/09/2018	EPA 6010 C	18.2	<18.2	mg/kg dry	3.E
Barium	02/09/2018	EPA 6010 C	18.2	103	mg/kg dry	3.E
Beryllium	02/09/2018	EPA 6010 C	18.2	<18.2	mg/kg dry	3.E
Cadmium	02/09/2018	EPA 6010 C	18.2	<18.2	mg/kg dry	3.E
Chromium	02/09/2018	EPA 6010 C	1.82	50.7	mg/kg dry	
Copper	02/09/2018	EPA 6010 C	18.2	1150	mg/kg dry	3.E
Lead	02/09/2018	EPA 6010 C	18.2	506	mg/kg dry	3.E
Manganese	02/09/2018	EPA 6010 C	18.2	599	mg/kg dry	3.E
Nickel	02/09/2018	EPA 6010 C	1.82	56.5	mg/kg dry	
Selenium	02/09/2018	EPA 6010 C	18.2	<18.2	mg/kg dry	3.E, 4.C, 4.M
Silver	02/09/2018	EPA 6010 C	18.2	<18.2	mg/kg dry	3.E
Zinc	02/09/2018	EPA 6010 C	18.2	2590	mg/kg dry	3.E

Date Prepared: 02/08/2018 Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	02/08/2018	EPA 7196 A	0.542	<0.542	mg/kg dry	

Date Prepared: 02/08/2018 Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	02/09/2018	EPA 7471 B	0.02	0.21	mg/kg dry	

Date Prepared: 02/09/2018 Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	02/12/2018	EPA 9014	0.22	<0.22	mg/kg dry	

Date Prepared: 02/08/2018 Preparation Method: Distillation Prep

Data Qualifiers Key Reference:

3.A	Reporting limit raised due to matrix interfernce.
3.E	Compound reported at a dilution factor.
4.C	Target compound found in blank.
4.M	LCS recovery was above QC acceptance limit.
4.N	LCS recovery was below QC acceptance limit.
5.L	Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.
MDL	Minimum Detection Limit
LOQ	Limit of Quantitation

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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS: GCI Parkway 7092 Motor Hauppauge N.Y. 11788
CONTACT: T. Smyth
PHONE: 851 1655
EMAIL:
SAMPLER (SIGNATURE): Tim Smyth
SAMPLER NAME (PRINT): Tim Smyth
SAMPLE(S) SEALED: YES / NO
CORRECT CONTAINER(S): YES / NO
8020753
PROJECT LOCATION: 84 N. Village Ave Rockville Centre
SAMPLES RECEIVED AT: 1.1 °C

TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month. Tendering of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms

LABORATORY ID # (For Laboratory Use Only)	MATRIX	TYPE	pH	RES. CHLORINE	PRES.	DATE	TIME	SAMPLE # LOCATION	ANALYSIS REQUIRED: Part 375 VOC	Part 375 SVOC	Part 375 Metals	# OF CONTAINERS
1. 8020753-01	S	C			1	2-7-18	1:30 pm	Sump Pit	X	X	X	3
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												

RUSH!

MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WIPE; PC=PAINT CHIPS; BM= BULK MATERIAL, O=OIL, WW=WASTE WATER
TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON
PRES: (1) ICE; (2) HCL; (3) H_2SO_4; (4) NAOH; (5) $NA_2S_3O_3$; (6) HNO_3; (7) OTHER

TURNAROUND REQUIRED: ☐ NORMAL ☑ STAT BY 2/12/18

COMMENTS / INSTRUCTIONS: 72 HR RUSH!!

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY (SIGNATURE)	DATE / TIME	PRINTED NAME
Tim Smyth	2-7-18 4:10 pm	Tim Smyth			
RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE 2-7-18 TIME 16:10	PRINTED NAME Kelley Kavanagh

WHITE - OFFICE / CANARY - CLIENT

LONG ISLAND ANALYTICAL LABORATORIES INC.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"

Laboratory Report

NYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 8020622

February 08, 2018

GCI
Tom Smyth
1092 Motor Parkway
Hauppauge, NY 11788

Re: 84 N. Village Ave. Rockville Centre

Dear Tom Smyth,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on February 06, 2018. Long Island Analytical laboratories analyzed the samples on February 07, 2018 for the following:

SAMPLE ID	ANALYSIS
MW-2	NYC Part 375 (Volatile)

Samples received at 1.0 ° C

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.

Michael Veraldi - Laboratory Director

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 14:00	Sample ID: MW-2
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020622-01
Matrix: Non-Potable Water	ELAP: #11693

Volatiles Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	5.00	<5.00	ug/L	
1,1-Dichloroethane	75-34-3	5.00	<5.00	ug/L	
1,1-Dichloroethylene	75-35-4	5.00	<5.00	ug/L	
1,2,4-Trimethylbenzene	95-63-6	5.00	<5.00	ug/L	
1,2-Dichlorobenzene	95-50-1	5.00	<5.00	ug/L	
1,2-Dichloroethane	107-06-2	5.00	<5.00	ug/L	
1,3,5-Trimethylbenzene	108-67-8	5.00	<5.00	ug/L	
1,3-Dichlorobenzene	541-73-1	5.00	<5.00	ug/L	
1,4-Dichlorobenzene	106-46-7	5.00	<5.00	ug/L	
Acetone	67-64-1	10.0	<10.0	ug/L	4.K, 4.M
Benzene	71-43-2	0.700	<0.700	ug/L	
Carbon Tetrachloride	56-23-5	5.00	<5.00	ug/L	
Chlorobenzene	108-90-7	5.00	<5.00	ug/L	
Chloroform	67-66-3	5.00	<5.00	ug/L	
cis-1,2-Dichloroethylene	156-59-2	5.00	<5.00	ug/L	
Ethylbenzene	100-41-4	5.00	<5.00	ug/L	
m,p-Xylenes	108-38-3/106-42-3	10.0	<10.0	ug/L	
Methyl Acetate	79-20-9	5.00	<5.00	ug/L	4.K, 4.M
Methyl Ethyl Ketone (2-Butanone)	78-93-3	10.0	<10.0	ug/L	4.K, 4.M
Methylene Chloride	75-09-2	5.00	<5.00	ug/L	4.K, 4.M
Methyl-tert-Butyl Ether	1634-04-4	5.00	<5.00	ug/L	
n-Butylbenzene	104-51-8	5.00	<5.00	ug/L	
n-Propylbenzene	103-65-1	5.00	<5.00	ug/L	
o-Xylene	95-47-6	5.00	<5.00	ug/L	
sec-Butylbenzene	135-98-8	5.00	<5.00	ug/L	
tert-Butyl alcohol	75-65-0	5.00	<5.00	ug/L	4.K, 4.M
tert-Butylbenzene	98-06-6	5.00	<5.00	ug/L	
Tetrachloroethylene	127-18-4	5.00	<5.00	ug/L	
Toluene	108-88-3	5.00	<5.00	ug/L	
trans-1,2-Dichloroethylene	156-60-5	5.00	<5.00	ug/L	

Client: GCI	Client ID: 84 N. Village Ave. Rockville Centre
Date (Time) Collected: 02/06/2018 14:00	Sample ID: MW-2
Date (Time) Received: 02/06/2018 17:00	Laboratory ID: 8020622-01
Matrix: Non-Potable Water	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Trichloroethylene	79-01-6	5.00	<5.00	ug/L	
Vinyl chloride	75-01-4	5.00	<5.00	ug/L	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	109	74.4-131	
4-Bromofluorobenzene	460-00-4	103	82.3-134	
Dibromofluoromethane	1868-53-7	113	79.4-122	
Toluene-d8	2037-26-5	99	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	85	50-200	
1,4-Difluorobenzene	540-36-3	95	50-200	
Chlorobenzene-d5	3114-55-4	93	50-200	
Pentafluorobenzene	363-72-4	95	50-200	

Date Prepared: 02/07/2018

Preparation Method: EPA 5035A-H

Date Analyzed: 02/07/2018

Analytical Method: EPA 8260 C

Data Qualifiers Key Reference:

4.K Continuing Calibration Verification (CCV) quality control levels failed high, values are considered to be estimated.

4.M LCS recovery was above QC acceptance limit.

MDL Minimum Detection Limit

LOQ Limit of Quantitation

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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS: GCI, 1092 Motor Parkway, Hauppauge N.Y. 11788

CONTACT: T. Smyth

PHONE: 851-1600

EMAIL:

SAMPLER (SIGNATURE): Tim Smyth

SAMPLER NAME (PRINT): Tim Smyth

SAMPLE(S) SEALED: YES / NO

CORRECT CONTAINER(S): YES / NO

8020622

PROJECT LOCATION: 84 N. Village Ave. Rockville Centre

SAMPLES RECEIVED AT: 1.0 °C

TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month. Tendering of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms

LABORATORY ID # (For Laboratory Use Only)	MATRIX	TYPE	PH	RES. CHLORINE	PRES.	DATE	TIME	SAMPLE # LOCATION	ANALYSIS REQUIRED: Voc 8260	# OF CONTAINERS
1. 8020622-01	WW	G			1	2-6-18	2PM	MW-2	X	4
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										

MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WIPE; PC=PAINT CHIPS; BM= BULK MATERIAL, O=OIL, WW=WASTE WATER

TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON

PRES: (1) ICE; (2) HCL; (3) H_2SO_4; (4) NAOH; (5) $NA_2S_3O_3$; (6) HNO_3; (7) OTHER

TURNAROUND REQUIRED: ☑ NORMAL ☑ STAT BY 2/12/18

COMMENTS / INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY (SIGNATURE)	DATE / TIME	PRINTED NAME
Tim Smyth	2-6-18 / 2PM	Tim Smyth			
RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE / TIME	PRINTED NAME
			Kelley Kavanaugh	2-6-18 / 17:00	Kelley Kavanaugh

WHITE - OFFICE / CANARY - CLIENT

SITE PHOTOGRAPHS

1. View of subject site from North Village Avenue.

2. View of south driveway of subject site.

3. View of rear / west parking area.

4. View of drywell DW-1 and trenching for piping.

5. View of monitoring well located on the south side of subject site.

6. View of monitoring well.

7. View of rear stairwell and floor drain.

8. View of stairwell floor drain and dye test from interior drain (bucket).

9. View of dye test of wastewater sink in basement.

10. View of dye present in municipal sewer line in North Village Avenue.

11. View of dye present in municipal sewer line in North Village Avenue.

12. View of sump pit in basement.

13. View of sump pit in basement.

14. View of sump pit in basement.

15. View of boiler pit in basement.

16. View of boiler pit in baseemnt.

APPENDIX C
COMMUNITY AIR MONITORING PLAN RESULTS

db TRC
A Joint Venture

Date: 3/22/2018

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS
Project Number: 279191.0000
Instrument: Dustrak II and Minirae 3000
Recorded by: James Robinson
Calibration Date: 3/22/2018
Weather Conditions: Overcast, snow cover 5in wind 0-2mph SSW, 32°F

Time	Location	Wind Speed and Direction	Reading	Observations
0810	20' SE of Stairwell entrance	SSW 0-2mph	0.0ppm / 0.014 mg/kg	CAMP Started
	↓	↓		
1010	" "	" "	1.8ppm / 0.007mg/kg	High humidity likely affecting PID with normal deflections (snow near 40°F + sunny)
1135	" "	" "		→ Discontinue CAMP; work finished

Recording Procedures/Remarks:

D&B_AMF/kb

Rev. 03/09/98

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db TRC
A Joint Venture

Date: 3/23/18

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS
Project Number: 279191.0000
Recorded by: James Robinson
Instrument: Dustrak II and Minirae 3000
Calibration Date: 3/23/18
Weather Conditions: Slightly overcast, 33°F, Dry

Time	Location	Wind Speed and Direction	Reading	Observations
0740	WSW of garage	WSW 0-2 mph	0.0ppm / 0.018 mg/kg	Start Camp
				background = 0.018 mg/kg + 0.0 ppm
1100	" "	NE- 0-2 mph	[redacted]	[redacted]
				logging PID
1320	" "	" "	0.0ppm / 0.010 mg/kg	Discontinue CAMP
			[redacted]	

Recording Procedures/Remarks:

D&B_AMF/kb

Rev. 03/09/98

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db TRC
A Joint Venture

Date: 3/26/2018

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS

Project Number: 279191.0000 Instrument: Dustrak II and Minirae 3000

Recorded by: James Robinson Calibration Date: 3/26/2018

Weather Conditions: Clear, 30°F, 2mph SSW

Time	Location	Wind Speed and Direction	background ↓ Reading	Observations
0725	± 40' NW of drill rig	2mph SSW (cannot have CAMP NE or drilling activities due to building obstruction	0.030 mg/kg / 0.3ppm	Begin CAMP logging
1400	" "	3-11 SSE	0.007 mg/kg 0.7ppm	AMRIO troubleshooting Geoprobe
1440	" "	" "		End CAMP

Recording Procedures/Remarks:

D&B_AMF/kb

Rev. 03/09/98

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db TRC
A Joint Venture

Date: 3/28/18

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS

Project Number: 279191.0000

Instrument: Dustrak II and Minirae 3000

Recorded by: James Robinson

Calibration Date: 3/28/18

Weather Conditions: ~~Clear~~ Overcast, light rain, 38°F, wind 2-4 NNW
Local wind 0-2mph E

Time	Location	Wind Speed and Direction	Reading	Observations
0730	40' E of drill rig @ MW107D	0-2mph E	0.035mg/kg = background 0ppm	Began CAMP
1500	"	2-4 mph SE	—	End CAMP

Recording Procedures/Remarks:

D&B_AMF/kb

Rev. 03/09/98

Scanned by CamScanner

db TRC
A Joint Venture

Date: 4/5/2018

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS

Project Number: 279191.0000 Instrument: Dustrak II and Minirae 3000

Recorded by: James Robinson Calibration Date: 4/5/2018

Weather Conditions: Clear, 34°F wind 3-10mph N

Time	Location	Wind Speed and Direction	Reading	Observations
0725	40' SE of rig @ MW-1100 (across street)	3-10mph ; N	0.003mg/kg 0.0ppm	Begin CAMP
1345	Broke camp.			

Recording Procedures/Remarks:

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.7
Calibration Date	11/9/2017
Test Name	MANUAL_024
Test Start Time	7:21:13 AM
Test Start Date	4/5/2018
Test Length [D:H:M]	0:06:15
Test Interval [M:S]	15:00
Mass Average [mg/m3]	0.009
Mass Minimum [mg/m3]	0.006
Mass Maximum [mg/m3]	0.012
Mass TWA [mg/m3]	0.007
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	25

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
900	0.01		
1800	0.009		
2700	0.006		
3600	0.007		
4500	0.007		
5400	0.009		
6300	0.012		
7200	0.008		
8100	0.006		
9000	0.01		
9900	0.01		
10800	0.012		
11700	0.009		
12600	0.007		
13500	0.012		
14400	0.011		
15300	0.008		
16200	0.009		
17100	0.007		
18000	0.007		
18900	0.006		
19800	0.007		
20700	0.009		
21600	0.008		
22500	0.009		

==========

18/04/05 06:27

****

Summary

Unit Name	MiniRAE 3000(PGM-7320)
Unit SN	592-919932
Unit Firmware Ver	V2.14

Running Mode	Hygiene Mode
Datalog Mode	Manual
Diagnostic Mode	No
Stop Reason	Stop by User

Site ID	RAE00000
User ID	USER0000

Begin	4/5/2018 6:27
End	4/5/2018 12:48
Sample Period(s)	60
Number of Records	380

Sensor	PID(ppm)
Sensor SN	S023030028M7
Measure Type	Min; Avg; Max; Real
Span	100
Span 2	1000
Low Alarm	50
High Alarm	100
Over Alarm	15000
STEL Alarm	100
TWA Alarm	50
Measurement Gas	Isobutylene
Calibration Time	4/5/2018 6:10
Peak	0.3
Min	0.1
Average	0.2

****

Datalog

Index	Date/Time	PID(ppm) (Min)	PID(ppm) (Avg)	PID(ppm) (Max)	PID(ppm) (Real)
1	4/5/2018 6:28	0.1	0.1	0.1	0.1
2	4/5/2018 6:29	0.1	0.1	0.1	0.1
3	4/5/2018 6:30	0.1	0.1	0.1	0.1
4	4/5/2018 6:31	0.1	0.1	0.1	0.1
5	4/5/2018 6:32	0.1	0.1	0.1	0.1

6	4/5/2018 6:33	0.1	0.1	0.1	0.1
7	4/5/2018 6:34	0.1	0.1	0.1	0.1
8	4/5/2018 6:35	0.1	0.1	0.1	0.1
9	4/5/2018 6:36	0.1	0.1	0.1	0.1
10	4/5/2018 6:37	0.1	0.1	0.1	0.1
11	4/5/2018 6:38	0.1	0.1	0.1	0.1
12	4/5/2018 6:39	0.1	0.1	0.1	0.1
13	4/5/2018 6:40	0.1	0.1	0.1	0.1
14	4/5/2018 6:41	0.1	0.1	0.2	0.1
15	4/5/2018 6:42	0.1	0.1	0.1	0.1
16	4/5/2018 6:43	0.1	0.1	0.2	0.1
17	4/5/2018 6:44	0.1	0.1	0.1	0.1
18	4/5/2018 6:45	0.1	0.1	0.1	0.1
19	4/5/2018 6:46	0.1	0.1	0.2	0.2
20	4/5/2018 6:47	0.1	0.1	0.2	0.1
21	4/5/2018 6:48	0.1	0.1	0.1	0.1
22	4/5/2018 6:49	0.1	0.1	0.1	0.1
23	4/5/2018 6:50	0.1	0.1	0.1	0.1
24	4/5/2018 6:51	0.1	0.1	0.1	0.1
25	4/5/2018 6:52	0.1	0.1	0.1	0.1
26	4/5/2018 6:53	0.1	0.1	0.1	0.1
27	4/5/2018 6:54	0.1	0.1	0.2	0.1
28	4/5/2018 6:55	0.1	0.1	0.2	0.1
29	4/5/2018 6:56	0.1	0.1	0.1	0.1
30	4/5/2018 6:57	0.1	0.1	0.1	0.1
31	4/5/2018 6:58	0.1	0.1	0.1	0.1
32	4/5/2018 6:59	0.1	0.1	0.2	0.1
33	4/5/2018 7:00	0.1	0.1	0.1	0.1
34	4/5/2018 7:01	0.1	0.1	0.1	0.1
35	4/5/2018 7:02	0.1	0.1	0.1	0.1
36	4/5/2018 7:03	0.1	0.1	0.1	0.1
37	4/5/2018 7:04	0.1	0.1	0.2	0.1
38	4/5/2018 7:05	0.1	0.1	0.2	0.1
39	4/5/2018 7:06	0.1	0.1	0.2	0.1
40	4/5/2018 7:07	0.1	0.1	0.1	0.1
41	4/5/2018 7:08	0.1	0.1	0.1	0.1
42	4/5/2018 7:09	0.1	0.1	0.1	0.1
43	4/5/2018 7:10	0.1	0.1	0.2	0.1
44	4/5/2018 7:11	0.1	0.1	0.1	0.1
45	4/5/2018 7:12	0.1	0.1	0.1	0.1
46	4/5/2018 7:13	0.1	0.1	0.1	0.1
47	4/5/2018 7:14	0.1	0.1	0.2	0.1
48	4/5/2018 7:15	0.1	0.1	0.1	0.1
49	4/5/2018 7:16	0.1	0.1	0.1	0.1
50	4/5/2018 7:17	0.1	0.1	0.2	0.1
51	4/5/2018 7:18	0.1	0.2	0.2	0.1
52	4/5/2018 7:19	0.1	0.1	0.2	0.1

53	4/5/2018 7:20	0.1	0.2	0.3	0.1
54	4/5/2018 7:21	0.1	0.2	0.2	0.1
55	4/5/2018 7:22	0.1	0.1	0.2	0.1
56	4/5/2018 7:23	0.1	0.1	0.2	0.1
57	4/5/2018 7:24	0.1	0.1	0.2	0.1
58	4/5/2018 7:25	0.1	0.1	0.2	0.1
59	4/5/2018 7:26	0.1	0.2	0.2	0.1
60	4/5/2018 7:27	0.1	0.1	0.2	0.1
61	4/5/2018 7:28	0.1	0.1	0.2	0.1
62	4/5/2018 7:29	0.1	0.2	0.2	0.2
63	4/5/2018 7:30	0.2	0.2	0.2	0.2
64	4/5/2018 7:31	0.1	0.2	0.2	0.1
65	4/5/2018 7:32	0.1	0.1	0.2	0.1
66	4/5/2018 7:33	0.1	0.2	0.2	0.2
67	4/5/2018 7:34	0.1	0.2	0.2	0.2
68	4/5/2018 7:35	0.2	0.2	0.2	0.2
69	4/5/2018 7:36	0.2	0.2	0.2	0.2
70	4/5/2018 7:37	0.1	0.2	0.2	0.2
71	4/5/2018 7:38	0.1	0.1	0.2	0.1
72	4/5/2018 7:39	0.1	0.2	0.2	0.2
73	4/5/2018 7:40	0.1	0.1	0.2	0.2
74	4/5/2018 7:41	0.1	0.1	0.2	0.1
75	4/5/2018 7:42	0.1	0.2	0.3	0.2
76	4/5/2018 7:43	0.2	0.2	0.2	0.2
77	4/5/2018 7:44	0.2	0.2	0.2	0.2
78	4/5/2018 7:45	0.1	0.2	0.2	0.2
79	4/5/2018 7:46	0.2	0.2	0.2	0.2
80	4/5/2018 7:47	0.2	0.2	0.2	0.2
81	4/5/2018 7:48	0.1	0.2	0.2	0.2
82	4/5/2018 7:49	0.2	0.2	0.2	0.2
83	4/5/2018 7:50	0.1	0.2	0.2	0.1
84	4/5/2018 7:51	0.1	0.1	0.2	0.1
85	4/5/2018 7:52	0.1	0.2	0.2	0.2
86	4/5/2018 7:53	0.2	0.2	0.2	0.2
87	4/5/2018 7:54	0.2	0.2	0.2	0.2
88	4/5/2018 7:55	0.1	0.2	0.2	0.1
89	4/5/2018 7:56	0.1	0.2	0.2	0.2
90	4/5/2018 7:57	0.1	0.2	0.2	0.2
91	4/5/2018 7:58	0.1	0.2	0.2	0.2
92	4/5/2018 7:59	0.1	0.2	0.2	0.2
93	4/5/2018 8:00	0.1	0.2	0.2	0.1
94	4/5/2018 8:01	0.1	0.2	0.2	0.1
95	4/5/2018 8:02	0.1	0.1	0.1	0.1
96	4/5/2018 8:03	0.1	0.1	0.2	0.1
97	4/5/2018 8:04	0.1	0.2	0.2	0.2
98	4/5/2018 8:05	0.1	0.2	0.2	0.1
99	4/5/2018 8:06	0.1	0.2	0.2	0.1

100	4/5/2018 8:07	0.1	0.1	0.1	0.1
101	4/5/2018 8:08	0.1	0.1	0.2	0.1
102	4/5/2018 8:09	0.1	0.1	0.1	0.1
103	4/5/2018 8:10	0.1	0.1	0.2	0.2
104	4/5/2018 8:11	0.1	0.1	0.2	0.1
105	4/5/2018 8:12	0.1	0.1	0.2	0.1
106	4/5/2018 8:13	0.1	0.1	0.2	0.2
107	4/5/2018 8:14	0.1	0.2	0.3	0.2
108	4/5/2018 8:15	0.1	0.2	0.2	0.1
109	4/5/2018 8:16	0.1	0.2	0.2	0.2
110	4/5/2018 8:17	0.1	0.2	0.2	0.1
111	4/5/2018 8:18	0.1	0.1	0.1	0.1
112	4/5/2018 8:19	0.1	0.1	0.1	0.1
113	4/5/2018 8:20	0.1	0.1	0.2	0.1
114	4/5/2018 8:21	0.1	0.1	0.1	0.1
115	4/5/2018 8:22	0.1	0.1	0.1	0.1
116	4/5/2018 8:23	0.1	0.1	0.1	0.1
117	4/5/2018 8:24	0.1	0.1	0.1	0.1
118	4/5/2018 8:25	0.1	0.1	0.1	0.1
119	4/5/2018 8:26	0.1	0.1	0.1	0.1
120	4/5/2018 8:27	0.1	0.1	0.1	0.1
121	4/5/2018 8:28	0.1	0.1	0.1	0.1
122	4/5/2018 8:29	0.1	0.1	0.1	0.1
123	4/5/2018 8:30	0.1	0.1	0.1	0.1
124	4/5/2018 8:31	0.1	0.1	0.1	0.1
125	4/5/2018 8:32	0.1	0.1	0.1	0.1
126	4/5/2018 8:33	0.1	0.1	0.2	0.2
127	4/5/2018 8:34	0.1	0.1	0.2	0.1
128	4/5/2018 8:35	0.1	0.1	0.1	0.1
129	4/5/2018 8:36	0.1	0.1	0.1	0.1
130	4/5/2018 8:37	0.1	0.1	0.1	0.1
131	4/5/2018 8:38	0.1	0.1	0.1	0.1
132	4/5/2018 8:39	0.1	0.1	0.2	0.1
133	4/5/2018 8:40	0.1	0.1	0.1	0.1
134	4/5/2018 8:41	0.1	0.1	0.2	0.1
135	4/5/2018 8:42	0.1	0.1	0.2	0.1
136	4/5/2018 8:43	0.1	0.1	0.2	0.2
137	4/5/2018 8:44	0.1	0.1	0.2	0.1
138	4/5/2018 8:45	0.1	0.1	0.1	0.1
139	4/5/2018 8:46	0.1	0.1	0.2	0.2
140	4/5/2018 8:47	0.1	0.2	0.2	0.2
141	4/5/2018 8:48	0.1	0.2	0.2	0.1
142	4/5/2018 8:49	0.1	0.1	0.2	0.1
143	4/5/2018 8:50	0.1	0.1	0.1	0.1
144	4/5/2018 8:51	0.1	0.1	0.2	0.1
145	4/5/2018 8:52	0.1	0.1	0.1	0.1
146	4/5/2018 8:53	0.1	0.2	0.2	0.1

147	4/5/2018 8:54	0.1	0.1	0.1	0.1
148	4/5/2018 8:55	0.1	0.1	0.2	0.1
149	4/5/2018 8:56	0.1	0.1	0.2	0.1
150	4/5/2018 8:57	0.1	0.1	0.2	0.1
151	4/5/2018 8:58	0.1	0.2	0.2	0.1
152	4/5/2018 8:59	0.1	0.1	0.2	0.2
153	4/5/2018 9:00	0.1	0.1	0.2	0.2
154	4/5/2018 9:01	0.1	0.2	0.2	0.2
155	4/5/2018 9:02	0.1	0.2	0.2	0.1
156	4/5/2018 9:03	0.1	0.1	0.2	0.1
157	4/5/2018 9:04	0.1	0.1	0.2	0.1
158	4/5/2018 9:05	0.1	0.1	0.1	0.1
159	4/5/2018 9:06	0.1	0.1	0.2	0.1
160	4/5/2018 9:07	0.1	0.1	0.1	0.1
161	4/5/2018 9:08	0.1	0.2	0.2	0.2
162	4/5/2018 9:09	0.1	0.2	0.2	0.2
163	4/5/2018 9:10	0.1	0.1	0.2	0.1
164	4/5/2018 9:11	0.1	0.2	0.2	0.1
165	4/5/2018 9:12	0.1	0.2	0.2	0.1
166	4/5/2018 9:13	0.1	0.1	0.2	0.2
167	4/5/2018 9:14	0.1	0.2	0.2	0.1
168	4/5/2018 9:15	0.1	0.1	0.2	0.1
169	4/5/2018 9:16	0.1	0.2	0.2	0.2
170	4/5/2018 9:17	0.1	0.2	0.2	0.1
171	4/5/2018 9:18	0.1	0.2	0.3	0.2
172	4/5/2018 9:19	0.2	0.2	0.2	0.2
173	4/5/2018 9:20	0.1	0.2	0.2	0.1
174	4/5/2018 9:21	0.1	0.2	0.2	0.1
175	4/5/2018 9:22	0.1	0.2	0.2	0.1
176	4/5/2018 9:23	0.1	0.1	0.2	0.2
177	4/5/2018 9:24	0.1	0.2	0.2	0.1
178	4/5/2018 9:25	0.1	0.1	0.2	0.1
179	4/5/2018 9:26	0.1	0.2	0.2	0.1
180	4/5/2018 9:27	0.1	0.2	0.2	0.1
181	4/5/2018 9:28	0.1	0.2	0.2	0.2
182	4/5/2018 9:29	0.1	0.2	0.2	0.2
183	4/5/2018 9:30	0.1	0.2	0.2	0.2
184	4/5/2018 9:31	0.1	0.2	0.2	0.1
185	4/5/2018 9:32	0.1	0.1	0.2	0.2
186	4/5/2018 9:33	0.1	0.2	0.2	0.2
187	4/5/2018 9:34	0.1	0.2	0.2	0.1
188	4/5/2018 9:35	0.1	0.2	0.2	0.2
189	4/5/2018 9:36	0.1	0.2	0.2	0.1
190	4/5/2018 9:37	0.1	0.1	0.2	0.1
191	4/5/2018 9:38	0.1	0.2	0.2	0.1
192	4/5/2018 9:39	0.1	0.2	0.2	0.1
193	4/5/2018 9:40	0.1	0.2	0.2	0.2

194	4/5/2018 9:41	0.1	0.2	0.2	0.1
195	4/5/2018 9:42	0.1	0.1	0.2	0.2
196	4/5/2018 9:43	0.1	0.2	0.2	0.1
197	4/5/2018 9:44	0.1	0.2	0.2	0.1
198	4/5/2018 9:45	0.1	0.2	0.2	0.1
199	4/5/2018 9:46	0.1	0.1	0.2	0.2
200	4/5/2018 9:47	0.1	0.1	0.2	0.1
201	4/5/2018 9:48	0.1	0.1	0.1	0.1
202	4/5/2018 9:49	0.1	0.1	0.1	0.1
203	4/5/2018 9:50	0.1	0.1	0.2	0.1
204	4/5/2018 9:51	0.1	0.1	0.1	0.1
205	4/5/2018 9:52	0.1	0.2	0.2	0.2
206	4/5/2018 9:53	0.2	0.2	0.2	0.2
207	4/5/2018 9:54	0.2	0.2	0.2	0.2
208	4/5/2018 9:55	0.2	0.2	0.2	0.2
209	4/5/2018 9:56	0.1	0.2	0.3	0.2
210	4/5/2018 9:57	0.1	0.2	0.2	0.2
211	4/5/2018 9:58	0.2	0.2	0.3	0.2
212	4/5/2018 9:59	0.2	0.2	0.3	0.2
213	4/5/2018 10:00	0.2	0.2	0.3	0.2
214	4/5/2018 10:01	0.2	0.2	0.2	0.2
215	4/5/2018 10:02	0.1	0.2	0.2	0.2
216	4/5/2018 10:03	0.2	0.2	0.2	0.2
217	4/5/2018 10:04	0.2	0.2	0.3	0.2
218	4/5/2018 10:05	0.1	0.2	0.2	0.2
219	4/5/2018 10:06	0.1	0.2	0.2	0.2
220	4/5/2018 10:07	0.1	0.2	0.2	0.1
221	4/5/2018 10:08	0.1	0.1	0.2	0.1
222	4/5/2018 10:09	0.1	0.2	0.2	0.2
223	4/5/2018 10:10	0.2	0.2	0.2	0.2
224	4/5/2018 10:11	0.2	0.2	0.2	0.2
225	4/5/2018 10:12	0.2	0.2	0.2	0.2
226	4/5/2018 10:13	0.1	0.2	0.2	0.2
227	4/5/2018 10:14	0.1	0.2	0.2	0.2
228	4/5/2018 10:15	0.1	0.2	0.2	0.1
229	4/5/2018 10:16	0.1	0.2	0.2	0.1
230	4/5/2018 10:17	0.1	0.2	0.2	0.2
231	4/5/2018 10:18	0.1	0.2	0.2	0.1
232	4/5/2018 10:19	0.1	0.2	0.2	0.2
233	4/5/2018 10:20	0.1	0.1	0.2	0.1
234	4/5/2018 10:21	0.1	0.2	0.2	0.2
235	4/5/2018 10:22	0.1	0.2	0.2	0.1
236	4/5/2018 10:23	0.1	0.2	0.2	0.2
237	4/5/2018 10:24	0.1	0.2	0.2	0.2
238	4/5/2018 10:25	0.1	0.2	0.2	0.2
239	4/5/2018 10:26	0.1	0.2	0.2	0.2
240	4/5/2018 10:27	0.2	0.2	0.2	0.2

241	4/5/2018 10:28	0.1	0.2	0.3	0.2
242	4/5/2018 10:29	0.1	0.2	0.2	0.2
243	4/5/2018 10:30	0.1	0.2	0.2	0.2
244	4/5/2018 10:31	0.1	0.2	0.2	0.2
245	4/5/2018 10:32	0.2	0.2	0.3	0.2
246	4/5/2018 10:33	0.1	0.2	0.2	0.2
247	4/5/2018 10:34	0.1	0.2	0.2	0.2
248	4/5/2018 10:35	0.2	0.2	0.2	0.2
249	4/5/2018 10:36	0.2	0.2	0.2	0.2
250	4/5/2018 10:37	0.2	0.2	0.2	0.2
251	4/5/2018 10:38	0.2	0.2	0.2	0.2
252	4/5/2018 10:39	0.2	0.2	0.2	0.2
253	4/5/2018 10:40	0.2	0.2	0.2	0.2
254	4/5/2018 10:41	0.2	0.2	0.2	0.2
255	4/5/2018 10:42	0.2	0.2	0.2	0.2
256	4/5/2018 10:43	0.2	0.2	0.2	0.2
257	4/5/2018 10:44	0.2	0.2	0.2	0.2
258	4/5/2018 10:45	0.2	0.2	0.2	0.2
259	4/5/2018 10:46	0.2	0.2	0.2	0.2
260	4/5/2018 10:47	0.2	0.2	0.2	0.2
261	4/5/2018 10:48	0.2	0.2	0.2	0.2
262	4/5/2018 10:49	0.2	0.2	0.2	0.2
263	4/5/2018 10:50	0.2	0.2	0.2	0.2
264	4/5/2018 10:51	0.2	0.2	0.2	0.2
265	4/5/2018 10:52	0.2	0.2	0.2	0.2
266	4/5/2018 10:53	0.2	0.2	0.3	0.2
267	4/5/2018 10:54	0.2	0.2	0.2	0.2
268	4/5/2018 10:55	0.2	0.2	0.2	0.2
269	4/5/2018 10:56	0.2	0.2	0.2	0.2
270	4/5/2018 10:57	0.2	0.2	0.2	0.2
271	4/5/2018 10:58	0.2	0.2	0.2	0.2
272	4/5/2018 10:59	0.2	0.2	0.2	0.2
273	4/5/2018 11:00	0.2	0.2	0.2	0.2
274	4/5/2018 11:01	0.2	0.2	0.2	0.2
275	4/5/2018 11:02	0.2	0.2	0.2	0.2
276	4/5/2018 11:03	0.2	0.2	0.2	0.2
277	4/5/2018 11:04	0.2	0.2	0.2	0.2
278	4/5/2018 11:05	0.2	0.2	0.2	0.2
279	4/5/2018 11:06	0.2	0.2	0.2	0.2
280	4/5/2018 11:07	0.2	0.2	0.2	0.2
281	4/5/2018 11:08	0.2	0.2	0.2	0.2
282	4/5/2018 11:09	0.2	0.2	0.2	0.2
283	4/5/2018 11:10	0.2	0.2	0.2	0.2
284	4/5/2018 11:11	0.2	0.2	0.2	0.2
285	4/5/2018 11:12	0.2	0.2	0.2	0.2
286	4/5/2018 11:13	0.2	0.2	0.2	0.2
287	4/5/2018 11:14	0.2	0.2	0.2	0.2

288	4/5/2018 11:15	0.2	0.2	0.2	0.2
289	4/5/2018 11:16	0.2	0.2	0.2	0.2
290	4/5/2018 11:17	0.2	0.2	0.2	0.2
291	4/5/2018 11:18	0.2	0.2	0.2	0.2
292	4/5/2018 11:19	0.2	0.2	0.2	0.2
293	4/5/2018 11:20	0.2	0.2	0.2	0.2
294	4/5/2018 11:21	0.2	0.2	0.2	0.2
295	4/5/2018 11:22	0.2	0.2	0.2	0.2
296	4/5/2018 11:23	0.2	0.2	0.2	0.2
297	4/5/2018 11:24	0.2	0.2	0.2	0.2
298	4/5/2018 11:25	0.2	0.2	0.2	0.2
299	4/5/2018 11:26	0.2	0.2	0.2	0.2
300	4/5/2018 11:27	0.2	0.2	0.2	0.2
301	4/5/2018 11:28	0.2	0.2	0.2	0.2
302	4/5/2018 11:29	0.2	0.2	0.2	0.2
303	4/5/2018 11:30	0.2	0.2	0.2	0.2
304	4/5/2018 11:31	0.2	0.2	0.2	0.2
305	4/5/2018 11:32	0.2	0.2	0.2	0.2
306	4/5/2018 11:33	0.2	0.2	0.2	0.2
307	4/5/2018 11:34	0.2	0.2	0.2	0.2
308	4/5/2018 11:35	0.2	0.2	0.2	0.2
309	4/5/2018 11:36	0.2	0.2	0.2	0.2
310	4/5/2018 11:37	0.2	0.2	0.2	0.2
311	4/5/2018 11:38	0.2	0.2	0.2	0.2
312	4/5/2018 11:39	0.2	0.2	0.2	0.2
313	4/5/2018 11:40	0.2	0.2	0.2	0.2
314	4/5/2018 11:41	0.2	0.2	0.2	0.2
315	4/5/2018 11:42	0.2	0.2	0.2	0.2
316	4/5/2018 11:43	0.2	0.2	0.2	0.2
317	4/5/2018 11:44	0.2	0.2	0.2	0.2
318	4/5/2018 11:45	0.2	0.2	0.2	0.2
319	4/5/2018 11:46	0.2	0.2	0.2	0.2
320	4/5/2018 11:47	0.2	0.2	0.2	0.2
321	4/5/2018 11:48	0.2	0.2	0.2	0.2
322	4/5/2018 11:49	0.2	0.2	0.2	0.2
323	4/5/2018 11:50	0.2	0.2	0.2	0.2
324	4/5/2018 11:51	0.2	0.2	0.2	0.2
325	4/5/2018 11:52	0.2	0.2	0.2	0.2
326	4/5/2018 11:53	0.2	0.2	0.2	0.2
327	4/5/2018 11:54	0.2	0.2	0.2	0.2
328	4/5/2018 11:55	0.2	0.2	0.2	0.2
329	4/5/2018 11:56	0.2	0.2	0.2	0.2
330	4/5/2018 11:57	0.2	0.2	0.2	0.2
331	4/5/2018 11:58	0.2	0.2	0.2	0.2
332	4/5/2018 11:59	0.2	0.2	0.2	0.2
333	4/5/2018 12:00	0.2	0.2	0.2	0.2
334	4/5/2018 12:01	0.2	0.2	0.2	0.2

	335	4/5/2018 12:02	0.2	0.2	0.2	0.2
	336	4/5/2018 12:03	0.2	0.2	0.3	0.2
	337	4/5/2018 12:04	0.2	0.2	0.2	0.2
	338	4/5/2018 12:05	0.2	0.2	0.2	0.2
	339	4/5/2018 12:06	0.2	0.2	0.2	0.2
	340	4/5/2018 12:07	0.2	0.2	0.3	0.2
	341	4/5/2018 12:08	0.2	0.2	0.3	0.2
	342	4/5/2018 12:09	0.2	0.2	0.3	0.2
	343	4/5/2018 12:10	0.2	0.2	0.3	0.3
	344	4/5/2018 12:11	0.2	0.2	0.3	0.2
	345	4/5/2018 12:12	0.2	0.2	0.3	0.2
	346	4/5/2018 12:13	0.2	0.2	0.3	0.2
	347	4/5/2018 12:14	0.2	0.2	0.3	0.2
	348	4/5/2018 12:15	0.2	0.2	0.2	0.2
	349	4/5/2018 12:16	0.2	0.2	0.2	0.2
	350	4/5/2018 12:17	0.2	0.2	0.2	0.2
	351	4/5/2018 12:18	0.2	0.2	0.2	0.2
	352	4/5/2018 12:19	0.2	0.2	0.2	0.2
	353	4/5/2018 12:20	0.2	0.2	0.2	0.2
	354	4/5/2018 12:21	0.2	0.2	0.3	0.3
	355	4/5/2018 12:22	0.2	0.2	0.3	0.2
	356	4/5/2018 12:23	0.2	0.2	0.2	0.2
	357	4/5/2018 12:24	0.2	0.2	0.2	0.2
	358	4/5/2018 12:25	0.2	0.2	0.2	0.2
	359	4/5/2018 12:26	0.2	0.2	0.2	0.2
	360	4/5/2018 12:27	0.2	0.2	0.2	0.2
	361	4/5/2018 12:28	0.2	0.2	0.2	0.2
	362	4/5/2018 12:29	0.2	0.2	0.3	0.2
	363	4/5/2018 12:30	0.2	0.2	0.3	0.2
	364	4/5/2018 12:31	0.2	0.2	0.3	0.2
	365	4/5/2018 12:32	0.2	0.2	0.2	0.2
	366	4/5/2018 12:33	0.2	0.2	0.2	0.2
	367	4/5/2018 12:34	0.2	0.2	0.2	0.2
	368	4/5/2018 12:35	0.2	0.2	0.2	0.2
	369	4/5/2018 12:36	0.2	0.2	0.2	0.2
	370	4/5/2018 12:37	0.2	0.2	0.2	0.2
	371	4/5/2018 12:38	0.2	0.2	0.2	0.2
	372	4/5/2018 12:39	0.2	0.2	0.2	0.2
	373	4/5/2018 12:40	0.2	0.2	0.2	0.2
	374	4/5/2018 12:41	0.2	0.2	0.2	0.2
	375	4/5/2018 12:42	0.2	0.2	0.2	0.2
	376	4/5/2018 12:43	0.2	0.2	0.2	0.2
	377	4/5/2018 12:44	0.2	0.2	0.2	0.2
	378	4/5/2018 12:45	0.2	0.2	0.2	0.2
	379	4/5/2018 12:46	0.2	0.2	0.2	0.2
	380	4/5/2018 12:47	0.2	0.2	0.2	0.2
Peak			0.2	0.2	0.3	0.3

Min	0.1	0.1	0.1	0.1
Average	0.1	0.2	0.2	0.2

****

TWA/STEL

Index	Date/Time	PID(ppm) (TWA)	PID(ppm) (STEL)
1	4/5/2018 6:28	0	---
2	4/5/2018 6:29	0	---
3	4/5/2018 6:30	0	---
4	4/5/2018 6:31	0	---
5	4/5/2018 6:32	0	---
6	4/5/2018 6:33	0	---
7	4/5/2018 6:34	0	---
8	4/5/2018 6:35	0	---
9	4/5/2018 6:36	0	---
10	4/5/2018 6:37	0	---
11	4/5/2018 6:38	0	---
12	4/5/2018 6:39	0	---
13	4/5/2018 6:40	0	---
14	4/5/2018 6:41	0	---
15	4/5/2018 6:42	0	0.1
16	4/5/2018 6:43	0	0.1
17	4/5/2018 6:44	0	0.1
18	4/5/2018 6:45	0	0.1
19	4/5/2018 6:46	0	0.1
20	4/5/2018 6:47	0	0.1
21	4/5/2018 6:48	0	0.1
22	4/5/2018 6:49	0	0.1
23	4/5/2018 6:50	0	0.1
24	4/5/2018 6:51	0	0.1
25	4/5/2018 6:52	0	0.1
26	4/5/2018 6:53	0	0.1
27	4/5/2018 6:54	0	0.1
28	4/5/2018 6:55	0	0.1
29	4/5/2018 6:56	0	0.1
30	4/5/2018 6:57	0	0.1
31	4/5/2018 6:58	0	0.1
32	4/5/2018 6:59	0	0.1
33	4/5/2018 7:00	0	0.1
34	4/5/2018 7:01	0	0.1
35	4/5/2018 7:02	0	0.1
36	4/5/2018 7:03	0	0.1
37	4/5/2018 7:04	0	0.1
38	4/5/2018 7:05	0	0.1
39	4/5/2018 7:06	0	0.1
40	4/5/2018 7:07	0	0.1

41	4/5/2018 7:08	0	0.1
42	4/5/2018 7:09	0	0.1
43	4/5/2018 7:10	0	0.1
44	4/5/2018 7:11	0	0.1
45	4/5/2018 7:12	0	0.1
46	4/5/2018 7:13	0	0.1
47	4/5/2018 7:14	0	0.1
48	4/5/2018 7:15	0	0.1
49	4/5/2018 7:16	0	0.1
50	4/5/2018 7:17	0	0.1
51	4/5/2018 7:18	0	0.1
52	4/5/2018 7:19	0	0.1
53	4/5/2018 7:20	0	0.1
54	4/5/2018 7:21	0	0.1
55	4/5/2018 7:22	0	0.1
56	4/5/2018 7:23	0	0.1
57	4/5/2018 7:24	0	0.1
58	4/5/2018 7:25	0	0.1
59	4/5/2018 7:26	0	0.1
60	4/5/2018 7:27	0	0.1
61	4/5/2018 7:28	0	0.1
62	4/5/2018 7:29	0	0.1
63	4/5/2018 7:30	0	0.1
64	4/5/2018 7:31	0	0.1
65	4/5/2018 7:32	0	0.1
66	4/5/2018 7:33	0	0.1
67	4/5/2018 7:34	0	0.1
68	4/5/2018 7:35	0	0.1
69	4/5/2018 7:36	0	0.1
70	4/5/2018 7:37	0	0.1
71	4/5/2018 7:38	0	0.1
72	4/5/2018 7:39	0	0.2
73	4/5/2018 7:40	0	0.2
74	4/5/2018 7:41	0	0.2
75	4/5/2018 7:42	0	0.2
76	4/5/2018 7:43	0	0.2
77	4/5/2018 7:44	0	0.2
78	4/5/2018 7:45	0	0.2
79	4/5/2018 7:46	0	0.2
80	4/5/2018 7:47	0	0.2
81	4/5/2018 7:48	0	0.2
82	4/5/2018 7:49	0	0.2
83	4/5/2018 7:50	0	0.2
84	4/5/2018 7:51	0	0.2
85	4/5/2018 7:52	0	0.2
86	4/5/2018 7:53	0	0.2
87	4/5/2018 7:54	0	0.2

88	4/5/2018 7:55	0	0.2
89	4/5/2018 7:56	0	0.2
90	4/5/2018 7:57	0	0.2
91	4/5/2018 7:58	0	0.2
92	4/5/2018 7:59	0	0.2
93	4/5/2018 8:00	0	0.2
94	4/5/2018 8:01	0	0.2
95	4/5/2018 8:02	0	0.2
96	4/5/2018 8:03	0	0.2
97	4/5/2018 8:04	0	0.2
98	4/5/2018 8:05	0	0.2
99	4/5/2018 8:06	0	0.2
100	4/5/2018 8:07	0	0.1
101	4/5/2018 8:08	0	0.1
102	4/5/2018 8:09	0	0.1
103	4/5/2018 8:10	0	0.1
104	4/5/2018 8:11	0	0.1
105	4/5/2018 8:12	0	0.1
106	4/5/2018 8:13	0	0.1
107	4/5/2018 8:14	0	0.1
108	4/5/2018 8:15	0	0.1
109	4/5/2018 8:16	0	0.1
110	4/5/2018 8:17	0	0.1
111	4/5/2018 8:18	0	0.1
112	4/5/2018 8:19	0	0.1
113	4/5/2018 8:20	0	0.1
114	4/5/2018 8:21	0	0.1
115	4/5/2018 8:22	0	0.1
116	4/5/2018 8:23	0	0.1
117	4/5/2018 8:24	0	0.1
118	4/5/2018 8:25	0	0.1
119	4/5/2018 8:26	0	0.1
120	4/5/2018 8:27	0	0.1
121	4/5/2018 8:28	0	0.1
122	4/5/2018 8:29	0	0.1
123	4/5/2018 8:30	0	0.1
124	4/5/2018 8:31	0	0.1
125	4/5/2018 8:32	0	0.1
126	4/5/2018 8:33	0	0.1
127	4/5/2018 8:34	0	0.1
128	4/5/2018 8:35	0	0.1
129	4/5/2018 8:36	0	0.1
130	4/5/2018 8:37	0	0.1
131	4/5/2018 8:38	0	0.1
132	4/5/2018 8:39	0	0.1
133	4/5/2018 8:40	0	0.1
134	4/5/2018 8:41	0	0.1

135	4/5/2018 8:42	0	0.1
136	4/5/2018 8:43	0	0.1
137	4/5/2018 8:44	0	0.1
138	4/5/2018 8:45	0	0.1
139	4/5/2018 8:46	0	0.1
140	4/5/2018 8:47	0	0.1
141	4/5/2018 8:48	0	0.1
142	4/5/2018 8:49	0	0.1
143	4/5/2018 8:50	0	0.1
144	4/5/2018 8:51	0	0.1
145	4/5/2018 8:52	0	0.1
146	4/5/2018 8:53	0	0.1
147	4/5/2018 8:54	0	0.1
148	4/5/2018 8:55	0	0.1
149	4/5/2018 8:56	0	0.1
150	4/5/2018 8:57	0	0.1
151	4/5/2018 8:58	0	0.1
152	4/5/2018 8:59	0	0.1
153	4/5/2018 9:00	0	0.1
154	4/5/2018 9:01	0	0.1
155	4/5/2018 9:02	0	0.1
156	4/5/2018 9:03	0	0.1
157	4/5/2018 9:04	0	0.1
158	4/5/2018 9:05	0	0.1
159	4/5/2018 9:06	0	0.1
160	4/5/2018 9:07	0	0.1
161	4/5/2018 9:08	0	0.1
162	4/5/2018 9:09	0	0.1
163	4/5/2018 9:10	0	0.1
164	4/5/2018 9:11	0	0.1
165	4/5/2018 9:12	0	0.1
166	4/5/2018 9:13	0	0.1
167	4/5/2018 9:14	0	0.1
168	4/5/2018 9:15	0	0.1
169	4/5/2018 9:16	0	0.1
170	4/5/2018 9:17	0	0.1
171	4/5/2018 9:18	0	0.1
172	4/5/2018 9:19	0	0.1
173	4/5/2018 9:20	0	0.1
174	4/5/2018 9:21	0	0.1
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177	4/5/2018 9:24	0	0.1
178	4/5/2018 9:25	0	0.1
179	4/5/2018 9:26	0	0.1
180	4/5/2018 9:27	0	0.1
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182	4/5/2018 9:29	0	0.1
183	4/5/2018 9:30	0	0.1
184	4/5/2018 9:31	0	0.1
185	4/5/2018 9:32	0	0.1
186	4/5/2018 9:33	0	0.1
187	4/5/2018 9:34	0	0.1
188	4/5/2018 9:35	0	0.1
189	4/5/2018 9:36	0	0.1
190	4/5/2018 9:37	0	0.1
191	4/5/2018 9:38	0.1	0.1
192	4/5/2018 9:39	0.1	0.1
193	4/5/2018 9:40	0.1	0.1
194	4/5/2018 9:41	0.1	0.1
195	4/5/2018 9:42	0.1	0.2
196	4/5/2018 9:43	0.1	0.1
197	4/5/2018 9:44	0.1	0.1
198	4/5/2018 9:45	0.1	0.1
199	4/5/2018 9:46	0.1	0.1
200	4/5/2018 9:47	0.1	0.1
201	4/5/2018 9:48	0.1	0.1
202	4/5/2018 9:49	0.1	0.1
203	4/5/2018 9:50	0.1	0.1
204	4/5/2018 9:51	0.1	0.1
205	4/5/2018 9:52	0.1	0.1
206	4/5/2018 9:53	0.1	0.1
207	4/5/2018 9:54	0.1	0.1
208	4/5/2018 9:55	0.1	0.1
209	4/5/2018 9:56	0.1	0.1
210	4/5/2018 9:57	0.1	0.1
211	4/5/2018 9:58	0.1	0.2
212	4/5/2018 9:59	0.1	0.2
213	4/5/2018 10:00	0.1	0.2
214	4/5/2018 10:01	0.1	0.2
215	4/5/2018 10:02	0.1	0.2
216	4/5/2018 10:03	0.1	0.2
217	4/5/2018 10:04	0.1	0.2
218	4/5/2018 10:05	0.1	0.2
219	4/5/2018 10:06	0.1	0.2
220	4/5/2018 10:07	0.1	0.2
221	4/5/2018 10:08	0.1	0.2
222	4/5/2018 10:09	0.1	0.2
223	4/5/2018 10:10	0.1	0.2
224	4/5/2018 10:11	0.1	0.2
225	4/5/2018 10:12	0.1	0.2
226	4/5/2018 10:13	0.1	0.2
227	4/5/2018 10:14	0.1	0.2
228	4/5/2018 10:15	0.1	0.2

229	4/5/2018 10:16	0.1	0.2
230	4/5/2018 10:17	0.1	0.2
231	4/5/2018 10:18	0.1	0.2
232	4/5/2018 10:19	0.1	0.2
233	4/5/2018 10:20	0.1	0.2
234	4/5/2018 10:21	0.1	0.2
235	4/5/2018 10:22	0.1	0.2
236	4/5/2018 10:23	0.1	0.2
237	4/5/2018 10:24	0.1	0.2
238	4/5/2018 10:25	0.1	0.2
239	4/5/2018 10:26	0.1	0.2
240	4/5/2018 10:27	0.1	0.2
241	4/5/2018 10:28	0.1	0.2
242	4/5/2018 10:29	0.1	0.2
243	4/5/2018 10:30	0.1	0.2
244	4/5/2018 10:31	0.1	0.2
245	4/5/2018 10:32	0.1	0.2
246	4/5/2018 10:33	0.1	0.2
247	4/5/2018 10:34	0.1	0.2
248	4/5/2018 10:35	0.1	0.2
249	4/5/2018 10:36	0.1	0.2
250	4/5/2018 10:37	0.1	0.2
251	4/5/2018 10:38	0.1	0.2
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254	4/5/2018 10:41	0.1	0.2
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256	4/5/2018 10:43	0.1	0.2
257	4/5/2018 10:44	0.1	0.2
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259	4/5/2018 10:46	0.1	0.2
260	4/5/2018 10:47	0.1	0.2
261	4/5/2018 10:48	0.1	0.2
262	4/5/2018 10:49	0.1	0.2
263	4/5/2018 10:50	0.1	0.2
264	4/5/2018 10:51	0.1	0.2
265	4/5/2018 10:52	0.1	0.2
266	4/5/2018 10:53	0.1	0.2
267	4/5/2018 10:54	0.1	0.2
268	4/5/2018 10:55	0.1	0.2
269	4/5/2018 10:56	0.1	0.2
270	4/5/2018 10:57	0.1	0.2
271	4/5/2018 10:58	0.1	0.2
272	4/5/2018 10:59	0.1	0.2
273	4/5/2018 11:00	0.1	0.2
274	4/5/2018 11:01	0.1	0.2
275	4/5/2018 11:02	0.1	0.2

276	4/5/2018 11:03	0.1	0.2
277	4/5/2018 11:04	0.1	0.2
278	4/5/2018 11:05	0.1	0.2
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281	4/5/2018 11:08	0.1	0.2
282	4/5/2018 11:09	0.1	0.2
283	4/5/2018 11:10	0.1	0.2
284	4/5/2018 11:11	0.1	0.2
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287	4/5/2018 11:14	0.1	0.2
288	4/5/2018 11:15	0.1	0.2
289	4/5/2018 11:16	0.1	0.2
290	4/5/2018 11:17	0.1	0.2
291	4/5/2018 11:18	0.1	0.2
292	4/5/2018 11:19	0.1	0.2
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294	4/5/2018 11:21	0.1	0.2
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304	4/5/2018 11:31	0.1	0.2
305	4/5/2018 11:32	0.1	0.2
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308	4/5/2018 11:35	0.1	0.2
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313	4/5/2018 11:40	0.1	0.2
314	4/5/2018 11:41	0.1	0.2
315	4/5/2018 11:42	0.1	0.2
316	4/5/2018 11:43	0.1	0.2
317	4/5/2018 11:44	0.1	0.2
318	4/5/2018 11:45	0.1	0.2
319	4/5/2018 11:46	0.1	0.2
320	4/5/2018 11:47	0.1	0.2
321	4/5/2018 11:48	0.1	0.2
322	4/5/2018 11:49	0.1	0.2

323	4/5/2018 11:50	0.1	0.2
324	4/5/2018 11:51	0.1	0.2
325	4/5/2018 11:52	0.1	0.2
326	4/5/2018 11:53	0.1	0.2
327	4/5/2018 11:54	0.1	0.2
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330	4/5/2018 11:57	0.1	0.2
331	4/5/2018 11:58	0.1	0.2
332	4/5/2018 11:59	0.1	0.2
333	4/5/2018 12:00	0.1	0.2
334	4/5/2018 12:01	0.1	0.2
335	4/5/2018 12:02	0.1	0.2
336	4/5/2018 12:03	0.1	0.2
337	4/5/2018 12:04	0.1	0.2
338	4/5/2018 12:05	0.1	0.2
339	4/5/2018 12:06	0.1	0.2
340	4/5/2018 12:07	0.1	0.2
341	4/5/2018 12:08	0.1	0.2
342	4/5/2018 12:09	0.1	0.2
343	4/5/2018 12:10	0.1	0.2
344	4/5/2018 12:11	0.1	0.2
345	4/5/2018 12:12	0.1	0.2
346	4/5/2018 12:13	0.1	0.2
347	4/5/2018 12:14	0.1	0.2
348	4/5/2018 12:15	0.1	0.2
349	4/5/2018 12:16	0.1	0.2
350	4/5/2018 12:17	0.1	0.2
351	4/5/2018 12:18	0.1	0.2
352	4/5/2018 12:19	0.1	0.2
353	4/5/2018 12:20	0.1	0.2
354	4/5/2018 12:21	0.1	0.2
355	4/5/2018 12:22	0.1	0.2
356	4/5/2018 12:23	0.1	0.2
357	4/5/2018 12:24	0.1	0.2
358	4/5/2018 12:25	0.1	0.2
359	4/5/2018 12:26	0.1	0.2
360	4/5/2018 12:27	0.1	0.2
361	4/5/2018 12:28	0.1	0.2
362	4/5/2018 12:29	0.1	0.2
363	4/5/2018 12:30	0.1	0.2
364	4/5/2018 12:31	0.1	0.2
365	4/5/2018 12:32	0.1	0.2
366	4/5/2018 12:33	0.1	0.2
367	4/5/2018 12:34	0.1	0.2
368	4/5/2018 12:35	0.1	0.2
369	4/5/2018 12:36	0.1	0.2

370	4/5/2018 12:37	0.1	0.2
371	4/5/2018 12:38	0.1	0.2
372	4/5/2018 12:39	0.1	0.2
373	4/5/2018 12:40	0.1	0.2
374	4/5/2018 12:41	0.1	0.2
375	4/5/2018 12:42	0.1	0.2
376	4/5/2018 12:43	0.1	0.2
377	4/5/2018 12:44	0.1	0.2
378	4/5/2018 12:45	0.1	0.2
379	4/5/2018 12:46	0.1	0.2
380	4/5/2018 12:47	0.1	0.2

Instrument Name	DustTrak II	
Model Number		8530
Serial Number		8530113202
Firmware Version		3.7
Calibration Date		11/9/2017
Test Name	MANUAL_001	
Test Start Time		7:04:17 AM
Test Start Date		4/6/2018
Test Length [D:H:M]		0:06:30
Test Interval [M:S]		15:00
Mass Average [mg/m3		0.031
Mass Minimum [mg/n		0.019
Mass Maximum [mg/r		0.052
Mass TWA [mg/m3]		0.025
Photometric User Cal		1
Flow User Cal		0
Errors		
Number of Samples		26

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
900	0.036		
1800	0.041		
2700	0.036		
3600	0.03		
4500	0.026		
5400	0.026		
6300	0.023		
7200	0.023		
8100	0.022		
9000	0.023		
9900	0.036		
10800	0.05		
11700	0.041		
12600	0.052		
13500	0.041		
14400	0.023		
15300	0.039		
16200	0.044		
17100	0.022		
18000	0.022		
18900	0.032		
19800	0.024		
20700	0.026		
21600	0.025		
22500	0.02		
23400	0.019		

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18/04/06 06:55

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Summary

Unit Name	MiniRAE 3000(PGM-7320)
Unit SN	592-919932
Unit Firmware Ver	V2.14

Running Mode	Hygiene Mode
Datalog Mode	Manual
Diagnostic Mode	No
Stop Reason	Stop by User

Site ID	RAE00000
User ID	USER0000

Begin	4/6/2018 6:55
End	4/6/2018 13:41
Sample Period(s)	900
Number of Records	27

Sensor	PID(ppm)
Sensor SN	S023030028M7
Measure Type	Min; Avg; Max; Real
Span	100
Span 2	1000
Low Alarm	50
High Alarm	100
Over Alarm	15000
STEL Alarm	100
TWA Alarm	50
Measurement Gas	Isobutylene
Calibration Time	4/6/2018 5:56
Peak	2.1
Min	0.6
Average	1.5

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Datalog

Index	Date/Time	PID(ppm) (Min)	PID(ppm) (Avg)	PID(ppm) (Max)	PID(ppm) (Real)
1	4/6/2018 7:10	0.5	0.8	2.4	0.6
2	4/6/2018 7:25	0.6	0.6	1.6	0.7
3	4/6/2018 7:40	0.3	1	2.9	1
4	4/6/2018 7:55	0.9	1.1	3.4	1
5	4/6/2018 8:10	1	1.1	3.1	1.1

6	4/6/2018 8:25	1.1	1.1	1.8	1.1
7	4/6/2018 8:40	1.1	1.2	2.3	1.3
8	4/6/2018 8:55	1.2	1.2	2.3	1.2
9	4/6/2018 9:10	1.2	1.3	2.2	1.2
10	4/6/2018 9:25	1.2	1.3	1.9	1.2
11	4/6/2018 9:40	1.2	1.3	2.4	1.2
12	4/6/2018 9:55	1.2	1.5	3	2.1
13	4/6/2018 10:10	1.3	1.6	3.7	1.5
14	4/6/2018 10:25	1.4	1.7	3.4	1.4
15	4/6/2018 10:40	1.4	1.7	3.1	1.5
16	4/6/2018 10:55	1.5	1.8	2.8	1.5
17	4/6/2018 11:10	1.5	1.5	1.9	1.9
18	4/6/2018 11:25	1.5	1.7	2.6	1.6
19	4/6/2018 11:40	1.6	1.7	3.2	1.6
20	4/6/2018 11:55	1.6	1.7	2.1	1.7
21	4/6/2018 12:10	1.6	1.7	2.1	1.7
22	4/6/2018 12:25	1.7	1.9	3.3	2.1
23	4/6/2018 12:40	1.8	2	3.4	1.8
24	4/6/2018 12:55	1.8	2	3.9	1.8
25	4/6/2018 13:10	1.8	1.9	3.3	1.9
26	4/6/2018 13:25	1.8	1.9	2.3	2
27	4/6/2018 13:40	1.9	1.9	2.4	2
Peak		1.9	2	3.9	2.1
Min		0.3	0.6	1.6	0.6
Average		1.3	1.5	2.7	1.5

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TWA/STEL

Index	Date/Time	PID(ppm) (TWA)	PID(ppm) (STEL)
1	4/6/2018 7:10	0	0.6
2	4/6/2018 7:25	0	0.7
3	4/6/2018 7:40	0.1	1
4	4/6/2018 7:55	0.1	1
5	4/6/2018 8:10	0.1	1.1
6	4/6/2018 8:25	0.2	1.1
7	4/6/2018 8:40	0.2	1.3
8	4/6/2018 8:55	0.3	1.2
9	4/6/2018 9:10	0.3	1.2
10	4/6/2018 9:25	0.3	1.2
11	4/6/2018 9:40	0.4	1.2
12	4/6/2018 9:55	0.4	2.1
13	4/6/2018 10:10	0.5	1.5
14	4/6/2018 10:25	0.5	1.4
15	4/6/2018 10:40	0.6	1.5
16	4/6/2018 10:55	0.6	1.5
17	4/6/2018 11:10	0.7	1.9

18	4/6/2018 11:25	0.7	1.6
19	4/6/2018 11:40	0.8	1.6
20	4/6/2018 11:55	0.8	1.7
21	4/6/2018 12:10	0.9	1.7
22	4/6/2018 12:25	0.9	2.1
23	4/6/2018 12:40	1	1.8
24	4/6/2018 12:55	1.1	1.8
25	4/6/2018 13:10	1.1	1.9
26	4/6/2018 13:25	1.2	2
27	4/6/2018 13:40	1.2	2

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18/04/08 06:10

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Summary

Unit Name	MiniRAE 3000(PGM-7320)
Unit SN	592-903790
Unit Firmware Ver	V2.14

Running Mode	Hygiene Mode
Datalog Mode	Manual
Diagnostic Mode	No
Stop Reason	Stop by User

Site ID	RAE00000
User ID	1

Begin	4/8/2018 6:10
End	4/8/2018 13:13
Sample Period(s)	60
Number of Records	423

Sensor	PID(ppm)
Sensor SN	S023030234T2
Measure Type	Min; Avg; Max; Real
Span	100
Span 2	1000
Low Alarm	50
High Alarm	100
Over Alarm	15000
STEL Alarm	100
TWA Alarm	50
Measurement Gas	Isobutylene
Calibration Time	4/8/2018 6:07
Peak	0.3
Min	0
Average	0

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Datalog

Index	Date/Time	PID(ppm) (Min)	PID(ppm) (Avg)	PID(ppm) (Max)	PID(ppm) (Real)
1	4/8/2018 6:11	0	0.1	0.2	0.2
2	4/8/2018 6:12	0.2	0.2	0.3	0.3
3	4/8/2018 6:13	0.2	0.2	0.4	0.2
4	4/8/2018 6:14	0.1	0.1	0.2	0.1
5	4/8/2018 6:15	0	0.1	0.1	0

6	4/8/2018 6:16	0	0	0.1	0
7	4/8/2018 6:17	0	0.1	0.1	0.1
8	4/8/2018 6:18	0.1	0.1	0.1	0.1
9	4/8/2018 6:19	0.1	0.1	0.1	0.1
10	4/8/2018 6:20	0.1	0.1	0.1	0.1
11	4/8/2018 6:21	0.1	0.1	0.1	0.1
12	4/8/2018 6:22	0.1	0.1	0.1	0.1
13	4/8/2018 6:23	0.1	0.1	0.1	0.1
14	4/8/2018 6:24	0.1	0.1	0.1	0.1
15	4/8/2018 6:25	0.1	0.1	0.1	0.1
16	4/8/2018 6:26	0.1	0.1	0.1	0.1
17	4/8/2018 6:27	0.1	0.1	0.1	0.1
18	4/8/2018 6:28	0.1	0.1	0.1	0.1
19	4/8/2018 6:29	0.1	0.1	0.1	0.1
20	4/8/2018 6:30	0.1	0.1	0.1	0.1
21	4/8/2018 6:31	0.1	0.1	0.1	0.1
22	4/8/2018 6:32	0.1	0.1	0.1	0.1
23	4/8/2018 6:33	0.1	0.1	0.1	0.1
24	4/8/2018 6:34	0.1	0.1	0.1	0.1
25	4/8/2018 6:35	0.1	0.1	0.1	0.1
26	4/8/2018 6:36	0.1	0.1	0.1	0.1
27	4/8/2018 6:37	0.1	0.1	0.1	0.1
28	4/8/2018 6:38	0.1	0.1	0.1	0.1
29	4/8/2018 6:39	0.1	0.1	0.1	0.1
30	4/8/2018 6:40	0.1	0.1	0.1	0.1
31	4/8/2018 6:41	0.1	0.1	0.1	0.1
32	4/8/2018 6:42	0.1	0.1	0.1	0.1
33	4/8/2018 6:43	0.1	0.1	0.1	0.1
34	4/8/2018 6:44	0.1	0.1	0.1	0.1
35	4/8/2018 6:45	0.1	0.1	0.1	0.1
36	4/8/2018 6:46	0.1	0.1	0.1	0.1
37	4/8/2018 6:47	0.1	0.1	0.1	0.1
38	4/8/2018 6:48	0.1	0.1	0.1	0.1
39	4/8/2018 6:49	0.1	0.1	0.1	0.1
40	4/8/2018 6:50	0.1	0.1	0.1	0.1
41	4/8/2018 6:51	0.1	0.1	0.1	0.1
42	4/8/2018 6:52	0.1	0.1	0.1	0.1
43	4/8/2018 6:53	0.1	0.1	0.1	0.1
44	4/8/2018 6:54	0.1	0.1	0.1	0.1
45	4/8/2018 6:55	0.1	0.1	0.1	0.1
46	4/8/2018 6:56	0.1	0.1	0.1	0.1
47	4/8/2018 6:57	0.1	0.1	0.1	0.1
48	4/8/2018 6:58	0.1	0.1	0.1	0.1
49	4/8/2018 6:59	0.1	0.1	0.1	0.1
50	4/8/2018 7:00	0.1	0.1	0.1	0.1
51	4/8/2018 7:01	0.1	0.1	0.1	0.1
52	4/8/2018 7:02	0.1	0.1	0.1	0.1

53	4/8/2018 7:03	0.1	0.1	0.1	0.1
54	4/8/2018 7:04	0.1	0.1	0.1	0.1
55	4/8/2018 7:05	0.1	0.1	0.1	0.1
56	4/8/2018 7:06	0.1	0.1	0.1	0.1
57	4/8/2018 7:07	0.1	0.1	0.1	0.1
58	4/8/2018 7:08	0.1	0.1	0.1	0.1
59	4/8/2018 7:09	0.1	0.1	0.1	0.1
60	4/8/2018 7:10	0.1	0.1	0.1	0.1
61	4/8/2018 7:11	0.1	0.1	0.1	0.1
62	4/8/2018 7:12	0.1	0.1	0.1	0.1
63	4/8/2018 7:13	0.1	0.1	0.1	0.1
64	4/8/2018 7:14	0.1	0.1	0.1	0.1
65	4/8/2018 7:15	0.1	0.1	0.1	0.1
66	4/8/2018 7:16	0.1	0.1	0.1	0.1
67	4/8/2018 7:17	0.1	0.1	0.1	0.1
68	4/8/2018 7:18	0.1	0.1	0.1	0.1
69	4/8/2018 7:19	0.1	0.1	0.1	0.1
70	4/8/2018 7:20	0.1	0.1	0.1	0.1
71	4/8/2018 7:21	0.1	0.1	0.1	0.1
72	4/8/2018 7:22	0.1	0.1	0.1	0.1
73	4/8/2018 7:23	0.1	0.1	0.1	0.1
74	4/8/2018 7:24	0.1	0.1	0.1	0.1
75	4/8/2018 7:25	0.1	0.1	0.1	0.1
76	4/8/2018 7:26	0.1	0.1	0.1	0.1
77	4/8/2018 7:27	0.1	0.1	0.1	0.1
78	4/8/2018 7:28	0.1	0.1	0.1	0.1
79	4/8/2018 7:29	0.1	0.1	0.1	0.1
80	4/8/2018 7:30	0.1	0.1	0.1	0.1
81	4/8/2018 7:31	0.1	0.1	0.1	0.1
82	4/8/2018 7:32	0.1	0.1	0.1	0.1
83	4/8/2018 7:33	0.1	0.1	0.1	0.1
84	4/8/2018 7:34	0.1	0.1	0.1	0.1
85	4/8/2018 7:35	0.1	0.1	0.1	0.1
86	4/8/2018 7:36	0.1	0.1	0.1	0.1
87	4/8/2018 7:37	0.1	0.1	0.1	0.1
88	4/8/2018 7:38	0.1	0.1	0.1	0.1
89	4/8/2018 7:39	0.1	0.1	0.1	0.1
90	4/8/2018 7:40	0.1	0.1	0.1	0.1
91	4/8/2018 7:41	0.1	0.1	0.1	0.1
92	4/8/2018 7:42	0.1	0.1	0.1	0.1
93	4/8/2018 7:43	0.1	0.1	0.1	0.1
94	4/8/2018 7:44	0.1	0.1	0.1	0.1
95	4/8/2018 7:45	0.1	0.1	0.1	0.1
96	4/8/2018 7:46	0.1	0.1	0.1	0.1
97	4/8/2018 7:47	0.1	0.1	0.1	0.1
98	4/8/2018 7:48	0.1	0.1	0.1	0.1
99	4/8/2018 7:49	0.1	0.1	0.1	0.1

100	4/8/2018 7:50	0.1	0.1	0.1	0.1
101	4/8/2018 7:51	0.1	0.1	0.1	0.1
102	4/8/2018 7:52	0.1	0.1	0.1	0.1
103	4/8/2018 7:53	0.1	0.1	0.1	0.1
104	4/8/2018 7:54	0.1	0.1	0.1	0.1
105	4/8/2018 7:55	0.1	0.1	0.1	0.1
106	4/8/2018 7:56	0.1	0.1	0.1	0.1
107	4/8/2018 7:57	0.1	0.1	0.1	0.1
108	4/8/2018 7:58	0.1	0.1	0.1	0.1
109	4/8/2018 7:59	0.1	0.1	0.1	0.1
110	4/8/2018 8:00	0.1	0.1	0.1	0.1
111	4/8/2018 8:01	0.1	0.1	0.1	0.1
112	4/8/2018 8:02	0.1	0.1	0.1	0.1
113	4/8/2018 8:03	0.1	0.1	0.1	0.1
114	4/8/2018 8:04	0.1	0.1	0.1	0.1
115	4/8/2018 8:05	0.1	0.1	0.1	0.1
116	4/8/2018 8:06	0.1	0.1	0.1	0.1
117	4/8/2018 8:07	0.1	0.1	0.1	0.1
118	4/8/2018 8:08	0.1	0.1	0.1	0.1
119	4/8/2018 8:09	0.1	0.1	0.1	0.1
120	4/8/2018 8:10	0.1	0.1	0.1	0.1
121	4/8/2018 8:11	0.1	0.1	0.1	0.1
122	4/8/2018 8:12	0.1	0.1	0.1	0.1
123	4/8/2018 8:13	0.1	0.1	0.1	0.1
124	4/8/2018 8:14	0.1	0.1	0.1	0.1
125	4/8/2018 8:15	0.1	0.1	0.1	0.1
126	4/8/2018 8:16	0.1	0.1	0.1	0.1
127	4/8/2018 8:17	0.1	0.1	0.1	0.1
128	4/8/2018 8:18	0.1	0.1	0.1	0.1
129	4/8/2018 8:19	0.1	0.1	0.1	0.1
130	4/8/2018 8:20	0.1	0.1	0.1	0.1
131	4/8/2018 8:21	0.1	0.1	0.1	0.1
132	4/8/2018 8:22	0.1	0.1	0.1	0.1
133	4/8/2018 8:23	0.1	0.1	0.1	0.1
134	4/8/2018 8:24	0.1	0.1	0.1	0.1
135	4/8/2018 8:25	0.1	0.1	0.1	0.1
136	4/8/2018 8:26	0.1	0.1	0.1	0.1
137	4/8/2018 8:27	0.1	0.1	0.1	0.1
138	4/8/2018 8:28	0.1	0.1	0.1	0.1
139	4/8/2018 8:29	0.1	0.1	0.1	0.1
140	4/8/2018 8:30	0.1	0.1	0.1	0.1
141	4/8/2018 8:31	0.1	0.1	0.1	0.1
142	4/8/2018 8:32	0.1	0.1	0.1	0.1
143	4/8/2018 8:33	0.1	0.1	0.1	0.1
144	4/8/2018 8:34	0.1	0.1	0.1	0.1
145	4/8/2018 8:35	0.1	0.1	0.1	0.1
146	4/8/2018 8:36	0.1	0.1	0.1	0.1

147	4/8/2018 8:37	0.1	0.1	0.1	0.1
148	4/8/2018 8:38	0.1	0.1	0.1	0.1
149	4/8/2018 8:39	0.1	0.1	0.1	0.1
150	4/8/2018 8:40	0.1	0.1	0.1	0.1
151	4/8/2018 8:41	0.1	0.1	0.1	0.1
152	4/8/2018 8:42	0.1	0.1	0.1	0.1
153	4/8/2018 8:43	0.1	0.1	0.1	0.1
154	4/8/2018 8:44	0.1	0.1	0.1	0.1
155	4/8/2018 8:45	0.1	0.1	0.1	0.1
156	4/8/2018 8:46	0.1	0.1	0.1	0.1
157	4/8/2018 8:47	0.1	0.1	0.1	0.1
158	4/8/2018 8:48	0.1	0.1	0.1	0.1
159	4/8/2018 8:49	0.1	0.1	0.1	0.1
160	4/8/2018 8:50	0.1	0.1	0.1	0.1
161	4/8/2018 8:51	0.1	0.1	0.1	0.1
162	4/8/2018 8:52	0.1	0.1	0.1	0.1
163	4/8/2018 8:53	0.1	0.1	0.1	0.1
164	4/8/2018 8:54	0.1	0.1	0.1	0.1
165	4/8/2018 8:55	0.1	0.1	0.1	0.1
166	4/8/2018 8:56	0.1	0.1	0.1	0.1
167	4/8/2018 8:57	0	0.1	0.1	0.1
168	4/8/2018 8:58	0	0	0.1	0
169	4/8/2018 8:59	0	0	0.1	0
170	4/8/2018 9:00	0	0.1	0.1	0.1
171	4/8/2018 9:01	0	0.1	0.1	0.1
172	4/8/2018 9:02	0.1	0.1	0.1	0.1
173	4/8/2018 9:03	0	0.1	0.1	0.1
174	4/8/2018 9:04	0	0.1	0.1	0.1
175	4/8/2018 9:05	0	0.1	0.1	0.1
176	4/8/2018 9:06	0	0.1	0.1	0.1
177	4/8/2018 9:07	0	0.1	0.1	0.1
178	4/8/2018 9:08	0.1	0.1	0.1	0.1
179	4/8/2018 9:09	0	0.1	0.1	0.1
180	4/8/2018 9:10	0	0.1	0.1	0.1
181	4/8/2018 9:11	0	0	0.1	0
182	4/8/2018 9:12	0	0	0.1	0
183	4/8/2018 9:13	0	0	0.1	0
184	4/8/2018 9:14	0	0	0.1	0
185	4/8/2018 9:15	0	0	0	0
186	4/8/2018 9:16	0	0	0.1	0
187	4/8/2018 9:17	0	0	0	0
188	4/8/2018 9:18	0	0	0.1	0.1
189	4/8/2018 9:19	0	0	0.1	0
190	4/8/2018 9:20	0	0	0	0
191	4/8/2018 9:21	0	0	0	0
192	4/8/2018 9:22	0	0	0	0
193	4/8/2018 9:23	0	0	0	0

194	4/8/2018 9:24	0	0	0	0
195	4/8/2018 9:25	0	0	0	0
196	4/8/2018 9:26	0	0	0	0
197	4/8/2018 9:27	0	0	0	0
198	4/8/2018 9:28	0	0	0	0
199	4/8/2018 9:29	0	0	0	0
200	4/8/2018 9:30	0	0	0	0
201	4/8/2018 9:31	0	0	0	0
202	4/8/2018 9:32	0	0	0	0
203	4/8/2018 9:33	0	0	0	0
204	4/8/2018 9:34	0	0	0	0
205	4/8/2018 9:35	0	0	0	0
206	4/8/2018 9:36	0	0	0	0
207	4/8/2018 9:37	0	0	0	0
208	4/8/2018 9:38	0	0	0	0
209	4/8/2018 9:39	0	0	0	0
210	4/8/2018 9:40	0	0	0	0
211	4/8/2018 9:41	0	0	0	0
212	4/8/2018 9:42	0	0	0	0
213	4/8/2018 9:43	0	0	0	0
214	4/8/2018 9:44	0	0	0	0
215	4/8/2018 9:45	0	0	0	0
216	4/8/2018 9:46	0	0	0	0
217	4/8/2018 9:47	0	0	0	0
218	4/8/2018 9:48	0	0	0	0
219	4/8/2018 9:49	0	0	0	0
220	4/8/2018 9:50	0	0	0	0
221	4/8/2018 9:51	0	0	0	0
222	4/8/2018 9:52	0	0	0	0
223	4/8/2018 9:53	0	0	0	0
224	4/8/2018 9:54	0	0	0	0
225	4/8/2018 9:55	0	0	0	0
226	4/8/2018 9:56	0	0	0.1	0
227	4/8/2018 9:57	0	0	0	0
228	4/8/2018 9:58	0	0	0	0
229	4/8/2018 9:59	0	0	0	0
230	4/8/2018 10:00	0	0	0	0
231	4/8/2018 10:01	0	0	0	0
232	4/8/2018 10:02	0	0	0	0
233	4/8/2018 10:03	0	0	0	0
234	4/8/2018 10:04	0	0	0	0
235	4/8/2018 10:05	0	0	0	0
236	4/8/2018 10:06	0	0	0	0
237	4/8/2018 10:07	0	0	0	0
238	4/8/2018 10:08	0	0	0	0
239	4/8/2018 10:09	0	0	0	0
240	4/8/2018 10:10	0	0	0	0

241	4/8/2018 10:11	0	0	0	0
242	4/8/2018 10:12	0	0	0	0
243	4/8/2018 10:13	0	0	0	0
244	4/8/2018 10:14	0	0	0	0
245	4/8/2018 10:15	0	0	0	0
246	4/8/2018 10:16	0	0	0	0
247	4/8/2018 10:17	0	0	0	0
248	4/8/2018 10:18	0	0	0	0
249	4/8/2018 10:19	0	0	0	0
250	4/8/2018 10:20	0	0	0	0
251	4/8/2018 10:21	0	0	0	0
252	4/8/2018 10:22	0	0	0	0
253	4/8/2018 10:23	0	0	0	0
254	4/8/2018 10:24	0	0	0	0
255	4/8/2018 10:25	0	0	0	0
256	4/8/2018 10:26	0	0	0	0
257	4/8/2018 10:27	0	0	0	0
258	4/8/2018 10:28	0	0	0	0
259	4/8/2018 10:29	0	0	0	0
260	4/8/2018 10:30	0	0	0	0
261	4/8/2018 10:31	0	0	0	0
262	4/8/2018 10:32	0	0	0	0
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265	4/8/2018 10:35	0	0	0	0
266	4/8/2018 10:36	0	0	0	0
267	4/8/2018 10:37	0	0	0	0
268	4/8/2018 10:38	0	0	0	0
269	4/8/2018 10:39	0	0	0	0
270	4/8/2018 10:40	0	0	0	0
271	4/8/2018 10:41	0	0	0	0
272	4/8/2018 10:42	0	0	0	0
273	4/8/2018 10:43	0	0	0	0
274	4/8/2018 10:44	0	0	0	0
275	4/8/2018 10:45	0	0	0	0
276	4/8/2018 10:46	0	0	0	0
277	4/8/2018 10:47	0	0	0	0
278	4/8/2018 10:48	0	0	0	0
279	4/8/2018 10:49	0	0	0	0
280	4/8/2018 10:50	0	0	0	0
281	4/8/2018 10:51	0	0	0	0
282	4/8/2018 10:52	0	0	0	0
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286	4/8/2018 10:56	0	0	0	0
287	4/8/2018 10:57	0	0	0	0

288	4/8/2018 10:58	0	0	0	0
289	4/8/2018 10:59	0	0	0	0
290	4/8/2018 11:00	0	0	0	0
291	4/8/2018 11:01	0	0	0	0
292	4/8/2018 11:02	0	0	0	0
293	4/8/2018 11:03	0	0	0	0
294	4/8/2018 11:04	0	0	0	0
295	4/8/2018 11:05	0	0	0	0
296	4/8/2018 11:06	0	0	0	0
297	4/8/2018 11:07	0	0	0	0
298	4/8/2018 11:08	0	0	0	0
299	4/8/2018 11:09	0	0	0	0
300	4/8/2018 11:10	0	0	0	0
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302	4/8/2018 11:12	0	0	0	0
303	4/8/2018 11:13	0	0	0	0
304	4/8/2018 11:14	0	0	0	0
305	4/8/2018 11:15	0	0	0	0
306	4/8/2018 11:16	0	0	0	0
307	4/8/2018 11:17	0	0	0	0
308	4/8/2018 11:18	0	0	0	0
309	4/8/2018 11:19	0	0	0	0
310	4/8/2018 11:20	0	0	0	0
311	4/8/2018 11:21	0	0	0	0
312	4/8/2018 11:22	0	0	0	0
313	4/8/2018 11:23	0	0	0	0
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317	4/8/2018 11:27	0	0	0	0
318	4/8/2018 11:28	0	0	0	0
319	4/8/2018 11:29	0	0	0	0
320	4/8/2018 11:30	0	0	0	0
321	4/8/2018 11:31	0	0	0	0
322	4/8/2018 11:32	0	0	0	0
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325	4/8/2018 11:35	0	0	0	0
326	4/8/2018 11:36	0	0	0	0
327	4/8/2018 11:37	0	0	0	0
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329	4/8/2018 11:39	0	0	0	0
330	4/8/2018 11:40	0	0	0	0
331	4/8/2018 11:41	0	0	0	0
332	4/8/2018 11:42	0	0	0	0
333	4/8/2018 11:43	0	0	0	0
334	4/8/2018 11:44	0	0	0	0

335	4/8/2018 11:45	0	0	0	0
336	4/8/2018 11:46	0	0	0	0
337	4/8/2018 11:47	0	0	0	0
338	4/8/2018 11:48	0	0	0	0
339	4/8/2018 11:49	0	0	0	0
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341	4/8/2018 11:51	0	0	0	0
342	4/8/2018 11:52	0	0	0	0
343	4/8/2018 11:53	0	0	0	0
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345	4/8/2018 11:55	0	0	0	0
346	4/8/2018 11:56	0	0	0	0
347	4/8/2018 11:57	0	0	0	0
348	4/8/2018 11:58	0	0	0	0
349	4/8/2018 11:59	0	0	0	0
350	4/8/2018 12:00	0	0	0	0
351	4/8/2018 12:01	0	0	0	0
352	4/8/2018 12:02	0	0	0	0
353	4/8/2018 12:03	0	0	0	0
354	4/8/2018 12:04	0	0	0	0
355	4/8/2018 12:05	0	0	0	0
356	4/8/2018 12:06	0	0	0	0
357	4/8/2018 12:07	0	0	0	0
358	4/8/2018 12:08	0	0	0	0
359	4/8/2018 12:09	0	0	0	0
360	4/8/2018 12:10	0	0	0	0
361	4/8/2018 12:11	0	0	0	0
362	4/8/2018 12:12	0	0	0	0
363	4/8/2018 12:13	0	0	0	0
364	4/8/2018 12:14	0	0	0	0
365	4/8/2018 12:15	0	0	0	0
366	4/8/2018 12:16	0	0	0	0
367	4/8/2018 12:17	0	0	0	0
368	4/8/2018 12:18	0	0	0	0
369	4/8/2018 12:19	0	0	0	0
370	4/8/2018 12:20	0	0	0	0
371	4/8/2018 12:21	0	0	0	0
372	4/8/2018 12:22	0	0	0	0
373	4/8/2018 12:23	0	0	0	0
374	4/8/2018 12:24	0	0	0	0
375	4/8/2018 12:25	0	0	0	0
376	4/8/2018 12:26	0	0	0	0
377	4/8/2018 12:27	0	0	0	0
378	4/8/2018 12:28	0	0	0	0
379	4/8/2018 12:29	0	0	0	0
380	4/8/2018 12:30	0	0	0	0
381	4/8/2018 12:31	0	0	0	0

	382	4/8/2018 12:32	0	0	0	0
	383	4/8/2018 12:33	0	0	0	0
	384	4/8/2018 12:34	0	0	0	0
	385	4/8/2018 12:35	0	0	0	0
	386	4/8/2018 12:36	0	0	0	0
	387	4/8/2018 12:37	0	0	0	0
	388	4/8/2018 12:38	0	0	0	0
	389	4/8/2018 12:39	0	0	0	0
	390	4/8/2018 12:40	0	0	0	0
	391	4/8/2018 12:41	0	0	0	0
	392	4/8/2018 12:42	0	0	0	0
	393	4/8/2018 12:43	0	0	0	0
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	395	4/8/2018 12:45	0	0	0	0
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	398	4/8/2018 12:48	0	0	0	0
	399	4/8/2018 12:49	0	0	0	0
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	401	4/8/2018 12:51	0	0	0	0
	402	4/8/2018 12:52	0	0	0	0
	403	4/8/2018 12:53	0	0	0	0
	404	4/8/2018 12:54	0	0	0	0
	405	4/8/2018 12:55	0	0	0	0
	406	4/8/2018 12:56	0	0	0	0
	407	4/8/2018 12:57	0	0	0	0
	408	4/8/2018 12:58	0	0	0	0
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	410	4/8/2018 13:00	0	0	0	0
	411	4/8/2018 13:01	0	0	0	0
	412	4/8/2018 13:02	0	0	0	0
	413	4/8/2018 13:03	0	0	0	0
	414	4/8/2018 13:04	0	0	0	0
	415	4/8/2018 13:05	0	0	0	0
	416	4/8/2018 13:06	0	0	0	0
	417	4/8/2018 13:07	0	0	0	0
	418	4/8/2018 13:08	0	0	0	0
	419	4/8/2018 13:09	0	0	0	0
	420	4/8/2018 13:10	0	0	0	0
	421	4/8/2018 13:11	0	0	0	0
	422	4/8/2018 13:12	0	0	0	0
	423	4/8/2018 13:13	0	0	0	0
Peak			0.2	0.2	0.4	0.3
Min			0	0	0	0
Average			0	0	0	0

****

TWA/STEL

Index	Date/Time	PID(ppm) (TWA)	PID(ppm) (STEL)
1	4/8/2018 6:11	0	---
2	4/8/2018 6:12	0	---
3	4/8/2018 6:13	0	---
4	4/8/2018 6:14	0	---
5	4/8/2018 6:15	0	---
6	4/8/2018 6:16	0	---
7	4/8/2018 6:17	0	---
8	4/8/2018 6:18	0	---
9	4/8/2018 6:19	0	---
10	4/8/2018 6:20	0	---
11	4/8/2018 6:21	0	---
12	4/8/2018 6:22	0	---
13	4/8/2018 6:23	0	---
14	4/8/2018 6:24	0	---
15	4/8/2018 6:25	0	0.1
16	4/8/2018 6:26	0	0.1
17	4/8/2018 6:27	0	0.1
18	4/8/2018 6:28	0	0.1
19	4/8/2018 6:29	0	0.1
20	4/8/2018 6:30	0	0.1
21	4/8/2018 6:31	0	0.1
22	4/8/2018 6:32	0	0.1
23	4/8/2018 6:33	0	0.1
24	4/8/2018 6:34	0	0.1
25	4/8/2018 6:35	0	0.1
26	4/8/2018 6:36	0	0.1
27	4/8/2018 6:37	0	0.1
28	4/8/2018 6:38	0	0.1
29	4/8/2018 6:39	0	0.1
30	4/8/2018 6:40	0	0.1
31	4/8/2018 6:41	0	0.1
32	4/8/2018 6:42	0	0.1
33	4/8/2018 6:43	0	0.1
34	4/8/2018 6:44	0	0.1
35	4/8/2018 6:45	0	0.1
36	4/8/2018 6:46	0	0.1
37	4/8/2018 6:47	0	0.1
38	4/8/2018 6:48	0	0.1
39	4/8/2018 6:49	0	0.1
40	4/8/2018 6:50	0	0.1
41	4/8/2018 6:51	0	0.1
42	4/8/2018 6:52	0	0.1
43	4/8/2018 6:53	0	0.1
44	4/8/2018 6:54	0	0.1

45	4/8/2018 6:55	0	0.1
46	4/8/2018 6:56	0	0.1
47	4/8/2018 6:57	0	0.1
48	4/8/2018 6:58	0	0.1
49	4/8/2018 6:59	0	0.1
50	4/8/2018 7:00	0	0.1
51	4/8/2018 7:01	0	0.1
52	4/8/2018 7:02	0	0.1
53	4/8/2018 7:03	0	0.1
54	4/8/2018 7:04	0	0.1
55	4/8/2018 7:05	0	0.1
56	4/8/2018 7:06	0	0.1
57	4/8/2018 7:07	0	0.1
58	4/8/2018 7:08	0	0.1
59	4/8/2018 7:09	0	0.1
60	4/8/2018 7:10	0	0.1
61	4/8/2018 7:11	0	0.1
62	4/8/2018 7:12	0	0.1
63	4/8/2018 7:13	0	0.1
64	4/8/2018 7:14	0	0.1
65	4/8/2018 7:15	0	0.1
66	4/8/2018 7:16	0	0.1
67	4/8/2018 7:17	0	0.1
68	4/8/2018 7:18	0	0.1
69	4/8/2018 7:19	0	0.1
70	4/8/2018 7:20	0	0.1
71	4/8/2018 7:21	0	0.1
72	4/8/2018 7:22	0	0.1
73	4/8/2018 7:23	0	0.1
74	4/8/2018 7:24	0	0.1
75	4/8/2018 7:25	0	0.1
76	4/8/2018 7:26	0	0.1
77	4/8/2018 7:27	0	0.1
78	4/8/2018 7:28	0	0.1
79	4/8/2018 7:29	0	0.1
80	4/8/2018 7:30	0	0.1
81	4/8/2018 7:31	0	0.1
82	4/8/2018 7:32	0	0.1
83	4/8/2018 7:33	0	0.1
84	4/8/2018 7:34	0	0.1
85	4/8/2018 7:35	0	0.1
86	4/8/2018 7:36	0	0.1
87	4/8/2018 7:37	0	0.1
88	4/8/2018 7:38	0	0.1
89	4/8/2018 7:39	0	0.1
90	4/8/2018 7:40	0	0.1
91	4/8/2018 7:41	0	0.1

92	4/8/2018 7:42	0	0.1
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94	4/8/2018 7:44	0	0.1
95	4/8/2018 7:45	0	0.1
96	4/8/2018 7:46	0	0.1
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113	4/8/2018 8:03	0	0.1
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117	4/8/2018 8:07	0	0.1
118	4/8/2018 8:08	0	0.1
119	4/8/2018 8:09	0	0.1
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124	4/8/2018 8:14	0	0.1
125	4/8/2018 8:15	0	0.1
126	4/8/2018 8:16	0	0.1
127	4/8/2018 8:17	0	0.1
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133	4/8/2018 8:23	0	0.1
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141	4/8/2018 8:31	0	0.1
142	4/8/2018 8:32	0	0.1
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146	4/8/2018 8:36	0	0.1
147	4/8/2018 8:37	0	0.1
148	4/8/2018 8:38	0	0.1
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185	4/8/2018 9:15	0	0.1

186	4/8/2018 9:16	0	0.1
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218	4/8/2018 9:48	0	0
219	4/8/2018 9:49	0	0
220	4/8/2018 9:50	0	0
221	4/8/2018 9:51	0	0
222	4/8/2018 9:52	0	0
223	4/8/2018 9:53	0	0
224	4/8/2018 9:54	0	0
225	4/8/2018 9:55	0	0
226	4/8/2018 9:56	0	0
227	4/8/2018 9:57	0	0
228	4/8/2018 9:58	0	0
229	4/8/2018 9:59	0	0
230	4/8/2018 10:00	0	0
231	4/8/2018 10:01	0	0
232	4/8/2018 10:02	0	0

233	4/8/2018 10:03	0	0
234	4/8/2018 10:04	0	0
235	4/8/2018 10:05	0	0
236	4/8/2018 10:06	0	0
237	4/8/2018 10:07	0	0
238	4/8/2018 10:08	0	0
239	4/8/2018 10:09	0	0
240	4/8/2018 10:10	0	0
241	4/8/2018 10:11	0	0
242	4/8/2018 10:12	0	0
243	4/8/2018 10:13	0	0
244	4/8/2018 10:14	0	0
245	4/8/2018 10:15	0	0
246	4/8/2018 10:16	0	0
247	4/8/2018 10:17	0	0
248	4/8/2018 10:18	0	0
249	4/8/2018 10:19	0	0
250	4/8/2018 10:20	0	0
251	4/8/2018 10:21	0	0
252	4/8/2018 10:22	0	0
253	4/8/2018 10:23	0	0
254	4/8/2018 10:24	0	0
255	4/8/2018 10:25	0	0
256	4/8/2018 10:26	0	0
257	4/8/2018 10:27	0	0
258	4/8/2018 10:28	0	0
259	4/8/2018 10:29	0	0
260	4/8/2018 10:30	0	0
261	4/8/2018 10:31	0	0
262	4/8/2018 10:32	0	0
263	4/8/2018 10:33	0	0
264	4/8/2018 10:34	0	0
265	4/8/2018 10:35	0	0
266	4/8/2018 10:36	0	0
267	4/8/2018 10:37	0	0
268	4/8/2018 10:38	0	0
269	4/8/2018 10:39	0	0
270	4/8/2018 10:40	0	0
271	4/8/2018 10:41	0	0
272	4/8/2018 10:42	0	0
273	4/8/2018 10:43	0	0
274	4/8/2018 10:44	0	0
275	4/8/2018 10:45	0	0
276	4/8/2018 10:46	0	0
277	4/8/2018 10:47	0	0
278	4/8/2018 10:48	0	0
279	4/8/2018 10:49	0	0

280	4/8/2018 10:50	0	0
281	4/8/2018 10:51	0	0
282	4/8/2018 10:52	0	0
283	4/8/2018 10:53	0	0
284	4/8/2018 10:54	0	0
285	4/8/2018 10:55	0	0
286	4/8/2018 10:56	0	0
287	4/8/2018 10:57	0	0
288	4/8/2018 10:58	0	0
289	4/8/2018 10:59	0	0
290	4/8/2018 11:00	0	0
291	4/8/2018 11:01	0	0
292	4/8/2018 11:02	0	0
293	4/8/2018 11:03	0	0
294	4/8/2018 11:04	0	0
295	4/8/2018 11:05	0	0
296	4/8/2018 11:06	0	0
297	4/8/2018 11:07	0	0
298	4/8/2018 11:08	0	0
299	4/8/2018 11:09	0	0
300	4/8/2018 11:10	0	0
301	4/8/2018 11:11	0	0
302	4/8/2018 11:12	0	0
303	4/8/2018 11:13	0	0
304	4/8/2018 11:14	0	0
305	4/8/2018 11:15	0	0
306	4/8/2018 11:16	0	0
307	4/8/2018 11:17	0	0
308	4/8/2018 11:18	0	0
309	4/8/2018 11:19	0	0
310	4/8/2018 11:20	0	0
311	4/8/2018 11:21	0	0
312	4/8/2018 11:22	0	0
313	4/8/2018 11:23	0	0
314	4/8/2018 11:24	0	0
315	4/8/2018 11:25	0	0
316	4/8/2018 11:26	0	0
317	4/8/2018 11:27	0	0
318	4/8/2018 11:28	0	0
319	4/8/2018 11:29	0	0
320	4/8/2018 11:30	0	0
321	4/8/2018 11:31	0	0
322	4/8/2018 11:32	0	0
323	4/8/2018 11:33	0	0
324	4/8/2018 11:34	0	0
325	4/8/2018 11:35	0	0
326	4/8/2018 11:36	0	0

327	4/8/2018 11:37	0	0
328	4/8/2018 11:38	0	0
329	4/8/2018 11:39	0	0
330	4/8/2018 11:40	0	0
331	4/8/2018 11:41	0	0
332	4/8/2018 11:42	0	0
333	4/8/2018 11:43	0	0
334	4/8/2018 11:44	0	0
335	4/8/2018 11:45	0	0
336	4/8/2018 11:46	0	0
337	4/8/2018 11:47	0	0
338	4/8/2018 11:48	0	0
339	4/8/2018 11:49	0	0
340	4/8/2018 11:50	0	0
341	4/8/2018 11:51	0	0
342	4/8/2018 11:52	0	0
343	4/8/2018 11:53	0	0
344	4/8/2018 11:54	0	0
345	4/8/2018 11:55	0	0
346	4/8/2018 11:56	0	0
347	4/8/2018 11:57	0	0
348	4/8/2018 11:58	0	0
349	4/8/2018 11:59	0	0
350	4/8/2018 12:00	0	0
351	4/8/2018 12:01	0	0
352	4/8/2018 12:02	0	0
353	4/8/2018 12:03	0	0
354	4/8/2018 12:04	0	0
355	4/8/2018 12:05	0	0
356	4/8/2018 12:06	0	0
357	4/8/2018 12:07	0	0
358	4/8/2018 12:08	0	0
359	4/8/2018 12:09	0	0
360	4/8/2018 12:10	0	0
361	4/8/2018 12:11	0	0
362	4/8/2018 12:12	0	0
363	4/8/2018 12:13	0	0
364	4/8/2018 12:14	0	0
365	4/8/2018 12:15	0	0
366	4/8/2018 12:16	0	0
367	4/8/2018 12:17	0	0
368	4/8/2018 12:18	0	0
369	4/8/2018 12:19	0	0
370	4/8/2018 12:20	0	0
371	4/8/2018 12:21	0	0
372	4/8/2018 12:22	0	0
373	4/8/2018 12:23	0	0

374	4/8/2018 12:24	0	0
375	4/8/2018 12:25	0	0
376	4/8/2018 12:26	0	0
377	4/8/2018 12:27	0	0
378	4/8/2018 12:28	0	0
379	4/8/2018 12:29	0	0
380	4/8/2018 12:30	0	0
381	4/8/2018 12:31	0	0
382	4/8/2018 12:32	0	0
383	4/8/2018 12:33	0	0
384	4/8/2018 12:34	0	0
385	4/8/2018 12:35	0	0
386	4/8/2018 12:36	0	0
387	4/8/2018 12:37	0	0
388	4/8/2018 12:38	0	0
389	4/8/2018 12:39	0	0
390	4/8/2018 12:40	0	0
391	4/8/2018 12:41	0	0
392	4/8/2018 12:42	0	0
393	4/8/2018 12:43	0	0
394	4/8/2018 12:44	0	0
395	4/8/2018 12:45	0	0
396	4/8/2018 12:46	0	0
397	4/8/2018 12:47	0	0
398	4/8/2018 12:48	0	0
399	4/8/2018 12:49	0	0
400	4/8/2018 12:50	0	0
401	4/8/2018 12:51	0	0
402	4/8/2018 12:52	0	0
403	4/8/2018 12:53	0	0
404	4/8/2018 12:54	0	0
405	4/8/2018 12:55	0	0
406	4/8/2018 12:56	0	0
407	4/8/2018 12:57	0	0
408	4/8/2018 12:58	0	0
409	4/8/2018 12:59	0	0
410	4/8/2018 13:00	0	0
411	4/8/2018 13:01	0	0
412	4/8/2018 13:02	0	0
413	4/8/2018 13:03	0	0
414	4/8/2018 13:04	0	0
415	4/8/2018 13:05	0	0
416	4/8/2018 13:06	0	0
417	4/8/2018 13:07	0	0
418	4/8/2018 13:08	0	0
419	4/8/2018 13:09	0	0
420	4/8/2018 13:10	0	0

421	4/8/2018 13:11	0	0
422	4/8/2018 13:12	0	0
423	4/8/2018 13:13	0	0

db TRC
A Joint Venture

Date: 4/09/18

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS

Project Number: 279191.0000

Instrument: Dustrak II and Minirae 3000

Recorded by: ~~James Robinson~~ S Sharma

Calibration Date: 4/9/18

Weather Conditions: Sunny

Time	Location	Wind Speed and Direction	Reading	Observations
0705	Dnwind of workzone MW-110(S)	NW-9mph	0.011mg/m3 0.5 ppm	Started CAMP
1100	Dn Wind of MW-101 on N. Village Ave.	NW-NW 6-7mph	0.010/0.0	Contd CAMP @ new location
1415	Booke CAMP			
			SS	

Recording Procedures/Remarks:

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.7
Calibration Date	11/9/2017
Test Name	MANUAL_001
Test Start Time	7:00:46 AM
Test Start Date	4/9/2018
Test Length [D:H:M]	0:07:00
Test Interval [M:S]	15:00
Mass Average [mg/m3]	0.013
Mass Minimum [mg/m3]	0.007
Mass Maximum [mg/m3]	0.021
Mass TWA [mg/m3]	0.011
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	28

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
900	0.011		
1800	0.01		
2700	0.012		
3600	0.016		
4500	0.02		
5400	0.012		
6300	0.009		
7200	0.011		
8100	0.015		
9000	0.009		
9900	0.009		
10800	0.01		
11700	0.008		
12600	0.007		
13500	0.008		
14400	0.012		
15300	0.008		
16200	0.011		
17100	0.012		
18000	0.013		
18900	0.011		
19800	0.012		
20700	0.016		
21600	0.019		
22500	0.018		
23400	0.016		
24300	0.021		

25200	0.017

db TRC
A Joint Venture

Date: 4-10-18

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS

Project Number: 279191.0000 Instrument: Dustrak II and Minirae 3000

Recorded by: ~~James Robinson~~ S Shaouee Calibration Date: 4-10-18

Weather Conditions:

Time	Location	Wind Speed and Direction	Reading	Observations
0700	D nw wind @ MW-6D on N. village Ave sidewalk	W 7 mph	0.027 mg/m³ 0.001 ppm	Started CAMP
1415	Back to CAMP			

Recording Procedures/Remarks:

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.7
Calibration Date	11/9/2017
Test Name	MANUAL_001
Test Start Time	6:59:33 AM
Test Start Date	4/10/2018
Test Length [D:H:M]	0:07:15
Test Interval [M:S]	15:00
Mass Average [mg/m3]	0.065
Mass Minimum [mg/m3]	0.028
Mass Maximum [mg/m3]	0.093
Mass TWA [mg/m3]	0.059
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	29

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
900	0.036		
1800	0.031		
2700	0.029		
3600	0.032		
4500	0.028		
5400	0.033		
6300	0.035		
7200	0.035		
8100	0.04		
9000	0.053		
9900	0.066		
10800	0.075		
11700	0.082		
12600	0.081		
13500	0.091		
14400	0.091		
15300	0.082		
16200	0.093		
17100	0.09		
18000	0.085		
18900	0.076		
19800	0.074		
20700	0.072		
21600	0.079		
22500	0.067		
23400	0.078		
24300	0.091		

25200	0.071
26100	0.085

db TRC
A Joint Venture

Date: 4/11/18

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS

Project Number: 279191.0000

Instrument: Dustrak II and Minirae 3000

Recorded by: ~~James Robinson~~ SShorma

Calibration Date: 4-11-18

Weather Conditions: AM – 31° Sunny NNE - 4mph
PM – 47° Sunny SW - 9mph

Time	Location	Wind Speed and Direction	Reading	Observations
0700	Dnwind of MW101 on Wheels Are Robotic	NNE 4mph	0.025 mg/m³ 0.0 ppm	CAMP Started
1230	moved to new Dnwind location to MW101	SW-9mph	0.038 mg/m³ 0.3 ppm	Cooled Camp
1645	Booklee	CAMP SS		

Recording Procedures/Remarks:

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.7
Calibration Date	11/9/2017
Test Name	MANUAL_001
Test Start Time	6:58:01 AM
Test Start Date	4/11/2018
Test Length [D:H:M]	0:07:45
Test Interval [M:S]	15:00
Mass Average [mg/m3]	0.025
Mass Minimum [mg/m3]	0.015
Mass Maximum [mg/m3]	0.064
Mass TWA [mg/m3]	0.024
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	31

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
900	0.064		
1800	0.026		
2700	0.023		
3600	0.025		
4500	0.02		
5400	0.026		
6300	0.017		
7200	0.032		
8100	0.015		
9000	0.022		
9900	0.021		
10800	0.023		
11700	0.02		
12600	0.029		
13500	0.018		
14400	0.019		
15300	0.019		
16200	0.021		
17100	0.02		
18000	0.02		
18900	0.019		
19800	0.022		
20700	0.026		
21600	0.027		
22500	0.028		
23400	0.02		
24300	0.028		

25200	0.034
26100	0.031
27000	0.033
27900	0.019

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18/04/11 06:57

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Summary

Unit Name	MiniRAE 3000(PGM-7320)
Unit SN	592-903790
Unit Firmware Ver	V2.14

Running Mode	Hygiene Mode
Datalog Mode	Manual
Diagnostic Mode	No
Stop Reason	Stop by User

Site ID	RAE00000
User ID	1

Begin	4/11/2018 6:57
End	4/11/2018 14:45
Sample Period(s)	900
Number of Records	31

Sensor	PID(ppm)
Sensor SN	S023030234T2
Measure Type	Min; Avg; Max; Real
Span	100
Span 2	1000
Low Alarm	50
High Alarm	100
Over Alarm	15000
STEL Alarm	100
TWA Alarm	50
Measurement Gas	Isobutylene
Calibration Time	4/11/2018 6:37
Peak	0.2
Min	0
Average	0.1

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Datalog

Index	Date/Time	PID(ppm) (Min)	PID(ppm) (Avg)	PID(ppm) (Max)	PID(ppm) (Real)
1	4/11/2018 7:12	0	0	0.3	0
2	4/11/2018 7:27	0	0	0.3	0.1
3	4/11/2018 7:42	0	0.1	0.4	0.1
4	4/11/2018 7:57	0.1	0.1	0.5	0.2
5	4/11/2018 8:12	0.1	0.1	0.3	0.1

6	4/11/2018 8:27	0.1	0.1	0.5	0.1
7	4/11/2018 8:42	0.1	0.1	0.2	0.1
8	4/11/2018 8:57	0	0.1	0.4	0.1
9	4/11/2018 9:12	0	0.1	0.2	0.1
10	4/11/2018 9:27	0	0.1	0.3	0.2
11	4/11/2018 9:42	0	0.1	0.4	0.1
12	4/11/2018 9:57	0	0.1	0.5	0.1
13	4/11/2018 10:12	0	0.1	0.3	0.1
14	4/11/2018 10:27	0	0.1	0.3	0.1
15	4/11/2018 10:42	0	0.1	0.3	0.1
16	4/11/2018 10:57	0	0.1	0.4	0.1
17	4/11/2018 11:12	0	0.1	0.4	0
18	4/11/2018 11:27	0	0.1	0.2	0
19	4/11/2018 11:42	0	0	0.1	0
20	4/11/2018 11:57	0	0	0.3	0
21	4/11/2018 12:12	0	0	0.2	0.1
22	4/11/2018 12:27	0	0.1	0.2	0.1
23	4/11/2018 12:42	0	0.1	0.3	0.1
24	4/11/2018 12:57	0	0.1	0.3	0.1
25	4/11/2018 13:12	0.1	0.1	0.3	0.1
26	4/11/2018 13:27	0.1	0.1	0.2	0.1
27	4/11/2018 13:42	0.1	0.1	0.3	0.1
28	4/11/2018 13:57	0.1	0.1	0.4	0.1
29	4/11/2018 14:12	0.1	0.1	0.3	0.1
30	4/11/2018 14:27	0	0.1	0.1	0.1
31	4/11/2018 14:42	0	0.1	0.1	0.1
Peak		0.1	0.1	0.5	0.2
Min		0	0	0.1	0
Average		0	0.1	0.3	0.1

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TWA/STEL

Index	Date/Time	PID(ppm) (TWA)	PID(ppm) (STEL)
1	4/11/2018 7:12	0	0
2	4/11/2018 7:27	0	0.1
3	4/11/2018 7:42	0	0.1
4	4/11/2018 7:57	0	0.2
5	4/11/2018 8:12	0	0.1
6	4/11/2018 8:27	0	0.1
7	4/11/2018 8:42	0	0.1
8	4/11/2018 8:57	0	0.1
9	4/11/2018 9:12	0	0.1
10	4/11/2018 9:27	0	0.2
11	4/11/2018 9:42	0	0.1
12	4/11/2018 9:57	0	0.1
13	4/11/2018 10:12	0	0.1

14	4/11/2018 10:27	0	0.1
15	4/11/2018 10:42	0.1	0.1
16	4/11/2018 10:57	0.1	0.1
17	4/11/2018 11:12	0.1	0
18	4/11/2018 11:27	0.1	0
19	4/11/2018 11:42	0.1	0
20	4/11/2018 11:57	0.1	0
21	4/11/2018 12:12	0.1	0.1
22	4/11/2018 12:27	0.1	0.1
23	4/11/2018 12:42	0.1	0.1
24	4/11/2018 12:57	0.1	0.1
25	4/11/2018 13:12	0.1	0.1
26	4/11/2018 13:27	0.1	0.1
27	4/11/2018 13:42	0.1	0.1
28	4/11/2018 13:57	0.1	0.1
29	4/11/2018 14:12	0.1	0.1
30	4/11/2018 14:27	0.1	0.1
31	4/11/2018 14:42	0.1	0.1

db TRC
A Joint Venture

Date: 4-12-18

AIR MONITORING FORM

Project Name: Gem Cleaners RI/FS

Project Number: 279191.0000

Instrument: Dustrak II and Minirae 3000

Recorded by: ~~James Robinson~~ SShorma

Calibration Date: 4-12-18

Weather Conditions: AM. P.cloudy, 44°F, SSW 4mph
PM. cloudy 52°F S 11 mph

Time	Location	Wind Speed and Direction	Reading	Observations
700	Downwind of MW-101 in N. side Area-side walls	SSW 4 mph.	0.048 mg/m3 0.0 ppm	construction
0930			Broke down	

SS

Recording Procedures/Remarks:

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.7
Calibration Date	11/9/2017
Test Name	MANUAL_001
Test Start Time	7:02:55 AM
Test Start Date	4/12/2018
Test Length [D:H:M]	0:02:15
Test Interval [M:S]	15:00
Mass Average [mg/m3]	0.043
Mass Minimum [mg/m3]	0.026
Mass Maximum [mg/m3]	0.104
Mass TWA [mg/m3]	0.012
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	9

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
900	0.104		
1800	0.048		
2700	0.045		
3600	0.036		
4500	0.032		
5400	0.028		
6300	0.026		
7200	0.035		
8100	0.03		

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18/04/12 07:02
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Summary

Unit Name	MiniRAE 3000(PGM-7320)
Unit SN	592-903790
Unit Firmware Ver	V2.14
Running Mode	Hygiene Mode
Datalog Mode	Manual
Diagnostic Mode	No
Stop Reason	Stop by User
Site ID	RAE00000
User ID	1
Begin	4/12/2018 7:02
End	4/12/2018 9:22
Sample Period(s)	900
Number of Records	9
Sensor	PID(ppm)
Sensor SN	S023030234T2
Measure Type	Min; Avg; Max; Real
Span	100
Span 2	1000
Low Alarm	50
High Alarm	100
Over Alarm	15000
STEL Alarm	100
TWA Alarm	50
Measurement Gas	Isobutylene
Calibration Time	4/12/2018 6:26
Peak	2.5
Min	0
Average	0.3

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Datalog

Index	Date/Time	PID(ppm) (Min)	PID(ppm) (Avg)	PID(ppm) (Max)	PID(ppm) (Real)
1	4/12/2018 7:17	0	1.6	42.4	2.5
2	4/12/2018 7:32	0	0.2	5.7	0
3	4/12/2018 7:47	0	0	0.3	0
4	4/12/2018 8:02	0	0.2	9.3	0
5	4/12/2018 8:17	0	0	0.3	0

	6	4/12/2018 8:32	0	0	0.2	0
	7	4/12/2018 8:47	0	0	0.6	0
	8	4/12/2018 9:02	0	0	0.4	0
	9	4/12/2018 9:17	0	0	0.3	0
Peak			0	1.6	42.4	2.5
Min			0	0	0.2	0
Average			0	0.2	6.6	0.3

****

TWA/STEL

Index	Date/Time	PID(ppm) (TWA)	PID(ppm) (STEL)
1	4/12/2018 7:17	0.1	2.5
2	4/12/2018 7:32	0.1	0
3	4/12/2018 7:47	0.1	0
4	4/12/2018 8:02	0.1	0
5	4/12/2018 8:17	0.1	0
6	4/12/2018 8:32	0.1	0
7	4/12/2018 8:47	0.1	0
8	4/12/2018 9:02	0.1	0
9	4/12/2018 9:17	0.1	0

APPENDIX D
GEOPHYSICAL SURVEY REPORT

GEOPHYSICAL ENGINEERING SURVEY REPORT

Gem Cleaners
84 North Village Avenue,
Rockville Centre, New York 11570

NOVA PROJECT NUMBER:

18-0709

DATED

APRIL 2, 2018

PREPARED FOR:

430 Broadway, 10th Floor,
New York, NY 10018

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions
56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway #765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.nova-gsi.com

April 2, 2018

Emily Ebert
Project Manager

1430 Broadway, 10th Floor,
New York, NY 10018
T: 212.221.7822

Re: Geophysical Engineering Survey (GES) Report
Gem Cleaners
84 North Village Avenue,
Rockville Centre, New York 11570

Dear Ms. Ebert:

Nova Geophysical Services (NOVA) is pleased to provide the findings of the geophysical engineering survey (GES) at the above referenced project site: 84 North Village Avenue, Rockville Centre, New York 11570 (the "Site").

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a geophysical engineering survey (GES) consisting of a Ground Penetrating Radar (GPR) and Electromagnetic (EM) survey at the site. The purpose of this survey is to locate and identify underground utilities, storage tanks, and clear and mark proposed environmental boring areas on March 19th & 28th, 2018.

The equipment selected for this investigation was a Sensors and Software Noggin 250 MHz ground penetrating radar (GPR) with a shielded antenna and a Radio Detection RD7100 Electromagnetic utility locator.

A GPR system consists of a radar control unit, control cable, and transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transduce via the control cable. The transmitter

electronics amplify the trigger pulse into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

A typical electromagnetic (EM) utility locating system consists of a transmitter unit and a receiver unit. The receiver unit can be used independently of the transmitter unit in order to detect utility lines with an inherent EM signature (electric utility lines, water lines, etc.). If needed a current at a specific frequency can also be placed on a utility that is being located. This can be done via the transmitter unit by either direct connection or induction via an EM field varying at specific frequency. The receiver unit is then set to the selected frequency and the electromagnetic field created by the current running through the utility can be located allowing the utility to be marked.

GEOPHYSICAL METHODS

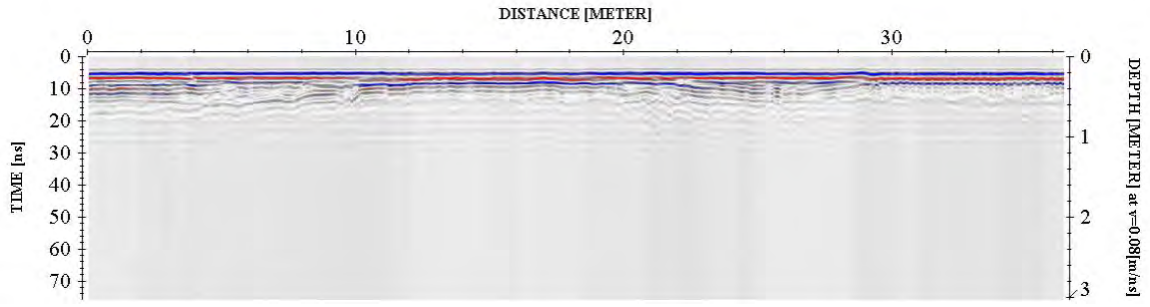
The project site was screened using GPR to search the specified area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface. An EM utility locator was also used to help determine the locations of utilities within the survey area.

EM data was collected and interpreted on site and suspected utilities marked as needed. GPR data profiles were collected for the areas of the Site specified by the client and processed as specified below.

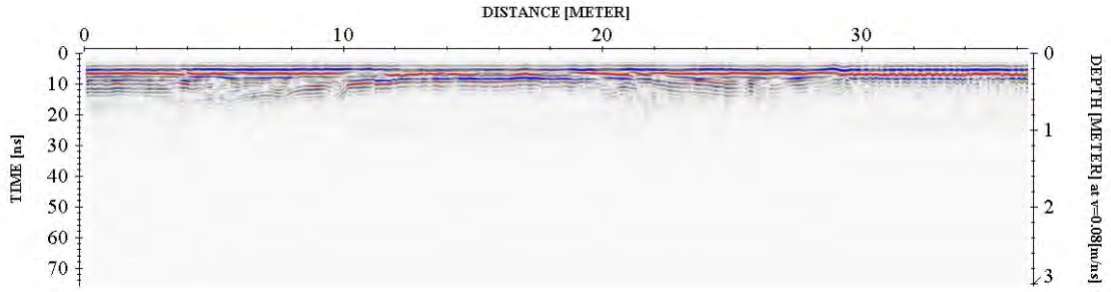
DATA PROCESSING

In order to improve the quality of the results and to better identify anomalies NOVA processed the collected data. The processing work flow is briefly described in this section.

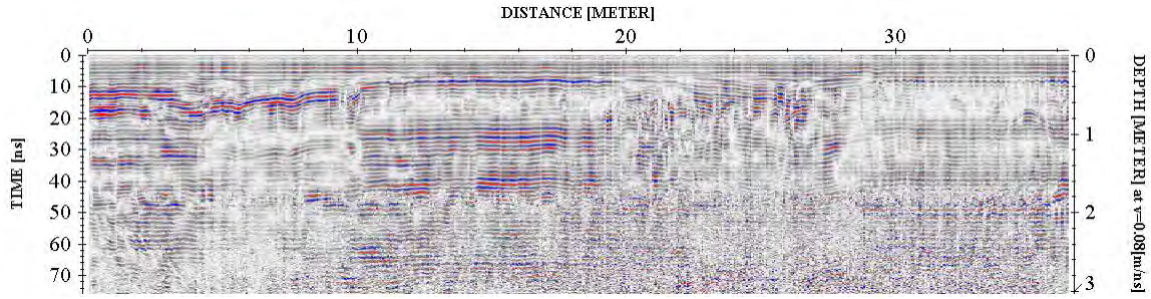
Step 1. Import Raw RAMAC data to standard processing format



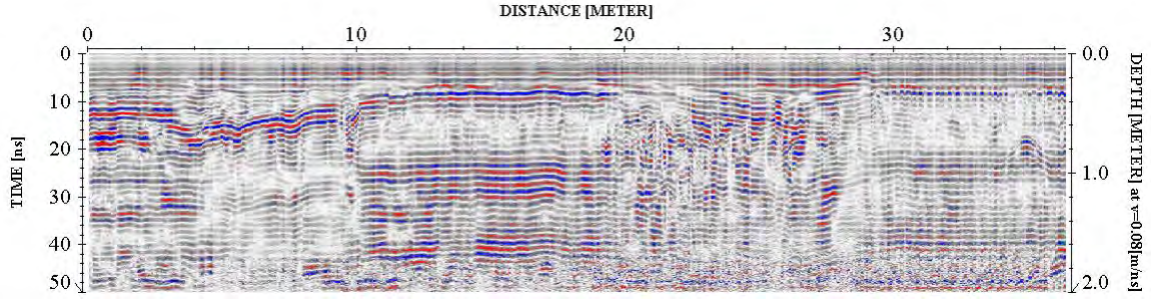
Step 2. Remove instrument noise *(dewow)*



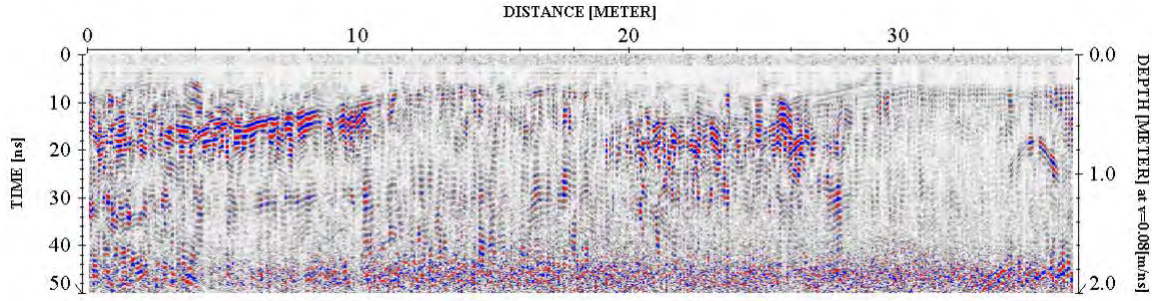
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and represents the subsurface anomalies much more accurately.

PHYSICAL SETTINGS

NOVA observed the following physical conditions at the time of the survey.

Weather: Sunny

Temperature: 45° F

Surface: Concrete, Asphalt, Vegetation, Gravel

Geophysical Noise Level: Geophysical noise at the site was medium due to being located in a semi-urban environment.

RESULTS

The results of the geophysical engineering survey (GES) identified the following at the project site:

- No large anomalies resembling an underground storage tank were identified during the geophysical surveys.
- Subsurface utilities: Electric, water, sewer, gas, and telecommunication lines were identified in the onsite mark out and are shown in the site survey plan.
- All detected subsurface anomalies were marked in the onsite mark out.
- Multiple boring locations were cleared. All cleared boring locations were marked in the onsite mark out.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

NOVA Geophysical Services

Levent Eskicakit, P.G., E.P.

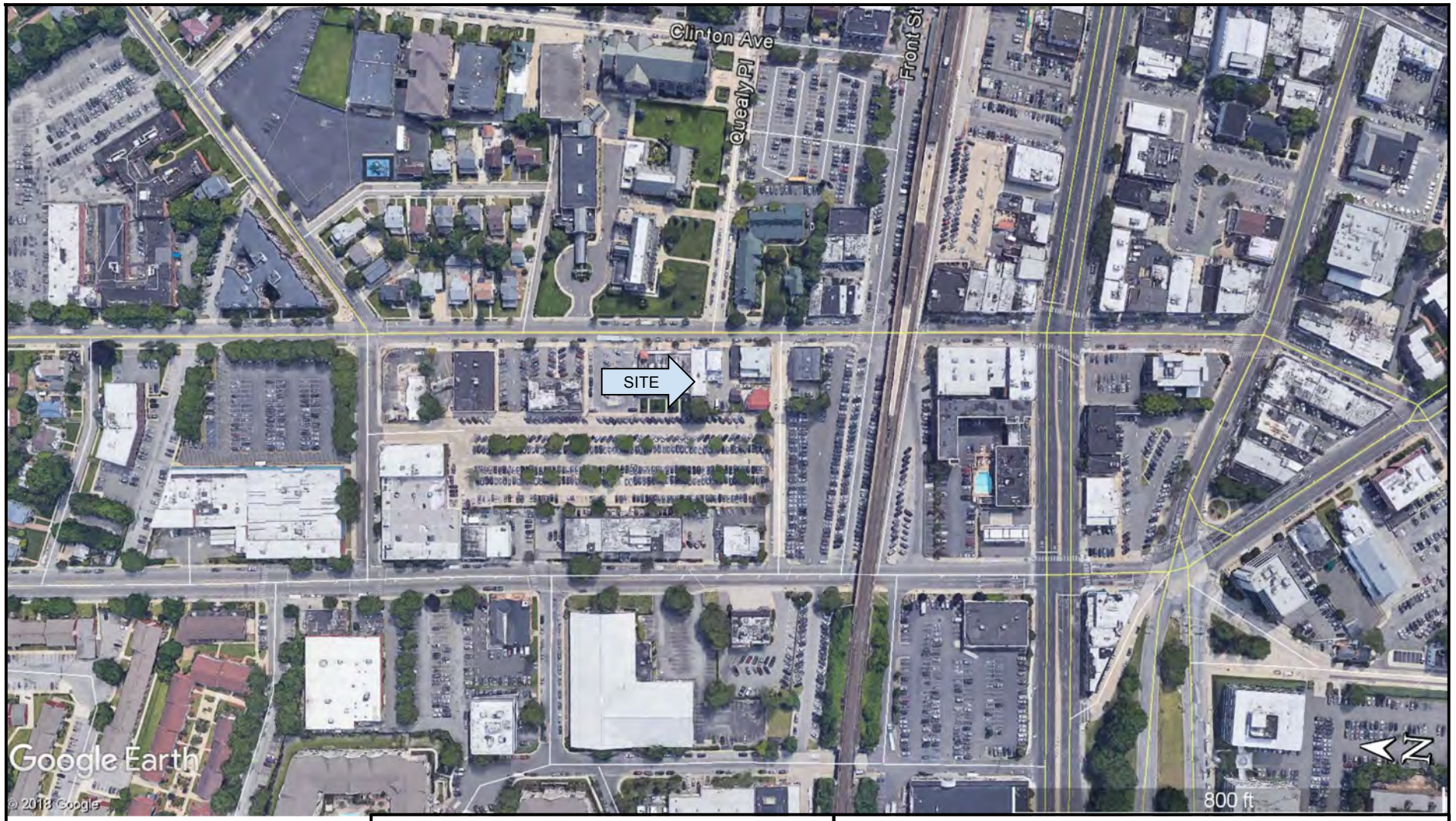
Project Engineer

Attachments:

Geophysical Images

Survey Plan

Site Location Map



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www.nova-gsi.com

SITE LOCATION MAP

SITE:	**Gem Cleaners** 84 North Village Avenue, Rockville Centre, New York 11570
CLIENT:	TRC
DATE:	March 19th & 28th, 2018
AUTH:	Chris Steinley

LEGEND

NOVA
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ENGINEERING
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SURVEY PLAN

SITE:	**Gem Cleaners** 84 North Village Avenue, Rockville Centre, New York 11570
CLIENT:	TRC
DATE:	March 19th & 28th, 2018
AUTH:	Chris Steinley

LEGEND

- Survey Area
- Sewer Catch Basin
- Sewer
- Gas
- Water
- Electric
- Telecom

LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- DW-1 — DRYWELL LOCATION AND IDENTIFICATION NUMBER
- MW-X — EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- SB-XXX — PROPOSED SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- SV/IA-XXX — PROPOSED SUB-SLAB VAPOR / INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- MW-XXX — PROPOSED SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW-XXXD — PROPOSED DEEP MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

NOTE:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.

SOURCE:

1. EXISTING MONITORING WELL LOCATIONS FROM REPORT TITLED "PRELIMINARY SITE CHARACTERIZATION - GEM CLEANERS" PREPARED BY O'BRIEN AND GERE ENGINEERS, INC. DATED OCTOBER 6, 2006.

0 30' 60'

SCALE: 1" = 30'
SHEET SIZE: 11" BY 17"

PRESUMED GROUNDWATER FLOW DIRECTION

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

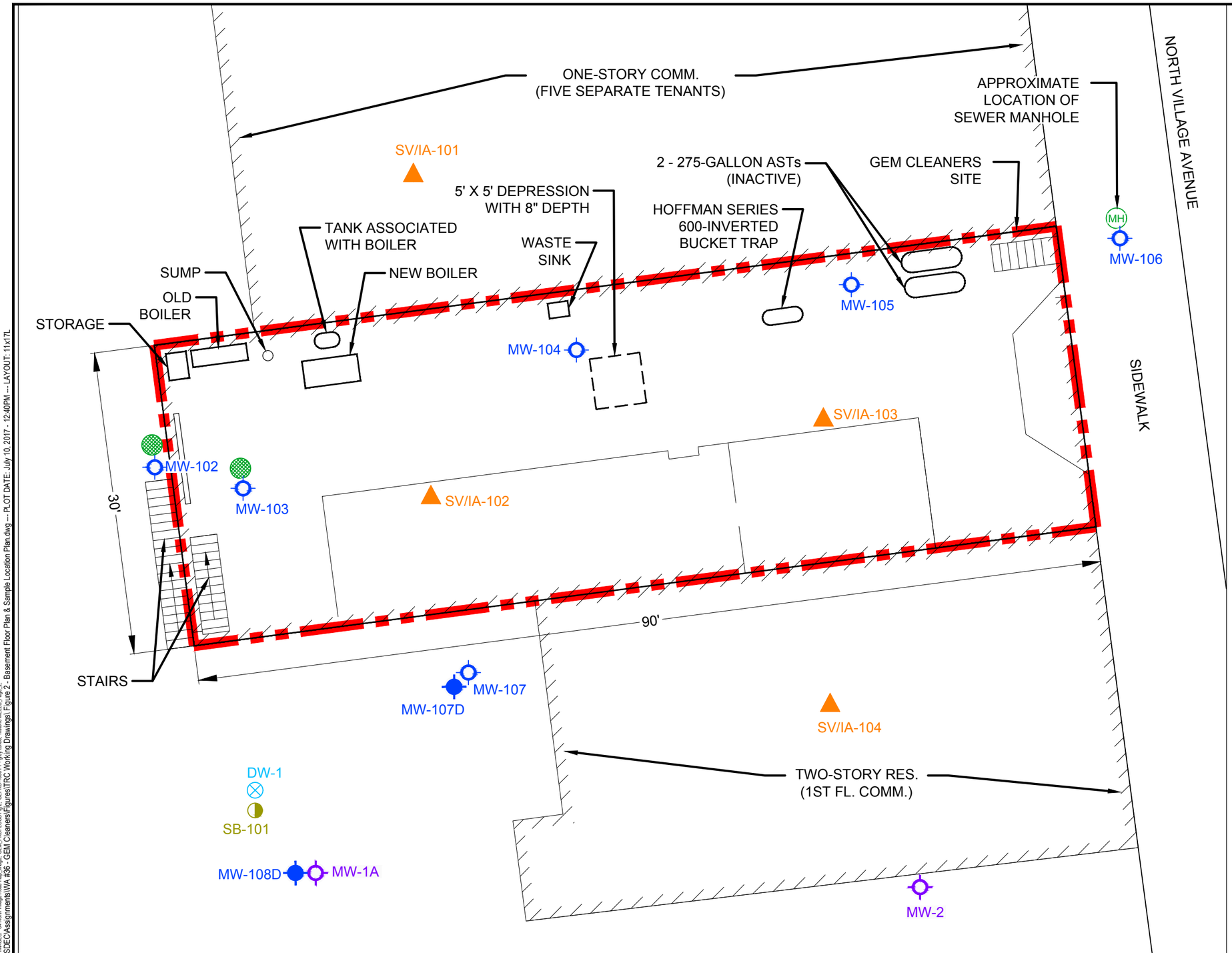
TITLE:
SAMPLE LOCATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	279191.0000.0000
CHECKED BY:	E. EBERT		**FIGURE 1**
APPROVED BY:	L. O'HARA		
DATE:	JULY 2017		

TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

FILE NO.: Figure 1 - Sample Location Plan.dwg

11x17 -- ATTACHED SHEETS: ACAD-Same Plots -- ATTACHED IMAGES: Figure 1 - Sample Location Plan 11x17 - GEM - PROPOSED SVS Fig 2 - SEPRO-1000 FT - grey toned - Interim WELLS - Page 2
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #35 - GEM Cleaners\Figures\TRC Working Drawings\Figure 1 - Sample Location Plan.dwg -- PLOT DATE: July 10, 2017 - 12:35PM -- LAYOUT: 11x17L



SCALE: 1" = 10'
SHEET SIZE: 11" BY 17"

LEGEND (SYMBOLS NOT TO SCALE):

	SITE BOUNDARY
DW-1	DRYWELL LOCATION AND IDENTIFICATION NUMBER
	DRAIN
AST	ABOVEGROUND STORAGE TANK
COMM.	COMMERCIAL
RES.	RESIDENTIAL
MW-X	EXISTING MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
SB-XXX	PROPOSED SOIL BORING LOCATION AND IDENTIFICATION NUMBER
SV/IA-XXX	PROPOSED SUB-SLAB VAPOR / INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
MW-XXX	PROPOSED SHALLOW MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
MW-XXXD	PROPOSED DEEP MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

NOTE:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.

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PRESUMED GROUNDWATER FLOW DIRECTION

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEM CLEANERS - SITE NO. 130082
84 NORTH VILLAGE AVENUE
ROCKVILLE CENTRE, NY

TITLE:
BASEMENT FLOOR PLAN AND SAMPLE LOCATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	279191.0000.0000
CHECKED BY:	E. EBERT		**FIGURE 2**
APPROVED BY:	L. O'HARA		
DATE:	JULY 2017		

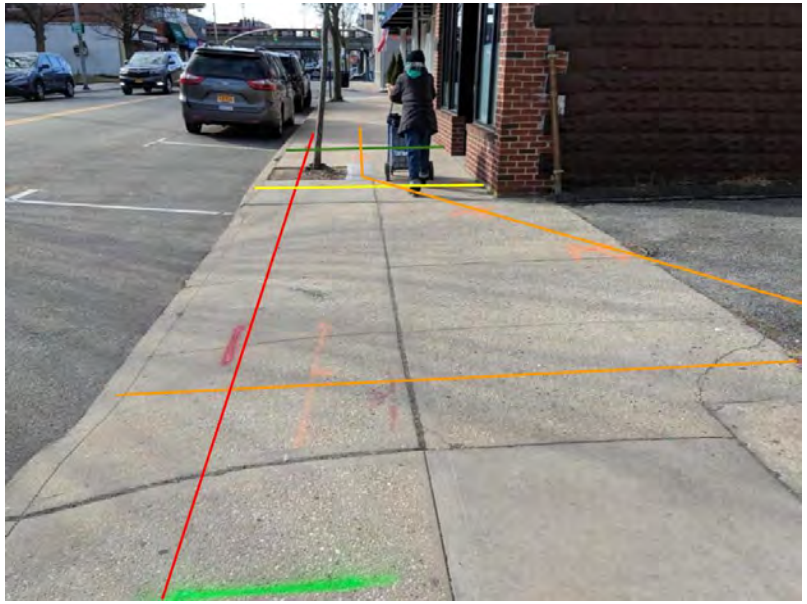
TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

FILE NO.: Figure 2 - Basement Floor Plan & Sample Location Plan.dwg

11x17 -- ATTACHED IMAGES: -- ATTACHED IMAGES: 84 North Village Road.jpeg; GEM PROFLOCS Fig 2 - GEPRS-1000 FT...jpeg (copy).jpeg; harbor WELLS Page 2...
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #36 - GEM Cleaners\Figures\TRC Working Drawings\Figure 2 - Basement Floor Plan & Sample Location Plan.dwg -- PLOT DATE: July 10, 2017 - 12:40PM -- LAYOUT: 11x17L

GEOPHYSICAL IMAGES

Gem Cleaners
84 North Village Avenue
Rockville Centre, New York 11570
March 28, 2018



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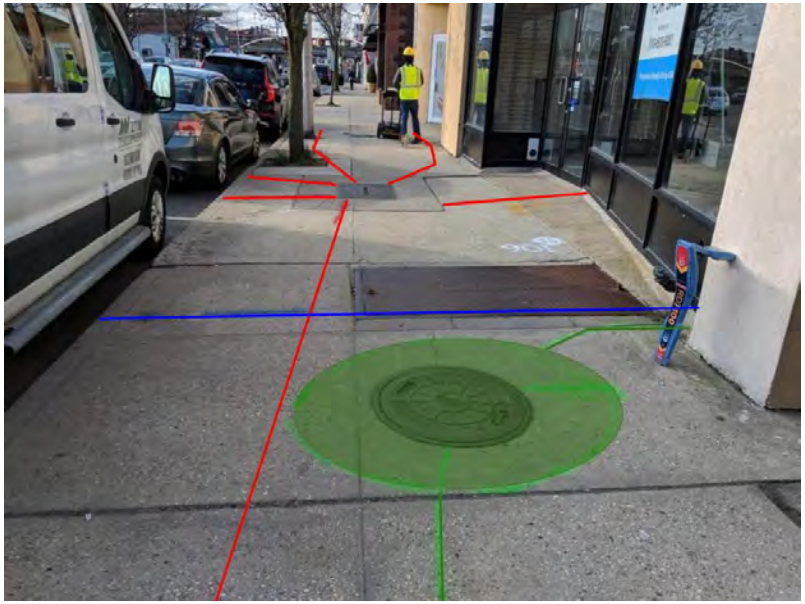

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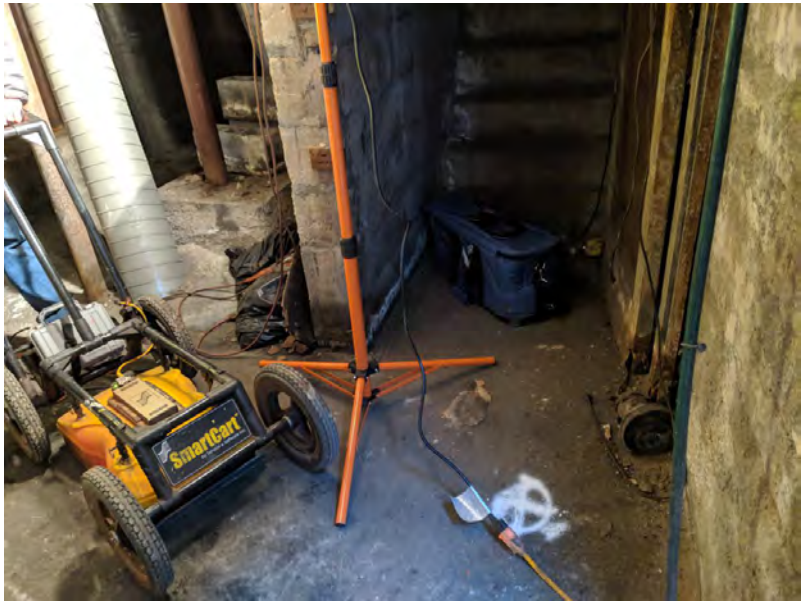

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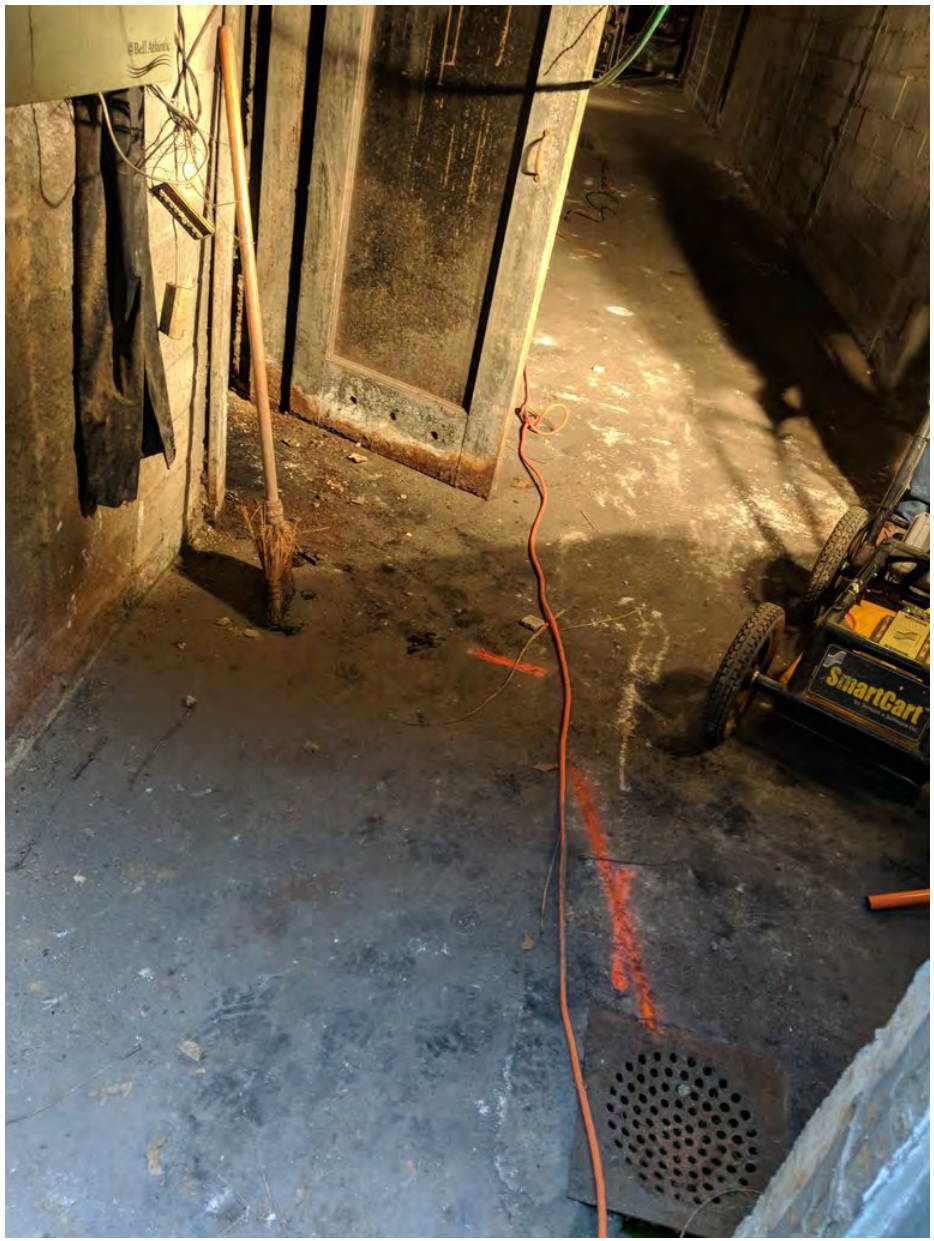

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GEOPHYSICAL IMAGES

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84 North Village Avenue
Rockville Centre, New York 11570
March 28, 2018

APPENDIX E
SOIL BORING AND MONITORING WELL CONSTRUCTION LOGS

BORING NUMBER: **MW-101D**

Results you can rely on

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	Gem Cleaners	Boring Depth (FT BGS):	100
Project Location:	84 N Village Avenue, Rockville Centre, NY	Date Started:	4/9/18
Project Number:	279191.0000.0000	Coordinate System:	NY State Plane - NYLI NAD83(96)
Client:	NYSDEC (TRC and D&B Joint Venture D007020)	North:	179787.0043
TRC Eng./Geol:	James Robinson	Vertical Datum:	NAVD 1988
Checked By:	Lindsay O'Hara		

		BORING INFORMATION	
		Hole Diameter:	8"
		Date Completed:	4/11/18
		East:	1081882.6792
		Ground Elevation:	25.46

DRILLING INFORMATION	
Drilling Contractor:	AARCO Environmental
Driller(s):	Daybi Pacheco
Drilling Method:	Hollow Stem Auger
Equipment/Model:	Geoprobe 7822
Sampler:	Split Spoon

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	4/9/2018		
DEPTH (ft.bgs.)	16		
REFERENCE	Ground Surface		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	◆VOC SCREENING RESULTS (ppm)
						0'- 0.7' Concrete and subbase (cut with wet saw)	
			6.0	6.0		0.7'- 6' Orange and brown f-m SAND, tr f gravel, dry, NO, NS	
			1.7	1.7		6'- 6.4' Tan to orange m-c SAND, dry, NO, NS 6.4'- 7' Dark grayish brown f-m SAND, tr f gravel, dry, loose, NO, NS 7'- 8' Tan to red m-c SAND, tr f gravel, dry, loose, NO, NS	
10			1.5	1.5		8'- 10' Tan to brown m-c SAND, tr f sand, tr f gravel, dry to moist, loose, NO, NS	
			1.7	1.7		10'- 11.5' Tan to brown m-c SAND, tr f sand, tr f gravel, dry to moist, loose, NO, NS 11.5'- 12' Grayish brown f-m SAND, tr m subrounded gravel, dry, NO, NS	
			1.5	1.5		12'- 12.5' Grayish brown f-m SAND, tr m subrounded gravel, dry, NO, NS 12.5'- 14' Grayish brown m-c SAND, little f-m subrounded white Gravel, tr fines, dry, loose, NO, NS	
	GC-MW-101(SO)-14-15		1.0	1.0		14'- 16' Grayish brown m-c SAND, little f-m subrounded white Gravel, tr fines, dry, moist at 15' bgs, wet at 16' bgs, loose, NO, NS	
			1.5	1.5		16'- 18' Grayish brown m-c SAND, little f-m subrounded white Gravel, little fines, wet, loose, NO, NS	
			1.0	1.0		18'- 20' Grayish brown m-c SAND, tr f-m subrounded white Gravel, little fines, wet, loose, NO, NS	
20							

Notes: bgs = below ground surface; NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**100**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/9/18**	Date Completed:	**4/11/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179787.0043**	East:	**1081882.6792**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.46**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			1.3	1.3		20' - 21' Grayish brown m-c SAND, tr f-m subrounded white Gravel, little fines, wet, loose, NO, NS	
						21' - 22' Dark gray f SAND, tr silt, medium dense, wet, NO, NS	
			1.3	1.3		22' - 24' Patched red/brown f SAND, tr silt, medium dense, wet, NO, NS	
			1.7	1.7		24' - 26' Patched red/brown f SAND, tr silt, medium dense, wet, NO, NS	
			1.5	1.5		26' - 26.7' Patched red/brown f SAND, tr silt, medium dense, wet, NO, NS 26.7' - 27.4' Red brown m-c SAND, little f gravel, wet, NO, NS 27.4' - 28' Red brown m-c SAND, little to tr silt/fines, wet, NO, NS	
			2.0	2.0		28' - 29' Red brown m-c SAND, little to tr silt/fines, wet, NO, NS 29' - 30' Dark brown plastic SILTY CLAY, wet, NO, NS	
30			1.5	1.5		30' - 30.5' Dark brown plastic SILTY CLAY, wet, NO, NS 30.5' - 31.4' Dark gray SILTY CLAY, plastic, med soft, wet, NO, NS 31.4' - 32' Dark gray f-m SAND, some silt, wet, NO, NS	
			2.0	2.0		32' - 32.4' Dark gray f-m SAND, some silt, wet, NO, NS 32.4' - 33' Dark gray SILTY CLAY, plastic, wet, NO, NS 33' - 34' Dark gray f SILTY SAND, slightly plastic, wet, NO, NS	
			2.0	2.0		34' - 34.6' Dark gray f SILTY SAND, slightly plastic, wet, NO, NS 34.6' - 35.2' Dark gray SILTY CLAY, wet, NO, NS 35.2' - 36' Dark gray f SAND, clayey in places, some silt, med stiff, wet, NO, NS	
			2.0	2.0		36' - 36.5' Light brown f-m SAND, dense, wet, NO, NS 36.5' - 37.2' Dark gray SILTY SAND, little clay, wet, NO, NS 37.2' - 38' Brown m-c SAND, little f subrounded gravel, dense, wet, NO, NS	
40			2.0	2.0		38' - 38.7' Light brown SILTY SAND, dense, wet, NO, NS 38.7' - 39.2' Dark gray SILTY CLAY, wet, NO, NS 39.2' - 40' Light brown/tan f-m SAND, tr f gravel, dense, wet, NO, NS	
			2.0	2.0		40' - 40.8' Light brown/tan f-m SAND, tr f gravel, dense, wet, NO, NS 40.8' - 42' Light brown to orange f-m SAND, little silt, tr f gravel, dense, wet, NO, NS	
			2.0	2.0		42' - 42.8' Light brown to orange f-m SAND, little silt, tr f gravel, dense, wet, NO, NS 42.8' - 44' Light yellow to orange f-m SAND, little f subrounded gravel, dense, wet, NO, NS	

VOC SCREENING RESULTS (ppm): 80 160 240 320

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**100**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/9/18**	Date Completed:	**4/11/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179787.0043**	East:	**1081882.6792**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.46**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			2.0	2.0		44'- 46' Light yellow to orange f-m SAND, little f subrounded gravel, dense, wet, NO, NS	
			2.0	2.0		46'- 46.5' Light yellow to orange f-m SAND, little f subrounded gravel, dense, wet, NO, NS 46.5'- 48' Light yellow to brown f-m SAND, tr f gravel, dense, wet, NO, NS	
			2.0	2.0		48'- 48.7' Light yellow to brown f-m SAND, tr f gravel, dense, wet, NO, NS 48.7'- 50' Light yellow to brown f-m SAND, tr f gravel, dense, wet, NO, NS	
50							
			2.0	2.0		50'- 50.7' Light yellow to brown f-m SAND, tr f gravel, dense, wet, NO, NS 50.7'- 52' Light brown f-m SAND, tr silt and tr f subrounded gravel, medium dense, wet, NO, NS	
			2.0	2.0		52'- 52.5' Light brown f-m SAND, tr silt and tr f subrounded gravel, medium dense, wet, NO, NS 52.5'- 54' Light brown/yellow brown f-m SAND, tr silt, tr f subrounded gravel, wet, NO, NS	
			2.0	2.0		54'- 54.7' Light brown/yellow brown f-m SAND, tr silt, tr f subrounded gravel, wet, NO, NS 54.7'- 56' Light brown f-m SAND and f-m subrounded gravel, tr silt, wet, NO, NS	
			2.0	2.0		56'- 56.5' Light brown f-m SAND and f-m subrounded gravel, tr silt, wet, NO, NS 56.5'- 58' Light brown f-m SAND and f-m subrounded gravel, tr silt, wet, NO, NS	
			2.0	2.0		58'- 59.2' Light gray f-m SAND, tr f gravel, medium dense, wet, NO, NS	
60						59.2'- 60' Yellow brown f-c SAND, little f-m rounded white gravel, medium dense, wet, NO, NS	
			2.0	2.0		60'- 61.5' Yellow brown f-c SAND, little f-m rounded white gravel, medium dense, wet, NO, NS 61.5'- 62' Light whitish gray GRAVEL and SAND, wet, NO, NS	
			2.0	2.0		62'- 63.8' Gray m-c SAND, little f-m subrounded white gravel, medium dense, wet, NO, NS	
			2.0	2.0		63.8'- 64' Yellowish brown m-c SAND, little f-m subrounded white Gravel, medium dense, NO, NS 64'- 65.5' Yellowish brown m-c SAND, little f-m subrounded white Gravel, medium dense, NO, NS	
			1.5	1.5		65.5'- 66' Tan to brown f-m GRAVEL and m-c SAND, sub rounded grains, wet, NO, NS 66'- 67.5' Tan to brown f-m GRAVEL and m-c SAND, sub rounded grains, wet, NO, NS	
						67.5'- 68' No recovery	

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**100**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/9/18**	Date Completed:	**4/11/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179787.0043**	East:	**1081882.6792**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.46**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			2.0	2.0		68' - 68.6' Tan to brown f-m GRAVEL and m-c SAND, sub rounded grains, wet, NO, NS	
70						68.6' - 70' Light gray/brown m-c SAND, tr f subrounded gravel, dense, wet, NO, NS	
			2.0	2.0		70' - 71.2' Light gray/brown m-c SAND, tr f subrounded gravel, dense, wet, NO, NS	
						71.2' - 72' Light gray m-c SAND, tr f gravel, dense, wet, NO, NS	
			2.0	2.0		72' - 72.5' Light gray m-c SAND, tr f gravel, dense, wet, NO, NS	
						72.5' - 74' Light yellow-brown m-c SAND and f-m subrounded white GRAVEL, very dense, wet, NO, NS	
			2.0	2.0		74' - 74.6' Light yellow-brown m-c SAND and f-m subrounded white GRAVEL, very dense, wet, NO, NS	
						74.6' - 76' Light yellow-brown m-c SAND and f-m subrounded white GRAVEL, very dense, wet, NO, NS	
			2.0	2.0		76' - 76.9' Light yellow-brown m-c SAND and f-m subrounded white GRAVEL, very dense, wet, NO, NS	
						76.9' - 78' Light grayish white c SAND, little f-m sand, little f-m white subrounded gravel, wet, NO, NS	
			2.0	2.0		78' - 78.8' Light grayish white c SAND, little f-m sand, little f-m white subrounded gravel, wet, NO, NS	
80						78.8' - 80' Light grayish white c SAND, little f-m sand, little f-m white subrounded gravel, wet, NO, NS	
			2.0	2.0		80' - 81' Light grayish white c SAND, little f-m sand, little f-m white subrounded gravel, wet, NO, NS	
						81' - 82' Light grayish f-m SAND, little f-m gravel, dense, wet, NO, NS	
			2.0	2.0		82' - 83' Light grayish f-m SAND, little f-m gravel, dense, wet, NO, NS	
						83' - 84' Light grayish f-m SAND, little f-m gravel, dense, wet, NO, NS	
			2.0	2.0		84' - 85.6' Light grayish f-m SAND, little f-m gravel, dense, wet, NO, NS	
						85.6' - 86' Grayish brown f SAND, tr f gravel, wet, NO, NS	
			2.0	2.0		86' - 86.8' Grayish brown f SAND, tr f gravel, wet, NO, NS	
						86.8' - 88' Tan to yellow-brown f-m SAND, dense, wet, NO, NS	
			2.0	2.0		88' - 89.4' Tan to yellow-brown f-m SAND, dense, wet, NO, NS	
90						89.4' - 90' Tan to yellow-brown f-m SAND, dense, wet, NO, NS	
			2.0	2.0		90' - 90.8' Tan to yellow-brown f-m SAND, dense, wet, NO, NS	
						90.8' - 92' Light brown f-m SAND, tr to little f gravel, medium dense, wet, NO, NS	
						92' - 93.2' Light brown f-m SAND, tr to little f gravel, medium dense, wet, NO, NS	

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**100**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/9/18**	Date Completed:	**4/11/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179787.0043**	East:	**1081882.6792**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.46**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			2.0	2.0		92' - 93.2' Light brown f-m SAND, tr to little f gravel, medium dense, wet, NO, NS	
						93.2' - 94' Light brown f-m SAND, tr to little f gravel, medium dense, wet, NO, NS	
			2.0	2.0		94' - 94.9' Light brown f-m SAND, tr to little f gravel, medium dense, wet, NO, NS	
						94.9' - 95.8' Light brown f-m SAND, tr f gravel, dense, wet, NO, NS	
			2.0	2.0		95.8' - 96' Dark gray f-m SAND, tr silt, medium dense, wet, NO, NS	
						96' - 96.6' Dark gray f-m SAND, tr silt, medium dense, wet, NO, NS	
						96.6' - 98' Light to dark brown f-m SAND, tr f gravel, med dense, wet, NO, NS	
			2.0	2.0		98' - 99.2' Light to dark brown f-m SAND, tr f gravel, med dense, wet, NO, NS	
100	GC-MW-101D(SO)-99.2-100					99.2' - 100' Light to dark brown f-m SAND, medium dense, tr silt, tr f gravel, wet, NO, NS	
						Bottom of borehole at 100.0 feet.	
110							

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
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BORING NUMBER: **MW-102**
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Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**12**	Hole Diameter:	**2.5"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/19/18**	Date Completed:	**3/19/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179701.3085**	East:	**1081789.5191**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**18.24**
Checked By:	**Lindsay O'Hara**				

DRILLING INFORMATION	
Drilling Contractor:	**LAWES**
Driller(s):	**Scott Pedersen**
Drilling Method:	**Direct-Push**
Equipment/Model:	**Geoprobe 420M**
Sampler:	**Macrocore**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**3/19/2018**		
DEPTH (ft.bgs.)	**10**		
REFERENCE	**Ground Surface**		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	◆VOC SCREENING RESULTS (ppm) 80 160 240 320
			3.0	1.3		0'- 0.33' Concrete (cored with wet saw) 0.33'- 1.1' Light tan/beige f-m SAND, little f-m white to yellow or black gravel, moist, NO, NS 1.1'- 1.33' Dark brown f-m SAND, little f red to black gravel, moist, NO, NS	
	GC-MW-102(SO)-3-5		3.0	1.0		3'- 4' Orange to tan m SAND, little, f-m rounded white to yellow-orange gravel, moist, NO, NS	
			3.0	1.8		6'- 6.25' Orange to tan m SAND, little, f-m rounded white to yellow-orange gravel, moist, NO, NS 6.25'- 7.75' Tan to orange f-m SAND, little f-m rounded white to orange gravel, moist, NO, NS	
10	GC-MW-102(SO)-9-11		3.0	2.3		9'- 9.25' Tan to orange f-m SAND, little f-m rounded white to orange gravel, moist, NO, NS 9.25'- 11.25' Orange f-m SAND, trace f gravel, wet at 10' below slab, NO, NS	
						Bottom of borehole at 12.0 feet.	
20							

Notes: NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **MW-103**
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Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**18**	Hole Diameter:	**2.5"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/19/18**	Date Completed:	**3/20/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179699.0488**	East:	**1081794.8245**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**18.25**
Checked By:	**Lindsay O'Hara**				

DRILLING INFORMATION	
Drilling Contractor:	**LAWES**
Driller(s):	**Scott Pedersen**
Drilling Method:	**Direct-Push**
Equipment/Model:	**Geoprobe 420M**
Sampler:	**Macrocore**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**3/19/2018**		
DEPTH (ft.bgs.)	**9.75**		
REFERENCE	**Ground Surface**		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			3.0			0'- 0.25' Concrete 0.25'- 2' Tan and orange f-m SAND, tr f rounded white gravel, slightly moist; 2" thick brown layer beginning at 1' below slab, NO,NS	
	GC-MW-103(SO)-3-5		3.0			3'- 3.25' Tan and orange f-m SAND, tr f rounded white gravel, slightly moist; 2" thick brown layer beginning at 1' below slab, NO,NS 3.25'- 5.33' Tan and orange f-m SAND, tr f gravel, slightly moist, NO,NS	
			3.0			6'- 6.4' Brown and tan dry sluff from above 6.4'- 7.8' Orange and light brown f-m SAND, tr f gravel, orange seam 6.4-6.5' below slab, slightly moist, NO,NS	
10	GC-MW-103(SO)-10-12		3.0			9'- 9.5' Orange-brown f-c SAND with f-c rounded white gravel, well graded, moist, NO,NS 9.5'- 10' Orange-brown f-c SAND, tr f-c rounded white gravel, well graded, moist, NO,NS 10'- 11' Tan/light gray f-m SAND, wet at 9.75' below slab, NO,NS	
	GC-MW-103(SO)-12-14		3.0			12'- 14' Brown to tan f SAND with black to dark gray staining from 13-13.5' below slab, wet, odorous 14'- 14.25' Orange and yellow/cream colored f gravel, wet, NS, SO 14.25'- 14.75' Tan very f SAND, poorly graded, dense, wet, NO,NS 15'- 16.5' Tan f SAND, wet, compact, NO,NS	
	GC-MW-103(SO)-15-17		3.0			16.5'- 17' Orange f SAND, tr m gravel, wet, compact, NO, NS 17'- 18' Tan f SAND, wet, compact, NO,NS	
20						Bottom of borehole at 18.0 feet.	

Notes: NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **MW-104**
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Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**12**	Hole Diameter:	**2.5"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/20/18**	Date Completed:	**3/20/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179709.1303**	East:	**1081833.6624**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**18.27**
Checked By:	**Lindsay O'Hara**				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	**LAWES**	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	**Scott Pedersen**	DATE	**3/20/2018**		
Drilling Method:	**Direct-Push**	DEPTH (ft.bgs.)	**8.75**		
Equipment/Model:	**Geoprobe 420M**	REFERENCE	**Ground Surface**		
Sampler:	**Macrocore**	STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
						0'- 0.25' Concrete	80 160 240 320
	GC-MW-104(SO)-0.5-2.5		3.0	2.0		0.25'- 2' Tan with orange hue f-m SAND, little f-m rounded yellow to brown f-m gravel, dry, NO, NS	
			3.0	2.3		3'- 5' Tan to orange f-m SAND, tr m rounded yellowish white gravel at 4' bgs, dry, loose, NO, NS	
						5'- 5.25' Tan to orange m-c SAND, tr m rounded yellowish white gravel at 4' bgs, dry, loose, NO, NS	
	GC-MW-104(SO)-7-9		3.0	2.3		6'- 8.25' Tan to orange f-c SAND, tr to little f-c gravel, wet at 8.75' below slab, NO, NS	
10			3.0	1.5		9'- 10.5' Dark beige with orange hue f-c SAND, some f-c gravel, wet, loose, NO, NS	
						Bottom of borehole at 12.0 feet.	
20							

Notes: NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
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BORING NUMBER: **MW-105**
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Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**12**	Hole Diameter:	**2.5"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/20/18**	Date Completed:	**3/20/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179711.659**	East:	**1081863.4267**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**18.29**
Checked By:	**Lindsay O'Hara**				

DRILLING INFORMATION	
Drilling Contractor:	**LAWES**
Driller(s):	**Scott Pedersen**
Drilling Method:	**Direct-Push**
Equipment/Model:	**Geoprobe 420M**
Sampler:	**Macrocore**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**3/20/2018**		
DEPTH (ft.bgs.)	**9**		
REFERENCE	**Ground Surface**		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
						0'- 0.25' Concrete	80 160 240 320
	GC-MW-105(SO)-0.5-2.5		3.0	1.8		0.25'- 1.75' Tan-brown f-m SAND, tr m gravel, dry (slightly damp at top from wet concrete saw); red 0.5" thick lens at 0.9' below slab, NO, NS	◆
						3'- 4.5' Tan-brown f SAND, dry, loose, NO, NS	
			3.0	1.8		4.5'- 4.75' Tan-brown f SAND, little m-c gravel, dry, loose, NO, NS	◆
	GC-MW-105(SO)-7-9		3.0	2.1		6'- 8.1' Tan-brown f-m SAND, tr m rounded orange gravel, moist, becoming wet at 8.1' (likely 9' below slab), NO, NS	◆
10			3.0	2.3		9'- 9.75' Tan-brown f-m SAND, tr m rounded orange gravel, wet, NO, NS	▽
						9.75'- 10.75' Brown to orange well graded m-c SAND with f-m white to orange gravel, wet, loose, NO, NS	◆
						10.75'- 11.25' Tan f SAND, wet, more compact, very poorly graded, NO, NS	
20						Bottom of borehole at 12.0 feet.	

Notes: NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **MW-106**

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Gem Cleaners	Boring Depth (FT BGS):	27	Hole Diameter:	8"
Project Location:	84 N Village Avenue, Rockville Centre, NY	Date Started:	4/3/18	Date Completed:	4/3/18
Project Number:	279191.0000.0000	Coordinate System:	NY State Plane - NYLI NAD83(96)		
Client:	NYSDEC (TRC and D&B Joint Venture D007020)	North:	179711.3471	East:	1081884.1173
TRC Eng./Geol:	James Robinson	Vertical Datum:	NAVD 1988	Ground Elevation:	25.83
Checked By:	Lindsay O'Hara				

DRILLING INFORMATION	
Drilling Contractor:	AARCO Environmental
Driller(s):	Daybi Pacheco
Drilling Method:	Hollow Stem Auger
Equipment/Model:	Geoprobe 7822
Sampler:	Split Spoon

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	4/3/2018		
DEPTH (ft.bgs.)	17		
REFERENCE	Ground Surface		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	BLOW COUNTS	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			5.0	5.0			0'- 0.67' Concrete and subbase 0.67'- 5' Brown with orange hue f-m SAND, tr f gravel, dry, NO, NS (0-5' bgs hand cleared)	
	SS		2.0	1.7	3 4 6 7		5'- 6.67' Light brown to orange-red f-m SAND, tr f gravel, dry, soft, NO, NS	
	SS		2.0	1.7	6 8 8 9		7'- 8.67' Light brown to orange-red f-m SAND, tr f gravel, dry, soft, NO, NS	
10	SS		2.0	1.5	2 6 8 8		9'- 10.5' Light brown to orange-red f-m SAND, tr f gravel, dry, soft, NO, NS	
	SS		2.0	1.5	4 2 6 13		11'- 11.67' Light brown to orange-red f-m SAND, tr f gravel, dry, soft, NO, NS 11.67'- 12.5' Tan m SAND, tr f gravel, chert or quartzite cobble (1.5" in diameter) at 12.4' bgs, stiffer, dry, NO, NS	
	SS		2.0	1.4	5 6 11 12		13'- 13.7' Brown-orange f-m SAND, tr f gravel (likely heave), NO, NS 13.7'- 14.4' Tan m SAND, tr f-m gravel, white cherty cobble at 14.2' bgs, dry, NO, NS	
	SS-GC-MW-106(SO)-15-17		2.0	0.3	5 9 10 10		15'- 15.3' Tan m SAND, tr f-m gravel, moist, NO, NS	
	SS		2.0	1.5	6 8 8 9		17'- 18.5' Brown f-m SAND with f-c rounded white to yellow gravel, wet (water table), NO, NS	
20					8 15		19'- 19.5' Brown f-m SAND with f-c rounded white to yellow gravel, wet, NO, NS 19.5'- 20.125' Tan very f SAND, wet, 1/8" thick red silt lens at 20' bgs, NO, NS	

Notes: bgs = below ground surface; NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
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BORING NUMBER: **MW-106**

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**27**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/3/18**	Date Completed:	**4/3/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179711.3471**	East:	**1081884.1173**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.83**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	BLOW COUNTS	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
	SS		2.0	1.5	15 19		20.125'- 20.3' White rounded f-m GRAVEL, wet, NO, NS	
	SS		2.0	1.7	2 6 13 16		21'- 22.67' Tan very f SAND, wet, very poorly graded, stiff, NO, NS	
	SS		2.0	2.0	6 7 11 14		23'- 24.6' Tan very f SAND, tr m gravel, wet, very poorly graded, stiff, NO, NS	
	SS		2.0	2.0	6 8 9 4		24.6'- 24.7' Red-orange f SILTY SAND, wet, NO, NS 24.7'- 25' Tan very f SAND, wet, very poorly graded, stiff, NO, NS 25'- 26' Tan f-m SAND (likely heave from above), wet, NO, NS 26'- 26.2' Tan f-m SAND, some f-c round gravel (white [fine] or dark red [coarse]), wet, NO, NS 26.2'- 26.55' Tan to orange very f SILTY SAND, wet, NO, NS 26.55'- 26.67' Light gray to orange CLAY, medium plasticity, some silt, wet, NO, NS 26.67'- 27' Tan f-m SAND, some f-m rounded gravel, tr silt, wet, NO, NS Bottom of borehole at 27.0 feet.	80 160 240 320
30								
40								

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **MW-107D**

Results you can rely on

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	Gem Cleaners	Boring Depth (FT BGS):	101
Project Location:	84 N Village Avenue, Rockville Centre, NY	Date Started:	3/26/18
Project Number:	279191.0000.0000	Coordinate System:	NY State Plane - NYLI NAD83(96)
Client:	NYSDEC (TRC and D&B Joint Venture D007020)	North:	179670.6621
TRC Eng./Geol:	James Robinson	Vertical Datum:	NAVD 1988
Checked By:	Lindsay O'Hara		

		BORING INFORMATION	
		Hole Diameter:	8"
		Date Completed:	3/29/18
		East:	1081811.2164
		Ground Elevation:	28.82

DRILLING INFORMATION	
Drilling Contractor:	AARCO Environmental
Driller(s):	Daybi Pacheco
Drilling Method:	Hollow Stem Auger
Equipment/Model:	Geoprobe 7822
Sampler:	Split Spoon

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	3/26/2018		
DEPTH (ft.bgs.)	17		
REFERENCE	Ground Surface		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			5.0	5.0		0'- 0.167' Asphalt 0.167'- 5' Orange to tan/brown m-f SAND, tr m gravel, tr silt, slightly plastic in some sections, moist (hand cleared 0-5' bgs), NO, NS	
			2.0	1.3		5'- 6.3' Brownish orange m-f SAND, tr m gravel, moist, NO, NS	
			2.0	1.5		7'- 8.5' Brownish orange m-f SAND, tr m gravel, moist, NO, NS	
10			2.0	1.4		9'- 10.6' Brownish orange m SAND, tr m gravel, moist, NO, NS	
			2.0	1.5		11'- 12.5' Tan m SAND, little f-m rounded black, white, and yellow gravel, moist, NO, NS	
			2.0	1.3		13'- 14.25' Tan m SAND, little f-m rounded black, white, and yellow gravel, moist, NO, NS	
	GC-MW-107D(SO)-15-17		2.0	1.3		15'- 16.33' Tan-orange m SAND, little f-c rounded gravel, moist, NS, NO	
			2.0	1.3		17'- 18.33' Tan-orange m SAND, little f-c rounded gravel, moist, wet at 17' bgs, NS, NO	
20						19'- 20.1' Tan-orange m SAND, little f-c rounded gravel, moist, wet at 17' bgs, NS, NO	

VOC SCREENING RESULTS (ppm): 80, 160, 240, 320

Notes: bgs = below ground surface; NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

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PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**101**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/26/18**	Date Completed:	**3/29/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179670.6621**	East:	**1081811.2164**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**28.82**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			2.0	1.8		20.1'- 20.833' Light tan f SAND, compact, tr f-m gravel, wet, NO, NS	
			2.0	2.0		21'- 22' Light tan f SAND, compact, tr f-m gravel, wet, NO, NS 22'- 23' Light tan very f SAND, stiff, tr m-f gravel, wet, NO, NS	
			2.0	1.5		23'- 23.33' Light tan very f SAND, stiff, tr m-f gravel, wet, NO, NS 23.33'- 24.5' Tan to orange very f SAND, stiff, wet, NO, NS	
			2.0	1.7		25'- 25.4' Tan to orange very f SAND, stiff, wet, NO, NS 25.4'- 26.6' Tan very f SAND, stiff, trace f gravel, wet, NO, NS	
			2.0	2.0		27'- 28' Tan very f SAND, stiff, trace f gravel, wet, NO, NS 28'- 28.5' Tan f SAND, stiff, wet, NO, NS 28.5'- 29' Brown well-graded m SAND with f-c Gravel, wet, NO, NS	
30			2.0	1.5		29'- 30' Brown well-graded m SAND, some f-c Gravel, wet, NO, NS 30'- 30.5' Gray to brown CLAYEY SILT, very soft, wet, NO, NS	
			2.0	2.0		31'- 31.4' Gray to brown CLAYEY SILT, very soft, wet, NO, NS 31.4'- 32.75' Gray and brown SILTY CLAY, slightly stiffer than above, wet, NO, NS	
			2.0	1.2		32.75'- 33' Gray to red brown f SAND with little silt, medium stiffness, wet, NO, NS 33'- 33.3' Gray to red brown f SAND with little silt, medium stiffness, wet, NO, NS 33.3'- 34.16' Gray to orange f SAND, little silt, soft, wet, NO, NS	
			2.0	1.7		35'- 35.5' Gray to orange f SAND, little silt, soft, wet, NO, NS 35.5'- 36.67' Gray and brown f SANDY SILT, tr dark gray cobble at 36' bgs, little to tr clay, wet, NO, NS	
			2.0	2.0		37'- 37.3' Gray and brown f SANDY SILT, tr dark gray cobble at 36' bgs, little to tr clay, wet, NO, NS 37.3'- 38.33' Gray and orange-brown SANDY SILT with clay, wet, NO, NS 38.33'- 39' Gray to orange-red m SAND, little silt, tr f-m gravel, wet, NO, NS	
40			2.0	1.2		39'- 40' Gray brown CLAYEY SILT, loose, wet, NS, NO 40'- 40.2' Gray f-m SILTY SAND, little m gravel, wet, NO, NS	
			2.0	2.0		41'- 43' Yellowish-orange tan m SAND, little f-m rounded black and white to yellow gravel, wet, NO, NS	
			2.0	1.4		43'- 44.45' Yellowish-orange tan m-f SAND, little f-m rounded black and white to yellow gravel, wet, NO, NS	

VOC SCREENING RESULTS (ppm): 80, 160, 240, 320

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

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PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**101**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/26/18**	Date Completed:	**3/29/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179670.6621**	East:	**1081811.2164**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**28.82**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm) 80 160 240 320
			2.0	1.4		45'- 45.5' Yellowish-orange tan m-f SAND, little f-m rounded black and white to yellow gravel, wet, NO, NS 45.5'- 46.45' Yellowish-orange tan m-f SAND, tr silt, little f-m rounded black and white to yellow gravel, wet, NO, NS	
			2.0	2.0		47'- 49' Tan to yellow f-m SAND, tr f-m rounded white/cream colored gravel; becoming more orange 48.75-49' bgs, wet, NO, NS	
50			2.0	2.0		49'- 51' Tan to yellow f-m SAND, tr f-m rounded white/cream colored gravel; becoming more orange 48.75-49' bgs, wet, NO, NS	
			2.0	1.5		51'- 53' Yellowish tan f SAND, very poorly graded, wet, NO, NS	
			2.0	2.0			
			2.0	2.0		53'- 55' Yellowish tan f SAND, very poorly graded, tr c rounded white gravel @ 54.75' bgs, wet NO, NS	
			2.0	2.0		55'- 57' Yellowish tan f SAND, very poorly graded, wet, NO, NS	
			2.0	1.3		57'- 58.5' Yellowish tan f SAND, very poorly graded, tr m rounded white gravel, wet, NO, NS	
60						59'- 60.5' Yellowish tan f SAND, little to some f-m rounded white and orange gravel, stiff/compact, wet, NO, NS	
			2.0	1.5		61'- 61.3' Yellowish tan f SAND, little to some f-m rounded white and orange gravel, stiff/compact, wet, NO, NS 61.3'- 62.5' Light orange f-c SAND, some f-m gravel, wet, NO, NS	
			2.0	1.5		63'- 63.5' Light orange f-c SAND, some f-m gravel, wet, NO, NS 63.5'- 64.5' Orange f-c SAND, some f-c subrounded, cherty gravel, some to little silt at 64.25' bgs, wet, NO, NS	
			2.0	1.8		65'- 66' Yellowish tan f SAND, wet, NO, NS 66'- 66.87' Yellowish orange f-m SAND, little f gravel, wet NO, NS	
			2.0	2.0		67'- 68' Tan f SAND, tr f rounded white gravel, wet, NO, NS	

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

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PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**101**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/26/18**	Date Completed:	**3/29/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179670.6621**	East:	**1081811.2164**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**28.82**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
						68' - 69' Orange f-m SAND, tr silt, wet, NO, NS	
						69' - 70' Orange f-m SAND, tr silt, wet, NO, NS	
70			2.0	1.3		70' - 70.33' Yellow orange/gold f-m SAND, tr f gravel, wet, NO, NS; bottom of spoon is empty	
						71' - 72.5' Tan f SAND, tr f gravel, wet, NO, NS	
			2.0	2.0			
						72.5' - 73' Yellow-gold/tan f-m SAND, tr f-m gravel, wet, NO, NS	
						73' - 74.2' Yellow-tan f SAND, tr f gravel, wet, NO, NS	
			2.0	2.0			
						74.2' - 74.4' Gray SILTY SAND, tr clay, slightly plastic, wet, NO, NS	
						74.4' - 75' Yellow-orange f-m SAND, tr f gravel, wet, NO, NS	
						75' - 76' Tan-brown-orange f SAND, tr f gravel, wet, NO, NS	
			2.0	1.3		76' - 76.33' Brown to dark brown/black SANDY SILT, tr clay, somewhat plastic, wet, NO, NS; missing bottom 4" of spoon	
						77' - 78' Light brown f-m SAND, tr silt, wet, NO, NS	
			2.0	2.0			
						78' - 78.75' Brown and gray f-m SILTY SAND, wet, NO, NS	
						78.75' - 79' Gray SILTY CLAY, tr f sand, soft, low plasticity, wet, NO, NS	
80			2.0	1.0		79' - 80' Light brown to gray f-m SAND, tr f gravel, tr silt, tr clay, wet, NO, NS	
						81' - 82' Light brown f-m SAND, tr f gravel, wet, NO, NS	
			2.0	1.3			
						82' - 82.33' Light brown and gray f-m SAND, little silt, wet, NO, NS	
						83' - 83.8' Light brown f-m SAND, little f gravel, wet, NO, NS	
			2.0	1.7		83.8' - 84.67' Light blue-gray f-m SAND, tr f gravel, tr silt, tr clay, wet, NO, NS	
						85' - 85.82' Light brown f-m SAND, tr f gravel, poor recovery in bottom of spoon, wet, NO, NS	
			2.0	0.8			
						87' - 88.75' Tan f SAND, poorly graded, compact, wet, NO, NS	
			2.0	2.0			
						88.75' - 89' Light gray f SILTY SAND, tr clay, maleable, wet, NO, NS	
						89' - 90' Light gray f SILTY SAND, tr clay, maleable, wet, NO, NS	
90			2.0	2.0		90' - 91' Light gray f SILTY SAND, tr clay, wet, NO, NS	
						91' - 92.5' Light gray f SILTY SAND, tr clay, wet, NO, NS	
			2.0	1.5			

VOC SCREENING RESULTS (ppm): 80 160 240 320

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
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PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**101**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/26/18**	Date Completed:	**3/29/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179670.6621**	East:	**1081811.2164**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**28.82**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
							80 160 240 320
			2.0	2.0		93'- 94.5' Light gray f SILTY SAND, tr clay, wet, NO, NS	
						94.5'- 95' Light gray SILTY f SAND, tr clay, wet, NO, NS	
			2.0	2.0		95'- 96.75' Light gray SILTY f SAND, tr clay, wet, NO, NS	
						96.75'- 97' Light gray SANDY SILT, some clay in top 0.5" of sample, wet, NO, NS	
	GC-MW-107D(SO)-97-99		2.0	2.0		97'- 99' Light brown to light gray f SAND, tr silt, tr clay, sugary-like texture, wet, NO, NS	
100			2.0	0.0		99'- 101' No recovery	
						Bottom of borehole at 101.0 feet.	
110							

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
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BORING NUMBER: **MW-108**

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PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**60.5**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/3/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179658.5233**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**
Checked By:	**Lindsay O'Hara**		

		BORING INFORMATION	
		Hole Diameter:	**8"**
		Date Completed:	**4/4/18**
		East:	**1081795.711**
		Ground Elevation:	**25.84**

DRILLING INFORMATION	
Drilling Contractor:	**AARCO Environmental**
Driller(s):	**Daybi Pacheco**
Drilling Method:	**Hollow Stem Auger**
Equipment/Model:	**Geoprobe 7822**
Sampler:	**Split Spoon**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**4/3/2018**		
DEPTH (ft.bgs.)	**17**		
REFERENCE	**Ground Surface**		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			5.0	5.0		0'- 0.25' Asphalt and subbase 0.25'- 5' Orange-brown f-m SAND, tr f-m gravel, dry, NO, NS (hand cleared)	
	SS		2.0	1.7		5'- 6.67' Orange-brown f-m SAND, tr f gravel, loose, dry, NO, NS	
	SS		2.0	1.8		7'- 8.8' Orange-brown f-m SAND, tr f gravel, loose, dry, NO, NS	
10	SS		2.0	1.7		9'- 9.5' Orange-brown f-m SAND, tr f gravel, loose, dry, NO, NS 9.5'- 11.67' Orange m SAND, tr m rounded white gravel, dry; 0.5" thick red lens @ 11' bgs, NO, NS 11'- 11.5' Brown f-m SAND, tr rounded white f gravel, NO, NS	
	SS		2.0	1.5		11.5'- 12.5' Tan f-m SAND, tr rounded gray to yellow gravel, dry, NO, NS	
	SS		2.0	1.8		13'- 14.8' Tan f-m SAND, tr rounded gray to yellow gravel, dry, NO, NS	
	SS-GC-MW-108D(SO)-15-17		2.0	1.7		15'- 15.67' Tan f-m SAND, tr rounded gray to yellow gravel, dry, NO, NS 15.67'- 16.67' Orange-brown f-c SAND with f-c rounded white to yellow gravel, damp, NO, NS	
	SS		2.0	1.7		17'- 17.67' Orange-brown f-c SAND with f-c rounded white to yellow gravel, damp, NO, NS 17.67'- 18.33' Orange-brown f-c SAND with f-c rounded white to yellow gravel, damp, NO, NS 18.33'- 18.67' Light beige/tan very f SAND, tr f-m rounded white gravel, wet, NO, NS	
20						19'- 19.25' Light beige/tan very f SAND, tr f-m rounded white gravel, wet, NO, NS	

Notes: bgs = below ground surface; NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

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PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**60.5**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/3/18**	Date Completed:	**4/4/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179658.5233**	East:	**1081795.711**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.84**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
	SS		2.0	1.0		19.25'- 20' Light beige/tan very f SAND, tr f-m rounded white gravel, wet, NO, NS	
	SS		2.0	1.3		21'- 21.33' Light beige/tan very f SAND, tr f-m rounded white gravel, wet, NO, NS 21.33'- 22.33' Light beige/tan very f SAND, tr f-m rounded white gravel, wet, NO, NS	
	SS		2.0	1.7		23'- 23.5' Light beige/tan very f SAND, tr f-m rounded white gravel, wet, NO, NS 23.5'- 24.67' Light beige/tan very f SAND, tr f-m rounded white gravel, wet, NO, NS	
	SS		2.0	1.5		25'- 26.5' Light beige/tan very f SAND, wet, NO, NS	
	SS		2.0	1.7		27'- 27.5' Light beige/tan very f SAND, wet, NO, NS 27.5'- 27.67' Red and brown f-m SAND with f-m rouned white gravel with little red silt, wet, NO, NS 27.67'- 27.8' Gray SANDY CLAY lens, wet, NO, NS 27.8'- 28.67' Gray to white to red f-m SILTY SAND, wet, NO, NS	
30	SS		2.0	2.0		29'- 30' Gray to white to red f-m SILTY SAND, wet, NO, NS 30'- 31' Gray with red and orange hued streaks CLAYEY SILT, very soft, low plasticity, wet, NO, NS	
	SS		2.0	2.0		31'- 32.5' Gray with red and orange hued streaks CLAYEY SILT, very soft, low plasticity, wet, NO, NS	
	SS		2.0	1.5		32.5'- 33' Orange and grayish brown f SILTY SAND, wet, NO, NS 33'- 34' Orange and grayish brown f SILTY SAND, wet, NO, NS 34'- 34.125' Orange CLAYEY SILT, little f sand, wet, NO, NS 34.125'- 34.5' Dark gray SILTY CLAY, low plasticity, wet, NO, NS	
	SS		2.0	2.0		35'- 35.67' Dark gray SILTY CLAY, low plasticity, wet, NO, NS 35.67'- 36.67' Dark gray SILTY CLAY, low plasticity, wet, NO, NS	
	SS		2.0	2.0		36.67'- 37' Orange-brown f-m SILTY SAND, wet, NO, NS 37'- 38' Orange-brown f-m SILTY SAND, wet, NO, NS 38'- 39' Orange to tan f-m SAND, tr silt, wet, NO, NS	
40	SS		2.0	2.0		39'- 40' Orange to tan f-m SAND, tr silt, wet, NO, NS 40'- 40.75' Orange to tan f-m SAND, tr silt, wet, NO, NS	
	SS		2.0	1.5		40.75'- 41' Tan f-m SAND with f-m rounded white gravel, wet, NO, NS 41'- 41.83' Tan f-m SAND with f-m rounded white gravel, wet, NO, NS 41.83'- 42.5' Light brown to tan f-m SAND, tr f gravel, compact, wet, NO, NS	
	SS		2.0	1.7		43'- 43.67' Light brown to tan f-m SAND, tr f gravel, compact, wet, NO, NS 43.67'- 44.67' Tan f-m SAND, tr f rounded white gravel, wet, NO, NS	

VOC SCREENING RESULTS (ppm): 80, 160, 240, 320

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Gem Cleaners	Boring Depth (FT BGS):	60.5	Hole Diameter:	8"
Project Location:	84 N Village Avenue, Rockville Centre, NY	Date Started:	4/3/18	Date Completed:	4/4/18
Project Number:	279191.0000.0000	Coordinate System:	NY State Plane - NYLI NAD83(96)		
Client:	NYSDEC (TRC and D&B Joint Venture D007020)	North:	179658.5233	East:	1081795.711
TRC Eng./Geol:	James Robinson	Vertical Datum:	NAVD 1988	Ground Elevation:	25.84
Checked By:	Lindsay O'Hara				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
							80 160 240 320
	SS		2.0	2.0		45'- 47' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS	
	SS		2.0	2.0		47'- 47.5' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS 47.5'- 49' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS	
50	SS		2.0	2.0		49'- 51' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS	
	SS		2.0	2.0		51'- 51.67' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS 51.67'- 53' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS	
	SS		2.0	2.0		53'- 55' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS	
	SS		2.0	1.3		55'- 55.5' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS 55.5'- 56.33' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS	
	SS		2.0	2.0		57'- 57.5' Light orange to yellow f-m SAND, tr f rounded white gravel, wet, NO, NS 57.5'- 59' Yellow-tan f-m SAND, little f-c rounded white gravel, wet, NO, NS	
60	SS-GC-MW-108D(SO)-59-60.5		2.0	2.0		59'- 60' Yellow-tan f-m SAND, little f-c rounded white gravel, wet, NO, NS 60'- 60.75' Yellow-tan f-m SAND, little f-c rounded white gravel, wet, NO, NS	
						60.75'- 61' Bright orange f-m SAND, tr silt, tr f-m rounded white gravel, wet, NO, NS Refusal at 60.5 feet. Bottom of borehole at 60.5 feet.	

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **MW-109M**

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**41**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/30/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179641.5561**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**
Checked By:	**Lindsay O'Hara**		

		BORING INFORMATION	
		Hole Diameter:	**8"**
		Date Completed:	**4/2/18**
		East:	**1081771.6211**
		Ground Elevation:	**25.86**

DRILLING INFORMATION	
Drilling Contractor:	**AARCO Environmental**
Driller(s):	**Daybi Pacheco**
Drilling Method:	**Hollow Stem Auger**
Equipment/Model:	**Geoprobe 7822**
Sampler:	**Split Spoon**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**3/30/2018**		
DEPTH (ft.bgs.)	**17**		
REFERENCE	**Ground Surface**		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			5.0	5.0		0'- 0.25' Asphalt and subbase 0.25'- 3' Brown, dark brown, and orange f SILTY SAND, likely fill; large 5" by 10" piece of metal pulled from hole, slightly moist, NO, NS 3'- 5' Orange f-m SAND, dry (hand cleared from 0 to 5 feet bgs), NO, NS	80 160 240 320
	SS		2.0	1.6		5'- 6.6' Light brown to orange f-m SAND, tr f gravel, dry, NO, NS	
	SS		2.0	1.8		7'- 7.33' Light brown to orange f-m SAND, tr f gravel, dry, NO, NS 7.33'- 8.75' Light brown to orange f-m SAND, tr white rounded gravel, dry, NO, NS	
10	SS		2.0	1.8		9'- 9.5' Light brown to orange f-m SAND, tr white rounded gravel, dry, NO, NS 9.5'- 10.75' Light brown f-m SAND, tr silt, dry, NO, NS	
	SS		2.0	1.6		11'- 12.6' Light brown f-m SAND, tr silt, tr f rounded white gravel, dry, NO, NS	
	SS		2.0	1.6		13'- 13.5' Light brown f-m SAND, tr silt, tr f rounded white gravel, dry, NO, NS 13.5'- 13.75' Tan f-c SAND, some f-m rounded white gravel, dry, NO, NS 13.75'- 14.6' Tan to orange f-m SAND, tr gravel, dry, NO, NS	
	SS-GC-MW-109(SO)-15-17		2.0	1.5		15'- 15.5' Tan to orange f-m SAND, tr gravel, dry, NO, NS 15.5'- 16.5' Tan to orange f-m SAND, little f-m gravel, dry, NO, NS	
	SS		2.0	1.2		17'- 18' Brown f-m SAND, tr f gravel, wet, NO, NS 18'- 18.2' Brown f-m SAND, some c gravel, wet, NO, NS	
20						19'- 19.5' Brown f-m SAND, tr f gravel, wet, NO, NS 19.5'- 20.67' Tan f SAND, stiff, tr f gravel, wet, NO, NS	

Notes: bgs = below ground surface; NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **MW-109M**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**41**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/30/18**	Date Completed:	**4/2/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179641.5561**	East:	**1081771.6211**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.86**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
	SS		2.0	1.7		19.5'- 20.67' Tan f SAND, stiff, tr f gravel, wet, NO, NS	
	SS		2.0	1.4		21'- 22.2' Tan very f SAND, tr m rounded gravel, wet, NO, NS 22.2'- 22.4' Tan c SAND and f-m GRAVEL lens, wet, NO, NS	
	SS		2.0	1.7		23'- 23.5' Tan very f SAND, tr m rounded gravel, wet, NO, NS 23.5'- 23.65' Tan c SAND and f-m GRAVEL lens, wet, NO, NS 23.65'- 24.67' Tan very f SAND, tr m rounded gravel, wet, NO, NS	
	SS		2.0	2.0		25'- 27' Tan to light brown very f SAND, tr m gravel, wet; 0.5" thick lens of red silt @ 27.8' bgs, NO, NS	
	SS		2.0	2.0		27'- 27.67' Tan to light brown very f SAND, tr m gravel, wet; 0.5" thick lens of red silt @ 27.8' bgs, NO, NS 27.67'- 28' Tan to light brown very f SAND, tr m gravel, wet, NO, NS 28'- 28.1' Brown SILT lens, wet, NO, NS	
30	SS		2.0	2.0		28.1'- 29' Light brown f-m SAND, tr silt, wet, NO, NS 29'- 30.25' Light brown m SAND, tr f-m gravel, wet, NO, NS 30.25'- 31' Brown f-m SAND, little silt, wet, NO, NS	
	SS		2.0	2.0		31'- 32.8' Brown f-m SAND, tr f-m gravel, tr silt, wet, NO, NS	
	SS-GC-MW-109(SO)-33-35		2.0	2.0		32.8'- 33' Brown CLAYEY SILT, wet, NO, NS 33'- 34.25' Brown CLAYEY SILT, wet, NO, NS 34.25'- 35' Brown CLAYEY SILT, tr f sand, tr f gravel, wet, NO, NS	
	SS		2.0	2.0		35'- 36' Brown CLAYEY SILT, tr f sand, tr f gravel, wet, NO, NS 36'- 37' Dark gray SILTY CLAY, low plasticity, wet, NO, NS	
	SS		2.0	2.0		37'- 37.75' Dark gray SILTY CLAY, low plasticity, wet, NO, NS 37.75'- 38.5' Dark gray SILTY CLAY, low plasticity, wet, NO, NS 38.5'- 39' Red-brown f-m SILTY SAND, tr f gravel, wet, NO, NS	
40	SS		2.0	2.0		39'- 39.8' Red-brown f-m SILTY SAND, tr f gravel, wet, NO, NS 39.8'- 40' Dark gray SILTY CLAY, wet, NO, NS 40'- 41' Orange-brown f-m SILTY SAND, some f-m gravel, wet, NO, NS	

Bottom of borehole at 41.0 feet.

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **MW-110D**

Results you can rely on

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	Gem Cleaners	Boring Depth (FT BGS):	81
Project Location:	84 N Village Avenue, Rockville Centre, NY	Date Started:	4/4/18
Project Number:	279191.0000.0000	Coordinate System:	NY State Plane - NYLI NAD83(96)
Client:	NYSDEC (TRC and D&B Joint Venture D007020)	North:	179556.1272
TRC Eng./Geol:	James Robinson	Vertical Datum:	NAVD 1988
Checked By:	Lindsay O'Hara		

				Hole Diameter:	8"
				Date Completed:	4/6/18
				East:	1081789.1461
				Ground Elevation:	25.04

DRILLING INFORMATION	
Drilling Contractor:	AARCO Environmental
Driller(s):	Daybi Pacheco
Drilling Method:	Hollow Stem Auger
Equipment/Model:	Geoprobe 7822
Sampler:	Split Spoon

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	4/4/2018		
DEPTH (ft.bgs.)	17		
REFERENCE	Ground Surface		
STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			5.0	5.0		0'- 0.67' Concrete and subbase aggregate (cut with wet saw) 0.67'- 3' Orange to brown f-m SILTY SAND, dry, NO, NS 3'- 5' Orange to brown f-m SAND, little silt, dry, NO, NS (hand cleared 0-5 feet bgs)	
			2.0	1.5		5'- 6.5' Brownish orange f-m SAND, tr f-m white rounded gravel, dry, NO, NS	
			2.0	1.8		7'- 8.75' Brownish orange f-m SAND, more red orange from 8'-8.5' bgs, tr f-m white rounded gravel, dry, NO, NS	
10			2.0	1.6		9'- 9.5' Brownish orange f-m SAND, more red orange from 8'-8.5' bgs, tr f-m white rounded gravel, dry, NO, NS 9.5'- 10.6' Brownish orange f-m SAND, tr f-m white rounded gravel, dry, NO, NS	
			2.0	1.3		11'- 11.25' Brownish orange f-m SAND, tr f-m white rounded gravel, dry, NO, NS 11.25'- 12.33' Brownish orange f-m SAND, tr c dark red conglomerate gravel, dry, NO, NS	
			2.0	0.8		13'- 13.1' Brownish orange f-m SAND, tr c dark red conglomerate gravel, dry, NO, NS 13.1'- 13.81' Brownish orange f-m SAND, tr c dark red conglomerate gravel, dry, NO, NS	
	GC-MW-110D(SO)-15-17		2.0	1.3		15'- 15.67' Brownish orange f-m SAND, tr c dark red conglomerate gravel, dry, NO, NS 15.67'- 16.33' Tan m SAND, little f-c rounded white gravel, moist, NO, NS	
			2.0	1.7		17'- 18.33' Tan m SAND, little f-c rounded white gravel, tr root (likely from adjacent tree), wet, NO, NS	
20						19'- 19.5' Tan m SAND, little f-c rounded white gravel, tr root (likely from adjacent tree), wet, NO, NS	

Notes: bgs = below ground surface; NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS): **81**	Hole Diameter: **8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started: **4/4/18**	Date Completed: **4/6/18**
Project Number:	**279191.0000.0000**	Coordinate System: **NY State Plane - NYLI NAD83(96)**	
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North: **179556.1272**	East: **1081789.1461**
TRC Eng./Geol:	**James Robinson**	Vertical Datum: **NAVD 1988**	Ground Elevation: **25.04**
Checked By:	**Lindsay O'Hara**		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
			2.0	1.5		19.5'- 20.5' Tan f SAND, tr f white rounded gravel, wet, NO, NS	
			2.0	1.5		21'- 22.5' Tan f SAND, tr f white rounded gravel, wet, NO, NS	
			2.0	1.8		23'- 24.8' Tan f SAND, tr f white rounded gravel, wet, NO, NS	
			2.0	1.8		25'- 25.67' Tan f SAND, tr f white rounded gravel, wet, NO, NS 25.67'- 26.67' Tan f-c SAND with f-m orange to white round gravel, wet, NO, NS	
			2.0	1.5		26.67'- 26.8' Tan to red-brown f SAND, some red silt, wet, NO, NS 27'- 27.5' Tan to red-brown f SAND, little red silt, wet, NO, NS 27.5'- 28.33' Tan to red-brown f-c SAND, little f-m yellow to white round gravel, wet, NO, NS 28.33'- 28.5' Red-brown f SILTY SAND, wet, NO, NS 29'- 29.33' Red-brown f SILTY SAND, wet, NO, NS	
30			2.0	2.0		29.33'- 30.25' Red-brown f SAND, some silt, wet, NO, NS 30.25'- 31' Orange-brown and gray CLAYEY SILT, soft, wet, NO, NS	
			2.0	2.0		31'- 31.16' Orange-brown and gray CLAYEY SILT, soft, wet, NO, NS 31.16'- 32.33' Orange-brown and gray CLAYEY SILT, soft, wet, NO, NS 32.33'- 33' Brown f-m SAND, some to little silt, tr f-m white round gravel, wet, NO, NS	
			2.0	2.0		33'- 33.25' Brown f-m SAND, some to little silt, tr f-m white round gravel, wet, NO, NS 33.25'- 33.75' Orange-brown CLAYEY SILT, wet, NO, NS 33.75'- 34' Brown to tan well graded f-c SAND, tr f gravel, tr root, wet, NO, NS 34'- 34.8' Orange-brown SILT, tr clay, wet, NO, NS	
			2.0	2.0		34.8'- 35' Dark gray SILTY CLAY, low plasticity, tr root, wet, NO, NS 35'- 36' Dark gray SILTY CLAY, low plasticity, tr root, wet, NO, NS 36'- 36.75' Dark gray SILTY CLAY, low plasticity, tr root, wet, NO, NS	
			2.0	2.0		36.75'- 37' Red-brown f-m SAND, little red silt, wet, NO, NS 37'- 38.33' Red-brown f-m SAND, little red silt, wet, NO, NS 38.33'- 39' Orange-brown f-m SAND, tr to little f-m white round gravel, wet, NO, NS	
40			2.0	2.0		39'- 40.25' Orange-brown f-m SAND, tr to little f-m white round gravel, wet, NO, NS 40.25'- 40.5' Dark gray SILTY CLAY, low plasticity, wet, NO, NS	
			2.0	2.0		40.5'- 41' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS 41'- 43' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	
			2.0	2.0		43'- 44' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	

VOC SCREENING RESULTS (ppm): 80, 160, 240, 320

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

TRC
Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**81**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/4/18**	Date Completed:	**4/6/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179556.1272**	East:	**1081789.1461**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.04**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
						44'- 45' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	
						45'- 45.67' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	
			2.0	1.3		45.67'- 46.33' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	
						47'- 47.5' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	
			2.0	1.3		47.5'- 48.33' Tan f-m SAND, tr f white rounded gravel, tr cobble, wet, NO, NS	
50			2.0	1.3		49'- 50.33' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	
			2.0	2.0		51'- 53' Tan f-m SAND, tr f-c white rounded gravel, wet, NO, NS	
			2.0	1.3		53'- 54.33' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	
			2.0	2.0		55'- 56.67' Tan f-m SAND, tr f white rounded gravel, wet, NO, NS	
						56.67'- 57' Orange f-m SAND, tr silt, wet, NO, NS	
			2.0	2.0		57'- 58.33' Orange f-m SAND, tr silt, wet, NO, NS	
						58.33'- 59' Orange m SAND, tr to little white rounded gravel, wet, NO, NS	
						59'- 59.5' Orange m SAND, tr to little white rounded gravel, wet, NO, NS	
60			2.0	1.5		59.5'- 60.5' Orange-brown f-c SAND, some f-m white rounded gravel, wet, NO, NS	
			2.0	1.3		61'- 63' Orange-brown m-c SAND and f rounded gravel, tr silt, med dense, wet, NO, NS	
			2.0	1.2		63'- 65' Orange-brown m-c SAND and f rounded gravel, tr silt, med dense, wet, NO, NS	
			2.0	1.7		65'- 66.45' Orange-brown m-c SAND, little f gravel, tr silt, wet, NO, NS	
						66.45'- 67' Orange-brown m-c SAND and f gravel, tr c gravel, wet, NO, NS	
			2.0	2.0		67'- 69' Orange-brown f-m SAND, tr f gravel, wet, NO, NS	

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **MW-110D**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**81**	Hole Diameter:	**8"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**4/4/18**	Date Completed:	**4/6/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179556.1272**	East:	**1081789.1461**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.04**
Checked By:	**Lindsay O'Hara**				

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
						67'- 69' Orange-brown f-m SAND, tr f gravel, wet, NO, NS	
						69'- 70.35' Orange-brown f-m SAND, tr f gravel, wet, NO, NS	
70	GC-MW-110D(SO)-69-70		2.0	2.0		70.35'- 71' Dark grayish black CLAY, stiff, black streaks (lignite) and white shells, wet, NO, NS	
			2.0	2.0		71'- 72.2' Dark grayish black CLAY, stiff, black streaks (lignite) and white shells, wet, NO, NS	
						72.2'- 73' Dark grayish black CLAY, stiff, black streaks (lignite) and white shells, wet, NO, NS	
			2.0	2.0		73'- 74.5' Dark grayish black CLAY, stiff, black streaks (lignite) and white shells, wet, NO, NS	
						74.5'- 75' Dark grayish black CLAY, stiff, black streaks (lignite) and white shells, wet, NO, NS	
			2.0	2.0		75'- 75.4' Dark grayish black CLAY, stiff, black streaks (lignite) and white shells, wet, NO, NS	
						75.4'- 76.65' Dark gray f-m SAND, little silt, dense, wet, NO, NS	
						76.67'- 77' Dark gray CLAY, wet, NO, NS	
			2.0	2.0		77'- 78.25' Dark gray CLAY, wet, NO, NS	
						78.25'- 79' Dark gray CLAY, wet, NO, NS	
						79'- 79.75' Dark gray CLAY, wet, NO, NS	
80			2.0	2.0		79.75'- 80.75' Dark gray f-m SAND, some clayey clumps, wet, NO, NS	
						80.75'- 81' Grayish f-m SAND, loose, wet, NO, NS	
						Bottom of borehole at 81.0 feet.	
90							

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES_SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

BORING NUMBER: **SB-101**
Page 1 of 1

Results you can rely on

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	**Gem Cleaners**	Boring Depth (FT BGS):	**20**	Hole Diameter:	**2.5"**
Project Location:	**84 N Village Avenue, Rockville Centre, NY**	Date Started:	**3/19/18**	Date Completed:	**3/19/18**
Project Number:	**279191.0000.0000**	Coordinate System:	**NY State Plane - NYLI NAD83(96)**		
Client:	**NYSDEC (TRC and D&B Joint Venture D007020)**	North:	**179657.5611**	East:	**1081792.4958**
TRC Eng./Geol:	**James Robinson**	Vertical Datum:	**NAVD 1988**	Ground Elevation:	**25.74**
Checked By:	**Lindsay O'Hara**				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	**LAWES**	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	**Scott Pedersen**	DATE	**3/19/2018**		
Drilling Method:	**Direct-Push**	DEPTH (ft.bgs.)	**17.5**		
Equipment/Model:	**Geoprobe 7822**	REFERENCE	**Ground Surface**		
Sampler:	**Macrocore**	STABILIZATION			

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
							80 160 240 320
						0'- 0.25' Dark brown m SAND with f-m rounded gravel, dry, NO, NS	
						0.25'- 2.75' Medium brown to orange m SAND, poorly graded, moist, NO, NS	
	GC-SB-101(SO)-3-5		5.0	2.8			
						5'- 5.5' Medium brown to orange m SAND, poorly graded, moist, NO, NS	
	None		5.0	3.5		5.5'- 8.5' Orange with some horizontal 1-2" red-orange striping, f-m SAND, moist, NO, NS	
10							
	None		5.0	3.0		10'- 13' Orangish tan f-m SAND, trace m rounded white gravel, moist, NO, NS	
						15'- 16' Orange f-m SAND, moist, NO, NS	
						16'- 17' Orange m SAND with f-m rounded gravel (mostly white to yellow, some black), poorly graded, wet (groudwater encountered), NO, NS	
	GC-SB-101(SO)-15.5-17.5		5.0	3.5		17'- 18.5' Whitish tan f SAND, medium hard/stiff, wet, NO, NS	
20							
						Bottom of borehole at 20.0 feet.	

Notes: bgs = below ground surface; NO = No odor; NS = No Staining, tr = trace, f = fine, m = medium, c = coarse

SOIL BORING/WELL COMPLETION WITH NOTES - TRC-STD US.GDT - 9/27/18
\\NYC-FP1\PROJECTS\NYSDEC\ASSIGNMENTS\WA #36 - GEM CLEANERS\RI IMPLEMENTATION\FIELD NOTES\ SOIL BORING LOGS\GINT\GEM CLEANERS SB LOGS - JMR GEO.GPJ

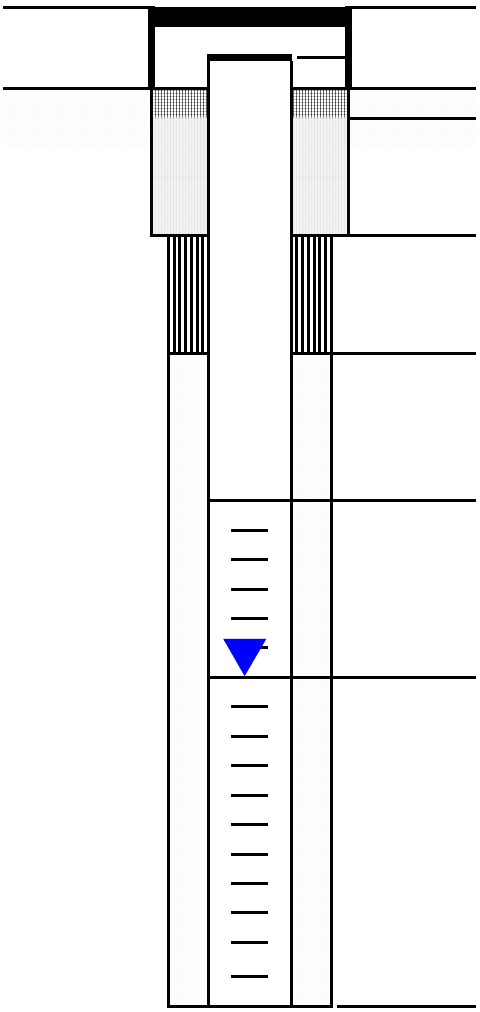
TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018
Phone 212 221 7822

WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-101
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	4/12/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/13/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER(1):	15.28
INSPECTOR:	Sanjay Sharma	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.46	Ground Surface
	25.18	Top of PVC Riser
		Top of concrete collar
1.00	24.46	Bottom of Concrete Collar/Top of Grout
2.00	23.46	Top of Hole Plug/Bottom of Grout
10.00	15.46	Top of No. 1 Sand Pack/ Bottom of Hole Plug
12.00	13.46	Top of Well Screen
15.28	9.90	Depth to Water
27.00	-1.54	End of Well Screen



Not to Scale

Notes: (1) Depth measured from the top of PVC on gauging date.

NOT TO SCALE

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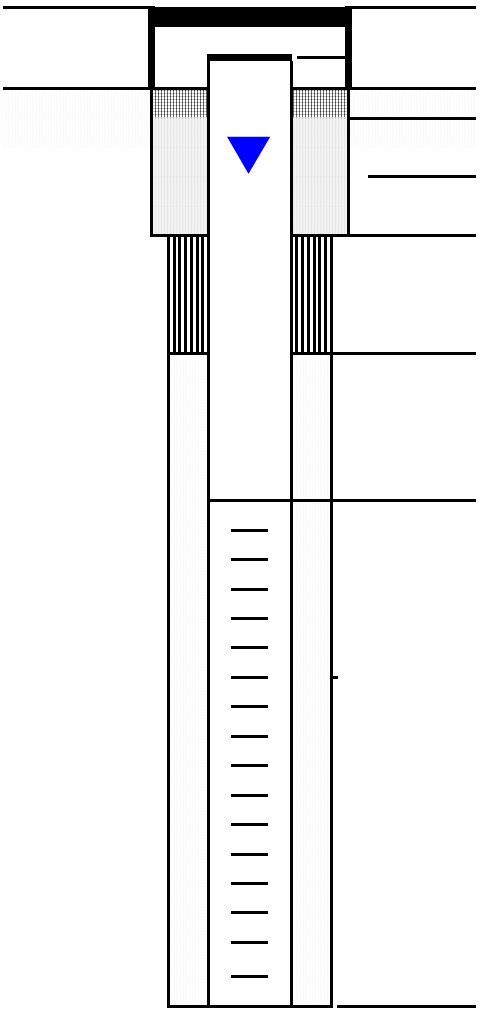
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-101D
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	4/11/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/13/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER(1):	15.73
INSPECTOR:	Sanjay Sharma	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.46	Ground Surface
	24.86	Top of PVC Riser
		Top of concrete collar
1.00	24.46	Bottom of Concrete Collar/Top of Grout
15.73	9.13	Depth to Water
82.00	-56.54	Top of Hole Plug/Bottom of Grout
84.00	-58.54	Top of No. 1 Sand Pack/ Bottom of Hole Plug
87.00	-61.54	Top of Well Screen
97.00	-71.54	End of Well Screen



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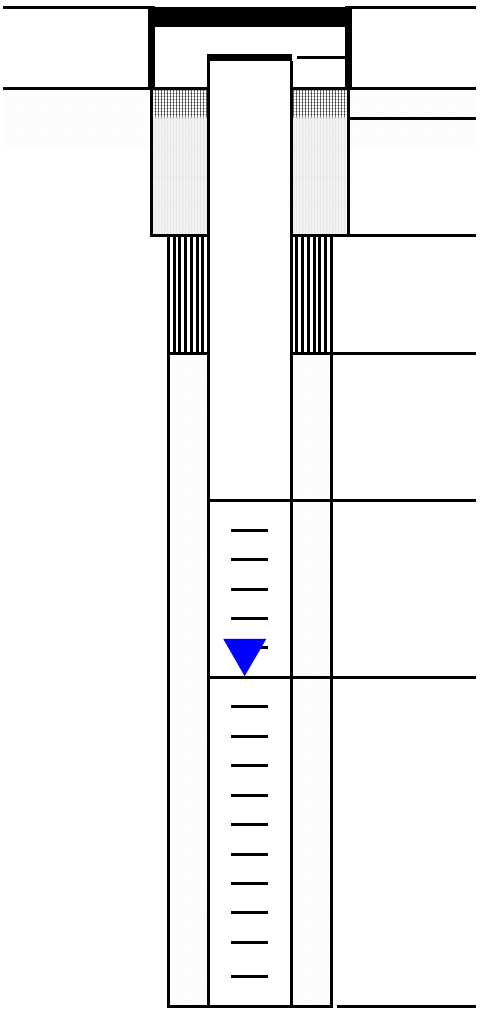
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-102
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	Vactron Unit
INSTALLATION DATE:	3/23/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/16/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER(1):	8.72
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	18.24	Ground Surface
	18.03	Top of PVC Riser
		Top of concrete collar
1.00	17.24	Bottom of Concrete Collar/Top of Grout
2.00	16.24	Top of Hole Plug/Bottom of Grout
3.00	15.24	Top of No. 1 Sand Pack/ Bottom of Hole Plug
5.00	13.24	Top of Well Screen
8.72	9.31	Depth to Water
15.00	3.24	End of Well Screen



Not to Scale

Notes: (1) Depth measured from the top of PVC on gauging date.

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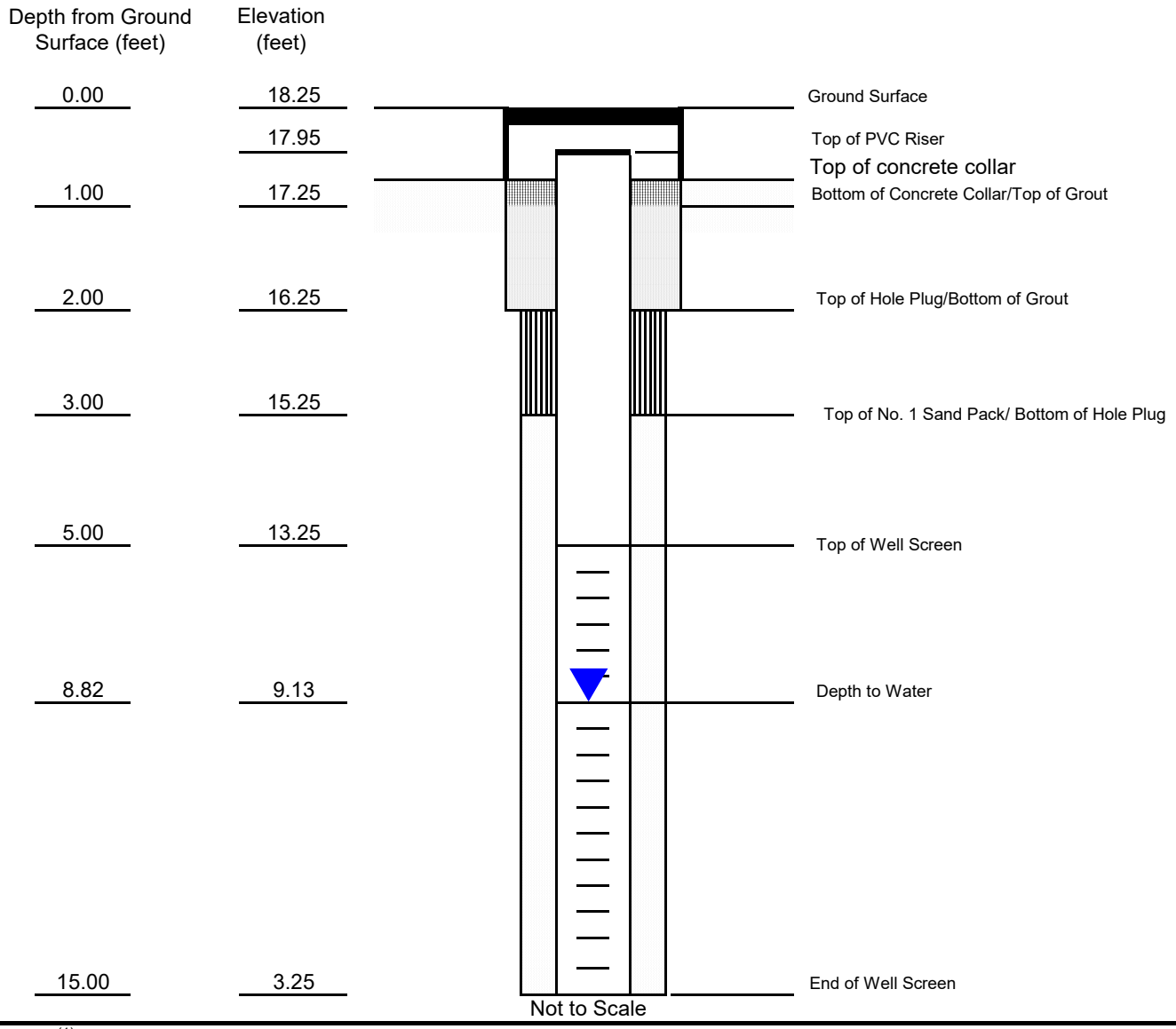
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-103
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	Vactron Unit
INSTALLATION DATE:	3/23/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/16/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER(1):	8.82
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA



Notes: (1) Depth measured from the top of PVC on gauging date.

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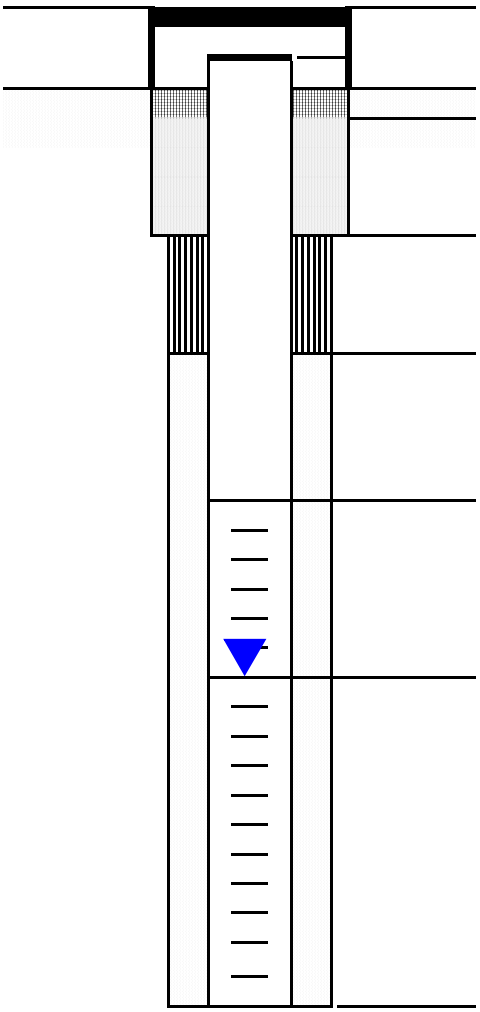
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-104
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	Vactron Unit
INSTALLATION DATE:	3/23/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/16/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER(1):	8.37
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	18.27	Ground Surface
	17.80	Top of PVC Riser
		Top of concrete collar
0.50	17.77	Bottom of Concrete Collar/Top of Grout
1.50	16.77	Top of Hole Plug/Bottom of Grout
2.50	15.77	Top of No. 1 Sand Pack/ Bottom of Hole Plug
4.50	13.77	Top of Well Screen
8.37	9.43	Depth to Water
14.50	3.77	End of Well Screen



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Notes: (1) Depth measured from the top of PVC on gauging date.

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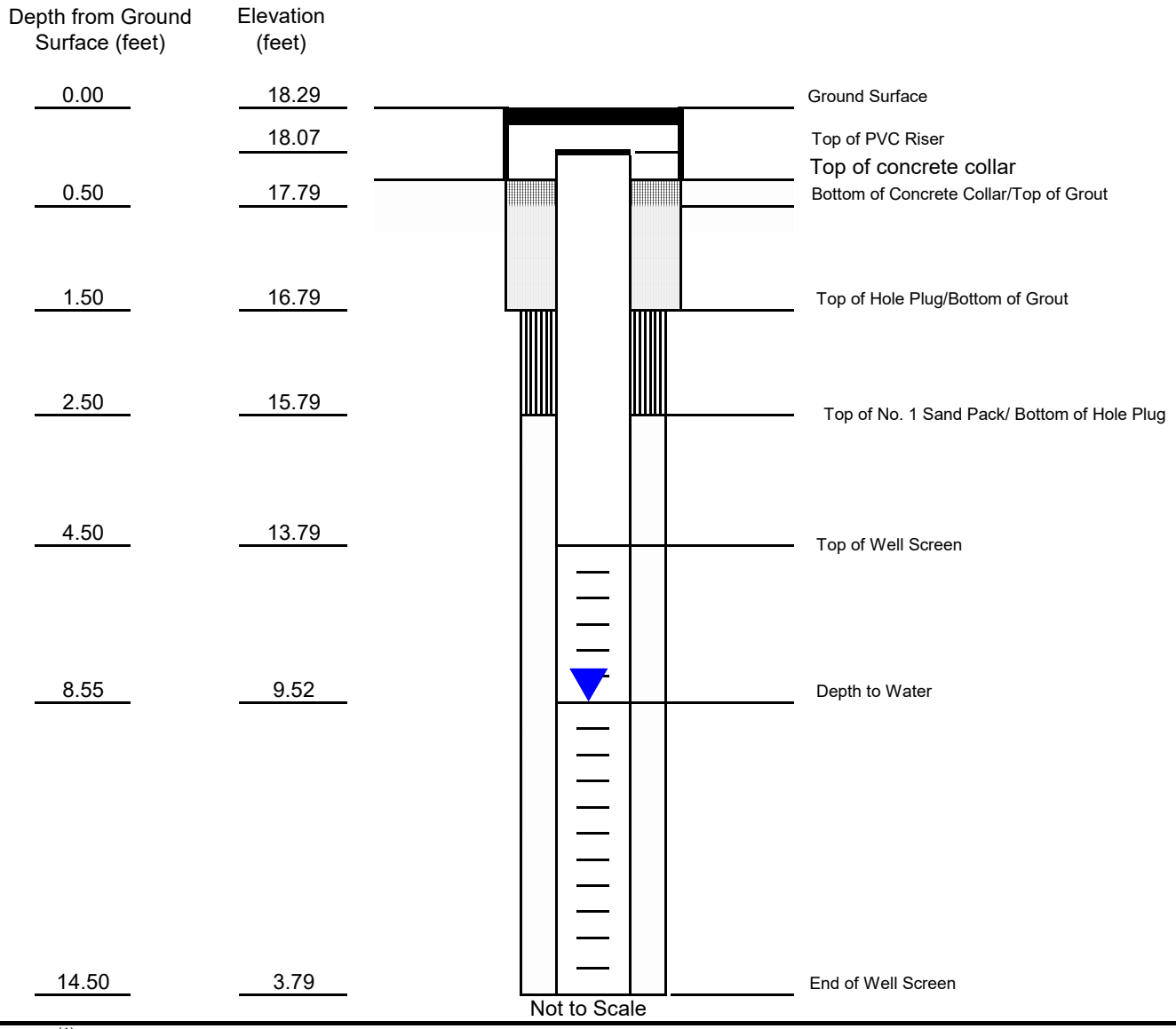
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-105
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	Vactron Unit
INSTALLATION DATE:	3/23/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/16/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER(1):	8.55
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA



Notes: (1) Depth measured from the top of PVC on gauging date.

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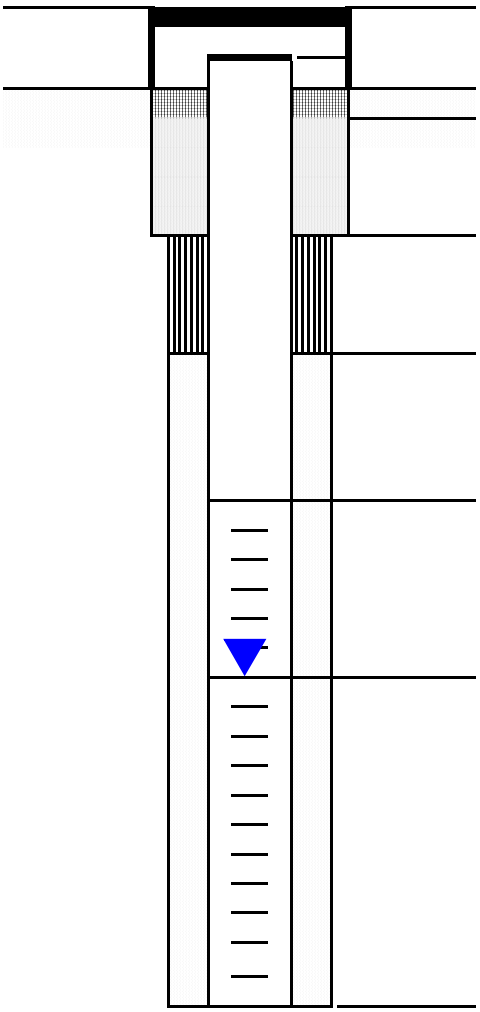
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-106
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	4/3/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/13/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER[1]:	16.02
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.83	Ground Surface
	25.55	Top of PVC Riser
		Top of concrete collar
1.00	24.83	Bottom of Concrete Collar/Top of Grout
2.00	23.83	Top of Hole Plug/Bottom of Grout
10.00	15.83	Top of No. 1 Sand Pack/ Bottom of Hole Plug
12.00	13.83	Top of Well Screen
16.02	9.53	Depth to Water
27.00	-1.17	End of Well Screen



Not to Scale

Notes: [1] Depth measured from the top of PVC on gauging date.

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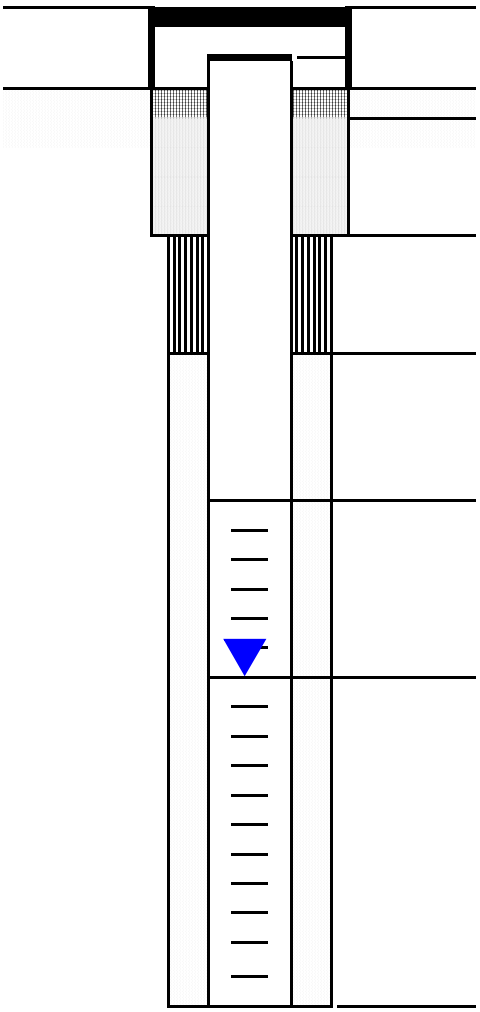
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME: Gem Cleaners (Site ID. 130082)
ADDRESS: Rockville Centre, NY
WELL ID: MW-107
DRILLING METHOD: H S A
INSTALLATION DATE: 3/26/18
DRILLER: AARCO Drilling, Inc.
DEVELOPMENT DATE: 4/16/18
GAUGING DATE: 4/25/18
ELEVATION/ DATUM: NAVD 1988
DEPTH TO WATER(1): 16.18
INSPECTOR: James Robinson
DEPTH TO PRODUCT: NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.86	Ground Surface
	25.56	Top of PVC Riser
		Top of concrete collar
1.00	24.86	Bottom of Concrete Collar/Top of Grout
2.00	23.86	Top of Hole Plug/Bottom of Grout
10.00	15.86	Top of No. 1 Sand Pack/ Bottom of Hole Plug
12.00	13.86	Top of Well Screen
16.18	9.38	Depth to Water
27.00	-1.14	End of Well Screen



Not to Scale

Notes: (1) Depth measured from the top of PVC on gauging date.

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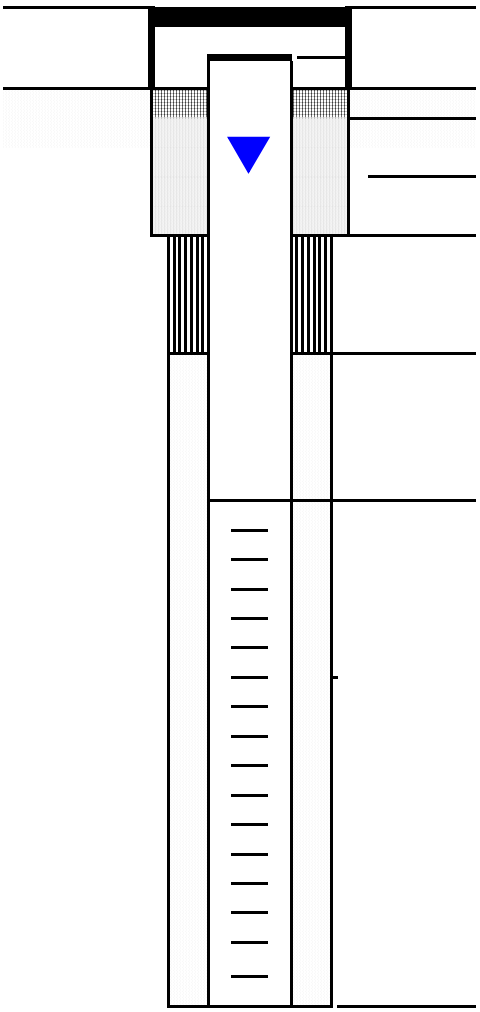
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	TRC-MW-107D
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	3/29/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/13/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER(1):	16.12
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.82	Ground Surface
	25.35	Top of PVC Riser
		Top of concrete collar
1.00	24.82	Bottom of Concrete Collar/Top of Grout
16.12	9.23	Depth to Water
83.00	-57.18	Top of Hole Plug/Bottom of Grout
85.00	-59.18	Top of No. 1 Sand Pack/ Bottom of Hole Plug
88.00	-62.18	Top of Well Screen
98.00	-72.18	End of Well Screen



Not to Scale

Notes: (1) Depth measured from the top of PVC on gauging date.

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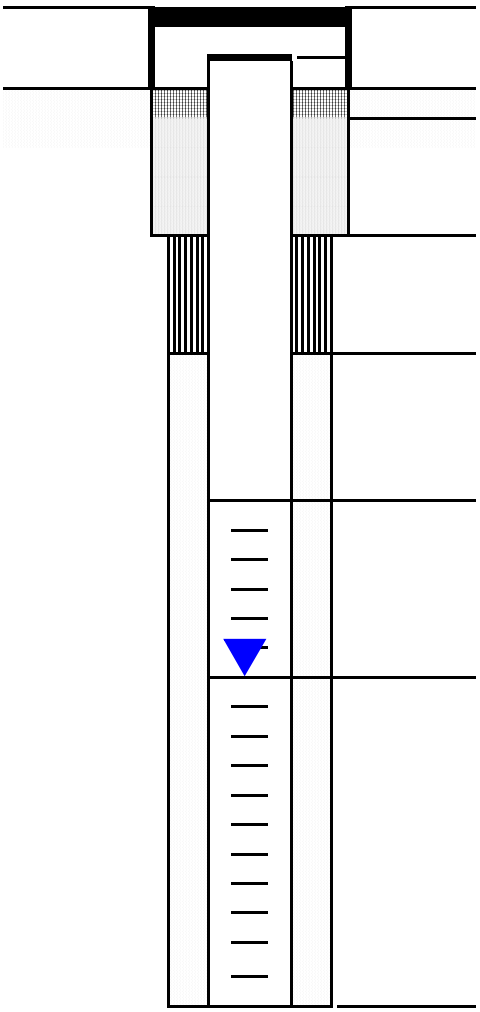
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-108
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	4/4/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/13/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER[1]:	16.32
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.84	Ground Surface
	25.63	Top of PVC Riser
		Top of concrete collar
1.00	24.84	Bottom of Concrete Collar/Top of Grout
2.00	23.84	Top of Hole Plug/Bottom of Grout
10.00	15.84	Top of No. 1 Sand Pack/ Bottom of Hole Plug
12.00	13.84	Top of Well Screen
16.32	9.31	Depth to Water
27.00	-1.16	End of Well Screen



Not to Scale

Notes: [1] Depth measured from the top of PVC on gauging date.

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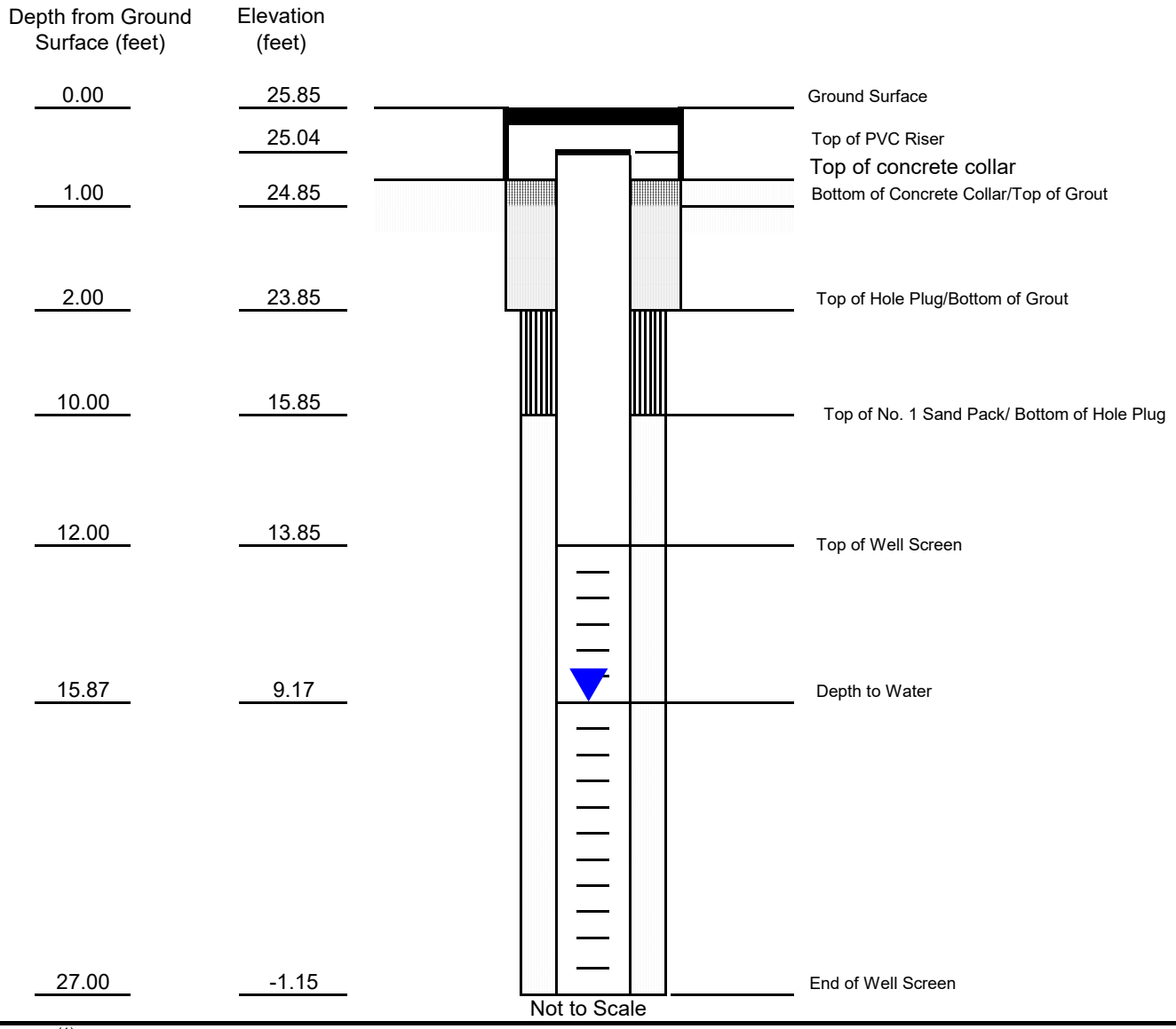
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-109
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	3/30/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/13/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER[1]:	15.87
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA



Notes: [1] Depth measured from the top of PVC on gauging date.

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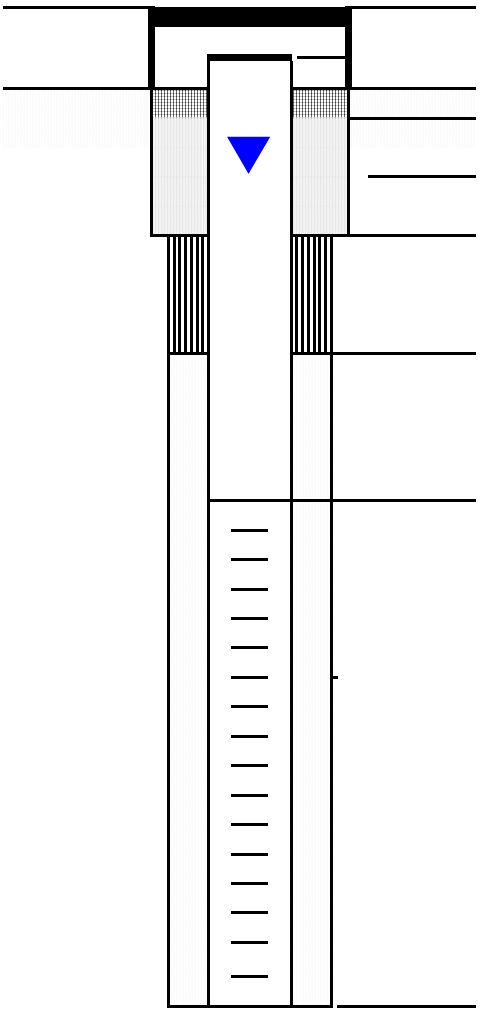
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-109M
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	4/2/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/13/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER(1):	16.46
INSPECTOR:	James Robinson	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.86	Ground Surface
	25.58	Top of PVC Riser
		Top of concrete collar
1.00	24.86	Bottom of Concrete Collar/Top of Grout
16.46	9.12	Depth to Water
22.00	3.86	Top of Hole Plug/Bottom of Grout
24.00	1.86	Top of No. 1 Sand Pack/ Bottom of Hole Plug
26.00	-0.14	Top of Well Screen
36.00	-10.14	End of Well Screen



Not to Scale

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NOT TO SCALE

TRC Engineers, Inc.
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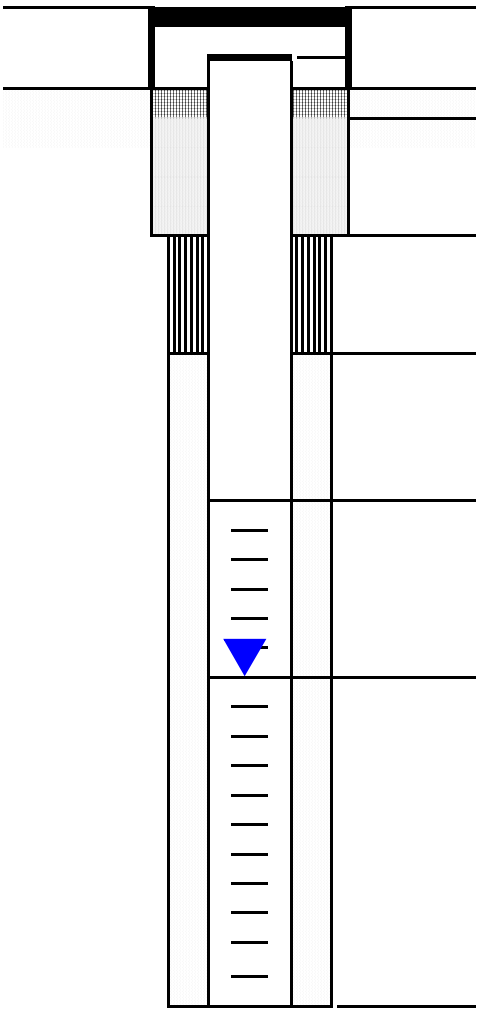
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-110
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	4/6/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/12/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER[(1)]:	15.15
INSPECTOR:	Sanjay Sharma	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.08	Ground Surface
	24.64	Top of PVC Riser
		Top of concrete collar
1.00	24.08	Bottom of Concrete Collar/Top of Grout
2.00	23.08	Top of Hole Plug/Bottom of Grout
10.00	15.08	Top of No. 1 Sand Pack/ Bottom of Hole Plug
12.00	13.08	Top of Well Screen
15.15	9.49	Depth to Water
27.00	-1.92	End of Well Screen



Not to Scale

Notes: [(1)] Depth measured from the top of PVC on gauging date.

NOT TO SCALE

TRC Engineers, Inc.
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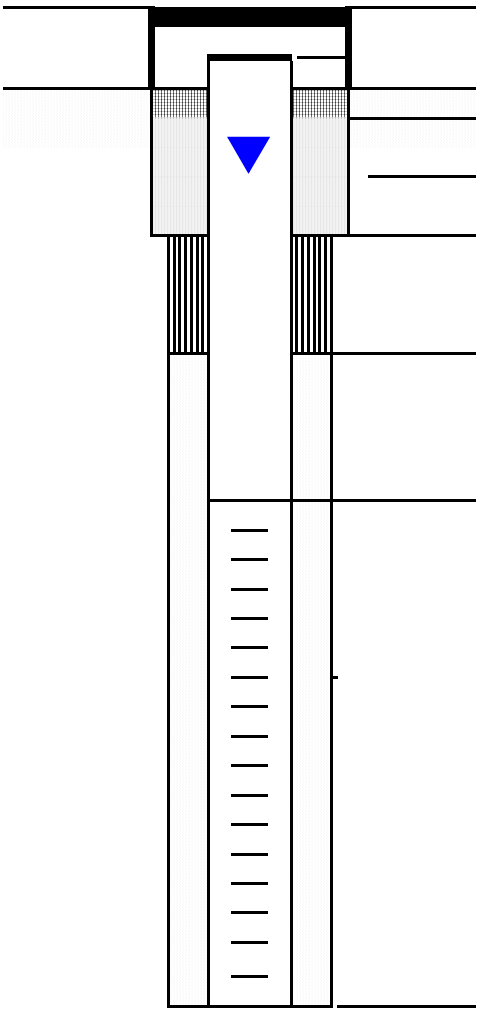
WELL INSTALLATION LOG

SHEET 1 OF 1

JOB NAME:	Gem Cleaners (Site ID. 130082)	WELL ID:	MW-110D
ADDRESS:	Rockville Centre, NY	DRILLING METHOD:	H S A
INSTALLATION DATE:	4/6/18	DRILLER:	AARCO Drilling, Inc.
DEVELOPMENT DATE:	4/12/18	GAUGING DATE:	4/25/18
ELEVATION/ DATUM:	NAVD 1988	DEPTH TO WATER[1]:	15.96
INSPECTOR:	Sanjay Sharma	DEPTH TO PRODUCT:	NA

Depth from Ground Surface (feet)	Elevation (feet)	
0.00	25.04	Ground Surface
	24.29	Top of PVC Riser
		Top of concrete collar
1.00	24.04	Bottom of Concrete Collar/Top of Grout
15.96	8.33	Depth to Water
55.00	-29.96	Top of Hole Plug/Bottom of Grout
57.00	-31.96	Top of No. 1 Sand Pack/ Bottom of Hole Plug
60.00	-34.96	Top of Well Screen
70.00	-44.96	End of Well Screen



Not to Scale

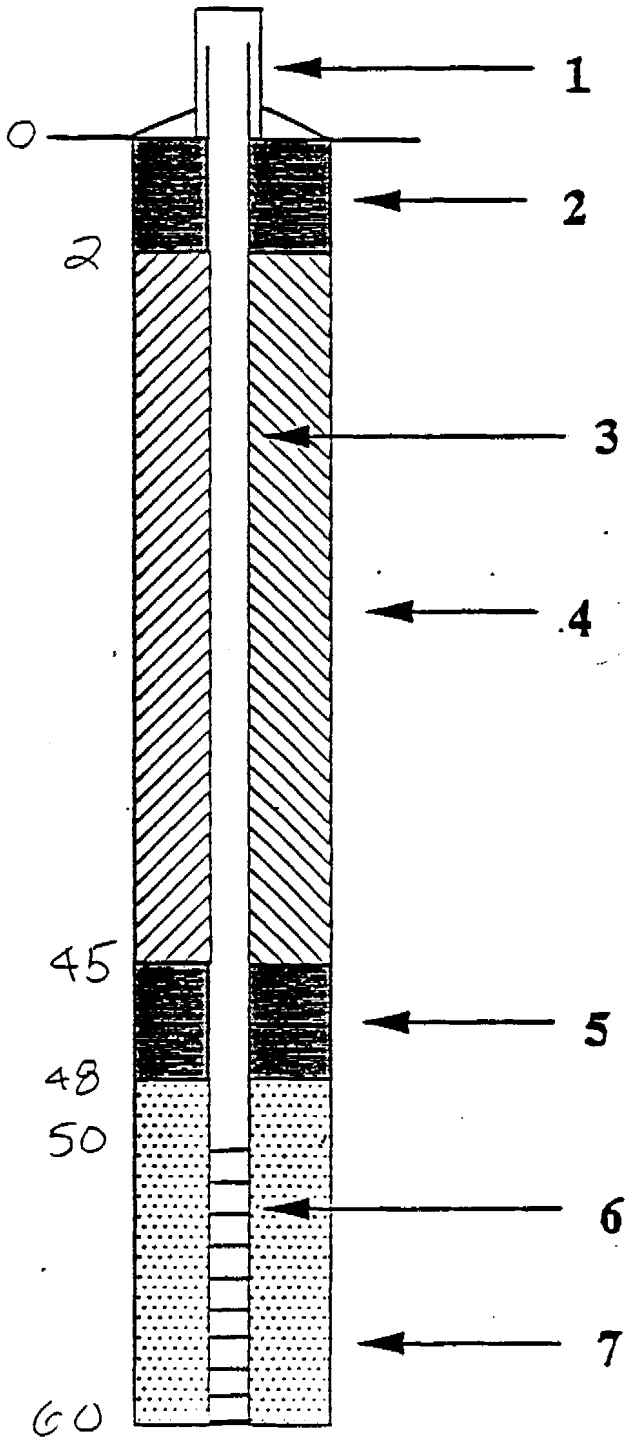
Notes: [1] Depth measured from the top of PVC on gauging date.

NOT TO SCALE

MONITOR WELL CONSTRUCTION SPECIFICATION
ENERGY AND ENVIROMENTAL ANALYSTS, INC.

JOB NUMBER : 95706

WELL IDENTIFICATION : MW-13



DATE: 3/13/95
HYDROGEOLOGIST: N. Recchia
DRILLING CONTRACTOR: TSDT

1. PROTECTIVE CASING (YES) NO
2. CONCRETE SEAL YES (NO)
3. RISER PIPE TYPE: PVC
   LENGTH: 50 FT
   DIAMETER: 2 FT IN
4. TYPE OF BACKFILL: NATURAL
   HOW INSTALLED BACKFILLED
5. TYPE OF LOWER SEAL: Bentonite
6. SCREEN TYPE: PVC
   SLOTTED LENGTH: 10 FT
   SLOT SIZE; 0.1
7. TYPE OF BACKFILL: NATURAL

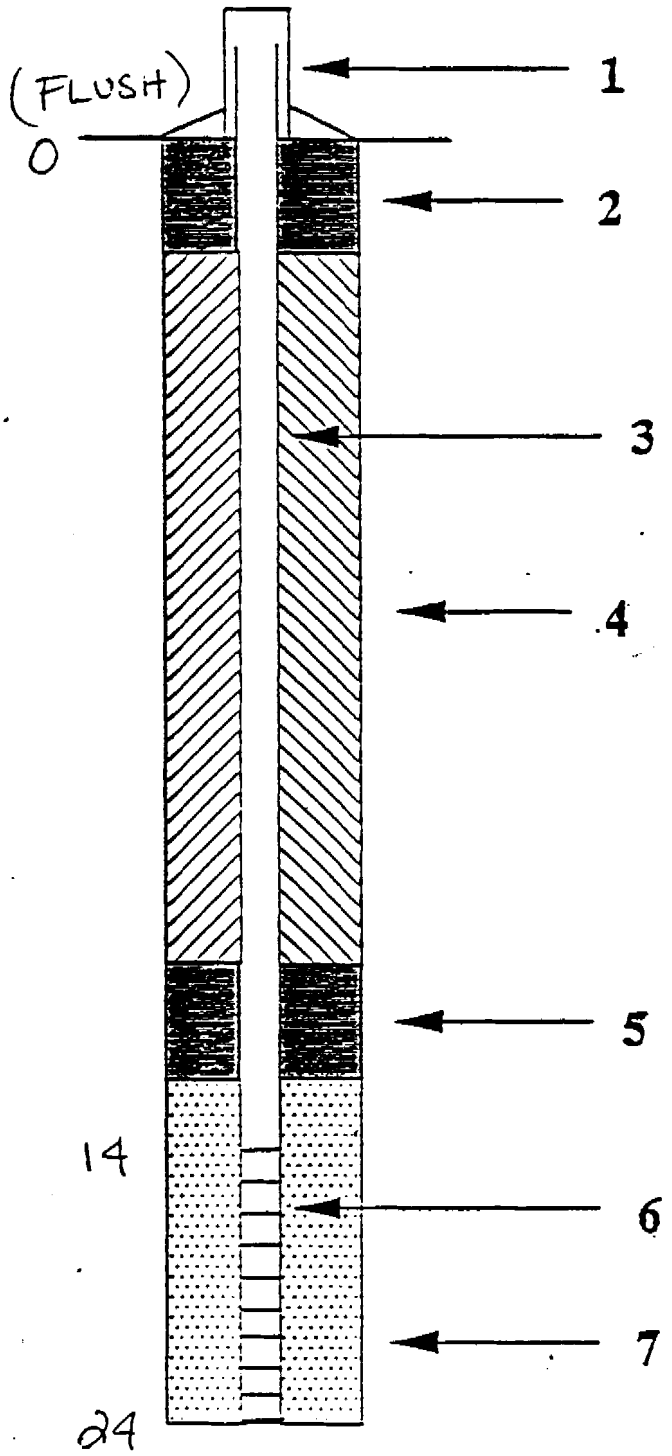
COMMENTS;
Deeper zone monitoring

WATER LEVEL CHECKS :

DATE	DEPTH	REMARKS
3/21/95	13.60	EOC
4/24/95	13.7	SAMP

MONITOR WELL CONSTRUCTION SPECIFICATION
ENERGY AND ENVIROMENTAL ANALYSTS, INC.

JOB NUMBER : 95706 WELL IDENTIFICATION : MW-3



DATE: 4/24/95
HYDROGEOLOGIST : N. Recchia
DRILLING CONTRACTOR : TSDT

1. PROTECTIVE CASING (YES) NO
2. CONCRETE SEAL (YES) NO
3. RISER PIPE TYPE : PVC
   LENGTH : 14 FT
   DIAMETER : 2 ~~FT~~ IN
4. TYPE OF BACKFILL : BACKFILL
   HOW INSTALLED BACKFILLED
5. TYPE OF LOWER SEAL : BENTONITE
6. SCREEN TYPE : PVC
   SLOTTED LENGTH : 10 FT
   SLOT SIZE ; 0.10
7. TYPE OF BACKFILL :
   SILICA SAND

COMMENTS ;
UPGRADIENT MW
RC PARKING LOT

WATER LEVEL CHECKS :

DATE	DEPTH	REMARKS
4/24	14.5	EOC

APPENDIX F
FIELD FORMS-GROUNDWATER SAMPLING LOGS

	Project:	Project No.:	Date/Time:	Sheet 1 of 17
Groundwater Sampling Data Record Form	NYSDEC GEM Cleaners	279191.0000.0000	4/25/2018	
	TRC Personnel: Emily Ebert & James Robinson			

Well Identification: GC-MW-1B

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

PID SCREENING (ppmV)

Background	0	
Well Mouth	2.1	(if required)

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER	
X	2 inch
	4 inch
	6 inch

WELL MATERIAL

X		
PVC	SS	

Well Depth (ft.):	56.25
Depth to Water (ft):	16.7

Reference Point:

	top of riser
X	top of casing
	_____

	historical
	measured:
	notch
	north side
X	high pt
	pen mark

Depth of pump intake (ft.): 53

Height of water column (ft.):	39.55

X	.16 gal/ft (2 in.)
	.65 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Volume of Water in Well (gal):	6.33
Total Gallons Purged:	14
[Vol. = $r^2h(0.163)$]	

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	11:50	11:55	12:00	12:05	12:10	12:15	12:20	12:25	12:30
Temp. (C.) - (±10%)	14.71	14.72	14.07	14.66	14.68	14.71	14.73	14.73	14.76
pH (Std.Units) - (± 0.1)	5.34	5.38	5.37	5.35	5.35	5.36	5.37	5.38	5.36
ORP (millivolts) - (± 10)	305	315	320	323	324	324	326	326	327
Conduct.(mS/cm) - (±3%)	0.383	0.384	0.384	0.384	0.385	0.385	0.386	0.386	0.385
Turb. (NTU) - (± 10%)	59.3	12.0	15.6	10.4	3.9	1.2	0.0	1.2	1.3
DO (mg/L) - (± 10%)	6.57	6.33	7.18	7.36	7.18	7.12	6.52	6.54	6.39
Depth to water (ft)	16.95	16.96	16.96	16.95	16.95	16.95	16.95	16.95	16.95
Flow (ml/min)	200	200	200	200	200	200	200	200	200
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	12:35	GC-MW-1B (WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 2 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/26/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-02

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up __NA__ ft. (from Ground)

WELL DIAMETER	
X	2 inch
	4 inch
	6 inch

WELL MATERIAL

X		
PVC	SS	

Well Depth (ft.):	22.70
Depth to Water (ft):	16.67

Reference Point:

	top of riser
X	top of casing
	_____

	historical
	measured:
	notch
	north side
X	high pt
	pen mark

Depth of pump intake (ft.): 20

X	.16 gal/ft (2 in.)
	.65 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Height of water column (ft.): 6.03

Volume of Water in Well (gal): 0.98

Total Gallons Purged: 12

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.): NA

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	14:25	14:38	14:45	14:48	14:51	14:54	14:57	15:00	
Temp. (C.) - (±10%)	-	14.59	15.69	14.99	15.00	15.21	15.23	15.19	
pH (Std.Units) - (± 0.1)	-	6.84	7.18	7.04	7.04	7.05	7.05	7.04	
ORP (millivolts) - (± 10)	-	234	232	236	237	236	239	240	
Conduct.(mS/cm) - (±3%)	-	0.005	1.56	1.52	1.52	1.51	1.51	1.51	
Turb. (NTU) - (± 10%)	-	402	1.2	0.0	0.0	0.0	0.0	0.0	
DO (mg/L) - (± 10%)	-	10.51	7.51	6.54	6.77	6.37	6.71	6.61	
Depth to water (ft)	16.70	16.70	16.70	16.69	16.69	16.69	16.69	16.69	
Flow (ml/min)	300	300	300	300	300	300	300	300	
Comments	Very Turbid	Clear							
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	15:00	GC-MW-2(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 3 of 17
Groundwater Sampling Data Record Form	NYSDEC GEM Cleaners	279191.0000.0000	4/26/2018	
	TRC Personnel: Emily Ebert & James Robinson			

Well Identification: GC-MW-03

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER	
	X 2 inch
	4 inch
	6 inch

WELL MATERIAL

X		
PVC	SS	

Well Depth (ft.):	24.25
Depth to Water (ft):	12.78

Reference Point:

		historical
		measured:
	top of riser	notch
X	top of casing	north side
	_____	high pt
		pen mark

Depth of pump intake (ft.): 20

Height of water column (ft.):	11.47

X	.16 gal/ft (2 in.)
	.65 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Volume of Water in Well (gal):	1.87
Total Gallons Purged:	10

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	12:10	12:15	12:20	12:25	12:30	12:35	12:40		
Temp. (C.) - (±10%)	13.85	13.81	13.84	13.96	13.95	13.95	13.98		
pH (Std.Units) - (± 0.1)	6.91	6.82	6.80	6.85	6.85	6.81	6.81		
ORP (millivolts) - (± 10)	185	209	217	221	227	228	229		
Conduct.(mS/cm) - (±3%)	2.48	2.61	2.53	2.46	2.45	2.45	2.47		
Turb. (NTU) - (± 10%)	129	30.8	19.1	9.7	4.9	4.4	4.0		
DO (mg/L) - (± 10%)	7.10	6.58	6.57	5.59	6.13	6.43	6.51		
Depth to water (ft)	13.15	13.16	13.16	13.16	13.16	13.16	13.16		
Flow (ml/min)	250	250	250	250	250	250	250		
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	12:45	GC-MW-03(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 4 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/26/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-101

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch; [ ]

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.): 27.15

Depth to Water (ft): 15.28

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 20

Height of water column (ft.): 11.87

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

PID SCREENING (ppmV)

Background	0	
Well Mouth	0.6	(if required)

Volume of Water in Well (gal): 1.94

Total Gallons Purged: 12

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.): NA

Thickness of NAPL (ft.):

FIELD WATER QUALITY MEASUREMENTS

Time	10:25	10:50	10:53	10:57	11:00	11:03	11:06	11:09	
Temp. (C.) - (±10%)	-	15.36	15.39	15.38	15.41	15.42	15.41	15.39	
pH (Std.Units) - (± 0.1)	-	6.97	6.95	6.93	6.94	6.94	6.94	6.95	
ORP (millivolts) - (± 10)	-	202	204	205	205	205	207	208	
Conduct.(mS/cm) - (±3%)	-	0.452	0.441	0.413	0.444	0.443	0.448	0.448	
Turb. (NTU) - (± 10%)	-	29.4	28.3	34.2	20.6	22.3	19.9	20.3	
DO (mg/L) - (± 10%)	-	3.03	3.07	2.97	3.01	3.02	3.01	3.11	
Depth to water (ft)	15.43	15.41	15.41	15.41	15.41	15.41	15.41	15.41	
Flow (ml/min)	333	333	333	333	333	333	333	333	
Comments	Turbid	Clear							
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	11:15	GC-MW-101(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 5 of 17
TRC	NYSDEC GEM Cleaners	249002.0000.0000	4/26/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-101D

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up _____ ft. (from Ground)

WELL DIAMETER: [X] 2 inch [ ] 4 inch [ ] 6 inch

WELL MATERIAL: [X] PVC [ ] SS [ ]

Well Depth (ft.): -

Depth to Water (ft.): 15.73

Reference Point: [ ] top of riser [X] top of casing [ ] _____

[ ] historical [ ] measured: [ ] notch [ ] north side [X] high pt [ ] pen mark

Depth of pump intake (ft.): 95

Height of water column (ft.): -

[X] .16 gal/ft (2 in.) [ ] .65 gal/ft (4 in.) [ ] 1.5 gal/ft (6 in.) [ ] ___ gal/ft (__in.)

Volume of Water in Well (gal): -

Total Gallons Purged: 7.5

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.): NA

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0	
Well Mouth	1.8	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	10:30	10:35	10:45	10:50	10:55	11:00	11:05	11:10	
Temp. (C.) - (±10%)	15.24	15.33	15.25	15.29	15.29	15.26	15.31	15.37	
pH (Std.Units) - (± 0.1)	4.50	4.90	4.82	4.89	4.83	4.87	4.81	4.80	
ORP (millivolts) - (± 10)	230	190	207	207	215	215	221	224	
Conduct.(mS/cm) - (±3%)	0.264	0.257	0.257	0.257	0.257	0.257	0.257	0.256	
Turb. (NTU) - (± 10%)	71000	71000	135	59.6	37.5	30.5	32.0	29.8	
DO (mg/L) - (± 10%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Depth to water (ft)	15.86	15.87	15.87	15.87	15.87	15.88	15.87	15.87	
Flow (ml/min)	250	250	250	250	250	250	250	250	
Salinity									
Comments	Very Turbid		Clearing						
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Salinity									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	11:15	GC-MW-101D(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 6 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/26/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-102

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up __NA___ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.): 14.40

Depth to Water (ft): 8.72

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 12

Height of water column (ft.): 5.68

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Volume of Water in Well (gal): 0.93

Total Gallons Purged: 11

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.): NA

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	7:45	7:50	8:05	8:08	8:11	8:14	8:17	8:20	8:25
Temp. (C.) - (±10%)	-	-	12.45	13.19	13.19	13.19	13.19	13.20	13.21
pH (Std.Units) - (± 0.1)	-	-	6.12	6.84	6.89	6.90	6.91	6.91	6.91
ORP (millivolts) - (± 10)	-	-	219	59	49	47	43	41	40
Conduct.(mS/cm) - (±3%)	-	-	0.41	0.996	1.00	1.00	1.00	1.01	1.010
Turb. (NTU) - (± 10%)	-	-	111	20.5	14.7	12.7	6.7	5.3	4.7
DO (mg/L) - (± 10%)	-	-	6.34	5.62	5.50	5.44	5.14	5.04	5.02
Depth to water (ft)	8.70	8.70	8.75	8.75	8.75	8.75	8.75	8.75	8.75
Flow (ml/min)	-	-	333	333	333	333	333	333	333
Comments	Slightly Turbid	Clear							
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	8:25	GC-MW-102(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 7 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/25/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-103

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

PID SCREENING (ppmV)

Background	0	
Well Mouth	1.3	(if required)

Protective Casing Stick-up ___NA____ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.):	15.50
Depth to Water (ft):	8.67
Depth of pump intake (ft.):	10
Height of water column (ft.):	6.83
Volume of Water in Well (gal):	1.11
Total Gallons Purged:	8
[Vol. = $r^2h(0.163)$]	

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Depth to NAPL (ft.): NA

Thickness of NAPL (ft.):

FIELD WATER QUALITY MEASUREMENTS

Time	12:30	12:35	12:40	12:43	12:46	12:49	12:52	12:55	12:58
Temp. (C.) - (±10%)	-	-	13.94	13.83	13.83	13.81	13.82	13.82	13.83
pH (Std.Units) - (± 0.1)	-	-	7.04	6.92	6.89	6.87	6.87	6.86	6.86
ORP (millivolts) - (± 10)	-	-	117	92	91	90	91	91	91
Conduct.(mS/cm) - (±3%)	-	-	0.842	0.939	0.944	0.942	0.941	0.942	0.938
Turb. (NTU) - (± 10%)	-	-	10.7	6.5	4.6	3.2	3.3	2.8	1.6
DO (mg/L) - (± 10%)	-	-	-	7.42	7.29	6.79	4.04	1.24	1.07
Depth to water (ft)	-	-	8.69	8.67	8.67	8.67	8.67	8.67	8.67
Flow (ml/min)	-	-	333	333	333	333	333	333	333
Comments	Very Turbid	Clearing	Clear						
Time	13:01	13:04							
Temp. (C.) - (±10%)	13.83	13.83							
pH (Std.Units) - (± 0.1)	6.86	6.86							
ORP (millivolts) - (± 10)	91	91							
Conduct.(mS/cm) - (±3%)	0.938	0.937							
Turb. (NTU) - (± 10%)	1.4	1.1							
DO (mg/L) - (± 10%)	1.07	1.08							
Depth to water (ft)	8.67	8.67							
Flow (ml/min)	333	333							
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	13:10	GC-MW-103(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 8 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/25/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-104

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up _____ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch; [ ]

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.): 14.55

Depth to Water (ft): 8.37

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: ; [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 12

Height of water column (ft.): 6.18

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Volume of Water in Well (gal): 1.01

Total Gallons Purged: 8

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.): NA

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	13:05	13:10	13:15	13:20	13:25	13:30			
Temp. (C.) - (±10%)	13.72	13.72	13.73	13.72	13.71	13.71			
pH (Std.Units) - (± 0.1)	6.95	6.95	6.94	6.96	6.96	6.96			
ORP (millivolts) - (± 10)	142	130	125	119	117	116			
Conduct.(mS/cm) - (±3%)	1.19	1.19	1.18	1.18	1.18	1.18			
Turb. (NTU) - (± 10%)	9.8	3.6	1.8	1.8	0.6	0.7			
DO (mg/L) - (± 10%)	5.71	5.70	5.66	5.74	5.70	5.76			
Depth to water (ft)	8.38	8.38	8.38	8.38	8.38	8.38			
Flow (ml/min)	200	200	200	200	200	200			
Salinity									
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Salinity									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump with weighted screen

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	13:35	GC-MW-104(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 9 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/25/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-105

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch; [ ]

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.): 14.21

Depth to Water (ft): 8.59

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 12

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Height of water column (ft.): 5.62

Volume of Water in Well (gal): 0.92

Total Gallons Purged: 7.5

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.): NA

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	14:08	14:13	14:18	14:23	14:28	14:33	14:38		
Temp. (C.) - (±10%)	13.04	13.03	13.03	13.02	13.01	13.01	13.02		
pH (Std.Units) - (± 0.1)	7.22	7.21	7.21	7.20	7.18	7.20	7.19		
ORP (millivolts) - (± 10)	72	71	65	58	61	57	55		
Conduct.(mS/cm) - (±3%)	1.28	1.27	1.27	1.27	1.26	1.27	1.26		
Turb. (NTU) - (± 10%)	24.5	20.1	18.1	15.5	13.5	12.7	10.2		
DO (mg/L) - (± 10%)	9.75	9.62	9.51	9.36	9.35	9.09	8.93		
Depth to water (ft)	8.60	8.60	8.60	8.60	8.60	8.60	8.60		
Flow (ml/min)	200	200	200	200	200	200	200		
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	14:43	GC- MW-105(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 10 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/26/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-106

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER		
	X	2 inch
		4 inch
		6 inch

WELL MATERIAL

X		
PVC	SS	

Well Depth (ft.):	27.00	Reference Point:	historical
			measured:
			top of riser
Depth to Water (ft):	16.02	X	top of casing
			_____
			notch
			north side
		X	high pt
			pen mark

Depth of pump intake (ft.): 20

Height of water column (ft.):	10.98

X	.16 gal/ft (2 in.)
	.65 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Volume of Water in Well (gal):	1.79
Total Gallons Purged:	6.5

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

PID SCREENING (ppmV)

Background	0	
Well Mouth	2.5	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	11:35	11:45	11:48	11:51					
Temp. (C.) - (±10%)	-	14.31	14.31	14.31					
pH (Std.Units) - (± 0.1)	-	7.14	7.14	7.13					
ORP (millivolts) - (± 10)	-	213	213	213					
Conduct.(mS/cm) - (±3%)	-	1.53	1.52	1.52					
Turb. (NTU) - (± 10%)	-	4.9	4.0	4.1					
DO (mg/L) - (± 10%)	-	3.98	3.94	3.93					
Depth to water (ft)	16.19	16.18	16.18	16.18					
Flow (ml/min)	333	333	333	333					
Comments	Turbid	Clear							
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	11:55	GC-MW-106(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 11 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/25/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-107

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.):	26.10
Depth to Water (ft):	16.18

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 22

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Height of water column (ft.):	9.92
Volume of Water in Well (gal):	1.62
Total Gallons Purged:	7

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

PID SCREENING (ppmV)

Background	0	
Well Mouth	0.3	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	9:22	9:25	9:28	9:31	9:34	9:37	9:40		
Temp. (C.) - (±10%)	13.88	13.89	13.93	13.93	13.89	13.89	13.89		
pH (Std.Units) - (± 0.1)	7.15	7.15	7.16	7.17	7.18	7.18	7.18		
ORP (millivolts) - (± 10)	205	205	204	204	204	204	204		
Conduct.(mS/cm) - (±3%)	1.03	1.03	1.04	1.04	1.04	1.05	1.05		
Turb. (NTU) - (± 10%)	48.7	47.1	36.4	33.3	23.2	23.6	22.6		
DO (mg/L) - (± 10%)	8.25	8.14	7.93	7.58	6.98	6.94	6.82		
Depth to water (ft)	16.16	16.16	16.16	16.16	16.16	16.16	16.16		
Flow (ml/min)	250	333	500	500	500	500	500		
Comments	Slightly Turbid								
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	10:00	GC-MW-107(WG)

Remarks:

Groundwater Sampling Data Record Form

Project:	Project No.:	Date/Time:	Sheet 12 of 17
NYSDEC GEM Cleaners	279191.0000.0000	4/25/2018	

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-107D

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

PID SCREENING (ppmV)

Background	0.1	
Well Mouth		(if required)

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER	
X	2 inch
	4 inch
	6 inch

WELL MATERIAL

X		
PVC	SS	

Well Depth (ft.):	98.37
Depth to Water (ft):	16.12
Height of water column (ft.):	82.25

Reference Point:

	top of riser
X	top of casing
	_____

	historical
	measured:
	notch
	north side
X	high pt
	pen mark

Depth of pump intake (ft.):

X	.16 gal/ft (2 in.)
	.65 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Volume of Water in Well (gal):	13.42
Total Gallons Purged:	17
[Vol. = $r^2h(0.163)$]	

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	9:20	9:30	9:40	9:50	10:00	10:05	10:10	10:15	10:20	10:25
Temp. (C.) - (±10%)	13.90	14.29	14.31	14.45	14.46	14.47	14.46	14.44	14.43	14.41
pH (Std.Units) - (± 0.1)	6.03	4.51	4.50	4.45	4.45	4.44	4.44	4.57	4.55	4.54
ORP (millivolts) - (± 10)	196	317	339	339	340	344	339	330	329	328
Conduct.(mS/cm) - (±3%)	0.281	0.330	0.331	0.331	0.331	0.331	0.331	0.330	0.326	0.326
Turb. (NTU) - (± 10%)	624	954	867	748	575	569	401	256	163	135
DO (mg/L) - (± 10%)	8.36	6.88	5.91	5.02	3.10	2.39	2.17	1.70	1.69	1.29
Depth to water (ft)	16.31	16.33	16.34	16.33	16.33	16.33	16.33	16.33	16.33	16.33
Flow (ml/min)	150	150	200	200	200	200	200	200	200	200
Comments										

Time	10:30	10:35	10:40	10:45	10:50	10:55	11:00	11:05	11:10
Temp. (C.) - (±10%)	14.41	14.43	14.42	14.39	14.40	14.42	14.42	14.42	14.42
pH (Std.Units) - (± 0.1)	4.52	4.50	4.51	4.54	4.54	4.60	4.60	4.60	4.59
ORP (millivolts) - (± 10)	328	331	330	328	323	326	322	324	322
Conduct.(mS/cm) - (±3%)	0.327	0.327	0.329	0.327	0.326	0.326	0.326	0.326	0.329
Turb. (NTU) - (± 10%)	123	91.0	78.1	71.5	50.1	33.1	33.7	31.9	30.7
DO (mg/L) - (± 10%)	1.14	1.00	0.90	0.72	0.00	0.00	0.00	0.00	0.00
Depth to water (ft)	16.33	16.33	16.33	16.33	16.33	16.33	16.33	16.33	16.33
Flow (ml/min)	200	200	200	200	200	200	200	200	200
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	11:15	GC-MW-107D(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 13 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/25/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-108

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER		
	X	2 inch
		4 inch
		6 inch

WELL MATERIAL

X		
PVC	SS	

Well Depth (ft.):	25.60
Depth to Water (ft):	16.32

Reference Point:

	historical
	measured:
	top of riser
X	top of casing
	notch
	north side
X	high pt
	pen mark
	_____

Depth of pump intake (ft.): 22

Height of water column (ft.):	9.28

X	.16 gal/ft (2 in.)
	.65 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

PID SCREENING (ppmV)

Background	0
Well Mouth	0.7 (if required)

Volume of Water in Well (gal):	1.51
Total Gallons Purged:	5

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	11:20	11:23	11:26	11:29	11:32	11:35	11:38	11:41	
Temp. (C.) - (±10%)	14.25	14.22	14.16	14.12	14.09	14.09	14.08	14.08	
pH (Std.Units) - (± 0.1)	7.17	7.16	7.15	7.13	7.11	7.11	7.10	7.10	
ORP (millivolts) - (± 10)	129	130	132	132	132	132	133	134	
Conduct.(mS/cm) - (±3%)	0.772	0.773	0.778	0.778	0.776	0.775	0.775	0.776	
Turb. (NTU) - (± 10%)	21.7	22.4	23.2	18.4	15.7	13.3	13.8	13.9	
DO (mg/L) - (± 10%)	0.00	0.04	0.17	0.21	0.20	0.19	0.18	0.17	
Depth to water (ft)	16.37	16.37	16.37	16.34	16.34	16.34	16.34	16.34	
Flow (ml/min)	550	333	333	333	333	333	333	333	
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	11:50	GC-MW-108(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 14 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/26/2018	
Groundwater Sampling Data Record Form	**TRC Personnel:** Emily Ebert & James Robinson			

Well Identification: GC-MW-109

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.):	24.70
Depth to Water (ft):	15.87

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 22

Height of water column (ft.):	8.83

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Volume of Water in Well (gal):	1.44
Total Gallons Purged:	13

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.): NA

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	9:15	9:25	9:28	9:31	9:33	9:36	9:39	9:42	9:45
Temp. (C.) - (±10%)	13.21	13.49	13.95	14.32	14.29	14.34	14.34	14.33	14.36
pH (Std.Units) - (± 0.1)	6.91	6.94	6.96	6.93	6.93	6.93	6.933	6.93	6.93
ORP (millivolts) - (± 10)	40	95	175	192	195	199	193	199	201
Conduct.(mS/cm) - (±3%)	1.01	0.775	0.489	0.484	0.480	0.480	0.482	0.488	0.491
Turb. (NTU) - (± 10%)	4.7	166	297	80.2	29.1	21.0	18.7	14.8	9.8
DO (mg/L) - (± 10%)	4.86	5.29	5.87	5.67	5.65	5.62	5.61	5.60	5.57
Depth to water (ft)	16.05	16.08	16.08	16.08	16.08	16.08	16.08	16.08	16.08
Flow (ml/min)	200	333	333	500	333	333	333	333	333
Comments									
Time	9:48	9:51	9:54	9:57					
Temp. (C.) - (±10%)	14.40	14.42	14.41	14.41					
pH (Std.Units) - (± 0.1)	6.93	6.93	6.93	6.93					
ORP (millivolts) - (± 10)	202	204	205	205					
Conduct.(mS/cm) - (±3%)	0.495	0.496	0.495	0.495					
Turb. (NTU) - (± 10%)	6.3	4.3	2.6	1.8					
DO (mg/L) - (± 10%)	5.53	5.50	5.45	5.47					
Depth to water (ft)	16.08	16.08	16.08	16.08					
Flow (ml/min)	333	333	333	333					
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	9:57	GC-MW-109(WG)

Remarks:

Groundwater Sampling Data Record Form

Project:	Project No.:	Date/Time:	Sheet 15 of 17
NYSDEC GEM Cleaners	249002.0000.0000	4/26/2018	

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-109M

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

PID SCREENING (ppmV)

Background	0	
Well Mouth	0.9	(if required)

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.):	36.4
Depth to Water (ft):	16.46

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 33

Height of water column (ft.):	19.94

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Volume of Water in Well (gal):	3.25
Total Gallons Purged:	10.5

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	8:30	8:35	8:40	8:45	8:50	8:55			
Temp. (C.) - (±10%)	14.21	14.30	14.32	14.31	14.33	14.29			
pH (Std.Units) - (± 0.1)	6.51	6.62	6.62	6.61	6.59	6.59			
ORP (millivolts) - (± 10)	239	231	216	208	207	204			
Conduct.(mS/cm) - (±3%)	0.544	0.644	0.617	0.612	0.606	0.600			
Turb. (NTU) - (± 10%)	126	25.9	5.7	0.0	0.0	0.0			
DO (mg/L) - (± 10%)	5.56	2.80	3.13	3.31	3.38	3.49			
Depth to water (ft)	16.86	16.86	16.86	16.86	16.86	16.86			
Flow (ml/min)	200	200	200	200	200	200			
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	9:00	GC-MW-109M(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 16 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/26/2018	

Groundwater Sampling Data Record Form

TRC Personnel: Emily Ebert & James Robinson

Well Identification: GC-MW-110

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.):	26.7
Depth to Water (ft):	15.14

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 20

Height of water column (ft.):	11.56

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Volume of Water in Well (gal):	1.89
Total Gallons Purged:	5.5

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	13:15	13:20	13:23	13:26	13:29				
Temp. (C.) - (±10%)	-	14.93	14.91	14.99	14.90				
pH (Std.Units) - (± 0.1)	-	6.60	6.61	6.61	6.61				
ORP (millivolts) - (± 10)	-	236	236	237	237				
Conduct.(mS/cm) - (±3%)	-	0.565	0.573	0.574	0.574				
Turb. (NTU) - (± 10%)	-	0.0	0.0	0.0	0.0				
DO (mg/L) - (± 10%)	-	4.87	4.80	4.85	4.87				
Depth to water (ft)	15.14	15.22	15.23	15.23	15.23				
Flow (ml/min)	300	300	300	300	300				
Comments	Turbid	Clear							
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	13:35	GC-MW-110(WG)

Remarks:

	Project:	Project No.:	Date/Time:	Sheet 17 of 17
TRC	NYSDEC GEM Cleaners	279191.0000.0000	4/26/2018	
Groundwater Sampling Data Record Form	**TRC Personnel:** Emily Ebert & James Robinson			

Well Identification: GC-MW-110D

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	N/A	
Well Cap Present	X	
Security Lock Present	X	

PID SCREENING (ppmV)

Background	0	
Well Mouth	2.3	(if required)

Protective Casing Stick-up __NA___ ft. (from Ground)

WELL DIAMETER: [X] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [X] PVC; [ ] SS; [ ]

Well Depth (ft.):	71.33
Depth to Water (ft):	15.96

Reference Point: [ ] top of riser; [X] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [ ] north side; [X] high pt; [ ] pen mark

Depth of pump intake (ft.): 67

Height of water column (ft.):	55.37

[X] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Volume of Water in Well (gal):	9.04
Total Gallons Purged:	13

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.):	NA
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	13:20	13:30	13:40	13:50	13:55	14:00	14:05	14:10	14:15
Temp. (C.) - (±10%)	16.48	16.37	16.37	16.96	-	17.18	17.35	17.36	17.50
pH (Std.Units) - (± 0.1)	5.39	5.30	5.32	5.34	-	5.34	5.37	5.36	5.38
ORP (millivolts) - (± 10)	241	278	281	276	-	281	289	291	293
Conduct.(mS/cm) - (±3%)	0.458	0.436	0.457	0.432	-	0.420	0.421	0.418	0.415
Turb. (NTU) - (± 10%)	71000	118	91.2	84.9	-	85.4	12.6	5.5	1.8
DO (mg/L) - (± 10%)	4.26	2.90	2.43	1.59	-	4.51	4.27	3.99	3.33
Depth to water (ft)	16.24	16.24	16.24	16.25	-	16.25	16.25	16.25	16.25
Flow (ml/min)	250	250	250	250	-	250	250	250	250
Comments	Very Turbid	Clearing			Emptied Flow Cell				
Time	14:20	14:25							
Temp. (C.) - (±10%)	14.45	17.41							
pH (Std.Units) - (± 0.1)	5.38	5.38							
ORP (millivolts) - (± 10)	295	295							
Conduct.(mS/cm) - (±3%)	0.417	0.417							
Turb. (NTU) - (± 10%)	1.1	1.4							
DO (mg/L) - (± 10%)	3.09	3.06							
Depth to water (ft)	16.25	16.25							
Flow (ml/min)	250	250							
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	X	X
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Solinst Peristaltic Pump

Horiba U-52 flow-through cell

Oil/water interface probe

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs + 10, PFAs	N	HCl/Ice	8 Bottles	14:30	GC-MW-110D

Remarks:

Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 23, July 2018
MW - 02	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	22.71	17.32	NIL	0.3	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	20	12:45	13:25	150	7.0	Rental Meter Serial No.:	Hand Set: 16557	Probe: 21165

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)

	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
12:45	150	17.45	19.17	8.23	1.10	7.30	135	1000.00	SS	Silty, light brown color, No sheen/No odor
12:50	150	17.48	18.81	7.79	1.12	6.82	170	785	SS	SAA
12:55	150	17.55	18.69	7.77	1.12	6.83	174	519	SS	SAA
13:00	150	17.48	18.79	7.74	1.12	6.10	195	385	SS	SAA
13:05	150	17.48	18.84	7.74	1.11	6.13	197	176	SS	SAA
13:10	150	17.45	18.87	7.75	1.12	6.11	201	99.3	SS	Clearing, No sheen/No odor
13:15	150	17.45	18.95	7.74	1.11	6.12	200	76.5	SS	SAA
13:20	150	17.45	18.95	7.75	1.12	6.11	201	51.9	SS	Clear, No Sheen/No odor
13:25	150	17.45	18.96	7.75	1.11	6.11	202	40.6	SS	SAA

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-02 (WG)	13:25	2	
Analytical Parameters: PFAs (21 compounds)			Sample Start Time: 13:25 Sample Finish Time: 13:30

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

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Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 23, July 2018
MW - 101	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	26.96	15.87	NIL	21.9	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	22	8:55	9:30	150	6.0	Rental Meter Serial No.:	Hand Set: 27111	Probe: 21358

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)

	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
8:55	150	15.91	18.41	6.34	0.248	8.57	248	144.00	SS	Clear to lightbrown, No sheen/No odor
9:00	150	15.91	18.63	6.49	0.238	4.05	233	105	SS	Light brown, No sheen/No odor
9:05	150	15.91	18.64	6.53	0.234	3.49	228	85.7	SS	SAA
9:10	150	15.91	18.60	6.53	0.233	3.32	227	63.0	SS	SAA
9:15	150	15.91	18.54	6.51	0.236	3.34	228	22.6	SS	Clear to lightbrown, No sheen/No odor
9:20	150	15.91	18.48	6.52	0.234	3.32	229	11.8	SS	Clear to lightbrown, No sheen/No odor
9:25	150	15.91	18.43	6.53	0.236	3.36	227	8.1	SS	Clear to lightbrown, No sheen/No odor
9:30	150	15.91	18.40	6.52	0.233	3.34	228	3.9	SS	Clear to lightbrown, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-101 (WG)	9:30	7	
Analytical Parameters: TCL VOCs + 10; Alkalinity;Sulphate; TDS;TOC.			Sample Start Time: 9:30
			Sample Finish Time: 9:40

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

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Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 23, July 2018
MW - 102	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	14.42	9.25	NIL	5.5	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	12.5	10:10	10:45	150	5.5	Rental Meter Serial No.:	Hand Set: 16557	Probe: 21165

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
10:10	150	9.32	21.77	8.42	0.748	1.81	33	176	WC	Brown, turbid, No sheen/No odor
10:15	150	9.35	21.35	8.28	0.718	1.00	53	126	WC	SAA
10:20	150	9.32	20.50	8.13	0.585	1.02	92	11.0	WC	Clear, No sheen/No odor
10:25	150	9.30	20.25	7.89	0.556	0.90	139	4.4	WC	Clear, No sheen/No odor
10:30	150	9.32	20.12	7.85	0.564	0.86	142	5.4	WC	Clear, No sheen/No odor
10:35	150	9.33	19.43	7.84	0.561	0.84	148	4.2	WC	Clear, No sheen/No odor
10:40	150	9.32	19.37	7.81	0.560	0.83	153	3.3	WC	Clear, No sheen/No odor
10:45	150	9.33	19.42	7.82	0.562	0.81	155	2.8	WC	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-102 (WG)	10:45	3	
Analytical Parameters: TCL VOCs + 10			Sample Start Time: 10:45 Sample Finish Time: 10:50

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

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Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 23, July 2018
MW - 103	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	15.32	9.22	NIL	11.1	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	13	10:55	11:30	150	5.5	Rental Meter Serial No.:	Hand Set: 27111	Probe: 21358

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)

	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
10:55	150	9.25	20.61	7.05	1.140	1.55	148	39.10	SS	Dark brown, No sheen/No odor
11:00	150	9.26	19.24	6.99	1.070	0.24	130	32.9	SS	Clear, No sheen/No odor
11:05	150	9.25	18.75	6.97	1.050	0.01	105	21.9	SS	Clear, No sheen/No odor
11:10	150	9.25	18.52	6.95	1.040	0.00	93	21.7	SS	Clear, No sheen/No odor
11:15	150	9.25	18.32	6.91	0.814	0.00	90	7.8	SS	Clear, No sheen/No odor
11:20	150	9.25	18.22	6.88	0.812	0.00	91	16.4	SS	Clear, No sheen/No odor
11:25	150	9.25	18.18	6.85	0.813	0.14	92	4.2	SS	Clear, No sheen/No odor
11:30	150	9.27	18.19	6.86	0.813	0.00	93	4.9	SS	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-103 (WG)	11:30	3	
Analytical Parameters: TCL VOCs + 10			Sample Start Time: 11:30 Sample Finish Time: 11:35

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

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Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 23, July 2018
MW - 104	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	14.52	9.0	NIL	1.3	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	12.0	11:50	12:20	150	5.5	Rental Meter Serial No.:	Hand Set:	16557 Probe: 21165

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
11:50	150	9.04	18.71	7.79	0.697	4.49	168	152	WC	Turbid, brown, No sheen/No odor
11:55	150	9.08	17.47	7.65	0.691	3.27	189	145	WC	SAA
12:00	150	9.10	17.23	7.69	0.701	3.15	191	145	WC	SAA
12:05	150	9.12	17.12	7.76	0.703	3.09	190	101	WC	SAA
12:10	150	9.11	17.02	7.80	0.708	3.13	189	85.4	WC	SAA
12:15	150	9.13	16.94	7.80	0.708	2.96	192	50.1	WC	Clear, No sheen/No odor
12:20	150	9.14	16.96	7.82	0.712	2.98	189	19.0	WC	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-104 (WG)	12:20	9	
Analytical Parameters: TCL VOCs + 10; Alkalinity;Sulphate; TDS;TOC; PFAs (21 compounds)			Sample Start Time: 12:20 Sample Finish Time: 12:25

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

TRC A Joint Venture

Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 23, July 2018
MW - 105	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	14.28	9.22	IL	3.0	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	12.0	12:40	13:10	150	6.0	Rental Meter Serial No.:	Hand Set:	27111 Probe: 21358

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
12:40	150	9.22	16.49	7.15	0.598	6.14	185	26.4	WC	Turbid, brown, No sheen/No odor
12:45	150	9.22	16.43	7.10	0.573	5.47	193	7.5	WC	Clear, No sheen/No odor
12:50	150	9.23	16.44	7.06	0.575	5.31	198	1.9	WC	Clear, No sheen/No odor
12:55	150	9.24	16.40	7.03	0.571	5.11	201	0.2	WC	Clear, No sheen/No odor
13:00	150	9.23	16.37	6.99	0.573	5.16	204	0.0	WC	Clear, No sheen/No odor
13:05	150	9.23	16.45	6.96	0.577	5.15	206	0.0	WC	Clear, No sheen/No odor
13:10	150	9.24	16.44	6.95	0.580	5.09	207	0.0	WC	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-105 (WG)	13:10	5	
Analytical Parameters:	**TCL VOCs + 10; PFAs (21 compounds)**		**Sample Start Time:** 13:10
			Sample Finish Time: 13:15

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

TRC A Joint Venture

Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 23, July 2018
MW - 106	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	26.72	16.68	NIL	13.5	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	24.0	8:45	9:25	150	6.0	Rental Meter Serial No.:	Hand Set:	16557 Probe: 21165

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
8:45	150	16.67	19.75	7.27	0.679	7.05	280	259	WC	Turbid, light brown, No sheen/No odor
8:50	150	16.71	19.00	7.52	0.671	6.80	259	185	WC	SAA
8:55	150	16.71	18.46	7.58	0.682	6.17	250	169	WC	SAA
9:00	150	16.68	18.06	7.59	0.700	6.08	244	73.4	WC	SAA
9:05	150	16.69	17.93	7.59	0.704	5.98	241	22.4	WC	Clear, No sheen/No odor
9:10	150	16.71	18.09	7.70	0.699	7.01	239	13.3	WC	Clear, No sheen/No odor
9:15	150	16.69	18.02	7.63	0.695	6.93	239	9.5	WC	Clear, No sheen/No odor
9:20	150	16.70	18.01	7.59	0.700	6.90	238	6.8	WC	Clear, No sheen/No odor
9:25	150	16.70	18.01	7.60	0.701	6.91	238	6.4	WC	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-106 (WG)	9:25	3	
Analytical Parameters: TCL VOCs + 10			Sample Start Time: 9:25 Sample Finish Time: 9:30

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

TRC A Joint Venture

Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 24, July 2018
MW - 107	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	26.05	16.82	NIL	11.1	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	24.0	7:00	7:45	150	8.0	Rental Meter Serial No.:	Hand Set: 27111	Probe: 21358

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
7:00	150	16.84	19.76	6.70	0.588	3.60	217	48.2	WC	Clear, No sheen/No odor
7:05	150	16.83	18.48	6.80	0.577	2.34	208	15.0	WC	Clear, No sheen/No odor
7:10	150	16.83	18.21	6.75	0.572	1.95	209	8.4	WC	Clear, No sheen/No odor
7:15	150	16.82	18.25	6.70	0.573	1.90	212	7.3	WC	Clear, No sheen/No odor
7:20	150	16.83	18.34	6.66	0.570	1.77	214	10.1	WC	Clear, No sheen/No odor
7:25	150	16.82	18.29	6.62	0.569	1.83	217	11.1	WC	Clear, No sheen/No odor
7:30	150	16.83	18.06	6.57	0.574	2.22	217	8.7	WC	Clear, No sheen/No odor
7:35	150	16.83	18.01	6.54	0.573	1.85	222	5.4	WC	Clear, No sheen/No odor
7:40	150	16.82	18.02	6.52	0.569	1.69	223	4.2	WC	Clear, No sheen/No odor
7:45	150	16.83	17.97	6.51	0.570	1.68	224	3.3	WC	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-107 (WG)	7:45	9	
Analytical Parameters: TCL VOCs + 10; Alkalinity;Sulphate; TDS;TOC; PFAs (21 compounds)			Sample Start Time: 7:45 Sample Finish Time: 7:50

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

db TRC A Joint Venture

Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 24, July 2018
MW - 108	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	25.44	16.91	NIL	13.1	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	23.0	8:10	8:50	150	7.5	Rental Meter Serial No.:	Hand Set: 16557	Probe: 21165

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)

	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
8:10	150	17.03	17.99	8.09	0.921	3.10	230	50.4	WC	Clear, No sheen/No odor
8:15	150	17.04	17.36	8.12	0.936	2.28	207	31.5	WC	Clear, No sheen/No odor
8:20	150	17.03	17.04	8.10	0.959	2.42	198	32.8	WC	Clear, No sheen/No odor
8:25	150	17.04	16.96	7.98	0.996	2.67	197	22.5	WC	Clear, No sheen/No odor
8:30	150	17.04	16.89	7.88	1.010	3.31	200	9.8	WC	Clear, No sheen/No odor
8:35	150	17.03	16.88	7.79	1.030	3.43	204	4.8	WC	Clear, No sheen/No odor
8:40	150	17.05	16.81	7.76	1.030	3.54	205	3.5	WC	Clear, No sheen/No odor
8:45	150	17.04	16.89	7.87	1.040	3.45	203	1.9	WC	Clear, No sheen/No odor
8:50	150	17.04	16.89	7.85	1.040	3.53	201	1.3	WC	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-108 (WG)	8:50	9	
Analytical Parameters: TCL VOCs + 10; Alkalinity;Sulphate; TDS;TOC; PFAs (21 compounds)			Sample Start Time: 8:50
			Sample Finish Time: 8:55

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

A Joint Venture

Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 24, July 2018
MW - 109	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	24.57	16.48	NIL	22.7	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	22.0	9:10	9:50	150	7.5	Rental Meter Serial No.:	Hand Set: 27111	Probe: 21358

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
9:10	150	16.54	27.67	6.91	0.646	5.89	207	46.4	WC	Clear, No sheen/No odor
9:15	150	16.52	24.66	6.85	0.672	4.49	208	236	WC	Turbid, No sheen/No odor
9:20	150	16.53	23.97	6.82	0.655	4.15	210	181	WC	Turbid, No sheen/No odor
9:25	150	16.52	23.81	6.81	0.651	4.14	210	137	WC	Turbid, No sheen/No odor
9:30	150	16.52	24.09	6.80	0.651	3.92	211	131	WC	Turbid, No sheen/No odor
9:35	150	16.53	25.69	6.79	0.636	3.50	212	133	WC	Turbid, No sheen/No odor
9:40	150	16.54	20.79	6.79	0.731	4.02	211	45.7	WC	Clear, No sheen/No odor
9:45	150	16.53	21.46	6.77	0.732	3.93	213	24.3	WC	Clear, No sheen/No odor
9:50	150	16.53	21.53	6.76	0.731	4.07	214	12.7	WC	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-109 (WG)	9:50	9	
Analytical Parameters: TCL VOCs + 10; Alkalinity;Sulphate; TDS;TOC; PFAs (21 compounds)			Sample Start Time: 9:50 Sample Finish Time: 9:55

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

db TRC A Joint Venture

Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 24, July 2018
MW - 109M	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	36.05	17.14	NIL	13.9	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	34.0	10:10	10:50	150	7.0	Rental Meter Serial No.:	Hand Set: 27111	Probe: 21358

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)										
	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
10:10	150	17.12	20.77	7.92	0.695	4.37	128	10.0	WC	Clear, No sheen/No odor
10:15	150	17.13	20.83	6.83	0.708	3.83	168	5.4	WC	Clear, No sheen/No odor
10:20	150	17.12	20.41	6.76	0.708	3.86	167	5.3	WC	Clear, No sheen/No odor
10:25	150	17.14	20.12	6.71	0.705	3.73	166	4.0	WC	Clear, No sheen/No odor
10:30	150	17.13	20.29	6.69	0.704	3.67	166	3.5	WC	Clear, No sheen/No odor
10:35	150	17.14	20.21	6.70	0.703	3.68	164	2.9	WC	Clear, No sheen/No odor
10:40	150	17.13	20.28	6.70	0.704	3.71	165	2.4	WC	Clear, No sheen/No odor
10:45	150	17.13	20.31	6.71	0.703	3.67	165	2.2	WC	Clear, No sheen/No odor
10:50	150	17.14	20.28	6.70	0.704	3.69	164	2.7	WC	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-109M (WG) and MS/MSD	10:50	9	
Analytical Parameters: TCL VOCs + 10; Alkalinity;Sulphate; TDS;TOC; PFAs (21 compounds)			Sample Start Time: 10:50 Sample Finish Time: 10:55

Also collected MS/MSD for VOCs and PFAs;

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

TRC A Joint Venture

Purging and Sampling Log

WELL NUMBER	WELL INFORMATION					Date: 24, July 2018
MW - 110	Well Diameter (inches)	Total (1) Depth (ft)	Depth to Water TOC (ft)	Depth to Product TOC (ft)	PID (ppm)	Personnel: SS/WC
PERMIT NUMBER						Site Name: Gem Cleaners
NA	2	26.45	15.80	NIL	13.4	Site Location: 84 N. Village Avenue, Rockville Centre, NY
						Job Number: 279191

(1) Use a previously determined total depth. Confirm the total depth of well after sampling.
TOC = top of casing

PURGING INFORMATION							WATER QUALITY METER CALIBRATION READINGS		
Pump Type	Tubing Type	Pump (2) Intake Depth (ft)	Purge Start Time	Purge Stop Time	Flow Rate (ml/m)	Total Purge Vol. (L)	Temp:	pH:	Cond:
							D.O.:	ORP:	Turbidity:
							Rental Meter Name:	Horiba U52/U50	
Peristaltic	HDPE	24.0	11:05	11:40	150	7.0	Rental Meter Serial No.:	Hand Set: 16557	Probe: 21165

(2) Below TOC

PURGING PARAMETERS (measurements are to be taken approximately every 5 minutes)

	Criteria:	<0.3 ft	± 3%	± 0.1 su	± 3%	± 10%	± 10 mv	± 10%(3)		
Time	Flow Rate (ml/m)	Depth to Water (ft)	Temp (ºC)	pH (su)	Cond (mS/cm)	D.O. (ppm)	ORP (mv)	Turbidity (NTU)	Initials	Water Conditions/Comments
11:05	150	15.84	20.21	7.18	0.588	6.76	282	7.4	SS	Clear, No sheen/No odor
11:10	150	15.84	19.07	7.52	0.551	5.29	256	24.6	SS	Clear, No sheen/No odor
11:15	150	15.84	19.00	7.53	0.548	5.16	244	29.1	SS	Clear, No sheen/No odor
11:20	150	15.84	18.95	7.68	0.559	4.29	231	10.7	SS	Clear, No sheen/No odor
11:25	150	15.84	18.95	7.69	0.561	4.42	238	9.9	SS	Clear, No sheen/No odor
11:30	150	15.84	18.96	7.67	0.564	4.39	236	8.1	SS	Clear, No sheen/No odor
11:35	150	15.84	18.92	7.70	0.564	4.41	238	7.3	SS	Clear, No sheen/No odor
11:40	150	15.84	18.94	7.69	0.563	4.40	238	6.7	SS	Clear, No sheen/No odor

Sample Name:	Sample Time:	Number of Bottles:	
GC-MW-110 (WG)	11:40	3	
Analytical Parameters: TCL VOCs + 10			Sample Start Time: 11:40 Sample Finish Time: 11:45

Revised 01/05

(3) For values greater than 1.
Note: Indicator parameters have stabilized when 3 consecutive readings taken every 5 mins are within criteria above.

APPENDIX G
INDOOR AIR QUALITY QUESTIONAIRE AND BUILDING INVENTORY

Gem Cleaners - 84 North Village Avenue

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Joe Mennitti/Emily Ebert Date/Time Prepared March 28, 2018

Preparer's Affiliation TRC Engineers, Inc. Phone No. 212-221-7822

Purpose of Investigation Vapor Intrusion Assessment

1. OCCUPANT:

Interviewed: Y / (N) Building is vacant

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / (N)

Last Name: Goldstein First Name: Gary

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial/Multi-use)
Industrial	Church	Other: Former Dry Cleaner

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: N/A

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Vacant-Former Dry Cleaner

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 1+Basement Building age Circa 1951

Is the building insulated? Y / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Building is vacant, and heating system was not in use at time of inspection

Airflow near source

N/A

Outdoor air infiltration

Outdoor air infiltrates through basement doors (door to exterior stairwell and hatch that leads to sidewalk along North Village Avenue.

Infiltration into air ducts

Building is vacant, and heating system was not in use at time of inspection

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	(concrete)	stone	brick
b. Basement type:	(full)	crawlspace	slab	other _____
c. Basement floor:	(concrete)	(dirt)	stone	other _____
d. Basement floor:	uncovered	(covered)	covered with _____	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls:	poured	(block)	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	(damp)	dry	moldy
i. The basement is:	finished	(unfinished)	partially finished	
j. Sump present?	(Y)	N		
k. Water in sump?	Y	(N)	not applicable	

Basement/Lowest level depth below grade: __12___(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_Floor drains, basement doors (Front and Back)_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Steam radiation	Radiant floor	
(Electric baseboard)	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
(Electric)	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: N/A

Boiler/furnace located in:	(Basement)	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	(None)

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Building is vacant, and heating system was not in use at time of inspection

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Storage
1st Floor	Vacant
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / (N) / NA
Please specify_____

d. Has the building ever had a fire? Y / N When? Unknown

e. Is a kerosene or unvented gas space heater present? Y / (N) Where? _____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? _____

g. Is there smoking in the building? Y / (N) How frequently? _____

h. Have cleaning products been used recently? Y / (N) When & Type? _____

i. Have cosmetic products been used recently? Y / (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented?_____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented?_____

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type?_____

Are there odors in the building? (Y) / N

If yes, please describe: Basement smells damp/moldy

Do any of the building occupants use solvents at work? Y / (N)

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? N/A

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response) N/A - Building is unoccupied

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: Unknown
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: N/A

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

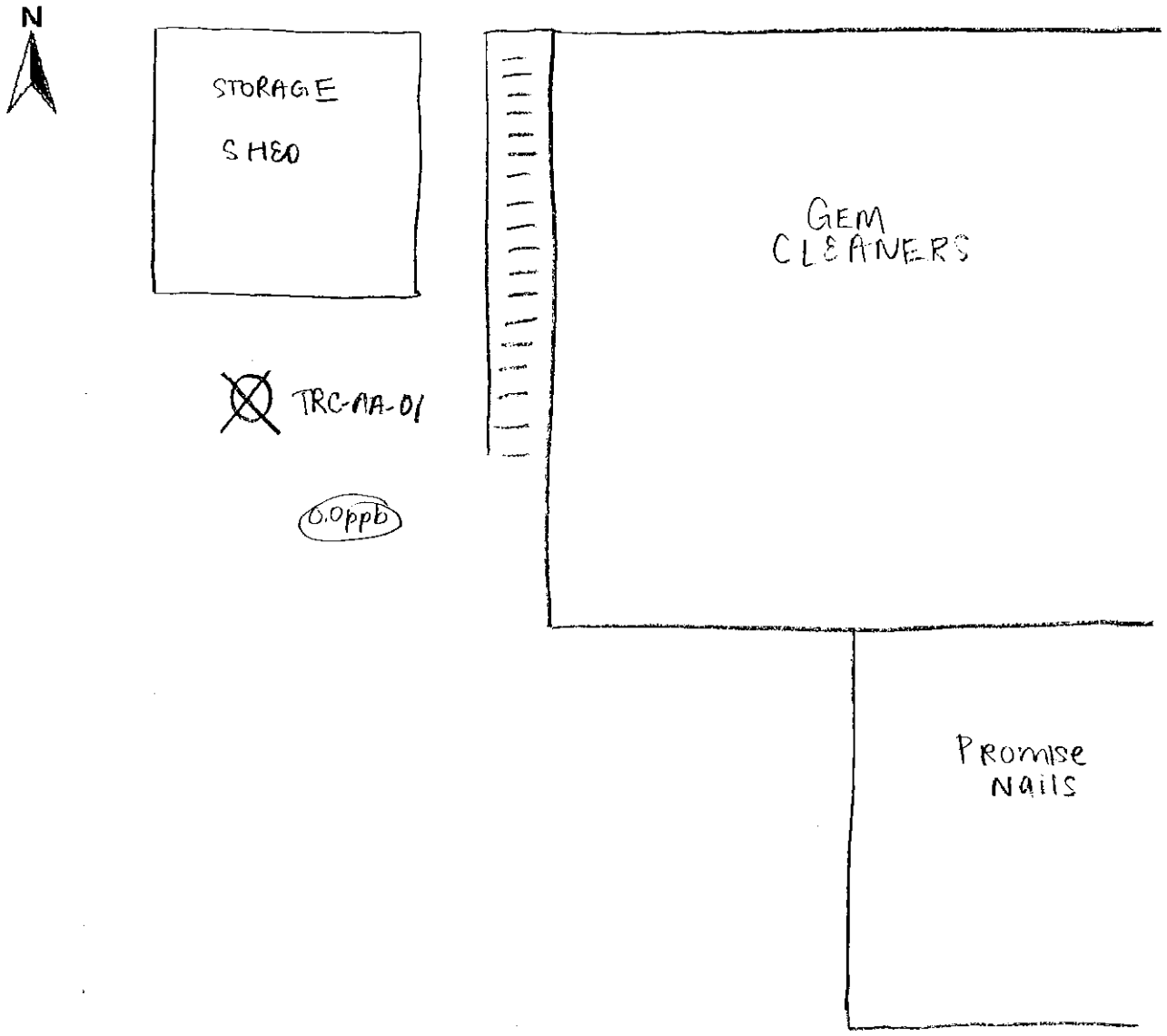
d. Relocation package provided and explained to residents? Y / N

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

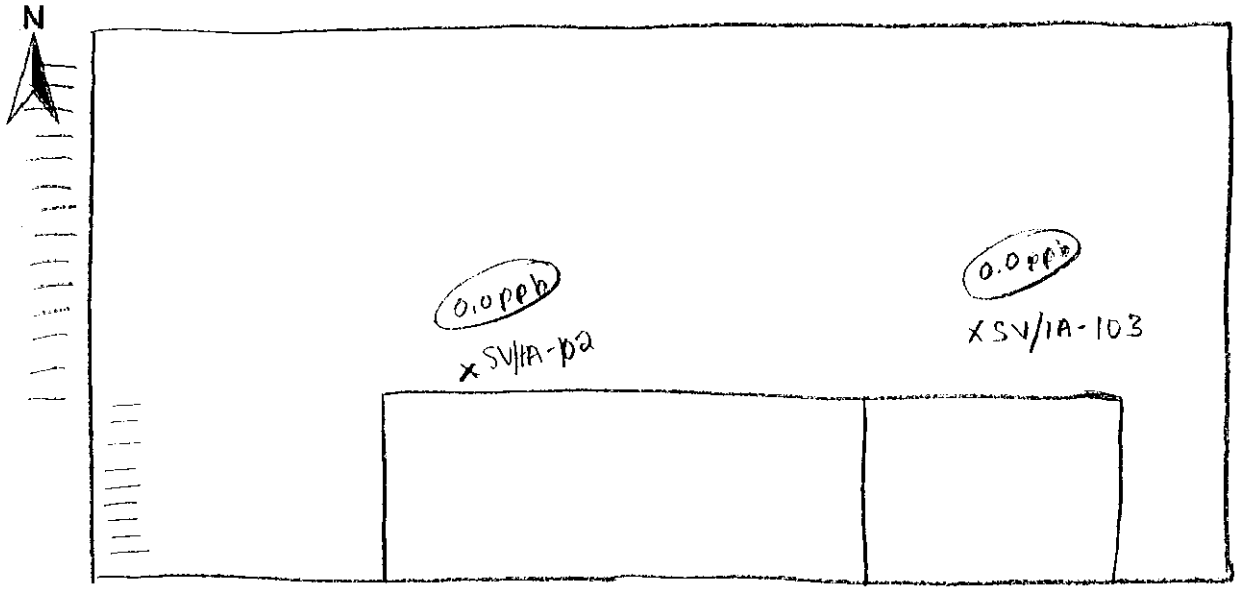
12:00 44° F WSW 6mph



11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
No paints or chemicals found in basement						

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Georgette Salon - 78 North Village Avenue

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Joe Menniti Date/Time Prepared March 27, 2018

Preparer's Affiliation TRC Engineers, Inc. Phone No. 212-221-7822

Purpose of Investigation Vapor Intrusion Investigation

1. OCCUPANT:

Interviewed: (Y)/ N

Last Name: Killarney First Name: Georgette

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 6-10 employees Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant X)

Interviewed: Y / N

Last Name: _____First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial/Multi-use)
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response) N/A

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Hair Salon

Does it include residences (i.e., multi-use)? Y / (N) If yes, how many? _____

Other characteristics:

Number of floors 1 + basement Building age 25+ years

Is the building insulated? (Y) / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

No airflow between floors

Airflow near source

N/A

Outdoor air infiltration

Rear Bilco door to basement

Infiltration into air ducts

N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	(concrete)	stone	brick
b. Basement type:	(full)	crawlspace	slab	other _____
c. Basement floor:	(concrete)	dirt	stone	other _____
d. Basement floor:	(uncovered)	covered	covered with _____	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls:	poured	(block)	stone	other _____
g. Foundation walls:	(unsealed)	sealed	sealed with _____	
h. The basement is:	wet	damp	(dry)	moldy
i. The basement is:	finished	(unfinished)	partially finished	
j. Sump present?	(Y) / N			
k. Water in sump?	(Y) / N / not applicable			

Basement/Lowest level depth below grade: 12 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	
Space Heaters	Steam radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural gas

Boiler/furnace located in:	(Basement)	Outdoors	Main Floor	Other_____
Air conditioning:	(Central Air)	Window units	Open Windows	None

Are there air distribution ducts present? (Y) / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

HVAC system provides A/C and heat - no return air

7. OCCUPANCY

Is basement/lowest level occupied? Full-time (Occasionally) Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Storage
1st Floor	Hair salon
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? _____

g. Is there smoking in the building? Y / (N) How frequently? _____

h. Have cleaning products been used recently? Y / (N) When & Type? _____

i. Have cosmetic products been used recently? (Y) / N When & Type? hair dye - daily

j. Has painting/staining been done in the last 6 months? (Y) / N Where & When? first floor - September 2017

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented?_____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? Roof

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? Y / (N)

p. Has there been a pesticide application? Y / (N) When & Type?_____

Are there odors in the building? Hair dye odor on first floor (Y) / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: N/A
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: N/A

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

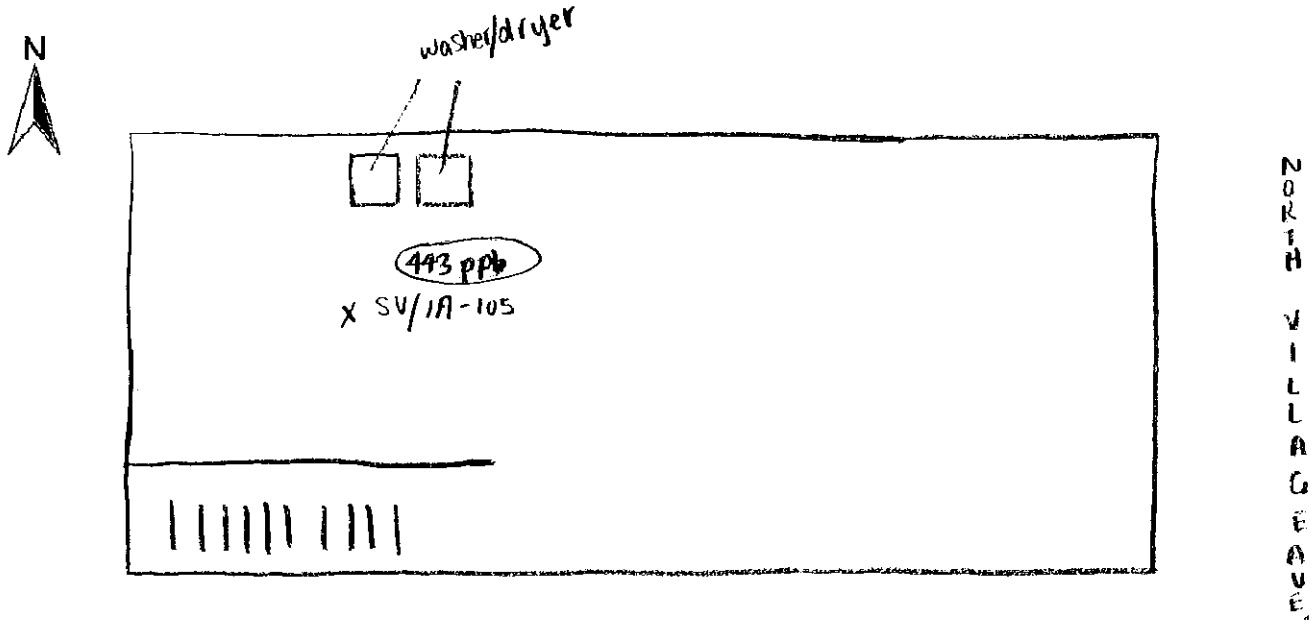
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

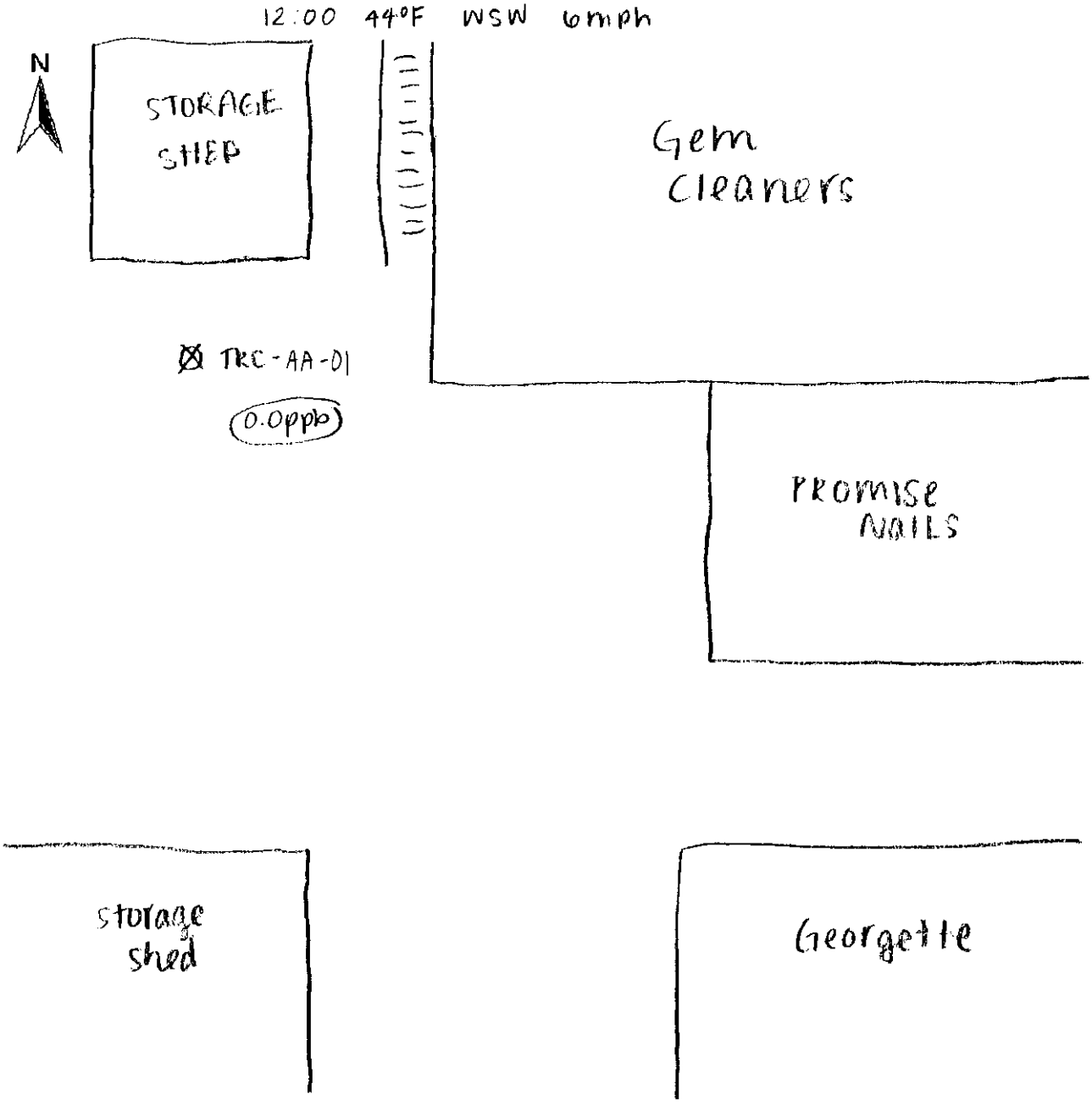


First Floor:

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: miniRAE ppb

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Basement	Clear - Power Grab Loctite	9 oz.	U	Limestone; silica; distillates (petroleum), hydrotreated light; quartz	50	Y
	Benjamin Moore & Co. Premium Interior 100% Acrylic Paint - Eggshell Finish	29.5 oz.	U	Titanium dioxide; propylene glycol; kaolin; silica; sodium c14-c16 olefin sulfonate	150	Y
	Formica Brand Adhesive	1 gal.	U	Toluene, ethyl acetate, heptane	225	Y
	MINWAX Wood Finish	8 oz.	U	Light aliphatic hydrocarbon; heaby naphthenic petroleum oil, medium aliphatic hydrocarbon sovlent; hydrotreated heavy petroleum naphtha; mineral spirits	50	Y
	Hercules - Plastic Pipe & Fittings Cleaner	1 pt.	U	Methyl ethyl ketone, acetone, tetrahydrofuran, cyclohexanone, pyrrolidone	1800	Y
	Nankee Turpentine	32 oz.	U	Turpentine	2500	Y
	Hercules PVC Primer	32 oz.	U	Acetone, cyclohexanone, tetrahydrofuran, methyl ethyl ketone	2850	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Promise Nails - 82 North Village Avenue

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Joe Mennitti/Emily Ebert Date/Time Prepared March 28, 2018

Preparer's Affiliation TRC Engineers, Inc. Phone No. 212-221-7822

Purpose of Investigation Vapor Intrusion Assessment

1. OCCUPANT:

Interviewed: Y / (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 5-7 Employees + Customers

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial/Multi-use)
Industrial	Church	Other: Nail Salon on first floor, vacant basement, residential apartment on second floor

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	(Apartment House)	Townhouses/Condos
Modular	Log Home	Other: on second floor

If multiple units, how many? 1

If the property is commercial, type?

Business Type(s) Nail Salon

Does it include residences (i.e., multi-use)? (Y) / N If yes, how many? 1 - under renovation at time of inspection

Other characteristics:

Number of floors 1+Basement Building age 1951

Is the building insulated? (Y) / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

None

Airflow near source

Outdoor air infiltration

Outdoor air infiltrates through rear door/window

Infiltration into air ducts

None

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	(concrete)	stone	brick
b. Basement type:	(full)	crawlspace	slab	other _____
c. Basement floor:	(concrete)	dirt	stone	other _____
d. Basement floor:	(uncovered)	covered	covered with _____	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls:	poured	(block)	stone	other _____
g. Foundation walls:	(unsealed)	sealed	sealed with _____	
h. The basement is:	wet	damp	(dry)	moldy
i. The basement is:	finished	(unfinished)	partially finished	
j. Sump present?	(Y) / N			
k. Water in sump?	Y / N / not applicable	Unknown		

Basement/Lowest level depth below grade: ___12_(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_Basement - utility ports_____
1st floor - None
_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	
Space Heaters	Steam radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Electric

Boiler/furnace located in: Basement Outdoors (Main Floor) Other_____

Air conditioning: (Central Air) Window units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

HVAC Provides A/C and heat

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Storage
1st Floor	Nail Salon
2nd Floor	Residential unit under renovation
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify

d. Has the building ever had a fire? Y / (N) When?

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type?

g. Is there smoking in the building? Y / (N) How frequently?

h. Have cleaning products been used recently? Y / N When & Type?

i. Have cosmetic products been used recently? (Y) / N When & Type? Every day

j. Has painting/staining been done in the last 6 months? (Y) / N Where & When? 1st floor, in December 2017

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented?_____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented?____Roof___

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type?_____

Are there odors in the building? (Y) / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? (Y) / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? Nail Polish Remover

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

(Yes, use dry-cleaning regularly (weekly)) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: ___N/A_____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: ____N/A_____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

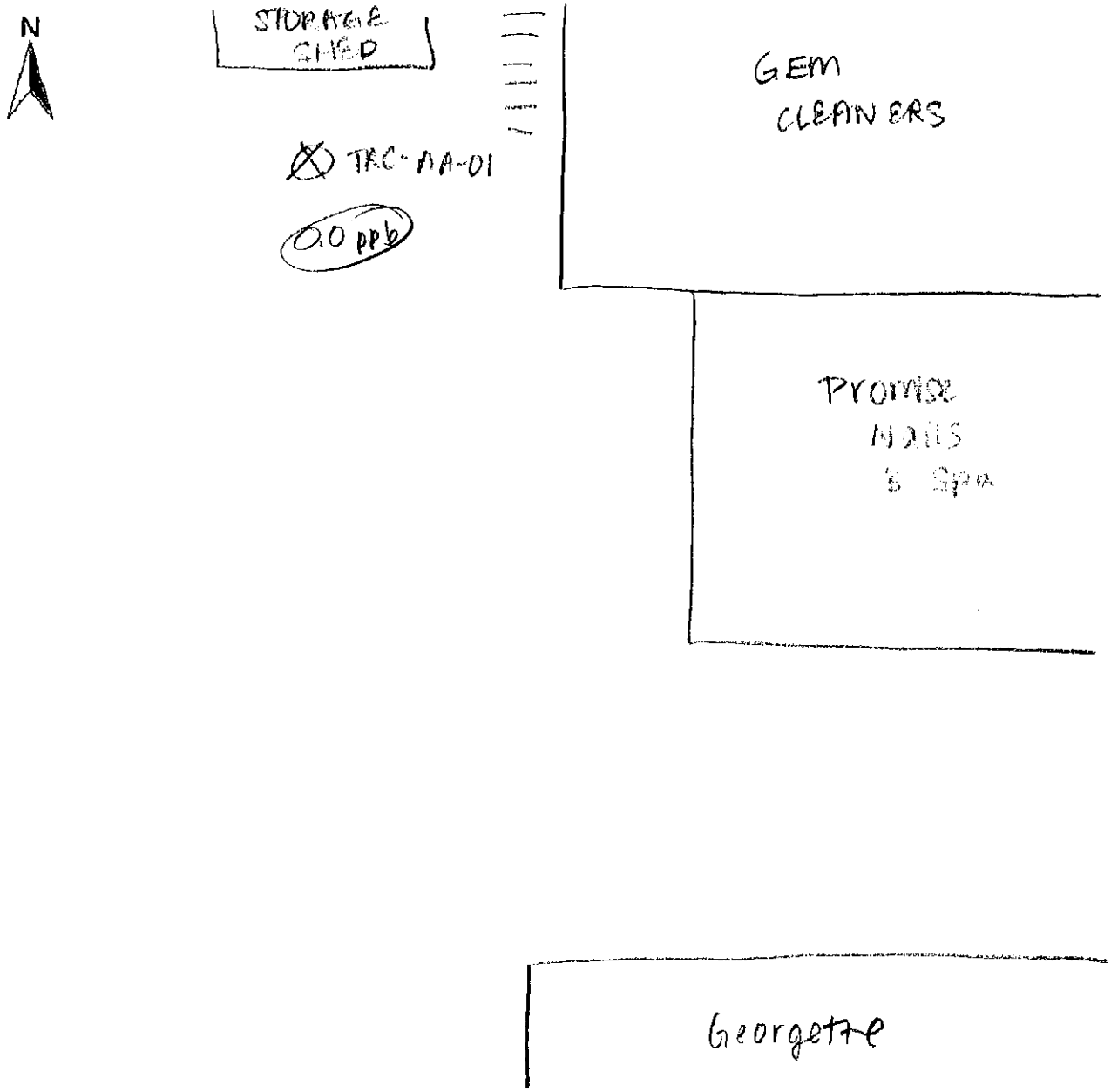
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

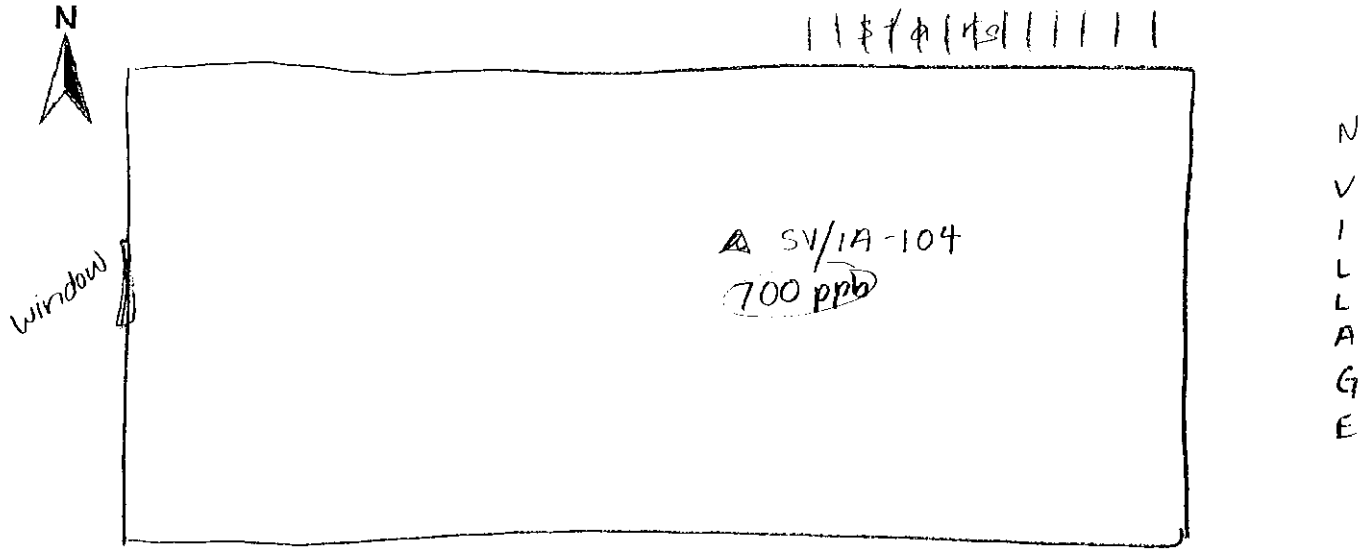
Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



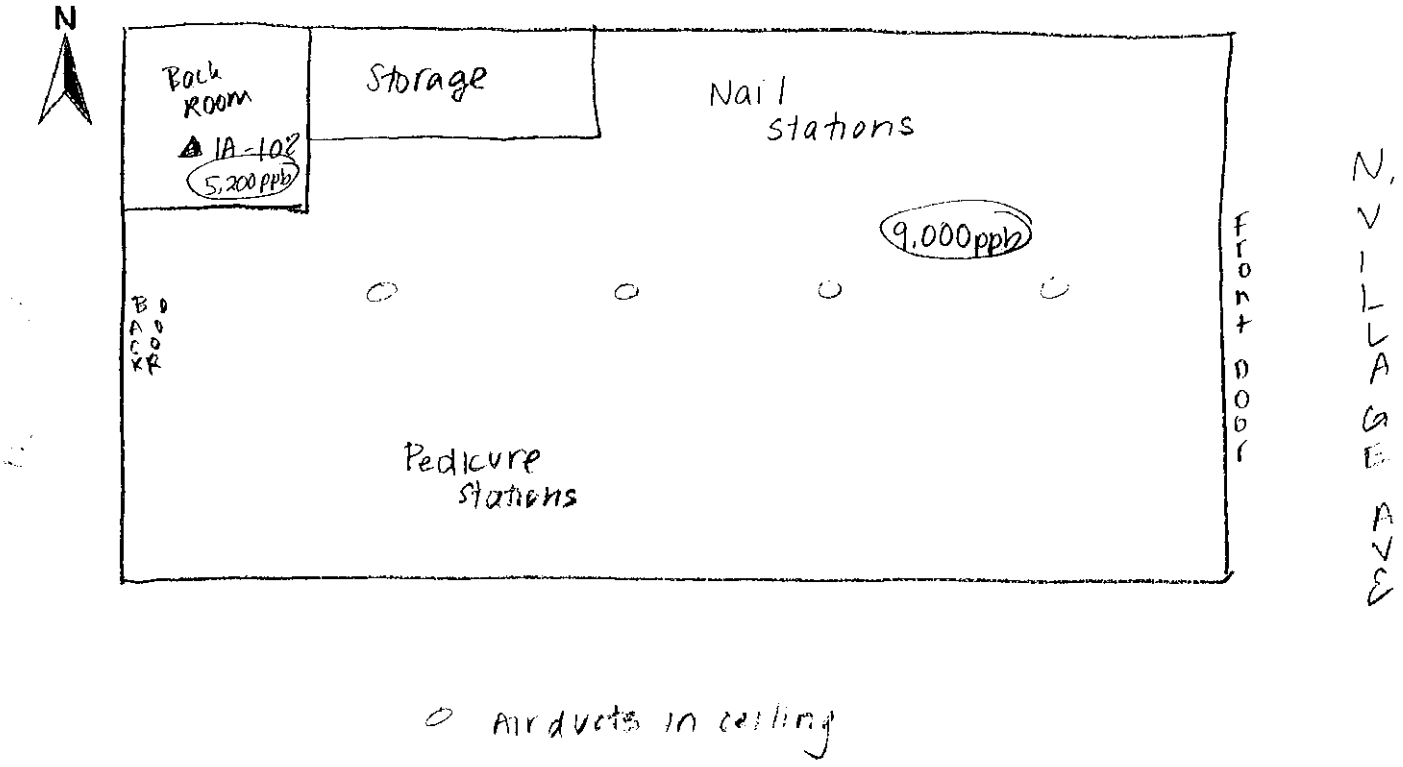
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: miniRAE ppb-rae 3000

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
1st Floor	D/U/NA Nail Polish Remover	1 gal.	U	Ethyl Acetate, Isopropyl Alcohol	*	
	Ben Moor Paint	1 gal.		Kaolin, Silica amorphous, titanium dioxide, carbon black, sodium C14-C16 olefin sulfonate, zinc pyrithione	*	
	Rust-Oleum	32 oz.		Propane,n-Butyl Acetate, Acetone, Dimethyl Carbonate, n-Butane, Talc, Titanium Dioxide, Hydrotreated Light Distillate, Solvent Naphtha, Light Aromatic, Zinc Phosphate, Methyl Ethyl Ketoxime, Ethylbenzene	*	
	Insl-X	32 oz.		Talc,Titanium dioxide, 2,2,4-trimethyl-1,3-propanediol diisobutyrate, Silica, crystalline	*	
*	First Floor ambient air is too high to separate individual product readings					

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

23 Washington Street - Residential Building

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Joe Menniti Date/Time Prepared March 28, 2018

Preparer's Affiliation TRC Engineers Phone No. 2121-221-7822

Purpose of Investigation Vapor Intrusion Assessment

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: Fishetto First Name: Jason

Address: 23 Washington Street, Rockville Centre, NY

County: Nassau County

Home Phone: 516-782-7593 Office Phone: _____

Number of Occupants/persons at this location 2 Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant _x_)

Interviewed: Y / N

Last Name: _____First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
(Cape Cod)	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____N/A_____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors__2+Basement__ Building age_30+ years_____

Is the building insulated? (Y) / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

__None_____

Airflow near source

N/A

Outdoor air infiltration

Basement Bilco Doors/ Basement Window

Infiltration into air ducts

N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _10_ (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Basement Bilco Doors/Window

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Steam radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Electric

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

None, Heat is electric. A/C from window units

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom (Almost Never)

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Empty/ Little Storage
1st Floor	Family room/Bedroom
2nd Floor	Bedrooms/ Family rooms
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) (Y) / N / NA
Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where? _____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? _____

g. Is there smoking in the building? Y / (N) How frequently? _____

h. Have cleaning products been used recently? Y / (N) When & Type? _____

i. Have cosmetic products been used recently? Y / (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented?_____

n. Is there a bathroom exhaust fan? Y / (N) If yes, where vented?_____

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type?_____

Are there odors in the building? (Y) / N
If yes, please describe: ___Old wood/moist_____

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) — No
Yes, use dry-cleaning infrequently (monthly or less) — (Unknown)
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _N/A_____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: __N/A_____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

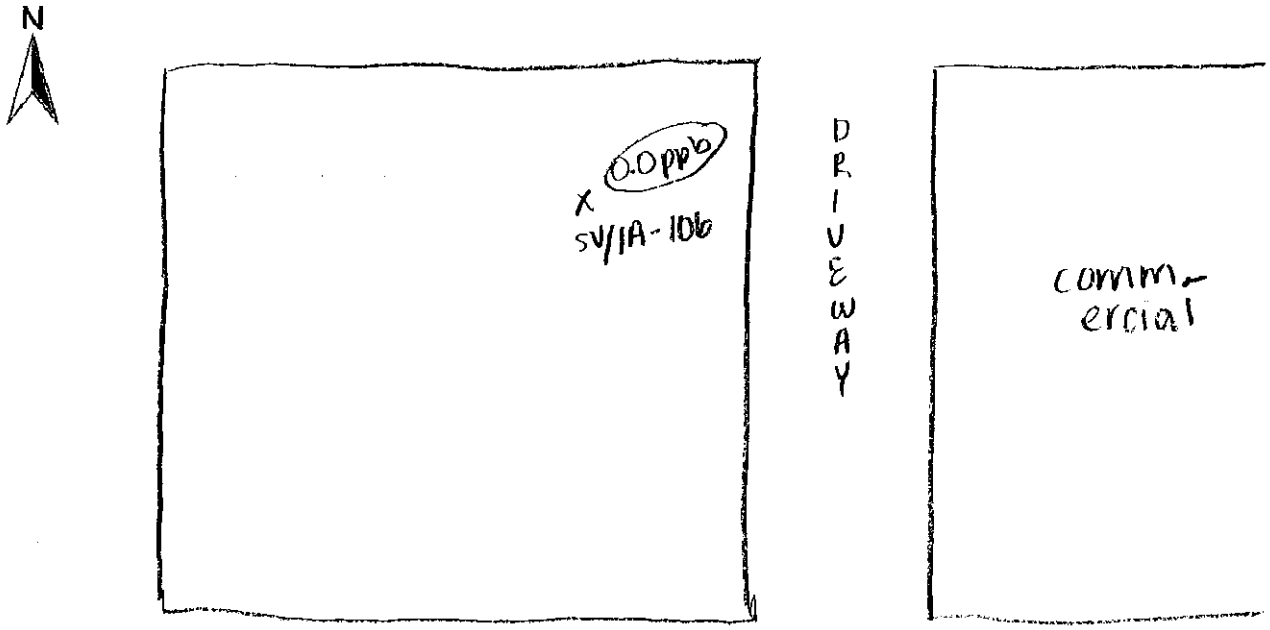
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

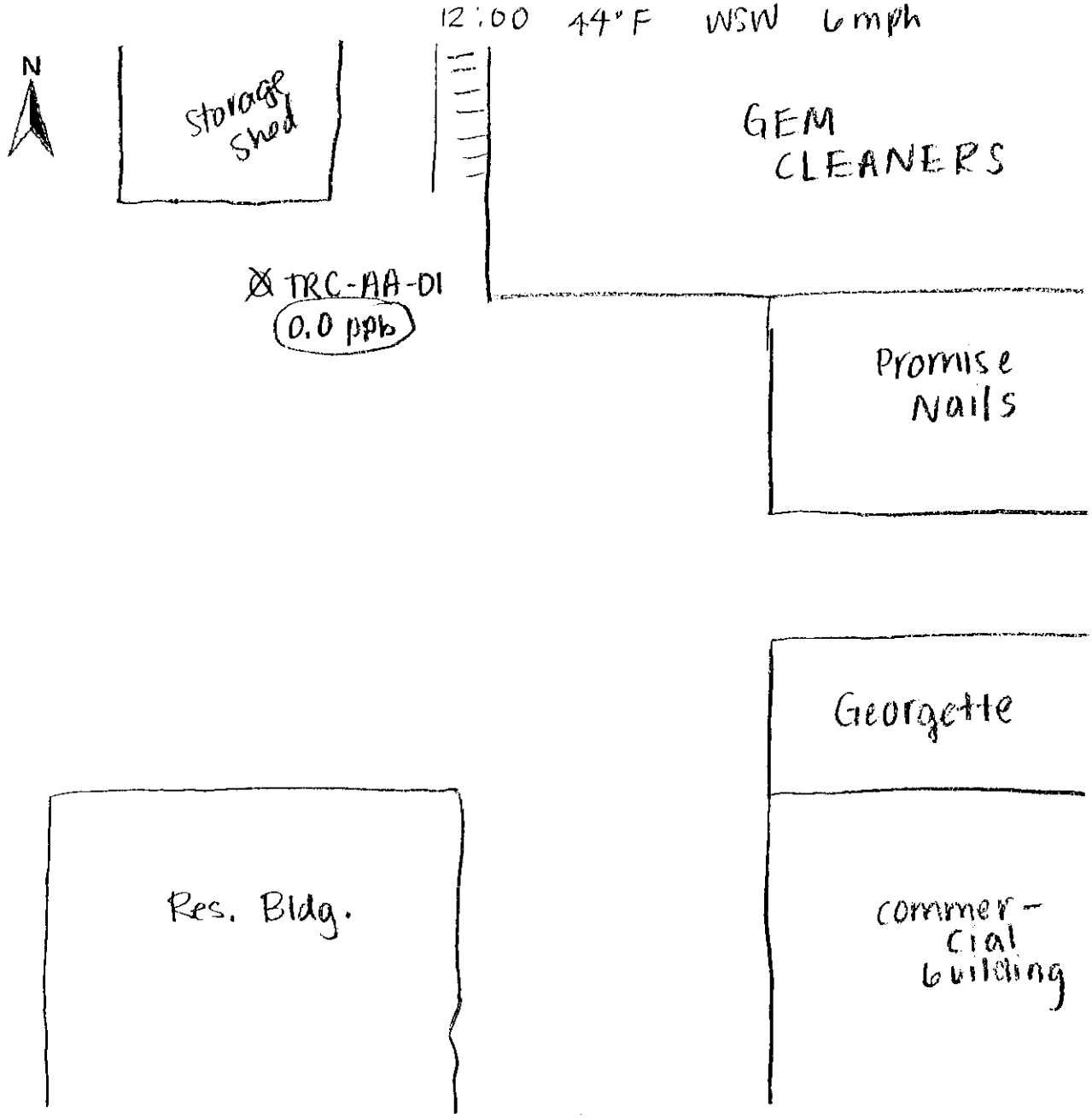


First Floor:

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass directiou, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
NO chemicals/paints/products found in basement						

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX H
LABORATORY AND ANALYTICAL DATA REPORTS

(ON CD)

ANALYTICAL REPORT

Job Number: 200-42918-1

Job Description: GEM Cleaners NYSDEC - TRC/D&B

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Emily Ebert

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
4/17/2018 8:45 PM

Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
04/17/2018

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

Job Number: 200-42918-1

Job Description: GEM Cleaners NYSDEC - TRC/D&B

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
4/17/2018 8:45 PM

Jannel O Franklin

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners NYSDEC - TRC/D&B

Report Number: 200-42918-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 4/2/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): GC-SV-104 (AS) (200-42918-8). The COC lists a flow controller ID of 4247,And a can ID of 2632. The Flow controller ID is 3022, And the can ID is 2734.

VOLATILE ORGANIC COMPOUNDS

Samples GC-AA-01 (AS) (200-42918-1), GC-IA-102 (AS) (200-42918-2), GC-SV-102 (AS) (200-42918-3), GC-IA-103 (AS) (200-42918-4), GC-SV-103 (AS) (200-42918-5), GC-SV-105 (AS) (200-42918-6), GC-IA-105 (AS) (200-42918-7), GC-SV-104 (AS) (200-42918-8), GC-IA-104 (AS) (200-42918-9), GC-IA-108 (AS) (200-42918-10), GC-IA-106 (AS) (200-42918-11) and GC-SV-106 (AS) (200-42918-12) were analyzed for Volatile Organic Compounds in accordance with EPA Method TO-15. The samples were analyzed on 04/05/2018, 04/06/2018, 04/07/2018 and 04/14/2018.

Isopropyl alcohol was detected in method blank MB 200-128215/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples GC-IA-102 (AS) (200-42918-2)[2X], GC-SV-102 (AS) (200-42918-3)[5X], GC-SV-103 (AS) (200-42918-5)[5X], GC-SV-105 (AS) (200-42918-6)[10.02X], GC-SV-105 (AS) (200-42918-6)[39.6X], GC-IA-105 (AS) (200-42918-7)[107X], GC-SV-104 (AS) (200-42918-8)[5X], GC-IA-104 (AS) (200-42918-9)[84.8X], GC-IA-108 (AS) (200-42918-10)[301X], GC-IA-106 (AS) (200-42918-11) [2.5X], GC-SV-106 (AS) (200-42918-12)[30.3X] and GC-SV-106 (AS) (200-42918-12)[6X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following samples were diluted due to the abundance of non-target analytes: GC-SV-102 (AS) (200-42918-3), GC-SV-103 (AS) (200-42918-5) and GC-SV-104 (AS) (200-42918-8). A more concentrated analysis was not possible.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners NYSDEC - TRC/D&B

TestAmerica Job ID: 200-42918-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-42918-1	GC-AA-01 (AS)	Air	03/28/18 15:45	04/02/18 09:00
200-42918-2	GC-IA-102 (AS)	Air	03/28/18 16:00	04/02/18 09:00
200-42918-3	GC-SV-102 (AS)	Air	03/28/18 17:00	04/02/18 09:00
200-42918-4	GC-IA-103 (AS)	Air	03/28/18 16:45	04/02/18 09:00
200-42918-5	GC-SV-103 (AS)	Air	03/28/18 17:00	04/02/18 09:00
200-42918-6	GC-SV-105 (AS)	Air	03/28/18 17:50	04/02/18 09:00
200-42918-7	GC-IA-105 (AS)	Air	03/28/18 17:50	04/02/18 09:00
200-42918-8	GC-SV-104 (AS)	Air	03/28/18 09:00	04/02/18 09:00
200-42918-9	GC-IA-104 (AS)	Air	03/28/18 09:30	04/02/18 09:00
200-42918-10	GC-IA-108 (AS)	Air	03/28/18 09:45	04/02/18 09:00
200-42918-11	GC-IA-106 (AS)	Air	03/28/18 15:45	04/02/18 09:00
200-42918-12	GC-SV-106 (AS)	Air	03/28/18 16:00	04/02/18 09:00

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners NYSDEC - TRC/D&B

TestAmerica Job ID: 200-42918-1

Client Sample ID: GC-AA-01 (AS)

Lab Sample ID: 200-42918-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.32	J	0.50	0.047	ppb v/v	1		TO-15	Total/NA
Freon 22	0.22	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.39	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
n-Butane	0.75		0.50	0.046	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.18	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Freon TF	0.061	J	0.20	0.027	ppb v/v	1		TO-15	Total/NA
Acetone	1.5	J	5.0	1.3	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	0.39	J	5.0	0.13	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.25	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.20		0.20	0.046	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.17	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.045	J	0.20	0.045	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.055		0.040	0.011	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.23		0.20	0.043	ppb v/v	1		TO-15	Total/NA
Benzene	0.25		0.20	0.028	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.098	J	0.20	0.068	ppb v/v	1		TO-15	Total/NA
Toluene	0.41		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.025	J	0.040	0.0098	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.067	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.23	J	0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.069	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
Xylene (total)	0.30	J	0.70	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.069	J	0.20	0.057	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.6	J	2.5	0.23	ug/m3	1		TO-15	Total/NA
Freon 22	0.79	J	1.8	0.71	ug/m3	1		TO-15	Total/NA
Chloromethane	0.81	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
n-Butane	1.8		1.2	0.11	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.0	J	1.1	0.17	ug/m3	1		TO-15	Total/NA
Freon TF	0.47	J	1.5	0.21	ug/m3	1		TO-15	Total/NA
Acetone	3.7	J	12	3.1	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	0.97	J	12	0.32	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.87	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
n-Hexane	0.72		0.70	0.16	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.50	J	1.5	0.32	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.16	J	0.69	0.15	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.34		0.25	0.069	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.1		0.93	0.20	ug/m3	1		TO-15	Total/NA
Benzene	0.80		0.64	0.089	ug/m3	1		TO-15	Total/NA
n-Heptane	0.40	J	0.82	0.28	ug/m3	1		TO-15	Total/NA
Toluene	1.5		0.75	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.17	J	0.27	0.066	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.29	J	0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	0.98	J	2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	0.30	J	0.87	0.17	ug/m3	1		TO-15	Total/NA
Xylene (total)	1.3	J	3.0	0.17	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.34	J	0.98	0.28	ug/m3	1		TO-15	Total/NA

Client Sample ID: GC-IA-102 (AS)

Lab Sample ID: 200-42918-2

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-102 (AS) (Continued)

Lab Sample ID: 200-42918-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.31	J	0.50	0.047	ppb v/v	1		TO-15	Total/NA
Freon 22	0.21	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.26	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
n-Butane	2.4		0.50	0.046	ppb v/v	1		TO-15	Total/NA
1,3-Butadiene	0.060	J	0.20	0.037	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.20		0.20	0.031	ppb v/v	1		TO-15	Total/NA
Freon TF	0.066	J	0.20	0.027	ppb v/v	1		TO-15	Total/NA
Acetone	43	E	5.0	1.3	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	1.6	J	5.0	0.13	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.31	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.26		0.20	0.046	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	2.2		0.50	0.11	ppb v/v	1		TO-15	Total/NA
Tetrahydrofuran	17		5.0	1.2	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.073	J	0.20	0.045	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.055		0.040	0.011	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.24		0.20	0.043	ppb v/v	1		TO-15	Total/NA
Benzene	0.26		0.20	0.028	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.19	J	0.20	0.068	ppb v/v	1		TO-15	Total/NA
Toluene	0.51		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.10		0.040	0.0098	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.22		0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.82		0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.26		0.20	0.040	ppb v/v	1		TO-15	Total/NA
Xylene (total)	1.1		0.70	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.097	J	0.20	0.057	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	0.45	J D	1.0	0.094	ppb v/v	2		TO-15	Total/NA
Chloromethane - DL	0.48	J D	1.0	0.32	ppb v/v	2		TO-15	Total/NA
n-Butane - DL	2.9	D	1.0	0.092	ppb v/v	2		TO-15	Total/NA
Trichlorofluoromethane - DL	0.16	J D	0.40	0.062	ppb v/v	2		TO-15	Total/NA
Acetone - DL	34	D	10	2.6	ppb v/v	2		TO-15	Total/NA
Isopropyl alcohol - DL	1.3	J D	10	0.26	ppb v/v	2		TO-15	Total/NA
Methylene Chloride - DL	0.32	J D	1.0	0.14	ppb v/v	2		TO-15	Total/NA
Methyl Ethyl Ketone - DL	1.8	D	1.0	0.22	ppb v/v	2		TO-15	Total/NA
Tetrahydrofuran - DL	15	D	10	2.4	ppb v/v	2		TO-15	Total/NA
Carbon tetrachloride - DL	0.051	J D	0.080	0.022	ppb v/v	2		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	0.25	J D	0.40	0.086	ppb v/v	2		TO-15	Total/NA
Benzene - DL	0.28	J D	0.40	0.056	ppb v/v	2		TO-15	Total/NA
n-Heptane - DL	0.19	J D	0.40	0.14	ppb v/v	2		TO-15	Total/NA
Toluene - DL	0.49	D	0.40	0.070	ppb v/v	2		TO-15	Total/NA
Tetrachloroethene - DL	0.091	D	0.080	0.020	ppb v/v	2		TO-15	Total/NA
Ethylbenzene - DL	0.22	J D	0.40	0.068	ppb v/v	2		TO-15	Total/NA
m,p-Xylene - DL	0.78	J D	1.0	0.15	ppb v/v	2		TO-15	Total/NA
Xylene, o- - DL	0.26	J D	0.40	0.080	ppb v/v	2		TO-15	Total/NA
Xylene (total) - DL	1.0	J D	1.4	0.080	ppb v/v	2		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.5	J	2.5	0.23	ug/m3	1		TO-15	Total/NA
Freon 22	0.75	J	1.8	0.71	ug/m3	1		TO-15	Total/NA
Chloromethane	0.55	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
n-Butane	5.8		1.2	0.11	ug/m3	1		TO-15	Total/NA
1,3-Butadiene	0.13	J	0.44	0.082	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-102 (AS) (Continued)

Lab Sample ID: 200-42918-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichlorofluoromethane	1.1		1.1	0.17	ug/m3	1		TO-15	Total/NA
Freon TF	0.51	J	1.5	0.21	ug/m3	1		TO-15	Total/NA
Acetone	100	E	12	3.1	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	3.8	J	12	0.32	ug/m3	1		TO-15	Total/NA
Methylene Chloride	1.1	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
n-Hexane	0.93		0.70	0.16	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	6.4		1.5	0.32	ug/m3	1		TO-15	Total/NA
Tetrahydrofuran	51		15	3.5	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.25	J	0.69	0.15	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.34		0.25	0.069	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.1		0.93	0.20	ug/m3	1		TO-15	Total/NA
Benzene	0.82		0.64	0.089	ug/m3	1		TO-15	Total/NA
n-Heptane	0.77	J	0.82	0.28	ug/m3	1		TO-15	Total/NA
Toluene	1.9		0.75	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.71		0.27	0.066	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.96		0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	3.6		2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	1.1		0.87	0.17	ug/m3	1		TO-15	Total/NA
Xylene (total)	4.7		3.0	0.17	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.48	J	0.98	0.28	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	2.2	J D	4.9	0.46	ug/m3	2		TO-15	Total/NA
Chloromethane - DL	1.0	J D	2.1	0.66	ug/m3	2		TO-15	Total/NA
n-Butane - DL	6.9	D	2.4	0.22	ug/m3	2		TO-15	Total/NA
Trichlorofluoromethane - DL	0.92	J D	2.2	0.35	ug/m3	2		TO-15	Total/NA
Acetone - DL	80	D	24	6.2	ug/m3	2		TO-15	Total/NA
Isopropyl alcohol - DL	3.2	J D	25	0.64	ug/m3	2		TO-15	Total/NA
Methylene Chloride - DL	1.1	J D	3.5	0.47	ug/m3	2		TO-15	Total/NA
Methyl Ethyl Ketone - DL	5.2	D	2.9	0.65	ug/m3	2		TO-15	Total/NA
Tetrahydrofuran - DL	43	D	29	7.1	ug/m3	2		TO-15	Total/NA
Carbon tetrachloride - DL	0.32	J D	0.50	0.14	ug/m3	2		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	1.2	J D	1.9	0.40	ug/m3	2		TO-15	Total/NA
Benzene - DL	0.88	J D	1.3	0.18	ug/m3	2		TO-15	Total/NA
n-Heptane - DL	0.78	J D	1.6	0.56	ug/m3	2		TO-15	Total/NA
Toluene - DL	1.8	D	1.5	0.26	ug/m3	2		TO-15	Total/NA
Tetrachloroethene - DL	0.61	D	0.54	0.13	ug/m3	2		TO-15	Total/NA
Ethylbenzene - DL	0.93	J D	1.7	0.30	ug/m3	2		TO-15	Total/NA
m,p-Xylene - DL	3.4	J D	4.3	0.67	ug/m3	2		TO-15	Total/NA
Xylene, o- - DL	1.1	J D	1.7	0.35	ug/m3	2		TO-15	Total/NA
Xylene (total) - DL	4.5	J D	6.1	0.35	ug/m3	2		TO-15	Total/NA

Client Sample ID: GC-SV-102 (AS)

Lab Sample ID: 200-42918-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane	2.4	J	2.5	1.6	ppb v/v	5		TO-15	Total/NA
Acetone	70		25	13	ppb v/v	5		TO-15	Total/NA
tert-Butyl alcohol	13	J	25	7.5	ppb v/v	5		TO-15	Total/NA
Methyl Ethyl Ketone	6.6		2.5	1.0	ppb v/v	5		TO-15	Total/NA
Chloroform	0.90	J	1.0	0.26	ppb v/v	5		TO-15	Total/NA
n-Heptane	0.85	J	1.0	0.70	ppb v/v	5		TO-15	Total/NA
Toluene	4.2		1.0	0.35	ppb v/v	5		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-SV-102 (AS) (Continued)

Lab Sample ID: 200-42918-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	15		0.20	0.15	ppb v/v	5		TO-15	Total/NA
m,p-Xylene	0.93	J	2.5	0.35	ppb v/v	5		TO-15	Total/NA
Xylene (total)	0.93	J	3.5	0.71	ppb v/v	5		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane	5.8	J	5.9	3.7	ug/m3	5		TO-15	Total/NA
Acetone	170		59	31	ug/m3	5		TO-15	Total/NA
tert-Butyl alcohol	41	J	76	23	ug/m3	5		TO-15	Total/NA
Methyl Ethyl Ketone	20		7.4	2.9	ug/m3	5		TO-15	Total/NA
Chloroform	4.4	J	4.9	1.3	ug/m3	5		TO-15	Total/NA
n-Heptane	3.5	J	4.1	2.9	ug/m3	5		TO-15	Total/NA
Toluene	16		3.8	1.3	ug/m3	5		TO-15	Total/NA
Tetrachloroethene	99		1.4	0.98	ug/m3	5		TO-15	Total/NA
m,p-Xylene	4.0	J	11	1.5	ug/m3	5		TO-15	Total/NA
Xylene (total)	4.0	J	15	3.1	ug/m3	5		TO-15	Total/NA

Client Sample ID: GC-IA-103 (AS)

Lab Sample ID: 200-42918-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.34	J	0.50	0.047	ppb v/v	1		TO-15	Total/NA
Freon 22	0.28	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.42	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
n-Butane	1.4		0.50	0.046	ppb v/v	1		TO-15	Total/NA
1,3-Butadiene	0.047	J	0.20	0.037	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.18	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Freon TF	0.057	J	0.20	0.027	ppb v/v	1		TO-15	Total/NA
Acetone	32		5.0	1.3	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	1.4	J	5.0	0.13	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.28	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.20		0.20	0.046	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	2.2		0.50	0.11	ppb v/v	1		TO-15	Total/NA
Tetrahydrofuran	14		5.0	1.2	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.056	J	0.20	0.045	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.056		0.040	0.011	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.22		0.20	0.043	ppb v/v	1		TO-15	Total/NA
Benzene	0.25		0.20	0.028	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.20		0.20	0.068	ppb v/v	1		TO-15	Total/NA
methyl isobutyl ketone	0.065	J	0.50	0.065	ppb v/v	1		TO-15	Total/NA
Toluene	0.48		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.093		0.040	0.0098	ppb v/v	1		TO-15	Total/NA
Methyl Butyl Ketone (2-Hexanone)	0.14	J	0.50	0.086	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.12	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.44	J	0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.14	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
Xylene (total)	0.58	J	0.70	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.066	J	0.20	0.057	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.7	J	2.5	0.23	ug/m3	1		TO-15	Total/NA
Freon 22	0.97	J	1.8	0.71	ug/m3	1		TO-15	Total/NA
Chloromethane	0.88	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
n-Butane	3.4		1.2	0.11	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-103 (AS) (Continued)

Lab Sample ID: 200-42918-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3-Butadiene	0.11	J	0.44	0.082	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.0	J	1.1	0.17	ug/m3	1		TO-15	Total/NA
Freon TF	0.44	J	1.5	0.21	ug/m3	1		TO-15	Total/NA
Acetone	76		12	3.1	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	3.6	J	12	0.32	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.98	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
n-Hexane	0.71		0.70	0.16	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	6.4		1.5	0.32	ug/m3	1		TO-15	Total/NA
Tetrahydrofuran	40		15	3.5	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.19	J	0.69	0.15	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.35		0.25	0.069	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.0		0.93	0.20	ug/m3	1		TO-15	Total/NA
Benzene	0.80		0.64	0.089	ug/m3	1		TO-15	Total/NA
n-Heptane	0.83		0.82	0.28	ug/m3	1		TO-15	Total/NA
methyl isobutyl ketone	0.27	J	2.0	0.27	ug/m3	1		TO-15	Total/NA
Toluene	1.8		0.75	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.63		0.27	0.066	ug/m3	1		TO-15	Total/NA
Methyl Butyl Ketone (2-Hexanone)	0.57	J	2.0	0.35	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.52	J	0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	1.9	J	2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	0.62	J	0.87	0.17	ug/m3	1		TO-15	Total/NA
Xylene (total)	2.5	J	3.0	0.17	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.33	J	0.98	0.28	ug/m3	1		TO-15	Total/NA

Client Sample ID: GC-SV-103 (AS)

Lab Sample ID: 200-42918-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane	13		2.5	1.6	ppb v/v	5		TO-15	Total/NA
Acetone	29		25	13	ppb v/v	5		TO-15	Total/NA
tert-Butyl alcohol	35		25	7.5	ppb v/v	5		TO-15	Total/NA
n-Hexane	1.2		1.0	0.80	ppb v/v	5		TO-15	Total/NA
Methyl Ethyl Ketone	3.7		2.5	1.0	ppb v/v	5		TO-15	Total/NA
Chloroform	2.0		1.0	0.26	ppb v/v	5		TO-15	Total/NA
Benzene	0.41	J	1.0	0.36	ppb v/v	5		TO-15	Total/NA
n-Heptane	2.1		1.0	0.70	ppb v/v	5		TO-15	Total/NA
Trichloroethene	0.37		0.20	0.15	ppb v/v	5		TO-15	Total/NA
Toluene	8.4		1.0	0.35	ppb v/v	5		TO-15	Total/NA
1,1,2-Trichloroethane	1.7		1.0	0.39	ppb v/v	5		TO-15	Total/NA
Tetrachloroethene	25		0.20	0.15	ppb v/v	5		TO-15	Total/NA
Ethylbenzene	12		1.0	0.37	ppb v/v	5		TO-15	Total/NA
m,p-Xylene	24		2.5	0.35	ppb v/v	5		TO-15	Total/NA
Xylene, o-	7.8		1.0	0.36	ppb v/v	5		TO-15	Total/NA
Xylene (total)	32		3.5	0.71	ppb v/v	5		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane	31		5.9	3.7	ug/m3	5		TO-15	Total/NA
Acetone	69		59	31	ug/m3	5		TO-15	Total/NA
tert-Butyl alcohol	110		76	23	ug/m3	5		TO-15	Total/NA
n-Hexane	4.1		3.5	2.8	ug/m3	5		TO-15	Total/NA
Methyl Ethyl Ketone	11		7.4	2.9	ug/m3	5		TO-15	Total/NA
Chloroform	9.5		4.9	1.3	ug/m3	5		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-SV-103 (AS) (Continued)

Lab Sample ID: 200-42918-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.3	J	3.2	1.1	ug/m3	5		TO-15	Total/NA
n-Heptane	8.5		4.1	2.9	ug/m3	5		TO-15	Total/NA
Trichloroethene	2.0		1.1	0.81	ug/m3	5		TO-15	Total/NA
Toluene	32		3.8	1.3	ug/m3	5		TO-15	Total/NA
1,1,2-Trichloroethane	9.2		5.5	2.1	ug/m3	5		TO-15	Total/NA
Tetrachloroethene	170		1.4	0.98	ug/m3	5		TO-15	Total/NA
Ethylbenzene	52		4.3	1.6	ug/m3	5		TO-15	Total/NA
m,p-Xylene	100		11	1.5	ug/m3	5		TO-15	Total/NA
Xylene, o-	34		4.3	1.5	ug/m3	5		TO-15	Total/NA
Xylene (total)	140		15	3.1	ug/m3	5		TO-15	Total/NA

Client Sample ID: GC-SV-105 (AS)

Lab Sample ID: 200-42918-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane - DL	5.5	D	5.0	3.1	ppb v/v	10.02		TO-15	Total/NA
n-Butane - DL	6.6	J D	20	1.8	ppb v/v	39.6		TO-15	Total/NA
Acetone - DL	1000	E D	50	26	ppb v/v	10.02		TO-15	Total/NA
Acetone - DL	1200	D	200	51	ppb v/v	39.6		TO-15	Total/NA
Isopropyl alcohol - DL	23	J B D	200	5.1	ppb v/v	39.6		TO-15	Total/NA
Methylene Chloride - DL	4.4	J D	20	2.7	ppb v/v	39.6		TO-15	Total/NA
tert-Butyl alcohol - DL	130	D	50	15	ppb v/v	10.02		TO-15	Total/NA
tert-Butyl alcohol - DL	150	J D	200	67	ppb v/v	39.6		TO-15	Total/NA
n-Hexane - DL	2.9	D	2.0	1.6	ppb v/v	10.02		TO-15	Total/NA
n-Hexane - DL	3.2	J D	7.9	1.8	ppb v/v	39.6		TO-15	Total/NA
Methyl Ethyl Ketone - DL	4.0	J D	5.0	2.0	ppb v/v	10.02		TO-15	Total/NA
Chloroform - DL	1.4	J D	2.0	0.52	ppb v/v	10.02		TO-15	Total/NA
Chloroform - DL	1.5	J D	7.9	0.99	ppb v/v	39.6		TO-15	Total/NA
n-Heptane - DL	5.7	D	2.0	1.4	ppb v/v	10.02		TO-15	Total/NA
n-Heptane - DL	6.2	J D	7.9	2.7	ppb v/v	39.6		TO-15	Total/NA
Trichloroethene - DL	0.32	J D	0.40	0.30	ppb v/v	10.02		TO-15	Total/NA
Toluene - DL	15	D	2.0	0.69	ppb v/v	10.02		TO-15	Total/NA
Toluene - DL	17	D	7.9	1.4	ppb v/v	39.6		TO-15	Total/NA
1,1,2-Trichloroethane - DL	3.5	D	2.0	0.78	ppb v/v	10.02		TO-15	Total/NA
1,1,2-Trichloroethane - DL	4.3	J D	7.9	0.67	ppb v/v	39.6		TO-15	Total/NA
Tetrachloroethene - DL	6.2	D	0.40	0.29	ppb v/v	10.02		TO-15	Total/NA
Tetrachloroethene - DL	6.3	D	1.6	0.39	ppb v/v	39.6		TO-15	Total/NA
Ethylbenzene - DL	21	D	2.0	0.73	ppb v/v	10.02		TO-15	Total/NA
Ethylbenzene - DL	22	D	7.9	1.3	ppb v/v	39.6		TO-15	Total/NA
m,p-Xylene - DL	72	D	5.0	0.70	ppb v/v	10.02		TO-15	Total/NA
m,p-Xylene - DL	73	D	20	3.0	ppb v/v	39.6		TO-15	Total/NA
Xylene, o- - DL	24	D	2.0	0.71	ppb v/v	10.02		TO-15	Total/NA
Xylene, o- - DL	25	D	7.9	1.6	ppb v/v	39.6		TO-15	Total/NA
Xylene (total) - DL	96	D	7.0	1.4	ppb v/v	10.02		TO-15	Total/NA
Xylene (total) - DL	98	D	28	1.6	ppb v/v	39.6		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane - DL	13	D	12	7.4	ug/m3	10.02		TO-15	Total/NA
n-Butane - DL	16	J D	47	4.3	ug/m3	39.6		TO-15	Total/NA
Acetone - DL	2400	E D	120	62	ug/m3	10.02		TO-15	Total/NA
Acetone - DL	2800	D	470	120	ug/m3	39.6		TO-15	Total/NA
Isopropyl alcohol - DL	56	J B D	490	13	ug/m3	39.6		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-SV-105 (AS) (Continued)

Lab Sample ID: 200-42918-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride - DL	15	J D	69	9.4	ug/m3	39.6		TO-15	Total/NA
tert-Butyl alcohol - DL	400	D	150	46	ug/m3	10.02		TO-15	Total/NA
tert-Butyl alcohol - DL	440	J D	600	200	ug/m3	39.6		TO-15	Total/NA
n-Hexane - DL	10	D	7.1	5.7	ug/m3	10.02		TO-15	Total/NA
n-Hexane - DL	11	J D	28	6.4	ug/m3	39.6		TO-15	Total/NA
Methyl Ethyl Ketone - DL	12	J D	15	5.9	ug/m3	10.02		TO-15	Total/NA
Chloroform - DL	7.0	J D	9.8	2.5	ug/m3	10.02		TO-15	Total/NA
Chloroform - DL	7.3	J D	39	4.8	ug/m3	39.6		TO-15	Total/NA
n-Heptane - DL	24	D	8.2	5.7	ug/m3	10.02		TO-15	Total/NA
n-Heptane - DL	25	J D	32	11	ug/m3	39.6		TO-15	Total/NA
Trichloroethene - DL	1.7	J D	2.2	1.6	ug/m3	10.02		TO-15	Total/NA
Toluene - DL	57	D	7.6	2.6	ug/m3	10.02		TO-15	Total/NA
Toluene - DL	62	D	30	5.2	ug/m3	39.6		TO-15	Total/NA
1,1,2-Trichloroethane - DL	19	D	11	4.3	ug/m3	10.02		TO-15	Total/NA
1,1,2-Trichloroethane - DL	23	J D	43	3.7	ug/m3	39.6		TO-15	Total/NA
Tetrachloroethene - DL	42	D	2.7	2.0	ug/m3	10.02		TO-15	Total/NA
Tetrachloroethene - DL	43	D	11	2.6	ug/m3	39.6		TO-15	Total/NA
Ethylbenzene - DL	92	D	8.7	3.2	ug/m3	10.02		TO-15	Total/NA
Ethylbenzene - DL	94	D	34	5.8	ug/m3	39.6		TO-15	Total/NA
m,p-Xylene - DL	310	D	22	3.0	ug/m3	10.02		TO-15	Total/NA
m,p-Xylene - DL	320	D	86	13	ug/m3	39.6		TO-15	Total/NA
Xylene, o- - DL	110	D	8.7	3.1	ug/m3	10.02		TO-15	Total/NA
Xylene, o- - DL	110	D	34	6.9	ug/m3	39.6		TO-15	Total/NA
Xylene (total) - DL	420	D	30	6.1	ug/m3	10.02		TO-15	Total/NA
Xylene (total) - DL	430	D	120	6.9	ug/m3	39.6		TO-15	Total/NA

Client Sample ID: GC-IA-105 (AS)

Lab Sample ID: 200-42918-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.37	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
n-Butane	12		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Chloroethane	0.30	J	0.50	0.21	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.18	J	0.20	0.062	ppb v/v	1		TO-15	Total/NA
Freon TF	0.060	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Acetone	1200	E	5.0	2.6	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	19		5.0	1.8	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	1.4		0.50	0.20	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.50		0.20	0.16	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.99		0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	1.5		0.20	0.052	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.14	J	0.20	0.063	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.11		0.040	0.024	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.29		0.20	0.088	ppb v/v	1		TO-15	Total/NA
Benzene	0.34		0.20	0.071	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethane	0.066	J	0.20	0.063	ppb v/v	1		TO-15	Total/NA
n-Heptane	2.5		0.20	0.14	ppb v/v	1		TO-15	Total/NA
Toluene	1.9		0.20	0.069	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.055		0.040	0.029	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.53		0.20	0.073	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	2.1		0.50	0.070	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-105 (AS) (Continued)

Lab Sample ID: 200-42918-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylene, o-	0.57		0.20	0.071	ppb v/v	1		TO-15	Total/NA
Xylene (total)	2.7		0.70	0.14	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.10	J	0.20	0.080	ppb v/v	1		TO-15	Total/NA
Acetone - DL	3000	D	540	280	ppb v/v	107		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.8	J	2.5	0.99	ug/m3	1		TO-15	Total/NA
n-Butane	27		1.2	0.74	ug/m3	1		TO-15	Total/NA
Chloroethane	0.80	J	1.3	0.55	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.0	J	1.1	0.35	ug/m3	1		TO-15	Total/NA
Freon TF	0.46	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
Acetone	2700	E	12	6.2	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	48		12	4.4	ug/m3	1		TO-15	Total/NA
Methylene Chloride	4.8		1.7	0.69	ug/m3	1		TO-15	Total/NA
n-Hexane	1.8		0.70	0.56	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	2.9		1.5	0.59	ug/m3	1		TO-15	Total/NA
Chloroform	7.4		0.98	0.25	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.49	J	0.69	0.22	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.67		0.25	0.15	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.4		0.93	0.41	ug/m3	1		TO-15	Total/NA
Benzene	1.1		0.64	0.23	ug/m3	1		TO-15	Total/NA
1,2-Dichloroethane	0.27	J	0.81	0.25	ug/m3	1		TO-15	Total/NA
n-Heptane	10		0.82	0.57	ug/m3	1		TO-15	Total/NA
Toluene	7.1		0.75	0.26	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.37		0.27	0.20	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.3		0.87	0.32	ug/m3	1		TO-15	Total/NA
m,p-Xylene	9.0		2.2	0.30	ug/m3	1		TO-15	Total/NA
Xylene, o-	2.5		0.87	0.31	ug/m3	1		TO-15	Total/NA
Xylene (total)	12		3.0	0.61	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.51	J	0.98	0.39	ug/m3	1		TO-15	Total/NA
Acetone - DL	7200	D	1300	660	ug/m3	107		TO-15	Total/NA

Client Sample ID: GC-SV-104 (AS)

Lab Sample ID: 200-42918-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane	82		2.5	1.6	ppb v/v	5		TO-15	Total/NA
Acetone	160		25	13	ppb v/v	5		TO-15	Total/NA
Isopropyl alcohol	14	J B	25	9.0	ppb v/v	5		TO-15	Total/NA
Carbon disulfide	1.6	J	2.5	0.60	ppb v/v	5		TO-15	Total/NA
tert-Butyl alcohol	110		25	7.5	ppb v/v	5		TO-15	Total/NA
trans-1,2-Dichloroethene	0.37	J	1.0	0.37	ppb v/v	5		TO-15	Total/NA
n-Hexane	2.1		1.0	0.80	ppb v/v	5		TO-15	Total/NA
Methyl Ethyl Ketone	5.9		2.5	1.0	ppb v/v	5		TO-15	Total/NA
Chloroform	0.44	J	1.0	0.26	ppb v/v	5		TO-15	Total/NA
Tetrahydrofuran	13	J	25	13	ppb v/v	5		TO-15	Total/NA
Benzene	0.46	J	1.0	0.36	ppb v/v	5		TO-15	Total/NA
n-Heptane	4.5		1.0	0.70	ppb v/v	5		TO-15	Total/NA
Trichloroethene	0.37		0.20	0.15	ppb v/v	5		TO-15	Total/NA
Toluene	14		1.0	0.35	ppb v/v	5		TO-15	Total/NA
1,1,2-Trichloroethane	3.2		1.0	0.39	ppb v/v	5		TO-15	Total/NA
Tetrachloroethene	15		0.20	0.15	ppb v/v	5		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-SV-104 (AS) (Continued)

Lab Sample ID: 200-42918-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	89		1.0	0.37	ppb v/v	5		TO-15	Total/NA
m,p-Xylene	250		2.5	0.35	ppb v/v	5		TO-15	Total/NA
Xylene, o-	75		1.0	0.36	ppb v/v	5		TO-15	Total/NA
Xylene (total)	330		3.5	0.71	ppb v/v	5		TO-15	Total/NA
Cumene	0.79	J	1.0	0.30	ppb v/v	5		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane	190		5.9	3.7	ug/m3	5		TO-15	Total/NA
Acetone	370		59	31	ug/m3	5		TO-15	Total/NA
Isopropyl alcohol	36	J B	61	22	ug/m3	5		TO-15	Total/NA
Carbon disulfide	5.1	J	7.8	1.9	ug/m3	5		TO-15	Total/NA
tert-Butyl alcohol	320		76	23	ug/m3	5		TO-15	Total/NA
trans-1,2-Dichloroethene	1.5	J	4.0	1.5	ug/m3	5		TO-15	Total/NA
n-Hexane	7.4		3.5	2.8	ug/m3	5		TO-15	Total/NA
Methyl Ethyl Ketone	17		7.4	2.9	ug/m3	5		TO-15	Total/NA
Chloroform	2.2	J	4.9	1.3	ug/m3	5		TO-15	Total/NA
Tetrahydrofuran	38	J	74	38	ug/m3	5		TO-15	Total/NA
Benzene	1.5	J	3.2	1.1	ug/m3	5		TO-15	Total/NA
n-Heptane	18		4.1	2.9	ug/m3	5		TO-15	Total/NA
Trichloroethene	2.0		1.1	0.81	ug/m3	5		TO-15	Total/NA
Toluene	52		3.8	1.3	ug/m3	5		TO-15	Total/NA
1,1,2-Trichloroethane	17		5.5	2.1	ug/m3	5		TO-15	Total/NA
Tetrachloroethene	100		1.4	0.98	ug/m3	5		TO-15	Total/NA
Ethylbenzene	390		4.3	1.6	ug/m3	5		TO-15	Total/NA
m,p-Xylene	1100		11	1.5	ug/m3	5		TO-15	Total/NA
Xylene, o-	330		4.3	1.5	ug/m3	5		TO-15	Total/NA
Xylene (total)	1400		15	3.1	ug/m3	5		TO-15	Total/NA
Cumene	3.9	J	4.9	1.5	ug/m3	5		TO-15	Total/NA

Client Sample ID: GC-IA-104 (AS)

Lab Sample ID: 200-42918-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.38	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.40	J	0.50	0.25	ppb v/v	1		TO-15	Total/NA
n-Butane	4.9		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.20		0.20	0.062	ppb v/v	1		TO-15	Total/NA
Freon TF	0.070	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Acetone	810	E	5.0	2.6	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	76	E	5.0	1.8	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.21	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
tert-Butyl alcohol	1.6	J	5.0	1.5	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.17	J	0.20	0.16	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	55	E	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	0.13	J	0.20	0.052	ppb v/v	1		TO-15	Total/NA
Tetrahydrofuran	260	E	5.0	2.6	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.080	J	0.20	0.063	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.20		0.040	0.024	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.22		0.20	0.088	ppb v/v	1		TO-15	Total/NA
Benzene	0.32		0.20	0.071	ppb v/v	1		TO-15	Total/NA
n-Heptane	1.0		0.20	0.14	ppb v/v	1		TO-15	Total/NA
Toluene	1.2		0.20	0.069	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-104 (AS) (Continued)

Lab Sample ID: 200-42918-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.097		0.040	0.029	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	1.2		0.20	0.073	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	6.2		0.50	0.070	ppb v/v	1		TO-15	Total/NA
Xylene, o-	1.9		0.20	0.071	ppb v/v	1		TO-15	Total/NA
Xylene (total)	8.1		0.70	0.14	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.20		0.20	0.069	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.10	J	0.20	0.058	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.39		0.20	0.080	ppb v/v	1		TO-15	Total/NA
Acetone - DL	1200	D	420	220	ppb v/v	84.8		TO-15	Total/NA
Methyl Ethyl Ketone - DL	44	D	42	17	ppb v/v	84.8		TO-15	Total/NA
Tetrahydrofuran - DL	290	J D	420	220	ppb v/v	84.8		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.9	J	2.5	0.99	ug/m3	1		TO-15	Total/NA
Chloromethane	0.82	J	1.0	0.52	ug/m3	1		TO-15	Total/NA
n-Butane	12		1.2	0.74	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.1		1.1	0.35	ug/m3	1		TO-15	Total/NA
Freon TF	0.54	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
Acetone	1900	E	12	6.2	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	190	E	12	4.4	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.74	J	1.7	0.69	ug/m3	1		TO-15	Total/NA
tert-Butyl alcohol	4.9	J	15	4.5	ug/m3	1		TO-15	Total/NA
n-Hexane	0.59	J	0.70	0.56	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	160	E	1.5	0.59	ug/m3	1		TO-15	Total/NA
Chloroform	0.63	J	0.98	0.25	ug/m3	1		TO-15	Total/NA
Tetrahydrofuran	780	E	15	7.7	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.28	J	0.69	0.22	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	1.3		0.25	0.15	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.0		0.93	0.41	ug/m3	1		TO-15	Total/NA
Benzene	1.0		0.64	0.23	ug/m3	1		TO-15	Total/NA
n-Heptane	4.3		0.82	0.57	ug/m3	1		TO-15	Total/NA
Toluene	4.4		0.75	0.26	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.66		0.27	0.20	ug/m3	1		TO-15	Total/NA
Ethylbenzene	5.4		0.87	0.32	ug/m3	1		TO-15	Total/NA
m,p-Xylene	27		2.2	0.30	ug/m3	1		TO-15	Total/NA
Xylene, o-	8.2		0.87	0.31	ug/m3	1		TO-15	Total/NA
Xylene (total)	35		3.0	0.61	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	1.0		0.98	0.34	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.49	J	0.98	0.29	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.9		0.98	0.39	ug/m3	1		TO-15	Total/NA
Acetone - DL	2900	D	1000	520	ug/m3	84.8		TO-15	Total/NA
Methyl Ethyl Ketone - DL	130	D	130	50	ug/m3	84.8		TO-15	Total/NA
Tetrahydrofuran - DL	840	J D	1300	650	ug/m3	84.8		TO-15	Total/NA

Client Sample ID: GC-IA-108 (AS)

Lab Sample ID: 200-42918-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.44	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Freon 22	0.32	J	0.50	0.26	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.56		0.50	0.25	ppb v/v	1		TO-15	Total/NA
n-Butane	6.0		0.50	0.31	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-108 (AS) (Continued)

Lab Sample ID: 200-42918-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichlorofluoromethane	0.21		0.20	0.062	ppb v/v	1		TO-15	Total/NA
Freon TF	0.074	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Acetone	1500	E	5.0	2.6	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	460	E	5.0	1.8	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.43	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.61		0.50	0.20	ppb v/v	1		TO-15	Total/NA
tert-Butyl alcohol	3.3	J	5.0	1.5	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.26		0.20	0.16	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	67	E	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	2.3		0.20	0.052	ppb v/v	1		TO-15	Total/NA
Tetrahydrofuran	320	E	5.0	2.6	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.15	J	0.20	0.063	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.23		0.20	0.088	ppb v/v	1		TO-15	Total/NA
Benzene	0.34		0.20	0.071	ppb v/v	1		TO-15	Total/NA
n-Heptane	5.4		0.20	0.14	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.12		0.040	0.030	ppb v/v	1		TO-15	Total/NA
Toluene	5.2		0.20	0.069	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.15		0.040	0.029	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.99		0.20	0.073	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	4.9		0.50	0.070	ppb v/v	1		TO-15	Total/NA
Xylene, o-	1.5		0.20	0.071	ppb v/v	1		TO-15	Total/NA
Xylene (total)	6.4		0.70	0.14	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.17	J	0.20	0.069	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.085	J	0.20	0.058	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.28		0.20	0.080	ppb v/v	1		TO-15	Total/NA
4-Isopropyltoluene	0.39		0.20	0.075	ppb v/v	1		TO-15	Total/NA
Benzyl chloride	0.25		0.20	0.12	ppb v/v	1		TO-15	Total/NA
Acetone - DL	8200	D	1500	780	ppb v/v	301		TO-15	Total/NA
Isopropyl alcohol - DL	570	J D B	1500	540	ppb v/v	301		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.2	J	2.5	0.99	ug/m3	1		TO-15	Total/NA
Freon 22	1.1	J	1.8	0.92	ug/m3	1		TO-15	Total/NA
Chloromethane	1.2		1.0	0.52	ug/m3	1		TO-15	Total/NA
n-Butane	14		1.2	0.74	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.2		1.1	0.35	ug/m3	1		TO-15	Total/NA
Freon TF	0.57	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
Acetone	3700	E	12	6.2	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	1100	E	12	4.4	ug/m3	1		TO-15	Total/NA
Carbon disulfide	1.3	J	1.6	0.37	ug/m3	1		TO-15	Total/NA
Methylene Chloride	2.1		1.7	0.69	ug/m3	1		TO-15	Total/NA
tert-Butyl alcohol	10	J	15	4.5	ug/m3	1		TO-15	Total/NA
n-Hexane	0.92		0.70	0.56	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	200	E	1.5	0.59	ug/m3	1		TO-15	Total/NA
Chloroform	11		0.98	0.25	ug/m3	1		TO-15	Total/NA
Tetrahydrofuran	950	E	15	7.7	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.53	J	0.69	0.22	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.1		0.93	0.41	ug/m3	1		TO-15	Total/NA
Benzene	1.1		0.64	0.23	ug/m3	1		TO-15	Total/NA
n-Heptane	22		0.82	0.57	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.63		0.21	0.16	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-108 (AS) (Continued)

Lab Sample ID: 200-42918-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	19		0.75	0.26	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.1		0.27	0.20	ug/m3	1		TO-15	Total/NA
Ethylbenzene	4.3		0.87	0.32	ug/m3	1		TO-15	Total/NA
m,p-Xylene	21		2.2	0.30	ug/m3	1		TO-15	Total/NA
Xylene, o-	6.5		0.87	0.31	ug/m3	1		TO-15	Total/NA
Xylene (total)	28		3.0	0.61	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	0.82	J	0.98	0.34	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.42	J	0.98	0.29	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.4		0.98	0.39	ug/m3	1		TO-15	Total/NA
4-Isopropyltoluene	2.2		1.1	0.41	ug/m3	1		TO-15	Total/NA
Benzyl chloride	1.3		1.0	0.62	ug/m3	1		TO-15	Total/NA
Acetone - DL	19000	D	3600	1900	ug/m3	301		TO-15	Total/NA
Isopropyl alcohol - DL	1400	J D B	3700	1300	ug/m3	301		TO-15	Total/NA

Client Sample ID: GC-IA-106 (AS)

Lab Sample ID: 200-42918-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.33	J	0.50	0.047	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.23	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
n-Butane	2.1		0.50	0.046	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.18	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Freon TF	0.058	J	0.20	0.027	ppb v/v	1		TO-15	Total/NA
Acetone	65	E	5.0	1.3	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	4.6	J	5.0	0.13	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	9.2		0.50	0.028	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.72		0.50	0.068	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.19	J	0.20	0.046	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	5.0		0.50	0.11	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.064	J	0.20	0.029	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethene, Total	0.064	J	0.40	0.029	ppb v/v	1		TO-15	Total/NA
Chloroform	0.032	J	0.20	0.025	ppb v/v	1		TO-15	Total/NA
Tetrahydrofuran	3.2	J	5.0	1.2	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.051	J	0.20	0.045	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.063		0.040	0.011	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.15	J	0.20	0.043	ppb v/v	1		TO-15	Total/NA
Benzene	0.26		0.20	0.028	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.13	J	0.20	0.068	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.14		0.040	0.0091	ppb v/v	1		TO-15	Total/NA
methyl isobutyl ketone	0.15	J	0.50	0.065	ppb v/v	1		TO-15	Total/NA
Toluene	0.39		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.062		0.040	0.0098	ppb v/v	1		TO-15	Total/NA
Methyl Butyl Ketone (2-Hexanone)	0.094	J	0.50	0.086	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.060	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.19	J	0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.070	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
Xylene (total)	0.26	J	0.70	0.040	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	0.49	J D	1.3	0.12	ppb v/v	2.5		TO-15	Total/NA
Chloromethane - DL	0.50	J D	1.3	0.40	ppb v/v	2.5		TO-15	Total/NA
n-Butane - DL	2.4	D	1.3	0.12	ppb v/v	2.5		TO-15	Total/NA
Trichlorofluoromethane - DL	0.20	J D	0.50	0.078	ppb v/v	2.5		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-106 (AS) (Continued)

Lab Sample ID: 200-42918-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone - DL	69	D	13	3.3	ppb v/v	2.5		TO-15	Total/NA
Isopropyl alcohol - DL	4.8	J D	13	0.33	ppb v/v	2.5		TO-15	Total/NA
Carbon disulfide - DL	9.4	D	1.3	0.070	ppb v/v	2.5		TO-15	Total/NA
Methylene Chloride - DL	0.62	J D	1.3	0.17	ppb v/v	2.5		TO-15	Total/NA
Methyl Ethyl Ketone - DL	5.0	D	1.3	0.28	ppb v/v	2.5		TO-15	Total/NA
Tetrahydrofuran - DL	3.1	J D	13	3.0	ppb v/v	2.5		TO-15	Total/NA
Carbon tetrachloride - DL	0.060	J D	0.10	0.028	ppb v/v	2.5		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	0.15	J D	0.50	0.11	ppb v/v	2.5		TO-15	Total/NA
Benzene - DL	0.27	J D	0.50	0.070	ppb v/v	2.5		TO-15	Total/NA
Trichloroethene - DL	0.14	D	0.10	0.023	ppb v/v	2.5		TO-15	Total/NA
methyl isobutyl ketone - DL	0.19	J D	1.3	0.16	ppb v/v	2.5		TO-15	Total/NA
Toluene - DL	0.40	J D	0.50	0.088	ppb v/v	2.5		TO-15	Total/NA
m,p-Xylene - DL	0.20	J D	1.3	0.19	ppb v/v	2.5		TO-15	Total/NA
Xylene (total) - DL	0.20	J D	1.8	0.10	ppb v/v	2.5		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.6	J	2.5	0.23	ug/m3	1		TO-15	Total/NA
Chloromethane	0.48	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
n-Butane	5.0		1.2	0.11	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.0	J	1.1	0.17	ug/m3	1		TO-15	Total/NA
Freon TF	0.45	J	1.5	0.21	ug/m3	1		TO-15	Total/NA
Acetone	150	E	12	3.1	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	11	J	12	0.32	ug/m3	1		TO-15	Total/NA
Carbon disulfide	29		1.6	0.087	ug/m3	1		TO-15	Total/NA
Methylene Chloride	2.5		1.7	0.24	ug/m3	1		TO-15	Total/NA
n-Hexane	0.66	J	0.70	0.16	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	15		1.5	0.32	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.26	J	0.79	0.11	ug/m3	1		TO-15	Total/NA
1,2-Dichloroethene, Total	0.25	J	1.6	0.11	ug/m3	1		TO-15	Total/NA
Chloroform	0.16	J	0.98	0.12	ug/m3	1		TO-15	Total/NA
Tetrahydrofuran	9.3	J	15	3.5	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.18	J	0.69	0.15	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.40		0.25	0.069	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.71	J	0.93	0.20	ug/m3	1		TO-15	Total/NA
Benzene	0.82		0.64	0.089	ug/m3	1		TO-15	Total/NA
n-Heptane	0.55	J	0.82	0.28	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.75		0.21	0.049	ug/m3	1		TO-15	Total/NA
methyl isobutyl ketone	0.63	J	2.0	0.27	ug/m3	1		TO-15	Total/NA
Toluene	1.5		0.75	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.42		0.27	0.066	ug/m3	1		TO-15	Total/NA
Methyl Butyl Ketone (2-Hexanone)	0.39	J	2.0	0.35	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.26	J	0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	0.84	J	2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	0.30	J	0.87	0.17	ug/m3	1		TO-15	Total/NA
Xylene (total)	1.1	J	3.0	0.17	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	2.4	J D	6.2	0.58	ug/m3	2.5		TO-15	Total/NA
Chloromethane - DL	1.0	J D	2.6	0.83	ug/m3	2.5		TO-15	Total/NA
n-Butane - DL	5.7	D	3.0	0.27	ug/m3	2.5		TO-15	Total/NA
Trichlorofluoromethane - DL	1.1	J D	2.8	0.44	ug/m3	2.5		TO-15	Total/NA
Acetone - DL	160	D	30	7.7	ug/m3	2.5		TO-15	Total/NA
Isopropyl alcohol - DL	12	J D	31	0.80	ug/m3	2.5		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-IA-106 (AS) (Continued)

Lab Sample ID: 200-42918-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide - DL	29	D	3.9	0.22	ug/m3	2.5		TO-15	Total/NA
Methylene Chloride - DL	2.1	J D	4.3	0.59	ug/m3	2.5		TO-15	Total/NA
Methyl Ethyl Ketone - DL	15	D	3.7	0.81	ug/m3	2.5		TO-15	Total/NA
Tetrahydrofuran - DL	9.2	J D	37	8.8	ug/m3	2.5		TO-15	Total/NA
Carbon tetrachloride - DL	0.38	J D	0.63	0.17	ug/m3	2.5		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	0.68	J D	2.3	0.50	ug/m3	2.5		TO-15	Total/NA
Benzene - DL	0.86	J D	1.6	0.22	ug/m3	2.5		TO-15	Total/NA
Trichloroethene - DL	0.76	D	0.54	0.12	ug/m3	2.5		TO-15	Total/NA
methyl isobutyl ketone - DL	0.79	J D	5.1	0.67	ug/m3	2.5		TO-15	Total/NA
Toluene - DL	1.5	J D	1.9	0.33	ug/m3	2.5		TO-15	Total/NA
m,p-Xylene - DL	0.87	J D	5.4	0.84	ug/m3	2.5		TO-15	Total/NA
Xylene (total) - DL	0.87	J D	7.6	0.43	ug/m3	2.5		TO-15	Total/NA

Client Sample ID: GC-SV-106 (AS)

Lab Sample ID: 200-42918-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	490	E	30	16	ppb v/v	6		TO-15	Total/NA
Methylene Chloride	2.3	J	3.0	1.2	ppb v/v	6		TO-15	Total/NA
tert-Butyl alcohol	39		30	9.0	ppb v/v	6		TO-15	Total/NA
n-Hexane	1.0	J	1.2	0.96	ppb v/v	6		TO-15	Total/NA
Methyl Ethyl Ketone	1.9	J	3.0	1.2	ppb v/v	6		TO-15	Total/NA
Toluene	0.87	J	1.2	0.41	ppb v/v	6		TO-15	Total/NA
Acetone - DL	810	D	150	79	ppb v/v	30.3		TO-15	Total/NA
Methylene Chloride - DL	6.1	J D	15	6.1	ppb v/v	30.3		TO-15	Total/NA
tert-Butyl alcohol - DL	56	J D	150	45	ppb v/v	30.3		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1200	E	71	37	ug/m3	6		TO-15	Total/NA
Methylene Chloride	7.9	J	10	4.2	ug/m3	6		TO-15	Total/NA
tert-Butyl alcohol	120		91	27	ug/m3	6		TO-15	Total/NA
n-Hexane	3.6	J	4.2	3.4	ug/m3	6		TO-15	Total/NA
Methyl Ethyl Ketone	5.5	J	8.8	3.5	ug/m3	6		TO-15	Total/NA
Toluene	3.3	J	4.5	1.6	ug/m3	6		TO-15	Total/NA
Acetone - DL	1900	D	360	190	ug/m3	30.3		TO-15	Total/NA
Methylene Chloride - DL	21	J D	53	21	ug/m3	30.3		TO-15	Total/NA
tert-Butyl alcohol - DL	170	J D	460	140	ug/m3	30.3		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners NYSDEC - TRC/D&B

TestAmerica Job ID: 200-42918-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Client Sample ID: GC-AA-01 (AS)

Date Collected: 03/28/18 15:45
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 200-42918-1

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.32**	**J**	0.50	0.047	ppb v/v			04/05/18 17:36	1
Freon 22	**0.22**	**J**	0.50	0.20	ppb v/v			04/05/18 17:36	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.041	ppb v/v			04/05/18 17:36	1
Chloromethane	**0.39**	**J**	0.50	0.16	ppb v/v			04/05/18 17:36	1
n-Butane	**0.75**		0.50	0.046	ppb v/v			04/05/18 17:36	1
Vinyl chloride	0.20	U	0.20	0.018	ppb v/v			04/05/18 17:36	1
1,3-Butadiene	0.20	U	0.20	0.037	ppb v/v			04/05/18 17:36	1
Bromomethane	0.20	U	0.20	0.036	ppb v/v			04/05/18 17:36	1
Chloroethane	0.50	U	0.50	0.13	ppb v/v			04/05/18 17:36	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.022	ppb v/v			04/05/18 17:36	1
Trichlorofluoromethane	**0.18**	**J**	0.20	0.031	ppb v/v			04/05/18 17:36	1
Freon TF	**0.061**	**J**	0.20	0.027	ppb v/v			04/05/18 17:36	1
1,1-Dichloroethene	0.20	U	0.20	0.035	ppb v/v			04/05/18 17:36	1
Acetone	**1.5**	**J**	5.0	1.3	ppb v/v			04/05/18 17:36	1
Isopropyl alcohol	**0.39**	**J**	5.0	0.13	ppb v/v			04/05/18 17:36	1
Carbon disulfide	0.50	U	0.50	0.028	ppb v/v			04/05/18 17:36	1
3-Chloropropene	0.50	U	0.50	0.063	ppb v/v			04/05/18 17:36	1
Methylene Chloride	**0.25**	**J**	0.50	0.068	ppb v/v			04/05/18 17:36	1
tert-Butyl alcohol	5.0	U	5.0	1.7	ppb v/v			04/05/18 17:36	1
Methyl tert-butyl ether	0.20	U	0.20	0.041	ppb v/v			04/05/18 17:36	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.050	ppb v/v			04/05/18 17:36	1
n-Hexane	**0.20**		0.20	0.046	ppb v/v			04/05/18 17:36	1
1,1-Dichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 17:36	1
Methyl Ethyl Ketone	**0.17**	**J**	0.50	0.11	ppb v/v			04/05/18 17:36	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.029	ppb v/v			04/05/18 17:36	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.029	ppb v/v			04/05/18 17:36	1
Chloroform	0.20	U	0.20	0.025	ppb v/v			04/05/18 17:36	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			04/05/18 17:36	1
1,1,1-Trichloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 17:36	1
Cyclohexane	**0.045**	**J**	0.20	0.045	ppb v/v			04/05/18 17:36	1
Carbon tetrachloride	**0.055**		0.040	0.011	ppb v/v			04/05/18 17:36	1
2,2,4-Trimethylpentane	**0.23**		0.20	0.043	ppb v/v			04/05/18 17:36	1
Benzene	**0.25**		0.20	0.028	ppb v/v			04/05/18 17:36	1
1,2-Dichloroethane	0.20	U	0.20	0.034	ppb v/v			04/05/18 17:36	1
n-Heptane	**0.098**	**J**	0.20	0.068	ppb v/v			04/05/18 17:36	1
Trichloroethene	0.040	U	0.040	0.0091	ppb v/v			04/05/18 17:36	1
Methyl methacrylate	0.50	U	0.50	0.11	ppb v/v			04/05/18 17:36	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			04/05/18 17:36	1
1,4-Dioxane	5.0	U	5.0	0.76	ppb v/v			04/05/18 17:36	1
Bromodichloromethane	0.20	U	0.20	0.059	ppb v/v			04/05/18 17:36	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.036	ppb v/v			04/05/18 17:36	1
methyl isobutyl ketone	0.50	U	0.50	0.065	ppb v/v			04/05/18 17:36	1
Toluene	**0.41**		0.20	0.035	ppb v/v			04/05/18 17:36	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.038	ppb v/v			04/05/18 17:36	1
1,1,2-Trichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 17:36	1
Tetrachloroethene	**0.025**	**J**	0.040	0.0098	ppb v/v			04/05/18 17:36	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.086	ppb v/v			04/05/18 17:36	1
Dibromochloromethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 17:36	1

Client Sample ID: GC-AA-01 (AS)
Lab Sample ID: 200-42918-1

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	0.20	U	0.20	0.023	ppb v/v			04/05/18 17:36	1
Chlorobenzene	0.20	U	0.20	0.025	ppb v/v			04/05/18 17:36	1
Ethylbenzene	**0.067**	**J**	0.20	0.034	ppb v/v			04/05/18 17:36	1
m,p-Xylene	**0.23**	**J**	0.50	0.077	ppb v/v			04/05/18 17:36	1
Xylene, o-	**0.069**	**J**	0.20	0.040	ppb v/v			04/05/18 17:36	1
Xylene (total)	**0.30**	**J**	0.70	0.040	ppb v/v			04/05/18 17:36	1
Styrene	0.20	U	0.20	0.035	ppb v/v			04/05/18 17:36	1
Bromoform	0.20	U	0.20	0.035	ppb v/v			04/05/18 17:36	1
Cumene	0.20	U	0.20	0.039	ppb v/v			04/05/18 17:36	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 17:36	1
n-Propylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 17:36	1
4-Ethyltoluene	0.20	U	0.20	0.040	ppb v/v			04/05/18 17:36	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 17:36	1
2-Chlorotoluene	0.20	U	0.20	0.035	ppb v/v			04/05/18 17:36	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 17:36	1
1,2,4-Trimethylbenzene	**0.069**	**J**	0.20	0.057	ppb v/v			04/05/18 17:36	1
sec-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 17:36	1
4-Isopropyltoluene	0.20	U	0.20	0.052	ppb v/v			04/05/18 17:36	1
1,3-Dichlorobenzene	0.20	U	0.20	0.050	ppb v/v			04/05/18 17:36	1
1,4-Dichlorobenzene	0.20	U	0.20	0.063	ppb v/v			04/05/18 17:36	1
Benzyl chloride	0.20	U	0.20	0.067	ppb v/v			04/05/18 17:36	1
n-Butylbenzene	0.20	U	0.20	0.068	ppb v/v			04/05/18 17:36	1
1,2-Dichlorobenzene	0.20	U	0.20	0.045	ppb v/v			04/05/18 17:36	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			04/05/18 17:36	1
Hexachlorobutadiene	0.20	U	0.20	0.064	ppb v/v			04/05/18 17:36	1
Naphthalene	0.50	U	0.50	0.10	ppb v/v			04/05/18 17:36	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**1.6**	**J**	2.5	0.23	ug/m3			04/05/18 17:36	1
Freon 22	**0.79**	**J**	1.8	0.71	ug/m3			04/05/18 17:36	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.29	ug/m3			04/05/18 17:36	1
Chloromethane	**0.81**	**J**	1.0	0.33	ug/m3			04/05/18 17:36	1
n-Butane	**1.8**		1.2	0.11	ug/m3			04/05/18 17:36	1
Vinyl chloride	0.51	U	0.51	0.046	ug/m3			04/05/18 17:36	1
1,3-Butadiene	0.44	U	0.44	0.082	ug/m3			04/05/18 17:36	1
Bromomethane	0.78	U	0.78	0.14	ug/m3			04/05/18 17:36	1
Chloroethane	1.3	U	1.3	0.34	ug/m3			04/05/18 17:36	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.096	ug/m3			04/05/18 17:36	1
Trichlorofluoromethane	**1.0**	**J**	1.1	0.17	ug/m3			04/05/18 17:36	1
Freon TF	**0.47**	**J**	1.5	0.21	ug/m3			04/05/18 17:36	1
1,1-Dichloroethene	0.79	U	0.79	0.14	ug/m3			04/05/18 17:36	1
Acetone	**3.7**	**J**	12	3.1	ug/m3			04/05/18 17:36	1
Isopropyl alcohol	**0.97**	**J**	12	0.32	ug/m3			04/05/18 17:36	1
Carbon disulfide	1.6	U	1.6	0.087	ug/m3			04/05/18 17:36	1
3-Chloropropene	1.6	U	1.6	0.20	ug/m3			04/05/18 17:36	1
Methylene Chloride	**0.87**	**J**	1.7	0.24	ug/m3			04/05/18 17:36	1
tert-Butyl alcohol	15	U	15	5.2	ug/m3			04/05/18 17:36	1
Methyl tert-butyl ether	0.72	U	0.72	0.15	ug/m3			04/05/18 17:36	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.20	ug/m3			04/05/18 17:36	1

Client Sample ID: GC-AA-01 (AS)
Lab Sample ID: 200-42918-1

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Hexane	**0.72**		0.70	0.16	ug/m3			04/05/18 17:36	1
1,1-Dichloroethane	0.81	U	0.81	0.069	ug/m3			04/05/18 17:36	1
Methyl Ethyl Ketone	**0.50**	**J**	1.5	0.32	ug/m3			04/05/18 17:36	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.11	ug/m3			04/05/18 17:36	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.11	ug/m3			04/05/18 17:36	1
Chloroform	0.98	U	0.98	0.12	ug/m3			04/05/18 17:36	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			04/05/18 17:36	1
1,1,1-Trichloroethane	1.1	U	1.1	0.14	ug/m3			04/05/18 17:36	1
Cyclohexane	**0.16**	**J**	0.69	0.15	ug/m3			04/05/18 17:36	1
Carbon tetrachloride	**0.34**		0.25	0.069	ug/m3			04/05/18 17:36	1
2,2,4-Trimethylpentane	**1.1**		0.93	0.20	ug/m3			04/05/18 17:36	1
Benzene	**0.80**		0.64	0.089	ug/m3			04/05/18 17:36	1
1,2-Dichloroethane	0.81	U	0.81	0.14	ug/m3			04/05/18 17:36	1
n-Heptane	**0.40**	**J**	0.82	0.28	ug/m3			04/05/18 17:36	1
Trichloroethene	0.21	U	0.21	0.049	ug/m3			04/05/18 17:36	1
Methyl methacrylate	2.0	U	2.0	0.45	ug/m3			04/05/18 17:36	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			04/05/18 17:36	1
1,4-Dioxane	18	U	18	2.7	ug/m3			04/05/18 17:36	1
Bromodichloromethane	1.3	U	1.3	0.40	ug/m3			04/05/18 17:36	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.16	ug/m3			04/05/18 17:36	1
methyl isobutyl ketone	2.0	U	2.0	0.27	ug/m3			04/05/18 17:36	1
Toluene	**1.5**		0.75	0.13	ug/m3			04/05/18 17:36	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.17	ug/m3			04/05/18 17:36	1
1,1,2-Trichloroethane	1.1	U	1.1	0.093	ug/m3			04/05/18 17:36	1
Tetrachloroethene	**0.17**	**J**	0.27	0.066	ug/m3			04/05/18 17:36	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.35	ug/m3			04/05/18 17:36	1
Dibromochloromethane	1.7	U	1.7	0.14	ug/m3			04/05/18 17:36	1
1,2-Dibromoethane	1.5	U	1.5	0.18	ug/m3			04/05/18 17:36	1
Chlorobenzene	0.92	U	0.92	0.12	ug/m3			04/05/18 17:36	1
Ethylbenzene	**0.29**	**J**	0.87	0.15	ug/m3			04/05/18 17:36	1
m,p-Xylene	**0.98**	**J**	2.2	0.33	ug/m3			04/05/18 17:36	1
Xylene, o-	**0.30**	**J**	0.87	0.17	ug/m3			04/05/18 17:36	1
Xylene (total)	**1.3**	**J**	3.0	0.17	ug/m3			04/05/18 17:36	1
Styrene	0.85	U	0.85	0.15	ug/m3			04/05/18 17:36	1
Bromoform	2.1	U	2.1	0.36	ug/m3			04/05/18 17:36	1
Cumene	0.98	U	0.98	0.19	ug/m3			04/05/18 17:36	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.18	ug/m3			04/05/18 17:36	1
n-Propylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 17:36	1
4-Ethyltoluene	0.98	U	0.98	0.20	ug/m3			04/05/18 17:36	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 17:36	1
2-Chlorotoluene	1.0	U	1.0	0.18	ug/m3			04/05/18 17:36	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 17:36	1
1,2,4-Trimethylbenzene	**0.34**	**J**	0.98	0.28	ug/m3			04/05/18 17:36	1
sec-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 17:36	1
4-Isopropyltoluene	1.1	U	1.1	0.29	ug/m3			04/05/18 17:36	1
1,3-Dichlorobenzene	1.2	U	1.2	0.30	ug/m3			04/05/18 17:36	1
1,4-Dichlorobenzene	1.2	U	1.2	0.38	ug/m3			04/05/18 17:36	1
Benzyl chloride	1.0	U	1.0	0.35	ug/m3			04/05/18 17:36	1

Client Sample ID: GC-AA-01 (AS)
Lab Sample ID: 200-42918-1

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	1.1	U	1.1	0.37	ug/m3			04/05/18 17:36	1
1,2-Dichlorobenzene	1.2	U	1.2	0.27	ug/m3			04/05/18 17:36	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			04/05/18 17:36	1
Hexachlorobutadiene	2.1	U	2.1	0.68	ug/m3			04/05/18 17:36	1
Naphthalene	2.6	U	2.6	0.52	ug/m3			04/05/18 17:36	1

Client Sample ID: GC-IA-102 (AS)
Lab Sample ID: 200-42918-2

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.31**	**J**	0.50	0.047	ppb v/v			04/05/18 16:45	1
Freon 22	**0.21**	**J**	0.50	0.20	ppb v/v			04/05/18 16:45	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.041	ppb v/v			04/05/18 16:45	1
Chloromethane	**0.26**	**J**	0.50	0.16	ppb v/v			04/05/18 16:45	1
n-Butane	**2.4**		0.50	0.046	ppb v/v			04/05/18 16:45	1
Vinyl chloride	0.20	U	0.20	0.018	ppb v/v			04/05/18 16:45	1
1,3-Butadiene	**0.060**	**J**	0.20	0.037	ppb v/v			04/05/18 16:45	1
Bromomethane	0.20	U	0.20	0.036	ppb v/v			04/05/18 16:45	1
Chloroethane	0.50	U	0.50	0.13	ppb v/v			04/05/18 16:45	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.022	ppb v/v			04/05/18 16:45	1
Trichlorofluoromethane	**0.20**		0.20	0.031	ppb v/v			04/05/18 16:45	1
Freon TF	**0.066**	**J**	0.20	0.027	ppb v/v			04/05/18 16:45	1
1,1-Dichloroethene	0.20	U	0.20	0.035	ppb v/v			04/05/18 16:45	1
Acetone	**43**	**E**	5.0	1.3	ppb v/v			04/05/18 16:45	1
Isopropyl alcohol	**1.6**	**J**	5.0	0.13	ppb v/v			04/05/18 16:45	1
Carbon disulfide	0.50	U	0.50	0.028	ppb v/v			04/05/18 16:45	1
3-Chloropropene	0.50	U	0.50	0.063	ppb v/v			04/05/18 16:45	1
Methylene Chloride	**0.31**	**J**	0.50	0.068	ppb v/v			04/05/18 16:45	1
tert-Butyl alcohol	5.0	U	5.0	1.7	ppb v/v			04/05/18 16:45	1
Methyl tert-butyl ether	0.20	U	0.20	0.041	ppb v/v			04/05/18 16:45	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.050	ppb v/v			04/05/18 16:45	1
n-Hexane	**0.26**		0.20	0.046	ppb v/v			04/05/18 16:45	1
1,1-Dichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 16:45	1
Methyl Ethyl Ketone	**2.2**		0.50	0.11	ppb v/v			04/05/18 16:45	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.029	ppb v/v			04/05/18 16:45	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.029	ppb v/v			04/05/18 16:45	1
Chloroform	0.20	U	0.20	0.025	ppb v/v			04/05/18 16:45	1
Tetrahydrofuran	**17**		5.0	1.2	ppb v/v			04/05/18 16:45	1
1,1,1-Trichloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 16:45	1
Cyclohexane	**0.073**	**J**	0.20	0.045	ppb v/v			04/05/18 16:45	1
Carbon tetrachloride	**0.055**		0.040	0.011	ppb v/v			04/05/18 16:45	1
2,2,4-Trimethylpentane	**0.24**		0.20	0.043	ppb v/v			04/05/18 16:45	1
Benzene	**0.26**		0.20	0.028	ppb v/v			04/05/18 16:45	1
1,2-Dichloroethane	0.20	U	0.20	0.034	ppb v/v			04/05/18 16:45	1
n-Heptane	**0.19**	**J**	0.20	0.068	ppb v/v			04/05/18 16:45	1
Trichloroethene	0.040	U	0.040	0.0091	ppb v/v			04/05/18 16:45	1

Client Sample ID: GC-IA-102 (AS)
Lab Sample ID: 200-42918-2

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl methacrylate	0.50	U	0.50	0.11	ppb v/v			04/05/18 16:45	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			04/05/18 16:45	1
1,4-Dioxane	5.0	U	5.0	0.76	ppb v/v			04/05/18 16:45	1
Bromodichloromethane	0.20	U	0.20	0.059	ppb v/v			04/05/18 16:45	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.036	ppb v/v			04/05/18 16:45	1
methyl isobutyl ketone	0.50	U	0.50	0.065	ppb v/v			04/05/18 16:45	1
Toluene	**0.51**		0.20	0.035	ppb v/v			04/05/18 16:45	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.038	ppb v/v			04/05/18 16:45	1
1,1,2-Trichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 16:45	1
Tetrachloroethene	**0.10**		0.040	0.0098	ppb v/v			04/05/18 16:45	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.086	ppb v/v			04/05/18 16:45	1
Dibromochloromethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 16:45	1
1,2-Dibromoethane	0.20	U	0.20	0.023	ppb v/v			04/05/18 16:45	1
Chlorobenzene	0.20	U	0.20	0.025	ppb v/v			04/05/18 16:45	1
Ethylbenzene	**0.22**		0.20	0.034	ppb v/v			04/05/18 16:45	1
m,p-Xylene	**0.82**		0.50	0.077	ppb v/v			04/05/18 16:45	1
Xylene, o-	**0.26**		0.20	0.040	ppb v/v			04/05/18 16:45	1
Xylene (total)	**1.1**		0.70	0.040	ppb v/v			04/05/18 16:45	1
Styrene	0.20	U	0.20	0.035	ppb v/v			04/05/18 16:45	1
Bromoform	0.20	U	0.20	0.035	ppb v/v			04/05/18 16:45	1
Cumene	0.20	U	0.20	0.039	ppb v/v			04/05/18 16:45	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 16:45	1
n-Propylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 16:45	1
4-Ethyltoluene	0.20	U	0.20	0.040	ppb v/v			04/05/18 16:45	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 16:45	1
2-Chlorotoluene	0.20	U	0.20	0.035	ppb v/v			04/05/18 16:45	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 16:45	1
1,2,4-Trimethylbenzene	**0.097**	**J**	0.20	0.057	ppb v/v			04/05/18 16:45	1
sec-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 16:45	1
4-Isopropyltoluene	0.20	U	0.20	0.052	ppb v/v			04/05/18 16:45	1
1,3-Dichlorobenzene	0.20	U	0.20	0.050	ppb v/v			04/05/18 16:45	1
1,4-Dichlorobenzene	0.20	U	0.20	0.063	ppb v/v			04/05/18 16:45	1
Benzyl chloride	0.20	U	0.20	0.067	ppb v/v			04/05/18 16:45	1
n-Butylbenzene	0.20	U	0.20	0.068	ppb v/v			04/05/18 16:45	1
1,2-Dichlorobenzene	0.20	U	0.20	0.045	ppb v/v			04/05/18 16:45	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			04/05/18 16:45	1
Hexachlorobutadiene	0.20	U	0.20	0.064	ppb v/v			04/05/18 16:45	1
Naphthalene	0.50	U	0.50	0.10	ppb v/v			04/05/18 16:45	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**1.5**	**J**	2.5	0.23	ug/m3			04/05/18 16:45	1
Freon 22	**0.75**	**J**	1.8	0.71	ug/m3			04/05/18 16:45	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.29	ug/m3			04/05/18 16:45	1
Chloromethane	**0.55**	**J**	1.0	0.33	ug/m3			04/05/18 16:45	1
n-Butane	**5.8**		1.2	0.11	ug/m3			04/05/18 16:45	1
Vinyl chloride	0.51	U	0.51	0.046	ug/m3			04/05/18 16:45	1
1,3-Butadiene	**0.13**	**J**	0.44	0.082	ug/m3			04/05/18 16:45	1
Bromomethane	0.78	U	0.78	0.14	ug/m3			04/05/18 16:45	1
Chloroethane	1.3	U	1.3	0.34	ug/m3			04/05/18 16:45	1

Client Sample ID: GC-IA-102 (AS)
Lab Sample ID: 200-42918-2

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.096	ug/m3			04/05/18 16:45	1
Trichlorofluoromethane	**1.1**		1.1	0.17	ug/m3			04/05/18 16:45	1
Freon TF	**0.51**	**J**	1.5	0.21	ug/m3			04/05/18 16:45	1
1,1-Dichloroethene	0.79	U	0.79	0.14	ug/m3			04/05/18 16:45	1
Acetone	**100**	**E**	12	3.1	ug/m3			04/05/18 16:45	1
Isopropyl alcohol	**3.8**	**J**	12	0.32	ug/m3			04/05/18 16:45	1
Carbon disulfide	1.6	U	1.6	0.087	ug/m3			04/05/18 16:45	1
3-Chloropropene	1.6	U	1.6	0.20	ug/m3			04/05/18 16:45	1
Methylene Chloride	**1.1**	**J**	1.7	0.24	ug/m3			04/05/18 16:45	1
tert-Butyl alcohol	15	U	15	5.2	ug/m3			04/05/18 16:45	1
Methyl tert-butyl ether	0.72	U	0.72	0.15	ug/m3			04/05/18 16:45	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.20	ug/m3			04/05/18 16:45	1
n-Hexane	**0.93**		0.70	0.16	ug/m3			04/05/18 16:45	1
1,1-Dichloroethane	0.81	U	0.81	0.069	ug/m3			04/05/18 16:45	1
Methyl Ethyl Ketone	**6.4**		1.5	0.32	ug/m3			04/05/18 16:45	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.11	ug/m3			04/05/18 16:45	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.11	ug/m3			04/05/18 16:45	1
Chloroform	0.98	U	0.98	0.12	ug/m3			04/05/18 16:45	1
Tetrahydrofuran	**51**		15	3.5	ug/m3			04/05/18 16:45	1
1,1,1-Trichloroethane	1.1	U	1.1	0.14	ug/m3			04/05/18 16:45	1
Cyclohexane	**0.25**	**J**	0.69	0.15	ug/m3			04/05/18 16:45	1
Carbon tetrachloride	**0.34**		0.25	0.069	ug/m3			04/05/18 16:45	1
2,2,4-Trimethylpentane	**1.1**		0.93	0.20	ug/m3			04/05/18 16:45	1
Benzene	**0.82**		0.64	0.089	ug/m3			04/05/18 16:45	1
1,2-Dichloroethane	0.81	U	0.81	0.14	ug/m3			04/05/18 16:45	1
n-Heptane	**0.77**	**J**	0.82	0.28	ug/m3			04/05/18 16:45	1
Trichloroethene	0.21	U	0.21	0.049	ug/m3			04/05/18 16:45	1
Methyl methacrylate	2.0	U	2.0	0.45	ug/m3			04/05/18 16:45	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			04/05/18 16:45	1
1,4-Dioxane	18	U	18	2.7	ug/m3			04/05/18 16:45	1
Bromodichloromethane	1.3	U	1.3	0.40	ug/m3			04/05/18 16:45	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.16	ug/m3			04/05/18 16:45	1
methyl isobutyl ketone	2.0	U	2.0	0.27	ug/m3			04/05/18 16:45	1
Toluene	**1.9**		0.75	0.13	ug/m3			04/05/18 16:45	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.17	ug/m3			04/05/18 16:45	1
1,1,2-Trichloroethane	1.1	U	1.1	0.093	ug/m3			04/05/18 16:45	1
Tetrachloroethene	**0.71**		0.27	0.066	ug/m3			04/05/18 16:45	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.35	ug/m3			04/05/18 16:45	1
Dibromochloromethane	1.7	U	1.7	0.14	ug/m3			04/05/18 16:45	1
1,2-Dibromoethane	1.5	U	1.5	0.18	ug/m3			04/05/18 16:45	1
Chlorobenzene	0.92	U	0.92	0.12	ug/m3			04/05/18 16:45	1
Ethylbenzene	**0.96**		0.87	0.15	ug/m3			04/05/18 16:45	1
m,p-Xylene	**3.6**		2.2	0.33	ug/m3			04/05/18 16:45	1
Xylene, o-	**1.1**		0.87	0.17	ug/m3			04/05/18 16:45	1
Xylene (total)	**4.7**		3.0	0.17	ug/m3			04/05/18 16:45	1
Styrene	0.85	U	0.85	0.15	ug/m3			04/05/18 16:45	1
Bromoform	2.1	U	2.1	0.36	ug/m3			04/05/18 16:45	1
Cumene	0.98	U	0.98	0.19	ug/m3			04/05/18 16:45	1

Client Sample ID: GC-IA-102 (AS)
Lab Sample ID: 200-42918-2

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.18	ug/m3			04/05/18 16:45	1
n-Propylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 16:45	1
4-Ethyltoluene	0.98	U	0.98	0.20	ug/m3			04/05/18 16:45	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 16:45	1
2-Chlorotoluene	1.0	U	1.0	0.18	ug/m3			04/05/18 16:45	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 16:45	1
1,2,4-Trimethylbenzene	**0.48**	**J**	0.98	0.28	ug/m3			04/05/18 16:45	1
sec-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 16:45	1
4-Isopropyltoluene	1.1	U	1.1	0.29	ug/m3			04/05/18 16:45	1
1,3-Dichlorobenzene	1.2	U	1.2	0.30	ug/m3			04/05/18 16:45	1
1,4-Dichlorobenzene	1.2	U	1.2	0.38	ug/m3			04/05/18 16:45	1
Benzyl chloride	1.0	U	1.0	0.35	ug/m3			04/05/18 16:45	1
n-Butylbenzene	1.1	U	1.1	0.37	ug/m3			04/05/18 16:45	1
1,2-Dichlorobenzene	1.2	U	1.2	0.27	ug/m3			04/05/18 16:45	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			04/05/18 16:45	1
Hexachlorobutadiene	2.1	U	2.1	0.68	ug/m3			04/05/18 16:45	1
Naphthalene	2.6	U	2.6	0.52	ug/m3			04/05/18 16:45	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.45**	**J D**	1.0	0.094	ppb v/v			04/06/18 09:15	2
Freon 22	1.0	U	1.0	0.40	ppb v/v			04/06/18 09:15	2
1,2-Dichlorotetrafluoroethane	0.40	U	0.40	0.082	ppb v/v			04/06/18 09:15	2
Chloromethane	**0.48**	**J D**	1.0	0.32	ppb v/v			04/06/18 09:15	2
n-Butane	**2.9**	**D**	1.0	0.092	ppb v/v			04/06/18 09:15	2
Vinyl chloride	0.40	U	0.40	0.036	ppb v/v			04/06/18 09:15	2
1,3-Butadiene	0.40	U	0.40	0.074	ppb v/v			04/06/18 09:15	2
Bromomethane	0.40	U	0.40	0.072	ppb v/v			04/06/18 09:15	2
Chloroethane	1.0	U	1.0	0.26	ppb v/v			04/06/18 09:15	2
Bromoethene(Vinyl Bromide)	0.40	U	0.40	0.044	ppb v/v			04/06/18 09:15	2
Trichlorofluoromethane	**0.16**	**J D**	0.40	0.062	ppb v/v			04/06/18 09:15	2
Freon TF	0.40	U	0.40	0.054	ppb v/v			04/06/18 09:15	2
1,1-Dichloroethene	0.40	U	0.40	0.070	ppb v/v			04/06/18 09:15	2
Acetone	**34**	**D**	10	2.6	ppb v/v			04/06/18 09:15	2
Isopropyl alcohol	**1.3**	**J D**	10	0.26	ppb v/v			04/06/18 09:15	2
Carbon disulfide	1.0	U	1.0	0.056	ppb v/v			04/06/18 09:15	2
3-Chloropropene	1.0	U	1.0	0.13	ppb v/v			04/06/18 09:15	2
Methylene Chloride	**0.32**	**J D**	1.0	0.14	ppb v/v			04/06/18 09:15	2
tert-Butyl alcohol	10	U	10	3.4	ppb v/v			04/06/18 09:15	2
Methyl tert-butyl ether	0.40	U	0.40	0.082	ppb v/v			04/06/18 09:15	2
trans-1,2-Dichloroethene	0.40	U	0.40	0.10	ppb v/v			04/06/18 09:15	2
n-Hexane	0.40	U	0.40	0.092	ppb v/v			04/06/18 09:15	2
1,1-Dichloroethane	0.40	U	0.40	0.034	ppb v/v			04/06/18 09:15	2
Methyl Ethyl Ketone	**1.8**	**D**	1.0	0.22	ppb v/v			04/06/18 09:15	2
cis-1,2-Dichloroethene	0.40	U	0.40	0.058	ppb v/v			04/06/18 09:15	2
1,2-Dichloroethene, Total	0.80	U	0.80	0.058	ppb v/v			04/06/18 09:15	2
Chloroform	0.40	U	0.40	0.050	ppb v/v			04/06/18 09:15	2
Tetrahydrofuran	**15**	**D**	10	2.4	ppb v/v			04/06/18 09:15	2
1,1,1-Trichloroethane	0.40	U	0.40	0.052	ppb v/v			04/06/18 09:15	2

Client Sample ID: GC-IA-102 (AS)
Lab Sample ID: 200-42918-2

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.40	U	0.40	0.090	ppb v/v			04/06/18 09:15	2
Carbon tetrachloride	**0.051**	**J D**	0.080	0.022	ppb v/v			04/06/18 09:15	2
2,2,4-Trimethylpentane	**0.25**	**J D**	0.40	0.086	ppb v/v			04/06/18 09:15	2
Benzene	**0.28**	**J D**	0.40	0.056	ppb v/v			04/06/18 09:15	2
1,2-Dichloroethane	0.40	U	0.40	0.068	ppb v/v			04/06/18 09:15	2
n-Heptane	**0.19**	**J D**	0.40	0.14	ppb v/v			04/06/18 09:15	2
Trichloroethene	0.080	U	0.080	0.018	ppb v/v			04/06/18 09:15	2
Methyl methacrylate	1.0	U	1.0	0.22	ppb v/v			04/06/18 09:15	2
1,2-Dichloropropane	0.40	U	0.40	0.070	ppb v/v			04/06/18 09:15	2
1,4-Dioxane	10	U	10	1.5	ppb v/v			04/06/18 09:15	2
Bromodichloromethane	0.40	U	0.40	0.12	ppb v/v			04/06/18 09:15	2
cis-1,3-Dichloropropene	0.40	U	0.40	0.072	ppb v/v			04/06/18 09:15	2
methyl isobutyl ketone	1.0	U	1.0	0.13	ppb v/v			04/06/18 09:15	2
Toluene	**0.49**	**D**	0.40	0.070	ppb v/v			04/06/18 09:15	2
trans-1,3-Dichloropropene	0.40	U	0.40	0.076	ppb v/v			04/06/18 09:15	2
1,1,2-Trichloroethane	0.40	U	0.40	0.034	ppb v/v			04/06/18 09:15	2
Tetrachloroethene	**0.091**	**D**	0.080	0.020	ppb v/v			04/06/18 09:15	2
Methyl Butyl Ketone (2-Hexanone)	1.0	U	1.0	0.17	ppb v/v			04/06/18 09:15	2
Dibromochloromethane	0.40	U	0.40	0.034	ppb v/v			04/06/18 09:15	2
1,2-Dibromoethane	0.40	U	0.40	0.046	ppb v/v			04/06/18 09:15	2
Chlorobenzene	0.40	U	0.40	0.050	ppb v/v			04/06/18 09:15	2
Ethylbenzene	**0.22**	**J D**	0.40	0.068	ppb v/v			04/06/18 09:15	2
m,p-Xylene	**0.78**	**J D**	1.0	0.15	ppb v/v			04/06/18 09:15	2
Xylene, o-	**0.26**	**J D**	0.40	0.080	ppb v/v			04/06/18 09:15	2
Xylene (total)	**1.0**	**J D**	1.4	0.080	ppb v/v			04/06/18 09:15	2
Styrene	0.40	U	0.40	0.070	ppb v/v			04/06/18 09:15	2
Bromoform	0.40	U	0.40	0.070	ppb v/v			04/06/18 09:15	2
Cumene	0.40	U	0.40	0.078	ppb v/v			04/06/18 09:15	2
1,1,2,2-Tetrachloroethane	0.40	U	0.40	0.052	ppb v/v			04/06/18 09:15	2
n-Propylbenzene	0.40	U	0.40	0.080	ppb v/v			04/06/18 09:15	2
4-Ethyltoluene	0.40	U	0.40	0.080	ppb v/v			04/06/18 09:15	2
1,3,5-Trimethylbenzene	0.40	U	0.40	0.080	ppb v/v			04/06/18 09:15	2
2-Chlorotoluene	0.40	U	0.40	0.070	ppb v/v			04/06/18 09:15	2
tert-Butylbenzene	0.40	U	0.40	0.074	ppb v/v			04/06/18 09:15	2
1,2,4-Trimethylbenzene	0.40	U	0.40	0.11	ppb v/v			04/06/18 09:15	2
sec-Butylbenzene	0.40	U	0.40	0.074	ppb v/v			04/06/18 09:15	2
4-Isopropyltoluene	0.40	U	0.40	0.10	ppb v/v			04/06/18 09:15	2
1,3-Dichlorobenzene	0.40	U	0.40	0.10	ppb v/v			04/06/18 09:15	2
1,4-Dichlorobenzene	0.40	U	0.40	0.13	ppb v/v			04/06/18 09:15	2
Benzyl chloride	0.40	U	0.40	0.13	ppb v/v			04/06/18 09:15	2
n-Butylbenzene	0.40	U	0.40	0.14	ppb v/v			04/06/18 09:15	2
1,2-Dichlorobenzene	0.40	U	0.40	0.090	ppb v/v			04/06/18 09:15	2
1,2,4-Trichlorobenzene	1.0	U	1.0	0.38	ppb v/v			04/06/18 09:15	2
Hexachlorobutadiene	0.40	U	0.40	0.13	ppb v/v			04/06/18 09:15	2
Naphthalene	1.0	U	1.0	0.20	ppb v/v			04/06/18 09:15	2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**2.2**	**J D**	4.9	0.46	ug/m3			04/06/18 09:15	2
Freon 22	3.5	U	3.5	1.4	ug/m3			04/06/18 09:15	2

Client Sample ID: GC-IA-102 (AS)
Lab Sample ID: 200-42918-2

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorotetrafluoroethane	2.8	U	2.8	0.57	ug/m3			04/06/18 09:15	2
Chloromethane	**1.0**	**J D**	2.1	0.66	ug/m3			04/06/18 09:15	2
n-Butane	**6.9**	**D**	2.4	0.22	ug/m3			04/06/18 09:15	2
Vinyl chloride	1.0	U	1.0	0.092	ug/m3			04/06/18 09:15	2
1,3-Butadiene	0.88	U	0.88	0.16	ug/m3			04/06/18 09:15	2
Bromomethane	1.6	U	1.6	0.28	ug/m3			04/06/18 09:15	2
Chloroethane	2.6	U	2.6	0.69	ug/m3			04/06/18 09:15	2
Bromoethene(Vinyl Bromide)	1.7	U	1.7	0.19	ug/m3			04/06/18 09:15	2
Trichlorofluoromethane	**0.92**	**J D**	2.2	0.35	ug/m3			04/06/18 09:15	2
Freon TF	3.1	U	3.1	0.41	ug/m3			04/06/18 09:15	2
1,1-Dichloroethene	1.6	U	1.6	0.28	ug/m3			04/06/18 09:15	2
Acetone	**80**	**D**	24	6.2	ug/m3			04/06/18 09:15	2
Isopropyl alcohol	**3.2**	**J D**	25	0.64	ug/m3			04/06/18 09:15	2
Carbon disulfide	3.1	U	3.1	0.17	ug/m3			04/06/18 09:15	2
3-Chloropropene	3.1	U	3.1	0.39	ug/m3			04/06/18 09:15	2
Methylene Chloride	**1.1**	**J D**	3.5	0.47	ug/m3			04/06/18 09:15	2
tert-Butyl alcohol	30	U	30	10	ug/m3			04/06/18 09:15	2
Methyl tert-butyl ether	1.4	U	1.4	0.30	ug/m3			04/06/18 09:15	2
trans-1,2-Dichloroethene	1.6	U	1.6	0.40	ug/m3			04/06/18 09:15	2
n-Hexane	1.4	U	1.4	0.32	ug/m3			04/06/18 09:15	2
1,1-Dichloroethane	1.6	U	1.6	0.14	ug/m3			04/06/18 09:15	2
Methyl Ethyl Ketone	**5.2**	**D**	2.9	0.65	ug/m3			04/06/18 09:15	2
cis-1,2-Dichloroethene	1.6	U	1.6	0.23	ug/m3			04/06/18 09:15	2
1,2-Dichloroethene, Total	3.2	U	3.2	0.23	ug/m3			04/06/18 09:15	2
Chloroform	2.0	U	2.0	0.24	ug/m3			04/06/18 09:15	2
Tetrahydrofuran	**43**	**D**	29	7.1	ug/m3			04/06/18 09:15	2
1,1,1-Trichloroethane	2.2	U	2.2	0.28	ug/m3			04/06/18 09:15	2
Cyclohexane	1.4	U	1.4	0.31	ug/m3			04/06/18 09:15	2
Carbon tetrachloride	**0.32**	**J D**	0.50	0.14	ug/m3			04/06/18 09:15	2
2,2,4-Trimethylpentane	**1.2**	**J D**	1.9	0.40	ug/m3			04/06/18 09:15	2
Benzene	**0.88**	**J D**	1.3	0.18	ug/m3			04/06/18 09:15	2
1,2-Dichloroethane	1.6	U	1.6	0.28	ug/m3			04/06/18 09:15	2
n-Heptane	**0.78**	**J D**	1.6	0.56	ug/m3			04/06/18 09:15	2
Trichloroethene	0.43	U	0.43	0.098	ug/m3			04/06/18 09:15	2
Methyl methacrylate	4.1	U	4.1	0.90	ug/m3			04/06/18 09:15	2
1,2-Dichloropropane	1.8	U	1.8	0.32	ug/m3			04/06/18 09:15	2
1,4-Dioxane	36	U	36	5.5	ug/m3			04/06/18 09:15	2
Bromodichloromethane	2.7	U	2.7	0.79	ug/m3			04/06/18 09:15	2
cis-1,3-Dichloropropene	1.8	U	1.8	0.33	ug/m3			04/06/18 09:15	2
methyl isobutyl ketone	4.1	U	4.1	0.53	ug/m3			04/06/18 09:15	2
Toluene	**1.8**	**D**	1.5	0.26	ug/m3			04/06/18 09:15	2
trans-1,3-Dichloropropene	1.8	U	1.8	0.34	ug/m3			04/06/18 09:15	2
1,1,2-Trichloroethane	2.2	U	2.2	0.19	ug/m3			04/06/18 09:15	2
Tetrachloroethene	**0.61**	**D**	0.54	0.13	ug/m3			04/06/18 09:15	2
Methyl Butyl Ketone (2-Hexanone)	4.1	U	4.1	0.70	ug/m3			04/06/18 09:15	2
Dibromochloromethane	3.4	U	3.4	0.29	ug/m3			04/06/18 09:15	2
1,2-Dibromoethane	3.1	U	3.1	0.35	ug/m3			04/06/18 09:15	2
Chlorobenzene	1.8	U	1.8	0.23	ug/m3			04/06/18 09:15	2

Client Sample ID: GC-IA-102 (AS)
Lab Sample ID: 200-42918-2

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.93**	**J D**	1.7	0.30	ug/m3			04/06/18 09:15	2
m,p-Xylene	**3.4**	**J D**	4.3	0.67	ug/m3			04/06/18 09:15	2
Xylene, o-	**1.1**	**J D**	1.7	0.35	ug/m3			04/06/18 09:15	2
Xylene (total)	**4.5**	**J D**	6.1	0.35	ug/m3			04/06/18 09:15	2
Styrene	1.7	U	1.7	0.30	ug/m3			04/06/18 09:15	2
Bromoform	4.1	U	4.1	0.72	ug/m3			04/06/18 09:15	2
Cumene	2.0	U	2.0	0.38	ug/m3			04/06/18 09:15	2
1,1,2,2-Tetrachloroethane	2.7	U	2.7	0.36	ug/m3			04/06/18 09:15	2
n-Propylbenzene	2.0	U	2.0	0.39	ug/m3			04/06/18 09:15	2
4-Ethyltoluene	2.0	U	2.0	0.39	ug/m3			04/06/18 09:15	2
1,3,5-Trimethylbenzene	2.0	U	2.0	0.39	ug/m3			04/06/18 09:15	2
2-Chlorotoluene	2.1	U	2.1	0.36	ug/m3			04/06/18 09:15	2
tert-Butylbenzene	2.2	U	2.2	0.41	ug/m3			04/06/18 09:15	2
1,2,4-Trimethylbenzene	2.0	U	2.0	0.56	ug/m3			04/06/18 09:15	2
sec-Butylbenzene	2.2	U	2.2	0.41	ug/m3			04/06/18 09:15	2
4-Isopropyltoluene	2.2	U	2.2	0.57	ug/m3			04/06/18 09:15	2
1,3-Dichlorobenzene	2.4	U	2.4	0.60	ug/m3			04/06/18 09:15	2
1,4-Dichlorobenzene	2.4	U	2.4	0.76	ug/m3			04/06/18 09:15	2
Benzyl chloride	2.1	U	2.1	0.69	ug/m3			04/06/18 09:15	2
n-Butylbenzene	2.2	U	2.2	0.75	ug/m3			04/06/18 09:15	2
1,2-Dichlorobenzene	2.4	U	2.4	0.54	ug/m3			04/06/18 09:15	2
1,2,4-Trichlorobenzene	7.4	U	7.4	2.8	ug/m3			04/06/18 09:15	2
Hexachlorobutadiene	4.3	U	4.3	1.4	ug/m3			04/06/18 09:15	2
Naphthalene	5.2	U	5.2	1.0	ug/m3			04/06/18 09:15	2

Client Sample ID: GC-SV-102 (AS)
Lab Sample ID: 200-42918-3

Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	1.0	ppb v/v			04/06/18 21:49	5
Freon 22	2.5	U	2.5	1.3	ppb v/v			04/06/18 21:49	5
1,2-Dichlorotetrafluoroethane	1.0	U	1.0	0.34	ppb v/v			04/06/18 21:49	5
Chloromethane	2.5	U	2.5	1.3	ppb v/v			04/06/18 21:49	5
n-Butane	**2.4**	**J**	2.5	1.6	ppb v/v			04/06/18 21:49	5
Vinyl chloride	1.0	U	1.0	0.21	ppb v/v			04/06/18 21:49	5
1,3-Butadiene	1.0	U	1.0	0.33	ppb v/v			04/06/18 21:49	5
Bromomethane	1.0	U	1.0	0.31	ppb v/v			04/06/18 21:49	5
Chloroethane	2.5	U	2.5	1.1	ppb v/v			04/06/18 21:49	5
Bromoethene(Vinyl Bromide)	1.0	U	1.0	0.28	ppb v/v			04/06/18 21:49	5
Trichlorofluoromethane	1.0	U	1.0	0.31	ppb v/v			04/06/18 21:49	5
Freon TF	1.0	U	1.0	0.16	ppb v/v			04/06/18 21:49	5
1,1-Dichloroethene	1.0	U	1.0	0.17	ppb v/v			04/06/18 21:49	5
Acetone	**70**		25	13	ppb v/v			04/06/18 21:49	5
Isopropyl alcohol	25	U	25	9.0	ppb v/v			04/06/18 21:49	5
Carbon disulfide	2.5	U	2.5	0.60	ppb v/v			04/06/18 21:49	5
3-Chloropropene	2.5	U	2.5	1.4	ppb v/v			04/06/18 21:49	5

Client Sample ID: GC-SV-102 (AS)
Lab Sample ID: 200-42918-3

Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	2.5	U	2.5	1.0	ppb v/v			04/06/18 21:49	5
tert-Butyl alcohol	**13**	**J**	25	7.5	ppb v/v			04/06/18 21:49	5
Methyl tert-butyl ether	1.0	U	1.0	0.31	ppb v/v			04/06/18 21:49	5
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ppb v/v			04/06/18 21:49	5
n-Hexane	1.0	U	1.0	0.80	ppb v/v			04/06/18 21:49	5
1,1-Dichloroethane	1.0	U	1.0	0.13	ppb v/v			04/06/18 21:49	5
Methyl Ethyl Ketone	**6.6**		2.5	1.0	ppb v/v			04/06/18 21:49	5
cis-1,2-Dichloroethene	1.0	U	1.0	0.19	ppb v/v			04/06/18 21:49	5
1,2-Dichloroethene, Total	2.0	U	2.0	0.56	ppb v/v			04/06/18 21:49	5
Chloroform	**0.90**	**J**	1.0	0.26	ppb v/v			04/06/18 21:49	5
Tetrahydrofuran	25	U	25	13	ppb v/v			04/06/18 21:49	5
1,1,1-Trichloroethane	1.0	U	1.0	0.34	ppb v/v			04/06/18 21:49	5
Cyclohexane	1.0	U	1.0	0.32	ppb v/v			04/06/18 21:49	5
Carbon tetrachloride	0.20	U	0.20	0.12	ppb v/v			04/06/18 21:49	5
2,2,4-Trimethylpentane	1.0	U	1.0	0.44	ppb v/v			04/06/18 21:49	5
Benzene	1.0	U	1.0	0.36	ppb v/v			04/06/18 21:49	5
1,2-Dichloroethane	1.0	U	1.0	0.32	ppb v/v			04/06/18 21:49	5
n-Heptane	**0.85**	**J**	1.0	0.70	ppb v/v			04/06/18 21:49	5
Trichloroethene	0.20	U	0.20	0.15	ppb v/v			04/06/18 21:49	5
Methyl methacrylate	2.5	U	2.5	1.1	ppb v/v			04/06/18 21:49	5
1,2-Dichloropropane	1.0	U	1.0	0.60	ppb v/v			04/06/18 21:49	5
1,4-Dioxane	25	U	25	6.5	ppb v/v			04/06/18 21:49	5
Bromodichloromethane	1.0	U	1.0	0.47	ppb v/v			04/06/18 21:49	5
cis-1,3-Dichloropropene	1.0	U	1.0	0.49	ppb v/v			04/06/18 21:49	5
methyl isobutyl ketone	2.5	U	2.5	1.8	ppb v/v			04/06/18 21:49	5
Toluene	**4.2**		1.0	0.35	ppb v/v			04/06/18 21:49	5
trans-1,3-Dichloropropene	1.0	U	1.0	0.60	ppb v/v			04/06/18 21:49	5
1,1,2-Trichloroethane	1.0	U	1.0	0.39	ppb v/v			04/06/18 21:49	5
Tetrachloroethene	**15**		0.20	0.15	ppb v/v			04/06/18 21:49	5
Methyl Butyl Ketone (2-Hexanone)	2.5	U	2.5	2.1	ppb v/v			04/06/18 21:49	5
Dibromochloromethane	1.0	U	1.0	0.36	ppb v/v			04/06/18 21:49	5
1,2-Dibromoethane	1.0	U	1.0	0.35	ppb v/v			04/06/18 21:49	5
Chlorobenzene	1.0	U	1.0	0.20	ppb v/v			04/06/18 21:49	5
Ethylbenzene	1.0	U	1.0	0.37	ppb v/v			04/06/18 21:49	5
m,p-Xylene	**0.93**	**J**	2.5	0.35	ppb v/v			04/06/18 21:49	5
Xylene, o-	1.0	U	1.0	0.36	ppb v/v			04/06/18 21:49	5
Xylene (total)	**0.93**	**J**	3.5	0.71	ppb v/v			04/06/18 21:49	5
Styrene	1.0	U	1.0	0.43	ppb v/v			04/06/18 21:49	5
Bromoform	1.0	U	1.0	0.43	ppb v/v			04/06/18 21:49	5
Cumene	1.0	U	1.0	0.30	ppb v/v			04/06/18 21:49	5
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.38	ppb v/v			04/06/18 21:49	5
n-Propylbenzene	1.0	U	1.0	0.35	ppb v/v			04/06/18 21:49	5
4-Ethyltoluene	1.0	U	1.0	0.35	ppb v/v			04/06/18 21:49	5
1,3,5-Trimethylbenzene	1.0	U	1.0	0.29	ppb v/v			04/06/18 21:49	5
2-Chlorotoluene	1.0	U	1.0	0.36	ppb v/v			04/06/18 21:49	5
tert-Butylbenzene	1.0	U	1.0	0.29	ppb v/v			04/06/18 21:49	5
1,2,4-Trimethylbenzene	1.0	U	1.0	0.40	ppb v/v			04/06/18 21:49	5
sec-Butylbenzene	1.0	U	1.0	0.33	ppb v/v			04/06/18 21:49	5

Client Sample ID: GC-SV-102 (AS)
Lab Sample ID: 200-42918-3

Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	1.0	U	1.0	0.38	ppb v/v			04/06/18 21:49	5
1,3-Dichlorobenzene	1.0	U	1.0	0.41	ppb v/v			04/06/18 21:49	5
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ppb v/v			04/06/18 21:49	5
Benzyl chloride	1.0	U	1.0	0.60	ppb v/v			04/06/18 21:49	5
n-Butylbenzene	1.0	U	1.0	0.40	ppb v/v			04/06/18 21:49	5
1,2-Dichlorobenzene	1.0	U	1.0	0.36	ppb v/v			04/06/18 21:49	5
1,2,4-Trichlorobenzene	2.5	U	2.5	1.2	ppb v/v			04/06/18 21:49	5
Hexachlorobutadiene	1.0	U	1.0	0.41	ppb v/v			04/06/18 21:49	5
Naphthalene	2.5	U	2.5	1.6	ppb v/v			04/06/18 21:49	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	12	U	12	4.9	ug/m3			04/06/18 21:49	5
Freon 22	8.8	U	8.8	4.6	ug/m3			04/06/18 21:49	5
1,2-Dichlorotetrafluoroethane	7.0	U	7.0	2.4	ug/m3			04/06/18 21:49	5
Chloromethane	5.2	U	5.2	2.6	ug/m3			04/06/18 21:49	5
n-Butane	**5.8**	**J**	5.9	3.7	ug/m3			04/06/18 21:49	5
Vinyl chloride	2.6	U	2.6	0.52	ug/m3			04/06/18 21:49	5
1,3-Butadiene	2.2	U	2.2	0.72	ug/m3			04/06/18 21:49	5
Bromomethane	3.9	U	3.9	1.2	ug/m3			04/06/18 21:49	5
Chloroethane	6.6	U	6.6	2.8	ug/m3			04/06/18 21:49	5
Bromoethene(Vinyl Bromide)	4.4	U	4.4	1.2	ug/m3			04/06/18 21:49	5
Trichlorofluoromethane	5.6	U	5.6	1.7	ug/m3			04/06/18 21:49	5
Freon TF	7.7	U	7.7	1.2	ug/m3			04/06/18 21:49	5
1,1-Dichloroethene	4.0	U	4.0	0.67	ug/m3			04/06/18 21:49	5
Acetone	**170**		59	31	ug/m3			04/06/18 21:49	5
Isopropyl alcohol	61	U	61	22	ug/m3			04/06/18 21:49	5
Carbon disulfide	7.8	U	7.8	1.9	ug/m3			04/06/18 21:49	5
3-Chloropropene	7.8	U	7.8	4.2	ug/m3			04/06/18 21:49	5
Methylene Chloride	8.7	U	8.7	3.5	ug/m3			04/06/18 21:49	5
tert-Butyl alcohol	**41**	**J**	76	23	ug/m3			04/06/18 21:49	5
Methyl tert-butyl ether	3.6	U	3.6	1.1	ug/m3			04/06/18 21:49	5
trans-1,2-Dichloroethene	4.0	U	4.0	1.5	ug/m3			04/06/18 21:49	5
n-Hexane	3.5	U	3.5	2.8	ug/m3			04/06/18 21:49	5
1,1-Dichloroethane	4.0	U	4.0	0.53	ug/m3			04/06/18 21:49	5
Methyl Ethyl Ketone	**20**		7.4	2.9	ug/m3			04/06/18 21:49	5
cis-1,2-Dichloroethene	4.0	U	4.0	0.73	ug/m3			04/06/18 21:49	5
1,2-Dichloroethene, Total	7.9	U	7.9	2.2	ug/m3			04/06/18 21:49	5
Chloroform	**4.4**	**J**	4.9	1.3	ug/m3			04/06/18 21:49	5
Tetrahydrofuran	74	U	74	38	ug/m3			04/06/18 21:49	5
1,1,1-Trichloroethane	5.5	U	5.5	1.9	ug/m3			04/06/18 21:49	5
Cyclohexane	3.4	U	3.4	1.1	ug/m3			04/06/18 21:49	5
Carbon tetrachloride	1.3	U	1.3	0.75	ug/m3			04/06/18 21:49	5
2,2,4-Trimethylpentane	4.7	U	4.7	2.1	ug/m3			04/06/18 21:49	5
Benzene	3.2	U	3.2	1.1	ug/m3			04/06/18 21:49	5
1,2-Dichloroethane	4.0	U	4.0	1.3	ug/m3			04/06/18 21:49	5
n-Heptane	**3.5**	**J**	4.1	2.9	ug/m3			04/06/18 21:49	5
Trichloroethene	1.1	U	1.1	0.81	ug/m3			04/06/18 21:49	5
Methyl methacrylate	10	U	10	4.5	ug/m3			04/06/18 21:49	5
1,2-Dichloropropane	4.6	U	4.6	2.8	ug/m3			04/06/18 21:49	5

Client Sample ID: GC-SV-102 (AS)
Lab Sample ID: 200-42918-3

Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	90	U	90	23	ug/m3			04/06/18 21:49	5
Bromodichloromethane	6.7	U	6.7	3.1	ug/m3			04/06/18 21:49	5
cis-1,3-Dichloropropene	4.5	U	4.5	2.2	ug/m3			04/06/18 21:49	5
methyl isobutyl ketone	10	U	10	7.4	ug/m3			04/06/18 21:49	5
Toluene	**16**		3.8	1.3	ug/m3			04/06/18 21:49	5
trans-1,3-Dichloropropene	4.5	U	4.5	2.7	ug/m3			04/06/18 21:49	5
1,1,2-Trichloroethane	5.5	U	5.5	2.1	ug/m3			04/06/18 21:49	5
Tetrachloroethene	**99**		1.4	0.98	ug/m3			04/06/18 21:49	5
Methyl Butyl Ketone (2-Hexanone)	10	U	10	8.6	ug/m3			04/06/18 21:49	5
Dibromochloromethane	8.5	U	8.5	3.0	ug/m3			04/06/18 21:49	5
1,2-Dibromoethane	7.7	U	7.7	2.7	ug/m3			04/06/18 21:49	5
Chlorobenzene	4.6	U	4.6	0.92	ug/m3			04/06/18 21:49	5
Ethylbenzene	4.3	U	4.3	1.6	ug/m3			04/06/18 21:49	5
m,p-Xylene	**4.0**	**J**	11	1.5	ug/m3			04/06/18 21:49	5
Xylene, o-	4.3	U	4.3	1.5	ug/m3			04/06/18 21:49	5
Xylene (total)	**4.0**	**J**	15	3.1	ug/m3			04/06/18 21:49	5
Styrene	4.3	U	4.3	1.8	ug/m3			04/06/18 21:49	5
Bromoform	10	U	10	4.4	ug/m3			04/06/18 21:49	5
Cumene	4.9	U	4.9	1.5	ug/m3			04/06/18 21:49	5
1,1,2,2-Tetrachloroethane	6.9	U	6.9	2.6	ug/m3			04/06/18 21:49	5
n-Propylbenzene	4.9	U	4.9	1.7	ug/m3			04/06/18 21:49	5
4-Ethyltoluene	4.9	U	4.9	1.7	ug/m3			04/06/18 21:49	5
1,3,5-Trimethylbenzene	4.9	U	4.9	1.4	ug/m3			04/06/18 21:49	5
2-Chlorotoluene	5.2	U	5.2	1.8	ug/m3			04/06/18 21:49	5
tert-Butylbenzene	5.5	U	5.5	1.6	ug/m3			04/06/18 21:49	5
1,2,4-Trimethylbenzene	4.9	U	4.9	2.0	ug/m3			04/06/18 21:49	5
sec-Butylbenzene	5.5	U	5.5	1.8	ug/m3			04/06/18 21:49	5
4-Isopropyltoluene	5.5	U	5.5	2.1	ug/m3			04/06/18 21:49	5
1,3-Dichlorobenzene	6.0	U	6.0	2.5	ug/m3			04/06/18 21:49	5
1,4-Dichlorobenzene	6.0	U	6.0	2.0	ug/m3			04/06/18 21:49	5
Benzyl chloride	5.2	U	5.2	3.1	ug/m3			04/06/18 21:49	5
n-Butylbenzene	5.5	U	5.5	2.2	ug/m3			04/06/18 21:49	5
1,2-Dichlorobenzene	6.0	U	6.0	2.1	ug/m3			04/06/18 21:49	5
1,2,4-Trichlorobenzene	19	U	19	8.9	ug/m3			04/06/18 21:49	5
Hexachlorobutadiene	11	U	11	4.4	ug/m3			04/06/18 21:49	5
Naphthalene	13	U	13	8.1	ug/m3			04/06/18 21:49	5

Client Sample ID: GC-IA-103 (AS)
Lab Sample ID: 200-42918-4

Date Collected: 03/28/18 16:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.34**	**J**	0.50	0.047	ppb v/v			04/05/18 18:26	1
Freon 22	**0.28**	**J**	0.50	0.20	ppb v/v			04/05/18 18:26	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.041	ppb v/v			04/05/18 18:26	1
Chloromethane	**0.42**	**J**	0.50	0.16	ppb v/v			04/05/18 18:26	1
n-Butane	**1.4**		0.50	0.046	ppb v/v			04/05/18 18:26	1

Client Sample ID: GC-IA-103 (AS)
Lab Sample ID: 200-42918-4

Date Collected: 03/28/18 16:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.20	U	0.20	0.018	ppb v/v			04/05/18 18:26	1
1,3-Butadiene	**0.047**	**J**	0.20	0.037	ppb v/v			04/05/18 18:26	1
Bromomethane	0.20	U	0.20	0.036	ppb v/v			04/05/18 18:26	1
Chloroethane	0.50	U	0.50	0.13	ppb v/v			04/05/18 18:26	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.022	ppb v/v			04/05/18 18:26	1
Trichlorofluoromethane	**0.18**	**J**	0.20	0.031	ppb v/v			04/05/18 18:26	1
Freon TF	**0.057**	**J**	0.20	0.027	ppb v/v			04/05/18 18:26	1
1,1-Dichloroethene	0.20	U	0.20	0.035	ppb v/v			04/05/18 18:26	1
Acetone	**32**		5.0	1.3	ppb v/v			04/05/18 18:26	1
Isopropyl alcohol	**1.4**	**J**	5.0	0.13	ppb v/v			04/05/18 18:26	1
Carbon disulfide	0.50	U	0.50	0.028	ppb v/v			04/05/18 18:26	1
3-Chloropropene	0.50	U	0.50	0.063	ppb v/v			04/05/18 18:26	1
Methylene Chloride	**0.28**	**J**	0.50	0.068	ppb v/v			04/05/18 18:26	1
tert-Butyl alcohol	5.0	U	5.0	1.7	ppb v/v			04/05/18 18:26	1
Methyl tert-butyl ether	0.20	U	0.20	0.041	ppb v/v			04/05/18 18:26	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.050	ppb v/v			04/05/18 18:26	1
n-Hexane	**0.20**		0.20	0.046	ppb v/v			04/05/18 18:26	1
1,1-Dichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 18:26	1
Methyl Ethyl Ketone	**2.2**		0.50	0.11	ppb v/v			04/05/18 18:26	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.029	ppb v/v			04/05/18 18:26	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.029	ppb v/v			04/05/18 18:26	1
Chloroform	0.20	U	0.20	0.025	ppb v/v			04/05/18 18:26	1
Tetrahydrofuran	**14**		5.0	1.2	ppb v/v			04/05/18 18:26	1
1,1,1-Trichloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 18:26	1
Cyclohexane	**0.056**	**J**	0.20	0.045	ppb v/v			04/05/18 18:26	1
Carbon tetrachloride	**0.056**		0.040	0.011	ppb v/v			04/05/18 18:26	1
2,2,4-Trimethylpentane	**0.22**		0.20	0.043	ppb v/v			04/05/18 18:26	1
Benzene	**0.25**		0.20	0.028	ppb v/v			04/05/18 18:26	1
1,2-Dichloroethane	0.20	U	0.20	0.034	ppb v/v			04/05/18 18:26	1
n-Heptane	**0.20**		0.20	0.068	ppb v/v			04/05/18 18:26	1
Trichloroethene	0.040	U	0.040	0.0091	ppb v/v			04/05/18 18:26	1
Methyl methacrylate	0.50	U	0.50	0.11	ppb v/v			04/05/18 18:26	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			04/05/18 18:26	1
1,4-Dioxane	5.0	U	5.0	0.76	ppb v/v			04/05/18 18:26	1
Bromodichloromethane	0.20	U	0.20	0.059	ppb v/v			04/05/18 18:26	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.036	ppb v/v			04/05/18 18:26	1
methyl isobutyl ketone	**0.065**	**J**	0.50	0.065	ppb v/v			04/05/18 18:26	1
Toluene	**0.48**		0.20	0.035	ppb v/v			04/05/18 18:26	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.038	ppb v/v			04/05/18 18:26	1
1,1,2-Trichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 18:26	1
Tetrachloroethene	**0.093**		0.040	0.0098	ppb v/v			04/05/18 18:26	1
Methyl Butyl Ketone (2-Hexanone)	**0.14**	**J**	0.50	0.086	ppb v/v			04/05/18 18:26	1
Dibromochloromethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 18:26	1
1,2-Dibromoethane	0.20	U	0.20	0.023	ppb v/v			04/05/18 18:26	1
Chlorobenzene	0.20	U	0.20	0.025	ppb v/v			04/05/18 18:26	1
Ethylbenzene	**0.12**	**J**	0.20	0.034	ppb v/v			04/05/18 18:26	1
m,p-Xylene	**0.44**	**J**	0.50	0.077	ppb v/v			04/05/18 18:26	1
Xylene, o-	**0.14**	**J**	0.20	0.040	ppb v/v			04/05/18 18:26	1

Client Sample ID: GC-IA-103 (AS)
Lab Sample ID: 200-42918-4

Date Collected: 03/28/18 16:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (total)	**0.58**	**J**	0.70	0.040	ppb v/v			04/05/18 18:26	1
Styrene	0.20	U	0.20	0.035	ppb v/v			04/05/18 18:26	1
Bromoform	0.20	U	0.20	0.035	ppb v/v			04/05/18 18:26	1
Cumene	0.20	U	0.20	0.039	ppb v/v			04/05/18 18:26	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 18:26	1
n-Propylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 18:26	1
4-Ethyltoluene	0.20	U	0.20	0.040	ppb v/v			04/05/18 18:26	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 18:26	1
2-Chlorotoluene	0.20	U	0.20	0.035	ppb v/v			04/05/18 18:26	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 18:26	1
1,2,4-Trimethylbenzene	**0.066**	**J**	0.20	0.057	ppb v/v			04/05/18 18:26	1
sec-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 18:26	1
4-Isopropyltoluene	0.20	U	0.20	0.052	ppb v/v			04/05/18 18:26	1
1,3-Dichlorobenzene	0.20	U	0.20	0.050	ppb v/v			04/05/18 18:26	1
1,4-Dichlorobenzene	0.20	U	0.20	0.063	ppb v/v			04/05/18 18:26	1
Benzyl chloride	0.20	U	0.20	0.067	ppb v/v			04/05/18 18:26	1
n-Butylbenzene	0.20	U	0.20	0.068	ppb v/v			04/05/18 18:26	1
1,2-Dichlorobenzene	0.20	U	0.20	0.045	ppb v/v			04/05/18 18:26	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			04/05/18 18:26	1
Hexachlorobutadiene	0.20	U	0.20	0.064	ppb v/v			04/05/18 18:26	1
Naphthalene	0.50	U	0.50	0.10	ppb v/v			04/05/18 18:26	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**1.7**	**J**	2.5	0.23	ug/m3			04/05/18 18:26	1
Freon 22	**0.97**	**J**	1.8	0.71	ug/m3			04/05/18 18:26	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.29	ug/m3			04/05/18 18:26	1
Chloromethane	**0.88**	**J**	1.0	0.33	ug/m3			04/05/18 18:26	1
n-Butane	**3.4**		1.2	0.11	ug/m3			04/05/18 18:26	1
Vinyl chloride	0.51	U	0.51	0.046	ug/m3			04/05/18 18:26	1
1,3-Butadiene	**0.11**	**J**	0.44	0.082	ug/m3			04/05/18 18:26	1
Bromomethane	0.78	U	0.78	0.14	ug/m3			04/05/18 18:26	1
Chloroethane	1.3	U	1.3	0.34	ug/m3			04/05/18 18:26	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.096	ug/m3			04/05/18 18:26	1
Trichlorofluoromethane	**1.0**	**J**	1.1	0.17	ug/m3			04/05/18 18:26	1
Freon TF	**0.44**	**J**	1.5	0.21	ug/m3			04/05/18 18:26	1
1,1-Dichloroethene	0.79	U	0.79	0.14	ug/m3			04/05/18 18:26	1
Acetone	**76**		12	3.1	ug/m3			04/05/18 18:26	1
Isopropyl alcohol	**3.6**	**J**	12	0.32	ug/m3			04/05/18 18:26	1
Carbon disulfide	1.6	U	1.6	0.087	ug/m3			04/05/18 18:26	1
3-Chloropropene	1.6	U	1.6	0.20	ug/m3			04/05/18 18:26	1
Methylene Chloride	**0.98**	**J**	1.7	0.24	ug/m3			04/05/18 18:26	1
tert-Butyl alcohol	15	U	15	5.2	ug/m3			04/05/18 18:26	1
Methyl tert-butyl ether	0.72	U	0.72	0.15	ug/m3			04/05/18 18:26	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.20	ug/m3			04/05/18 18:26	1
n-Hexane	**0.71**		0.70	0.16	ug/m3			04/05/18 18:26	1
1,1-Dichloroethane	0.81	U	0.81	0.069	ug/m3			04/05/18 18:26	1
Methyl Ethyl Ketone	**6.4**		1.5	0.32	ug/m3			04/05/18 18:26	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.11	ug/m3			04/05/18 18:26	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.11	ug/m3			04/05/18 18:26	1

Client Sample ID: GC-IA-103 (AS)
Lab Sample ID: 200-42918-4

Date Collected: 03/28/18 16:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.98	U	0.98	0.12	ug/m3			04/05/18 18:26	1
Tetrahydrofuran	**40**		15	3.5	ug/m3			04/05/18 18:26	1
1,1,1-Trichloroethane	1.1	U	1.1	0.14	ug/m3			04/05/18 18:26	1
Cyclohexane	**0.19**	**J**	0.69	0.15	ug/m3			04/05/18 18:26	1
Carbon tetrachloride	**0.35**		0.25	0.069	ug/m3			04/05/18 18:26	1
2,2,4-Trimethylpentane	**1.0**		0.93	0.20	ug/m3			04/05/18 18:26	1
Benzene	**0.80**		0.64	0.089	ug/m3			04/05/18 18:26	1
1,2-Dichloroethane	0.81	U	0.81	0.14	ug/m3			04/05/18 18:26	1
n-Heptane	**0.83**		0.82	0.28	ug/m3			04/05/18 18:26	1
Trichloroethene	0.21	U	0.21	0.049	ug/m3			04/05/18 18:26	1
Methyl methacrylate	2.0	U	2.0	0.45	ug/m3			04/05/18 18:26	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			04/05/18 18:26	1
1,4-Dioxane	18	U	18	2.7	ug/m3			04/05/18 18:26	1
Bromodichloromethane	1.3	U	1.3	0.40	ug/m3			04/05/18 18:26	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.16	ug/m3			04/05/18 18:26	1
methyl isobutyl ketone	**0.27**	**J**	2.0	0.27	ug/m3			04/05/18 18:26	1
Toluene	**1.8**		0.75	0.13	ug/m3			04/05/18 18:26	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.17	ug/m3			04/05/18 18:26	1
1,1,2-Trichloroethane	1.1	U	1.1	0.093	ug/m3			04/05/18 18:26	1
Tetrachloroethene	**0.63**		0.27	0.066	ug/m3			04/05/18 18:26	1
Methyl Butyl Ketone (2-Hexanone)	**0.57**	**J**	2.0	0.35	ug/m3			04/05/18 18:26	1
Dibromochloromethane	1.7	U	1.7	0.14	ug/m3			04/05/18 18:26	1
1,2-Dibromoethane	1.5	U	1.5	0.18	ug/m3			04/05/18 18:26	1
Chlorobenzene	0.92	U	0.92	0.12	ug/m3			04/05/18 18:26	1
Ethylbenzene	**0.52**	**J**	0.87	0.15	ug/m3			04/05/18 18:26	1
m,p-Xylene	**1.9**	**J**	2.2	0.33	ug/m3			04/05/18 18:26	1
Xylene, o-	**0.62**	**J**	0.87	0.17	ug/m3			04/05/18 18:26	1
Xylene (total)	**2.5**	**J**	3.0	0.17	ug/m3			04/05/18 18:26	1
Styrene	0.85	U	0.85	0.15	ug/m3			04/05/18 18:26	1
Bromoform	2.1	U	2.1	0.36	ug/m3			04/05/18 18:26	1
Cumene	0.98	U	0.98	0.19	ug/m3			04/05/18 18:26	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.18	ug/m3			04/05/18 18:26	1
n-Propylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 18:26	1
4-Ethyltoluene	0.98	U	0.98	0.20	ug/m3			04/05/18 18:26	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 18:26	1
2-Chlorotoluene	1.0	U	1.0	0.18	ug/m3			04/05/18 18:26	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 18:26	1
1,2,4-Trimethylbenzene	**0.33**	**J**	0.98	0.28	ug/m3			04/05/18 18:26	1
sec-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 18:26	1
4-Isopropyltoluene	1.1	U	1.1	0.29	ug/m3			04/05/18 18:26	1
1,3-Dichlorobenzene	1.2	U	1.2	0.30	ug/m3			04/05/18 18:26	1
1,4-Dichlorobenzene	1.2	U	1.2	0.38	ug/m3			04/05/18 18:26	1
Benzyl chloride	1.0	U	1.0	0.35	ug/m3			04/05/18 18:26	1
n-Butylbenzene	1.1	U	1.1	0.37	ug/m3			04/05/18 18:26	1
1,2-Dichlorobenzene	1.2	U	1.2	0.27	ug/m3			04/05/18 18:26	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			04/05/18 18:26	1
Hexachlorobutadiene	2.1	U	2.1	0.68	ug/m3			04/05/18 18:26	1
Naphthalene	2.6	U	2.6	0.52	ug/m3			04/05/18 18:26	1

Client Sample ID: GC-SV-103 (AS)
Lab Sample ID: 200-42918-5

Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	1.0	ppb v/v			04/06/18 22:39	5
Freon 22	2.5	U	2.5	1.3	ppb v/v			04/06/18 22:39	5
1,2-Dichlorotetrafluoroethane	1.0	U	1.0	0.34	ppb v/v			04/06/18 22:39	5
Chloromethane	2.5	U	2.5	1.3	ppb v/v			04/06/18 22:39	5
n-Butane	**13**		2.5	1.6	ppb v/v			04/06/18 22:39	5
Vinyl chloride	1.0	U	1.0	0.21	ppb v/v			04/06/18 22:39	5
1,3-Butadiene	1.0	U	1.0	0.33	ppb v/v			04/06/18 22:39	5
Bromomethane	1.0	U	1.0	0.31	ppb v/v			04/06/18 22:39	5
Chloroethane	2.5	U	2.5	1.1	ppb v/v			04/06/18 22:39	5
Bromoethene(Vinyl Bromide)	1.0	U	1.0	0.28	ppb v/v			04/06/18 22:39	5
Trichlorofluoromethane	1.0	U	1.0	0.31	ppb v/v			04/06/18 22:39	5
Freon TF	1.0	U	1.0	0.16	ppb v/v			04/06/18 22:39	5
1,1-Dichloroethene	1.0	U	1.0	0.17	ppb v/v			04/06/18 22:39	5
Acetone	**29**		25	13	ppb v/v			04/06/18 22:39	5
Isopropyl alcohol	25	U	25	9.0	ppb v/v			04/06/18 22:39	5
Carbon disulfide	2.5	U	2.5	0.60	ppb v/v			04/06/18 22:39	5
3-Chloropropene	2.5	U	2.5	1.4	ppb v/v			04/06/18 22:39	5
Methylene Chloride	2.5	U	2.5	1.0	ppb v/v			04/06/18 22:39	5
tert-Butyl alcohol	**35**		25	7.5	ppb v/v			04/06/18 22:39	5
Methyl tert-butyl ether	1.0	U	1.0	0.31	ppb v/v			04/06/18 22:39	5
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ppb v/v			04/06/18 22:39	5
n-Hexane	**1.2**		1.0	0.80	ppb v/v			04/06/18 22:39	5
1,1-Dichloroethane	1.0	U	1.0	0.13	ppb v/v			04/06/18 22:39	5
Methyl Ethyl Ketone	**3.7**		2.5	1.0	ppb v/v			04/06/18 22:39	5
cis-1,2-Dichloroethene	1.0	U	1.0	0.19	ppb v/v			04/06/18 22:39	5
1,2-Dichloroethene, Total	2.0	U	2.0	0.56	ppb v/v			04/06/18 22:39	5
Chloroform	**2.0**		1.0	0.26	ppb v/v			04/06/18 22:39	5
Tetrahydrofuran	25	U	25	13	ppb v/v			04/06/18 22:39	5
1,1,1-Trichloroethane	1.0	U	1.0	0.34	ppb v/v			04/06/18 22:39	5
Cyclohexane	1.0	U	1.0	0.32	ppb v/v			04/06/18 22:39	5
Carbon tetrachloride	0.20	U	0.20	0.12	ppb v/v			04/06/18 22:39	5
2,2,4-Trimethylpentane	1.0	U	1.0	0.44	ppb v/v			04/06/18 22:39	5
Benzene	**0.41**	**J**	1.0	0.36	ppb v/v			04/06/18 22:39	5
1,2-Dichloroethane	1.0	U	1.0	0.32	ppb v/v			04/06/18 22:39	5
n-Heptane	**2.1**		1.0	0.70	ppb v/v			04/06/18 22:39	5
Trichloroethene	**0.37**		0.20	0.15	ppb v/v			04/06/18 22:39	5
Methyl methacrylate	2.5	U	2.5	1.1	ppb v/v			04/06/18 22:39	5
1,2-Dichloropropane	1.0	U	1.0	0.60	ppb v/v			04/06/18 22:39	5
1,4-Dioxane	25	U	25	6.5	ppb v/v			04/06/18 22:39	5
Bromodichloromethane	1.0	U	1.0	0.47	ppb v/v			04/06/18 22:39	5
cis-1,3-Dichloropropene	1.0	U	1.0	0.49	ppb v/v			04/06/18 22:39	5
methyl isobutyl ketone	2.5	U	2.5	1.8	ppb v/v			04/06/18 22:39	5
Toluene	**8.4**		1.0	0.35	ppb v/v			04/06/18 22:39	5
trans-1,3-Dichloropropene	1.0	U	1.0	0.60	ppb v/v			04/06/18 22:39	5
1,1,2-Trichloroethane	**1.7**		1.0	0.39	ppb v/v			04/06/18 22:39	5
Tetrachloroethene	**25**		0.20	0.15	ppb v/v			04/06/18 22:39	5
Methyl Butyl Ketone (2-Hexanone)	2.5	U	2.5	2.1	ppb v/v			04/06/18 22:39	5
Dibromochloromethane	1.0	U	1.0	0.36	ppb v/v			04/06/18 22:39	5

Client Sample ID: GC-SV-103 (AS)
Lab Sample ID: 200-42918-5

Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	1.0	U	1.0	0.35	ppb v/v			04/06/18 22:39	5
Chlorobenzene	1.0	U	1.0	0.20	ppb v/v			04/06/18 22:39	5
Ethylbenzene	**12**		1.0	0.37	ppb v/v			04/06/18 22:39	5
m,p-Xylene	**24**		2.5	0.35	ppb v/v			04/06/18 22:39	5
Xylene, o-	**7.8**		1.0	0.36	ppb v/v			04/06/18 22:39	5
Xylene (total)	**32**		3.5	0.71	ppb v/v			04/06/18 22:39	5
Styrene	1.0	U	1.0	0.43	ppb v/v			04/06/18 22:39	5
Bromoform	1.0	U	1.0	0.43	ppb v/v			04/06/18 22:39	5
Cumene	1.0	U	1.0	0.30	ppb v/v			04/06/18 22:39	5
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.38	ppb v/v			04/06/18 22:39	5
n-Propylbenzene	1.0	U	1.0	0.35	ppb v/v			04/06/18 22:39	5
4-Ethyltoluene	1.0	U	1.0	0.35	ppb v/v			04/06/18 22:39	5
1,3,5-Trimethylbenzene	1.0	U	1.0	0.29	ppb v/v			04/06/18 22:39	5
2-Chlorotoluene	1.0	U	1.0	0.36	ppb v/v			04/06/18 22:39	5
tert-Butylbenzene	1.0	U	1.0	0.29	ppb v/v			04/06/18 22:39	5
1,2,4-Trimethylbenzene	1.0	U	1.0	0.40	ppb v/v			04/06/18 22:39	5
sec-Butylbenzene	1.0	U	1.0	0.33	ppb v/v			04/06/18 22:39	5
4-Isopropyltoluene	1.0	U	1.0	0.38	ppb v/v			04/06/18 22:39	5
1,3-Dichlorobenzene	1.0	U	1.0	0.41	ppb v/v			04/06/18 22:39	5
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ppb v/v			04/06/18 22:39	5
Benzyl chloride	1.0	U	1.0	0.60	ppb v/v			04/06/18 22:39	5
n-Butylbenzene	1.0	U	1.0	0.40	ppb v/v			04/06/18 22:39	5
1,2-Dichlorobenzene	1.0	U	1.0	0.36	ppb v/v			04/06/18 22:39	5
1,2,4-Trichlorobenzene	2.5	U	2.5	1.2	ppb v/v			04/06/18 22:39	5
Hexachlorobutadiene	1.0	U	1.0	0.41	ppb v/v			04/06/18 22:39	5
Naphthalene	2.5	U	2.5	1.6	ppb v/v			04/06/18 22:39	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	12	U	12	4.9	ug/m3			04/06/18 22:39	5
Freon 22	8.8	U	8.8	4.6	ug/m3			04/06/18 22:39	5
1,2-Dichlorotetrafluoroethane	7.0	U	7.0	2.4	ug/m3			04/06/18 22:39	5
Chloromethane	5.2	U	5.2	2.6	ug/m3			04/06/18 22:39	5
n-Butane	**31**		5.9	3.7	ug/m3			04/06/18 22:39	5
Vinyl chloride	2.6	U	2.6	0.52	ug/m3			04/06/18 22:39	5
1,3-Butadiene	2.2	U	2.2	0.72	ug/m3			04/06/18 22:39	5
Bromomethane	3.9	U	3.9	1.2	ug/m3			04/06/18 22:39	5
Chloroethane	6.6	U	6.6	2.8	ug/m3			04/06/18 22:39	5
Bromoethene(Vinyl Bromide)	4.4	U	4.4	1.2	ug/m3			04/06/18 22:39	5
Trichlorofluoromethane	5.6	U	5.6	1.7	ug/m3			04/06/18 22:39	5
Freon TF	7.7	U	7.7	1.2	ug/m3			04/06/18 22:39	5
1,1-Dichloroethene	4.0	U	4.0	0.67	ug/m3			04/06/18 22:39	5
Acetone	**69**		59	31	ug/m3			04/06/18 22:39	5
Isopropyl alcohol	61	U	61	22	ug/m3			04/06/18 22:39	5
Carbon disulfide	7.8	U	7.8	1.9	ug/m3			04/06/18 22:39	5
3-Chloropropene	7.8	U	7.8	4.2	ug/m3			04/06/18 22:39	5
Methylene Chloride	8.7	U	8.7	3.5	ug/m3			04/06/18 22:39	5
tert-Butyl alcohol	**110**		76	23	ug/m3			04/06/18 22:39	5
Methyl tert-butyl ether	3.6	U	3.6	1.1	ug/m3			04/06/18 22:39	5
trans-1,2-Dichloroethene	4.0	U	4.0	1.5	ug/m3			04/06/18 22:39	5

Client Sample ID: GC-SV-103 (AS)
Lab Sample ID: 200-42918-5

Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Hexane	**4.1**		3.5	2.8	ug/m3			04/06/18 22:39	5
1,1-Dichloroethane	4.0	U	4.0	0.53	ug/m3			04/06/18 22:39	5
Methyl Ethyl Ketone	**11**		7.4	2.9	ug/m3			04/06/18 22:39	5
cis-1,2-Dichloroethene	4.0	U	4.0	0.73	ug/m3			04/06/18 22:39	5
1,2-Dichloroethene, Total	7.9	U	7.9	2.2	ug/m3			04/06/18 22:39	5
Chloroform	**9.5**		4.9	1.3	ug/m3			04/06/18 22:39	5
Tetrahydrofuran	74	U	74	38	ug/m3			04/06/18 22:39	5
1,1,1-Trichloroethane	5.5	U	5.5	1.9	ug/m3			04/06/18 22:39	5
Cyclohexane	3.4	U	3.4	1.1	ug/m3			04/06/18 22:39	5
Carbon tetrachloride	1.3	U	1.3	0.75	ug/m3			04/06/18 22:39	5
2,2,4-Trimethylpentane	4.7	U	4.7	2.1	ug/m3			04/06/18 22:39	5
Benzene	**1.3**	**J**	3.2	1.1	ug/m3			04/06/18 22:39	5
1,2-Dichloroethane	4.0	U	4.0	1.3	ug/m3			04/06/18 22:39	5
n-Heptane	**8.5**		4.1	2.9	ug/m3			04/06/18 22:39	5
Trichloroethene	**2.0**		1.1	0.81	ug/m3			04/06/18 22:39	5
Methyl methacrylate	10	U	10	4.5	ug/m3			04/06/18 22:39	5
1,2-Dichloropropane	4.6	U	4.6	2.8	ug/m3			04/06/18 22:39	5
1,4-Dioxane	90	U	90	23	ug/m3			04/06/18 22:39	5
Bromodichloromethane	6.7	U	6.7	3.1	ug/m3			04/06/18 22:39	5
cis-1,3-Dichloropropene	4.5	U	4.5	2.2	ug/m3			04/06/18 22:39	5
methyl isobutyl ketone	10	U	10	7.4	ug/m3			04/06/18 22:39	5
Toluene	**32**		3.8	1.3	ug/m3			04/06/18 22:39	5
trans-1,3-Dichloropropene	4.5	U	4.5	2.7	ug/m3			04/06/18 22:39	5
1,1,2-Trichloroethane	**9.2**		5.5	2.1	ug/m3			04/06/18 22:39	5
Tetrachloroethene	**170**		1.4	0.98	ug/m3			04/06/18 22:39	5
Methyl Butyl Ketone (2-Hexanone)	10	U	10	8.6	ug/m3			04/06/18 22:39	5
Dibromochloromethane	8.5	U	8.5	3.0	ug/m3			04/06/18 22:39	5
1,2-Dibromoethane	7.7	U	7.7	2.7	ug/m3			04/06/18 22:39	5
Chlorobenzene	4.6	U	4.6	0.92	ug/m3			04/06/18 22:39	5
Ethylbenzene	**52**		4.3	1.6	ug/m3			04/06/18 22:39	5
m,p-Xylene	**100**		11	1.5	ug/m3			04/06/18 22:39	5
Xylene, o-	**34**		4.3	1.5	ug/m3			04/06/18 22:39	5
Xylene (total)	**140**		15	3.1	ug/m3			04/06/18 22:39	5
Styrene	4.3	U	4.3	1.8	ug/m3			04/06/18 22:39	5
Bromoform	10	U	10	4.4	ug/m3			04/06/18 22:39	5
Cumene	4.9	U	4.9	1.5	ug/m3			04/06/18 22:39	5
1,1,2,2-Tetrachloroethane	6.9	U	6.9	2.6	ug/m3			04/06/18 22:39	5
n-Propylbenzene	4.9	U	4.9	1.7	ug/m3			04/06/18 22:39	5
4-Ethyltoluene	4.9	U	4.9	1.7	ug/m3			04/06/18 22:39	5
1,3,5-Trimethylbenzene	4.9	U	4.9	1.4	ug/m3			04/06/18 22:39	5
2-Chlorotoluene	5.2	U	5.2	1.8	ug/m3			04/06/18 22:39	5
tert-Butylbenzene	5.5	U	5.5	1.6	ug/m3			04/06/18 22:39	5
1,2,4-Trimethylbenzene	4.9	U	4.9	2.0	ug/m3			04/06/18 22:39	5
sec-Butylbenzene	5.5	U	5.5	1.8	ug/m3			04/06/18 22:39	5
4-Isopropyltoluene	5.5	U	5.5	2.1	ug/m3			04/06/18 22:39	5
1,3-Dichlorobenzene	6.0	U	6.0	2.5	ug/m3			04/06/18 22:39	5
1,4-Dichlorobenzene	6.0	U	6.0	2.0	ug/m3			04/06/18 22:39	5
Benzyl chloride	5.2	U	5.2	3.1	ug/m3			04/06/18 22:39	5

Client Sample ID: GC-SV-103 (AS)
Lab Sample ID: 200-42918-5

Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	5.5	U	5.5	2.2	ug/m3			04/06/18 22:39	5
1,2-Dichlorobenzene	6.0	U	6.0	2.1	ug/m3			04/06/18 22:39	5
1,2,4-Trichlorobenzene	19	U	19	8.9	ug/m3			04/06/18 22:39	5
Hexachlorobutadiene	11	U	11	4.4	ug/m3			04/06/18 22:39	5
Naphthalene	13	U	13	8.1	ug/m3			04/06/18 22:39	5

Client Sample ID: GC-SV-105 (AS)
Lab Sample ID: 200-42918-6

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	5.0	U	5.0	2.0	ppb v/v			04/07/18 00:20	10.02
Dichlorodifluoromethane	20	U	20	1.9	ppb v/v			04/07/18 01:10	39.6
Freon 22	5.0	U	5.0	2.6	ppb v/v			04/07/18 00:20	10.02
Freon 22	20	U	20	7.9	ppb v/v			04/07/18 01:10	39.6
1,2-Dichlorotetrafluoroethane	2.0	U	2.0	0.68	ppb v/v			04/07/18 00:20	10.02
1,2-Dichlorotetrafluoroethane	7.9	U	7.9	1.6	ppb v/v			04/07/18 01:10	39.6
Chloromethane	5.0	U	5.0	2.5	ppb v/v			04/07/18 00:20	10.02
Chloromethane	20	U	20	6.3	ppb v/v			04/07/18 01:10	39.6
n-Butane	**5.5**	**D**	5.0	3.1	ppb v/v			04/07/18 00:20	10.02
n-Butane	**6.6**	**J D**	20	1.8	ppb v/v			04/07/18 01:10	39.6
Vinyl chloride	2.0	U	2.0	0.41	ppb v/v			04/07/18 00:20	10.02
Vinyl chloride	7.9	U	7.9	0.71	ppb v/v			04/07/18 01:10	39.6
1,3-Butadiene	2.0	U	2.0	0.65	ppb v/v			04/07/18 00:20	10.02
1,3-Butadiene	7.9	U	7.9	1.5	ppb v/v			04/07/18 01:10	39.6
Bromomethane	2.0	U	2.0	0.62	ppb v/v			04/07/18 00:20	10.02
Bromomethane	7.9	U	7.9	1.4	ppb v/v			04/07/18 01:10	39.6
Chloroethane	5.0	U	5.0	2.1	ppb v/v			04/07/18 00:20	10.02
Chloroethane	20	U	20	5.1	ppb v/v			04/07/18 01:10	39.6
Bromoethene(Vinyl Bromide)	2.0	U	2.0	0.56	ppb v/v			04/07/18 00:20	10.02
Bromoethene(Vinyl Bromide)	7.9	U	7.9	0.87	ppb v/v			04/07/18 01:10	39.6
Trichlorofluoromethane	2.0	U	2.0	0.62	ppb v/v			04/07/18 00:20	10.02
Trichlorofluoromethane	7.9	U	7.9	1.2	ppb v/v			04/07/18 01:10	39.6
Freon TF	2.0	U	2.0	0.31	ppb v/v			04/07/18 00:20	10.02
Freon TF	7.9	U	7.9	1.1	ppb v/v			04/07/18 01:10	39.6
1,1-Dichloroethene	2.0	U	2.0	0.34	ppb v/v			04/07/18 00:20	10.02
1,1-Dichloroethene	7.9	U	7.9	1.4	ppb v/v			04/07/18 01:10	39.6
Acetone	**1000**	**E D**	50	26	ppb v/v			04/07/18 00:20	10.02
Acetone	**1200**	**D**	200	51	ppb v/v			04/07/18 01:10	39.6
Isopropyl alcohol	50	U	50	18	ppb v/v			04/07/18 00:20	10.02
Isopropyl alcohol	**23**	**J B D**	200	5.1	ppb v/v			04/07/18 01:10	39.6
Carbon disulfide	5.0	U	5.0	1.2	ppb v/v			04/07/18 00:20	10.02
Carbon disulfide	20	U	20	1.1	ppb v/v			04/07/18 01:10	39.6
3-Chloropropene	5.0	U	5.0	2.7	ppb v/v			04/07/18 00:20	10.02
3-Chloropropene	20	U	20	2.5	ppb v/v			04/07/18 01:10	39.6
Methylene Chloride	5.0	U	5.0	2.0	ppb v/v			04/07/18 00:20	10.02
Methylene Chloride	**4.4**	**J D**	20	2.7	ppb v/v			04/07/18 01:10	39.6

Client Sample ID: GC-SV-105 (AS)
Lab Sample ID: 200-42918-6

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol	**130**	**D**	50	15	ppb v/v			04/07/18 00:20	10.02
tert-Butyl alcohol	**150**	**J D**	200	67	ppb v/v			04/07/18 01:10	39.6
Methyl tert-butyl ether	2.0	U	2.0	0.61	ppb v/v			04/07/18 00:20	10.02
Methyl tert-butyl ether	7.9	U	7.9	1.6	ppb v/v			04/07/18 01:10	39.6
trans-1,2-Dichloroethene	2.0	U	2.0	0.74	ppb v/v			04/07/18 00:20	10.02
trans-1,2-Dichloroethene	7.9	U	7.9	2.0	ppb v/v			04/07/18 01:10	39.6
n-Hexane	**2.9**	**D**	2.0	1.6	ppb v/v			04/07/18 00:20	10.02
n-Hexane	**3.2**	**J D**	7.9	1.8	ppb v/v			04/07/18 01:10	39.6
1,1-Dichloroethane	2.0	U	2.0	0.26	ppb v/v			04/07/18 00:20	10.02
1,1-Dichloroethane	7.9	U	7.9	0.67	ppb v/v			04/07/18 01:10	39.6
Methyl Ethyl Ketone	**4.0**	**J D**	5.0	2.0	ppb v/v			04/07/18 00:20	10.02
Methyl Ethyl Ketone	20	U	20	4.4	ppb v/v			04/07/18 01:10	39.6
cis-1,2-Dichloroethene	2.0	U	2.0	0.37	ppb v/v			04/07/18 00:20	10.02
cis-1,2-Dichloroethene	7.9	U	7.9	1.1	ppb v/v			04/07/18 01:10	39.6
1,2-Dichloroethene, Total	4.0	U	4.0	1.1	ppb v/v			04/07/18 00:20	10.02
1,2-Dichloroethene, Total	16	U	16	1.1	ppb v/v			04/07/18 01:10	39.6
Chloroform	**1.4**	**J D**	2.0	0.52	ppb v/v			04/07/18 00:20	10.02
Chloroform	**1.5**	**J D**	7.9	0.99	ppb v/v			04/07/18 01:10	39.6
Tetrahydrofuran	50	U	50	26	ppb v/v			04/07/18 00:20	10.02
Tetrahydrofuran	200	U	200	48	ppb v/v			04/07/18 01:10	39.6
1,1,1-Trichloroethane	2.0	U	2.0	0.68	ppb v/v			04/07/18 00:20	10.02
1,1,1-Trichloroethane	7.9	U	7.9	1.0	ppb v/v			04/07/18 01:10	39.6
Cyclohexane	2.0	U	2.0	0.63	ppb v/v			04/07/18 00:20	10.02
Cyclohexane	7.9	U	7.9	1.8	ppb v/v			04/07/18 01:10	39.6
Carbon tetrachloride	0.40	U	0.40	0.24	ppb v/v			04/07/18 00:20	10.02
Carbon tetrachloride	1.6	U	1.6	0.44	ppb v/v			04/07/18 01:10	39.6
2,2,4-Trimethylpentane	2.0	U	2.0	0.88	ppb v/v			04/07/18 00:20	10.02
2,2,4-Trimethylpentane	7.9	U	7.9	1.7	ppb v/v			04/07/18 01:10	39.6
Benzene	2.0	U	2.0	0.71	ppb v/v			04/07/18 00:20	10.02
Benzene	7.9	U	7.9	1.1	ppb v/v			04/07/18 01:10	39.6
1,2-Dichloroethane	2.0	U	2.0	0.63	ppb v/v			04/07/18 00:20	10.02
1,2-Dichloroethane	7.9	U	7.9	1.3	ppb v/v			04/07/18 01:10	39.6
n-Heptane	**5.7**	**D**	2.0	1.4	ppb v/v			04/07/18 00:20	10.02
n-Heptane	**6.2**	**J D**	7.9	2.7	ppb v/v			04/07/18 01:10	39.6
Trichloroethene	**0.32**	**J D**	0.40	0.30	ppb v/v			04/07/18 00:20	10.02
Trichloroethene	1.6	U	1.6	0.36	ppb v/v			04/07/18 01:10	39.6
Methyl methacrylate	5.0	U	5.0	2.2	ppb v/v			04/07/18 00:20	10.02
Methyl methacrylate	20	U	20	4.4	ppb v/v			04/07/18 01:10	39.6
1,2-Dichloropropane	2.0	U	2.0	1.2	ppb v/v			04/07/18 00:20	10.02
1,2-Dichloropropane	7.9	U	7.9	1.4	ppb v/v			04/07/18 01:10	39.6
1,4-Dioxane	50	U	50	13	ppb v/v			04/07/18 00:20	10.02
1,4-Dioxane	200	U	200	30	ppb v/v			04/07/18 01:10	39.6
Bromodichloromethane	2.0	U	2.0	0.94	ppb v/v			04/07/18 00:20	10.02
Bromodichloromethane	7.9	U	7.9	2.3	ppb v/v			04/07/18 01:10	39.6
cis-1,3-Dichloropropene	2.0	U	2.0	0.98	ppb v/v			04/07/18 00:20	10.02
cis-1,3-Dichloropropene	7.9	U	7.9	1.4	ppb v/v			04/07/18 01:10	39.6
methyl isobutyl ketone	5.0	U	5.0	3.6	ppb v/v			04/07/18 00:20	10.02
methyl isobutyl ketone	20	U	20	2.6	ppb v/v			04/07/18 01:10	39.6

Client Sample ID: GC-SV-105 (AS)
Lab Sample ID: 200-42918-6

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**15**	**D**	2.0	0.69	ppb v/v			04/07/18 00:20	10.02
Toluene	**17**	**D**	7.9	1.4	ppb v/v			04/07/18 01:10	39.6
trans-1,3-Dichloropropene	2.0	U	2.0	1.2	ppb v/v			04/07/18 00:20	10.02
trans-1,3-Dichloropropene	7.9	U	7.9	1.5	ppb v/v			04/07/18 01:10	39.6
1,1,2-Trichloroethane	**3.5**	**D**	2.0	0.78	ppb v/v			04/07/18 00:20	10.02
1,1,2-Trichloroethane	**4.3**	**J D**	7.9	0.67	ppb v/v			04/07/18 01:10	39.6
Tetrachloroethene	**6.2**	**D**	0.40	0.29	ppb v/v			04/07/18 00:20	10.02
Tetrachloroethene	**6.3**	**D**	1.6	0.39	ppb v/v			04/07/18 01:10	39.6
Methyl Butyl Ketone (2-Hexanone)	5.0	U	5.0	4.2	ppb v/v			04/07/18 00:20	10.02
Methyl Butyl Ketone (2-Hexanone)	20	U	20	3.4	ppb v/v			04/07/18 01:10	39.6
Dibromochloromethane	2.0	U	2.0	0.71	ppb v/v			04/07/18 00:20	10.02
Dibromochloromethane	7.9	U	7.9	0.67	ppb v/v			04/07/18 01:10	39.6
1,2-Dibromoethane	2.0	U	2.0	0.69	ppb v/v			04/07/18 00:20	10.02
1,2-Dibromoethane	7.9	U	7.9	0.91	ppb v/v			04/07/18 01:10	39.6
Chlorobenzene	2.0	U	2.0	0.40	ppb v/v			04/07/18 00:20	10.02
Chlorobenzene	7.9	U	7.9	0.99	ppb v/v			04/07/18 01:10	39.6
Ethylbenzene	**21**	**D**	2.0	0.73	ppb v/v			04/07/18 00:20	10.02
Ethylbenzene	**22**	**D**	7.9	1.3	ppb v/v			04/07/18 01:10	39.6
m,p-Xylene	**72**	**D**	5.0	0.70	ppb v/v			04/07/18 00:20	10.02
m,p-Xylene	**73**	**D**	20	3.0	ppb v/v			04/07/18 01:10	39.6
Xylene, o-	**24**	**D**	2.0	0.71	ppb v/v			04/07/18 00:20	10.02
Xylene, o-	**25**	**D**	7.9	1.6	ppb v/v			04/07/18 01:10	39.6
Xylene (total)	**96**	**D**	7.0	1.4	ppb v/v			04/07/18 00:20	10.02
Xylene (total)	**98**	**D**	28	1.6	ppb v/v			04/07/18 01:10	39.6
Styrene	2.0	U	2.0	0.86	ppb v/v			04/07/18 00:20	10.02
Styrene	7.9	U	7.9	1.4	ppb v/v			04/07/18 01:10	39.6
Bromoform	2.0	U	2.0	0.86	ppb v/v			04/07/18 00:20	10.02
Bromoform	7.9	U	7.9	1.4	ppb v/v			04/07/18 01:10	39.6
Cumene	2.0	U	2.0	0.59	ppb v/v			04/07/18 00:20	10.02
Cumene	7.9	U	7.9	1.5	ppb v/v			04/07/18 01:10	39.6
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.76	ppb v/v			04/07/18 00:20	10.02
1,1,2,2-Tetrachloroethane	7.9	U	7.9	1.0	ppb v/v			04/07/18 01:10	39.6
n-Propylbenzene	2.0	U	2.0	0.69	ppb v/v			04/07/18 00:20	10.02
n-Propylbenzene	7.9	U	7.9	1.6	ppb v/v			04/07/18 01:10	39.6
4-Ethyltoluene	2.0	U	2.0	0.69	ppb v/v			04/07/18 00:20	10.02
4-Ethyltoluene	7.9	U	7.9	1.6	ppb v/v			04/07/18 01:10	39.6
1,3,5-Trimethylbenzene	2.0	U	2.0	0.58	ppb v/v			04/07/18 00:20	10.02
1,3,5-Trimethylbenzene	7.9	U	7.9	1.6	ppb v/v			04/07/18 01:10	39.6
2-Chlorotoluene	2.0	U	2.0	0.71	ppb v/v			04/07/18 00:20	10.02
2-Chlorotoluene	7.9	U	7.9	1.4	ppb v/v			04/07/18 01:10	39.6
tert-Butylbenzene	2.0	U	2.0	0.58	ppb v/v			04/07/18 00:20	10.02
tert-Butylbenzene	7.9	U	7.9	1.5	ppb v/v			04/07/18 01:10	39.6
1,2,4-Trimethylbenzene	2.0	U	2.0	0.80	ppb v/v			04/07/18 00:20	10.02
1,2,4-Trimethylbenzene	7.9	U	7.9	2.3	ppb v/v			04/07/18 01:10	39.6
sec-Butylbenzene	2.0	U	2.0	0.66	ppb v/v			04/07/18 00:20	10.02
sec-Butylbenzene	7.9	U	7.9	1.5	ppb v/v			04/07/18 01:10	39.6
4-Isopropyltoluene	2.0	U	2.0	0.75	ppb v/v			04/07/18 00:20	10.02
4-Isopropyltoluene	7.9	U	7.9	2.1	ppb v/v			04/07/18 01:10	39.6

Client Sample ID: GC-SV-105 (AS)
Lab Sample ID: 200-42918-6
Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	2.0	U	2.0	0.82	ppb v/v			04/07/18 00:20	10.02
1,3-Dichlorobenzene	7.9	U	7.9	2.0	ppb v/v			04/07/18 01:10	39.6
1,4-Dichlorobenzene	2.0	U	2.0	0.65	ppb v/v			04/07/18 00:20	10.02
1,4-Dichlorobenzene	7.9	U	7.9	2.5	ppb v/v			04/07/18 01:10	39.6
Benzyl chloride	2.0	U	2.0	1.2	ppb v/v			04/07/18 00:20	10.02
Benzyl chloride	7.9	U	7.9	2.7	ppb v/v			04/07/18 01:10	39.6
n-Butylbenzene	2.0	U	2.0	0.80	ppb v/v			04/07/18 00:20	10.02
n-Butylbenzene	7.9	U	7.9	2.7	ppb v/v			04/07/18 01:10	39.6
1,2-Dichlorobenzene	2.0	U	2.0	0.71	ppb v/v			04/07/18 00:20	10.02
1,2-Dichlorobenzene	7.9	U	7.9	1.8	ppb v/v			04/07/18 01:10	39.6
1,2,4-Trichlorobenzene	5.0	U	5.0	2.4	ppb v/v			04/07/18 00:20	10.02
1,2,4-Trichlorobenzene	20	U	20	7.5	ppb v/v			04/07/18 01:10	39.6
Hexachlorobutadiene	2.0	U	2.0	0.82	ppb v/v			04/07/18 00:20	10.02
Hexachlorobutadiene	7.9	U	7.9	2.5	ppb v/v			04/07/18 01:10	39.6
Naphthalene	5.0	U	5.0	3.1	ppb v/v			04/07/18 00:20	10.02
Naphthalene	20	U	20	4.0	ppb v/v			04/07/18 01:10	39.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	25	U	25	9.9	ug/m3			04/07/18 00:20	10.02
Dichlorodifluoromethane	98	U	98	9.2	ug/m3			04/07/18 01:10	39.6
Freon 22	18	U	18	9.2	ug/m3			04/07/18 00:20	10.02
Freon 22	70	U	70	28	ug/m3			04/07/18 01:10	39.6
1,2-Dichlorotetrafluoroethane	14	U	14	4.8	ug/m3			04/07/18 00:20	10.02
1,2-Dichlorotetrafluoroethane	55	U	55	11	ug/m3			04/07/18 01:10	39.6
Chloromethane	10	U	10	5.2	ug/m3			04/07/18 00:20	10.02
Chloromethane	41	U	41	13	ug/m3			04/07/18 01:10	39.6
n-Butane	**13**	**D**	12	7.4	ug/m3			04/07/18 00:20	10.02
n-Butane	**16**	**J D**	47	4.3	ug/m3			04/07/18 01:10	39.6
Vinyl chloride	5.1	U	5.1	1.1	ug/m3			04/07/18 00:20	10.02
Vinyl chloride	20	U	20	1.8	ug/m3			04/07/18 01:10	39.6
1,3-Butadiene	4.4	U	4.4	1.4	ug/m3			04/07/18 00:20	10.02
1,3-Butadiene	18	U	18	3.2	ug/m3			04/07/18 01:10	39.6
Bromomethane	7.8	U	7.8	2.4	ug/m3			04/07/18 00:20	10.02
Bromomethane	31	U	31	5.5	ug/m3			04/07/18 01:10	39.6
Chloroethane	13	U	13	5.6	ug/m3			04/07/18 00:20	10.02
Chloroethane	52	U	52	14	ug/m3			04/07/18 01:10	39.6
Bromoethene(Vinyl Bromide)	8.8	U	8.8	2.5	ug/m3			04/07/18 00:20	10.02
Bromoethene(Vinyl Bromide)	35	U	35	3.8	ug/m3			04/07/18 01:10	39.6
Trichlorofluoromethane	11	U	11	3.5	ug/m3			04/07/18 00:20	10.02
Trichlorofluoromethane	44	U	44	6.9	ug/m3			04/07/18 01:10	39.6
Freon TF	15	U	15	2.4	ug/m3			04/07/18 00:20	10.02
Freon TF	61	U	61	8.2	ug/m3			04/07/18 01:10	39.6
1,1-Dichloroethene	7.9	U	7.9	1.4	ug/m3			04/07/18 00:20	10.02
1,1-Dichloroethene	31	U	31	5.5	ug/m3			04/07/18 01:10	39.6
Acetone	**2400**	**E D**	120	62	ug/m3			04/07/18 00:20	10.02
Acetone	**2800**	**D**	470	120	ug/m3			04/07/18 01:10	39.6
Isopropyl alcohol	120	U	120	44	ug/m3			04/07/18 00:20	10.02
Isopropyl alcohol	**56**	**J B D**	490	13	ug/m3			04/07/18 01:10	39.6
Carbon disulfide	16	U	16	3.7	ug/m3			04/07/18 00:20	10.02

Client Sample ID: GC-SV-105 (AS)
Lab Sample ID: 200-42918-6
Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	62	U	62	3.5	ug/m3			04/07/18 01:10	39.6
3-Chloropropene	16	U	16	8.5	ug/m3			04/07/18 00:20	10.02
3-Chloropropene	62	U	62	7.8	ug/m3			04/07/18 01:10	39.6
Methylene Chloride	17	U	17	7.0	ug/m3			04/07/18 00:20	10.02
Methylene Chloride	**15**	**J D**	69	9.4	ug/m3			04/07/18 01:10	39.6
tert-Butyl alcohol	**400**	**D**	150	46	ug/m3			04/07/18 00:20	10.02
tert-Butyl alcohol	**440**	**J D**	600	200	ug/m3			04/07/18 01:10	39.6
Methyl tert-butyl ether	7.2	U	7.2	2.2	ug/m3			04/07/18 00:20	10.02
Methyl tert-butyl ether	29	U	29	5.9	ug/m3			04/07/18 01:10	39.6
trans-1,2-Dichloroethene	7.9	U	7.9	2.9	ug/m3			04/07/18 00:20	10.02
trans-1,2-Dichloroethene	31	U	31	7.9	ug/m3			04/07/18 01:10	39.6
n-Hexane	**10**	**D**	7.1	5.7	ug/m3			04/07/18 00:20	10.02
n-Hexane	**11**	**J D**	28	6.4	ug/m3			04/07/18 01:10	39.6
1,1-Dichloroethane	8.1	U	8.1	1.1	ug/m3			04/07/18 00:20	10.02
1,1-Dichloroethane	32	U	32	2.7	ug/m3			04/07/18 01:10	39.6
Methyl Ethyl Ketone	**12**	**J D**	15	5.9	ug/m3			04/07/18 00:20	10.02
Methyl Ethyl Ketone	58	U	58	13	ug/m3			04/07/18 01:10	39.6
cis-1,2-Dichloroethene	7.9	U	7.9	1.5	ug/m3			04/07/18 00:20	10.02
cis-1,2-Dichloroethene	31	U	31	4.6	ug/m3			04/07/18 01:10	39.6
1,2-Dichloroethene, Total	16	U	16	4.4	ug/m3			04/07/18 00:20	10.02
1,2-Dichloroethene, Total	63	U	63	4.6	ug/m3			04/07/18 01:10	39.6
Chloroform	**7.0**	**J D**	9.8	2.5	ug/m3			04/07/18 00:20	10.02
Chloroform	**7.3**	**J D**	39	4.8	ug/m3			04/07/18 01:10	39.6
Tetrahydrofuran	150	U	150	77	ug/m3			04/07/18 00:20	10.02
Tetrahydrofuran	580	U	580	140	ug/m3			04/07/18 01:10	39.6
1,1,1-Trichloroethane	11	U	11	3.7	ug/m3			04/07/18 00:20	10.02
1,1,1-Trichloroethane	43	U	43	5.6	ug/m3			04/07/18 01:10	39.6
Cyclohexane	6.9	U	6.9	2.2	ug/m3			04/07/18 00:20	10.02
Cyclohexane	27	U	27	6.1	ug/m3			04/07/18 01:10	39.6
Carbon tetrachloride	2.5	U	2.5	1.5	ug/m3			04/07/18 00:20	10.02
Carbon tetrachloride	10	U	10	2.7	ug/m3			04/07/18 01:10	39.6
2,2,4-Trimethylpentane	9.4	U	9.4	4.1	ug/m3			04/07/18 00:20	10.02
2,2,4-Trimethylpentane	37	U	37	8.0	ug/m3			04/07/18 01:10	39.6
Benzene	6.4	U	6.4	2.3	ug/m3			04/07/18 00:20	10.02
Benzene	25	U	25	3.5	ug/m3			04/07/18 01:10	39.6
1,2-Dichloroethane	8.1	U	8.1	2.6	ug/m3			04/07/18 00:20	10.02
1,2-Dichloroethane	32	U	32	5.4	ug/m3			04/07/18 01:10	39.6
n-Heptane	**24**	**D**	8.2	5.7	ug/m3			04/07/18 00:20	10.02
n-Heptane	**25**	**J D**	32	11	ug/m3			04/07/18 01:10	39.6
Trichloroethene	**1.7**	**J D**	2.2	1.6	ug/m3			04/07/18 00:20	10.02
Trichloroethene	8.5	U	8.5	1.9	ug/m3			04/07/18 01:10	39.6
Methyl methacrylate	21	U	21	9.0	ug/m3			04/07/18 00:20	10.02
Methyl methacrylate	81	U	81	18	ug/m3			04/07/18 01:10	39.6
1,2-Dichloropropane	9.3	U	9.3	5.6	ug/m3			04/07/18 00:20	10.02
1,2-Dichloropropane	37	U	37	6.4	ug/m3			04/07/18 01:10	39.6
1,4-Dioxane	180	U	180	47	ug/m3			04/07/18 00:20	10.02
1,4-Dioxane	710	U	710	110	ug/m3			04/07/18 01:10	39.6
Bromodichloromethane	13	U	13	6.3	ug/m3			04/07/18 00:20	10.02

Client Sample ID: GC-SV-105 (AS)
Lab Sample ID: 200-42918-6
Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	53	U	53	16	ug/m3			04/07/18 01:10	39.6
cis-1,3-Dichloropropene	9.1	U	9.1	4.5	ug/m3			04/07/18 00:20	10.02
cis-1,3-Dichloropropene	36	U	36	6.5	ug/m3			04/07/18 01:10	39.6
methyl isobutyl ketone	21	U	21	15	ug/m3			04/07/18 00:20	10.02
methyl isobutyl ketone	81	U	81	11	ug/m3			04/07/18 01:10	39.6
Toluene	**57**	**D**	7.6	2.6	ug/m3			04/07/18 00:20	10.02
Toluene	**62**	**D**	30	5.2	ug/m3			04/07/18 01:10	39.6
trans-1,3-Dichloropropene	9.1	U	9.1	5.5	ug/m3			04/07/18 00:20	10.02
trans-1,3-Dichloropropene	36	U	36	6.8	ug/m3			04/07/18 01:10	39.6
1,1,2-Trichloroethane	**19**	**D**	11	4.3	ug/m3			04/07/18 00:20	10.02
1,1,2-Trichloroethane	**23**	**J D**	43	3.7	ug/m3			04/07/18 01:10	39.6
Tetrachloroethene	**42**	**D**	2.7	2.0	ug/m3			04/07/18 00:20	10.02
Tetrachloroethene	**43**	**D**	11	2.6	ug/m3			04/07/18 01:10	39.6
Methyl Butyl Ketone (2-Hexanone)	21	U	21	17	ug/m3			04/07/18 00:20	10.02
Methyl Butyl Ketone (2-Hexanone)	81	U	81	14	ug/m3			04/07/18 01:10	39.6
Dibromochloromethane	17	U	17	6.1	ug/m3			04/07/18 00:20	10.02
Dibromochloromethane	67	U	67	5.7	ug/m3			04/07/18 01:10	39.6
1,2-Dibromoethane	15	U	15	5.3	ug/m3			04/07/18 00:20	10.02
1,2-Dibromoethane	61	U	61	7.0	ug/m3			04/07/18 01:10	39.6
Chlorobenzene	9.2	U	9.2	1.8	ug/m3			04/07/18 00:20	10.02
Chlorobenzene	36	U	36	4.6	ug/m3			04/07/18 01:10	39.6
Ethylbenzene	**92**	**D**	8.7	3.2	ug/m3			04/07/18 00:20	10.02
Ethylbenzene	**94**	**D**	34	5.8	ug/m3			04/07/18 01:10	39.6
m,p-Xylene	**310**	**D**	22	3.0	ug/m3			04/07/18 00:20	10.02
m,p-Xylene	**320**	**D**	86	13	ug/m3			04/07/18 01:10	39.6
Xylene, o-	**110**	**D**	8.7	3.1	ug/m3			04/07/18 00:20	10.02
Xylene, o-	**110**	**D**	34	6.9	ug/m3			04/07/18 01:10	39.6
Xylene (total)	**420**	**D**	30	6.1	ug/m3			04/07/18 00:20	10.02
Xylene (total)	**430**	**D**	120	6.9	ug/m3			04/07/18 01:10	39.6
Styrene	8.5	U	8.5	3.7	ug/m3			04/07/18 00:20	10.02
Styrene	34	U	34	5.9	ug/m3			04/07/18 01:10	39.6
Bromoform	21	U	21	8.9	ug/m3			04/07/18 00:20	10.02
Bromoform	82	U	82	14	ug/m3			04/07/18 01:10	39.6
Cumene	9.9	U	9.9	2.9	ug/m3			04/07/18 00:20	10.02
Cumene	39	U	39	7.6	ug/m3			04/07/18 01:10	39.6
1,1,2,2-Tetrachloroethane	14	U	14	5.2	ug/m3			04/07/18 00:20	10.02
1,1,2,2-Tetrachloroethane	54	U	54	7.1	ug/m3			04/07/18 01:10	39.6
n-Propylbenzene	9.9	U	9.9	3.4	ug/m3			04/07/18 00:20	10.02
n-Propylbenzene	39	U	39	7.8	ug/m3			04/07/18 01:10	39.6
4-Ethyltoluene	9.9	U	9.9	3.4	ug/m3			04/07/18 00:20	10.02
4-Ethyltoluene	39	U	39	7.8	ug/m3			04/07/18 01:10	39.6
1,3,5-Trimethylbenzene	9.9	U	9.9	2.9	ug/m3			04/07/18 00:20	10.02
1,3,5-Trimethylbenzene	39	U	39	7.8	ug/m3			04/07/18 01:10	39.6
2-Chlorotoluene	10	U	10	3.7	ug/m3			04/07/18 00:20	10.02
2-Chlorotoluene	41	U	41	7.2	ug/m3			04/07/18 01:10	39.6
tert-Butylbenzene	11	U	11	3.2	ug/m3			04/07/18 00:20	10.02
tert-Butylbenzene	43	U	43	8.0	ug/m3			04/07/18 01:10	39.6
1,2,4-Trimethylbenzene	9.9	U	9.9	3.9	ug/m3			04/07/18 00:20	10.02

Client Sample ID: GC-SV-105 (AS)
Lab Sample ID: 200-42918-6

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	39	U	39	11	ug/m3			04/07/18 01:10	39.6
sec-Butylbenzene	11	U	11	3.6	ug/m3			04/07/18 00:20	10.02
sec-Butylbenzene	43	U	43	8.0	ug/m3			04/07/18 01:10	39.6
4-Isopropyltoluene	11	U	11	4.1	ug/m3			04/07/18 00:20	10.02
4-Isopropyltoluene	43	U	43	11	ug/m3			04/07/18 01:10	39.6
1,3-Dichlorobenzene	12	U	12	4.9	ug/m3			04/07/18 00:20	10.02
1,3-Dichlorobenzene	48	U	48	12	ug/m3			04/07/18 01:10	39.6
1,4-Dichlorobenzene	12	U	12	3.9	ug/m3			04/07/18 00:20	10.02
1,4-Dichlorobenzene	48	U	48	15	ug/m3			04/07/18 01:10	39.6
Benzyl chloride	10	U	10	6.2	ug/m3			04/07/18 00:20	10.02
Benzyl chloride	41	U	41	14	ug/m3			04/07/18 01:10	39.6
n-Butylbenzene	11	U	11	4.4	ug/m3			04/07/18 00:20	10.02
n-Butylbenzene	43	U	43	15	ug/m3			04/07/18 01:10	39.6
1,2-Dichlorobenzene	12	U	12	4.3	ug/m3			04/07/18 00:20	10.02
1,2-Dichlorobenzene	48	U	48	11	ug/m3			04/07/18 01:10	39.6
1,2,4-Trichlorobenzene	37	U	37	18	ug/m3			04/07/18 00:20	10.02
1,2,4-Trichlorobenzene	150	U	150	56	ug/m3			04/07/18 01:10	39.6
Hexachlorobutadiene	21	U	21	8.8	ug/m3			04/07/18 00:20	10.02
Hexachlorobutadiene	84	U	84	27	ug/m3			04/07/18 01:10	39.6
Naphthalene	26	U	26	16	ug/m3			04/07/18 00:20	10.02
Naphthalene	100	U	100	21	ug/m3			04/07/18 01:10	39.6

Client Sample ID: GC-IA-105 (AS)
Lab Sample ID: 200-42918-7

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.37**	**J**	0.50	0.20	ppb v/v			04/06/18 01:26	1
Freon 22	0.50	U	0.50	0.26	ppb v/v			04/06/18 01:26	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.068	ppb v/v			04/06/18 01:26	1
Chloromethane	0.50	U	0.50	0.25	ppb v/v			04/06/18 01:26	1
n-Butane	**12**		0.50	0.31	ppb v/v			04/06/18 01:26	1
Vinyl chloride	0.20	U	0.20	0.041	ppb v/v			04/06/18 01:26	1
1,3-Butadiene	0.20	U	0.20	0.065	ppb v/v			04/06/18 01:26	1
Bromomethane	0.20	U	0.20	0.062	ppb v/v			04/06/18 01:26	1
Chloroethane	**0.30**	**J**	0.50	0.21	ppb v/v			04/06/18 01:26	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.056	ppb v/v			04/06/18 01:26	1
Trichlorofluoromethane	**0.18**	**J**	0.20	0.062	ppb v/v			04/06/18 01:26	1
Freon TF	**0.060**	**J**	0.20	0.031	ppb v/v			04/06/18 01:26	1
1,1-Dichloroethene	0.20	U	0.20	0.034	ppb v/v			04/06/18 01:26	1
Acetone	**1200**	**E**	5.0	2.6	ppb v/v			04/06/18 01:26	1
Isopropyl alcohol	**19**		5.0	1.8	ppb v/v			04/06/18 01:26	1
Carbon disulfide	0.50	U	0.50	0.12	ppb v/v			04/06/18 01:26	1
3-Chloropropene	0.50	U	0.50	0.27	ppb v/v			04/06/18 01:26	1
Methylene Chloride	**1.4**		0.50	0.20	ppb v/v			04/06/18 01:26	1
tert-Butyl alcohol	5.0	U	5.0	1.5	ppb v/v			04/06/18 01:26	1
Methyl tert-butyl ether	0.20	U	0.20	0.061	ppb v/v			04/06/18 01:26	1

Client Sample ID: GC-IA-105 (AS)
Lab Sample ID: 200-42918-7

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.20	U	0.20	0.074	ppb v/v			04/06/18 01:26	1
n-Hexane	**0.50**		0.20	0.16	ppb v/v			04/06/18 01:26	1
1,1-Dichloroethane	0.20	U	0.20	0.026	ppb v/v			04/06/18 01:26	1
Methyl Ethyl Ketone	**0.99**		0.50	0.20	ppb v/v			04/06/18 01:26	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.037	ppb v/v			04/06/18 01:26	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.11	ppb v/v			04/06/18 01:26	1
Chloroform	**1.5**		0.20	0.052	ppb v/v			04/06/18 01:26	1
Tetrahydrofuran	5.0	U	5.0	2.6	ppb v/v			04/06/18 01:26	1
1,1,1-Trichloroethane	0.20	U	0.20	0.068	ppb v/v			04/06/18 01:26	1
Cyclohexane	**0.14**	**J**	0.20	0.063	ppb v/v			04/06/18 01:26	1
Carbon tetrachloride	**0.11**		0.040	0.024	ppb v/v			04/06/18 01:26	1
2,2,4-Trimethylpentane	**0.29**		0.20	0.088	ppb v/v			04/06/18 01:26	1
Benzene	**0.34**		0.20	0.071	ppb v/v			04/06/18 01:26	1
1,2-Dichloroethane	**0.066**	**J**	0.20	0.063	ppb v/v			04/06/18 01:26	1
n-Heptane	**2.5**		0.20	0.14	ppb v/v			04/06/18 01:26	1
Trichloroethene	0.040	U	0.040	0.030	ppb v/v			04/06/18 01:26	1
Methyl methacrylate	0.50	U	0.50	0.22	ppb v/v			04/06/18 01:26	1
1,2-Dichloropropane	0.20	U	0.20	0.12	ppb v/v			04/06/18 01:26	1
1,4-Dioxane	5.0	U	5.0	1.3	ppb v/v			04/06/18 01:26	1
Bromodichloromethane	0.20	U	0.20	0.094	ppb v/v			04/06/18 01:26	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.098	ppb v/v			04/06/18 01:26	1
methyl isobutyl ketone	0.50	U	0.50	0.36	ppb v/v			04/06/18 01:26	1
Toluene	**1.9**		0.20	0.069	ppb v/v			04/06/18 01:26	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.12	ppb v/v			04/06/18 01:26	1
1,1,2-Trichloroethane	0.20	U	0.20	0.078	ppb v/v			04/06/18 01:26	1
Tetrachloroethene	**0.055**		0.040	0.029	ppb v/v			04/06/18 01:26	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.42	ppb v/v			04/06/18 01:26	1
Dibromochloromethane	0.20	U	0.20	0.071	ppb v/v			04/06/18 01:26	1
1,2-Dibromoethane	0.20	U	0.20	0.069	ppb v/v			04/06/18 01:26	1
Chlorobenzene	0.20	U	0.20	0.040	ppb v/v			04/06/18 01:26	1
Ethylbenzene	**0.53**		0.20	0.073	ppb v/v			04/06/18 01:26	1
m,p-Xylene	**2.1**		0.50	0.070	ppb v/v			04/06/18 01:26	1
Xylene, o-	**0.57**		0.20	0.071	ppb v/v			04/06/18 01:26	1
Xylene (total)	**2.7**		0.70	0.14	ppb v/v			04/06/18 01:26	1
Styrene	0.20	U	0.20	0.086	ppb v/v			04/06/18 01:26	1
Bromoform	0.20	U	0.20	0.086	ppb v/v			04/06/18 01:26	1
Cumene	0.20	U	0.20	0.059	ppb v/v			04/06/18 01:26	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.076	ppb v/v			04/06/18 01:26	1
n-Propylbenzene	0.20	U	0.20	0.069	ppb v/v			04/06/18 01:26	1
4-Ethyltoluene	0.20	U	0.20	0.069	ppb v/v			04/06/18 01:26	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.058	ppb v/v			04/06/18 01:26	1
2-Chlorotoluene	0.20	U	0.20	0.071	ppb v/v			04/06/18 01:26	1
tert-Butylbenzene	0.20	U	0.20	0.058	ppb v/v			04/06/18 01:26	1
1,2,4-Trimethylbenzene	**0.10**	**J**	0.20	0.080	ppb v/v			04/06/18 01:26	1
sec-Butylbenzene	0.20	U	0.20	0.066	ppb v/v			04/06/18 01:26	1
4-Isopropyltoluene	0.20	U	0.20	0.075	ppb v/v			04/06/18 01:26	1
1,3-Dichlorobenzene	0.20	U	0.20	0.082	ppb v/v			04/06/18 01:26	1
1,4-Dichlorobenzene	0.20	U	0.20	0.065	ppb v/v			04/06/18 01:26	1

Client Sample ID: GC-IA-105 (AS)
Lab Sample ID: 200-42918-7

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl chloride	0.20	U	0.20	0.12	ppb v/v			04/06/18 01:26	1
n-Butylbenzene	0.20	U	0.20	0.080	ppb v/v			04/06/18 01:26	1
1,2-Dichlorobenzene	0.20	U	0.20	0.071	ppb v/v			04/06/18 01:26	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.24	ppb v/v			04/06/18 01:26	1
Hexachlorobutadiene	0.20	U	0.20	0.082	ppb v/v			04/06/18 01:26	1
Naphthalene	0.50	U	0.50	0.31	ppb v/v			04/06/18 01:26	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**1.8**	**J**	2.5	0.99	ug/m3			04/06/18 01:26	1
Freon 22	1.8	U	1.8	0.92	ug/m3			04/06/18 01:26	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.48	ug/m3			04/06/18 01:26	1
Chloromethane	1.0	U	1.0	0.52	ug/m3			04/06/18 01:26	1
n-Butane	**27**		1.2	0.74	ug/m3			04/06/18 01:26	1
Vinyl chloride	0.51	U	0.51	0.10	ug/m3			04/06/18 01:26	1
1,3-Butadiene	0.44	U	0.44	0.14	ug/m3			04/06/18 01:26	1
Bromomethane	0.78	U	0.78	0.24	ug/m3			04/06/18 01:26	1
Chloroethane	**0.80**	**J**	1.3	0.55	ug/m3			04/06/18 01:26	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.24	ug/m3			04/06/18 01:26	1
Trichlorofluoromethane	**1.0**	**J**	1.1	0.35	ug/m3			04/06/18 01:26	1
Freon TF	**0.46**	**J**	1.5	0.24	ug/m3			04/06/18 01:26	1
1,1-Dichloroethene	0.79	U	0.79	0.13	ug/m3			04/06/18 01:26	1
Acetone	**2700**	**E**	12	6.2	ug/m3			04/06/18 01:26	1
Isopropyl alcohol	**48**		12	4.4	ug/m3			04/06/18 01:26	1
Carbon disulfide	1.6	U	1.6	0.37	ug/m3			04/06/18 01:26	1
3-Chloropropene	1.6	U	1.6	0.85	ug/m3			04/06/18 01:26	1
Methylene Chloride	**4.8**		1.7	0.69	ug/m3			04/06/18 01:26	1
tert-Butyl alcohol	15	U	15	4.5	ug/m3			04/06/18 01:26	1
Methyl tert-butyl ether	0.72	U	0.72	0.22	ug/m3			04/06/18 01:26	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.29	ug/m3			04/06/18 01:26	1
n-Hexane	**1.8**		0.70	0.56	ug/m3			04/06/18 01:26	1
1,1-Dichloroethane	0.81	U	0.81	0.11	ug/m3			04/06/18 01:26	1
Methyl Ethyl Ketone	**2.9**		1.5	0.59	ug/m3			04/06/18 01:26	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.15	ug/m3			04/06/18 01:26	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.44	ug/m3			04/06/18 01:26	1
Chloroform	**7.4**		0.98	0.25	ug/m3			04/06/18 01:26	1
Tetrahydrofuran	15	U	15	7.7	ug/m3			04/06/18 01:26	1
1,1,1-Trichloroethane	1.1	U	1.1	0.37	ug/m3			04/06/18 01:26	1
Cyclohexane	**0.49**	**J**	0.69	0.22	ug/m3			04/06/18 01:26	1
Carbon tetrachloride	**0.67**		0.25	0.15	ug/m3			04/06/18 01:26	1
2,2,4-Trimethylpentane	**1.4**		0.93	0.41	ug/m3			04/06/18 01:26	1
Benzene	**1.1**		0.64	0.23	ug/m3			04/06/18 01:26	1
1,2-Dichloroethane	**0.27**	**J**	0.81	0.25	ug/m3			04/06/18 01:26	1
n-Heptane	**10**		0.82	0.57	ug/m3			04/06/18 01:26	1
Trichloroethene	0.21	U	0.21	0.16	ug/m3			04/06/18 01:26	1
Methyl methacrylate	2.0	U	2.0	0.90	ug/m3			04/06/18 01:26	1
1,2-Dichloropropane	0.92	U	0.92	0.55	ug/m3			04/06/18 01:26	1
1,4-Dioxane	18	U	18	4.7	ug/m3			04/06/18 01:26	1
Bromodichloromethane	1.3	U	1.3	0.63	ug/m3			04/06/18 01:26	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.44	ug/m3			04/06/18 01:26	1

Client Sample ID: GC-IA-105 (AS)
Lab Sample ID: 200-42918-7

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	2.0	U	2.0	1.5	ug/m3			04/06/18 01:26	1
Toluene	**7.1**		0.75	0.26	ug/m3			04/06/18 01:26	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.54	ug/m3			04/06/18 01:26	1
1,1,2-Trichloroethane	1.1	U	1.1	0.43	ug/m3			04/06/18 01:26	1
Tetrachloroethene	**0.37**		0.27	0.20	ug/m3			04/06/18 01:26	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	1.7	ug/m3			04/06/18 01:26	1
Dibromochloromethane	1.7	U	1.7	0.60	ug/m3			04/06/18 01:26	1
1,2-Dibromoethane	1.5	U	1.5	0.53	ug/m3			04/06/18 01:26	1
Chlorobenzene	0.92	U	0.92	0.18	ug/m3			04/06/18 01:26	1
Ethylbenzene	**2.3**		0.87	0.32	ug/m3			04/06/18 01:26	1
m,p-Xylene	**9.0**		2.2	0.30	ug/m3			04/06/18 01:26	1
Xylene, o-	**2.5**		0.87	0.31	ug/m3			04/06/18 01:26	1
Xylene (total)	**12**		3.0	0.61	ug/m3			04/06/18 01:26	1
Styrene	0.85	U	0.85	0.37	ug/m3			04/06/18 01:26	1
Bromoform	2.1	U	2.1	0.89	ug/m3			04/06/18 01:26	1
Cumene	0.98	U	0.98	0.29	ug/m3			04/06/18 01:26	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.52	ug/m3			04/06/18 01:26	1
n-Propylbenzene	0.98	U	0.98	0.34	ug/m3			04/06/18 01:26	1
4-Ethyltoluene	0.98	U	0.98	0.34	ug/m3			04/06/18 01:26	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.29	ug/m3			04/06/18 01:26	1
2-Chlorotoluene	1.0	U	1.0	0.37	ug/m3			04/06/18 01:26	1
tert-Butylbenzene	1.1	U	1.1	0.32	ug/m3			04/06/18 01:26	1
1,2,4-Trimethylbenzene	**0.51**	**J**	0.98	0.39	ug/m3			04/06/18 01:26	1
sec-Butylbenzene	1.1	U	1.1	0.36	ug/m3			04/06/18 01:26	1
4-Isopropyltoluene	1.1	U	1.1	0.41	ug/m3			04/06/18 01:26	1
1,3-Dichlorobenzene	1.2	U	1.2	0.49	ug/m3			04/06/18 01:26	1
1,4-Dichlorobenzene	1.2	U	1.2	0.39	ug/m3			04/06/18 01:26	1
Benzyl chloride	1.0	U	1.0	0.62	ug/m3			04/06/18 01:26	1
n-Butylbenzene	1.1	U	1.1	0.44	ug/m3			04/06/18 01:26	1
1,2-Dichlorobenzene	1.2	U	1.2	0.43	ug/m3			04/06/18 01:26	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.8	ug/m3			04/06/18 01:26	1
Hexachlorobutadiene	2.1	U	2.1	0.87	ug/m3			04/06/18 01:26	1
Naphthalene	2.6	U	2.6	1.6	ug/m3			04/06/18 01:26	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	54	U	54	21	ppb v/v			04/06/18 19:18	107
Freon 22	54	U	54	28	ppb v/v			04/06/18 19:18	107
1,2-Dichlorotetrafluoroethane	21	U	21	7.3	ppb v/v			04/06/18 19:18	107
Chloromethane	54	U	54	27	ppb v/v			04/06/18 19:18	107
n-Butane	54	U	54	33	ppb v/v			04/06/18 19:18	107
Vinyl chloride	21	U	21	4.4	ppb v/v			04/06/18 19:18	107
1,3-Butadiene	21	U	21	7.0	ppb v/v			04/06/18 19:18	107
Bromomethane	21	U	21	6.6	ppb v/v			04/06/18 19:18	107
Chloroethane	54	U	54	22	ppb v/v			04/06/18 19:18	107
Bromoethene(Vinyl Bromide)	21	U	21	6.0	ppb v/v			04/06/18 19:18	107
Trichlorofluoromethane	21	U	21	6.6	ppb v/v			04/06/18 19:18	107
Freon TF	21	U	21	3.3	ppb v/v			04/06/18 19:18	107
1,1-Dichloroethene	21	U	21	3.6	ppb v/v			04/06/18 19:18	107

Client Sample ID: GC-IA-105 (AS)
Lab Sample ID: 200-42918-7

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3000**	**D**	540	280	ppb v/v			04/06/18 19:18	107
Isopropyl alcohol	540	U	540	190	ppb v/v			04/06/18 19:18	107
Carbon disulfide	54	U	54	13	ppb v/v			04/06/18 19:18	107
3-Chloropropene	54	U	54	29	ppb v/v			04/06/18 19:18	107
Methylene Chloride	54	U	54	21	ppb v/v			04/06/18 19:18	107
tert-Butyl alcohol	540	U	540	160	ppb v/v			04/06/18 19:18	107
Methyl tert-butyl ether	21	U	21	6.5	ppb v/v			04/06/18 19:18	107
trans-1,2-Dichloroethene	21	U	21	7.9	ppb v/v			04/06/18 19:18	107
n-Hexane	21	U	21	17	ppb v/v			04/06/18 19:18	107
1,1-Dichloroethane	21	U	21	2.8	ppb v/v			04/06/18 19:18	107
Methyl Ethyl Ketone	54	U	54	21	ppb v/v			04/06/18 19:18	107
cis-1,2-Dichloroethene	21	U	21	4.0	ppb v/v			04/06/18 19:18	107
1,2-Dichloroethene, Total	43	U	43	12	ppb v/v			04/06/18 19:18	107
Chloroform	21	U	21	5.6	ppb v/v			04/06/18 19:18	107
Tetrahydrofuran	540	U	540	280	ppb v/v			04/06/18 19:18	107
1,1,1-Trichloroethane	21	U	21	7.3	ppb v/v			04/06/18 19:18	107
Cyclohexane	21	U	21	6.7	ppb v/v			04/06/18 19:18	107
Carbon tetrachloride	4.3	U	4.3	2.6	ppb v/v			04/06/18 19:18	107
2,2,4-Trimethylpentane	21	U	21	9.4	ppb v/v			04/06/18 19:18	107
Benzene	21	U	21	7.6	ppb v/v			04/06/18 19:18	107
1,2-Dichloroethane	21	U	21	6.7	ppb v/v			04/06/18 19:18	107
n-Heptane	21	U	21	15	ppb v/v			04/06/18 19:18	107
Trichloroethene	4.3	U	4.3	3.2	ppb v/v			04/06/18 19:18	107
Methyl methacrylate	54	U	54	24	ppb v/v			04/06/18 19:18	107
1,2-Dichloropropane	21	U	21	13	ppb v/v			04/06/18 19:18	107
1,4-Dioxane	540	U	540	140	ppb v/v			04/06/18 19:18	107
Bromodichloromethane	21	U	21	10	ppb v/v			04/06/18 19:18	107
cis-1,3-Dichloropropene	21	U	21	10	ppb v/v			04/06/18 19:18	107
methyl isobutyl ketone	54	U	54	39	ppb v/v			04/06/18 19:18	107
Toluene	21	U	21	7.4	ppb v/v			04/06/18 19:18	107
trans-1,3-Dichloropropene	21	U	21	13	ppb v/v			04/06/18 19:18	107
1,1,2-Trichloroethane	21	U	21	8.3	ppb v/v			04/06/18 19:18	107
Tetrachloroethene	4.3	U	4.3	3.1	ppb v/v			04/06/18 19:18	107
Methyl Butyl Ketone (2-Hexanone)	54	U	54	45	ppb v/v			04/06/18 19:18	107
Dibromochloromethane	21	U	21	7.6	ppb v/v			04/06/18 19:18	107
1,2-Dibromoethane	21	U	21	7.4	ppb v/v			04/06/18 19:18	107
Chlorobenzene	21	U	21	4.3	ppb v/v			04/06/18 19:18	107
Ethylbenzene	21	U	21	7.8	ppb v/v			04/06/18 19:18	107
m,p-Xylene	54	U	54	7.5	ppb v/v			04/06/18 19:18	107
Xylene, o-	21	U	21	7.6	ppb v/v			04/06/18 19:18	107
Xylene (total)	75	U	75	15	ppb v/v			04/06/18 19:18	107
Styrene	21	U	21	9.2	ppb v/v			04/06/18 19:18	107
Bromoform	21	U	21	9.2	ppb v/v			04/06/18 19:18	107
Cumene	21	U	21	6.3	ppb v/v			04/06/18 19:18	107
1,1,2,2-Tetrachloroethane	21	U	21	8.1	ppb v/v			04/06/18 19:18	107
n-Propylbenzene	21	U	21	7.4	ppb v/v			04/06/18 19:18	107
4-Ethyltoluene	21	U	21	7.4	ppb v/v			04/06/18 19:18	107
1,3,5-Trimethylbenzene	21	U	21	6.2	ppb v/v			04/06/18 19:18	107

Client Sample ID: GC-IA-105 (AS)
Lab Sample ID: 200-42918-7

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	21	U	21	7.6	ppb v/v			04/06/18 19:18	107
tert-Butylbenzene	21	U	21	6.2	ppb v/v			04/06/18 19:18	107
1,2,4-Trimethylbenzene	21	U	21	8.6	ppb v/v			04/06/18 19:18	107
sec-Butylbenzene	21	U	21	7.1	ppb v/v			04/06/18 19:18	107
4-Isopropyltoluene	21	U	21	8.0	ppb v/v			04/06/18 19:18	107
1,3-Dichlorobenzene	21	U	21	8.8	ppb v/v			04/06/18 19:18	107
1,4-Dichlorobenzene	21	U	21	7.0	ppb v/v			04/06/18 19:18	107
Benzyl chloride	21	U	21	13	ppb v/v			04/06/18 19:18	107
n-Butylbenzene	21	U	21	8.6	ppb v/v			04/06/18 19:18	107
1,2-Dichlorobenzene	21	U	21	7.6	ppb v/v			04/06/18 19:18	107
1,2,4-Trichlorobenzene	54	U	54	26	ppb v/v			04/06/18 19:18	107
Hexachlorobutadiene	21	U	21	8.8	ppb v/v			04/06/18 19:18	107
Naphthalene	54	U	54	33	ppb v/v			04/06/18 19:18	107

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	260	U	260	110	ug/m3			04/06/18 19:18	107
Freon 22	190	U	190	98	ug/m3			04/06/18 19:18	107
1,2-Dichlorotetrafluoroethane	150	U	150	51	ug/m3			04/06/18 19:18	107
Chloromethane	110	U	110	55	ug/m3			04/06/18 19:18	107
n-Butane	130	U	130	79	ug/m3			04/06/18 19:18	107
Vinyl chloride	55	U	55	11	ug/m3			04/06/18 19:18	107
1,3-Butadiene	47	U	47	15	ug/m3			04/06/18 19:18	107
Bromomethane	83	U	83	26	ug/m3			04/06/18 19:18	107
Chloroethane	140	U	140	59	ug/m3			04/06/18 19:18	107
Bromoethene(Vinyl Bromide)	94	U	94	26	ug/m3			04/06/18 19:18	107
Trichlorofluoromethane	120	U	120	37	ug/m3			04/06/18 19:18	107
Freon TF	160	U	160	25	ug/m3			04/06/18 19:18	107
1,1-Dichloroethene	85	U	85	14	ug/m3			04/06/18 19:18	107
Acetone	**7200**	**D**	1300	660	ug/m3			04/06/18 19:18	107
Isopropyl alcohol	1300	U	1300	470	ug/m3			04/06/18 19:18	107
Carbon disulfide	170	U	170	40	ug/m3			04/06/18 19:18	107
3-Chloropropene	170	U	170	90	ug/m3			04/06/18 19:18	107
Methylene Chloride	190	U	190	74	ug/m3			04/06/18 19:18	107
tert-Butyl alcohol	1600	U	1600	490	ug/m3			04/06/18 19:18	107
Methyl tert-butyl ether	77	U	77	24	ug/m3			04/06/18 19:18	107
trans-1,2-Dichloroethene	85	U	85	31	ug/m3			04/06/18 19:18	107
n-Hexane	75	U	75	60	ug/m3			04/06/18 19:18	107
1,1-Dichloroethane	87	U	87	11	ug/m3			04/06/18 19:18	107
Methyl Ethyl Ketone	160	U	160	63	ug/m3			04/06/18 19:18	107
cis-1,2-Dichloroethene	85	U	85	16	ug/m3			04/06/18 19:18	107
1,2-Dichloroethene, Total	170	U	170	47	ug/m3			04/06/18 19:18	107
Chloroform	100	U	100	27	ug/m3			04/06/18 19:18	107
Tetrahydrofuran	1600	U	1600	820	ug/m3			04/06/18 19:18	107
1,1,1-Trichloroethane	120	U	120	40	ug/m3			04/06/18 19:18	107
Cyclohexane	74	U	74	23	ug/m3			04/06/18 19:18	107
Carbon tetrachloride	27	U	27	16	ug/m3			04/06/18 19:18	107
2,2,4-Trimethylpentane	100	U	100	44	ug/m3			04/06/18 19:18	107
Benzene	68	U	68	24	ug/m3			04/06/18 19:18	107
1,2-Dichloroethane	87	U	87	27	ug/m3			04/06/18 19:18	107

Client Sample ID: GC-IA-105 (AS)
Lab Sample ID: 200-42918-7

Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Heptane	88	U	88	61	ug/m3			04/06/18 19:18	107
Trichloroethene	23	U	23	17	ug/m3			04/06/18 19:18	107
Methyl methacrylate	220	U	220	96	ug/m3			04/06/18 19:18	107
1,2-Dichloropropane	99	U	99	59	ug/m3			04/06/18 19:18	107
1,4-Dioxane	1900	U	1900	500	ug/m3			04/06/18 19:18	107
Bromodichloromethane	140	U	140	67	ug/m3			04/06/18 19:18	107
cis-1,3-Dichloropropene	97	U	97	48	ug/m3			04/06/18 19:18	107
methyl isobutyl ketone	220	U	220	160	ug/m3			04/06/18 19:18	107
Toluene	81	U	81	28	ug/m3			04/06/18 19:18	107
trans-1,3-Dichloropropene	97	U	97	58	ug/m3			04/06/18 19:18	107
1,1,2-Trichloroethane	120	U	120	46	ug/m3			04/06/18 19:18	107
Tetrachloroethene	29	U	29	21	ug/m3			04/06/18 19:18	107
Methyl Butyl Ketone (2-Hexanone)	220	U	220	180	ug/m3			04/06/18 19:18	107
Dibromochloromethane	180	U	180	65	ug/m3			04/06/18 19:18	107
1,2-Dibromoethane	160	U	160	57	ug/m3			04/06/18 19:18	107
Chlorobenzene	99	U	99	20	ug/m3			04/06/18 19:18	107
Ethylbenzene	93	U	93	34	ug/m3			04/06/18 19:18	107
m,p-Xylene	230	U	230	33	ug/m3			04/06/18 19:18	107
Xylene, o-	93	U	93	33	ug/m3			04/06/18 19:18	107
Xylene (total)	330	U	330	66	ug/m3			04/06/18 19:18	107
Styrene	91	U	91	39	ug/m3			04/06/18 19:18	107
Bromoform	220	U	220	95	ug/m3			04/06/18 19:18	107
Cumene	110	U	110	31	ug/m3			04/06/18 19:18	107
1,1,2,2-Tetrachloroethane	150	U	150	56	ug/m3			04/06/18 19:18	107
n-Propylbenzene	110	U	110	36	ug/m3			04/06/18 19:18	107
4-Ethyltoluene	110	U	110	36	ug/m3			04/06/18 19:18	107
1,3,5-Trimethylbenzene	110	U	110	31	ug/m3			04/06/18 19:18	107
2-Chlorotoluene	110	U	110	39	ug/m3			04/06/18 19:18	107
tert-Butylbenzene	120	U	120	34	ug/m3			04/06/18 19:18	107
1,2,4-Trimethylbenzene	110	U	110	42	ug/m3			04/06/18 19:18	107
sec-Butylbenzene	120	U	120	39	ug/m3			04/06/18 19:18	107
4-Isopropyltoluene	120	U	120	44	ug/m3			04/06/18 19:18	107
1,3-Dichlorobenzene	130	U	130	53	ug/m3			04/06/18 19:18	107
1,4-Dichlorobenzene	130	U	130	42	ug/m3			04/06/18 19:18	107
Benzyl chloride	110	U	110	66	ug/m3			04/06/18 19:18	107
n-Butylbenzene	120	U	120	47	ug/m3			04/06/18 19:18	107
1,2-Dichlorobenzene	130	U	130	46	ug/m3			04/06/18 19:18	107
1,2,4-Trichlorobenzene	400	U	400	190	ug/m3			04/06/18 19:18	107
Hexachlorobutadiene	230	U	230	94	ug/m3			04/06/18 19:18	107
Naphthalene	280	U	280	170	ug/m3			04/06/18 19:18	107

Client Sample ID: GC-SV-104 (AS)
Lab Sample ID: 200-42918-8

Date Collected: 03/28/18 09:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	1.0	ppb v/v			04/06/18 23:30	5

Client Sample ID: GC-SV-104 (AS)
Lab Sample ID: 200-42918-8

Date Collected: 03/28/18 09:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 22	2.5	U	2.5	1.3	ppb v/v			04/06/18 23:30	5
1,2-Dichlorotetrafluoroethane	1.0	U	1.0	0.34	ppb v/v			04/06/18 23:30	5
Chloromethane	2.5	U	2.5	1.3	ppb v/v			04/06/18 23:30	5
n-Butane	**82**		2.5	1.6	ppb v/v			04/06/18 23:30	5
Vinyl chloride	1.0	U	1.0	0.21	ppb v/v			04/06/18 23:30	5
1,3-Butadiene	1.0	U	1.0	0.33	ppb v/v			04/06/18 23:30	5
Bromomethane	1.0	U	1.0	0.31	ppb v/v			04/06/18 23:30	5
Chloroethane	2.5	U	2.5	1.1	ppb v/v			04/06/18 23:30	5
Bromoethene(Vinyl Bromide)	1.0	U	1.0	0.28	ppb v/v			04/06/18 23:30	5
Trichlorofluoromethane	1.0	U	1.0	0.31	ppb v/v			04/06/18 23:30	5
Freon TF	1.0	U	1.0	0.16	ppb v/v			04/06/18 23:30	5
1,1-Dichloroethene	1.0	U	1.0	0.17	ppb v/v			04/06/18 23:30	5
Acetone	**160**		25	13	ppb v/v			04/06/18 23:30	5
Isopropyl alcohol	**14**	**J B**	25	9.0	ppb v/v			04/06/18 23:30	5
Carbon disulfide	**1.6**	**J**	2.5	0.60	ppb v/v			04/06/18 23:30	5
3-Chloropropene	2.5	U	2.5	1.4	ppb v/v			04/06/18 23:30	5
Methylene Chloride	2.5	U	2.5	1.0	ppb v/v			04/06/18 23:30	5
tert-Butyl alcohol	**110**		25	7.5	ppb v/v			04/06/18 23:30	5
Methyl tert-butyl ether	1.0	U	1.0	0.31	ppb v/v			04/06/18 23:30	5
trans-1,2-Dichloroethene	**0.37**	**J**	1.0	0.37	ppb v/v			04/06/18 23:30	5
n-Hexane	**2.1**		1.0	0.80	ppb v/v			04/06/18 23:30	5
1,1-Dichloroethane	1.0	U	1.0	0.13	ppb v/v			04/06/18 23:30	5
Methyl Ethyl Ketone	**5.9**		2.5	1.0	ppb v/v			04/06/18 23:30	5
cis-1,2-Dichloroethene	1.0	U	1.0	0.19	ppb v/v			04/06/18 23:30	5
1,2-Dichloroethene, Total	2.0	U	2.0	0.56	ppb v/v			04/06/18 23:30	5
Chloroform	**0.44**	**J**	1.0	0.26	ppb v/v			04/06/18 23:30	5
Tetrahydrofuran	**13**	**J**	25	13	ppb v/v			04/06/18 23:30	5
1,1,1-Trichloroethane	1.0	U	1.0	0.34	ppb v/v			04/06/18 23:30	5
Cyclohexane	1.0	U	1.0	0.32	ppb v/v			04/06/18 23:30	5
Carbon tetrachloride	0.20	U	0.20	0.12	ppb v/v			04/06/18 23:30	5
2,2,4-Trimethylpentane	1.0	U	1.0	0.44	ppb v/v			04/06/18 23:30	5
Benzene	**0.46**	**J**	1.0	0.36	ppb v/v			04/06/18 23:30	5
1,2-Dichloroethane	1.0	U	1.0	0.32	ppb v/v			04/06/18 23:30	5
n-Heptane	**4.5**		1.0	0.70	ppb v/v			04/06/18 23:30	5
Trichloroethene	**0.37**		0.20	0.15	ppb v/v			04/06/18 23:30	5
Methyl methacrylate	2.5	U	2.5	1.1	ppb v/v			04/06/18 23:30	5
1,2-Dichloropropane	1.0	U	1.0	0.60	ppb v/v			04/06/18 23:30	5
1,4-Dioxane	25	U	25	6.5	ppb v/v			04/06/18 23:30	5
Bromodichloromethane	1.0	U	1.0	0.47	ppb v/v			04/06/18 23:30	5
cis-1,3-Dichloropropene	1.0	U	1.0	0.49	ppb v/v			04/06/18 23:30	5
methyl isobutyl ketone	2.5	U	2.5	1.8	ppb v/v			04/06/18 23:30	5
Toluene	**14**		1.0	0.35	ppb v/v			04/06/18 23:30	5
trans-1,3-Dichloropropene	1.0	U	1.0	0.60	ppb v/v			04/06/18 23:30	5
1,1,2-Trichloroethane	**3.2**		1.0	0.39	ppb v/v			04/06/18 23:30	5
Tetrachloroethene	**15**		0.20	0.15	ppb v/v			04/06/18 23:30	5
Methyl Butyl Ketone (2-Hexanone)	2.5	U	2.5	2.1	ppb v/v			04/06/18 23:30	5
Dibromochloromethane	1.0	U	1.0	0.36	ppb v/v			04/06/18 23:30	5
1,2-Dibromoethane	1.0	U	1.0	0.35	ppb v/v			04/06/18 23:30	5

Client Sample ID: GC-SV-104 (AS)
Lab Sample ID: 200-42918-8

Date Collected: 03/28/18 09:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	1.0	U	1.0	0.20	ppb v/v			04/06/18 23:30	5
Ethylbenzene	**89**		1.0	0.37	ppb v/v			04/06/18 23:30	5
m,p-Xylene	**250**		2.5	0.35	ppb v/v			04/06/18 23:30	5
Xylene, o-	**75**		1.0	0.36	ppb v/v			04/06/18 23:30	5
Xylene (total)	**330**		3.5	0.71	ppb v/v			04/06/18 23:30	5
Styrene	1.0	U	1.0	0.43	ppb v/v			04/06/18 23:30	5
Bromoform	1.0	U	1.0	0.43	ppb v/v			04/06/18 23:30	5
Cumene	**0.79**	**J**	1.0	0.30	ppb v/v			04/06/18 23:30	5
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.38	ppb v/v			04/06/18 23:30	5
n-Propylbenzene	1.0	U	1.0	0.35	ppb v/v			04/06/18 23:30	5
4-Ethyltoluene	1.0	U	1.0	0.35	ppb v/v			04/06/18 23:30	5
1,3,5-Trimethylbenzene	1.0	U	1.0	0.29	ppb v/v			04/06/18 23:30	5
2-Chlorotoluene	1.0	U	1.0	0.36	ppb v/v			04/06/18 23:30	5
tert-Butylbenzene	1.0	U	1.0	0.29	ppb v/v			04/06/18 23:30	5
1,2,4-Trimethylbenzene	1.0	U	1.0	0.40	ppb v/v			04/06/18 23:30	5
sec-Butylbenzene	1.0	U	1.0	0.33	ppb v/v			04/06/18 23:30	5
4-Isopropyltoluene	1.0	U	1.0	0.38	ppb v/v			04/06/18 23:30	5
1,3-Dichlorobenzene	1.0	U	1.0	0.41	ppb v/v			04/06/18 23:30	5
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ppb v/v			04/06/18 23:30	5
Benzyl chloride	1.0	U	1.0	0.60	ppb v/v			04/06/18 23:30	5
n-Butylbenzene	1.0	U	1.0	0.40	ppb v/v			04/06/18 23:30	5
1,2-Dichlorobenzene	1.0	U	1.0	0.36	ppb v/v			04/06/18 23:30	5
1,2,4-Trichlorobenzene	2.5	U	2.5	1.2	ppb v/v			04/06/18 23:30	5
Hexachlorobutadiene	1.0	U	1.0	0.41	ppb v/v			04/06/18 23:30	5
Naphthalene	2.5	U	2.5	1.6	ppb v/v			04/06/18 23:30	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	12	U	12	4.9	ug/m3			04/06/18 23:30	5
Freon 22	8.8	U	8.8	4.6	ug/m3			04/06/18 23:30	5
1,2-Dichlorotetrafluoroethane	7.0	U	7.0	2.4	ug/m3			04/06/18 23:30	5
Chloromethane	5.2	U	5.2	2.6	ug/m3			04/06/18 23:30	5
n-Butane	**190**		5.9	3.7	ug/m3			04/06/18 23:30	5
Vinyl chloride	2.6	U	2.6	0.52	ug/m3			04/06/18 23:30	5
1,3-Butadiene	2.2	U	2.2	0.72	ug/m3			04/06/18 23:30	5
Bromomethane	3.9	U	3.9	1.2	ug/m3			04/06/18 23:30	5
Chloroethane	6.6	U	6.6	2.8	ug/m3			04/06/18 23:30	5
Bromoethene(Vinyl Bromide)	4.4	U	4.4	1.2	ug/m3			04/06/18 23:30	5
Trichlorofluoromethane	5.6	U	5.6	1.7	ug/m3			04/06/18 23:30	5
Freon TF	7.7	U	7.7	1.2	ug/m3			04/06/18 23:30	5
1,1-Dichloroethene	4.0	U	4.0	0.67	ug/m3			04/06/18 23:30	5
Acetone	**370**		59	31	ug/m3			04/06/18 23:30	5
Isopropyl alcohol	**36**	**J B**	61	22	ug/m3			04/06/18 23:30	5
Carbon disulfide	**5.1**	**J**	7.8	1.9	ug/m3			04/06/18 23:30	5
3-Chloropropene	7.8	U	7.8	4.2	ug/m3			04/06/18 23:30	5
Methylene Chloride	8.7	U	8.7	3.5	ug/m3			04/06/18 23:30	5
tert-Butyl alcohol	**320**		76	23	ug/m3			04/06/18 23:30	5
Methyl tert-butyl ether	3.6	U	3.6	1.1	ug/m3			04/06/18 23:30	5
trans-1,2-Dichloroethene	**1.5**	**J**	4.0	1.5	ug/m3			04/06/18 23:30	5
n-Hexane	**7.4**		3.5	2.8	ug/m3			04/06/18 23:30	5

Client Sample ID: GC-SV-104 (AS)
Lab Sample ID: 200-42918-8

Date Collected: 03/28/18 09:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	4.0	U	4.0	0.53	ug/m3			04/06/18 23:30	5
Methyl Ethyl Ketone	**17**		7.4	2.9	ug/m3			04/06/18 23:30	5
cis-1,2-Dichloroethene	4.0	U	4.0	0.73	ug/m3			04/06/18 23:30	5
1,2-Dichloroethene, Total	7.9	U	7.9	2.2	ug/m3			04/06/18 23:30	5
Chloroform	**2.2**	**J**	4.9	1.3	ug/m3			04/06/18 23:30	5
Tetrahydrofuran	**38**	**J**	74	38	ug/m3			04/06/18 23:30	5
1,1,1-Trichloroethane	5.5	U	5.5	1.9	ug/m3			04/06/18 23:30	5
Cyclohexane	3.4	U	3.4	1.1	ug/m3			04/06/18 23:30	5
Carbon tetrachloride	1.3	U	1.3	0.75	ug/m3			04/06/18 23:30	5
2,2,4-Trimethylpentane	4.7	U	4.7	2.1	ug/m3			04/06/18 23:30	5
Benzene	**1.5**	**J**	3.2	1.1	ug/m3			04/06/18 23:30	5
1,2-Dichloroethane	4.0	U	4.0	1.3	ug/m3			04/06/18 23:30	5
n-Heptane	**18**		4.1	2.9	ug/m3			04/06/18 23:30	5
Trichloroethene	**2.0**		1.1	0.81	ug/m3			04/06/18 23:30	5
Methyl methacrylate	10	U	10	4.5	ug/m3			04/06/18 23:30	5
1,2-Dichloropropane	4.6	U	4.6	2.8	ug/m3			04/06/18 23:30	5
1,4-Dioxane	90	U	90	23	ug/m3			04/06/18 23:30	5
Bromodichloromethane	6.7	U	6.7	3.1	ug/m3			04/06/18 23:30	5
cis-1,3-Dichloropropene	4.5	U	4.5	2.2	ug/m3			04/06/18 23:30	5
methyl isobutyl ketone	10	U	10	7.4	ug/m3			04/06/18 23:30	5
Toluene	**52**		3.8	1.3	ug/m3			04/06/18 23:30	5
trans-1,3-Dichloropropene	4.5	U	4.5	2.7	ug/m3			04/06/18 23:30	5
1,1,2-Trichloroethane	**17**		5.5	2.1	ug/m3			04/06/18 23:30	5
Tetrachloroethene	**100**		1.4	0.98	ug/m3			04/06/18 23:30	5
Methyl Butyl Ketone (2-Hexanone)	10	U	10	8.6	ug/m3			04/06/18 23:30	5
Dibromochloromethane	8.5	U	8.5	3.0	ug/m3			04/06/18 23:30	5
1,2-Dibromoethane	7.7	U	7.7	2.7	ug/m3			04/06/18 23:30	5
Chlorobenzene	4.6	U	4.6	0.92	ug/m3			04/06/18 23:30	5
Ethylbenzene	**390**		4.3	1.6	ug/m3			04/06/18 23:30	5
m,p-Xylene	**1100**		11	1.5	ug/m3			04/06/18 23:30	5
Xylene, o-	**330**		4.3	1.5	ug/m3			04/06/18 23:30	5
Xylene (total)	**1400**		15	3.1	ug/m3			04/06/18 23:30	5
Styrene	4.3	U	4.3	1.8	ug/m3			04/06/18 23:30	5
Bromoform	10	U	10	4.4	ug/m3			04/06/18 23:30	5
Cumene	**3.9**	**J**	4.9	1.5	ug/m3			04/06/18 23:30	5
1,1,2,2-Tetrachloroethane	6.9	U	6.9	2.6	ug/m3			04/06/18 23:30	5
n-Propylbenzene	4.9	U	4.9	1.7	ug/m3			04/06/18 23:30	5
4-Ethyltoluene	4.9	U	4.9	1.7	ug/m3			04/06/18 23:30	5
1,3,5-Trimethylbenzene	4.9	U	4.9	1.4	ug/m3			04/06/18 23:30	5
2-Chlorotoluene	5.2	U	5.2	1.8	ug/m3			04/06/18 23:30	5
tert-Butylbenzene	5.5	U	5.5	1.6	ug/m3			04/06/18 23:30	5
1,2,4-Trimethylbenzene	4.9	U	4.9	2.0	ug/m3			04/06/18 23:30	5
sec-Butylbenzene	5.5	U	5.5	1.8	ug/m3			04/06/18 23:30	5
4-Isopropyltoluene	5.5	U	5.5	2.1	ug/m3			04/06/18 23:30	5
1,3-Dichlorobenzene	6.0	U	6.0	2.5	ug/m3			04/06/18 23:30	5
1,4-Dichlorobenzene	6.0	U	6.0	2.0	ug/m3			04/06/18 23:30	5
Benzyl chloride	5.2	U	5.2	3.1	ug/m3			04/06/18 23:30	5
n-Butylbenzene	5.5	U	5.5	2.2	ug/m3			04/06/18 23:30	5

Client Sample ID: GC-SV-104 (AS)
Lab Sample ID: 200-42918-8

Date Collected: 03/28/18 09:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	6.0	U	6.0	2.1	ug/m3			04/06/18 23:30	5
1,2,4-Trichlorobenzene	19	U	19	8.9	ug/m3			04/06/18 23:30	5
Hexachlorobutadiene	11	U	11	4.4	ug/m3			04/06/18 23:30	5
Naphthalene	13	U	13	8.1	ug/m3			04/06/18 23:30	5

Client Sample ID: GC-IA-104 (AS)
Lab Sample ID: 200-42918-9

Date Collected: 03/28/18 09:30
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.38**	**J**	0.50	0.20	ppb v/v			04/06/18 02:20	1
Freon 22	0.50	U	0.50	0.26	ppb v/v			04/06/18 02:20	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.068	ppb v/v			04/06/18 02:20	1
Chloromethane	**0.40**	**J**	0.50	0.25	ppb v/v			04/06/18 02:20	1
n-Butane	**4.9**		0.50	0.31	ppb v/v			04/06/18 02:20	1
Vinyl chloride	0.20	U	0.20	0.041	ppb v/v			04/06/18 02:20	1
1,3-Butadiene	0.20	U	0.20	0.065	ppb v/v			04/06/18 02:20	1
Bromomethane	0.20	U	0.20	0.062	ppb v/v			04/06/18 02:20	1
Chloroethane	0.50	U	0.50	0.21	ppb v/v			04/06/18 02:20	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.056	ppb v/v			04/06/18 02:20	1
Trichlorofluoromethane	**0.20**		0.20	0.062	ppb v/v			04/06/18 02:20	1
Freon TF	**0.070**	**J**	0.20	0.031	ppb v/v			04/06/18 02:20	1
1,1-Dichloroethene	0.20	U	0.20	0.034	ppb v/v			04/06/18 02:20	1
Acetone	**810**	**E**	5.0	2.6	ppb v/v			04/06/18 02:20	1
Isopropyl alcohol	**76**	**E**	5.0	1.8	ppb v/v			04/06/18 02:20	1
Carbon disulfide	0.50	U	0.50	0.12	ppb v/v			04/06/18 02:20	1
3-Chloropropene	0.50	U	0.50	0.27	ppb v/v			04/06/18 02:20	1
Methylene Chloride	**0.21**	**J**	0.50	0.20	ppb v/v			04/06/18 02:20	1
tert-Butyl alcohol	**1.6**	**J**	5.0	1.5	ppb v/v			04/06/18 02:20	1
Methyl tert-butyl ether	0.20	U	0.20	0.061	ppb v/v			04/06/18 02:20	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.074	ppb v/v			04/06/18 02:20	1
n-Hexane	**0.17**	**J**	0.20	0.16	ppb v/v			04/06/18 02:20	1
1,1-Dichloroethane	0.20	U	0.20	0.026	ppb v/v			04/06/18 02:20	1
Methyl Ethyl Ketone	**55**	**E**	0.50	0.20	ppb v/v			04/06/18 02:20	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.037	ppb v/v			04/06/18 02:20	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.11	ppb v/v			04/06/18 02:20	1
Chloroform	**0.13**	**J**	0.20	0.052	ppb v/v			04/06/18 02:20	1
Tetrahydrofuran	**260**	**E**	5.0	2.6	ppb v/v			04/06/18 02:20	1
1,1,1-Trichloroethane	0.20	U	0.20	0.068	ppb v/v			04/06/18 02:20	1
Cyclohexane	**0.080**	**J**	0.20	0.063	ppb v/v			04/06/18 02:20	1
Carbon tetrachloride	**0.20**		0.040	0.024	ppb v/v			04/06/18 02:20	1
2,2,4-Trimethylpentane	**0.22**		0.20	0.088	ppb v/v			04/06/18 02:20	1
Benzene	**0.32**		0.20	0.071	ppb v/v			04/06/18 02:20	1
1,2-Dichloroethane	0.20	U	0.20	0.063	ppb v/v			04/06/18 02:20	1
n-Heptane	**1.0**		0.20	0.14	ppb v/v			04/06/18 02:20	1
Trichloroethene	0.040	U	0.040	0.030	ppb v/v			04/06/18 02:20	1
Methyl methacrylate	0.50	U	0.50	0.22	ppb v/v			04/06/18 02:20	1

Client Sample ID: GC-IA-104 (AS)
Lab Sample ID: 200-42918-9

Date Collected: 03/28/18 09:30
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	0.20	U	0.20	0.12	ppb v/v			04/06/18 02:20	1
1,4-Dioxane	5.0	U	5.0	1.3	ppb v/v			04/06/18 02:20	1
Bromodichloromethane	0.20	U	0.20	0.094	ppb v/v			04/06/18 02:20	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.098	ppb v/v			04/06/18 02:20	1
methyl isobutyl ketone	0.50	U	0.50	0.36	ppb v/v			04/06/18 02:20	1
Toluene	**1.2**		0.20	0.069	ppb v/v			04/06/18 02:20	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.12	ppb v/v			04/06/18 02:20	1
1,1,2-Trichloroethane	0.20	U	0.20	0.078	ppb v/v			04/06/18 02:20	1
Tetrachloroethene	**0.097**		0.040	0.029	ppb v/v			04/06/18 02:20	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.42	ppb v/v			04/06/18 02:20	1
Dibromochloromethane	0.20	U	0.20	0.071	ppb v/v			04/06/18 02:20	1
1,2-Dibromoethane	0.20	U	0.20	0.069	ppb v/v			04/06/18 02:20	1
Chlorobenzene	0.20	U	0.20	0.040	ppb v/v			04/06/18 02:20	1
Ethylbenzene	**1.2**		0.20	0.073	ppb v/v			04/06/18 02:20	1
m,p-Xylene	**6.2**		0.50	0.070	ppb v/v			04/06/18 02:20	1
Xylene, o-	**1.9**		0.20	0.071	ppb v/v			04/06/18 02:20	1
Xylene (total)	**8.1**		0.70	0.14	ppb v/v			04/06/18 02:20	1
Styrene	0.20	U	0.20	0.086	ppb v/v			04/06/18 02:20	1
Bromoform	0.20	U	0.20	0.086	ppb v/v			04/06/18 02:20	1
Cumene	0.20	U	0.20	0.059	ppb v/v			04/06/18 02:20	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.076	ppb v/v			04/06/18 02:20	1
n-Propylbenzene	0.20	U	0.20	0.069	ppb v/v			04/06/18 02:20	1
4-Ethyltoluene	**0.20**		0.20	0.069	ppb v/v			04/06/18 02:20	1
1,3,5-Trimethylbenzene	**0.10**	**J**	0.20	0.058	ppb v/v			04/06/18 02:20	1
2-Chlorotoluene	0.20	U	0.20	0.071	ppb v/v			04/06/18 02:20	1
tert-Butylbenzene	0.20	U	0.20	0.058	ppb v/v			04/06/18 02:20	1
1,2,4-Trimethylbenzene	**0.39**		0.20	0.080	ppb v/v			04/06/18 02:20	1
sec-Butylbenzene	0.20	U	0.20	0.066	ppb v/v			04/06/18 02:20	1
4-Isopropyltoluene	0.20	U	0.20	0.075	ppb v/v			04/06/18 02:20	1
1,3-Dichlorobenzene	0.20	U	0.20	0.082	ppb v/v			04/06/18 02:20	1
1,4-Dichlorobenzene	0.20	U	0.20	0.065	ppb v/v			04/06/18 02:20	1
Benzyl chloride	0.20	U	0.20	0.12	ppb v/v			04/06/18 02:20	1
n-Butylbenzene	0.20	U	0.20	0.080	ppb v/v			04/06/18 02:20	1
1,2-Dichlorobenzene	0.20	U	0.20	0.071	ppb v/v			04/06/18 02:20	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.24	ppb v/v			04/06/18 02:20	1
Hexachlorobutadiene	0.20	U	0.20	0.082	ppb v/v			04/06/18 02:20	1
Naphthalene	0.50	U	0.50	0.31	ppb v/v			04/06/18 02:20	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**1.9**	**J**	2.5	0.99	ug/m3			04/06/18 02:20	1
Freon 22	1.8	U	1.8	0.92	ug/m3			04/06/18 02:20	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.48	ug/m3			04/06/18 02:20	1
Chloromethane	**0.82**	**J**	1.0	0.52	ug/m3			04/06/18 02:20	1
n-Butane	**12**		1.2	0.74	ug/m3			04/06/18 02:20	1
Vinyl chloride	0.51	U	0.51	0.10	ug/m3			04/06/18 02:20	1
1,3-Butadiene	0.44	U	0.44	0.14	ug/m3			04/06/18 02:20	1
Bromomethane	0.78	U	0.78	0.24	ug/m3			04/06/18 02:20	1
Chloroethane	1.3	U	1.3	0.55	ug/m3			04/06/18 02:20	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.24	ug/m3			04/06/18 02:20	1

Client Sample ID: GC-IA-104 (AS)
Lab Sample ID: 200-42918-9

Date Collected: 03/28/18 09:30
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	**1.1**		1.1	0.35	ug/m3			04/06/18 02:20	1
Freon TF	**0.54**	**J**	1.5	0.24	ug/m3			04/06/18 02:20	1
1,1-Dichloroethene	0.79	U	0.79	0.13	ug/m3			04/06/18 02:20	1
Acetone	**1900**	**E**	12	6.2	ug/m3			04/06/18 02:20	1
Isopropyl alcohol	**190**	**E**	12	4.4	ug/m3			04/06/18 02:20	1
Carbon disulfide	1.6	U	1.6	0.37	ug/m3			04/06/18 02:20	1
3-Chloropropene	1.6	U	1.6	0.85	ug/m3			04/06/18 02:20	1
Methylene Chloride	**0.74**	**J**	1.7	0.69	ug/m3			04/06/18 02:20	1
tert-Butyl alcohol	**4.9**	**J**	15	4.5	ug/m3			04/06/18 02:20	1
Methyl tert-butyl ether	0.72	U	0.72	0.22	ug/m3			04/06/18 02:20	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.29	ug/m3			04/06/18 02:20	1
n-Hexane	**0.59**	**J**	0.70	0.56	ug/m3			04/06/18 02:20	1
1,1-Dichloroethane	0.81	U	0.81	0.11	ug/m3			04/06/18 02:20	1
Methyl Ethyl Ketone	**160**	**E**	1.5	0.59	ug/m3			04/06/18 02:20	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.15	ug/m3			04/06/18 02:20	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.44	ug/m3			04/06/18 02:20	1
Chloroform	**0.63**	**J**	0.98	0.25	ug/m3			04/06/18 02:20	1
Tetrahydrofuran	**780**	**E**	15	7.7	ug/m3			04/06/18 02:20	1
1,1,1-Trichloroethane	1.1	U	1.1	0.37	ug/m3			04/06/18 02:20	1
Cyclohexane	**0.28**	**J**	0.69	0.22	ug/m3			04/06/18 02:20	1
Carbon tetrachloride	**1.3**		0.25	0.15	ug/m3			04/06/18 02:20	1
2,2,4-Trimethylpentane	**1.0**		0.93	0.41	ug/m3			04/06/18 02:20	1
Benzene	**1.0**		0.64	0.23	ug/m3			04/06/18 02:20	1
1,2-Dichloroethane	0.81	U	0.81	0.25	ug/m3			04/06/18 02:20	1
n-Heptane	**4.3**		0.82	0.57	ug/m3			04/06/18 02:20	1
Trichloroethene	0.21	U	0.21	0.16	ug/m3			04/06/18 02:20	1
Methyl methacrylate	2.0	U	2.0	0.90	ug/m3			04/06/18 02:20	1
1,2-Dichloropropane	0.92	U	0.92	0.55	ug/m3			04/06/18 02:20	1
1,4-Dioxane	18	U	18	4.7	ug/m3			04/06/18 02:20	1
Bromodichloromethane	1.3	U	1.3	0.63	ug/m3			04/06/18 02:20	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.44	ug/m3			04/06/18 02:20	1
methyl isobutyl ketone	2.0	U	2.0	1.5	ug/m3			04/06/18 02:20	1
Toluene	**4.4**		0.75	0.26	ug/m3			04/06/18 02:20	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.54	ug/m3			04/06/18 02:20	1
1,1,2-Trichloroethane	1.1	U	1.1	0.43	ug/m3			04/06/18 02:20	1
Tetrachloroethene	**0.66**		0.27	0.20	ug/m3			04/06/18 02:20	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	1.7	ug/m3			04/06/18 02:20	1
Dibromochloromethane	1.7	U	1.7	0.60	ug/m3			04/06/18 02:20	1
1,2-Dibromoethane	1.5	U	1.5	0.53	ug/m3			04/06/18 02:20	1
Chlorobenzene	0.92	U	0.92	0.18	ug/m3			04/06/18 02:20	1
Ethylbenzene	**5.4**		0.87	0.32	ug/m3			04/06/18 02:20	1
m,p-Xylene	**27**		2.2	0.30	ug/m3			04/06/18 02:20	1
Xylene, o-	**8.2**		0.87	0.31	ug/m3			04/06/18 02:20	1
Xylene (total)	**35**		3.0	0.61	ug/m3			04/06/18 02:20	1
Styrene	0.85	U	0.85	0.37	ug/m3			04/06/18 02:20	1
Bromoform	2.1	U	2.1	0.89	ug/m3			04/06/18 02:20	1
Cumene	0.98	U	0.98	0.29	ug/m3			04/06/18 02:20	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.52	ug/m3			04/06/18 02:20	1

Client Sample ID: GC-IA-104 (AS)
Lab Sample ID: 200-42918-9

Date Collected: 03/28/18 09:30
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	0.98	U	0.98	0.34	ug/m3			04/06/18 02:20	1
4-Ethyltoluene	**1.0**		0.98	0.34	ug/m3			04/06/18 02:20	1
1,3,5-Trimethylbenzene	**0.49**	**J**	0.98	0.29	ug/m3			04/06/18 02:20	1
2-Chlorotoluene	1.0	U	1.0	0.37	ug/m3			04/06/18 02:20	1
tert-Butylbenzene	1.1	U	1.1	0.32	ug/m3			04/06/18 02:20	1
1,2,4-Trimethylbenzene	**1.9**		0.98	0.39	ug/m3			04/06/18 02:20	1
sec-Butylbenzene	1.1	U	1.1	0.36	ug/m3			04/06/18 02:20	1
4-Isopropyltoluene	1.1	U	1.1	0.41	ug/m3			04/06/18 02:20	1
1,3-Dichlorobenzene	1.2	U	1.2	0.49	ug/m3			04/06/18 02:20	1
1,4-Dichlorobenzene	1.2	U	1.2	0.39	ug/m3			04/06/18 02:20	1
Benzyl chloride	1.0	U	1.0	0.62	ug/m3			04/06/18 02:20	1
n-Butylbenzene	1.1	U	1.1	0.44	ug/m3			04/06/18 02:20	1
1,2-Dichlorobenzene	1.2	U	1.2	0.43	ug/m3			04/06/18 02:20	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.8	ug/m3			04/06/18 02:20	1
Hexachlorobutadiene	2.1	U	2.1	0.87	ug/m3			04/06/18 02:20	1
Naphthalene	2.6	U	2.6	1.6	ug/m3			04/06/18 02:20	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	42	U	42	17	ppb v/v			04/06/18 20:08	84.8
Freon 22	42	U	42	22	ppb v/v			04/06/18 20:08	84.8
1,2-Dichlorotetrafluoroethane	17	U	17	5.8	ppb v/v			04/06/18 20:08	84.8
Chloromethane	42	U	42	21	ppb v/v			04/06/18 20:08	84.8
n-Butane	42	U	42	26	ppb v/v			04/06/18 20:08	84.8
Vinyl chloride	17	U	17	3.5	ppb v/v			04/06/18 20:08	84.8
1,3-Butadiene	17	U	17	5.5	ppb v/v			04/06/18 20:08	84.8
Bromomethane	17	U	17	5.3	ppb v/v			04/06/18 20:08	84.8
Chloroethane	42	U	42	18	ppb v/v			04/06/18 20:08	84.8
Bromoethene(Vinyl Bromide)	17	U	17	4.7	ppb v/v			04/06/18 20:08	84.8
Trichlorofluoromethane	17	U	17	5.3	ppb v/v			04/06/18 20:08	84.8
Freon TF	17	U	17	2.6	ppb v/v			04/06/18 20:08	84.8
1,1-Dichloroethene	17	U	17	2.9	ppb v/v			04/06/18 20:08	84.8
Acetone	**1200**	**D**	420	220	ppb v/v			04/06/18 20:08	84.8
Isopropyl alcohol	420	U	420	150	ppb v/v			04/06/18 20:08	84.8
Carbon disulfide	42	U	42	10	ppb v/v			04/06/18 20:08	84.8
3-Chloropropene	42	U	42	23	ppb v/v			04/06/18 20:08	84.8
Methylene Chloride	42	U	42	17	ppb v/v			04/06/18 20:08	84.8
tert-Butyl alcohol	420	U	420	130	ppb v/v			04/06/18 20:08	84.8
Methyl tert-butyl ether	17	U	17	5.2	ppb v/v			04/06/18 20:08	84.8
trans-1,2-Dichloroethene	17	U	17	6.3	ppb v/v			04/06/18 20:08	84.8
n-Hexane	17	U	17	14	ppb v/v			04/06/18 20:08	84.8
1,1-Dichloroethane	17	U	17	2.2	ppb v/v			04/06/18 20:08	84.8
Methyl Ethyl Ketone	**44**	**D**	42	17	ppb v/v			04/06/18 20:08	84.8
cis-1,2-Dichloroethene	17	U	17	3.1	ppb v/v			04/06/18 20:08	84.8
1,2-Dichloroethene, Total	34	U	34	9.4	ppb v/v			04/06/18 20:08	84.8
Chloroform	17	U	17	4.4	ppb v/v			04/06/18 20:08	84.8
Tetrahydrofuran	**290**	**J D**	420	220	ppb v/v			04/06/18 20:08	84.8
1,1,1-Trichloroethane	17	U	17	5.8	ppb v/v			04/06/18 20:08	84.8
Cyclohexane	17	U	17	5.3	ppb v/v			04/06/18 20:08	84.8

Client Sample ID: GC-IA-104 (AS)
Lab Sample ID: 200-42918-9

Date Collected: 03/28/18 09:30
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	3.4	U	3.4	2.0	ppb v/v			04/06/18 20:08	84.8
2,2,4-Trimethylpentane	17	U	17	7.5	ppb v/v			04/06/18 20:08	84.8
Benzene	17	U	17	6.0	ppb v/v			04/06/18 20:08	84.8
1,2-Dichloroethane	17	U	17	5.3	ppb v/v			04/06/18 20:08	84.8
n-Heptane	17	U	17	12	ppb v/v			04/06/18 20:08	84.8
Trichloroethene	3.4	U	3.4	2.5	ppb v/v			04/06/18 20:08	84.8
Methyl methacrylate	42	U	42	19	ppb v/v			04/06/18 20:08	84.8
1,2-Dichloropropane	17	U	17	10	ppb v/v			04/06/18 20:08	84.8
1,4-Dioxane	420	U	420	110	ppb v/v			04/06/18 20:08	84.8
Bromodichloromethane	17	U	17	8.0	ppb v/v			04/06/18 20:08	84.8
cis-1,3-Dichloropropene	17	U	17	8.3	ppb v/v			04/06/18 20:08	84.8
methyl isobutyl ketone	42	U	42	31	ppb v/v			04/06/18 20:08	84.8
Toluene	17	U	17	5.9	ppb v/v			04/06/18 20:08	84.8
trans-1,3-Dichloropropene	17	U	17	10	ppb v/v			04/06/18 20:08	84.8
1,1,2-Trichloroethane	17	U	17	6.6	ppb v/v			04/06/18 20:08	84.8
Tetrachloroethene	3.4	U	3.4	2.5	ppb v/v			04/06/18 20:08	84.8
Methyl Butyl Ketone (2-Hexanone)	42	U	42	36	ppb v/v			04/06/18 20:08	84.8
Dibromochloromethane	17	U	17	6.0	ppb v/v			04/06/18 20:08	84.8
1,2-Dibromoethane	17	U	17	5.9	ppb v/v			04/06/18 20:08	84.8
Chlorobenzene	17	U	17	3.4	ppb v/v			04/06/18 20:08	84.8
Ethylbenzene	17	U	17	6.2	ppb v/v			04/06/18 20:08	84.8
m,p-Xylene	42	U	42	5.9	ppb v/v			04/06/18 20:08	84.8
Xylene, o-	17	U	17	6.0	ppb v/v			04/06/18 20:08	84.8
Xylene (total)	59	U	59	12	ppb v/v			04/06/18 20:08	84.8
Styrene	17	U	17	7.3	ppb v/v			04/06/18 20:08	84.8
Bromoform	17	U	17	7.3	ppb v/v			04/06/18 20:08	84.8
Cumene	17	U	17	5.0	ppb v/v			04/06/18 20:08	84.8
1,1,2,2-Tetrachloroethane	17	U	17	6.4	ppb v/v			04/06/18 20:08	84.8
n-Propylbenzene	17	U	17	5.9	ppb v/v			04/06/18 20:08	84.8
4-Ethyltoluene	17	U	17	5.9	ppb v/v			04/06/18 20:08	84.8
1,3,5-Trimethylbenzene	17	U	17	4.9	ppb v/v			04/06/18 20:08	84.8
2-Chlorotoluene	17	U	17	6.0	ppb v/v			04/06/18 20:08	84.8
tert-Butylbenzene	17	U	17	4.9	ppb v/v			04/06/18 20:08	84.8
1,2,4-Trimethylbenzene	17	U	17	6.8	ppb v/v			04/06/18 20:08	84.8
sec-Butylbenzene	17	U	17	5.6	ppb v/v			04/06/18 20:08	84.8
4-Isopropyltoluene	17	U	17	6.4	ppb v/v			04/06/18 20:08	84.8
1,3-Dichlorobenzene	17	U	17	7.0	ppb v/v			04/06/18 20:08	84.8
1,4-Dichlorobenzene	17	U	17	5.5	ppb v/v			04/06/18 20:08	84.8
Benzyl chloride	17	U	17	10	ppb v/v			04/06/18 20:08	84.8
n-Butylbenzene	17	U	17	6.8	ppb v/v			04/06/18 20:08	84.8
1,2-Dichlorobenzene	17	U	17	6.0	ppb v/v			04/06/18 20:08	84.8
1,2,4-Trichlorobenzene	42	U	42	20	ppb v/v			04/06/18 20:08	84.8
Hexachlorobutadiene	17	U	17	7.0	ppb v/v			04/06/18 20:08	84.8
Naphthalene	42	U	42	26	ppb v/v			04/06/18 20:08	84.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	210	U	210	84	ug/m3			04/06/18 20:08	84.8
Freon 22	150	U	150	78	ug/m3			04/06/18 20:08	84.8
1,2-Dichlorotetrafluoroethane	120	U	120	40	ug/m3			04/06/18 20:08	84.8

Client Sample ID: GC-IA-104 (AS)
Lab Sample ID: 200-42918-9

Date Collected: 03/28/18 09:30
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	88	U	88	44	ug/m3			04/06/18 20:08	84.8
n-Butane	100	U	100	62	ug/m3			04/06/18 20:08	84.8
Vinyl chloride	43	U	43	8.9	ug/m3			04/06/18 20:08	84.8
1,3-Butadiene	38	U	38	12	ug/m3			04/06/18 20:08	84.8
Bromomethane	66	U	66	20	ug/m3			04/06/18 20:08	84.8
Chloroethane	110	U	110	47	ug/m3			04/06/18 20:08	84.8
Bromoethene(Vinyl Bromide)	74	U	74	21	ug/m3			04/06/18 20:08	84.8
Trichlorofluoromethane	95	U	95	30	ug/m3			04/06/18 20:08	84.8
Freon TF	130	U	130	20	ug/m3			04/06/18 20:08	84.8
1,1-Dichloroethene	67	U	67	11	ug/m3			04/06/18 20:08	84.8
Acetone	**2900**	**D**	1000	520	ug/m3			04/06/18 20:08	84.8
Isopropyl alcohol	1000	U	1000	380	ug/m3			04/06/18 20:08	84.8
Carbon disulfide	130	U	130	32	ug/m3			04/06/18 20:08	84.8
3-Chloropropene	130	U	130	72	ug/m3			04/06/18 20:08	84.8
Methylene Chloride	150	U	150	59	ug/m3			04/06/18 20:08	84.8
tert-Butyl alcohol	1300	U	1300	390	ug/m3			04/06/18 20:08	84.8
Methyl tert-butyl ether	61	U	61	19	ug/m3			04/06/18 20:08	84.8
trans-1,2-Dichloroethene	67	U	67	25	ug/m3			04/06/18 20:08	84.8
n-Hexane	60	U	60	48	ug/m3			04/06/18 20:08	84.8
1,1-Dichloroethane	69	U	69	8.9	ug/m3			04/06/18 20:08	84.8
Methyl Ethyl Ketone	**130**	**D**	130	50	ug/m3			04/06/18 20:08	84.8
cis-1,2-Dichloroethene	67	U	67	12	ug/m3			04/06/18 20:08	84.8
1,2-Dichloroethene, Total	130	U	130	37	ug/m3			04/06/18 20:08	84.8
Chloroform	83	U	83	22	ug/m3			04/06/18 20:08	84.8
Tetrahydrofuran	**840**	**J D**	1300	650	ug/m3			04/06/18 20:08	84.8
1,1,1-Trichloroethane	93	U	93	31	ug/m3			04/06/18 20:08	84.8
Cyclohexane	58	U	58	18	ug/m3			04/06/18 20:08	84.8
Carbon tetrachloride	21	U	21	13	ug/m3			04/06/18 20:08	84.8
2,2,4-Trimethylpentane	79	U	79	35	ug/m3			04/06/18 20:08	84.8
Benzene	54	U	54	19	ug/m3			04/06/18 20:08	84.8
1,2-Dichloroethane	69	U	69	22	ug/m3			04/06/18 20:08	84.8
n-Heptane	70	U	70	49	ug/m3			04/06/18 20:08	84.8
Trichloroethene	18	U	18	14	ug/m3			04/06/18 20:08	84.8
Methyl methacrylate	170	U	170	76	ug/m3			04/06/18 20:08	84.8
1,2-Dichloropropane	78	U	78	47	ug/m3			04/06/18 20:08	84.8
1,4-Dioxane	1500	U	1500	400	ug/m3			04/06/18 20:08	84.8
Bromodichloromethane	110	U	110	53	ug/m3			04/06/18 20:08	84.8
cis-1,3-Dichloropropene	77	U	77	38	ug/m3			04/06/18 20:08	84.8
methyl isobutyl ketone	170	U	170	130	ug/m3			04/06/18 20:08	84.8
Toluene	64	U	64	22	ug/m3			04/06/18 20:08	84.8
trans-1,3-Dichloropropene	77	U	77	46	ug/m3			04/06/18 20:08	84.8
1,1,2-Trichloroethane	93	U	93	36	ug/m3			04/06/18 20:08	84.8
Tetrachloroethene	23	U	23	17	ug/m3			04/06/18 20:08	84.8
Methyl Butyl Ketone (2-Hexanone)	170	U	170	150	ug/m3			04/06/18 20:08	84.8
Dibromochloromethane	140	U	140	51	ug/m3			04/06/18 20:08	84.8
1,2-Dibromoethane	130	U	130	45	ug/m3			04/06/18 20:08	84.8
Chlorobenzene	78	U	78	16	ug/m3			04/06/18 20:08	84.8
Ethylbenzene	74	U	74	27	ug/m3			04/06/18 20:08	84.8

Client Sample ID: GC-IA-104 (AS)
Lab Sample ID: 200-42918-9

Date Collected: 03/28/18 09:30
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	180	U	180	26	ug/m3			04/06/18 20:08	84.8
Xylene, o-	74	U	74	26	ug/m3			04/06/18 20:08	84.8
Xylene (total)	260	U	260	52	ug/m3			04/06/18 20:08	84.8
Styrene	72	U	72	31	ug/m3			04/06/18 20:08	84.8
Bromoform	180	U	180	75	ug/m3			04/06/18 20:08	84.8
Cumene	83	U	83	25	ug/m3			04/06/18 20:08	84.8
1,1,2,2-Tetrachloroethane	120	U	120	44	ug/m3			04/06/18 20:08	84.8
n-Propylbenzene	83	U	83	29	ug/m3			04/06/18 20:08	84.8
4-Ethyltoluene	83	U	83	29	ug/m3			04/06/18 20:08	84.8
1,3,5-Trimethylbenzene	83	U	83	24	ug/m3			04/06/18 20:08	84.8
2-Chlorotoluene	88	U	88	31	ug/m3			04/06/18 20:08	84.8
tert-Butylbenzene	93	U	93	27	ug/m3			04/06/18 20:08	84.8
1,2,4-Trimethylbenzene	83	U	83	33	ug/m3			04/06/18 20:08	84.8
sec-Butylbenzene	93	U	93	31	ug/m3			04/06/18 20:08	84.8
4-Isopropyltoluene	93	U	93	35	ug/m3			04/06/18 20:08	84.8
1,3-Dichlorobenzene	100	U	100	42	ug/m3			04/06/18 20:08	84.8
1,4-Dichlorobenzene	100	U	100	33	ug/m3			04/06/18 20:08	84.8
Benzyl chloride	88	U	88	53	ug/m3			04/06/18 20:08	84.8
n-Butylbenzene	93	U	93	37	ug/m3			04/06/18 20:08	84.8
1,2-Dichlorobenzene	100	U	100	36	ug/m3			04/06/18 20:08	84.8
1,2,4-Trichlorobenzene	310	U	310	150	ug/m3			04/06/18 20:08	84.8
Hexachlorobutadiene	180	U	180	74	ug/m3			04/06/18 20:08	84.8
Naphthalene	220	U	220	140	ug/m3			04/06/18 20:08	84.8

Client Sample ID: GC-IA-108 (AS)
Lab Sample ID: 200-42918-10

Date Collected: 03/28/18 09:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.44**	**J**	0.50	0.20	ppb v/v			04/06/18 03:14	1
Freon 22	**0.32**	**J**	0.50	0.26	ppb v/v			04/06/18 03:14	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.068	ppb v/v			04/06/18 03:14	1
Chloromethane	**0.56**		0.50	0.25	ppb v/v			04/06/18 03:14	1
n-Butane	**6.0**		0.50	0.31	ppb v/v			04/06/18 03:14	1
Vinyl chloride	0.20	U	0.20	0.041	ppb v/v			04/06/18 03:14	1
1,3-Butadiene	0.20	U	0.20	0.065	ppb v/v			04/06/18 03:14	1
Bromomethane	0.20	U	0.20	0.062	ppb v/v			04/06/18 03:14	1
Chloroethane	0.50	U	0.50	0.21	ppb v/v			04/06/18 03:14	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.056	ppb v/v			04/06/18 03:14	1
Trichlorofluoromethane	**0.21**		0.20	0.062	ppb v/v			04/06/18 03:14	1
Freon TF	**0.074**	**J**	0.20	0.031	ppb v/v			04/06/18 03:14	1
1,1-Dichloroethene	0.20	U	0.20	0.034	ppb v/v			04/06/18 03:14	1
Acetone	**1500**	**E**	5.0	2.6	ppb v/v			04/06/18 03:14	1
Isopropyl alcohol	**460**	**E**	5.0	1.8	ppb v/v			04/06/18 03:14	1
Carbon disulfide	**0.43**	**J**	0.50	0.12	ppb v/v			04/06/18 03:14	1
3-Chloropropene	0.50	U	0.50	0.27	ppb v/v			04/06/18 03:14	1
Methylene Chloride	**0.61**		0.50	0.20	ppb v/v			04/06/18 03:14	1

Client Sample ID: GC-IA-108 (AS)
Lab Sample ID: 200-42918-10

Date Collected: 03/28/18 09:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol	**3.3**	**J**	5.0	1.5	ppb v/v			04/06/18 03:14	1
Methyl tert-butyl ether	0.20	U	0.20	0.061	ppb v/v			04/06/18 03:14	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.074	ppb v/v			04/06/18 03:14	1
n-Hexane	**0.26**		0.20	0.16	ppb v/v			04/06/18 03:14	1
1,1-Dichloroethane	0.20	U	0.20	0.026	ppb v/v			04/06/18 03:14	1
Methyl Ethyl Ketone	**67**	**E**	0.50	0.20	ppb v/v			04/06/18 03:14	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.037	ppb v/v			04/06/18 03:14	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.11	ppb v/v			04/06/18 03:14	1
Chloroform	**2.3**		0.20	0.052	ppb v/v			04/06/18 03:14	1
Tetrahydrofuran	**320**	**E**	5.0	2.6	ppb v/v			04/06/18 03:14	1
1,1,1-Trichloroethane	0.20	U	0.20	0.068	ppb v/v			04/06/18 03:14	1
Cyclohexane	**0.15**	**J**	0.20	0.063	ppb v/v			04/06/18 03:14	1
Carbon tetrachloride	0.040	U	0.040	0.024	ppb v/v			04/06/18 03:14	1
2,2,4-Trimethylpentane	**0.23**		0.20	0.088	ppb v/v			04/06/18 03:14	1
Benzene	**0.34**		0.20	0.071	ppb v/v			04/06/18 03:14	1
1,2-Dichloroethane	0.20	U	0.20	0.063	ppb v/v			04/06/18 03:14	1
n-Heptane	**5.4**		0.20	0.14	ppb v/v			04/06/18 03:14	1
Trichloroethene	**0.12**		0.040	0.030	ppb v/v			04/06/18 03:14	1
Methyl methacrylate	0.50	U	0.50	0.22	ppb v/v			04/06/18 03:14	1
1,2-Dichloropropane	0.20	U	0.20	0.12	ppb v/v			04/06/18 03:14	1
1,4-Dioxane	5.0	U	5.0	1.3	ppb v/v			04/06/18 03:14	1
Bromodichloromethane	0.20	U	0.20	0.094	ppb v/v			04/06/18 03:14	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.098	ppb v/v			04/06/18 03:14	1
methyl isobutyl ketone	0.50	U	0.50	0.36	ppb v/v			04/06/18 03:14	1
Toluene	**5.2**		0.20	0.069	ppb v/v			04/06/18 03:14	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.12	ppb v/v			04/06/18 03:14	1
1,1,2-Trichloroethane	0.20	U	0.20	0.078	ppb v/v			04/06/18 03:14	1
Tetrachloroethene	**0.15**		0.040	0.029	ppb v/v			04/06/18 03:14	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.42	ppb v/v			04/06/18 03:14	1
Dibromochloromethane	0.20	U	0.20	0.071	ppb v/v			04/06/18 03:14	1
1,2-Dibromoethane	0.20	U	0.20	0.069	ppb v/v			04/06/18 03:14	1
Chlorobenzene	0.20	U	0.20	0.040	ppb v/v			04/06/18 03:14	1
Ethylbenzene	**0.99**		0.20	0.073	ppb v/v			04/06/18 03:14	1
m,p-Xylene	**4.9**		0.50	0.070	ppb v/v			04/06/18 03:14	1
Xylene, o-	**1.5**		0.20	0.071	ppb v/v			04/06/18 03:14	1
Xylene (total)	**6.4**		0.70	0.14	ppb v/v			04/06/18 03:14	1
Styrene	0.20	U	0.20	0.086	ppb v/v			04/06/18 03:14	1
Bromoform	0.20	U	0.20	0.086	ppb v/v			04/06/18 03:14	1
Cumene	0.20	U	0.20	0.059	ppb v/v			04/06/18 03:14	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.076	ppb v/v			04/06/18 03:14	1
n-Propylbenzene	0.20	U	0.20	0.069	ppb v/v			04/06/18 03:14	1
4-Ethyltoluene	**0.17**	**J**	0.20	0.069	ppb v/v			04/06/18 03:14	1
1,3,5-Trimethylbenzene	**0.085**	**J**	0.20	0.058	ppb v/v			04/06/18 03:14	1
2-Chlorotoluene	0.20	U	0.20	0.071	ppb v/v			04/06/18 03:14	1
tert-Butylbenzene	0.20	U	0.20	0.058	ppb v/v			04/06/18 03:14	1
1,2,4-Trimethylbenzene	**0.28**		0.20	0.080	ppb v/v			04/06/18 03:14	1
sec-Butylbenzene	0.20	U	0.20	0.066	ppb v/v			04/06/18 03:14	1
4-Isopropyltoluene	**0.39**		0.20	0.075	ppb v/v			04/06/18 03:14	1

Client Sample ID: GC-IA-108 (AS)
Lab Sample ID: 200-42918-10

Date Collected: 03/28/18 09:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.20	U	0.20	0.082	ppb v/v			04/06/18 03:14	1
1,4-Dichlorobenzene	0.20	U	0.20	0.065	ppb v/v			04/06/18 03:14	1
Benzyl chloride	**0.25**		0.20	0.12	ppb v/v			04/06/18 03:14	1
n-Butylbenzene	0.20	U	0.20	0.080	ppb v/v			04/06/18 03:14	1
1,2-Dichlorobenzene	0.20	U	0.20	0.071	ppb v/v			04/06/18 03:14	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.24	ppb v/v			04/06/18 03:14	1
Hexachlorobutadiene	0.20	U	0.20	0.082	ppb v/v			04/06/18 03:14	1
Naphthalene	0.50	U	0.50	0.31	ppb v/v			04/06/18 03:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**2.2**	**J**	2.5	0.99	ug/m3			04/06/18 03:14	1
Freon 22	**1.1**	**J**	1.8	0.92	ug/m3			04/06/18 03:14	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.48	ug/m3			04/06/18 03:14	1
Chloromethane	**1.2**		1.0	0.52	ug/m3			04/06/18 03:14	1
n-Butane	**14**		1.2	0.74	ug/m3			04/06/18 03:14	1
Vinyl chloride	0.51	U	0.51	0.10	ug/m3			04/06/18 03:14	1
1,3-Butadiene	0.44	U	0.44	0.14	ug/m3			04/06/18 03:14	1
Bromomethane	0.78	U	0.78	0.24	ug/m3			04/06/18 03:14	1
Chloroethane	1.3	U	1.3	0.55	ug/m3			04/06/18 03:14	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.24	ug/m3			04/06/18 03:14	1
Trichlorofluoromethane	**1.2**		1.1	0.35	ug/m3			04/06/18 03:14	1
Freon TF	**0.57**	**J**	1.5	0.24	ug/m3			04/06/18 03:14	1
1,1-Dichloroethene	0.79	U	0.79	0.13	ug/m3			04/06/18 03:14	1
Acetone	**3700**	**E**	12	6.2	ug/m3			04/06/18 03:14	1
Isopropyl alcohol	**1100**	**E**	12	4.4	ug/m3			04/06/18 03:14	1
Carbon disulfide	**1.3**	**J**	1.6	0.37	ug/m3			04/06/18 03:14	1
3-Chloropropene	1.6	U	1.6	0.85	ug/m3			04/06/18 03:14	1
Methylene Chloride	**2.1**		1.7	0.69	ug/m3			04/06/18 03:14	1
tert-Butyl alcohol	**10**	**J**	15	4.5	ug/m3			04/06/18 03:14	1
Methyl tert-butyl ether	0.72	U	0.72	0.22	ug/m3			04/06/18 03:14	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.29	ug/m3			04/06/18 03:14	1
n-Hexane	**0.92**		0.70	0.56	ug/m3			04/06/18 03:14	1
1,1-Dichloroethane	0.81	U	0.81	0.11	ug/m3			04/06/18 03:14	1
Methyl Ethyl Ketone	**200**	**E**	1.5	0.59	ug/m3			04/06/18 03:14	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.15	ug/m3			04/06/18 03:14	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.44	ug/m3			04/06/18 03:14	1
Chloroform	**11**		0.98	0.25	ug/m3			04/06/18 03:14	1
Tetrahydrofuran	**950**	**E**	15	7.7	ug/m3			04/06/18 03:14	1
1,1,1-Trichloroethane	1.1	U	1.1	0.37	ug/m3			04/06/18 03:14	1
Cyclohexane	**0.53**	**J**	0.69	0.22	ug/m3			04/06/18 03:14	1
Carbon tetrachloride	0.25	U	0.25	0.15	ug/m3			04/06/18 03:14	1
2,2,4-Trimethylpentane	**1.1**		0.93	0.41	ug/m3			04/06/18 03:14	1
Benzene	**1.1**		0.64	0.23	ug/m3			04/06/18 03:14	1
1,2-Dichloroethane	0.81	U	0.81	0.25	ug/m3			04/06/18 03:14	1
n-Heptane	**22**		0.82	0.57	ug/m3			04/06/18 03:14	1
Trichloroethene	**0.63**		0.21	0.16	ug/m3			04/06/18 03:14	1
Methyl methacrylate	2.0	U	2.0	0.90	ug/m3			04/06/18 03:14	1
1,2-Dichloropropane	0.92	U	0.92	0.55	ug/m3			04/06/18 03:14	1
1,4-Dioxane	18	U	18	4.7	ug/m3			04/06/18 03:14	1

Client Sample ID: GC-IA-108 (AS)
Lab Sample ID: 200-42918-10

Date Collected: 03/28/18 09:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	1.3	U	1.3	0.63	ug/m3			04/06/18 03:14	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.44	ug/m3			04/06/18 03:14	1
methyl isobutyl ketone	2.0	U	2.0	1.5	ug/m3			04/06/18 03:14	1
Toluene	**19**		0.75	0.26	ug/m3			04/06/18 03:14	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.54	ug/m3			04/06/18 03:14	1
1,1,2-Trichloroethane	1.1	U	1.1	0.43	ug/m3			04/06/18 03:14	1
Tetrachloroethene	**1.1**		0.27	0.20	ug/m3			04/06/18 03:14	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	1.7	ug/m3			04/06/18 03:14	1
Dibromochloromethane	1.7	U	1.7	0.60	ug/m3			04/06/18 03:14	1
1,2-Dibromoethane	1.5	U	1.5	0.53	ug/m3			04/06/18 03:14	1
Chlorobenzene	0.92	U	0.92	0.18	ug/m3			04/06/18 03:14	1
Ethylbenzene	**4.3**		0.87	0.32	ug/m3			04/06/18 03:14	1
m,p-Xylene	**21**		2.2	0.30	ug/m3			04/06/18 03:14	1
Xylene, o-	**6.5**		0.87	0.31	ug/m3			04/06/18 03:14	1
Xylene (total)	**28**		3.0	0.61	ug/m3			04/06/18 03:14	1
Styrene	0.85	U	0.85	0.37	ug/m3			04/06/18 03:14	1
Bromoform	2.1	U	2.1	0.89	ug/m3			04/06/18 03:14	1
Cumene	0.98	U	0.98	0.29	ug/m3			04/06/18 03:14	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.52	ug/m3			04/06/18 03:14	1
n-Propylbenzene	0.98	U	0.98	0.34	ug/m3			04/06/18 03:14	1
4-Ethyltoluene	**0.82**	**J**	0.98	0.34	ug/m3			04/06/18 03:14	1
1,3,5-Trimethylbenzene	**0.42**	**J**	0.98	0.29	ug/m3			04/06/18 03:14	1
2-Chlorotoluene	1.0	U	1.0	0.37	ug/m3			04/06/18 03:14	1
tert-Butylbenzene	1.1	U	1.1	0.32	ug/m3			04/06/18 03:14	1
1,2,4-Trimethylbenzene	**1.4**		0.98	0.39	ug/m3			04/06/18 03:14	1
sec-Butylbenzene	1.1	U	1.1	0.36	ug/m3			04/06/18 03:14	1
4-Isopropyltoluene	**2.2**		1.1	0.41	ug/m3			04/06/18 03:14	1
1,3-Dichlorobenzene	1.2	U	1.2	0.49	ug/m3			04/06/18 03:14	1
1,4-Dichlorobenzene	1.2	U	1.2	0.39	ug/m3			04/06/18 03:14	1
Benzyl chloride	**1.3**		1.0	0.62	ug/m3			04/06/18 03:14	1
n-Butylbenzene	1.1	U	1.1	0.44	ug/m3			04/06/18 03:14	1
1,2-Dichlorobenzene	1.2	U	1.2	0.43	ug/m3			04/06/18 03:14	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.8	ug/m3			04/06/18 03:14	1
Hexachlorobutadiene	2.1	U	2.1	0.87	ug/m3			04/06/18 03:14	1
Naphthalene	2.6	U	2.6	1.6	ug/m3			04/06/18 03:14	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	150	U	150	60	ppb v/v			04/06/18 20:59	301
Freon 22	150	U	150	78	ppb v/v			04/06/18 20:59	301
1,2-Dichlorotetrafluoroethane	60	U	60	20	ppb v/v			04/06/18 20:59	301
Chloromethane	150	U	150	75	ppb v/v			04/06/18 20:59	301
n-Butane	150	U	150	93	ppb v/v			04/06/18 20:59	301
Vinyl chloride	60	U	60	12	ppb v/v			04/06/18 20:59	301
1,3-Butadiene	60	U	60	20	ppb v/v			04/06/18 20:59	301
Bromomethane	60	U	60	19	ppb v/v			04/06/18 20:59	301
Chloroethane	150	U	150	63	ppb v/v			04/06/18 20:59	301
Bromoethene(Vinyl Bromide)	60	U	60	17	ppb v/v			04/06/18 20:59	301
Trichlorofluoromethane	60	U	60	19	ppb v/v			04/06/18 20:59	301

Client Sample ID: GC-IA-108 (AS)
Lab Sample ID: 200-42918-10

Date Collected: 03/28/18 09:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon TF	60	U	60	9.3	ppb v/v			04/06/18 20:59	301
1,1-Dichloroethene	60	U	60	10	ppb v/v			04/06/18 20:59	301
Acetone	**8200**	**D**	1500	780	ppb v/v			04/06/18 20:59	301
Isopropyl alcohol	**570**	**J D B**	1500	540	ppb v/v			04/06/18 20:59	301
Carbon disulfide	150	U	150	36	ppb v/v			04/06/18 20:59	301
3-Chloropropene	150	U	150	81	ppb v/v			04/06/18 20:59	301
Methylene Chloride	150	U	150	60	ppb v/v			04/06/18 20:59	301
tert-Butyl alcohol	1500	U	1500	450	ppb v/v			04/06/18 20:59	301
Methyl tert-butyl ether	60	U	60	18	ppb v/v			04/06/18 20:59	301
trans-1,2-Dichloroethene	60	U	60	22	ppb v/v			04/06/18 20:59	301
n-Hexane	60	U	60	48	ppb v/v			04/06/18 20:59	301
1,1-Dichloroethane	60	U	60	7.8	ppb v/v			04/06/18 20:59	301
Methyl Ethyl Ketone	150	U	150	60	ppb v/v			04/06/18 20:59	301
cis-1,2-Dichloroethene	60	U	60	11	ppb v/v			04/06/18 20:59	301
1,2-Dichloroethene, Total	120	U	120	33	ppb v/v			04/06/18 20:59	301
Chloroform	60	U	60	16	ppb v/v			04/06/18 20:59	301
Tetrahydrofuran	1500	U	1500	780	ppb v/v			04/06/18 20:59	301
1,1,1-Trichloroethane	60	U	60	20	ppb v/v			04/06/18 20:59	301
Cyclohexane	60	U	60	19	ppb v/v			04/06/18 20:59	301
Carbon tetrachloride	12	U	12	7.2	ppb v/v			04/06/18 20:59	301
2,2,4-Trimethylpentane	60	U	60	26	ppb v/v			04/06/18 20:59	301
Benzene	60	U	60	21	ppb v/v			04/06/18 20:59	301
1,2-Dichloroethane	60	U	60	19	ppb v/v			04/06/18 20:59	301
n-Heptane	60	U	60	42	ppb v/v			04/06/18 20:59	301
Trichloroethene	12	U	12	9.0	ppb v/v			04/06/18 20:59	301
Methyl methacrylate	150	U	150	66	ppb v/v			04/06/18 20:59	301
1,2-Dichloropropane	60	U	60	36	ppb v/v			04/06/18 20:59	301
1,4-Dioxane	1500	U	1500	390	ppb v/v			04/06/18 20:59	301
Bromodichloromethane	60	U	60	28	ppb v/v			04/06/18 20:59	301
cis-1,3-Dichloropropene	60	U	60	29	ppb v/v			04/06/18 20:59	301
methyl isobutyl ketone	150	U	150	110	ppb v/v			04/06/18 20:59	301
Toluene	60	U	60	21	ppb v/v			04/06/18 20:59	301
trans-1,3-Dichloropropene	60	U	60	36	ppb v/v			04/06/18 20:59	301
1,1,2-Trichloroethane	60	U	60	23	ppb v/v			04/06/18 20:59	301
Tetrachloroethene	12	U	12	8.7	ppb v/v			04/06/18 20:59	301
Methyl Butyl Ketone (2-Hexanone)	150	U	150	130	ppb v/v			04/06/18 20:59	301
Dibromochloromethane	60	U	60	21	ppb v/v			04/06/18 20:59	301
1,2-Dibromoethane	60	U	60	21	ppb v/v			04/06/18 20:59	301
Chlorobenzene	60	U	60	12	ppb v/v			04/06/18 20:59	301
Ethylbenzene	60	U	60	22	ppb v/v			04/06/18 20:59	301
m,p-Xylene	150	U	150	21	ppb v/v			04/06/18 20:59	301
Xylene, o-	60	U	60	21	ppb v/v			04/06/18 20:59	301
Xylene (total)	210	U	210	42	ppb v/v			04/06/18 20:59	301
Styrene	60	U	60	26	ppb v/v			04/06/18 20:59	301
Bromoform	60	U	60	26	ppb v/v			04/06/18 20:59	301
Cumene	60	U	60	18	ppb v/v			04/06/18 20:59	301
1,1,2,2-Tetrachloroethane	60	U	60	23	ppb v/v			04/06/18 20:59	301
n-Propylbenzene	60	U	60	21	ppb v/v			04/06/18 20:59	301

Client Sample ID: GC-IA-108 (AS)
Lab Sample ID: 200-42918-10

Date Collected: 03/28/18 09:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	60	U	60	21	ppb v/v			04/06/18 20:59	301
1,3,5-Trimethylbenzene	60	U	60	17	ppb v/v			04/06/18 20:59	301
2-Chlorotoluene	60	U	60	21	ppb v/v			04/06/18 20:59	301
tert-Butylbenzene	60	U	60	17	ppb v/v			04/06/18 20:59	301
1,2,4-Trimethylbenzene	60	U	60	24	ppb v/v			04/06/18 20:59	301
sec-Butylbenzene	60	U	60	20	ppb v/v			04/06/18 20:59	301
4-Isopropyltoluene	60	U	60	23	ppb v/v			04/06/18 20:59	301
1,3-Dichlorobenzene	60	U	60	25	ppb v/v			04/06/18 20:59	301
1,4-Dichlorobenzene	60	U	60	20	ppb v/v			04/06/18 20:59	301
Benzyl chloride	60	U	60	36	ppb v/v			04/06/18 20:59	301
n-Butylbenzene	60	U	60	24	ppb v/v			04/06/18 20:59	301
1,2-Dichlorobenzene	60	U	60	21	ppb v/v			04/06/18 20:59	301
1,2,4-Trichlorobenzene	150	U	150	72	ppb v/v			04/06/18 20:59	301
Hexachlorobutadiene	60	U	60	25	ppb v/v			04/06/18 20:59	301
Naphthalene	150	U	150	93	ppb v/v			04/06/18 20:59	301

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	740	U	740	300	ug/m3			04/06/18 20:59	301
Freon 22	530	U	530	280	ug/m3			04/06/18 20:59	301
1,2-Dichlorotetrafluoroethane	420	U	420	140	ug/m3			04/06/18 20:59	301
Chloromethane	310	U	310	160	ug/m3			04/06/18 20:59	301
n-Butane	360	U	360	220	ug/m3			04/06/18 20:59	301
Vinyl chloride	150	U	150	32	ug/m3			04/06/18 20:59	301
1,3-Butadiene	130	U	130	43	ug/m3			04/06/18 20:59	301
Bromomethane	230	U	230	72	ug/m3			04/06/18 20:59	301
Chloroethane	400	U	400	170	ug/m3			04/06/18 20:59	301
Bromoethene(Vinyl Bromide)	260	U	260	74	ug/m3			04/06/18 20:59	301
Trichlorofluoromethane	340	U	340	100	ug/m3			04/06/18 20:59	301
Freon TF	460	U	460	72	ug/m3			04/06/18 20:59	301
1,1-Dichloroethene	240	U	240	41	ug/m3			04/06/18 20:59	301
Acetone	**19000**	**D**	3600	1900	ug/m3			04/06/18 20:59	301
Isopropyl alcohol	**1400**	**J D B**	3700	1300	ug/m3			04/06/18 20:59	301
Carbon disulfide	470	U	470	110	ug/m3			04/06/18 20:59	301
3-Chloropropene	470	U	470	250	ug/m3			04/06/18 20:59	301
Methylene Chloride	520	U	520	210	ug/m3			04/06/18 20:59	301
tert-Butyl alcohol	4600	U	4600	1400	ug/m3			04/06/18 20:59	301
Methyl tert-butyl ether	220	U	220	66	ug/m3			04/06/18 20:59	301
trans-1,2-Dichloroethene	240	U	240	88	ug/m3			04/06/18 20:59	301
n-Hexane	210	U	210	170	ug/m3			04/06/18 20:59	301
1,1-Dichloroethane	240	U	240	32	ug/m3			04/06/18 20:59	301
Methyl Ethyl Ketone	440	U	440	180	ug/m3			04/06/18 20:59	301
cis-1,2-Dichloroethene	240	U	240	44	ug/m3			04/06/18 20:59	301
1,2-Dichloroethene, Total	480	U	480	130	ug/m3			04/06/18 20:59	301
Chloroform	290	U	290	76	ug/m3			04/06/18 20:59	301
Tetrahydrofuran	4400	U	4400	2300	ug/m3			04/06/18 20:59	301
1,1,1-Trichloroethane	330	U	330	110	ug/m3			04/06/18 20:59	301
Cyclohexane	210	U	210	65	ug/m3			04/06/18 20:59	301
Carbon tetrachloride	76	U	76	45	ug/m3			04/06/18 20:59	301
2,2,4-Trimethylpentane	280	U	280	120	ug/m3			04/06/18 20:59	301

Client Sample ID: GC-IA-108 (AS)
Lab Sample ID: 200-42918-10
Date Collected: 03/28/18 09:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	190	U	190	68	ug/m3			04/06/18 20:59	301
1,2-Dichloroethane	240	U	240	77	ug/m3			04/06/18 20:59	301
n-Heptane	250	U	250	170	ug/m3			04/06/18 20:59	301
Trichloroethene	65	U	65	49	ug/m3			04/06/18 20:59	301
Methyl methacrylate	620	U	620	270	ug/m3			04/06/18 20:59	301
1,2-Dichloropropane	280	U	280	170	ug/m3			04/06/18 20:59	301
1,4-Dioxane	5400	U	5400	1400	ug/m3			04/06/18 20:59	301
Bromodichloromethane	400	U	400	190	ug/m3			04/06/18 20:59	301
cis-1,3-Dichloropropene	270	U	270	130	ug/m3			04/06/18 20:59	301
methyl isobutyl ketone	620	U	620	440	ug/m3			04/06/18 20:59	301
Toluene	230	U	230	78	ug/m3			04/06/18 20:59	301
trans-1,3-Dichloropropene	270	U	270	160	ug/m3			04/06/18 20:59	301
1,1,2-Trichloroethane	330	U	330	130	ug/m3			04/06/18 20:59	301
Tetrachloroethene	82	U	82	59	ug/m3			04/06/18 20:59	301
Methyl Butyl Ketone (2-Hexanone)	620	U	620	520	ug/m3			04/06/18 20:59	301
Dibromochloromethane	510	U	510	180	ug/m3			04/06/18 20:59	301
1,2-Dibromoethane	460	U	460	160	ug/m3			04/06/18 20:59	301
Chlorobenzene	280	U	280	55	ug/m3			04/06/18 20:59	301
Ethylbenzene	260	U	260	95	ug/m3			04/06/18 20:59	301
m,p-Xylene	650	U	650	91	ug/m3			04/06/18 20:59	301
Xylene, o-	260	U	260	93	ug/m3			04/06/18 20:59	301
Xylene (total)	910	U	910	180	ug/m3			04/06/18 20:59	301
Styrene	260	U	260	110	ug/m3			04/06/18 20:59	301
Bromoform	620	U	620	270	ug/m3			04/06/18 20:59	301
Cumene	300	U	300	87	ug/m3			04/06/18 20:59	301
1,1,2,2-Tetrachloroethane	410	U	410	160	ug/m3			04/06/18 20:59	301
n-Propylbenzene	300	U	300	100	ug/m3			04/06/18 20:59	301
4-Ethyltoluene	300	U	300	100	ug/m3			04/06/18 20:59	301
1,3,5-Trimethylbenzene	300	U	300	86	ug/m3			04/06/18 20:59	301
2-Chlorotoluene	310	U	310	110	ug/m3			04/06/18 20:59	301
tert-Butylbenzene	330	U	330	96	ug/m3			04/06/18 20:59	301
1,2,4-Trimethylbenzene	300	U	300	120	ug/m3			04/06/18 20:59	301
sec-Butylbenzene	330	U	330	110	ug/m3			04/06/18 20:59	301
4-Isopropyltoluene	330	U	330	120	ug/m3			04/06/18 20:59	301
1,3-Dichlorobenzene	360	U	360	150	ug/m3			04/06/18 20:59	301
1,4-Dichlorobenzene	360	U	360	120	ug/m3			04/06/18 20:59	301
Benzyl chloride	310	U	310	190	ug/m3			04/06/18 20:59	301
n-Butylbenzene	330	U	330	130	ug/m3			04/06/18 20:59	301
1,2-Dichlorobenzene	360	U	360	130	ug/m3			04/06/18 20:59	301
1,2,4-Trichlorobenzene	1100	U	1100	540	ug/m3			04/06/18 20:59	301
Hexachlorobutadiene	640	U	640	260	ug/m3			04/06/18 20:59	301
Naphthalene	790	U	790	490	ug/m3			04/06/18 20:59	301

Client Sample ID: GC-IA-106 (AS)
Lab Sample ID: 200-42918-11

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.33**	**J**	0.50	0.047	ppb v/v			04/05/18 15:55	1
Freon 22	0.50	U	0.50	0.20	ppb v/v			04/05/18 15:55	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.041	ppb v/v			04/05/18 15:55	1
Chloromethane	**0.23**	**J**	0.50	0.16	ppb v/v			04/05/18 15:55	1
n-Butane	**2.1**		0.50	0.046	ppb v/v			04/05/18 15:55	1
Vinyl chloride	0.20	U	0.20	0.018	ppb v/v			04/05/18 15:55	1
1,3-Butadiene	0.20	U	0.20	0.037	ppb v/v			04/05/18 15:55	1
Bromomethane	0.20	U	0.20	0.036	ppb v/v			04/05/18 15:55	1
Chloroethane	0.50	U	0.50	0.13	ppb v/v			04/05/18 15:55	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.022	ppb v/v			04/05/18 15:55	1
Trichlorofluoromethane	**0.18**	**J**	0.20	0.031	ppb v/v			04/05/18 15:55	1
Freon TF	**0.058**	**J**	0.20	0.027	ppb v/v			04/05/18 15:55	1
1,1-Dichloroethene	0.20	U	0.20	0.035	ppb v/v			04/05/18 15:55	1
Acetone	**65**	**E**	5.0	1.3	ppb v/v			04/05/18 15:55	1
Isopropyl alcohol	**4.6**	**J**	5.0	0.13	ppb v/v			04/05/18 15:55	1
Carbon disulfide	**9.2**		0.50	0.028	ppb v/v			04/05/18 15:55	1
3-Chloropropene	0.50	U	0.50	0.063	ppb v/v			04/05/18 15:55	1
Methylene Chloride	**0.72**		0.50	0.068	ppb v/v			04/05/18 15:55	1
tert-Butyl alcohol	5.0	U	5.0	1.7	ppb v/v			04/05/18 15:55	1
Methyl tert-butyl ether	0.20	U	0.20	0.041	ppb v/v			04/05/18 15:55	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.050	ppb v/v			04/05/18 15:55	1
n-Hexane	**0.19**	**J**	0.20	0.046	ppb v/v			04/05/18 15:55	1
1,1-Dichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 15:55	1
Methyl Ethyl Ketone	**5.0**		0.50	0.11	ppb v/v			04/05/18 15:55	1
cis-1,2-Dichloroethene	**0.064**	**J**	0.20	0.029	ppb v/v			04/05/18 15:55	1
1,2-Dichloroethene, Total	**0.064**	**J**	0.40	0.029	ppb v/v			04/05/18 15:55	1
Chloroform	**0.032**	**J**	0.20	0.025	ppb v/v			04/05/18 15:55	1
Tetrahydrofuran	**3.2**	**J**	5.0	1.2	ppb v/v			04/05/18 15:55	1
1,1,1-Trichloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 15:55	1
Cyclohexane	**0.051**	**J**	0.20	0.045	ppb v/v			04/05/18 15:55	1
Carbon tetrachloride	**0.063**		0.040	0.011	ppb v/v			04/05/18 15:55	1
2,2,4-Trimethylpentane	**0.15**	**J**	0.20	0.043	ppb v/v			04/05/18 15:55	1
Benzene	**0.26**		0.20	0.028	ppb v/v			04/05/18 15:55	1
1,2-Dichloroethane	0.20	U	0.20	0.034	ppb v/v			04/05/18 15:55	1
n-Heptane	**0.13**	**J**	0.20	0.068	ppb v/v			04/05/18 15:55	1
Trichloroethene	**0.14**		0.040	0.0091	ppb v/v			04/05/18 15:55	1
Methyl methacrylate	0.50	U	0.50	0.11	ppb v/v			04/05/18 15:55	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			04/05/18 15:55	1
1,4-Dioxane	5.0	U	5.0	0.76	ppb v/v			04/05/18 15:55	1
Bromodichloromethane	0.20	U	0.20	0.059	ppb v/v			04/05/18 15:55	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.036	ppb v/v			04/05/18 15:55	1
methyl isobutyl ketone	**0.15**	**J**	0.50	0.065	ppb v/v			04/05/18 15:55	1
Toluene	**0.39**		0.20	0.035	ppb v/v			04/05/18 15:55	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.038	ppb v/v			04/05/18 15:55	1
1,1,2-Trichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 15:55	1
Tetrachloroethene	**0.062**		0.040	0.0098	ppb v/v			04/05/18 15:55	1
Methyl Butyl Ketone (2-Hexanone)	**0.094**	**J**	0.50	0.086	ppb v/v			04/05/18 15:55	1
Dibromochloromethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 15:55	1

Client Sample ID: GC-IA-106 (AS)
Lab Sample ID: 200-42918-11
Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	0.20	U	0.20	0.023	ppb v/v			04/05/18 15:55	1
Chlorobenzene	0.20	U	0.20	0.025	ppb v/v			04/05/18 15:55	1
Ethylbenzene	**0.060**	**J**	0.20	0.034	ppb v/v			04/05/18 15:55	1
m,p-Xylene	**0.19**	**J**	0.50	0.077	ppb v/v			04/05/18 15:55	1
Xylene, o-	**0.070**	**J**	0.20	0.040	ppb v/v			04/05/18 15:55	1
Xylene (total)	**0.26**	**J**	0.70	0.040	ppb v/v			04/05/18 15:55	1
Styrene	0.20	U	0.20	0.035	ppb v/v			04/05/18 15:55	1
Bromoform	0.20	U	0.20	0.035	ppb v/v			04/05/18 15:55	1
Cumene	0.20	U	0.20	0.039	ppb v/v			04/05/18 15:55	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 15:55	1
n-Propylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 15:55	1
4-Ethyltoluene	0.20	U	0.20	0.040	ppb v/v			04/05/18 15:55	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 15:55	1
2-Chlorotoluene	0.20	U	0.20	0.035	ppb v/v			04/05/18 15:55	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 15:55	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.057	ppb v/v			04/05/18 15:55	1
sec-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 15:55	1
4-Isopropyltoluene	0.20	U	0.20	0.052	ppb v/v			04/05/18 15:55	1
1,3-Dichlorobenzene	0.20	U	0.20	0.050	ppb v/v			04/05/18 15:55	1
1,4-Dichlorobenzene	0.20	U	0.20	0.063	ppb v/v			04/05/18 15:55	1
Benzyl chloride	0.20	U	0.20	0.067	ppb v/v			04/05/18 15:55	1
n-Butylbenzene	0.20	U	0.20	0.068	ppb v/v			04/05/18 15:55	1
1,2-Dichlorobenzene	0.20	U	0.20	0.045	ppb v/v			04/05/18 15:55	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			04/05/18 15:55	1
Hexachlorobutadiene	0.20	U	0.20	0.064	ppb v/v			04/05/18 15:55	1
Naphthalene	0.50	U	0.50	0.10	ppb v/v			04/05/18 15:55	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**1.6**	**J**	2.5	0.23	ug/m3			04/05/18 15:55	1
Freon 22	1.8	U	1.8	0.71	ug/m3			04/05/18 15:55	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.29	ug/m3			04/05/18 15:55	1
Chloromethane	**0.48**	**J**	1.0	0.33	ug/m3			04/05/18 15:55	1
n-Butane	**5.0**		1.2	0.11	ug/m3			04/05/18 15:55	1
Vinyl chloride	0.51	U	0.51	0.046	ug/m3			04/05/18 15:55	1
1,3-Butadiene	0.44	U	0.44	0.082	ug/m3			04/05/18 15:55	1
Bromomethane	0.78	U	0.78	0.14	ug/m3			04/05/18 15:55	1
Chloroethane	1.3	U	1.3	0.34	ug/m3			04/05/18 15:55	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.096	ug/m3			04/05/18 15:55	1
Trichlorofluoromethane	**1.0**	**J**	1.1	0.17	ug/m3			04/05/18 15:55	1
Freon TF	**0.45**	**J**	1.5	0.21	ug/m3			04/05/18 15:55	1
1,1-Dichloroethene	0.79	U	0.79	0.14	ug/m3			04/05/18 15:55	1
Acetone	**150**	**E**	12	3.1	ug/m3			04/05/18 15:55	1
Isopropyl alcohol	**11**	**J**	12	0.32	ug/m3			04/05/18 15:55	1
Carbon disulfide	**29**		1.6	0.087	ug/m3			04/05/18 15:55	1
3-Chloropropene	1.6	U	1.6	0.20	ug/m3			04/05/18 15:55	1
Methylene Chloride	**2.5**		1.7	0.24	ug/m3			04/05/18 15:55	1
tert-Butyl alcohol	15	U	15	5.2	ug/m3			04/05/18 15:55	1
Methyl tert-butyl ether	0.72	U	0.72	0.15	ug/m3			04/05/18 15:55	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.20	ug/m3			04/05/18 15:55	1

Client Sample ID: GC-IA-106 (AS)
Lab Sample ID: 200-42918-11

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Hexane	**0.66**	**J**	0.70	0.16	ug/m3			04/05/18 15:55	1
1,1-Dichloroethane	0.81	U	0.81	0.069	ug/m3			04/05/18 15:55	1
Methyl Ethyl Ketone	**15**		1.5	0.32	ug/m3			04/05/18 15:55	1
cis-1,2-Dichloroethene	**0.26**	**J**	0.79	0.11	ug/m3			04/05/18 15:55	1
1,2-Dichloroethene, Total	**0.25**	**J**	1.6	0.11	ug/m3			04/05/18 15:55	1
Chloroform	**0.16**	**J**	0.98	0.12	ug/m3			04/05/18 15:55	1
Tetrahydrofuran	**9.3**	**J**	15	3.5	ug/m3			04/05/18 15:55	1
1,1,1-Trichloroethane	1.1	U	1.1	0.14	ug/m3			04/05/18 15:55	1
Cyclohexane	**0.18**	**J**	0.69	0.15	ug/m3			04/05/18 15:55	1
Carbon tetrachloride	**0.40**		0.25	0.069	ug/m3			04/05/18 15:55	1
2,2,4-Trimethylpentane	**0.71**	**J**	0.93	0.20	ug/m3			04/05/18 15:55	1
Benzene	**0.82**		0.64	0.089	ug/m3			04/05/18 15:55	1
1,2-Dichloroethane	0.81	U	0.81	0.14	ug/m3			04/05/18 15:55	1
n-Heptane	**0.55**	**J**	0.82	0.28	ug/m3			04/05/18 15:55	1
Trichloroethene	**0.75**		0.21	0.049	ug/m3			04/05/18 15:55	1
Methyl methacrylate	2.0	U	2.0	0.45	ug/m3			04/05/18 15:55	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			04/05/18 15:55	1
1,4-Dioxane	18	U	18	2.7	ug/m3			04/05/18 15:55	1
Bromodichloromethane	1.3	U	1.3	0.40	ug/m3			04/05/18 15:55	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.16	ug/m3			04/05/18 15:55	1
methyl isobutyl ketone	**0.63**	**J**	2.0	0.27	ug/m3			04/05/18 15:55	1
Toluene	**1.5**		0.75	0.13	ug/m3			04/05/18 15:55	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.17	ug/m3			04/05/18 15:55	1
1,1,2-Trichloroethane	1.1	U	1.1	0.093	ug/m3			04/05/18 15:55	1
Tetrachloroethene	**0.42**		0.27	0.066	ug/m3			04/05/18 15:55	1
Methyl Butyl Ketone (2-Hexanone)	**0.39**	**J**	2.0	0.35	ug/m3			04/05/18 15:55	1
Dibromochloromethane	1.7	U	1.7	0.14	ug/m3			04/05/18 15:55	1
1,2-Dibromoethane	1.5	U	1.5	0.18	ug/m3			04/05/18 15:55	1
Chlorobenzene	0.92	U	0.92	0.12	ug/m3			04/05/18 15:55	1
Ethylbenzene	**0.26**	**J**	0.87	0.15	ug/m3			04/05/18 15:55	1
m,p-Xylene	**0.84**	**J**	2.2	0.33	ug/m3			04/05/18 15:55	1
Xylene, o-	**0.30**	**J**	0.87	0.17	ug/m3			04/05/18 15:55	1
Xylene (total)	**1.1**	**J**	3.0	0.17	ug/m3			04/05/18 15:55	1
Styrene	0.85	U	0.85	0.15	ug/m3			04/05/18 15:55	1
Bromoform	2.1	U	2.1	0.36	ug/m3			04/05/18 15:55	1
Cumene	0.98	U	0.98	0.19	ug/m3			04/05/18 15:55	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.18	ug/m3			04/05/18 15:55	1
n-Propylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 15:55	1
4-Ethyltoluene	0.98	U	0.98	0.20	ug/m3			04/05/18 15:55	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 15:55	1
2-Chlorotoluene	1.0	U	1.0	0.18	ug/m3			04/05/18 15:55	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 15:55	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.28	ug/m3			04/05/18 15:55	1
sec-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 15:55	1
4-Isopropyltoluene	1.1	U	1.1	0.29	ug/m3			04/05/18 15:55	1
1,3-Dichlorobenzene	1.2	U	1.2	0.30	ug/m3			04/05/18 15:55	1
1,4-Dichlorobenzene	1.2	U	1.2	0.38	ug/m3			04/05/18 15:55	1
Benzyl chloride	1.0	U	1.0	0.35	ug/m3			04/05/18 15:55	1

Client Sample ID: GC-IA-106 (AS)
Lab Sample ID: 200-42918-11

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	1.1	U	1.1	0.37	ug/m3			04/05/18 15:55	1
1,2-Dichlorobenzene	1.2	U	1.2	0.27	ug/m3			04/05/18 15:55	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			04/05/18 15:55	1
Hexachlorobutadiene	2.1	U	2.1	0.68	ug/m3			04/05/18 15:55	1
Naphthalene	2.6	U	2.6	0.52	ug/m3			04/05/18 15:55	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.49**	**J D**	1.3	0.12	ppb v/v			04/06/18 08:25	2.5
Freon 22	1.3	U	1.3	0.50	ppb v/v			04/06/18 08:25	2.5
1,2-Dichlorotetrafluoroethane	0.50	U	0.50	0.10	ppb v/v			04/06/18 08:25	2.5
Chloromethane	**0.50**	**J D**	1.3	0.40	ppb v/v			04/06/18 08:25	2.5
n-Butane	**2.4**	**D**	1.3	0.12	ppb v/v			04/06/18 08:25	2.5
Vinyl chloride	0.50	U	0.50	0.045	ppb v/v			04/06/18 08:25	2.5
1,3-Butadiene	0.50	U	0.50	0.093	ppb v/v			04/06/18 08:25	2.5
Bromomethane	0.50	U	0.50	0.090	ppb v/v			04/06/18 08:25	2.5
Chloroethane	1.3	U	1.3	0.33	ppb v/v			04/06/18 08:25	2.5
Bromoethene(Vinyl Bromide)	0.50	U	0.50	0.055	ppb v/v			04/06/18 08:25	2.5
Trichlorofluoromethane	**0.20**	**J D**	0.50	0.078	ppb v/v			04/06/18 08:25	2.5
Freon TF	0.50	U	0.50	0.068	ppb v/v			04/06/18 08:25	2.5
1,1-Dichloroethene	0.50	U	0.50	0.088	ppb v/v			04/06/18 08:25	2.5
Acetone	**69**	**D**	13	3.3	ppb v/v			04/06/18 08:25	2.5
Isopropyl alcohol	**4.8**	**J D**	13	0.33	ppb v/v			04/06/18 08:25	2.5
Carbon disulfide	**9.4**	**D**	1.3	0.070	ppb v/v			04/06/18 08:25	2.5
3-Chloropropene	1.3	U	1.3	0.16	ppb v/v			04/06/18 08:25	2.5
Methylene Chloride	**0.62**	**J D**	1.3	0.17	ppb v/v			04/06/18 08:25	2.5
tert-Butyl alcohol	13	U	13	4.3	ppb v/v			04/06/18 08:25	2.5
Methyl tert-butyl ether	0.50	U	0.50	0.10	ppb v/v			04/06/18 08:25	2.5
trans-1,2-Dichloroethene	0.50	U	0.50	0.13	ppb v/v			04/06/18 08:25	2.5
n-Hexane	0.50	U	0.50	0.12	ppb v/v			04/06/18 08:25	2.5
1,1-Dichloroethane	0.50	U	0.50	0.043	ppb v/v			04/06/18 08:25	2.5
Methyl Ethyl Ketone	**5.0**	**D**	1.3	0.28	ppb v/v			04/06/18 08:25	2.5
cis-1,2-Dichloroethene	0.50	U	0.50	0.073	ppb v/v			04/06/18 08:25	2.5
1,2-Dichloroethene, Total	1.0	U	1.0	0.073	ppb v/v			04/06/18 08:25	2.5
Chloroform	0.50	U	0.50	0.063	ppb v/v			04/06/18 08:25	2.5
Tetrahydrofuran	**3.1**	**J D**	13	3.0	ppb v/v			04/06/18 08:25	2.5
1,1,1-Trichloroethane	0.50	U	0.50	0.065	ppb v/v			04/06/18 08:25	2.5
Cyclohexane	0.50	U	0.50	0.11	ppb v/v			04/06/18 08:25	2.5
Carbon tetrachloride	**0.060**	**J D**	0.10	0.028	ppb v/v			04/06/18 08:25	2.5
2,2,4-Trimethylpentane	**0.15**	**J D**	0.50	0.11	ppb v/v			04/06/18 08:25	2.5
Benzene	**0.27**	**J D**	0.50	0.070	ppb v/v			04/06/18 08:25	2.5
1,2-Dichloroethane	0.50	U	0.50	0.085	ppb v/v			04/06/18 08:25	2.5
n-Heptane	0.50	U	0.50	0.17	ppb v/v			04/06/18 08:25	2.5
Trichloroethene	**0.14**	**D**	0.10	0.023	ppb v/v			04/06/18 08:25	2.5
Methyl methacrylate	1.3	U	1.3	0.28	ppb v/v			04/06/18 08:25	2.5
1,2-Dichloropropane	0.50	U	0.50	0.088	ppb v/v			04/06/18 08:25	2.5
1,4-Dioxane	13	U	13	1.9	ppb v/v			04/06/18 08:25	2.5
Bromodichloromethane	0.50	U	0.50	0.15	ppb v/v			04/06/18 08:25	2.5
cis-1,3-Dichloropropene	0.50	U	0.50	0.090	ppb v/v			04/06/18 08:25	2.5

Client Sample ID: GC-IA-106 (AS)
Lab Sample ID: 200-42918-11

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	**0.19**	**J D**	1.3	0.16	ppb v/v			04/06/18 08:25	2.5
Toluene	**0.40**	**J D**	0.50	0.088	ppb v/v			04/06/18 08:25	2.5
trans-1,3-Dichloropropene	0.50	U	0.50	0.095	ppb v/v			04/06/18 08:25	2.5
1,1,2-Trichloroethane	0.50	U	0.50	0.043	ppb v/v			04/06/18 08:25	2.5
Tetrachloroethene	0.10	U	0.10	0.025	ppb v/v			04/06/18 08:25	2.5
Methyl Butyl Ketone (2-Hexanone)	1.3	U	1.3	0.22	ppb v/v			04/06/18 08:25	2.5
Dibromochloromethane	0.50	U	0.50	0.043	ppb v/v			04/06/18 08:25	2.5
1,2-Dibromoethane	0.50	U	0.50	0.058	ppb v/v			04/06/18 08:25	2.5
Chlorobenzene	0.50	U	0.50	0.063	ppb v/v			04/06/18 08:25	2.5
Ethylbenzene	0.50	U	0.50	0.085	ppb v/v			04/06/18 08:25	2.5
m,p-Xylene	**0.20**	**J D**	1.3	0.19	ppb v/v			04/06/18 08:25	2.5
Xylene, o-	0.50	U	0.50	0.10	ppb v/v			04/06/18 08:25	2.5
Xylene (total)	**0.20**	**J D**	1.8	0.10	ppb v/v			04/06/18 08:25	2.5
Styrene	0.50	U	0.50	0.088	ppb v/v			04/06/18 08:25	2.5
Bromoform	0.50	U	0.50	0.088	ppb v/v			04/06/18 08:25	2.5
Cumene	0.50	U	0.50	0.098	ppb v/v			04/06/18 08:25	2.5
1,1,2,2-Tetrachloroethane	0.50	U	0.50	0.065	ppb v/v			04/06/18 08:25	2.5
n-Propylbenzene	0.50	U	0.50	0.10	ppb v/v			04/06/18 08:25	2.5
4-Ethyltoluene	0.50	U	0.50	0.10	ppb v/v			04/06/18 08:25	2.5
1,3,5-Trimethylbenzene	0.50	U	0.50	0.10	ppb v/v			04/06/18 08:25	2.5
2-Chlorotoluene	0.50	U	0.50	0.088	ppb v/v			04/06/18 08:25	2.5
tert-Butylbenzene	0.50	U	0.50	0.093	ppb v/v			04/06/18 08:25	2.5
1,2,4-Trimethylbenzene	0.50	U	0.50	0.14	ppb v/v			04/06/18 08:25	2.5
sec-Butylbenzene	0.50	U	0.50	0.093	ppb v/v			04/06/18 08:25	2.5
4-Isopropyltoluene	0.50	U	0.50	0.13	ppb v/v			04/06/18 08:25	2.5
1,3-Dichlorobenzene	0.50	U	0.50	0.13	ppb v/v			04/06/18 08:25	2.5
1,4-Dichlorobenzene	0.50	U	0.50	0.16	ppb v/v			04/06/18 08:25	2.5
Benzyl chloride	0.50	U	0.50	0.17	ppb v/v			04/06/18 08:25	2.5
n-Butylbenzene	0.50	U	0.50	0.17	ppb v/v			04/06/18 08:25	2.5
1,2-Dichlorobenzene	0.50	U	0.50	0.11	ppb v/v			04/06/18 08:25	2.5
1,2,4-Trichlorobenzene	1.3	U	1.3	0.48	ppb v/v			04/06/18 08:25	2.5
Hexachlorobutadiene	0.50	U	0.50	0.16	ppb v/v			04/06/18 08:25	2.5
Naphthalene	1.3	U	1.3	0.25	ppb v/v			04/06/18 08:25	2.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**2.4**	**J D**	6.2	0.58	ug/m3			04/06/18 08:25	2.5
Freon 22	4.4	U	4.4	1.8	ug/m3			04/06/18 08:25	2.5
1,2-Dichlorotetrafluoroethane	3.5	U	3.5	0.72	ug/m3			04/06/18 08:25	2.5
Chloromethane	**1.0**	**J D**	2.6	0.83	ug/m3			04/06/18 08:25	2.5
n-Butane	**5.7**	**D**	3.0	0.27	ug/m3			04/06/18 08:25	2.5
Vinyl chloride	1.3	U	1.3	0.12	ug/m3			04/06/18 08:25	2.5
1,3-Butadiene	1.1	U	1.1	0.20	ug/m3			04/06/18 08:25	2.5
Bromomethane	1.9	U	1.9	0.35	ug/m3			04/06/18 08:25	2.5
Chloroethane	3.3	U	3.3	0.86	ug/m3			04/06/18 08:25	2.5
Bromoethene(Vinyl Bromide)	2.2	U	2.2	0.24	ug/m3			04/06/18 08:25	2.5
Trichlorofluoromethane	**1.1**	**J D**	2.8	0.44	ug/m3			04/06/18 08:25	2.5
Freon TF	3.8	U	3.8	0.52	ug/m3			04/06/18 08:25	2.5
1,1-Dichloroethene	2.0	U	2.0	0.35	ug/m3			04/06/18 08:25	2.5
Acetone	**160**	**D**	30	7.7	ug/m3			04/06/18 08:25	2.5

Client Sample ID: GC-IA-106 (AS)
Lab Sample ID: 200-42918-11

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl alcohol	**12**	**J D**	31	0.80	ug/m3			04/06/18 08:25	2.5
Carbon disulfide	**29**	**D**	3.9	0.22	ug/m3			04/06/18 08:25	2.5
3-Chloropropene	3.9	U	3.9	0.49	ug/m3			04/06/18 08:25	2.5
Methylene Chloride	**2.1**	**J D**	4.3	0.59	ug/m3			04/06/18 08:25	2.5
tert-Butyl alcohol	38	U	38	13	ug/m3			04/06/18 08:25	2.5
Methyl tert-butyl ether	1.8	U	1.8	0.37	ug/m3			04/06/18 08:25	2.5
trans-1,2-Dichloroethene	2.0	U	2.0	0.50	ug/m3			04/06/18 08:25	2.5
n-Hexane	1.8	U	1.8	0.41	ug/m3			04/06/18 08:25	2.5
1,1-Dichloroethane	2.0	U	2.0	0.17	ug/m3			04/06/18 08:25	2.5
Methyl Ethyl Ketone	**15**	**D**	3.7	0.81	ug/m3			04/06/18 08:25	2.5
cis-1,2-Dichloroethene	2.0	U	2.0	0.29	ug/m3			04/06/18 08:25	2.5
1,2-Dichloroethene, Total	4.0	U	4.0	0.29	ug/m3			04/06/18 08:25	2.5
Chloroform	2.4	U	2.4	0.31	ug/m3			04/06/18 08:25	2.5
Tetrahydrofuran	**9.2**	**J D**	37	8.8	ug/m3			04/06/18 08:25	2.5
1,1,1-Trichloroethane	2.7	U	2.7	0.35	ug/m3			04/06/18 08:25	2.5
Cyclohexane	1.7	U	1.7	0.39	ug/m3			04/06/18 08:25	2.5
Carbon tetrachloride	**0.38**	**J D**	0.63	0.17	ug/m3			04/06/18 08:25	2.5
2,2,4-Trimethylpentane	**0.68**	**J D**	2.3	0.50	ug/m3			04/06/18 08:25	2.5
Benzene	**0.86**	**J D**	1.6	0.22	ug/m3			04/06/18 08:25	2.5
1,2-Dichloroethane	2.0	U	2.0	0.34	ug/m3			04/06/18 08:25	2.5
n-Heptane	2.0	U	2.0	0.70	ug/m3			04/06/18 08:25	2.5
Trichloroethene	**0.76**	**D**	0.54	0.12	ug/m3			04/06/18 08:25	2.5
Methyl methacrylate	5.1	U	5.1	1.1	ug/m3			04/06/18 08:25	2.5
1,2-Dichloropropane	2.3	U	2.3	0.40	ug/m3			04/06/18 08:25	2.5
1,4-Dioxane	45	U	45	6.8	ug/m3			04/06/18 08:25	2.5
Bromodichloromethane	3.4	U	3.4	0.99	ug/m3			04/06/18 08:25	2.5
cis-1,3-Dichloropropene	2.3	U	2.3	0.41	ug/m3			04/06/18 08:25	2.5
methyl isobutyl ketone	**0.79**	**J D**	5.1	0.67	ug/m3			04/06/18 08:25	2.5
Toluene	**1.5**	**J D**	1.9	0.33	ug/m3			04/06/18 08:25	2.5
trans-1,3-Dichloropropene	2.3	U	2.3	0.43	ug/m3			04/06/18 08:25	2.5
1,1,2-Trichloroethane	2.7	U	2.7	0.23	ug/m3			04/06/18 08:25	2.5
Tetrachloroethene	0.68	U	0.68	0.17	ug/m3			04/06/18 08:25	2.5
Methyl Butyl Ketone (2-Hexanone)	5.1	U	5.1	0.88	ug/m3			04/06/18 08:25	2.5
Dibromochloromethane	4.3	U	4.3	0.36	ug/m3			04/06/18 08:25	2.5
1,2-Dibromoethane	3.8	U	3.8	0.44	ug/m3			04/06/18 08:25	2.5
Chlorobenzene	2.3	U	2.3	0.29	ug/m3			04/06/18 08:25	2.5
Ethylbenzene	2.2	U	2.2	0.37	ug/m3			04/06/18 08:25	2.5
m,p-Xylene	**0.87**	**J D**	5.4	0.84	ug/m3			04/06/18 08:25	2.5
Xylene, o-	2.2	U	2.2	0.43	ug/m3			04/06/18 08:25	2.5
Xylene (total)	**0.87**	**J D**	7.6	0.43	ug/m3			04/06/18 08:25	2.5
Styrene	2.1	U	2.1	0.37	ug/m3			04/06/18 08:25	2.5
Bromoform	5.2	U	5.2	0.90	ug/m3			04/06/18 08:25	2.5
Cumene	2.5	U	2.5	0.48	ug/m3			04/06/18 08:25	2.5
1,1,2,2-Tetrachloroethane	3.4	U	3.4	0.45	ug/m3			04/06/18 08:25	2.5
n-Propylbenzene	2.5	U	2.5	0.49	ug/m3			04/06/18 08:25	2.5
4-Ethyltoluene	2.5	U	2.5	0.49	ug/m3			04/06/18 08:25	2.5
1,3,5-Trimethylbenzene	2.5	U	2.5	0.49	ug/m3			04/06/18 08:25	2.5
2-Chlorotoluene	2.6	U	2.6	0.45	ug/m3			04/06/18 08:25	2.5

Client Sample ID: GC-IA-106 (AS)
Lab Sample ID: 200-42918-11

Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	2.7	U	2.7	0.51	ug/m3			04/06/18 08:25	2.5
1,2,4-Trimethylbenzene	2.5	U	2.5	0.70	ug/m3			04/06/18 08:25	2.5
sec-Butylbenzene	2.7	U	2.7	0.51	ug/m3			04/06/18 08:25	2.5
4-Isopropyltoluene	2.7	U	2.7	0.71	ug/m3			04/06/18 08:25	2.5
1,3-Dichlorobenzene	3.0	U	3.0	0.75	ug/m3			04/06/18 08:25	2.5
1,4-Dichlorobenzene	3.0	U	3.0	0.95	ug/m3			04/06/18 08:25	2.5
Benzyl chloride	2.6	U	2.6	0.87	ug/m3			04/06/18 08:25	2.5
n-Butylbenzene	2.7	U	2.7	0.93	ug/m3			04/06/18 08:25	2.5
1,2-Dichlorobenzene	3.0	U	3.0	0.68	ug/m3			04/06/18 08:25	2.5
1,2,4-Trichlorobenzene	9.3	U	9.3	3.5	ug/m3			04/06/18 08:25	2.5
Hexachlorobutadiene	5.3	U	5.3	1.7	ug/m3			04/06/18 08:25	2.5
Naphthalene	6.6	U	6.6	1.3	ug/m3			04/06/18 08:25	2.5

Client Sample ID: GC-SV-106 (AS)
Lab Sample ID: 200-42918-12

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	3.0	U	3.0	1.2	ppb v/v			04/14/18 00:14	6
Freon 22	3.0	U	3.0	1.6	ppb v/v			04/14/18 00:14	6
1,2-Dichlorotetrafluoroethane	1.2	U	1.2	0.41	ppb v/v			04/14/18 00:14	6
Chloromethane	3.0	U	3.0	1.5	ppb v/v			04/14/18 00:14	6
n-Butane	3.0	U	3.0	1.9	ppb v/v			04/14/18 00:14	6
Vinyl chloride	1.2	U	1.2	0.25	ppb v/v			04/14/18 00:14	6
1,3-Butadiene	1.2	U	1.2	0.39	ppb v/v			04/14/18 00:14	6
Bromomethane	1.2	U	1.2	0.37	ppb v/v			04/14/18 00:14	6
Chloroethane	3.0	U	3.0	1.3	ppb v/v			04/14/18 00:14	6
Bromoethene(Vinyl Bromide)	1.2	U	1.2	0.34	ppb v/v			04/14/18 00:14	6
Trichlorofluoromethane	1.2	U	1.2	0.37	ppb v/v			04/14/18 00:14	6
Freon TF	1.2	U	1.2	0.19	ppb v/v			04/14/18 00:14	6
1,1-Dichloroethene	1.2	U	1.2	0.20	ppb v/v			04/14/18 00:14	6
Acetone	**490**	**E**	30	16	ppb v/v			04/14/18 00:14	6
Isopropyl alcohol	30	U	30	11	ppb v/v			04/14/18 00:14	6
Carbon disulfide	3.0	U	3.0	0.72	ppb v/v			04/14/18 00:14	6
3-Chloropropene	3.0	U	3.0	1.6	ppb v/v			04/14/18 00:14	6
Methylene Chloride	**2.3**	**J**	3.0	1.2	ppb v/v			04/14/18 00:14	6
tert-Butyl alcohol	**39**		30	9.0	ppb v/v			04/14/18 00:14	6
Methyl tert-butyl ether	1.2	U	1.2	0.37	ppb v/v			04/14/18 00:14	6
trans-1,2-Dichloroethene	1.2	U	1.2	0.44	ppb v/v			04/14/18 00:14	6
n-Hexane	**1.0**	**J**	1.2	0.96	ppb v/v			04/14/18 00:14	6
1,1-Dichloroethane	1.2	U	1.2	0.16	ppb v/v			04/14/18 00:14	6
Methyl Ethyl Ketone	**1.9**	**J**	3.0	1.2	ppb v/v			04/14/18 00:14	6
cis-1,2-Dichloroethene	1.2	U	1.2	0.22	ppb v/v			04/14/18 00:14	6
1,2-Dichloroethene, Total	2.4	U	2.4	0.67	ppb v/v			04/14/18 00:14	6
Chloroform	1.2	U	1.2	0.31	ppb v/v			04/14/18 00:14	6
Tetrahydrofuran	30	U	30	16	ppb v/v			04/14/18 00:14	6
1,1,1-Trichloroethane	1.2	U	1.2	0.41	ppb v/v			04/14/18 00:14	6

Client Sample ID: GC-SV-106 (AS)
Lab Sample ID: 200-42918-12

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	1.2	U	1.2	0.38	ppb v/v			04/14/18 00:14	6
Carbon tetrachloride	0.24	U	0.24	0.14	ppb v/v			04/14/18 00:14	6
2,2,4-Trimethylpentane	1.2	U	1.2	0.53	ppb v/v			04/14/18 00:14	6
Benzene	1.2	U	1.2	0.43	ppb v/v			04/14/18 00:14	6
1,2-Dichloroethane	1.2	U	1.2	0.38	ppb v/v			04/14/18 00:14	6
n-Heptane	1.2	U	1.2	0.84	ppb v/v			04/14/18 00:14	6
Trichloroethene	0.24	U	0.24	0.18	ppb v/v			04/14/18 00:14	6
Methyl methacrylate	3.0	U	3.0	1.3	ppb v/v			04/14/18 00:14	6
1,2-Dichloropropane	1.2	U	1.2	0.72	ppb v/v			04/14/18 00:14	6
1,4-Dioxane	30	U	30	7.8	ppb v/v			04/14/18 00:14	6
Bromodichloromethane	1.2	U	1.2	0.56	ppb v/v			04/14/18 00:14	6
cis-1,3-Dichloropropene	1.2	U	1.2	0.59	ppb v/v			04/14/18 00:14	6
methyl isobutyl ketone	3.0	U	3.0	2.2	ppb v/v			04/14/18 00:14	6
Toluene	**0.87**	**J**	1.2	0.41	ppb v/v			04/14/18 00:14	6
trans-1,3-Dichloropropene	1.2	U	1.2	0.72	ppb v/v			04/14/18 00:14	6
1,1,2-Trichloroethane	1.2	U	1.2	0.47	ppb v/v			04/14/18 00:14	6
Tetrachloroethene	0.24	U	0.24	0.17	ppb v/v			04/14/18 00:14	6
Methyl Butyl Ketone (2-Hexanone)	3.0	U	3.0	2.5	ppb v/v			04/14/18 00:14	6
Dibromochloromethane	1.2	U	1.2	0.43	ppb v/v			04/14/18 00:14	6
1,2-Dibromoethane	1.2	U	1.2	0.41	ppb v/v			04/14/18 00:14	6
Chlorobenzene	1.2	U	1.2	0.24	ppb v/v			04/14/18 00:14	6
Ethylbenzene	1.2	U	1.2	0.44	ppb v/v			04/14/18 00:14	6
m,p-Xylene	3.0	U	3.0	0.42	ppb v/v			04/14/18 00:14	6
Xylene, o-	1.2	U	1.2	0.43	ppb v/v			04/14/18 00:14	6
Xylene (total)	4.2	U	4.2	0.85	ppb v/v			04/14/18 00:14	6
Styrene	1.2	U	1.2	0.52	ppb v/v			04/14/18 00:14	6
Bromoform	1.2	U	1.2	0.52	ppb v/v			04/14/18 00:14	6
Cumene	1.2	U	1.2	0.35	ppb v/v			04/14/18 00:14	6
1,1,2,2-Tetrachloroethane	1.2	U	1.2	0.46	ppb v/v			04/14/18 00:14	6
n-Propylbenzene	1.2	U	1.2	0.41	ppb v/v			04/14/18 00:14	6
4-Ethyltoluene	1.2	U	1.2	0.41	ppb v/v			04/14/18 00:14	6
1,3,5-Trimethylbenzene	1.2	U	1.2	0.35	ppb v/v			04/14/18 00:14	6
2-Chlorotoluene	1.2	U	1.2	0.43	ppb v/v			04/14/18 00:14	6
tert-Butylbenzene	1.2	U	1.2	0.35	ppb v/v			04/14/18 00:14	6
1,2,4-Trimethylbenzene	1.2	U	1.2	0.48	ppb v/v			04/14/18 00:14	6
sec-Butylbenzene	1.2	U	1.2	0.40	ppb v/v			04/14/18 00:14	6
4-Isopropyltoluene	1.2	U	1.2	0.45	ppb v/v			04/14/18 00:14	6
1,3-Dichlorobenzene	1.2	U	1.2	0.49	ppb v/v			04/14/18 00:14	6
1,4-Dichlorobenzene	1.2	U	1.2	0.39	ppb v/v			04/14/18 00:14	6
Benzyl chloride	1.2	U	1.2	0.72	ppb v/v			04/14/18 00:14	6
n-Butylbenzene	1.2	U	1.2	0.48	ppb v/v			04/14/18 00:14	6
1,2-Dichlorobenzene	1.2	U	1.2	0.43	ppb v/v			04/14/18 00:14	6
1,2,4-Trichlorobenzene	3.0	U	3.0	1.4	ppb v/v			04/14/18 00:14	6
Hexachlorobutadiene	1.2	U	1.2	0.49	ppb v/v			04/14/18 00:14	6
Naphthalene	3.0	U	3.0	1.9	ppb v/v			04/14/18 00:14	6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	15	U	15	5.9	ug/m3			04/14/18 00:14	6
Freon 22	11	U	11	5.5	ug/m3			04/14/18 00:14	6

Client Sample ID: GC-SV-106 (AS)
Lab Sample ID: 200-42918-12

Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorotetrafluoroethane	8.4	U	8.4	2.9	ug/m3			04/14/18 00:14	6
Chloromethane	6.2	U	6.2	3.1	ug/m3			04/14/18 00:14	6
n-Butane	7.1	U	7.1	4.4	ug/m3			04/14/18 00:14	6
Vinyl chloride	3.1	U	3.1	0.63	ug/m3			04/14/18 00:14	6
1,3-Butadiene	2.7	U	2.7	0.86	ug/m3			04/14/18 00:14	6
Bromomethane	4.7	U	4.7	1.4	ug/m3			04/14/18 00:14	6
Chloroethane	7.9	U	7.9	3.3	ug/m3			04/14/18 00:14	6
Bromoethene(Vinyl Bromide)	5.2	U	5.2	1.5	ug/m3			04/14/18 00:14	6
Trichlorofluoromethane	6.7	U	6.7	2.1	ug/m3			04/14/18 00:14	6
Freon TF	9.2	U	9.2	1.4	ug/m3			04/14/18 00:14	6
1,1-Dichloroethene	4.8	U	4.8	0.81	ug/m3			04/14/18 00:14	6
Acetone	**1200**	**E**	71	37	ug/m3			04/14/18 00:14	6
Isopropyl alcohol	74	U	74	27	ug/m3			04/14/18 00:14	6
Carbon disulfide	9.3	U	9.3	2.2	ug/m3			04/14/18 00:14	6
3-Chloropropene	9.4	U	9.4	5.1	ug/m3			04/14/18 00:14	6
Methylene Chloride	**7.9**	**J**	10	4.2	ug/m3			04/14/18 00:14	6
tert-Butyl alcohol	**120**		91	27	ug/m3			04/14/18 00:14	6
Methyl tert-butyl ether	4.3	U	4.3	1.3	ug/m3			04/14/18 00:14	6
trans-1,2-Dichloroethene	4.8	U	4.8	1.8	ug/m3			04/14/18 00:14	6
n-Hexane	**3.6**	**J**	4.2	3.4	ug/m3			04/14/18 00:14	6
1,1-Dichloroethane	4.9	U	4.9	0.63	ug/m3			04/14/18 00:14	6
Methyl Ethyl Ketone	**5.5**	**J**	8.8	3.5	ug/m3			04/14/18 00:14	6
cis-1,2-Dichloroethene	4.8	U	4.8	0.88	ug/m3			04/14/18 00:14	6
1,2-Dichloroethene, Total	9.5	U	9.5	2.6	ug/m3			04/14/18 00:14	6
Chloroform	5.9	U	5.9	1.5	ug/m3			04/14/18 00:14	6
Tetrahydrofuran	88	U	88	46	ug/m3			04/14/18 00:14	6
1,1,1-Trichloroethane	6.5	U	6.5	2.2	ug/m3			04/14/18 00:14	6
Cyclohexane	4.1	U	4.1	1.3	ug/m3			04/14/18 00:14	6
Carbon tetrachloride	1.5	U	1.5	0.91	ug/m3			04/14/18 00:14	6
2,2,4-Trimethylpentane	5.6	U	5.6	2.5	ug/m3			04/14/18 00:14	6
Benzene	3.8	U	3.8	1.4	ug/m3			04/14/18 00:14	6
1,2-Dichloroethane	4.9	U	4.9	1.5	ug/m3			04/14/18 00:14	6
n-Heptane	4.9	U	4.9	3.4	ug/m3			04/14/18 00:14	6
Trichloroethene	1.3	U	1.3	0.97	ug/m3			04/14/18 00:14	6
Methyl methacrylate	12	U	12	5.4	ug/m3			04/14/18 00:14	6
1,2-Dichloropropane	5.5	U	5.5	3.3	ug/m3			04/14/18 00:14	6
1,4-Dioxane	110	U	110	28	ug/m3			04/14/18 00:14	6
Bromodichloromethane	8.0	U	8.0	3.8	ug/m3			04/14/18 00:14	6
cis-1,3-Dichloropropene	5.4	U	5.4	2.7	ug/m3			04/14/18 00:14	6
methyl isobutyl ketone	12	U	12	8.8	ug/m3			04/14/18 00:14	6
Toluene	**3.3**	**J**	4.5	1.6	ug/m3			04/14/18 00:14	6
trans-1,3-Dichloropropene	5.4	U	5.4	3.3	ug/m3			04/14/18 00:14	6
1,1,2-Trichloroethane	6.5	U	6.5	2.6	ug/m3			04/14/18 00:14	6
Tetrachloroethene	1.6	U	1.6	1.2	ug/m3			04/14/18 00:14	6
Methyl Butyl Ketone (2-Hexanone)	12	U	12	10	ug/m3			04/14/18 00:14	6
Dibromochloromethane	10	U	10	3.6	ug/m3			04/14/18 00:14	6
1,2-Dibromoethane	9.2	U	9.2	3.2	ug/m3			04/14/18 00:14	6
Chlorobenzene	5.5	U	5.5	1.1	ug/m3			04/14/18 00:14	6

Client Sample ID: GC-SV-106 (AS)
Lab Sample ID: 200-42918-12
Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	5.2	U	5.2	1.9	ug/m3			04/14/18 00:14	6
m,p-Xylene	13	U	13	1.8	ug/m3			04/14/18 00:14	6
Xylene, o-	5.2	U	5.2	1.8	ug/m3			04/14/18 00:14	6
Xylene (total)	18	U	18	3.7	ug/m3			04/14/18 00:14	6
Styrene	5.1	U	5.1	2.2	ug/m3			04/14/18 00:14	6
Bromoform	12	U	12	5.3	ug/m3			04/14/18 00:14	6
Cumene	5.9	U	5.9	1.7	ug/m3			04/14/18 00:14	6
1,1,2,2-Tetrachloroethane	8.2	U	8.2	3.1	ug/m3			04/14/18 00:14	6
n-Propylbenzene	5.9	U	5.9	2.0	ug/m3			04/14/18 00:14	6
4-Ethyltoluene	5.9	U	5.9	2.0	ug/m3			04/14/18 00:14	6
1,3,5-Trimethylbenzene	5.9	U	5.9	1.7	ug/m3			04/14/18 00:14	6
2-Chlorotoluene	6.2	U	6.2	2.2	ug/m3			04/14/18 00:14	6
tert-Butylbenzene	6.6	U	6.6	1.9	ug/m3			04/14/18 00:14	6
1,2,4-Trimethylbenzene	5.9	U	5.9	2.4	ug/m3			04/14/18 00:14	6
sec-Butylbenzene	6.6	U	6.6	2.2	ug/m3			04/14/18 00:14	6
4-Isopropyltoluene	6.6	U	6.6	2.5	ug/m3			04/14/18 00:14	6
1,3-Dichlorobenzene	7.2	U	7.2	3.0	ug/m3			04/14/18 00:14	6
1,4-Dichlorobenzene	7.2	U	7.2	2.3	ug/m3			04/14/18 00:14	6
Benzyl chloride	6.2	U	6.2	3.7	ug/m3			04/14/18 00:14	6
n-Butylbenzene	6.6	U	6.6	2.6	ug/m3			04/14/18 00:14	6
1,2-Dichlorobenzene	7.2	U	7.2	2.6	ug/m3			04/14/18 00:14	6
1,2,4-Trichlorobenzene	22	U	22	11	ug/m3			04/14/18 00:14	6
Hexachlorobutadiene	13	U	13	5.2	ug/m3			04/14/18 00:14	6
Naphthalene	16	U	16	9.8	ug/m3			04/14/18 00:14	6

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	15	U	15	6.1	ppb v/v			04/07/18 02:49	30.3
Freon 22	15	U	15	7.9	ppb v/v			04/07/18 02:49	30.3
1,2-Dichlorotetrafluoroethane	6.1	U	6.1	2.1	ppb v/v			04/07/18 02:49	30.3
Chloromethane	15	U	15	7.6	ppb v/v			04/07/18 02:49	30.3
n-Butane	15	U	15	9.4	ppb v/v			04/07/18 02:49	30.3
Vinyl chloride	6.1	U	6.1	1.2	ppb v/v			04/07/18 02:49	30.3
1,3-Butadiene	6.1	U	6.1	2.0	ppb v/v			04/07/18 02:49	30.3
Bromomethane	6.1	U	6.1	1.9	ppb v/v			04/07/18 02:49	30.3
Chloroethane	15	U	15	6.4	ppb v/v			04/07/18 02:49	30.3
Bromoethene(Vinyl Bromide)	6.1	U	6.1	1.7	ppb v/v			04/07/18 02:49	30.3
Trichlorofluoromethane	6.1	U	6.1	1.9	ppb v/v			04/07/18 02:49	30.3
Freon TF	6.1	U	6.1	0.94	ppb v/v			04/07/18 02:49	30.3
1,1-Dichloroethene	6.1	U	6.1	1.0	ppb v/v			04/07/18 02:49	30.3
Acetone	**810**	**D**	150	79	ppb v/v			04/07/18 02:49	30.3
Isopropyl alcohol	150	U	150	55	ppb v/v			04/07/18 02:49	30.3
Carbon disulfide	15	U	15	3.6	ppb v/v			04/07/18 02:49	30.3
3-Chloropropene	15	U	15	8.2	ppb v/v			04/07/18 02:49	30.3
Methylene Chloride	**6.1**	**J D**	15	6.1	ppb v/v			04/07/18 02:49	30.3
tert-Butyl alcohol	**56**	**J D**	150	45	ppb v/v			04/07/18 02:49	30.3
Methyl tert-butyl ether	6.1	U	6.1	1.8	ppb v/v			04/07/18 02:49	30.3
trans-1,2-Dichloroethene	6.1	U	6.1	2.2	ppb v/v			04/07/18 02:49	30.3
n-Hexane	6.1	U	6.1	4.8	ppb v/v			04/07/18 02:49	30.3

Client Sample ID: GC-SV-106 (AS)
Lab Sample ID: 200-42918-12
Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	6.1	U	6.1	0.79	ppb v/v			04/07/18 02:49	30.3
Methyl Ethyl Ketone	15	U	15	6.1	ppb v/v			04/07/18 02:49	30.3
cis-1,2-Dichloroethene	6.1	U	6.1	1.1	ppb v/v			04/07/18 02:49	30.3
1,2-Dichloroethene, Total	12	U	12	3.4	ppb v/v			04/07/18 02:49	30.3
Chloroform	6.1	U	6.1	1.6	ppb v/v			04/07/18 02:49	30.3
Tetrahydrofuran	150	U	150	79	ppb v/v			04/07/18 02:49	30.3
1,1,1-Trichloroethane	6.1	U	6.1	2.1	ppb v/v			04/07/18 02:49	30.3
Cyclohexane	6.1	U	6.1	1.9	ppb v/v			04/07/18 02:49	30.3
Carbon tetrachloride	1.2	U	1.2	0.73	ppb v/v			04/07/18 02:49	30.3
2,2,4-Trimethylpentane	6.1	U	6.1	2.7	ppb v/v			04/07/18 02:49	30.3
Benzene	6.1	U	6.1	2.2	ppb v/v			04/07/18 02:49	30.3
1,2-Dichloroethane	6.1	U	6.1	1.9	ppb v/v			04/07/18 02:49	30.3
n-Heptane	6.1	U	6.1	4.2	ppb v/v			04/07/18 02:49	30.3
Trichloroethene	1.2	U	1.2	0.91	ppb v/v			04/07/18 02:49	30.3
Methyl methacrylate	15	U	15	6.7	ppb v/v			04/07/18 02:49	30.3
1,2-Dichloropropane	6.1	U	6.1	3.6	ppb v/v			04/07/18 02:49	30.3
1,4-Dioxane	150	U	150	39	ppb v/v			04/07/18 02:49	30.3
Bromodichloromethane	6.1	U	6.1	2.8	ppb v/v			04/07/18 02:49	30.3
cis-1,3-Dichloropropene	6.1	U	6.1	3.0	ppb v/v			04/07/18 02:49	30.3
methyl isobutyl ketone	15	U	15	11	ppb v/v			04/07/18 02:49	30.3
Toluene	6.1	U	6.1	2.1	ppb v/v			04/07/18 02:49	30.3
trans-1,3-Dichloropropene	6.1	U	6.1	3.6	ppb v/v			04/07/18 02:49	30.3
1,1,2-Trichloroethane	6.1	U	6.1	2.4	ppb v/v			04/07/18 02:49	30.3
Tetrachloroethene	1.2	U	1.2	0.88	ppb v/v			04/07/18 02:49	30.3
Methyl Butyl Ketone (2-Hexanone)	15	U	15	13	ppb v/v			04/07/18 02:49	30.3
Dibromochloromethane	6.1	U	6.1	2.2	ppb v/v			04/07/18 02:49	30.3
1,2-Dibromoethane	6.1	U	6.1	2.1	ppb v/v			04/07/18 02:49	30.3
Chlorobenzene	6.1	U	6.1	1.2	ppb v/v			04/07/18 02:49	30.3
Ethylbenzene	6.1	U	6.1	2.2	ppb v/v			04/07/18 02:49	30.3
m,p-Xylene	15	U	15	2.1	ppb v/v			04/07/18 02:49	30.3
Xylene, o-	6.1	U	6.1	2.2	ppb v/v			04/07/18 02:49	30.3
Xylene (total)	21	U	21	4.3	ppb v/v			04/07/18 02:49	30.3
Styrene	6.1	U	6.1	2.6	ppb v/v			04/07/18 02:49	30.3
Bromoform	6.1	U	6.1	2.6	ppb v/v			04/07/18 02:49	30.3
Cumene	6.1	U	6.1	1.8	ppb v/v			04/07/18 02:49	30.3
1,1,2,2-Tetrachloroethane	6.1	U	6.1	2.3	ppb v/v			04/07/18 02:49	30.3
n-Propylbenzene	6.1	U	6.1	2.1	ppb v/v			04/07/18 02:49	30.3
4-Ethyltoluene	6.1	U	6.1	2.1	ppb v/v			04/07/18 02:49	30.3
1,3,5-Trimethylbenzene	6.1	U	6.1	1.8	ppb v/v			04/07/18 02:49	30.3
2-Chlorotoluene	6.1	U	6.1	2.2	ppb v/v			04/07/18 02:49	30.3
tert-Butylbenzene	6.1	U	6.1	1.8	ppb v/v			04/07/18 02:49	30.3
1,2,4-Trimethylbenzene	6.1	U	6.1	2.4	ppb v/v			04/07/18 02:49	30.3
sec-Butylbenzene	6.1	U	6.1	2.0	ppb v/v			04/07/18 02:49	30.3
4-Isopropyltoluene	6.1	U	6.1	2.3	ppb v/v			04/07/18 02:49	30.3
1,3-Dichlorobenzene	6.1	U	6.1	2.5	ppb v/v			04/07/18 02:49	30.3
1,4-Dichlorobenzene	6.1	U	6.1	2.0	ppb v/v			04/07/18 02:49	30.3
Benzyl chloride	6.1	U	6.1	3.6	ppb v/v			04/07/18 02:49	30.3
n-Butylbenzene	6.1	U	6.1	2.4	ppb v/v			04/07/18 02:49	30.3

Client Sample ID: GC-SV-106 (AS)
Lab Sample ID: 200-42918-12
Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	6.1	U	6.1	2.2	ppb v/v			04/07/18 02:49	30.3
1,2,4-Trichlorobenzene	15	U	15	7.3	ppb v/v			04/07/18 02:49	30.3
Hexachlorobutadiene	6.1	U	6.1	2.5	ppb v/v			04/07/18 02:49	30.3
Naphthalene	15	U	15	9.4	ppb v/v			04/07/18 02:49	30.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	75	U	75	30	ug/m3			04/07/18 02:49	30.3
Freon 22	54	U	54	28	ug/m3			04/07/18 02:49	30.3
1,2-Dichlorotetrafluoroethane	42	U	42	14	ug/m3			04/07/18 02:49	30.3
Chloromethane	31	U	31	16	ug/m3			04/07/18 02:49	30.3
n-Butane	36	U	36	22	ug/m3			04/07/18 02:49	30.3
Vinyl chloride	15	U	15	3.2	ug/m3			04/07/18 02:49	30.3
1,3-Butadiene	13	U	13	4.4	ug/m3			04/07/18 02:49	30.3
Bromomethane	24	U	24	7.3	ug/m3			04/07/18 02:49	30.3
Chloroethane	40	U	40	17	ug/m3			04/07/18 02:49	30.3
Bromoethene(Vinyl Bromide)	27	U	27	7.4	ug/m3			04/07/18 02:49	30.3
Trichlorofluoromethane	34	U	34	11	ug/m3			04/07/18 02:49	30.3
Freon TF	46	U	46	7.2	ug/m3			04/07/18 02:49	30.3
1,1-Dichloroethene	24	U	24	4.1	ug/m3			04/07/18 02:49	30.3
Acetone	**1900**	**D**	360	190	ug/m3			04/07/18 02:49	30.3
Isopropyl alcohol	370	U	370	130	ug/m3			04/07/18 02:49	30.3
Carbon disulfide	47	U	47	11	ug/m3			04/07/18 02:49	30.3
3-Chloropropene	47	U	47	26	ug/m3			04/07/18 02:49	30.3
Methylene Chloride	**21**	**J D**	53	21	ug/m3			04/07/18 02:49	30.3
tert-Butyl alcohol	**170**	**J D**	460	140	ug/m3			04/07/18 02:49	30.3
Methyl tert-butyl ether	22	U	22	6.7	ug/m3			04/07/18 02:49	30.3
trans-1,2-Dichloroethene	24	U	24	8.9	ug/m3			04/07/18 02:49	30.3
n-Hexane	21	U	21	17	ug/m3			04/07/18 02:49	30.3
1,1-Dichloroethane	25	U	25	3.2	ug/m3			04/07/18 02:49	30.3
Methyl Ethyl Ketone	45	U	45	18	ug/m3			04/07/18 02:49	30.3
cis-1,2-Dichloroethene	24	U	24	4.4	ug/m3			04/07/18 02:49	30.3
1,2-Dichloroethene, Total	48	U	48	13	ug/m3			04/07/18 02:49	30.3
Chloroform	30	U	30	7.7	ug/m3			04/07/18 02:49	30.3
Tetrahydrofuran	450	U	450	230	ug/m3			04/07/18 02:49	30.3
1,1,1-Trichloroethane	33	U	33	11	ug/m3			04/07/18 02:49	30.3
Cyclohexane	21	U	21	6.6	ug/m3			04/07/18 02:49	30.3
Carbon tetrachloride	7.6	U	7.6	4.6	ug/m3			04/07/18 02:49	30.3
2,2,4-Trimethylpentane	28	U	28	12	ug/m3			04/07/18 02:49	30.3
Benzene	19	U	19	6.9	ug/m3			04/07/18 02:49	30.3
1,2-Dichloroethane	25	U	25	7.7	ug/m3			04/07/18 02:49	30.3
n-Heptane	25	U	25	17	ug/m3			04/07/18 02:49	30.3
Trichloroethene	6.5	U	6.5	4.9	ug/m3			04/07/18 02:49	30.3
Methyl methacrylate	62	U	62	27	ug/m3			04/07/18 02:49	30.3
1,2-Dichloropropane	28	U	28	17	ug/m3			04/07/18 02:49	30.3
1,4-Dioxane	550	U	550	140	ug/m3			04/07/18 02:49	30.3
Bromodichloromethane	41	U	41	19	ug/m3			04/07/18 02:49	30.3
cis-1,3-Dichloropropene	28	U	28	13	ug/m3			04/07/18 02:49	30.3
methyl isobutyl ketone	62	U	62	45	ug/m3			04/07/18 02:49	30.3
Toluene	23	U	23	7.9	ug/m3			04/07/18 02:49	30.3

Client Sample ID: GC-SV-106 (AS)
Lab Sample ID: 200-42918-12
Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	28	U	28	17	ug/m3			04/07/18 02:49	30.3
1,1,2-Trichloroethane	33	U	33	13	ug/m3			04/07/18 02:49	30.3
Tetrachloroethene	8.2	U	8.2	6.0	ug/m3			04/07/18 02:49	30.3
Methyl Butyl Ketone (2-Hexanone)	62	U	62	52	ug/m3			04/07/18 02:49	30.3
Dibromochloromethane	52	U	52	18	ug/m3			04/07/18 02:49	30.3
1,2-Dibromoethane	47	U	47	16	ug/m3			04/07/18 02:49	30.3
Chlorobenzene	28	U	28	5.6	ug/m3			04/07/18 02:49	30.3
Ethylbenzene	26	U	26	9.6	ug/m3			04/07/18 02:49	30.3
m,p-Xylene	66	U	66	9.2	ug/m3			04/07/18 02:49	30.3
Xylene, o-	26	U	26	9.3	ug/m3			04/07/18 02:49	30.3
Xylene (total)	92	U	92	19	ug/m3			04/07/18 02:49	30.3
Styrene	26	U	26	11	ug/m3			04/07/18 02:49	30.3
Bromoform	63	U	63	27	ug/m3			04/07/18 02:49	30.3
Cumene	30	U	30	8.8	ug/m3			04/07/18 02:49	30.3
1,1,2,2-Tetrachloroethane	42	U	42	16	ug/m3			04/07/18 02:49	30.3
n-Propylbenzene	30	U	30	10	ug/m3			04/07/18 02:49	30.3
4-Ethyltoluene	30	U	30	10	ug/m3			04/07/18 02:49	30.3
1,3,5-Trimethylbenzene	30	U	30	8.6	ug/m3			04/07/18 02:49	30.3
2-Chlorotoluene	31	U	31	11	ug/m3			04/07/18 02:49	30.3
tert-Butylbenzene	33	U	33	9.6	ug/m3			04/07/18 02:49	30.3
1,2,4-Trimethylbenzene	30	U	30	12	ug/m3			04/07/18 02:49	30.3
sec-Butylbenzene	33	U	33	11	ug/m3			04/07/18 02:49	30.3
4-Isopropyltoluene	33	U	33	12	ug/m3			04/07/18 02:49	30.3
1,3-Dichlorobenzene	36	U	36	15	ug/m3			04/07/18 02:49	30.3
1,4-Dichlorobenzene	36	U	36	12	ug/m3			04/07/18 02:49	30.3
Benzyl chloride	31	U	31	19	ug/m3			04/07/18 02:49	30.3
n-Butylbenzene	33	U	33	13	ug/m3			04/07/18 02:49	30.3
1,2-Dichlorobenzene	36	U	36	13	ug/m3			04/07/18 02:49	30.3
1,2,4-Trichlorobenzene	110	U	110	54	ug/m3			04/07/18 02:49	30.3
Hexachlorobutadiene	65	U	65	26	ug/m3			04/07/18 02:49	30.3
Naphthalene	79	U	79	49	ug/m3			04/07/18 02:49	30.3

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-128151/5
Matrix: Air
Analysis Batch: 128151

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.50	U	0.50	0.047	ppb v/v			04/05/18 13:24	1
Freon 22	0.50	U	0.50	0.20	ppb v/v			04/05/18 13:24	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.041	ppb v/v			04/05/18 13:24	1
Chloromethane	0.50	U	0.50	0.16	ppb v/v			04/05/18 13:24	1
n-Butane	0.50	U	0.50	0.046	ppb v/v			04/05/18 13:24	1
Vinyl chloride	0.20	U	0.20	0.018	ppb v/v			04/05/18 13:24	1
1,3-Butadiene	0.20	U	0.20	0.037	ppb v/v			04/05/18 13:24	1
Bromomethane	0.20	U	0.20	0.036	ppb v/v			04/05/18 13:24	1
Chloroethane	0.50	U	0.50	0.13	ppb v/v			04/05/18 13:24	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.022	ppb v/v			04/05/18 13:24	1
Trichlorofluoromethane	0.20	U	0.20	0.031	ppb v/v			04/05/18 13:24	1
Freon TF	0.20	U	0.20	0.027	ppb v/v			04/05/18 13:24	1
1,1-Dichloroethene	0.20	U	0.20	0.035	ppb v/v			04/05/18 13:24	1
Acetone	5.0	U	5.0	1.3	ppb v/v			04/05/18 13:24	1
Isopropyl alcohol	5.0	U	5.0	0.13	ppb v/v			04/05/18 13:24	1
Carbon disulfide	0.50	U	0.50	0.028	ppb v/v			04/05/18 13:24	1
3-Chloropropene	0.50	U	0.50	0.063	ppb v/v			04/05/18 13:24	1
Methylene Chloride	0.50	U	0.50	0.068	ppb v/v			04/05/18 13:24	1
tert-Butyl alcohol	5.0	U	5.0	1.7	ppb v/v			04/05/18 13:24	1
Methyl tert-butyl ether	0.20	U	0.20	0.041	ppb v/v			04/05/18 13:24	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.050	ppb v/v			04/05/18 13:24	1
n-Hexane	0.20	U	0.20	0.046	ppb v/v			04/05/18 13:24	1
1,1-Dichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 13:24	1
Methyl Ethyl Ketone	0.50	U	0.50	0.11	ppb v/v			04/05/18 13:24	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.029	ppb v/v			04/05/18 13:24	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.029	ppb v/v			04/05/18 13:24	1
Chloroform	0.20	U	0.20	0.025	ppb v/v			04/05/18 13:24	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			04/05/18 13:24	1
1,1,1-Trichloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 13:24	1
Cyclohexane	0.20	U	0.20	0.045	ppb v/v			04/05/18 13:24	1
Carbon tetrachloride	0.040	U	0.040	0.011	ppb v/v			04/05/18 13:24	1
2,2,4-Trimethylpentane	0.20	U	0.20	0.043	ppb v/v			04/05/18 13:24	1
Benzene	0.20	U	0.20	0.028	ppb v/v			04/05/18 13:24	1
1,2-Dichloroethane	0.20	U	0.20	0.034	ppb v/v			04/05/18 13:24	1
n-Heptane	0.20	U	0.20	0.068	ppb v/v			04/05/18 13:24	1
Trichloroethene	0.040	U	0.040	0.0091	ppb v/v			04/05/18 13:24	1
Methyl methacrylate	0.50	U	0.50	0.11	ppb v/v			04/05/18 13:24	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			04/05/18 13:24	1
1,4-Dioxane	5.0	U	5.0	0.76	ppb v/v			04/05/18 13:24	1
Bromodichloromethane	0.20	U	0.20	0.059	ppb v/v			04/05/18 13:24	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.036	ppb v/v			04/05/18 13:24	1
methyl isobutyl ketone	0.50	U	0.50	0.065	ppb v/v			04/05/18 13:24	1
Toluene	0.20	U	0.20	0.035	ppb v/v			04/05/18 13:24	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.038	ppb v/v			04/05/18 13:24	1
1,1,2-Trichloroethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 13:24	1
Tetrachloroethene	0.040	U	0.040	0.0098	ppb v/v			04/05/18 13:24	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.086	ppb v/v			04/05/18 13:24	1
Dibromochloromethane	0.20	U	0.20	0.017	ppb v/v			04/05/18 13:24	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128151/5
Matrix: Air
Analysis Batch: 128151

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	0.20	U	0.20	0.023	ppb v/v			04/05/18 13:24	1
Chlorobenzene	0.20	U	0.20	0.025	ppb v/v			04/05/18 13:24	1
Ethylbenzene	0.20	U	0.20	0.034	ppb v/v			04/05/18 13:24	1
m,p-Xylene	0.50	U	0.50	0.077	ppb v/v			04/05/18 13:24	1
Xylene, o-	0.20	U	0.20	0.040	ppb v/v			04/05/18 13:24	1
Xylene (total)	0.70	U	0.70	0.040	ppb v/v			04/05/18 13:24	1
Styrene	0.20	U	0.20	0.035	ppb v/v			04/05/18 13:24	1
Bromoform	0.20	U	0.20	0.035	ppb v/v			04/05/18 13:24	1
Cumene	0.20	U	0.20	0.039	ppb v/v			04/05/18 13:24	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 13:24	1
n-Propylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 13:24	1
4-Ethyltoluene	0.20	U	0.20	0.040	ppb v/v			04/05/18 13:24	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 13:24	1
2-Chlorotoluene	0.20	U	0.20	0.035	ppb v/v			04/05/18 13:24	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 13:24	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.057	ppb v/v			04/05/18 13:24	1
sec-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/05/18 13:24	1
4-Isopropyltoluene	0.20	U	0.20	0.052	ppb v/v			04/05/18 13:24	1
1,3-Dichlorobenzene	0.20	U	0.20	0.050	ppb v/v			04/05/18 13:24	1
1,4-Dichlorobenzene	0.20	U	0.20	0.063	ppb v/v			04/05/18 13:24	1
Benzyl chloride	0.20	U	0.20	0.067	ppb v/v			04/05/18 13:24	1
n-Butylbenzene	0.20	U	0.20	0.068	ppb v/v			04/05/18 13:24	1
1,2-Dichlorobenzene	0.20	U	0.20	0.045	ppb v/v			04/05/18 13:24	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			04/05/18 13:24	1
Hexachlorobutadiene	0.20	U	0.20	0.064	ppb v/v			04/05/18 13:24	1
Naphthalene	0.50	U	0.50	0.10	ppb v/v			04/05/18 13:24	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	0.23	ug/m3			04/05/18 13:24	1
Freon 22	1.8	U	1.8	0.71	ug/m3			04/05/18 13:24	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.29	ug/m3			04/05/18 13:24	1
Chloromethane	1.0	U	1.0	0.33	ug/m3			04/05/18 13:24	1
n-Butane	1.2	U	1.2	0.11	ug/m3			04/05/18 13:24	1
Vinyl chloride	0.51	U	0.51	0.046	ug/m3			04/05/18 13:24	1
1,3-Butadiene	0.44	U	0.44	0.082	ug/m3			04/05/18 13:24	1
Bromomethane	0.78	U	0.78	0.14	ug/m3			04/05/18 13:24	1
Chloroethane	1.3	U	1.3	0.34	ug/m3			04/05/18 13:24	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.096	ug/m3			04/05/18 13:24	1
Trichlorofluoromethane	1.1	U	1.1	0.17	ug/m3			04/05/18 13:24	1
Freon TF	1.5	U	1.5	0.21	ug/m3			04/05/18 13:24	1
1,1-Dichloroethene	0.79	U	0.79	0.14	ug/m3			04/05/18 13:24	1
Acetone	12	U	12	3.1	ug/m3			04/05/18 13:24	1
Isopropyl alcohol	12	U	12	0.32	ug/m3			04/05/18 13:24	1
Carbon disulfide	1.6	U	1.6	0.087	ug/m3			04/05/18 13:24	1
3-Chloropropene	1.6	U	1.6	0.20	ug/m3			04/05/18 13:24	1
Methylene Chloride	1.7	U	1.7	0.24	ug/m3			04/05/18 13:24	1
tert-Butyl alcohol	15	U	15	5.2	ug/m3			04/05/18 13:24	1
Methyl tert-butyl ether	0.72	U	0.72	0.15	ug/m3			04/05/18 13:24	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128151/5
Matrix: Air
Analysis Batch: 128151

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.79	U	0.79	0.20	ug/m3			04/05/18 13:24	1
n-Hexane	0.70	U	0.70	0.16	ug/m3			04/05/18 13:24	1
1,1-Dichloroethane	0.81	U	0.81	0.069	ug/m3			04/05/18 13:24	1
Methyl Ethyl Ketone	1.5	U	1.5	0.32	ug/m3			04/05/18 13:24	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.11	ug/m3			04/05/18 13:24	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.11	ug/m3			04/05/18 13:24	1
Chloroform	0.98	U	0.98	0.12	ug/m3			04/05/18 13:24	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			04/05/18 13:24	1
1,1,1-Trichloroethane	1.1	U	1.1	0.14	ug/m3			04/05/18 13:24	1
Cyclohexane	0.69	U	0.69	0.15	ug/m3			04/05/18 13:24	1
Carbon tetrachloride	0.25	U	0.25	0.069	ug/m3			04/05/18 13:24	1
2,2,4-Trimethylpentane	0.93	U	0.93	0.20	ug/m3			04/05/18 13:24	1
Benzene	0.64	U	0.64	0.089	ug/m3			04/05/18 13:24	1
1,2-Dichloroethane	0.81	U	0.81	0.14	ug/m3			04/05/18 13:24	1
n-Heptane	0.82	U	0.82	0.28	ug/m3			04/05/18 13:24	1
Trichloroethene	0.21	U	0.21	0.049	ug/m3			04/05/18 13:24	1
Methyl methacrylate	2.0	U	2.0	0.45	ug/m3			04/05/18 13:24	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			04/05/18 13:24	1
1,4-Dioxane	18	U	18	2.7	ug/m3			04/05/18 13:24	1
Bromodichloromethane	1.3	U	1.3	0.40	ug/m3			04/05/18 13:24	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.16	ug/m3			04/05/18 13:24	1
methyl isobutyl ketone	2.0	U	2.0	0.27	ug/m3			04/05/18 13:24	1
Toluene	0.75	U	0.75	0.13	ug/m3			04/05/18 13:24	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.17	ug/m3			04/05/18 13:24	1
1,1,2-Trichloroethane	1.1	U	1.1	0.093	ug/m3			04/05/18 13:24	1
Tetrachloroethene	0.27	U	0.27	0.066	ug/m3			04/05/18 13:24	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.35	ug/m3			04/05/18 13:24	1
Dibromochloromethane	1.7	U	1.7	0.14	ug/m3			04/05/18 13:24	1
1,2-Dibromoethane	1.5	U	1.5	0.18	ug/m3			04/05/18 13:24	1
Chlorobenzene	0.92	U	0.92	0.12	ug/m3			04/05/18 13:24	1
Ethylbenzene	0.87	U	0.87	0.15	ug/m3			04/05/18 13:24	1
m,p-Xylene	2.2	U	2.2	0.33	ug/m3			04/05/18 13:24	1
Xylene, o-	0.87	U	0.87	0.17	ug/m3			04/05/18 13:24	1
Xylene (total)	3.0	U	3.0	0.17	ug/m3			04/05/18 13:24	1
Styrene	0.85	U	0.85	0.15	ug/m3			04/05/18 13:24	1
Bromoform	2.1	U	2.1	0.36	ug/m3			04/05/18 13:24	1
Cumene	0.98	U	0.98	0.19	ug/m3			04/05/18 13:24	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.18	ug/m3			04/05/18 13:24	1
n-Propylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 13:24	1
4-Ethyltoluene	0.98	U	0.98	0.20	ug/m3			04/05/18 13:24	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.20	ug/m3			04/05/18 13:24	1
2-Chlorotoluene	1.0	U	1.0	0.18	ug/m3			04/05/18 13:24	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 13:24	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.28	ug/m3			04/05/18 13:24	1
sec-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/05/18 13:24	1
4-Isopropyltoluene	1.1	U	1.1	0.29	ug/m3			04/05/18 13:24	1
1,3-Dichlorobenzene	1.2	U	1.2	0.30	ug/m3			04/05/18 13:24	1
1,4-Dichlorobenzene	1.2	U	1.2	0.38	ug/m3			04/05/18 13:24	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128151/5
Matrix: Air
Analysis Batch: 128151

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl chloride	1.0	U	1.0	0.35	ug/m3			04/05/18 13:24	1
n-Butylbenzene	1.1	U	1.1	0.37	ug/m3			04/05/18 13:24	1
1,2-Dichlorobenzene	1.2	U	1.2	0.27	ug/m3			04/05/18 13:24	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			04/05/18 13:24	1
Hexachlorobutadiene	2.1	U	2.1	0.68	ug/m3			04/05/18 13:24	1
Naphthalene	2.6	U	2.6	0.52	ug/m3			04/05/18 13:24	1

Lab Sample ID: LCS 200-128151/4
Matrix: Air
Analysis Batch: 128151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	10.0	8.42		ppb v/v		84	68 - 128
Freon 22	10.0	7.21		ppb v/v		72	64 - 128
1,2-Dichlorotetrafluoroethane	10.0	8.19		ppb v/v		82	78 - 138
Chloromethane	10.0	8.67		ppb v/v		87	57 - 126
n-Butane	10.0	9.06		ppb v/v		91	56 - 130
Vinyl chloride	10.0	8.26		ppb v/v		83	62 - 125
1,3-Butadiene	10.0	8.19		ppb v/v		82	59 - 125
Bromomethane	10.0	9.50		ppb v/v		95	68 - 128
Chloroethane	10.0	9.78		ppb v/v		98	65 - 125
Bromoethene(Vinyl Bromide)	10.0	9.59		ppb v/v		96	67 - 127
Trichlorofluoromethane	10.0	9.20		ppb v/v		92	67 - 127
Freon TF	10.0	9.27		ppb v/v		93	68 - 128
1,1-Dichloroethene	10.0	9.16		ppb v/v		92	67 - 127
Acetone	10.0	9.18		ppb v/v		92	64 - 136
Isopropyl alcohol	10.0	8.31		ppb v/v		83	55 - 124
Carbon disulfide	10.0	10.6		ppb v/v		106	81 - 141
3-Chloropropene	10.0	9.05		ppb v/v		91	53 - 133
Methylene Chloride	10.0	8.99		ppb v/v		90	62 - 122
tert-Butyl alcohol	10.0	8.83		ppb v/v		88	64 - 124
Methyl tert-butyl ether	10.0	9.29		ppb v/v		93	67 - 127
trans-1,2-Dichloroethene	10.0	9.44		ppb v/v		94	72 - 132
n-Hexane	10.0	9.49		ppb v/v		95	71 - 131
1,1-Dichloroethane	10.0	9.06		ppb v/v		91	66 - 126
Methyl Ethyl Ketone	10.0	9.23		ppb v/v		92	62 - 122
cis-1,2-Dichloroethene	10.0	9.03		ppb v/v		90	67 - 127
Chloroform	10.0	9.40		ppb v/v		94	69 - 129
Tetrahydrofuran	10.0	9.85		ppb v/v		98	61 - 136
1,1,1-Trichloroethane	10.0	9.70		ppb v/v		97	70 - 130
Cyclohexane	10.0	9.30		ppb v/v		93	69 - 129
Carbon tetrachloride	10.0	9.89		ppb v/v		99	62 - 143
2,2,4-Trimethylpentane	10.0	9.37		ppb v/v		94	67 - 127
Benzene	10.0	9.19		ppb v/v		92	67 - 127
1,2-Dichloroethane	10.0	10.1		ppb v/v		101	67 - 132
n-Heptane	10.0	9.99		ppb v/v		100	62 - 130
Trichloroethene	10.0	9.46		ppb v/v		95	68 - 128
Methyl methacrylate	10.0	9.75		ppb v/v		98	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128151/4
Matrix: Air
Analysis Batch: 128151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	10.0	9.50		ppb v/v		95	67 - 127
1,4-Dioxane	10.0	8.81		ppb v/v		88	66 - 132
Bromodichloromethane	10.0	9.80		ppb v/v		98	69 - 129
cis-1,3-Dichloropropene	10.0	9.93		ppb v/v		99	70 - 130
methyl isobutyl ketone	10.0	10.2		ppb v/v		102	62 - 130
Toluene	10.0	9.33		ppb v/v		93	67 - 127
trans-1,3-Dichloropropene	10.0	9.99		ppb v/v		100	69 - 129
1,1,2-Trichloroethane	10.0	9.35		ppb v/v		94	69 - 129
Tetrachloroethene	10.0	9.30		ppb v/v		93	70 - 130
Methyl Butyl Ketone (2-Hexanone)	10.0	10.2		ppb v/v		102	61 - 127
Dibromochloromethane	10.0	9.30		ppb v/v		93	66 - 130
1,2-Dibromoethane	10.0	9.34		ppb v/v		93	70 - 130
Chlorobenzene	10.0	9.11		ppb v/v		91	68 - 128
Ethylbenzene	10.0	9.37		ppb v/v		94	68 - 128
m,p-Xylene	20.0	18.2		ppb v/v		91	68 - 128
Xylene, o-	10.0	9.00		ppb v/v		90	67 - 127
Styrene	10.0	9.45		ppb v/v		95	68 - 128
Bromoform	10.0	9.71		ppb v/v		97	34 - 170
Cumene	10.0	9.01		ppb v/v		90	67 - 127
1,1,2,2-Tetrachloroethane	10.0	9.45		ppb v/v		94	69 - 129
n-Propylbenzene	10.0	9.19		ppb v/v		92	67 - 127
4-Ethyltoluene	10.0	9.43		ppb v/v		94	69 - 129
1,3,5-Trimethylbenzene	10.0	9.31		ppb v/v		93	65 - 125
2-Chlorotoluene	10.0	9.25		ppb v/v		93	67 - 127
tert-Butylbenzene	10.0	9.22		ppb v/v		92	63 - 125
1,2,4-Trimethylbenzene	10.0	9.34		ppb v/v		93	65 - 125
sec-Butylbenzene	10.0	9.24		ppb v/v		92	66 - 126
4-Isopropyltoluene	10.0	9.48		ppb v/v		95	67 - 129
1,3-Dichlorobenzene	10.0	9.10		ppb v/v		91	67 - 127
1,4-Dichlorobenzene	10.0	9.08		ppb v/v		91	66 - 126
Benzyl chloride	10.0	9.17		ppb v/v		92	54 - 135
n-Butylbenzene	10.0	9.67		ppb v/v		97	67 - 127
1,2-Dichlorobenzene	10.0	9.12		ppb v/v		91	67 - 127
1,2,4-Trichlorobenzene	10.0	7.69		ppb v/v		77	59 - 126
Hexachlorobutadiene	10.0	8.92		ppb v/v		89	62 - 130
Naphthalene	10.0	6.71		ppb v/v		67	50 - 121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	49	41.7		ug/m3		84	68 - 128
Freon 22	35	25.5		ug/m3		72	64 - 128
1,2-Dichlorotetrafluoroethane	70	57.2		ug/m3		82	78 - 138
Chloromethane	21	17.9		ug/m3		87	57 - 126
n-Butane	24	21.5		ug/m3		91	56 - 130
Vinyl chloride	26	21.1		ug/m3		83	62 - 125
1,3-Butadiene	22	18.1		ug/m3		82	59 - 125
Bromomethane	39	36.9		ug/m3		95	68 - 128
Chloroethane	26	25.8		ug/m3		98	65 - 125

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128151/4
Matrix: Air
Analysis Batch: 128151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoethene(Vinyl Bromide)	44	42.0		ug/m3		96	67 - 127
Trichlorofluoromethane	56	51.7		ug/m3		92	67 - 127
Freon TF	77	71.1		ug/m3		93	68 - 128
1,1-Dichloroethene	40	36.3		ug/m3		92	67 - 127
Acetone	24	21.8		ug/m3		92	64 - 136
Isopropyl alcohol	25	20.4		ug/m3		83	55 - 124
Carbon disulfide	31	32.9		ug/m3		106	81 - 141
3-Chloropropene	31	28.3		ug/m3		91	53 - 133
Methylene Chloride	35	31.2		ug/m3		90	62 - 122
tert-Butyl alcohol	30	26.8		ug/m3		88	64 - 124
Methyl tert-butyl ether	36	33.5		ug/m3		93	67 - 127
trans-1,2-Dichloroethene	40	37.4		ug/m3		94	72 - 132
n-Hexane	35	33.4		ug/m3		95	71 - 131
1,1-Dichloroethane	40	36.7		ug/m3		91	66 - 126
Methyl Ethyl Ketone	29	27.2		ug/m3		92	62 - 122
cis-1,2-Dichloroethene	40	35.8		ug/m3		90	67 - 127
Chloroform	49	45.9		ug/m3		94	69 - 129
Tetrahydrofuran	29	29.0		ug/m3		98	61 - 136
1,1,1-Trichloroethane	55	52.9		ug/m3		97	70 - 130
Cyclohexane	34	32.0		ug/m3		93	69 - 129
Carbon tetrachloride	63	62.2		ug/m3		99	62 - 143
2,2,4-Trimethylpentane	47	43.8		ug/m3		94	67 - 127
Benzene	32	29.4		ug/m3		92	67 - 127
1,2-Dichloroethane	40	40.8		ug/m3		101	67 - 132
n-Heptane	41	40.9		ug/m3		100	62 - 130
Trichloroethene	54	50.8		ug/m3		95	68 - 128
Methyl methacrylate	41	39.9		ug/m3		98	70 - 130
1,2-Dichloropropane	46	43.9		ug/m3		95	67 - 127
1,4-Dioxane	36	31.7		ug/m3		88	66 - 132
Bromodichloromethane	67	65.7		ug/m3		98	69 - 129
cis-1,3-Dichloropropene	45	45.1		ug/m3		99	70 - 130
methyl isobutyl ketone	41	41.7		ug/m3		102	62 - 130
Toluene	38	35.1		ug/m3		93	67 - 127
trans-1,3-Dichloropropene	45	45.3		ug/m3		100	69 - 129
1,1,2-Trichloroethane	55	51.0		ug/m3		94	69 - 129
Tetrachloroethene	68	63.1		ug/m3		93	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41	41.6		ug/m3		102	61 - 127
Dibromochloromethane	85	79.2		ug/m3		93	66 - 130
1,2-Dibromoethane	77	71.7		ug/m3		93	70 - 130
Chlorobenzene	46	41.9		ug/m3		91	68 - 128
Ethylbenzene	43	40.7		ug/m3		94	68 - 128
m,p-Xylene	87	79.0		ug/m3		91	68 - 128
Xylene, o-	43	39.1		ug/m3		90	67 - 127
Styrene	43	40.3		ug/m3		95	68 - 128
Bromoform	100	100		ug/m3		97	34 - 170
Cumene	49	44.3		ug/m3		90	67 - 127
1,1,2,2-Tetrachloroethane	69	64.9		ug/m3		94	69 - 129

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128151/4
Matrix: Air
Analysis Batch: 128151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Propylbenzene	49	45.2		ug/m3		92	67 - 127
4-Ethyltoluene	49	46.4		ug/m3		94	69 - 129
1,3,5-Trimethylbenzene	49	45.8		ug/m3		93	65 - 125
2-Chlorotoluene	52	47.9		ug/m3		93	67 - 127
tert-Butylbenzene	55	50.6		ug/m3		92	63 - 125
1,2,4-Trimethylbenzene	49	45.9		ug/m3		93	65 - 125
sec-Butylbenzene	55	50.7		ug/m3		92	66 - 126
4-Isopropyltoluene	55	52.0		ug/m3		95	67 - 129
1,3-Dichlorobenzene	60	54.7		ug/m3		91	67 - 127
1,4-Dichlorobenzene	60	54.6		ug/m3		91	66 - 126
Benzyl chloride	52	47.5		ug/m3		92	54 - 135
n-Butylbenzene	55	53.1		ug/m3		97	67 - 127
1,2-Dichlorobenzene	60	54.8		ug/m3		91	67 - 127
1,2,4-Trichlorobenzene	74	57.0		ug/m3		77	59 - 126
Hexachlorobutadiene	110	95.2		ug/m3		89	62 - 130
Naphthalene	52	35.2		ug/m3		67	50 - 121

Lab Sample ID: MB 200-128156/4
Matrix: Air
Analysis Batch: 128156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.50	U	0.50	0.20	ppb v/v			04/05/18 14:31	1
Freon 22	0.50	U	0.50	0.26	ppb v/v			04/05/18 14:31	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.068	ppb v/v			04/05/18 14:31	1
Chloromethane	0.50	U	0.50	0.25	ppb v/v			04/05/18 14:31	1
n-Butane	0.50	U	0.50	0.31	ppb v/v			04/05/18 14:31	1
Vinyl chloride	0.20	U	0.20	0.041	ppb v/v			04/05/18 14:31	1
1,3-Butadiene	0.20	U	0.20	0.065	ppb v/v			04/05/18 14:31	1
Bromomethane	0.20	U	0.20	0.062	ppb v/v			04/05/18 14:31	1
Chloroethane	0.50	U	0.50	0.21	ppb v/v			04/05/18 14:31	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.056	ppb v/v			04/05/18 14:31	1
Trichlorofluoromethane	0.20	U	0.20	0.062	ppb v/v			04/05/18 14:31	1
Freon TF	0.20	U	0.20	0.031	ppb v/v			04/05/18 14:31	1
1,1-Dichloroethene	0.20	U	0.20	0.034	ppb v/v			04/05/18 14:31	1
Acetone	5.0	U	5.0	2.6	ppb v/v			04/05/18 14:31	1
Isopropyl alcohol	5.0	U	5.0	1.8	ppb v/v			04/05/18 14:31	1
Carbon disulfide	0.50	U	0.50	0.12	ppb v/v			04/05/18 14:31	1
3-Chloropropene	0.50	U	0.50	0.27	ppb v/v			04/05/18 14:31	1
Methylene Chloride	0.50	U	0.50	0.20	ppb v/v			04/05/18 14:31	1
tert-Butyl alcohol	5.0	U	5.0	1.5	ppb v/v			04/05/18 14:31	1
Methyl tert-butyl ether	0.20	U	0.20	0.061	ppb v/v			04/05/18 14:31	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.074	ppb v/v			04/05/18 14:31	1
n-Hexane	0.20	U	0.20	0.16	ppb v/v			04/05/18 14:31	1
1,1-Dichloroethane	0.20	U	0.20	0.026	ppb v/v			04/05/18 14:31	1
Methyl Ethyl Ketone	0.50	U	0.50	0.20	ppb v/v			04/05/18 14:31	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.037	ppb v/v			04/05/18 14:31	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.11	ppb v/v			04/05/18 14:31	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128156/4
Matrix: Air
Analysis Batch: 128156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.20	U	0.20	0.052	ppb v/v			04/05/18 14:31	1
Tetrahydrofuran	5.0	U	5.0	2.6	ppb v/v			04/05/18 14:31	1
1,1,1-Trichloroethane	0.20	U	0.20	0.068	ppb v/v			04/05/18 14:31	1
Cyclohexane	0.20	U	0.20	0.063	ppb v/v			04/05/18 14:31	1
Carbon tetrachloride	0.040	U	0.040	0.024	ppb v/v			04/05/18 14:31	1
2,2,4-Trimethylpentane	0.20	U	0.20	0.088	ppb v/v			04/05/18 14:31	1
Benzene	0.20	U	0.20	0.071	ppb v/v			04/05/18 14:31	1
1,2-Dichloroethane	0.20	U	0.20	0.063	ppb v/v			04/05/18 14:31	1
n-Heptane	0.20	U	0.20	0.14	ppb v/v			04/05/18 14:31	1
Trichloroethene	0.040	U	0.040	0.030	ppb v/v			04/05/18 14:31	1
Methyl methacrylate	0.50	U	0.50	0.22	ppb v/v			04/05/18 14:31	1
1,2-Dichloropropane	0.20	U	0.20	0.12	ppb v/v			04/05/18 14:31	1
1,4-Dioxane	5.0	U	5.0	1.3	ppb v/v			04/05/18 14:31	1
Bromodichloromethane	0.20	U	0.20	0.094	ppb v/v			04/05/18 14:31	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.098	ppb v/v			04/05/18 14:31	1
methyl isobutyl ketone	0.50	U	0.50	0.36	ppb v/v			04/05/18 14:31	1
Toluene	0.20	U	0.20	0.069	ppb v/v			04/05/18 14:31	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.12	ppb v/v			04/05/18 14:31	1
1,1,2-Trichloroethane	0.20	U	0.20	0.078	ppb v/v			04/05/18 14:31	1
Tetrachloroethene	0.040	U	0.040	0.029	ppb v/v			04/05/18 14:31	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.42	ppb v/v			04/05/18 14:31	1
Dibromochloromethane	0.20	U	0.20	0.071	ppb v/v			04/05/18 14:31	1
1,2-Dibromoethane	0.20	U	0.20	0.069	ppb v/v			04/05/18 14:31	1
Chlorobenzene	0.20	U	0.20	0.040	ppb v/v			04/05/18 14:31	1
Ethylbenzene	0.20	U	0.20	0.073	ppb v/v			04/05/18 14:31	1
m,p-Xylene	0.50	U	0.50	0.070	ppb v/v			04/05/18 14:31	1
Xylene, o-	0.20	U	0.20	0.071	ppb v/v			04/05/18 14:31	1
Xylene (total)	0.70	U	0.70	0.14	ppb v/v			04/05/18 14:31	1
Styrene	0.20	U	0.20	0.086	ppb v/v			04/05/18 14:31	1
Bromoform	0.20	U	0.20	0.086	ppb v/v			04/05/18 14:31	1
Cumene	0.20	U	0.20	0.059	ppb v/v			04/05/18 14:31	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.076	ppb v/v			04/05/18 14:31	1
n-Propylbenzene	0.20	U	0.20	0.069	ppb v/v			04/05/18 14:31	1
4-Ethyltoluene	0.20	U	0.20	0.069	ppb v/v			04/05/18 14:31	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.058	ppb v/v			04/05/18 14:31	1
2-Chlorotoluene	0.20	U	0.20	0.071	ppb v/v			04/05/18 14:31	1
tert-Butylbenzene	0.20	U	0.20	0.058	ppb v/v			04/05/18 14:31	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.080	ppb v/v			04/05/18 14:31	1
sec-Butylbenzene	0.20	U	0.20	0.066	ppb v/v			04/05/18 14:31	1
4-Isopropyltoluene	0.20	U	0.20	0.075	ppb v/v			04/05/18 14:31	1
1,3-Dichlorobenzene	0.20	U	0.20	0.082	ppb v/v			04/05/18 14:31	1
1,4-Dichlorobenzene	0.20	U	0.20	0.065	ppb v/v			04/05/18 14:31	1
Benzyl chloride	0.20	U	0.20	0.12	ppb v/v			04/05/18 14:31	1
n-Butylbenzene	0.20	U	0.20	0.080	ppb v/v			04/05/18 14:31	1
1,2-Dichlorobenzene	0.20	U	0.20	0.071	ppb v/v			04/05/18 14:31	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.24	ppb v/v			04/05/18 14:31	1
Hexachlorobutadiene	0.20	U	0.20	0.082	ppb v/v			04/05/18 14:31	1
Naphthalene	0.50	U	0.50	0.31	ppb v/v			04/05/18 14:31	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	0.99	ug/m3			04/05/18 14:31	1
Freon 22	1.8	U	1.8	0.92	ug/m3			04/05/18 14:31	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.48	ug/m3			04/05/18 14:31	1
Chloromethane	1.0	U	1.0	0.52	ug/m3			04/05/18 14:31	1
n-Butane	1.2	U	1.2	0.74	ug/m3			04/05/18 14:31	1
Vinyl chloride	0.51	U	0.51	0.10	ug/m3			04/05/18 14:31	1
1,3-Butadiene	0.44	U	0.44	0.14	ug/m3			04/05/18 14:31	1
Bromomethane	0.78	U	0.78	0.24	ug/m3			04/05/18 14:31	1
Chloroethane	1.3	U	1.3	0.55	ug/m3			04/05/18 14:31	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.24	ug/m3			04/05/18 14:31	1
Trichlorofluoromethane	1.1	U	1.1	0.35	ug/m3			04/05/18 14:31	1
Freon TF	1.5	U	1.5	0.24	ug/m3			04/05/18 14:31	1
1,1-Dichloroethene	0.79	U	0.79	0.13	ug/m3			04/05/18 14:31	1
Acetone	12	U	12	6.2	ug/m3			04/05/18 14:31	1
Isopropyl alcohol	12	U	12	4.4	ug/m3			04/05/18 14:31	1
Carbon disulfide	1.6	U	1.6	0.37	ug/m3			04/05/18 14:31	1
3-Chloropropene	1.6	U	1.6	0.85	ug/m3			04/05/18 14:31	1
Methylene Chloride	1.7	U	1.7	0.69	ug/m3			04/05/18 14:31	1
tert-Butyl alcohol	15	U	15	4.5	ug/m3			04/05/18 14:31	1
Methyl tert-butyl ether	0.72	U	0.72	0.22	ug/m3			04/05/18 14:31	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.29	ug/m3			04/05/18 14:31	1
n-Hexane	0.70	U	0.70	0.56	ug/m3			04/05/18 14:31	1
1,1-Dichloroethane	0.81	U	0.81	0.11	ug/m3			04/05/18 14:31	1
Methyl Ethyl Ketone	1.5	U	1.5	0.59	ug/m3			04/05/18 14:31	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.15	ug/m3			04/05/18 14:31	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.44	ug/m3			04/05/18 14:31	1
Chloroform	0.98	U	0.98	0.25	ug/m3			04/05/18 14:31	1
Tetrahydrofuran	15	U	15	7.7	ug/m3			04/05/18 14:31	1
1,1,1-Trichloroethane	1.1	U	1.1	0.37	ug/m3			04/05/18 14:31	1
Cyclohexane	0.69	U	0.69	0.22	ug/m3			04/05/18 14:31	1
Carbon tetrachloride	0.25	U	0.25	0.15	ug/m3			04/05/18 14:31	1
2,2,4-Trimethylpentane	0.93	U	0.93	0.41	ug/m3			04/05/18 14:31	1
Benzene	0.64	U	0.64	0.23	ug/m3			04/05/18 14:31	1
1,2-Dichloroethane	0.81	U	0.81	0.25	ug/m3			04/05/18 14:31	1
n-Heptane	0.82	U	0.82	0.57	ug/m3			04/05/18 14:31	1
Trichloroethene	0.21	U	0.21	0.16	ug/m3			04/05/18 14:31	1
Methyl methacrylate	2.0	U	2.0	0.90	ug/m3			04/05/18 14:31	1
1,2-Dichloropropane	0.92	U	0.92	0.55	ug/m3			04/05/18 14:31	1
1,4-Dioxane	18	U	18	4.7	ug/m3			04/05/18 14:31	1
Bromodichloromethane	1.3	U	1.3	0.63	ug/m3			04/05/18 14:31	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.44	ug/m3			04/05/18 14:31	1
methyl isobutyl ketone	2.0	U	2.0	1.5	ug/m3			04/05/18 14:31	1
Toluene	0.75	U	0.75	0.26	ug/m3			04/05/18 14:31	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.54	ug/m3			04/05/18 14:31	1
1,1,2-Trichloroethane	1.1	U	1.1	0.43	ug/m3			04/05/18 14:31	1
Tetrachloroethene	0.27	U	0.27	0.20	ug/m3			04/05/18 14:31	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	1.7	ug/m3			04/05/18 14:31	1
Dibromochloromethane	1.7	U	1.7	0.60	ug/m3			04/05/18 14:31	1
1,2-Dibromoethane	1.5	U	1.5	0.53	ug/m3			04/05/18 14:31	1
Chlorobenzene	0.92	U	0.92	0.18	ug/m3			04/05/18 14:31	1
Ethylbenzene	0.87	U	0.87	0.32	ug/m3			04/05/18 14:31	1
m,p-Xylene	2.2	U	2.2	0.30	ug/m3			04/05/18 14:31	1
Xylene, o-	0.87	U	0.87	0.31	ug/m3			04/05/18 14:31	1
Xylene (total)	3.0	U	3.0	0.61	ug/m3			04/05/18 14:31	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128156/4
Matrix: Air
Analysis Batch: 128156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.85	U	0.85	0.37	ug/m3			04/05/18 14:31	1
Bromoform	2.1	U	2.1	0.89	ug/m3			04/05/18 14:31	1
Cumene	0.98	U	0.98	0.29	ug/m3			04/05/18 14:31	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.52	ug/m3			04/05/18 14:31	1
n-Propylbenzene	0.98	U	0.98	0.34	ug/m3			04/05/18 14:31	1
4-Ethyltoluene	0.98	U	0.98	0.34	ug/m3			04/05/18 14:31	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.29	ug/m3			04/05/18 14:31	1
2-Chlorotoluene	1.0	U	1.0	0.37	ug/m3			04/05/18 14:31	1
tert-Butylbenzene	1.1	U	1.1	0.32	ug/m3			04/05/18 14:31	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.39	ug/m3			04/05/18 14:31	1
sec-Butylbenzene	1.1	U	1.1	0.36	ug/m3			04/05/18 14:31	1
4-Isopropyltoluene	1.1	U	1.1	0.41	ug/m3			04/05/18 14:31	1
1,3-Dichlorobenzene	1.2	U	1.2	0.49	ug/m3			04/05/18 14:31	1
1,4-Dichlorobenzene	1.2	U	1.2	0.39	ug/m3			04/05/18 14:31	1
Benzyl chloride	1.0	U	1.0	0.62	ug/m3			04/05/18 14:31	1
n-Butylbenzene	1.1	U	1.1	0.44	ug/m3			04/05/18 14:31	1
1,2-Dichlorobenzene	1.2	U	1.2	0.43	ug/m3			04/05/18 14:31	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.8	ug/m3			04/05/18 14:31	1
Hexachlorobutadiene	2.1	U	2.1	0.87	ug/m3			04/05/18 14:31	1
Naphthalene	2.6	U	2.6	1.6	ug/m3			04/05/18 14:31	1

Lab Sample ID: LCS 200-128156/3
Matrix: Air
Analysis Batch: 128156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	10.0	11.0		ppb v/v		110	68 - 128
Freon 22	10.0	11.6		ppb v/v		116	64 - 128
1,2-Dichlorotetrafluoroethane	10.0	12.2		ppb v/v		122	78 - 138
Chloromethane	10.0	11.6		ppb v/v		116	57 - 126
n-Butane	10.0	12.2		ppb v/v		122	56 - 130
Vinyl chloride	10.0	10.9		ppb v/v		109	62 - 125
1,3-Butadiene	10.0	11.4		ppb v/v		114	59 - 125
Bromomethane	10.0	10.5		ppb v/v		105	68 - 128
Chloroethane	10.0	10.7		ppb v/v		107	65 - 125
Bromoethene(Vinyl Bromide)	10.0	10.3		ppb v/v		103	67 - 127
Trichlorofluoromethane	10.0	10.3		ppb v/v		103	67 - 127
Freon TF	10.0	10.6		ppb v/v		106	68 - 128
1,1-Dichloroethene	10.0	10.7		ppb v/v		107	67 - 127
Acetone	10.0	11.0		ppb v/v		110	64 - 136
Isopropyl alcohol	10.0	10.1		ppb v/v		101	55 - 124
Carbon disulfide	10.0	12.2		ppb v/v		122	81 - 141
3-Chloropropene	10.0	11.1		ppb v/v		111	53 - 133
Methylene Chloride	10.0	10.4		ppb v/v		104	62 - 122
tert-Butyl alcohol	10.0	9.93		ppb v/v		99	64 - 124
Methyl tert-butyl ether	10.0	10.4		ppb v/v		104	67 - 127
trans-1,2-Dichloroethene	10.0	11.2		ppb v/v		112	72 - 132
n-Hexane	10.0	11.6		ppb v/v		116	71 - 131

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128156/3
Matrix: Air
Analysis Batch: 128156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	10.0	10.6		ppb v/v		106	66 - 126
Methyl Ethyl Ketone	10.0	10.8		ppb v/v		108	62 - 122
cis-1,2-Dichloroethene	10.0	10.3		ppb v/v		103	67 - 127
Chloroform	10.0	10.5		ppb v/v		105	69 - 129
Tetrahydrofuran	10.0	10.7		ppb v/v		107	61 - 136
1,1,1-Trichloroethane	10.0	10.5		ppb v/v		105	70 - 130
Cyclohexane	10.0	10.5		ppb v/v		105	69 - 129
Carbon tetrachloride	10.0	10.4		ppb v/v		104	62 - 143
2,2,4-Trimethylpentane	10.0	10.7		ppb v/v		107	67 - 127
Benzene	10.0	10.4		ppb v/v		104	67 - 127
1,2-Dichloroethane	10.0	11.0		ppb v/v		110	67 - 132
n-Heptane	10.0	11.1		ppb v/v		111	62 - 130
Trichloroethene	10.0	10.8		ppb v/v		108	68 - 128
Methyl methacrylate	10.0	10.9		ppb v/v		109	70 - 130
1,2-Dichloropropane	10.0	10.3		ppb v/v		103	67 - 127
1,4-Dioxane	10.0	10.1		ppb v/v		101	66 - 132
Bromodichloromethane	10.0	10.3		ppb v/v		103	69 - 129
cis-1,3-Dichloropropene	10.0	11.1		ppb v/v		111	70 - 130
methyl isobutyl ketone	10.0	11.0		ppb v/v		110	62 - 130
Toluene	10.0	10.2		ppb v/v		102	67 - 127
trans-1,3-Dichloropropene	10.0	11.3		ppb v/v		113	69 - 129
1,1,2-Trichloroethane	10.0	10.3		ppb v/v		103	69 - 129
Tetrachloroethene	10.0	9.40		ppb v/v		94	70 - 130
Methyl Butyl Ketone (2-Hexanone)	10.0	10.3		ppb v/v		103	61 - 127
Dibromochloromethane	10.0	9.16		ppb v/v		92	66 - 130
1,2-Dibromoethane	10.0	10.4		ppb v/v		104	70 - 130
Chlorobenzene	10.0	9.96		ppb v/v		100	68 - 128
Ethylbenzene	10.0	10.3		ppb v/v		103	68 - 128
m,p-Xylene	20.0	20.4		ppb v/v		102	68 - 128
Xylene, o-	10.0	10.2		ppb v/v		102	67 - 127
Styrene	10.0	10.8		ppb v/v		108	68 - 128
Bromoform	10.0	7.99		ppb v/v		80	34 - 170
Cumene	10.0	10.2		ppb v/v		102	67 - 127
1,1,2,2-Tetrachloroethane	10.0	10.1		ppb v/v		101	69 - 129
n-Propylbenzene	10.0	10.3		ppb v/v		103	67 - 127
4-Ethyltoluene	10.0	10.6		ppb v/v		106	69 - 129
1,3,5-Trimethylbenzene	10.0	10.1		ppb v/v		101	65 - 125
2-Chlorotoluene	10.0	10.2		ppb v/v		102	67 - 127
tert-Butylbenzene	10.0	9.90		ppb v/v		99	63 - 125
1,2,4-Trimethylbenzene	10.0	10.3		ppb v/v		103	65 - 125
sec-Butylbenzene	10.0	10.3		ppb v/v		103	66 - 126
4-Isopropyltoluene	10.0	10.3		ppb v/v		103	67 - 129
1,3-Dichlorobenzene	10.0	10.3		ppb v/v		103	67 - 127
1,4-Dichlorobenzene	10.0	10.4		ppb v/v		104	66 - 126
Benzyl chloride	10.0	10.6		ppb v/v		106	54 - 135
n-Butylbenzene	10.0	11.2		ppb v/v		112	67 - 127
1,2-Dichlorobenzene	10.0	10.1		ppb v/v		101	67 - 127

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128156/3
Matrix: Air
Analysis Batch: 128156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	10.0	7.96		ppb v/v		80	59 - 126
Hexachlorobutadiene	10.0	8.63		ppb v/v		86	62 - 130
Naphthalene	10.0	7.05		ppb v/v		70	50 - 121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	49	54.6		ug/m3		110	68 - 128
Freon 22	35	41.2		ug/m3		116	64 - 128
1,2-Dichlorotetrafluoroethane	70	85.4		ug/m3		122	78 - 138
Chloromethane	21	23.9		ug/m3		116	57 - 126
n-Butane	24	29.1		ug/m3		122	56 - 130
Vinyl chloride	26	27.9		ug/m3		109	62 - 125
1,3-Butadiene	22	25.2		ug/m3		114	59 - 125
Bromomethane	39	40.7		ug/m3		105	68 - 128
Chloroethane	26	28.2		ug/m3		107	65 - 125
Bromoethene(Vinyl Bromide)	44	45.2		ug/m3		103	67 - 127
Trichlorofluoromethane	56	57.7		ug/m3		103	67 - 127
Freon TF	77	80.9		ug/m3		106	68 - 128
1,1-Dichloroethene	40	42.5		ug/m3		107	67 - 127
Acetone	24	26.1		ug/m3		110	64 - 136
Isopropyl alcohol	25	24.9		ug/m3		101	55 - 124
Carbon disulfide	31	37.9		ug/m3		122	81 - 141
3-Chloropropene	31	34.8		ug/m3		111	53 - 133
Methylene Chloride	35	36.2		ug/m3		104	62 - 122
tert-Butyl alcohol	30	30.1		ug/m3		99	64 - 124
Methyl tert-butyl ether	36	37.6		ug/m3		104	67 - 127
trans-1,2-Dichloroethene	40	44.2		ug/m3		112	72 - 132
n-Hexane	35	41.0		ug/m3		116	71 - 131
1,1-Dichloroethane	40	42.9		ug/m3		106	66 - 126
Methyl Ethyl Ketone	29	31.9		ug/m3		108	62 - 122
cis-1,2-Dichloroethene	40	41.0		ug/m3		103	67 - 127
Chloroform	49	51.2		ug/m3		105	69 - 129
Tetrahydrofuran	29	31.5		ug/m3		107	61 - 136
1,1,1-Trichloroethane	55	57.1		ug/m3		105	70 - 130
Cyclohexane	34	36.1		ug/m3		105	69 - 129
Carbon tetrachloride	63	65.5		ug/m3		104	62 - 143
2,2,4-Trimethylpentane	47	49.9		ug/m3		107	67 - 127
Benzene	32	33.1		ug/m3		104	67 - 127
1,2-Dichloroethane	40	44.5		ug/m3		110	67 - 132
n-Heptane	41	45.4		ug/m3		111	62 - 130
Trichloroethene	54	58.1		ug/m3		108	68 - 128
Methyl methacrylate	41	44.7		ug/m3		109	70 - 130
1,2-Dichloropropane	46	47.8		ug/m3		103	67 - 127
1,4-Dioxane	36	36.3		ug/m3		101	66 - 132
Bromodichloromethane	67	68.9		ug/m3		103	69 - 129
cis-1,3-Dichloropropene	45	50.6		ug/m3		111	70 - 130
methyl isobutyl ketone	41	45.2		ug/m3		110	62 - 130
Toluene	38	38.4		ug/m3		102	67 - 127
trans-1,3-Dichloropropene	45	51.5		ug/m3		113	69 - 129

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128156/3
Matrix: Air
Analysis Batch: 128156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	55	56.4		ug/m3		103	69 - 129
Tetrachloroethene	68	63.8		ug/m3		94	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41	42.2		ug/m3		103	61 - 127
Dibromochloromethane	85	78.0		ug/m3		92	66 - 130
1,2-Dibromoethane	77	79.8		ug/m3		104	70 - 130
Chlorobenzene	46	45.9		ug/m3		100	68 - 128
Ethylbenzene	43	44.5		ug/m3		103	68 - 128
m,p-Xylene	87	88.6		ug/m3		102	68 - 128
Xylene, o-	43	44.3		ug/m3		102	67 - 127
Styrene	43	45.8		ug/m3		108	68 - 128
Bromoform	100	82.6		ug/m3		80	34 - 170
Cumene	49	50.2		ug/m3		102	67 - 127
1,1,2,2-Tetrachloroethane	69	69.0		ug/m3		101	69 - 129
n-Propylbenzene	49	50.7		ug/m3		103	67 - 127
4-Ethyltoluene	49	51.9		ug/m3		106	69 - 129
1,3,5-Trimethylbenzene	49	49.5		ug/m3		101	65 - 125
2-Chlorotoluene	52	52.7		ug/m3		102	67 - 127
tert-Butylbenzene	55	54.4		ug/m3		99	63 - 125
1,2,4-Trimethylbenzene	49	50.8		ug/m3		103	65 - 125
sec-Butylbenzene	55	56.7		ug/m3		103	66 - 126
4-Isopropyltoluene	55	56.6		ug/m3		103	67 - 129
1,3-Dichlorobenzene	60	61.8		ug/m3		103	67 - 127
1,4-Dichlorobenzene	60	62.7		ug/m3		104	66 - 126
Benzyl chloride	52	54.9		ug/m3		106	54 - 135
n-Butylbenzene	55	61.4		ug/m3		112	67 - 127
1,2-Dichlorobenzene	60	60.6		ug/m3		101	67 - 127
1,2,4-Trichlorobenzene	74	59.1		ug/m3		80	59 - 126
Hexachlorobutadiene	110	92.0		ug/m3		86	62 - 130
Naphthalene	52	36.9		ug/m3		70	50 - 121

Lab Sample ID: MB 200-128215/6
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.50	U	0.50	0.047	ppb v/v			04/06/18 16:42	1
Freon 22	0.50	U	0.50	0.20	ppb v/v			04/06/18 16:42	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.041	ppb v/v			04/06/18 16:42	1
Chloromethane	0.50	U	0.50	0.16	ppb v/v			04/06/18 16:42	1
n-Butane	0.50	U	0.50	0.046	ppb v/v			04/06/18 16:42	1
Vinyl chloride	0.20	U	0.20	0.018	ppb v/v			04/06/18 16:42	1
1,3-Butadiene	0.20	U	0.20	0.037	ppb v/v			04/06/18 16:42	1
Bromomethane	0.20	U	0.20	0.036	ppb v/v			04/06/18 16:42	1
Chloroethane	0.50	U	0.50	0.13	ppb v/v			04/06/18 16:42	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.022	ppb v/v			04/06/18 16:42	1
Trichlorofluoromethane	0.20	U	0.20	0.031	ppb v/v			04/06/18 16:42	1
Freon TF	0.20	U	0.20	0.027	ppb v/v			04/06/18 16:42	1
1,1-Dichloroethene	0.20	U	0.20	0.035	ppb v/v			04/06/18 16:42	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128215/6
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	5.0	1.3	ppb v/v			04/06/18 16:42	1
Isopropyl alcohol	0.251	J	5.0	0.13	ppb v/v			04/06/18 16:42	1
Carbon disulfide	0.50	U	0.50	0.028	ppb v/v			04/06/18 16:42	1
3-Chloropropene	0.50	U	0.50	0.063	ppb v/v			04/06/18 16:42	1
Methylene Chloride	0.50	U	0.50	0.068	ppb v/v			04/06/18 16:42	1
tert-Butyl alcohol	5.0	U	5.0	1.7	ppb v/v			04/06/18 16:42	1
Methyl tert-butyl ether	0.20	U	0.20	0.041	ppb v/v			04/06/18 16:42	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.050	ppb v/v			04/06/18 16:42	1
n-Hexane	0.20	U	0.20	0.046	ppb v/v			04/06/18 16:42	1
1,1-Dichloroethane	0.20	U	0.20	0.017	ppb v/v			04/06/18 16:42	1
Methyl Ethyl Ketone	0.50	U	0.50	0.11	ppb v/v			04/06/18 16:42	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.029	ppb v/v			04/06/18 16:42	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.029	ppb v/v			04/06/18 16:42	1
Chloroform	0.20	U	0.20	0.025	ppb v/v			04/06/18 16:42	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			04/06/18 16:42	1
1,1,1-Trichloroethane	0.20	U	0.20	0.026	ppb v/v			04/06/18 16:42	1
Cyclohexane	0.20	U	0.20	0.045	ppb v/v			04/06/18 16:42	1
Carbon tetrachloride	0.040	U	0.040	0.011	ppb v/v			04/06/18 16:42	1
2,2,4-Trimethylpentane	0.20	U	0.20	0.043	ppb v/v			04/06/18 16:42	1
Benzene	0.20	U	0.20	0.028	ppb v/v			04/06/18 16:42	1
1,2-Dichloroethane	0.20	U	0.20	0.034	ppb v/v			04/06/18 16:42	1
n-Heptane	0.20	U	0.20	0.068	ppb v/v			04/06/18 16:42	1
Trichloroethene	0.040	U	0.040	0.0091	ppb v/v			04/06/18 16:42	1
Methyl methacrylate	0.50	U	0.50	0.11	ppb v/v			04/06/18 16:42	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			04/06/18 16:42	1
1,4-Dioxane	5.0	U	5.0	0.76	ppb v/v			04/06/18 16:42	1
Bromodichloromethane	0.20	U	0.20	0.059	ppb v/v			04/06/18 16:42	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.036	ppb v/v			04/06/18 16:42	1
methyl isobutyl ketone	0.50	U	0.50	0.065	ppb v/v			04/06/18 16:42	1
Toluene	0.20	U	0.20	0.035	ppb v/v			04/06/18 16:42	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.038	ppb v/v			04/06/18 16:42	1
1,1,2-Trichloroethane	0.20	U	0.20	0.017	ppb v/v			04/06/18 16:42	1
Tetrachloroethene	0.040	U	0.040	0.0098	ppb v/v			04/06/18 16:42	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.086	ppb v/v			04/06/18 16:42	1
Dibromochloromethane	0.20	U	0.20	0.017	ppb v/v			04/06/18 16:42	1
1,2-Dibromoethane	0.20	U	0.20	0.023	ppb v/v			04/06/18 16:42	1
Chlorobenzene	0.20	U	0.20	0.025	ppb v/v			04/06/18 16:42	1
Ethylbenzene	0.20	U	0.20	0.034	ppb v/v			04/06/18 16:42	1
m,p-Xylene	0.50	U	0.50	0.077	ppb v/v			04/06/18 16:42	1
Xylene, o-	0.20	U	0.20	0.040	ppb v/v			04/06/18 16:42	1
Xylene (total)	0.70	U	0.70	0.040	ppb v/v			04/06/18 16:42	1
Styrene	0.20	U	0.20	0.035	ppb v/v			04/06/18 16:42	1
Bromoform	0.20	U	0.20	0.035	ppb v/v			04/06/18 16:42	1
Cumene	0.20	U	0.20	0.039	ppb v/v			04/06/18 16:42	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.026	ppb v/v			04/06/18 16:42	1
n-Propylbenzene	0.20	U	0.20	0.040	ppb v/v			04/06/18 16:42	1
4-Ethyltoluene	0.20	U	0.20	0.040	ppb v/v			04/06/18 16:42	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.040	ppb v/v			04/06/18 16:42	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128215/6
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	0.20	U	0.20	0.035	ppb v/v			04/06/18 16:42	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/06/18 16:42	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.057	ppb v/v			04/06/18 16:42	1
sec-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			04/06/18 16:42	1
4-Isopropyltoluene	0.20	U	0.20	0.052	ppb v/v			04/06/18 16:42	1
1,3-Dichlorobenzene	0.20	U	0.20	0.050	ppb v/v			04/06/18 16:42	1
1,4-Dichlorobenzene	0.20	U	0.20	0.063	ppb v/v			04/06/18 16:42	1
Benzyl chloride	0.20	U	0.20	0.067	ppb v/v			04/06/18 16:42	1
n-Butylbenzene	0.20	U	0.20	0.068	ppb v/v			04/06/18 16:42	1
1,2-Dichlorobenzene	0.20	U	0.20	0.045	ppb v/v			04/06/18 16:42	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			04/06/18 16:42	1
Hexachlorobutadiene	0.20	U	0.20	0.064	ppb v/v			04/06/18 16:42	1
Naphthalene	0.50	U	0.50	0.10	ppb v/v			04/06/18 16:42	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	0.23	ug/m3			04/06/18 16:42	1
Freon 22	1.8	U	1.8	0.71	ug/m3			04/06/18 16:42	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.29	ug/m3			04/06/18 16:42	1
Chloromethane	1.0	U	1.0	0.33	ug/m3			04/06/18 16:42	1
n-Butane	1.2	U	1.2	0.11	ug/m3			04/06/18 16:42	1
Vinyl chloride	0.51	U	0.51	0.046	ug/m3			04/06/18 16:42	1
1,3-Butadiene	0.44	U	0.44	0.082	ug/m3			04/06/18 16:42	1
Bromomethane	0.78	U	0.78	0.14	ug/m3			04/06/18 16:42	1
Chloroethane	1.3	U	1.3	0.34	ug/m3			04/06/18 16:42	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.096	ug/m3			04/06/18 16:42	1
Trichlorofluoromethane	1.1	U	1.1	0.17	ug/m3			04/06/18 16:42	1
Freon TF	1.5	U	1.5	0.21	ug/m3			04/06/18 16:42	1
1,1-Dichloroethene	0.79	U	0.79	0.14	ug/m3			04/06/18 16:42	1
Acetone	12	U	12	3.1	ug/m3			04/06/18 16:42	1
Isopropyl alcohol	0.618	J	12	0.32	ug/m3			04/06/18 16:42	1
Carbon disulfide	1.6	U	1.6	0.087	ug/m3			04/06/18 16:42	1
3-Chloropropene	1.6	U	1.6	0.20	ug/m3			04/06/18 16:42	1
Methylene Chloride	1.7	U	1.7	0.24	ug/m3			04/06/18 16:42	1
tert-Butyl alcohol	15	U	15	5.2	ug/m3			04/06/18 16:42	1
Methyl tert-butyl ether	0.72	U	0.72	0.15	ug/m3			04/06/18 16:42	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.20	ug/m3			04/06/18 16:42	1
n-Hexane	0.70	U	0.70	0.16	ug/m3			04/06/18 16:42	1
1,1-Dichloroethane	0.81	U	0.81	0.069	ug/m3			04/06/18 16:42	1
Methyl Ethyl Ketone	1.5	U	1.5	0.32	ug/m3			04/06/18 16:42	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.11	ug/m3			04/06/18 16:42	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.11	ug/m3			04/06/18 16:42	1
Chloroform	0.98	U	0.98	0.12	ug/m3			04/06/18 16:42	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			04/06/18 16:42	1
1,1,1-Trichloroethane	1.1	U	1.1	0.14	ug/m3			04/06/18 16:42	1
Cyclohexane	0.69	U	0.69	0.15	ug/m3			04/06/18 16:42	1
Carbon tetrachloride	0.25	U	0.25	0.069	ug/m3			04/06/18 16:42	1
2,2,4-Trimethylpentane	0.93	U	0.93	0.20	ug/m3			04/06/18 16:42	1
Benzene	0.64	U	0.64	0.089	ug/m3			04/06/18 16:42	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128215/6
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.81	U	0.81	0.14	ug/m3			04/06/18 16:42	1
n-Heptane	0.82	U	0.82	0.28	ug/m3			04/06/18 16:42	1
Trichloroethene	0.21	U	0.21	0.049	ug/m3			04/06/18 16:42	1
Methyl methacrylate	2.0	U	2.0	0.45	ug/m3			04/06/18 16:42	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			04/06/18 16:42	1
1,4-Dioxane	18	U	18	2.7	ug/m3			04/06/18 16:42	1
Bromodichloromethane	1.3	U	1.3	0.40	ug/m3			04/06/18 16:42	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.16	ug/m3			04/06/18 16:42	1
methyl isobutyl ketone	2.0	U	2.0	0.27	ug/m3			04/06/18 16:42	1
Toluene	0.75	U	0.75	0.13	ug/m3			04/06/18 16:42	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.17	ug/m3			04/06/18 16:42	1
1,1,2-Trichloroethane	1.1	U	1.1	0.093	ug/m3			04/06/18 16:42	1
Tetrachloroethene	0.27	U	0.27	0.066	ug/m3			04/06/18 16:42	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.35	ug/m3			04/06/18 16:42	1
Dibromochloromethane	1.7	U	1.7	0.14	ug/m3			04/06/18 16:42	1
1,2-Dibromoethane	1.5	U	1.5	0.18	ug/m3			04/06/18 16:42	1
Chlorobenzene	0.92	U	0.92	0.12	ug/m3			04/06/18 16:42	1
Ethylbenzene	0.87	U	0.87	0.15	ug/m3			04/06/18 16:42	1
m,p-Xylene	2.2	U	2.2	0.33	ug/m3			04/06/18 16:42	1
Xylene, o-	0.87	U	0.87	0.17	ug/m3			04/06/18 16:42	1
Xylene (total)	3.0	U	3.0	0.17	ug/m3			04/06/18 16:42	1
Styrene	0.85	U	0.85	0.15	ug/m3			04/06/18 16:42	1
Bromoform	2.1	U	2.1	0.36	ug/m3			04/06/18 16:42	1
Cumene	0.98	U	0.98	0.19	ug/m3			04/06/18 16:42	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.18	ug/m3			04/06/18 16:42	1
n-Propylbenzene	0.98	U	0.98	0.20	ug/m3			04/06/18 16:42	1
4-Ethyltoluene	0.98	U	0.98	0.20	ug/m3			04/06/18 16:42	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.20	ug/m3			04/06/18 16:42	1
2-Chlorotoluene	1.0	U	1.0	0.18	ug/m3			04/06/18 16:42	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/06/18 16:42	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.28	ug/m3			04/06/18 16:42	1
sec-Butylbenzene	1.1	U	1.1	0.20	ug/m3			04/06/18 16:42	1
4-Isopropyltoluene	1.1	U	1.1	0.29	ug/m3			04/06/18 16:42	1
1,3-Dichlorobenzene	1.2	U	1.2	0.30	ug/m3			04/06/18 16:42	1
1,4-Dichlorobenzene	1.2	U	1.2	0.38	ug/m3			04/06/18 16:42	1
Benzyl chloride	1.0	U	1.0	0.35	ug/m3			04/06/18 16:42	1
n-Butylbenzene	1.1	U	1.1	0.37	ug/m3			04/06/18 16:42	1
1,2-Dichlorobenzene	1.2	U	1.2	0.27	ug/m3			04/06/18 16:42	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			04/06/18 16:42	1
Hexachlorobutadiene	2.1	U	2.1	0.68	ug/m3			04/06/18 16:42	1
Naphthalene	2.6	U	2.6	0.52	ug/m3			04/06/18 16:42	1

Lab Sample ID: LCS 200-128215/5
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	10.0	11.1		ppb v/v		111	68 - 128

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128215/5
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 22	10.0	11.3		ppb v/v		113	64 - 128
1,2-Dichlorotetrafluoroethane	10.0	12.2		ppb v/v		122	78 - 138
Chloromethane	10.0	11.2		ppb v/v		112	57 - 126
n-Butane	10.0	11.3		ppb v/v		113	56 - 130
Vinyl chloride	10.0	10.7		ppb v/v		107	62 - 125
1,3-Butadiene	10.0	11.0		ppb v/v		110	59 - 125
Bromomethane	10.0	10.6		ppb v/v		107	68 - 128
Chloroethane	10.0	10.5		ppb v/v		105	65 - 125
Bromoethene(Vinyl Bromide)	10.0	10.6		ppb v/v		106	67 - 127
Trichlorofluoromethane	10.0	10.8		ppb v/v		108	67 - 127
Freon TF	10.0	10.8		ppb v/v		108	68 - 128
1,1-Dichloroethene	10.0	10.8		ppb v/v		108	67 - 127
Acetone	10.0	11.0		ppb v/v		110	64 - 136
Isopropyl alcohol	10.0	10.2		ppb v/v		102	55 - 124
Carbon disulfide	10.0	12.3		ppb v/v		123	81 - 141
3-Chloropropene	10.0	10.8		ppb v/v		108	53 - 133
Methylene Chloride	10.0	10.7		ppb v/v		107	62 - 122
tert-Butyl alcohol	10.0	10.6		ppb v/v		107	64 - 124
Methyl tert-butyl ether	10.0	11.2		ppb v/v		112	67 - 127
trans-1,2-Dichloroethene	10.0	12.0		ppb v/v		120	72 - 132
n-Hexane	10.0	12.0		ppb v/v		120	71 - 131
1,1-Dichloroethane	10.0	11.0		ppb v/v		110	66 - 126
Methyl Ethyl Ketone	10.0	10.9		ppb v/v		109	62 - 122
cis-1,2-Dichloroethene	10.0	10.8		ppb v/v		108	67 - 127
Chloroform	10.0	11.1		ppb v/v		111	69 - 129
Tetrahydrofuran	10.0	10.8		ppb v/v		108	61 - 136
1,1,1-Trichloroethane	10.0	11.5		ppb v/v		115	70 - 130
Cyclohexane	10.0	11.2		ppb v/v		112	69 - 129
Carbon tetrachloride	10.0	11.6		ppb v/v		116	62 - 143
2,2,4-Trimethylpentane	10.0	11.1		ppb v/v		111	67 - 127
Benzene	10.0	11.0		ppb v/v		110	67 - 127
1,2-Dichloroethane	10.0	12.0		ppb v/v		120	67 - 132
n-Heptane	10.0	11.3		ppb v/v		113	62 - 130
Trichloroethene	10.0	11.7		ppb v/v		117	68 - 128
Methyl methacrylate	10.0	11.3		ppb v/v		113	70 - 130
1,2-Dichloropropane	10.0	10.7		ppb v/v		107	67 - 127
1,4-Dioxane	10.0	10.7		ppb v/v		107	66 - 132
Bromodichloromethane	10.0	11.1		ppb v/v		111	69 - 129
cis-1,3-Dichloropropene	10.0	11.6		ppb v/v		116	70 - 130
methyl isobutyl ketone	10.0	11.2		ppb v/v		112	62 - 130
Toluene	10.0	11.2		ppb v/v		112	67 - 127
trans-1,3-Dichloropropene	10.0	12.2		ppb v/v		122	69 - 129
1,1,2-Trichloroethane	10.0	11.1		ppb v/v		111	69 - 129
Tetrachloroethene	10.0	10.6		ppb v/v		106	70 - 130
Methyl Butyl Ketone (2-Hexanone)	10.0	10.8		ppb v/v		108	61 - 127
Dibromochloromethane	10.0	10.2		ppb v/v		102	66 - 130
1,2-Dibromoethane	10.0	11.4		ppb v/v		114	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128215/5
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	10.0	11.0		ppb v/v		110	68 - 128
Ethylbenzene	10.0	11.2		ppb v/v		112	68 - 128
m,p-Xylene	20.0	22.6		ppb v/v		113	68 - 128
Xylene, o-	10.0	11.1		ppb v/v		111	67 - 127
Styrene	10.0	11.9		ppb v/v		119	68 - 128
Bromoform	10.0	8.97		ppb v/v		90	34 - 170
Cumene	10.0	11.2		ppb v/v		112	67 - 127
1,1,2,2-Tetrachloroethane	10.0	10.7		ppb v/v		107	69 - 129
n-Propylbenzene	10.0	11.3		ppb v/v		113	67 - 127
4-Ethyltoluene	10.0	11.7		ppb v/v		117	69 - 129
1,3,5-Trimethylbenzene	10.0	11.3		ppb v/v		113	65 - 125
2-Chlorotoluene	10.0	11.4		ppb v/v		114	67 - 127
tert-Butylbenzene	10.0	11.2		ppb v/v		112	63 - 125
1,2,4-Trimethylbenzene	10.0	11.6		ppb v/v		116	65 - 125
sec-Butylbenzene	10.0	11.6		ppb v/v		116	66 - 126
4-Isopropyltoluene	10.0	11.7		ppb v/v		117	67 - 129
1,3-Dichlorobenzene	10.0	11.7		ppb v/v		118	67 - 127
1,4-Dichlorobenzene	10.0	11.7		ppb v/v		117	66 - 126
Benzyl chloride	10.0	11.7		ppb v/v		117	54 - 135
n-Butylbenzene	10.0	12.5		ppb v/v		125	67 - 127
1,2-Dichlorobenzene	10.0	11.6		ppb v/v		116	67 - 127
1,2,4-Trichlorobenzene	10.0	9.70		ppb v/v		97	59 - 126
Hexachlorobutadiene	10.0	10.2		ppb v/v		102	62 - 130
Naphthalene	10.0	8.06		ppb v/v		81	50 - 121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	49	54.8		ug/m3		111	68 - 128
Freon 22	35	40.0		ug/m3		113	64 - 128
1,2-Dichlorotetrafluoroethane	70	85.1		ug/m3		122	78 - 138
Chloromethane	21	23.1		ug/m3		112	57 - 126
n-Butane	24	26.9		ug/m3		113	56 - 130
Vinyl chloride	26	27.3		ug/m3		107	62 - 125
1,3-Butadiene	22	24.4		ug/m3		110	59 - 125
Bromomethane	39	41.3		ug/m3		107	68 - 128
Chloroethane	26	27.8		ug/m3		105	65 - 125
Bromoethene(Vinyl Bromide)	44	46.2		ug/m3		106	67 - 127
Trichlorofluoromethane	56	60.5		ug/m3		108	67 - 127
Freon TF	77	83.1		ug/m3		108	68 - 128
1,1-Dichloroethene	40	43.0		ug/m3		108	67 - 127
Acetone	24	26.1		ug/m3		110	64 - 136
Isopropyl alcohol	25	25.0		ug/m3		102	55 - 124
Carbon disulfide	31	38.4		ug/m3		123	81 - 141
3-Chloropropene	31	33.9		ug/m3		108	53 - 133
Methylene Chloride	35	37.1		ug/m3		107	62 - 122
tert-Butyl alcohol	30	32.3		ug/m3		107	64 - 124
Methyl tert-butyl ether	36	40.3		ug/m3		112	67 - 127
trans-1,2-Dichloroethene	40	47.5		ug/m3		120	72 - 132
n-Hexane	35	42.2		ug/m3		120	71 - 131

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128215/5
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	40	44.4		ug/m3		110	66 - 126
Methyl Ethyl Ketone	29	32.2		ug/m3		109	62 - 122
cis-1,2-Dichloroethene	40	42.8		ug/m3		108	67 - 127
Chloroform	49	54.2		ug/m3		111	69 - 129
Tetrahydrofuran	29	31.9		ug/m3		108	61 - 136
1,1,1-Trichloroethane	55	62.8		ug/m3		115	70 - 130
Cyclohexane	34	38.7		ug/m3		112	69 - 129
Carbon tetrachloride	63	72.7		ug/m3		116	62 - 143
2,2,4-Trimethylpentane	47	51.9		ug/m3		111	67 - 127
Benzene	32	35.2		ug/m3		110	67 - 127
1,2-Dichloroethane	40	48.7		ug/m3		120	67 - 132
n-Heptane	41	46.3		ug/m3		113	62 - 130
Trichloroethene	54	62.6		ug/m3		117	68 - 128
Methyl methacrylate	41	46.4		ug/m3		113	70 - 130
1,2-Dichloropropane	46	49.4		ug/m3		107	67 - 127
1,4-Dioxane	36	38.4		ug/m3		107	66 - 132
Bromodichloromethane	67	74.2		ug/m3		111	69 - 129
cis-1,3-Dichloropropene	45	52.9		ug/m3		116	70 - 130
methyl isobutyl ketone	41	46.1		ug/m3		112	62 - 130
Toluene	38	42.3		ug/m3		112	67 - 127
trans-1,3-Dichloropropene	45	55.3		ug/m3		122	69 - 129
1,1,2-Trichloroethane	55	60.6		ug/m3		111	69 - 129
Tetrachloroethene	68	71.6		ug/m3		106	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41	44.2		ug/m3		108	61 - 127
Dibromochloromethane	85	87.0		ug/m3		102	66 - 130
1,2-Dibromoethane	77	87.7		ug/m3		114	70 - 130
Chlorobenzene	46	50.5		ug/m3		110	68 - 128
Ethylbenzene	43	48.6		ug/m3		112	68 - 128
m,p-Xylene	87	98.2		ug/m3		113	68 - 128
Xylene, o-	43	48.3		ug/m3		111	67 - 127
Styrene	43	50.6		ug/m3		119	68 - 128
Bromoform	100	92.7		ug/m3		90	34 - 170
Cumene	49	55.2		ug/m3		112	67 - 127
1,1,2,2-Tetrachloroethane	69	73.5		ug/m3		107	69 - 129
n-Propylbenzene	49	55.5		ug/m3		113	67 - 127
4-Ethyltoluene	49	57.5		ug/m3		117	69 - 129
1,3,5-Trimethylbenzene	49	55.4		ug/m3		113	65 - 125
2-Chlorotoluene	52	58.9		ug/m3		114	67 - 127
tert-Butylbenzene	55	61.4		ug/m3		112	63 - 125
1,2,4-Trimethylbenzene	49	57.2		ug/m3		116	65 - 125
sec-Butylbenzene	55	63.6		ug/m3		116	66 - 126
4-Isopropyltoluene	55	64.1		ug/m3		117	67 - 129
1,3-Dichlorobenzene	60	70.6		ug/m3		118	67 - 127
1,4-Dichlorobenzene	60	70.3		ug/m3		117	66 - 126
Benzyl chloride	52	60.6		ug/m3		117	54 - 135
n-Butylbenzene	55	68.9		ug/m3		125	67 - 127
1,2-Dichlorobenzene	60	69.7		ug/m3		116	67 - 127

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128215/5
Matrix: Air
Analysis Batch: 128215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	74	72.0		ug/m3		97	59 - 126
Hexachlorobutadiene	110	108		ug/m3		102	62 - 130
Naphthalene	52	42.2		ug/m3		81	50 - 121

Lab Sample ID: MB 200-128434/5
Matrix: Air
Analysis Batch: 128434

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.50	U	0.50	0.20	ppb v/v			04/13/18 13:18	1
Freon 22	0.50	U	0.50	0.26	ppb v/v			04/13/18 13:18	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.068	ppb v/v			04/13/18 13:18	1
Chloromethane	0.50	U	0.50	0.25	ppb v/v			04/13/18 13:18	1
n-Butane	0.50	U	0.50	0.31	ppb v/v			04/13/18 13:18	1
Vinyl chloride	0.20	U	0.20	0.041	ppb v/v			04/13/18 13:18	1
1,3-Butadiene	0.20	U	0.20	0.065	ppb v/v			04/13/18 13:18	1
Bromomethane	0.20	U	0.20	0.062	ppb v/v			04/13/18 13:18	1
Chloroethane	0.50	U	0.50	0.21	ppb v/v			04/13/18 13:18	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.056	ppb v/v			04/13/18 13:18	1
Trichlorofluoromethane	0.20	U	0.20	0.062	ppb v/v			04/13/18 13:18	1
Freon TF	0.20	U	0.20	0.031	ppb v/v			04/13/18 13:18	1
1,1-Dichloroethene	0.20	U	0.20	0.034	ppb v/v			04/13/18 13:18	1
Acetone	5.0	U	5.0	2.6	ppb v/v			04/13/18 13:18	1
Isopropyl alcohol	5.0	U	5.0	1.8	ppb v/v			04/13/18 13:18	1
Carbon disulfide	0.50	U	0.50	0.12	ppb v/v			04/13/18 13:18	1
3-Chloropropene	0.50	U	0.50	0.27	ppb v/v			04/13/18 13:18	1
Methylene Chloride	0.50	U	0.50	0.20	ppb v/v			04/13/18 13:18	1
tert-Butyl alcohol	5.0	U	5.0	1.5	ppb v/v			04/13/18 13:18	1
Methyl tert-butyl ether	0.20	U	0.20	0.061	ppb v/v			04/13/18 13:18	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.074	ppb v/v			04/13/18 13:18	1
n-Hexane	0.20	U	0.20	0.16	ppb v/v			04/13/18 13:18	1
1,1-Dichloroethane	0.20	U	0.20	0.026	ppb v/v			04/13/18 13:18	1
Methyl Ethyl Ketone	0.50	U	0.50	0.20	ppb v/v			04/13/18 13:18	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.037	ppb v/v			04/13/18 13:18	1
1,2-Dichloroethene, Total	0.40	U	0.40	0.11	ppb v/v			04/13/18 13:18	1
Chloroform	0.20	U	0.20	0.052	ppb v/v			04/13/18 13:18	1
Tetrahydrofuran	5.0	U	5.0	2.6	ppb v/v			04/13/18 13:18	1
1,1,1-Trichloroethane	0.20	U	0.20	0.068	ppb v/v			04/13/18 13:18	1
Cyclohexane	0.20	U	0.20	0.063	ppb v/v			04/13/18 13:18	1
Carbon tetrachloride	0.040	U	0.040	0.024	ppb v/v			04/13/18 13:18	1
2,2,4-Trimethylpentane	0.20	U	0.20	0.088	ppb v/v			04/13/18 13:18	1
Benzene	0.20	U	0.20	0.071	ppb v/v			04/13/18 13:18	1
1,2-Dichloroethane	0.20	U	0.20	0.063	ppb v/v			04/13/18 13:18	1
n-Heptane	0.20	U	0.20	0.14	ppb v/v			04/13/18 13:18	1
Trichloroethene	0.040	U	0.040	0.030	ppb v/v			04/13/18 13:18	1
Methyl methacrylate	0.50	U	0.50	0.22	ppb v/v			04/13/18 13:18	1
1,2-Dichloropropane	0.20	U	0.20	0.12	ppb v/v			04/13/18 13:18	1
1,4-Dioxane	5.0	U	5.0	1.3	ppb v/v			04/13/18 13:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128434/5
Matrix: Air
Analysis Batch: 128434

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	0.20	U	0.20	0.094	ppb v/v			04/13/18 13:18	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.098	ppb v/v			04/13/18 13:18	1
methyl isobutyl ketone	0.50	U	0.50	0.36	ppb v/v			04/13/18 13:18	1
Toluene	0.20	U	0.20	0.069	ppb v/v			04/13/18 13:18	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.12	ppb v/v			04/13/18 13:18	1
1,1,2-Trichloroethane	0.20	U	0.20	0.078	ppb v/v			04/13/18 13:18	1
Tetrachloroethene	0.040	U	0.040	0.029	ppb v/v			04/13/18 13:18	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.42	ppb v/v			04/13/18 13:18	1
Dibromochloromethane	0.20	U	0.20	0.071	ppb v/v			04/13/18 13:18	1
1,2-Dibromoethane	0.20	U	0.20	0.069	ppb v/v			04/13/18 13:18	1
Chlorobenzene	0.20	U	0.20	0.040	ppb v/v			04/13/18 13:18	1
Ethylbenzene	0.20	U	0.20	0.073	ppb v/v			04/13/18 13:18	1
m,p-Xylene	0.50	U	0.50	0.070	ppb v/v			04/13/18 13:18	1
Xylene, o-	0.20	U	0.20	0.071	ppb v/v			04/13/18 13:18	1
Xylene (total)	0.70	U	0.70	0.14	ppb v/v			04/13/18 13:18	1
Styrene	0.20	U	0.20	0.086	ppb v/v			04/13/18 13:18	1
Bromoform	0.20	U	0.20	0.086	ppb v/v			04/13/18 13:18	1
Cumene	0.20	U	0.20	0.059	ppb v/v			04/13/18 13:18	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.076	ppb v/v			04/13/18 13:18	1
n-Propylbenzene	0.20	U	0.20	0.069	ppb v/v			04/13/18 13:18	1
4-Ethyltoluene	0.20	U	0.20	0.069	ppb v/v			04/13/18 13:18	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.058	ppb v/v			04/13/18 13:18	1
2-Chlorotoluene	0.20	U	0.20	0.071	ppb v/v			04/13/18 13:18	1
tert-Butylbenzene	0.20	U	0.20	0.058	ppb v/v			04/13/18 13:18	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.080	ppb v/v			04/13/18 13:18	1
sec-Butylbenzene	0.20	U	0.20	0.066	ppb v/v			04/13/18 13:18	1
4-Isopropyltoluene	0.20	U	0.20	0.075	ppb v/v			04/13/18 13:18	1
1,3-Dichlorobenzene	0.20	U	0.20	0.082	ppb v/v			04/13/18 13:18	1
1,4-Dichlorobenzene	0.20	U	0.20	0.065	ppb v/v			04/13/18 13:18	1
Benzyl chloride	0.20	U	0.20	0.12	ppb v/v			04/13/18 13:18	1
n-Butylbenzene	0.20	U	0.20	0.080	ppb v/v			04/13/18 13:18	1
1,2-Dichlorobenzene	0.20	U	0.20	0.071	ppb v/v			04/13/18 13:18	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.24	ppb v/v			04/13/18 13:18	1
Hexachlorobutadiene	0.20	U	0.20	0.082	ppb v/v			04/13/18 13:18	1
Naphthalene	0.50	U	0.50	0.31	ppb v/v			04/13/18 13:18	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	0.99	ug/m3			04/13/18 13:18	1
Freon 22	1.8	U	1.8	0.92	ug/m3			04/13/18 13:18	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.48	ug/m3			04/13/18 13:18	1
Chloromethane	1.0	U	1.0	0.52	ug/m3			04/13/18 13:18	1
n-Butane	1.2	U	1.2	0.74	ug/m3			04/13/18 13:18	1
Vinyl chloride	0.51	U	0.51	0.10	ug/m3			04/13/18 13:18	1
1,3-Butadiene	0.44	U	0.44	0.14	ug/m3			04/13/18 13:18	1
Bromomethane	0.78	U	0.78	0.24	ug/m3			04/13/18 13:18	1
Chloroethane	1.3	U	1.3	0.55	ug/m3			04/13/18 13:18	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.24	ug/m3			04/13/18 13:18	1
Trichlorofluoromethane	1.1	U	1.1	0.35	ug/m3			04/13/18 13:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128434/5
Matrix: Air
Analysis Batch: 128434

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon TF	1.5	U	1.5	0.24	ug/m3			04/13/18 13:18	1
1,1-Dichloroethene	0.79	U	0.79	0.13	ug/m3			04/13/18 13:18	1
Acetone	12	U	12	6.2	ug/m3			04/13/18 13:18	1
Isopropyl alcohol	12	U	12	4.4	ug/m3			04/13/18 13:18	1
Carbon disulfide	1.6	U	1.6	0.37	ug/m3			04/13/18 13:18	1
3-Chloropropene	1.6	U	1.6	0.85	ug/m3			04/13/18 13:18	1
Methylene Chloride	1.7	U	1.7	0.69	ug/m3			04/13/18 13:18	1
tert-Butyl alcohol	15	U	15	4.5	ug/m3			04/13/18 13:18	1
Methyl tert-butyl ether	0.72	U	0.72	0.22	ug/m3			04/13/18 13:18	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.29	ug/m3			04/13/18 13:18	1
n-Hexane	0.70	U	0.70	0.56	ug/m3			04/13/18 13:18	1
1,1-Dichloroethane	0.81	U	0.81	0.11	ug/m3			04/13/18 13:18	1
Methyl Ethyl Ketone	1.5	U	1.5	0.59	ug/m3			04/13/18 13:18	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.15	ug/m3			04/13/18 13:18	1
1,2-Dichloroethene, Total	1.6	U	1.6	0.44	ug/m3			04/13/18 13:18	1
Chloroform	0.98	U	0.98	0.25	ug/m3			04/13/18 13:18	1
Tetrahydrofuran	15	U	15	7.7	ug/m3			04/13/18 13:18	1
1,1,1-Trichloroethane	1.1	U	1.1	0.37	ug/m3			04/13/18 13:18	1
Cyclohexane	0.69	U	0.69	0.22	ug/m3			04/13/18 13:18	1
Carbon tetrachloride	0.25	U	0.25	0.15	ug/m3			04/13/18 13:18	1
2,2,4-Trimethylpentane	0.93	U	0.93	0.41	ug/m3			04/13/18 13:18	1
Benzene	0.64	U	0.64	0.23	ug/m3			04/13/18 13:18	1
1,2-Dichloroethane	0.81	U	0.81	0.25	ug/m3			04/13/18 13:18	1
n-Heptane	0.82	U	0.82	0.57	ug/m3			04/13/18 13:18	1
Trichloroethene	0.21	U	0.21	0.16	ug/m3			04/13/18 13:18	1
Methyl methacrylate	2.0	U	2.0	0.90	ug/m3			04/13/18 13:18	1
1,2-Dichloropropane	0.92	U	0.92	0.55	ug/m3			04/13/18 13:18	1
1,4-Dioxane	18	U	18	4.7	ug/m3			04/13/18 13:18	1
Bromodichloromethane	1.3	U	1.3	0.63	ug/m3			04/13/18 13:18	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.44	ug/m3			04/13/18 13:18	1
methyl isobutyl ketone	2.0	U	2.0	1.5	ug/m3			04/13/18 13:18	1
Toluene	0.75	U	0.75	0.26	ug/m3			04/13/18 13:18	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.54	ug/m3			04/13/18 13:18	1
1,1,2-Trichloroethane	1.1	U	1.1	0.43	ug/m3			04/13/18 13:18	1
Tetrachloroethene	0.27	U	0.27	0.20	ug/m3			04/13/18 13:18	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	1.7	ug/m3			04/13/18 13:18	1
Dibromochloromethane	1.7	U	1.7	0.60	ug/m3			04/13/18 13:18	1
1,2-Dibromoethane	1.5	U	1.5	0.53	ug/m3			04/13/18 13:18	1
Chlorobenzene	0.92	U	0.92	0.18	ug/m3			04/13/18 13:18	1
Ethylbenzene	0.87	U	0.87	0.32	ug/m3			04/13/18 13:18	1
m,p-Xylene	2.2	U	2.2	0.30	ug/m3			04/13/18 13:18	1
Xylene, o-	0.87	U	0.87	0.31	ug/m3			04/13/18 13:18	1
Xylene (total)	3.0	U	3.0	0.61	ug/m3			04/13/18 13:18	1
Styrene	0.85	U	0.85	0.37	ug/m3			04/13/18 13:18	1
Bromoform	2.1	U	2.1	0.89	ug/m3			04/13/18 13:18	1
Cumene	0.98	U	0.98	0.29	ug/m3			04/13/18 13:18	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.52	ug/m3			04/13/18 13:18	1
n-Propylbenzene	0.98	U	0.98	0.34	ug/m3			04/13/18 13:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-128434/5
Matrix: Air
Analysis Batch: 128434

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	0.98	U	0.98	0.34	ug/m3			04/13/18 13:18	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.29	ug/m3			04/13/18 13:18	1
2-Chlorotoluene	1.0	U	1.0	0.37	ug/m3			04/13/18 13:18	1
tert-Butylbenzene	1.1	U	1.1	0.32	ug/m3			04/13/18 13:18	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.39	ug/m3			04/13/18 13:18	1
sec-Butylbenzene	1.1	U	1.1	0.36	ug/m3			04/13/18 13:18	1
4-Isopropyltoluene	1.1	U	1.1	0.41	ug/m3			04/13/18 13:18	1
1,3-Dichlorobenzene	1.2	U	1.2	0.49	ug/m3			04/13/18 13:18	1
1,4-Dichlorobenzene	1.2	U	1.2	0.39	ug/m3			04/13/18 13:18	1
Benzyl chloride	1.0	U	1.0	0.62	ug/m3			04/13/18 13:18	1
n-Butylbenzene	1.1	U	1.1	0.44	ug/m3			04/13/18 13:18	1
1,2-Dichlorobenzene	1.2	U	1.2	0.43	ug/m3			04/13/18 13:18	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.8	ug/m3			04/13/18 13:18	1
Hexachlorobutadiene	2.1	U	2.1	0.87	ug/m3			04/13/18 13:18	1
Naphthalene	2.6	U	2.6	1.6	ug/m3			04/13/18 13:18	1

Lab Sample ID: LCS 200-128434/3
Matrix: Air
Analysis Batch: 128434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	10.0	8.46		ppb v/v		85	68 - 128
Freon 22	10.0	9.21		ppb v/v		92	64 - 128
1,2-Dichlorotetrafluoroethane	10.0	10.5		ppb v/v		105	78 - 138
Chloromethane	10.0	8.85		ppb v/v		88	57 - 126
n-Butane	10.0	9.04		ppb v/v		90	56 - 130
Vinyl chloride	10.0	9.17		ppb v/v		92	62 - 125
1,3-Butadiene	10.0	8.75		ppb v/v		88	59 - 125
Bromomethane	10.0	9.74		ppb v/v		97	68 - 128
Chloroethane	10.0	9.45		ppb v/v		95	65 - 125
Bromoethene(Vinyl Bromide)	10.0	9.82		ppb v/v		98	67 - 127
Trichlorofluoromethane	10.0	9.44		ppb v/v		94	67 - 127
Freon TF	10.0	9.75		ppb v/v		98	68 - 128
1,1-Dichloroethene	10.0	9.32		ppb v/v		93	67 - 127
Acetone	10.0	9.00		ppb v/v		90	64 - 136
Isopropyl alcohol	10.0	8.87		ppb v/v		89	55 - 124
Carbon disulfide	10.0	11.1		ppb v/v		111	81 - 141
3-Chloropropene	10.0	9.46		ppb v/v		95	53 - 133
Methylene Chloride	10.0	9.27		ppb v/v		93	62 - 122
tert-Butyl alcohol	10.0	9.50		ppb v/v		95	64 - 124
Methyl tert-butyl ether	10.0	9.78		ppb v/v		98	67 - 127
trans-1,2-Dichloroethene	10.0	10.1		ppb v/v		101	72 - 132
n-Hexane	10.0	10.1		ppb v/v		101	71 - 131
1,1-Dichloroethane	10.0	9.59		ppb v/v		96	66 - 126
Methyl Ethyl Ketone	10.0	9.49		ppb v/v		95	62 - 122
cis-1,2-Dichloroethene	10.0	9.77		ppb v/v		98	67 - 127
Chloroform	10.0	9.44		ppb v/v		94	69 - 129
Tetrahydrofuran	10.0	9.60		ppb v/v		96	61 - 136

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128434/3
Matrix: Air
Analysis Batch: 128434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.57		ppb v/v		96	70 - 130
Cyclohexane	10.0	9.64		ppb v/v		96	69 - 129
Carbon tetrachloride	10.0	9.60		ppb v/v		96	62 - 143
2,2,4-Trimethylpentane	10.0	9.45		ppb v/v		95	67 - 127
Benzene	10.0	9.62		ppb v/v		96	67 - 127
1,2-Dichloroethane	10.0	9.24		ppb v/v		92	67 - 132
n-Heptane	10.0	9.28		ppb v/v		93	62 - 130
Trichloroethene	10.0	9.25		ppb v/v		93	68 - 128
Methyl methacrylate	10.0	9.77		ppb v/v		98	70 - 130
1,2-Dichloropropane	10.0	9.45		ppb v/v		95	67 - 127
1,4-Dioxane	10.0	9.52		ppb v/v		95	66 - 132
Bromodichloromethane	10.0	9.45		ppb v/v		95	69 - 129
cis-1,3-Dichloropropene	10.0	9.71		ppb v/v		97	70 - 130
methyl isobutyl ketone	10.0	8.99		ppb v/v		90	62 - 130
Toluene	10.0	9.64		ppb v/v		96	67 - 127
trans-1,3-Dichloropropene	10.0	8.71		ppb v/v		87	69 - 129
1,1,2-Trichloroethane	10.0	9.71		ppb v/v		97	69 - 129
Tetrachloroethene	10.0	9.34		ppb v/v		93	70 - 130
Methyl Butyl Ketone (2-Hexanone)	10.0	8.94		ppb v/v		89	61 - 127
Dibromochloromethane	10.0	9.17		ppb v/v		92	66 - 130
1,2-Dibromoethane	10.0	9.66		ppb v/v		97	70 - 130
Chlorobenzene	10.0	9.51		ppb v/v		95	68 - 128
Ethylbenzene	10.0	9.55		ppb v/v		95	68 - 128
m,p-Xylene	20.0	18.8		ppb v/v		94	68 - 128
Xylene, o-	10.0	9.31		ppb v/v		93	67 - 127
Styrene	10.0	9.27		ppb v/v		93	68 - 128
Bromoform	10.0	8.78		ppb v/v		88	34 - 170
Cumene	10.0	9.28		ppb v/v		93	67 - 127
1,1,2,2-Tetrachloroethane	10.0	9.63		ppb v/v		96	69 - 129
n-Propylbenzene	10.0	9.30		ppb v/v		93	67 - 127
4-Ethyltoluene	10.0	9.54		ppb v/v		95	69 - 129
1,3,5-Trimethylbenzene	10.0	9.41		ppb v/v		94	65 - 125
2-Chlorotoluene	10.0	9.26		ppb v/v		93	67 - 127
tert-Butylbenzene	10.0	9.32		ppb v/v		93	63 - 125
1,2,4-Trimethylbenzene	10.0	9.48		ppb v/v		95	65 - 125
sec-Butylbenzene	10.0	9.48		ppb v/v		95	66 - 126
4-Isopropyltoluene	10.0	9.58		ppb v/v		96	67 - 129
1,3-Dichlorobenzene	10.0	9.17		ppb v/v		92	67 - 127
1,4-Dichlorobenzene	10.0	8.93		ppb v/v		89	66 - 126
Benzyl chloride	10.0	8.61		ppb v/v		86	54 - 135
n-Butylbenzene	10.0	9.33		ppb v/v		93	67 - 127
1,2-Dichlorobenzene	10.0	9.24		ppb v/v		92	67 - 127
1,2,4-Trichlorobenzene	10.0	8.00		ppb v/v		80	59 - 126
Hexachlorobutadiene	10.0	8.76		ppb v/v		88	62 - 130
Naphthalene	10.0	7.05		ppb v/v		70	50 - 121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	49	41.8		ug/m3		85	68 - 128
Freon 22	35	32.6		ug/m3		92	64 - 128
1,2-Dichlorotetrafluoroethane	70	73.2		ug/m3		105	78 - 138
Chloromethane	21	18.3		ug/m3		88	57 - 126
n-Butane	24	21.5		ug/m3		90	56 - 130
Vinyl chloride	26	23.4		ug/m3		92	62 - 125
1,3-Butadiene	22	19.4		ug/m3		88	59 - 125
Bromomethane	39	37.8		ug/m3		97	68 - 128
Chloroethane	26	24.9		ug/m3		95	65 - 125
Bromoethene(Vinyl Bromide)	44	43.0		ug/m3		98	67 - 127
Trichlorofluoromethane	56	53.0		ug/m3		94	67 - 127
Freon TF	77	74.8		ug/m3		98	68 - 128
1,1-Dichloroethene	40	37.0		ug/m3		93	67 - 127
Acetone	24	21.4		ug/m3		90	64 - 136
Isopropyl alcohol	25	21.8		ug/m3		89	55 - 124
Carbon disulfide	31	34.7		ug/m3		111	81 - 141
3-Chloropropene	31	29.6		ug/m3		95	53 - 133
Methylene Chloride	35	32.2		ug/m3		93	62 - 122
tert-Butyl alcohol	30	28.8		ug/m3		95	64 - 124
Methyl tert-butyl ether	36	35.2		ug/m3		98	67 - 127
trans-1,2-Dichloroethene	40	40.0		ug/m3		101	72 - 132
n-Hexane	35	35.7		ug/m3		101	71 - 131
1,1-Dichloroethane	40	38.8		ug/m3		96	66 - 126
Methyl Ethyl Ketone	29	28.0		ug/m3		95	62 - 122
cis-1,2-Dichloroethene	40	38.7		ug/m3		98	67 - 127
Chloroform	49	46.1		ug/m3		94	69 - 129
Tetrahydrofuran	29	28.3		ug/m3		96	61 - 136
1,1,1-Trichloroethane	55	52.2		ug/m3		96	70 - 130
Cyclohexane	34	33.2		ug/m3		96	69 - 129
Carbon tetrachloride	63	60.4		ug/m3		96	62 - 143
2,2,4-Trimethylpentane	47	44.2		ug/m3		95	67 - 127
Benzene	32	30.7		ug/m3		96	67 - 127
1,2-Dichloroethane	40	37.4		ug/m3		92	67 - 132
n-Heptane	41	38.0		ug/m3		93	62 - 130
Trichloroethene	54	49.7		ug/m3		93	68 - 128
Methyl methacrylate	41	40.0		ug/m3		98	70 - 130
1,2-Dichloropropane	46	43.7		ug/m3		95	67 - 127
1,4-Dioxane	36	34.3		ug/m3		95	66 - 132
Bromodichloromethane	67	63.3		ug/m3		95	69 - 129
cis-1,3-Dichloropropene	45	44.1		ug/m3		97	70 - 130
methyl isobutyl ketone	41	36.8		ug/m3		90	62 - 130
Toluene	38	36.3		ug/m3		96	67 - 127
trans-1,3-Dichloropropene	45	39.5		ug/m3		87	69 - 129
1,1,2-Trichloroethane	55	53.0		ug/m3		97	69 - 129
Tetrachloroethene	68	63.3		ug/m3		93	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41	36.6		ug/m3		89	61 - 127
Dibromochloromethane	85	78.1		ug/m3		92	66 - 130
1,2-Dibromoethane	77	74.2		ug/m3		97	70 - 130
Chlorobenzene	46	43.8		ug/m3		95	68 - 128
Ethylbenzene	43	41.5		ug/m3		95	68 - 128
m,p-Xylene	87	81.7		ug/m3		94	68 - 128
Xylene, o-	43	40.4		ug/m3		93	67 - 127
Styrene	43	39.5		ug/m3		93	68 - 128

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-128434/3
Matrix: Air
Analysis Batch: 128434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	100	90.8		ug/m3		88	34 - 170
Cumene	49	45.6		ug/m3		93	67 - 127
1,1,2,2-Tetrachloroethane	69	66.1		ug/m3		96	69 - 129
n-Propylbenzene	49	45.7		ug/m3		93	67 - 127
4-Ethyltoluene	49	46.9		ug/m3		95	69 - 129
1,3,5-Trimethylbenzene	49	46.3		ug/m3		94	65 - 125
2-Chlorotoluene	52	48.0		ug/m3		93	67 - 127
tert-Butylbenzene	55	51.2		ug/m3		93	63 - 125
1,2,4-Trimethylbenzene	49	46.6		ug/m3		95	65 - 125
sec-Butylbenzene	55	52.0		ug/m3		95	66 - 126
4-Isopropyltoluene	55	52.6		ug/m3		96	67 - 129
1,3-Dichlorobenzene	60	55.1		ug/m3		92	67 - 127
1,4-Dichlorobenzene	60	53.7		ug/m3		89	66 - 126
Benzyl chloride	52	44.6		ug/m3		86	54 - 135
n-Butylbenzene	55	51.2		ug/m3		93	67 - 127
1,2-Dichlorobenzene	60	55.5		ug/m3		92	67 - 127
1,2,4-Trichlorobenzene	74	59.4		ug/m3		80	59 - 126
Hexachlorobutadiene	110	93.4		ug/m3		88	62 - 130
Naphthalene	52	36.9		ug/m3		70	50 - 121

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Air - GC/MS VOA

Analysis Batch: 128151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-42918-1	GC-AA-01 (AS)	Total/NA	Air	TO-15	
200-42918-2	GC-IA-102 (AS)	Total/NA	Air	TO-15	
200-42918-2 - DL	GC-IA-102 (AS)	Total/NA	Air	TO-15	
200-42918-4	GC-IA-103 (AS)	Total/NA	Air	TO-15	
200-42918-11	GC-IA-106 (AS)	Total/NA	Air	TO-15	
200-42918-11 - DL	GC-IA-106 (AS)	Total/NA	Air	TO-15	
MB 200-128151/5	Method Blank	Total/NA	Air	TO-15	
LCS 200-128151/4	Lab Control Sample	Total/NA	Air	TO-15	

Analysis Batch: 128156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-42918-7	GC-IA-105 (AS)	Total/NA	Air	TO-15	
200-42918-9	GC-IA-104 (AS)	Total/NA	Air	TO-15	
200-42918-10	GC-IA-108 (AS)	Total/NA	Air	TO-15	
MB 200-128156/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-128156/3	Lab Control Sample	Total/NA	Air	TO-15	

Analysis Batch: 128215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-42918-3	GC-SV-102 (AS)	Total/NA	Air	TO-15	
200-42918-5	GC-SV-103 (AS)	Total/NA	Air	TO-15	
200-42918-6 - DL	GC-SV-105 (AS)	Total/NA	Air	TO-15	
200-42918-6 - DL	GC-SV-105 (AS)	Total/NA	Air	TO-15	
200-42918-7 - DL	GC-IA-105 (AS)	Total/NA	Air	TO-15	
200-42918-8	GC-SV-104 (AS)	Total/NA	Air	TO-15	
200-42918-9 - DL	GC-IA-104 (AS)	Total/NA	Air	TO-15	
200-42918-10 - DL	GC-IA-108 (AS)	Total/NA	Air	TO-15	
200-42918-12 - DL	GC-SV-106 (AS)	Total/NA	Air	TO-15	
MB 200-128215/6	Method Blank	Total/NA	Air	TO-15	
LCS 200-128215/5	Lab Control Sample	Total/NA	Air	TO-15	

Analysis Batch: 128434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-42918-12	GC-SV-106 (AS)	Total/NA	Air	TO-15	
MB 200-128434/5	Method Blank	Total/NA	Air	TO-15	
LCS 200-128434/3	Lab Control Sample	Total/NA	Air	TO-15	

Client Sample ID: GC-AA-01 (AS)
Lab Sample ID: 200-42918-1
Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	128151	04/05/18 17:36	K1P	TAL BUR

Client Sample ID: GC-IA-102 (AS)
Lab Sample ID: 200-42918-2
Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	128151	04/05/18 16:45	K1P	TAL BUR
Total/NA	Analysis	TO-15	DL	2	128151	04/06/18 09:15	K1P	TAL BUR

Client Sample ID: GC-SV-102 (AS)
Lab Sample ID: 200-42918-3
Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		5	128215	04/06/18 21:49	A1B	TAL BUR

Client Sample ID: GC-IA-103 (AS)
Lab Sample ID: 200-42918-4
Date Collected: 03/28/18 16:45
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	128151	04/05/18 18:26	K1P	TAL BUR

Client Sample ID: GC-SV-103 (AS)
Lab Sample ID: 200-42918-5
Date Collected: 03/28/18 17:00
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		5	128215	04/06/18 22:39	A1B	TAL BUR

Client Sample ID: GC-SV-105 (AS)
Lab Sample ID: 200-42918-6
Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15	DL	10.02	128215	04/07/18 00:20	A1B	TAL BUR
Total/NA	Analysis	TO-15	DL	39.6	128215	04/07/18 01:10	A1B	TAL BUR

Client Sample ID: GC-IA-105 (AS)
Lab Sample ID: 200-42918-7
Date Collected: 03/28/18 17:50
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	128156	04/06/18 01:26	K1P	TAL BUR
Total/NA	Analysis	TO-15	DL	107	128215	04/06/18 19:18	A1B	TAL BUR

Client Sample ID: GC-SV-104 (AS)
Lab Sample ID: 200-42918-8
Date Collected: 03/28/18 09:00
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		5	128215	04/06/18 23:30	A1B	TAL BUR

Client Sample ID: GC-IA-104 (AS)
Lab Sample ID: 200-42918-9
Date Collected: 03/28/18 09:30
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	128156	04/06/18 02:20	K1P	TAL BUR
Total/NA	Analysis	TO-15	DL	84.8	128215	04/06/18 20:08	A1B	TAL BUR

Client Sample ID: GC-IA-108 (AS)
Lab Sample ID: 200-42918-10
Date Collected: 03/28/18 09:45
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	128156	04/06/18 03:14	K1P	TAL BUR
Total/NA	Analysis	TO-15	DL	301	128215	04/06/18 20:59	A1B	TAL BUR

Client Sample ID: GC-IA-106 (AS)
Lab Sample ID: 200-42918-11
Date Collected: 03/28/18 15:45
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	128151	04/05/18 15:55	K1P	TAL BUR
Total/NA	Analysis	TO-15	DL	2.5	128151	04/06/18 08:25	K1P	TAL BUR

Client Sample ID: GC-SV-106 (AS)
Lab Sample ID: 200-42918-12
Date Collected: 03/28/18 16:00
Matrix: Air
Date Received: 04/02/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15	DL	30.3	128215	04/07/18 02:49	A1B	TAL BUR
Total/NA	Analysis	TO-15		6	128434	04/14/18 00:14	ERT	TAL BUR

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners NYSDEC - TRC/D&B

TestAmerica Job ID: 200-42918-1

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: TRC Environmental Corporation
TestAmerica Job ID: 200-42918-1
Project/Site: GEM Cleaners NYSDEC - TRC/D&B

Laboratory: TestAmerica Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10391	04-01-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	1,2-Dichloroethene, Total
TO-15		Air	4-Ethyltoluene
TO-15		Air	4-Isopropyltoluene
TO-15		Air	Cumene
TO-15		Air	Freon 22
TO-15		Air	Methyl Butyl Ketone (2-Hexanone)
TO-15		Air	n-Butane
TO-15		Air	n-Butylbenzene
TO-15		Air	n-Propylbenzene
TO-15		Air	sec-Butylbenzene
TO-15		Air	tert-Butylbenzene
TO-15		Air	Tetrahydrofuran

Method TO15

Volatile Organic Compounds (GC/MS) by Method TO15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29949_04.D

Lab ID: LCS 200-128151/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	8.42	84	68-128	
Freon 22	10.0	7.21	72	64-128	
1,2-Dichlorotetrafluoroethane	10.0	8.19	82	78-138	
Chloromethane	10.0	8.67	87	57-126	
n-Butane	10.0	9.06	91	56-130	
Vinyl chloride	10.0	8.26	83	62-125	
1,3-Butadiene	10.0	8.19	82	59-125	
Bromomethane	10.0	9.50	95	68-128	
Chloroethane	10.0	9.78	98	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.59	96	67-127	
Trichlorofluoromethane	10.0	9.20	92	67-127	
Freon TF	10.0	9.27	93	68-128	
1,1-Dichloroethene	10.0	9.16	92	67-127	
Acetone	10.0	9.18	92	64-136	
Isopropyl alcohol	10.0	8.31	83	55-124	
Carbon disulfide	10.0	10.6	106	81-141	
3-Chloropropene	10.0	9.05	91	53-133	
Methylene Chloride	10.0	8.99	90	62-122	
tert-Butyl alcohol	10.0	8.83	88	64-124	
Methyl tert-butyl ether	10.0	9.29	93	67-127	
trans-1,2-Dichloroethene	10.0	9.44	94	72-132	
n-Hexane	10.0	9.49	95	71-131	
1,1-Dichloroethane	10.0	9.06	91	66-126	
Methyl Ethyl Ketone	10.0	9.23	92	62-122	
cis-1,2-Dichloroethene	10.0	9.03	90	67-127	
Chloroform	10.0	9.40	94	69-129	
Tetrahydrofuran	10.0	9.85	98	61-136	
1,1,1-Trichloroethane	10.0	9.70	97	70-130	
Cyclohexane	10.0	9.30	93	69-129	
Carbon tetrachloride	10.0	9.89	99	62-143	
2,2,4-Trimethylpentane	10.0	9.37	94	67-127	
Benzene	10.0	9.19	92	67-127	
1,2-Dichloroethane	10.0	10.1	101	67-132	
n-Heptane	10.0	9.99	100	62-130	
Trichloroethene	10.0	9.46	95	68-128	
Methyl methacrylate	10.0	9.75	98	70-130	
1,2-Dichloropropane	10.0	9.50	95	67-127	
1,4-Dioxane	10.0	8.81	88	66-132	
Bromodichloromethane	10.0	9.80	98	69-129	
cis-1,3-Dichloropropene	10.0	9.93	99	70-130	
methyl isobutyl ketone	10.0	10.2	102	62-130	
Toluene	10.0	9.33	93	67-127	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29949_04.D

Lab ID: LCS 200-128151/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	9.99	100	69-129	
1,1,2-Trichloroethane	10.0	9.35	94	69-129	
Tetrachloroethene	10.0	9.30	93	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	10.2	102	61-127	
Dibromochloromethane	10.0	9.30	93	66-130	
1,2-Dibromoethane	10.0	9.34	93	70-130	
Chlorobenzene	10.0	9.11	91	68-128	
Ethylbenzene	10.0	9.37	94	68-128	
m,p-Xylene	20.0	18.2	91	68-128	
Xylene, o-	10.0	9.00	90	67-127	
Styrene	10.0	9.45	95	68-128	
Bromoform	10.0	9.71	97	34-170	
Cumene	10.0	9.01	90	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.45	94	69-129	
n-Propylbenzene	10.0	9.19	92	67-127	
4-Ethyltoluene	10.0	9.43	94	69-129	
1,3,5-Trimethylbenzene	10.0	9.31	93	65-125	
2-Chlorotoluene	10.0	9.25	93	67-127	
tert-Butylbenzene	10.0	9.22	92	63-125	
1,2,4-Trimethylbenzene	10.0	9.34	93	65-125	
sec-Butylbenzene	10.0	9.24	92	66-126	
4-Isopropyltoluene	10.0	9.48	95	67-129	
1,3-Dichlorobenzene	10.0	9.10	91	67-127	
1,4-Dichlorobenzene	10.0	9.08	91	66-126	
Benzyl chloride	10.0	9.17	92	54-135	
n-Butylbenzene	10.0	9.67	97	67-127	
1,2-Dichlorobenzene	10.0	9.12	91	67-127	
1,2,4-Trichlorobenzene	10.0	7.69	77	59-126	
Hexachlorobutadiene	10.0	8.92	89	62-130	
Naphthalene	10.0	6.71	67	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29952-03.d

Lab ID: LCS 200-128156/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	11.0	110	68-128	
Freon 22	10.0	11.6	116	64-128	
1,2-Dichlorotetrafluoroethane	10.0	12.2	122	78-138	
Chloromethane	10.0	11.6	116	57-126	
n-Butane	10.0	12.2	122	56-130	
Vinyl chloride	10.0	10.9	109	62-125	
1,3-Butadiene	10.0	11.4	114	59-125	
Bromomethane	10.0	10.5	105	68-128	
Chloroethane	10.0	10.7	107	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.3	103	67-127	
Trichlorofluoromethane	10.0	10.3	103	67-127	
Freon TF	10.0	10.6	106	68-128	
1,1-Dichloroethene	10.0	10.7	107	67-127	
Acetone	10.0	11.0	110	64-136	
Isopropyl alcohol	10.0	10.1	101	55-124	
Carbon disulfide	10.0	12.2	122	81-141	
3-Chloropropene	10.0	11.1	111	53-133	
Methylene Chloride	10.0	10.4	104	62-122	
tert-Butyl alcohol	10.0	9.93	99	64-124	
Methyl tert-butyl ether	10.0	10.4	104	67-127	
trans-1,2-Dichloroethene	10.0	11.2	112	72-132	
n-Hexane	10.0	11.6	116	71-131	
1,1-Dichloroethane	10.0	10.6	106	66-126	
Methyl Ethyl Ketone	10.0	10.8	108	62-122	
cis-1,2-Dichloroethene	10.0	10.3	103	67-127	
Chloroform	10.0	10.5	105	69-129	
Tetrahydrofuran	10.0	10.7	107	61-136	
1,1,1-Trichloroethane	10.0	10.5	105	70-130	
Cyclohexane	10.0	10.5	105	69-129	
Carbon tetrachloride	10.0	10.4	104	62-143	
2,2,4-Trimethylpentane	10.0	10.7	107	67-127	
Benzene	10.0	10.4	104	67-127	
1,2-Dichloroethane	10.0	11.0	110	67-132	
n-Heptane	10.0	11.1	111	62-130	
Trichloroethene	10.0	10.8	108	68-128	
Methyl methacrylate	10.0	10.9	109	70-130	
1,2-Dichloropropane	10.0	10.3	103	67-127	
1,4-Dioxane	10.0	10.1	101	66-132	
Bromodichloromethane	10.0	10.3	103	69-129	
cis-1,3-Dichloropropene	10.0	11.1	111	70-130	
methyl isobutyl ketone	10.0	11.0	110	62-130	
Toluene	10.0	10.2	102	67-127	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29952-03.d

Lab ID: LCS 200-128156/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	11.3	113	69-129	
1,1,2-Trichloroethane	10.0	10.3	103	69-129	
Tetrachloroethene	10.0	9.40	94	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	10.3	103	61-127	
Dibromochloromethane	10.0	9.16	92	66-130	
1,2-Dibromoethane	10.0	10.4	104	70-130	
Chlorobenzene	10.0	9.96	100	68-128	
Ethylbenzene	10.0	10.3	103	68-128	
m,p-Xylene	20.0	20.4	102	68-128	
Xylene, o-	10.0	10.2	102	67-127	
Styrene	10.0	10.8	108	68-128	
Bromoform	10.0	7.99	80	34-170	
Cumene	10.0	10.2	102	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	69-129	
n-Propylbenzene	10.0	10.3	103	67-127	
4-Ethyltoluene	10.0	10.6	106	69-129	
1,3,5-Trimethylbenzene	10.0	10.1	101	65-125	
2-Chlorotoluene	10.0	10.2	102	67-127	
tert-Butylbenzene	10.0	9.90	99	63-125	
1,2,4-Trimethylbenzene	10.0	10.3	103	65-125	
sec-Butylbenzene	10.0	10.3	103	66-126	
4-Isopropyltoluene	10.0	10.3	103	67-129	
1,3-Dichlorobenzene	10.0	10.3	103	67-127	
1,4-Dichlorobenzene	10.0	10.4	104	66-126	
Benzyl chloride	10.0	10.6	106	54-135	
n-Butylbenzene	10.0	11.2	112	67-127	
1,2-Dichlorobenzene	10.0	10.1	101	67-127	
1,2,4-Trichlorobenzene	10.0	7.96	80	59-126	
Hexachlorobutadiene	10.0	8.63	86	62-130	
Naphthalene	10.0	7.05	70	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29983-05.d

Lab ID: LCS 200-128215/5 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	11.1	111	68-128	
Freon 22	10.0	11.3	113	64-128	
1,2-Dichlorotetrafluoroethane	10.0	12.2	122	78-138	
Chloromethane	10.0	11.2	112	57-126	
n-Butane	10.0	11.3	113	56-130	
Vinyl chloride	10.0	10.7	107	62-125	
1,3-Butadiene	10.0	11.0	110	59-125	
Bromomethane	10.0	10.6	107	68-128	
Chloroethane	10.0	10.5	105	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.6	106	67-127	
Trichlorofluoromethane	10.0	10.8	108	67-127	
Freon TF	10.0	10.8	108	68-128	
1,1-Dichloroethene	10.0	10.8	108	67-127	
Acetone	10.0	11.0	110	64-136	
Isopropyl alcohol	10.0	10.2	102	55-124	
Carbon disulfide	10.0	12.3	123	81-141	
3-Chloropropene	10.0	10.8	108	53-133	
Methylene Chloride	10.0	10.7	107	62-122	
tert-Butyl alcohol	10.0	10.6	107	64-124	
Methyl tert-butyl ether	10.0	11.2	112	67-127	
trans-1,2-Dichloroethene	10.0	12.0	120	72-132	
n-Hexane	10.0	12.0	120	71-131	
1,1-Dichloroethane	10.0	11.0	110	66-126	
Methyl Ethyl Ketone	10.0	10.9	109	62-122	
cis-1,2-Dichloroethene	10.0	10.8	108	67-127	
Chloroform	10.0	11.1	111	69-129	
Tetrahydrofuran	10.0	10.8	108	61-136	
1,1,1-Trichloroethane	10.0	11.5	115	70-130	
Cyclohexane	10.0	11.2	112	69-129	
Carbon tetrachloride	10.0	11.6	116	62-143	
2,2,4-Trimethylpentane	10.0	11.1	111	67-127	
Benzene	10.0	11.0	110	67-127	
1,2-Dichloroethane	10.0	12.0	120	67-132	
n-Heptane	10.0	11.3	113	62-130	
Trichloroethene	10.0	11.7	117	68-128	
Methyl methacrylate	10.0	11.3	113	70-130	
1,2-Dichloropropane	10.0	10.7	107	67-127	
1,4-Dioxane	10.0	10.7	107	66-132	
Bromodichloromethane	10.0	11.1	111	69-129	
cis-1,3-Dichloropropene	10.0	11.6	116	70-130	
methyl isobutyl ketone	10.0	11.2	112	62-130	
Toluene	10.0	11.2	112	67-127	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29983-05.d

Lab ID: LCS 200-128215/5 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	12.2	122	69-129	
1,1,2-Trichloroethane	10.0	11.1	111	69-129	
Tetrachloroethene	10.0	10.6	106	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	10.8	108	61-127	
Dibromochloromethane	10.0	10.2	102	66-130	
1,2-Dibromoethane	10.0	11.4	114	70-130	
Chlorobenzene	10.0	11.0	110	68-128	
Ethylbenzene	10.0	11.2	112	68-128	
m,p-Xylene	20.0	22.6	113	68-128	
Xylene, o-	10.0	11.1	111	67-127	
Styrene	10.0	11.9	119	68-128	
Bromoform	10.0	8.97	90	34-170	
Cumene	10.0	11.2	112	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.7	107	69-129	
n-Propylbenzene	10.0	11.3	113	67-127	
4-Ethyltoluene	10.0	11.7	117	69-129	
1,3,5-Trimethylbenzene	10.0	11.3	113	65-125	
2-Chlorotoluene	10.0	11.4	114	67-127	
tert-Butylbenzene	10.0	11.2	112	63-125	
1,2,4-Trimethylbenzene	10.0	11.6	116	65-125	
sec-Butylbenzene	10.0	11.6	116	66-126	
4-Isopropyltoluene	10.0	11.7	117	67-129	
1,3-Dichlorobenzene	10.0	11.7	118	67-127	
1,4-Dichlorobenzene	10.0	11.7	117	66-126	
Benzyl chloride	10.0	11.7	117	54-135	
n-Butylbenzene	10.0	12.5	125	67-127	
1,2-Dichlorobenzene	10.0	11.6	116	67-127	
1,2,4-Trichlorobenzene	10.0	9.70	97	59-126	
Hexachlorobutadiene	10.0	10.2	102	62-130	
Naphthalene	10.0	8.06	81	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 30087_03.D

Lab ID: LCS 200-128434/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	8.46	85	68-128	
Freon 22	10.0	9.21	92	64-128	
1,2-Dichlorotetrafluoroethane	10.0	10.5	105	78-138	
Chloromethane	10.0	8.85	88	57-126	
n-Butane	10.0	9.04	90	56-130	
Vinyl chloride	10.0	9.17	92	62-125	
1,3-Butadiene	10.0	8.75	88	59-125	
Bromomethane	10.0	9.74	97	68-128	
Chloroethane	10.0	9.45	95	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.82	98	67-127	
Trichlorofluoromethane	10.0	9.44	94	67-127	
Freon TF	10.0	9.75	98	68-128	
1,1-Dichloroethene	10.0	9.32	93	67-127	
Acetone	10.0	9.00	90	64-136	
Isopropyl alcohol	10.0	8.87	89	55-124	
Carbon disulfide	10.0	11.1	111	81-141	
3-Chloropropene	10.0	9.46	95	53-133	
Methylene Chloride	10.0	9.27	93	62-122	
tert-Butyl alcohol	10.0	9.50	95	64-124	
Methyl tert-butyl ether	10.0	9.78	98	67-127	
trans-1,2-Dichloroethene	10.0	10.1	101	72-132	
n-Hexane	10.0	10.1	101	71-131	
1,1-Dichloroethane	10.0	9.59	96	66-126	
Methyl Ethyl Ketone	10.0	9.49	95	62-122	
cis-1,2-Dichloroethene	10.0	9.77	98	67-127	
Chloroform	10.0	9.44	94	69-129	
Tetrahydrofuran	10.0	9.60	96	61-136	
1,1,1-Trichloroethane	10.0	9.57	96	70-130	
Cyclohexane	10.0	9.64	96	69-129	
Carbon tetrachloride	10.0	9.60	96	62-143	
2,2,4-Trimethylpentane	10.0	9.45	95	67-127	
Benzene	10.0	9.62	96	67-127	
1,2-Dichloroethane	10.0	9.24	92	67-132	
n-Heptane	10.0	9.28	93	62-130	
Trichloroethene	10.0	9.25	93	68-128	
Methyl methacrylate	10.0	9.77	98	70-130	
1,2-Dichloropropane	10.0	9.45	95	67-127	
1,4-Dioxane	10.0	9.52	95	66-132	
Bromodichloromethane	10.0	9.45	95	69-129	
cis-1,3-Dichloropropene	10.0	9.71	97	70-130	
methyl isobutyl ketone	10.0	8.99	90	62-130	
Toluene	10.0	9.64	96	67-127	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 30087_03.D

Lab ID: LCS 200-128434/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	8.71	87	69-129	
1,1,2-Trichloroethane	10.0	9.71	97	69-129	
Tetrachloroethene	10.0	9.34	93	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	8.94	89	61-127	
Dibromochloromethane	10.0	9.17	92	66-130	
1,2-Dibromoethane	10.0	9.66	97	70-130	
Chlorobenzene	10.0	9.51	95	68-128	
Ethylbenzene	10.0	9.55	95	68-128	
m,p-Xylene	20.0	18.8	94	68-128	
Xylene, o-	10.0	9.31	93	67-127	
Styrene	10.0	9.27	93	68-128	
Bromoform	10.0	8.78	88	34-170	
Cumene	10.0	9.28	93	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.63	96	69-129	
n-Propylbenzene	10.0	9.30	93	67-127	
4-Ethyltoluene	10.0	9.54	95	69-129	
1,3,5-Trimethylbenzene	10.0	9.41	94	65-125	
2-Chlorotoluene	10.0	9.26	93	67-127	
tert-Butylbenzene	10.0	9.32	93	63-125	
1,2,4-Trimethylbenzene	10.0	9.48	95	65-125	
sec-Butylbenzene	10.0	9.48	95	66-126	
4-Isopropyltoluene	10.0	9.58	96	67-129	
1,3-Dichlorobenzene	10.0	9.17	92	67-127	
1,4-Dichlorobenzene	10.0	8.93	89	66-126	
Benzyl chloride	10.0	8.61	86	54-135	
n-Butylbenzene	10.0	9.33	93	67-127	
1,2-Dichlorobenzene	10.0	9.24	92	67-127	
1,2,4-Trichlorobenzene	10.0	8.00	80	59-126	
Hexachlorobutadiene	10.0	8.76	88	62-130	
Naphthalene	10.0	7.05	70	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 29949_05.D Lab Sample ID: MB 200-128151/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHX.i Date Analyzed: 04/05/2018 13:24

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-128151/4	29949_04.D	04/05/2018 12:33
GC-IA-106 (AS)	200-42918-11	29949_08.D	04/05/2018 15:55
GC-IA-102 (AS)	200-42918-2	29949_09.D	04/05/2018 16:45
GC-AA-01 (AS)	200-42918-1	29949_10.D	04/05/2018 17:36
GC-IA-103 (AS)	200-42918-4	29949_11.D	04/05/2018 18:26
GC-IA-106 (AS) DL	200-42918-11 DL	29949_24.D	04/06/2018 08:25
GC-IA-102 (AS) DL	200-42918-2 DL	29949_25.D	04/06/2018 09:15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 29952-04.d Lab Sample ID: MB 200-128156/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHW.i Date Analyzed: 04/05/2018 14:31

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-128156/3	29952-03.d	04/05/2018 13:37
GC-IA-105 (AS)	200-42918-7	29952-16.d	04/06/2018 01:26
GC-IA-104 (AS)	200-42918-9	29952-17.d	04/06/2018 02:20
GC-IA-108 (AS)	200-42918-10	29952-18.d	04/06/2018 03:14

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 29983-06.d Lab Sample ID: MB 200-128215/6

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHW.i Date Analyzed: 04/06/2018 16:42

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-128215/5	29983-05.d	04/06/2018 15:49
GC-IA-105 (AS) DL	200-42918-7 DL	29983-09.d	04/06/2018 19:18
GC-IA-104 (AS) DL	200-42918-9 DL	29983-10.d	04/06/2018 20:08
GC-IA-108 (AS) DL	200-42918-10 DL	29983-11.d	04/06/2018 20:59
GC-SV-102 (AS)	200-42918-3	29983-12.d	04/06/2018 21:49
GC-SV-103 (AS)	200-42918-5	29983-13.d	04/06/2018 22:39
GC-SV-104 (AS)	200-42918-8	29983-14.d	04/06/2018 23:30
GC-SV-105 (AS) DL	200-42918-6 DL	29983-15.d	04/07/2018 00:20
GC-SV-105 (AS) DL	200-42918-6 DL	29983-16.d	04/07/2018 01:10
GC-SV-106 (AS) DL	200-42918-12 DL	29983-18.d	04/07/2018 02:49

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 30087_05.D Lab Sample ID: MB 200-128434/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHX.i Date Analyzed: 04/13/2018 13:18

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-128434/3	30087_03.D	04/13/2018 11:38
GC-SV-106 (AS)	200-42918-12	30087_18.D	04/14/2018 00:14

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 29580-01.d BFB Injection Date: 03/14/2018

Instrument ID: CHW.i BFB Injection Time: 15:16

Analysis Batch No.: 127372

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	15.6	
75	30.0 - 66.0% of mass 95	45.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.5	(0.6) 1
174	50.0 - 120.0% of mass 95	83.2	
175	4.0 - 9.0 % of mass 174	6.0	(7.3) 1
176	93.0 - 101.0% of mass 174	81.9	(98.5) 1
177	5.0 - 9.0% of mass 176	5.4	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-127372/3	29580-03.d	03/14/2018	16:58
	IC 200-127372/4	29580-04.d	03/14/2018	17:52
	IC 200-127372/5	29580-05.d	03/14/2018	18:45
	IC 200-127372/6	29580-06.d	03/14/2018	19:39
	ICIS 200-127372/7	29580-07.d	03/14/2018	20:33
	IC 200-127372/8	29580-08.d	03/14/2018	21:27
	IC 200-127372/9	29580-09.d	03/14/2018	22:20
	IC 200-127372/10	29580-10.d	03/14/2018	23:14
	ICV 200-127372/14	29580-14.d	03/15/2018	02:48

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 29952-01.d BFB Injection Date: 04/05/2018

Instrument ID: CHW.i BFB Injection Time: 11:48

Analysis Batch No.: 128156

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	15.5	
75	30.0 - 66.0% of mass 95	44.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.6	(0.6) 1
174	50.0 - 120.0% of mass 95	93.4	
175	4.0 - 9.0 % of mass 174	6.7	(7.2) 1
176	93.0 - 101.0% of mass 174	92.6	(99.2) 1
177	5.0 - 9.0% of mass 176	6.4	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-128156/2	29952-02.d	04/05/2018	12:44
	LCS 200-128156/3	29952-03.d	04/05/2018	13:37
	MB 200-128156/4	29952-04.d	04/05/2018	14:31
GC-IA-105 (AS)	200-42918-7	29952-16.d	04/06/2018	01:26
GC-IA-104 (AS)	200-42918-9	29952-17.d	04/06/2018	02:20
GC-IA-108 (AS)	200-42918-10	29952-18.d	04/06/2018	03:14

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 29983-01.d BFB Injection Date: 04/06/2018

Instrument ID: CHW.i BFB Injection Time: 12:06

Analysis Batch No.: 128215

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	14.8	
75	30.0 - 66.0% of mass 95	45.5	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.6	(0.6) 1
174	50.0 - 120.0% of mass 95	99.2	
175	4.0 - 9.0 % of mass 174	7.2	(7.2) 1
176	93.0 - 101.0% of mass 174	96.7	(97.4) 1
177	5.0 - 9.0% of mass 176	6.5	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-128215/4	29983-04.d	04/06/2018	14:56
	LCS 200-128215/5	29983-05.d	04/06/2018	15:49
	MB 200-128215/6	29983-06.d	04/06/2018	16:42
GC-IA-105 (AS) DL	200-42918-7 DL	29983-09.d	04/06/2018	19:18
GC-IA-104 (AS) DL	200-42918-9 DL	29983-10.d	04/06/2018	20:08
GC-IA-108 (AS) DL	200-42918-10 DL	29983-11.d	04/06/2018	20:59
GC-SV-102 (AS)	200-42918-3	29983-12.d	04/06/2018	21:49
GC-SV-103 (AS)	200-42918-5	29983-13.d	04/06/2018	22:39
GC-SV-104 (AS)	200-42918-8	29983-14.d	04/06/2018	23:30
GC-SV-105 (AS) DL	200-42918-6 DL	29983-15.d	04/07/2018	00:20
GC-SV-105 (AS) DL	200-42918-6 DL	29983-16.d	04/07/2018	01:10
GC-SV-106 (AS) DL	200-42918-12 DL	29983-18.d	04/07/2018	02:49

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 200-0029291-001.D BFB Injection Date: 02/21/2018

Instrument ID: CHX.i BFB Injection Time: 15:47

Analysis Batch No.: 126632

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	27.9	
75	30.0 - 66.0% of mass 95	59.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.3	
173	Less than 2.0% of mass 174	0.7	(1.1) 1
174	50.0 - 120.0% of mass 95	61.5	
175	4.0 - 9.0 % of mass 174	4.4	(7.2) 1
176	93.0 - 101.0% of mass 174	58.6	(95.2) 1
177	5.0 - 9.0% of mass 176	3.8	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-126632/5	200-0029291-005.D	02/21/2018	19:15
	IC 200-126632/6	200-0029291-006.D	02/21/2018	20:06
	IC 200-126632/9	200-0029291-009.D	02/21/2018	22:37
	IC 200-126632/10	200-0029291-010.D	02/21/2018	23:27
	ICIS 200-126632/11	200-0029291-011.D	02/22/2018	00:18
	IC 200-126632/12	200-0029291-012.D	02/22/2018	01:08
	IC 200-126632/13	200-0029291-013.D	02/22/2018	01:59
	IC 200-126632/14	200-0029291-014.D	02/22/2018	02:49
	ICV 200-126632/18	200-0029291-018.D	02/22/2018	06:10

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 29949_01.D BFB Injection Date: 04/05/2018

Instrument ID: CHX.i BFB Injection Time: 10:03

Analysis Batch No.: 128151

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	30.7	
75	30.0 - 66.0% of mass 95	60.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.7	(1.4) 1
174	50.0 - 120.0% of mass 95	54.6	
175	4.0 - 9.0 % of mass 174	4.2	(7.6) 1
176	93.0 - 101.0% of mass 174	52.7	(96.5) 1
177	5.0 - 9.0% of mass 176	3.4	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-128151/3	29949_03.D	04/05/2018	11:43
	LCS 200-128151/4	29949_04.D	04/05/2018	12:33
	MB 200-128151/5	29949_05.D	04/05/2018	13:24
GC-IA-106 (AS)	200-42918-11	29949_08.D	04/05/2018	15:55
GC-IA-102 (AS)	200-42918-2	29949_09.D	04/05/2018	16:45
GC-AA-01 (AS)	200-42918-1	29949_10.D	04/05/2018	17:36
GC-IA-103 (AS)	200-42918-4	29949_11.D	04/05/2018	18:26
GC-IA-106 (AS) DL	200-42918-11 DL	29949_24.D	04/06/2018	08:25
GC-IA-102 (AS) DL	200-42918-2 DL	29949_25.D	04/06/2018	09:15

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 30075_01.D BFB Injection Date: 04/12/2018

Instrument ID: CHX.i BFB Injection Time: 15:03

Analysis Batch No.: 128414

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	14.7	
75	30.0 - 66.0% of mass 95	44.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.3	
173	Less than 2.0% of mass 174	1.4	(1.4) 1
174	50.0 - 120.0% of mass 95	103.1	
175	4.0 - 9.0 % of mass 174	7.7	(7.5) 1
176	93.0 - 101.0% of mass 174	99.6	(96.6) 1
177	5.0 - 9.0% of mass 176	6.5	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-128414/4	30075_04.D	04/12/2018	17:29
	IC 200-128414/5	30075_05.D	04/12/2018	18:21
	IC 200-128414/6	30075_06.D	04/12/2018	19:11
	IC 200-128414/7	30075_07.D	04/12/2018	20:01
	ICIS 200-128414/8	30075_08.D	04/12/2018	20:51
	IC 200-128414/9	30075_09.D	04/12/2018	21:42
	IC 200-128414/10	30075_10.D	04/12/2018	22:32
	IC 200-128414/11	30075_11.D	04/12/2018	23:23
	ICV 200-128414/16	30075_16.D	04/13/2018	03:34

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab File ID: 30087_01.D BFB Injection Date: 04/13/2018

Instrument ID: CHX.i BFB Injection Time: 09:59

Analysis Batch No.: 128434

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	15.7	
75	30.0 - 66.0% of mass 95	46.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.4	(0.4) 1
174	50.0 - 120.0% of mass 95	98.8	
175	4.0 - 9.0 % of mass 174	7.9	(8.0) 1
176	93.0 - 101.0% of mass 174	97.2	(98.3) 1
177	5.0 - 9.0% of mass 176	6.3	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-128434/2	30087_02.D	04/13/2018	10:48
	LCS 200-128434/3	30087_03.D	04/13/2018	11:38
	MB 200-128434/5	30087_05.D	04/13/2018	13:18
GC-SV-106 (AS)	200-42918-12	30087_18.D	04/14/2018	00:14

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Sample No.: ICIS 200-127372/7 Date Analyzed: 03/14/2018 20:33

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29580-07.d Heated Purge: (Y/N) N

Calibration ID: 39087

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		180091	12.38	930934	14.08	867885	19.54
UPPER LIMIT		252127	12.71	1303308	14.41	1215039	19.87
LOWER LIMIT		108055	12.05	558560	13.75	520731	19.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-127372/14		206593	12.38	1070993	14.08	981090	19.54

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Sample No.: CCVIS 200-128156/2 Date Analyzed: 04/05/2018 12:44

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29952-02.d Heated Purge: (Y/N) N

Calibration ID: 39087

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		167257	12.38	856200	14.07	854695	19.54
UPPER LIMIT		234160	12.71	1198680	14.40	1196573	19.87
LOWER LIMIT		100354	12.05	513720	13.74	512817	19.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-128156/3		182511	12.38	948281	14.08	923213	19.54
MB 200-128156/4		179970	12.37	963789	14.08	850754	19.54
200-42918-7	GC-IA-105 (AS)	135936	12.39	667743	14.08	622876	19.54
200-42918-9	GC-IA-104 (AS)	130195	12.40	654051	14.08	593905	19.54
200-42918-10	GC-IA-108 (AS)	140390	12.40	756717	14.09	719363	19.54

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Sample No.: CCVIS 200-128215/4 Date Analyzed: 04/06/2018 14:56

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29983-04.d Heated Purge: (Y/N) N

Calibration ID: 39087

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		154498	12.38	788251	14.08	743832	19.54
UPPER LIMIT		216297	12.71	1103551	14.41	1041365	19.87
LOWER LIMIT		92699	12.05	472951	13.75	446299	19.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-128215/5		154773	12.38	782402	14.08	746002	19.54
MB 200-128215/6		165675	12.37	864909	14.07	725815	19.54
200-42918-7 DL	GC-IA-105 (AS) DL	125885	12.36	639715	14.06	540003	19.53
200-42918-9 DL	GC-IA-104 (AS) DL	126749	12.36	629277	14.07	539523	19.53
200-42918-10 DL	GC-IA-108 (AS) DL	119203	12.35	623601	14.06	528702	19.53
200-42918-3	GC-SV-102 (AS)	121246	12.35	625931	14.06	571849	19.53
200-42918-5	GC-SV-103 (AS)	139594	12.36	734582	14.06	698083	19.53
200-42918-8	GC-SV-104 (AS)	162970	12.35	852059	14.06	803561	19.53
200-42918-6 DL	GC-SV-105 (AS) DL	183851	12.36	968485	14.06	844830	19.53
200-42918-6 DL	GC-SV-105 (AS) DL	192169	12.36	1049309	14.07	874366	19.53
200-42918-12 DL	GC-SV-106 (AS) DL	196473	12.37	1041452	14.07	829116	19.54

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Sample No.: ICIS 200-126632/11 Date Analyzed: 02/22/2018 00:18

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-0029291-011.D Heated Purge: (Y/N) N

Calibration ID: 38910

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		262260	10.17	1595224	12.25	1493018	18.57
UPPER LIMIT		367164	10.50	2233314	12.58	2090225	18.90
LOWER LIMIT		157356	9.84	957134	11.92	895811	18.24
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-126632/18		344168	10.17	2088307	12.25	1876087	18.57

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Sample No.: CCVIS 200-128151/3 Date Analyzed: 04/05/2018 11:43

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29949_03.D Heated Purge: (Y/N) N

Calibration ID: 38910

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		191701	10.16	1163711	12.24	1081085	18.57
UPPER LIMIT		268381	10.49	1629195	12.57	1513519	18.90
LOWER LIMIT		115021	9.83	698227	11.91	648651	18.24
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-128151/4		207842	10.16	1244860	12.24	1168092	18.57
MB 200-128151/5		213586	10.15	1325247	12.24	1179917	18.56
200-42918-11	GC-IA-106 (AS)	189258	10.16	1147177	12.24	1052561	18.56
200-42918-2	GC-IA-102 (AS)	179214	10.16	1079073	12.24	966876	18.56
200-42918-1	GC-AA-01 (AS)	162746	10.16	1006085	12.23	911120	18.56
200-42918-4	GC-IA-103 (AS)	151335	10.16	944040	12.23	871764	18.56
200-42918-11 DL	GC-IA-106 (AS) DL	135834	10.16	848639	12.24	771485	18.56
200-42918-2 DL	GC-IA-102 (AS) DL	131866	10.16	807799	12.24	775019	18.56

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Sample No.: ICIS 200-128414/8 Date Analyzed: 04/12/2018 20:51

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 30075_08.D Heated Purge: (Y/N) N

Calibration ID: 39268

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		201948	10.16	1045546	12.24	987354	18.56
UPPER LIMIT		282727	10.49	1463764	12.57	1382296	18.89
LOWER LIMIT		121169	9.83	627328	11.91	592412	18.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-128414/16		261301	10.16	1356008	12.24	1238907	18.57

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Sample No.: CCVIS 200-128434/2 Date Analyzed: 04/13/2018 10:48

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 30087_02.D Heated Purge: (Y/N) N

Calibration ID: 39268

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		269329	10.16	1406480	12.23	1269150	18.56
UPPER LIMIT		377061	10.49	1969072	12.56	1776810	18.89
LOWER LIMIT		161597	9.83	843888	11.90	761490	18.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-128434/3		278784	10.16	1467824	12.24	1360609	18.56
MB 200-128434/5		291609	10.16	1536889	12.24	1384162	18.56
200-42918-12	GC-SV-106 (AS)	280601	10.16	1468668	12.23	1358360	18.56

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-AA-01 (AS) Lab Sample ID: 200-42918-1

Matrix: Air Lab File ID: 29949_10.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.32	J	0.50	0.047
75-45-6	Freon 22	86.47	0.22	J	0.50	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.041
74-87-3	Chloromethane	50.49	0.39	J	0.50	0.16
106-97-8	n-Butane	58.12	0.75		0.50	0.046
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.018
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.037
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.036
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.13
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.022
75-69-4	Trichlorofluoromethane	137.37	0.18	J	0.20	0.031
76-13-1	Freon TF	187.38	0.061	J	0.20	0.027
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.035
67-64-1	Acetone	58.08	1.5	J	5.0	1.3
67-63-0	Isopropyl alcohol	60.10	0.39	J	5.0	0.13
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.028
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.063
75-09-2	Methylene Chloride	84.93	0.25	J	0.50	0.068
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.7
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.050
110-54-3	n-Hexane	86.17	0.20		0.20	0.046
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.017
78-93-3	Methyl Ethyl Ketone	72.11	0.17	J	0.50	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.029
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.029
67-66-3	Chloroform	119.38	0.20	U	0.20	0.025
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	1.2
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.026
110-82-7	Cyclohexane	84.16	0.045	J	0.20	0.045
56-23-5	Carbon tetrachloride	153.81	0.055		0.040	0.011
540-84-1	2,2,4-Trimethylpentane	114.23	0.23		0.20	0.043
71-43-2	Benzene	78.11	0.25		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.034

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-AA-01 (AS) Lab Sample ID: 200-42918-1

Matrix: Air Lab File ID: 29949_10.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.098	J	0.20	0.068
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.0091
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.11
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.035
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	0.76
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.059
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.036
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.065
108-88-3	Toluene	92.14	0.41		0.20	0.035
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.038
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.017
127-18-4	Tetrachloroethene	165.83	0.025	J	0.040	0.0098
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.086
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.017
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.023
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.067	J	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.23	J	0.50	0.077
95-47-6	Xylene, o-	106.17	0.069	J	0.20	0.040
1330-20-7	Xylene (total)	106.17	0.30	J	0.70	0.040
100-42-5	Styrene	104.15	0.20	U	0.20	0.035
75-25-2	Bromoform	252.75	0.20	U	0.20	0.035
98-82-8	Cumene	120.19	0.20	U	0.20	0.039
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.026
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.040
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.040
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.035
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.037
95-63-6	1,2,4-Trimethylbenzene	120.20	0.069	J	0.20	0.057
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.037
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.052
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.050
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-AA-01 (AS) Lab Sample ID: 200-42918-1

Matrix: Air Lab File ID: 29949_10.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.067
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.068
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.045
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.19
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.064
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-AA-01 (AS) | Lab Sample ID: 200-42918-1

Matrix: Air | Lab File ID: 29949_10.D

Analysis Method: TO-15 | Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) | Date Analyzed: 04/05/2018 17:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128151 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	1.6	J	2.5	0.23
75-45-6	Freon 22	86.47	0.79	J	1.8	0.71
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.29
74-87-3	Chloromethane	50.49	0.81	J	1.0	0.33
106-97-8	n-Butane	58.12	1.8		1.2	0.11
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.046
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.082
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.14
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.34
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.096
75-69-4	Trichlorofluoromethane	137.37	1.0	J	1.1	0.17
76-13-1	Freon TF	187.38	0.47	J	1.5	0.21
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.14
67-64-1	Acetone	58.08	3.7	J	12	3.1
67-63-0	Isopropyl alcohol	60.10	0.97	J	12	0.32
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.087
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.20
75-09-2	Methylene Chloride	84.93	0.87	J	1.7	0.24
75-65-0	tert-Butyl alcohol	74.12	15	U	15	5.2
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.20
110-54-3	n-Hexane	86.17	0.72		0.70	0.16
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.069
78-93-3	Methyl Ethyl Ketone	72.11	0.50	J	1.5	0.32
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.11
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.11
67-66-3	Chloroform	119.38	0.98	U	0.98	0.12
109-99-9	Tetrahydrofuran	72.11	15	U	15	3.5
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.14
110-82-7	Cyclohexane	84.16	0.16	J	0.69	0.15
56-23-5	Carbon tetrachloride	153.81	0.34		0.25	0.069
540-84-1	2,2,4-Trimethylpentane	114.23	1.1		0.93	0.20
71-43-2	Benzene	78.11	0.80		0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-AA-01 (AS) Lab Sample ID: 200-42918-1

Matrix: Air Lab File ID: 29949_10.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.40	J	0.82	0.28
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.049
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.45
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.16
123-91-1	1,4-Dioxane	88.11	18	U	18	2.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.16
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	0.27
108-88-3	Toluene	92.14	1.5		0.75	0.13
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.17
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.093
127-18-4	Tetrachloroethene	165.83	0.17	J	0.27	0.066
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	0.35
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.14
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.18
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.29	J	0.87	0.15
179601-23-1	m,p-Xylene	106.17	0.98	J	2.2	0.33
95-47-6	Xylene, o-	106.17	0.30	J	0.87	0.17
1330-20-7	Xylene (total)	106.17	1.3	J	3.0	0.17
100-42-5	Styrene	104.15	0.85	U	0.85	0.15
75-25-2	Bromoform	252.75	2.1	U	2.1	0.36
98-82-8	Cumene	120.19	0.98	U	0.98	0.19
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.18
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.20
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.20
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.18
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.34	J	0.98	0.28
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.20
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.29
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.30
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.38

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-AA-01 (AS) Lab Sample ID: 200-42918-1

Matrix: Air Lab File ID: 29949_10.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.35
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.37
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.27
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.68
91-20-3	Naphthalene	128.17	2.6	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Lims ID: 200-42918-A-1
Client ID: GC-AA-01 (AS)
Sample Type: Client
Inject. Date: 05-Apr-2018 17:36:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029949-010
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 13:46:05 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 13:46:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.108	3.106	0.000	99	20124	0.3169	
3 Chlorodifluoromethane	51	3.156	3.149	0.005	97	12668	0.2234	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354				ND	U
5 Chloromethane	50	3.488	3.481	0.006	98	12664	0.3914	
6 Butane	43	3.670	3.662	0.006	99	47598	0.7505	
7 Vinyl chloride	62		3.707				ND	
8 Butadiene	54	3.782	3.777	0.005	87	675	0.0260	
10 Bromomethane	94		4.413				ND	
11 Chloroethane	64		4.638				ND	
13 Vinyl bromide	106		4.996				ND	
14 Trichlorofluoromethane	101	5.082	5.088	-0.005	97	10798	0.1816	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.104	0.000	88	2347	0.0610	
21 1,1-Dichloroethene	96		6.163				ND	
22 Acetone	43	6.419	6.400	0.016	99	95945	1.55	
23 Carbon disulfide	76		6.548				ND	
24 Isopropyl alcohol	45	6.719	6.682	0.037	100	25295	0.3930	
25 3-Chloro-1-propene	41		6.933				ND	U
27 Methylene Chloride	49	7.222	7.223	-0.005	90	10182	0.2511	
28 2-Methyl-2-propanol	59		7.452				ND	
29 Methyl tert-butyl ether	73		7.623				ND	
31 trans-1,2-Dichloroethene	61		7.661				ND	
33 Hexane	57	8.024	8.030	-0.006	90	9732	0.2031	
34 1,1-Dichloroethane	63		8.543				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.677				ND	
38 2-Butanone (MEK)	72	9.768	9.737	0.026	99	2327	0.1683	
* 40 Chlorobromomethane	128	10.159	10.159	0.000	85	162746	10.0	
41 Tetrahydrofuran	42		10.170				ND	
42 Chloroform	83		10.298				ND	
43 Cyclohexane	84	10.539	10.528	0.000	61	1591	0.0453	
44 1,1,1-Trichloroethane	97		10.576				ND	
45 Carbon tetrachloride	117	10.838	10.834	0.000	65	2779	0.0547	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
46 Isooctane	57	11.277	11.278	-0.005	94	44462	0.2287	
47 Benzene	78	11.330	11.331	-0.006	98	22855	0.2495	
48 1,2-Dichloroethane	62		11.539				ND	
49 n-Heptane	43	11.694	11.694	-0.006	96	9017	0.0985	
* 50 1,4-Difluorobenzene	114	12.234	12.240	-0.006	98	1006085	10.0	
53 Trichloroethene	95		12.732				ND	
54 1,2-Dichloropropane	63		13.331				ND	
55 Methyl methacrylate	69		13.513				ND	
56 1,4-Dioxane	88		13.572				ND	
58 Dichlorobromomethane	83		13.914				ND	
60 cis-1,3-Dichloropropene	75		14.893				ND	
61 4-Methyl-2-pentanone (MIBK	43	15.241	15.241	0.037	41	4058	0.0342	7a
65 Toluene	92	15.503	15.499	0.000	91	24158	0.4077	
66 trans-1,3-Dichloropropene	75		16.145				ND	
67 1,1,2-Trichloroethane	83		16.541				ND	
68 Tetrachloroethene	166	16.632	16.632	0.000	80	831	0.0249	
69 2-Hexanone	43	17.049	17.049	0.026	34	3689	0.0326	7Ma
71 Chlorodibromomethane	129		17.338				ND	
72 Ethylene Dibromide	107		17.622				ND	
* 74 Chlorobenzene-d5	117	18.563	18.569	-0.006	99	911120	10.0	
75 Chlorobenzene	112		18.627				ND	
76 Ethylbenzene	91	18.793	18.788	0.000	97	9487	0.0672	
78 m-Xylene & p-Xylene	106	19.061	19.050	0.006	0	10922	0.2254	
S 73 Xylenes, Total	106				0		0.2939	
79 o-Xylene	106	19.943	19.954	-0.011	94	3232	0.0685	
80 Styrene	104	20.013	20.007	0.000	9	738	0.0103	
81 Bromoform	173		20.484				ND	
82 Isopropylbenzene	105		20.714				ND	
84 1,1,2,2-Tetrachloroethane	83		21.441				ND	
85 N-Propylbenzene	91	21.506	21.494	0.006	96	3095	0.0155	
88 4-Ethyltoluene	105	21.703	21.704	-0.006	73	3100	0.0211	
89 2-Chlorotoluene	91		21.714				ND	U
90 1,3,5-Trimethylbenzene	105	21.816	21.820	-0.011	93	2831	0.0232	
92 tert-Butylbenzene	119		22.346				ND	U
93 1,2,4-Trimethylbenzene	105	22.452	22.441	0.005	96	8418	0.0687	
94 sec-Butylbenzene	105		22.688				ND	U
95 4-Isopropyltoluene	119		22.902				ND	
96 1,3-Dichlorobenzene	146		22.929				ND	
97 1,4-Dichlorobenzene	146		23.073				ND	
98 Benzyl chloride	91		23.282				ND	
100 n-Butylbenzene	91		23.496				ND	
101 1,2-Dichlorobenzene	146		23.624				ND	
103 1,2,4-Trichlorobenzene	180		26.187				ND	
104 Hexachlorobutadiene	225		26.374				ND	
105 Naphthalene	128	26.673	26.673	-0.011	95	2739	0.0258	M

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

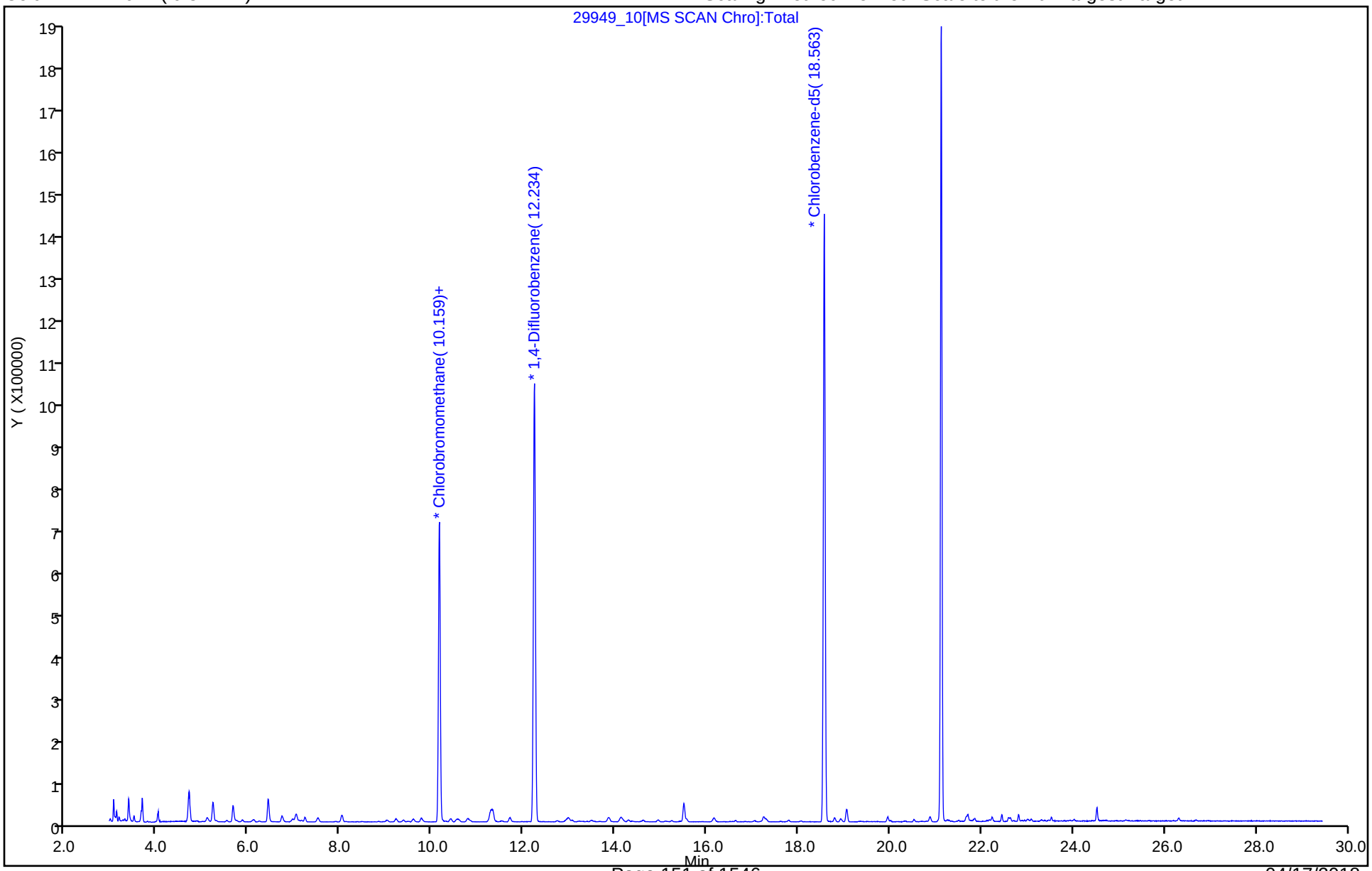
Report Date: 06-Apr-2018 13:46:06 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D

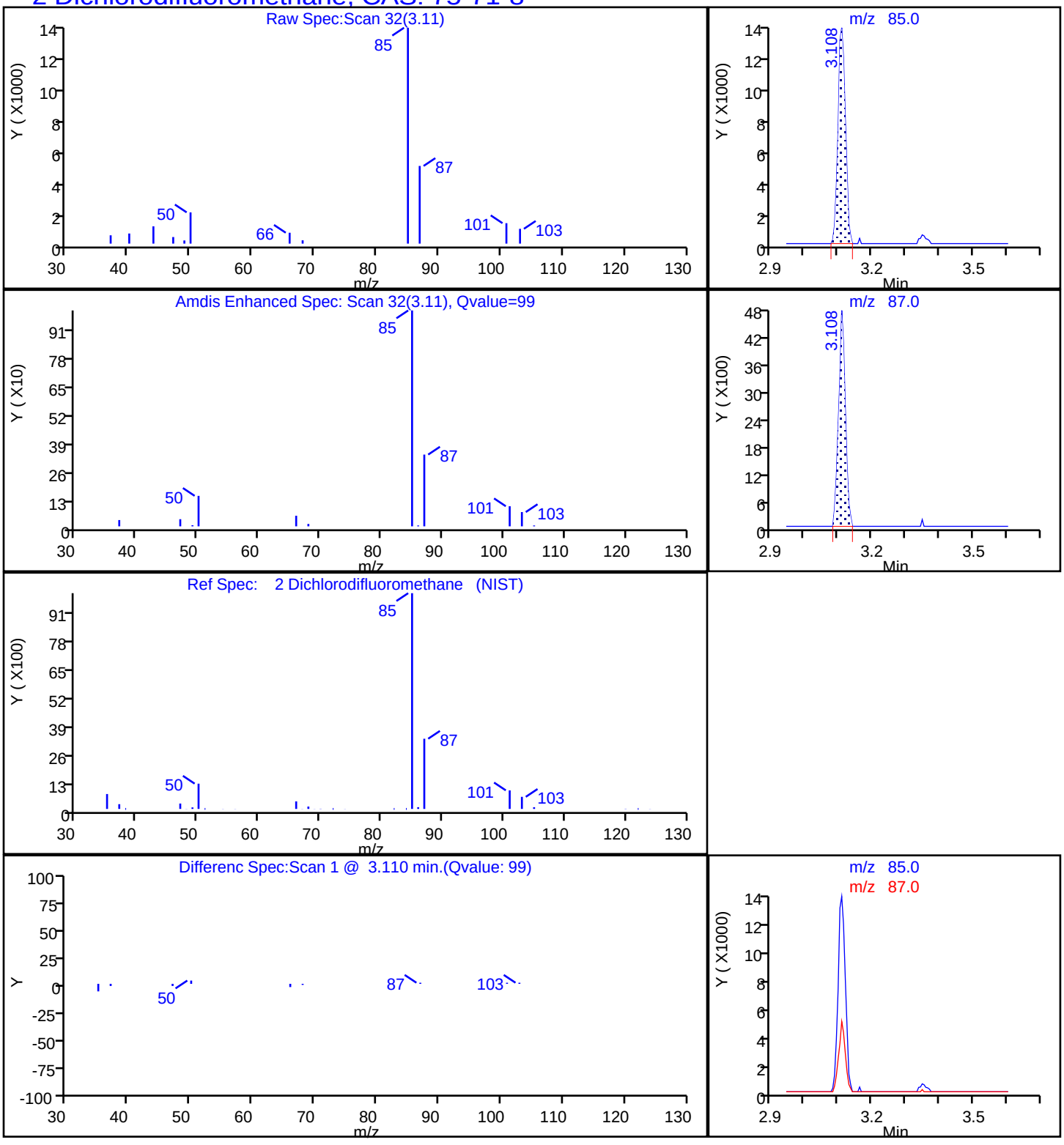
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1	Worklist Smp#:	10
Client ID:	GC-AA-01 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

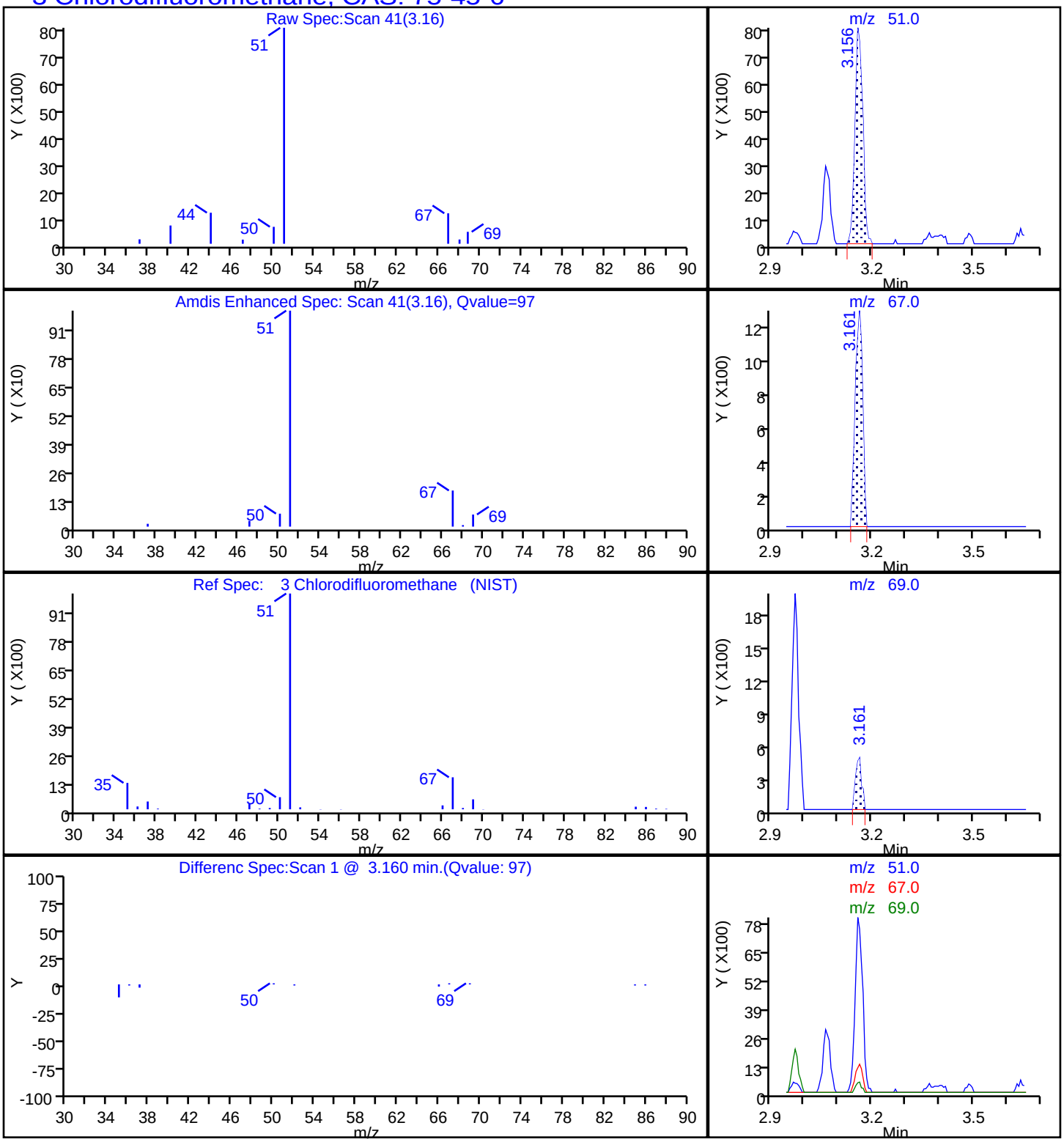
2 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

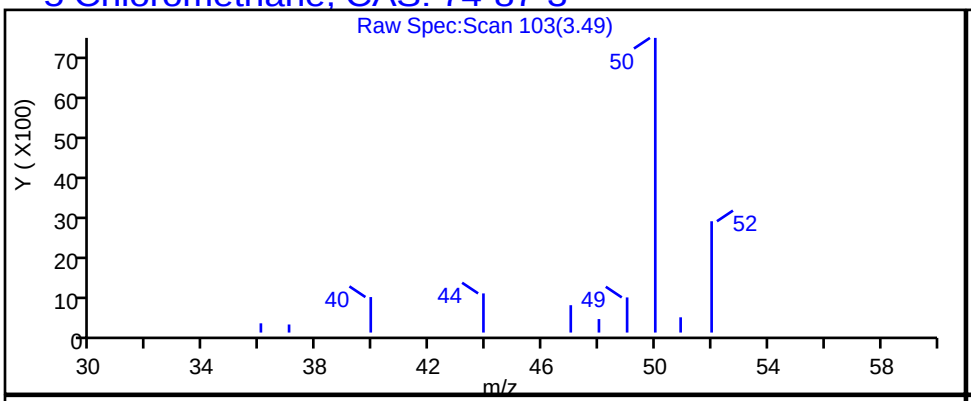
3 Chlorodifluoromethane, CAS: 75-45-6

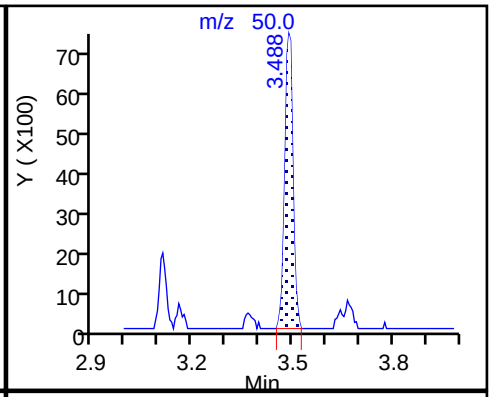


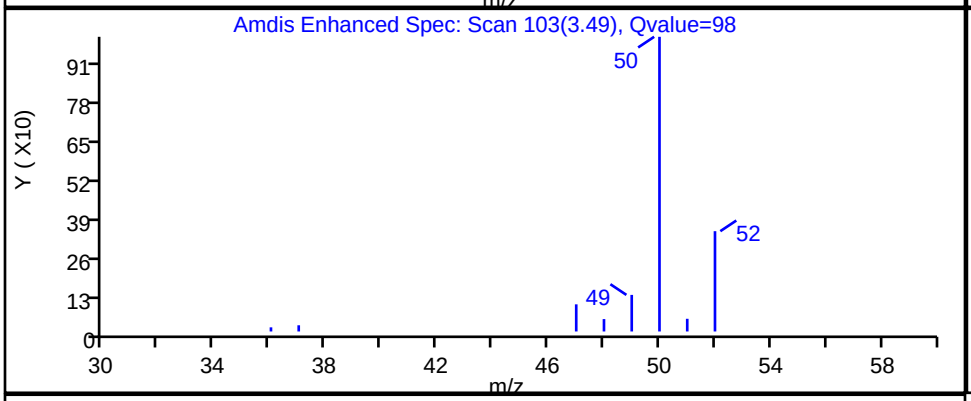
TestAmerica Burlington

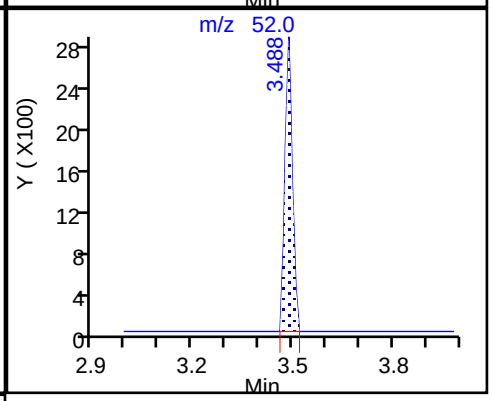
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

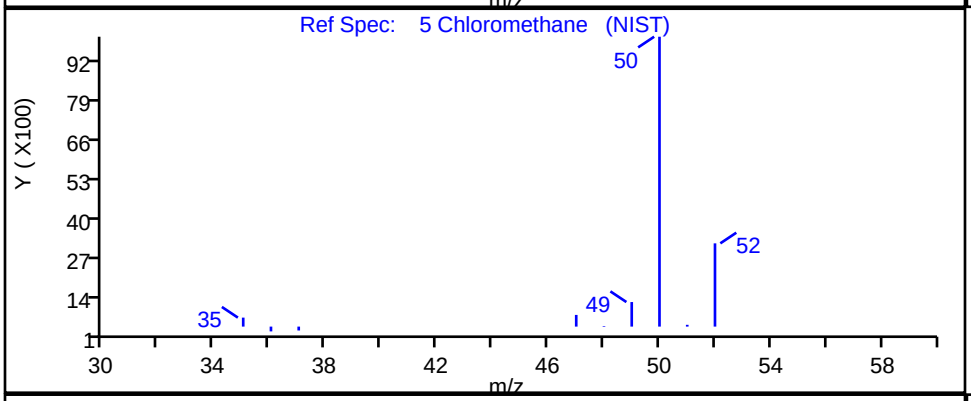
5 Chloromethane, CAS: 74-87-3

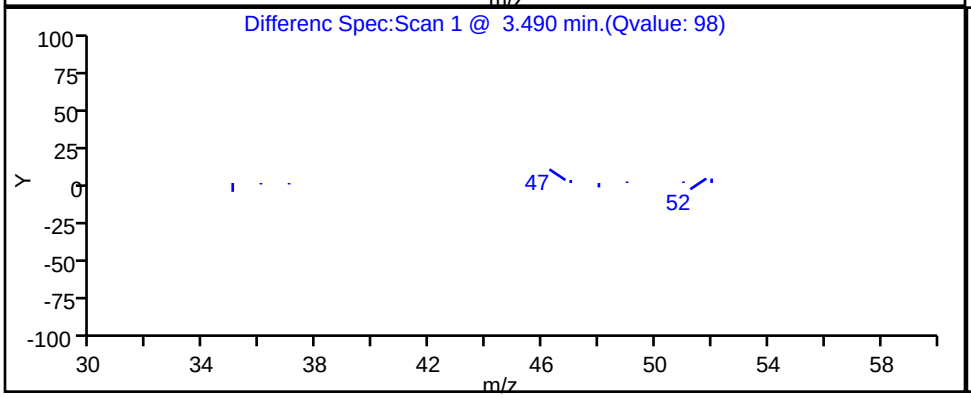


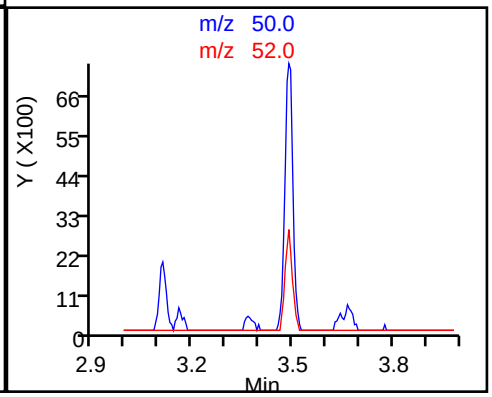






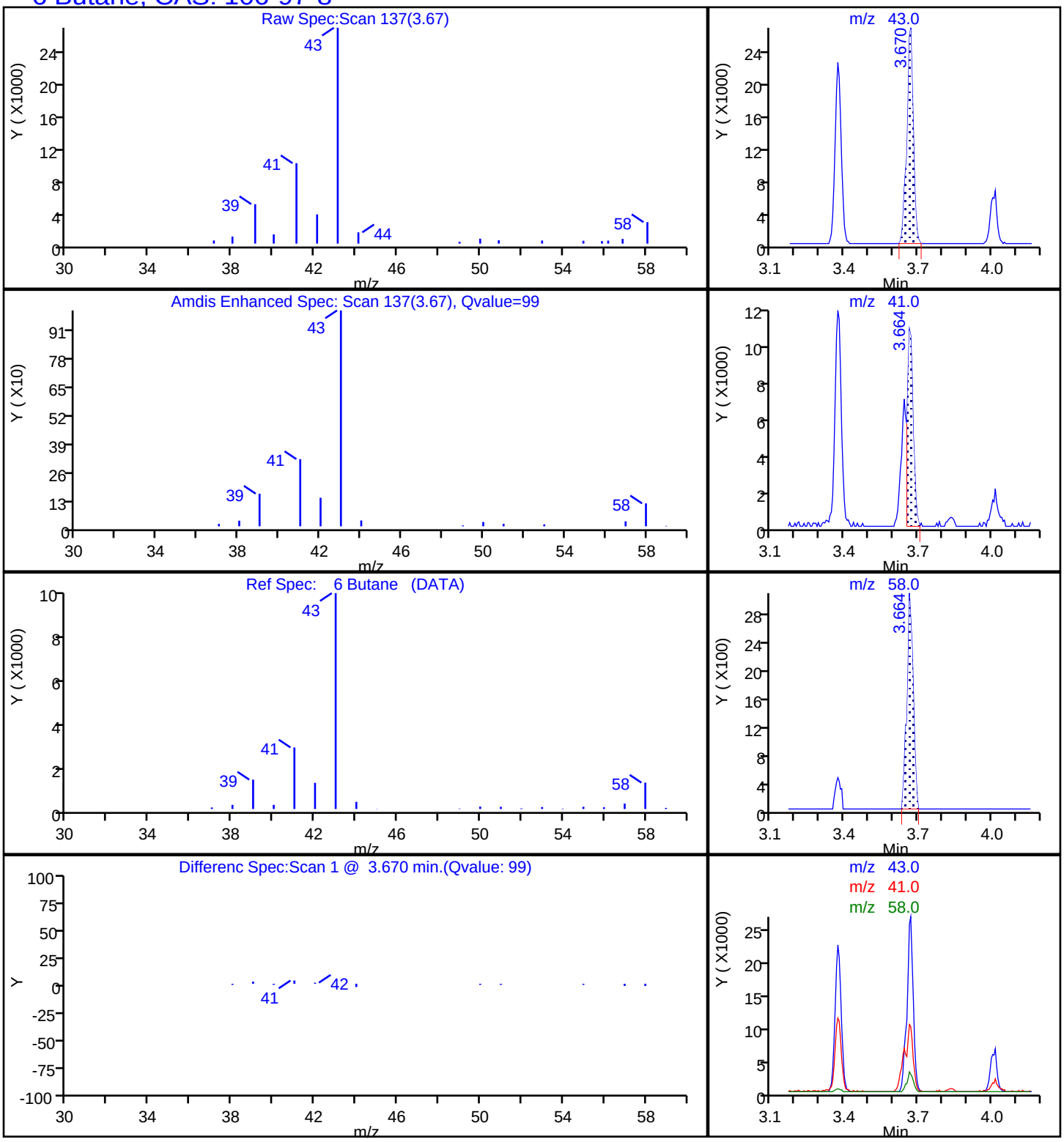






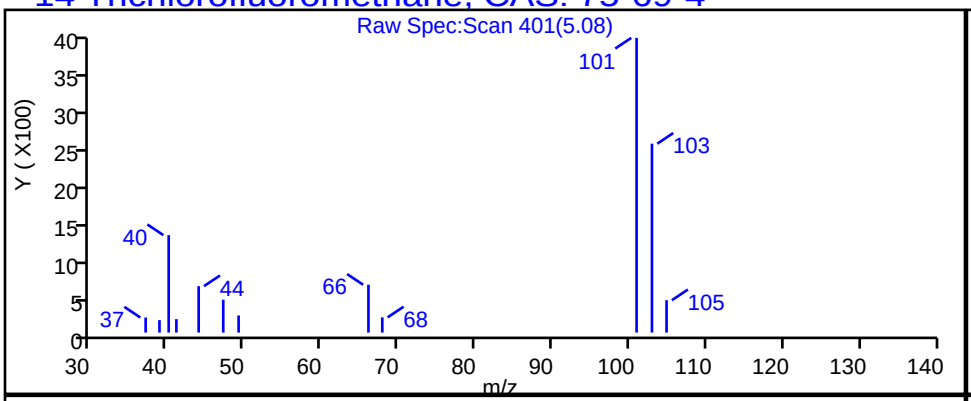
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

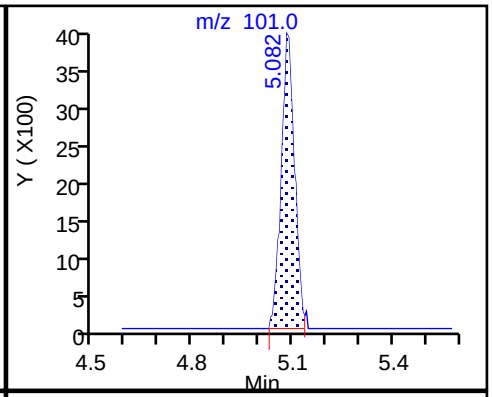
6 Butane, CAS: 106-97-8

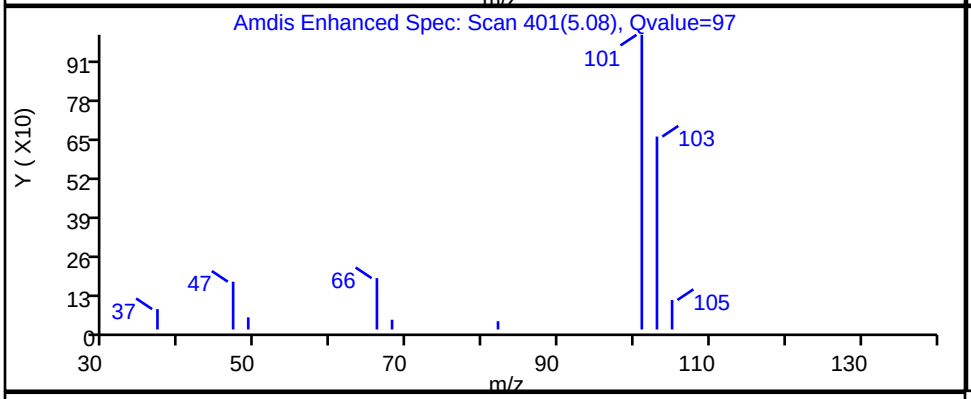


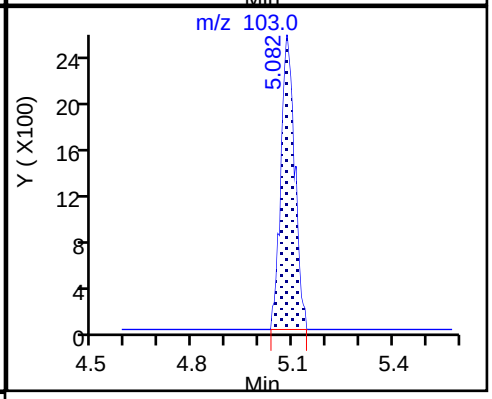
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

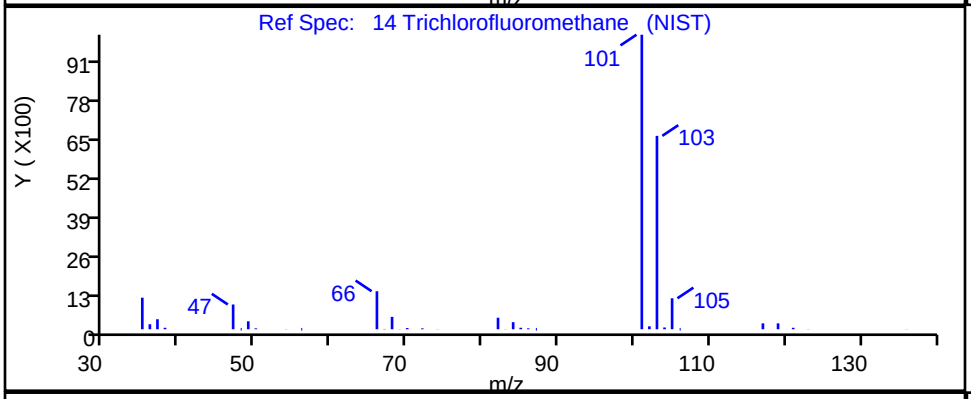
14 Trichlorofluoromethane, CAS: 75-69-4

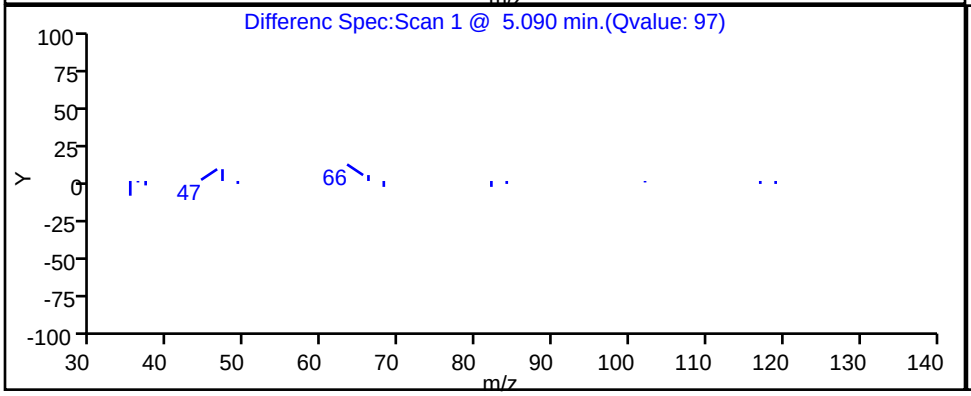


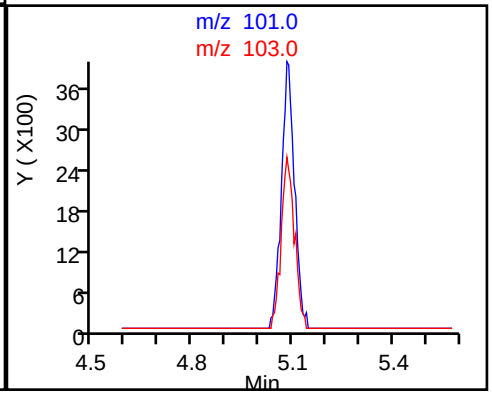








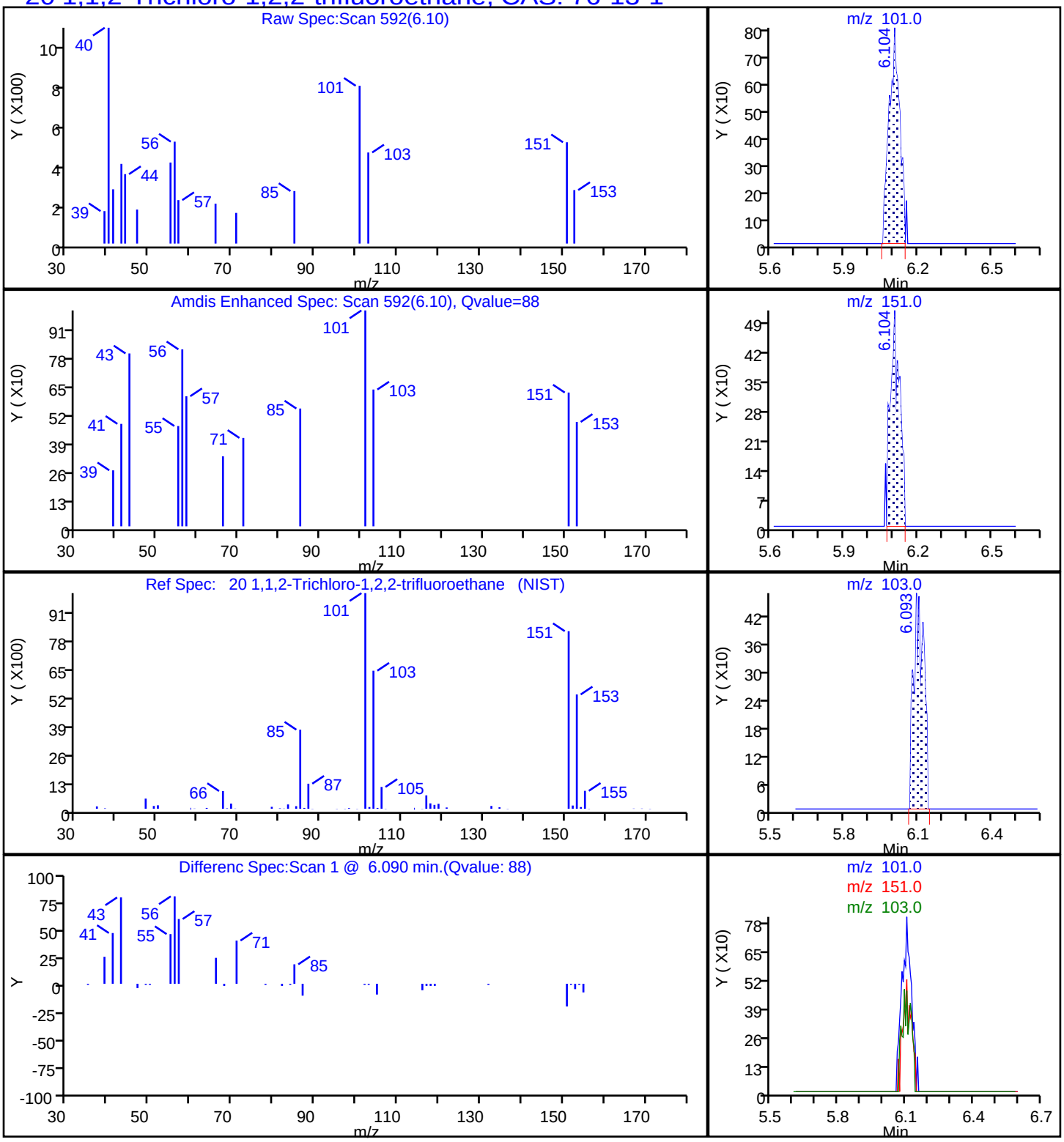




TestAmerica Burlington

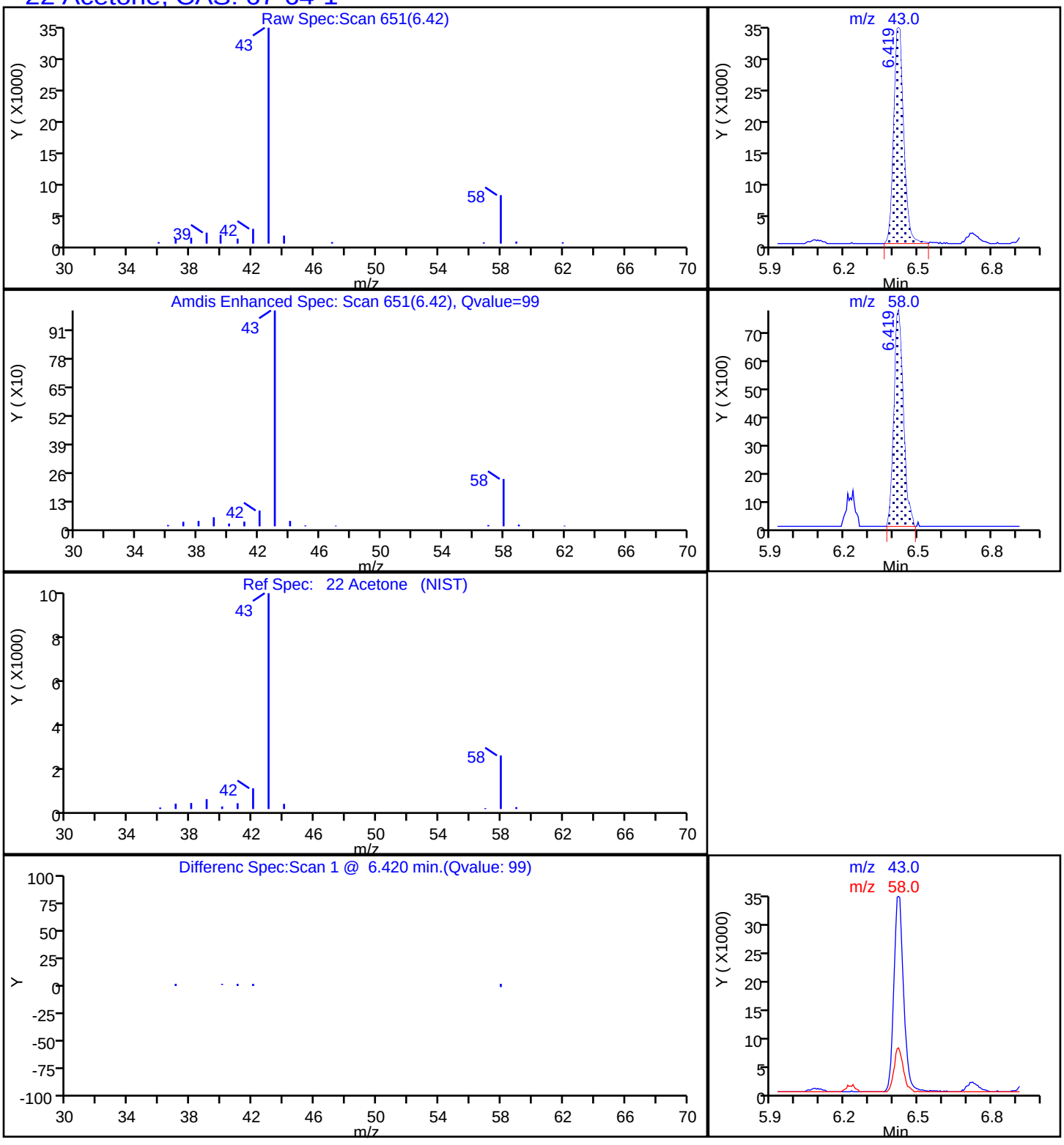
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



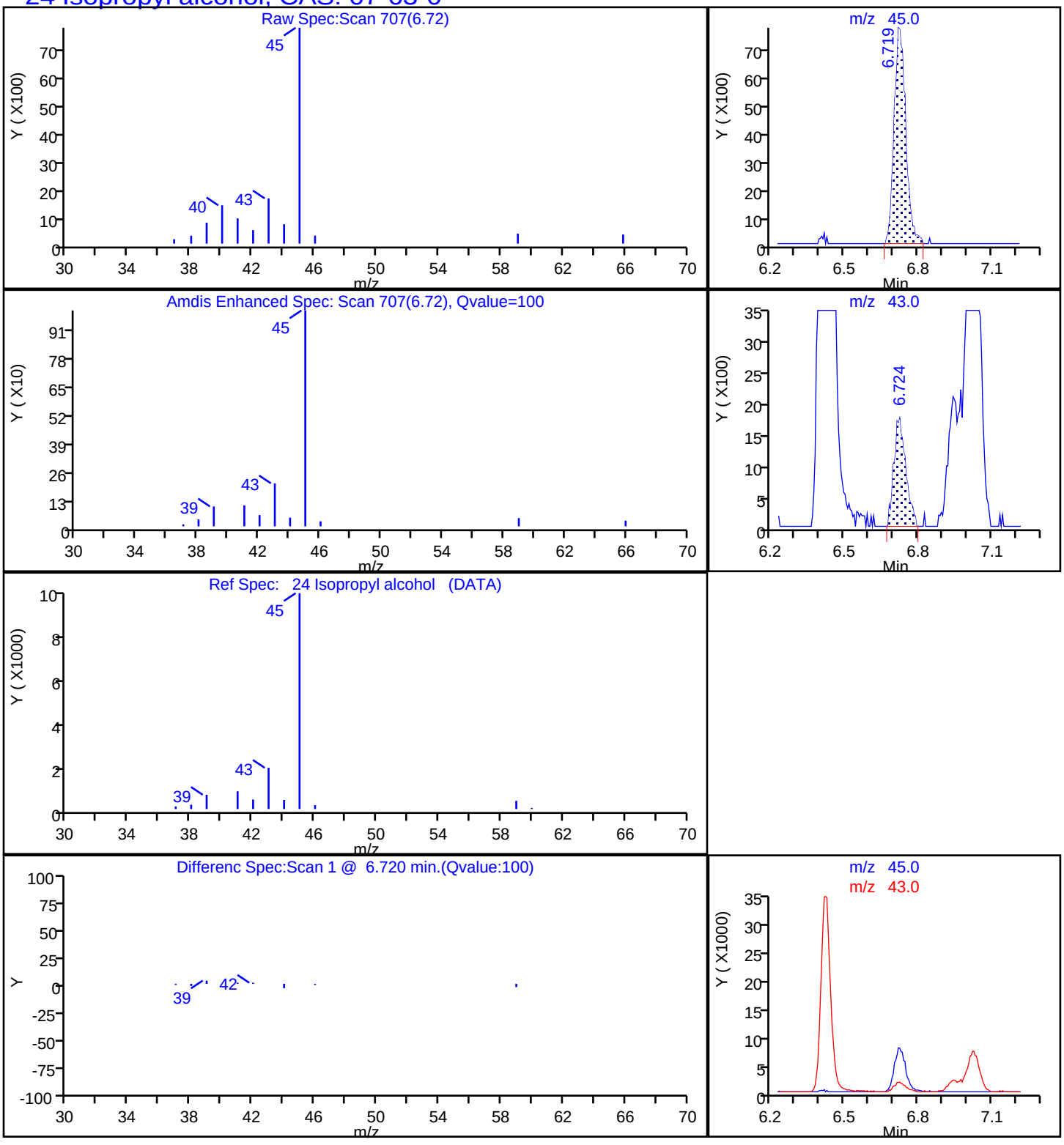
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

22 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

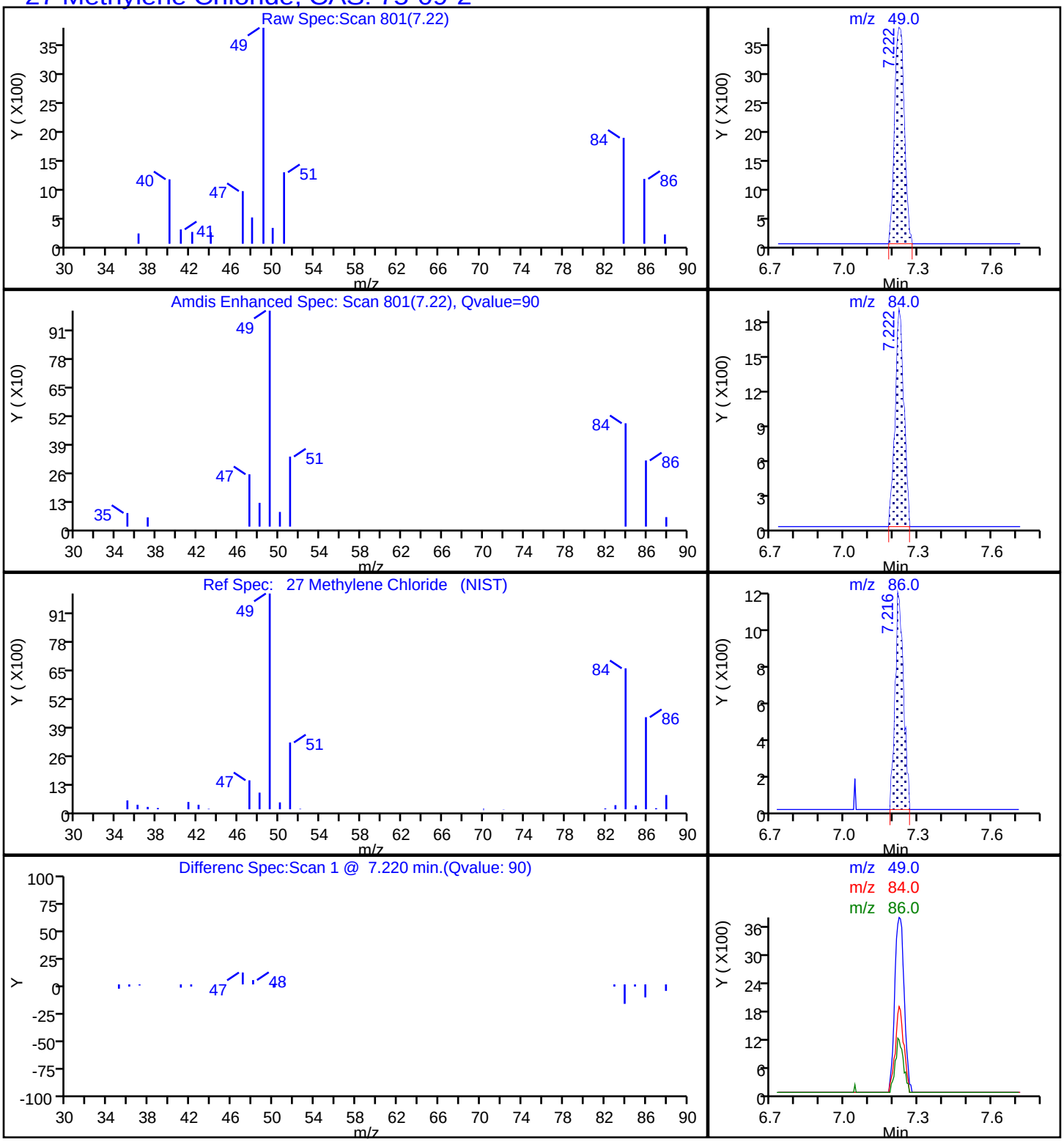
24 Isopropyl alcohol, CAS: 67-63-0



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

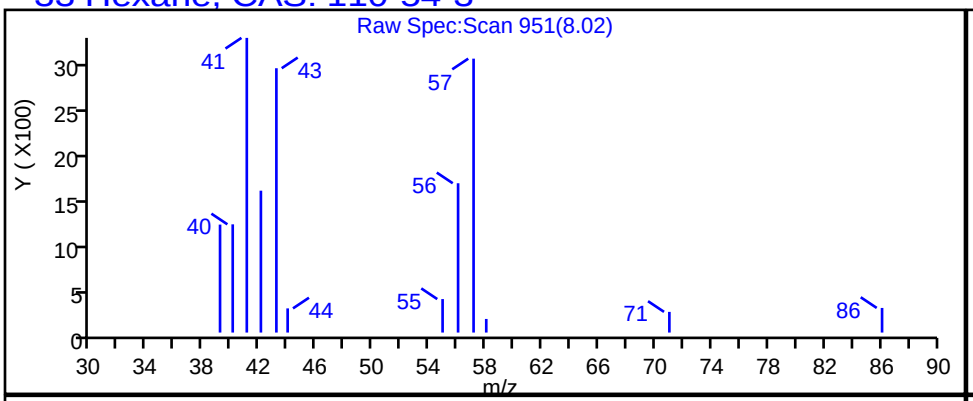
27 Methylene Chloride, CAS: 75-09-2

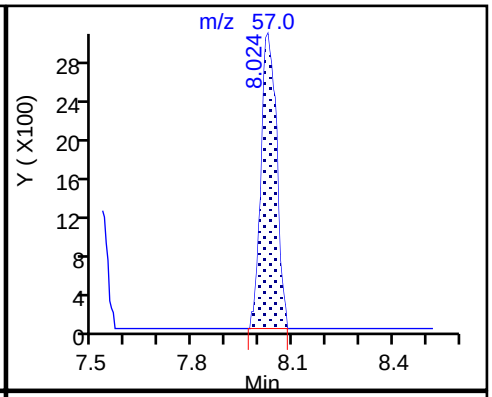


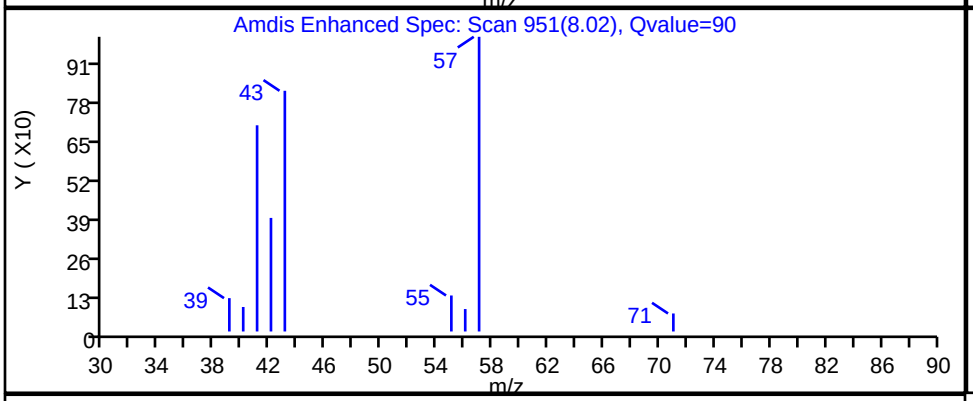
TestAmerica Burlington

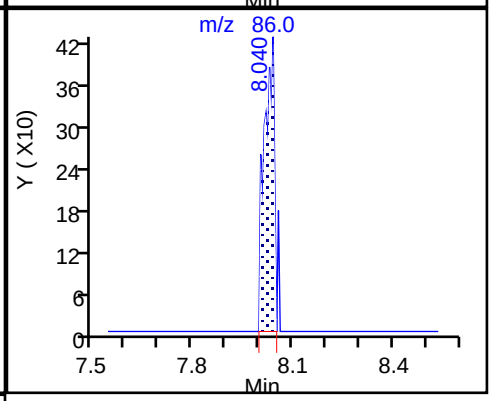
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

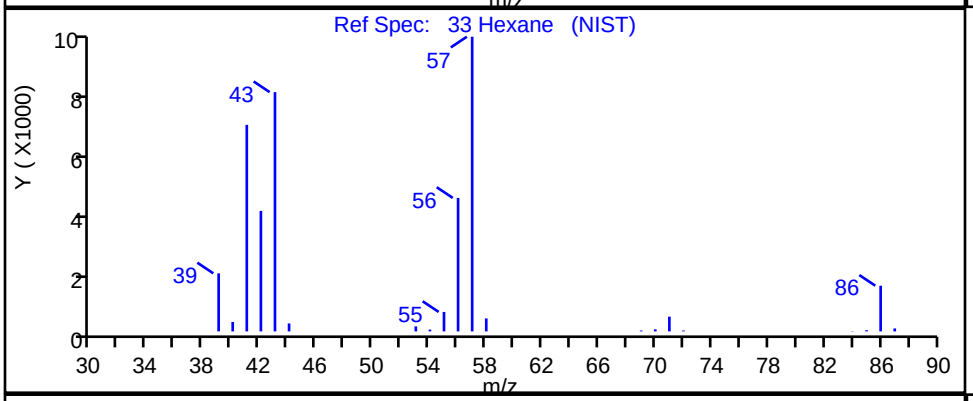
33 Hexane, CAS: 110-54-3

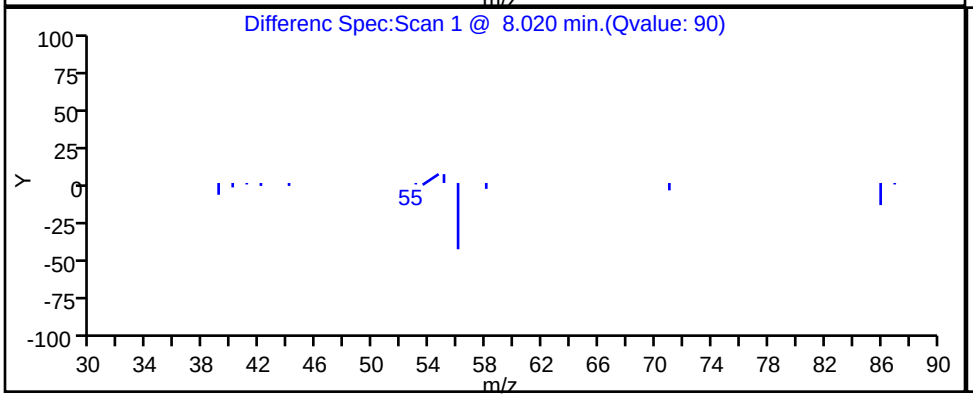


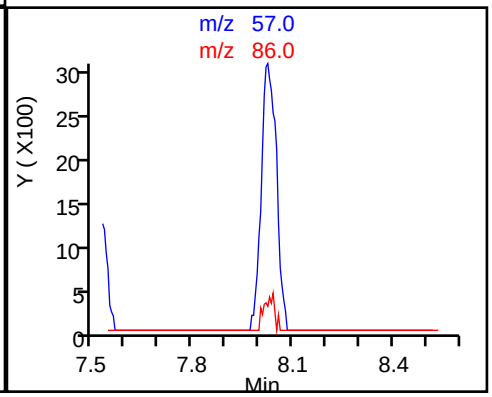








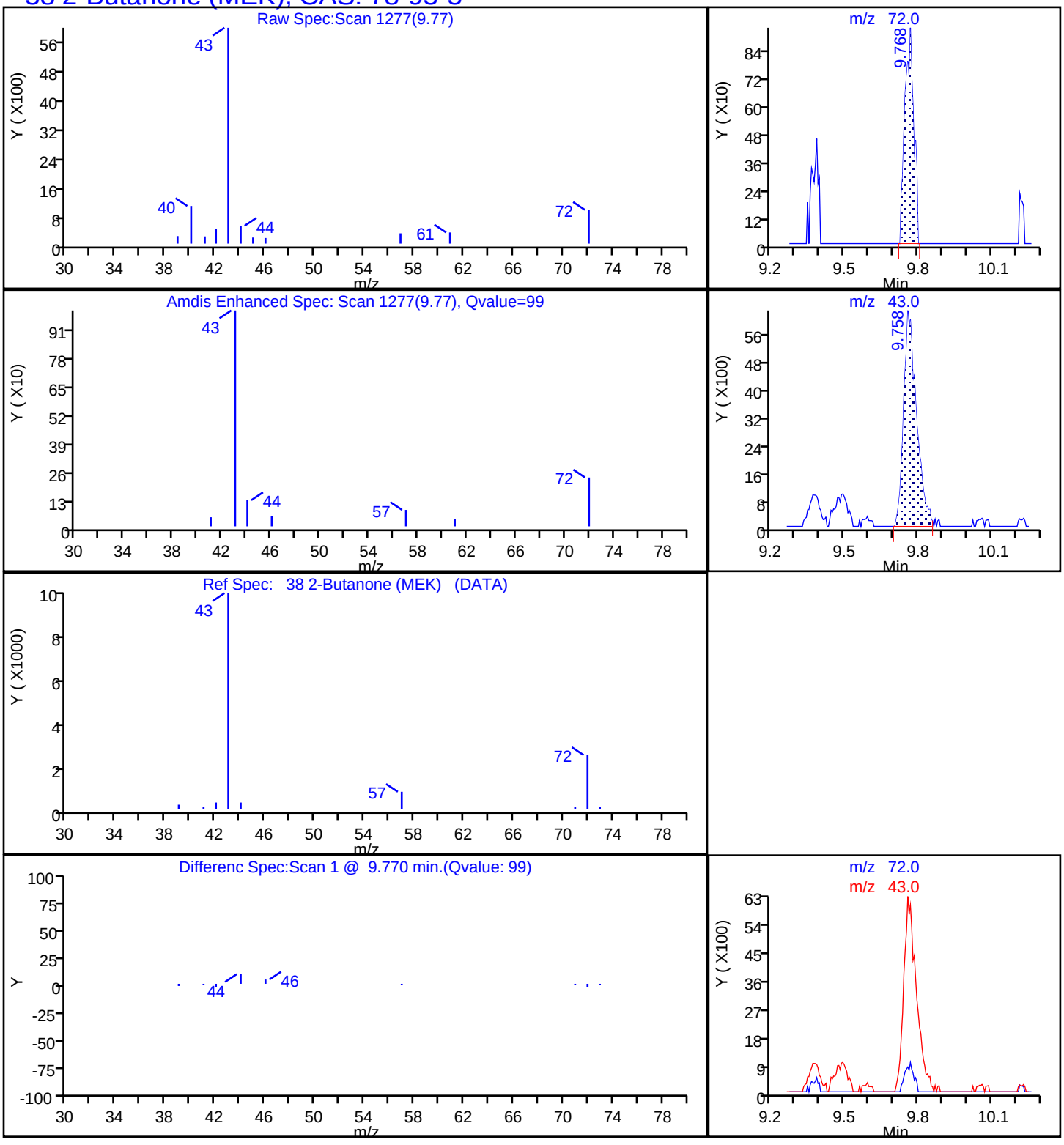




TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

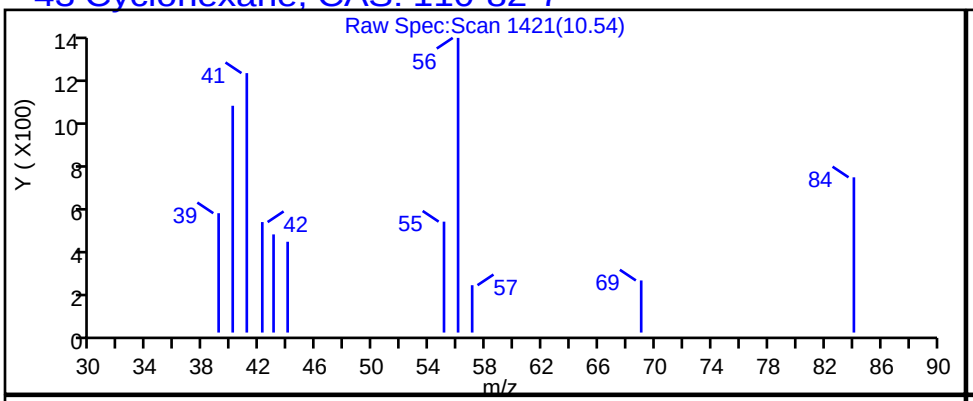
38 2-Butanone (MEK), CAS: 78-93-3

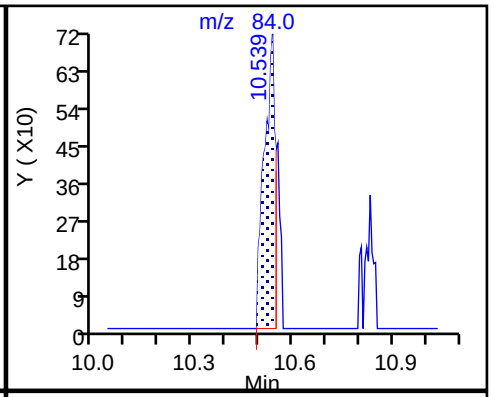


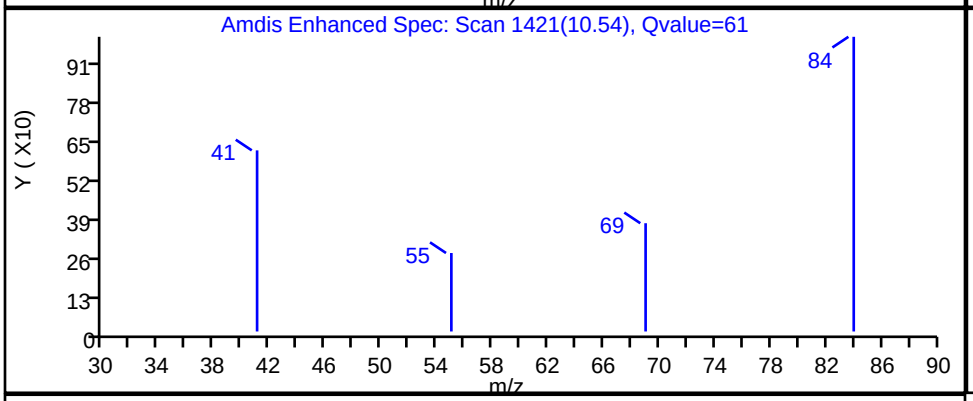
TestAmerica Burlington

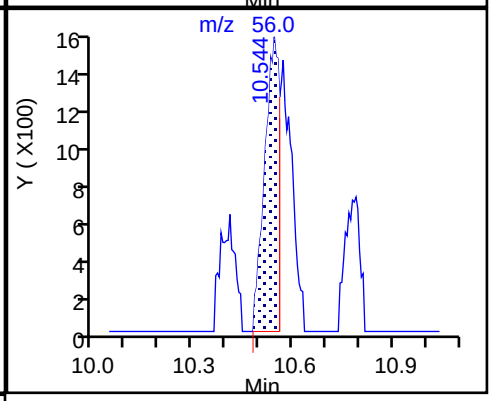
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

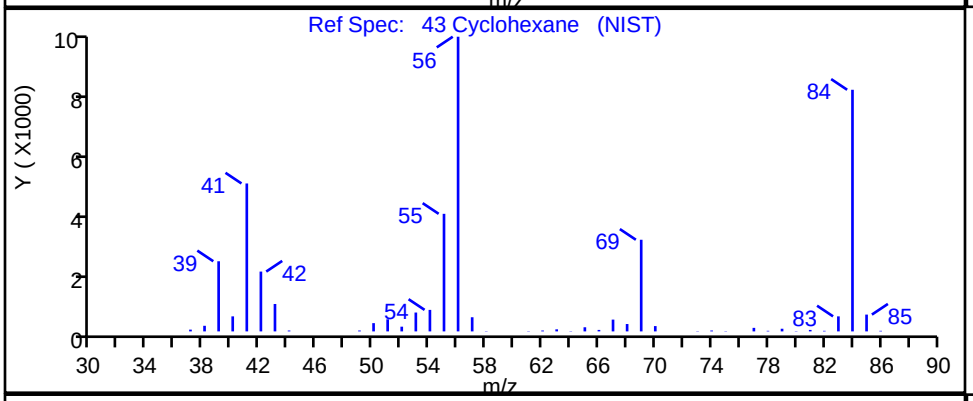
43 Cyclohexane, CAS: 110-82-7

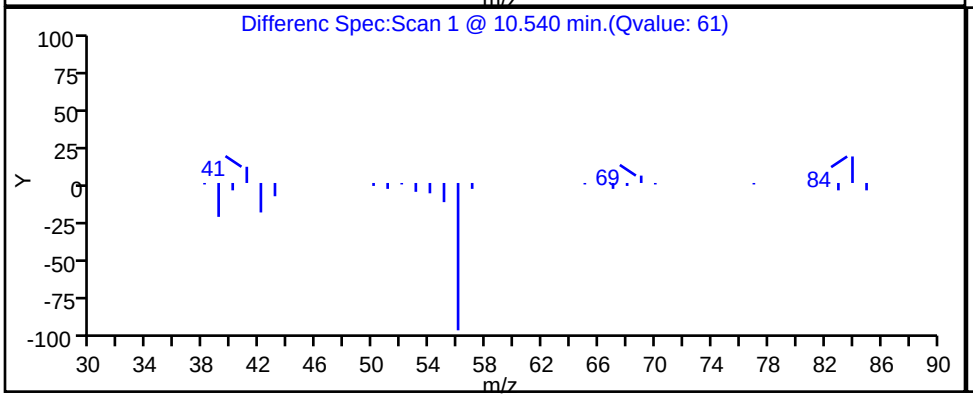


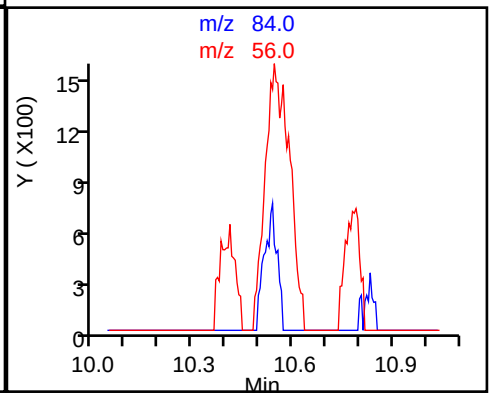












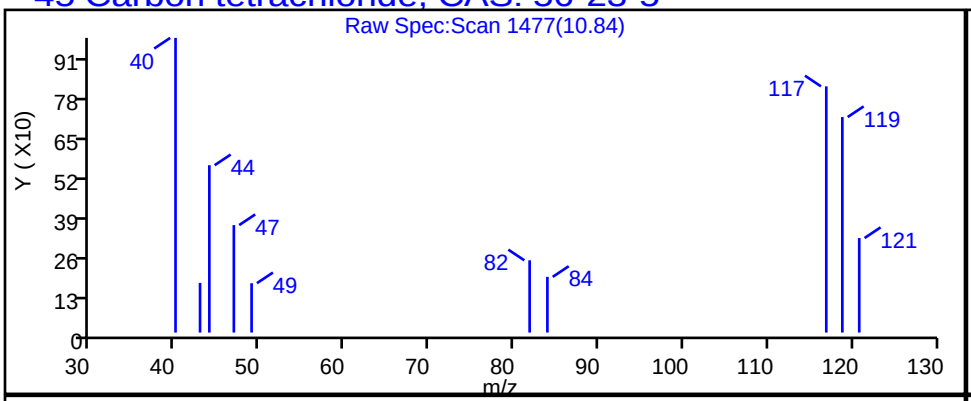
Report Date: 06-Apr-2018 13:46:06 Chrom Revision: 2.2 13-Mar-2018 08:45:20

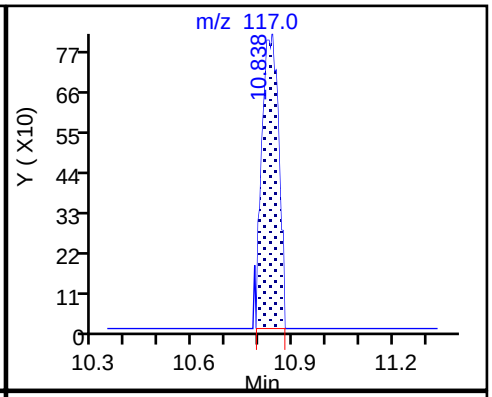
TestAmerica Burlington

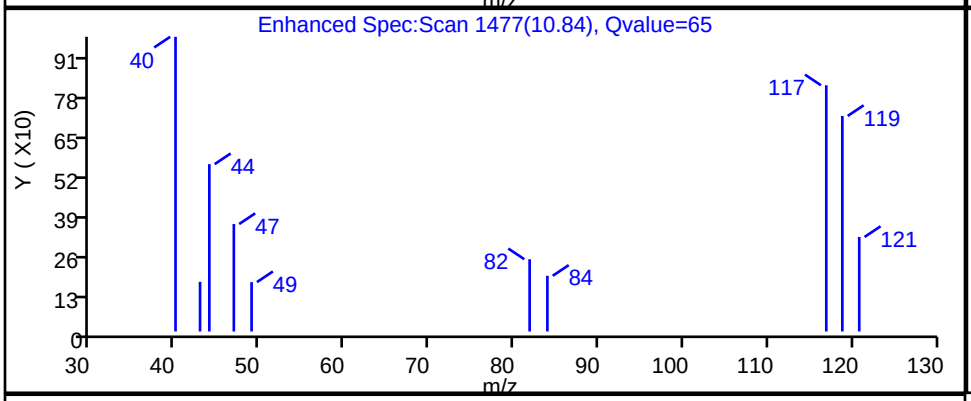
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D

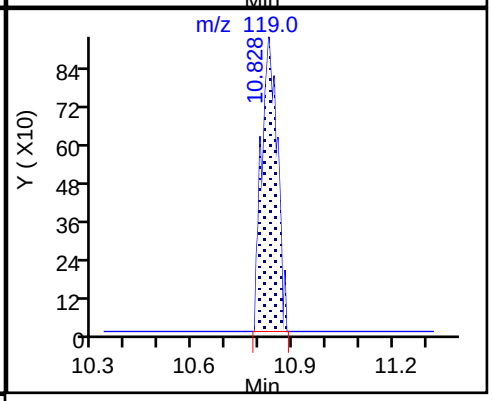
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

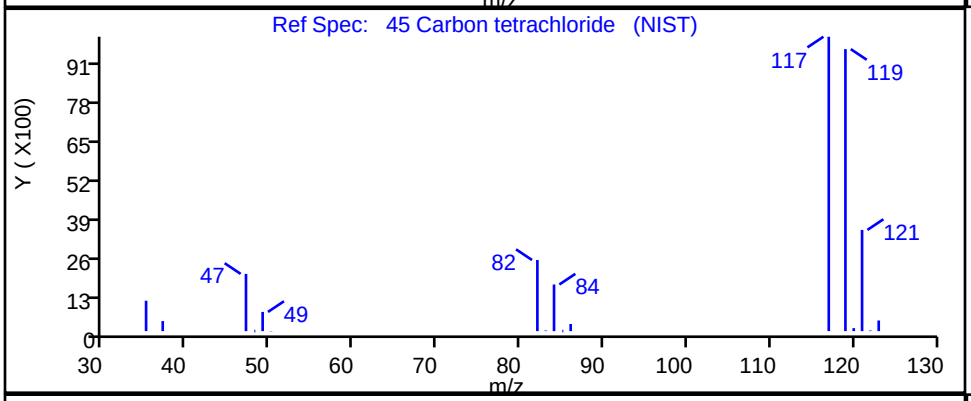
45 Carbon tetrachloride, CAS: 56-23-5

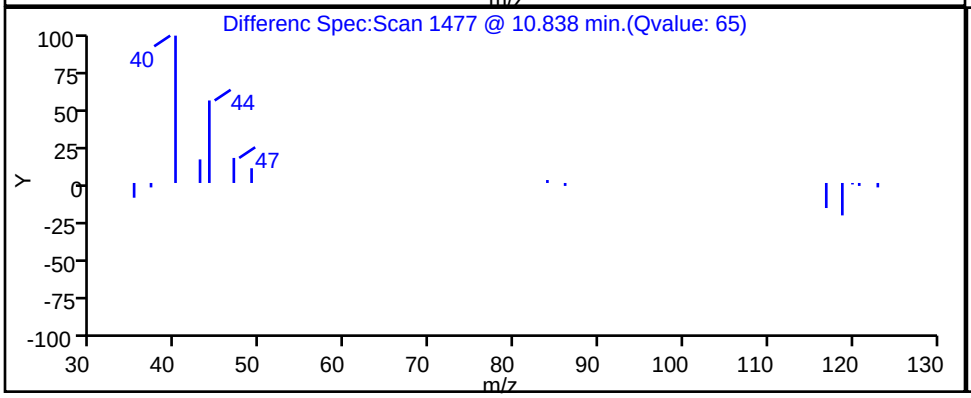


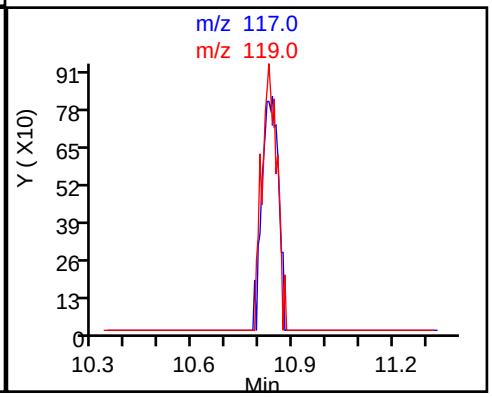






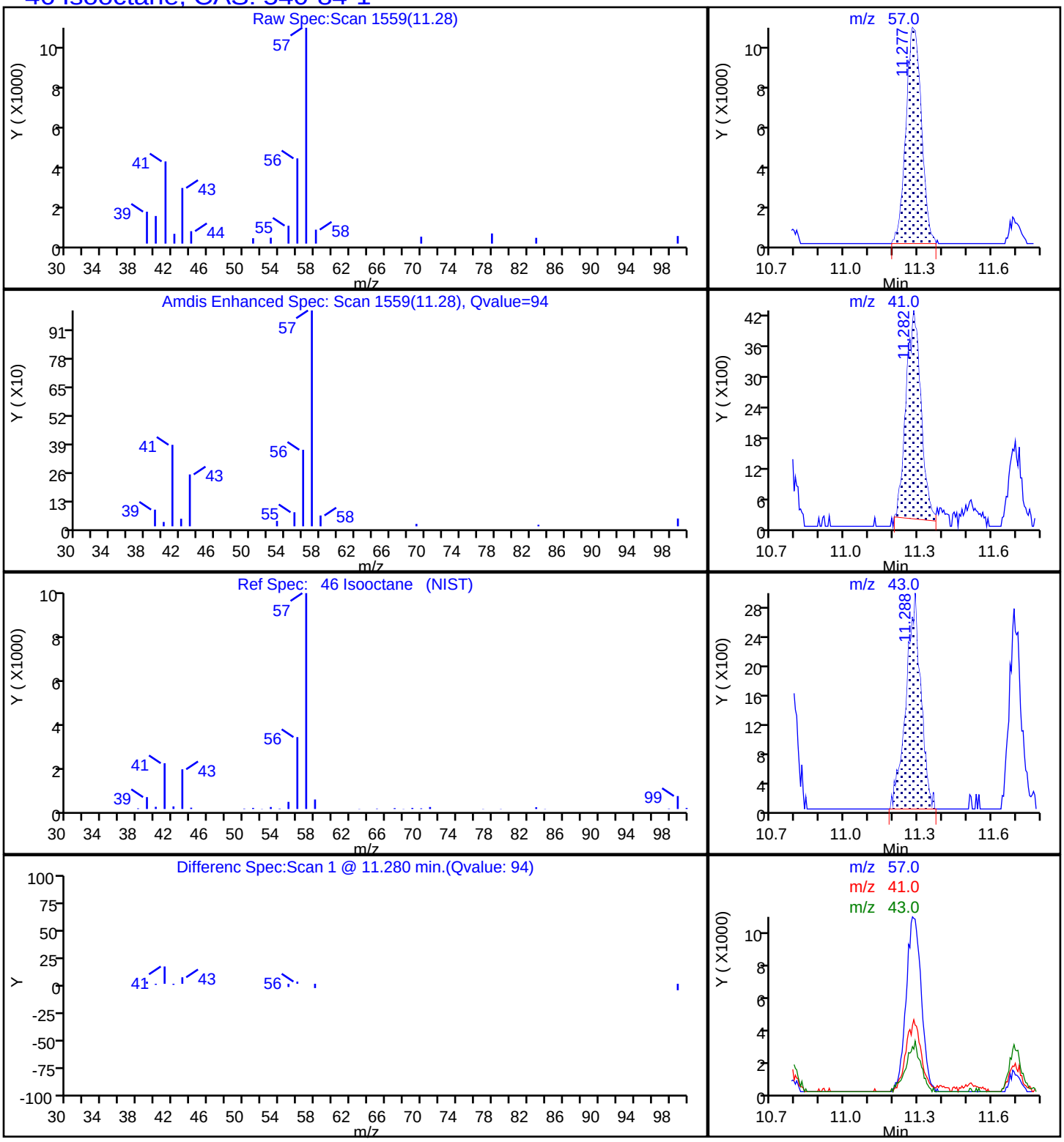






Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

46 Isooctane, CAS: 540-84-1



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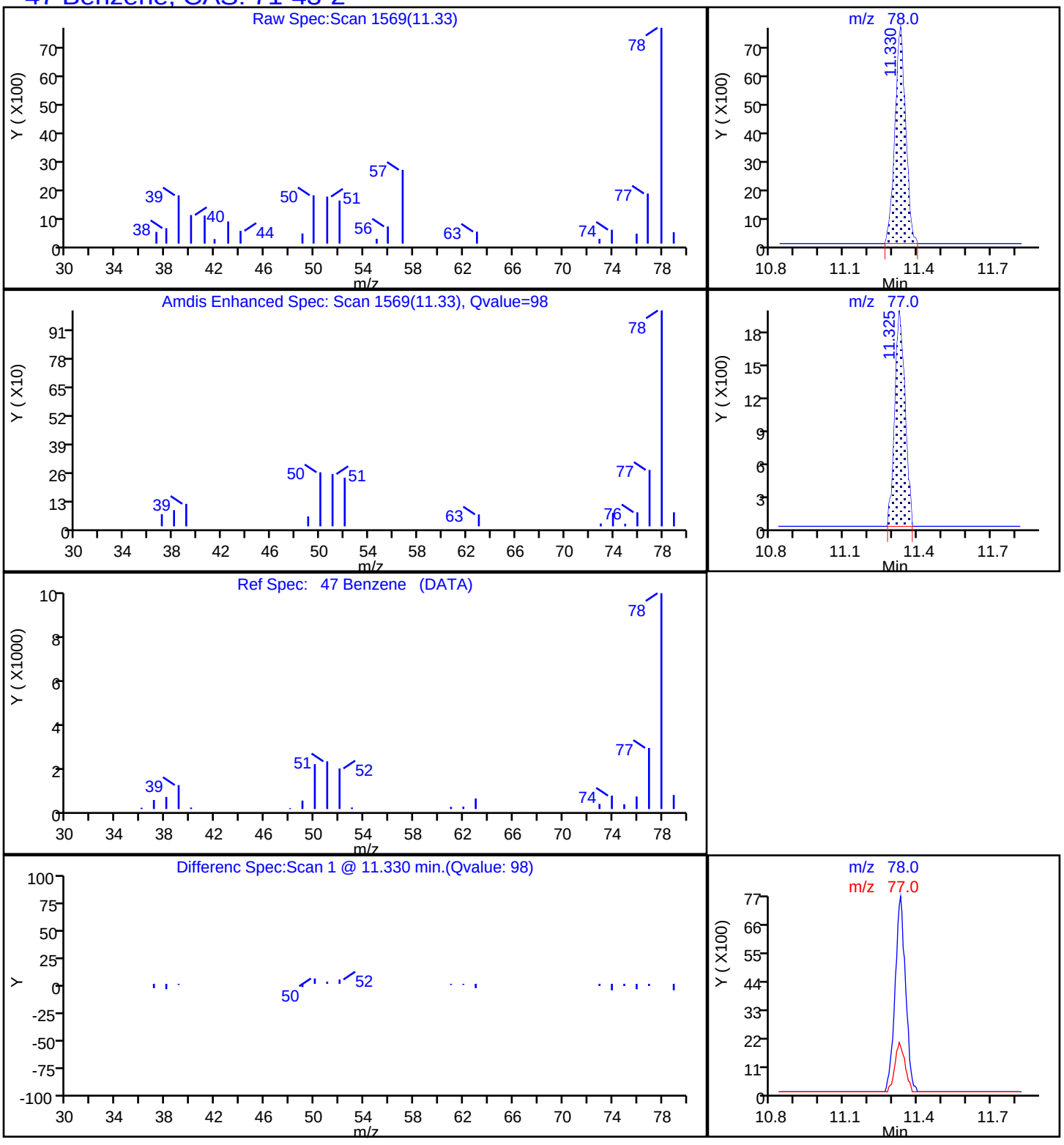
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

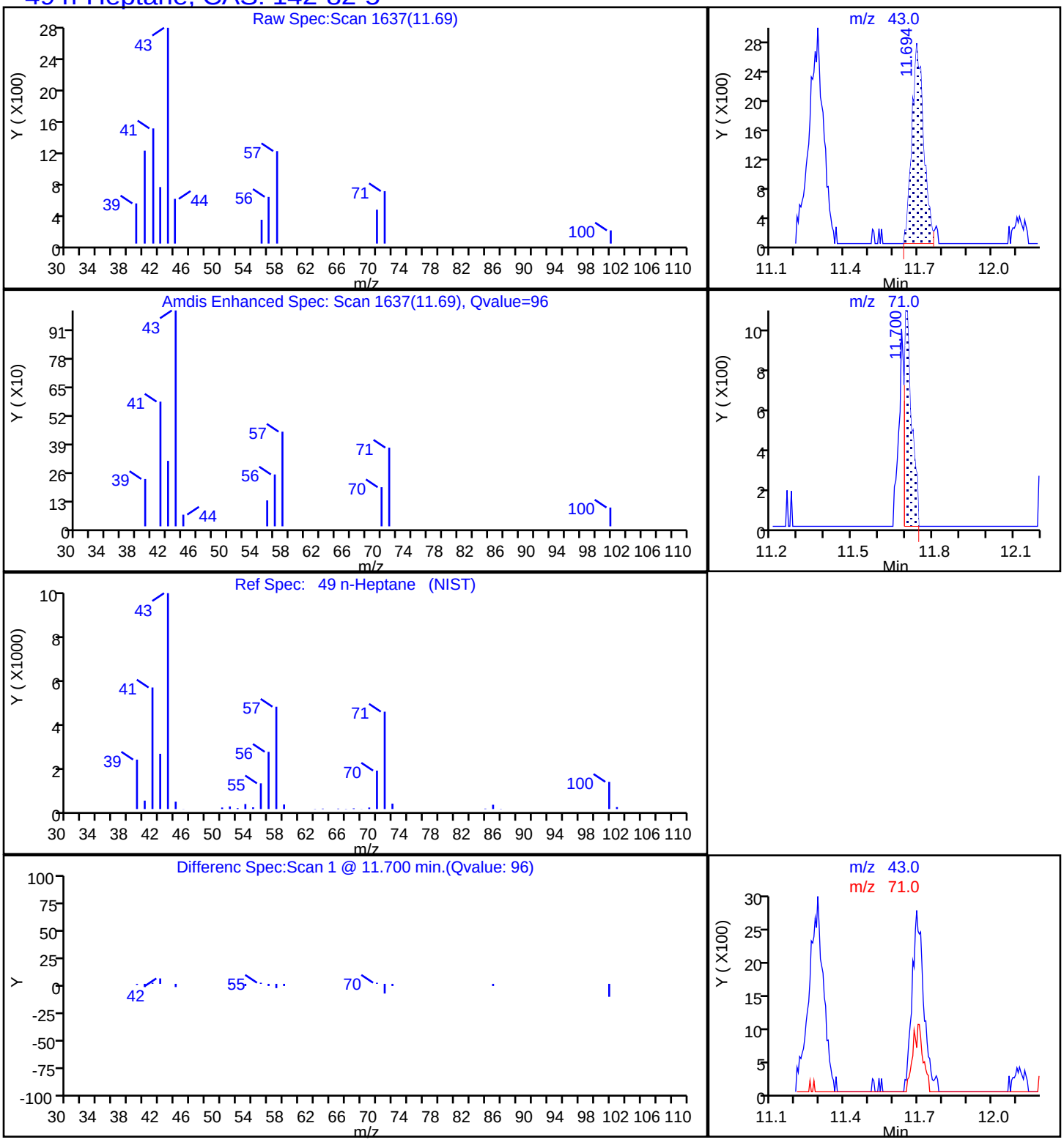
47 Benzene, CAS: 71-43-2



TestAmerica Burlington

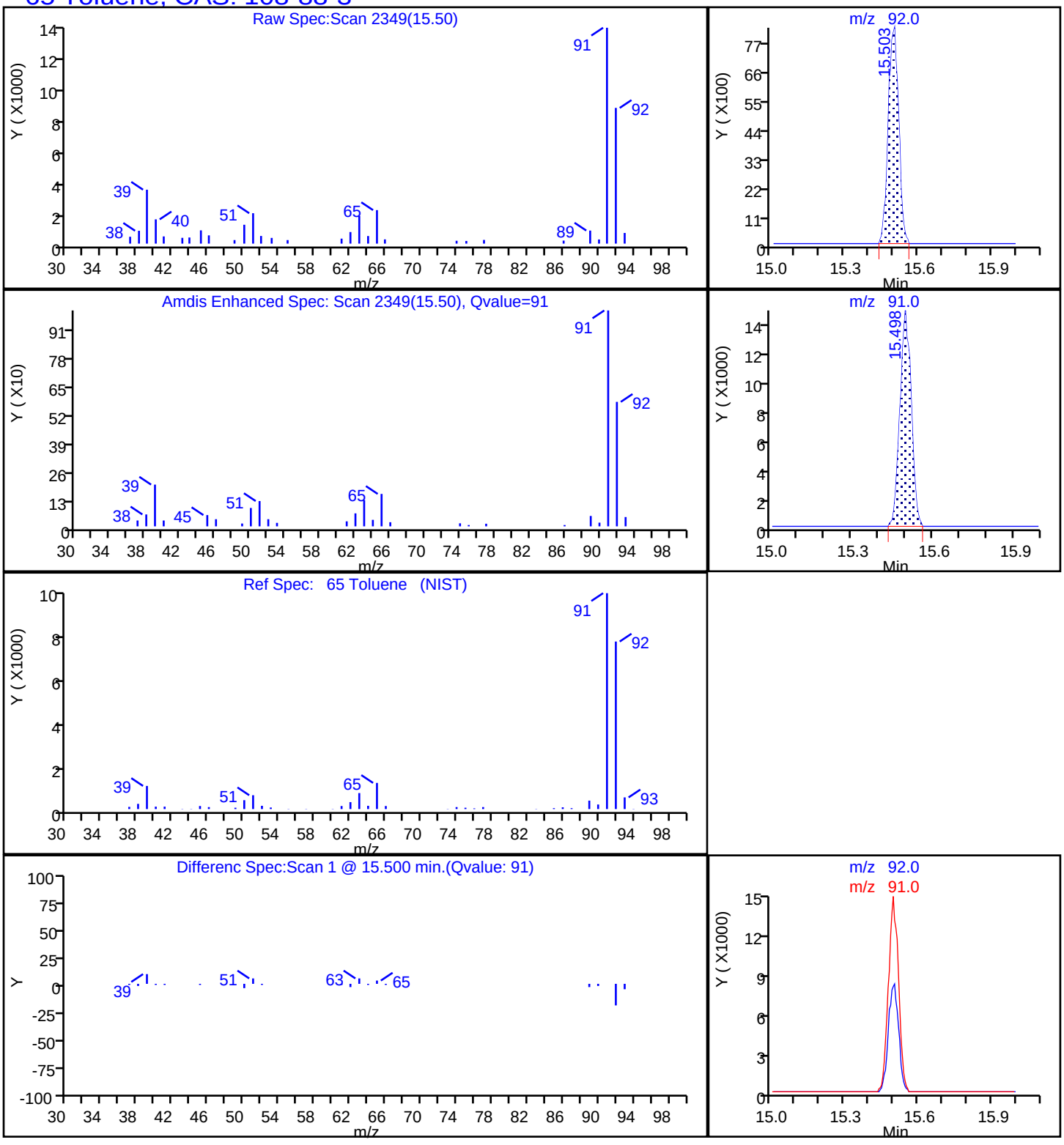
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

49 n-Heptane, CAS: 142-82-5



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

65 Toluene, CAS: 108-88-3



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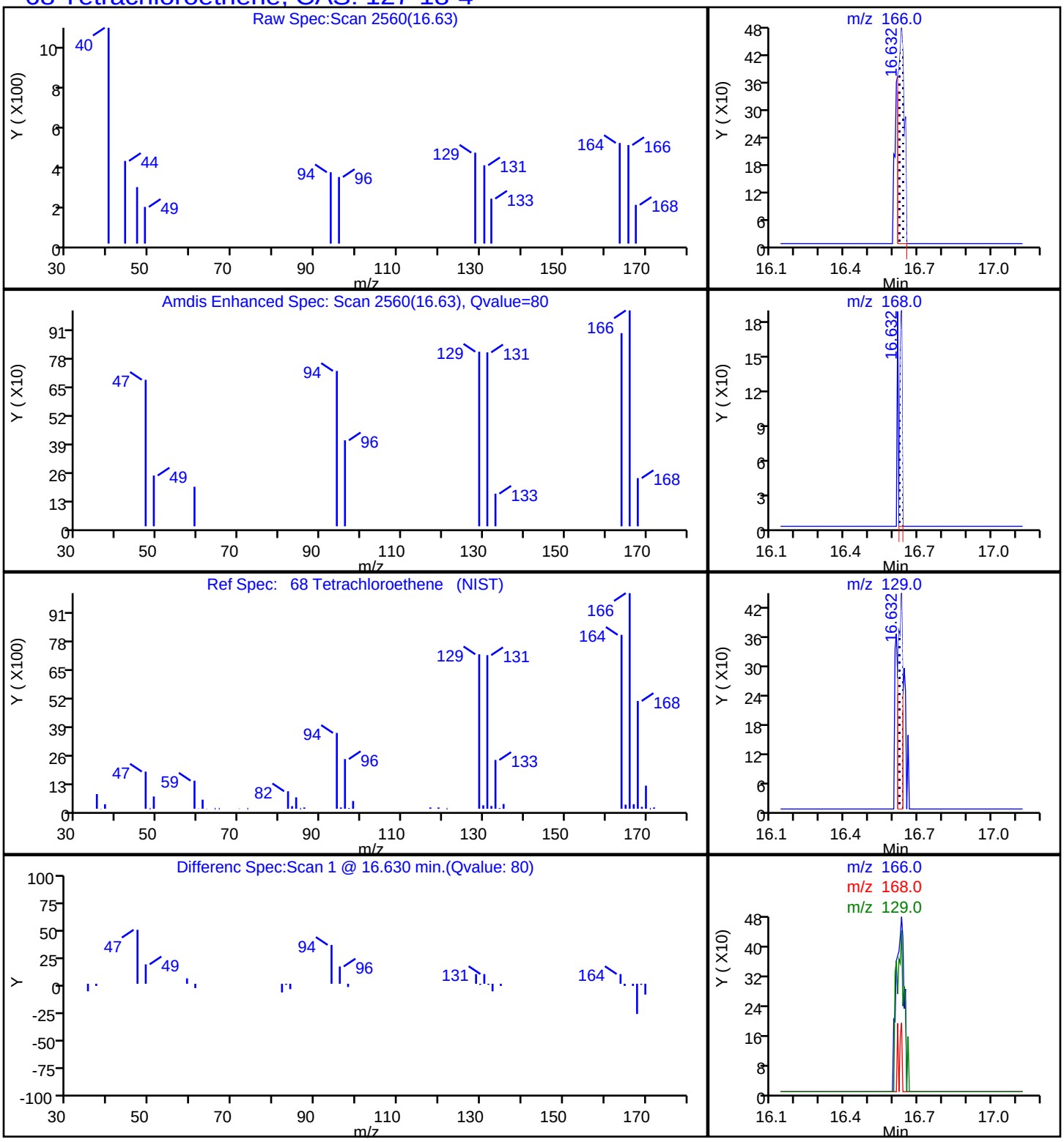
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

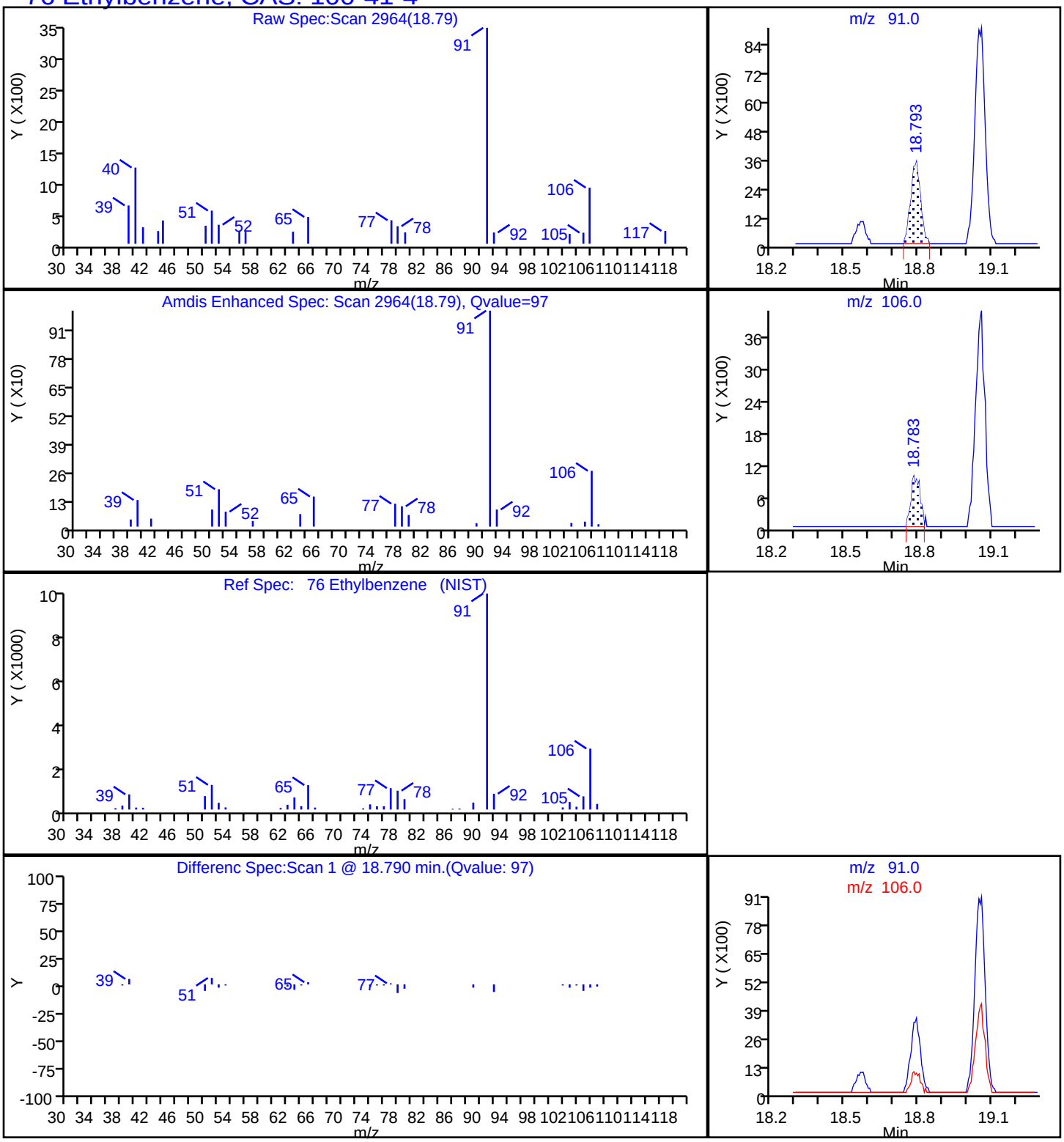
68 Tetrachloroethene, CAS: 127-18-4



TestAmerica Burlington

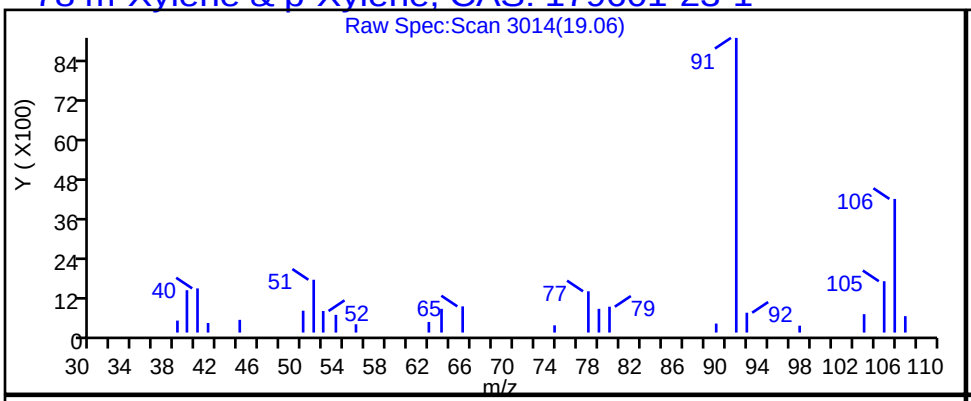
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

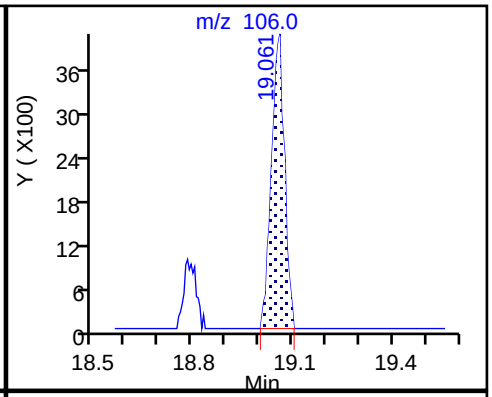
76 Ethylbenzene, CAS: 100-41-4

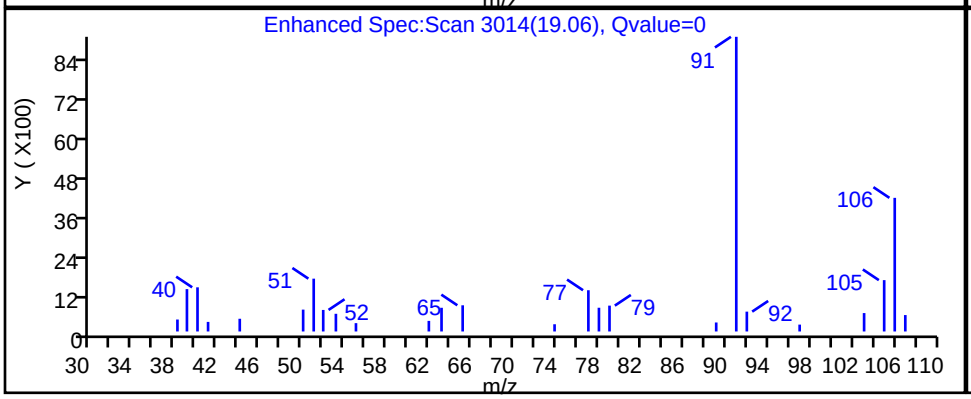


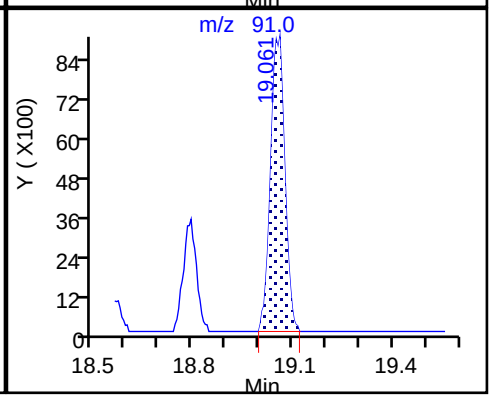
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D
Injection Date: 05-Apr-2018 17:36:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-1 Lab Sample ID: 200-42918-1
Client ID: GC-AA-01 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

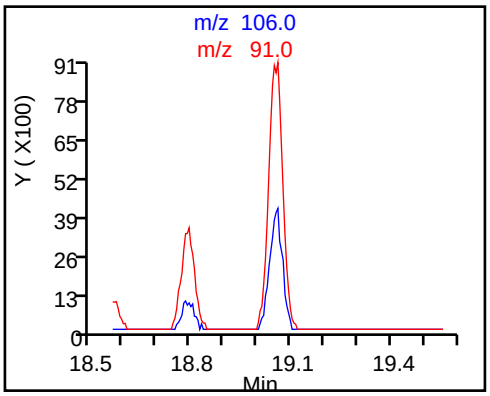
78 m-Xylene & p-Xylene, CAS: 179601-23-1







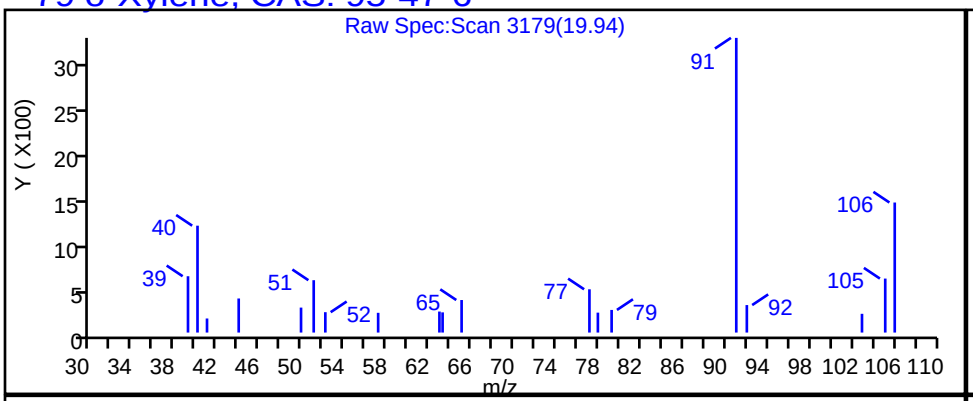


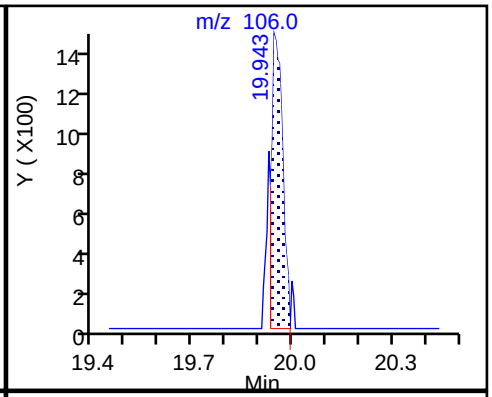


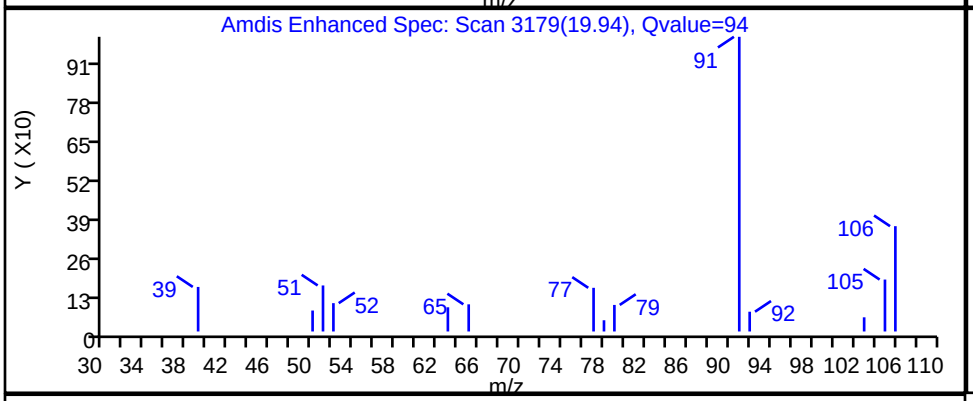
TestAmerica Burlington

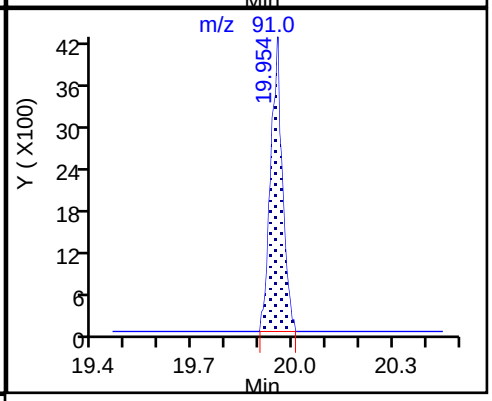
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

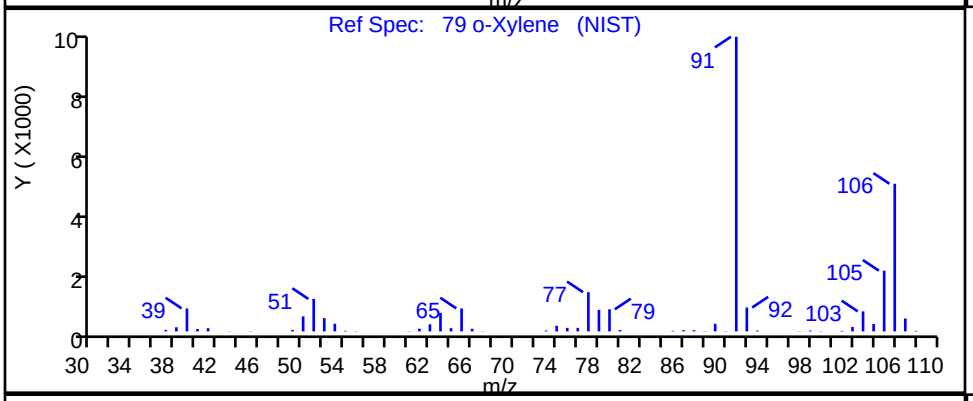
79 o-Xylene, CAS: 95-47-6

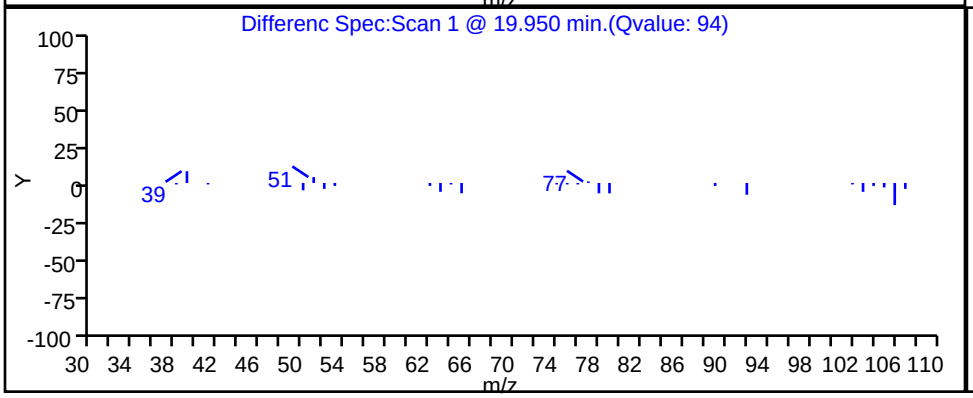


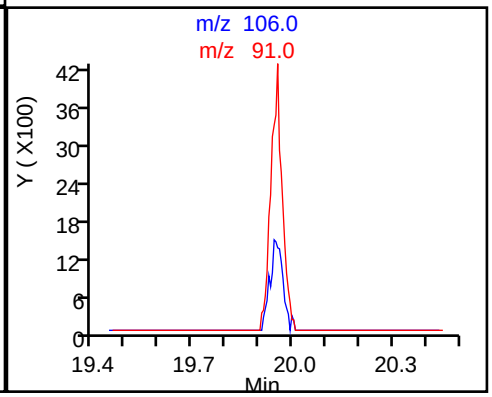












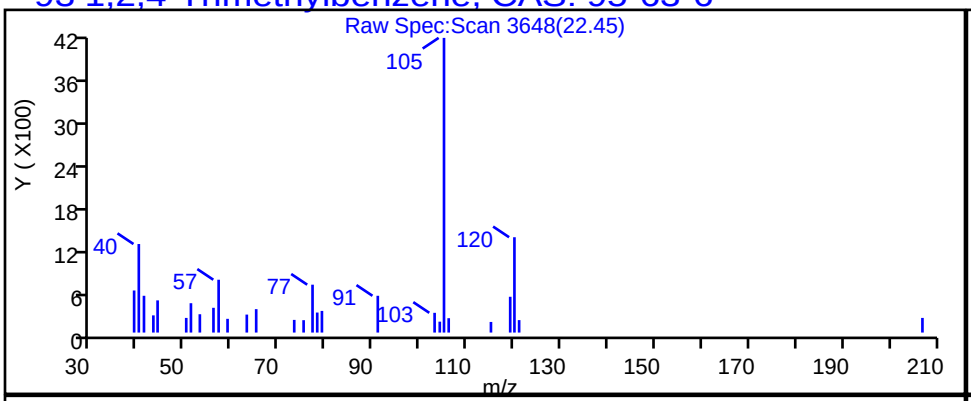
Report Date: 06-Apr-2018 13:46:07 Chrom Revision: 2.2 13-Mar-2018 08:45:20

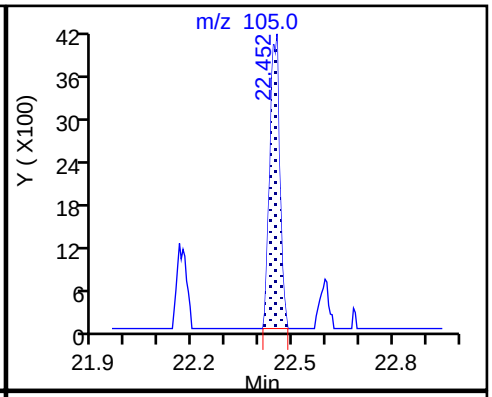
TestAmerica Burlington

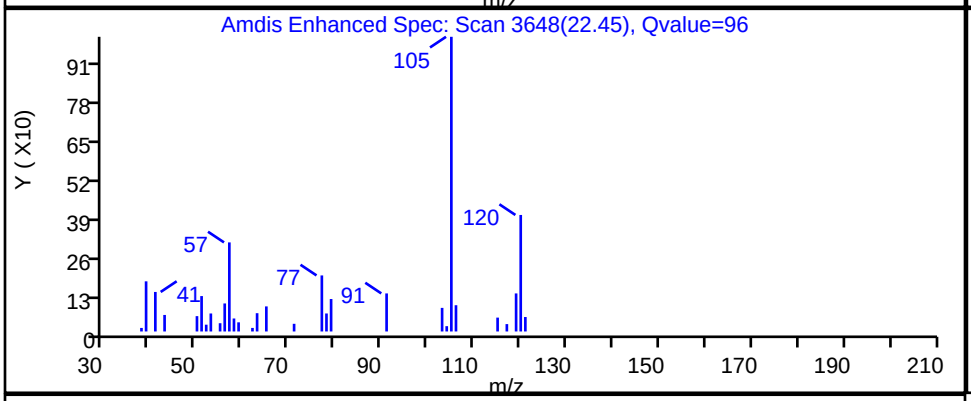
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D

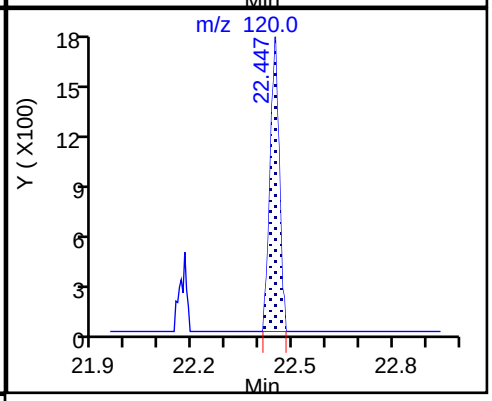
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

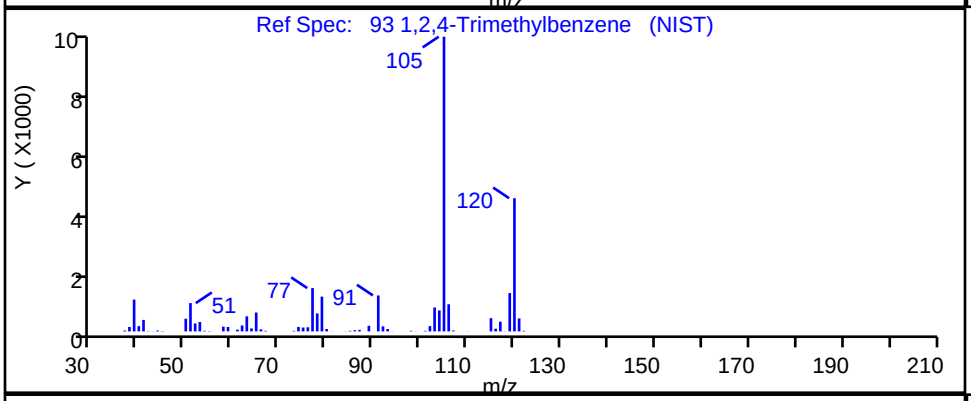
93 1,2,4-Trimethylbenzene, CAS: 95-63-6

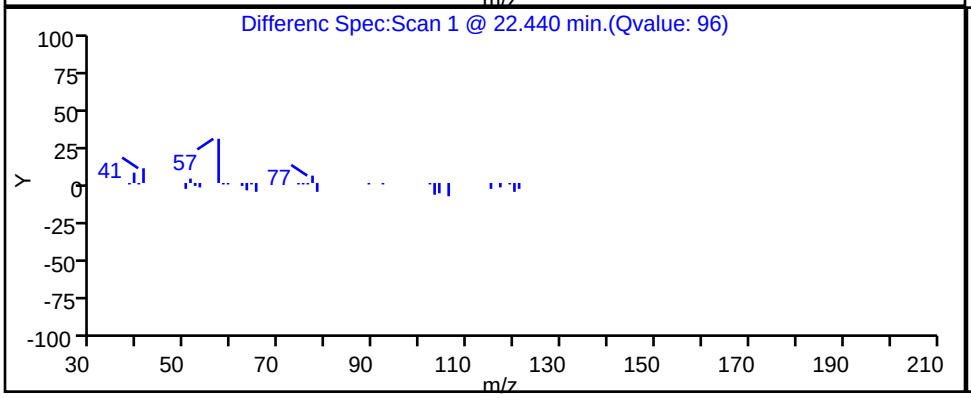


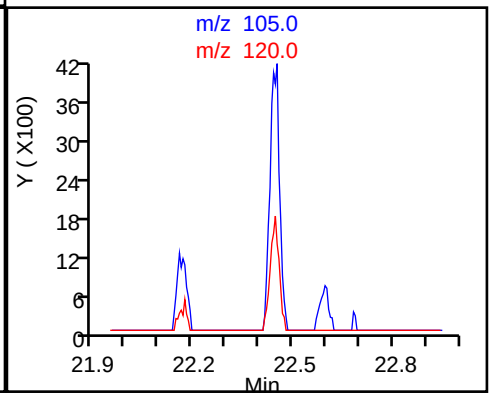












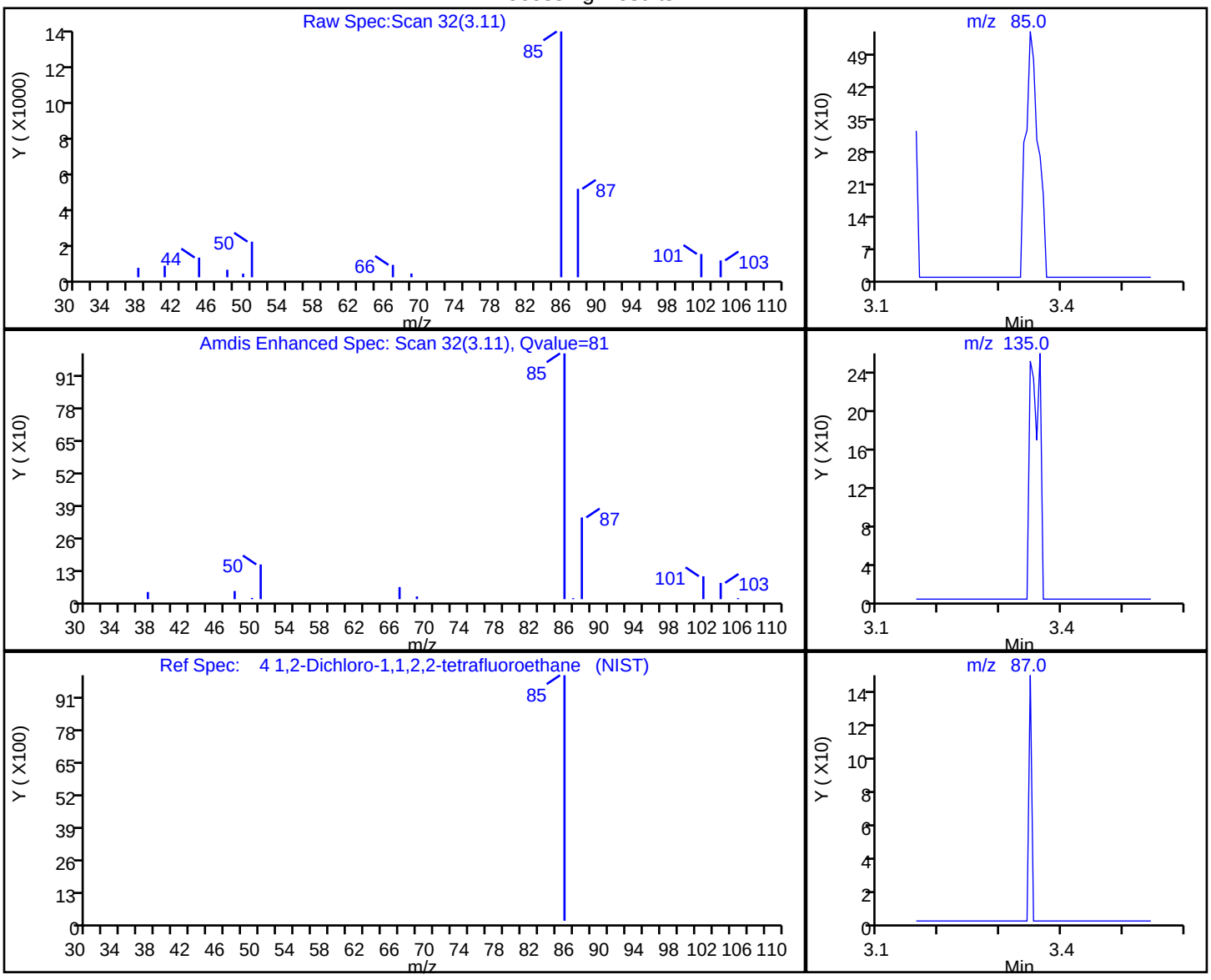
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
3.11	85.00	20124	0.341376
3.35	135.00	0	
3.11	87.00	6568	

Reviewer: puangmaleek, 06-Apr-2018 13:46:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

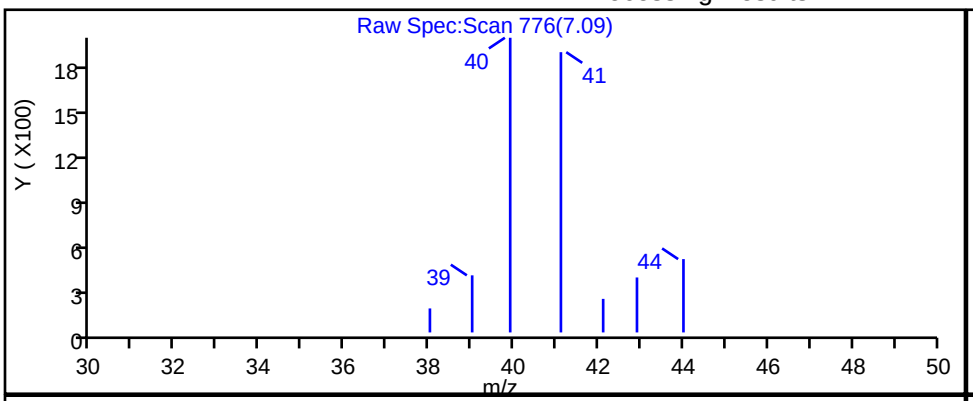
User Disabled Compound Report

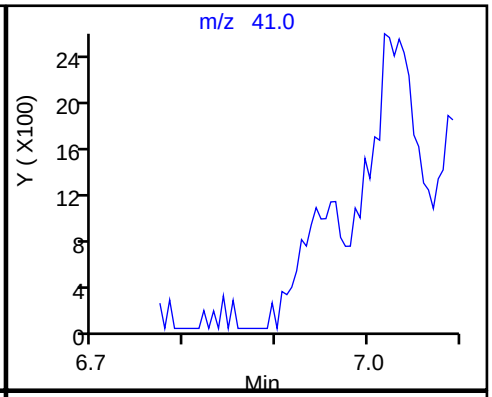
TestAmerica Burlington

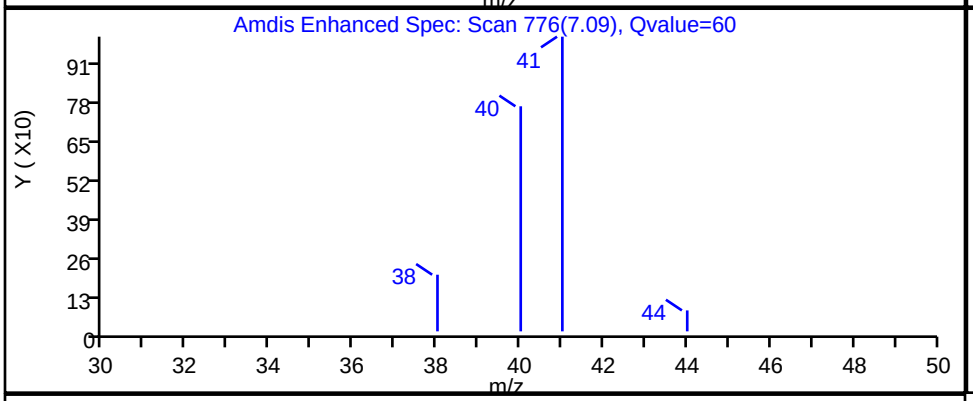
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

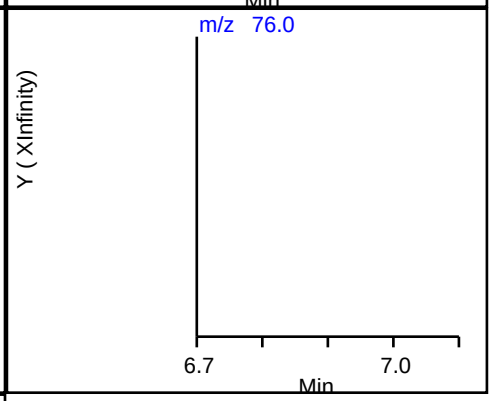
25 3-Chloro-1-propene, CAS: 107-05-1

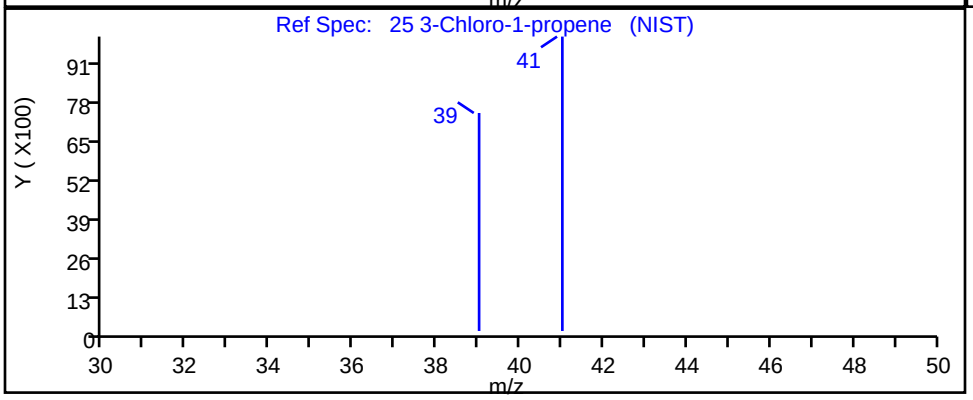
Processing Results











RT	Mass	Response	Amount
7.09	41.00	4393	0.089546
6.93	76.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:46:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

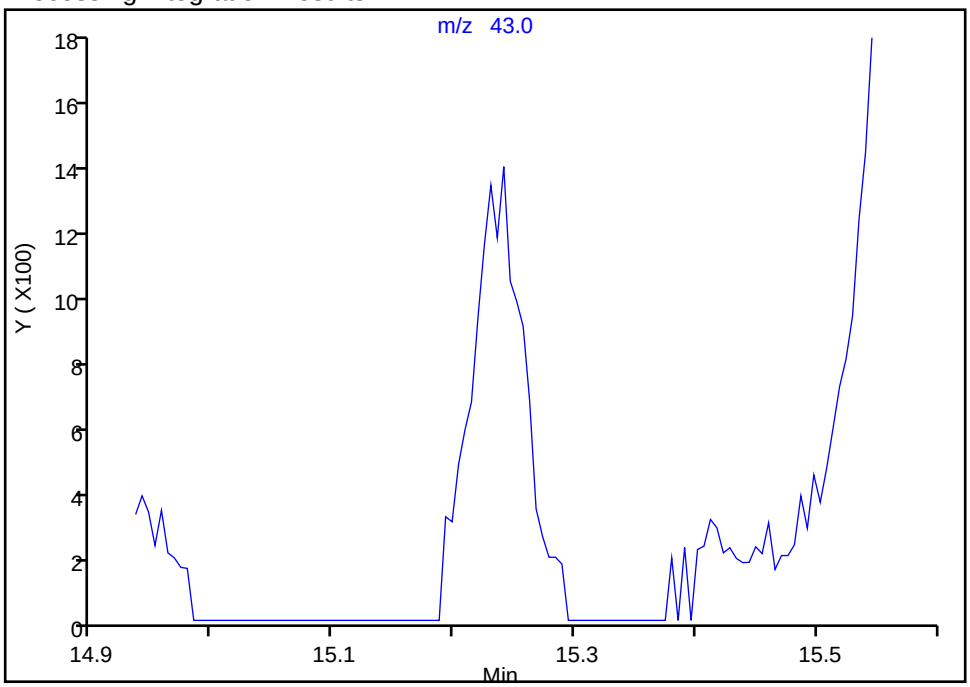
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

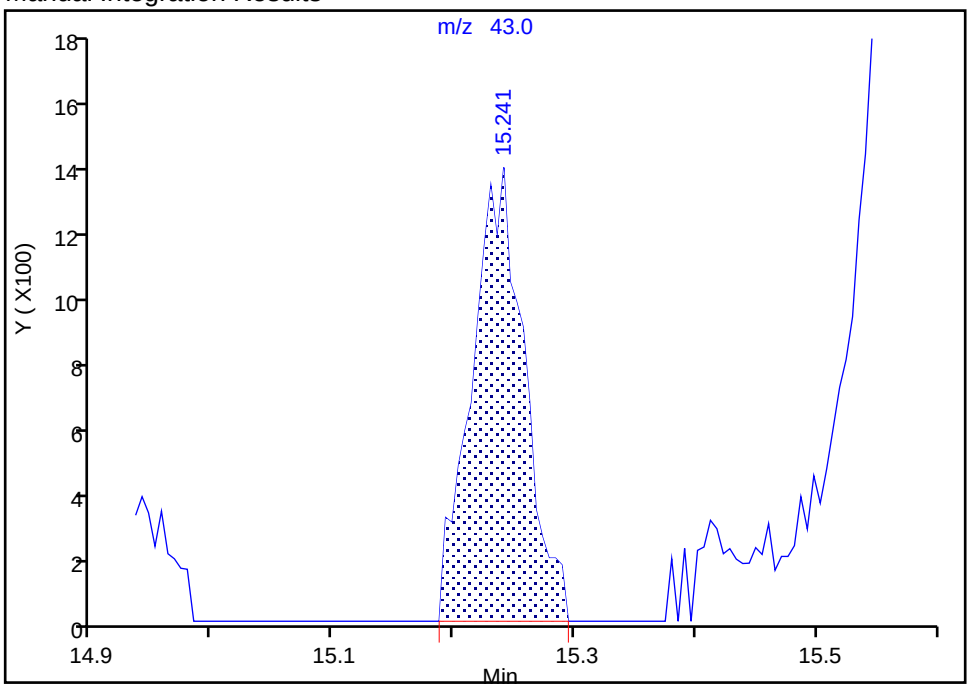
Not Detected
Expected RT: 15.20

Processing Integration Results



Manual Integration Results

RT: 15.24
Area: 4058
Amount: 0.034196
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:45:11
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

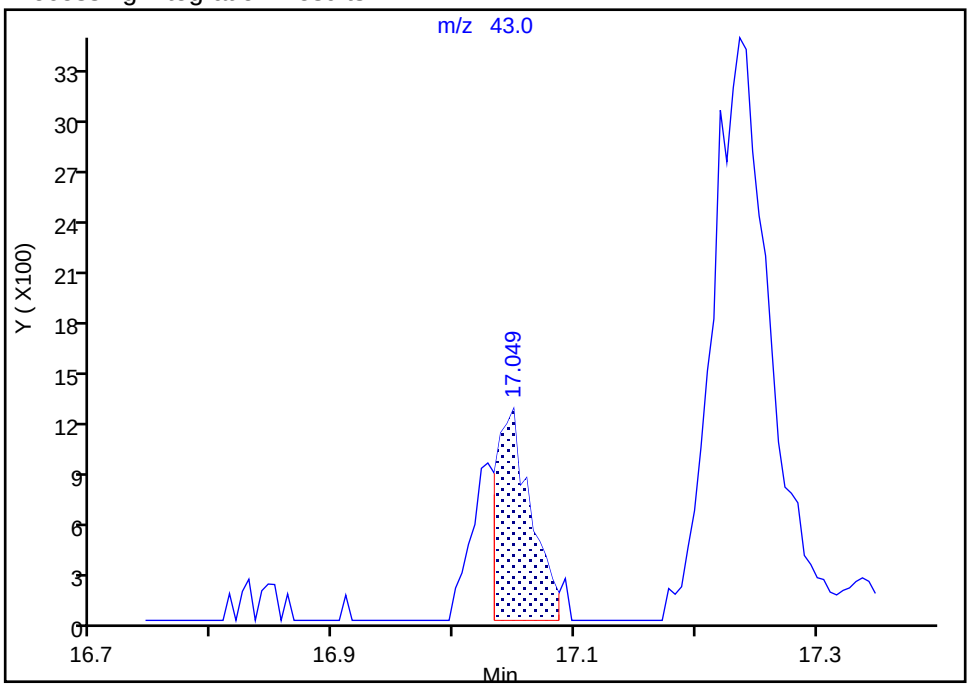
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

69 2-Hexanone, CAS: 591-78-6

Signal: 1

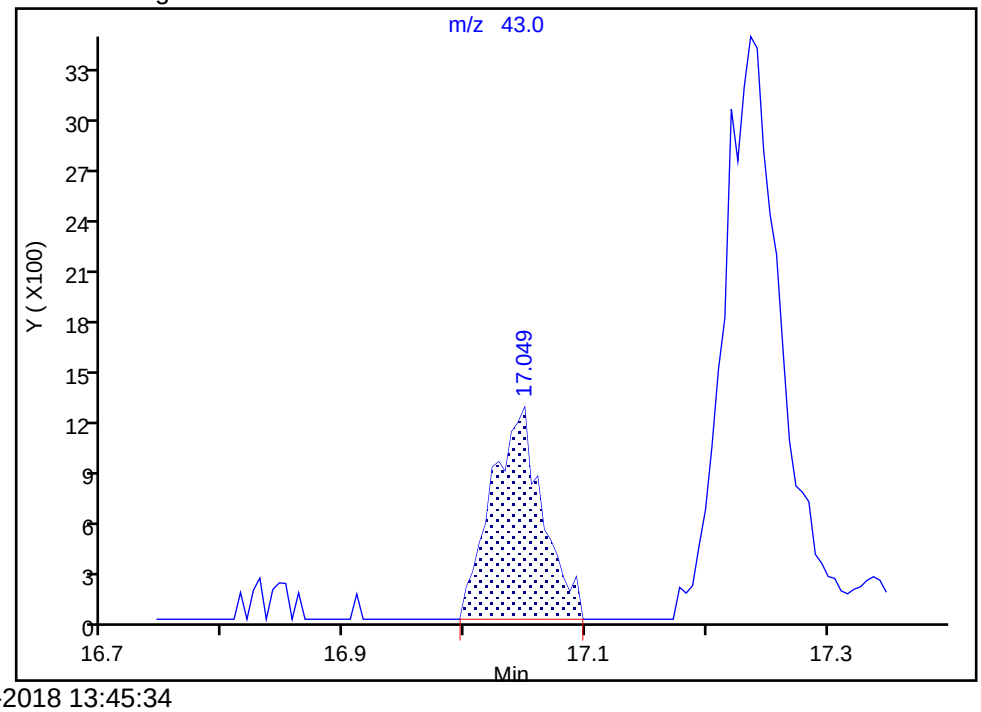
Processing Integration Results

RT: 17.05
Area: 2532
Amount: 0.022372
Amount Units: ppb v/v



Manual Integration Results

RT: 17.05
Area: 3689
Amount: 0.032595
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:45:34

Audit Action: Manually Integrated Audit Reason: Assign Peak

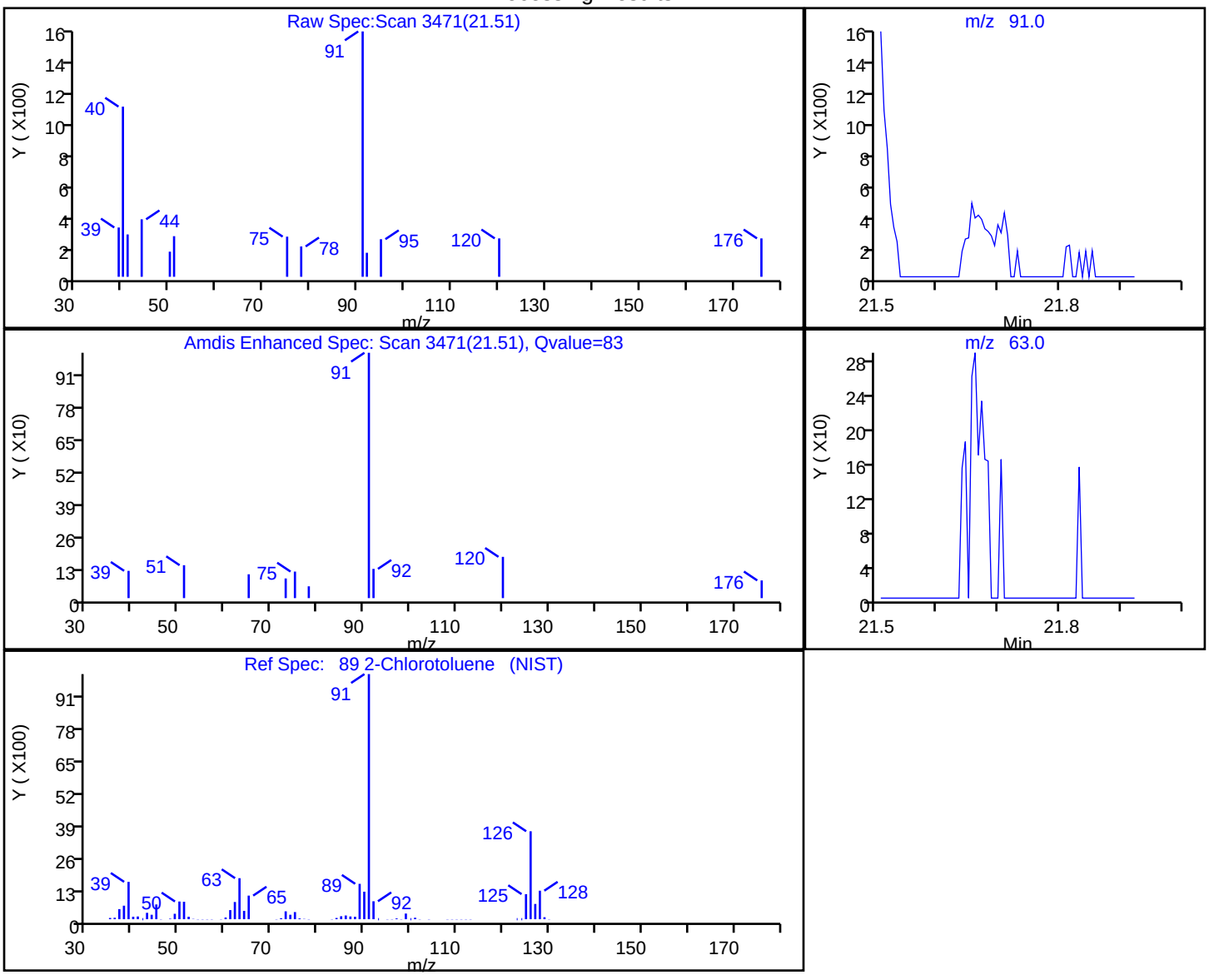
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

89 2-Chlorotoluene, CAS: 95-49-8

Processing Results



RT	Mass	Response	Amount
21.51	91.00	3095	0.021787
21.71	63.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:46:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

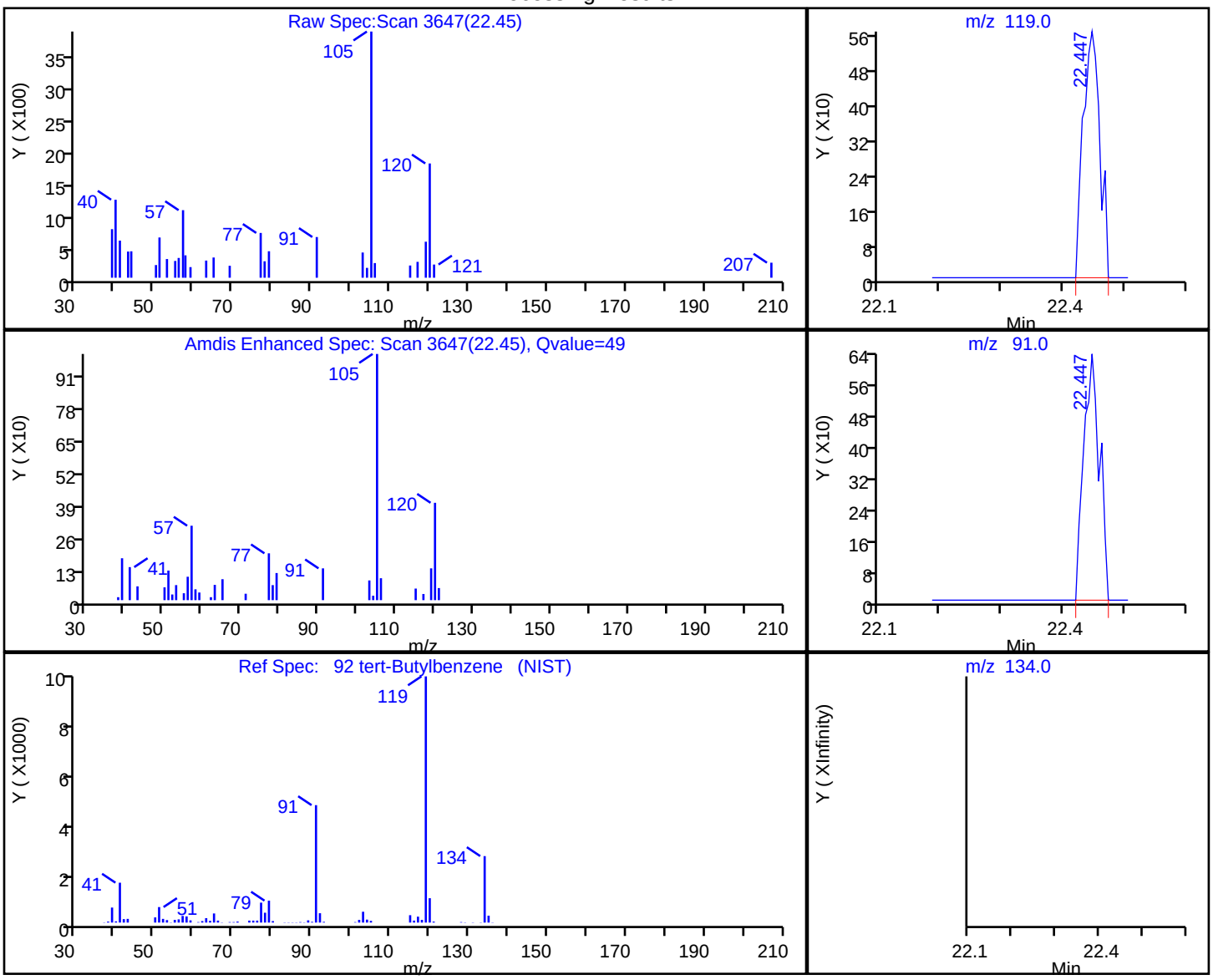
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

92 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
22.45	119.00	1065	0.010059
22.45	91.00	1141	
22.35	134.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:46:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

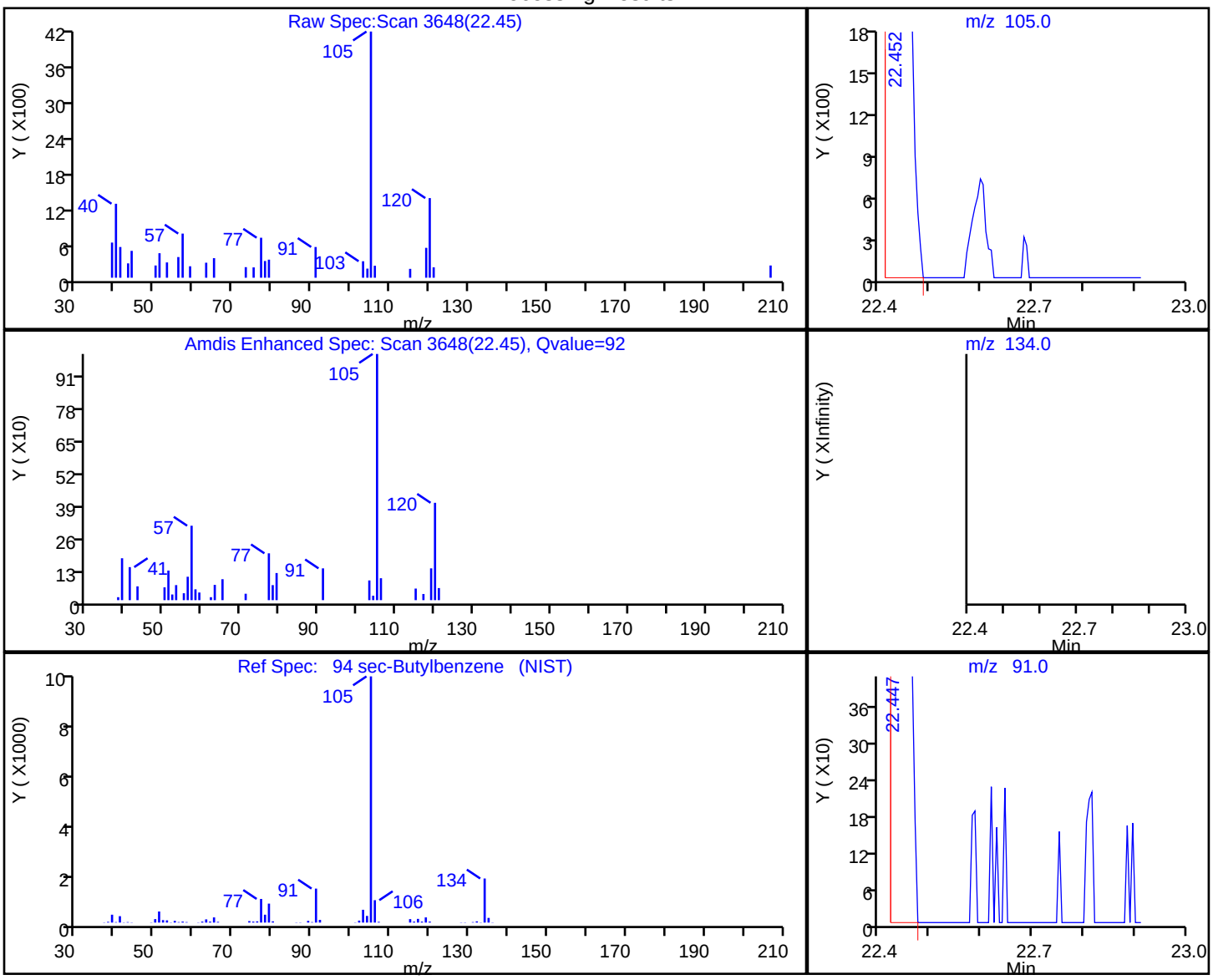
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.45	105.00	8418	0.047933
22.69	134.00	0	
22.45	91.00	1141	

Reviewer: puangmaleek, 06-Apr-2018 13:46:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

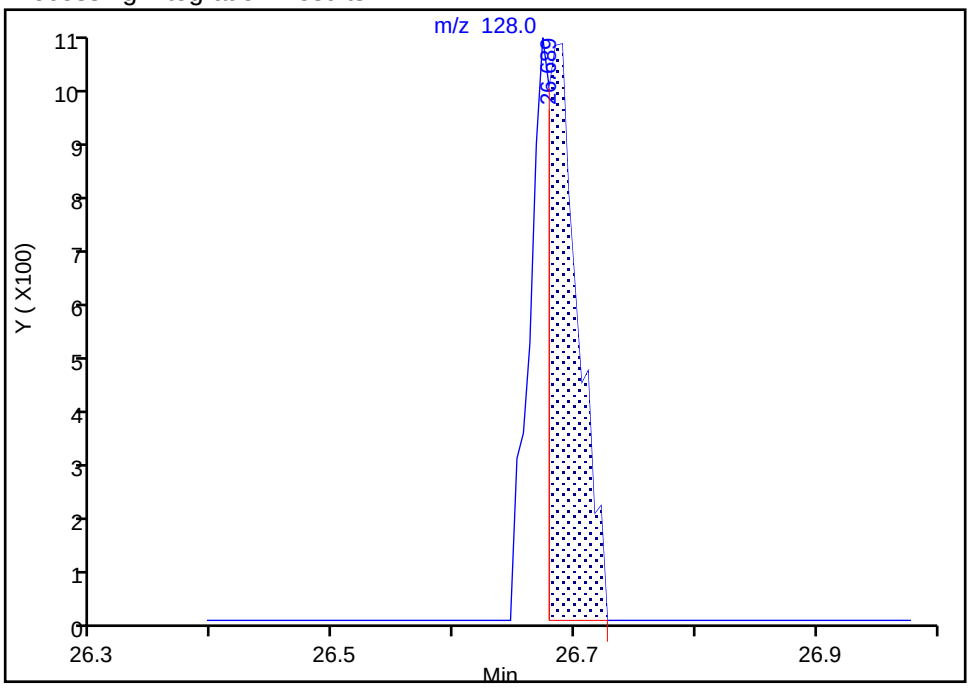
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_10.D				
Injection Date:	05-Apr-2018 17:36:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-1	Lab Sample ID:	200-42918-1		
Client ID:	GC-AA-01 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

Signal: 1

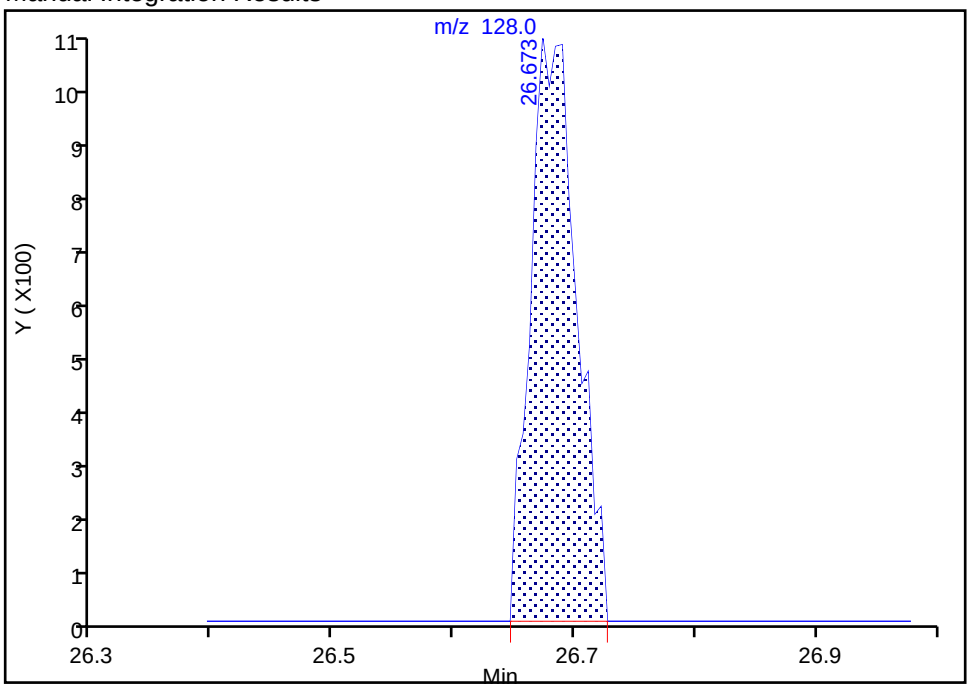
Processing Integration Results

RT: 26.69
Area: 1783
Amount: 0.016807
Amount Units: ppb v/v



Manual Integration Results

RT: 26.67
Area: 2739
Amount: 0.025819
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:44:20

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) Lab Sample ID: 200-42918-2

Matrix: Air Lab File ID: 29949_09.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.31	J	0.50	0.047
75-45-6	Freon 22	86.47	0.21	J	0.50	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.041
74-87-3	Chloromethane	50.49	0.26	J	0.50	0.16
106-97-8	n-Butane	58.12	2.4		0.50	0.046
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.018
106-99-0	1,3-Butadiene	54.09	0.060	J	0.20	0.037
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.036
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.13
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.022
75-69-4	Trichlorofluoromethane	137.37	0.20		0.20	0.031
76-13-1	Freon TF	187.38	0.066	J	0.20	0.027
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.035
67-64-1	*Acetone*	*58.08*	*43*	*E*	*5.0*	*1.3*
67-63-0	Isopropyl alcohol	60.10	1.6	J	5.0	0.13
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.028
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.063
75-09-2	Methylene Chloride	84.93	0.31	J	0.50	0.068
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.7
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.050
110-54-3	n-Hexane	86.17	0.26		0.20	0.046
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.017
78-93-3	Methyl Ethyl Ketone	72.11	2.2		0.50	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.029
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.029
67-66-3	Chloroform	119.38	0.20	U	0.20	0.025
109-99-9	Tetrahydrofuran	72.11	17		5.0	1.2
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.026
110-82-7	Cyclohexane	84.16	0.073	J	0.20	0.045
56-23-5	Carbon tetrachloride	153.81	0.055		0.040	0.011
540-84-1	2,2,4-Trimethylpentane	114.23	0.24		0.20	0.043
71-43-2	Benzene	78.11	0.26		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.034

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) Lab Sample ID: 200-42918-2

Matrix: Air Lab File ID: 29949_09.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.19	J	0.20	0.068
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.0091
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.11
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.035
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	0.76
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.059
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.036
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.065
108-88-3	Toluene	92.14	0.51		0.20	0.035
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.038
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.017
127-18-4	Tetrachloroethene	165.83	0.10		0.040	0.0098
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.086
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.017
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.023
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.22		0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.82		0.50	0.077
95-47-6	Xylene, o-	106.17	0.26		0.20	0.040
1330-20-7	Xylene (total)	106.17	1.1		0.70	0.040
100-42-5	Styrene	104.15	0.20	U	0.20	0.035
75-25-2	Bromoform	252.75	0.20	U	0.20	0.035
98-82-8	Cumene	120.19	0.20	U	0.20	0.039
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.026
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.040
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.040
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.035
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.037
95-63-6	1,2,4-Trimethylbenzene	120.20	0.097	J	0.20	0.057
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.037
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.052
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.050
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) Lab Sample ID: 200-42918-2

Matrix: Air Lab File ID: 29949_09.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.067
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.068
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.045
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.19
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.064
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) | Lab Sample ID: 200-42918-2

Matrix: Air | Lab File ID: 29949_09.D

Analysis Method: TO-15 | Date Collected: 03/28/2018 16:00

Sample wt/vol: 200(mL) | Date Analyzed: 04/05/2018 16:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128151 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	1.5	J	2.5	0.23
75-45-6	Freon 22	86.47	0.75	J	1.8	0.71
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.29
74-87-3	Chloromethane	50.49	0.55	J	1.0	0.33
106-97-8	n-Butane	58.12	5.8		1.2	0.11
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.046
106-99-0	1,3-Butadiene	54.09	0.13	J	0.44	0.082
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.14
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.34
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.096
75-69-4	Trichlorofluoromethane	137.37	1.1		1.1	0.17
76-13-1	Freon TF	187.38	0.51	J	1.5	0.21
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.14
67-64-1	*Acetone*	*58.08*	*100*	*E*	*12*	*3.1*
67-63-0	Isopropyl alcohol	60.10	3.8	J	12	0.32
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.087
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.20
75-09-2	Methylene Chloride	84.93	1.1	J	1.7	0.24
75-65-0	tert-Butyl alcohol	74.12	15	U	15	5.2
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.20
110-54-3	n-Hexane	86.17	0.93		0.70	0.16
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.069
78-93-3	Methyl Ethyl Ketone	72.11	6.4		1.5	0.32
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.11
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.11
67-66-3	Chloroform	119.38	0.98	U	0.98	0.12
109-99-9	Tetrahydrofuran	72.11	51		15	3.5
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.14
110-82-7	Cyclohexane	84.16	0.25	J	0.69	0.15
56-23-5	Carbon tetrachloride	153.81	0.34		0.25	0.069
540-84-1	2,2,4-Trimethylpentane	114.23	1.1		0.93	0.20
71-43-2	Benzene	78.11	0.82		0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) Lab Sample ID: 200-42918-2

Matrix: Air Lab File ID: 29949_09.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.77	J	0.82	0.28
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.049
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.45
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.16
123-91-1	1,4-Dioxane	88.11	18	U	18	2.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.16
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	0.27
108-88-3	Toluene	92.14	1.9		0.75	0.13
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.17
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.093
127-18-4	Tetrachloroethene	165.83	0.71		0.27	0.066
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	0.35
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.14
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.18
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.96		0.87	0.15
179601-23-1	m,p-Xylene	106.17	3.6		2.2	0.33
95-47-6	Xylene, o-	106.17	1.1		0.87	0.17
1330-20-7	Xylene (total)	106.17	4.7		3.0	0.17
100-42-5	Styrene	104.15	0.85	U	0.85	0.15
75-25-2	Bromoform	252.75	2.1	U	2.1	0.36
98-82-8	Cumene	120.19	0.98	U	0.98	0.19
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.18
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.20
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.20
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.18
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.48	J	0.98	0.28
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.20
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.29
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.30
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.38

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) Lab Sample ID: 200-42918-2

Matrix: Air Lab File ID: 29949_09.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.35
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.37
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.27
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.68
91-20-3	Naphthalene	128.17	2.6	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D
Lims ID: 200-42918-A-2
Client ID: GC-IA-102 (AS)
Sample Type: Client
Inject. Date: 05-Apr-2018 16:45:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029949-009
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 13:44:04 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 13:44:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.108	3.106	0.000	99	21718	0.3106	
3 Chlorodifluoromethane	51	3.156	3.149	0.005	97	13302	0.2131	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354				ND	U
5 Chloromethane	50	3.488	3.481	0.006	99	9407	0.2640	
6 Butane	43	3.665	3.662	0.000	99	169422	2.43	
7 Vinyl chloride	62		3.707				ND	
8 Butadiene	54	3.771	3.777	-0.006	85	1709	0.0597	
10 Bromomethane	94		4.413				ND	
11 Chloroethane	64		4.638				ND	
13 Vinyl bromide	106		4.996				ND	
14 Trichlorofluoromethane	101	5.088	5.088	0.001	95	13235	0.2021	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.104	0.000	63	2811	0.0664	
21 1,1-Dichloroethene	96		6.163				ND	
22 Acetone	43	6.393	6.400	-0.010	99	2907582	42.6	E
23 Carbon disulfide	76	6.543	6.548	-0.005	94	1169	0.0175	
24 Isopropyl alcohol	45	6.698	6.682	0.016	100	110447	1.56	
25 3-Chloro-1-propene	41		6.933				ND	U
27 Methylene Chloride	49	7.227	7.223	0.000	87	14059	0.3148	
28 2-Methyl-2-propanol	59	7.490	7.452	0.038	97	65971	0.9053	
29 Methyl tert-butyl ether	73		7.623				ND	
31 trans-1,2-Dichloroethene	61		7.661				ND	
33 Hexane	57	8.035	8.030	0.005	86	13918	0.2638	
34 1,1-Dichloroethane	63		8.543				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.677				ND	
38 2-Butanone (MEK)	72	9.742	9.737	0.000	96	32865	2.16	
* 40 Chlorobromomethane	128	10.159	10.159	0.000	83	179214	10.0	
41 Tetrahydrofuran	42	10.170	10.165	0.000	89	1015891	17.3	
42 Chloroform	83	10.293	10.293	-0.005	1	1125	0.0183	7a
43 Cyclohexane	84	10.528	10.528	-0.011	78	2763	0.0734	M
44 1,1,1-Trichloroethane	97		10.576				ND	
45 Carbon tetrachloride	117	10.838	10.834	0.000	89	2981	0.0547	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	46 Isooctane	57	11.277	11.278	-0.005	92	50148	0.2405	
	47 Benzene	78	11.331	11.331	-0.005	97	25342	0.2579	
	48 1,2-Dichloroethane	62		11.539				ND	
	49 n-Heptane	43	11.694	11.694	-0.006	96	18384	0.1872	
*	50 1,4-Difluorobenzene	114	12.235	12.240	-0.005	98	1079073	10.0	
	53 Trichloroethene	95		12.732				ND	
	54 1,2-Dichloropropane	63		13.331				ND	
	55 Methyl methacrylate	69		13.513				ND	
	56 1,4-Dioxane	88		13.572				ND	
	58 Dichlorobromomethane	83		13.914				ND	
	60 cis-1,3-Dichloropropene	75		14.893				ND	
	61 4-Methyl-2-pentanone (MIBK	43	15.236	15.236	0.032	71	6954	0.0546	7M
	65 Toluene	92	15.493	15.499	-0.010	90	31911	0.5075	
	66 trans-1,3-Dichloropropene	75		16.145				ND	
	67 1,1,2-Trichloroethane	83		16.541				ND	
	68 Tetrachloroethene	166	16.632	16.632	0.000	82	3706	0.1045	M
	69 2-Hexanone	43	17.039	17.039	0.016	55	9839	0.0819	7a
	71 Chlorodibromomethane	129		17.338				ND	
	72 Ethylene Dibromide	107		17.622				ND	
*	74 Chlorobenzene-d5	117	18.563	18.569	-0.006	99	966876	10.0	
	75 Chlorobenzene	112		18.627				ND	
	76 Ethylbenzene	91	18.788	18.788	-0.005	98	33104	0.2211	
	78 m-Xylene & p-Xylene	106	19.056	19.050	0.001	0	42218	0.8211	
S	73 Xylenes, Total	106				0		1.08	
	79 o-Xylene	106	19.954	19.954	0.000	91	13129	0.2623	M
	80 Styrene	104	20.013	20.007	0.000	74	1642	0.0216	
	81 Bromoform	173		20.484				ND	
	82 Isopropylbenzene	105	20.714	20.708	0.000	1	1548	0.0101	
	84 1,1,2,2-Tetrachloroethane	83		21.441				ND	
	85 N-Propylbenzene	91	21.495	21.494	-0.005	95	3755	0.0177	
	88 4-Ethyltoluene	105	21.709	21.704	0.000	61	3894	0.0249	
	89 2-Chlorotoluene	91		21.714				ND	U
	90 1,3,5-Trimethylbenzene	105	21.827	21.820	0.000	90	3202	0.0247	
	92 tert-Butylbenzene	119		22.346				ND	U
	93 1,2,4-Trimethylbenzene	105	22.442	22.441	-0.005	95	12609	0.0970	
	94 sec-Butylbenzene	105		22.688				ND	U
	95 4-Isopropyltoluene	119		22.902				ND	
	96 1,3-Dichlorobenzene	146		22.929				ND	
	97 1,4-Dichlorobenzene	146		23.073				ND	
	98 Benzyl chloride	91		23.282				ND	
	100 n-Butylbenzene	91		23.496				ND	
	101 1,2-Dichlorobenzene	146		23.624				ND	
	103 1,2,4-Trichlorobenzene	180		26.187				ND	
	104 Hexachlorobutadiene	225		26.374				ND	
	105 Naphthalene	128	26.684	26.677	0.000	95	2766	0.0246	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

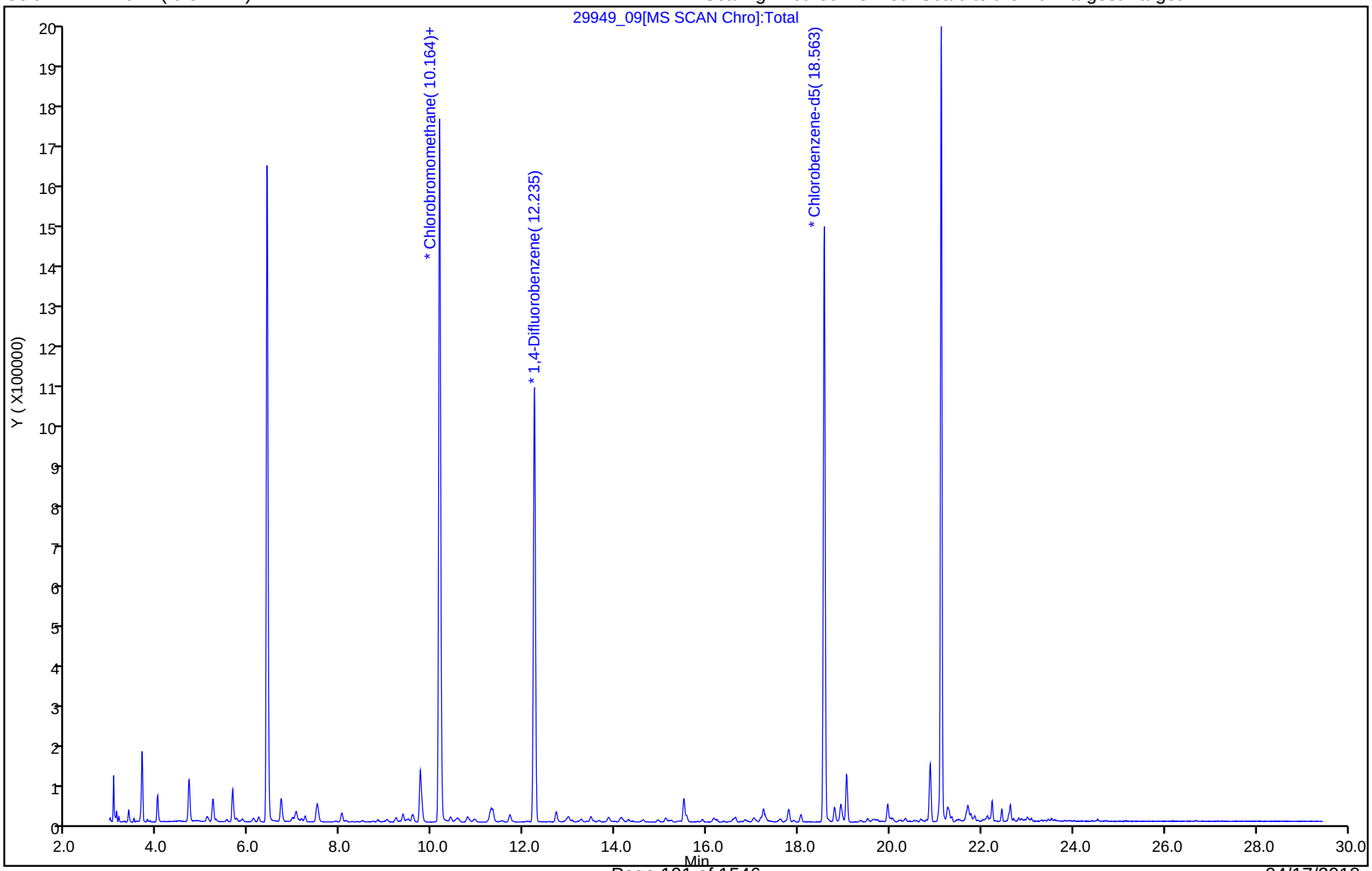
Report Date: 06-Apr-2018 13:44:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

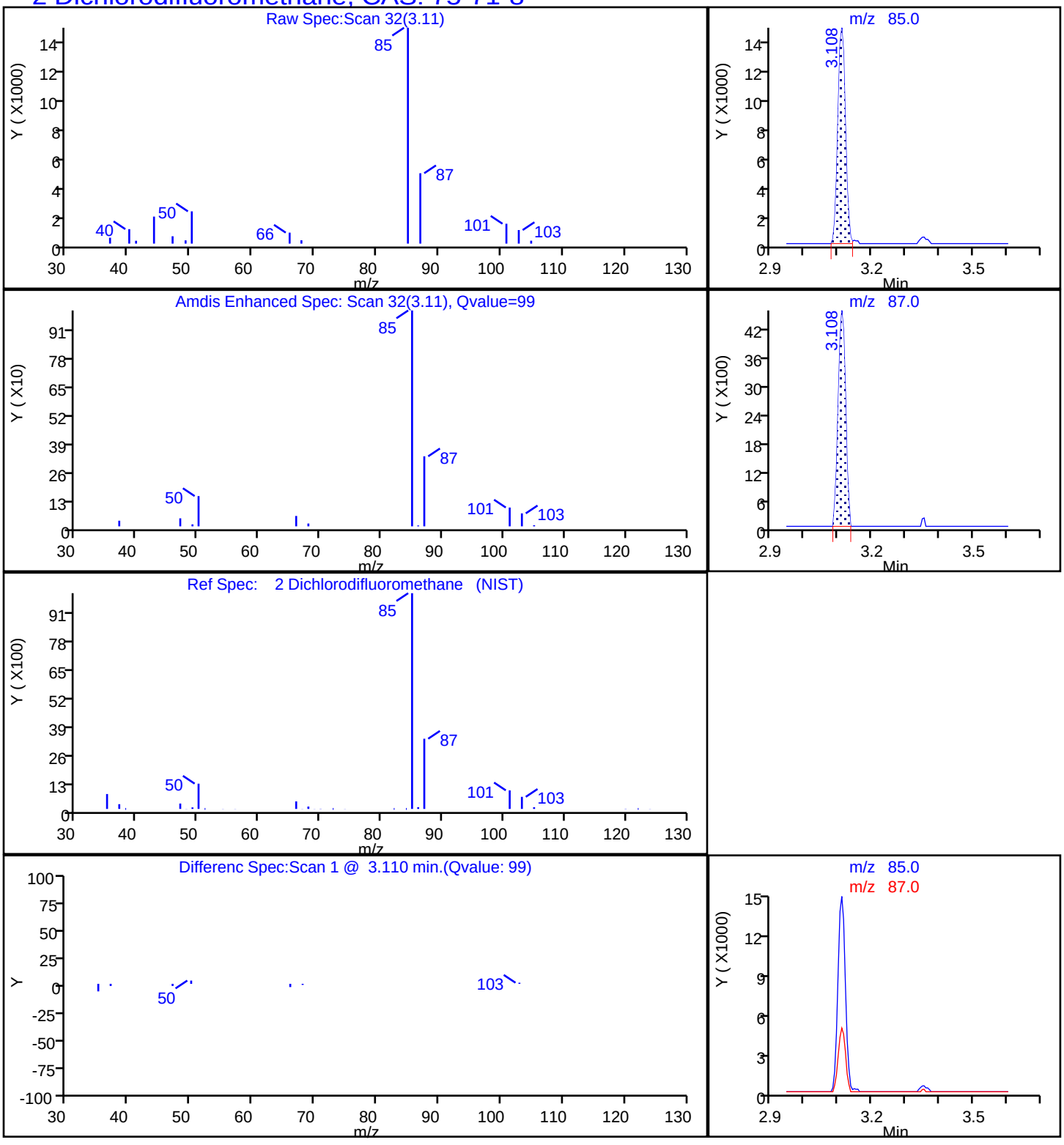
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2	Worklist Smp#:	9
Client ID:	GC-IA-102 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8



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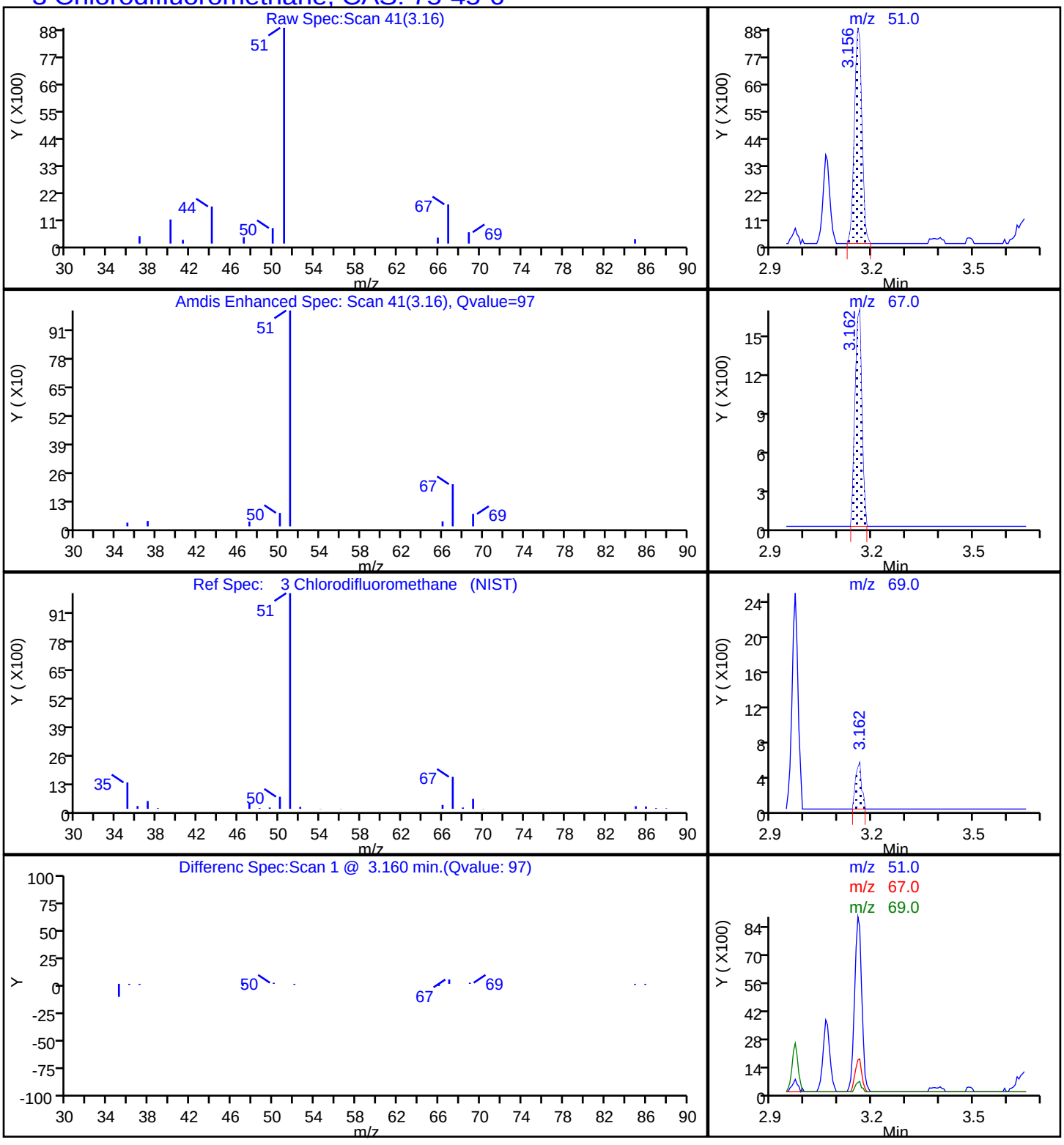
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

3 Chlorodifluoromethane, CAS: 75-45-6



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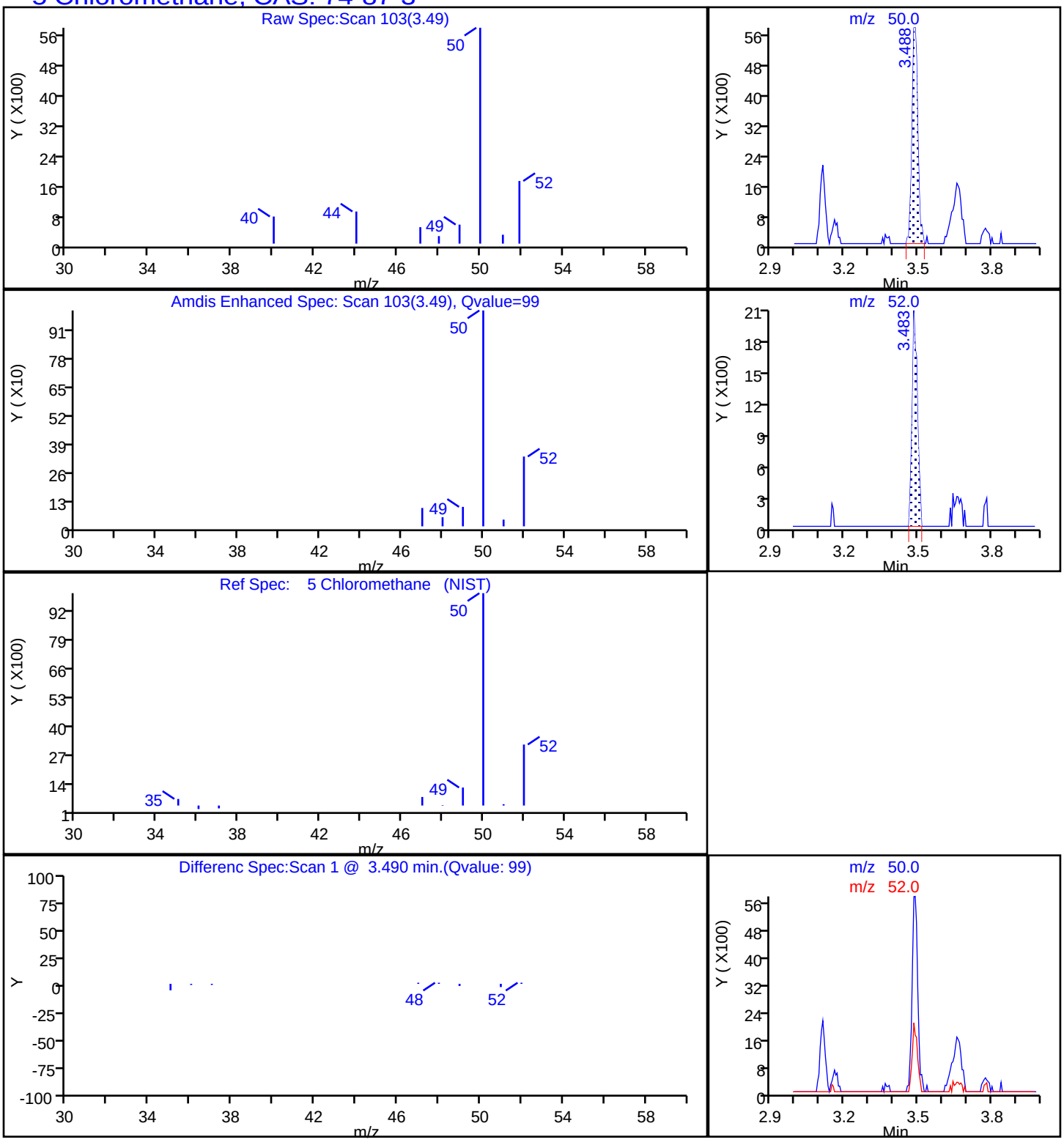
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

5 Chloromethane, CAS: 74-87-3



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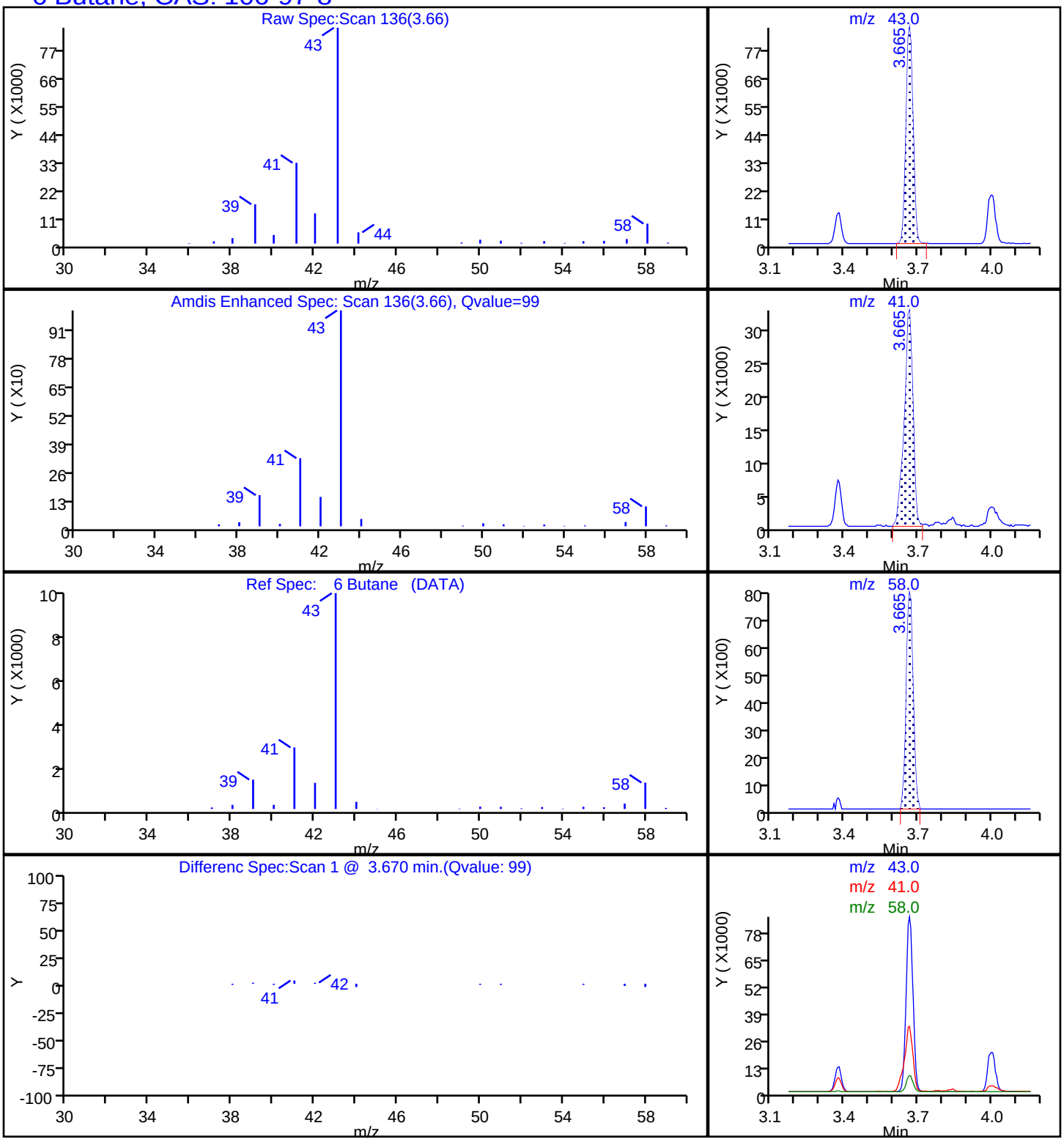
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

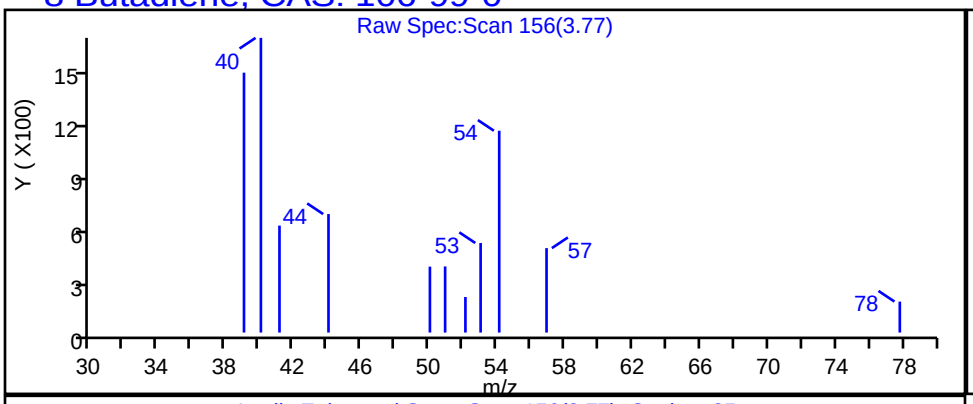
6 Butane, CAS: 106-97-8

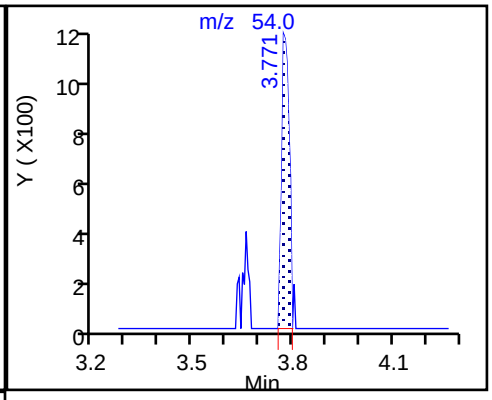


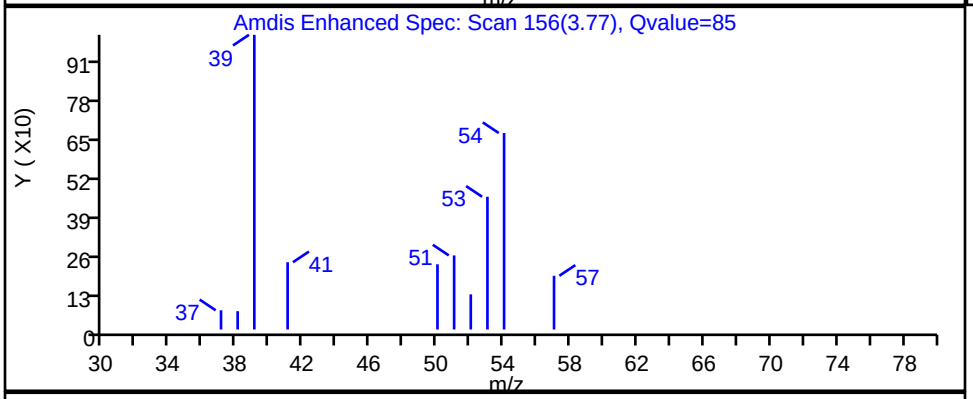
TestAmerica Burlington

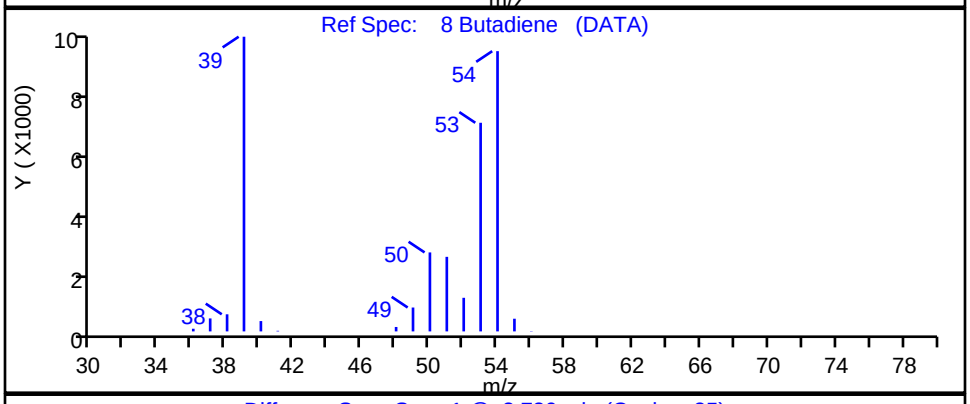
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

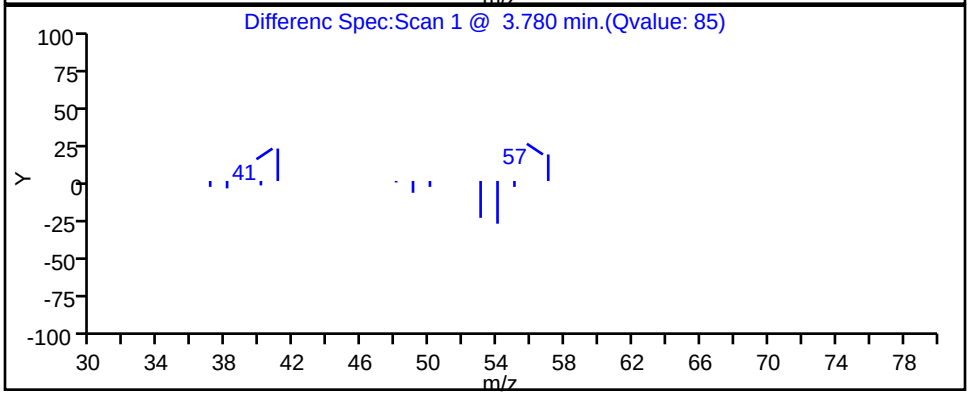
8 Butadiene, CAS: 106-99-0





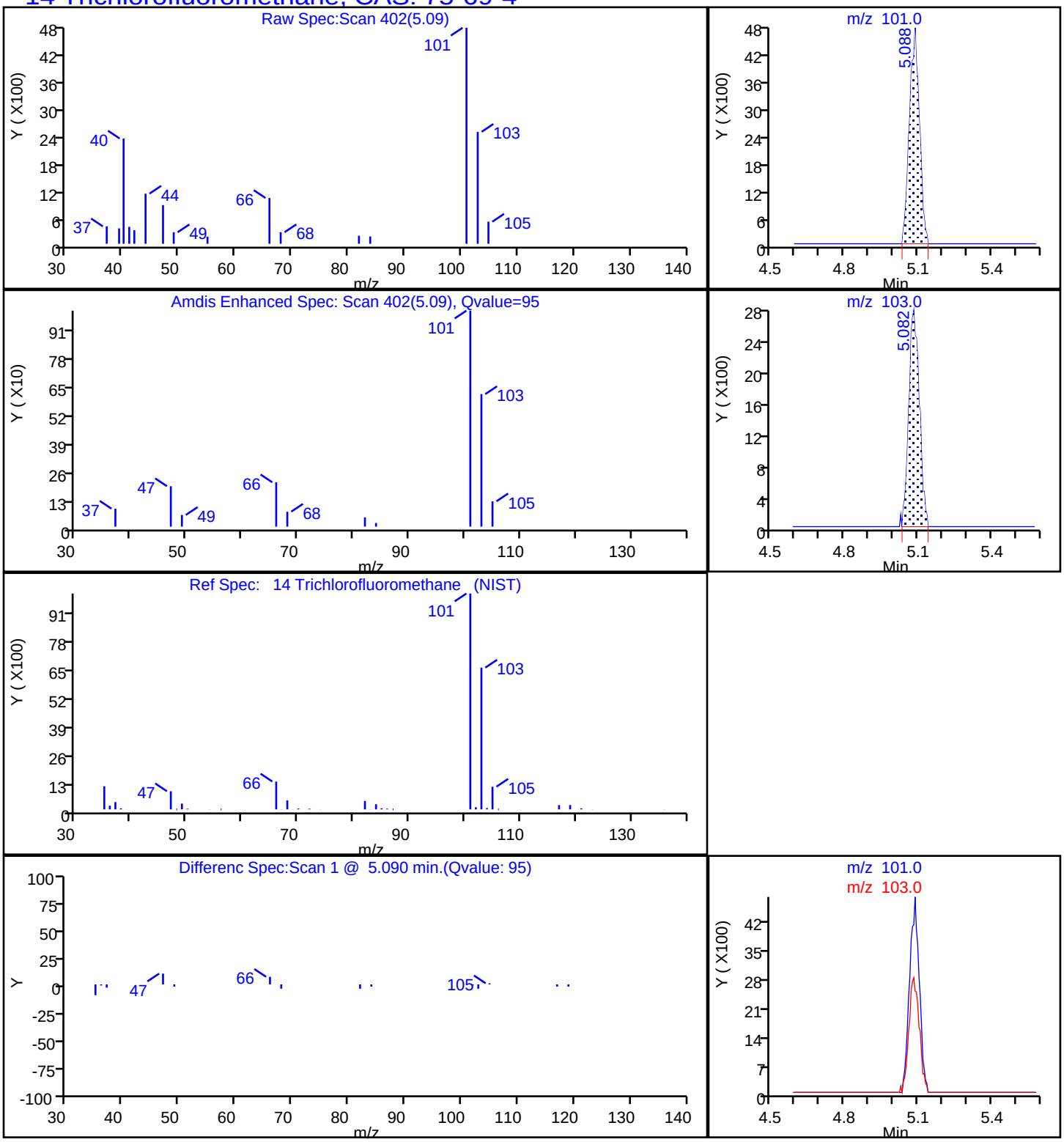






Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

14 Trichlorofluoromethane, CAS: 75-69-4



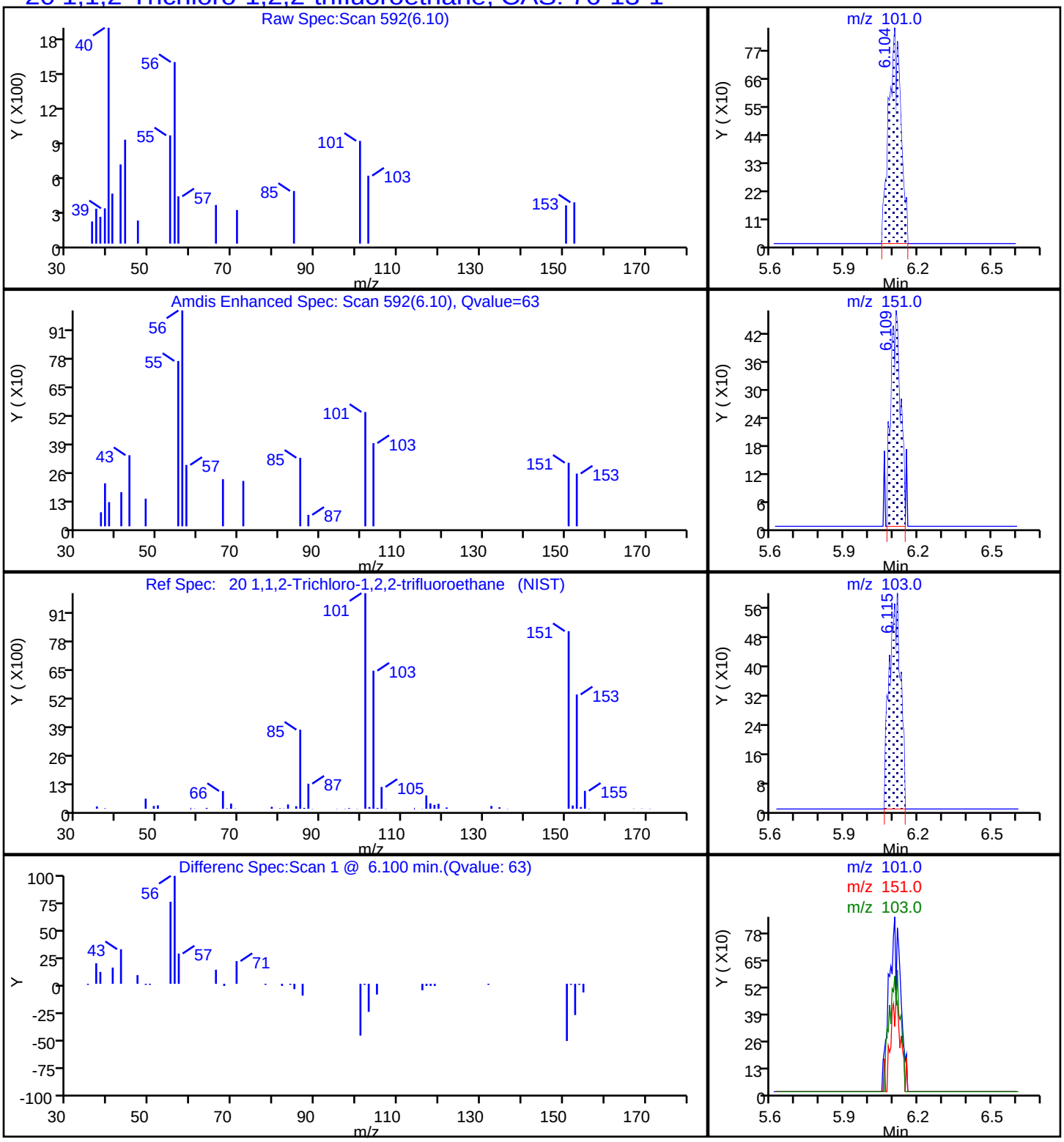
Report Date: 06-Apr-2018 13:44:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

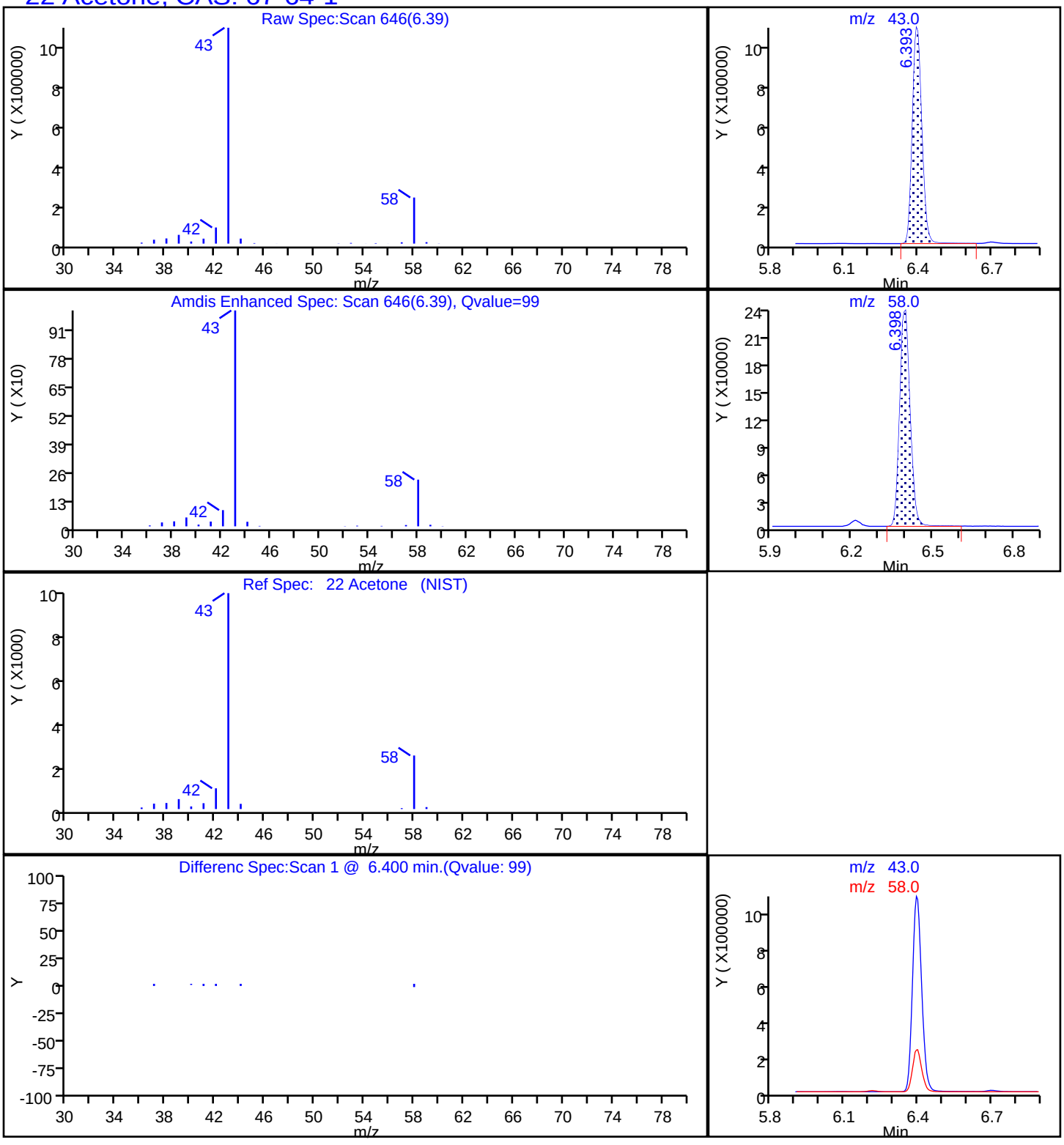
20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1



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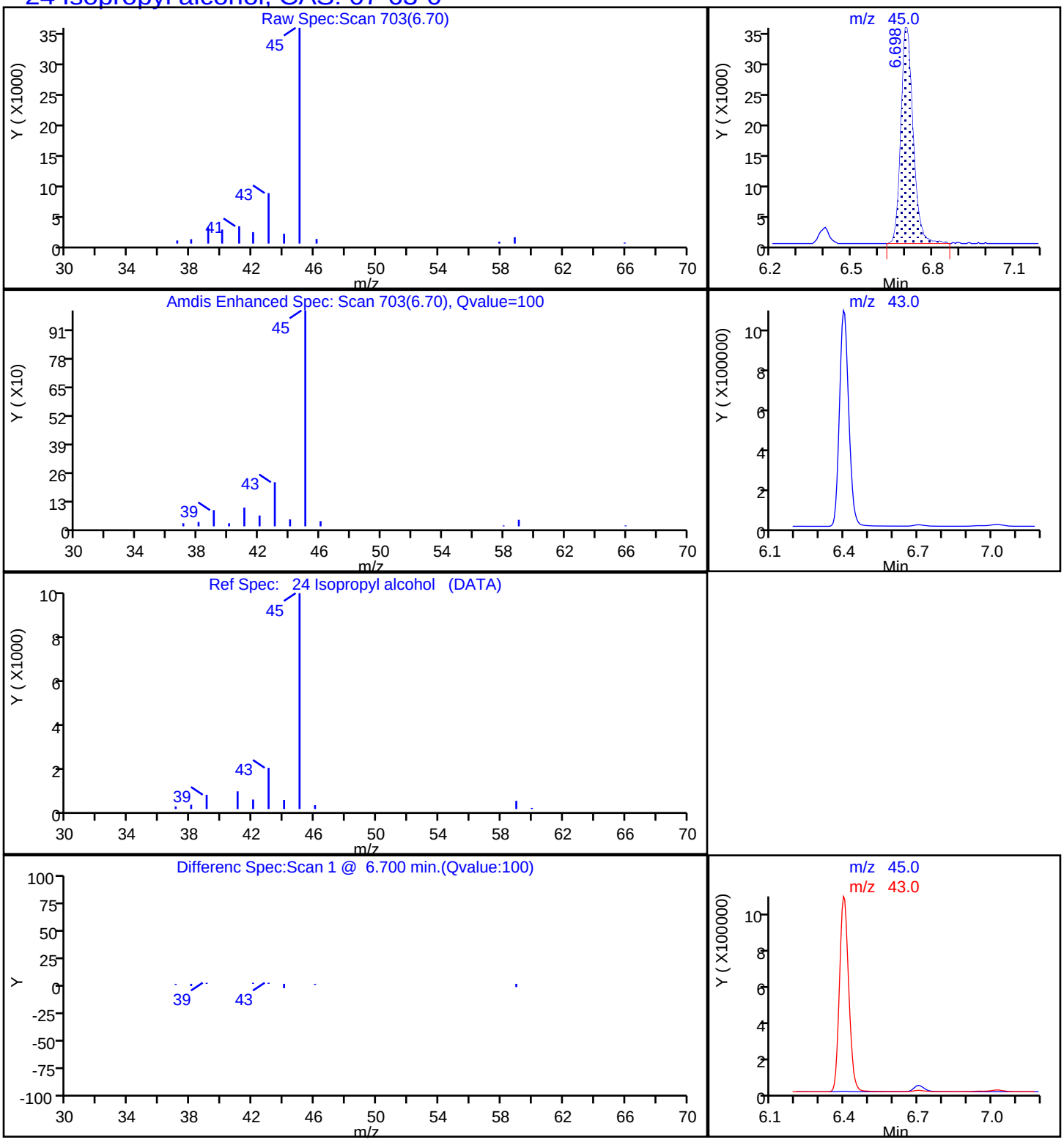
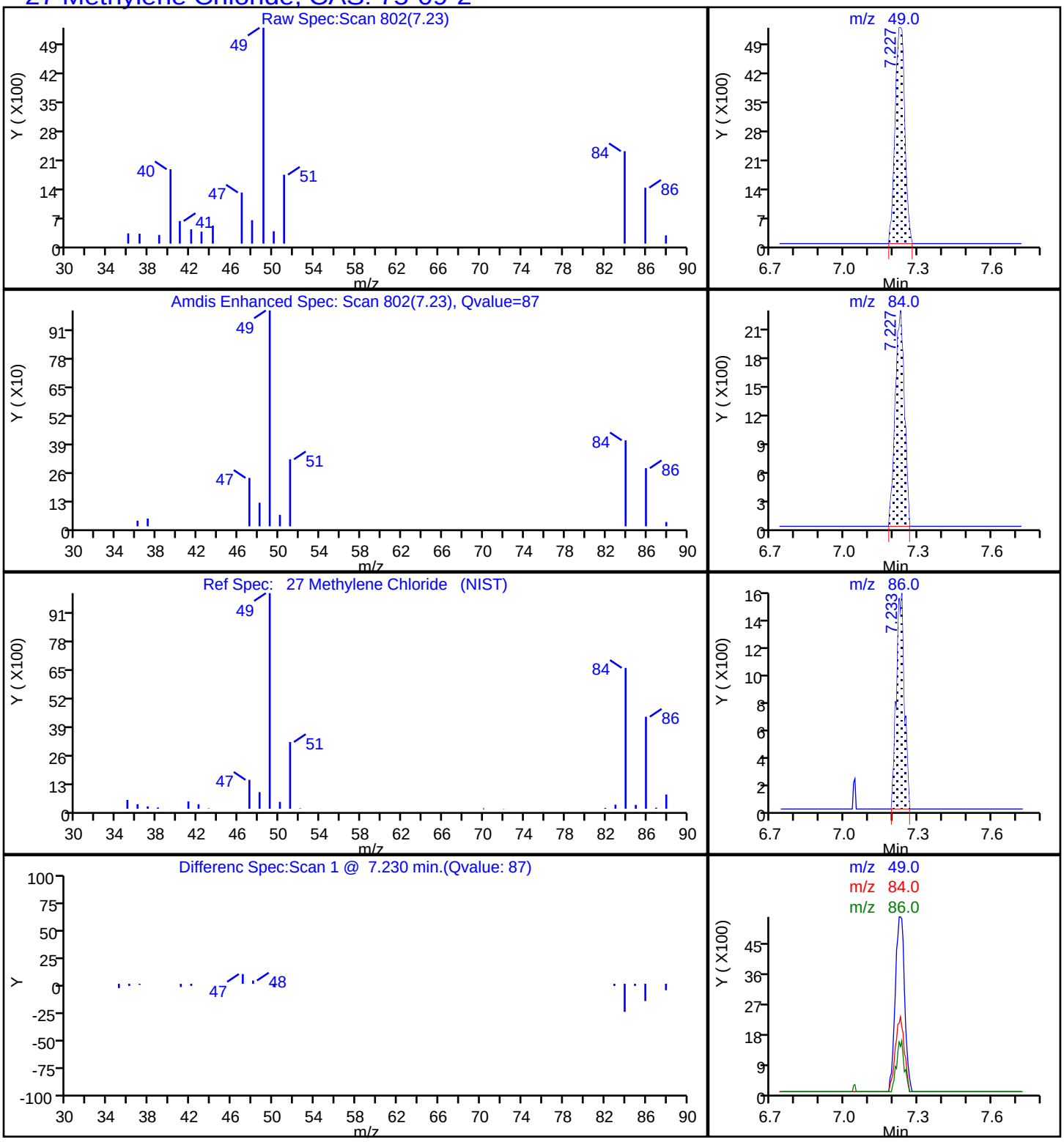
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

24 Isopropyl alcohol, CAS: 67-63-0



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

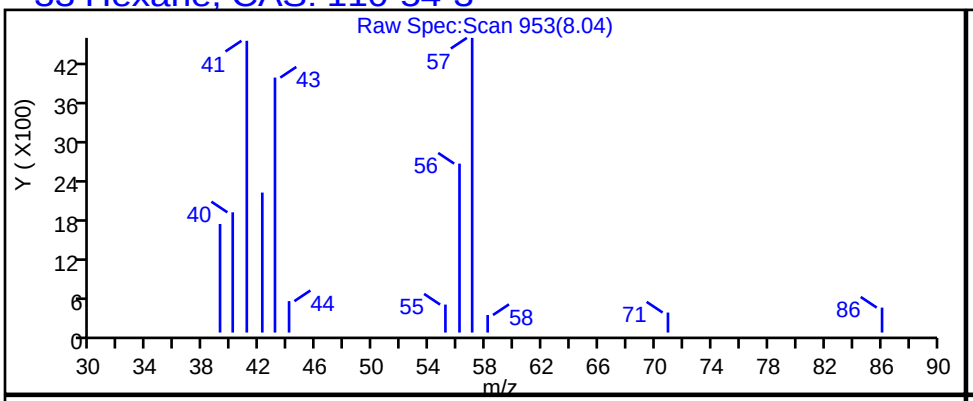
27 Methylene Chloride, CAS: 75-09-2

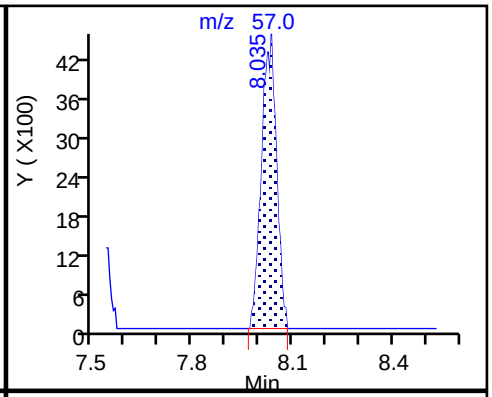


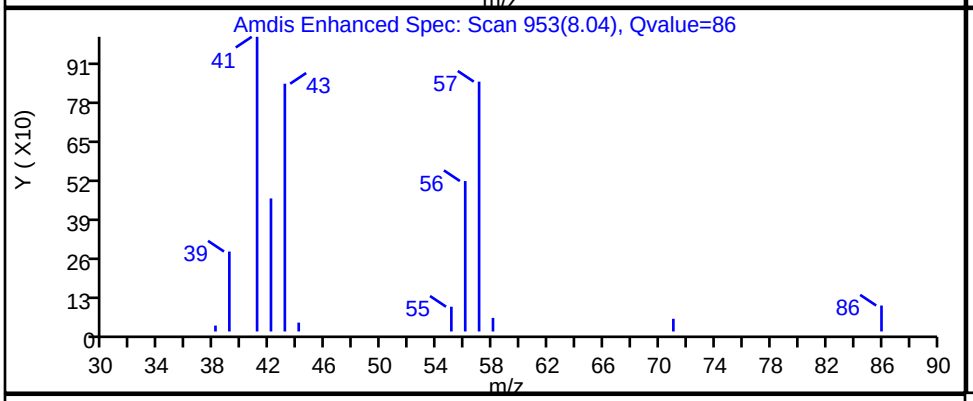
TestAmerica Burlington

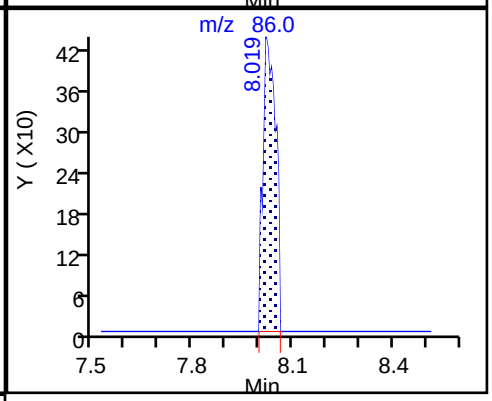
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

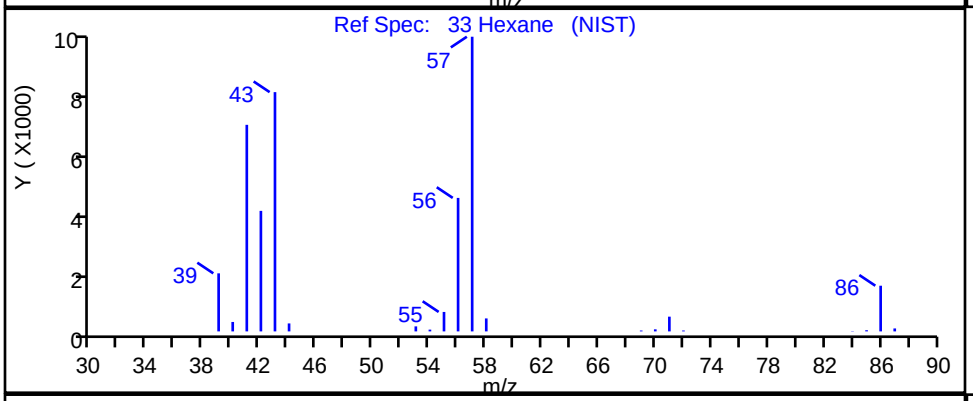
33 Hexane, CAS: 110-54-3

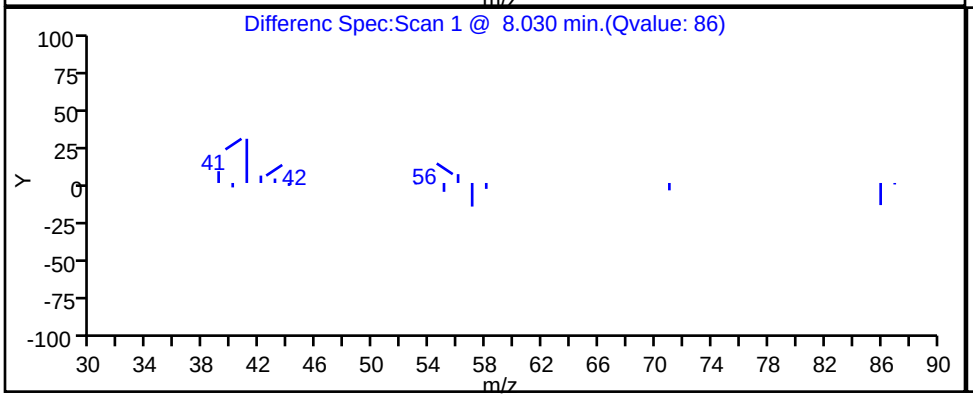


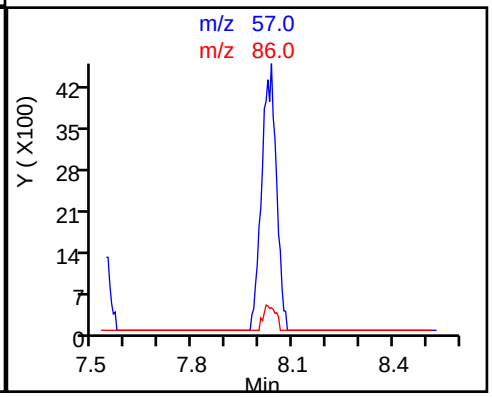












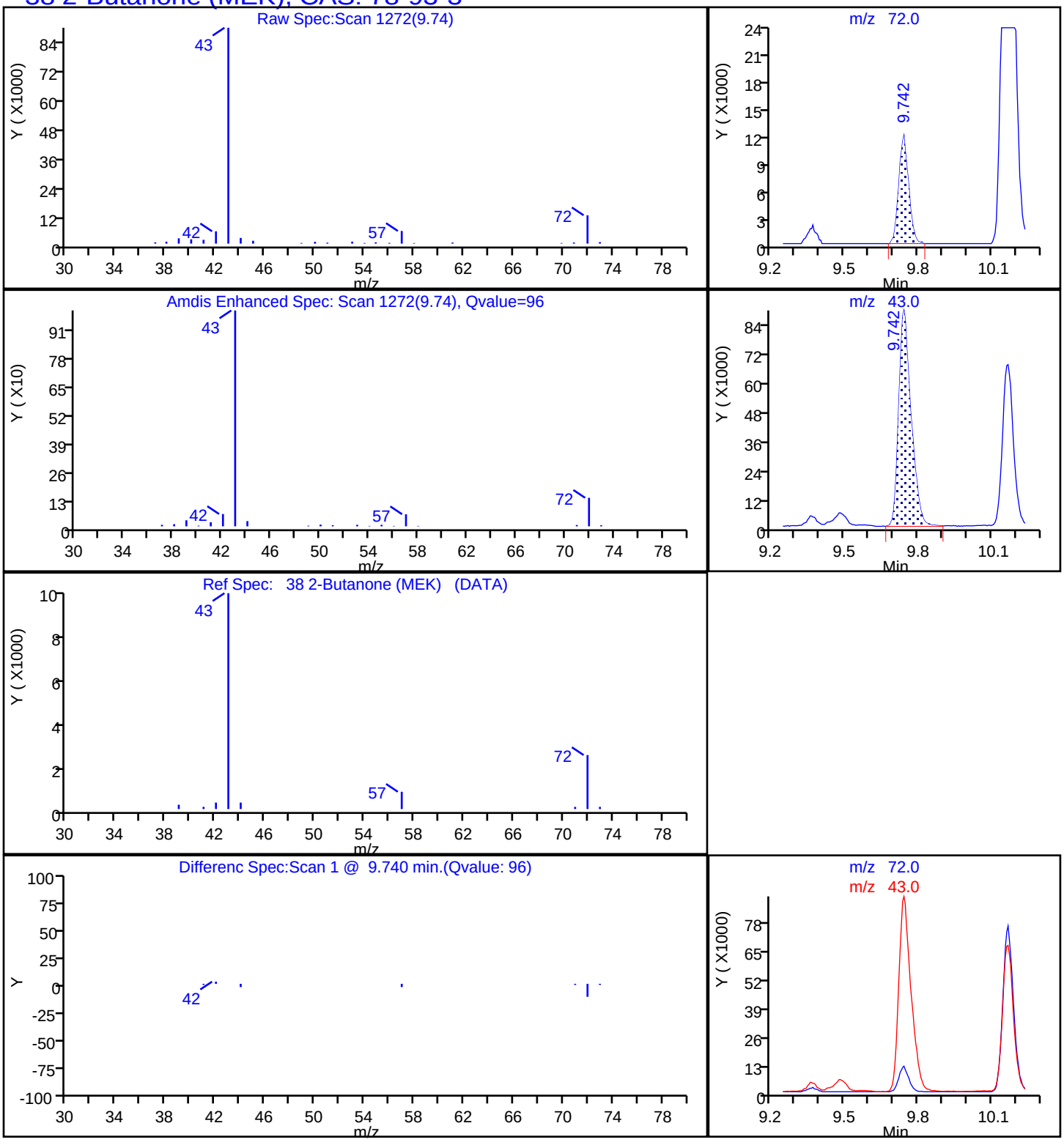
Report Date: 06-Apr-2018 13:44:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

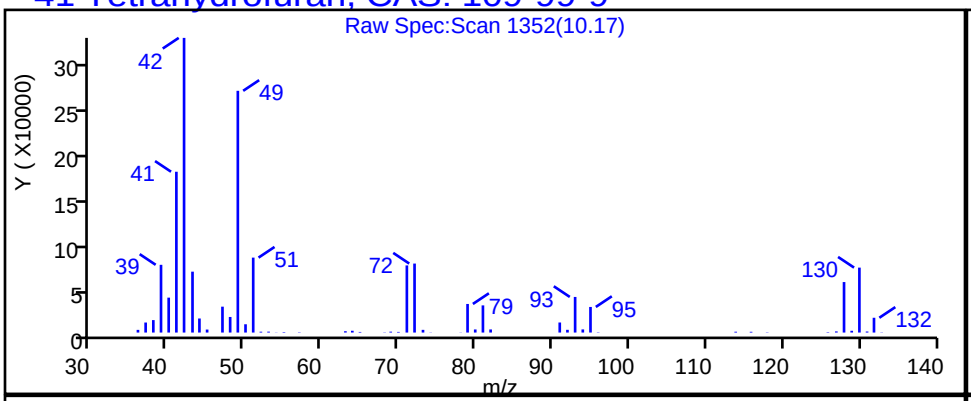
38 2-Butanone (MEK), CAS: 78-93-3

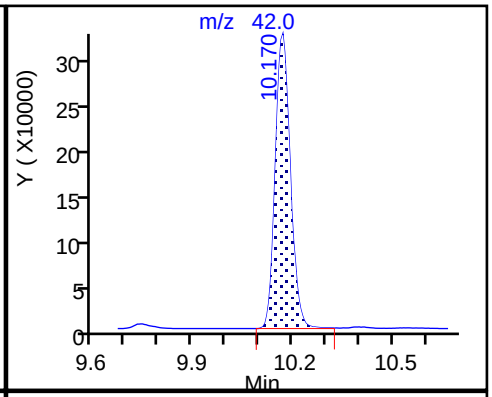


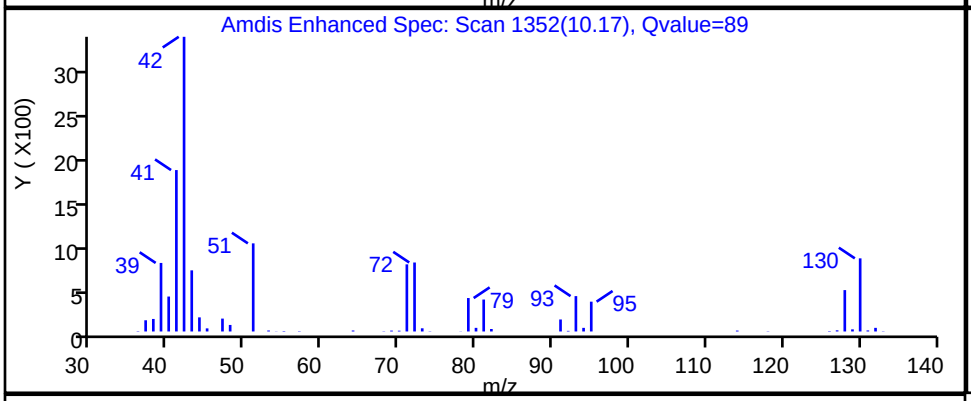
TestAmerica Burlington

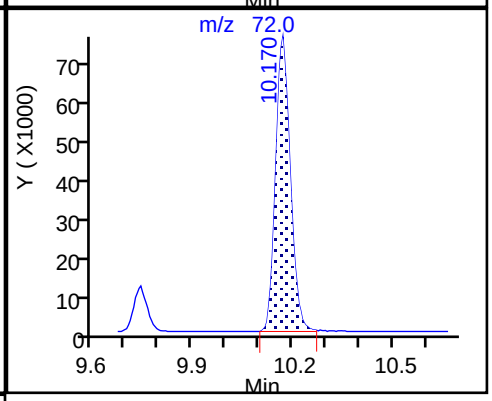
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

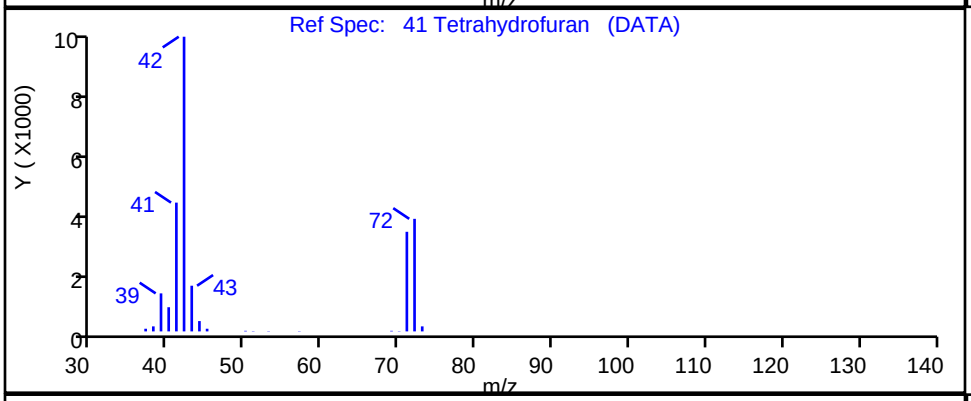
41 Tetrahydrofuran, CAS: 109-99-9

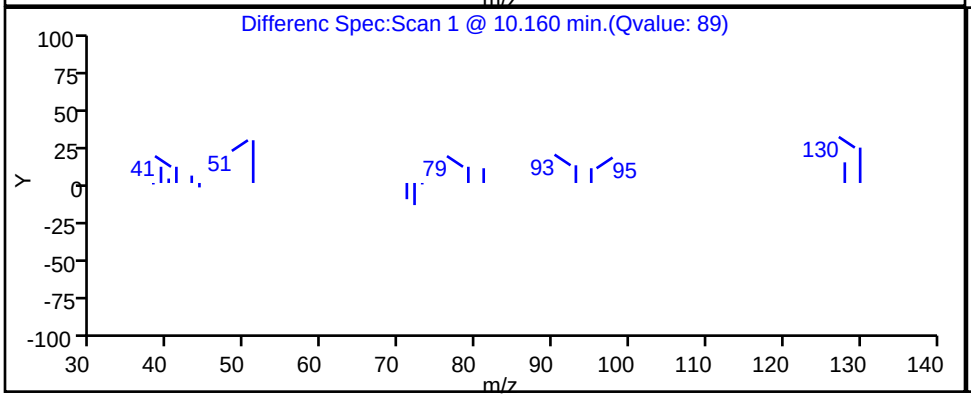


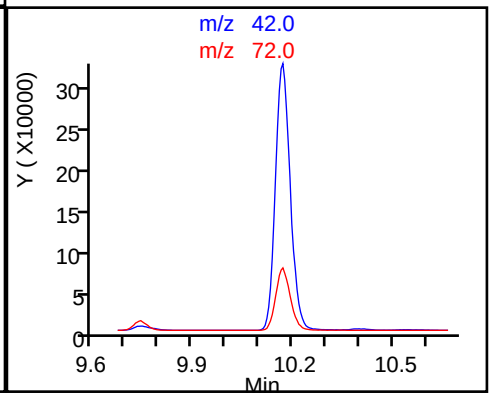








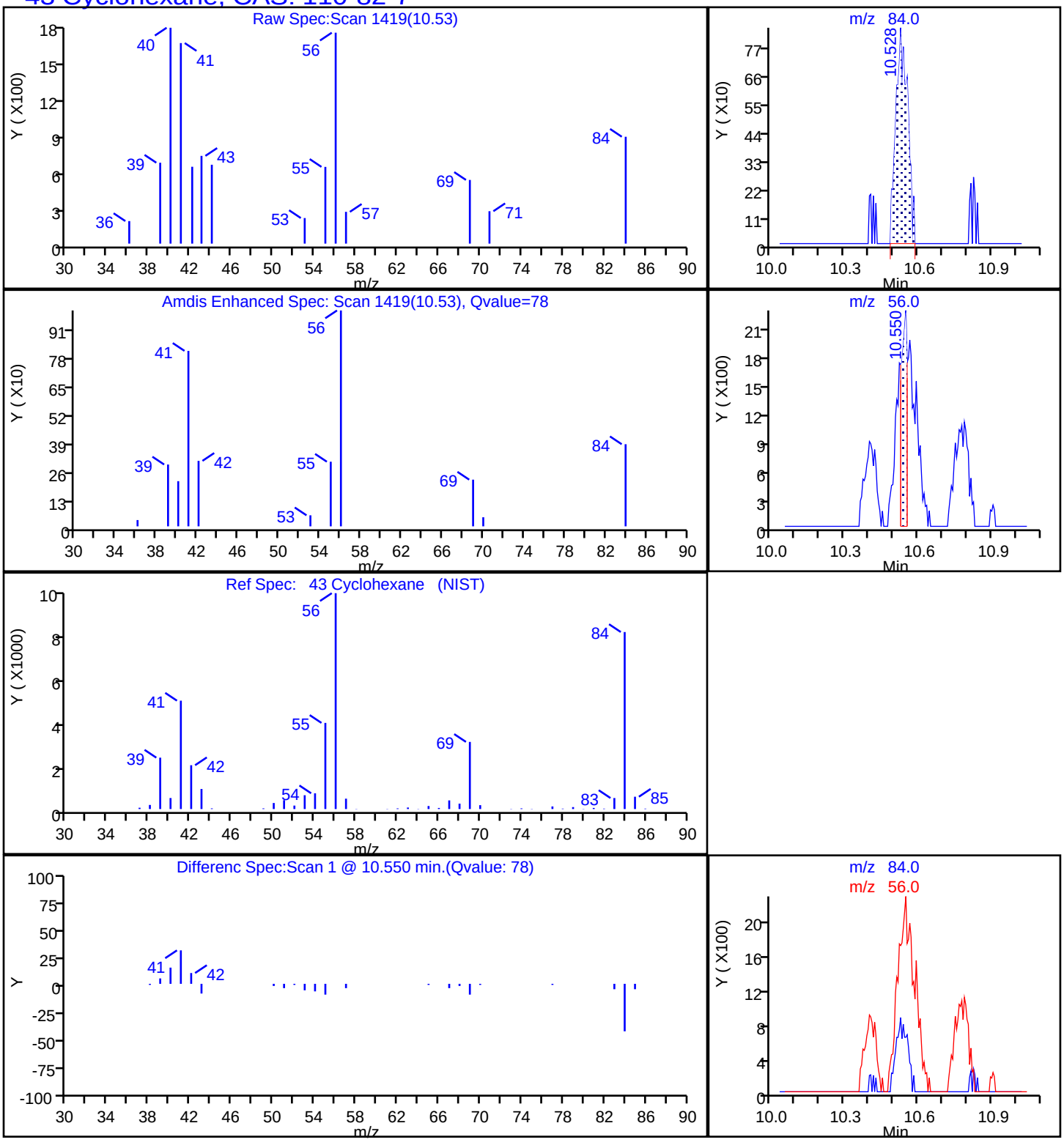




TestAmerica Burlington

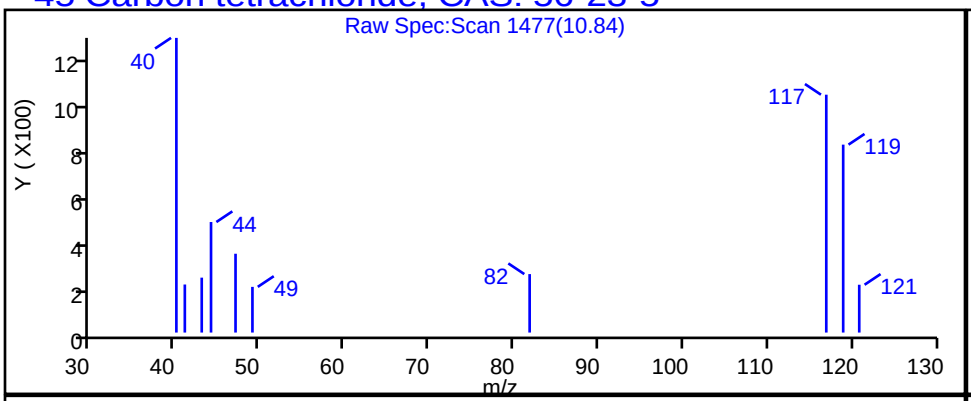
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

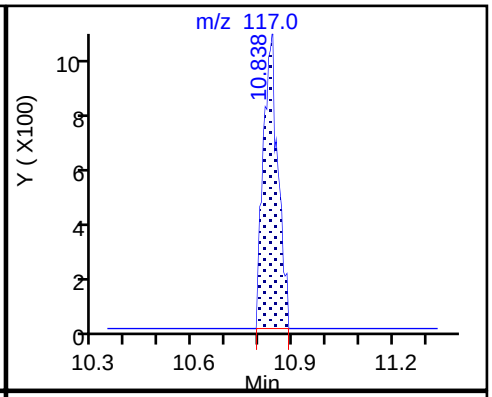
43 Cyclohexane, CAS: 110-82-7

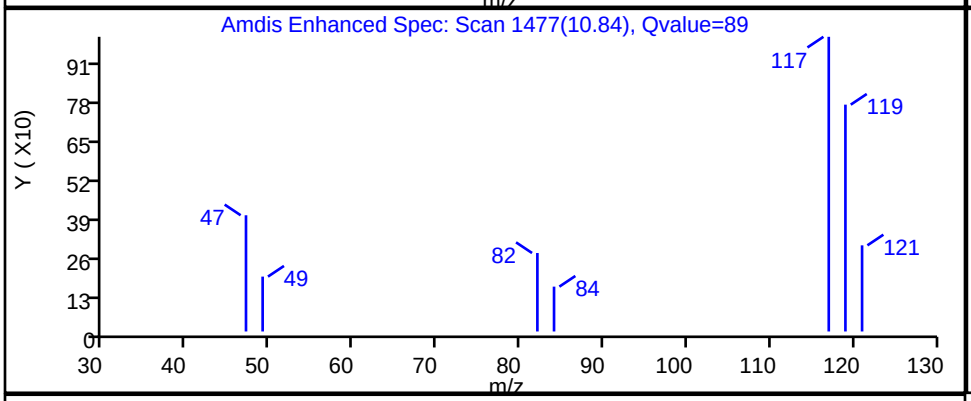


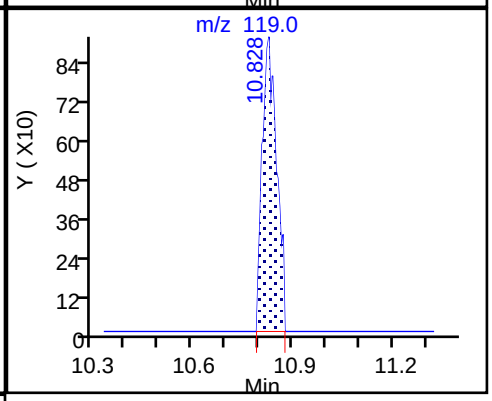
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

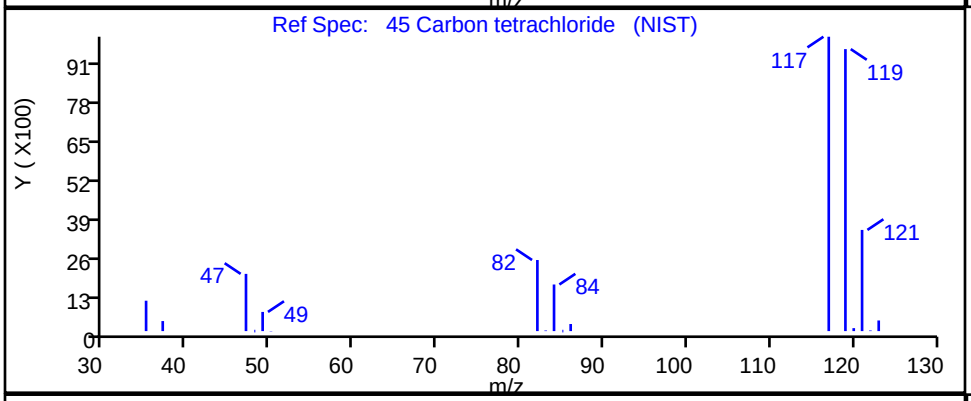
45 Carbon tetrachloride, CAS: 56-23-5

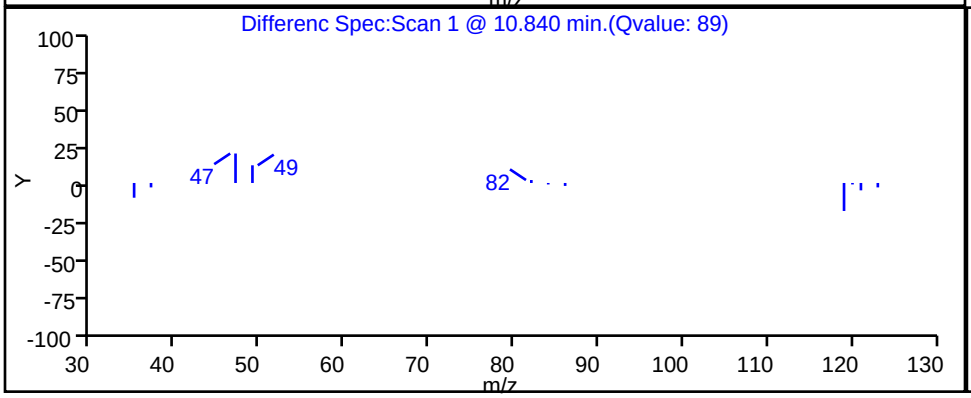


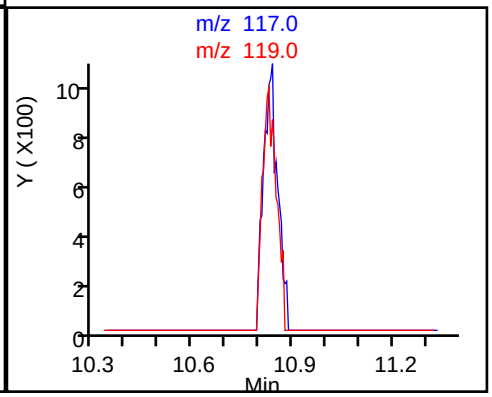








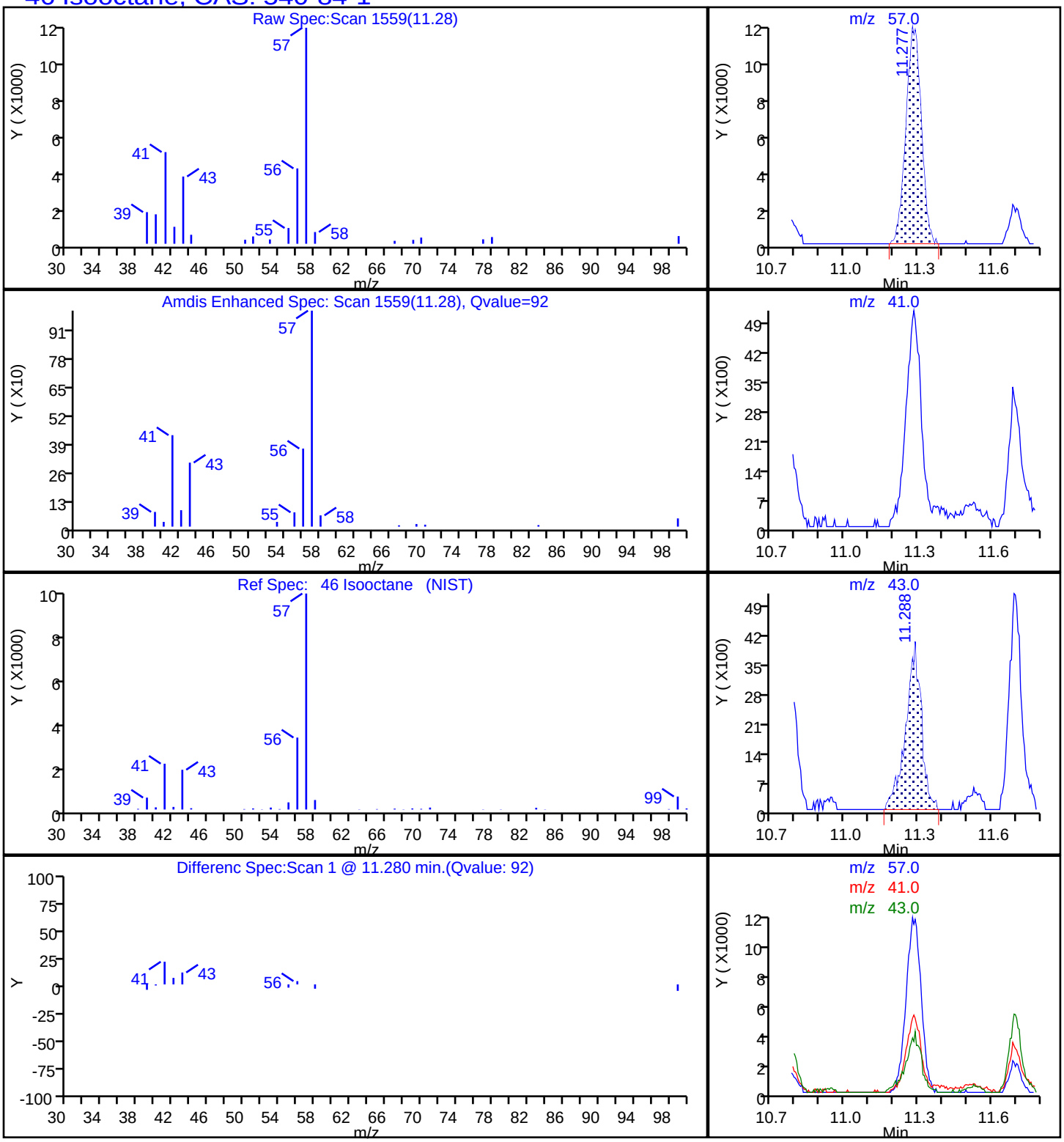




TestAmerica Burlington

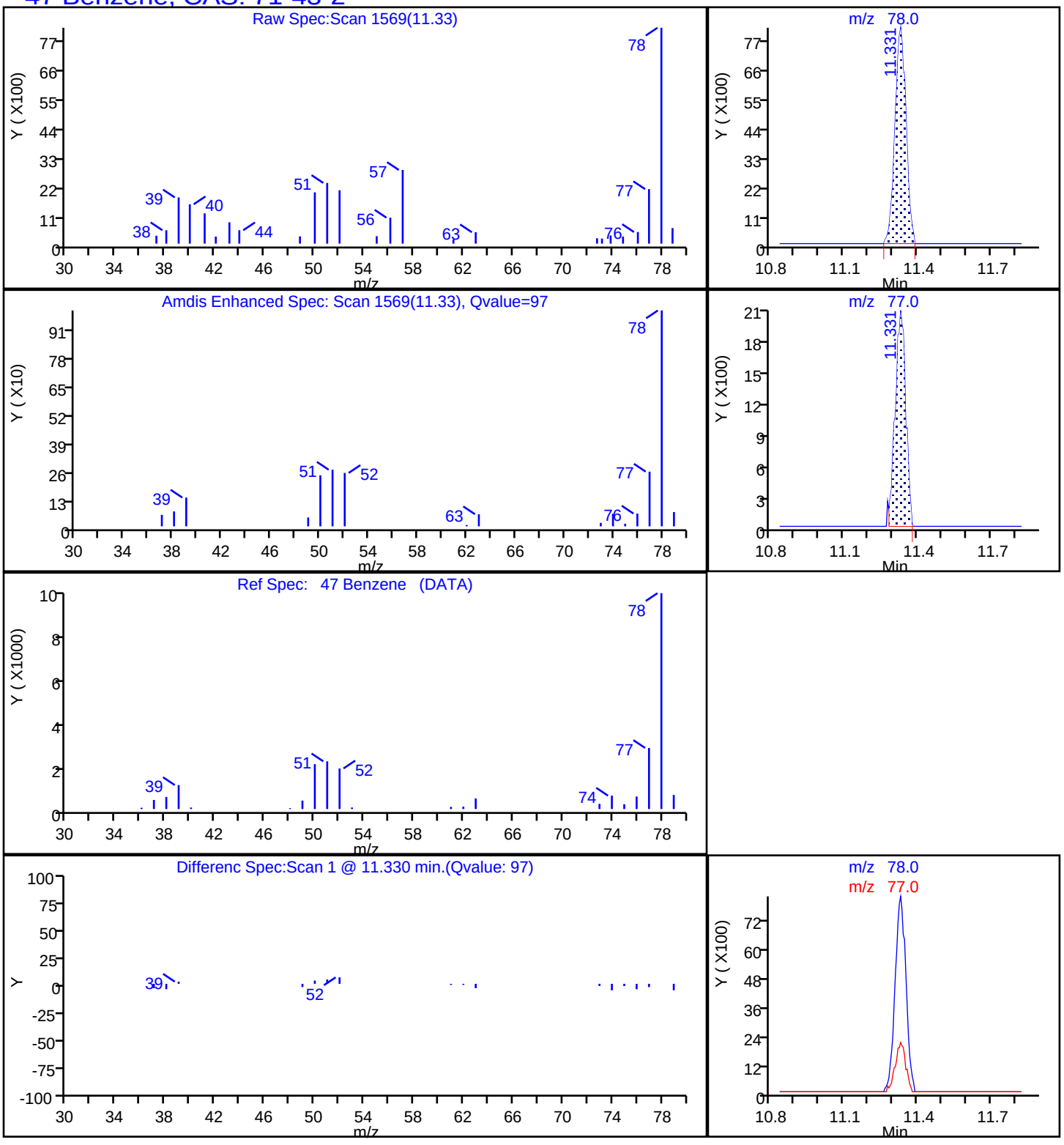
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Isooctane, CAS: 540-84-1



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

47 Benzene, CAS: 71-43-2



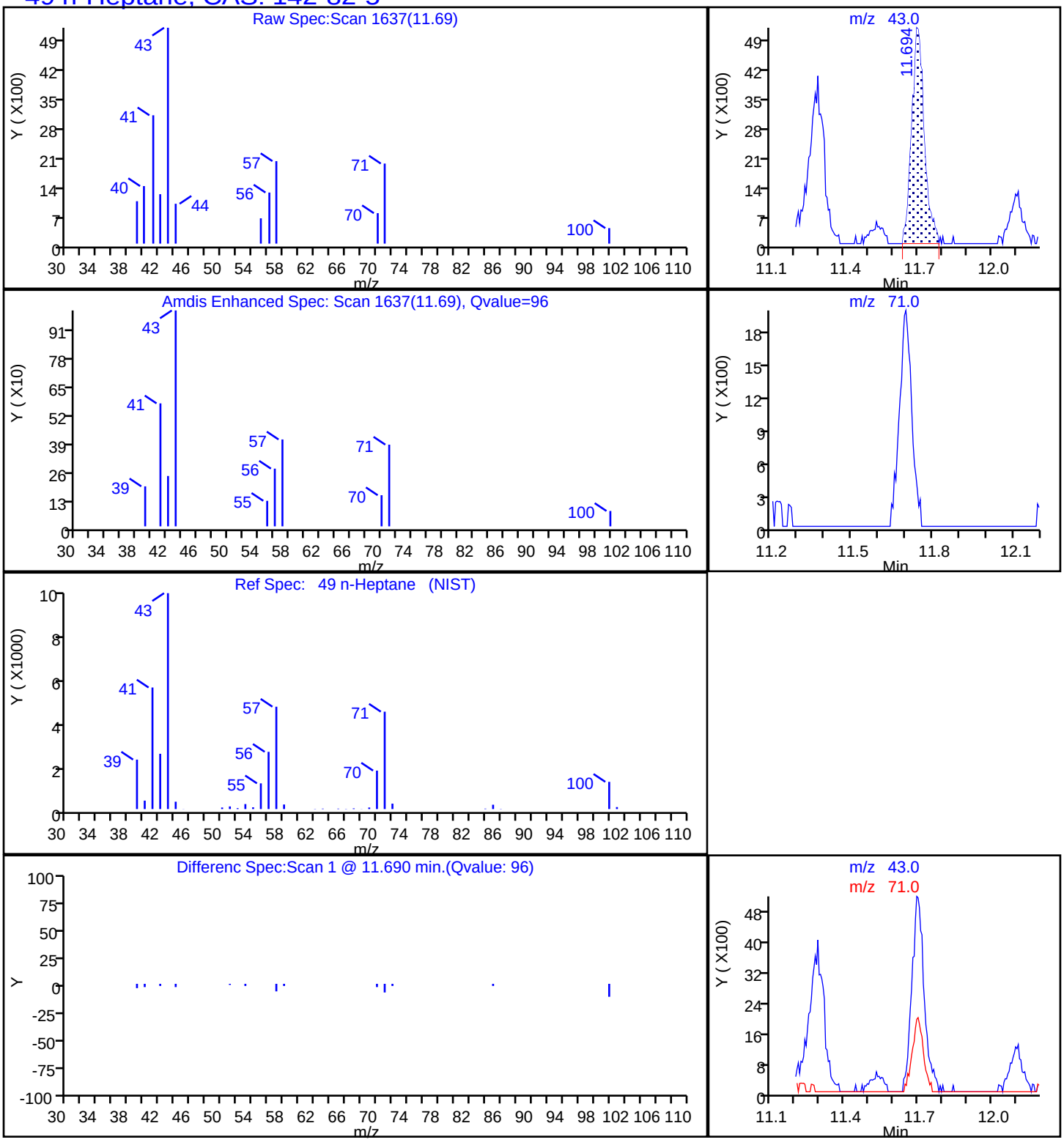
Report Date: 06-Apr-2018 13:44:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

49 n-Heptane, CAS: 142-82-5



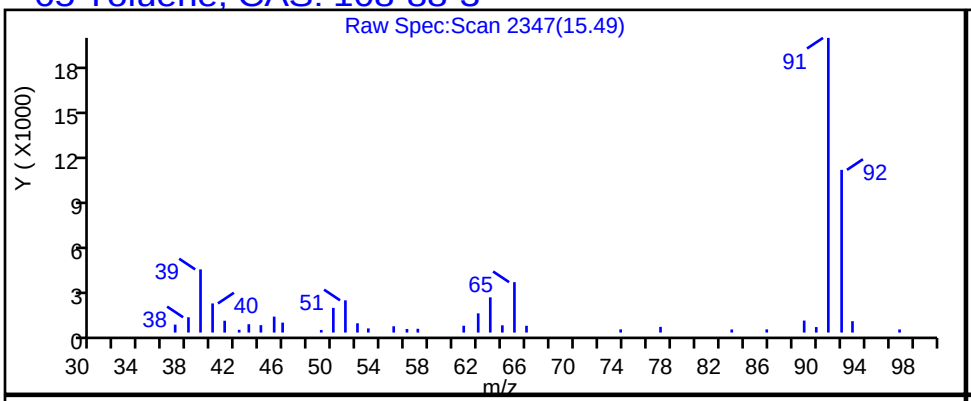
Report Date: 06-Apr-2018 13:44:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

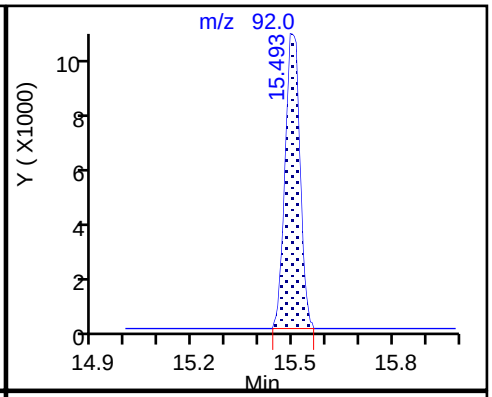
TestAmerica Burlington

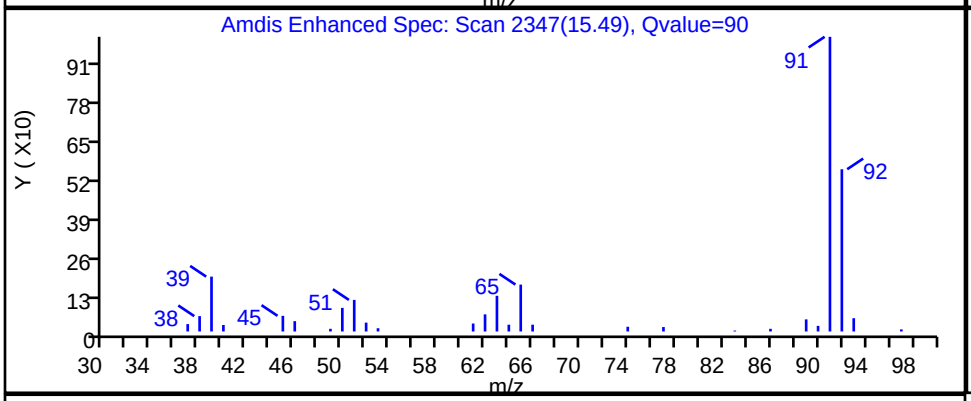
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

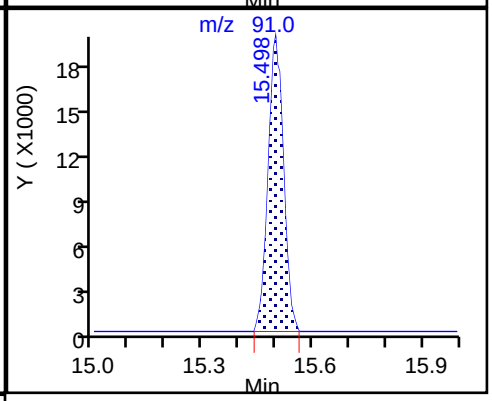
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

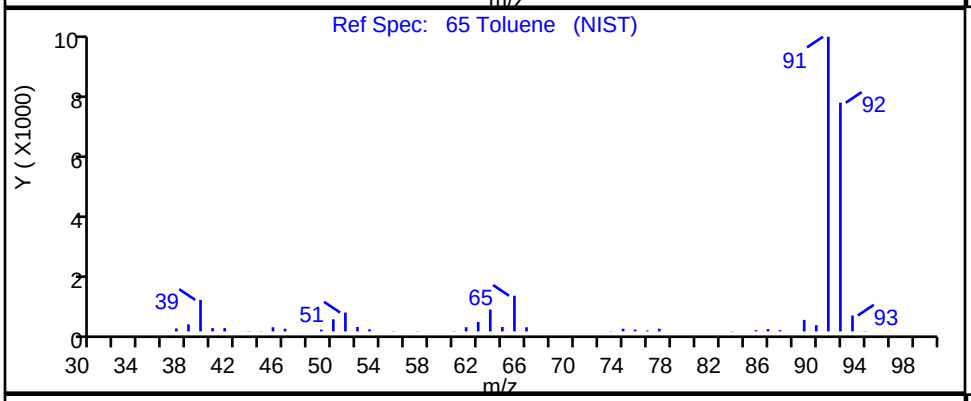
65 Toluene, CAS: 108-88-3

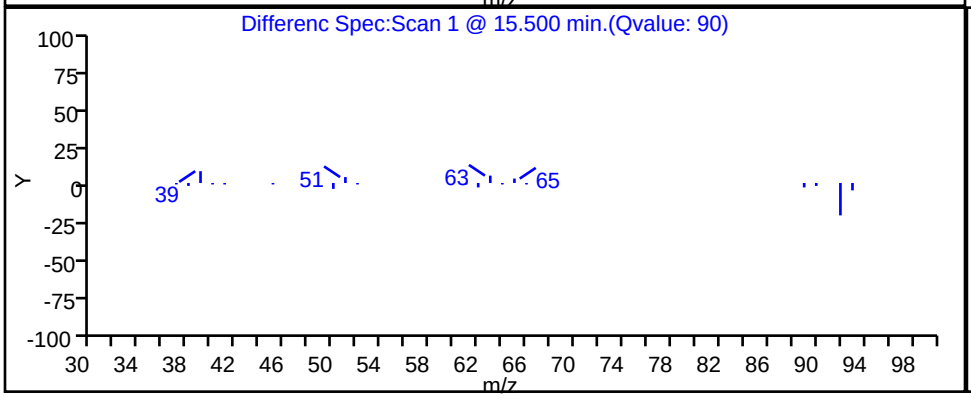


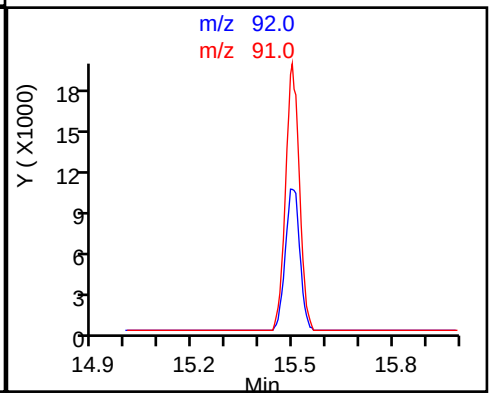












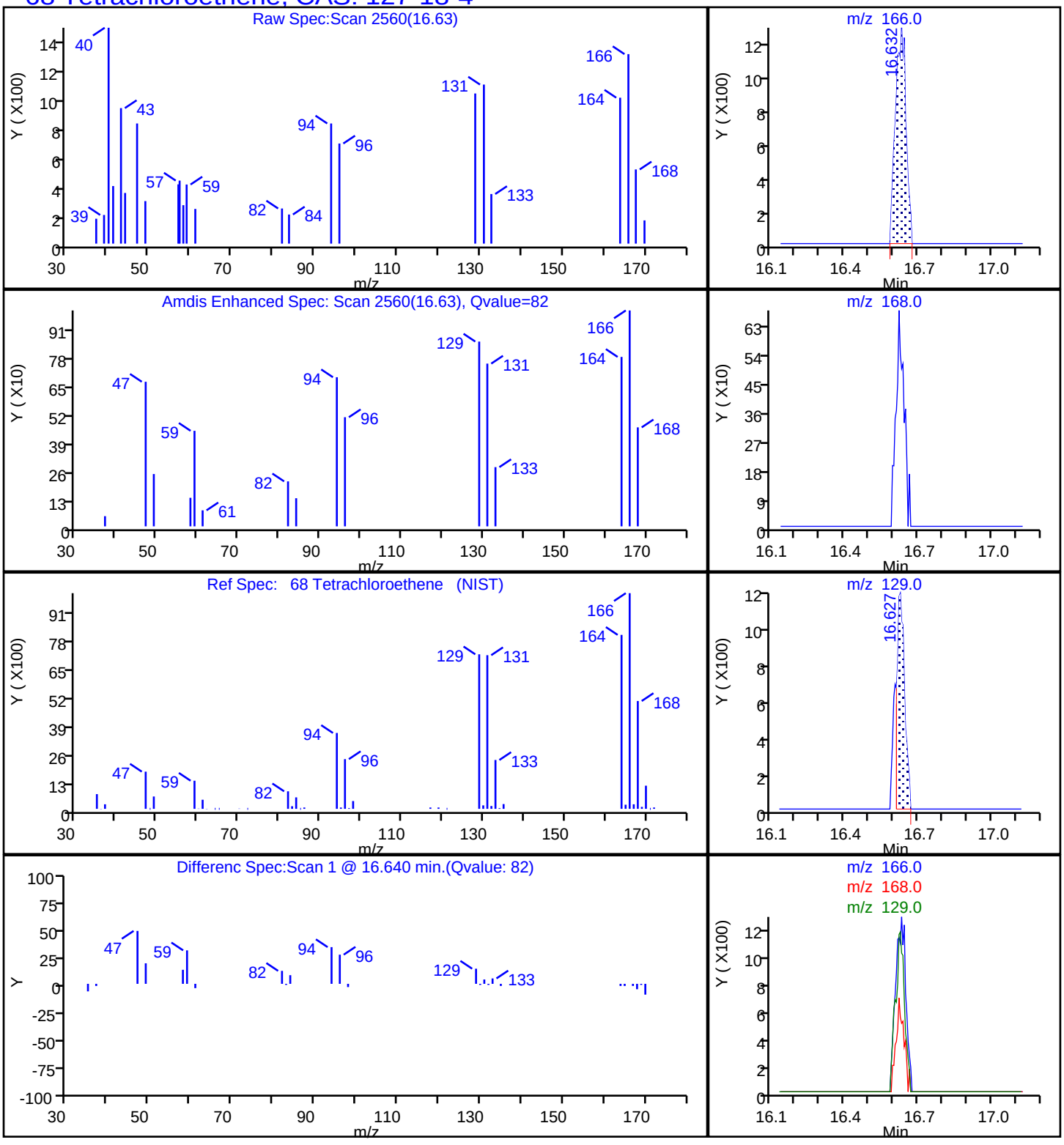
Report Date: 06-Apr-2018 13:44:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



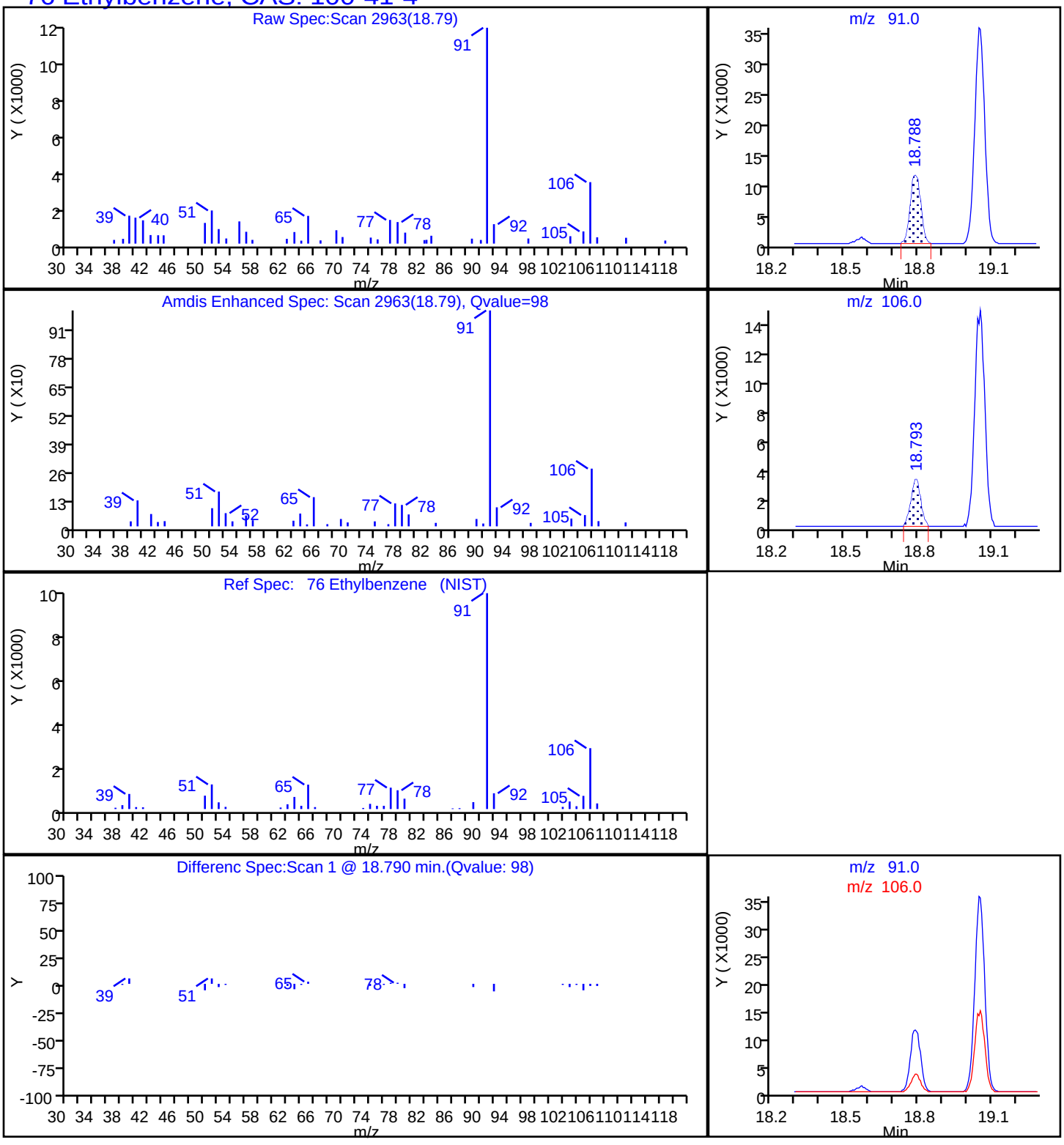
Report Date: 06-Apr-2018 13:44:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

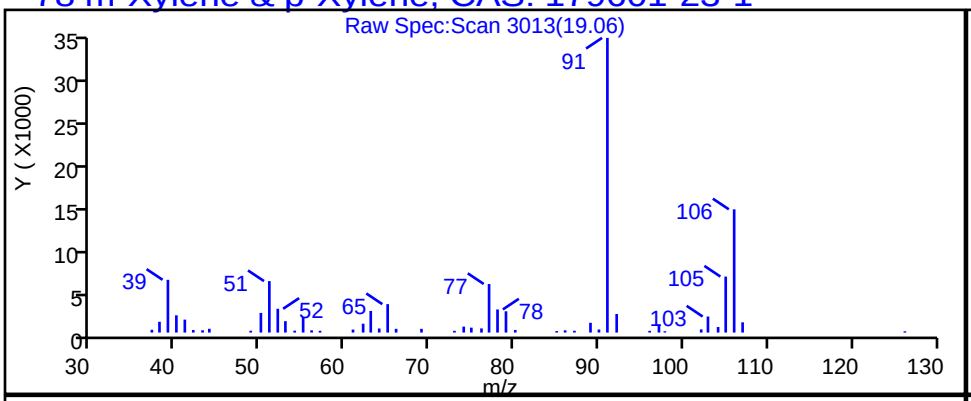
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

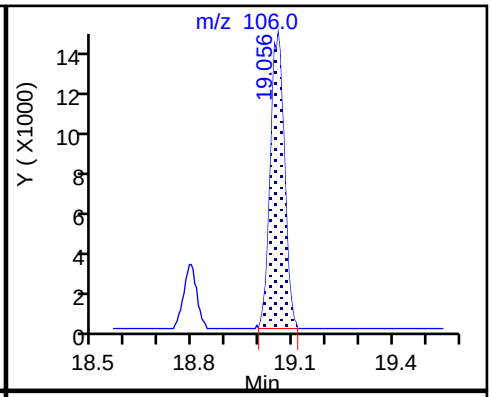
76 Ethylbenzene, CAS: 100-41-4

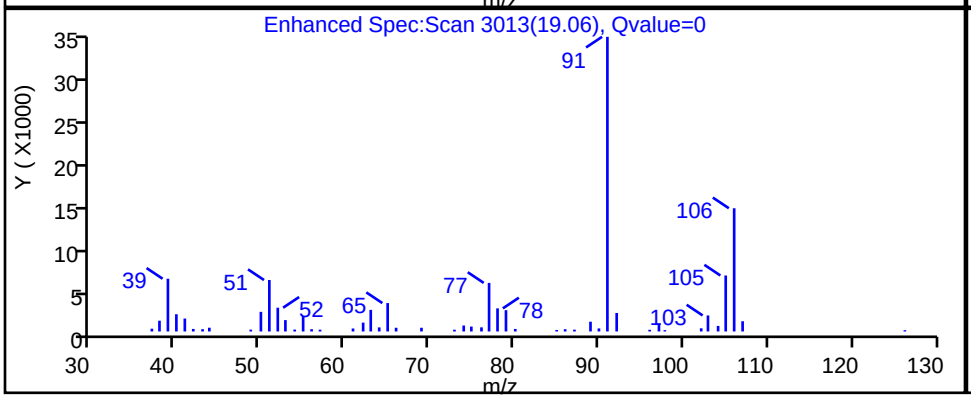


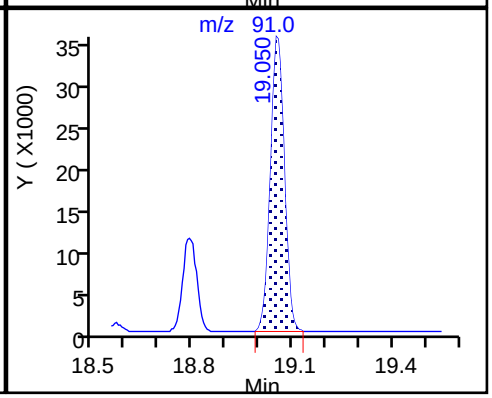
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D
Injection Date: 05-Apr-2018 16:45:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

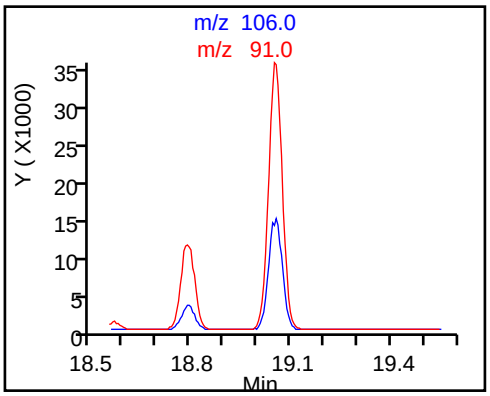
78 m-Xylene & p-Xylene, CAS: 179601-23-1









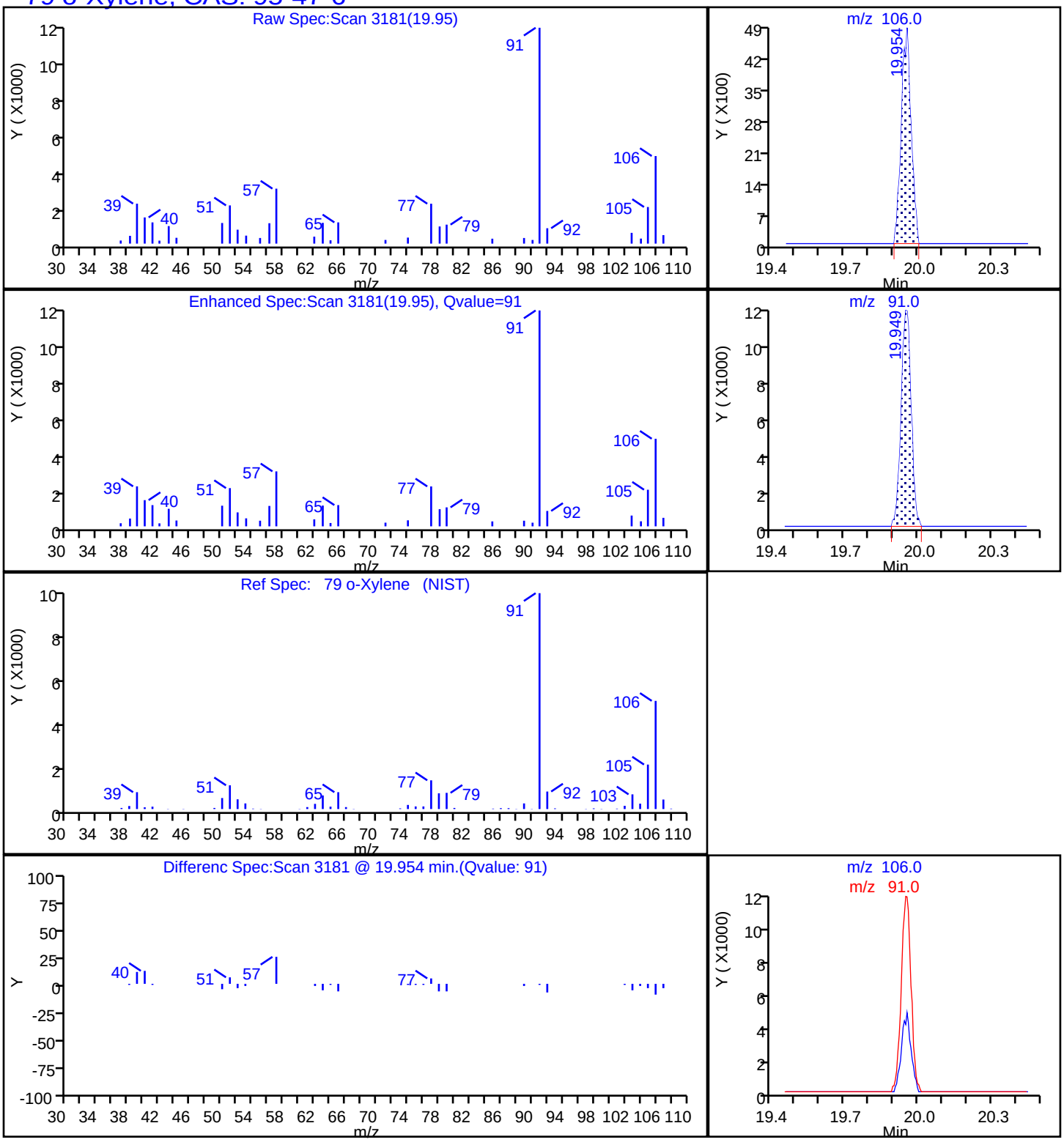


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6



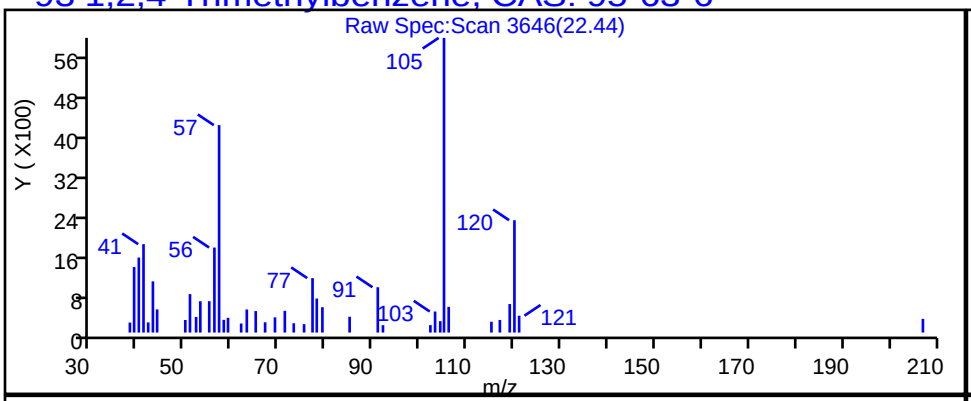
Report Date: 06-Apr-2018 13:44:06 Chrom Revision: 2.2 13-Mar-2018 08:45:20

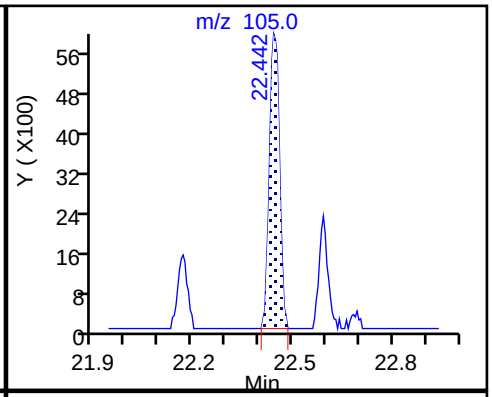
TestAmerica Burlington

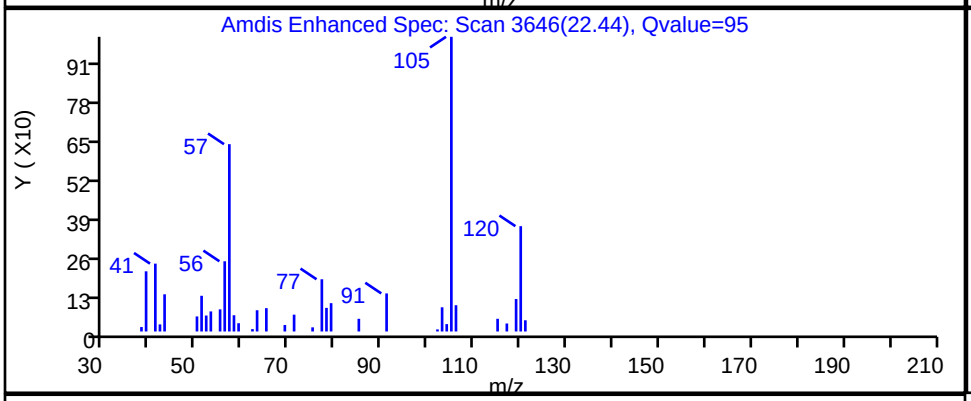
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D

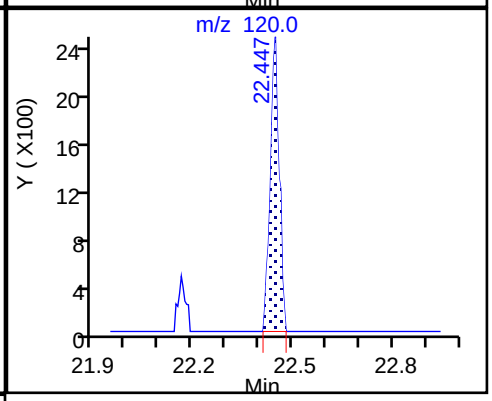
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

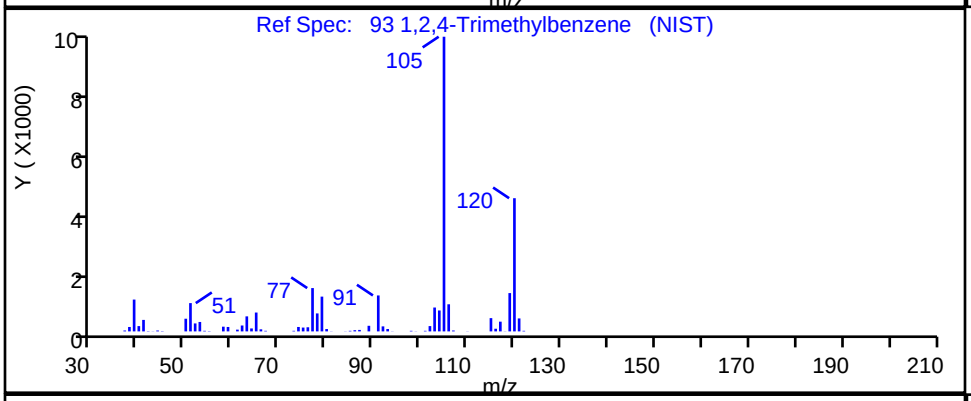
93 1,2,4-Trimethylbenzene, CAS: 95-63-6

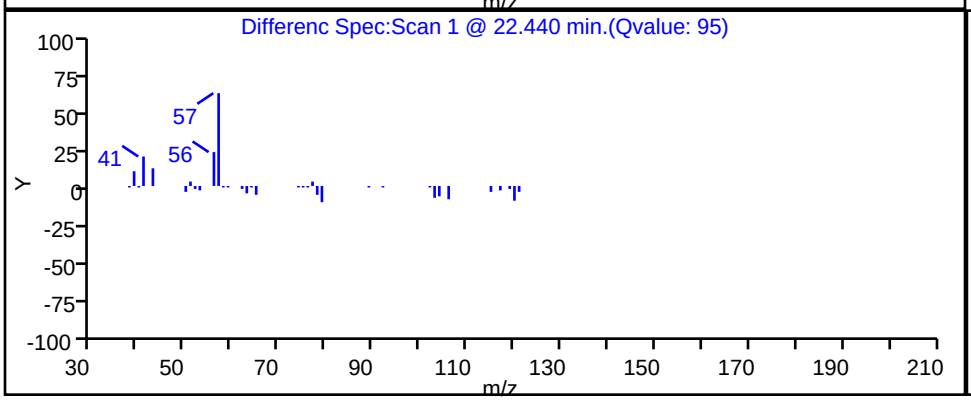


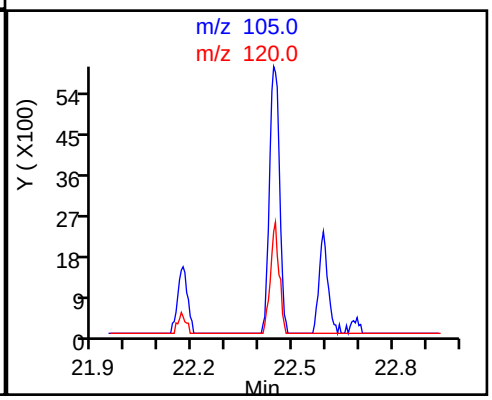












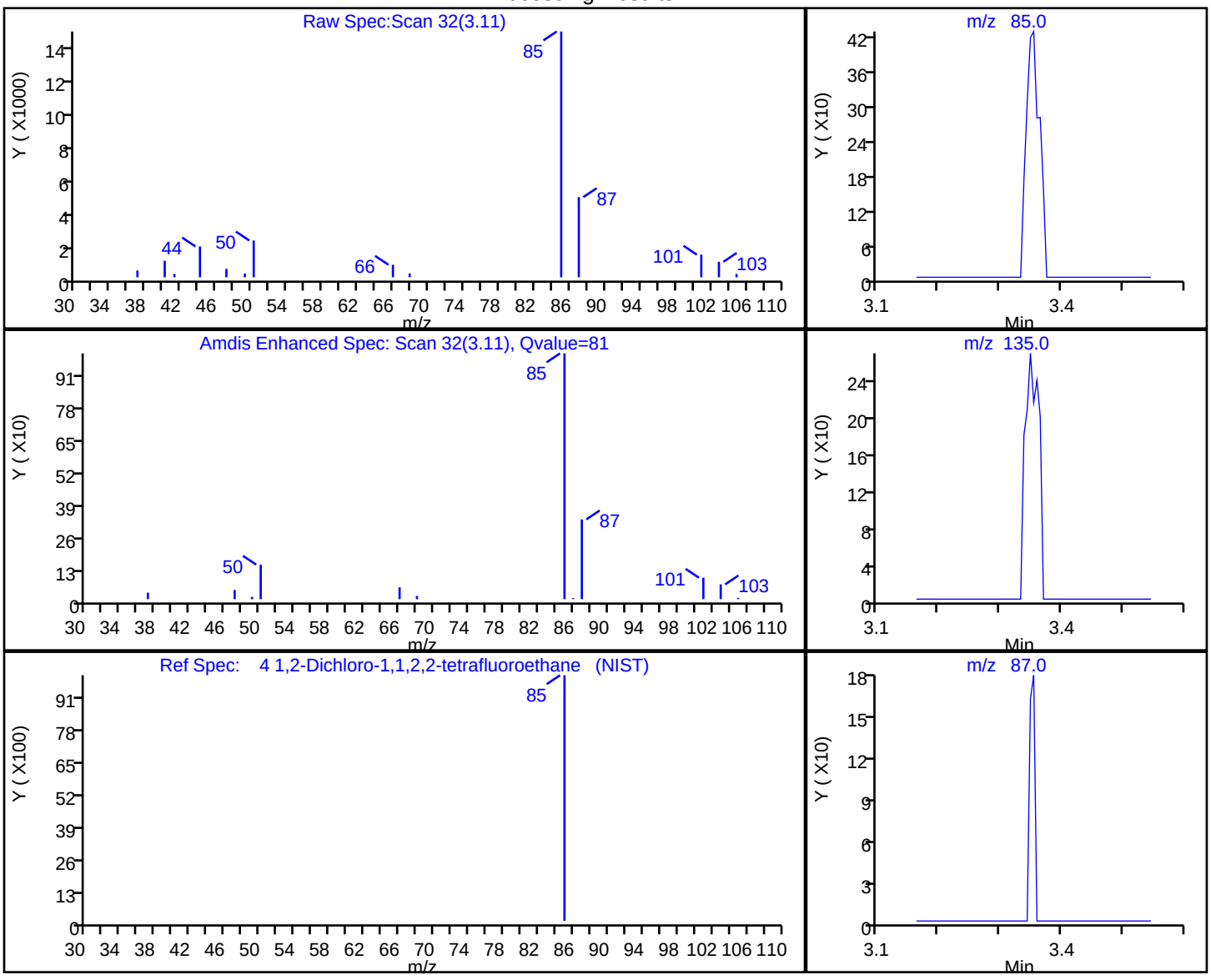
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
3.11	85.00	21718	0.334563
3.35	135.00	0	
3.11	87.00	6933	

Reviewer: puangmaleek, 06-Apr-2018 13:44:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

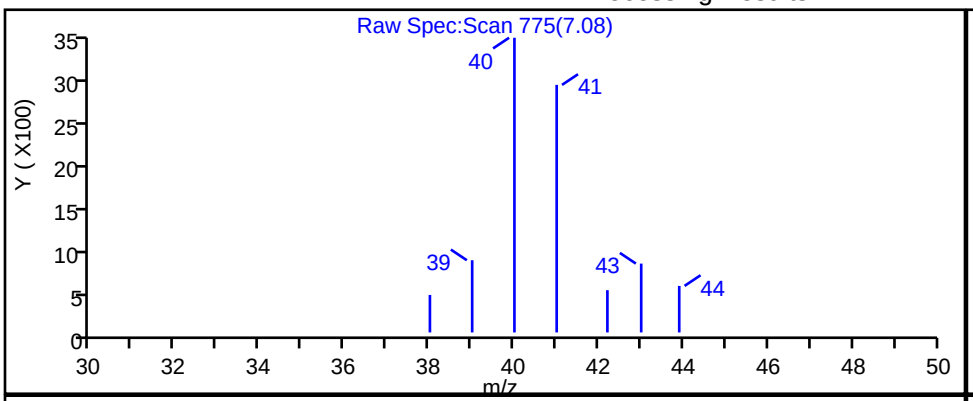
User Disabled Compound Report

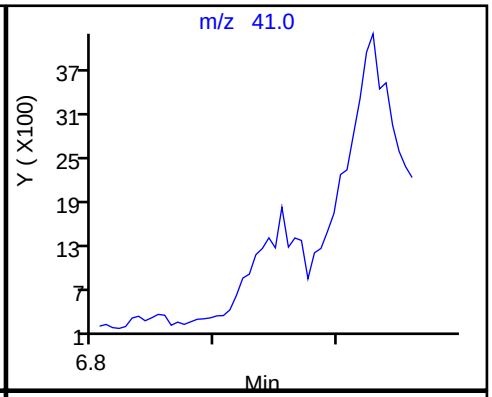
TestAmerica Burlington

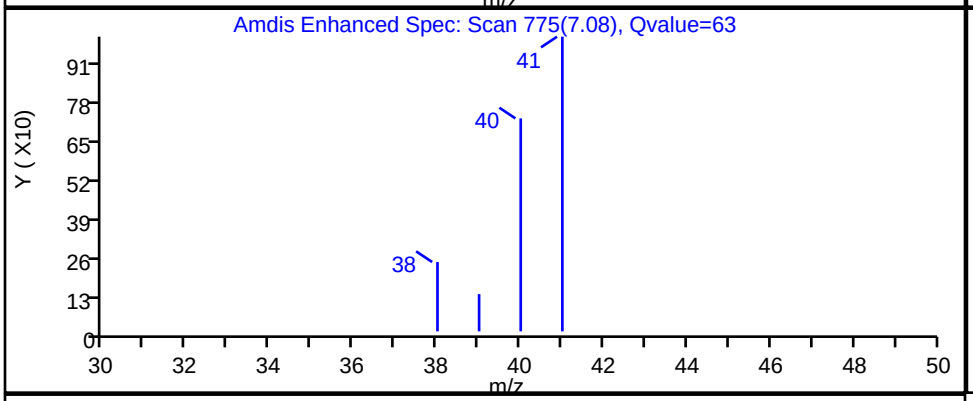
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

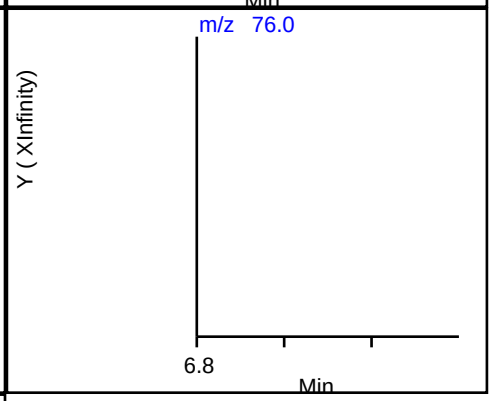
25 3-Chloro-1-propene, CAS: 107-05-1

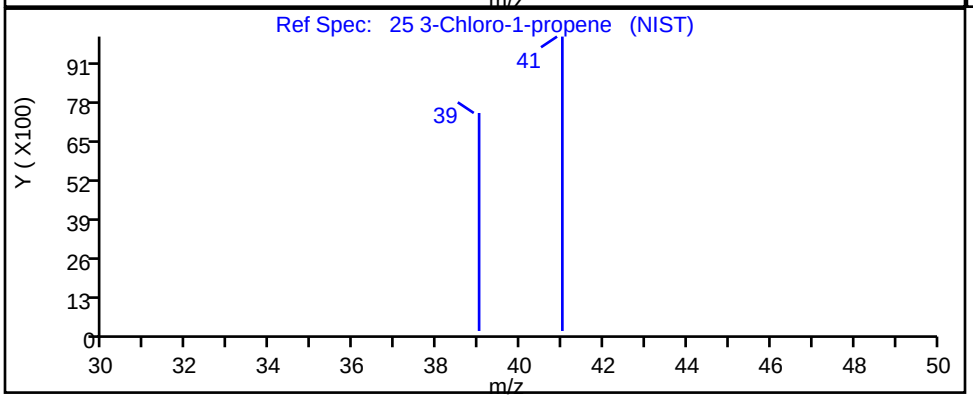
Processing Results











RT	Mass	Response	Amount
7.08	41.00	5872	0.108695
6.93	76.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:44:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

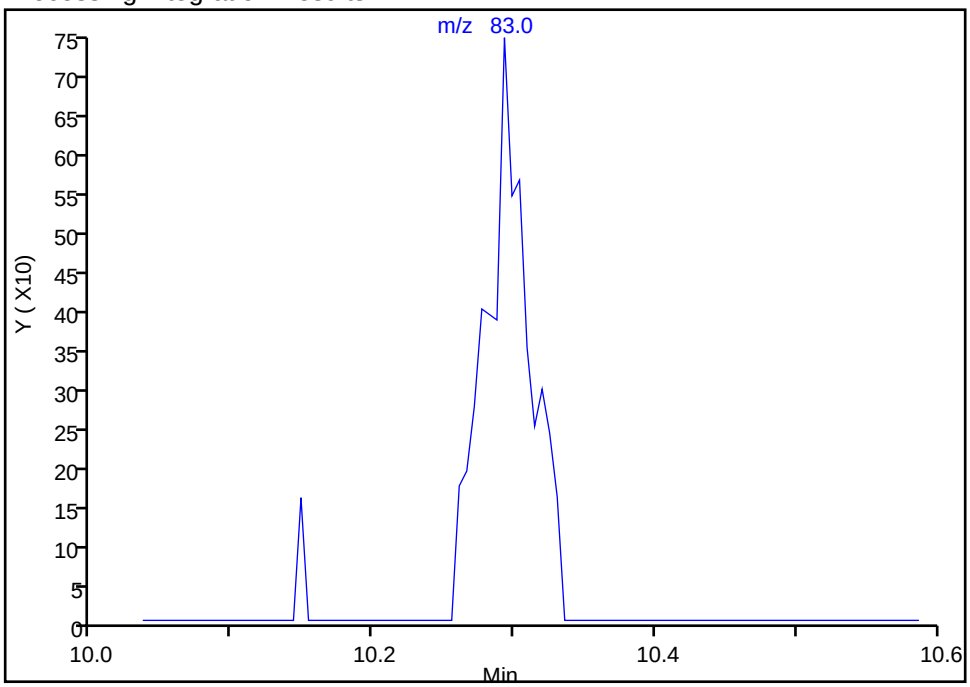
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Chloroform, CAS: 67-66-3

Signal: 1

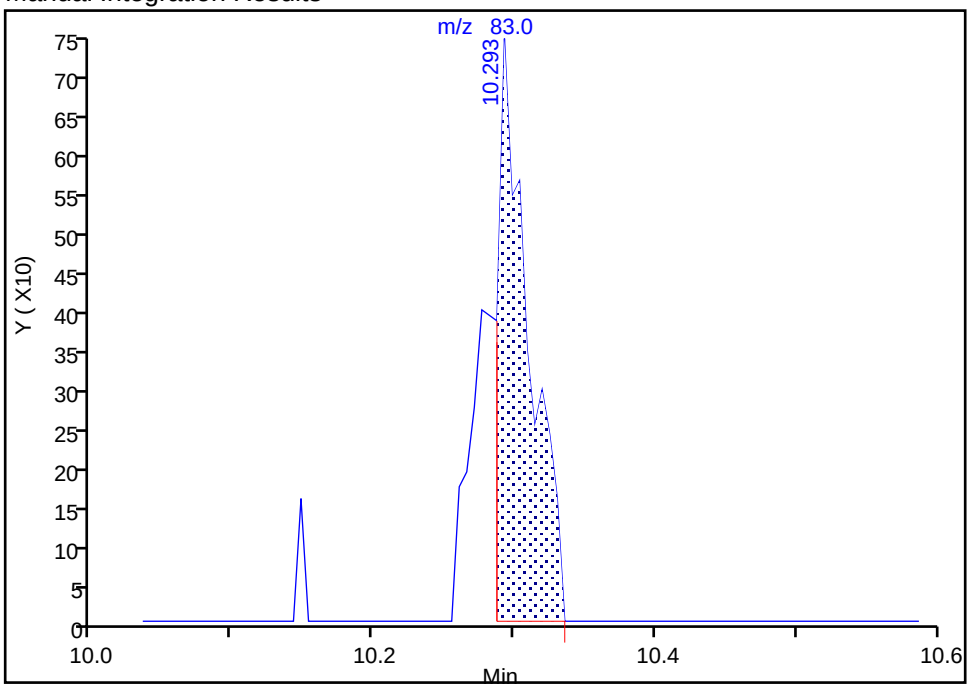
Not Detected
Expected RT: 10.30

Processing Integration Results



Manual Integration Results

RT: 10.29
Area: 1125
Amount: 0.018319
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:42:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Burlington

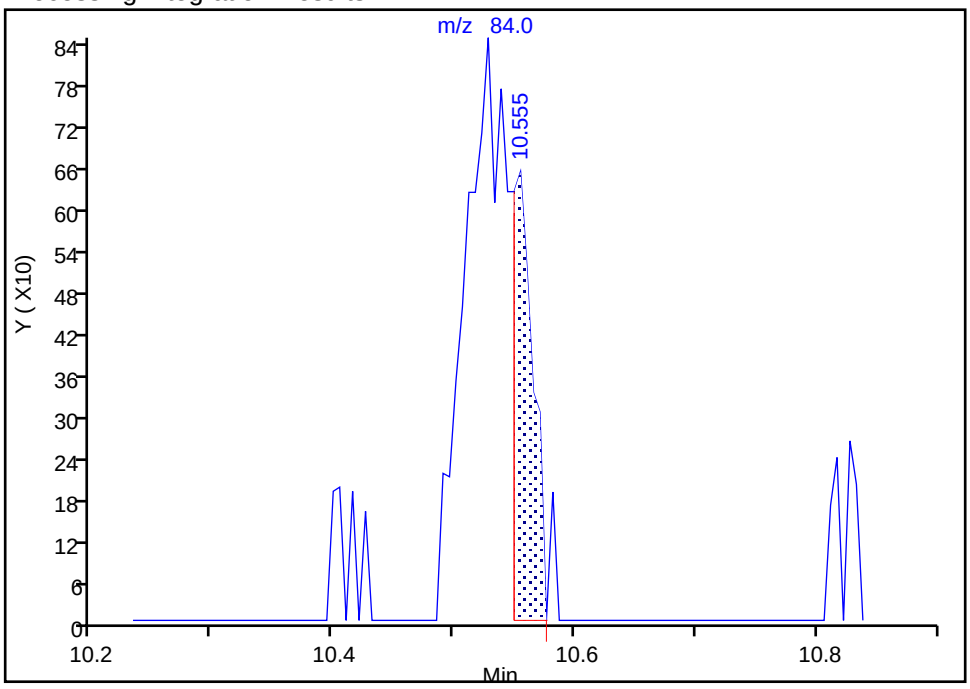
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

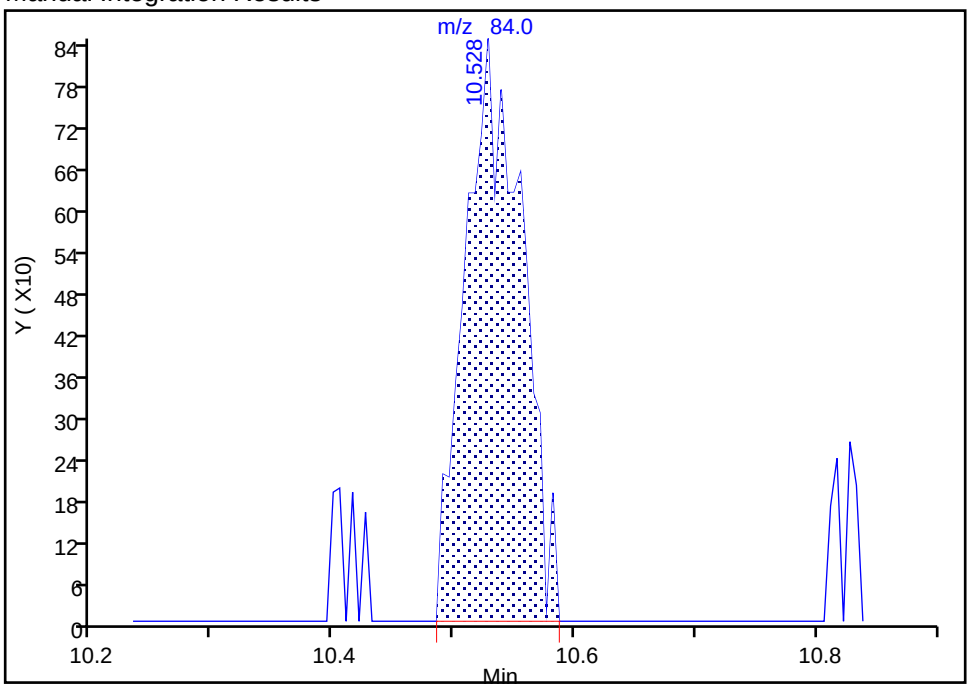
Processing Integration Results

RT: 10.55
Area: 775
Amount: 0.020578
Amount Units: ppb v/v



Manual Integration Results

RT: 10.53
Area: 2763
Amount: 0.073365
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:42:45

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

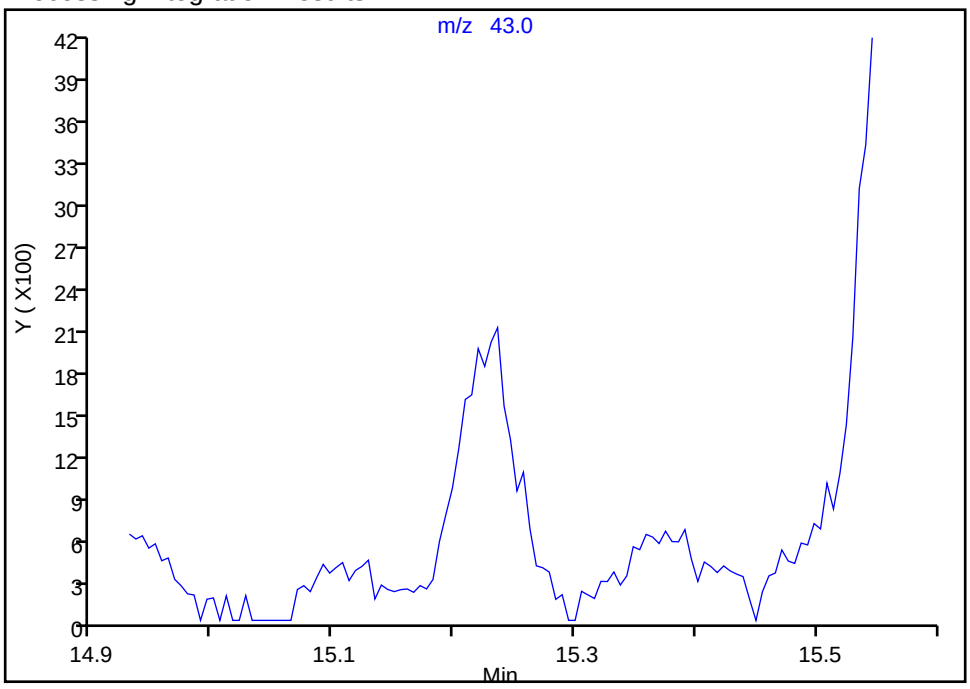
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

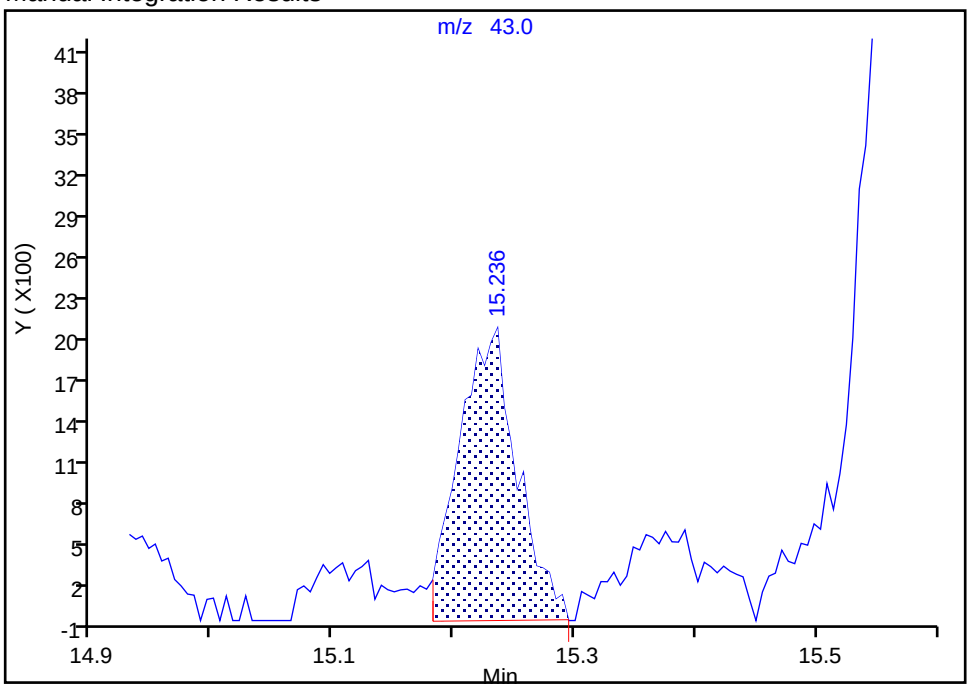
Not Detected
Expected RT: 15.20

Processing Integration Results



Manual Integration Results

RT: 15.24
Area: 6954
Amount: 0.054637
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:43:02
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

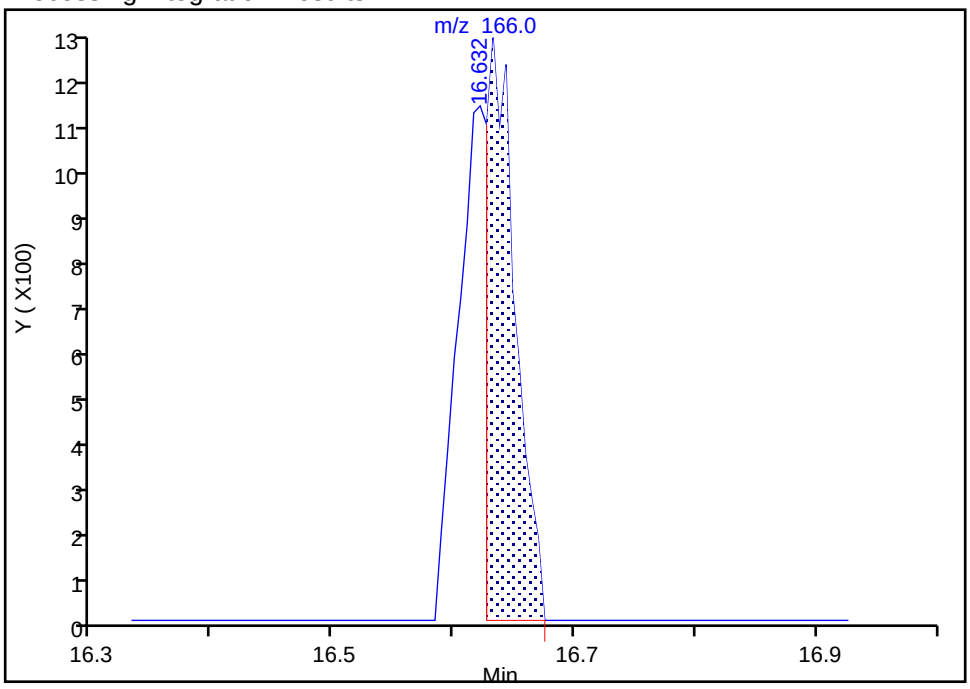
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 1

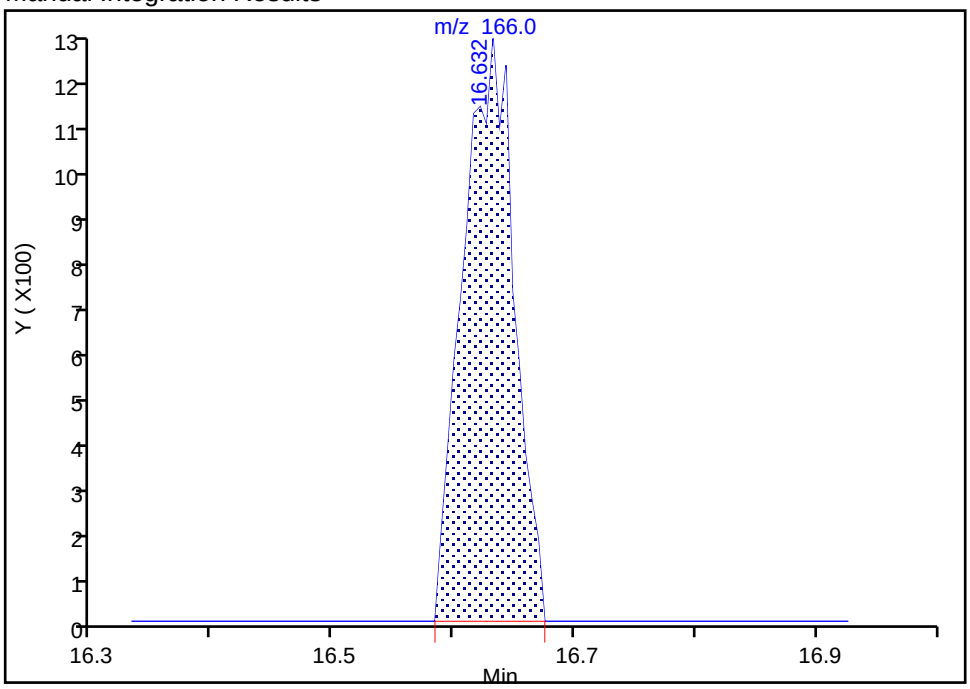
Processing Integration Results

RT: 16.63
Area: 2135
Amount: 0.060206
Amount Units: ppb v/v



Manual Integration Results

RT: 16.63
Area: 3706
Amount: 0.104507
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:43:14

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

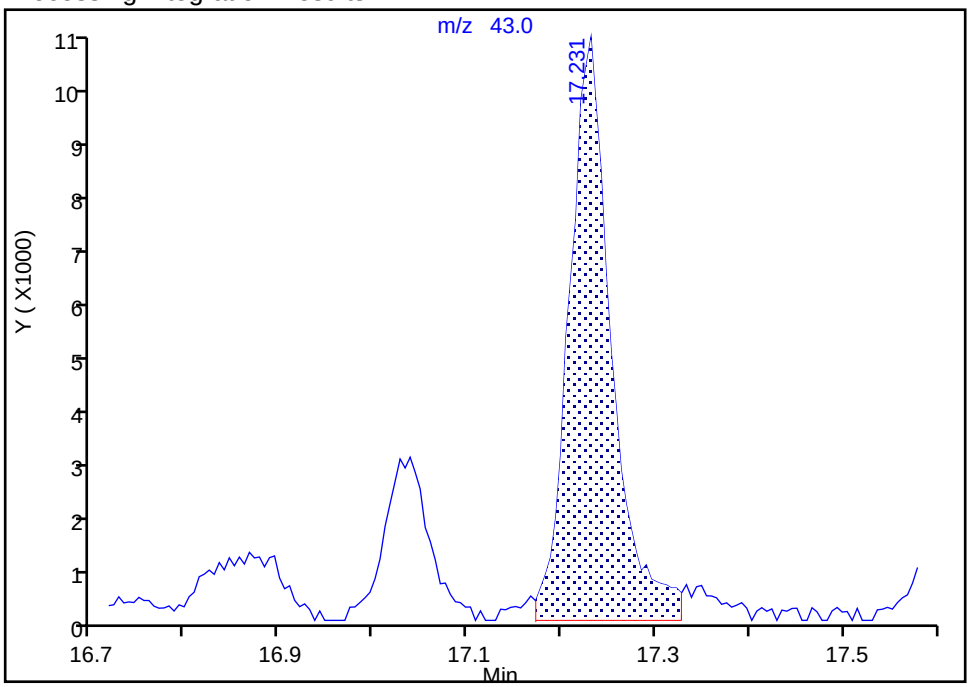
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

69 2-Hexanone, CAS: 591-78-6

Signal: 1

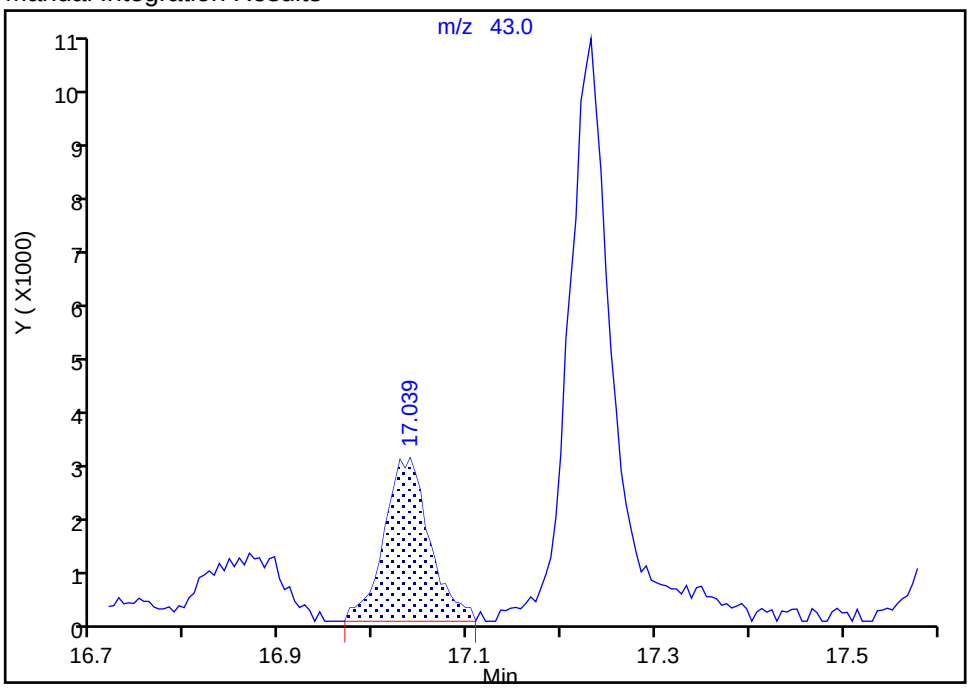
Processing Integration Results

RT: 17.23
Area: 32937
Amount: 0.274244
Amount Units: ppb v/v



Manual Integration Results

RT: 17.04
Area: 9839
Amount: 0.081923
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:43:18

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

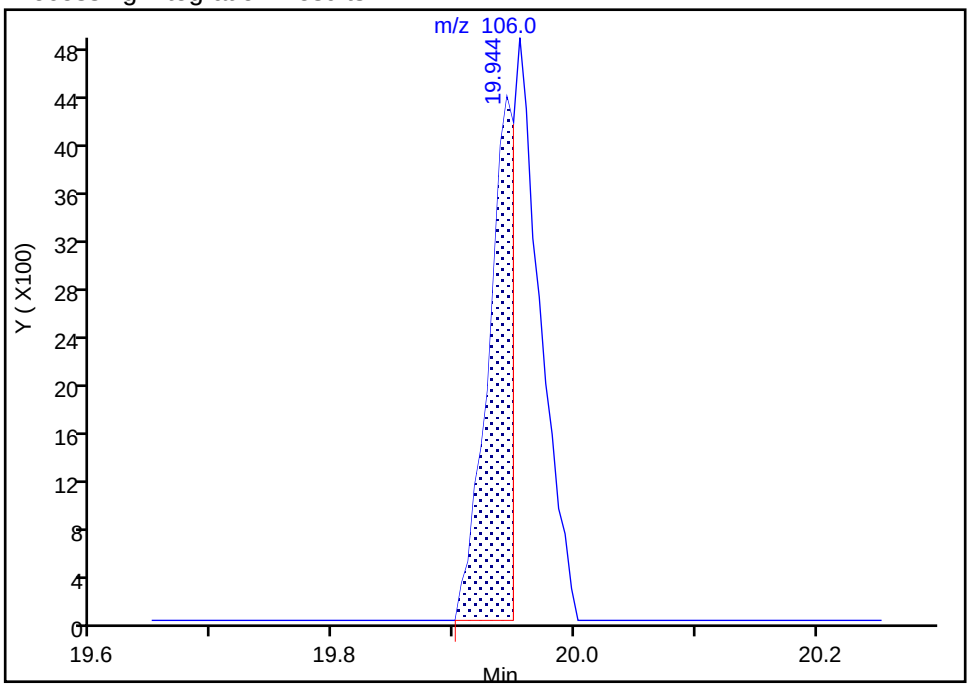
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6

Signal: 1

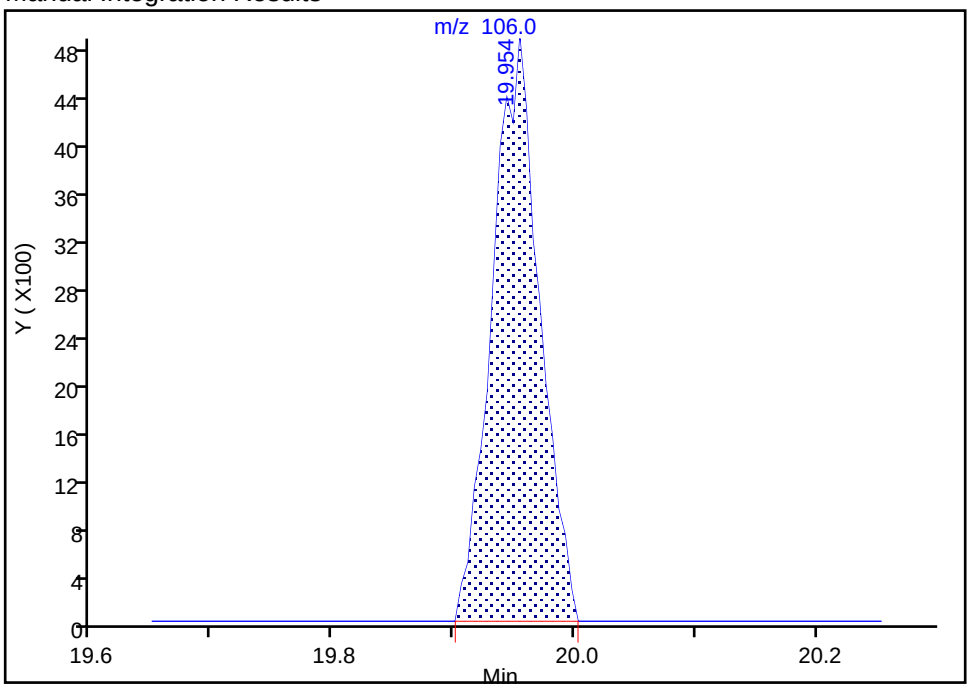
Processing Integration Results

RT: 19.94
Area: 6600
Amount: 0.131866
Amount Units: ppb v/v



Manual Integration Results

RT: 19.95
Area: 13129
Amount: 0.262314
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:43:30

Audit Action: Manually Integrated Audit Reason: Assign Peak

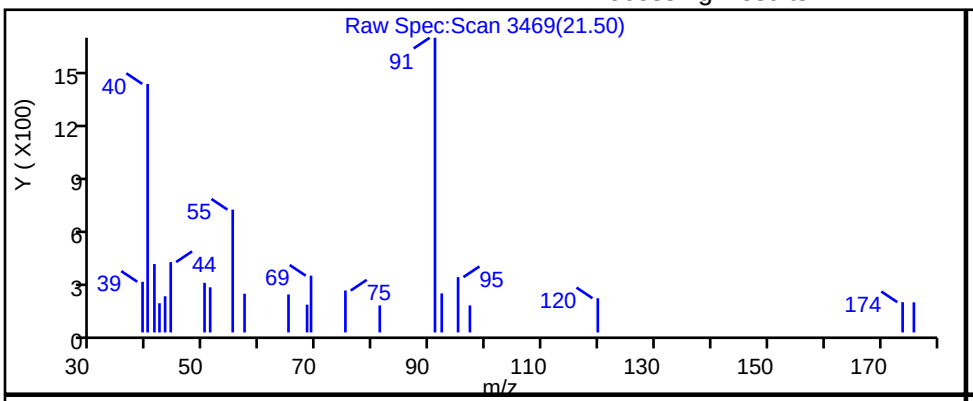
User Disabled Compound Report

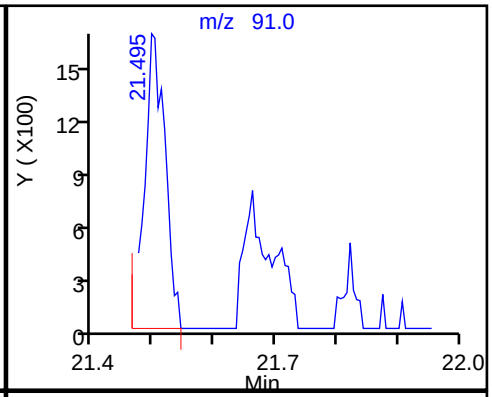
TestAmerica Burlington

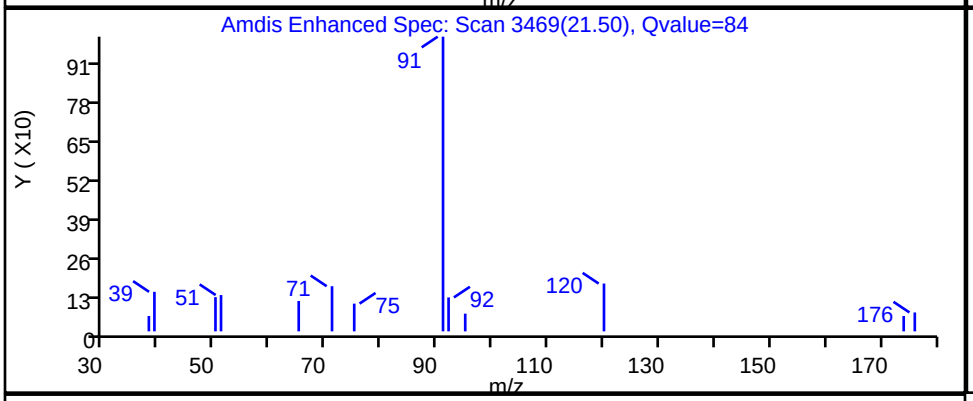
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

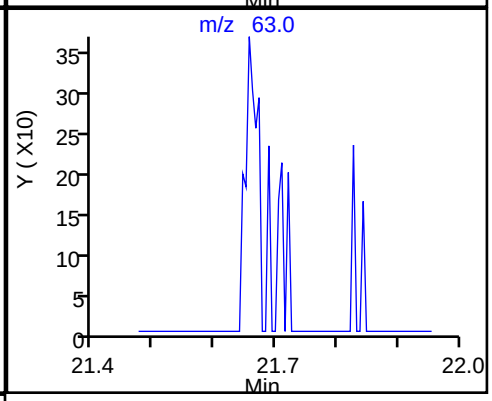
89 2-Chlorotoluene, CAS: 95-49-8

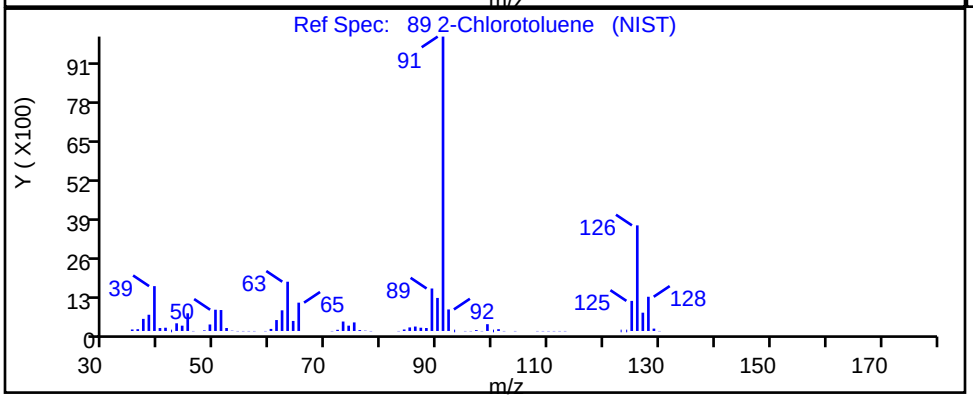
Processing Results











RT	Mass	Response	Amount
21.50	91.00	3755	0.024909
21.71	63.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:44:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

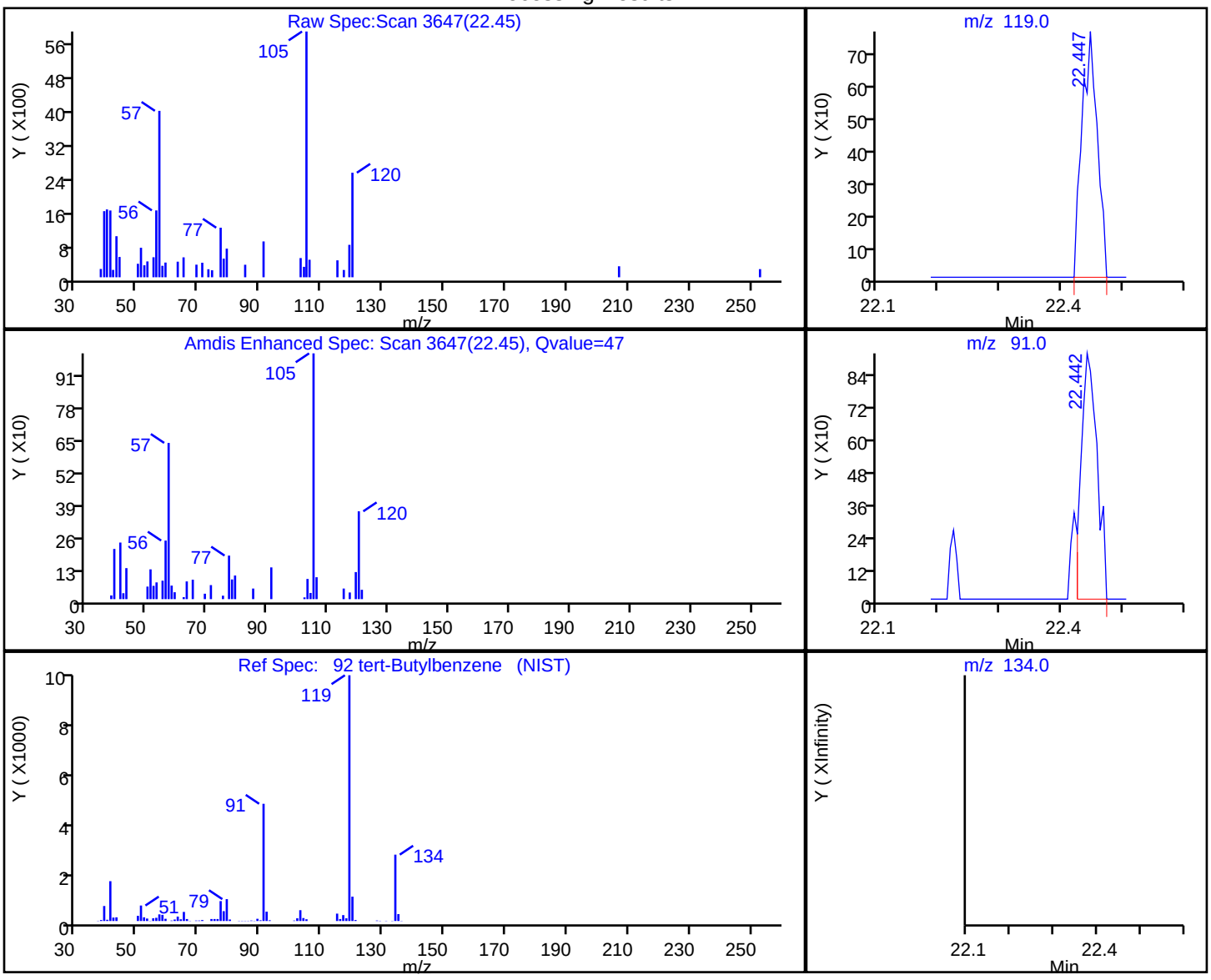
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

92 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
22.45	119.00	1347	0.011989
22.44	91.00	1645	
22.35	134.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:44:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

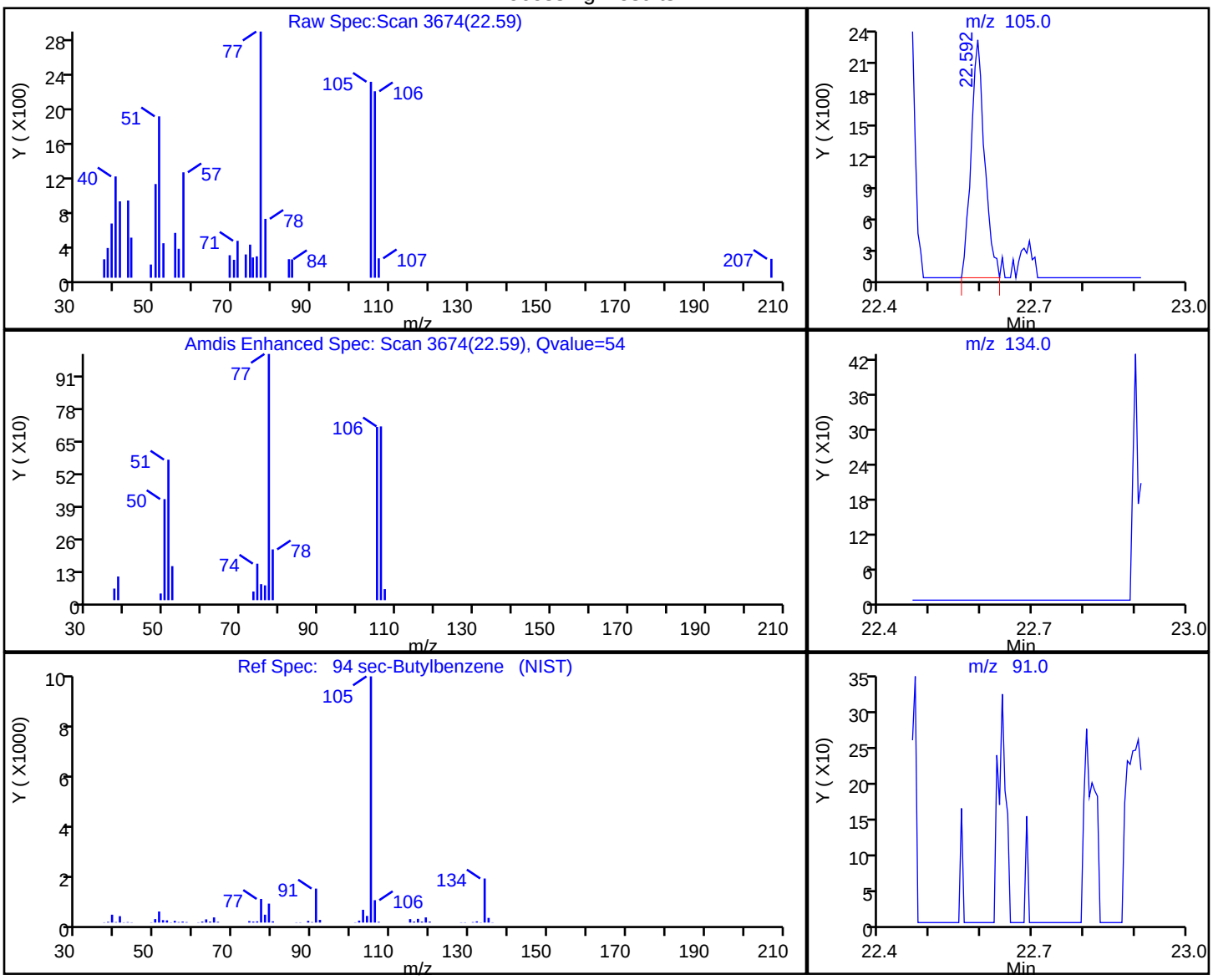
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_09.D				
Injection Date:	05-Apr-2018 16:45:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.59	105.00	4160	0.022321
22.69	134.00	0	
22.69	91.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:44:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) DL | Lab Sample ID: 200-42918-2 DL

Matrix: Air | Lab File ID: 29949_25.D

Analysis Method: TO-15 | Date Collected: 03/28/2018 16:00

Sample wt/vol: 100(mL) | Date Analyzed: 04/06/2018 09:15

Soil Aliquot Vol: | Dilution Factor: 2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128151 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.45	J D	1.0	0.094
75-45-6	Freon 22	86.47	1.0	U	1.0	0.40
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.40	U	0.40	0.082
74-87-3	Chloromethane	50.49	0.48	J D	1.0	0.32
106-97-8	n-Butane	58.12	2.9	D	1.0	0.092
75-01-4	Vinyl chloride	62.50	0.40	U	0.40	0.036
106-99-0	1,3-Butadiene	54.09	0.40	U	0.40	0.074
74-83-9	Bromomethane	94.94	0.40	U	0.40	0.072
75-00-3	Chloroethane	64.52	1.0	U	1.0	0.26
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.40	U	0.40	0.044
75-69-4	Trichlorofluoromethane	137.37	0.16	J D	0.40	0.062
76-13-1	Freon TF	187.38	0.40	U	0.40	0.054
75-35-4	1,1-Dichloroethene	96.94	0.40	U	0.40	0.070
67-64-1	Acetone	58.08	34	D	10	2.6
67-63-0	Isopropyl alcohol	60.10	1.3	J D	10	0.26
75-15-0	Carbon disulfide	76.14	1.0	U	1.0	0.056
107-05-1	3-Chloropropene	76.53	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	84.93	0.32	J D	1.0	0.14
75-65-0	tert-Butyl alcohol	74.12	10	U	10	3.4
1634-04-4	Methyl tert-butyl ether	88.15	0.40	U	0.40	0.082
156-60-5	trans-1,2-Dichloroethene	96.94	0.40	U	0.40	0.10
110-54-3	n-Hexane	86.17	0.40	U	0.40	0.092
75-34-3	1,1-Dichloroethane	98.96	0.40	U	0.40	0.034
78-93-3	Methyl Ethyl Ketone	72.11	1.8	D	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	96.94	0.40	U	0.40	0.058
540-59-0	1,2-Dichloroethene, Total	96.94	0.80	U	0.80	0.058
67-66-3	Chloroform	119.38	0.40	U	0.40	0.050
109-99-9	Tetrahydrofuran	72.11	15	D	10	2.4
71-55-6	1,1,1-Trichloroethane	133.41	0.40	U	0.40	0.052
110-82-7	Cyclohexane	84.16	0.40	U	0.40	0.090
56-23-5	Carbon tetrachloride	153.81	0.051	J D	0.080	0.022
540-84-1	2,2,4-Trimethylpentane	114.23	0.25	J D	0.40	0.086
71-43-2	Benzene	78.11	0.28	J D	0.40	0.056
107-06-2	1,2-Dichloroethane	98.96	0.40	U	0.40	0.068

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) DL | Lab Sample ID: 200-42918-2 DL

Matrix: Air | Lab File ID: 29949_25.D

Analysis Method: TO-15 | Date Collected: 03/28/2018 16:00

Sample wt/vol: 100(mL) | Date Analyzed: 04/06/2018 09:15

Soil Aliquot Vol: | Dilution Factor: 2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128151 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.19	J D	0.40	0.14
79-01-6	Trichloroethene	131.39	0.080	U	0.080	0.018
80-62-6	Methyl methacrylate	100.12	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	112.99	0.40	U	0.40	0.070
123-91-1	1,4-Dioxane	88.11	10	U	10	1.5
75-27-4	Bromodichloromethane	163.83	0.40	U	0.40	0.12
10061-01-5	cis-1,3-Dichloropropene	110.97	0.40	U	0.40	0.072
108-10-1	methyl isobutyl ketone	100.16	1.0	U	1.0	0.13
108-88-3	Toluene	92.14	0.49	D	0.40	0.070
10061-02-6	trans-1,3-Dichloropropene	110.97	0.40	U	0.40	0.076
79-00-5	1,1,2-Trichloroethane	133.41	0.40	U	0.40	0.034
127-18-4	Tetrachloroethene	165.83	0.091	D	0.080	0.020
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	1.0	U	1.0	0.17
124-48-1	Dibromochloromethane	208.29	0.40	U	0.40	0.034
106-93-4	1,2-Dibromoethane	187.87	0.40	U	0.40	0.046
108-90-7	Chlorobenzene	112.56	0.40	U	0.40	0.050
100-41-4	Ethylbenzene	106.17	0.22	J D	0.40	0.068
179601-23-1	m,p-Xylene	106.17	0.78	J D	1.0	0.15
95-47-6	Xylene, o-	106.17	0.26	J D	0.40	0.080
1330-20-7	Xylene (total)	106.17	1.0	J D	1.4	0.080
100-42-5	Styrene	104.15	0.40	U	0.40	0.070
75-25-2	Bromoform	252.75	0.40	U	0.40	0.070
98-82-8	Cumene	120.19	0.40	U	0.40	0.078
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.40	U	0.40	0.052
103-65-1	n-Propylbenzene	120.19	0.40	U	0.40	0.080
622-96-8	4-Ethyltoluene	120.20	0.40	U	0.40	0.080
108-67-8	1,3,5-Trimethylbenzene	120.20	0.40	U	0.40	0.080
95-49-8	2-Chlorotoluene	126.59	0.40	U	0.40	0.070
98-06-6	tert-Butylbenzene	134.22	0.40	U	0.40	0.074
95-63-6	1,2,4-Trimethylbenzene	120.20	0.40	U	0.40	0.11
135-98-8	sec-Butylbenzene	134.22	0.40	U	0.40	0.074
99-87-6	4-Isopropyltoluene	134.22	0.40	U	0.40	0.10
541-73-1	1,3-Dichlorobenzene	147.00	0.40	U	0.40	0.10
106-46-7	1,4-Dichlorobenzene	147.00	0.40	U	0.40	0.13

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) DL Lab Sample ID: 200-42918-2 DL

Matrix: Air Lab File ID: 29949_25.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 100(mL) Date Analyzed: 04/06/2018 09:15

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*0.40*	*U*	*0.40*	*0.13*
104-51-8	*n-Butylbenzene*	*134.22*	*0.40*	*U*	*0.40*	*0.14*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*0.40*	*U*	*0.40*	*0.090*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*1.0*	*U*	*1.0*	*0.38*
87-68-3	*Hexachlorobutadiene*	*260.76*	*0.40*	*U*	*0.40*	*0.13*
91-20-3	*Naphthalene*	*128.17*	*1.0*	*U*	*1.0*	*0.20*

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) DL Lab Sample ID: 200-42918-2 DL

Matrix: Air Lab File ID: 29949_25.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 100(mL) Date Analyzed: 04/06/2018 09:15

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.2	J D	4.9	0.46
75-45-6	Freon 22	86.47	3.5	U	3.5	1.4
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.8	U	2.8	0.57
74-87-3	Chloromethane	50.49	1.0	J D	2.1	0.66
106-97-8	n-Butane	58.12	6.9	D	2.4	0.22
75-01-4	Vinyl chloride	62.50	1.0	U	1.0	0.092
106-99-0	1,3-Butadiene	54.09	0.88	U	0.88	0.16
74-83-9	Bromomethane	94.94	1.6	U	1.6	0.28
75-00-3	Chloroethane	64.52	2.6	U	2.6	0.69
593-60-2	Bromoethene(Vinyl Bromide)	106.96	1.7	U	1.7	0.19
75-69-4	Trichlorofluoromethane	137.37	0.92	J D	2.2	0.35
76-13-1	Freon TF	187.38	3.1	U	3.1	0.41
75-35-4	1,1-Dichloroethene	96.94	1.6	U	1.6	0.28
67-64-1	Acetone	58.08	80	D	24	6.2
67-63-0	Isopropyl alcohol	60.10	3.2	J D	25	0.64
75-15-0	Carbon disulfide	76.14	3.1	U	3.1	0.17
107-05-1	3-Chloropropene	76.53	3.1	U	3.1	0.39
75-09-2	Methylene Chloride	84.93	1.1	J D	3.5	0.47
75-65-0	tert-Butyl alcohol	74.12	30	U	30	10
1634-04-4	Methyl tert-butyl ether	88.15	1.4	U	1.4	0.30
156-60-5	trans-1,2-Dichloroethene	96.94	1.6	U	1.6	0.40
110-54-3	n-Hexane	86.17	1.4	U	1.4	0.32
75-34-3	1,1-Dichloroethane	98.96	1.6	U	1.6	0.14
78-93-3	Methyl Ethyl Ketone	72.11	5.2	D	2.9	0.65
156-59-2	cis-1,2-Dichloroethene	96.94	1.6	U	1.6	0.23
540-59-0	1,2-Dichloroethene, Total	96.94	3.2	U	3.2	0.23
67-66-3	Chloroform	119.38	2.0	U	2.0	0.24
109-99-9	Tetrahydrofuran	72.11	43	D	29	7.1
71-55-6	1,1,1-Trichloroethane	133.41	2.2	U	2.2	0.28
110-82-7	Cyclohexane	84.16	1.4	U	1.4	0.31
56-23-5	Carbon tetrachloride	153.81	0.32	J D	0.50	0.14
540-84-1	2,2,4-Trimethylpentane	114.23	1.2	J D	1.9	0.40
71-43-2	Benzene	78.11	0.88	J D	1.3	0.18
107-06-2	1,2-Dichloroethane	98.96	1.6	U	1.6	0.28

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) DL | Lab Sample ID: 200-42918-2 DL

Matrix: Air | Lab File ID: 29949_25.D

Analysis Method: TO-15 | Date Collected: 03/28/2018 16:00

Sample wt/vol: 100(mL) | Date Analyzed: 04/06/2018 09:15

Soil Aliquot Vol: | Dilution Factor: 2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128151 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.78	J D	1.6	0.56
79-01-6	Trichloroethene	131.39	0.43	U	0.43	0.098
80-62-6	Methyl methacrylate	100.12	4.1	U	4.1	0.90
78-87-5	1,2-Dichloropropane	112.99	1.8	U	1.8	0.32
123-91-1	1,4-Dioxane	88.11	36	U	36	5.5
75-27-4	Bromodichloromethane	163.83	2.7	U	2.7	0.79
10061-01-5	cis-1,3-Dichloropropene	110.97	1.8	U	1.8	0.33
108-10-1	methyl isobutyl ketone	100.16	4.1	U	4.1	0.53
108-88-3	Toluene	92.14	1.8	D	1.5	0.26
10061-02-6	trans-1,3-Dichloropropene	110.97	1.8	U	1.8	0.34
79-00-5	1,1,2-Trichloroethane	133.41	2.2	U	2.2	0.19
127-18-4	Tetrachloroethene	165.83	0.61	D	0.54	0.13
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	4.1	U	4.1	0.70
124-48-1	Dibromochloromethane	208.29	3.4	U	3.4	0.29
106-93-4	1,2-Dibromoethane	187.87	3.1	U	3.1	0.35
108-90-7	Chlorobenzene	112.56	1.8	U	1.8	0.23
100-41-4	Ethylbenzene	106.17	0.93	J D	1.7	0.30
179601-23-1	m,p-Xylene	106.17	3.4	J D	4.3	0.67
95-47-6	Xylene, o-	106.17	1.1	J D	1.7	0.35
1330-20-7	Xylene (total)	106.17	4.5	J D	6.1	0.35
100-42-5	Styrene	104.15	1.7	U	1.7	0.30
75-25-2	Bromoform	252.75	4.1	U	4.1	0.72
98-82-8	Cumene	120.19	2.0	U	2.0	0.38
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.7	U	2.7	0.36
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0	0.39
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0	0.39
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0	0.39
95-49-8	2-Chlorotoluene	126.59	2.1	U	2.1	0.36
98-06-6	tert-Butylbenzene	134.22	2.2	U	2.2	0.41
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0	0.56
135-98-8	sec-Butylbenzene	134.22	2.2	U	2.2	0.41
99-87-6	4-Isopropyltoluene	134.22	2.2	U	2.2	0.57
541-73-1	1,3-Dichlorobenzene	147.00	2.4	U	2.4	0.60
106-46-7	1,4-Dichlorobenzene	147.00	2.4	U	2.4	0.76

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-102 (AS) DL Lab Sample ID: 200-42918-2 DL

Matrix: Air Lab File ID: 29949_25.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 100(mL) Date Analyzed: 04/06/2018 09:15

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*2.1*	*U*	*2.1*	*0.69*
104-51-8	*n-Butylbenzene*	*134.22*	*2.2*	*U*	*2.2*	*0.75*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*2.4*	*U*	*2.4*	*0.54*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*7.4*	*U*	*7.4*	*2.8*
87-68-3	*Hexachlorobutadiene*	*260.76*	*4.3*	*U*	*4.3*	*1.4*
91-20-3	*Naphthalene*	*128.17*	*5.2*	*U*	*5.2*	*1.0*

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D
Lims ID: 200-42918-A-2
Client ID: GC-IA-102 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 09:15:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 200.000 mL Dil. Factor: 2.0000
Sample Info: 200-0029949-025
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 08:38:56 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: puangmaleek Date: 09-Apr-2018 08:38:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	98	11559	0.2247	
3 Chlorodifluoromethane	51	3.156	3.151	0.005	97	8849	0.1926	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354				ND	U
5 Chloromethane	50	3.488	3.482	0.006	98	6346	0.2421	
6 Butane	43	3.664	3.664	0.000	97	74707	1.45	
7 Vinyl chloride	62		3.707				ND	
8 Butadiene	54		3.777				ND	U
10 Bromomethane	94		4.413				ND	
11 Chloroethane	64		4.638				ND	
13 Vinyl bromide	106		4.996				ND	
14 Trichlorofluoromethane	101	5.082	5.087	-0.005	97	3949	0.0820	
20 1,1,2-Trichloro-1,2,2-trif	101		6.104				ND	
21 1,1-Dichloroethene	96		6.163				ND	
22 Acetone	43	6.398	6.403	-0.005	99	843418	16.8	
23 Carbon disulfide	76		6.548				ND	
24 Isopropyl alcohol	45	6.703	6.682	0.021	99	33433	0.6412	
25 3-Chloro-1-propene	41		6.933				ND	U
27 Methylene Chloride	49	7.222	7.227	-0.005	90	5290	0.1610	
28 2-Methyl-2-propanol	59	7.495	7.452	0.043	90	19939	0.3719	
29 Methyl tert-butyl ether	73		7.623				ND	
31 trans-1,2-Dichloroethene	61		7.661				ND	
33 Hexane	57		8.030				ND	U
34 1,1-Dichloroethane	63		8.543				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.677				ND	
38 2-Butanone (MEK)	72	9.742	9.742	0.000	95	9920	0.8857	
* 40 Chlorobromomethane	128	10.159	10.159	0.000	85	131866	10.0	
41 Tetrahydrofuran	42	10.175	10.165	0.005	89	322648	7.33	
42 Chloroform	83		10.298				ND	
43 Cyclohexane	84	10.533	10.533	-0.006	75	600	0.0213	M
44 1,1,1-Trichloroethane	97		10.576				ND	
45 Carbon tetrachloride	117	10.849	10.834	0.011	1	1031	0.0253	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	46 Isooctane	57	11.282	11.277	0.000	96	19239	0.1232	
	47 Benzene	78	11.325	11.331	-0.011	94	10179	0.1384	
	48 1,2-Dichloroethane	62		11.539				ND	
	49 n-Heptane	43	11.705	11.705	0.005	1	6998	0.0952	Ma
*	50 1,4-Difluorobenzene	114	12.235	12.240	-0.005	98	807799	10.0	
	53 Trichloroethene	95		12.732				ND	
	54 1,2-Dichloropropane	63		13.331				ND	
	55 Methyl methacrylate	69		13.513				ND	
	56 1,4-Dioxane	88		13.572				ND	
	58 Dichlorobromomethane	83		13.914				ND	
	60 cis-1,3-Dichloropropene	75		14.893				ND	
	61 4-Methyl-2-pentanone (MIBK	43	15.220	15.220	0.016	45	3553	0.0373	7a
	65 Toluene	92	15.503	15.487	0.000	89	12347	0.2450	
	66 trans-1,3-Dichloropropene	75		16.145				ND	
	67 1,1,2-Trichloroethane	83		16.541				ND	
	68 Tetrachloroethene	166	16.627	16.627	-0.005	73	1287	0.0453	
	69 2-Hexanone	43	17.044	17.044	0.021	49	5082	0.0528	7Ma
	71 Chlorodibromomethane	129		17.338				ND	
	72 Ethylene Dibromide	107		17.622				ND	
*	74 Chlorobenzene-d5	117	18.563	18.569	-0.006	99	775019	10.0	
	75 Chlorobenzene	112		18.627				ND	
	76 Ethylbenzene	91	18.788	18.788	-0.005	97	12910	0.1076	
	78 m-Xylene & p-Xylene	106	19.055	19.050	0.000	0	16113	0.3910	
S	73 Xylenes, Total	106				0		0.5225	
	79 o-Xylene	106	19.960	19.960	0.006	90	5277	0.1315	M
	80 Styrene	104		20.013				ND	
	81 Bromoform	173		20.484				ND	
	82 Isopropylbenzene	105		20.714				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.441				ND	
	85 N-Propylbenzene	91		21.500				ND	
	88 4-Ethyltoluene	105	21.709	21.703	0.000	54	1649	0.0132	
	89 2-Chlorotoluene	91		21.714				ND	
	90 1,3,5-Trimethylbenzene	105		21.827				ND	U
	92 tert-Butylbenzene	119		22.346				ND	
	93 1,2,4-Trimethylbenzene	105	22.447	22.441	0.000	96	4706	0.0451	
	94 sec-Butylbenzene	105		22.688				ND	U
	95 4-Isopropyltoluene	119		22.902				ND	
	96 1,3-Dichlorobenzene	146		22.929				ND	
	97 1,4-Dichlorobenzene	146		23.073				ND	
	98 Benzyl chloride	91		23.282				ND	
	100 n-Butylbenzene	91		23.496				ND	
	101 1,2-Dichlorobenzene	146		23.624				ND	
	103 1,2,4-Trichlorobenzene	180		26.187				ND	
	104 Hexachlorobutadiene	225		26.374				ND	
	105 Naphthalene	128		26.684				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

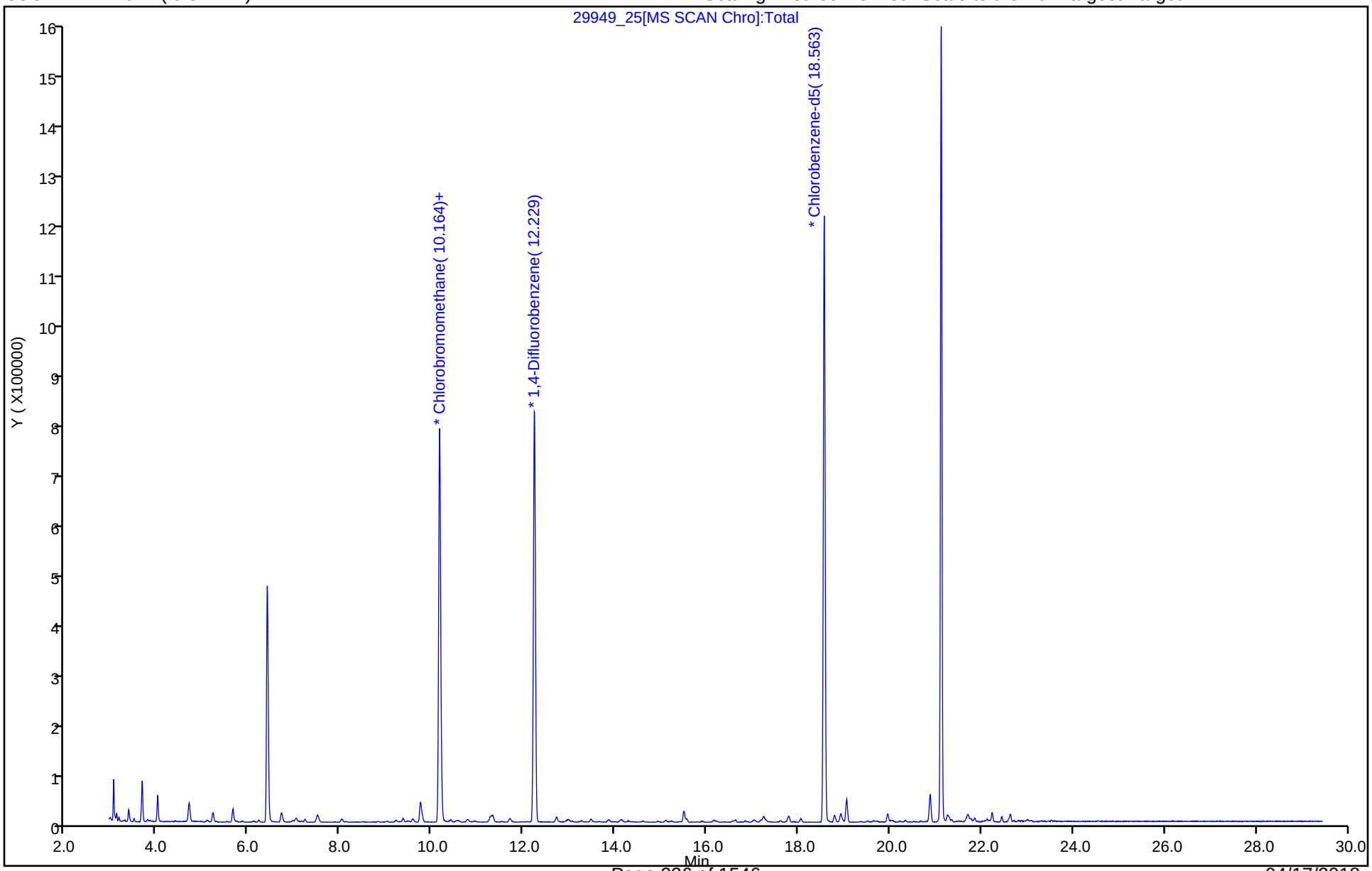
Report Date: 09-Apr-2018 08:38:56 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

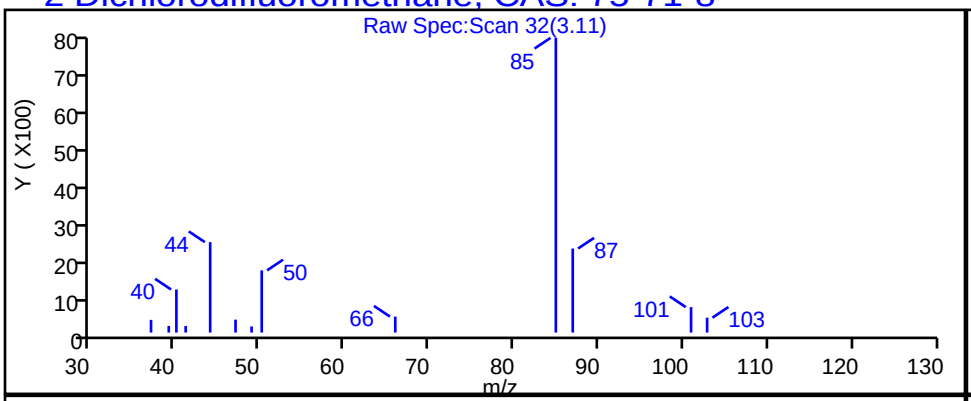
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2	Worklist Smp#:	25
Client ID:	GC-IA-102 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	24
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

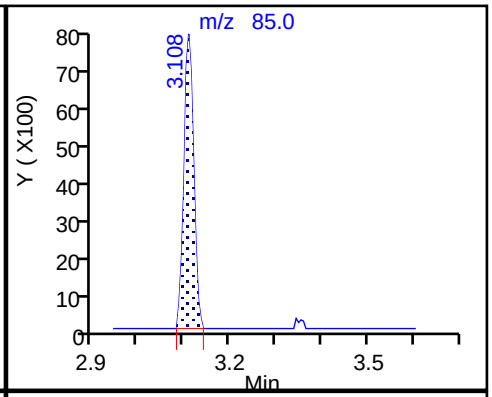
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

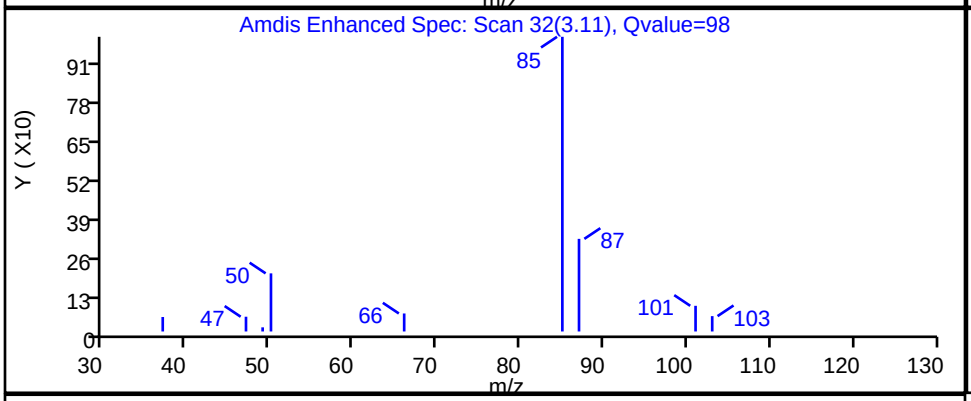


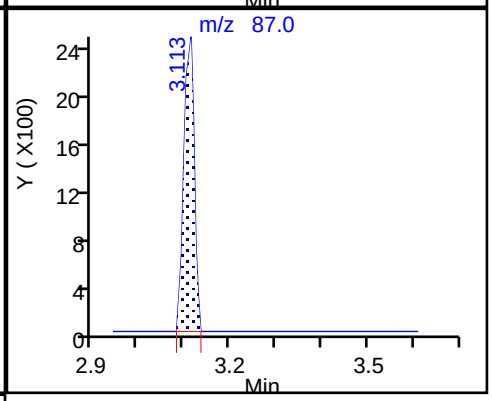
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D
Injection Date: 06-Apr-2018 09:15:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 200.000 mL Dil. Factor: 2.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

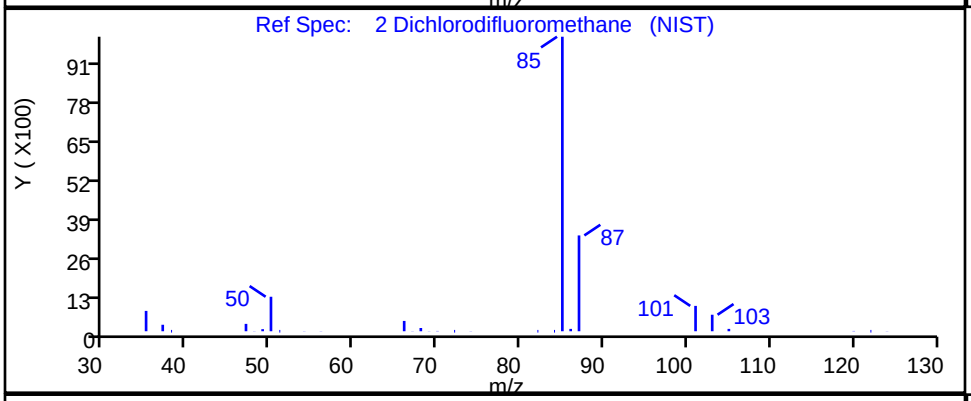
2 Dichlorodifluoromethane, CAS: 75-71-8

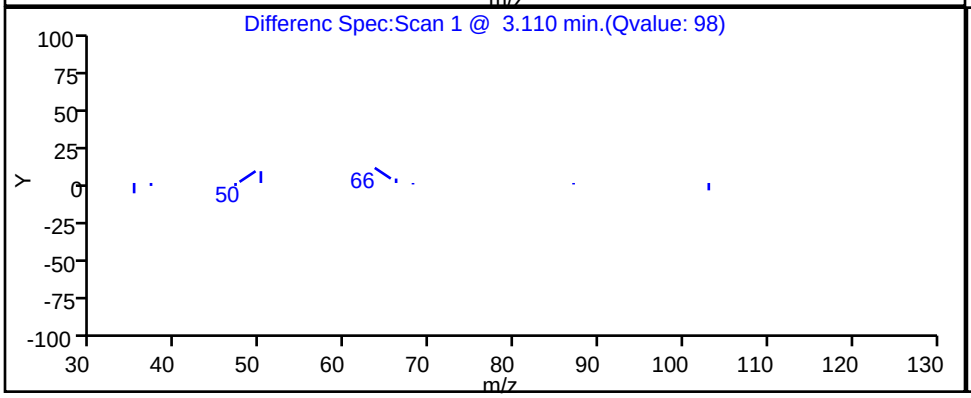


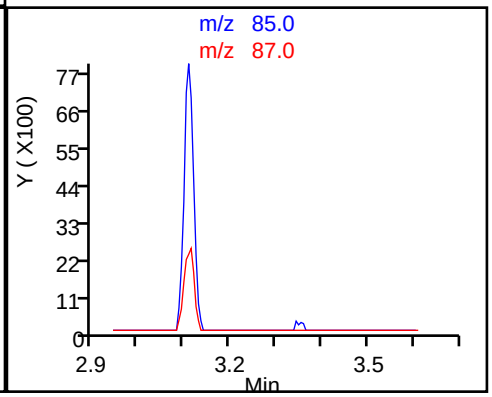










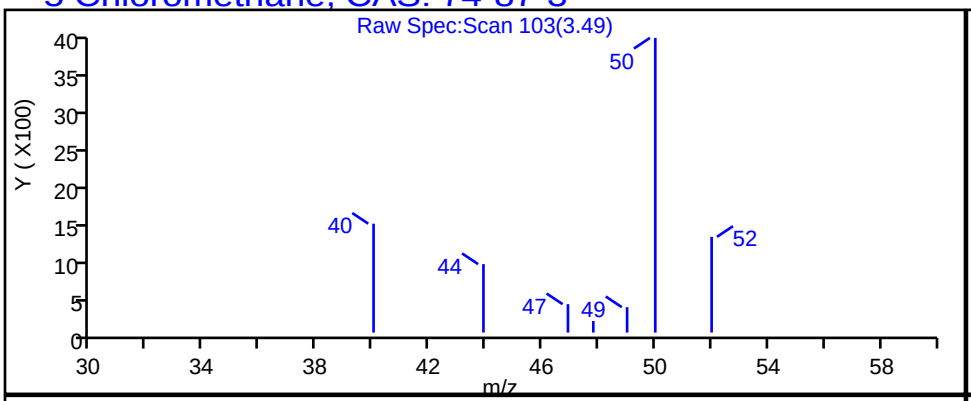


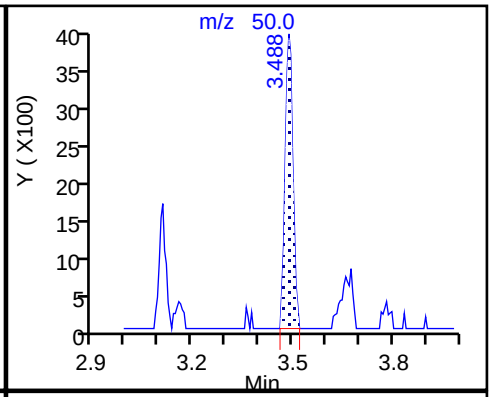
TestAmerica Burlington

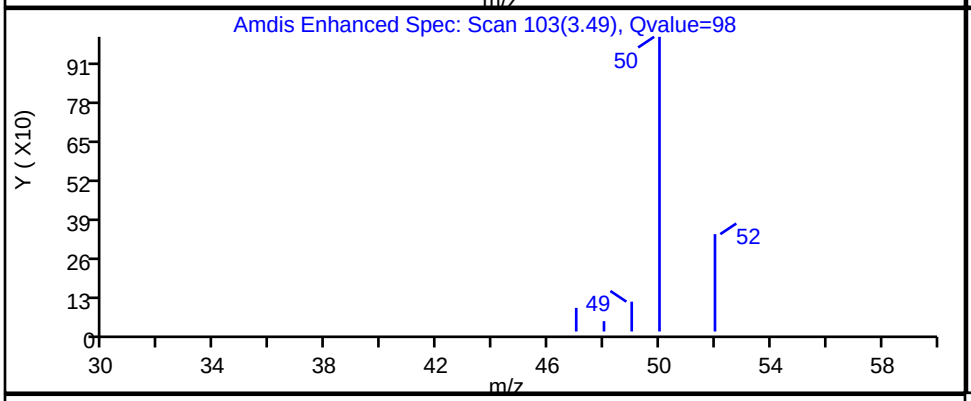
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

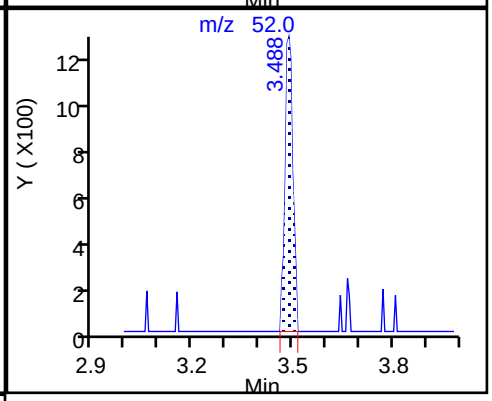
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

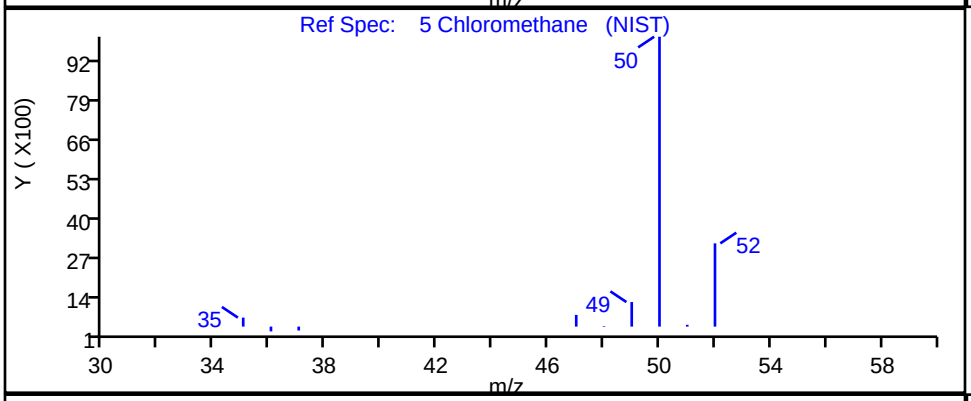
5 Chloromethane, CAS: 74-87-3

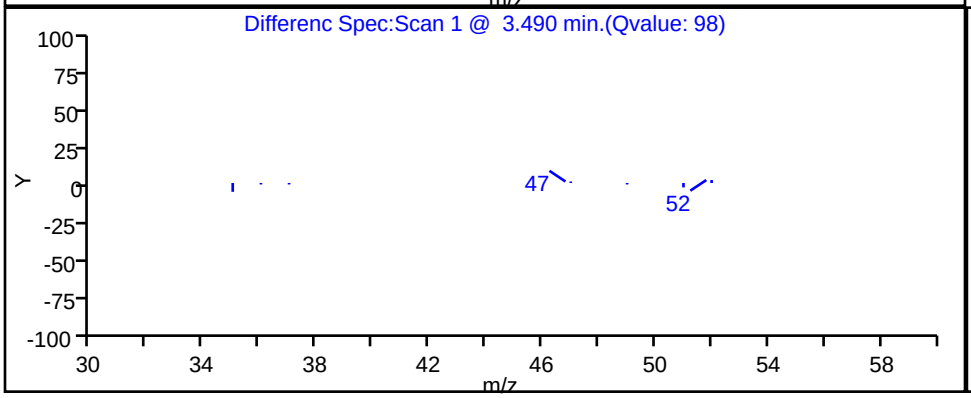


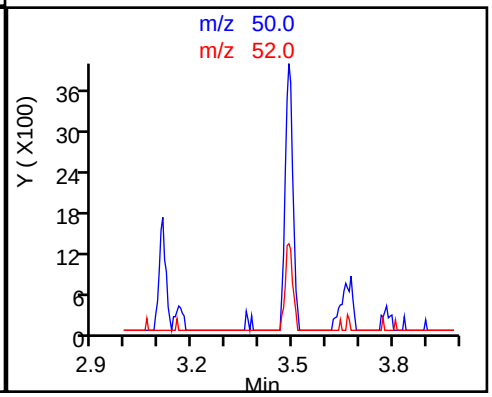










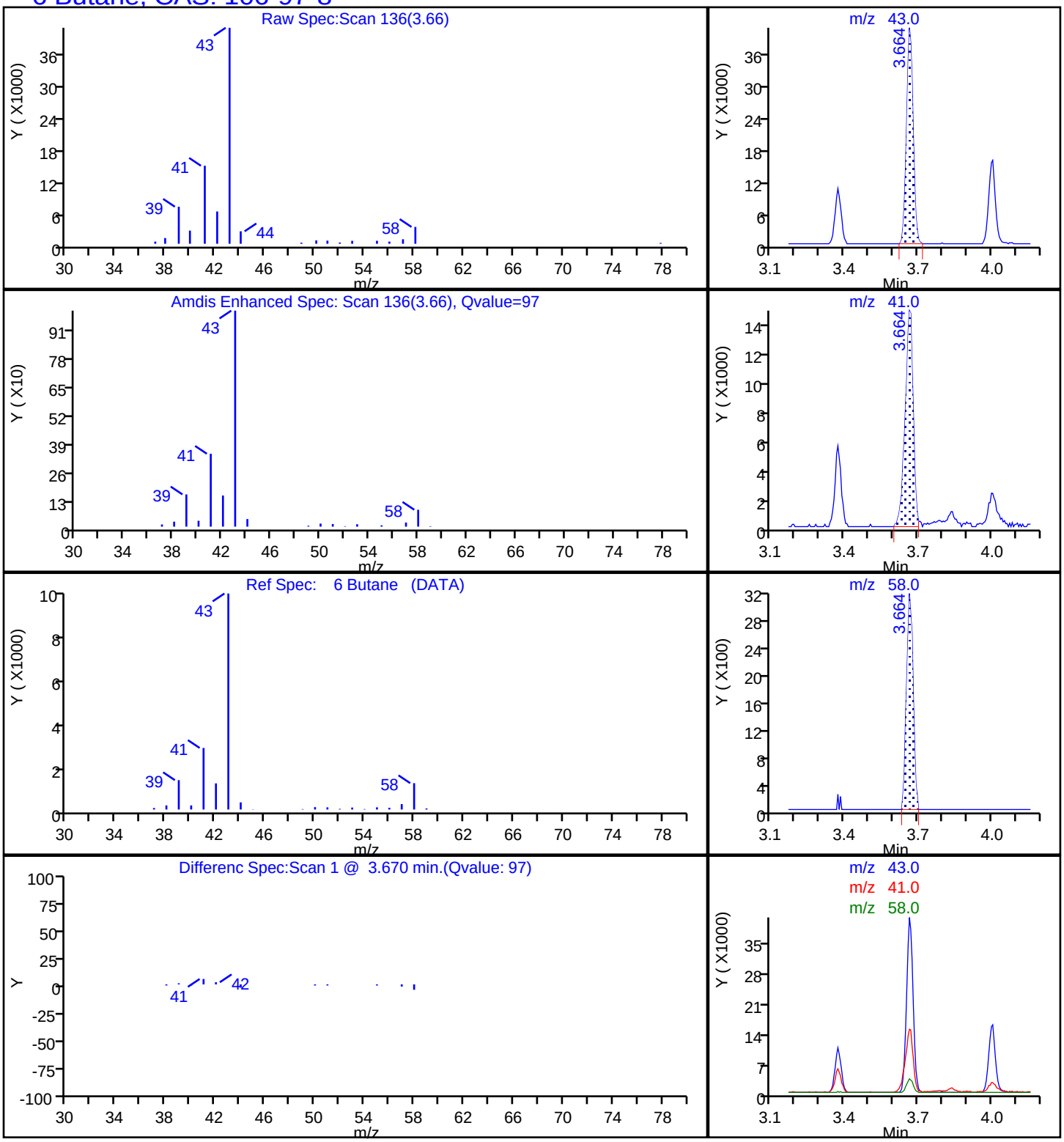


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

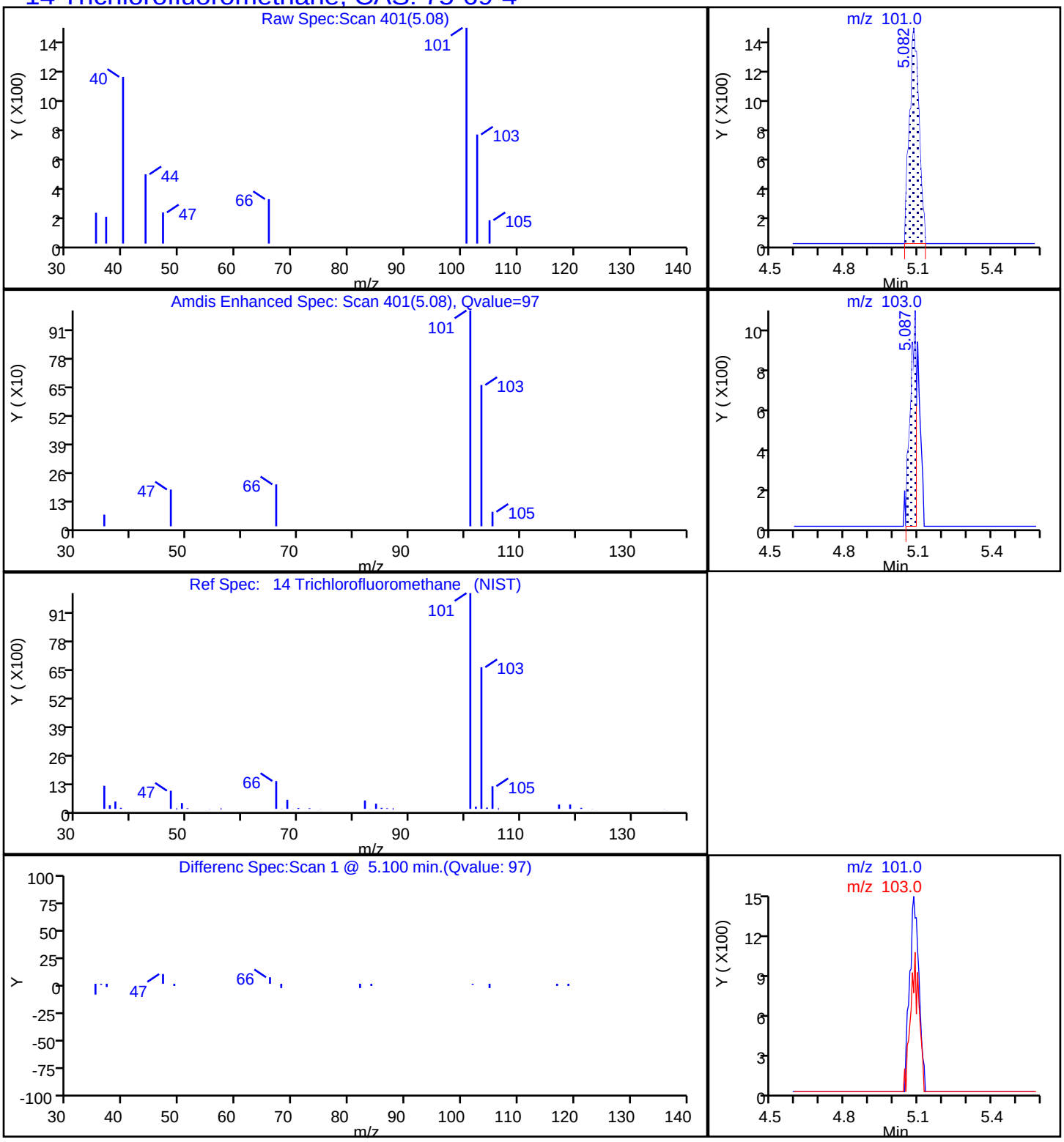
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8



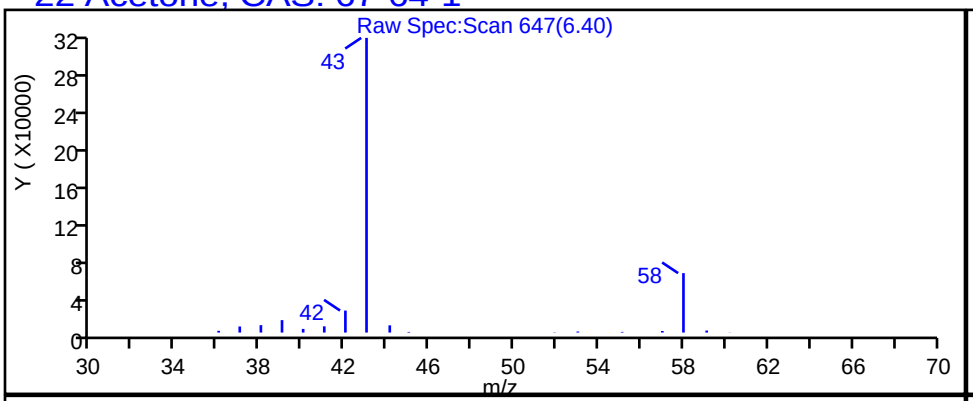
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D
Injection Date: 06-Apr-2018 09:15:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 200.000 mL Dil. Factor: 2.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

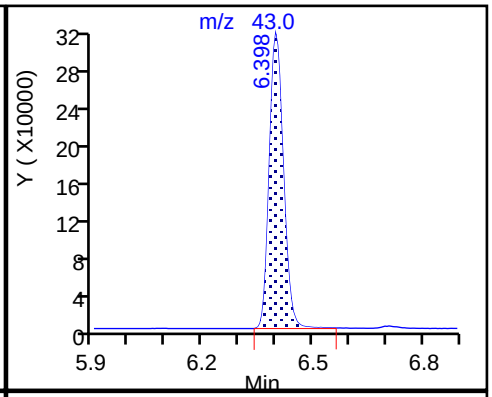
14 Trichlorofluoromethane, CAS: 75-69-4

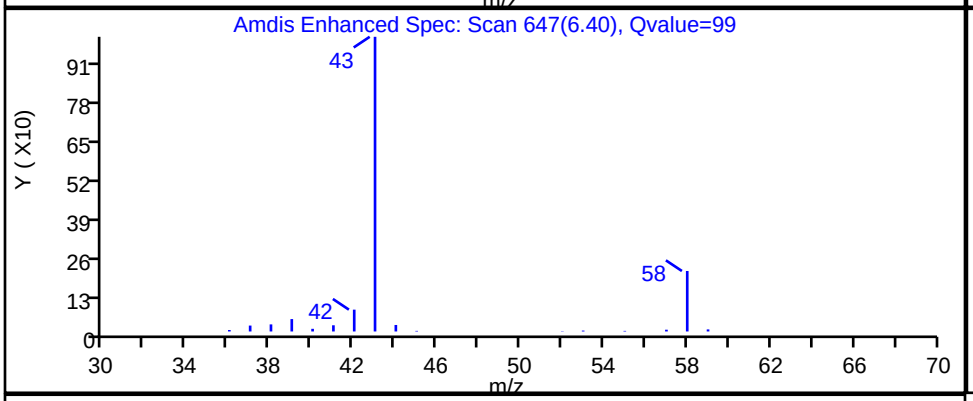


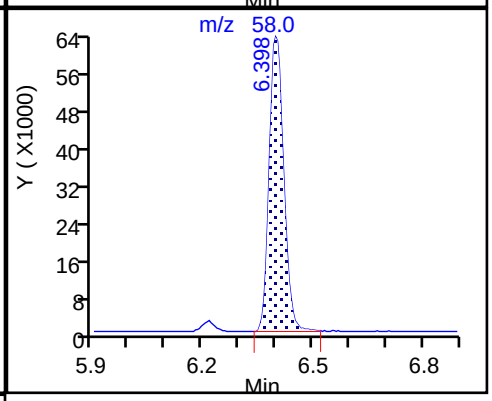
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D
Injection Date: 06-Apr-2018 09:15:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 200.000 mL Dil. Factor: 2.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

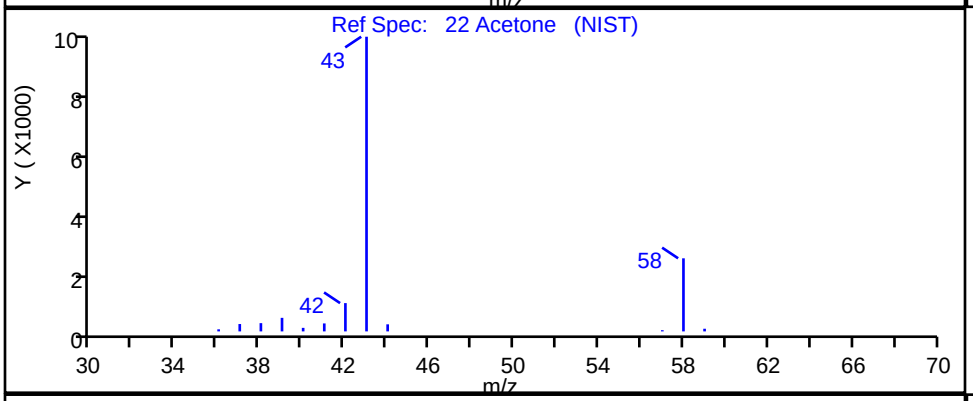
22 Acetone, CAS: 67-64-1

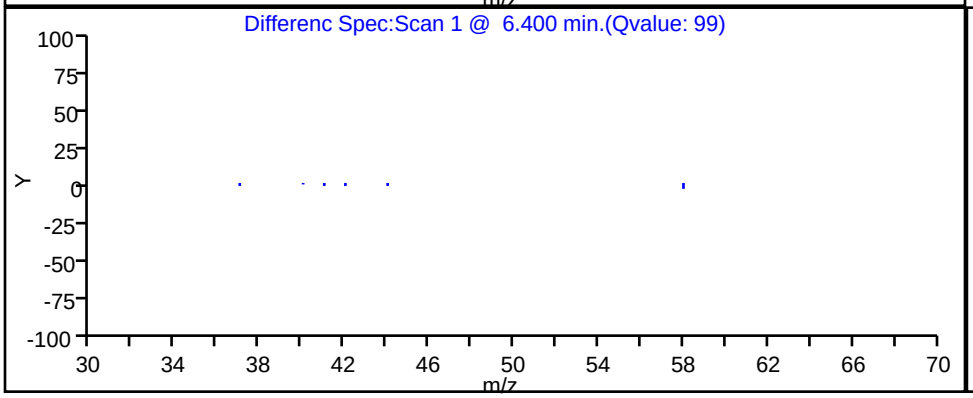


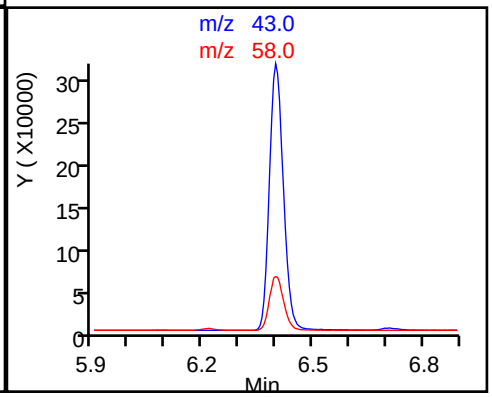






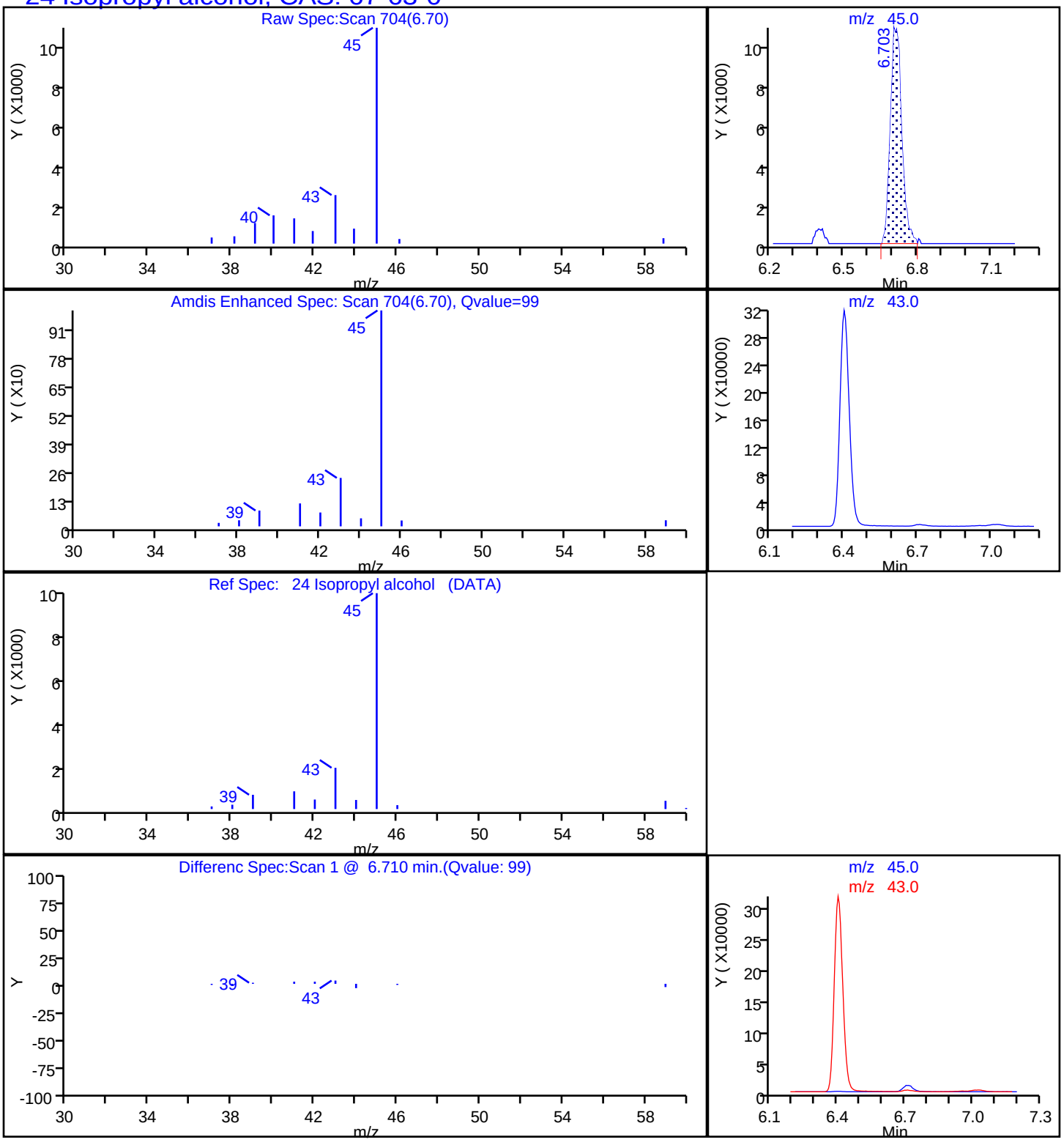






Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D
Injection Date: 06-Apr-2018 09:15:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 200.000 mL Dil. Factor: 2.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

24 Isopropyl alcohol, CAS: 67-63-0

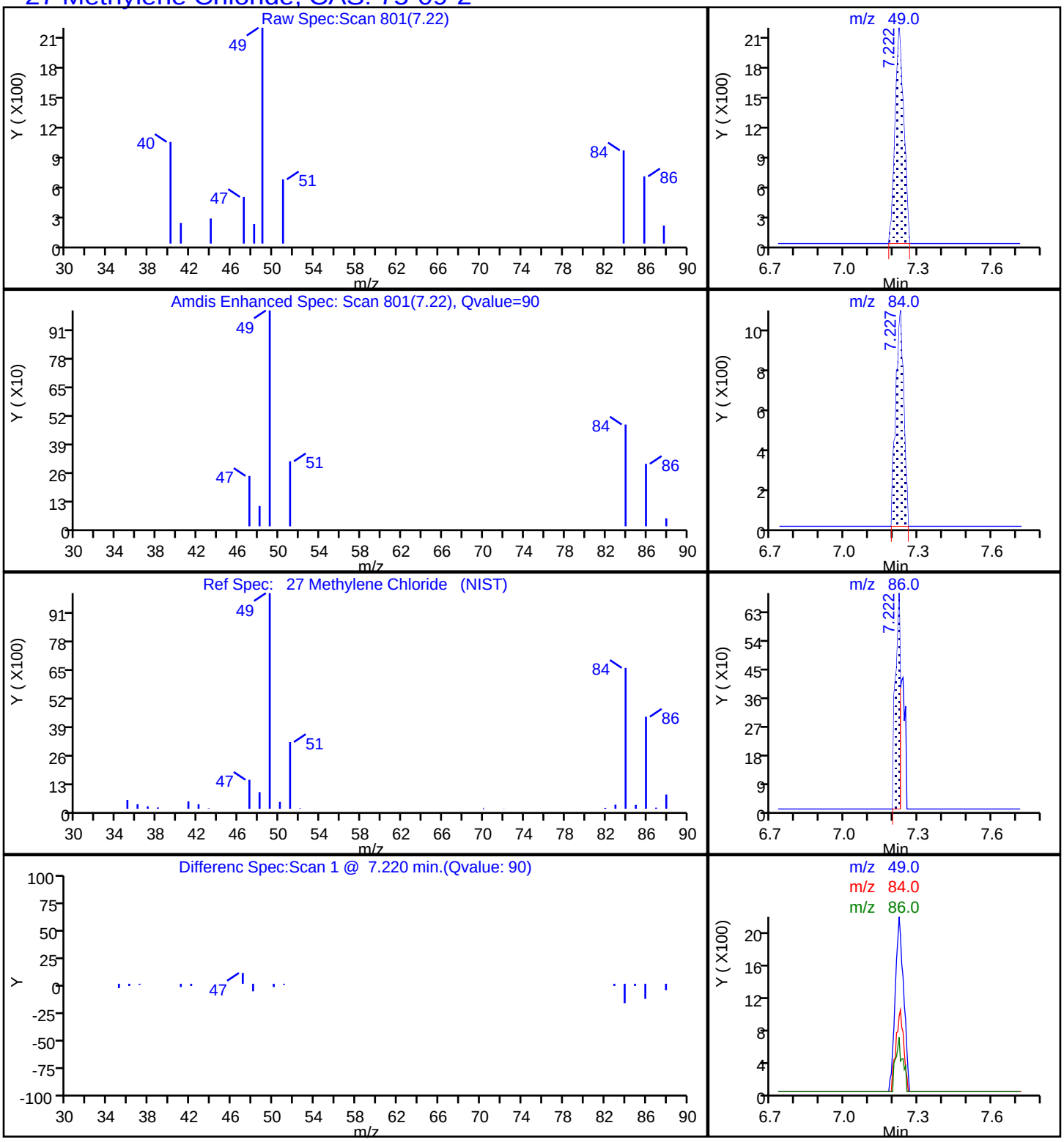


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

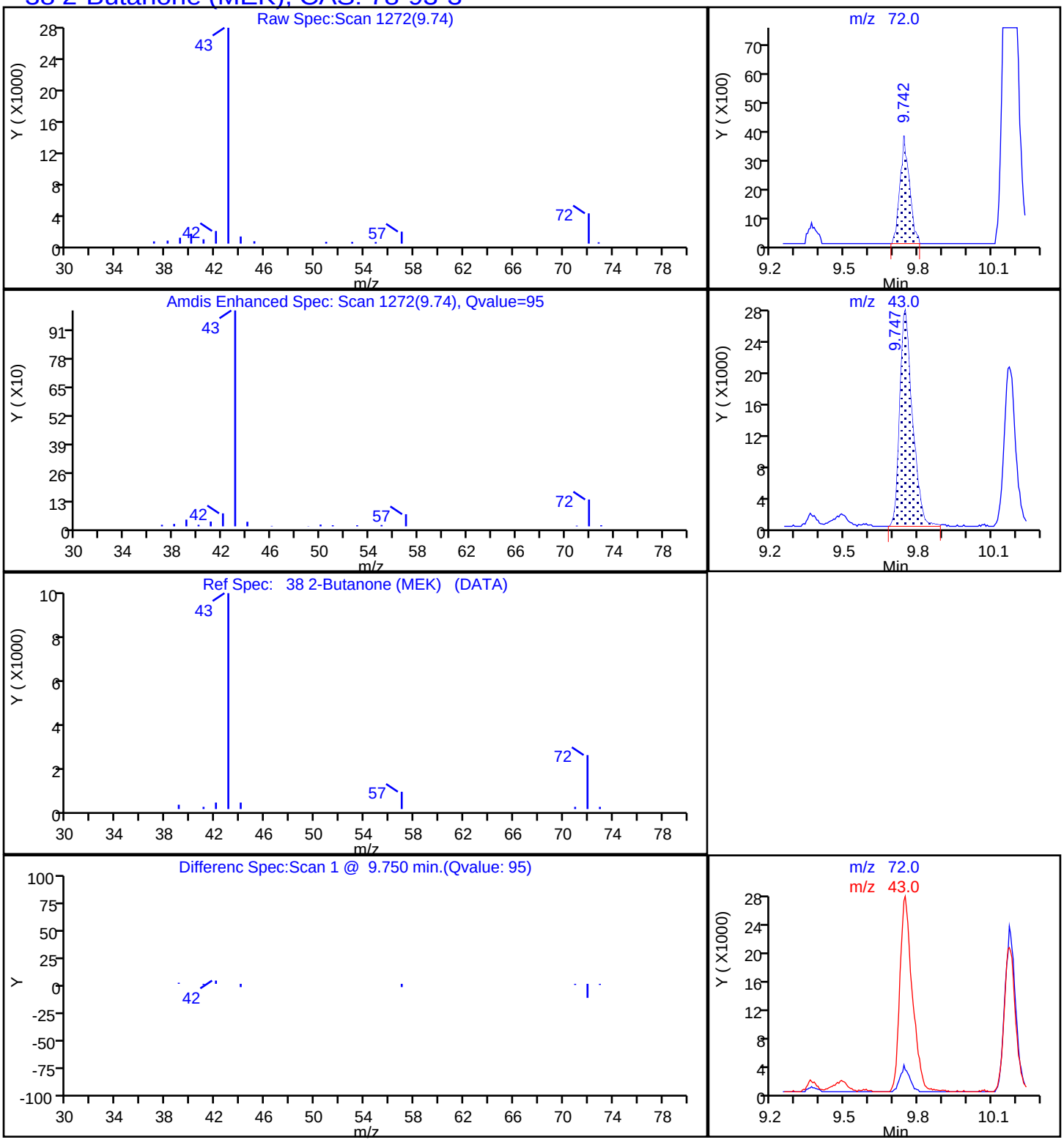
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D
Injection Date: 06-Apr-2018 09:15:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 200.000 mL Dil. Factor: 2.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

38 2-Butanone (MEK), CAS: 78-93-3



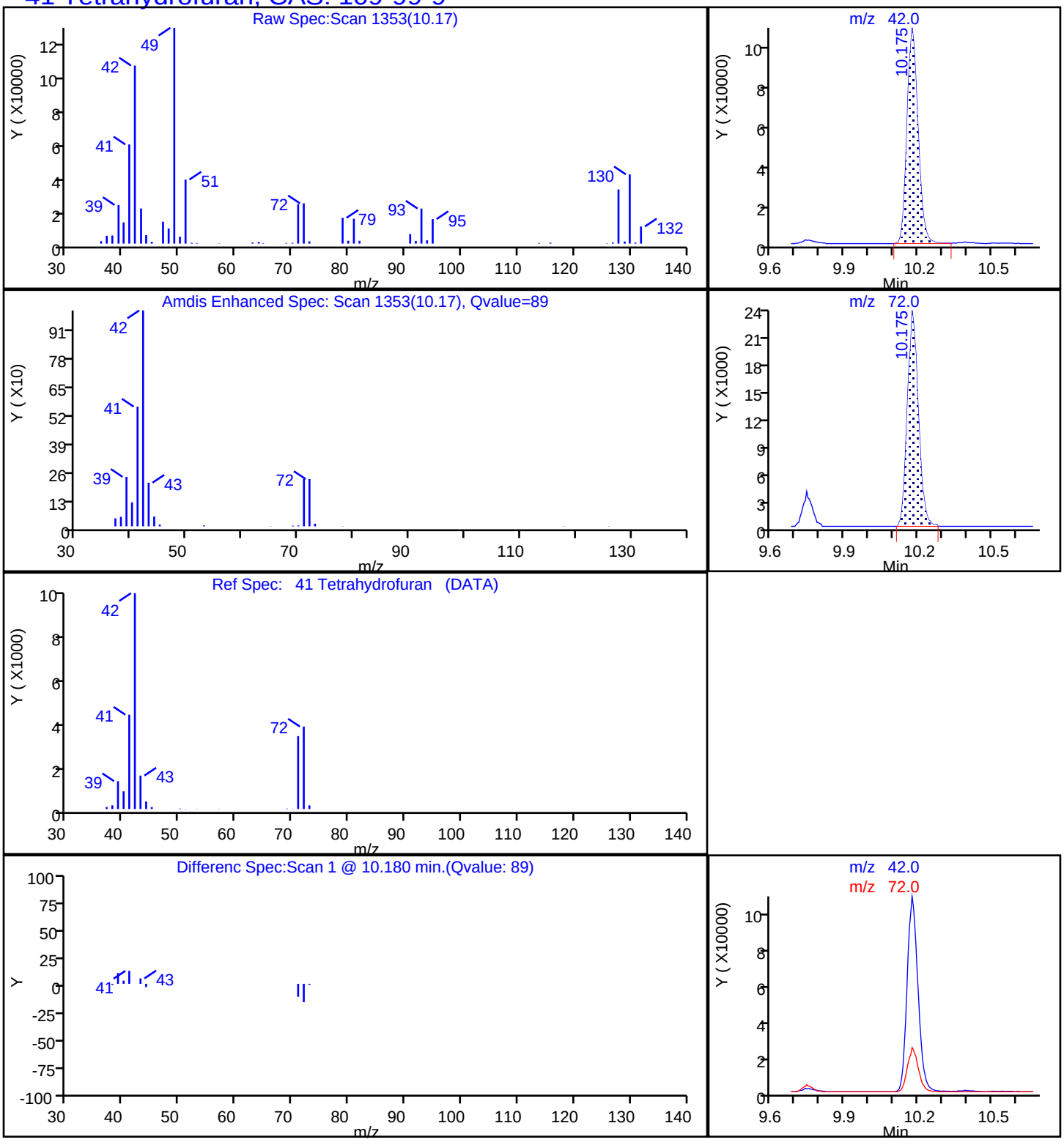
Report Date: 09-Apr-2018 08:38:57 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

41 Tetrahydrofuran, CAS: 109-99-9

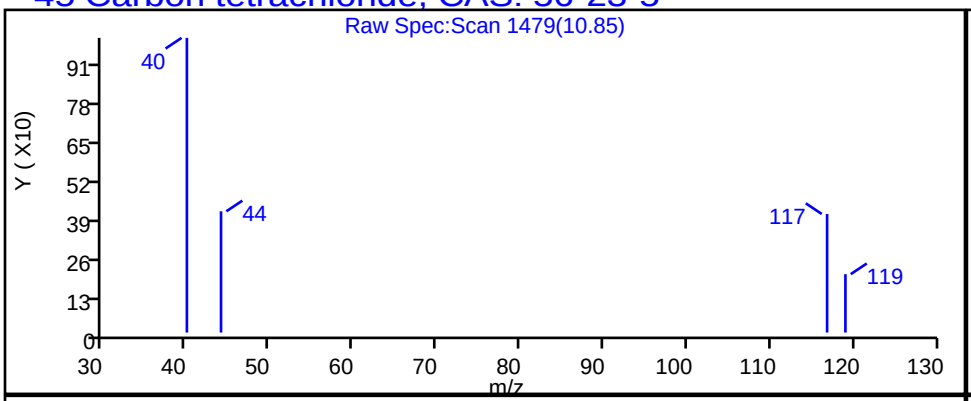


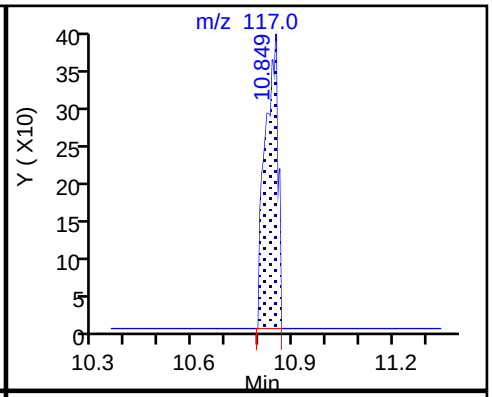
TestAmerica Burlington

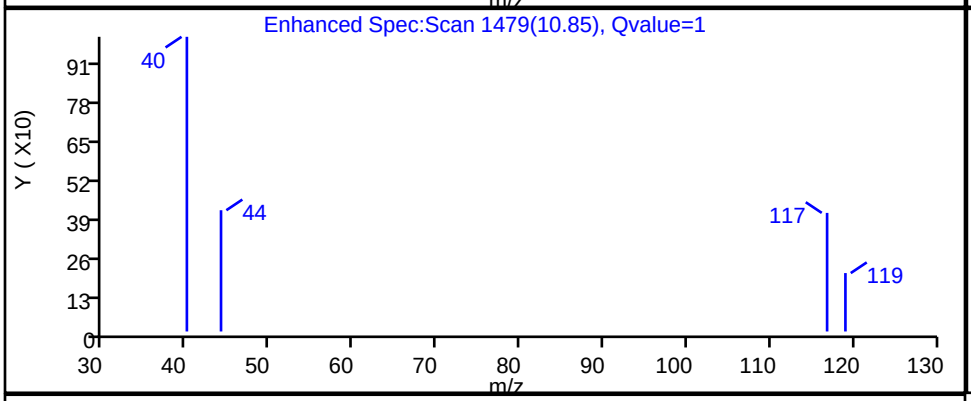
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

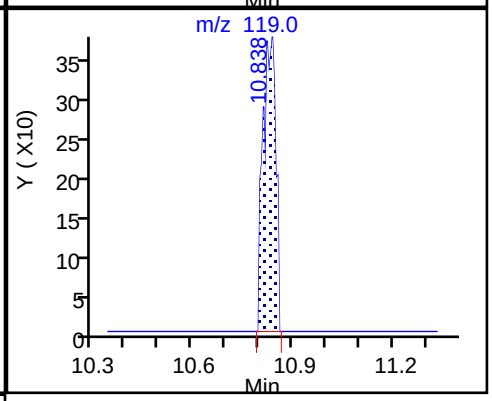
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

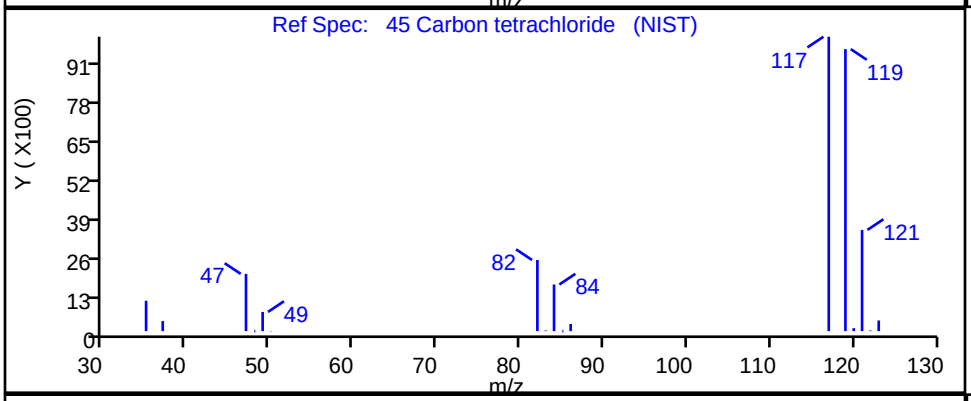
45 Carbon tetrachloride, CAS: 56-23-5

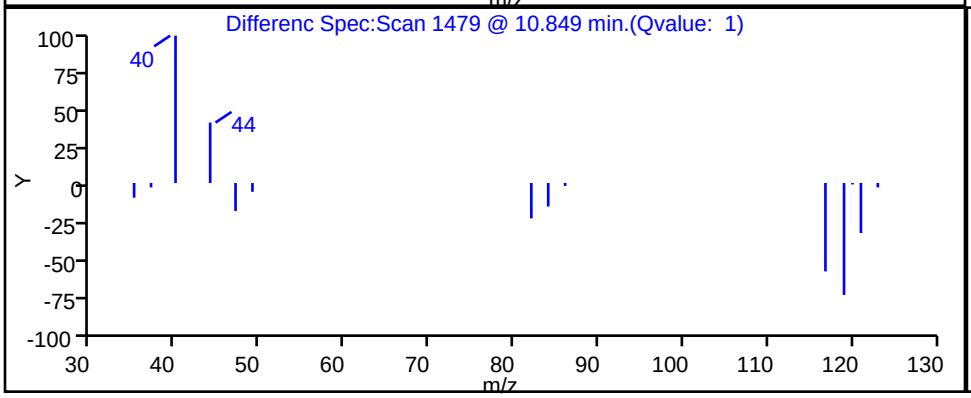


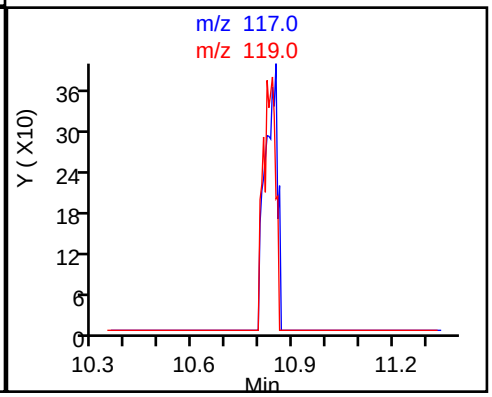








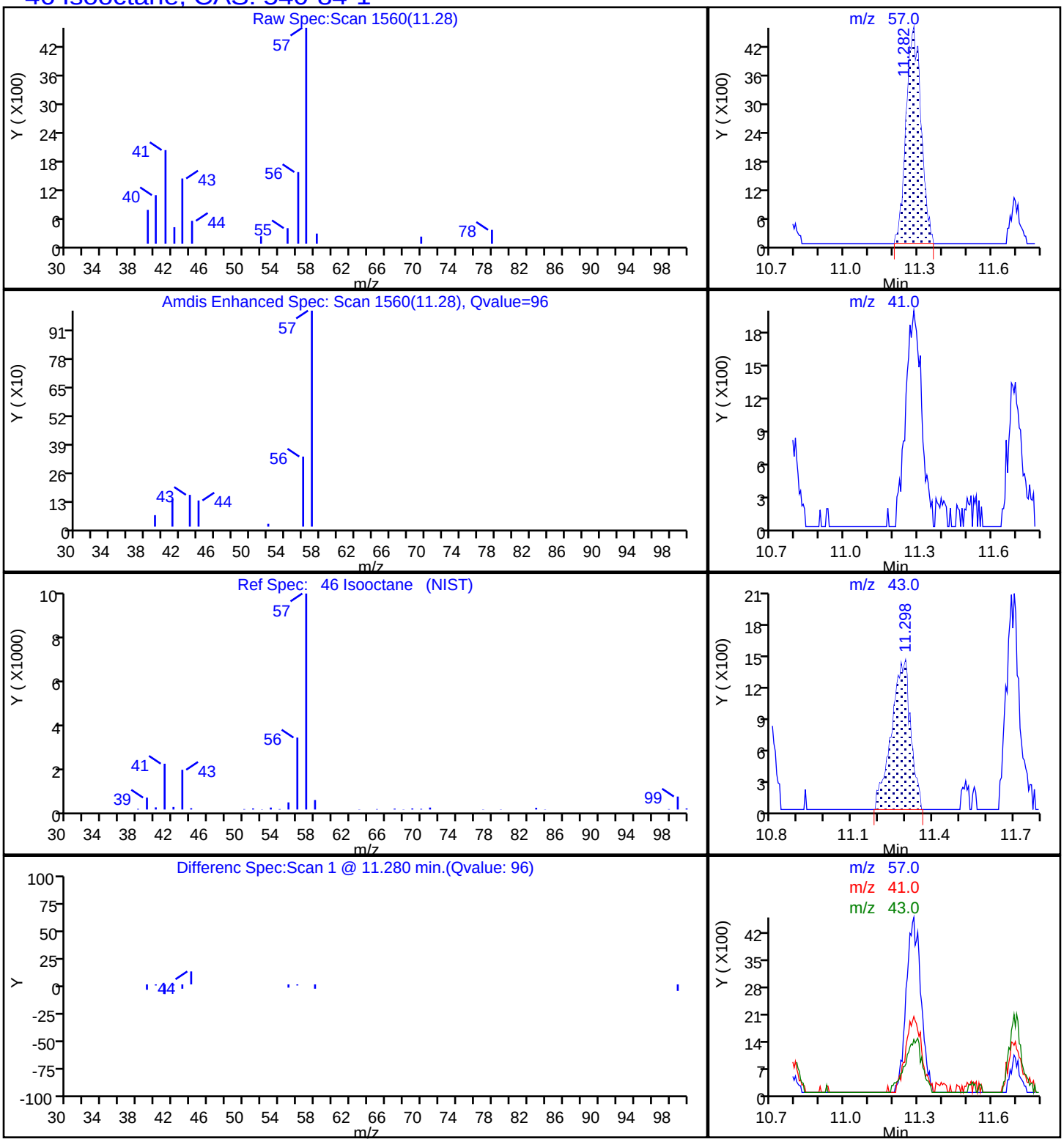




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Isooctane, CAS: 540-84-1

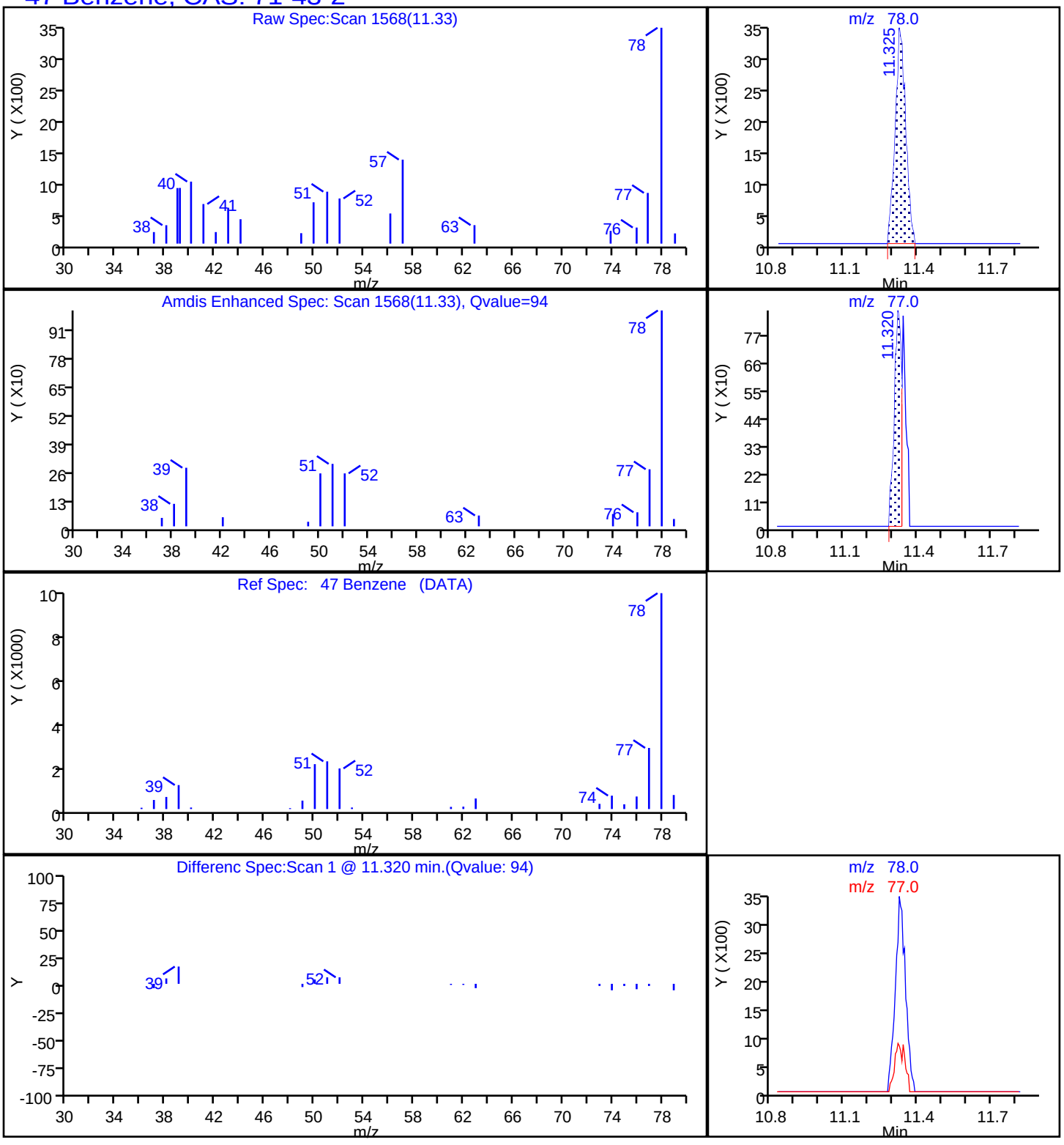


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

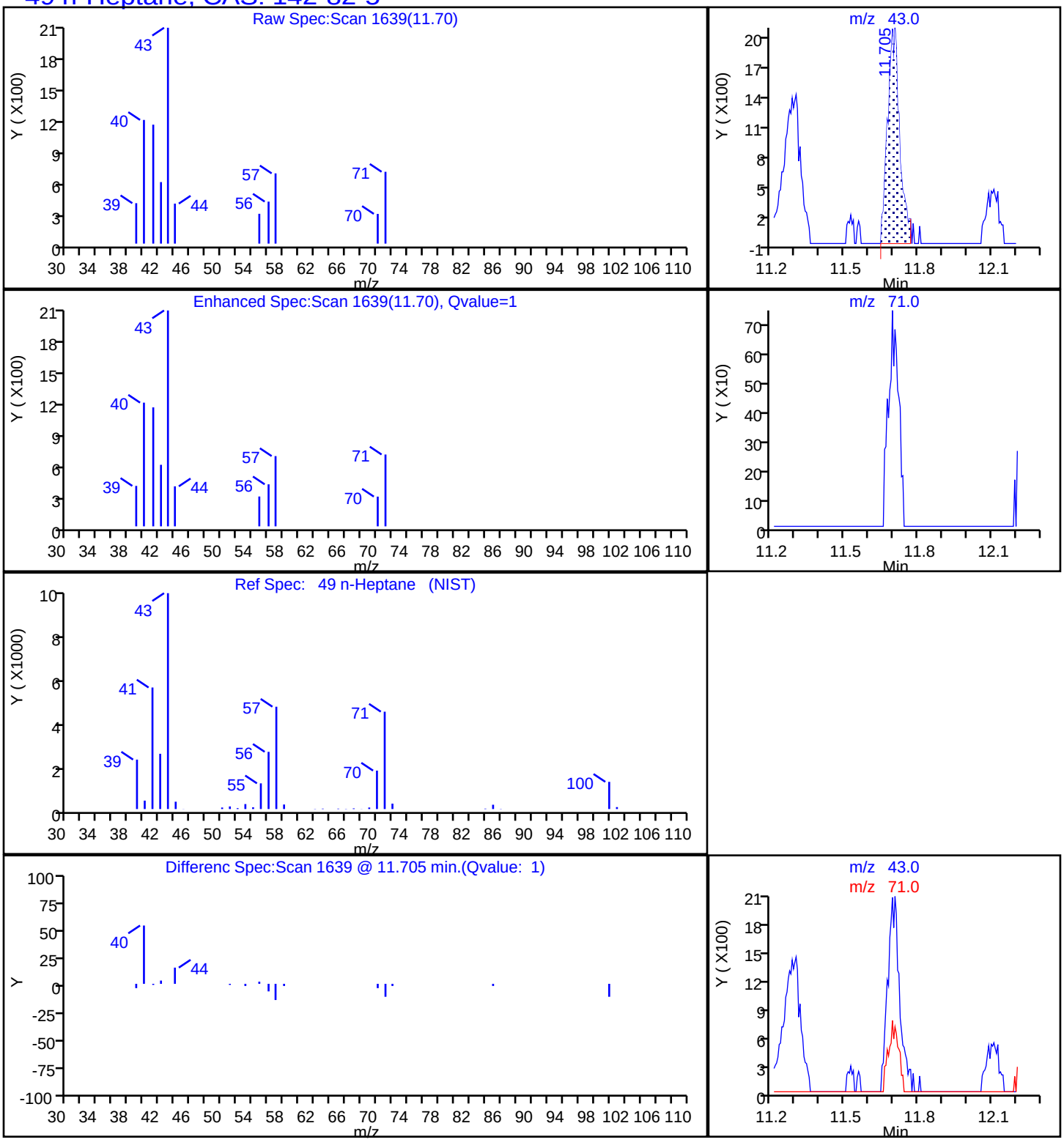


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

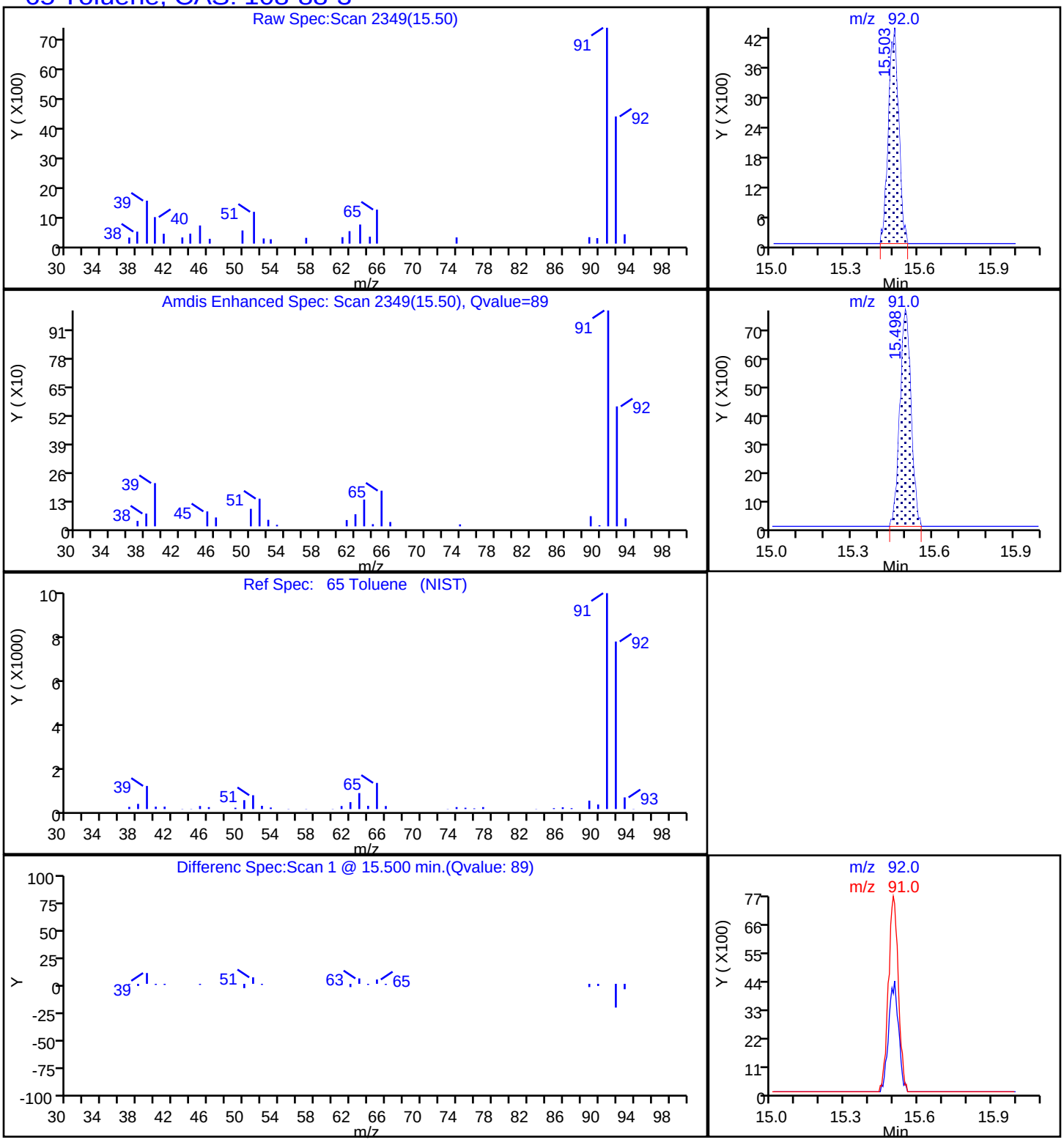
49 n-Heptane, CAS: 142-82-5



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

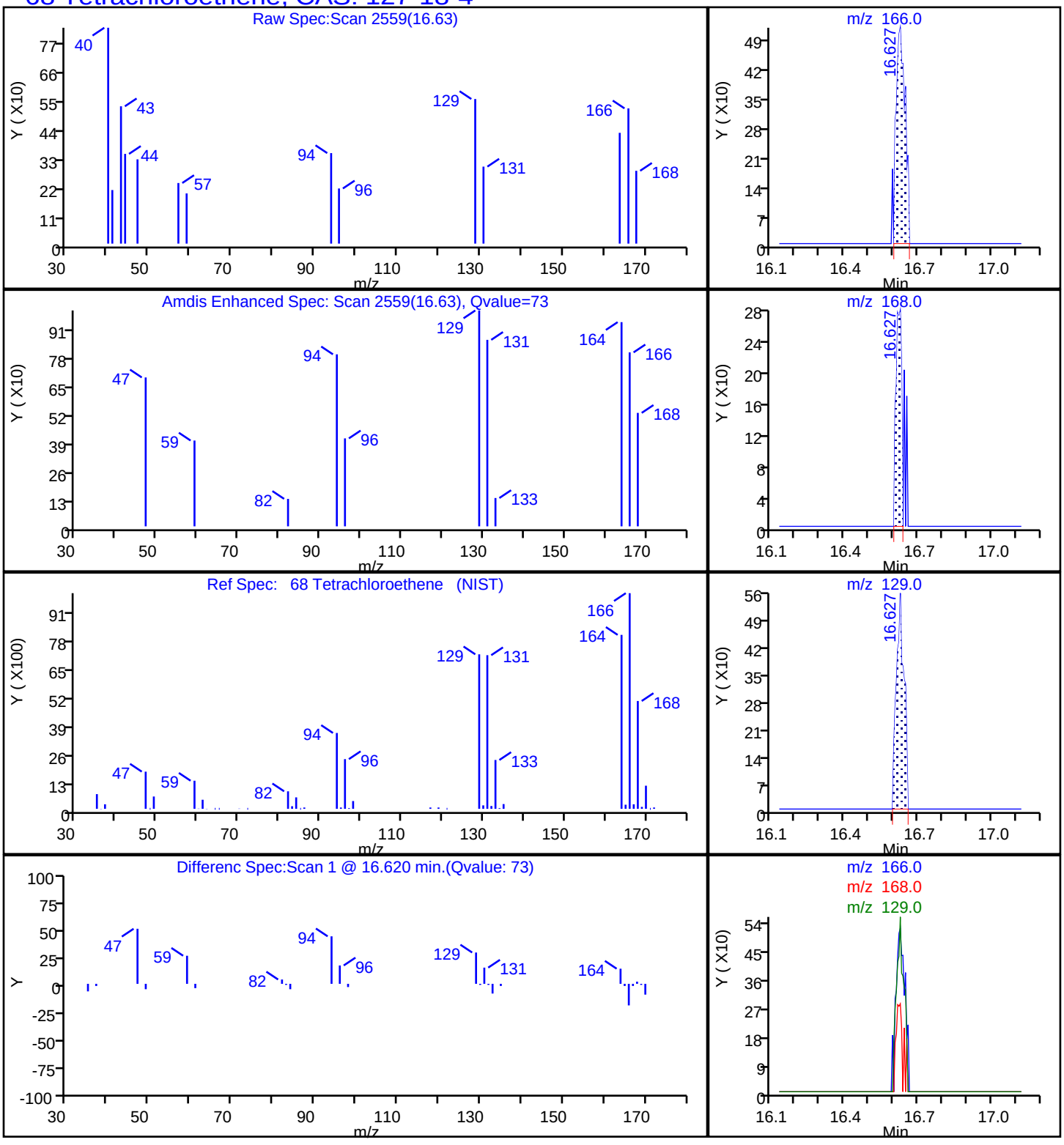


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



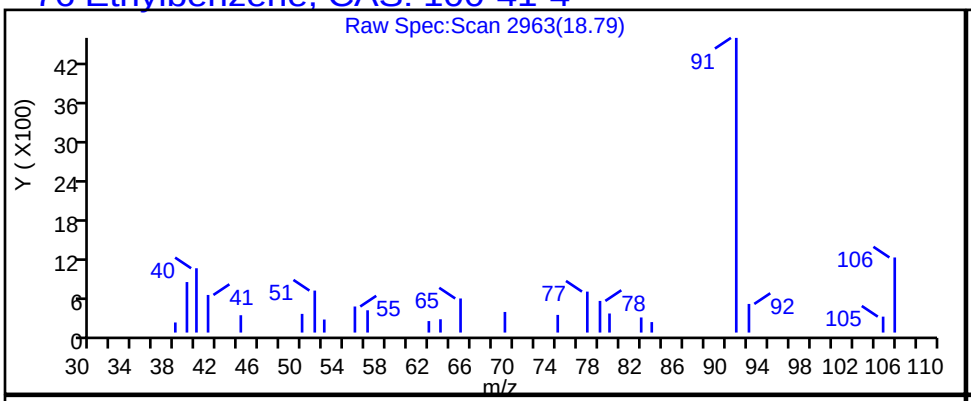
Report Date: 09-Apr-2018 08:38:57 Chrom Revision: 2.2 13-Mar-2018 08:45:20

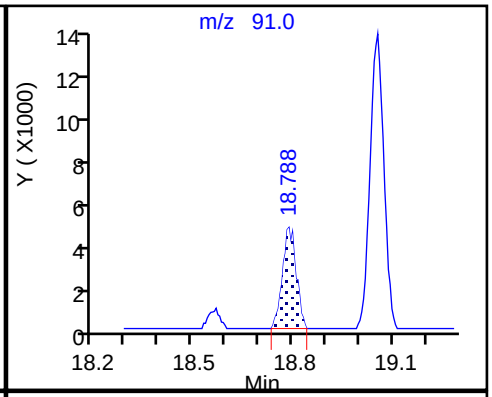
TestAmerica Burlington

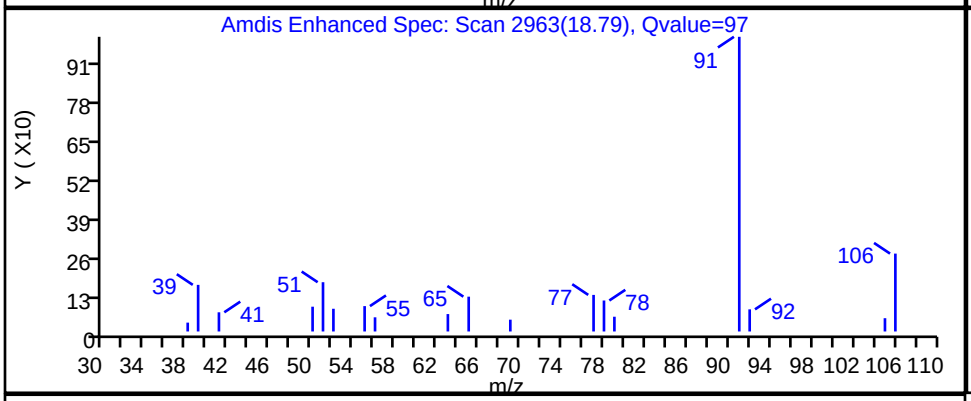
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D

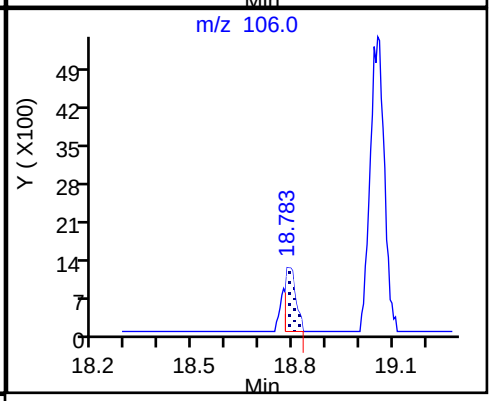
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

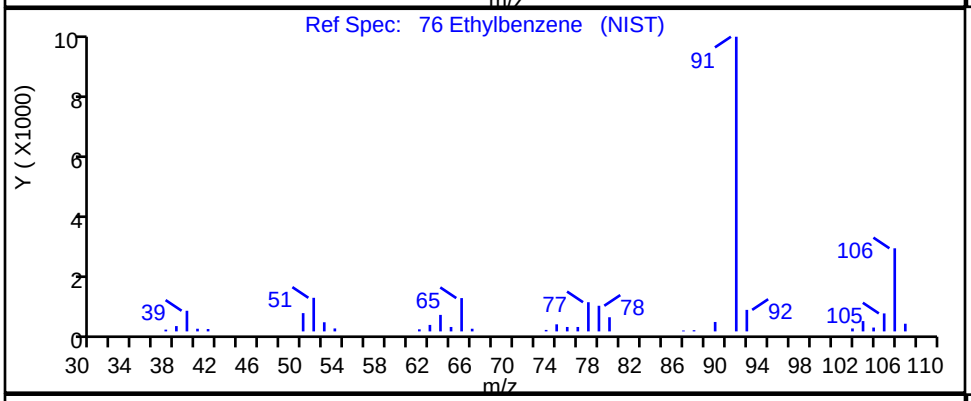
76 Ethylbenzene, CAS: 100-41-4

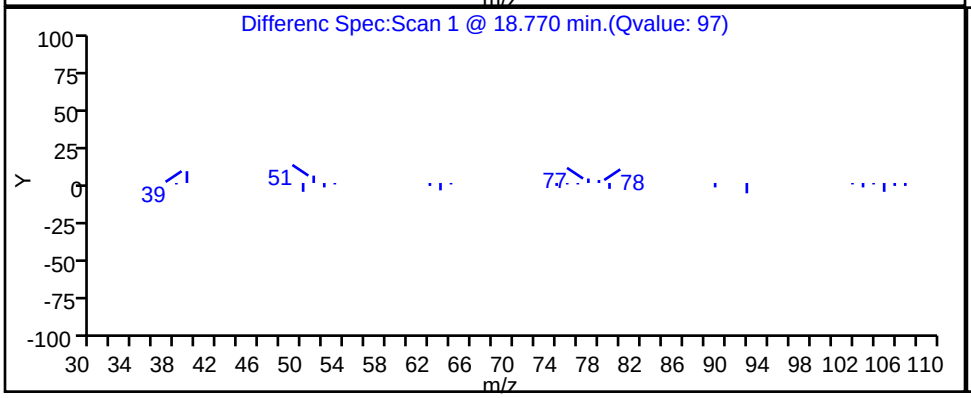


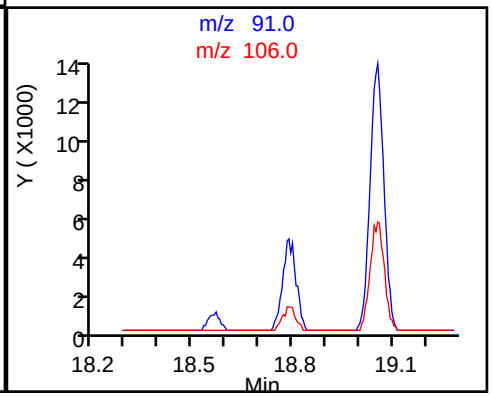






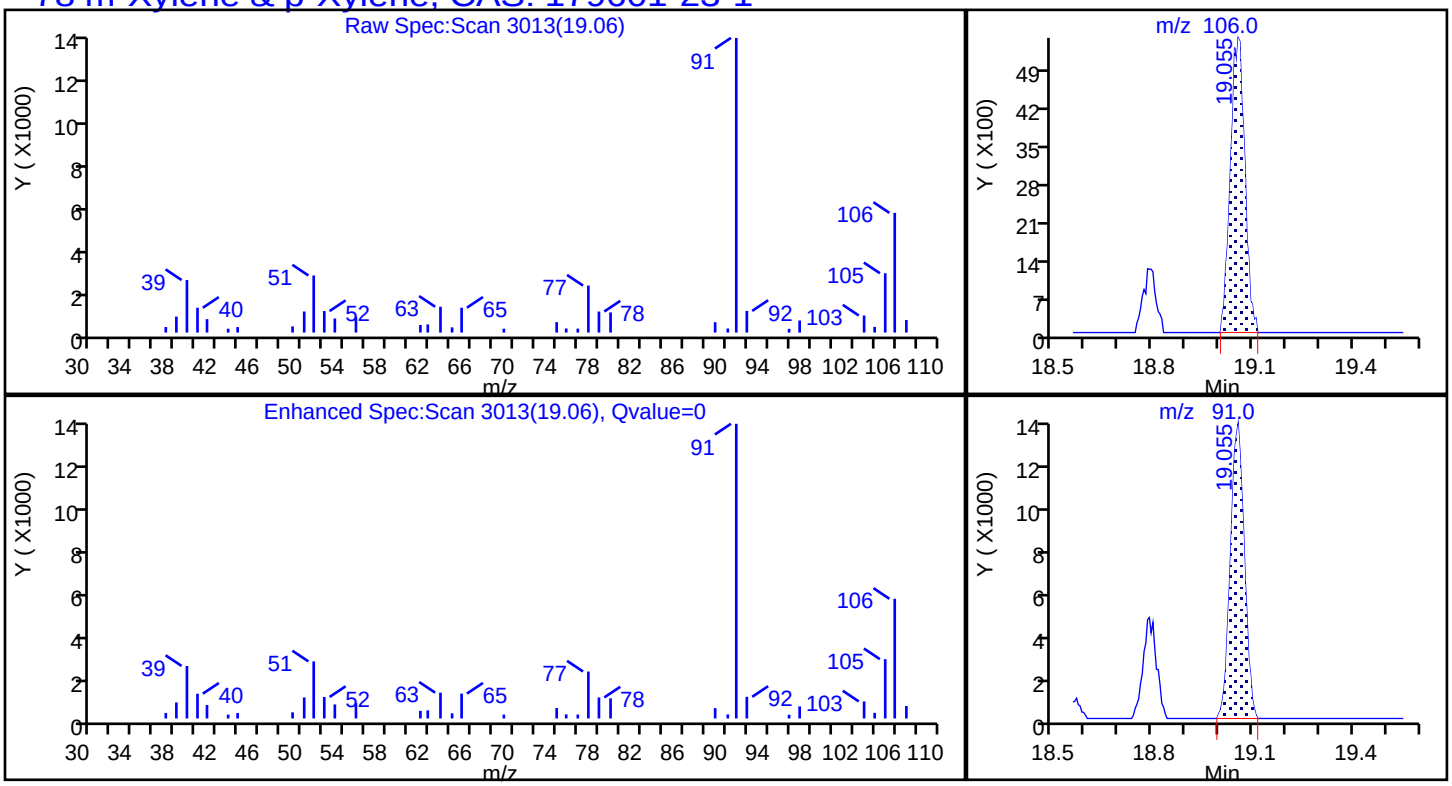


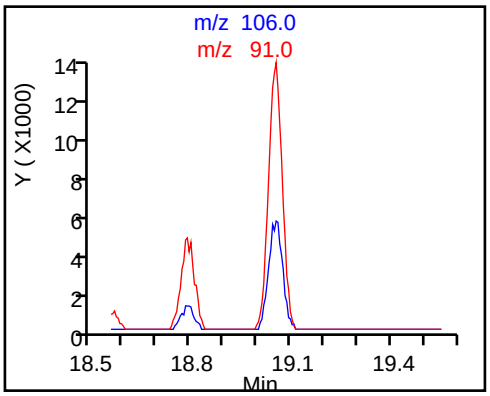




Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D
Injection Date: 06-Apr-2018 09:15:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 200.000 mL Dil. Factor: 2.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

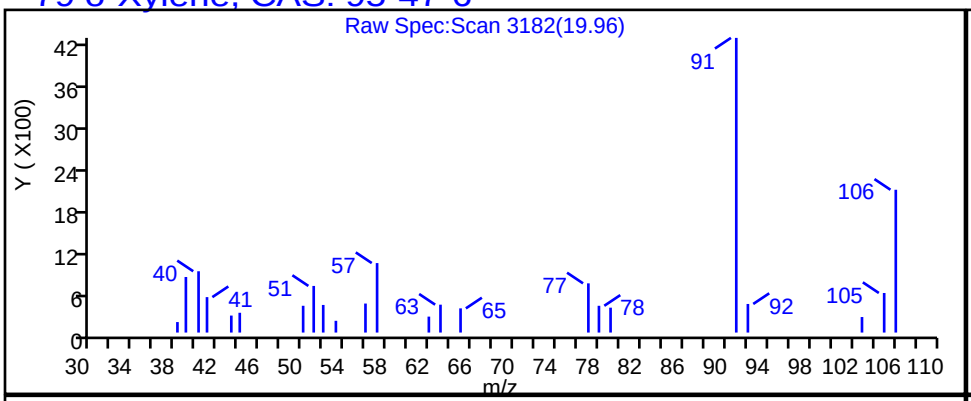
78 m-Xylene & p-Xylene, CAS: 179601-23-1

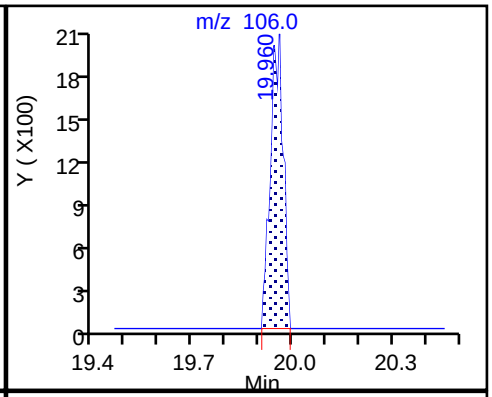


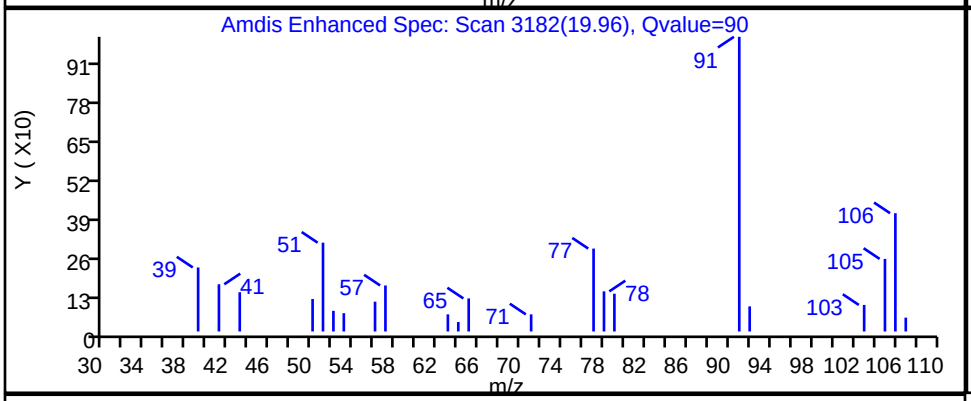


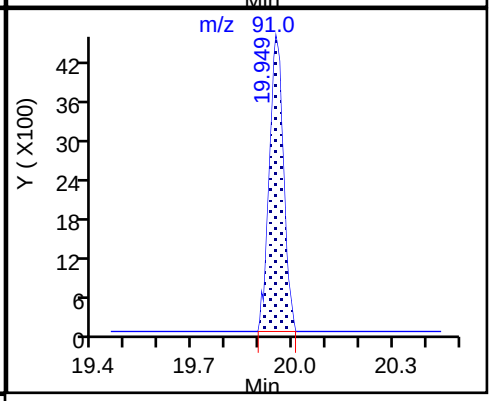
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D
Injection Date: 06-Apr-2018 09:15:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-2 Lab Sample ID: 200-42918-2
Client ID: GC-IA-102 (AS)
Operator ID: ert ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 200.000 mL Dil. Factor: 2.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

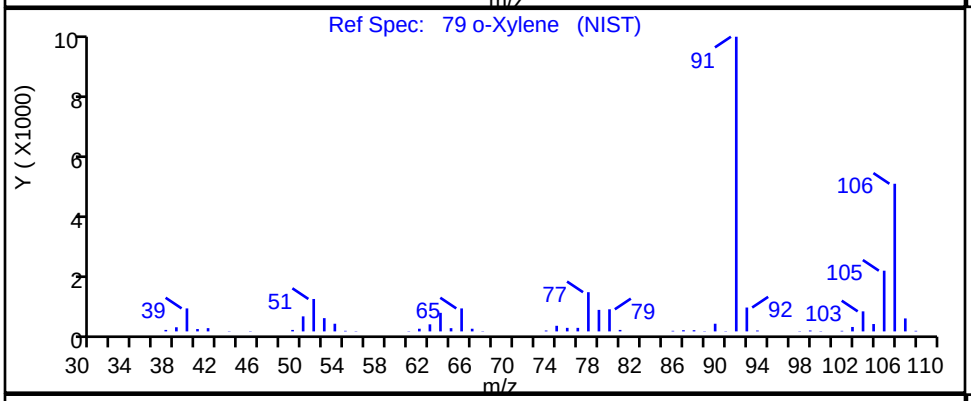
79 o-Xylene, CAS: 95-47-6

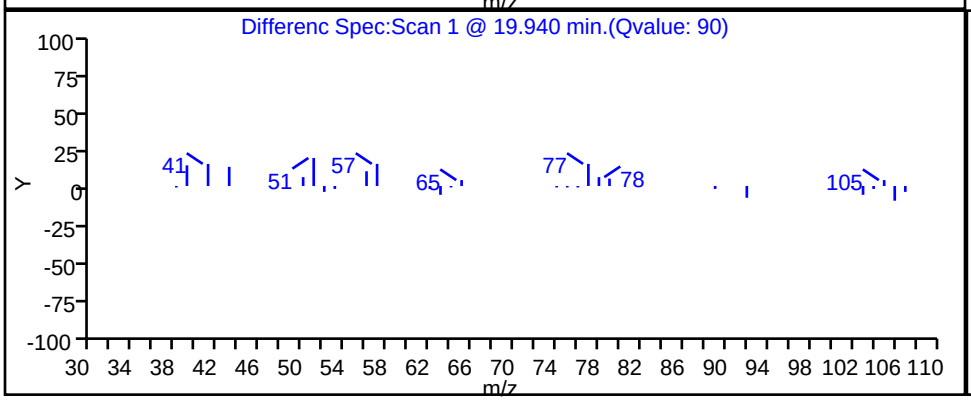


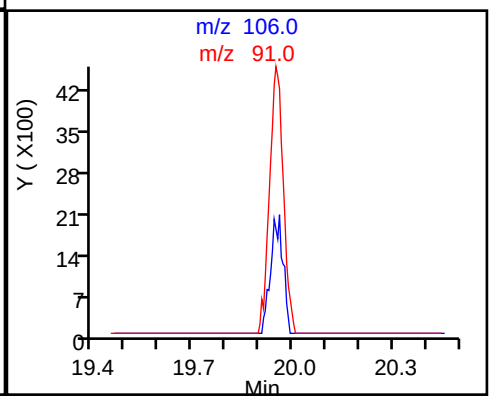












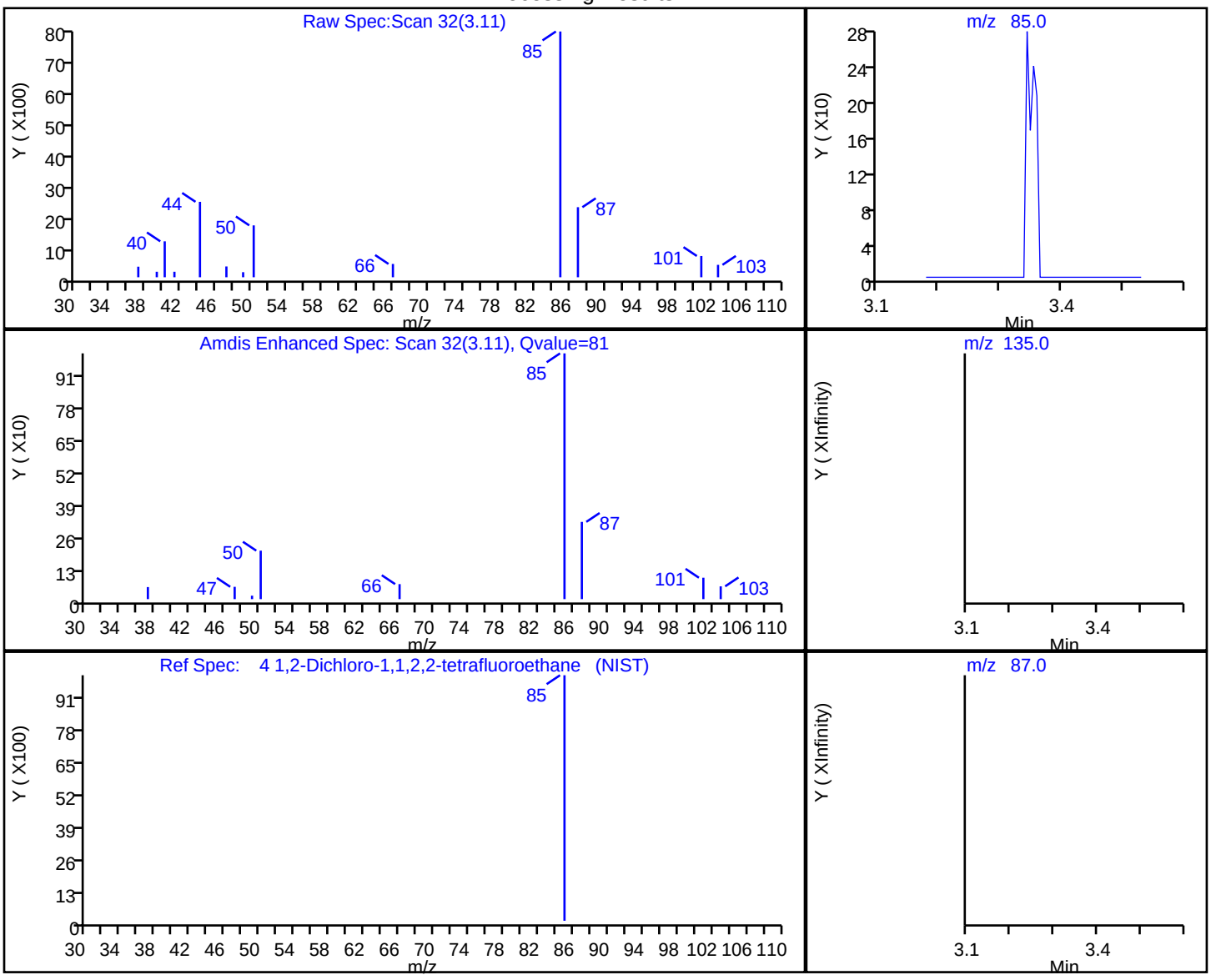
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
3.11	85.00	11559	0.242001
3.35	135.00	0	
3.11	87.00	3804	

Reviewer: puangmaleek, 09-Apr-2018 08:38:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

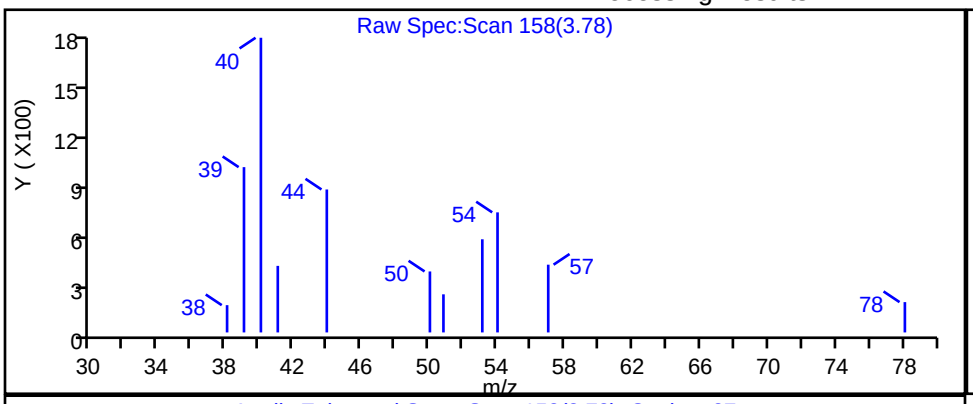
User Disabled Compound Report

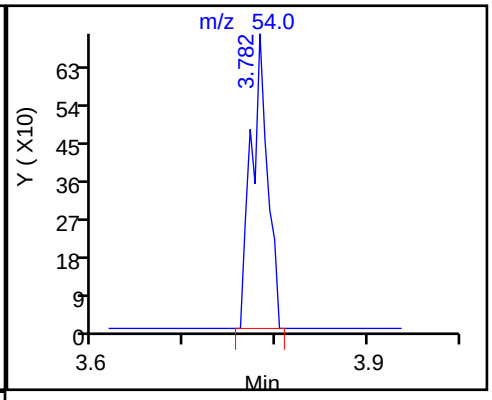
TestAmerica Burlington

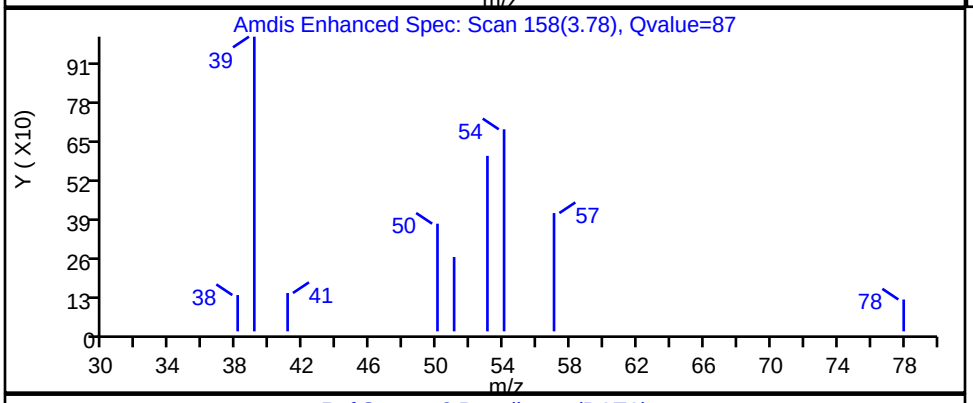
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

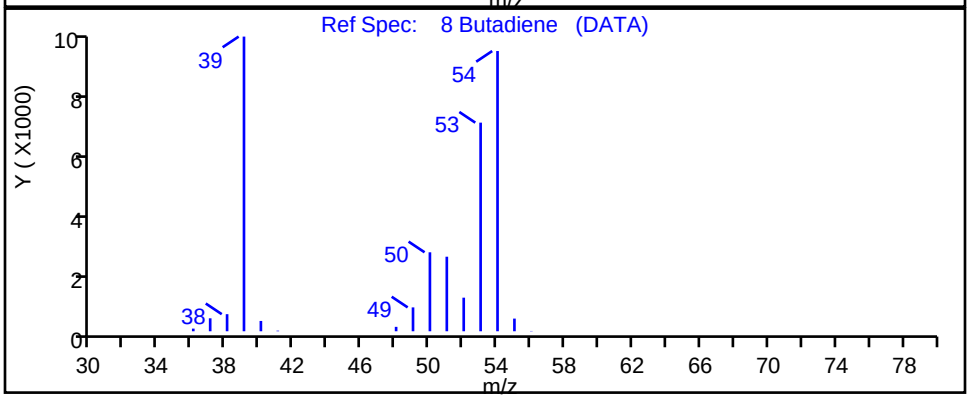
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
3.78	54.00	884	0.041998

Reviewer: puangmaleek, 09-Apr-2018 08:38:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

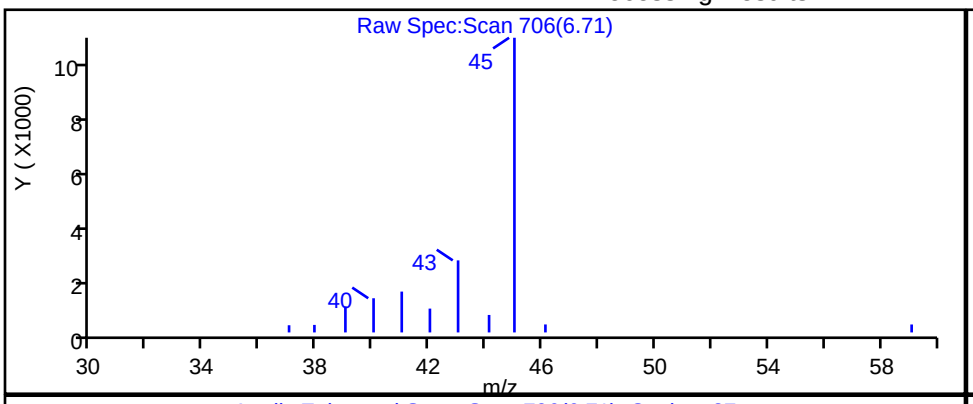
User Disabled Compound Report

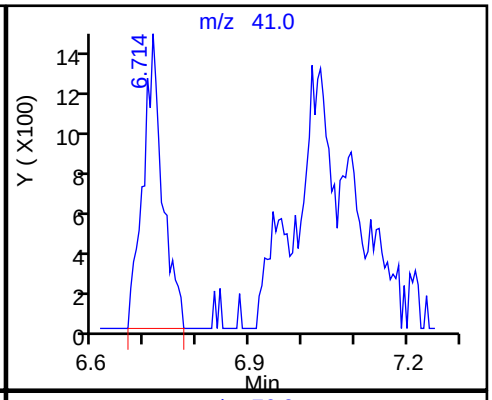
TestAmerica Burlington

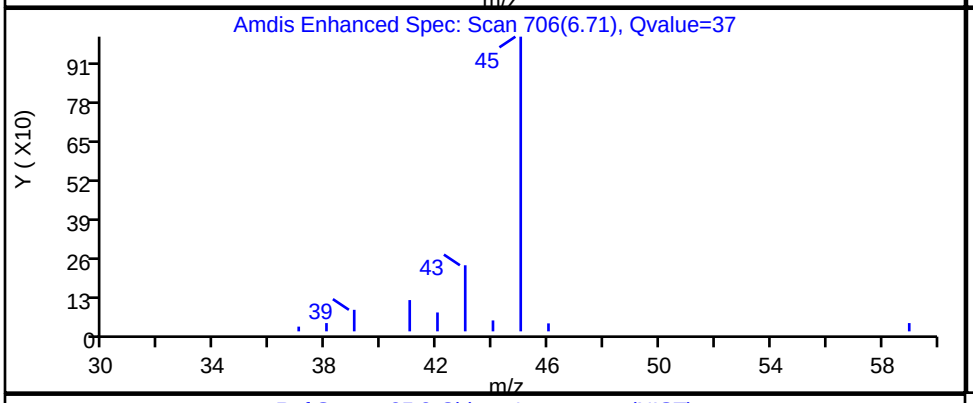
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

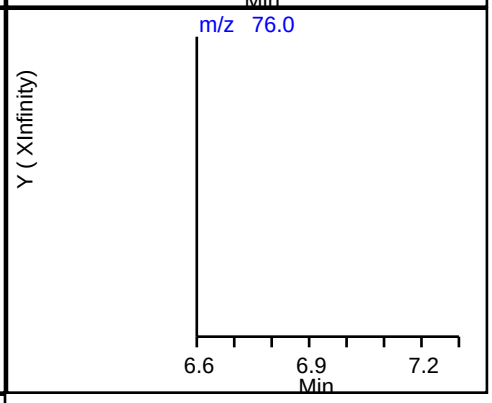
25 3-Chloro-1-propene, CAS: 107-05-1

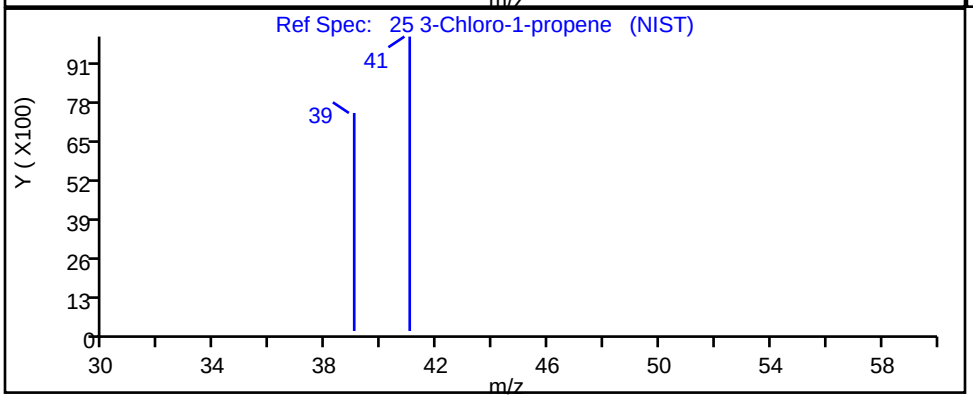
Processing Results











RT	Mass	Response	Amount
6.71	41.00	3675	0.092453
6.93	76.00	0	

Reviewer: puangmaleek, 09-Apr-2018 08:38:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

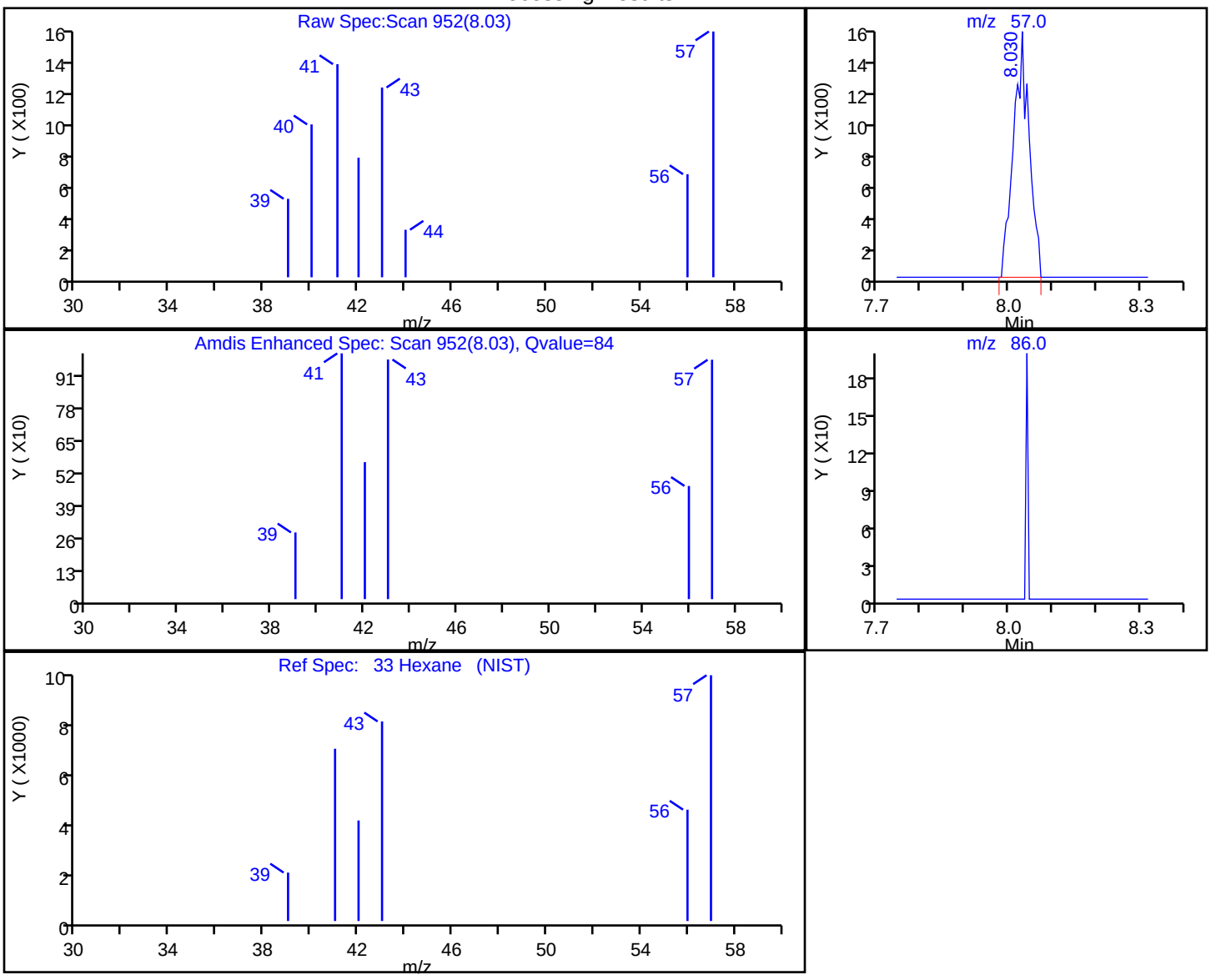
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3

Processing Results



RT	Mass	Response	Amount
8.03	57.00	3934	0.101329
8.03	86.00	0	

Reviewer: puangmaleek, 09-Apr-2018 08:38:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

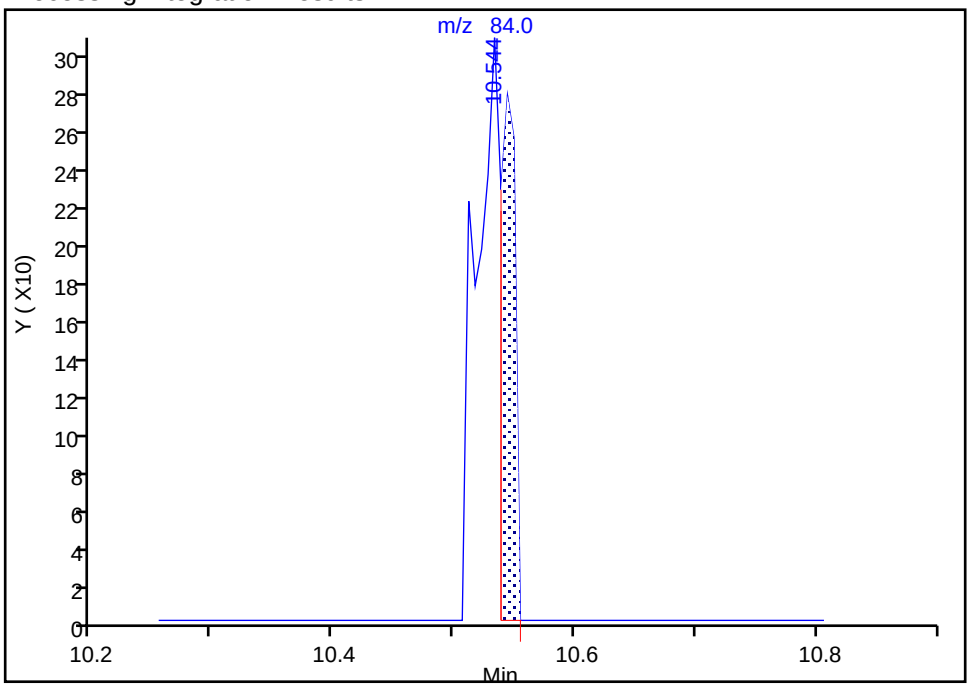
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

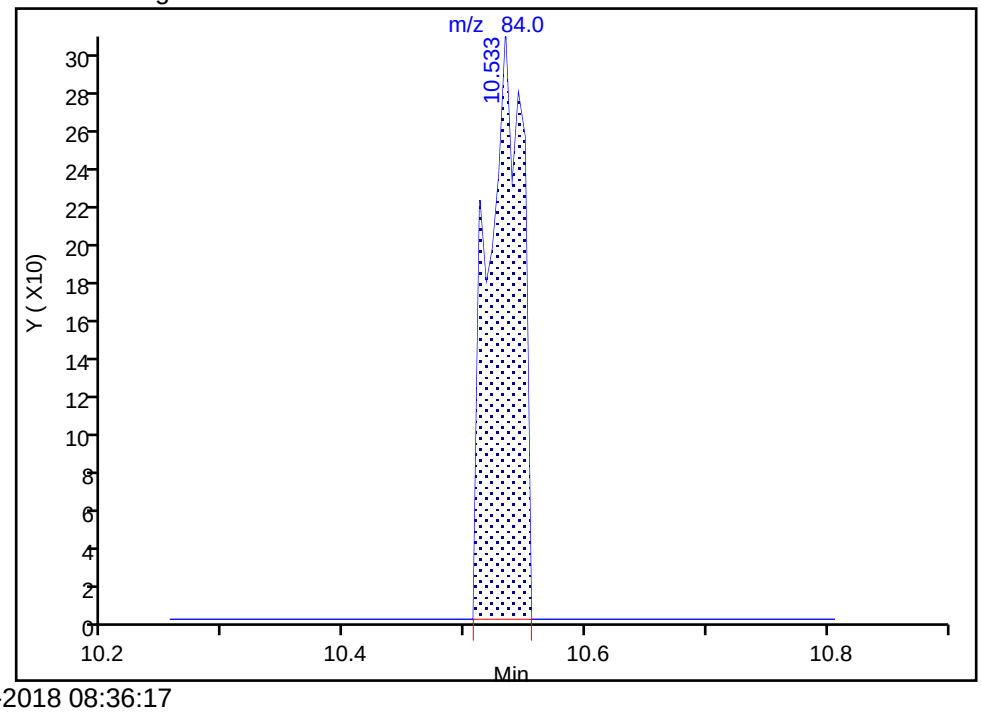
Processing Integration Results

RT: 10.54
Area: 240
Amount: 0.008513
Amount Units: ppb v/v



Manual Integration Results

RT: 10.53
Area: 600
Amount: 0.021282
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:36:17

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

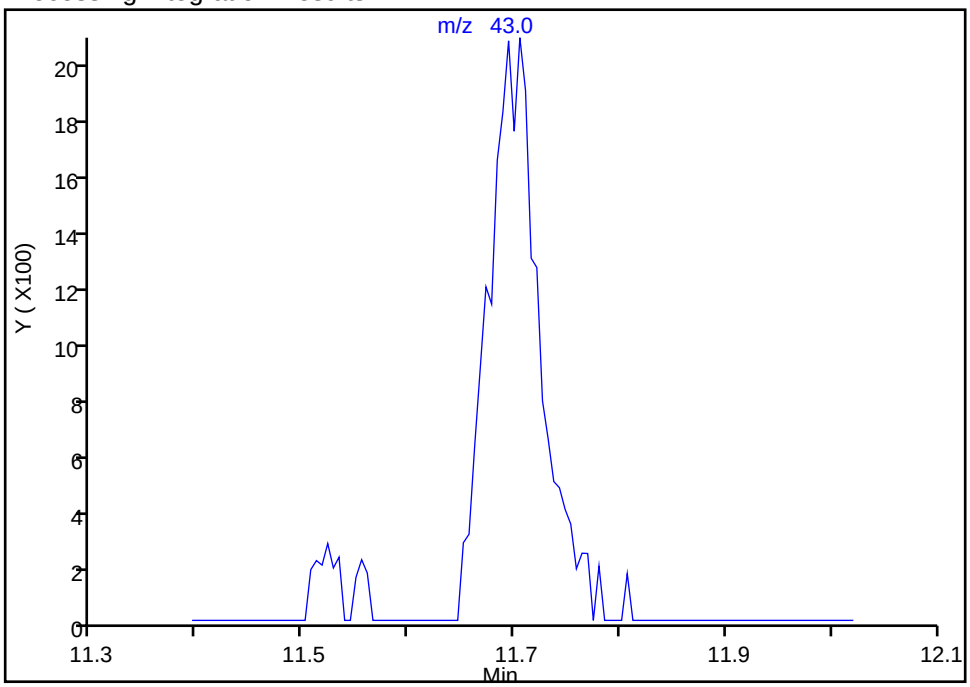
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

49 n-Heptane, CAS: 142-82-5

Signal: 1

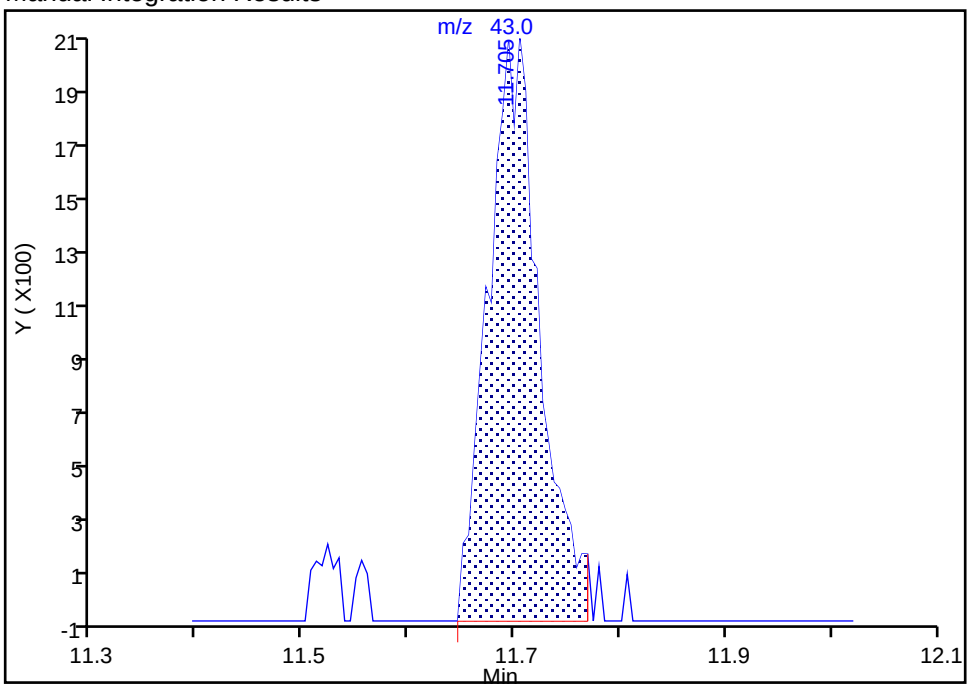
Not Detected
Expected RT: 11.70

Processing Integration Results



Manual Integration Results

RT: 11.70
Area: 6998
Amount: 0.095203
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:36:38
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

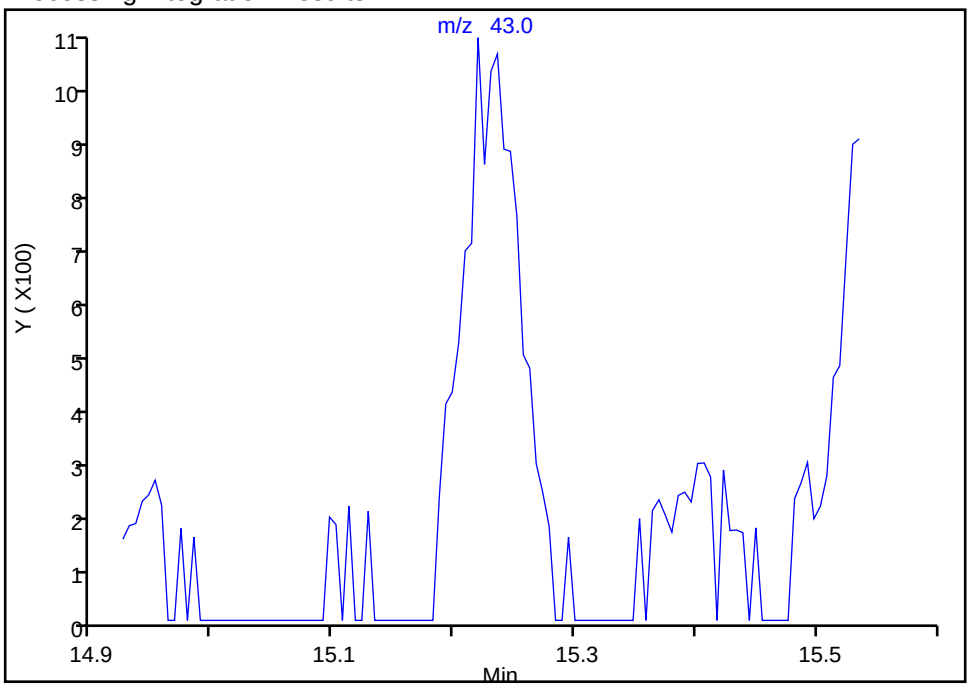
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

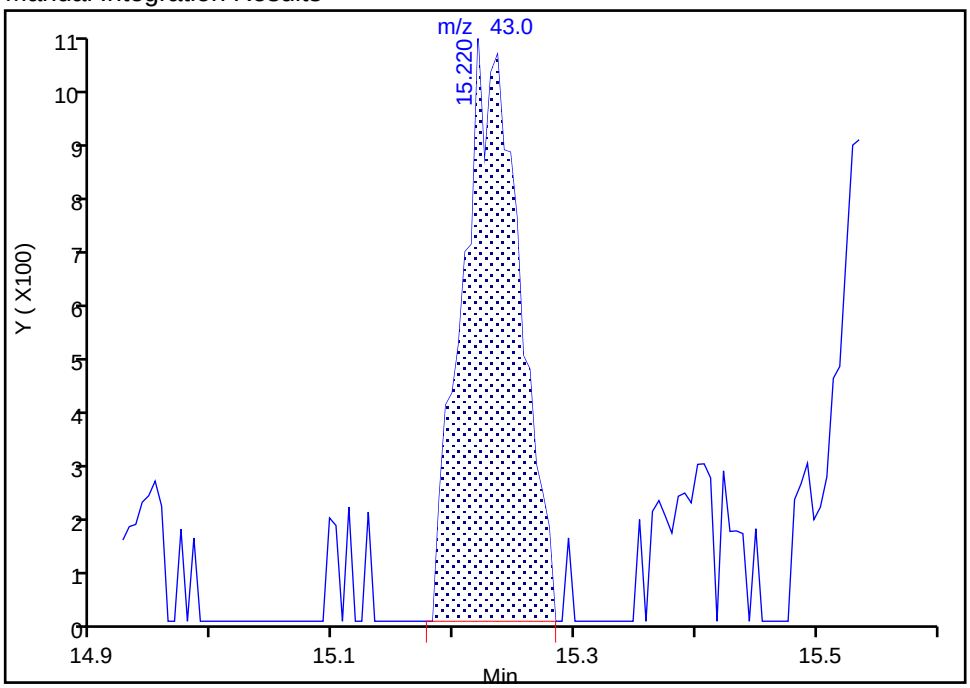
Not Detected
Expected RT: 15.20

Processing Integration Results



Manual Integration Results

RT: 15.22
Area: 3553
Amount: 0.037290
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:37:32
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

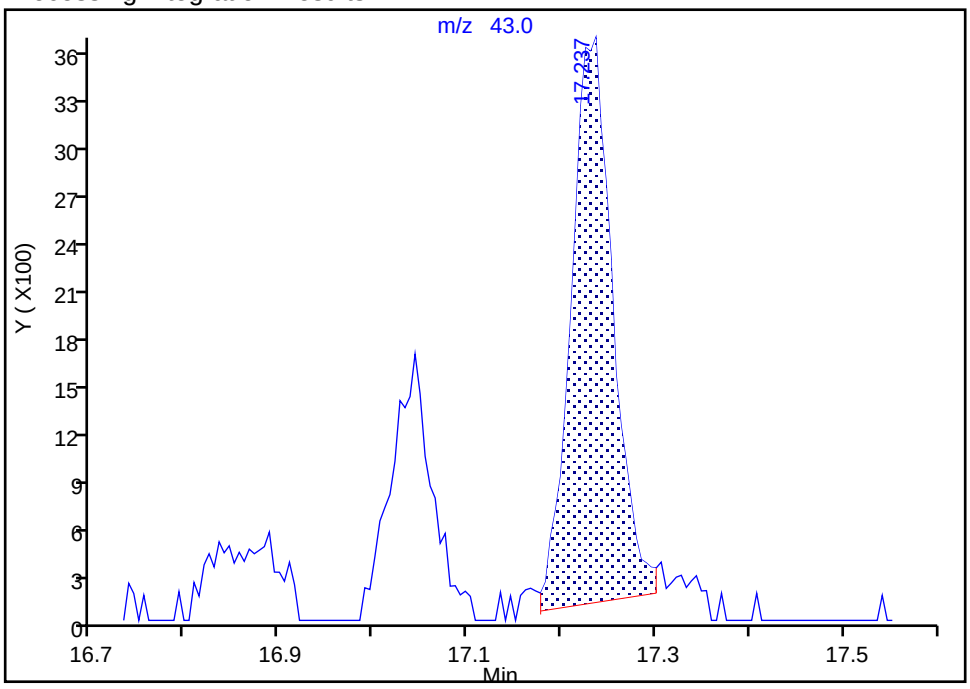
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

69 2-Hexanone, CAS: 591-78-6

Signal: 1

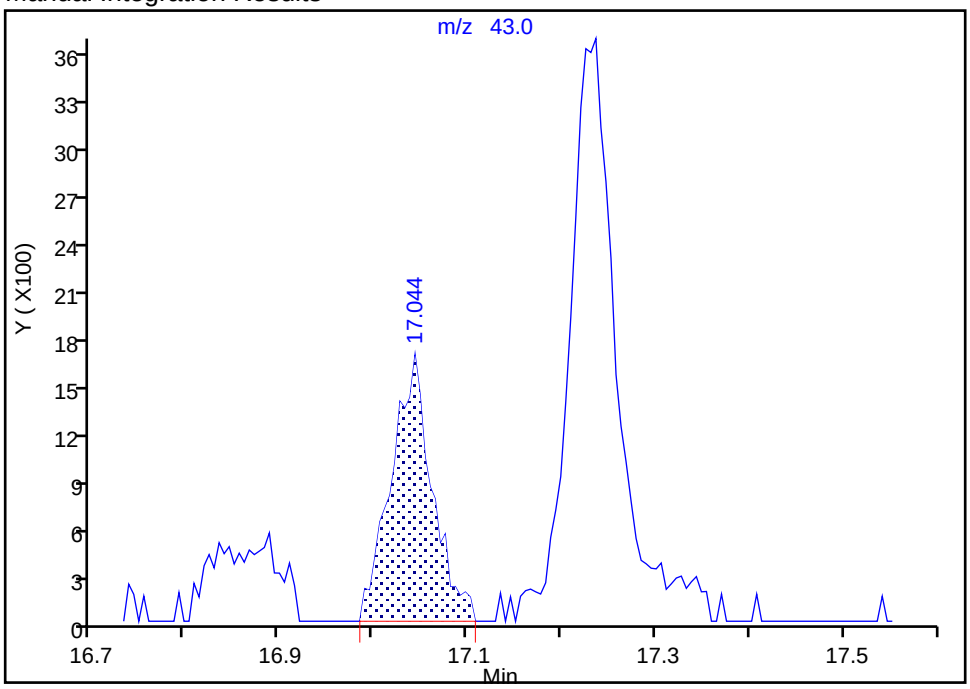
Processing Integration Results

RT: 17.24
Area: 11065
Amount: 0.114938
Amount Units: ppb v/v



Manual Integration Results

RT: 17.04
Area: 5082
Amount: 0.052789
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:37:58

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

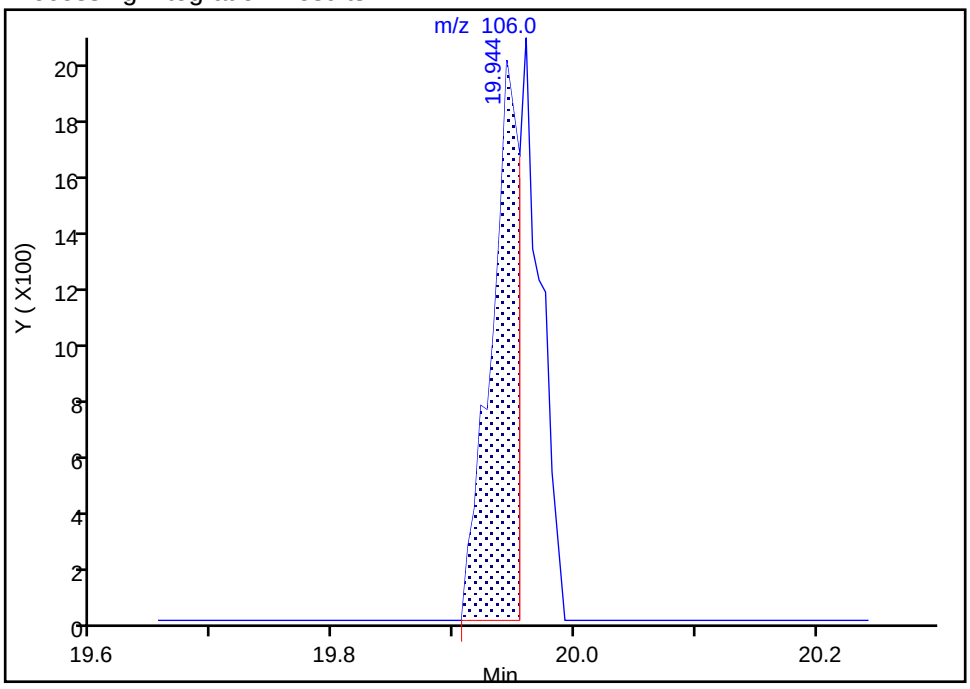
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6

Signal: 1

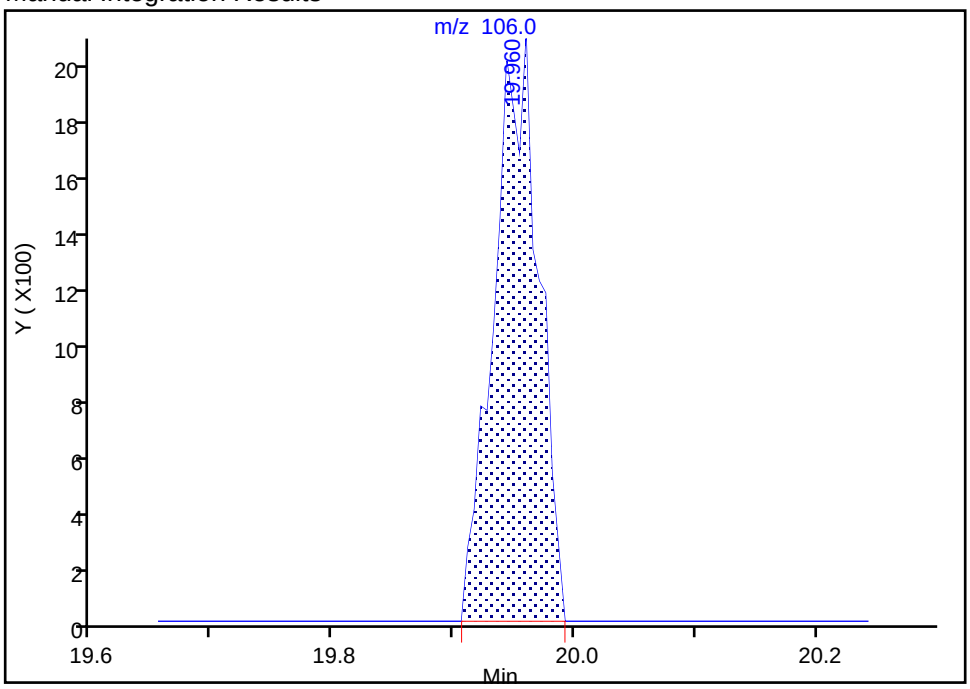
Processing Integration Results

RT: 19.94
Area: 3199
Amount: 0.079738
Amount Units: ppb v/v



Manual Integration Results

RT: 19.96
Area: 5277
Amount: 0.131533
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:38:21

Audit Action: Manually Integrated Audit Reason: Assign Peak

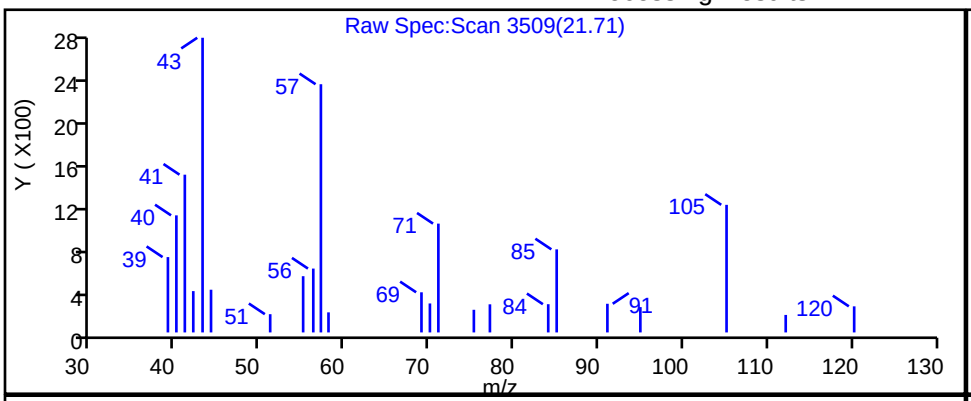
User Disabled Compound Report

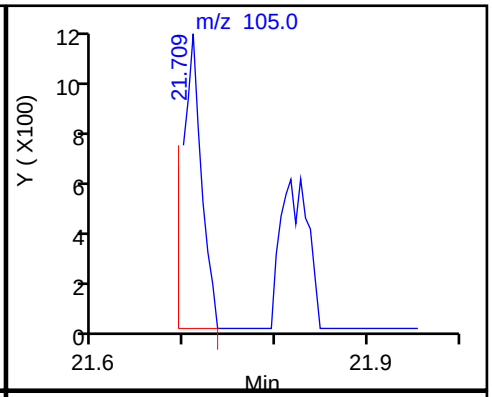
TestAmerica Burlington

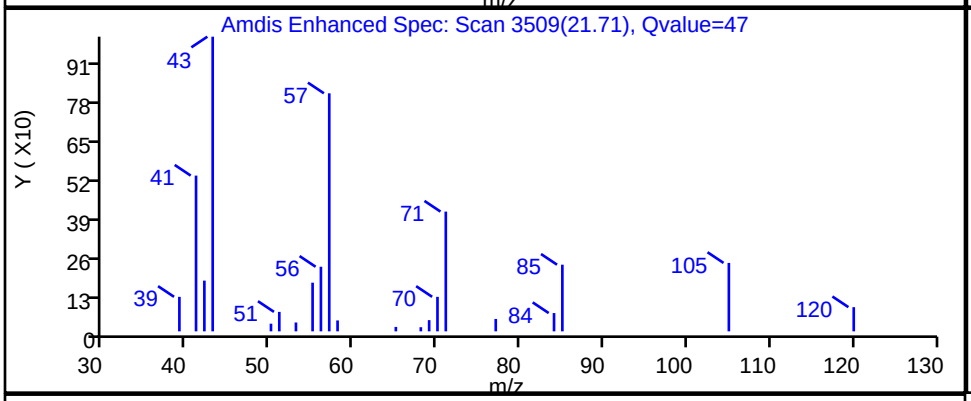
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

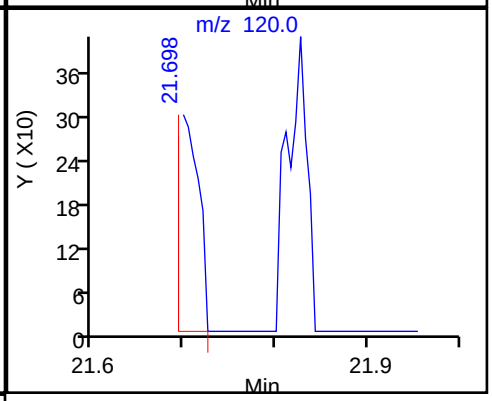
90 1,3,5-Trimethylbenzene, CAS: 108-67-8

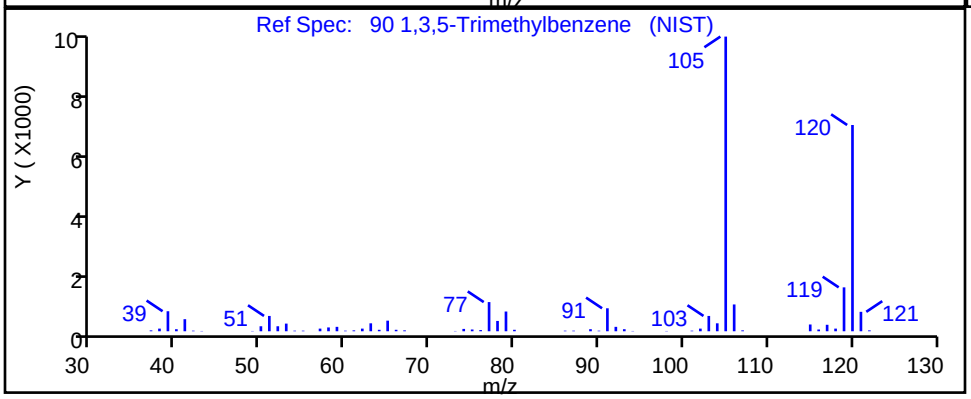
Processing Results











RT	Mass	Response	Amount
21.71	105.00	1649	0.015873
21.70	120.00	448	

Reviewer: puangmaleek, 09-Apr-2018 08:38:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

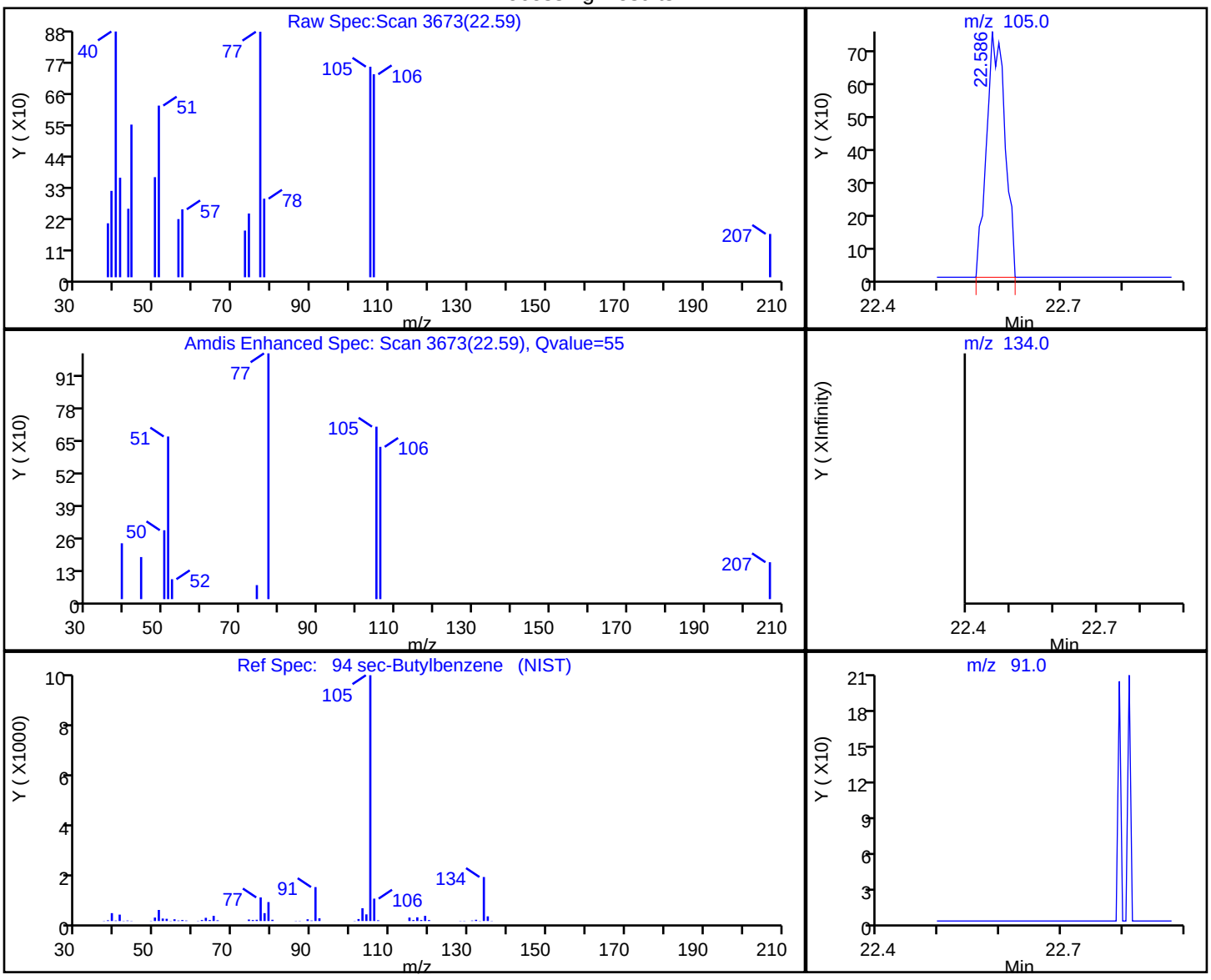
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_25.D				
Injection Date:	06-Apr-2018 09:15:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-2	Lab Sample ID:	200-42918-2		
Client ID:	GC-IA-102 (AS)				
Operator ID:	ert	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	200.000 mL	Dil. Factor:	2.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.59	105.00	1574	0.010536
22.69	134.00	0	
22.69	91.00	0	

Reviewer: puangmaleek, 09-Apr-2018 08:38:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-102 (AS) Lab Sample ID: 200-42918-3

Matrix: Air Lab File ID: 29983-12.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 21:49

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	1.0
75-45-6	Freon 22	86.47	2.5	U	2.5	1.3
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.0	U	1.0	0.34
74-87-3	Chloromethane	50.49	2.5	U	2.5	1.3
106-97-8	n-Butane	58.12	2.4	J	2.5	1.6
75-01-4	Vinyl chloride	62.50	1.0	U	1.0	0.21
106-99-0	1,3-Butadiene	54.09	1.0	U	1.0	0.33
74-83-9	Bromomethane	94.94	1.0	U	1.0	0.31
75-00-3	Chloroethane	64.52	2.5	U	2.5	1.1
593-60-2	Bromoethene(Vinyl Bromide)	106.96	1.0	U	1.0	0.28
75-69-4	Trichlorofluoromethane	137.37	1.0	U	1.0	0.31
76-13-1	Freon TF	187.38	1.0	U	1.0	0.16
75-35-4	1,1-Dichloroethene	96.94	1.0	U	1.0	0.17
67-64-1	Acetone	58.08	70		25	13
67-63-0	Isopropyl alcohol	60.10	25	U	25	9.0
75-15-0	Carbon disulfide	76.14	2.5	U	2.5	0.60
107-05-1	3-Chloropropene	76.53	2.5	U	2.5	1.4
75-09-2	Methylene Chloride	84.93	2.5	U	2.5	1.0
75-65-0	tert-Butyl alcohol	74.12	13	J	25	7.5
1634-04-4	Methyl tert-butyl ether	88.15	1.0	U	1.0	0.31
156-60-5	trans-1,2-Dichloroethene	96.94	1.0	U	1.0	0.37
110-54-3	n-Hexane	86.17	1.0	U	1.0	0.80
75-34-3	1,1-Dichloroethane	98.96	1.0	U	1.0	0.13
78-93-3	Methyl Ethyl Ketone	72.11	6.6		2.5	1.0
156-59-2	cis-1,2-Dichloroethene	96.94	1.0	U	1.0	0.19
540-59-0	1,2-Dichloroethene, Total	96.94	2.0	U	2.0	0.56
67-66-3	Chloroform	119.38	0.90	J	1.0	0.26
109-99-9	Tetrahydrofuran	72.11	25	U	25	13
71-55-6	1,1,1-Trichloroethane	133.41	1.0	U	1.0	0.34
110-82-7	Cyclohexane	84.16	1.0	U	1.0	0.32
56-23-5	Carbon tetrachloride	153.81	0.20	U	0.20	0.12
540-84-1	2,2,4-Trimethylpentane	114.23	1.0	U	1.0	0.44
71-43-2	Benzene	78.11	1.0	U	1.0	0.36
107-06-2	1,2-Dichloroethane	98.96	1.0	U	1.0	0.32

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-102 (AS) Lab Sample ID: 200-42918-3

Matrix: Air Lab File ID: 29983-12.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 21:49

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.85	J	1.0	0.70
79-01-6	Trichloroethene	131.39	0.20	U	0.20	0.15
80-62-6	Methyl methacrylate	100.12	2.5	U	2.5	1.1
78-87-5	1,2-Dichloropropane	112.99	1.0	U	1.0	0.60
123-91-1	1,4-Dioxane	88.11	25	U	25	6.5
75-27-4	Bromodichloromethane	163.83	1.0	U	1.0	0.47
10061-01-5	cis-1,3-Dichloropropene	110.97	1.0	U	1.0	0.49
108-10-1	methyl isobutyl ketone	100.16	2.5	U	2.5	1.8
108-88-3	Toluene	92.14	4.2		1.0	0.35
10061-02-6	trans-1,3-Dichloropropene	110.97	1.0	U	1.0	0.60
79-00-5	1,1,2-Trichloroethane	133.41	1.0	U	1.0	0.39
127-18-4	Tetrachloroethene	165.83	15		0.20	0.15
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.5	U	2.5	2.1
124-48-1	Dibromochloromethane	208.29	1.0	U	1.0	0.36
106-93-4	1,2-Dibromoethane	187.87	1.0	U	1.0	0.35
108-90-7	Chlorobenzene	112.56	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	106.17	1.0	U	1.0	0.37
179601-23-1	m,p-Xylene	106.17	0.93	J	2.5	0.35
95-47-6	Xylene, o-	106.17	1.0	U	1.0	0.36
1330-20-7	Xylene (total)	106.17	0.93	J	3.5	0.71
100-42-5	Styrene	104.15	1.0	U	1.0	0.43
75-25-2	Bromoform	252.75	1.0	U	1.0	0.43
98-82-8	Cumene	120.19	1.0	U	1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.0	U	1.0	0.38
103-65-1	n-Propylbenzene	120.19	1.0	U	1.0	0.35
622-96-8	4-Ethyltoluene	120.20	1.0	U	1.0	0.35
108-67-8	1,3,5-Trimethylbenzene	120.20	1.0	U	1.0	0.29
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.36
98-06-6	tert-Butylbenzene	134.22	1.0	U	1.0	0.29
95-63-6	1,2,4-Trimethylbenzene	120.20	1.0	U	1.0	0.40
135-98-8	sec-Butylbenzene	134.22	1.0	U	1.0	0.33
99-87-6	4-Isopropyltoluene	134.22	1.0	U	1.0	0.38
541-73-1	1,3-Dichlorobenzene	147.00	1.0	U	1.0	0.41
106-46-7	1,4-Dichlorobenzene	147.00	1.0	U	1.0	0.33

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-102 (AS) Lab Sample ID: 200-42918-3

Matrix: Air Lab File ID: 29983-12.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 21:49

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.60
104-51-8	n-Butylbenzene	134.22	1.0	U	1.0	0.40
95-50-1	1,2-Dichlorobenzene	147.00	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	181.45	2.5	U	2.5	1.2
87-68-3	Hexachlorobutadiene	260.76	1.0	U	1.0	0.41
91-20-3	Naphthalene	128.17	2.5	U	2.5	1.6

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-102 (AS) Lab Sample ID: 200-42918-3

Matrix: Air Lab File ID: 29983-12.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 21:49

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	12	U	12	4.9
75-45-6	Freon 22	86.47	8.8	U	8.8	4.6
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	7.0	U	7.0	2.4
74-87-3	Chloromethane	50.49	5.2	U	5.2	2.6
106-97-8	n-Butane	58.12	5.8	J	5.9	3.7
75-01-4	Vinyl chloride	62.50	2.6	U	2.6	0.52
106-99-0	1,3-Butadiene	54.09	2.2	U	2.2	0.72
74-83-9	Bromomethane	94.94	3.9	U	3.9	1.2
75-00-3	Chloroethane	64.52	6.6	U	6.6	2.8
593-60-2	Bromoethene(Vinyl Bromide)	106.96	4.4	U	4.4	1.2
75-69-4	Trichlorofluoromethane	137.37	5.6	U	5.6	1.7
76-13-1	Freon TF	187.38	7.7	U	7.7	1.2
75-35-4	1,1-Dichloroethene	96.94	4.0	U	4.0	0.67
67-64-1	Acetone	58.08	170		59	31
67-63-0	Isopropyl alcohol	60.10	61	U	61	22
75-15-0	Carbon disulfide	76.14	7.8	U	7.8	1.9
107-05-1	3-Chloropropene	76.53	7.8	U	7.8	4.2
75-09-2	Methylene Chloride	84.93	8.7	U	8.7	3.5
75-65-0	tert-Butyl alcohol	74.12	41	J	76	23
1634-04-4	Methyl tert-butyl ether	88.15	3.6	U	3.6	1.1
156-60-5	trans-1,2-Dichloroethene	96.94	4.0	U	4.0	1.5
110-54-3	n-Hexane	86.17	3.5	U	3.5	2.8
75-34-3	1,1-Dichloroethane	98.96	4.0	U	4.0	0.53
78-93-3	Methyl Ethyl Ketone	72.11	20		7.4	2.9
156-59-2	cis-1,2-Dichloroethene	96.94	4.0	U	4.0	0.73
540-59-0	1,2-Dichloroethene, Total	96.94	7.9	U	7.9	2.2
67-66-3	Chloroform	119.38	4.4	J	4.9	1.3
109-99-9	Tetrahydrofuran	72.11	74	U	74	38
71-55-6	1,1,1-Trichloroethane	133.41	5.5	U	5.5	1.9
110-82-7	Cyclohexane	84.16	3.4	U	3.4	1.1
56-23-5	Carbon tetrachloride	153.81	1.3	U	1.3	0.75
540-84-1	2,2,4-Trimethylpentane	114.23	4.7	U	4.7	2.1
71-43-2	Benzene	78.11	3.2	U	3.2	1.1
107-06-2	1,2-Dichloroethane	98.96	4.0	U	4.0	1.3

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-102 (AS) | Lab Sample ID: 200-42918-3

Matrix: Air | Lab File ID: 29983-12.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) | Date Analyzed: 04/06/2018 21:49

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	3.5	J	4.1	2.9
79-01-6	Trichloroethene	131.39	1.1	U	1.1	0.81
80-62-6	Methyl methacrylate	100.12	10	U	10	4.5
78-87-5	1,2-Dichloropropane	112.99	4.6	U	4.6	2.8
123-91-1	1,4-Dioxane	88.11	90	U	90	23
75-27-4	Bromodichloromethane	163.83	6.7	U	6.7	3.1
10061-01-5	cis-1,3-Dichloropropene	110.97	4.5	U	4.5	2.2
108-10-1	methyl isobutyl ketone	100.16	10	U	10	7.4
108-88-3	Toluene	92.14	16		3.8	1.3
10061-02-6	trans-1,3-Dichloropropene	110.97	4.5	U	4.5	2.7
79-00-5	1,1,2-Trichloroethane	133.41	5.5	U	5.5	2.1
127-18-4	Tetrachloroethene	165.83	99		1.4	0.98
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	10	U	10	8.6
124-48-1	Dibromochloromethane	208.29	8.5	U	8.5	3.0
106-93-4	1,2-Dibromoethane	187.87	7.7	U	7.7	2.7
108-90-7	Chlorobenzene	112.56	4.6	U	4.6	0.92
100-41-4	Ethylbenzene	106.17	4.3	U	4.3	1.6
179601-23-1	m,p-Xylene	106.17	4.0	J	11	1.5
95-47-6	Xylene, o-	106.17	4.3	U	4.3	1.5
1330-20-7	Xylene (total)	106.17	4.0	J	15	3.1
100-42-5	Styrene	104.15	4.3	U	4.3	1.8
75-25-2	Bromoform	252.75	10	U	10	4.4
98-82-8	Cumene	120.19	4.9	U	4.9	1.5
79-34-5	1,1,2,2-Tetrachloroethane	167.85	6.9	U	6.9	2.6
103-65-1	n-Propylbenzene	120.19	4.9	U	4.9	1.7
622-96-8	4-Ethyltoluene	120.20	4.9	U	4.9	1.7
108-67-8	1,3,5-Trimethylbenzene	120.20	4.9	U	4.9	1.4
95-49-8	2-Chlorotoluene	126.59	5.2	U	5.2	1.8
98-06-6	tert-Butylbenzene	134.22	5.5	U	5.5	1.6
95-63-6	1,2,4-Trimethylbenzene	120.20	4.9	U	4.9	2.0
135-98-8	sec-Butylbenzene	134.22	5.5	U	5.5	1.8
99-87-6	4-Isopropyltoluene	134.22	5.5	U	5.5	2.1
541-73-1	1,3-Dichlorobenzene	147.00	6.0	U	6.0	2.5
106-46-7	1,4-Dichlorobenzene	147.00	6.0	U	6.0	2.0

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-102 (AS) Lab Sample ID: 200-42918-3

Matrix: Air Lab File ID: 29983-12.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 21:49

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	5.2	U	5.2	3.1
104-51-8	n-Butylbenzene	134.22	5.5	U	5.5	2.2
95-50-1	1,2-Dichlorobenzene	147.00	6.0	U	6.0	2.1
120-82-1	1,2,4-Trichlorobenzene	181.45	19	U	19	8.9
87-68-3	Hexachlorobutadiene	260.76	11	U	11	4.4
91-20-3	Naphthalene	128.17	13	U	13	8.1

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d
Lims ID: 200-42918-A-3
Client ID: GC-SV-102 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 21:49:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 5.0000
Sample Info: 200-0029983-012
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 18:56:32 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 18:56:32

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85	5.144	5.138	-0.005	98	5517	0.0876	
	3 Chlorodifluoromethane	51		5.235				ND	U
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
	5 Chloromethane	50		5.748				ND	U
	6 Butane	43	6.000	6.016	-0.026	97	16752	0.4850	
	7 Vinyl chloride	62		6.080				ND	
	8 Butadiene	54		6.176				ND	
	9 Bromomethane	94		6.979				ND	
	11 Chloroethane	64		7.225				ND	
	13 Vinyl bromide	106		7.631				ND	
	14 Trichlorofluoromethane	101	7.690	7.690	-0.038	94	2106	0.0413	M
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	8.963	9.022	-0.038	97	339109	14.0	
	23 Carbon disulfide	76		9.193				ND	
	24 Isopropyl alcohol	45	9.183	9.204	-0.021	99	13874	0.5543	
	25 3-Chloro-1-propene	41		9.493				ND	
	27 Methylene Chloride	49	9.744	9.734	-0.016	85	1604	0.1003	
	28 2-Methyl-2-propanol	59	9.857	9.867	-0.032	94	95483	2.68	
	29 Methyl tert-butyl ether	73		10.092				ND	
	30 trans-1,2-Dichloroethene	61		10.156				ND	
S	31 1,2-Dichloroethene, Total	61		10.200				ND	
	33 Hexane	57	10.445	10.460	-0.038	84	2334	0.0960	
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.949				ND	
	37 2-Butanone (MEK)	72	11.943	11.944	-0.022	99	11551	1.33	
	39 Tetrahydrofuran	42	12.360	12.352	-0.011	33	6198	0.3644	
*	40 Chlorobromomethane	128	12.350	12.377	-0.026	78	121246	10.0	
	41 Chloroform	83	12.441	12.440	-0.026	94	6439	0.1804	
	42 Cyclohexane	84		12.724				ND	U
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117	12.949	12.945	-0.016	44	405	0.0101	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Isooctane	57	13.297	13.298	-0.021	63	3569	0.0430	
	46 Benzene	78	13.355	13.362	-0.027	90	3472	0.0624	
	47 1,2-Dichloroethane	62		13.532				ND	
	48 n-Heptane	43	13.607	13.607	-0.027	84	4758	0.1701	M
*	49 1,4-Difluorobenzene	114	14.056	14.078	-0.022	94	625931	10.0	
	51 Trichloroethene	95		14.500				ND	
	53 1,2-Dichloropropane	63		14.998				ND	
	55 Methyl methacrylate	69		15.078				ND	
	56 1,4-Dioxane	88		15.164				ND	
	58 Dichlorobromomethane	83		15.458				ND	
	59 cis-1,3-Dichloropropene	75		16.282				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	MU
	63 Toluene	92	16.811	16.806	-0.011	93	34479	0.8436	
	64 trans-1,3-Dichloropropene	75		17.352				ND	
	65 1,1,2-Trichloroethane	83		17.699				ND	MUa
	66 Tetrachloroethene	166	17.806	17.812	-0.011	97	121668	2.93	
	67 2-Hexanone	43		18.090				ND	U
	68 Chlorodibromomethane	129		18.427				ND	
	69 Ethylene Dibromide	107		18.700				ND	
*	71 Chlorobenzene-d5	117	19.529	19.540	-0.011	85	571849	10.0	
	72 Chlorobenzene	112		19.599				ND	
	73 Ethylbenzene	91	19.722	19.722	-0.005	90	6545	0.0694	Ma
	75 m-Xylene & p-Xylene	106	19.957	19.957	-0.005	0	6864	0.1855	
S	76 Xylenes, Total	106				0		0.1855	
	77 o-Xylene	106		20.738				ND	MU
	78 Styrene	104		20.781				ND	
	79 Bromoform	173		21.171				ND	
	80 Isopropylbenzene	105		21.343				ND	
	81 1,1,2,2-Tetrachloroethane	83		21.942				ND	U
	82 N-Propylbenzene	91		22.011				ND	U
	85 4-Ethyltoluene	105		22.193				ND	U
	86 2-Chlorotoluene	91		22.209				ND	U
	87 1,3,5-Trimethylbenzene	105	22.289	22.283	-0.001	40	1251	0.0127	
	89 tert-Butylbenzene	119		22.766				ND	
	90 1,2,4-Trimethylbenzene	105	22.857	22.850	0.000	62	3488	0.0361	
	91 sec-Butylbenzene	105		23.081				ND	U
	92 4-Isopropyltoluene	119		23.279				ND	MUa
	93 1,3-Dichlorobenzene	146		23.327				ND	
	94 1,4-Dichlorobenzene	146		23.466				ND	
	95 Benzyl chloride	91		23.670				ND	U
	96 n-Butylbenzene	91		23.878				ND	U
	98 1,2-Dichlorobenzene	146		24.028				ND	
	100 1,2,4-Trichlorobenzene	180		26.703				ND	
	101 Hexachlorobutadiene	225		26.896				ND	
	102 Naphthalene	128		27.238				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004	Amount Added:	20.00	Units: mL	Run Reagent

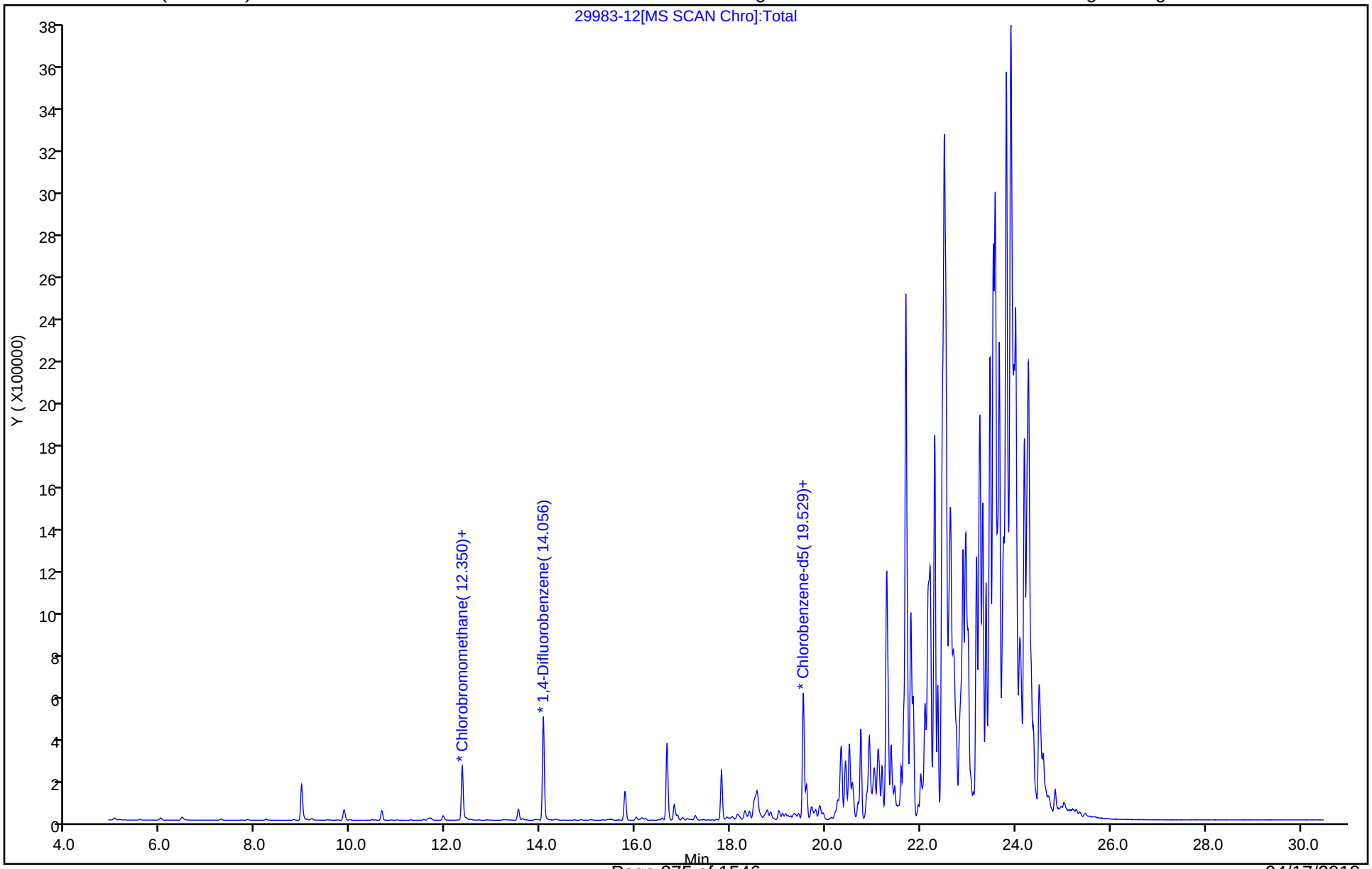
Report Date: 09-Apr-2018 18:56:32 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d

Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3	Worklist Smp#:	12
Client ID:	GC-SV-102 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

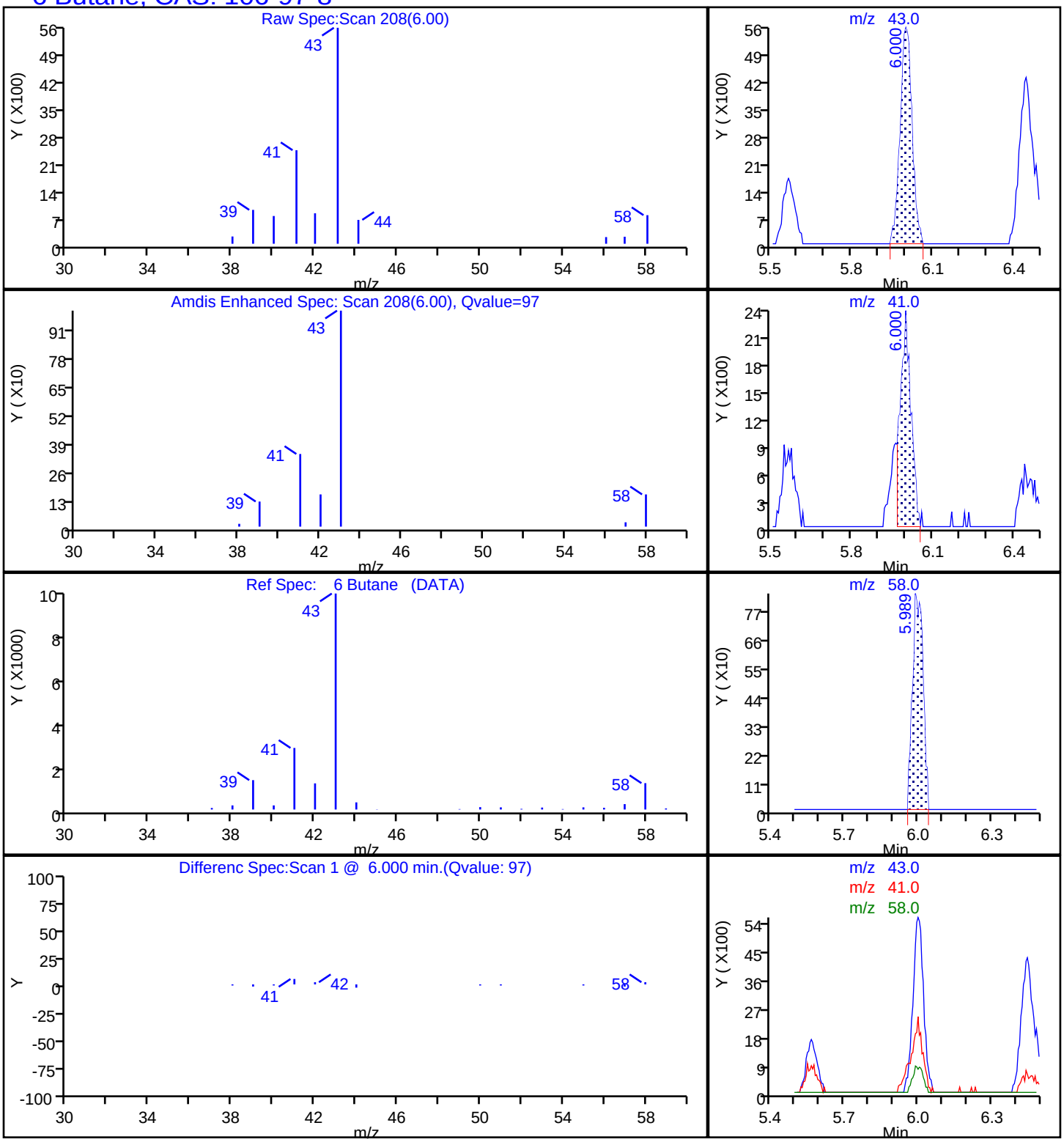


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d

Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

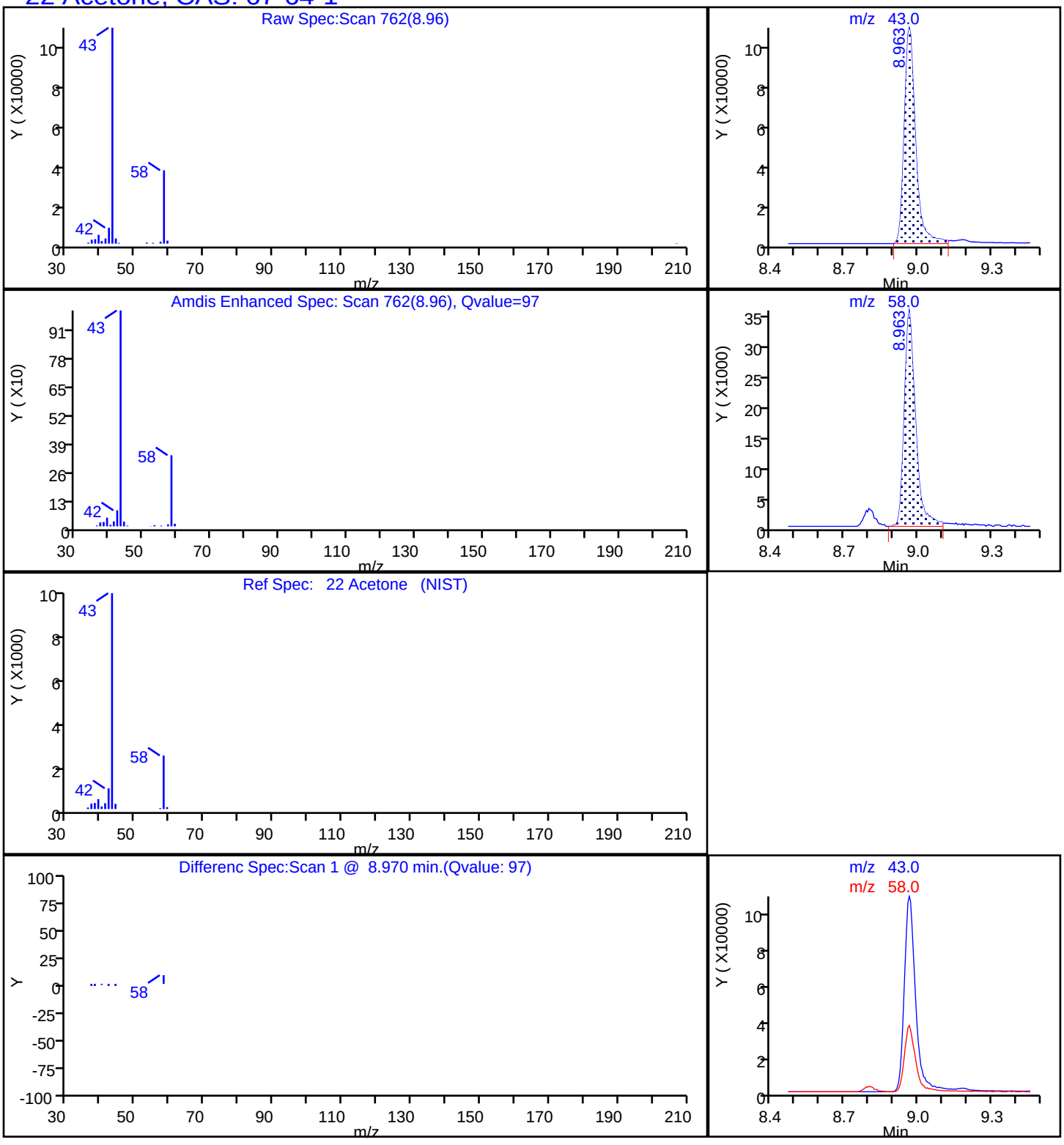
6 Butane, CAS: 106-97-8



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1

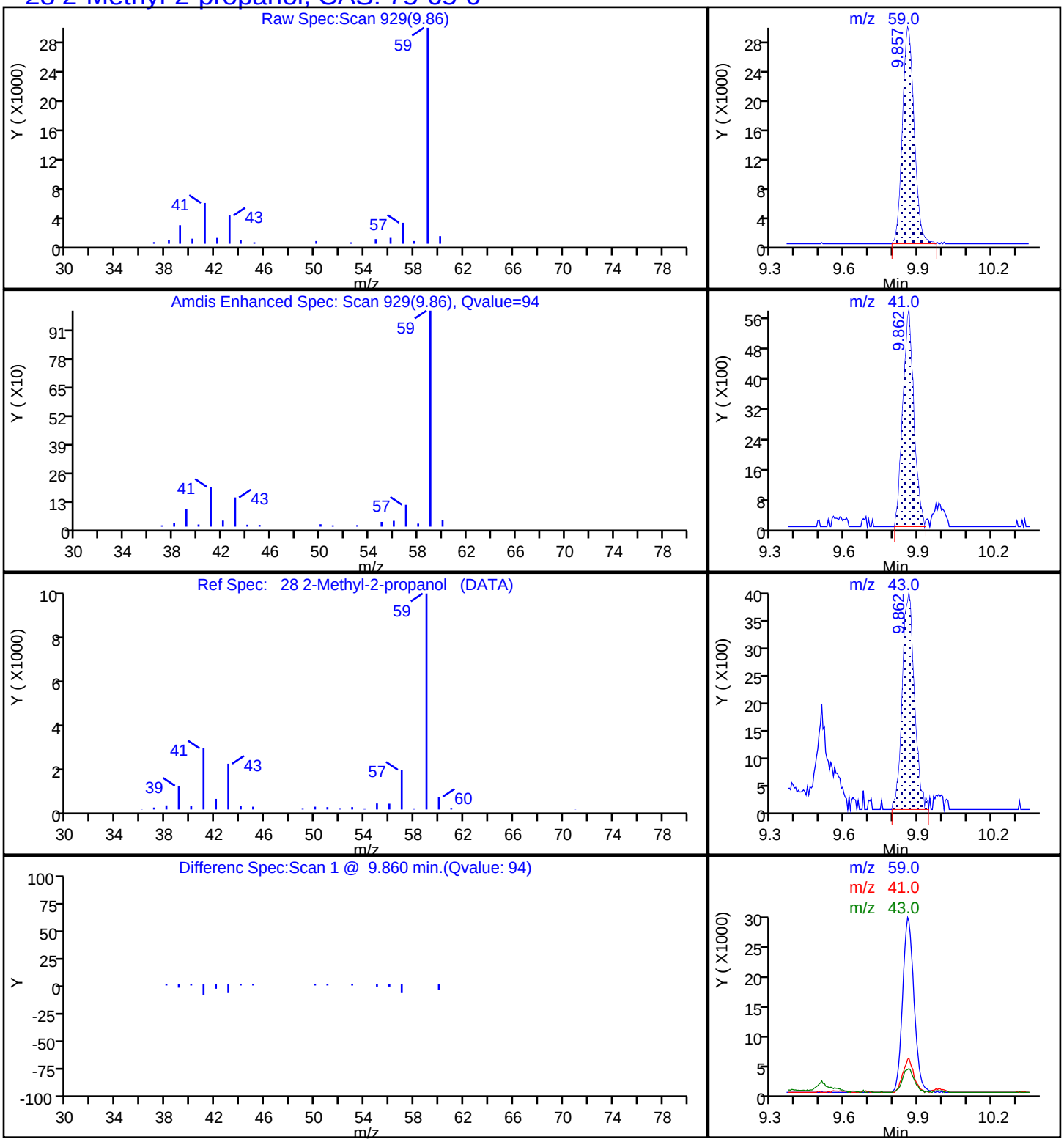


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d

Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

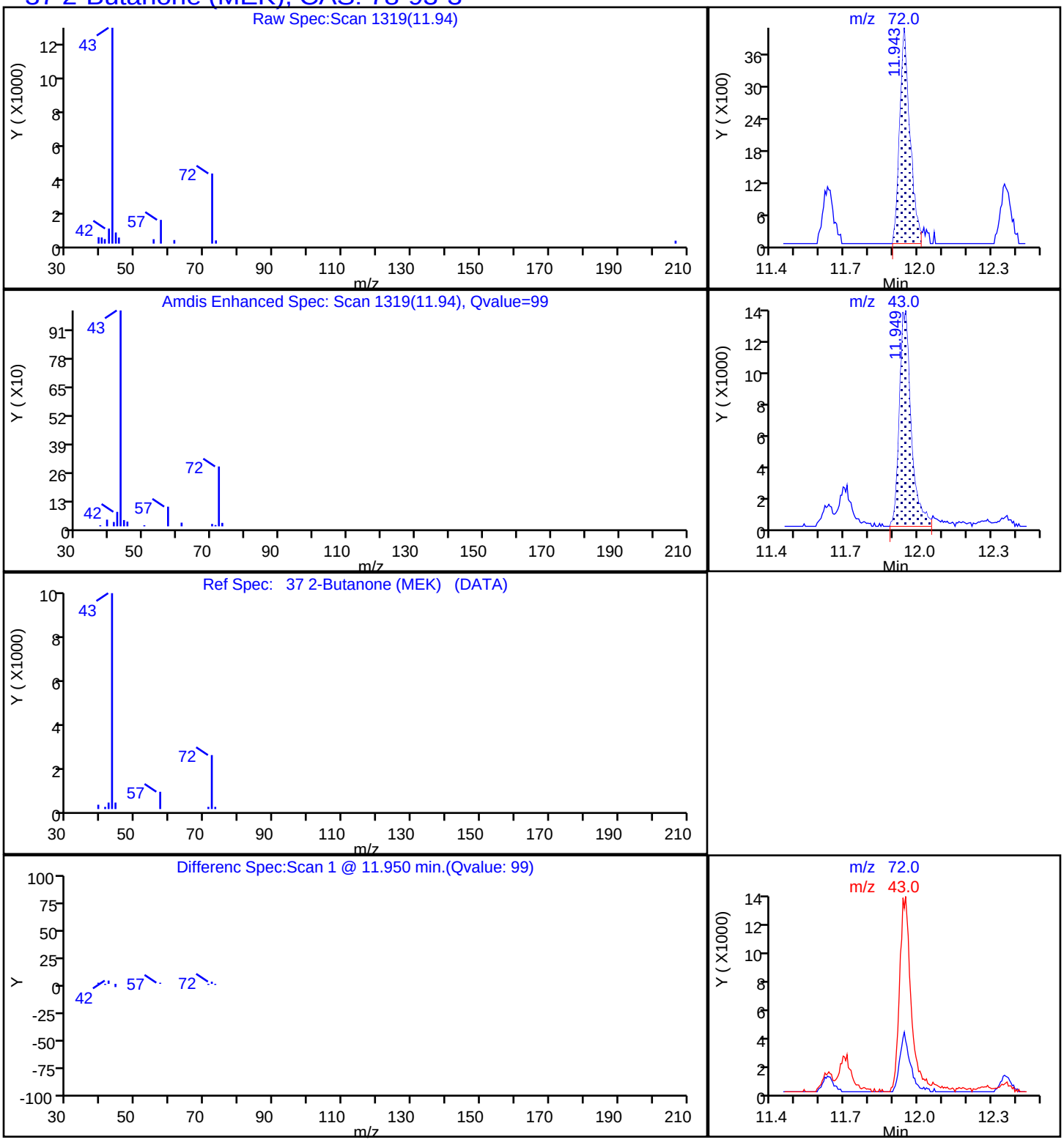
28 2-Methyl-2-propanol, CAS: 75-65-0



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 2-Butanone (MEK), CAS: 78-93-3

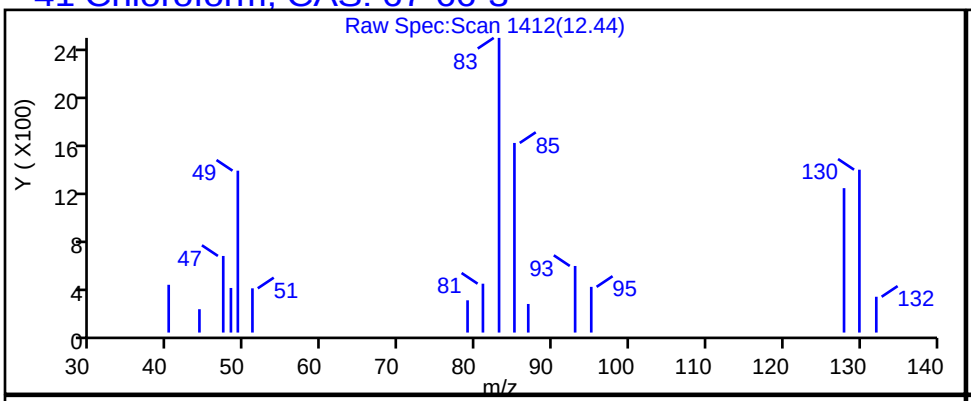


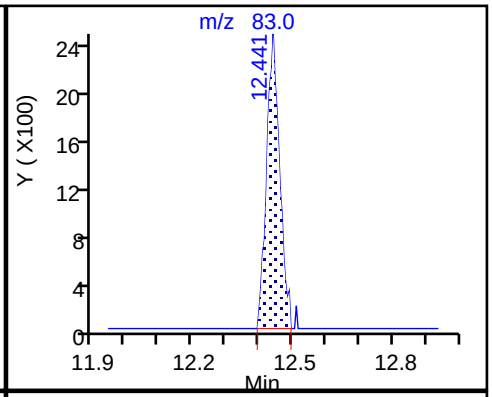
TestAmerica Burlington

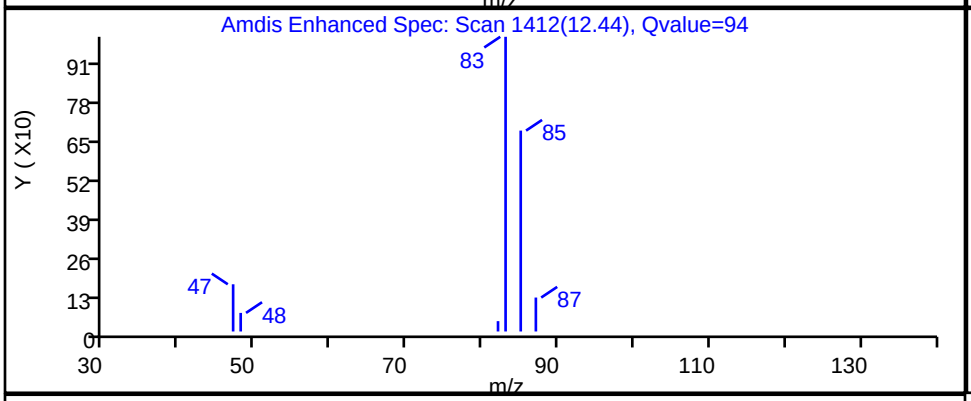
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d

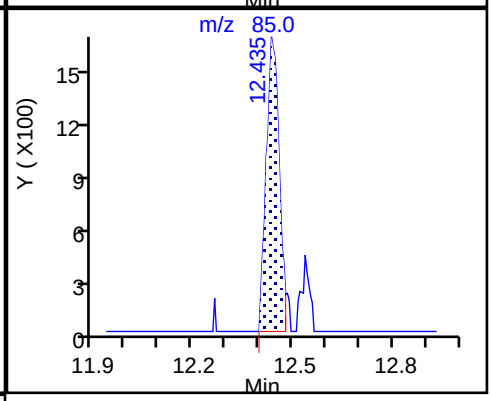
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

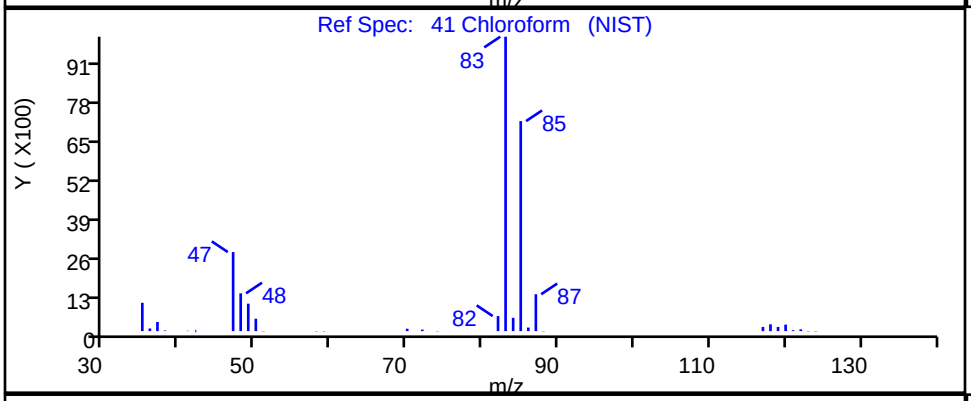
41 Chloroform, CAS: 67-66-3

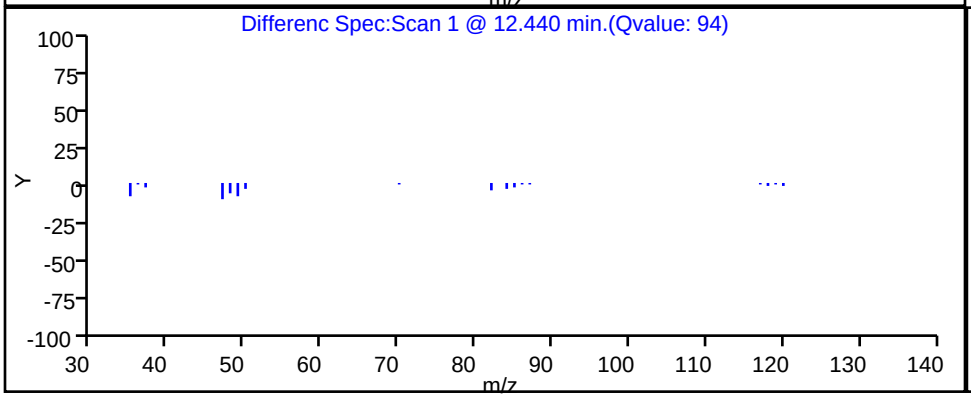


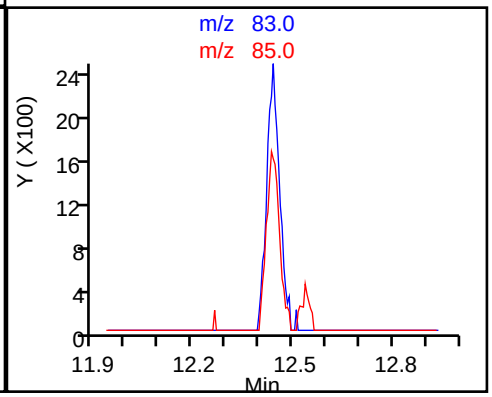








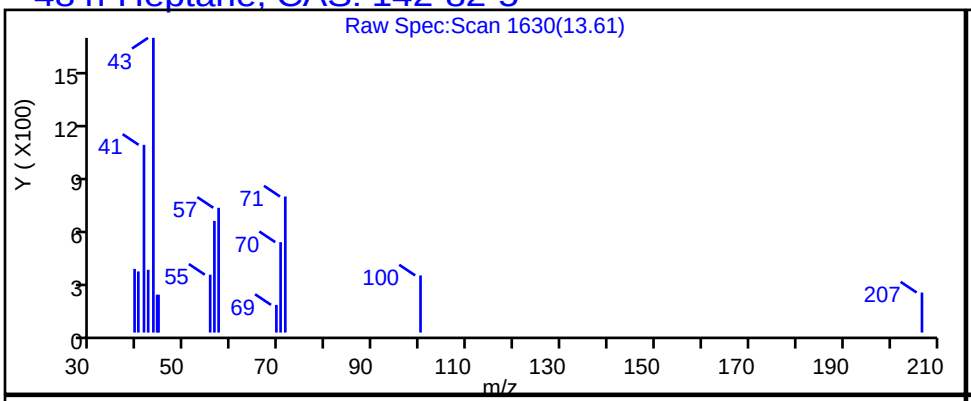


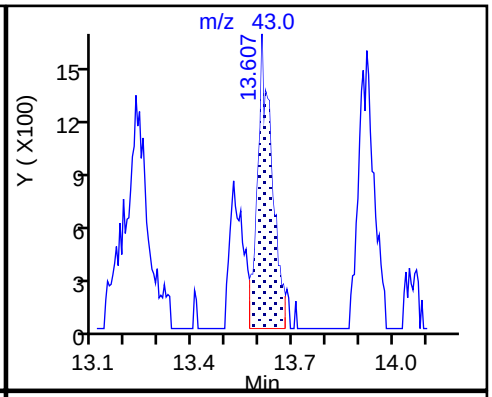


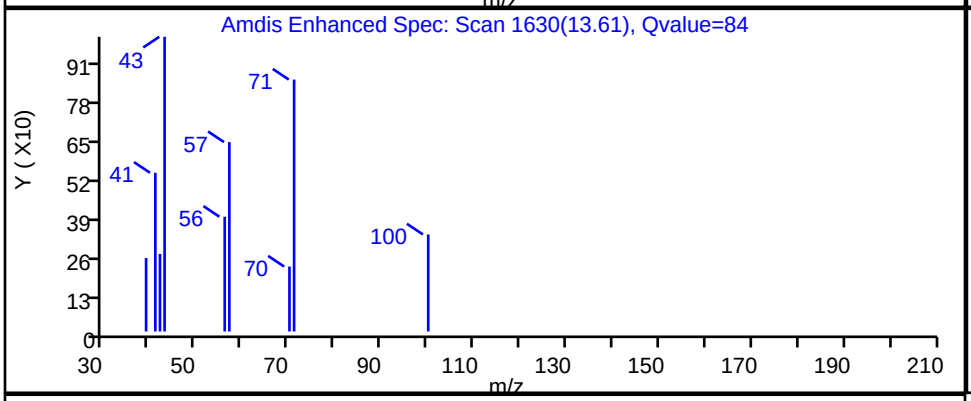
TestAmerica Burlington

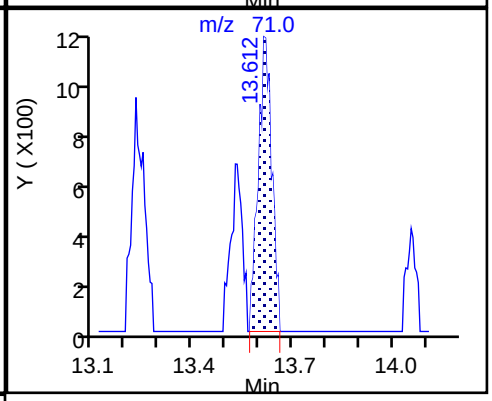
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

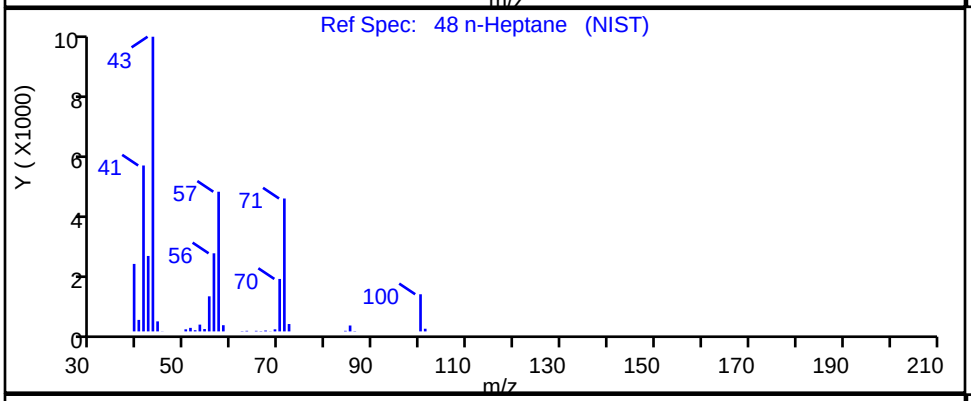
48 n-Heptane, CAS: 142-82-5

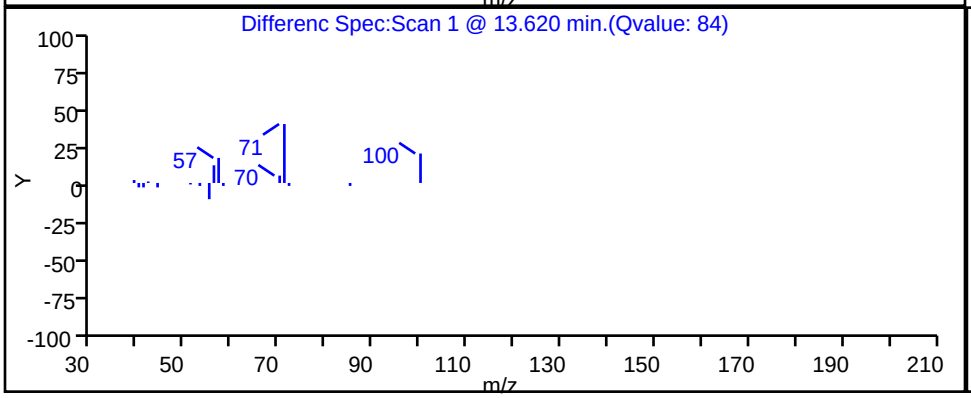


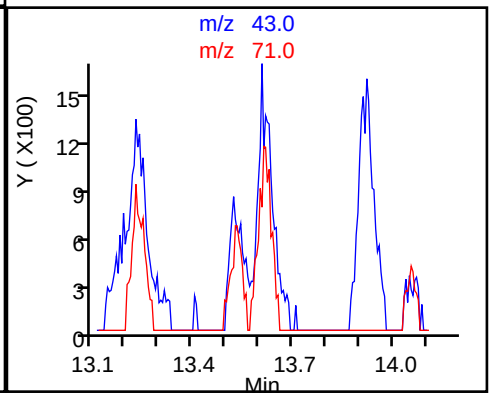












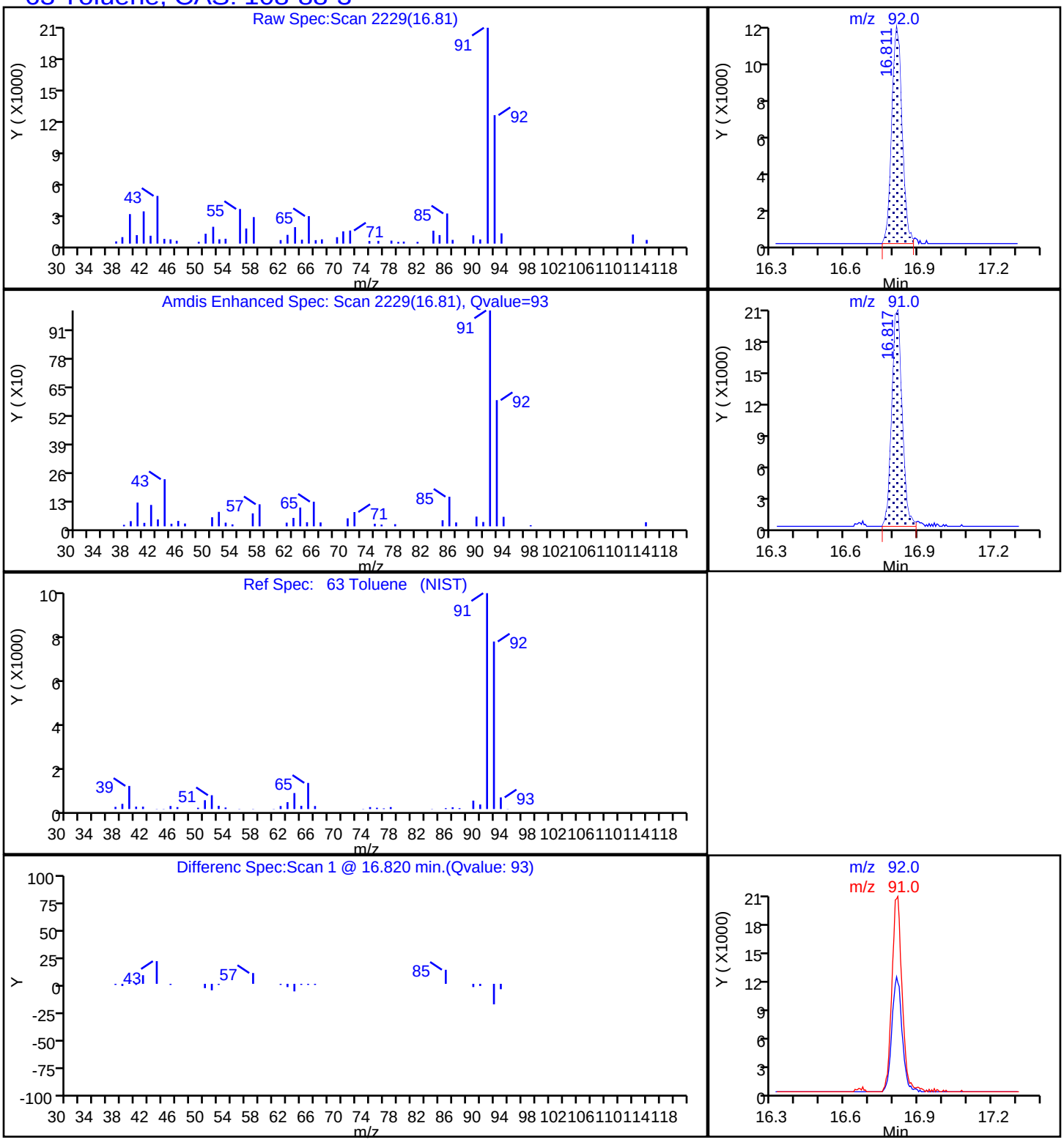
Report Date: 09-Apr-2018 18:56:33 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d

Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

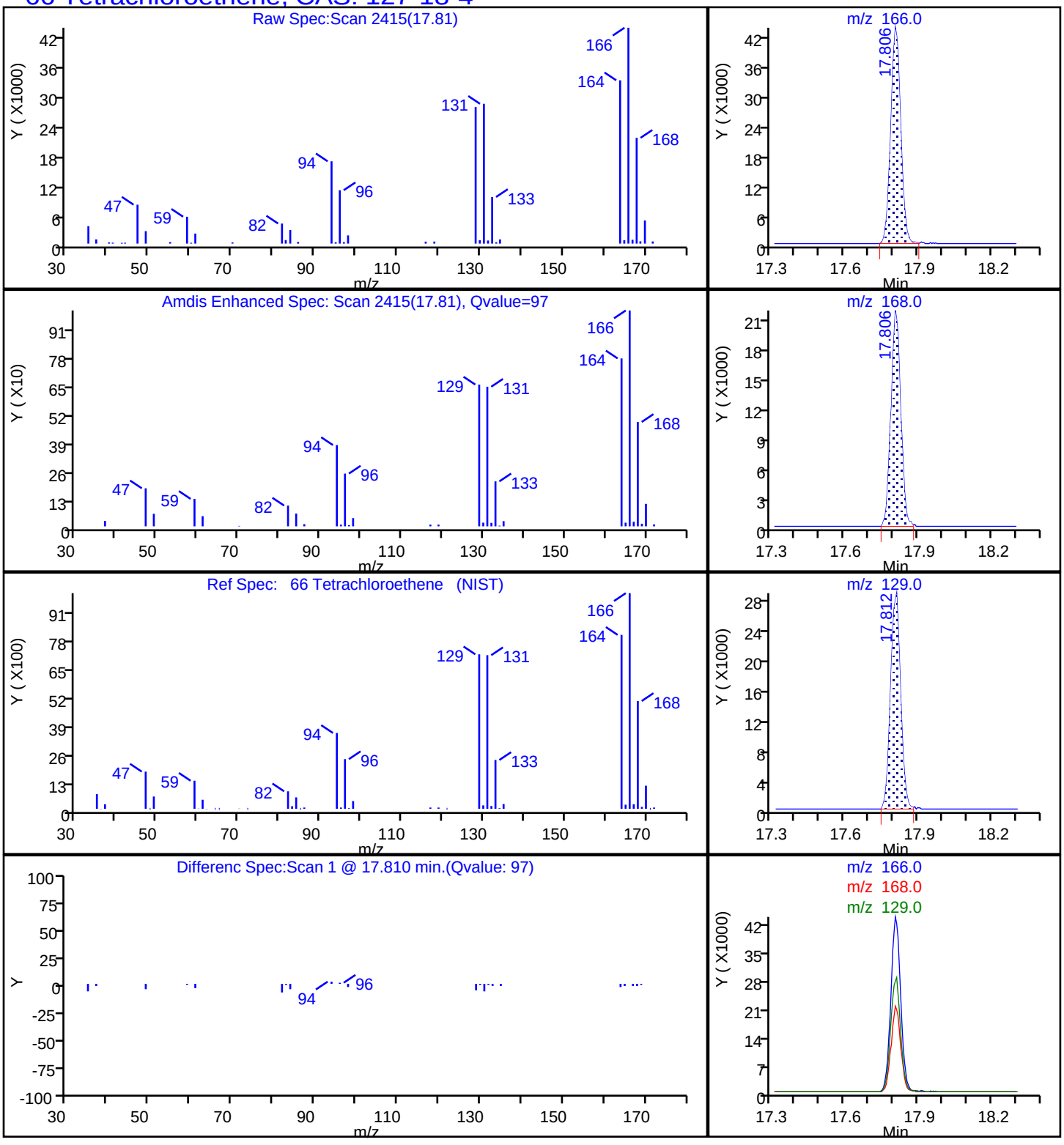
63 Toluene, CAS: 108-88-3



TestAmerica Burlington

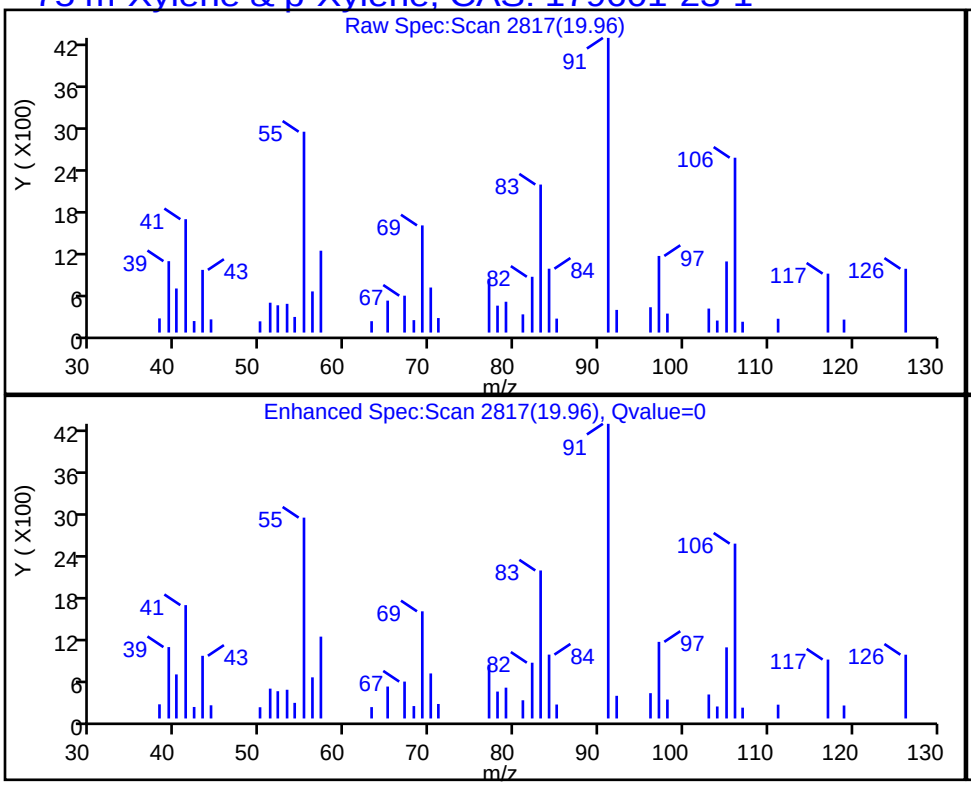
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

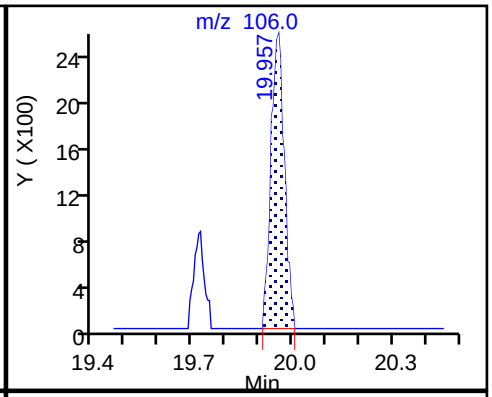
66 Tetrachloroethene, CAS: 127-18-4

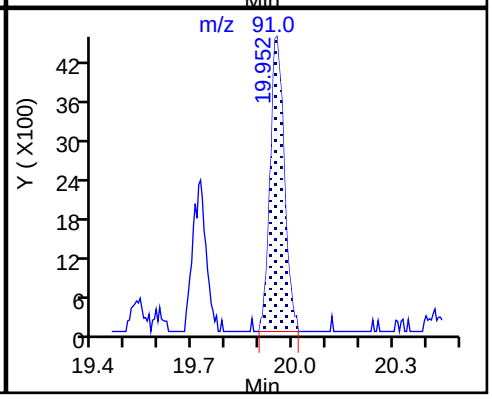


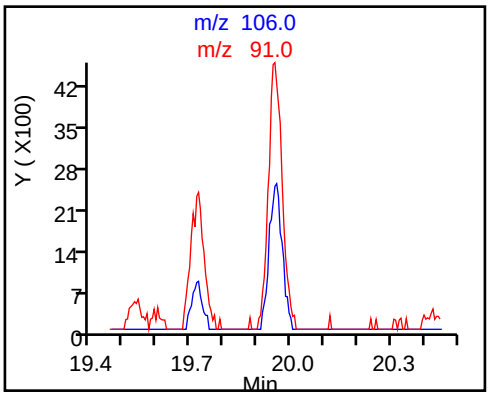
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d
Injection Date: 06-Apr-2018 21:49:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-3 Lab Sample ID: 200-42918-3
Client ID: GC-SV-102 (AS)
Operator ID: ert ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 5.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

75 m-Xylene & p-Xylene, CAS: 179601-23-1









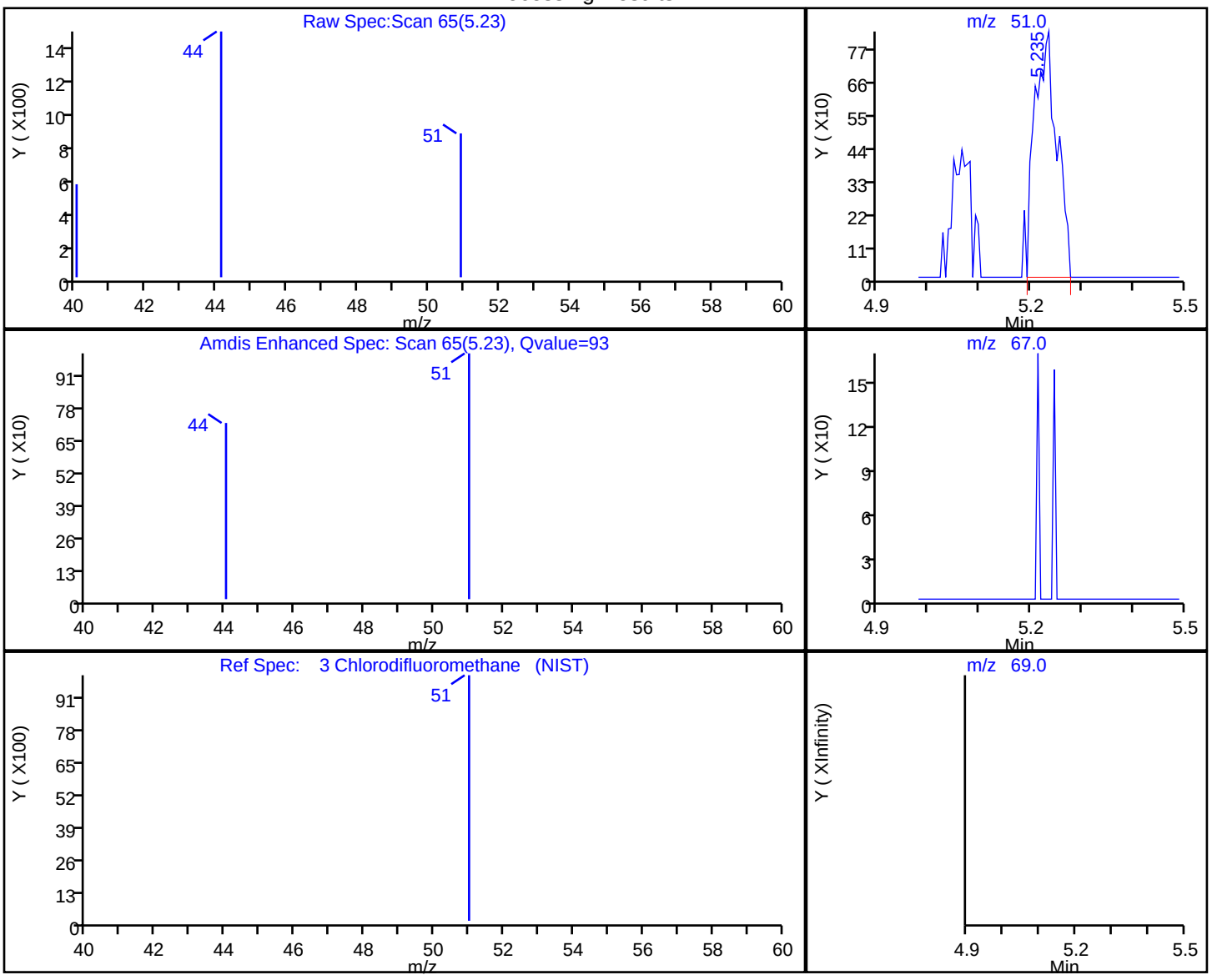
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
5.23	51.00	2483	0.071420
5.23	67.00	0	
5.23	69.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

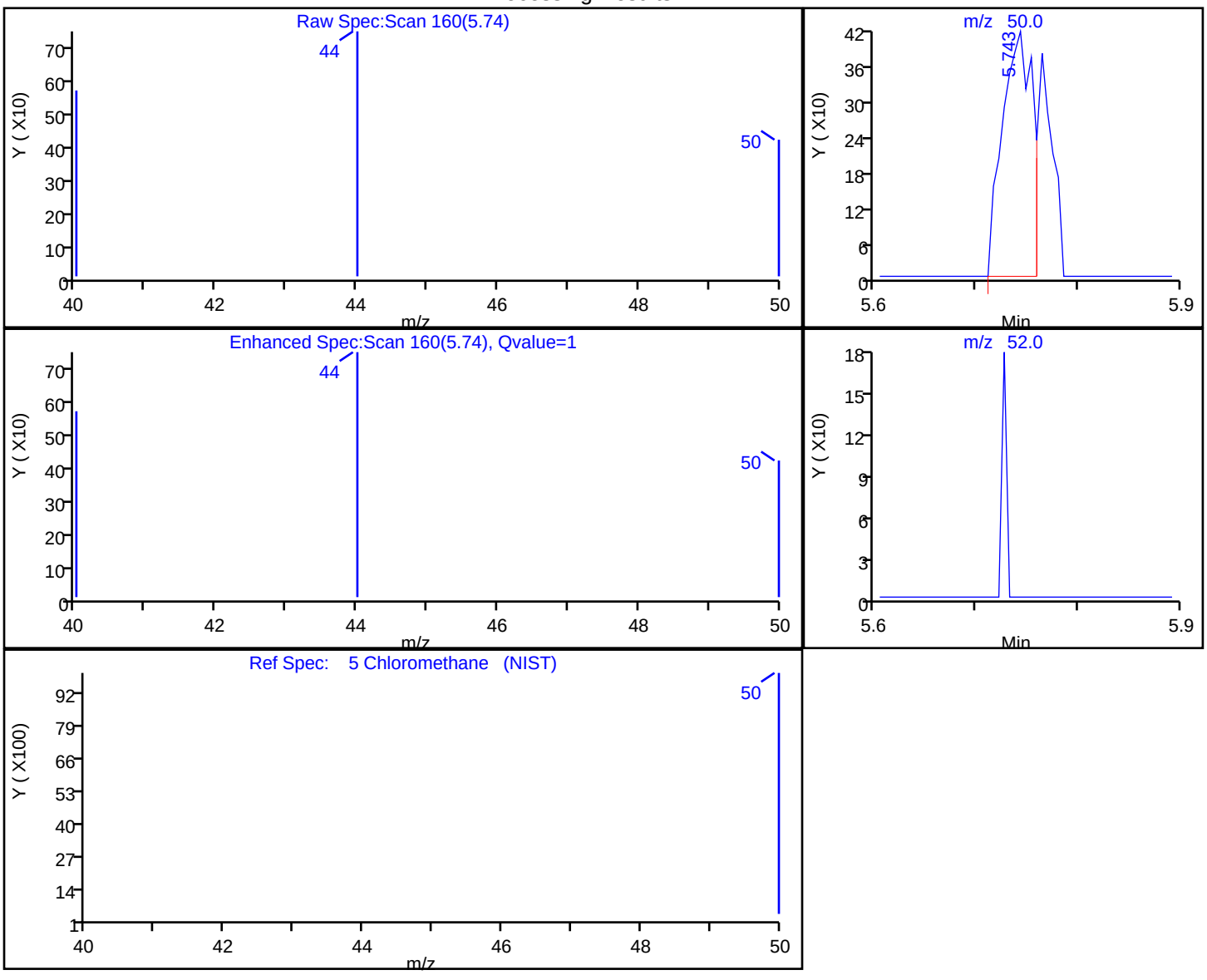
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
5.74	50.00	868	0.041562
5.75	52.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

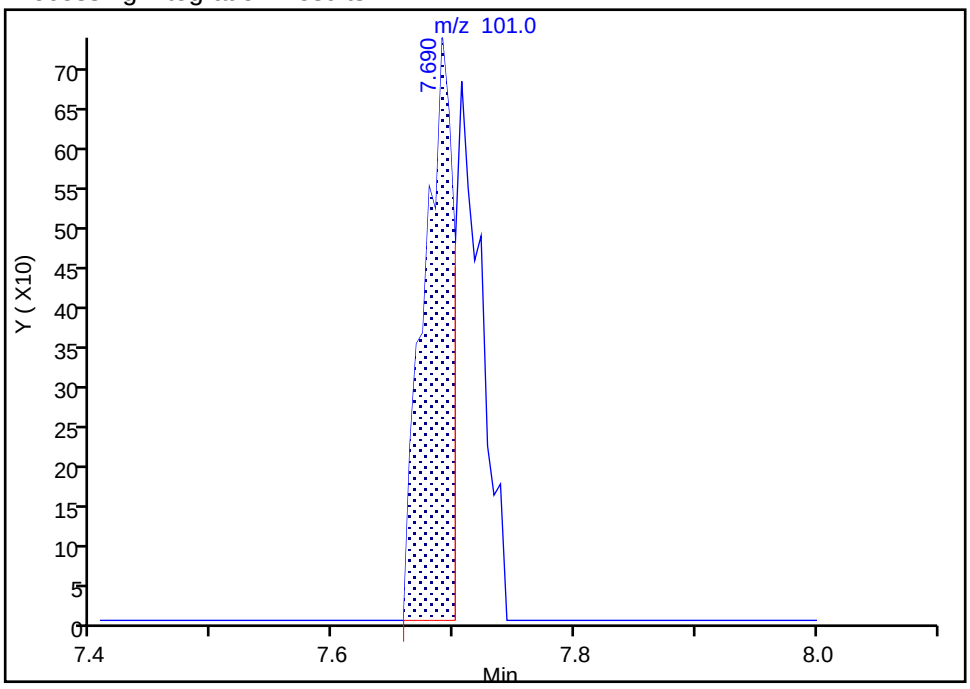
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

14 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

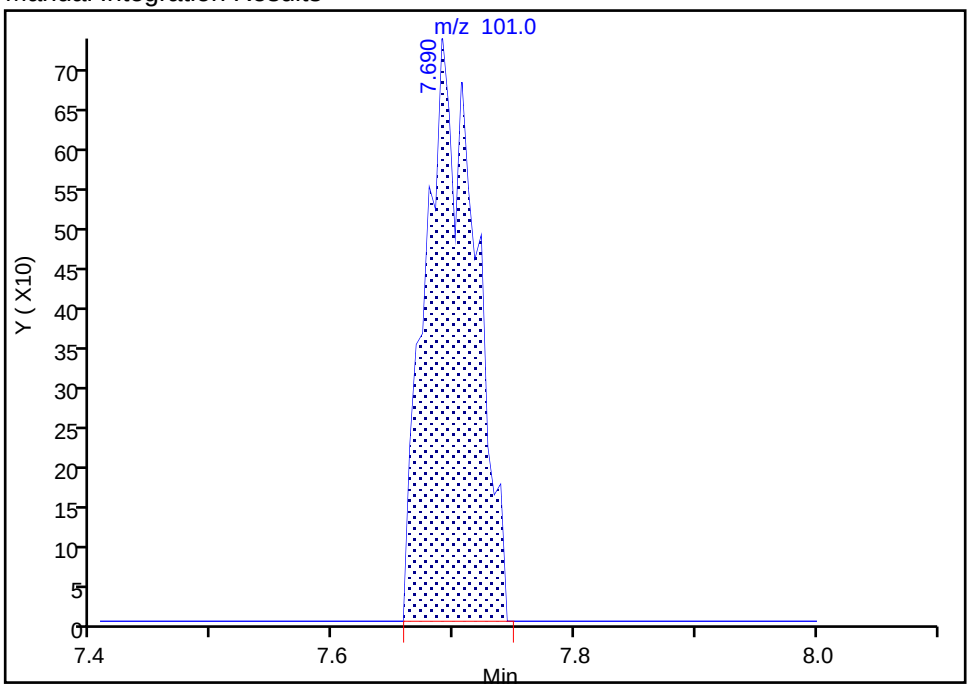
Processing Integration Results

RT: 7.69
Area: 1234
Amount: 0.024215
Amount Units: ppb v/v



Manual Integration Results

RT: 7.69
Area: 2106
Amount: 0.041327
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:51:00

Audit Action: Manually Integrated Audit Reason: Assign Peak

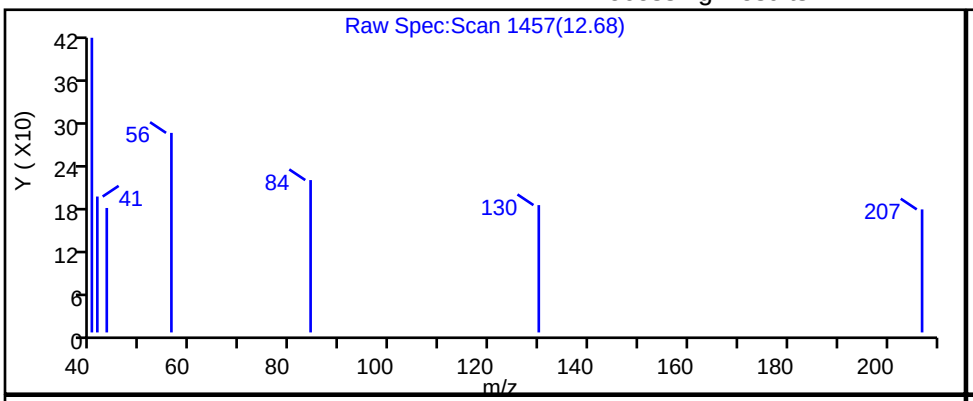
User Disabled Compound Report

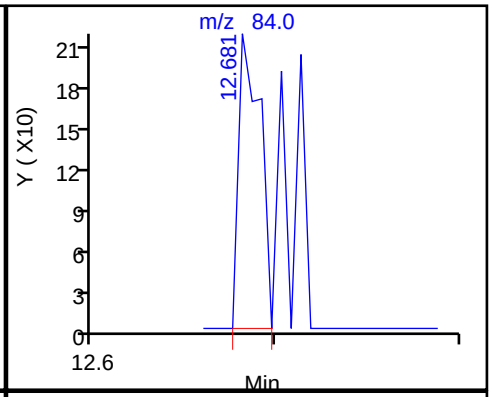
TestAmerica Burlington

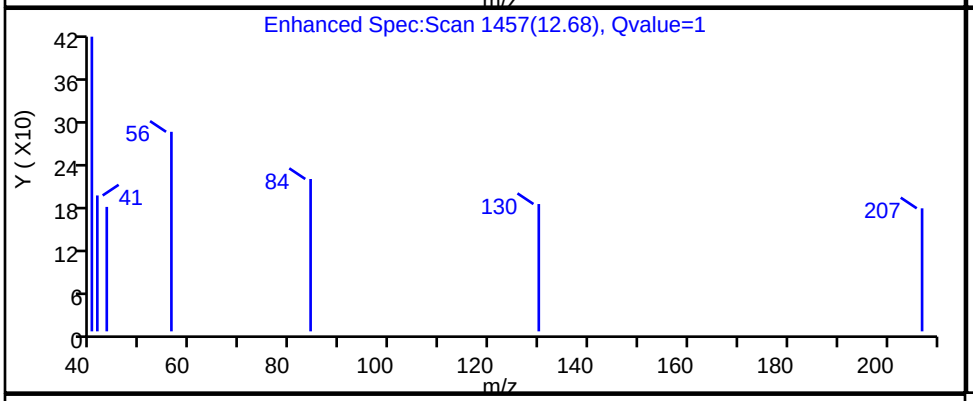
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

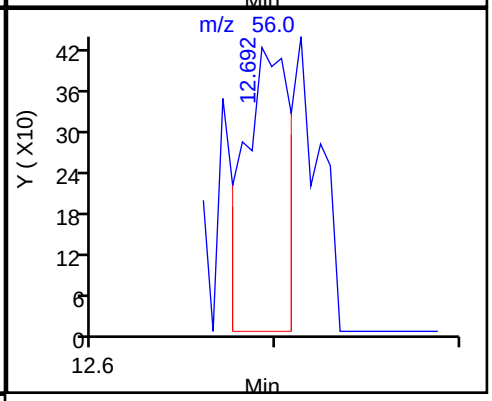
42 Cyclohexane, CAS: 110-82-7

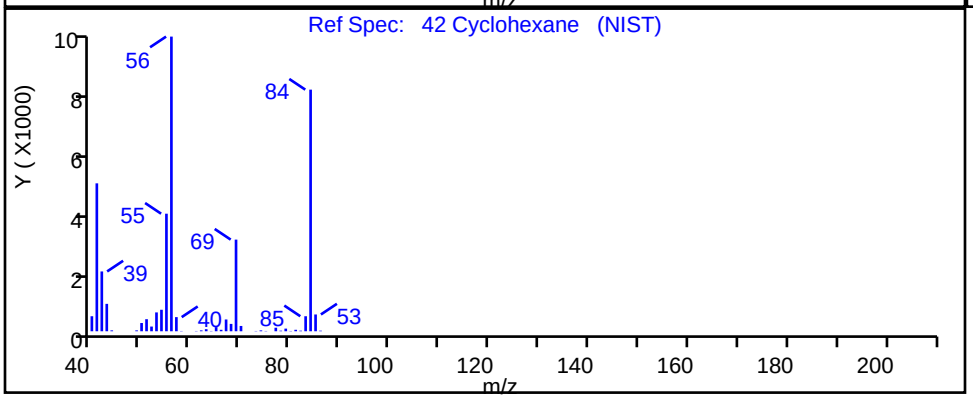
Processing Results











RT	Mass	Response	Amount
12.68	84.00	174	0.007113
12.69	56.00	735	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

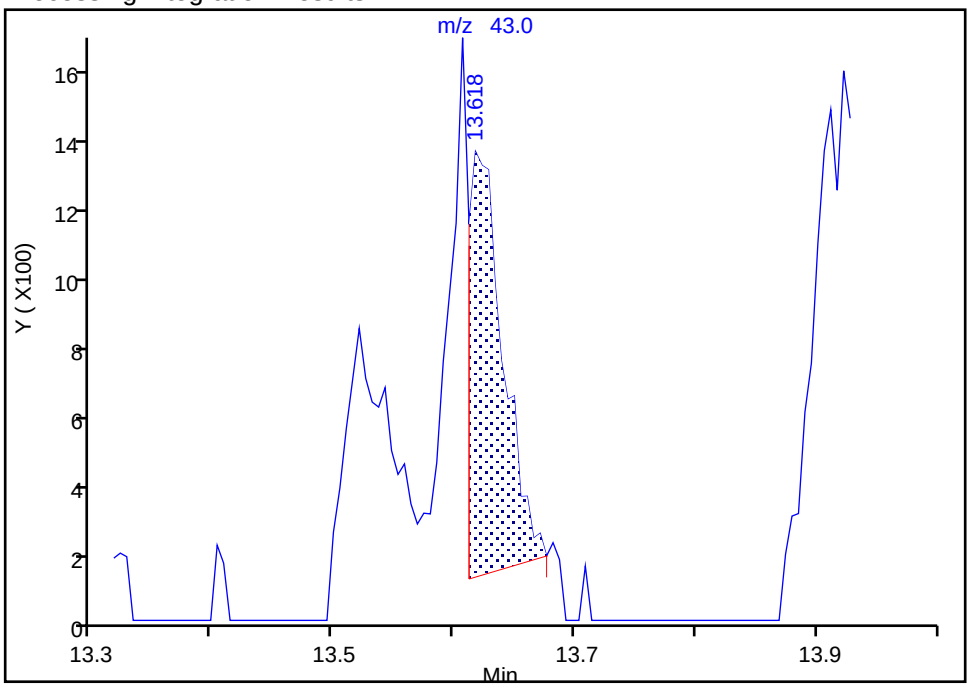
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 n-Heptane, CAS: 142-82-5

Signal: 1

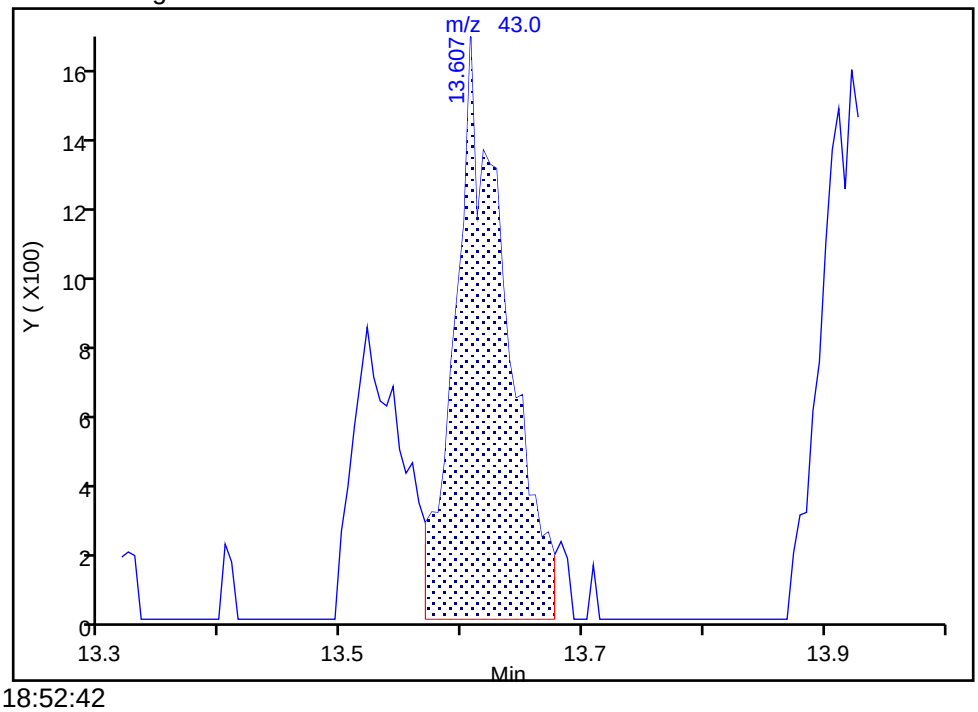
Processing Integration Results

RT: 13.62
Area: 2328
Amount: 0.083249
Amount Units: ppb v/v



Manual Integration Results

RT: 13.61
Area: 4758
Amount: 0.170145
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:52:42

Audit Action: Manually Integrated Audit Reason: Assign Peak

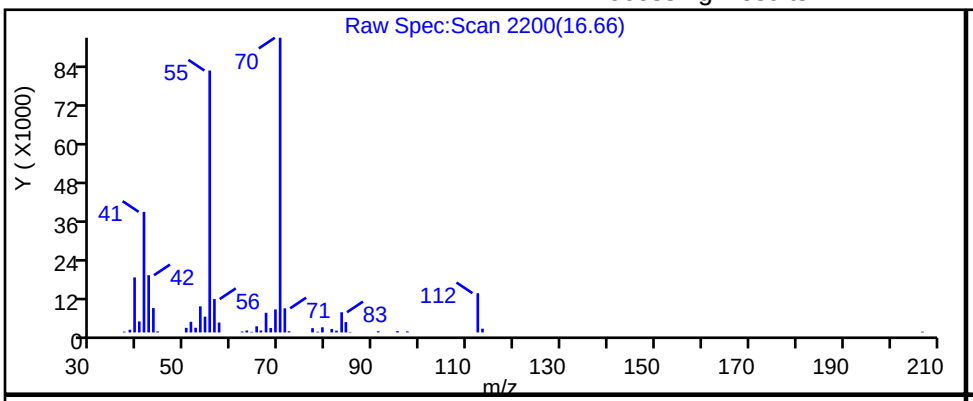
User Disabled Compound Report

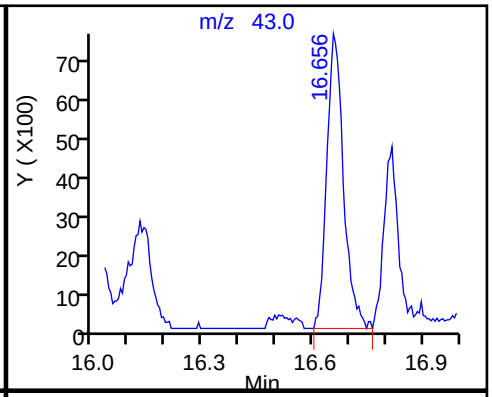
TestAmerica Burlington

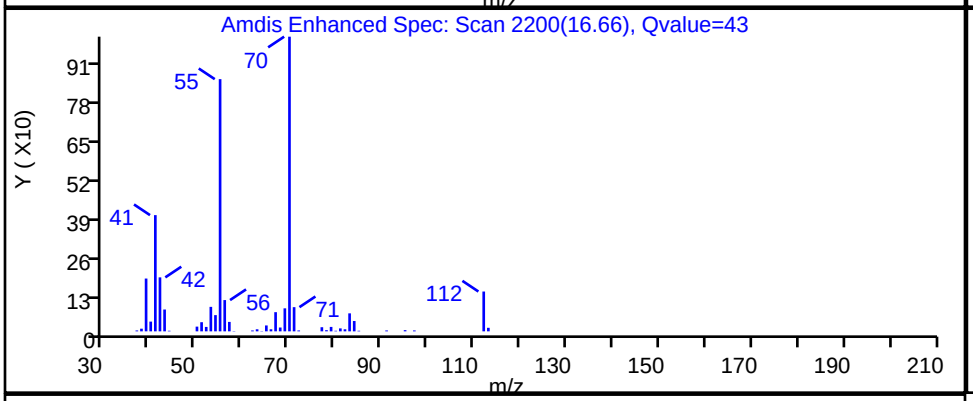
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

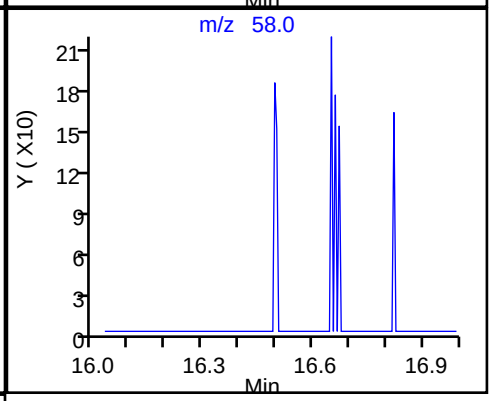
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

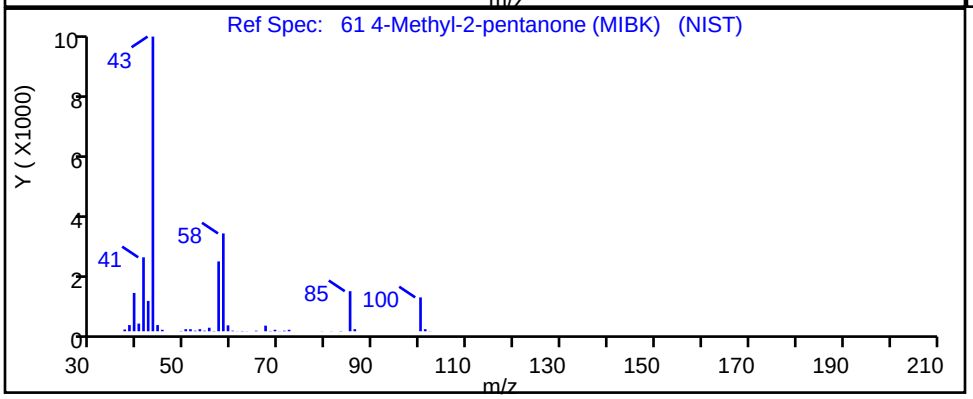
Processing Results











RT	Mass	Response	Amount
16.66	43.00	24288	0.650325
16.51	58.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

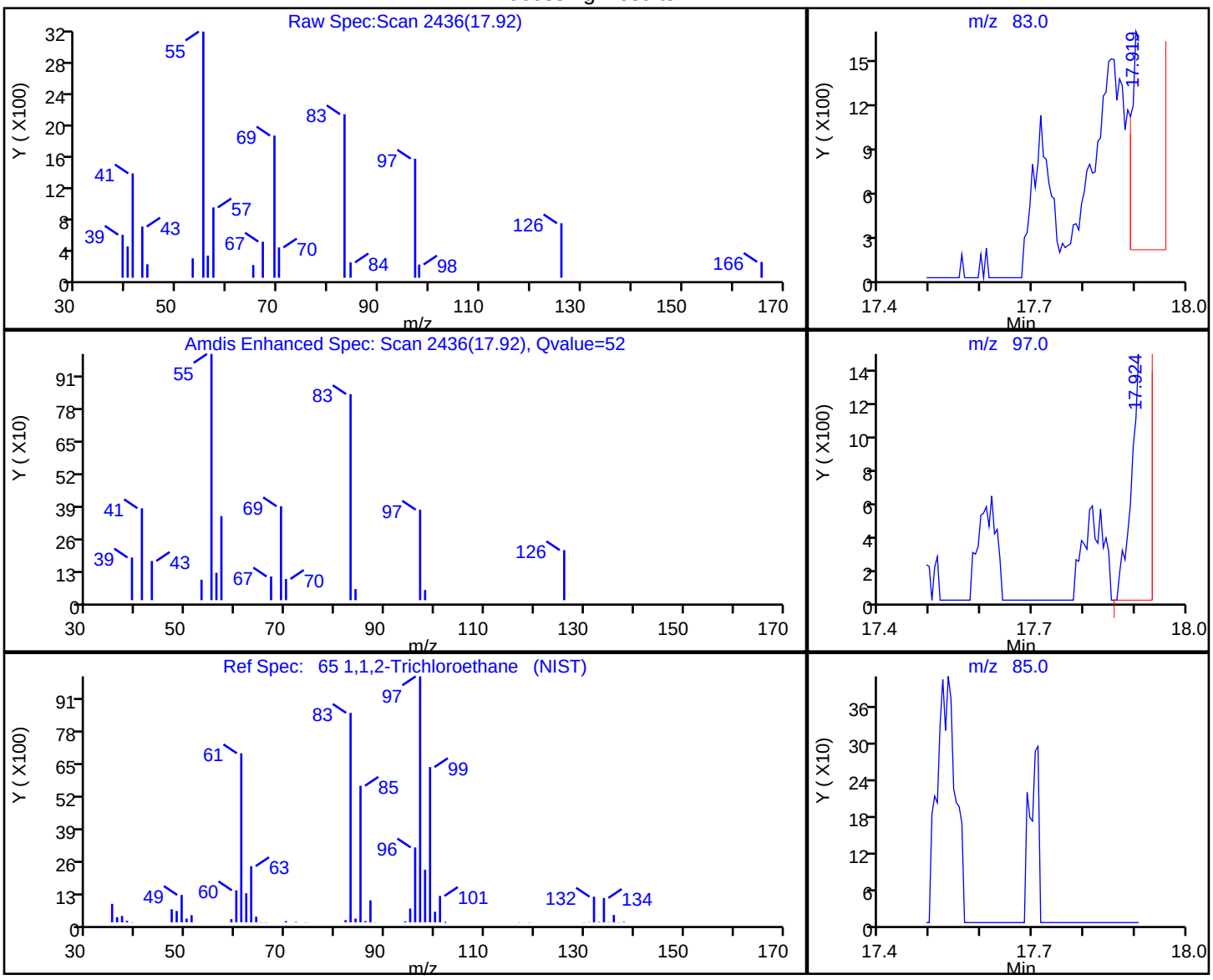
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
17.92	83.00	4994	0.253740
17.92	97.00	3940	
17.70	85.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

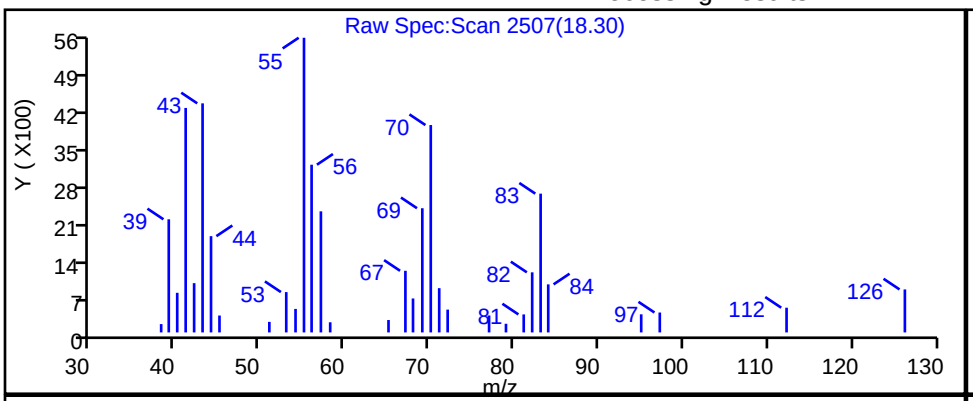
User Disabled Compound Report

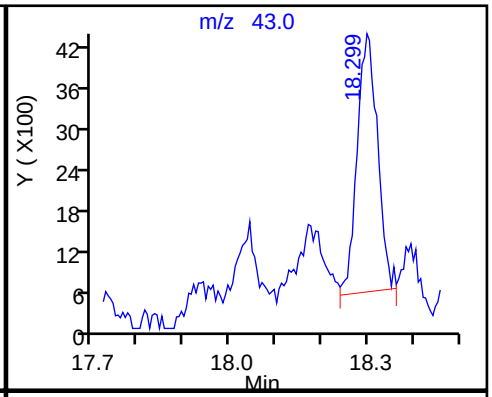
TestAmerica Burlington

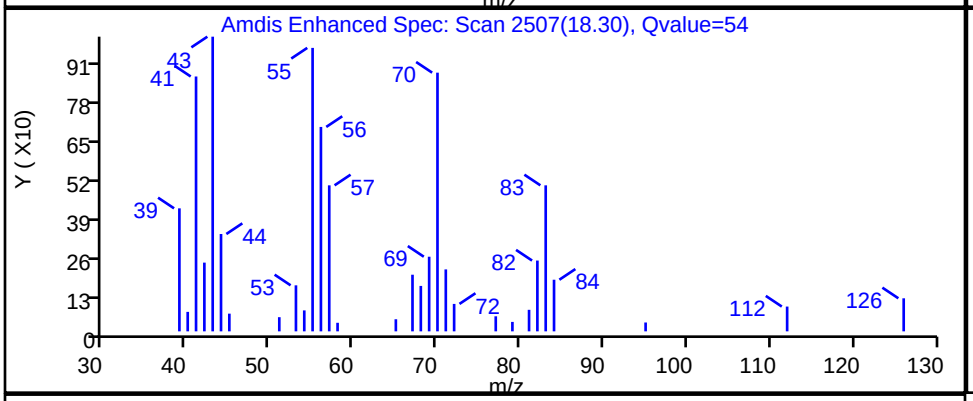
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

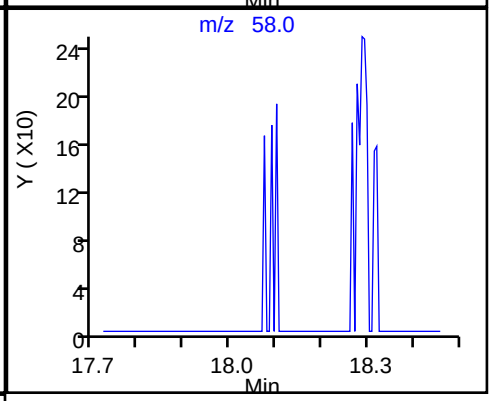
67 2-Hexanone, CAS: 591-78-6

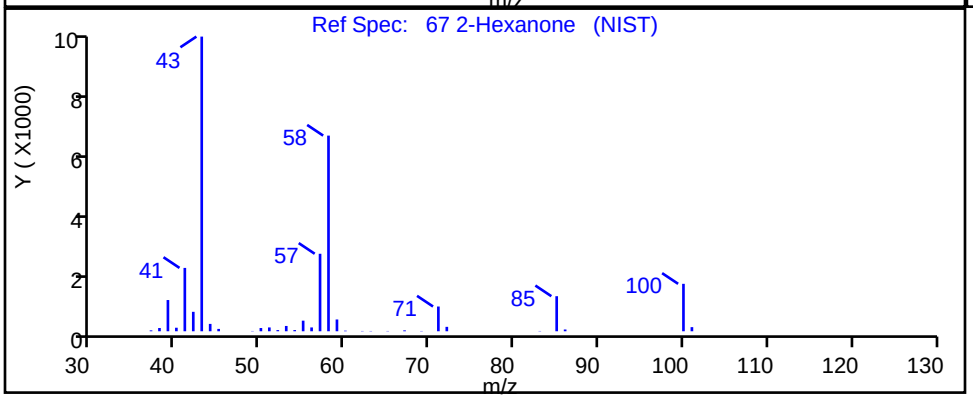
Processing Results











RT	Mass	Response	Amount
18.30	43.00	11782	0.334788
18.09	58.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

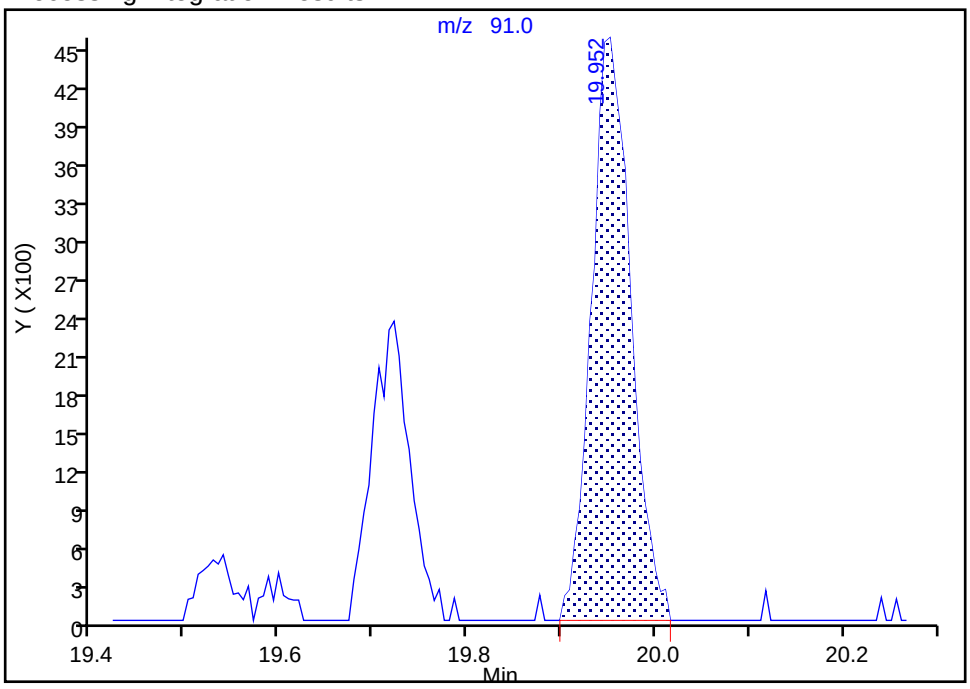
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

73 Ethylbenzene, CAS: 100-41-4

Signal: 1

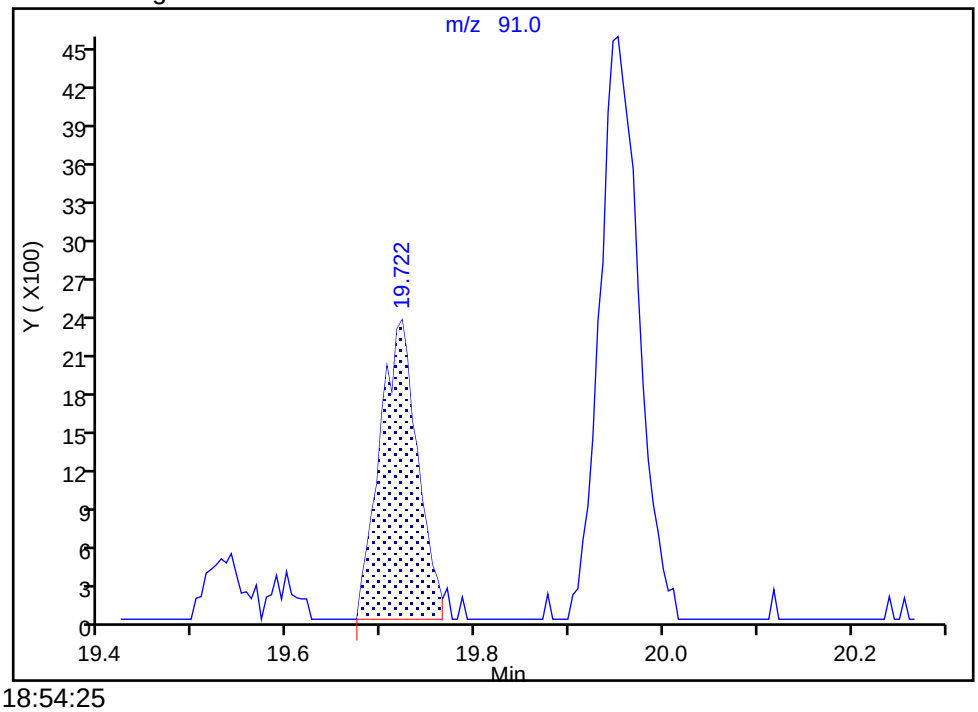
Processing Integration Results

RT: 19.95
Area: 13325
Amount: 0.141341
Amount Units: ppb v/v



Manual Integration Results

RT: 19.72
Area: 6545
Amount: 0.069424
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:54:25

Audit Action: Manually Integrated Audit Reason: Assign Peak

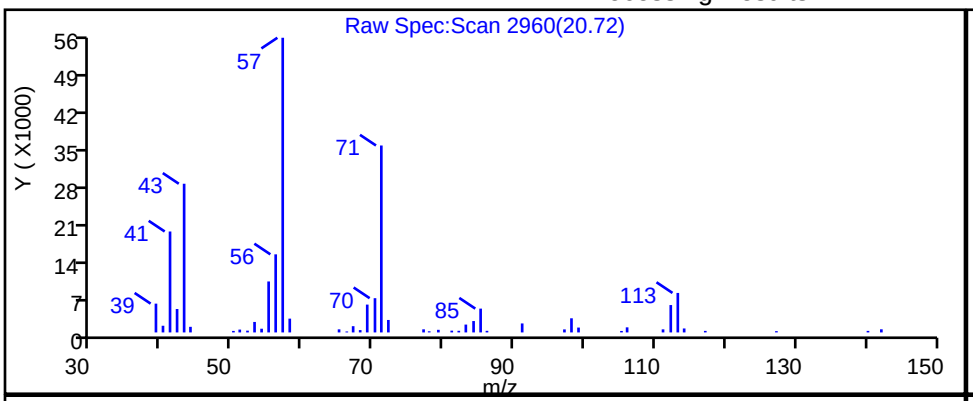
User Disabled Compound Report

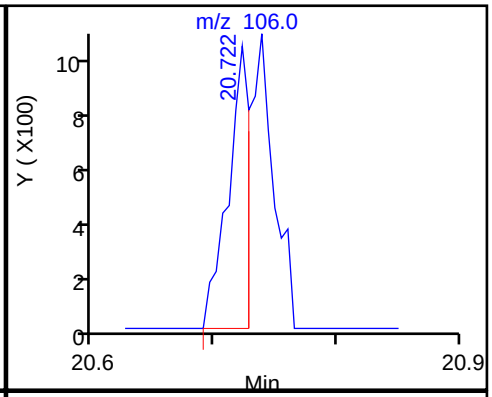
TestAmerica Burlington

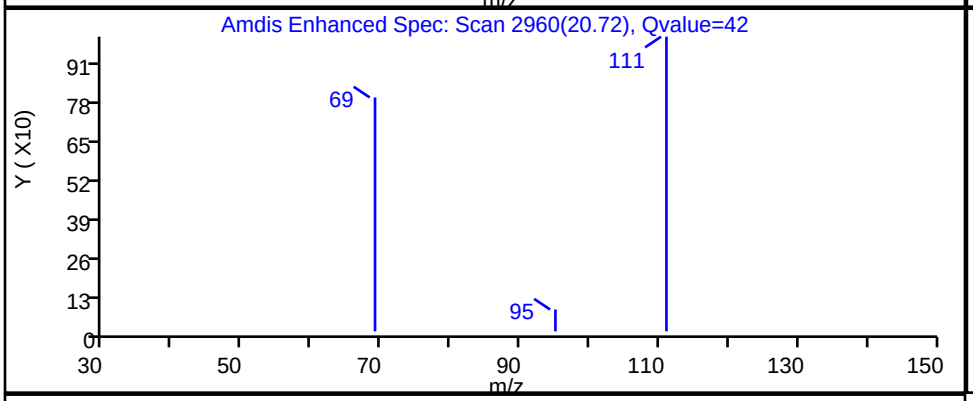
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

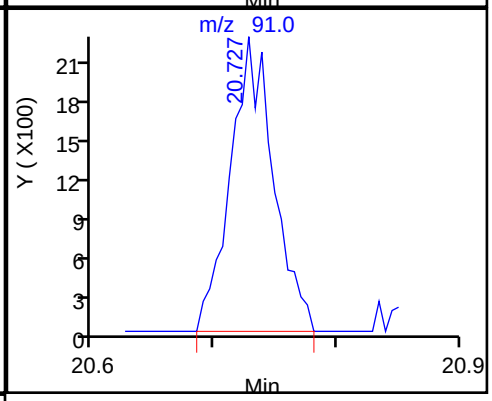
77 o-Xylene, CAS: 95-47-6

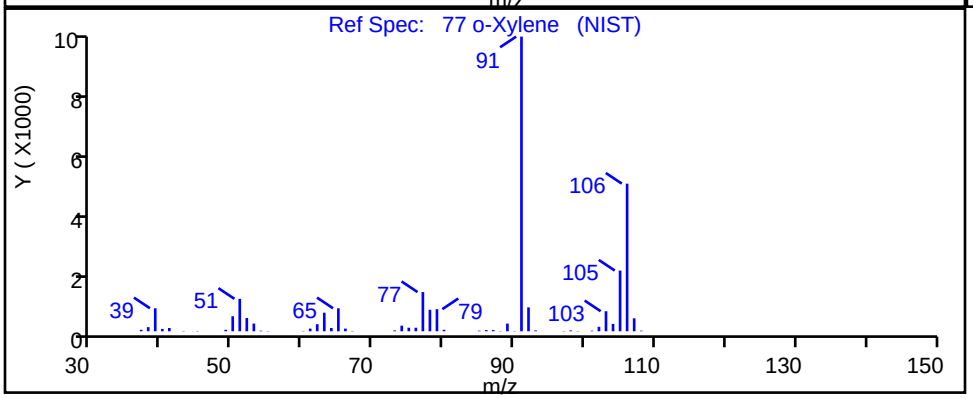
Processing Results











RT	Mass	Response	Amount
20.72	106.00	1157	0.030971
20.73	91.00	5391	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

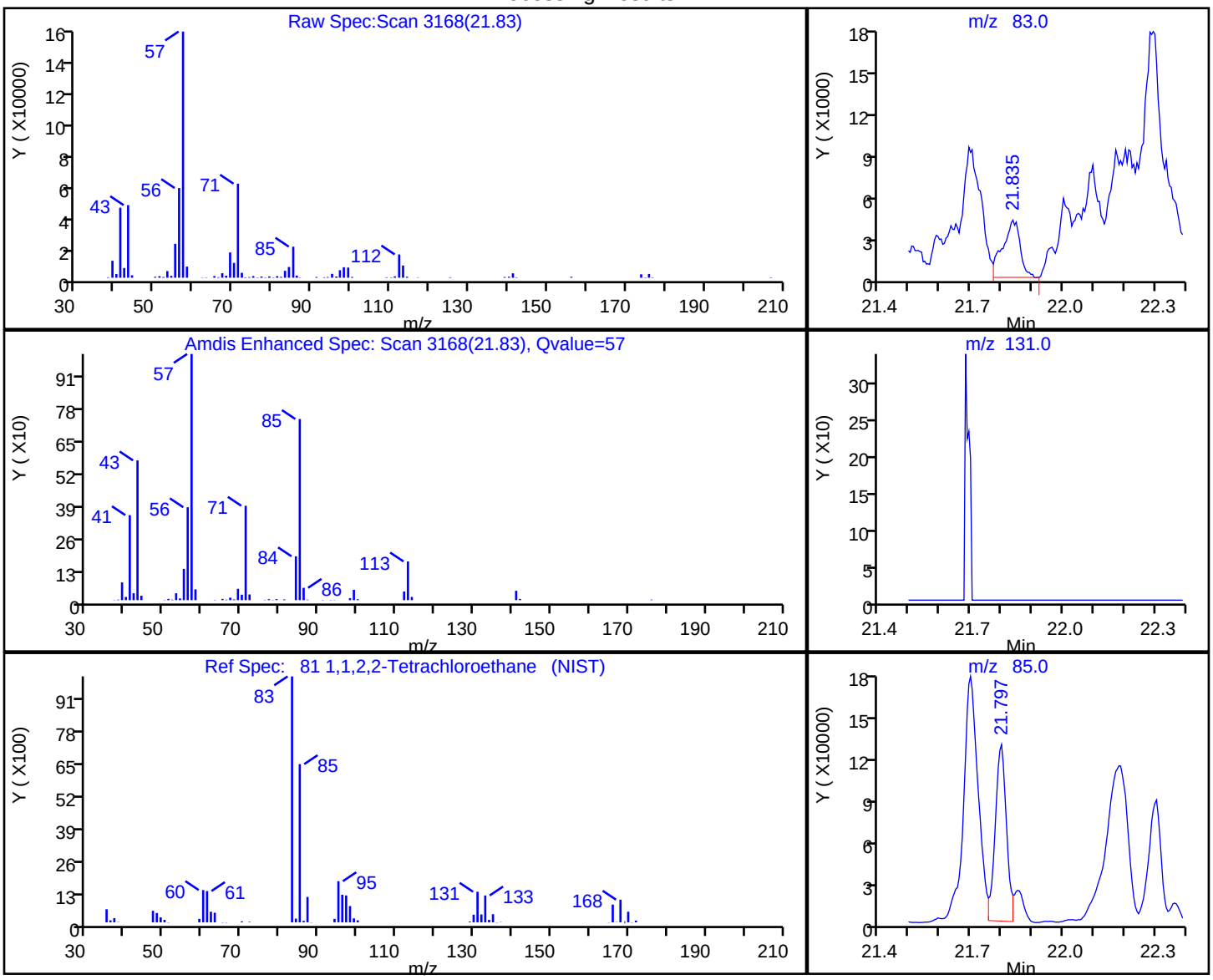
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.83	83.00	15483	0.282001
21.94	131.00	0	
21.80	85.00	328427	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

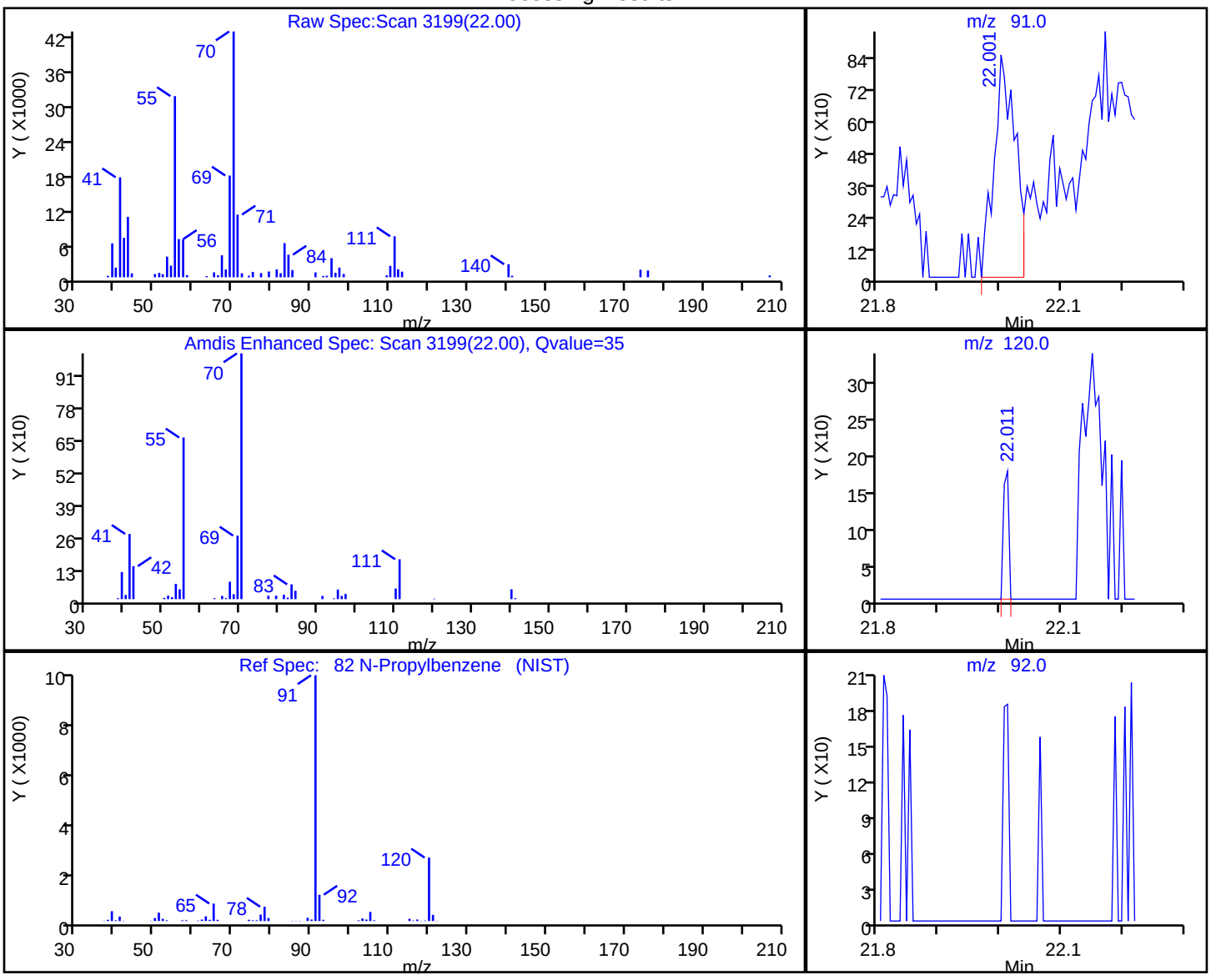
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

82 N-Propylbenzene, CAS: 103-65-1

Processing Results



RT	Mass	Response	Amount
22.00	91.00	2028	0.015427
22.01	120.00	108	
22.01	92.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

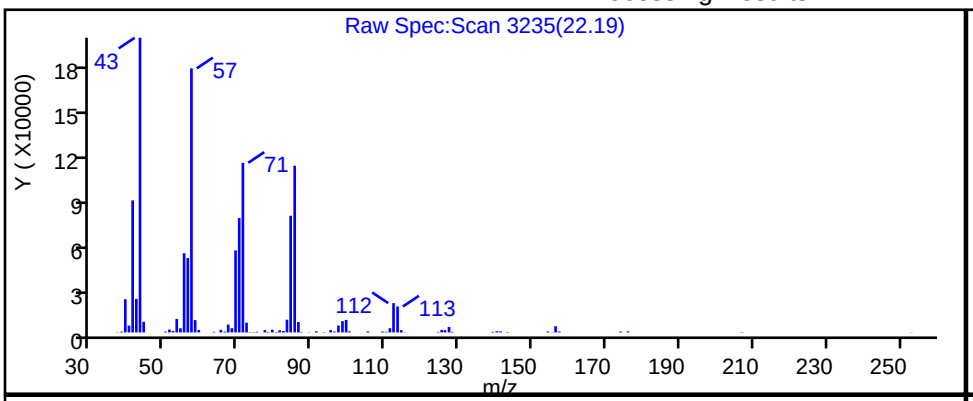
User Disabled Compound Report

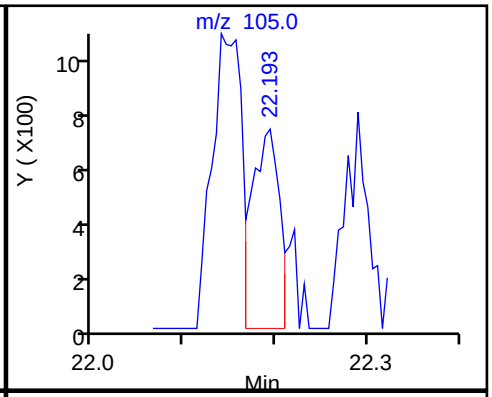
TestAmerica Burlington

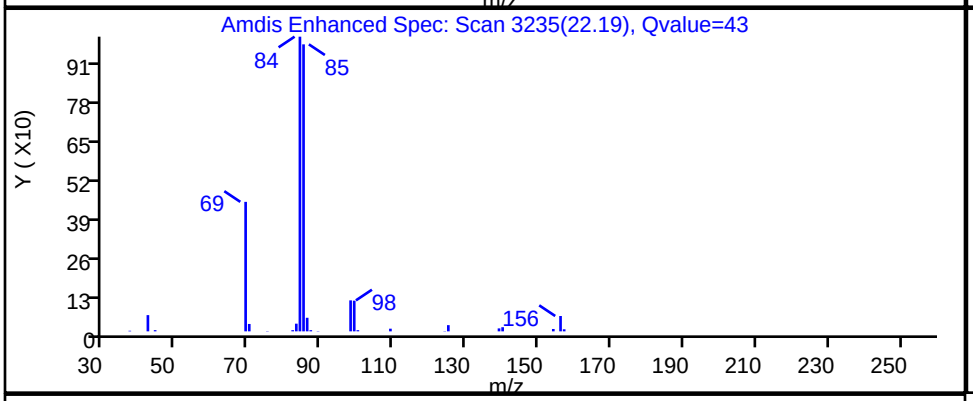
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

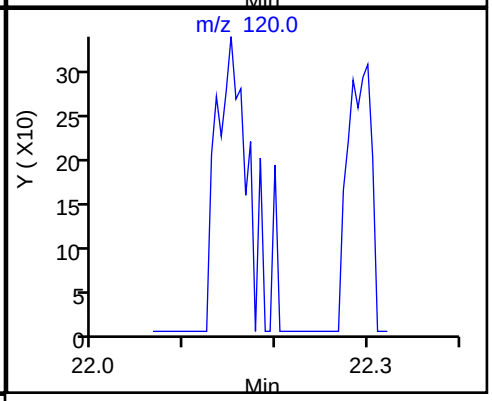
85 4-Ethyltoluene, CAS: 622-96-8

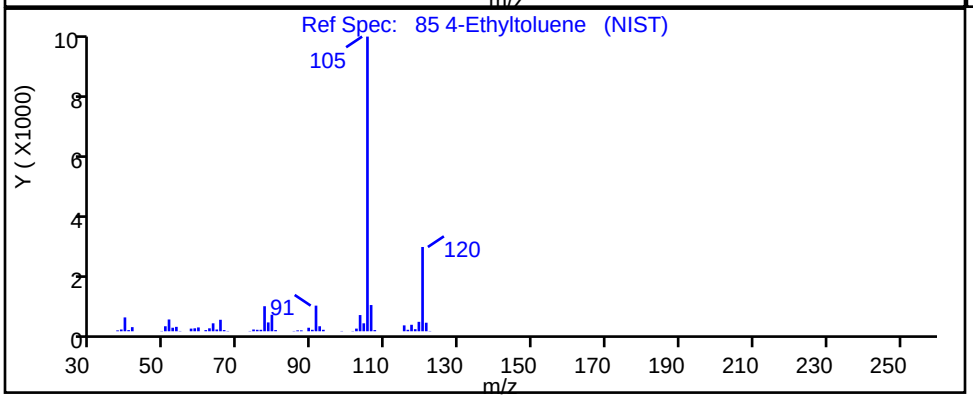
Processing Results











RT	Mass	Response	Amount
22.19	105.00	1442	0.013131
22.19	120.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

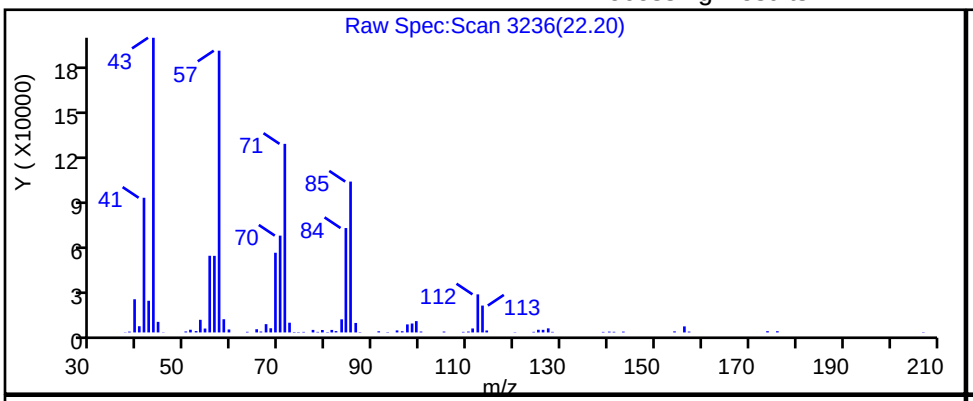
User Disabled Compound Report

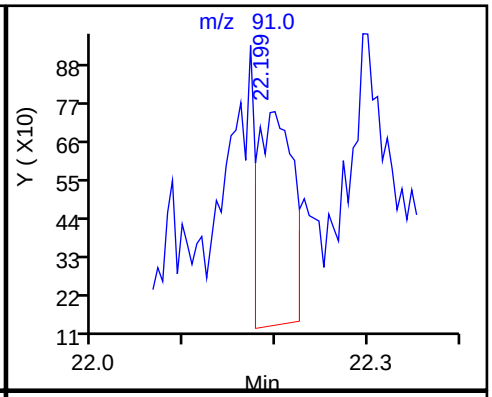
TestAmerica Burlington

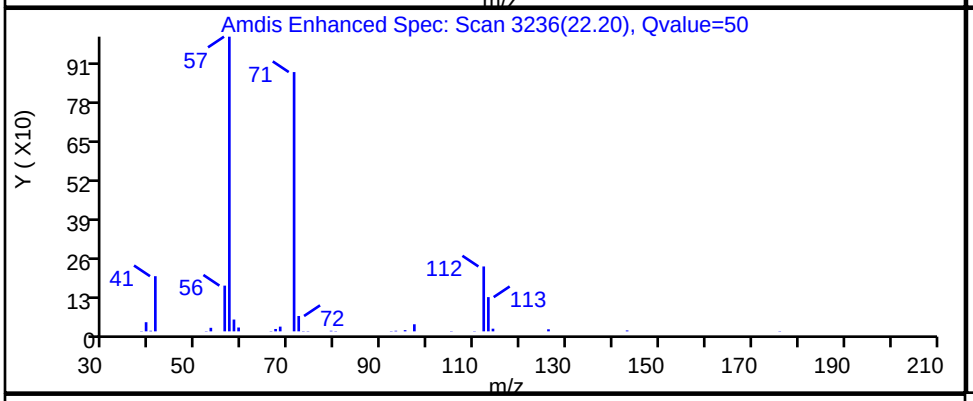
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

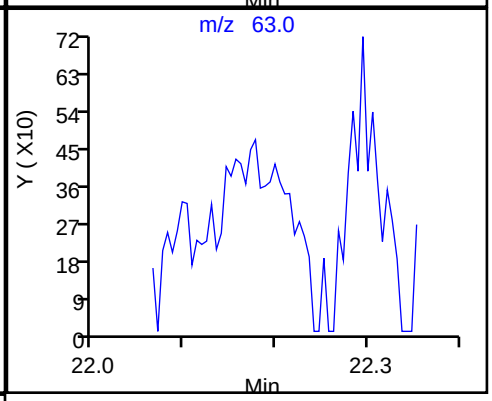
86 2-Chlorotoluene, CAS: 95-49-8

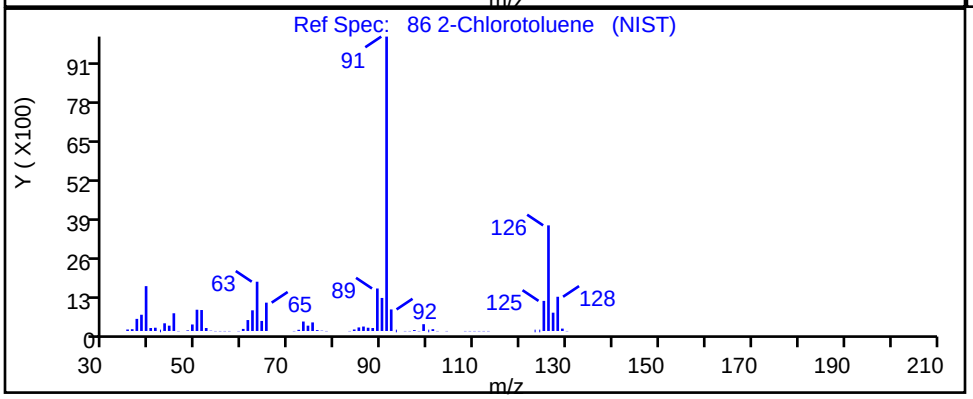
Processing Results











RT	Mass	Response	Amount
22.20	91.00	1682	0.018111
22.21	63.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

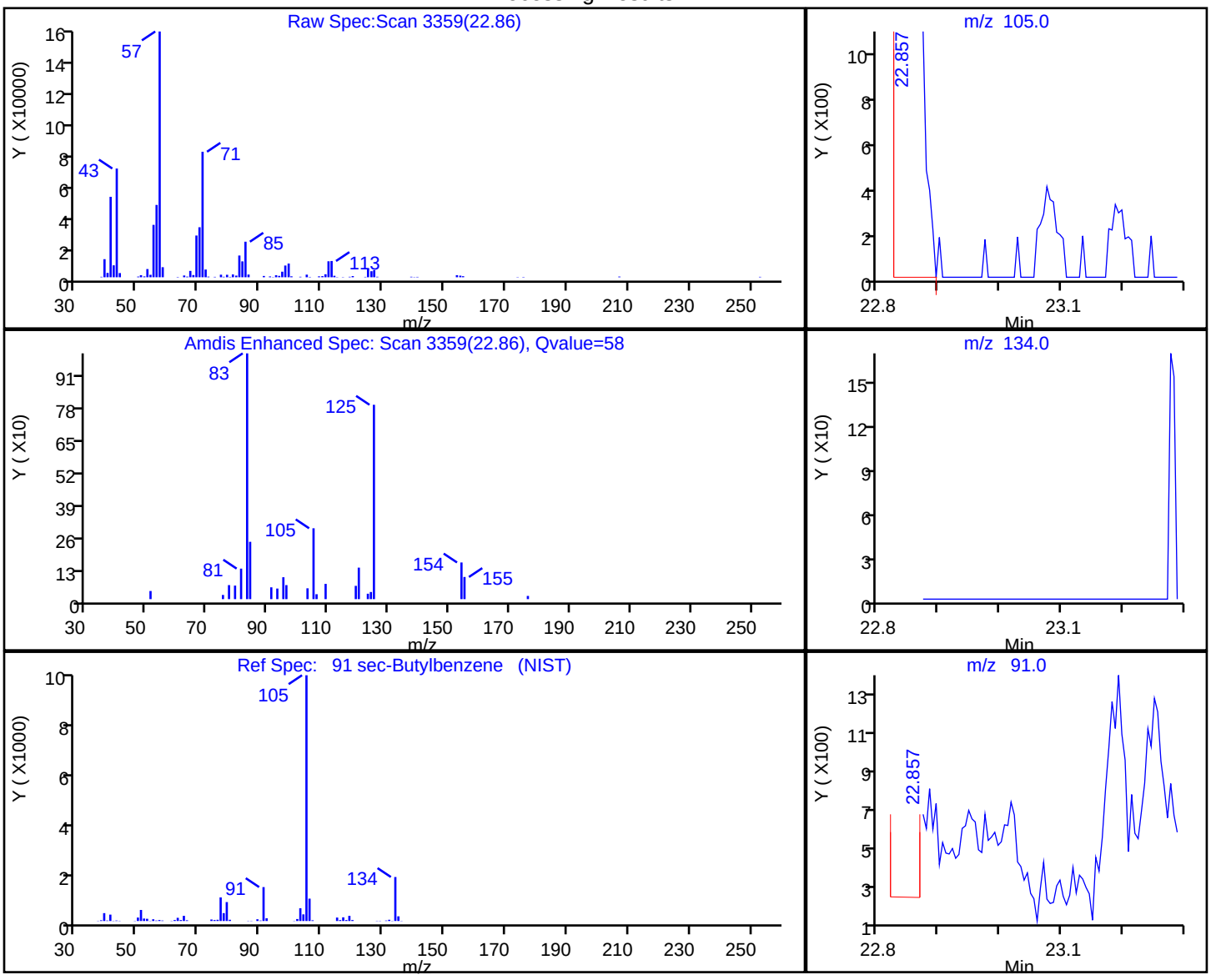
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

91 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.86	105.00	3488	0.024903
23.08	134.00	0	
22.86	91.00	1741	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

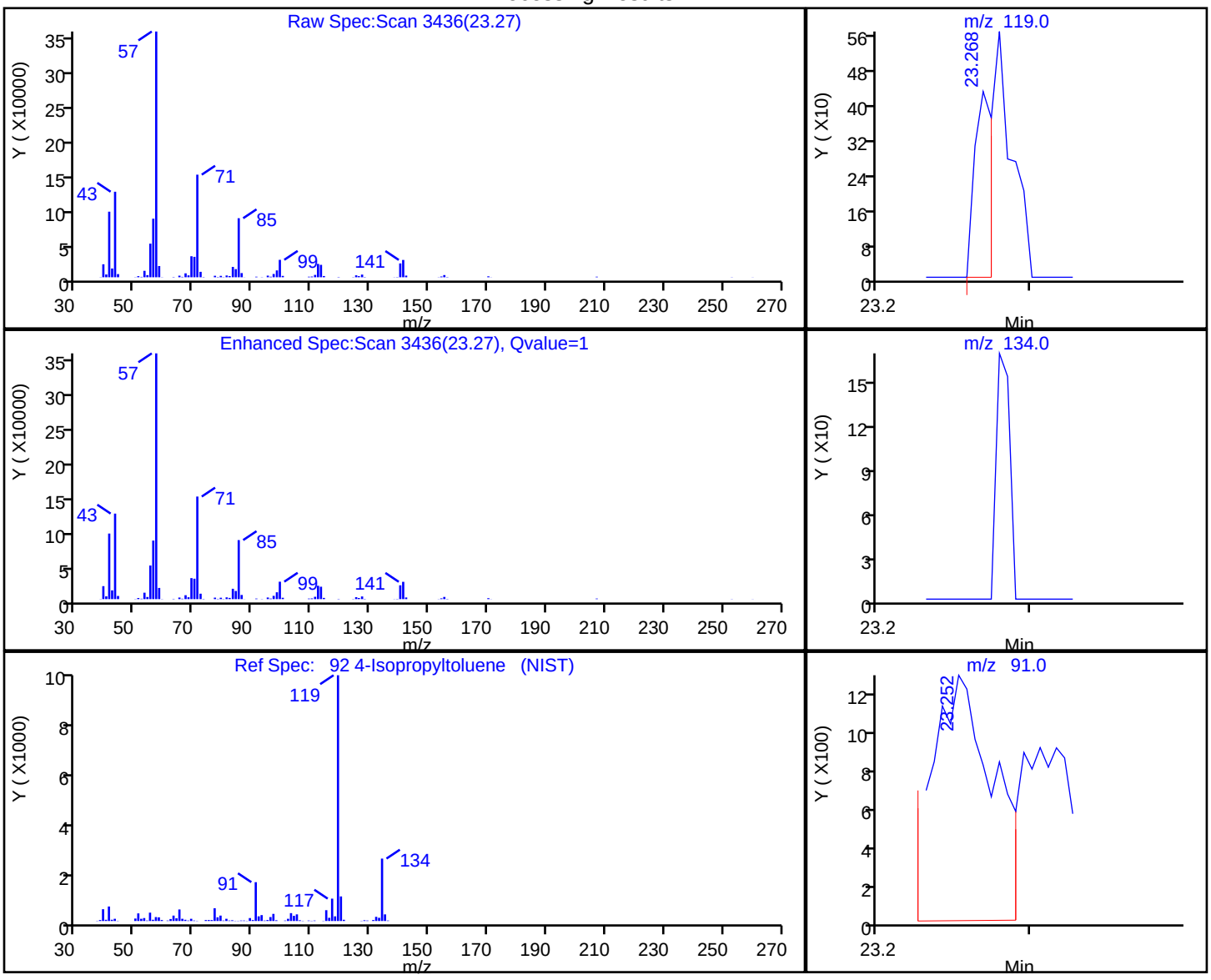
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

92 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
23.27	119.00	351	0.002962
23.27	134.00	0	
23.25	91.00	3265	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

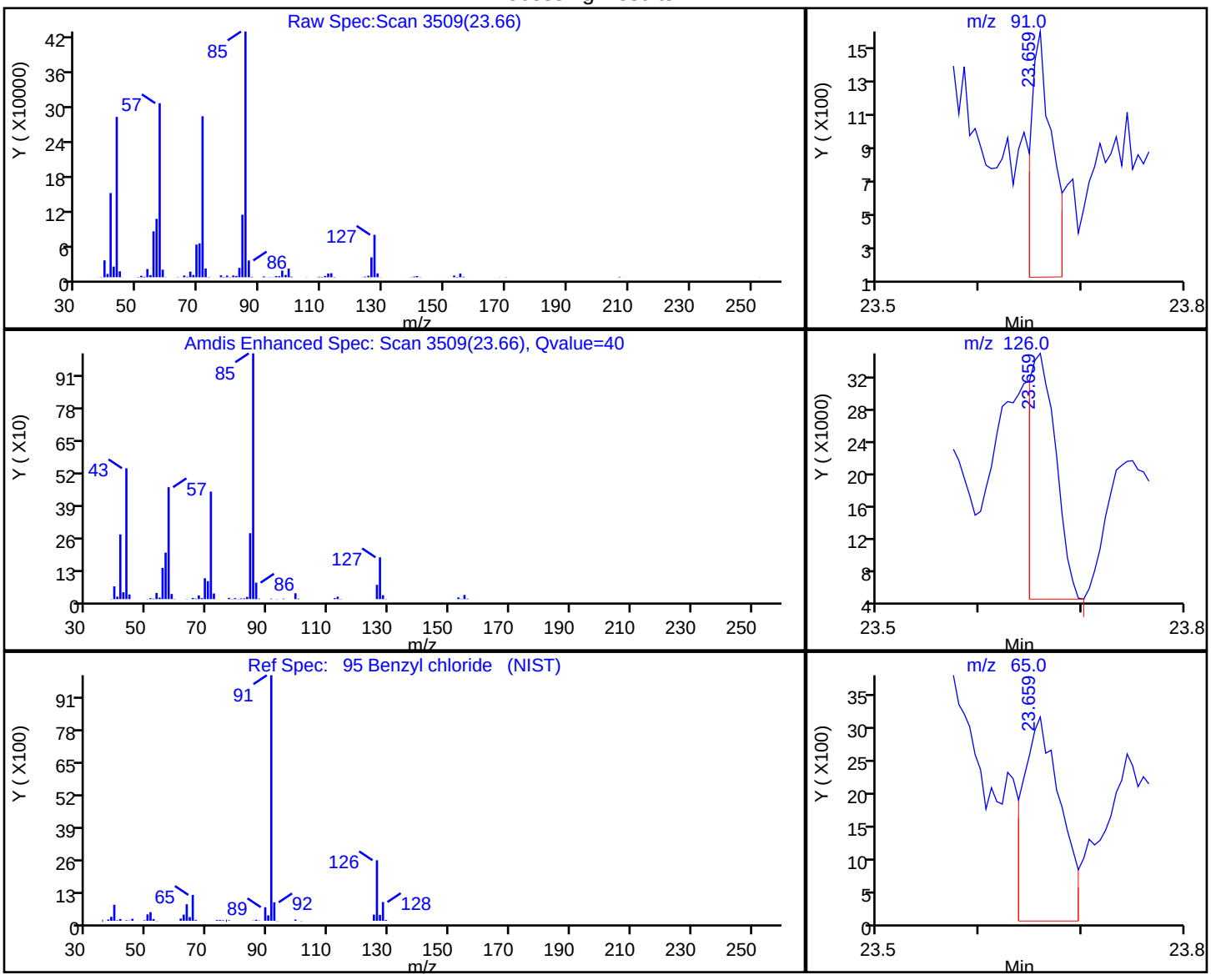
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
23.66	91.00	2026	0.030683
23.66	126.00	55761	
23.66	65.00	7890	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

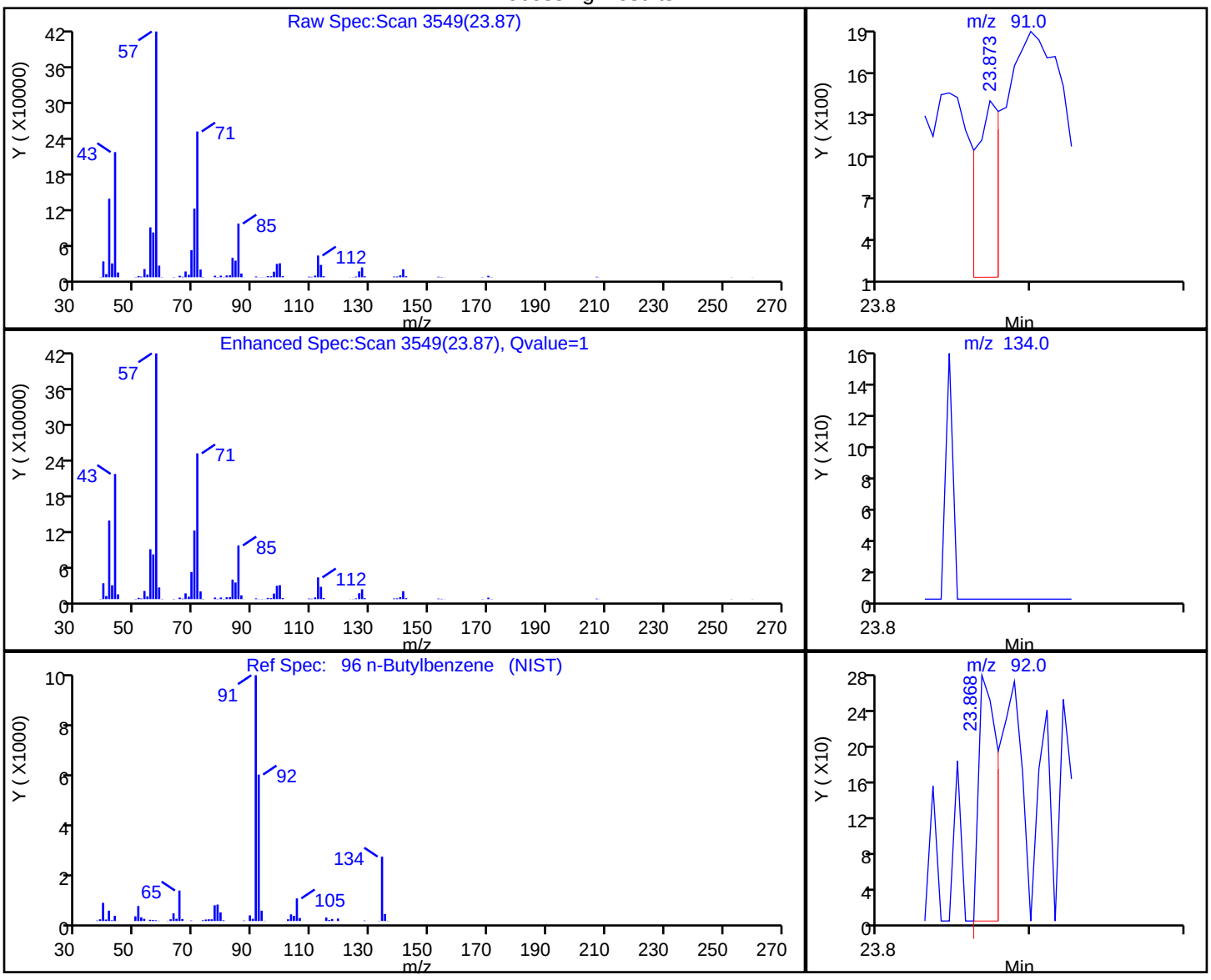
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-12.d				
Injection Date:	06-Apr-2018 21:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-3	Lab Sample ID:	200-42918-3		
Client ID:	GC-SV-102 (AS)				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
23.87	91.00	1367	0.014491
23.88	134.00	0	
23.87	92.00	229	

Reviewer: bunmaa, 09-Apr-2018 18:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-103 (AS) Lab Sample ID: 200-42918-4

Matrix: Air Lab File ID: 29949_11.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 18:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.34	J	0.50	0.047
75-45-6	Freon 22	86.47	0.28	J	0.50	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.041
74-87-3	Chloromethane	50.49	0.42	J	0.50	0.16
106-97-8	n-Butane	58.12	1.4		0.50	0.046
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.018
106-99-0	1,3-Butadiene	54.09	0.047	J	0.20	0.037
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.036
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.13
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.022
75-69-4	Trichlorofluoromethane	137.37	0.18	J	0.20	0.031
76-13-1	Freon TF	187.38	0.057	J	0.20	0.027
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.035
67-64-1	Acetone	58.08	32		5.0	1.3
67-63-0	Isopropyl alcohol	60.10	1.4	J	5.0	0.13
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.028
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.063
75-09-2	Methylene Chloride	84.93	0.28	J	0.50	0.068
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.7
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.050
110-54-3	n-Hexane	86.17	0.20		0.20	0.046
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.017
78-93-3	Methyl Ethyl Ketone	72.11	2.2		0.50	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.029
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.029
67-66-3	Chloroform	119.38	0.20	U	0.20	0.025
109-99-9	Tetrahydrofuran	72.11	14		5.0	1.2
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.026
110-82-7	Cyclohexane	84.16	0.056	J	0.20	0.045
56-23-5	Carbon tetrachloride	153.81	0.056		0.040	0.011
540-84-1	2,2,4-Trimethylpentane	114.23	0.22		0.20	0.043
71-43-2	Benzene	78.11	0.25		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.034

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-103 (AS) Lab Sample ID: 200-42918-4

Matrix: Air Lab File ID: 29949_11.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 18:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.20		0.20	0.068
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.0091
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.11
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.035
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	0.76
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.059
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.036
108-10-1	methyl isobutyl ketone	100.16	0.065	J	0.50	0.065
108-88-3	Toluene	92.14	0.48		0.20	0.035
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.038
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.017
127-18-4	Tetrachloroethene	165.83	0.093		0.040	0.0098
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.14	J	0.50	0.086
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.017
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.023
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.12	J	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.44	J	0.50	0.077
95-47-6	Xylene, o-	106.17	0.14	J	0.20	0.040
1330-20-7	Xylene (total)	106.17	0.58	J	0.70	0.040
100-42-5	Styrene	104.15	0.20	U	0.20	0.035
75-25-2	Bromoform	252.75	0.20	U	0.20	0.035
98-82-8	Cumene	120.19	0.20	U	0.20	0.039
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.026
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.040
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.040
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.035
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.037
95-63-6	1,2,4-Trimethylbenzene	120.20	0.066	J	0.20	0.057
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.037
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.052
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.050
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-103 (AS) Lab Sample ID: 200-42918-4

Matrix: Air Lab File ID: 29949_11.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 18:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.067
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.068
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.045
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.19
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.064
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-103 (AS) Lab Sample ID: 200-42918-4

Matrix: Air Lab File ID: 29949_11.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 18:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.5	0.23
75-45-6	Freon 22	86.47	0.97	J	1.8	0.71
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.29
74-87-3	Chloromethane	50.49	0.88	J	1.0	0.33
106-97-8	n-Butane	58.12	3.4		1.2	0.11
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.046
106-99-0	1,3-Butadiene	54.09	0.11	J	0.44	0.082
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.14
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.34
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.096
75-69-4	Trichlorofluoromethane	137.37	1.0	J	1.1	0.17
76-13-1	Freon TF	187.38	0.44	J	1.5	0.21
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.14
67-64-1	Acetone	58.08	76		12	3.1
67-63-0	Isopropyl alcohol	60.10	3.6	J	12	0.32
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.087
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.20
75-09-2	Methylene Chloride	84.93	0.98	J	1.7	0.24
75-65-0	tert-Butyl alcohol	74.12	15	U	15	5.2
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.20
110-54-3	n-Hexane	86.17	0.71		0.70	0.16
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.069
78-93-3	Methyl Ethyl Ketone	72.11	6.4		1.5	0.32
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.11
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.11
67-66-3	Chloroform	119.38	0.98	U	0.98	0.12
109-99-9	Tetrahydrofuran	72.11	40		15	3.5
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.14
110-82-7	Cyclohexane	84.16	0.19	J	0.69	0.15
56-23-5	Carbon tetrachloride	153.81	0.35		0.25	0.069
540-84-1	2,2,4-Trimethylpentane	114.23	1.0		0.93	0.20
71-43-2	Benzene	78.11	0.80		0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-103 (AS) Lab Sample ID: 200-42918-4

Matrix: Air Lab File ID: 29949_11.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 18:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.83		0.82	0.28
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.049
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.45
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.16
123-91-1	1,4-Dioxane	88.11	18	U	18	2.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.16
108-10-1	methyl isobutyl ketone	100.16	0.27	J	2.0	0.27
108-88-3	Toluene	92.14	1.8		0.75	0.13
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.17
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.093
127-18-4	Tetrachloroethene	165.83	0.63		0.27	0.066
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.57	J	2.0	0.35
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.14
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.18
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.52	J	0.87	0.15
179601-23-1	m,p-Xylene	106.17	1.9	J	2.2	0.33
95-47-6	Xylene, o-	106.17	0.62	J	0.87	0.17
1330-20-7	Xylene (total)	106.17	2.5	J	3.0	0.17
100-42-5	Styrene	104.15	0.85	U	0.85	0.15
75-25-2	Bromoform	252.75	2.1	U	2.1	0.36
98-82-8	Cumene	120.19	0.98	U	0.98	0.19
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.18
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.20
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.20
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.18
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.33	J	0.98	0.28
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.20
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.29
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.30
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.38

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-103 (AS) Lab Sample ID: 200-42918-4

Matrix: Air Lab File ID: 29949_11.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 18:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.35
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.37
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.27
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.68
91-20-3	Naphthalene	128.17	2.6	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Lims ID: 200-42918-A-4
Client ID: GC-IA-103 (AS)
Sample Type: Client
Inject. Date: 05-Apr-2018 18:26:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029949-011
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 13:47:58 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 13:47:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.108	3.106	0.000	98	20263	0.3432	
3 Chlorodifluoromethane	51	3.156	3.149	0.005	98	14518	0.2754	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354				ND	U
5 Chloromethane	50	3.488	3.481	0.006	99	12780	0.4248	
6 Butane	43	3.664	3.662	0.000	98	85238	1.45	
7 Vinyl chloride	62		3.707				ND	
8 Butadiene	54	3.782	3.777	0.005	86	1147	0.0475	
10 Bromomethane	94		4.413				ND	
11 Chloroethane	64		4.638				ND	
13 Vinyl bromide	106		4.996				ND	
14 Trichlorofluoromethane	101	5.082	5.088	-0.005	96	10217	0.1848	
20 1,1,2-Trichloro-1,2,2-trif	101	6.098	6.104	-0.006	89	2038	0.0570	
21 1,1-Dichloroethene	96		6.163				ND	
22 Acetone	43	6.393	6.400	-0.010	99	1833584	31.8	
23 Carbon disulfide	76		6.548				ND	
24 Isopropyl alcohol	45	6.703	6.682	0.021	100	86700	1.45	
25 3-Chloro-1-propene	41		6.933				ND	U
27 Methylene Chloride	49	7.227	7.223	0.000	87	10642	0.2822	
28 2-Methyl-2-propanol	59	7.489	7.452	0.037	45	5785	0.0940	
29 Methyl tert-butyl ether	73		7.623				ND	
31 trans-1,2-Dichloroethene	61		7.661				ND	
33 Hexane	57	8.024	8.030	-0.006	87	9019	0.2024	
34 1,1-Dichloroethane	63		8.543				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.677				ND	
38 2-Butanone (MEK)	72	9.736	9.737	-0.006	96	27747	2.16	
* 40 Chlorobromomethane	128	10.159	10.159	0.000	85	151335	10.0	
41 Tetrahydrofuran	42	10.169	10.165	-0.001	89	694694	13.5	
42 Chloroform	83		10.298				ND	
43 Cyclohexane	84	10.549	10.549	0.010	73	1829	0.0555	M
44 1,1,1-Trichloroethane	97		10.576				ND	
45 Carbon tetrachloride	117	10.822	10.834	-0.016	60	2649	0.0556	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
46 Isooctane	57	11.288	11.278	0.006	93	39857	0.2185	
47 Benzene	78	11.330	11.331	-0.006	97	21395	0.2489	
48 1,2-Dichloroethane	62		11.539				ND	
49 n-Heptane	43	11.700	11.700	0.000	94	17461	0.2033	M
* 50 1,4-Difluorobenzene	114	12.234	12.240	-0.006	98	944040	10.0	
53 Trichloroethene	95		12.732				ND	
54 1,2-Dichloropropane	63		13.331				ND	
55 Methyl methacrylate	69		13.513				ND	
56 1,4-Dioxane	88		13.572				ND	
58 Dichlorobromomethane	83		13.914				ND	
60 cis-1,3-Dichloropropene	75		14.893				ND	
61 4-Methyl-2-pentanone (MIBK	43	15.214	15.214	0.010	59	7246	0.0651	7a
65 Toluene	92	15.503	15.499	0.000	90	27147	0.4788	
66 trans-1,3-Dichloropropene	75		16.145				ND	
67 1,1,2-Trichloroethane	83		16.541				ND	
68 Tetrachloroethene	166	16.621	16.632	-0.011	81	2963	0.0927	
69 2-Hexanone	43	17.033	17.049	0.010	89	15180	0.1402	
71 Chlorodibromomethane	129		17.338				ND	
72 Ethylene Dibromide	107		17.622				ND	
* 74 Chlorobenzene-d5	117	18.563	18.569	-0.006	99	871764	10.0	
75 Chlorobenzene	112		18.627				ND	
76 Ethylbenzene	91	18.793	18.788	0.000	98	16189	0.1199	
78 m-Xylene & p-Xylene	106	19.061	19.050	0.006	0	20198	0.4357	
S 73 Xylenes, Total	106				0		0.5778	
79 o-Xylene	106	19.949	19.954	-0.005	95	6415	0.1422	
80 Styrene	104	20.013	20.013	0.000	56	950	0.0139	M
81 Bromoform	173		20.484				ND	
82 Isopropylbenzene	105		20.714				ND	
84 1,1,2,2-Tetrachloroethane	83		21.441				ND	
85 N-Propylbenzene	91		21.500				ND	
88 4-Ethyltoluene	105	21.709	21.709	0.000	43	3367	0.0239	a
89 2-Chlorotoluene	91		21.714				ND	
90 1,3,5-Trimethylbenzene	105	21.821	21.820	-0.006	87	2414	0.0207	
92 tert-Butylbenzene	119		22.346				ND	
93 1,2,4-Trimethylbenzene	105	22.447	22.441	0.000	62	7783	0.0664	
94 sec-Butylbenzene	105		22.688				ND	U
95 4-Isopropyltoluene	119		22.902				ND	
96 1,3-Dichlorobenzene	146		22.929				ND	U
97 1,4-Dichlorobenzene	146	23.073	23.066	0.000	66	932	0.0146	
98 Benzyl chloride	91		23.282				ND	
100 n-Butylbenzene	91		23.496				ND	
101 1,2-Dichlorobenzene	146		23.624				ND	
103 1,2,4-Trichlorobenzene	180		26.187				ND	
104 Hexachlorobutadiene	225		26.374				ND	
105 Naphthalene	128	26.684	26.673	0.000	80	2317	0.0228	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

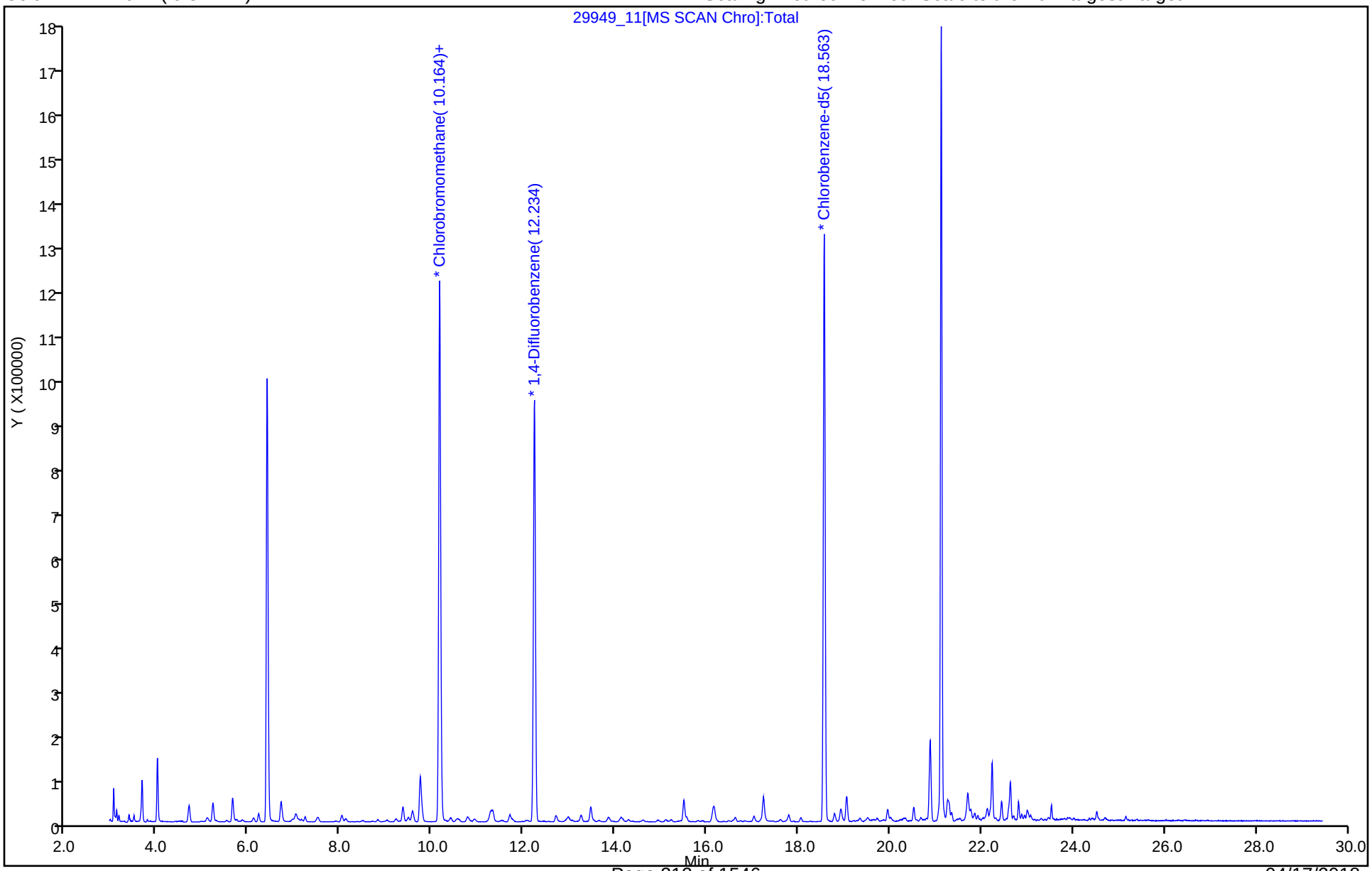
Report Date: 06-Apr-2018 13:47:58 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D

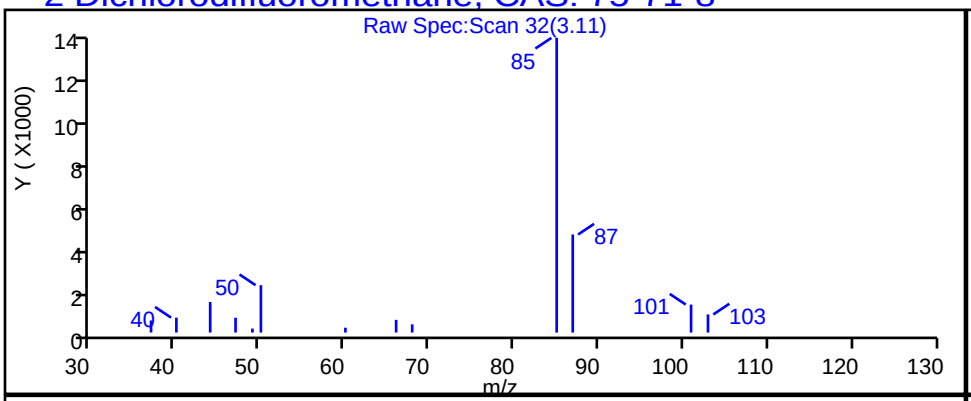
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4	Worklist Smp#:	11
Client ID:	GC-IA-103 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

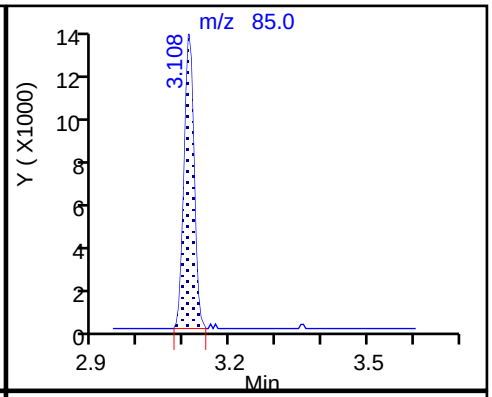
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

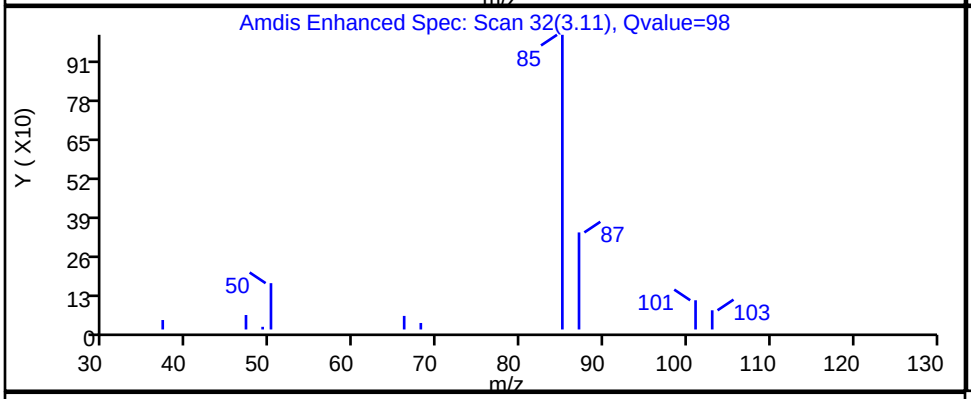


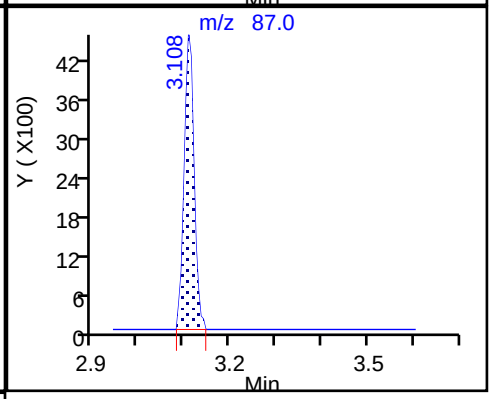
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

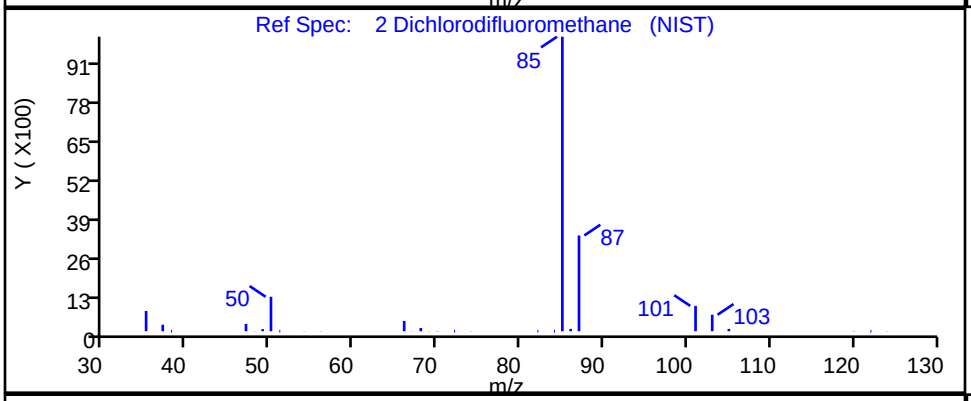
2 Dichlorodifluoromethane, CAS: 75-71-8

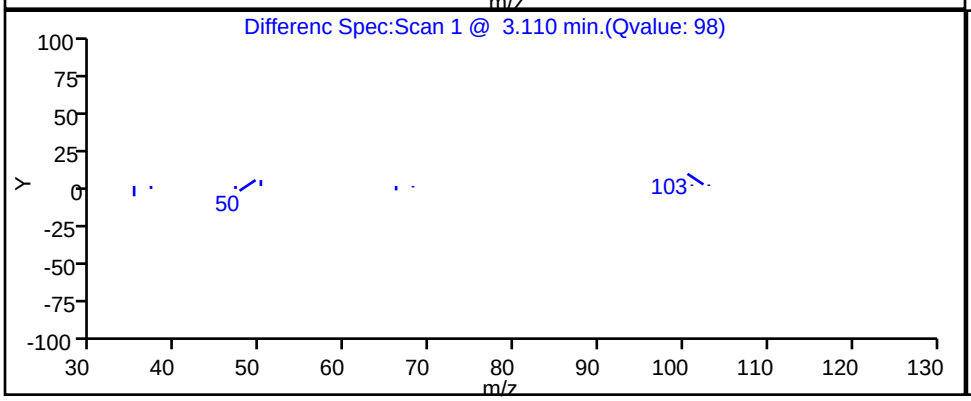


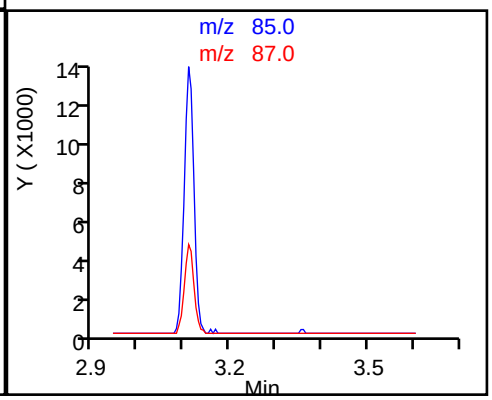








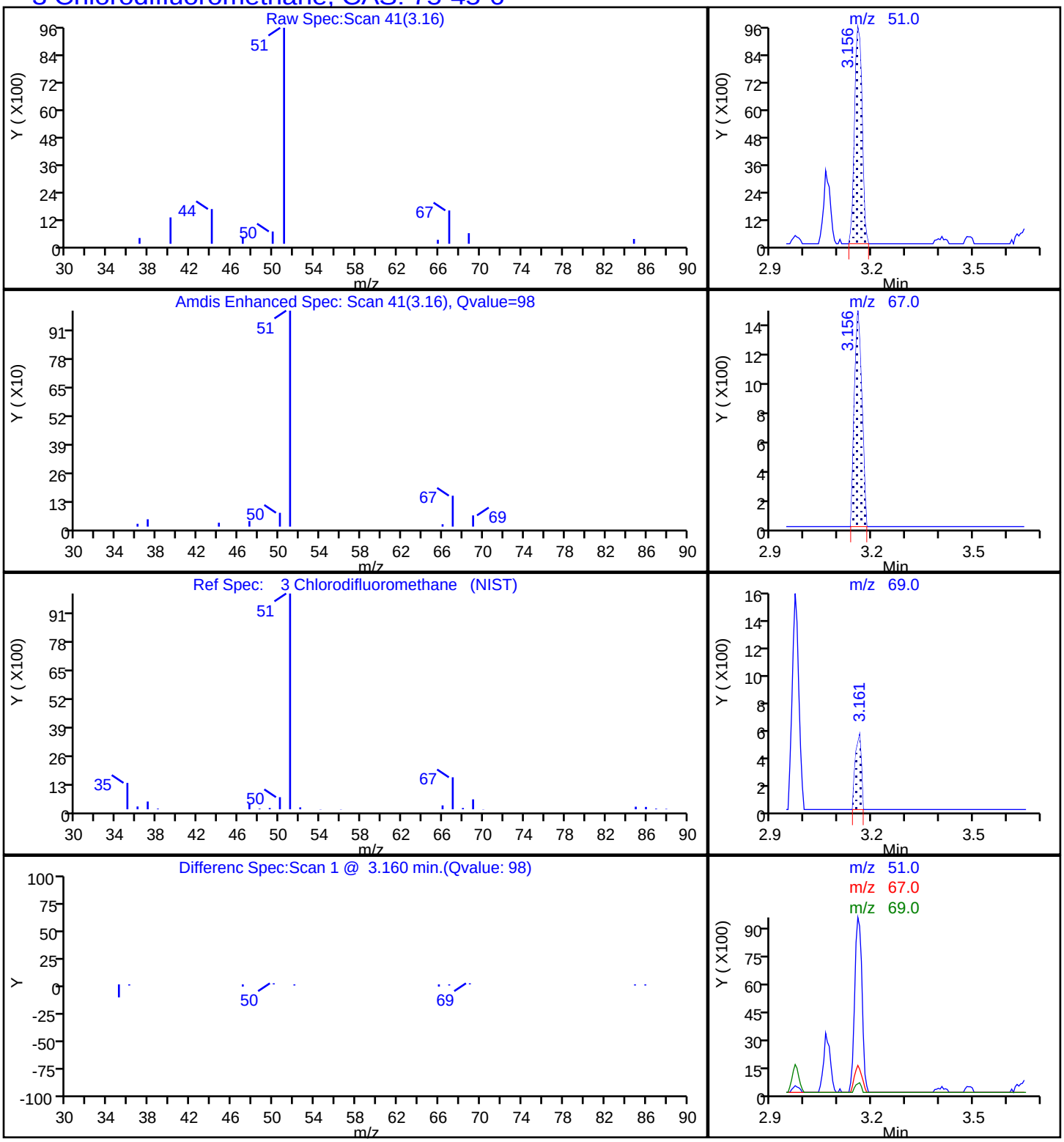




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

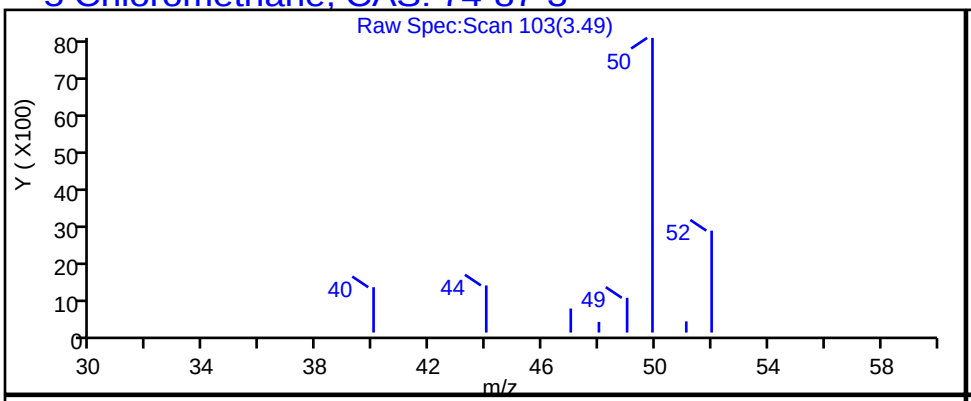


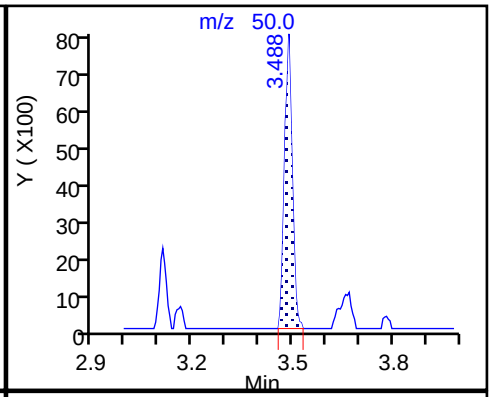
TestAmerica Burlington

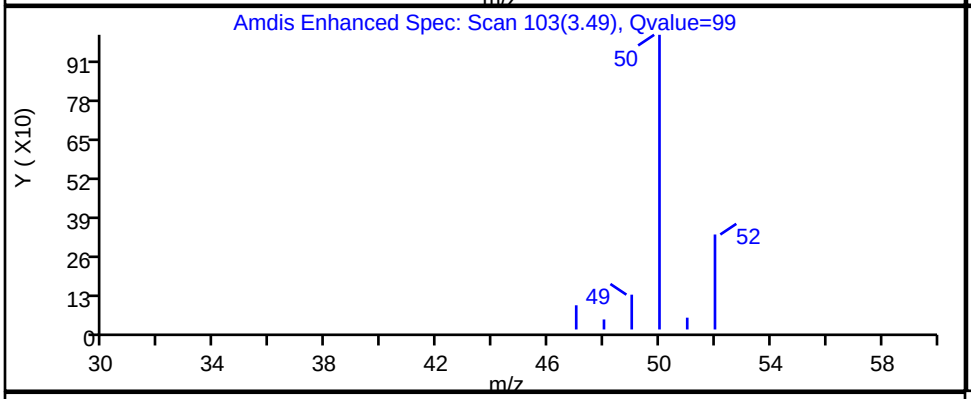
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D

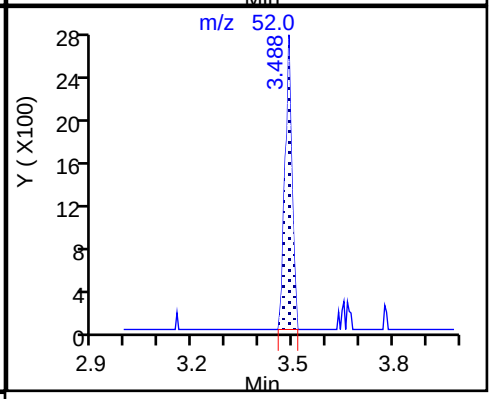
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

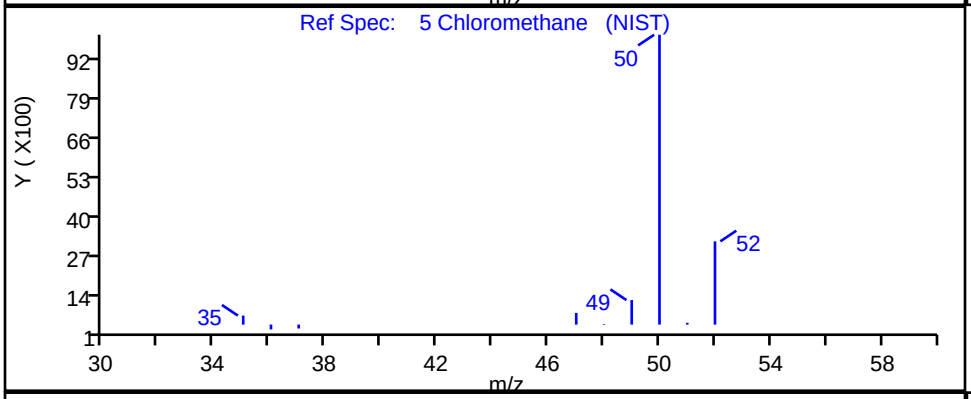
5 Chloromethane, CAS: 74-87-3

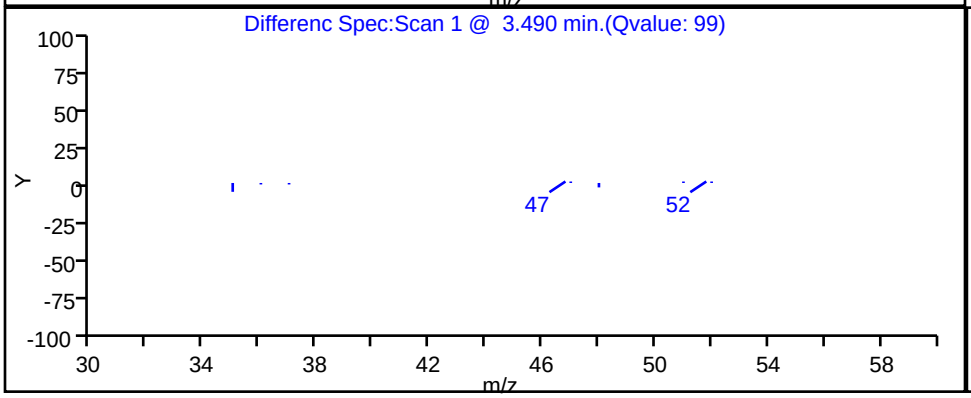


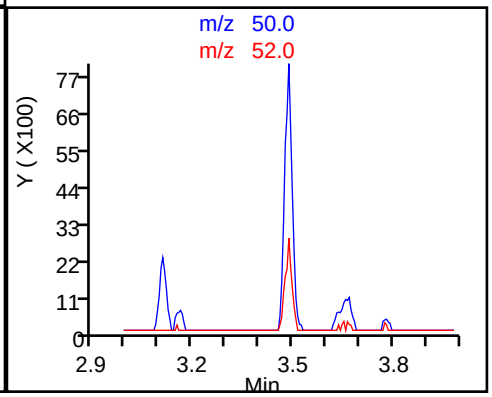










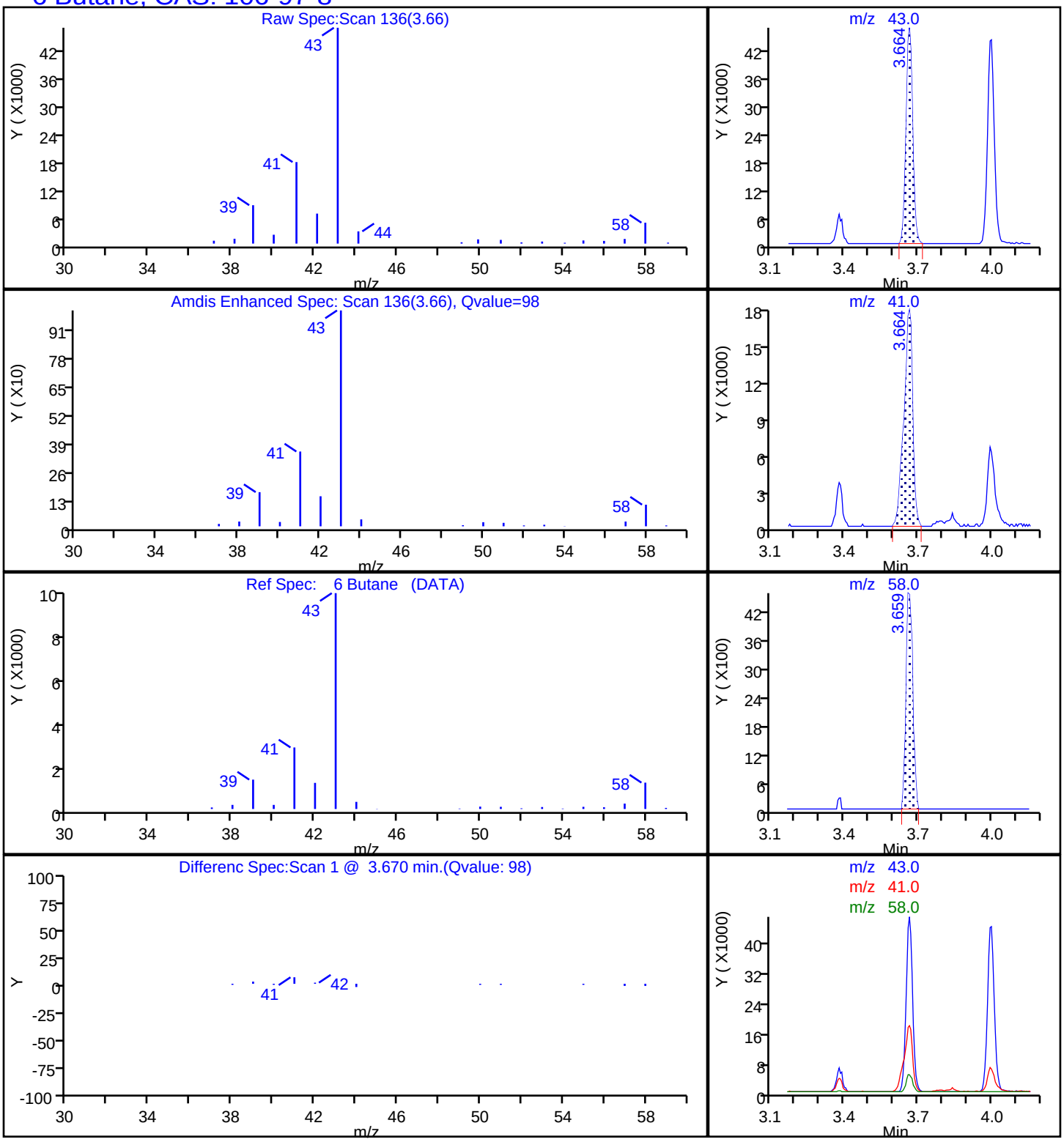


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D

Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8



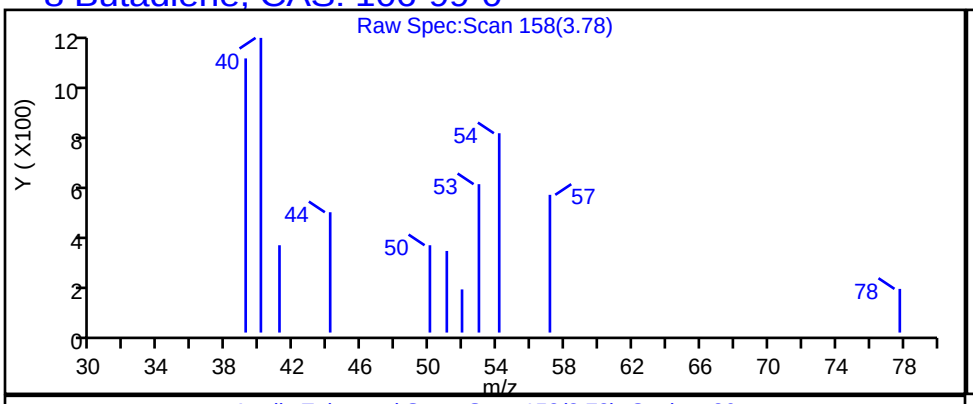
Report Date: 06-Apr-2018 13:47:58 Chrom Revision: 2.2 13-Mar-2018 08:45:20

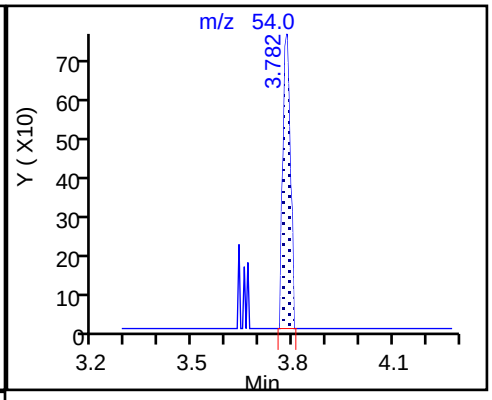
TestAmerica Burlington

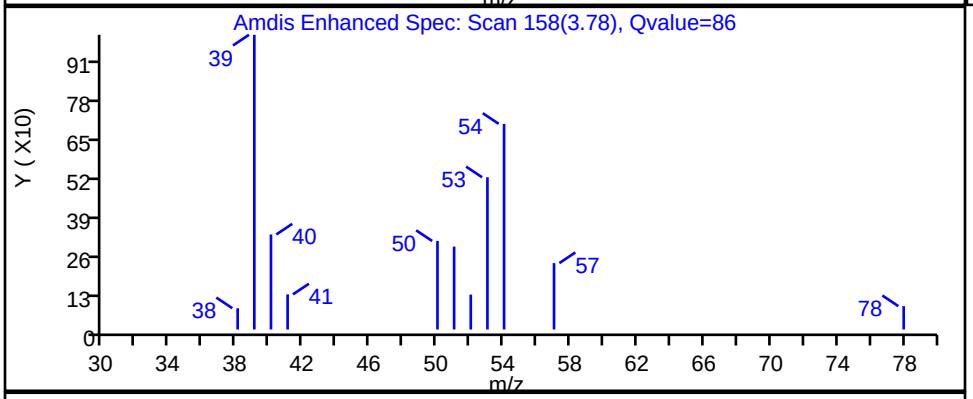
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D

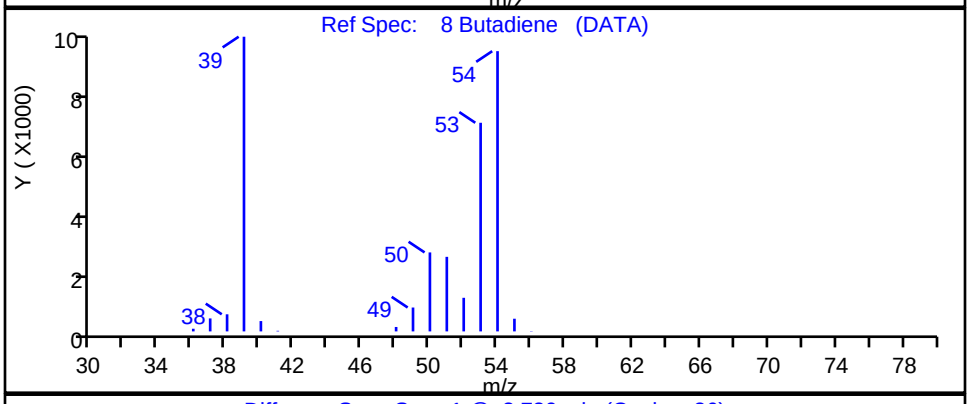
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

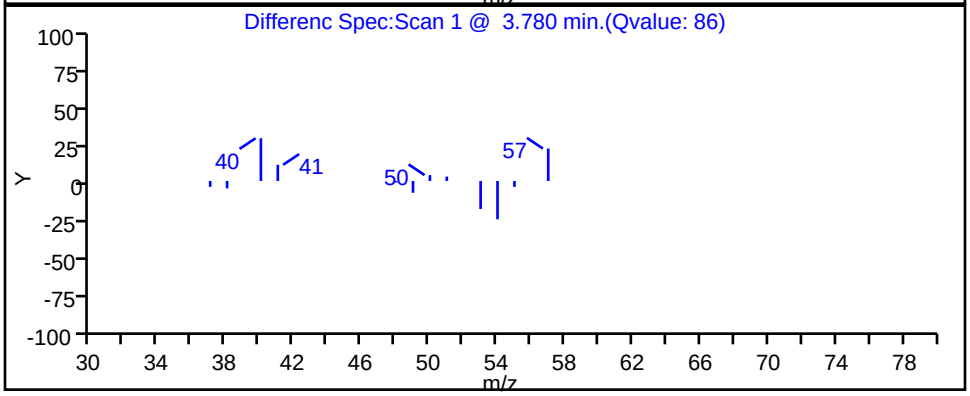
8 Butadiene, CAS: 106-99-0





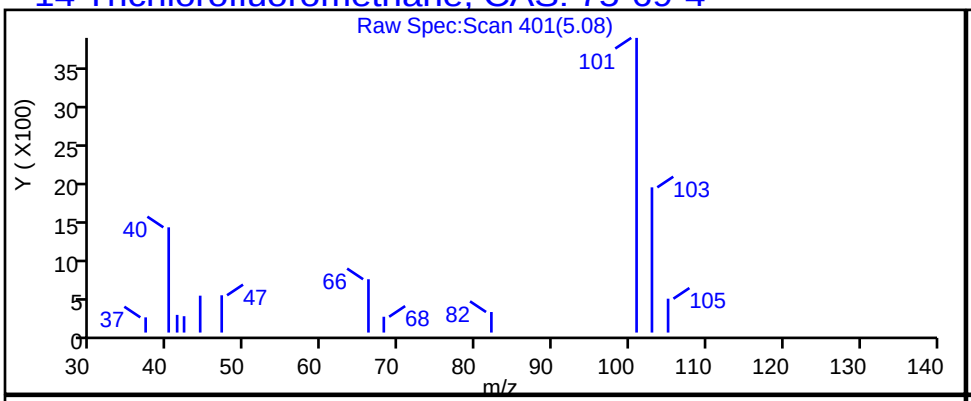


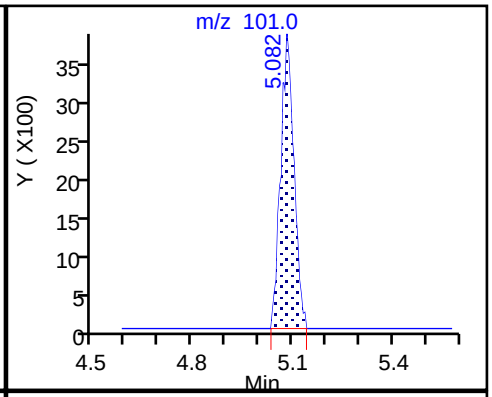


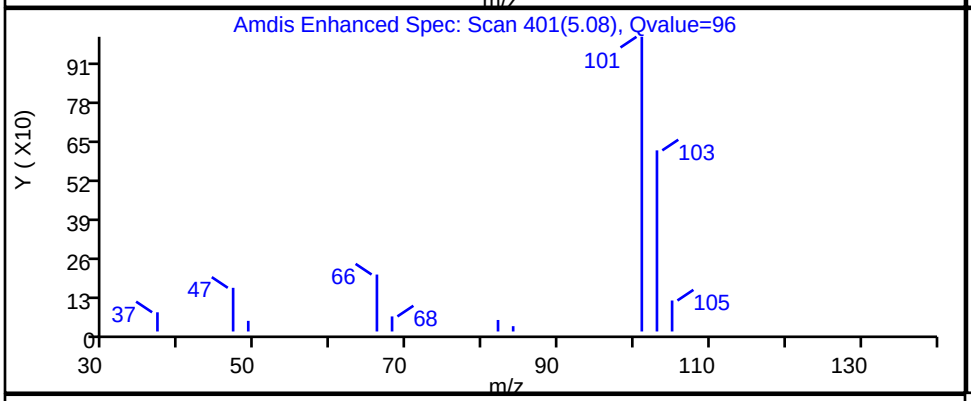


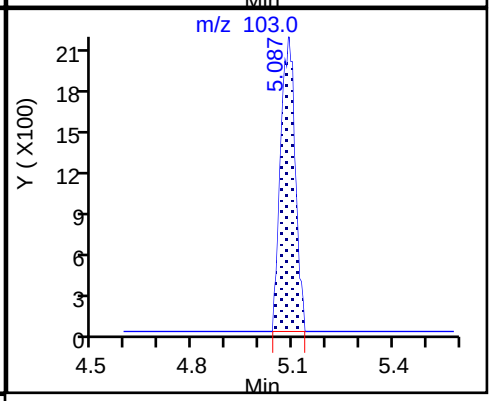
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

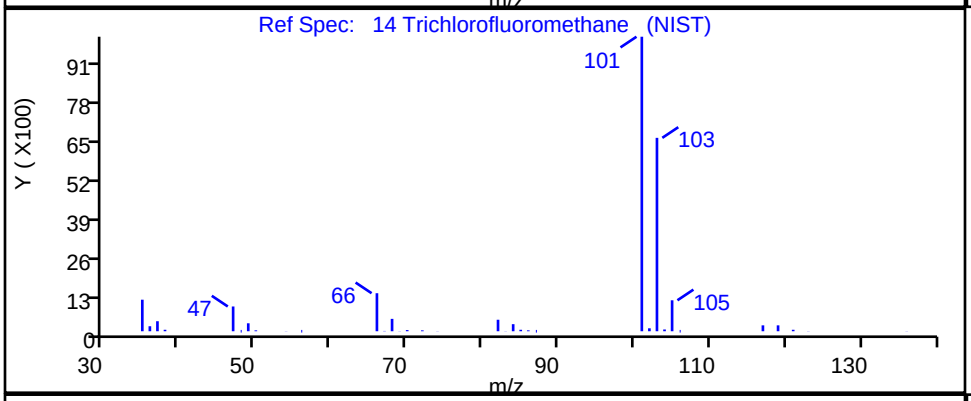
14 Trichlorofluoromethane, CAS: 75-69-4

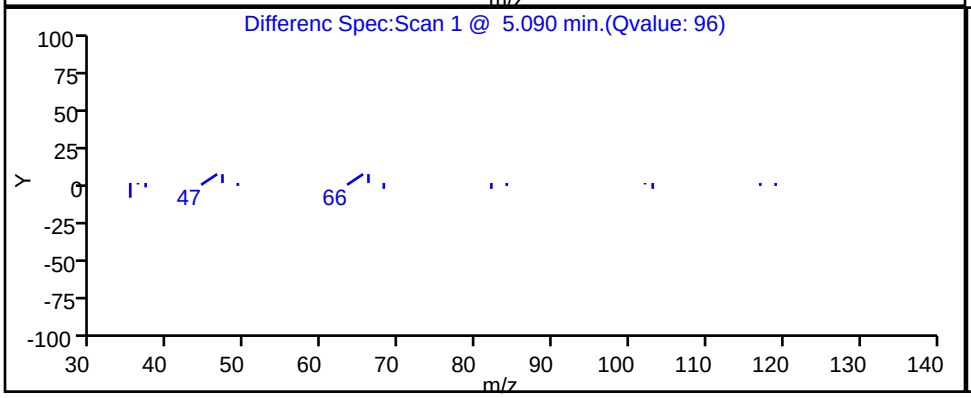


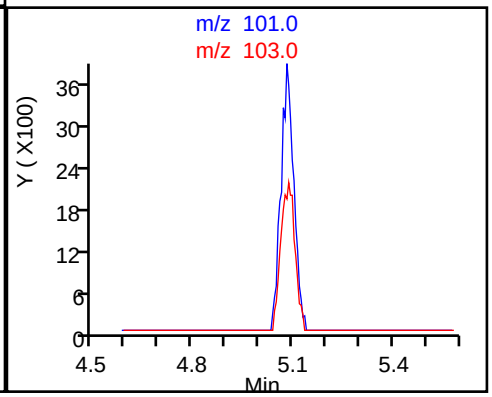






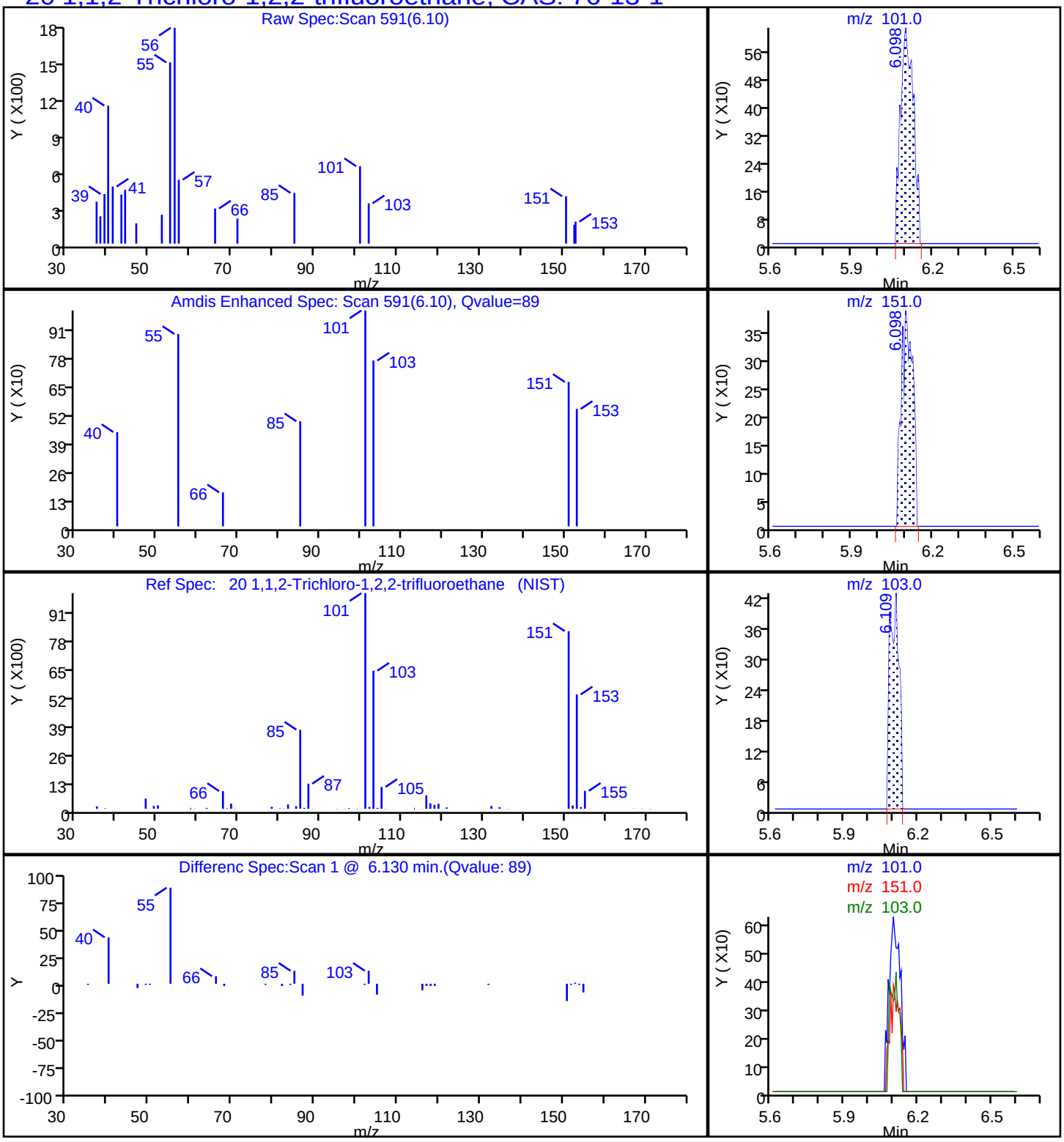






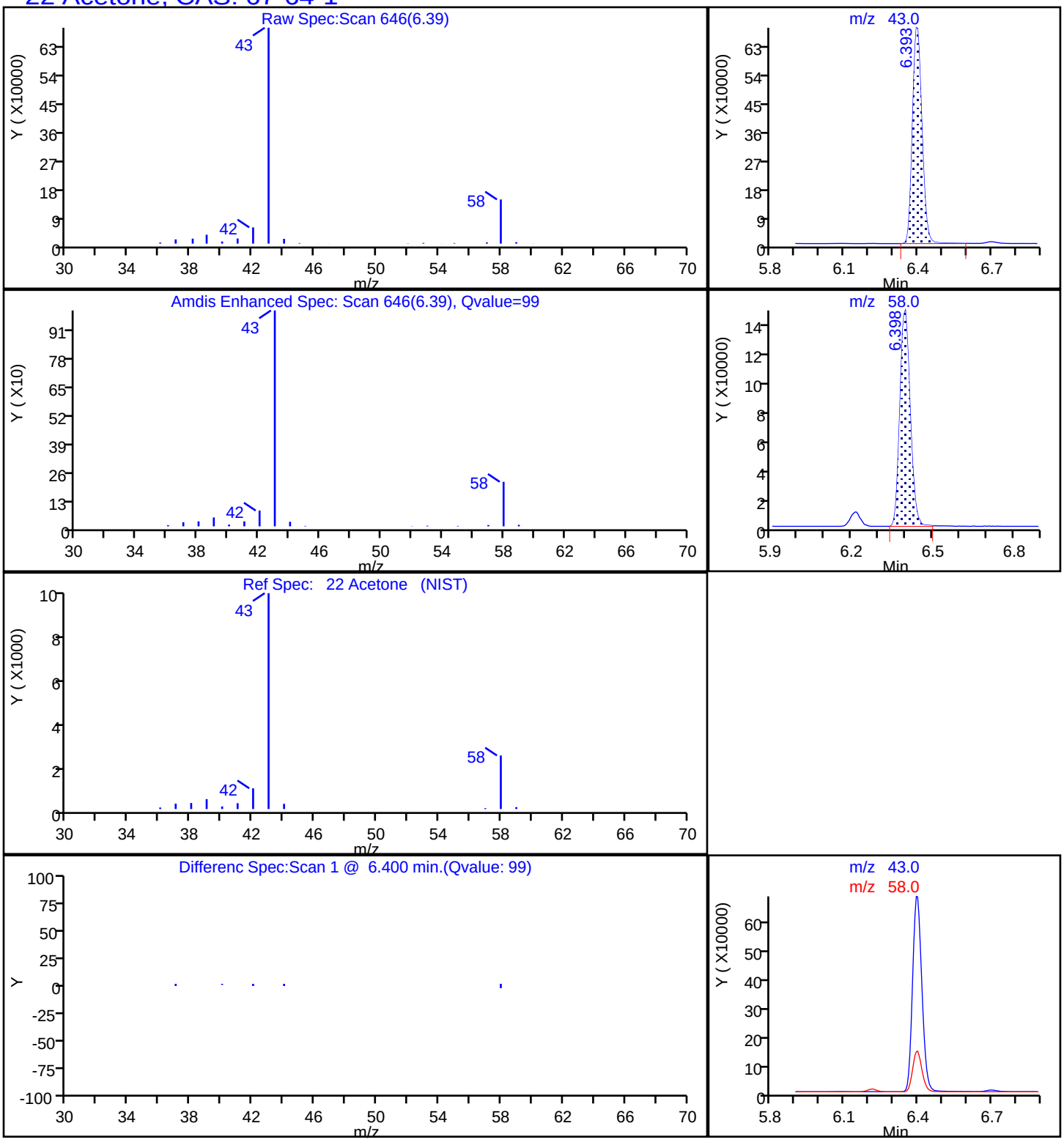
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

22 Acetone, CAS: 67-64-1



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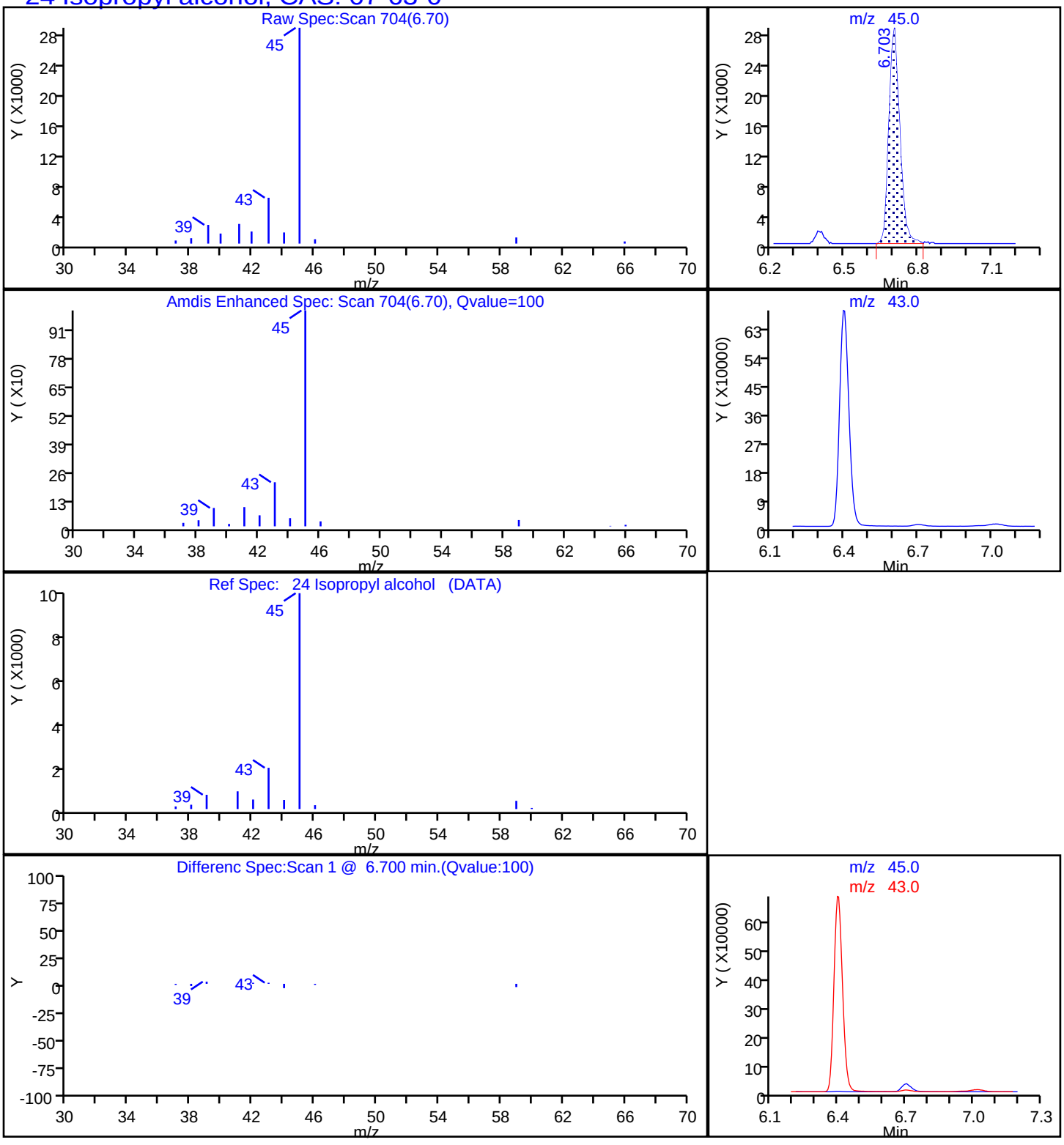
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

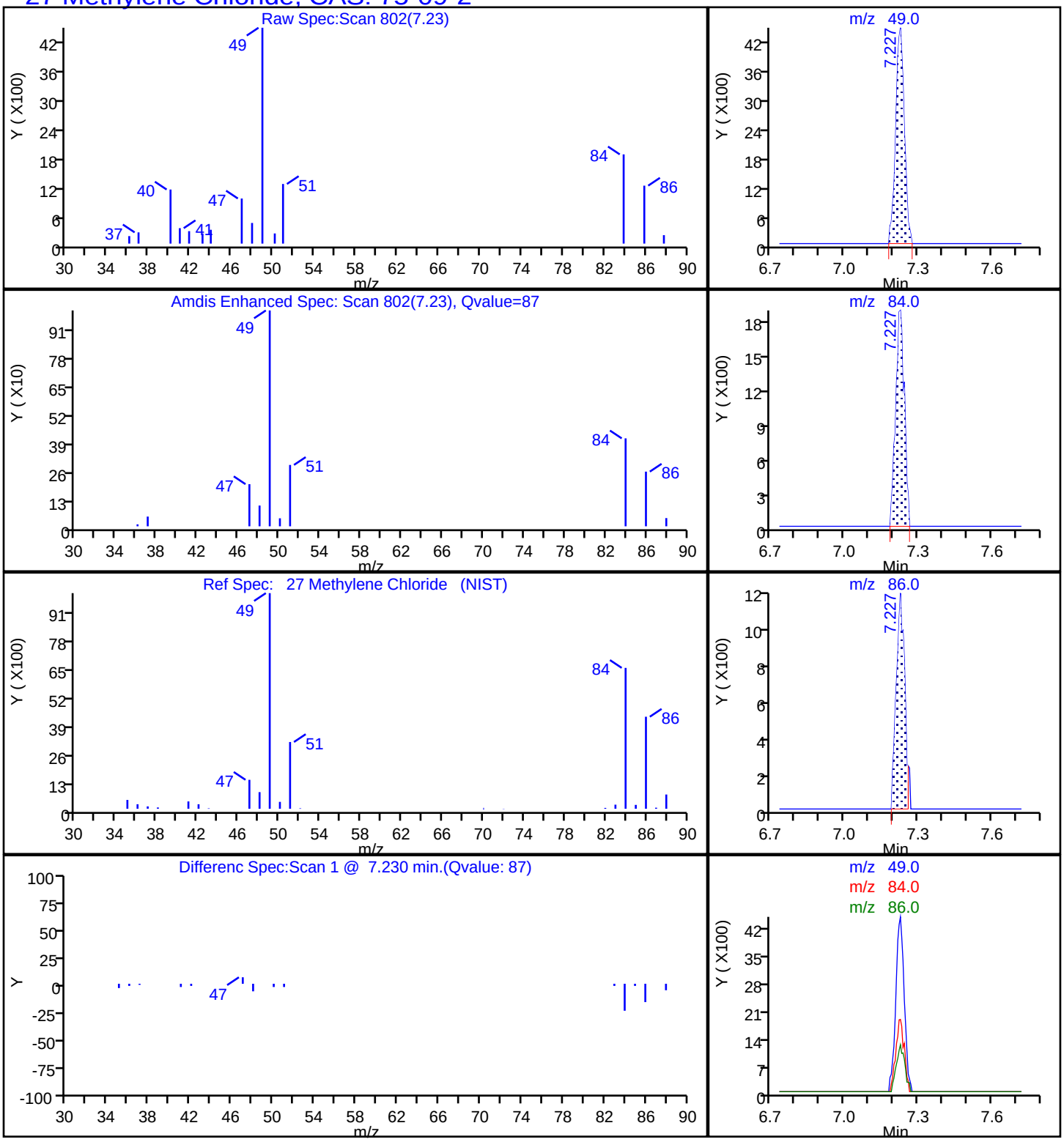
24 Isopropyl alcohol, CAS: 67-63-0



TestAmerica Burlington

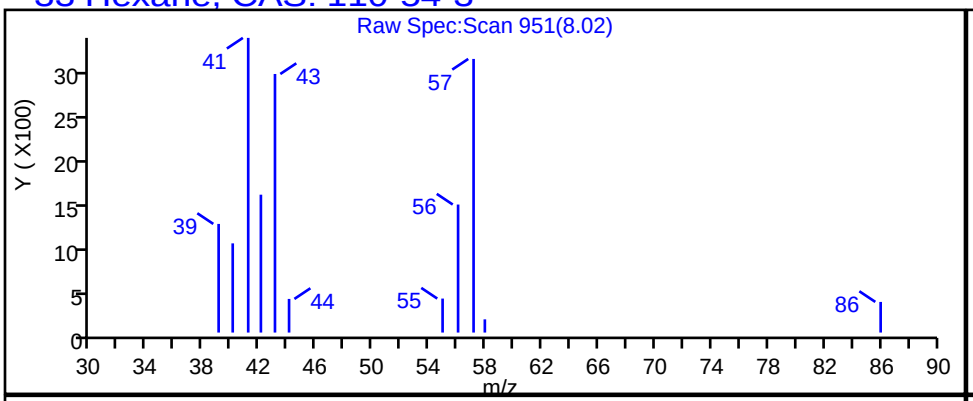
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

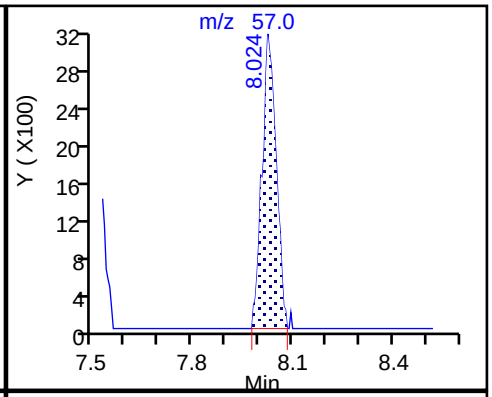
27 Methylene Chloride, CAS: 75-09-2

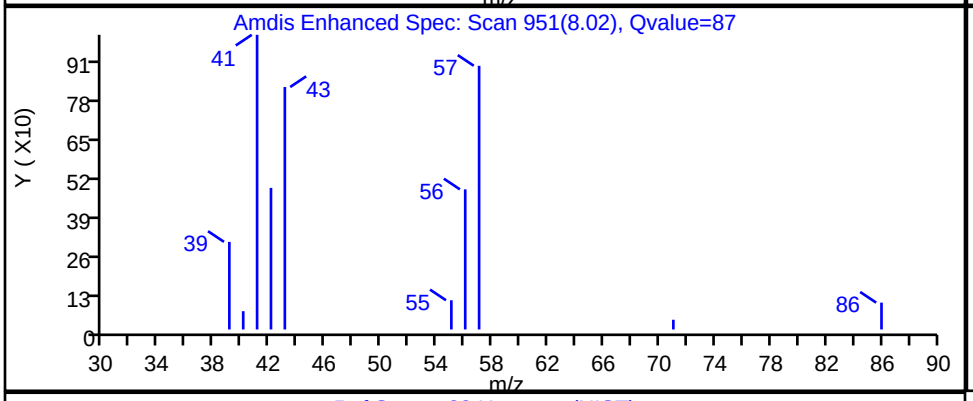


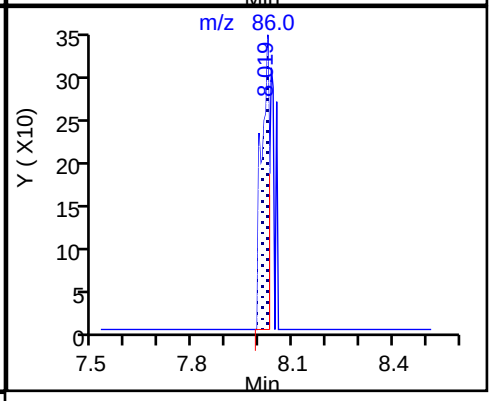
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

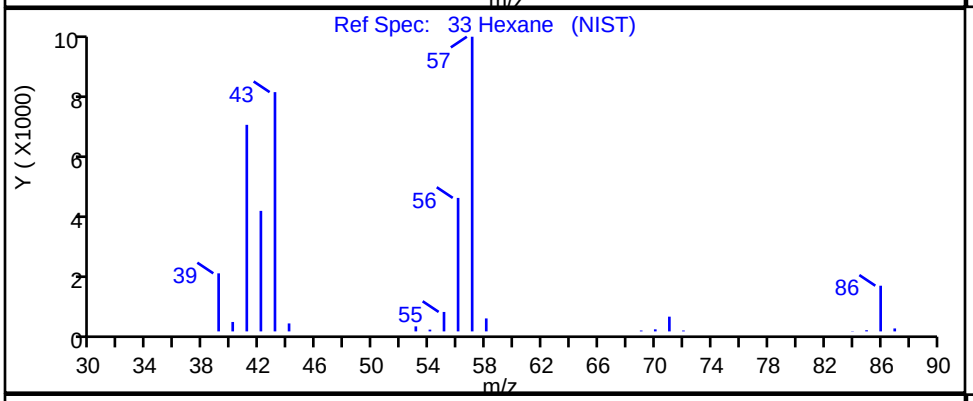
33 Hexane, CAS: 110-54-3

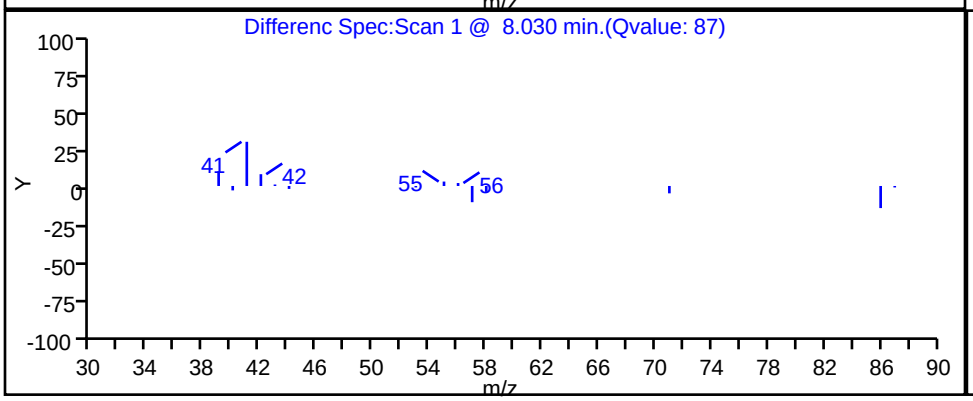


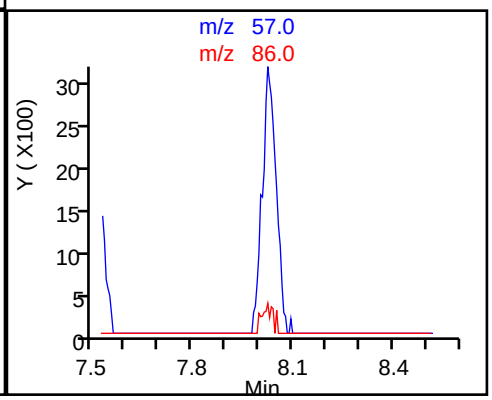






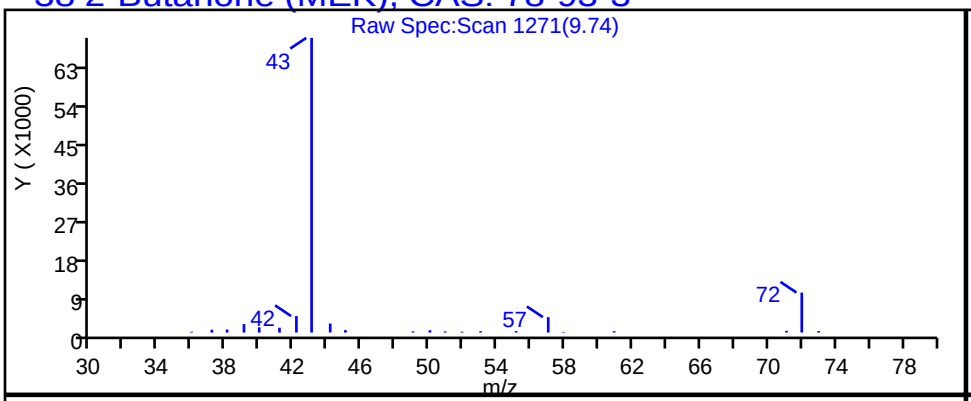


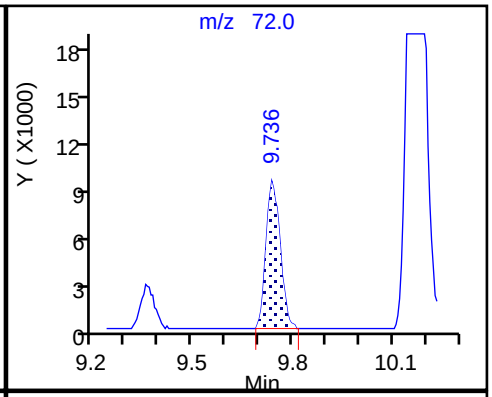


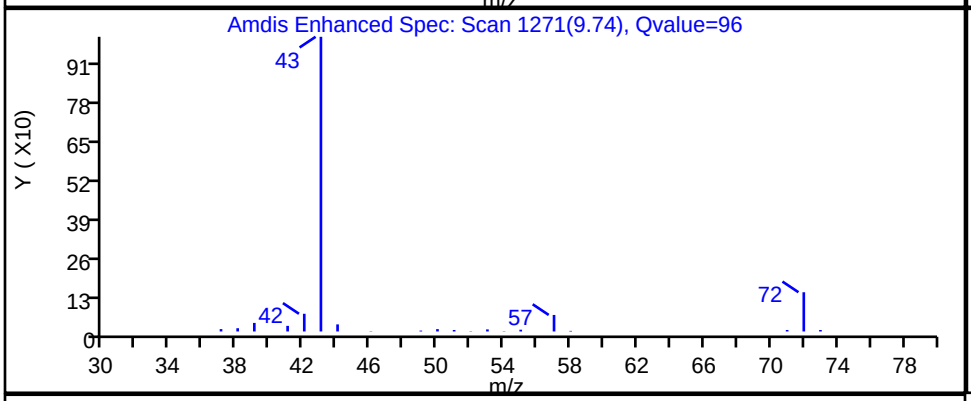


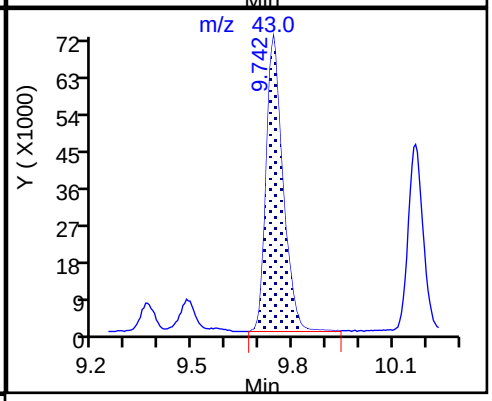
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

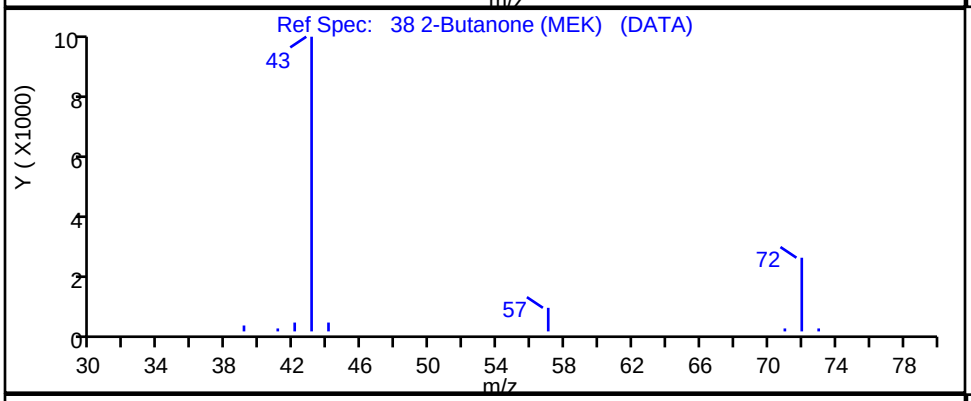
38 2-Butanone (MEK), CAS: 78-93-3

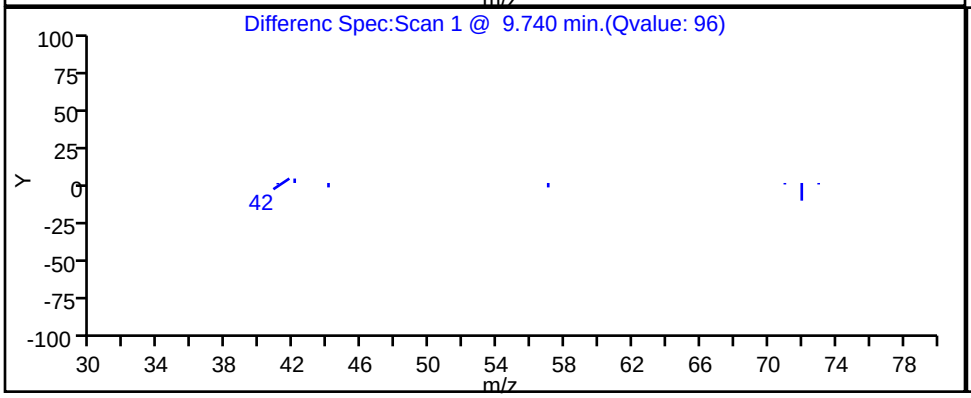


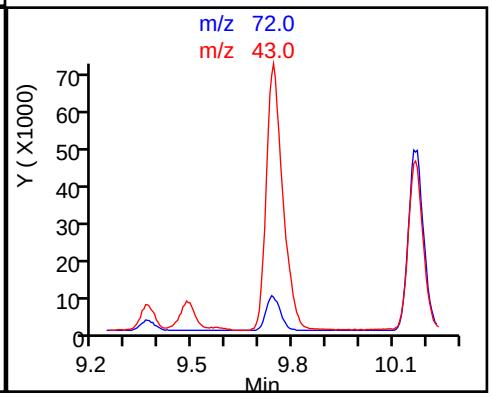






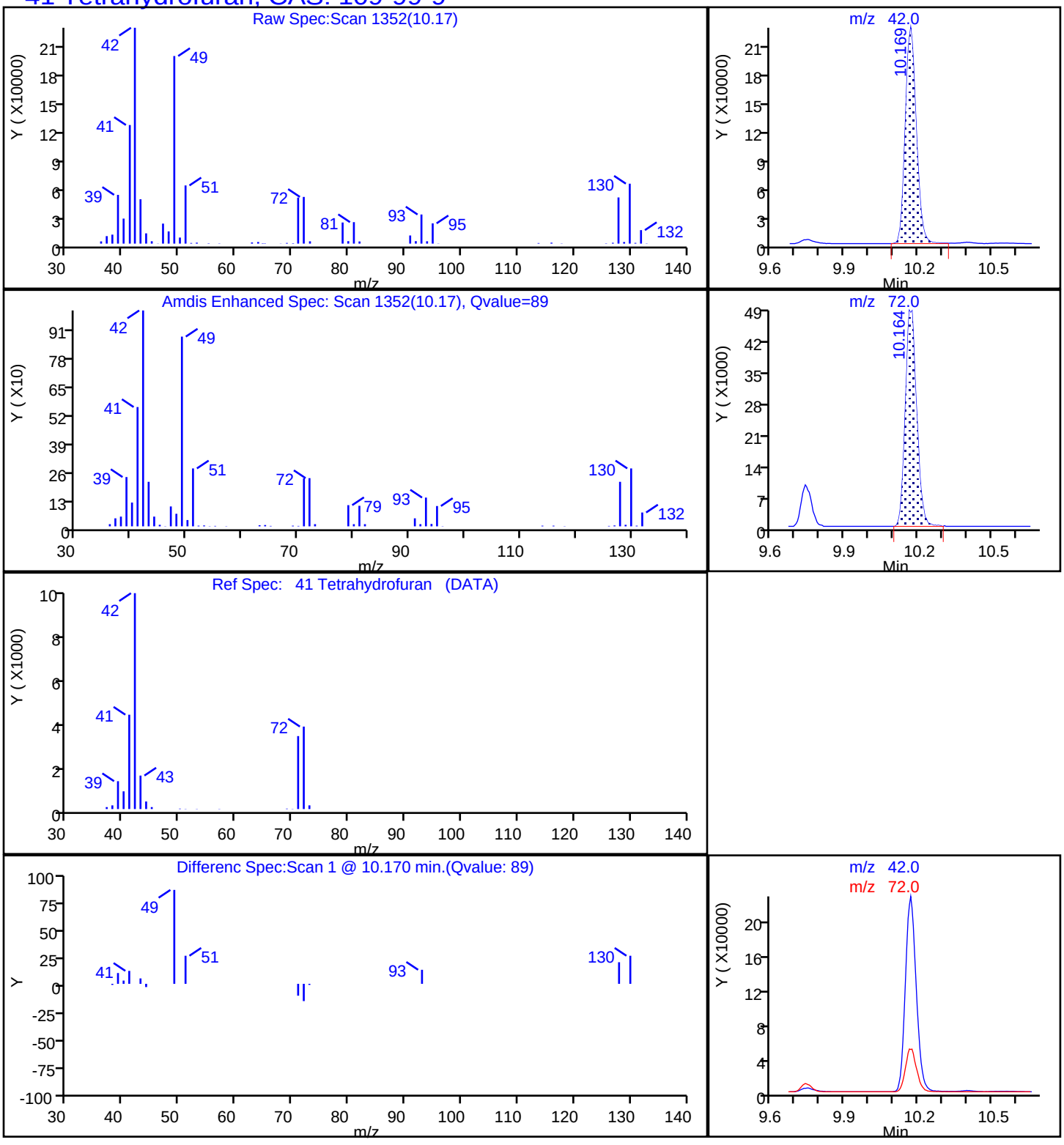






Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

41 Tetrahydrofuran, CAS: 109-99-9

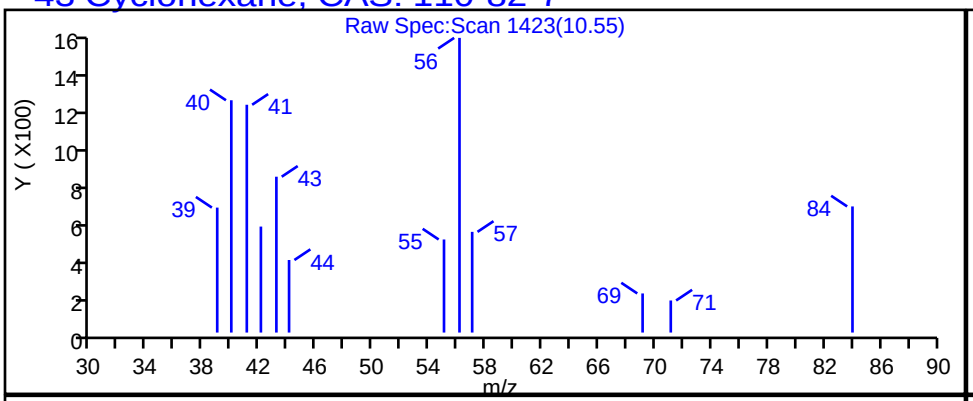


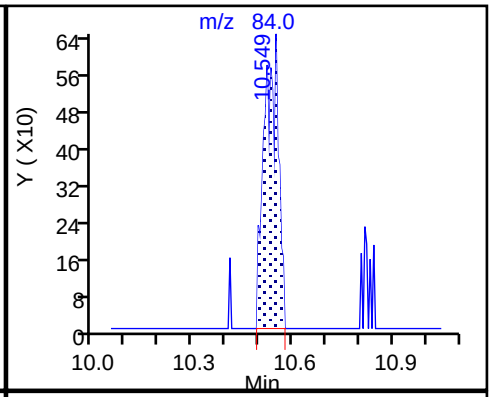
TestAmerica Burlington

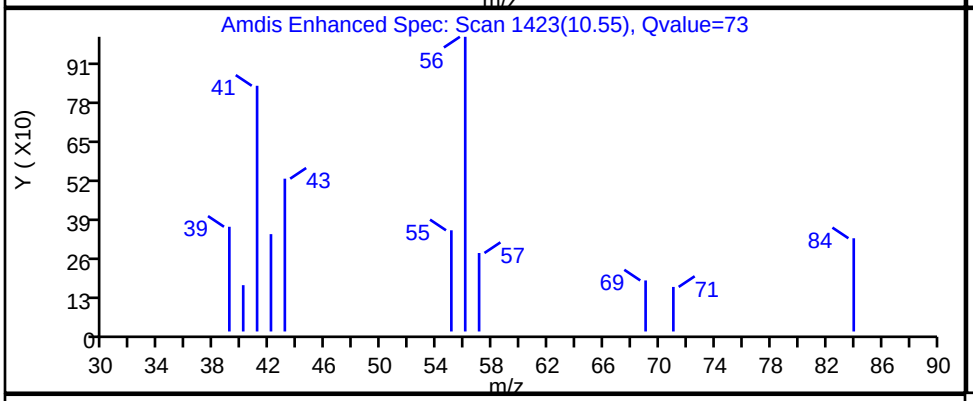
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D

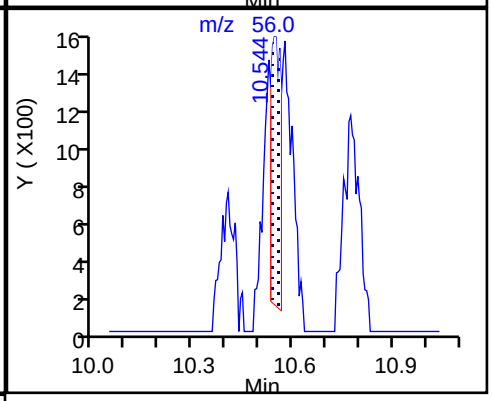
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

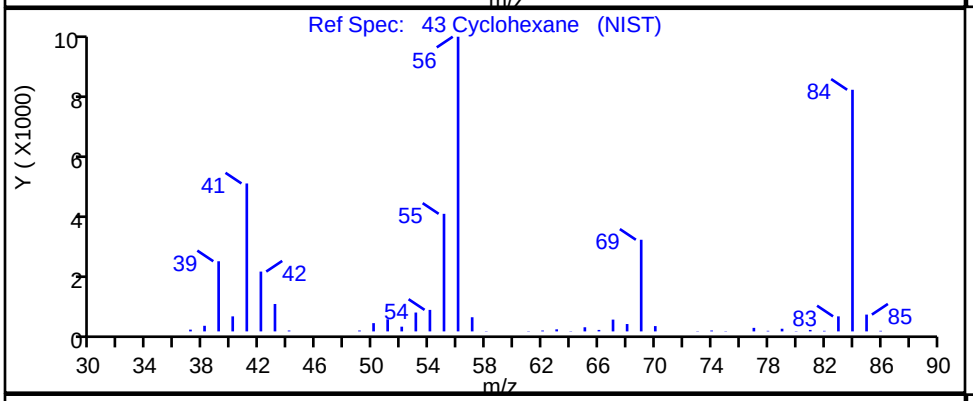
43 Cyclohexane, CAS: 110-82-7

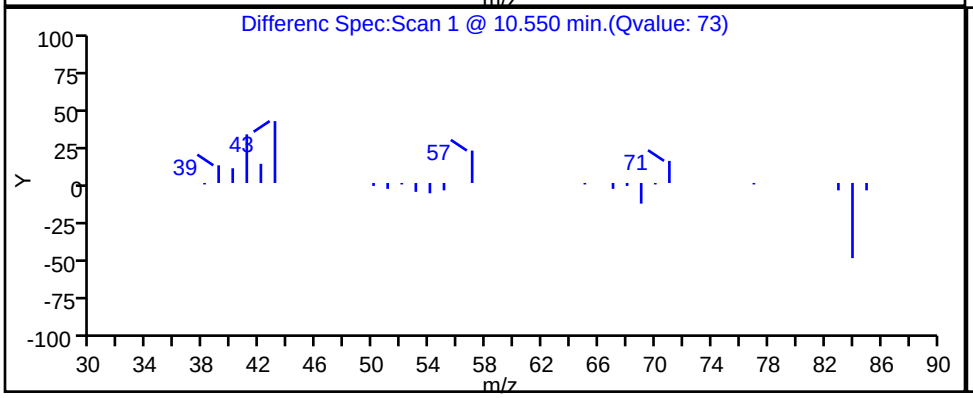


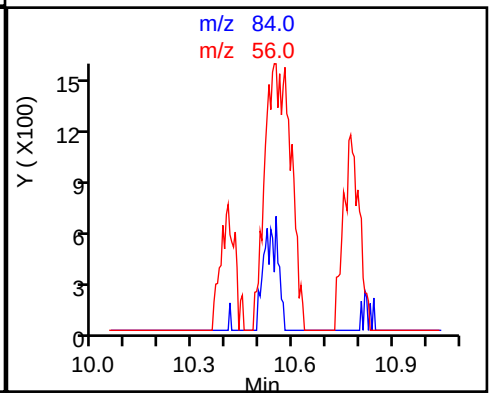








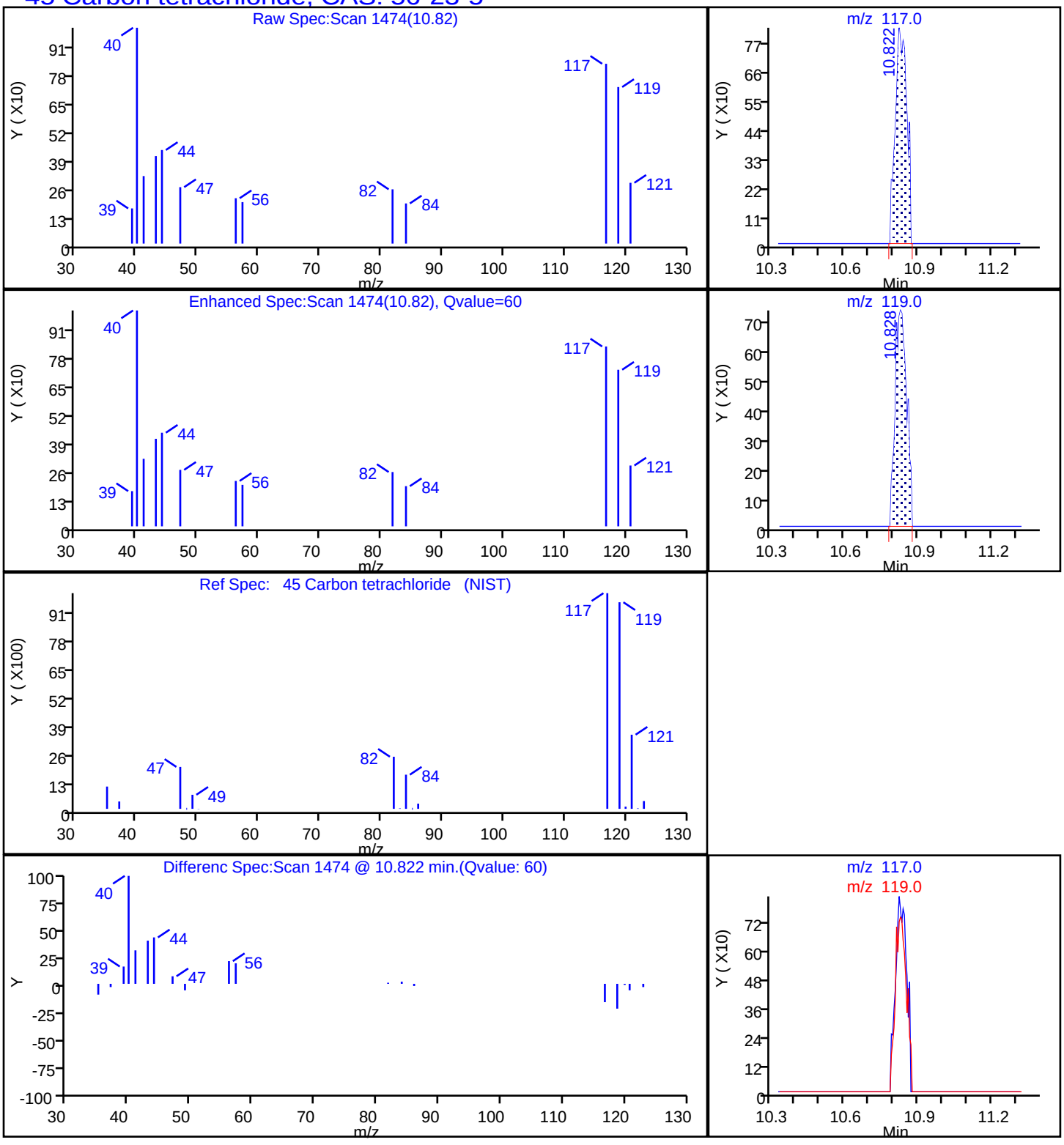




TestAmerica Burlington

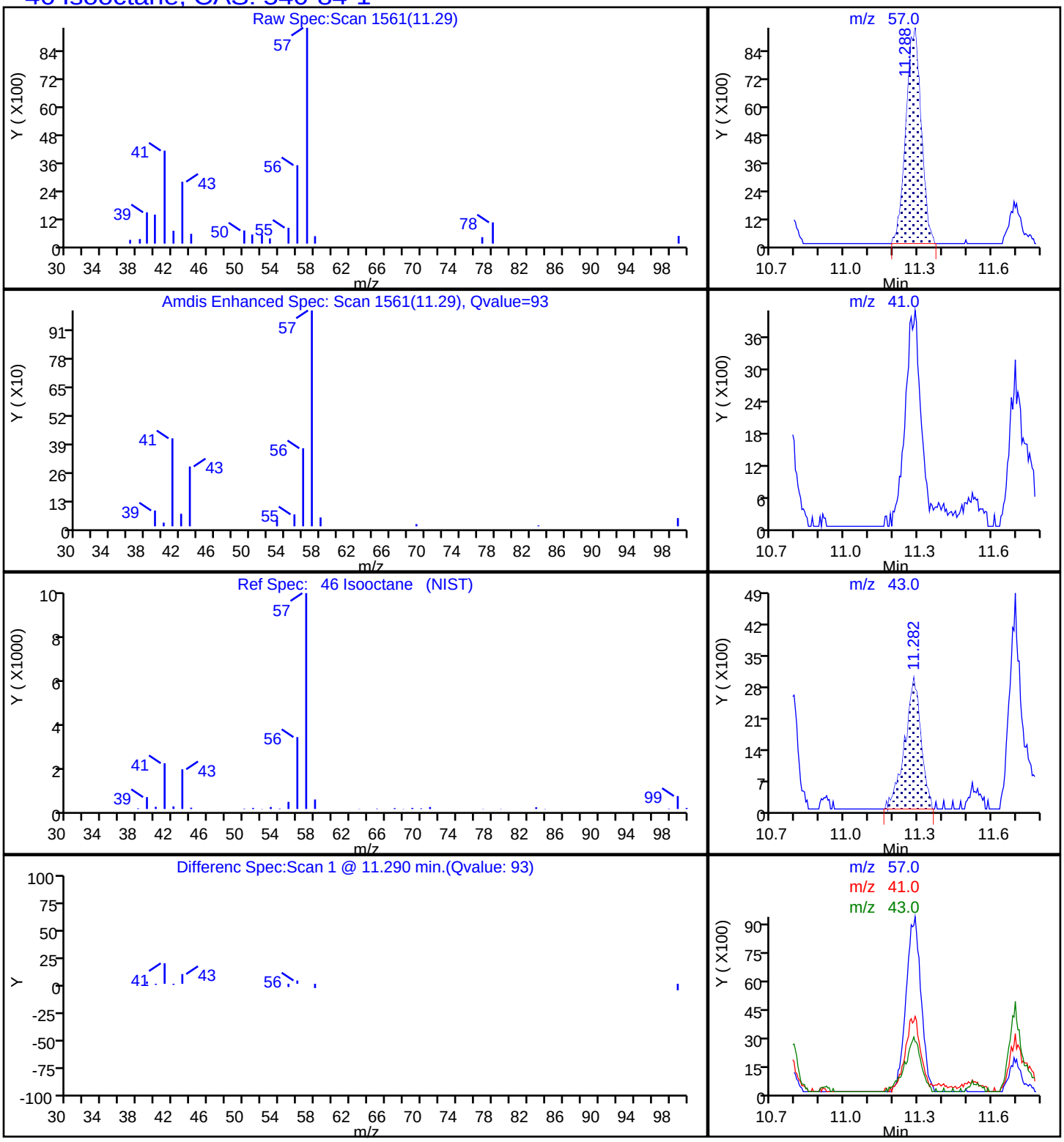
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

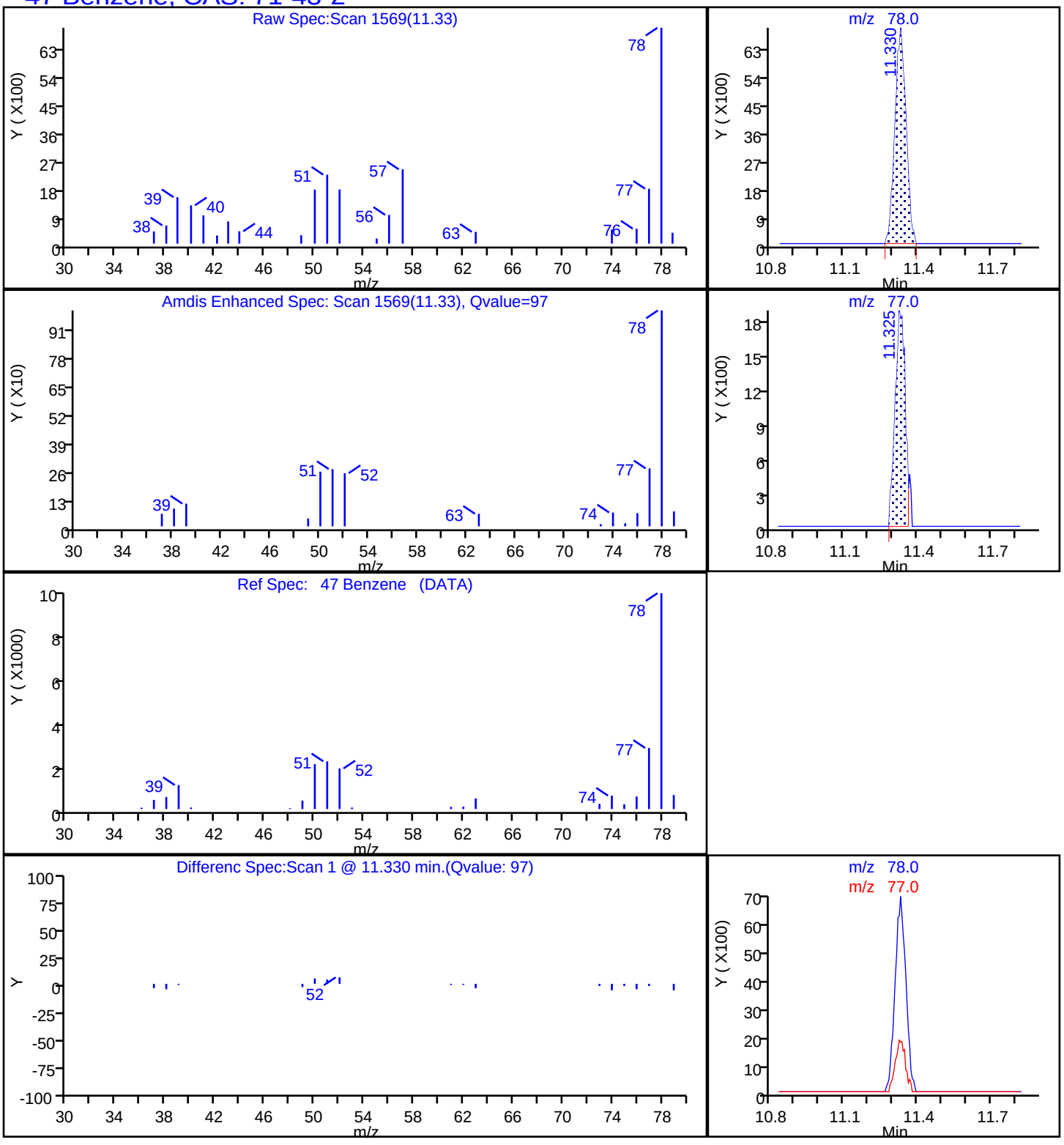
46 Isooctane, CAS: 540-84-1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

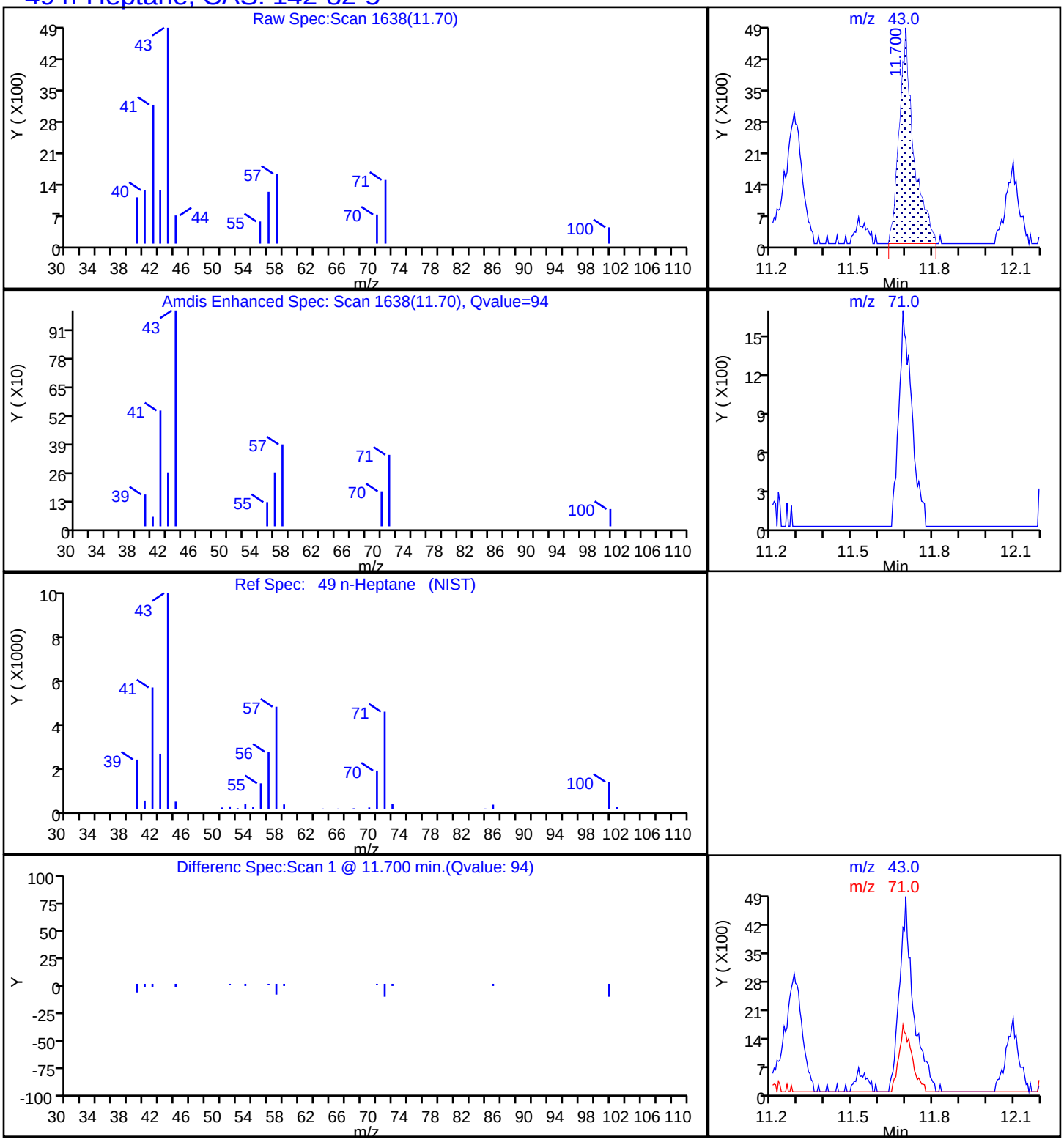
47 Benzene, CAS: 71-43-2



TestAmerica Burlington

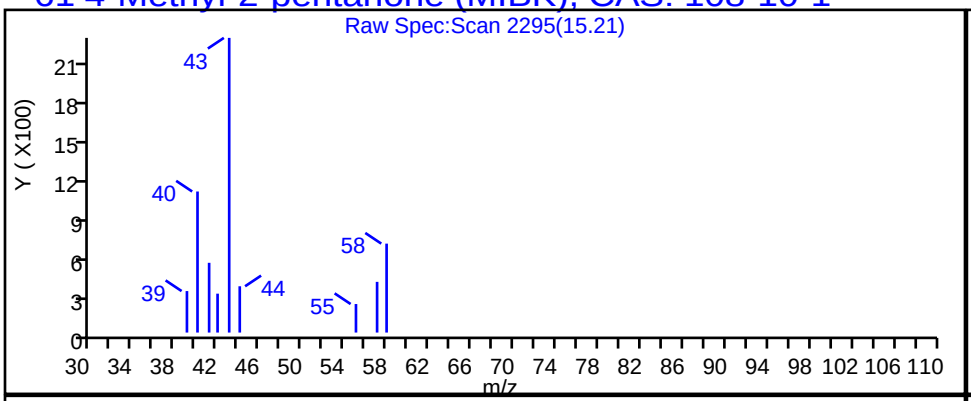
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

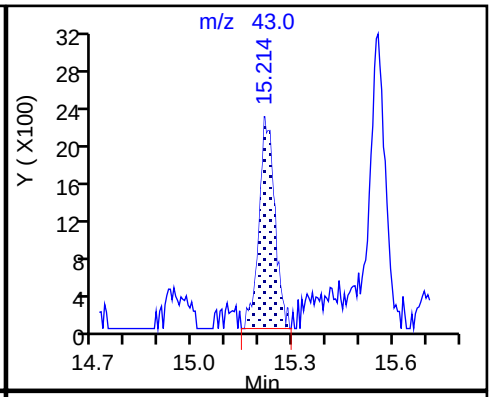
49 n-Heptane, CAS: 142-82-5

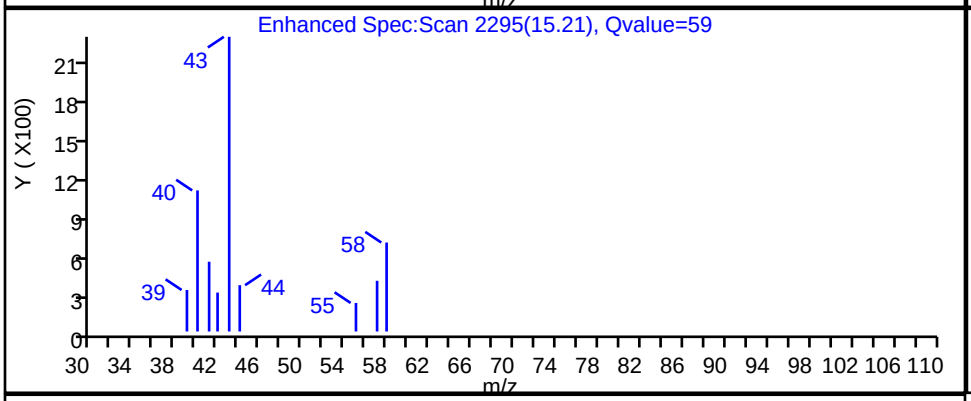


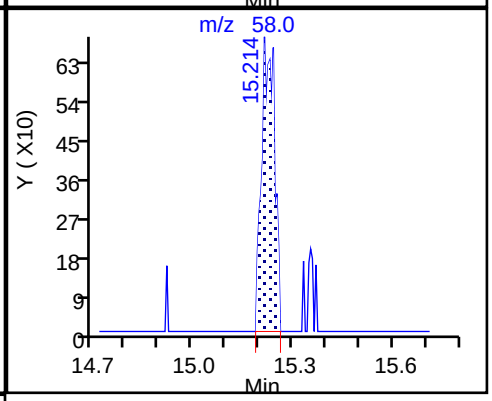
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

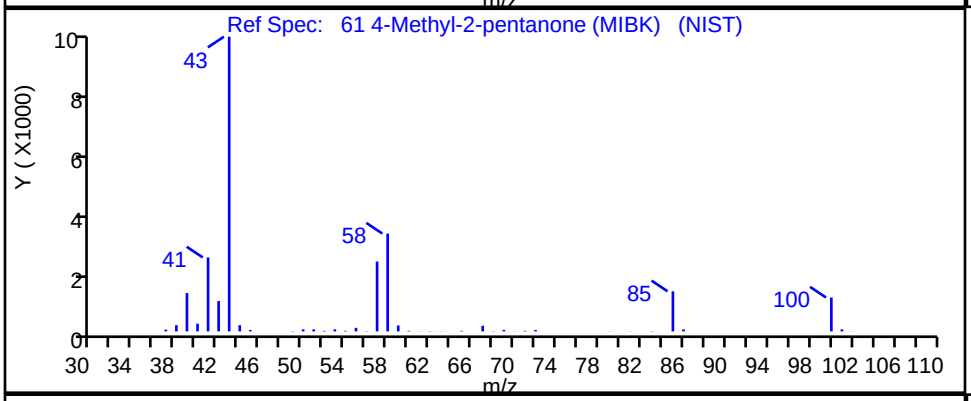
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

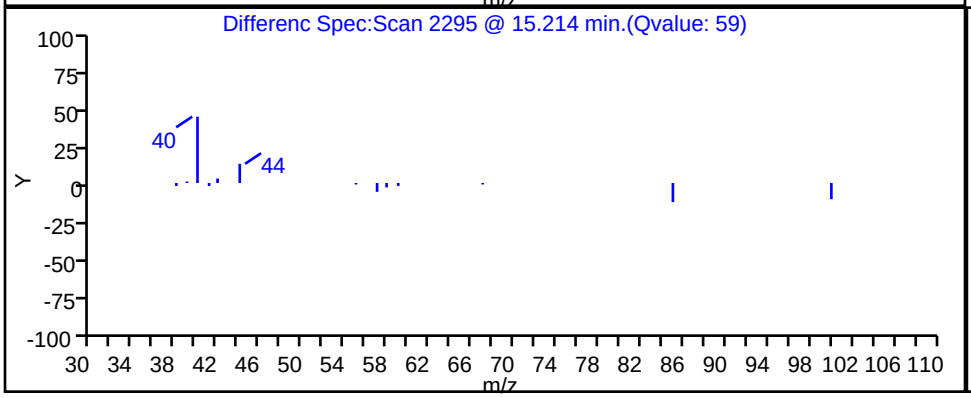


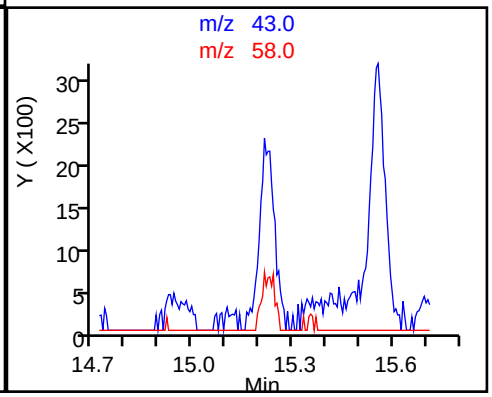








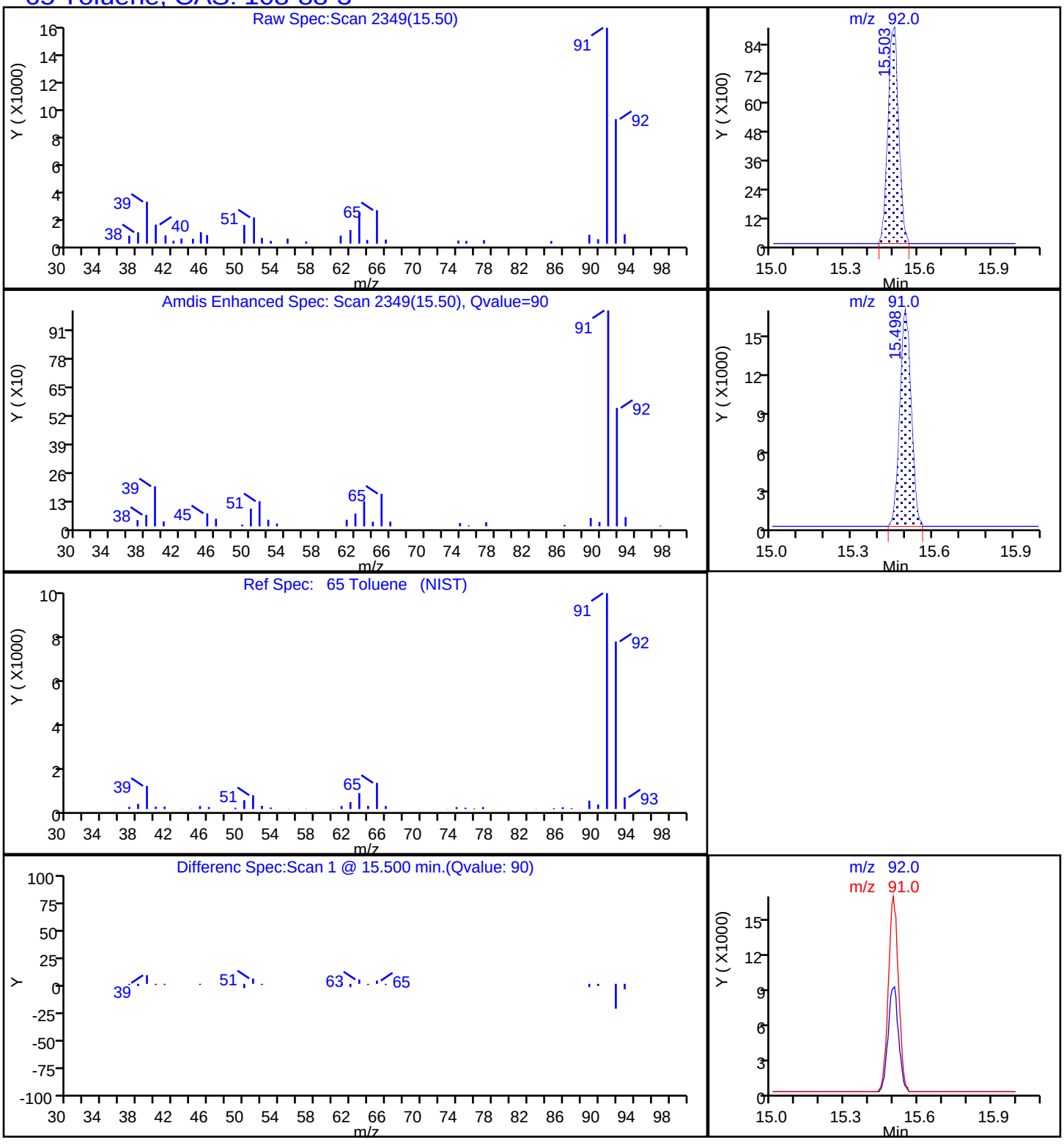




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



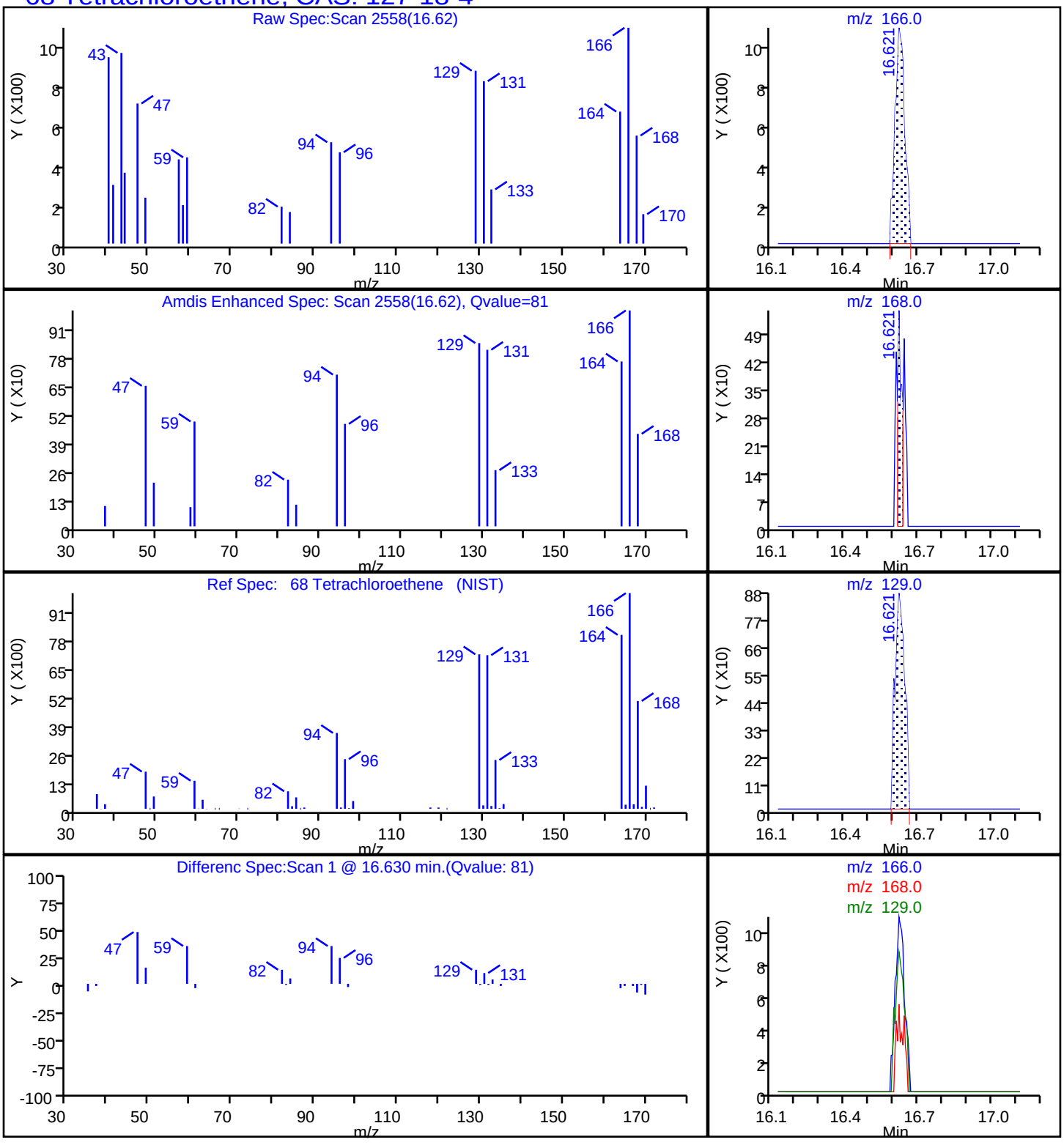
Report Date: 06-Apr-2018 13:47:59 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D

Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



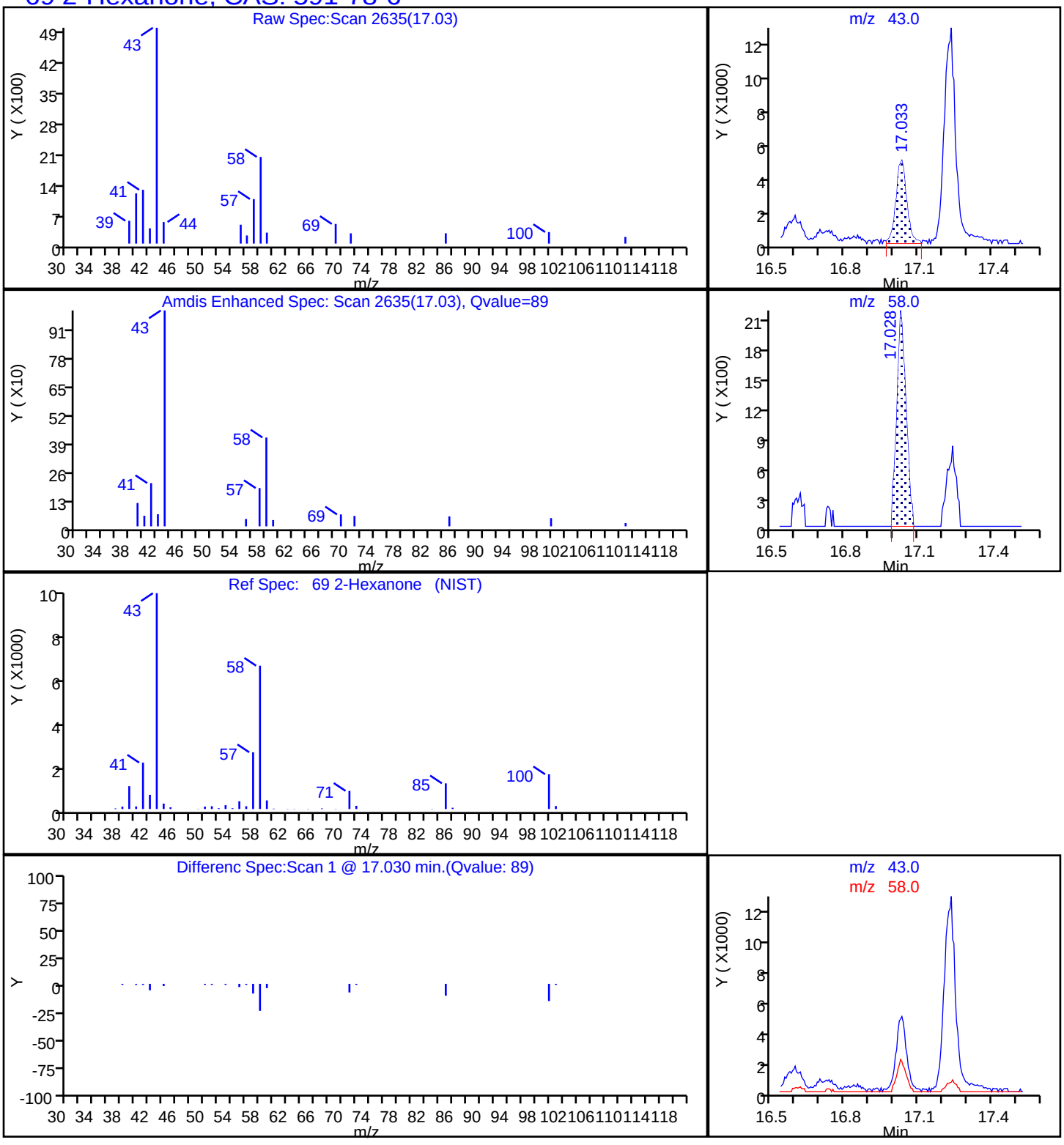
Report Date: 06-Apr-2018 13:47:59 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D

Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

69 2-Hexanone, CAS: 591-78-6



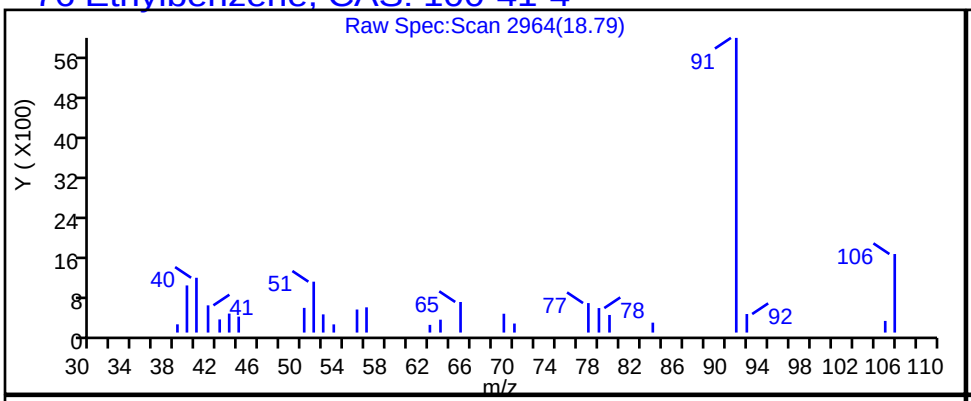
Report Date: 06-Apr-2018 13:47:59 Chrom Revision: 2.2 13-Mar-2018 08:45:20

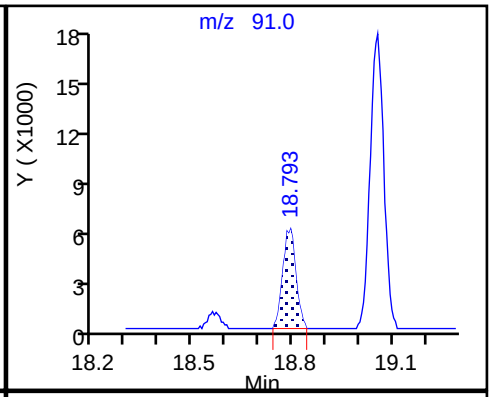
TestAmerica Burlington

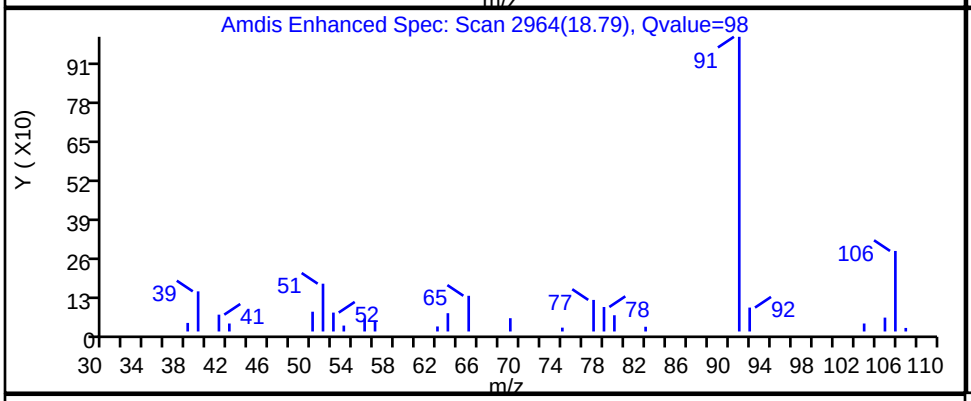
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D

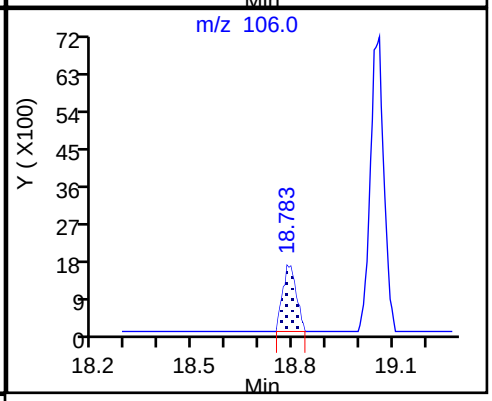
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

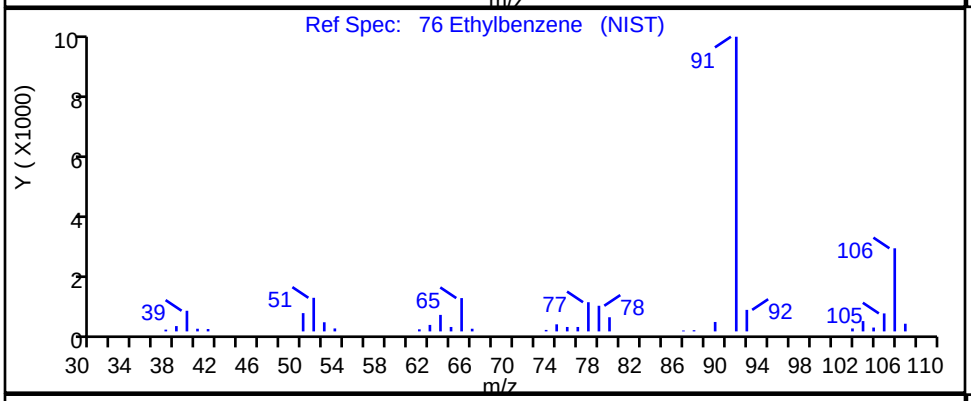
76 Ethylbenzene, CAS: 100-41-4

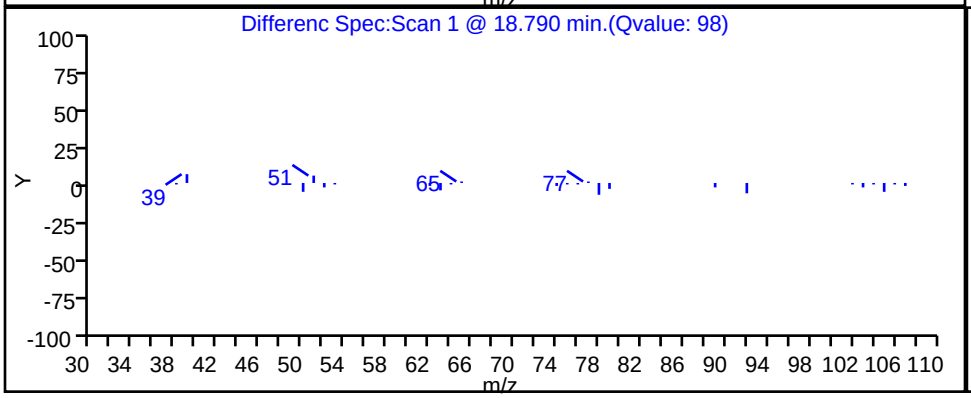


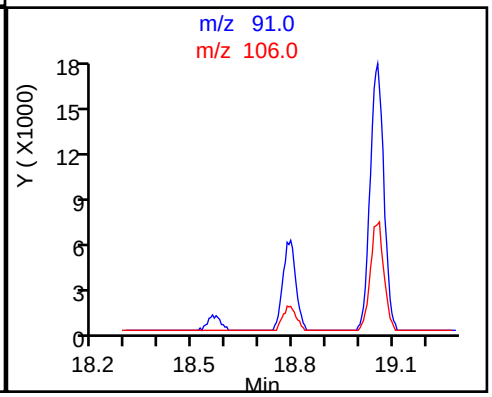






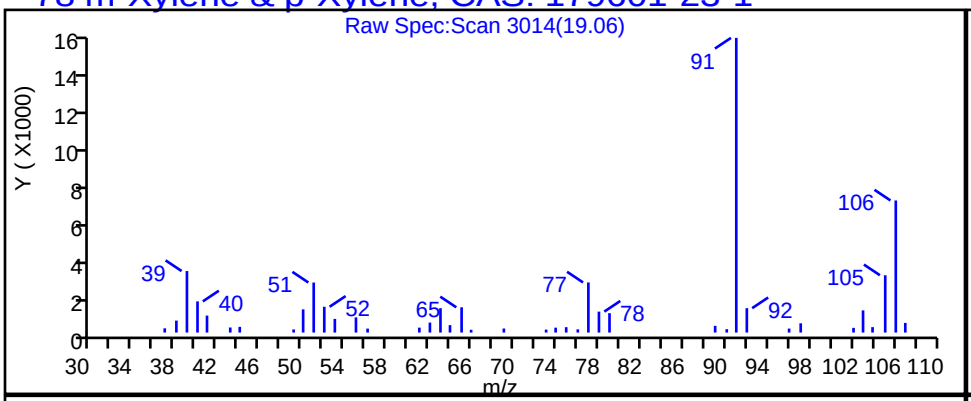


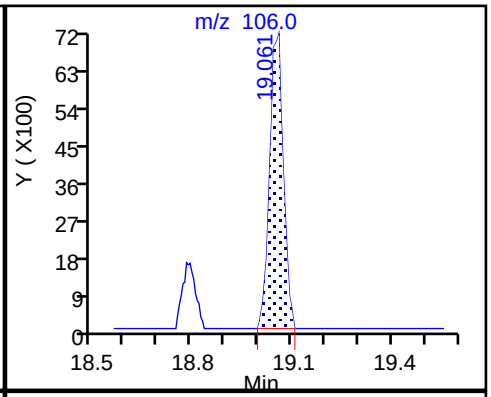


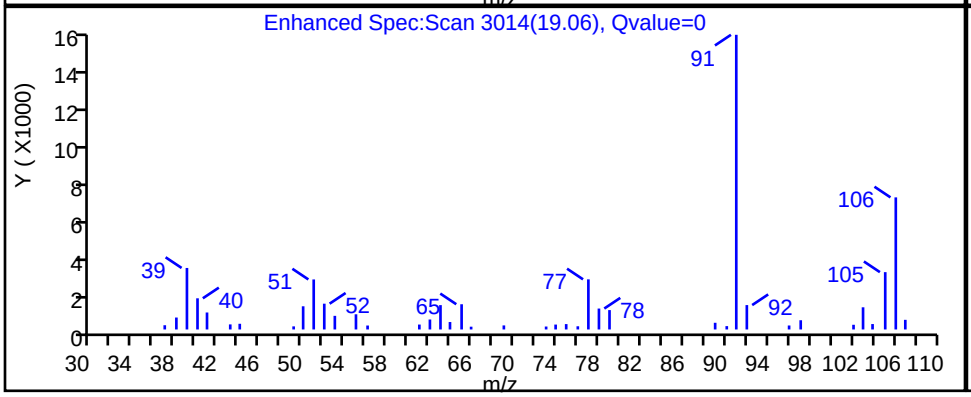


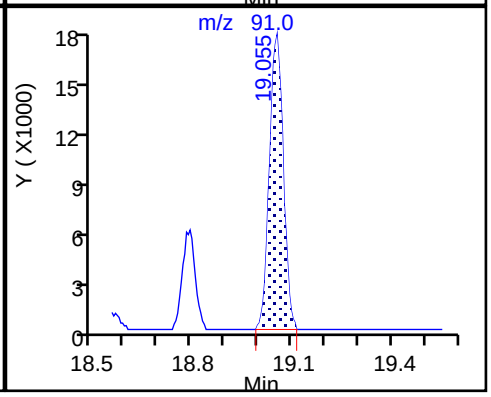
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

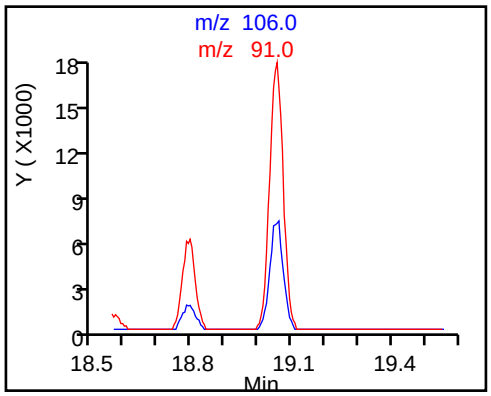
78 m-Xylene & p-Xylene, CAS: 179601-23-1







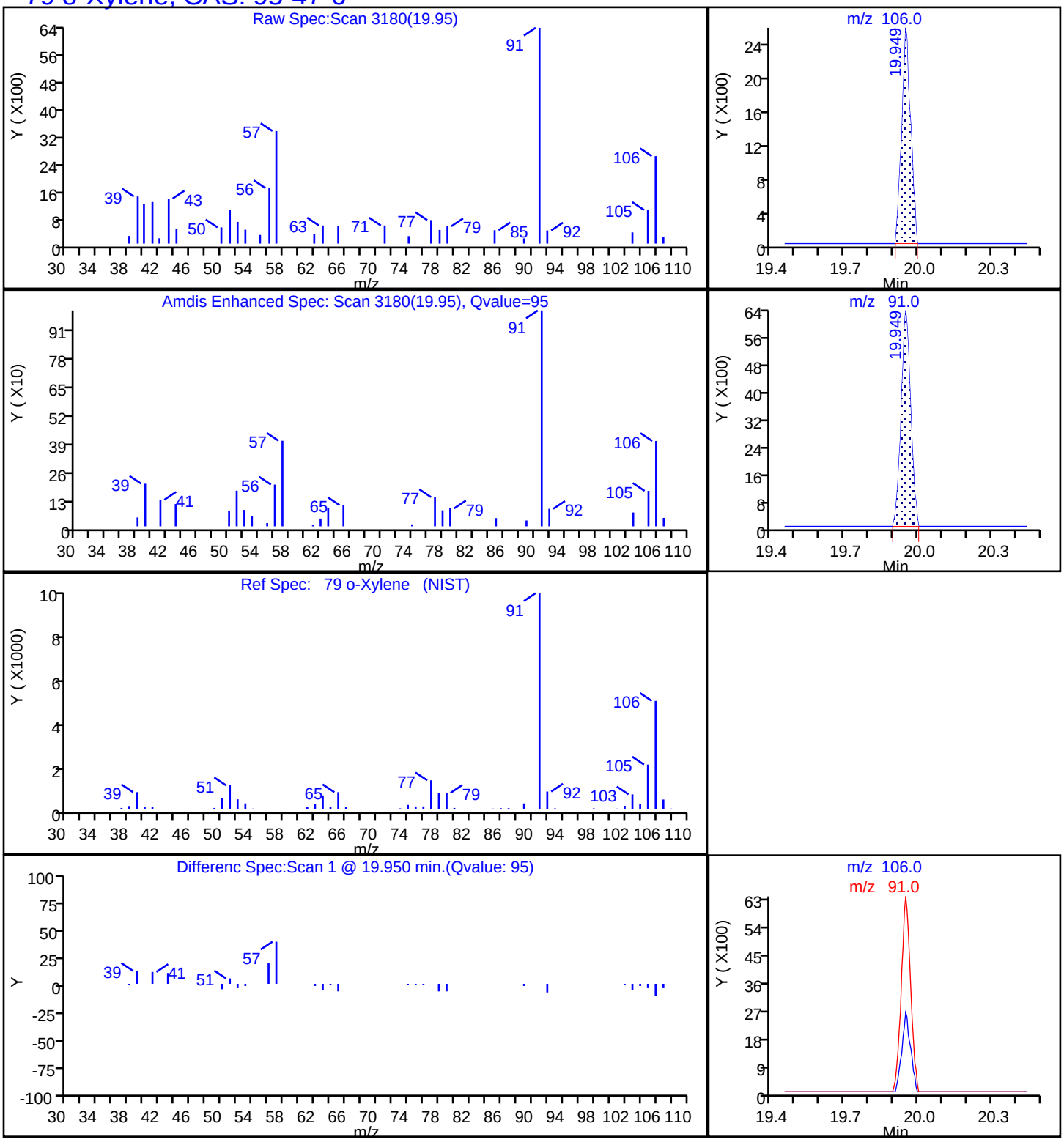




TestAmerica Burlington

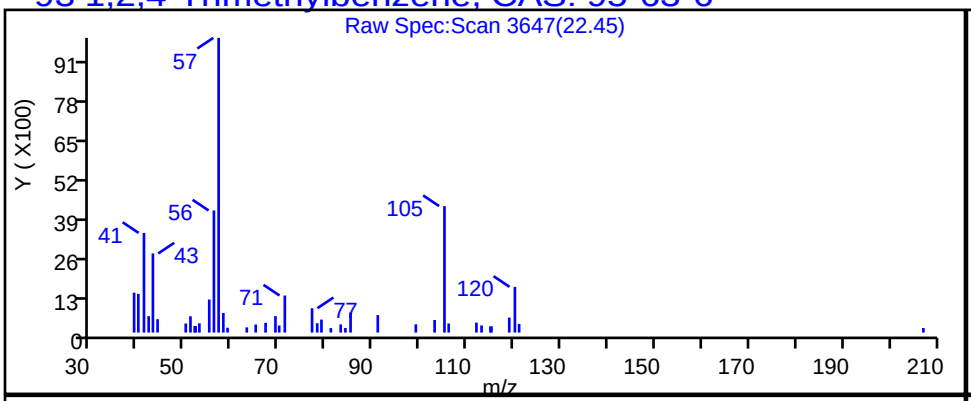
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

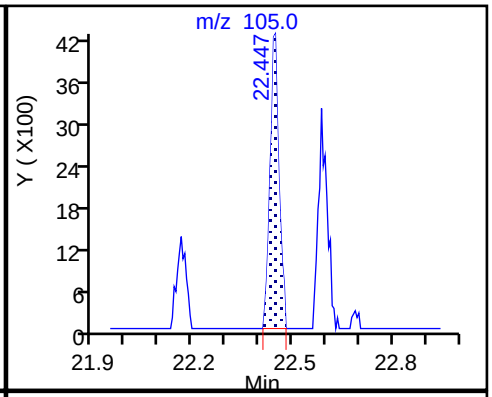
79 o-Xylene, CAS: 95-47-6

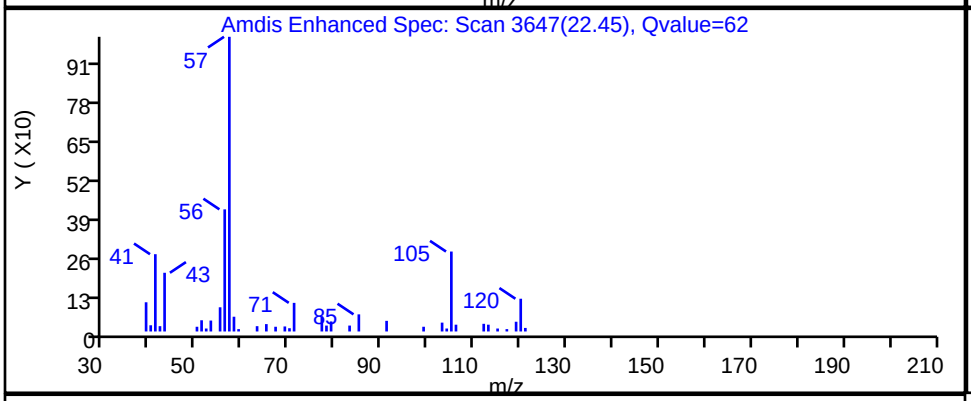


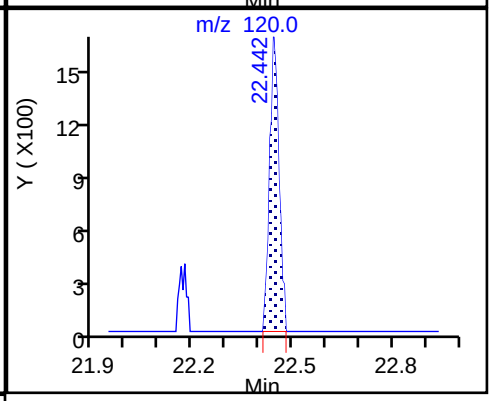
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D
Injection Date: 05-Apr-2018 18:26:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-4 Lab Sample ID: 200-42918-4
Client ID: GC-IA-103 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

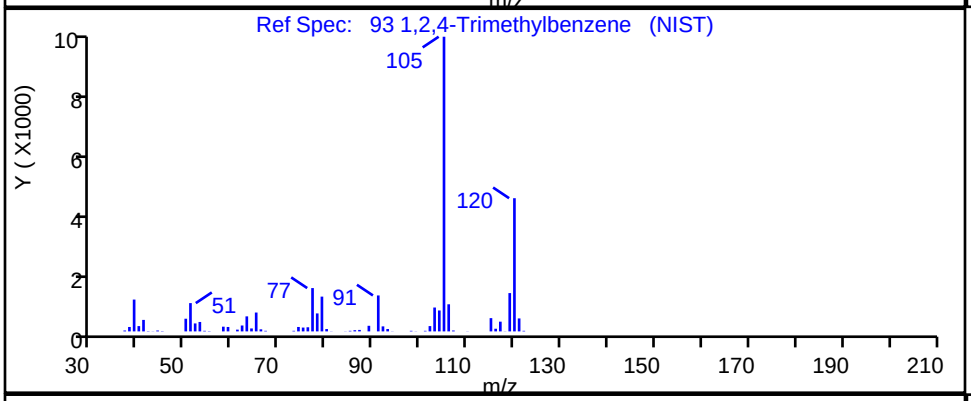
93 1,2,4-Trimethylbenzene, CAS: 95-63-6

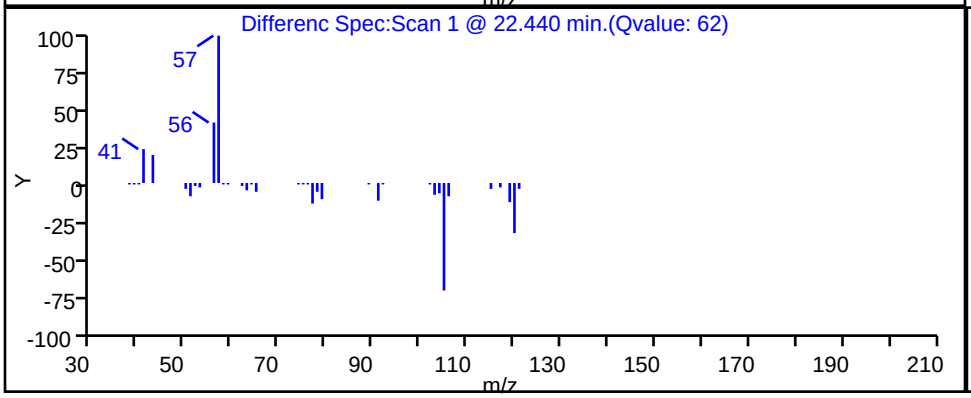


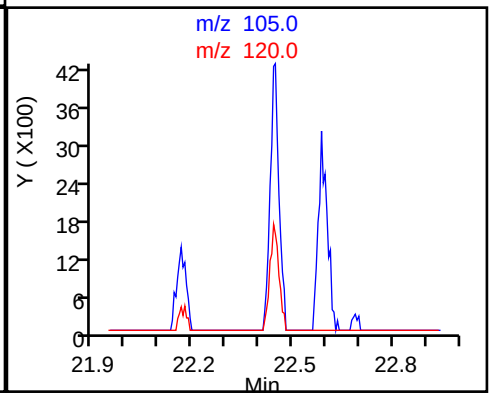












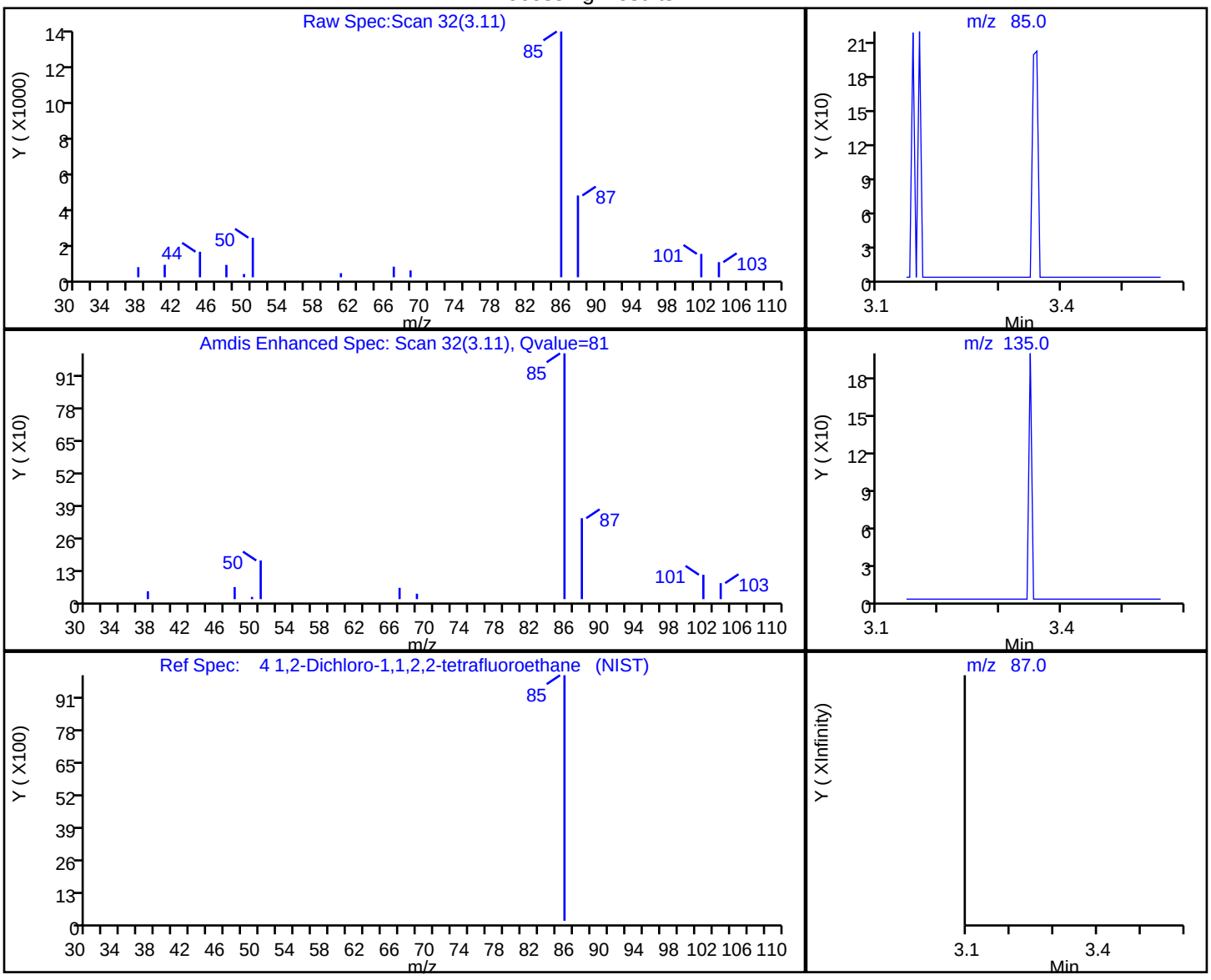
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
3.11	85.00	20263	0.369653
3.35	135.00	0	
3.11	87.00	6677	

Reviewer: puangmaleek, 06-Apr-2018 13:47:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

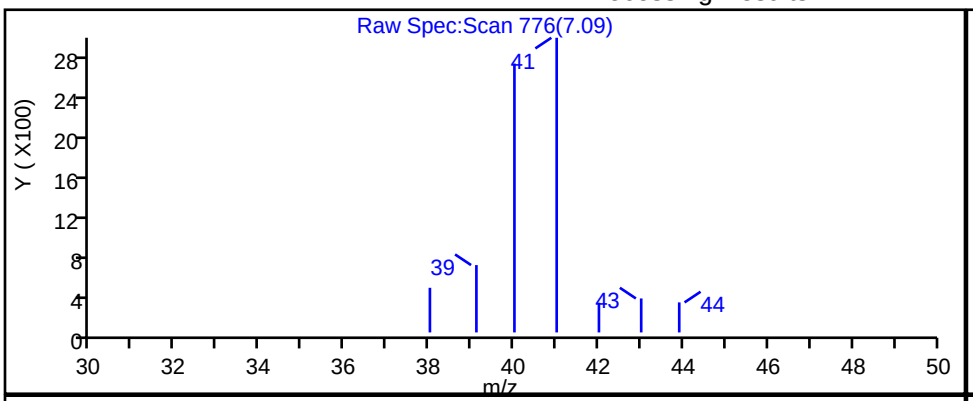
User Disabled Compound Report

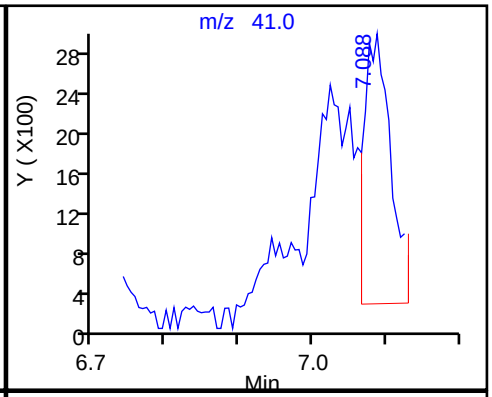
TestAmerica Burlington

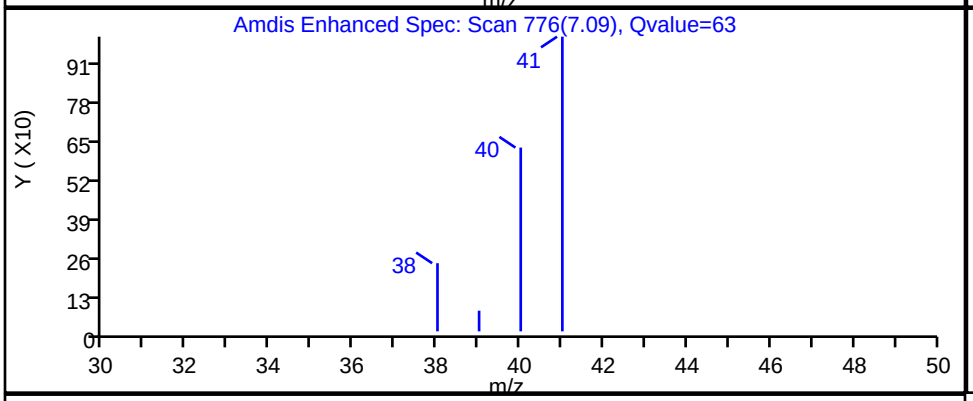
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

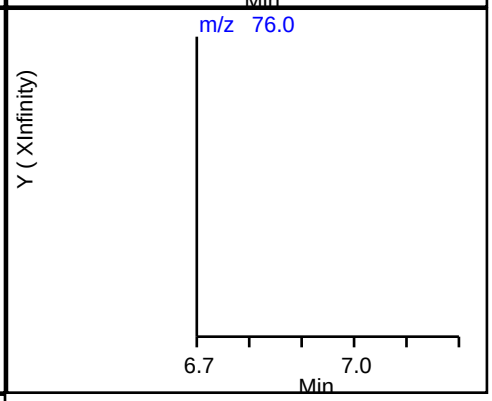
25 3-Chloro-1-propene, CAS: 107-05-1

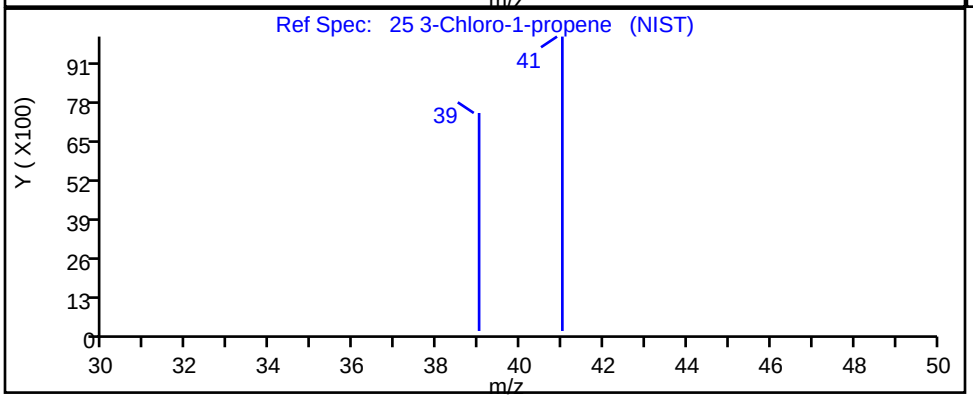
Processing Results











RT	Mass	Response	Amount
7.09	41.00	6935	0.152021
6.93	76.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:47:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

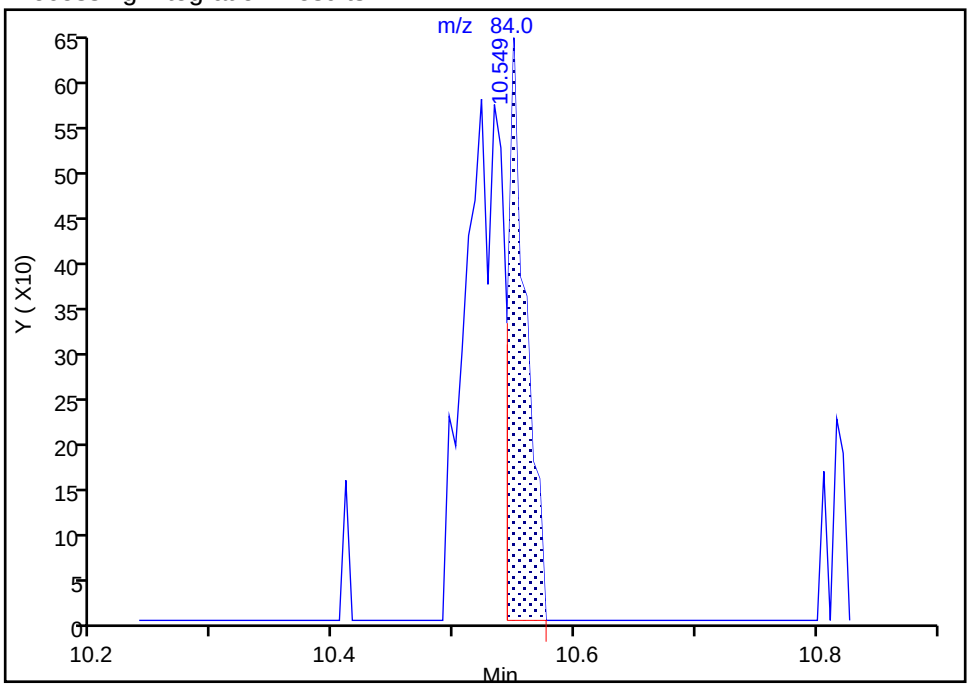
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

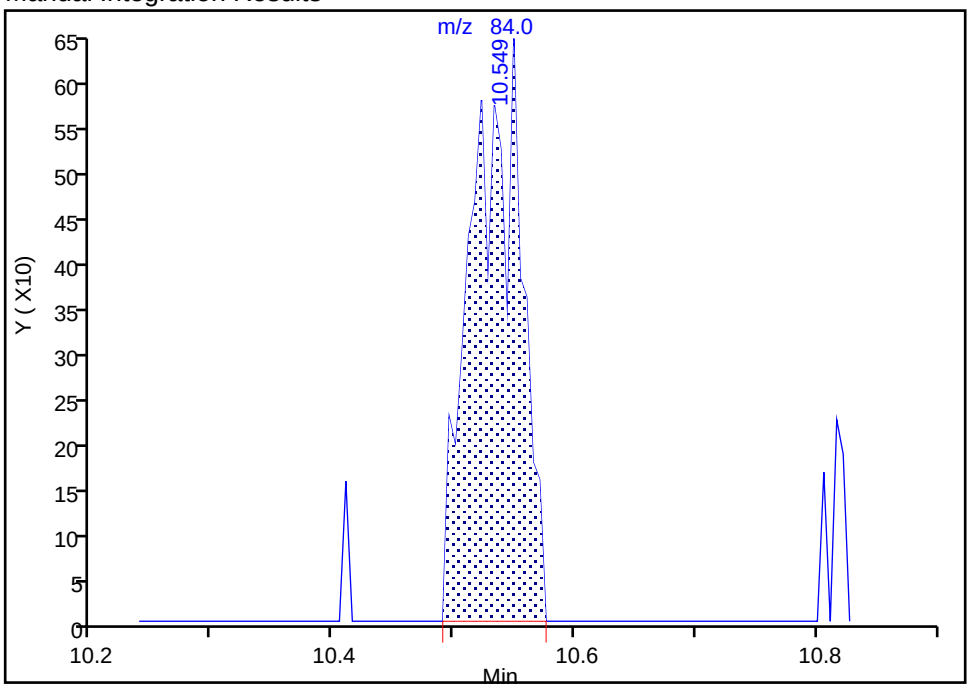
Processing Integration Results

RT: 10.55
Area: 657
Amount: 0.019940
Amount Units: ppb v/v



Manual Integration Results

RT: 10.55
Area: 1829
Amount: 0.055512
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:46:47

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

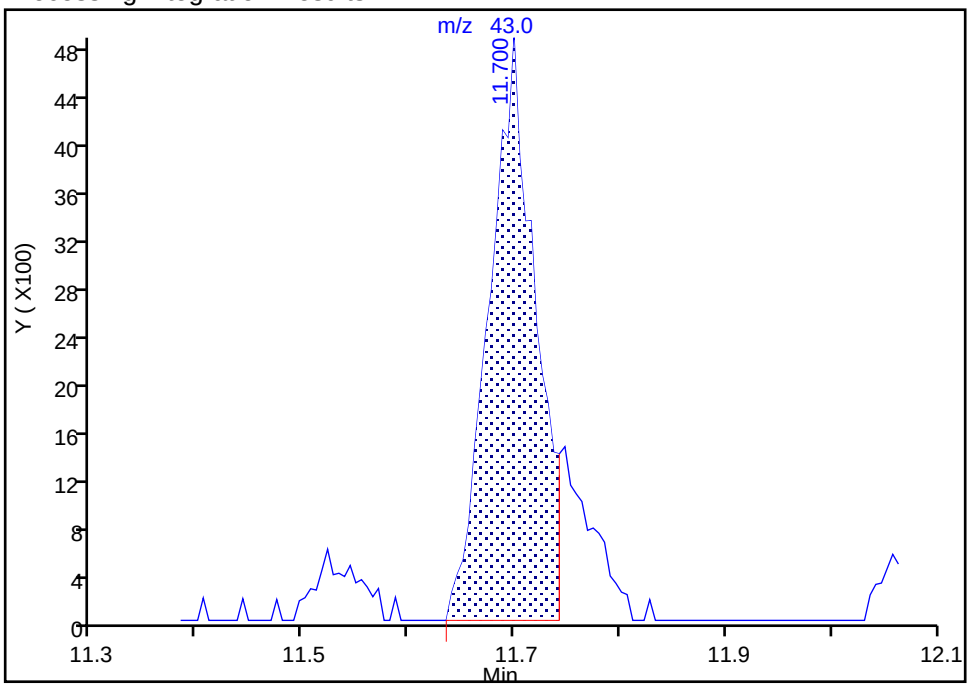
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

49 n-Heptane, CAS: 142-82-5

Signal: 1

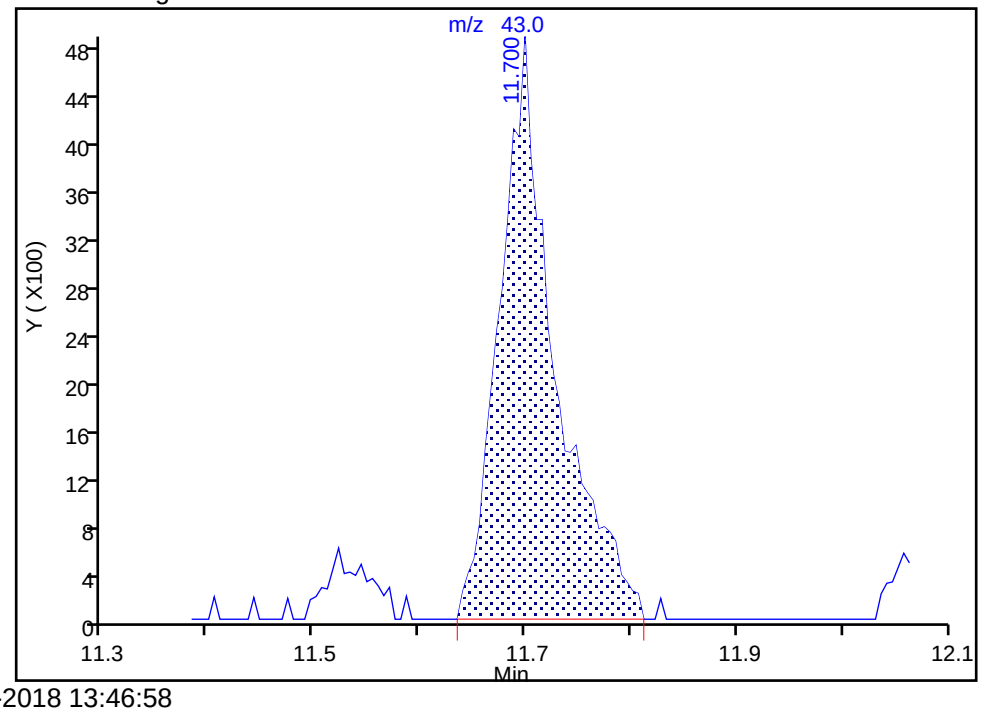
Processing Integration Results

RT: 11.70
Area: 14723
Amount: 0.171390
Amount Units: ppb v/v



Manual Integration Results

RT: 11.70
Area: 17461
Amount: 0.203264
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:46:58

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

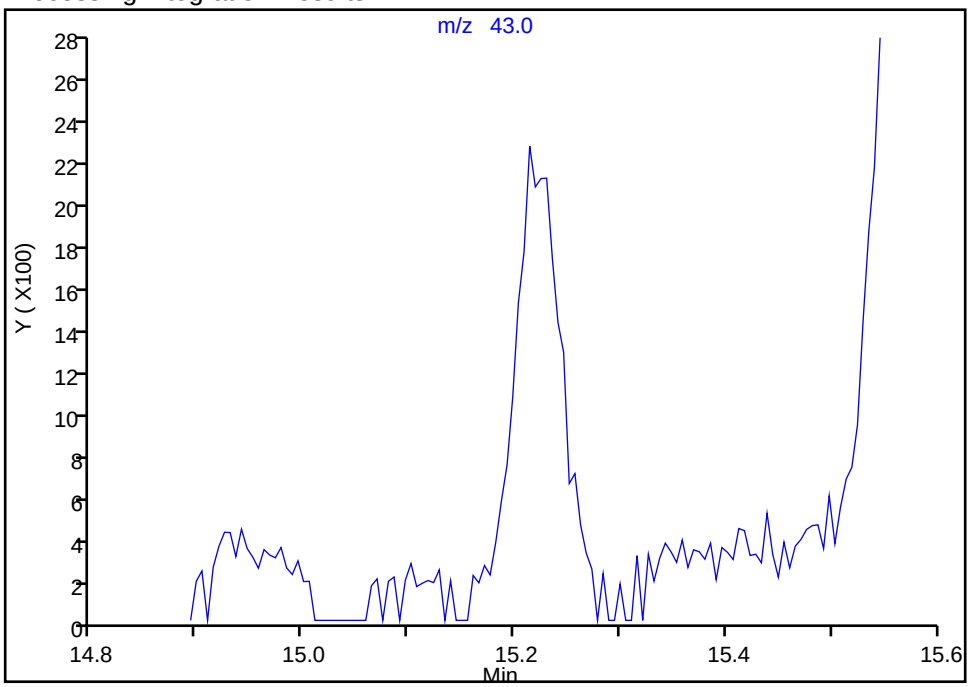
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

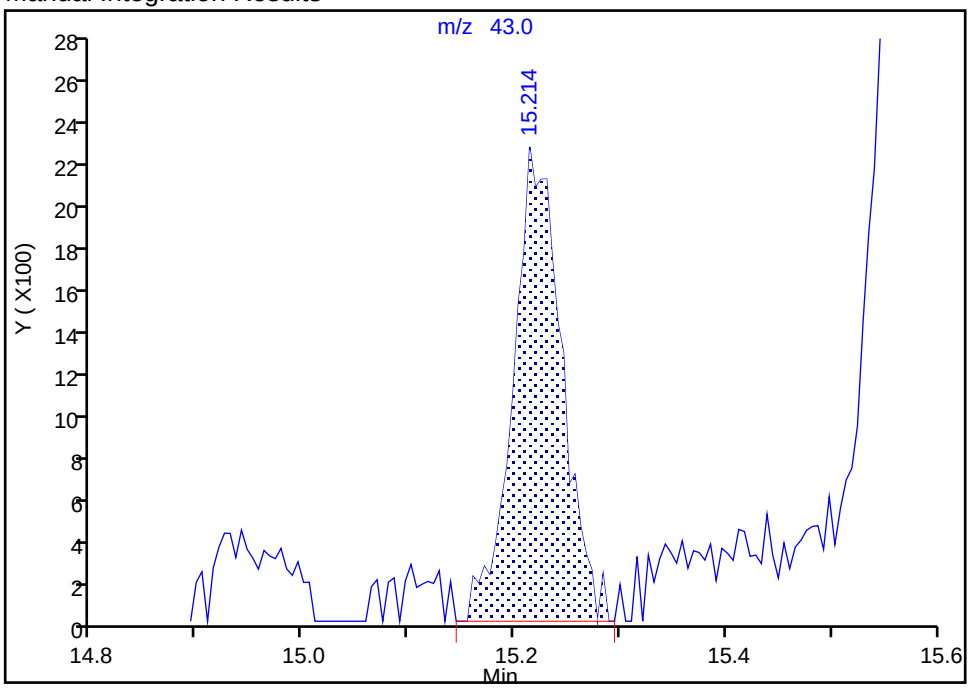
Not Detected
Expected RT: 15.20

Processing Integration Results



Manual Integration Results

RT: 15.21
Area: 7246
Amount: 0.065074
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:47:12
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

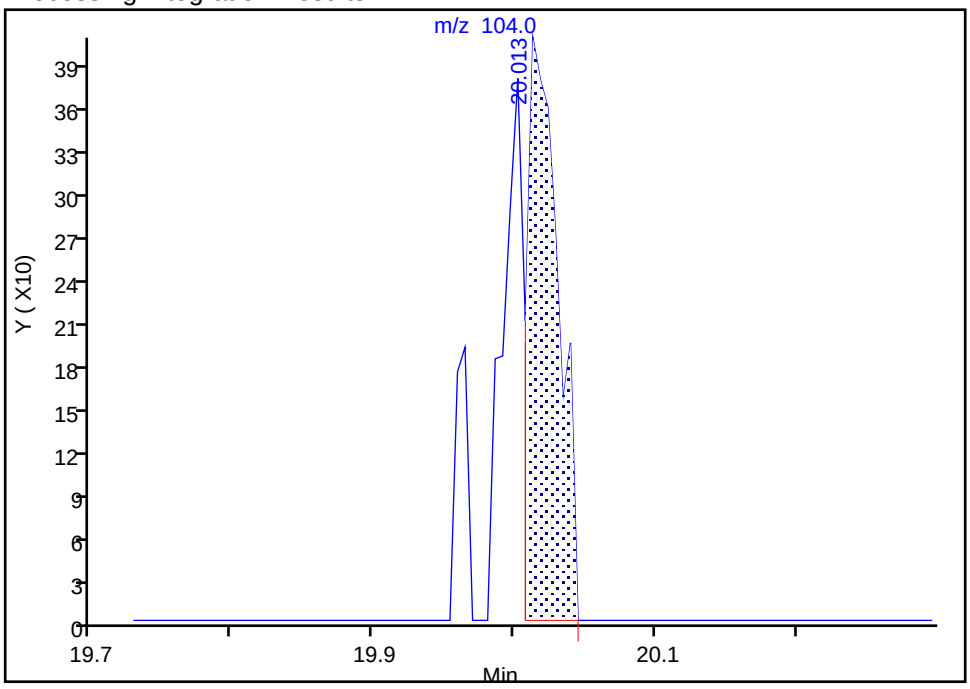
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

80 Styrene, CAS: 100-42-5

Signal: 1

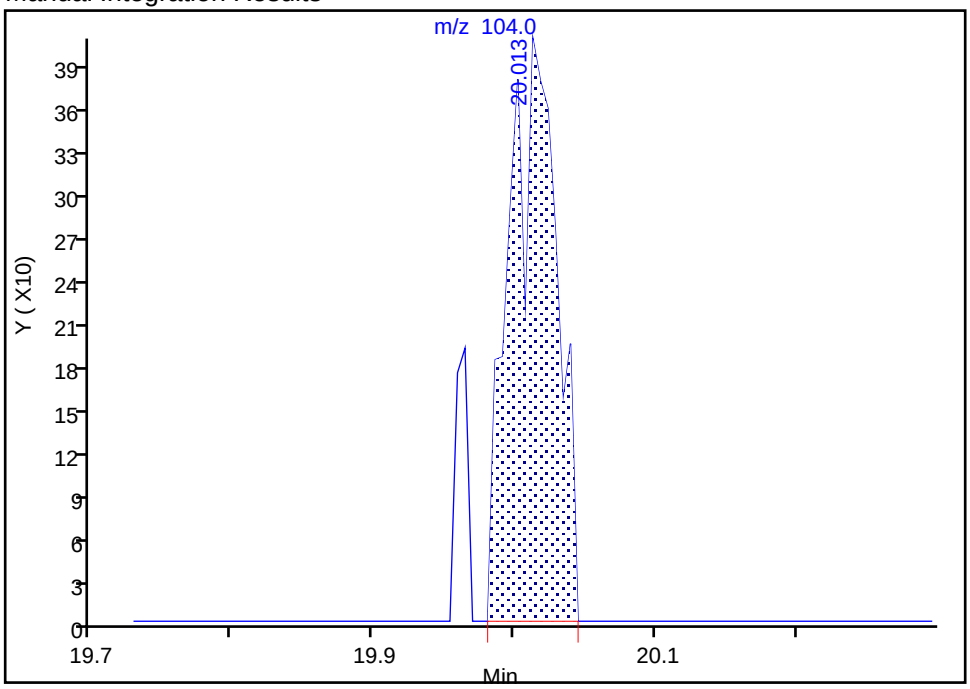
Processing Integration Results

RT: 20.01
Area: 623
Amount: 0.009101
Amount Units: ppb v/v



Manual Integration Results

RT: 20.01
Area: 950
Amount: 0.013878
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:47:32

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

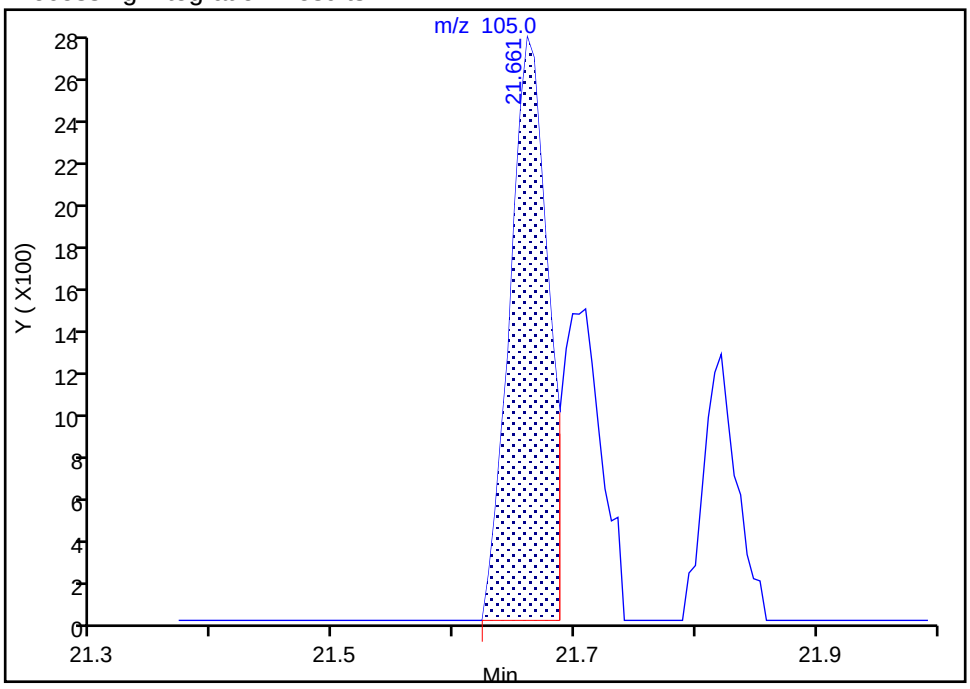
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

88 4-Ethyltoluene, CAS: 622-96-8

Signal: 1

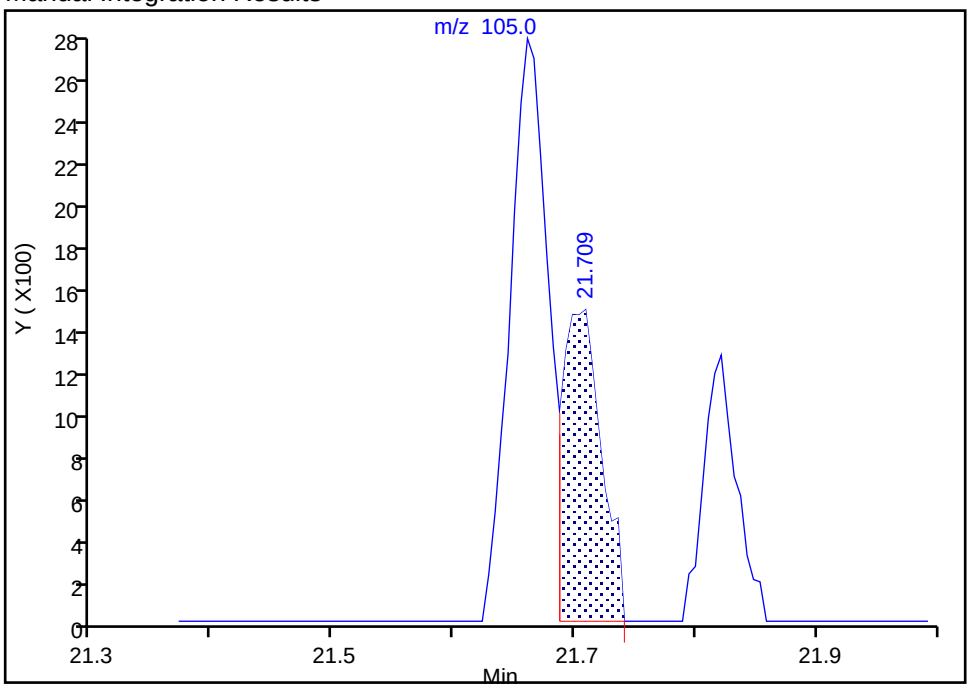
Processing Integration Results

RT: 21.66
Area: 6168
Amount: 0.043779
Amount Units: ppb v/v



Manual Integration Results

RT: 21.71
Area: 3367
Amount: 0.023898
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:47:39
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

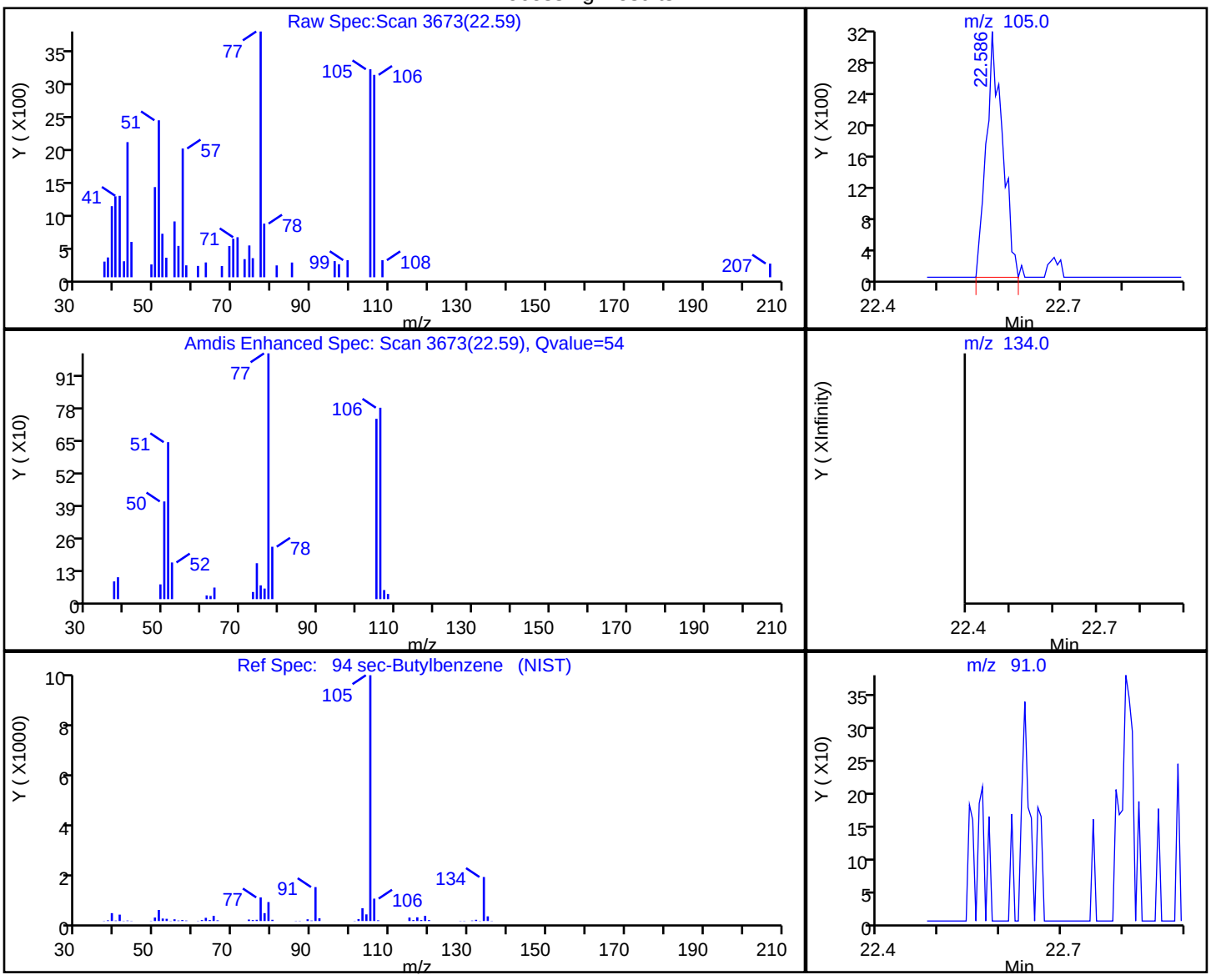
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.59	105.00	5815	0.034606
22.69	134.00	0	
22.69	91.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:47:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

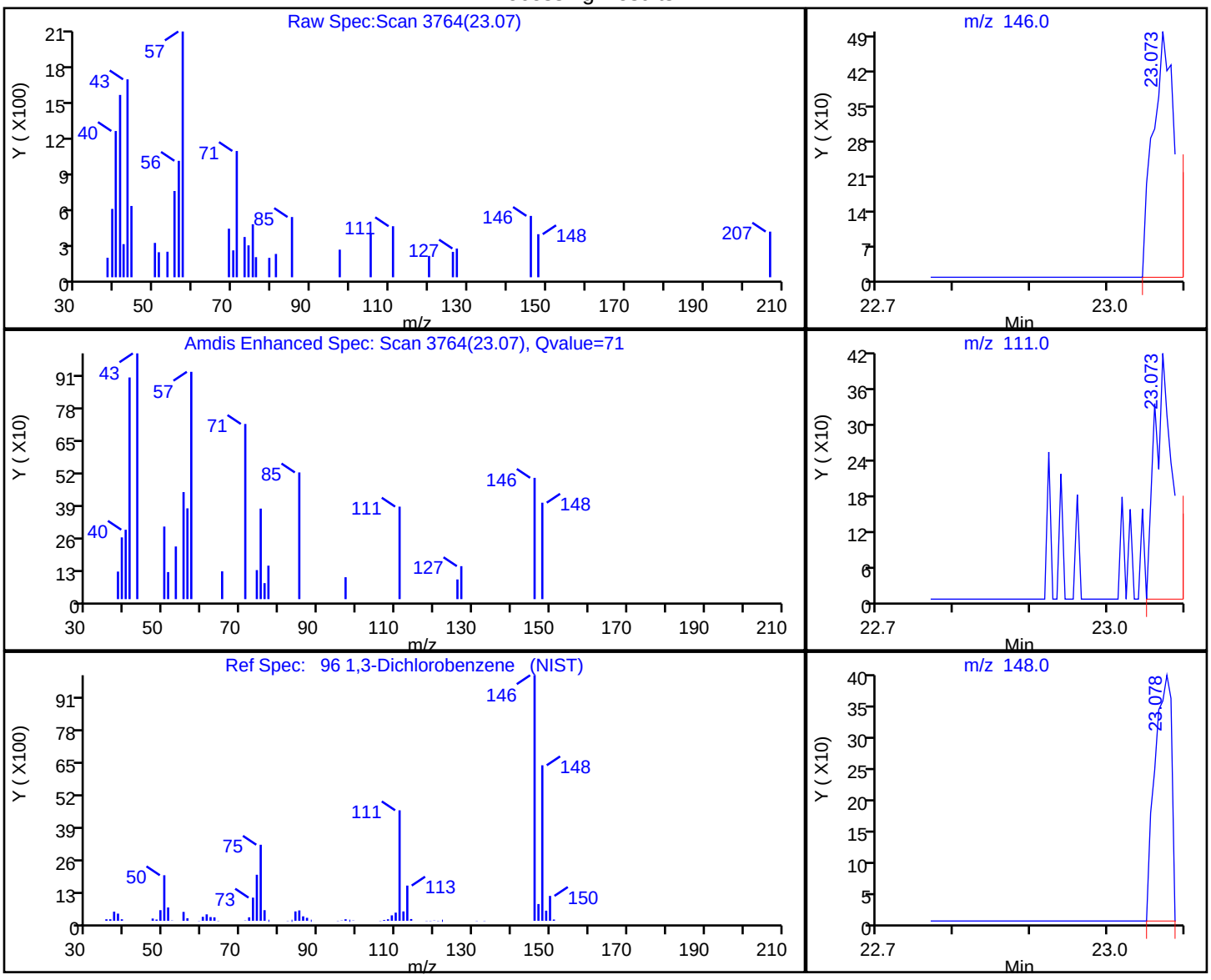
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_11.D				
Injection Date:	05-Apr-2018 18:26:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-4	Lab Sample ID:	200-42918-4		
Client ID:	GC-IA-103 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
23.07	146.00	932	0.014399
23.07	111.00	643	
23.08	148.00	593	

Reviewer: puangmaleek, 06-Apr-2018 13:47:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-103 (AS) | Lab Sample ID: 200-42918-5

Matrix: Air | Lab File ID: 29983-13.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) | Date Analyzed: 04/06/2018 22:39

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	1.0
75-45-6	Freon 22	86.47	2.5	U	2.5	1.3
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.0	U	1.0	0.34
74-87-3	Chloromethane	50.49	2.5	U	2.5	1.3
106-97-8	n-Butane	58.12	13		2.5	1.6
75-01-4	Vinyl chloride	62.50	1.0	U	1.0	0.21
106-99-0	1,3-Butadiene	54.09	1.0	U	1.0	0.33
74-83-9	Bromomethane	94.94	1.0	U	1.0	0.31
75-00-3	Chloroethane	64.52	2.5	U	2.5	1.1
593-60-2	Bromoethene(Vinyl Bromide)	106.96	1.0	U	1.0	0.28
75-69-4	Trichlorofluoromethane	137.37	1.0	U	1.0	0.31
76-13-1	Freon TF	187.38	1.0	U	1.0	0.16
75-35-4	1,1-Dichloroethene	96.94	1.0	U	1.0	0.17
67-64-1	Acetone	58.08	29		25	13
67-63-0	Isopropyl alcohol	60.10	25	U	25	9.0
75-15-0	Carbon disulfide	76.14	2.5	U	2.5	0.60
107-05-1	3-Chloropropene	76.53	2.5	U	2.5	1.4
75-09-2	Methylene Chloride	84.93	2.5	U	2.5	1.0
75-65-0	tert-Butyl alcohol	74.12	35		25	7.5
1634-04-4	Methyl tert-butyl ether	88.15	1.0	U	1.0	0.31
156-60-5	trans-1,2-Dichloroethene	96.94	1.0	U	1.0	0.37
110-54-3	n-Hexane	86.17	1.2		1.0	0.80
75-34-3	1,1-Dichloroethane	98.96	1.0	U	1.0	0.13
78-93-3	Methyl Ethyl Ketone	72.11	3.7		2.5	1.0
156-59-2	cis-1,2-Dichloroethene	96.94	1.0	U	1.0	0.19
540-59-0	1,2-Dichloroethene, Total	96.94	2.0	U	2.0	0.56
67-66-3	Chloroform	119.38	2.0		1.0	0.26
109-99-9	Tetrahydrofuran	72.11	25	U	25	13
71-55-6	1,1,1-Trichloroethane	133.41	1.0	U	1.0	0.34
110-82-7	Cyclohexane	84.16	1.0	U	1.0	0.32
56-23-5	Carbon tetrachloride	153.81	0.20	U	0.20	0.12
540-84-1	2,2,4-Trimethylpentane	114.23	1.0	U	1.0	0.44
71-43-2	Benzene	78.11	0.41	J	1.0	0.36
107-06-2	1,2-Dichloroethane	98.96	1.0	U	1.0	0.32

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-103 (AS) Lab Sample ID: 200-42918-5

Matrix: Air Lab File ID: 29983-13.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 22:39

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	2.1		1.0	0.70
79-01-6	Trichloroethene	131.39	0.37		0.20	0.15
80-62-6	Methyl methacrylate	100.12	2.5	U	2.5	1.1
78-87-5	1,2-Dichloropropane	112.99	1.0	U	1.0	0.60
123-91-1	1,4-Dioxane	88.11	25	U	25	6.5
75-27-4	Bromodichloromethane	163.83	1.0	U	1.0	0.47
10061-01-5	cis-1,3-Dichloropropene	110.97	1.0	U	1.0	0.49
108-10-1	methyl isobutyl ketone	100.16	2.5	U	2.5	1.8
108-88-3	Toluene	92.14	8.4		1.0	0.35
10061-02-6	trans-1,3-Dichloropropene	110.97	1.0	U	1.0	0.60
79-00-5	1,1,2-Trichloroethane	133.41	1.7		1.0	0.39
127-18-4	Tetrachloroethene	165.83	25		0.20	0.15
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.5	U	2.5	2.1
124-48-1	Dibromochloromethane	208.29	1.0	U	1.0	0.36
106-93-4	1,2-Dibromoethane	187.87	1.0	U	1.0	0.35
108-90-7	Chlorobenzene	112.56	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	106.17	12		1.0	0.37
179601-23-1	m,p-Xylene	106.17	24		2.5	0.35
95-47-6	Xylene, o-	106.17	7.8		1.0	0.36
1330-20-7	Xylene (total)	106.17	32		3.5	0.71
100-42-5	Styrene	104.15	1.0	U	1.0	0.43
75-25-2	Bromoform	252.75	1.0	U	1.0	0.43
98-82-8	Cumene	120.19	1.0	U	1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.0	U	1.0	0.38
103-65-1	n-Propylbenzene	120.19	1.0	U	1.0	0.35
622-96-8	4-Ethyltoluene	120.20	1.0	U	1.0	0.35
108-67-8	1,3,5-Trimethylbenzene	120.20	1.0	U	1.0	0.29
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.36
98-06-6	tert-Butylbenzene	134.22	1.0	U	1.0	0.29
95-63-6	1,2,4-Trimethylbenzene	120.20	1.0	U	1.0	0.40
135-98-8	sec-Butylbenzene	134.22	1.0	U	1.0	0.33
99-87-6	4-Isopropyltoluene	134.22	1.0	U	1.0	0.38
541-73-1	1,3-Dichlorobenzene	147.00	1.0	U	1.0	0.41
106-46-7	1,4-Dichlorobenzene	147.00	1.0	U	1.0	0.33

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-103 (AS) Lab Sample ID: 200-42918-5

Matrix: Air Lab File ID: 29983-13.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 22:39

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.60
104-51-8	n-Butylbenzene	134.22	1.0	U	1.0	0.40
95-50-1	1,2-Dichlorobenzene	147.00	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	181.45	2.5	U	2.5	1.2
87-68-3	Hexachlorobutadiene	260.76	1.0	U	1.0	0.41
91-20-3	Naphthalene	128.17	2.5	U	2.5	1.6

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-103 (AS) Lab Sample ID: 200-42918-5

Matrix: Air Lab File ID: 29983-13.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 22:39

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	12	U	12	4.9
75-45-6	Freon 22	86.47	8.8	U	8.8	4.6
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	7.0	U	7.0	2.4
74-87-3	Chloromethane	50.49	5.2	U	5.2	2.6
106-97-8	n-Butane	58.12	31		5.9	3.7
75-01-4	Vinyl chloride	62.50	2.6	U	2.6	0.52
106-99-0	1,3-Butadiene	54.09	2.2	U	2.2	0.72
74-83-9	Bromomethane	94.94	3.9	U	3.9	1.2
75-00-3	Chloroethane	64.52	6.6	U	6.6	2.8
593-60-2	Bromoethene(Vinyl Bromide)	106.96	4.4	U	4.4	1.2
75-69-4	Trichlorofluoromethane	137.37	5.6	U	5.6	1.7
76-13-1	Freon TF	187.38	7.7	U	7.7	1.2
75-35-4	1,1-Dichloroethene	96.94	4.0	U	4.0	0.67
67-64-1	Acetone	58.08	69		59	31
67-63-0	Isopropyl alcohol	60.10	61	U	61	22
75-15-0	Carbon disulfide	76.14	7.8	U	7.8	1.9
107-05-1	3-Chloropropene	76.53	7.8	U	7.8	4.2
75-09-2	Methylene Chloride	84.93	8.7	U	8.7	3.5
75-65-0	tert-Butyl alcohol	74.12	110		76	23
1634-04-4	Methyl tert-butyl ether	88.15	3.6	U	3.6	1.1
156-60-5	trans-1,2-Dichloroethene	96.94	4.0	U	4.0	1.5
110-54-3	n-Hexane	86.17	4.1		3.5	2.8
75-34-3	1,1-Dichloroethane	98.96	4.0	U	4.0	0.53
78-93-3	Methyl Ethyl Ketone	72.11	11		7.4	2.9
156-59-2	cis-1,2-Dichloroethene	96.94	4.0	U	4.0	0.73
540-59-0	1,2-Dichloroethene, Total	96.94	7.9	U	7.9	2.2
67-66-3	Chloroform	119.38	9.5		4.9	1.3
109-99-9	Tetrahydrofuran	72.11	74	U	74	38
71-55-6	1,1,1-Trichloroethane	133.41	5.5	U	5.5	1.9
110-82-7	Cyclohexane	84.16	3.4	U	3.4	1.1
56-23-5	Carbon tetrachloride	153.81	1.3	U	1.3	0.75
540-84-1	2,2,4-Trimethylpentane	114.23	4.7	U	4.7	2.1
71-43-2	Benzene	78.11	1.3	J	3.2	1.1
107-06-2	1,2-Dichloroethane	98.96	4.0	U	4.0	1.3

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-103 (AS) Lab Sample ID: 200-42918-5

Matrix: Air Lab File ID: 29983-13.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 22:39

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	8.5		4.1	2.9
79-01-6	Trichloroethene	131.39	2.0		1.1	0.81
80-62-6	Methyl methacrylate	100.12	10	U	10	4.5
78-87-5	1,2-Dichloropropane	112.99	4.6	U	4.6	2.8
123-91-1	1,4-Dioxane	88.11	90	U	90	23
75-27-4	Bromodichloromethane	163.83	6.7	U	6.7	3.1
10061-01-5	cis-1,3-Dichloropropene	110.97	4.5	U	4.5	2.2
108-10-1	methyl isobutyl ketone	100.16	10	U	10	7.4
108-88-3	Toluene	92.14	32		3.8	1.3
10061-02-6	trans-1,3-Dichloropropene	110.97	4.5	U	4.5	2.7
79-00-5	1,1,2-Trichloroethane	133.41	9.2		5.5	2.1
127-18-4	Tetrachloroethene	165.83	170		1.4	0.98
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	10	U	10	8.6
124-48-1	Dibromochloromethane	208.29	8.5	U	8.5	3.0
106-93-4	1,2-Dibromoethane	187.87	7.7	U	7.7	2.7
108-90-7	Chlorobenzene	112.56	4.6	U	4.6	0.92
100-41-4	Ethylbenzene	106.17	52		4.3	1.6
179601-23-1	m,p-Xylene	106.17	100		11	1.5
95-47-6	Xylene, o-	106.17	34		4.3	1.5
1330-20-7	Xylene (total)	106.17	140		15	3.1
100-42-5	Styrene	104.15	4.3	U	4.3	1.8
75-25-2	Bromoform	252.75	10	U	10	4.4
98-82-8	Cumene	120.19	4.9	U	4.9	1.5
79-34-5	1,1,2,2-Tetrachloroethane	167.85	6.9	U	6.9	2.6
103-65-1	n-Propylbenzene	120.19	4.9	U	4.9	1.7
622-96-8	4-Ethyltoluene	120.20	4.9	U	4.9	1.7
108-67-8	1,3,5-Trimethylbenzene	120.20	4.9	U	4.9	1.4
95-49-8	2-Chlorotoluene	126.59	5.2	U	5.2	1.8
98-06-6	tert-Butylbenzene	134.22	5.5	U	5.5	1.6
95-63-6	1,2,4-Trimethylbenzene	120.20	4.9	U	4.9	2.0
135-98-8	sec-Butylbenzene	134.22	5.5	U	5.5	1.8
99-87-6	4-Isopropyltoluene	134.22	5.5	U	5.5	2.1
541-73-1	1,3-Dichlorobenzene	147.00	6.0	U	6.0	2.5
106-46-7	1,4-Dichlorobenzene	147.00	6.0	U	6.0	2.0

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-103 (AS) Lab Sample ID: 200-42918-5

Matrix: Air Lab File ID: 29983-13.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 22:39

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	5.2	U	5.2	3.1
104-51-8	n-Butylbenzene	134.22	5.5	U	5.5	2.2
95-50-1	1,2-Dichlorobenzene	147.00	6.0	U	6.0	2.1
120-82-1	1,2,4-Trichlorobenzene	181.45	19	U	19	8.9
87-68-3	Hexachlorobutadiene	260.76	11	U	11	4.4
91-20-3	Naphthalene	128.17	13	U	13	8.1

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d
Lims ID: 200-42918-A-5
Client ID: GC-SV-103 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 22:39:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 5.0000
Sample Info: 200-0029983-013
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 19:04:12 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 19:04:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	5.144	5.138	-0.005	98	7044	0.0972	
3 Chlorodifluoromethane	51		5.235				ND	U
4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
5 Chloromethane	50	5.759	5.759	0.011	1	1062	0.0442	M
6 Butane	43	6.010	6.016	-0.016	98	105175	2.64	
7 Vinyl chloride	62		6.080				ND	
8 Butadiene	54		6.176				ND	
9 Bromomethane	94		6.979				ND	
11 Chloroethane	64		7.225				ND	
13 Vinyl bromide	106		7.631				ND	
14 Trichlorofluoromethane	101	7.706	7.706	-0.022	93	2574	0.0439	M
20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	
21 1,1-Dichloroethene	96		8.803				ND	
22 Acetone	43	8.979	9.022	-0.022	97	162378	5.82	
23 Carbon disulfide	76	9.172	9.174	-0.021	24	1093	0.0222	
24 Isopropyl alcohol	45	9.188	9.204	-0.016	100	15014	0.5210	
25 3-Chloro-1-propene	41		9.493				ND	
27 Methylene Chloride	49	9.739	9.734	-0.021	88	1488	0.0808	
28 2-Methyl-2-propanol	59	9.873	9.867	-0.016	94	287447	7.01	
29 Methyl tert-butyl ether	73		10.092				ND	
30 trans-1,2-Dichloroethene	61	10.130	10.134	-0.026	90	842	0.0333	
S 31 1,2-Dichloroethene, Total	61				0		0.0333	
33 Hexane	57	10.461	10.460	-0.022	87	6482	0.2316	
34 1,1-Dichloroethane	63		10.948				ND	
36 cis-1,2-Dichloroethene	96		11.949				ND	
37 2-Butanone (MEK)	72	11.959	11.944	-0.006	99	7458	0.7446	
39 Tetrahydrofuran	42	12.366	12.352	-0.005	42	12633	0.6329	
* 40 Chlorobromomethane	128	12.360	12.377	-0.016	84	139594	10.0	
41 Chloroform	83	12.446	12.440	-0.021	96	16073	0.3910	
42 Cyclohexane	84	12.719	12.719	-0.005	74	849	0.0296	M
43 1,1,1-Trichloroethane	97		12.740				ND	
44 Carbon tetrachloride	117	12.965	12.945	0.000	37	404	0.008562	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Isooctane	57	13.302	13.298	-0.016	66	2960	0.0304	
46 Benzene	78	13.372	13.372	-0.010	57	5290	0.0811	M
47 1,2-Dichloroethane	62		13.532				ND	MU
48 n-Heptane	43	13.618	13.607	-0.016	87	13580	0.4138	
* 49 1,4-Difluorobenzene	114	14.062	14.078	-0.016	94	734582	10.0	
51 Trichloroethene	95	14.484	14.484	-0.016	35	2177	0.0743	M
53 1,2-Dichloropropane	63		14.998				ND	
55 Methyl methacrylate	69		15.078				ND	MU
56 1,4-Dioxane	88		15.164				ND	
58 Dichlorobromomethane	83		15.458				ND	MU
59 cis-1,3-Dichloropropene	75		16.282				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	U
63 Toluene	92	16.817	16.806	-0.005	92	84077	1.69	
64 trans-1,3-Dichloropropene	75		17.352				ND	
65 1,1,2-Trichloroethane	83	17.721	17.721	0.022	51	8116	0.3378	M
66 Tetrachloroethene	166	17.812	17.812	-0.005	97	253201	4.99	
67 2-Hexanone	43		18.090				ND	U
68 Chlorodibromomethane	129		18.427				ND	
69 Ethylene Dibromide	107		18.700				ND	
* 71 Chlorobenzene-d5	117	19.534	19.540	-0.006	86	698083	10.0	
72 Chlorobenzene	112		19.599				ND	U
73 Ethylbenzene	91	19.722	19.722	-0.005	98	273516	2.38	
75 m-Xylene & p-Xylene	106	19.957	19.957	-0.005	0	218382	4.83	
S 76 Xylenes, Total	106				0		6.40	
77 o-Xylene	106	20.733	20.738	-0.005	98	71274	1.56	
78 Styrene	104		20.781				ND	MU
79 Bromoform	173		21.171				ND	
80 Isopropylbenzene	105	21.337	21.337	-0.006	25	4654	0.0347	M
81 1,1,2,2-Tetrachloroethane	83		21.942				ND	U
82 N-Propylbenzene	91		22.011				ND	MU
85 4-Ethyltoluene	105		22.193				ND	U
86 2-Chlorotoluene	91		22.209				ND	
87 1,3,5-Trimethylbenzene	105		22.290				ND	MUa
89 tert-Butylbenzene	119		22.766				ND	
90 1,2,4-Trimethylbenzene	105		22.857				ND	U
91 sec-Butylbenzene	105		23.081				ND	U
92 4-Isopropyltoluene	119		23.279				ND	
93 1,3-Dichlorobenzene	146		23.327				ND	
94 1,4-Dichlorobenzene	146		23.466				ND	
95 Benzyl chloride	91		23.670				ND	U
96 n-Butylbenzene	91		23.878				ND	U
98 1,2-Dichlorobenzene	146		24.028				ND	
100 1,2,4-Trichlorobenzene	180		26.703				ND	
101 Hexachlorobutadiene	225		26.896				ND	
102 Naphthalene	128		27.238				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

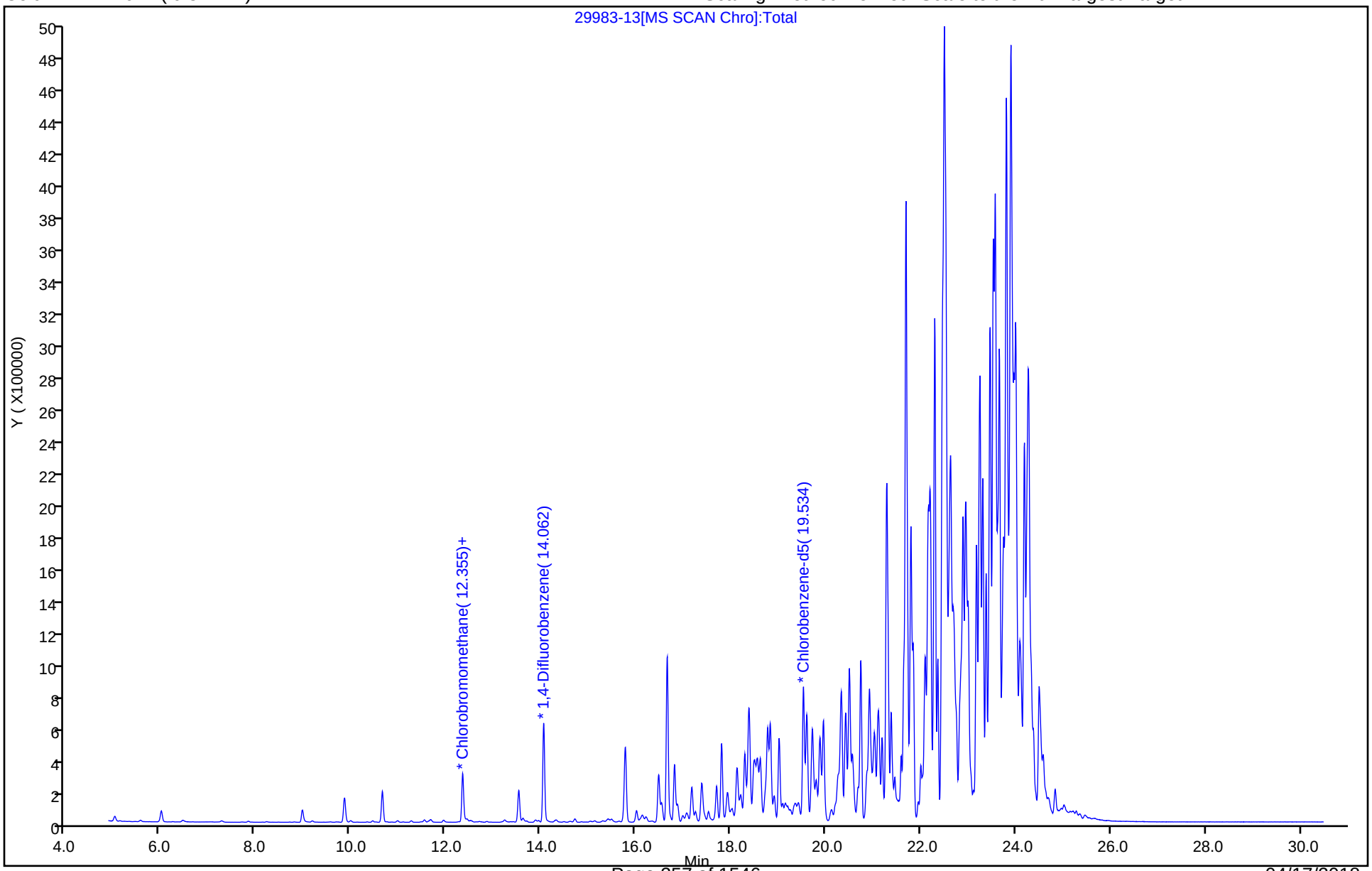
Report Date: 09-Apr-2018 19:04:12 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d

Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5	Worklist Smp#:	13
Client ID:	GC-SV-103 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

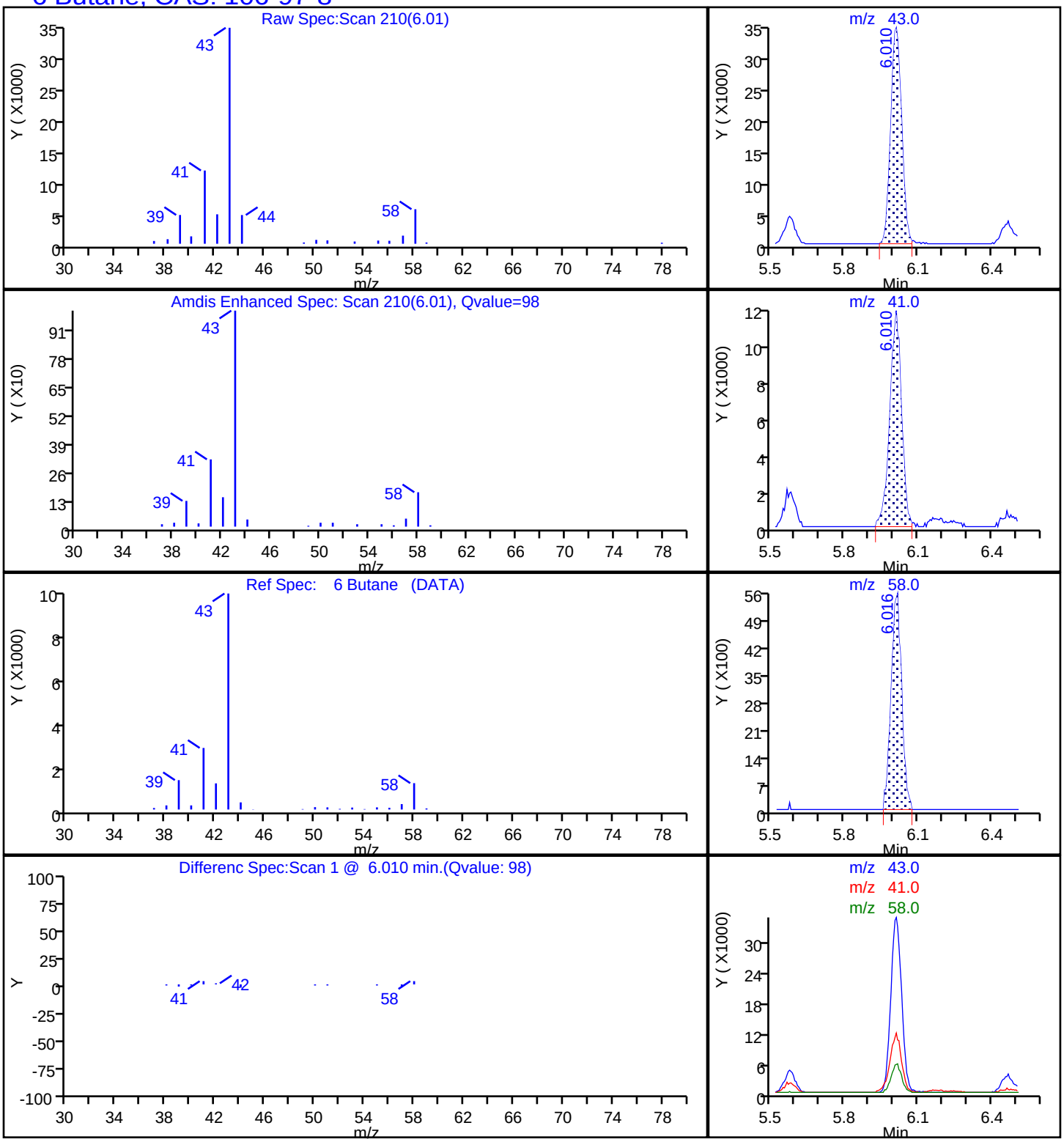


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d

Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

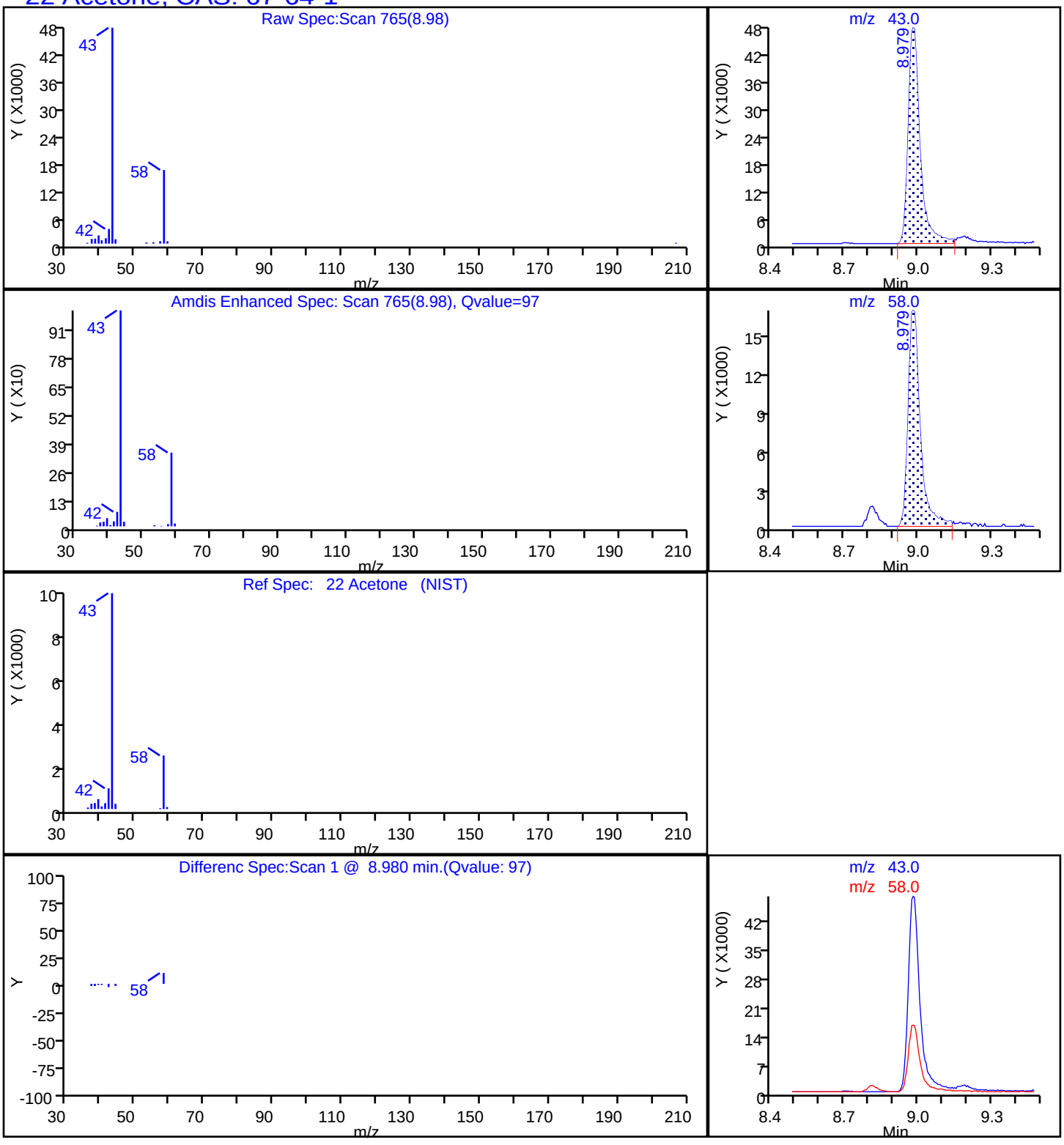
6 Butane, CAS: 106-97-8



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

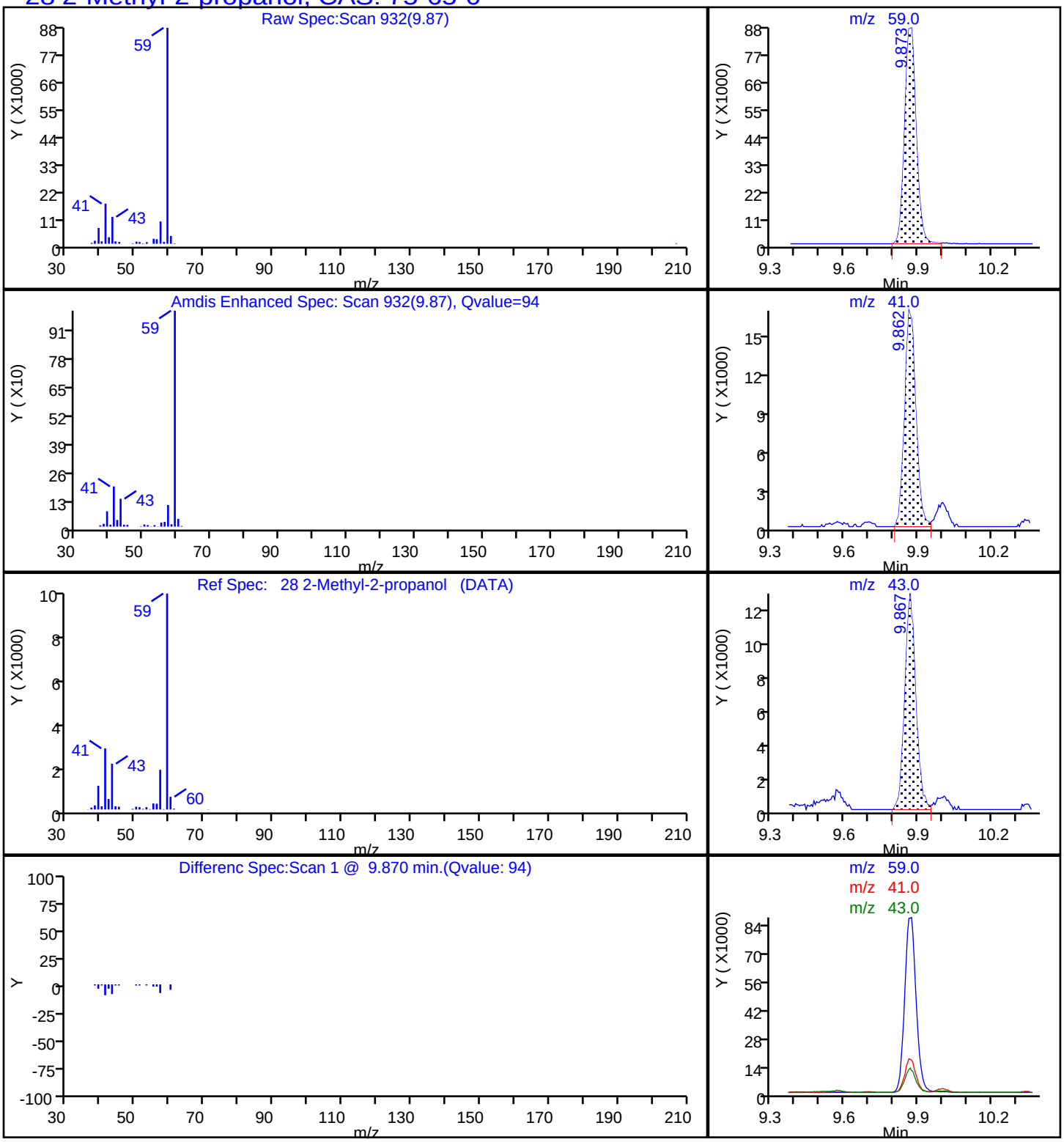
22 Acetone, CAS: 67-64-1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

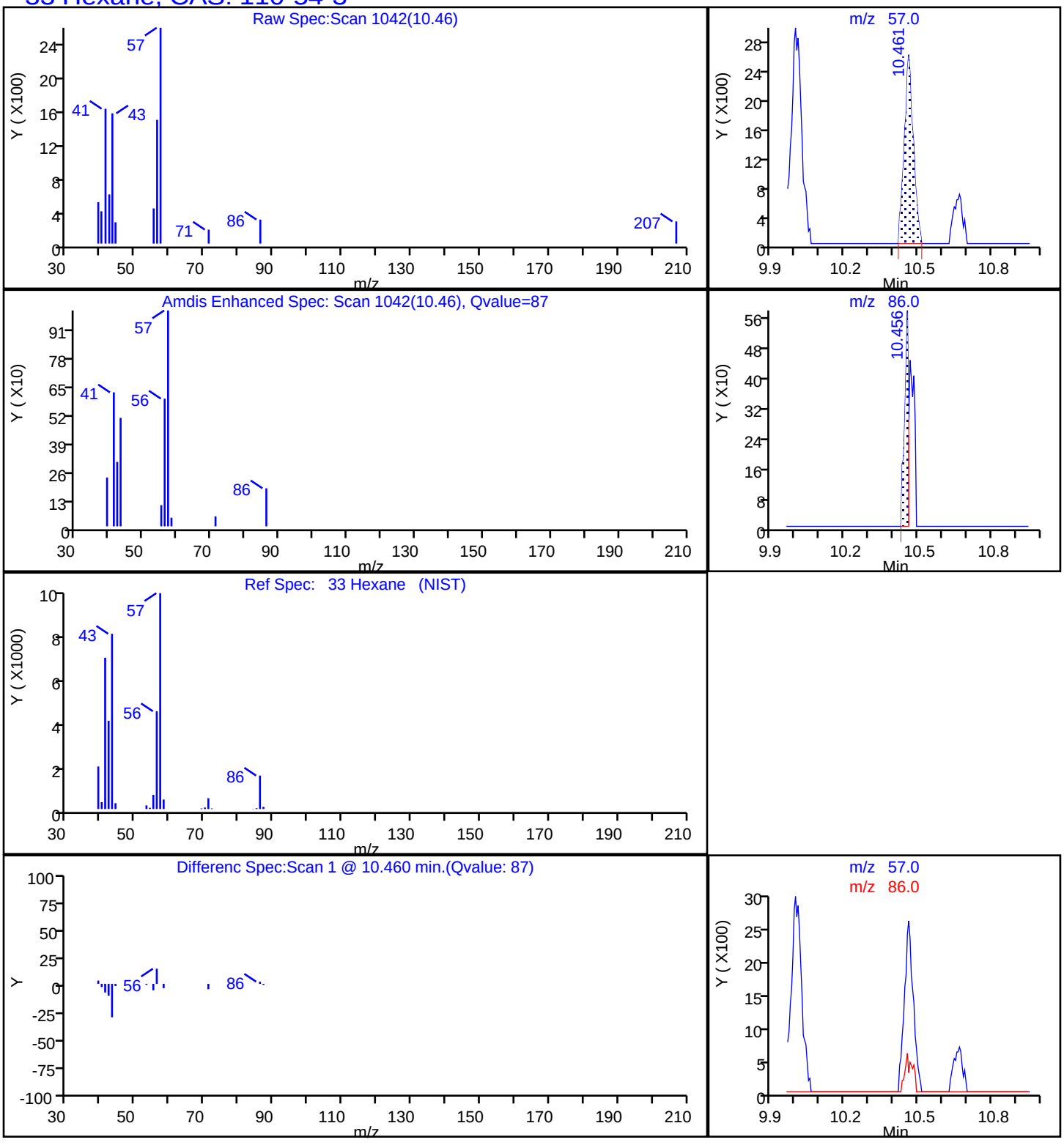
28 2-Methyl-2-propanol, CAS: 75-65-0



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

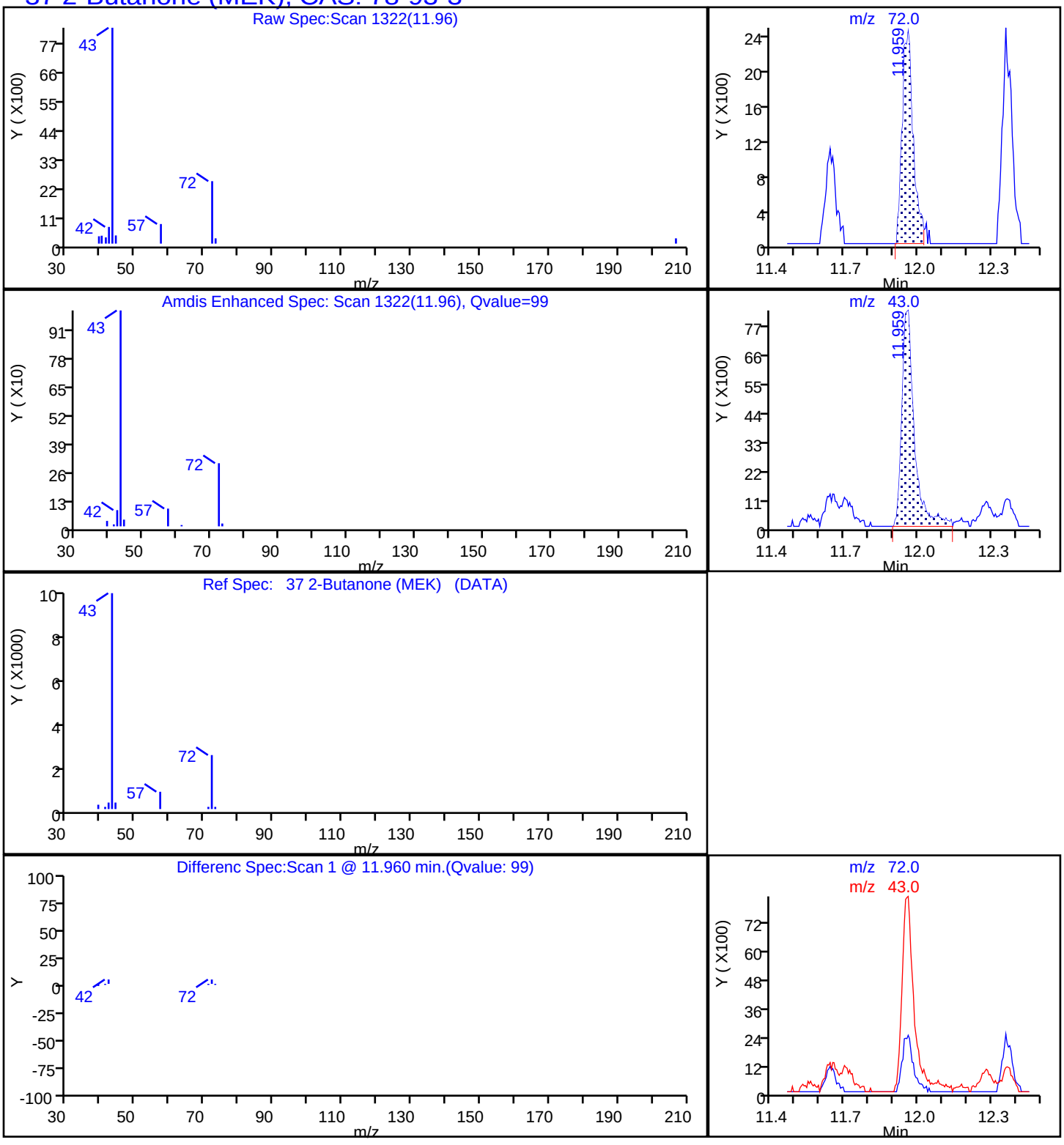
33 Hexane, CAS: 110-54-3



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 2-Butanone (MEK), CAS: 78-93-3

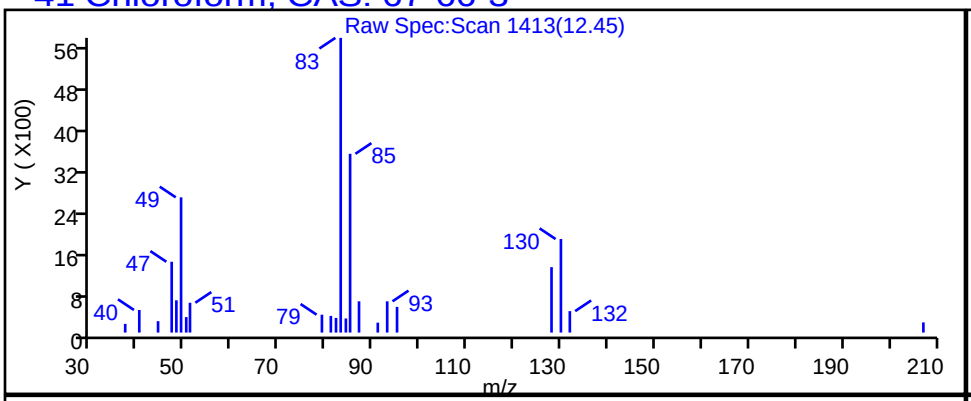


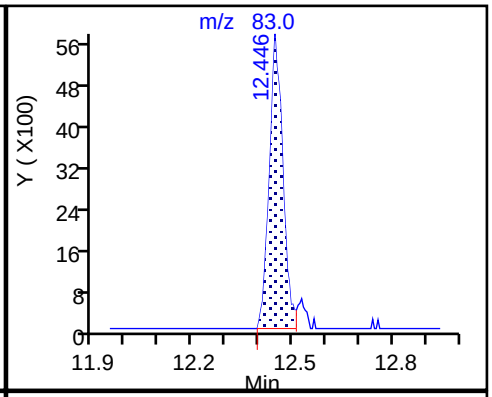
TestAmerica Burlington

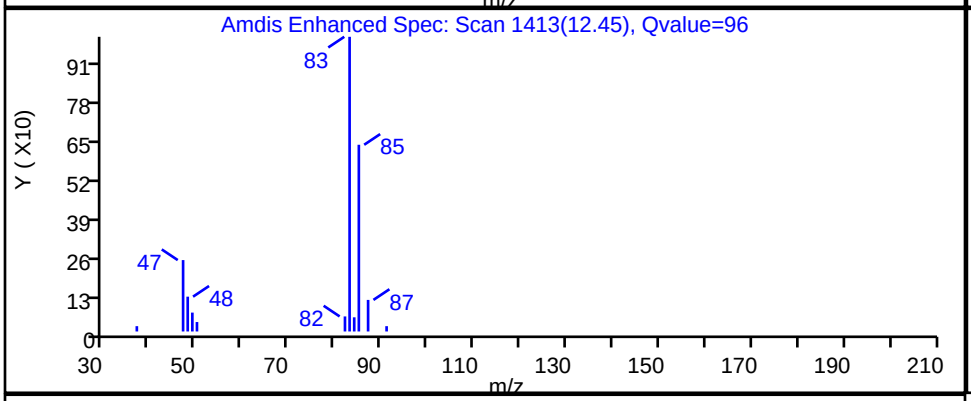
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d

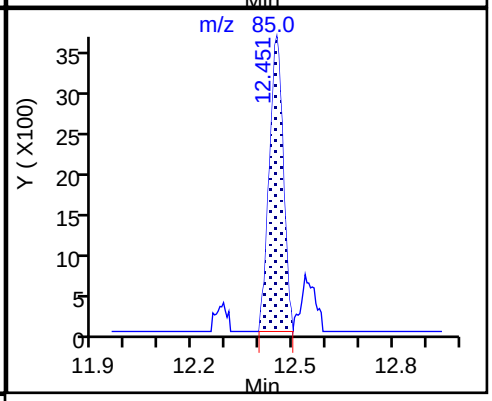
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

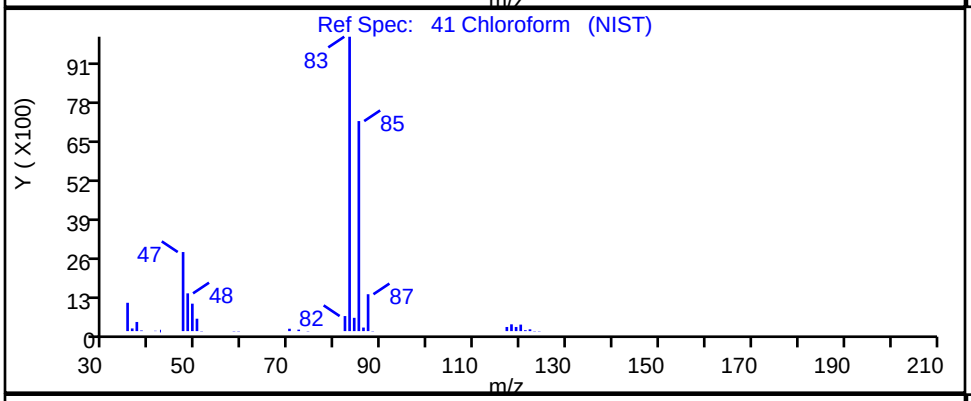
41 Chloroform, CAS: 67-66-3

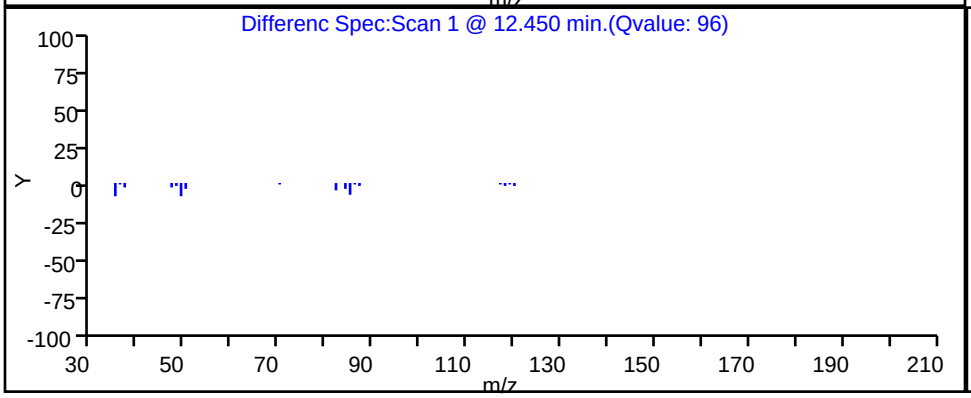


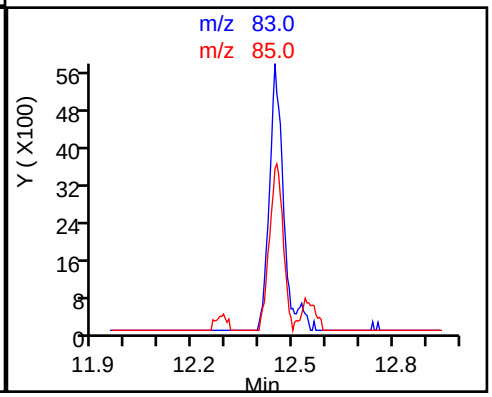








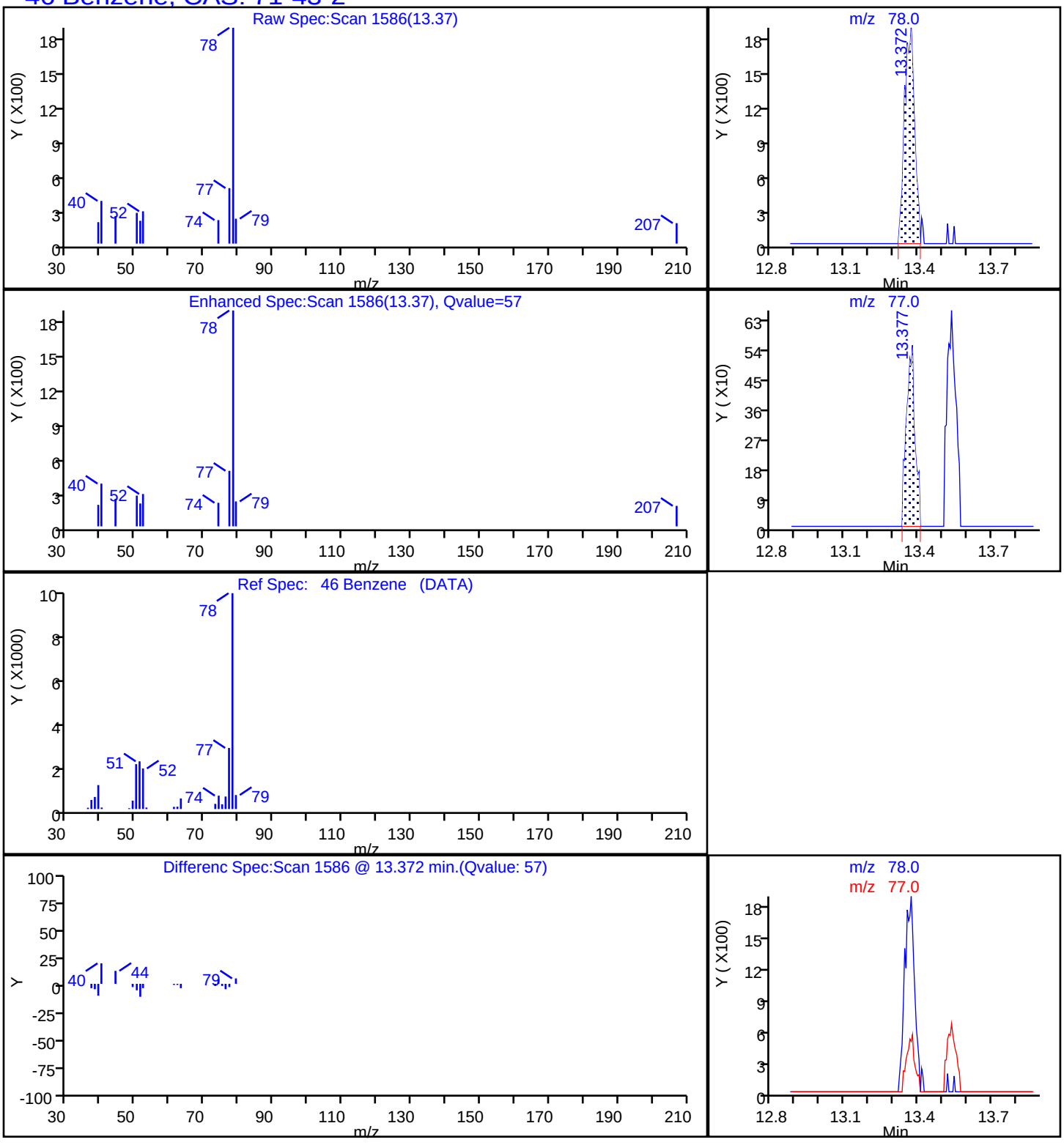




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

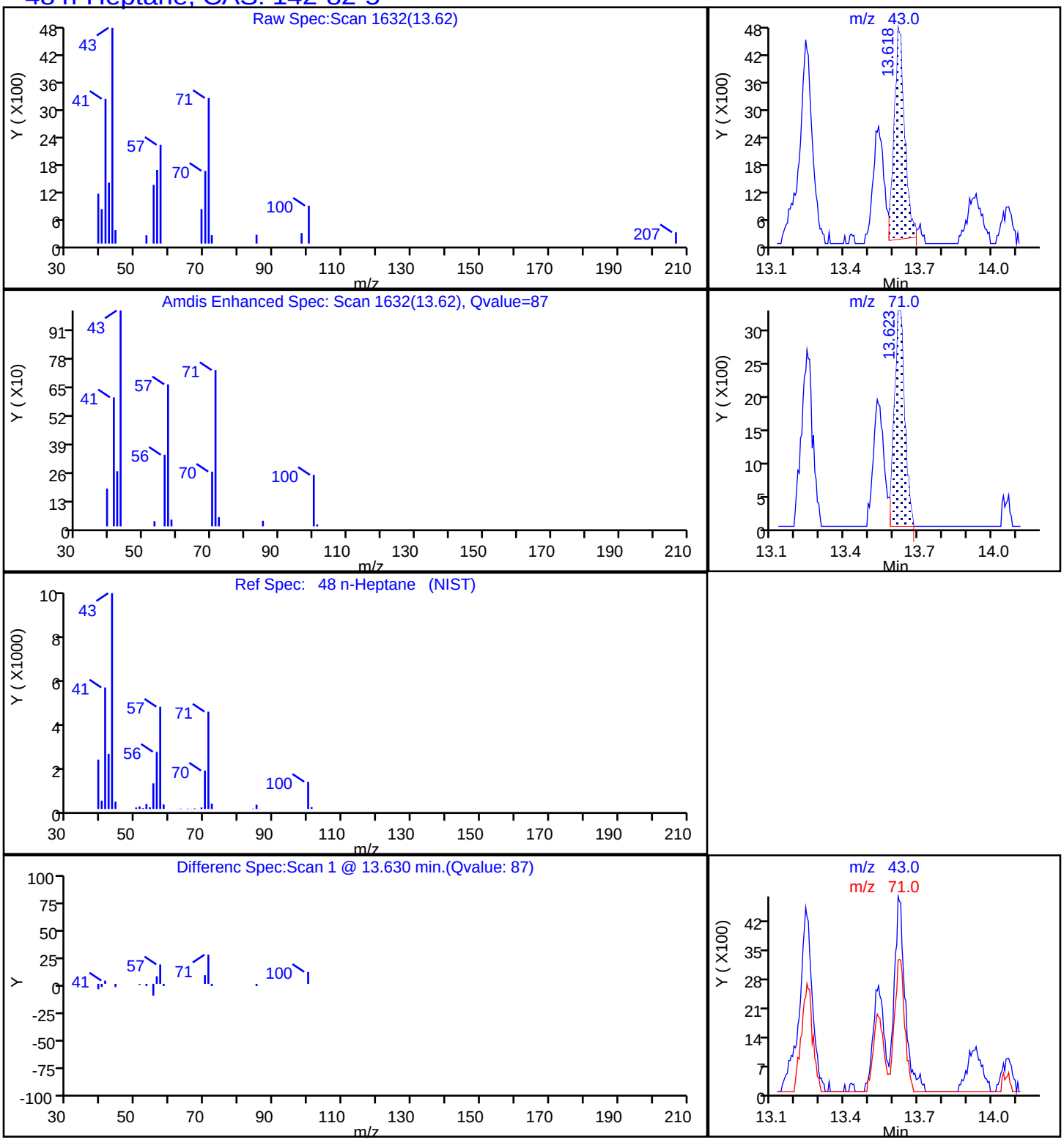
46 Benzene, CAS: 71-43-2



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

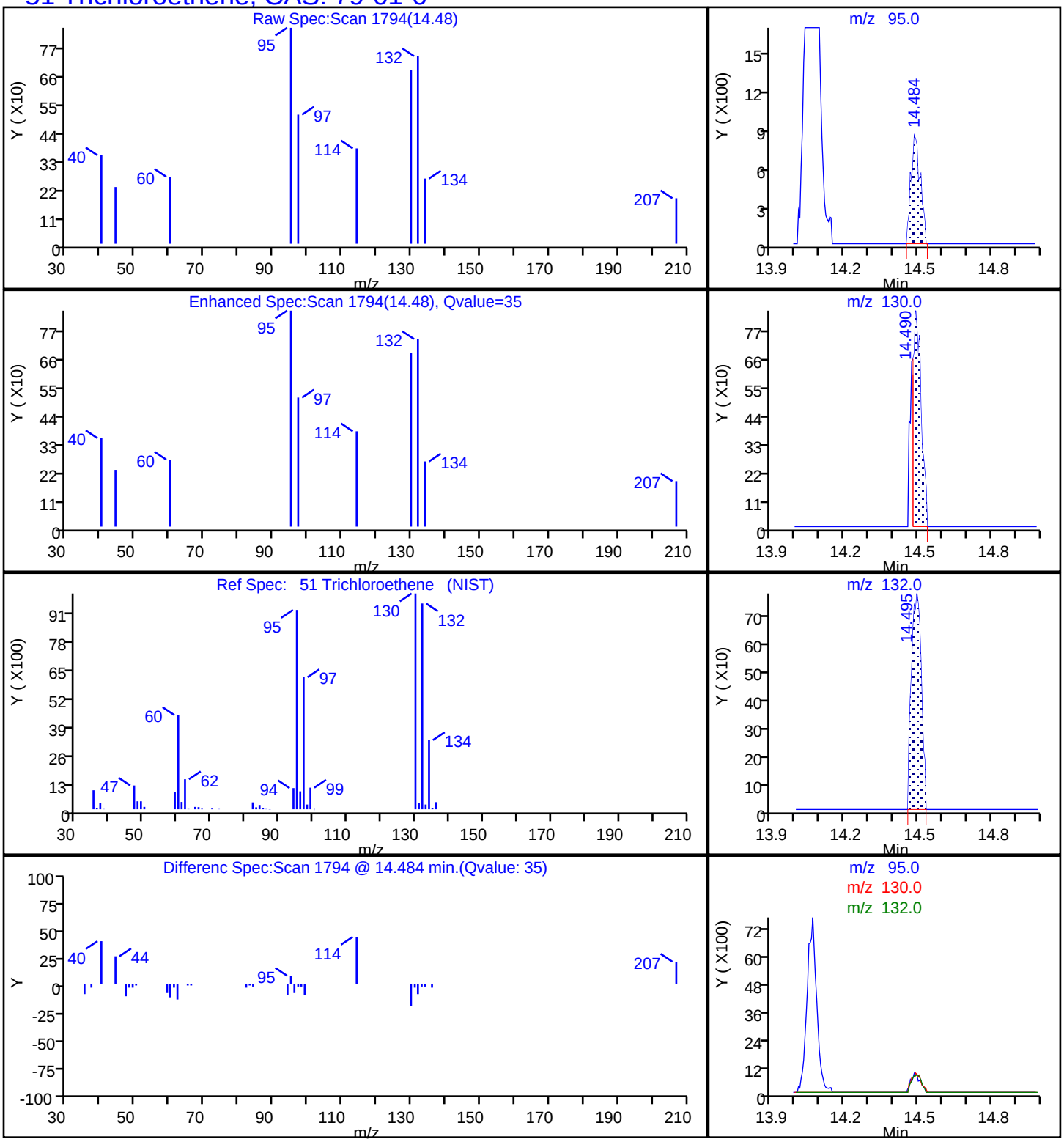
48 n-Heptane, CAS: 142-82-5



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

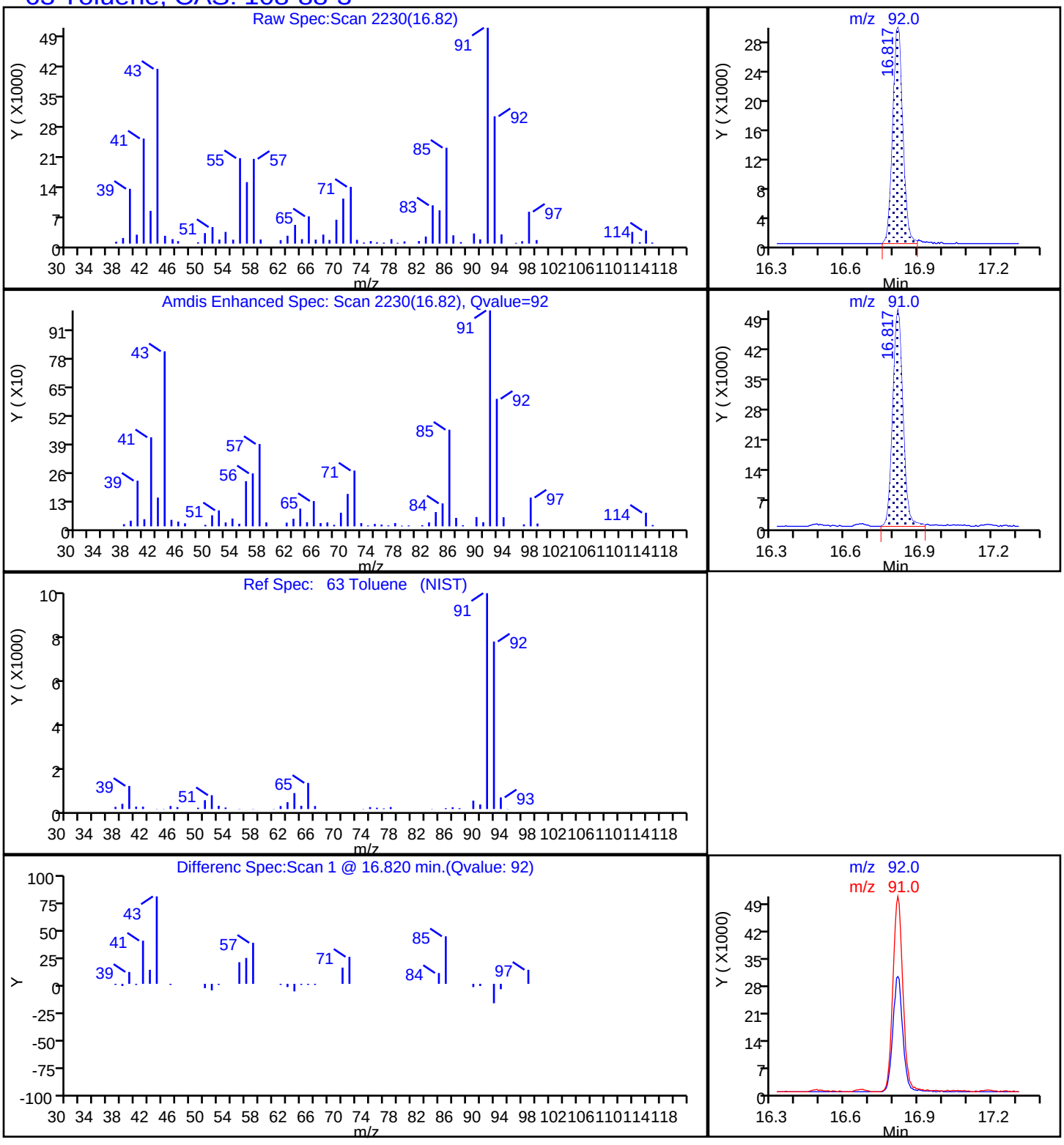
51 Trichloroethene, CAS: 79-01-6



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

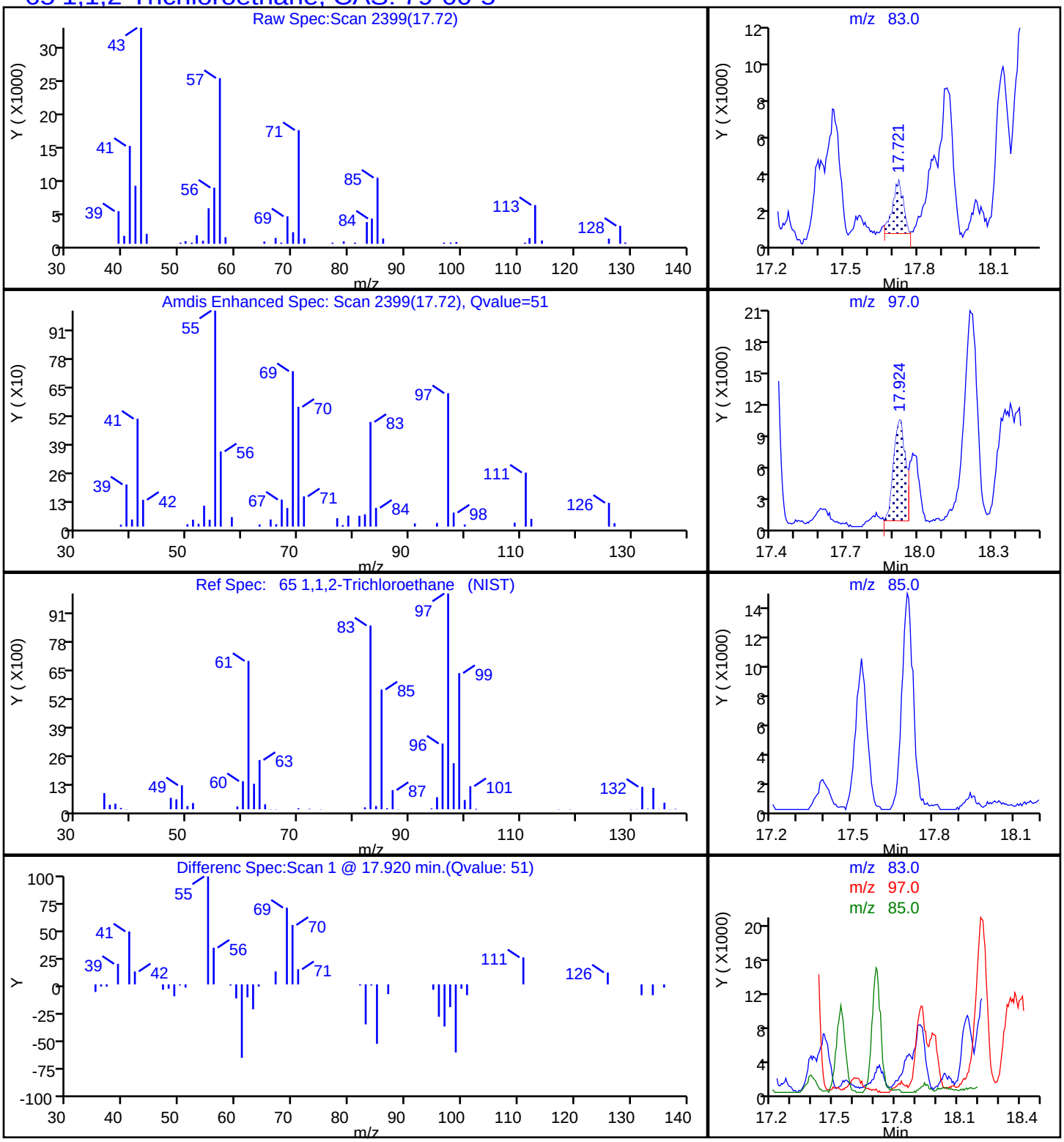
63 Toluene, CAS: 108-88-3



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 1,1,2-Trichloroethane, CAS: 79-00-5



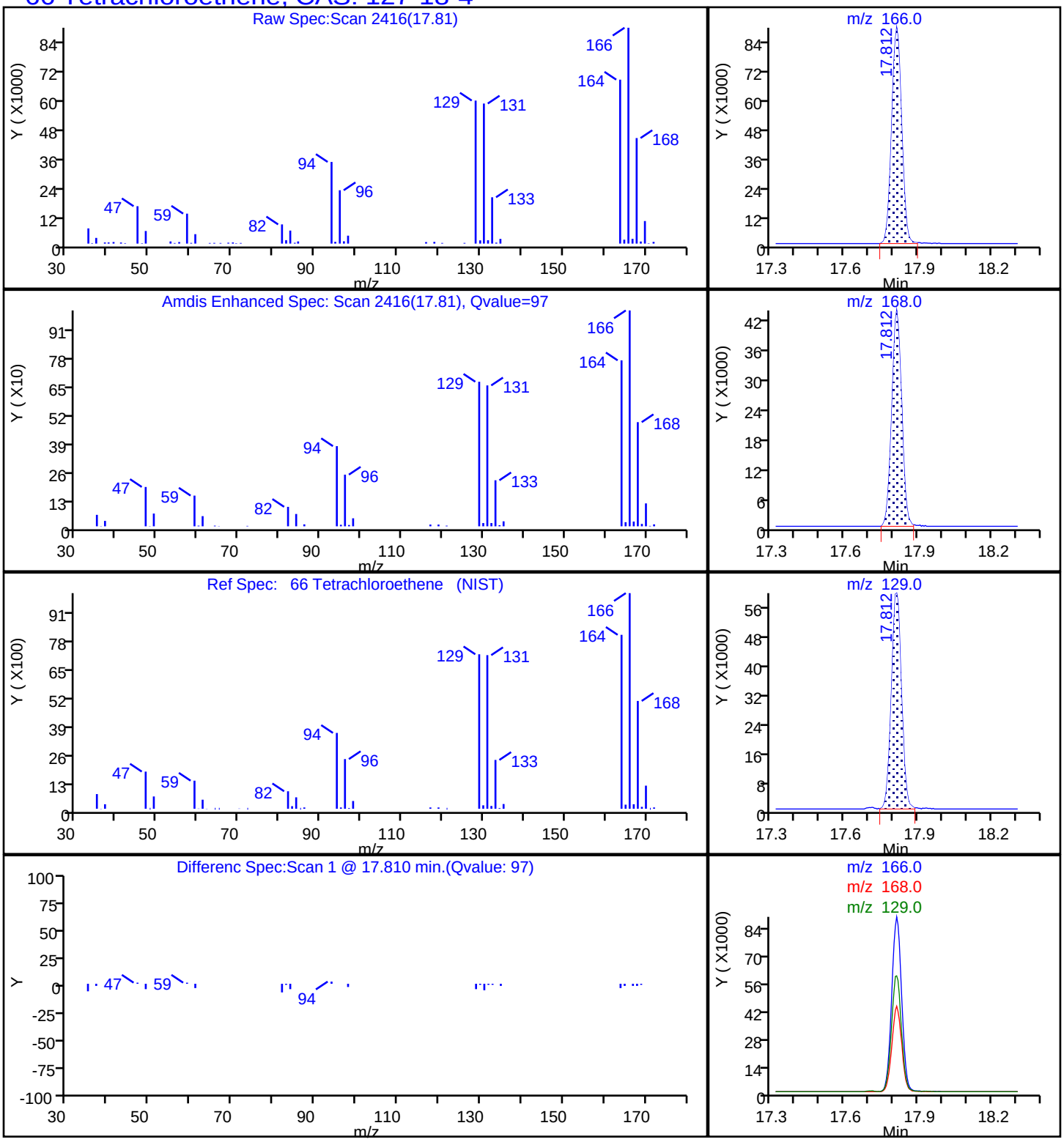
Report Date: 09-Apr-2018 19:04:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d

Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

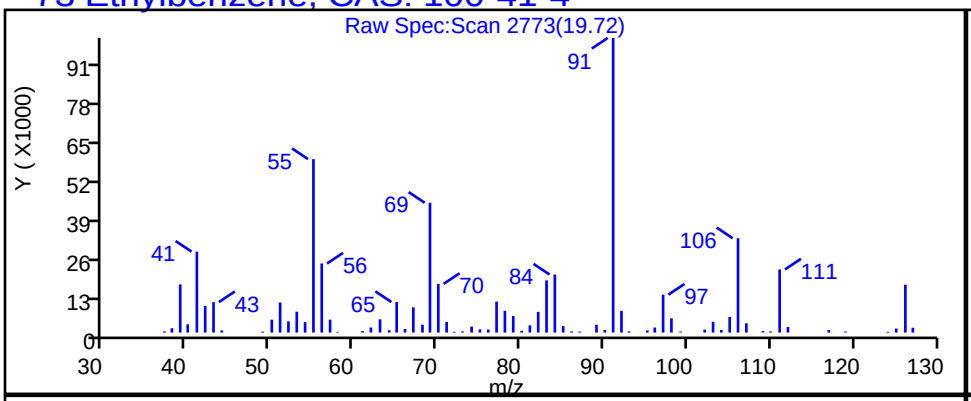
66 Tetrachloroethene, CAS: 127-18-4

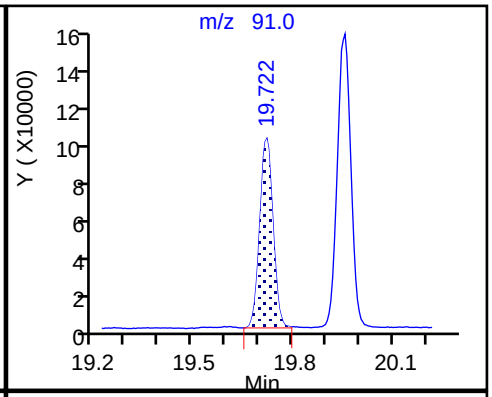


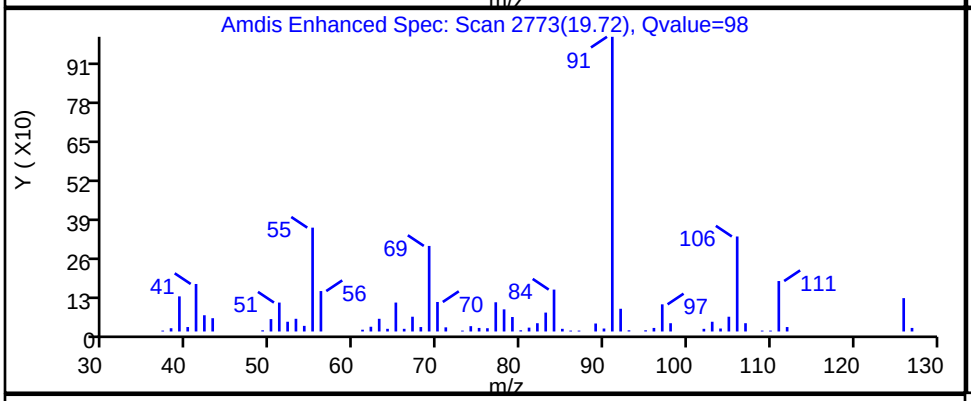
TestAmerica Burlington

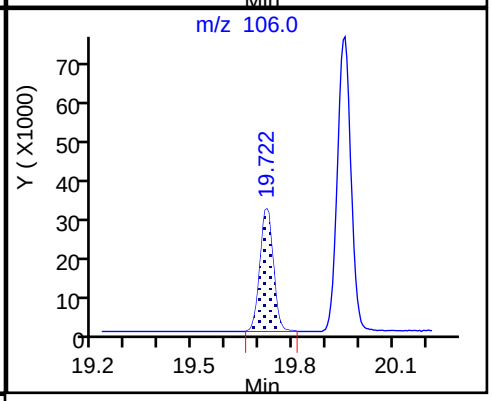
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

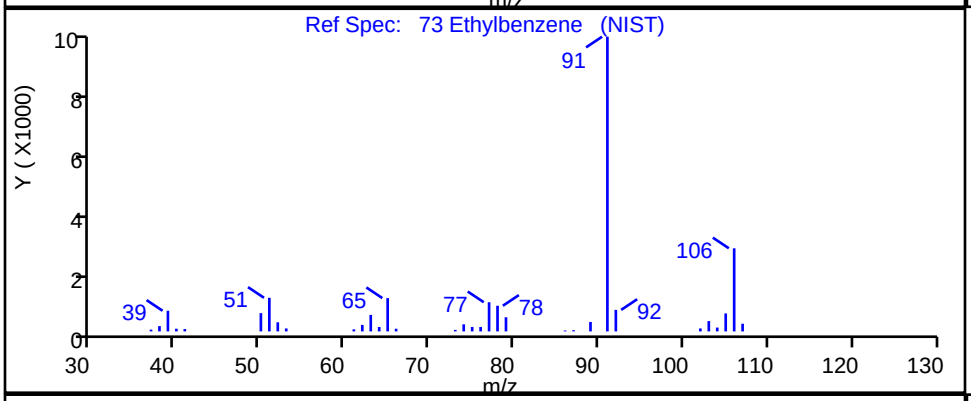
73 Ethylbenzene, CAS: 100-41-4

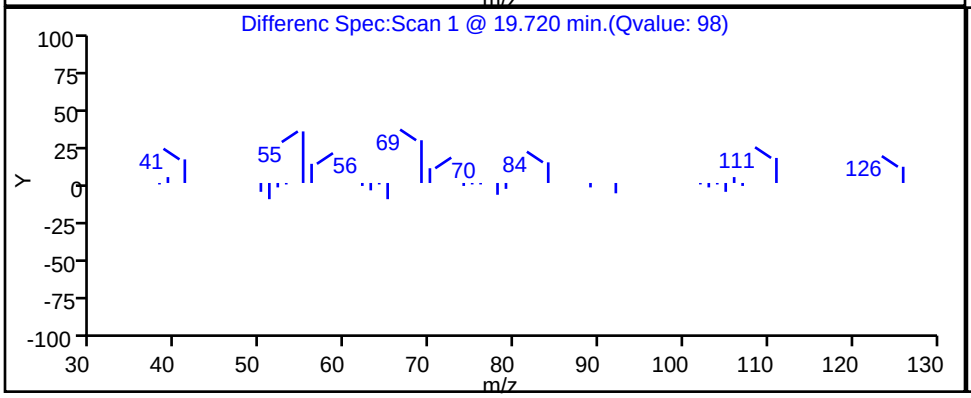


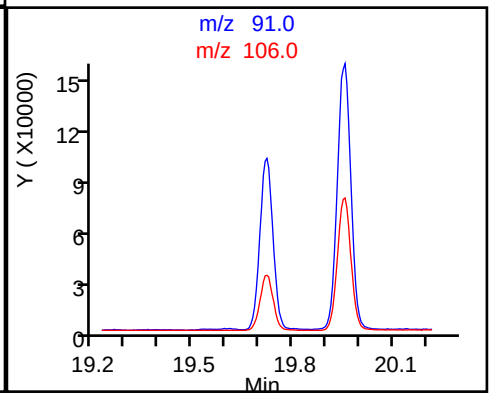












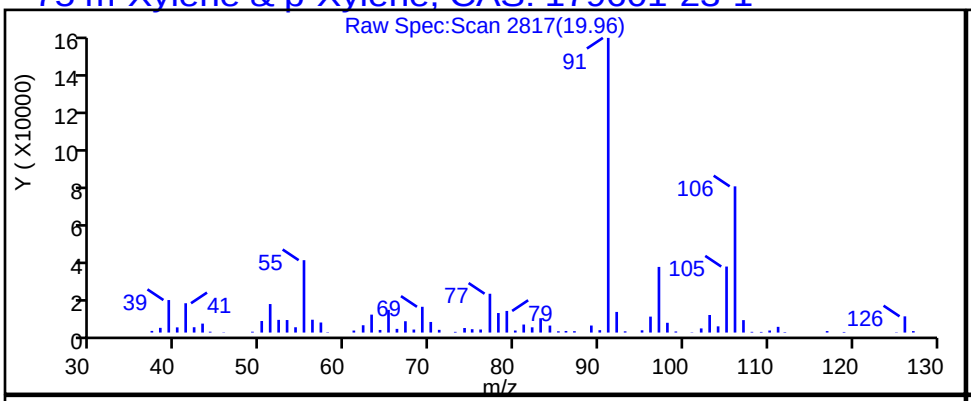
Report Date: 09-Apr-2018 19:04:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

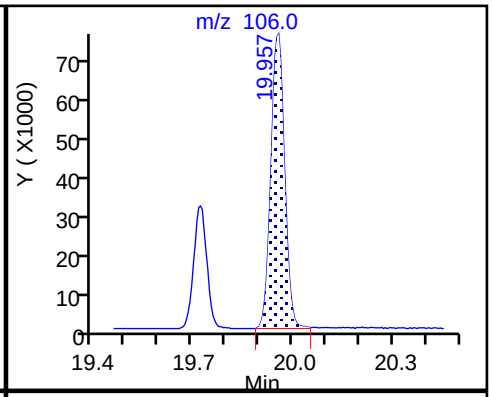
TestAmerica Burlington

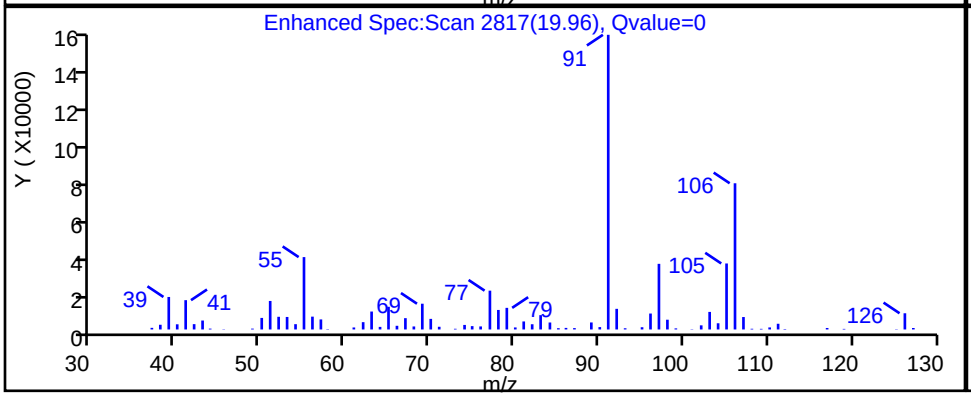
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d

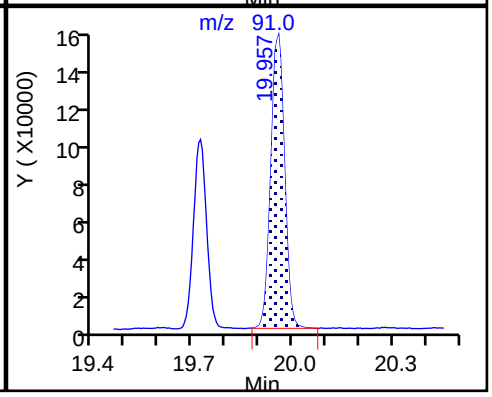
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

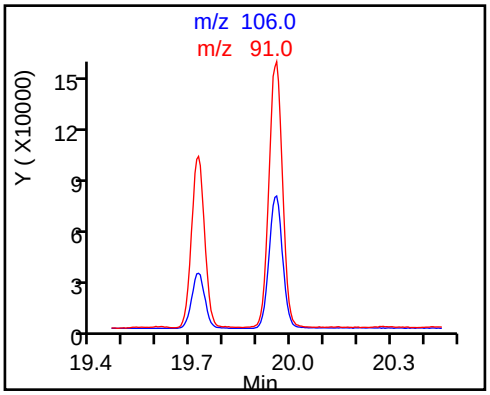
75 m-Xylene & p-Xylene, CAS: 179601-23-1







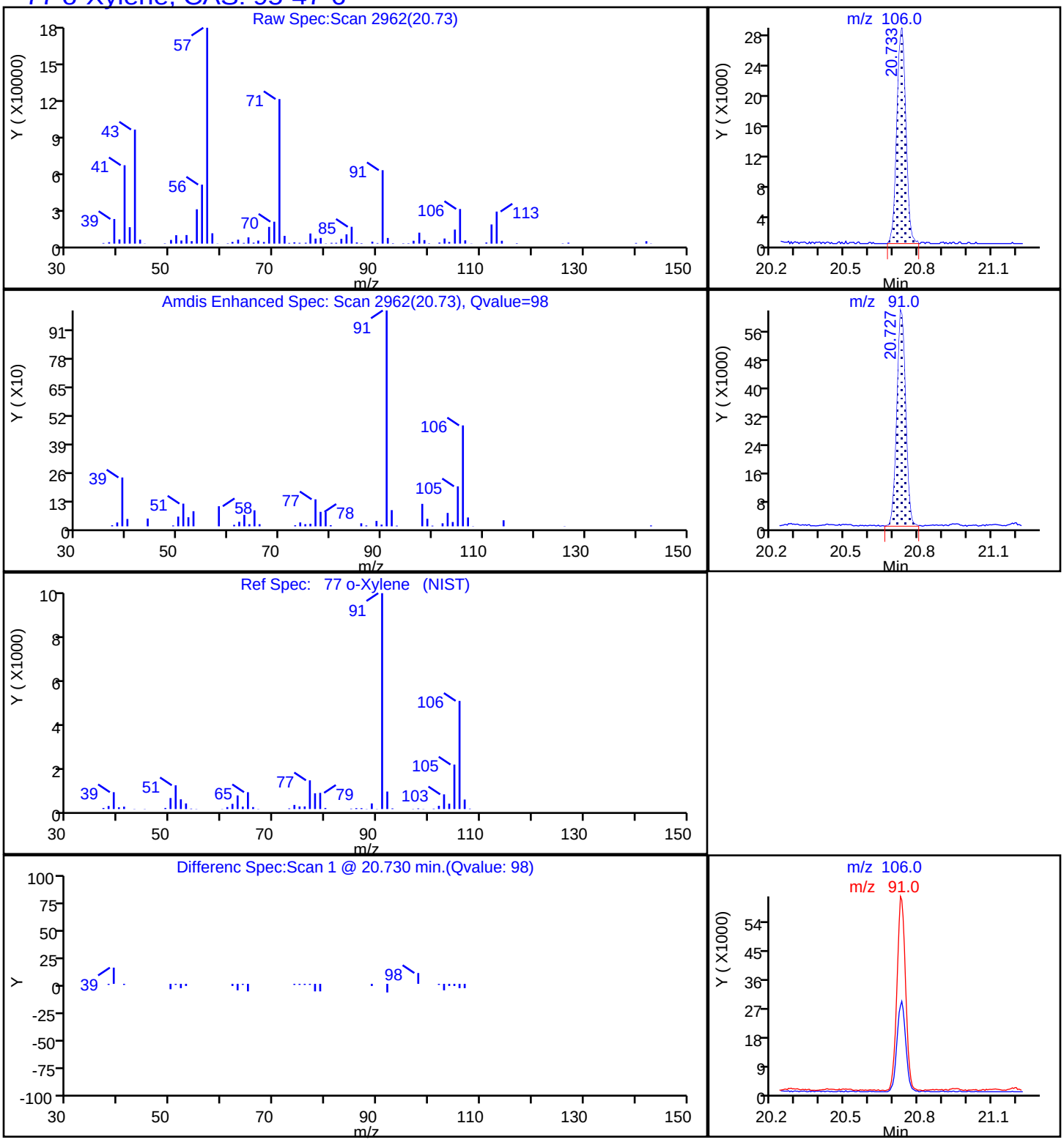




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

77 o-Xylene, CAS: 95-47-6



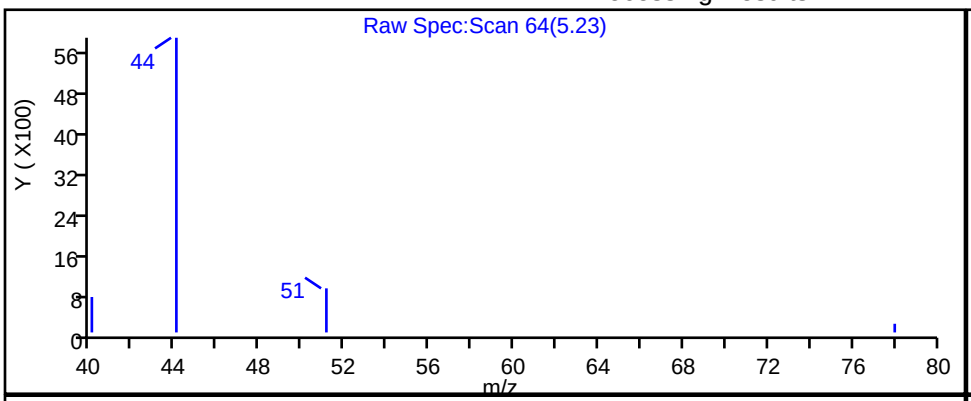
User Disabled Compound Report

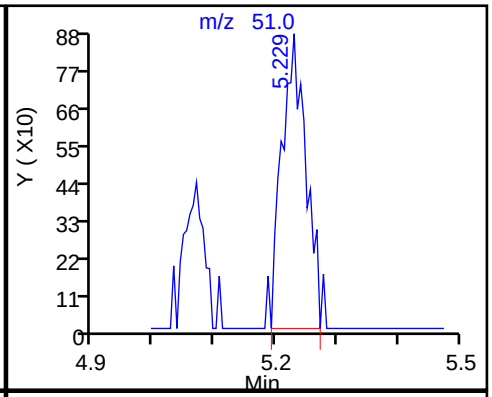
TestAmerica Burlington

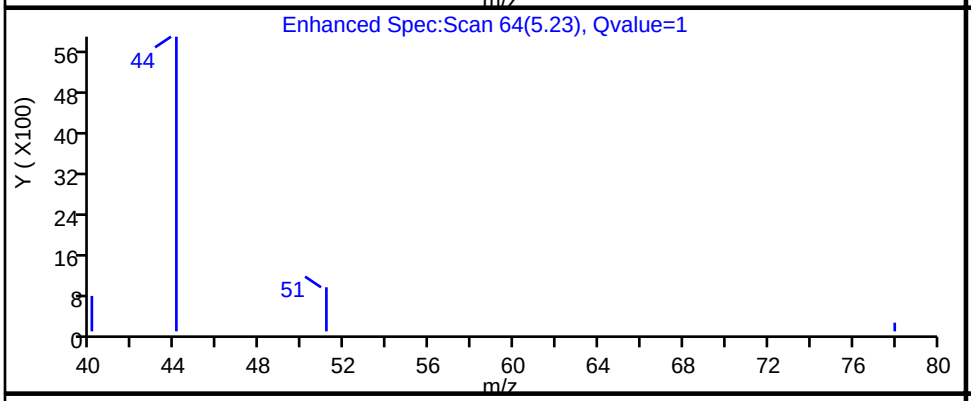
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

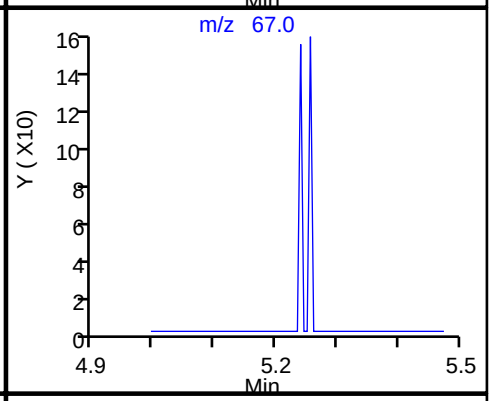
3 Chlorodifluoromethane, CAS: 75-45-6

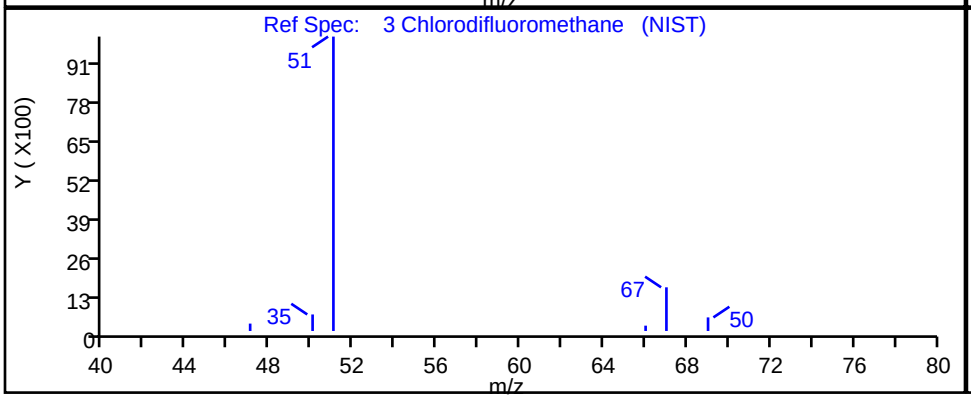
Processing Results

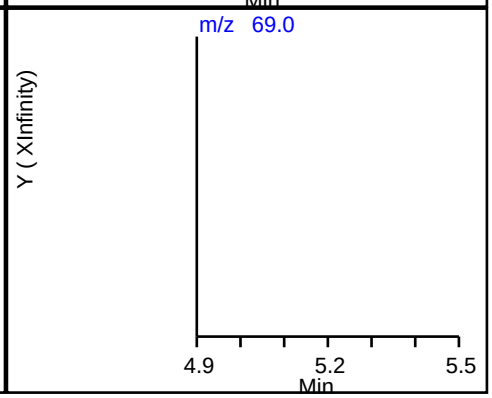












RT	Mass	Response	Amount
5.23	51.00	2370	0.059210
5.23	67.00	0	
5.23	69.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

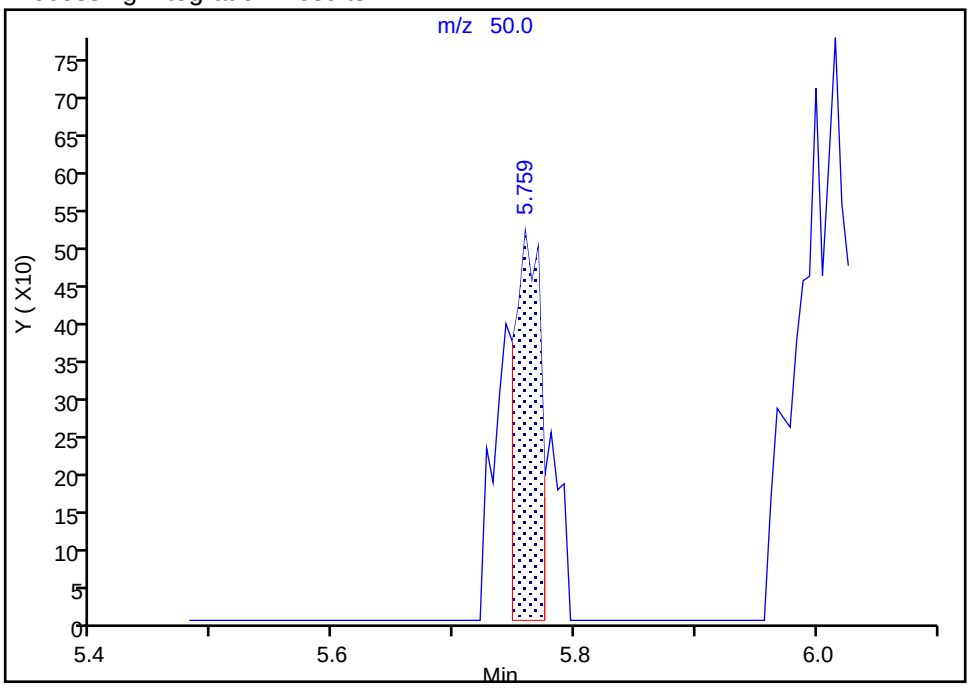
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Signal: 1

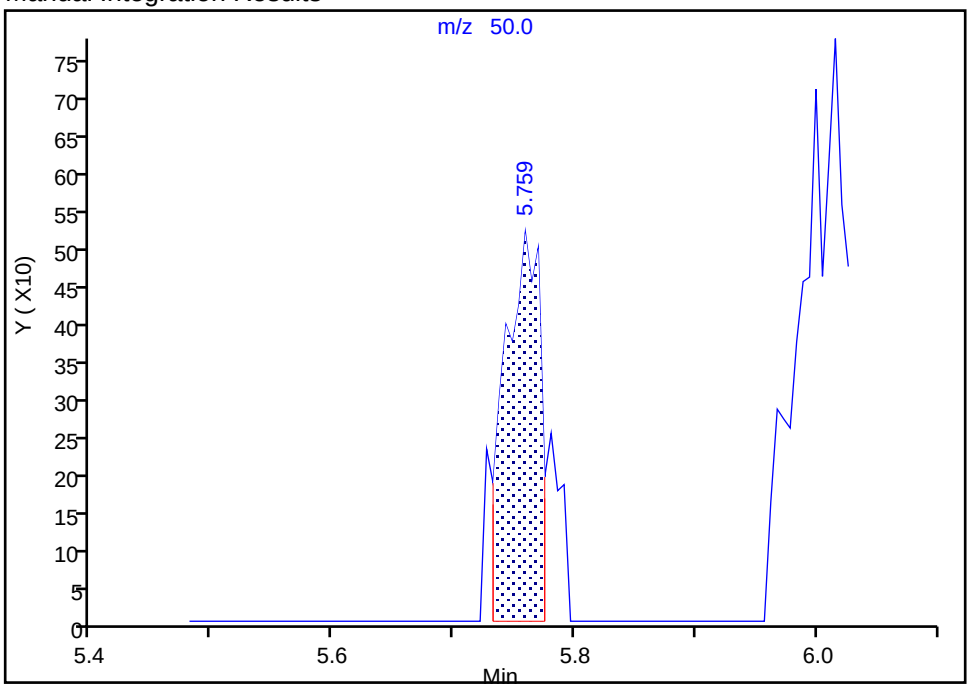
Processing Integration Results

RT: 5.76
Area: 781
Amount: 0.032481
Amount Units: ppb v/v



Manual Integration Results

RT: 5.76
Area: 1062
Amount: 0.044167
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:57:18
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

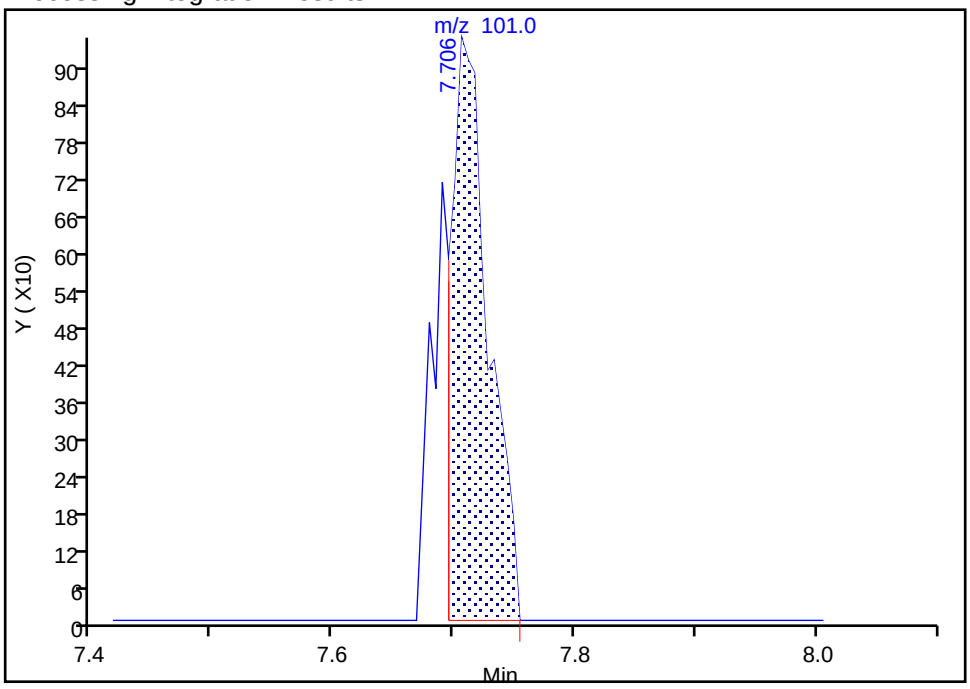
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

14 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

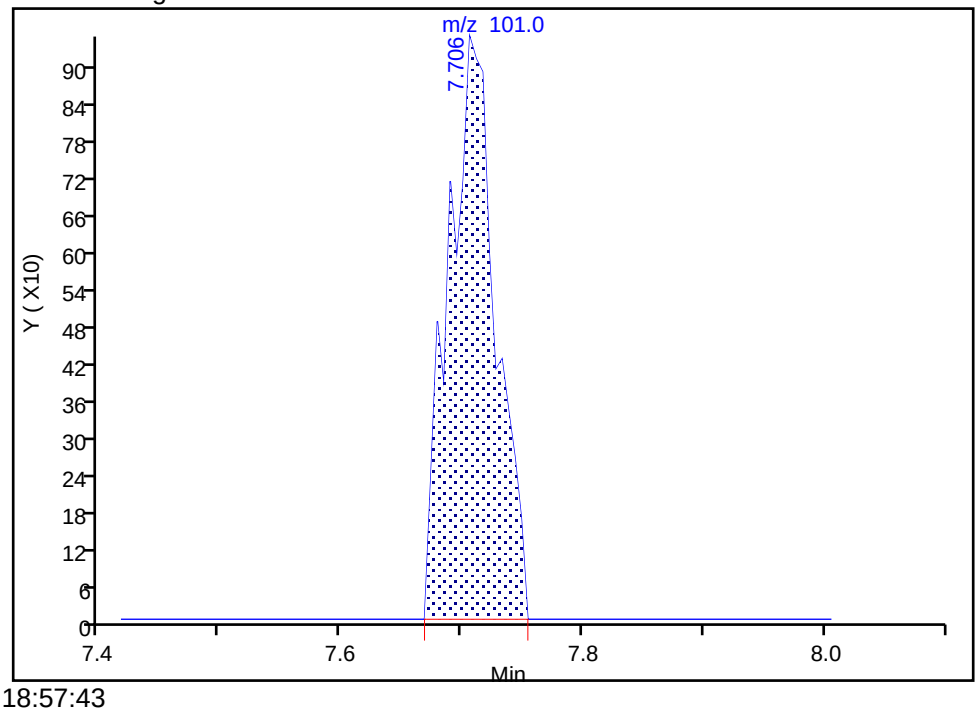
Processing Integration Results

RT: 7.71
Area: 1996
Amount: 0.034020
Amount Units: ppb v/v



Manual Integration Results

RT: 7.71
Area: 2574
Amount: 0.043871
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:57:43

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

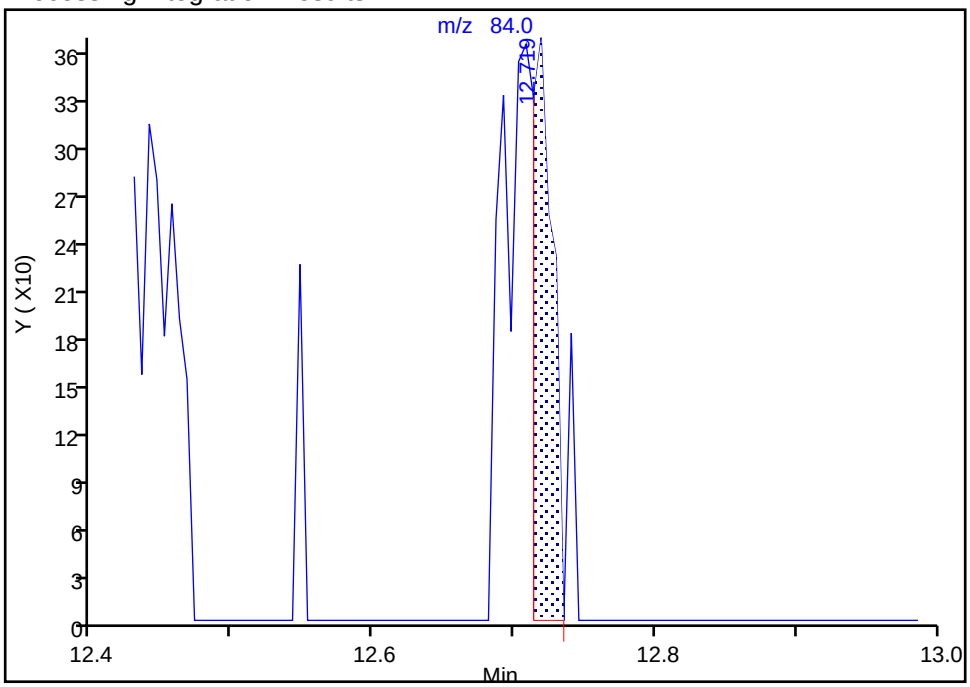
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Cyclohexane, CAS: 110-82-7

Signal: 1

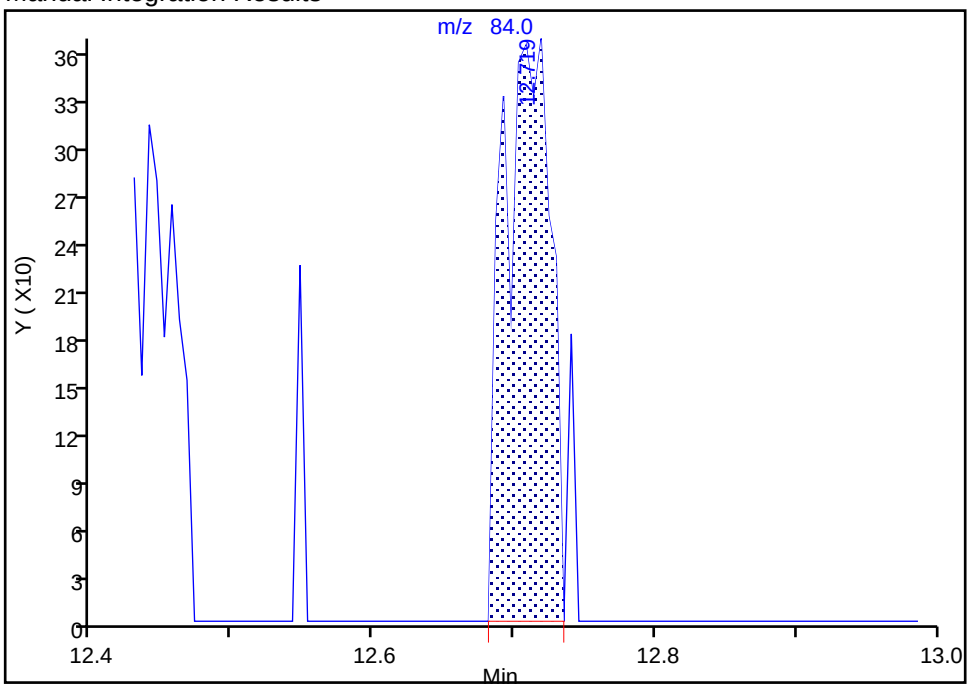
Processing Integration Results

RT: 12.72
Area: 377
Amount: 0.013132
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 849
Amount: 0.029572
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:58:43

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

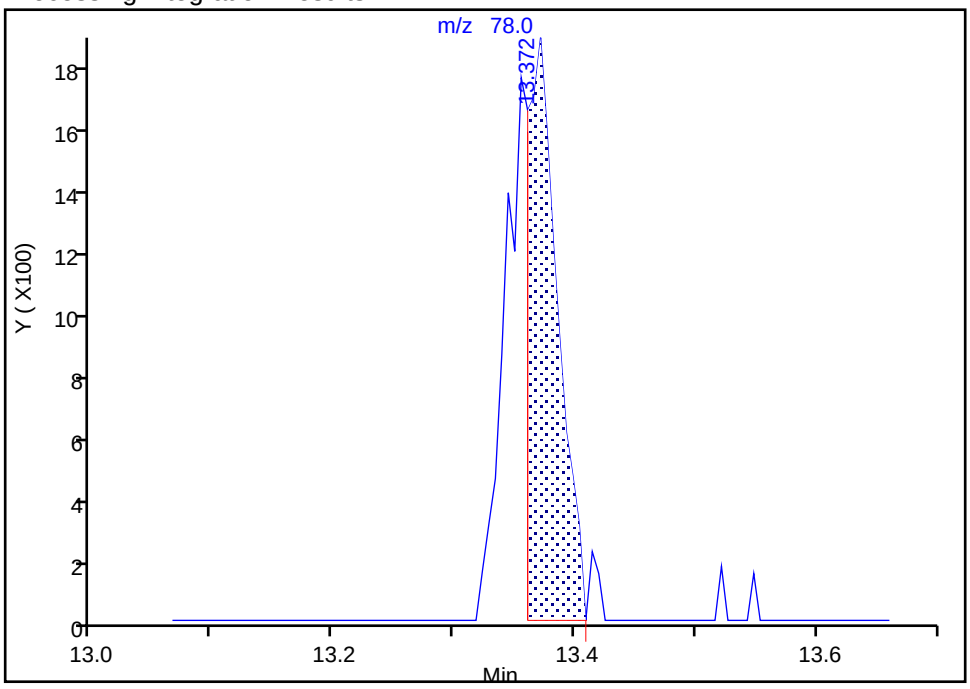
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Benzene, CAS: 71-43-2

Signal: 1

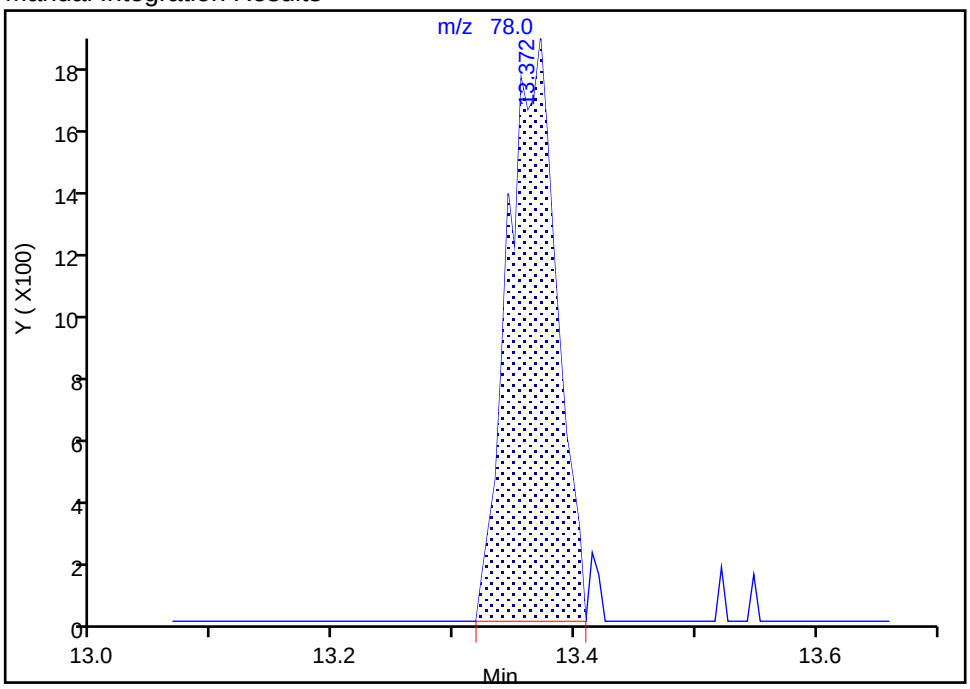
Processing Integration Results

RT: 13.37
Area: 3319
Amount: 0.050864
Amount Units: ppb v/v



Manual Integration Results

RT: 13.37
Area: 5290
Amount: 0.081069
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:59:05

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

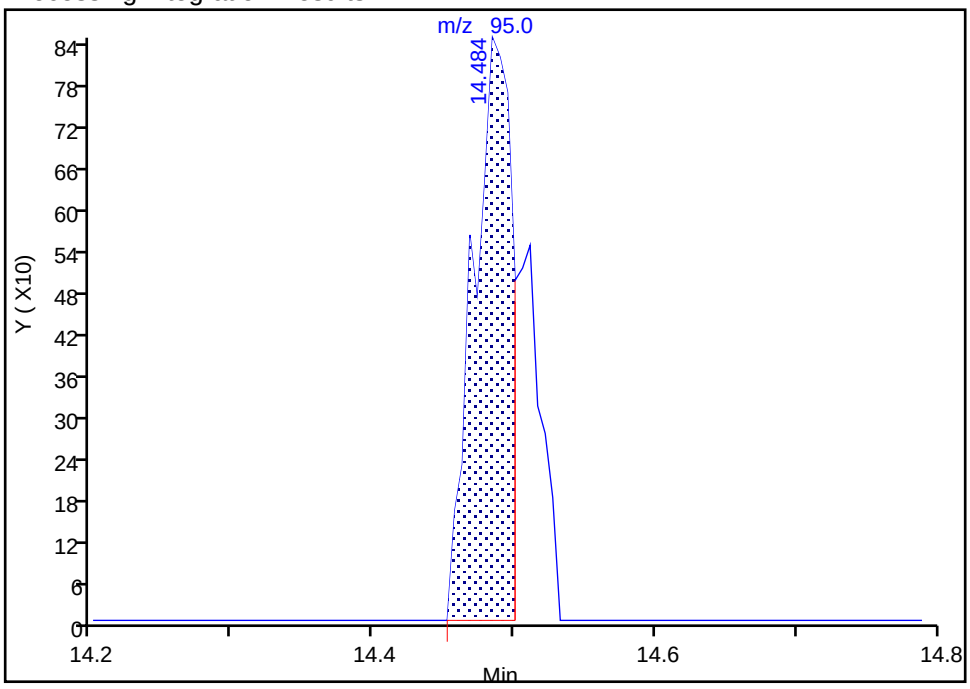
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6

Signal: 1

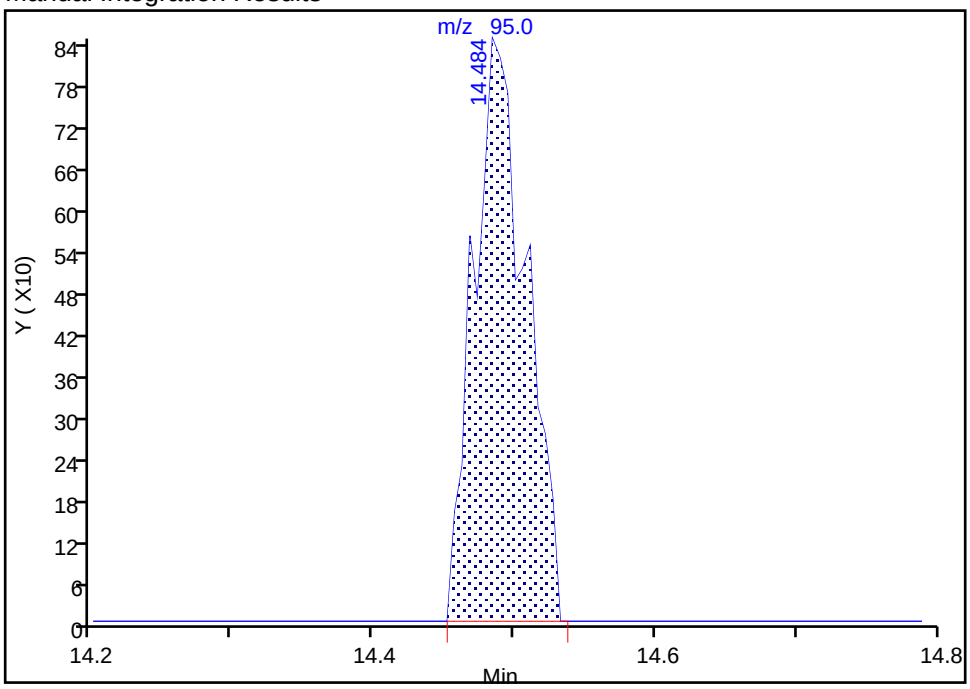
Processing Integration Results

RT: 14.48
Area: 1595
Amount: 0.054450
Amount Units: ppb v/v



Manual Integration Results

RT: 14.48
Area: 2177
Amount: 0.074319
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:59:41

Audit Action: Manually Integrated Audit Reason: Assign Peak

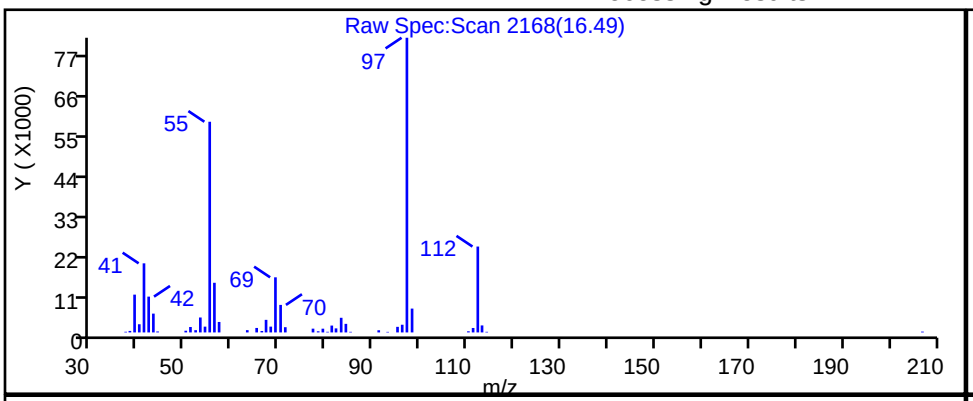
User Disabled Compound Report

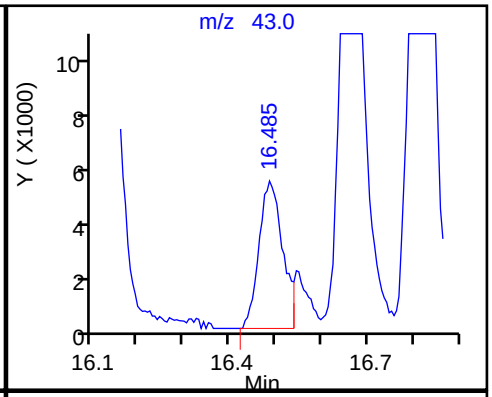
TestAmerica Burlington

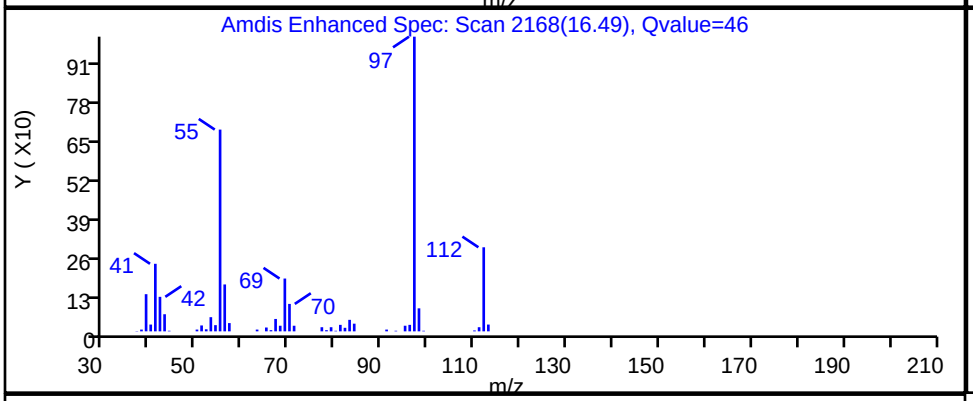
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

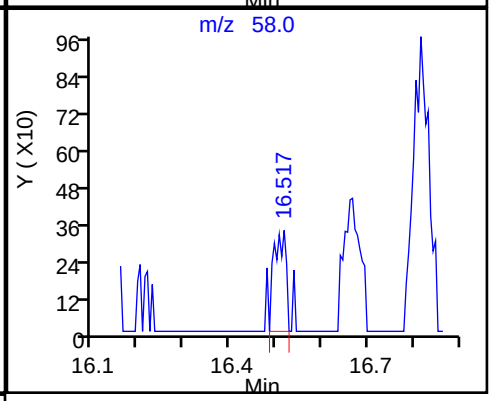
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

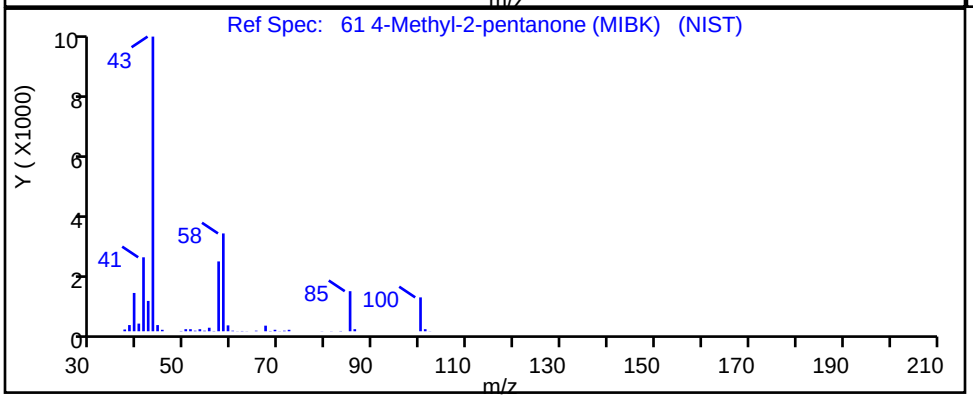
Processing Results











RT	Mass	Response	Amount
16.49	43.00	18783	0.428538
16.52	58.00	598	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

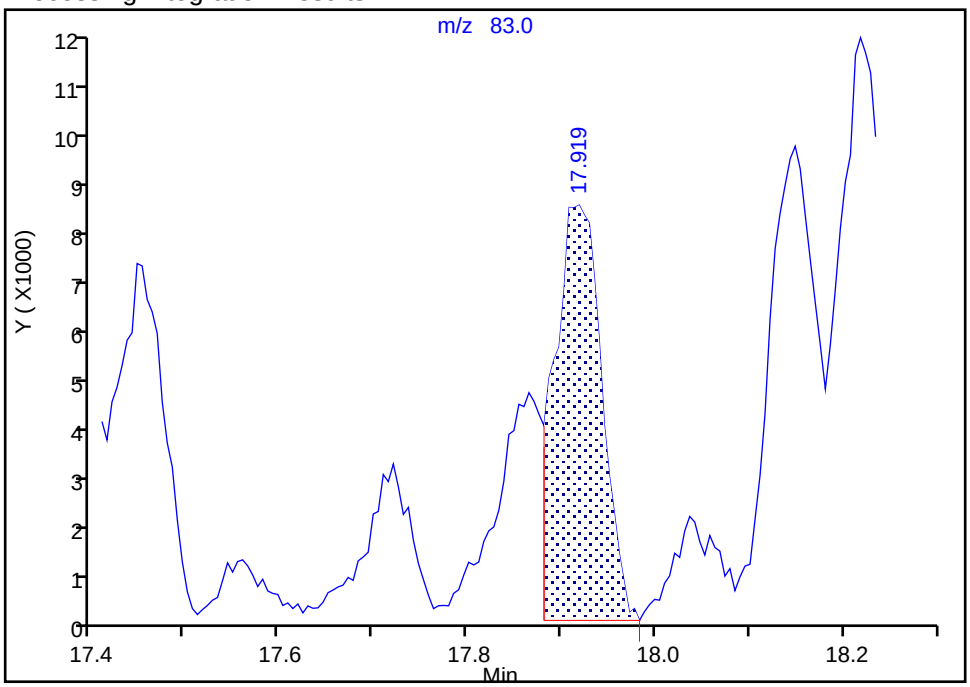
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

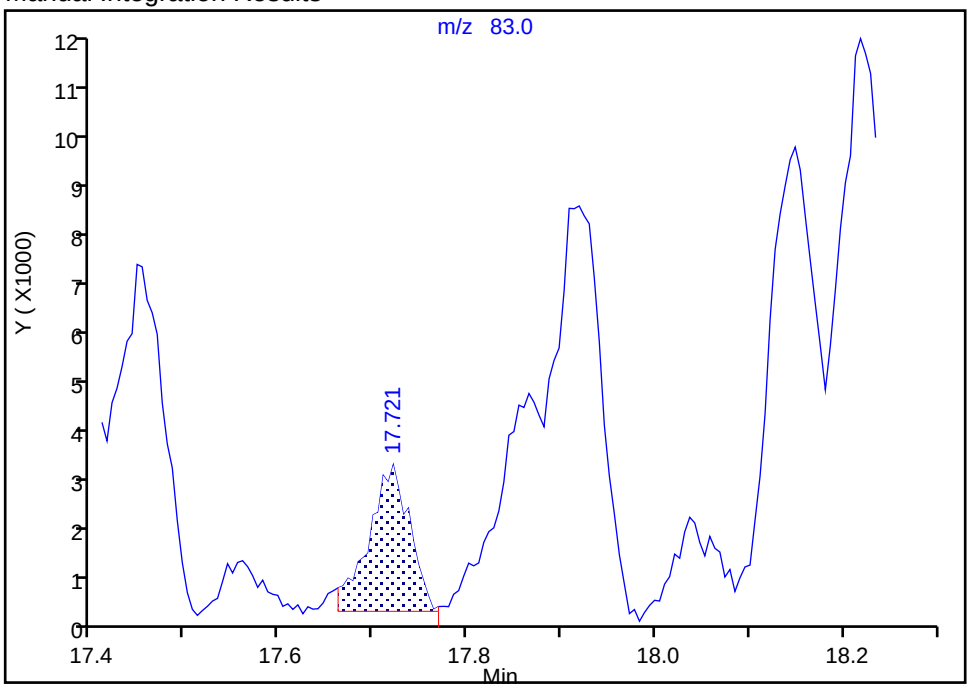
Processing Integration Results

RT: 17.92
Area: 26866
Amount: 1.118195
Amount Units: ppb v/v



Manual Integration Results

RT: 17.72
Area: 8116
Amount: 0.337798
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:00:55

Audit Action: Manually Integrated Audit Reason: Assign Peak

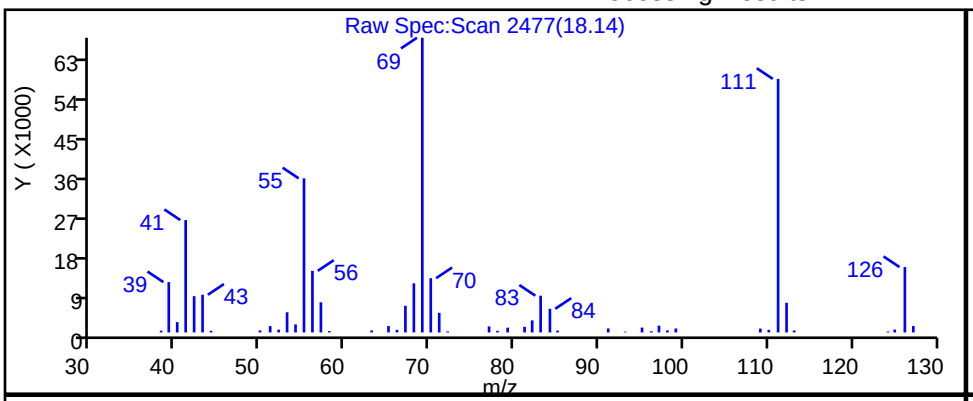
User Disabled Compound Report

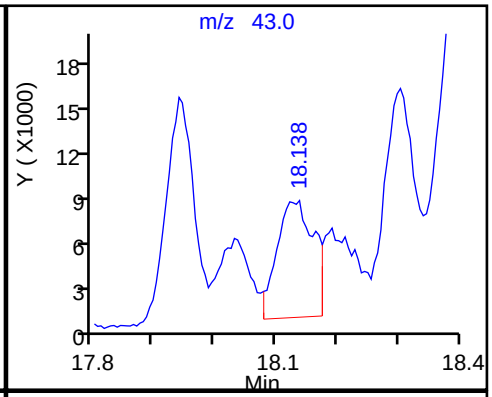
TestAmerica Burlington

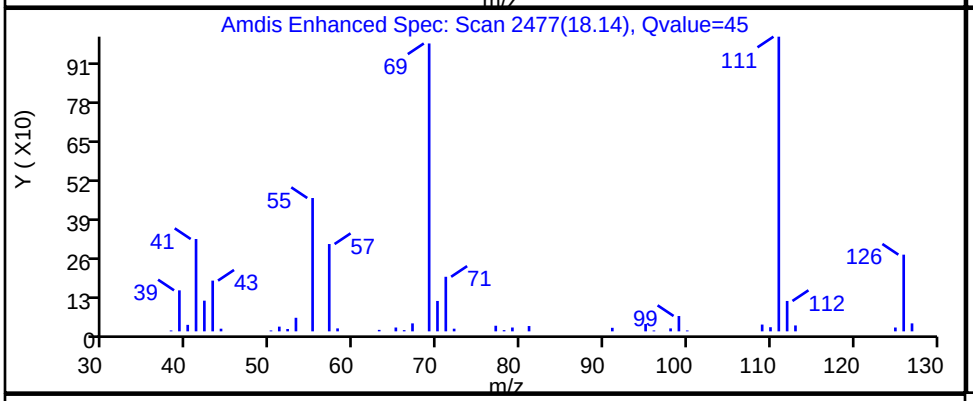
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

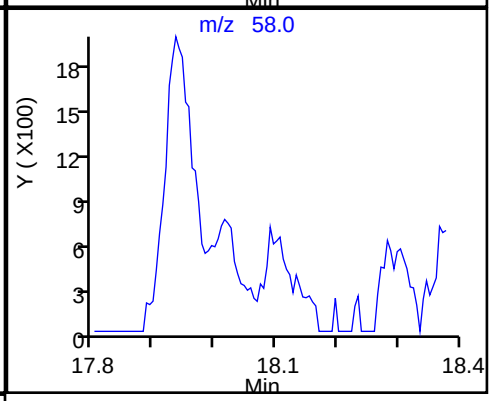
67 2-Hexanone, CAS: 591-78-6

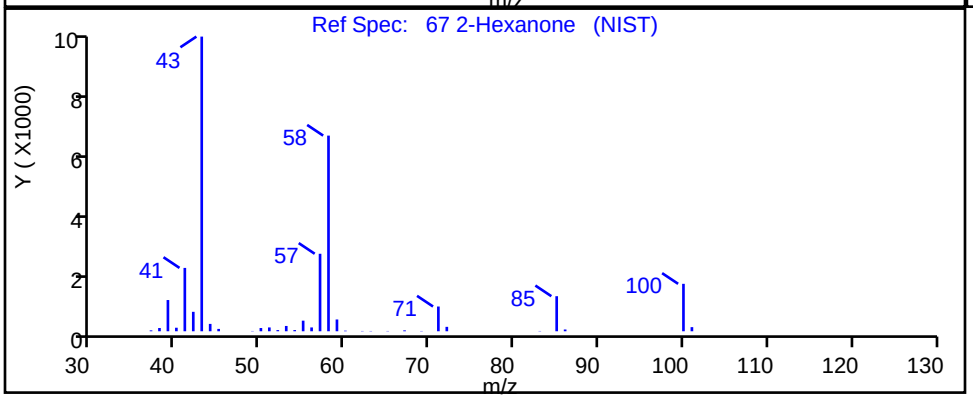
Processing Results











RT	Mass	Response	Amount
18.14	43.00	32411	0.754428
18.09	58.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

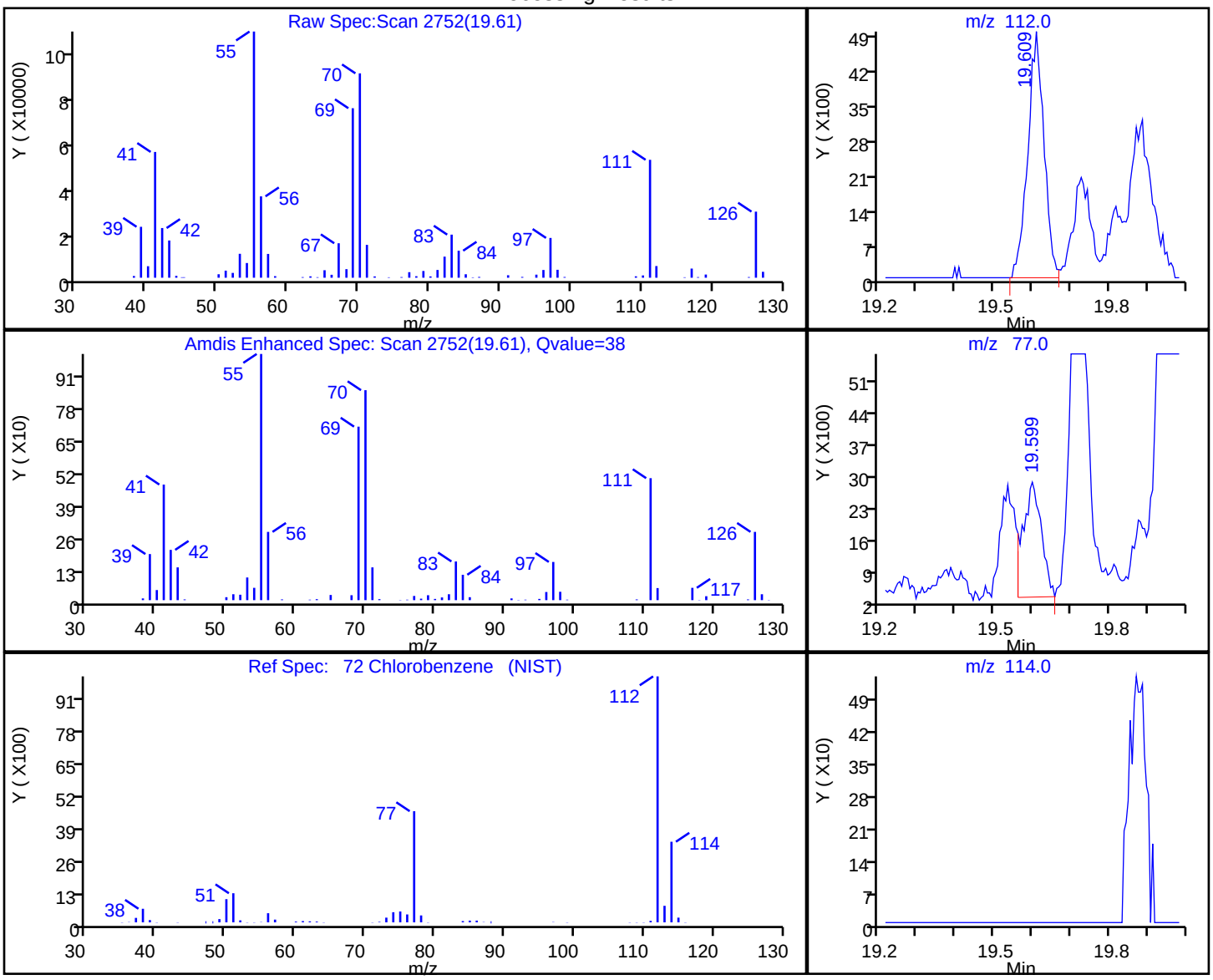
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

72 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
19.61	112.00	14533	0.206275
19.60	77.00	8466	
19.60	114.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

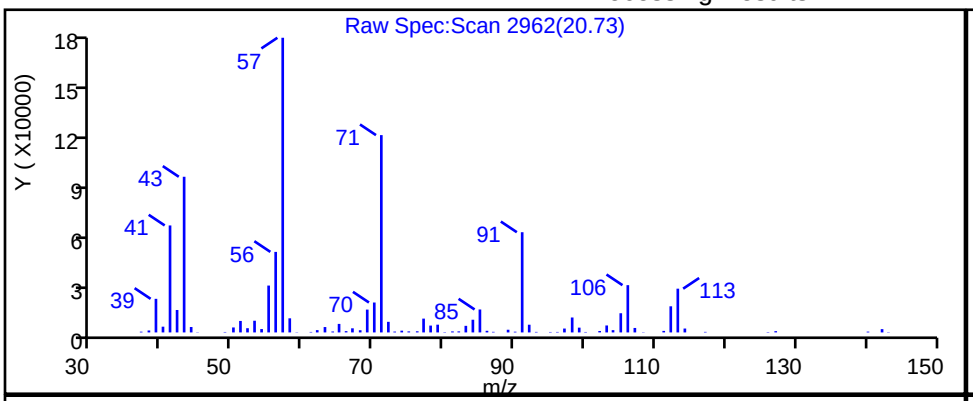
User Disabled Compound Report

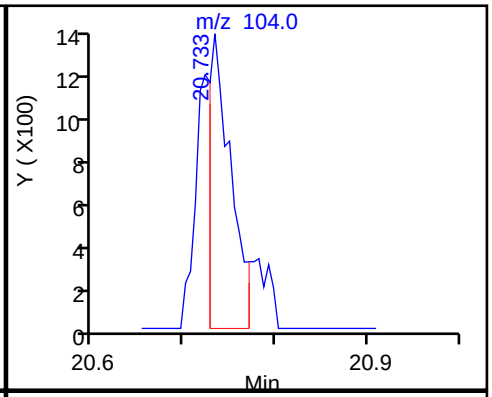
TestAmerica Burlington

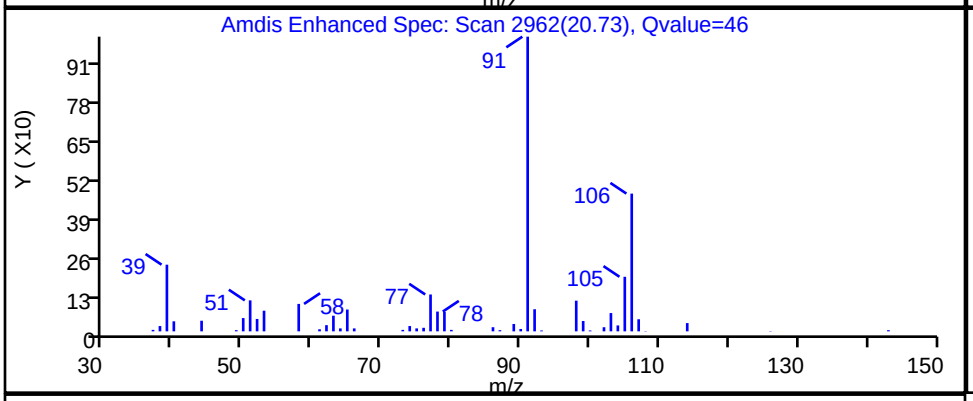
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

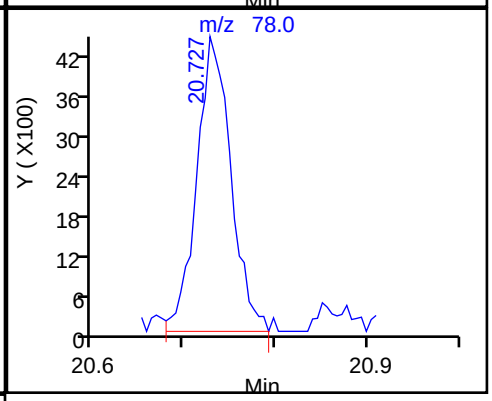
78 Styrene, CAS: 100-42-5

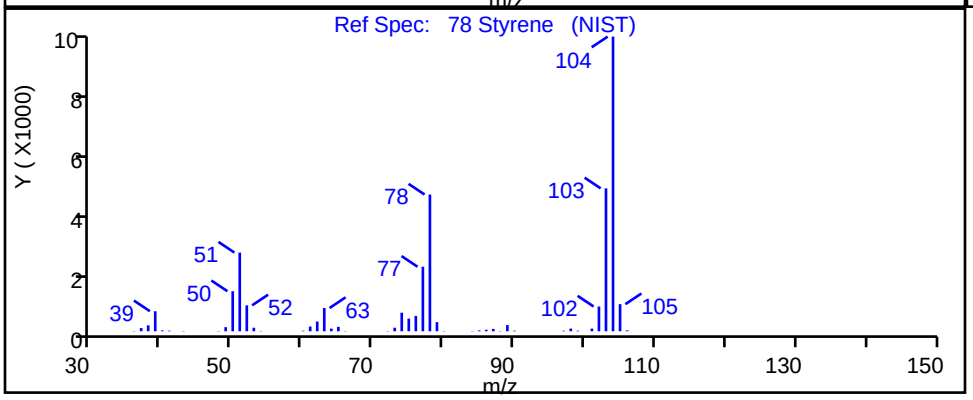
Processing Results











RT	Mass	Response	Amount
20.73	104.00	2250	0.034167
20.73	78.00	11414	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

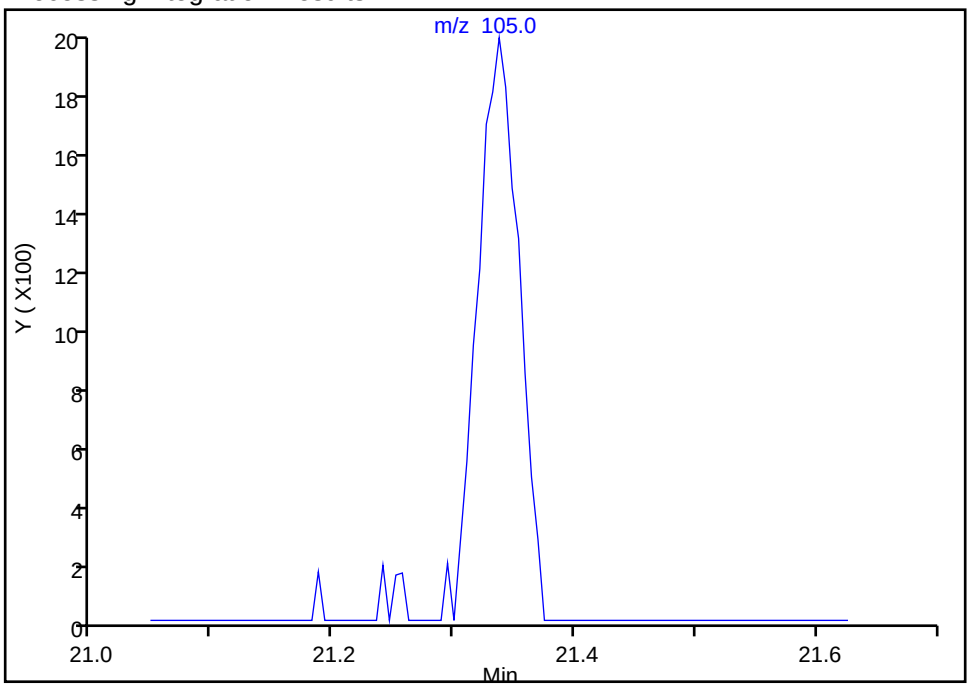
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

80 Isopropylbenzene, CAS: 98-82-8

Signal: 1

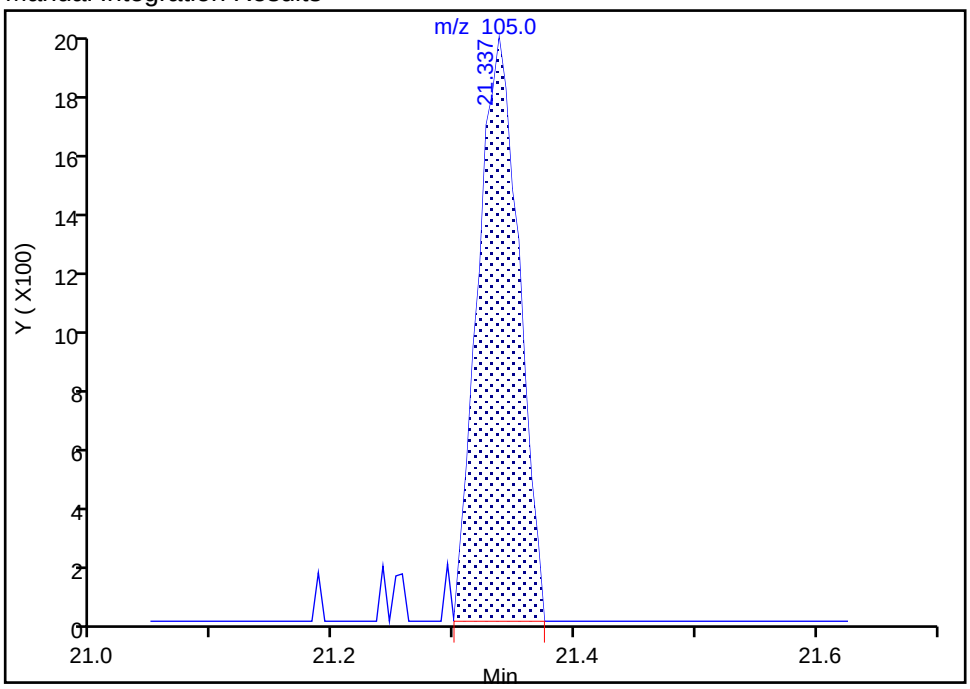
Not Detected
Expected RT: 21.34

Processing Integration Results



Manual Integration Results

RT: 21.34
Area: 4654
Amount: 0.034743
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:02:08
Audit Action: Manually Integrated Audit Reason: Assign Peak

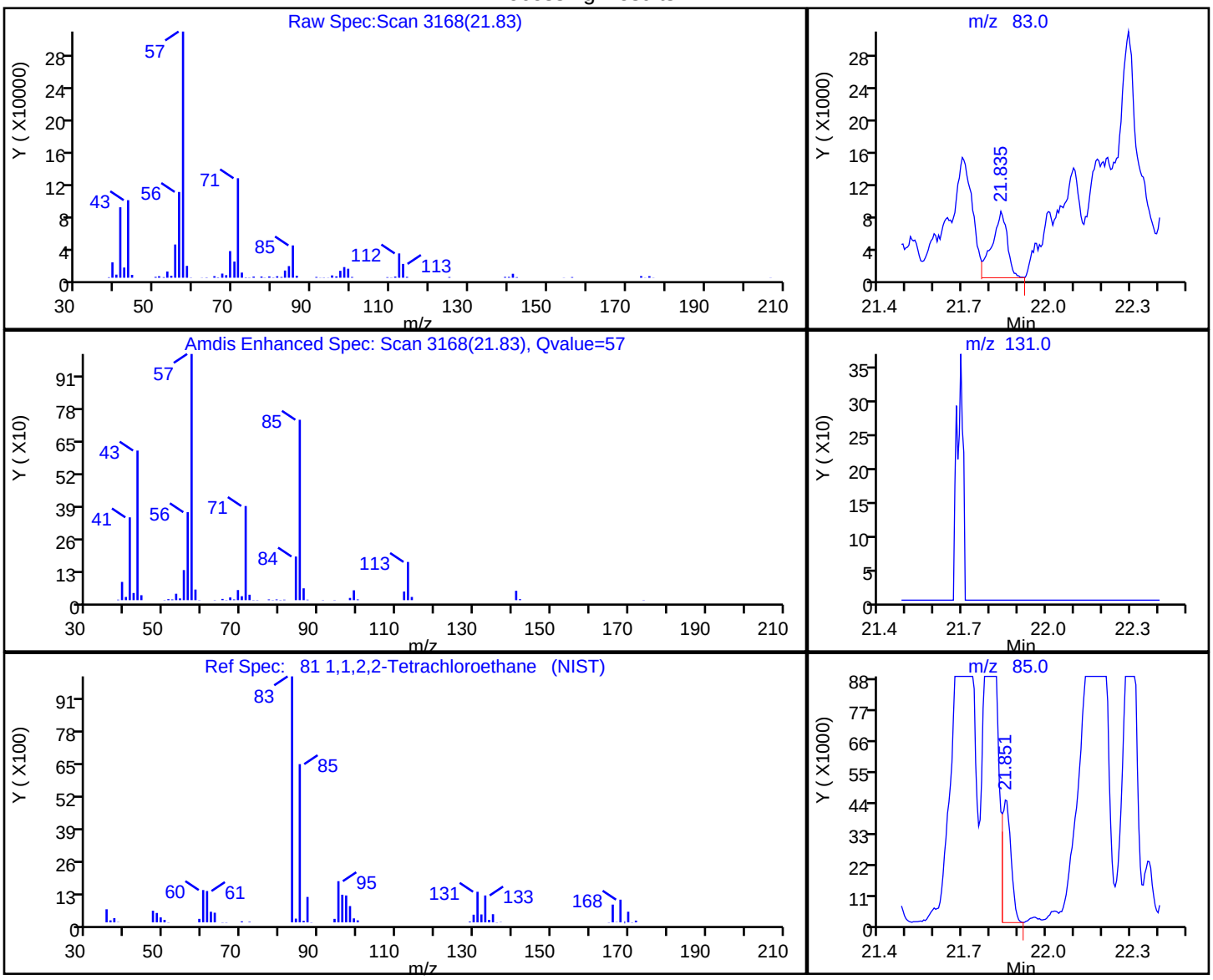
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.83	83.00	31136	0.464550
21.94	131.00	0	
21.85	85.00	93752	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

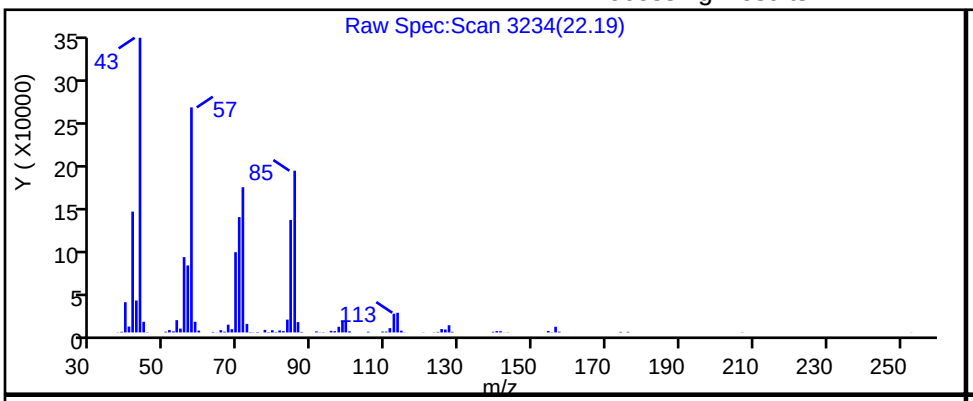
User Disabled Compound Report

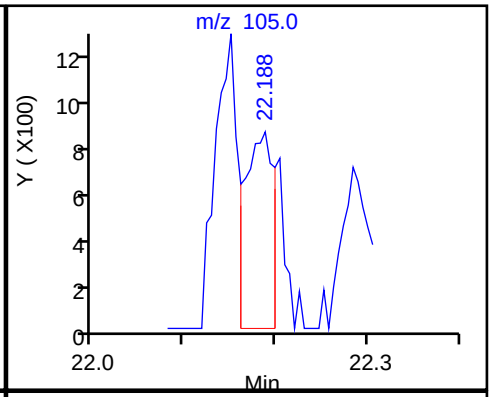
TestAmerica Burlington

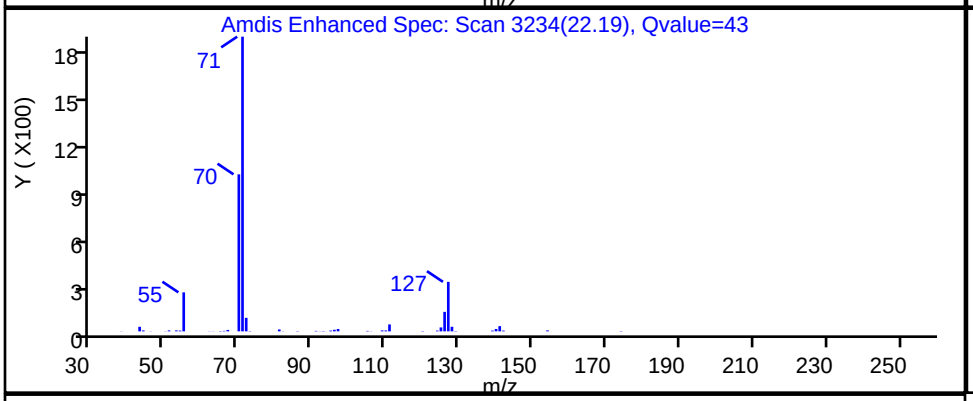
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

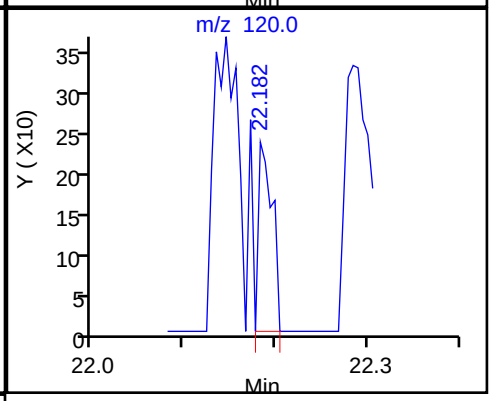
85 4-Ethyltoluene, CAS: 622-96-8

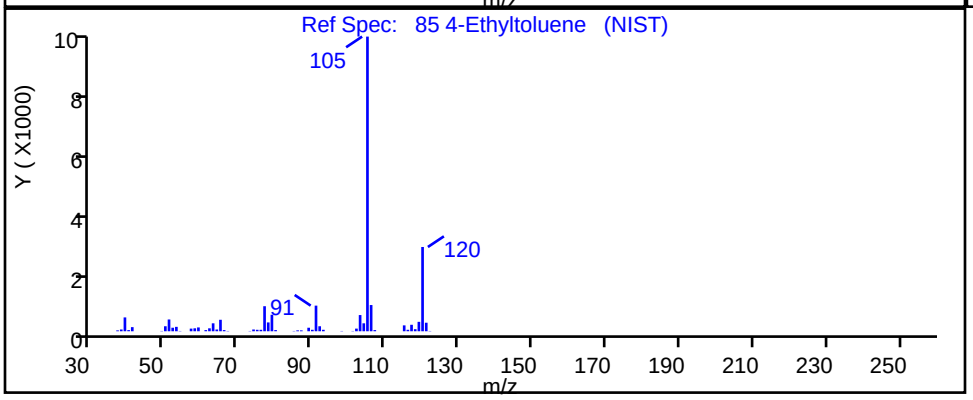
Processing Results











RT	Mass	Response	Amount
22.19	105.00	1806	0.013472
22.18	120.00	247	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

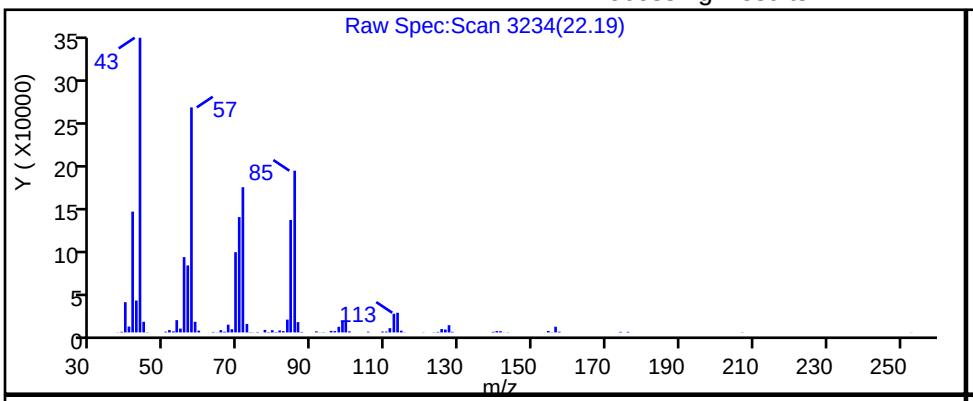
User Disabled Compound Report

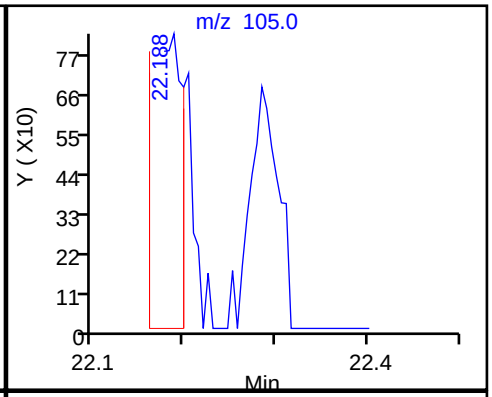
TestAmerica Burlington

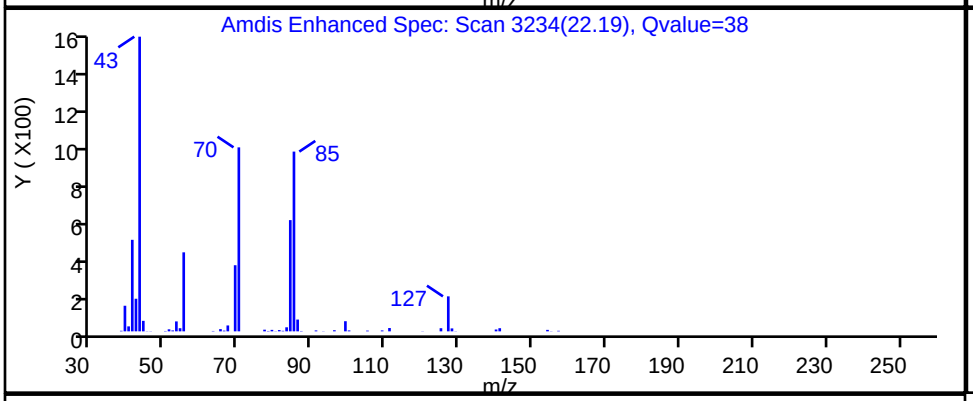
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

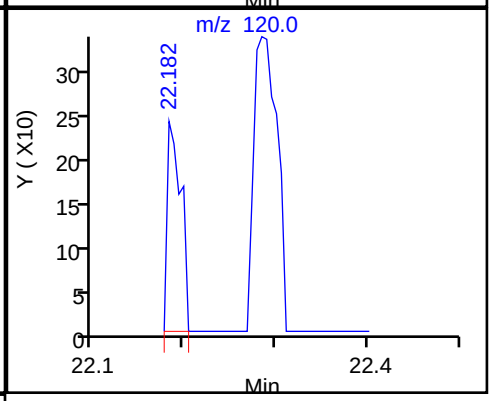
87 1,3,5-Trimethylbenzene, CAS: 108-67-8

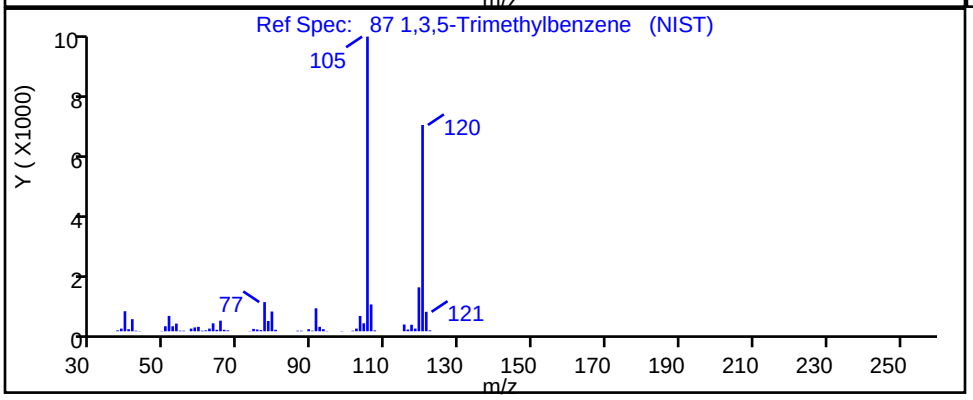
Processing Results











RT	Mass	Response	Amount
22.19	105.00	1806	0.015070
22.18	120.00	247	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

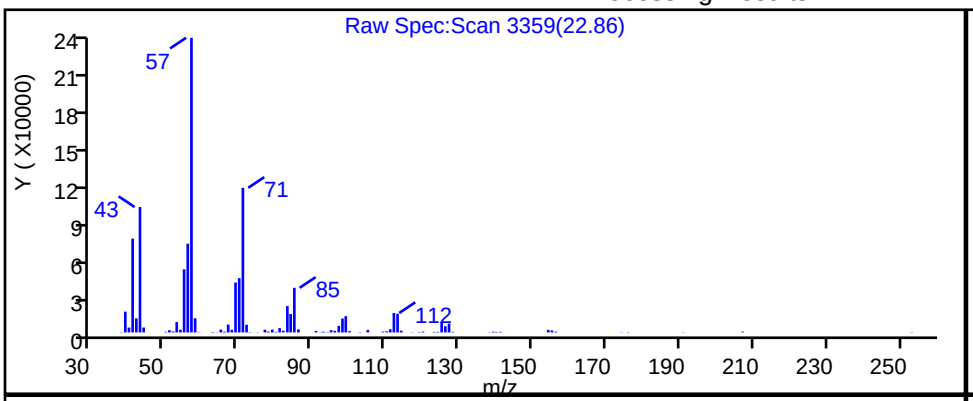
User Disabled Compound Report

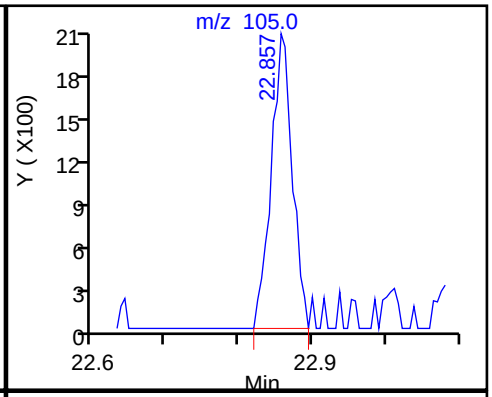
TestAmerica Burlington

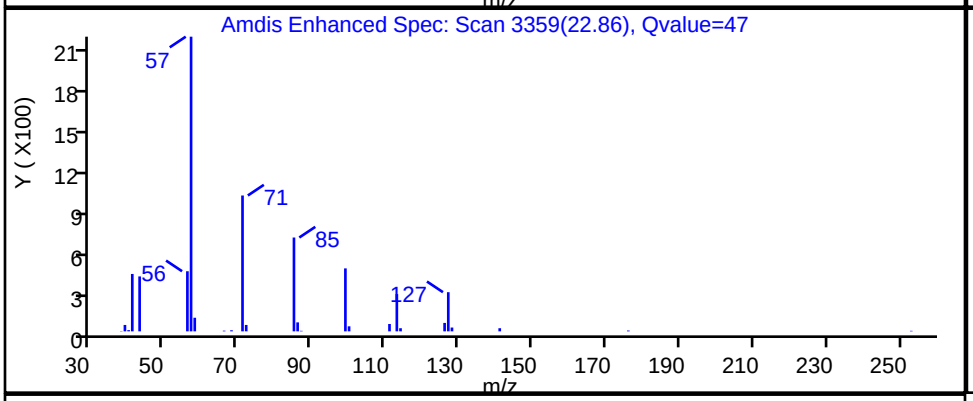
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

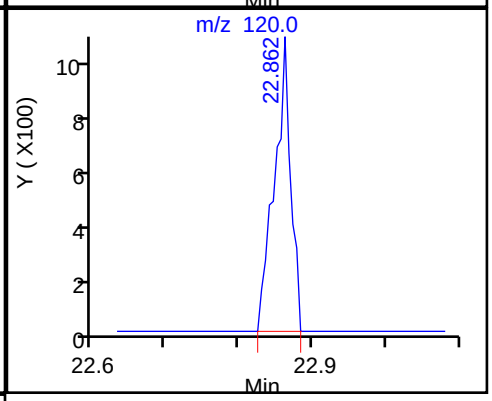
90 1,2,4-Trimethylbenzene, CAS: 95-63-6

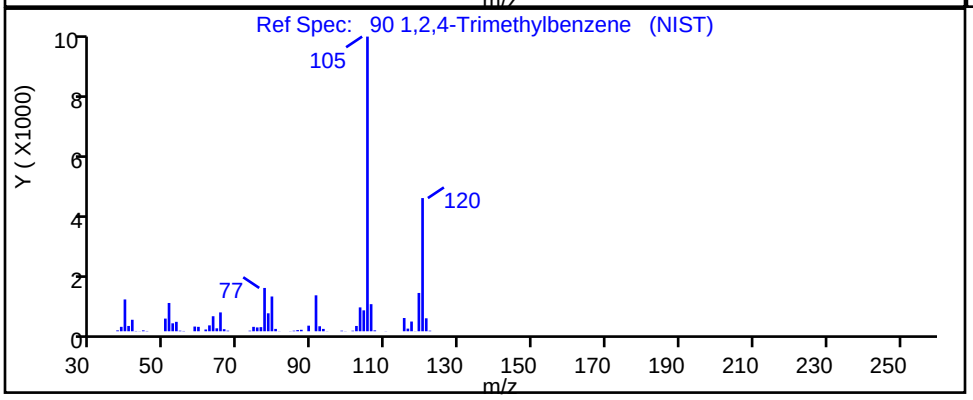
Processing Results











RT	Mass	Response	Amount
22.86	105.00	4111	0.034818
22.86	120.00	1629	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

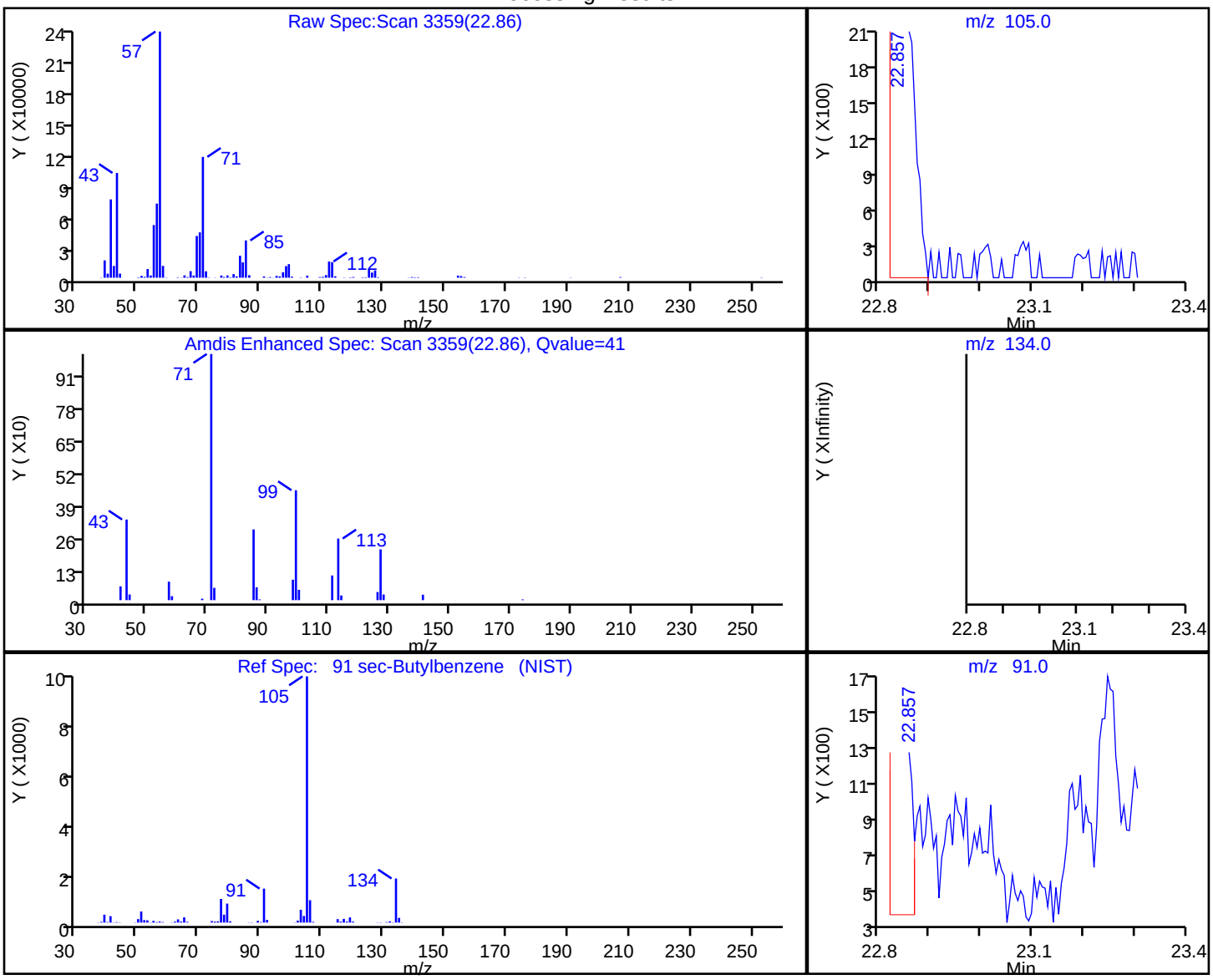
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

91 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.86	105.00	4111	0.024043
23.08	134.00	0	
22.86	91.00	1493	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

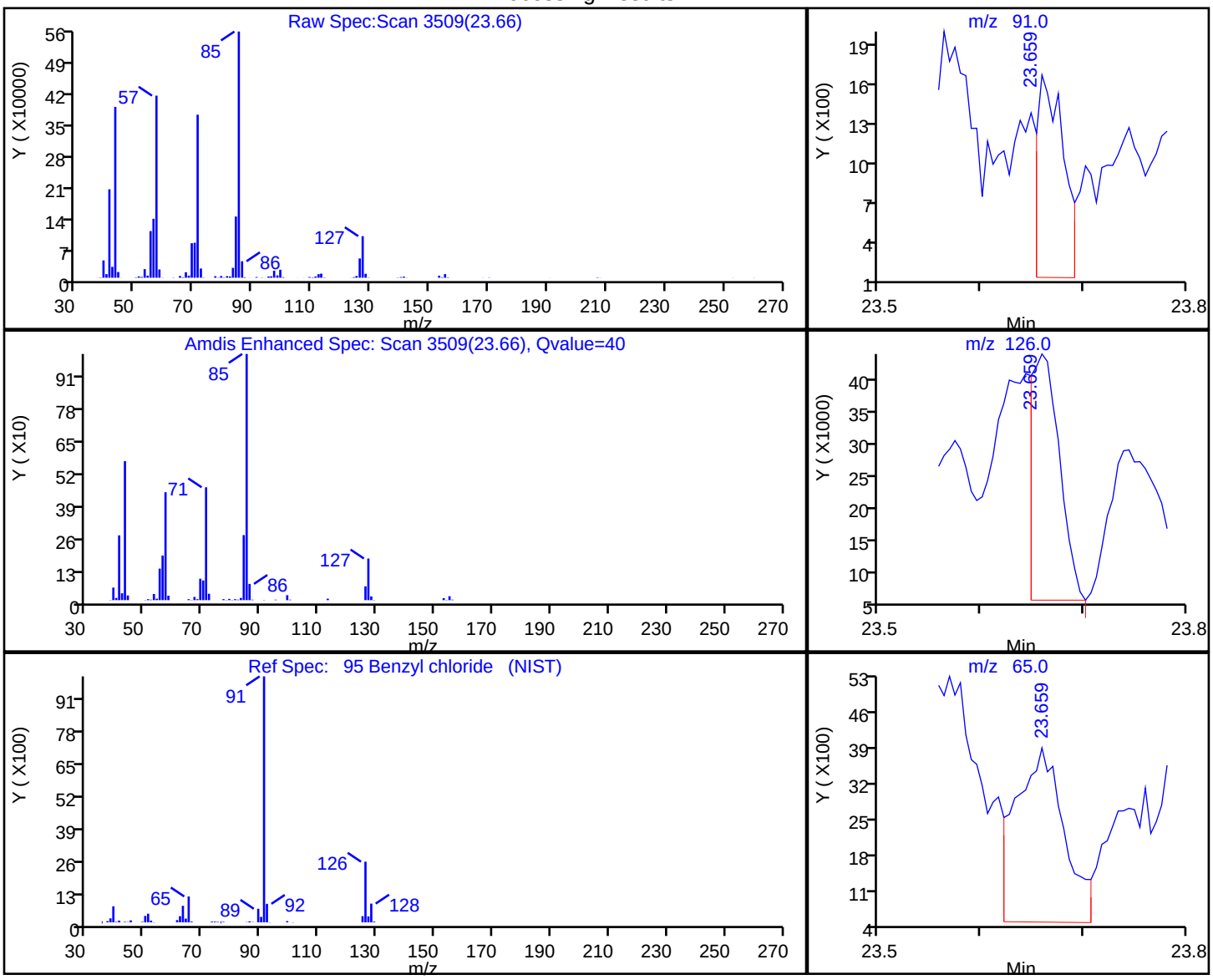
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
23.66	91.00	2648	0.032851
23.66	126.00	73917	
23.66	65.00	11554	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

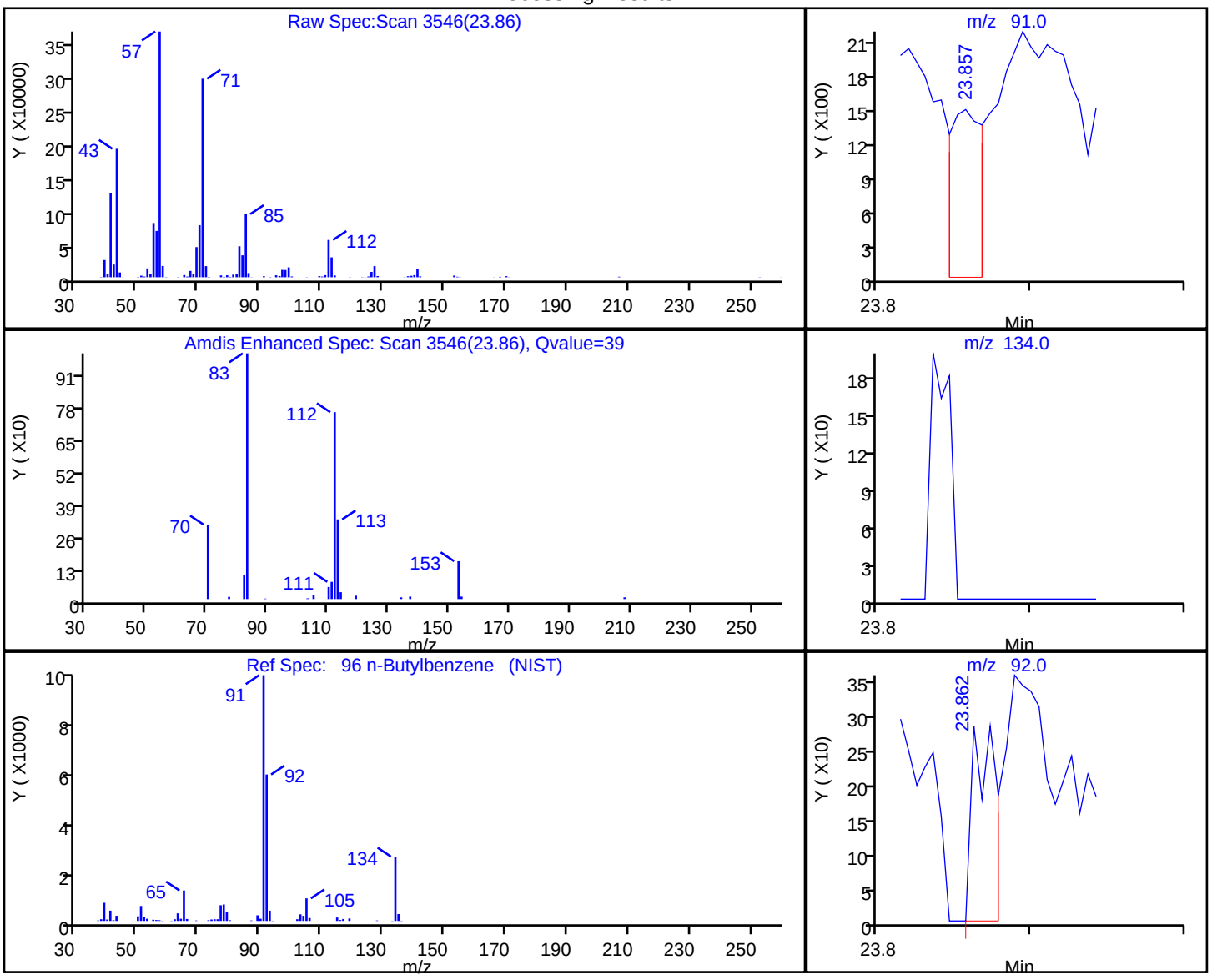
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-13.d				
Injection Date:	06-Apr-2018 22:39:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-5	Lab Sample ID:	200-42918-5		
Client ID:	GC-SV-103 (AS)				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
23.86	91.00	2213	0.019218
23.88	134.00	0	
23.86	92.00	294	

Reviewer: bunmaa, 09-Apr-2018 19:04:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL | Lab Sample ID: 200-42918-6 DL

Matrix: Air | Lab File ID: 29983-15.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 79(mL) | Date Analyzed: 04/07/2018 00:20

Soil Aliquot Vol: | Dilution Factor: 10.02

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0	2.0
75-45-6	Freon 22	86.47	5.0	U	5.0	2.6
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0	0.68
74-87-3	Chloromethane	50.49	5.0	U	5.0	2.5
106-97-8	n-Butane	58.12	5.5	D	5.0	3.1
75-01-4	Vinyl chloride	62.50	2.0	U	2.0	0.41
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0	0.65
74-83-9	Bromomethane	94.94	2.0	U	2.0	0.62
75-00-3	Chloroethane	64.52	5.0	U	5.0	2.1
593-60-2	Bromoethene(Vinyl Bromide)	106.96	2.0	U	2.0	0.56
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0	0.62
76-13-1	Freon TF	187.38	2.0	U	2.0	0.31
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0	0.34
67-64-1	*Acetone*	*58.08*	*1000*	*E D*	*50*	*26*
67-63-0	Isopropyl alcohol	60.10	50	U	50	18
75-15-0	Carbon disulfide	76.14	5.0	U	5.0	1.2
107-05-1	3-Chloropropene	76.53	5.0	U	5.0	2.7
75-09-2	Methylene Chloride	84.93	5.0	U	5.0	2.0
75-65-0	tert-Butyl alcohol	74.12	130	D	50	15
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0	0.61
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0	0.74
110-54-3	n-Hexane	86.17	2.9	D	2.0	1.6
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0	0.26
78-93-3	Methyl Ethyl Ketone	72.11	4.0	J D	5.0	2.0
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0	0.37
540-59-0	1,2-Dichloroethene, Total	96.94	4.0	U	4.0	1.1
67-66-3	Chloroform	119.38	1.4	J D	2.0	0.52
109-99-9	Tetrahydrofuran	72.11	50	U	50	26
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0	0.68
110-82-7	Cyclohexane	84.16	2.0	U	2.0	0.63
56-23-5	Carbon tetrachloride	153.81	0.40	U	0.40	0.24
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0	0.88
71-43-2	Benzene	78.11	2.0	U	2.0	0.71
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0	0.63

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL | Lab Sample ID: 200-42918-6 DL

Matrix: Air | Lab File ID: 29983-15.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 79(mL) | Date Analyzed: 04/07/2018 00:20

Soil Aliquot Vol: | Dilution Factor: 10.02

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	5.7	D	2.0	1.4
79-01-6	Trichloroethene	131.39	0.32	J D	0.40	0.30
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0	2.2
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0	1.2
123-91-1	1,4-Dioxane	88.11	50	U	50	13
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0	0.94
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0	0.98
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0	3.6
108-88-3	Toluene	92.14	15	D	2.0	0.69
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0	1.2
79-00-5	1,1,2-Trichloroethane	133.41	3.5	D	2.0	0.78
127-18-4	Tetrachloroethene	165.83	6.2	D	0.40	0.29
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0	4.2
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0	0.71
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0	0.69
108-90-7	Chlorobenzene	112.56	2.0	U	2.0	0.40
100-41-4	Ethylbenzene	106.17	21	D	2.0	0.73
179601-23-1	m,p-Xylene	106.17	72	D	5.0	0.70
95-47-6	Xylene, o-	106.17	24	D	2.0	0.71
1330-20-7	Xylene (total)	106.17	96	D	7.0	1.4
100-42-5	Styrene	104.15	2.0	U	2.0	0.86
75-25-2	Bromoform	252.75	2.0	U	2.0	0.86
98-82-8	Cumene	120.19	2.0	U	2.0	0.59
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0	0.76
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0	0.69
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0	0.69
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0	0.58
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0	0.71
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0	0.58
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0	0.80
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0	0.66
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0	0.75
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0	0.82
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0	0.65

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL Lab Sample ID: 200-42918-6 DL

Matrix: Air Lab File ID: 29983-15.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 79(mL) Date Analyzed: 04/07/2018 00:20

Soil Aliquot Vol: Dilution Factor: 10.02

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	2.0	U	2.0	1.2
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0	0.80
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0	0.71
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0	2.4
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0	0.82
91-20-3	Naphthalene	128.17	5.0	U	5.0	3.1

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL | Lab Sample ID: 200-42918-6 DL

Matrix: Air | Lab File ID: 29983-15.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 79(mL) | Date Analyzed: 04/07/2018 00:20

Soil Aliquot Vol: | Dilution Factor: 10.02

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	25	U	25	9.9
75-45-6	Freon 22	86.47	18	U	18	9.2
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14	4.8
74-87-3	Chloromethane	50.49	10	U	10	5.2
106-97-8	n-Butane	58.12	13	D	12	7.4
75-01-4	Vinyl chloride	62.50	5.1	U	5.1	1.1
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4	1.4
74-83-9	Bromomethane	94.94	7.8	U	7.8	2.4
75-00-3	Chloroethane	64.52	13	U	13	5.6
593-60-2	Bromoethene(Vinyl Bromide)	106.96	8.8	U	8.8	2.5
75-69-4	Trichlorofluoromethane	137.37	11	U	11	3.5
76-13-1	Freon TF	187.38	15	U	15	2.4
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9	1.4
67-64-1	*Acetone*	*58.08*	*2400*	*E D*	*120*	*62*
67-63-0	Isopropyl alcohol	60.10	120	U	120	44
75-15-0	Carbon disulfide	76.14	16	U	16	3.7
107-05-1	3-Chloropropene	76.53	16	U	16	8.5
75-09-2	Methylene Chloride	84.93	17	U	17	7.0
75-65-0	tert-Butyl alcohol	74.12	400	D	150	46
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2	2.2
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9	2.9
110-54-3	n-Hexane	86.17	10	D	7.1	5.7
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1	1.1
78-93-3	Methyl Ethyl Ketone	72.11	12	J D	15	5.9
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9	1.5
540-59-0	1,2-Dichloroethene, Total	96.94	16	U	16	4.4
67-66-3	Chloroform	119.38	7.0	J D	9.8	2.5
109-99-9	Tetrahydrofuran	72.11	150	U	150	77
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11	3.7
110-82-7	Cyclohexane	84.16	6.9	U	6.9	2.2
56-23-5	Carbon tetrachloride	153.81	2.5	U	2.5	1.5
540-84-1	2,2,4-Trimethylpentane	114.23	9.4	U	9.4	4.1
71-43-2	Benzene	78.11	6.4	U	6.4	2.3
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1	2.6

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL | Lab Sample ID: 200-42918-6 DL

Matrix: Air | Lab File ID: 29983-15.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 79(mL) | Date Analyzed: 04/07/2018 00:20

Soil Aliquot Vol: | Dilution Factor: 10.02

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	24	D	8.2	5.7
79-01-6	Trichloroethene	131.39	1.7	J D	2.2	1.6
80-62-6	Methyl methacrylate	100.12	21	U	21	9.0
78-87-5	1,2-Dichloropropane	112.99	9.3	U	9.3	5.6
123-91-1	1,4-Dioxane	88.11	180	U	180	47
75-27-4	Bromodichloromethane	163.83	13	U	13	6.3
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1	4.5
108-10-1	methyl isobutyl ketone	100.16	21	U	21	15
108-88-3	Toluene	92.14	57	D	7.6	2.6
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1	5.5
79-00-5	1,1,2-Trichloroethane	133.41	19	D	11	4.3
127-18-4	Tetrachloroethene	165.83	42	D	2.7	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	21	U	21	17
124-48-1	Dibromochloromethane	208.29	17	U	17	6.1
106-93-4	1,2-Dibromoethane	187.87	15	U	15	5.3
108-90-7	Chlorobenzene	112.56	9.2	U	9.2	1.8
100-41-4	Ethylbenzene	106.17	92	D	8.7	3.2
179601-23-1	m,p-Xylene	106.17	310	D	22	3.0
95-47-6	Xylene, o-	106.17	110	D	8.7	3.1
1330-20-7	Xylene (total)	106.17	420	D	30	6.1
100-42-5	Styrene	104.15	8.5	U	8.5	3.7
75-25-2	Bromoform	252.75	21	U	21	8.9
98-82-8	Cumene	120.19	9.9	U	9.9	2.9
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14	5.2
103-65-1	n-Propylbenzene	120.19	9.9	U	9.9	3.4
622-96-8	4-Ethyltoluene	120.20	9.9	U	9.9	3.4
108-67-8	1,3,5-Trimethylbenzene	120.20	9.9	U	9.9	2.9
95-49-8	2-Chlorotoluene	126.59	10	U	10	3.7
98-06-6	tert-Butylbenzene	134.22	11	U	11	3.2
95-63-6	1,2,4-Trimethylbenzene	120.20	9.9	U	9.9	3.9
135-98-8	sec-Butylbenzene	134.22	11	U	11	3.6
99-87-6	4-Isopropyltoluene	134.22	11	U	11	4.1
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12	4.9
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12	3.9

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL Lab Sample ID: 200-42918-6 DL

Matrix: Air Lab File ID: 29983-15.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 79(mL) Date Analyzed: 04/07/2018 00:20

Soil Aliquot Vol: Dilution Factor: 10.02

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	10	U	10	6.2
104-51-8	n-Butylbenzene	134.22	11	U	11	4.4
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12	4.3
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37	18
87-68-3	Hexachlorobutadiene	260.76	21	U	21	8.8
91-20-3	Naphthalene	128.17	26	U	26	16

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d
Lims ID: 200-42918-A-6
Client ID: GC-SV-105 (AS)
Sample Type: Client
Inject. Date: 07-Apr-2018 00:20:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 200.000 mL Dil. Factor: 10.0200
Sample Info: 200-0029983-015
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 19:20:21 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 19:20:21

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85	5.138	5.138	-0.011	46	4952	0.0519	
	3 Chlorodifluoromethane	51		5.235				ND	U
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
	5 Chloromethane	50		5.748				ND	MU
	6 Butane	43	6.010	6.010	-0.016	83	28923	0.5522	M
	7 Vinyl chloride	62		6.080				ND	
	8 Butadiene	54		6.176				ND	
	9 Bromomethane	94		6.979				ND	
	11 Chloroethane	64		7.225				ND	
	13 Vinyl bromide	106		7.631				ND	
	14 Trichlorofluoromethane	101		7.728				ND	MU
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	8.974	9.022	-0.027	97	3651242	99.3	E
	23 Carbon disulfide	76		9.193				ND	MU
	24 Isopropyl alcohol	45	9.188	9.204	-0.016	100	41737	1.10	
	25 3-Chloro-1-propene	41		9.493				ND	
	27 Methylene Chloride	49	9.755	9.755	-0.005	71	4073	0.1679	M
	28 2-Methyl-2-propanol	59	9.873	9.867	-0.016	97	708529	13.1	
	29 Methyl tert-butyl ether	73		10.092				ND	
	30 trans-1,2-Dichloroethene	61	10.151	10.151	-0.005	1	1381	0.0415	M
S	31 1,2-Dichloroethene, Total	61				0		0.0415	
	33 Hexane	57	10.461	10.460	-0.022	91	10493	0.2847	
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.949				ND	
	37 2-Butanone (MEK)	72	11.954	11.944	-0.011	93	5325	0.4037	
	39 Tetrahydrofuran	42		12.371				ND	
*	40 Chlorobromomethane	128	12.355	12.377	-0.021	93	183851	10.0	
	41 Chloroform	83	12.451	12.446	-0.016	94	7750	0.1432	
	42 Cyclohexane	84	12.703	12.703	-0.021	75	902	0.0238	M
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117		12.965				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Isooctane	57		13.318				ND	MU
	46 Benzene	78	13.366	13.372	-0.016	92	4677	0.0544	
	47 1,2-Dichloroethane	62		13.532				ND	MU
	48 n-Heptane	43	13.618	13.607	-0.016	91	24797	0.5731	
*	49 1,4-Difluorobenzene	114	14.062	14.078	-0.016	95	968485	10.0	
	51 Trichloroethene	95	14.495	14.495	-0.005	89	1238	0.0321	M
	53 1,2-Dichloropropane	63		14.998				ND	
	55 Methyl methacrylate	69		15.078				ND	
	56 1,4-Dioxane	88	15.164	15.140	0.000	41	1636	0.0894	
	58 Dichlorobromomethane	83		15.458				ND	U
	59 cis-1,3-Dichloropropene	75		16.282				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	MU
	63 Toluene	92	16.817	16.806	-0.005	92	90791	1.50	
	64 trans-1,3-Dichloropropene	75		17.352				ND	
	65 1,1,2-Trichloroethane	83	17.715	17.715	0.016	50	10101	0.3474	M
	66 Tetrachloroethene	166	17.812	17.812	-0.005	98	37762	0.6147	
	67 2-Hexanone	43		18.090				ND	U
	68 Chlorodibromomethane	129		18.427				ND	
	69 Ethylene Dibromide	107		18.700				ND	
*	71 Chlorobenzene-d5	117	19.534	19.540	-0.006	87	844830	10.0	
	72 Chlorobenzene	112		19.599				ND	U
	73 Ethylbenzene	91	19.722	19.722	-0.005	98	293651	2.11	
	75 m-Xylene & p-Xylene	106	19.957	19.957	-0.005	0	393889	7.20	
S	76 Xylenes, Total	106				0		9.62	
	77 o-Xylene	106	20.733	20.738	-0.005	98	133461	2.42	
	78 Styrene	104		20.781				ND	MU
	79 Bromoform	173		21.171				ND	
	80 Isopropylbenzene	105		21.343				ND	MU
	81 1,1,2,2-Tetrachloroethane	83		21.942				ND	U
	82 N-Propylbenzene	91		22.011				ND	MU
	85 4-Ethyltoluene	105		22.193				ND	MUa
	86 2-Chlorotoluene	91		22.209				ND	
	87 1,3,5-Trimethylbenzene	105		22.290				ND	MUa
	89 tert-Butylbenzene	119		22.766				ND	
	90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.005	55	5039	0.0353	
	91 sec-Butylbenzene	105		23.081				ND	U
	92 4-Isopropyltoluene	119		23.279				ND	
	93 1,3-Dichlorobenzene	146		23.327				ND	
	94 1,4-Dichlorobenzene	146		23.466				ND	
	95 Benzyl chloride	91		23.670				ND	U
	96 n-Butylbenzene	91		23.878				ND	U
	98 1,2-Dichlorobenzene	146		24.028				ND	
	100 1,2,4-Trichlorobenzene	180		26.703				ND	
	101 Hexachlorobutadiene	225		26.896				ND	
	102 Naphthalene	128		27.238				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

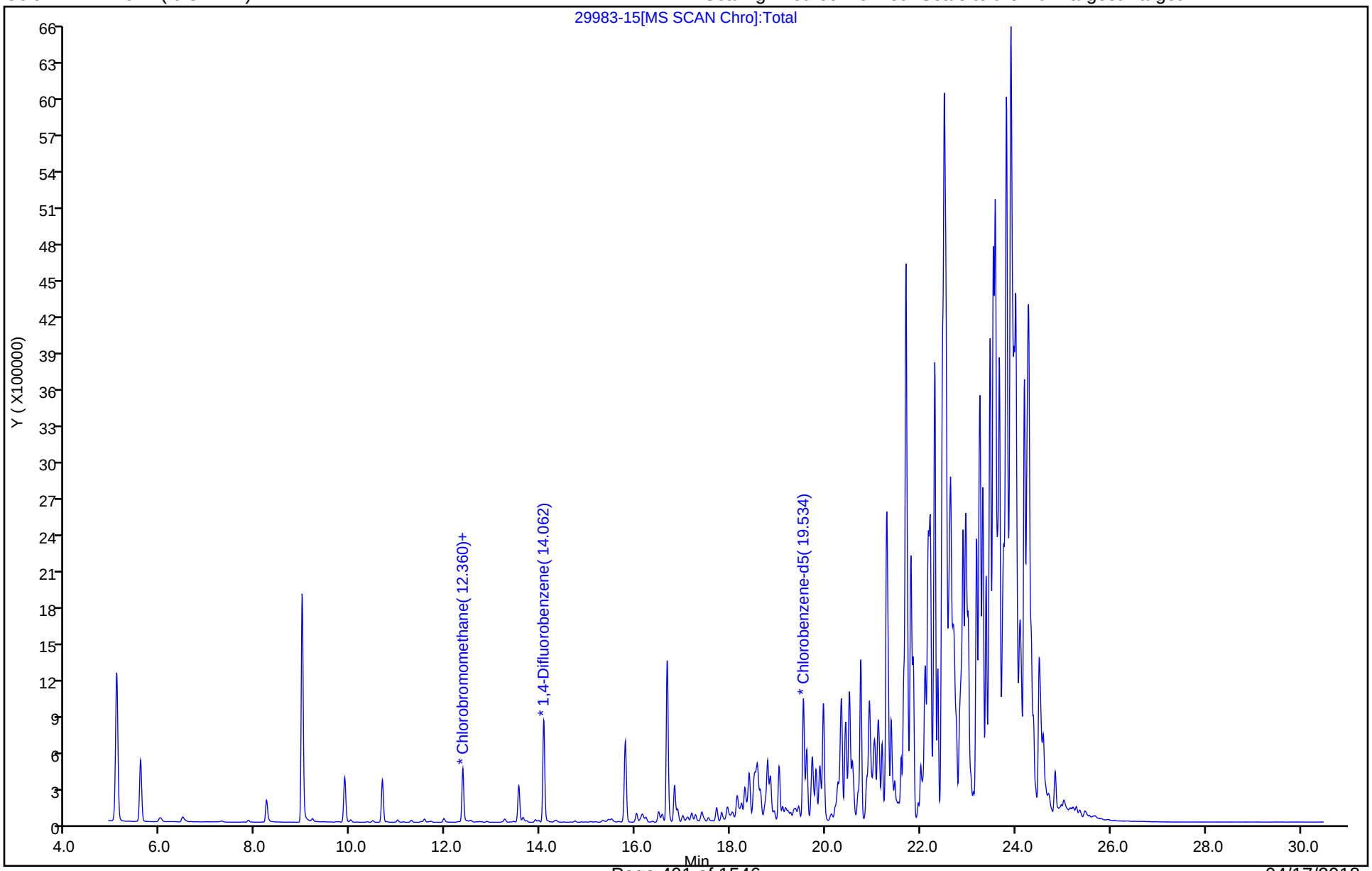
Report Date: 09-Apr-2018 19:20:22 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6	Worklist Smp#:	15
Client ID:	GC-SV-105 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	10.0200	ALS Bottle#:	14
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

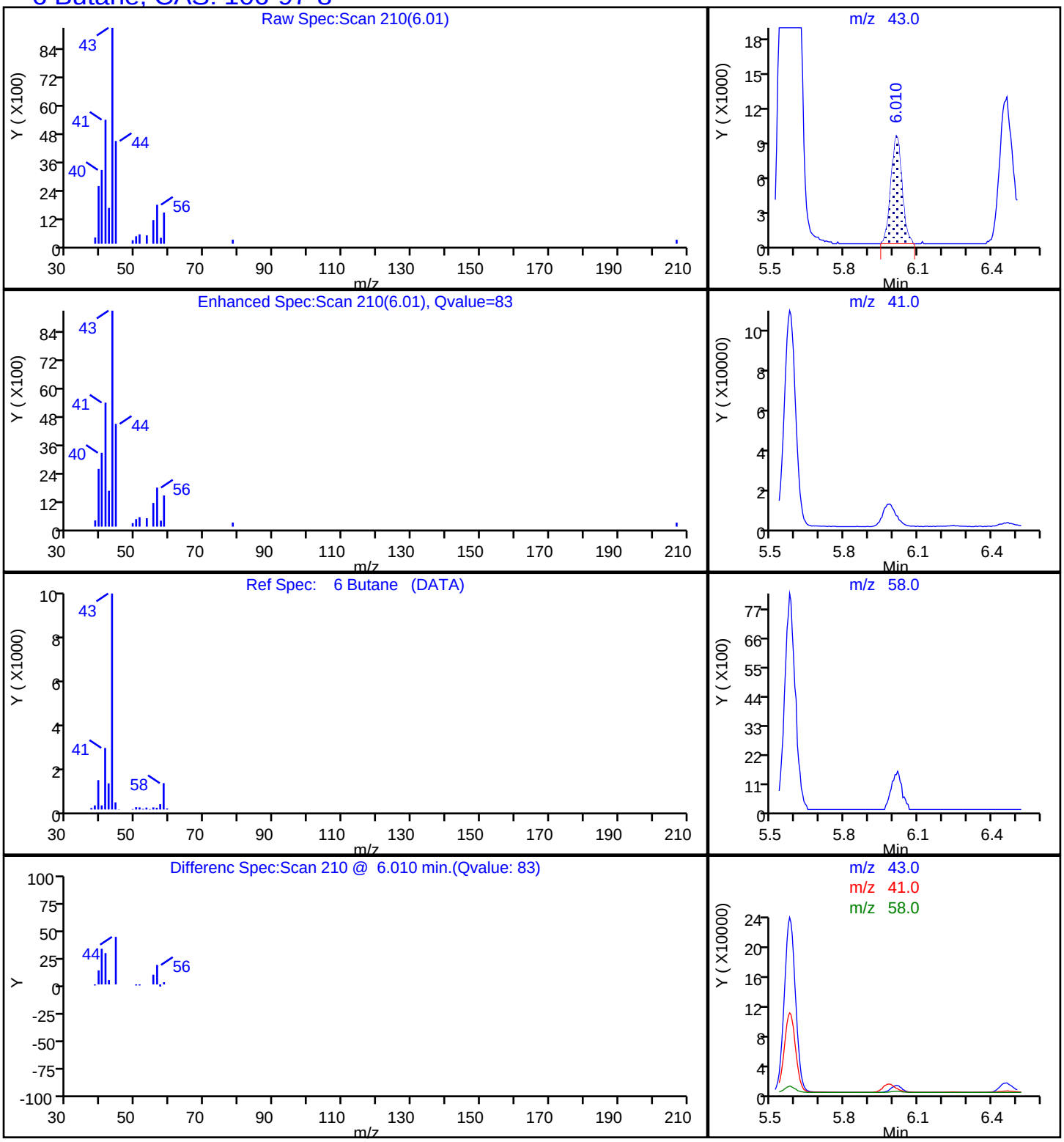


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

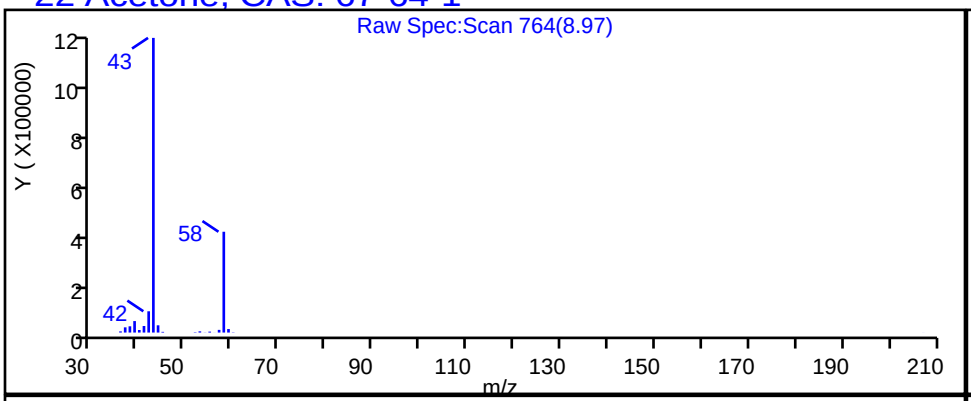
6 Butane, CAS: 106-97-8

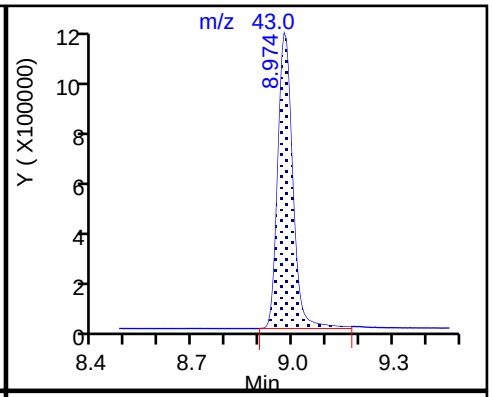


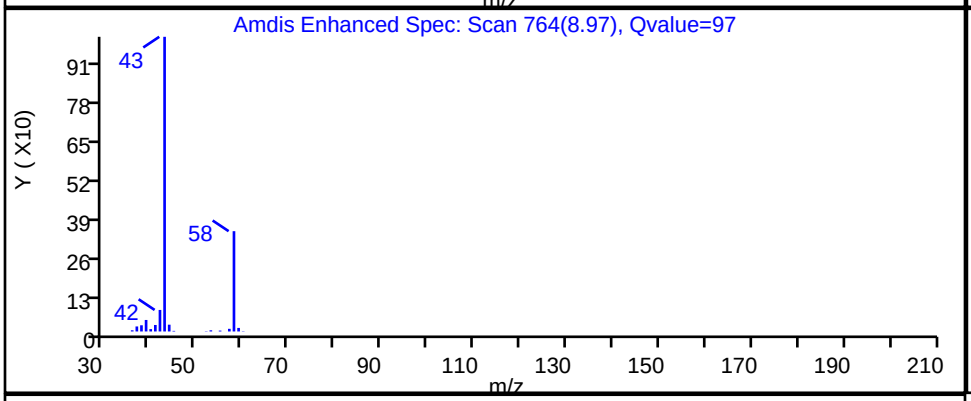
TestAmerica Burlington

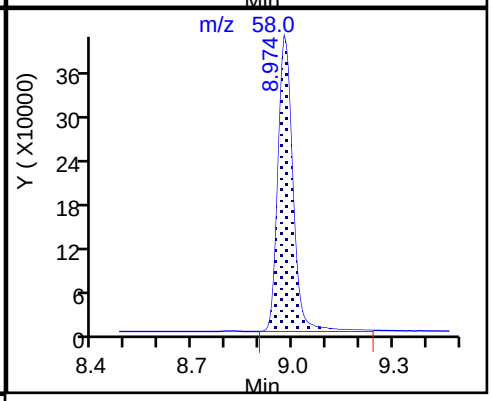
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

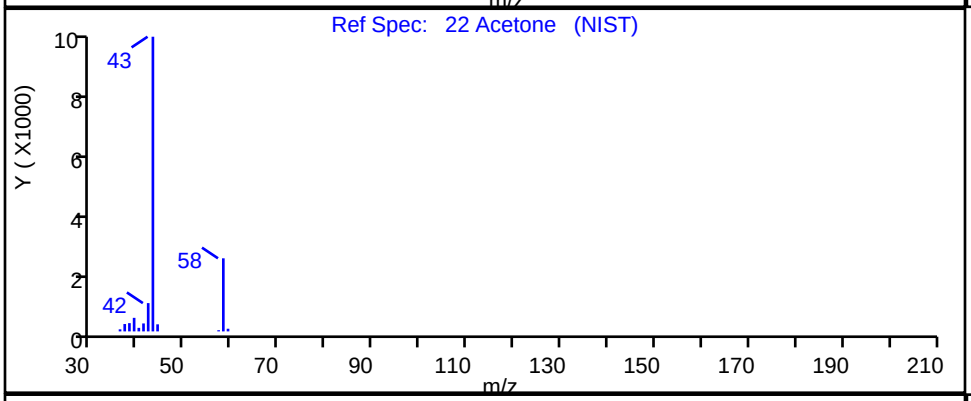
22 Acetone, CAS: 67-64-1

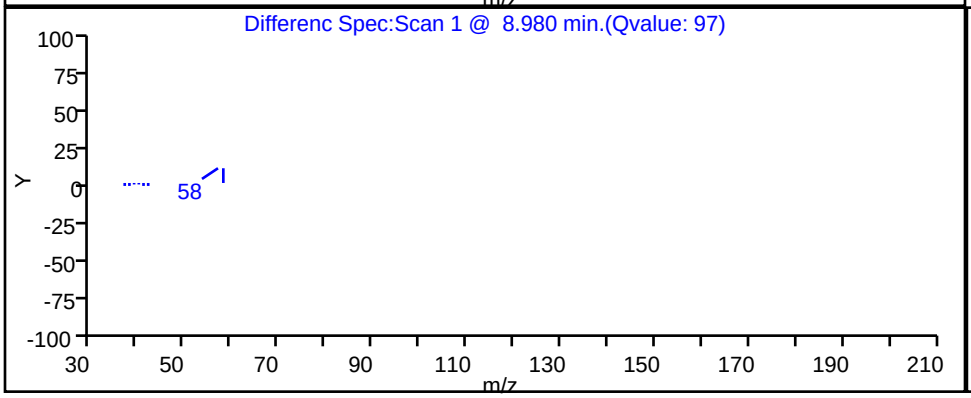


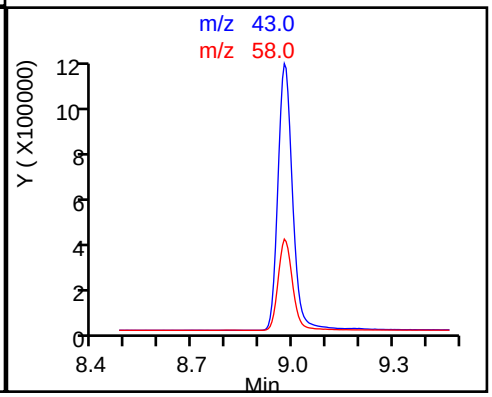








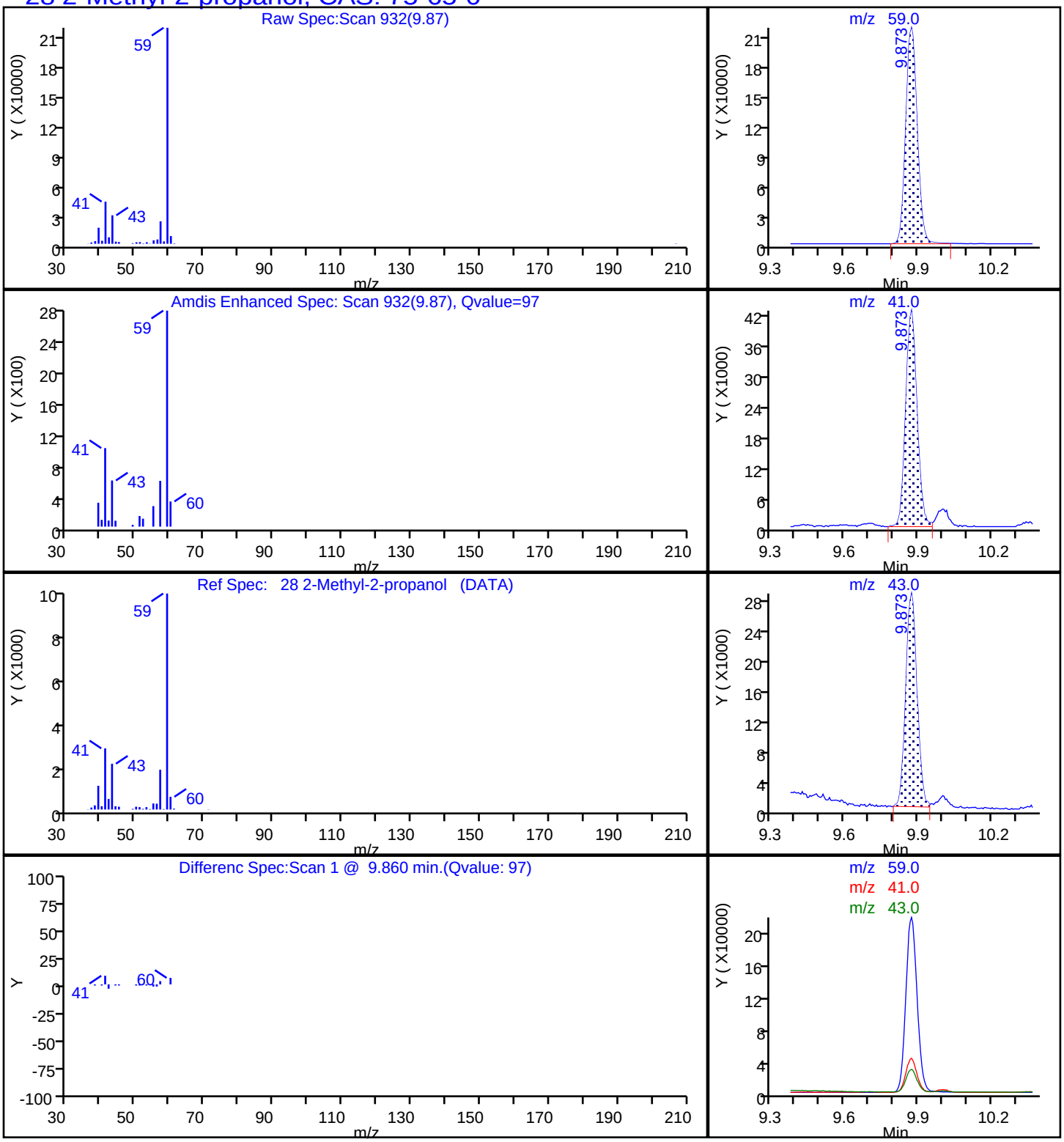




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

28 2-Methyl-2-propanol, CAS: 75-65-0

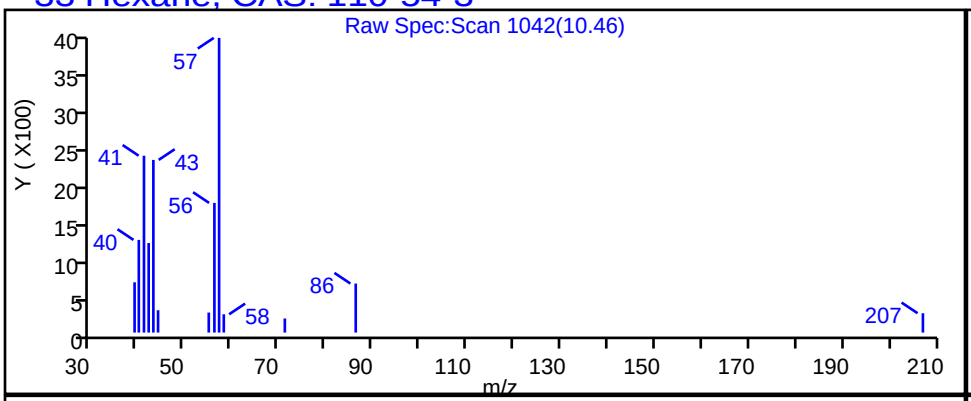


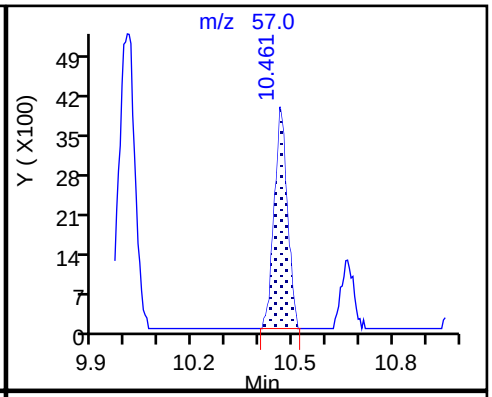
TestAmerica Burlington

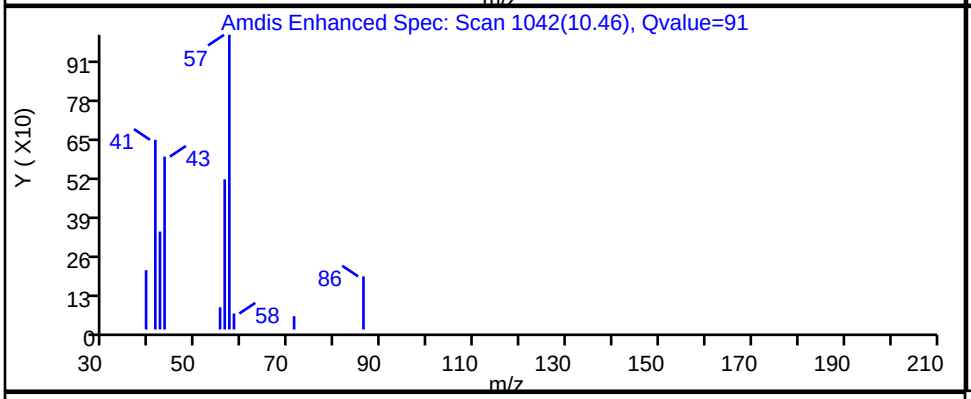
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

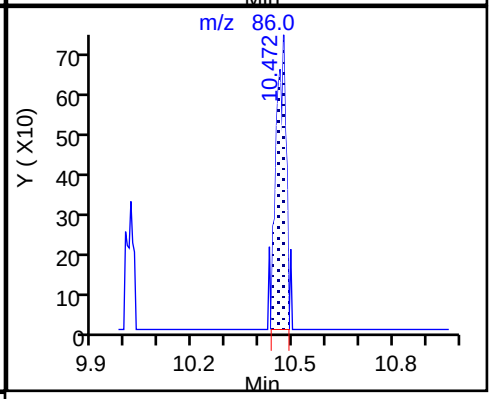
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

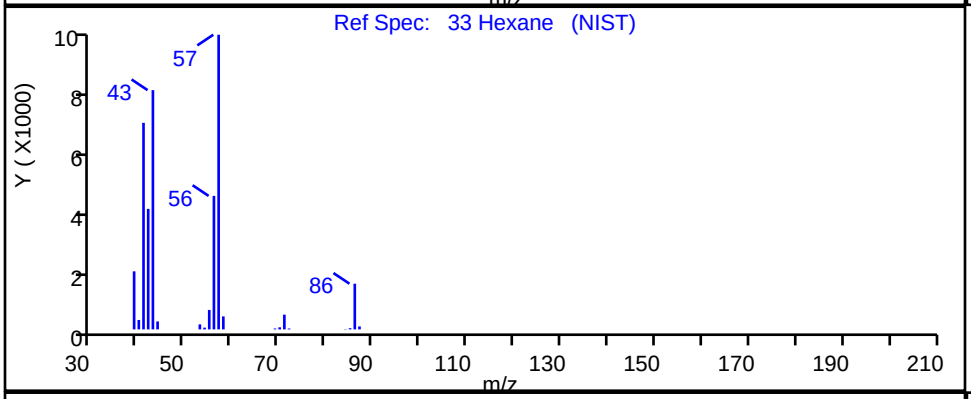
33 Hexane, CAS: 110-54-3

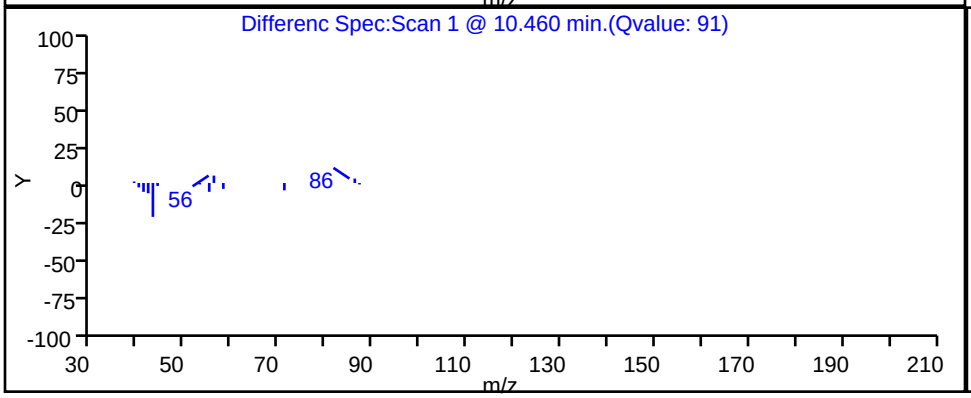


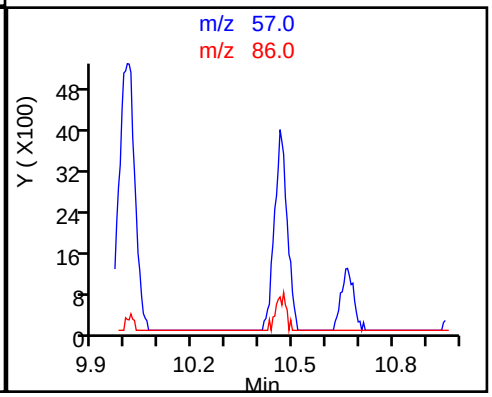










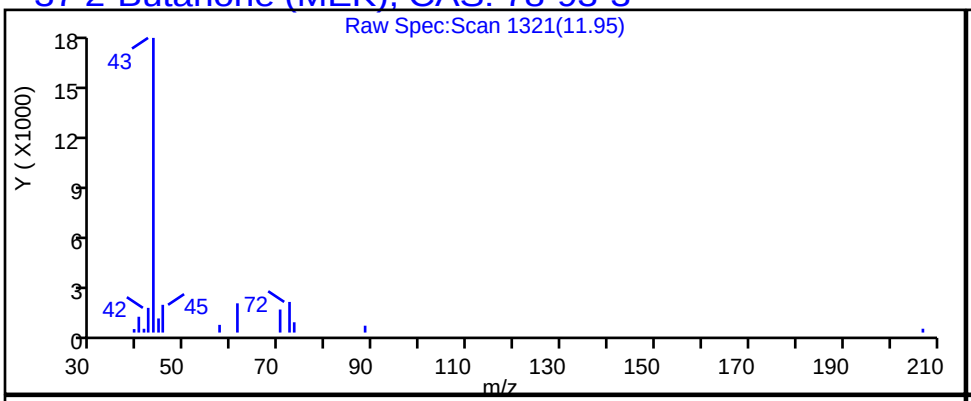


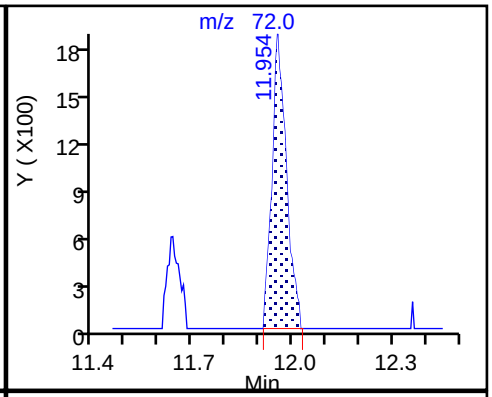
TestAmerica Burlington

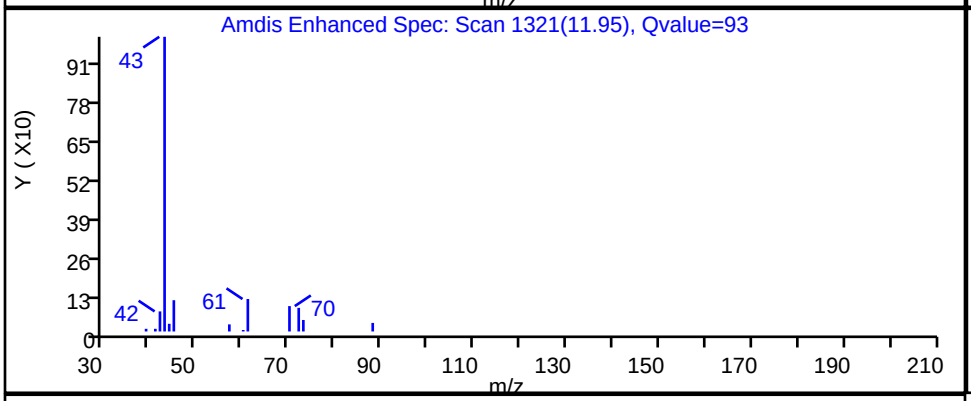
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

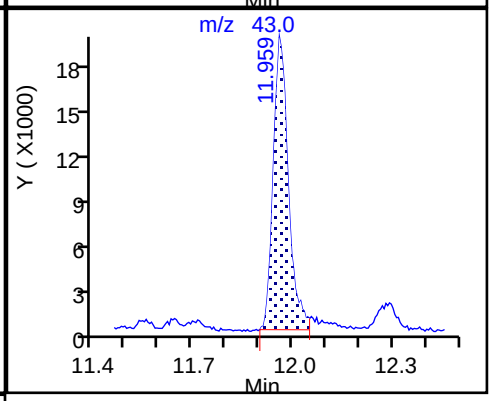
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

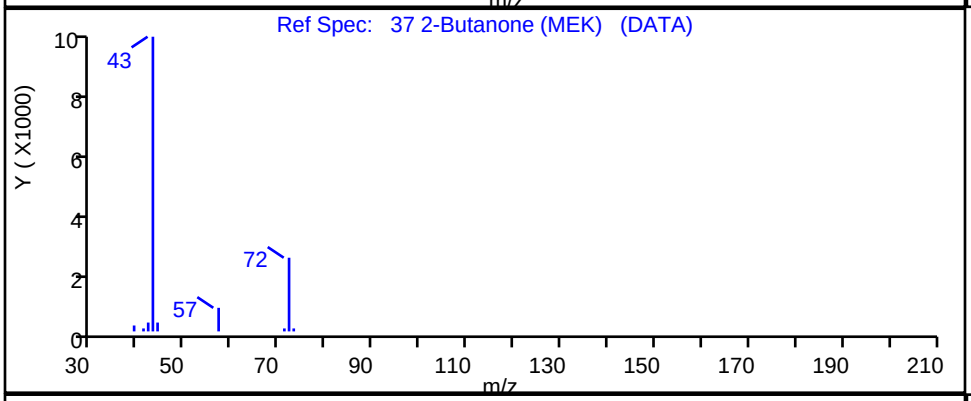
37 2-Butanone (MEK), CAS: 78-93-3

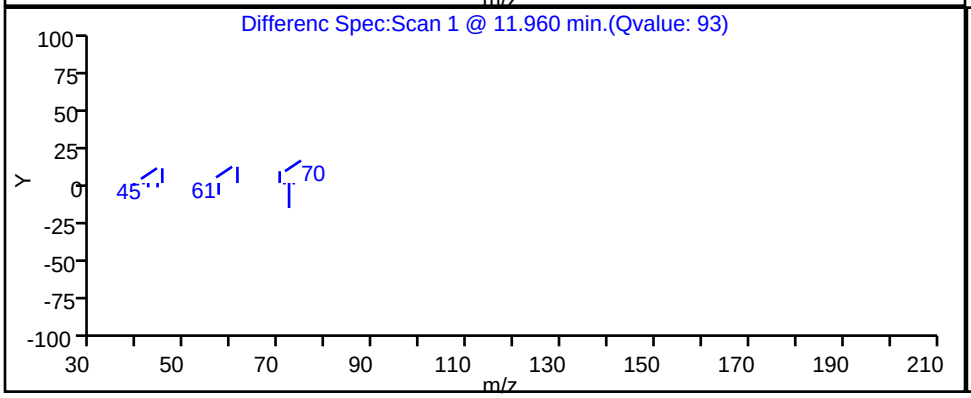


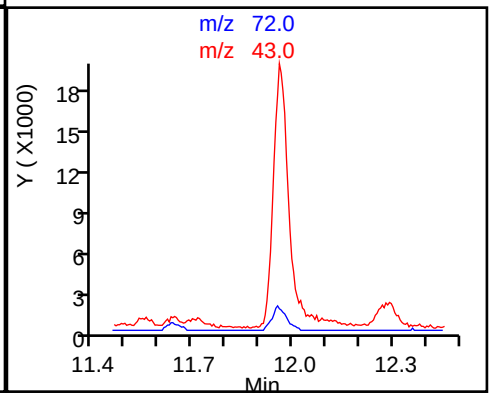










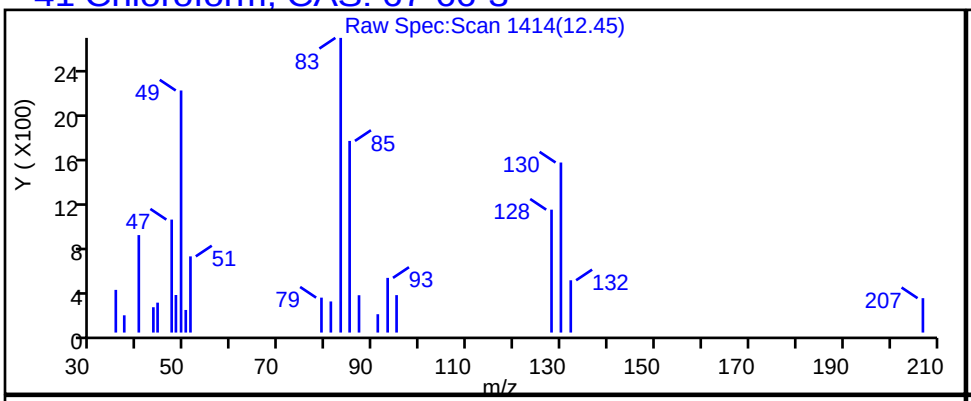


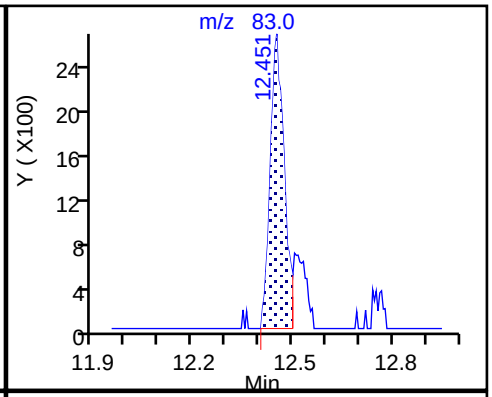
TestAmerica Burlington

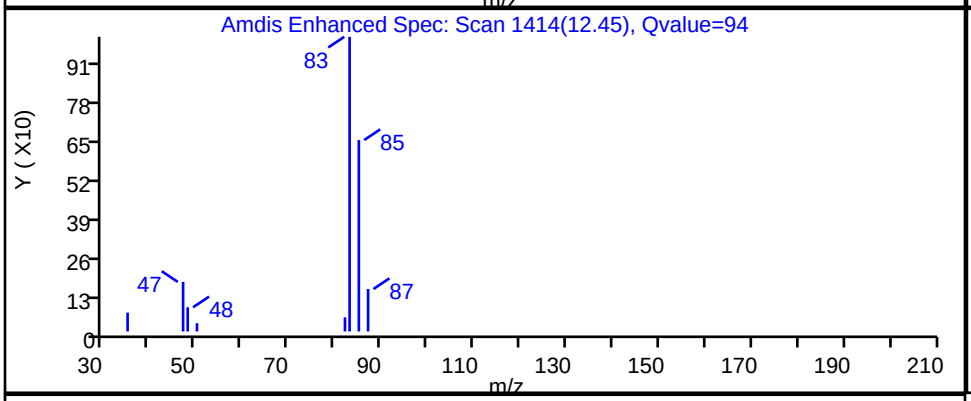
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

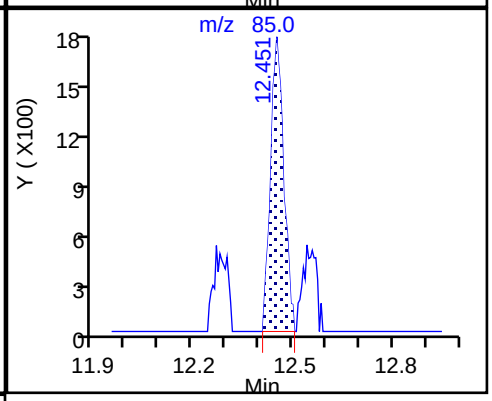
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

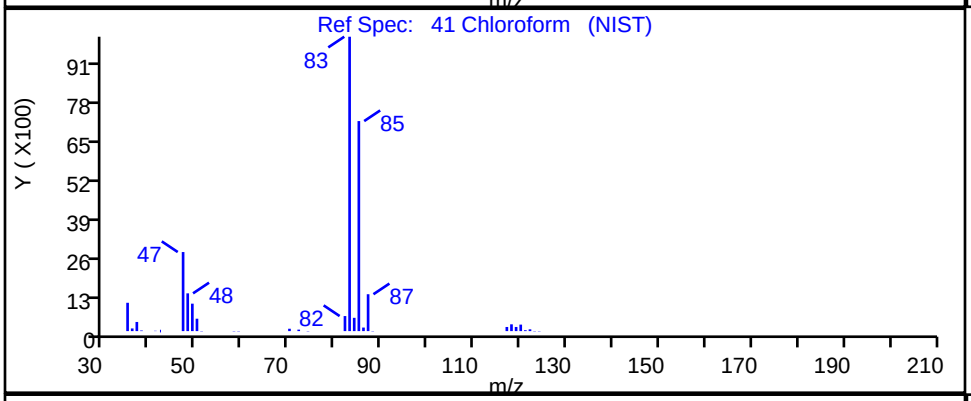
41 Chloroform, CAS: 67-66-3

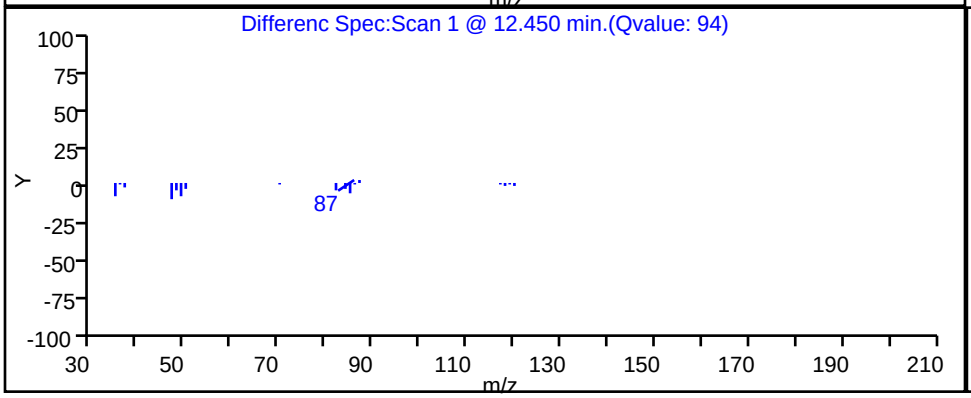


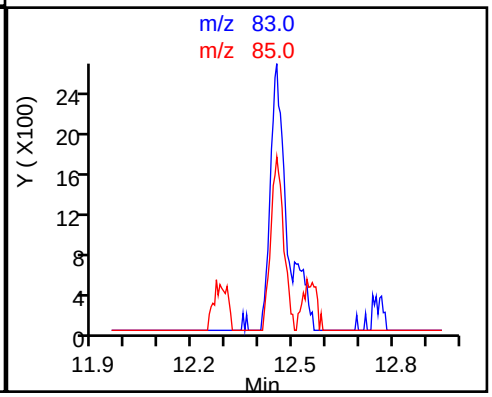












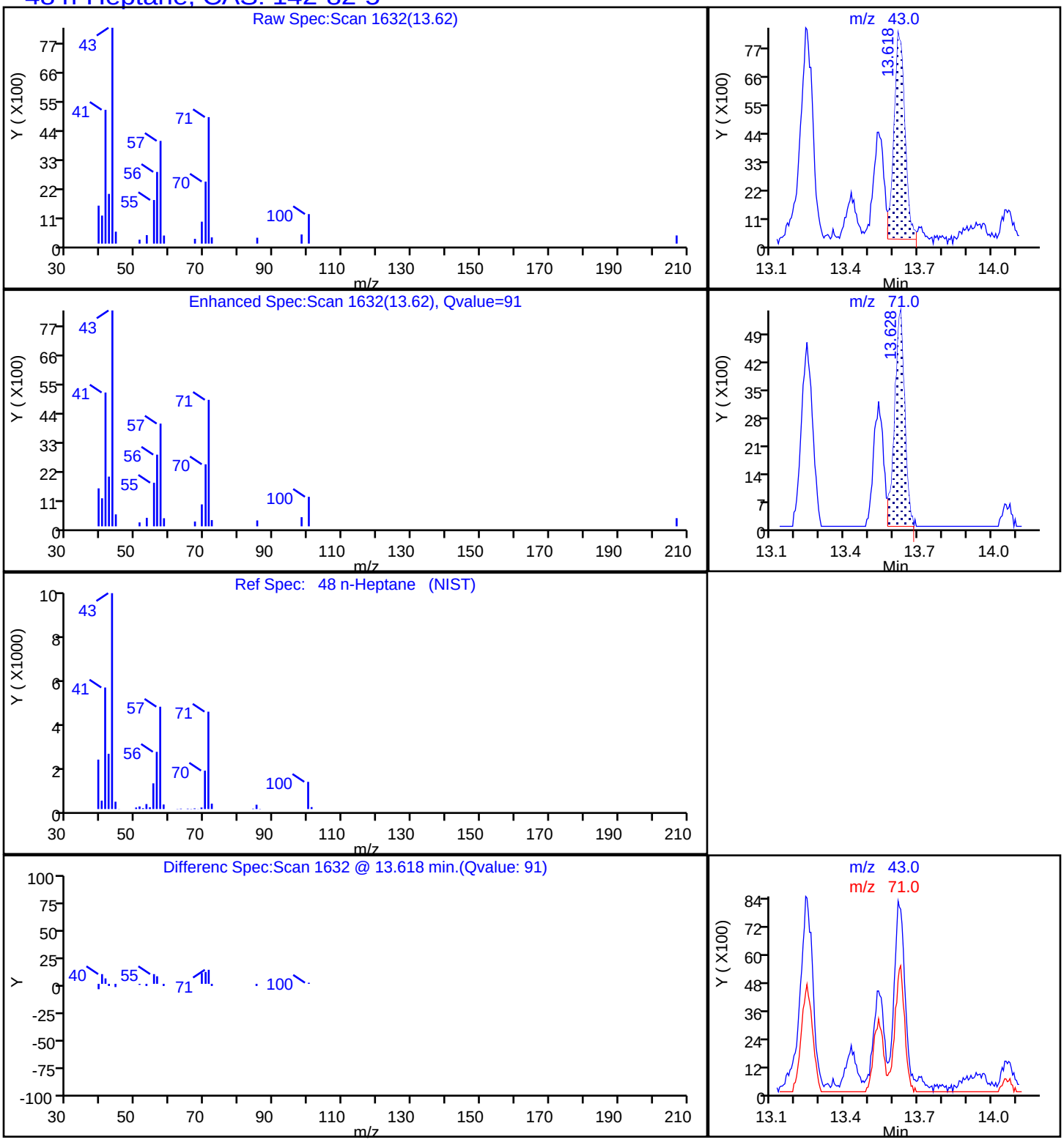
Report Date: 09-Apr-2018 19:20:23 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 n-Heptane, CAS: 142-82-5

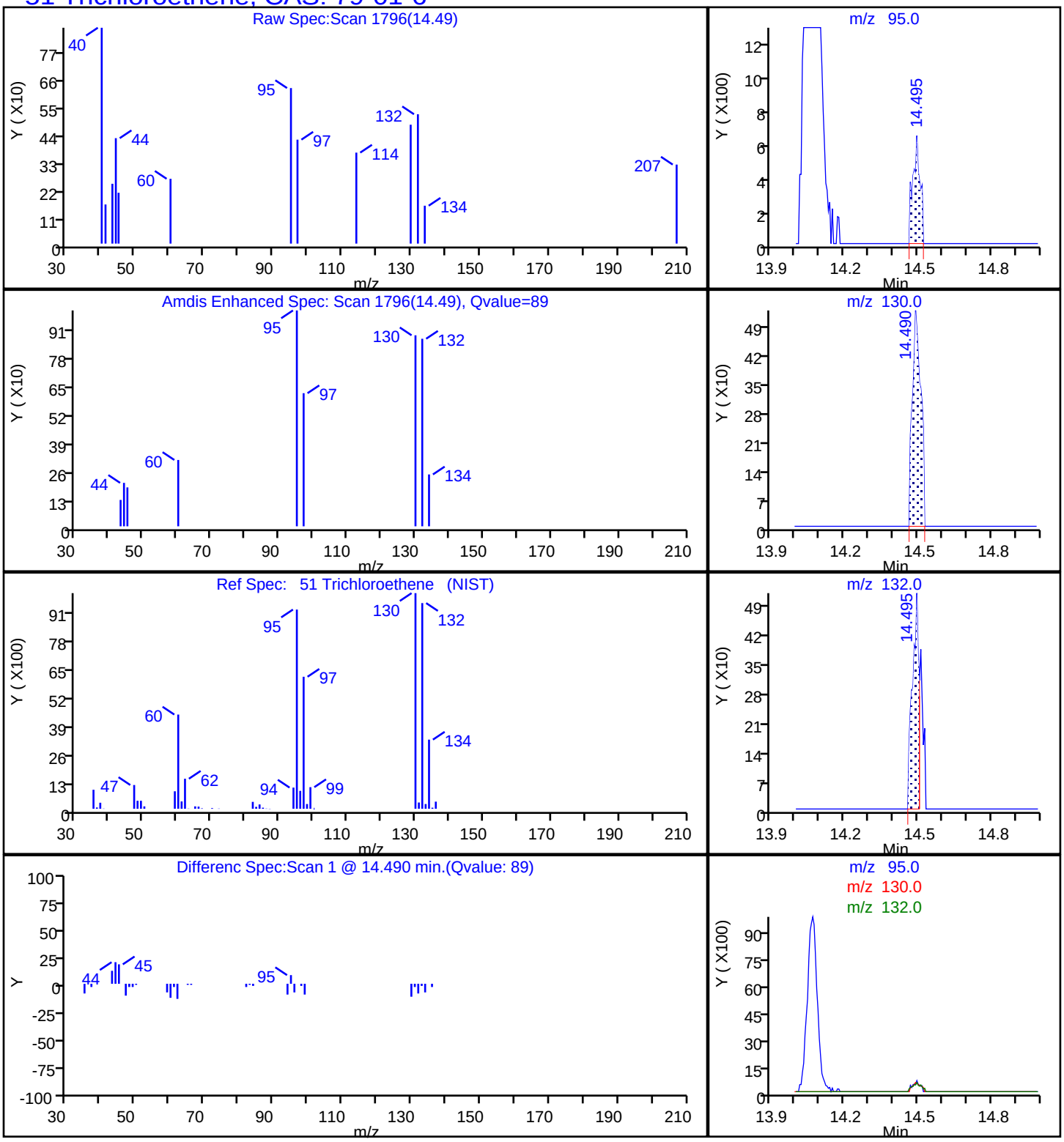


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

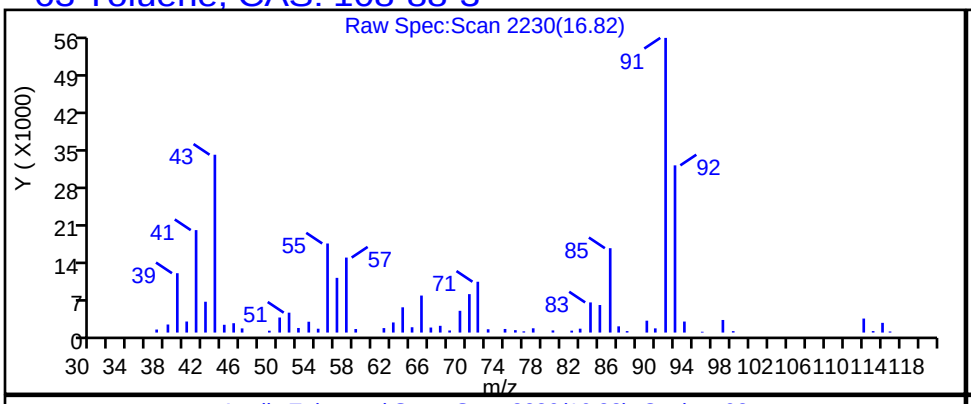
51 Trichloroethene, CAS: 79-01-6

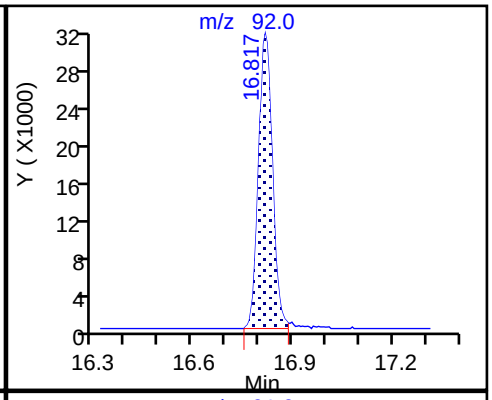


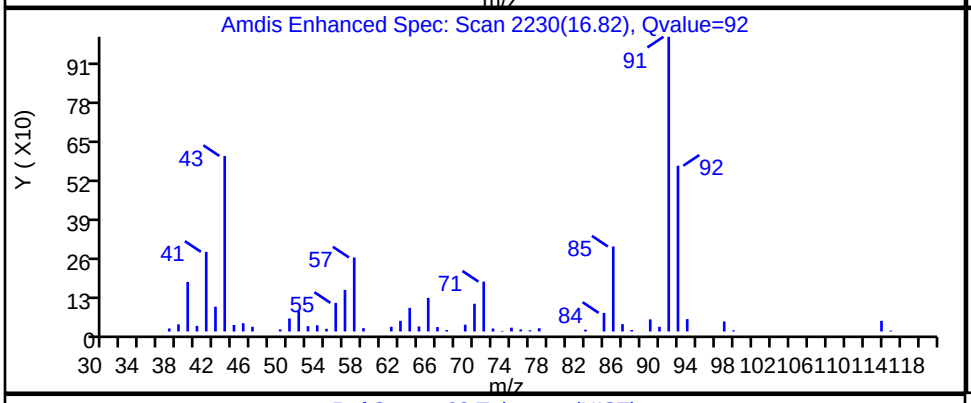
TestAmerica Burlington

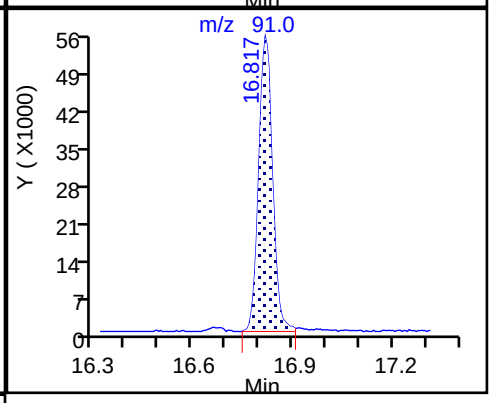
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

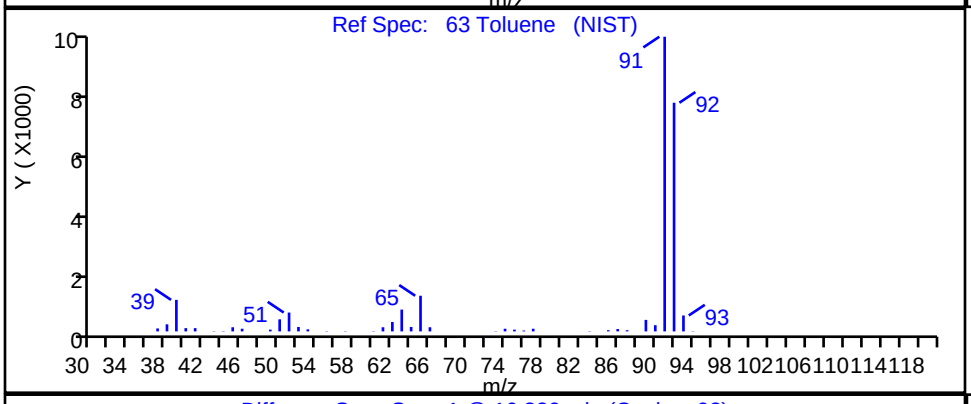
63 Toluene, CAS: 108-88-3

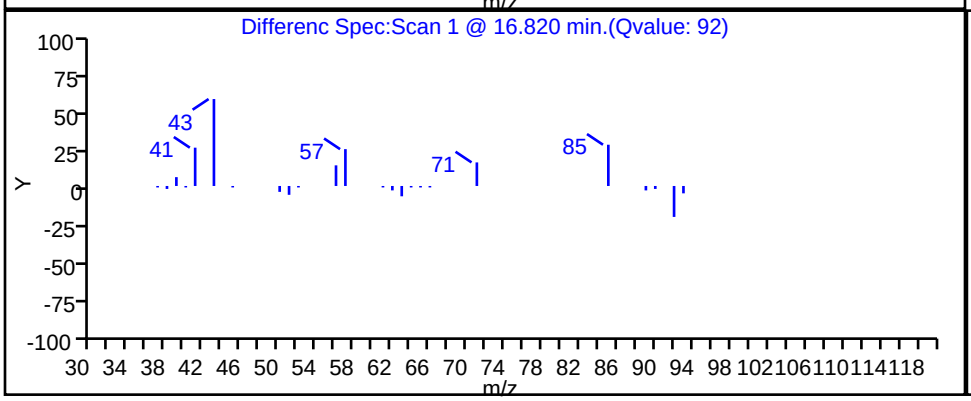


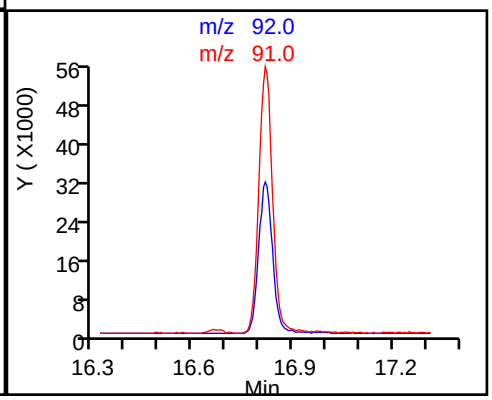








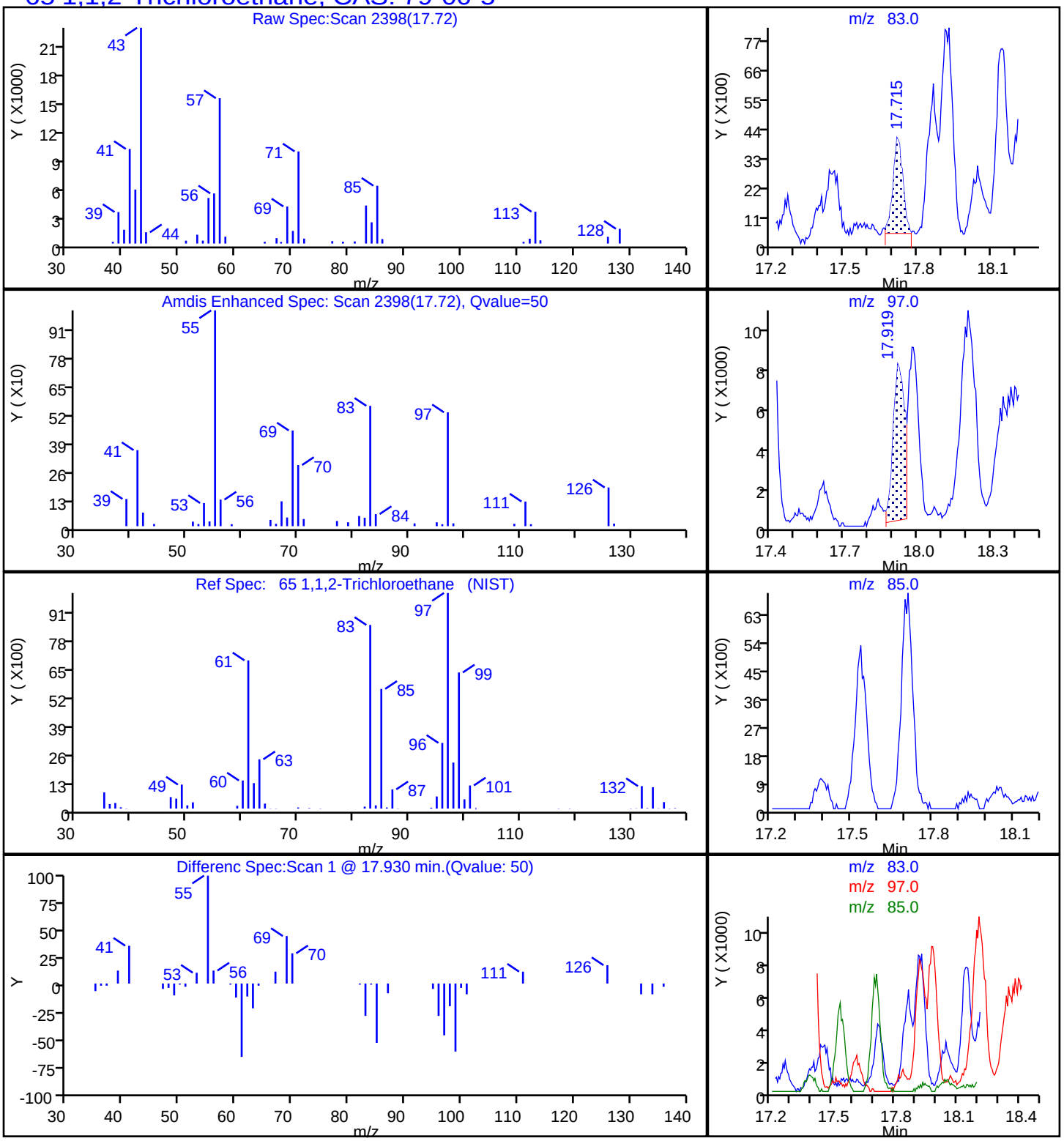




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 1,1,2-Trichloroethane, CAS: 79-00-5



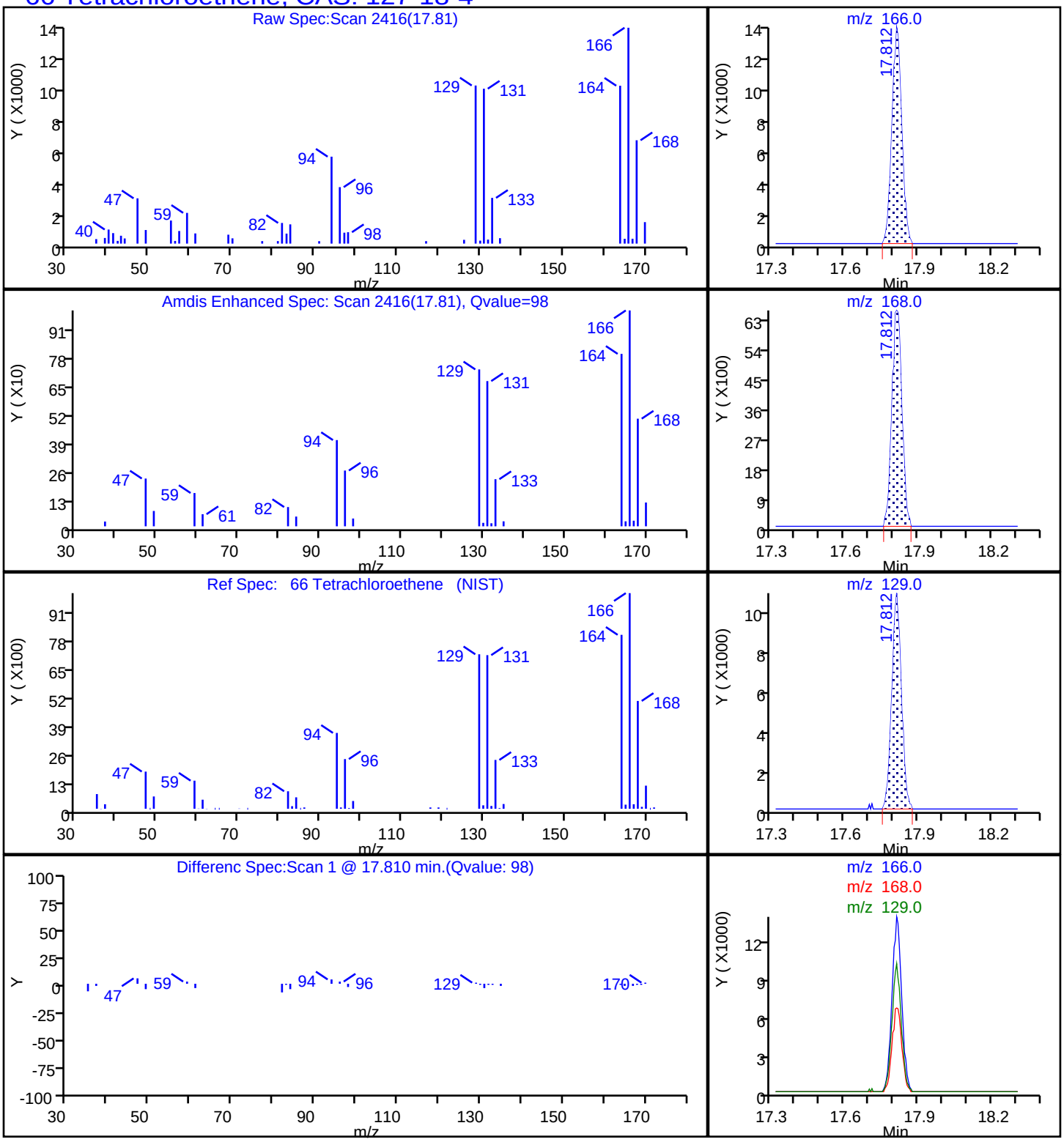
Report Date: 09-Apr-2018 19:20:23 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

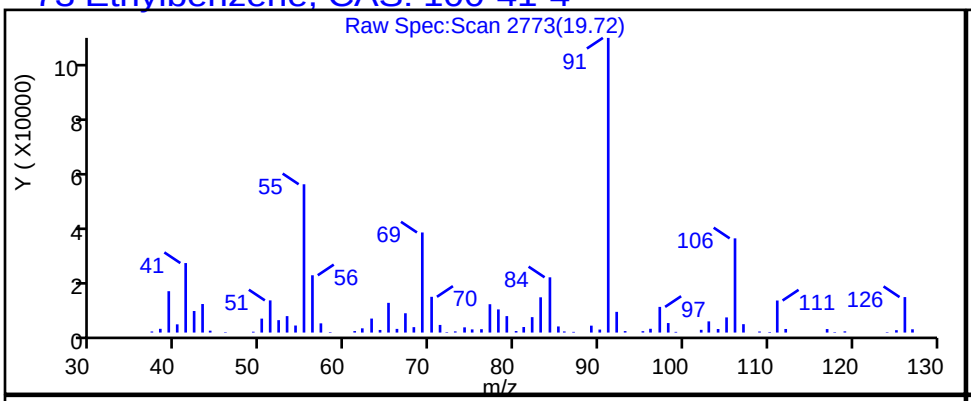
66 Tetrachloroethene, CAS: 127-18-4

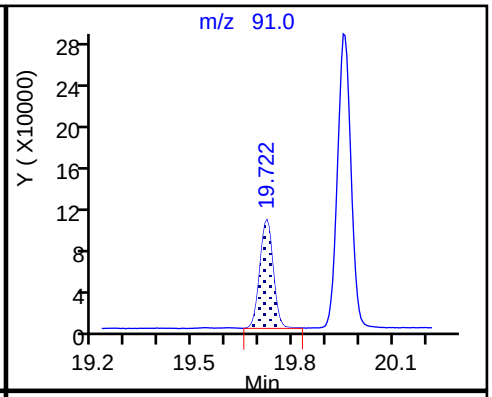


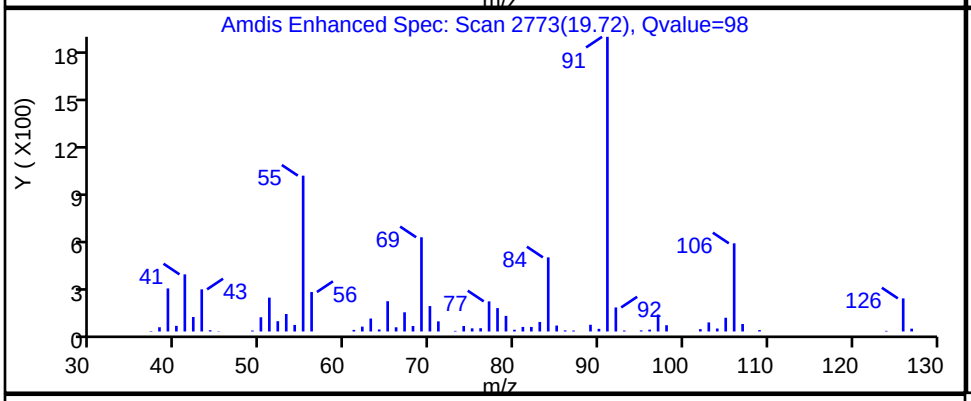
TestAmerica Burlington

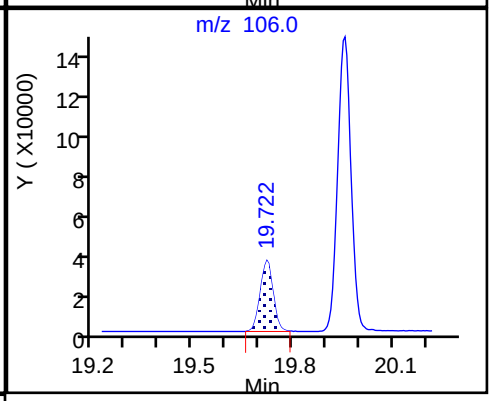
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

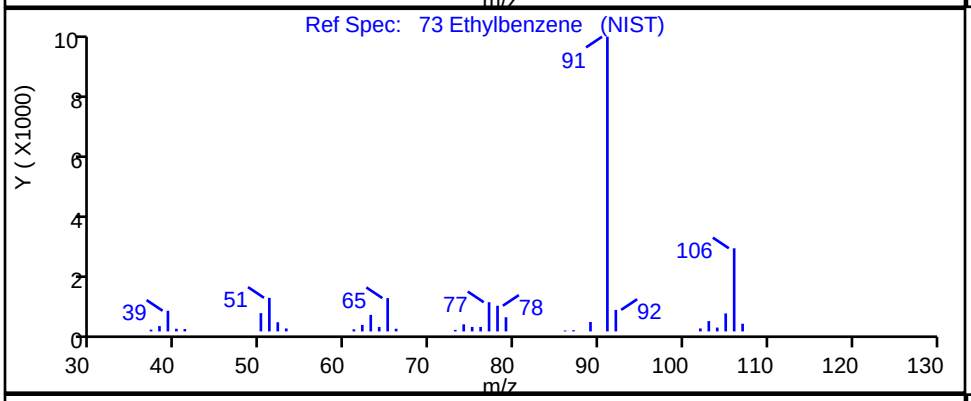
73 Ethylbenzene, CAS: 100-41-4

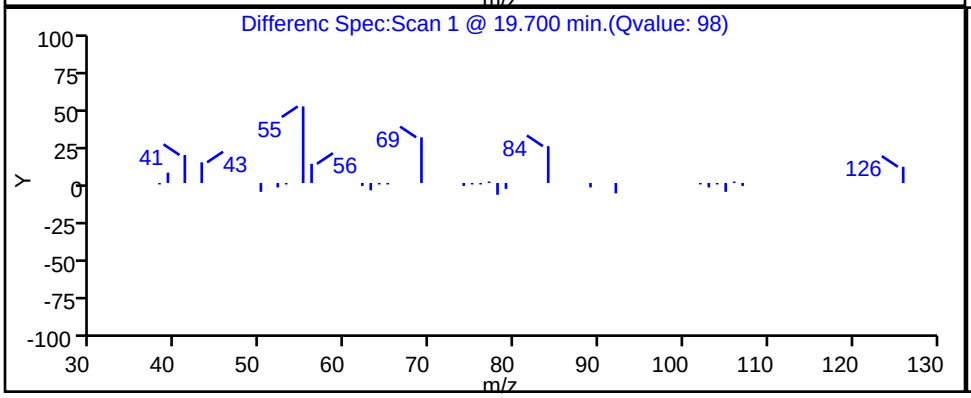


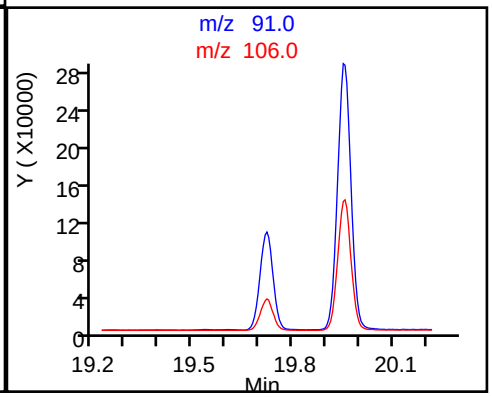












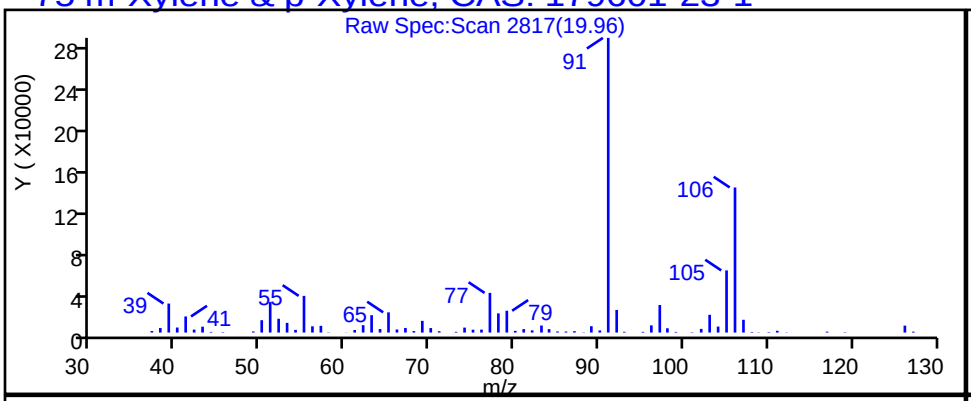
Report Date: 09-Apr-2018 19:20:23 Chrom Revision: 2.2 13-Mar-2018 08:45:20

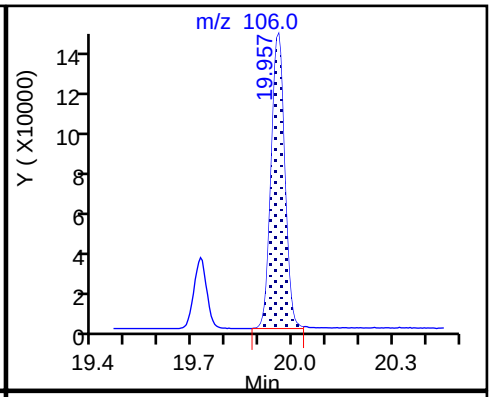
TestAmerica Burlington

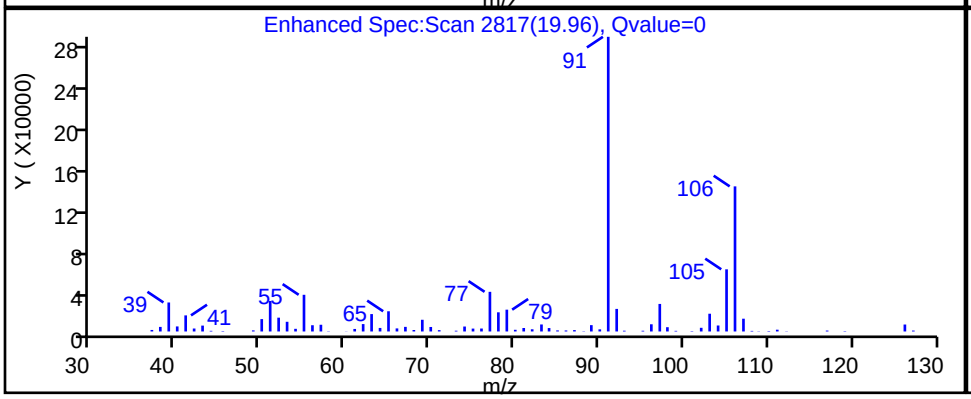
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

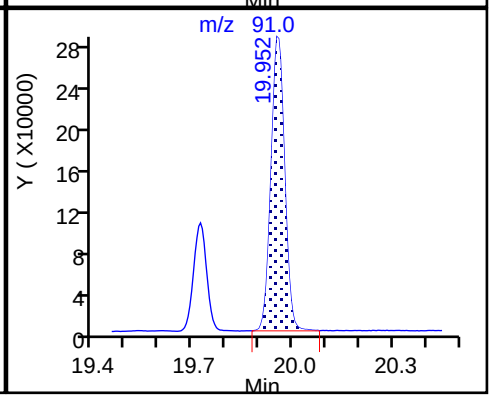
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

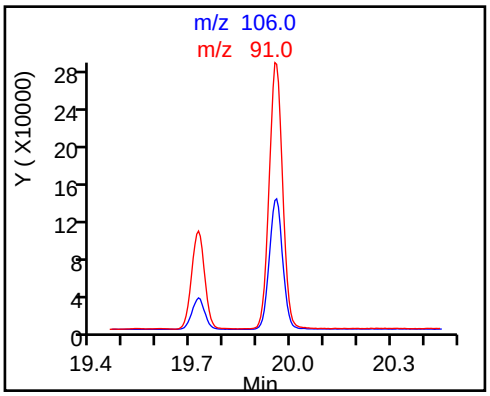
75 m-Xylene & p-Xylene, CAS: 179601-23-1











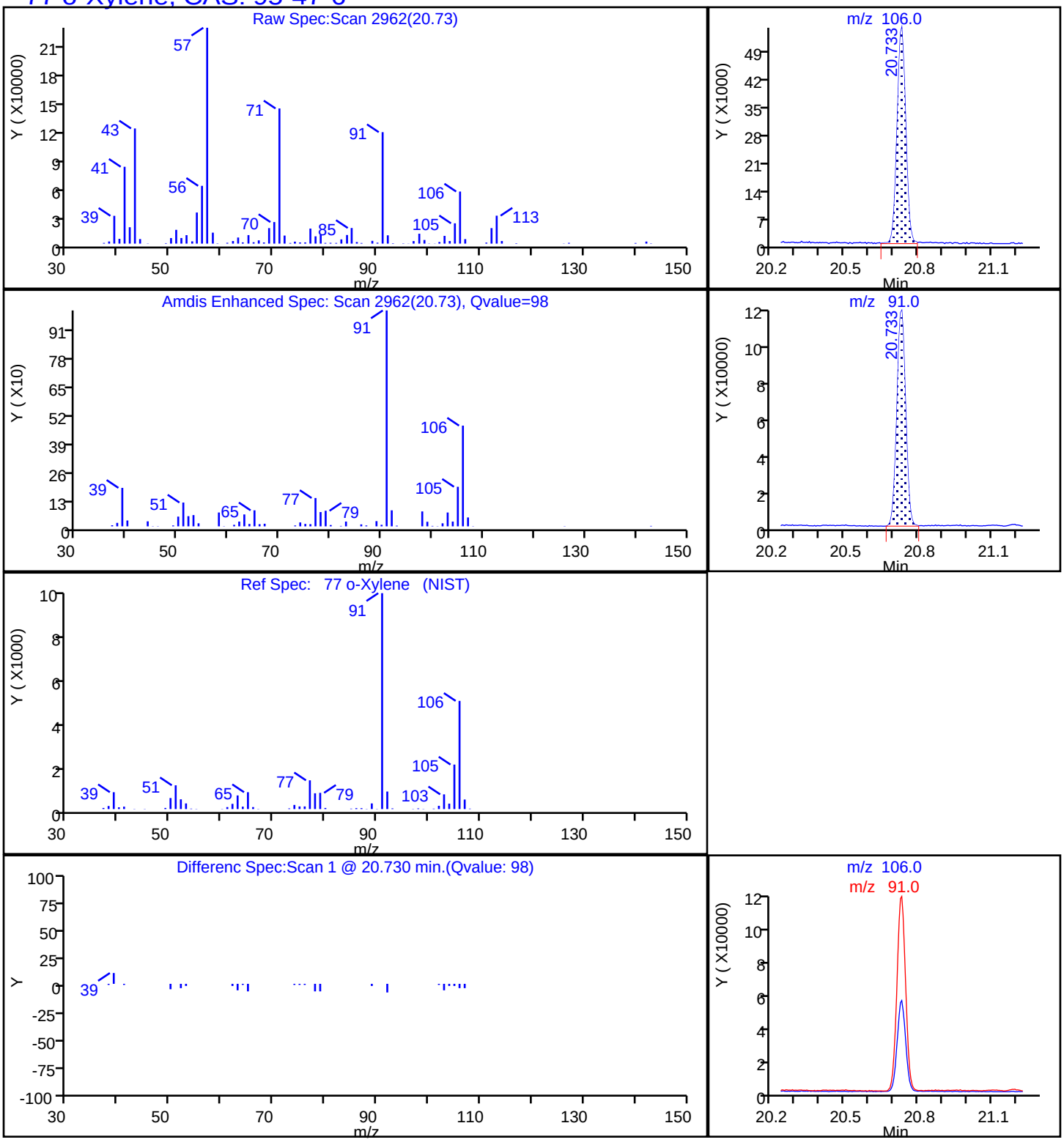
Report Date: 09-Apr-2018 19:20:23 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d

Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

77 o-Xylene, CAS: 95-47-6



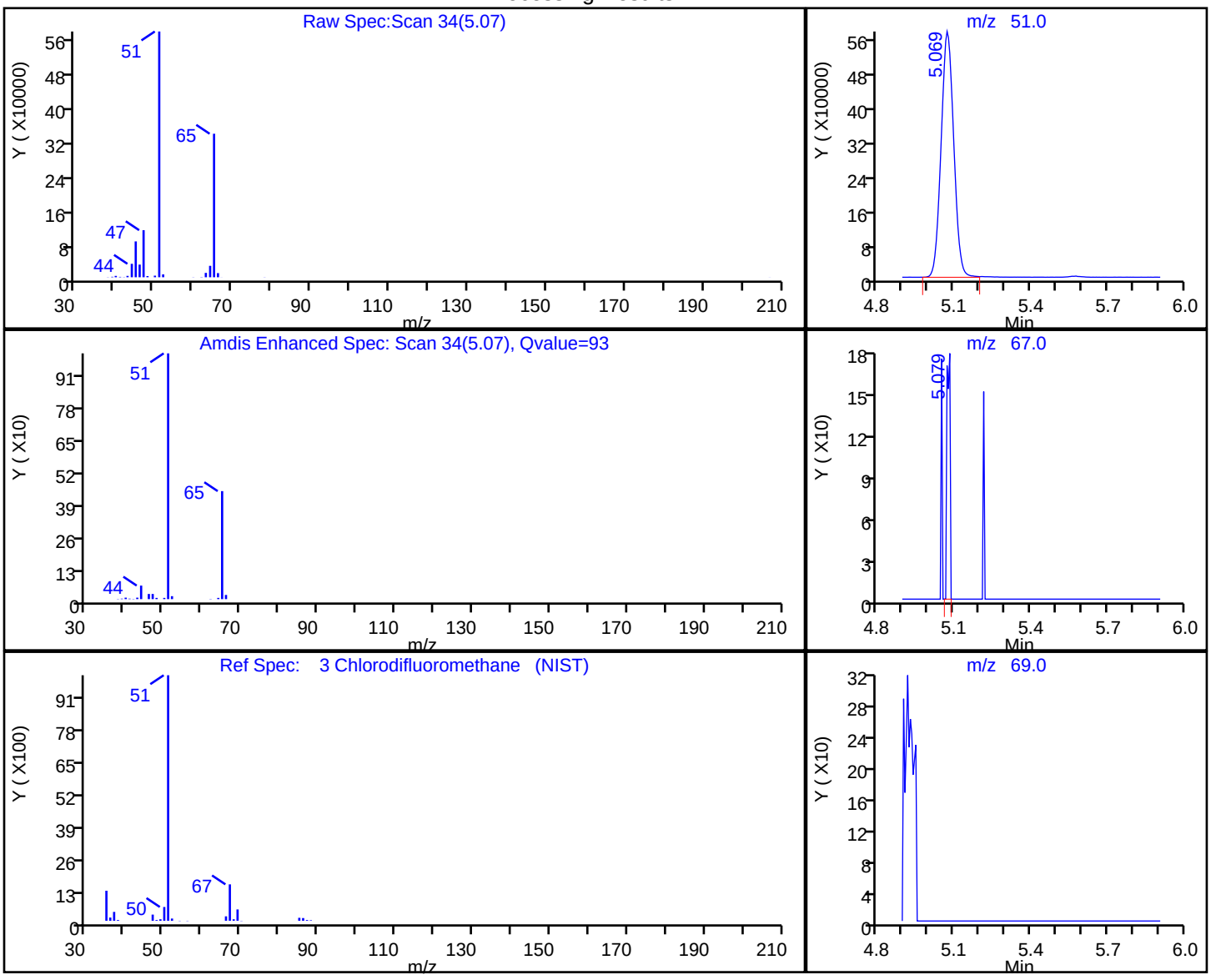
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
5.07	51.00	1982252	37.601462
5.08	67.00	162	
5.23	69.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

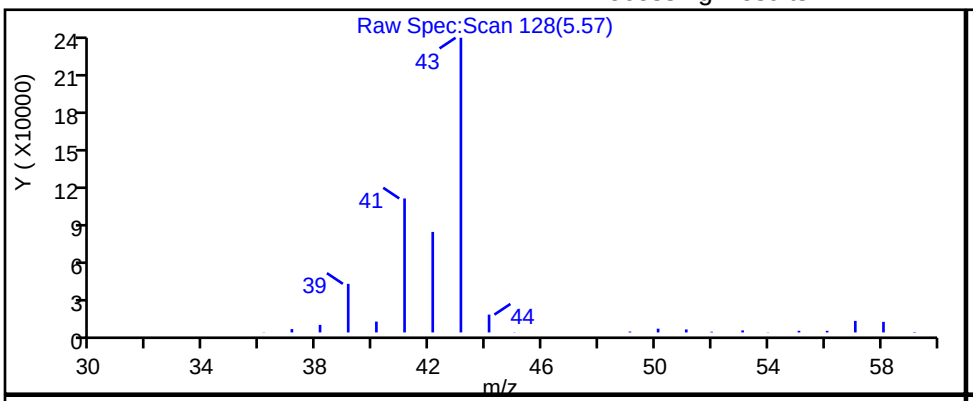
User Disabled Compound Report

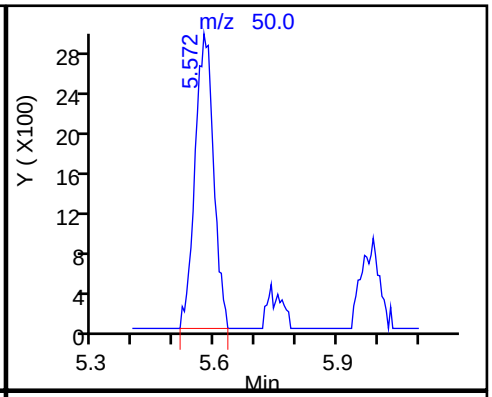
TestAmerica Burlington

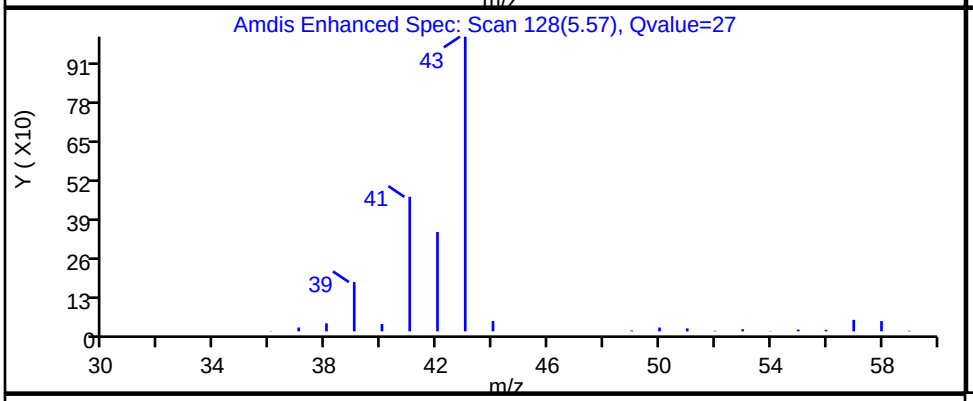
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

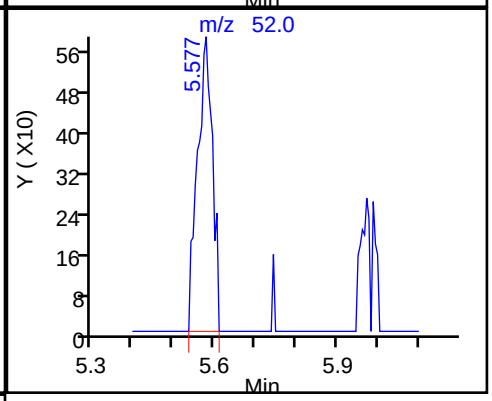
5 Chloromethane, CAS: 74-87-3

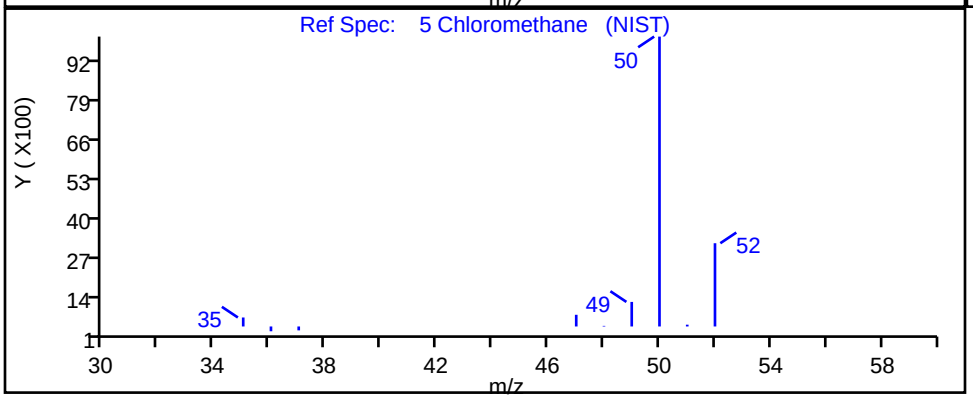
Processing Results











RT	Mass	Response	Amount
5.57	50.00	9360	0.295565
5.58	52.00	1498	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

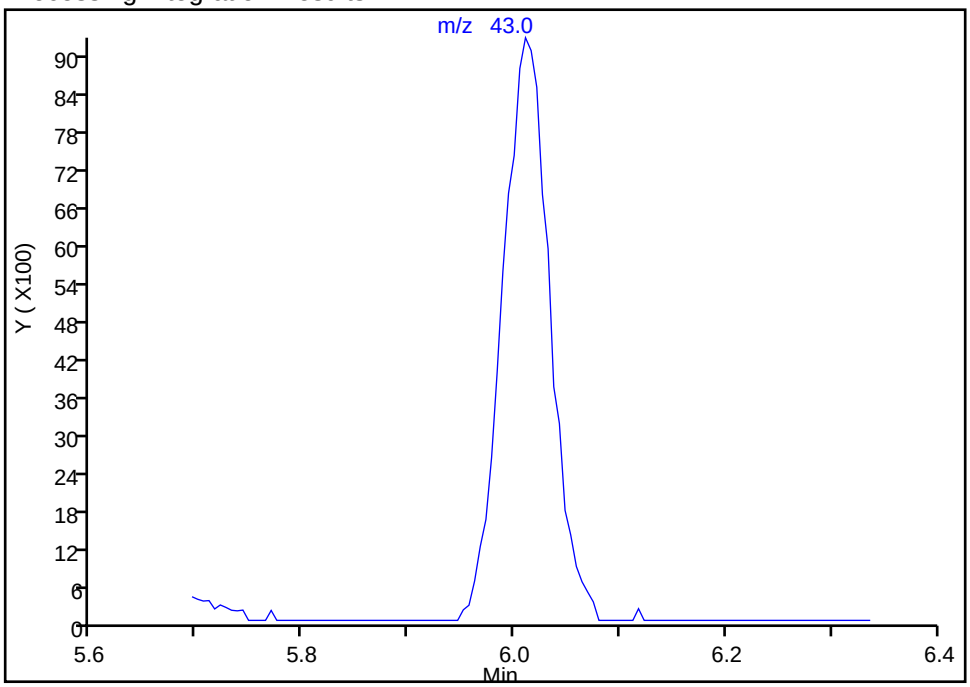
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

Signal: 1

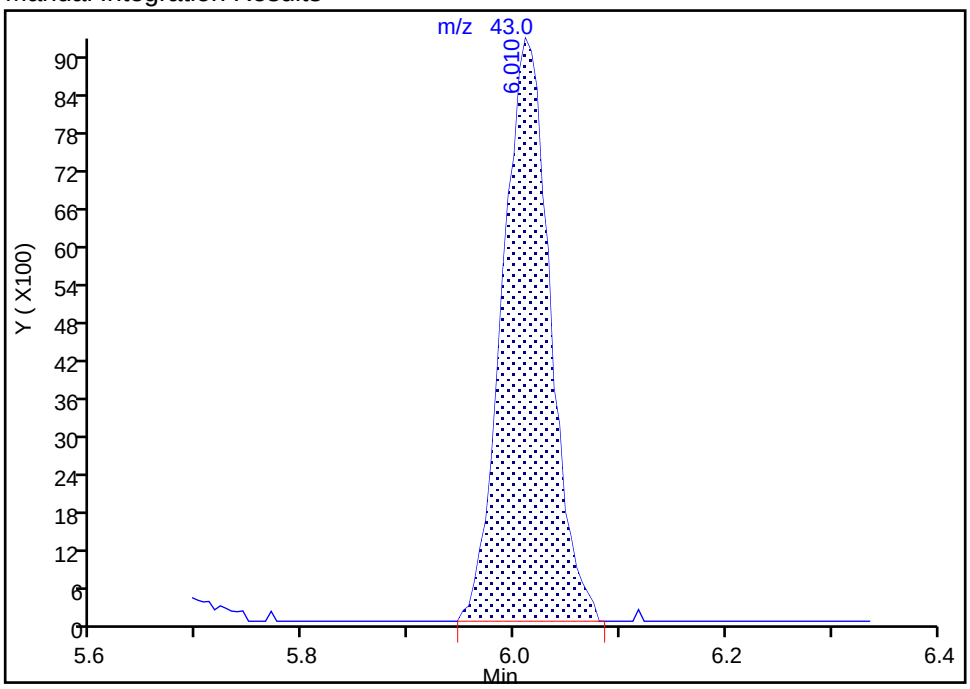
Not Detected
Expected RT: 6.03

Processing Integration Results



Manual Integration Results

RT: 6.01
Area: 28923
Amount: 0.552227
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:14:02
Audit Action: Manually Integrated Audit Reason: Assign Peak

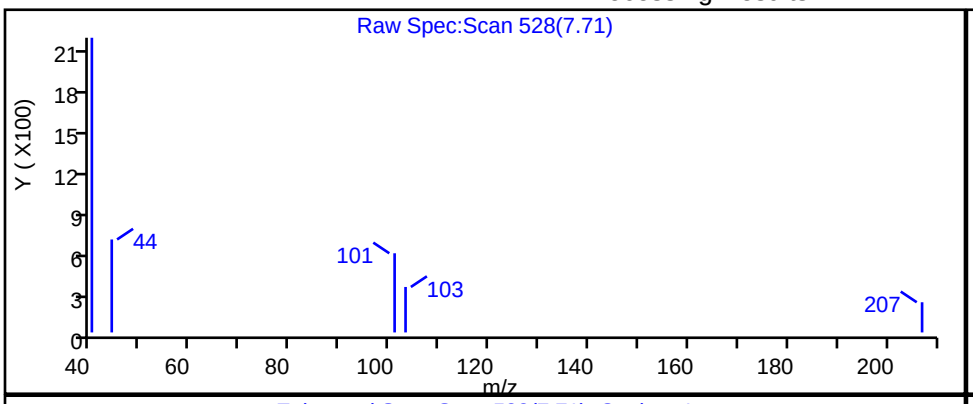
User Disabled Compound Report

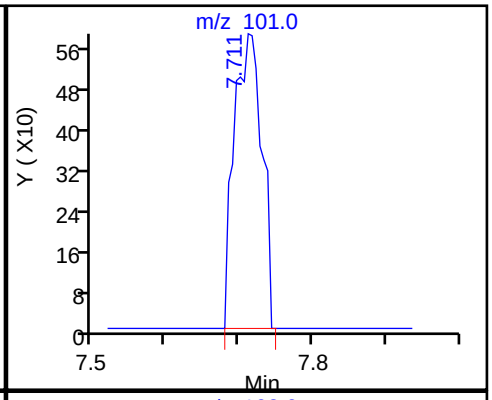
TestAmerica Burlington

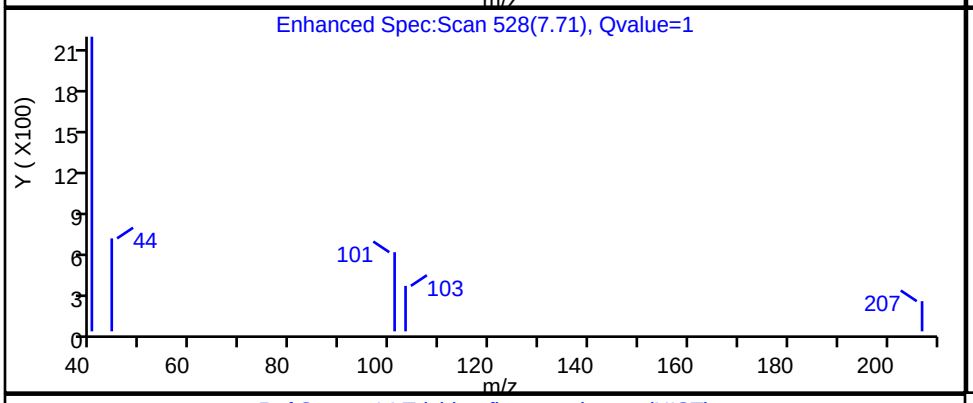
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

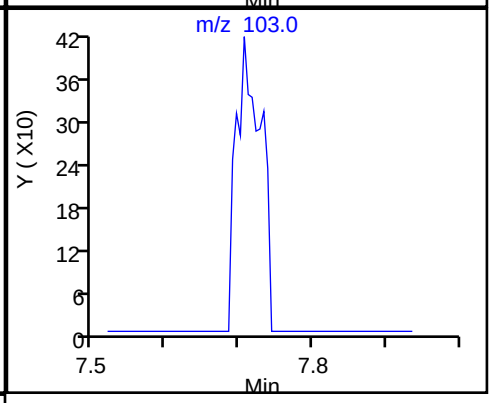
14 Trichlorofluoromethane, CAS: 75-69-4

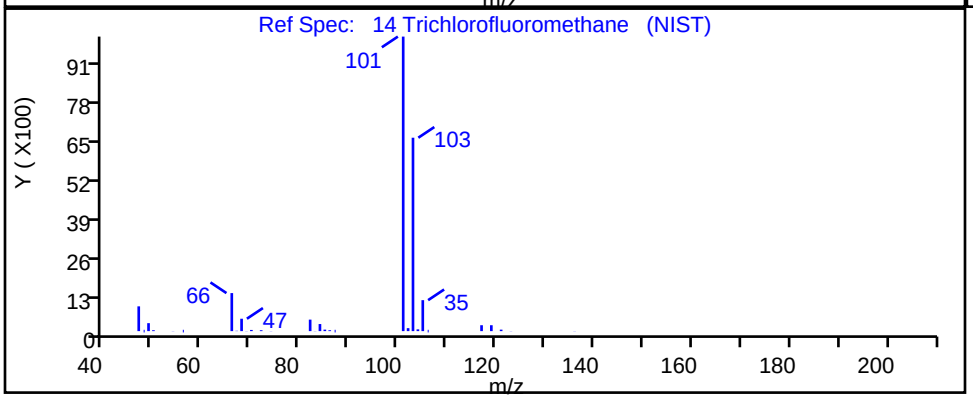
Processing Results











RT	Mass	Response	Amount
7.71	101.00	1537	0.019891
7.73	103.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

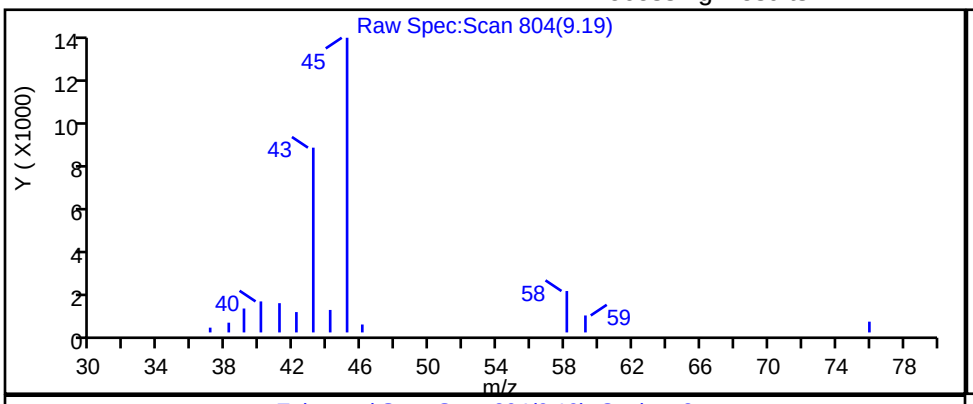
User Disabled Compound Report

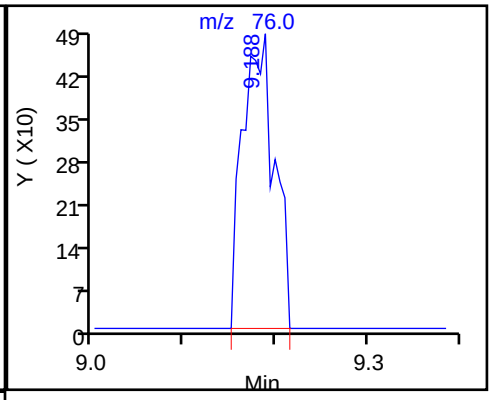
TestAmerica Burlington

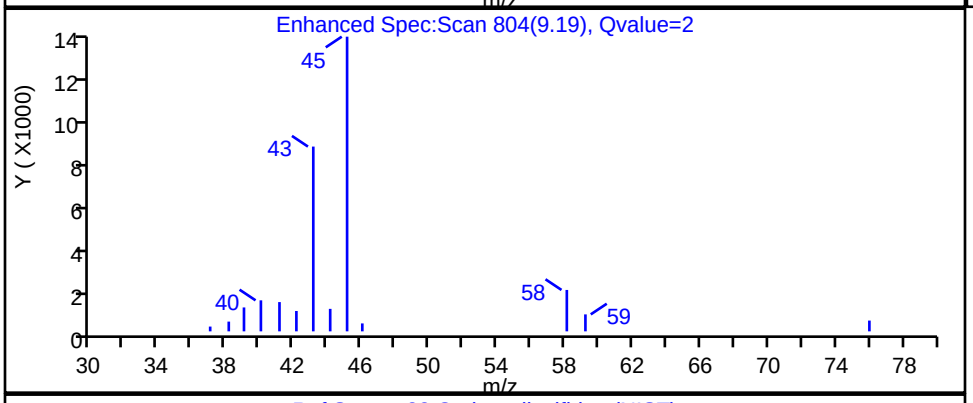
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

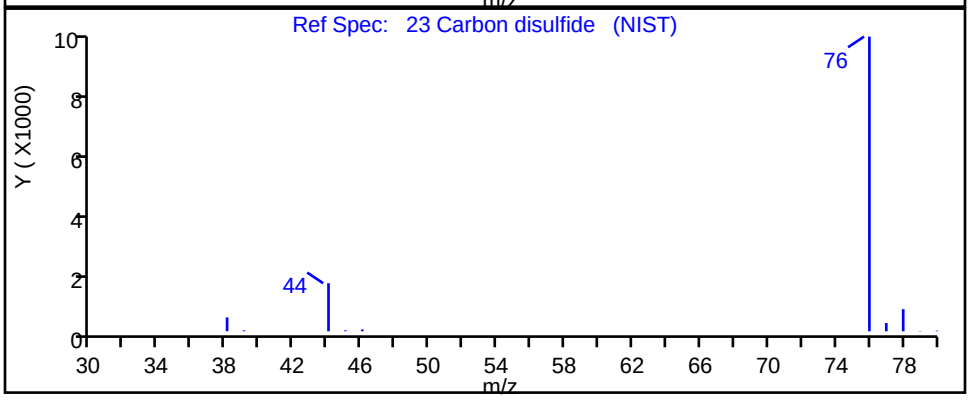
23 Carbon disulfide, CAS: 75-15-0

Processing Results









RT	Mass	Response	Amount
9.19	76.00	1174	0.018143

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

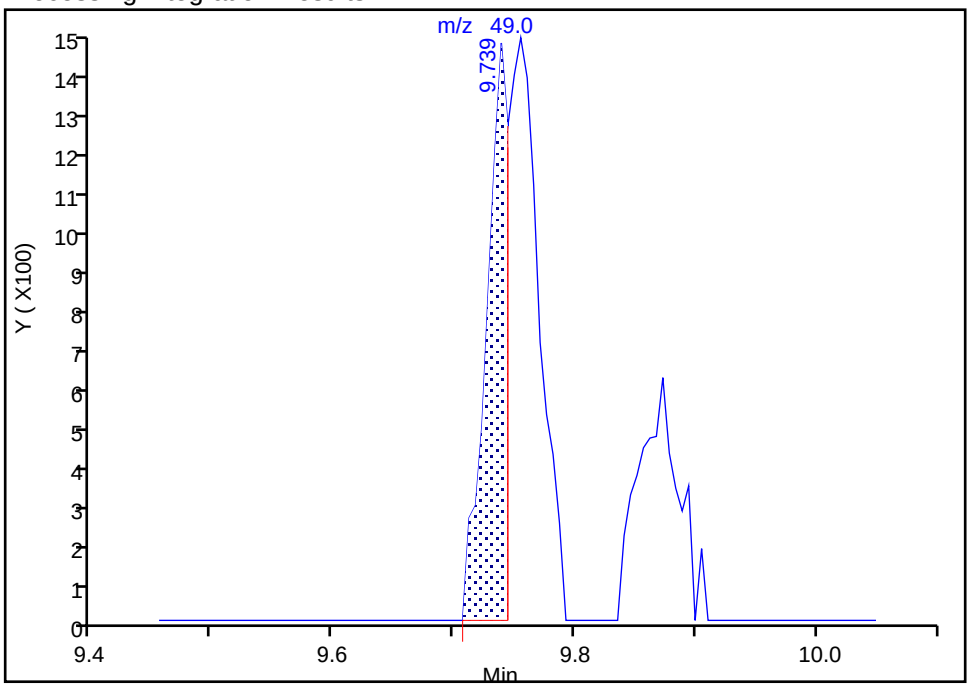
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

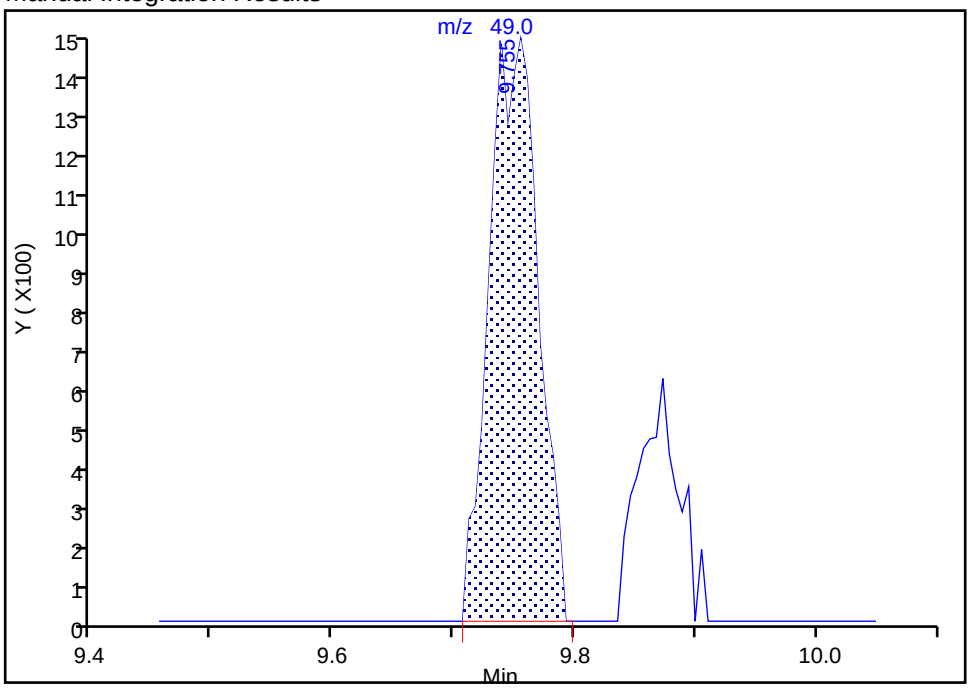
Processing Integration Results

RT: 9.74
Area: 1814
Amount: 0.074798
Amount Units: ppb v/v



Manual Integration Results

RT: 9.76
Area: 4073
Amount: 0.167944
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:14:52
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

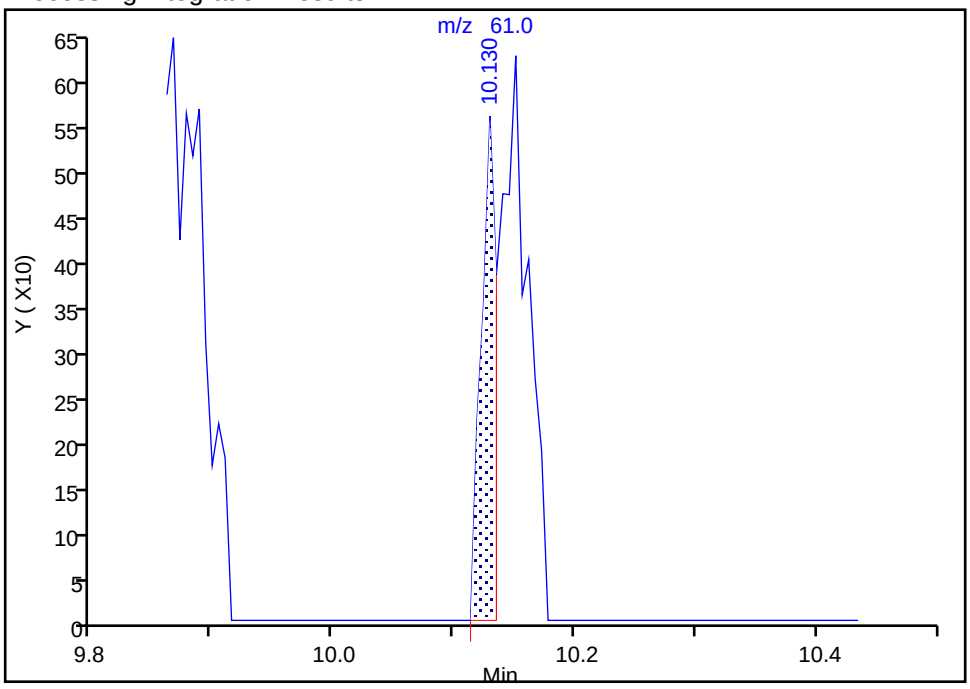
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

30 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

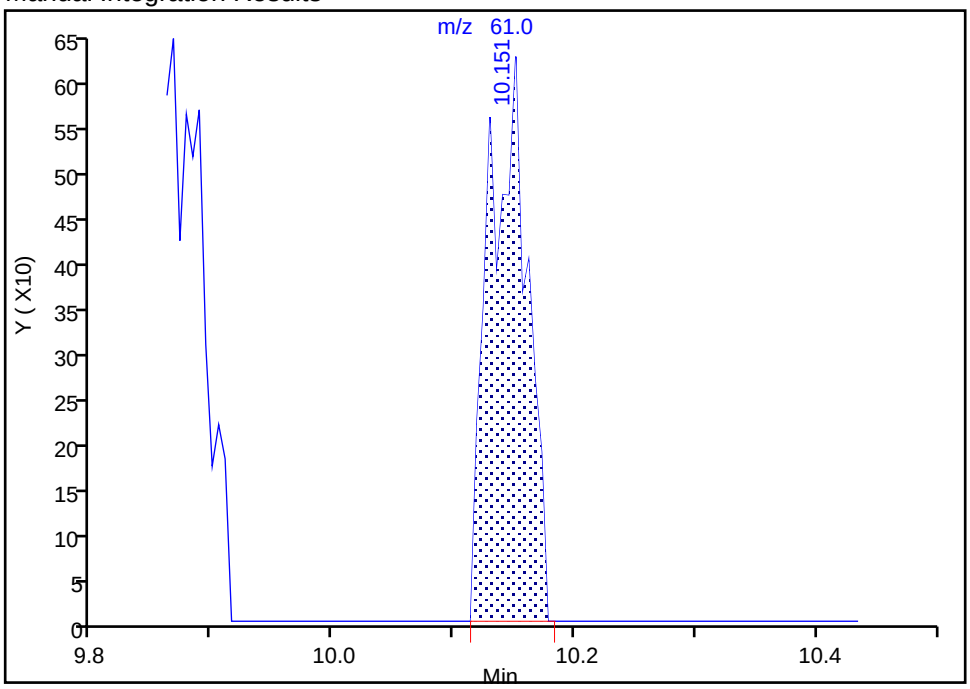
Processing Integration Results

RT: 10.13
Area: 486
Amount: 0.014613
Amount Units: ppb v/v



Manual Integration Results

RT: 10.15
Area: 1381
Amount: 0.041525
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:15:19

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

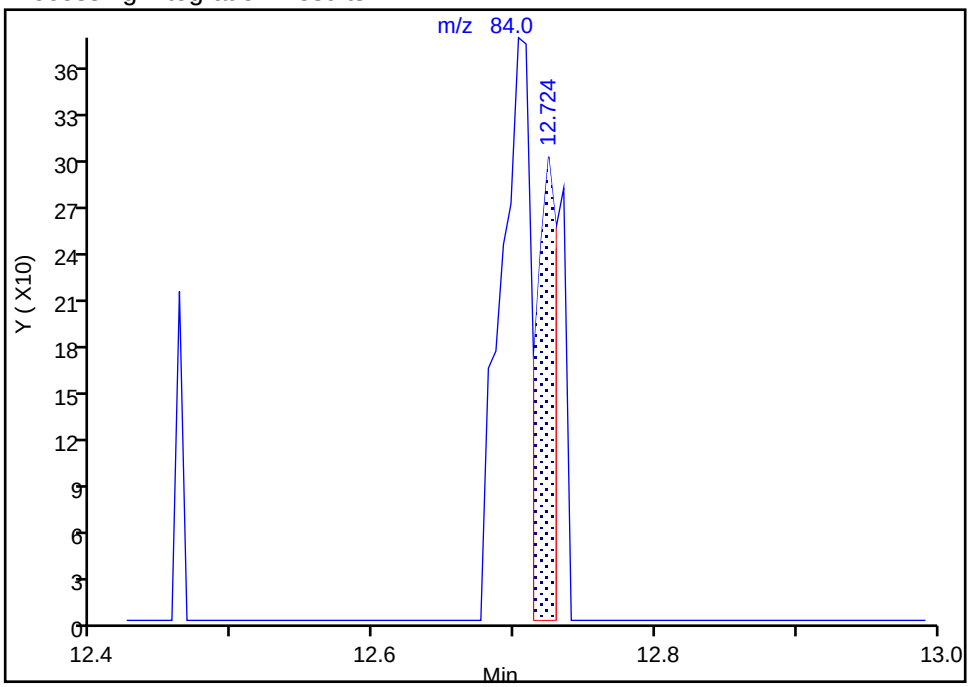
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Cyclohexane, CAS: 110-82-7

Signal: 1

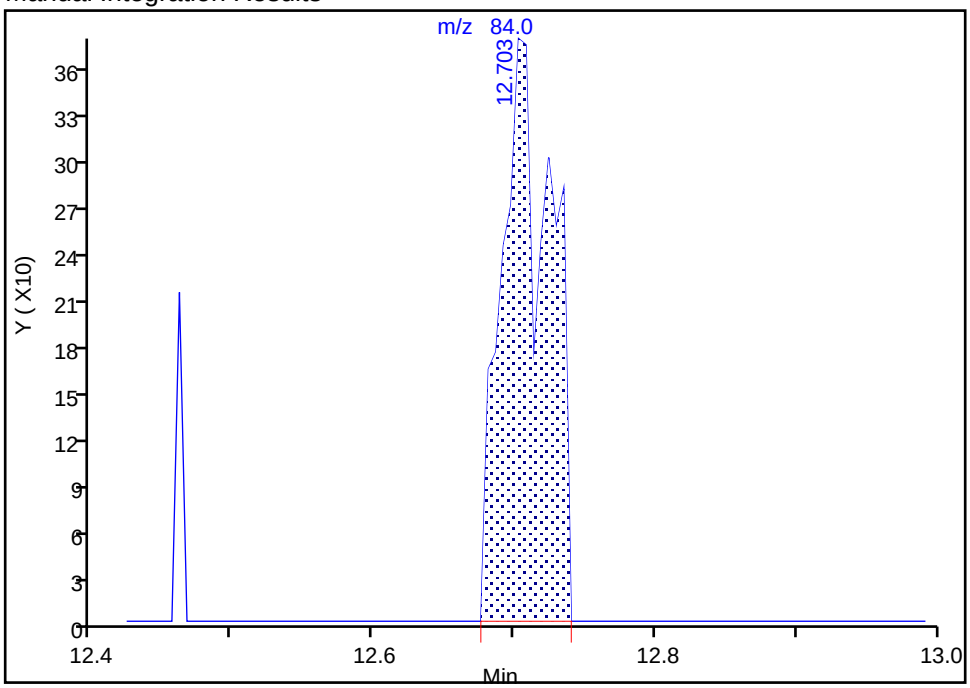
Processing Integration Results

RT: 12.72
Area: 307
Amount: 0.008111
Amount Units: ppb v/v



Manual Integration Results

RT: 12.70
Area: 902
Amount: 0.023830
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:15:49

Audit Action: Manually Integrated Audit Reason: Assign Peak

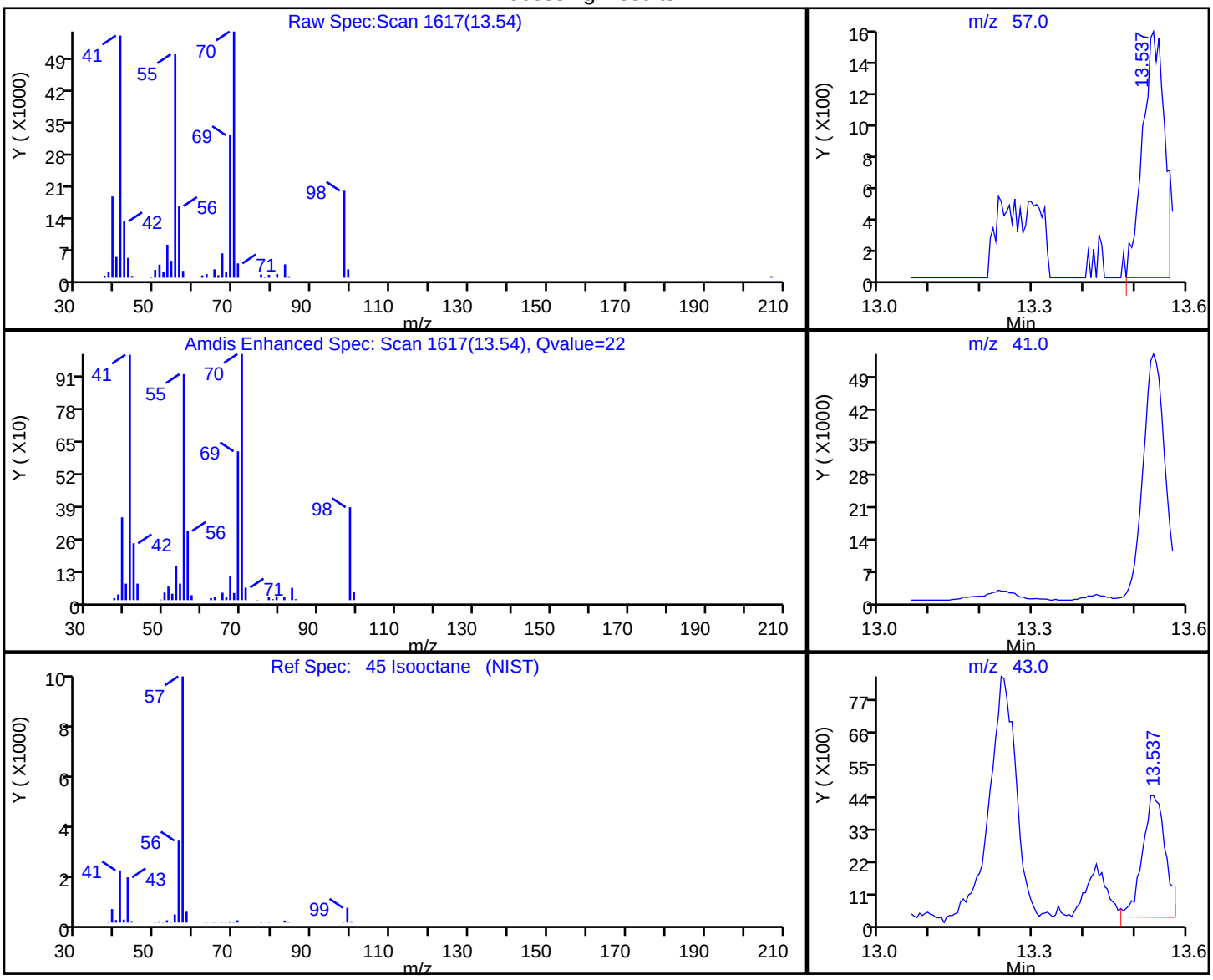
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Isooctane, CAS: 540-84-1

Processing Results



RT	Mass	Response	Amount
13.54	57.00	4501	0.035036
13.54	41.00	162595	
13.54	43.00	13170	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

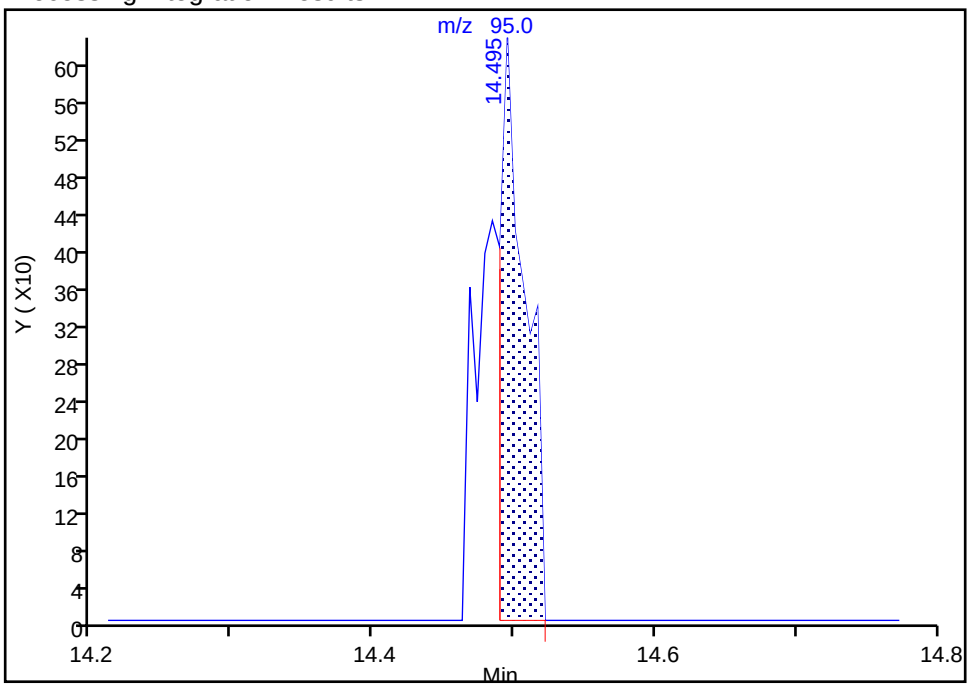
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6

Signal: 1

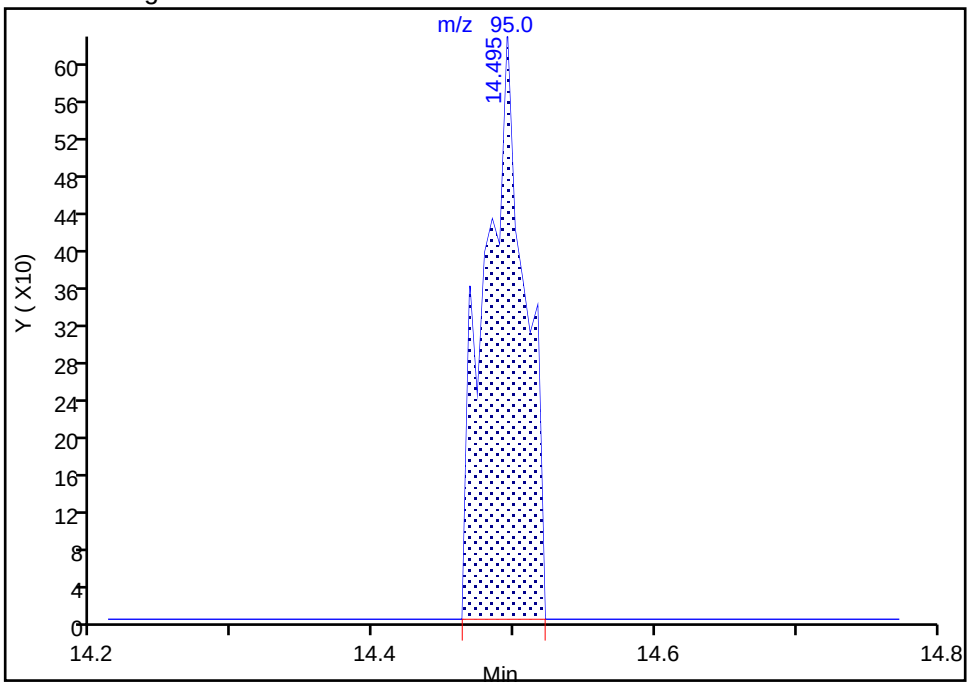
Processing Integration Results

RT: 14.49
Area: 785
Amount: 0.020326
Amount Units: ppb v/v



Manual Integration Results

RT: 14.49
Area: 1238
Amount: 0.032056
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:16:41

Audit Action: Manually Integrated Audit Reason: Assign Peak

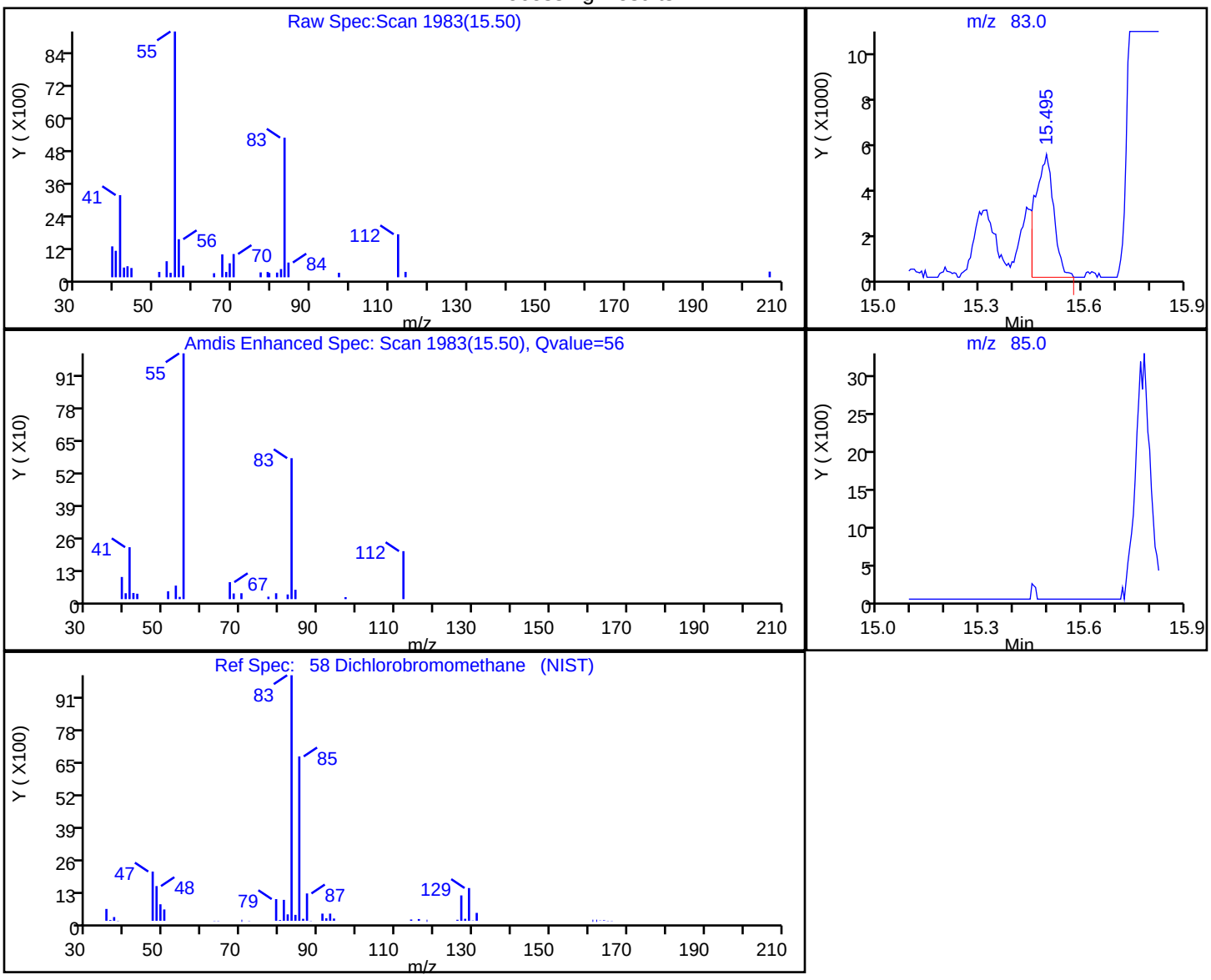
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

58 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
15.50	83.00	18938	0.306549
15.46	85.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

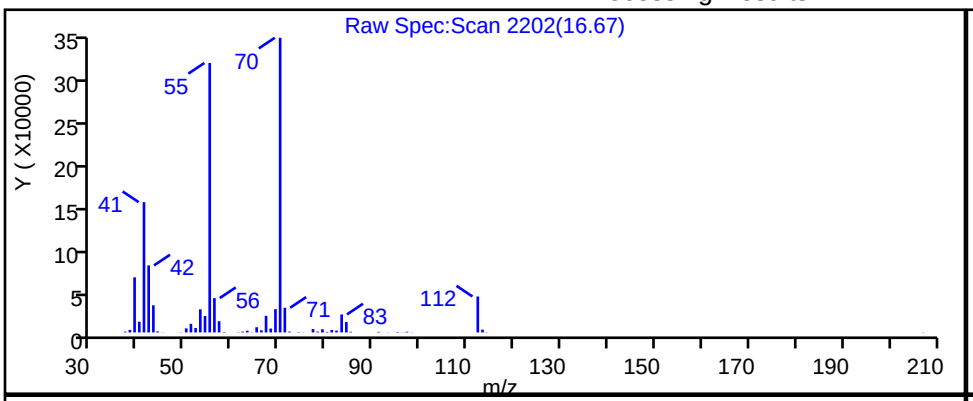
User Disabled Compound Report

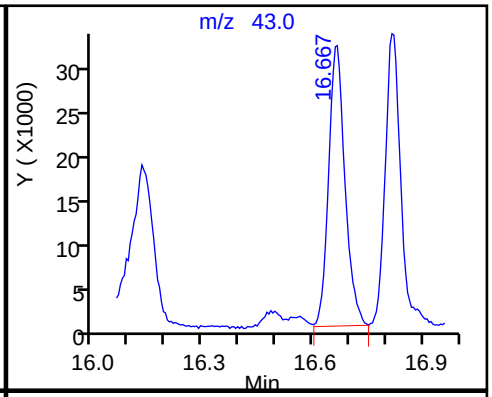
TestAmerica Burlington

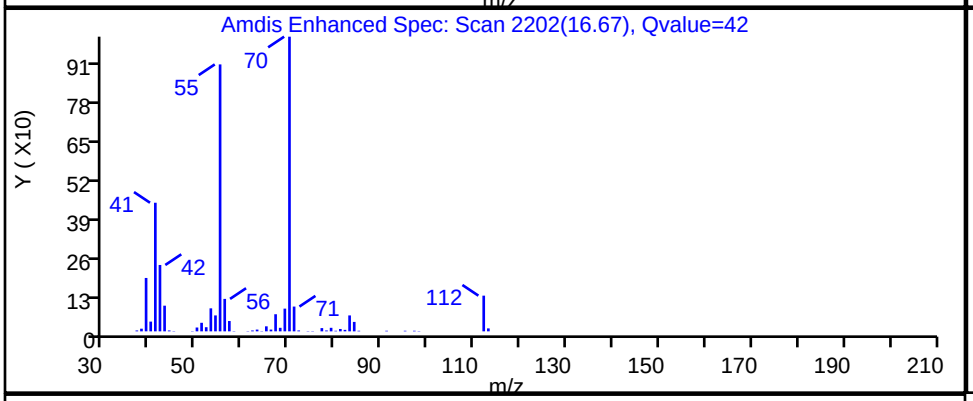
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

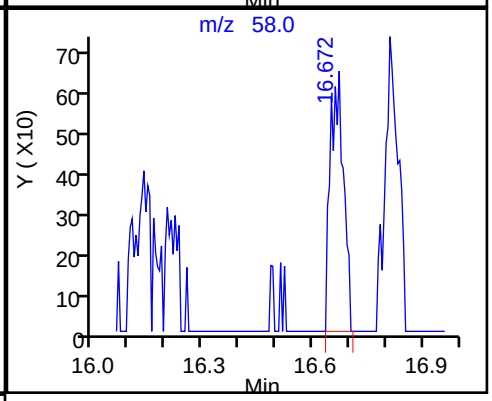
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

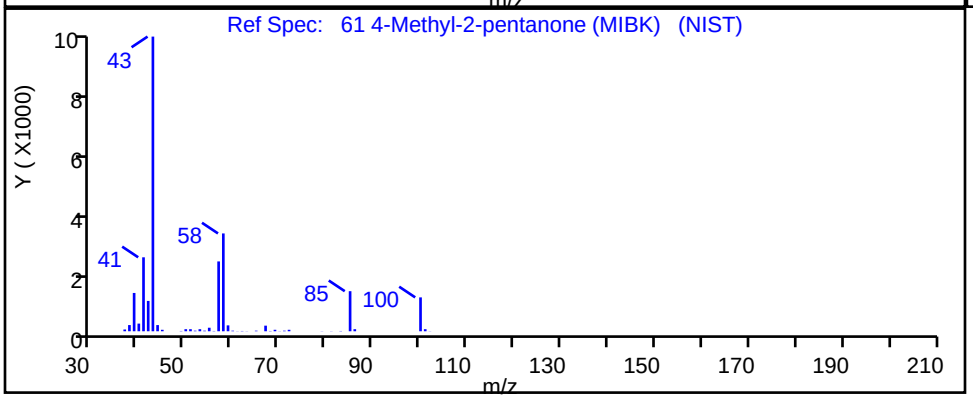
Processing Results











RT	Mass	Response	Amount
16.67	43.00	99194	1.716554
16.67	58.00	1631	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

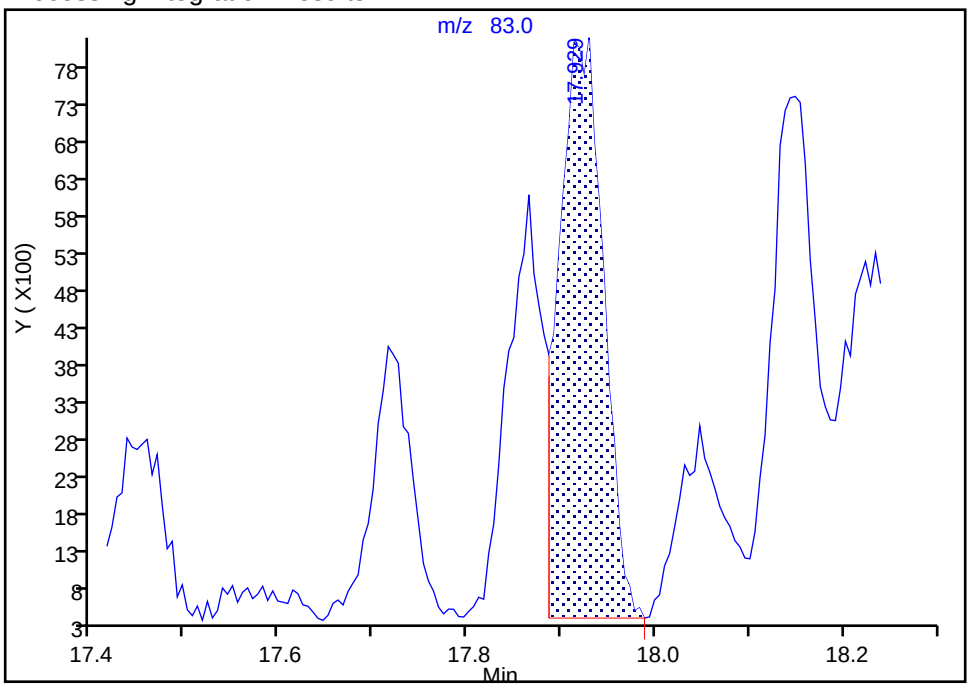
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

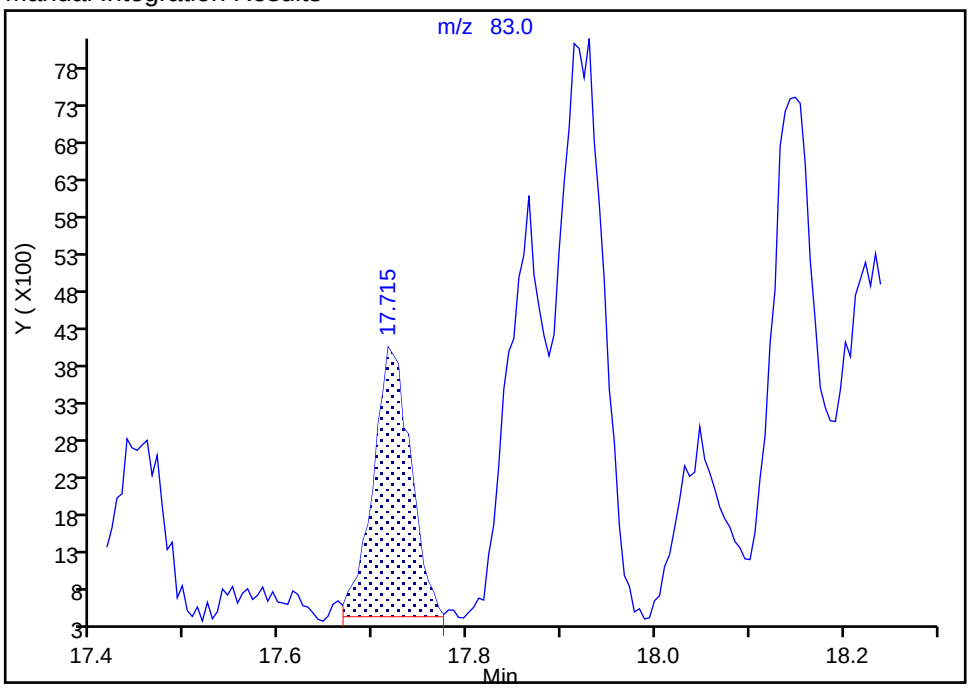
Processing Integration Results

RT: 17.93
Area: 25731
Amount: 0.884930
Amount Units: ppb v/v



Manual Integration Results

RT: 17.72
Area: 10101
Amount: 0.347390
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:17:28

Audit Action: Manually Integrated Audit Reason: Assign Peak

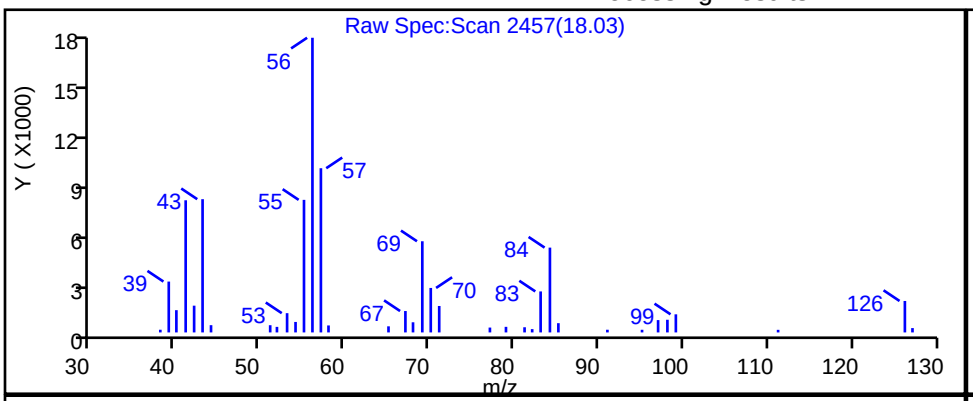
User Disabled Compound Report

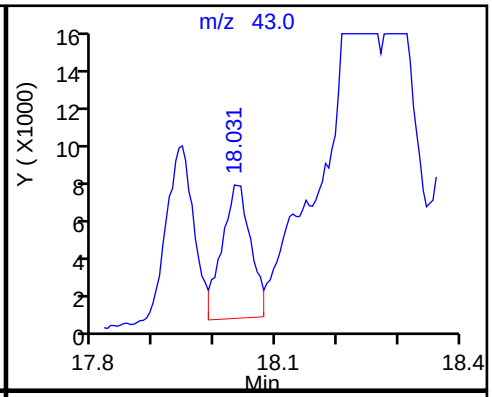
TestAmerica Burlington

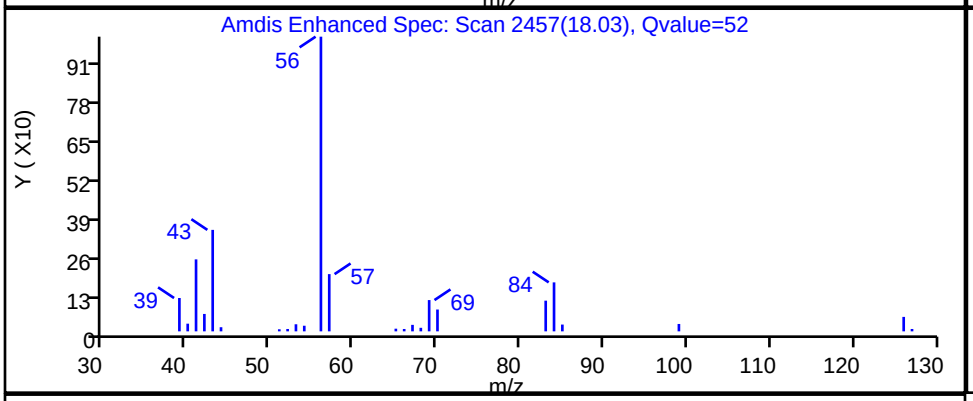
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

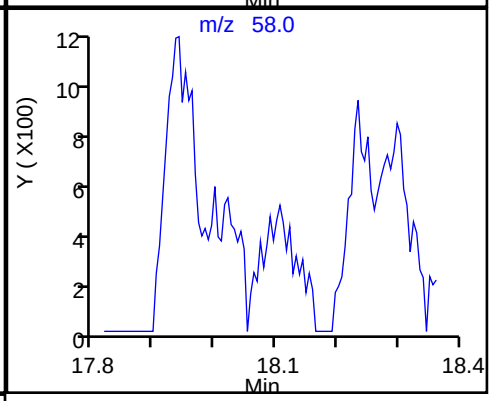
67 2-Hexanone, CAS: 591-78-6

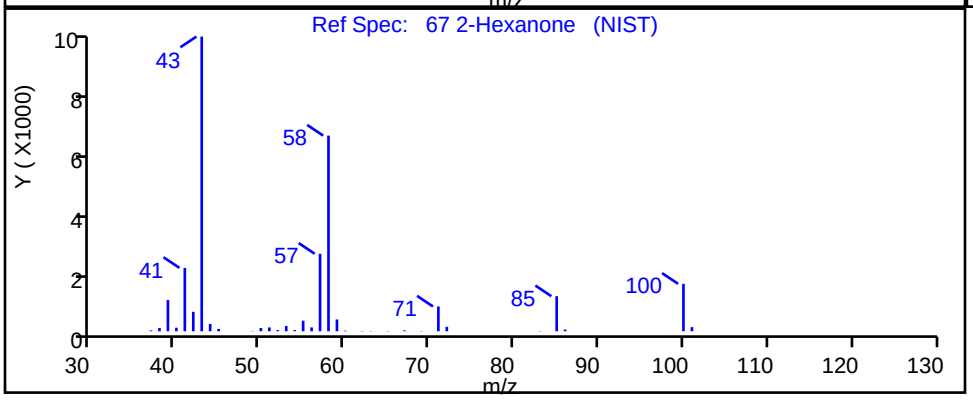
Processing Results











RT	Mass	Response	Amount
18.03	43.00	23083	0.443971
18.09	58.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

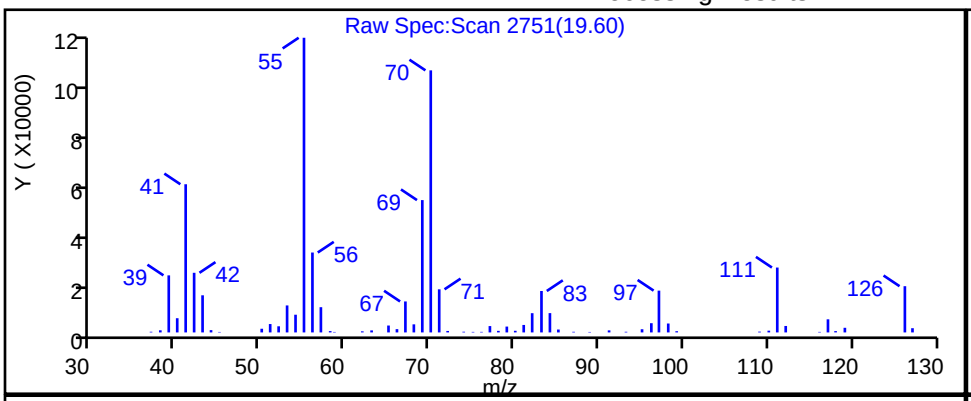
User Disabled Compound Report

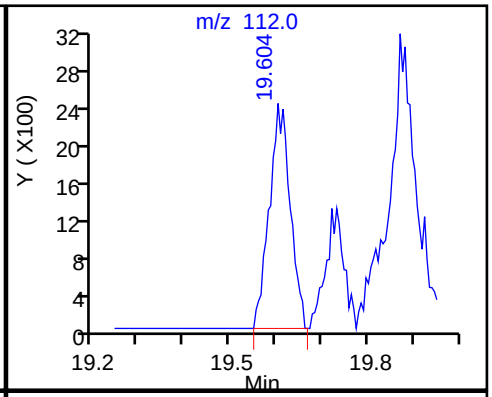
TestAmerica Burlington

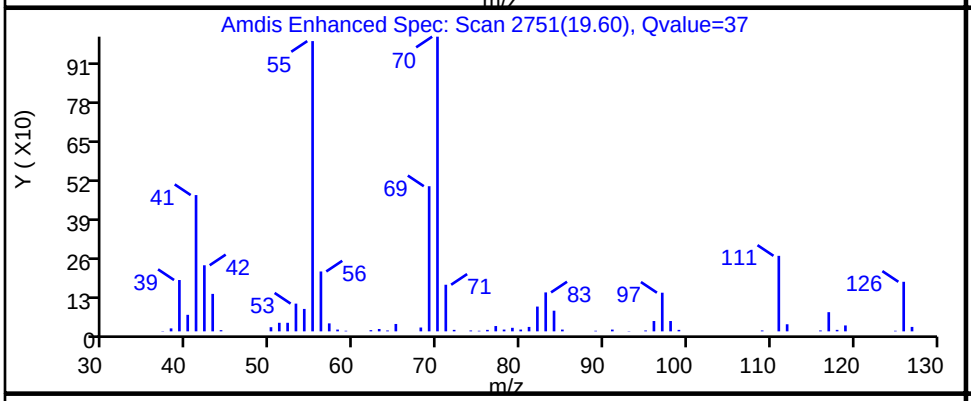
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

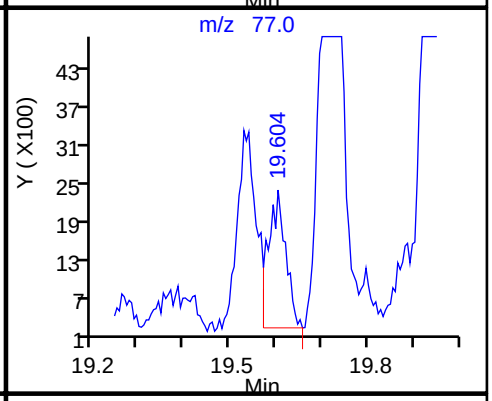
72 Chlorobenzene, CAS: 108-90-7

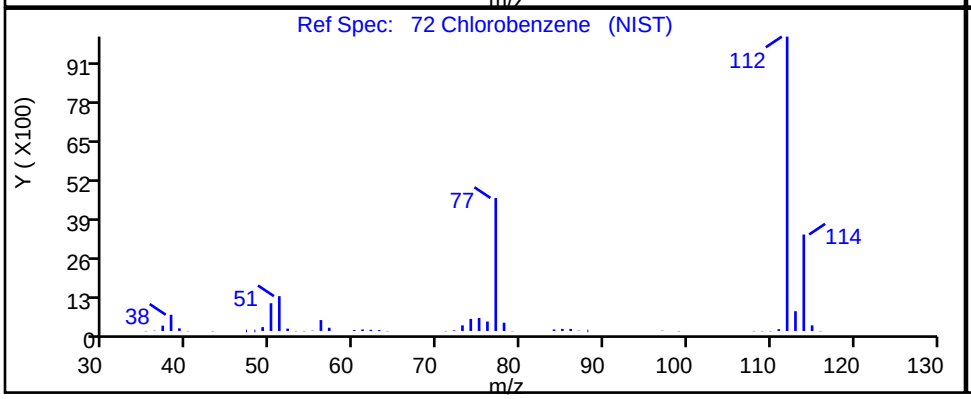
Processing Results

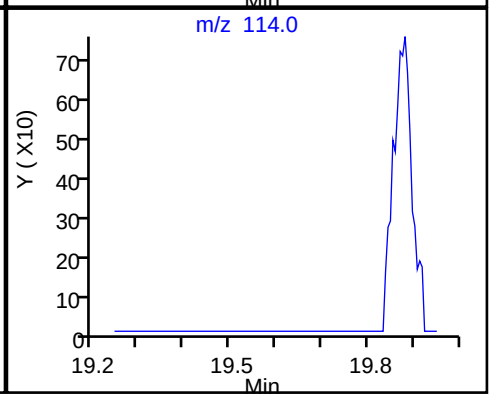












RT	Mass	Response	Amount
19.60	112.00	7646	0.089674
19.60	77.00	5604	
19.60	114.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

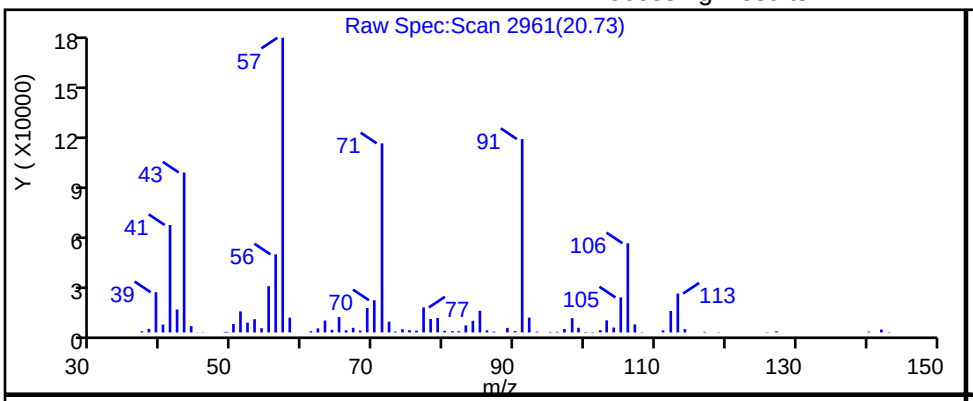
User Disabled Compound Report

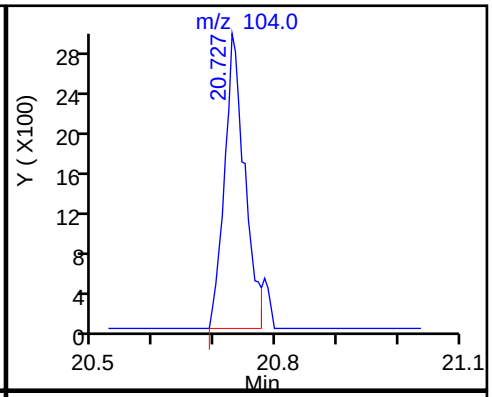
TestAmerica Burlington

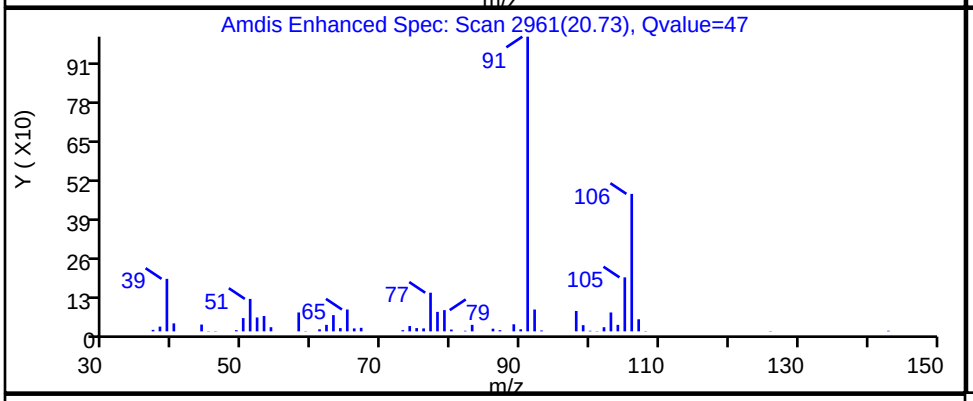
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

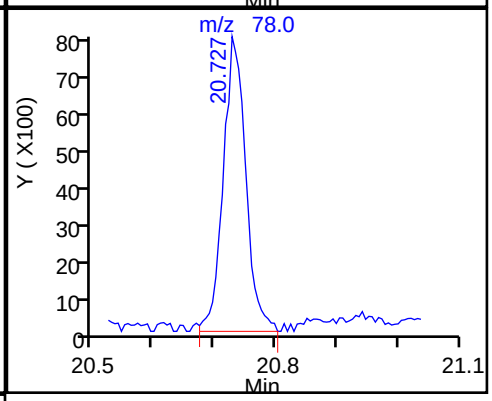
78 Styrene, CAS: 100-42-5

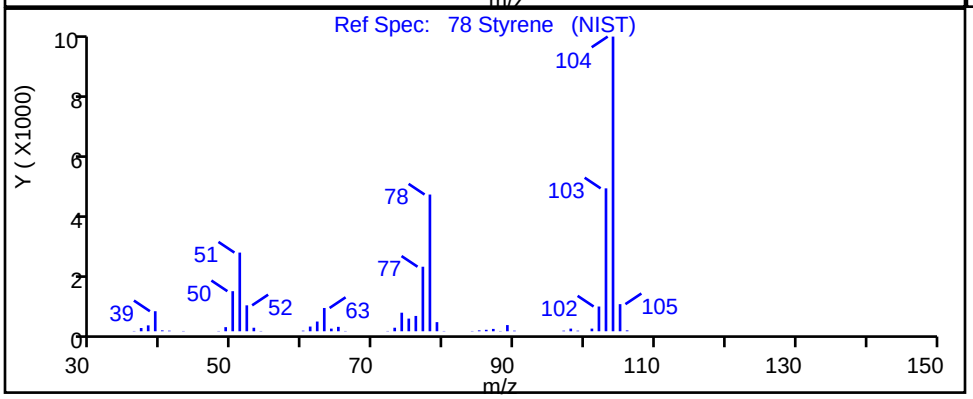
Processing Results











RT	Mass	Response	Amount
20.73	104.00	6664	0.083617
20.73	78.00	20749	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

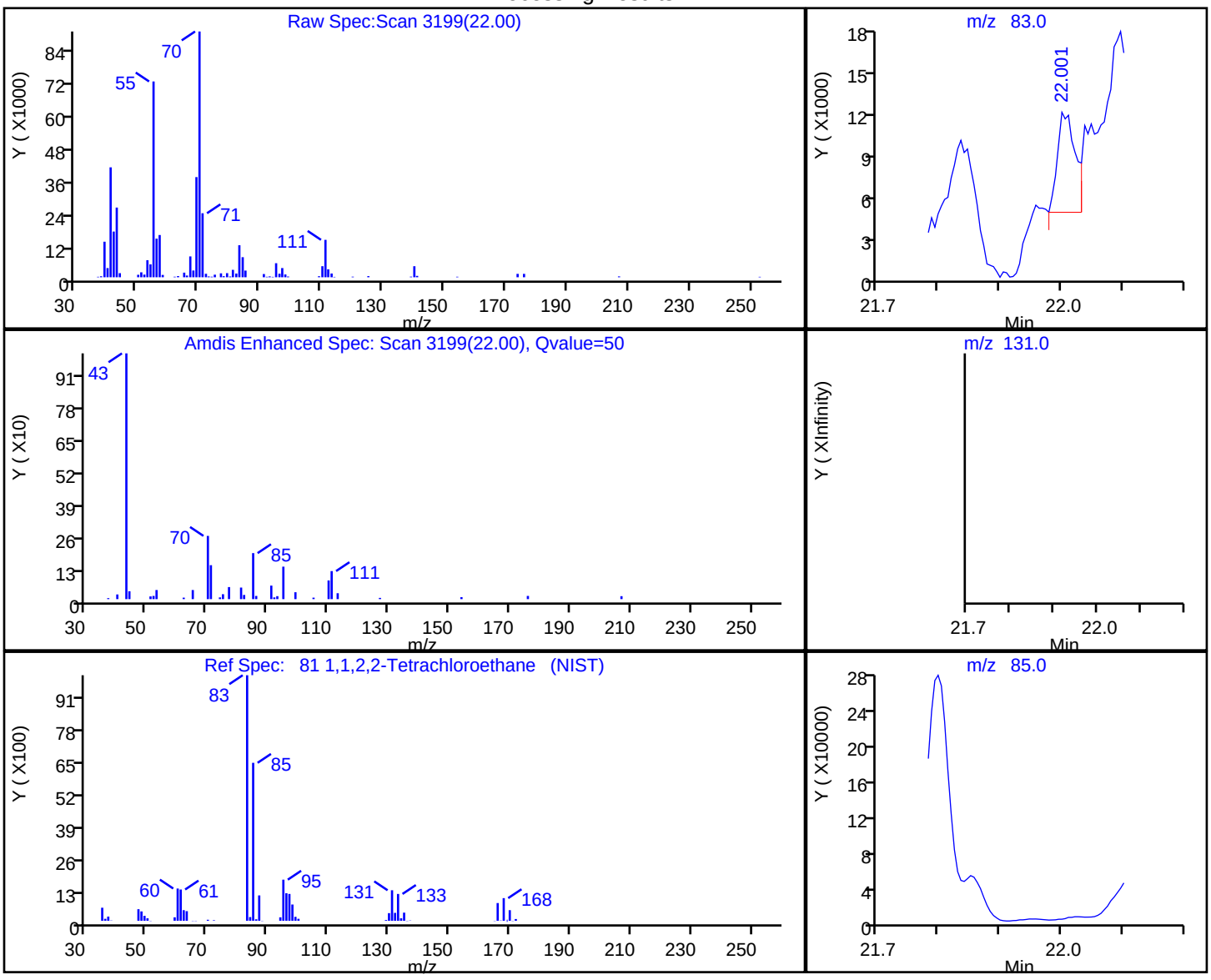
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
22.00	83.00	13544	0.166976
21.94	131.00	0	
21.94	85.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

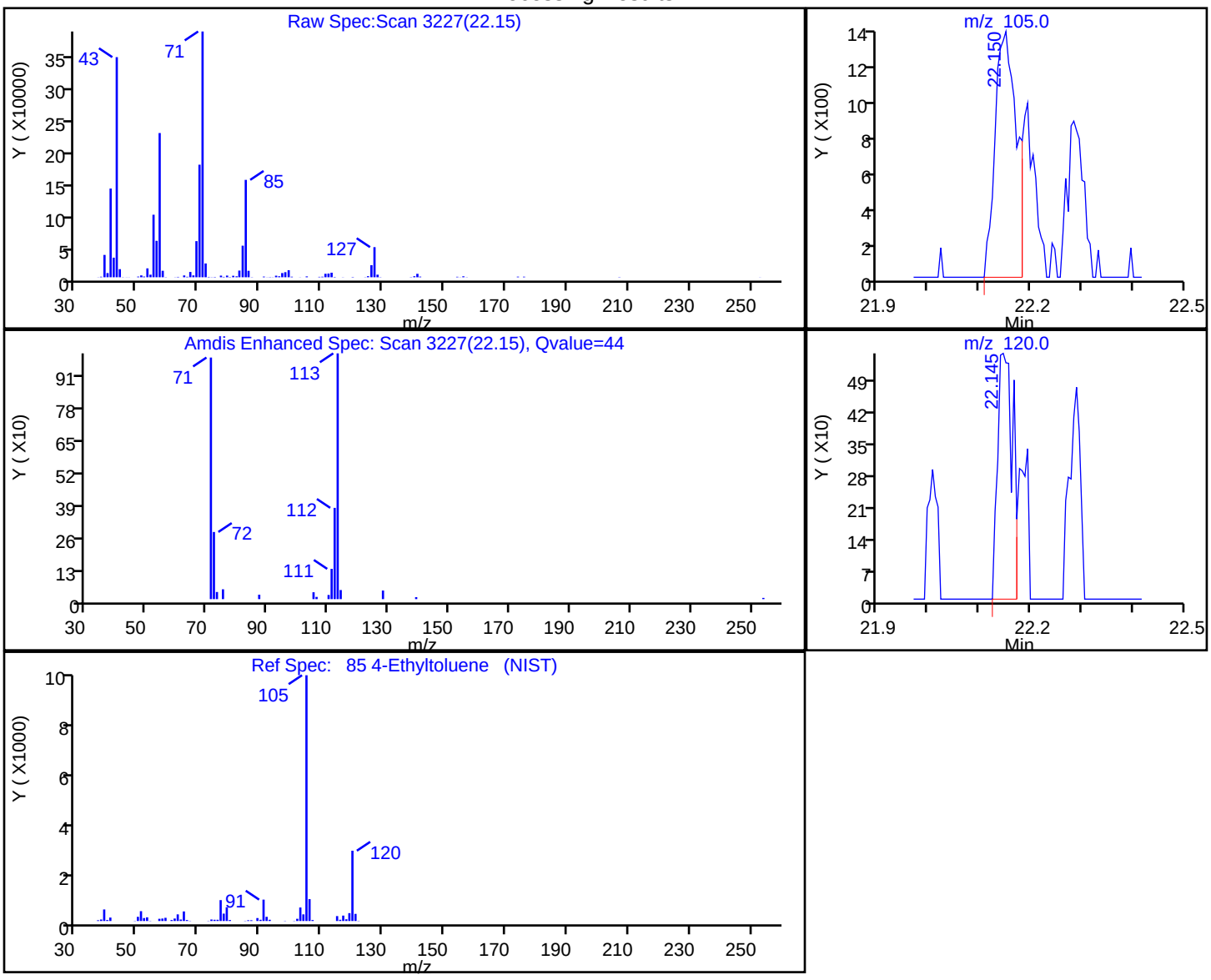
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

85 4-Ethyltoluene, CAS: 622-96-8

Processing Results



RT	Mass	Response	Amount
22.15	105.00	3946	0.024322
22.15	120.00	1132	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

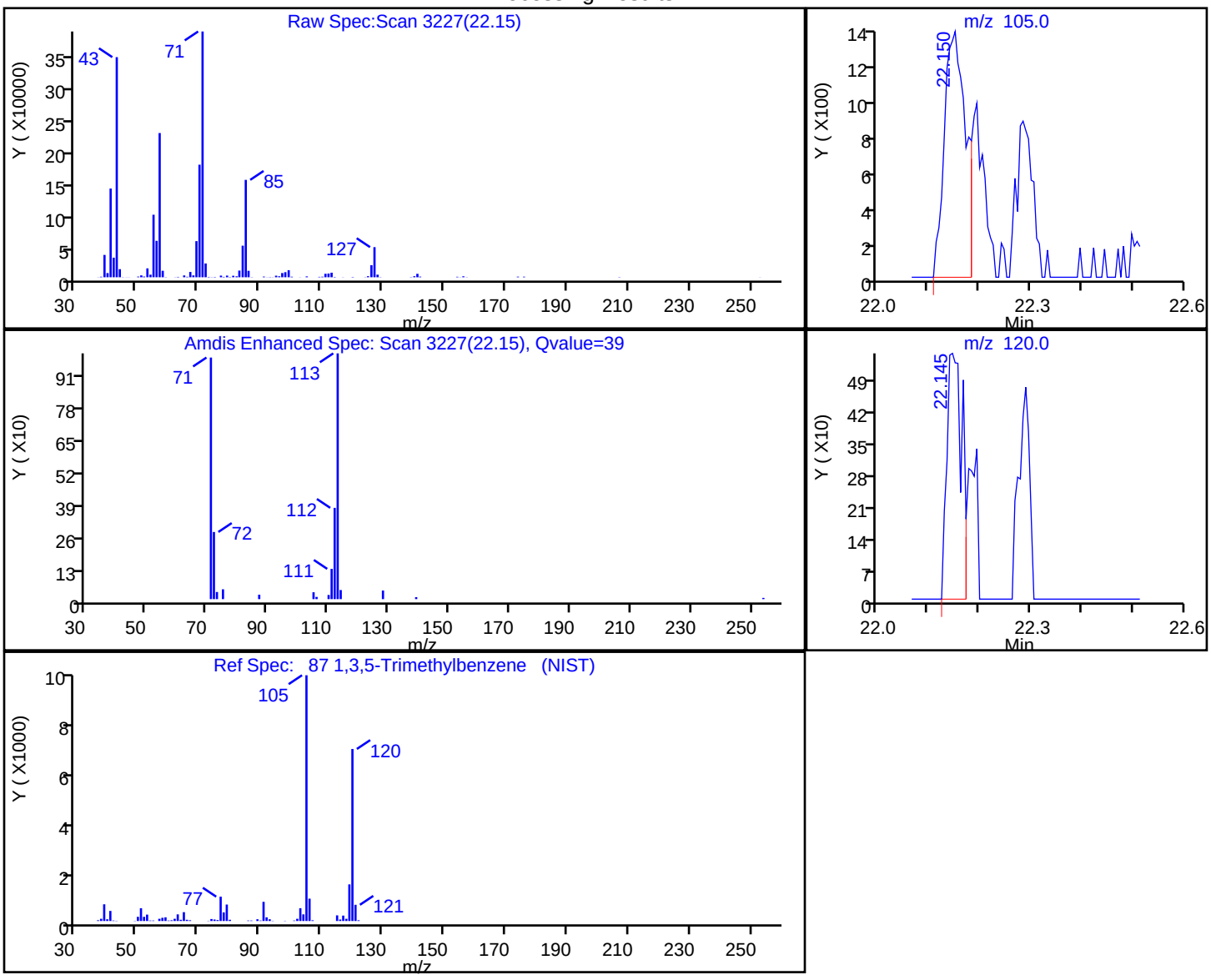
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

87 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
22.15	105.00	3946	0.027207
22.15	120.00	1132	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

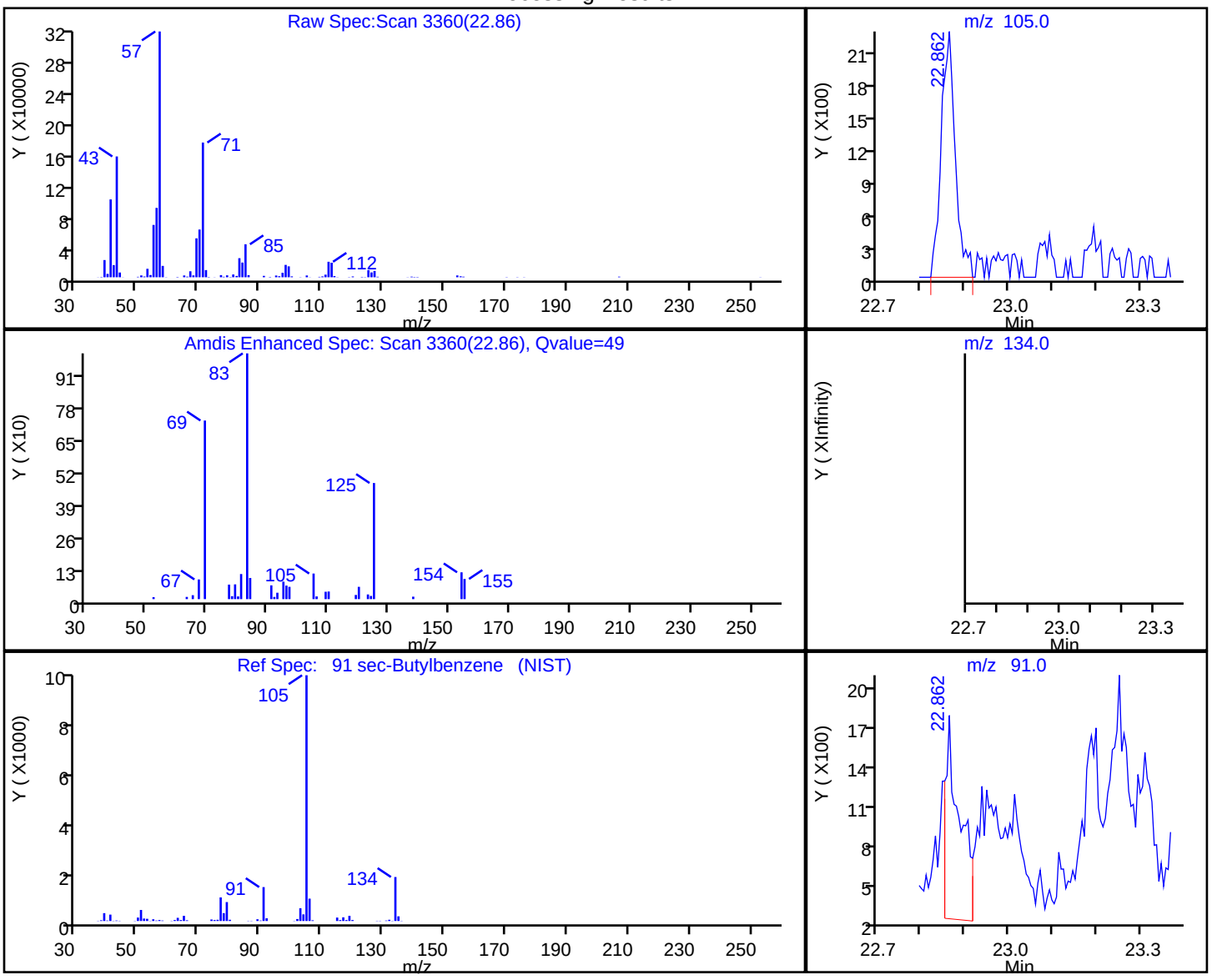
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

91 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.86	105.00	5039	0.024352
23.08	134.00	0	
22.86	91.00	3410	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

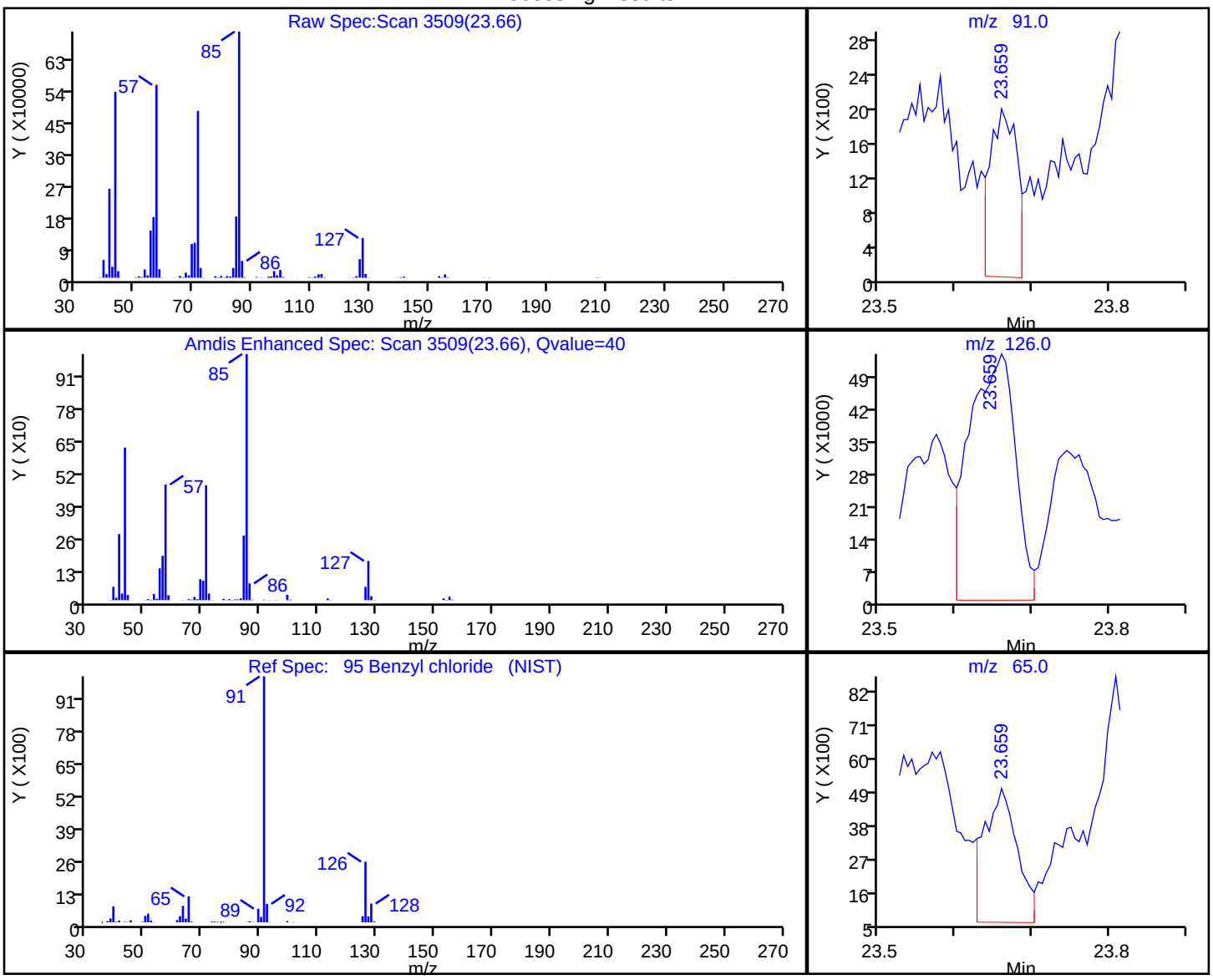
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
23.66	91.00	4880	0.050025
23.66	126.00	224030	
23.66	65.00	13577	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

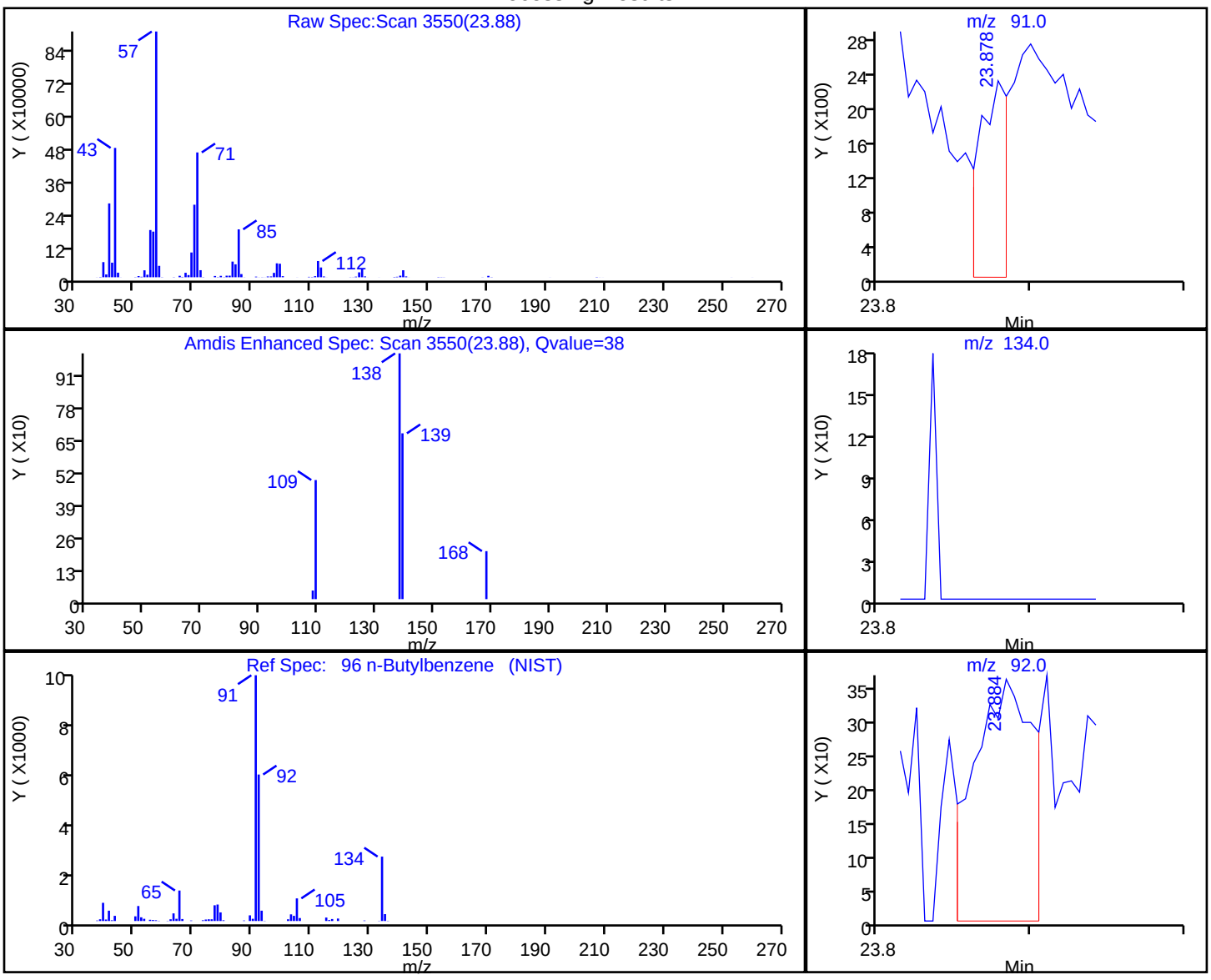
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-15.d				
Injection Date:	07-Apr-2018 00:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	10.0200		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
23.88	91.00	2877	0.020644
23.88	134.00	0	
23.88	92.00	987	

Reviewer: bunmaa, 09-Apr-2018 19:20:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL | Lab Sample ID: 200-42918-6 DL

Matrix: Air | Lab File ID: 29983-16.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) | Date Analyzed: 04/07/2018 01:10

Soil Aliquot Vol: | Dilution Factor: 39.6

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	20	U	20	1.9
75-45-6	Freon 22	86.47	20	U	20	7.9
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	7.9	U	7.9	1.6
74-87-3	Chloromethane	50.49	20	U	20	6.3
106-97-8	n-Butane	58.12	6.6	J D	20	1.8
75-01-4	Vinyl chloride	62.50	7.9	U	7.9	0.71
106-99-0	1,3-Butadiene	54.09	7.9	U	7.9	1.5
74-83-9	Bromomethane	94.94	7.9	U	7.9	1.4
75-00-3	Chloroethane	64.52	20	U	20	5.1
593-60-2	Bromoethene(Vinyl Bromide)	106.96	7.9	U	7.9	0.87
75-69-4	Trichlorofluoromethane	137.37	7.9	U	7.9	1.2
76-13-1	Freon TF	187.38	7.9	U	7.9	1.1
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9	1.4
67-64-1	Acetone	58.08	1200	D	200	51
67-63-0	Isopropyl alcohol	60.10	23	J B D	200	5.1
75-15-0	Carbon disulfide	76.14	20	U	20	1.1
107-05-1	3-Chloropropene	76.53	20	U	20	2.5
75-09-2	Methylene Chloride	84.93	4.4	J D	20	2.7
75-65-0	tert-Butyl alcohol	74.12	150	J D	200	67
1634-04-4	Methyl tert-butyl ether	88.15	7.9	U	7.9	1.6
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9	2.0
110-54-3	n-Hexane	86.17	3.2	J D	7.9	1.8
75-34-3	1,1-Dichloroethane	98.96	7.9	U	7.9	0.67
78-93-3	Methyl Ethyl Ketone	72.11	20	U	20	4.4
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9	1.1
540-59-0	1,2-Dichloroethene, Total	96.94	16	U	16	1.1
67-66-3	Chloroform	119.38	1.5	J D	7.9	0.99
109-99-9	Tetrahydrofuran	72.11	200	U	200	48
71-55-6	1,1,1-Trichloroethane	133.41	7.9	U	7.9	1.0
110-82-7	Cyclohexane	84.16	7.9	U	7.9	1.8
56-23-5	Carbon tetrachloride	153.81	1.6	U	1.6	0.44
540-84-1	2,2,4-Trimethylpentane	114.23	7.9	U	7.9	1.7
71-43-2	Benzene	78.11	7.9	U	7.9	1.1
107-06-2	1,2-Dichloroethane	98.96	7.9	U	7.9	1.3

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL | Lab Sample ID: 200-42918-6 DL

Matrix: Air | Lab File ID: 29983-16.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) | Date Analyzed: 04/07/2018 01:10

Soil Aliquot Vol: | Dilution Factor: 39.6

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	6.2	J D	7.9	2.7
79-01-6	Trichloroethene	131.39	1.6	U	1.6	0.36
80-62-6	Methyl methacrylate	100.12	20	U	20	4.4
78-87-5	1,2-Dichloropropane	112.99	7.9	U	7.9	1.4
123-91-1	1,4-Dioxane	88.11	200	U	200	30
75-27-4	Bromodichloromethane	163.83	7.9	U	7.9	2.3
10061-01-5	cis-1,3-Dichloropropene	110.97	7.9	U	7.9	1.4
108-10-1	methyl isobutyl ketone	100.16	20	U	20	2.6
108-88-3	Toluene	92.14	17	D	7.9	1.4
10061-02-6	trans-1,3-Dichloropropene	110.97	7.9	U	7.9	1.5
79-00-5	1,1,2-Trichloroethane	133.41	4.3	J D	7.9	0.67
127-18-4	Tetrachloroethene	165.83	6.3	D	1.6	0.39
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20	3.4
124-48-1	Dibromochloromethane	208.29	7.9	U	7.9	0.67
106-93-4	1,2-Dibromoethane	187.87	7.9	U	7.9	0.91
108-90-7	Chlorobenzene	112.56	7.9	U	7.9	0.99
100-41-4	Ethylbenzene	106.17	22	D	7.9	1.3
179601-23-1	m,p-Xylene	106.17	73	D	20	3.0
95-47-6	Xylene, o-	106.17	25	D	7.9	1.6
1330-20-7	Xylene (total)	106.17	98	D	28	1.6
100-42-5	Styrene	104.15	7.9	U	7.9	1.4
75-25-2	Bromoform	252.75	7.9	U	7.9	1.4
98-82-8	Cumene	120.19	7.9	U	7.9	1.5
79-34-5	1,1,2,2-Tetrachloroethane	167.85	7.9	U	7.9	1.0
103-65-1	n-Propylbenzene	120.19	7.9	U	7.9	1.6
622-96-8	4-Ethyltoluene	120.20	7.9	U	7.9	1.6
108-67-8	1,3,5-Trimethylbenzene	120.20	7.9	U	7.9	1.6
95-49-8	2-Chlorotoluene	126.59	7.9	U	7.9	1.4
98-06-6	tert-Butylbenzene	134.22	7.9	U	7.9	1.5
95-63-6	1,2,4-Trimethylbenzene	120.20	7.9	U	7.9	2.3
135-98-8	sec-Butylbenzene	134.22	7.9	U	7.9	1.5
99-87-6	4-Isopropyltoluene	134.22	7.9	U	7.9	2.1
541-73-1	1,3-Dichlorobenzene	147.00	7.9	U	7.9	2.0
106-46-7	1,4-Dichlorobenzene	147.00	7.9	U	7.9	2.5

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL Lab Sample ID: 200-42918-6 DL

Matrix: Air Lab File ID: 29983-16.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) Date Analyzed: 04/07/2018 01:10

Soil Aliquot Vol: Dilution Factor: 39.6

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*7.9*	*U*	*7.9*	*2.7*
104-51-8	*n-Butylbenzene*	*134.22*	*7.9*	*U*	*7.9*	*2.7*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*7.9*	*U*	*7.9*	*1.8*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*20*	*U*	*20*	*7.5*
87-68-3	*Hexachlorobutadiene*	*260.76*	*7.9*	*U*	*7.9*	*2.5*
91-20-3	*Naphthalene*	*128.17*	*20*	*U*	*20*	*4.0*

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL | Lab Sample ID: 200-42918-6 DL

Matrix: Air | Lab File ID: 29983-16.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) | Date Analyzed: 04/07/2018 01:10

Soil Aliquot Vol: | Dilution Factor: 39.6

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	98	U	98	9.2
75-45-6	Freon 22	86.47	70	U	70	28
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	55	U	55	11
74-87-3	Chloromethane	50.49	41	U	41	13
106-97-8	n-Butane	58.12	16	J D	47	4.3
75-01-4	Vinyl chloride	62.50	20	U	20	1.8
106-99-0	1,3-Butadiene	54.09	18	U	18	3.2
74-83-9	Bromomethane	94.94	31	U	31	5.5
75-00-3	Chloroethane	64.52	52	U	52	14
593-60-2	Bromoethene(Vinyl Bromide)	106.96	35	U	35	3.8
75-69-4	Trichlorofluoromethane	137.37	44	U	44	6.9
76-13-1	Freon TF	187.38	61	U	61	8.2
75-35-4	1,1-Dichloroethene	96.94	31	U	31	5.5
67-64-1	Acetone	58.08	2800	D	470	120
67-63-0	Isopropyl alcohol	60.10	56	J B D	490	13
75-15-0	Carbon disulfide	76.14	62	U	62	3.5
107-05-1	3-Chloropropene	76.53	62	U	62	7.8
75-09-2	Methylene Chloride	84.93	15	J D	69	9.4
75-65-0	tert-Butyl alcohol	74.12	440	J D	600	200
1634-04-4	Methyl tert-butyl ether	88.15	29	U	29	5.9
156-60-5	trans-1,2-Dichloroethene	96.94	31	U	31	7.9
110-54-3	n-Hexane	86.17	11	J D	28	6.4
75-34-3	1,1-Dichloroethane	98.96	32	U	32	2.7
78-93-3	Methyl Ethyl Ketone	72.11	58	U	58	13
156-59-2	cis-1,2-Dichloroethene	96.94	31	U	31	4.6
540-59-0	1,2-Dichloroethene, Total	96.94	63	U	63	4.6
67-66-3	Chloroform	119.38	7.3	J D	39	4.8
109-99-9	Tetrahydrofuran	72.11	580	U	580	140
71-55-6	1,1,1-Trichloroethane	133.41	43	U	43	5.6
110-82-7	Cyclohexane	84.16	27	U	27	6.1
56-23-5	Carbon tetrachloride	153.81	10	U	10	2.7
540-84-1	2,2,4-Trimethylpentane	114.23	37	U	37	8.0
71-43-2	Benzene	78.11	25	U	25	3.5
107-06-2	1,2-Dichloroethane	98.96	32	U	32	5.4

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL | Lab Sample ID: 200-42918-6 DL

Matrix: Air | Lab File ID: 29983-16.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) | Date Analyzed: 04/07/2018 01:10

Soil Aliquot Vol: | Dilution Factor: 39.6

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	25	J D	32	11
79-01-6	Trichloroethene	131.39	8.5	U	8.5	1.9
80-62-6	Methyl methacrylate	100.12	81	U	81	18
78-87-5	1,2-Dichloropropane	112.99	37	U	37	6.4
123-91-1	1,4-Dioxane	88.11	710	U	710	110
75-27-4	Bromodichloromethane	163.83	53	U	53	16
10061-01-5	cis-1,3-Dichloropropene	110.97	36	U	36	6.5
108-10-1	methyl isobutyl ketone	100.16	81	U	81	11
108-88-3	Toluene	92.14	62	D	30	5.2
10061-02-6	trans-1,3-Dichloropropene	110.97	36	U	36	6.8
79-00-5	1,1,2-Trichloroethane	133.41	23	J D	43	3.7
127-18-4	Tetrachloroethene	165.83	43	D	11	2.6
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	81	U	81	14
124-48-1	Dibromochloromethane	208.29	67	U	67	5.7
106-93-4	1,2-Dibromoethane	187.87	61	U	61	7.0
108-90-7	Chlorobenzene	112.56	36	U	36	4.6
100-41-4	Ethylbenzene	106.17	94	D	34	5.8
179601-23-1	m,p-Xylene	106.17	320	D	86	13
95-47-6	Xylene, o-	106.17	110	D	34	6.9
1330-20-7	Xylene (total)	106.17	430	D	120	6.9
100-42-5	Styrene	104.15	34	U	34	5.9
75-25-2	Bromoform	252.75	82	U	82	14
98-82-8	Cumene	120.19	39	U	39	7.6
79-34-5	1,1,2,2-Tetrachloroethane	167.85	54	U	54	7.1
103-65-1	n-Propylbenzene	120.19	39	U	39	7.8
622-96-8	4-Ethyltoluene	120.20	39	U	39	7.8
108-67-8	1,3,5-Trimethylbenzene	120.20	39	U	39	7.8
95-49-8	2-Chlorotoluene	126.59	41	U	41	7.2
98-06-6	tert-Butylbenzene	134.22	43	U	43	8.0
95-63-6	1,2,4-Trimethylbenzene	120.20	39	U	39	11
135-98-8	sec-Butylbenzene	134.22	43	U	43	8.0
99-87-6	4-Isopropyltoluene	134.22	43	U	43	11
541-73-1	1,3-Dichlorobenzene	147.00	48	U	48	12
106-46-7	1,4-Dichlorobenzene	147.00	48	U	48	15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-105 (AS) DL Lab Sample ID: 200-42918-6 DL

Matrix: Air Lab File ID: 29983-16.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) Date Analyzed: 04/07/2018 01:10

Soil Aliquot Vol: Dilution Factor: 39.6

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*41*	*U*	*41*	*14*
104-51-8	*n-Butylbenzene*	*134.22*	*43*	*U*	*43*	*15*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*48*	*U*	*48*	*11*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*150*	*U*	*150*	*56*
87-68-3	*Hexachlorobutadiene*	*260.76*	*84*	*U*	*84*	*27*
91-20-3	*Naphthalene*	*128.17*	*100*	*U*	*100*	*21*

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d
Lims ID: 200-42918-A-6
Client ID: GC-SV-105 (AS)
Sample Type: Client
Inject. Date: 07-Apr-2018 01:10:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 39.6000
Sample Info: 200-0029983-016
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 19:25:13 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 19:25:13

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85		5.149				ND	MU
	3 Chlorodifluoromethane	51		5.235				ND	U
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
	5 Chloromethane	50		5.748				ND	U
	6 Butane	43	6.016	6.016	-0.010	69	9070	0.1657	M
	7 Vinyl chloride	62		6.080				ND	
	8 Butadiene	54		6.176				ND	
	9 Bromomethane	94		6.979				ND	
	11 Chloroethane	64		7.225				ND	
	13 Vinyl bromide	106		7.631				ND	
	14 Trichlorofluoromethane	101		7.728				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	8.979	9.022	-0.022	97	1140044	29.7	
	23 Carbon disulfide	76		9.193				ND	
	24 Isopropyl alcohol	45	9.199	9.204	-0.005	100	22769	0.5740	
	25 3-Chloro-1-propene	41		9.493				ND	
	27 Methylene Chloride	49	9.744	9.755	-0.016	94	2807	0.1107	
	28 2-Methyl-2-propanol	59	9.878	9.867	-0.011	94	207959	3.68	
	29 Methyl tert-butyl ether	73		10.092				ND	
	30 trans-1,2-Dichloroethene	61		10.156				ND	
S	31 1,2-Dichloroethene, Total	61		10.200				ND	
	33 Hexane	57	10.461	10.460	-0.022	91	3109	0.0807	
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.949				ND	
	37 2-Butanone (MEK)	72	11.964	11.944	-0.001	93	1311	0.0951	
	39 Tetrahydrofuran	42		12.371				ND	
*	40 Chlorobromomethane	128	12.360	12.377	-0.016	95	192169	10.0	
	41 Chloroform	83	12.446	12.446	-0.021	4	2146	0.0379	
	42 Cyclohexane	84		12.724				ND	
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117		12.965				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Isooctane	57		13.318				ND	
	46 Benzene	78	13.371	13.371	-0.011	12	2075	0.0223	M
	47 1,2-Dichloroethane	62		13.532				ND	
	48 n-Heptane	43	13.623	13.607	-0.011	93	7356	0.1569	
*	49 1,4-Difluorobenzene	114	14.067	14.078	-0.011	95	1049309	10.0	
	51 Trichloroethene	95		14.500				ND	
	53 1,2-Dichloropropane	63		14.998				ND	
	55 Methyl methacrylate	69		15.078				ND	
	56 1,4-Dioxane	88		15.164				ND	
	58 Dichlorobromomethane	83		15.458				ND	
	59 cis-1,3-Dichloropropene	75		16.282				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	U
	63 Toluene	92	16.817	16.806	-0.005	93	26124	0.4180	
	64 trans-1,3-Dichloropropene	75		17.352				ND	
	65 1,1,2-Trichloroethane	83	17.726	17.726	0.027	51	3266	0.1085	M
	66 Tetrachloroethene	166	17.817	17.812	0.000	96	10144	0.1595	
	67 2-Hexanone	43		18.090				ND	U
	68 Chlorodibromomethane	129		18.427				ND	
	69 Ethylene Dibromide	107		18.700				ND	
*	71 Chlorobenzene-d5	117	19.534	19.540	-0.006	89	874366	10.0	
	72 Chlorobenzene	112		19.599				ND	U
	73 Ethylbenzene	91	19.727	19.722	0.000	98	78935	0.5476	
	75 m-Xylene & p-Xylene	106	19.957	19.957	-0.005	0	104151	1.84	
S	76 Xylenes, Total	106				0		2.47	
	77 o-Xylene	106	20.733	20.738	-0.005	98	35999	0.6302	
	78 Styrene	104		20.781				ND	U
	79 Bromoform	173		21.171				ND	
	80 Isopropylbenzene	105		21.343				ND	MU
	81 1,1,2,2-Tetrachloroethane	83		21.942				ND	U
	82 N-Propylbenzene	91		22.011				ND	
	85 4-Ethyltoluene	105		22.193				ND	
	86 2-Chlorotoluene	91		22.209				ND	
	87 1,3,5-Trimethylbenzene	105		22.290				ND	
	89 tert-Butylbenzene	119		22.766				ND	
	90 1,2,4-Trimethylbenzene	105		22.857				ND	MU
	91 sec-Butylbenzene	105		23.081				ND	
	92 4-Isopropyltoluene	119		23.279				ND	
	93 1,3-Dichlorobenzene	146		23.327				ND	
	94 1,4-Dichlorobenzene	146		23.466				ND	
	95 Benzyl chloride	91		23.670				ND	U
	96 n-Butylbenzene	91		23.878				ND	U
	98 1,2-Dichlorobenzene	146		24.028				ND	
	100 1,2,4-Trichlorobenzene	180		26.703				ND	
	101 Hexachlorobutadiene	225		26.896				ND	
	102 Naphthalene	128		27.238				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15WISs_00004	Amount Added:	20.00	Units: mL	Run Reagent

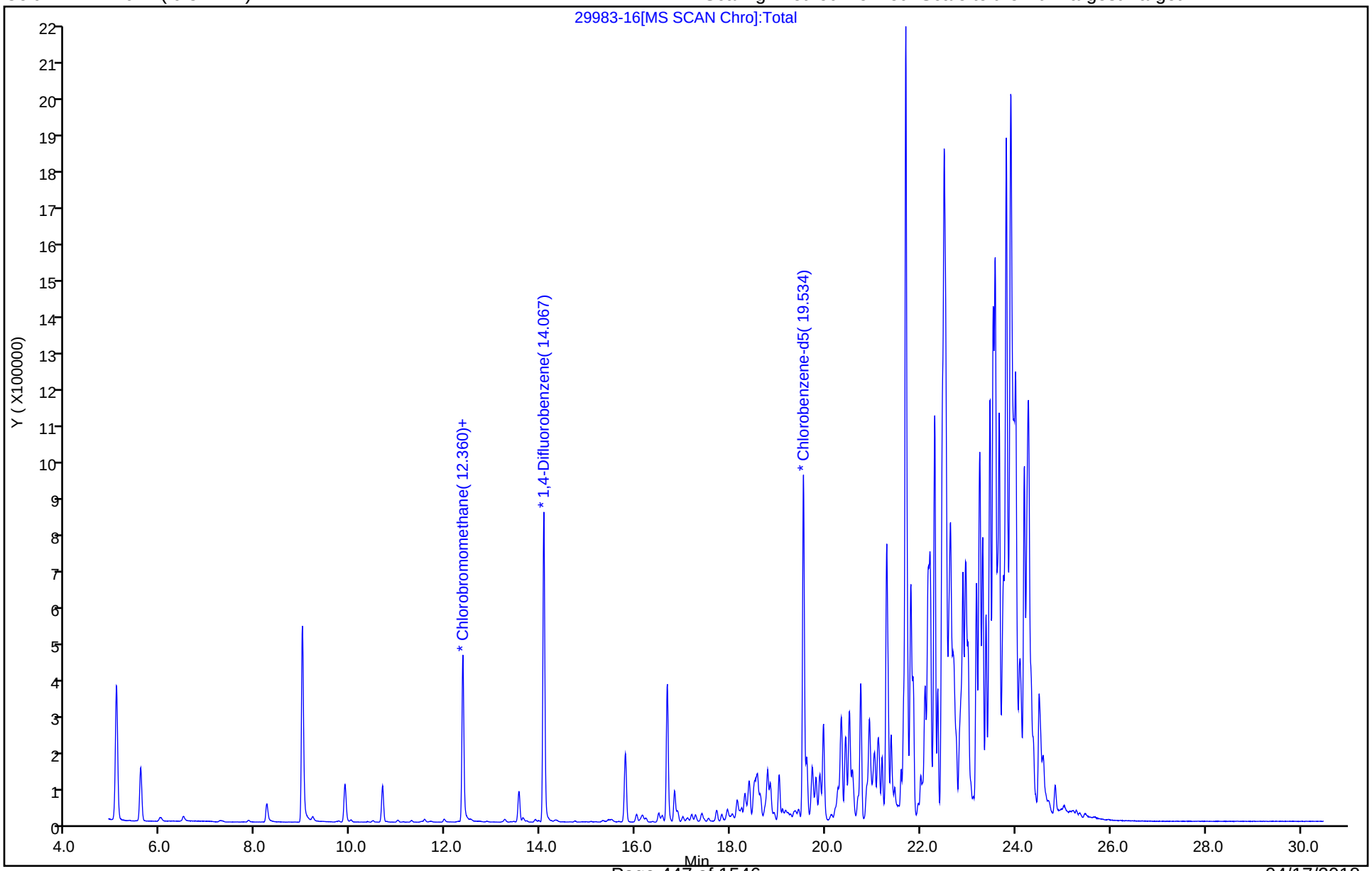
Report Date: 09-Apr-2018 19:25:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d

Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6	Worklist Smp#:	16
Client ID:	GC-SV-105 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	39.6000	ALS Bottle#:	15
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

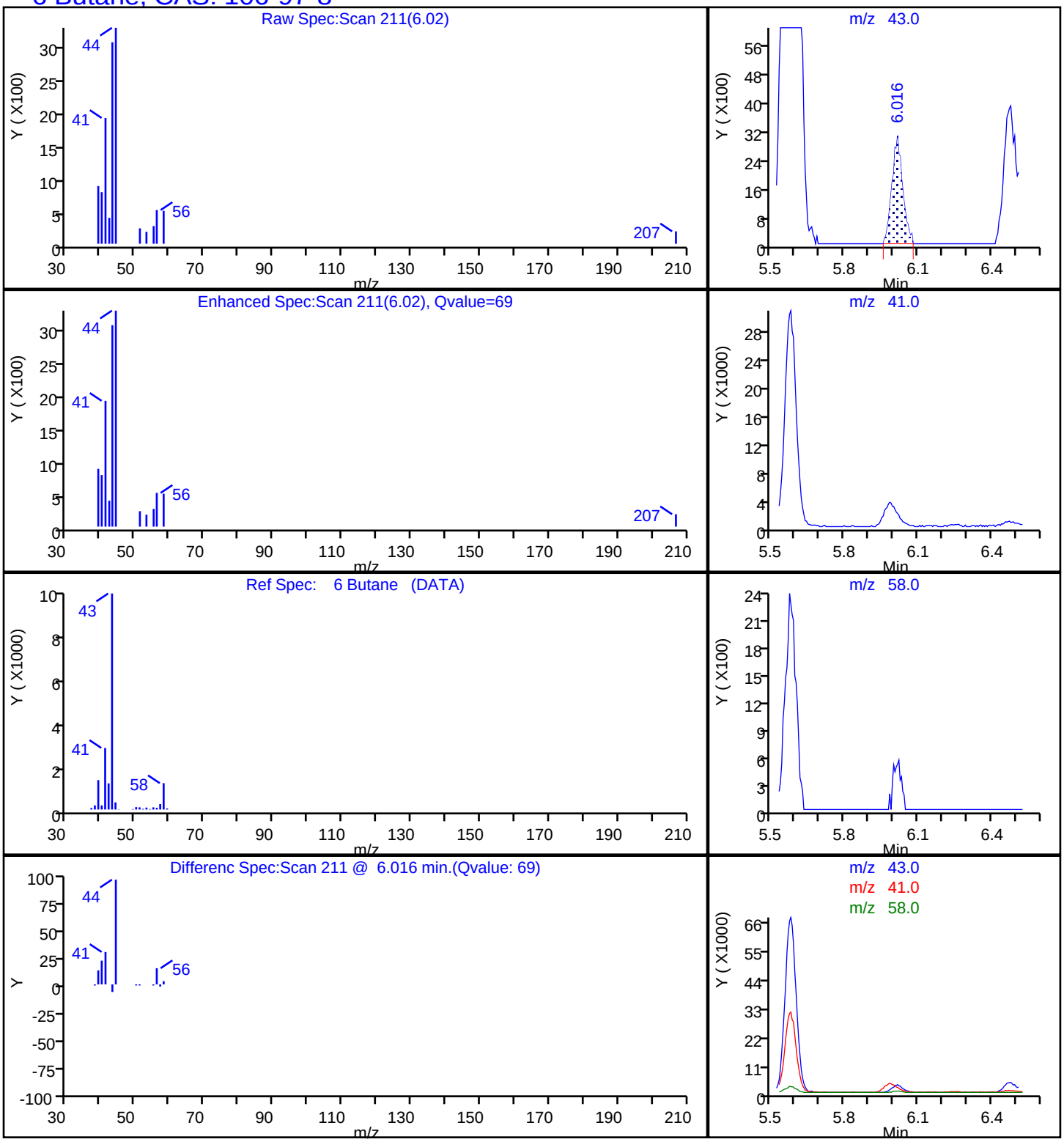
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

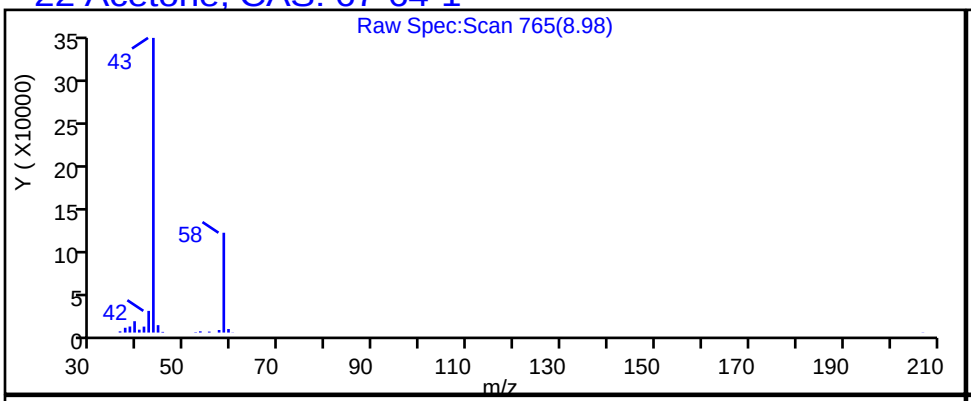
6 Butane, CAS: 106-97-8

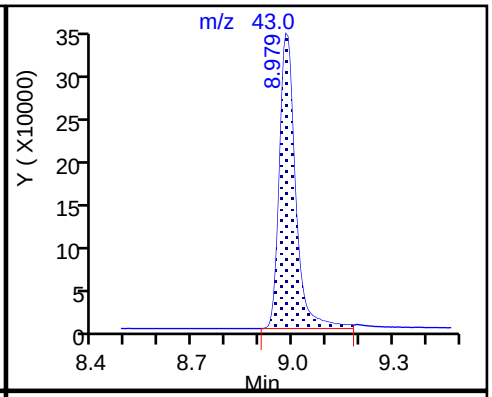


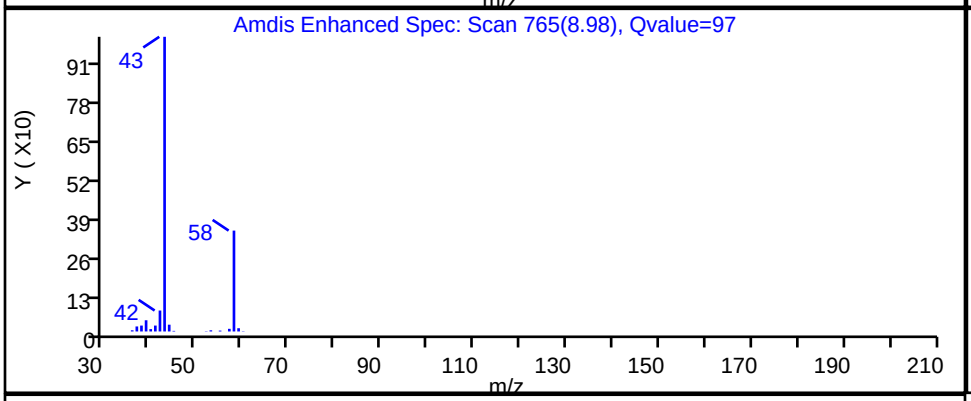
TestAmerica Burlington

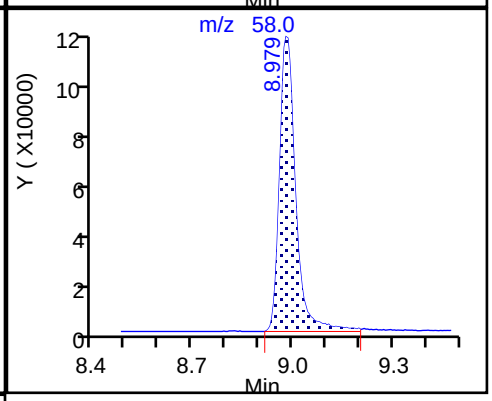
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

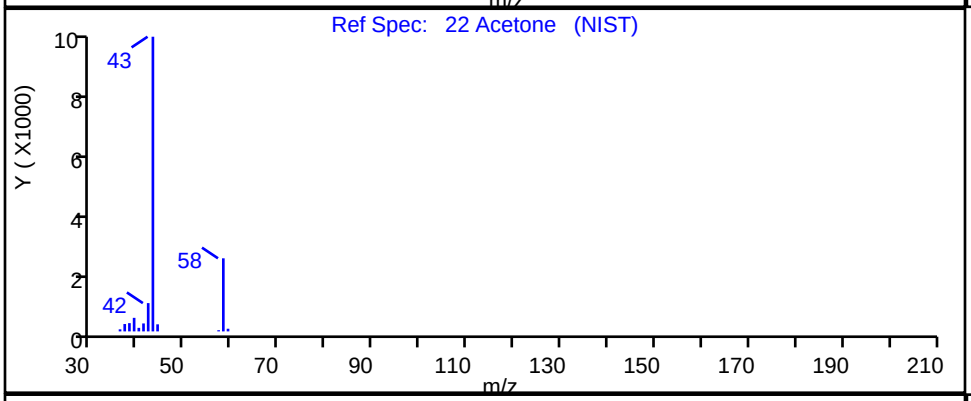
22 Acetone, CAS: 67-64-1

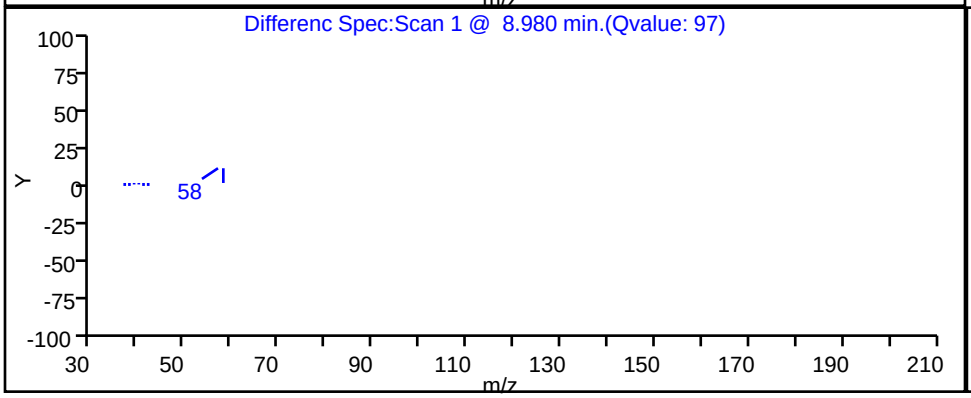


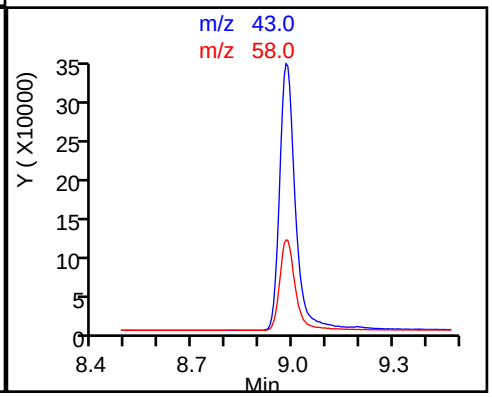








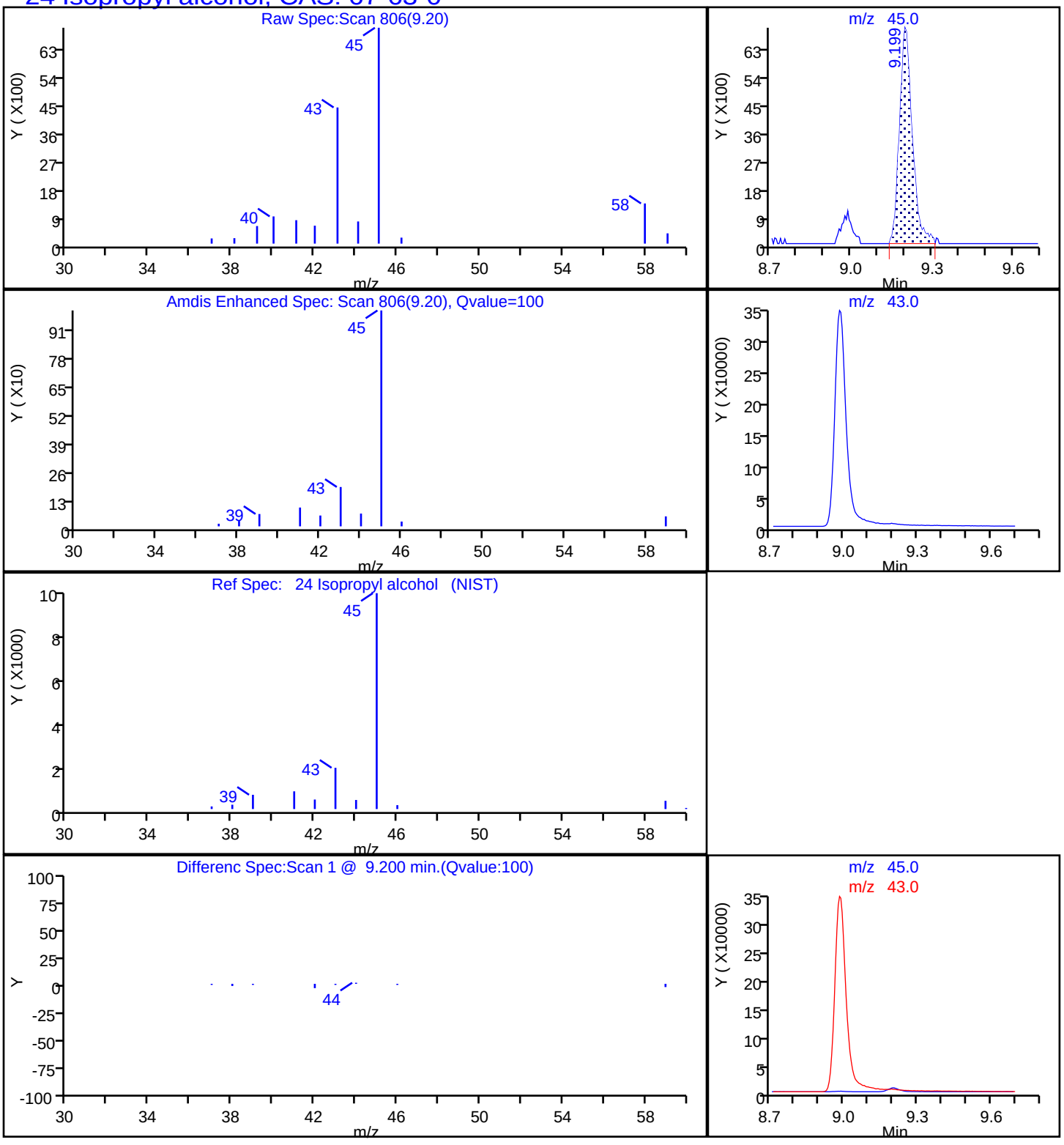




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

24 Isopropyl alcohol, CAS: 67-63-0



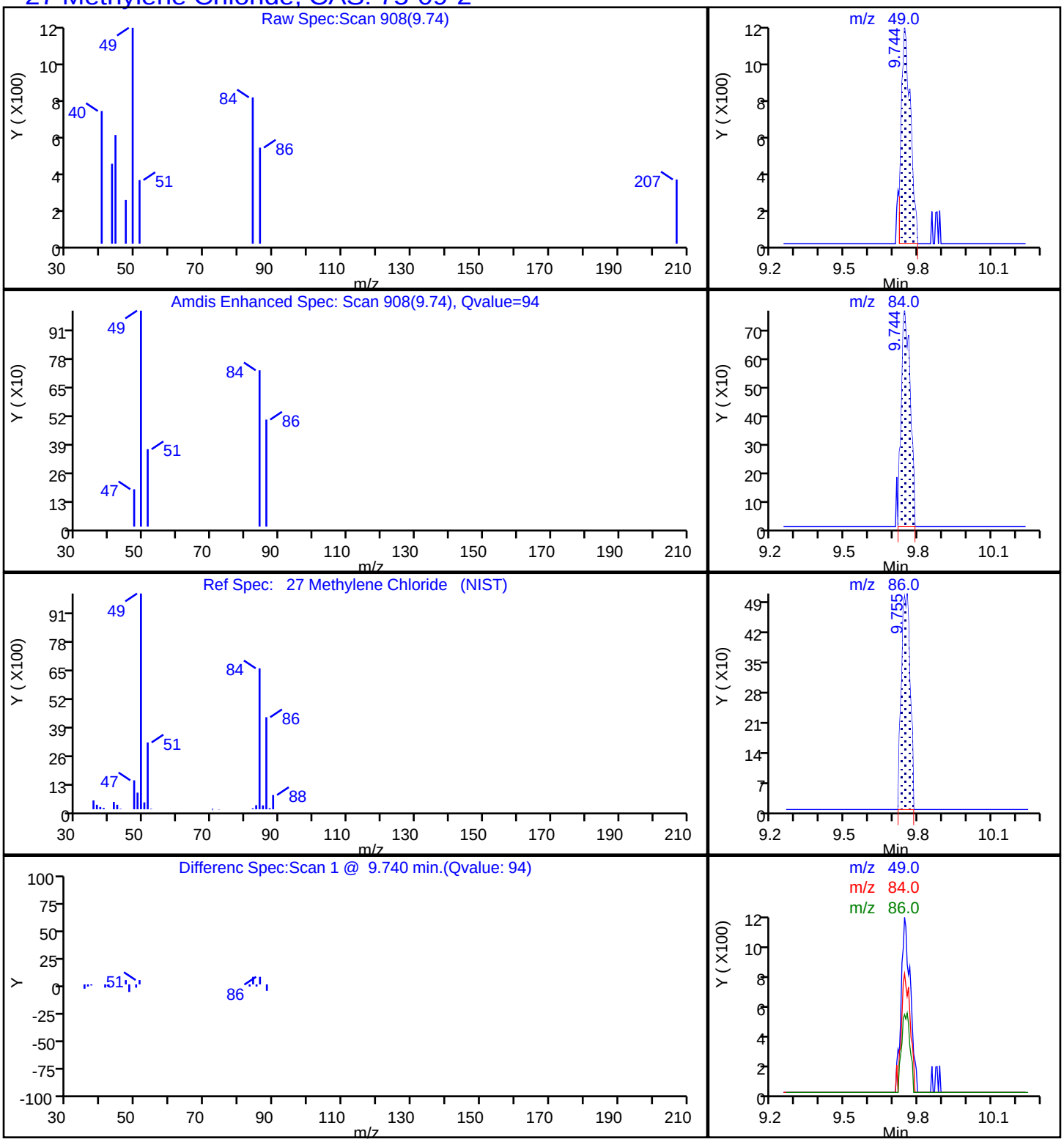
Report Date: 09-Apr-2018 19:25:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d

Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

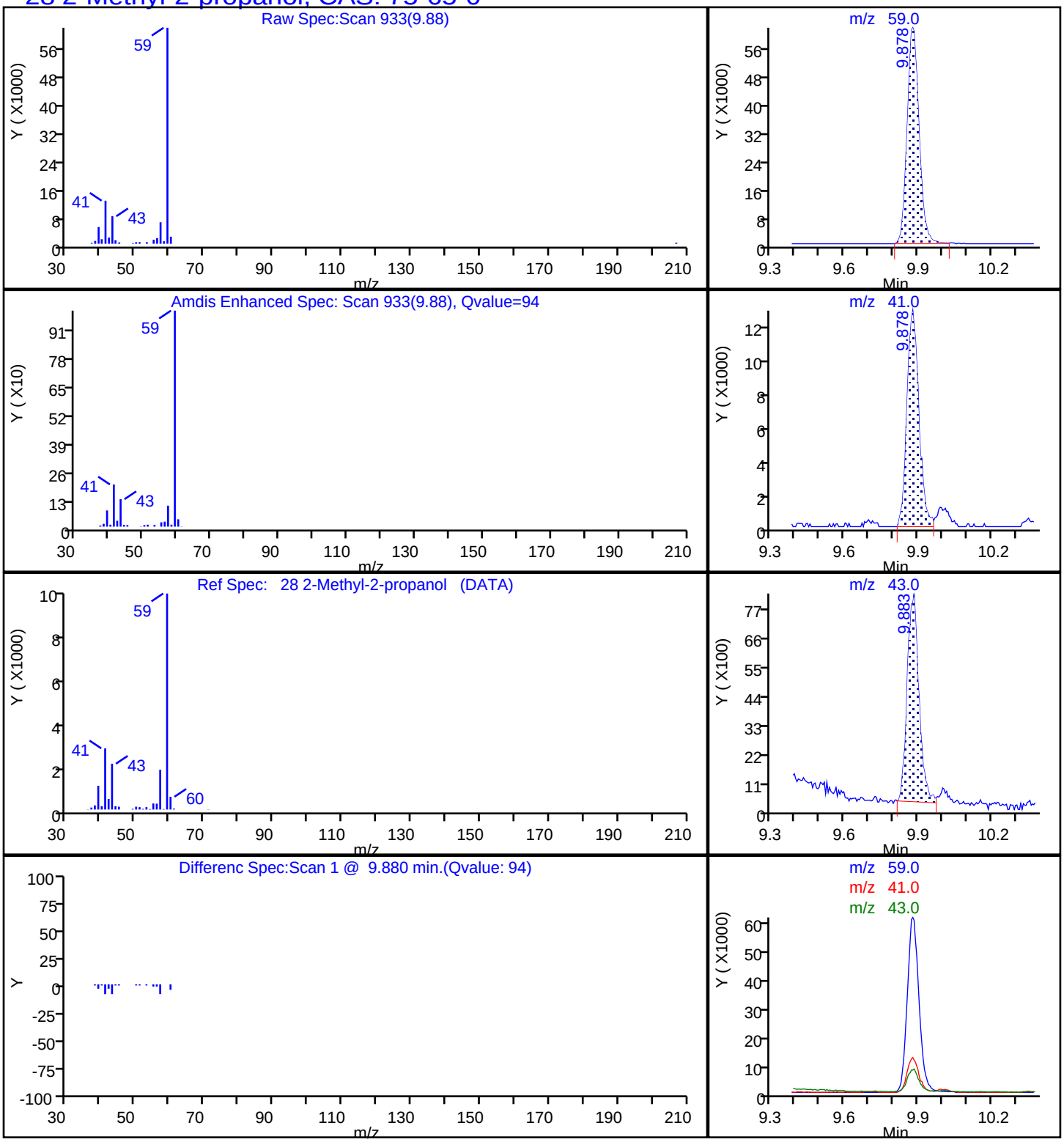
27 Methylene Chloride, CAS: 75-09-2



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

28 2-Methyl-2-propanol, CAS: 75-65-0



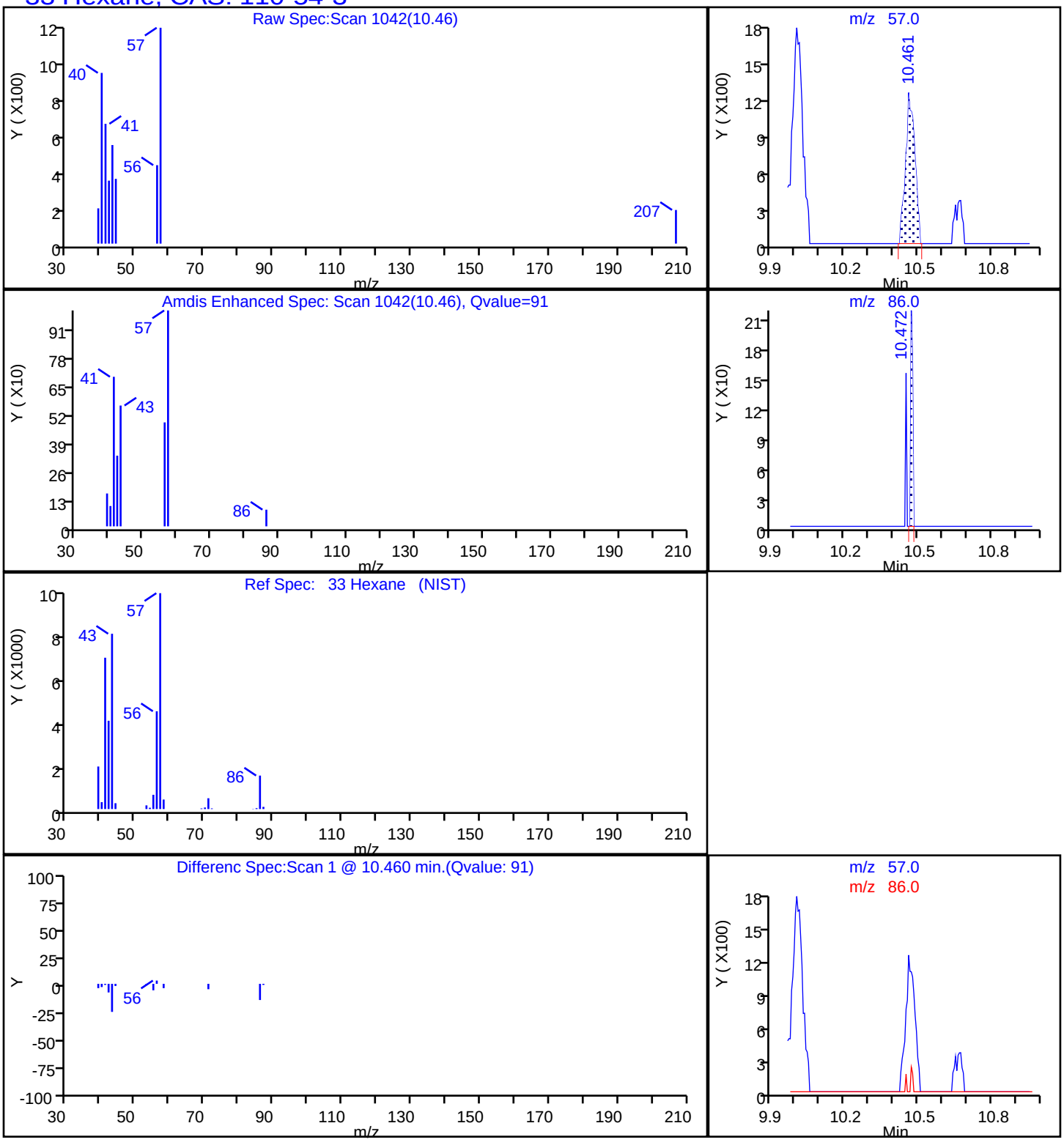
Report Date: 09-Apr-2018 19:25:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d

Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

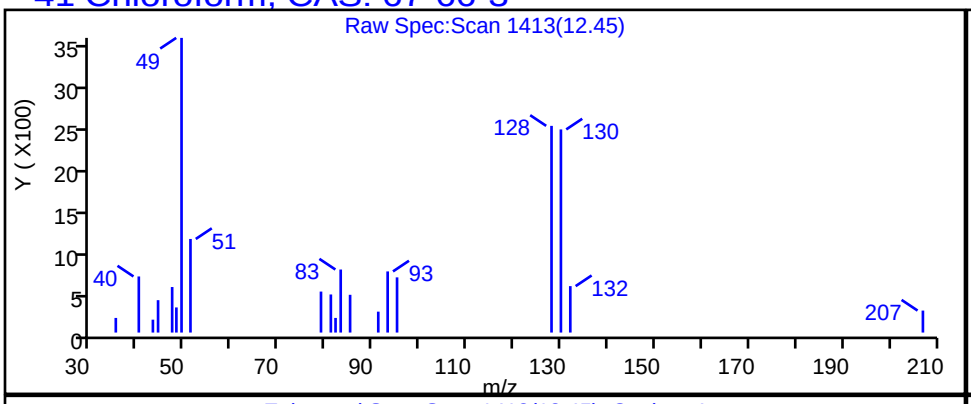
33 Hexane, CAS: 110-54-3

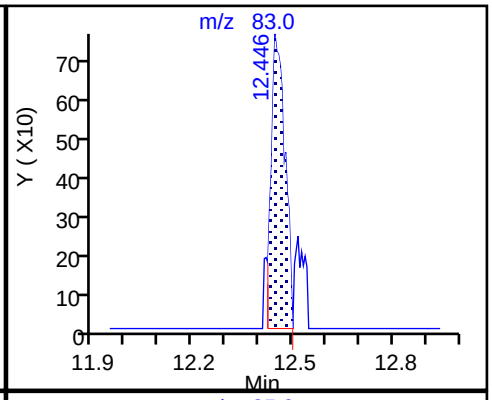


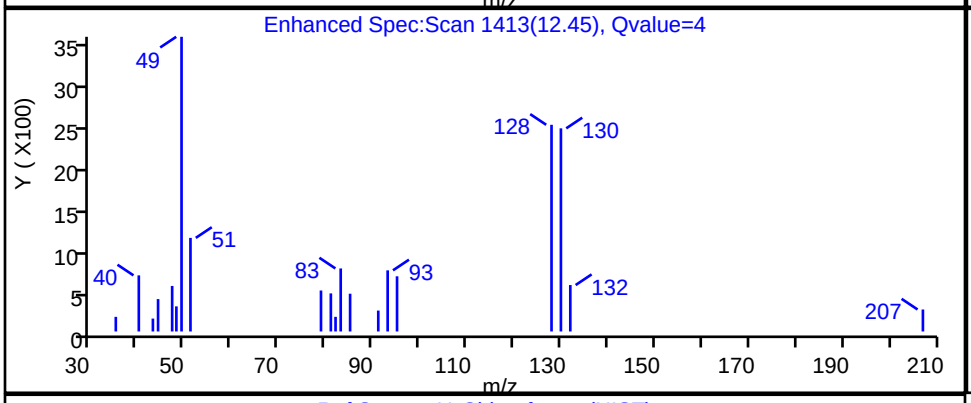
TestAmerica Burlington

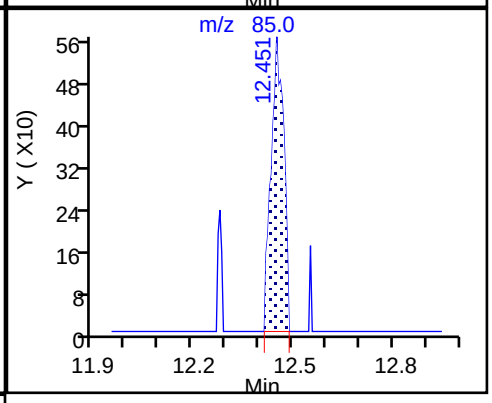
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

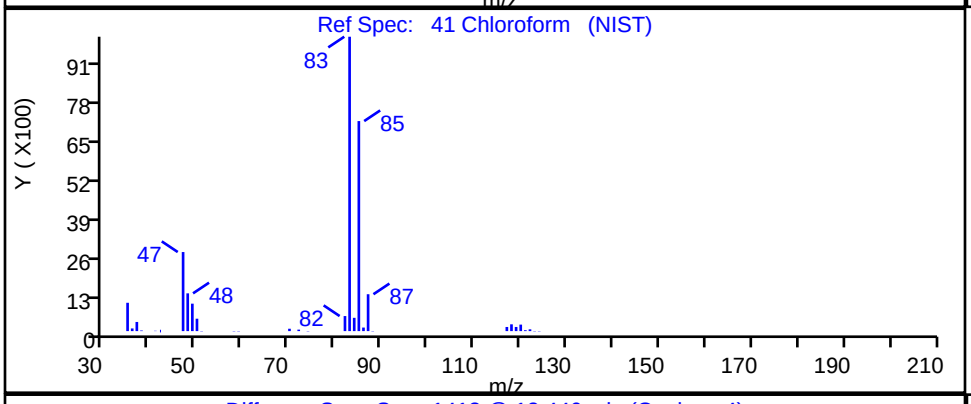
41 Chloroform, CAS: 67-66-3

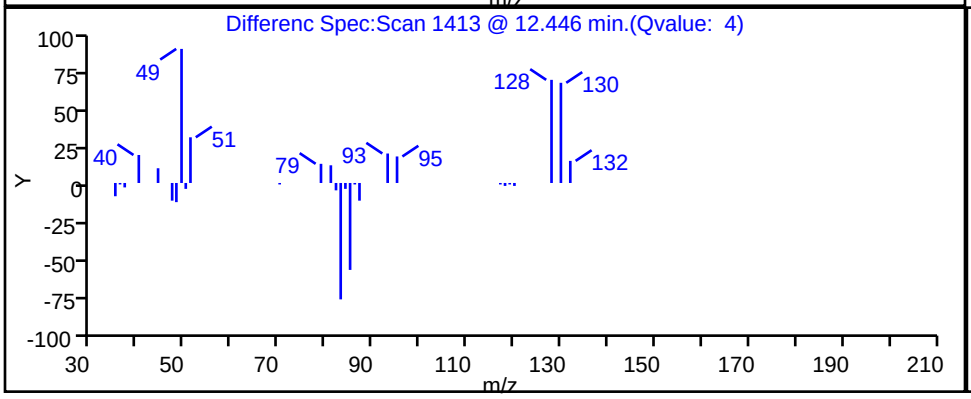


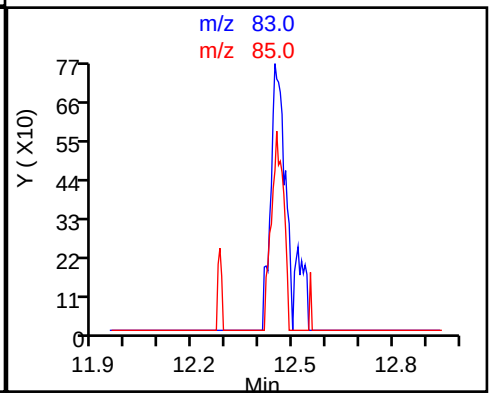










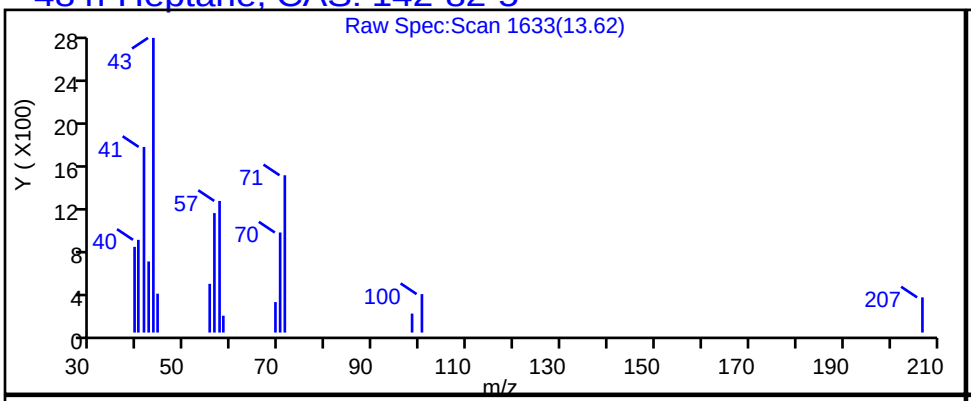


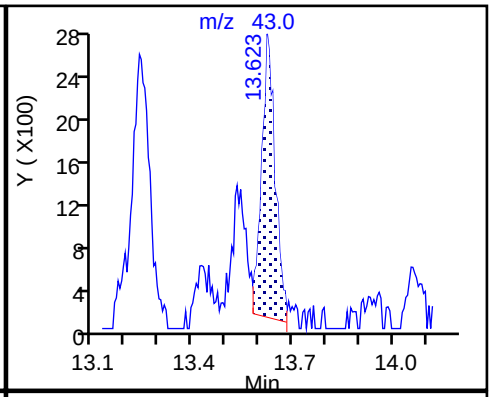
TestAmerica Burlington

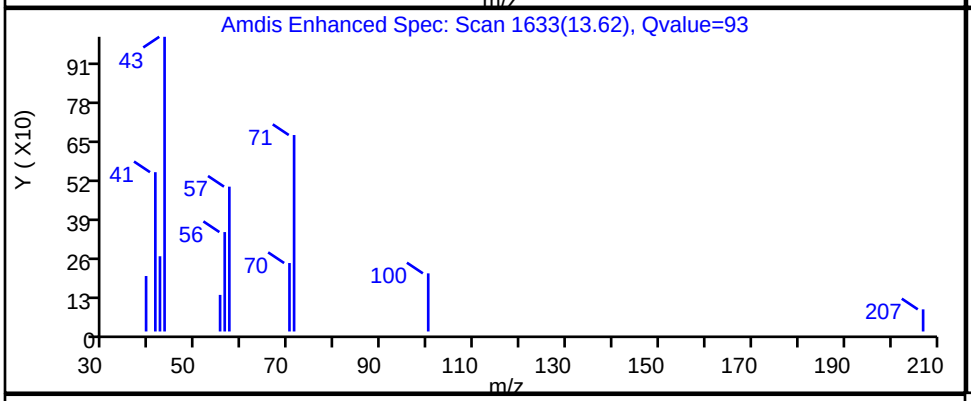
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d

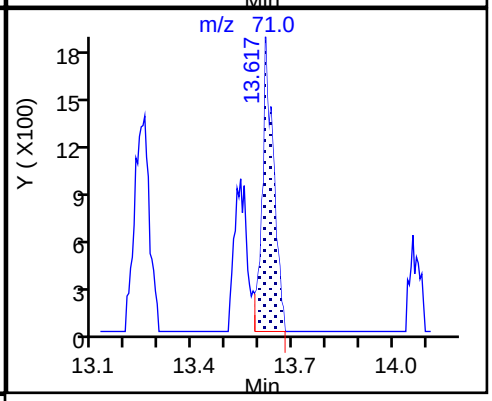
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

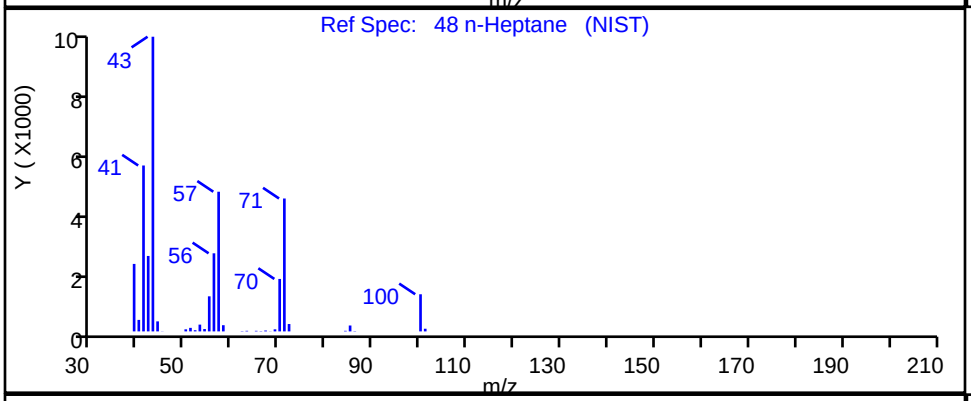
48 n-Heptane, CAS: 142-82-5

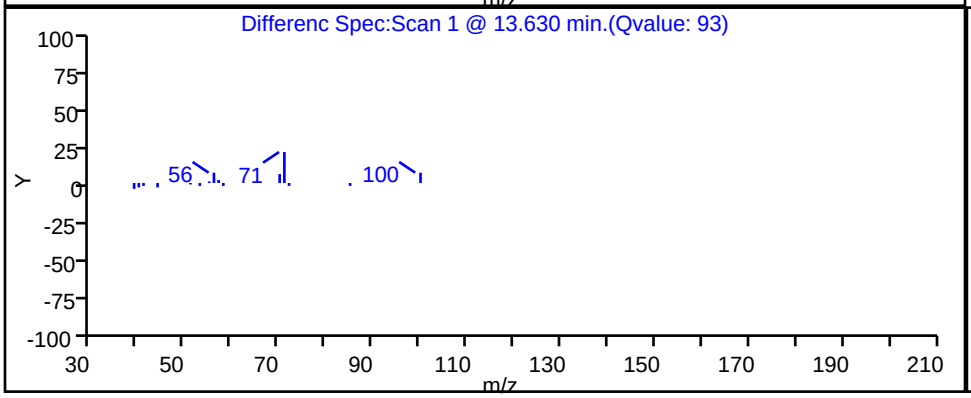


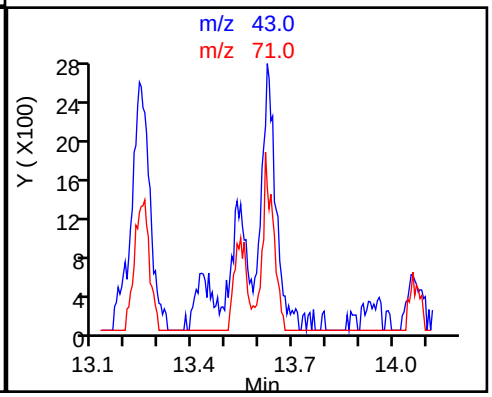








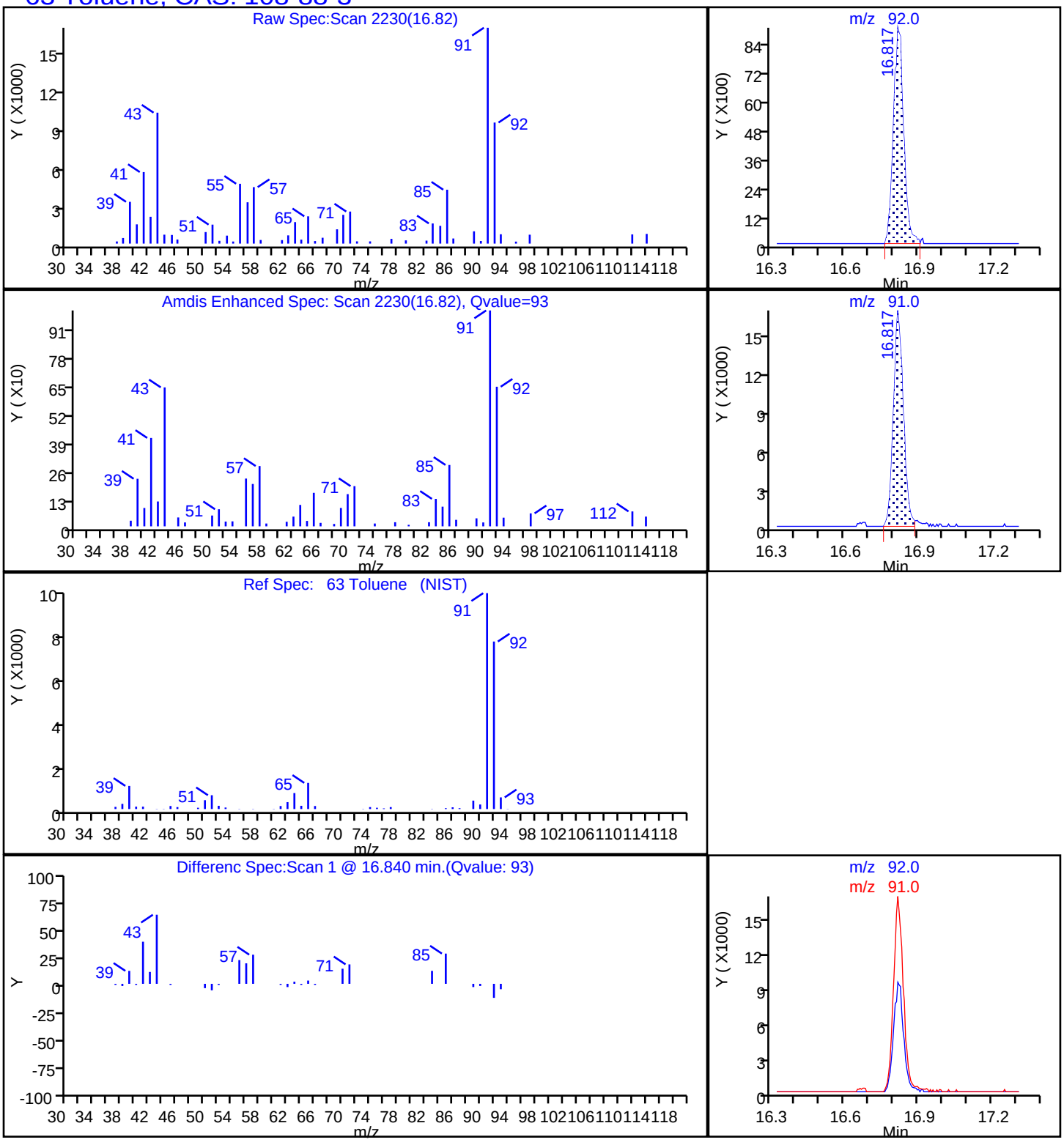




TestAmerica Burlington

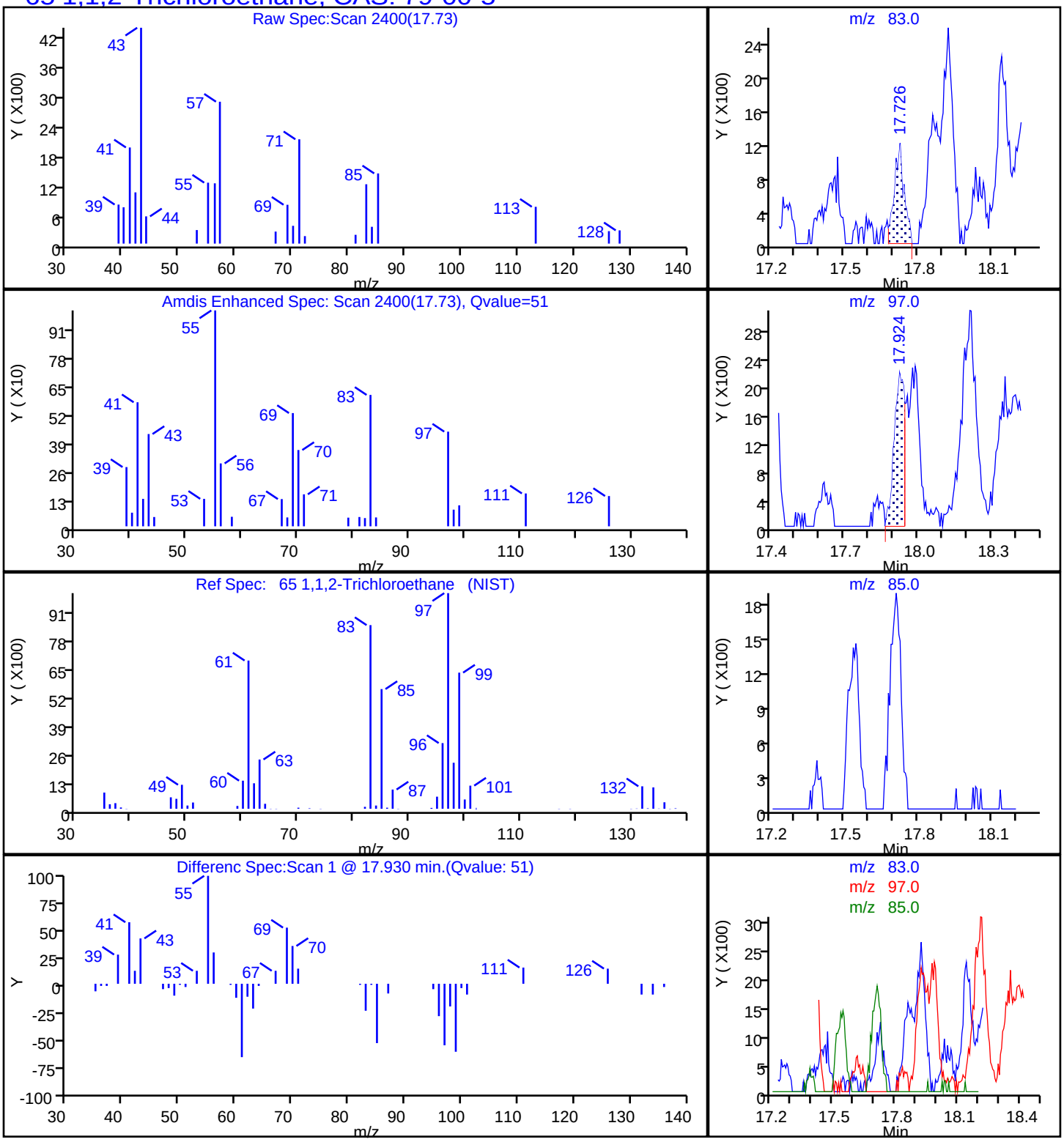
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3



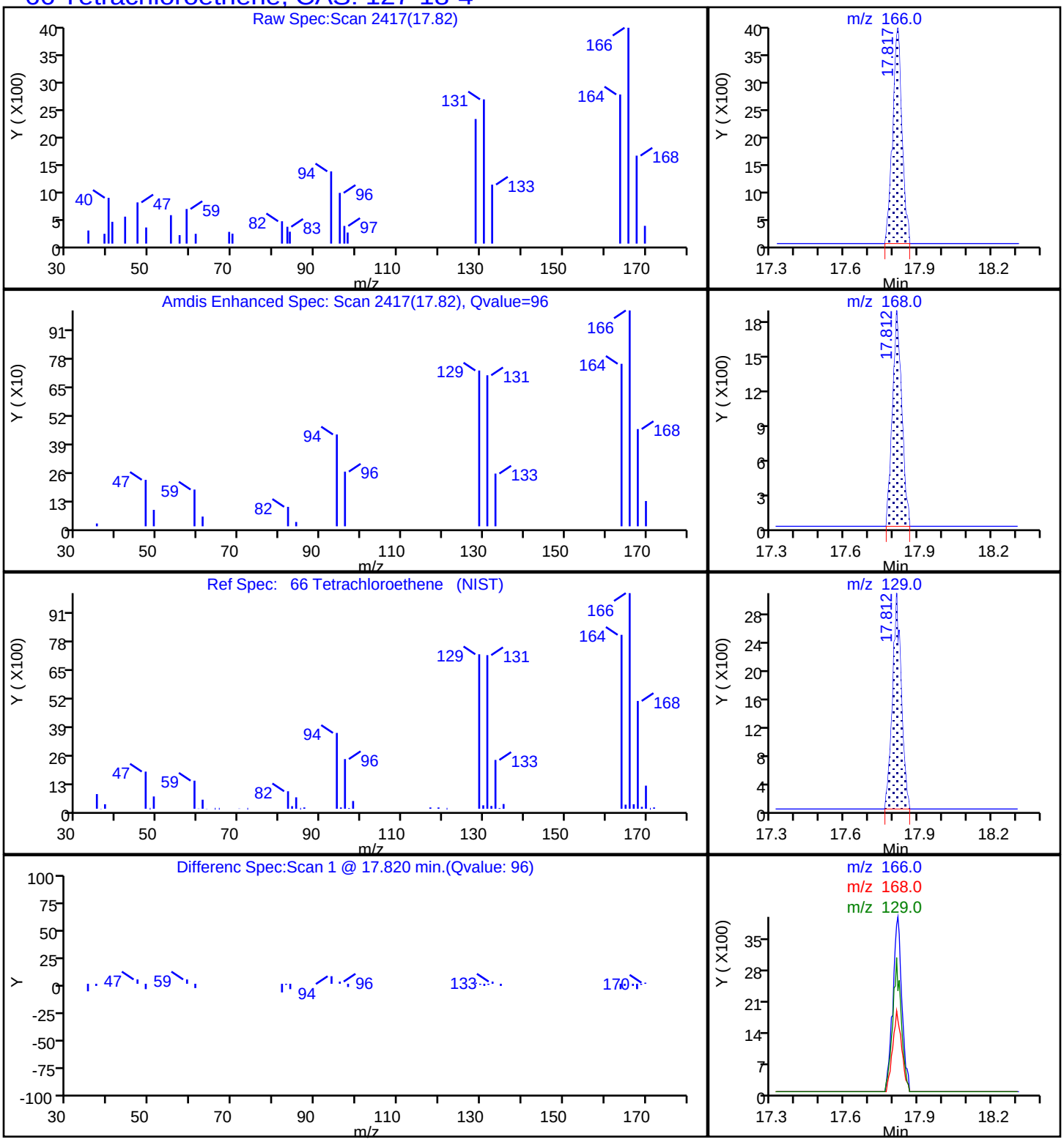
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d
Injection Date: 07-Apr-2018 01:10:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-6 Lab Sample ID: 200-42918-6
Client ID: GC-SV-105 (AS)
Operator ID: ert ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 39.6000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

65 1,1,2-Trichloroethane, CAS: 79-00-5



Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d
Injection Date: 07-Apr-2018 01:10:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-6 Lab Sample ID: 200-42918-6
Client ID: GC-SV-105 (AS)
Operator ID: ert ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 39.6000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

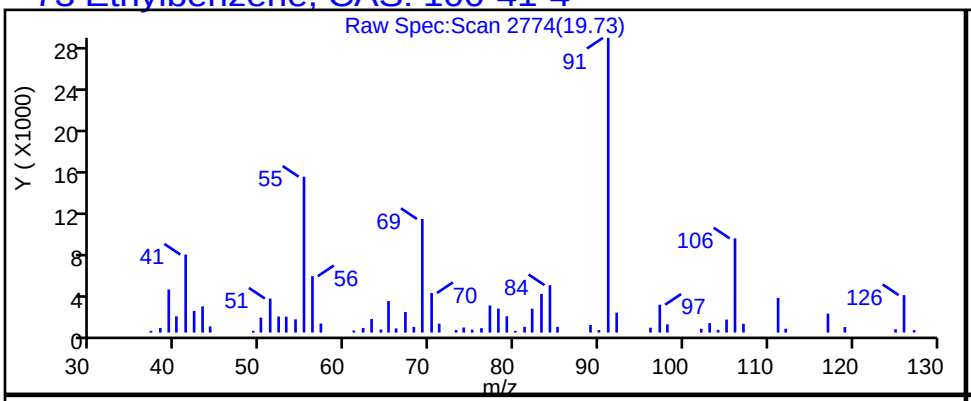
66 Tetrachloroethene, CAS: 127-18-4

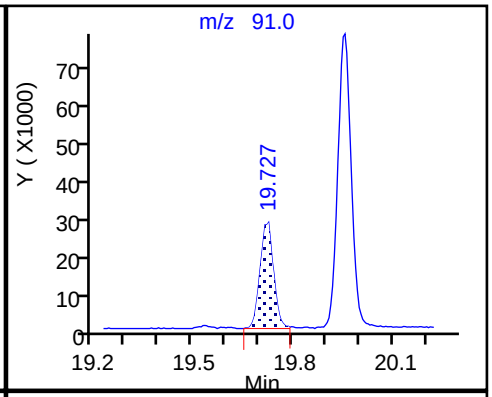


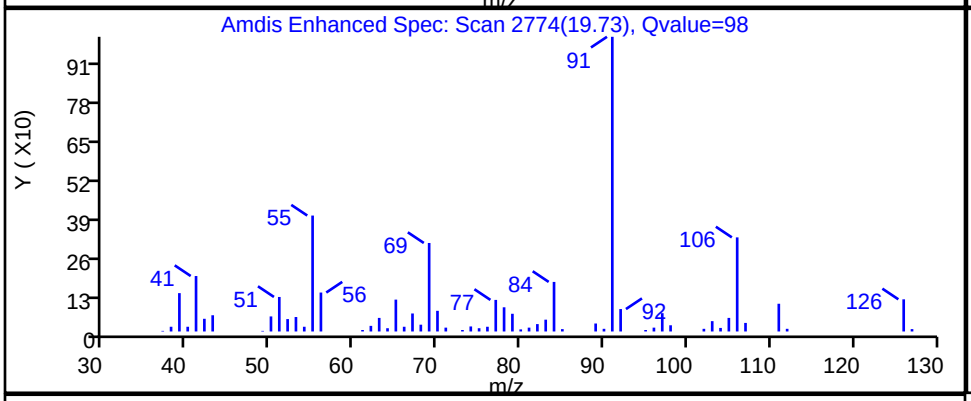
TestAmerica Burlington

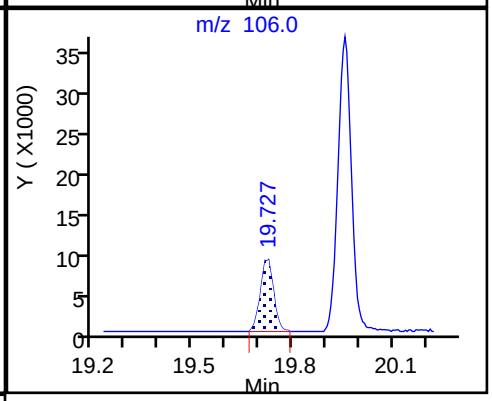
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

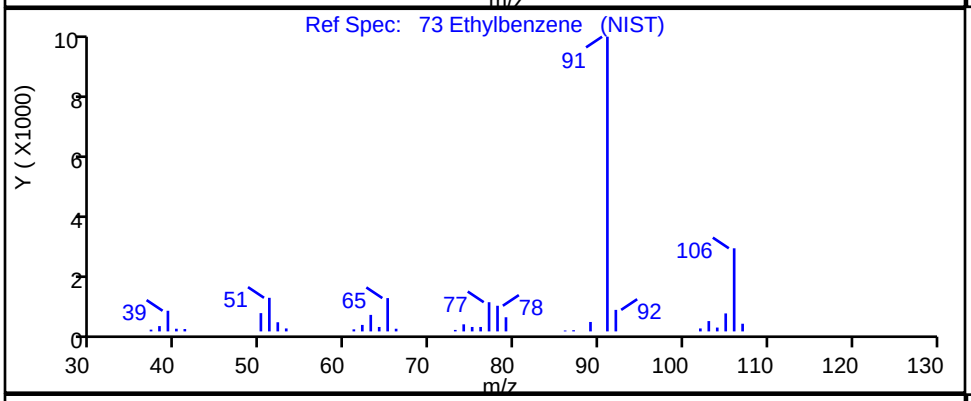
73 Ethylbenzene, CAS: 100-41-4

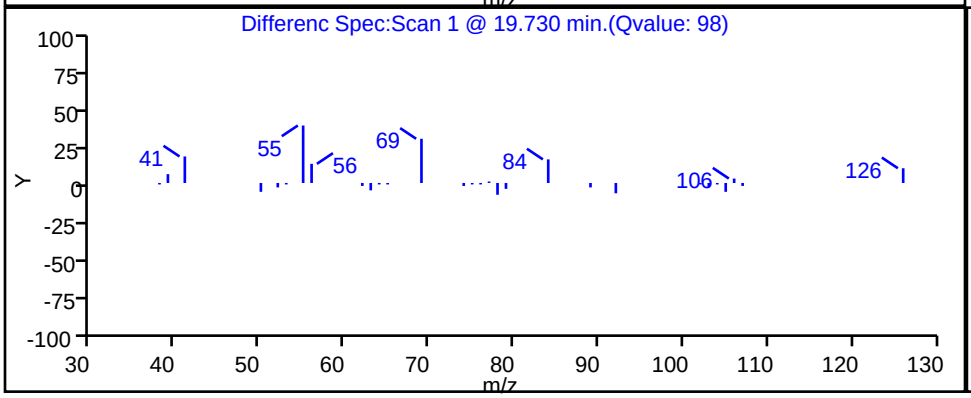


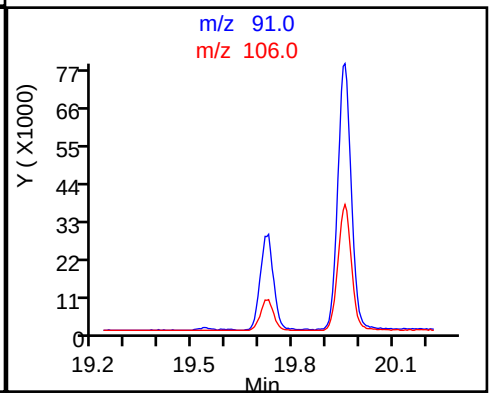








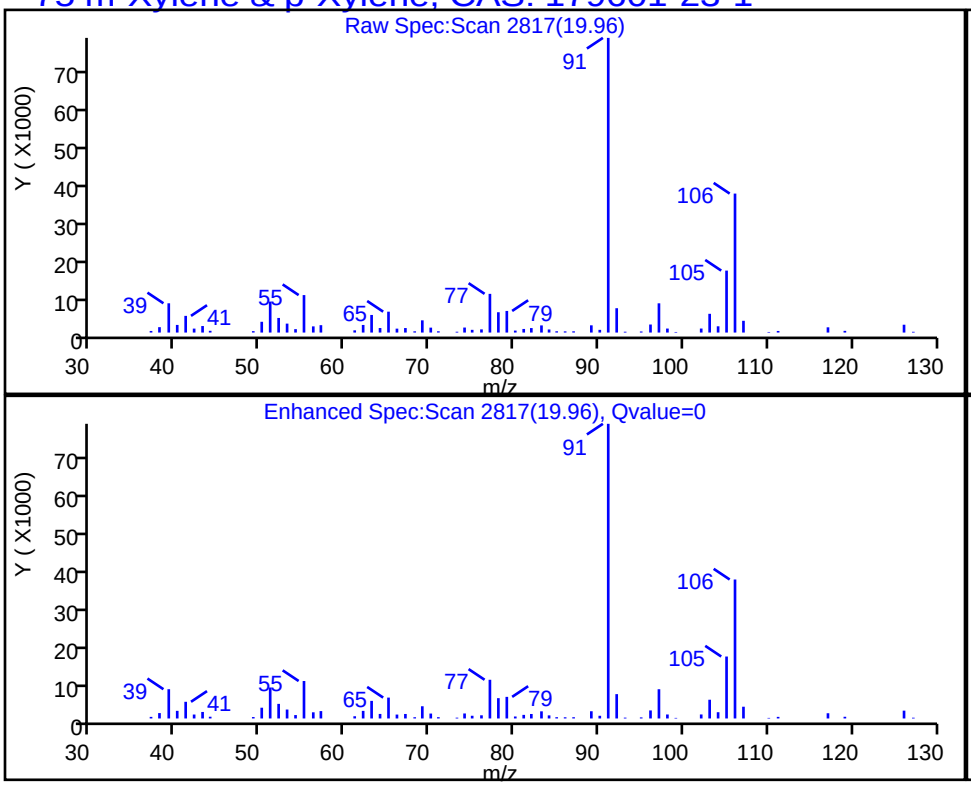


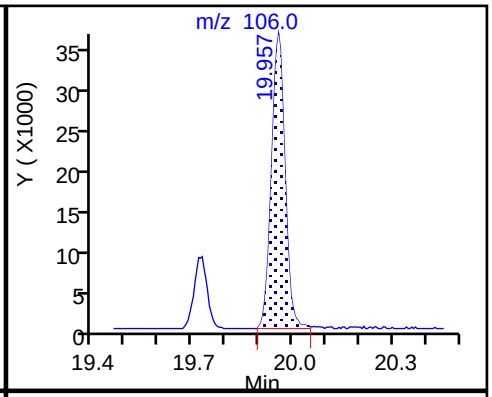


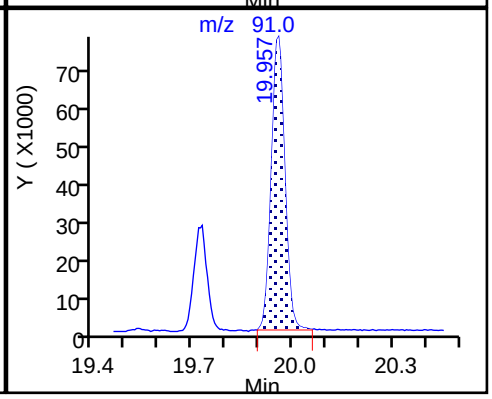
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d

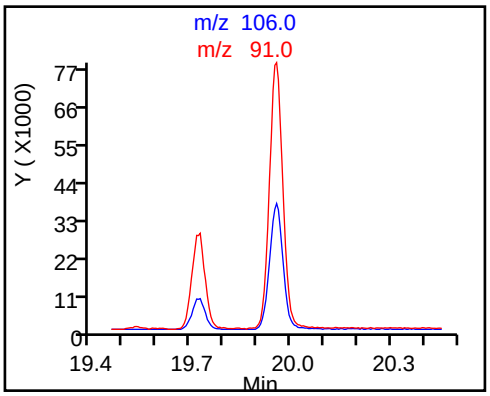
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

75 m-Xylene & p-Xylene, CAS: 179601-23-1





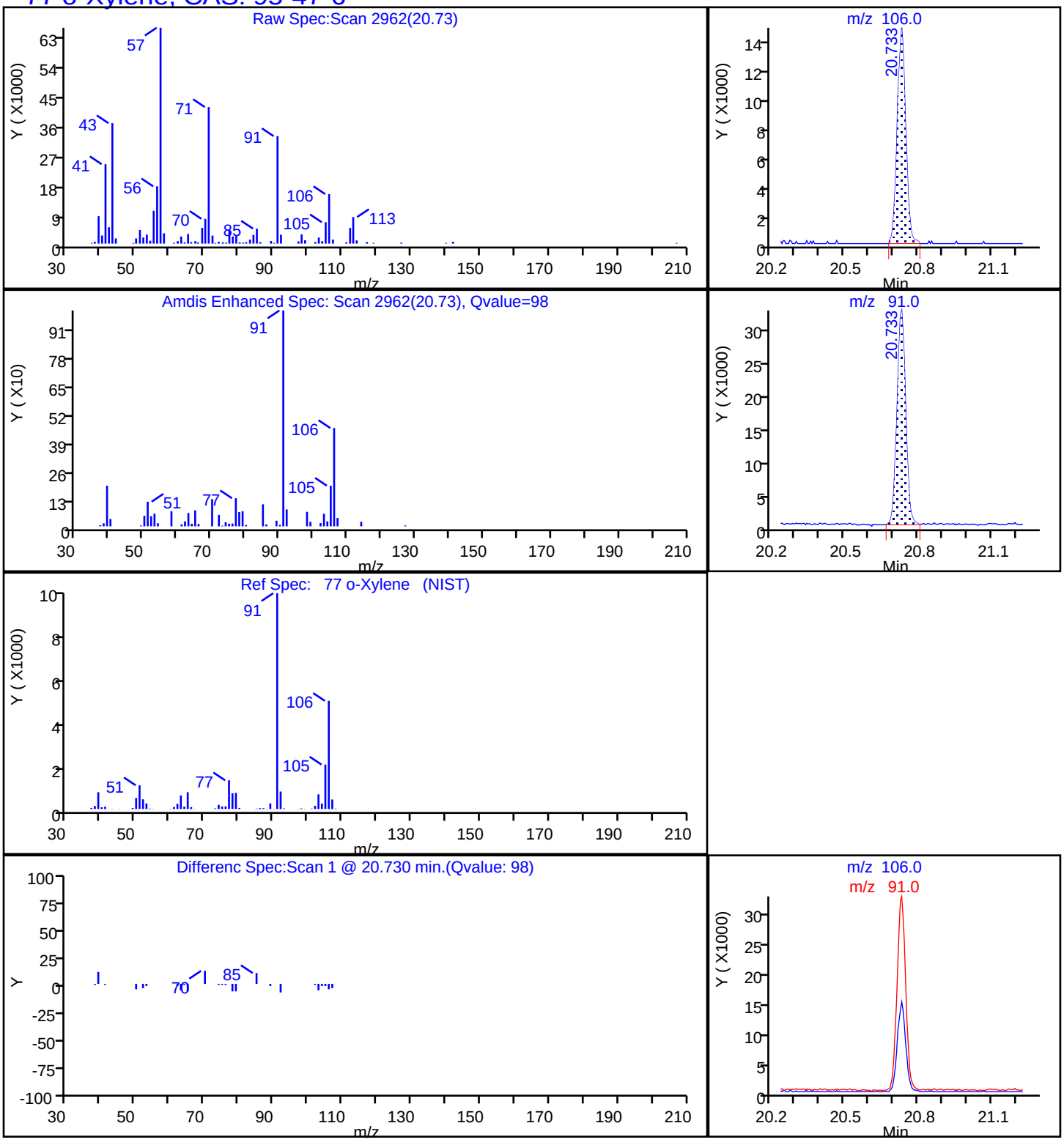




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

77 o-Xylene, CAS: 95-47-6



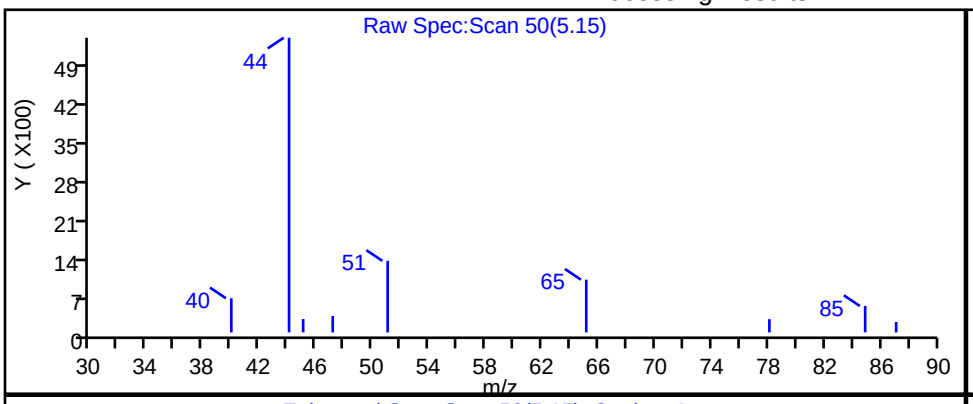
User Disabled Compound Report

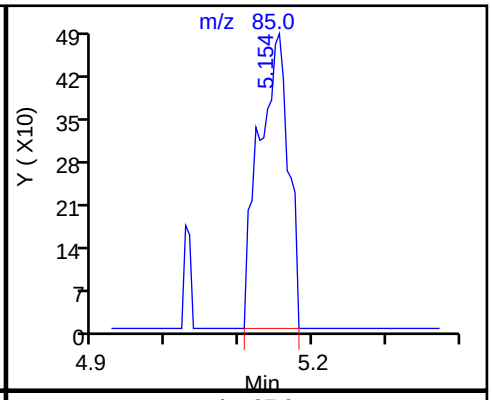
TestAmerica Burlington

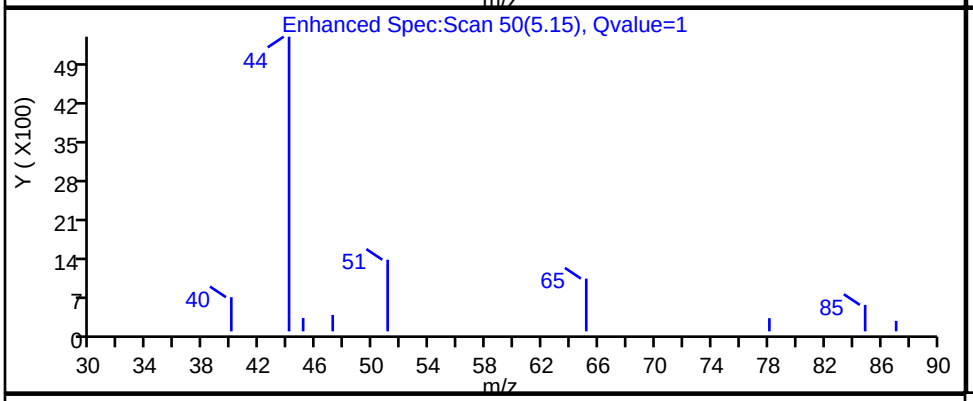
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

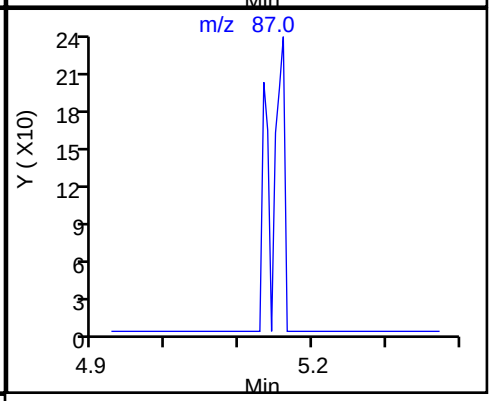
2 Dichlorodifluoromethane, CAS: 75-71-8

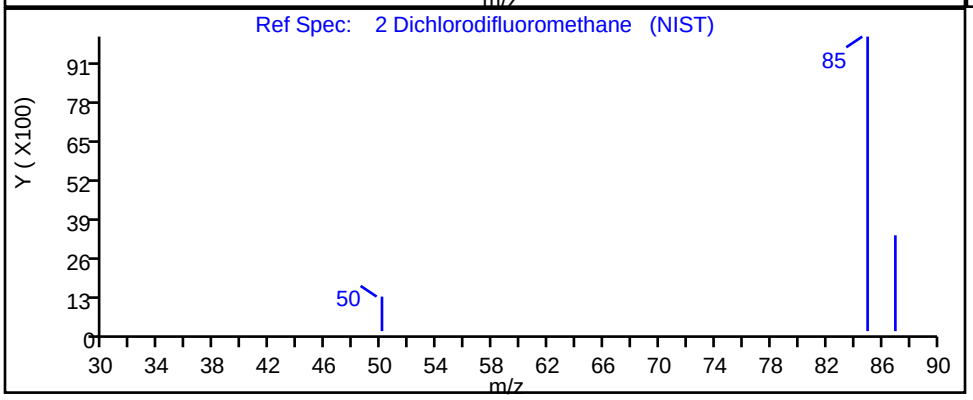
Processing Results











RT	Mass	Response	Amount
5.15	85.00	1343	0.013459
5.15	87.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

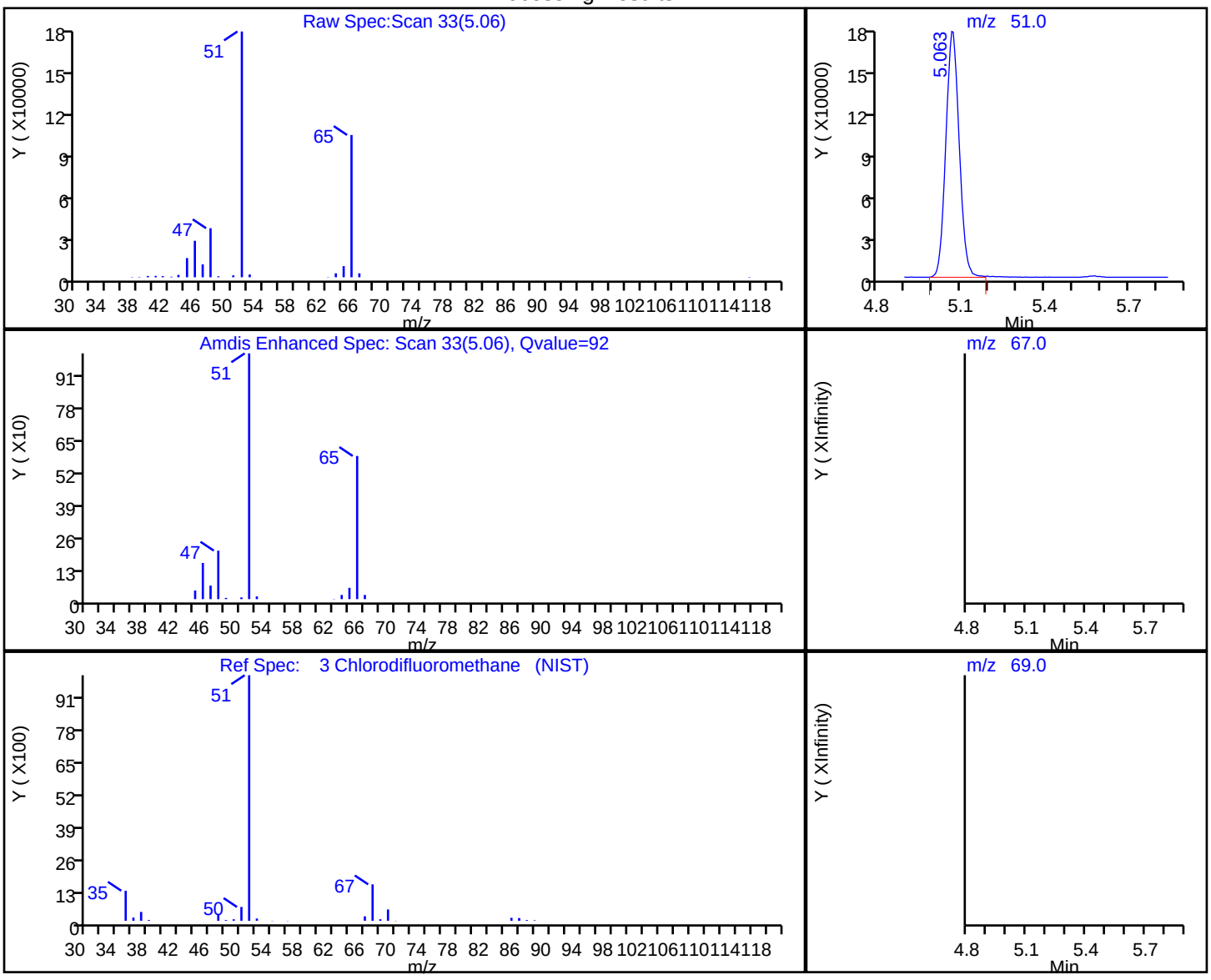
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
5.06	51.00	580105	10.527740
5.23	67.00	0	
5.23	69.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

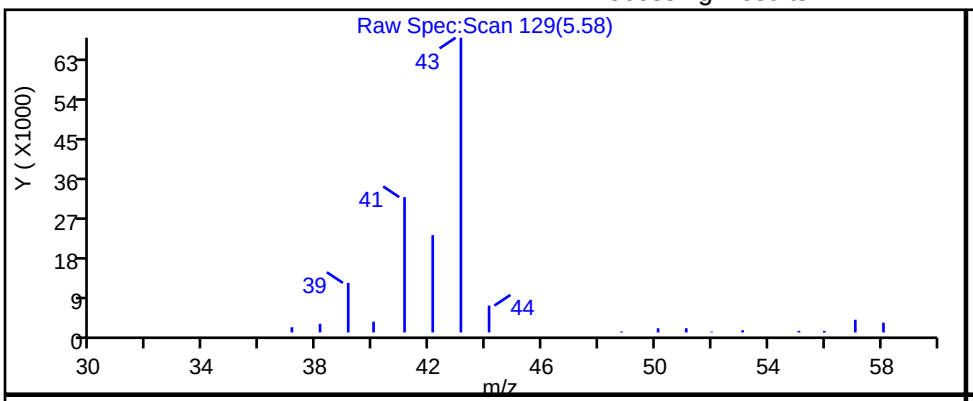
User Disabled Compound Report

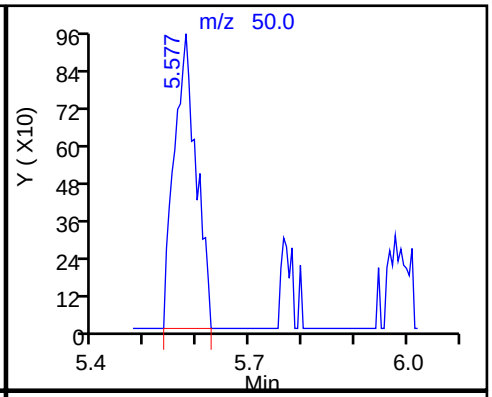
TestAmerica Burlington

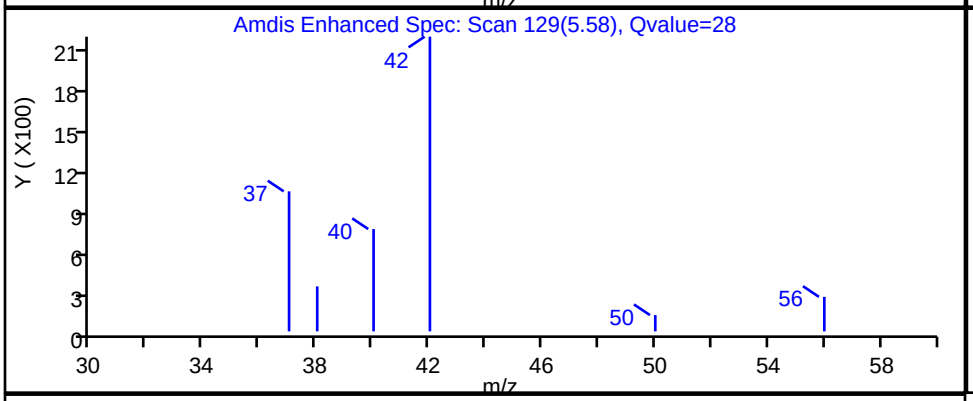
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

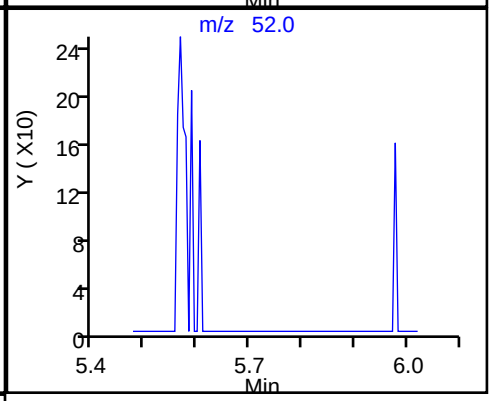
5 Chloromethane, CAS: 74-87-3

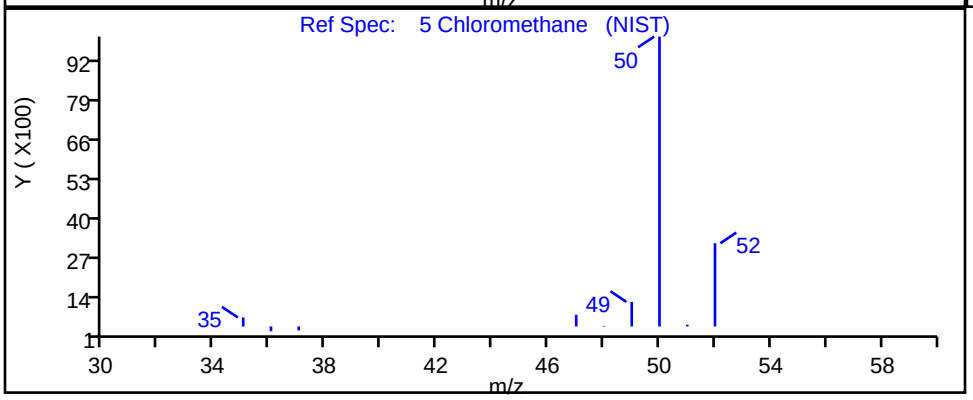
Processing Results











RT	Mass	Response	Amount
5.58	50.00	2771	0.083714
5.75	52.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

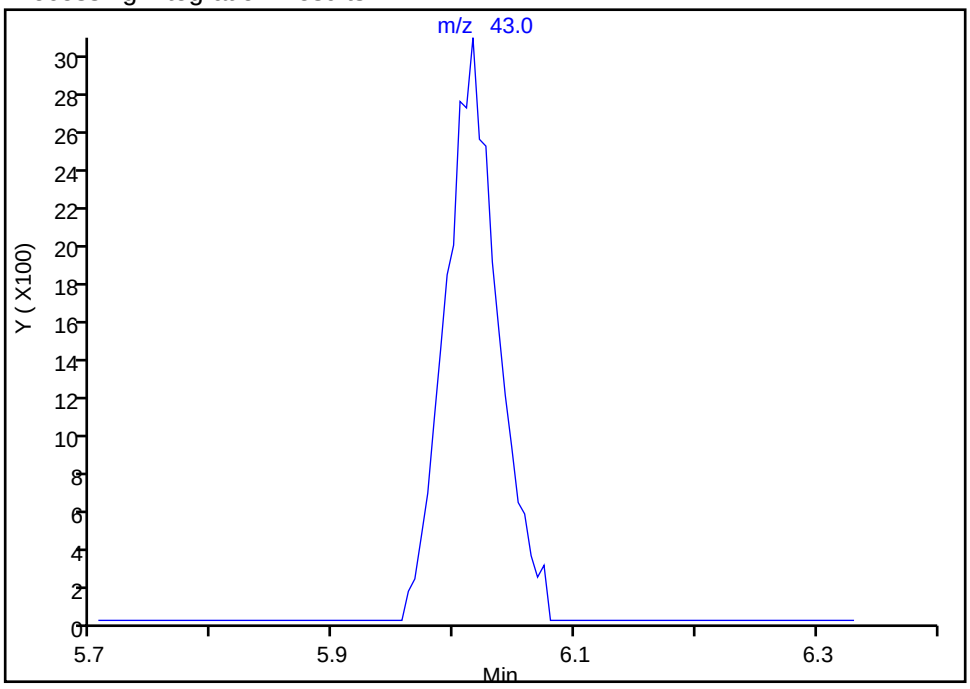
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

Signal: 1

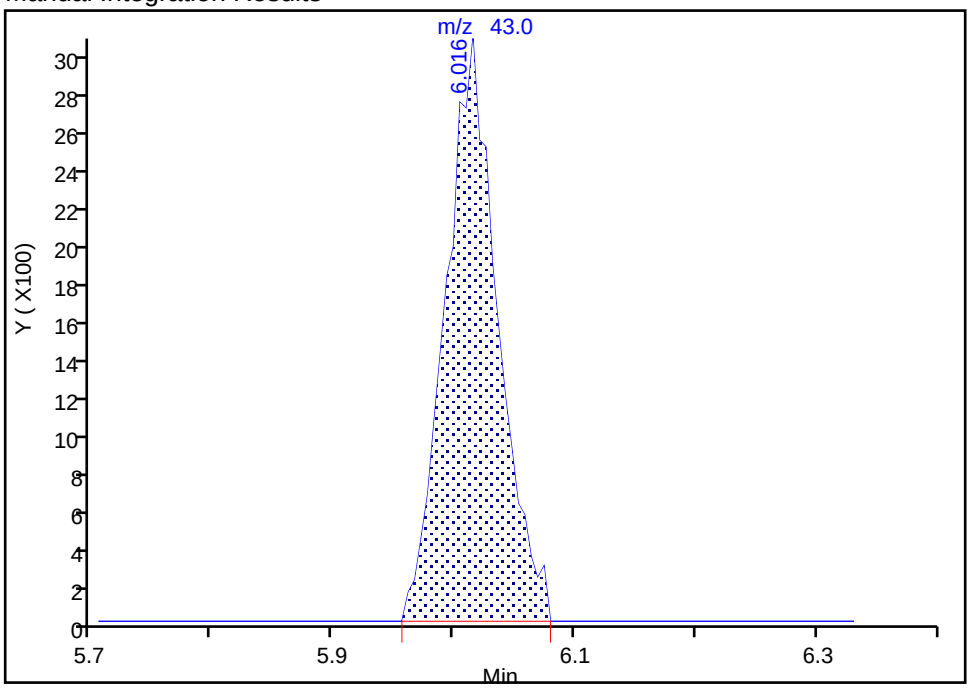
Not Detected
Expected RT: 6.03

Processing Integration Results



Manual Integration Results

RT: 6.02
Area: 9070
Amount: 0.165678
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:21:21
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

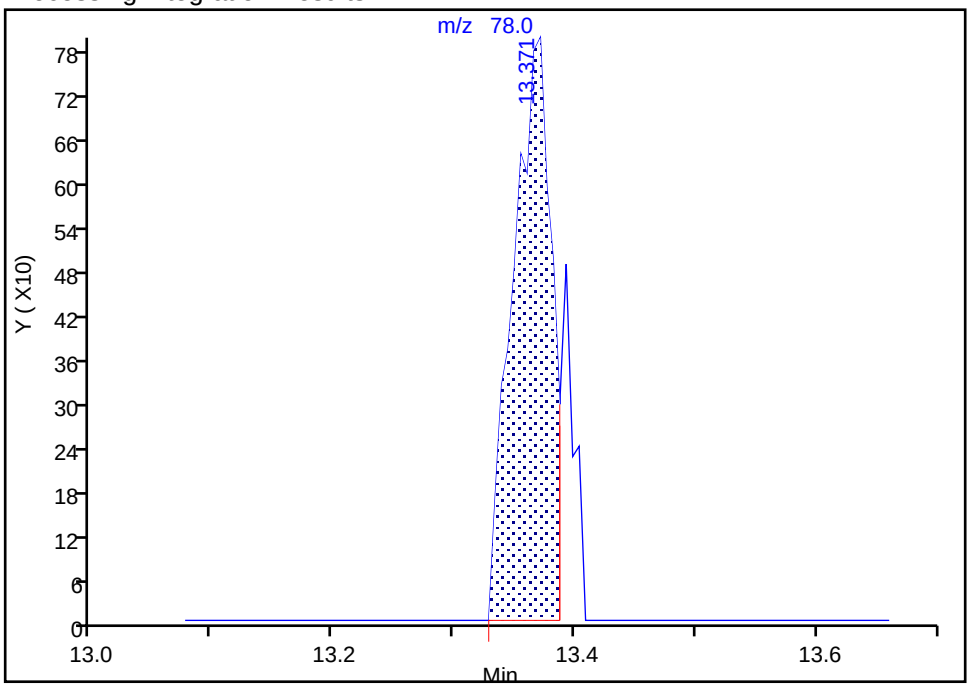
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Benzene, CAS: 71-43-2

Signal: 1

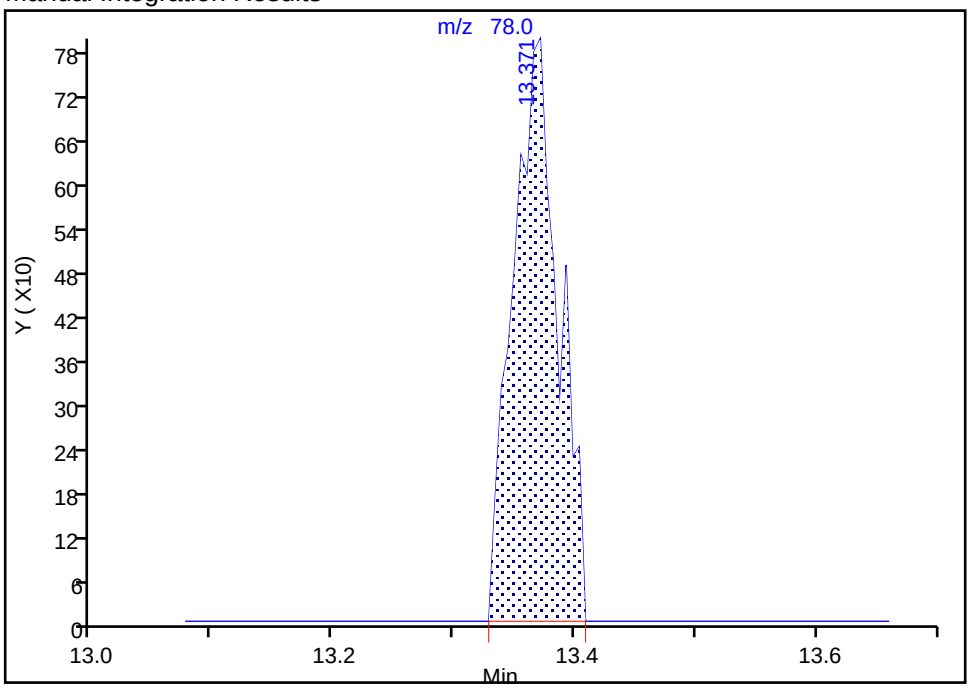
Processing Integration Results

RT: 13.37
Area: 1772
Amount: 0.019011
Amount Units: ppb v/v



Manual Integration Results

RT: 13.37
Area: 2075
Amount: 0.022261
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:22:24

Audit Action: Manually Integrated Audit Reason: Assign Peak

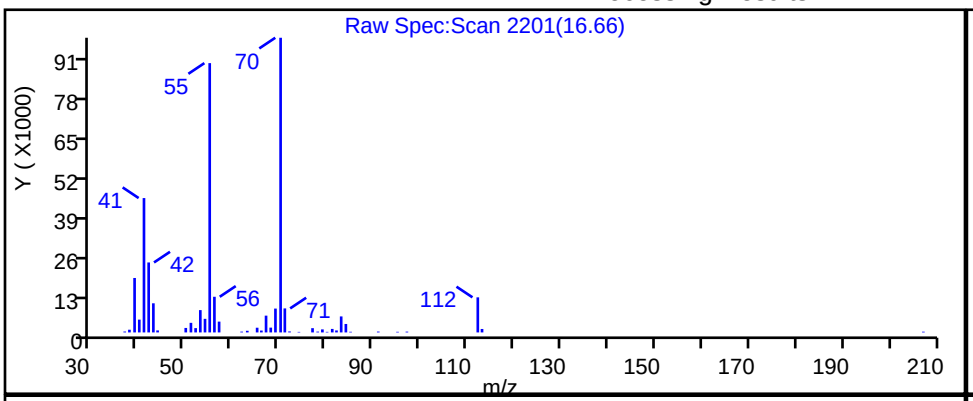
User Disabled Compound Report

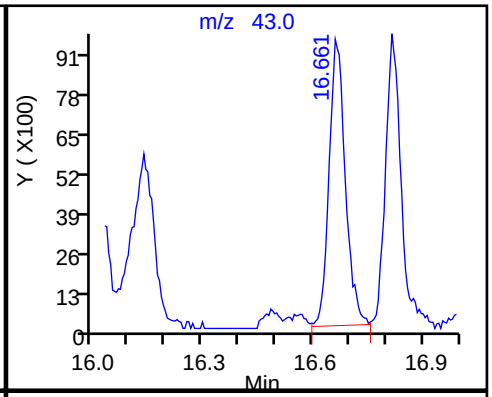
TestAmerica Burlington

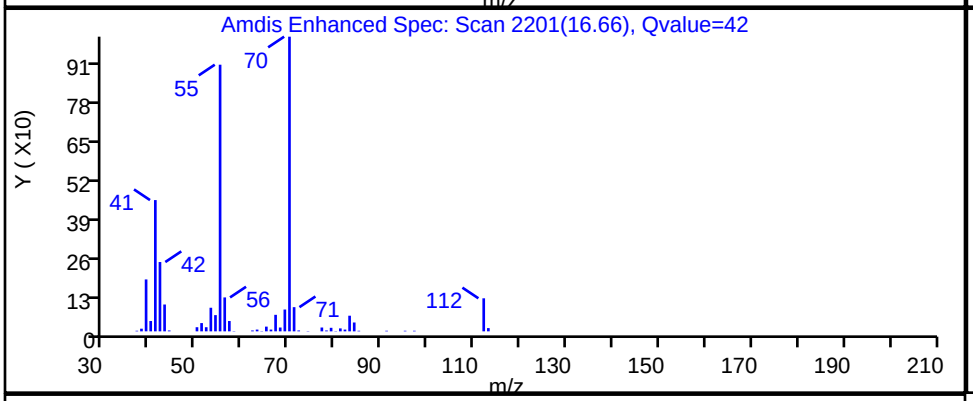
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

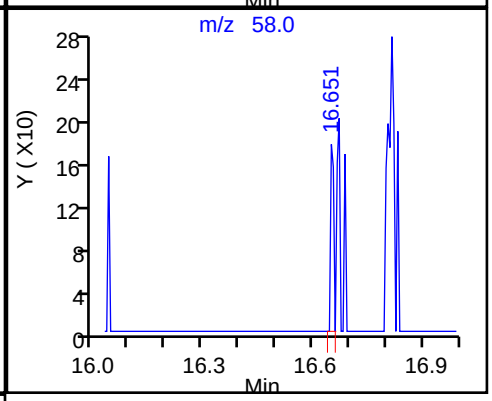
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

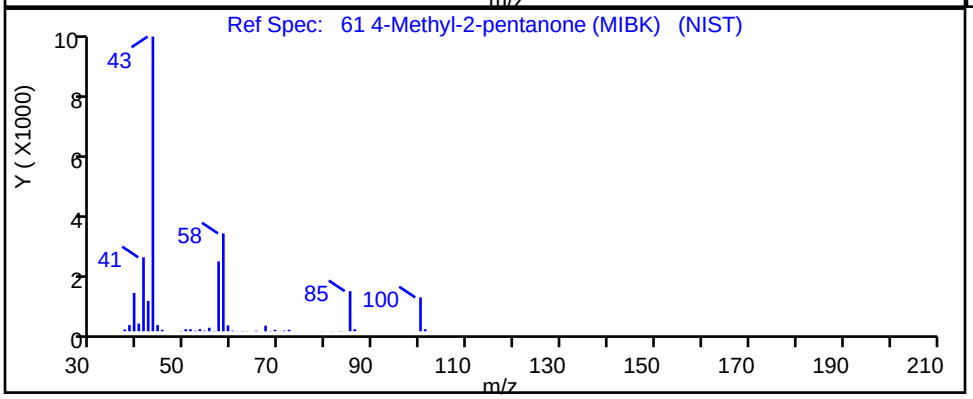
Processing Results











RT	Mass	Response	Amount
16.66	43.00	29402	0.469611
16.65	58.00	104	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

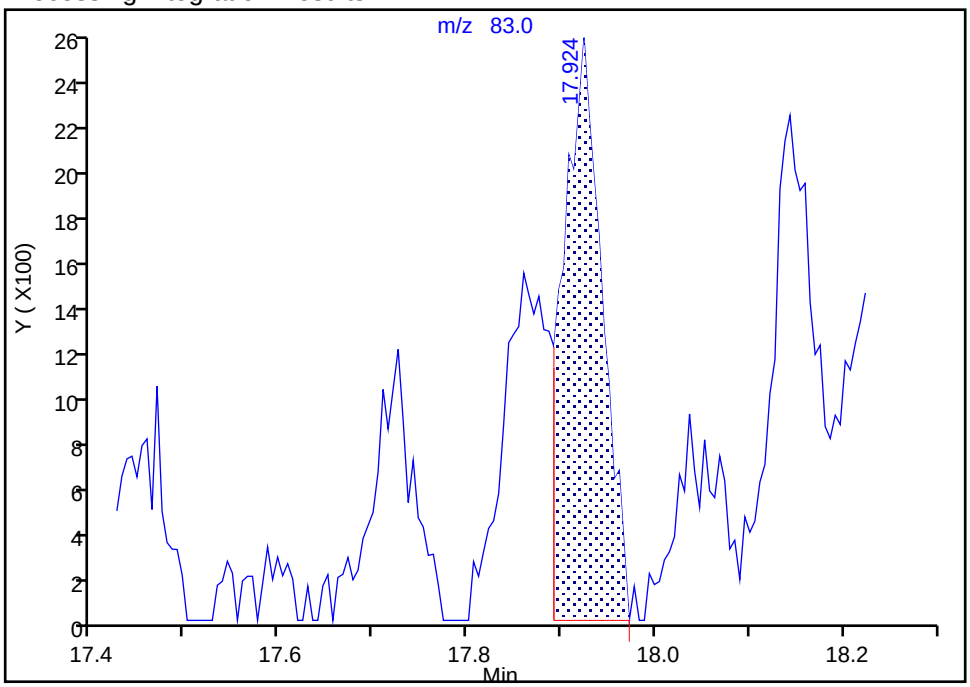
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

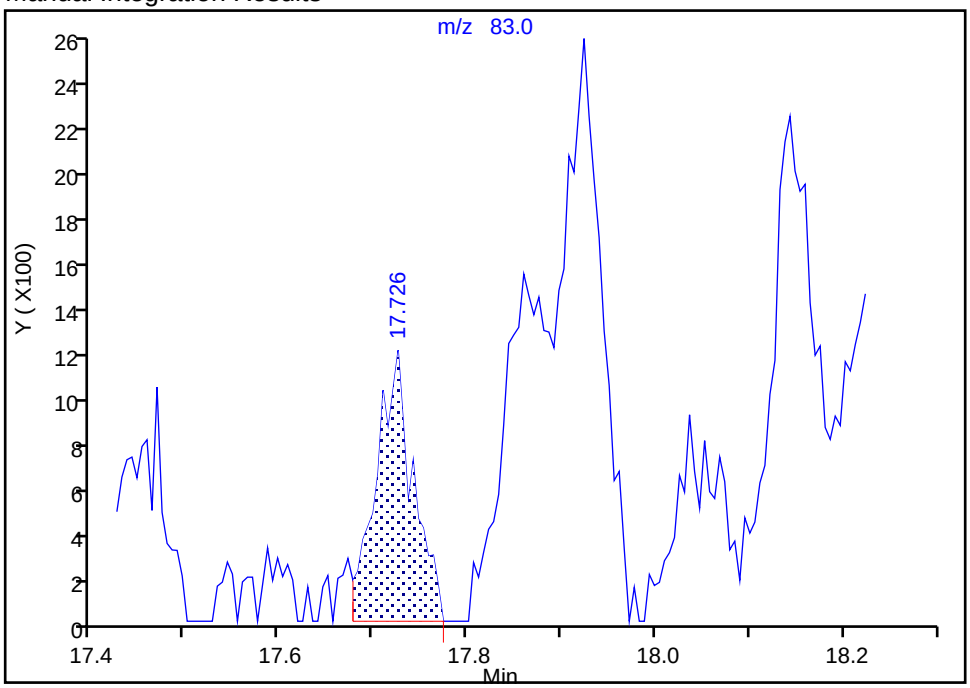
Processing Integration Results

RT: 17.92
Area: 7403
Amount: 0.246001
Amount Units: ppb v/v



Manual Integration Results

RT: 17.73
Area: 3266
Amount: 0.108529
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:22:58

Audit Action: Manually Integrated Audit Reason: Assign Peak

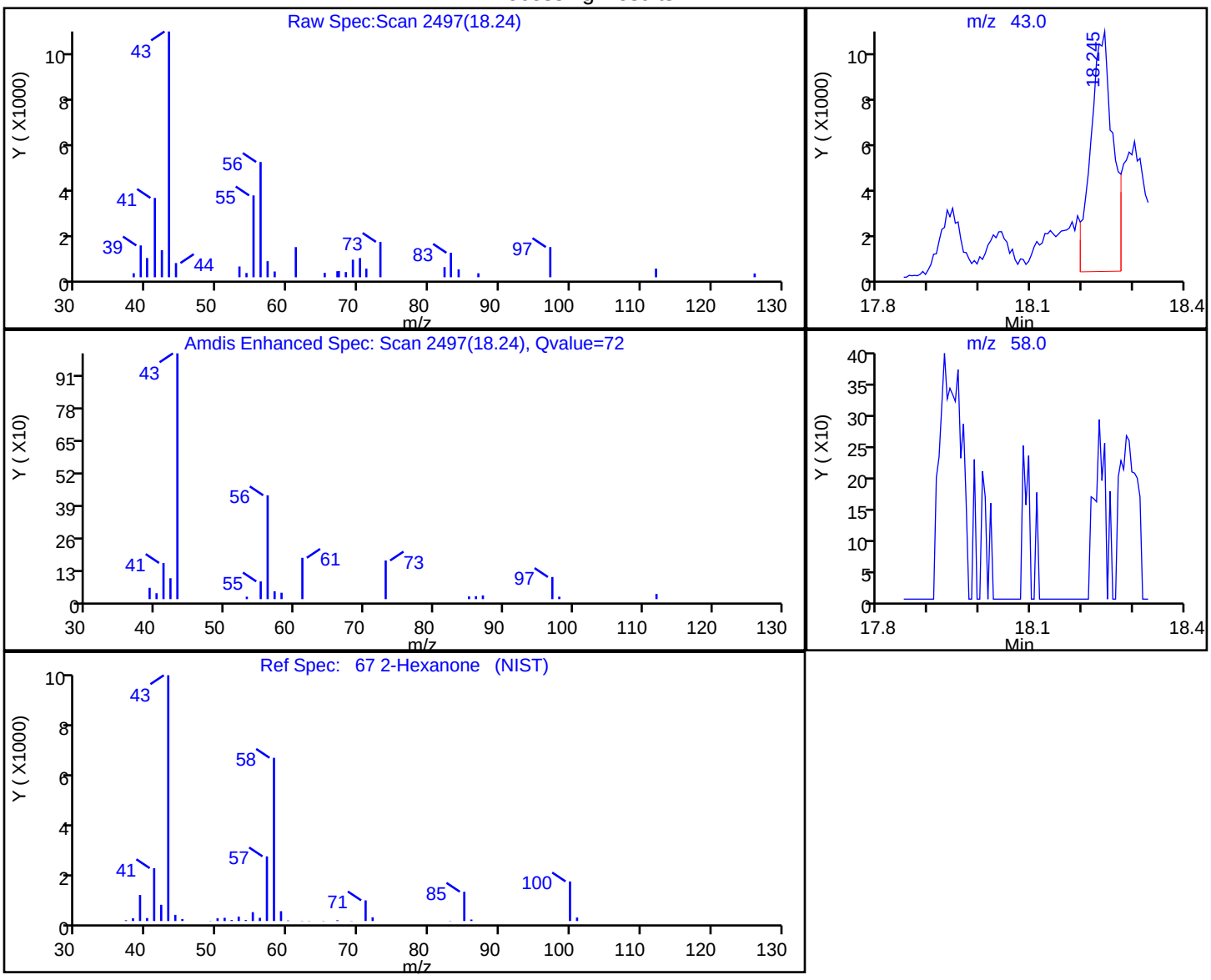
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

67 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
18.24	43.00	30932	0.574840
18.09	58.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

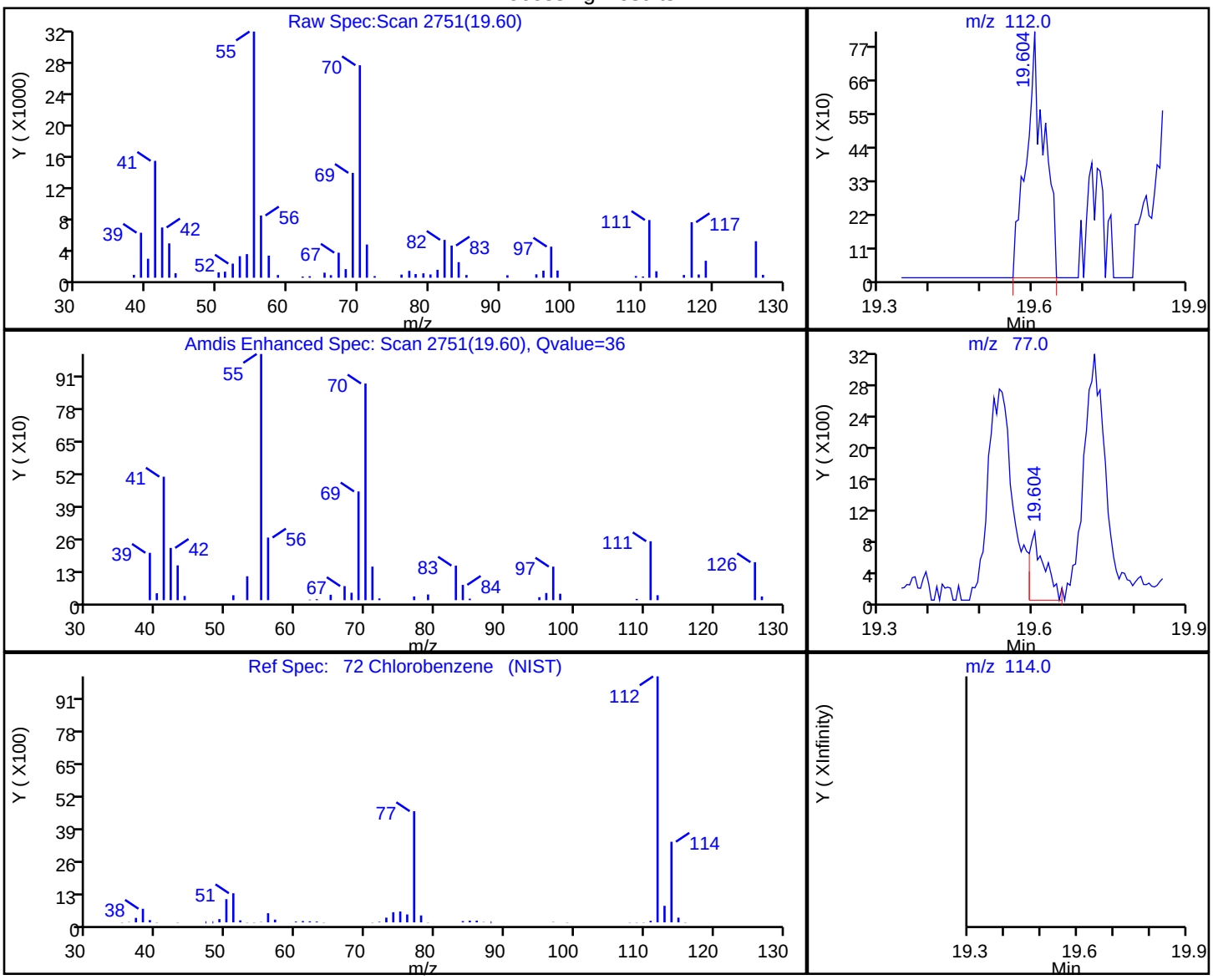
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

72 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
19.60	112.00	1995	0.022607
19.60	77.00	1747	
19.60	114.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

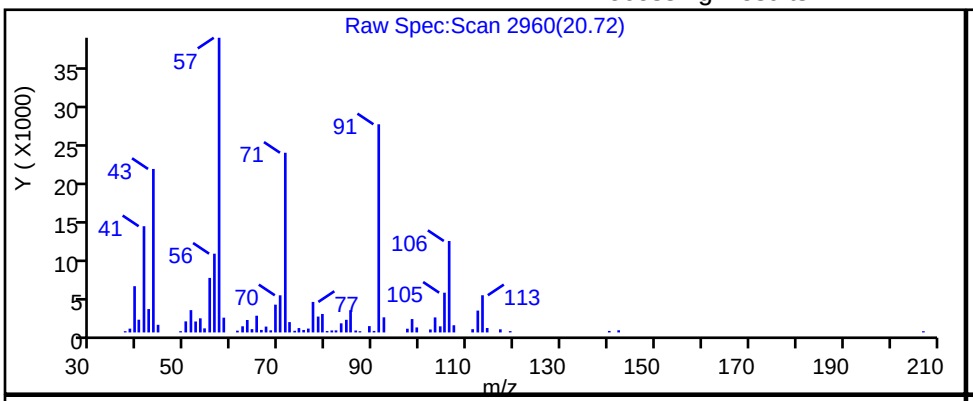
User Disabled Compound Report

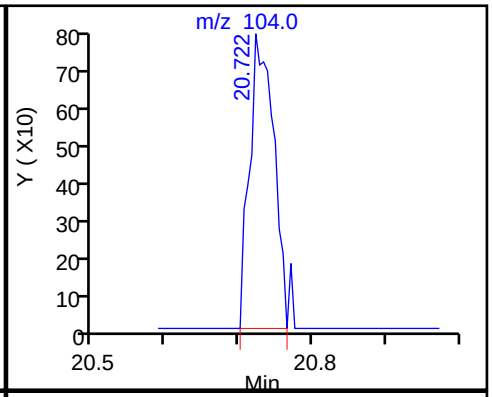
TestAmerica Burlington

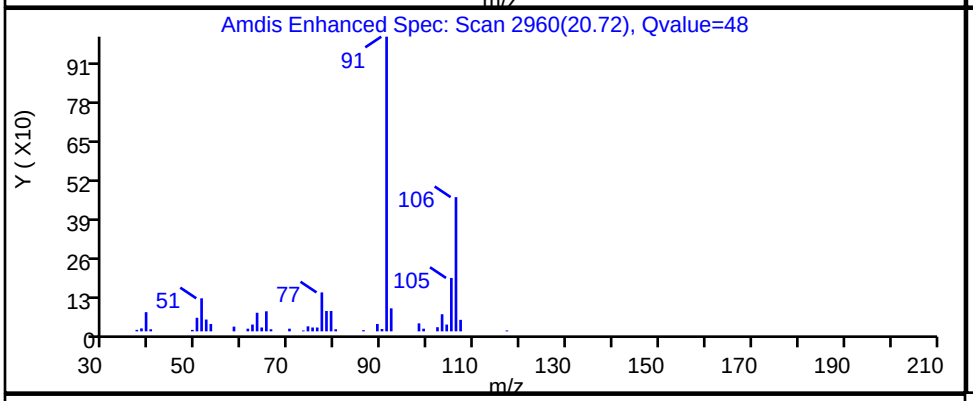
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

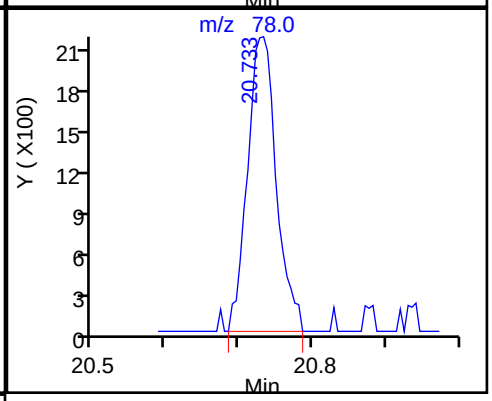
78 Styrene, CAS: 100-42-5

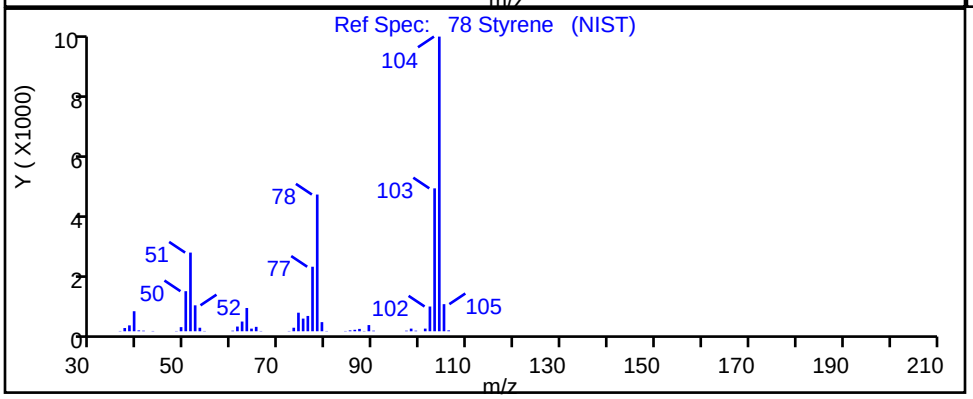
Processing Results











RT	Mass	Response	Amount
20.72	104.00	1811	0.021956
20.73	78.00	5949	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

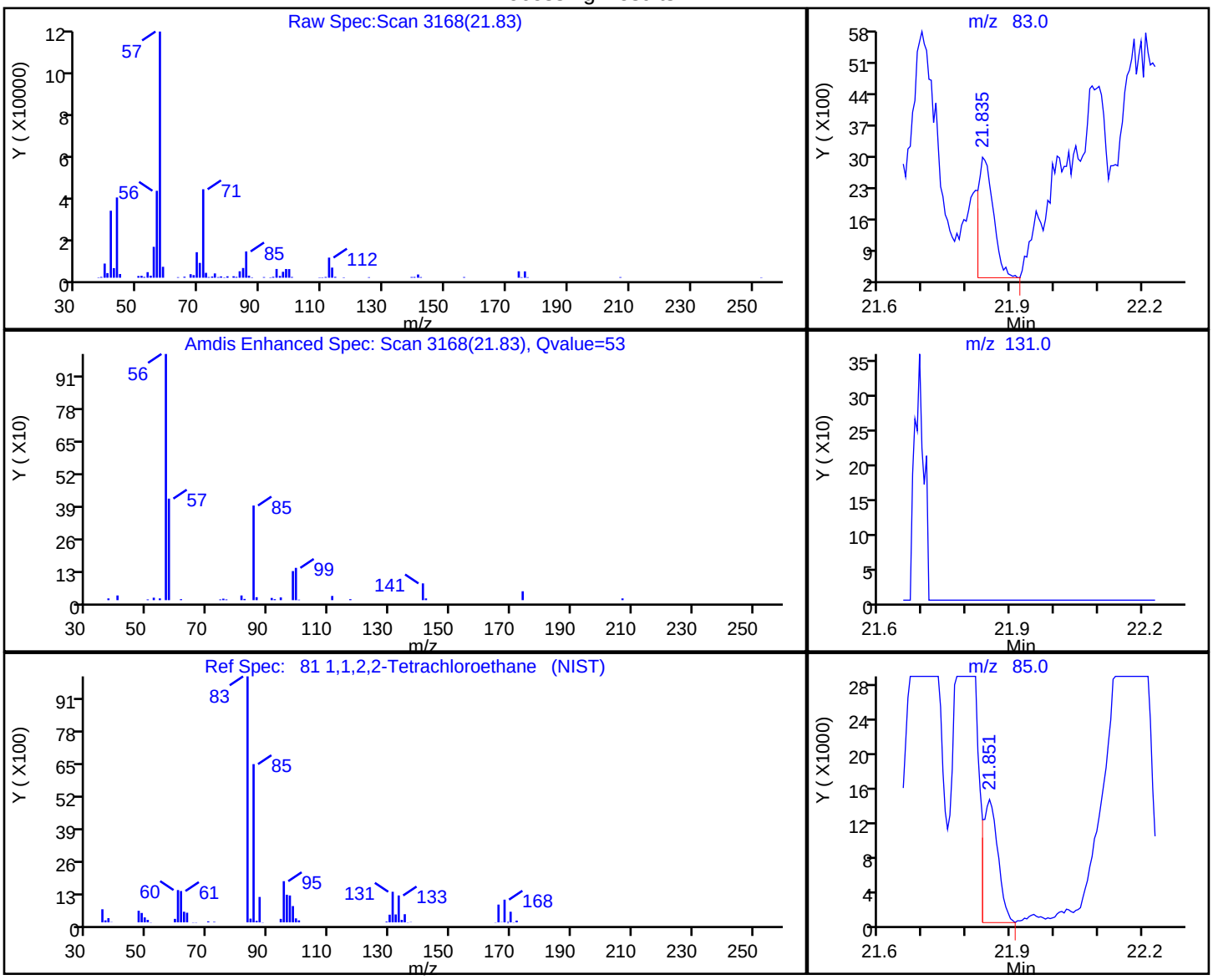
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.83	83.00	6317	0.075248
21.94	131.00	0	
21.85	85.00	33960	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

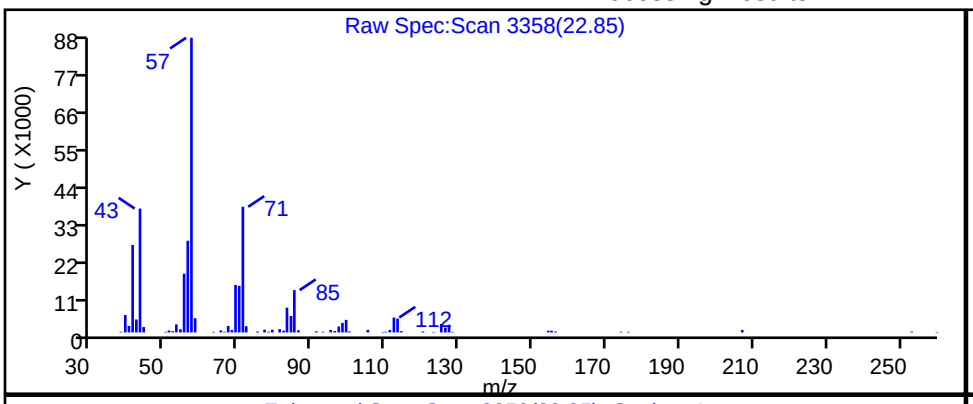
User Disabled Compound Report

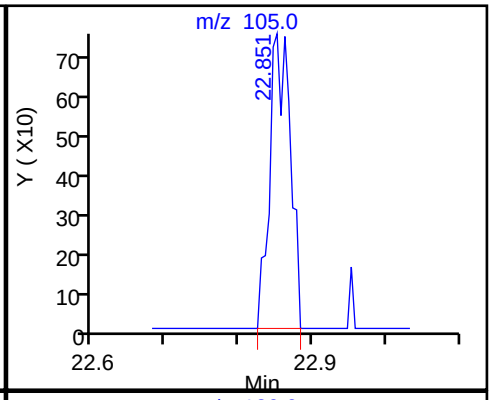
TestAmerica Burlington

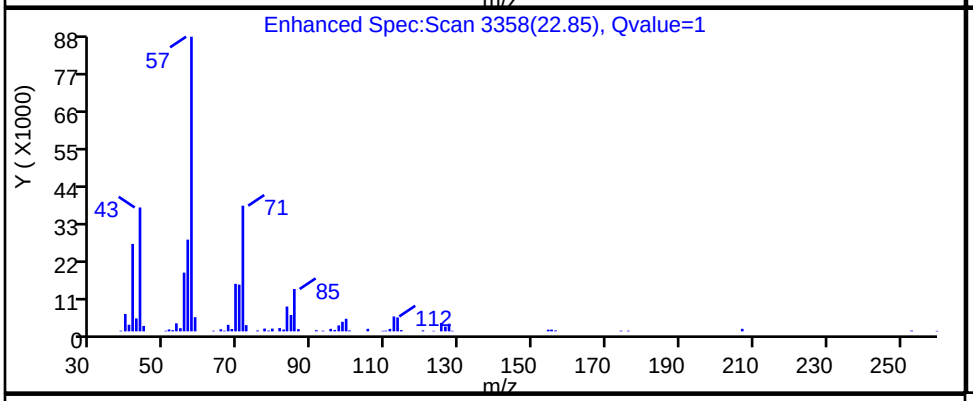
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

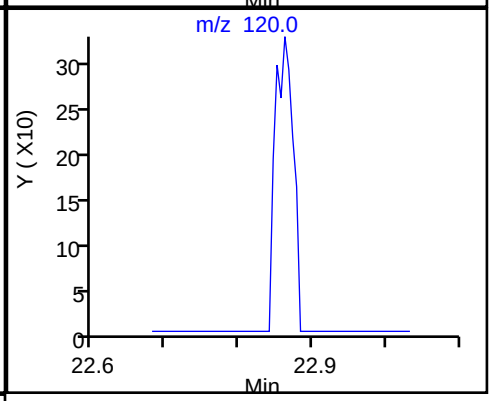
90 1,2,4-Trimethylbenzene, CAS: 95-63-6

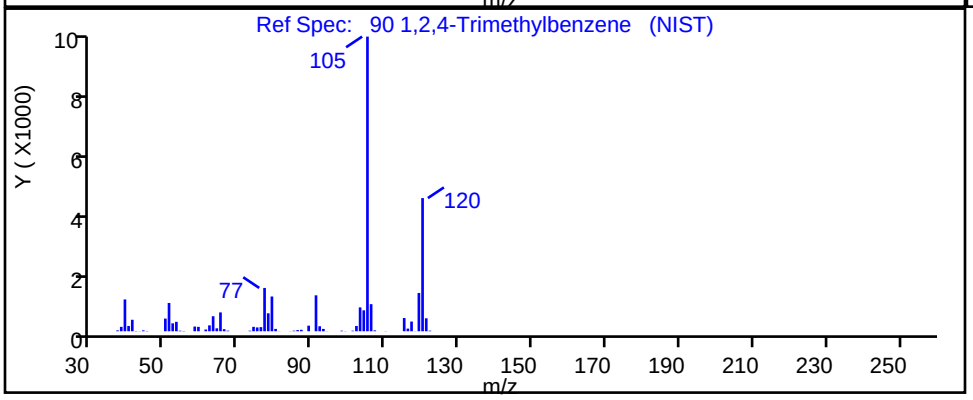
Processing Results











RT	Mass	Response	Amount
22.85	105.00	1480	0.010008
22.86	120.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

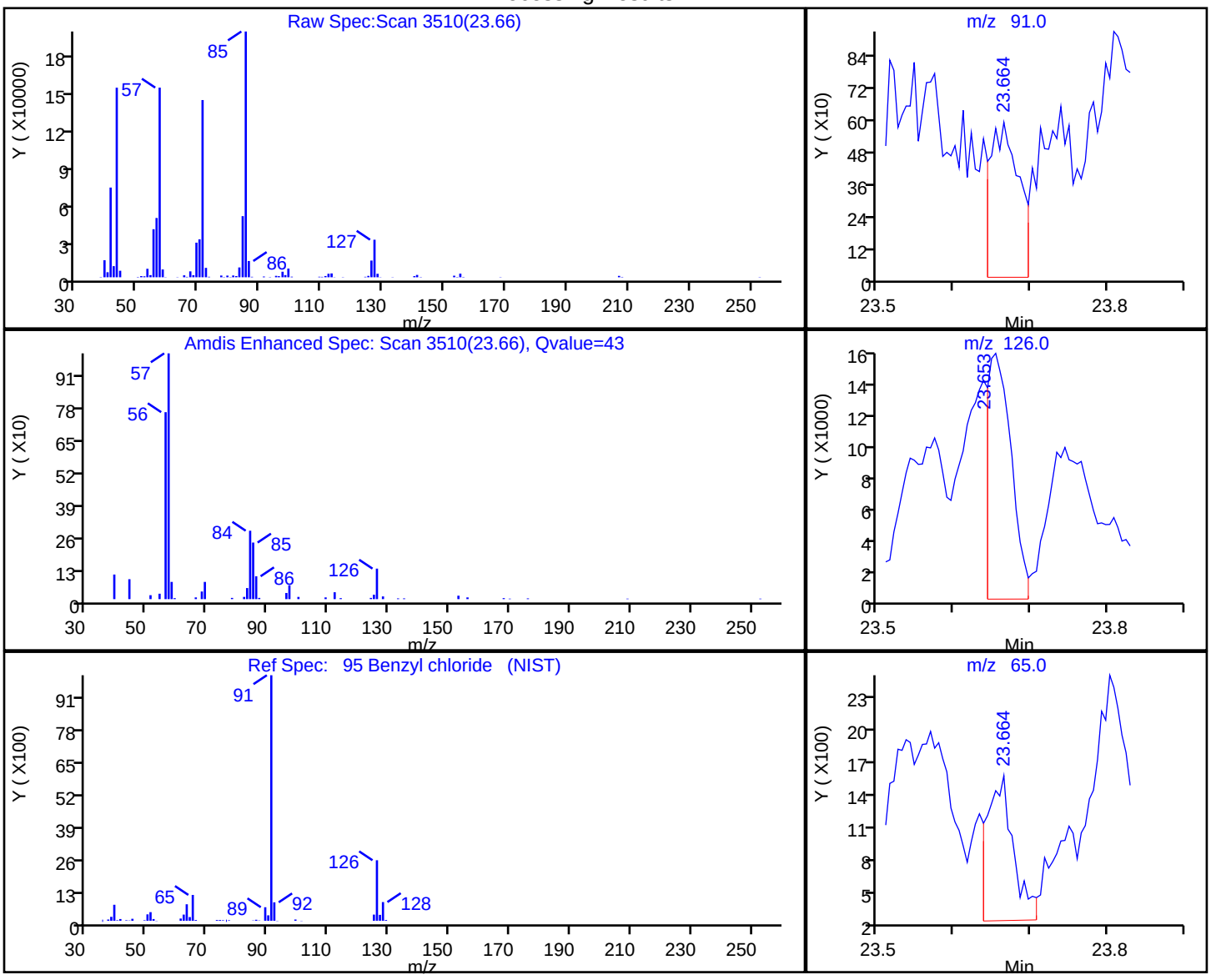
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
23.66	91.00	1548	0.015333
23.65	126.00	32703	
23.66	65.00	3101	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

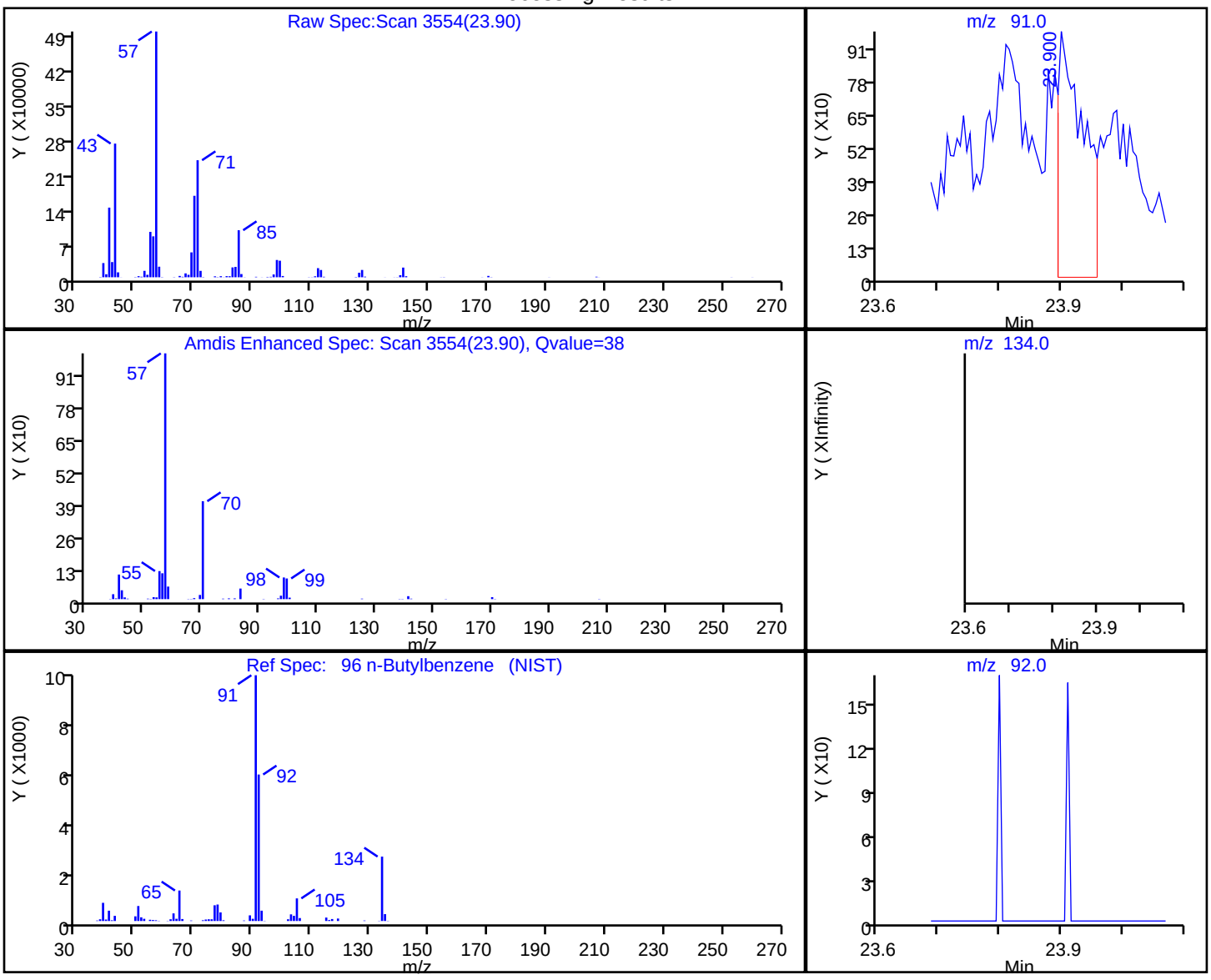
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-16.d				
Injection Date:	07-Apr-2018 01:10:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-6	Lab Sample ID:	200-42918-6		
Client ID:	GC-SV-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	39.6000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
23.90	91.00	2811	0.019489
23.88	134.00	0	
23.88	92.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:25:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) | Lab Sample ID: 200-42918-7

Matrix: Air | Lab File ID: 29952-16.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 200(mL) | Date Analyzed: 04/06/2018 01:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128156 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.37	J	0.50	0.20
75-45-6	Freon 22	86.47	0.50	U	0.50	0.26
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.068
74-87-3	Chloromethane	50.49	0.50	U	0.50	0.25
106-97-8	n-Butane	58.12	12		0.50	0.31
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.041
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.065
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.062
75-00-3	Chloroethane	64.52	0.30	J	0.50	0.21
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.056
75-69-4	Trichlorofluoromethane	137.37	0.18	J	0.20	0.062
76-13-1	Freon TF	187.38	0.060	J	0.20	0.031
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.034
67-64-1	*Acetone*	*58.08*	*1200*	*E*	*5.0*	*2.6*
67-63-0	Isopropyl alcohol	60.10	19		5.0	1.8
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.12
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.27
75-09-2	Methylene Chloride	84.93	1.4		0.50	0.20
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.5
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.061
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.074
110-54-3	n-Hexane	86.17	0.50		0.20	0.16
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.026
78-93-3	Methyl Ethyl Ketone	72.11	0.99		0.50	0.20
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.037
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.11
67-66-3	Chloroform	119.38	1.5		0.20	0.052
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	2.6
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.068
110-82-7	Cyclohexane	84.16	0.14	J	0.20	0.063
56-23-5	Carbon tetrachloride	153.81	0.11		0.040	0.024
540-84-1	2,2,4-Trimethylpentane	114.23	0.29		0.20	0.088
71-43-2	Benzene	78.11	0.34		0.20	0.071
107-06-2	1,2-Dichloroethane	98.96	0.066	J	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) Lab Sample ID: 200-42918-7

Matrix: Air Lab File ID: 29952-16.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 01:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	2.5		0.20	0.14
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.030
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.22
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.12
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	1.3
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.094
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.098
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.36
108-88-3	Toluene	92.14	1.9		0.20	0.069
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.12
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.078
127-18-4	Tetrachloroethene	165.83	0.055		0.040	0.029
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.42
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.071
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.069
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.040
100-41-4	Ethylbenzene	106.17	0.53		0.20	0.073
179601-23-1	m,p-Xylene	106.17	2.1		0.50	0.070
95-47-6	Xylene, o-	106.17	0.57		0.20	0.071
1330-20-7	Xylene (total)	106.17	2.7		0.70	0.14
100-42-5	Styrene	104.15	0.20	U	0.20	0.086
75-25-2	Bromoform	252.75	0.20	U	0.20	0.086
98-82-8	Cumene	120.19	0.20	U	0.20	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.076
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.069
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.069
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.058
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.071
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.058
95-63-6	1,2,4-Trimethylbenzene	120.20	0.10	J	0.20	0.080
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.066
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.075
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.082
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.065

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) Lab Sample ID: 200-42918-7

Matrix: Air Lab File ID: 29952-16.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 01:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.12
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.080
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.071
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.24
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.082
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.31

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) | Lab Sample ID: 200-42918-7

Matrix: Air | Lab File ID: 29952-16.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 200(mL) | Date Analyzed: 04/06/2018 01:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128156 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.5	0.99
75-45-6	Freon 22	86.47	1.8	U	1.8	0.92
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.48
74-87-3	Chloromethane	50.49	1.0	U	1.0	0.52
106-97-8	n-Butane	58.12	27		1.2	0.74
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.10
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.14
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.24
75-00-3	Chloroethane	64.52	0.80	J	1.3	0.55
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.24
75-69-4	Trichlorofluoromethane	137.37	1.0	J	1.1	0.35
76-13-1	Freon TF	187.38	0.46	J	1.5	0.24
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.13
67-64-1	*Acetone*	*58.08*	*2700*	*E*	*12*	*6.2*
67-63-0	Isopropyl alcohol	60.10	48		12	4.4
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.37
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.85
75-09-2	Methylene Chloride	84.93	4.8		1.7	0.69
75-65-0	tert-Butyl alcohol	74.12	15	U	15	4.5
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.22
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.29
110-54-3	n-Hexane	86.17	1.8		0.70	0.56
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.11
78-93-3	Methyl Ethyl Ketone	72.11	2.9		1.5	0.59
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.15
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.44
67-66-3	Chloroform	119.38	7.4		0.98	0.25
109-99-9	Tetrahydrofuran	72.11	15	U	15	7.7
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.37
110-82-7	Cyclohexane	84.16	0.49	J	0.69	0.22
56-23-5	Carbon tetrachloride	153.81	0.67		0.25	0.15
540-84-1	2,2,4-Trimethylpentane	114.23	1.4		0.93	0.41
71-43-2	Benzene	78.11	1.1		0.64	0.23
107-06-2	1,2-Dichloroethane	98.96	0.27	J	0.81	0.25

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) Lab Sample ID: 200-42918-7

Matrix: Air Lab File ID: 29952-16.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 01:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	10		0.82	0.57
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.16
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.90
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.55
123-91-1	1,4-Dioxane	88.11	18	U	18	4.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.63
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.44
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	1.5
108-88-3	Toluene	92.14	7.1		0.75	0.26
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.54
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.43
127-18-4	Tetrachloroethene	165.83	0.37		0.27	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	1.7
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.60
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.53
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.18
100-41-4	Ethylbenzene	106.17	2.3		0.87	0.32
179601-23-1	m,p-Xylene	106.17	9.0		2.2	0.30
95-47-6	Xylene, o-	106.17	2.5		0.87	0.31
1330-20-7	Xylene (total)	106.17	12		3.0	0.61
100-42-5	Styrene	104.15	0.85	U	0.85	0.37
75-25-2	Bromoform	252.75	2.1	U	2.1	0.89
98-82-8	Cumene	120.19	0.98	U	0.98	0.29
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.52
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.34
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.34
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.29
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.32
95-63-6	1,2,4-Trimethylbenzene	120.20	0.51	J	0.98	0.39
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.36
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.41
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.49
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.39

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) Lab Sample ID: 200-42918-7

Matrix: Air Lab File ID: 29952-16.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 01:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.62
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.44
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.43
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.8
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.87
91-20-3	Naphthalene	128.17	2.6	U	2.6	1.6

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d
Lims ID: 200-42918-A-7
Client ID: GC-IA-105 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 01:26:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029952-016
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 09:31:11 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: puangmaleek Date: 09-Apr-2018 09:31:11

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85	5.170	5.157	0.010	97	26104	0.3698	
	3 Chlorodifluoromethane	51		5.240				ND	U
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.566				ND	
	5 Chloromethane	50		5.759				ND	U
	6 Butane	43	6.053	6.053	0.021	1	447260	11.5	Ma
	7 Vinyl chloride	62		6.085				ND	
	8 Butadiene	54		6.181				ND	U
	9 Bromomethane	94		6.984				ND	
	11 Chloroethane	64	7.246	7.230	0.016	83	3789	0.3039	
	13 Vinyl bromide	106		7.637				ND	
	14 Trichlorofluoromethane	101	7.738	7.733	0.005	96	10409	0.1822	
	20 1,1,2-Trichloro-1,2,2-trif	101	8.744	8.749	0.005	86	2468	0.0603	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	9.022	8.997	0.021	88	31272008	1150.6	E
	23 Carbon disulfide	76		9.193				ND	U
	24 Isopropyl alcohol	45	9.236	9.200	0.032	100	542580	19.3	
	25 3-Chloro-1-propene	41		9.498				ND	
	27 Methylene Chloride	49	9.787	9.756	0.027	89	24645	1.37	
	28 2-Methyl-2-propanol	59	9.921	9.883	0.038	93	48281	1.21	
	29 Methyl tert-butyl ether	73		10.097				ND	
	30 trans-1,2-Dichloroethene	61		10.151				ND	
S	31 1,2-Dichloroethene, Total	61		10.200				ND	
	33 Hexane	57	10.483	10.483	0.000	1	13553	0.4974	Ma
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.954				ND	
	37 2-Butanone (MEK)	72	11.975	11.959	0.011	91	9655	0.9899	
	39 Tetrahydrofuran	42		12.371				ND	U
*	40 Chlorobromomethane	128	12.387	12.376	0.011	78	135936	10.0	
	41 Chloroform	83	12.483	12.462	0.016	95	60437	1.51	
	42 Cyclohexane	84	12.729	12.729	0.005	57	3735	0.1431	M
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117	12.976	12.970	0.011	96	4602	0.1073	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Isooctane	57	13.313	13.323	-0.005	92	25969	0.2932	
	46 Benzene	78	13.387	13.361	0.010	94	20346	0.3430	
	47 1,2-Dichloroethane	62	13.543	13.537	0.011	55	1555	0.0660	
	48 n-Heptane	43	13.639	13.633	0.005	88	75843	2.54	
*	49 1,4-Difluorobenzene	114	14.083	14.072	0.011	94	667743	10.0	
	51 Trichloroethene	95		14.506				ND	
	53 1,2-Dichloropropane	63		14.992				ND	
	55 Methyl methacrylate	69		15.078				ND	U
	56 1,4-Dioxane	88		15.158				ND	
	58 Dichlorobromomethane	83		15.458				ND	
	59 cis-1,3-Dichloropropene	75		16.282				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	
	63 Toluene	92	16.827	16.822	0.005	95	83464	1.87	
	64 trans-1,3-Dichloropropene	75		17.346				ND	
	65 1,1,2-Trichloroethane	83		17.699				ND	
	66 Tetrachloroethene	166	17.806	17.817	-0.011	91	2488	0.0549	
	67 2-Hexanone	43		18.090				ND	U
	68 Chlorodibromomethane	129		18.427				ND	
	69 Ethylene Dibromide	107		18.700				ND	
*	71 Chlorobenzene-d5	117	19.540	19.540	0.000	89	622876	10.0	
	72 Chlorobenzene	112		19.593				ND	
	73 Ethylbenzene	91	19.727	19.743	0.000	98	54075	0.5266	
	75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	83614	2.07	
S	76 Xylenes, Total	106				0		2.64	
	77 o-Xylene	106	20.733	20.727	-0.005	99	23194	0.5700	
	78 Styrene	104	20.781	20.781	0.000	68	1818	0.0309	
	79 Bromoform	173		21.171				ND	
	80 Isopropylbenzene	105	21.343	21.342	-0.001	87	1987	0.0166	
	81 1,1,2,2-Tetrachloroethane	83		21.942				ND	
	82 N-Propylbenzene	91	22.011	22.004	0.000	98	3891	0.0272	
	85 4-Ethyltoluene	105	22.182	22.199	-0.006	96	5748	0.0481	
	86 2-Chlorotoluene	91		22.215				ND	U
	87 1,3,5-Trimethylbenzene	105	22.289	22.295	0.000	89	5338	0.0499	
	89 tert-Butylbenzene	119		22.766				ND	U
	90 1,2,4-Trimethylbenzene	105	22.862	22.856	0.006	98	10955	0.1040	
	91 sec-Butylbenzene	105		23.081				ND	U
	92 4-Isopropyltoluene	119	23.274	23.279	-0.005	94	3956	0.0307	
	93 1,3-Dichlorobenzene	146		23.327				ND	
	94 1,4-Dichlorobenzene	146		23.466				ND	
	95 Benzyl chloride	91		23.670				ND	
	96 n-Butylbenzene	91		23.878				ND	
	98 1,2-Dichlorobenzene	146		24.028				ND	
	100 1,2,4-Trichlorobenzene	180		26.703				ND	
	101 Hexachlorobutadiene	225		26.896				ND	
	102 Naphthalene	128		27.238				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004	Amount Added:	20.00	Units: mL	Run Reagent

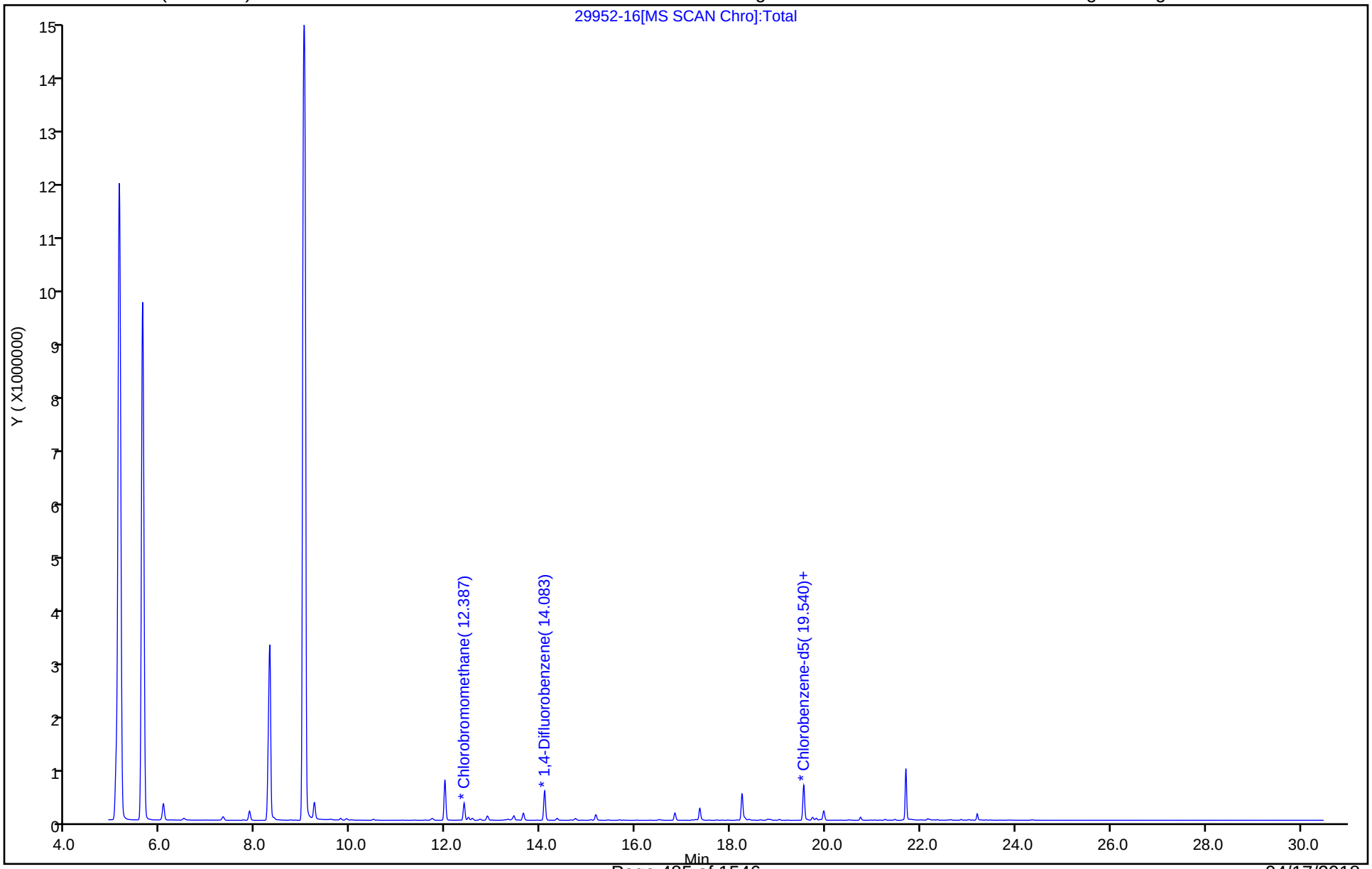
Report Date: 09-Apr-2018 09:31:12 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d

Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7	Worklist Smp#:	16
Client ID:	GC-IA-105 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

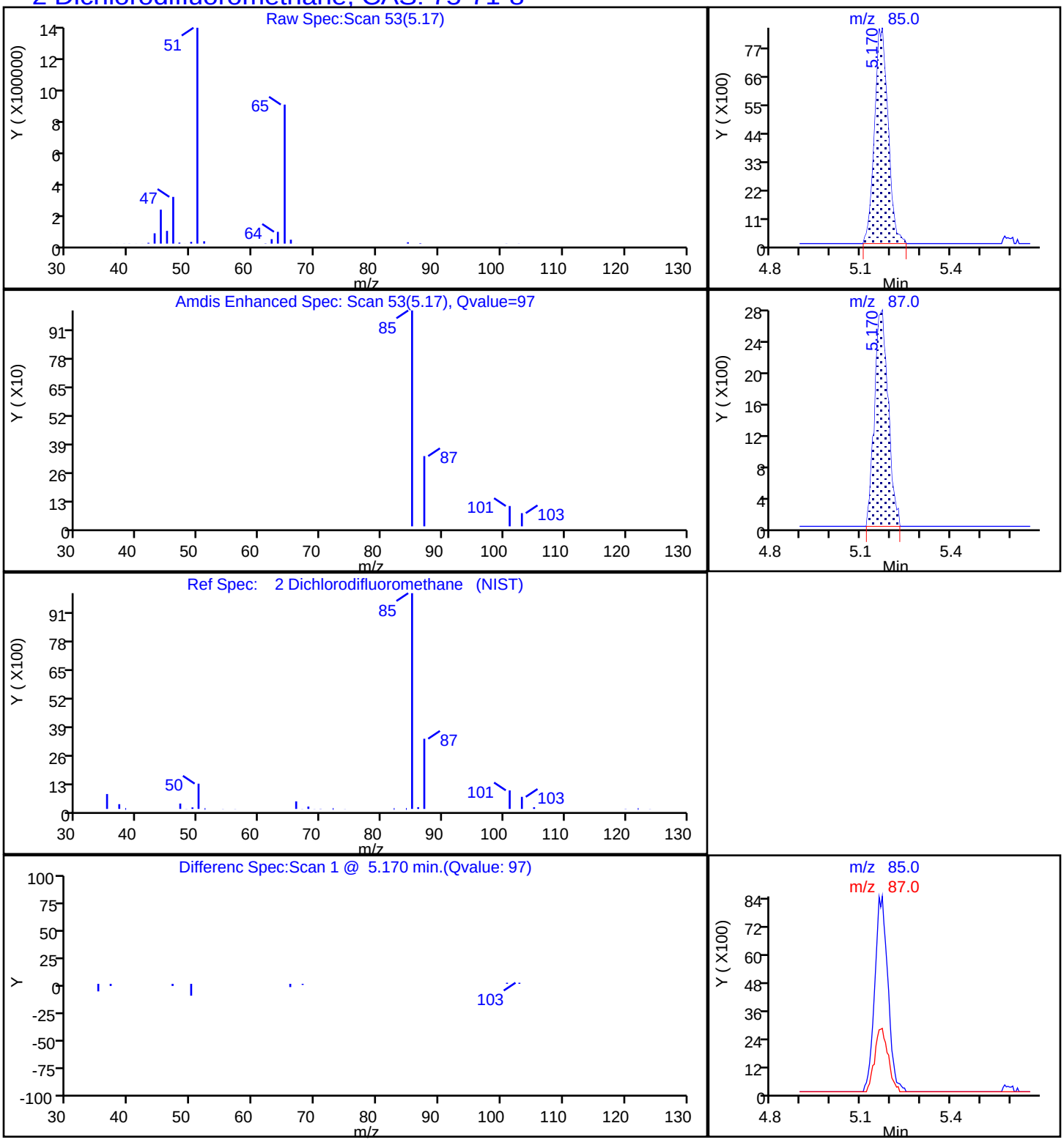


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d

Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

2 Dichlorodifluoromethane, CAS: 75-71-8

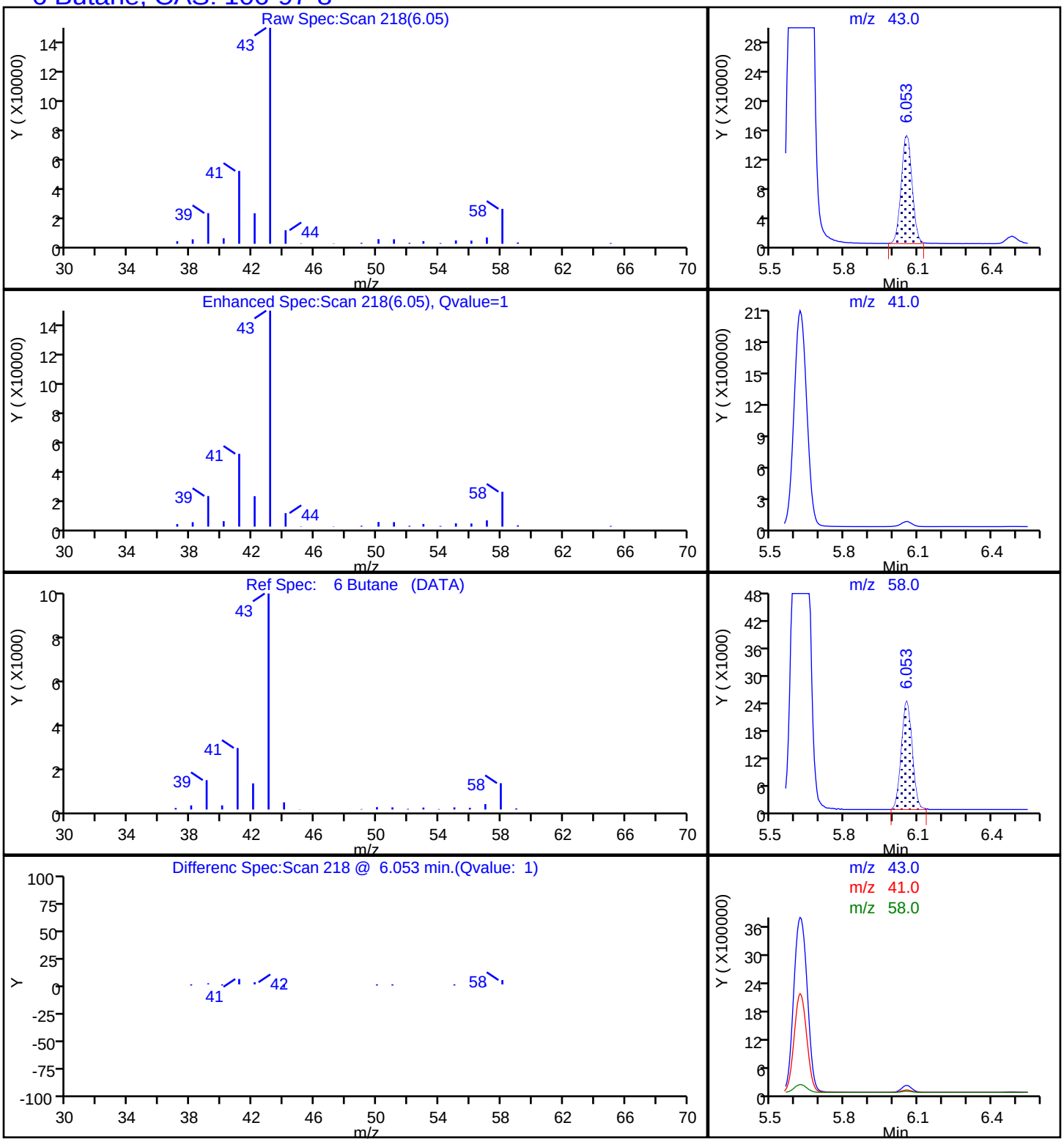


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d

Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

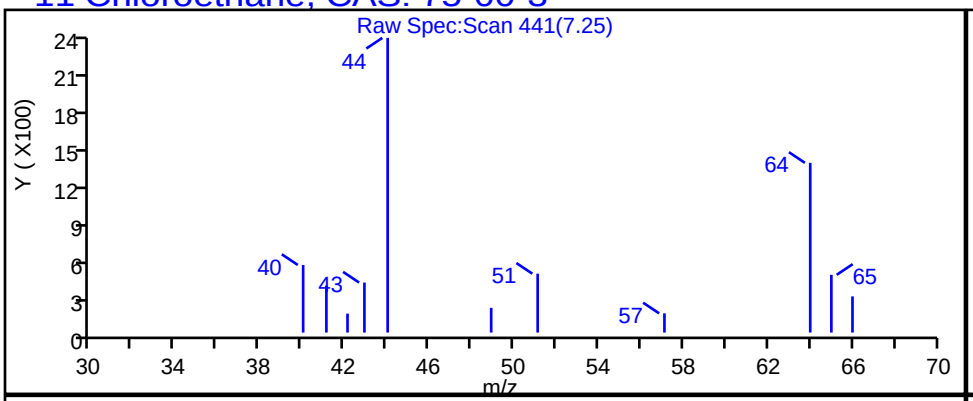


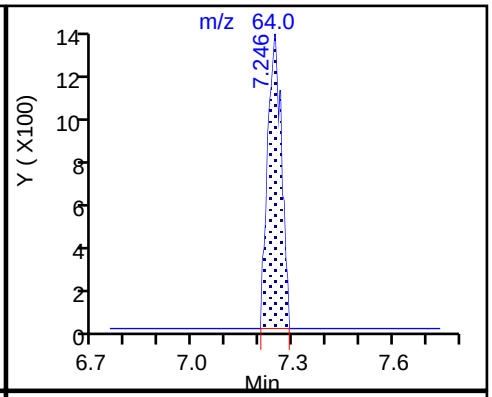
TestAmerica Burlington

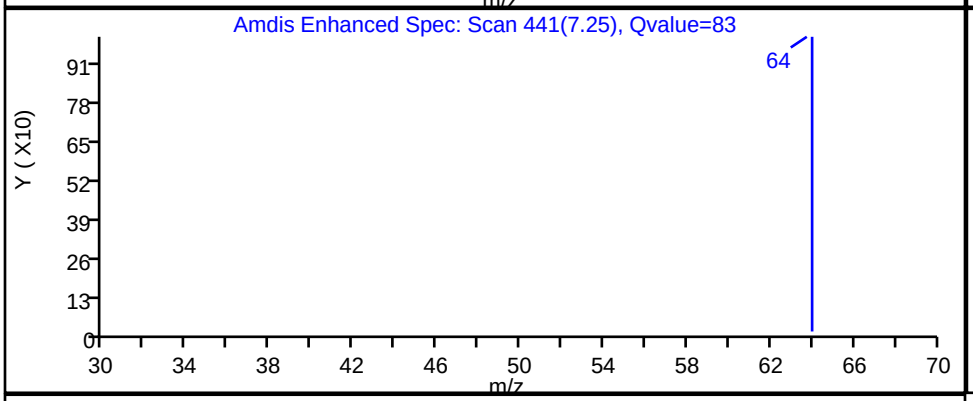
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d

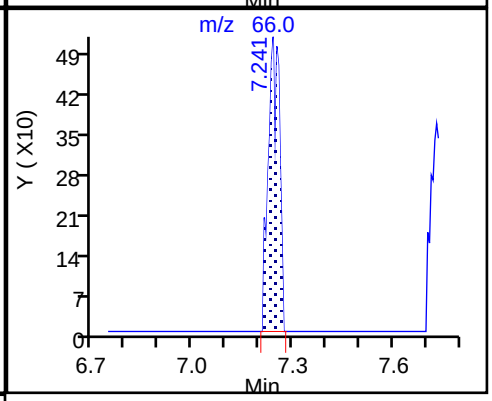
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

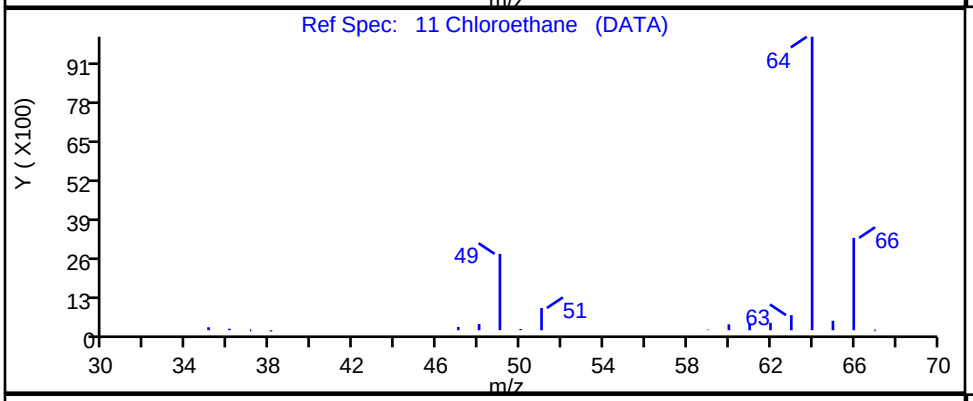
11 Chloroethane, CAS: 75-00-3

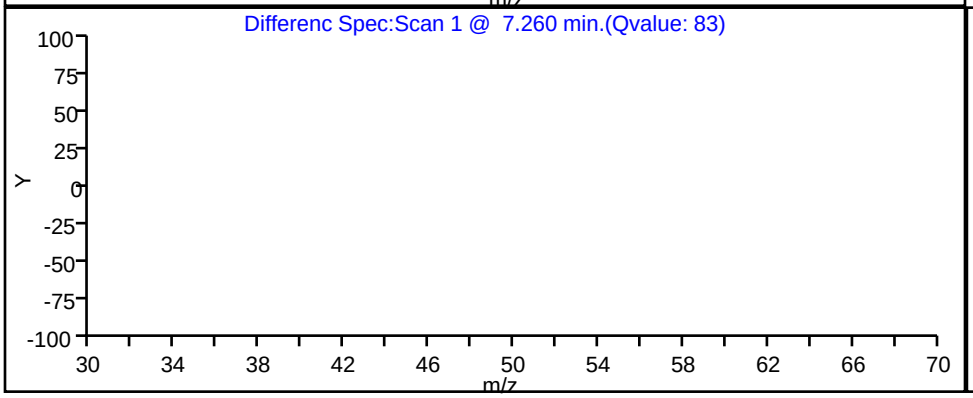


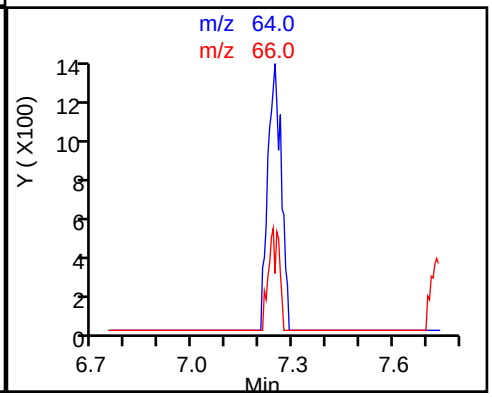








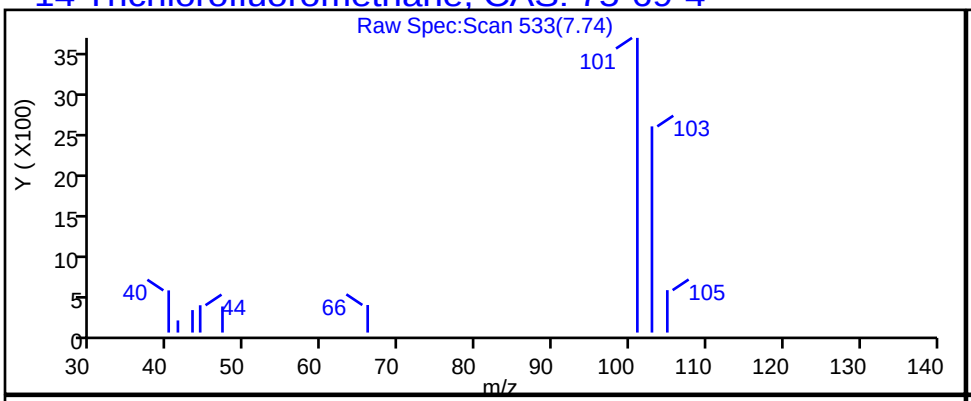


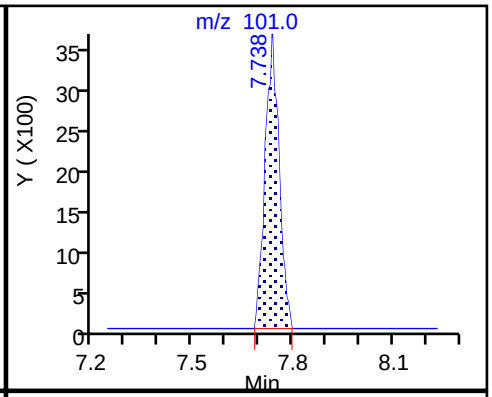


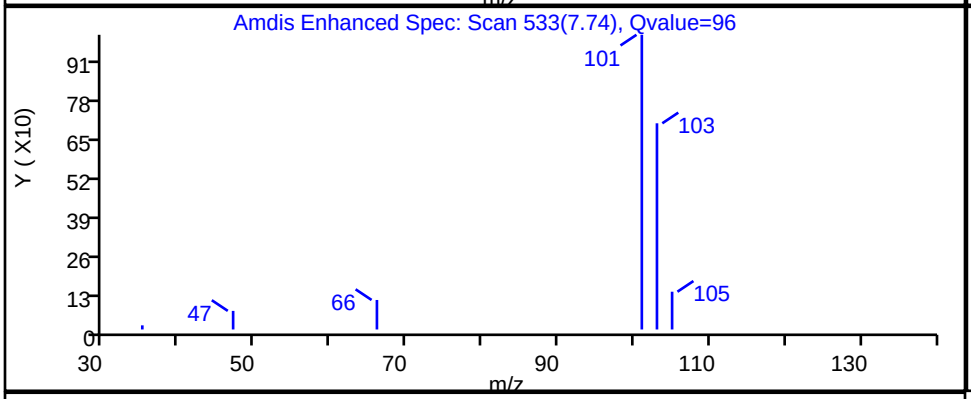
TestAmerica Burlington

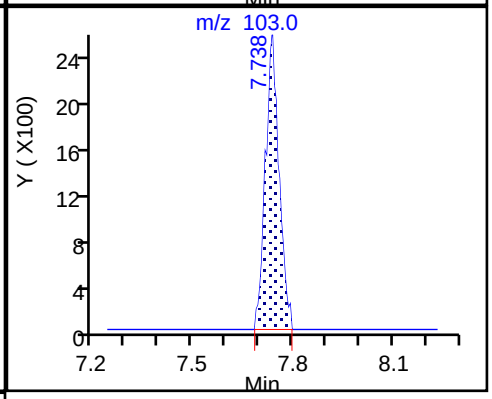
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

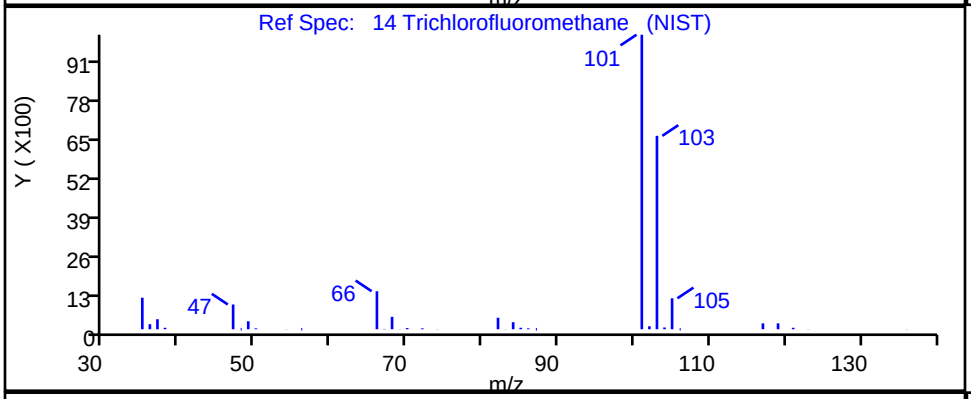
14 Trichlorofluoromethane, CAS: 75-69-4

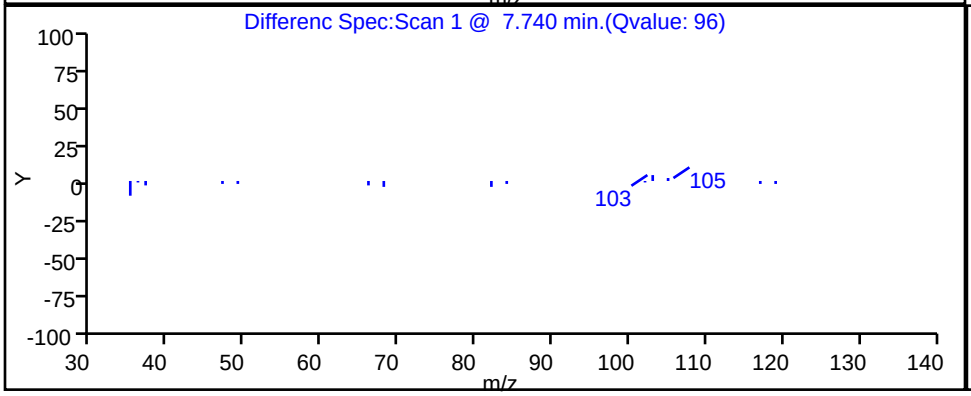


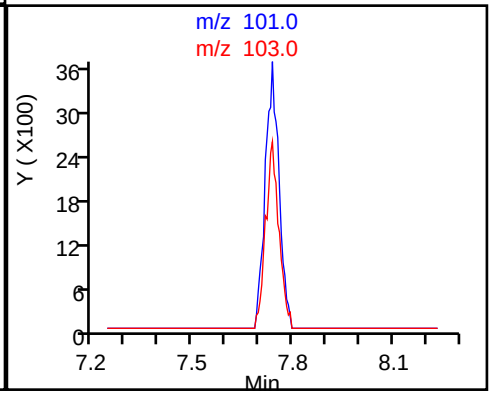










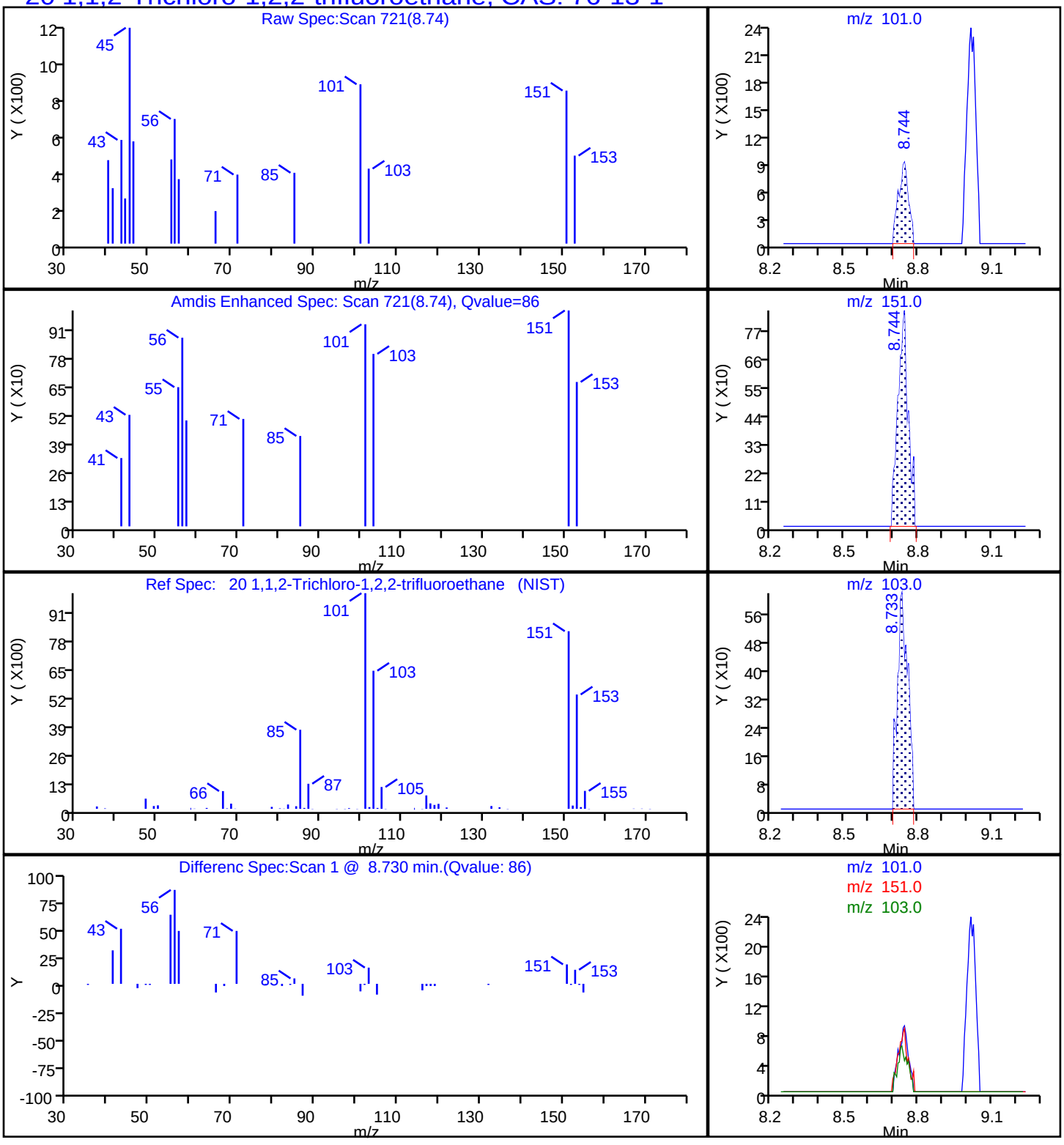


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d

Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
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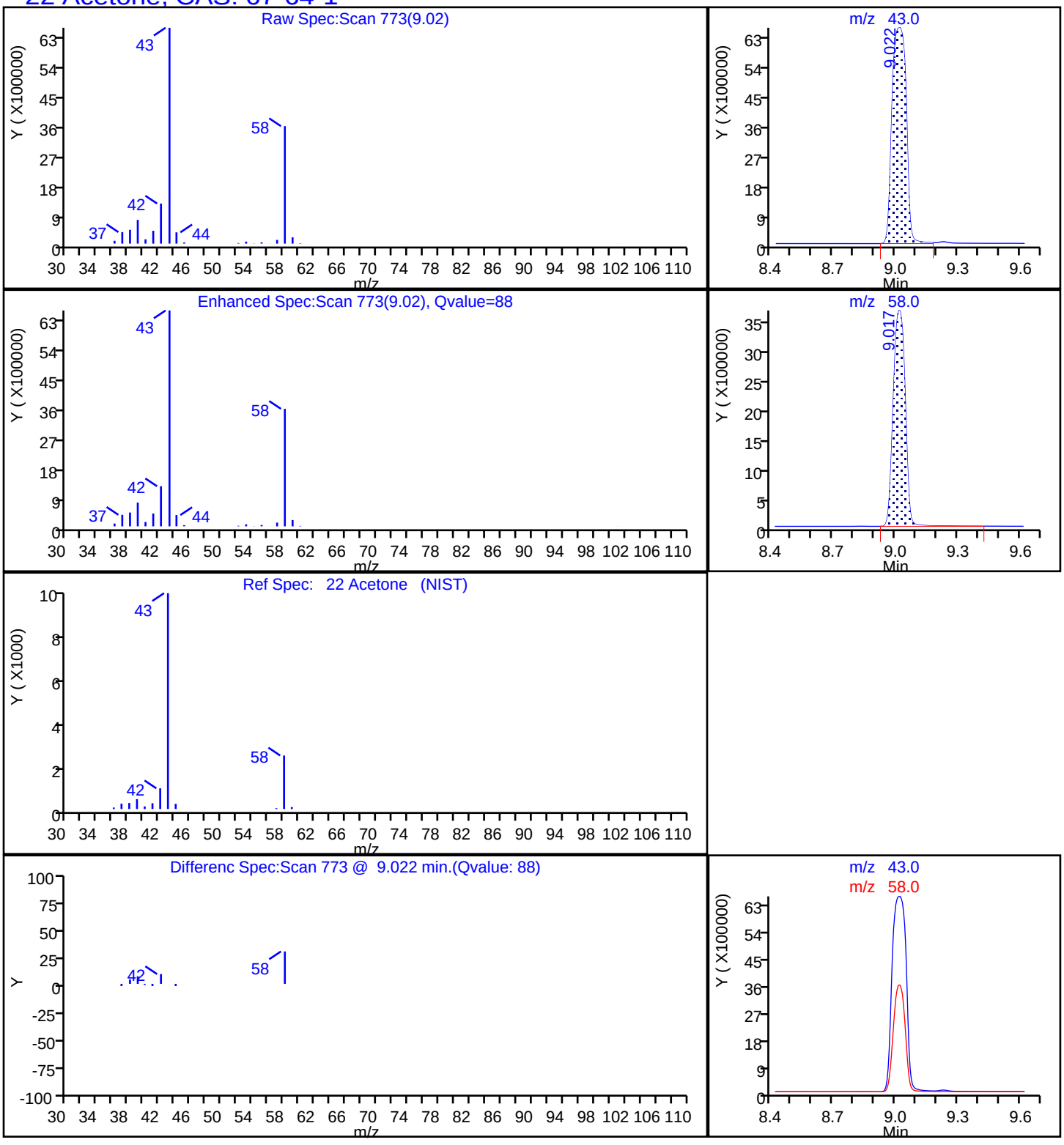
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

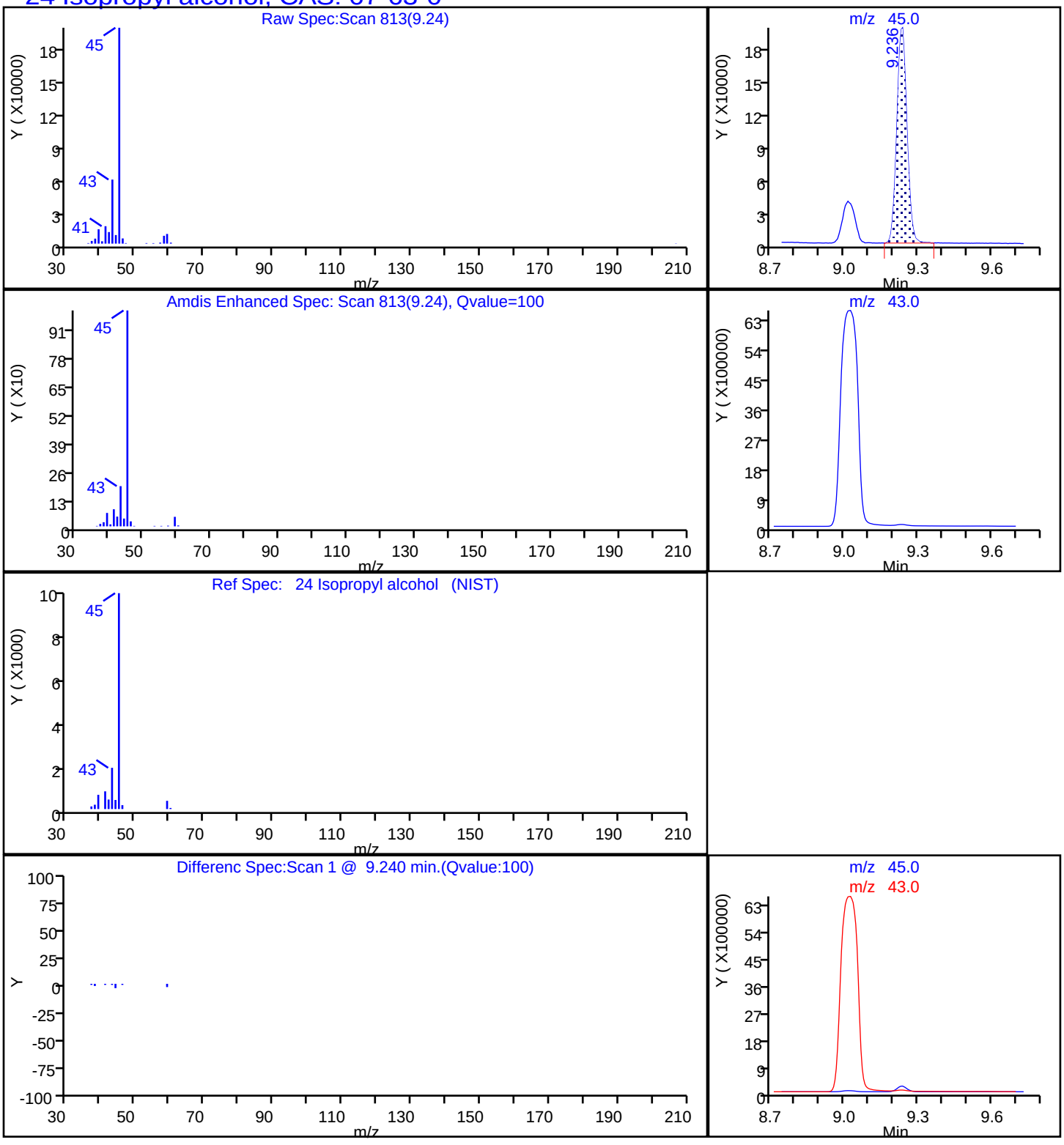
22 Acetone, CAS: 67-64-1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

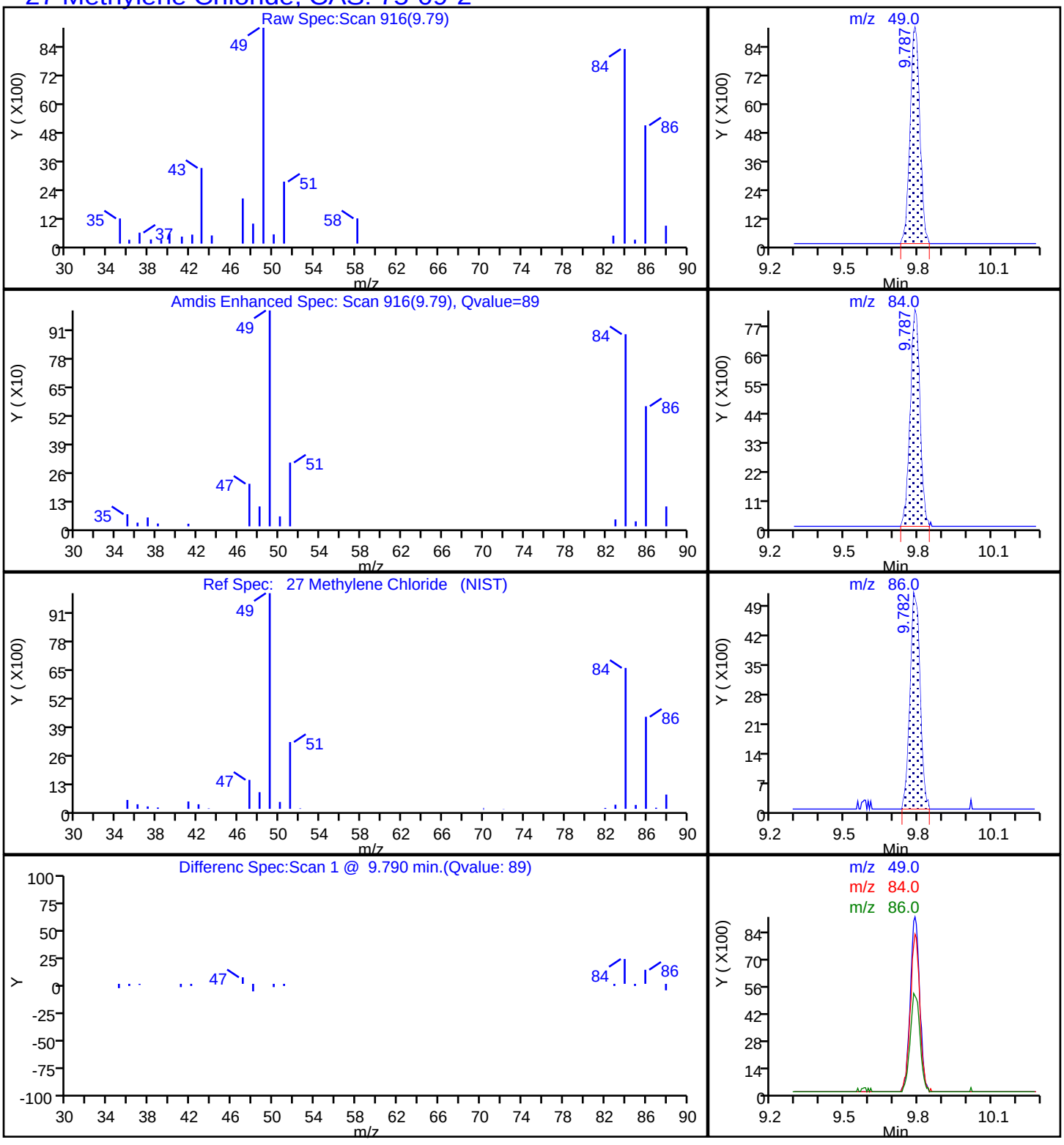
24 Isopropyl alcohol, CAS: 67-63-0



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
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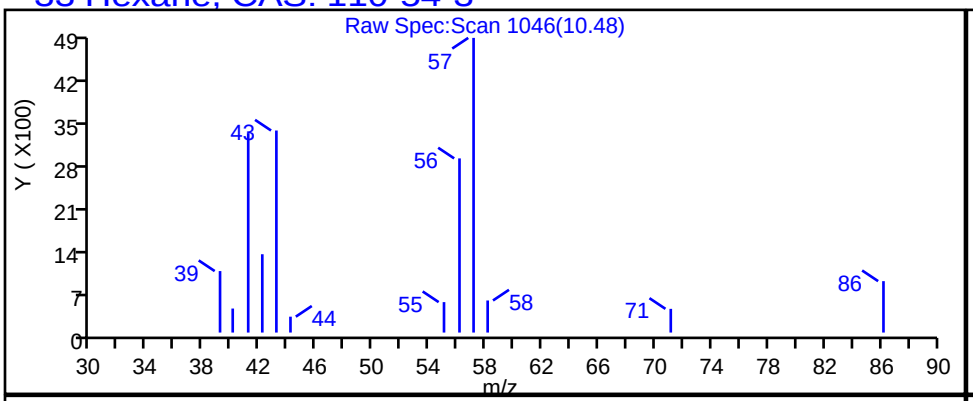
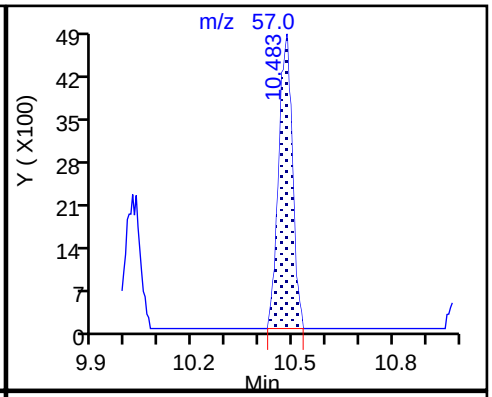
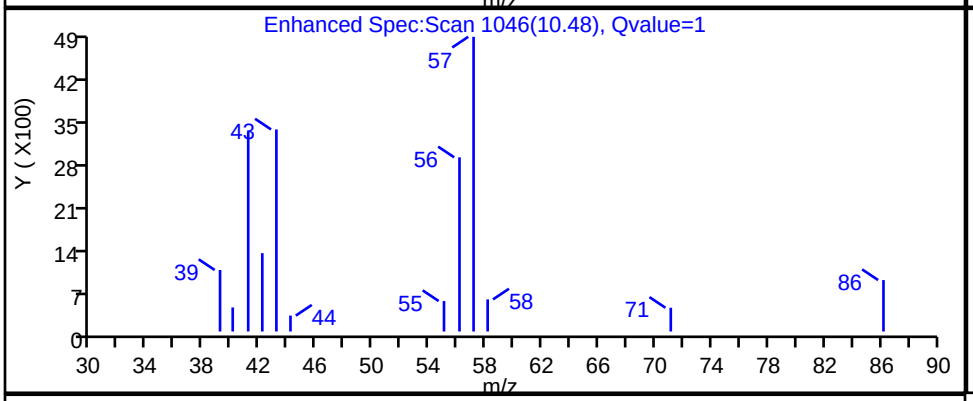
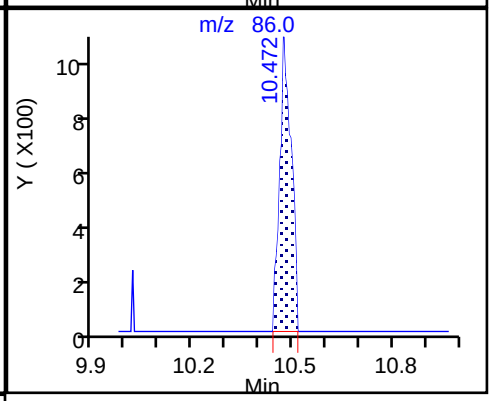
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

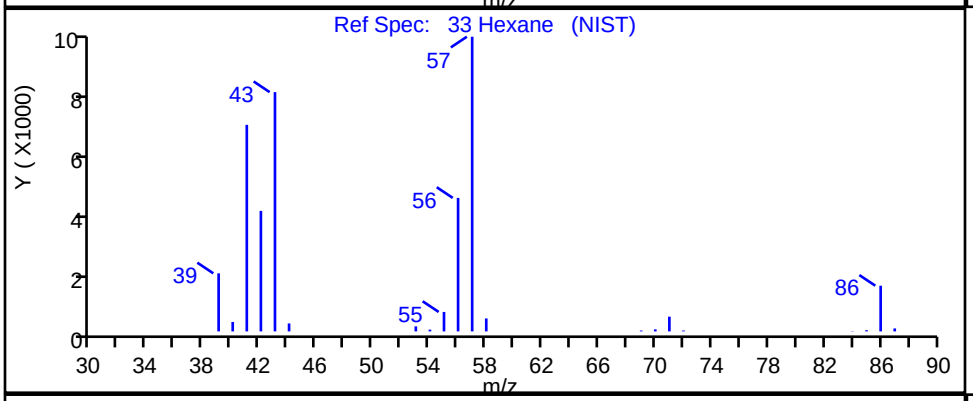
33 Hexane, CAS: 110-54-3

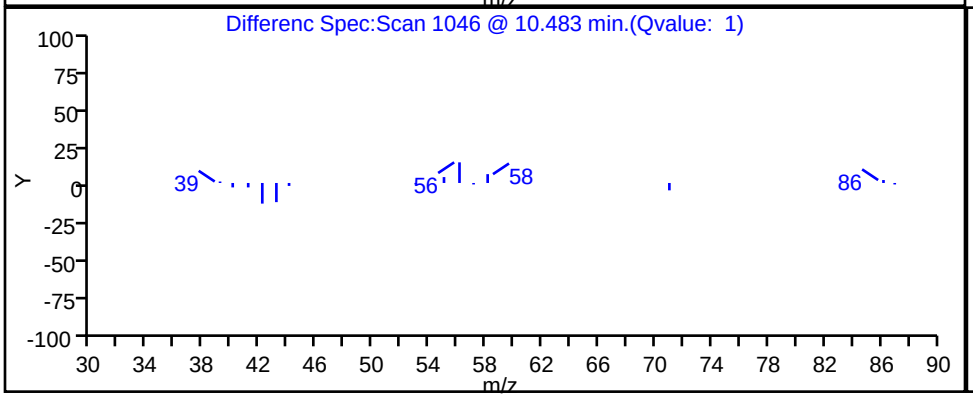


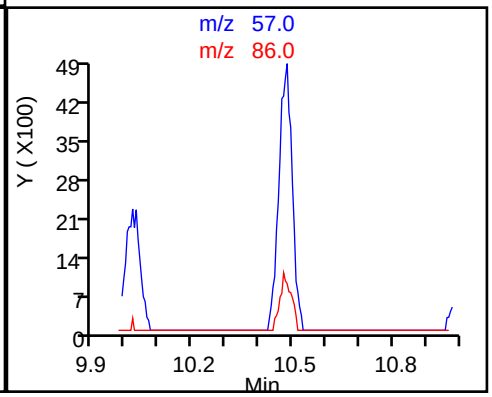








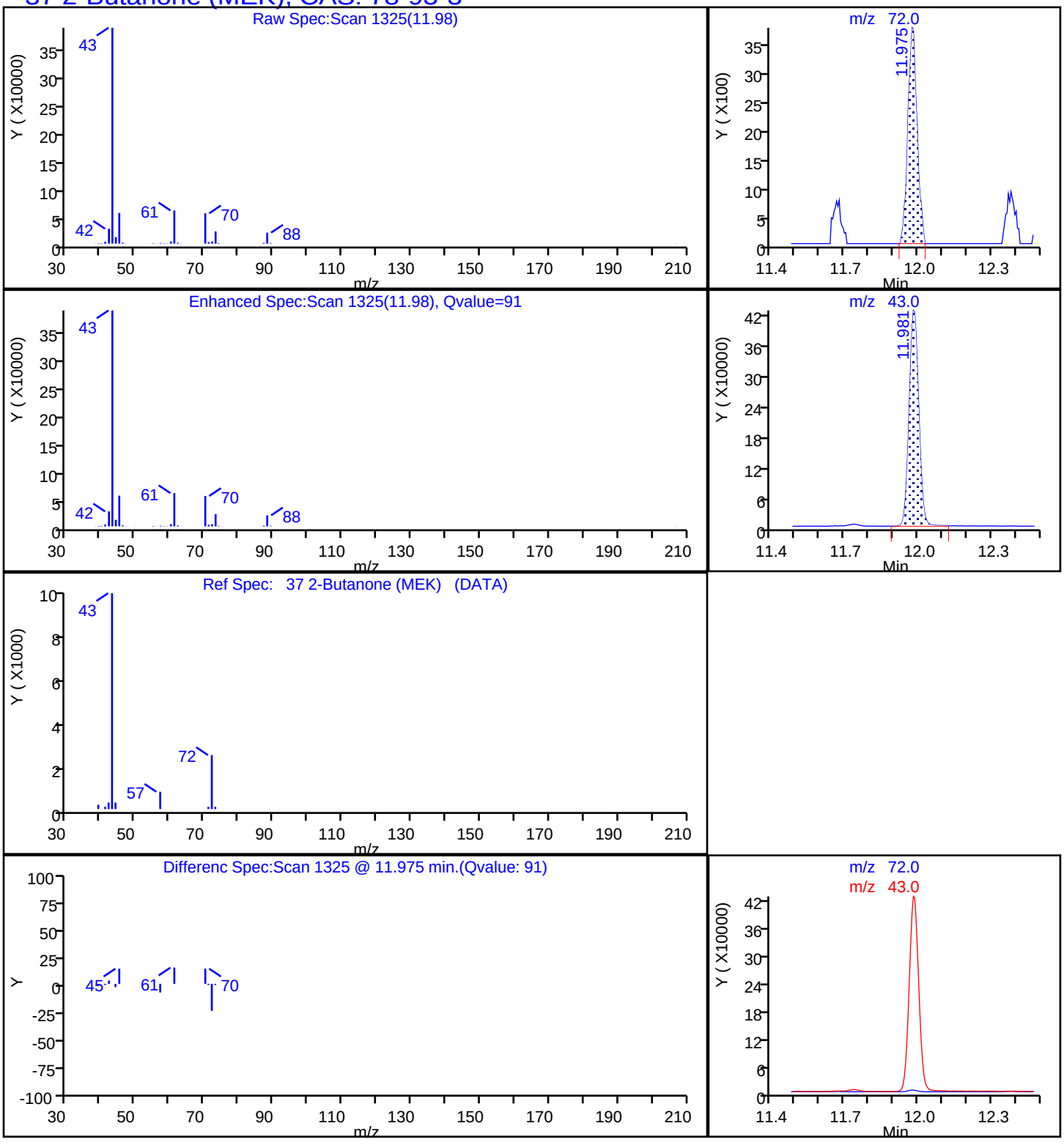




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 2-Butanone (MEK), CAS: 78-93-3

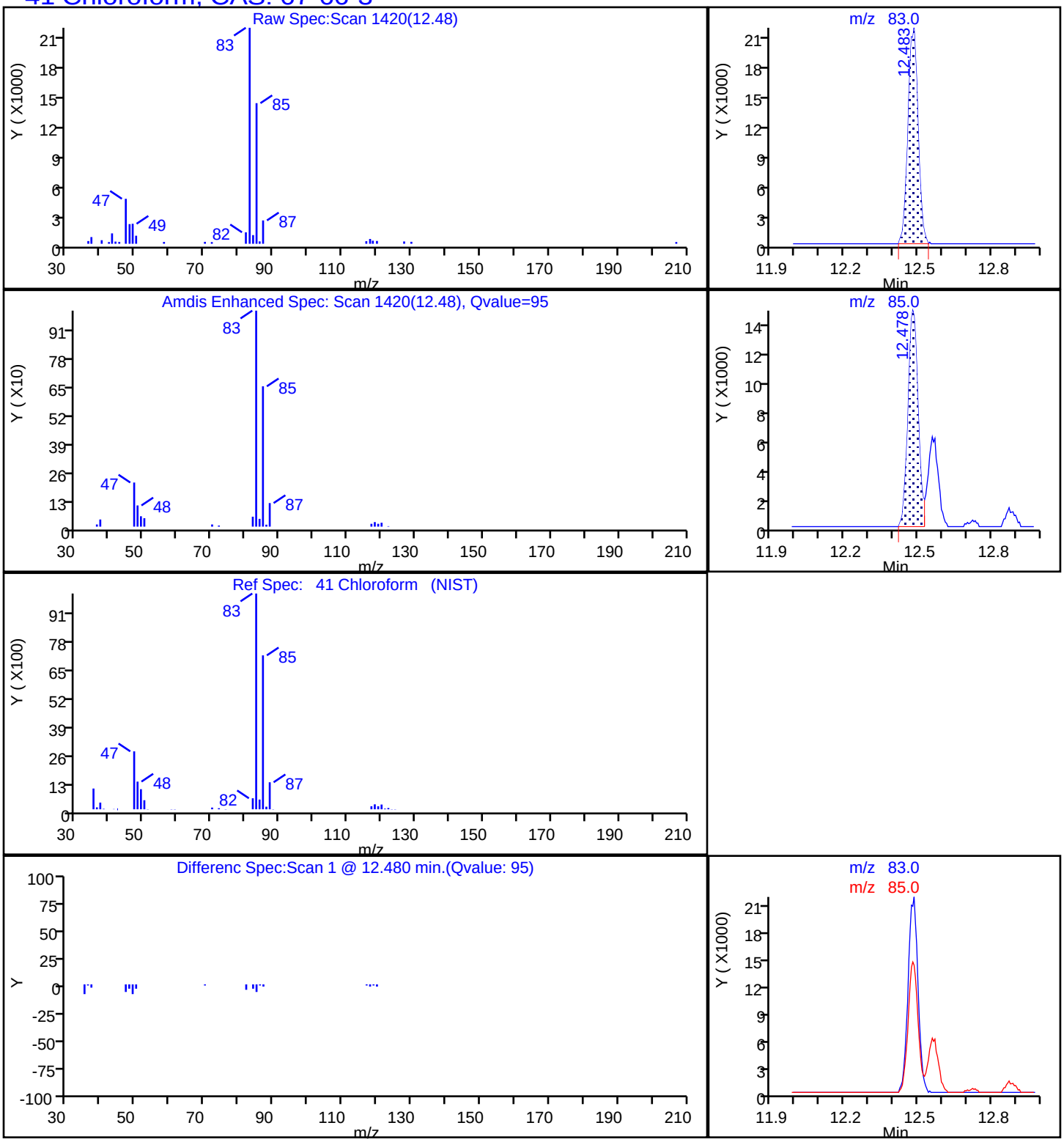


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d

Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

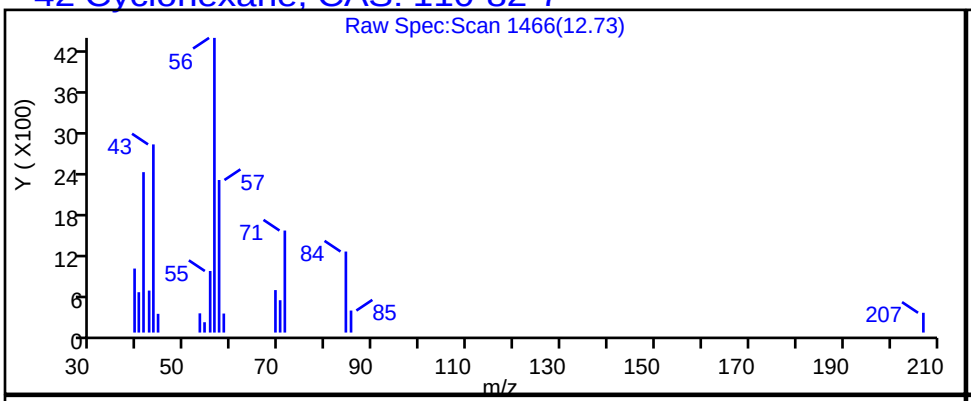
41 Chloroform, CAS: 67-66-3

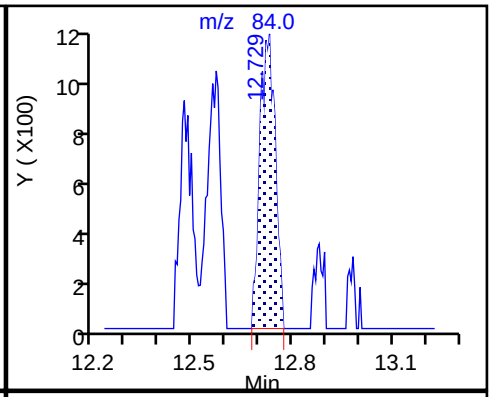


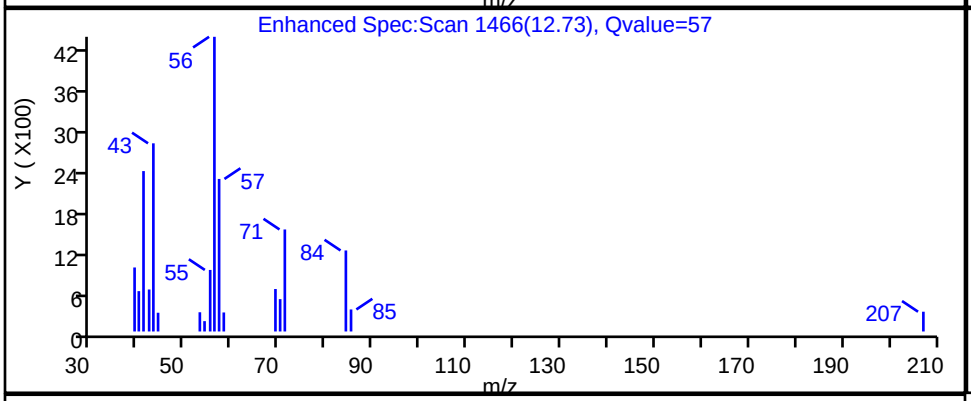
TestAmerica Burlington

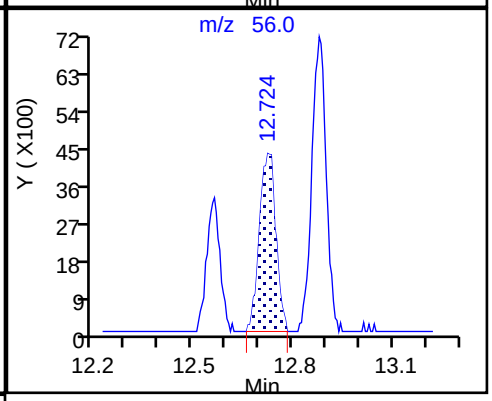
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

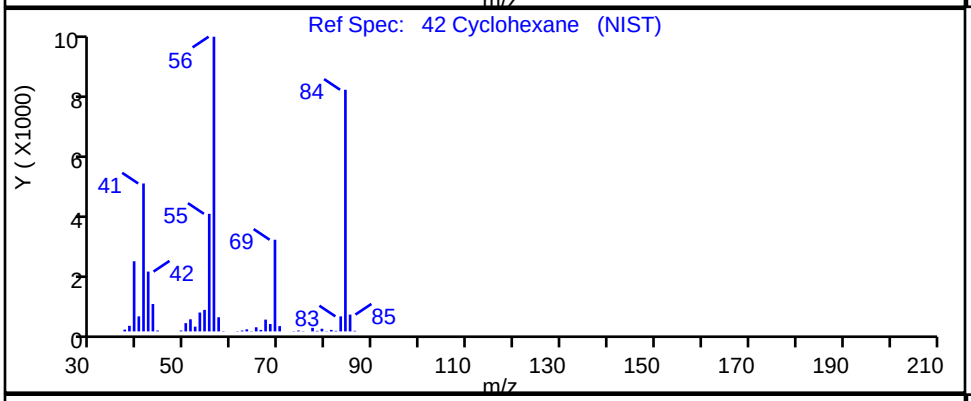
42 Cyclohexane, CAS: 110-82-7

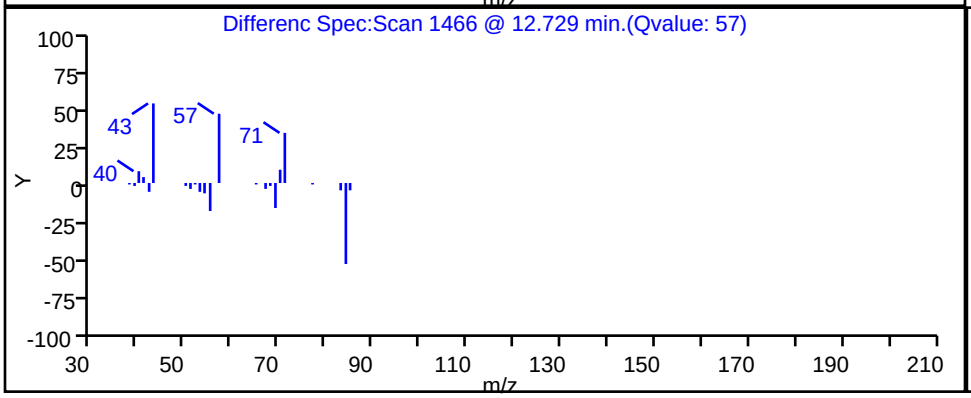


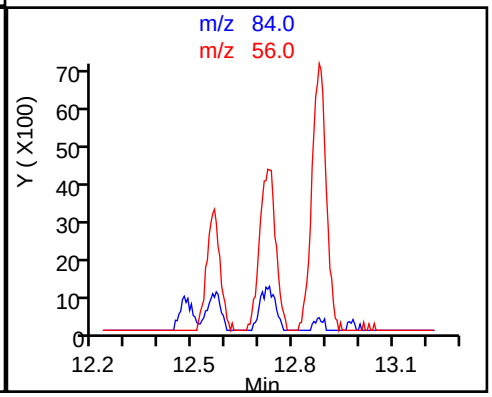






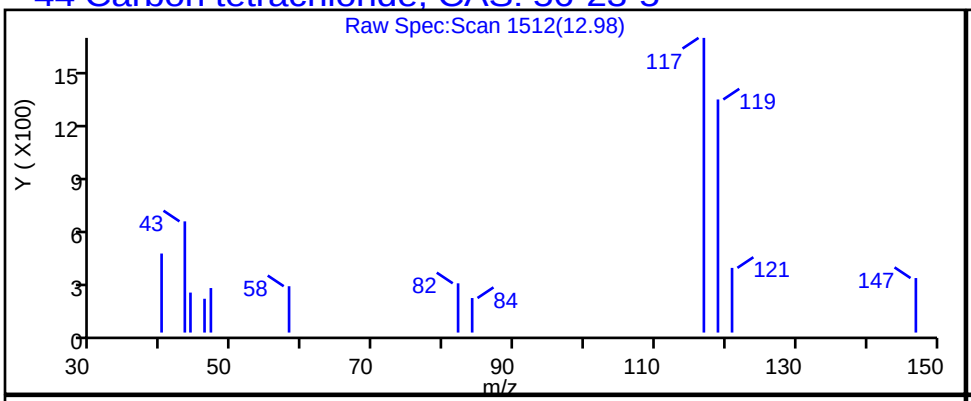


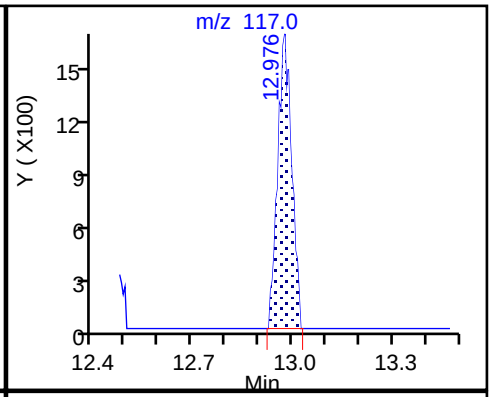


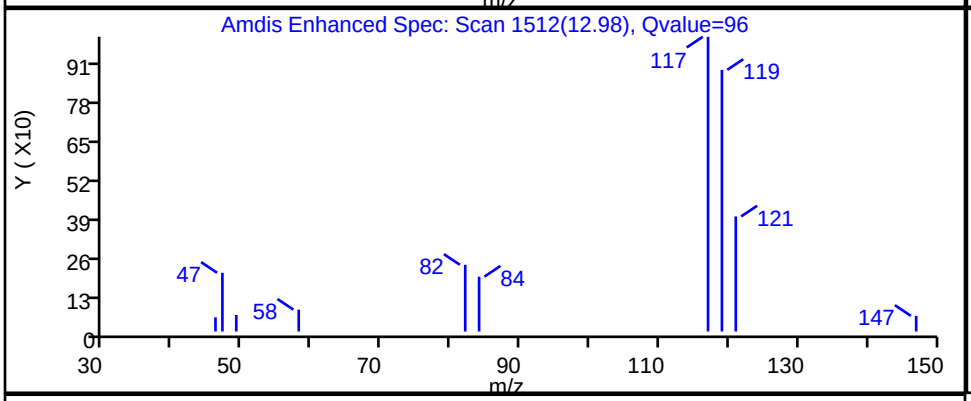


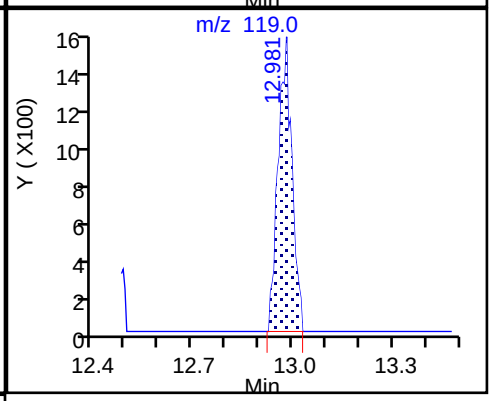
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d
Injection Date: 06-Apr-2018 01:26:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-7 Lab Sample ID: 200-42918-7
Client ID: GC-IA-105 (AS)
Operator ID: ert ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

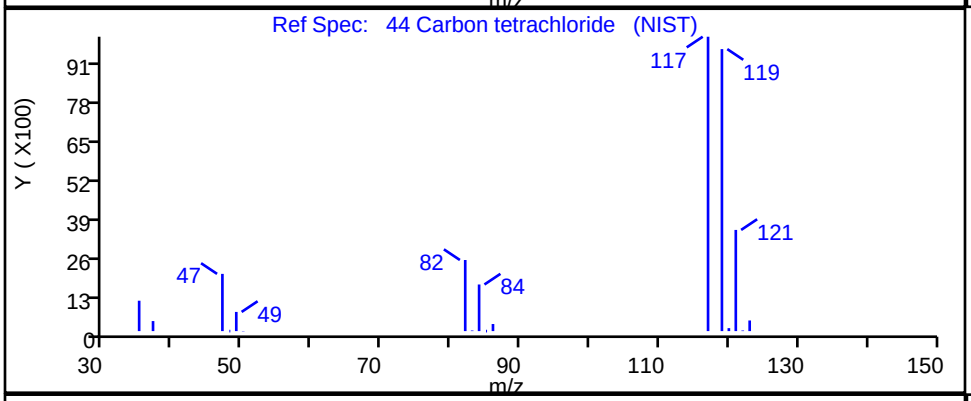
44 Carbon tetrachloride, CAS: 56-23-5

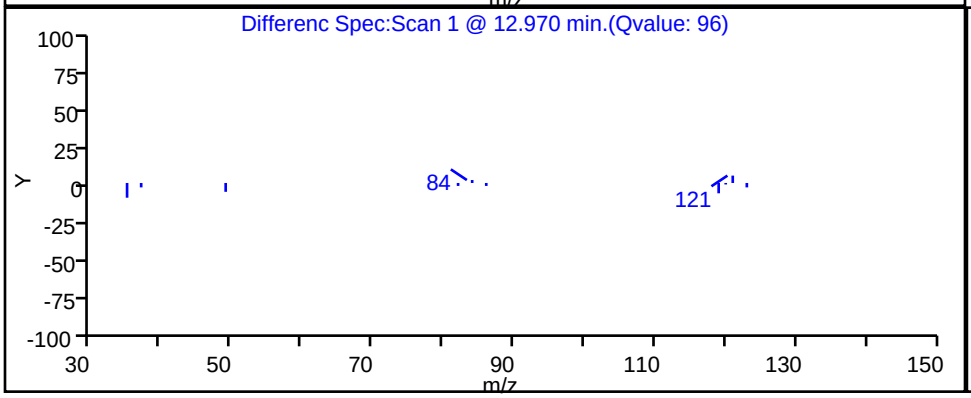


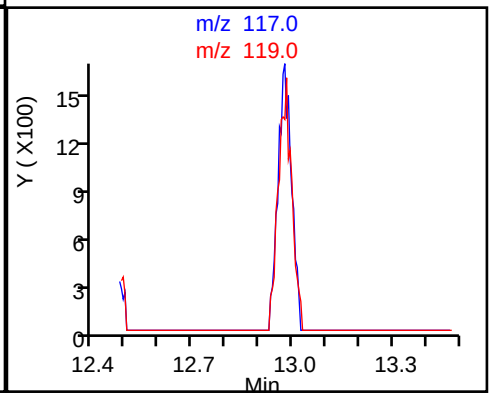






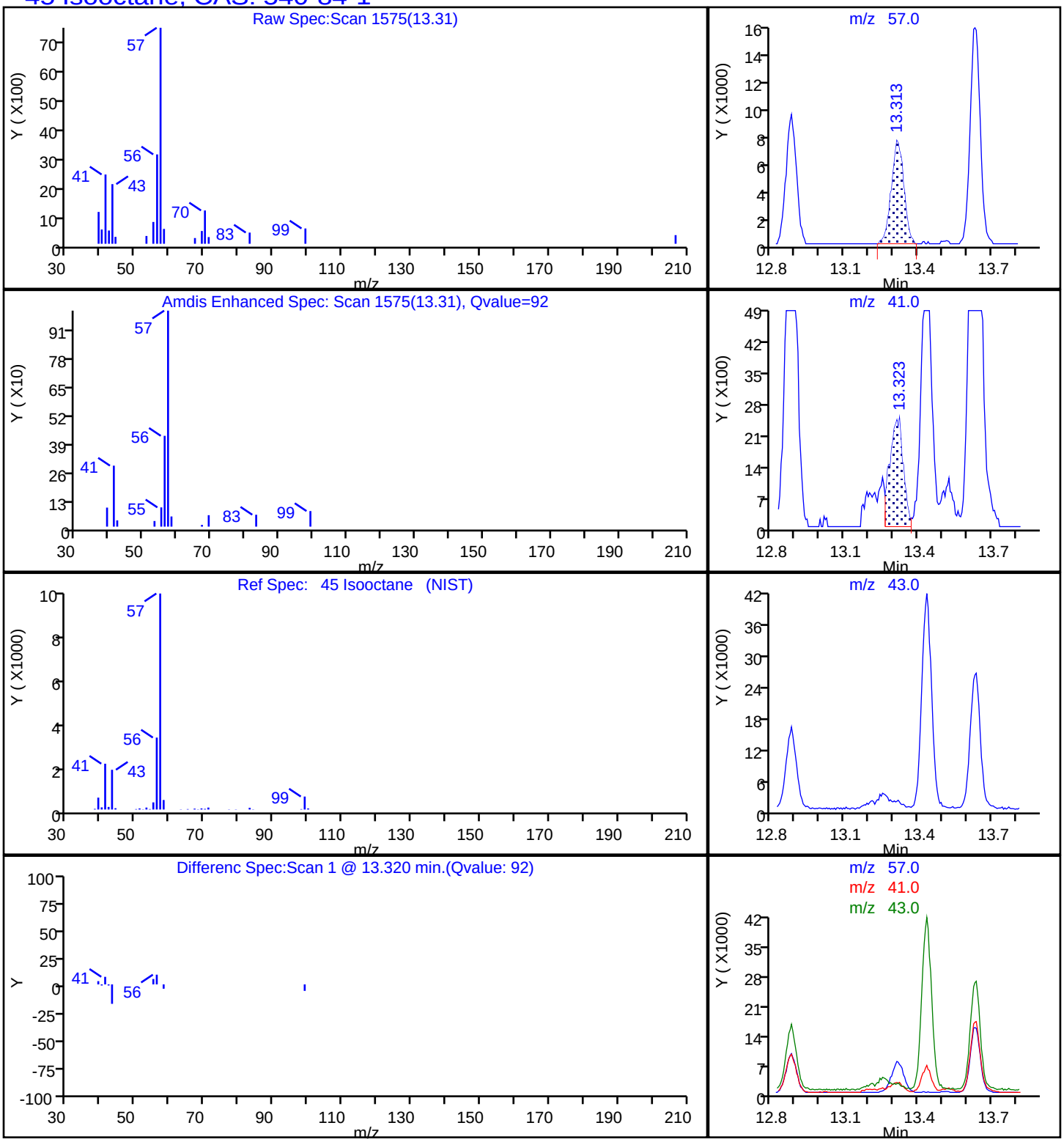






Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d
Injection Date: 06-Apr-2018 01:26:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-7 Lab Sample ID: 200-42918-7
Client ID: GC-IA-105 (AS)
Operator ID: ert ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

45 Isooctane, CAS: 540-84-1



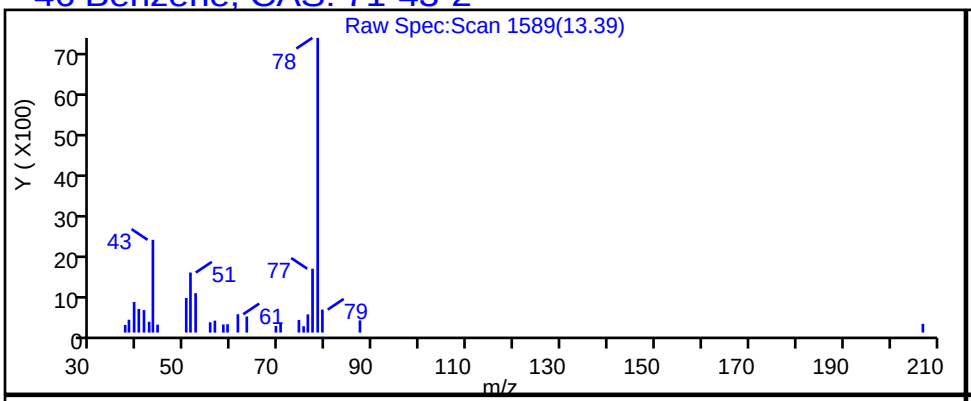
Report Date: 09-Apr-2018 09:31:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

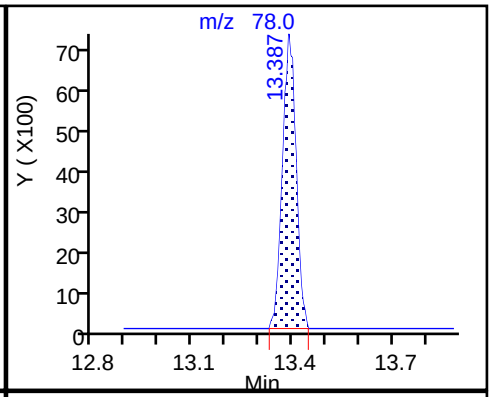
TestAmerica Burlington

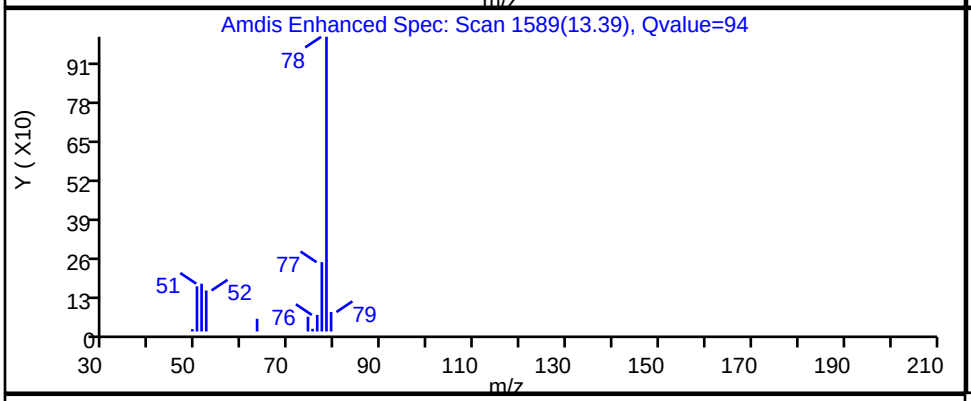
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d

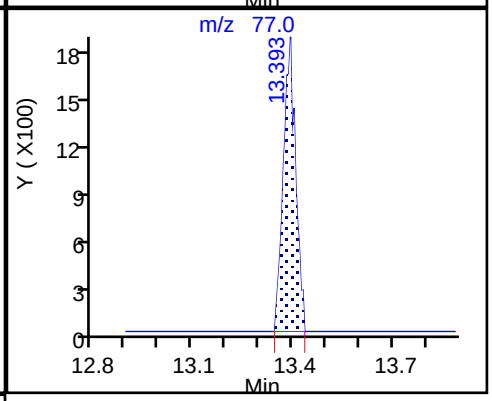
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

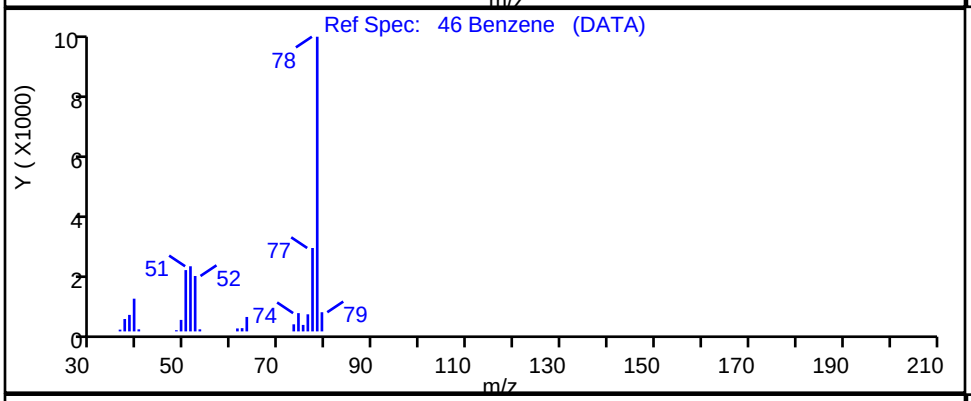
46 Benzene, CAS: 71-43-2

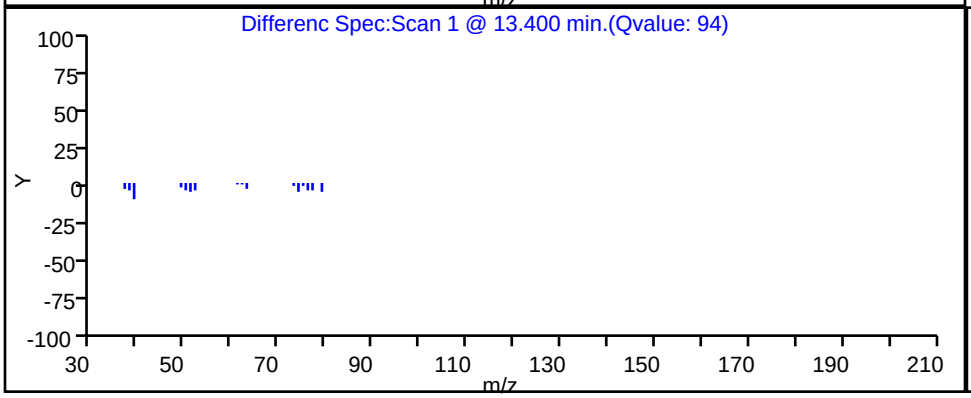


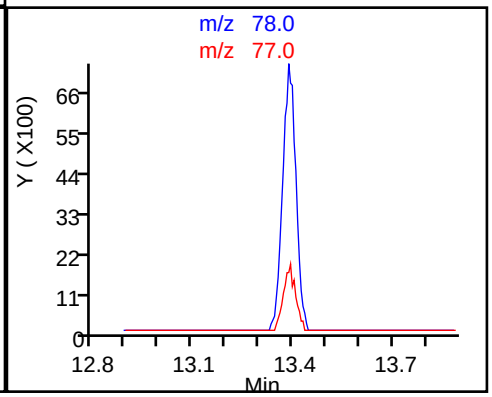








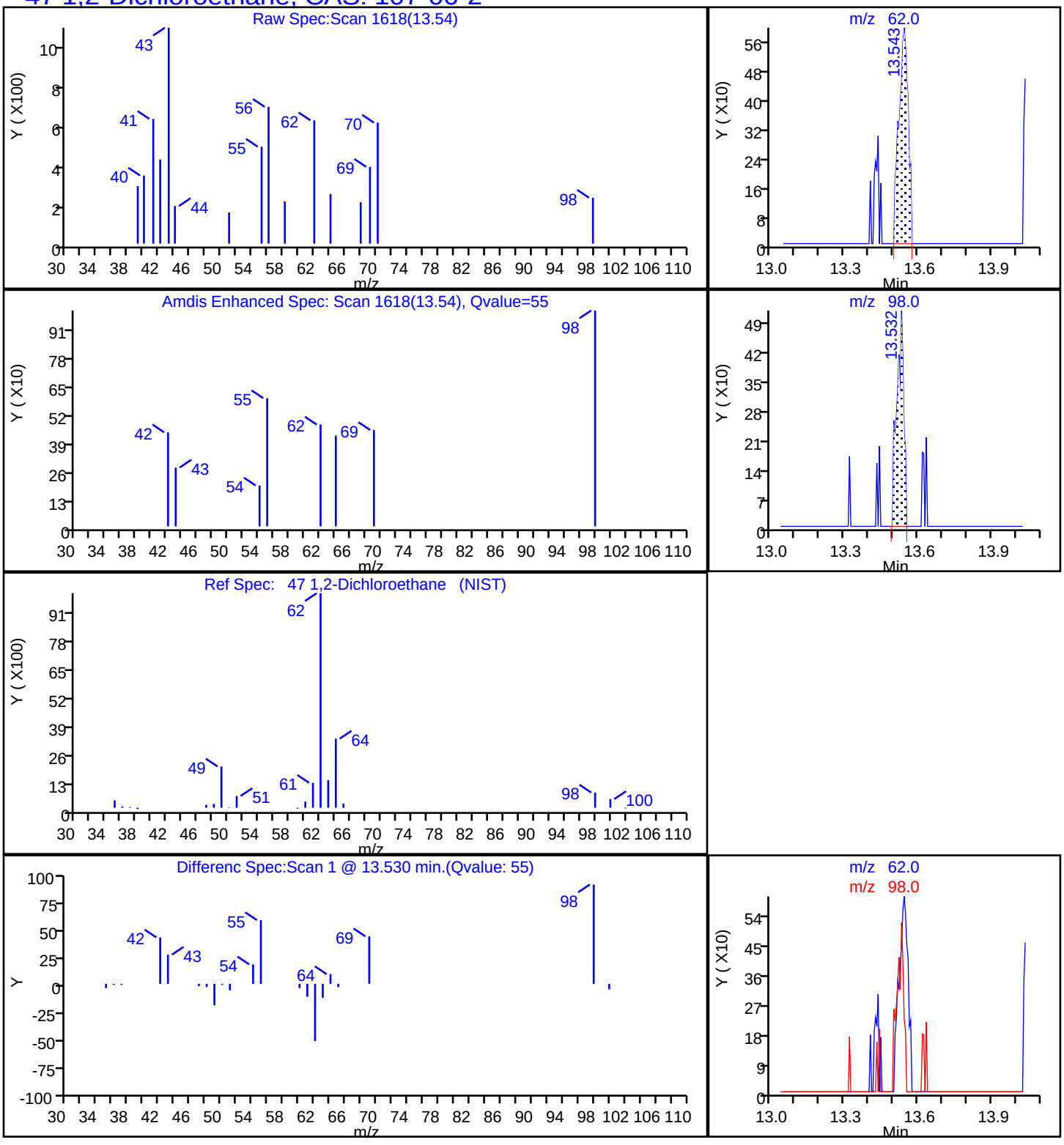




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

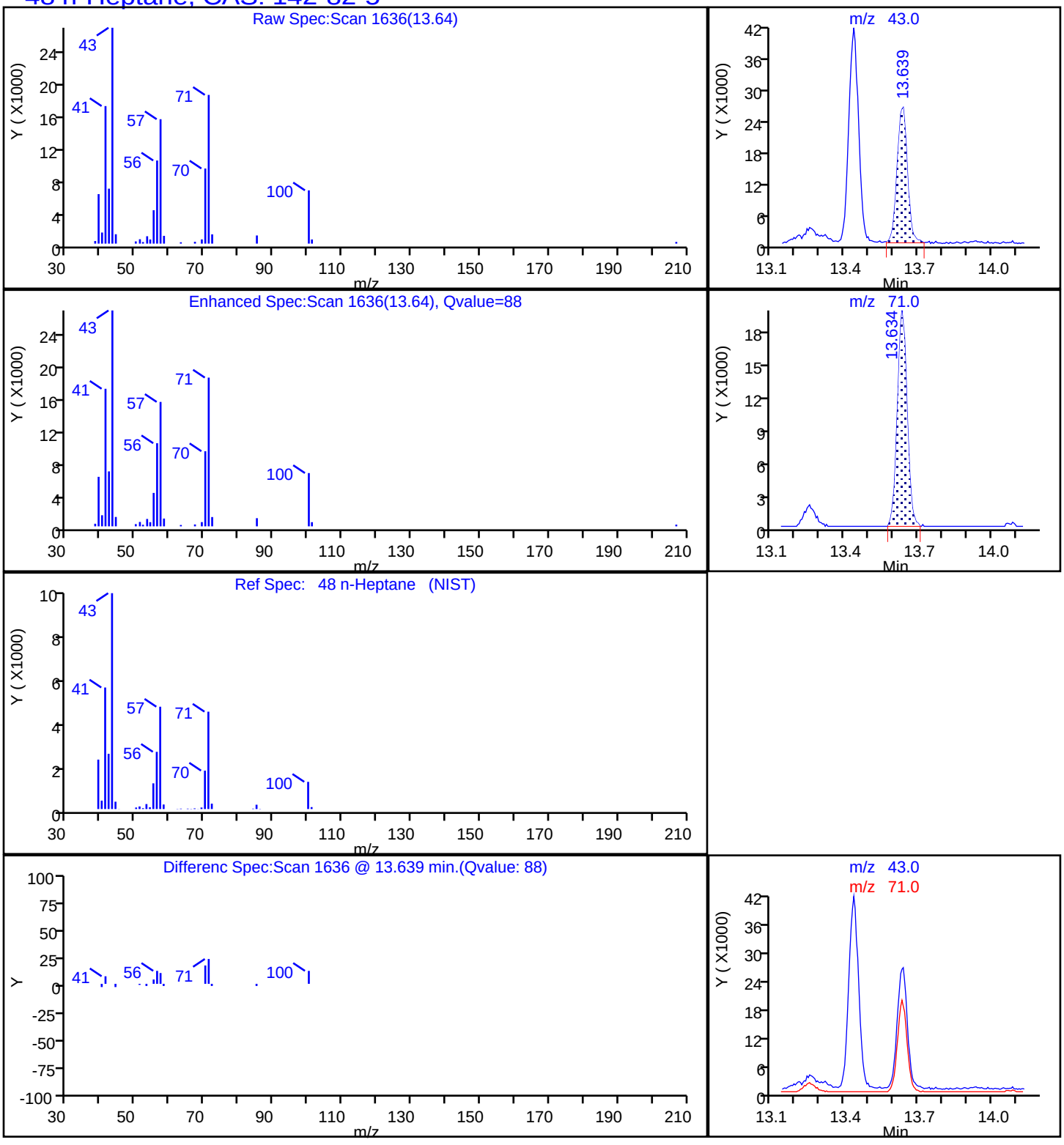
47 1,2-Dichloroethane, CAS: 107-06-2



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

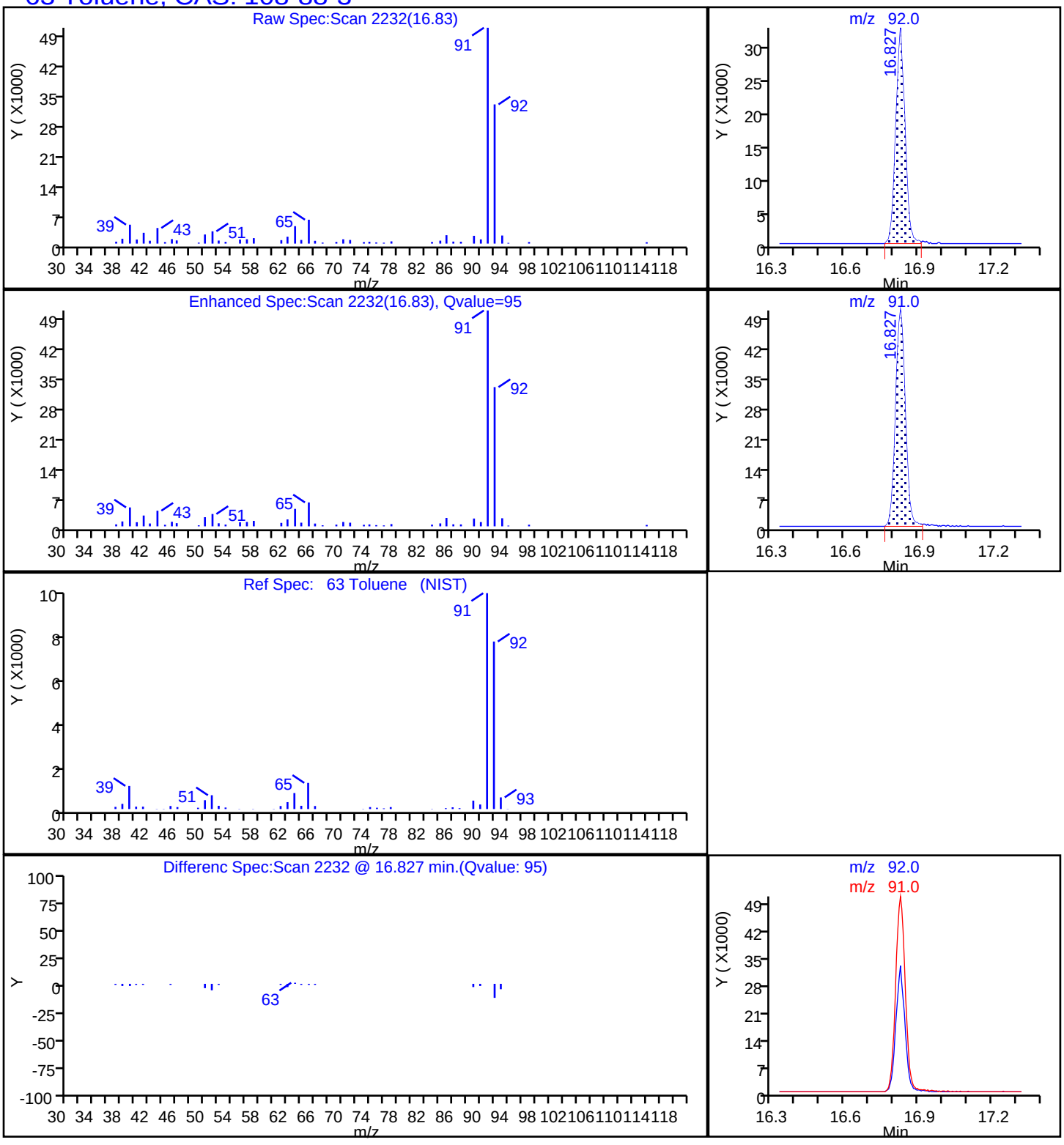
48 n-Heptane, CAS: 142-82-5



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
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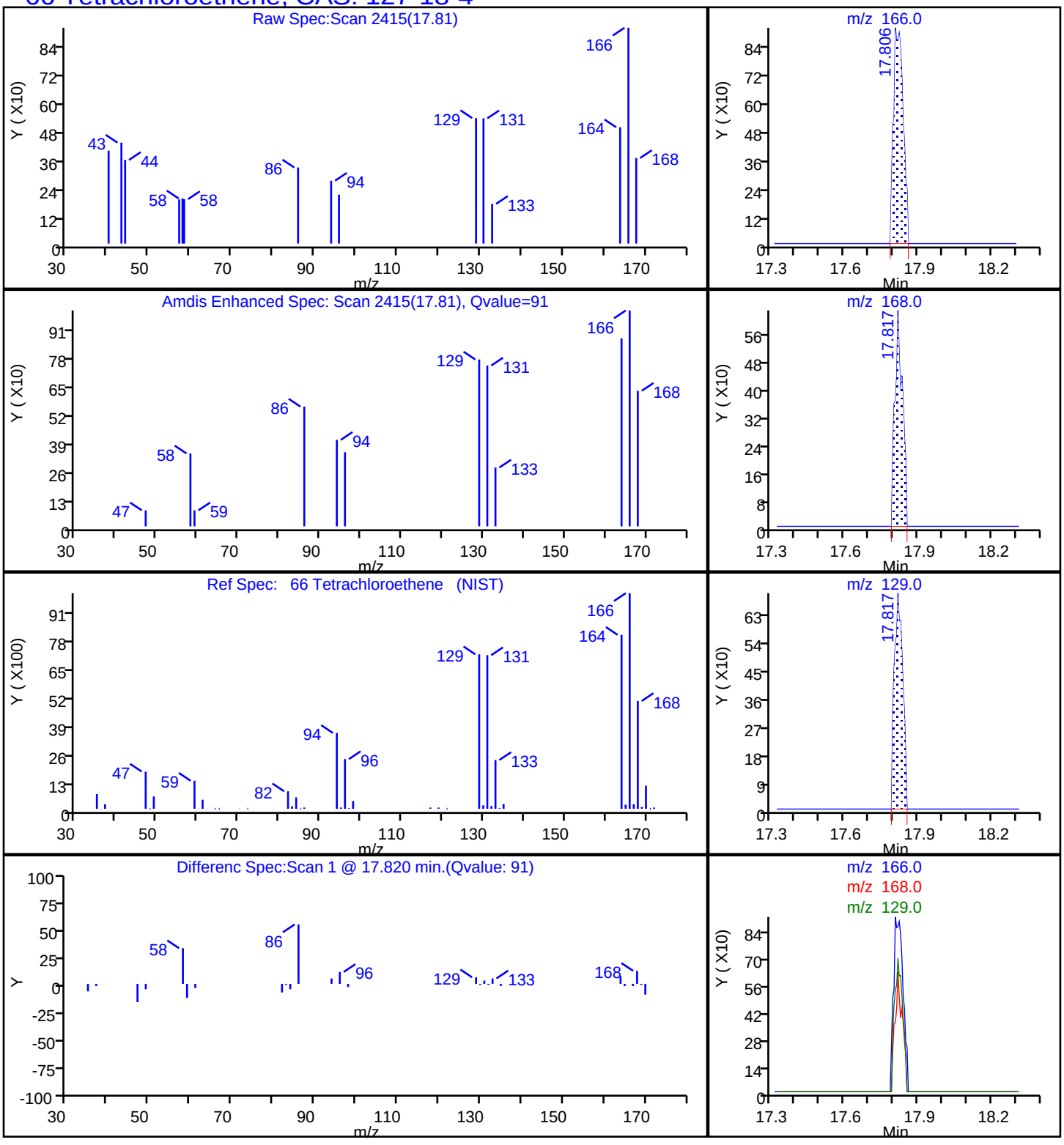
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

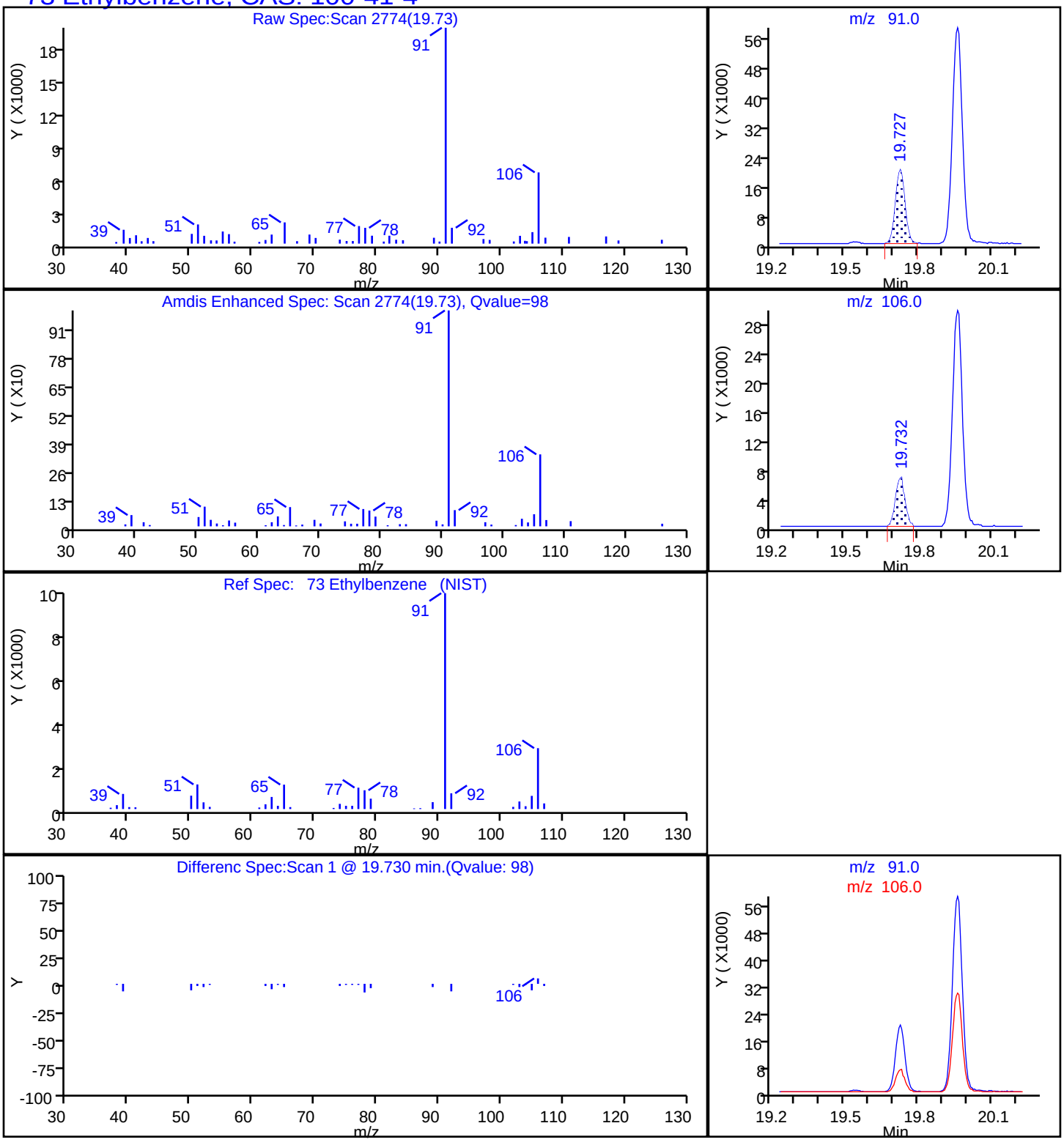
66 Tetrachloroethene, CAS: 127-18-4



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

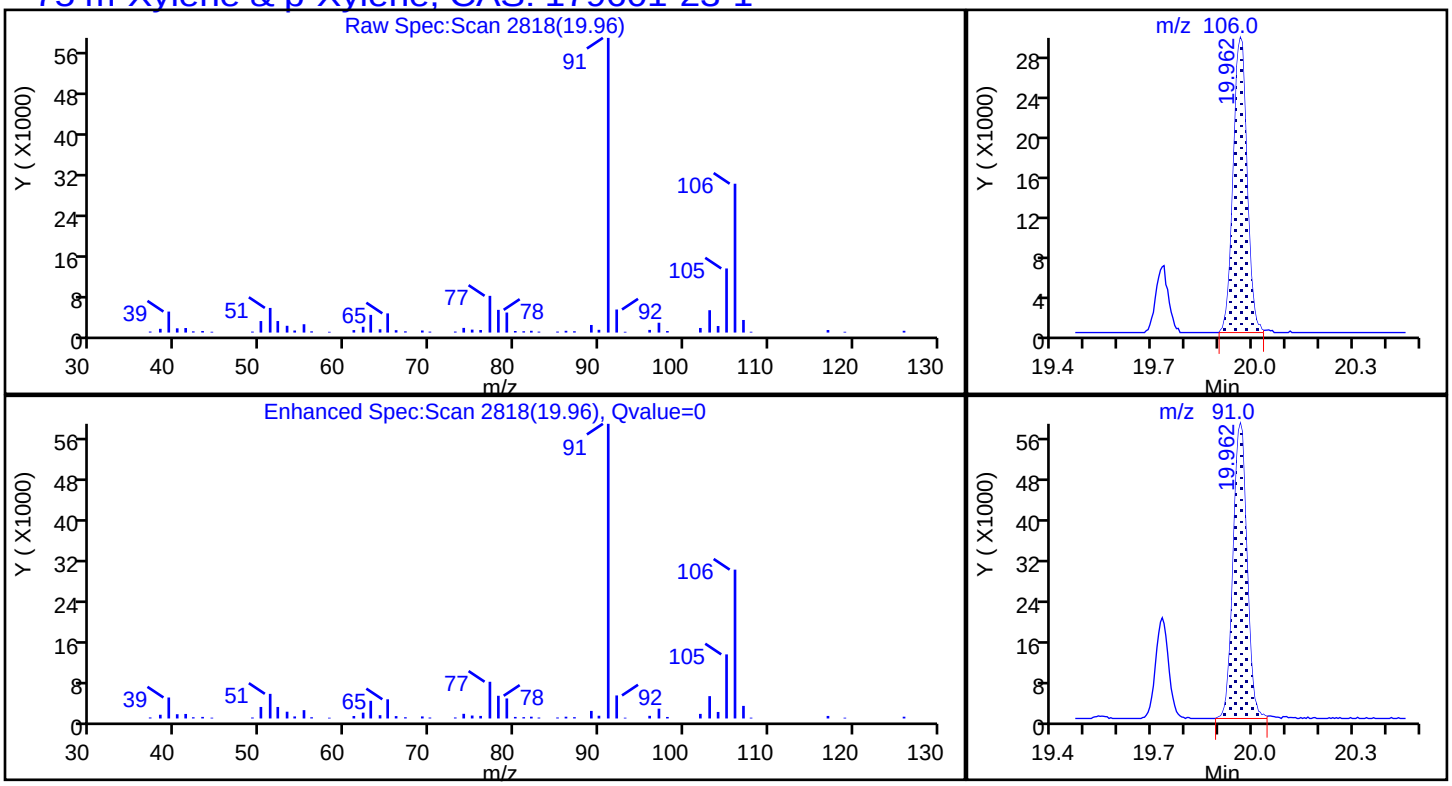
73 Ethylbenzene, CAS: 100-41-4

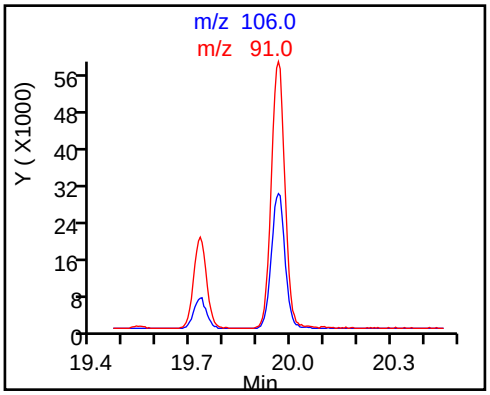


TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

75 m-Xylene & p-Xylene, CAS: 179601-23-1





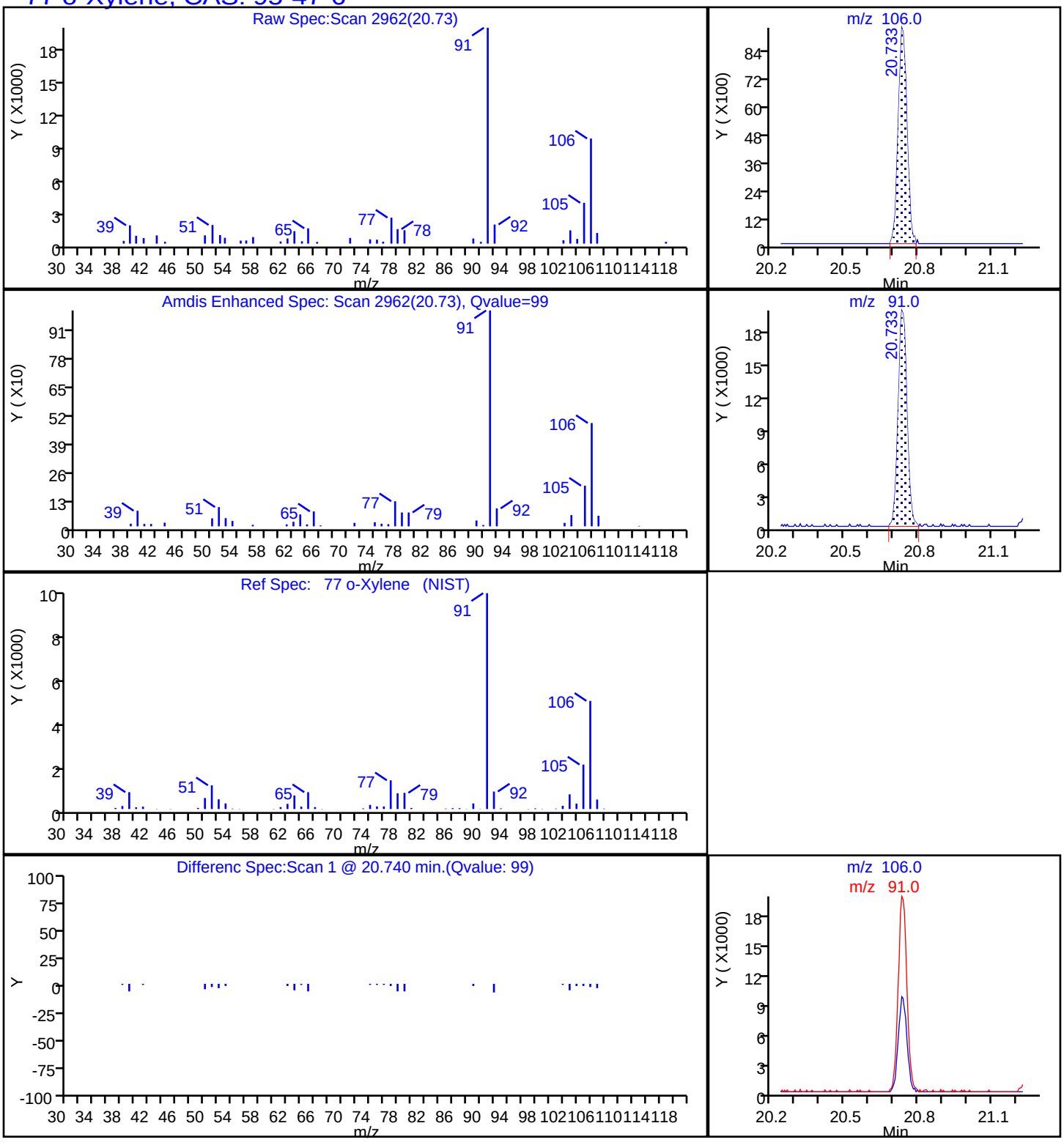
Report Date: 09-Apr-2018 09:31:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d

Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

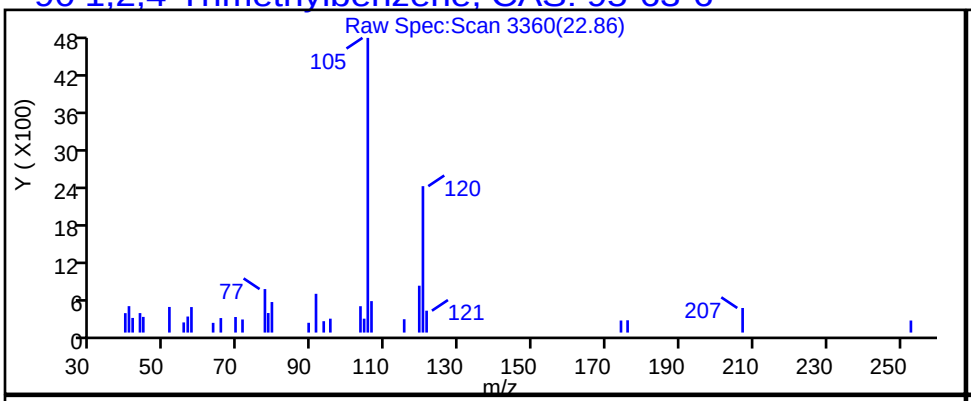
77 o-Xylene, CAS: 95-47-6

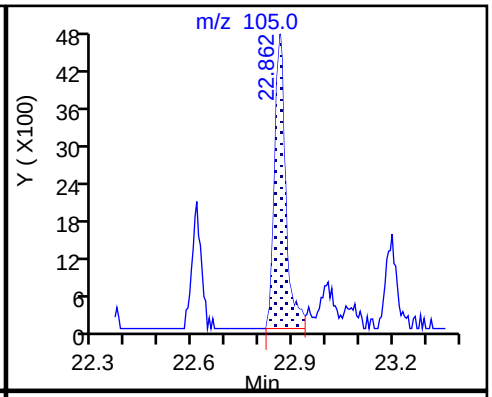


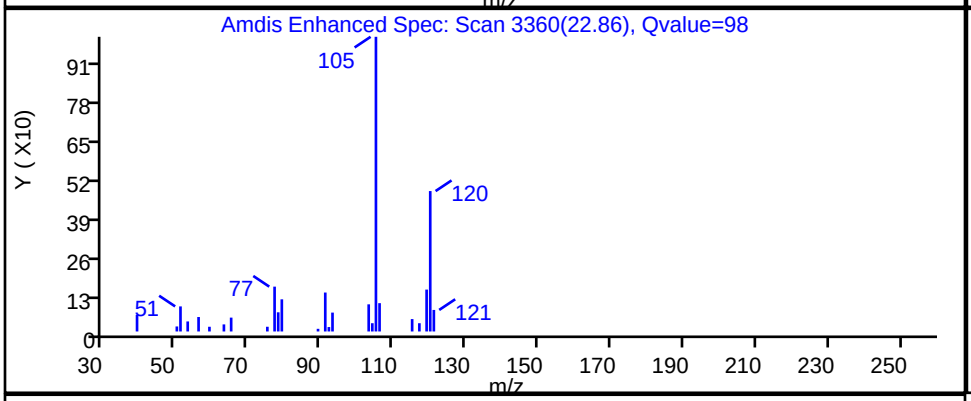
TestAmerica Burlington

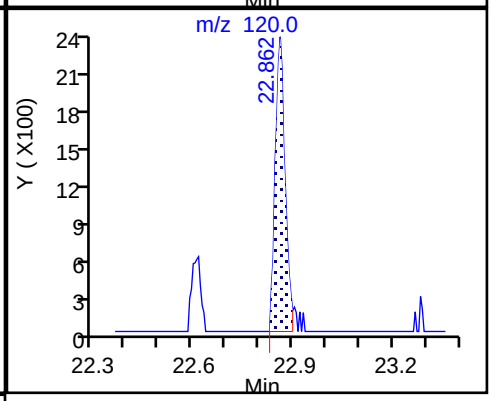
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

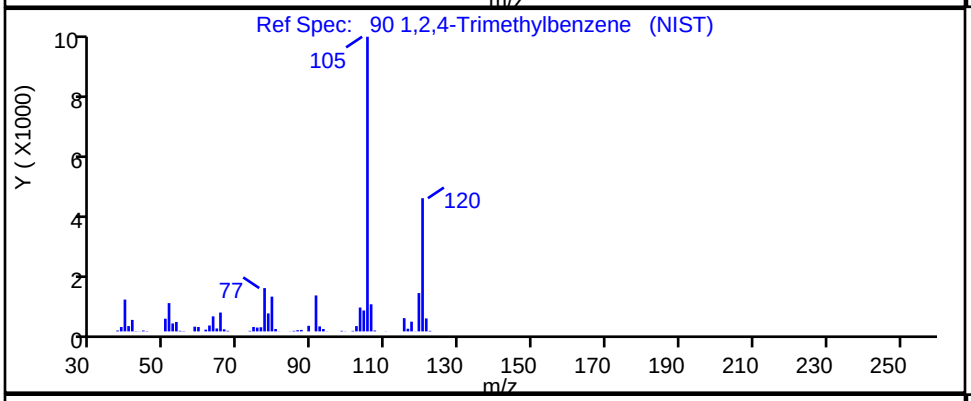
90 1,2,4-Trimethylbenzene, CAS: 95-63-6

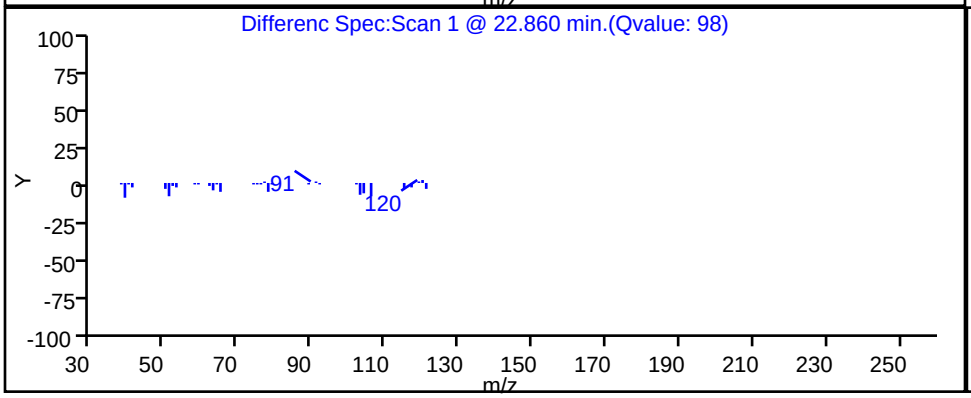


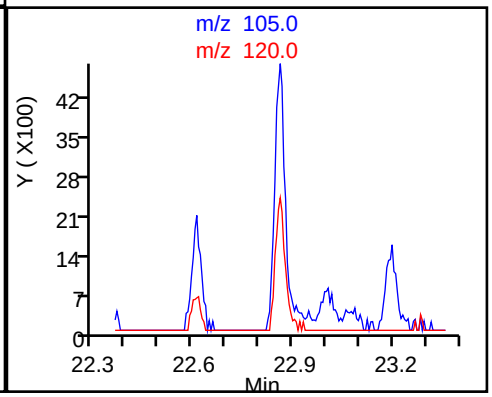












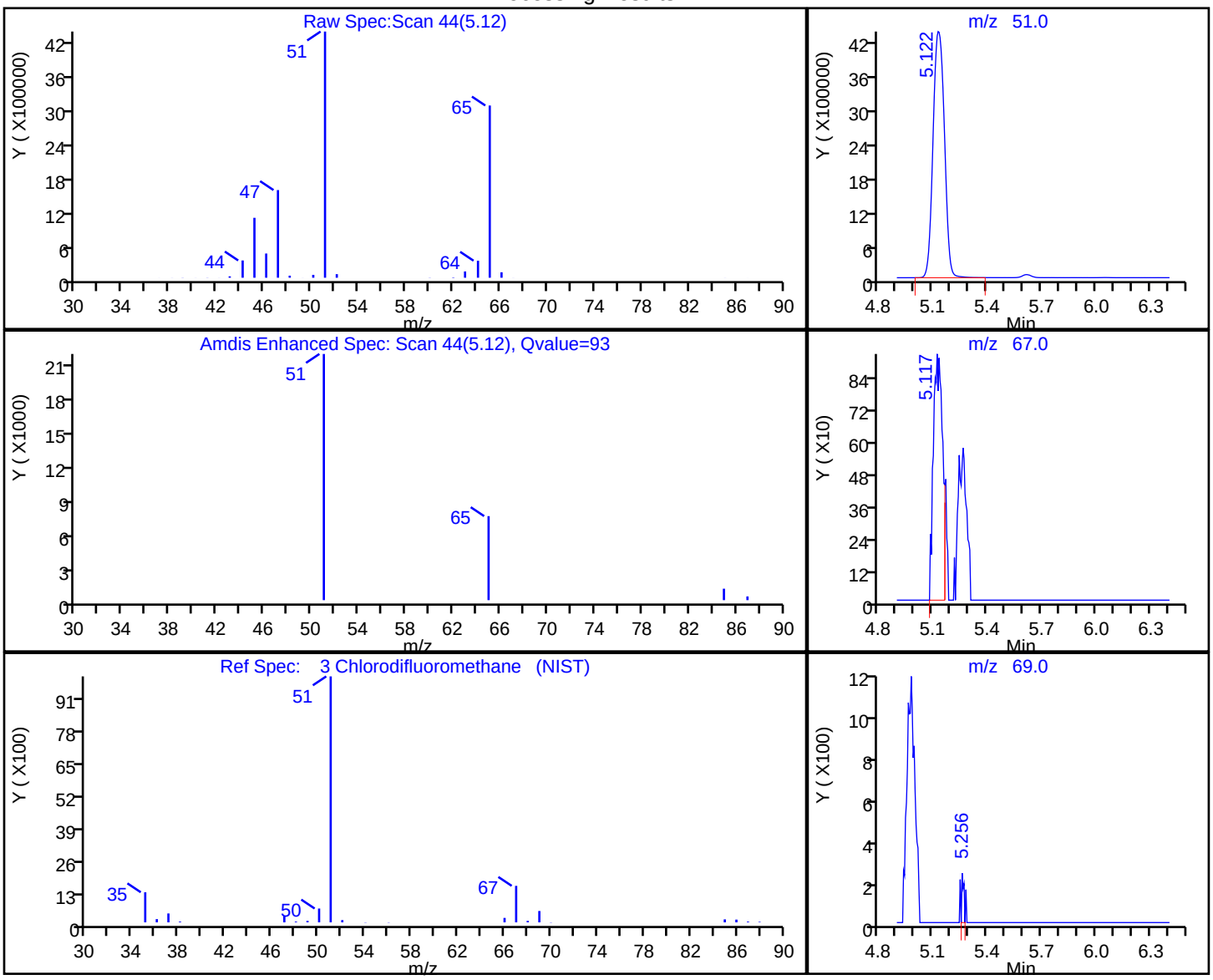
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
5.12	51.00	19334507	496.0329
5.12	67.00	3269	
5.26	69.00	183	

Reviewer: desjardinsb, 06-Apr-2018 08:43:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

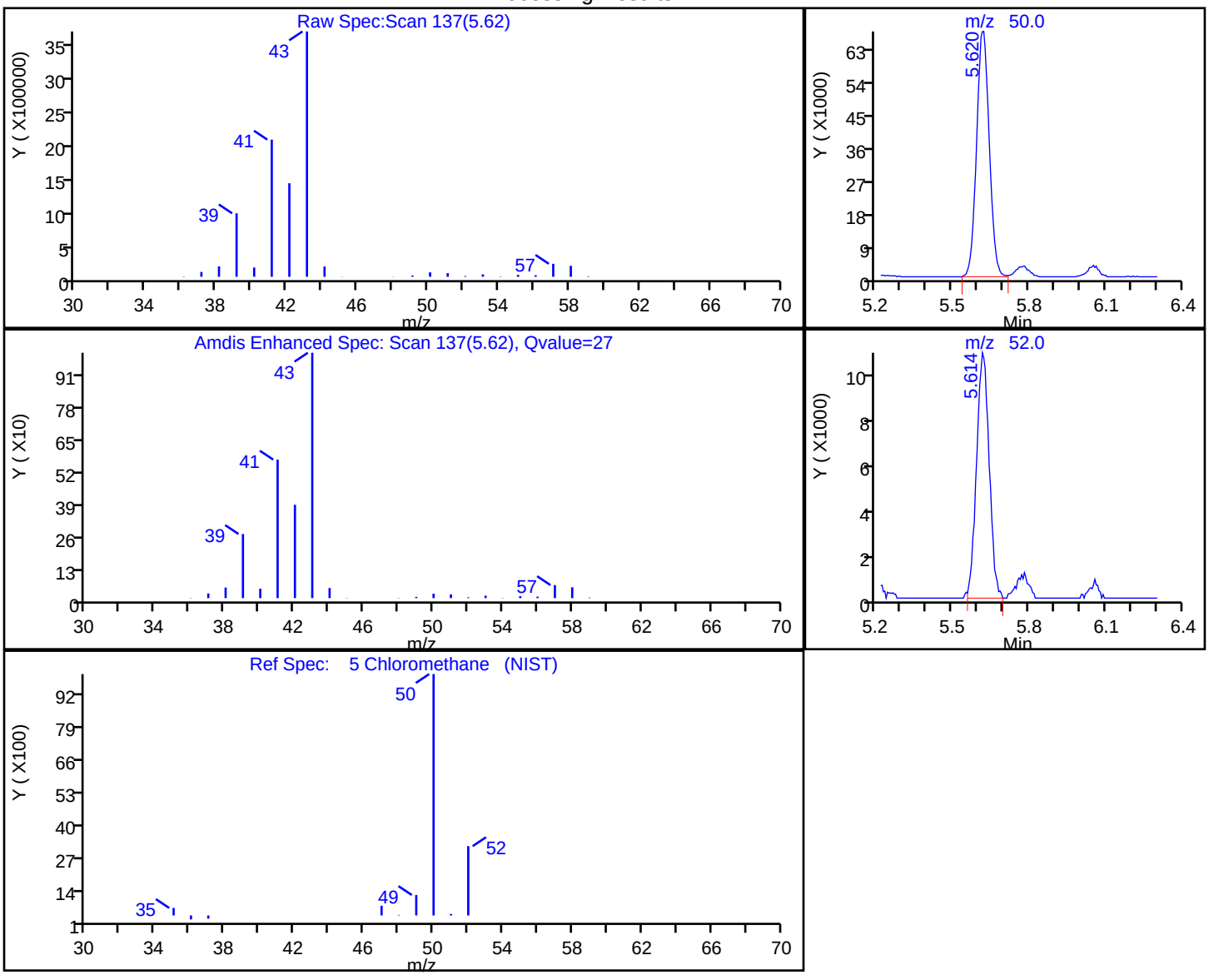
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
5.62	50.00	233523	9.973278
5.61	52.00	36288	

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

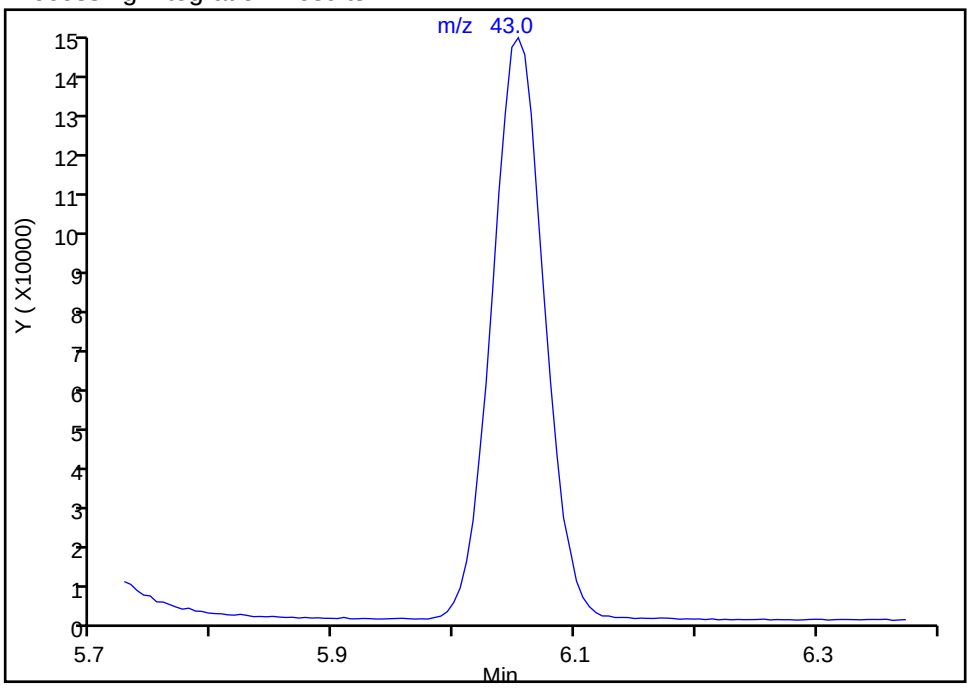
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

Signal: 1

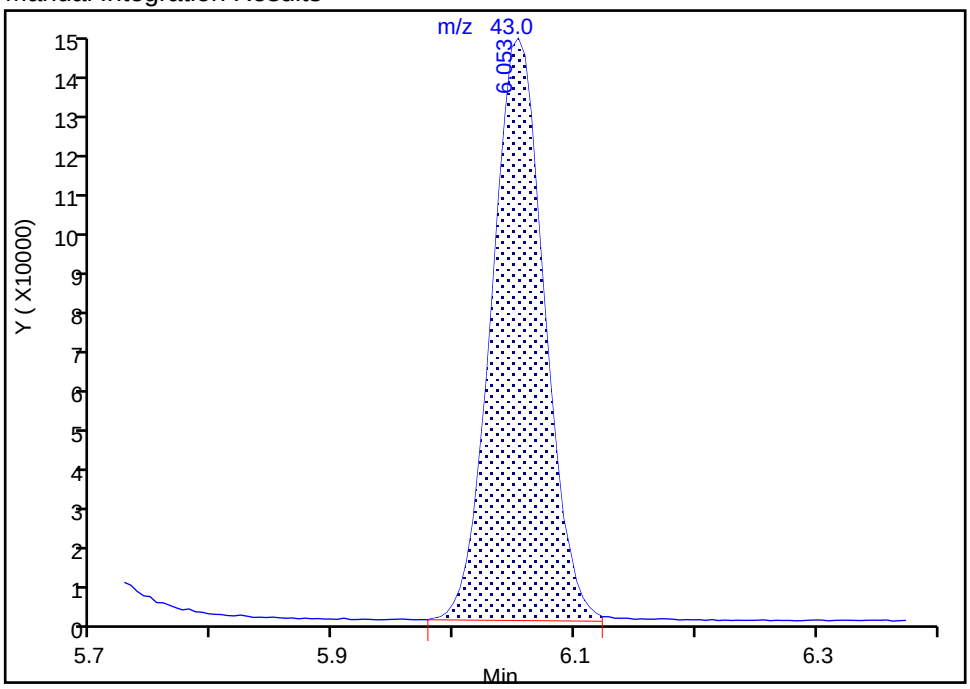
Not Detected
Expected RT: 6.03

Processing Integration Results



Manual Integration Results

RT: 6.05
Area: 447260
Amount: 11.549581
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:26:05
Audit Action: Manually Integrated Audit Reason: Assign Peak

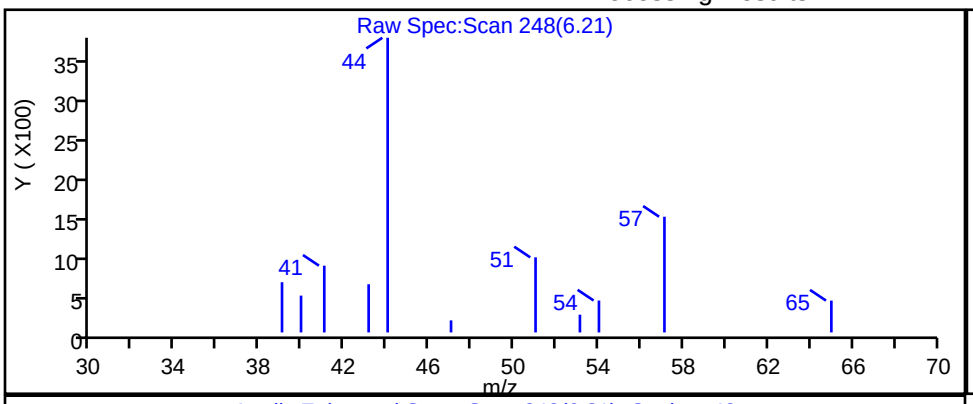
User Disabled Compound Report

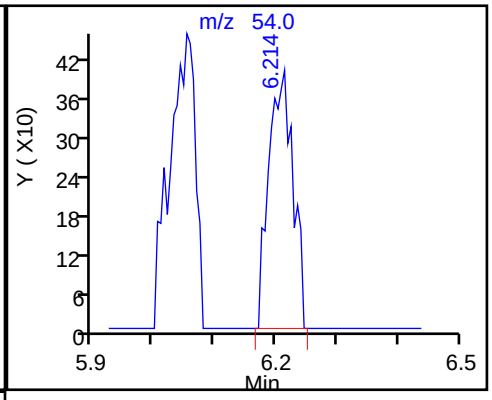
TestAmerica Burlington

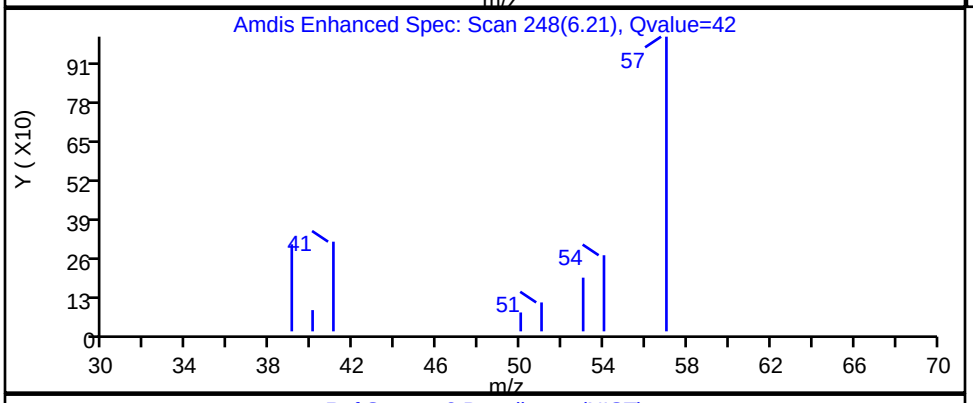
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

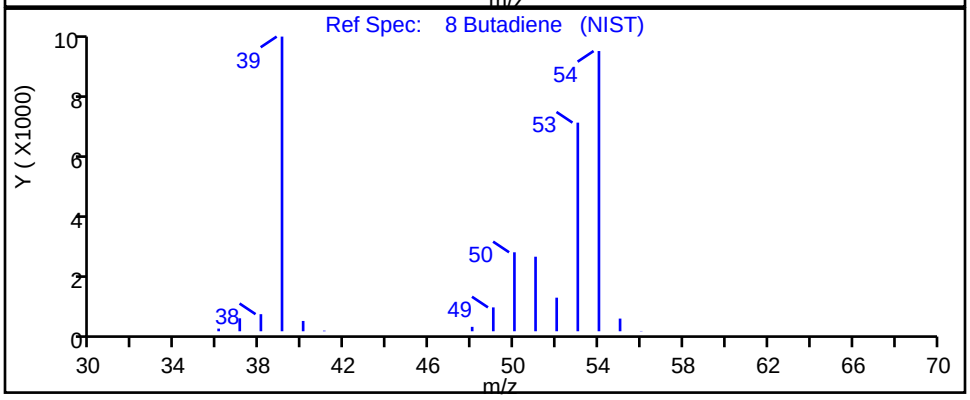
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
6.21	54.00	1109	0.058560

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

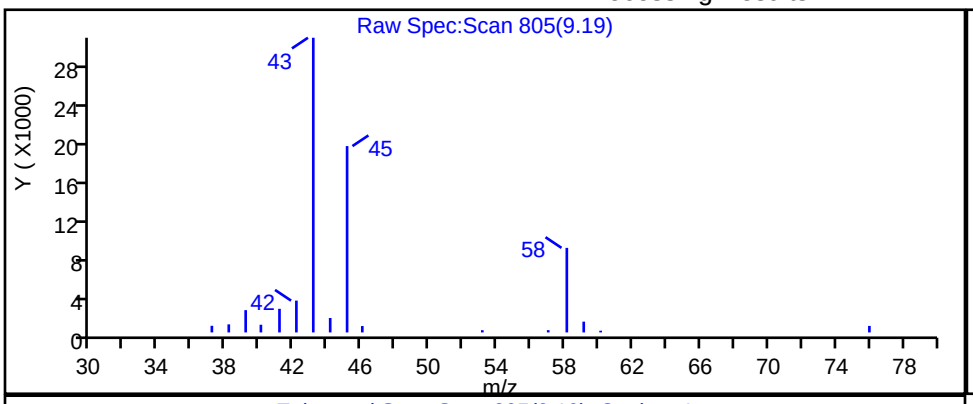
User Disabled Compound Report

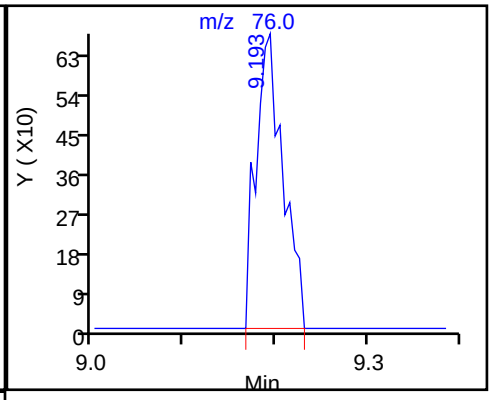
TestAmerica Burlington

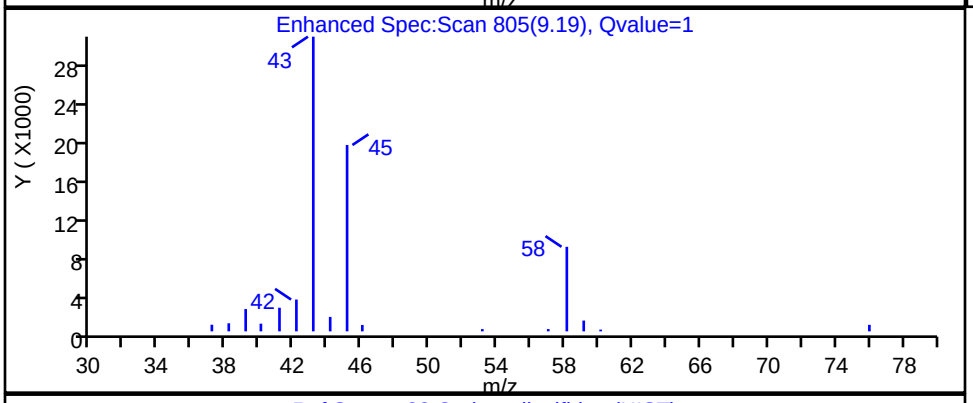
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

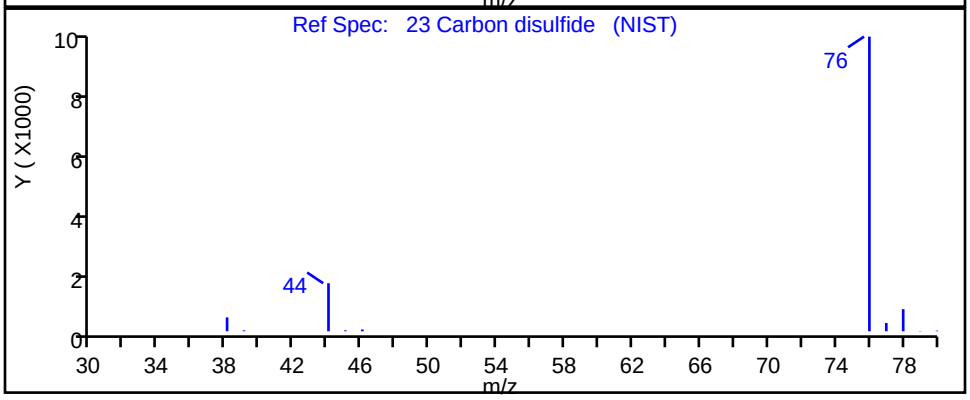
23 Carbon disulfide, CAS: 75-15-0

Processing Results









RT	Mass	Response	Amount
9.19	76.00	1391	0.029073

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

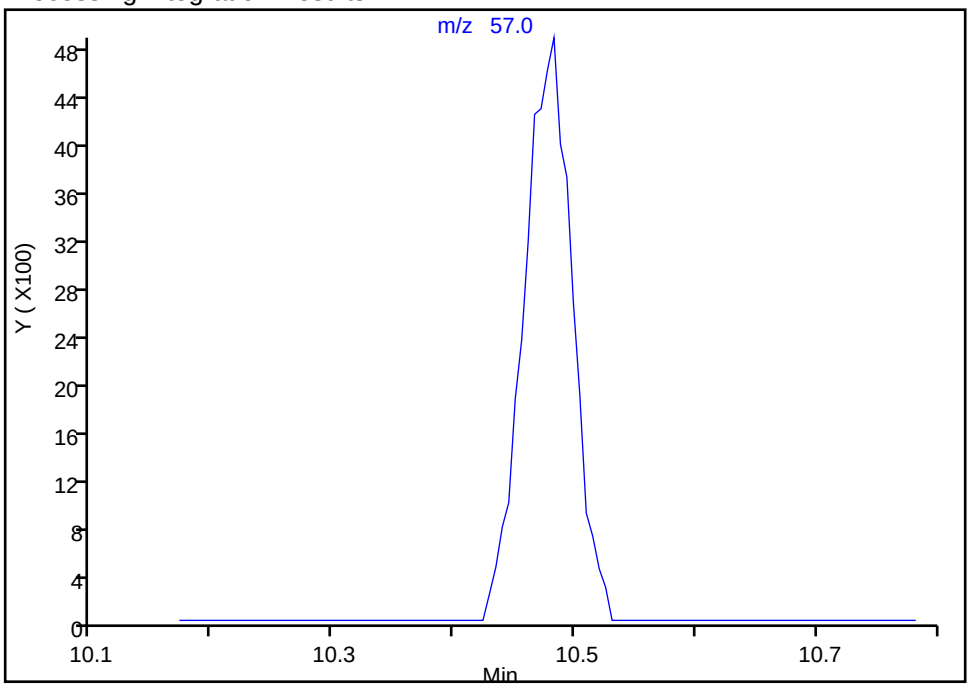
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3

Signal: 1

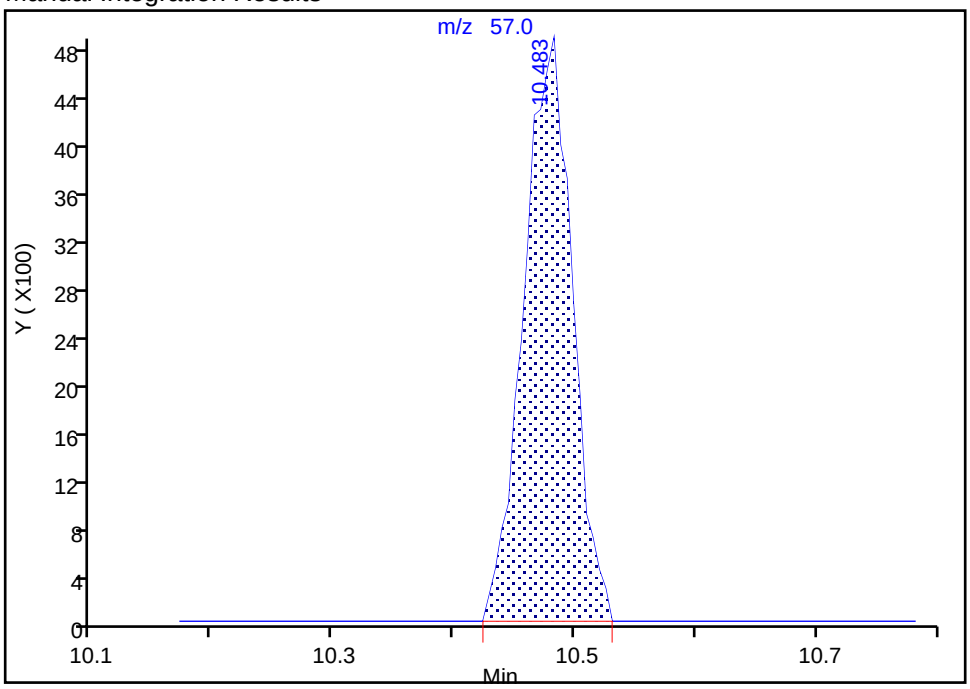
Not Detected
Expected RT: 10.48

Processing Integration Results



Manual Integration Results

RT: 10.48
Area: 13553
Amount: 0.497354
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:27:04
Audit Action: Manually Integrated Audit Reason: Assign Peak

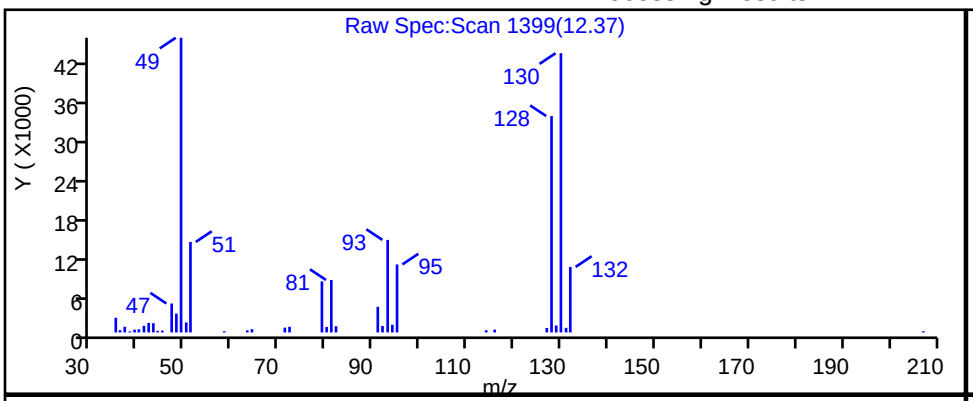
User Disabled Compound Report

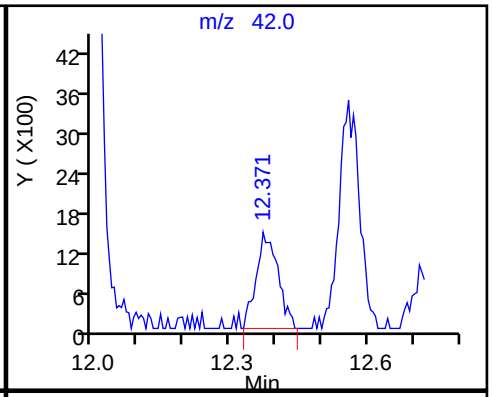
TestAmerica Burlington

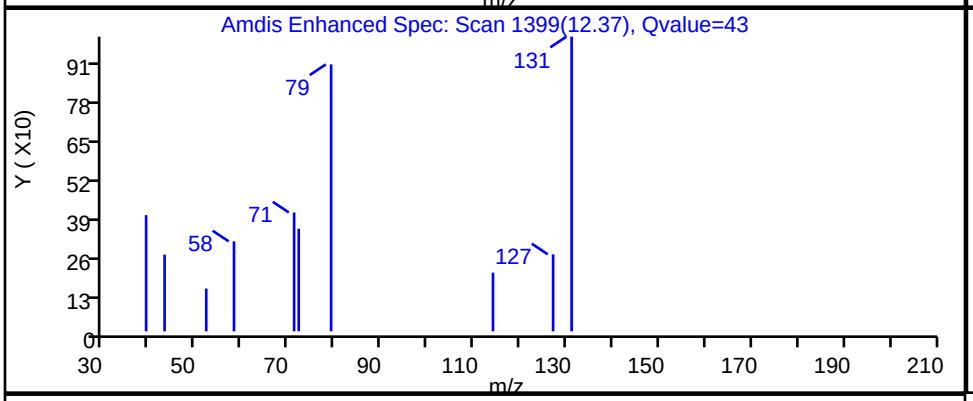
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

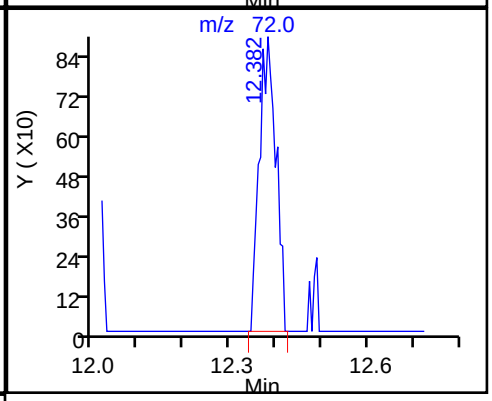
39 Tetrahydrofuran, CAS: 109-99-9

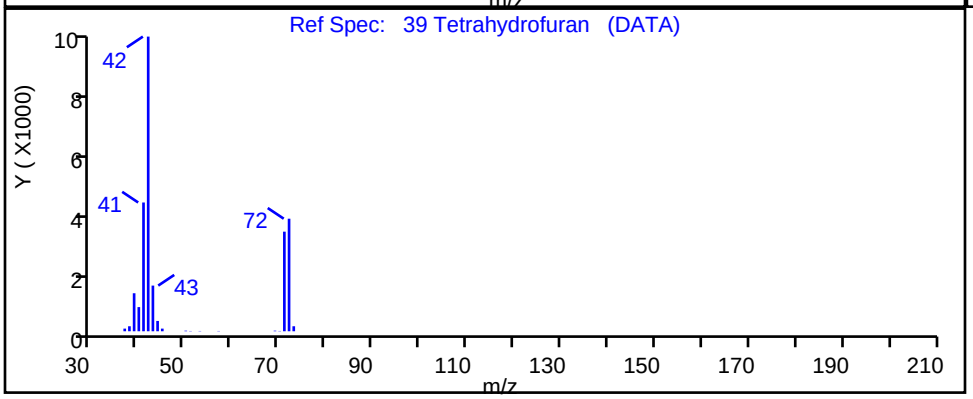
Processing Results











RT	Mass	Response	Amount
12.37	42.00	4780	0.263429
12.38	72.00	2276	

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

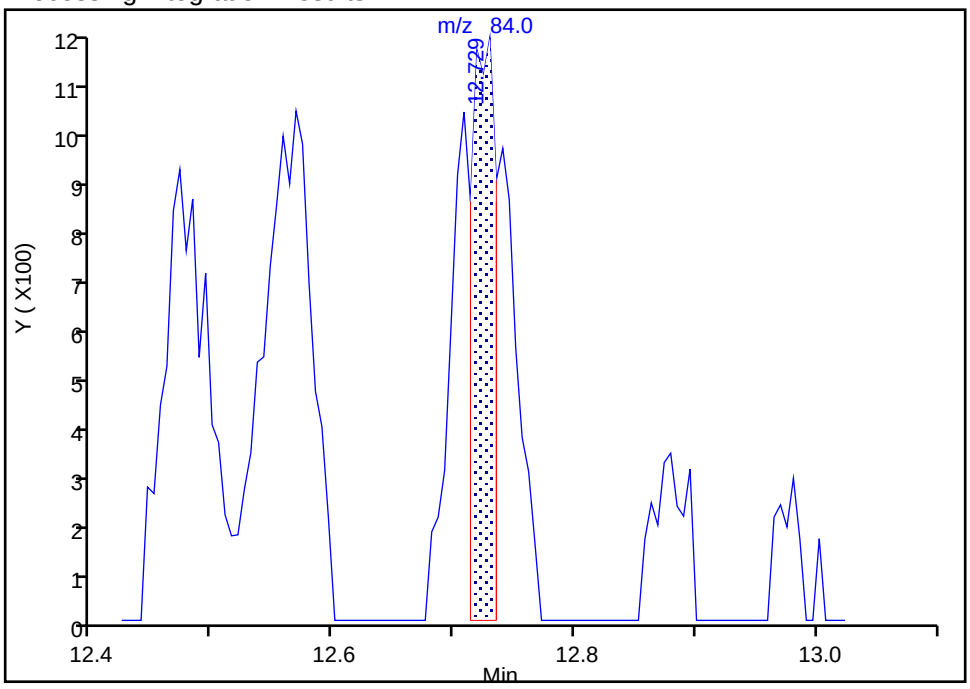
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Cyclohexane, CAS: 110-82-7

Signal: 1

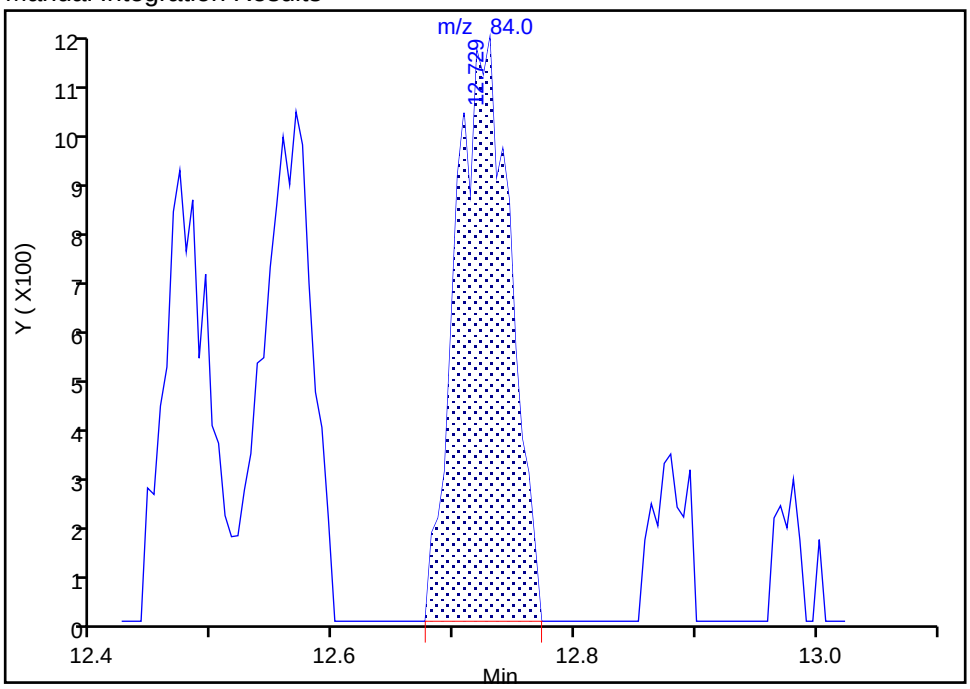
Processing Integration Results

RT: 12.73
Area: 1669
Amount: 0.063953
Amount Units: ppb v/v



Manual Integration Results

RT: 12.73
Area: 3735
Amount: 0.143119
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:27:27

Audit Action: Manually Integrated Audit Reason: Assign Peak

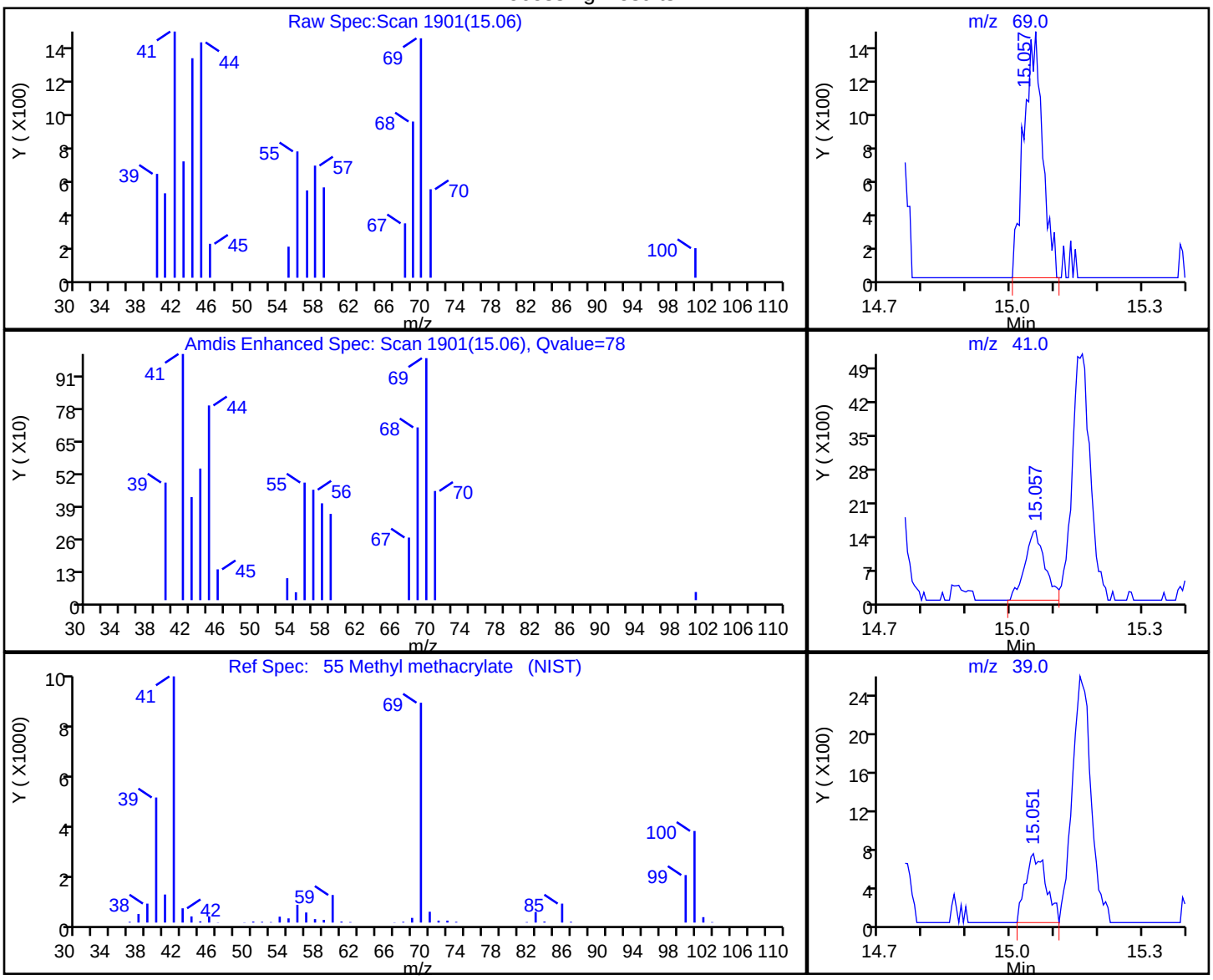
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

55 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
15.06	69.00	4194	0.200187
15.06	41.00	4627	
15.05	39.00	2380	

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

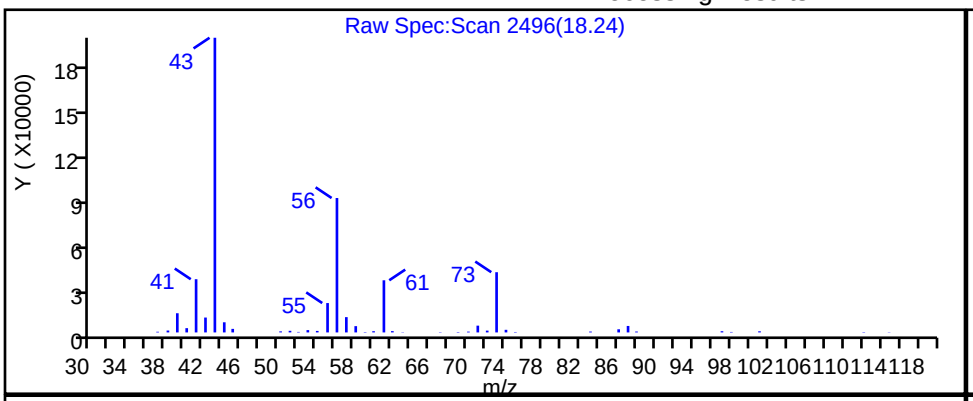
User Disabled Compound Report

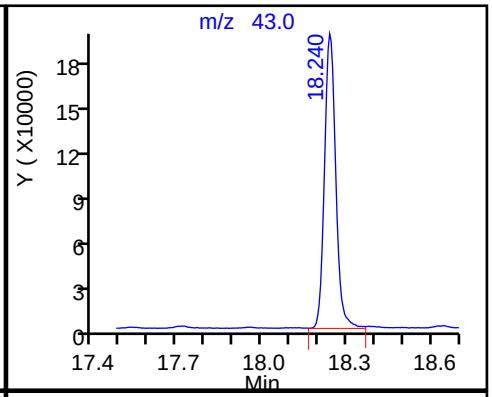
TestAmerica Burlington

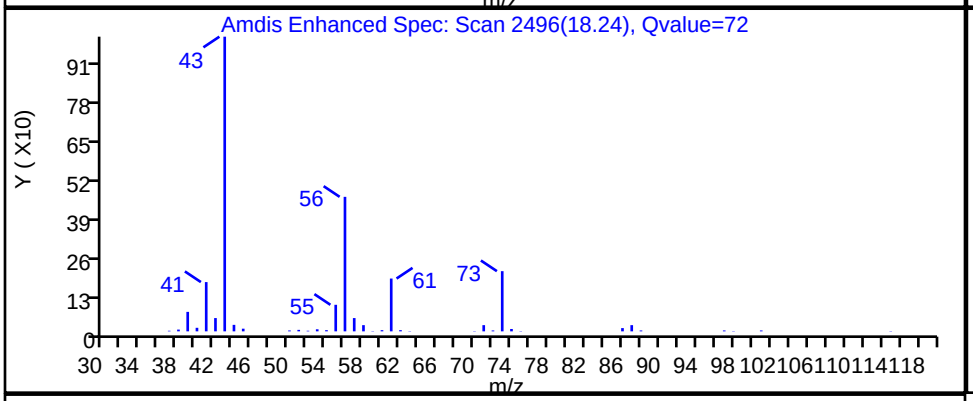
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

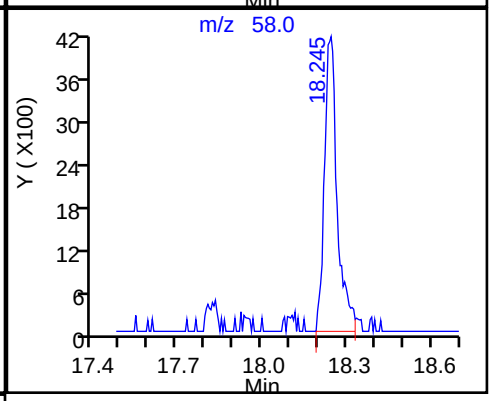
67 2-Hexanone, CAS: 591-78-6

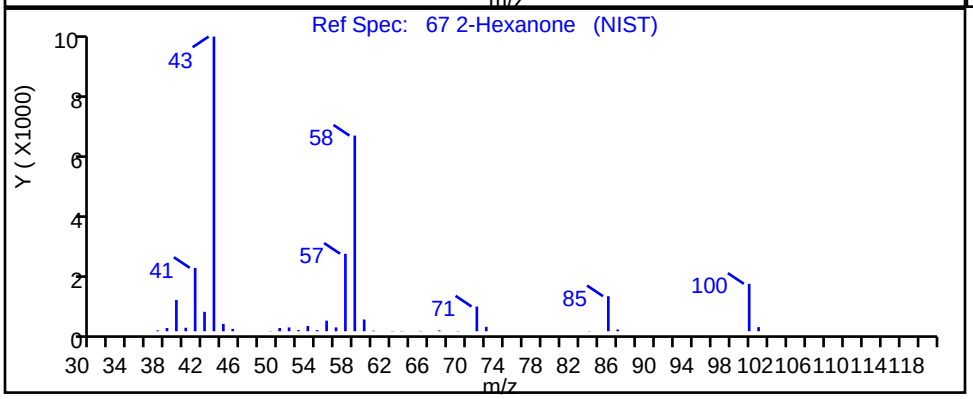
Processing Results











RT	Mass	Response	Amount
18.24	43.00	531462	13.864454
18.25	58.00	12986	

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

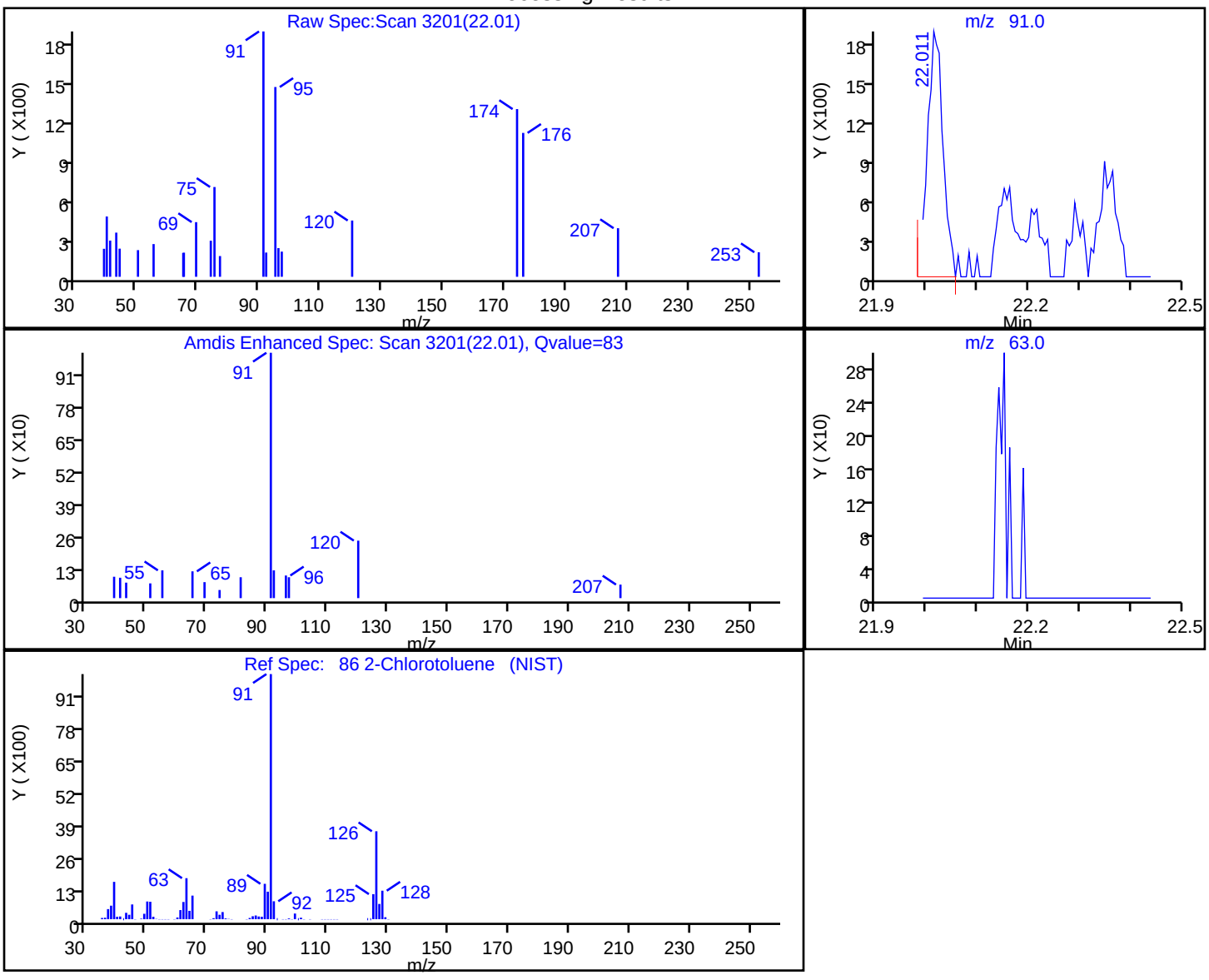
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

86 2-Chlorotoluene, CAS: 95-49-8

Processing Results



RT	Mass	Response	Amount
22.01	91.00	3891	0.038464
22.21	63.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

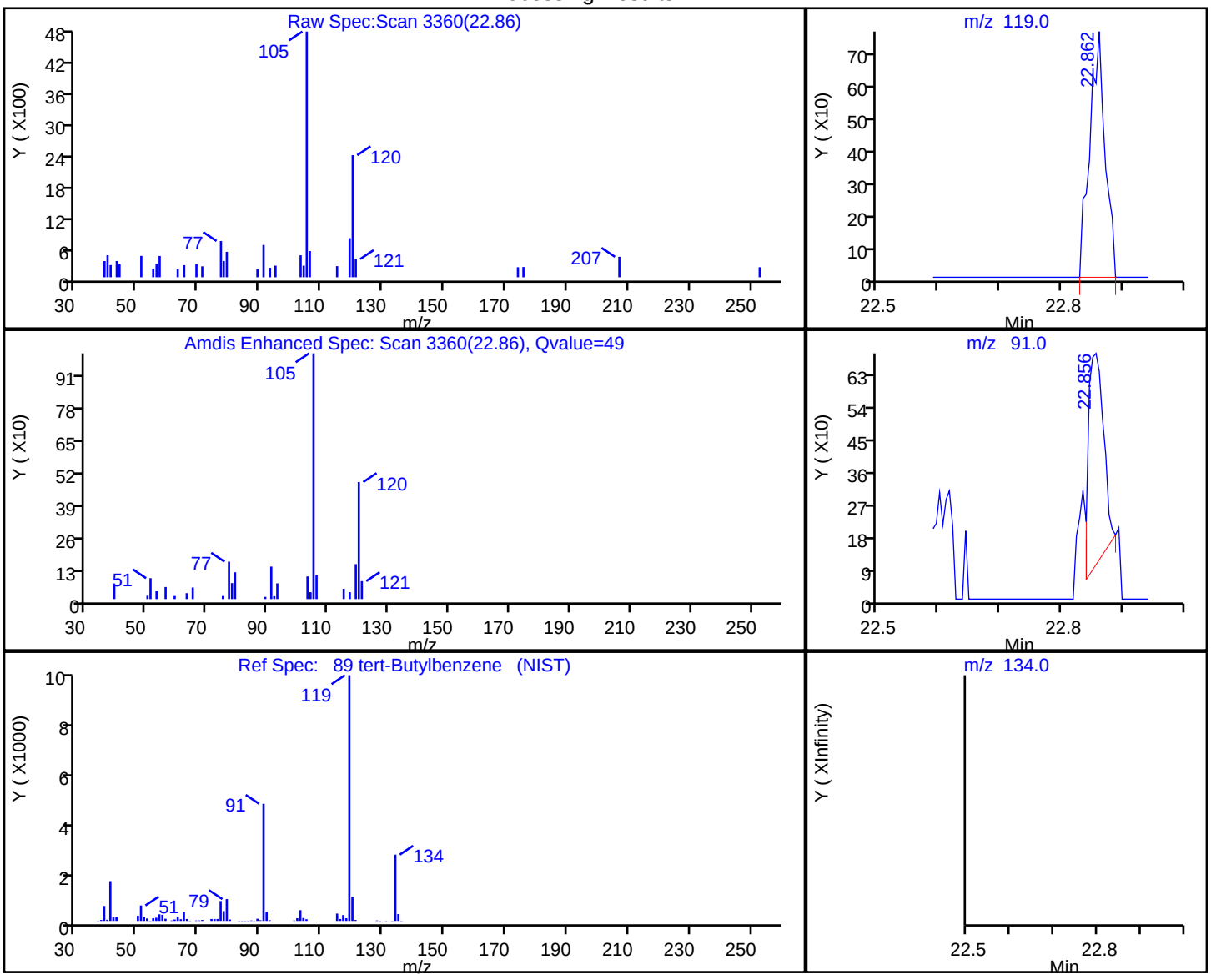
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

89 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
22.86	119.00	1332	0.012616
22.86	91.00	1007	
22.77	134.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

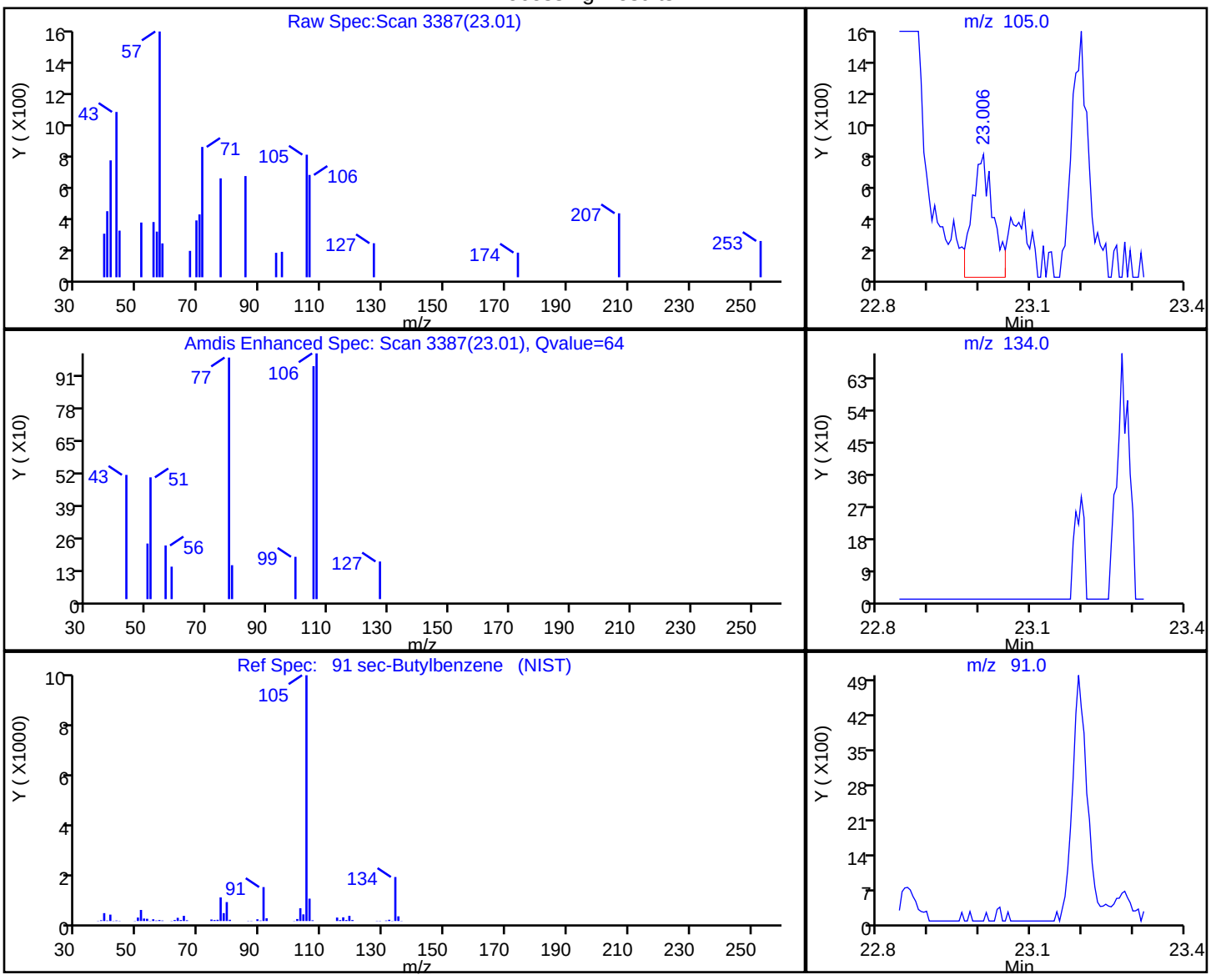
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-16.d				
Injection Date:	06-Apr-2018 01:26:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

91 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
23.01	105.00	2139	0.014021
23.08	134.00	0	
23.08	91.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) DL Lab Sample ID: 200-42918-7 DL

Matrix: Air Lab File ID: 29983-09.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 19:18

Soil Aliquot Vol: Dilution Factor: 107

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	54	U	54	21
75-45-6	Freon 22	86.47	54	U	54	28
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	21	U	21	7.3
74-87-3	Chloromethane	50.49	54	U	54	27
106-97-8	n-Butane	58.12	54	U	54	33
75-01-4	Vinyl chloride	62.50	21	U	21	4.4
106-99-0	1,3-Butadiene	54.09	21	U	21	7.0
74-83-9	Bromomethane	94.94	21	U	21	6.6
75-00-3	Chloroethane	64.52	54	U	54	22
593-60-2	Bromoethene(Vinyl Bromide)	106.96	21	U	21	6.0
75-69-4	Trichlorofluoromethane	137.37	21	U	21	6.6
76-13-1	Freon TF	187.38	21	U	21	3.3
75-35-4	1,1-Dichloroethene	96.94	21	U	21	3.6
67-64-1	Acetone	58.08	3000	D	540	280
67-63-0	Isopropyl alcohol	60.10	540	U	540	190
75-15-0	Carbon disulfide	76.14	54	U	54	13
107-05-1	3-Chloropropene	76.53	54	U	54	29
75-09-2	Methylene Chloride	84.93	54	U	54	21
75-65-0	tert-Butyl alcohol	74.12	540	U	540	160
1634-04-4	Methyl tert-butyl ether	88.15	21	U	21	6.5
156-60-5	trans-1,2-Dichloroethene	96.94	21	U	21	7.9
110-54-3	n-Hexane	86.17	21	U	21	17
75-34-3	1,1-Dichloroethane	98.96	21	U	21	2.8
78-93-3	Methyl Ethyl Ketone	72.11	54	U	54	21
156-59-2	cis-1,2-Dichloroethene	96.94	21	U	21	4.0
540-59-0	1,2-Dichloroethene, Total	96.94	43	U	43	12
67-66-3	Chloroform	119.38	21	U	21	5.6
109-99-9	Tetrahydrofuran	72.11	540	U	540	280
71-55-6	1,1,1-Trichloroethane	133.41	21	U	21	7.3
110-82-7	Cyclohexane	84.16	21	U	21	6.7
56-23-5	Carbon tetrachloride	153.81	4.3	U	4.3	2.6
540-84-1	2,2,4-Trimethylpentane	114.23	21	U	21	9.4
71-43-2	Benzene	78.11	21	U	21	7.6
107-06-2	1,2-Dichloroethane	98.96	21	U	21	6.7

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) DL | Lab Sample ID: 200-42918-7 DL

Matrix: Air | Lab File ID: 29983-09.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2018 19:18

Soil Aliquot Vol: | Dilution Factor: 107

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	21	U	21	15
79-01-6	Trichloroethene	131.39	4.3	U	4.3	3.2
80-62-6	Methyl methacrylate	100.12	54	U	54	24
78-87-5	1,2-Dichloropropane	112.99	21	U	21	13
123-91-1	1,4-Dioxane	88.11	540	U	540	140
75-27-4	Bromodichloromethane	163.83	21	U	21	10
10061-01-5	cis-1,3-Dichloropropene	110.97	21	U	21	10
108-10-1	methyl isobutyl ketone	100.16	54	U	54	39
108-88-3	Toluene	92.14	21	U	21	7.4
10061-02-6	trans-1,3-Dichloropropene	110.97	21	U	21	13
79-00-5	1,1,2-Trichloroethane	133.41	21	U	21	8.3
127-18-4	Tetrachloroethene	165.83	4.3	U	4.3	3.1
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	54	U	54	45
124-48-1	Dibromochloromethane	208.29	21	U	21	7.6
106-93-4	1,2-Dibromoethane	187.87	21	U	21	7.4
108-90-7	Chlorobenzene	112.56	21	U	21	4.3
100-41-4	Ethylbenzene	106.17	21	U	21	7.8
179601-23-1	m,p-Xylene	106.17	54	U	54	7.5
95-47-6	Xylene, o-	106.17	21	U	21	7.6
1330-20-7	Xylene (total)	106.17	75	U	75	15
100-42-5	Styrene	104.15	21	U	21	9.2
75-25-2	Bromoform	252.75	21	U	21	9.2
98-82-8	Cumene	120.19	21	U	21	6.3
79-34-5	1,1,2,2-Tetrachloroethane	167.85	21	U	21	8.1
103-65-1	n-Propylbenzene	120.19	21	U	21	7.4
622-96-8	4-Ethyltoluene	120.20	21	U	21	7.4
108-67-8	1,3,5-Trimethylbenzene	120.20	21	U	21	6.2
95-49-8	2-Chlorotoluene	126.59	21	U	21	7.6
98-06-6	tert-Butylbenzene	134.22	21	U	21	6.2
95-63-6	1,2,4-Trimethylbenzene	120.20	21	U	21	8.6
135-98-8	sec-Butylbenzene	134.22	21	U	21	7.1
99-87-6	4-Isopropyltoluene	134.22	21	U	21	8.0
541-73-1	1,3-Dichlorobenzene	147.00	21	U	21	8.8
106-46-7	1,4-Dichlorobenzene	147.00	21	U	21	7.0

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) DL Lab Sample ID: 200-42918-7 DL

Matrix: Air Lab File ID: 29983-09.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 19:18

Soil Aliquot Vol: Dilution Factor: 107

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*21*	*U*	*21*	*13*
104-51-8	*n-Butylbenzene*	*134.22*	*21*	*U*	*21*	*8.6*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*21*	*U*	*21*	*7.6*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*54*	*U*	*54*	*26*
87-68-3	*Hexachlorobutadiene*	*260.76*	*21*	*U*	*21*	*8.8*
91-20-3	*Naphthalene*	*128.17*	*54*	*U*	*54*	*33*

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) DL | Lab Sample ID: 200-42918-7 DL

Matrix: Air | Lab File ID: 29983-09.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2018 19:18

Soil Aliquot Vol: | Dilution Factor: 107

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	260	U	260	110
75-45-6	Freon 22	86.47	190	U	190	98
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	150	U	150	51
74-87-3	Chloromethane	50.49	110	U	110	55
106-97-8	n-Butane	58.12	130	U	130	79
75-01-4	Vinyl chloride	62.50	55	U	55	11
106-99-0	1,3-Butadiene	54.09	47	U	47	15
74-83-9	Bromomethane	94.94	83	U	83	26
75-00-3	Chloroethane	64.52	140	U	140	59
593-60-2	Bromoethene(Vinyl Bromide)	106.96	94	U	94	26
75-69-4	Trichlorofluoromethane	137.37	120	U	120	37
76-13-1	Freon TF	187.38	160	U	160	25
75-35-4	1,1-Dichloroethene	96.94	85	U	85	14
67-64-1	Acetone	58.08	7200	D	1300	660
67-63-0	Isopropyl alcohol	60.10	1300	U	1300	470
75-15-0	Carbon disulfide	76.14	170	U	170	40
107-05-1	3-Chloropropene	76.53	170	U	170	90
75-09-2	Methylene Chloride	84.93	190	U	190	74
75-65-0	tert-Butyl alcohol	74.12	1600	U	1600	490
1634-04-4	Methyl tert-butyl ether	88.15	77	U	77	24
156-60-5	trans-1,2-Dichloroethene	96.94	85	U	85	31
110-54-3	n-Hexane	86.17	75	U	75	60
75-34-3	1,1-Dichloroethane	98.96	87	U	87	11
78-93-3	Methyl Ethyl Ketone	72.11	160	U	160	63
156-59-2	cis-1,2-Dichloroethene	96.94	85	U	85	16
540-59-0	1,2-Dichloroethene, Total	96.94	170	U	170	47
67-66-3	Chloroform	119.38	100	U	100	27
109-99-9	Tetrahydrofuran	72.11	1600	U	1600	820
71-55-6	1,1,1-Trichloroethane	133.41	120	U	120	40
110-82-7	Cyclohexane	84.16	74	U	74	23
56-23-5	Carbon tetrachloride	153.81	27	U	27	16
540-84-1	2,2,4-Trimethylpentane	114.23	100	U	100	44
71-43-2	Benzene	78.11	68	U	68	24
107-06-2	1,2-Dichloroethane	98.96	87	U	87	27

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) DL | Lab Sample ID: 200-42918-7 DL

Matrix: Air | Lab File ID: 29983-09.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2018 19:18

Soil Aliquot Vol: | Dilution Factor: 107

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	88	U	88	61
79-01-6	Trichloroethene	131.39	23	U	23	17
80-62-6	Methyl methacrylate	100.12	220	U	220	96
78-87-5	1,2-Dichloropropane	112.99	99	U	99	59
123-91-1	1,4-Dioxane	88.11	1900	U	1900	500
75-27-4	Bromodichloromethane	163.83	140	U	140	67
10061-01-5	cis-1,3-Dichloropropene	110.97	97	U	97	48
108-10-1	methyl isobutyl ketone	100.16	220	U	220	160
108-88-3	Toluene	92.14	81	U	81	28
10061-02-6	trans-1,3-Dichloropropene	110.97	97	U	97	58
79-00-5	1,1,2-Trichloroethane	133.41	120	U	120	46
127-18-4	Tetrachloroethene	165.83	29	U	29	21
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	220	U	220	180
124-48-1	Dibromochloromethane	208.29	180	U	180	65
106-93-4	1,2-Dibromoethane	187.87	160	U	160	57
108-90-7	Chlorobenzene	112.56	99	U	99	20
100-41-4	Ethylbenzene	106.17	93	U	93	34
179601-23-1	m,p-Xylene	106.17	230	U	230	33
95-47-6	Xylene, o-	106.17	93	U	93	33
1330-20-7	Xylene (total)	106.17	330	U	330	66
100-42-5	Styrene	104.15	91	U	91	39
75-25-2	Bromoform	252.75	220	U	220	95
98-82-8	Cumene	120.19	110	U	110	31
79-34-5	1,1,2,2-Tetrachloroethane	167.85	150	U	150	56
103-65-1	n-Propylbenzene	120.19	110	U	110	36
622-96-8	4-Ethyltoluene	120.20	110	U	110	36
108-67-8	1,3,5-Trimethylbenzene	120.20	110	U	110	31
95-49-8	2-Chlorotoluene	126.59	110	U	110	39
98-06-6	tert-Butylbenzene	134.22	120	U	120	34
95-63-6	1,2,4-Trimethylbenzene	120.20	110	U	110	42
135-98-8	sec-Butylbenzene	134.22	120	U	120	39
99-87-6	4-Isopropyltoluene	134.22	120	U	120	44
541-73-1	1,3-Dichlorobenzene	147.00	130	U	130	53
106-46-7	1,4-Dichlorobenzene	147.00	130	U	130	42

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-105 (AS) DL Lab Sample ID: 200-42918-7 DL

Matrix: Air Lab File ID: 29983-09.d

Analysis Method: TO-15 Date Collected: 03/28/2018 17:50

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 19:18

Soil Aliquot Vol: Dilution Factor: 107

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*110*	*U*	*110*	*66*
104-51-8	*n-Butylbenzene*	*134.22*	*120*	*U*	*120*	*47*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*130*	*U*	*130*	*46*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*400*	*U*	*400*	*190*
87-68-3	*Hexachlorobutadiene*	*260.76*	*230*	*U*	*230*	*94*
91-20-3	*Naphthalene*	*128.17*	*280*	*U*	*280*	*170*

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d
Lims ID: 200-42918-A-7
Client ID: GC-IA-105 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 19:18:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 107.0000
Sample Info: 200-0029983-009
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 18:43:24 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 18:43:24

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85		5.149				ND	
	3 Chlorodifluoromethane	51		5.235				ND	U
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
	5 Chloromethane	50		5.748				ND	U
	6 Butane	43	6.005	6.005	-0.021	80	5294	0.1476	M
	7 Vinyl chloride	62		6.080				ND	
	8 Butadiene	54		6.176				ND	
	9 Bromomethane	94		6.979				ND	
	11 Chloroethane	64		7.225				ND	
	13 Vinyl bromide	106		7.631				ND	
	14 Trichlorofluoromethane	101		7.728				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	8.963	9.022	-0.038	97	710839	28.2	
	23 Carbon disulfide	76		9.193				ND	
	24 Isopropyl alcohol	45	9.199	9.204	-0.005	98	10188	0.3921	
	25 3-Chloro-1-propene	41		9.493				ND	
	27 Methylene Chloride	49	9.734	9.734	-0.026	24	1045	0.0629	M
	28 2-Methyl-2-propanol	59		9.889				ND	
	29 Methyl tert-butyl ether	73		10.092				ND	
	30 trans-1,2-Dichloroethene	61		10.156				ND	
S	31 1,2-Dichloroethene, Total	61		10.200				ND	
	33 Hexane	57		10.483				ND	
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.949				ND	
	37 2-Butanone (MEK)	72		11.965				ND	
	39 Tetrahydrofuran	42		12.371				ND	
*	40 Chlorobromomethane	128	12.355	12.377	-0.021	78	125885	10.0	
	41 Chloroform	83		12.467				ND	
	42 Cyclohexane	84		12.724				ND	
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117		12.965				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Isooctane	57		13.318				ND	
	46 Benzene	78		13.382				ND	
	47 1,2-Dichloroethane	62		13.532				ND	
	48 n-Heptane	43		13.634				ND	MU
*	49 1,4-Difluorobenzene	114	14.056	14.078	-0.022	94	639715	10.0	
	51 Trichloroethene	95		14.500				ND	
	53 1,2-Dichloropropane	63		14.998				ND	
	55 Methyl methacrylate	69		15.078				ND	
	56 1,4-Dioxane	88		15.164				ND	
	58 Dichlorobromomethane	83		15.458				ND	
	59 cis-1,3-Dichloropropene	75		16.282				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	
	63 Toluene	92	16.817	16.817	-0.005	18	1001	0.0259	M
	64 trans-1,3-Dichloropropene	75		17.352				ND	
	65 1,1,2-Trichloroethane	83		17.699				ND	
	66 Tetrachloroethene	166		17.817				ND	
	67 2-Hexanone	43		18.090				ND	
	68 Chlorodibromomethane	129		18.427				ND	
	69 Ethylene Dibromide	107		18.700				ND	
*	71 Chlorobenzene-d5	117	19.534	19.540	-0.006	85	540003	10.0	
	72 Chlorobenzene	112		19.599				ND	
	73 Ethylbenzene	91		19.727				ND	
	75 m-Xylene & p-Xylene	106		19.962				ND	MU
S	76 Xylenes, Total	106		20.100				ND	
	77 o-Xylene	106		20.738				ND	
	78 Styrene	104		20.781				ND	
	79 Bromoform	173		21.171				ND	
	80 Isopropylbenzene	105		21.343				ND	
	81 1,1,2,2-Tetrachloroethane	83		21.942				ND	
	82 N-Propylbenzene	91		22.011				ND	
	85 4-Ethyltoluene	105		22.193				ND	
	86 2-Chlorotoluene	91		22.209				ND	
	87 1,3,5-Trimethylbenzene	105		22.290				ND	
	89 tert-Butylbenzene	119		22.766				ND	
	90 1,2,4-Trimethylbenzene	105		22.857				ND	
	91 sec-Butylbenzene	105		23.081				ND	
	92 4-Isopropyltoluene	119		23.279				ND	
	93 1,3-Dichlorobenzene	146		23.327				ND	
	94 1,4-Dichlorobenzene	146		23.466				ND	
	95 Benzyl chloride	91		23.670				ND	
	96 n-Butylbenzene	91		23.878				ND	
	98 1,2-Dichlorobenzene	146		24.028				ND	
	100 1,2,4-Trichlorobenzene	180		26.703				ND	
	101 Hexachlorobutadiene	225		26.896				ND	
	102 Naphthalene	128		27.238				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15WISs_00004	Amount Added:	20.00	Units: mL	Run Reagent

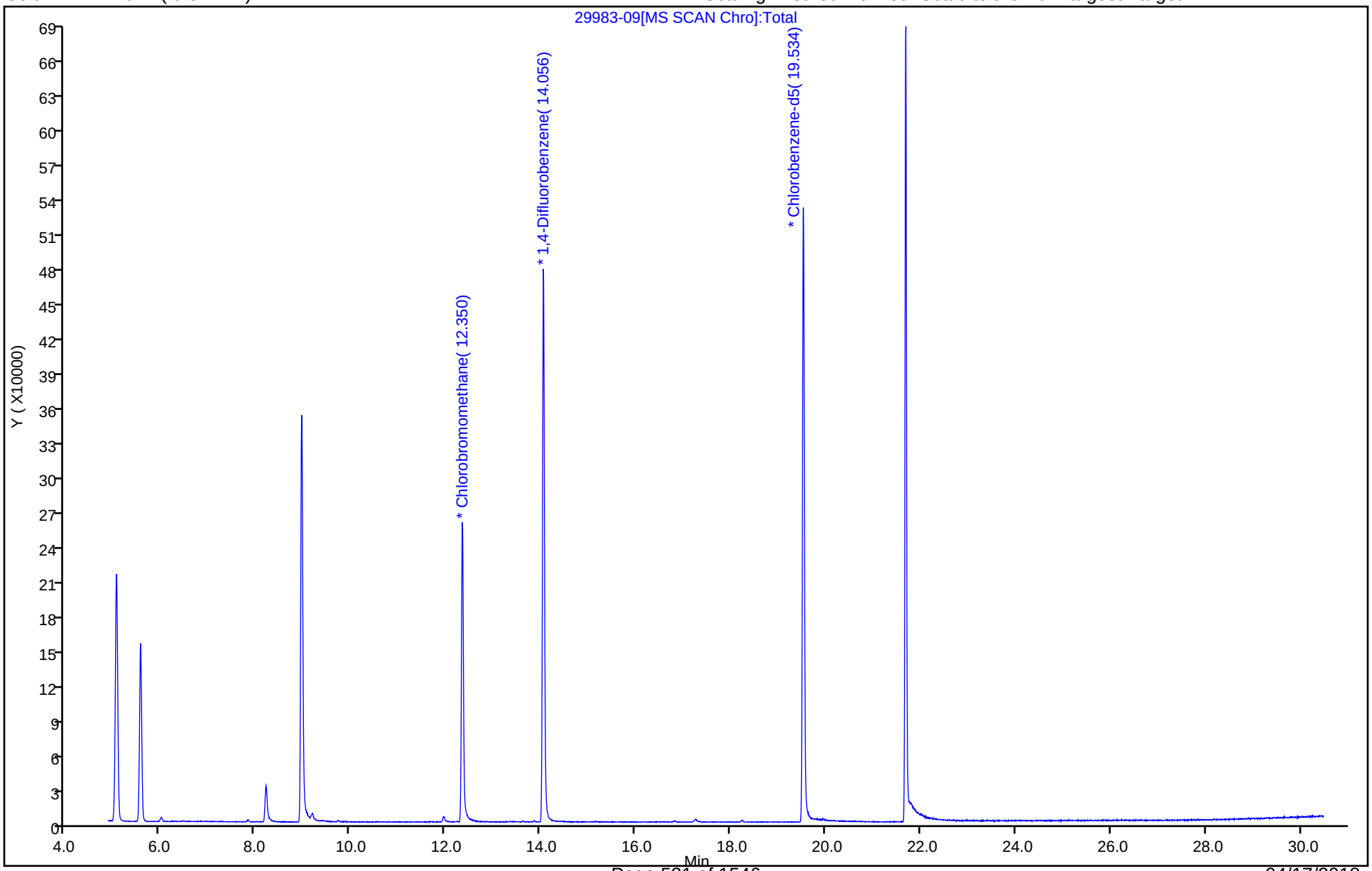
Report Date: 09-Apr-2018 18:43:24 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d

Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7	Worklist Smp#:	9
Client ID:	GC-IA-105 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	107.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

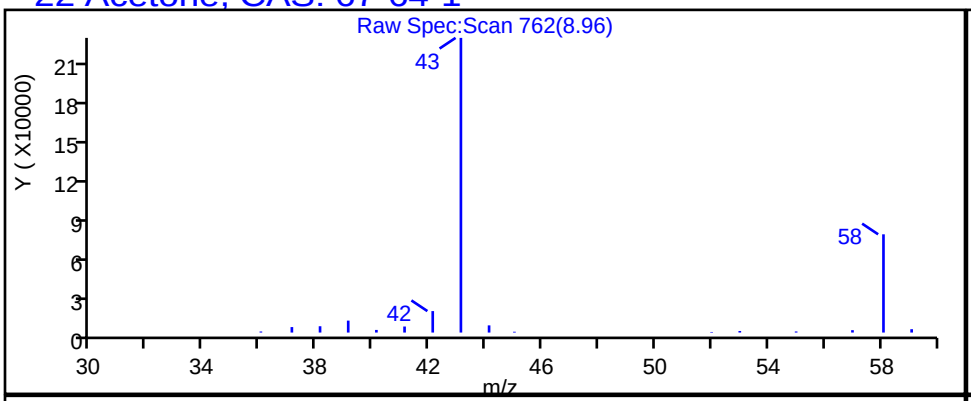
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

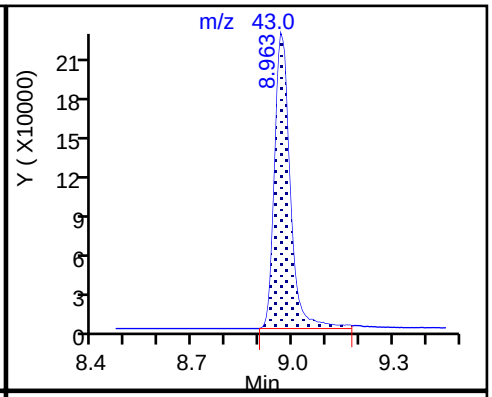


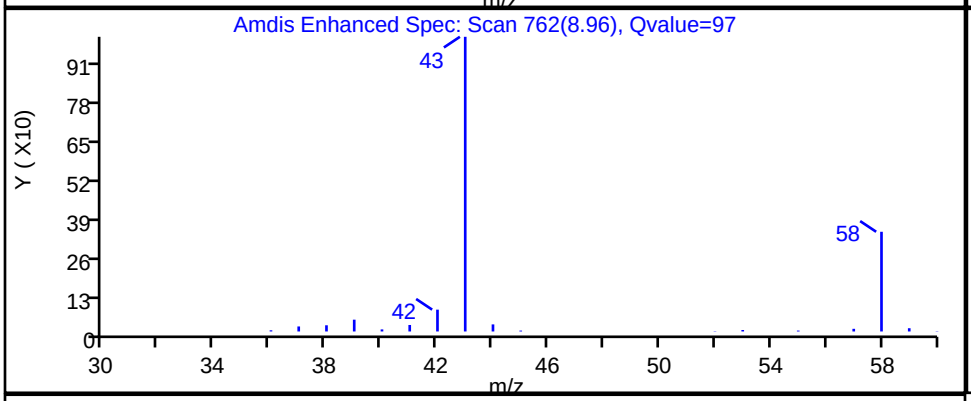
TestAmerica Burlington

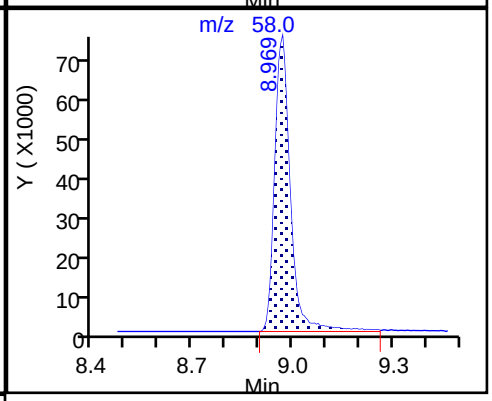
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d				
Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	107.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

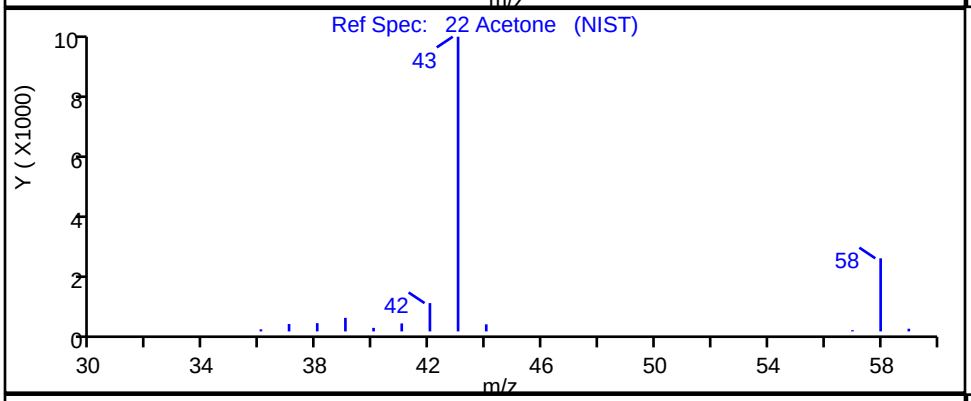
22 Acetone, CAS: 67-64-1

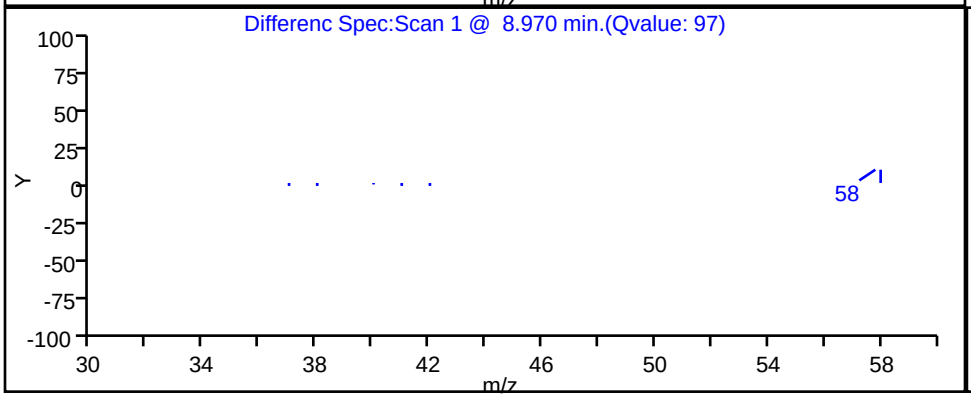


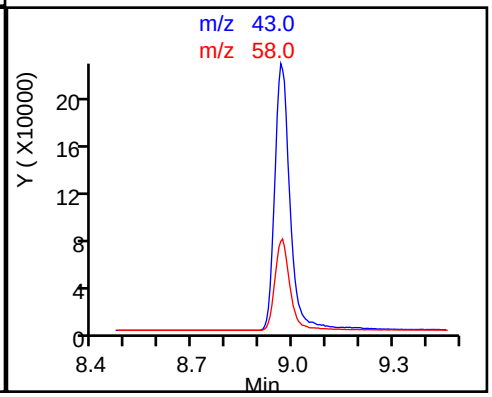












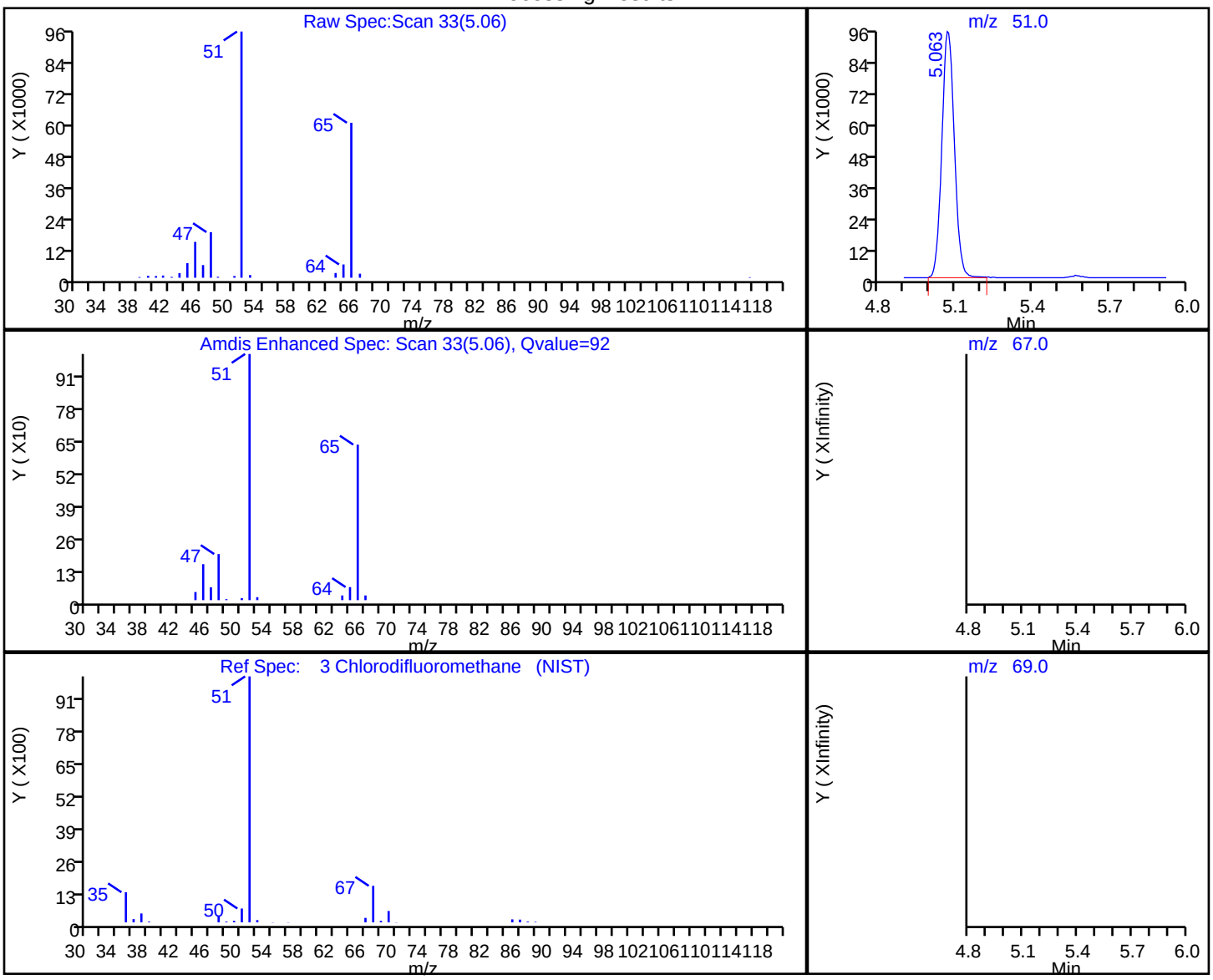
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d				
Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	107.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
5.06	51.00	327254	9.066149
5.23	67.00	0	
5.23	69.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:43:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

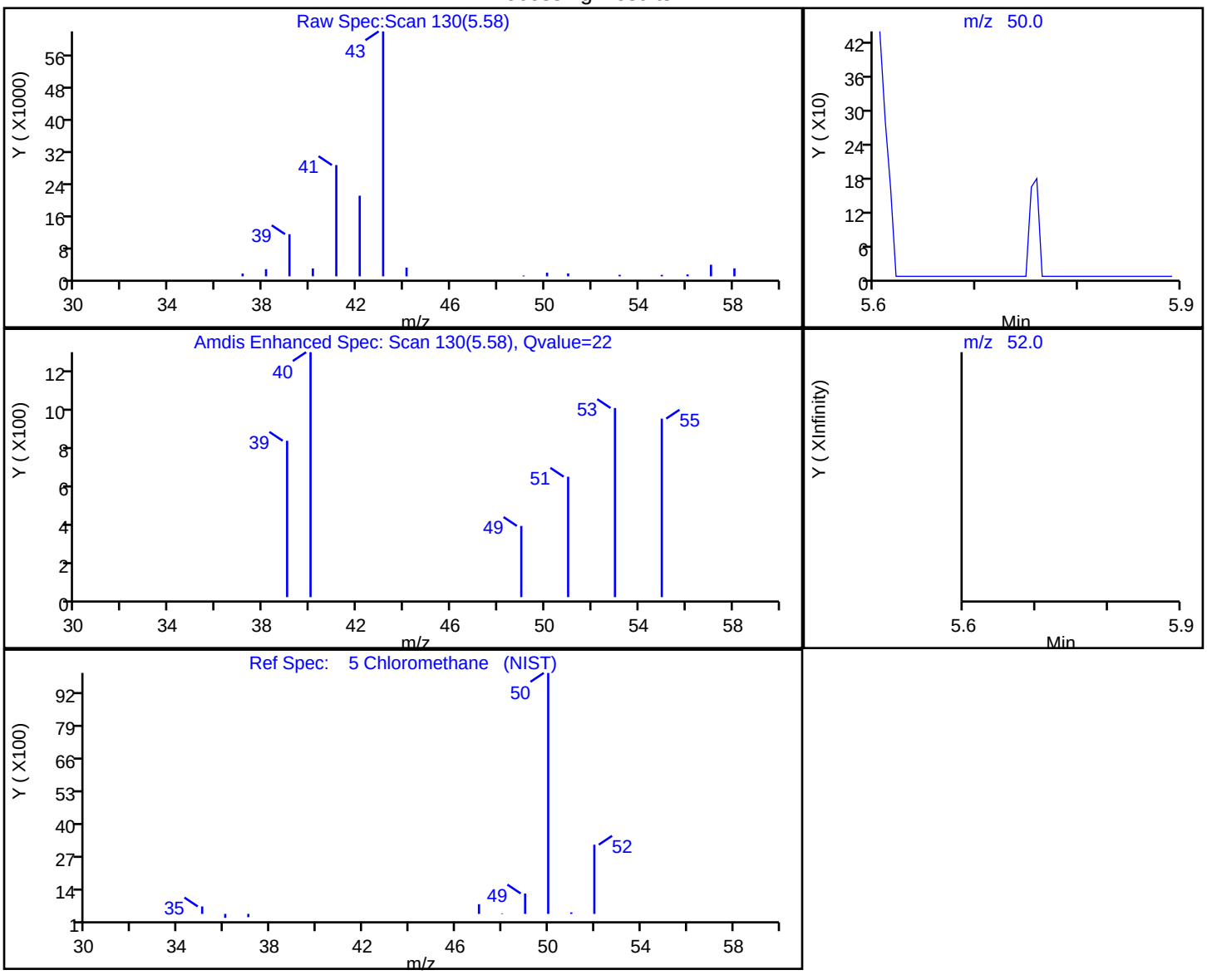
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d				
Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	107.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
5.58	50.00	1647	0.075956
5.75	52.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:43:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

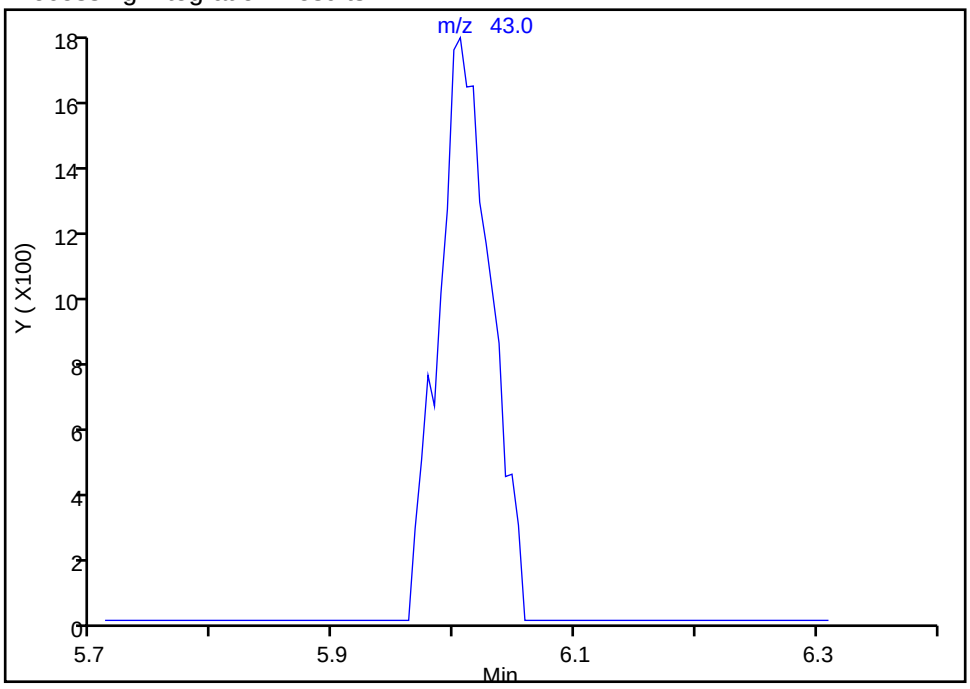
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d				
Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	107.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

Signal: 1

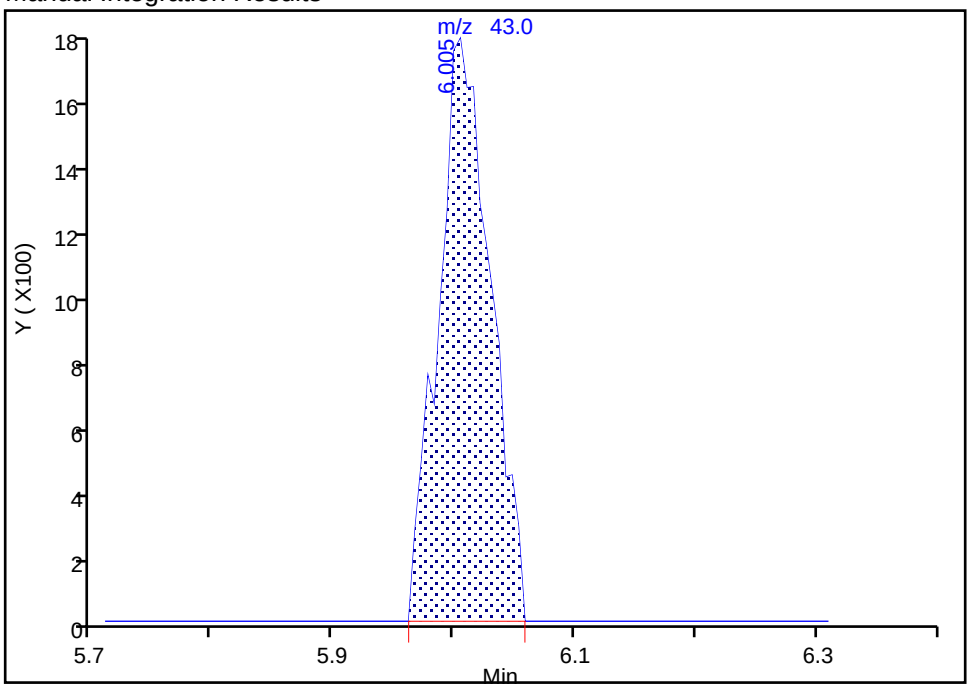
Not Detected
Expected RT: 6.03

Processing Integration Results



Manual Integration Results

RT: 6.01
Area: 5294
Amount: 0.147622
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:41:03
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

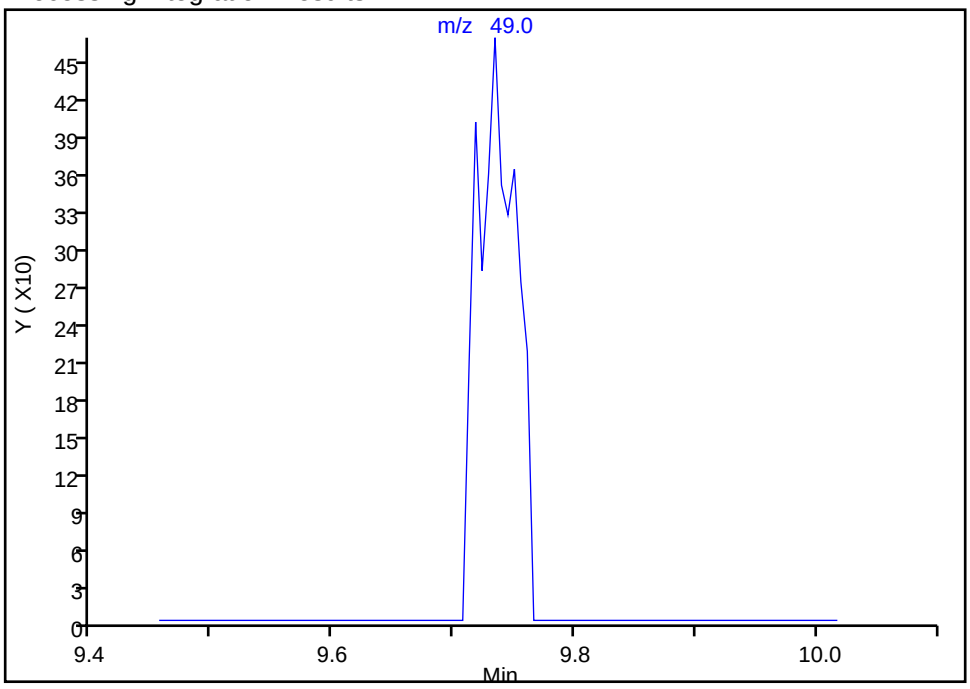
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d				
Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	107.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

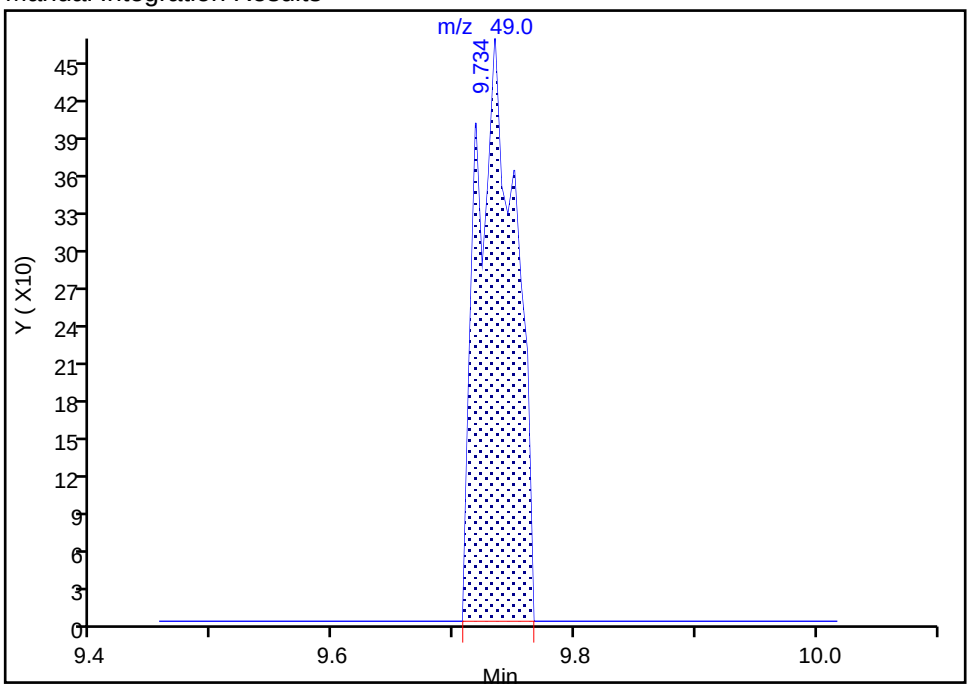
Not Detected
Expected RT: 9.76

Processing Integration Results



Manual Integration Results

RT: 9.73
Area: 1045
Amount: 0.062930
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:41:30
Audit Action: Manually Integrated Audit Reason: Assign Peak

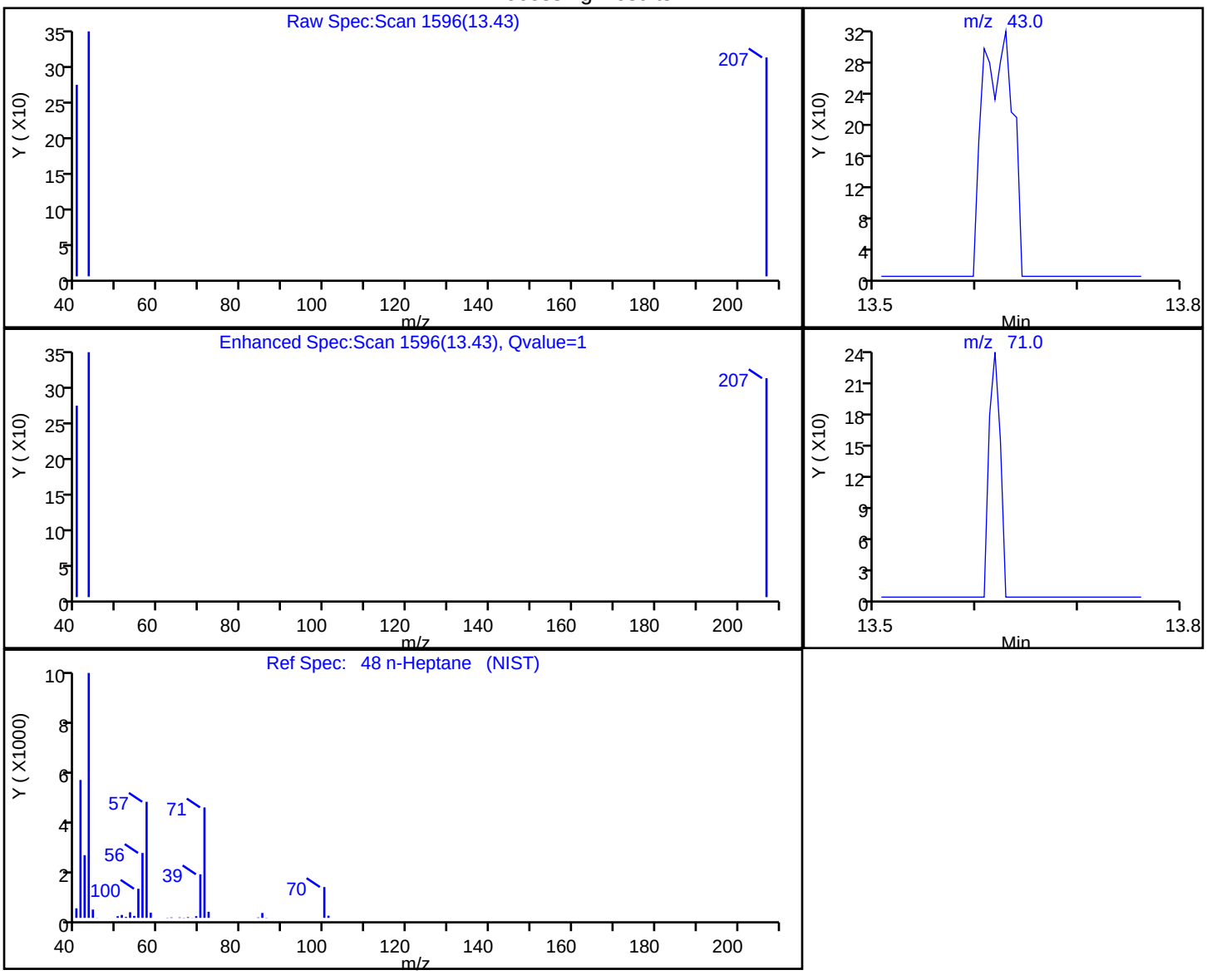
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d				
Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	107.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 n-Heptane, CAS: 142-82-5

Processing Results



RT	Mass	Response	Amount
13.43	43.00	691	0.024178
13.63	71.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:43:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

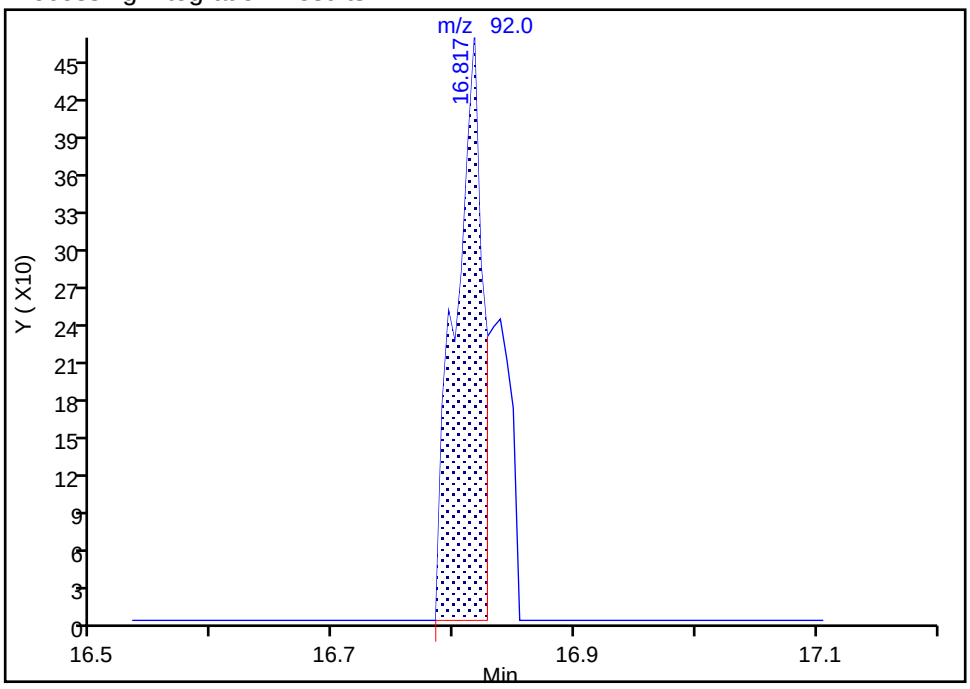
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d				
Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	107.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3

Signal: 1

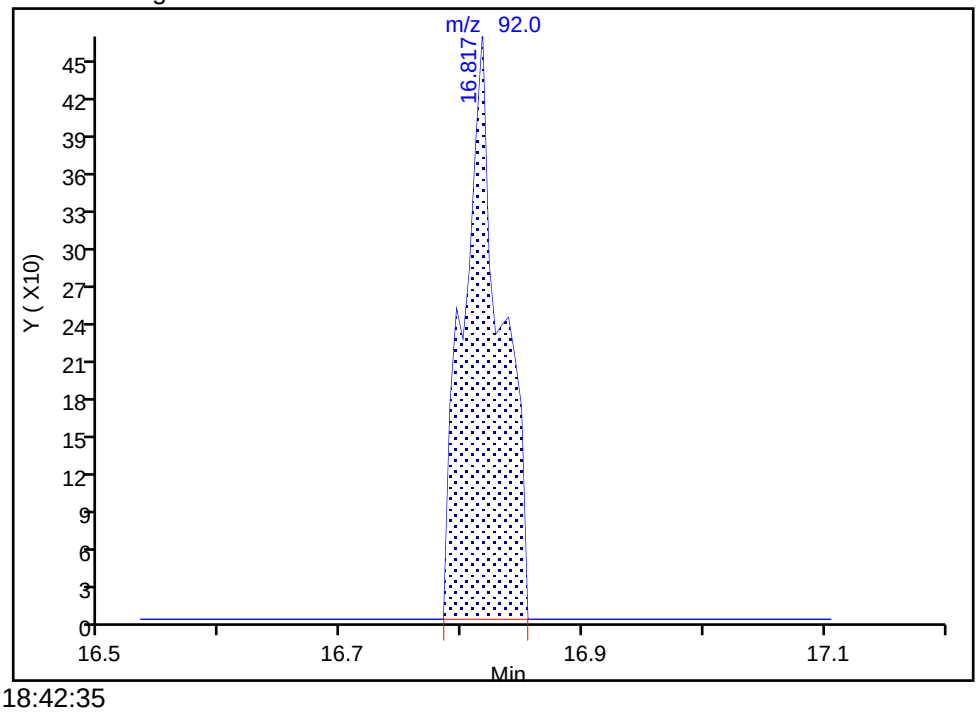
Processing Integration Results

RT: 16.82
Area: 728
Amount: 0.018863
Amount Units: ppb v/v



Manual Integration Results

RT: 16.82
Area: 1001
Amount: 0.025936
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:42:35

Audit Action: Manually Integrated Audit Reason: Assign Peak

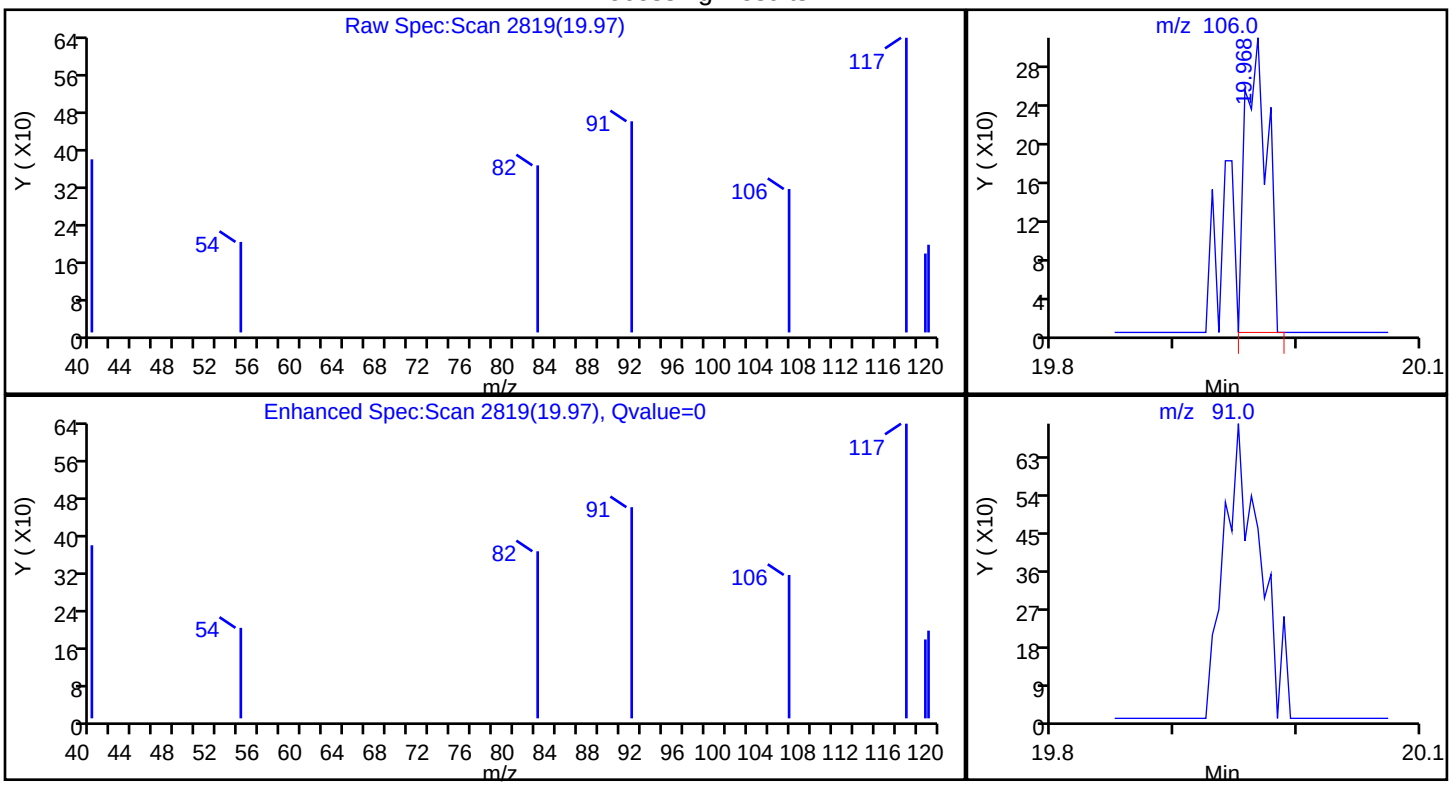
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-09.d				
Injection Date:	06-Apr-2018 19:18:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-7	Lab Sample ID:	200-42918-7		
Client ID:	GC-IA-105 (AS)				
Operator ID:	ert	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	107.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

75 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
19.97	106.00	381	0.010901
19.96	91.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:43:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-104 (AS) Lab Sample ID: 200-42918-8

Matrix: Air Lab File ID: 29983-14.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 23:30

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	1.0
75-45-6	Freon 22	86.47	2.5	U	2.5	1.3
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.0	U	1.0	0.34
74-87-3	Chloromethane	50.49	2.5	U	2.5	1.3
106-97-8	n-Butane	58.12	82		2.5	1.6
75-01-4	Vinyl chloride	62.50	1.0	U	1.0	0.21
106-99-0	1,3-Butadiene	54.09	1.0	U	1.0	0.33
74-83-9	Bromomethane	94.94	1.0	U	1.0	0.31
75-00-3	Chloroethane	64.52	2.5	U	2.5	1.1
593-60-2	Bromoethene(Vinyl Bromide)	106.96	1.0	U	1.0	0.28
75-69-4	Trichlorofluoromethane	137.37	1.0	U	1.0	0.31
76-13-1	Freon TF	187.38	1.0	U	1.0	0.16
75-35-4	1,1-Dichloroethene	96.94	1.0	U	1.0	0.17
67-64-1	Acetone	58.08	160		25	13
67-63-0	Isopropyl alcohol	60.10	14	J B	25	9.0
75-15-0	Carbon disulfide	76.14	1.6	J	2.5	0.60
107-05-1	3-Chloropropene	76.53	2.5	U	2.5	1.4
75-09-2	Methylene Chloride	84.93	2.5	U	2.5	1.0
75-65-0	tert-Butyl alcohol	74.12	110		25	7.5
1634-04-4	Methyl tert-butyl ether	88.15	1.0	U	1.0	0.31
156-60-5	trans-1,2-Dichloroethene	96.94	0.37	J	1.0	0.37
110-54-3	n-Hexane	86.17	2.1		1.0	0.80
75-34-3	1,1-Dichloroethane	98.96	1.0	U	1.0	0.13
78-93-3	Methyl Ethyl Ketone	72.11	5.9		2.5	1.0
156-59-2	cis-1,2-Dichloroethene	96.94	1.0	U	1.0	0.19
540-59-0	1,2-Dichloroethene, Total	96.94	2.0	U	2.0	0.56
67-66-3	Chloroform	119.38	0.44	J	1.0	0.26
109-99-9	Tetrahydrofuran	72.11	13	J	25	13
71-55-6	1,1,1-Trichloroethane	133.41	1.0	U	1.0	0.34
110-82-7	Cyclohexane	84.16	1.0	U	1.0	0.32
56-23-5	Carbon tetrachloride	153.81	0.20	U	0.20	0.12
540-84-1	2,2,4-Trimethylpentane	114.23	1.0	U	1.0	0.44
71-43-2	Benzene	78.11	0.46	J	1.0	0.36
107-06-2	1,2-Dichloroethane	98.96	1.0	U	1.0	0.32

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-104 (AS) Lab Sample ID: 200-42918-8

Matrix: Air Lab File ID: 29983-14.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 23:30

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	4.5		1.0	0.70
79-01-6	Trichloroethene	131.39	0.37		0.20	0.15
80-62-6	Methyl methacrylate	100.12	2.5	U	2.5	1.1
78-87-5	1,2-Dichloropropane	112.99	1.0	U	1.0	0.60
123-91-1	1,4-Dioxane	88.11	25	U	25	6.5
75-27-4	Bromodichloromethane	163.83	1.0	U	1.0	0.47
10061-01-5	cis-1,3-Dichloropropene	110.97	1.0	U	1.0	0.49
108-10-1	methyl isobutyl ketone	100.16	2.5	U	2.5	1.8
108-88-3	Toluene	92.14	14		1.0	0.35
10061-02-6	trans-1,3-Dichloropropene	110.97	1.0	U	1.0	0.60
79-00-5	1,1,2-Trichloroethane	133.41	3.2		1.0	0.39
127-18-4	Tetrachloroethene	165.83	15		0.20	0.15
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.5	U	2.5	2.1
124-48-1	Dibromochloromethane	208.29	1.0	U	1.0	0.36
106-93-4	1,2-Dibromoethane	187.87	1.0	U	1.0	0.35
108-90-7	Chlorobenzene	112.56	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	106.17	89		1.0	0.37
179601-23-1	m,p-Xylene	106.17	250		2.5	0.35
95-47-6	Xylene, o-	106.17	75		1.0	0.36
1330-20-7	Xylene (total)	106.17	330		3.5	0.71
100-42-5	Styrene	104.15	1.0	U	1.0	0.43
75-25-2	Bromoform	252.75	1.0	U	1.0	0.43
98-82-8	Cumene	120.19	0.79	J	1.0	0.30
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.0	U	1.0	0.38
103-65-1	n-Propylbenzene	120.19	1.0	U	1.0	0.35
622-96-8	4-Ethyltoluene	120.20	1.0	U	1.0	0.35
108-67-8	1,3,5-Trimethylbenzene	120.20	1.0	U	1.0	0.29
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.36
98-06-6	tert-Butylbenzene	134.22	1.0	U	1.0	0.29
95-63-6	1,2,4-Trimethylbenzene	120.20	1.0	U	1.0	0.40
135-98-8	sec-Butylbenzene	134.22	1.0	U	1.0	0.33
99-87-6	4-Isopropyltoluene	134.22	1.0	U	1.0	0.38
541-73-1	1,3-Dichlorobenzene	147.00	1.0	U	1.0	0.41
106-46-7	1,4-Dichlorobenzene	147.00	1.0	U	1.0	0.33

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-104 (AS) Lab Sample ID: 200-42918-8

Matrix: Air Lab File ID: 29983-14.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 23:30

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.60
104-51-8	n-Butylbenzene	134.22	1.0	U	1.0	0.40
95-50-1	1,2-Dichlorobenzene	147.00	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	181.45	2.5	U	2.5	1.2
87-68-3	Hexachlorobutadiene	260.76	1.0	U	1.0	0.41
91-20-3	Naphthalene	128.17	2.5	U	2.5	1.6

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-104 (AS) Lab Sample ID: 200-42918-8

Matrix: Air Lab File ID: 29983-14.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 23:30

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	12	U	12	4.9
75-45-6	Freon 22	86.47	8.8	U	8.8	4.6
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	7.0	U	7.0	2.4
74-87-3	Chloromethane	50.49	5.2	U	5.2	2.6
106-97-8	n-Butane	58.12	190		5.9	3.7
75-01-4	Vinyl chloride	62.50	2.6	U	2.6	0.52
106-99-0	1,3-Butadiene	54.09	2.2	U	2.2	0.72
74-83-9	Bromomethane	94.94	3.9	U	3.9	1.2
75-00-3	Chloroethane	64.52	6.6	U	6.6	2.8
593-60-2	Bromoethene(Vinyl Bromide)	106.96	4.4	U	4.4	1.2
75-69-4	Trichlorofluoromethane	137.37	5.6	U	5.6	1.7
76-13-1	Freon TF	187.38	7.7	U	7.7	1.2
75-35-4	1,1-Dichloroethene	96.94	4.0	U	4.0	0.67
67-64-1	Acetone	58.08	370		59	31
67-63-0	Isopropyl alcohol	60.10	36	J B	61	22
75-15-0	Carbon disulfide	76.14	5.1	J	7.8	1.9
107-05-1	3-Chloropropene	76.53	7.8	U	7.8	4.2
75-09-2	Methylene Chloride	84.93	8.7	U	8.7	3.5
75-65-0	tert-Butyl alcohol	74.12	320		76	23
1634-04-4	Methyl tert-butyl ether	88.15	3.6	U	3.6	1.1
156-60-5	trans-1,2-Dichloroethene	96.94	1.5	J	4.0	1.5
110-54-3	n-Hexane	86.17	7.4		3.5	2.8
75-34-3	1,1-Dichloroethane	98.96	4.0	U	4.0	0.53
78-93-3	Methyl Ethyl Ketone	72.11	17		7.4	2.9
156-59-2	cis-1,2-Dichloroethene	96.94	4.0	U	4.0	0.73
540-59-0	1,2-Dichloroethene, Total	96.94	7.9	U	7.9	2.2
67-66-3	Chloroform	119.38	2.2	J	4.9	1.3
109-99-9	Tetrahydrofuran	72.11	38	J	74	38
71-55-6	1,1,1-Trichloroethane	133.41	5.5	U	5.5	1.9
110-82-7	Cyclohexane	84.16	3.4	U	3.4	1.1
56-23-5	Carbon tetrachloride	153.81	1.3	U	1.3	0.75
540-84-1	2,2,4-Trimethylpentane	114.23	4.7	U	4.7	2.1
71-43-2	Benzene	78.11	1.5	J	3.2	1.1
107-06-2	1,2-Dichloroethane	98.96	4.0	U	4.0	1.3

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-104 (AS) Lab Sample ID: 200-42918-8

Matrix: Air Lab File ID: 29983-14.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 23:30

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	18		4.1	2.9
79-01-6	Trichloroethene	131.39	2.0		1.1	0.81
80-62-6	Methyl methacrylate	100.12	10	U	10	4.5
78-87-5	1,2-Dichloropropane	112.99	4.6	U	4.6	2.8
123-91-1	1,4-Dioxane	88.11	90	U	90	23
75-27-4	Bromodichloromethane	163.83	6.7	U	6.7	3.1
10061-01-5	cis-1,3-Dichloropropene	110.97	4.5	U	4.5	2.2
108-10-1	methyl isobutyl ketone	100.16	10	U	10	7.4
108-88-3	Toluene	92.14	52		3.8	1.3
10061-02-6	trans-1,3-Dichloropropene	110.97	4.5	U	4.5	2.7
79-00-5	1,1,2-Trichloroethane	133.41	17		5.5	2.1
127-18-4	Tetrachloroethene	165.83	100		1.4	0.98
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	10	U	10	8.6
124-48-1	Dibromochloromethane	208.29	8.5	U	8.5	3.0
106-93-4	1,2-Dibromoethane	187.87	7.7	U	7.7	2.7
108-90-7	Chlorobenzene	112.56	4.6	U	4.6	0.92
100-41-4	Ethylbenzene	106.17	390		4.3	1.6
179601-23-1	m,p-Xylene	106.17	1100		11	1.5
95-47-6	Xylene, o-	106.17	330		4.3	1.5
1330-20-7	Xylene (total)	106.17	1400		15	3.1
100-42-5	Styrene	104.15	4.3	U	4.3	1.8
75-25-2	Bromoform	252.75	10	U	10	4.4
98-82-8	Cumene	120.19	3.9	J	4.9	1.5
79-34-5	1,1,2,2-Tetrachloroethane	167.85	6.9	U	6.9	2.6
103-65-1	n-Propylbenzene	120.19	4.9	U	4.9	1.7
622-96-8	4-Ethyltoluene	120.20	4.9	U	4.9	1.7
108-67-8	1,3,5-Trimethylbenzene	120.20	4.9	U	4.9	1.4
95-49-8	2-Chlorotoluene	126.59	5.2	U	5.2	1.8
98-06-6	tert-Butylbenzene	134.22	5.5	U	5.5	1.6
95-63-6	1,2,4-Trimethylbenzene	120.20	4.9	U	4.9	2.0
135-98-8	sec-Butylbenzene	134.22	5.5	U	5.5	1.8
99-87-6	4-Isopropyltoluene	134.22	5.5	U	5.5	2.1
541-73-1	1,3-Dichlorobenzene	147.00	6.0	U	6.0	2.5
106-46-7	1,4-Dichlorobenzene	147.00	6.0	U	6.0	2.0

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-104 (AS) Lab Sample ID: 200-42918-8

Matrix: Air Lab File ID: 29983-14.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:00

Sample wt/vol: 40(mL) Date Analyzed: 04/06/2018 23:30

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	5.2	U	5.2	3.1
104-51-8	n-Butylbenzene	134.22	5.5	U	5.5	2.2
95-50-1	1,2-Dichlorobenzene	147.00	6.0	U	6.0	2.1
120-82-1	1,2,4-Trichlorobenzene	181.45	19	U	19	8.9
87-68-3	Hexachlorobutadiene	260.76	11	U	11	4.4
91-20-3	Naphthalene	128.17	13	U	13	8.1

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d
Lims ID: 200-42918-A-8
Client ID: GC-SV-104 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 23:30:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 5.0000
Sample Info: 200-0029983-014
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 20:29:26 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 19:13:02

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85	5.143	5.127	-0.006	97	8215	0.0971	
	3 Chlorodifluoromethane	51		5.235				ND	MU
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
	5 Chloromethane	50		5.748				ND	MU
	6 Butane	43	6.005	6.021	-0.021	99	760052	16.4	
	7 Vinyl chloride	62		6.080				ND	
	8 Butadiene	54		6.176				ND	U
	9 Bromomethane	94		6.979				ND	
	11 Chloroethane	64		7.225				ND	
	13 Vinyl bromide	106		7.631				ND	
	14 Trichlorofluoromethane	101	7.695	7.722	-0.033	40	3358	0.0490	M
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	MU
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	8.963	9.011	-0.038	97	1015189	31.2	
	23 Carbon disulfide	76	9.166	9.189	-0.027	99	18637	0.3249	
	24 Isopropyl alcohol	45	9.182	9.204	-0.022	100	97302	2.89	
	25 3-Chloro-1-propene	41		9.493				ND	
	27 Methylene Chloride	49	9.734	9.755	-0.026	91	3292	0.1531	
	28 2-Methyl-2-propanol	59	9.857	9.899	-0.032	94	1020388	21.3	
	29 Methyl tert-butyl ether	73	10.071	10.088	-0.021	3	829	0.0122	M
	30 trans-1,2-Dichloroethene	61	10.124	10.162	-0.032	95	2165	0.0734	
S	31 1,2-Dichloroethene, Total	61				0		0.0734	
	33 Hexane	57	10.450	10.478	-0.033	91	13641	0.4175	
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.949				ND	
	37 2-Butanone (MEK)	72	11.948	11.944	-0.017	99	13735	1.17	
	39 Tetrahydrofuran	42	12.350	12.398	-0.021	51	60214	2.60	
*	40 Chlorobromomethane	128	12.350	12.377	-0.026	85	162970	10.0	
	41 Chloroform	83	12.446	12.462	-0.021	45	4228	0.0881	M
	42 Cyclohexane	84	12.697	12.730	-0.027	78	1705	0.0512	M
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117	12.943	12.965	-0.022	27	576	0.0105	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Isooctane	57		13.318				ND	MU
	46 Benzene	78	13.355	13.366	-0.027	91	6892	0.0911	
	47 1,2-Dichloroethane	62		13.532				ND	U
	48 n-Heptane	43	13.612	13.634	-0.022	89	33882	0.8901	
*	49 1,4-Difluorobenzene	114	14.056	14.078	-0.022	94	852059	10.0	
	51 Trichloroethene	95	14.495	14.500	-0.005	94	2497	0.0735	
	53 1,2-Dichloropropane	63		14.998				ND	
	55 Methyl methacrylate	69		15.078				ND	MU
	56 1,4-Dioxane	88		15.164				ND	
	58 Dichlorobromomethane	83		15.458				ND	U
	59 cis-1,3-Dichloropropene	75		16.282				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	MU
	63 Toluene	92	16.811	16.822	-0.011	92	159648	2.78	
	64 trans-1,3-Dichloropropene	75		17.352				ND	
	65 1,1,2-Trichloroethane	83	17.715	17.715	0.016	51	17497	0.6327	M
	66 Tetrachloroethene	166	17.806	17.812	-0.011	97	180029	3.08	
	67 2-Hexanone	43		18.090				ND	U
	68 Chlorodibromomethane	129		18.427				ND	
	69 Ethylene Dibromide	107		18.700				ND	
*	71 Chlorobenzene-d5	117	19.534	19.540	-0.006	87	803561	10.0	
	72 Chlorobenzene	112		19.599				ND	U
	73 Ethylbenzene	91	19.716	19.732	-0.011	98	2353391	17.8	
	75 m-Xylene & p-Xylene	106	19.957	19.962	-0.005	0	2620081	50.4	
S	76 Xylenes, Total	106				0		65.4	
	77 o-Xylene	106	20.733	20.738	-0.006	99	786757	15.0	
	78 Styrene	104		20.781				ND	U
	79 Bromoform	173		21.171				ND	
	80 Isopropylbenzene	105	21.342	21.332	-0.001	44	24374	0.1581	M
	81 1,1,2,2-Tetrachloroethane	83		21.942				ND	U
	82 N-Propylbenzene	91		22.011				ND	MUa
	85 4-Ethyltoluene	105		22.193				ND	MUa
	86 2-Chlorotoluene	91		22.209				ND	MUa
	87 1,3,5-Trimethylbenzene	105		22.290				ND	MUa
	89 tert-Butylbenzene	119		22.766				ND	U
	90 1,2,4-Trimethylbenzene	105		22.857				ND	Ua
	91 sec-Butylbenzene	105		23.081				ND	U
	92 4-Isopropyltoluene	119		23.279				ND	U
	93 1,3-Dichlorobenzene	146		23.327				ND	
	94 1,4-Dichlorobenzene	146		23.466				ND	
	95 Benzyl chloride	91		23.670				ND	U
	96 n-Butylbenzene	91		23.878				ND	U
	98 1,2-Dichlorobenzene	146		24.028				ND	
	100 1,2,4-Trichlorobenzene	180		26.703				ND	
	101 Hexachlorobutadiene	225		26.896				ND	
	102 Naphthalene	128		27.238				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004	Amount Added:	20.00	Units: mL	Run Reagent

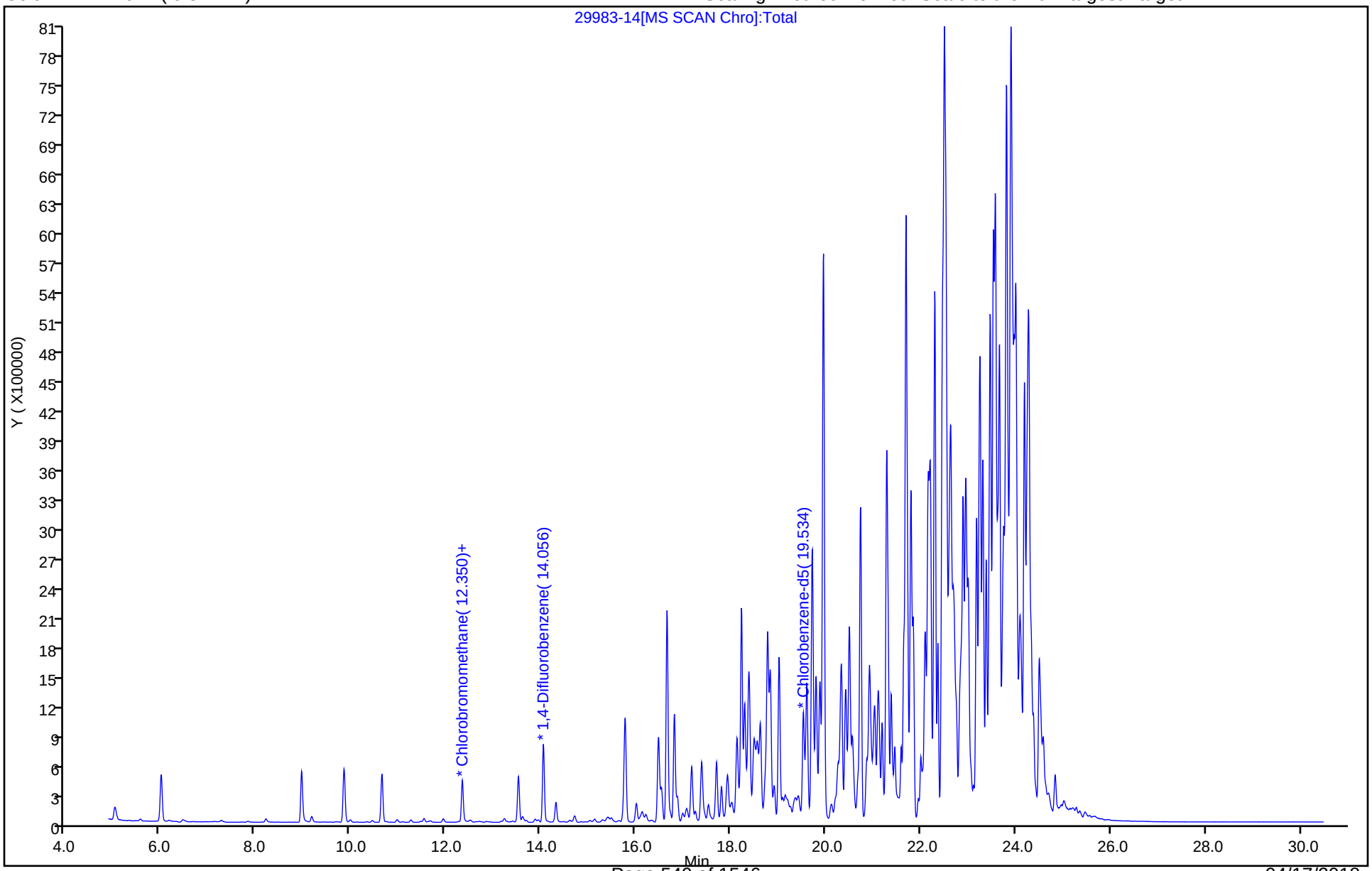
Report Date: 09-Apr-2018 20:29:27 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8	Worklist Smp#:	14
Client ID:	GC-SV-104 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	13
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

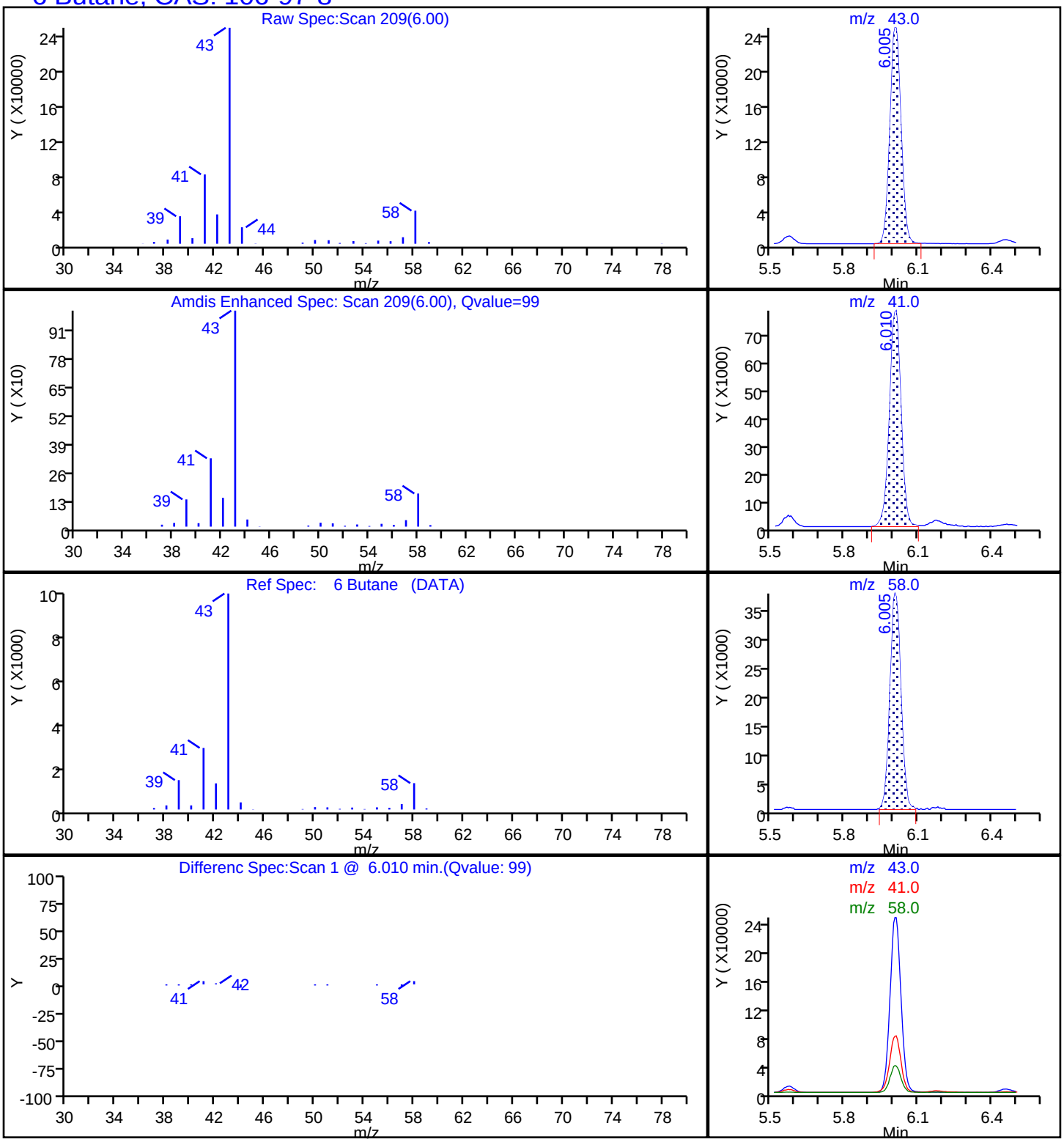
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8



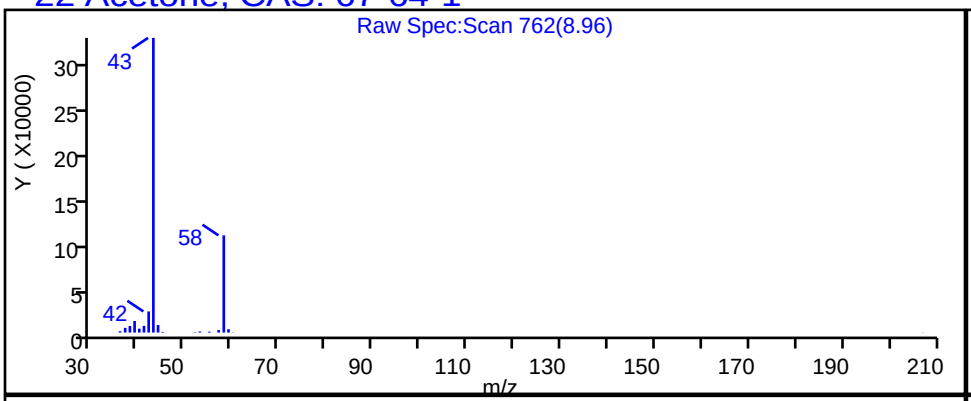
Report Date: 09-Apr-2018 20:29:27 Chrom Revision: 2.2 13-Mar-2018 08:45:20

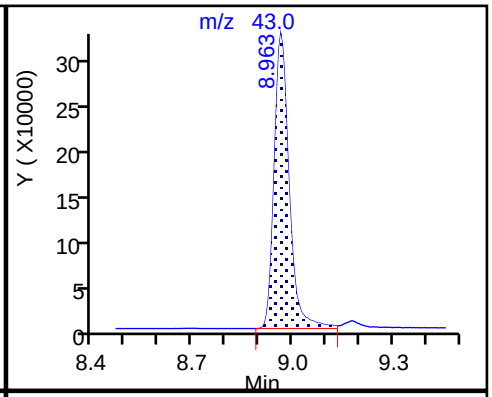
TestAmerica Burlington

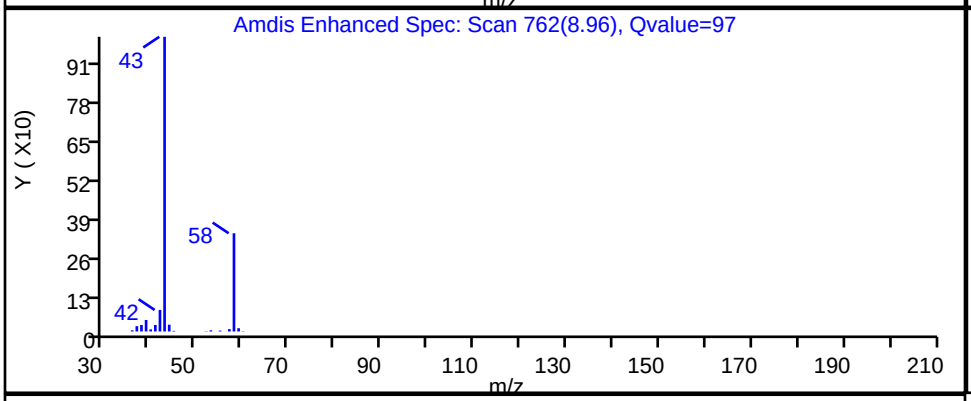
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

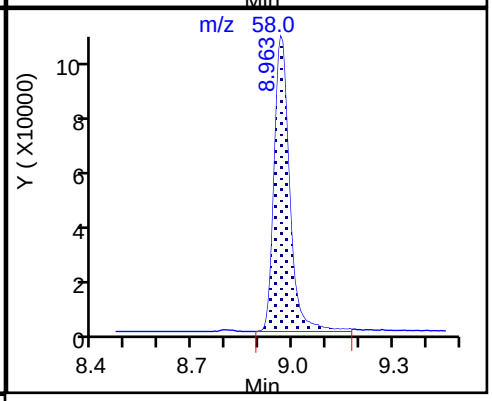
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

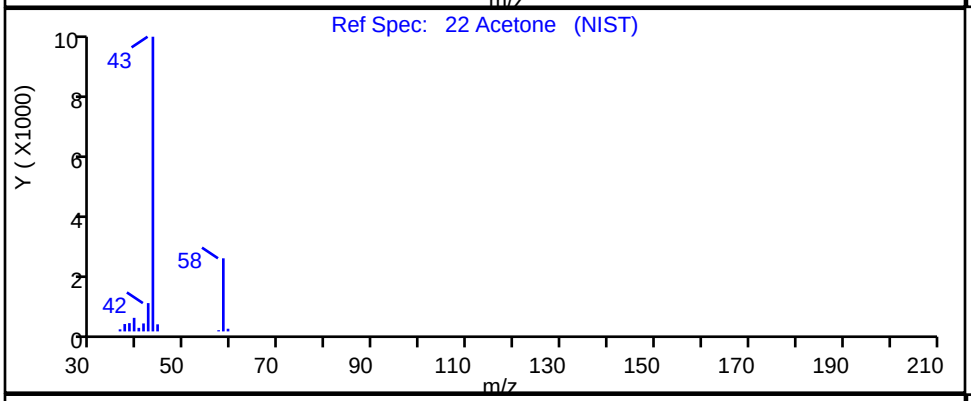
22 Acetone, CAS: 67-64-1

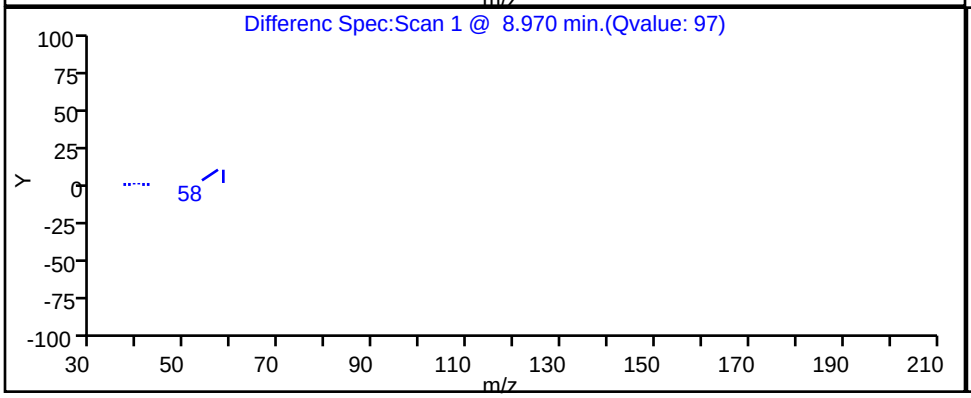


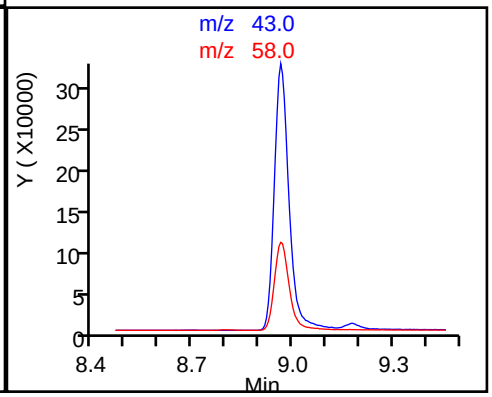










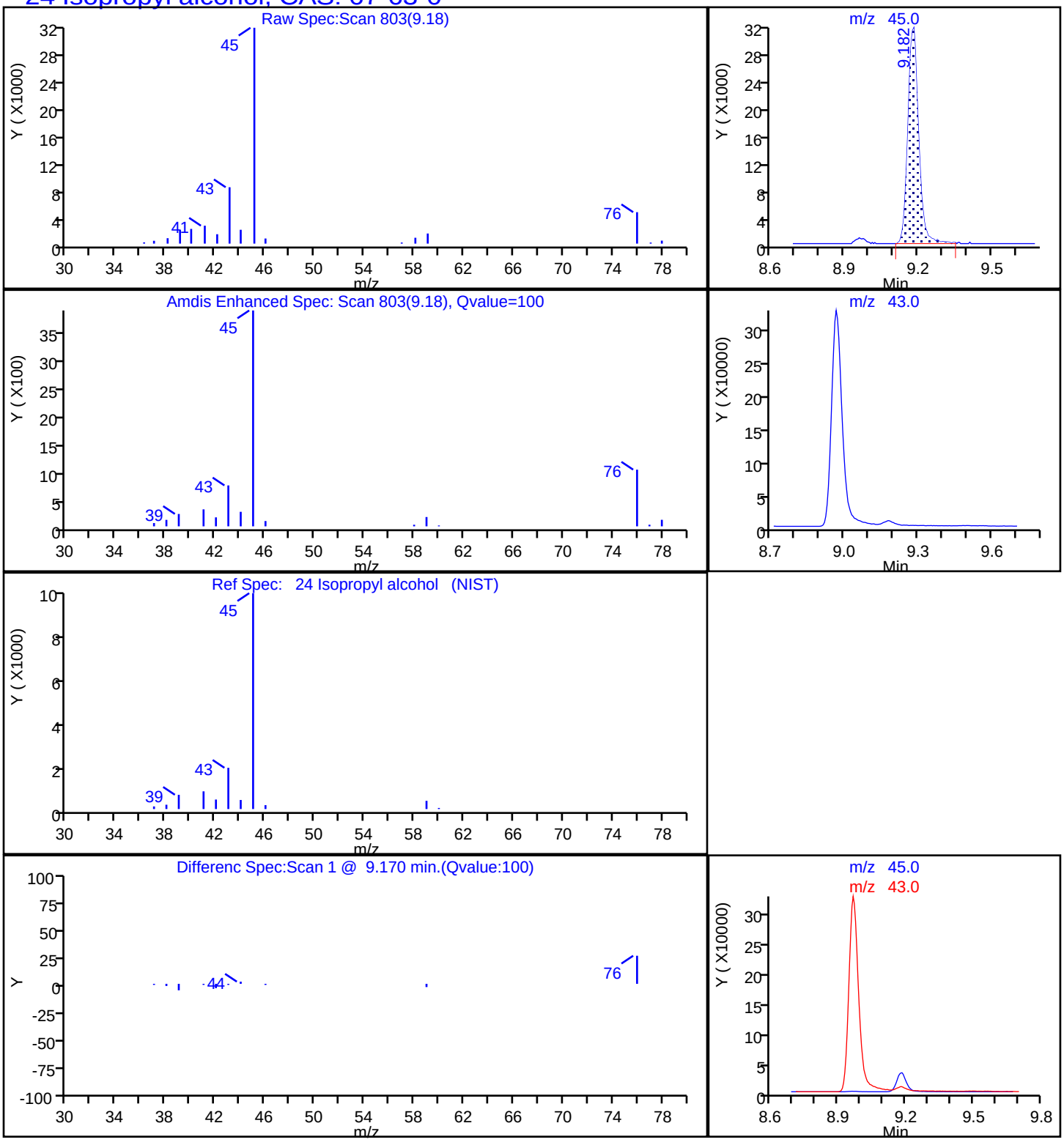


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

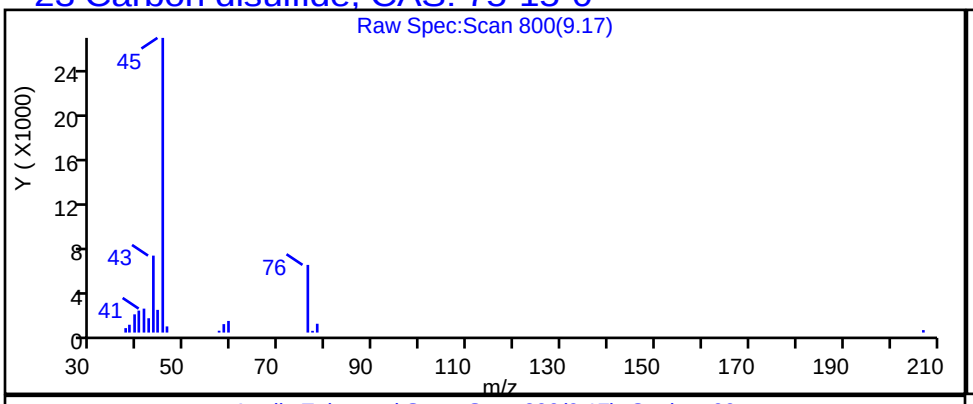
24 Isopropyl alcohol, CAS: 67-63-0

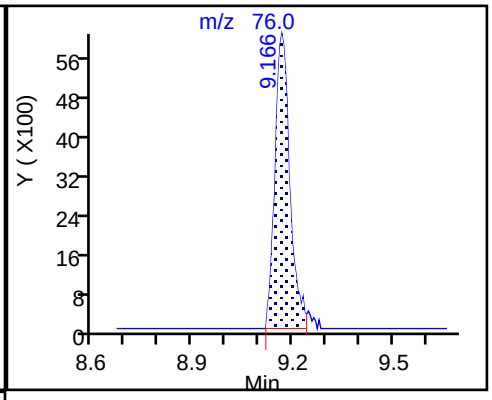


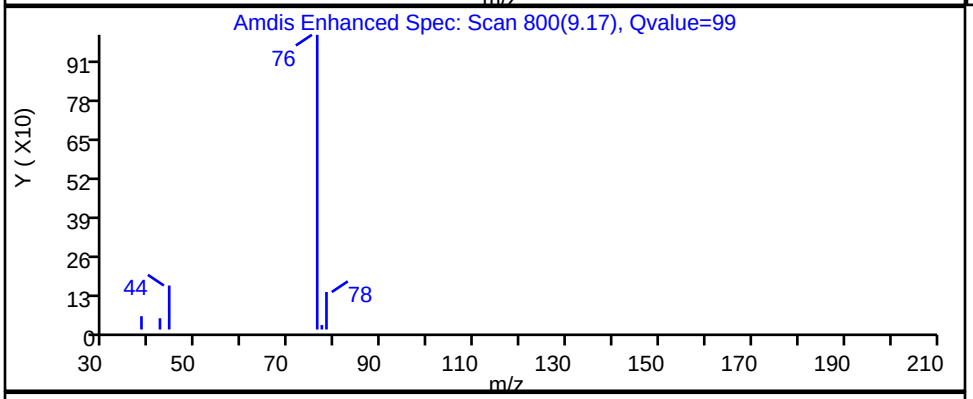
TestAmerica Burlington

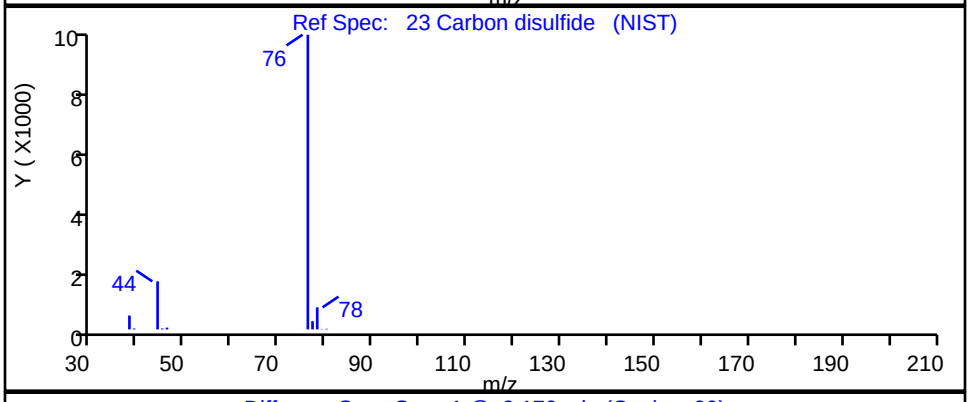
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

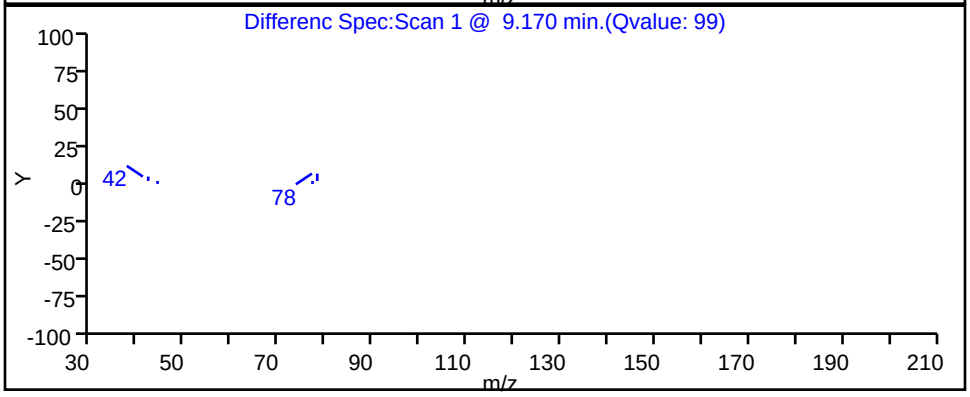
23 Carbon disulfide, CAS: 75-15-0









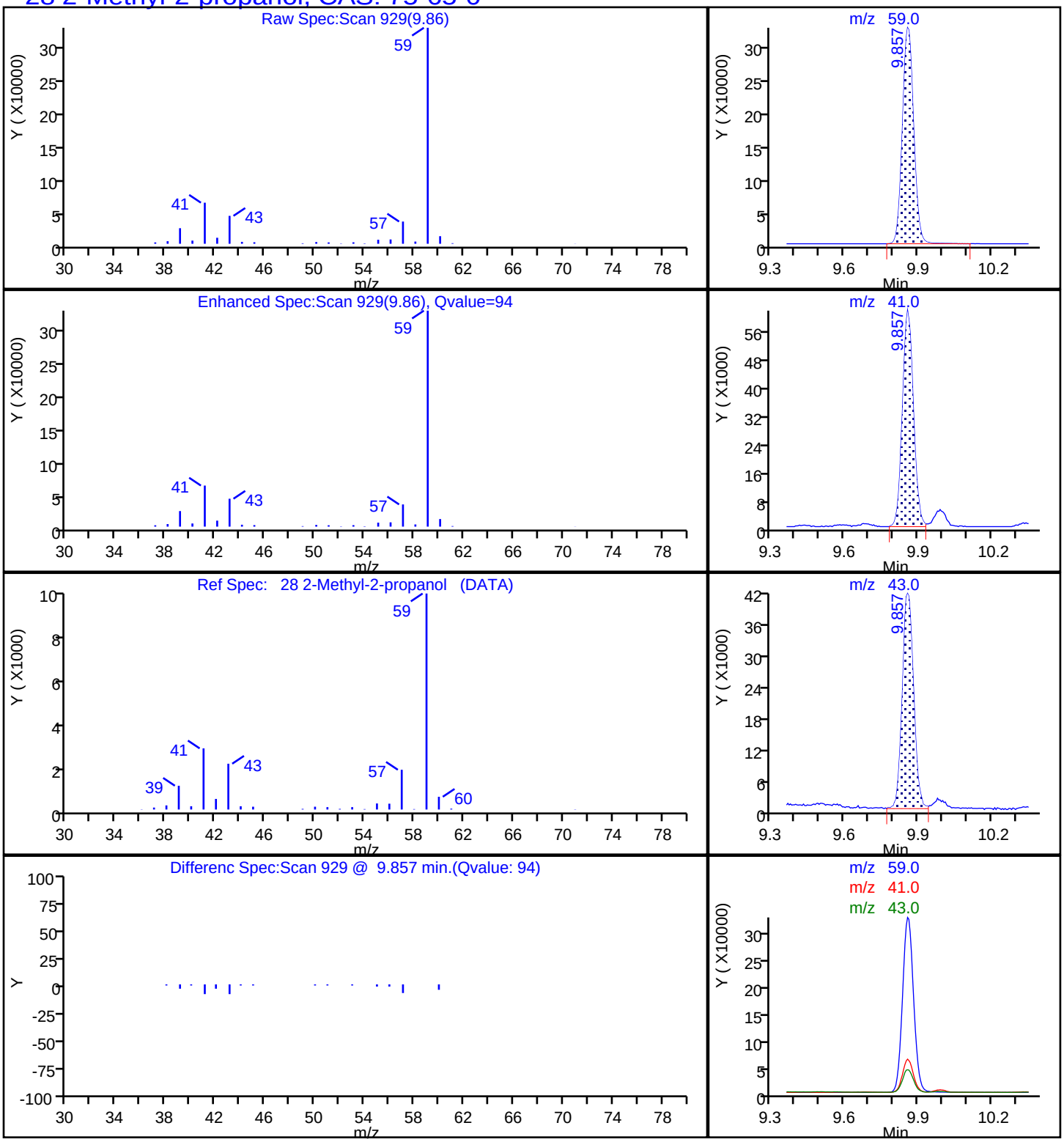


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

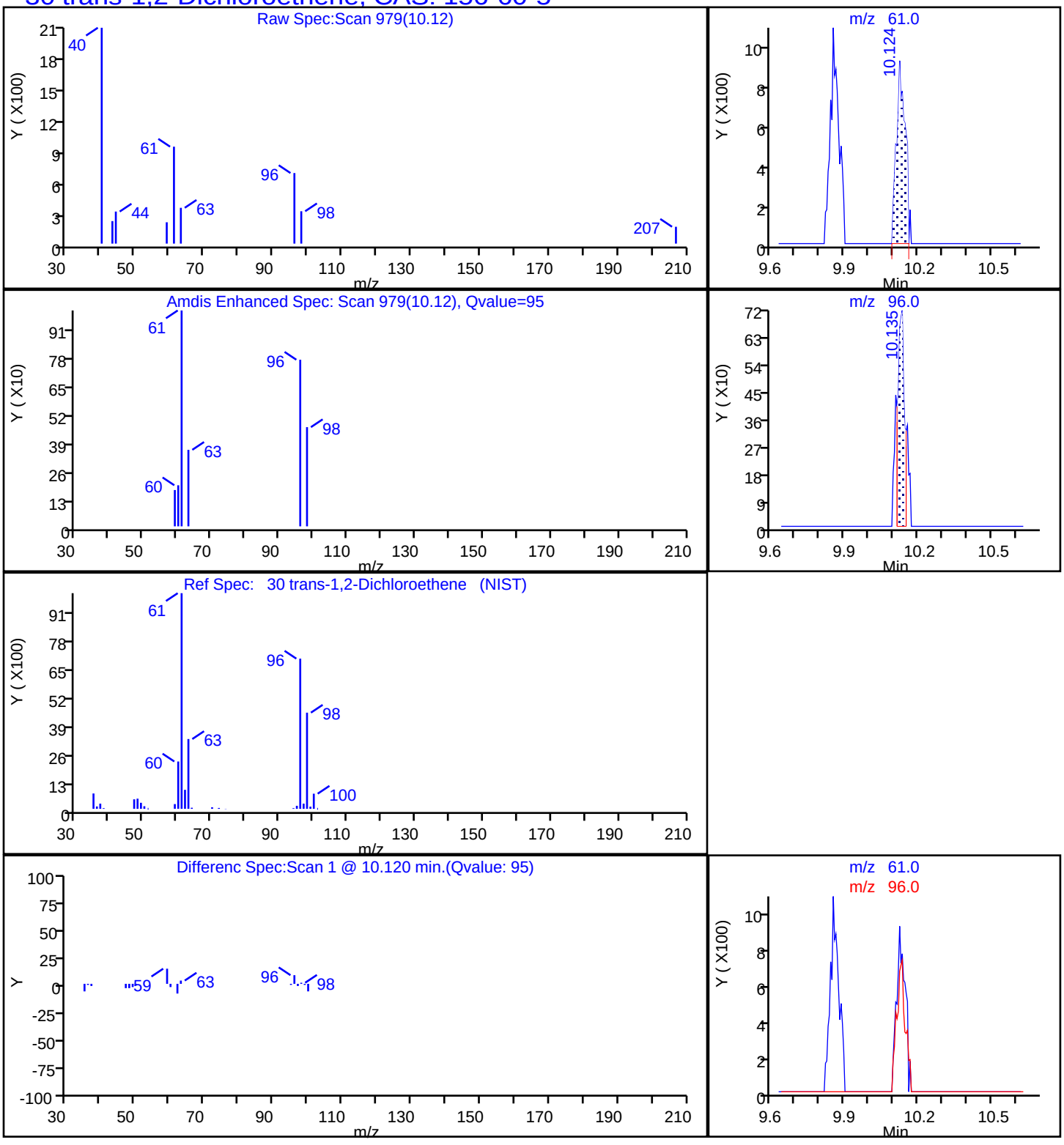
28 2-Methyl-2-propanol, CAS: 75-65-0



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

30 trans-1,2-Dichloroethene, CAS: 156-60-5



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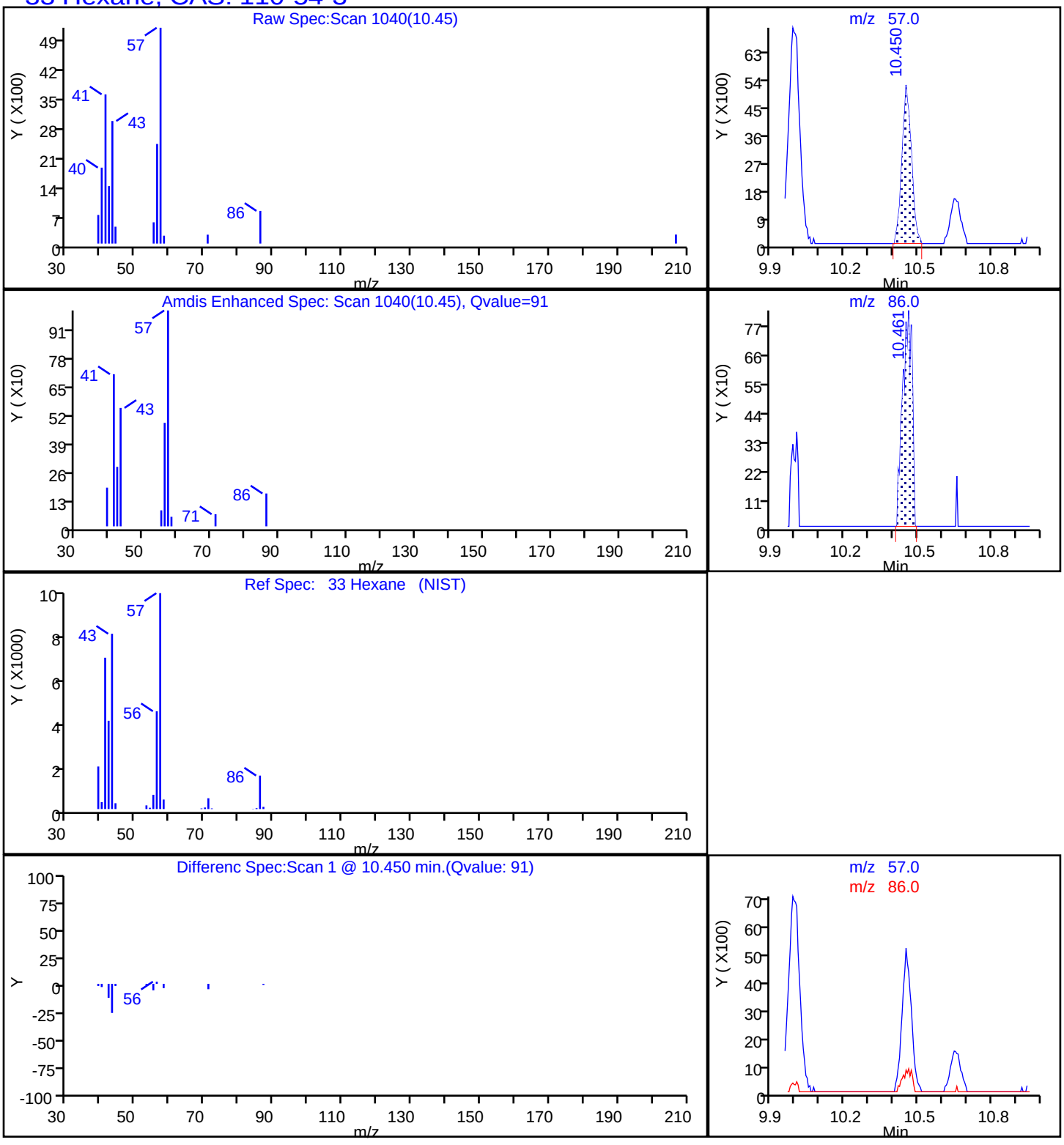
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3

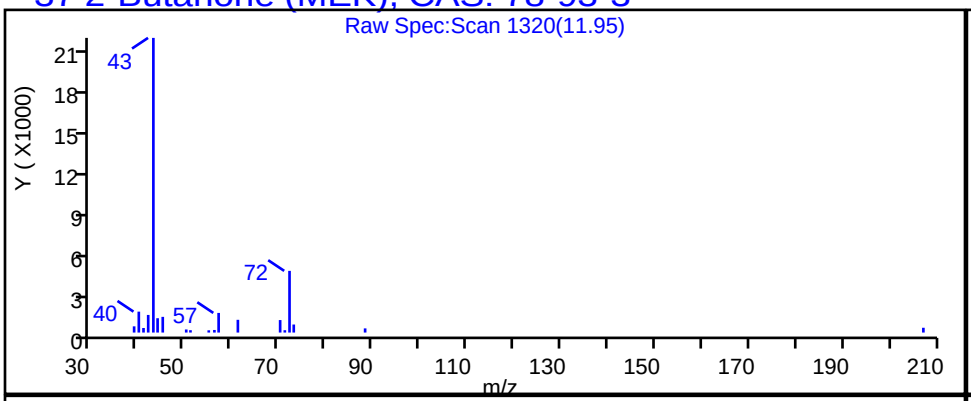


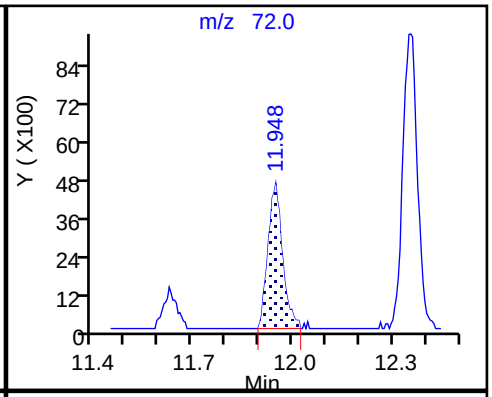
TestAmerica Burlington

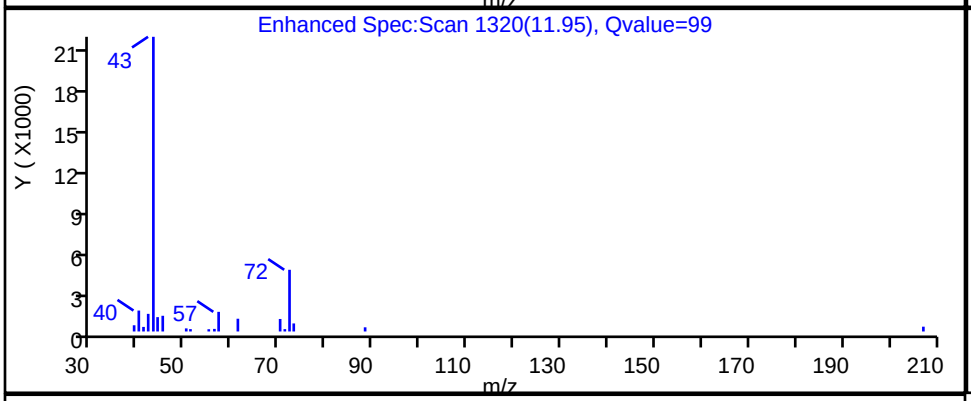
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

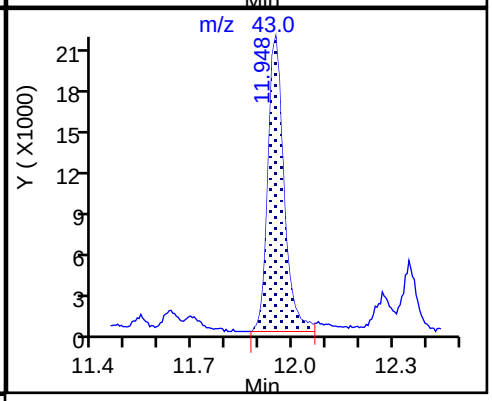
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

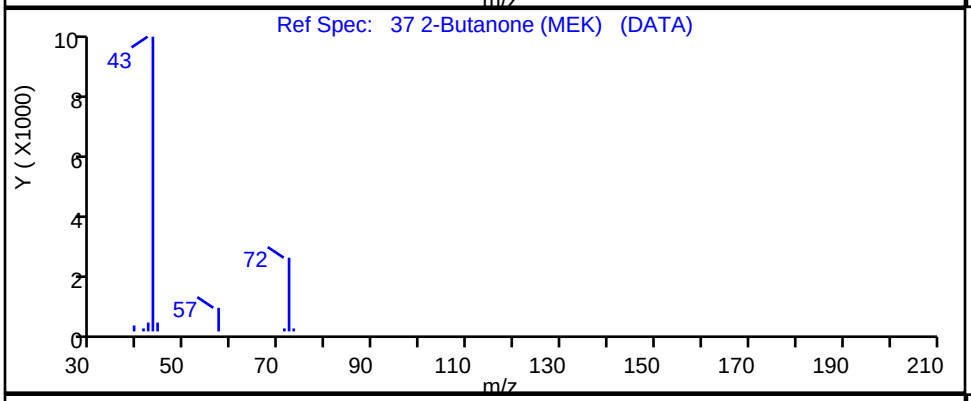
37 2-Butanone (MEK), CAS: 78-93-3

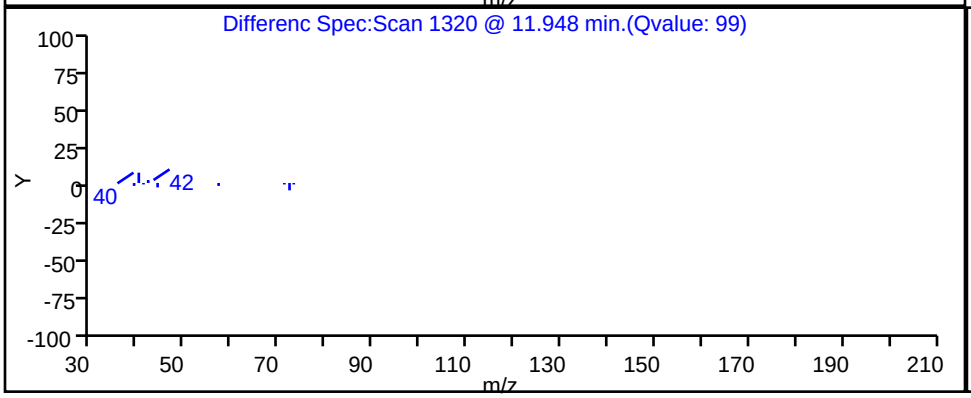


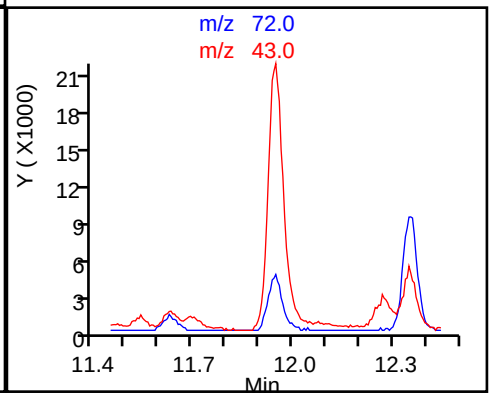






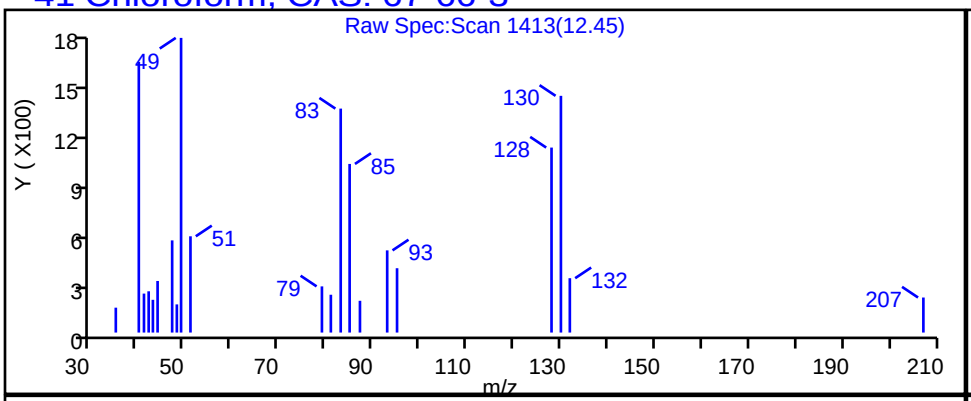


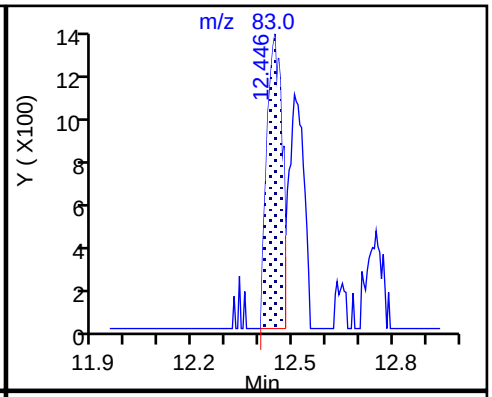


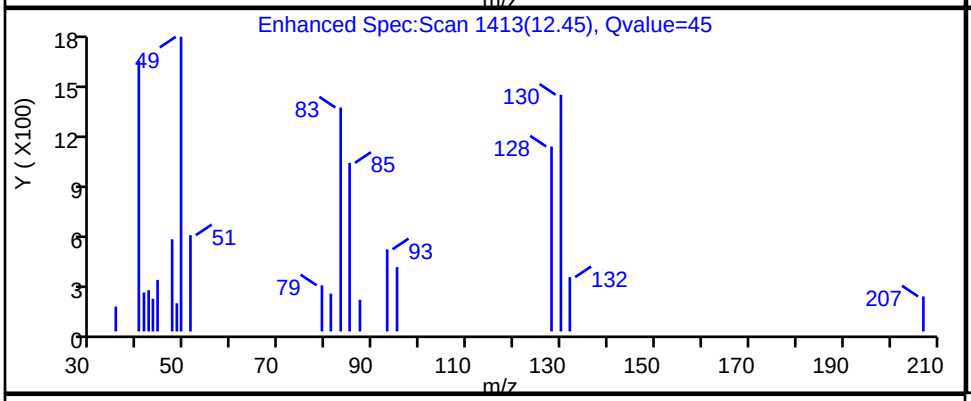


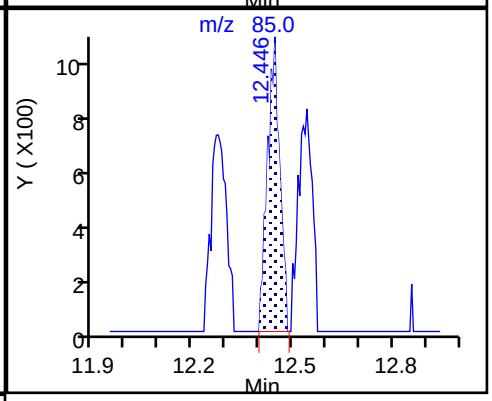
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d
Injection Date: 06-Apr-2018 23:30:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-8 Lab Sample ID: 200-42918-8
Client ID: GC-SV-104 (AS)
Operator ID: ert ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 5.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

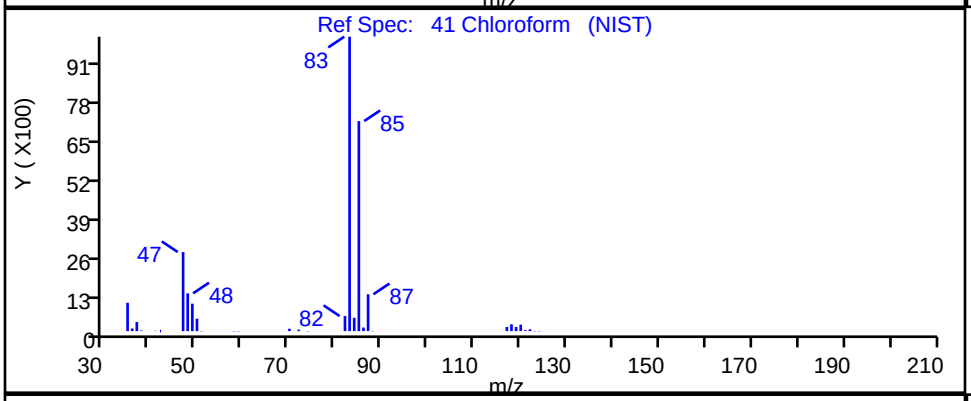
41 Chloroform, CAS: 67-66-3

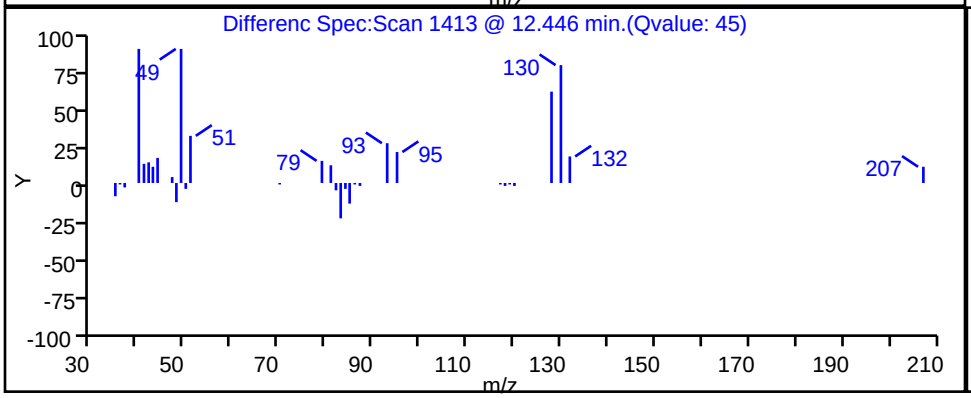


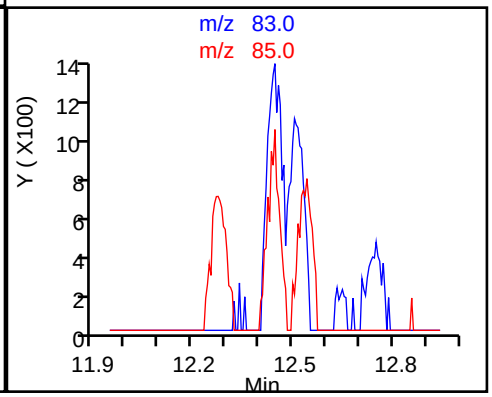










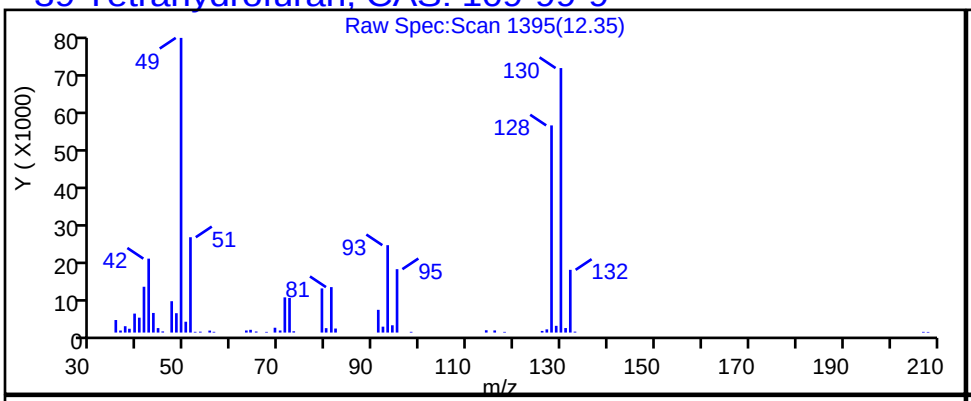


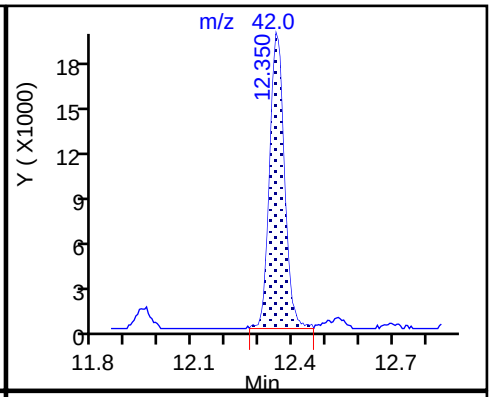
TestAmerica Burlington

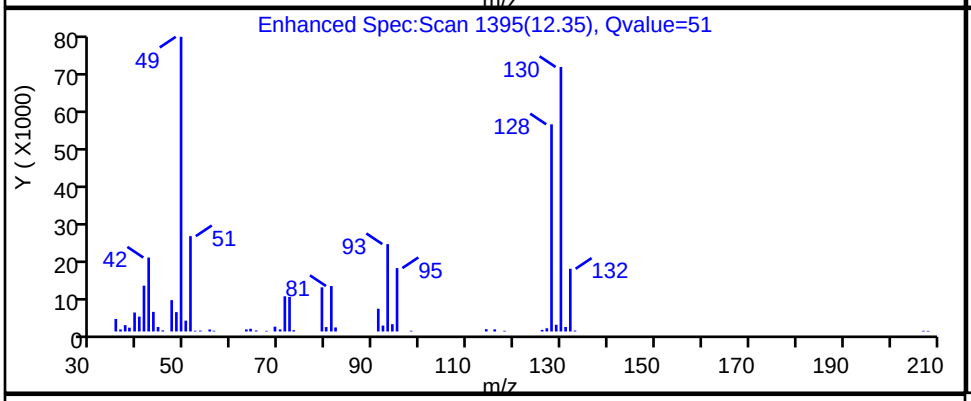
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

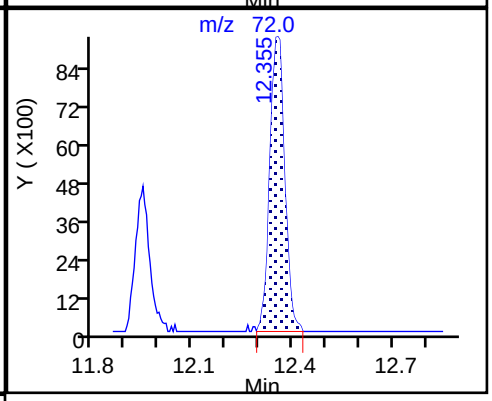
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

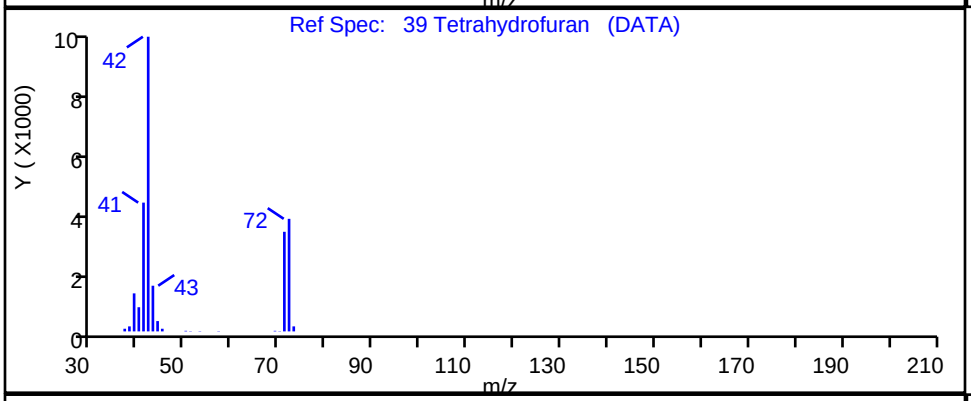
39 Tetrahydrofuran, CAS: 109-99-9

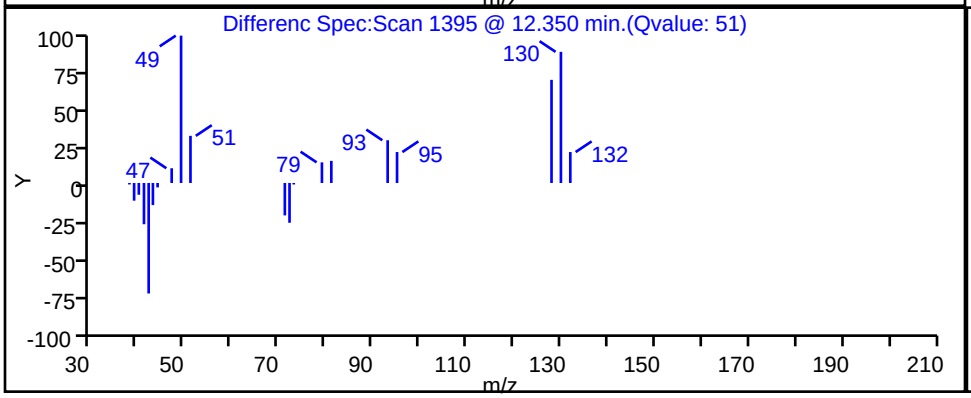


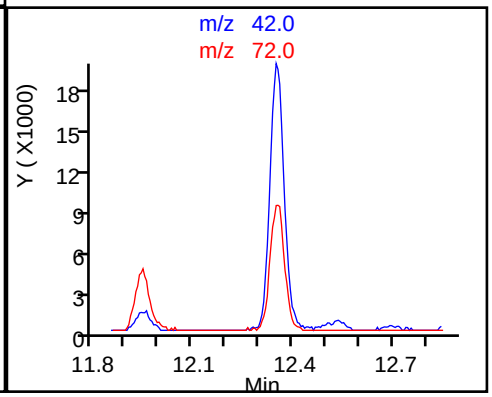










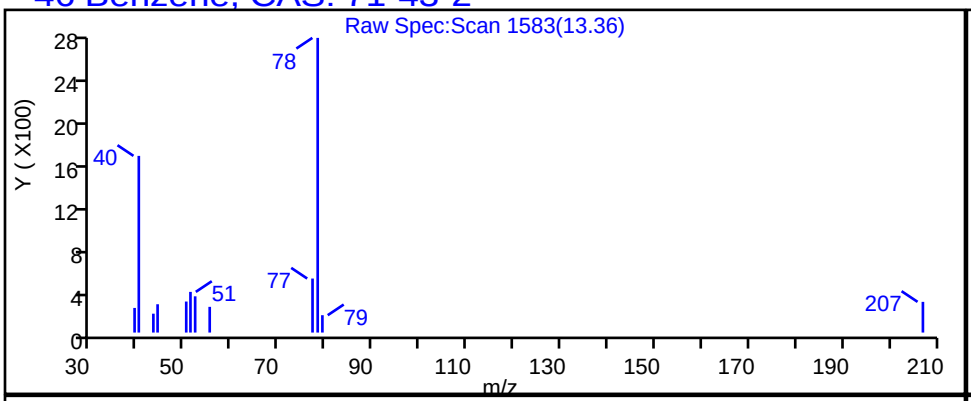


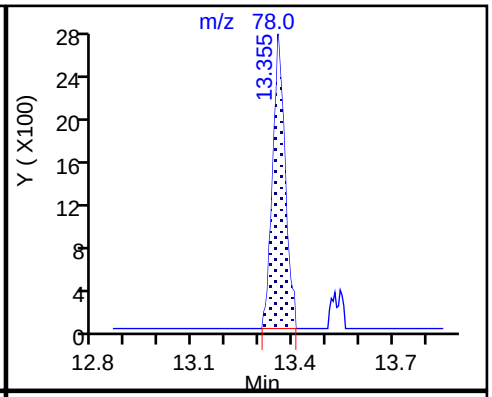
TestAmerica Burlington

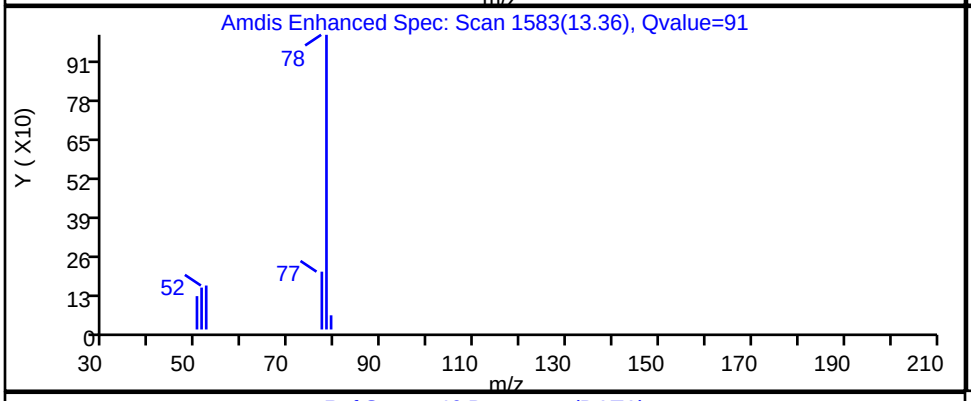
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

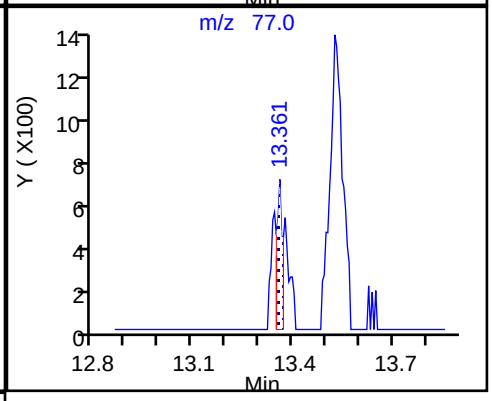
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

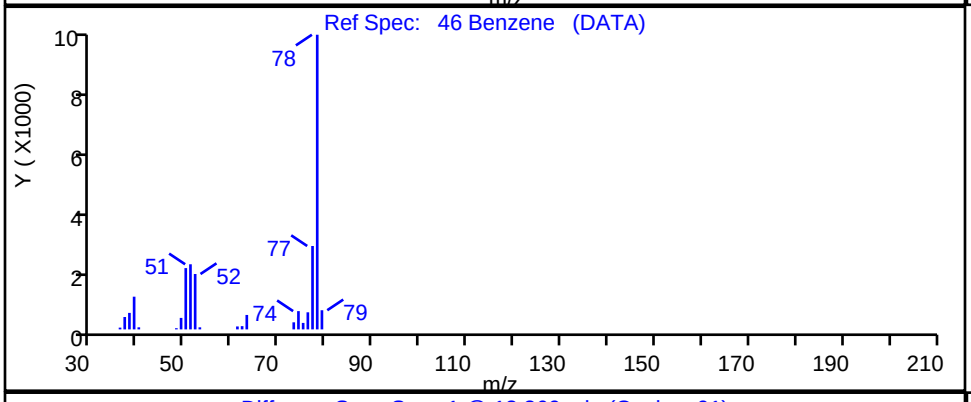
46 Benzene, CAS: 71-43-2

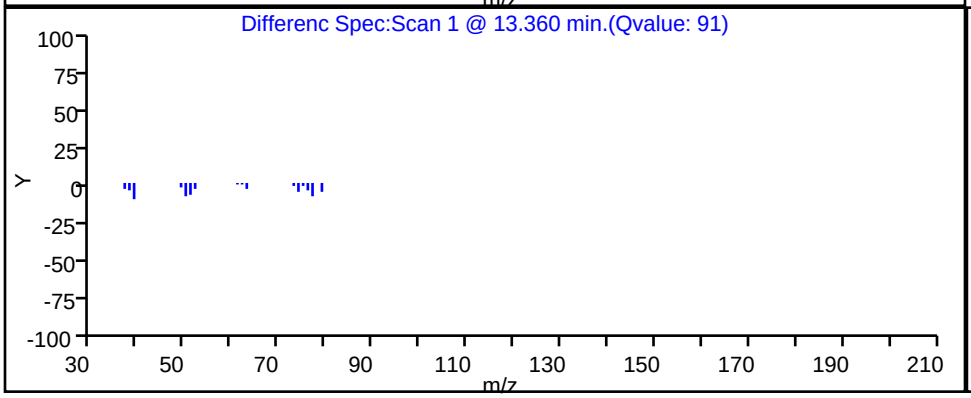


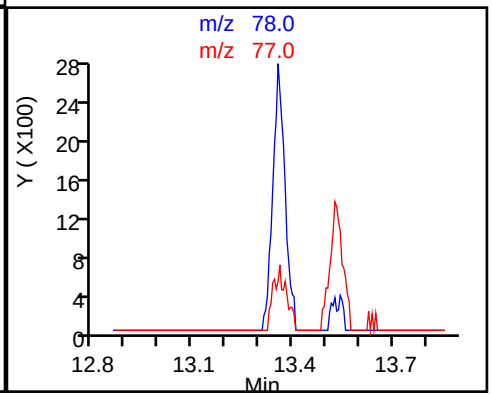








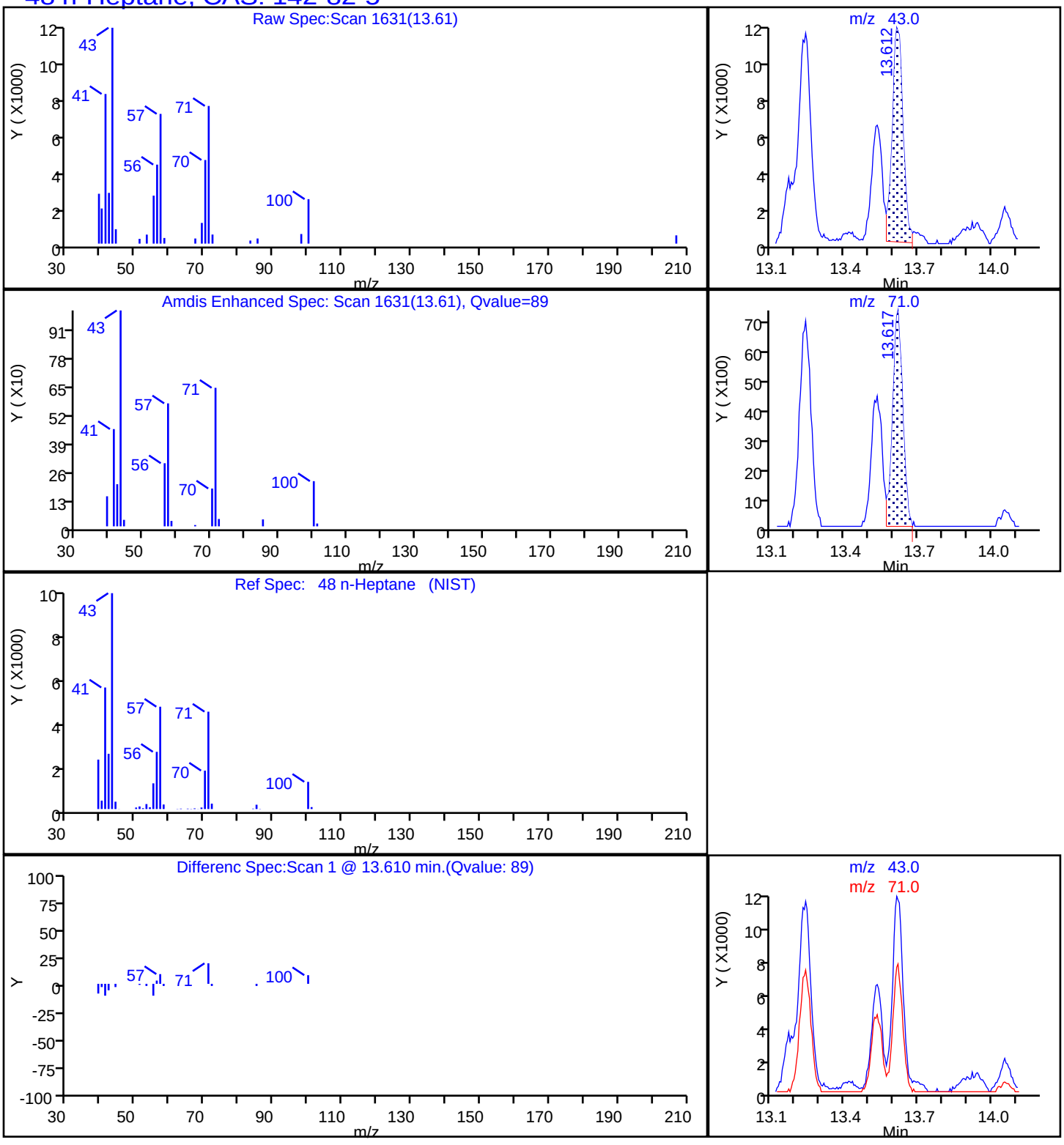




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 n-Heptane, CAS: 142-82-5

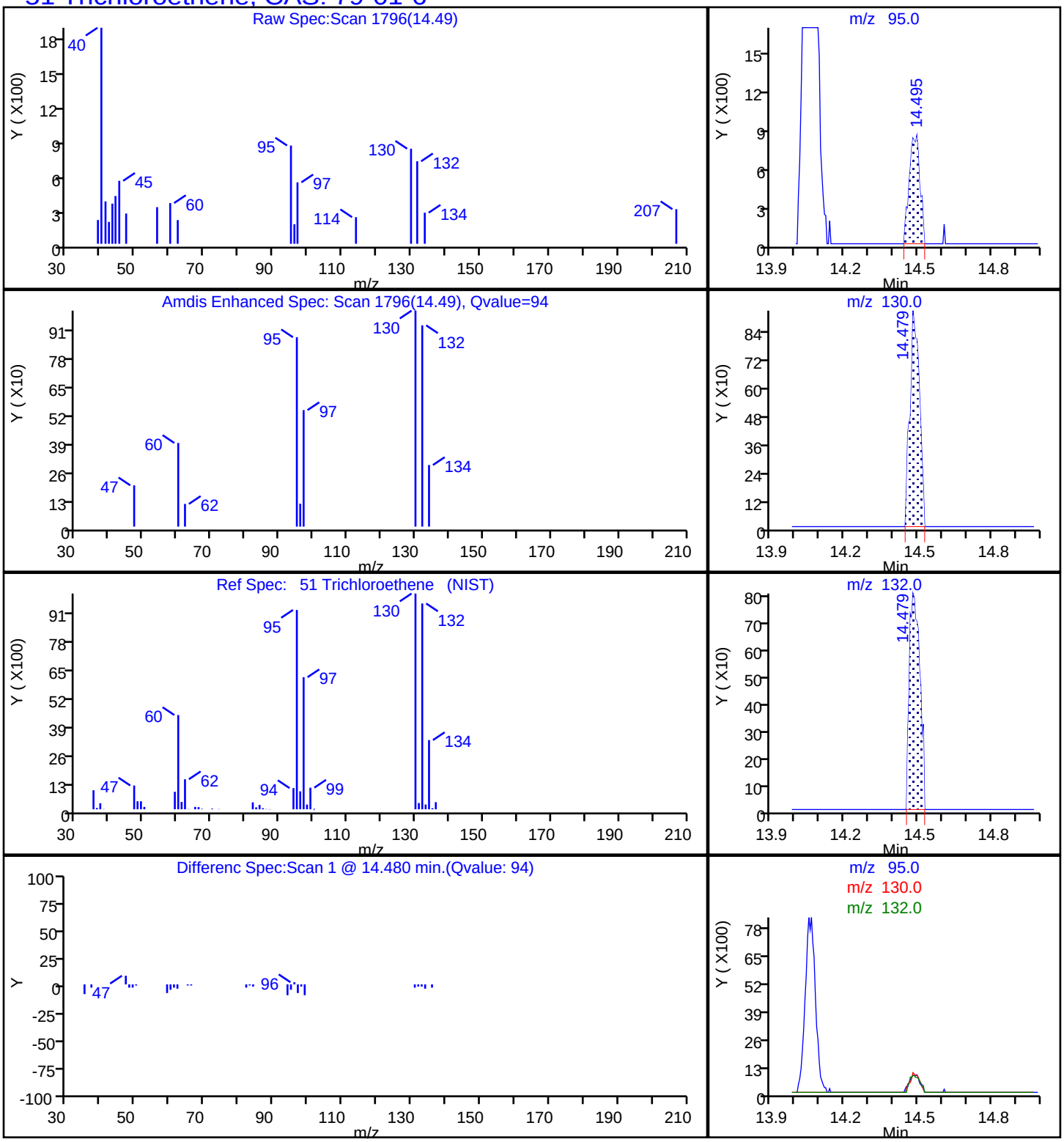


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

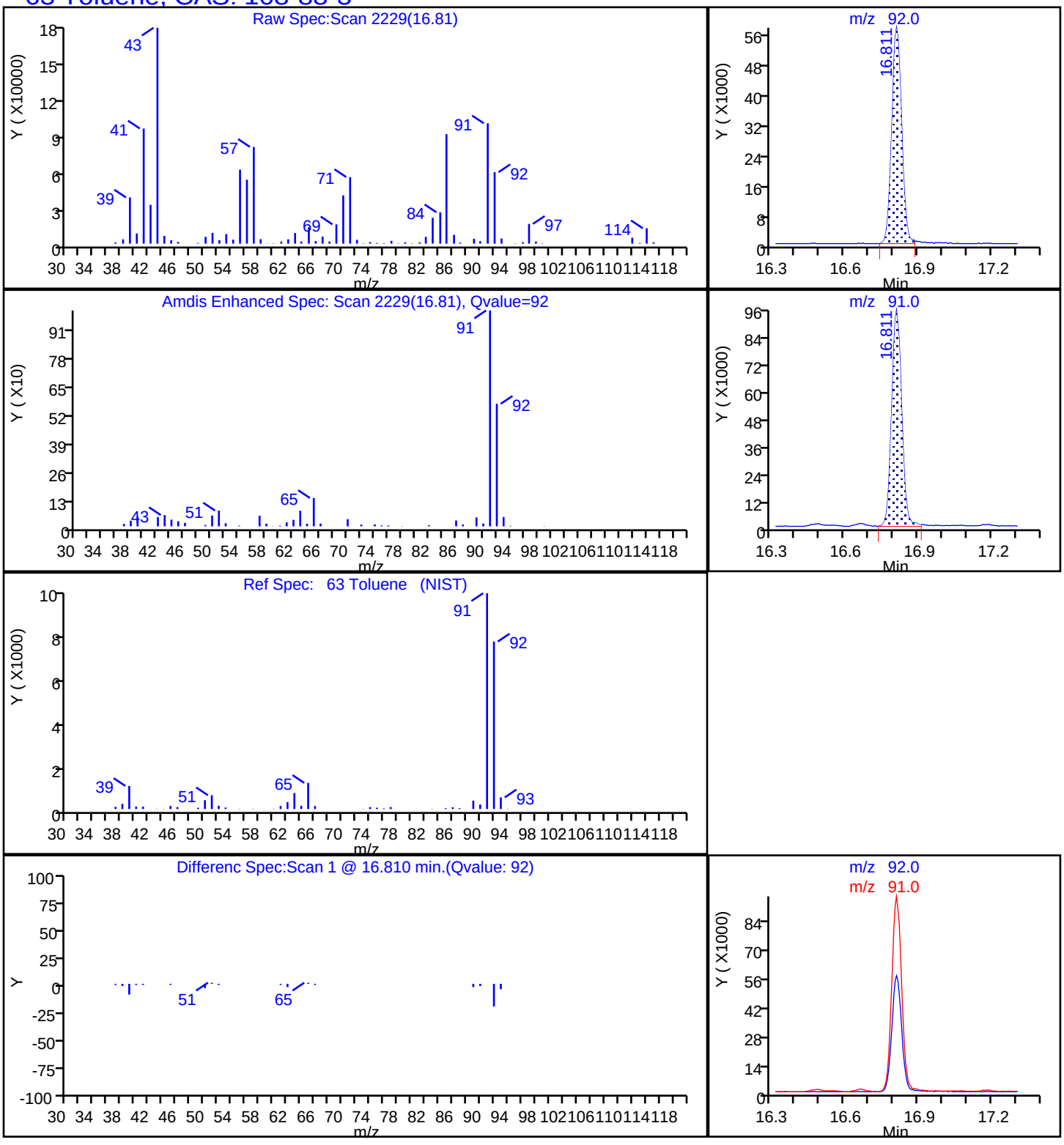
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6



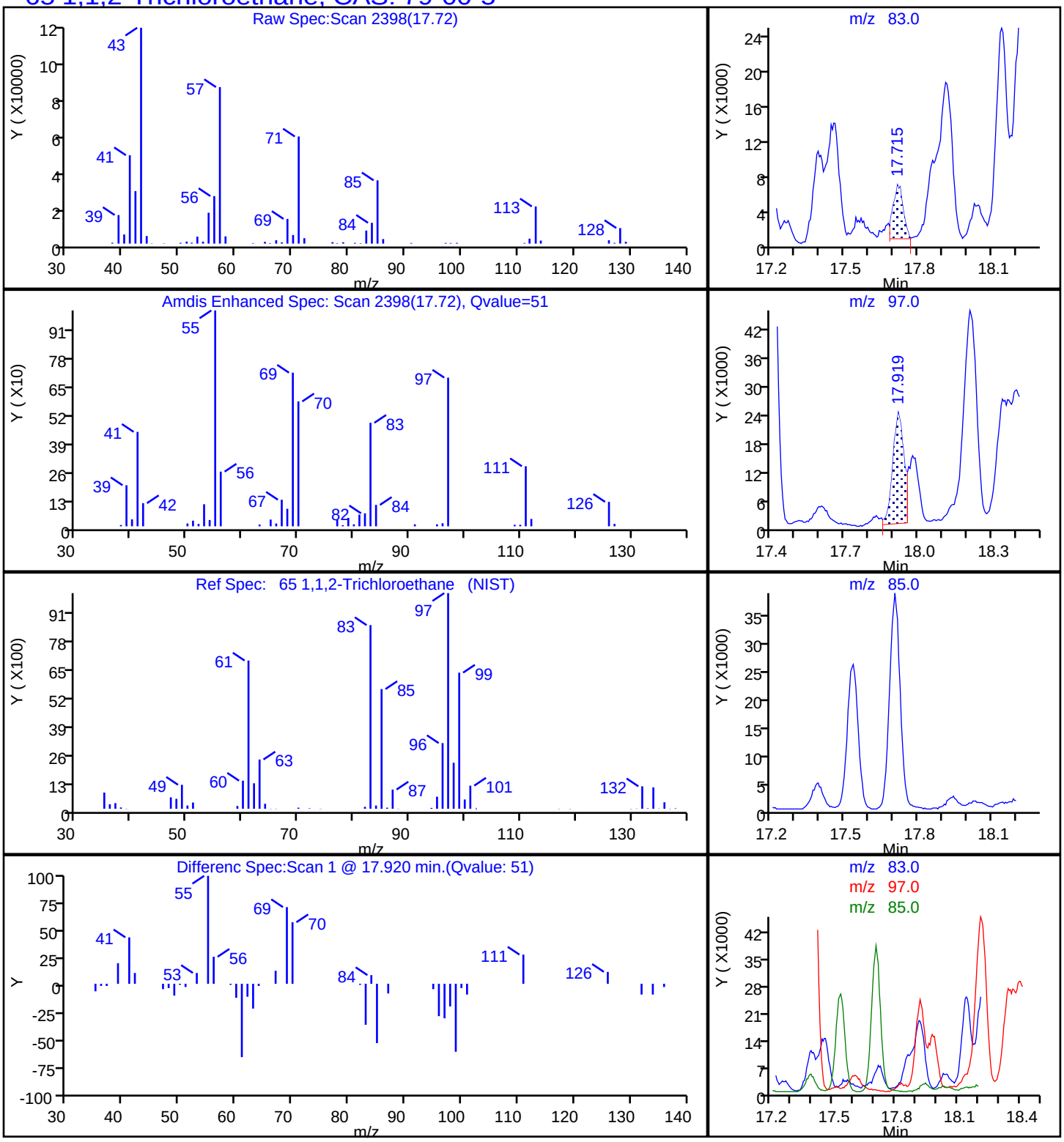
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d
Injection Date: 06-Apr-2018 23:30:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-8 Lab Sample ID: 200-42918-8
Client ID: GC-SV-104 (AS)
Operator ID: ert ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 5.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

63 Toluene, CAS: 108-88-3



Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d
Injection Date: 06-Apr-2018 23:30:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-8 Lab Sample ID: 200-42918-8
Client ID: GC-SV-104 (AS)
Operator ID: ert ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 5.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

65 1,1,2-Trichloroethane, CAS: 79-00-5

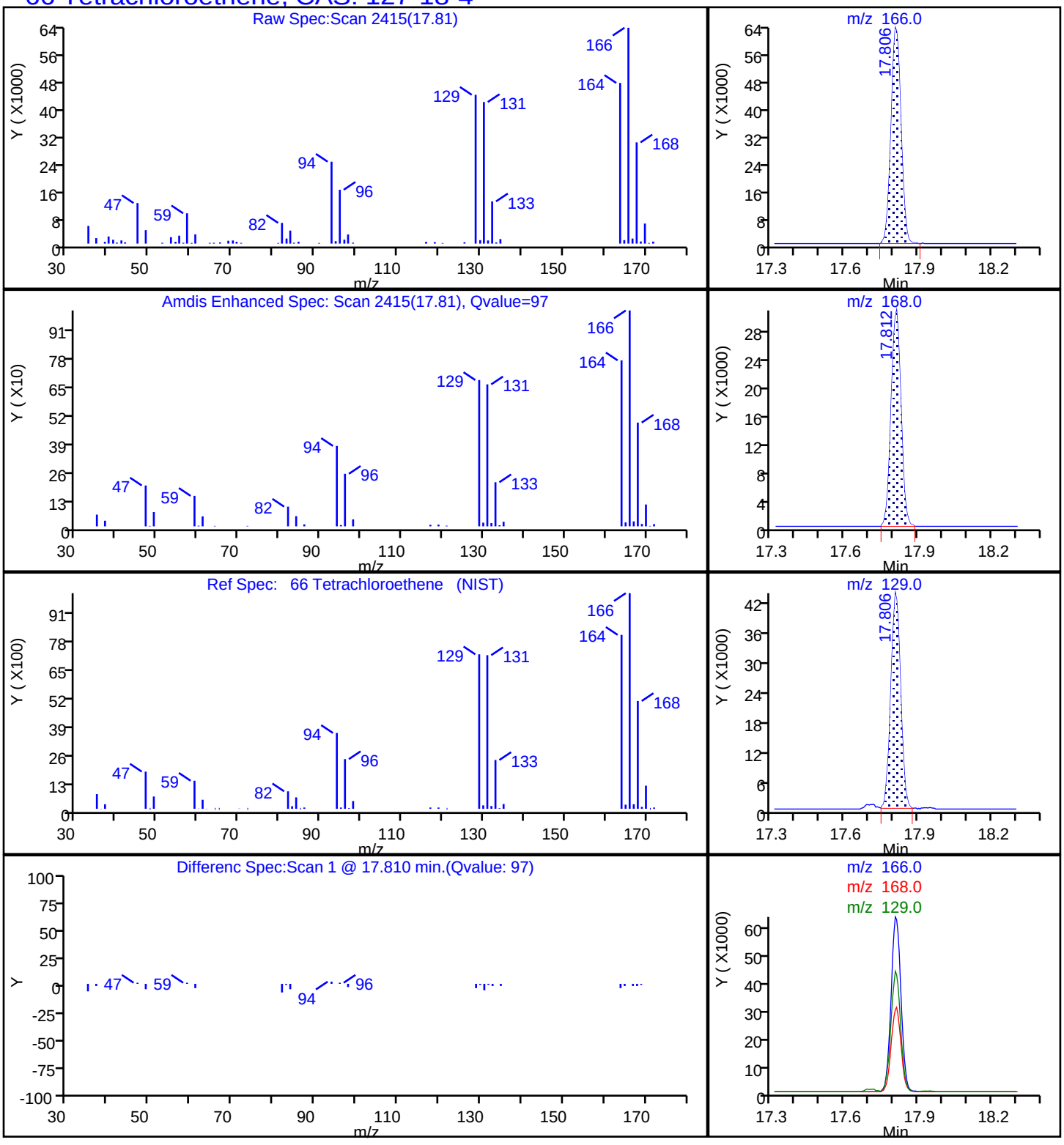


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

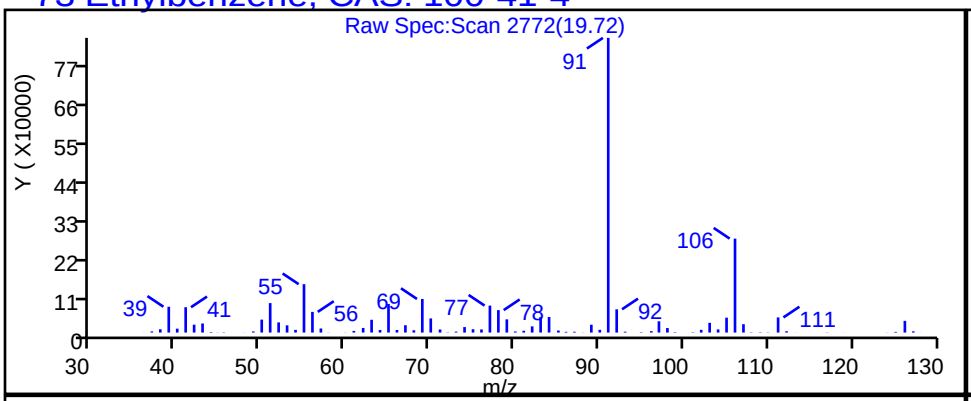
66 Tetrachloroethene, CAS: 127-18-4

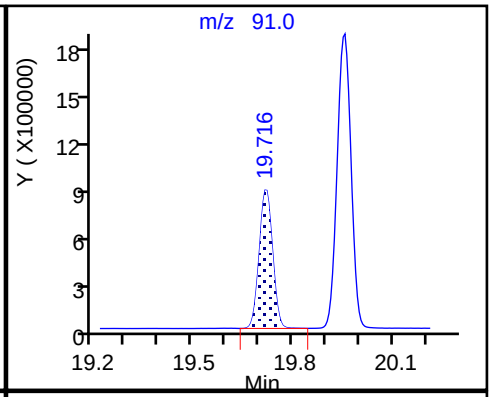


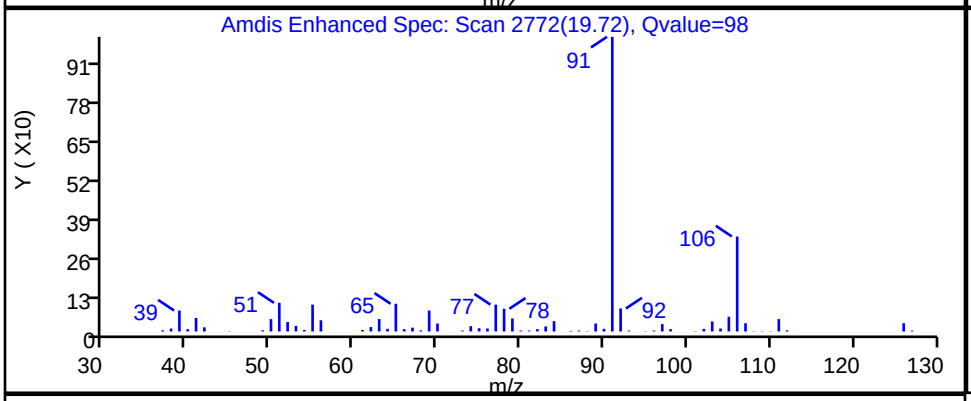
TestAmerica Burlington

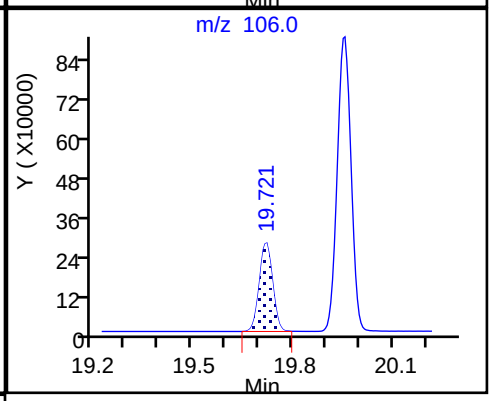
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

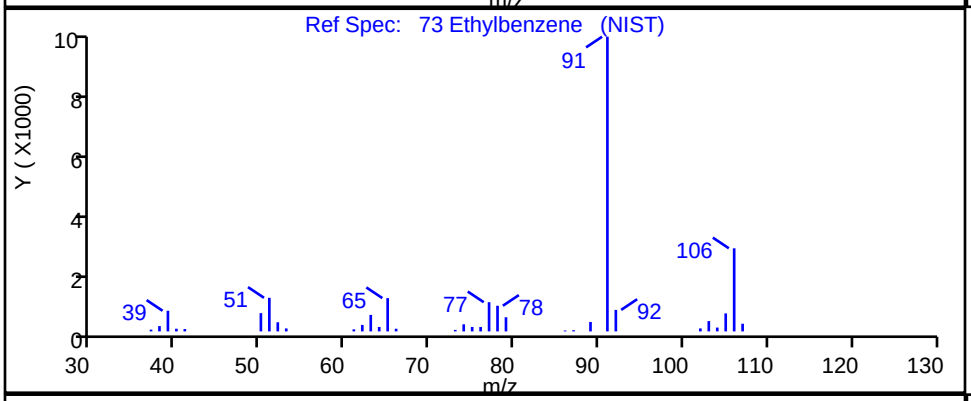
73 Ethylbenzene, CAS: 100-41-4

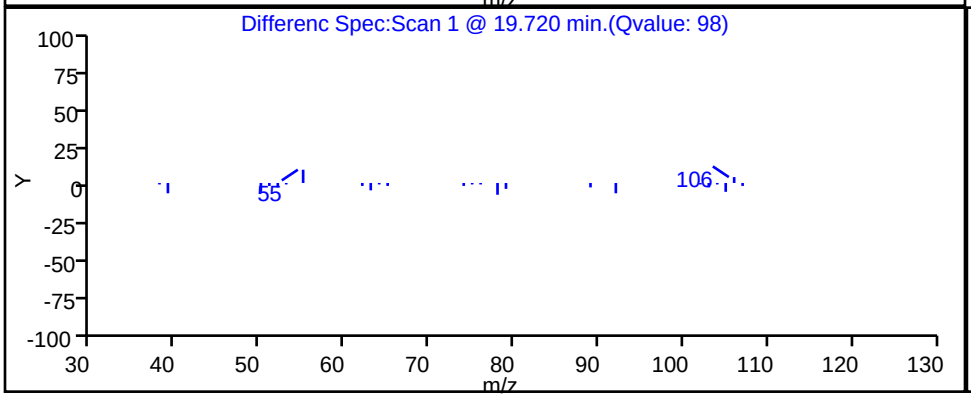


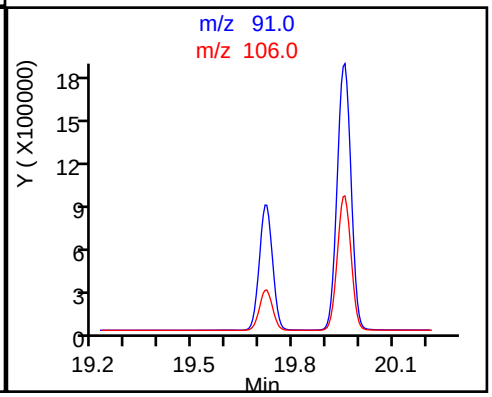












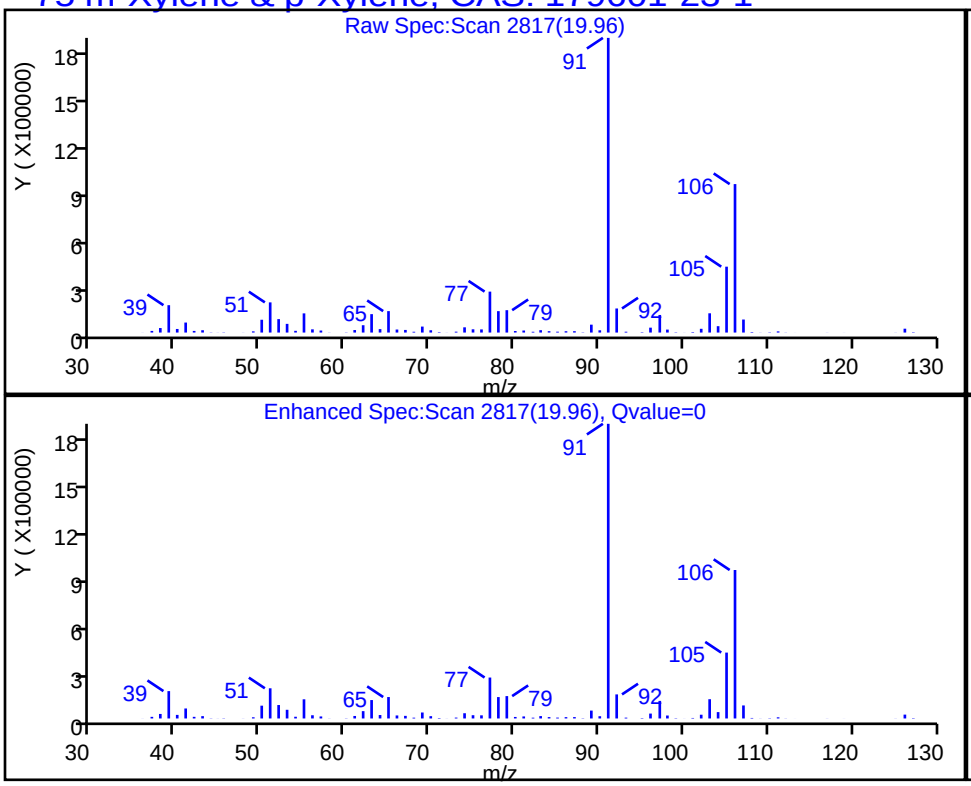
Report Date: 09-Apr-2018 20:29:28 Chrom Revision: 2.2 13-Mar-2018 08:45:20

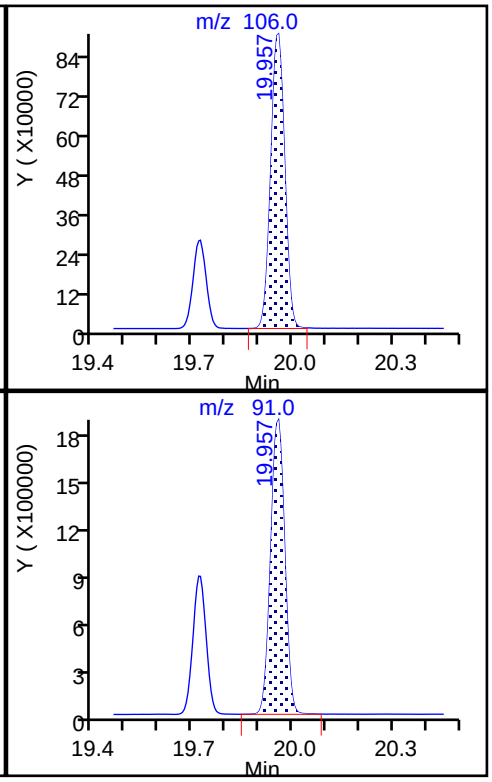
TestAmerica Burlington

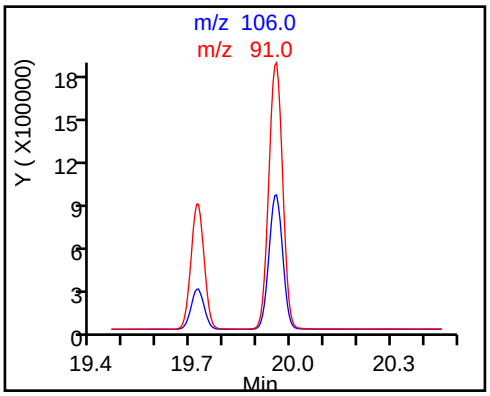
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

75 m-Xylene & p-Xylene, CAS: 179601-23-1

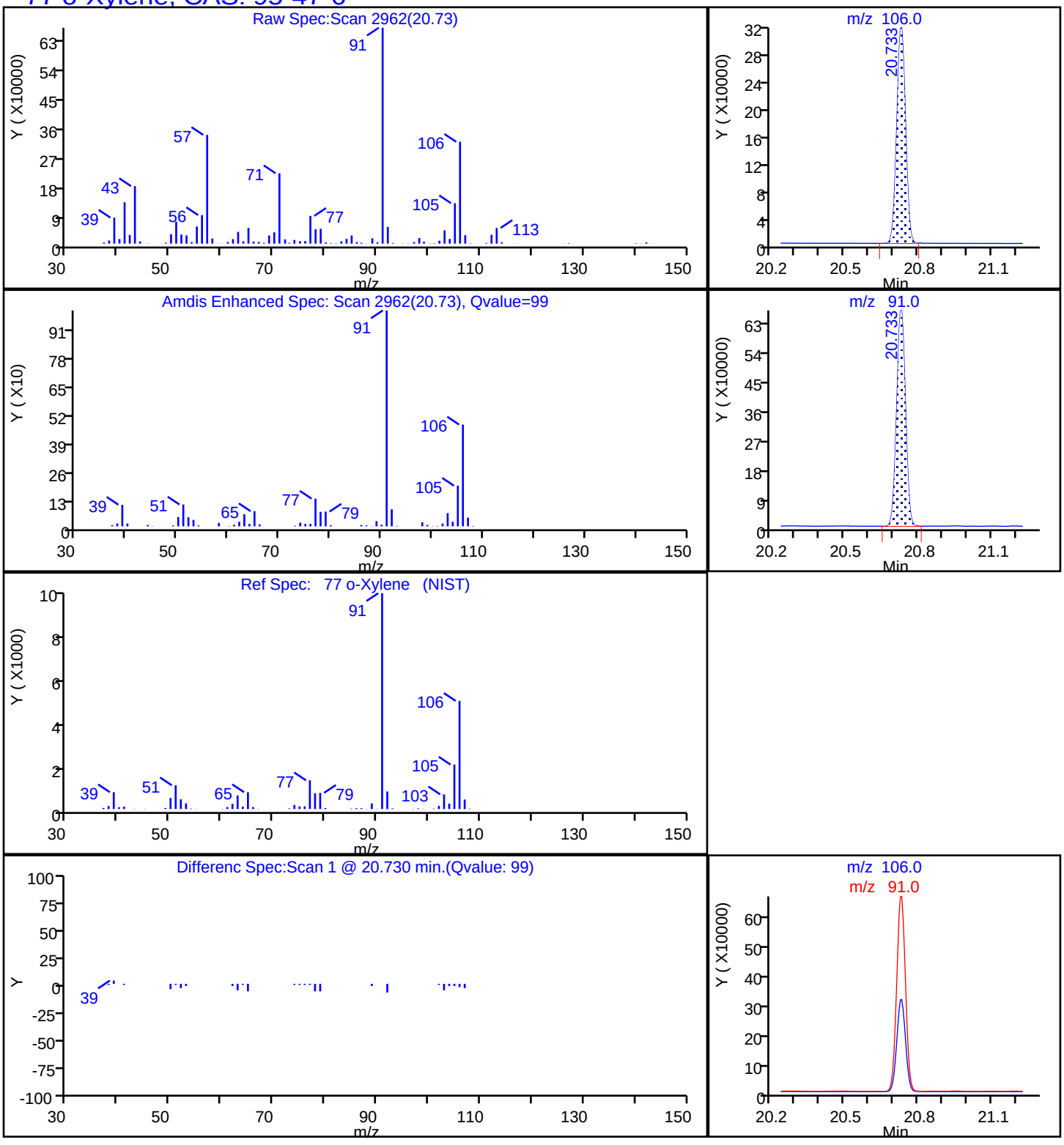






Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d
Injection Date: 06-Apr-2018 23:30:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-8 Lab Sample ID: 200-42918-8
Client ID: GC-SV-104 (AS)
Operator ID: ert ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 5.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

77 o-Xylene, CAS: 95-47-6



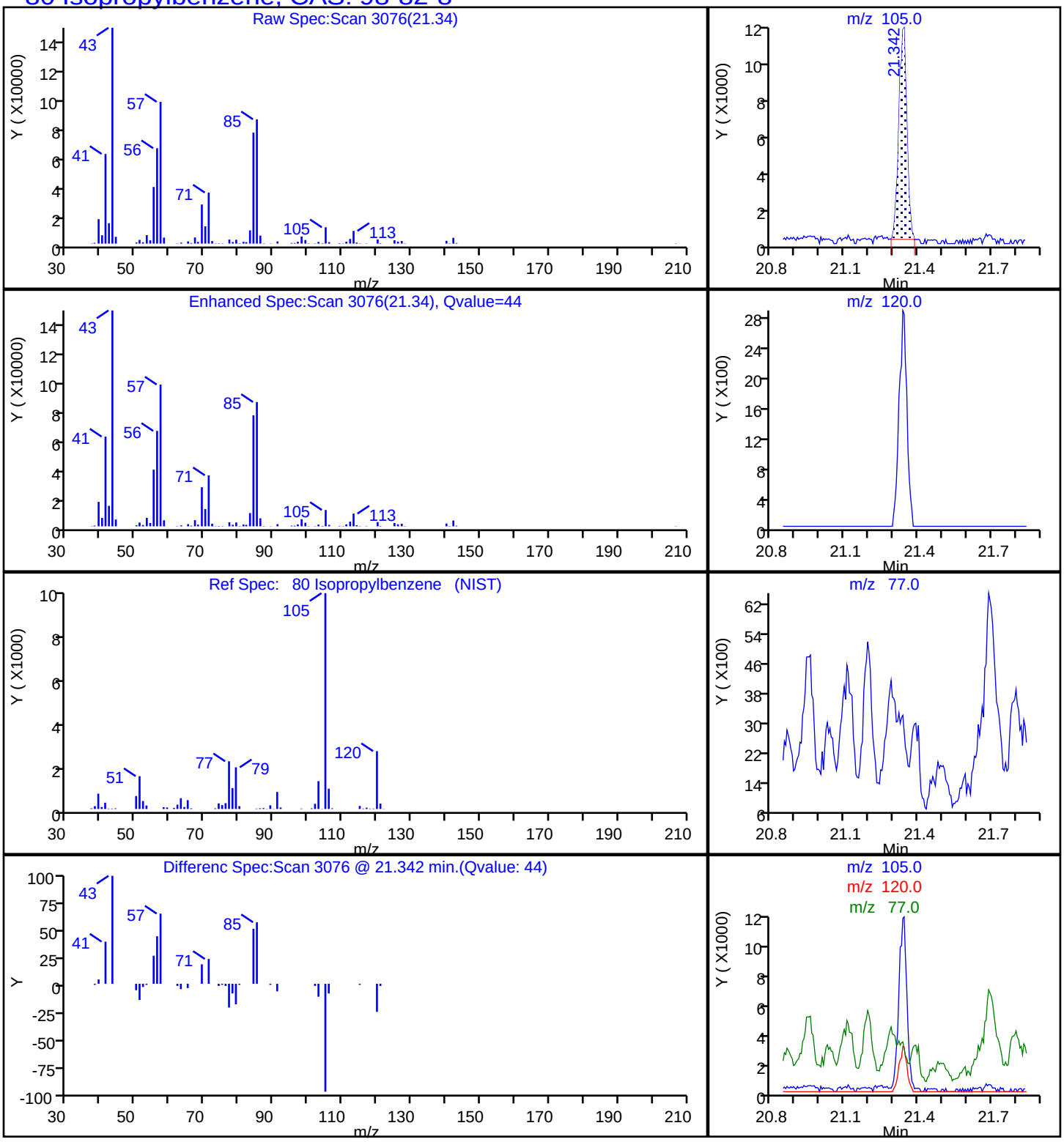
Report Date: 09-Apr-2018 20:29:28 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d

Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

80 Isopropylbenzene, CAS: 98-82-8



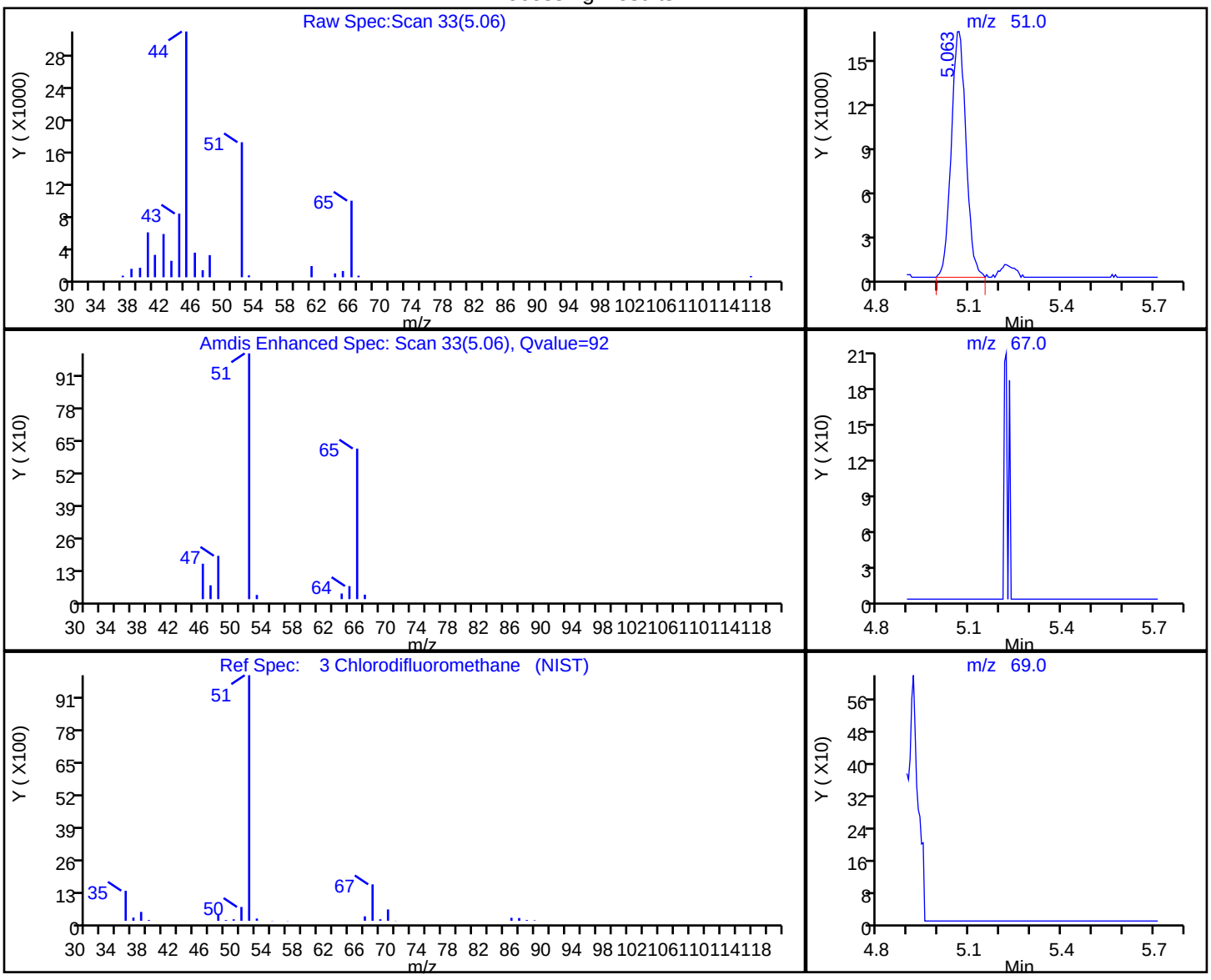
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
5.06	51.00	56394	1.206805
5.23	67.00	0	
5.23	69.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

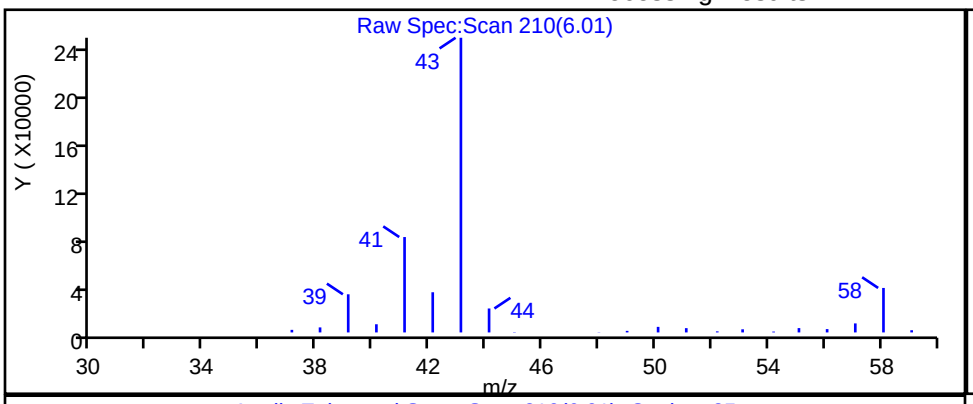
User Disabled Compound Report

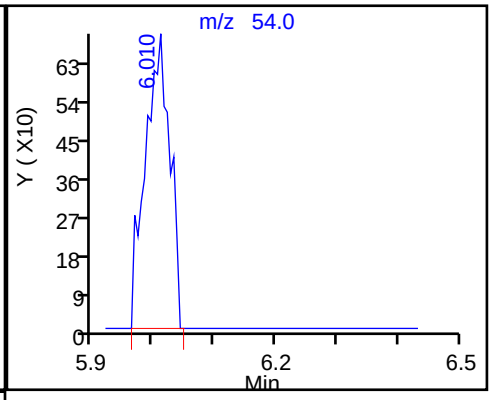
TestAmerica Burlington

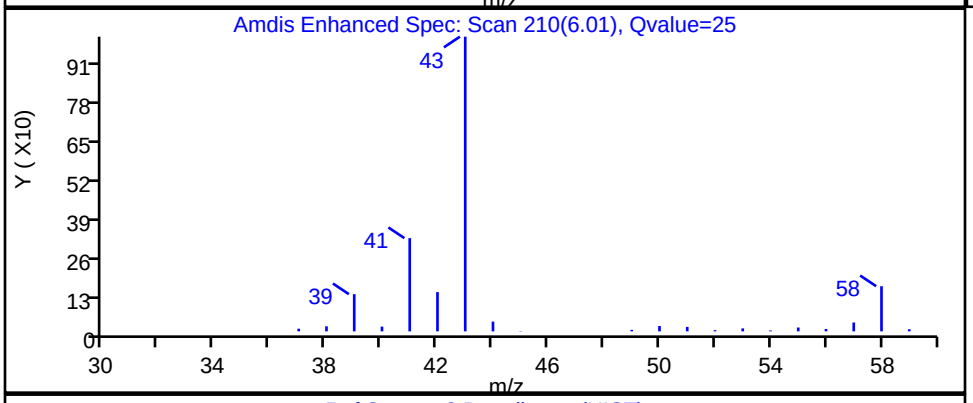
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

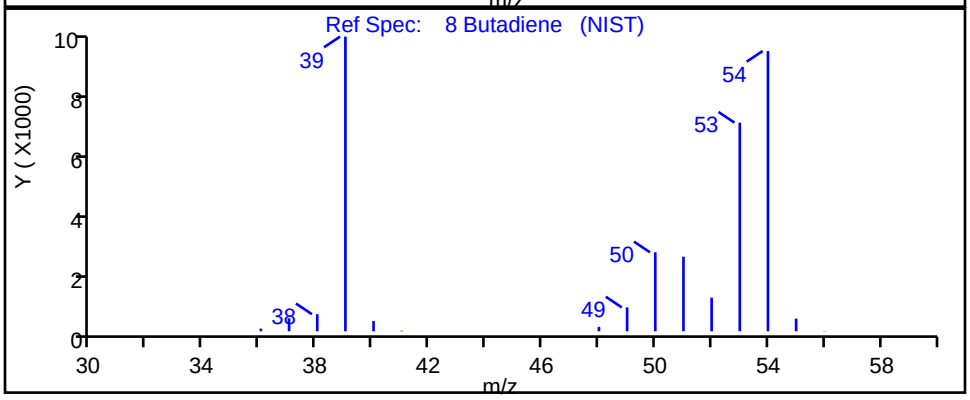
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
6.01	54.00	1947	0.085755

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

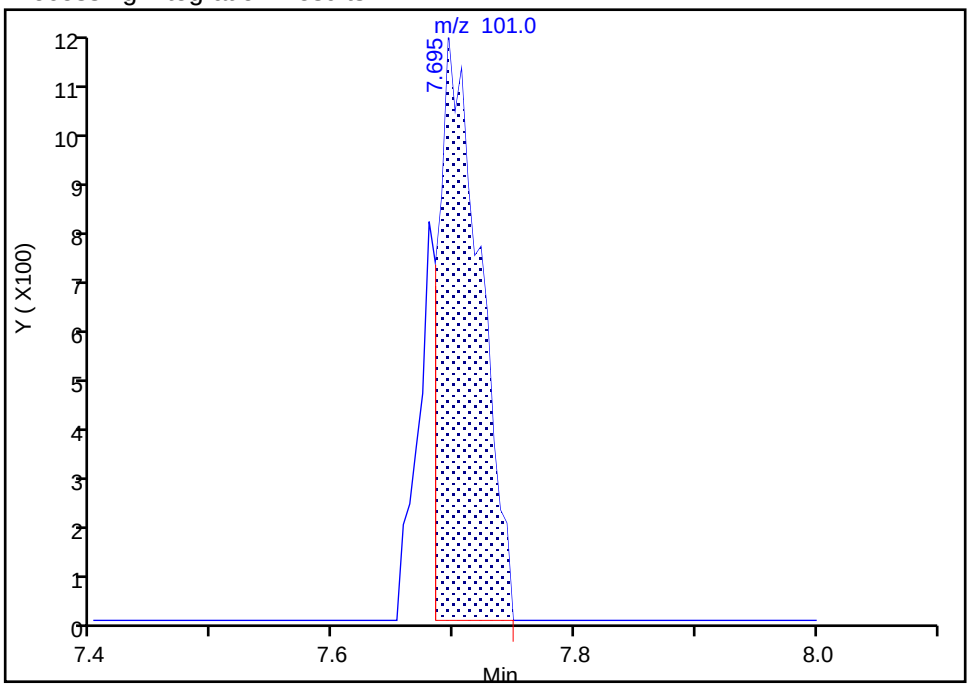
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

14 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

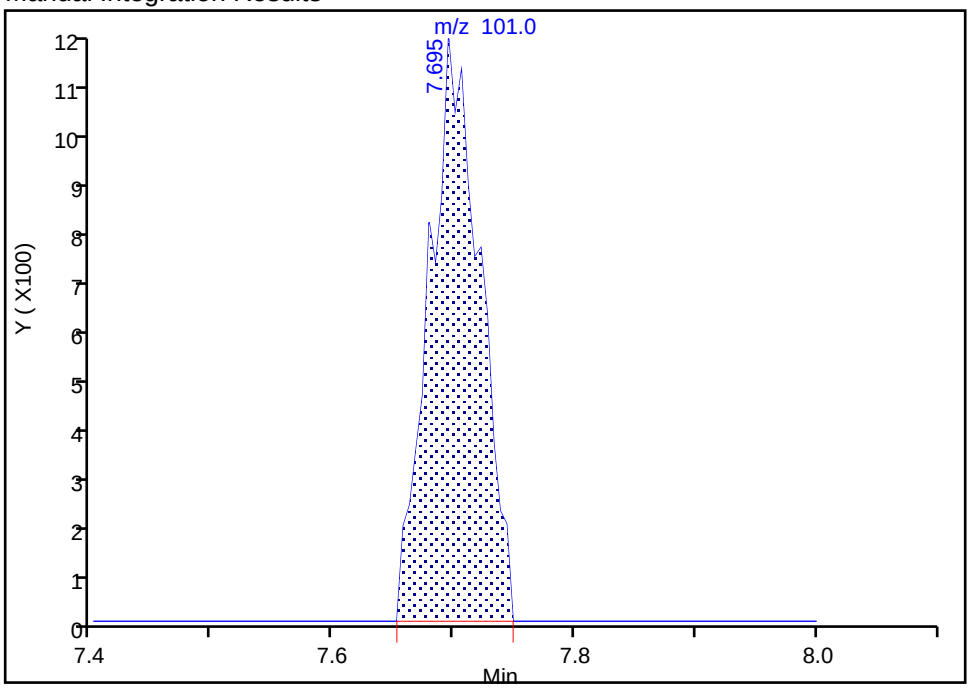
Processing Integration Results

RT: 7.70
Area: 2717
Amount: 0.039666
Amount Units: ppb v/v



Manual Integration Results

RT: 7.70
Area: 3358
Amount: 0.049024
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:05:37

Audit Action: Manually Integrated Audit Reason: Assign Peak

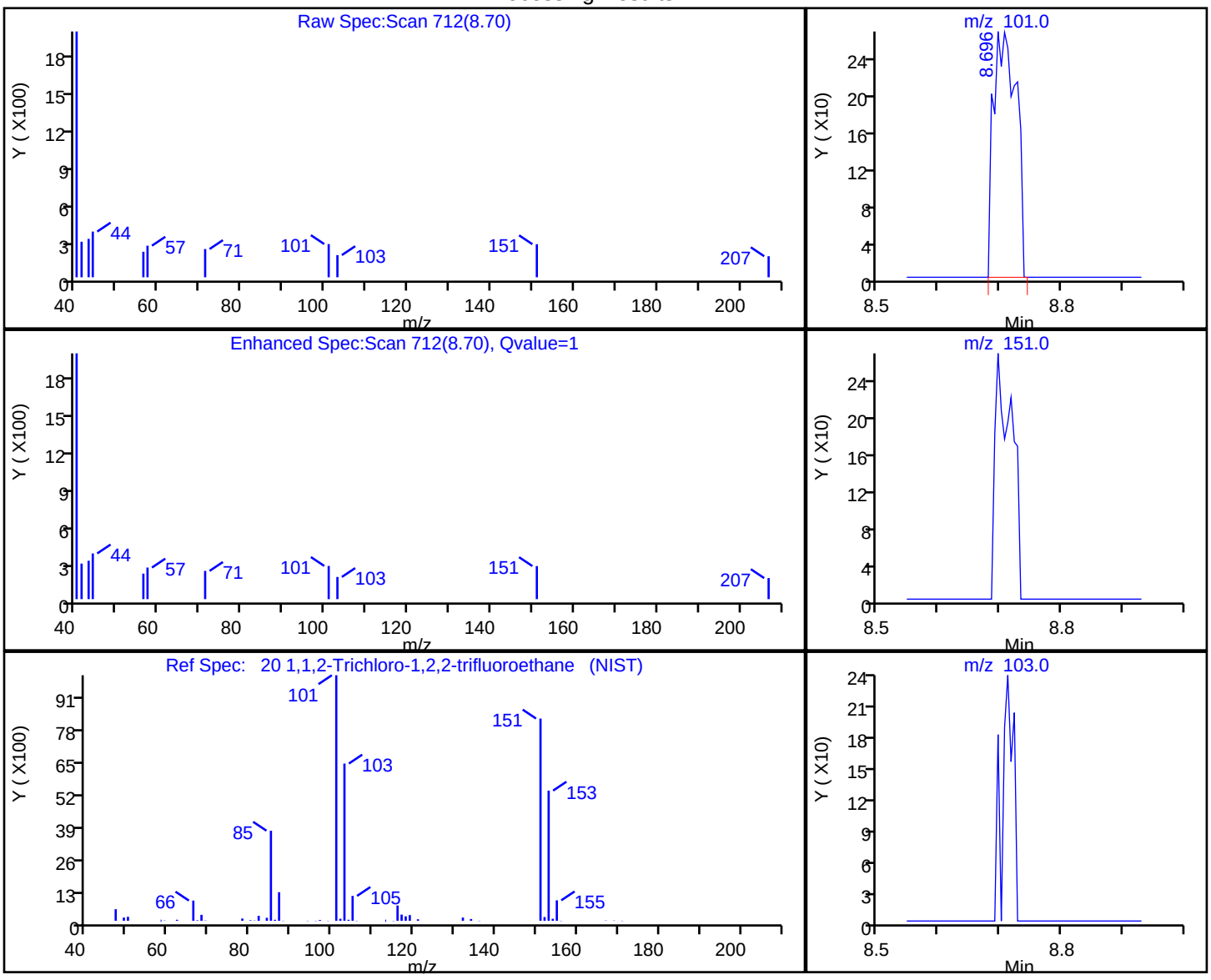
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Processing Results



RT	Mass	Response	Amount
8.70	101.00	697	0.014198
8.74	151.00	0	
8.74	103.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

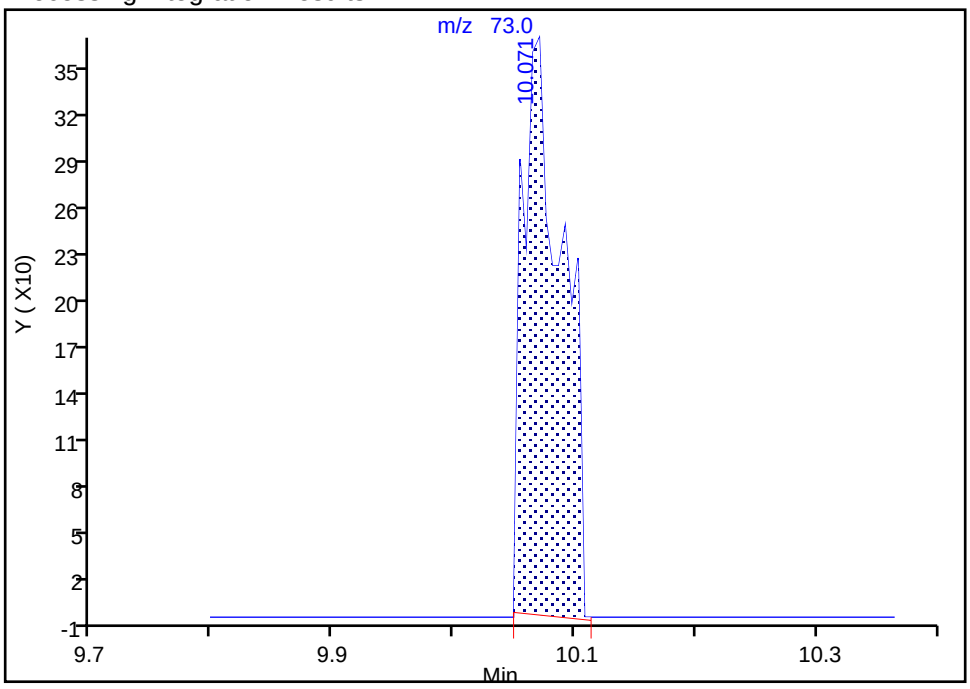
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

29 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

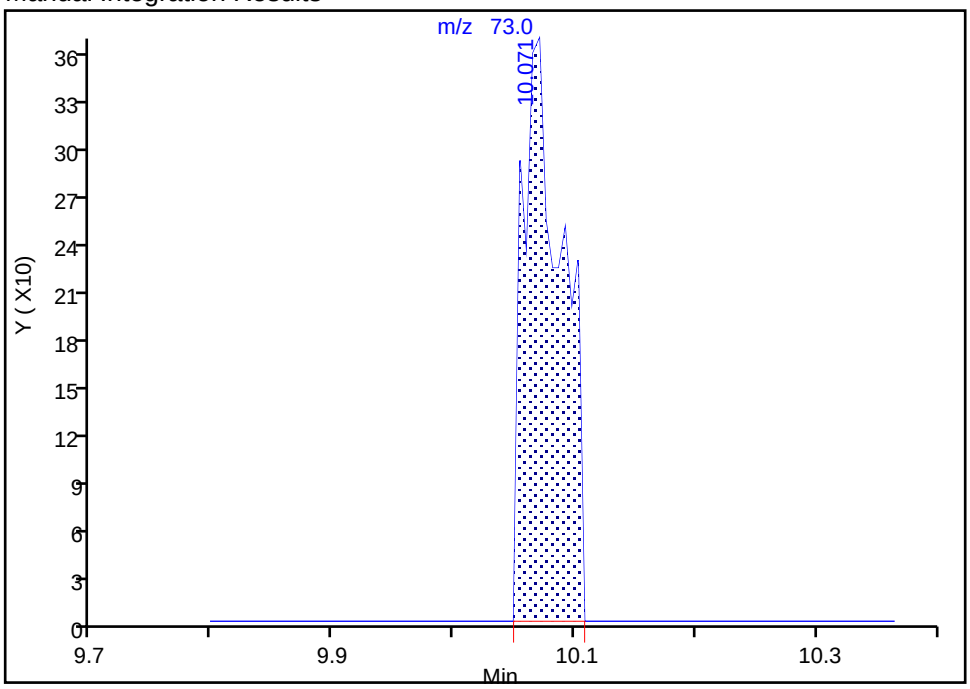
Processing Integration Results

RT: 10.07
Area: 827
Amount: 0.012193
Amount Units: ppb v/v



Manual Integration Results

RT: 10.07
Area: 829
Amount: 0.012222
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:06:27

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

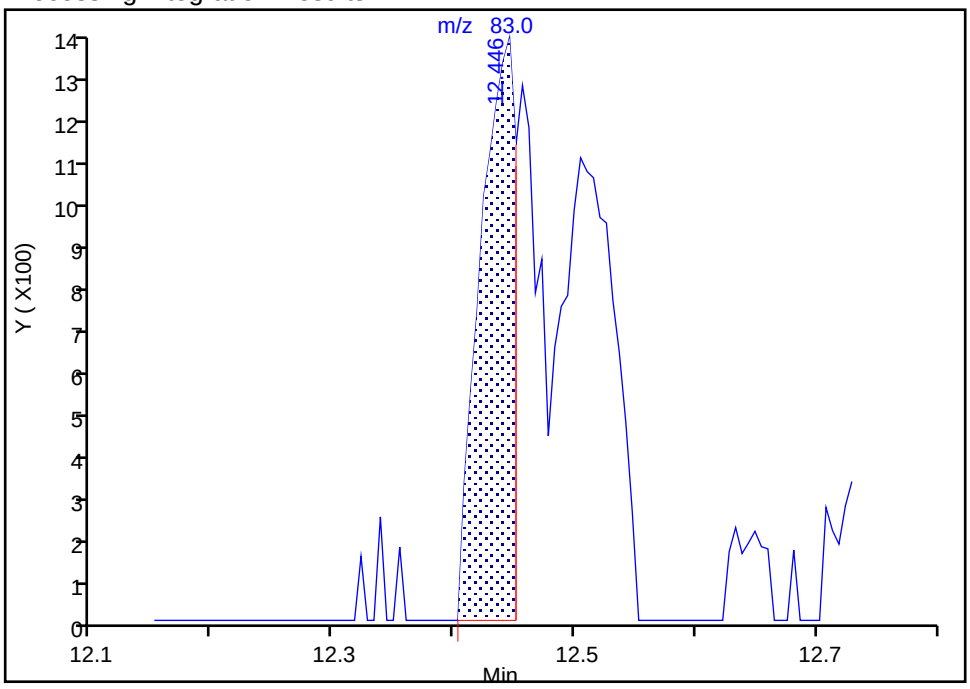
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

41 Chloroform, CAS: 67-66-3

Signal: 1

Processing Integration Results

RT: 12.45
Area: 2796
Amount: 0.058266
Amount Units: ppb v/v



Manual Integration Results

RT: 12.45
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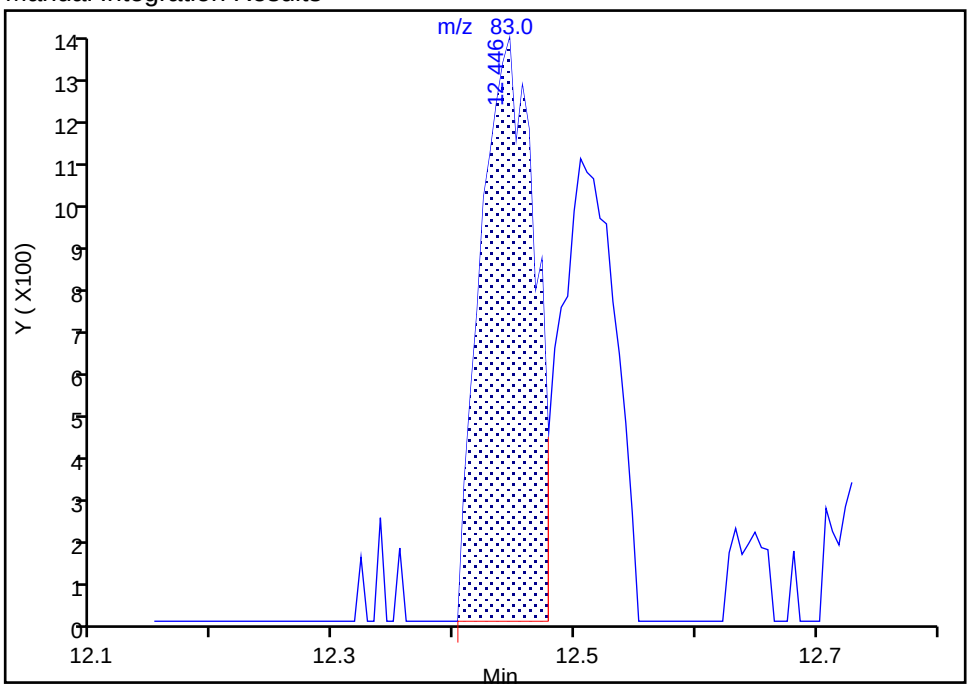
Amount: 0.088107
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:07:07

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

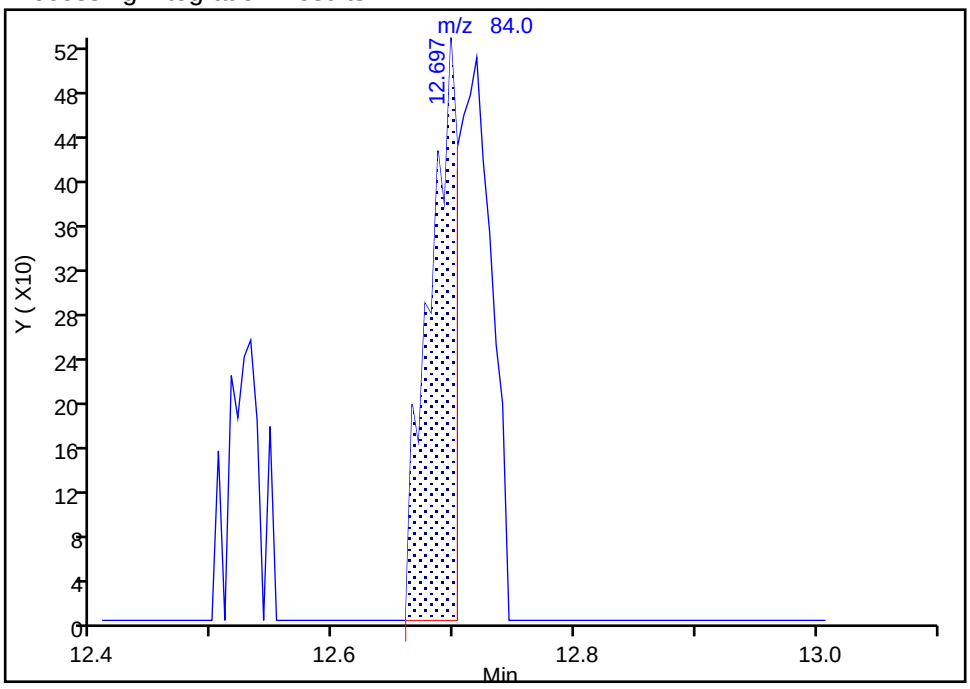
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Cyclohexane, CAS: 110-82-7

Signal: 1

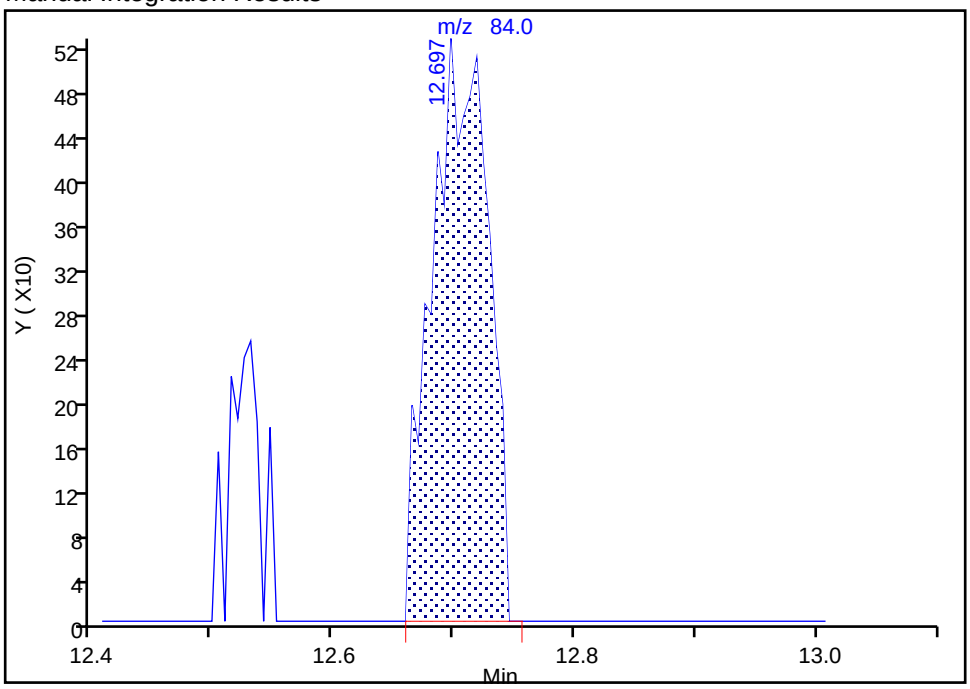
Processing Integration Results

RT: 12.70
Area: 855
Amount: 0.025675
Amount Units: ppb v/v



Manual Integration Results

RT: 12.70
Area: 1705
Amount: 0.051200
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:07:18

Audit Action: Manually Integrated Audit Reason: Assign Peak

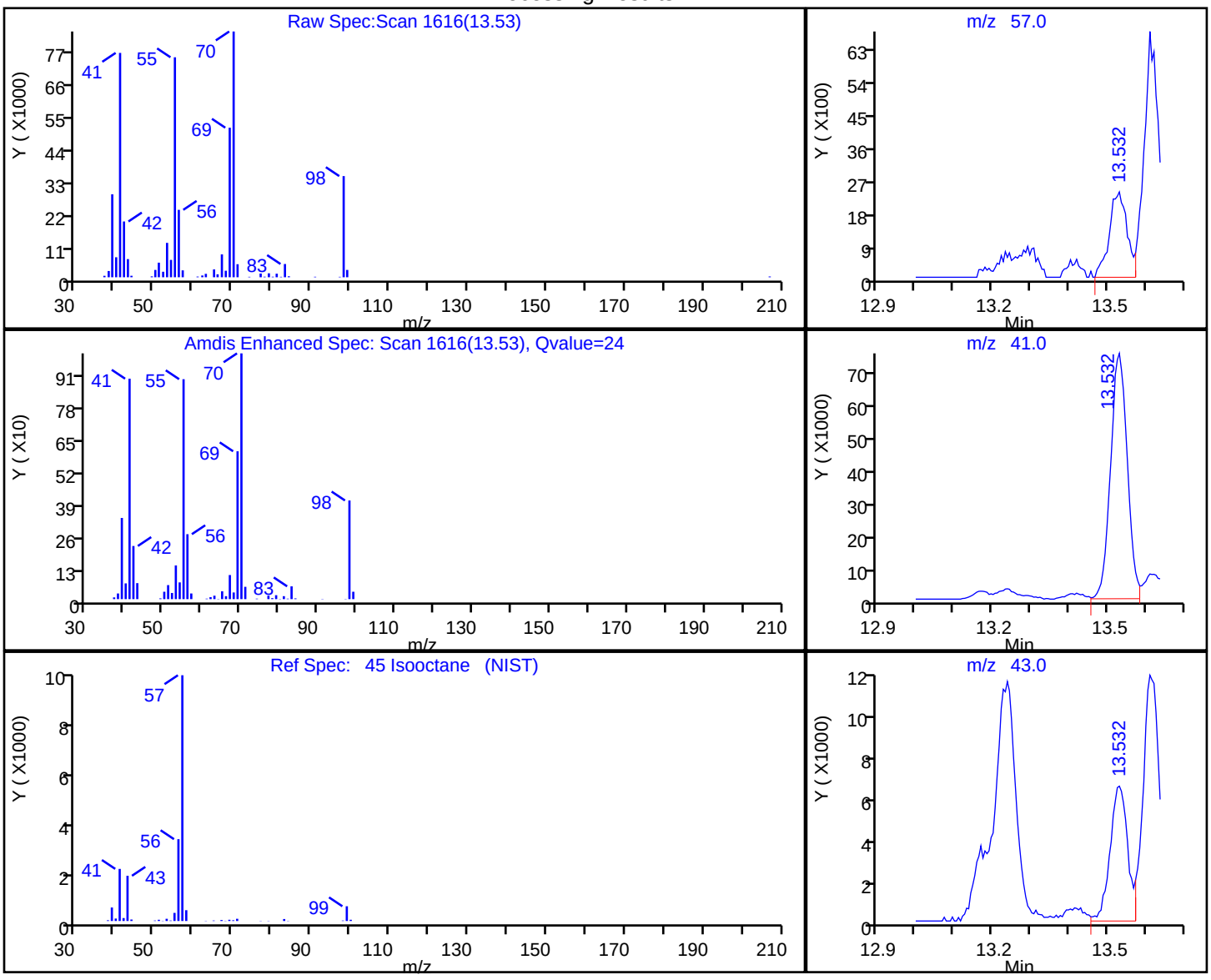
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Isooctane, CAS: 540-84-1

Processing Results



RT	Mass	Response	Amount
13.53	57.00	7693	0.068066
13.53	41.00	230978	
13.53	43.00	19966	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

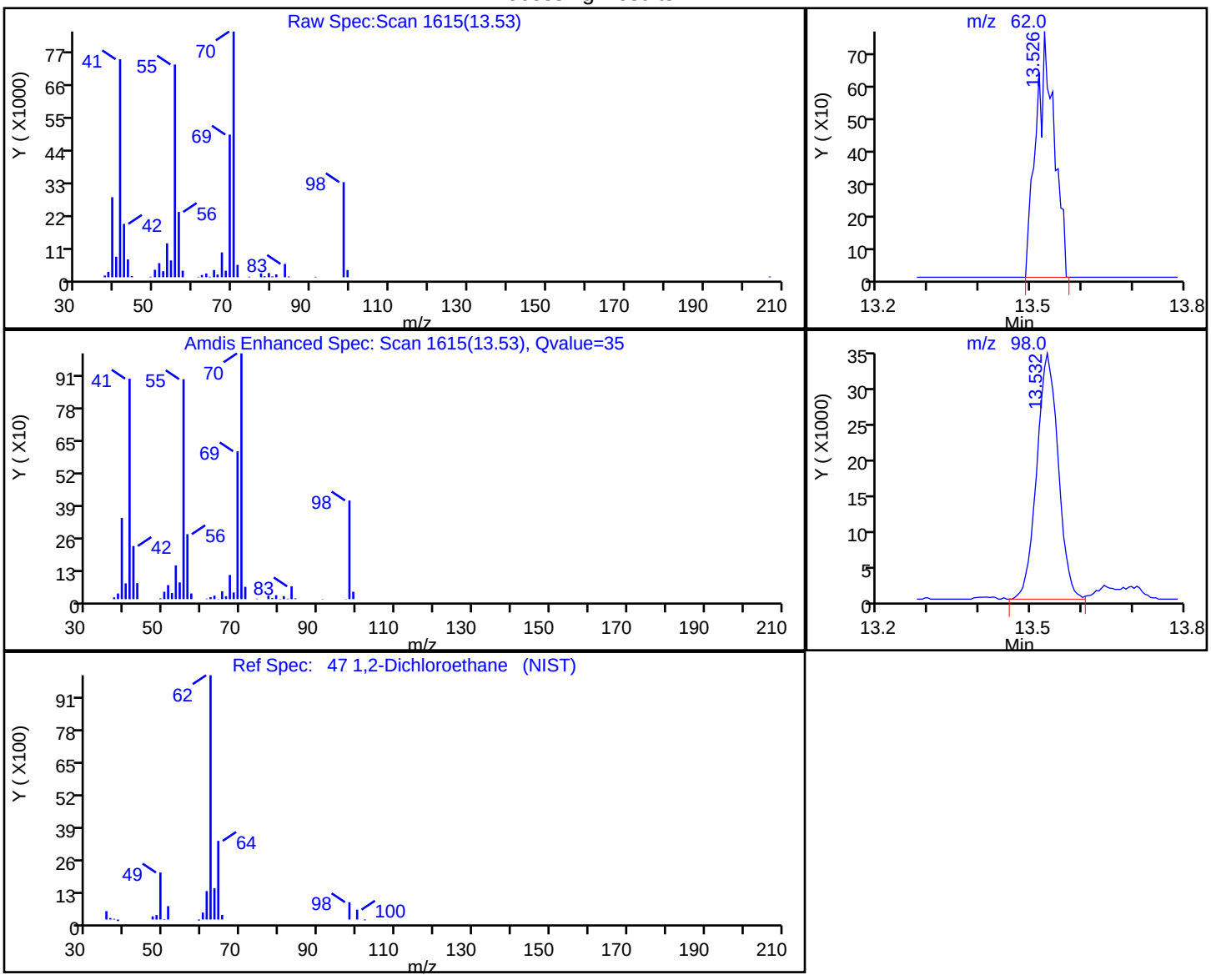
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
13.53	62.00	1910	0.063576
13.53	98.00	100072	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

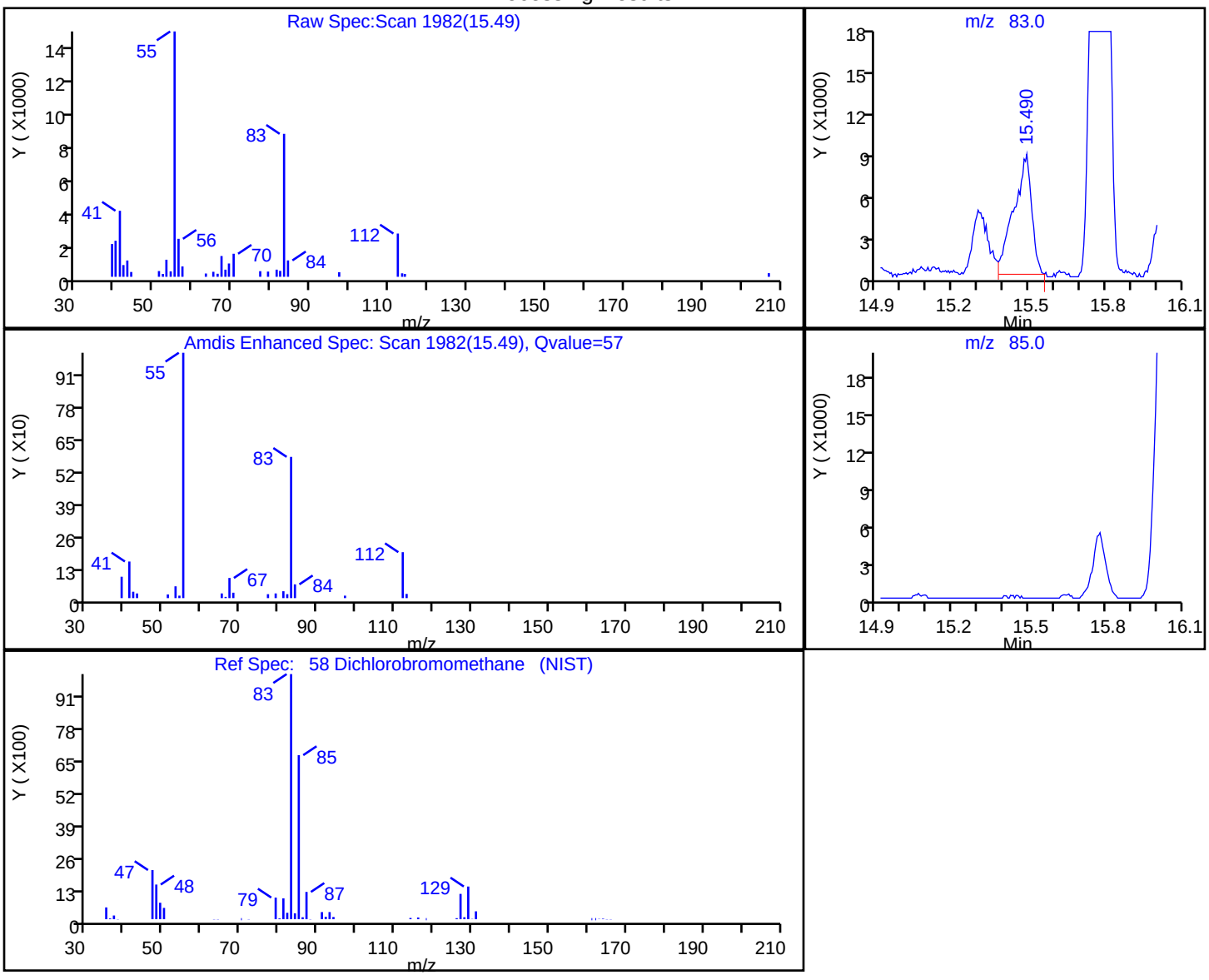
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

58 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
15.49	83.00	40926	0.752988
15.46	85.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

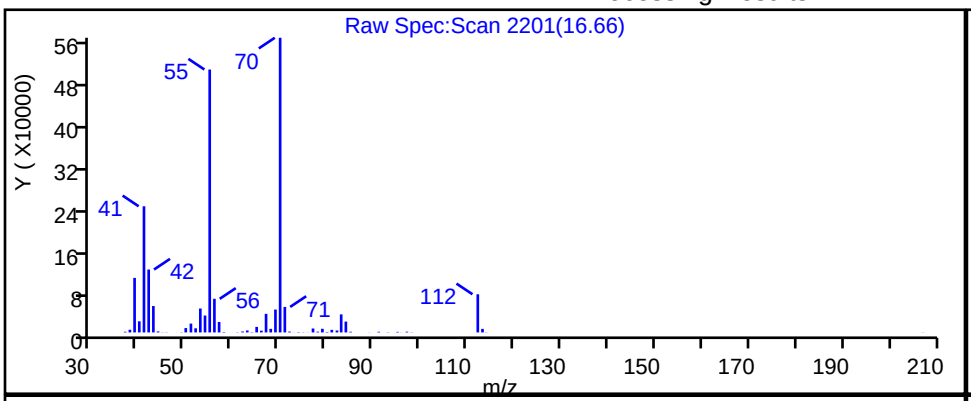
User Disabled Compound Report

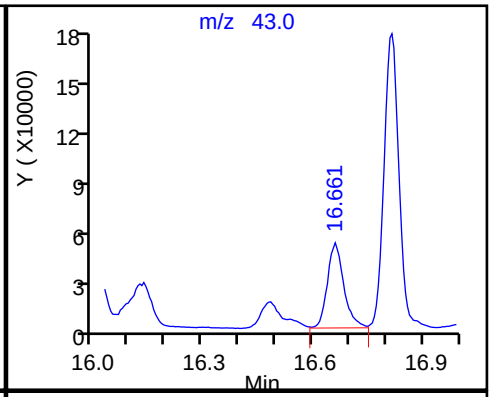
TestAmerica Burlington

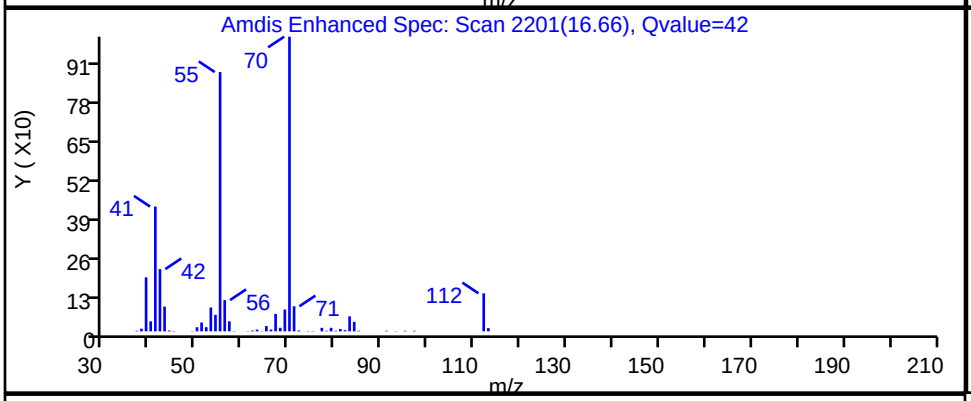
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

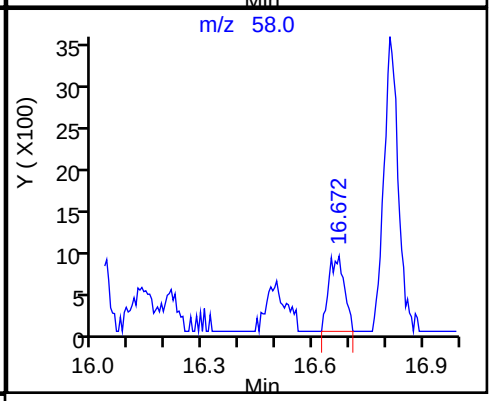
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

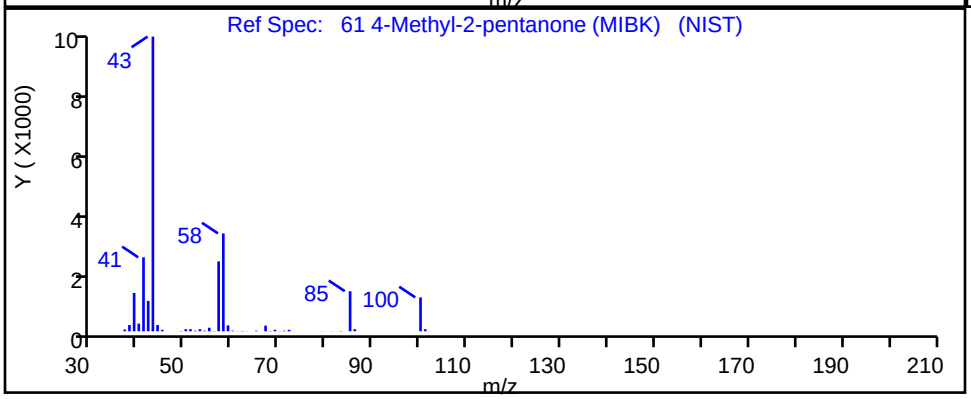
Processing Results











RT	Mass	Response	Amount
16.66	43.00	157833	3.104510
16.67	58.00	2673	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

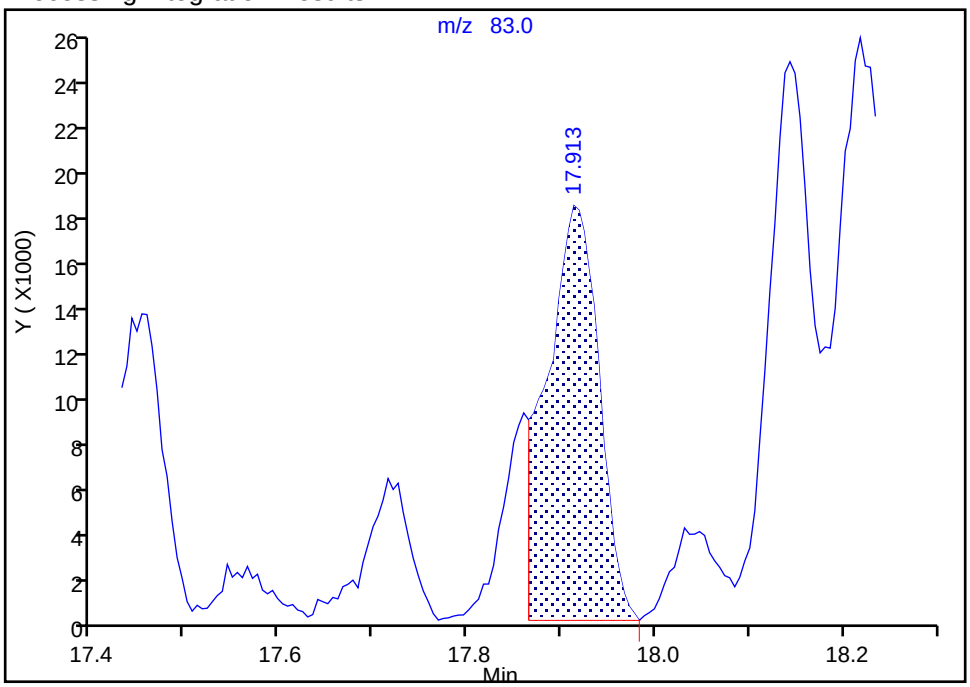
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

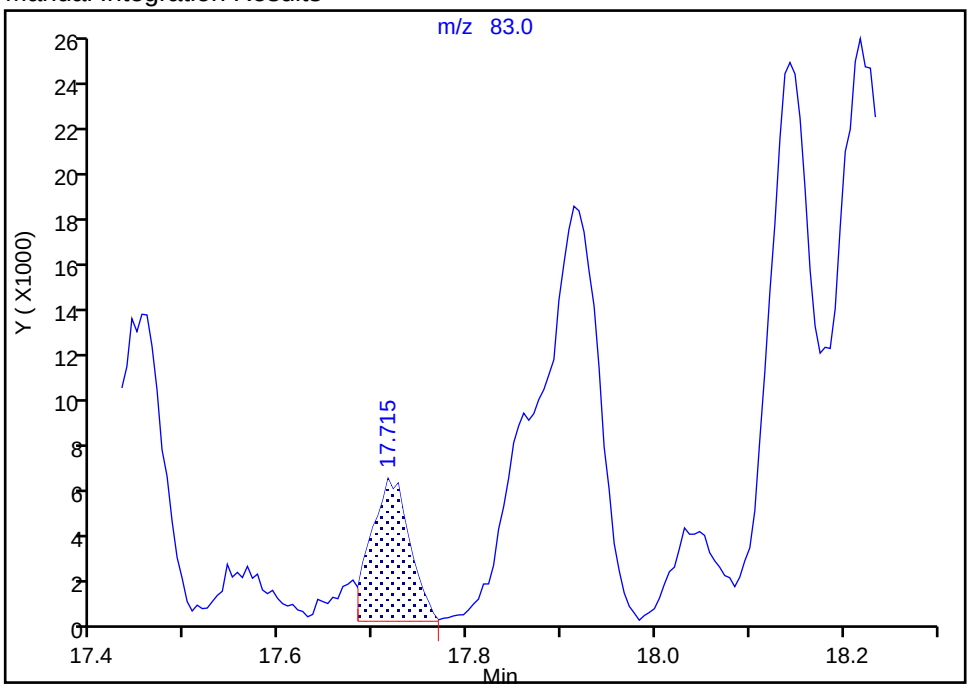
Processing Integration Results

RT: 17.91
Area: 69674
Amount: 2.519263
Amount Units: ppb v/v



Manual Integration Results

RT: 17.72
Area: 17497
Amount: 0.632654
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:09:06

Audit Action: Manually Integrated Audit Reason: Assign Peak

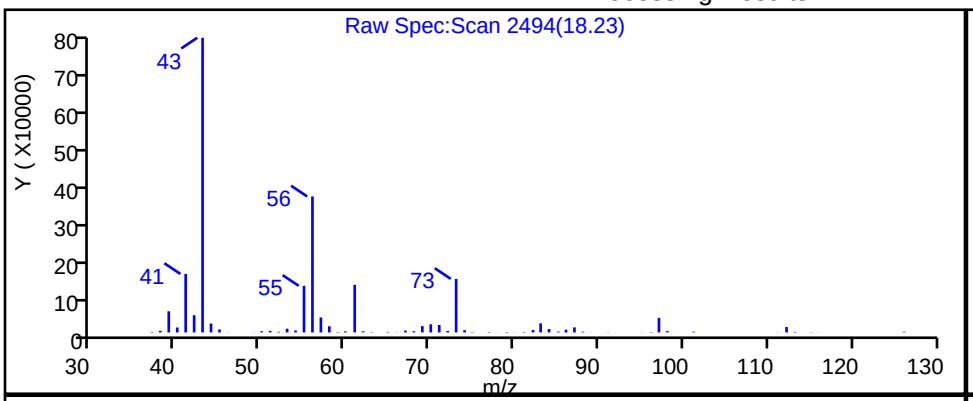
User Disabled Compound Report

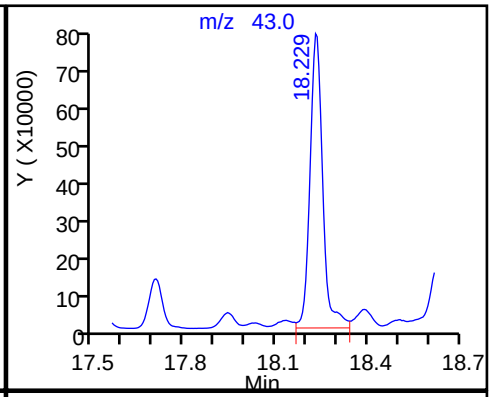
TestAmerica Burlington

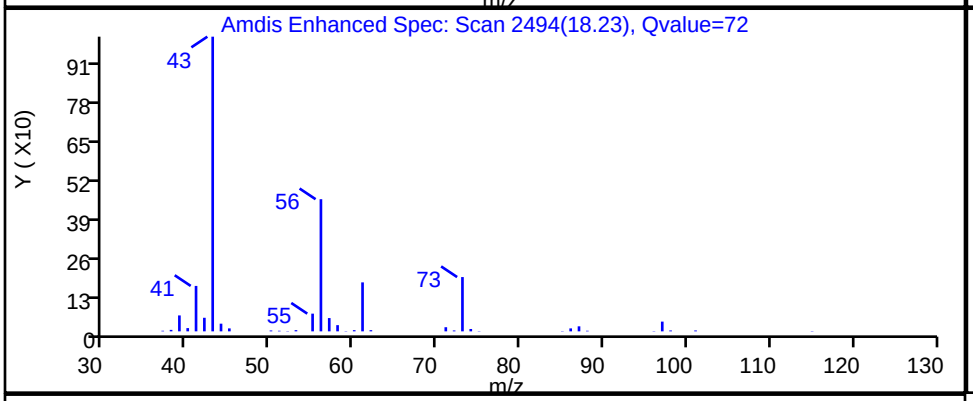
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

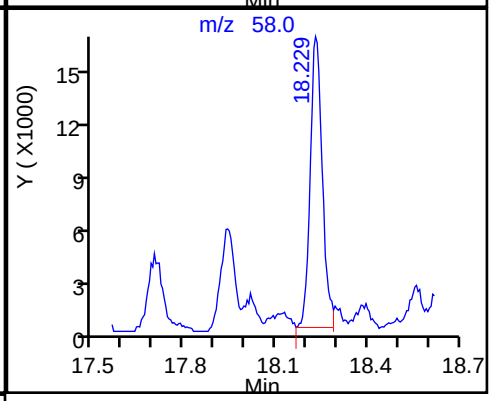
67 2-Hexanone, CAS: 591-78-6

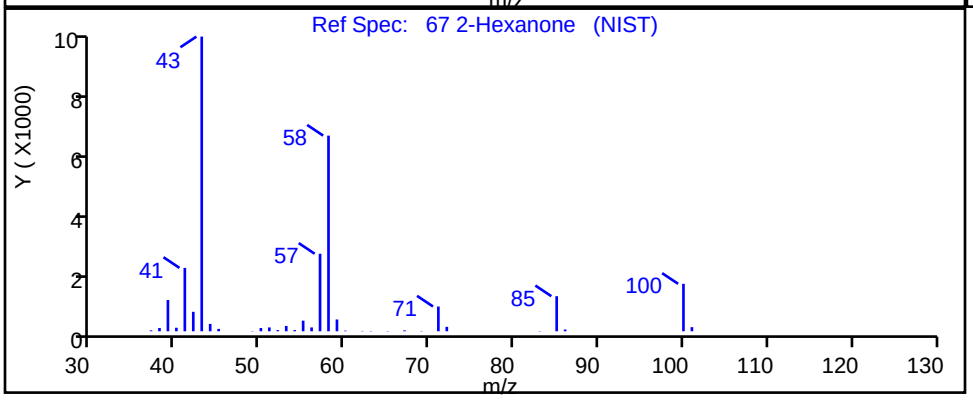
Processing Results











RT	Mass	Response	Amount
18.23	43.00	2300638	46.522345
18.23	58.00	45093	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

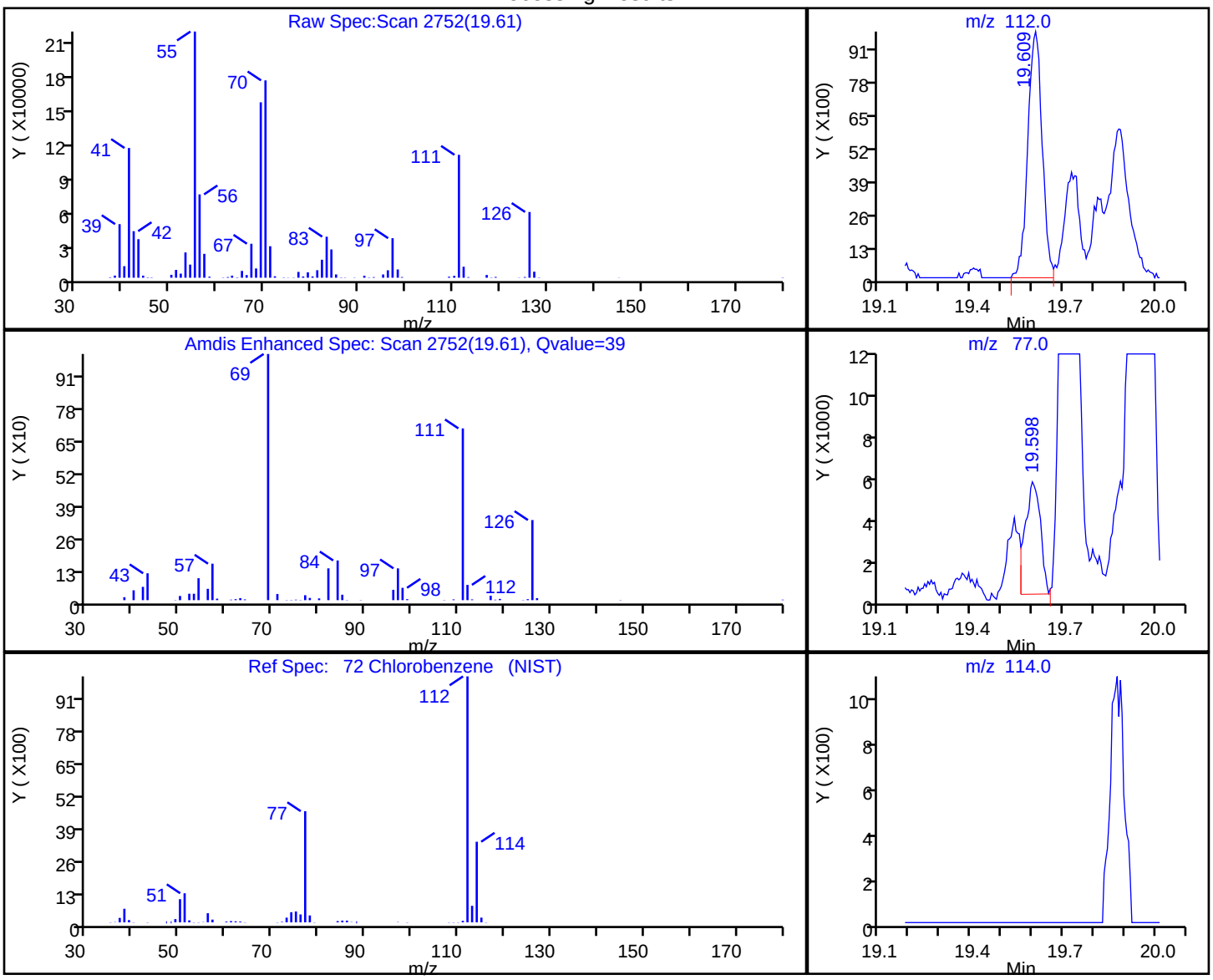
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

72 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
19.61	112.00	31983	0.394366
19.60	77.00	16741	
19.60	114.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

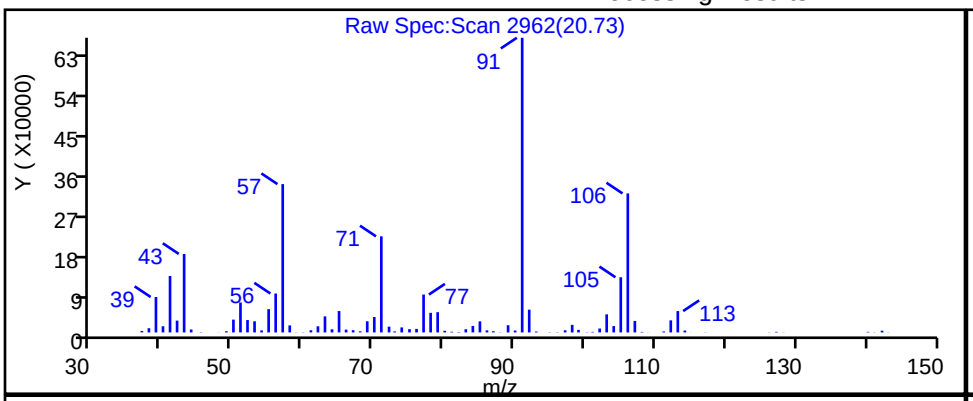
User Disabled Compound Report

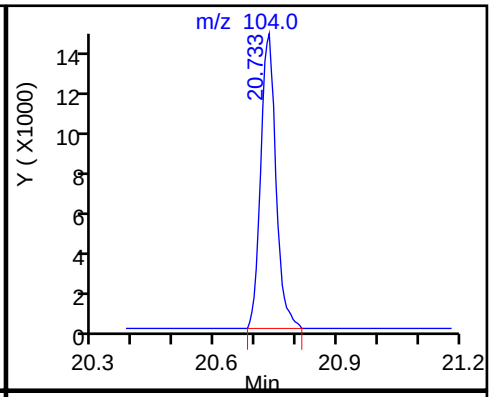
TestAmerica Burlington

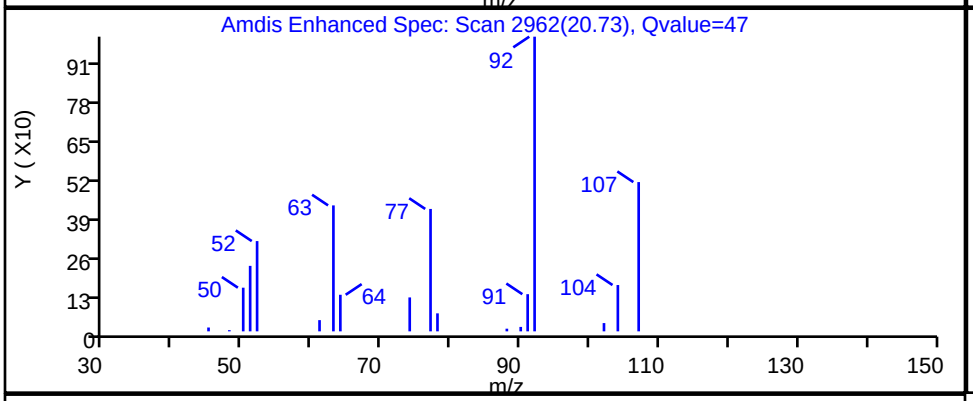
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

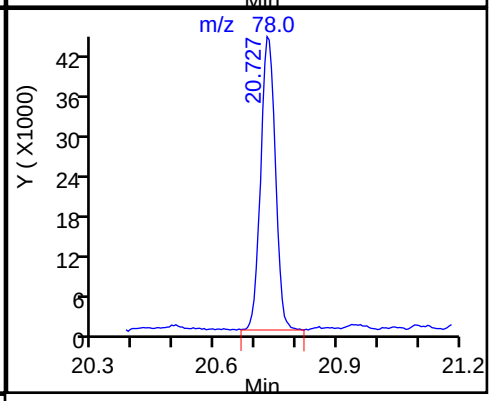
78 Styrene, CAS: 100-42-5

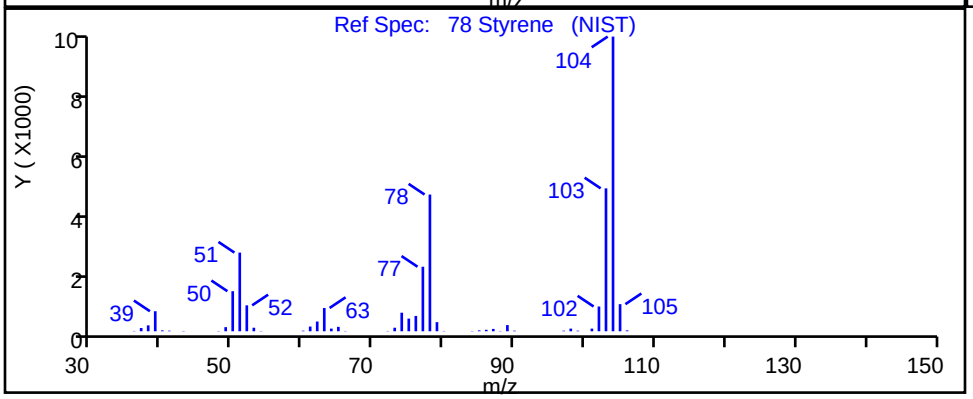
Processing Results











RT	Mass	Response	Amount
20.73	104.00	37408	0.493488
20.73	78.00	112531	

Reviewer: bunmaa, 09-Apr-2018 20:29:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

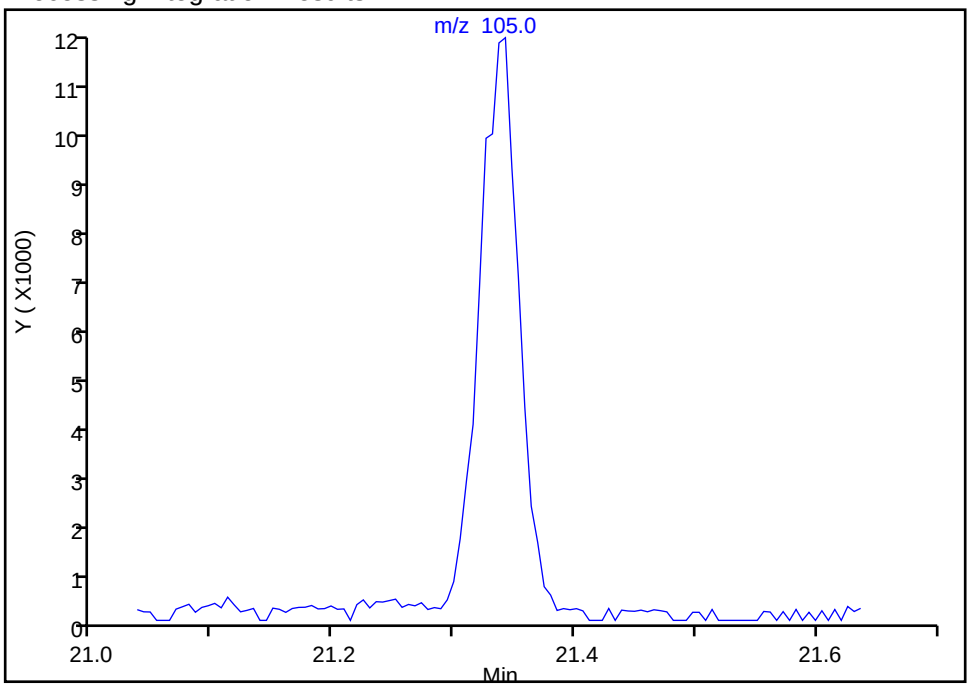
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

80 Isopropylbenzene, CAS: 98-82-8

Signal: 1

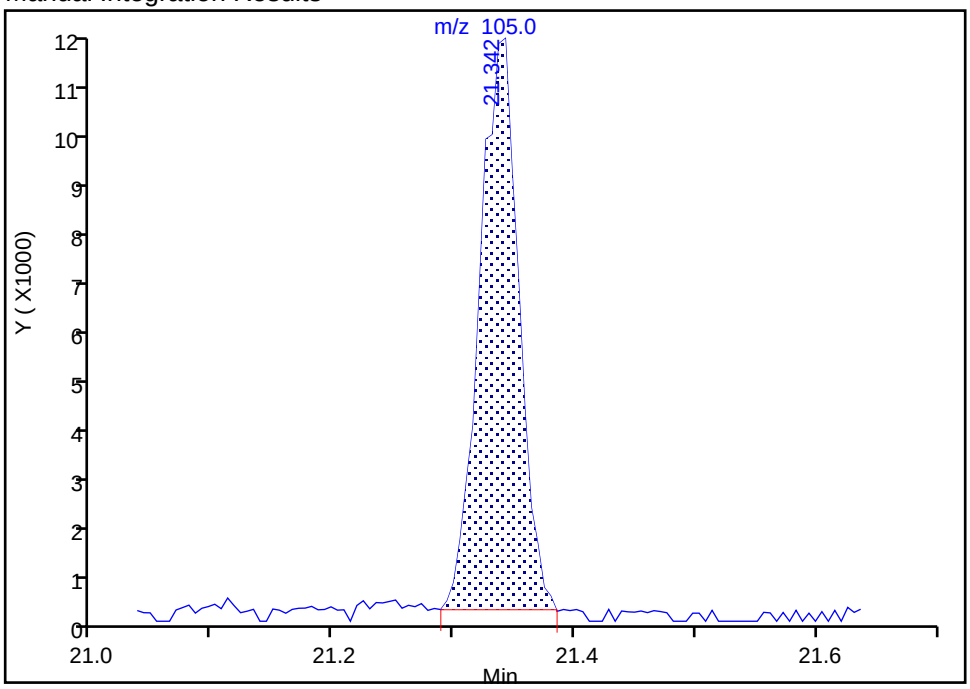
Not Detected
Expected RT: 21.34

Processing Integration Results



Manual Integration Results

RT: 21.34
Area: 24374
Amount: 0.158072
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:10:14
Audit Action: Manually Integrated Audit Reason: Assign Peak

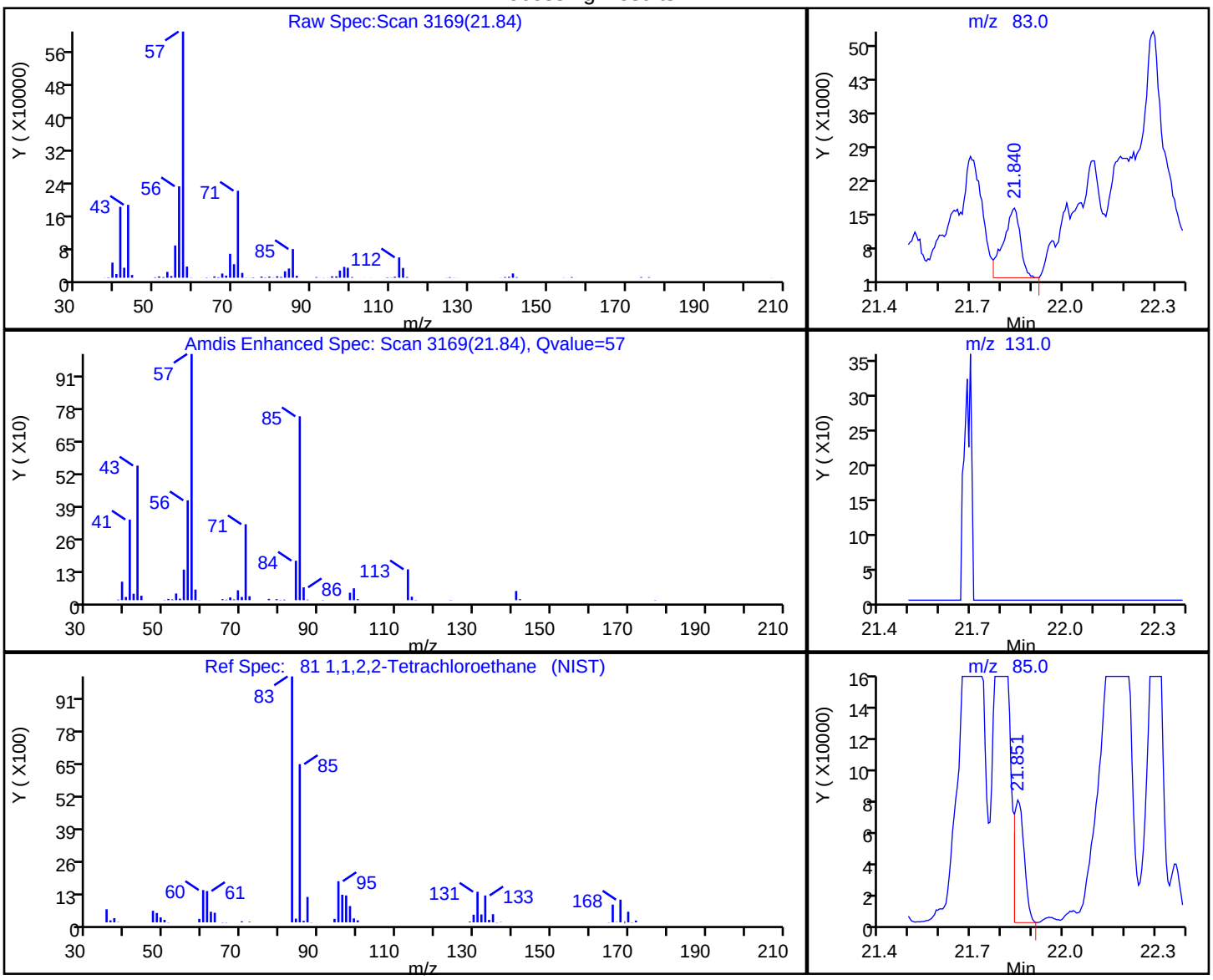
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.84	83.00	55121	0.714455
21.94	131.00	0	
21.85	85.00	173527	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

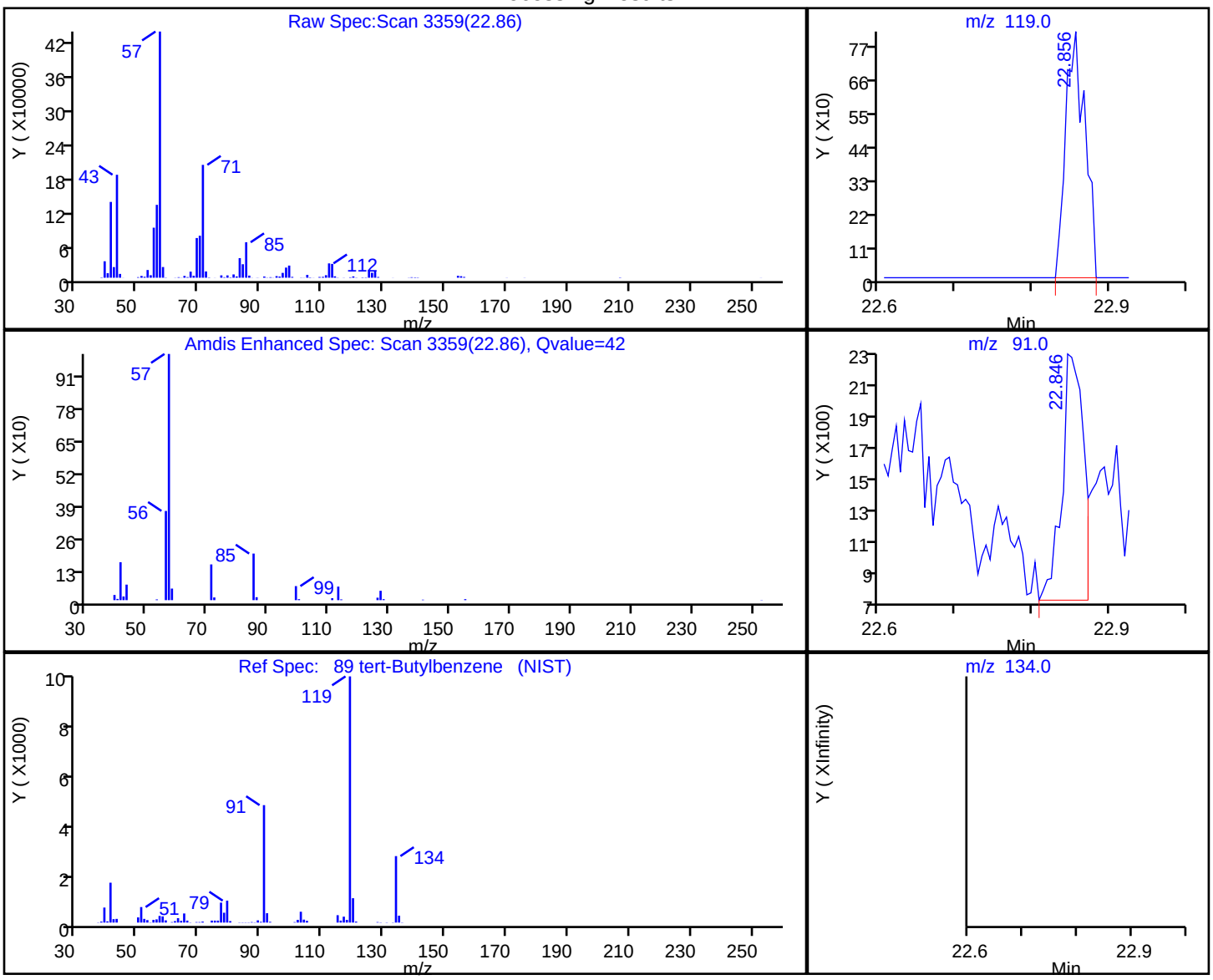
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

89 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
22.86	119.00	1426	0.010469
22.85	91.00	2970	
22.77	134.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

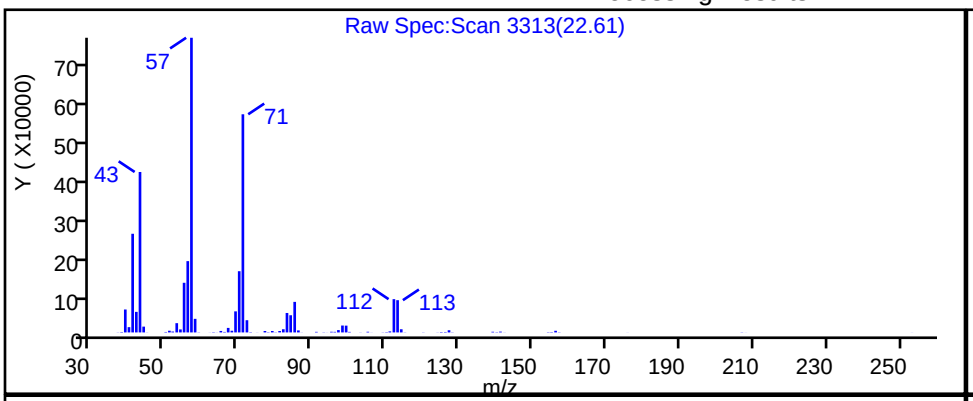
User Disabled Compound Report

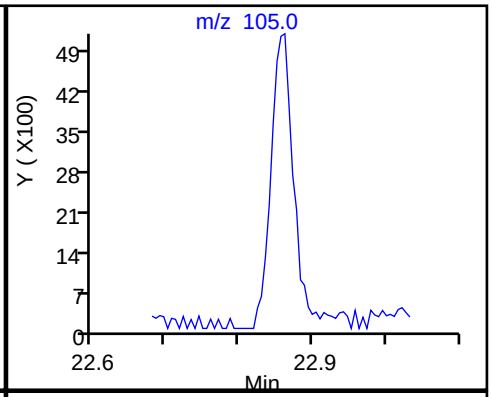
TestAmerica Burlington

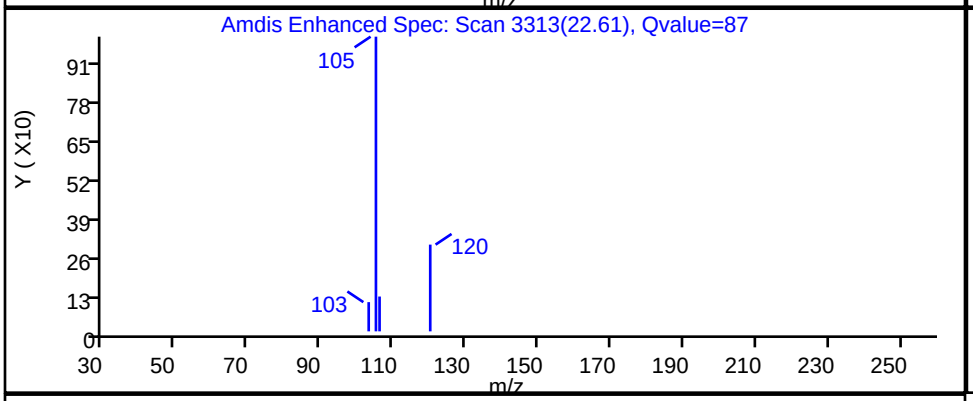
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

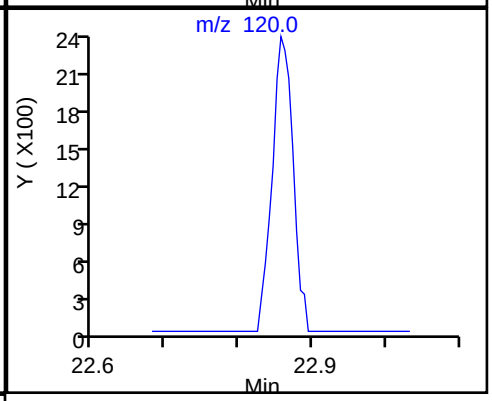
90 1,2,4-Trimethylbenzene, CAS: 95-63-6

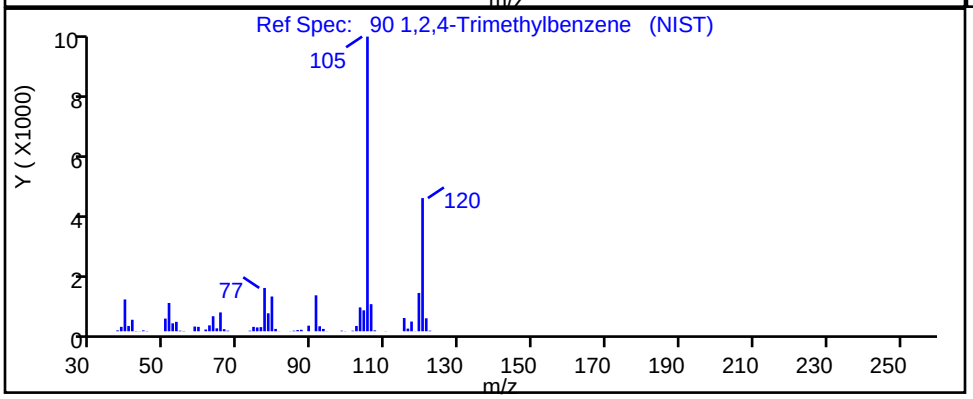
Processing Results











RT	Mass	Response	Amount
22.61	105.00	3226	0.023736
22.60	120.00	929	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

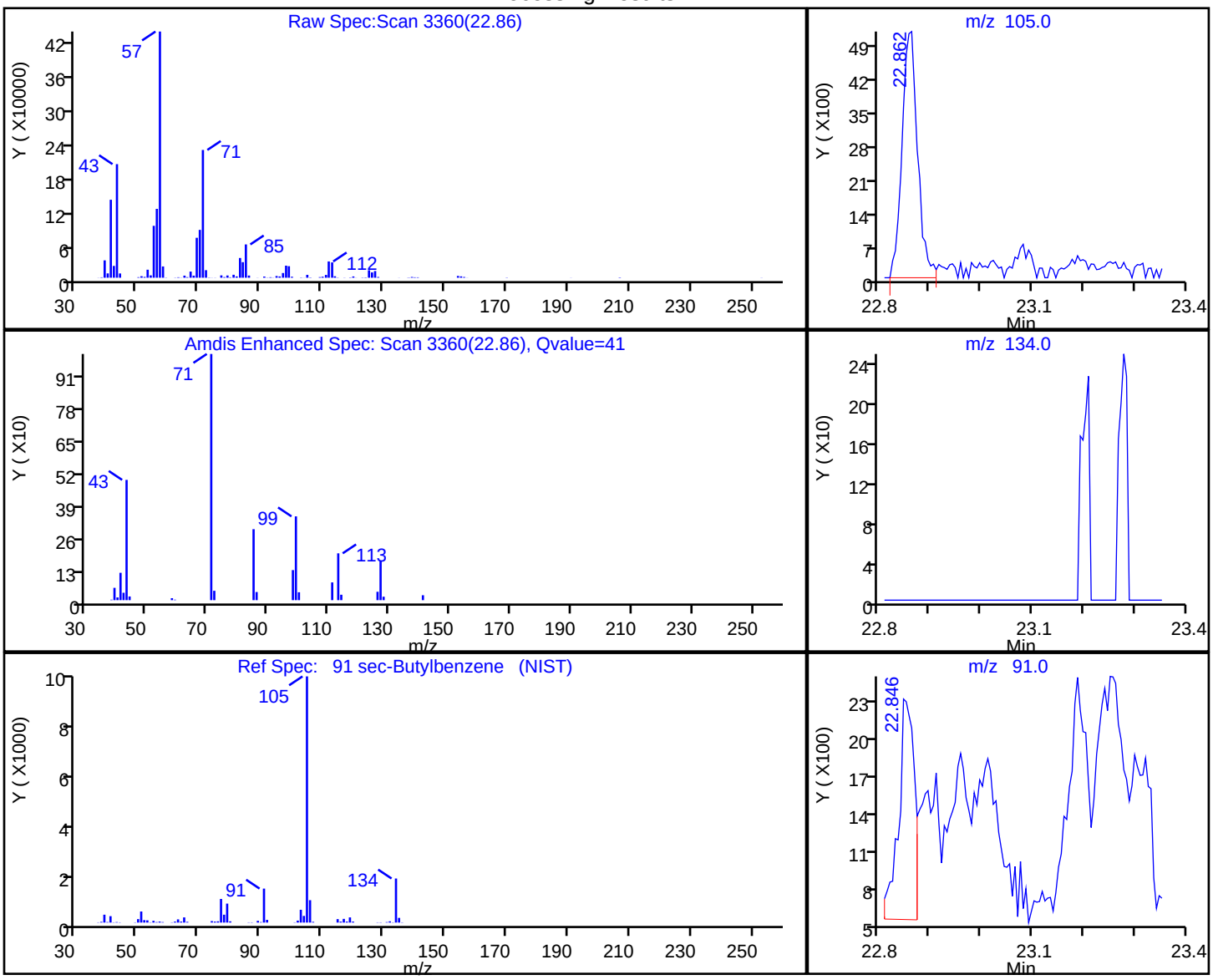
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

91 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.86	105.00	10996	0.055869
23.08	134.00	0	
22.85	91.00	3629	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

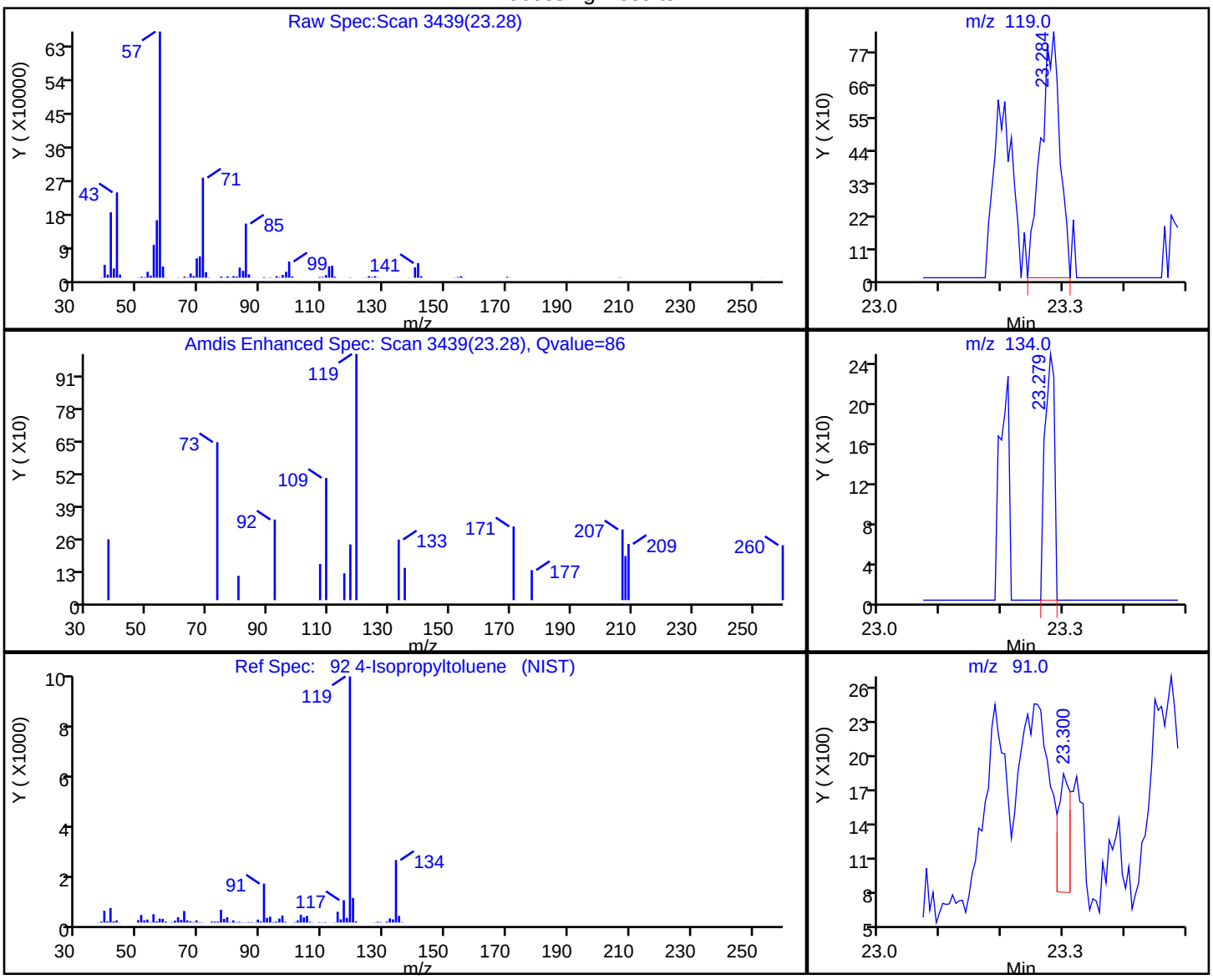
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

92 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
23.28	119.00	1782	0.010703
23.28	134.00	263	
23.30	91.00	1369	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

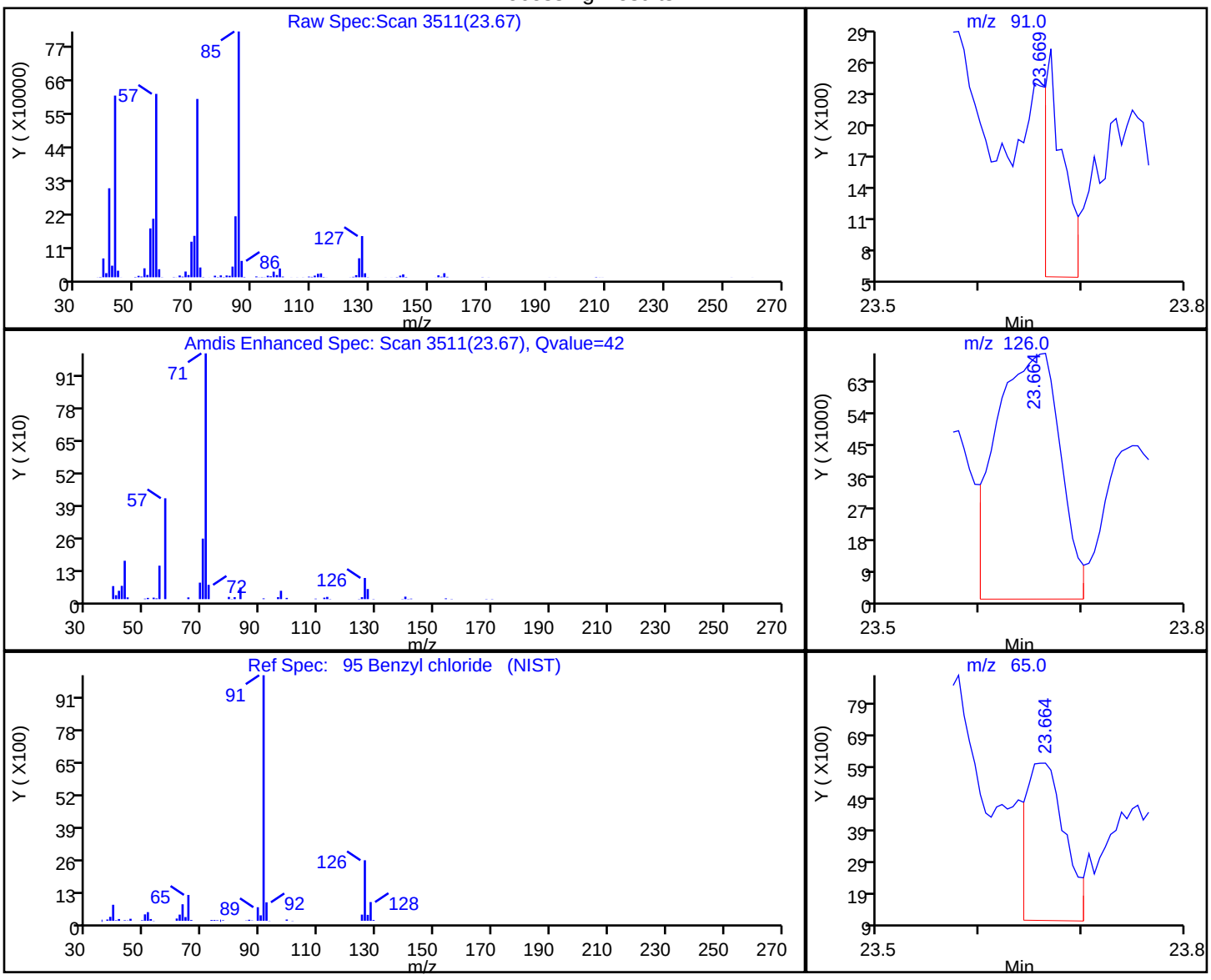
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
23.67	91.00	2694	0.029035
23.66	126.00	309571	
23.66	65.00	13538	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

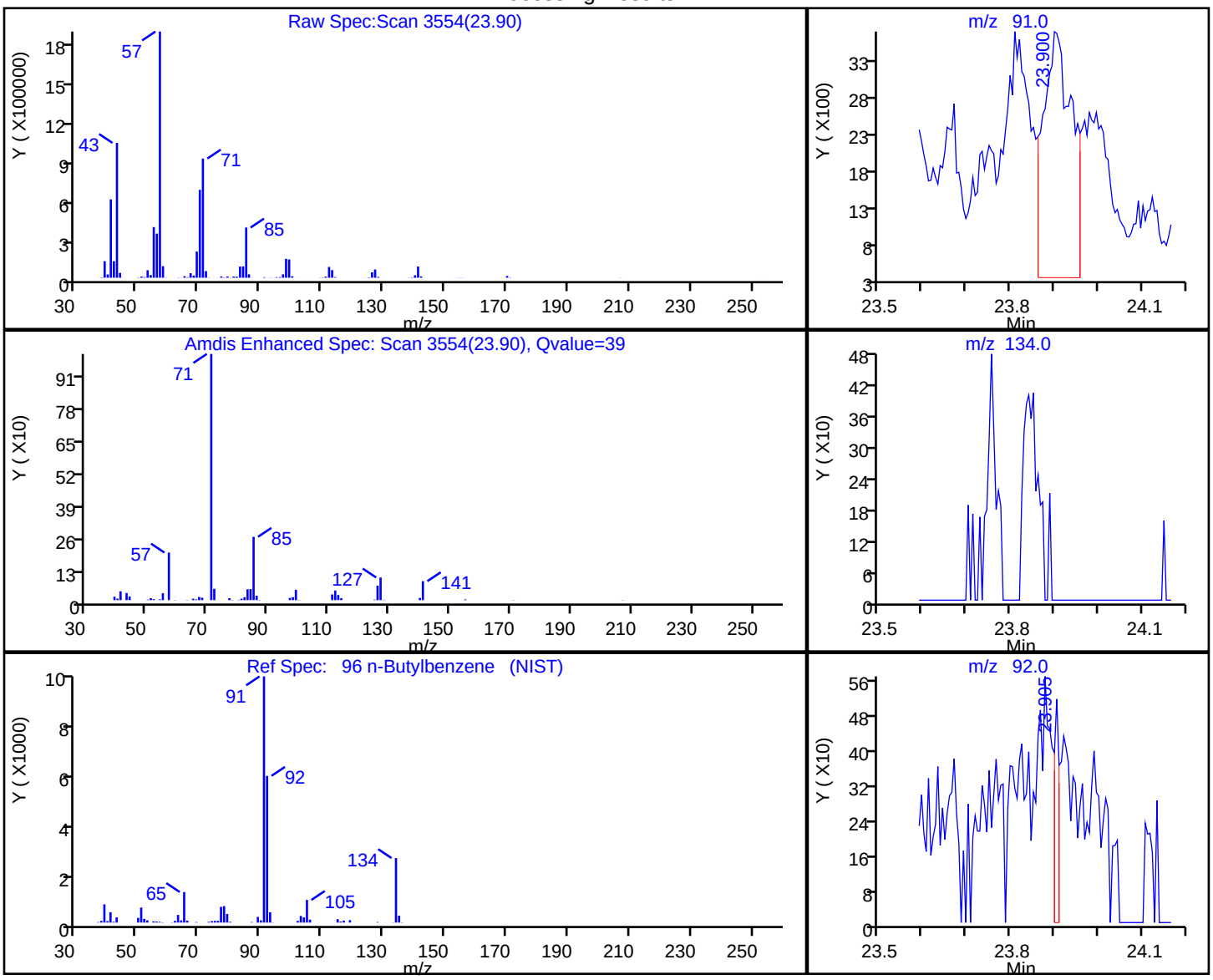
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-14.d				
Injection Date:	06-Apr-2018 23:30:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-8	Lab Sample ID:	200-42918-8		
Client ID:	GC-SV-104 (AS)				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	5.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
23.90	91.00	15072	0.113704
23.88	134.00	0	
23.90	92.00	406	

Reviewer: bunmaa, 09-Apr-2018 19:13:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) Lab Sample ID: 200-42918-9

Matrix: Air Lab File ID: 29952-17.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:30

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 02:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.50	0.20
75-45-6	Freon 22	86.47	0.50	U	0.50	0.26
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.068
74-87-3	Chloromethane	50.49	0.40	J	0.50	0.25
106-97-8	n-Butane	58.12	4.9		0.50	0.31
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.041
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.065
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.062
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.21
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.056
75-69-4	Trichlorofluoromethane	137.37	0.20		0.20	0.062
76-13-1	Freon TF	187.38	0.070	J	0.20	0.031
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.034
67-64-1	*Acetone*	*58.08*	*810*	*E*	*5.0*	*2.6*
67-63-0	*Isopropyl alcohol*	*60.10*	*76*	*E*	*5.0*	*1.8*
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.12
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.27
75-09-2	Methylene Chloride	84.93	0.21	J	0.50	0.20
75-65-0	tert-Butyl alcohol	74.12	1.6	J	5.0	1.5
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.061
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.074
110-54-3	n-Hexane	86.17	0.17	J	0.20	0.16
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.026
78-93-3	*Methyl Ethyl Ketone*	*72.11*	*55*	*E*	*0.50*	*0.20*
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.037
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.11
67-66-3	Chloroform	119.38	0.13	J	0.20	0.052
109-99-9	*Tetrahydrofuran*	*72.11*	*260*	*E*	*5.0*	*2.6*
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.068
110-82-7	Cyclohexane	84.16	0.080	J	0.20	0.063
56-23-5	Carbon tetrachloride	153.81	0.20		0.040	0.024
540-84-1	2,2,4-Trimethylpentane	114.23	0.22		0.20	0.088
71-43-2	Benzene	78.11	0.32		0.20	0.071
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) Lab Sample ID: 200-42918-9

Matrix: Air Lab File ID: 29952-17.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:30

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 02:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	1.0		0.20	0.14
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.030
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.22
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.12
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	1.3
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.094
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.098
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.36
108-88-3	Toluene	92.14	1.2		0.20	0.069
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.12
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.078
127-18-4	Tetrachloroethene	165.83	0.097		0.040	0.029
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.42
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.071
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.069
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.040
100-41-4	Ethylbenzene	106.17	1.2		0.20	0.073
179601-23-1	m,p-Xylene	106.17	6.2		0.50	0.070
95-47-6	Xylene, o-	106.17	1.9		0.20	0.071
1330-20-7	Xylene (total)	106.17	8.1		0.70	0.14
100-42-5	Styrene	104.15	0.20	U	0.20	0.086
75-25-2	Bromoform	252.75	0.20	U	0.20	0.086
98-82-8	Cumene	120.19	0.20	U	0.20	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.076
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.069
622-96-8	4-Ethyltoluene	120.20	0.20		0.20	0.069
108-67-8	1,3,5-Trimethylbenzene	120.20	0.10	J	0.20	0.058
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.071
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.058
95-63-6	1,2,4-Trimethylbenzene	120.20	0.39		0.20	0.080
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.066
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.075
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.082
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.065

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) Lab Sample ID: 200-42918-9

Matrix: Air Lab File ID: 29952-17.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:30

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 02:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.12
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.080
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.071
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.24
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.082
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.31

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) | Lab Sample ID: 200-42918-9

Matrix: Air | Lab File ID: 29952-17.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 09:30

Sample wt/vol: 200(mL) | Date Analyzed: 04/06/2018 02:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128156 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.5	0.99
75-45-6	Freon 22	86.47	1.8	U	1.8	0.92
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.48
74-87-3	Chloromethane	50.49	0.82	J	1.0	0.52
106-97-8	n-Butane	58.12	12		1.2	0.74
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.10
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.14
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.24
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.55
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.24
75-69-4	Trichlorofluoromethane	137.37	1.1		1.1	0.35
76-13-1	Freon TF	187.38	0.54	J	1.5	0.24
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.13
67-64-1	*Acetone*	*58.08*	*1900*	*E*	*12*	*6.2*
67-63-0	*Isopropyl alcohol*	*60.10*	*190*	*E*	*12*	*4.4*
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.37
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.85
75-09-2	Methylene Chloride	84.93	0.74	J	1.7	0.69
75-65-0	tert-Butyl alcohol	74.12	4.9	J	15	4.5
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.22
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.29
110-54-3	n-Hexane	86.17	0.59	J	0.70	0.56
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.11
78-93-3	*Methyl Ethyl Ketone*	*72.11*	*160*	*E*	*1.5*	*0.59*
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.15
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.44
67-66-3	Chloroform	119.38	0.63	J	0.98	0.25
109-99-9	*Tetrahydrofuran*	*72.11*	*780*	*E*	*15*	*7.7*
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.37
110-82-7	Cyclohexane	84.16	0.28	J	0.69	0.22
56-23-5	Carbon tetrachloride	153.81	1.3		0.25	0.15
540-84-1	2,2,4-Trimethylpentane	114.23	1.0		0.93	0.41
71-43-2	Benzene	78.11	1.0		0.64	0.23
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.25

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) Lab Sample ID: 200-42918-9

Matrix: Air Lab File ID: 29952-17.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:30

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 02:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	4.3		0.82	0.57
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.16
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.90
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.55
123-91-1	1,4-Dioxane	88.11	18	U	18	4.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.63
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.44
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	1.5
108-88-3	Toluene	92.14	4.4		0.75	0.26
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.54
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.43
127-18-4	Tetrachloroethene	165.83	0.66		0.27	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	1.7
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.60
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.53
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.18
100-41-4	Ethylbenzene	106.17	5.4		0.87	0.32
179601-23-1	m,p-Xylene	106.17	27		2.2	0.30
95-47-6	Xylene, o-	106.17	8.2		0.87	0.31
1330-20-7	Xylene (total)	106.17	35		3.0	0.61
100-42-5	Styrene	104.15	0.85	U	0.85	0.37
75-25-2	Bromoform	252.75	2.1	U	2.1	0.89
98-82-8	Cumene	120.19	0.98	U	0.98	0.29
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.52
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.34
622-96-8	4-Ethyltoluene	120.20	1.0		0.98	0.34
108-67-8	1,3,5-Trimethylbenzene	120.20	0.49	J	0.98	0.29
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.32
95-63-6	1,2,4-Trimethylbenzene	120.20	1.9		0.98	0.39
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.36
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.41
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.49
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.39

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) Lab Sample ID: 200-42918-9

Matrix: Air Lab File ID: 29952-17.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:30

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 02:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.62
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.44
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.43
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.8
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.87
91-20-3	Naphthalene	128.17	2.6	U	2.6	1.6

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Lims ID: 200-42918-A-9
Client ID: GC-IA-104 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 02:20:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029952-017
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 09:49:28 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: puangmaleek Date: 09-Apr-2018 09:49:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	5.170	5.157	0.010	98	25959	0.3840	
3 Chlorodifluoromethane	51	5.245	5.245	0.005	97	8950	0.2397	M
4 1,2-Dichloro-1,1,2,2-tetra	85		5.566				ND	
5 Chloromethane	50	5.769	5.756	0.010	98	8917	0.3976	
6 Butane	43	6.042	6.053	0.010	98	182956	4.93	
7 Vinyl chloride	62		6.085				ND	
8 Butadiene	54		6.181				ND	U
9 Bromomethane	94		6.984				ND	
11 Chloroethane	64		7.230				ND	
13 Vinyl bromide	106		7.637				ND	
14 Trichlorofluoromethane	101	7.738	7.733	0.005	96	10691	0.1954	
20 1,1,2-Trichloro-1,2,2-trif	101	8.765	8.749	0.026	89	2741	0.0699	
21 1,1-Dichloroethene	96		8.803				ND	
22 Acetone	43	9.017	8.997	0.016	94	20963145	805.3	E
23 Carbon disulfide	76	9.199	9.189	0.006	94	1730	0.0378	
24 Isopropyl alcohol	45	9.231	9.200	0.027	100	2048942	76.2	E
25 3-Chloro-1-propene	41		9.498				ND	
27 Methylene Chloride	49	9.792	9.756	0.032	83	3672	0.2138	
28 2-Methyl-2-propanol	59	9.915	9.883	0.032	93	61650	1.61	
29 Methyl tert-butyl ether	73		10.097				ND	
30 trans-1,2-Dichloroethene	61		10.151				ND	
S 31 1,2-Dichloroethene, Total	61		10.200				ND	
33 Hexane	57	10.493	10.493	0.010	1	4390	0.1682	Ma
34 1,1-Dichloroethane	63		10.948				ND	
36 cis-1,2-Dichloroethene	96		11.954				ND	
37 2-Butanone (MEK)	72	11.975	11.959	0.011	99	516059	55.2	E
39 Tetrahydrofuran	42	12.371	12.376	0.000	84	4694291	264.1	E
* 40 Chlorobromomethane	128	12.398	12.376	0.022	79	130195	10.0	
41 Chloroform	83	12.478	12.462	0.011	92	4919	0.1283	
42 Cyclohexane	84	12.724	12.724	0.000	77	2056	0.0804	M
43 1,1,1-Trichloroethane	97		12.740				ND	
44 Carbon tetrachloride	117	12.970	12.970	0.005	78	8609	0.2049	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Isooctane	57	13.312	13.323	-0.006	95	19277	0.2222	
46 Benzene	78	13.387	13.361	0.010	95	18658	0.3211	
47 1,2-Dichloroethane	62		13.532				ND	
48 n-Heptane	43	13.633	13.633	-0.001	1	30399	1.04	Ma
* 49 1,4-Difluorobenzene	114	14.083	14.072	0.011	94	654051	10.0	
51 Trichloroethene	95	14.516	14.516	0.010	1	695	0.0266	M
53 1,2-Dichloropropane	63		14.992				ND	
55 Methyl methacrylate	69		15.078				ND	U
56 1,4-Dioxane	88		15.158				ND	
58 Dichlorobromomethane	83		15.458				ND	
59 cis-1,3-Dichloropropene	75		16.282				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	MUa
63 Toluene	92	16.827	16.822	0.005	93	49141	1.16	
64 trans-1,3-Dichloropropene	75		17.346				ND	
65 1,1,2-Trichloroethane	83		17.699				ND	
66 Tetrachloroethene	166	17.822	17.817	0.005	95	4186	0.0969	
67 2-Hexanone	43		18.090				ND	U
68 Chlorodibromomethane	129		18.427				ND	
69 Ethylene Dibromide	107		18.700				ND	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	86	593905	10.0	
72 Chlorobenzene	112		19.593				ND	U
73 Ethylbenzene	91	19.727	19.743	0.000	98	120948	1.24	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	237160	6.17	
S 76 Xylenes, Total	106				0		8.06	
77 o-Xylene	106	20.738	20.727	0.000	99	73476	1.89	
78 Styrene	104		20.781				ND	U
79 Bromoform	173		21.171				ND	
80 Isopropylbenzene	105		21.343				ND	
81 1,1,2,2-Tetrachloroethane	83		21.942				ND	U
82 N-Propylbenzene	91	22.016	22.004	0.005	58	9013	0.0660	
85 4-Ethyltoluene	105	22.188	22.199	0.000	52	23231	0.2037	
86 2-Chlorotoluene	91		22.215				ND	U
87 1,3,5-Trimethylbenzene	105	22.295	22.295	0.006	92	10220	0.1002	
89 tert-Butylbenzene	119		22.766				ND	U
90 1,2,4-Trimethylbenzene	105	22.856	22.856	0.000	98	39209	0.3903	
91 sec-Butylbenzene	105		23.081				ND	U
92 4-Isopropyltoluene	119	23.279	23.279	0.000	94	9127	0.0742	
93 1,3-Dichlorobenzene	146		23.327				ND	
94 1,4-Dichlorobenzene	146		23.466				ND	
95 Benzyl chloride	91		23.670				ND	U
96 n-Butylbenzene	91		23.878				ND	U
98 1,2-Dichlorobenzene	146		24.028				ND	
100 1,2,4-Trichlorobenzene	180		26.703				ND	
101 Hexachlorobutadiene	225		26.896				ND	
102 Naphthalene	128	27.248	27.248	0.010	1	2305	0.0350	M

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

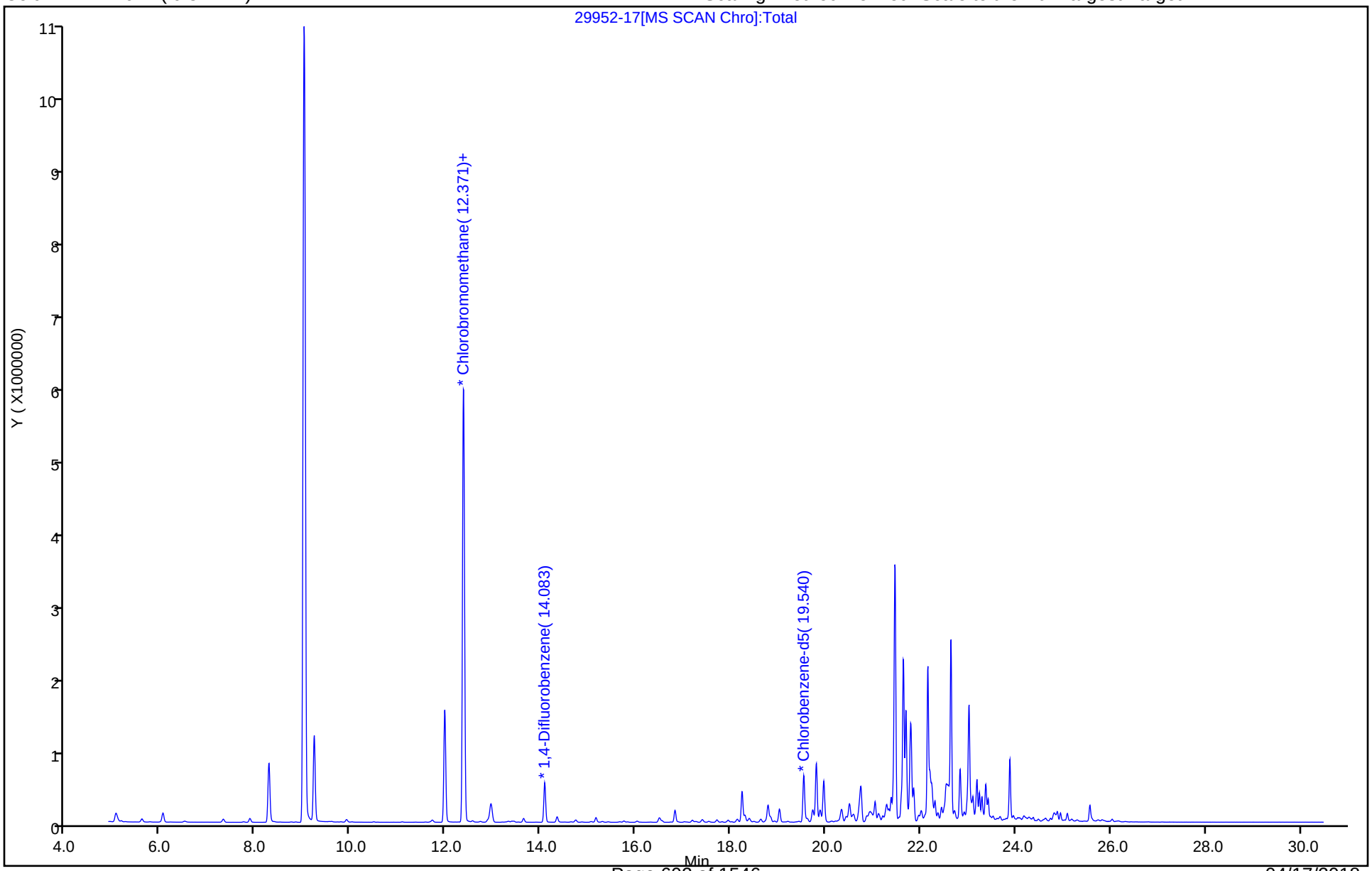
Report Date: 09-Apr-2018 09:49:29 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

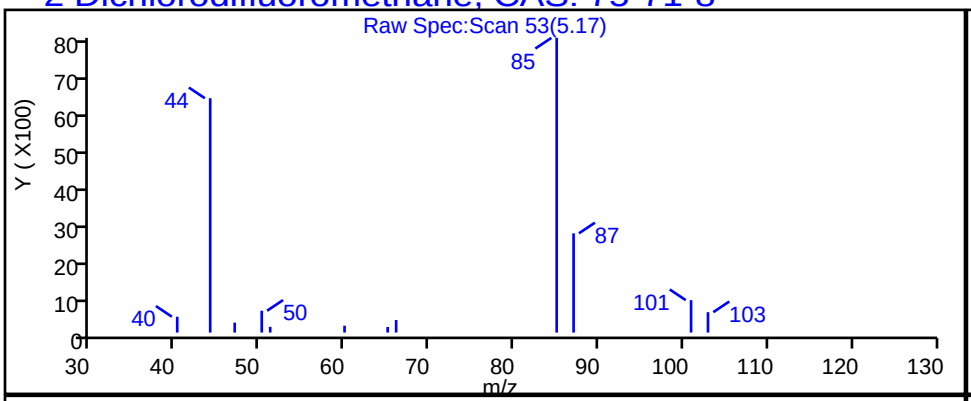
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9	Worklist Smp#:	17
Client ID:	GC-IA-104 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

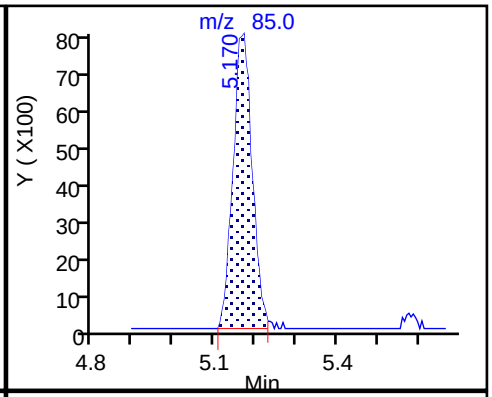
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

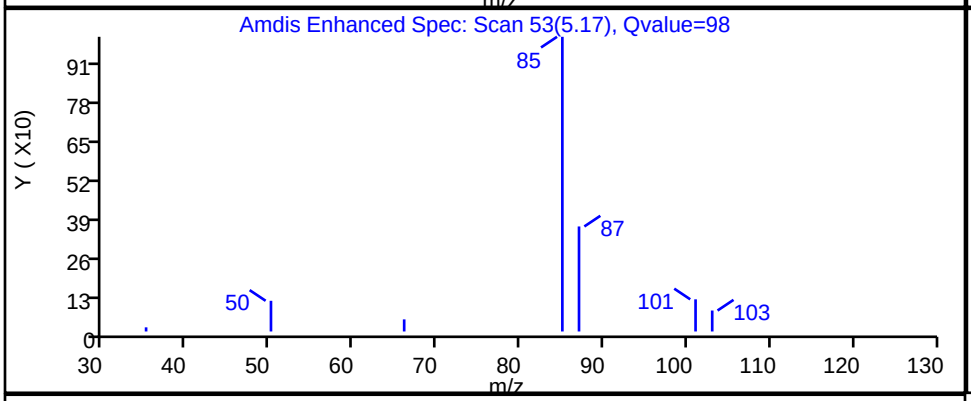


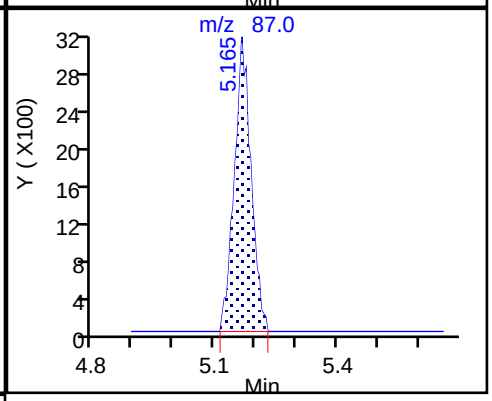
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

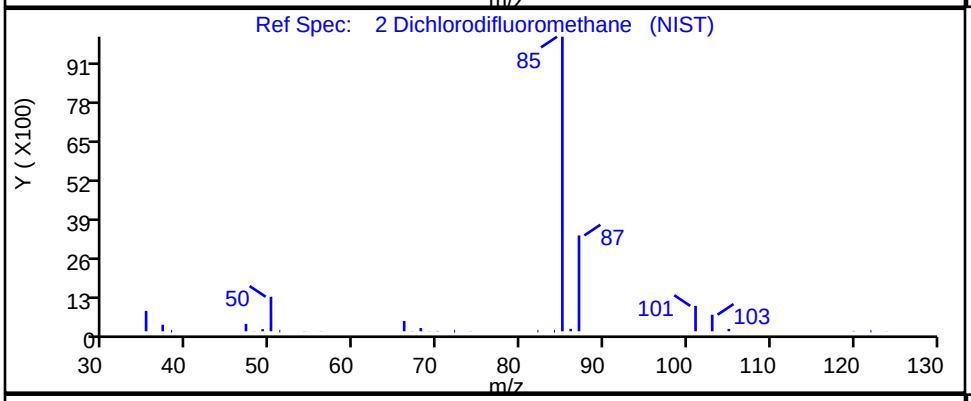
2 Dichlorodifluoromethane, CAS: 75-71-8

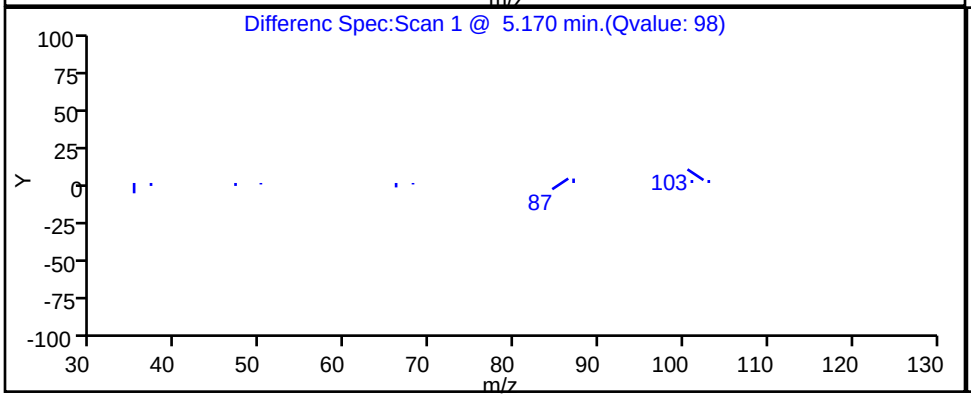


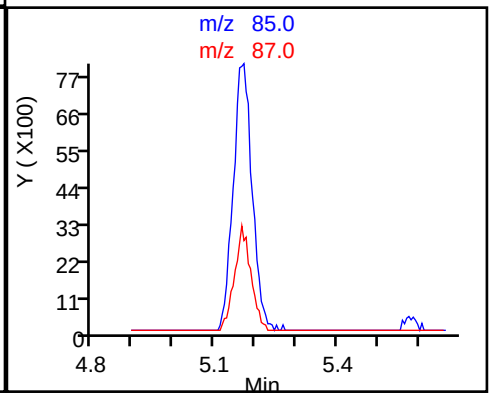












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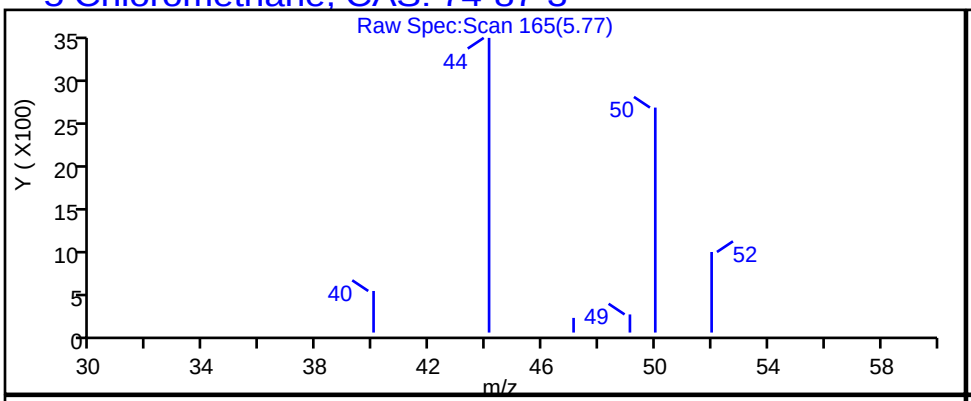
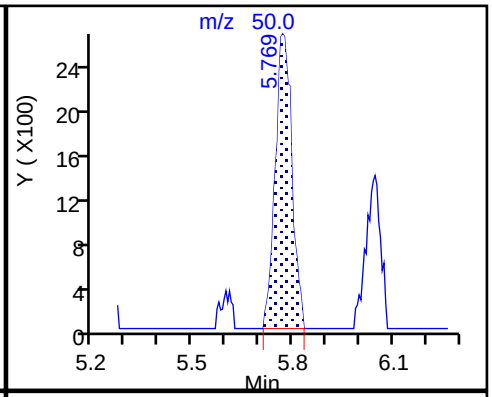
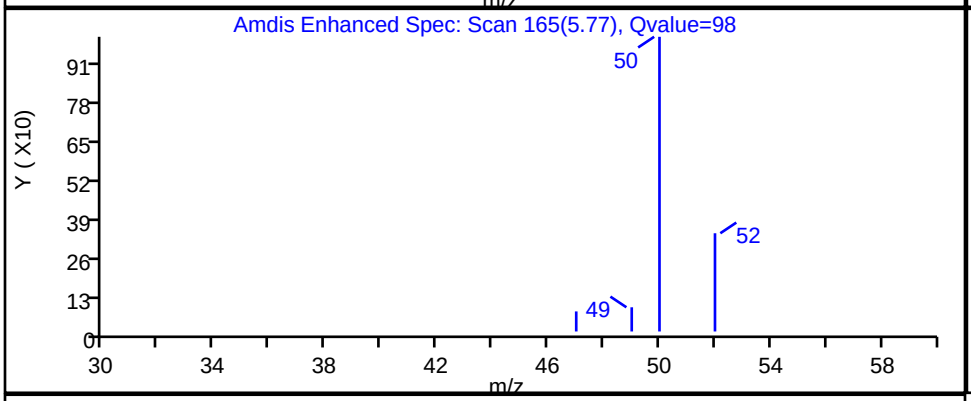
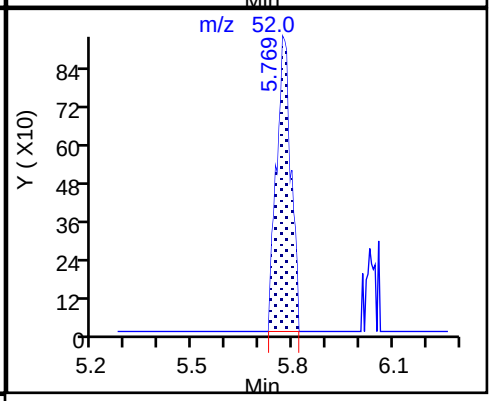
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

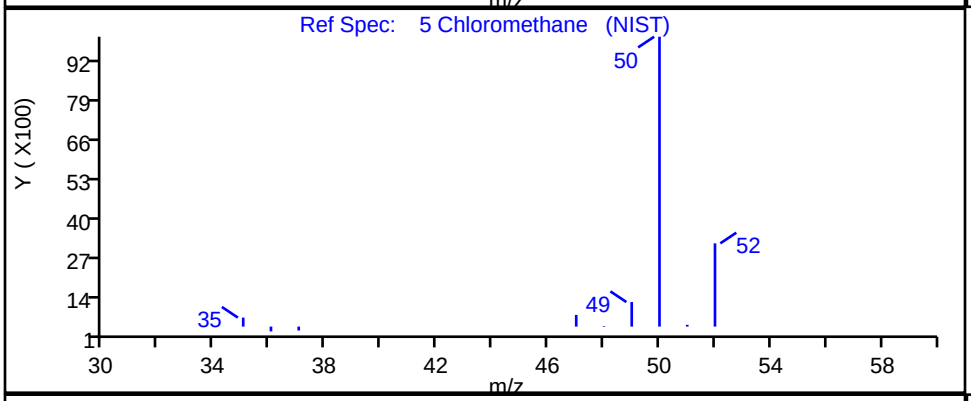
5 Chloromethane, CAS: 74-87-3

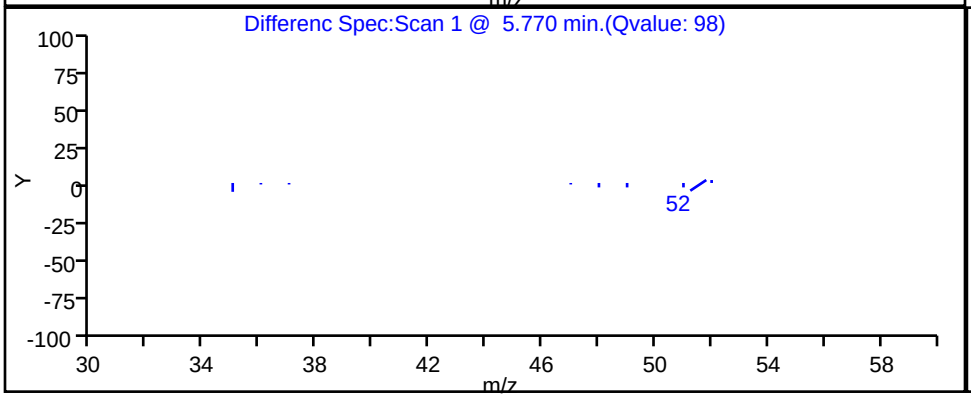


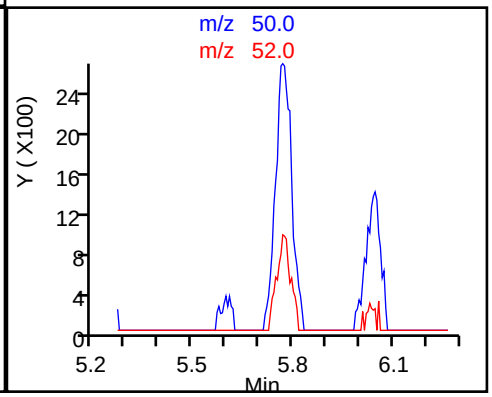










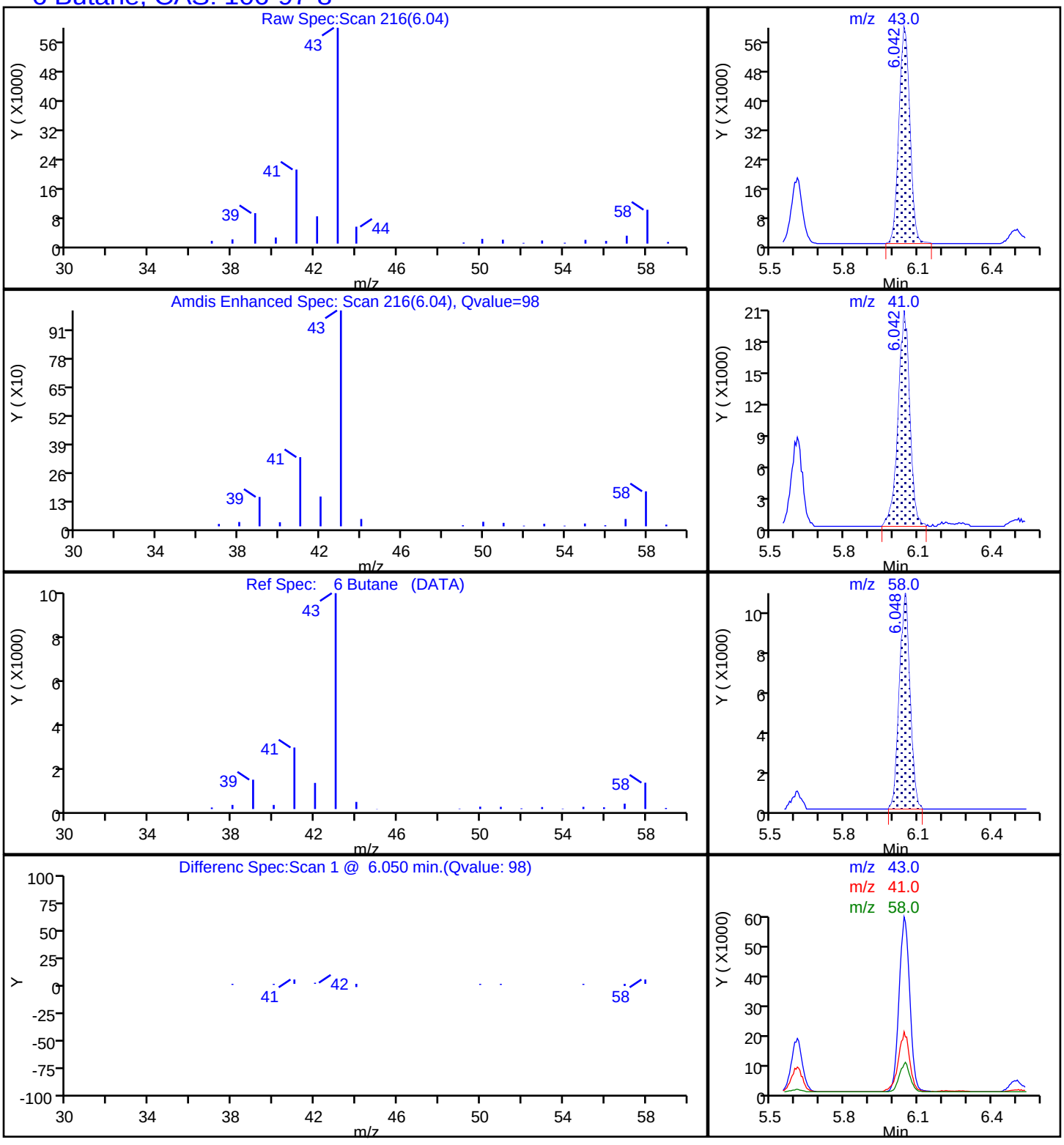


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8



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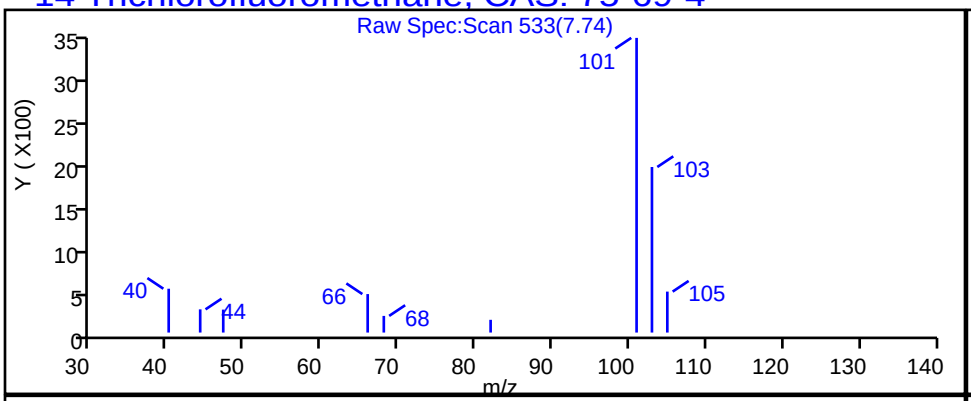
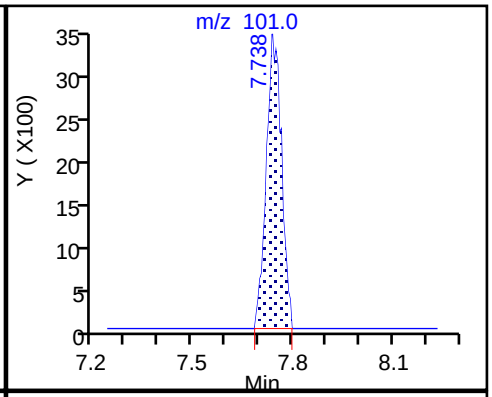
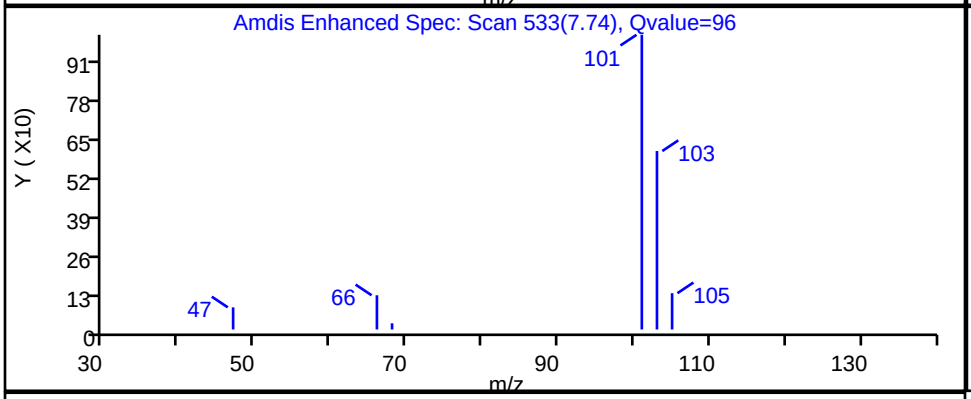
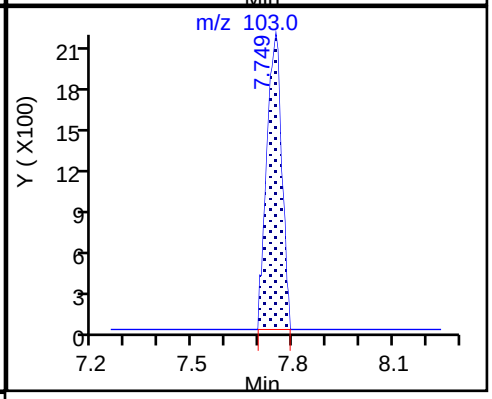
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

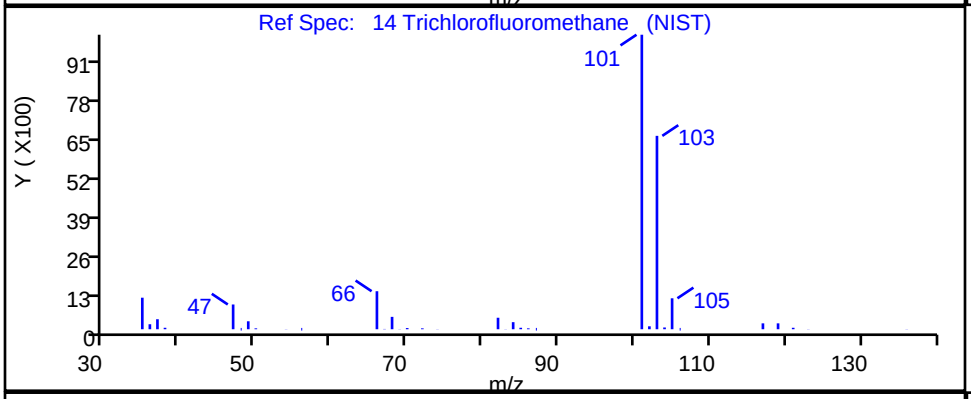
14 Trichlorofluoromethane, CAS: 75-69-4

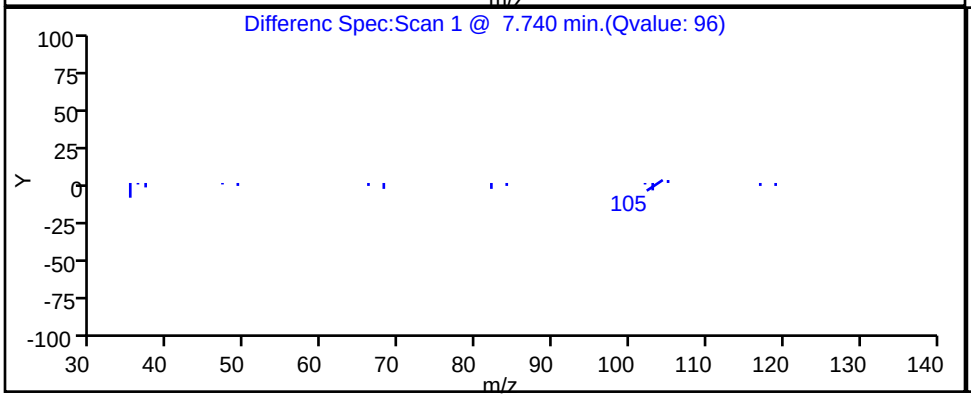


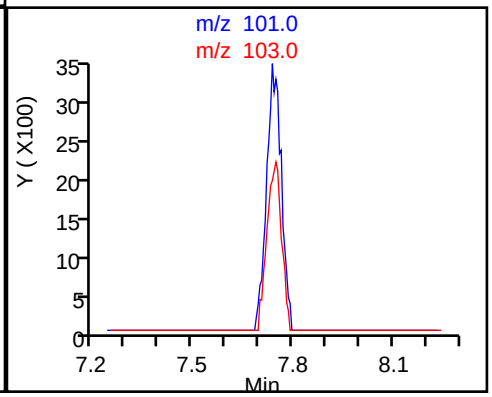










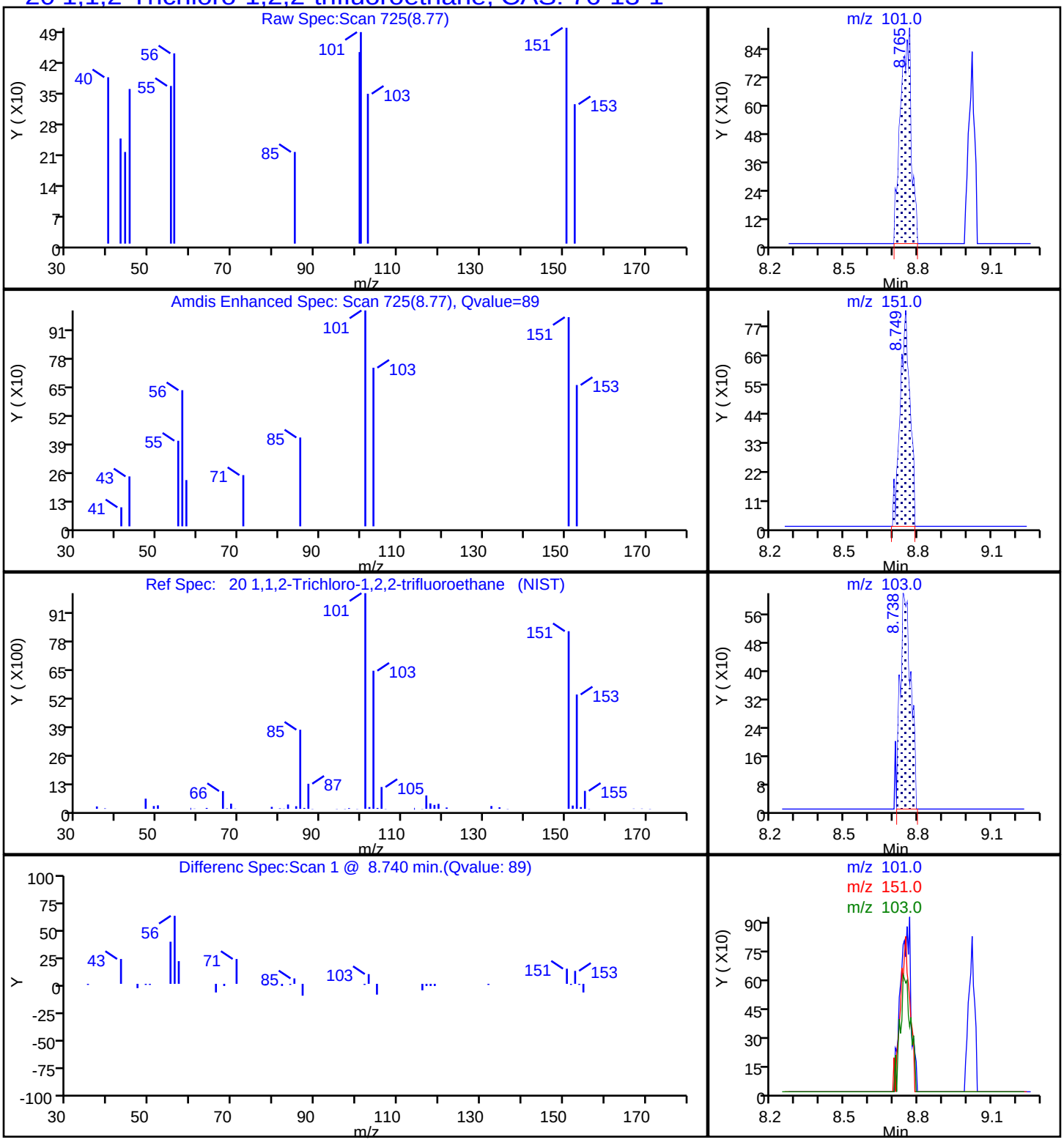


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

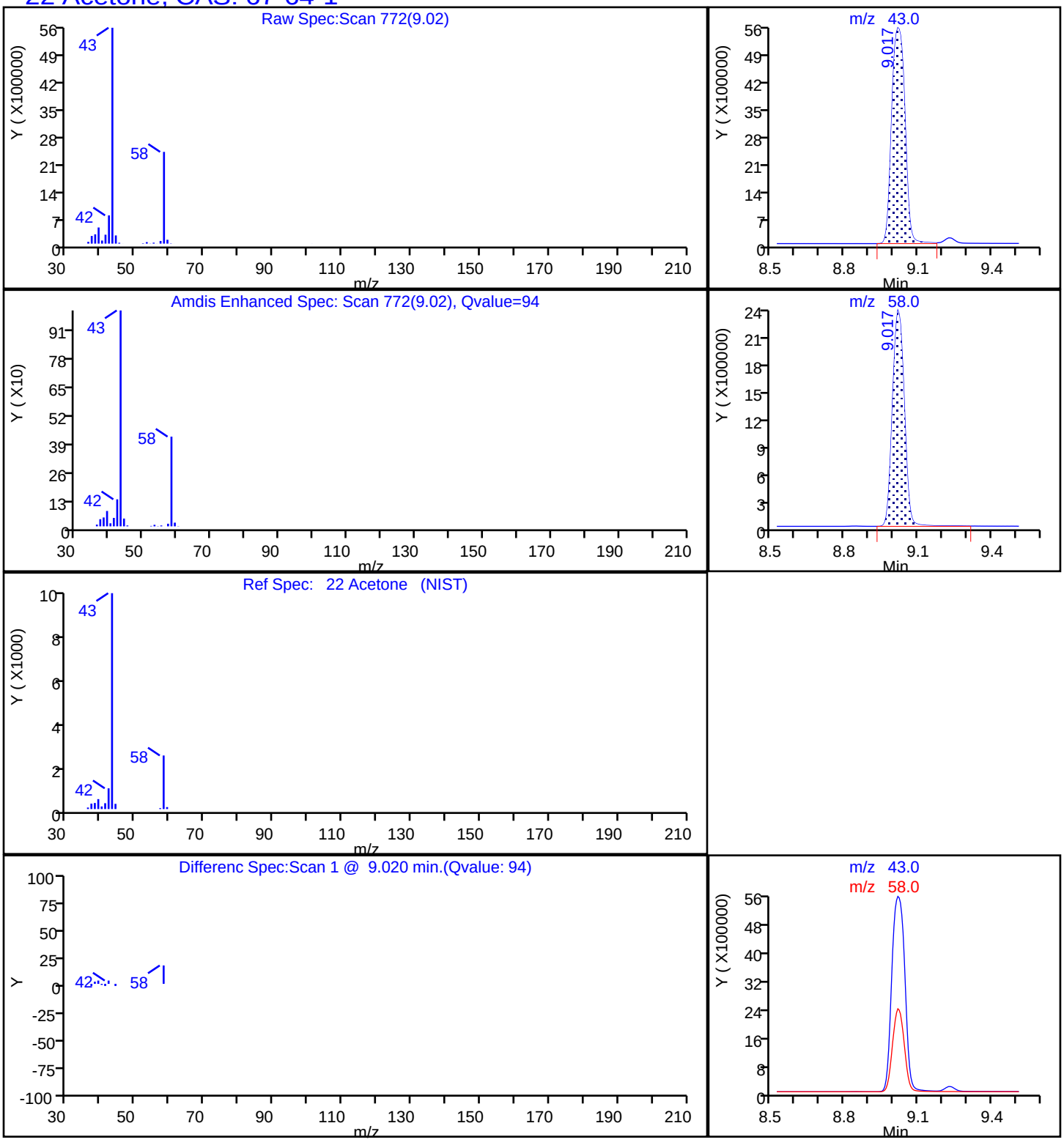
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



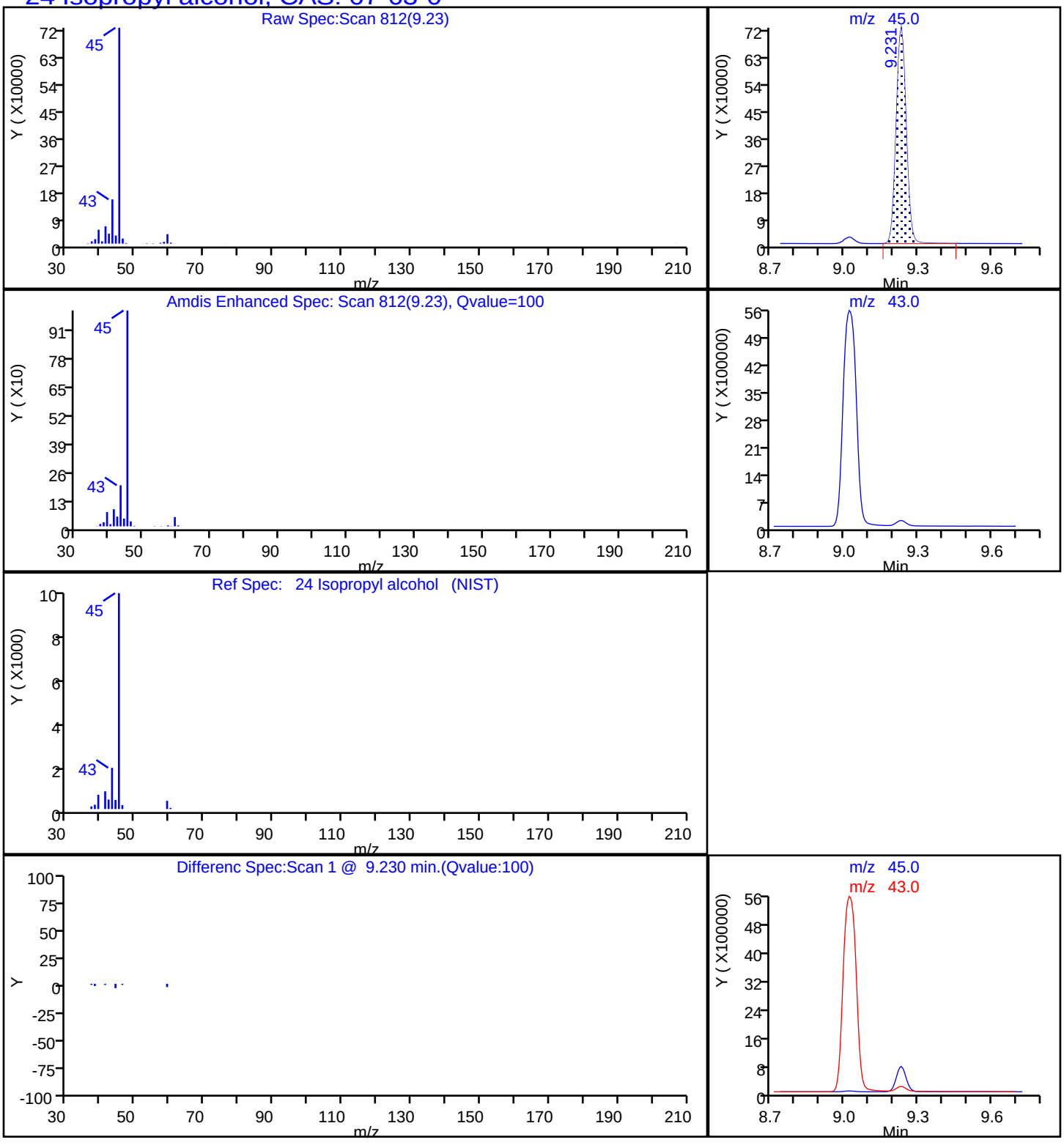
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

22 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

24 Isopropyl alcohol, CAS: 67-63-0

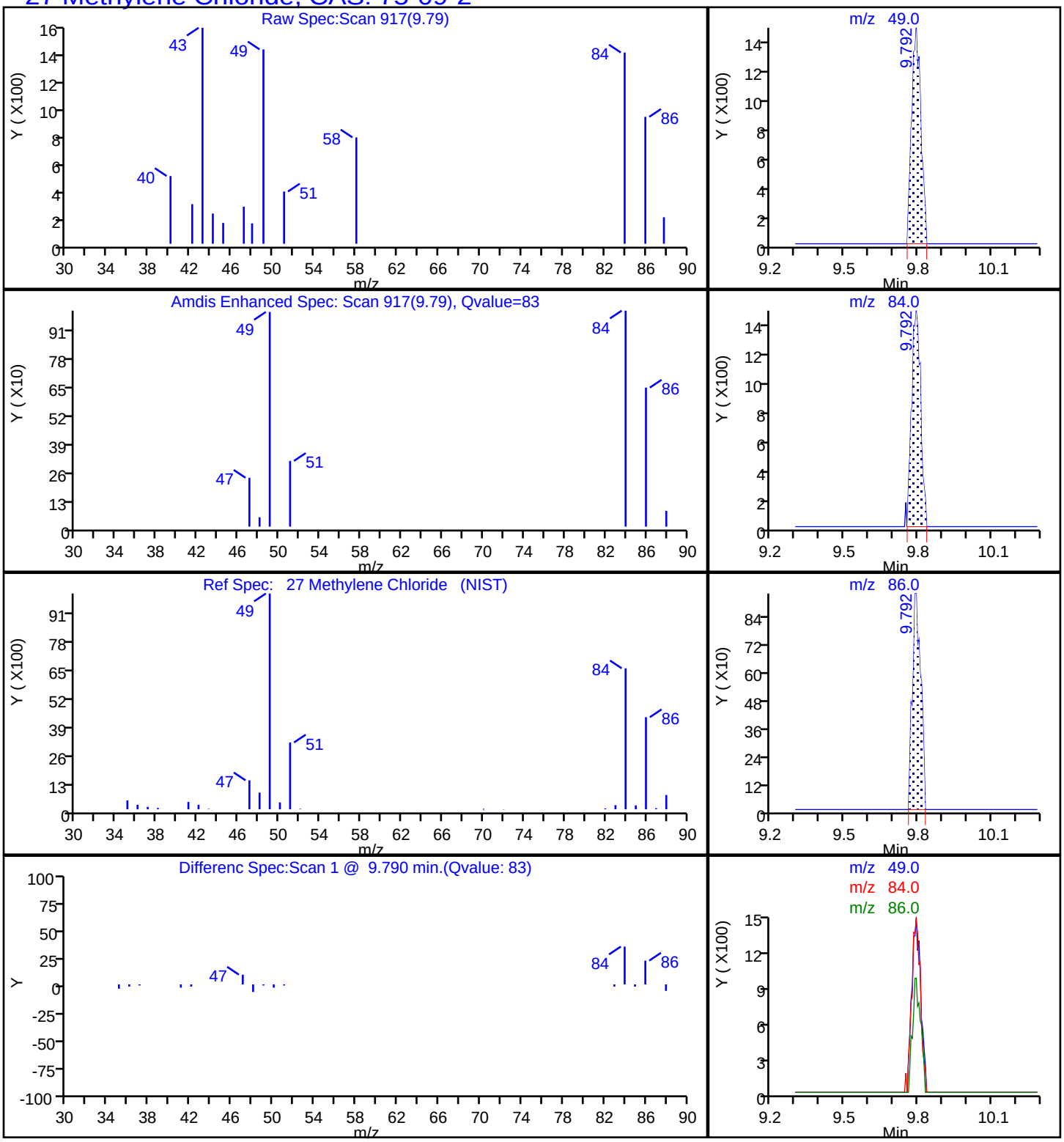


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

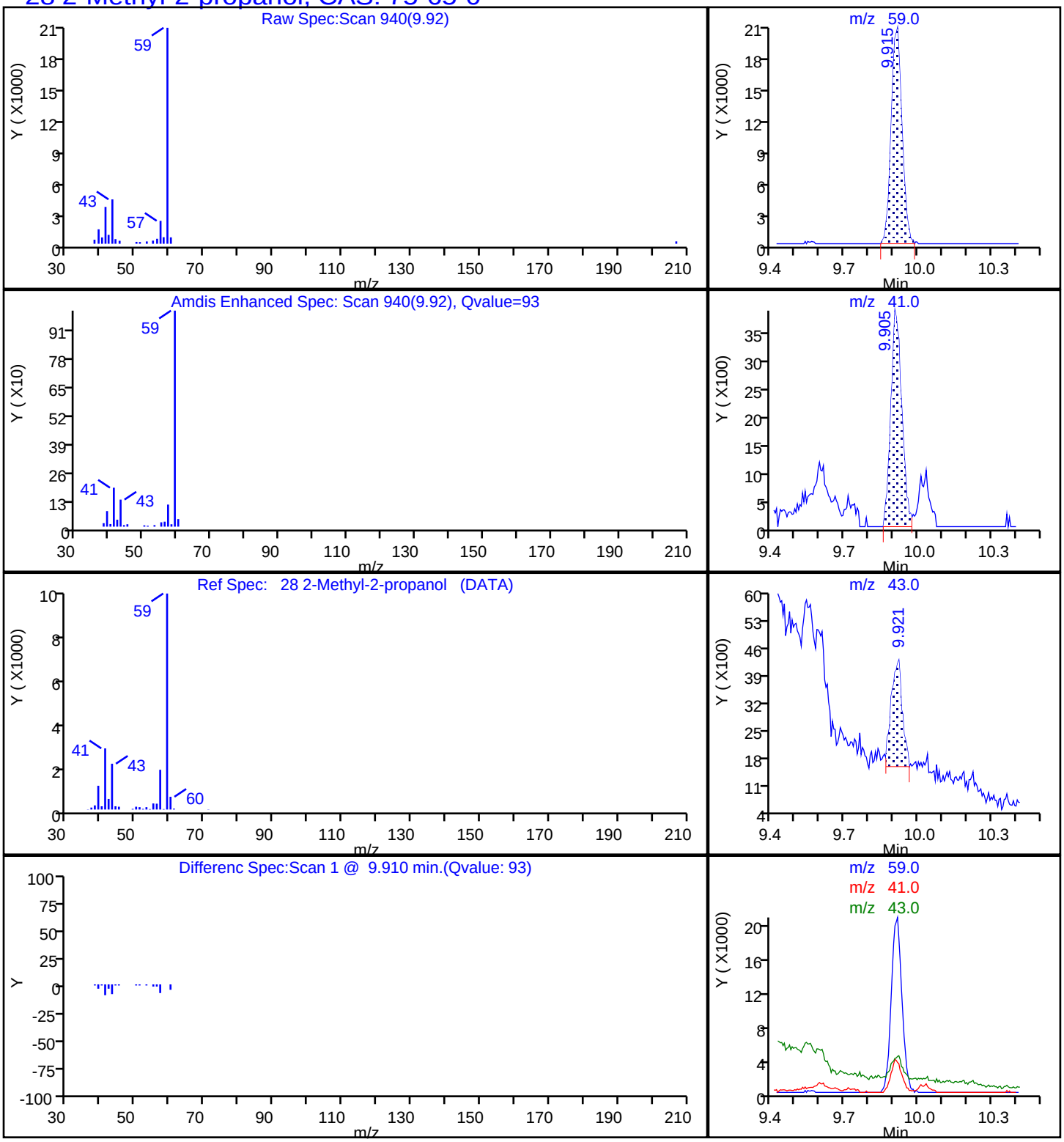


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

28 2-Methyl-2-propanol, CAS: 75-65-0

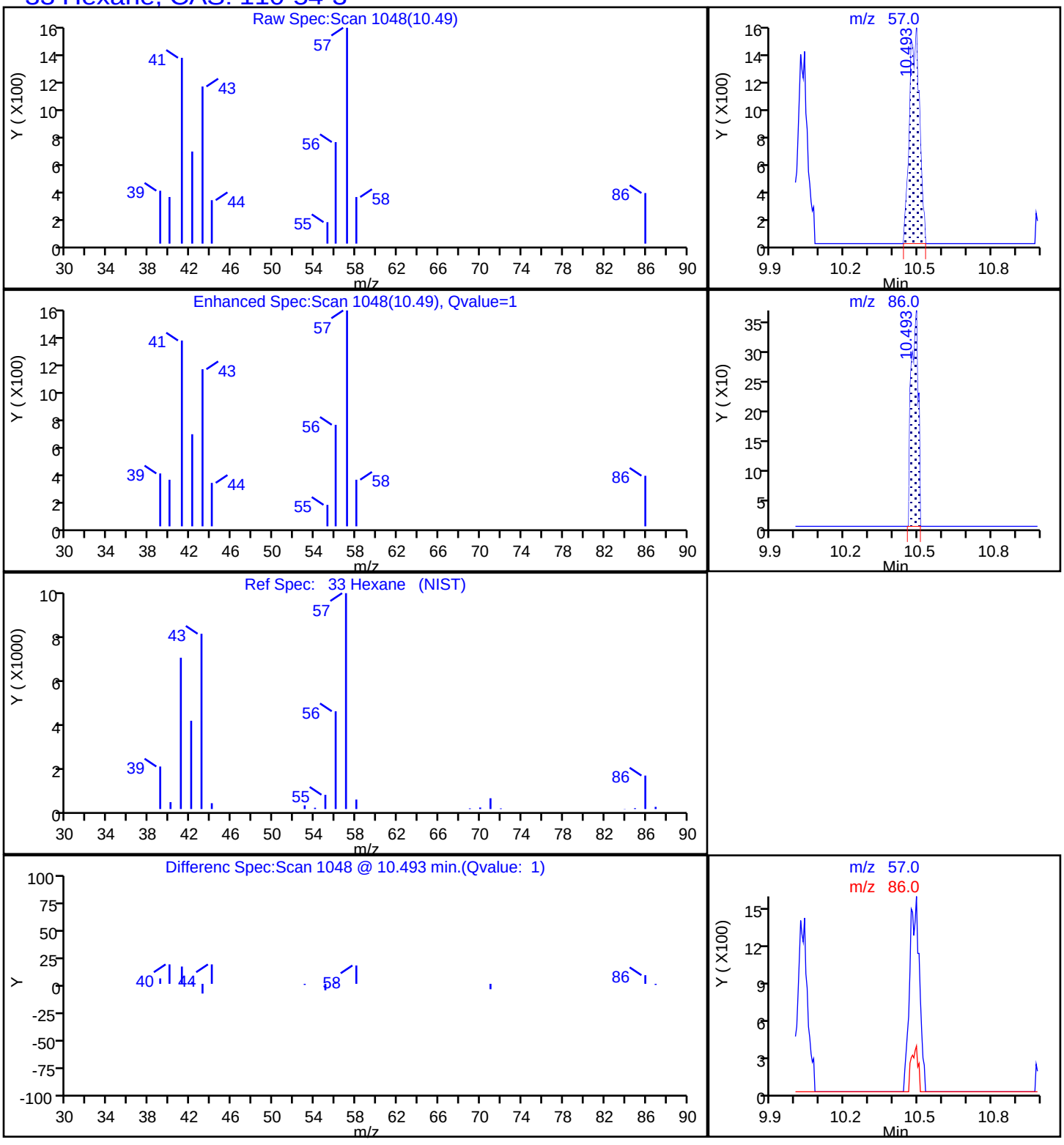


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

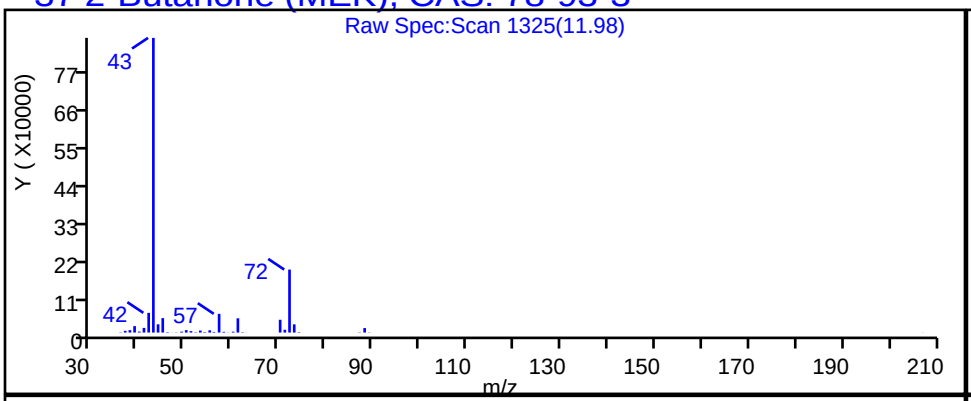
33 Hexane, CAS: 110-54-3

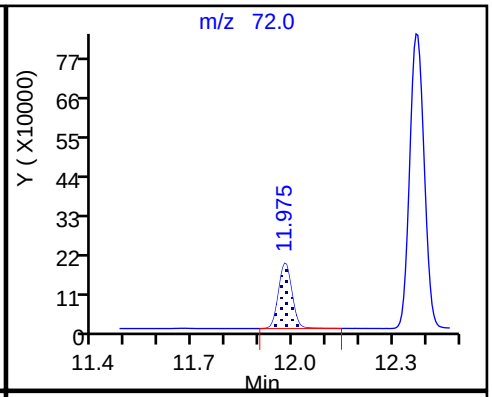


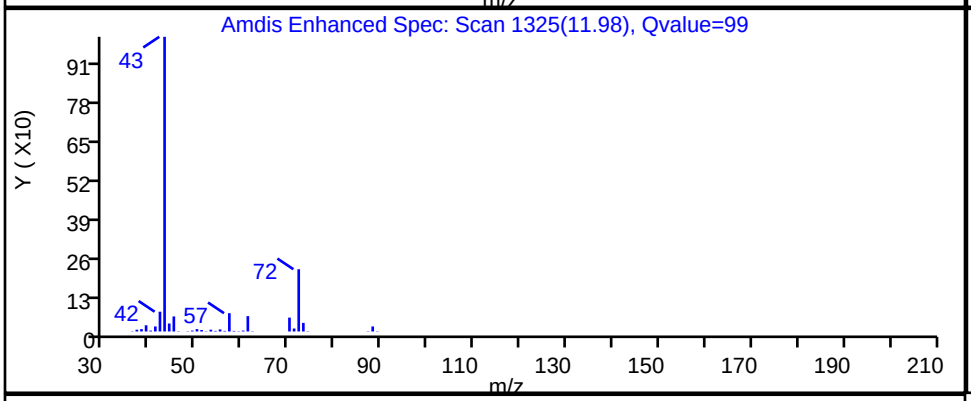
TestAmerica Burlington

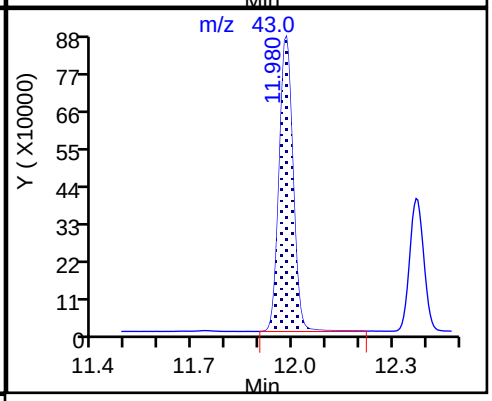
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

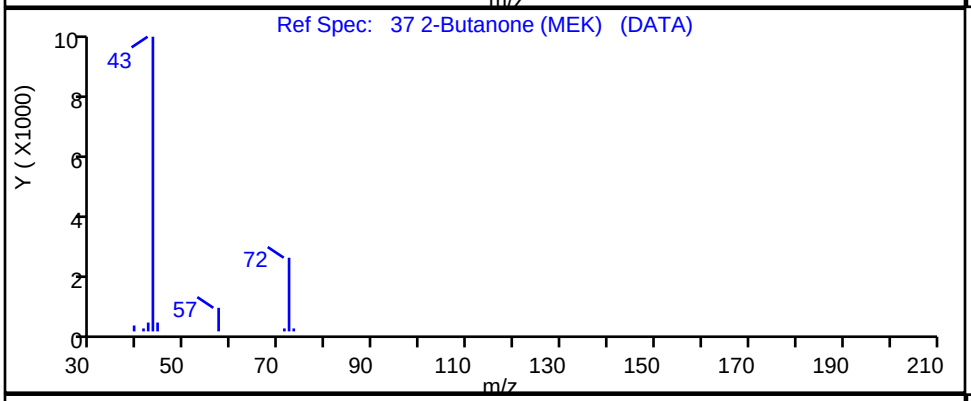
37 2-Butanone (MEK), CAS: 78-93-3

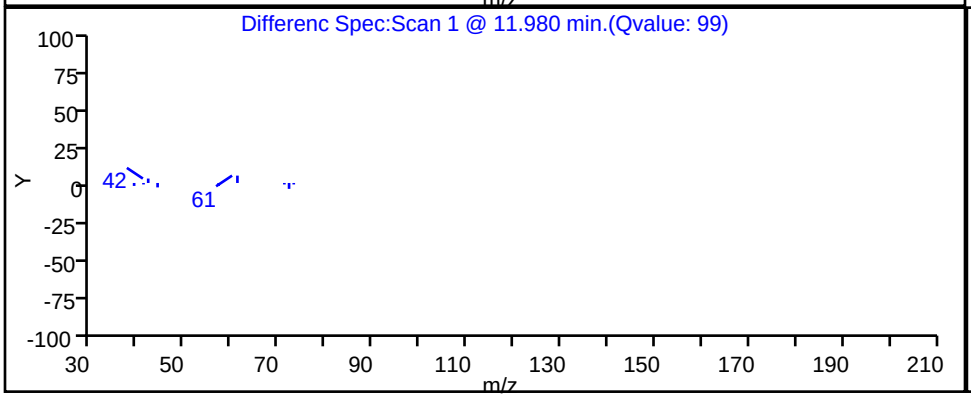


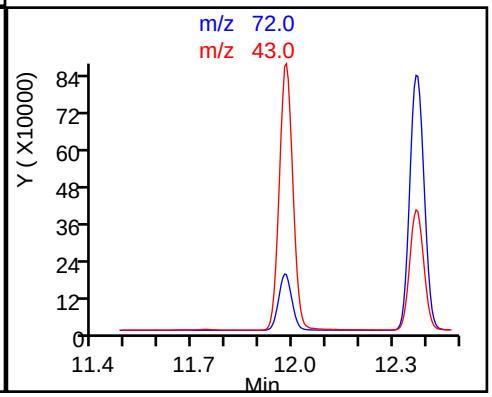










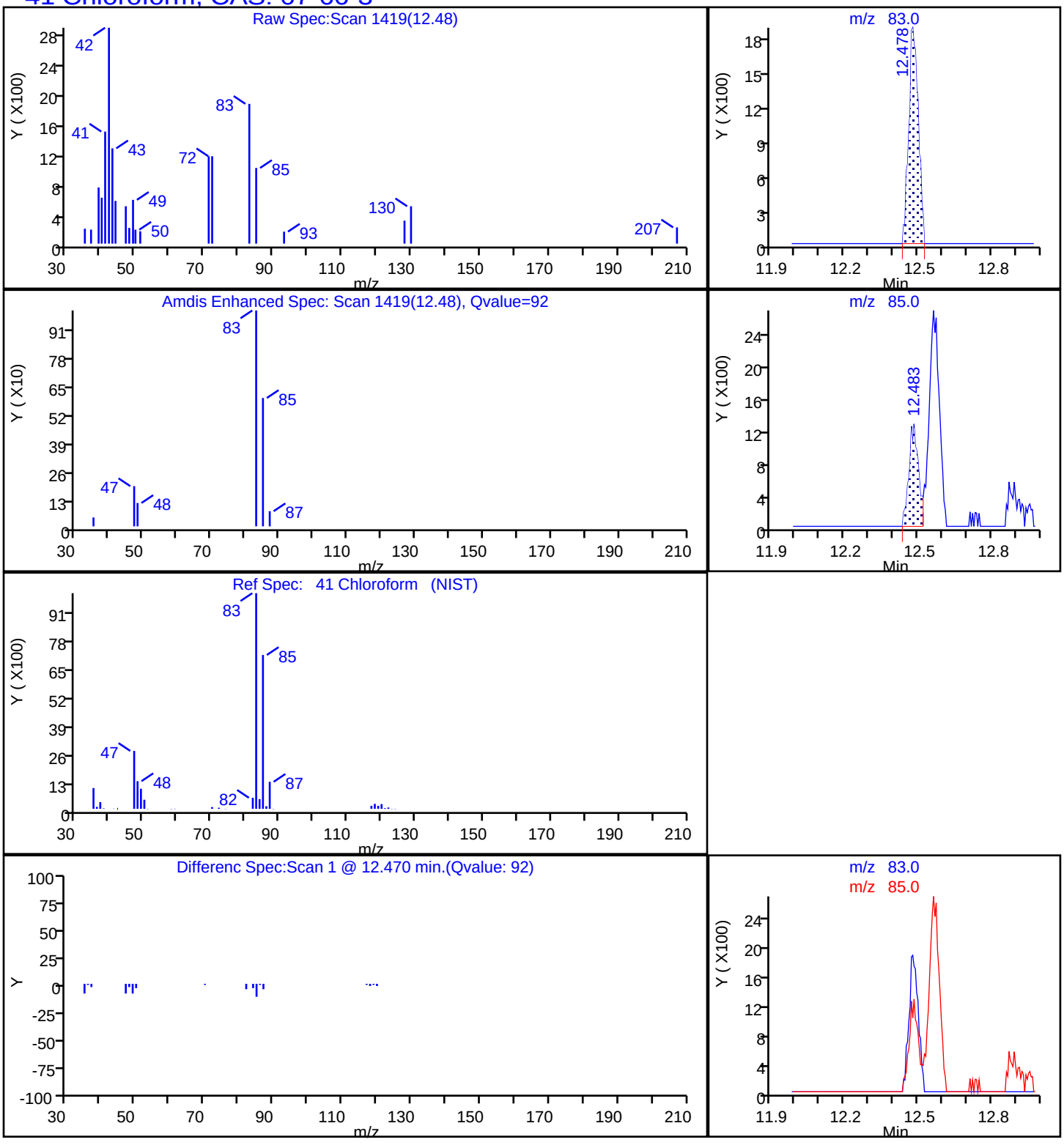


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

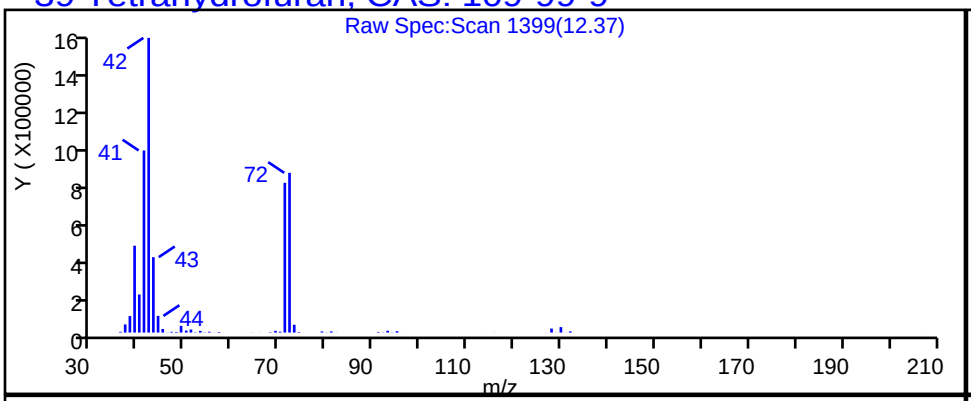
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

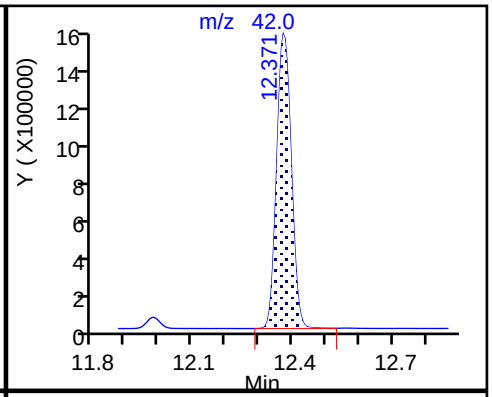
41 Chloroform, CAS: 67-66-3

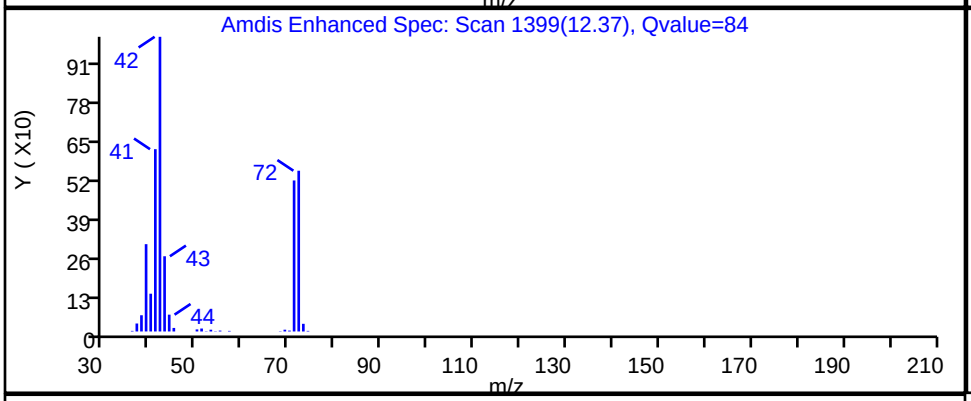


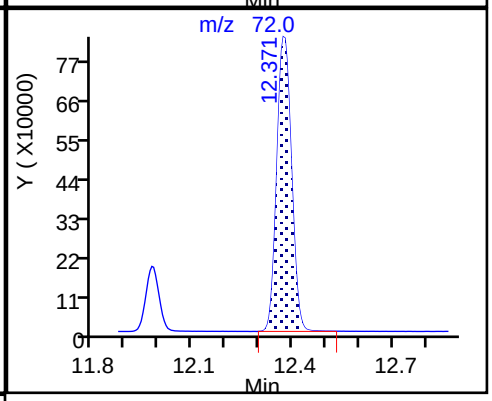
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

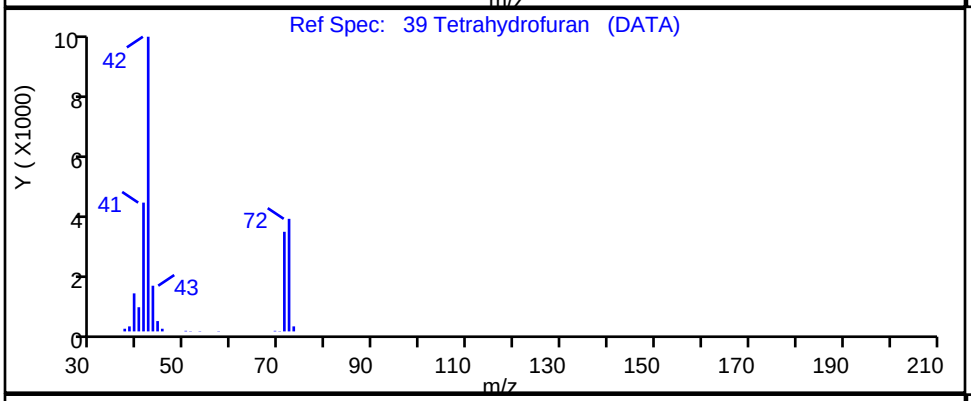
39 Tetrahydrofuran, CAS: 109-99-9

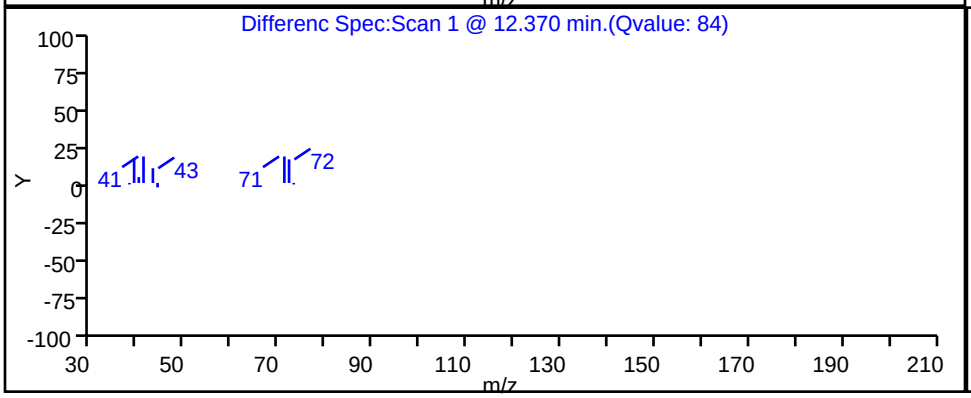


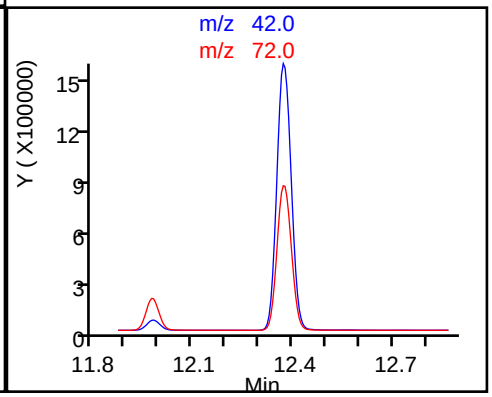






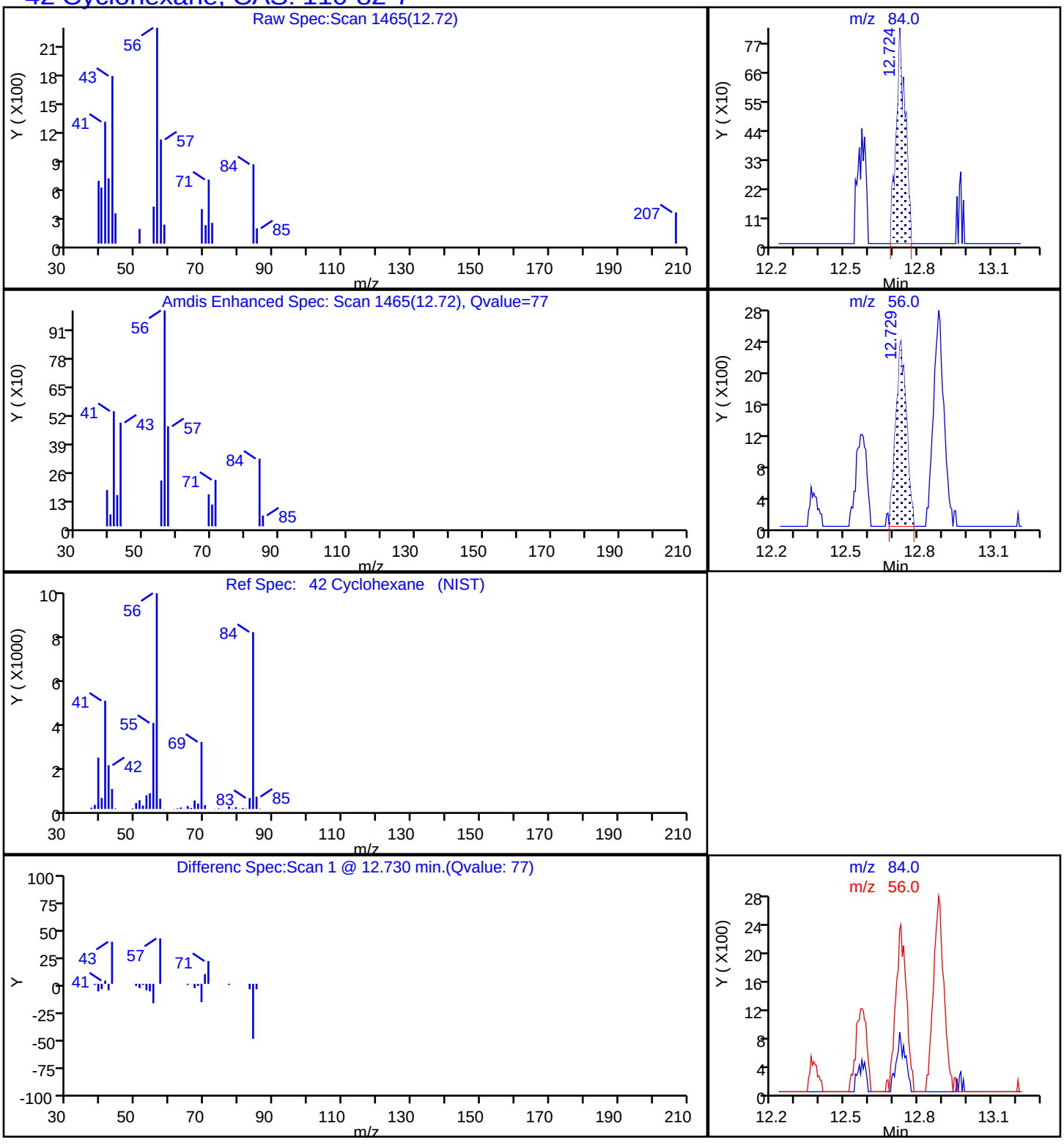






Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

42 Cyclohexane, CAS: 110-82-7

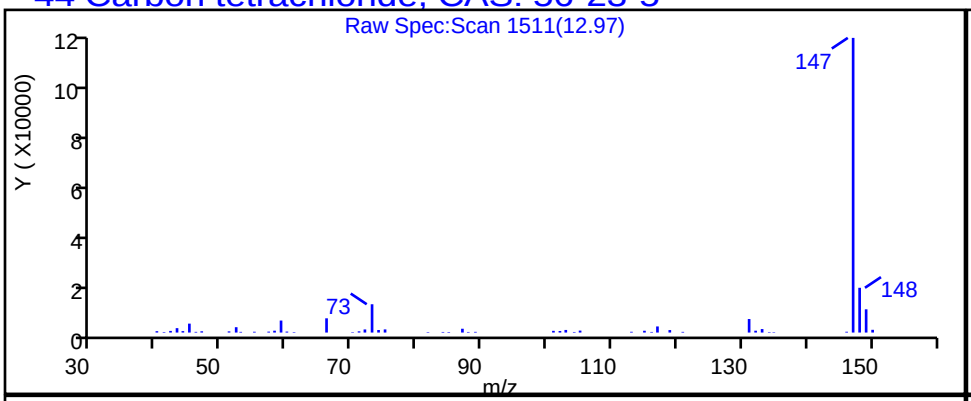


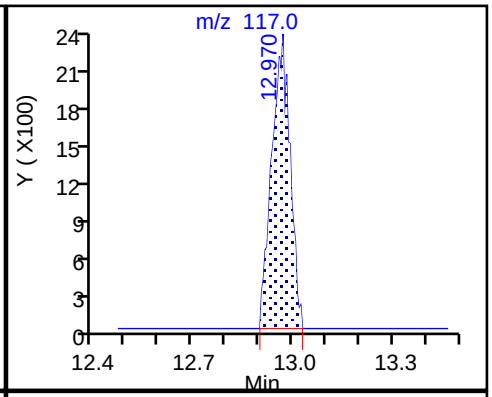
TestAmerica Burlington

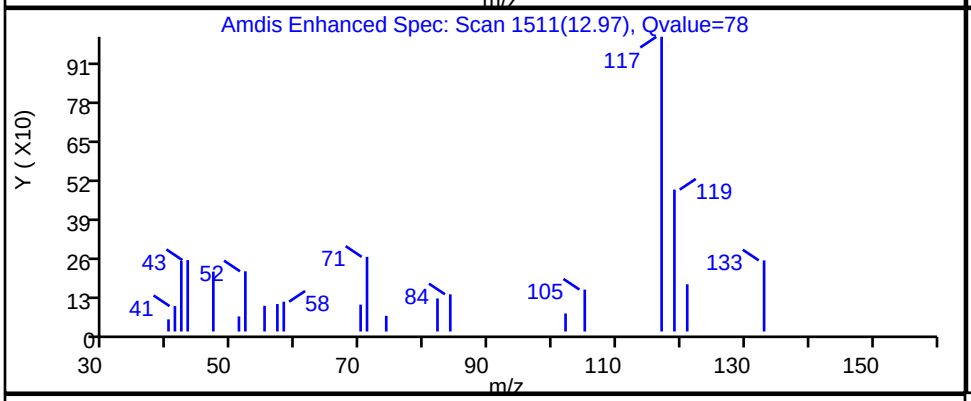
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

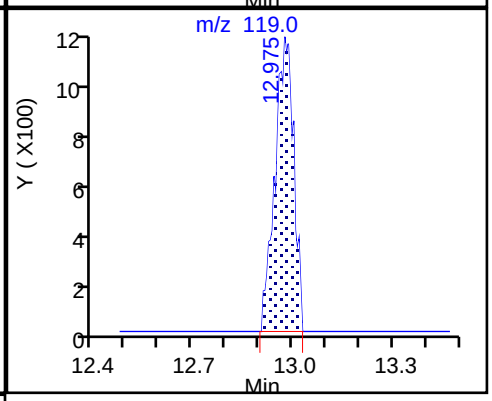
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

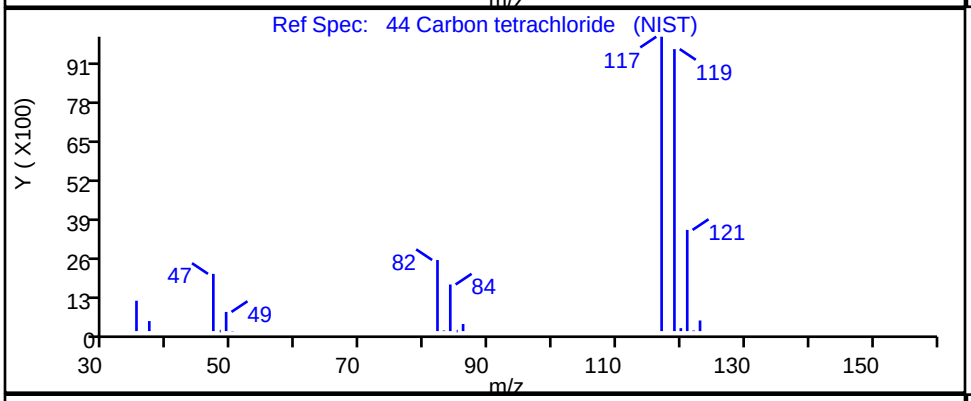
44 Carbon tetrachloride, CAS: 56-23-5

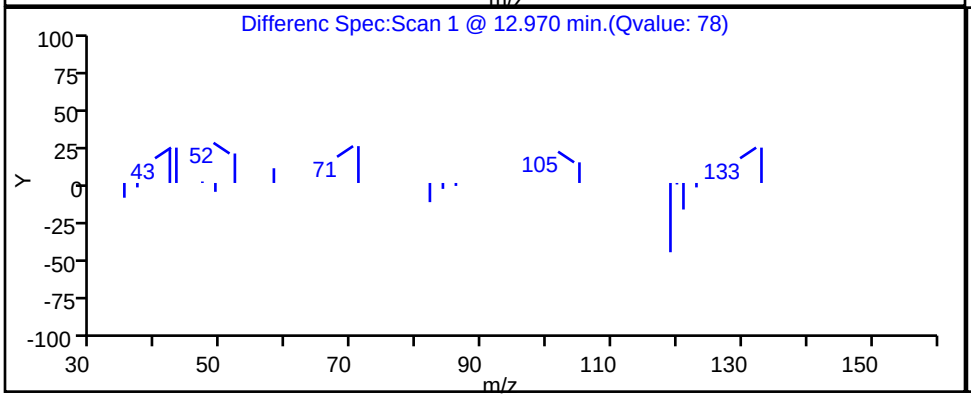


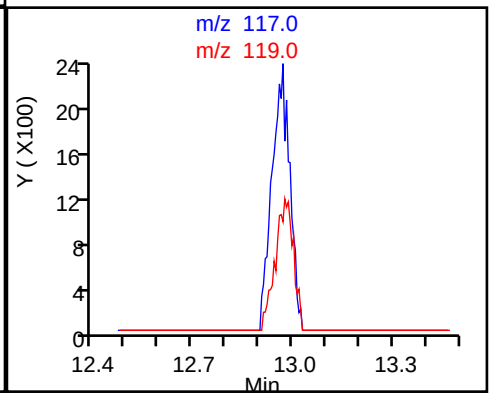






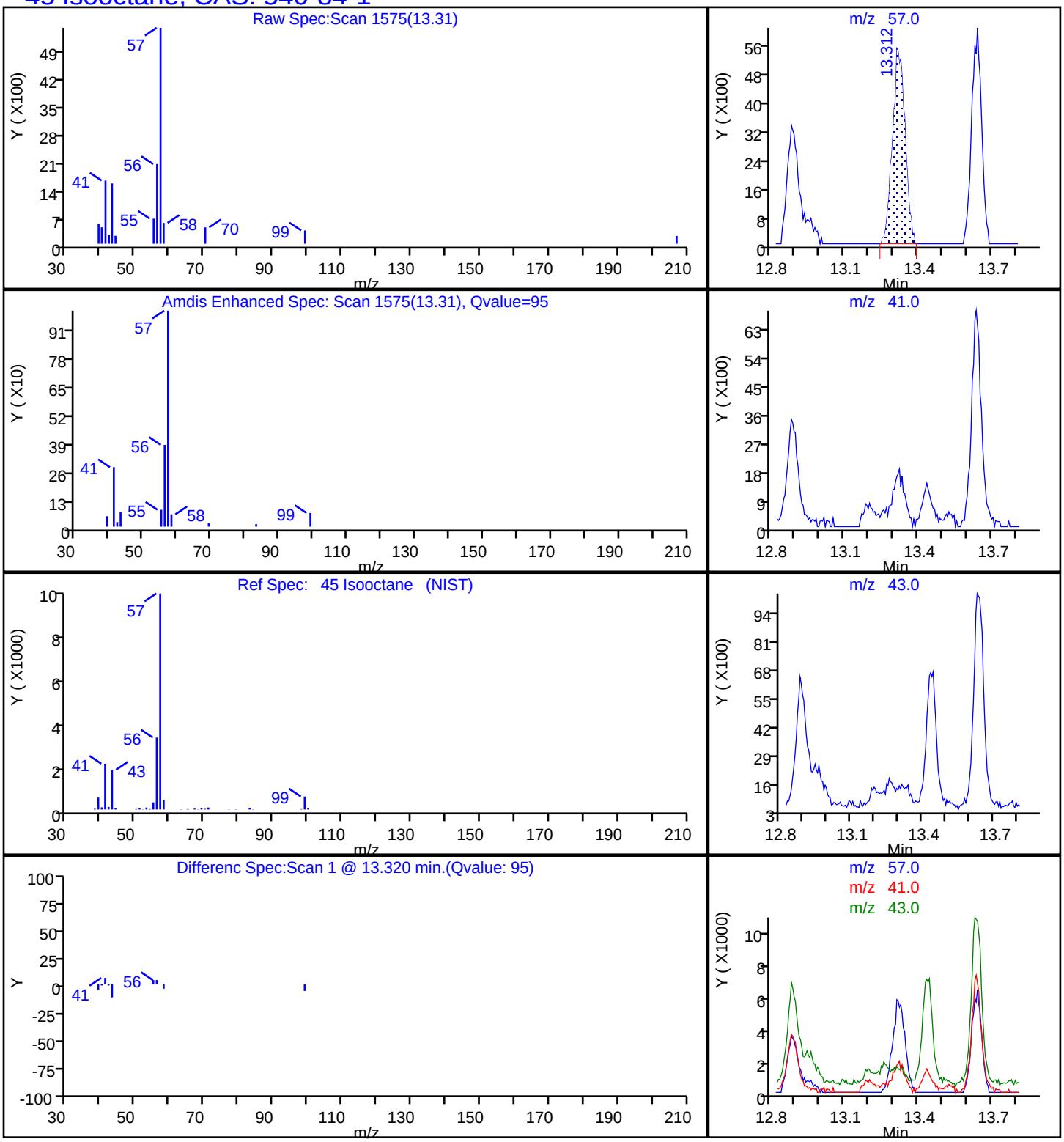






Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

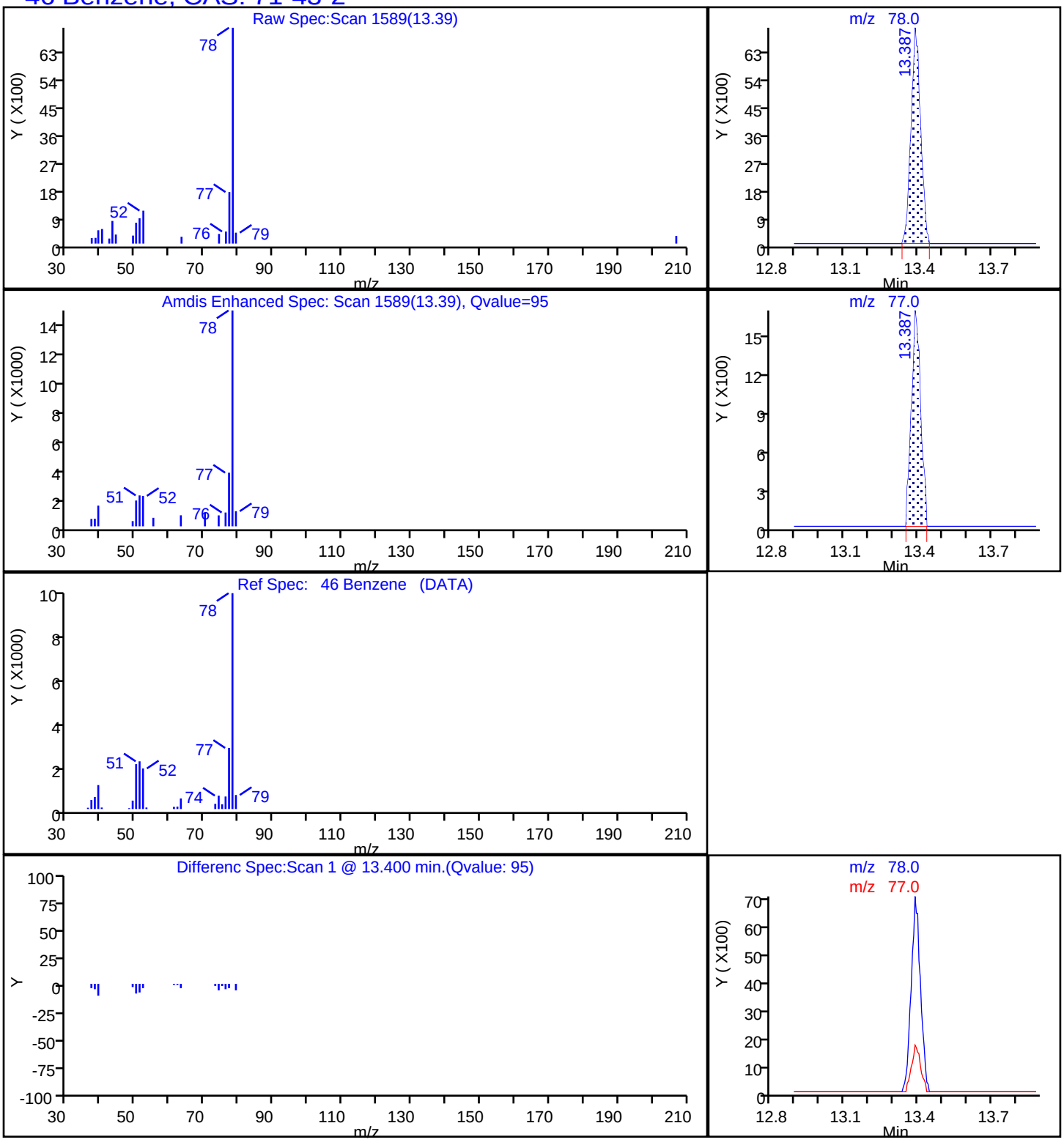
45 Isooctane, CAS: 540-84-1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Benzene, CAS: 71-43-2

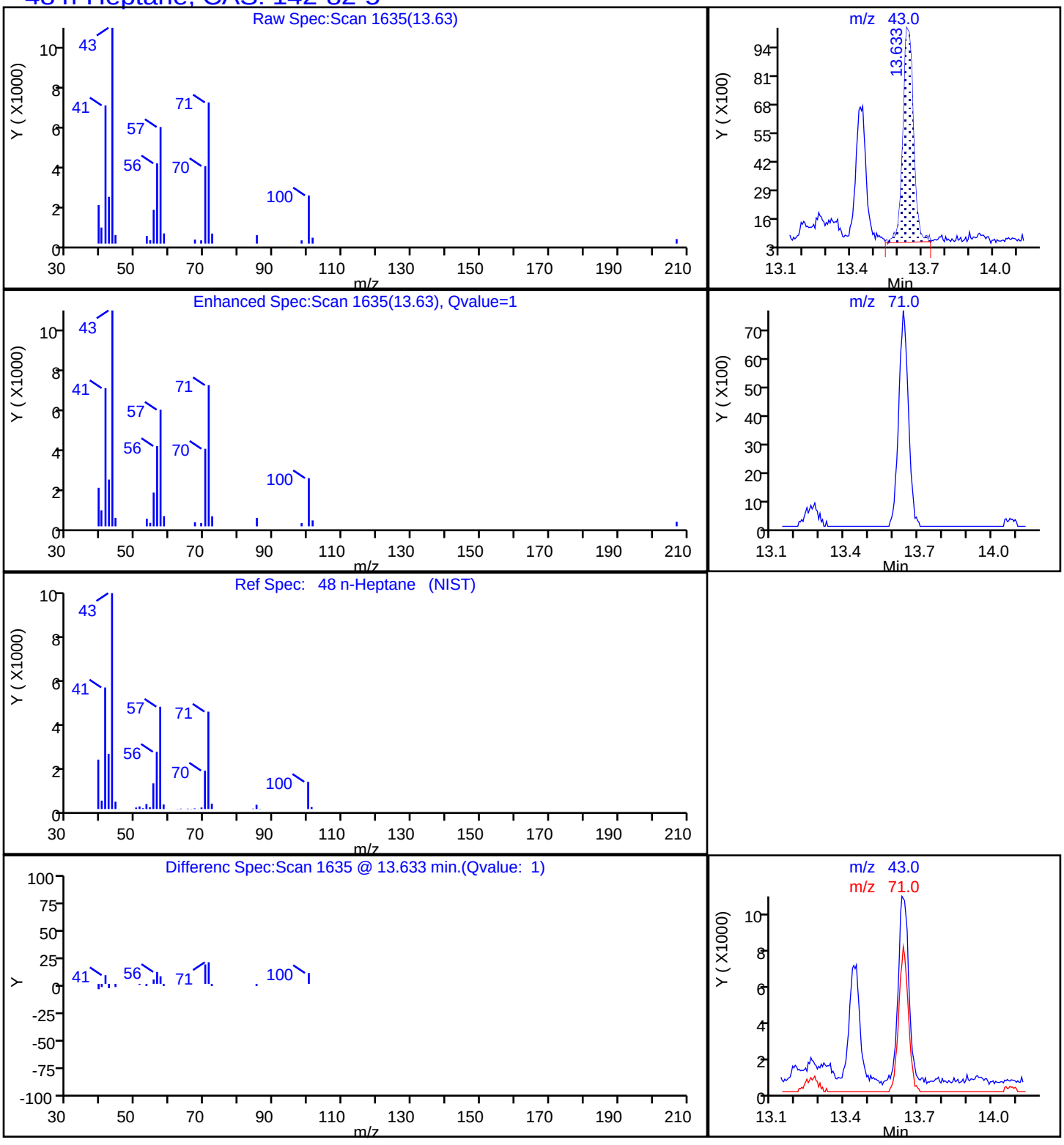


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 n-Heptane, CAS: 142-82-5



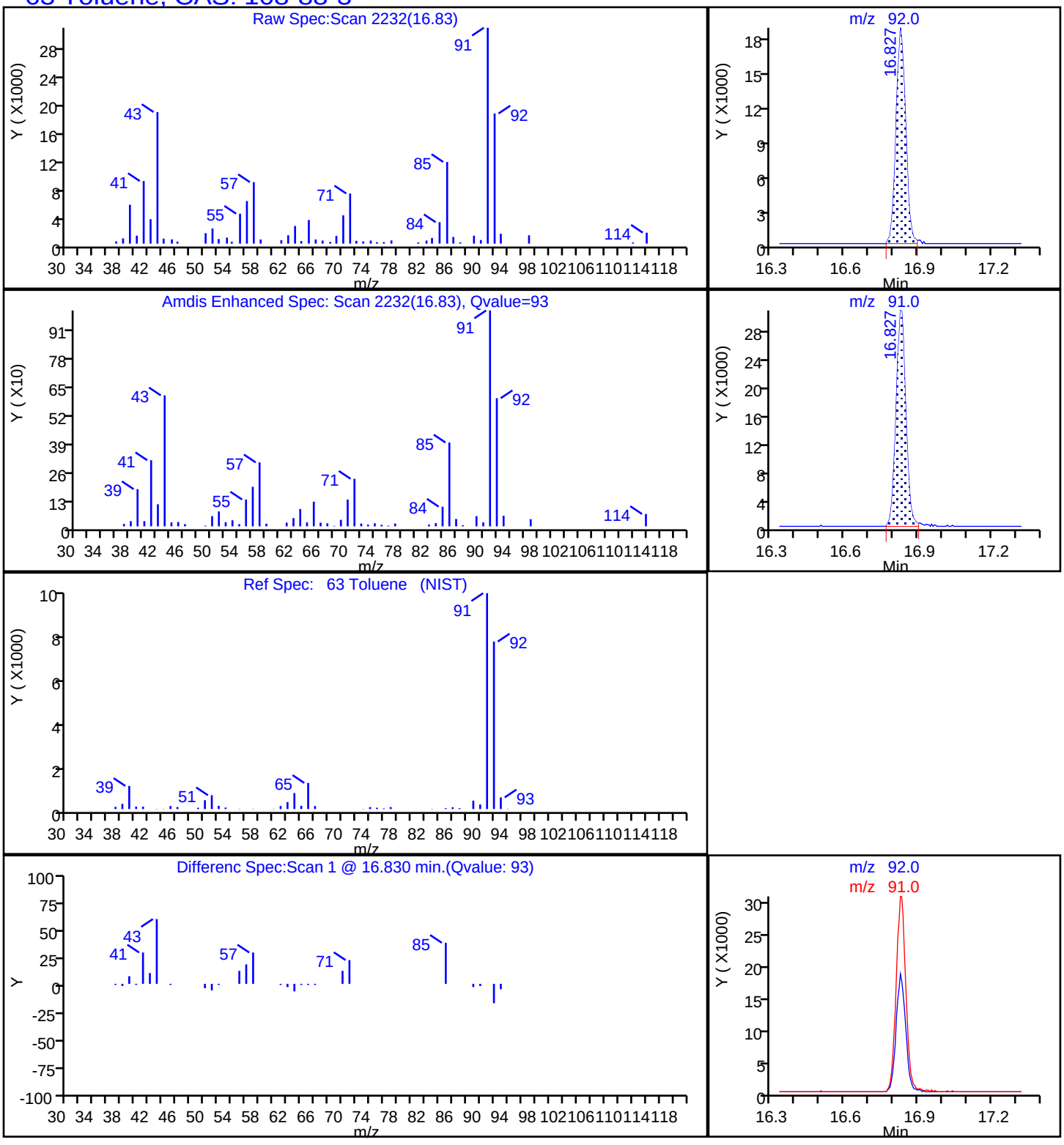
Report Date: 09-Apr-2018 09:49:29 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3

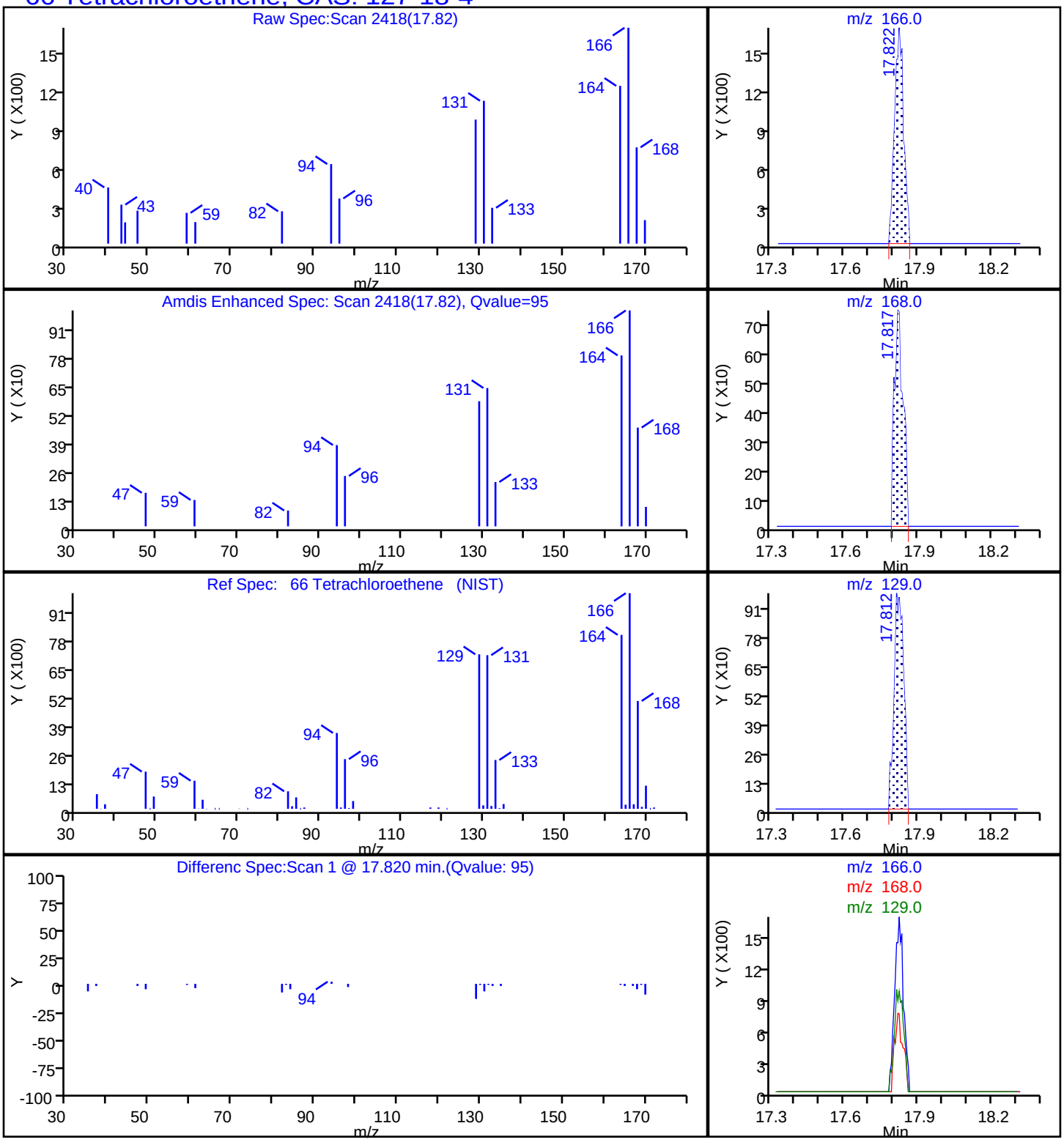


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

66 Tetrachloroethene, CAS: 127-18-4

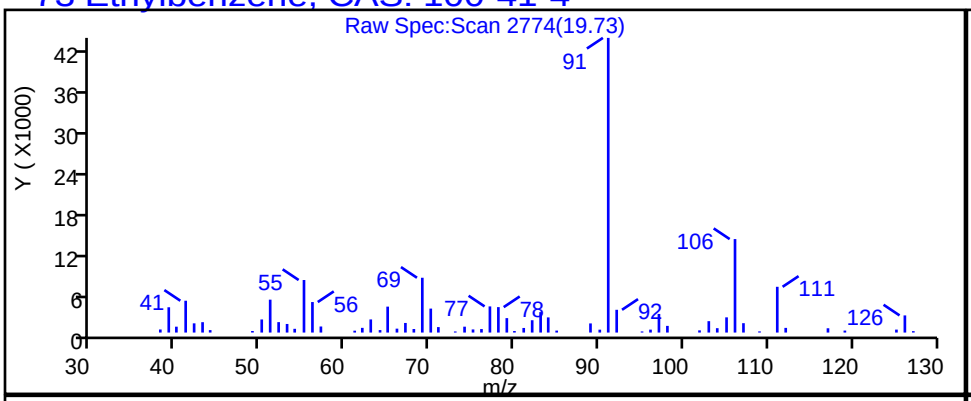


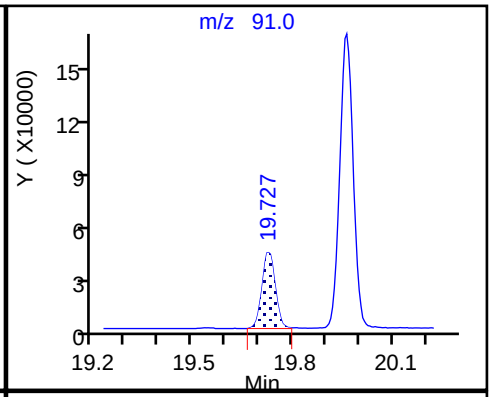
TestAmerica Burlington

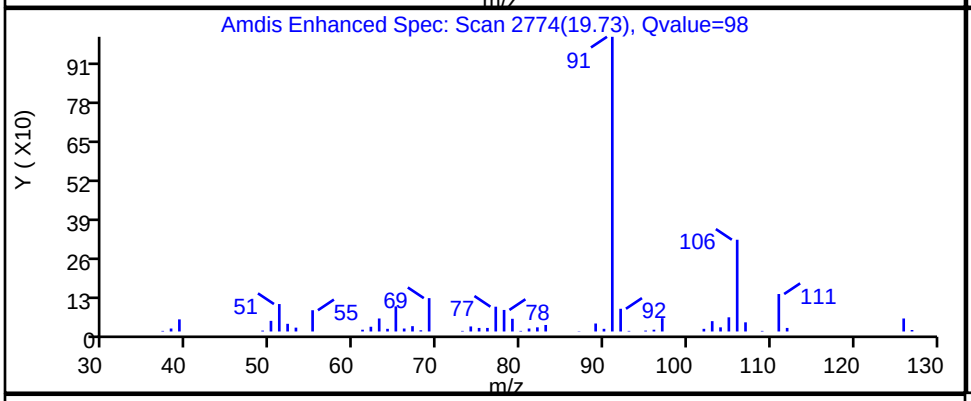
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

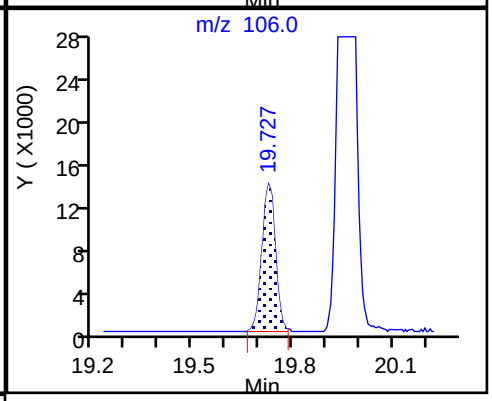
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

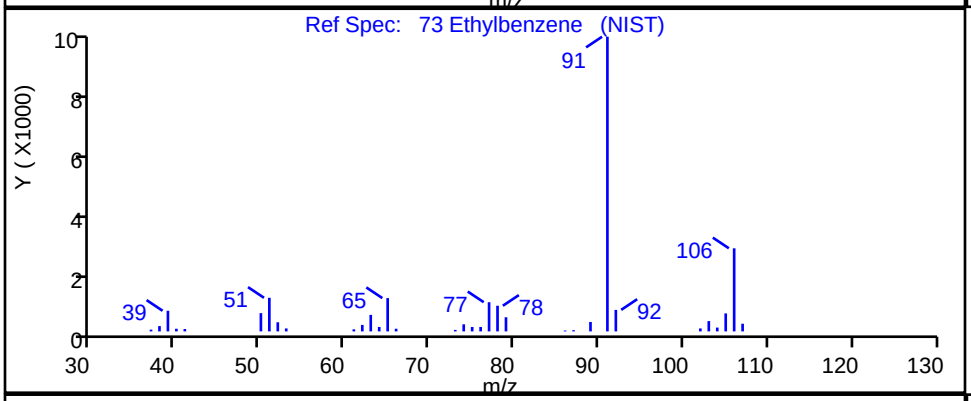
73 Ethylbenzene, CAS: 100-41-4

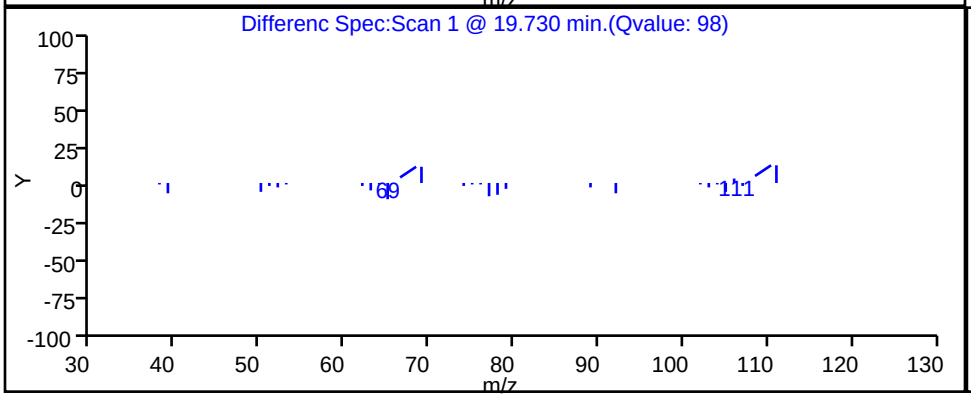


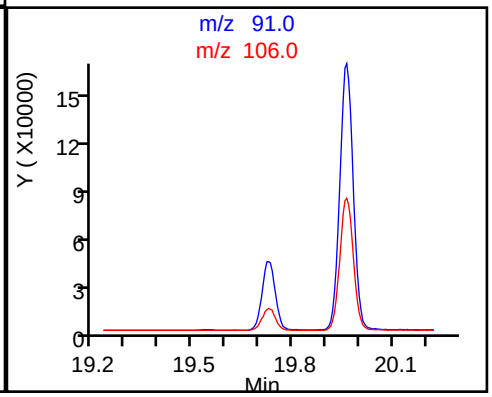








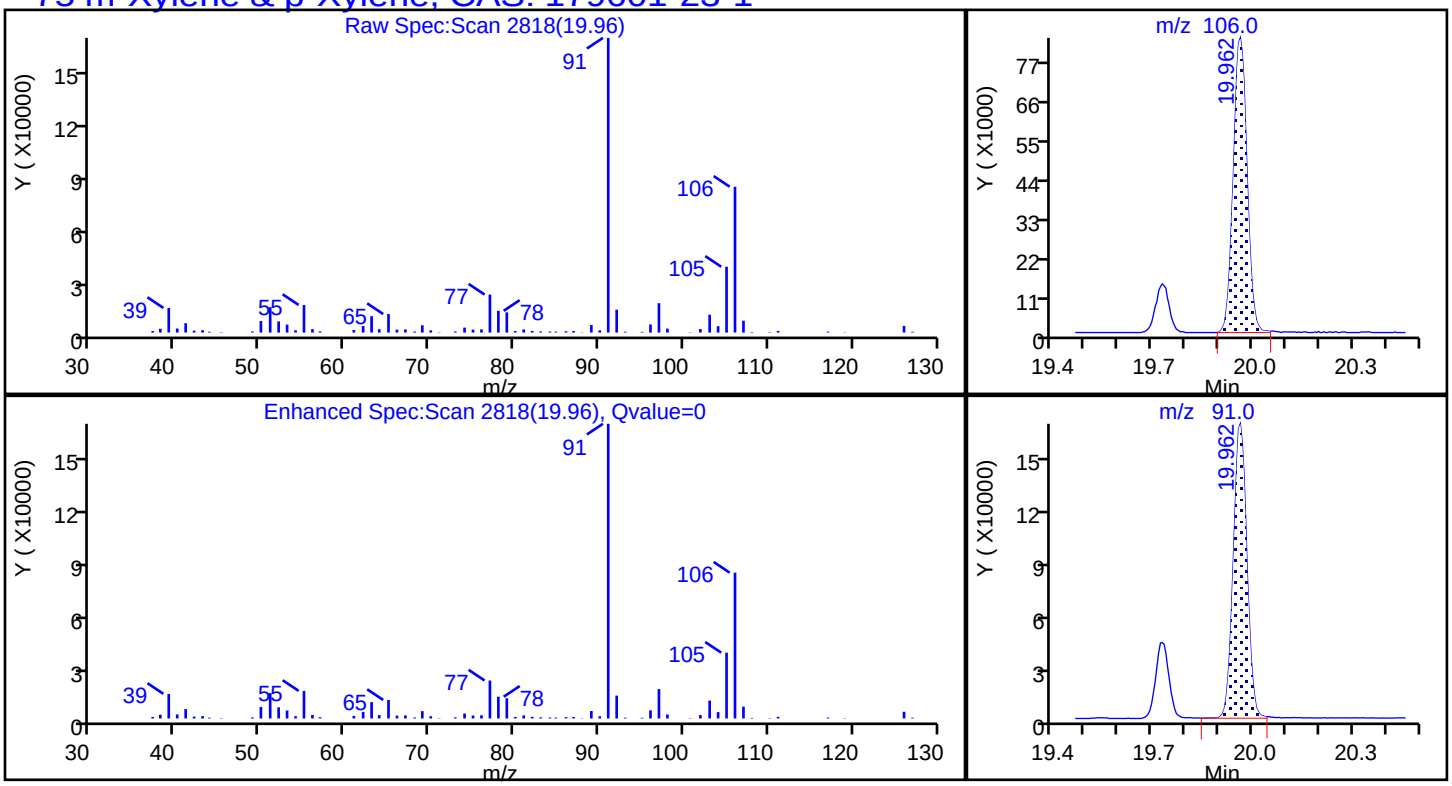


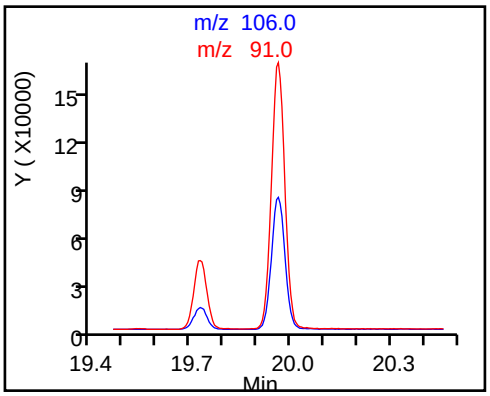


TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

75 m-Xylene & p-Xylene, CAS: 179601-23-1

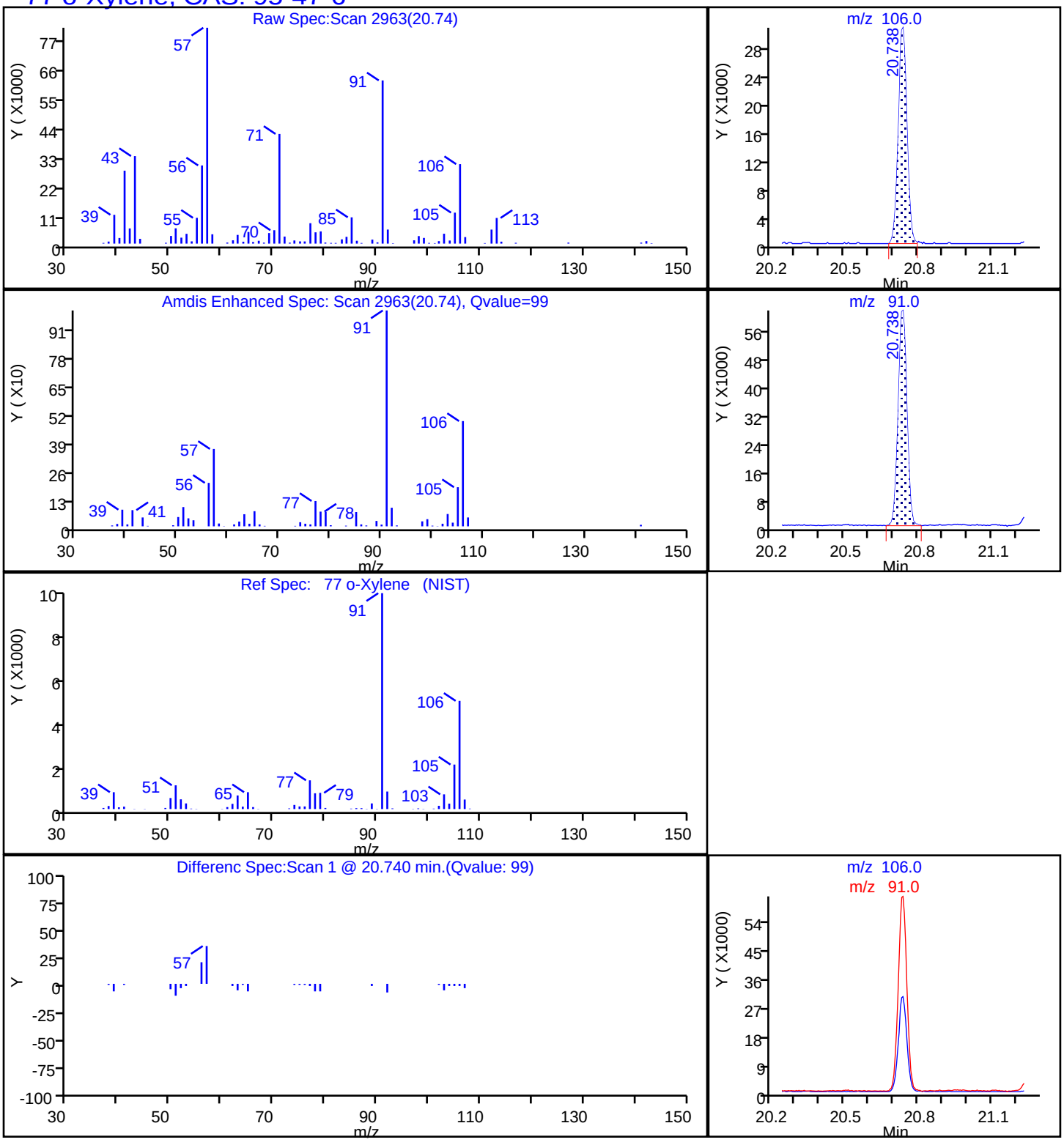




TestAmerica Burlington

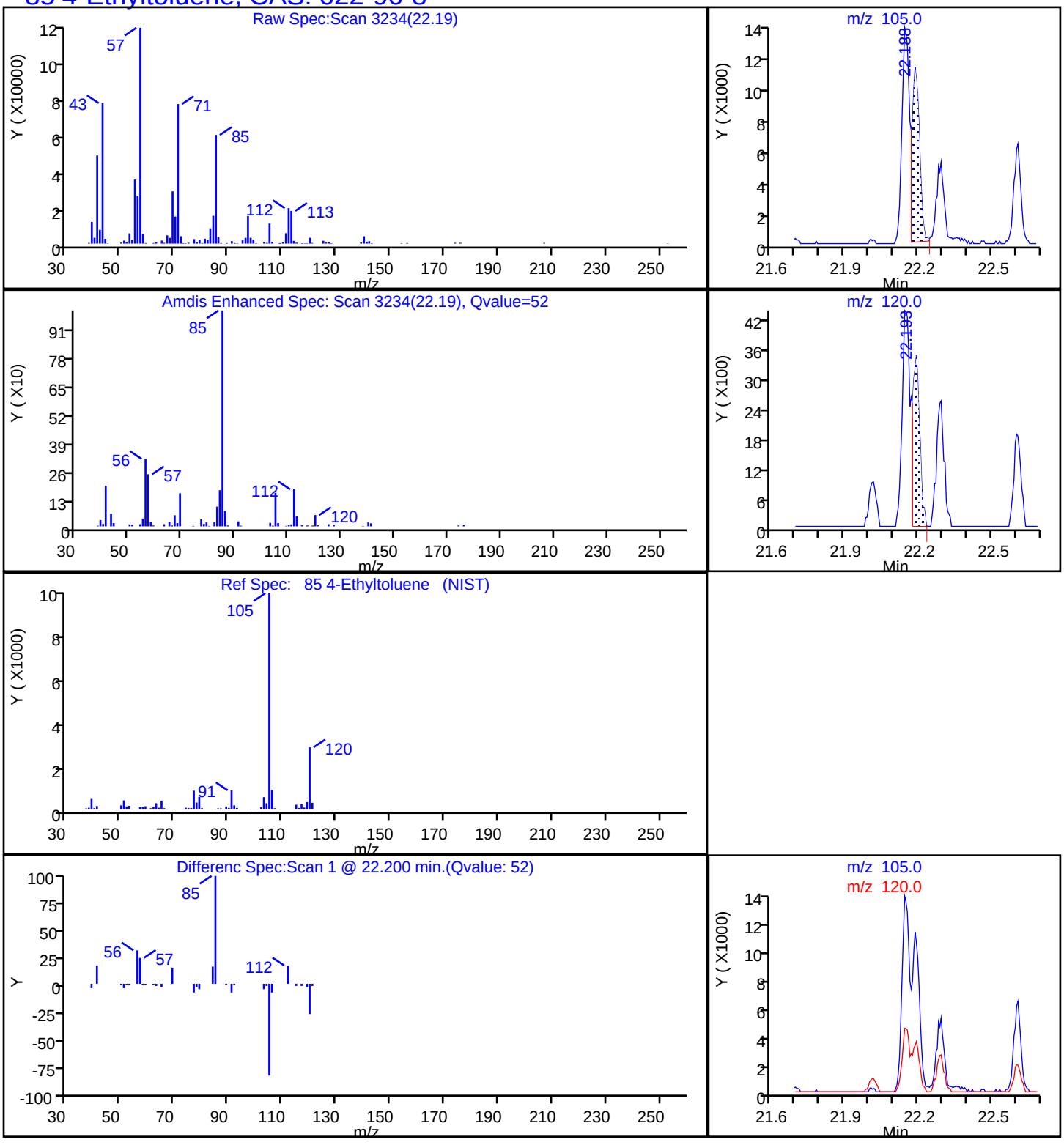
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

77 o-Xylene, CAS: 95-47-6



Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

85 4-Ethyltoluene, CAS: 622-96-8

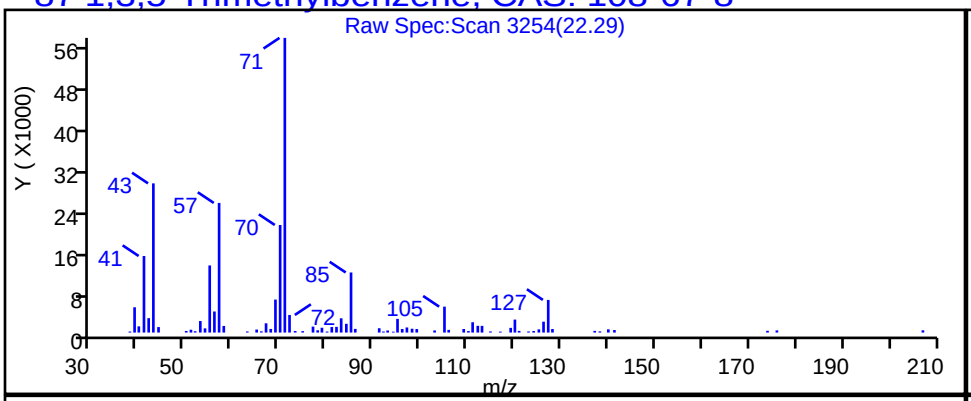


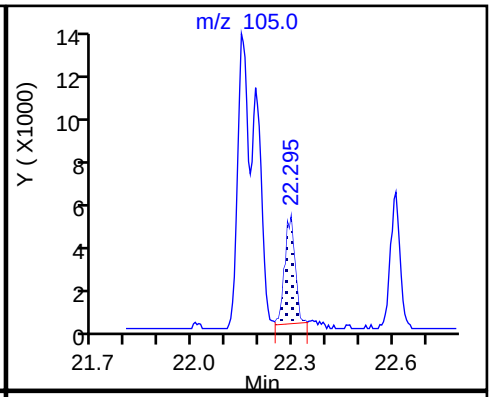
TestAmerica Burlington

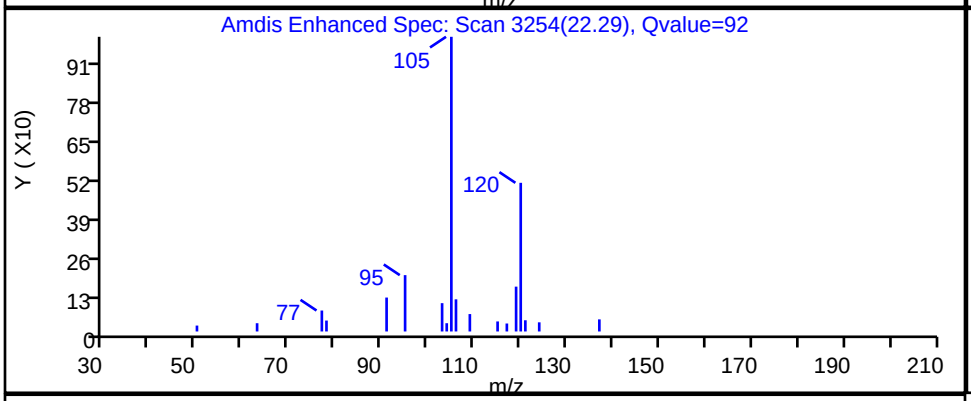
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d

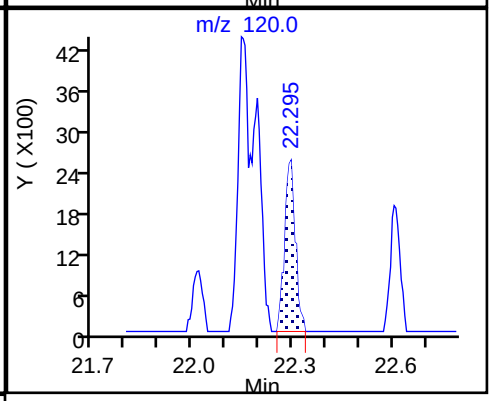
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

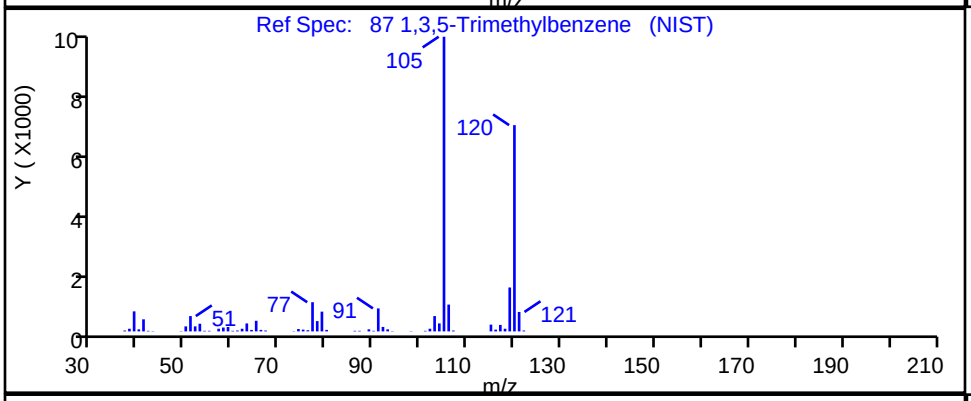
87 1,3,5-Trimethylbenzene, CAS: 108-67-8

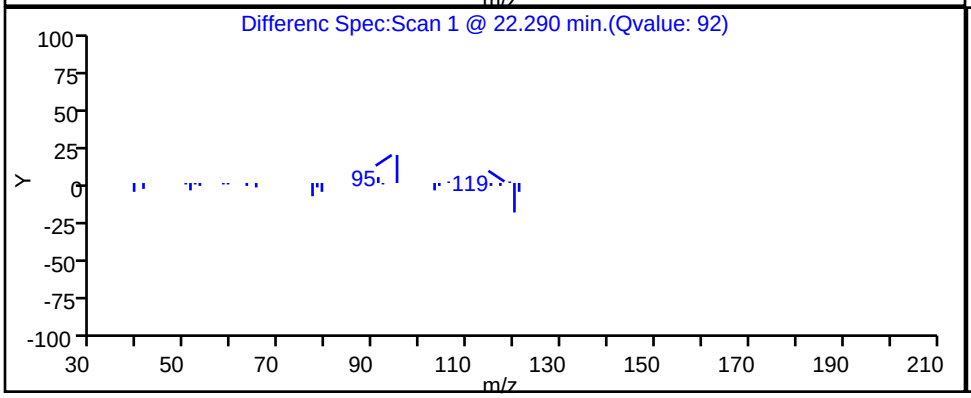


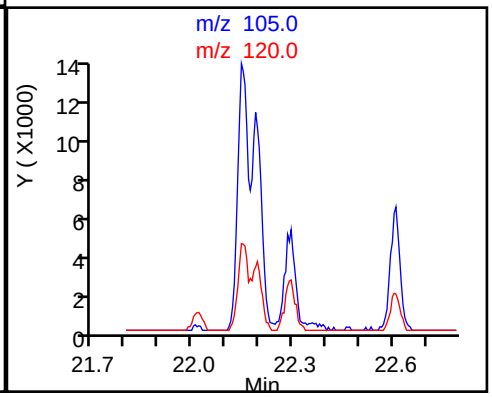






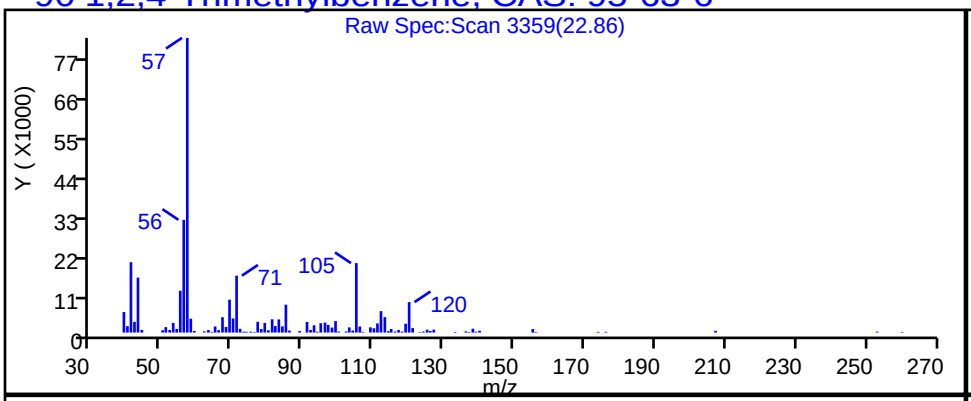


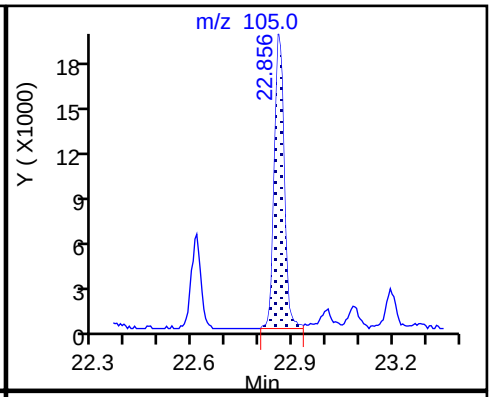


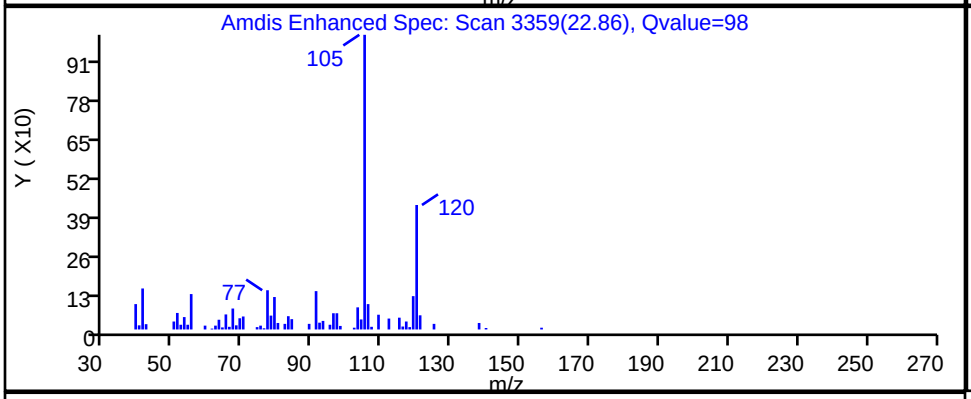


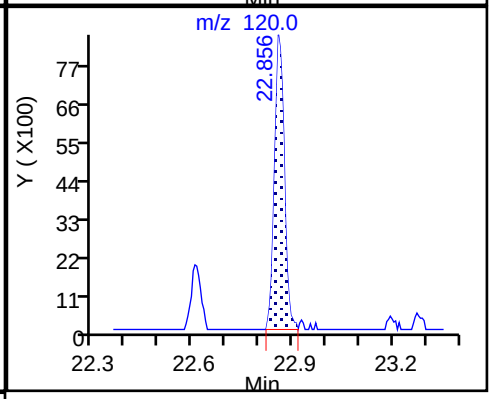
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d
Injection Date: 06-Apr-2018 02:20:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

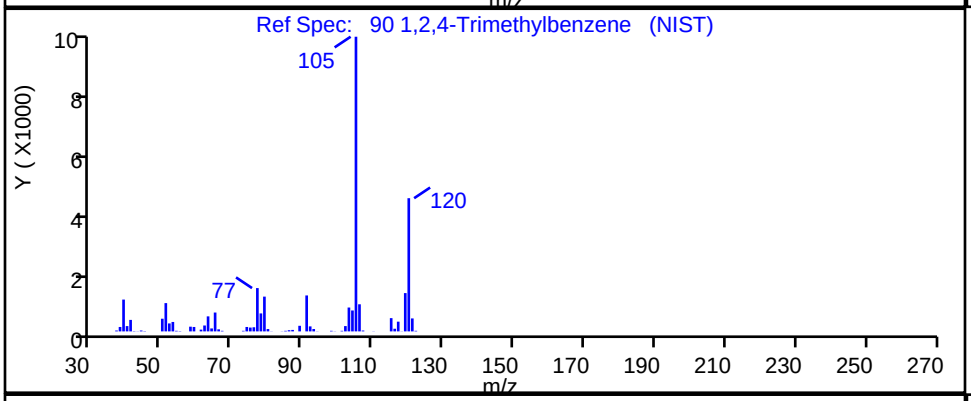
90 1,2,4-Trimethylbenzene, CAS: 95-63-6

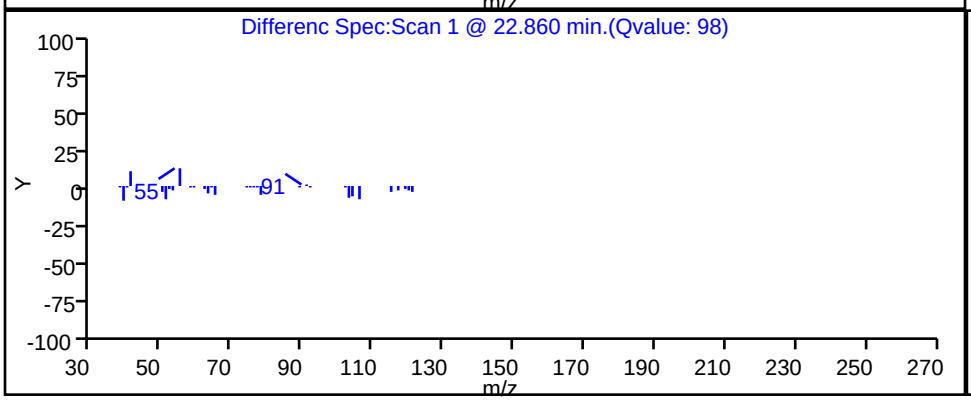


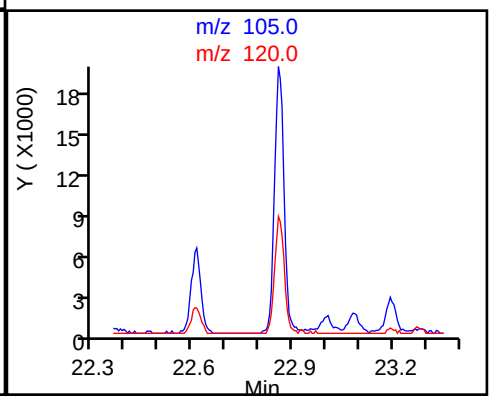












Manual Integration/User Assign Peak Report

TestAmerica Burlington

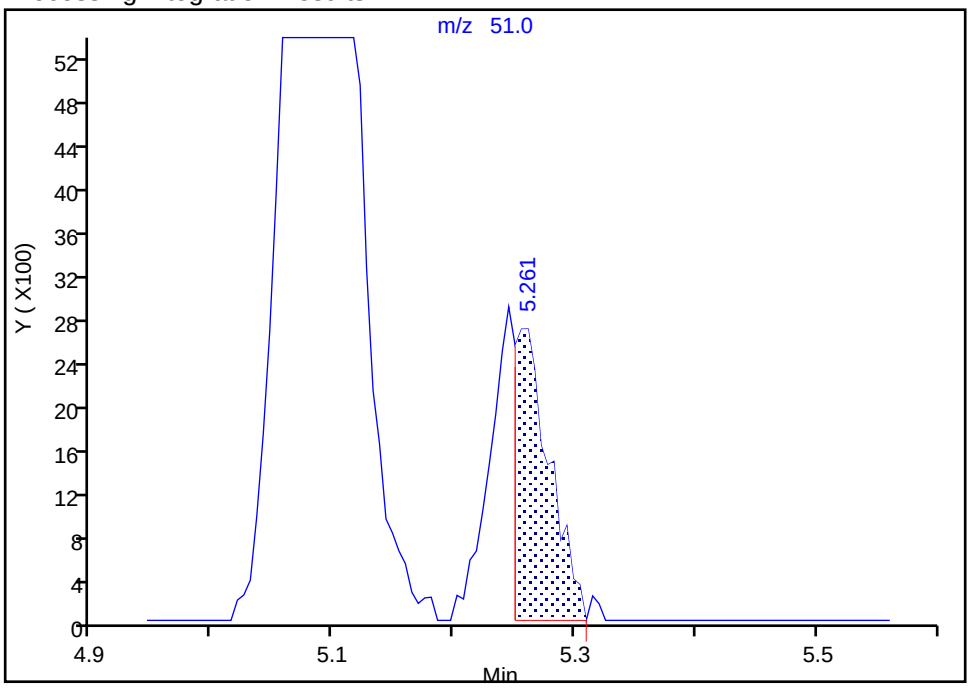
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

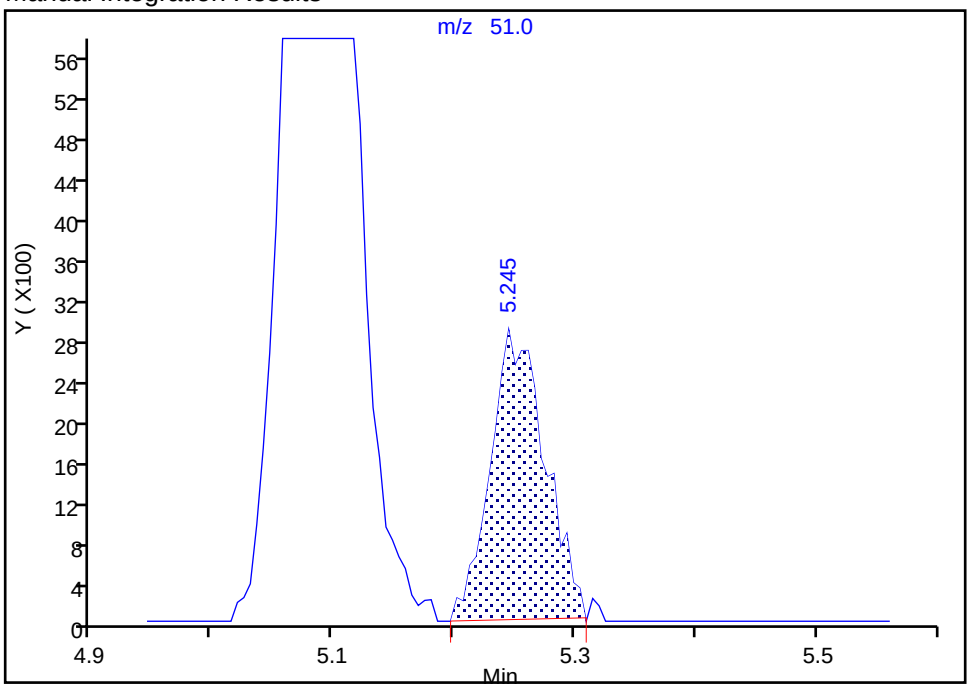
Processing Integration Results

RT: 5.26
Area: 5447
Amount: 0.145907
Amount Units: ppb v/v



Manual Integration Results

RT: 5.25
Area: 8950
Amount: 0.239740
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:32:30

Audit Action: Manually Integrated Audit Reason: Assign Peak

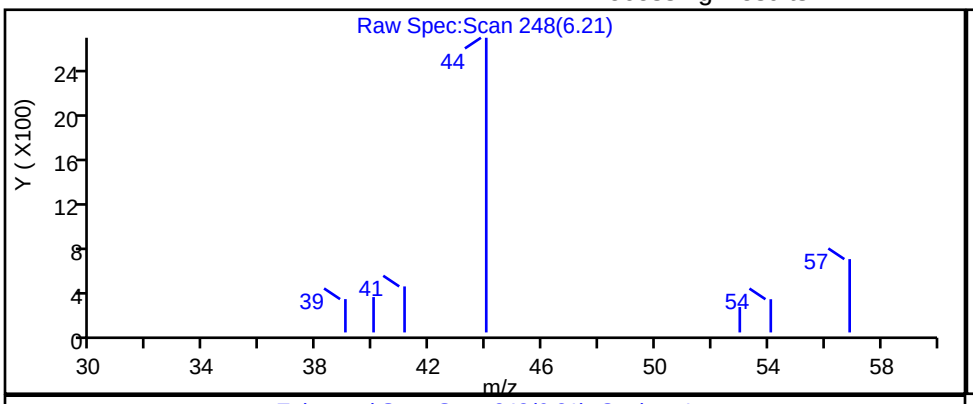
User Disabled Compound Report

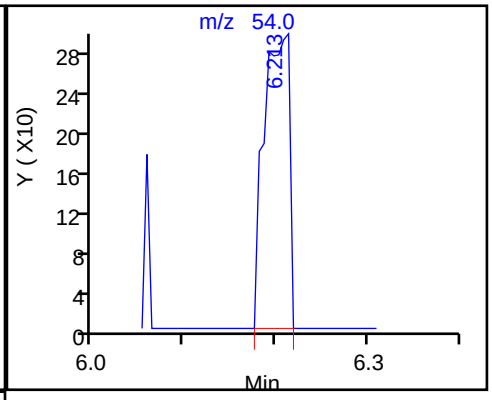
TestAmerica Burlington

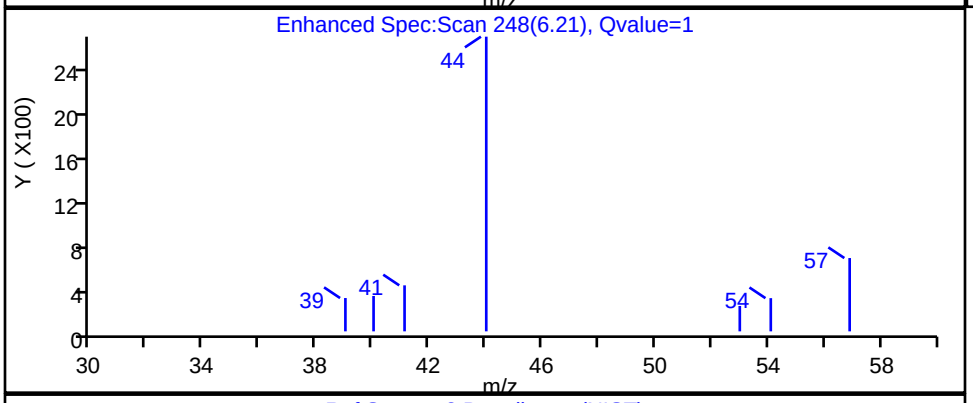
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

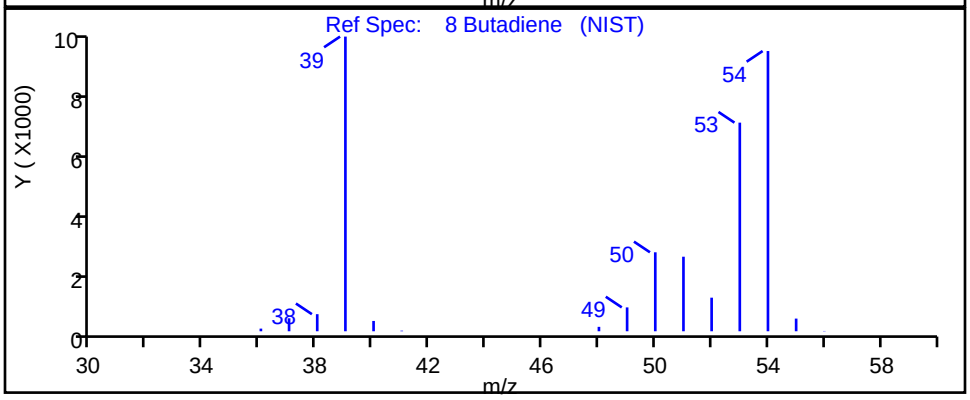
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
6.21	54.00	564	0.031095

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

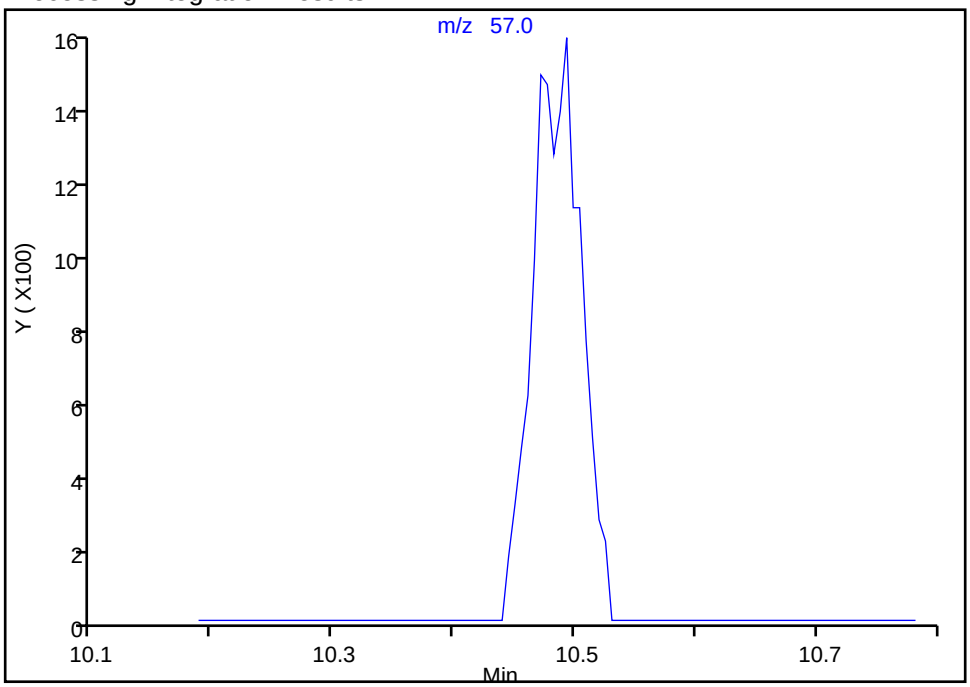
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3

Signal: 1

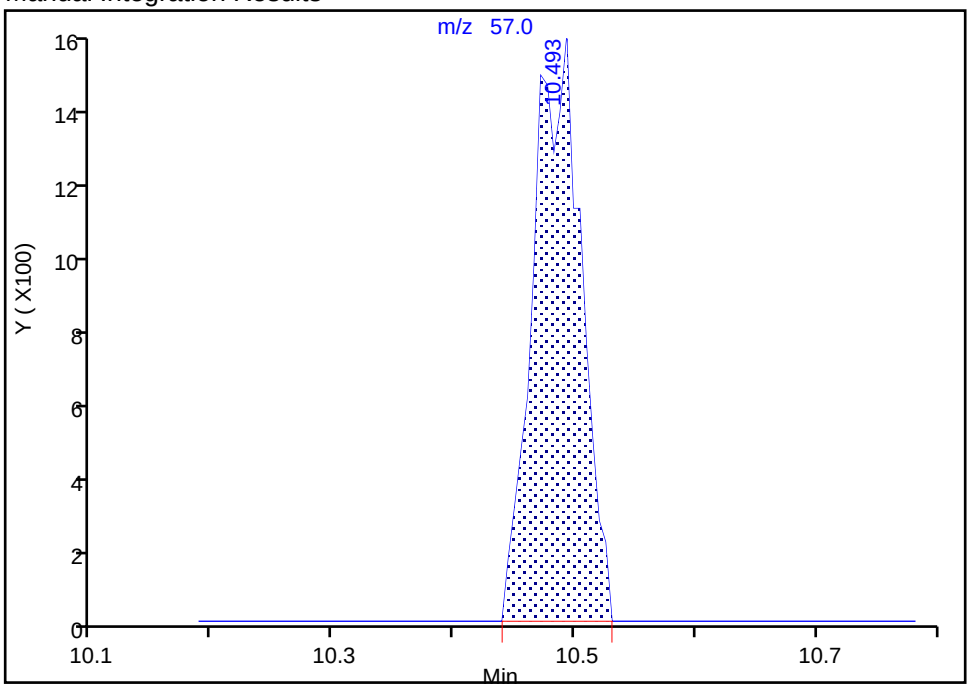
Not Detected
Expected RT: 10.48

Processing Integration Results



Manual Integration Results

RT: 10.49
Area: 4390
Amount: 0.168204
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:33:11
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

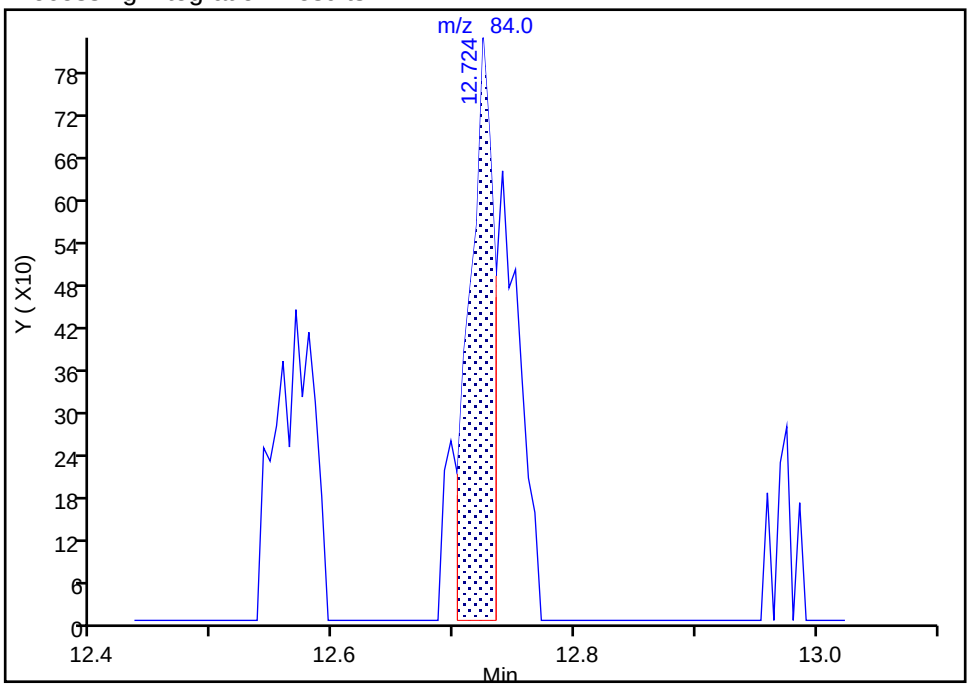
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Cyclohexane, CAS: 110-82-7

Signal: 1

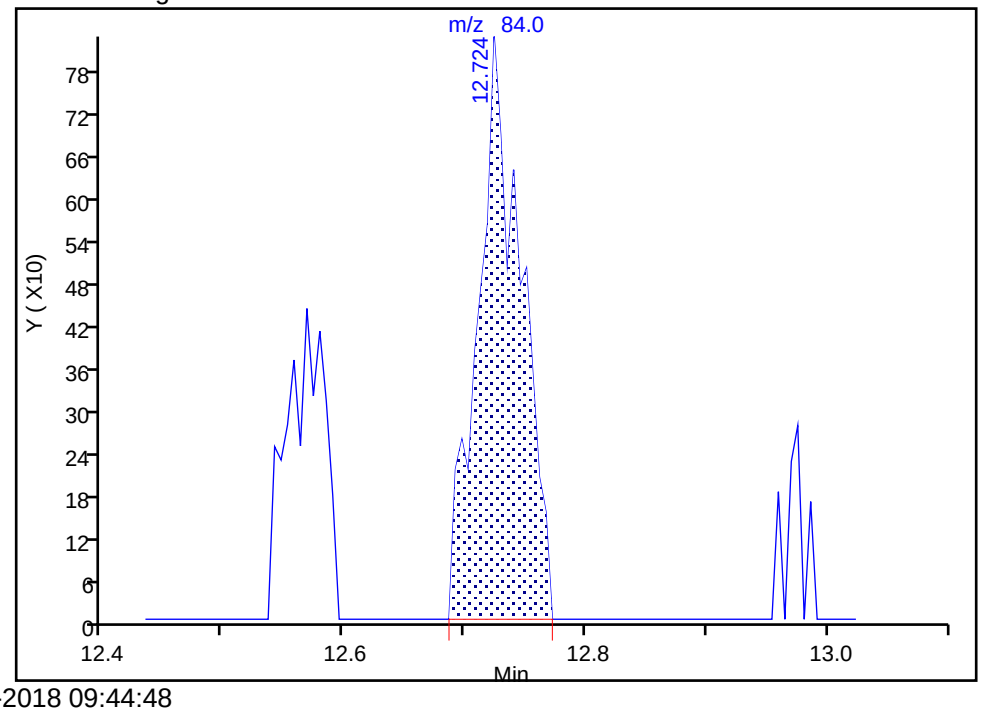
Processing Integration Results

RT: 12.72
Area: 1165
Amount: 0.045575
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 2056
Amount: 0.080432
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:44:48

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

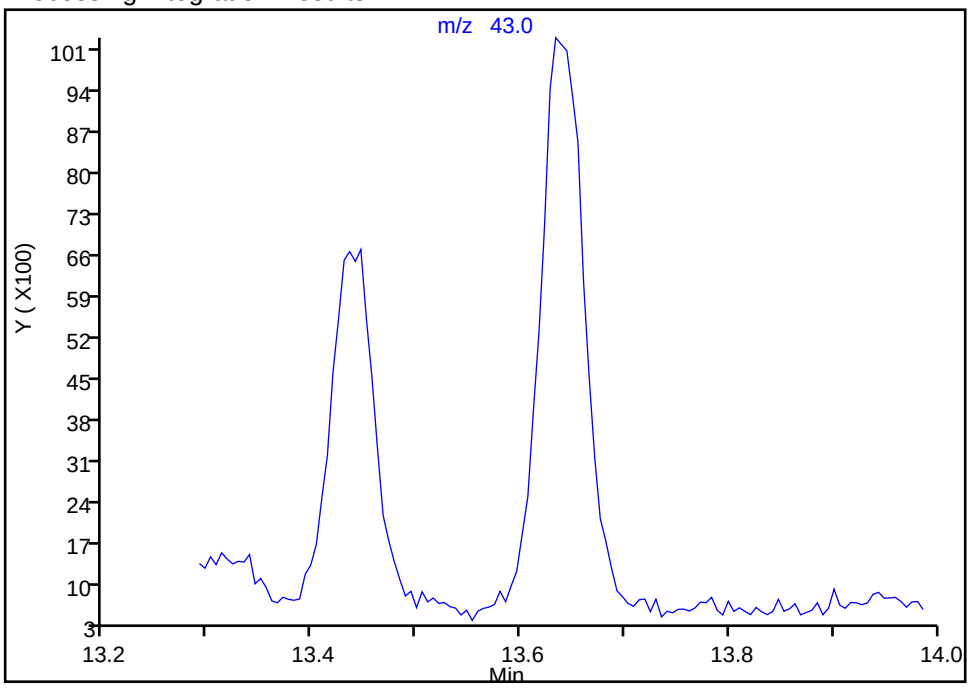
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 n-Heptane, CAS: 142-82-5

Signal: 1

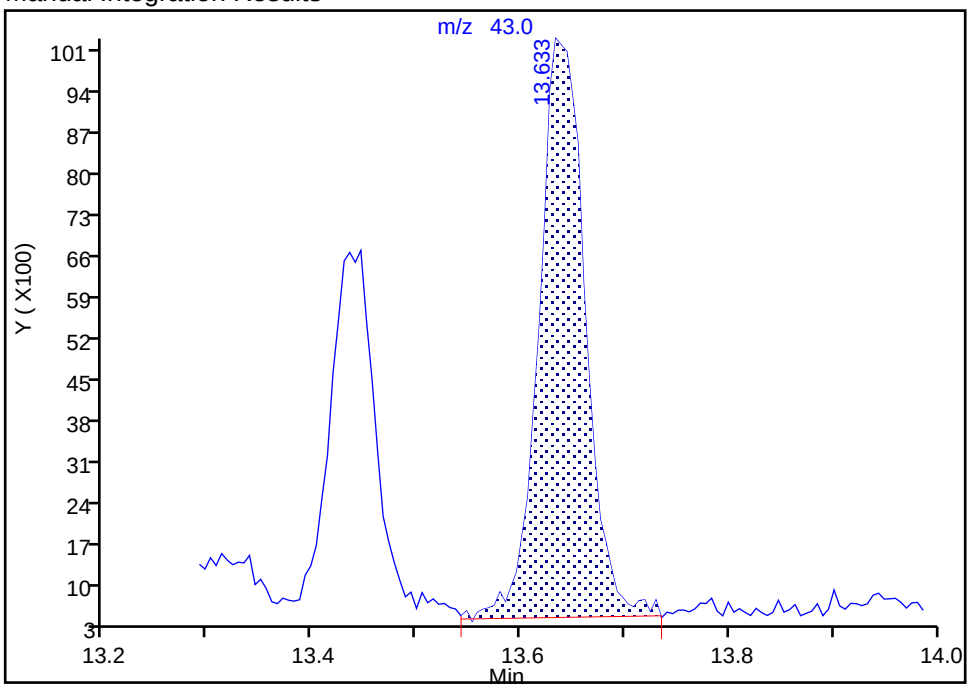
Not Detected
Expected RT: 13.63

Processing Integration Results



Manual Integration Results

RT: 13.63
Area: 30399
Amount: 1.040326
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:45:51
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

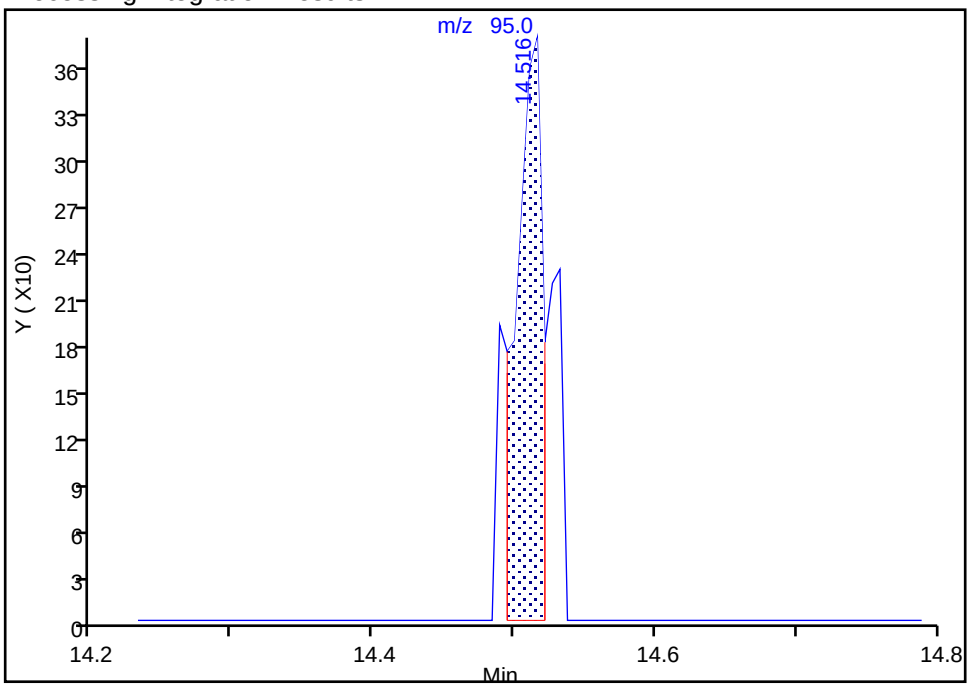
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6

Signal: 1

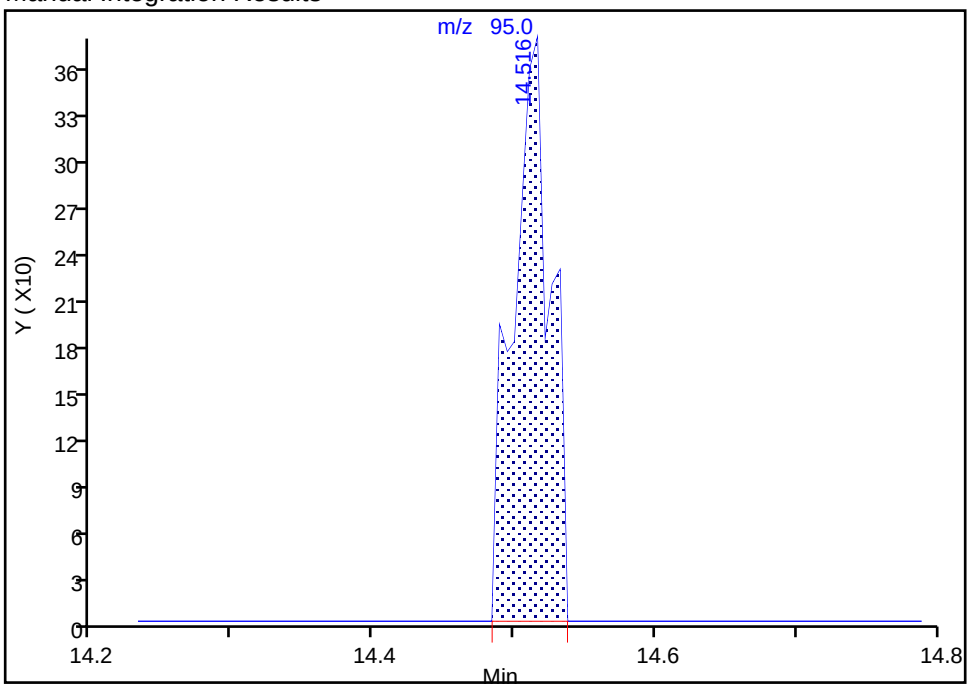
Processing Integration Results

RT: 14.52
Area: 491
Amount: 0.018826
Amount Units: ppb v/v



Manual Integration Results

RT: 14.52
Area: 695
Amount: 0.026647
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:46:23

Audit Action: Manually Integrated Audit Reason: Assign Peak

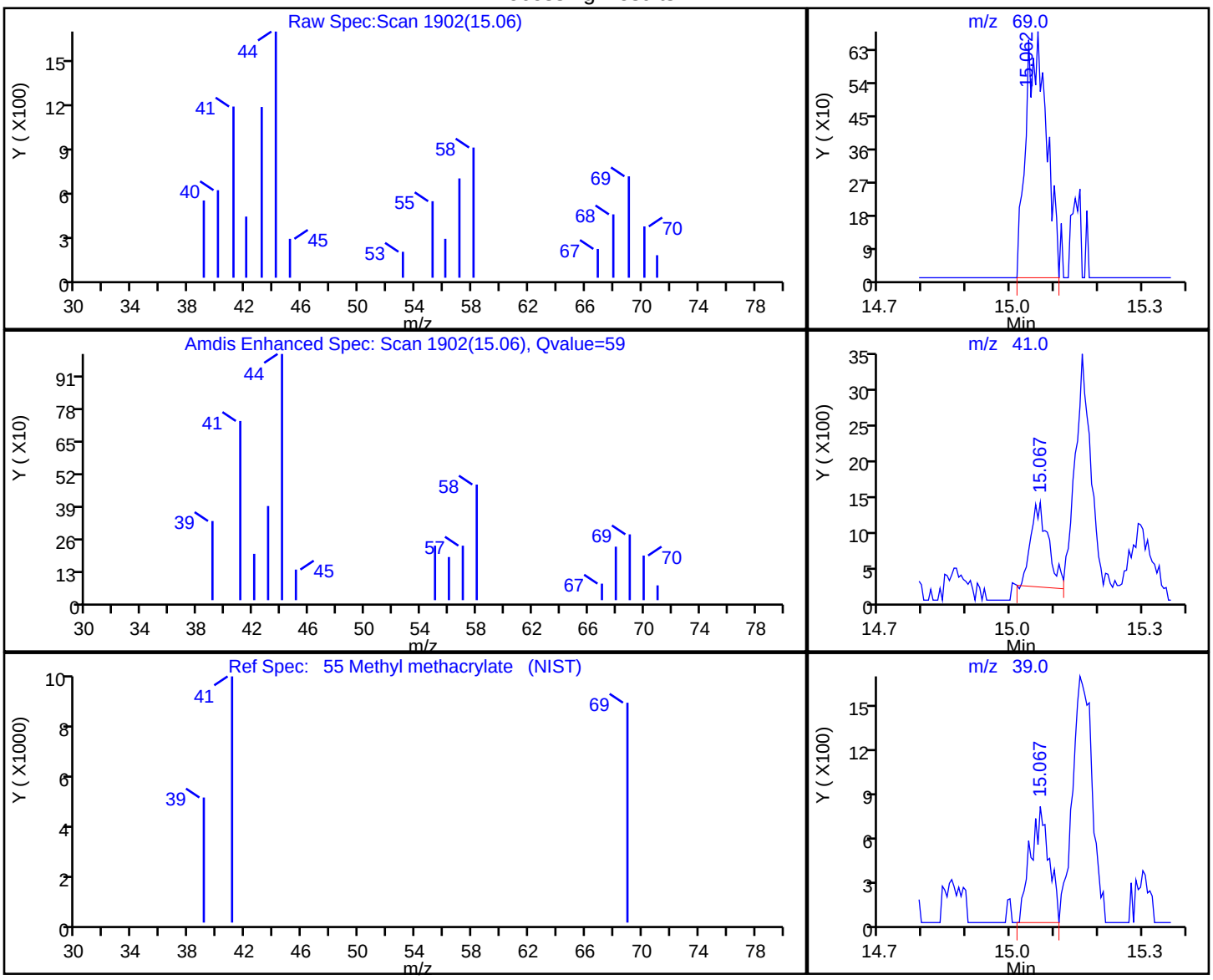
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

55 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
15.06	69.00	2217	0.108036
15.07	41.00	3299	
15.07	39.00	2250	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

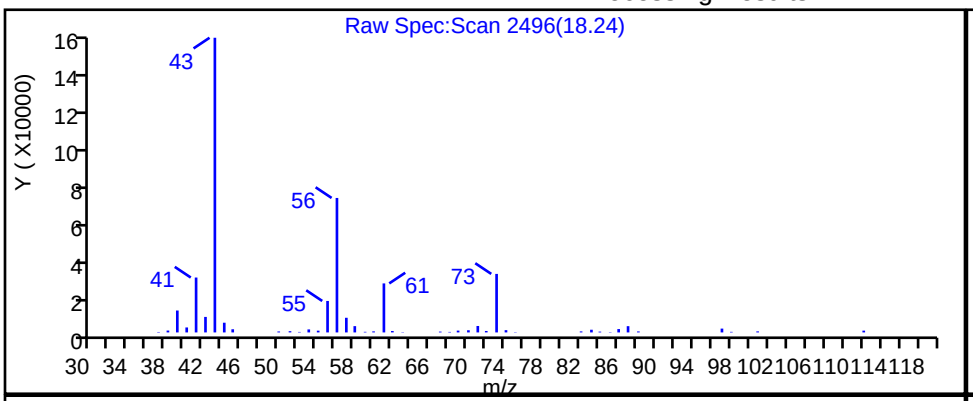
User Disabled Compound Report

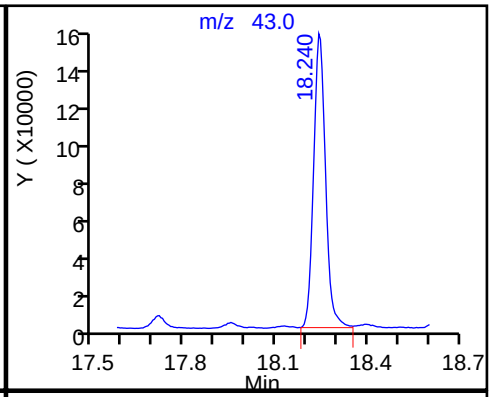
TestAmerica Burlington

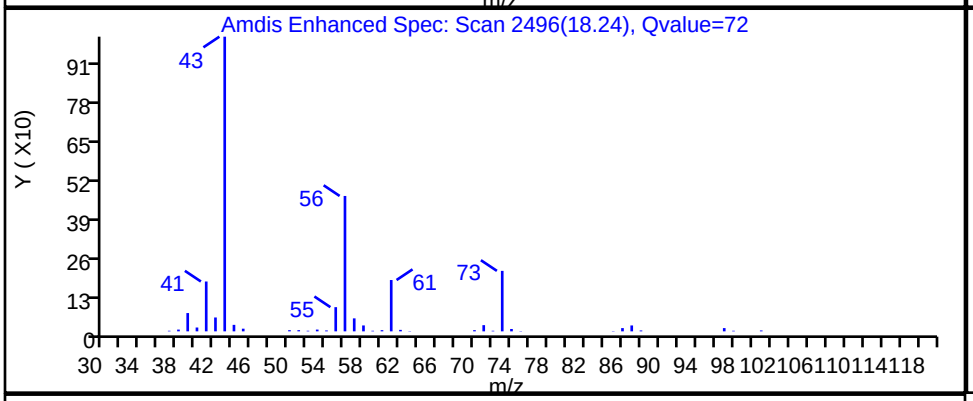
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

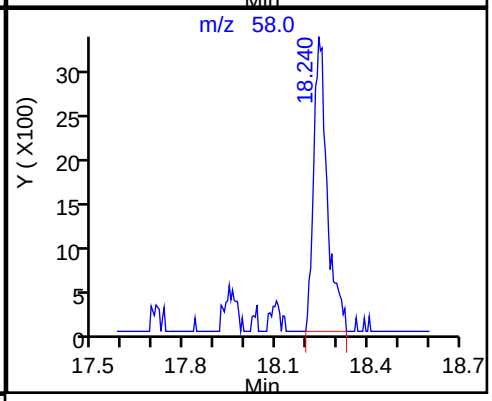
67 2-Hexanone, CAS: 591-78-6

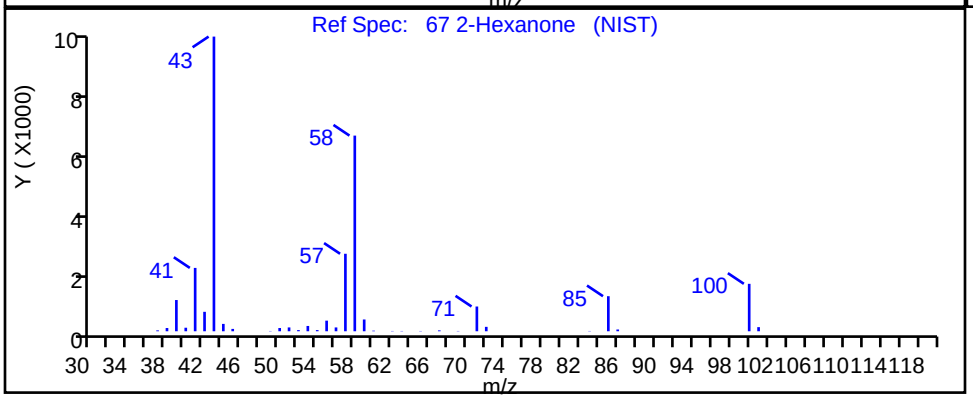
Processing Results











RT	Mass	Response	Amount
18.24	43.00	427118	11.685924
18.24	58.00	10393	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

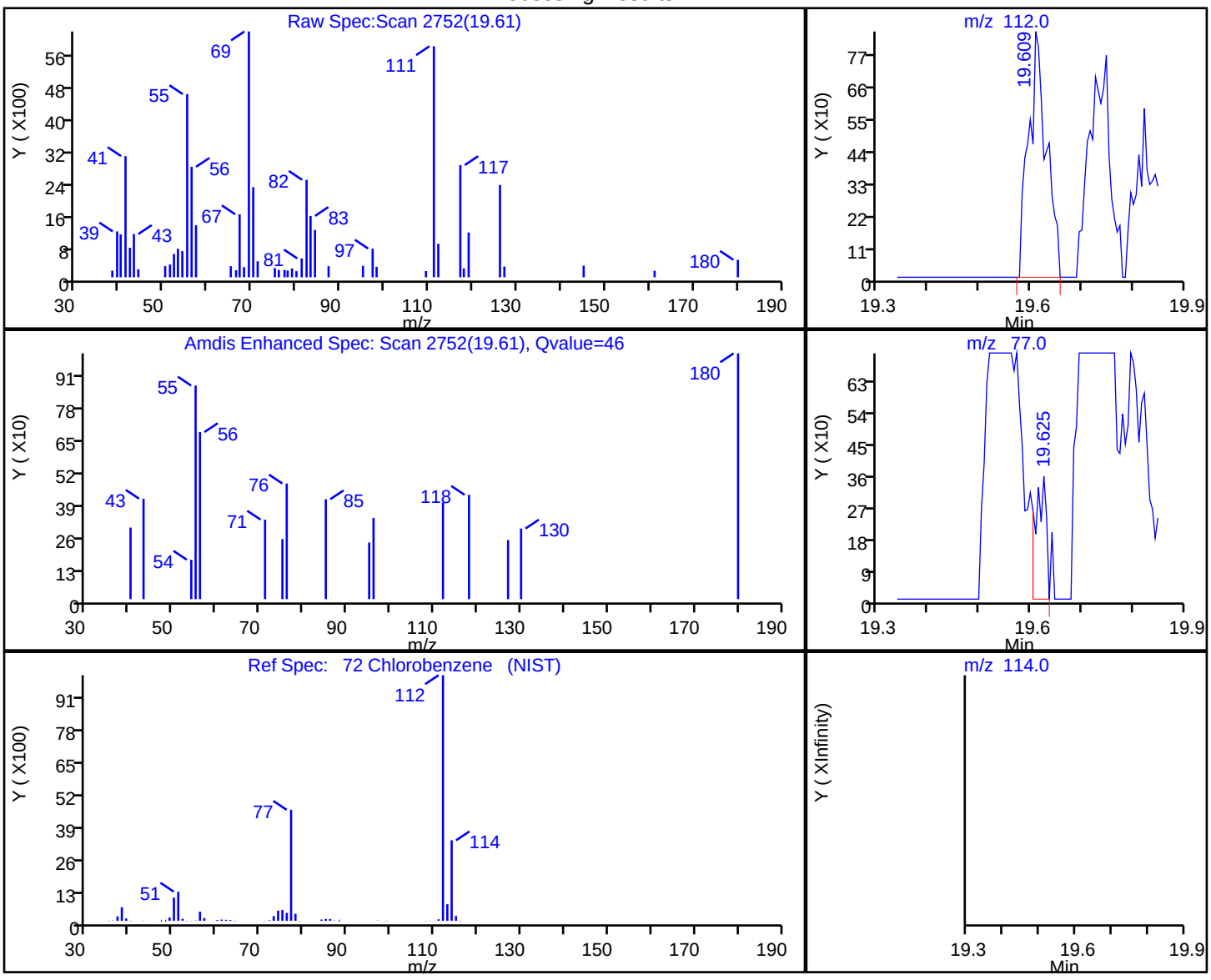
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

72 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
19.61	112.00	2045	0.034117
19.63	77.00	502	
19.59	114.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

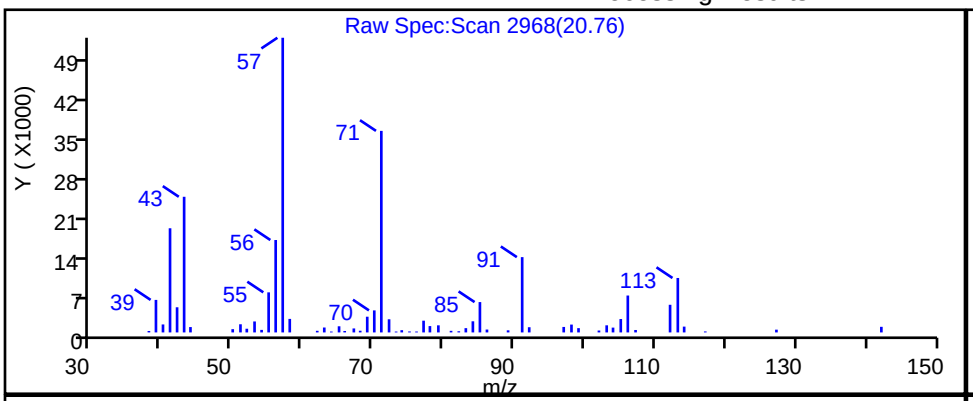
User Disabled Compound Report

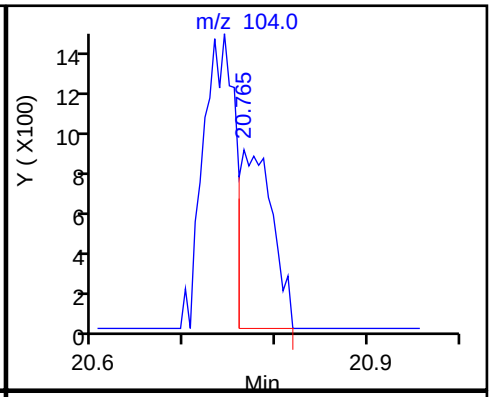
TestAmerica Burlington

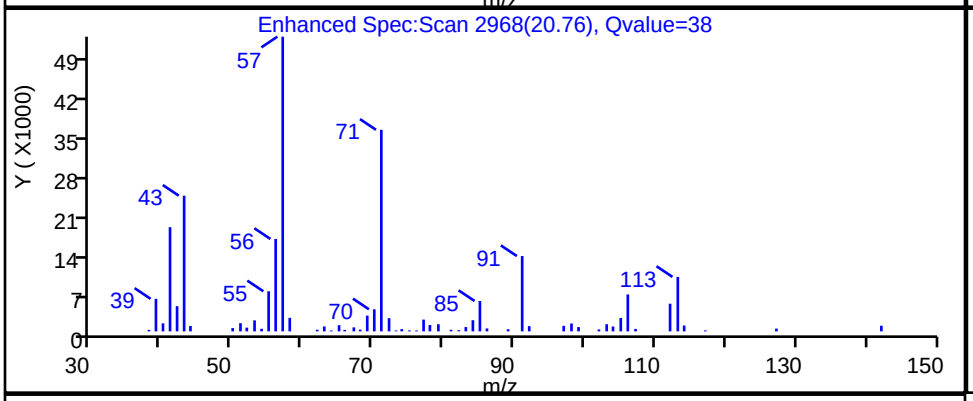
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

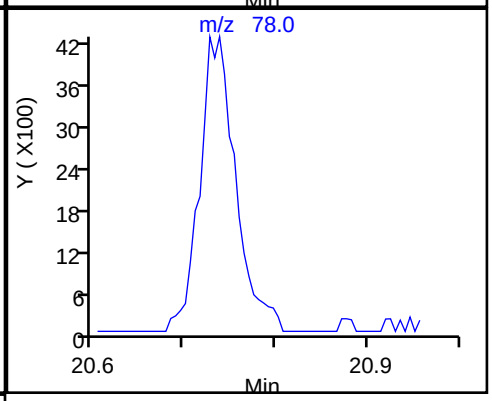
78 Styrene, CAS: 100-42-5

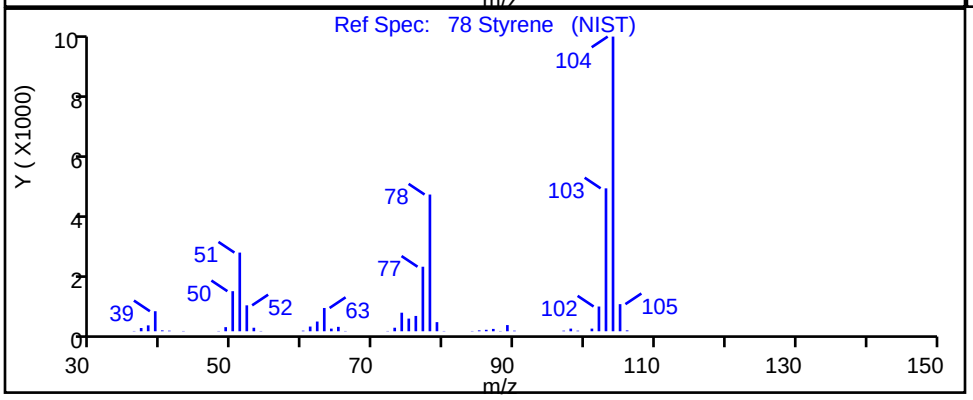
Processing Results











RT	Mass	Response	Amount
20.76	104.00	2191	0.039107
20.78	78.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

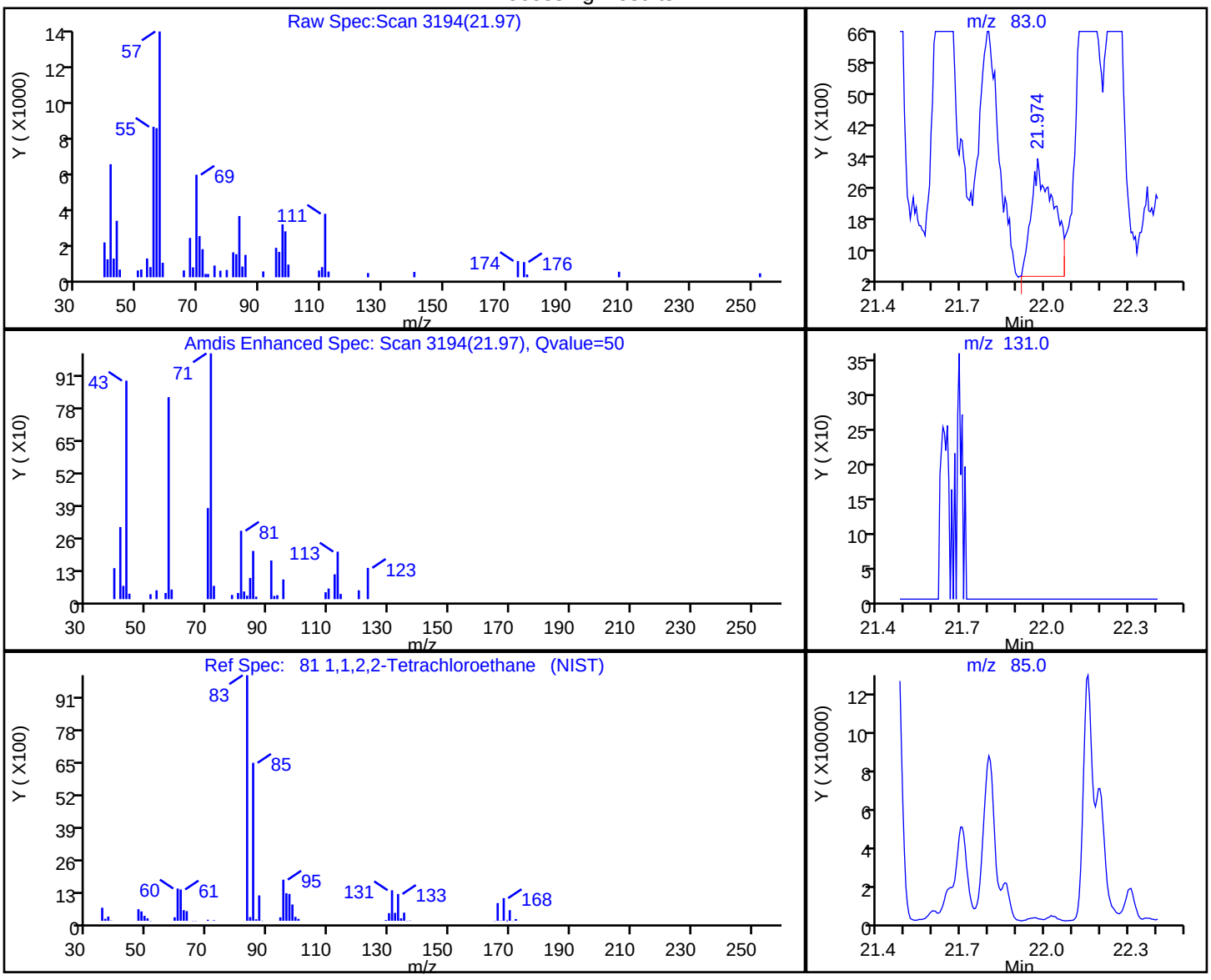
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.97	83.00	16515	0.289626
21.94	131.00	0	
21.94	85.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

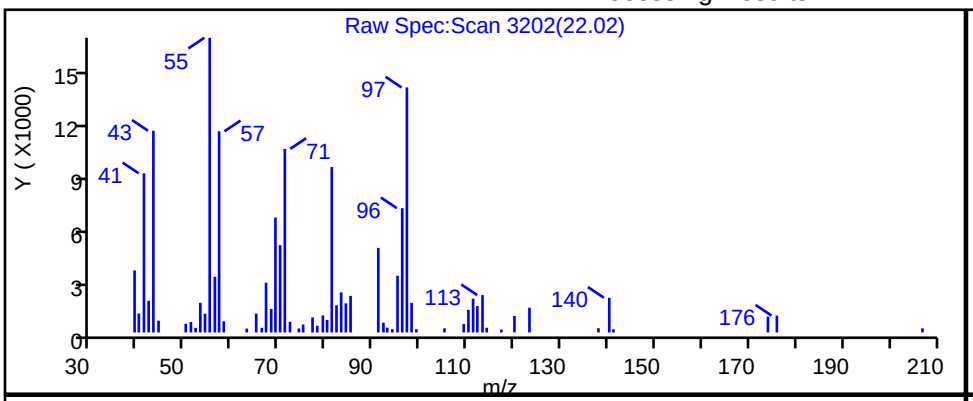
User Disabled Compound Report

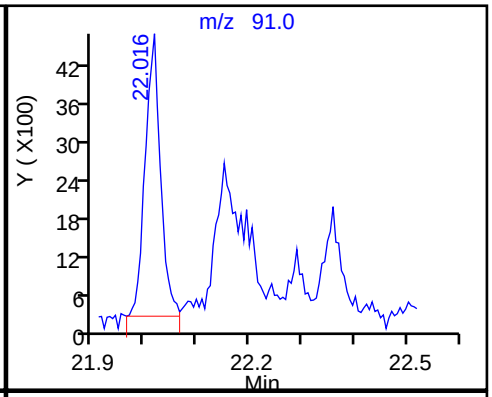
TestAmerica Burlington

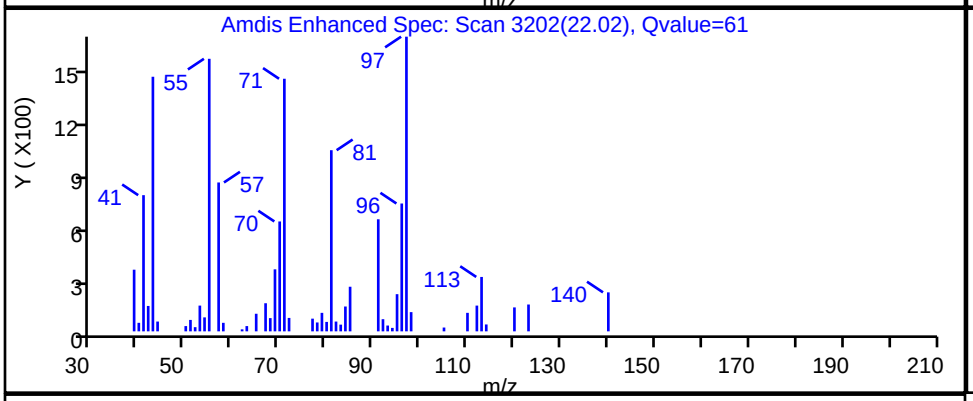
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

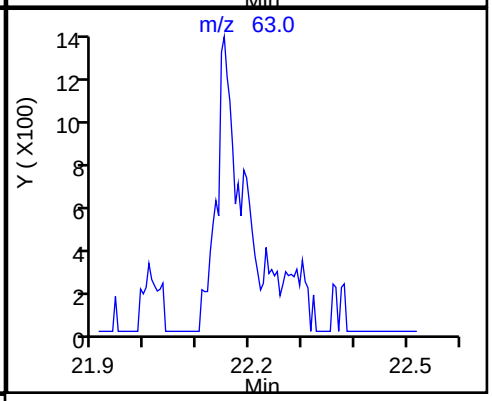
86 2-Chlorotoluene, CAS: 95-49-8

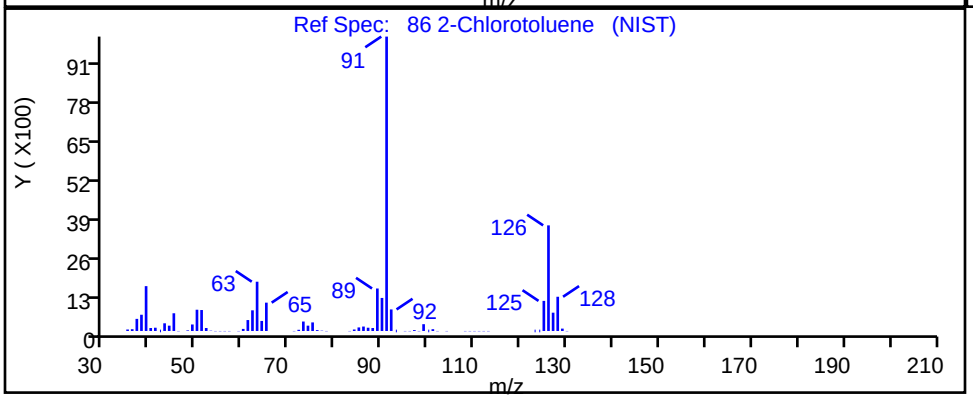
Processing Results











RT	Mass	Response	Amount
22.02	91.00	9013	0.093442
22.21	63.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

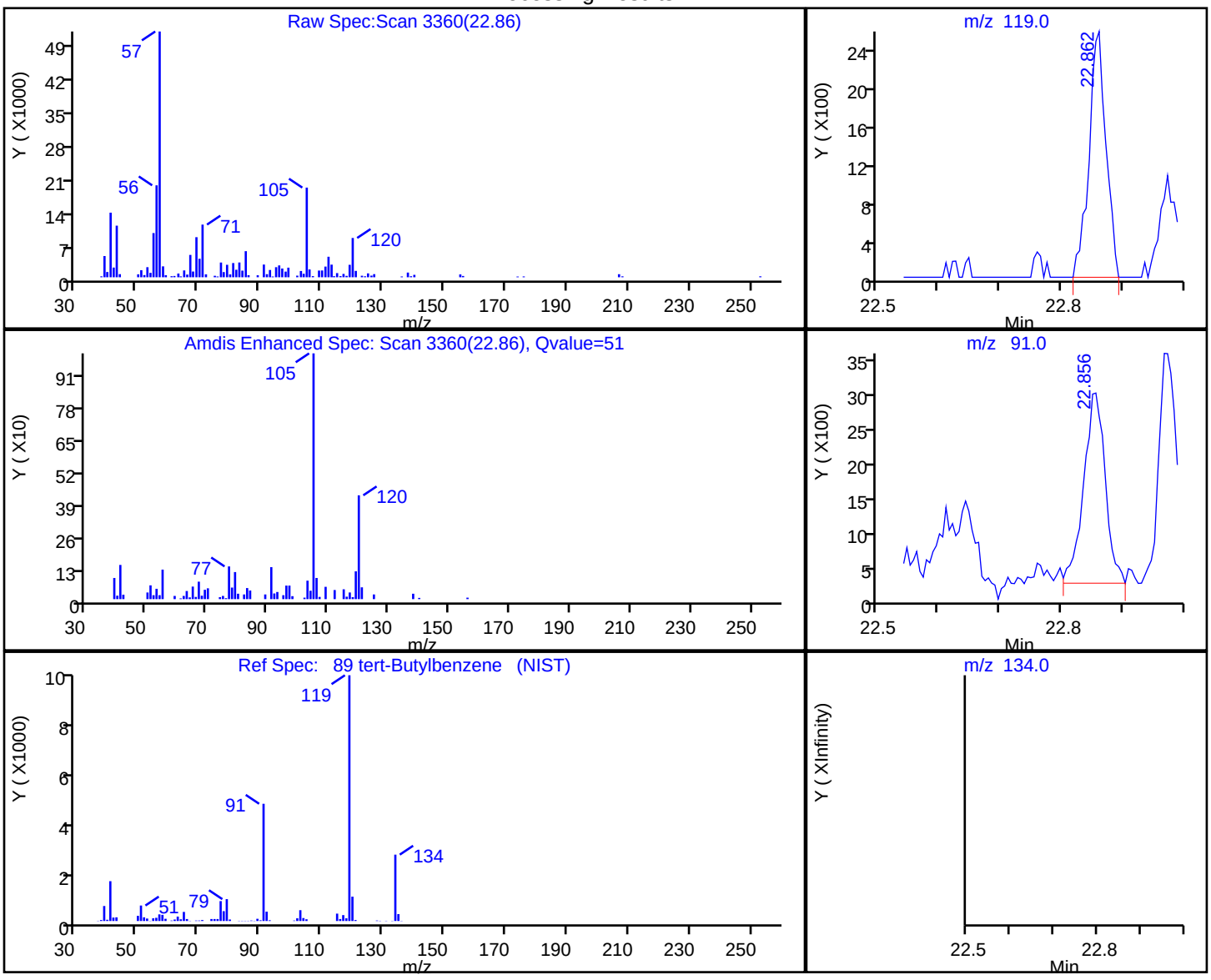
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

89 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
22.86	119.00	4998	0.049648
22.86	91.00	6751	
22.77	134.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

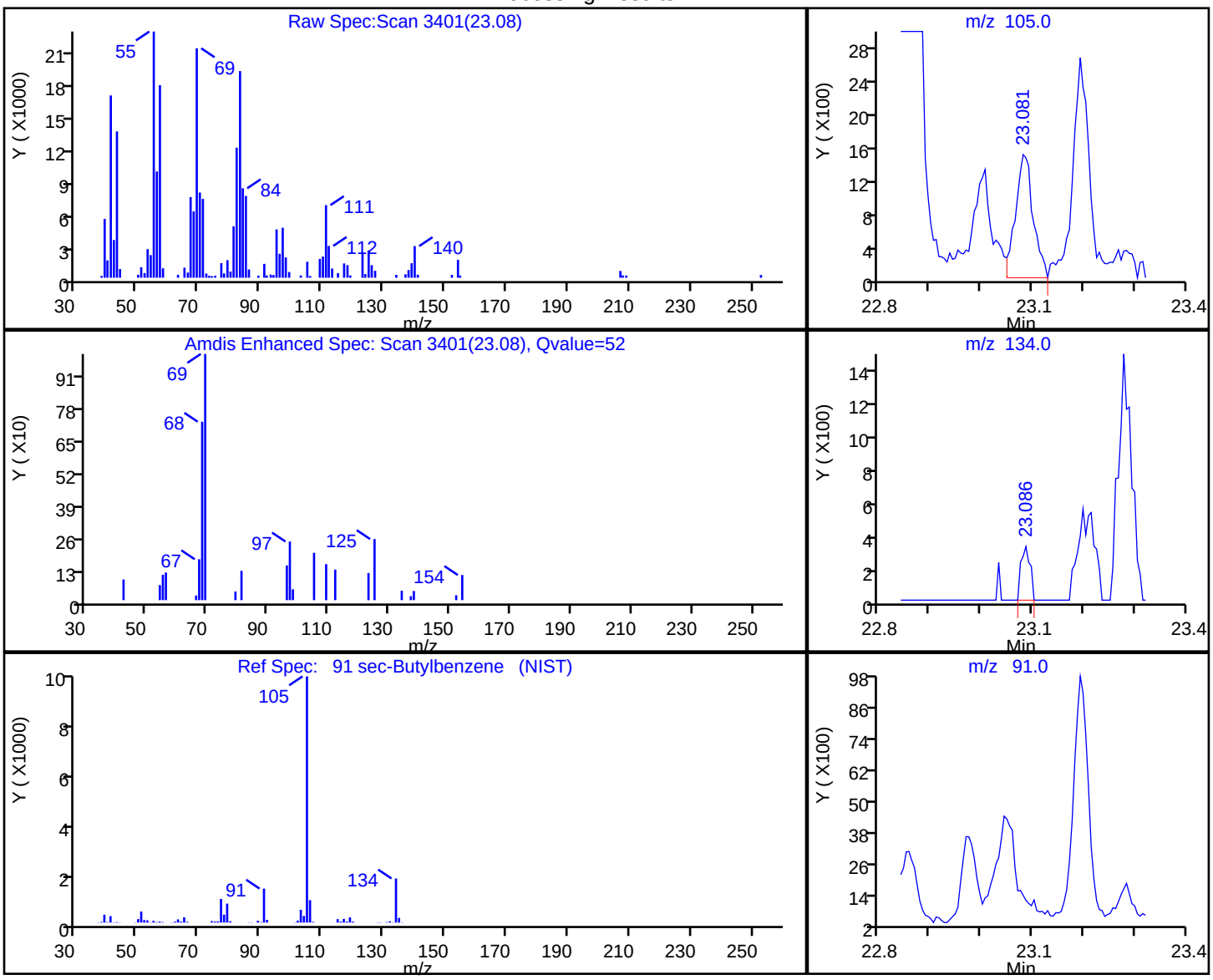
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

91 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
23.08	105.00	3534	0.024294
23.09	134.00	400	
23.08	91.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

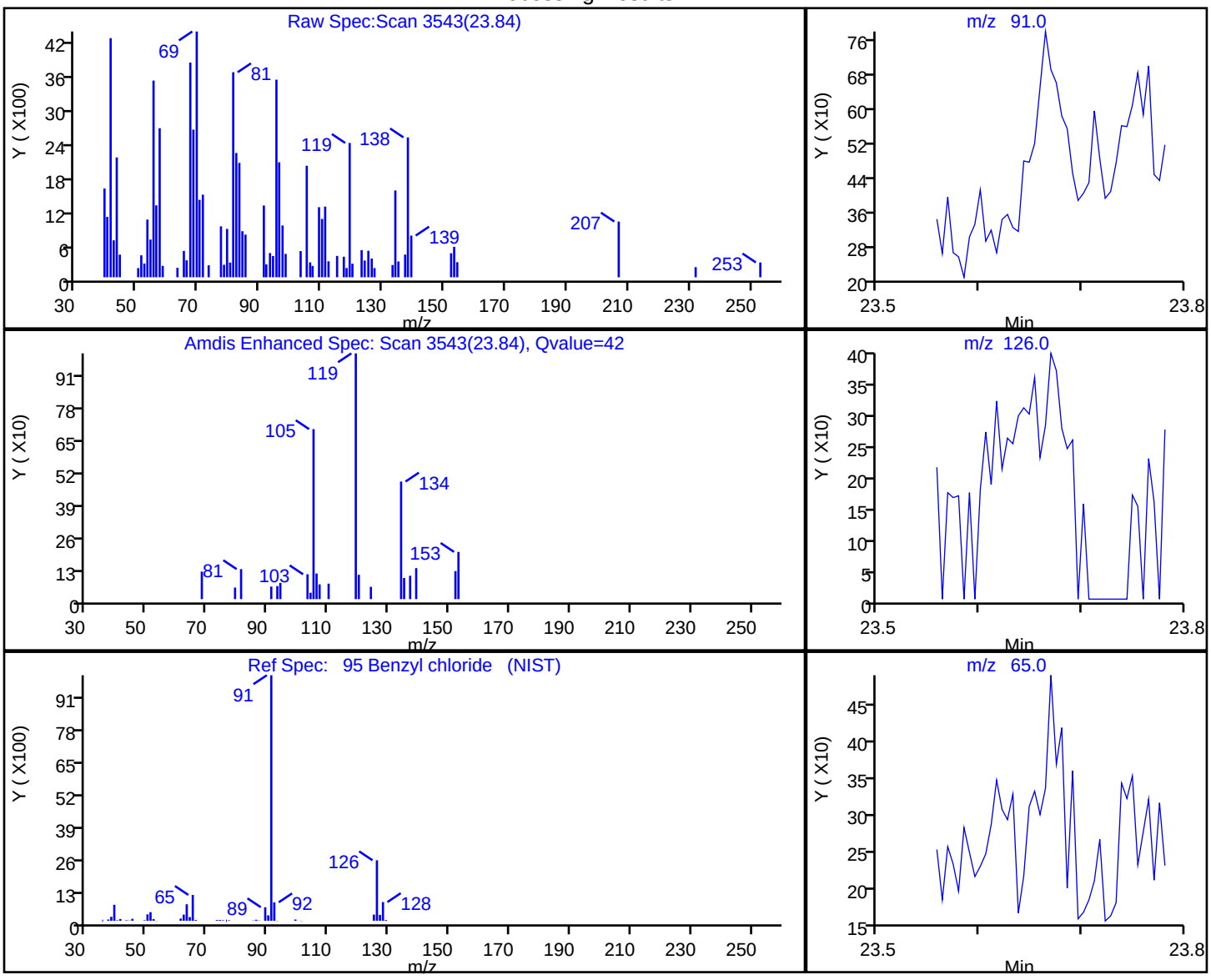
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
23.84	91.00	1282	0.018694
23.67	126.00	0	
23.67	65.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

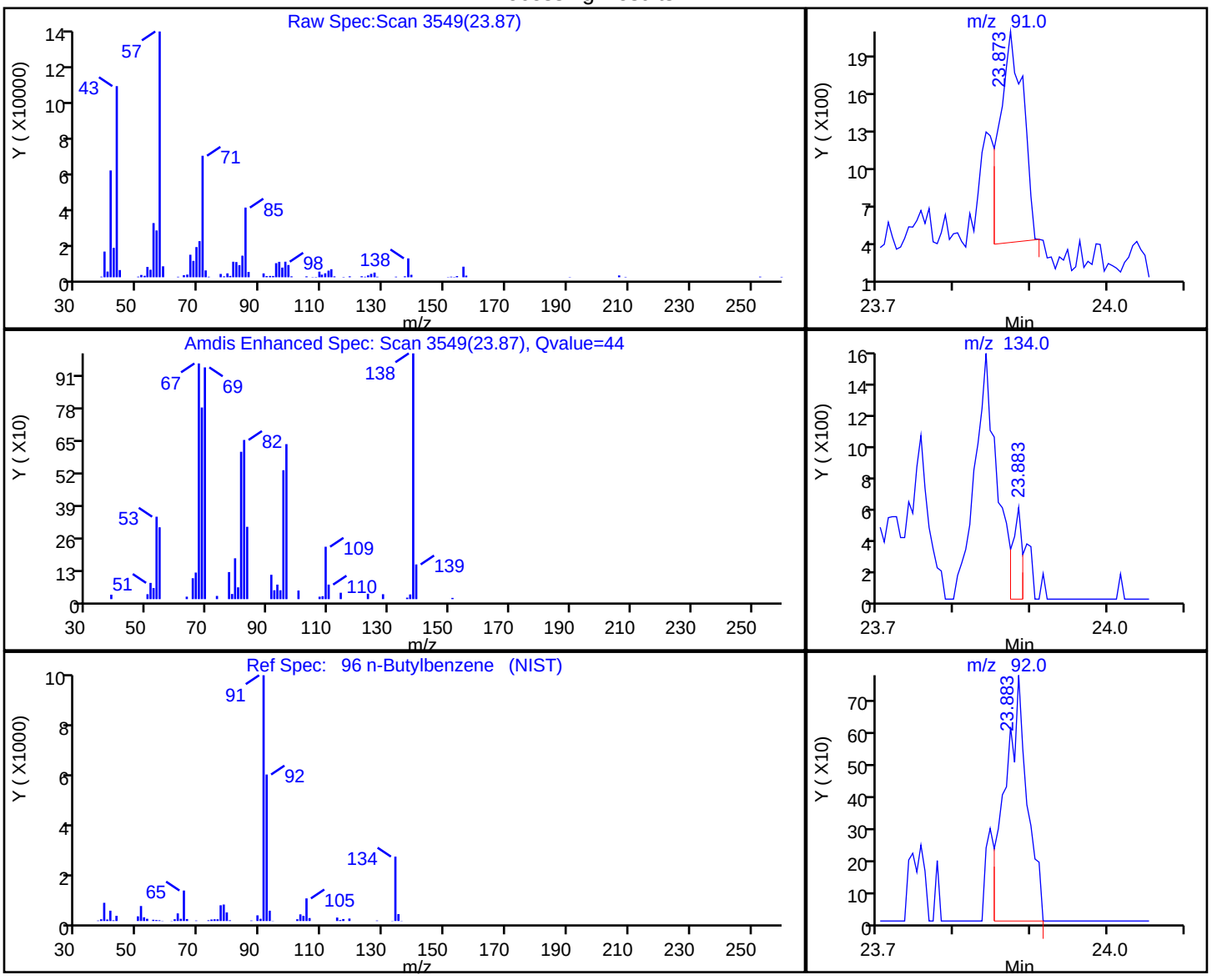
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
23.87	91.00	3392	0.034623
23.88	134.00	504	
23.88	92.00	1543	

Reviewer: puangmaleek, 09-Apr-2018 09:49:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

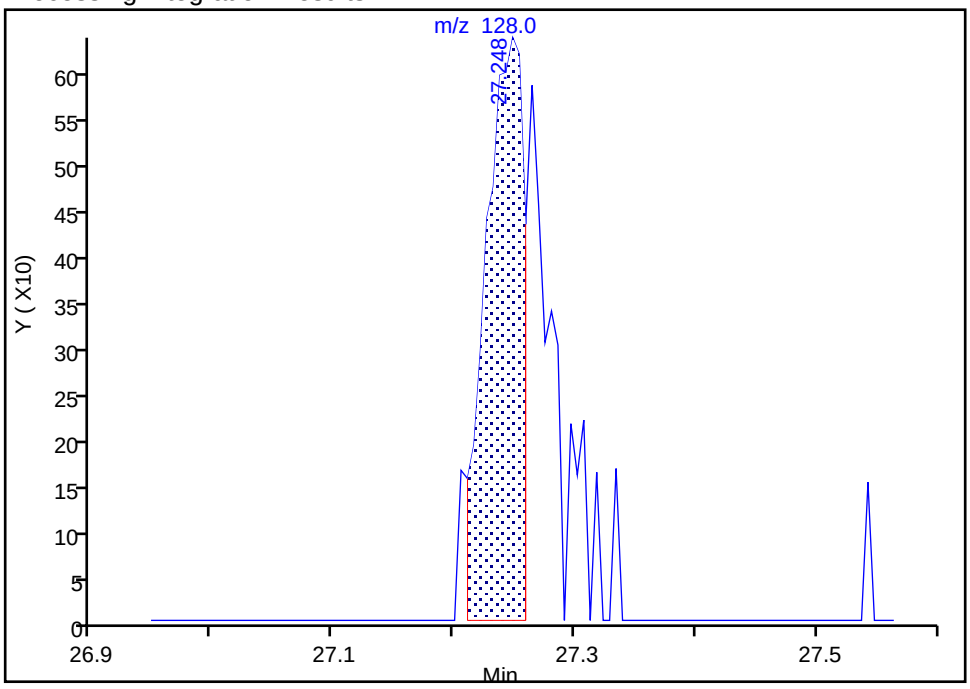
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-17.d				
Injection Date:	06-Apr-2018 02:20:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

102 Naphthalene, CAS: 91-20-3

Signal: 1

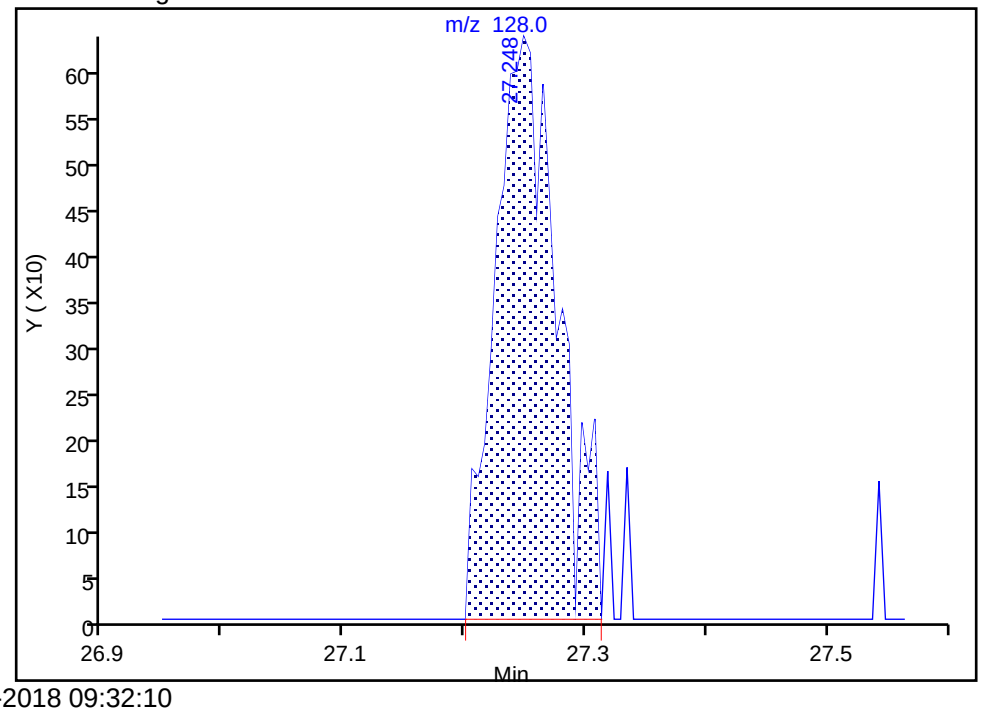
Processing Integration Results

RT: 27.25
Area: 1425
Amount: 0.021667
Amount Units: ppb v/v



Manual Integration Results

RT: 27.25
Area: 2305
Amount: 0.035048
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:32:10

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) DL | Lab Sample ID: 200-42918-9 DL

Matrix: Air | Lab File ID: 29983-10.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 09:30

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2018 20:08

Soil Aliquot Vol: | Dilution Factor: 84.8

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	42	U	42	17
75-45-6	Freon 22	86.47	42	U	42	22
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	17	U	17	5.8
74-87-3	Chloromethane	50.49	42	U	42	21
106-97-8	n-Butane	58.12	42	U	42	26
75-01-4	Vinyl chloride	62.50	17	U	17	3.5
106-99-0	1,3-Butadiene	54.09	17	U	17	5.5
74-83-9	Bromomethane	94.94	17	U	17	5.3
75-00-3	Chloroethane	64.52	42	U	42	18
593-60-2	Bromoethene(Vinyl Bromide)	106.96	17	U	17	4.7
75-69-4	Trichlorofluoromethane	137.37	17	U	17	5.3
76-13-1	Freon TF	187.38	17	U	17	2.6
75-35-4	1,1-Dichloroethene	96.94	17	U	17	2.9
67-64-1	Acetone	58.08	1200	D	420	220
67-63-0	Isopropyl alcohol	60.10	420	U	420	150
75-15-0	Carbon disulfide	76.14	42	U	42	10
107-05-1	3-Chloropropene	76.53	42	U	42	23
75-09-2	Methylene Chloride	84.93	42	U	42	17
75-65-0	tert-Butyl alcohol	74.12	420	U	420	130
1634-04-4	Methyl tert-butyl ether	88.15	17	U	17	5.2
156-60-5	trans-1,2-Dichloroethene	96.94	17	U	17	6.3
110-54-3	n-Hexane	86.17	17	U	17	14
75-34-3	1,1-Dichloroethane	98.96	17	U	17	2.2
78-93-3	Methyl Ethyl Ketone	72.11	44	D	42	17
156-59-2	cis-1,2-Dichloroethene	96.94	17	U	17	3.1
540-59-0	1,2-Dichloroethene, Total	96.94	34	U	34	9.4
67-66-3	Chloroform	119.38	17	U	17	4.4
109-99-9	Tetrahydrofuran	72.11	290	J D	420	220
71-55-6	1,1,1-Trichloroethane	133.41	17	U	17	5.8
110-82-7	Cyclohexane	84.16	17	U	17	5.3
56-23-5	Carbon tetrachloride	153.81	3.4	U	3.4	2.0
540-84-1	2,2,4-Trimethylpentane	114.23	17	U	17	7.5
71-43-2	Benzene	78.11	17	U	17	6.0
107-06-2	1,2-Dichloroethane	98.96	17	U	17	5.3

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) DL | Lab Sample ID: 200-42918-9 DL

Matrix: Air | Lab File ID: 29983-10.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 09:30

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2018 20:08

Soil Aliquot Vol: | Dilution Factor: 84.8

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	17	U	17	12
79-01-6	Trichloroethene	131.39	3.4	U	3.4	2.5
80-62-6	Methyl methacrylate	100.12	42	U	42	19
78-87-5	1,2-Dichloropropane	112.99	17	U	17	10
123-91-1	1,4-Dioxane	88.11	420	U	420	110
75-27-4	Bromodichloromethane	163.83	17	U	17	8.0
10061-01-5	cis-1,3-Dichloropropene	110.97	17	U	17	8.3
108-10-1	methyl isobutyl ketone	100.16	42	U	42	31
108-88-3	Toluene	92.14	17	U	17	5.9
10061-02-6	trans-1,3-Dichloropropene	110.97	17	U	17	10
79-00-5	1,1,2-Trichloroethane	133.41	17	U	17	6.6
127-18-4	Tetrachloroethene	165.83	3.4	U	3.4	2.5
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	42	U	42	36
124-48-1	Dibromochloromethane	208.29	17	U	17	6.0
106-93-4	1,2-Dibromoethane	187.87	17	U	17	5.9
108-90-7	Chlorobenzene	112.56	17	U	17	3.4
100-41-4	Ethylbenzene	106.17	17	U	17	6.2
179601-23-1	m,p-Xylene	106.17	42	U	42	5.9
95-47-6	Xylene, o-	106.17	17	U	17	6.0
1330-20-7	Xylene (total)	106.17	59	U	59	12
100-42-5	Styrene	104.15	17	U	17	7.3
75-25-2	Bromoform	252.75	17	U	17	7.3
98-82-8	Cumene	120.19	17	U	17	5.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	17	U	17	6.4
103-65-1	n-Propylbenzene	120.19	17	U	17	5.9
622-96-8	4-Ethyltoluene	120.20	17	U	17	5.9
108-67-8	1,3,5-Trimethylbenzene	120.20	17	U	17	4.9
95-49-8	2-Chlorotoluene	126.59	17	U	17	6.0
98-06-6	tert-Butylbenzene	134.22	17	U	17	4.9
95-63-6	1,2,4-Trimethylbenzene	120.20	17	U	17	6.8
135-98-8	sec-Butylbenzene	134.22	17	U	17	5.6
99-87-6	4-Isopropyltoluene	134.22	17	U	17	6.4
541-73-1	1,3-Dichlorobenzene	147.00	17	U	17	7.0
106-46-7	1,4-Dichlorobenzene	147.00	17	U	17	5.5

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) DL Lab Sample ID: 200-42918-9 DL

Matrix: Air Lab File ID: 29983-10.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 20:08

Soil Aliquot Vol: Dilution Factor: 84.8

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*17*	*U*	*17*	*10*
104-51-8	*n-Butylbenzene*	*134.22*	*17*	*U*	*17*	*6.8*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*17*	*U*	*17*	*6.0*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*42*	*U*	*42*	*20*
87-68-3	*Hexachlorobutadiene*	*260.76*	*17*	*U*	*17*	*7.0*
91-20-3	*Naphthalene*	*128.17*	*42*	*U*	*42*	*26*

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) DL Lab Sample ID: 200-42918-9 DL

Matrix: Air Lab File ID: 29983-10.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 20:08

Soil Aliquot Vol: Dilution Factor: 84.8

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	210	U	210	84
75-45-6	Freon 22	86.47	150	U	150	78
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	120	U	120	40
74-87-3	Chloromethane	50.49	88	U	88	44
106-97-8	n-Butane	58.12	100	U	100	62
75-01-4	Vinyl chloride	62.50	43	U	43	8.9
106-99-0	1,3-Butadiene	54.09	38	U	38	12
74-83-9	Bromomethane	94.94	66	U	66	20
75-00-3	Chloroethane	64.52	110	U	110	47
593-60-2	Bromoethene(Vinyl Bromide)	106.96	74	U	74	21
75-69-4	Trichlorofluoromethane	137.37	95	U	95	30
76-13-1	Freon TF	187.38	130	U	130	20
75-35-4	1,1-Dichloroethene	96.94	67	U	67	11
67-64-1	Acetone	58.08	2900	D	1000	520
67-63-0	Isopropyl alcohol	60.10	1000	U	1000	380
75-15-0	Carbon disulfide	76.14	130	U	130	32
107-05-1	3-Chloropropene	76.53	130	U	130	72
75-09-2	Methylene Chloride	84.93	150	U	150	59
75-65-0	tert-Butyl alcohol	74.12	1300	U	1300	390
1634-04-4	Methyl tert-butyl ether	88.15	61	U	61	19
156-60-5	trans-1,2-Dichloroethene	96.94	67	U	67	25
110-54-3	n-Hexane	86.17	60	U	60	48
75-34-3	1,1-Dichloroethane	98.96	69	U	69	8.9
78-93-3	Methyl Ethyl Ketone	72.11	130	D	130	50
156-59-2	cis-1,2-Dichloroethene	96.94	67	U	67	12
540-59-0	1,2-Dichloroethene, Total	96.94	130	U	130	37
67-66-3	Chloroform	119.38	83	U	83	22
109-99-9	Tetrahydrofuran	72.11	840	J D	1300	650
71-55-6	1,1,1-Trichloroethane	133.41	93	U	93	31
110-82-7	Cyclohexane	84.16	58	U	58	18
56-23-5	Carbon tetrachloride	153.81	21	U	21	13
540-84-1	2,2,4-Trimethylpentane	114.23	79	U	79	35
71-43-2	Benzene	78.11	54	U	54	19
107-06-2	1,2-Dichloroethane	98.96	69	U	69	22

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) DL | Lab Sample ID: 200-42918-9 DL

Matrix: Air | Lab File ID: 29983-10.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 09:30

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2018 20:08

Soil Aliquot Vol: | Dilution Factor: 84.8

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	70	U	70	49
79-01-6	Trichloroethene	131.39	18	U	18	14
80-62-6	Methyl methacrylate	100.12	170	U	170	76
78-87-5	1,2-Dichloropropane	112.99	78	U	78	47
123-91-1	1,4-Dioxane	88.11	1500	U	1500	400
75-27-4	Bromodichloromethane	163.83	110	U	110	53
10061-01-5	cis-1,3-Dichloropropene	110.97	77	U	77	38
108-10-1	methyl isobutyl ketone	100.16	170	U	170	130
108-88-3	Toluene	92.14	64	U	64	22
10061-02-6	trans-1,3-Dichloropropene	110.97	77	U	77	46
79-00-5	1,1,2-Trichloroethane	133.41	93	U	93	36
127-18-4	Tetrachloroethene	165.83	23	U	23	17
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	170	U	170	150
124-48-1	Dibromochloromethane	208.29	140	U	140	51
106-93-4	1,2-Dibromoethane	187.87	130	U	130	45
108-90-7	Chlorobenzene	112.56	78	U	78	16
100-41-4	Ethylbenzene	106.17	74	U	74	27
179601-23-1	m,p-Xylene	106.17	180	U	180	26
95-47-6	Xylene, o-	106.17	74	U	74	26
1330-20-7	Xylene (total)	106.17	260	U	260	52
100-42-5	Styrene	104.15	72	U	72	31
75-25-2	Bromoform	252.75	180	U	180	75
98-82-8	Cumene	120.19	83	U	83	25
79-34-5	1,1,2,2-Tetrachloroethane	167.85	120	U	120	44
103-65-1	n-Propylbenzene	120.19	83	U	83	29
622-96-8	4-Ethyltoluene	120.20	83	U	83	29
108-67-8	1,3,5-Trimethylbenzene	120.20	83	U	83	24
95-49-8	2-Chlorotoluene	126.59	88	U	88	31
98-06-6	tert-Butylbenzene	134.22	93	U	93	27
95-63-6	1,2,4-Trimethylbenzene	120.20	83	U	83	33
135-98-8	sec-Butylbenzene	134.22	93	U	93	31
99-87-6	4-Isopropyltoluene	134.22	93	U	93	35
541-73-1	1,3-Dichlorobenzene	147.00	100	U	100	42
106-46-7	1,4-Dichlorobenzene	147.00	100	U	100	33

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-104 (AS) DL Lab Sample ID: 200-42918-9 DL

Matrix: Air Lab File ID: 29983-10.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 20:08

Soil Aliquot Vol: Dilution Factor: 84.8

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*88*	*U*	*88*	*53*
104-51-8	*n-Butylbenzene*	*134.22*	*93*	*U*	*93*	*37*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*100*	*U*	*100*	*36*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*310*	*U*	*310*	*150*
87-68-3	*Hexachlorobutadiene*	*260.76*	*180*	*U*	*180*	*74*
91-20-3	*Naphthalene*	*128.17*	*220*	*U*	*220*	*140*

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d
Lims ID: 200-42918-A-9
Client ID: GC-IA-104 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 20:08:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 84.8000
Sample Info: 200-0029983-010
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 18:47:47 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 18:47:47

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85		5.149				ND	
	3 Chlorodifluoromethane	51		5.235				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
	5 Chloromethane	50		5.748				ND	
	6 Butane	43	6.016	6.016	-0.010	57	2643	0.0732	7Ma
	7 Vinyl chloride	62		6.080				ND	
	8 Butadiene	54		6.176				ND	
	9 Bromomethane	94		6.979				ND	
	11 Chloroethane	64		7.225				ND	
	13 Vinyl bromide	106		7.631				ND	
	14 Trichlorofluoromethane	101		7.728				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	8.979	9.022	-0.022	97	370568	14.6	
	23 Carbon disulfide	76		9.193				ND	
	24 Isopropyl alcohol	45	9.199	9.204	-0.005	100	25896	0.9898	
	25 3-Chloro-1-propene	41		9.493				ND	
	27 Methylene Chloride	49	9.739	9.739	-0.021	6	885	0.0529	7M
	28 2-Methyl-2-propanol	59		9.889				ND	
	29 Methyl tert-butyl ether	73		10.092				ND	
	30 trans-1,2-Dichloroethene	61		10.156				ND	
S	31 1,2-Dichloroethene, Total	61		10.200				ND	
	33 Hexane	57		10.483				ND	
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.949				ND	
	37 2-Butanone (MEK)	72	11.943	11.944	-0.022	97	4748	0.5221	
	39 Tetrahydrofuran	42	12.361	12.352	-0.011	84	57500	3.36	
*	40 Chlorobromomethane	128	12.355	12.377	-0.021	82	126749	10.0	
	41 Chloroform	83		12.467				ND	
	42 Cyclohexane	84		12.724				ND	
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117		12.965				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Isooctane	57		13.318				ND	
46 Benzene	78		13.382				ND	
47 1,2-Dichloroethane	62		13.532				ND	
48 n-Heptane	43		13.634				ND	
* 49 1,4-Difluorobenzene	114	14.067	14.078	-0.011	94	629277	10.0	
51 Trichloroethene	95		14.500				ND	
53 1,2-Dichloropropane	63		14.998				ND	
55 Methyl methacrylate	69		15.078				ND	
56 1,4-Dioxane	88		15.164				ND	
58 Dichlorobromomethane	83		15.458				ND	
59 cis-1,3-Dichloropropene	75		16.282				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	
63 Toluene	92	16.828	16.828	0.006	92	671	0.0174	M
64 trans-1,3-Dichloropropene	75		17.352				ND	
65 1,1,2-Trichloroethane	83		17.699				ND	
66 Tetrachloroethene	166		17.817				ND	
67 2-Hexanone	43		18.090				ND	
68 Chlorodibromomethane	129		18.427				ND	
69 Ethylene Dibromide	107		18.700				ND	
* 71 Chlorobenzene-d5	117	19.534	19.540	-0.006	85	539523	10.0	
72 Chlorobenzene	112		19.599				ND	
73 Ethylbenzene	91	19.732	19.732	0.005	89	1434	0.0161	M
75 m-Xylene & p-Xylene	106	19.962	19.968	0.000	0	2142	0.0613	
S 76 Xylenes, Total	106				0		0.0805	
77 o-Xylene	106	20.733	20.732	-0.005	89	674	0.0191	
78 Styrene	104		20.781				ND	
79 Bromoform	173		21.171				ND	
80 Isopropylbenzene	105		21.343				ND	
81 1,1,2,2-Tetrachloroethane	83		21.942				ND	
82 N-Propylbenzene	91		22.011				ND	
85 4-Ethyltoluene	105		22.193				ND	
86 2-Chlorotoluene	91		22.209				ND	
87 1,3,5-Trimethylbenzene	105		22.290				ND	
89 tert-Butylbenzene	119		22.766				ND	
90 1,2,4-Trimethylbenzene	105		22.857				ND	
91 sec-Butylbenzene	105		23.081				ND	
92 4-Isopropyltoluene	119		23.279				ND	
93 1,3-Dichlorobenzene	146		23.327				ND	
94 1,4-Dichlorobenzene	146		23.466				ND	
95 Benzyl chloride	91		23.670				ND	
96 n-Butylbenzene	91		23.878				ND	
98 1,2-Dichlorobenzene	146		24.028				ND	
100 1,2,4-Trichlorobenzene	180		26.703				ND	
101 Hexachlorobutadiene	225		26.896				ND	
102 Naphthalene	128		27.238				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

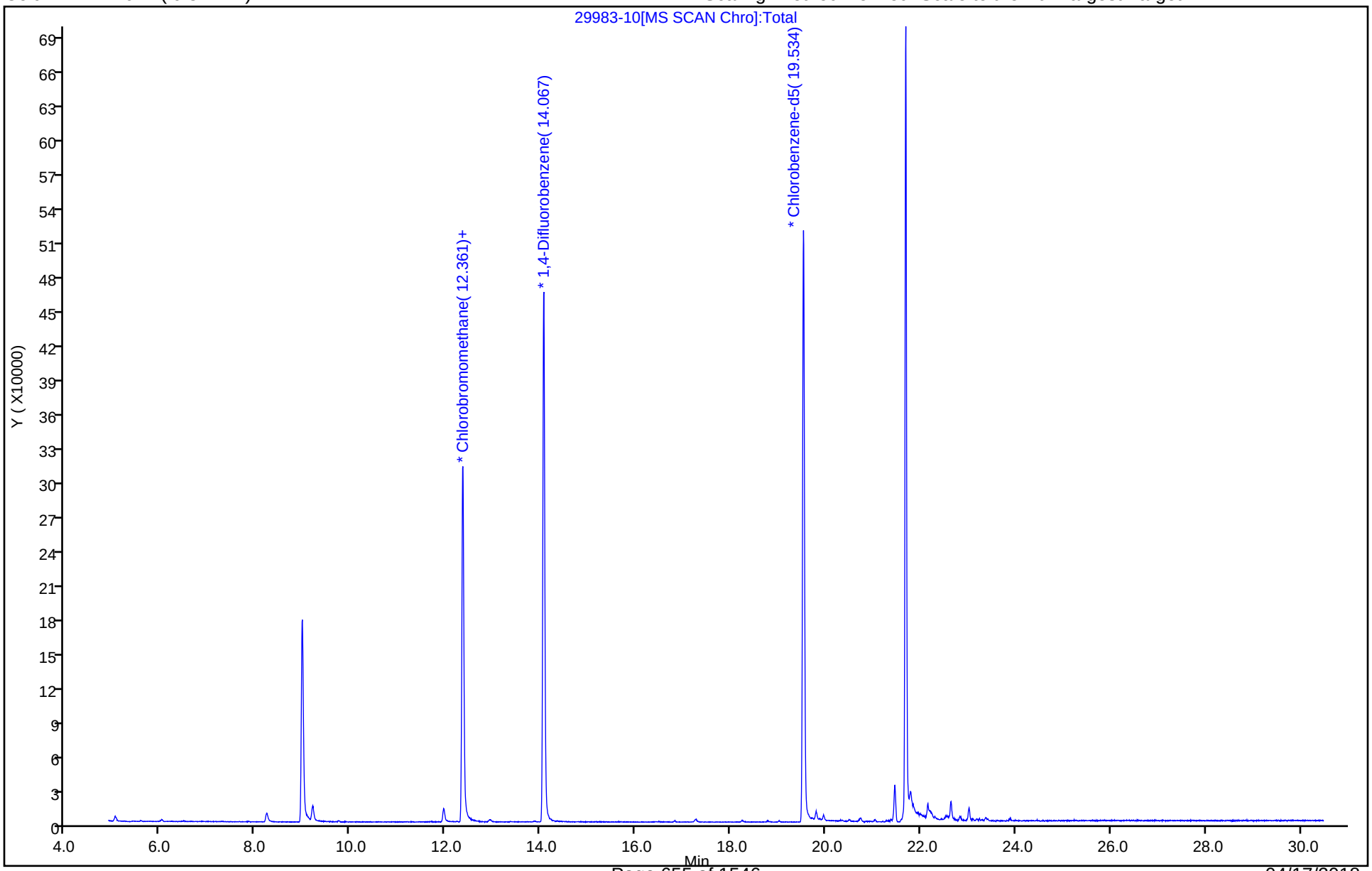
Report Date: 09-Apr-2018 18:47:48 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d

Injection Date:	06-Apr-2018 20:08:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9	Worklist Smp#:	10
Client ID:	GC-IA-104 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	84.8000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

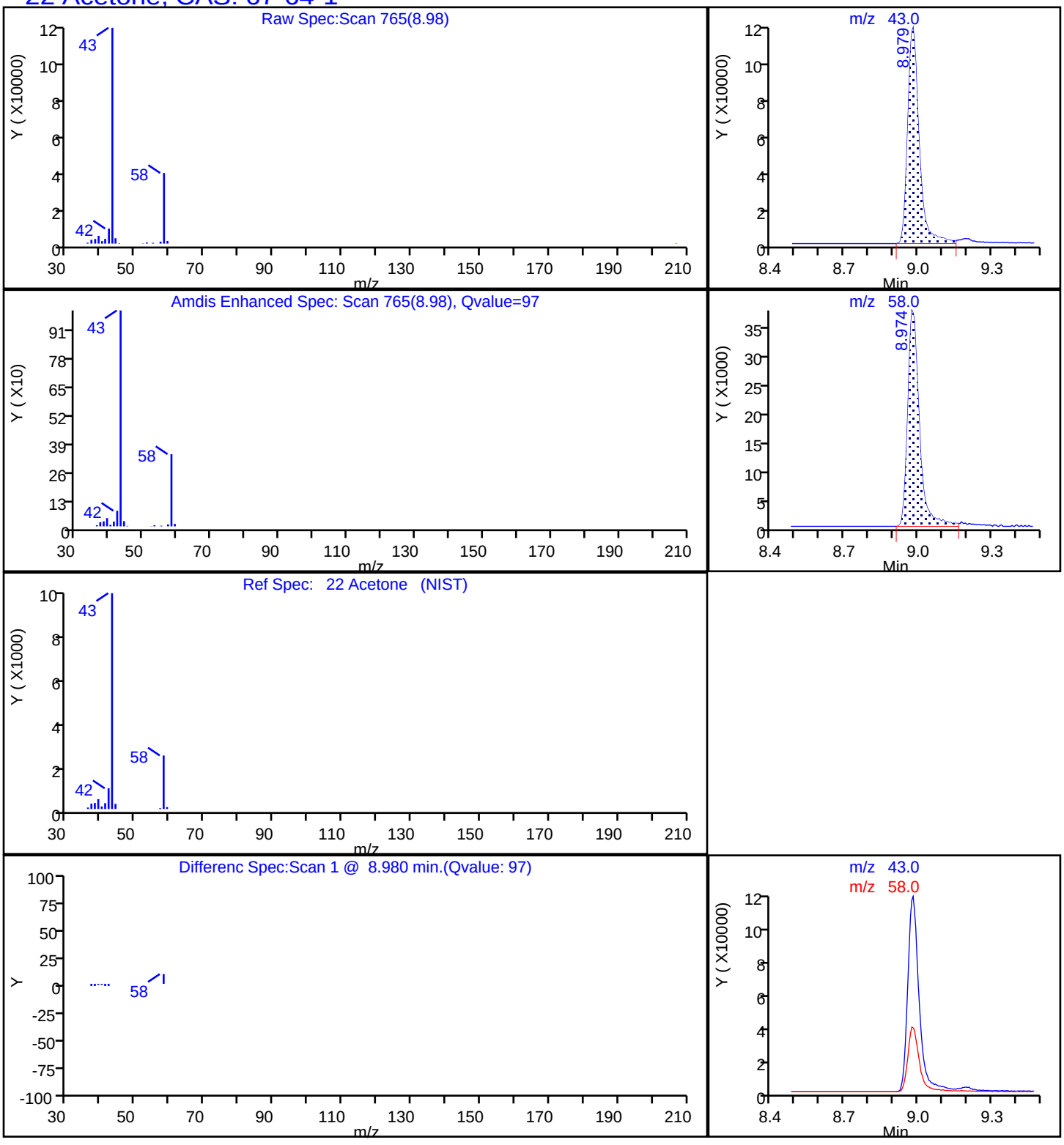
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d				
Injection Date:	06-Apr-2018 20:08:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	84.8000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

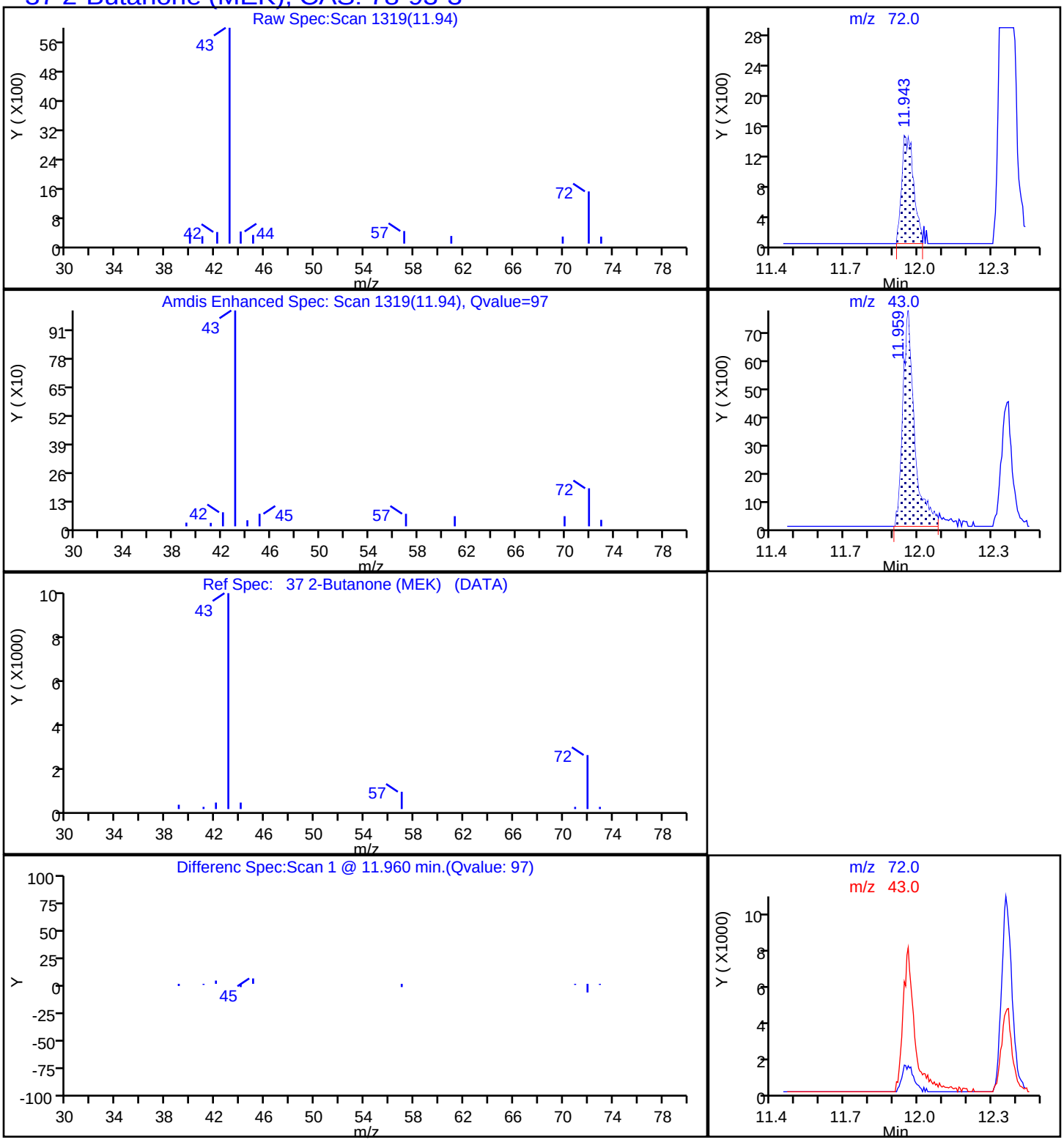
22 Acetone, CAS: 67-64-1



TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d
Injection Date: 06-Apr-2018 20:08:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-9 Lab Sample ID: 200-42918-9
Client ID: GC-IA-104 (AS)
Operator ID: ert ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 84.8000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

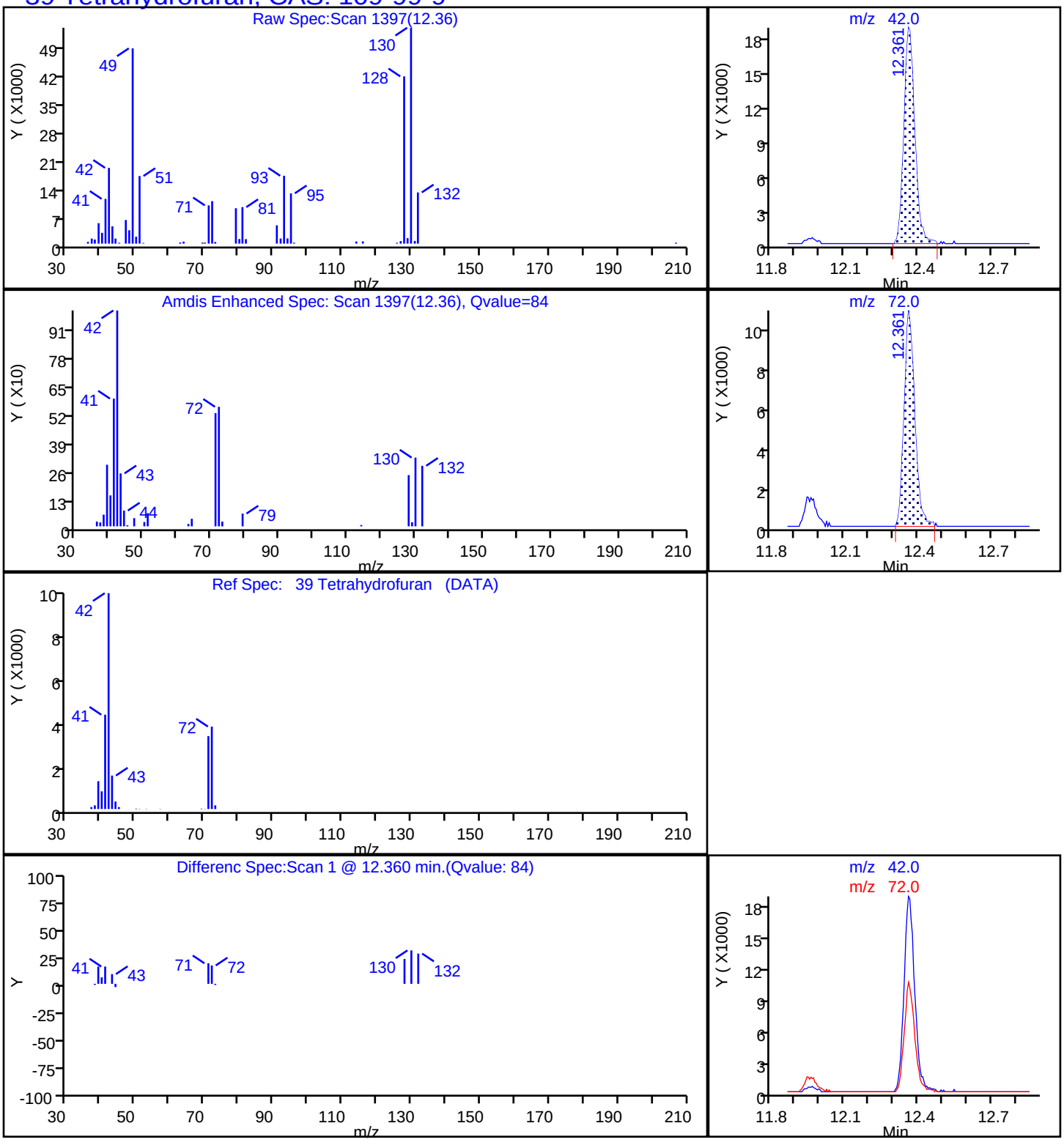
37 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d				
Injection Date:	06-Apr-2018 20:08:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	84.8000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

39 Tetrahydrofuran, CAS: 109-99-9



Manual Integration/User Assign Peak Report

TestAmerica Burlington

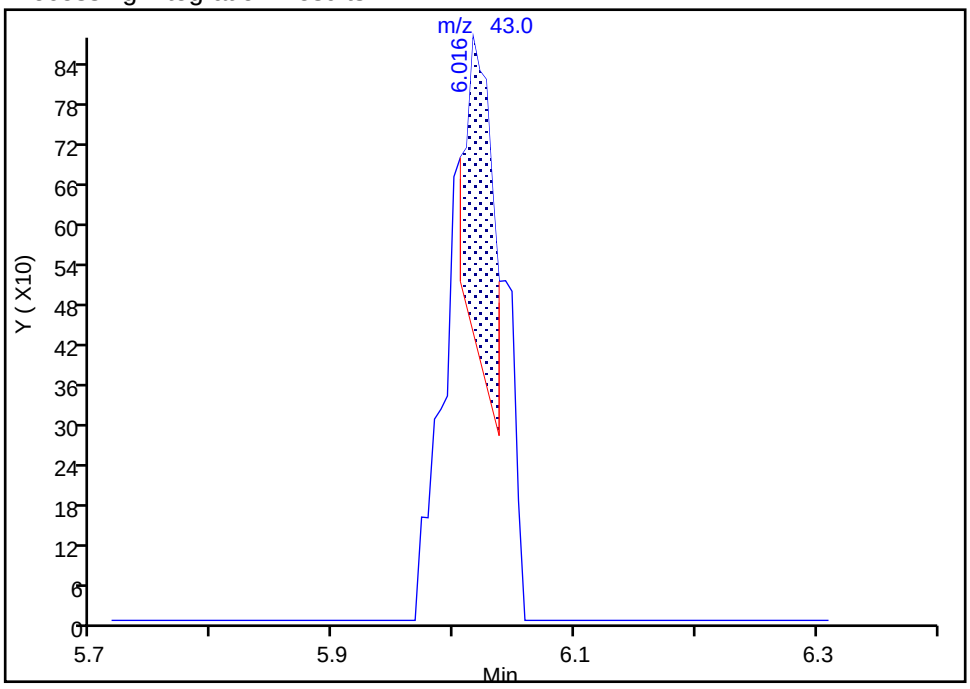
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d				
Injection Date:	06-Apr-2018 20:08:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	84.8000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

Signal: 1

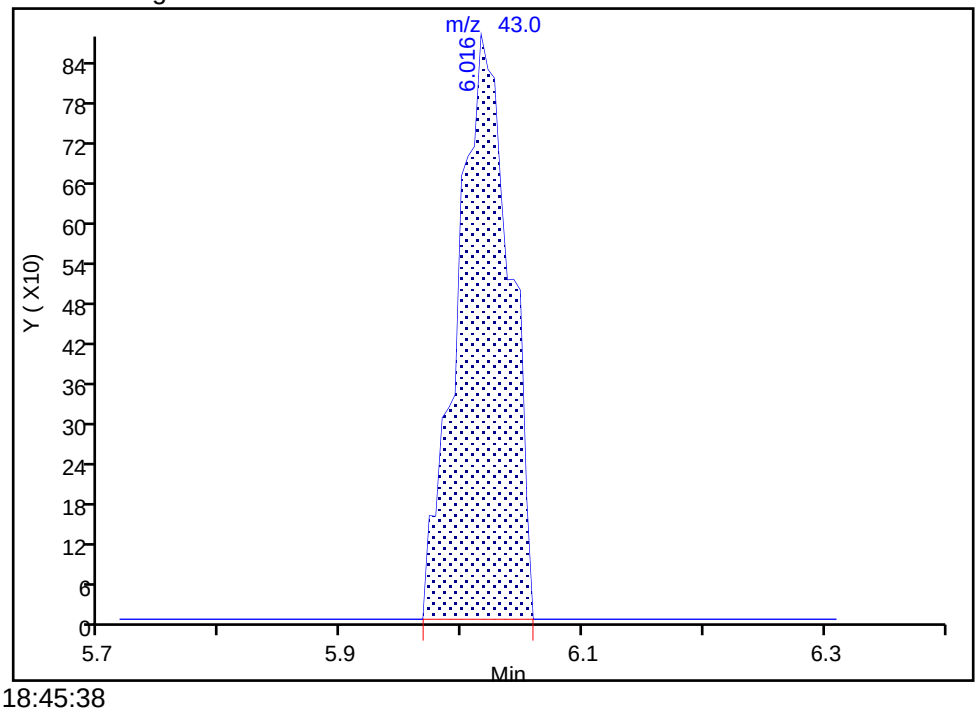
Processing Integration Results

RT: 6.02
Area: 748
Amount: 0.020716
Amount Units: ppb v/v



Manual Integration Results

RT: 6.02
Area: 2643
Amount: 0.073197
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:45:38

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

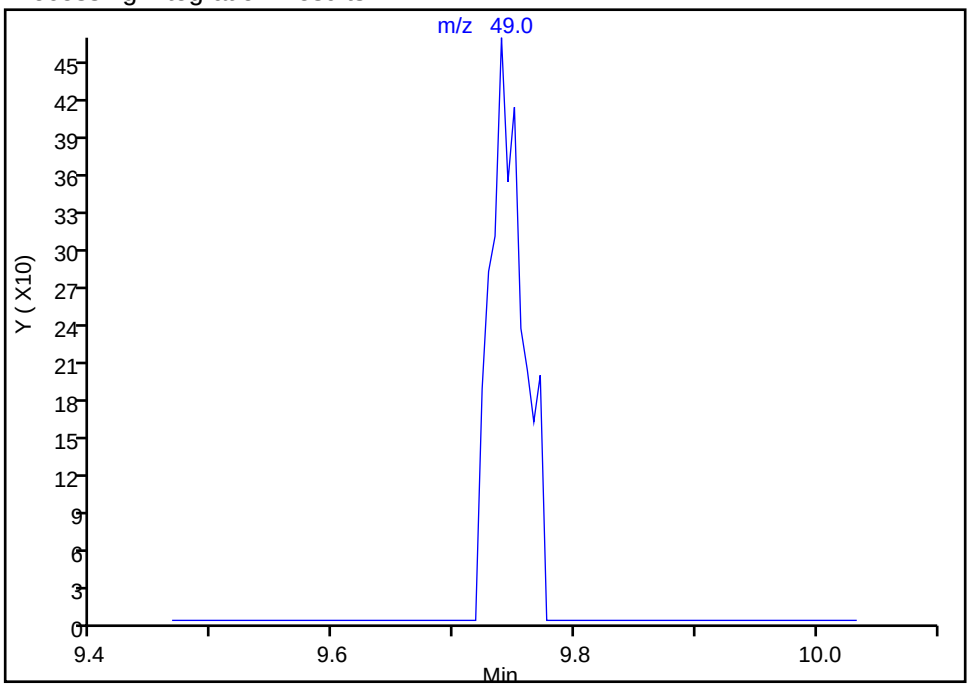
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d				
Injection Date:	06-Apr-2018 20:08:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	84.8000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

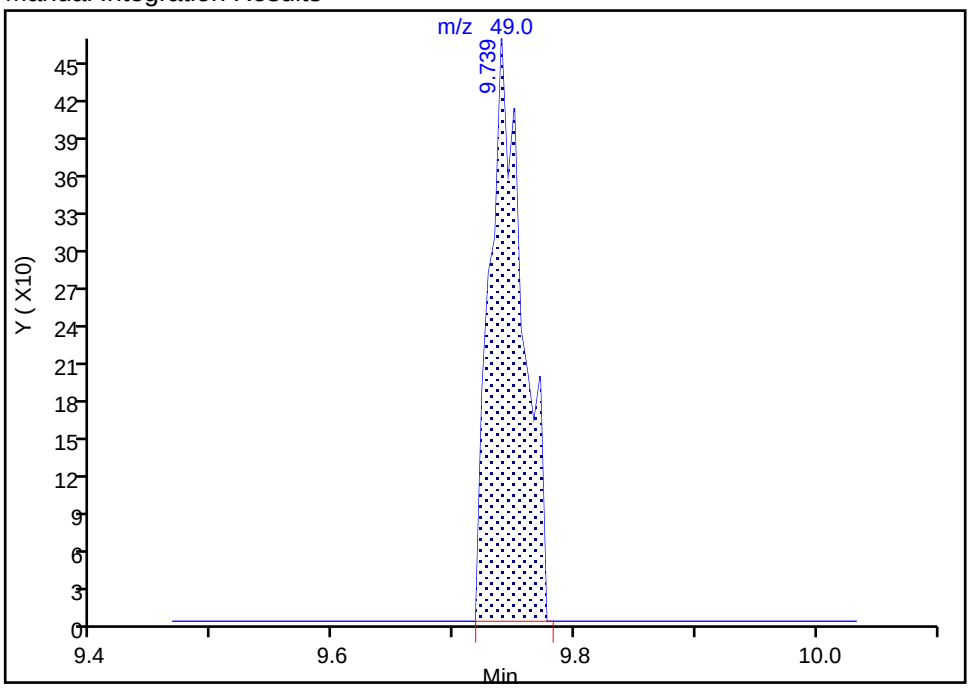
Not Detected
Expected RT: 9.76

Processing Integration Results



Manual Integration Results

RT: 9.74
Area: 885
Amount: 0.052932
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:46:08
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

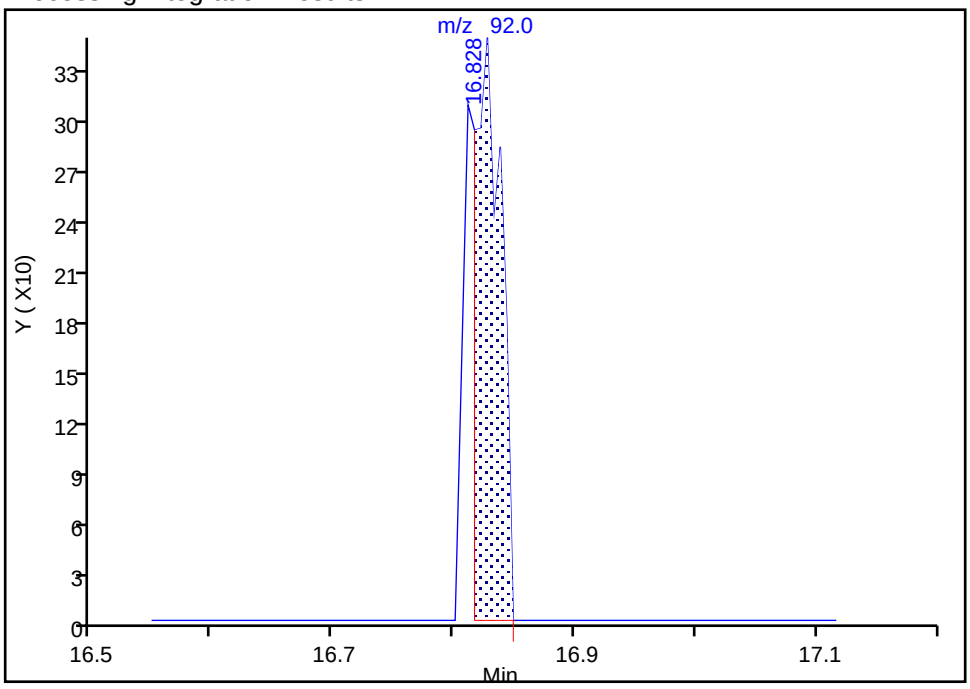
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d				
Injection Date:	06-Apr-2018 20:08:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	84.8000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3

Signal: 1

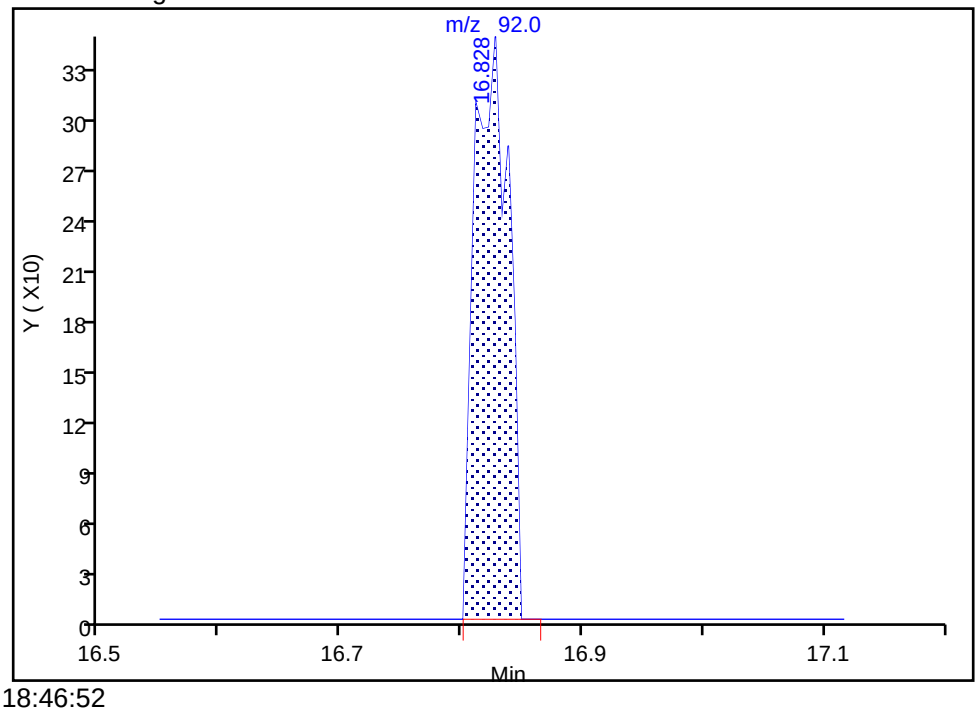
Processing Integration Results

RT: 16.83
Area: 523
Amount: 0.013563
Amount Units: ppb v/v



Manual Integration Results

RT: 16.83
Area: 671
Amount: 0.017401
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:46:52

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

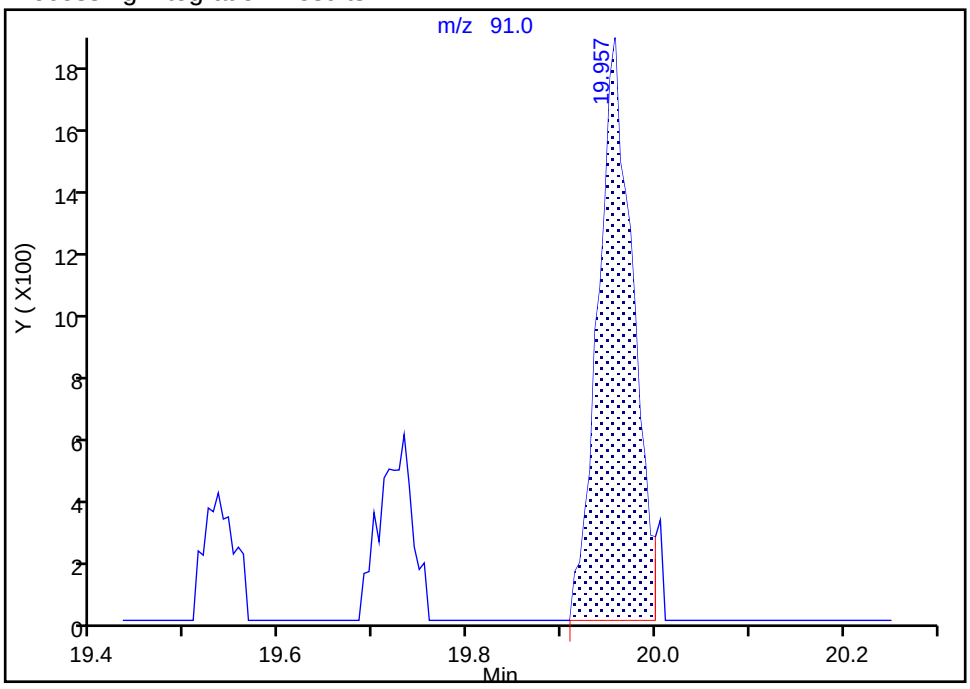
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-10.d				
Injection Date:	06-Apr-2018 20:08:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-9	Lab Sample ID:	200-42918-9		
Client ID:	GC-IA-104 (AS)				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	84.8000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

73 Ethylbenzene, CAS: 100-41-4

Signal: 1

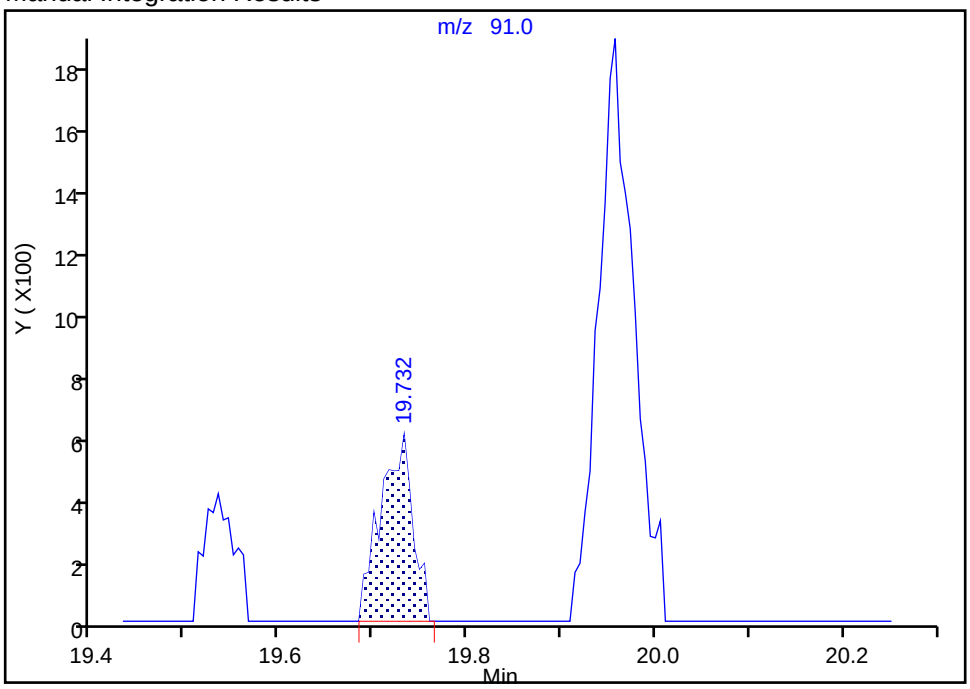
Processing Integration Results

RT: 19.96
Area: 4837
Amount: 0.054381
Amount Units: ppb v/v



Manual Integration Results

RT: 19.73
Area: 1434
Amount: 0.016122
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:47:16

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) Lab Sample ID: 200-42918-10

Matrix: Air Lab File ID: 29952-18.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 03:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.44	J	0.50	0.20
75-45-6	Freon 22	86.47	0.32	J	0.50	0.26
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.068
74-87-3	Chloromethane	50.49	0.56		0.50	0.25
106-97-8	n-Butane	58.12	6.0		0.50	0.31
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.041
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.065
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.062
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.21
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.056
75-69-4	Trichlorofluoromethane	137.37	0.21		0.20	0.062
76-13-1	Freon TF	187.38	0.074	J	0.20	0.031
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.034
67-64-1	*Acetone*	*58.08*	*1500*	*E*	*5.0*	*2.6*
67-63-0	*Isopropyl alcohol*	*60.10*	*460*	*E*	*5.0*	*1.8*
75-15-0	Carbon disulfide	76.14	0.43	J	0.50	0.12
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.27
75-09-2	Methylene Chloride	84.93	0.61		0.50	0.20
75-65-0	tert-Butyl alcohol	74.12	3.3	J	5.0	1.5
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.061
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.074
110-54-3	n-Hexane	86.17	0.26		0.20	0.16
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.026
78-93-3	*Methyl Ethyl Ketone*	*72.11*	*67*	*E*	*0.50*	*0.20*
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.037
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.11
67-66-3	Chloroform	119.38	2.3		0.20	0.052
109-99-9	*Tetrahydrofuran*	*72.11*	*320*	*E*	*5.0*	*2.6*
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.068
110-82-7	Cyclohexane	84.16	0.15	J	0.20	0.063
56-23-5	Carbon tetrachloride	153.81	0.040	U	0.040	0.024
540-84-1	2,2,4-Trimethylpentane	114.23	0.23		0.20	0.088
71-43-2	Benzene	78.11	0.34		0.20	0.071
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) Lab Sample ID: 200-42918-10

Matrix: Air Lab File ID: 29952-18.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 03:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	5.4		0.20	0.14
79-01-6	Trichloroethene	131.39	0.12		0.040	0.030
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.22
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.12
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	1.3
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.094
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.098
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.36
108-88-3	Toluene	92.14	5.2		0.20	0.069
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.12
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.078
127-18-4	Tetrachloroethene	165.83	0.15		0.040	0.029
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.42
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.071
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.069
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.040
100-41-4	Ethylbenzene	106.17	0.99		0.20	0.073
179601-23-1	m,p-Xylene	106.17	4.9		0.50	0.070
95-47-6	Xylene, o-	106.17	1.5		0.20	0.071
1330-20-7	Xylene (total)	106.17	6.4		0.70	0.14
100-42-5	Styrene	104.15	0.20	U	0.20	0.086
75-25-2	Bromoform	252.75	0.20	U	0.20	0.086
98-82-8	Cumene	120.19	0.20	U	0.20	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.076
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.069
622-96-8	4-Ethyltoluene	120.20	0.17	J	0.20	0.069
108-67-8	1,3,5-Trimethylbenzene	120.20	0.085	J	0.20	0.058
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.071
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.058
95-63-6	1,2,4-Trimethylbenzene	120.20	0.28		0.20	0.080
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.066
99-87-6	4-Isopropyltoluene	134.22	0.39		0.20	0.075
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.082
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.065

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) Lab Sample ID: 200-42918-10

Matrix: Air Lab File ID: 29952-18.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 03:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.25		0.20	0.12
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.080
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.071
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.24
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.082
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.31

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) Lab Sample ID: 200-42918-10

Matrix: Air Lab File ID: 29952-18.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 03:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.2	J	2.5	0.99
75-45-6	Freon 22	86.47	1.1	J	1.8	0.92
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.48
74-87-3	Chloromethane	50.49	1.2		1.0	0.52
106-97-8	n-Butane	58.12	14		1.2	0.74
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.10
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.14
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.24
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.55
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.24
75-69-4	Trichlorofluoromethane	137.37	1.2		1.1	0.35
76-13-1	Freon TF	187.38	0.57	J	1.5	0.24
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.13
67-64-1	*Acetone*	*58.08*	*3700*	*E*	*12*	*6.2*
67-63-0	*Isopropyl alcohol*	*60.10*	*1100*	*E*	*12*	*4.4*
75-15-0	Carbon disulfide	76.14	1.3	J	1.6	0.37
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.85
75-09-2	Methylene Chloride	84.93	2.1		1.7	0.69
75-65-0	tert-Butyl alcohol	74.12	10	J	15	4.5
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.22
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.29
110-54-3	n-Hexane	86.17	0.92		0.70	0.56
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.11
78-93-3	*Methyl Ethyl Ketone*	*72.11*	*200*	*E*	*1.5*	*0.59*
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.15
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.44
67-66-3	Chloroform	119.38	11		0.98	0.25
109-99-9	*Tetrahydrofuran*	*72.11*	*950*	*E*	*15*	*7.7*
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.37
110-82-7	Cyclohexane	84.16	0.53	J	0.69	0.22
56-23-5	Carbon tetrachloride	153.81	0.25	U	0.25	0.15
540-84-1	2,2,4-Trimethylpentane	114.23	1.1		0.93	0.41
71-43-2	Benzene	78.11	1.1		0.64	0.23
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.25

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) Lab Sample ID: 200-42918-10

Matrix: Air Lab File ID: 29952-18.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 03:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	22		0.82	0.57
79-01-6	Trichloroethene	131.39	0.63		0.21	0.16
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.90
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.55
123-91-1	1,4-Dioxane	88.11	18	U	18	4.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.63
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.44
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	1.5
108-88-3	Toluene	92.14	19		0.75	0.26
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.54
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.43
127-18-4	Tetrachloroethene	165.83	1.1		0.27	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	1.7
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.60
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.53
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.18
100-41-4	Ethylbenzene	106.17	4.3		0.87	0.32
179601-23-1	m,p-Xylene	106.17	21		2.2	0.30
95-47-6	Xylene, o-	106.17	6.5		0.87	0.31
1330-20-7	Xylene (total)	106.17	28		3.0	0.61
100-42-5	Styrene	104.15	0.85	U	0.85	0.37
75-25-2	Bromoform	252.75	2.1	U	2.1	0.89
98-82-8	Cumene	120.19	0.98	U	0.98	0.29
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.52
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.34
622-96-8	4-Ethyltoluene	120.20	0.82	J	0.98	0.34
108-67-8	1,3,5-Trimethylbenzene	120.20	0.42	J	0.98	0.29
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.32
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4		0.98	0.39
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.36
99-87-6	4-Isopropyltoluene	134.22	2.2		1.1	0.41
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.49
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.39

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) Lab Sample ID: 200-42918-10

Matrix: Air Lab File ID: 29952-18.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 03:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.3		1.0	0.62
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.44
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.43
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.8
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.87
91-20-3	Naphthalene	128.17	2.6	U	2.6	1.6

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d
Lims ID: 200-42918-A-10
Client ID: GC-IA-108 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 03:14:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029952-018
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 09:56:20 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: puangmaleek Date: 09-Apr-2018 09:56:20

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85	5.144	5.157	-0.016	99	32320	0.4434	
	3 Chlorodifluoromethane	51	5.229	5.245	-0.011	95	12763	0.3171	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.566				ND	
	5 Chloromethane	50	5.753	5.756	-0.006	99	13517	0.5590	
	6 Butane	43	6.016	6.053	-0.016	99	239415	5.99	
	7 Vinyl chloride	62		6.085				ND	
	8 Butadiene	54		6.181				ND	U
	9 Bromomethane	94		6.984				ND	
	11 Chloroethane	64		7.230				ND	
	13 Vinyl bromide	106		7.637				ND	
	14 Trichlorofluoromethane	101	7.722	7.733	-0.011	97	12573	0.2131	
	20 1,1,2-Trichloro-1,2,2-trif	101	8.733	8.749	-0.006	94	3127	0.0739	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	9.060	8.997	0.059	96	43218267	1539.7	E
	23 Carbon disulfide	76	9.177	9.189	-0.016	95	21190	0.4288	
	24 Isopropyl alcohol	45	9.257	9.200	0.053	99	13374127	461.5	E
	25 3-Chloro-1-propene	41		9.498				ND	
	27 Methylene Chloride	49	9.792	9.756	0.032	88	11215	0.6056	
	28 2-Methyl-2-propanol	59	9.926	9.883	0.043	93	138155	3.35	
	29 Methyl tert-butyl ether	73		10.097				ND	
	30 trans-1,2-Dichloroethene	61		10.151				ND	
S	31 1,2-Dichloroethene, Total	61		10.200				ND	
	33 Hexane	57	10.477	10.477	-0.006	1	7377	0.2621	Ma
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.954				ND	
	37 2-Butanone (MEK)	72	11.980	11.959	0.016	98	670745	66.6	E
	39 Tetrahydrofuran	42	12.376	12.376	0.005	85	6616309	321.8	E
*	40 Chlorobromomethane	128	12.398	12.376	0.022	82	140390	10.0	
	41 Chloroform	83	12.489	12.462	0.022	93	93268	2.26	
	42 Cyclohexane	84	12.729	12.724	0.005	73	4564	0.1543	
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117		12.965				ND	U

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Isooctane	57	13.318	13.323	0.000	94	23519	0.2343	
46 Benzene	78	13.393	13.361	0.016	93	22752	0.3385	
47 1,2-Dichloroethane	62		13.532				ND	
48 n-Heptane	43	13.634	13.634	0.000	1	181735	5.38	Ma
* 49 1,4-Difluorobenzene	114	14.088	14.072	0.016	94	756717	10.0	
51 Trichloroethene	95	14.516	14.516	0.010	94	3563	0.1181	
53 1,2-Dichloropropane	63		14.992				ND	U
55 Methyl methacrylate	69		15.078				ND	U
56 1,4-Dioxane	88		15.158				ND	
58 Dichlorobromomethane	83	15.468	15.468	0.010	1	2377	0.0492	Ma
59 cis-1,3-Dichloropropene	75		16.282				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	
63 Toluene	92	16.827	16.822	0.005	94	265223	5.16	
64 trans-1,3-Dichloropropene	75		17.346				ND	
65 1,1,2-Trichloroethane	83		17.699				ND	
66 Tetrachloroethene	166	17.822	17.817	0.005	94	8103	0.1549	
67 2-Hexanone	43		18.090				ND	U
68 Chlorodibromomethane	129		18.427				ND	
69 Ethylene Dibromide	107		18.700				ND	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	85	719363	10.0	
72 Chlorobenzene	112		19.593				ND	U
73 Ethylbenzene	91	19.727	19.743	0.000	98	117211	0.9883	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	225927	4.85	
S 76 Xylenes, Total	106				0		6.35	
77 o-Xylene	106	20.738	20.727	0.000	98	70278	1.50	
78 Styrene	104	20.781	20.781	0.000	81	3785	0.0558	
79 Bromoform	173		21.171				ND	
80 Isopropylbenzene	105	21.342	21.342	-0.001	51	6216	0.0450	
81 1,1,2,2-Tetrachloroethane	83		21.942				ND	U
82 N-Propylbenzene	91		22.011				ND	MUa
85 4-Ethyltoluene	105	22.188	22.199	0.000	49	23114	0.1673	
86 2-Chlorotoluene	91		22.215				ND	U
87 1,3,5-Trimethylbenzene	105	22.289	22.295	0.000	42	10554	0.0855	
89 tert-Butylbenzene	119		22.766				ND	U
90 1,2,4-Trimethylbenzene	105	22.856	22.856	0.000	98	33589	0.2761	
91 sec-Butylbenzene	105	23.081	23.081	0.000	53	3658	0.0208	
92 4-Isopropyltoluene	119	23.279	23.279	0.000	97	58720	0.3939	
93 1,3-Dichlorobenzene	146		23.327				ND	U
94 1,4-Dichlorobenzene	146	23.461	23.466	-0.005	61	1261	0.0166	
95 Benzyl chloride	91	23.664	23.670	-0.006	69	20668	0.2488	
96 n-Butylbenzene	91		23.878				ND	U
98 1,2-Dichlorobenzene	146		24.028				ND	
100 1,2,4-Trichlorobenzene	180		26.703				ND	
101 Hexachlorobutadiene	225		26.896				ND	
102 Naphthalene	128	27.243	27.243	0.005	93	3603	0.0452	M

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004	Amount Added:	20.00	Units: mL	Run Reagent

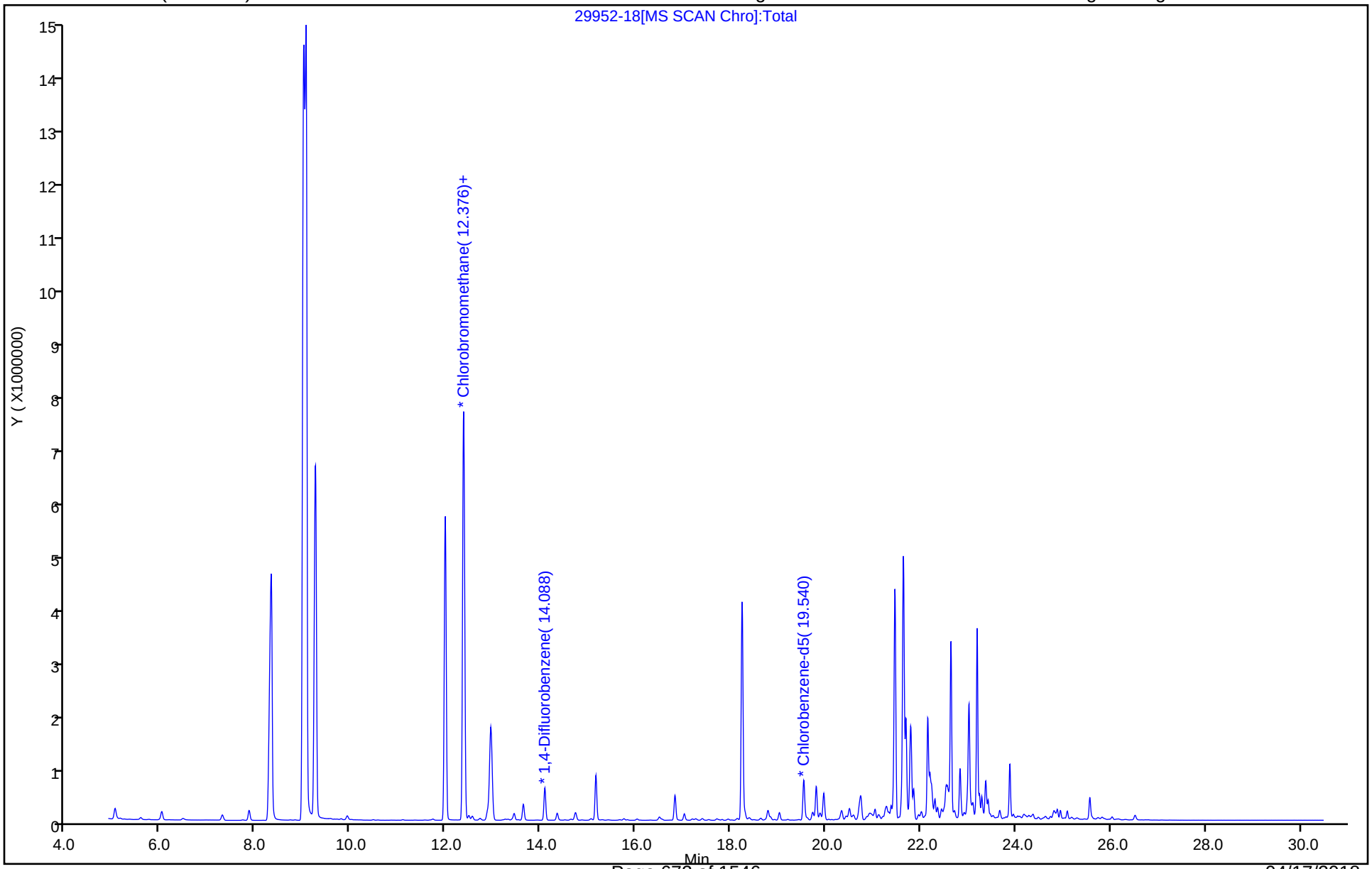
Report Date: 09-Apr-2018 09:56:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

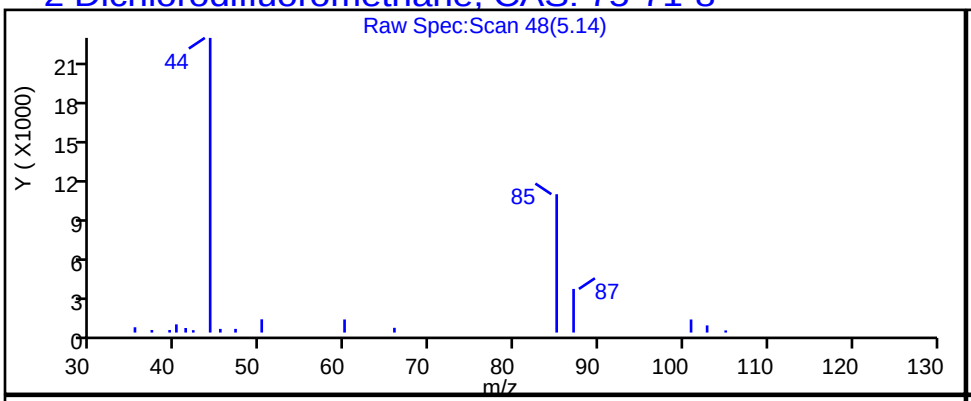
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10	Worklist Smp#:	18
Client ID:	GC-IA-108 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

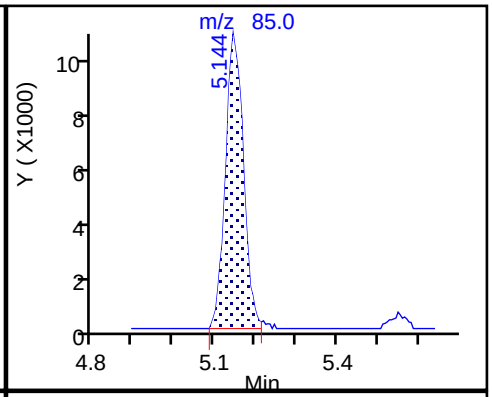
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

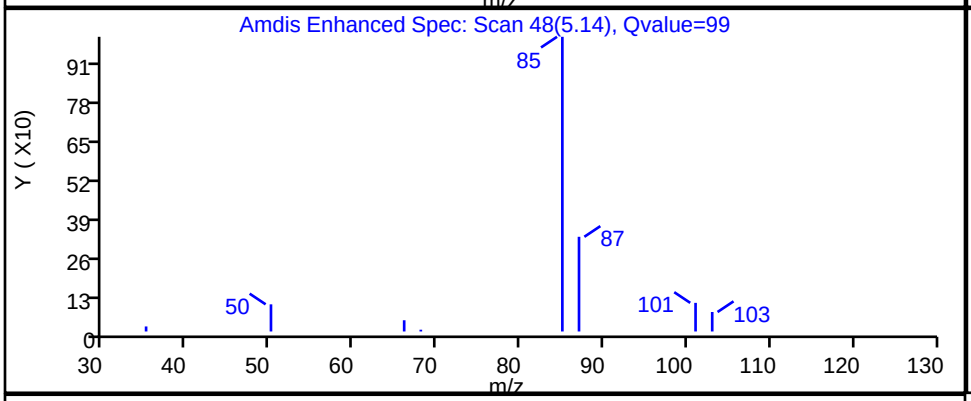


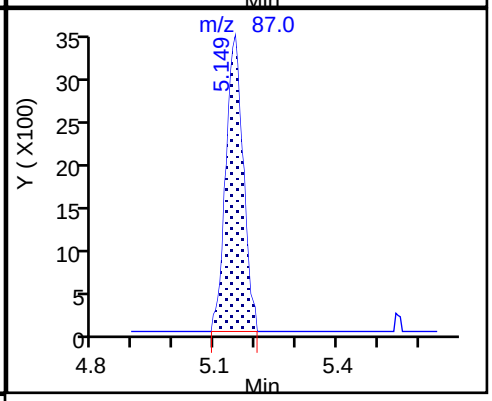
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d
Injection Date: 06-Apr-2018 03:14:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-10 Lab Sample ID: 200-42918-10
Client ID: GC-IA-108 (AS)
Operator ID: ert ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

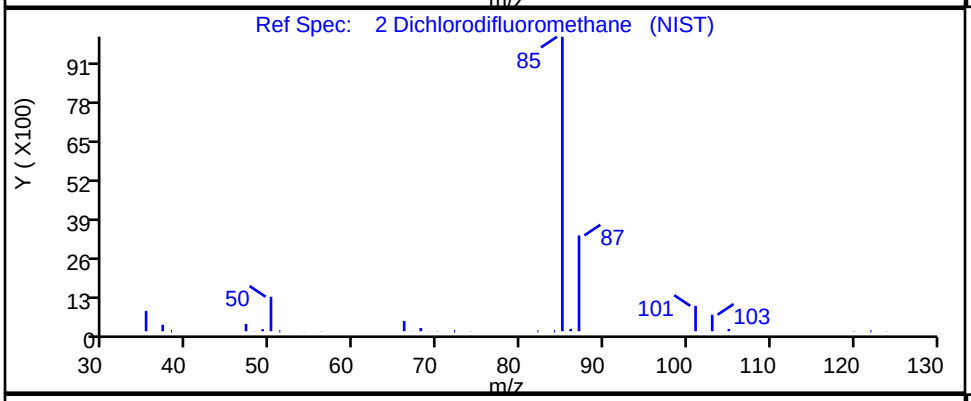
2 Dichlorodifluoromethane, CAS: 75-71-8

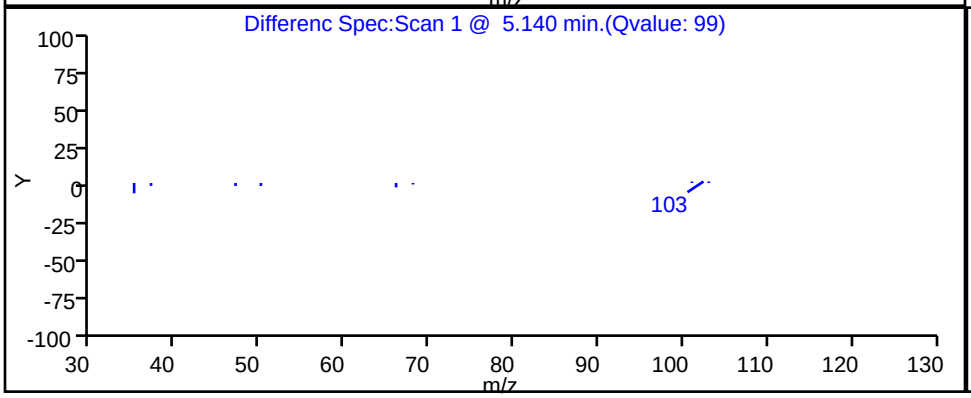


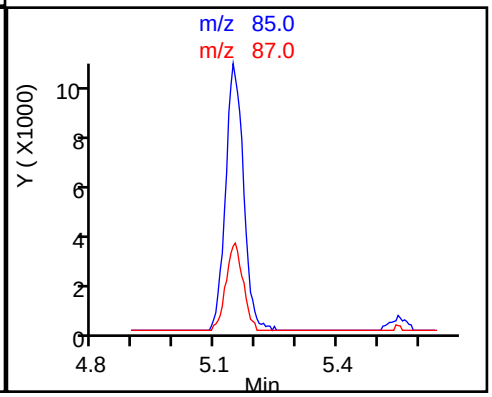










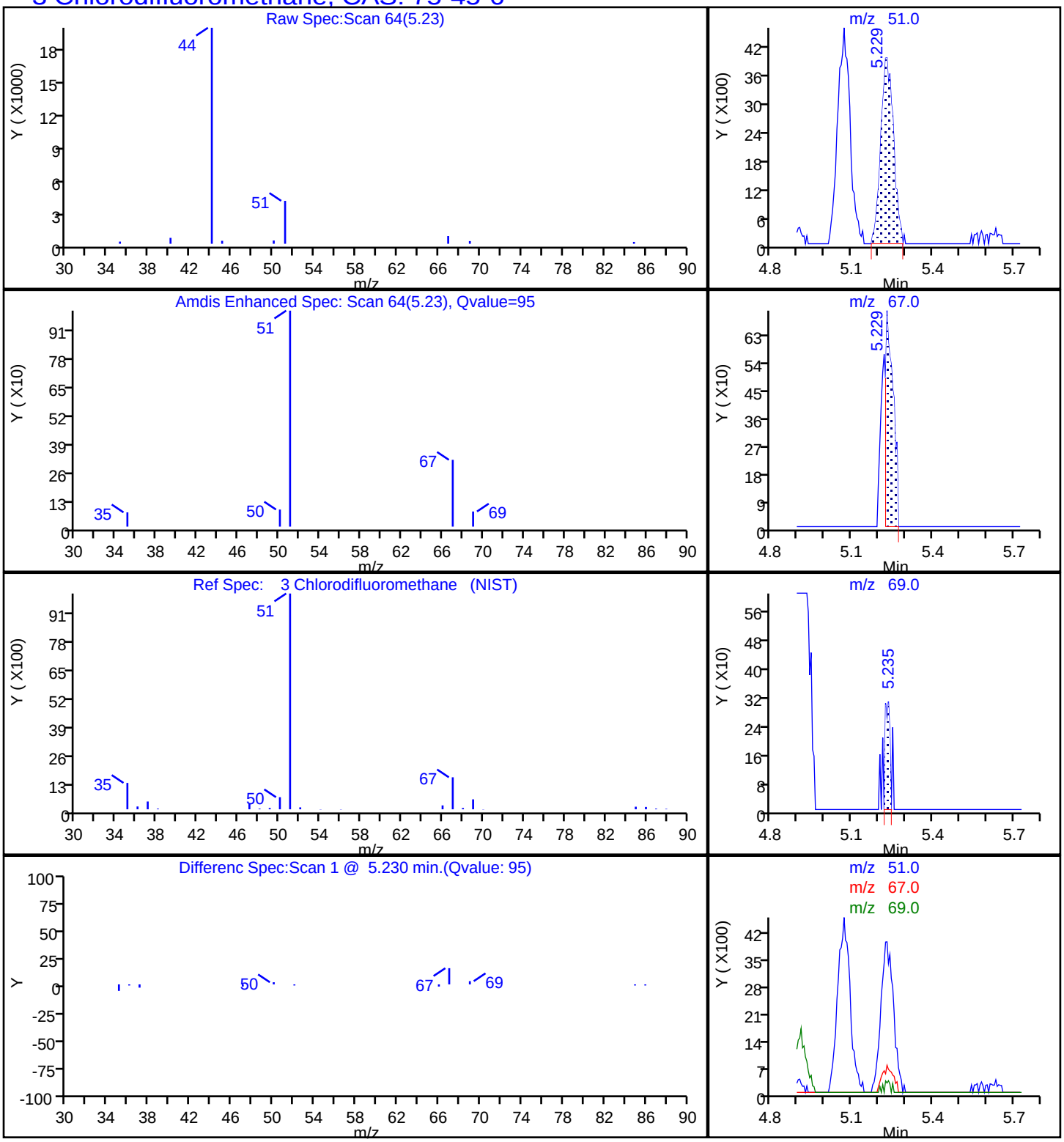


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6



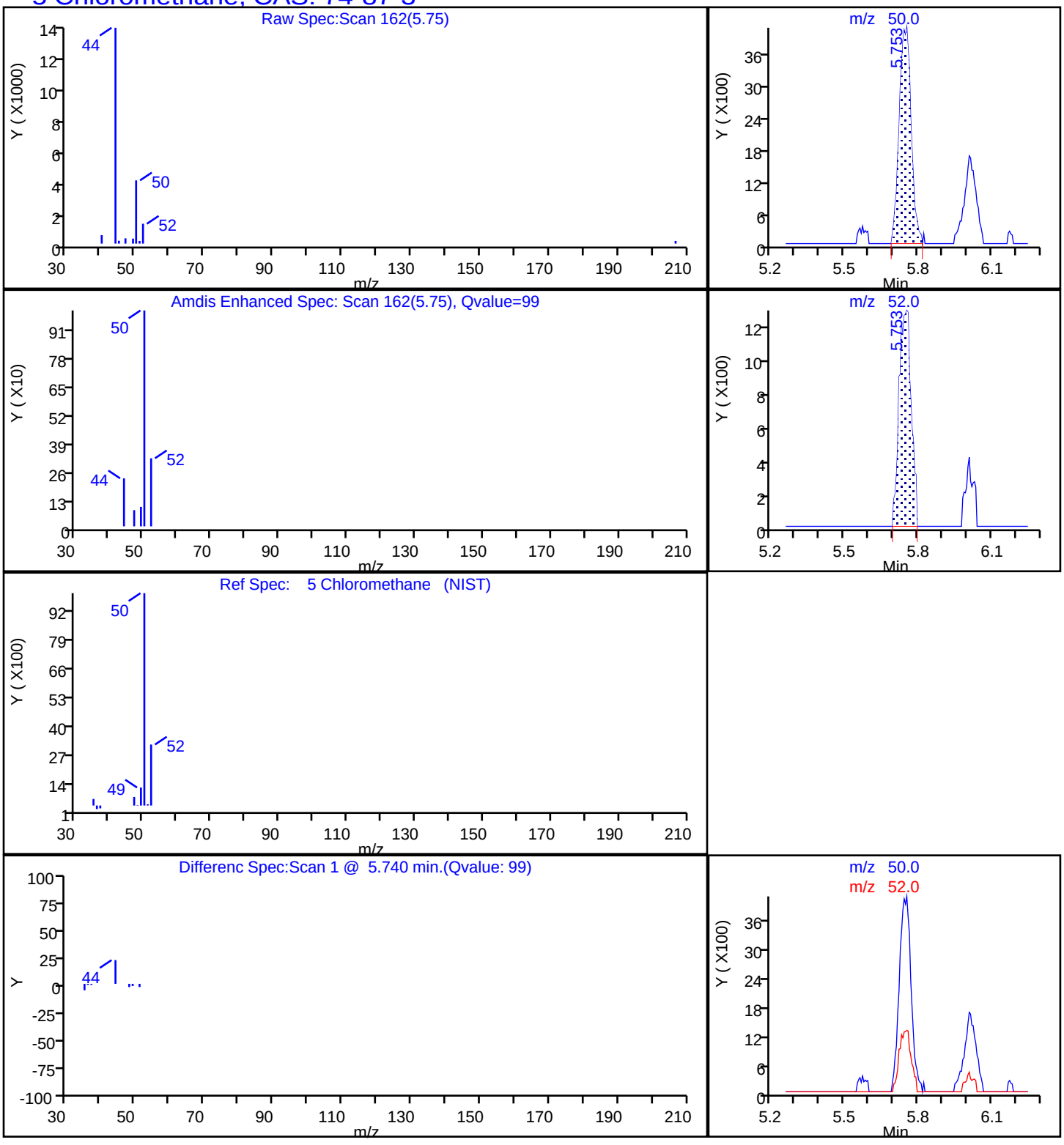
Report Date: 09-Apr-2018 09:56:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

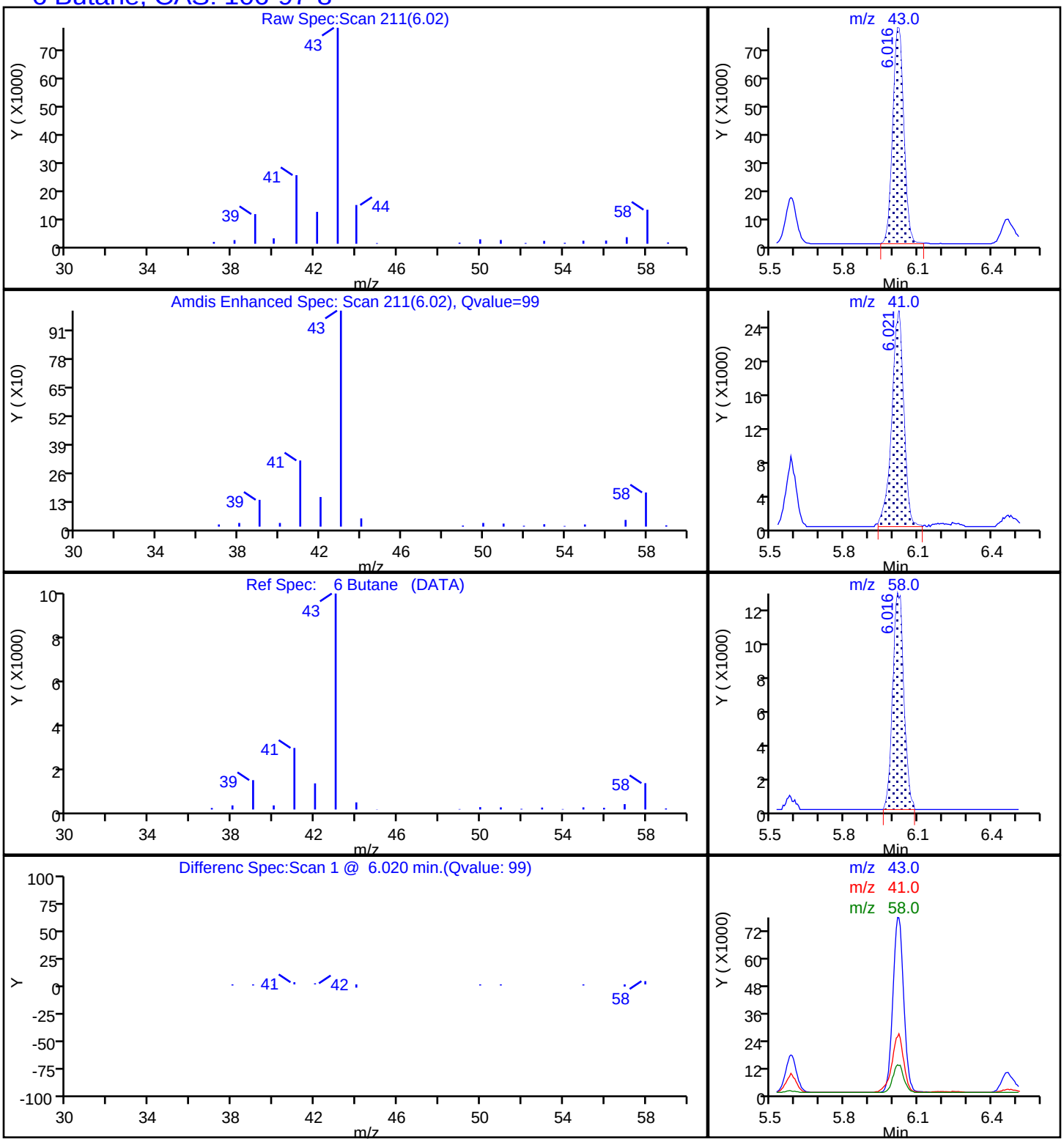


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

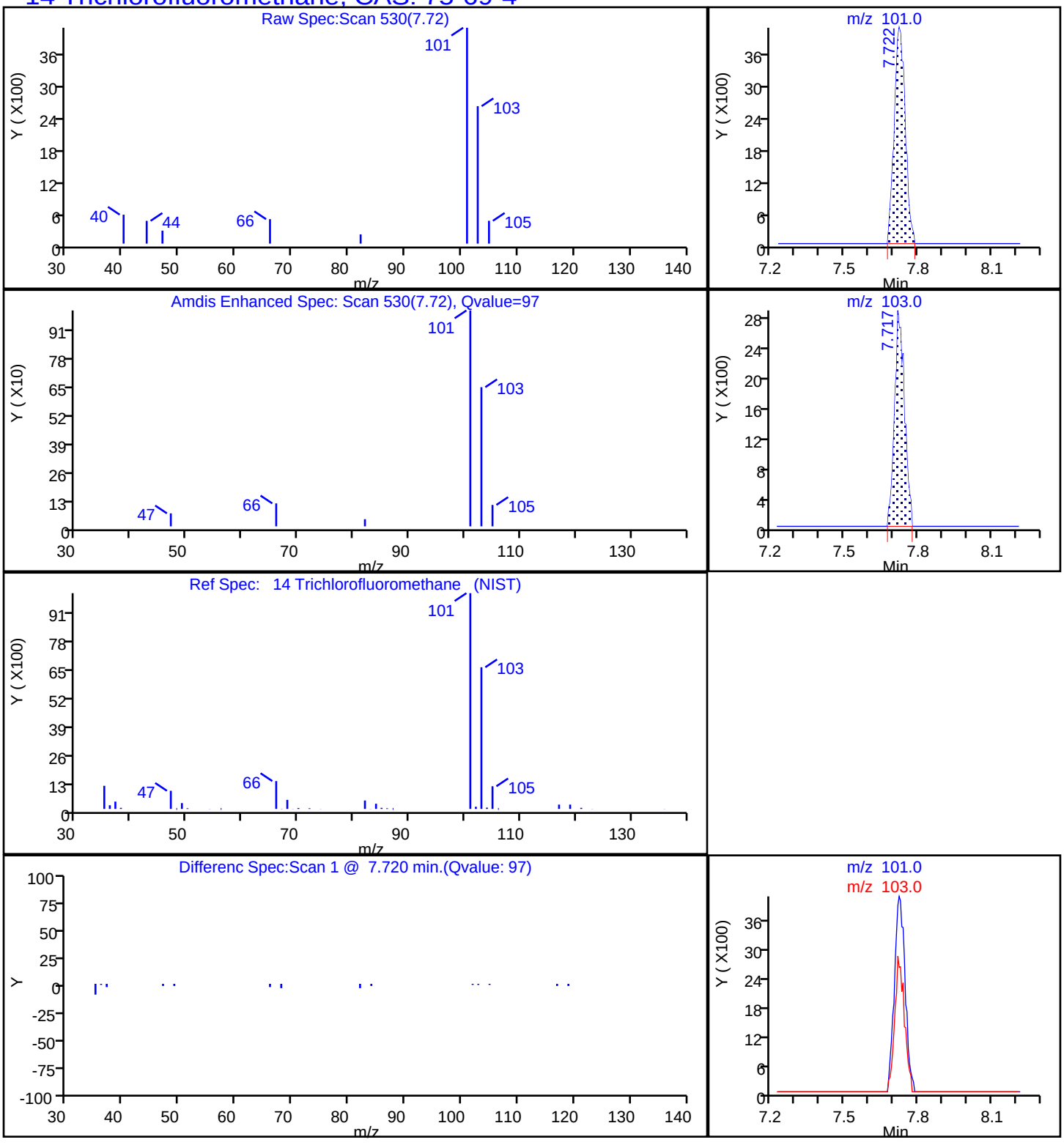


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

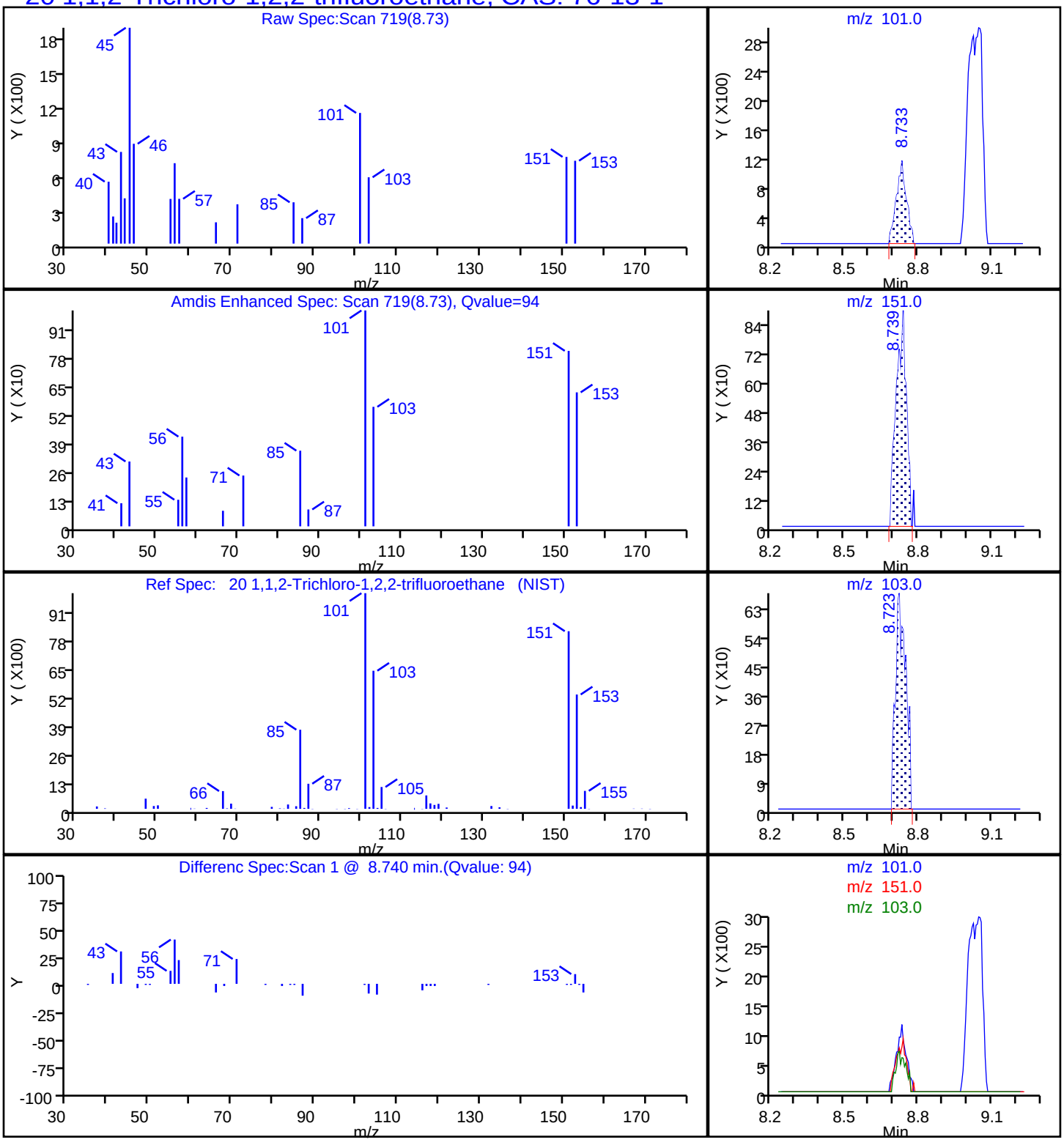
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

14 Trichlorofluoromethane, CAS: 75-69-4



Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d
Injection Date: 06-Apr-2018 03:14:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-10 Lab Sample ID: 200-42918-10
Client ID: GC-IA-108 (AS)
Operator ID: ert ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



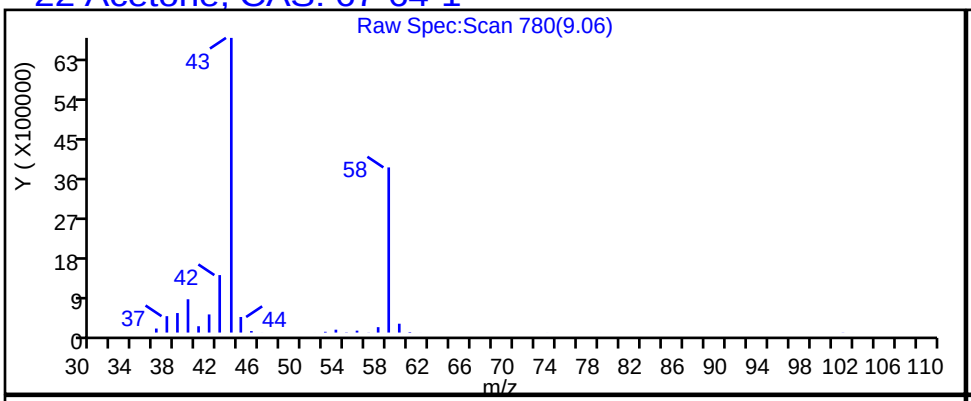
Report Date: 09-Apr-2018 09:56:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

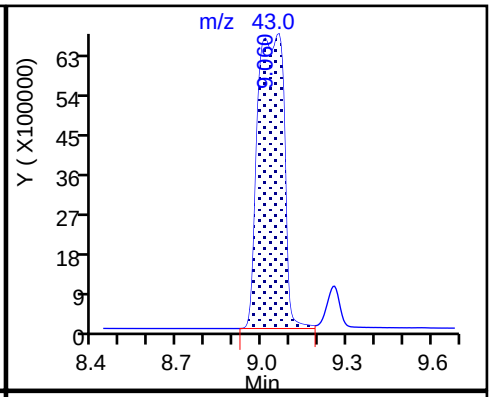
TestAmerica Burlington

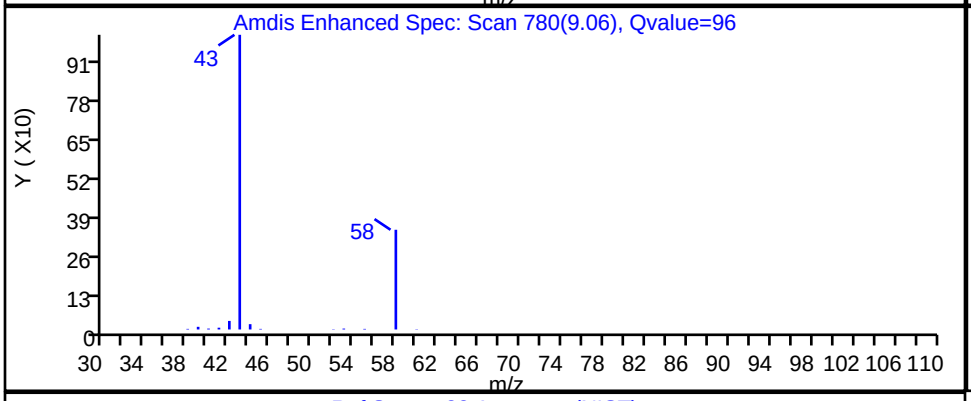
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

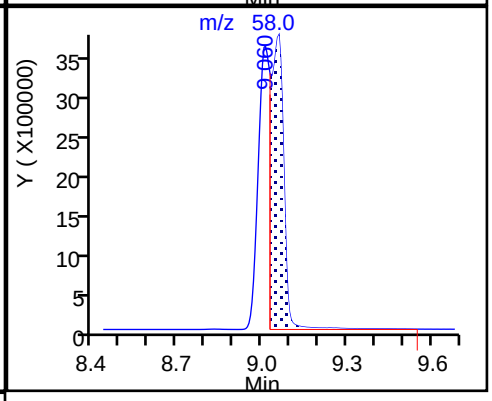
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

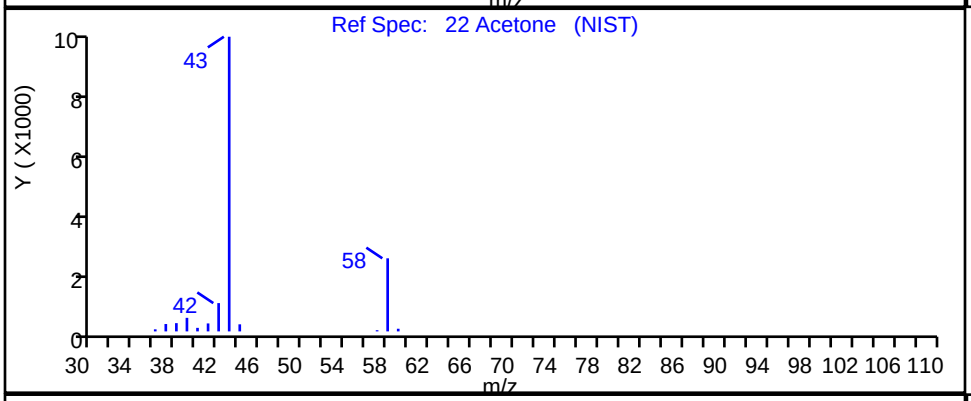
22 Acetone, CAS: 67-64-1

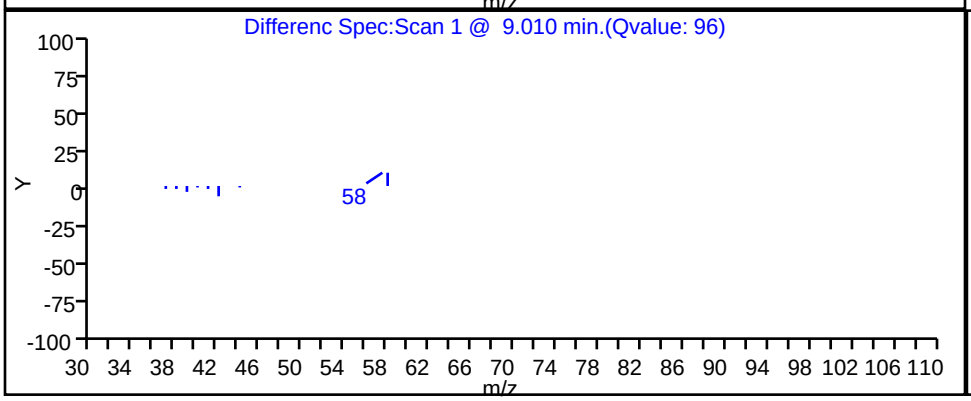


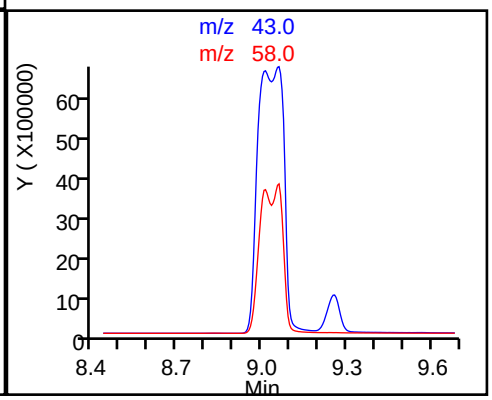








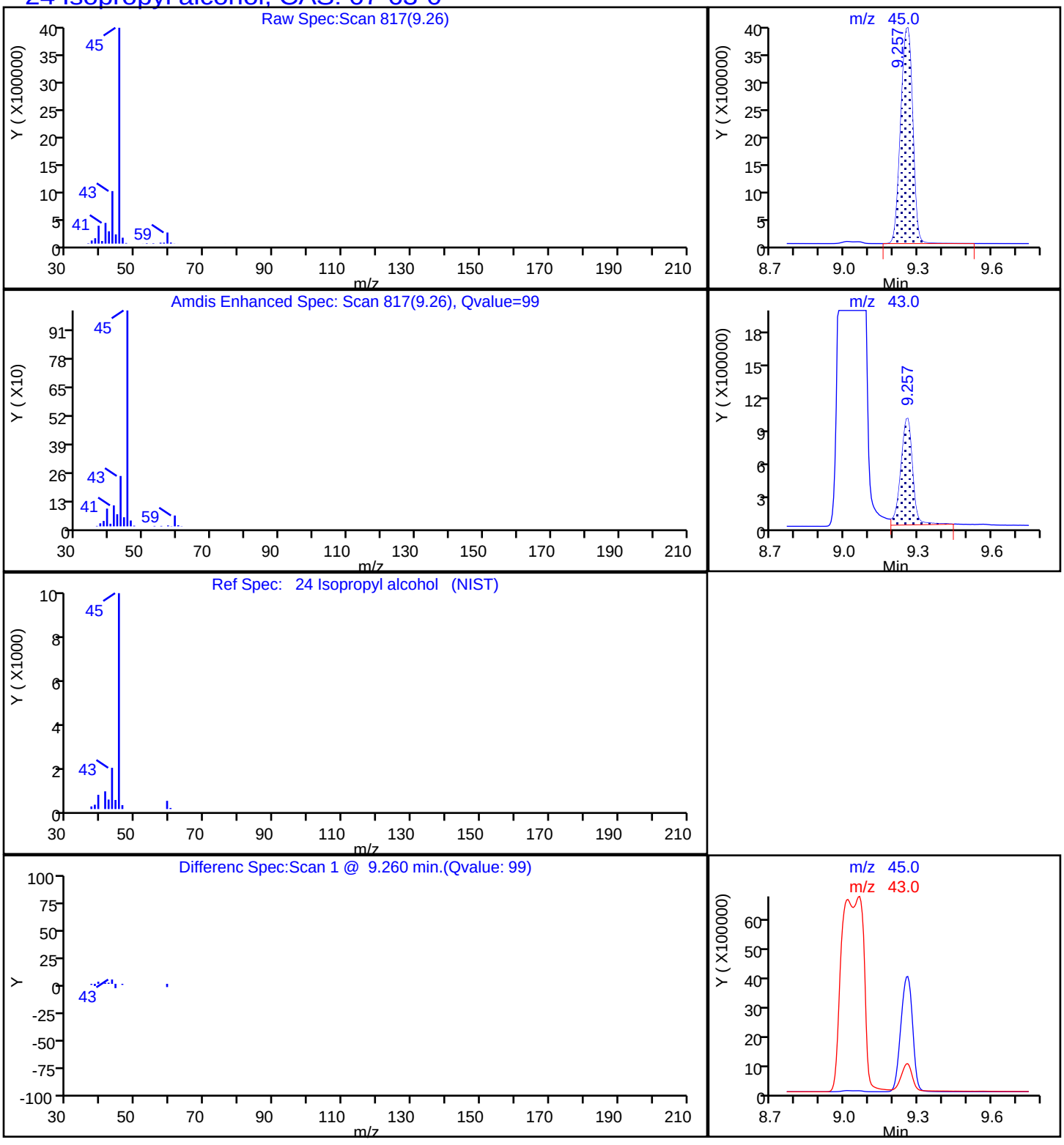




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

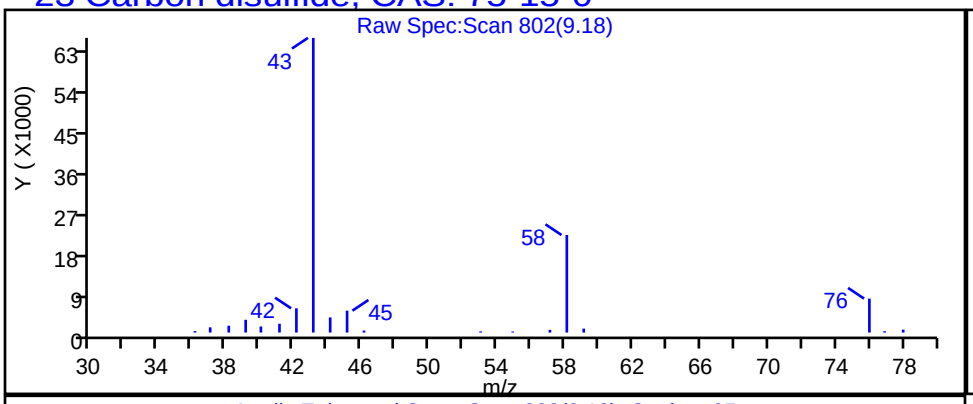
24 Isopropyl alcohol, CAS: 67-63-0

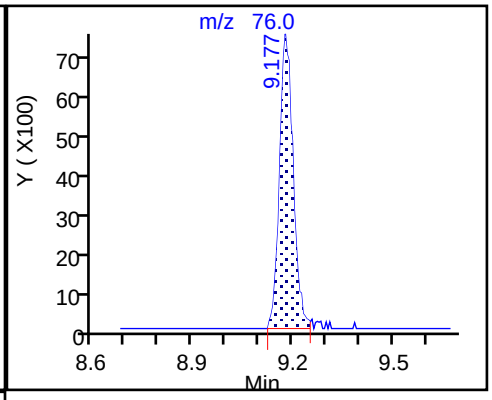


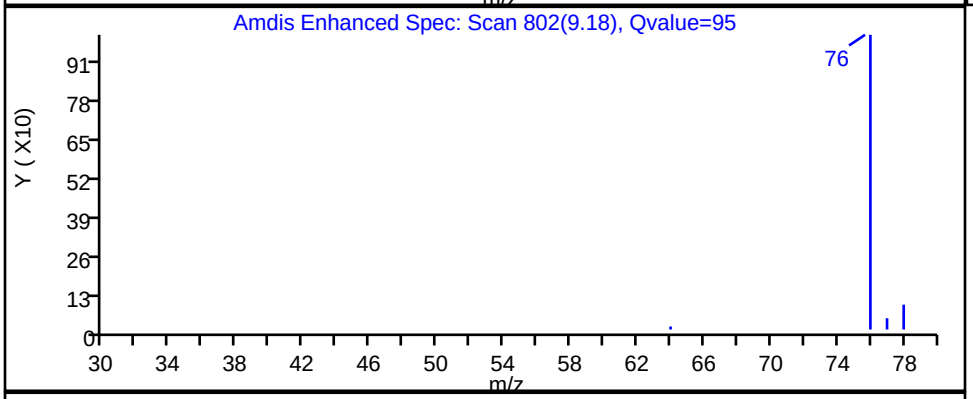
TestAmerica Burlington

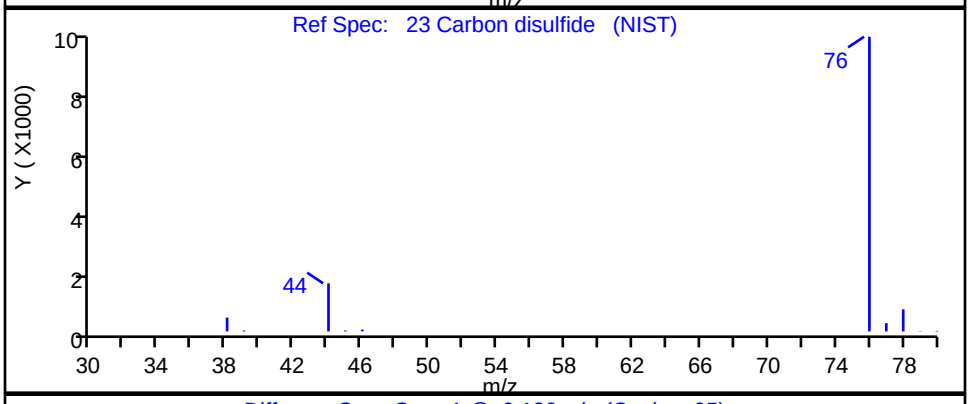
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

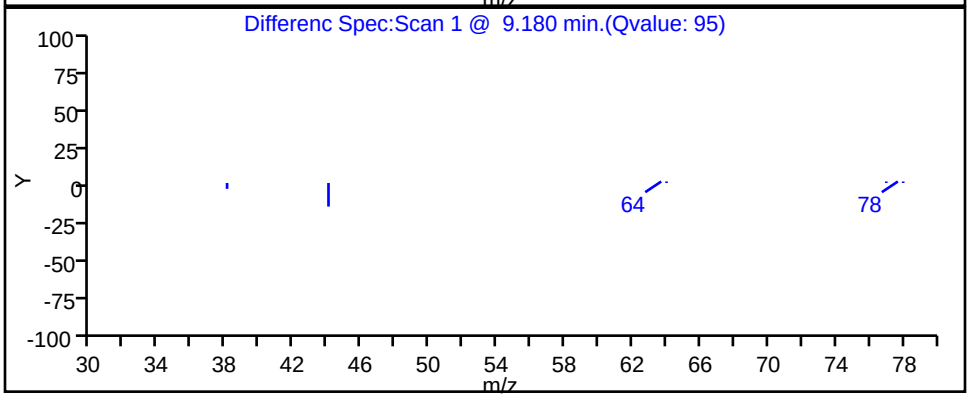
23 Carbon disulfide, CAS: 75-15-0











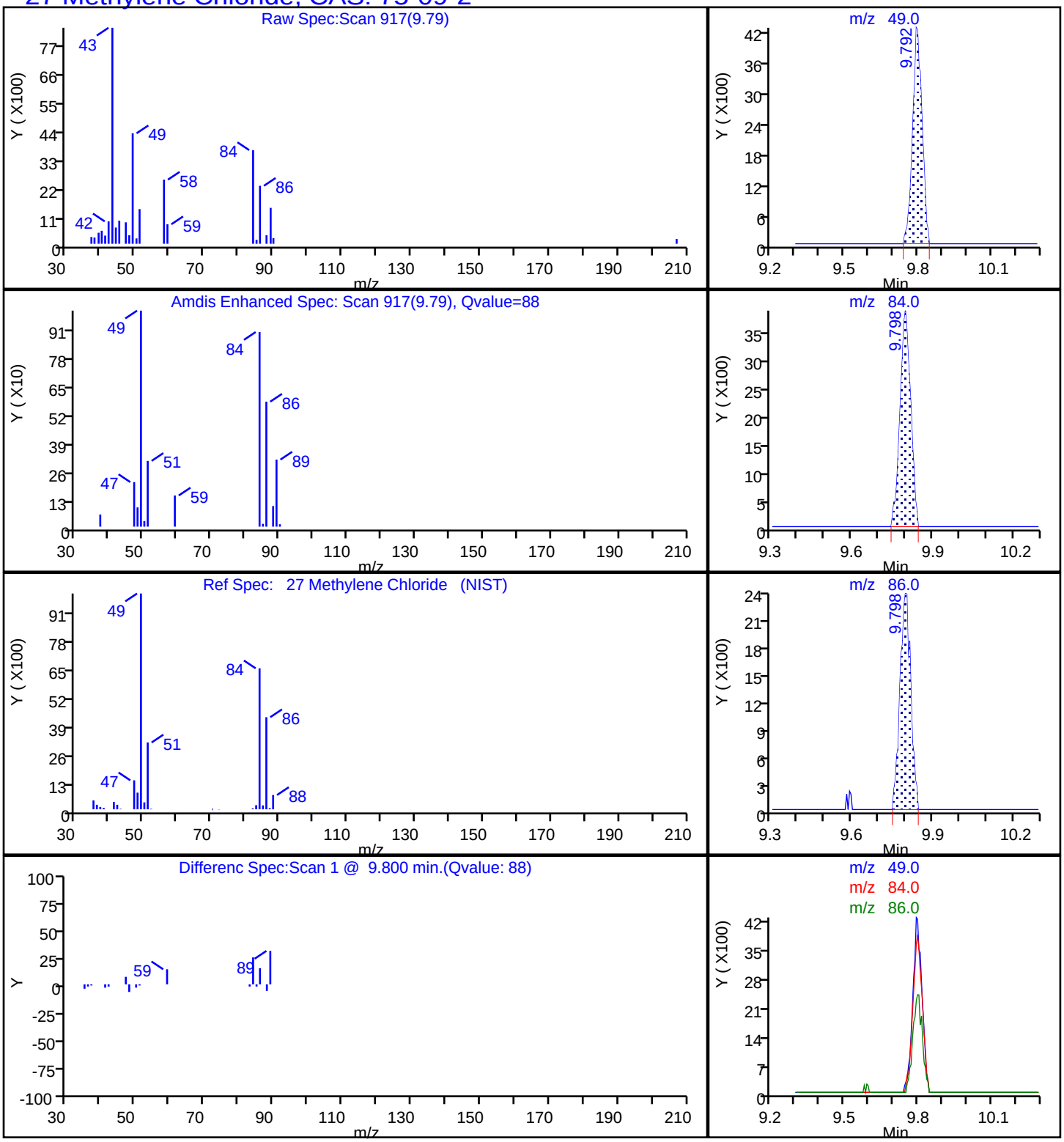
Report Date: 09-Apr-2018 09:56:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

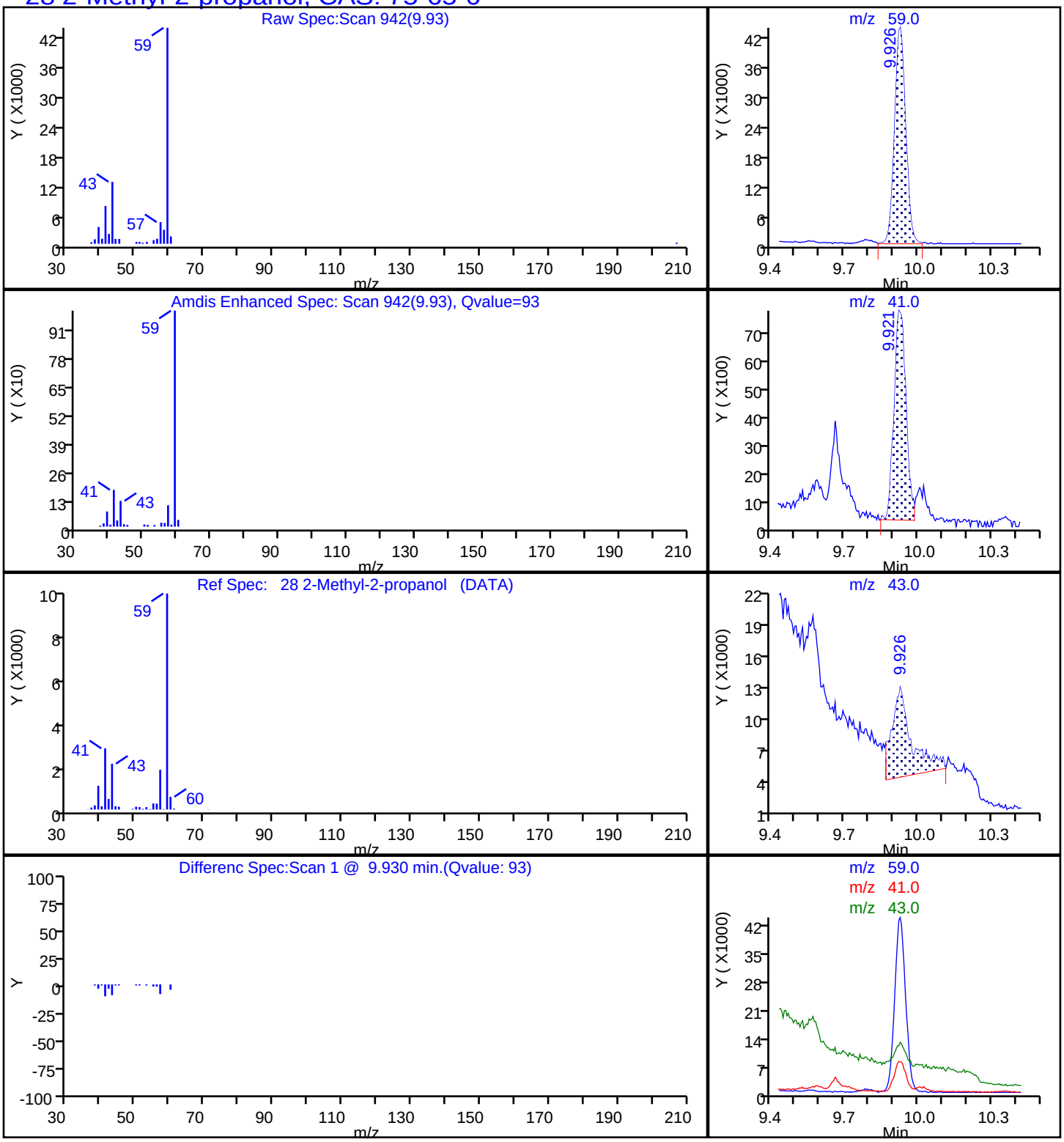


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

28 2-Methyl-2-propanol, CAS: 75-65-0



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
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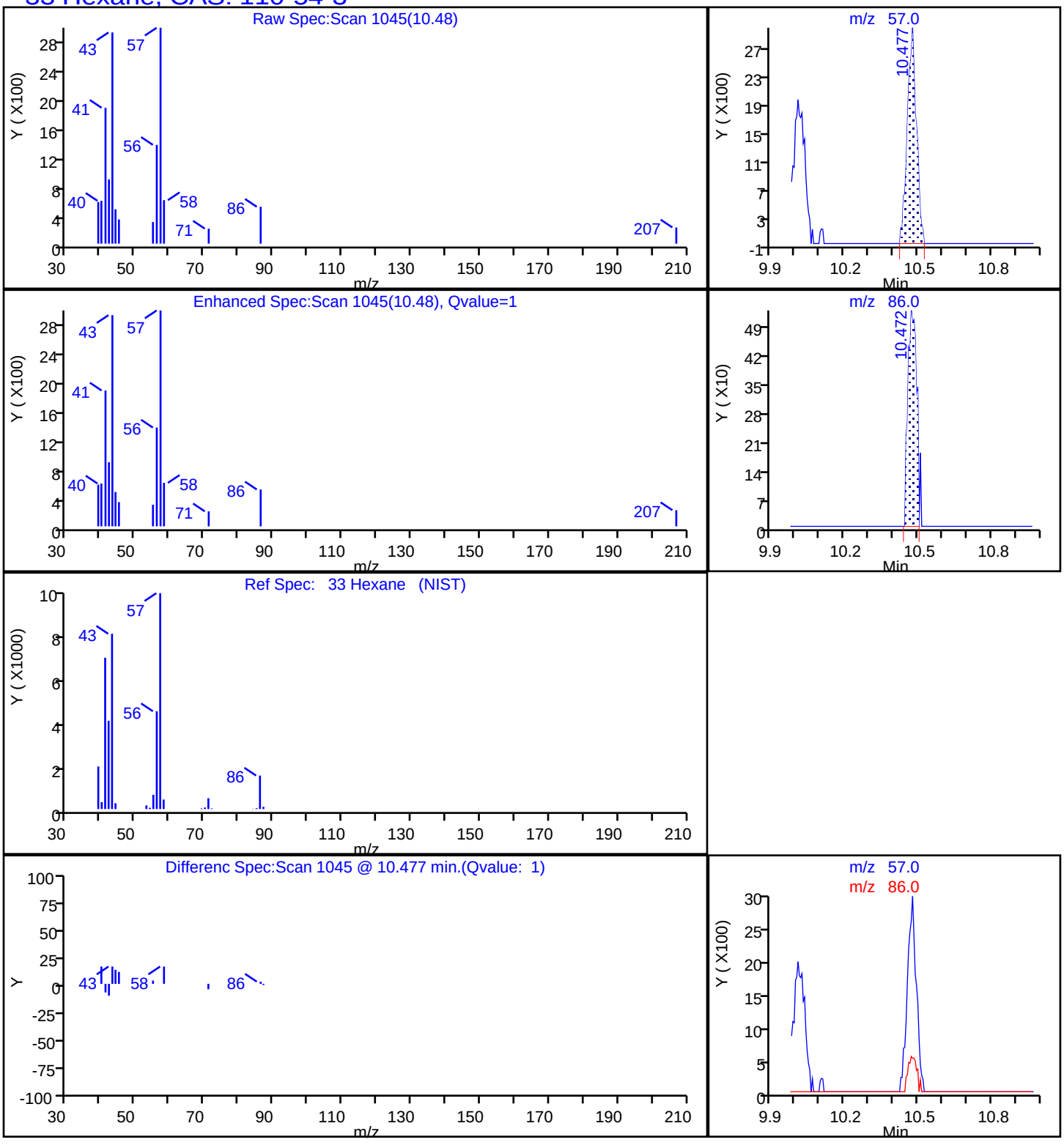
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3



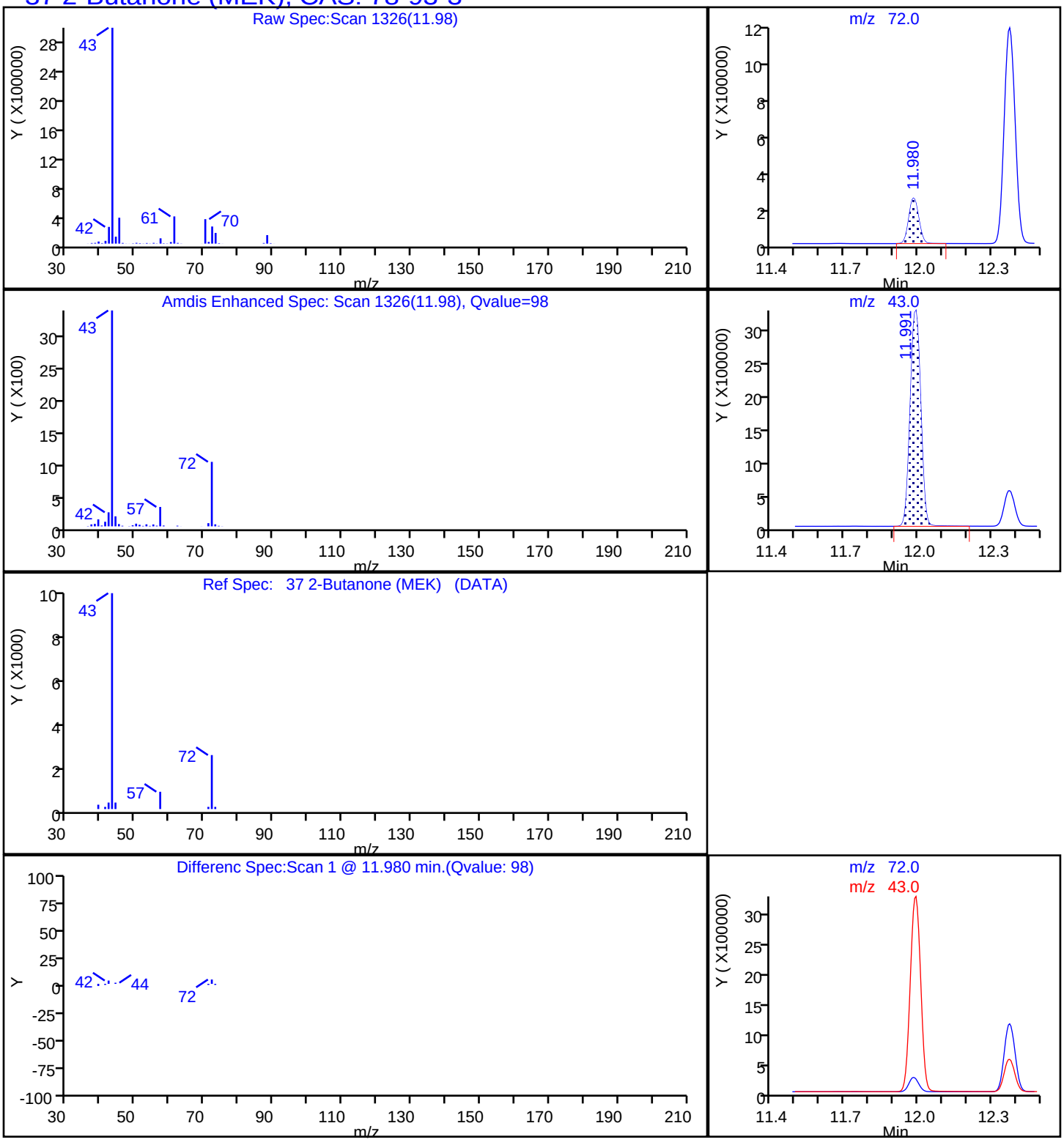
Report Date: 09-Apr-2018 09:56:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
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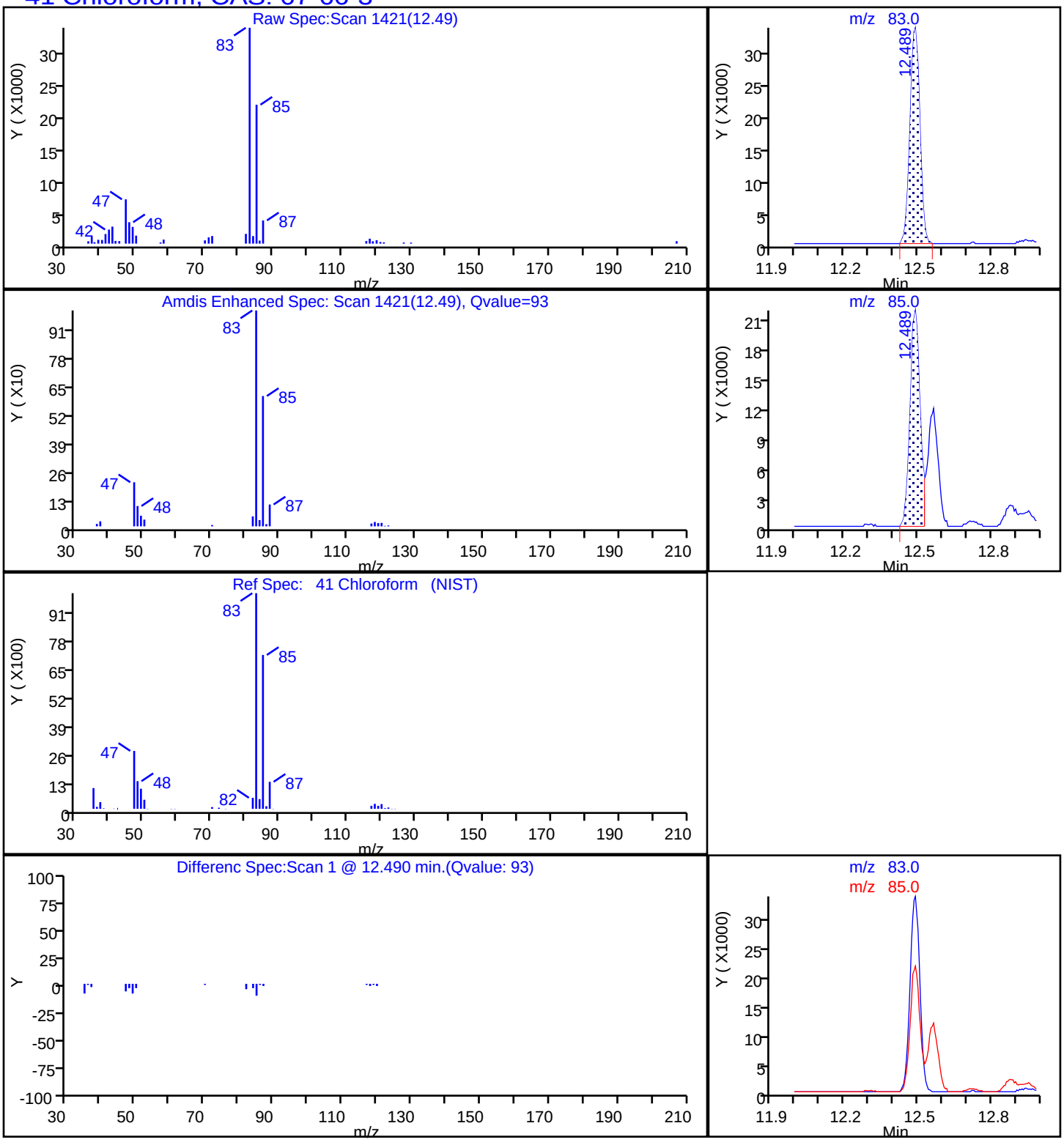
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

41 Chloroform, CAS: 67-66-3



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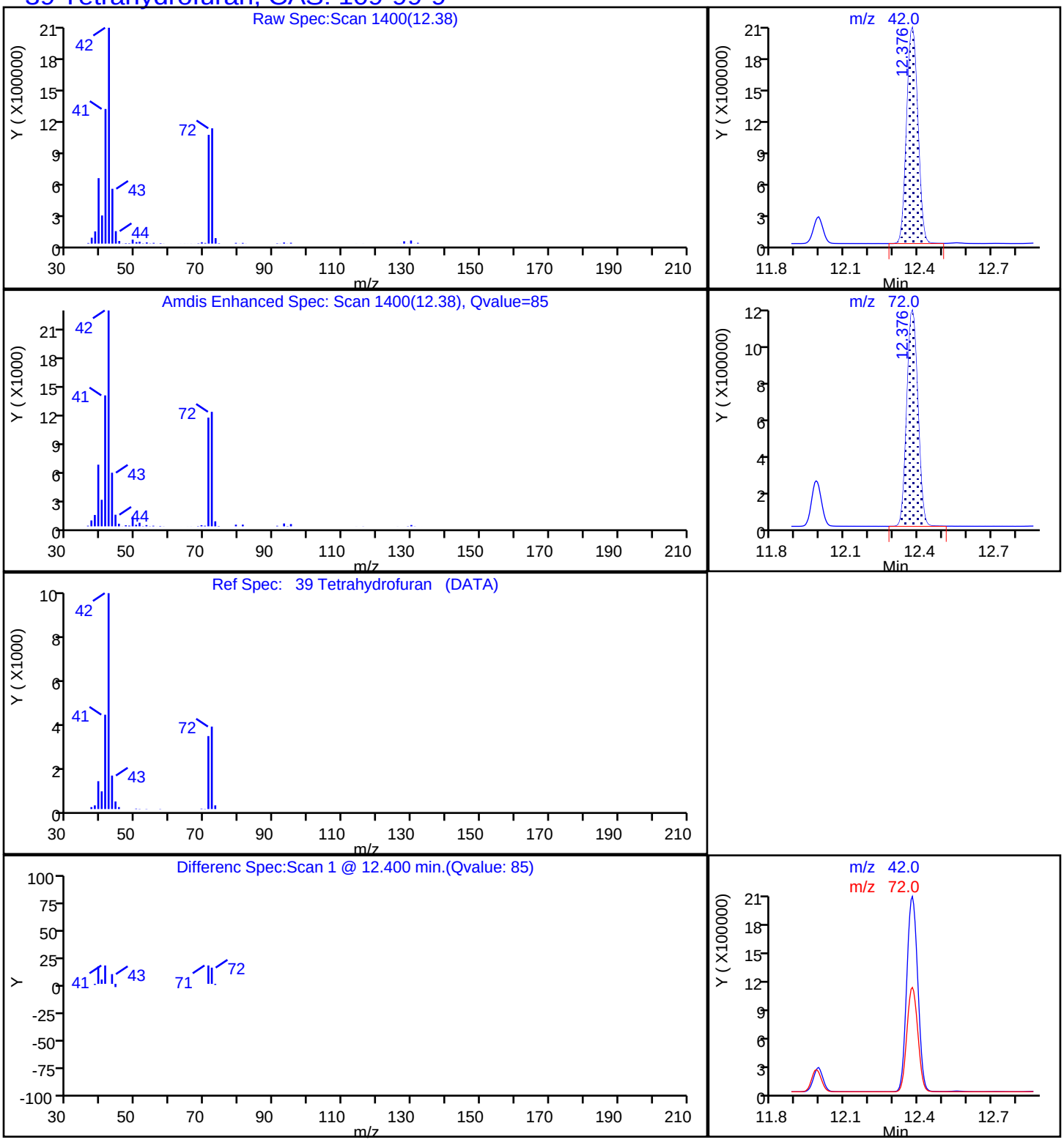
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

39 Tetrahydrofuran, CAS: 109-99-9



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
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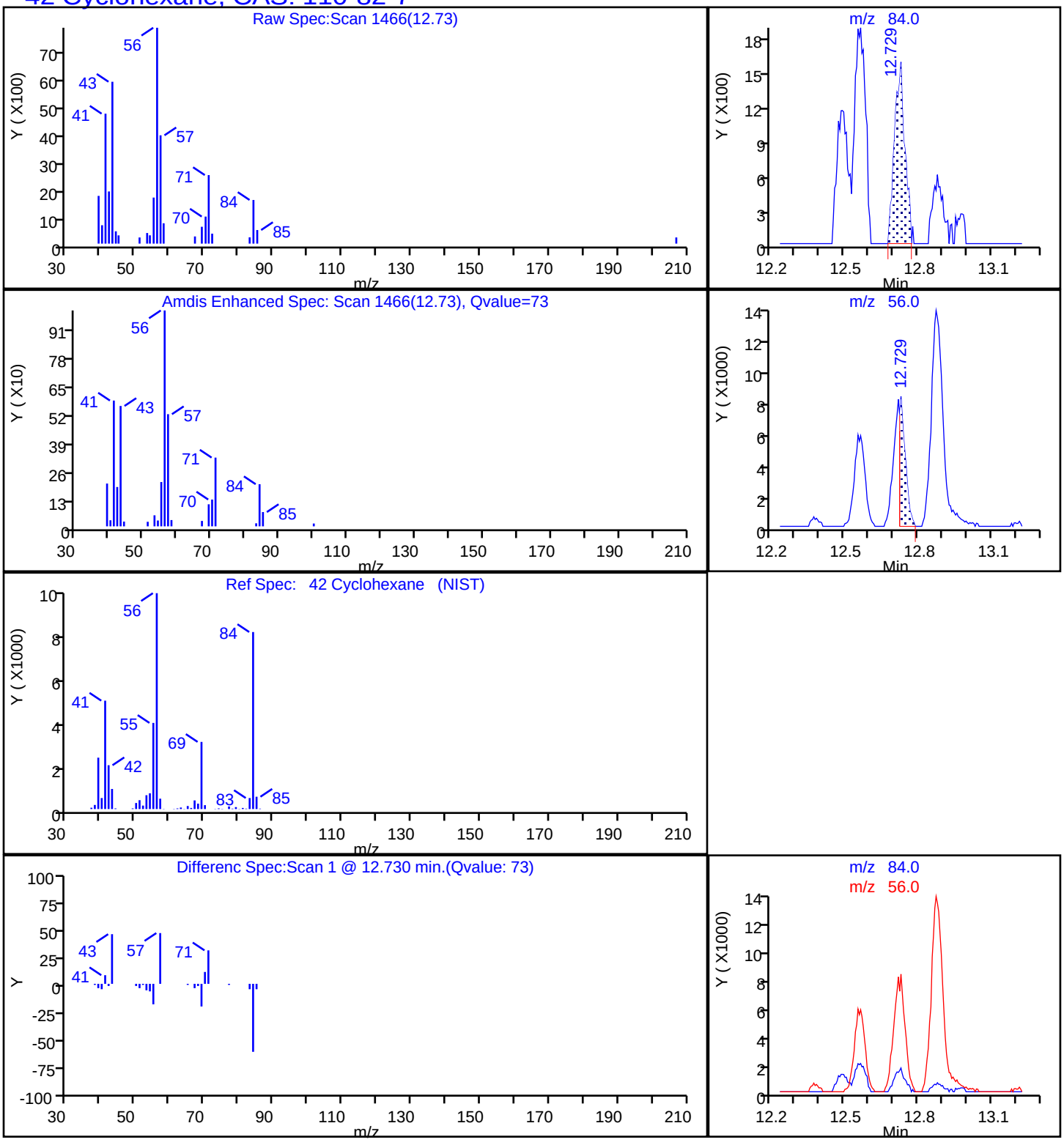
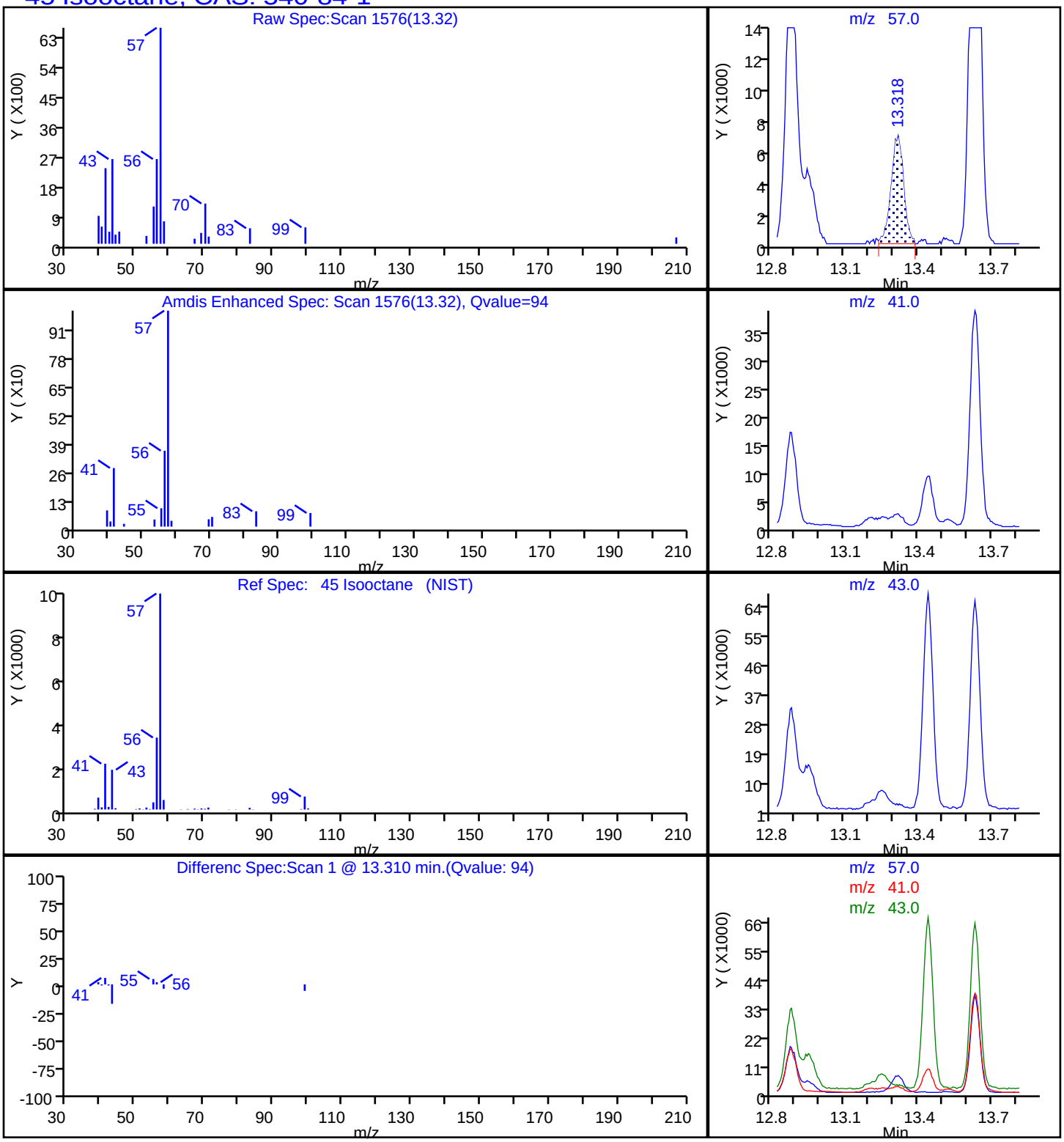
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Cyclohexane, CAS: 110-82-7



Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d
Injection Date: 06-Apr-2018 03:14:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-10 Lab Sample ID: 200-42918-10
Client ID: GC-IA-108 (AS)
Operator ID: ert ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

45 Isooctane, CAS: 540-84-1



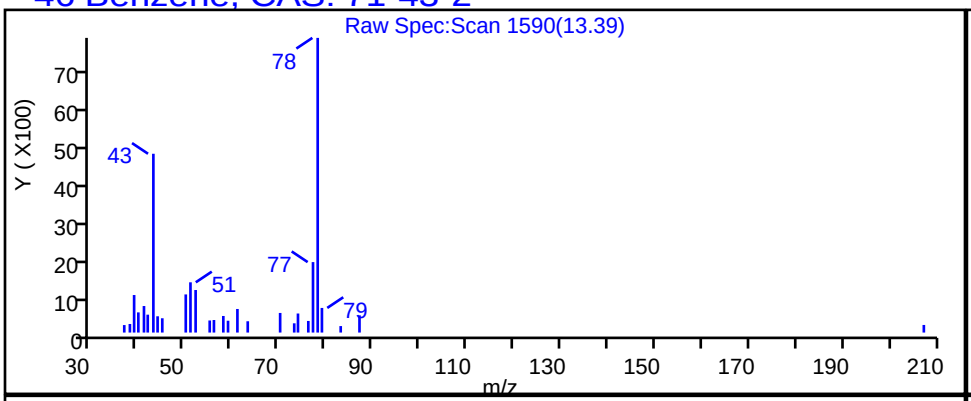
Report Date: 09-Apr-2018 09:56:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

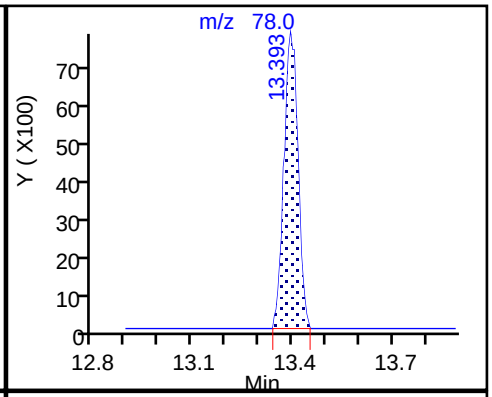
TestAmerica Burlington

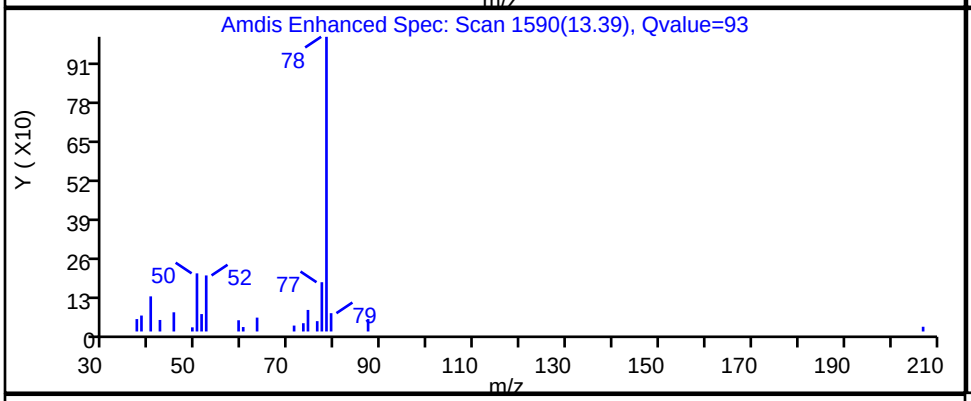
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

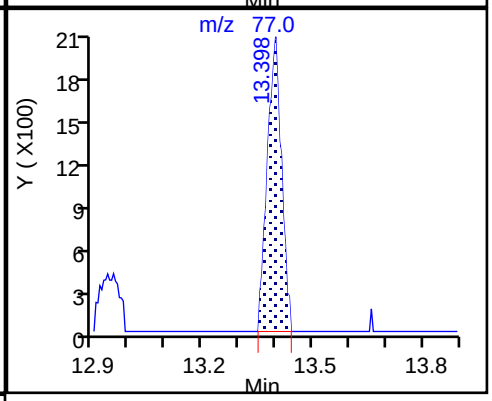
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

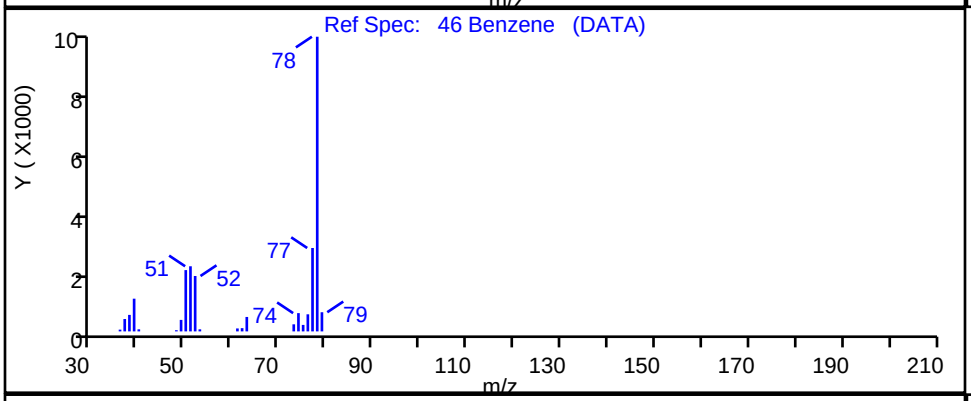
46 Benzene, CAS: 71-43-2

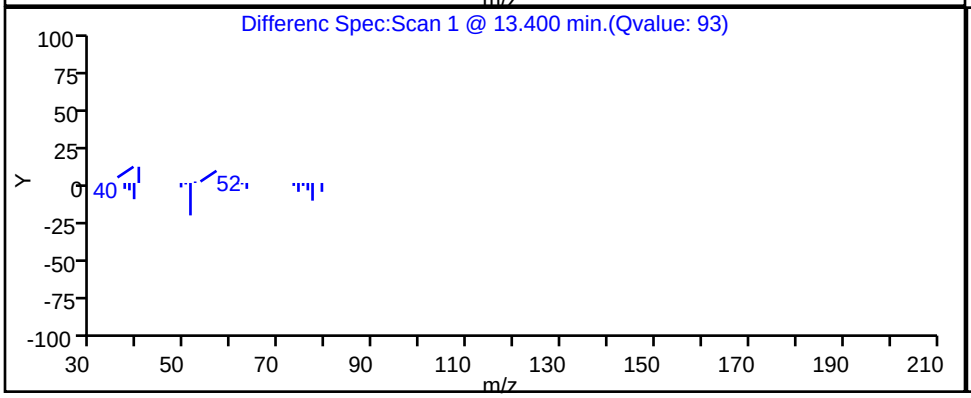


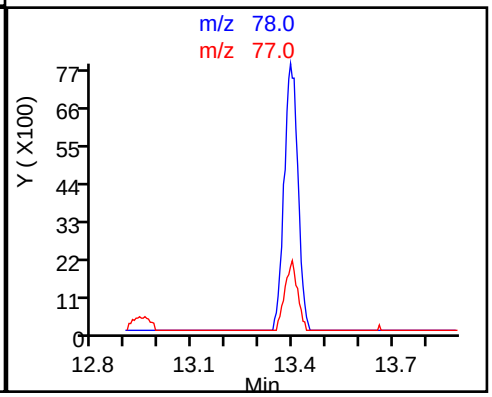








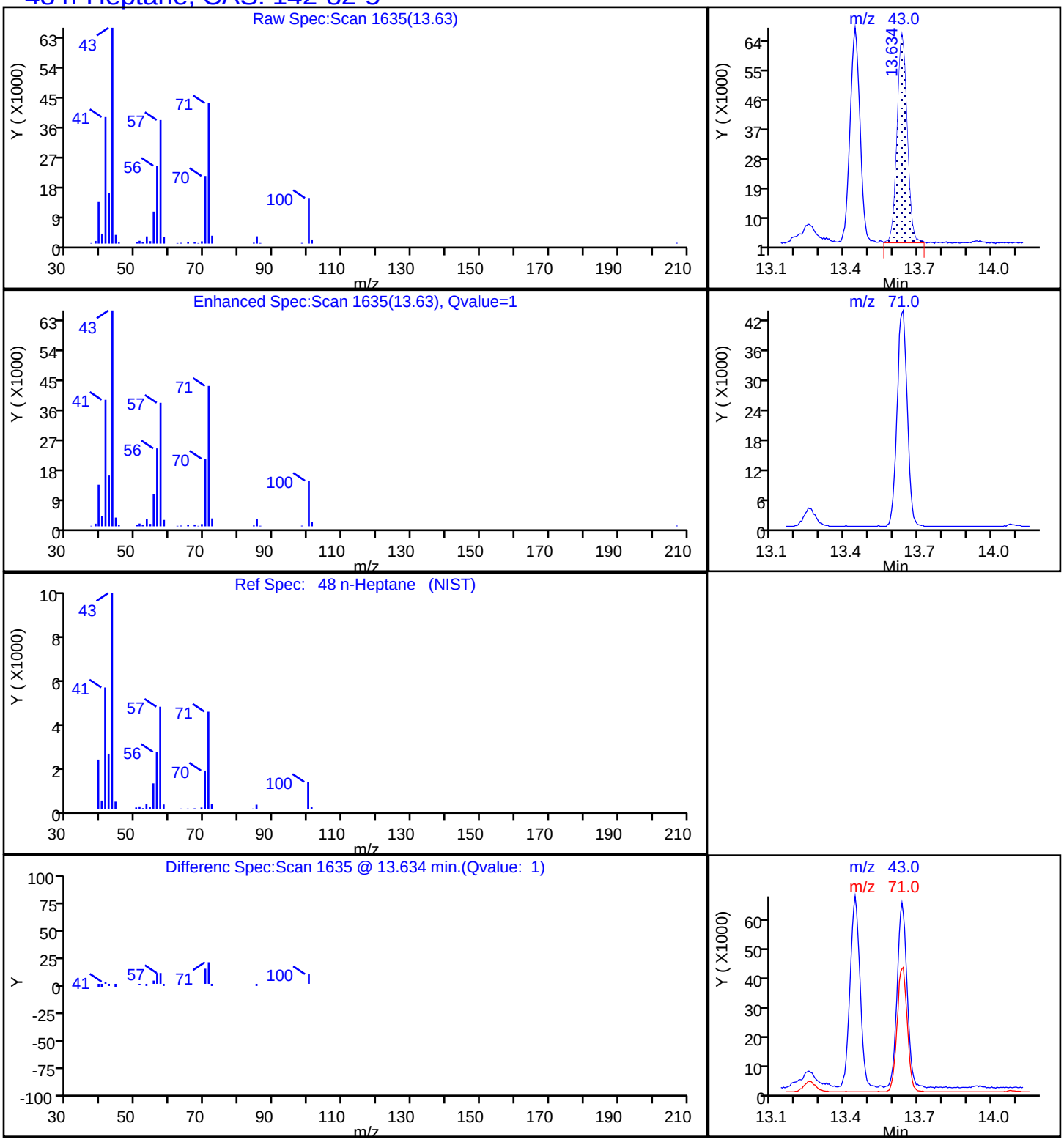




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 n-Heptane, CAS: 142-82-5



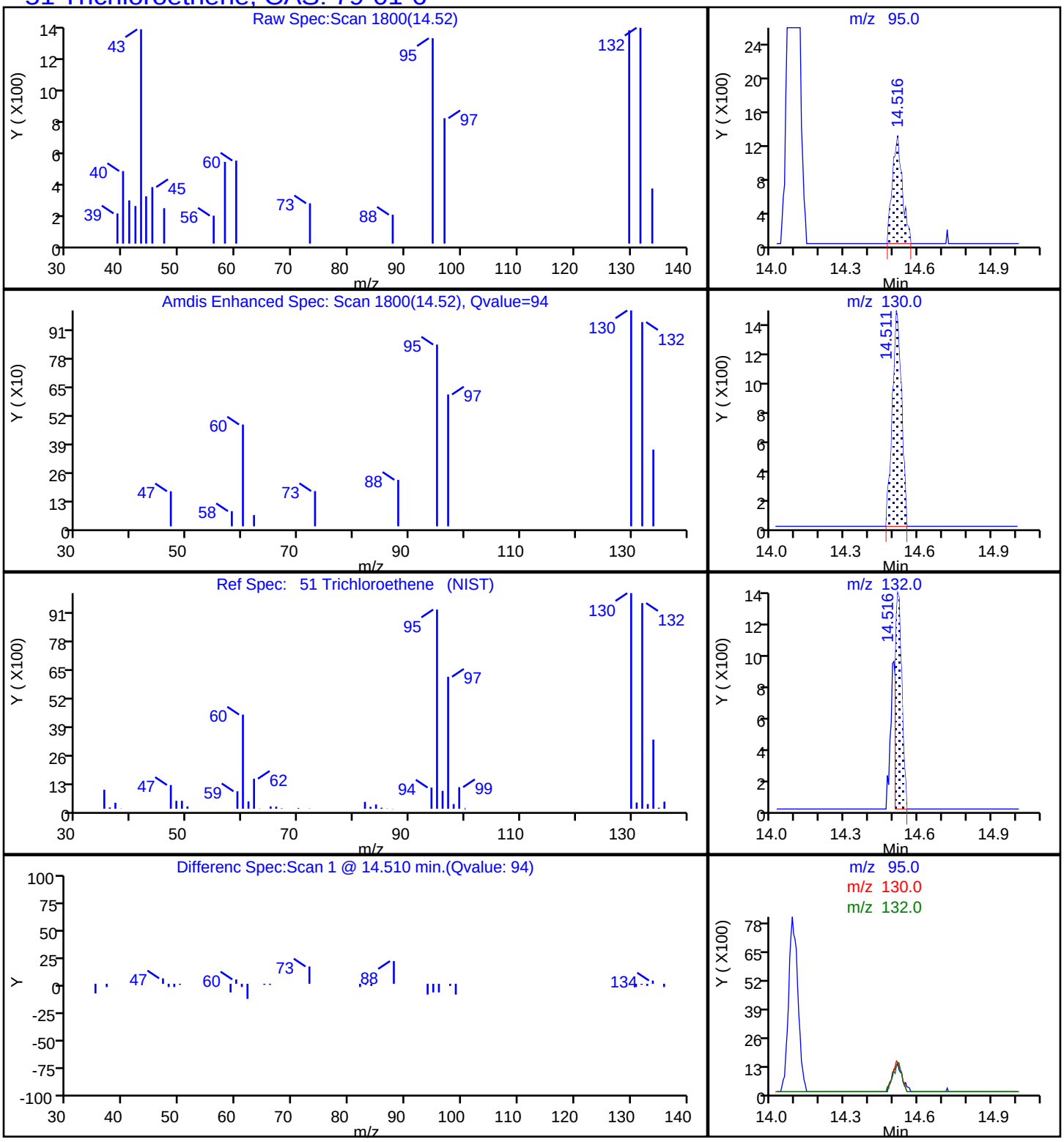
Report Date: 09-Apr-2018 09:56:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

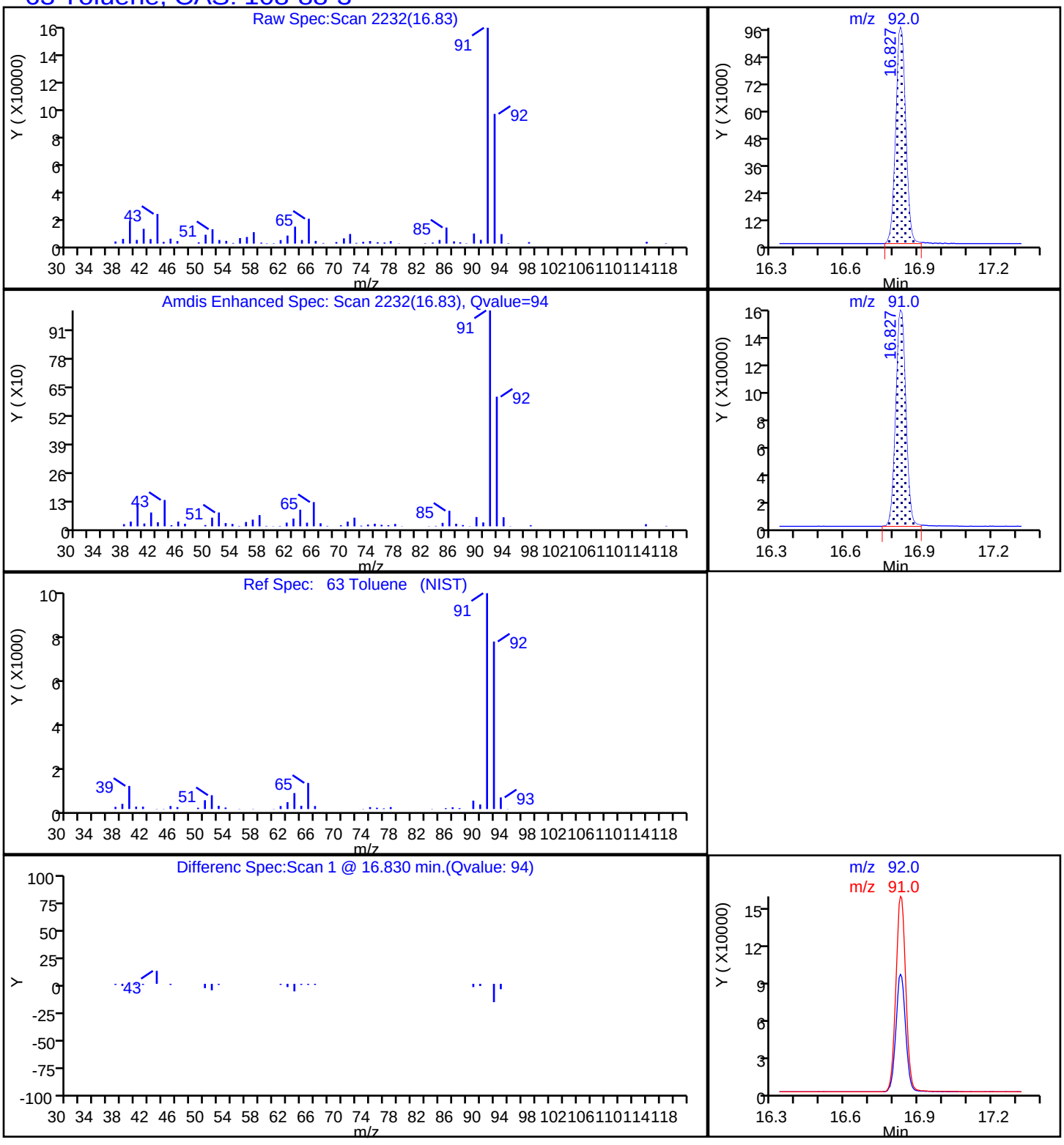
51 Trichloroethene, CAS: 79-01-6



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3



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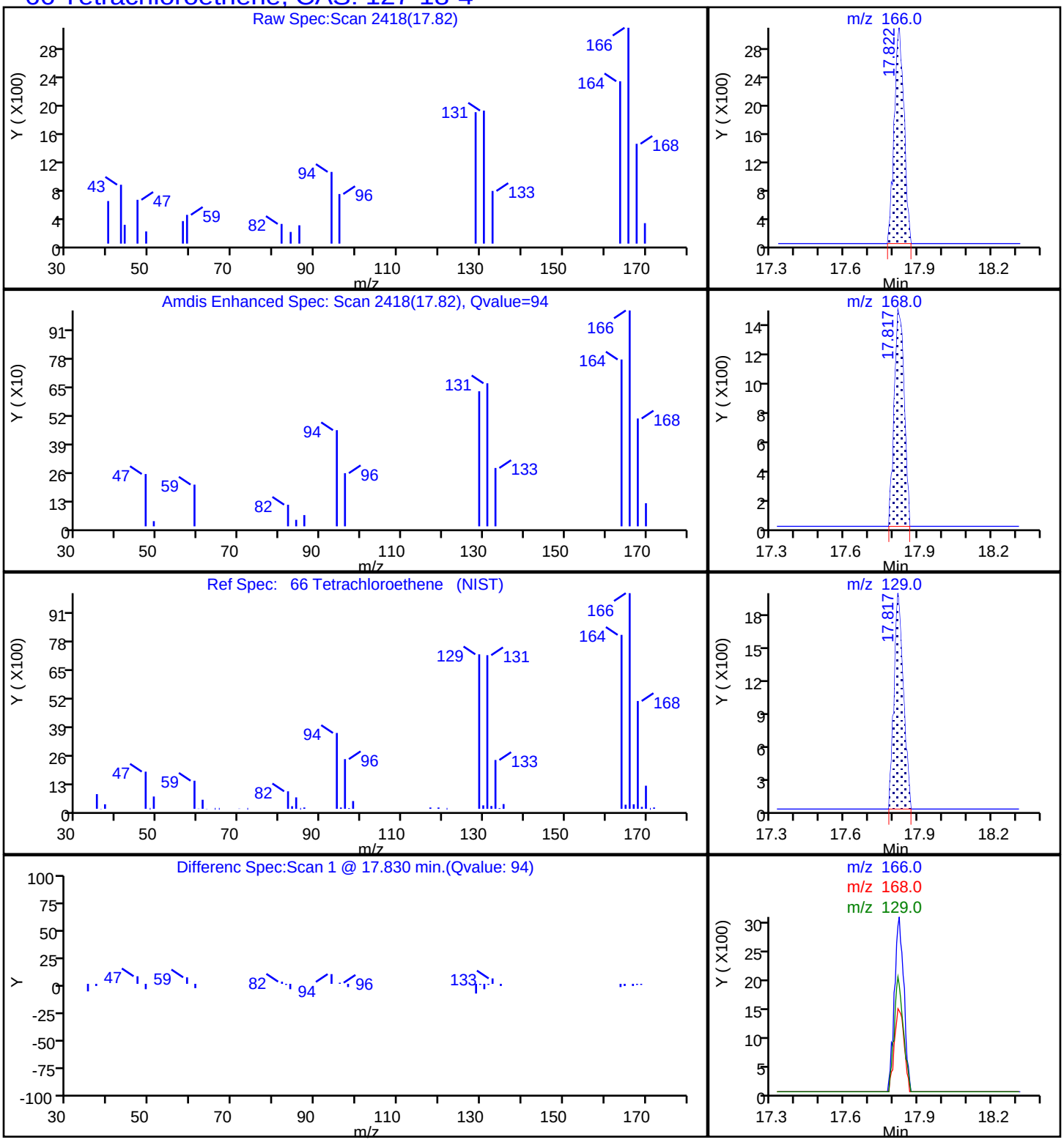
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d

Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

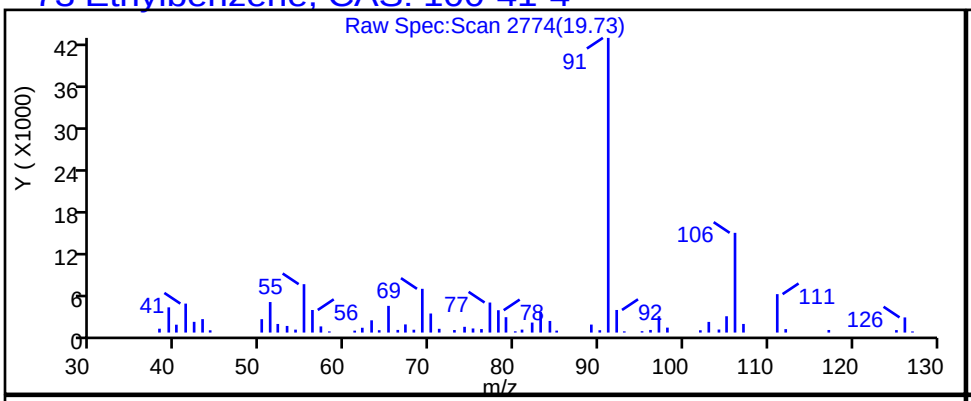
66 Tetrachloroethene, CAS: 127-18-4

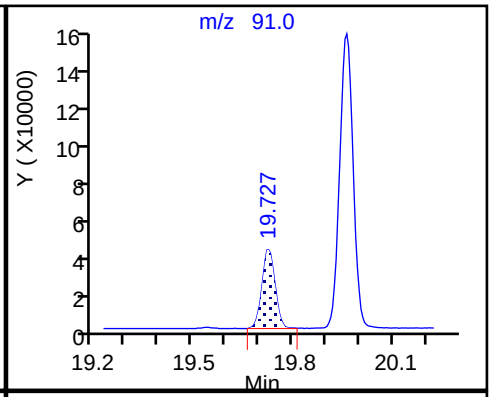


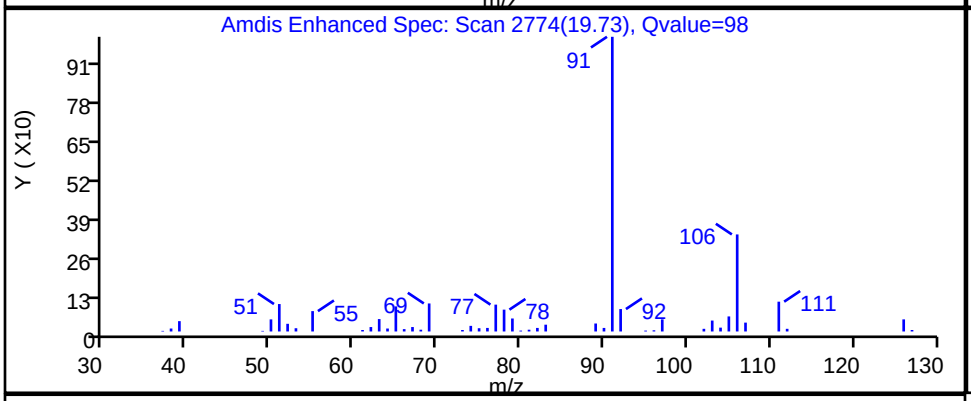
TestAmerica Burlington

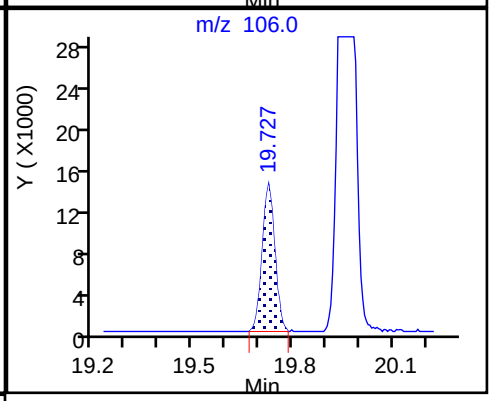
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

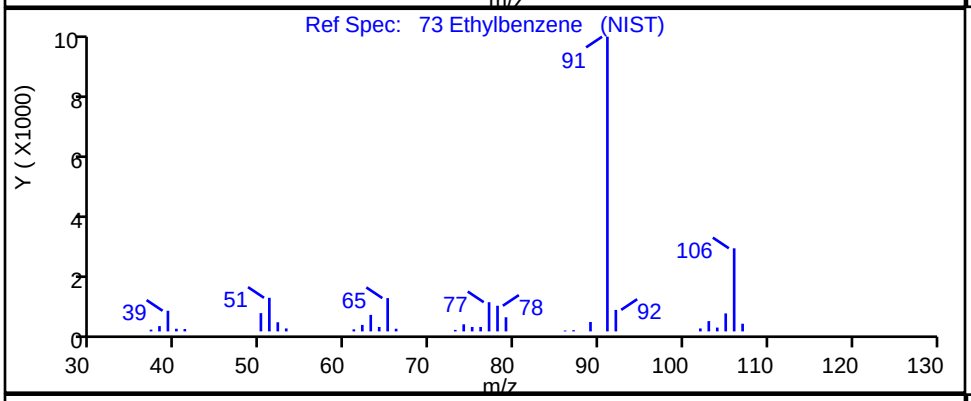
73 Ethylbenzene, CAS: 100-41-4

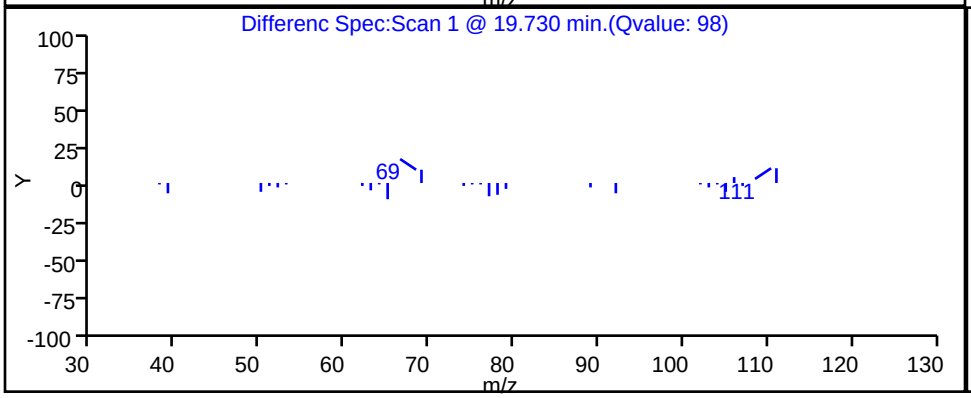


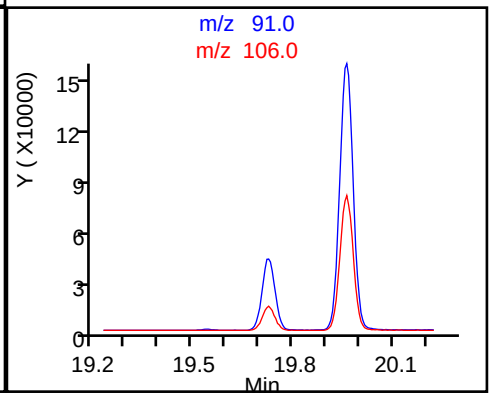








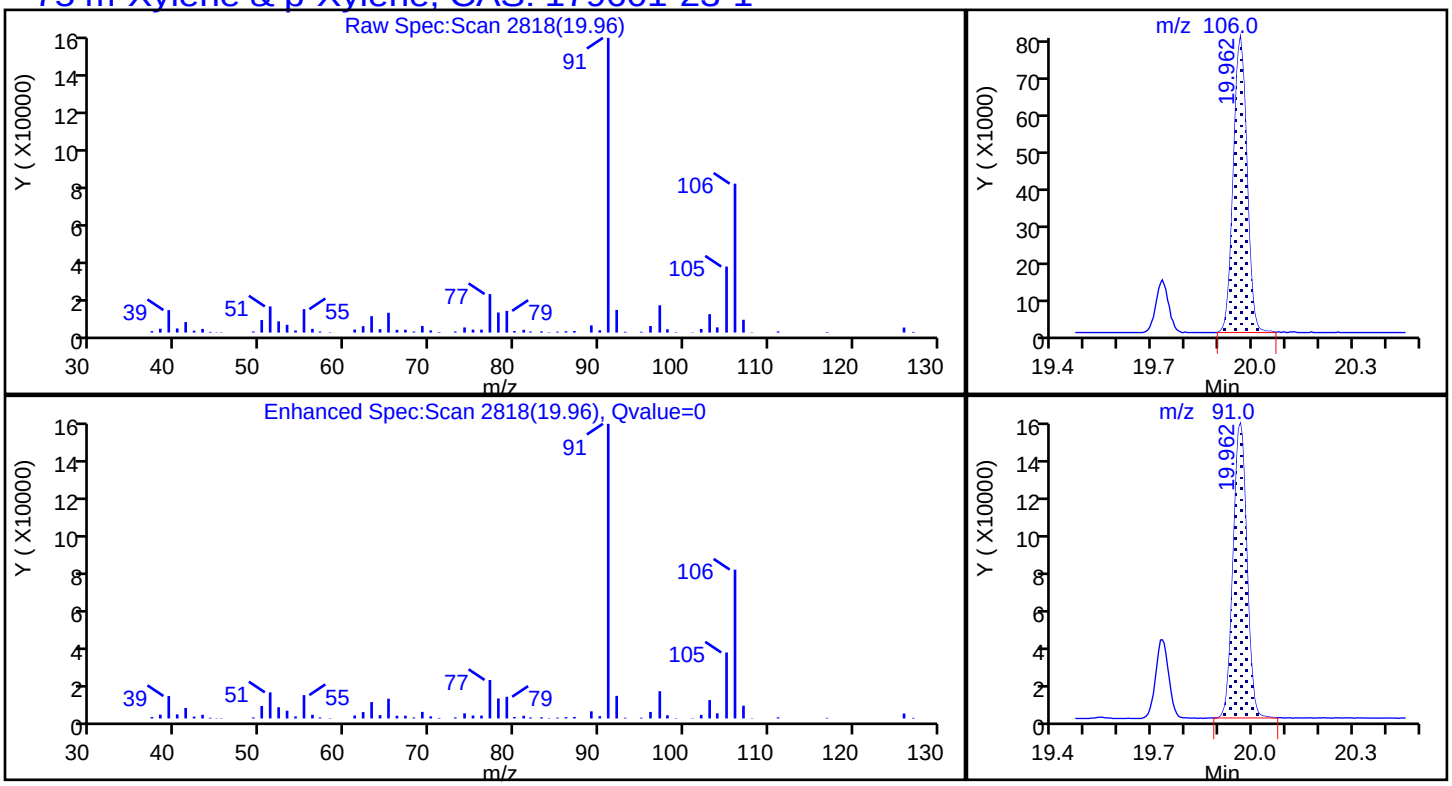


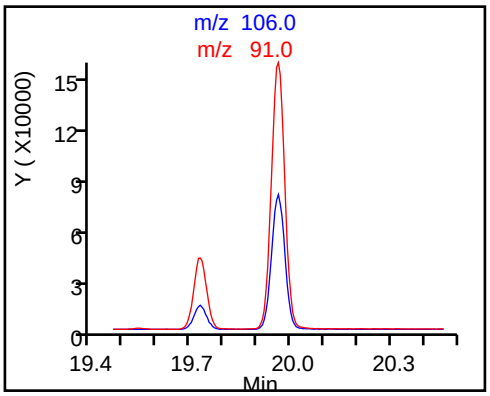


TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

75 m-Xylene & p-Xylene, CAS: 179601-23-1

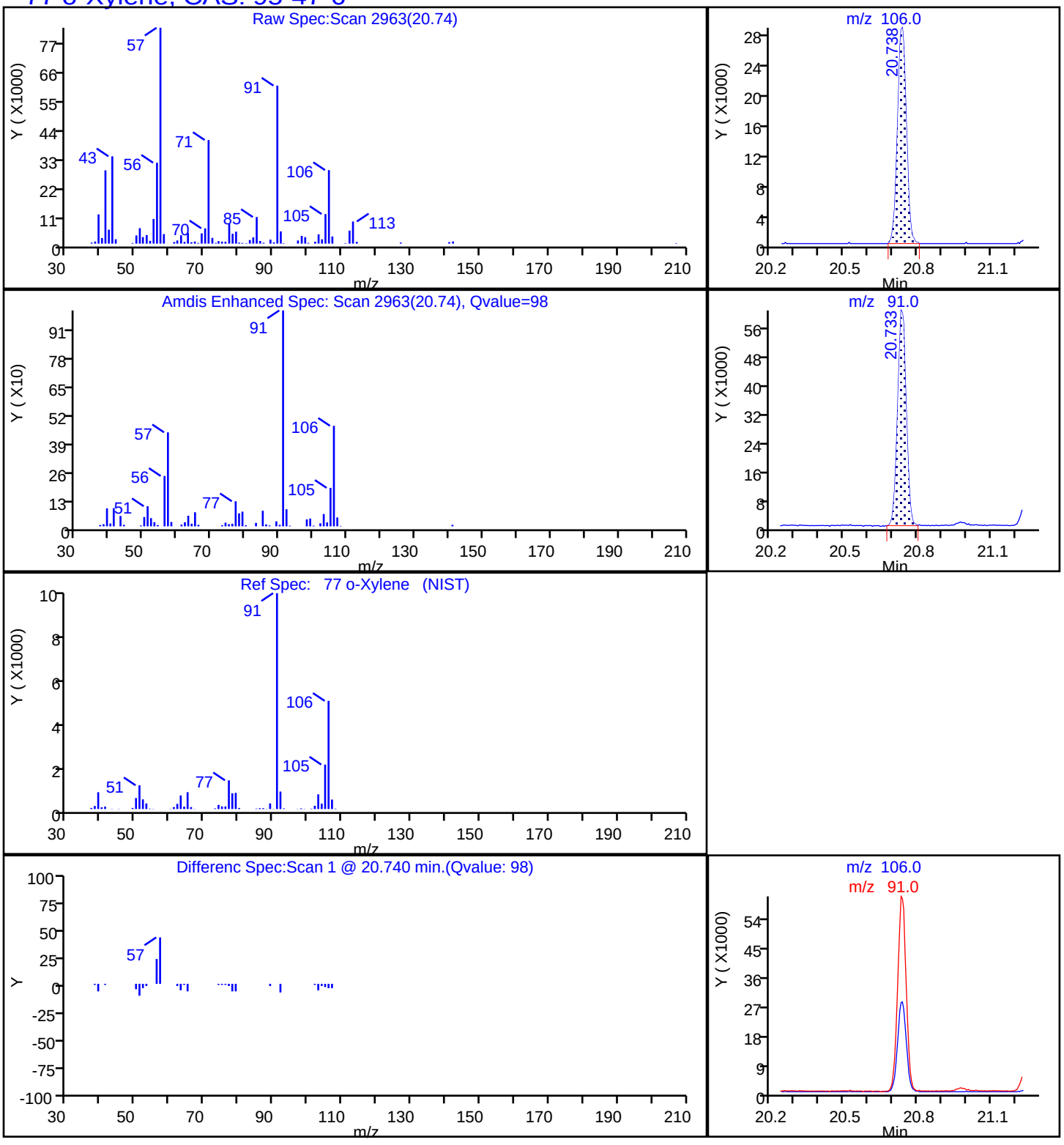




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

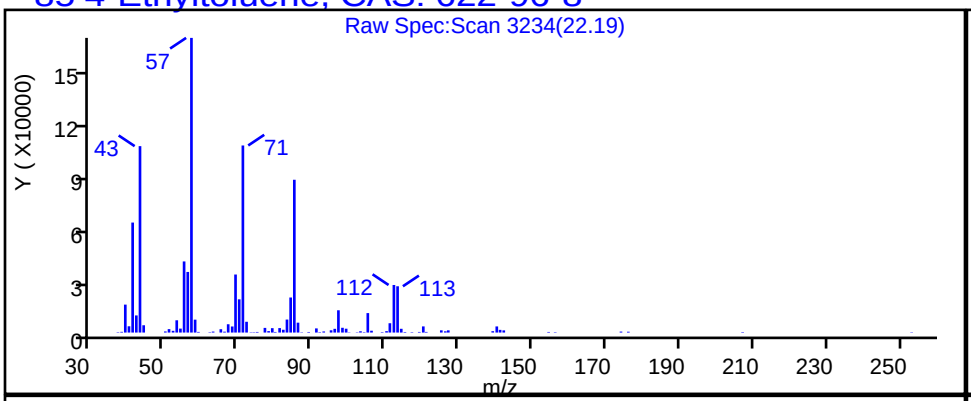
77 o-Xylene, CAS: 95-47-6

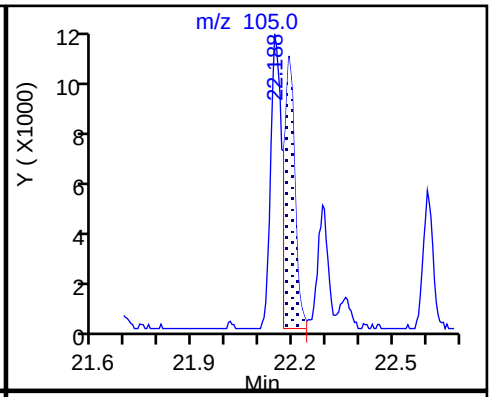


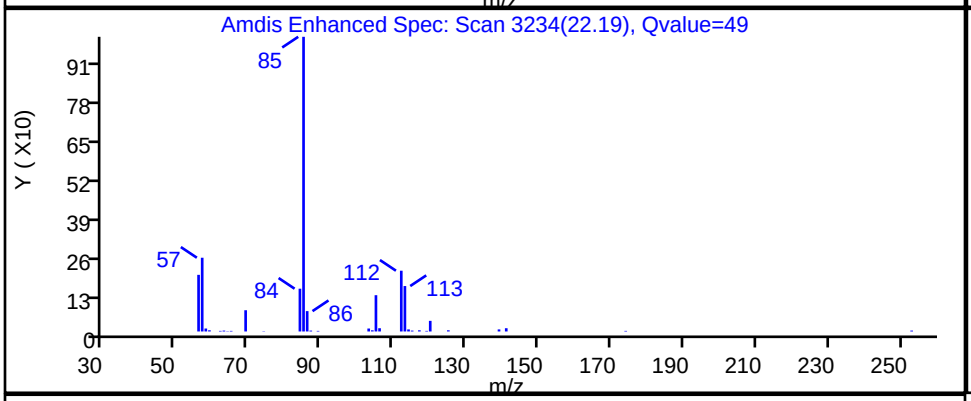
TestAmerica Burlington

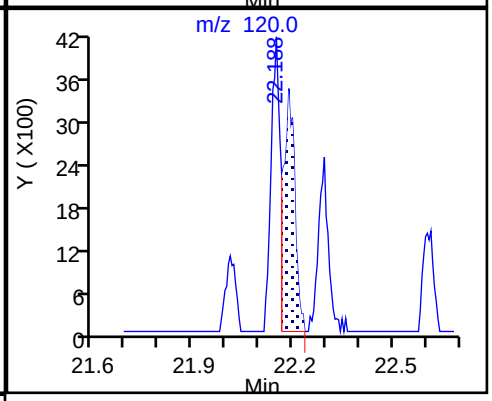
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

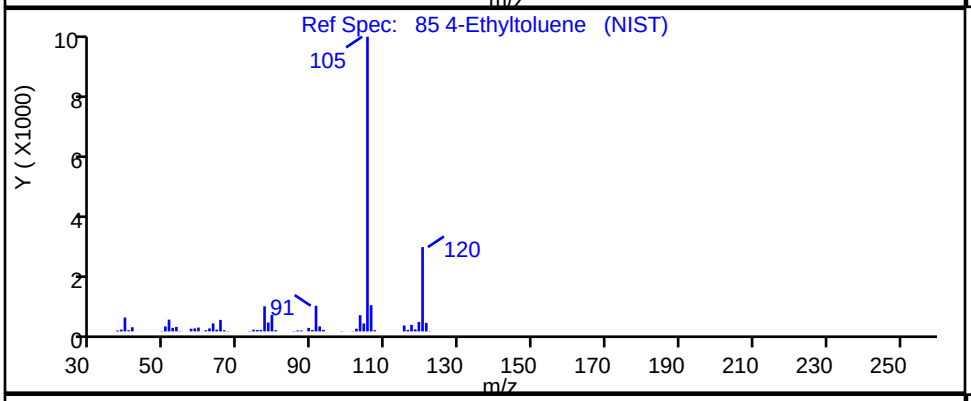
85 4-Ethyltoluene, CAS: 622-96-8

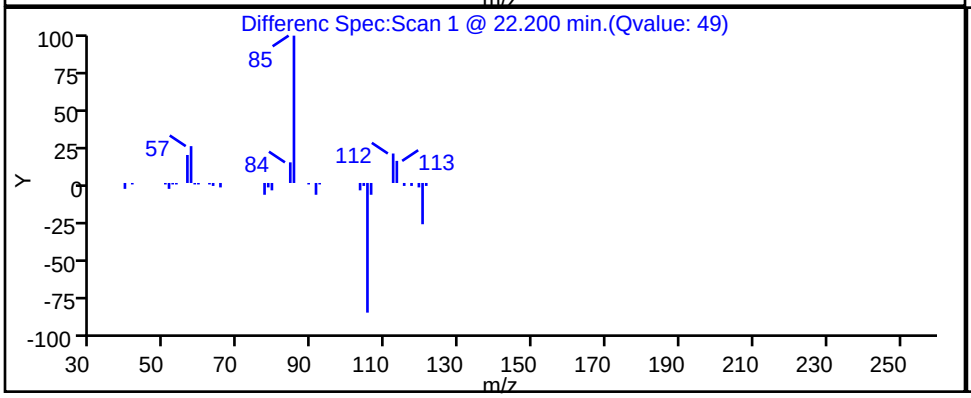


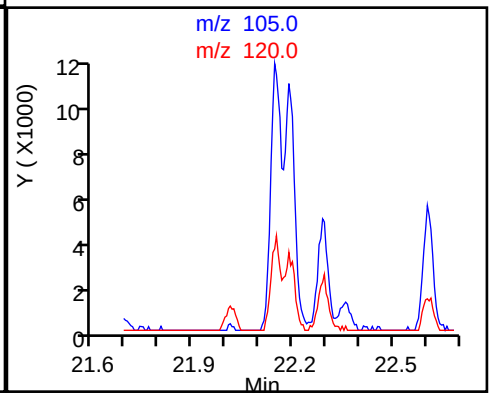








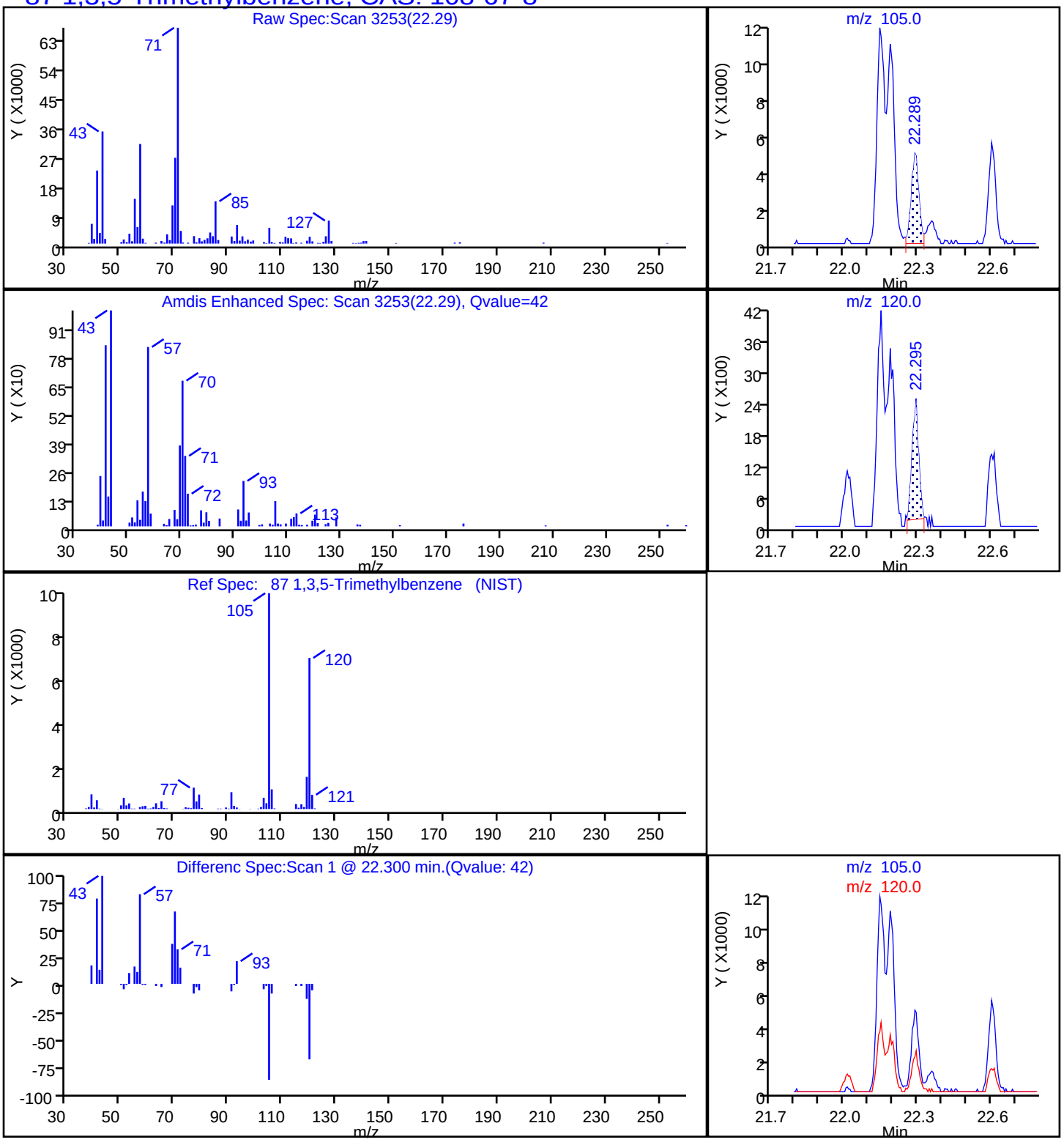




TestAmerica Burlington

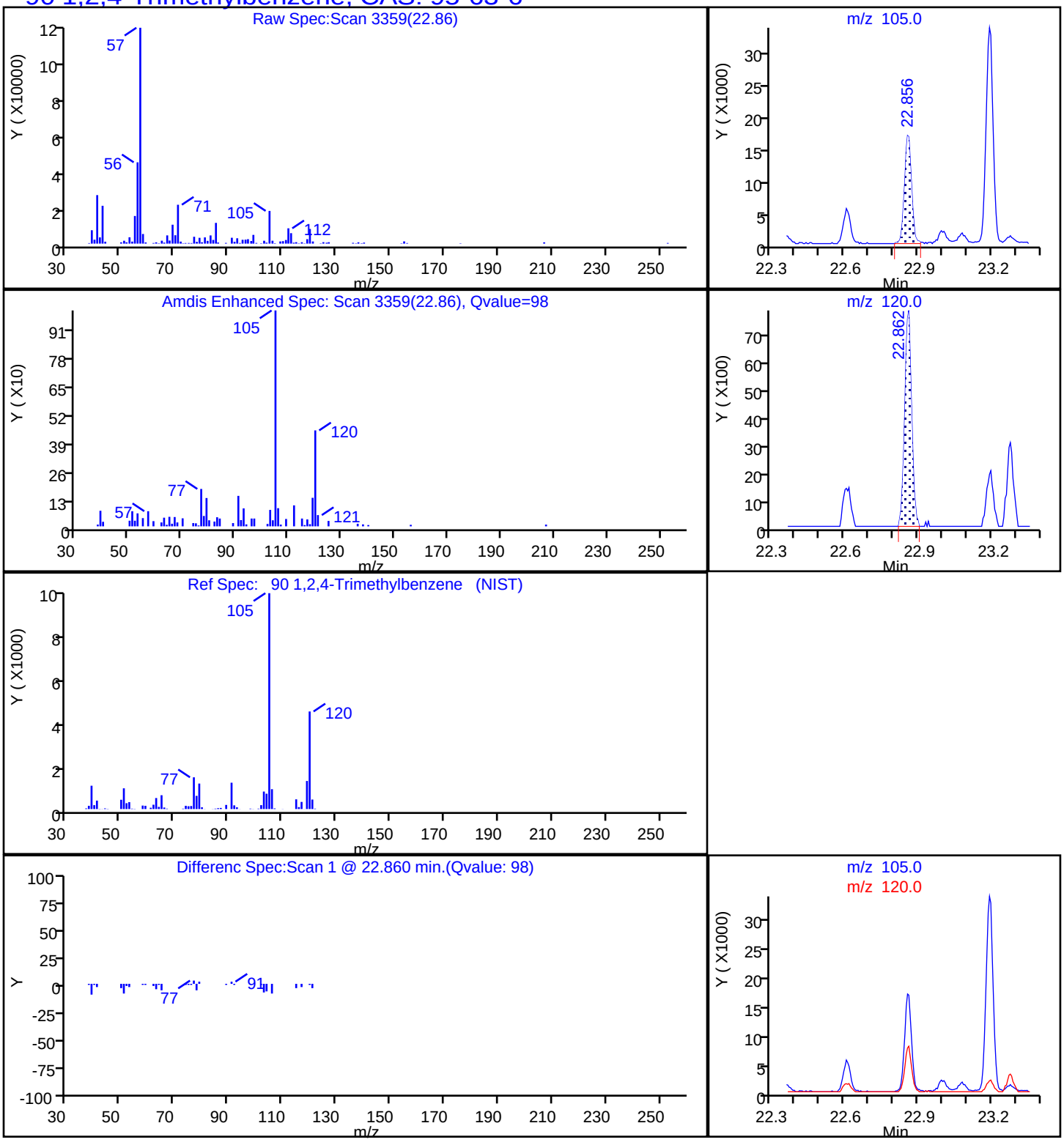
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

87 1,3,5-Trimethylbenzene, CAS: 108-67-8



Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d
Injection Date: 06-Apr-2018 03:14:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-10 Lab Sample ID: 200-42918-10
Client ID: GC-IA-108 (AS)
Operator ID: ert ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

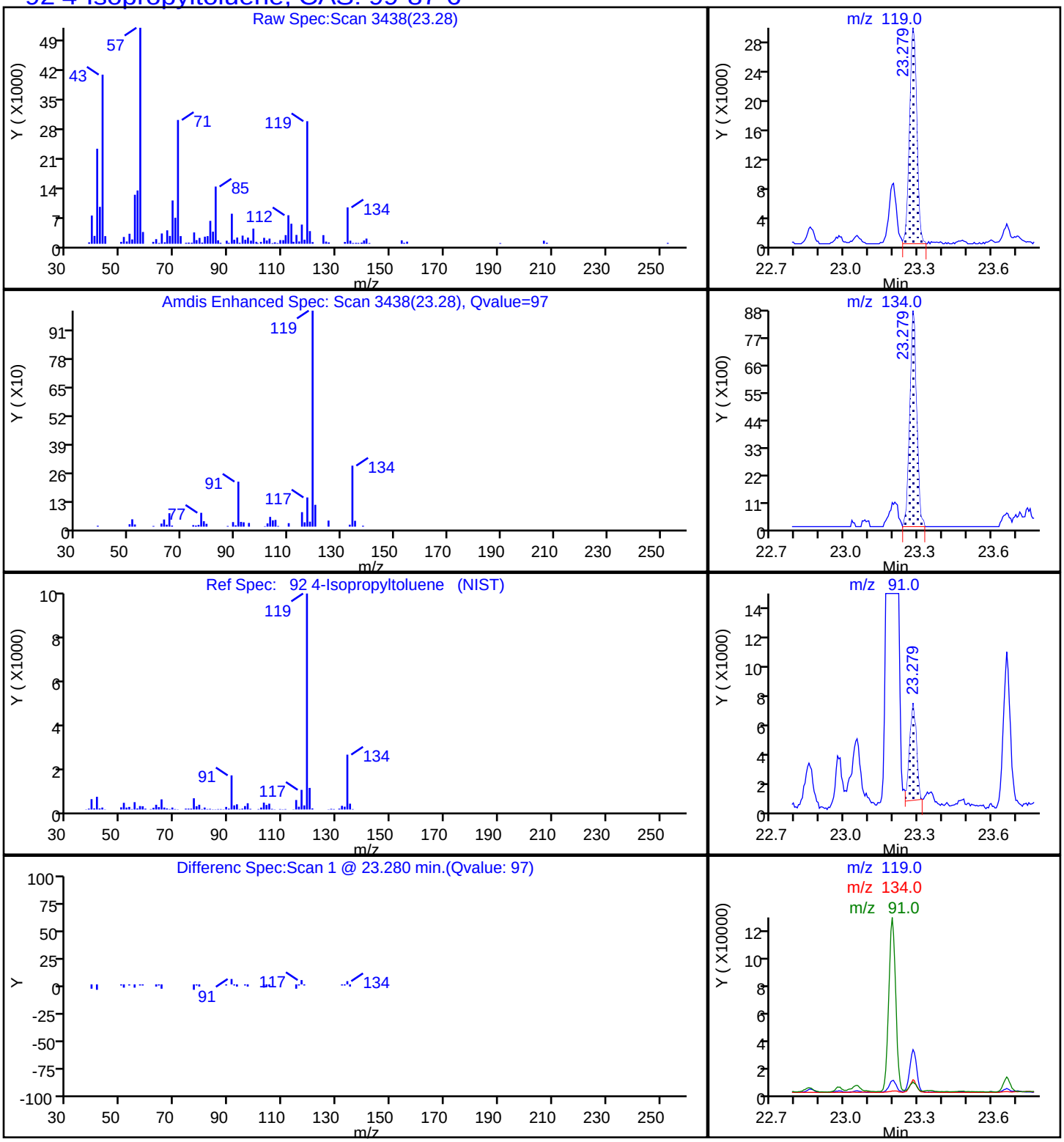
90 1,2,4-Trimethylbenzene, CAS: 95-63-6



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

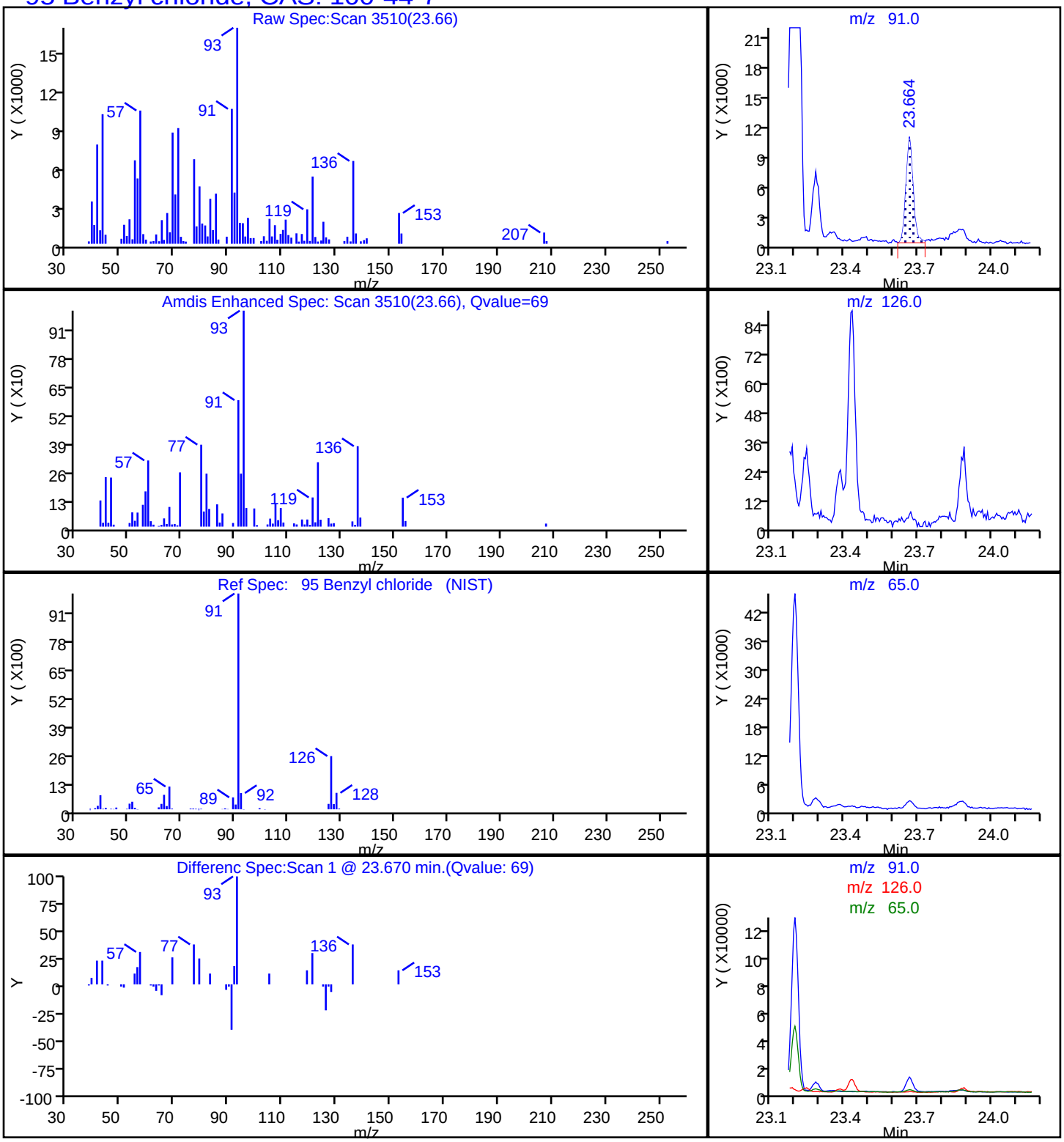
92 4-Isopropyltoluene, CAS: 99-87-6



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 Benzyl chloride, CAS: 100-44-7



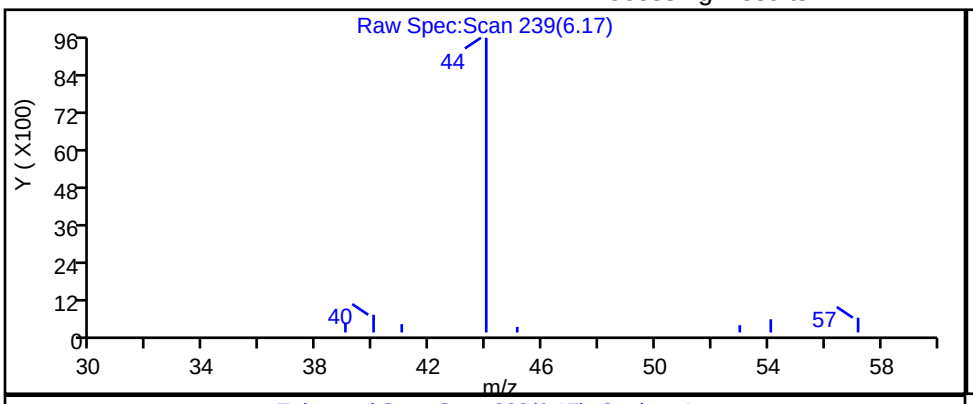
User Disabled Compound Report

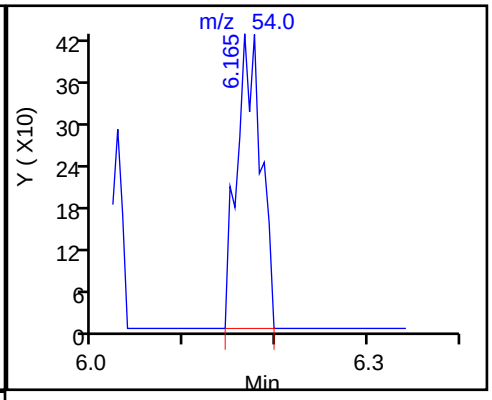
TestAmerica Burlington

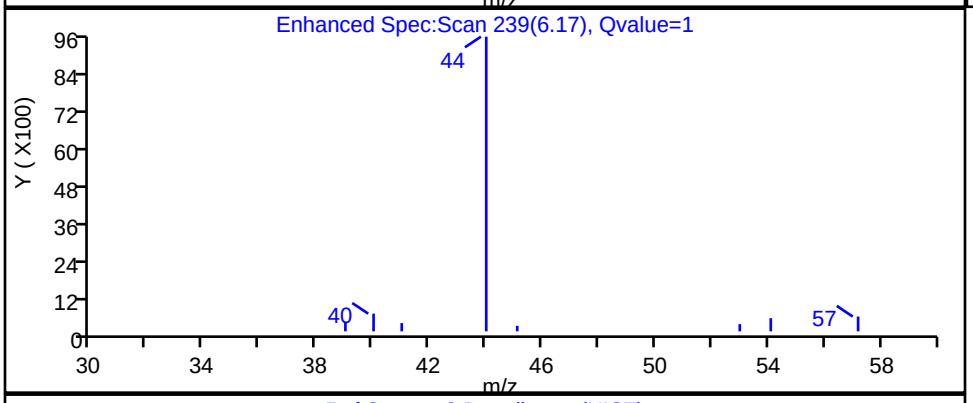
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

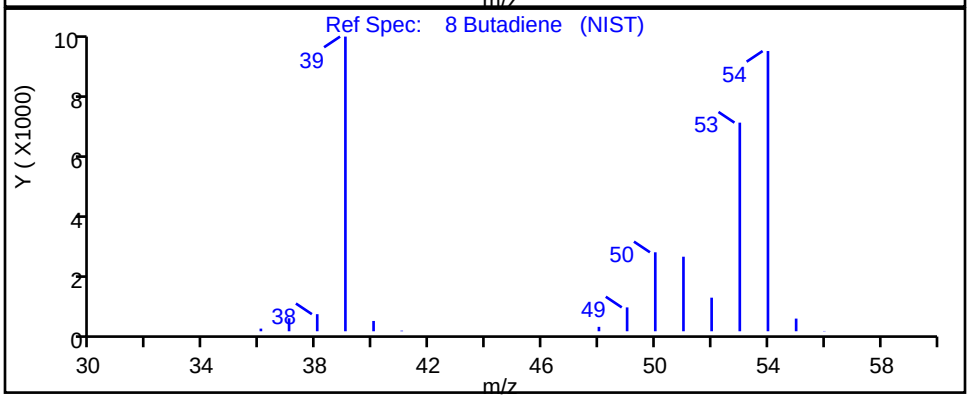
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
6.17	54.00	783	0.040034

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

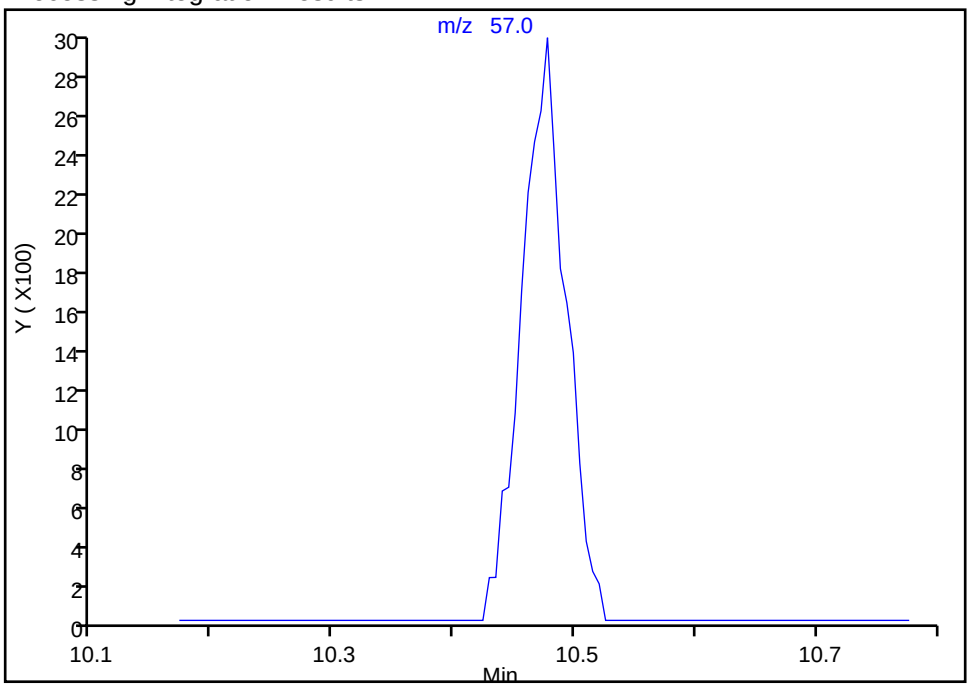
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3

Signal: 1

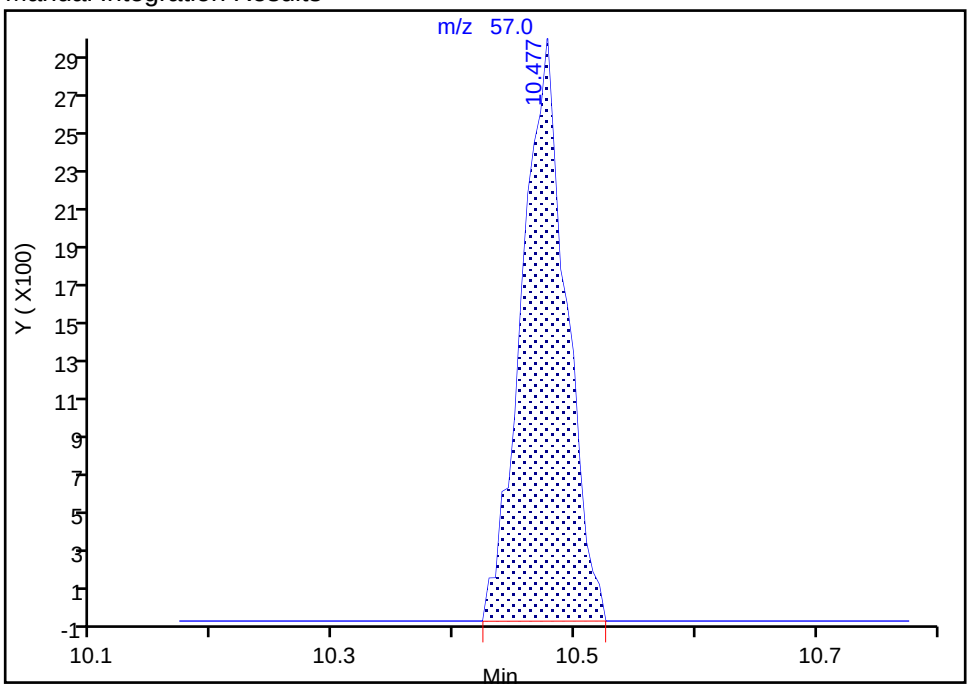
Not Detected
Expected RT: 10.48

Processing Integration Results



Manual Integration Results

RT: 10.48
Area: 7377
Amount: 0.262125
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:51:49
Audit Action: Manually Integrated Audit Reason: Assign Peak

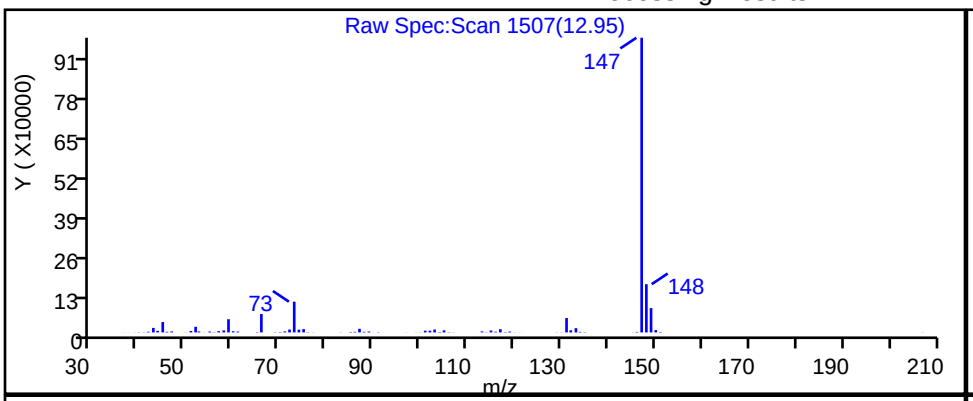
User Disabled Compound Report

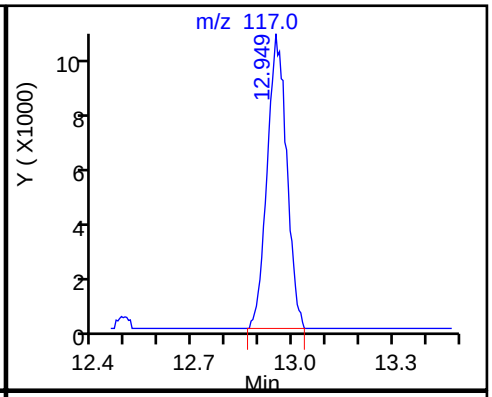
TestAmerica Burlington

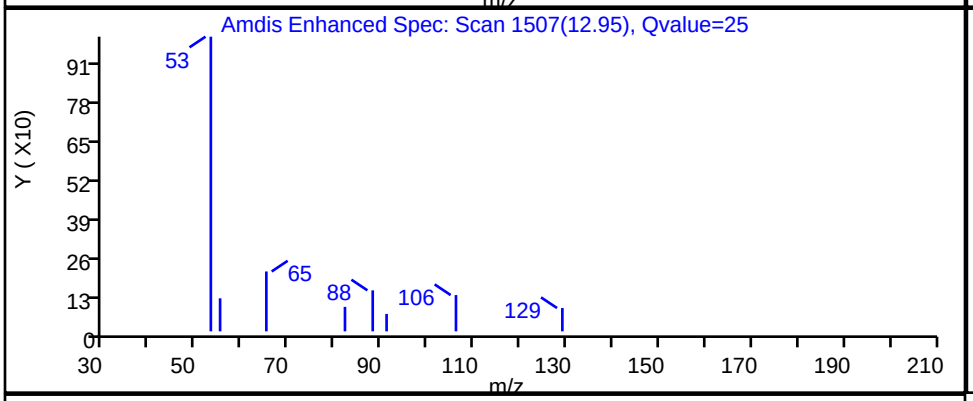
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

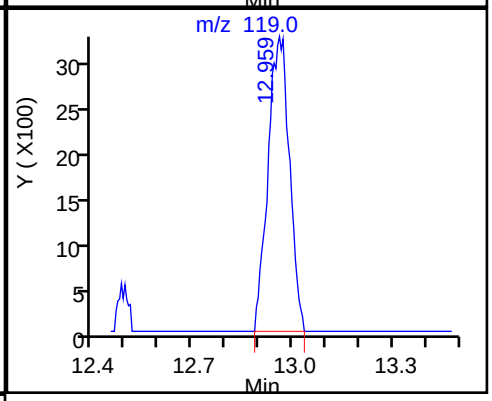
44 Carbon tetrachloride, CAS: 56-23-5

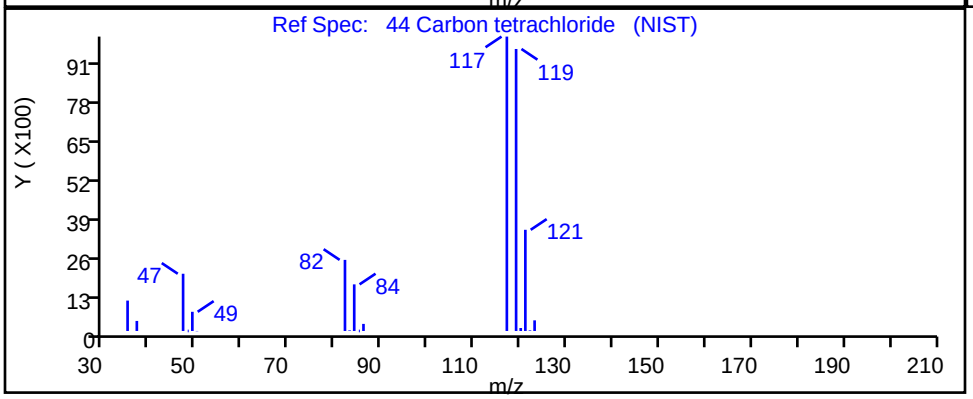
Processing Results











RT	Mass	Response	Amount
12.95	117.00	43592	0.896780
12.96	119.00	14396	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

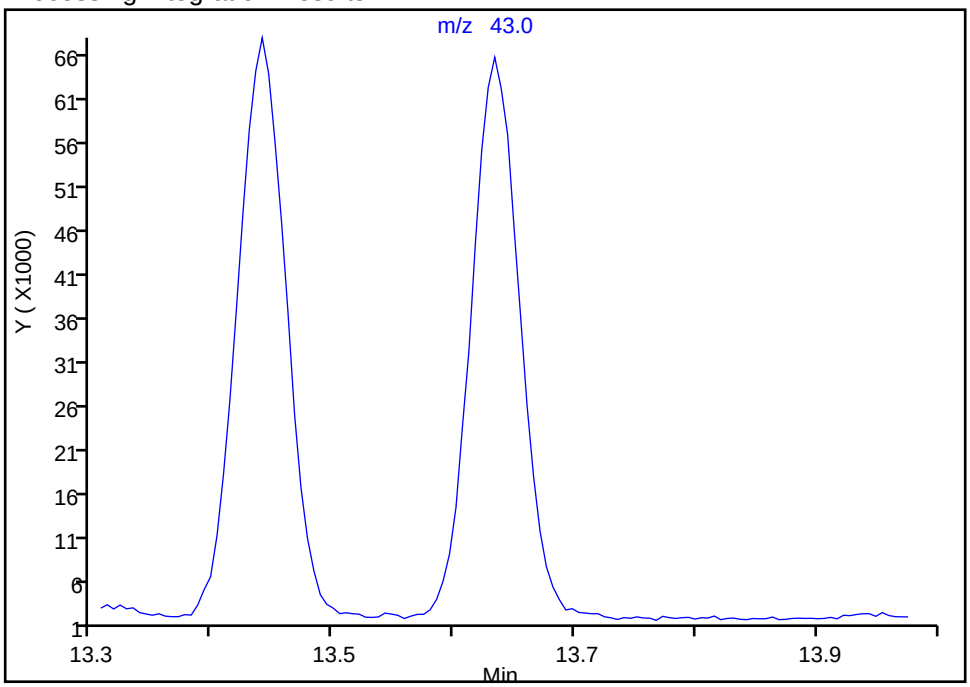
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 n-Heptane, CAS: 142-82-5

Signal: 1

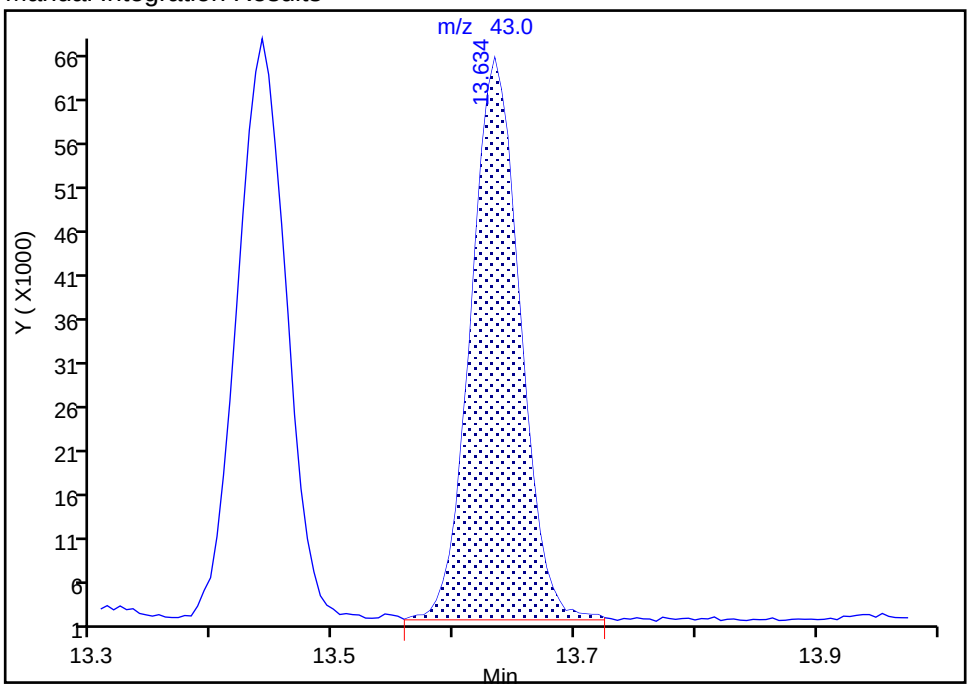
Not Detected
Expected RT: 13.63

Processing Integration Results



Manual Integration Results

RT: 13.63
Area: 181735
Amount: 5.375599
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:53:52
Audit Action: Manually Integrated Audit Reason: Assign Peak

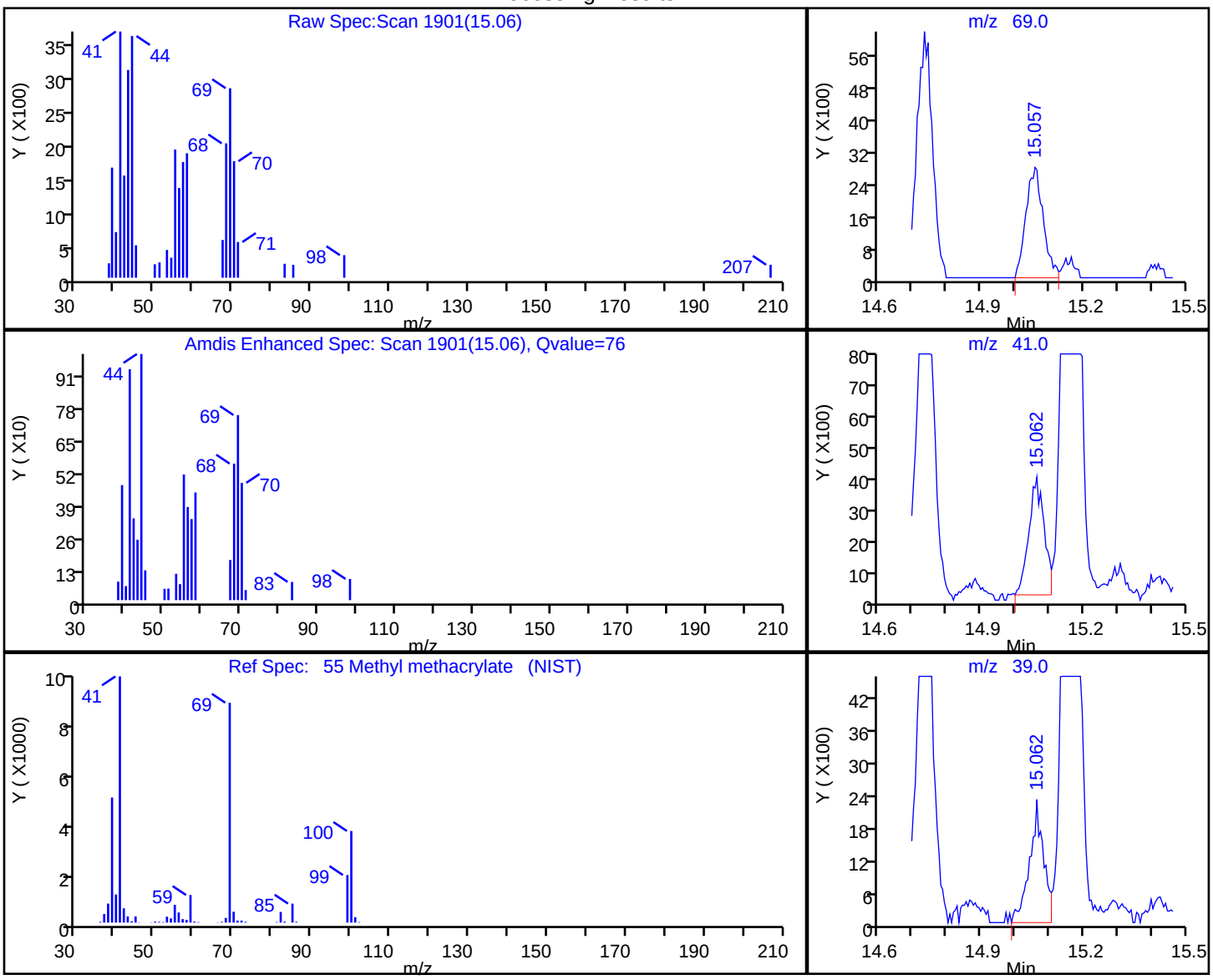
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

55 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
15.06	69.00	9823	0.413739
15.06	41.00	11881	
15.06	39.00	6551	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

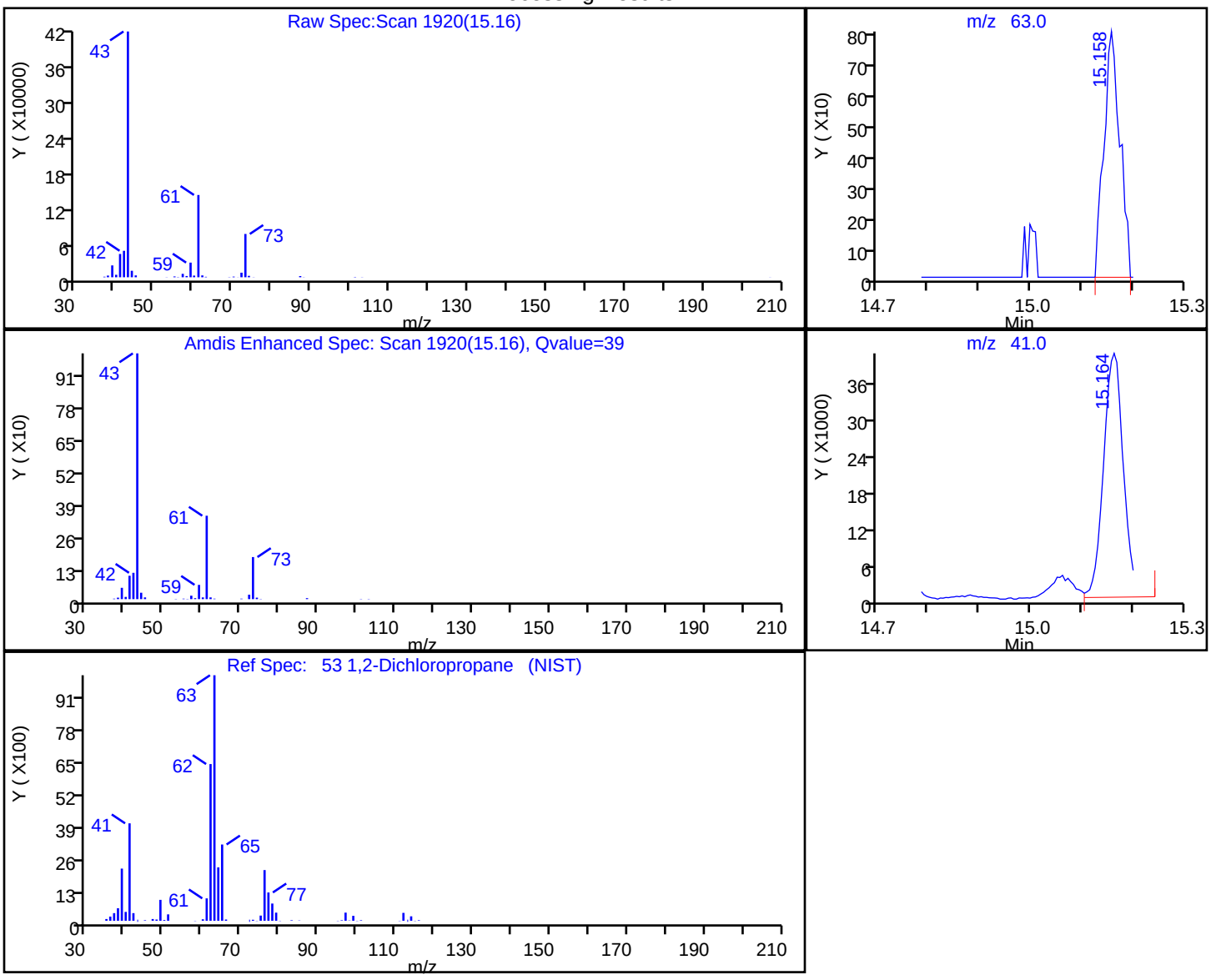
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
15.16	63.00	1764	0.073098
15.16	41.00	109945	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

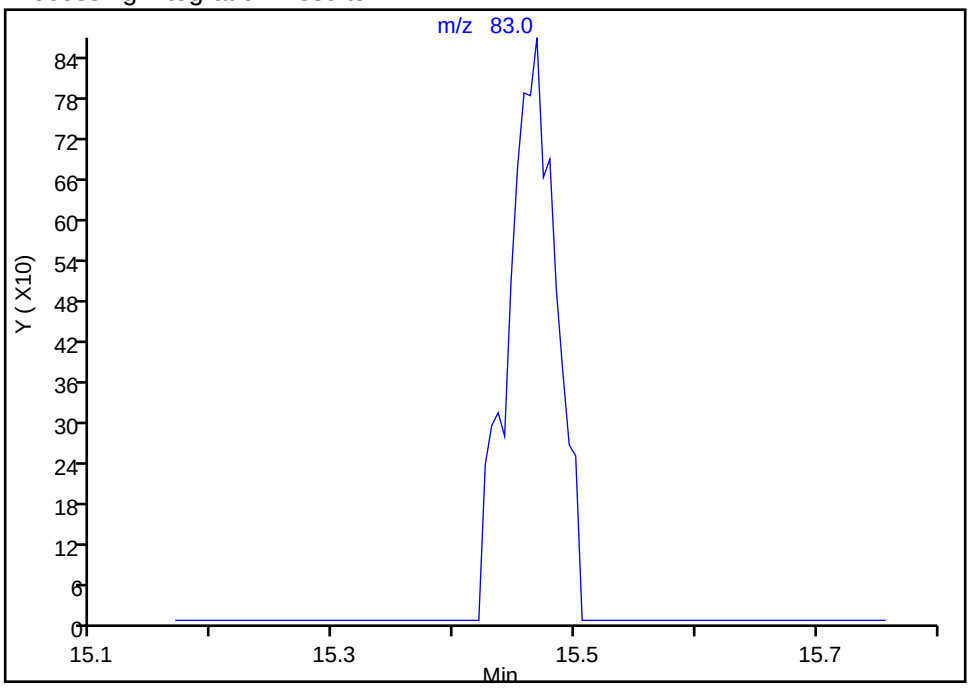
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

58 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

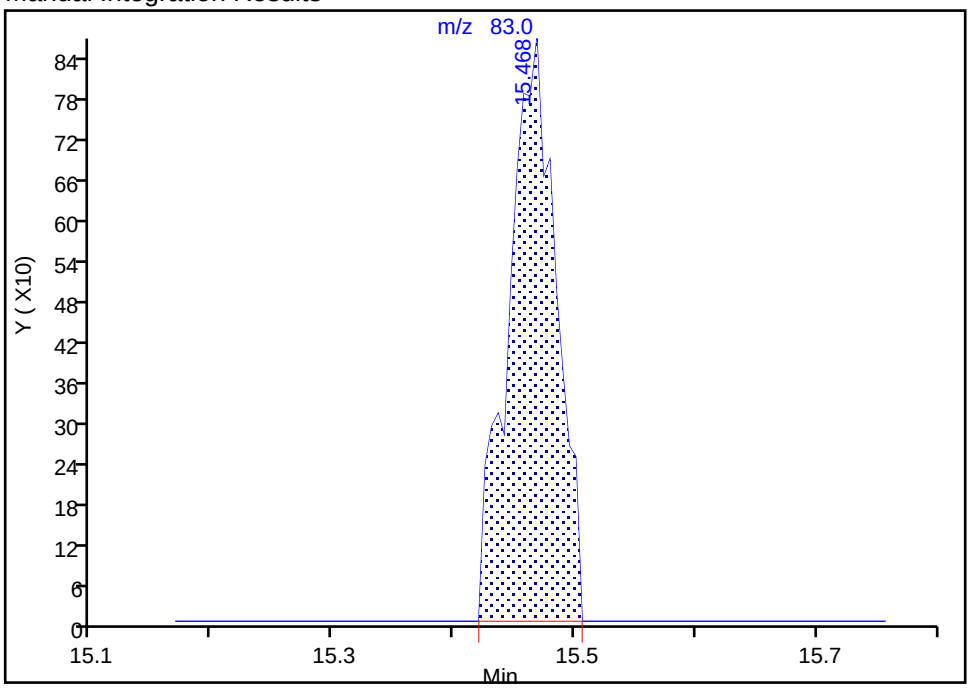
Not Detected
Expected RT: 15.46

Processing Integration Results



Manual Integration Results

RT: 15.47
Area: 2377
Amount: 0.049244
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:54:18
Audit Action: Manually Integrated Audit Reason: Assign Peak

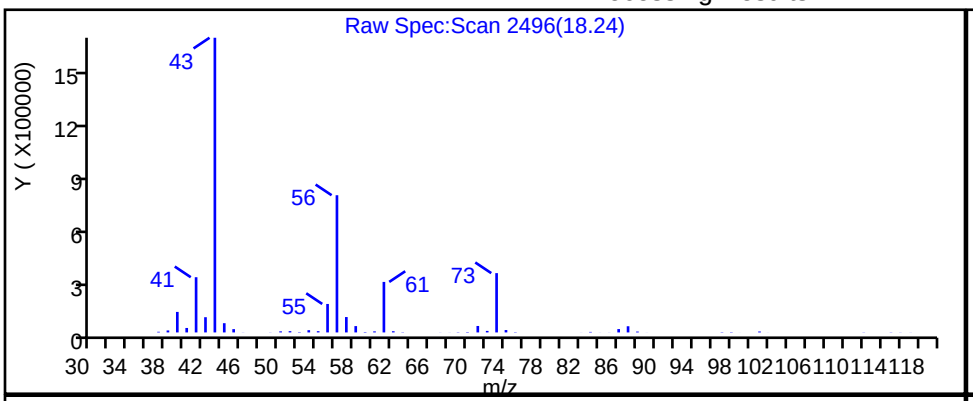
User Disabled Compound Report

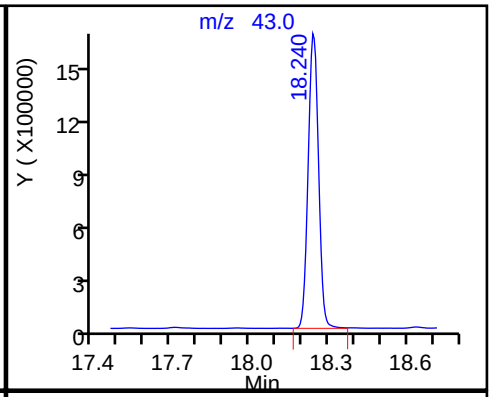
TestAmerica Burlington

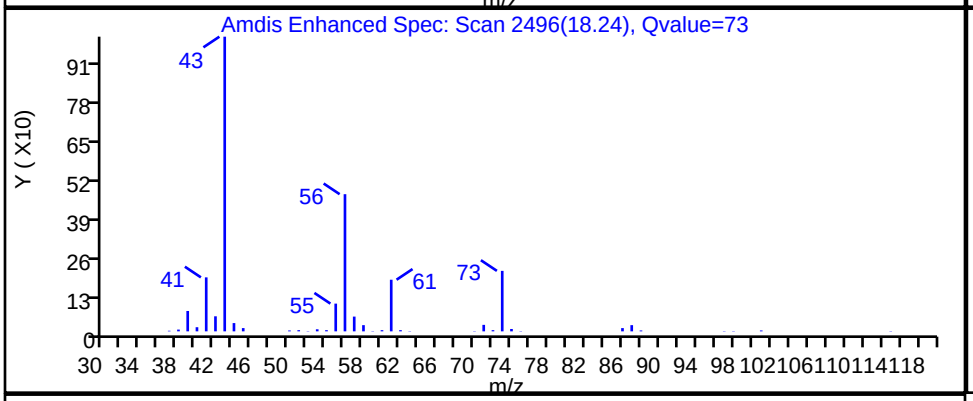
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

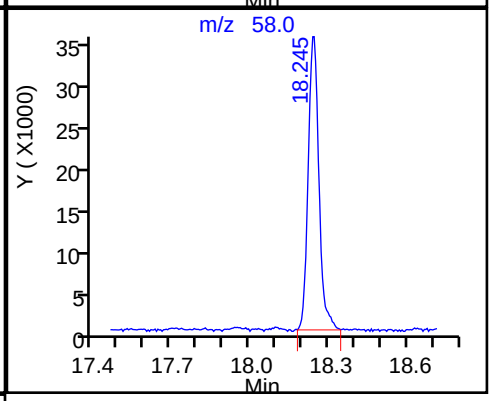
67 2-Hexanone, CAS: 591-78-6

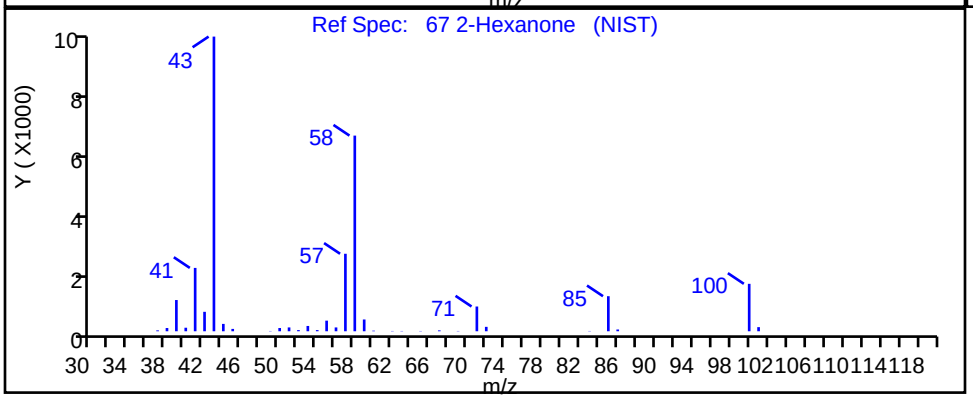
Processing Results











RT	Mass	Response	Amount
18.24	43.00	4527507	102.2688
18.24	58.00	100119	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

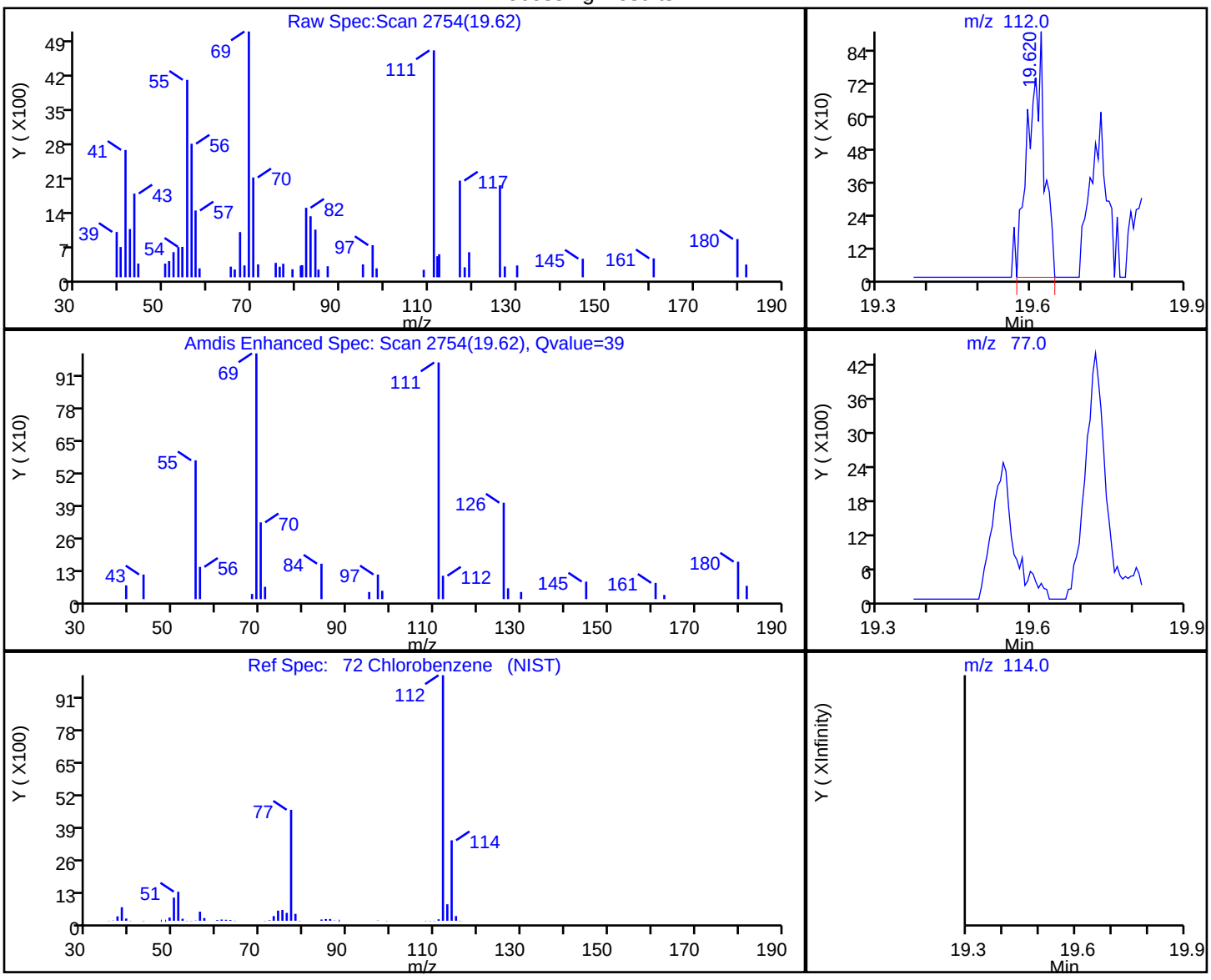
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

72 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
19.62	112.00	1919	0.026432
19.59	77.00	0	
19.59	114.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

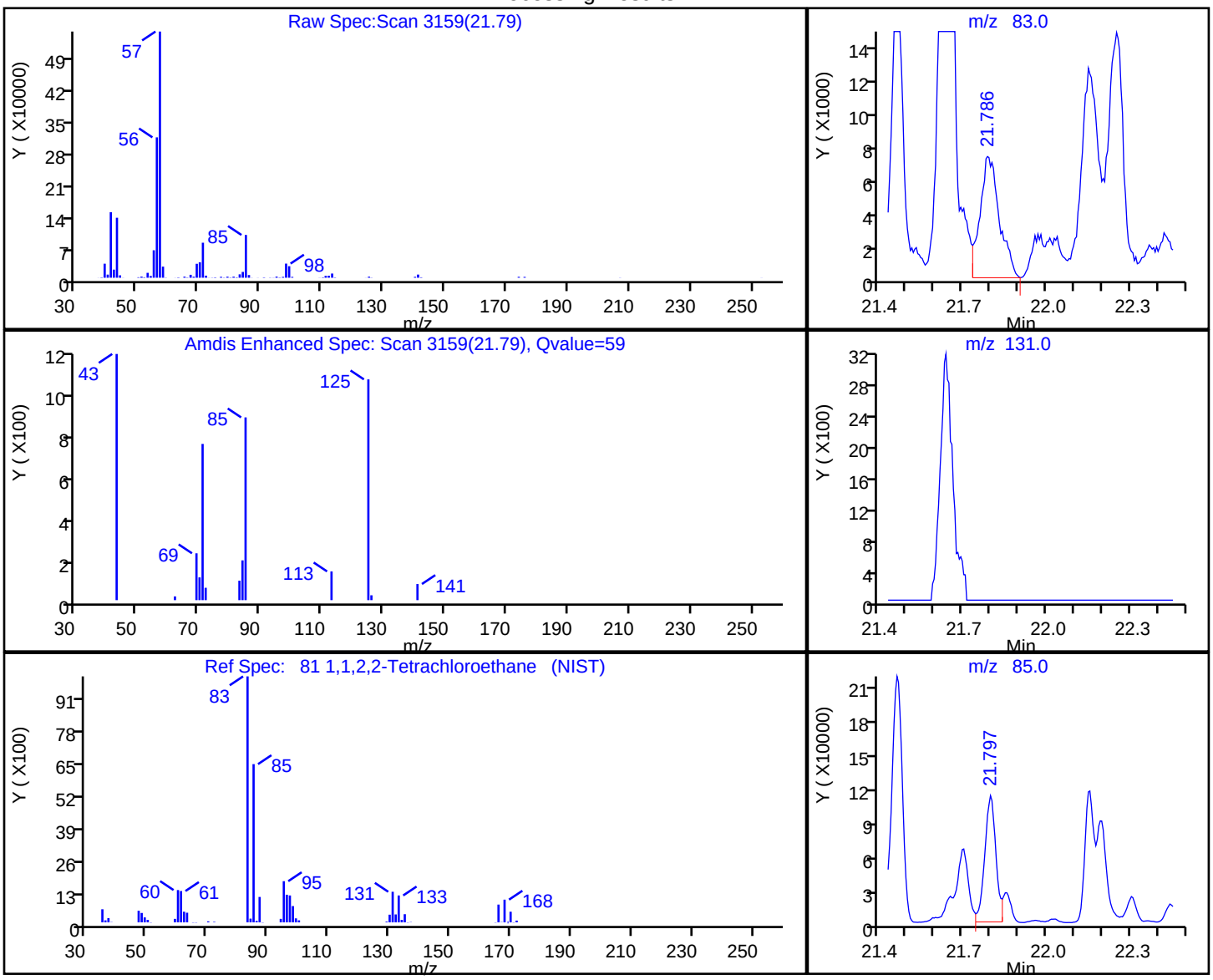
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.79	83.00	34875	0.504943
21.94	131.00	0	
21.80	85.00	312383	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

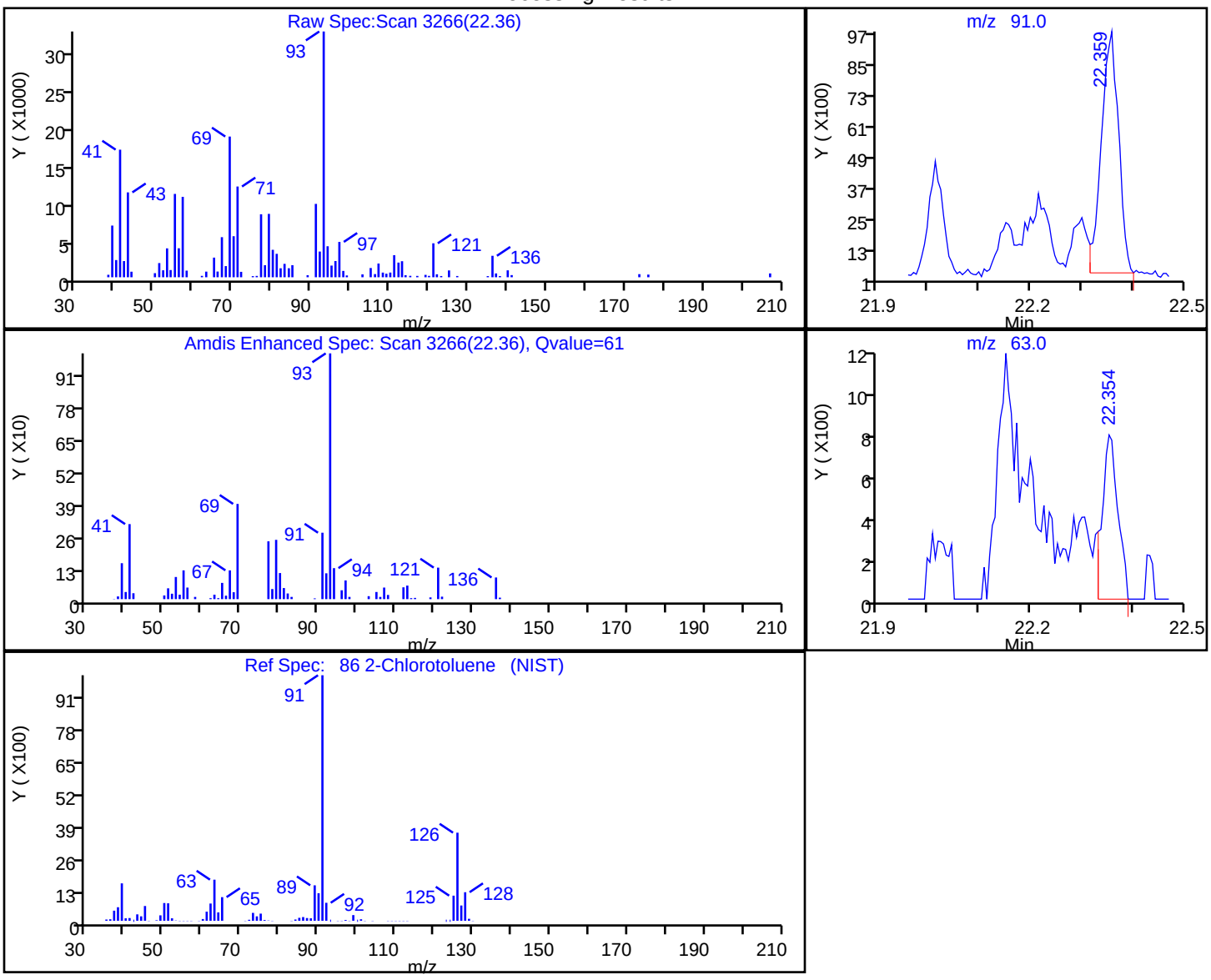
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

86 2-Chlorotoluene, CAS: 95-49-8

Processing Results



RT	Mass	Response	Amount
22.36	91.00	22243	0.190387
22.35	63.00	1637	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

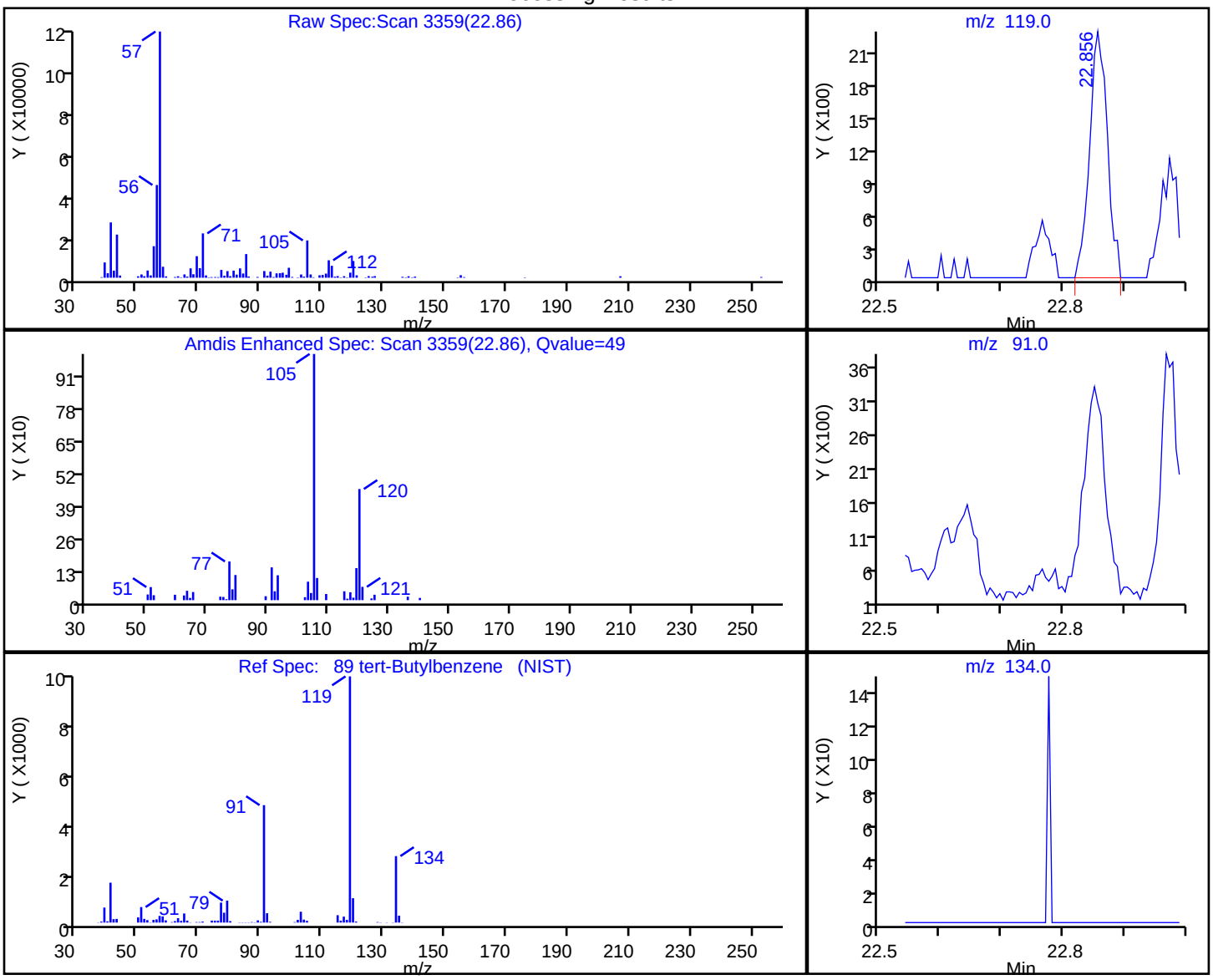
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

89 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
22.86	119.00	4608	0.037791
22.77	91.00	0	
22.77	134.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

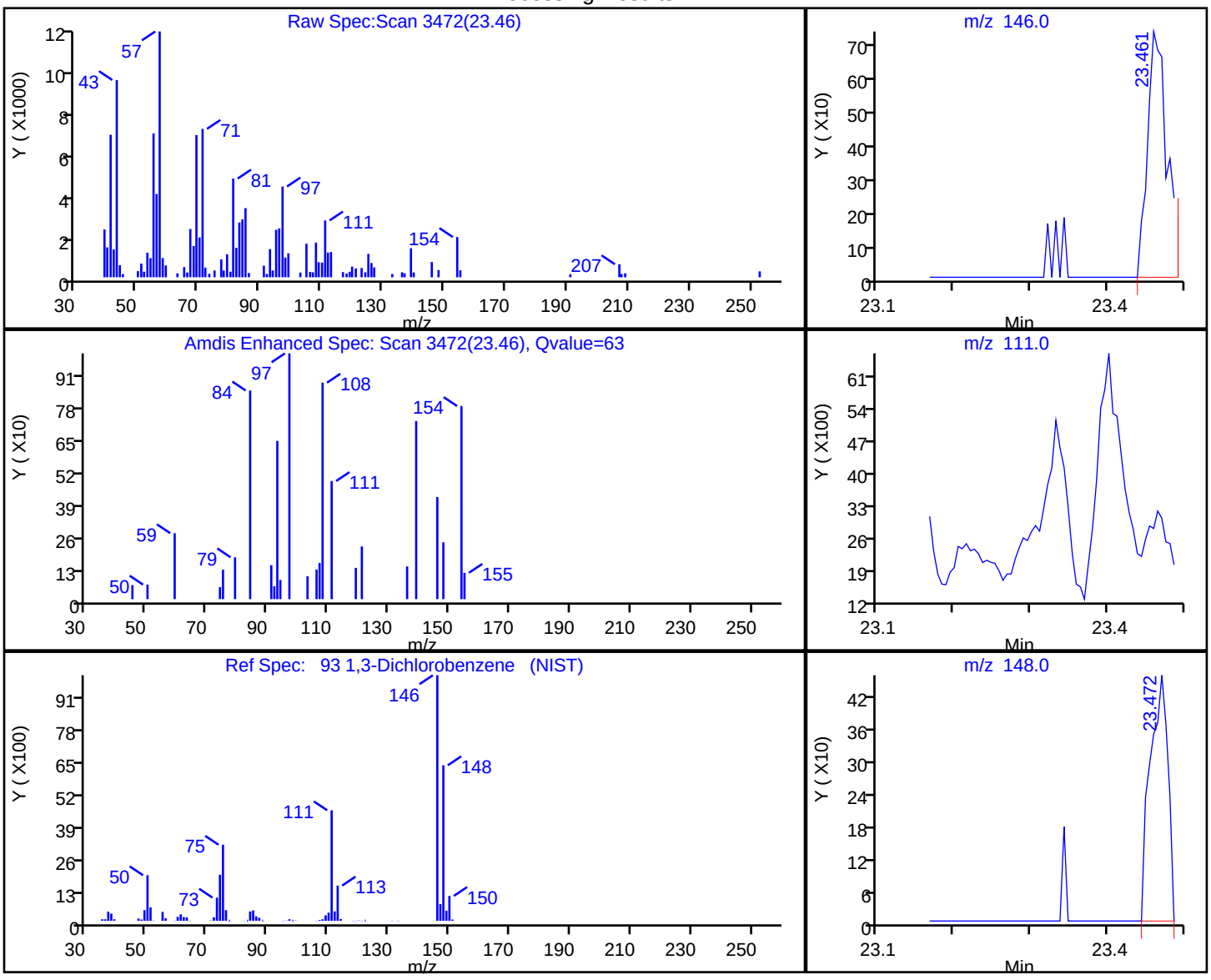
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
23.46	146.00	1261	0.015990
23.33	111.00	0	
23.47	148.00	735	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

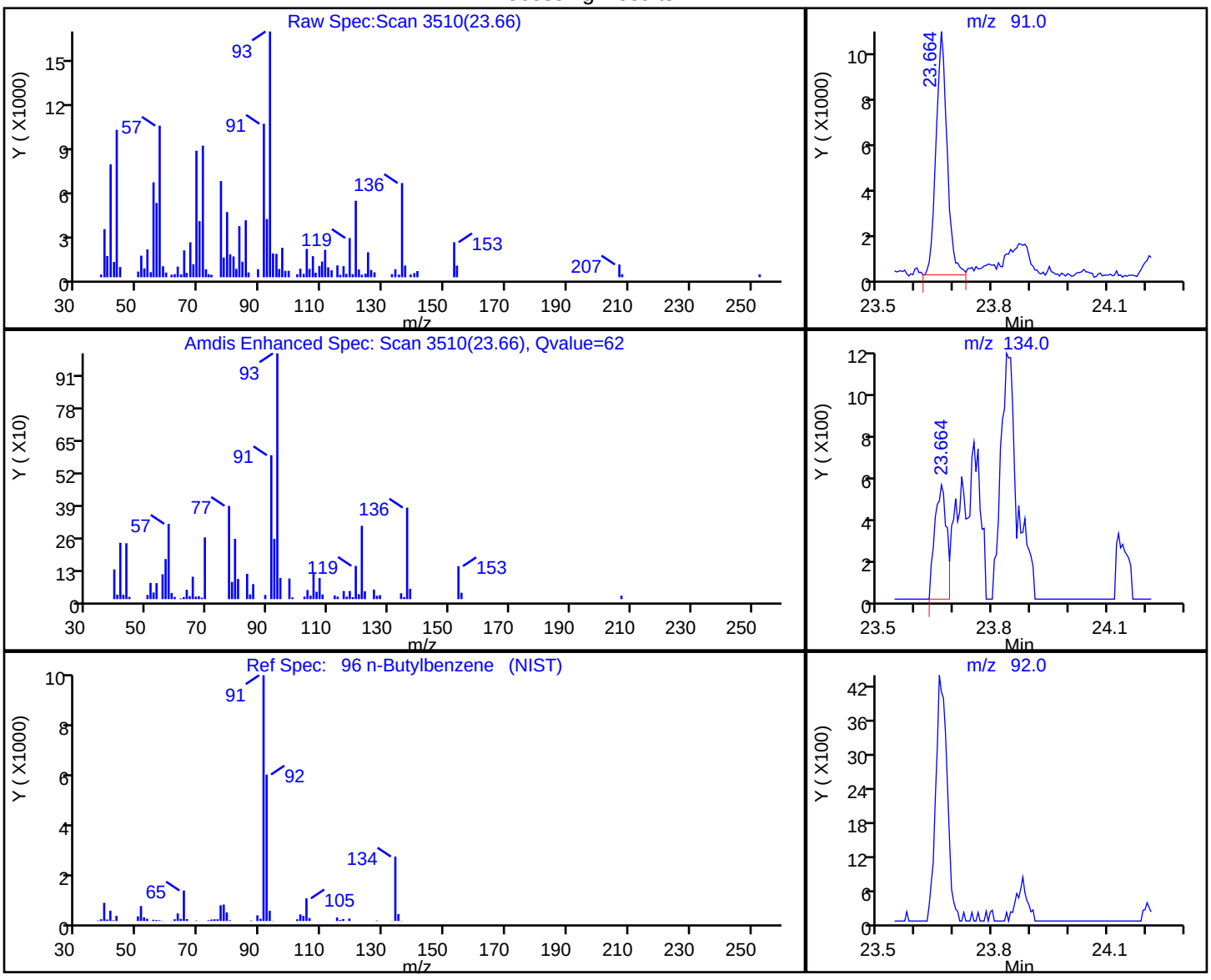
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
23.66	91.00	20668	0.174171
23.66	134.00	1189	
23.88	92.00	0	

Reviewer: puangmaleek, 09-Apr-2018 09:56:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

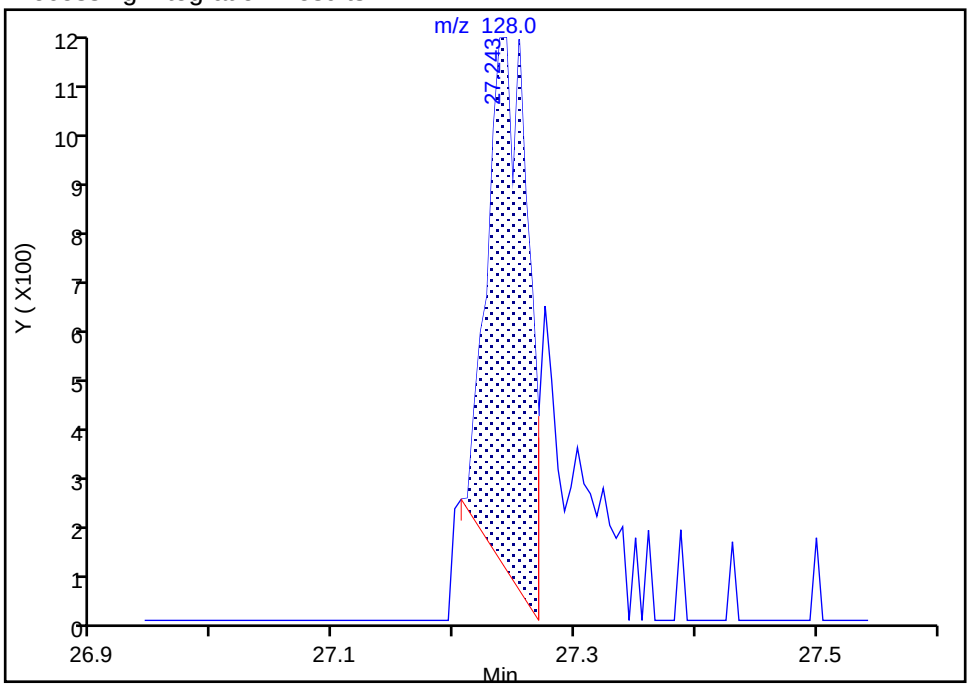
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-18.d				
Injection Date:	06-Apr-2018 03:14:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

102 Naphthalene, CAS: 91-20-3

Signal: 1

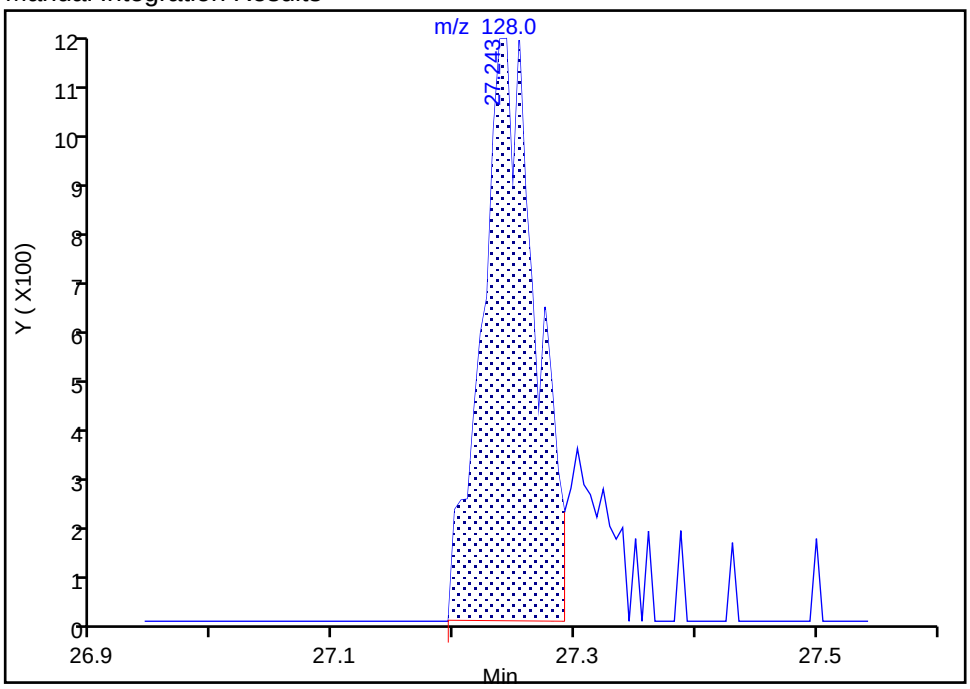
Processing Integration Results

RT: 27.24
Area: 2510
Amount: 0.031509
Amount Units: ppb v/v



Manual Integration Results

RT: 27.24
Area: 3603
Amount: 0.045229
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 09:50:01

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) DL Lab Sample ID: 200-42918-10 DL

Matrix: Air Lab File ID: 29983-11.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 20:59

Soil Aliquot Vol: Dilution Factor: 301

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	150	U	150	60
75-45-6	Freon 22	86.47	150	U	150	78
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	60	U	60	20
74-87-3	Chloromethane	50.49	150	U	150	75
106-97-8	n-Butane	58.12	150	U	150	93
75-01-4	Vinyl chloride	62.50	60	U	60	12
106-99-0	1,3-Butadiene	54.09	60	U	60	20
74-83-9	Bromomethane	94.94	60	U	60	19
75-00-3	Chloroethane	64.52	150	U	150	63
593-60-2	Bromoethene(Vinyl Bromide)	106.96	60	U	60	17
75-69-4	Trichlorofluoromethane	137.37	60	U	60	19
76-13-1	Freon TF	187.38	60	U	60	9.3
75-35-4	1,1-Dichloroethene	96.94	60	U	60	10
67-64-1	Acetone	58.08	8200	D	1500	780
67-63-0	Isopropyl alcohol	60.10	570	J D B	1500	540
75-15-0	Carbon disulfide	76.14	150	U	150	36
107-05-1	3-Chloropropene	76.53	150	U	150	81
75-09-2	Methylene Chloride	84.93	150	U	150	60
75-65-0	tert-Butyl alcohol	74.12	1500	U	1500	450
1634-04-4	Methyl tert-butyl ether	88.15	60	U	60	18
156-60-5	trans-1,2-Dichloroethene	96.94	60	U	60	22
110-54-3	n-Hexane	86.17	60	U	60	48
75-34-3	1,1-Dichloroethane	98.96	60	U	60	7.8
78-93-3	Methyl Ethyl Ketone	72.11	150	U	150	60
156-59-2	cis-1,2-Dichloroethene	96.94	60	U	60	11
540-59-0	1,2-Dichloroethene, Total	96.94	120	U	120	33
67-66-3	Chloroform	119.38	60	U	60	16
109-99-9	Tetrahydrofuran	72.11	1500	U	1500	780
71-55-6	1,1,1-Trichloroethane	133.41	60	U	60	20
110-82-7	Cyclohexane	84.16	60	U	60	19
56-23-5	Carbon tetrachloride	153.81	12	U	12	7.2
540-84-1	2,2,4-Trimethylpentane	114.23	60	U	60	26
71-43-2	Benzene	78.11	60	U	60	21
107-06-2	1,2-Dichloroethane	98.96	60	U	60	19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) DL | Lab Sample ID: 200-42918-10 DL

Matrix: Air | Lab File ID: 29983-11.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 09:45

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2018 20:59

Soil Aliquot Vol: | Dilution Factor: 301

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	60	U	60	42
79-01-6	Trichloroethene	131.39	12	U	12	9.0
80-62-6	Methyl methacrylate	100.12	150	U	150	66
78-87-5	1,2-Dichloropropane	112.99	60	U	60	36
123-91-1	1,4-Dioxane	88.11	1500	U	1500	390
75-27-4	Bromodichloromethane	163.83	60	U	60	28
10061-01-5	cis-1,3-Dichloropropene	110.97	60	U	60	29
108-10-1	methyl isobutyl ketone	100.16	150	U	150	110
108-88-3	Toluene	92.14	60	U	60	21
10061-02-6	trans-1,3-Dichloropropene	110.97	60	U	60	36
79-00-5	1,1,2-Trichloroethane	133.41	60	U	60	23
127-18-4	Tetrachloroethene	165.83	12	U	12	8.7
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	150	U	150	130
124-48-1	Dibromochloromethane	208.29	60	U	60	21
106-93-4	1,2-Dibromoethane	187.87	60	U	60	21
108-90-7	Chlorobenzene	112.56	60	U	60	12
100-41-4	Ethylbenzene	106.17	60	U	60	22
179601-23-1	m,p-Xylene	106.17	150	U	150	21
95-47-6	Xylene, o-	106.17	60	U	60	21
1330-20-7	Xylene (total)	106.17	210	U	210	42
100-42-5	Styrene	104.15	60	U	60	26
75-25-2	Bromoform	252.75	60	U	60	26
98-82-8	Cumene	120.19	60	U	60	18
79-34-5	1,1,2,2-Tetrachloroethane	167.85	60	U	60	23
103-65-1	n-Propylbenzene	120.19	60	U	60	21
622-96-8	4-Ethyltoluene	120.20	60	U	60	21
108-67-8	1,3,5-Trimethylbenzene	120.20	60	U	60	17
95-49-8	2-Chlorotoluene	126.59	60	U	60	21
98-06-6	tert-Butylbenzene	134.22	60	U	60	17
95-63-6	1,2,4-Trimethylbenzene	120.20	60	U	60	24
135-98-8	sec-Butylbenzene	134.22	60	U	60	20
99-87-6	4-Isopropyltoluene	134.22	60	U	60	23
541-73-1	1,3-Dichlorobenzene	147.00	60	U	60	25
106-46-7	1,4-Dichlorobenzene	147.00	60	U	60	20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) DL Lab Sample ID: 200-42918-10 DL

Matrix: Air Lab File ID: 29983-11.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 20:59

Soil Aliquot Vol: Dilution Factor: 301

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*60*	*U*	*60*	*36*
104-51-8	*n-Butylbenzene*	*134.22*	*60*	*U*	*60*	*24*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*60*	*U*	*60*	*21*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*150*	*U*	*150*	*72*
87-68-3	*Hexachlorobutadiene*	*260.76*	*60*	*U*	*60*	*25*
91-20-3	*Naphthalene*	*128.17*	*150*	*U*	*150*	*93*

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) DL Lab Sample ID: 200-42918-10 DL

Matrix: Air Lab File ID: 29983-11.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 20:59

Soil Aliquot Vol: Dilution Factor: 301

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	740	U	740	300
75-45-6	Freon 22	86.47	530	U	530	280
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	420	U	420	140
74-87-3	Chloromethane	50.49	310	U	310	160
106-97-8	n-Butane	58.12	360	U	360	220
75-01-4	Vinyl chloride	62.50	150	U	150	32
106-99-0	1,3-Butadiene	54.09	130	U	130	43
74-83-9	Bromomethane	94.94	230	U	230	72
75-00-3	Chloroethane	64.52	400	U	400	170
593-60-2	Bromoethene(Vinyl Bromide)	106.96	260	U	260	74
75-69-4	Trichlorofluoromethane	137.37	340	U	340	100
76-13-1	Freon TF	187.38	460	U	460	72
75-35-4	1,1-Dichloroethene	96.94	240	U	240	41
67-64-1	Acetone	58.08	19000	D	3600	1900
67-63-0	Isopropyl alcohol	60.10	1400	J D B	3700	1300
75-15-0	Carbon disulfide	76.14	470	U	470	110
107-05-1	3-Chloropropene	76.53	470	U	470	250
75-09-2	Methylene Chloride	84.93	520	U	520	210
75-65-0	tert-Butyl alcohol	74.12	4600	U	4600	1400
1634-04-4	Methyl tert-butyl ether	88.15	220	U	220	66
156-60-5	trans-1,2-Dichloroethene	96.94	240	U	240	88
110-54-3	n-Hexane	86.17	210	U	210	170
75-34-3	1,1-Dichloroethane	98.96	240	U	240	32
78-93-3	Methyl Ethyl Ketone	72.11	440	U	440	180
156-59-2	cis-1,2-Dichloroethene	96.94	240	U	240	44
540-59-0	1,2-Dichloroethene, Total	96.94	480	U	480	130
67-66-3	Chloroform	119.38	290	U	290	76
109-99-9	Tetrahydrofuran	72.11	4400	U	4400	2300
71-55-6	1,1,1-Trichloroethane	133.41	330	U	330	110
110-82-7	Cyclohexane	84.16	210	U	210	65
56-23-5	Carbon tetrachloride	153.81	76	U	76	45
540-84-1	2,2,4-Trimethylpentane	114.23	280	U	280	120
71-43-2	Benzene	78.11	190	U	190	68
107-06-2	1,2-Dichloroethane	98.96	240	U	240	77

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) DL | Lab Sample ID: 200-42918-10 DL

Matrix: Air | Lab File ID: 29983-11.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 09:45

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2018 20:59

Soil Aliquot Vol: | Dilution Factor: 301

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	250	U	250	170
79-01-6	Trichloroethene	131.39	65	U	65	49
80-62-6	Methyl methacrylate	100.12	620	U	620	270
78-87-5	1,2-Dichloropropane	112.99	280	U	280	170
123-91-1	1,4-Dioxane	88.11	5400	U	5400	1400
75-27-4	Bromodichloromethane	163.83	400	U	400	190
10061-01-5	cis-1,3-Dichloropropene	110.97	270	U	270	130
108-10-1	methyl isobutyl ketone	100.16	620	U	620	440
108-88-3	Toluene	92.14	230	U	230	78
10061-02-6	trans-1,3-Dichloropropene	110.97	270	U	270	160
79-00-5	1,1,2-Trichloroethane	133.41	330	U	330	130
127-18-4	Tetrachloroethene	165.83	82	U	82	59
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	620	U	620	520
124-48-1	Dibromochloromethane	208.29	510	U	510	180
106-93-4	1,2-Dibromoethane	187.87	460	U	460	160
108-90-7	Chlorobenzene	112.56	280	U	280	55
100-41-4	Ethylbenzene	106.17	260	U	260	95
179601-23-1	m,p-Xylene	106.17	650	U	650	91
95-47-6	Xylene, o-	106.17	260	U	260	93
1330-20-7	Xylene (total)	106.17	910	U	910	180
100-42-5	Styrene	104.15	260	U	260	110
75-25-2	Bromoform	252.75	620	U	620	270
98-82-8	Cumene	120.19	300	U	300	87
79-34-5	1,1,2,2-Tetrachloroethane	167.85	410	U	410	160
103-65-1	n-Propylbenzene	120.19	300	U	300	100
622-96-8	4-Ethyltoluene	120.20	300	U	300	100
108-67-8	1,3,5-Trimethylbenzene	120.20	300	U	300	86
95-49-8	2-Chlorotoluene	126.59	310	U	310	110
98-06-6	tert-Butylbenzene	134.22	330	U	330	96
95-63-6	1,2,4-Trimethylbenzene	120.20	300	U	300	120
135-98-8	sec-Butylbenzene	134.22	330	U	330	110
99-87-6	4-Isopropyltoluene	134.22	330	U	330	120
541-73-1	1,3-Dichlorobenzene	147.00	360	U	360	150
106-46-7	1,4-Dichlorobenzene	147.00	360	U	360	120

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-108 (AS) DL Lab Sample ID: 200-42918-10 DL

Matrix: Air Lab File ID: 29983-11.d

Analysis Method: TO-15 Date Collected: 03/28/2018 09:45

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2018 20:59

Soil Aliquot Vol: Dilution Factor: 301

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*310*	*U*	*310*	*190*
104-51-8	*n-Butylbenzene*	*134.22*	*330*	*U*	*330*	*130*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*360*	*U*	*360*	*130*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*1100*	*U*	*1100*	*540*
87-68-3	*Hexachlorobutadiene*	*260.76*	*640*	*U*	*640*	*260*
91-20-3	*Naphthalene*	*128.17*	*790*	*U*	*790*	*490*

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d
Lims ID: 200-42918-A-10
Client ID: GC-IA-108 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 20:59:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 301.0000
Sample Info: 200-0029983-011
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 18:50:04 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 18:50:04

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85		5.149				ND	
	3 Chlorodifluoromethane	51		5.235				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
	5 Chloromethane	50		5.748				ND	
	6 Butane	43		6.026				ND	MUa
	7 Vinyl chloride	62		6.080				ND	
	8 Butadiene	54		6.176				ND	
	9 Bromomethane	94		6.979				ND	
	11 Chloroethane	64		7.225				ND	
	13 Vinyl bromide	106		7.631				ND	
	14 Trichlorofluoromethane	101		7.728				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	8.969	9.022	-0.032	97	645779	27.1	
	23 Carbon disulfide	76		9.193				ND	
	24 Isopropyl alcohol	45	9.183	9.204	-0.021	100	46250	1.88	
	25 3-Chloro-1-propene	41		9.493				ND	
	27 Methylene Chloride	49	9.734	9.734	-0.026	25	846	0.0538	7a
	28 2-Methyl-2-propanol	59		9.889				ND	
	29 Methyl tert-butyl ether	73		10.092				ND	
	30 trans-1,2-Dichloroethene	61		10.156				ND	
S	31 1,2-Dichloroethene, Total	61		10.200				ND	
	33 Hexane	57		10.483				ND	
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.949				ND	
	37 2-Butanone (MEK)	72	11.948	11.944	-0.017	93	1664	0.1945	
	39 Tetrahydrofuran	42	12.360	12.352	-0.011	84	21797	1.29	
*	40 Chlorobromomethane	128	12.350	12.377	-0.026	79	119203	10.0	
	41 Chloroform	83		12.467				ND	
	42 Cyclohexane	84		12.724				ND	
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117		12.965				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Isooctane	57		13.318				ND	
	46 Benzene	78		13.382				ND	
	47 1,2-Dichloroethane	62		13.532				ND	
	48 n-Heptane	43		13.634				ND	
*	49 1,4-Difluorobenzene	114	14.056	14.078	-0.022	94	623601	10.0	
	51 Trichloroethene	95		14.500				ND	
	53 1,2-Dichloropropane	63		14.998				ND	
	55 Methyl methacrylate	69		15.078				ND	
	56 1,4-Dioxane	88		15.164				ND	
	58 Dichlorobromomethane	83		15.458				ND	
	59 cis-1,3-Dichloropropene	75		16.282				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	
	63 Toluene	92	16.806	16.806	-0.016	91	962	0.0255	M
	64 trans-1,3-Dichloropropene	75		17.352				ND	
	65 1,1,2-Trichloroethane	83		17.699				ND	
	66 Tetrachloroethene	166		17.817				ND	
	67 2-Hexanone	43		18.090				ND	U
	68 Chlorodibromomethane	129		18.427				ND	
	69 Ethylene Dibromide	107		18.700				ND	
*	71 Chlorobenzene-d5	117	19.534	19.540	-0.006	85	528702	10.0	
	72 Chlorobenzene	112		19.599				ND	
	73 Ethylbenzene	91		19.727				ND	U
	75 m-Xylene & p-Xylene	106		19.962				ND	
S	76 Xylenes, Total	106		20.100				ND	
	77 o-Xylene	106		20.738				ND	
	78 Styrene	104		20.781				ND	
	79 Bromoform	173		21.171				ND	
	80 Isopropylbenzene	105		21.343				ND	
	81 1,1,2,2-Tetrachloroethane	83		21.942				ND	
	82 N-Propylbenzene	91		22.011				ND	
	85 4-Ethyltoluene	105		22.193				ND	
	86 2-Chlorotoluene	91		22.209				ND	
	87 1,3,5-Trimethylbenzene	105		22.290				ND	
	89 tert-Butylbenzene	119		22.766				ND	
	90 1,2,4-Trimethylbenzene	105		22.857				ND	
	91 sec-Butylbenzene	105		23.081				ND	
	92 4-Isopropyltoluene	119		23.279				ND	
	93 1,3-Dichlorobenzene	146		23.327				ND	
	94 1,4-Dichlorobenzene	146		23.466				ND	
	95 Benzyl chloride	91		23.670				ND	
	96 n-Butylbenzene	91		23.878				ND	
	98 1,2-Dichlorobenzene	146		24.028				ND	
	100 1,2,4-Trichlorobenzene	180		26.703				ND	
	101 Hexachlorobutadiene	225		26.896				ND	
	102 Naphthalene	128		27.238				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

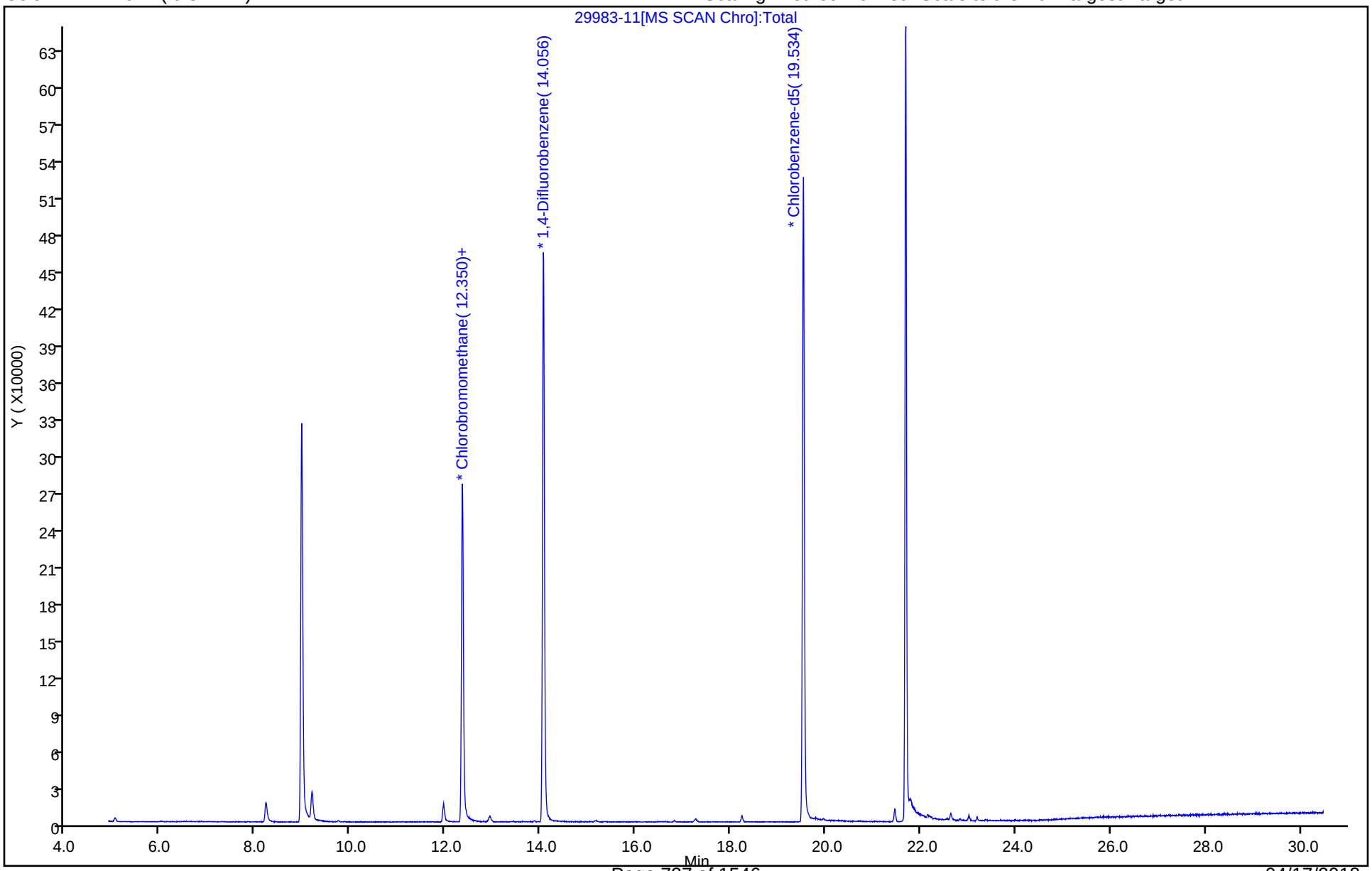
Report Date: 09-Apr-2018 18:50:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d

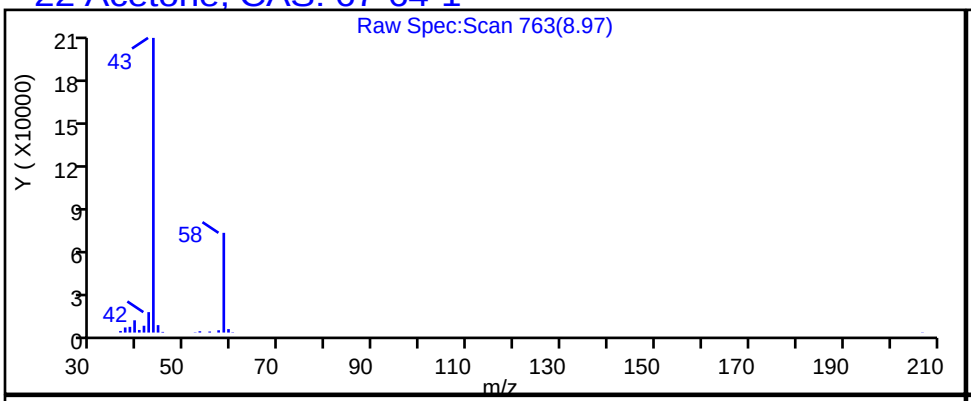
Injection Date:	06-Apr-2018 20:59:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10	Worklist Smp#:	11
Client ID:	GC-IA-108 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	301.0000	ALS Bottle#:	10
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

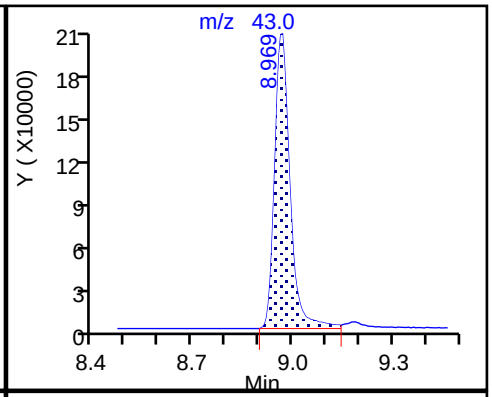
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

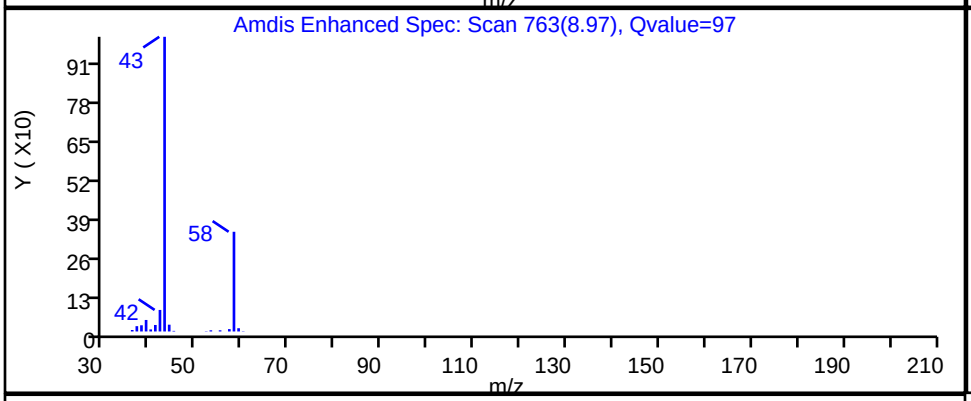


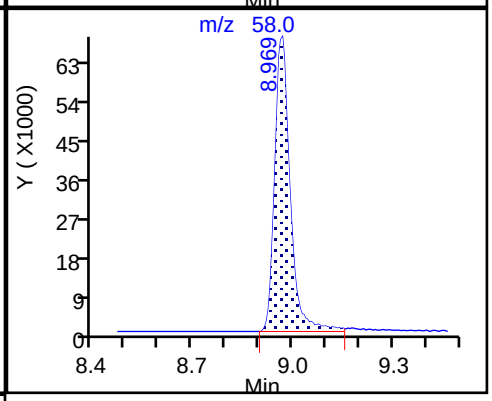
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d
Injection Date: 06-Apr-2018 20:59:30 Instrument ID: CHW.i
Lims ID: 200-42918-A-10 Lab Sample ID: 200-42918-10
Client ID: GC-IA-108 (AS)
Operator ID: ert ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 301.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

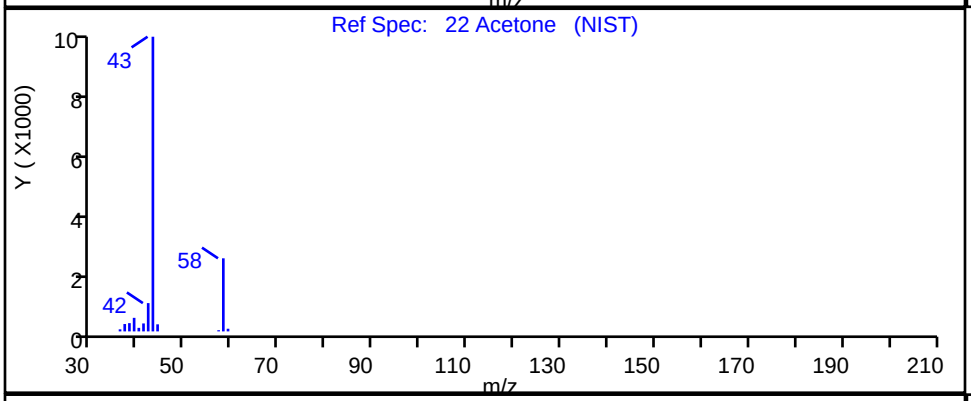
22 Acetone, CAS: 67-64-1

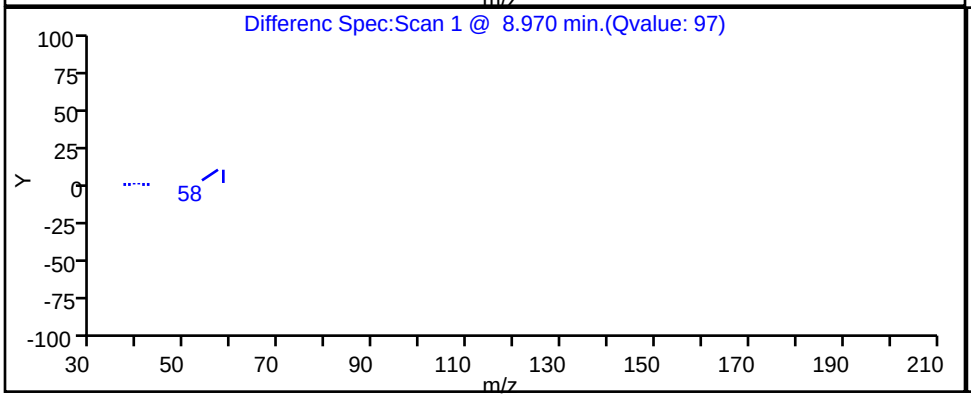


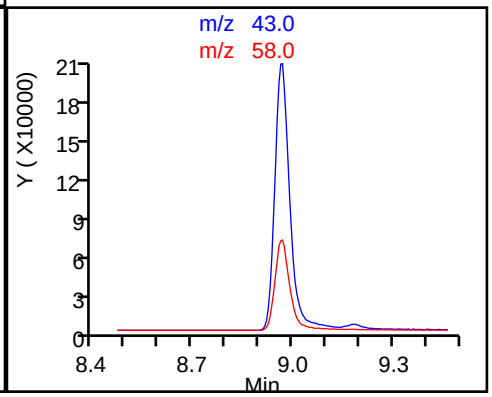








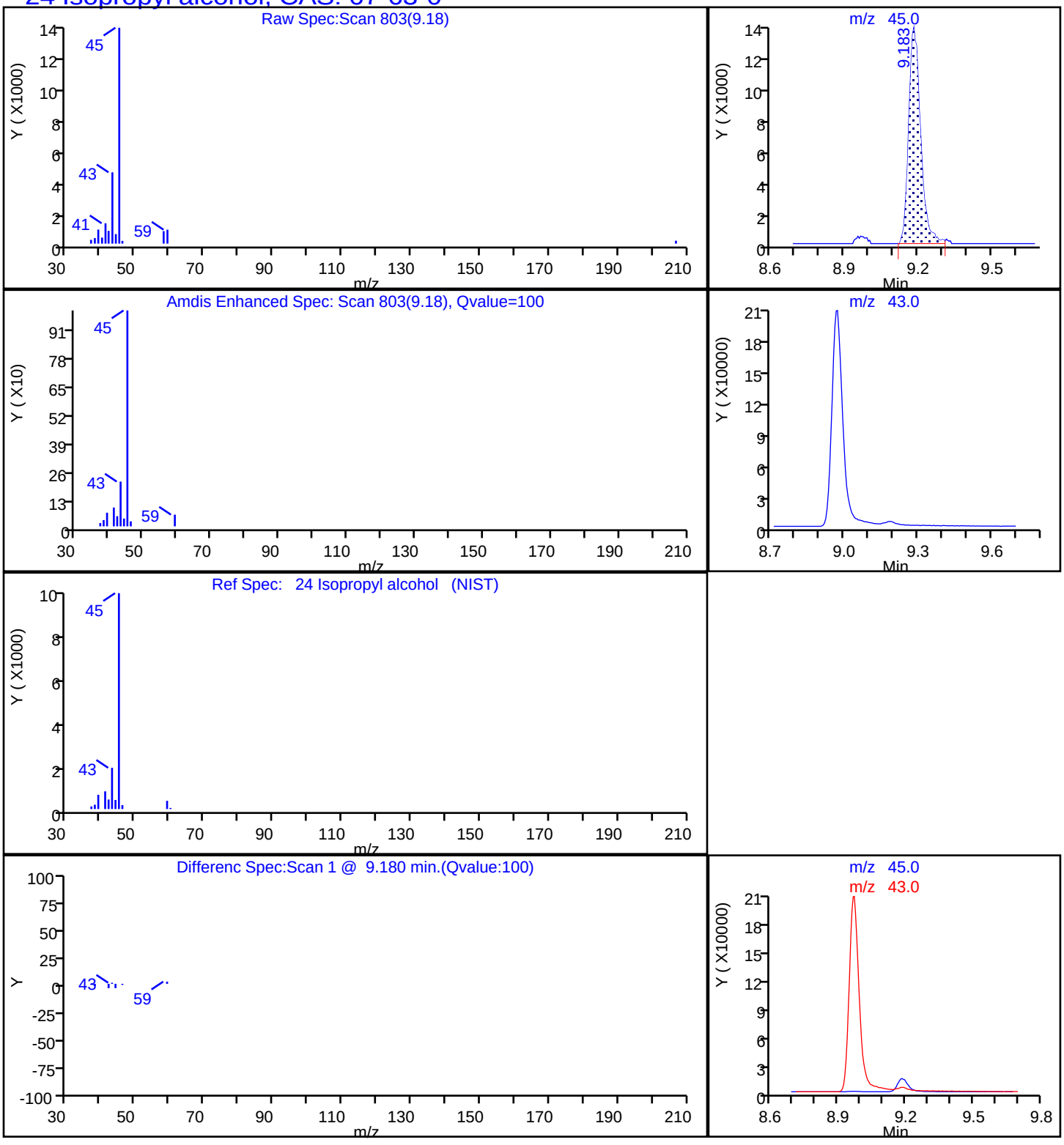




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d				
Injection Date:	06-Apr-2018 20:59:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	301.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

24 Isopropyl alcohol, CAS: 67-63-0



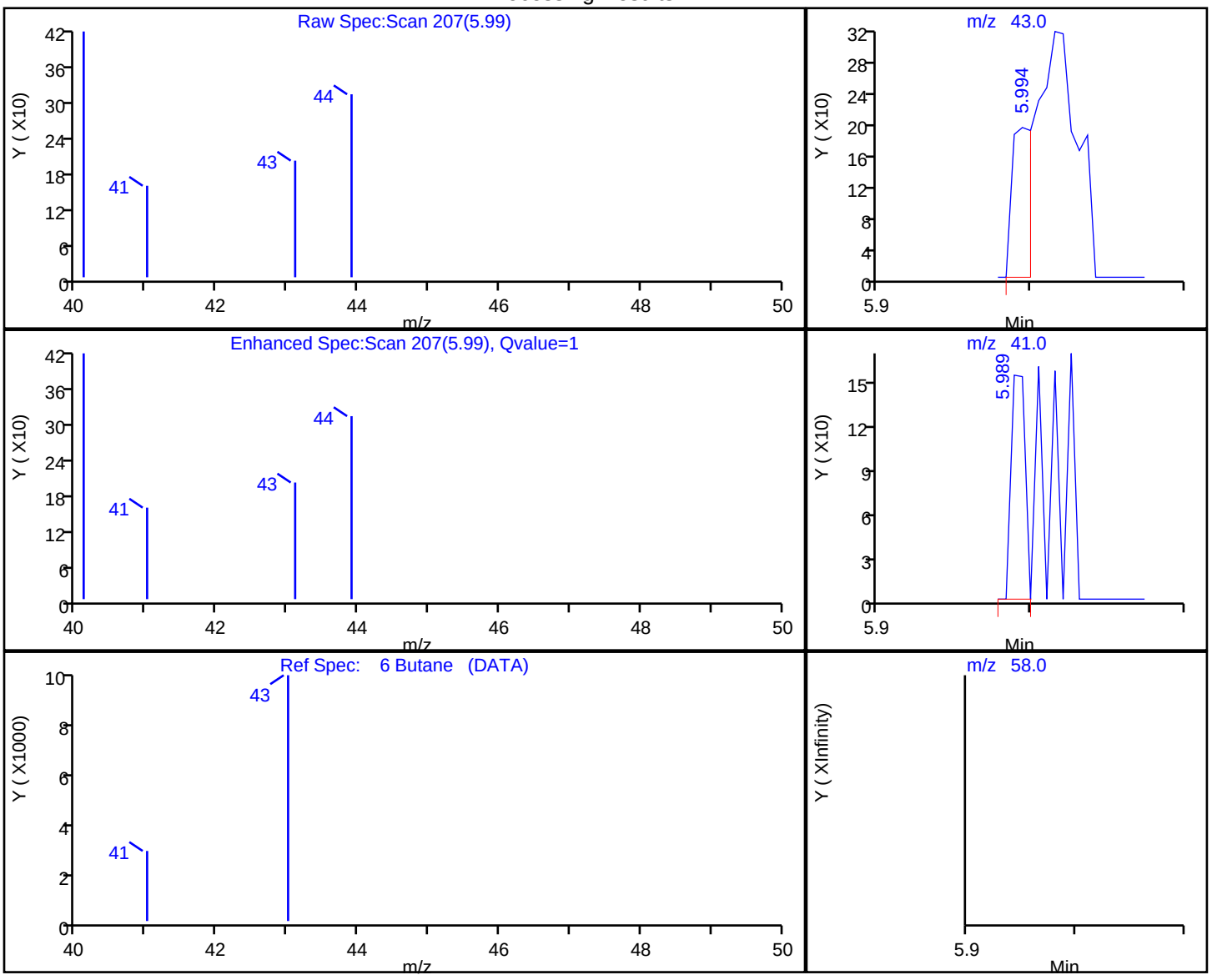
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d				
Injection Date:	06-Apr-2018 20:59:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	301.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

Processing Results



RT	Mass	Response	Amount
5.99	43.00	184	0.005418
5.99	41.00	99	
5.99	58.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:50:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

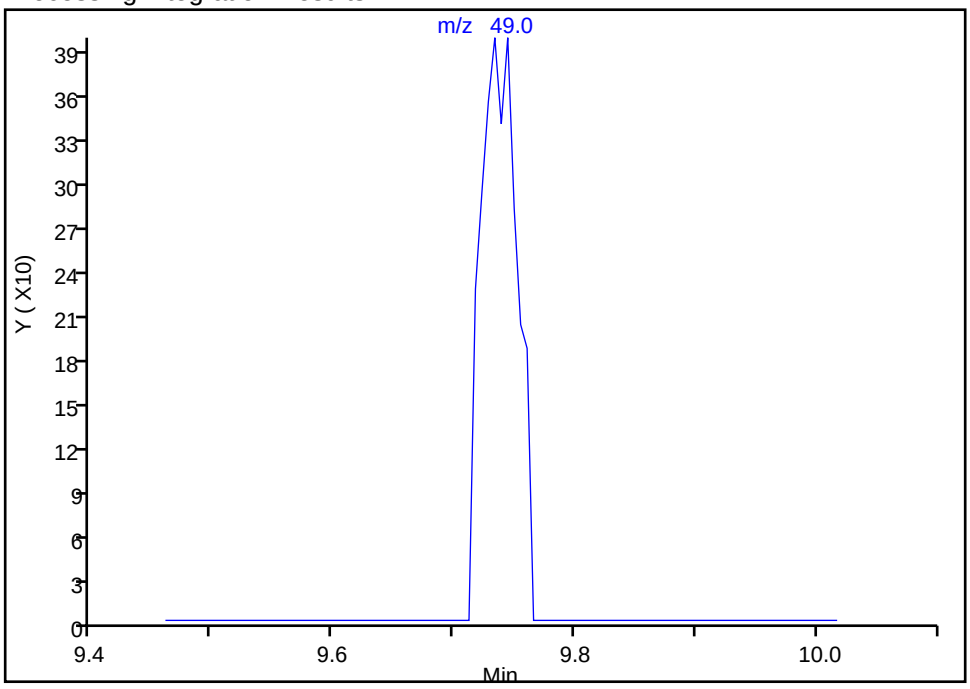
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d				
Injection Date:	06-Apr-2018 20:59:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	301.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

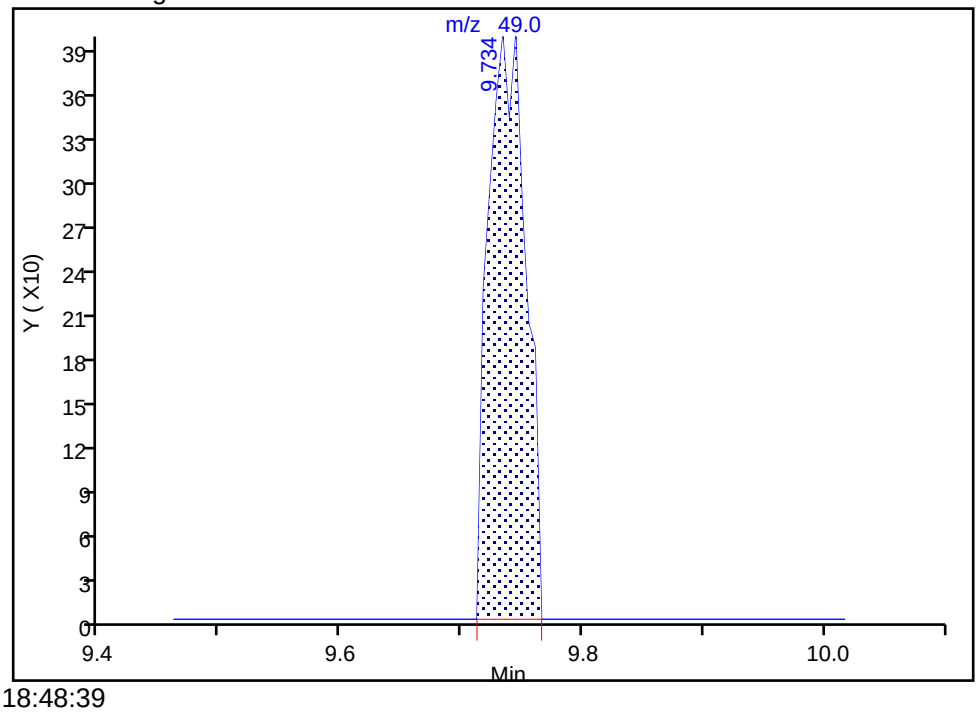
Not Detected
Expected RT: 9.76

Processing Integration Results



Manual Integration Results

RT: 9.73
Area: 846
Amount: 0.053802
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:48:39
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

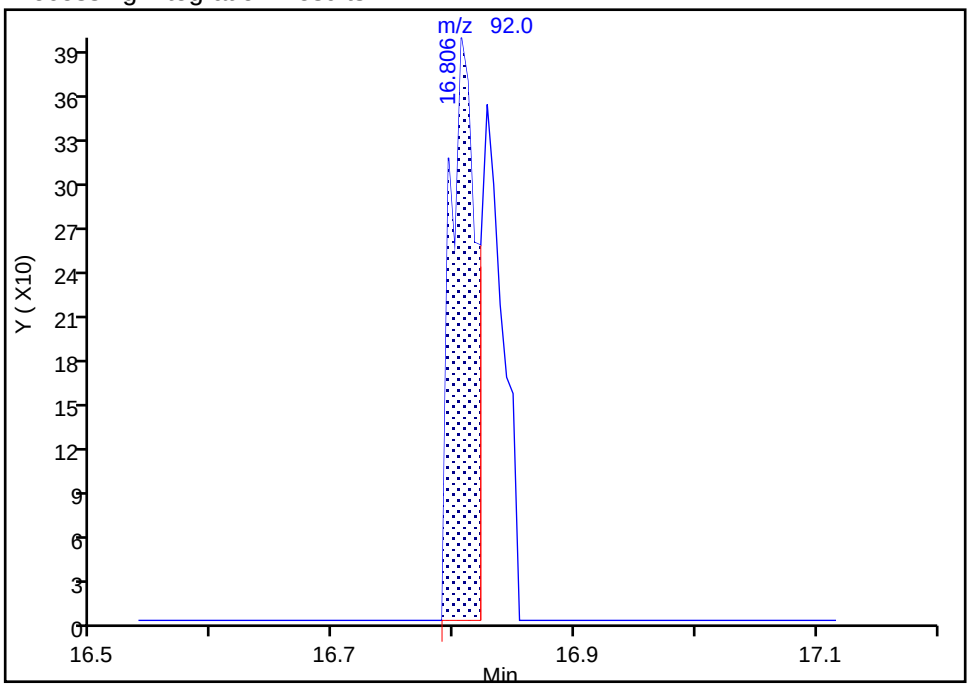
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d				
Injection Date:	06-Apr-2018 20:59:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	301.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3

Signal: 1

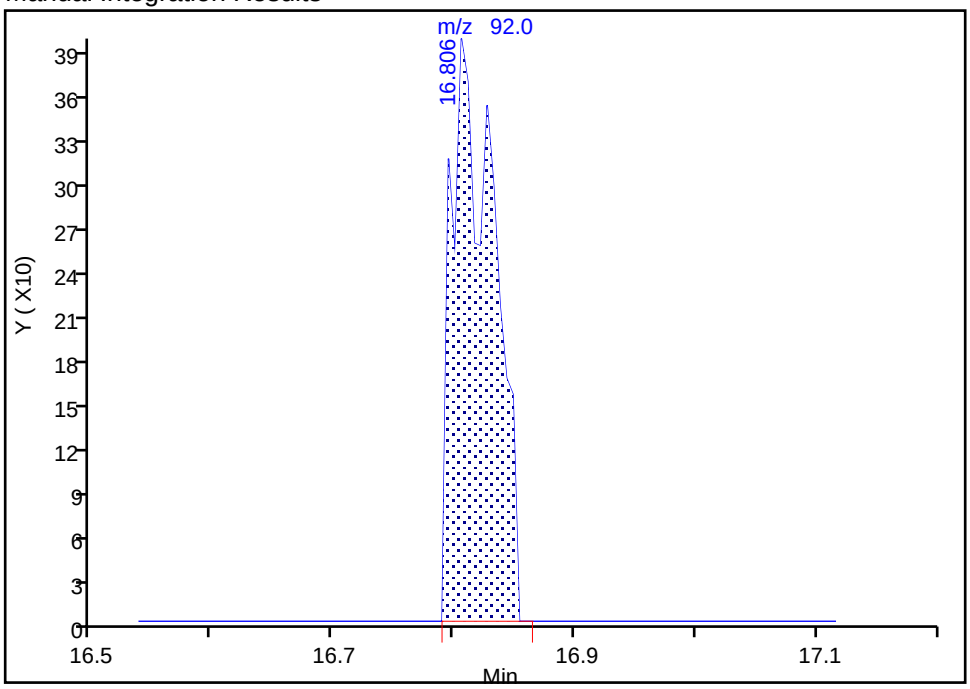
Processing Integration Results

RT: 16.81
Area: 586
Amount: 0.015508
Amount Units: ppb v/v



Manual Integration Results

RT: 16.81
Area: 962
Amount: 0.025459
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:49:21

Audit Action: Manually Integrated Audit Reason: Assign Peak

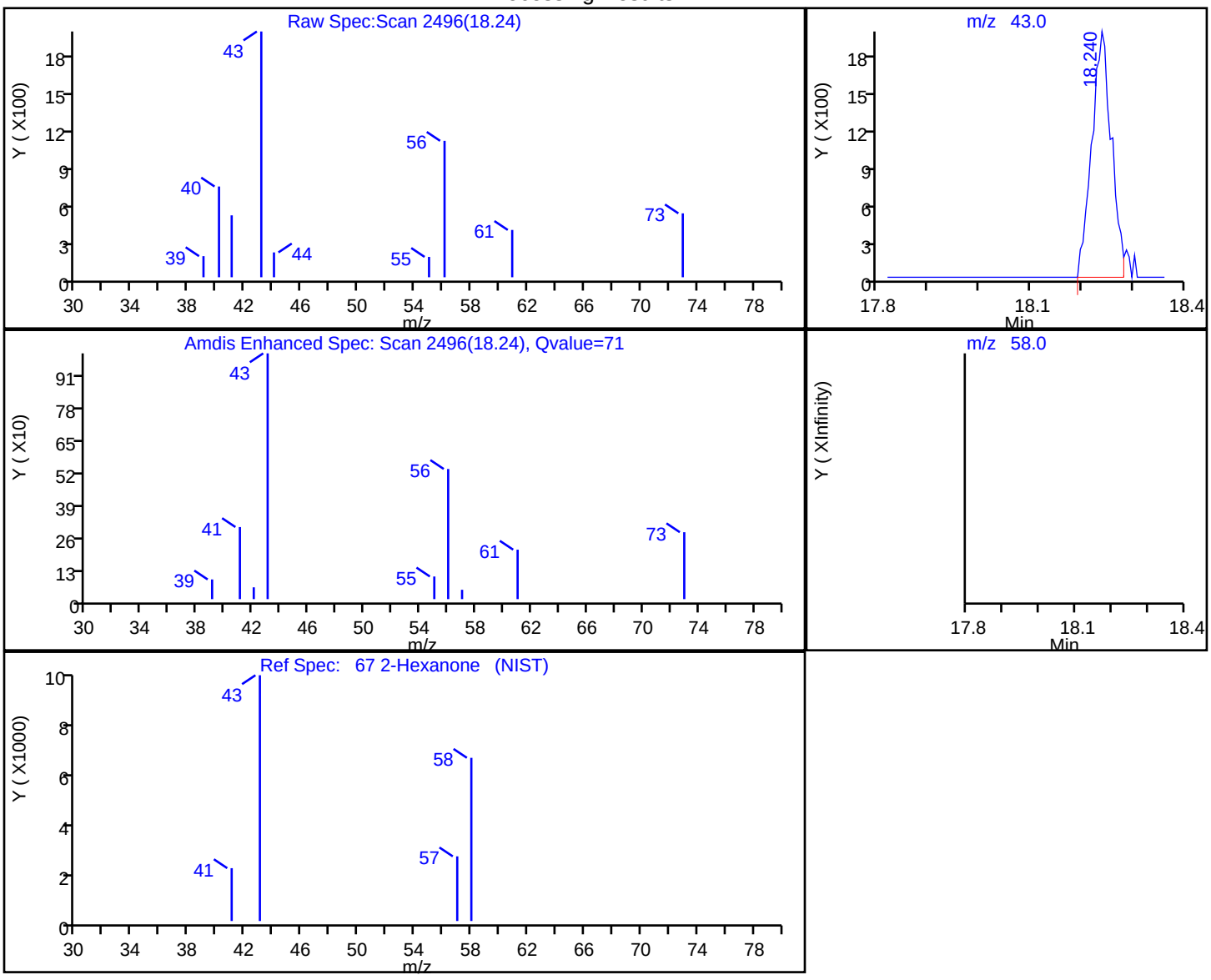
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d				
Injection Date:	06-Apr-2018 20:59:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	301.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

67 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
18.24	43.00	5280	0.162276
18.09	58.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:50:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

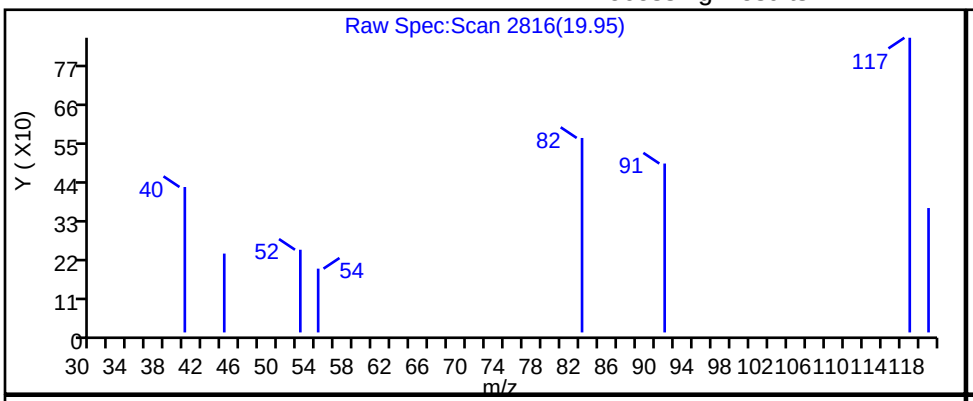
User Disabled Compound Report

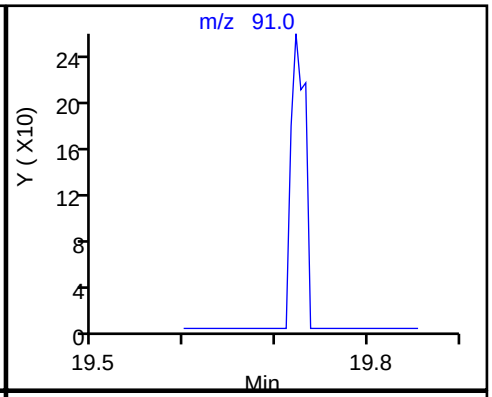
TestAmerica Burlington

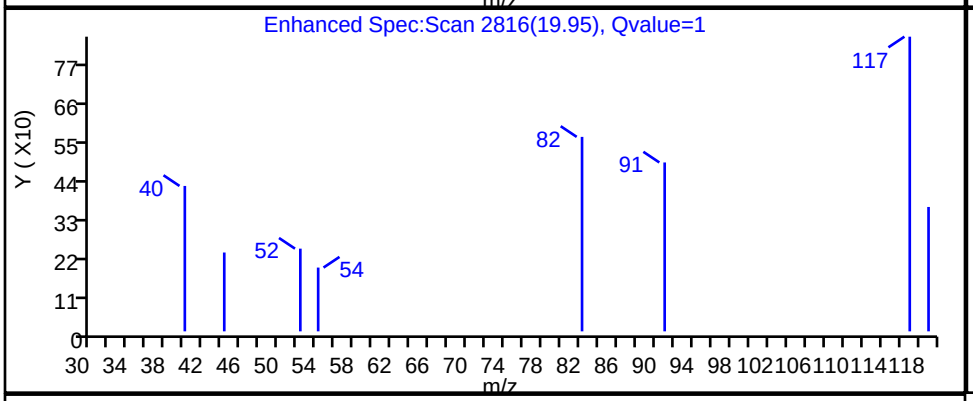
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-11.d				
Injection Date:	06-Apr-2018 20:59:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-10	Lab Sample ID:	200-42918-10		
Client ID:	GC-IA-108 (AS)				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	301.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

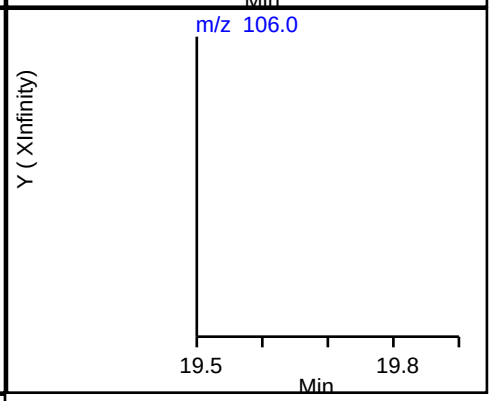
73 Ethylbenzene, CAS: 100-41-4

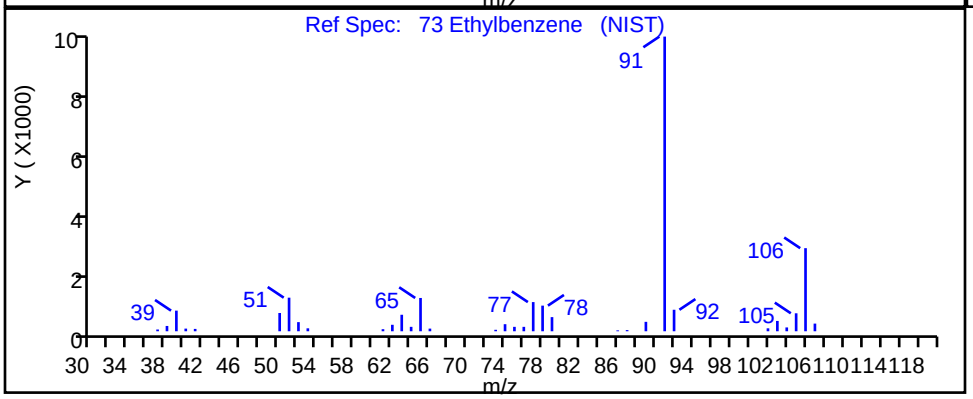
Processing Results











RT	Mass	Response	Amount
19.95	91.00	897	0.010291
19.95	106.00	69	

Reviewer: bunmaa, 09-Apr-2018 18:50:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) Lab Sample ID: 200-42918-11

Matrix: Air Lab File ID: 29949_08.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 15:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.33	J	0.50	0.047
75-45-6	Freon 22	86.47	0.50	U	0.50	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.041
74-87-3	Chloromethane	50.49	0.23	J	0.50	0.16
106-97-8	n-Butane	58.12	2.1		0.50	0.046
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.018
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.037
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.036
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.13
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.022
75-69-4	Trichlorofluoromethane	137.37	0.18	J	0.20	0.031
76-13-1	Freon TF	187.38	0.058	J	0.20	0.027
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.035
67-64-1	*Acetone*	*58.08*	*65*	*E*	*5.0*	*1.3*
67-63-0	Isopropyl alcohol	60.10	4.6	J	5.0	0.13
75-15-0	Carbon disulfide	76.14	9.2		0.50	0.028
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.063
75-09-2	Methylene Chloride	84.93	0.72		0.50	0.068
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.7
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.050
110-54-3	n-Hexane	86.17	0.19	J	0.20	0.046
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.017
78-93-3	Methyl Ethyl Ketone	72.11	5.0		0.50	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	0.064	J	0.20	0.029
540-59-0	1,2-Dichloroethene, Total	96.94	0.064	J	0.40	0.029
67-66-3	Chloroform	119.38	0.032	J	0.20	0.025
109-99-9	Tetrahydrofuran	72.11	3.2	J	5.0	1.2
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.026
110-82-7	Cyclohexane	84.16	0.051	J	0.20	0.045
56-23-5	Carbon tetrachloride	153.81	0.063		0.040	0.011
540-84-1	2,2,4-Trimethylpentane	114.23	0.15	J	0.20	0.043
71-43-2	Benzene	78.11	0.26		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.034

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) Lab Sample ID: 200-42918-11

Matrix: Air Lab File ID: 29949_08.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 15:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.13	J	0.20	0.068
79-01-6	Trichloroethene	131.39	0.14		0.040	0.0091
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.11
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.035
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	0.76
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.059
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.036
108-10-1	methyl isobutyl ketone	100.16	0.15	J	0.50	0.065
108-88-3	Toluene	92.14	0.39		0.20	0.035
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.038
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.017
127-18-4	Tetrachloroethene	165.83	0.062		0.040	0.0098
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.094	J	0.50	0.086
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.017
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.023
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.060	J	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.19	J	0.50	0.077
95-47-6	Xylene, o-	106.17	0.070	J	0.20	0.040
1330-20-7	Xylene (total)	106.17	0.26	J	0.70	0.040
100-42-5	Styrene	104.15	0.20	U	0.20	0.035
75-25-2	Bromoform	252.75	0.20	U	0.20	0.035
98-82-8	Cumene	120.19	0.20	U	0.20	0.039
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.026
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.040
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.040
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.035
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.037
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20	0.057
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.037
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.052
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.050
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) Lab Sample ID: 200-42918-11

Matrix: Air Lab File ID: 29949_08.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 15:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.067
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.068
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.045
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.19
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.064
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) Lab Sample ID: 200-42918-11

Matrix: Air Lab File ID: 29949_08.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 15:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	1.6	J	2.5	0.23
75-45-6	Freon 22	86.47	1.8	U	1.8	0.71
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.29
74-87-3	Chloromethane	50.49	0.48	J	1.0	0.33
106-97-8	n-Butane	58.12	5.0		1.2	0.11
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.046
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.082
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.14
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.34
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.096
75-69-4	Trichlorofluoromethane	137.37	1.0	J	1.1	0.17
76-13-1	Freon TF	187.38	0.45	J	1.5	0.21
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.14
67-64-1	*Acetone*	*58.08*	*150*	*E*	*12*	*3.1*
67-63-0	Isopropyl alcohol	60.10	11	J	12	0.32
75-15-0	Carbon disulfide	76.14	29		1.6	0.087
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.20
75-09-2	Methylene Chloride	84.93	2.5		1.7	0.24
75-65-0	tert-Butyl alcohol	74.12	15	U	15	5.2
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.20
110-54-3	n-Hexane	86.17	0.66	J	0.70	0.16
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.069
78-93-3	Methyl Ethyl Ketone	72.11	15		1.5	0.32
156-59-2	cis-1,2-Dichloroethene	96.94	0.26	J	0.79	0.11
540-59-0	1,2-Dichloroethene, Total	96.94	0.25	J	1.6	0.11
67-66-3	Chloroform	119.38	0.16	J	0.98	0.12
109-99-9	Tetrahydrofuran	72.11	9.3	J	15	3.5
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.14
110-82-7	Cyclohexane	84.16	0.18	J	0.69	0.15
56-23-5	Carbon tetrachloride	153.81	0.40		0.25	0.069
540-84-1	2,2,4-Trimethylpentane	114.23	0.71	J	0.93	0.20
71-43-2	Benzene	78.11	0.82		0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) Lab Sample ID: 200-42918-11

Matrix: Air Lab File ID: 29949_08.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 15:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.55	J	0.82	0.28
79-01-6	Trichloroethene	131.39	0.75		0.21	0.049
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.45
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.16
123-91-1	1,4-Dioxane	88.11	18	U	18	2.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.16
108-10-1	methyl isobutyl ketone	100.16	0.63	J	2.0	0.27
108-88-3	Toluene	92.14	1.5		0.75	0.13
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.17
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.093
127-18-4	Tetrachloroethene	165.83	0.42		0.27	0.066
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.39	J	2.0	0.35
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.14
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.18
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.26	J	0.87	0.15
179601-23-1	m,p-Xylene	106.17	0.84	J	2.2	0.33
95-47-6	Xylene, o-	106.17	0.30	J	0.87	0.17
1330-20-7	Xylene (total)	106.17	1.1	J	3.0	0.17
100-42-5	Styrene	104.15	0.85	U	0.85	0.15
75-25-2	Bromoform	252.75	2.1	U	2.1	0.36
98-82-8	Cumene	120.19	0.98	U	0.98	0.19
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.18
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.20
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.20
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.18
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98	0.28
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.20
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.29
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.30
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.38

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) Lab Sample ID: 200-42918-11

Matrix: Air Lab File ID: 29949_08.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 15:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.35
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.37
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.27
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.68
91-20-3	Naphthalene	128.17	2.6	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Lims ID: 200-42918-A-11
Client ID: GC-IA-106 (AS)
Sample Type: Client
Inject. Date: 05-Apr-2018 15:55:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029949-008
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 13:41:49 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 13:41:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.108	3.106	0.000	98	24392	0.3303	
3 Chlorodifluoromethane	51	3.156	3.149	0.005	97	11962	0.1814	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354				ND	U
5 Chloromethane	50	3.488	3.481	0.006	98	8716	0.2316	
6 Butane	43	3.665	3.662	0.000	99	154126	2.09	
7 Vinyl chloride	62		3.707				ND	
8 Butadiene	54	3.782	3.777	0.005	85	977	0.0323	
10 Bromomethane	94		4.413				ND	
11 Chloroethane	64		4.638				ND	
13 Vinyl bromide	106		4.996				ND	
14 Trichlorofluoromethane	101	5.093	5.088	0.006	98	12603	0.1822	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.104	0.000	59	2613	0.0584	
21 1,1-Dichloroethene	96		6.163				ND	
22 Acetone	43	6.393	6.400	-0.010	99	4670519	64.9	E
23 Carbon disulfide	76	6.548	6.548	0.000	98	648875	9.19	
24 Isopropyl alcohol	45	6.687	6.682	0.005	100	340876	4.55	
25 3-Chloro-1-propene	41		6.933				ND	U
27 Methylene Chloride	49	7.227	7.223	0.000	90	33903	0.7188	
28 2-Methyl-2-propanol	59	7.484	7.452	0.032	79	6920	0.0899	
29 Methyl tert-butyl ether	73		7.623				ND	
31 trans-1,2-Dichloroethene	61		7.661				ND	
33 Hexane	57	8.025	8.030	-0.005	90	10508	0.1886	
34 1,1-Dichloroethane	63		8.543				ND	
S 30 1,2-Dichloroethene, Total	61				0		0.0644	
37 cis-1,2-Dichloroethene	96	9.683	9.683	0.006	93	1669	0.0644	M
38 2-Butanone (MEK)	72	9.736	9.737	-0.006	96	81047	5.04	
* 40 Chlorobromomethane	128	10.164	10.159	0.005	91	189258	10.0	
41 Tetrahydrofuran	42	10.175	10.165	0.005	89	197482	3.16	
42 Chloroform	83	10.293	10.298	-0.005	73	2089	0.0322	
43 Cyclohexane	84	10.523	10.523	-0.016	63	2055	0.0513	M
44 1,1,1-Trichloroethane	97		10.576				ND	
45 Carbon tetrachloride	117	10.822	10.834	-0.016	74	3666	0.0633	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	46 Isooctane	57	11.282	11.278	0.000	90	33893	0.1529	
	47 Benzene	78	11.325	11.331	-0.011	98	26753	0.2561	
	48 1,2-Dichloroethane	62		11.539				ND	
	49 n-Heptane	43	11.694	11.694	-0.006	1	13971	0.1338	Ma
*	50 1,4-Difluorobenzene	114	12.235	12.240	-0.005	98	1147177	10.0	
	53 Trichloroethene	95	12.722	12.722	-0.010	66	5836	0.1391	M
	54 1,2-Dichloropropane	63		13.331				ND	
	55 Methyl methacrylate	69		13.513				ND	
	56 1,4-Dioxane	88	13.610	13.566	0.038	76	4450	0.2091	
	58 Dichlorobromomethane	83		13.914				ND	
	60 cis-1,3-Dichloropropene	75		14.893				ND	
	61 4-Methyl-2-pentanone (MIBK	43	15.220	15.197	0.016	97	20867	0.1542	
	65 Toluene	92	15.498	15.499	-0.005	90	26815	0.3917	
	66 trans-1,3-Dichloropropene	75		16.145				ND	U
	67 1,1,2-Trichloroethane	83		16.541				ND	
	68 Tetrachloroethene	166	16.621	16.627	-0.011	83	2397	0.0621	
	69 2-Hexanone	43	17.033	17.023	0.010	88	12327	0.0943	
	71 Chlorodibromomethane	129		17.338				ND	
	72 Ethylene Dibromide	107		17.622				ND	
*	74 Chlorobenzene-d5	117	18.563	18.569	-0.006	99	1052561	10.0	
	75 Chlorobenzene	112		18.627				ND	
	76 Ethylbenzene	91	18.788	18.788	-0.005	97	9770	0.0599	
	78 m-Xylene & p-Xylene	106	19.050	19.050	-0.005	0	10779	0.1926	
S	73 Xylenes, Total	106				0		0.2622	
	79 o-Xylene	106	19.938	19.949	-0.016	93	3793	0.0696	
	80 Styrene	104		20.013				ND	
	81 Bromoform	173		20.484				ND	
	82 Isopropylbenzene	105		20.714				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.441				ND	
	85 N-Propylbenzene	91		21.500				ND	
	88 4-Ethyltoluene	105	21.704	21.704	-0.005	43	3676	0.0216	a
	89 2-Chlorotoluene	91		21.714				ND	
	90 1,3,5-Trimethylbenzene	105	21.827	21.820	0.000	87	3170	0.0225	
	92 tert-Butylbenzene	119		22.346				ND	
	93 1,2,4-Trimethylbenzene	105	22.442	22.441	-0.005	95	6963	0.0492	
	94 sec-Butylbenzene	105		22.688				ND	U
	95 4-Isopropyltoluene	119	22.897	22.895	-0.005	87	1860	0.0119	
	96 1,3-Dichlorobenzene	146		22.929				ND	
	97 1,4-Dichlorobenzene	146		23.073				ND	
	98 Benzyl chloride	91		23.282				ND	U
	100 n-Butylbenzene	91		23.496				ND	
	101 1,2-Dichlorobenzene	146		23.624				ND	
	103 1,2,4-Trichlorobenzene	180		26.187				ND	
	104 Hexachlorobutadiene	225		26.374				ND	
	105 Naphthalene	128		26.684				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

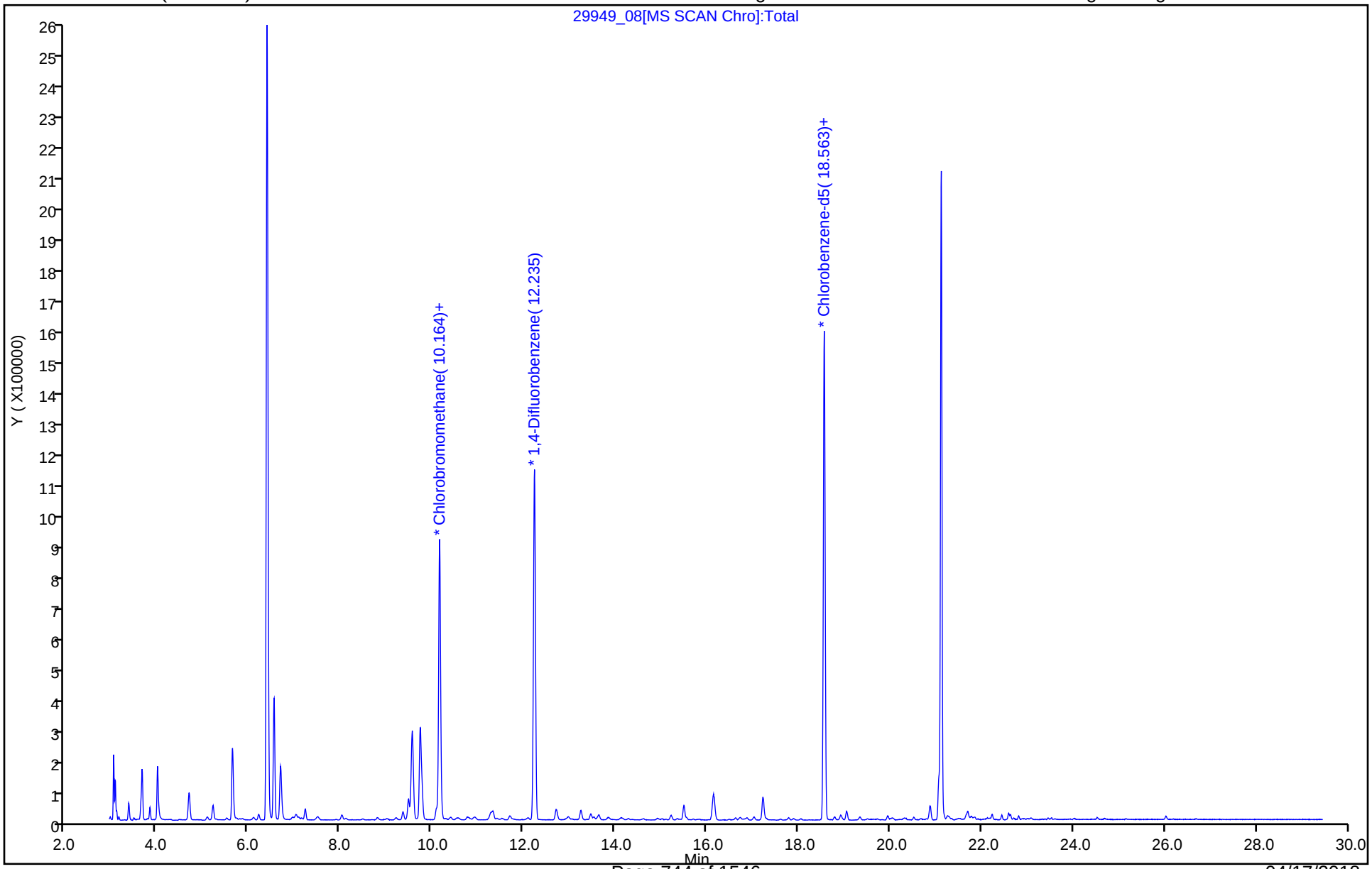
Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11	Worklist Smp#:	8
Client ID:	GC-IA-106 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

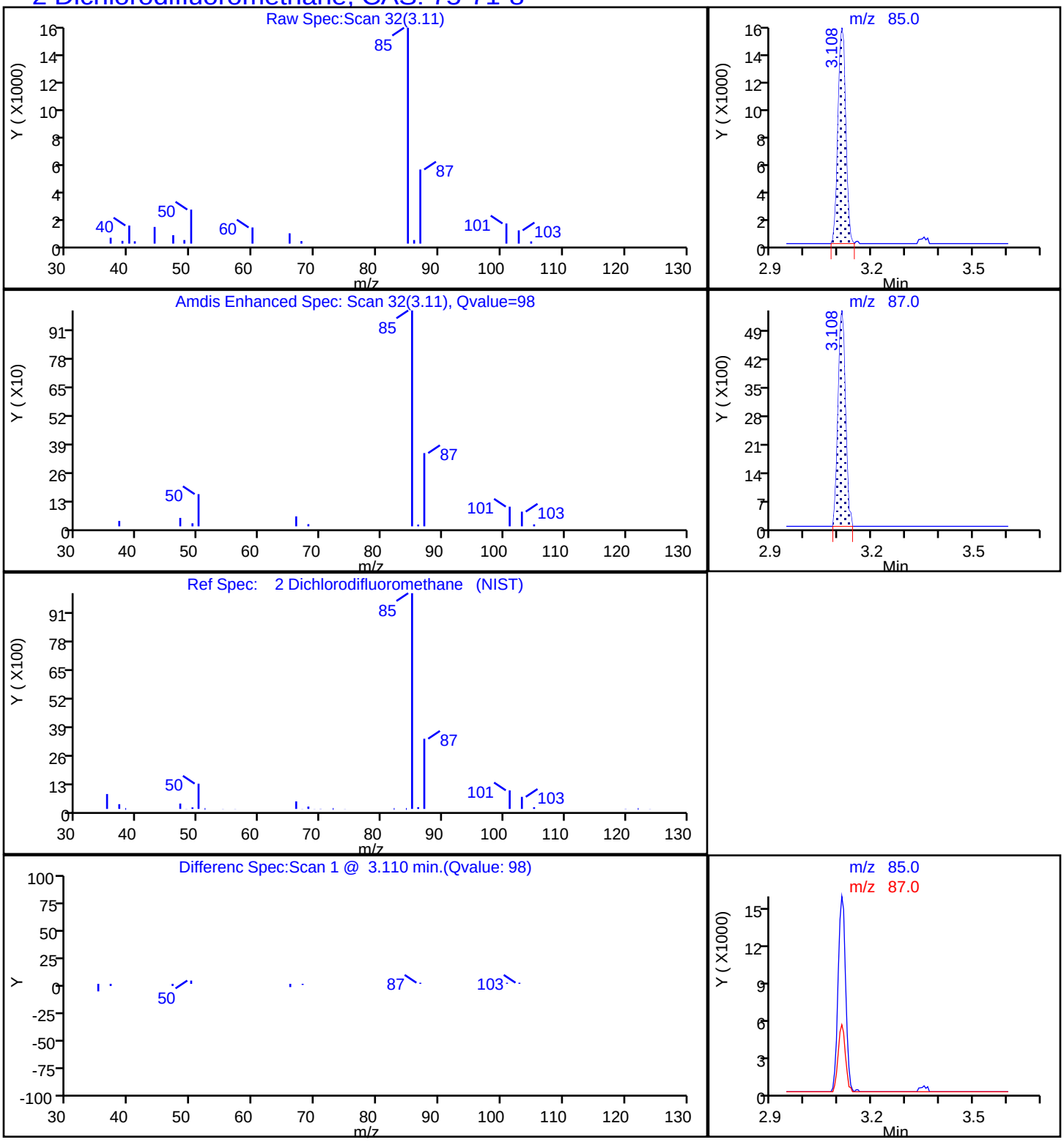
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

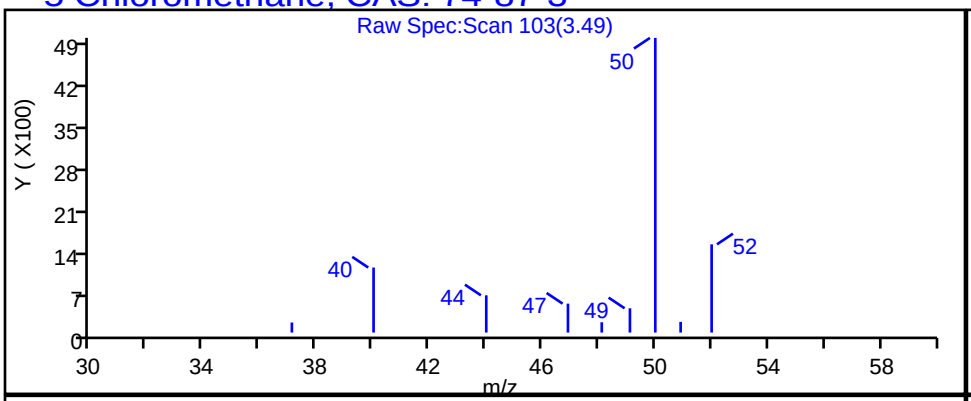
2 Dichlorodifluoromethane, CAS: 75-71-8

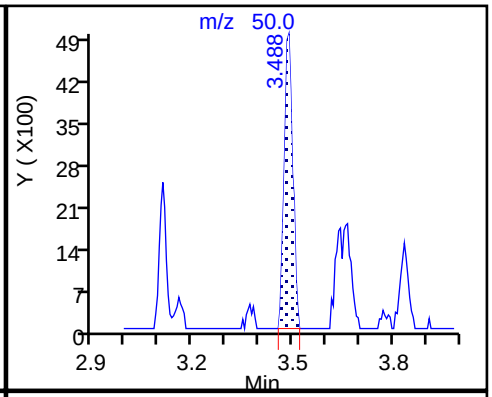


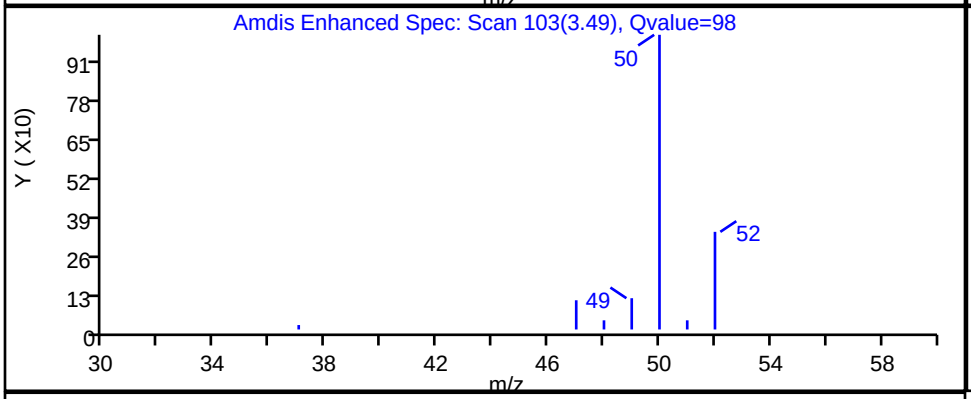
TestAmerica Burlington

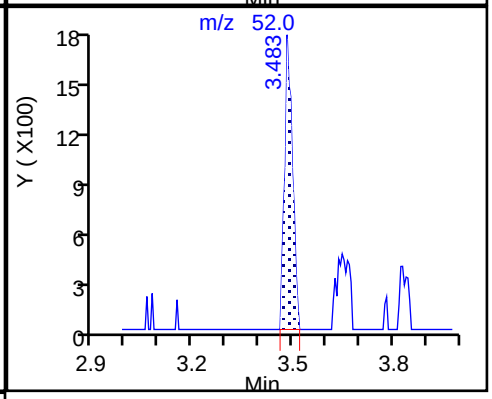
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

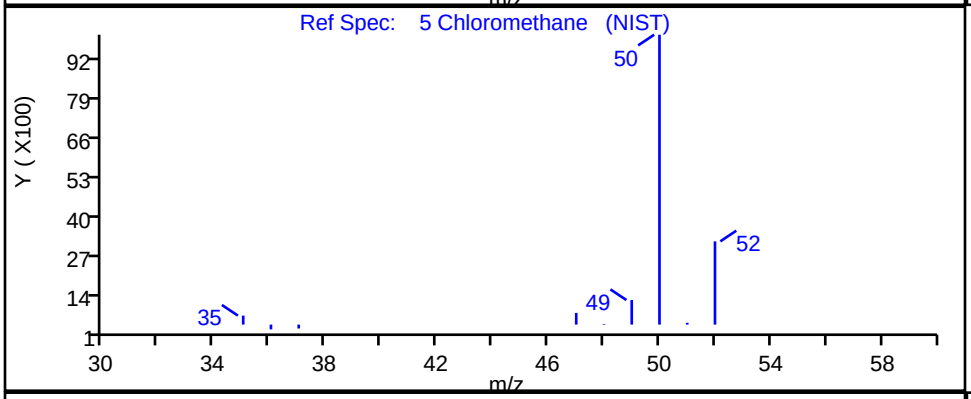
5 Chloromethane, CAS: 74-87-3

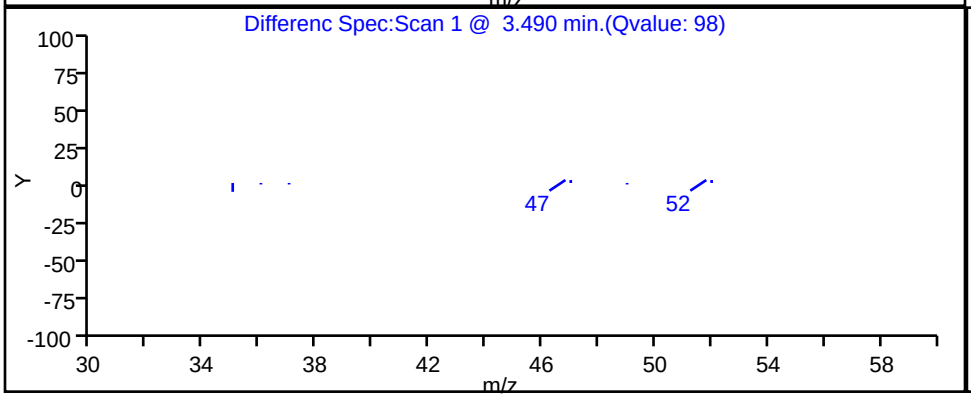


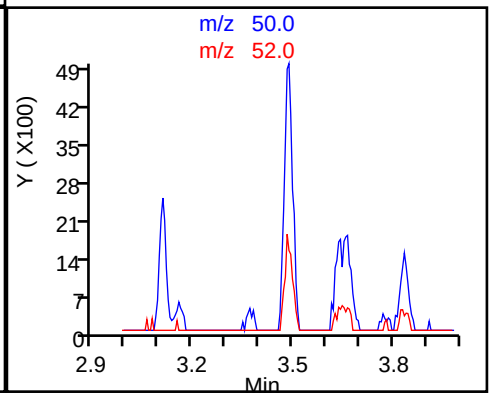






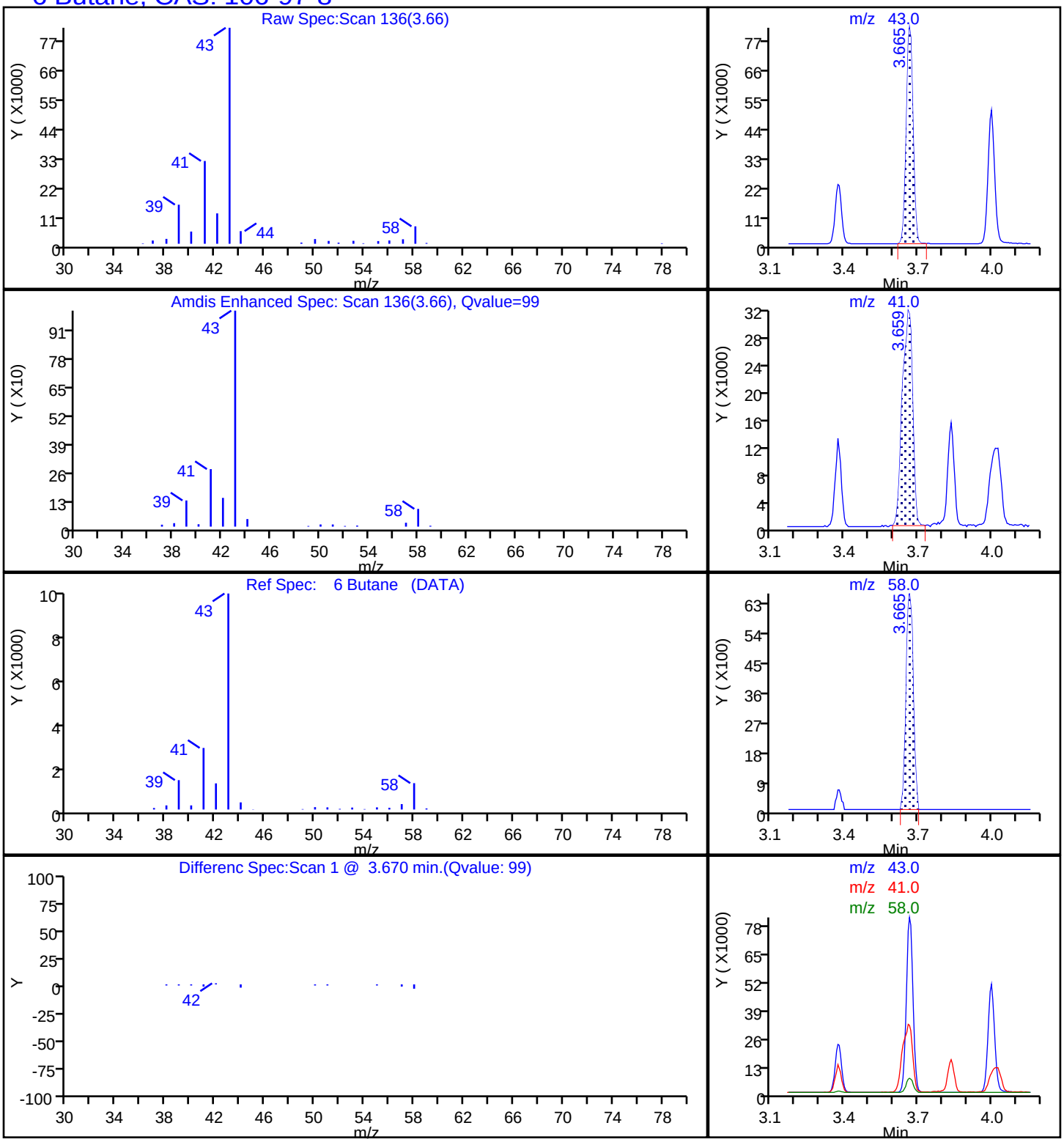






Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

6 Butane, CAS: 106-97-8



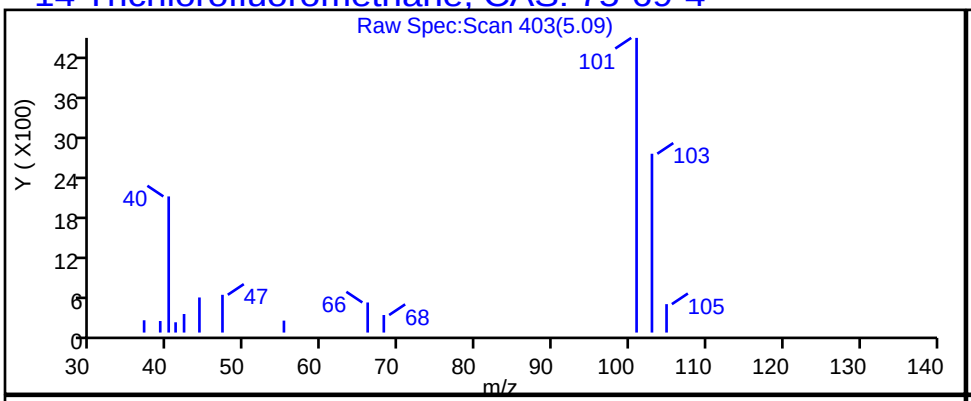
Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

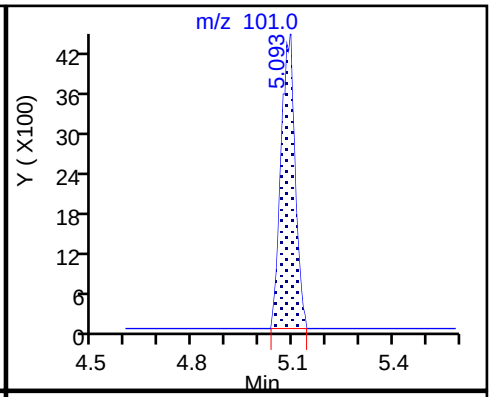
TestAmerica Burlington

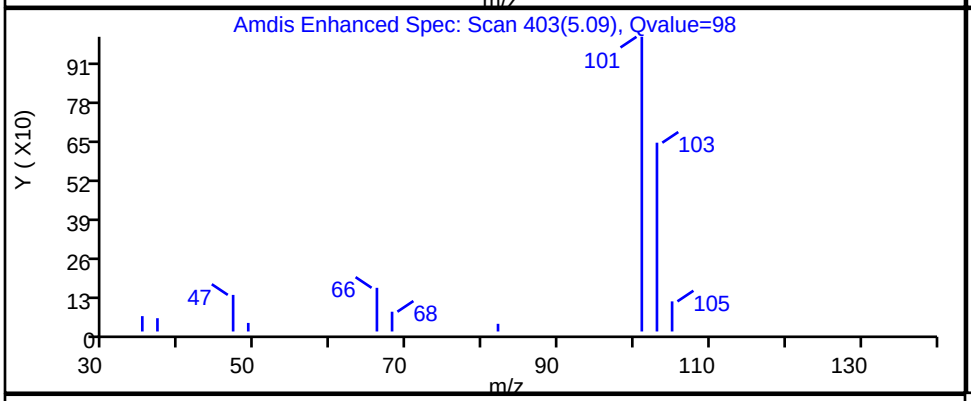
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

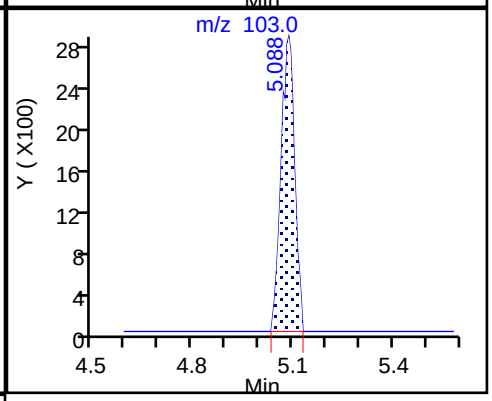
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

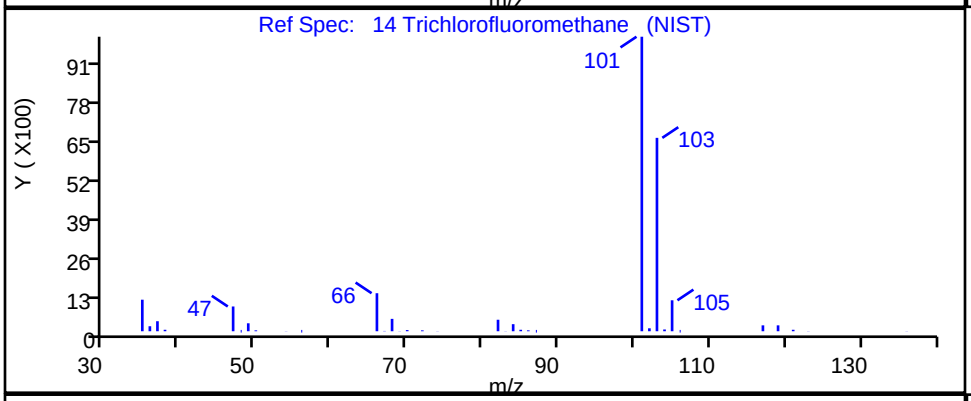
14 Trichlorofluoromethane, CAS: 75-69-4

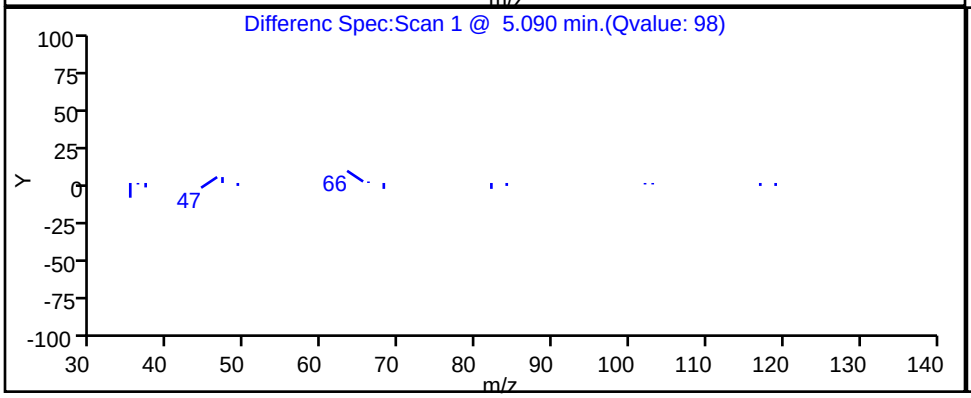


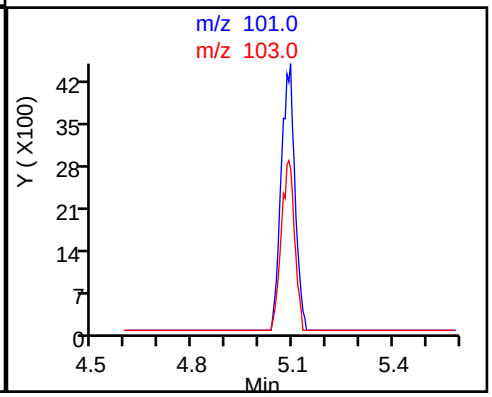








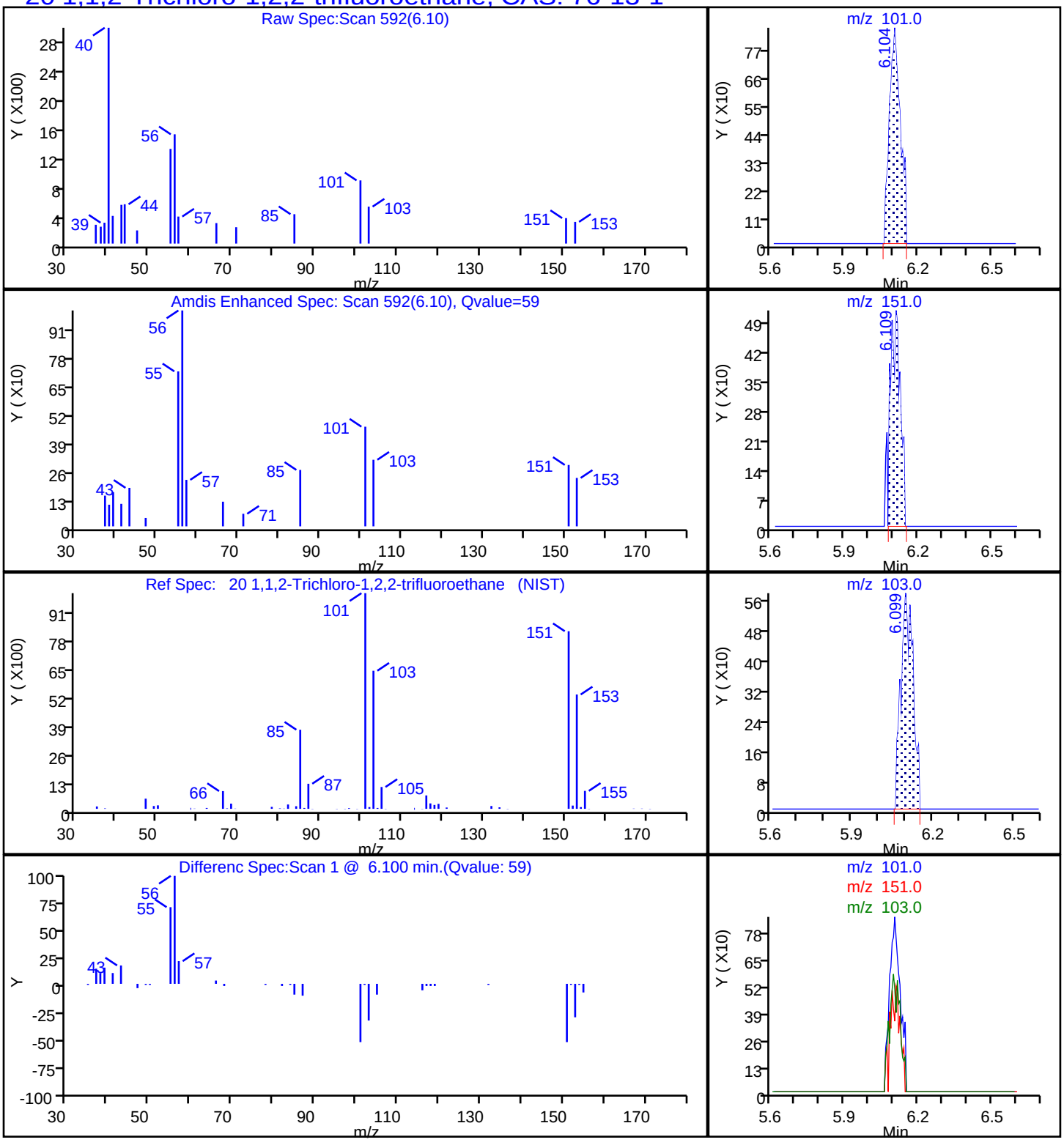




TestAmerica Burlington

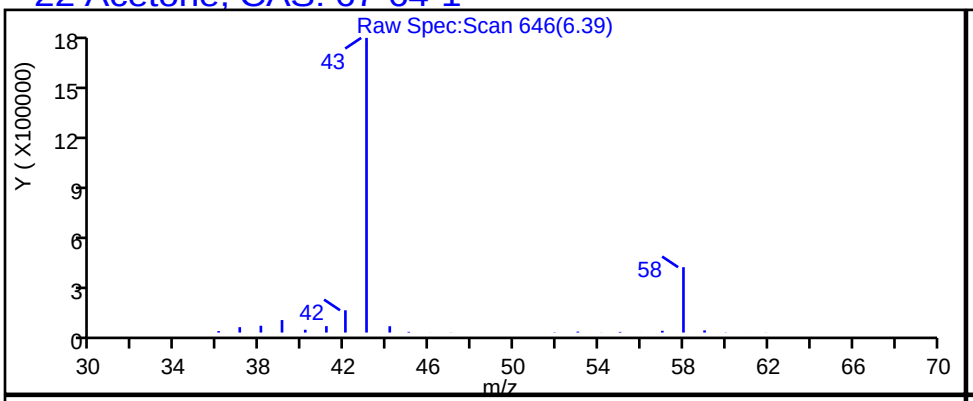
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

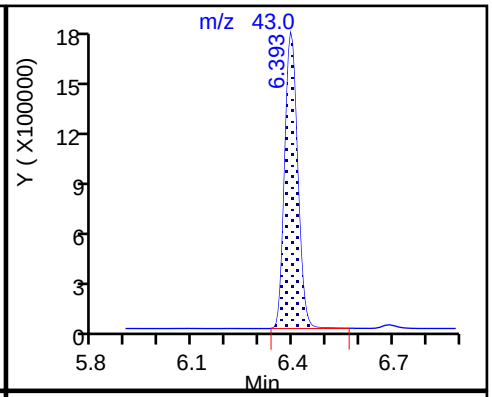
20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

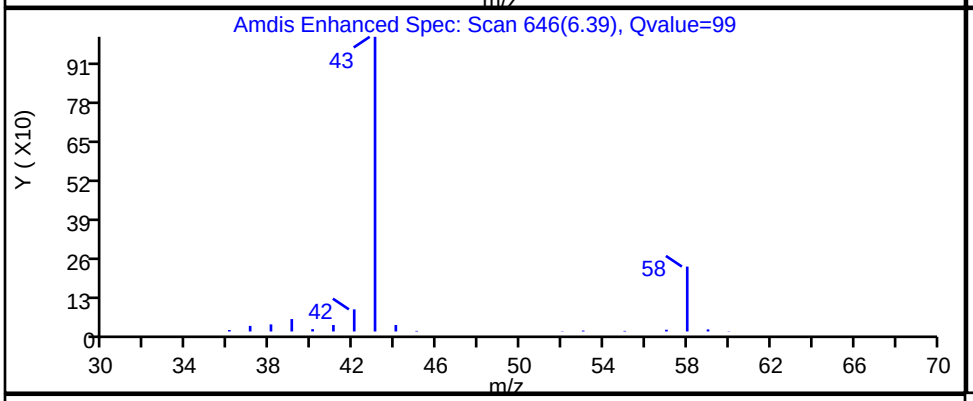


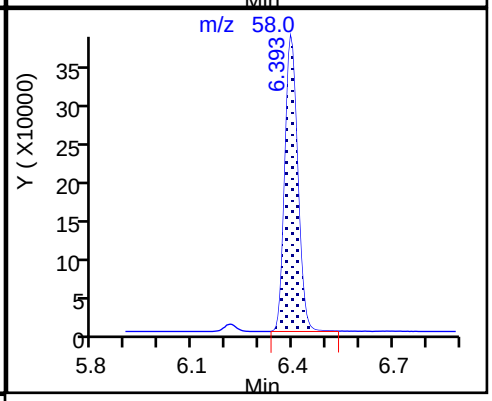
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

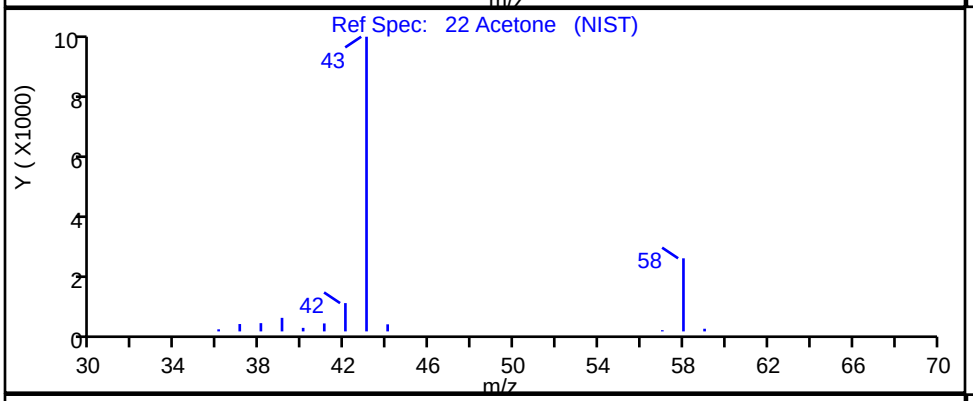
22 Acetone, CAS: 67-64-1

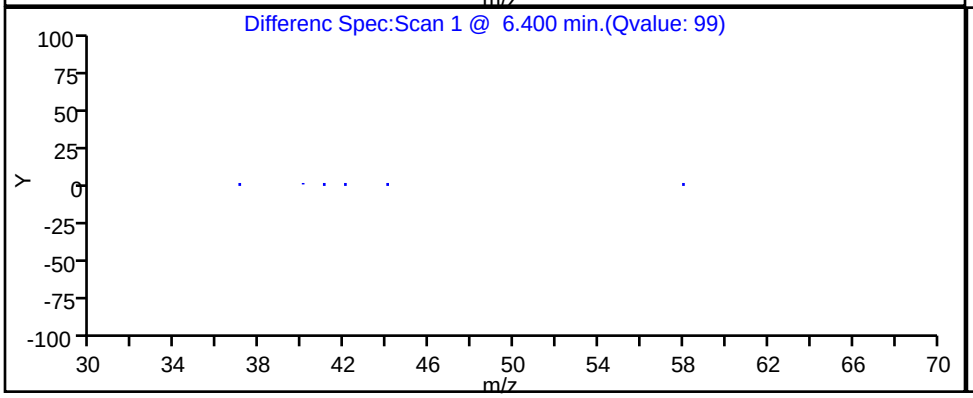


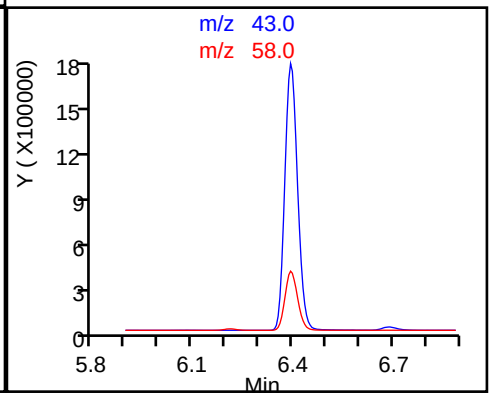






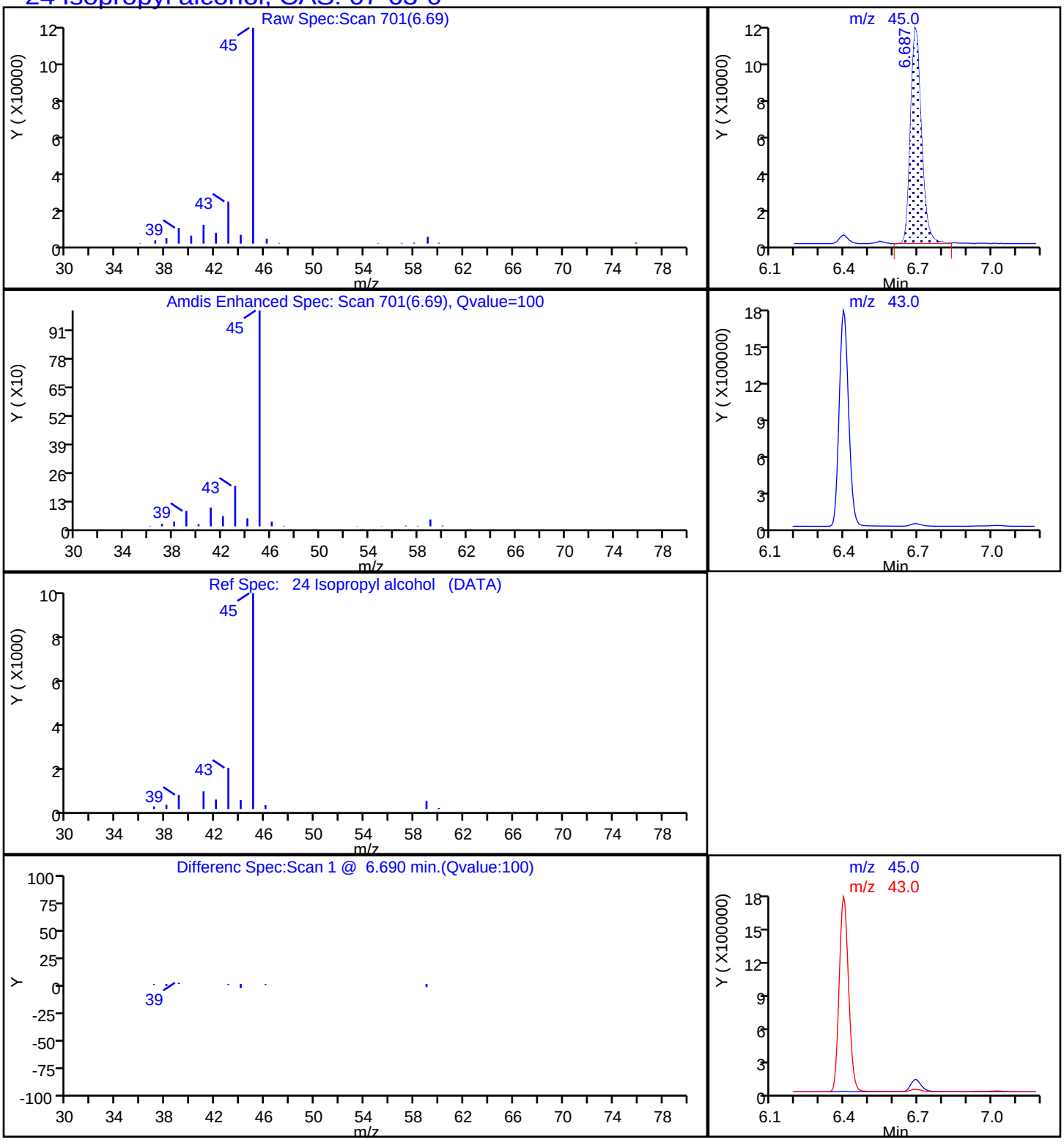






Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

24 Isopropyl alcohol, CAS: 67-63-0



Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
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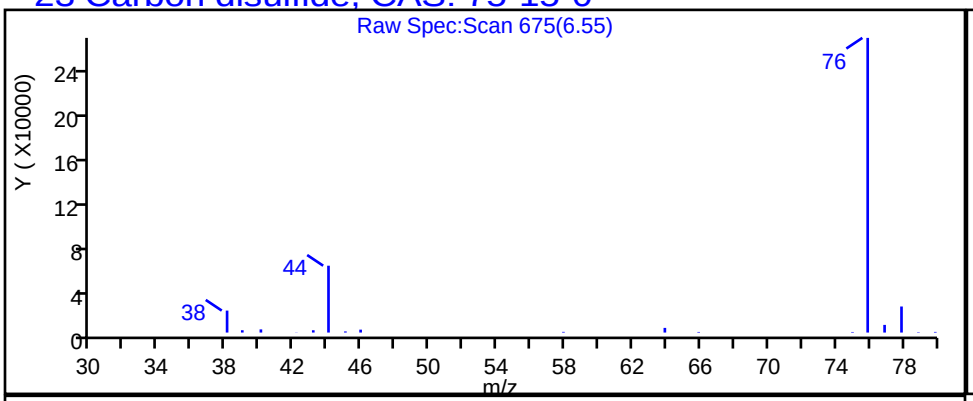
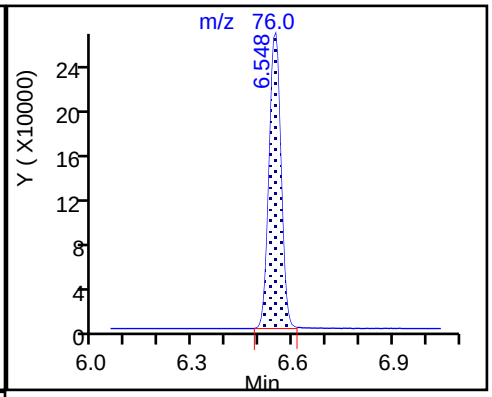
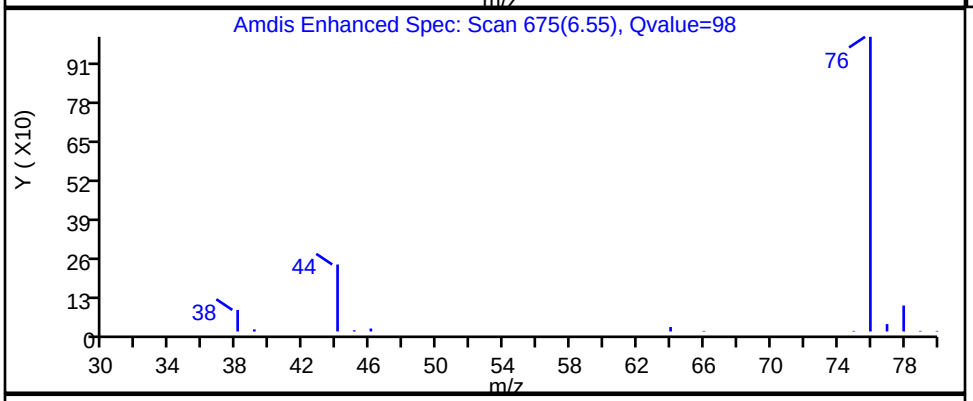
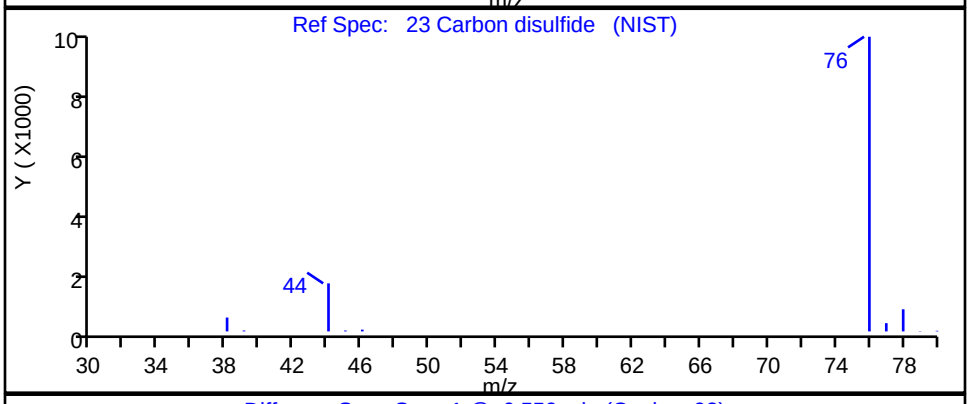
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

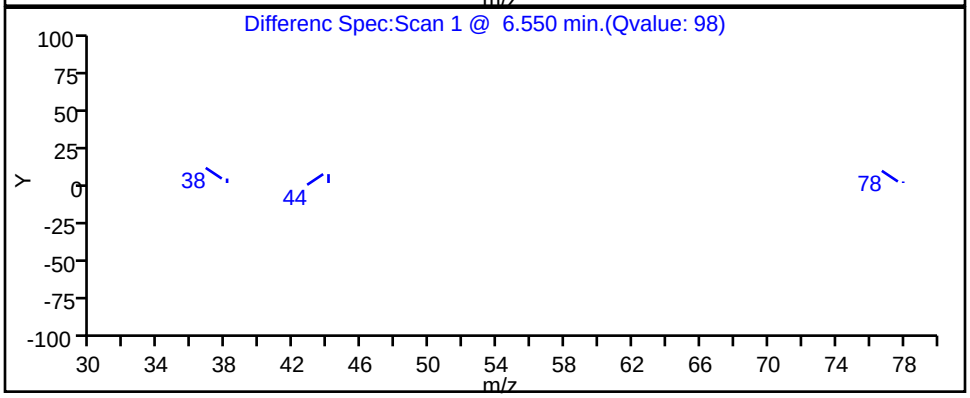
23 Carbon disulfide, CAS: 75-15-0











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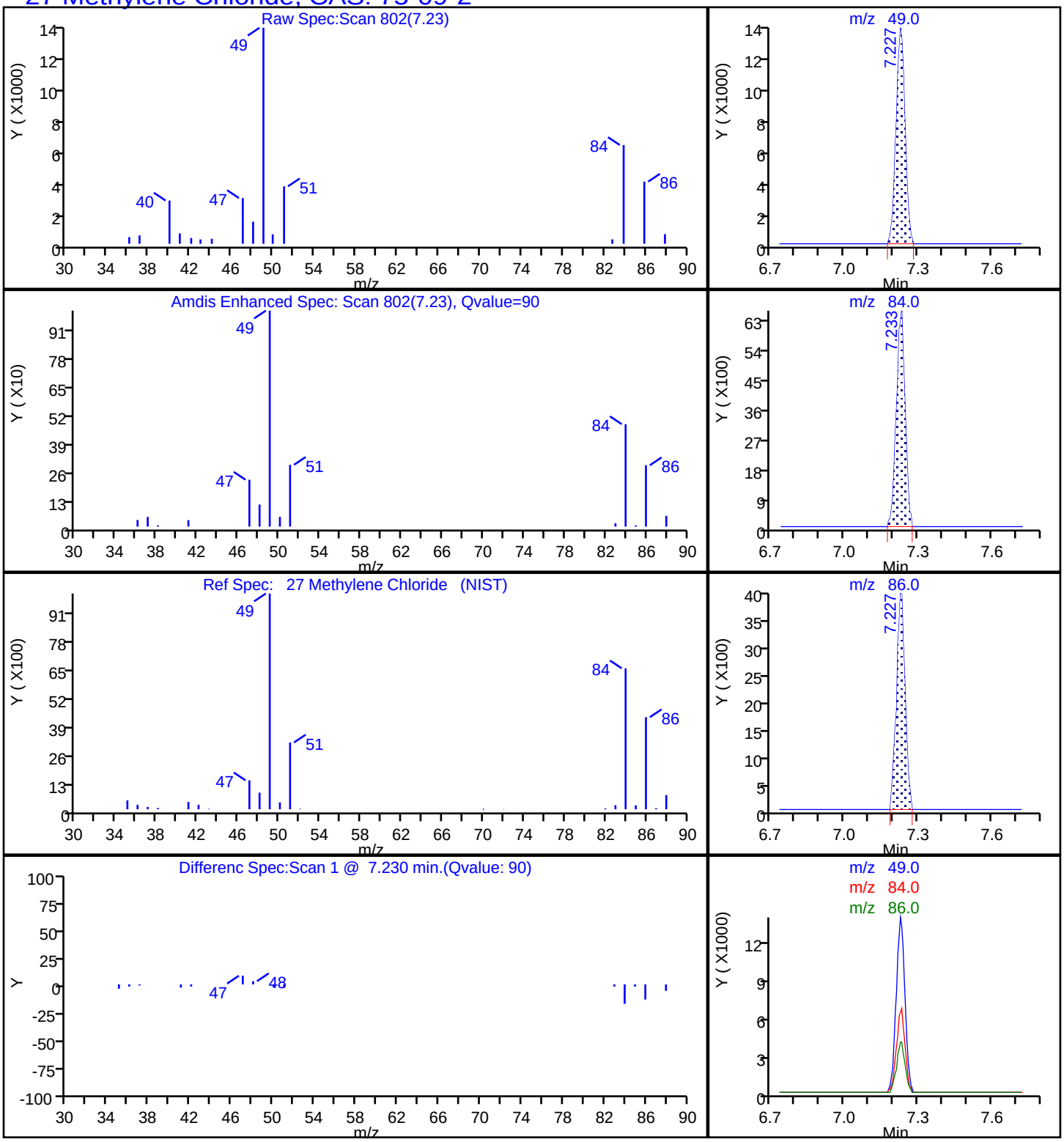
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

27 Methylene Chloride, CAS: 75-09-2



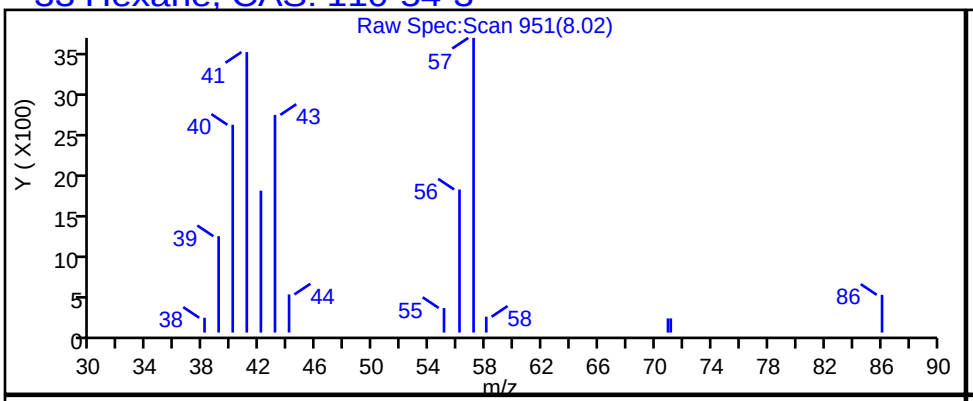
Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

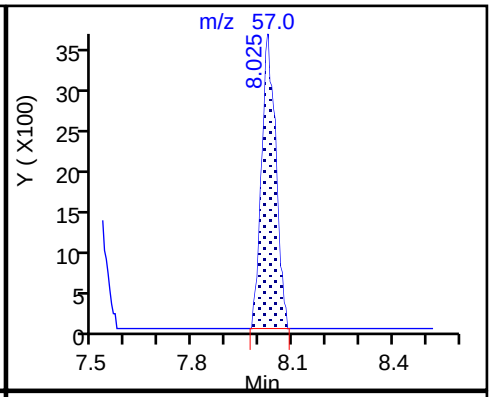
TestAmerica Burlington

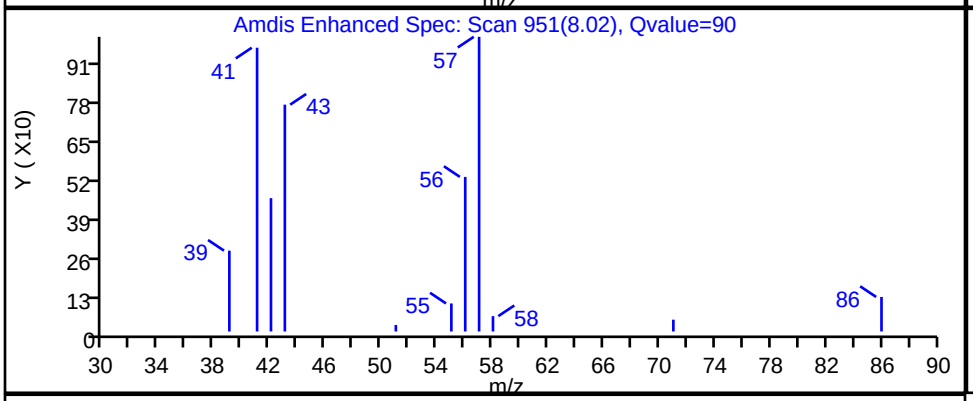
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

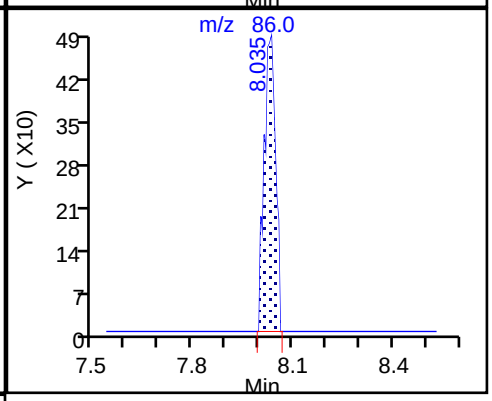
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

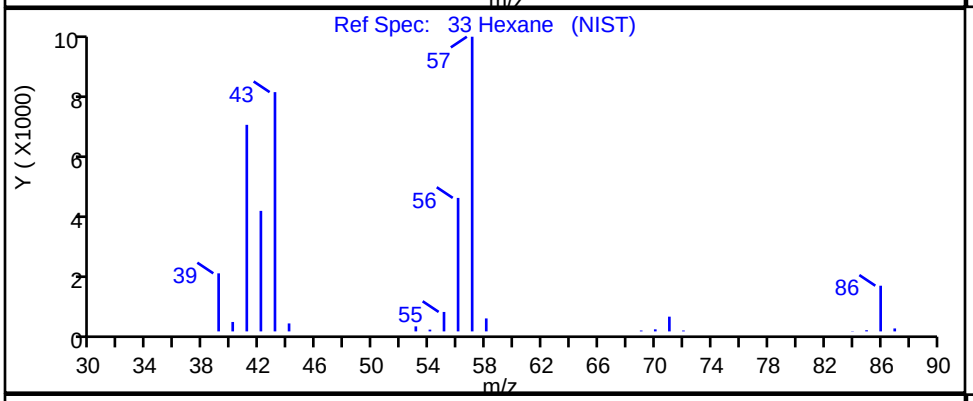
33 Hexane, CAS: 110-54-3

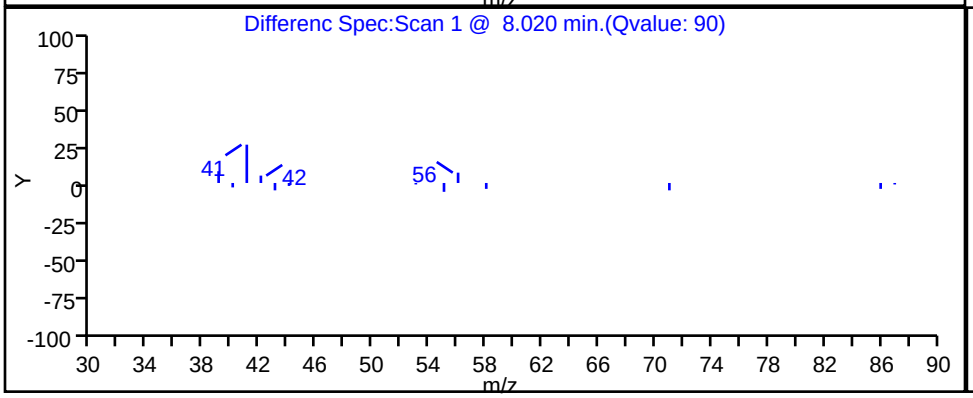


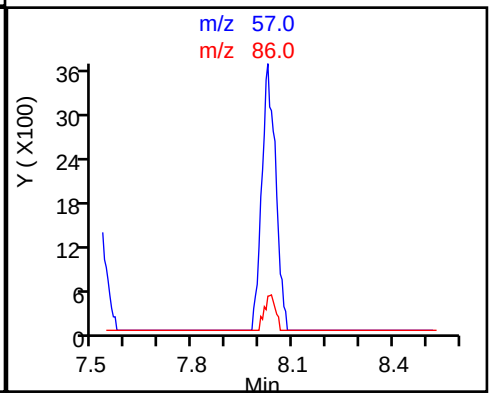








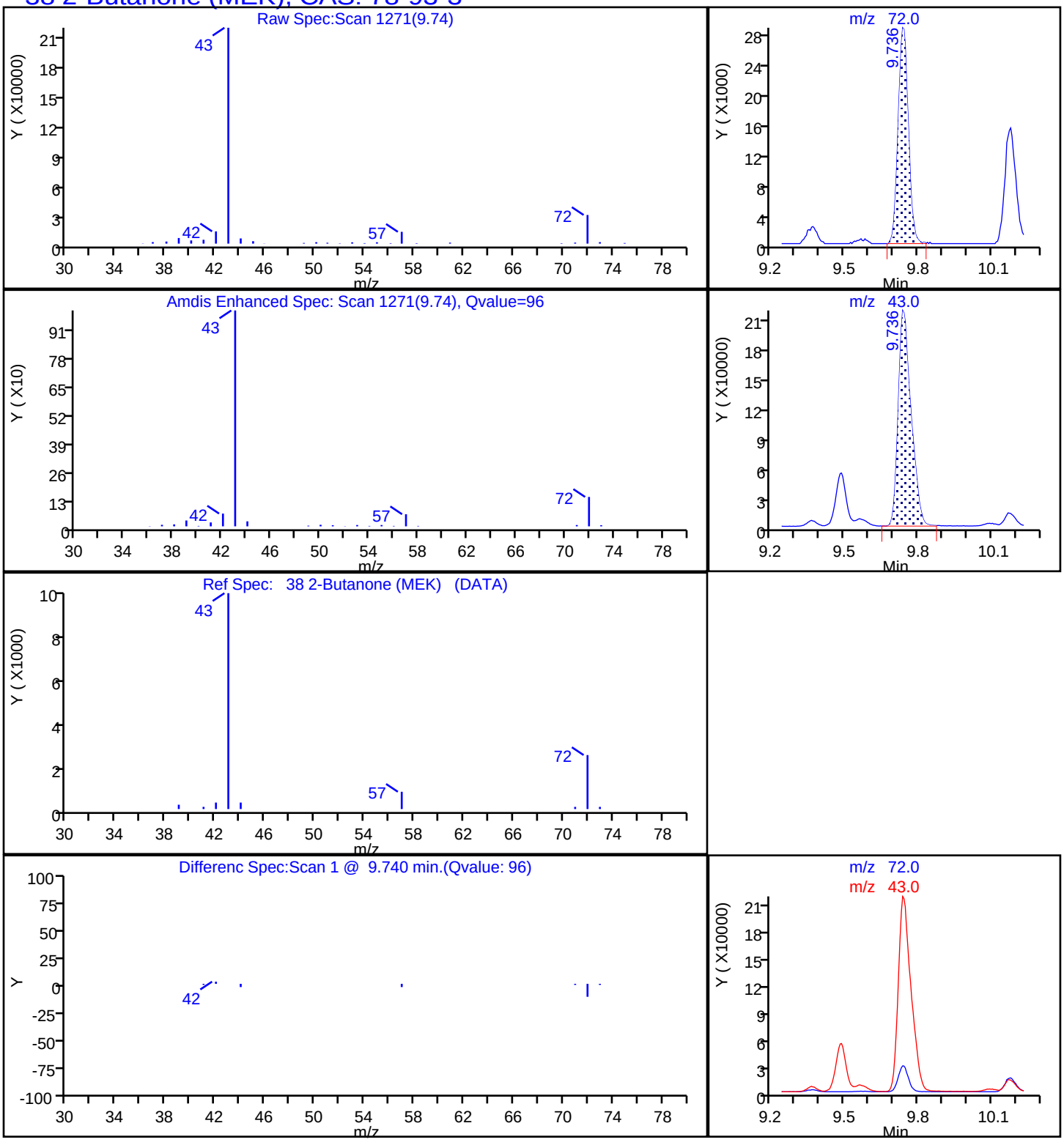




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

38 2-Butanone (MEK), CAS: 78-93-3



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Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
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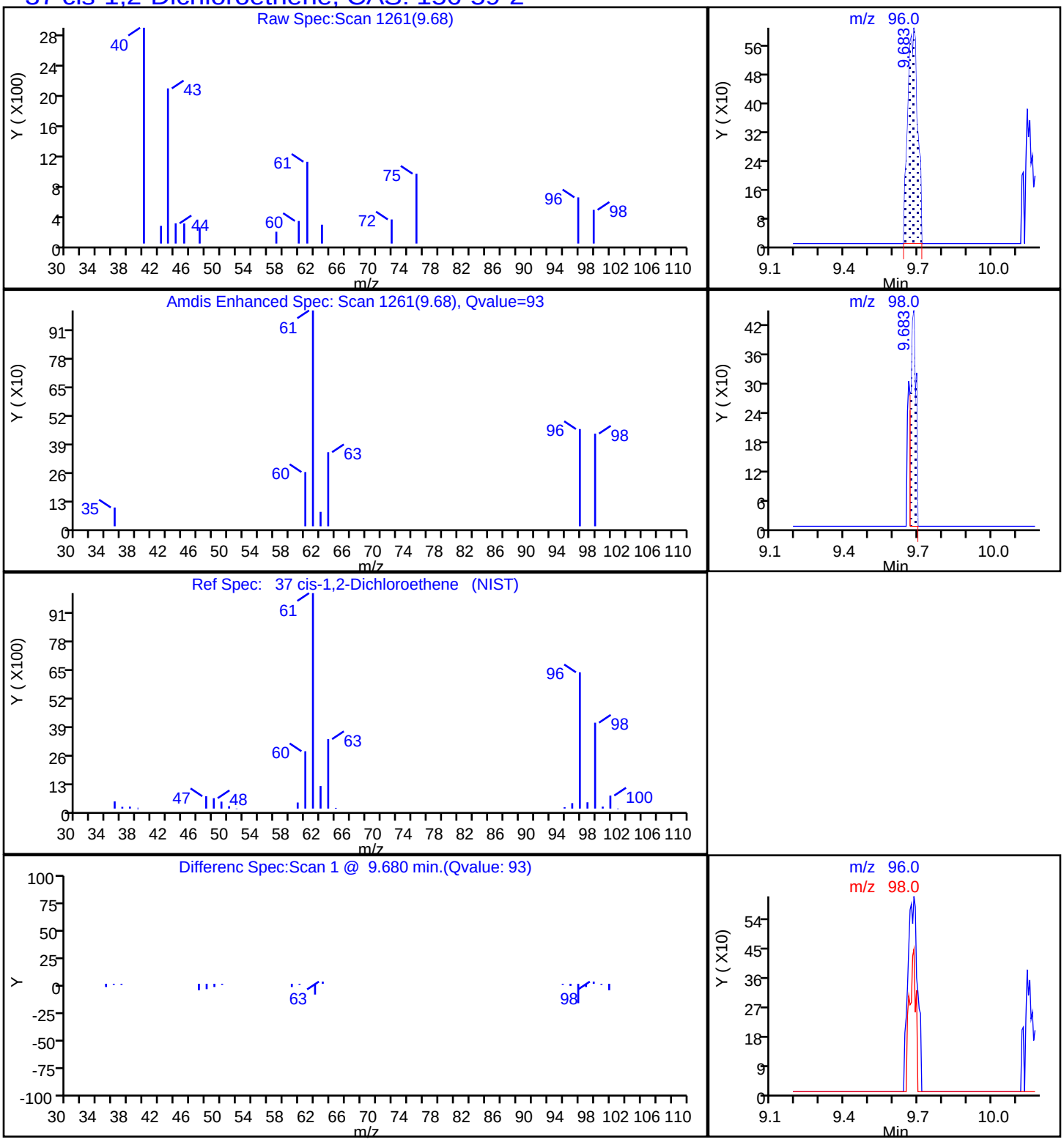
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

37 cis-1,2-Dichloroethene, CAS: 156-59-2



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Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
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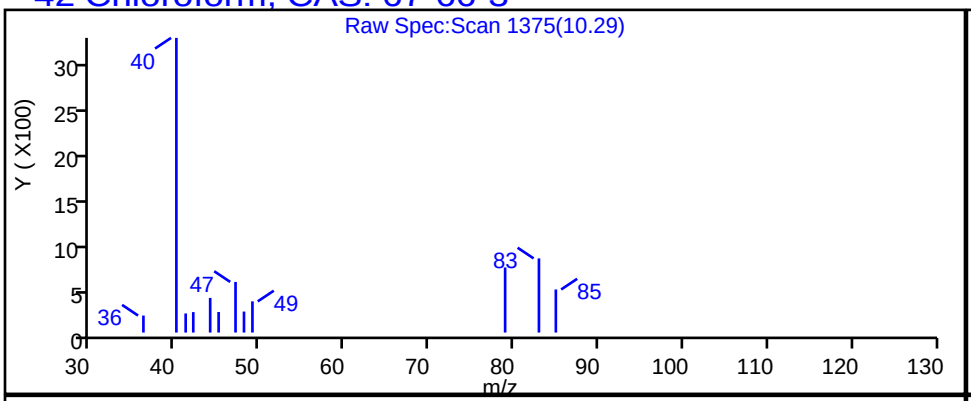
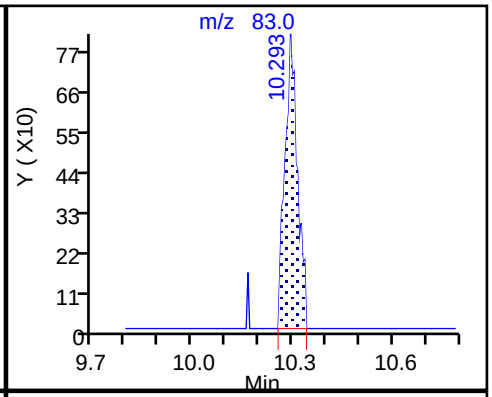
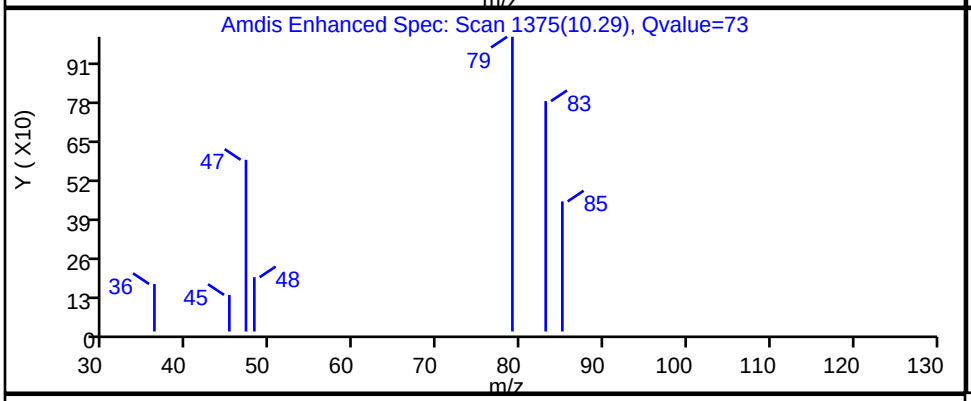
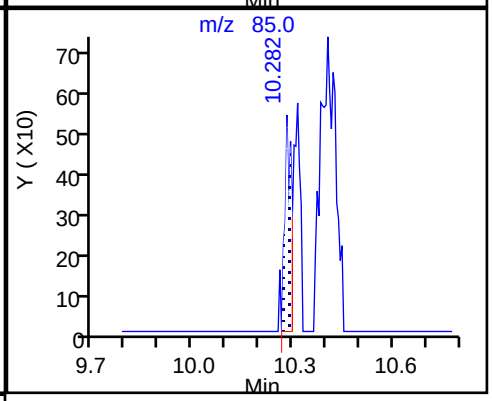
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

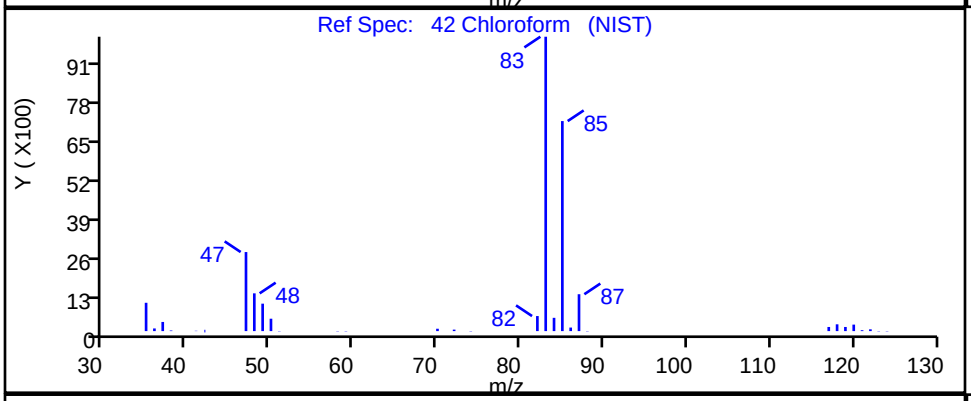
42 Chloroform, CAS: 67-66-3

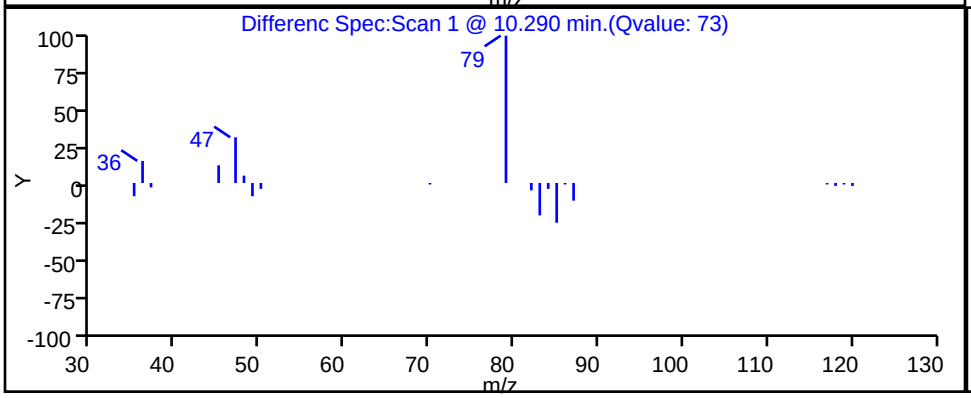


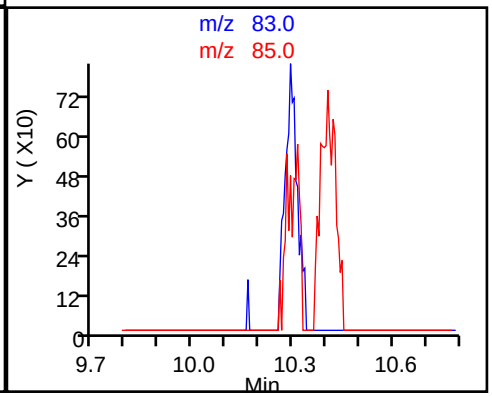












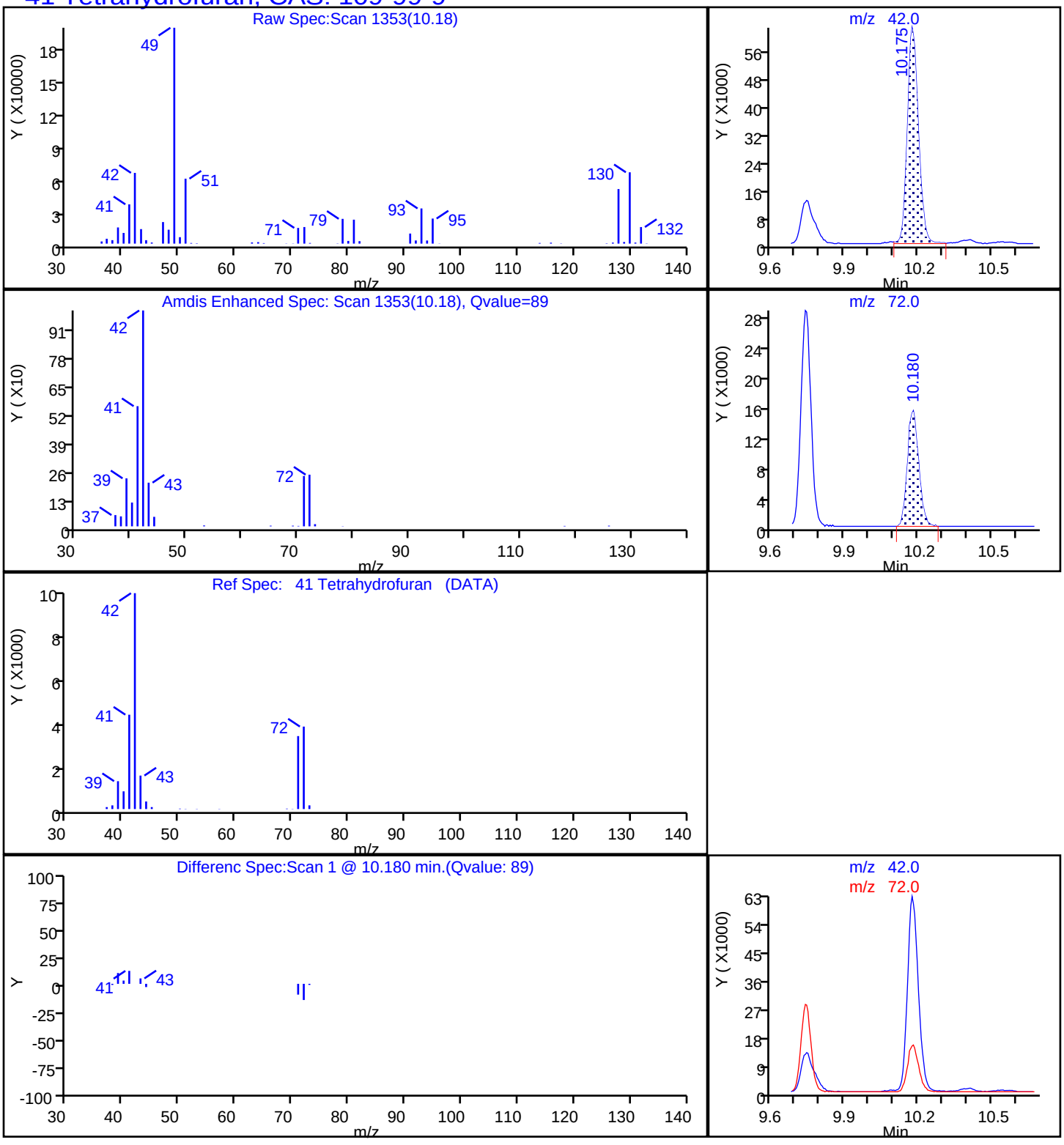
Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

41 Tetrahydrofuran, CAS: 109-99-9



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TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

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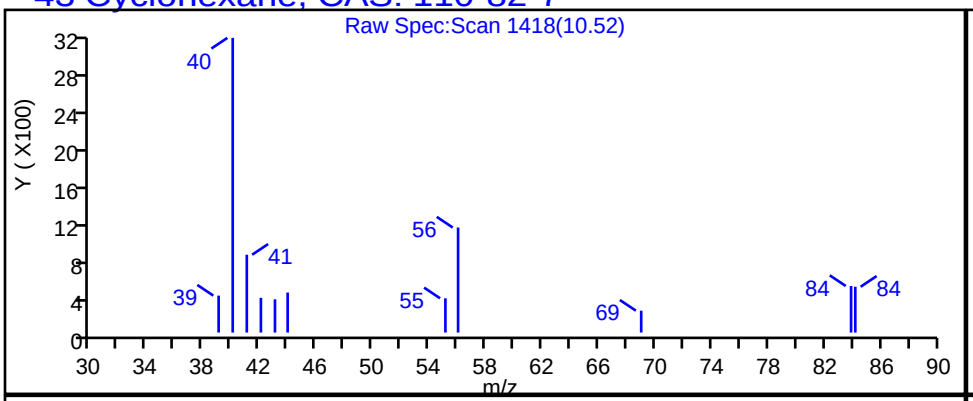
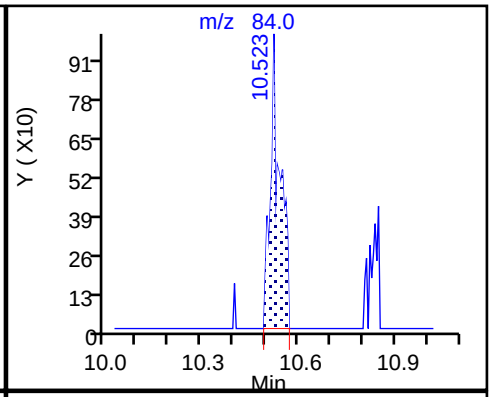
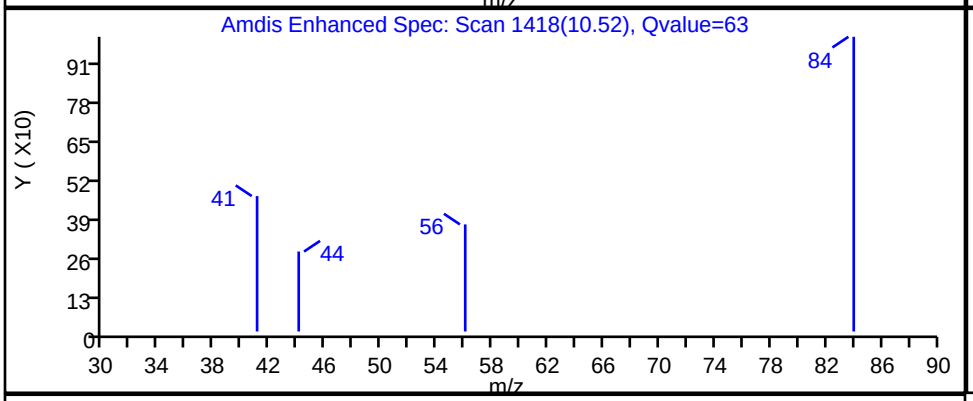
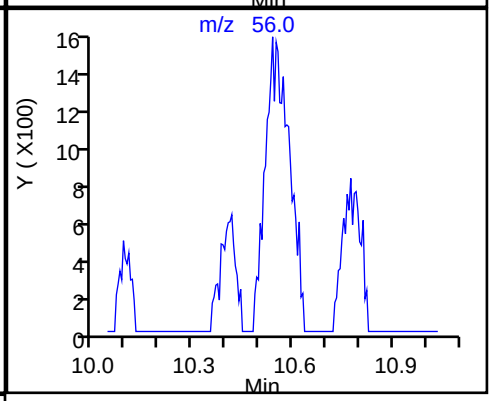
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

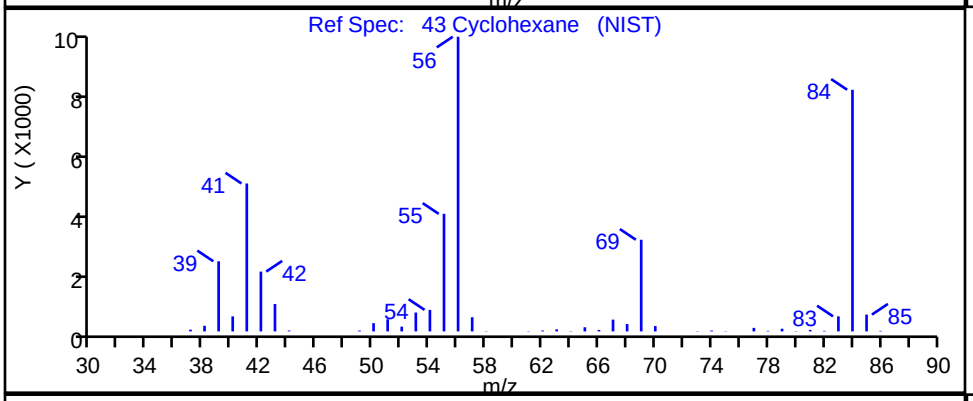
43 Cyclohexane, CAS: 110-82-7

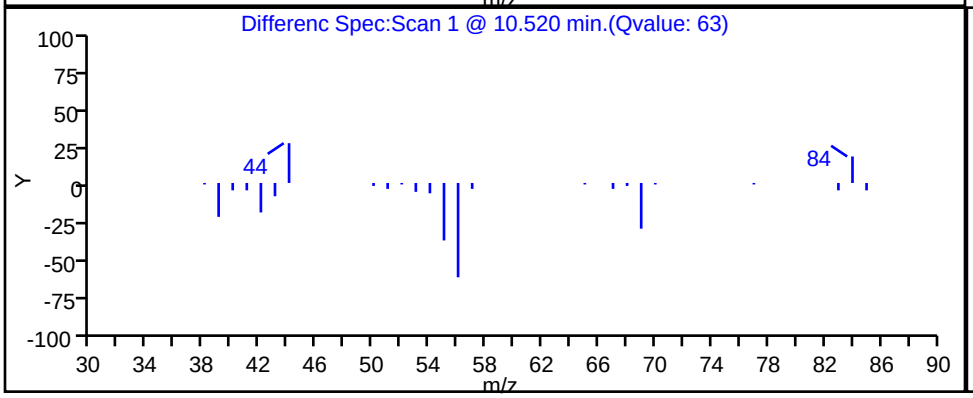


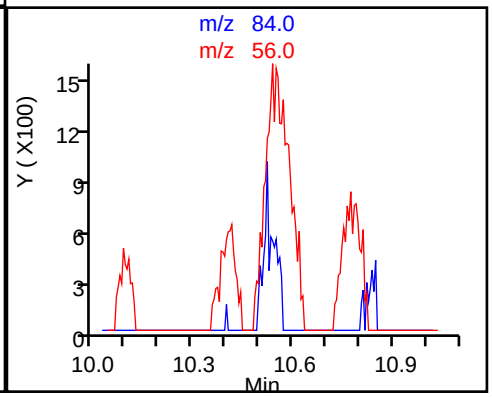












TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
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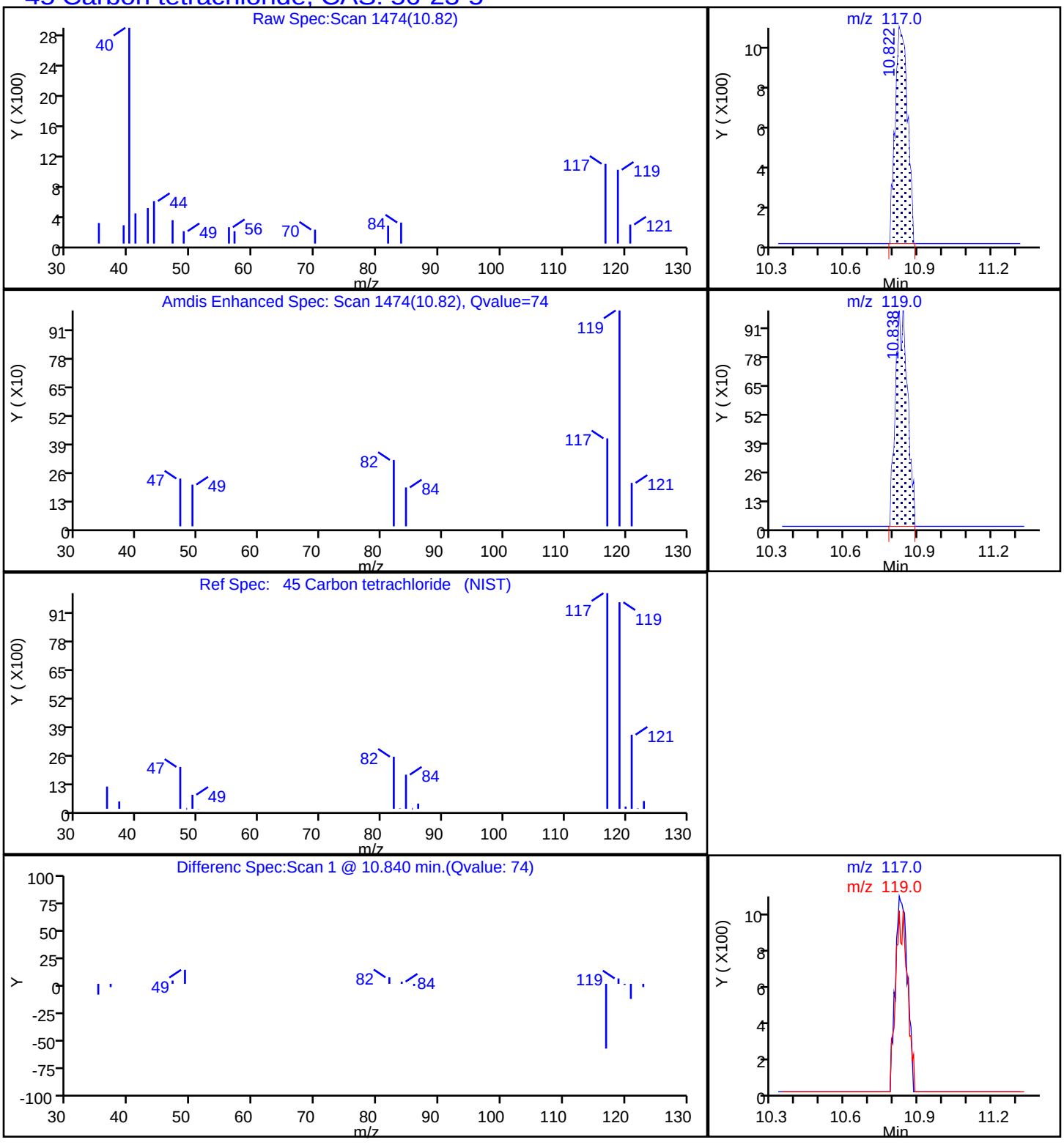
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Burlington

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Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
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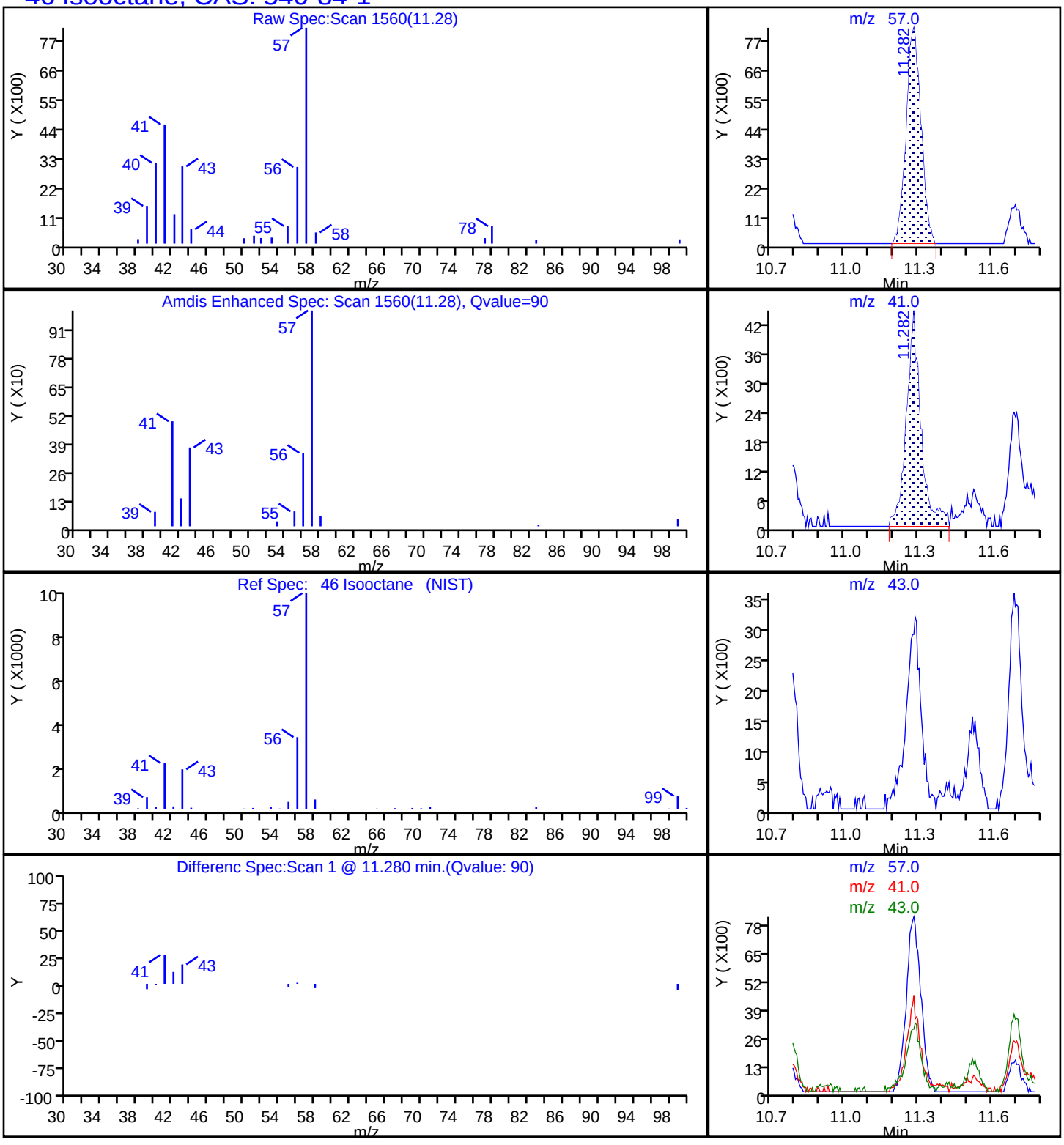
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Isooctane, CAS: 540-84-1



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
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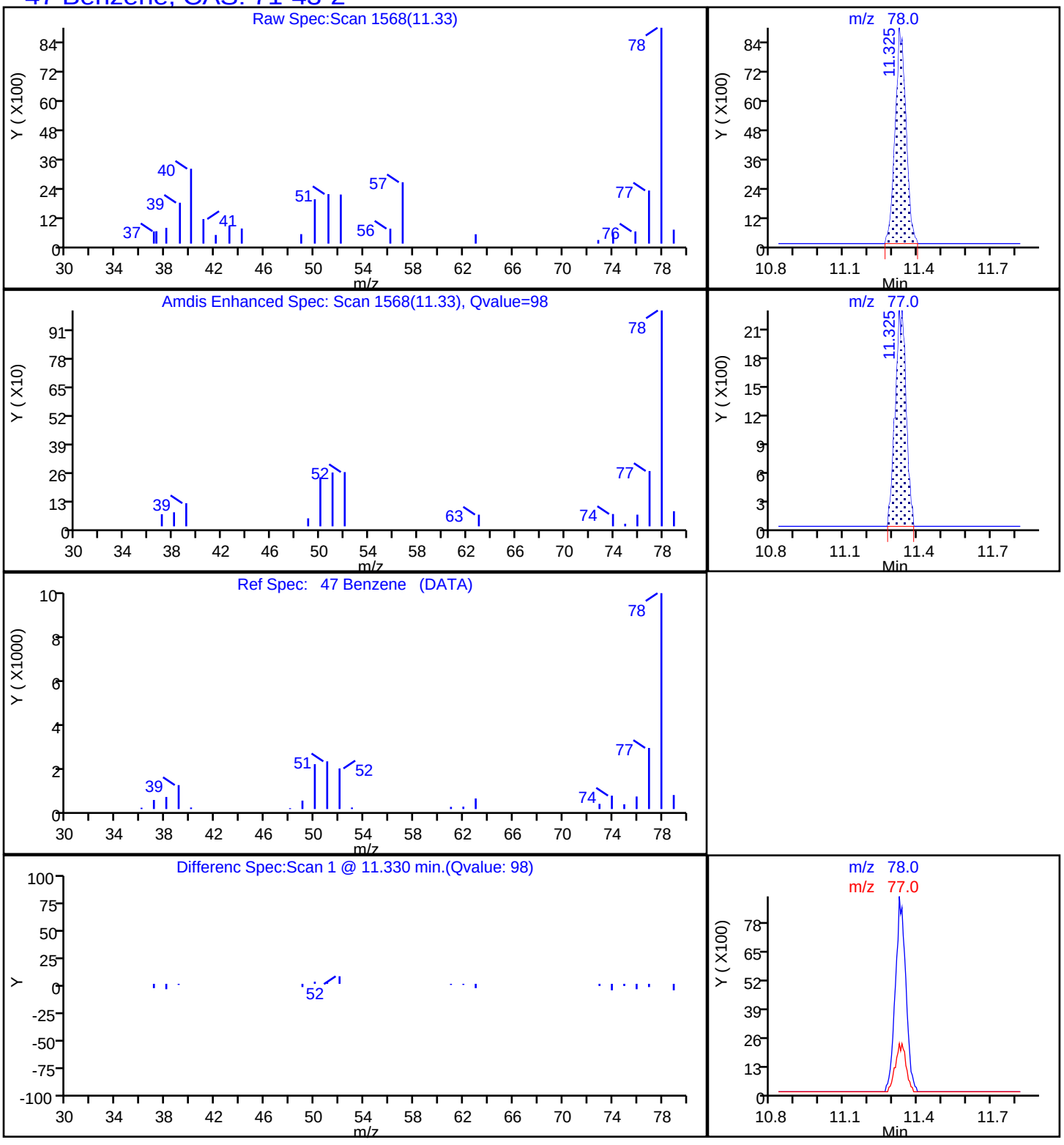
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

47 Benzene, CAS: 71-43-2



Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

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Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
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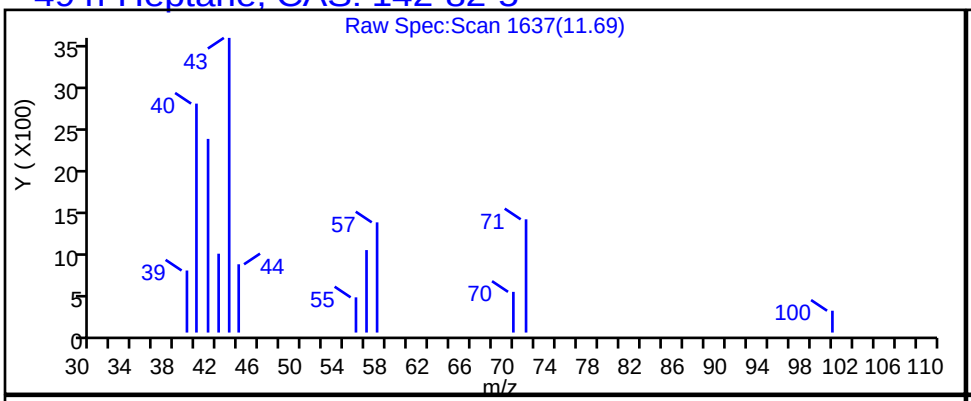
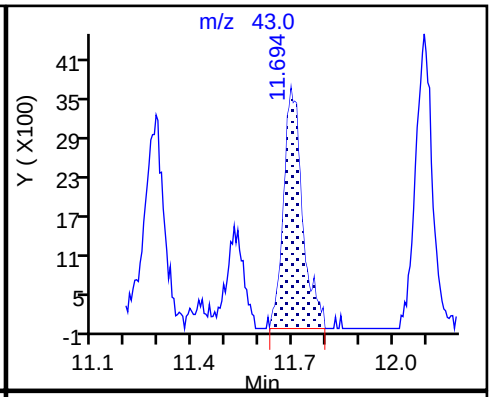
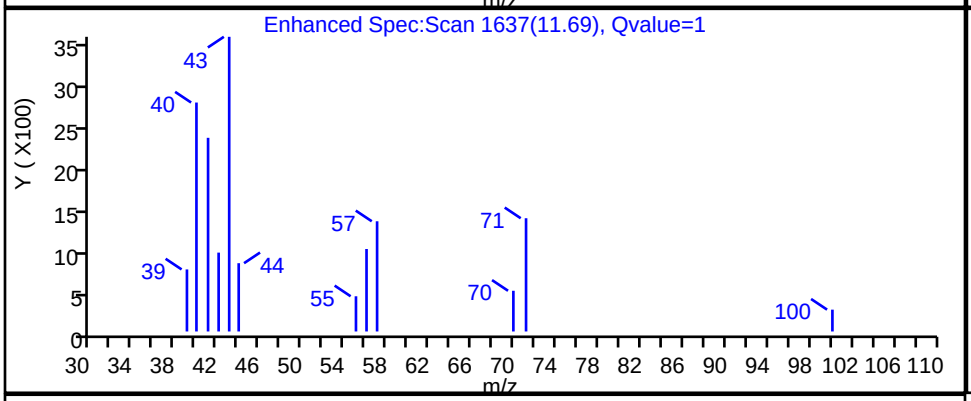
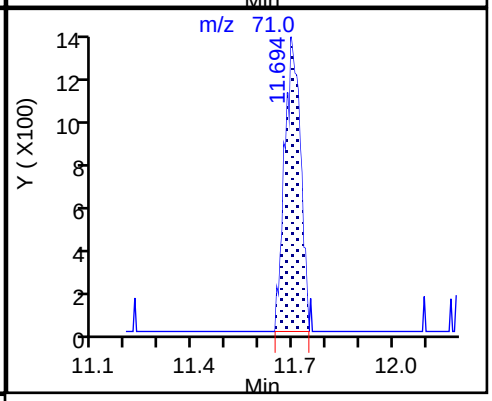
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

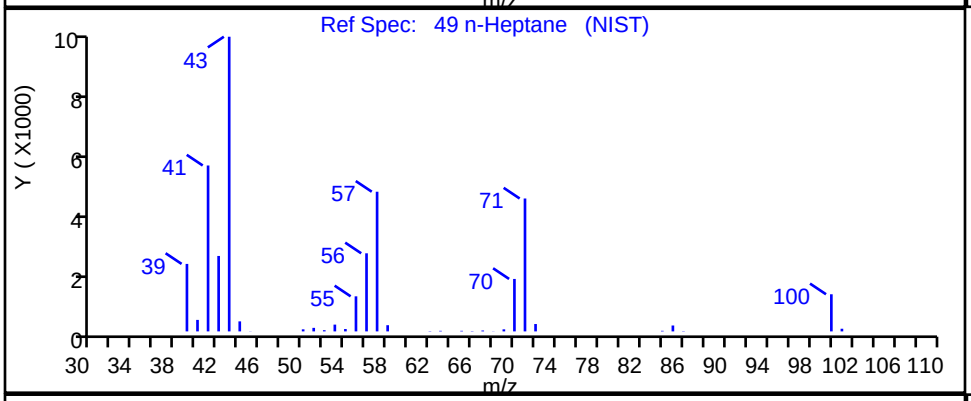
49 n-Heptane, CAS: 142-82-5

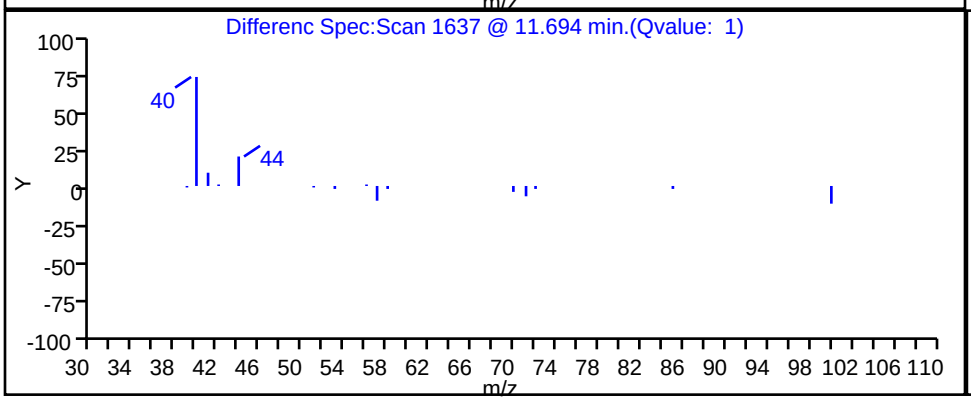


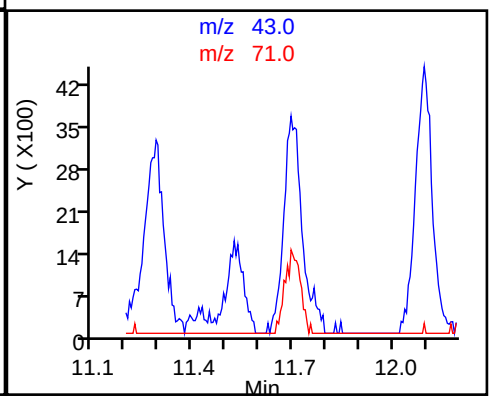












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TestAmerica Burlington

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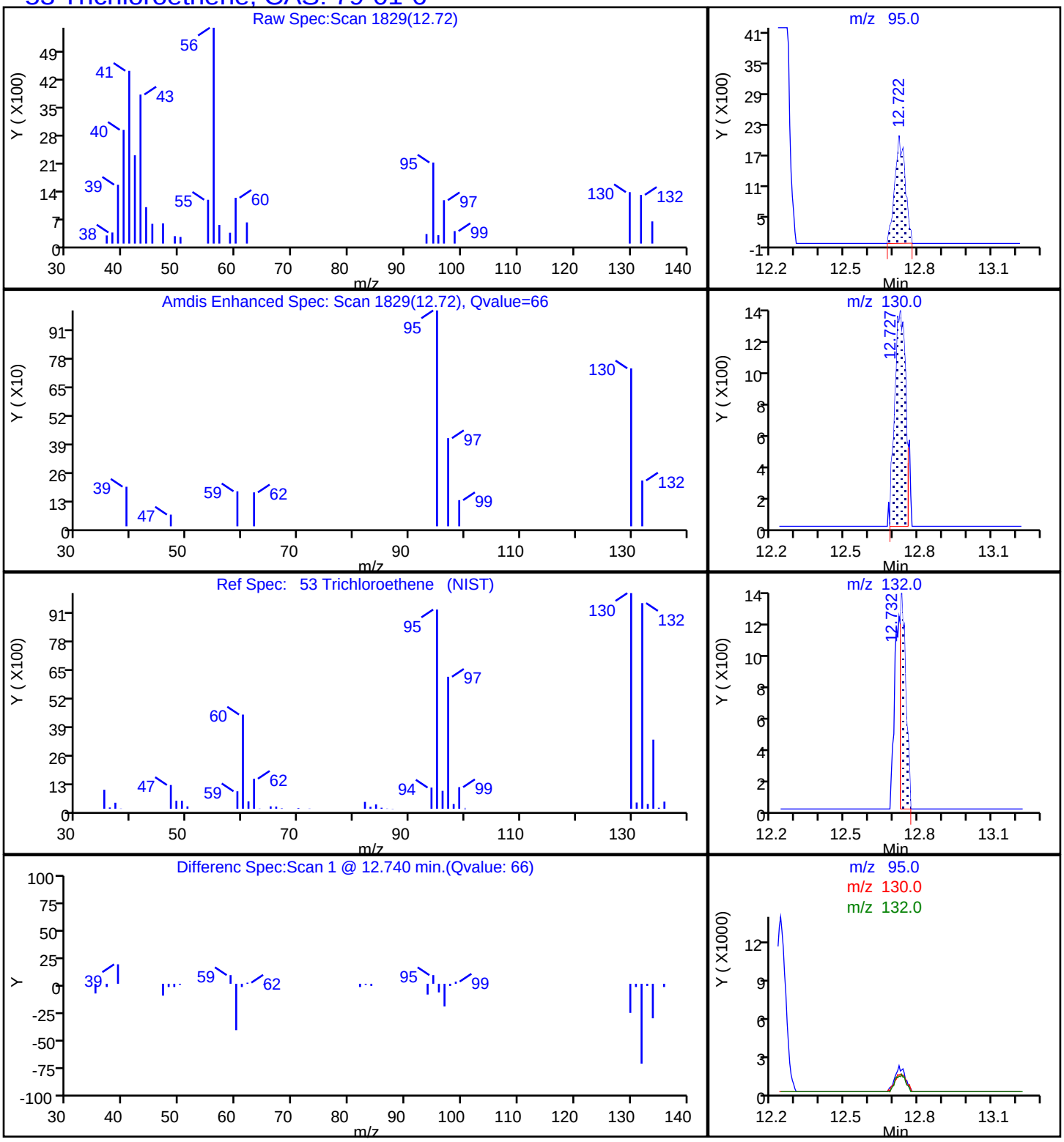
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6



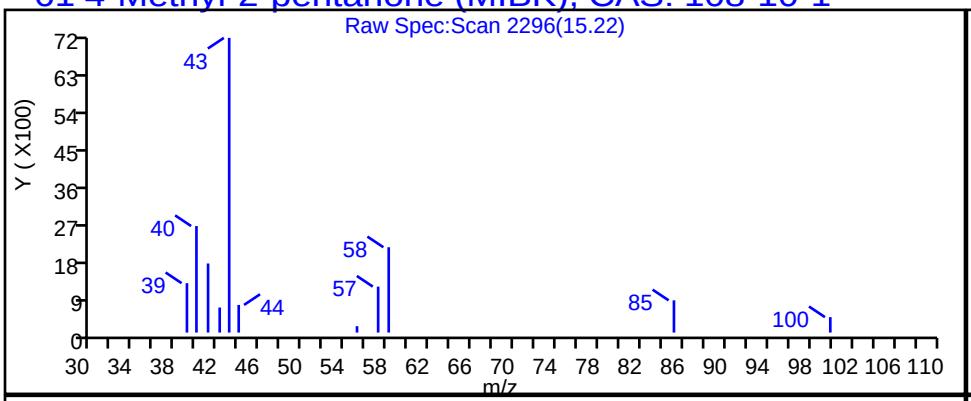
Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

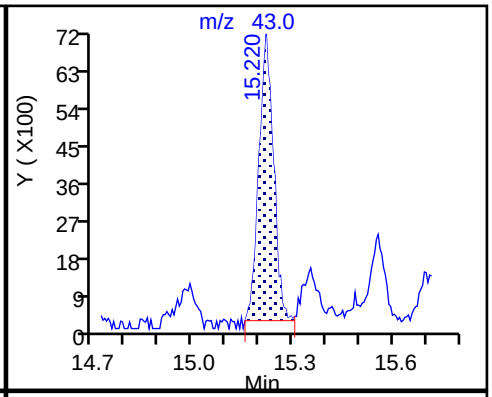
TestAmerica Burlington

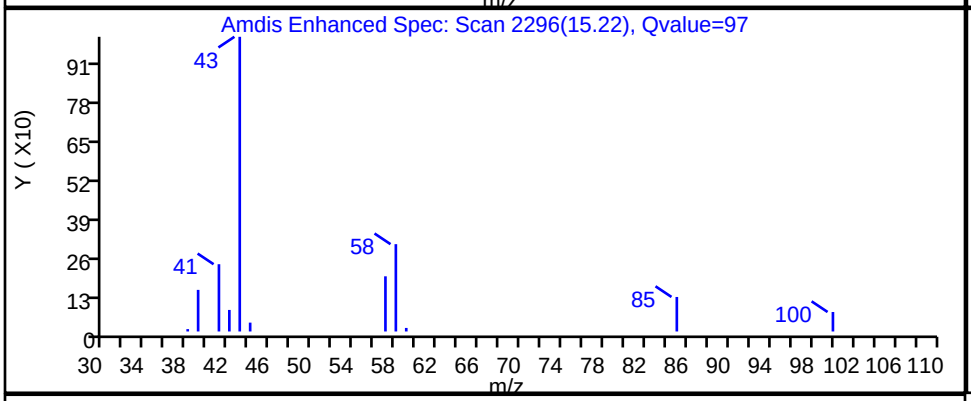
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

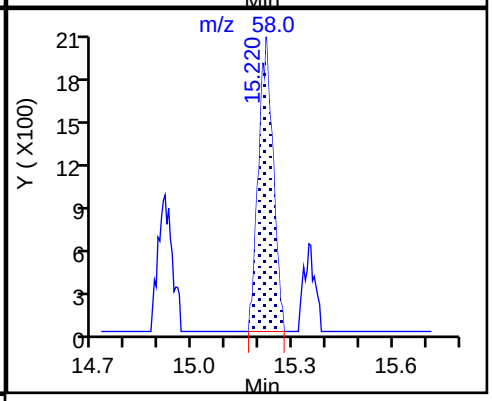
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

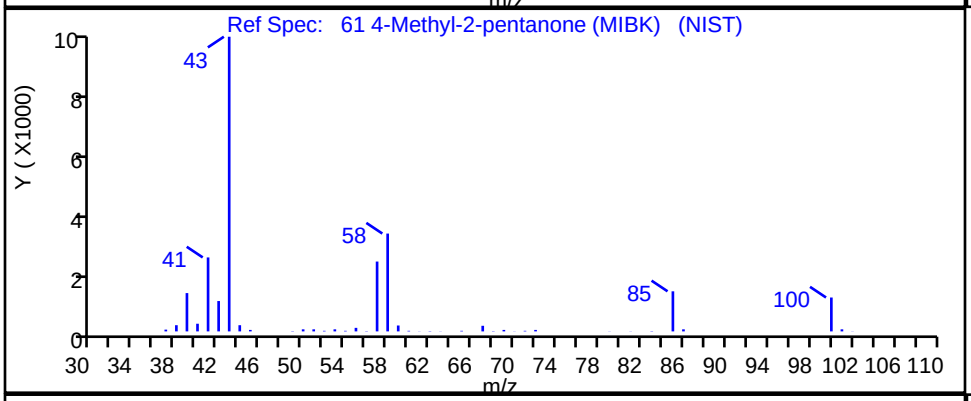
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

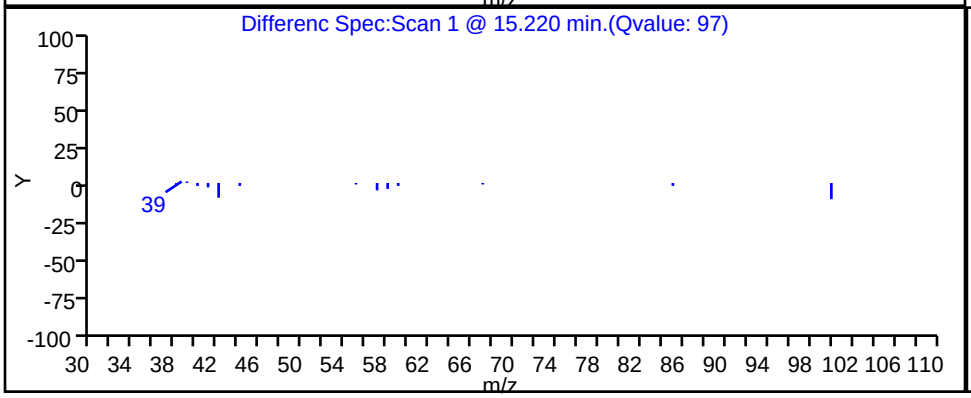


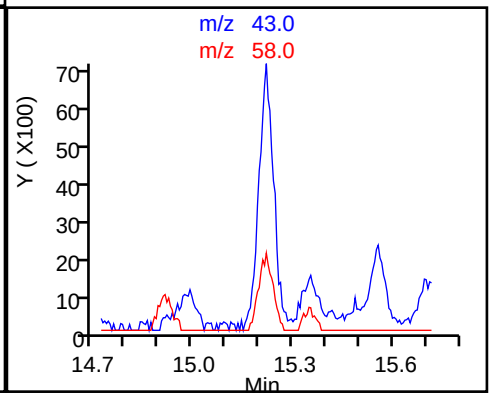












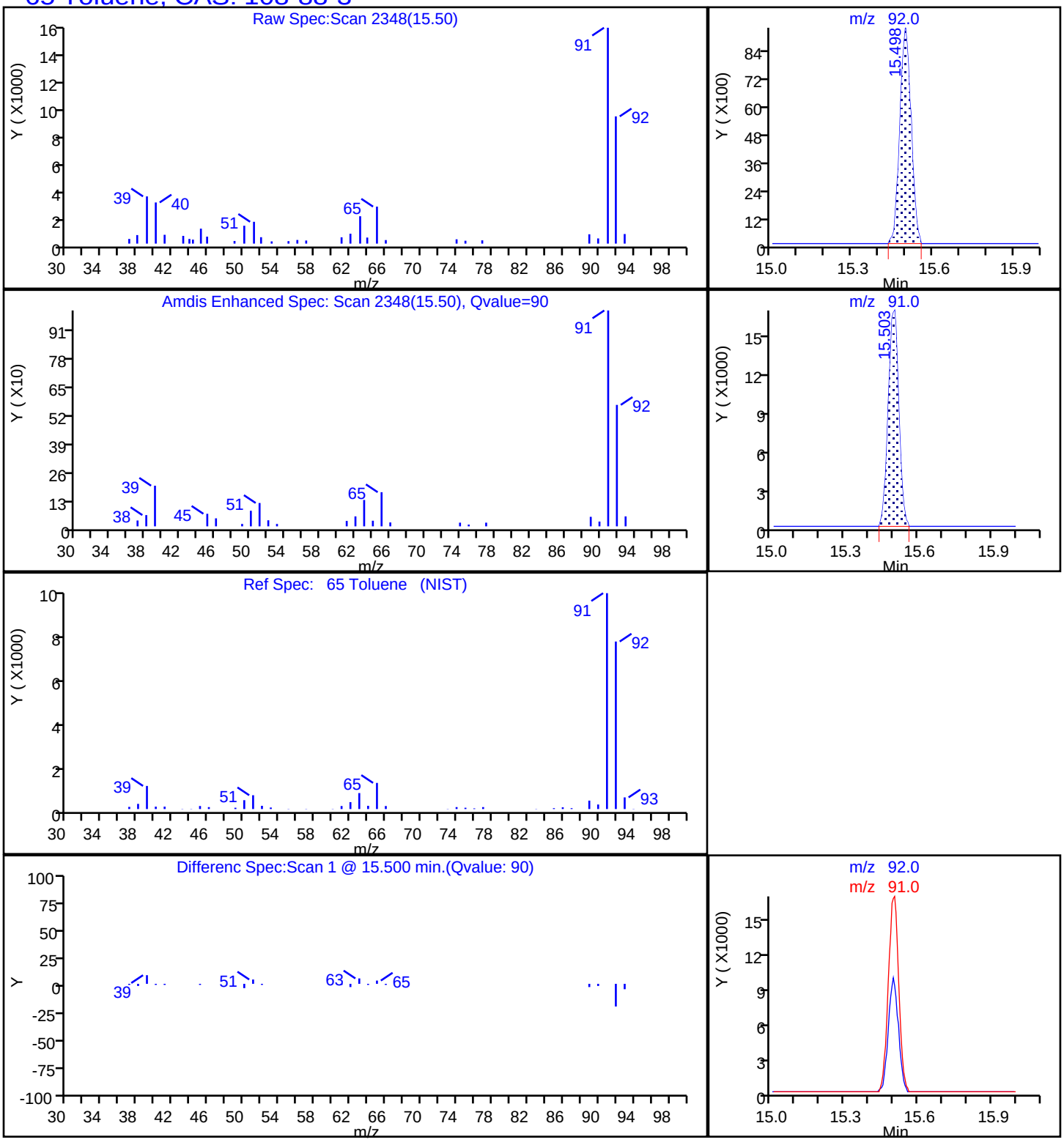
Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

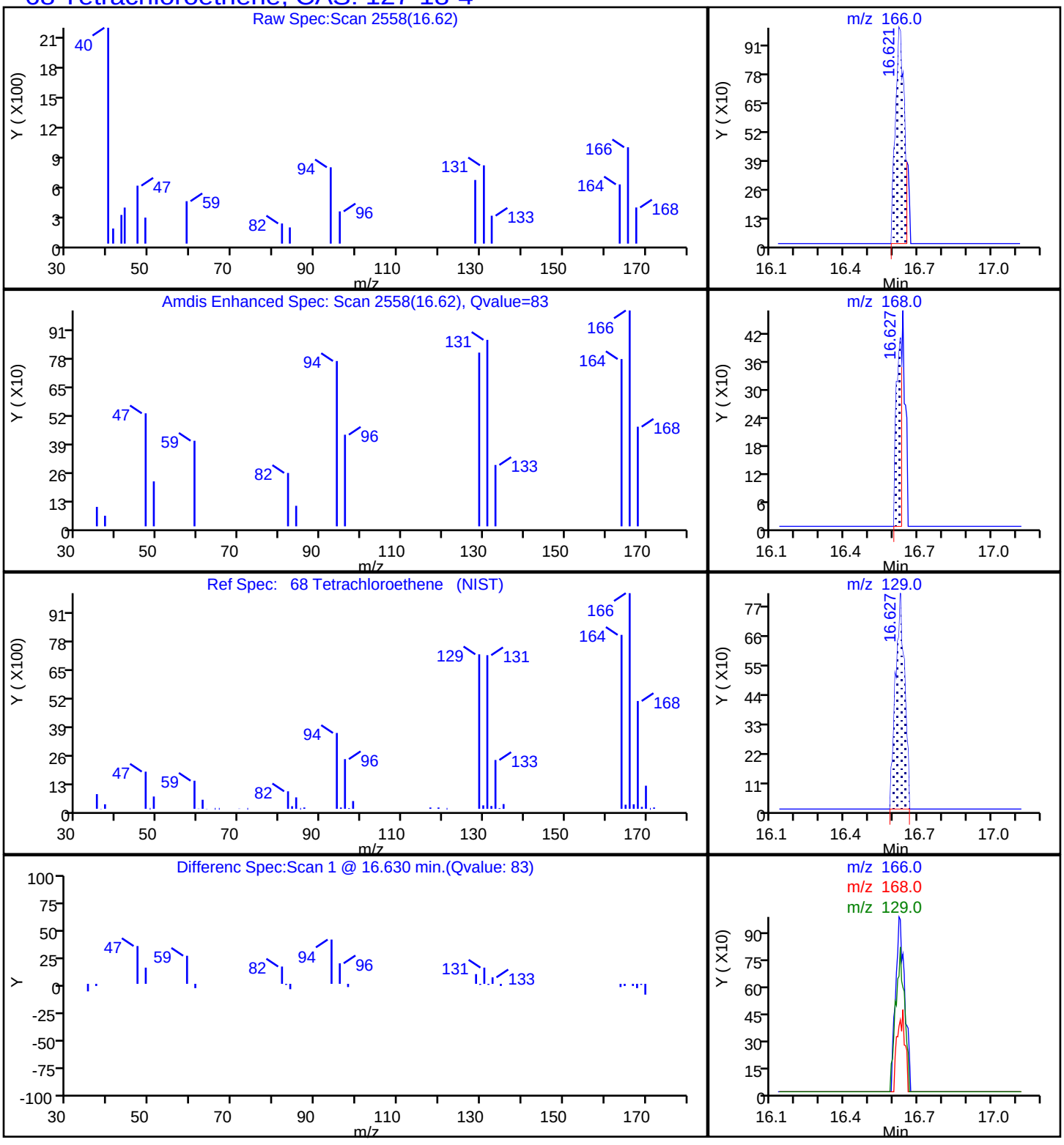
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4



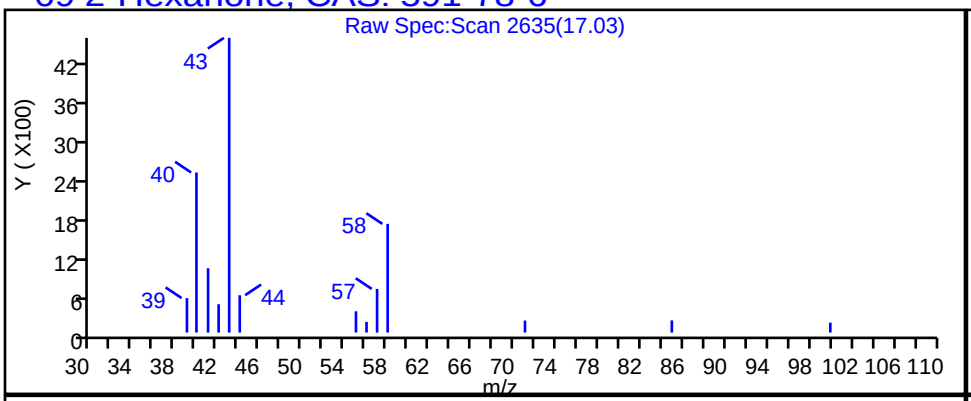
Report Date: 06-Apr-2018 13:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

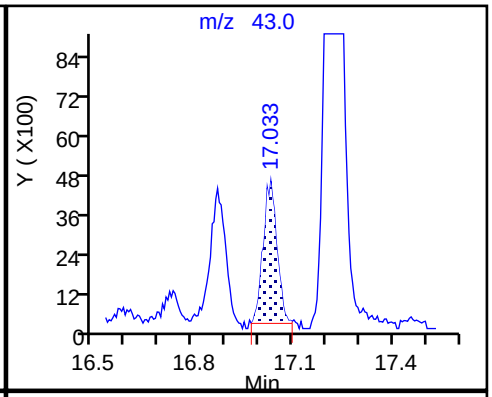
TestAmerica Burlington

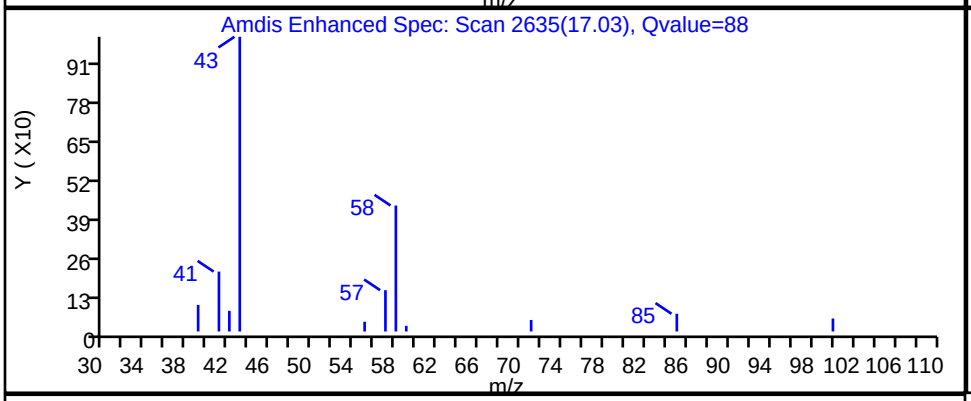
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D

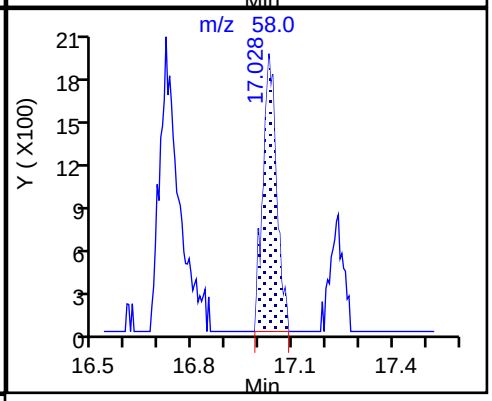
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

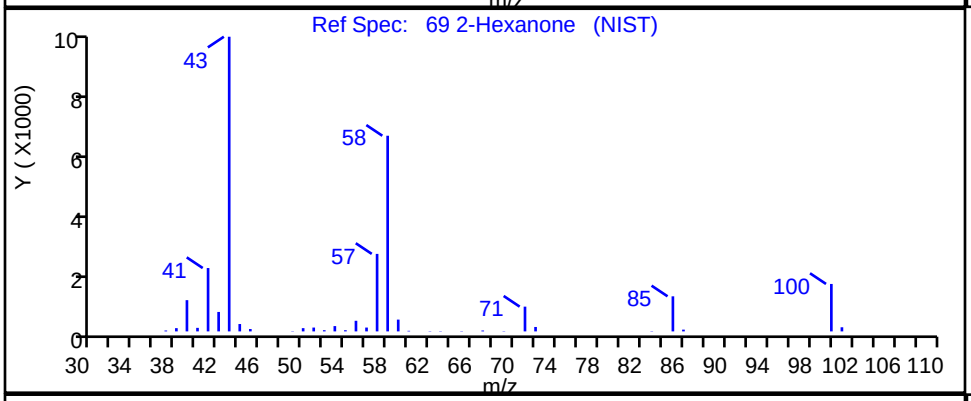
69 2-Hexanone, CAS: 591-78-6

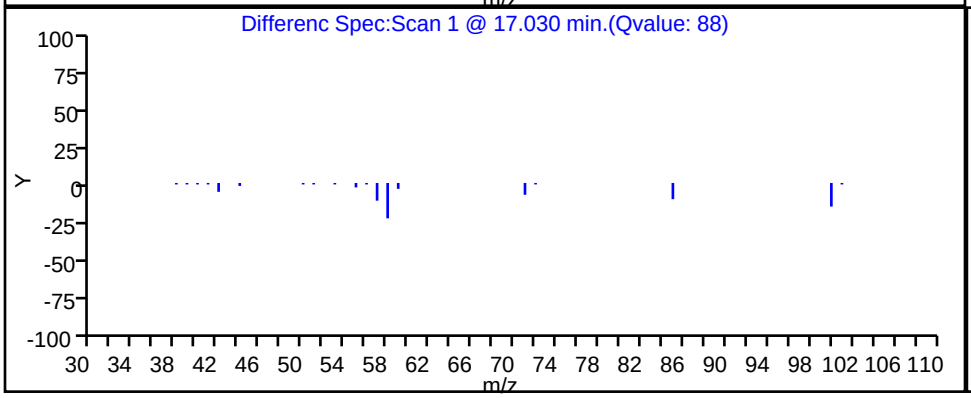


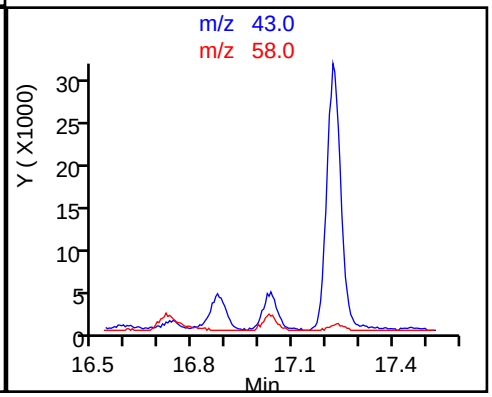






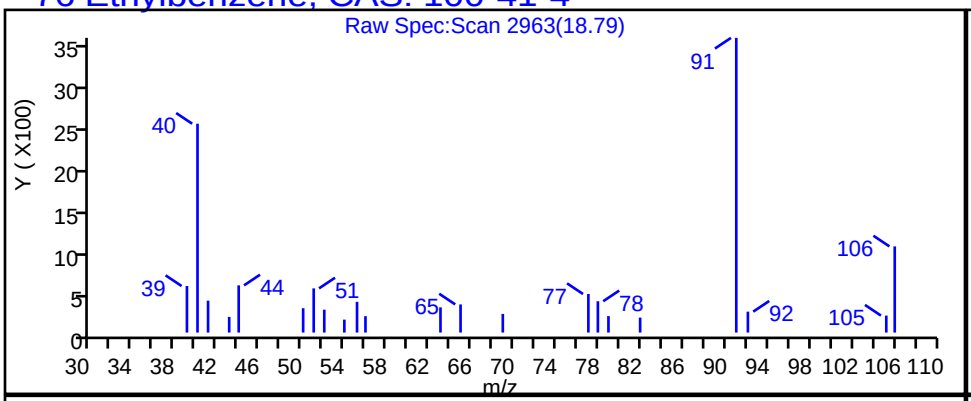


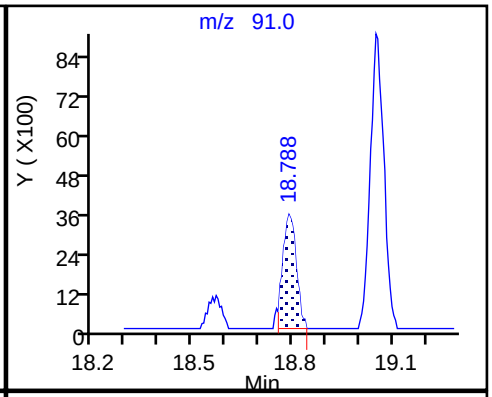


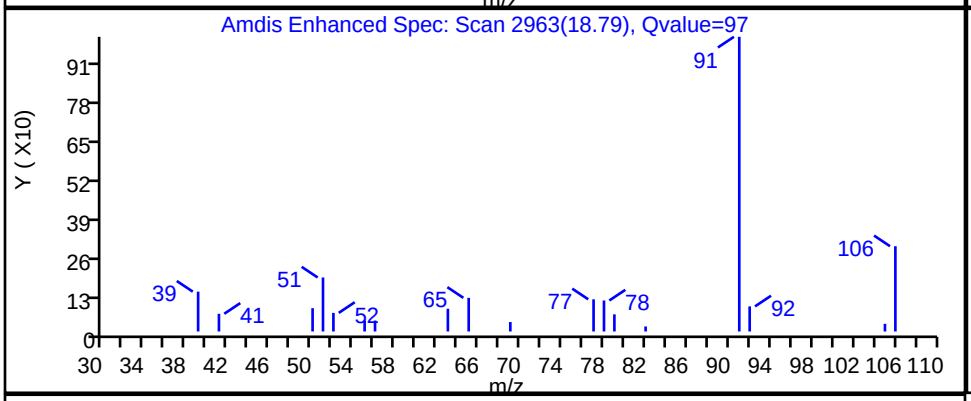


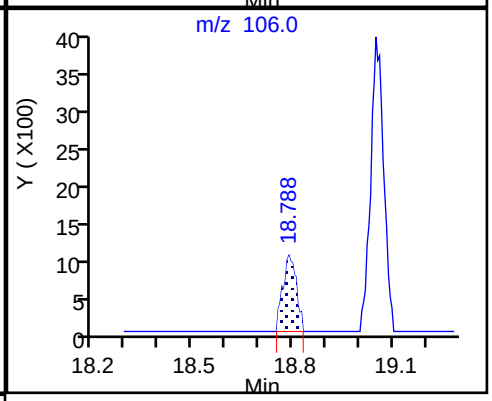
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

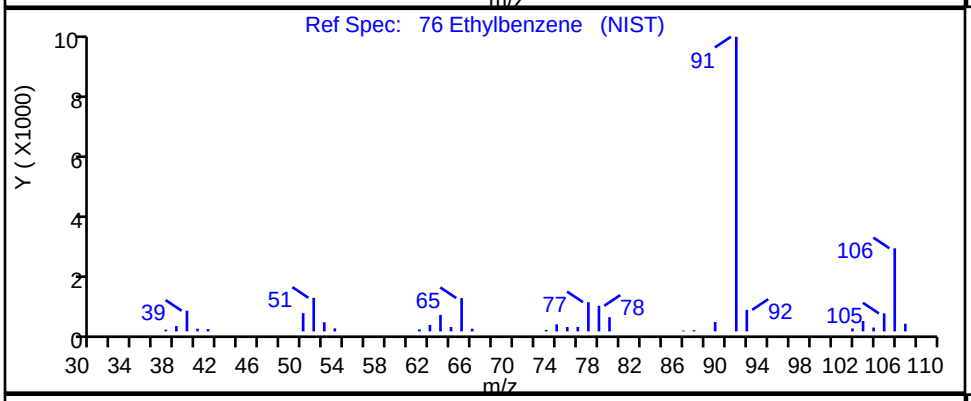
76 Ethylbenzene, CAS: 100-41-4

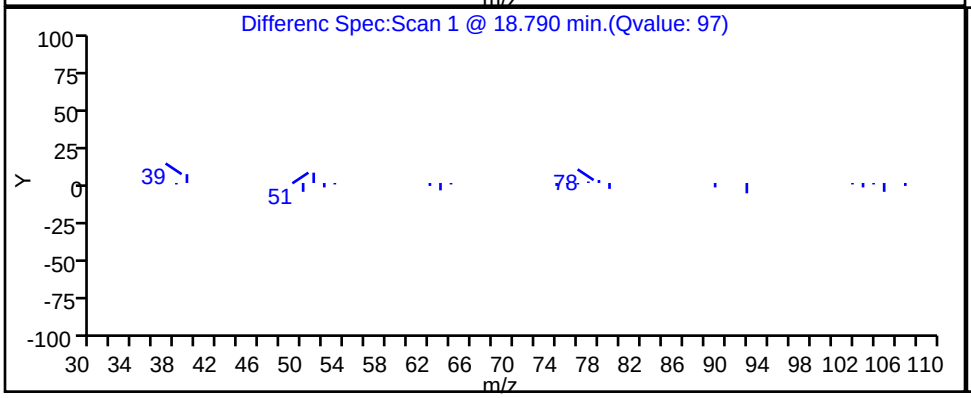


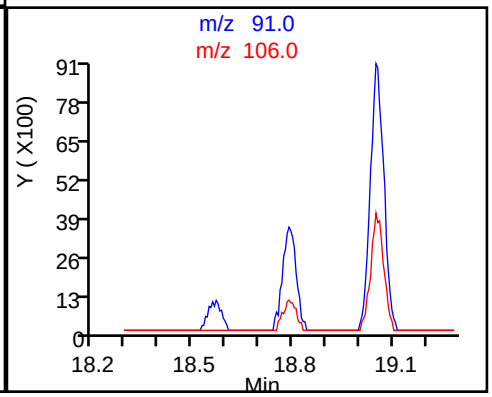






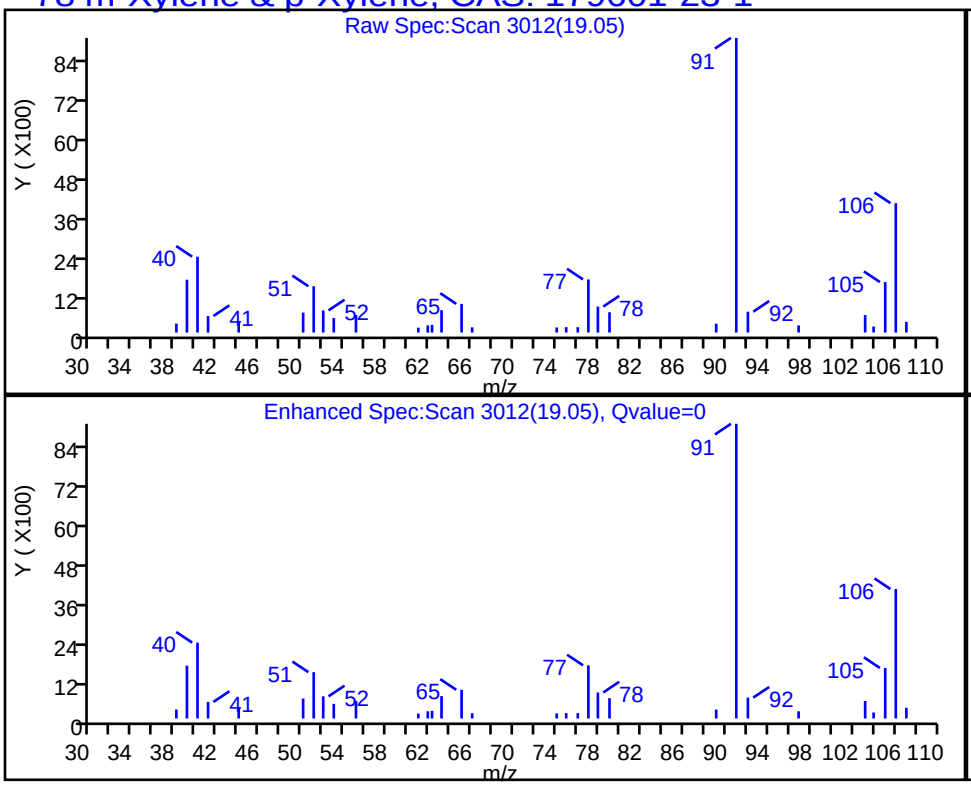


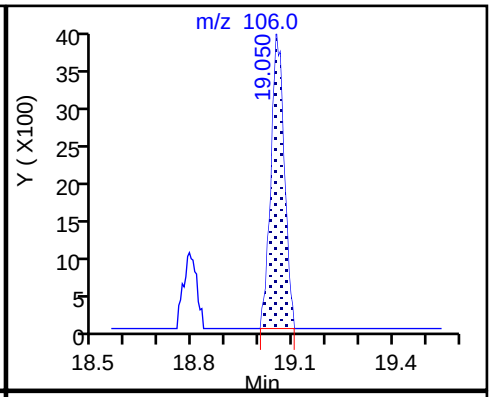


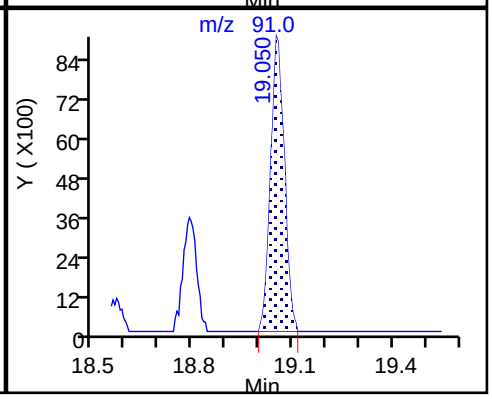


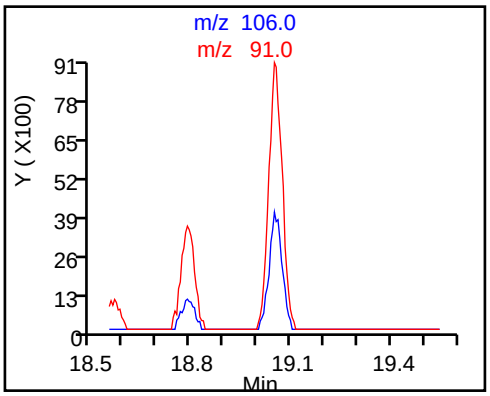
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

78 m-Xylene & p-Xylene, CAS: 179601-23-1



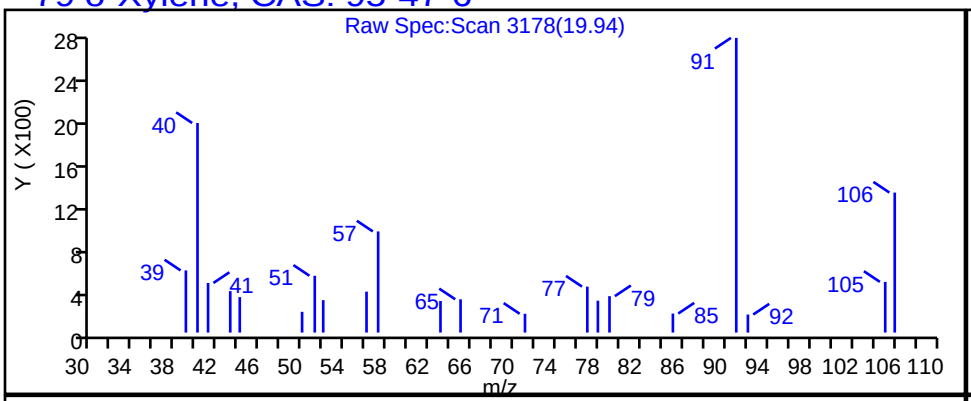


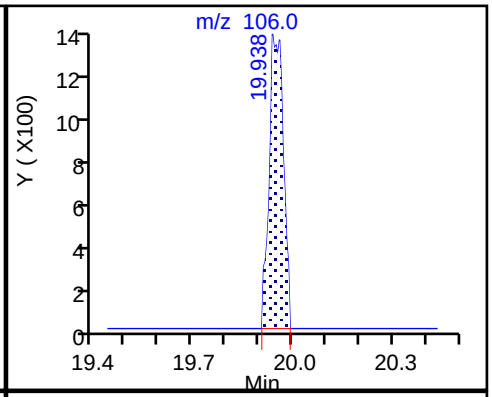


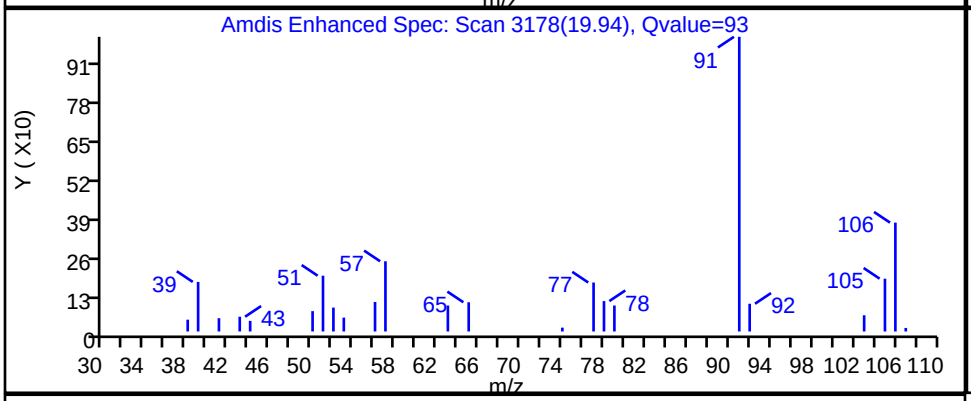


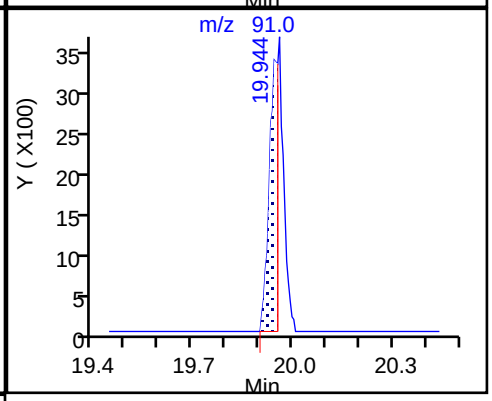
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D
Injection Date: 05-Apr-2018 15:55:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

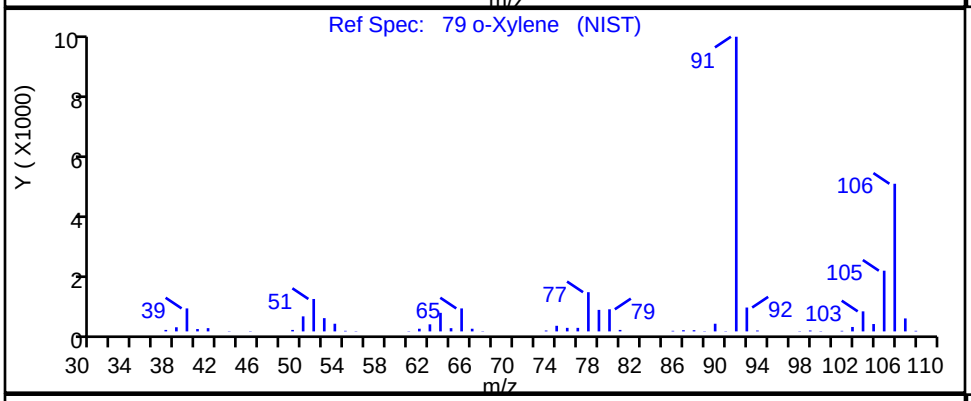
79 o-Xylene, CAS: 95-47-6

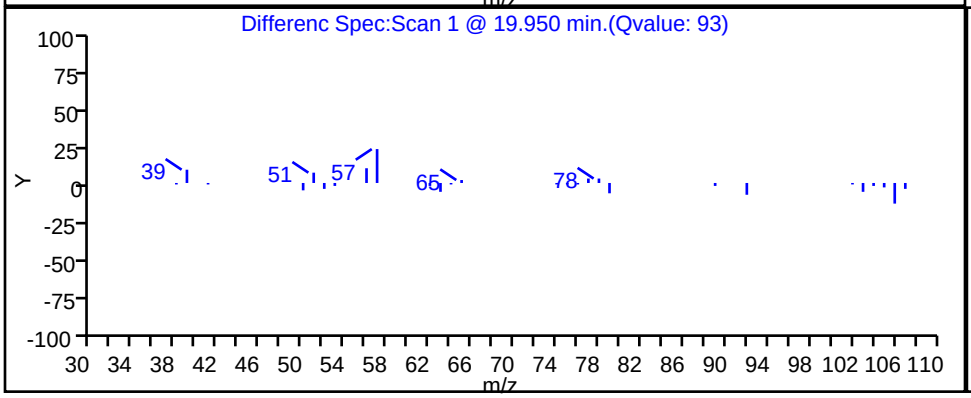


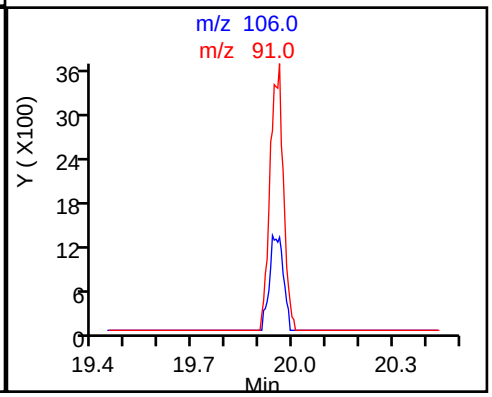












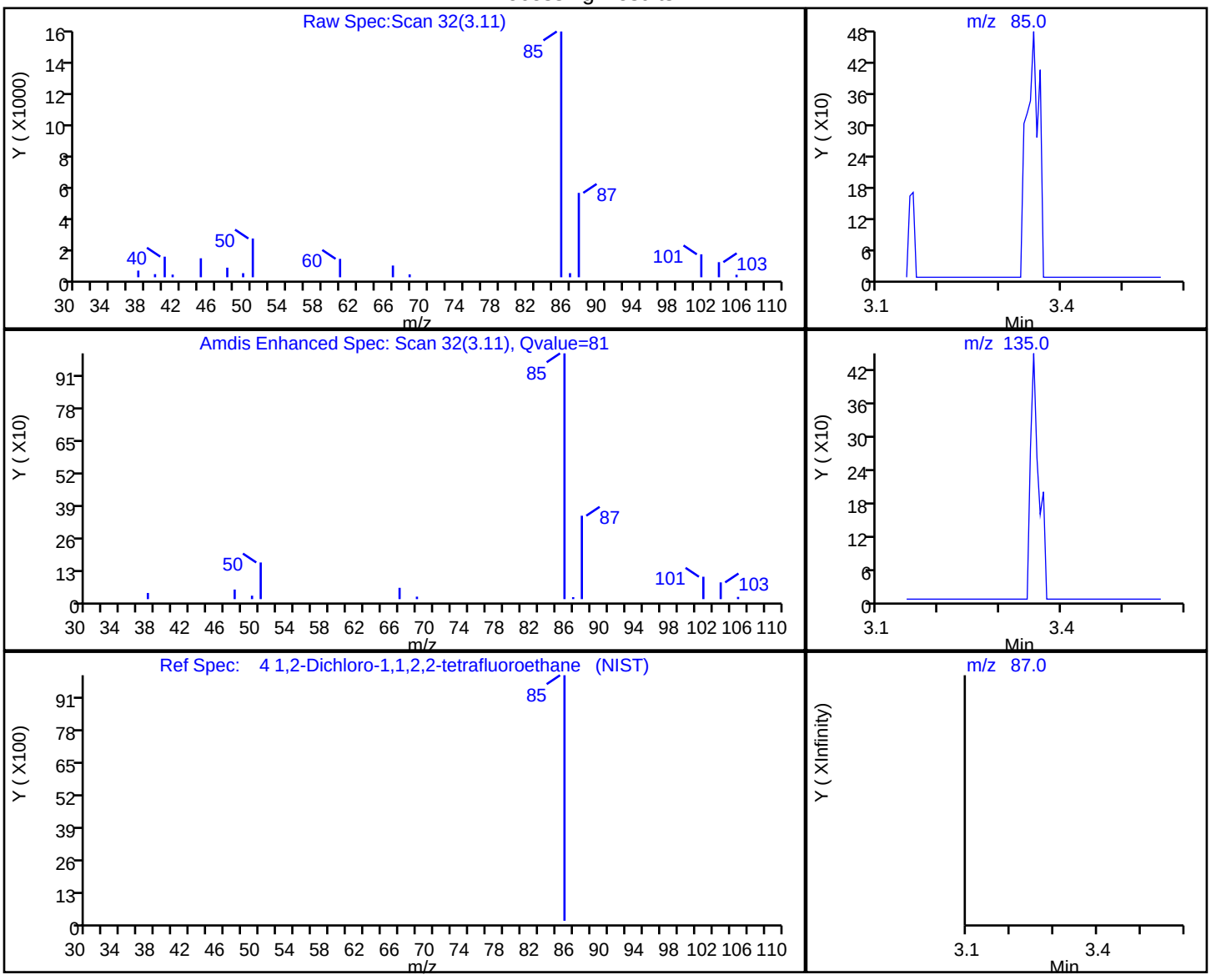
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
3.11	85.00	24392	0.355814
3.35	135.00	0	
3.11	87.00	8066	

Reviewer: puangmaleek, 06-Apr-2018 13:41:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

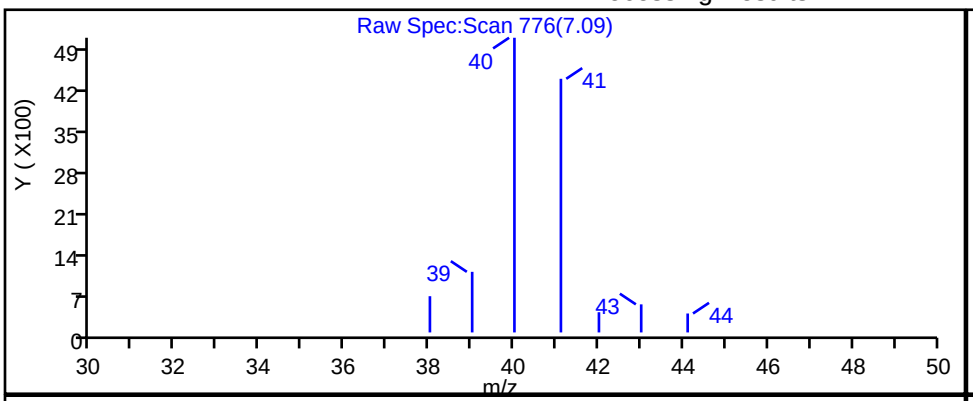
User Disabled Compound Report

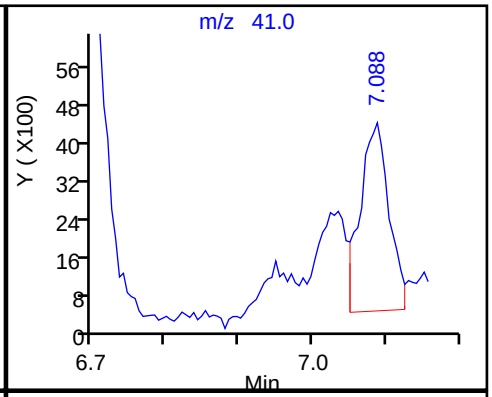
TestAmerica Burlington

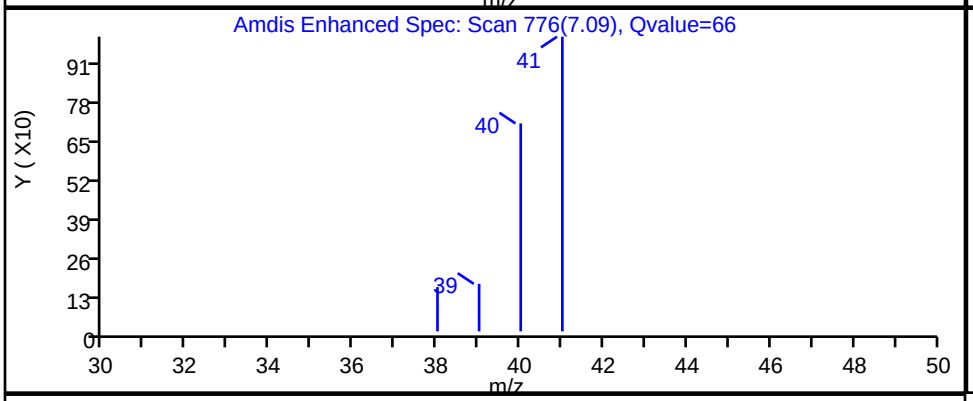
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

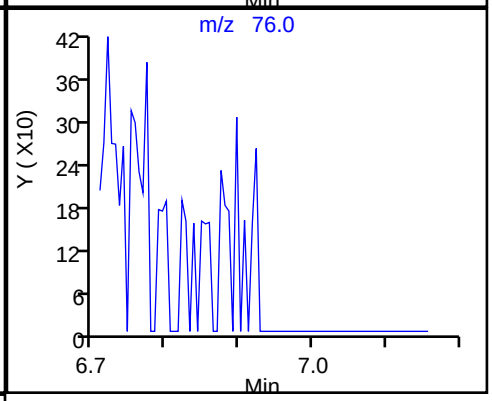
25 3-Chloro-1-propene, CAS: 107-05-1

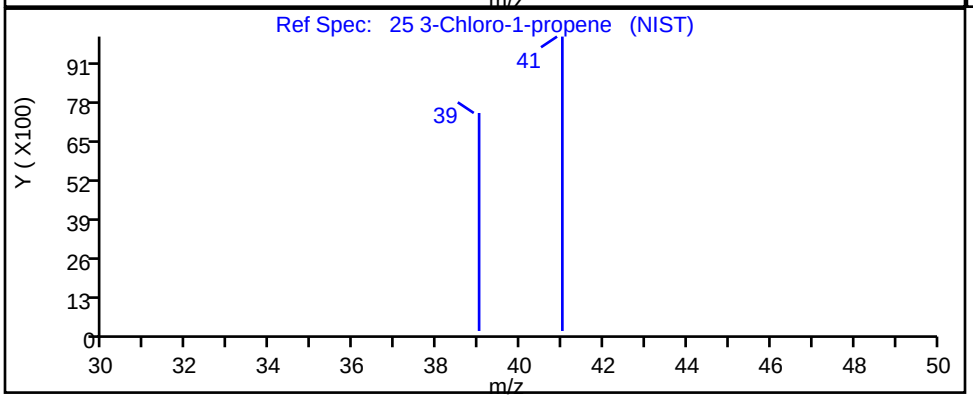
Processing Results











RT	Mass	Response	Amount
7.09	41.00	11098	0.194530
6.93	76.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:41:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

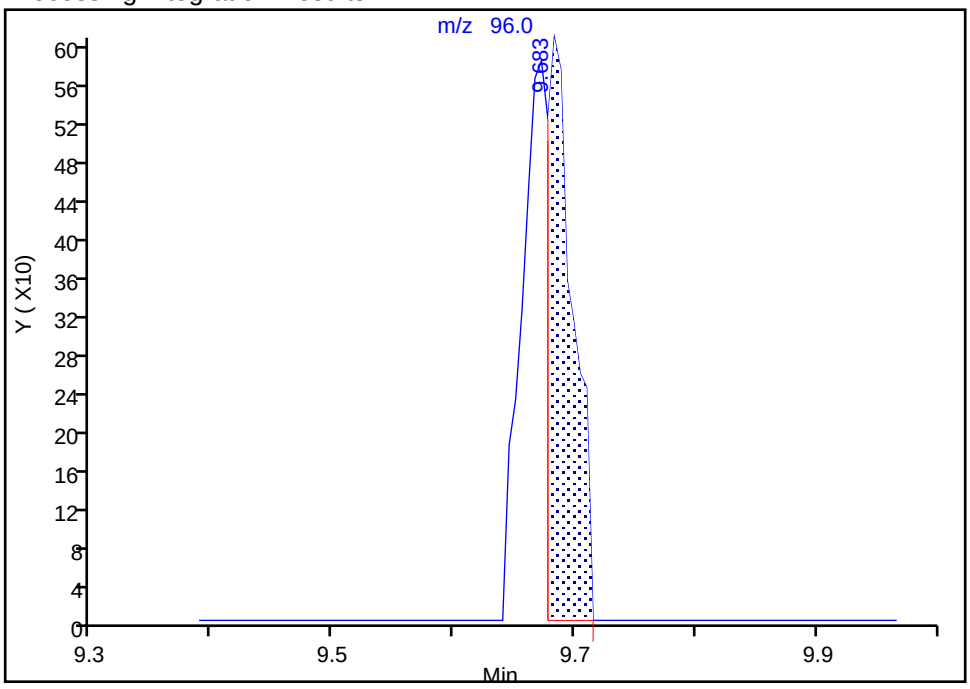
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

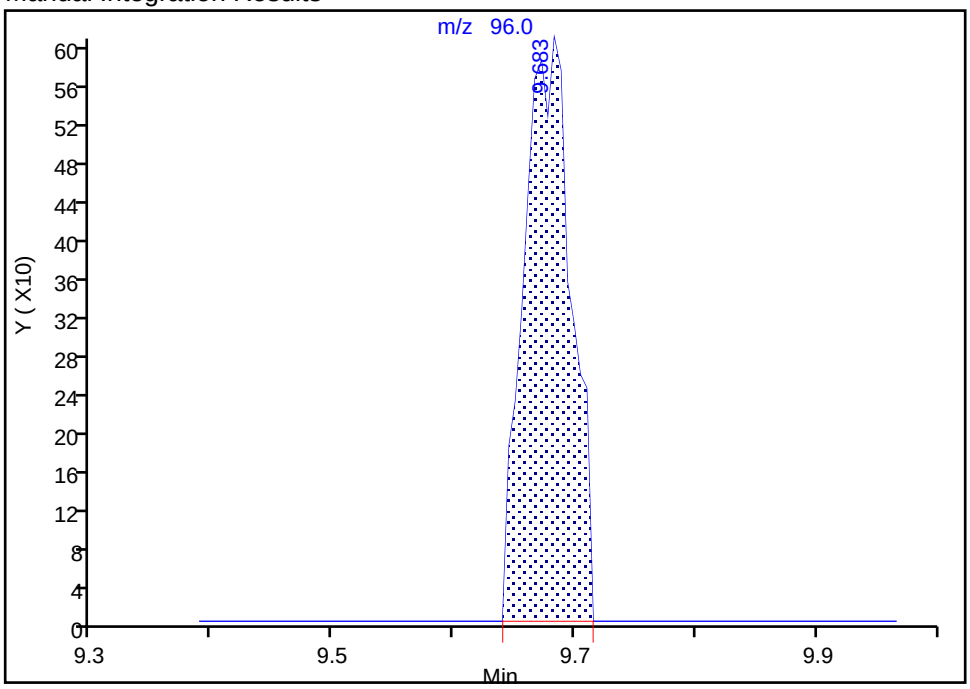
Processing Integration Results

RT: 9.68
Area: 921
Amount: 0.035543
Amount Units: ppb v/v



Manual Integration Results

RT: 9.68
Area: 1669
Amount: 0.064409
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:40:18

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

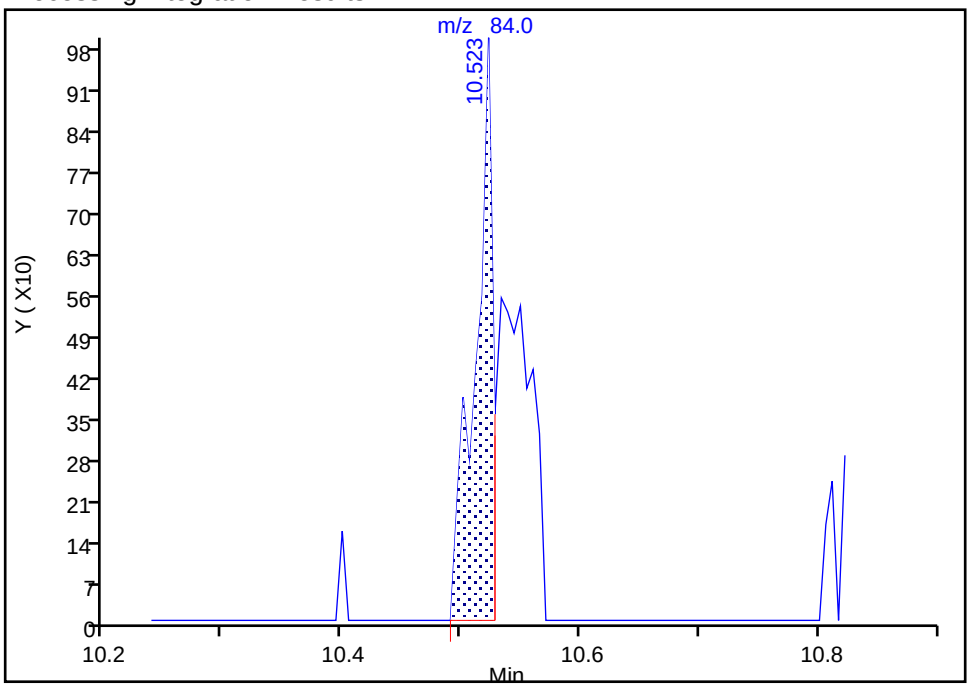
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

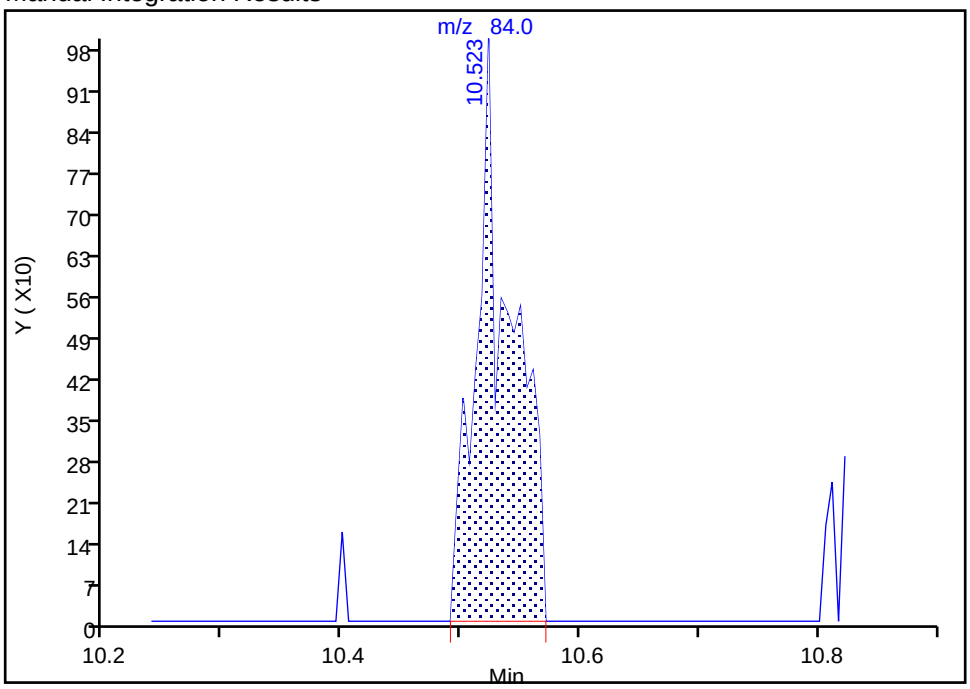
Processing Integration Results

RT: 10.52
Area: 1016
Amount: 0.025376
Amount Units: ppb v/v



Manual Integration Results

RT: 10.52
Area: 2055
Amount: 0.051327
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:40:34

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

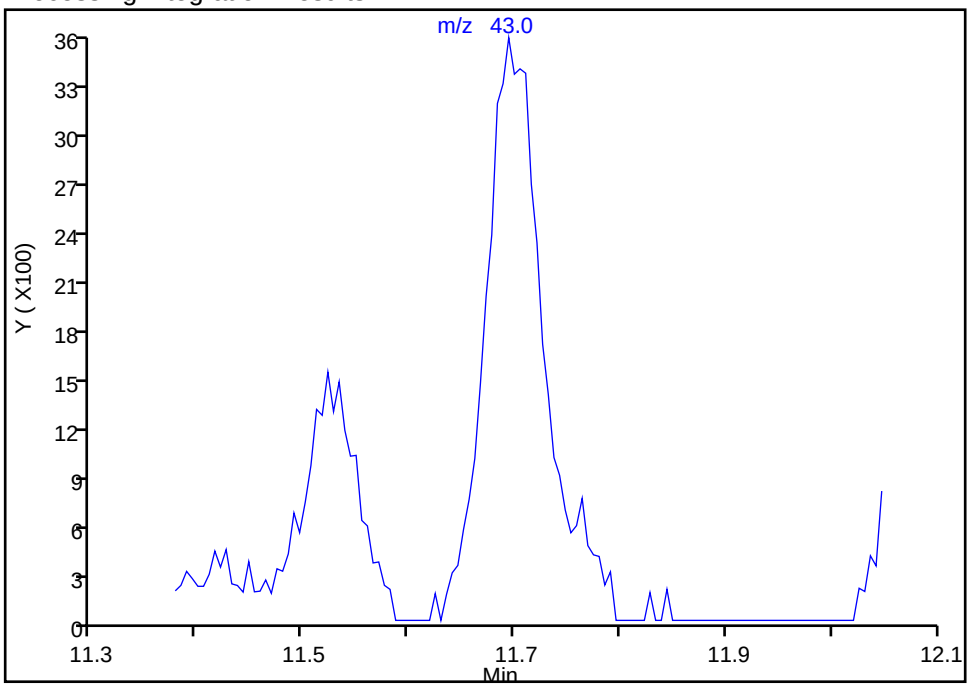
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

49 n-Heptane, CAS: 142-82-5

Signal: 1

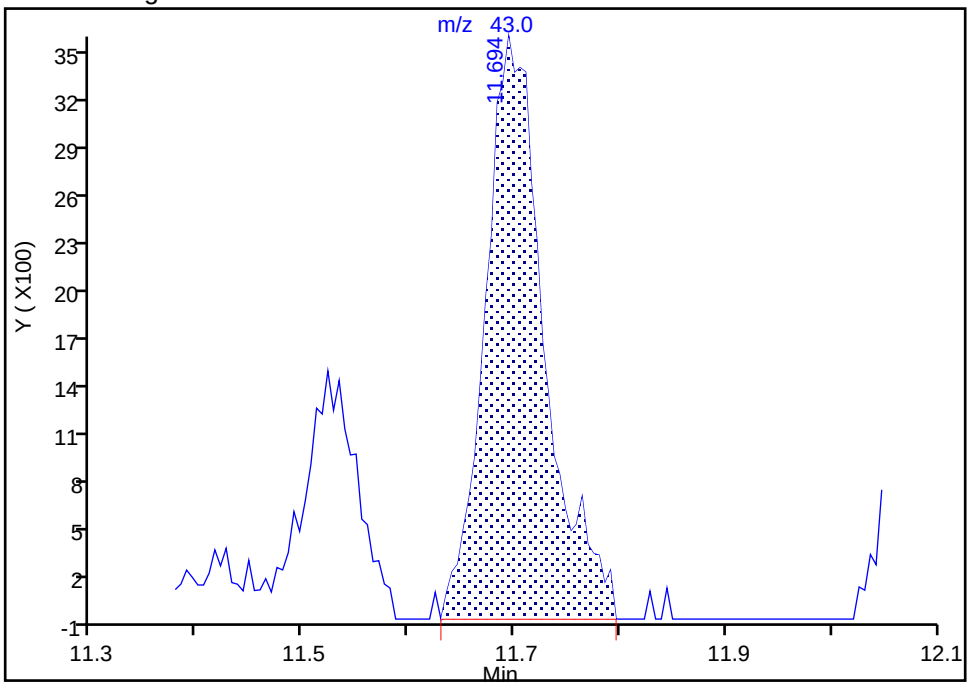
Not Detected
Expected RT: 11.70

Processing Integration Results



Manual Integration Results

RT: 11.69
Area: 13971
Amount: 0.133837
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:40:47
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

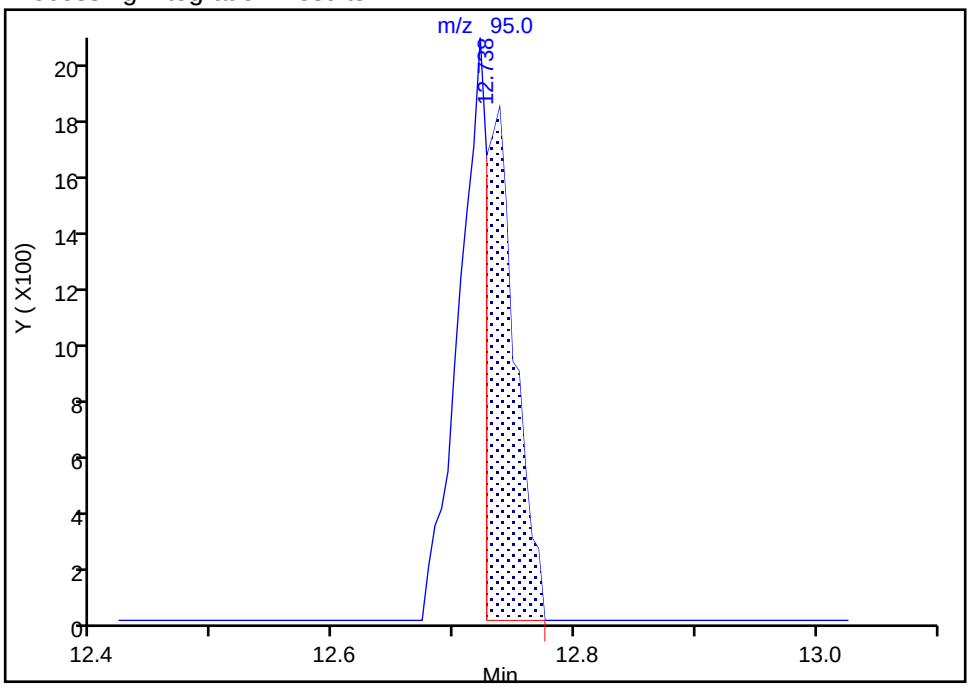
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

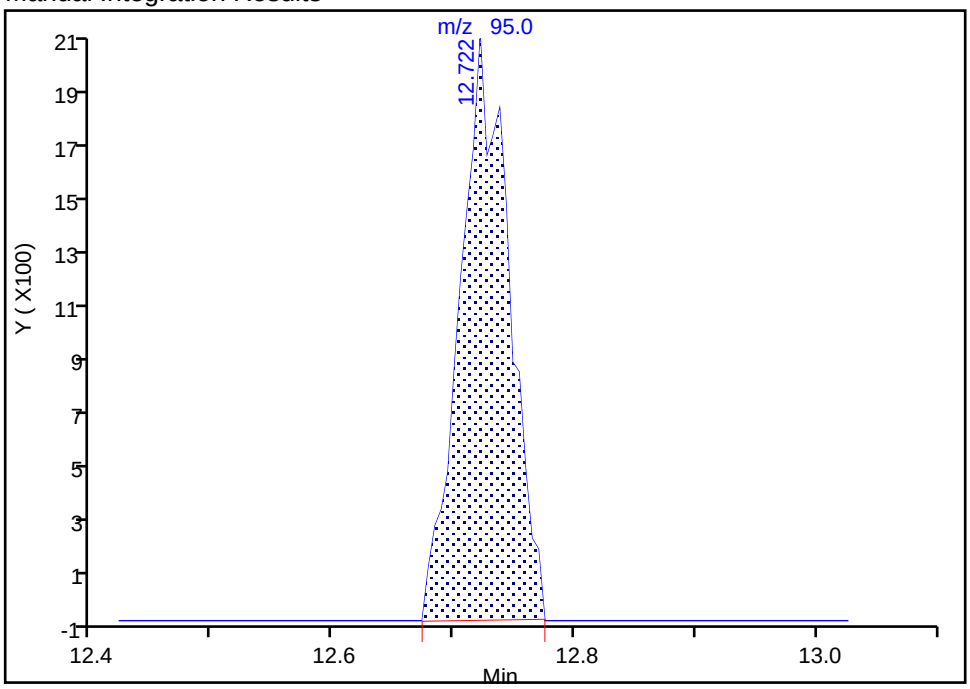
Processing Integration Results

RT: 12.74
Area: 3046
Amount: 0.072606
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 5836
Amount: 0.139109
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:40:56

Audit Action: Manually Integrated Audit Reason: Assign Peak

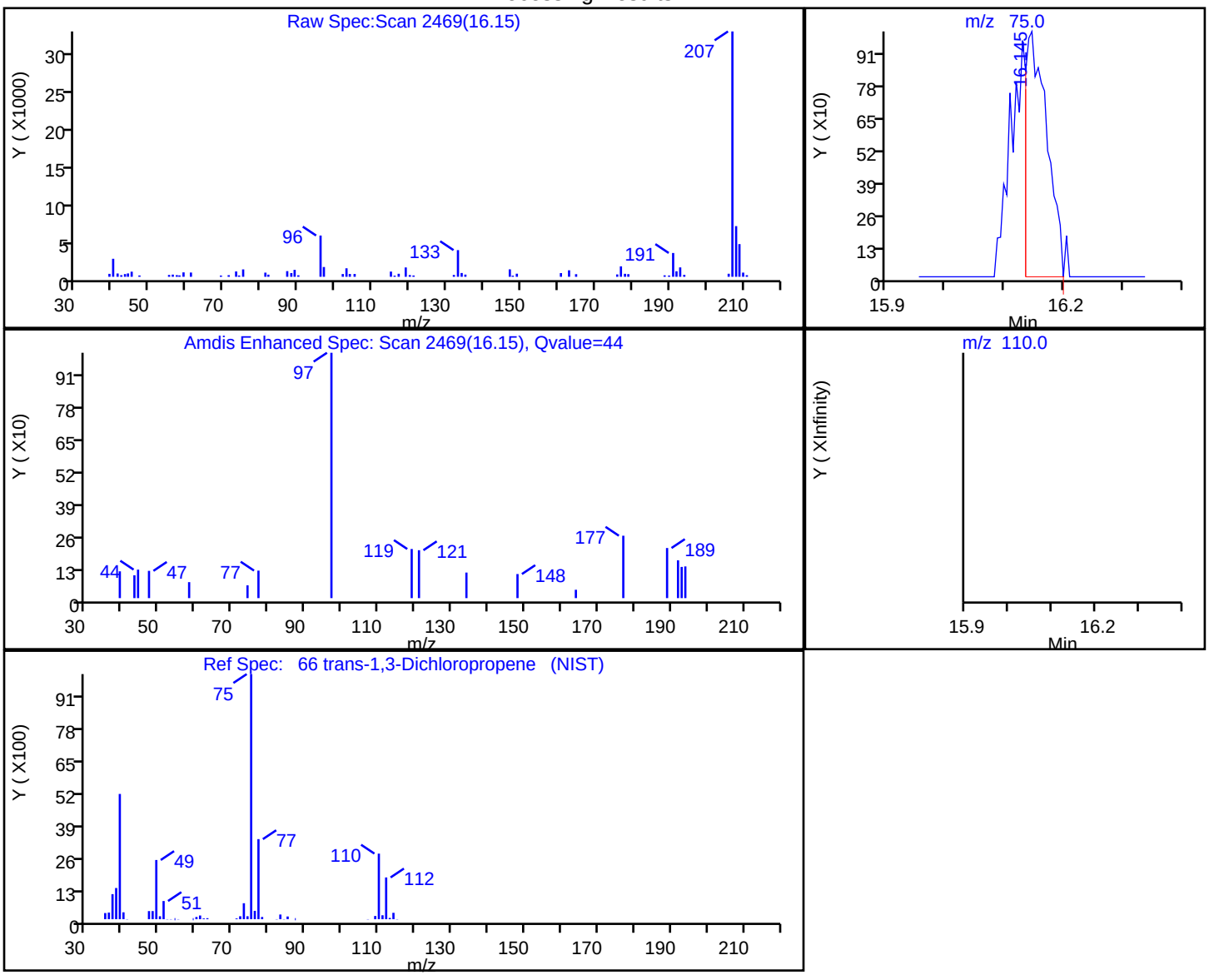
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
16.15	75.00	2497	0.038093
16.15	110.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:41:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

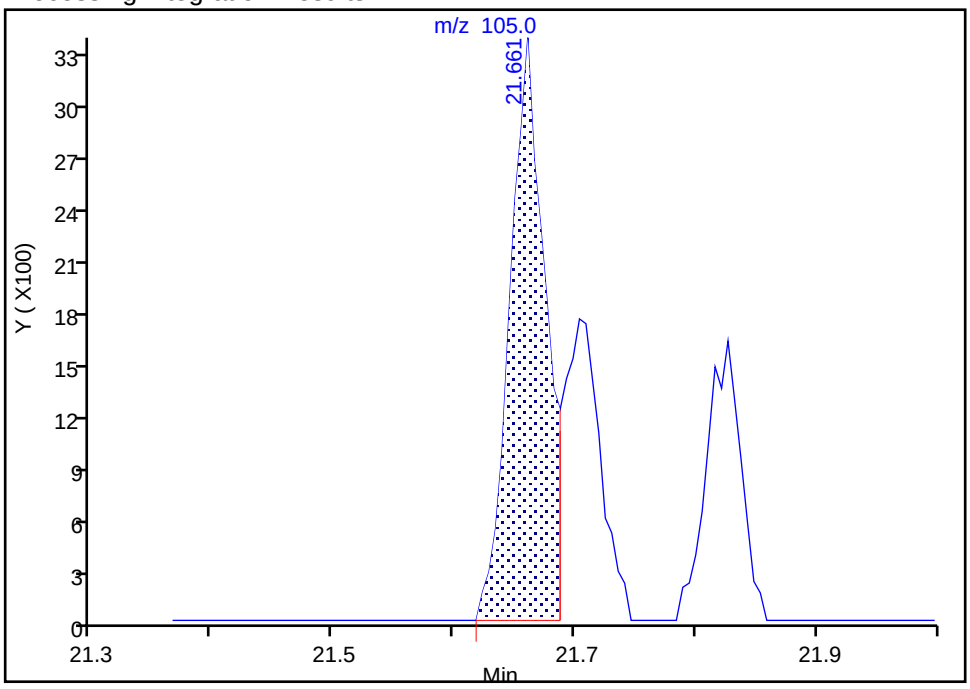
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

88 4-Ethyltoluene, CAS: 622-96-8

Signal: 1

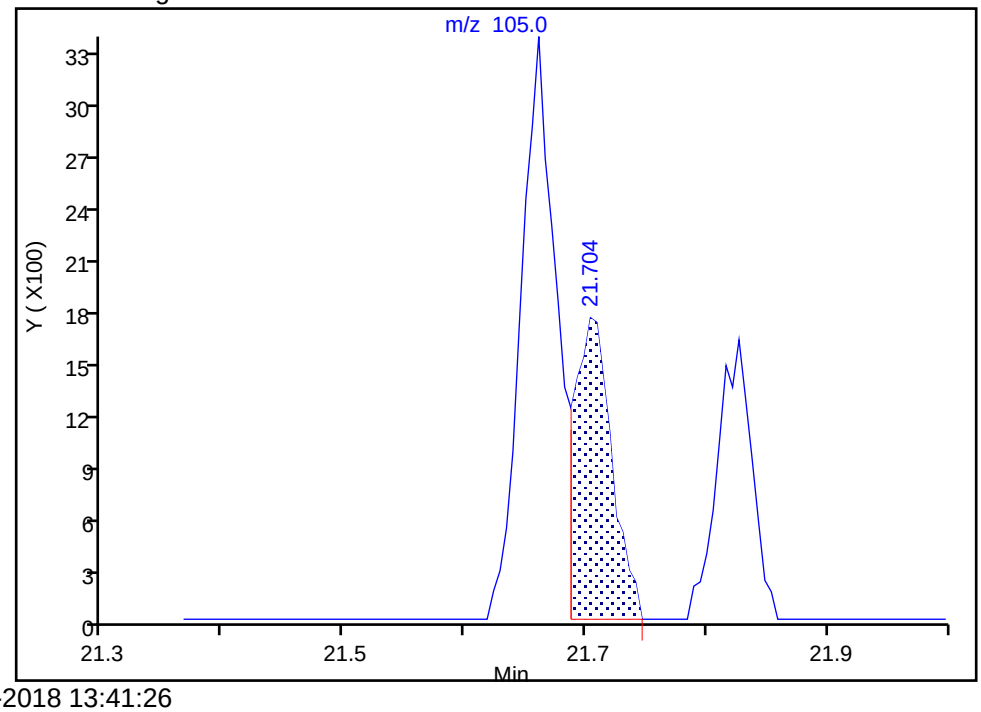
Processing Integration Results

RT: 21.66
Area: 6824
Amount: 0.040116
Amount Units: ppb v/v



Manual Integration Results

RT: 21.70
Area: 3676
Amount: 0.021610
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 13:41:26

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

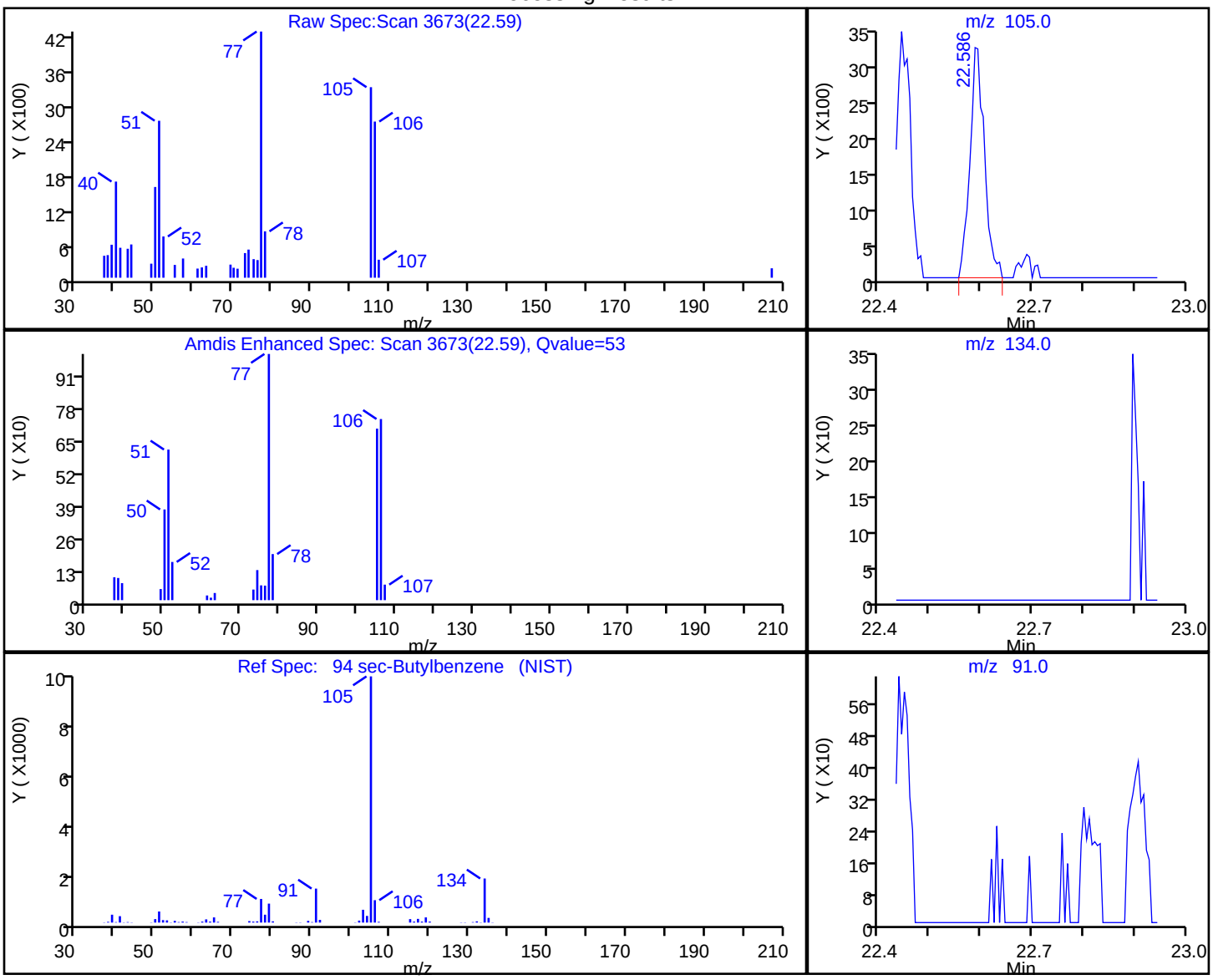
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.59	105.00	6494	0.032008
22.69	134.00	0	
22.69	91.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:41:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

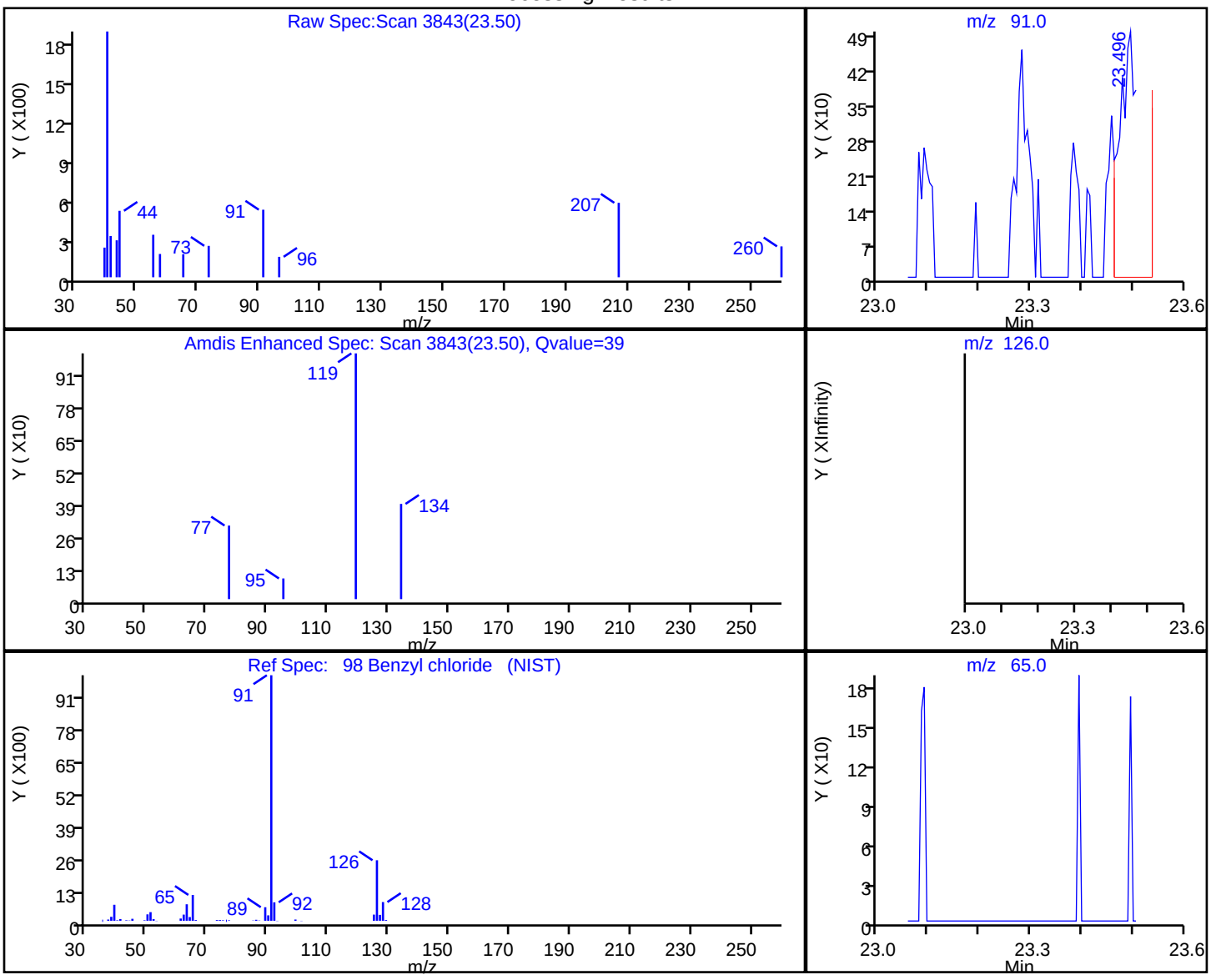
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_08.D				
Injection Date:	05-Apr-2018 15:55:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

98 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
23.50	91.00	1340	0.009909
23.28	126.00	0	
23.28	65.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:41:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) DL | Lab Sample ID: 200-42918-11 DL

Matrix: Air | Lab File ID: 29949_24.D

Analysis Method: TO-15 | Date Collected: 03/28/2018 15:45

Sample wt/vol: 80(mL) | Date Analyzed: 04/06/2018 08:25

Soil Aliquot Vol: | Dilution Factor: 2.5

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128151 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.49	J D	1.3	0.12
75-45-6	Freon 22	86.47	1.3	U	1.3	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.50	U	0.50	0.10
74-87-3	Chloromethane	50.49	0.50	J D	1.3	0.40
106-97-8	n-Butane	58.12	2.4	D	1.3	0.12
75-01-4	Vinyl chloride	62.50	0.50	U	0.50	0.045
106-99-0	1,3-Butadiene	54.09	0.50	U	0.50	0.093
74-83-9	Bromomethane	94.94	0.50	U	0.50	0.090
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.33
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.50	U	0.50	0.055
75-69-4	Trichlorofluoromethane	137.37	0.20	J D	0.50	0.078
76-13-1	Freon TF	187.38	0.50	U	0.50	0.068
75-35-4	1,1-Dichloroethene	96.94	0.50	U	0.50	0.088
67-64-1	Acetone	58.08	69	D	13	3.3
67-63-0	Isopropyl alcohol	60.10	4.8	J D	13	0.33
75-15-0	Carbon disulfide	76.14	9.4	D	1.3	0.070
107-05-1	3-Chloropropene	76.53	1.3	U	1.3	0.16
75-09-2	Methylene Chloride	84.93	0.62	J D	1.3	0.17
75-65-0	tert-Butyl alcohol	74.12	13	U	13	4.3
1634-04-4	Methyl tert-butyl ether	88.15	0.50	U	0.50	0.10
156-60-5	trans-1,2-Dichloroethene	96.94	0.50	U	0.50	0.13
110-54-3	n-Hexane	86.17	0.50	U	0.50	0.12
75-34-3	1,1-Dichloroethane	98.96	0.50	U	0.50	0.043
78-93-3	Methyl Ethyl Ketone	72.11	5.0	D	1.3	0.28
156-59-2	cis-1,2-Dichloroethene	96.94	0.50	U	0.50	0.073
540-59-0	1,2-Dichloroethene, Total	96.94	1.0	U	1.0	0.073
67-66-3	Chloroform	119.38	0.50	U	0.50	0.063
109-99-9	Tetrahydrofuran	72.11	3.1	J D	13	3.0
71-55-6	1,1,1-Trichloroethane	133.41	0.50	U	0.50	0.065
110-82-7	Cyclohexane	84.16	0.50	U	0.50	0.11
56-23-5	Carbon tetrachloride	153.81	0.060	J D	0.10	0.028
540-84-1	2,2,4-Trimethylpentane	114.23	0.15	J D	0.50	0.11
71-43-2	Benzene	78.11	0.27	J D	0.50	0.070
107-06-2	1,2-Dichloroethane	98.96	0.50	U	0.50	0.085

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) DL Lab Sample ID: 200-42918-11 DL

Matrix: Air Lab File ID: 29949_24.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 80(mL) Date Analyzed: 04/06/2018 08:25

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.50	U	0.50	0.17
79-01-6	Trichloroethene	131.39	0.14	D	0.10	0.023
80-62-6	Methyl methacrylate	100.12	1.3	U	1.3	0.28
78-87-5	1,2-Dichloropropane	112.99	0.50	U	0.50	0.088
123-91-1	1,4-Dioxane	88.11	13	U	13	1.9
75-27-4	Bromodichloromethane	163.83	0.50	U	0.50	0.15
10061-01-5	cis-1,3-Dichloropropene	110.97	0.50	U	0.50	0.090
108-10-1	methyl isobutyl ketone	100.16	0.19	J D	1.3	0.16
108-88-3	Toluene	92.14	0.40	J D	0.50	0.088
10061-02-6	trans-1,3-Dichloropropene	110.97	0.50	U	0.50	0.095
79-00-5	1,1,2-Trichloroethane	133.41	0.50	U	0.50	0.043
127-18-4	Tetrachloroethene	165.83	0.10	U	0.10	0.025
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	1.3	U	1.3	0.22
124-48-1	Dibromochloromethane	208.29	0.50	U	0.50	0.043
106-93-4	1,2-Dibromoethane	187.87	0.50	U	0.50	0.058
108-90-7	Chlorobenzene	112.56	0.50	U	0.50	0.063
100-41-4	Ethylbenzene	106.17	0.50	U	0.50	0.085
179601-23-1	m,p-Xylene	106.17	0.20	J D	1.3	0.19
95-47-6	Xylene, o-	106.17	0.50	U	0.50	0.10
1330-20-7	Xylene (total)	106.17	0.20	J D	1.8	0.10
100-42-5	Styrene	104.15	0.50	U	0.50	0.088
75-25-2	Bromoform	252.75	0.50	U	0.50	0.088
98-82-8	Cumene	120.19	0.50	U	0.50	0.098
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.50	U	0.50	0.065
103-65-1	n-Propylbenzene	120.19	0.50	U	0.50	0.10
622-96-8	4-Ethyltoluene	120.20	0.50	U	0.50	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.50	U	0.50	0.10
95-49-8	2-Chlorotoluene	126.59	0.50	U	0.50	0.088
98-06-6	tert-Butylbenzene	134.22	0.50	U	0.50	0.093
95-63-6	1,2,4-Trimethylbenzene	120.20	0.50	U	0.50	0.14
135-98-8	sec-Butylbenzene	134.22	0.50	U	0.50	0.093
99-87-6	4-Isopropyltoluene	134.22	0.50	U	0.50	0.13
541-73-1	1,3-Dichlorobenzene	147.00	0.50	U	0.50	0.13
106-46-7	1,4-Dichlorobenzene	147.00	0.50	U	0.50	0.16

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) DL Lab Sample ID: 200-42918-11 DL

Matrix: Air Lab File ID: 29949_24.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 80(mL) Date Analyzed: 04/06/2018 08:25

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*0.50*	*U*	*0.50*	*0.17*
104-51-8	*n-Butylbenzene*	*134.22*	*0.50*	*U*	*0.50*	*0.17*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*0.50*	*U*	*0.50*	*0.11*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*1.3*	*U*	*1.3*	*0.48*
87-68-3	*Hexachlorobutadiene*	*260.76*	*0.50*	*U*	*0.50*	*0.16*
91-20-3	*Naphthalene*	*128.17*	*1.3*	*U*	*1.3*	*0.25*

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) DL Lab Sample ID: 200-42918-11 DL

Matrix: Air Lab File ID: 29949_24.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 80(mL) Date Analyzed: 04/06/2018 08:25

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.4	J D	6.2	0.58
75-45-6	Freon 22	86.47	4.4	U	4.4	1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	3.5	U	3.5	0.72
74-87-3	Chloromethane	50.49	1.0	J D	2.6	0.83
106-97-8	n-Butane	58.12	5.7	D	3.0	0.27
75-01-4	Vinyl chloride	62.50	1.3	U	1.3	0.12
106-99-0	1,3-Butadiene	54.09	1.1	U	1.1	0.20
74-83-9	Bromomethane	94.94	1.9	U	1.9	0.35
75-00-3	Chloroethane	64.52	3.3	U	3.3	0.86
593-60-2	Bromoethene(Vinyl Bromide)	106.96	2.2	U	2.2	0.24
75-69-4	Trichlorofluoromethane	137.37	1.1	J D	2.8	0.44
76-13-1	Freon TF	187.38	3.8	U	3.8	0.52
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0	0.35
67-64-1	Acetone	58.08	160	D	30	7.7
67-63-0	Isopropyl alcohol	60.10	12	J D	31	0.80
75-15-0	Carbon disulfide	76.14	29	D	3.9	0.22
107-05-1	3-Chloropropene	76.53	3.9	U	3.9	0.49
75-09-2	Methylene Chloride	84.93	2.1	J D	4.3	0.59
75-65-0	tert-Butyl alcohol	74.12	38	U	38	13
1634-04-4	Methyl tert-butyl ether	88.15	1.8	U	1.8	0.37
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0	0.50
110-54-3	n-Hexane	86.17	1.8	U	1.8	0.41
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0	0.17
78-93-3	Methyl Ethyl Ketone	72.11	15	D	3.7	0.81
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0	0.29
540-59-0	1,2-Dichloroethene, Total	96.94	4.0	U	4.0	0.29
67-66-3	Chloroform	119.38	2.4	U	2.4	0.31
109-99-9	Tetrahydrofuran	72.11	9.2	J D	37	8.8
71-55-6	1,1,1-Trichloroethane	133.41	2.7	U	2.7	0.35
110-82-7	Cyclohexane	84.16	1.7	U	1.7	0.39
56-23-5	Carbon tetrachloride	153.81	0.38	J D	0.63	0.17
540-84-1	2,2,4-Trimethylpentane	114.23	0.68	J D	2.3	0.50
71-43-2	Benzene	78.11	0.86	J D	1.6	0.22
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0	0.34

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) DL Lab Sample ID: 200-42918-11 DL

Matrix: Air Lab File ID: 29949_24.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 80(mL) Date Analyzed: 04/06/2018 08:25

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	2.0	U	2.0	0.70
79-01-6	Trichloroethene	131.39	0.76	D	0.54	0.12
80-62-6	Methyl methacrylate	100.12	5.1	U	5.1	1.1
78-87-5	1,2-Dichloropropane	112.99	2.3	U	2.3	0.40
123-91-1	1,4-Dioxane	88.11	45	U	45	6.8
75-27-4	Bromodichloromethane	163.83	3.4	U	3.4	0.99
10061-01-5	cis-1,3-Dichloropropene	110.97	2.3	U	2.3	0.41
108-10-1	methyl isobutyl ketone	100.16	0.79	J D	5.1	0.67
108-88-3	Toluene	92.14	1.5	J D	1.9	0.33
10061-02-6	trans-1,3-Dichloropropene	110.97	2.3	U	2.3	0.43
79-00-5	1,1,2-Trichloroethane	133.41	2.7	U	2.7	0.23
127-18-4	Tetrachloroethene	165.83	0.68	U	0.68	0.17
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.1	U	5.1	0.88
124-48-1	Dibromochloromethane	208.29	4.3	U	4.3	0.36
106-93-4	1,2-Dibromoethane	187.87	3.8	U	3.8	0.44
108-90-7	Chlorobenzene	112.56	2.3	U	2.3	0.29
100-41-4	Ethylbenzene	106.17	2.2	U	2.2	0.37
179601-23-1	m,p-Xylene	106.17	0.87	J D	5.4	0.84
95-47-6	Xylene, o-	106.17	2.2	U	2.2	0.43
1330-20-7	Xylene (total)	106.17	0.87	J D	7.6	0.43
100-42-5	Styrene	104.15	2.1	U	2.1	0.37
75-25-2	Bromoform	252.75	5.2	U	5.2	0.90
98-82-8	Cumene	120.19	2.5	U	2.5	0.48
79-34-5	1,1,2,2-Tetrachloroethane	167.85	3.4	U	3.4	0.45
103-65-1	n-Propylbenzene	120.19	2.5	U	2.5	0.49
622-96-8	4-Ethyltoluene	120.20	2.5	U	2.5	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	2.5	U	2.5	0.49
95-49-8	2-Chlorotoluene	126.59	2.6	U	2.6	0.45
98-06-6	tert-Butylbenzene	134.22	2.7	U	2.7	0.51
95-63-6	1,2,4-Trimethylbenzene	120.20	2.5	U	2.5	0.70
135-98-8	sec-Butylbenzene	134.22	2.7	U	2.7	0.51
99-87-6	4-Isopropyltoluene	134.22	2.7	U	2.7	0.71
541-73-1	1,3-Dichlorobenzene	147.00	3.0	U	3.0	0.75
106-46-7	1,4-Dichlorobenzene	147.00	3.0	U	3.0	0.95

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-IA-106 (AS) DL Lab Sample ID: 200-42918-11 DL

Matrix: Air Lab File ID: 29949_24.D

Analysis Method: TO-15 Date Collected: 03/28/2018 15:45

Sample wt/vol: 80(mL) Date Analyzed: 04/06/2018 08:25

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*2.6*	*U*	*2.6*	*0.87*
104-51-8	*n-Butylbenzene*	*134.22*	*2.7*	*U*	*2.7*	*0.93*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*3.0*	*U*	*3.0*	*0.68*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*9.3*	*U*	*9.3*	*3.5*
87-68-3	*Hexachlorobutadiene*	*260.76*	*5.3*	*U*	*5.3*	*1.7*
91-20-3	*Naphthalene*	*128.17*	*6.6*	*U*	*6.6*	*1.3*

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D
Lims ID: 200-42918-A-11
Client ID: GC-IA-106 (AS)
Sample Type: Client
Inject. Date: 06-Apr-2018 08:25:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 200.000 mL Dil. Factor: 2.5000
Sample Info: 200-0029949-024
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 08:34:36 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: puangmaleek Date: 09-Apr-2018 08:34:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	98	10452	0.1972	
3 Chlorodifluoromethane	51	3.161	3.151	0.010	98	8817	0.1863	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354				ND	U
5 Chloromethane	50	3.488	3.482	0.006	99	5385	0.1994	
6 Butane	43	3.664	3.664	0.000	99	50820	0.9600	
7 Vinyl chloride	62		3.707				ND	
8 Butadiene	54		3.777				ND	
10 Bromomethane	94		4.413				ND	
11 Chloroethane	64		4.638				ND	
13 Vinyl bromide	106		4.996				ND	
14 Trichlorofluoromethane	101	5.082	5.087	-0.005	94	4004	0.0807	
20 1,1,2-Trichloro-1,2,2-trif	101		6.104				ND	
21 1,1-Dichloroethene	96		6.163				ND	
22 Acetone	43	6.398	6.403	-0.005	99	1428136	27.6	
23 Carbon disulfide	76	6.548	6.548	0.000	98	190086	3.75	
24 Isopropyl alcohol	45	6.703	6.682	0.021	100	103557	1.93	
25 3-Chloro-1-propene	41		6.933				ND	U
27 Methylene Chloride	49	7.227	7.227	0.000	91	8376	0.2474	
28 2-Methyl-2-propanol	59		7.452				ND	
29 Methyl tert-butyl ether	73		7.623				ND	
31 trans-1,2-Dichloroethene	61		7.661				ND	
33 Hexane	57		8.030				ND	U
34 1,1-Dichloroethane	63		8.543				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.677				ND	
38 2-Butanone (MEK)	72	9.747	9.742	0.005	96	23083	2.00	
* 40 Chlorobromomethane	128	10.159	10.159	0.000	85	135834	10.0	
41 Tetrahydrofuran	42	10.191	10.165	0.021	90	58001	1.25	
42 Chloroform	83		10.298				ND	
43 Cyclohexane	84		10.539				ND	
44 1,1,1-Trichloroethane	97		10.576				ND	
45 Carbon tetrachloride	117	10.828	10.834	-0.010	1	1028	0.0240	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	46 Isooctane	57	11.288	11.277	0.006	87	9542	0.0582	
	47 Benzene	78	11.330	11.331	-0.006	97	8305	0.1075	
	48 1,2-Dichloroethane	62		11.539				ND	
	49 n-Heptane	43	11.700	11.700	0.000	1	4116	0.0533	Ma
*	50 1,4-Difluorobenzene	114	12.235	12.240	-0.005	98	848639	10.0	
	53 Trichloroethene	95	12.727	12.727	-0.005	44	1756	0.0566	M
	54 1,2-Dichloropropane	63		13.331				ND	
	55 Methyl methacrylate	69		13.513				ND	
	56 1,4-Dioxane	88	13.631	13.566	0.059	26	1379	0.0876	
	58 Dichlorobromomethane	83		13.914				ND	
	60 cis-1,3-Dichloropropene	75		14.893				ND	
	61 4-Methyl-2-pentanone (MIBK	43	15.230	15.230	0.026	70	7708	0.0770	7a
	65 Toluene	92	15.498	15.487	-0.005	91	7948	0.1584	
	66 trans-1,3-Dichloropropene	75		16.145				ND	
	67 1,1,2-Trichloroethane	83		16.541				ND	
	68 Tetrachloroethene	166		16.632				ND	
	69 2-Hexanone	43	17.039	17.039	0.016	40	5361	0.0559	7a
	71 Chlorodibromomethane	129		17.338				ND	
	72 Ethylene Dibromide	107		17.622				ND	
*	74 Chlorobenzene-d5	117	18.563	18.569	-0.006	99	771485	10.0	
	75 Chlorobenzene	112		18.627				ND	
	76 Ethylbenzene	91	18.793	18.788	0.000	93	3088	0.0258	
	78 m-Xylene & p-Xylene	106	19.061	19.050	0.006	0	3302	0.0805	
S	73 Xylenes, Total	106				0		0.1059	
	79 o-Xylene	106	19.965	19.965	0.011	92	1017	0.0255	M
	80 Styrene	104		20.013				ND	
	81 Bromoform	173		20.484				ND	
	82 Isopropylbenzene	105		20.714				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.441				ND	
	85 N-Propylbenzene	91		21.500				ND	
	88 4-Ethyltoluene	105		21.709				ND	U
	89 2-Chlorotoluene	91		21.714				ND	
	90 1,3,5-Trimethylbenzene	105	21.827	21.827	0.000	1	1084	0.0105	a
	92 tert-Butylbenzene	119		22.346				ND	
	93 1,2,4-Trimethylbenzene	105	22.447	22.441	0.000	93	2509	0.0242	
	94 sec-Butylbenzene	105		22.688				ND	U
	95 4-Isopropyltoluene	119		22.902				ND	
	96 1,3-Dichlorobenzene	146		22.929				ND	
	97 1,4-Dichlorobenzene	146		23.073				ND	
	98 Benzyl chloride	91		23.282				ND	
	100 n-Butylbenzene	91		23.496				ND	
	101 1,2-Dichlorobenzene	146		23.624				ND	
	103 1,2,4-Trichlorobenzene	180		26.187				ND	
	104 Hexachlorobutadiene	225		26.374				ND	
	105 Naphthalene	128		26.684				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15XISs_00002	Amount Added:	20.00	Units: mL	Run Reagent

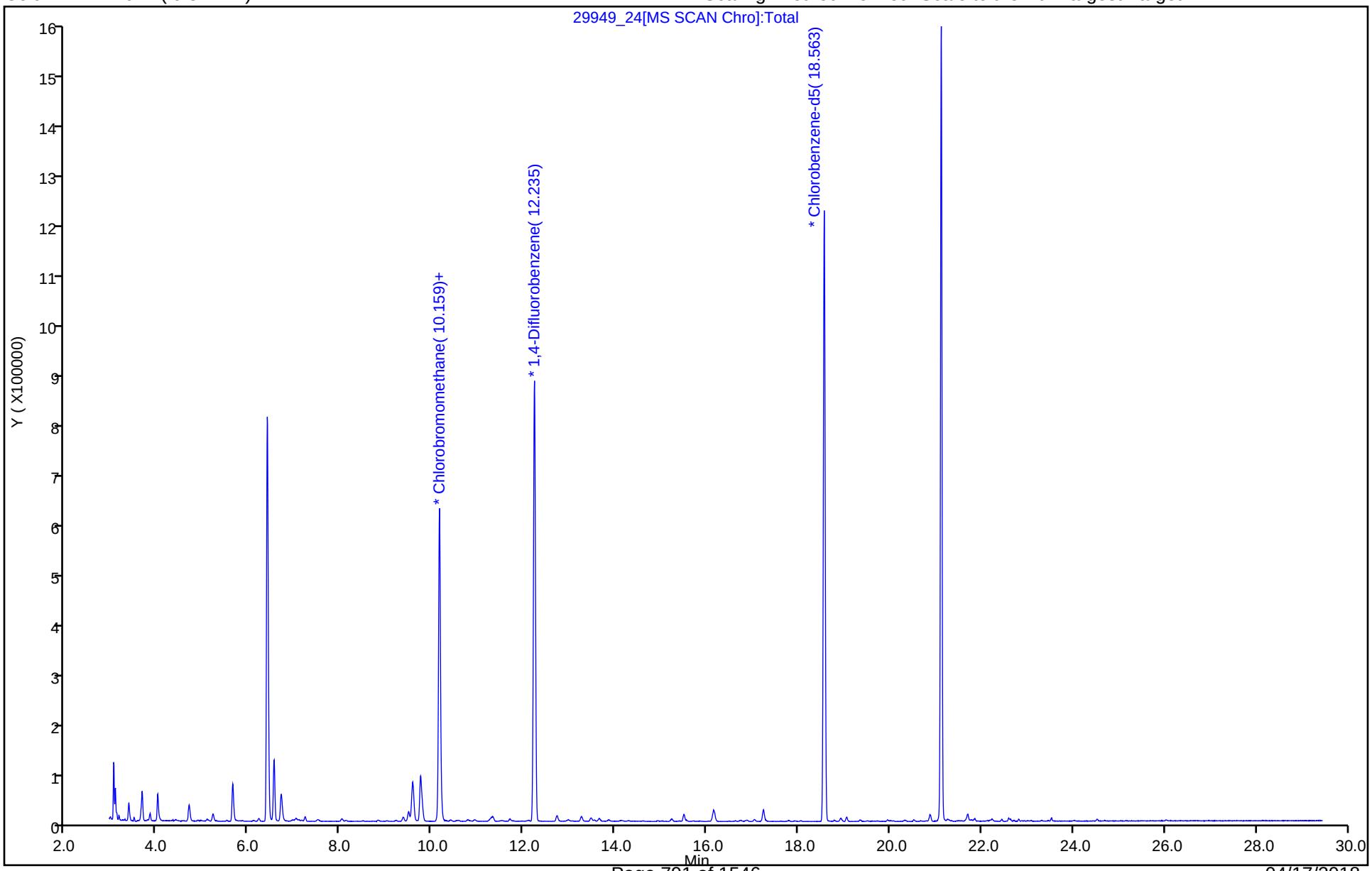
Report Date: 09-Apr-2018 08:34:38 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D

Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11	Worklist Smp#:	24
Client ID:	GC-IA-106 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	2.5000	ALS Bottle#:	23
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

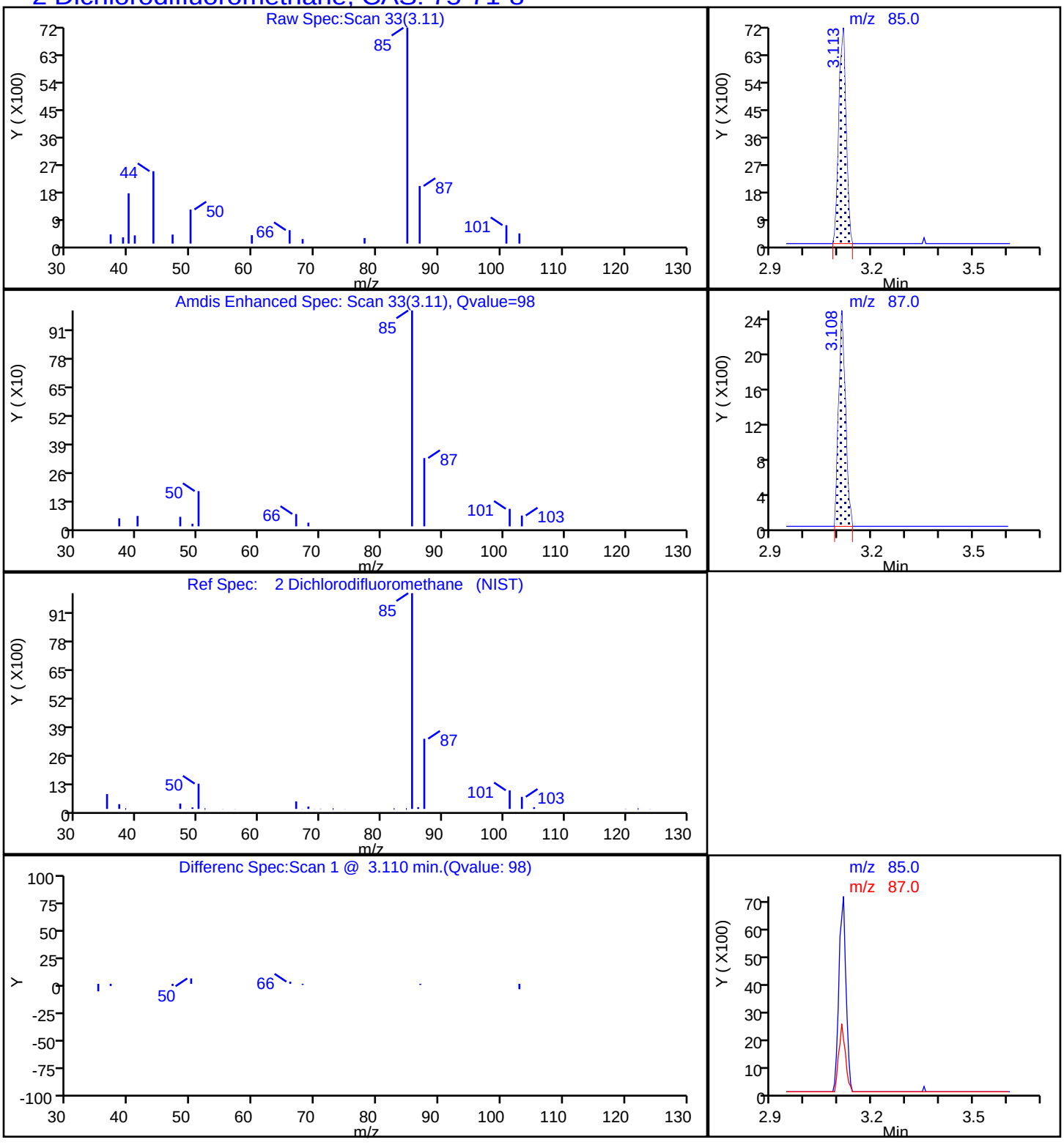
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

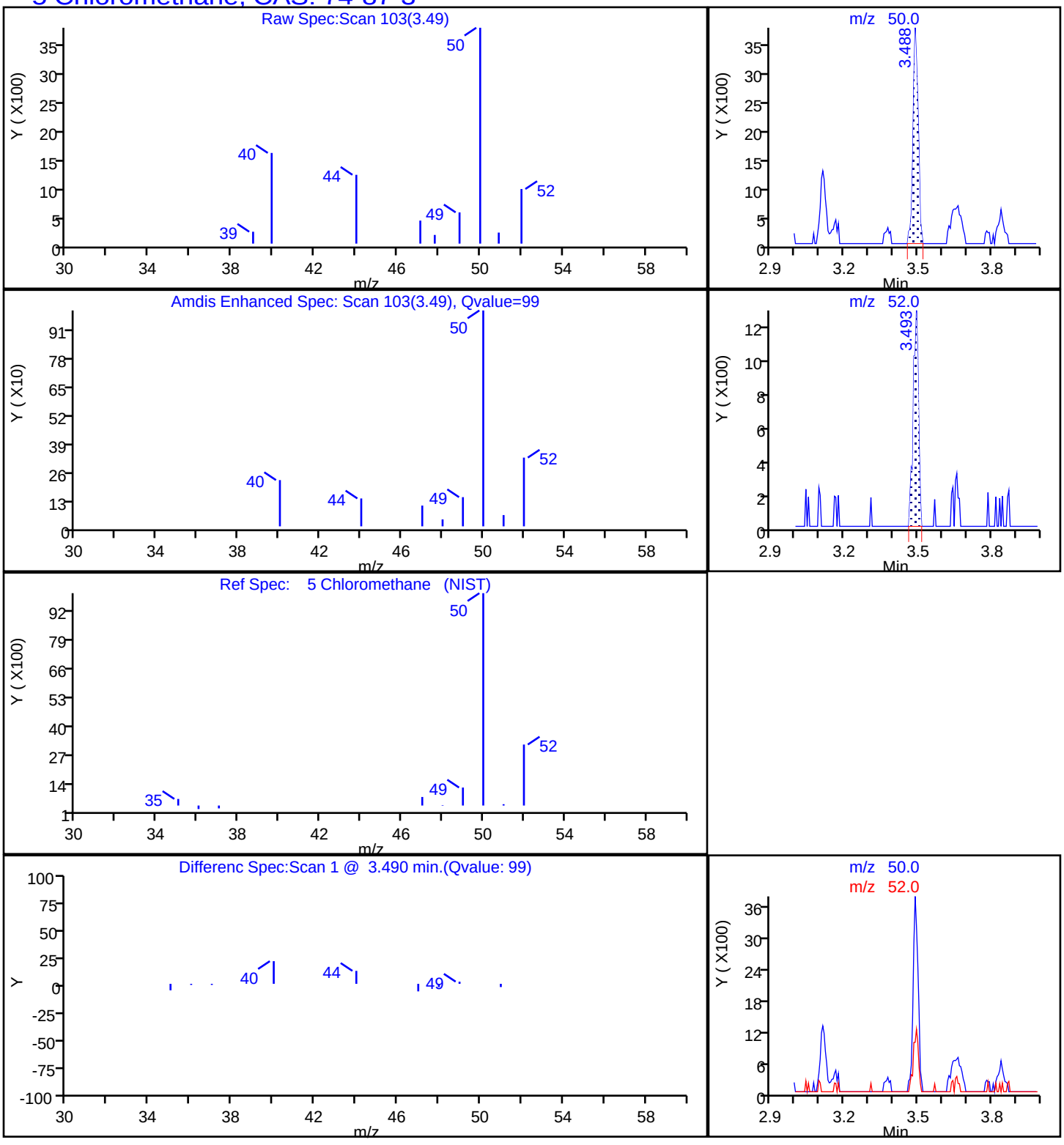
2 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

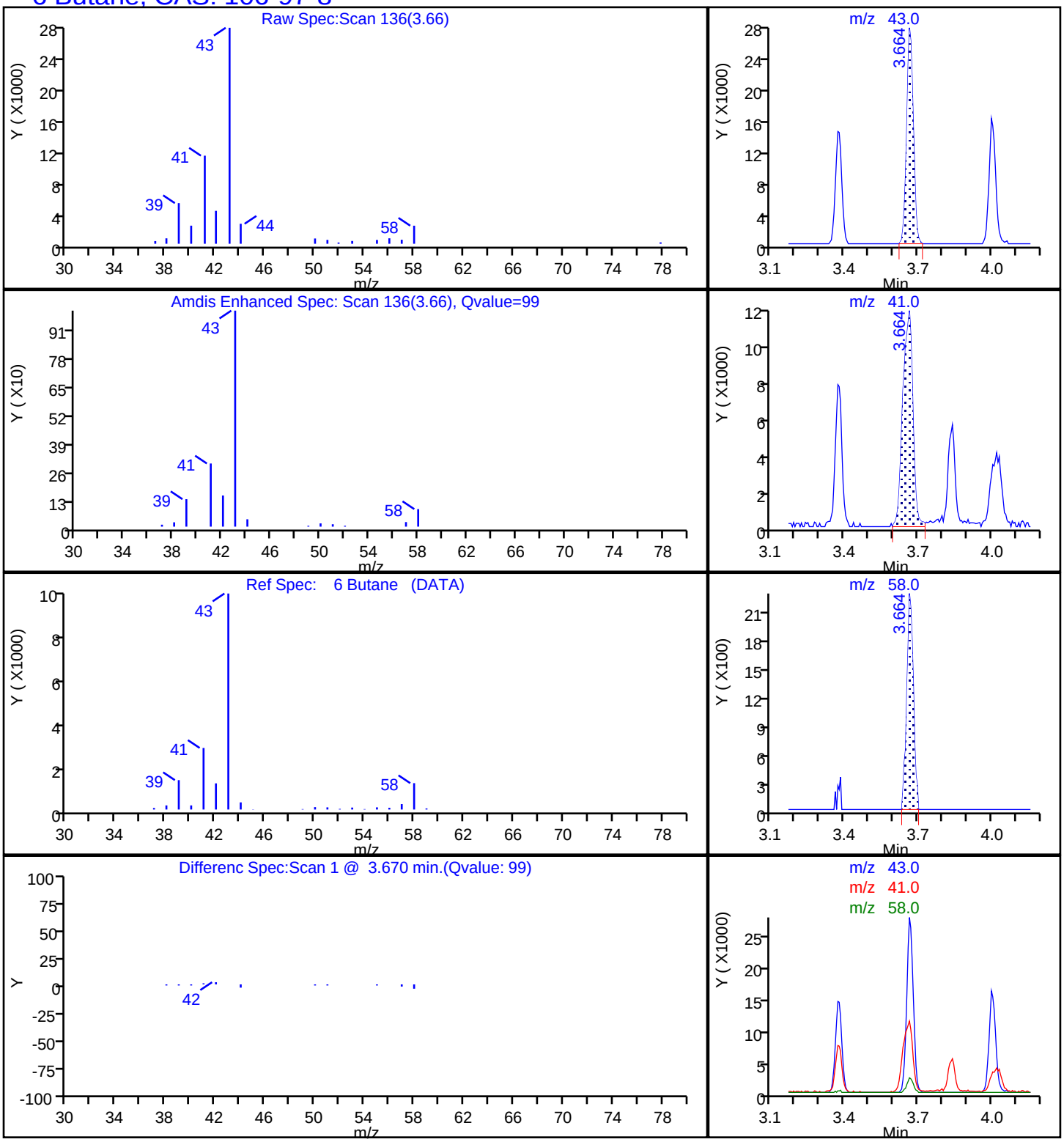


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D

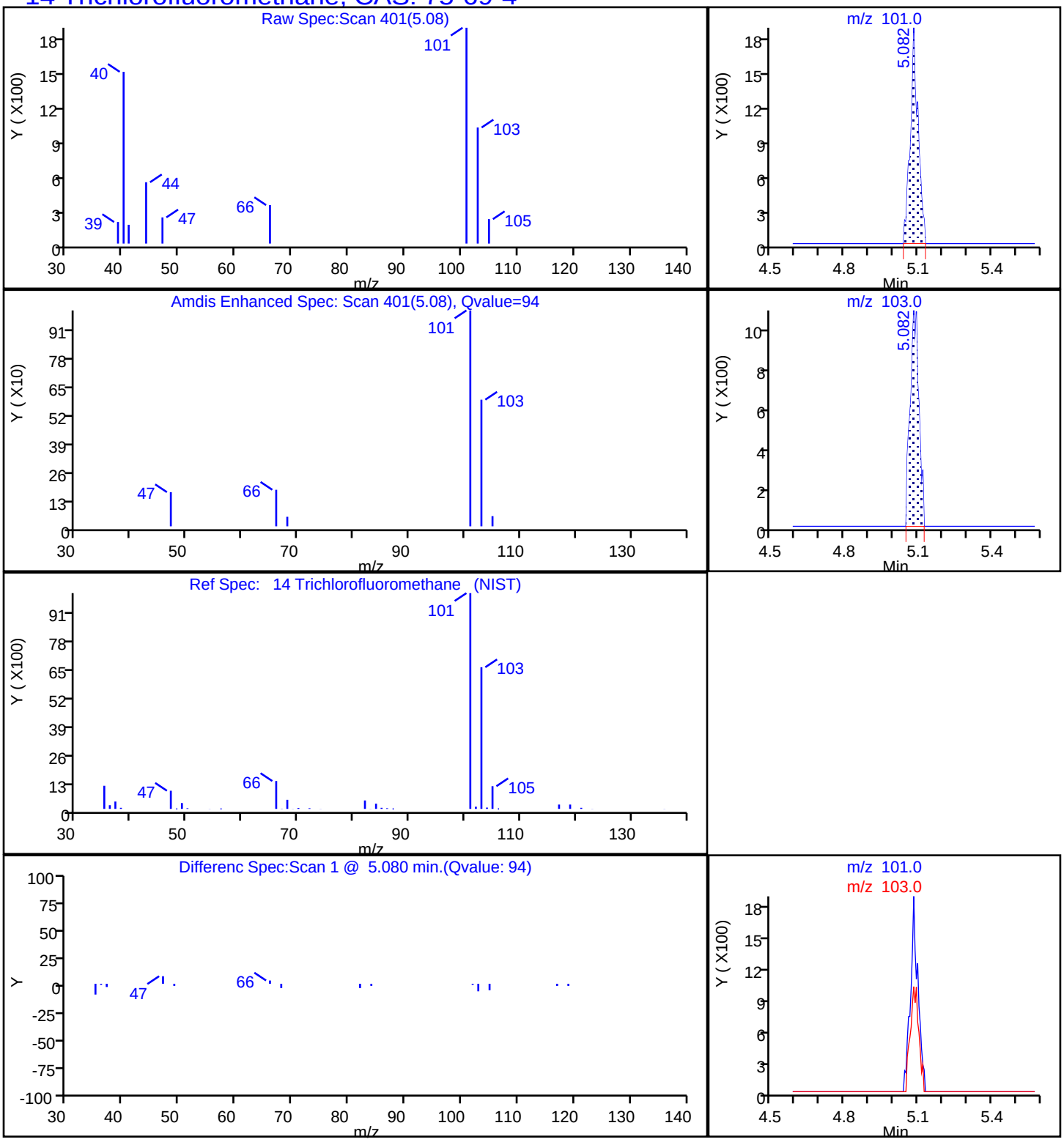
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D
Injection Date: 06-Apr-2018 08:25:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 200.000 mL Dil. Factor: 2.5000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

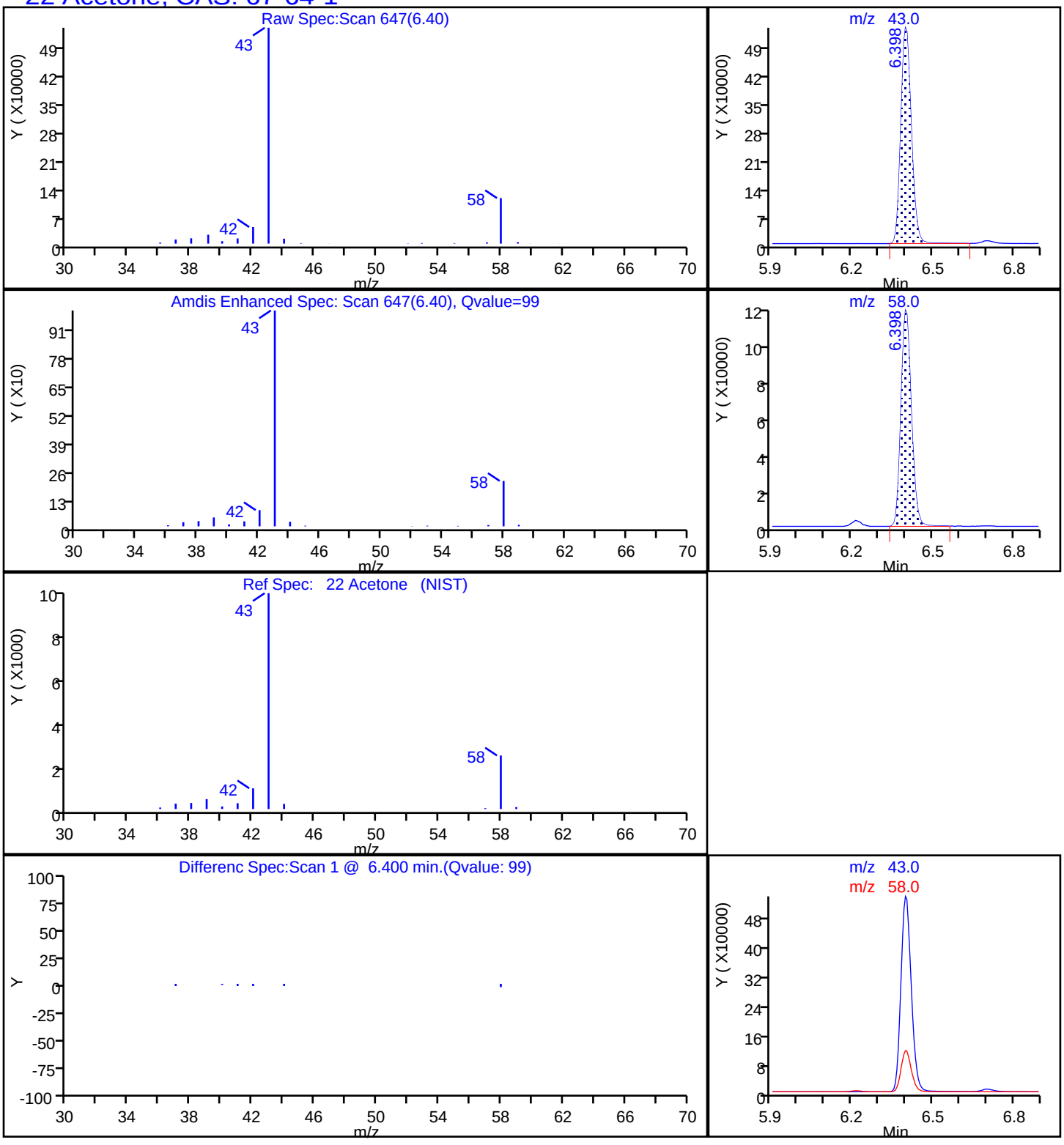
14 Trichlorofluoromethane, CAS: 75-69-4



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
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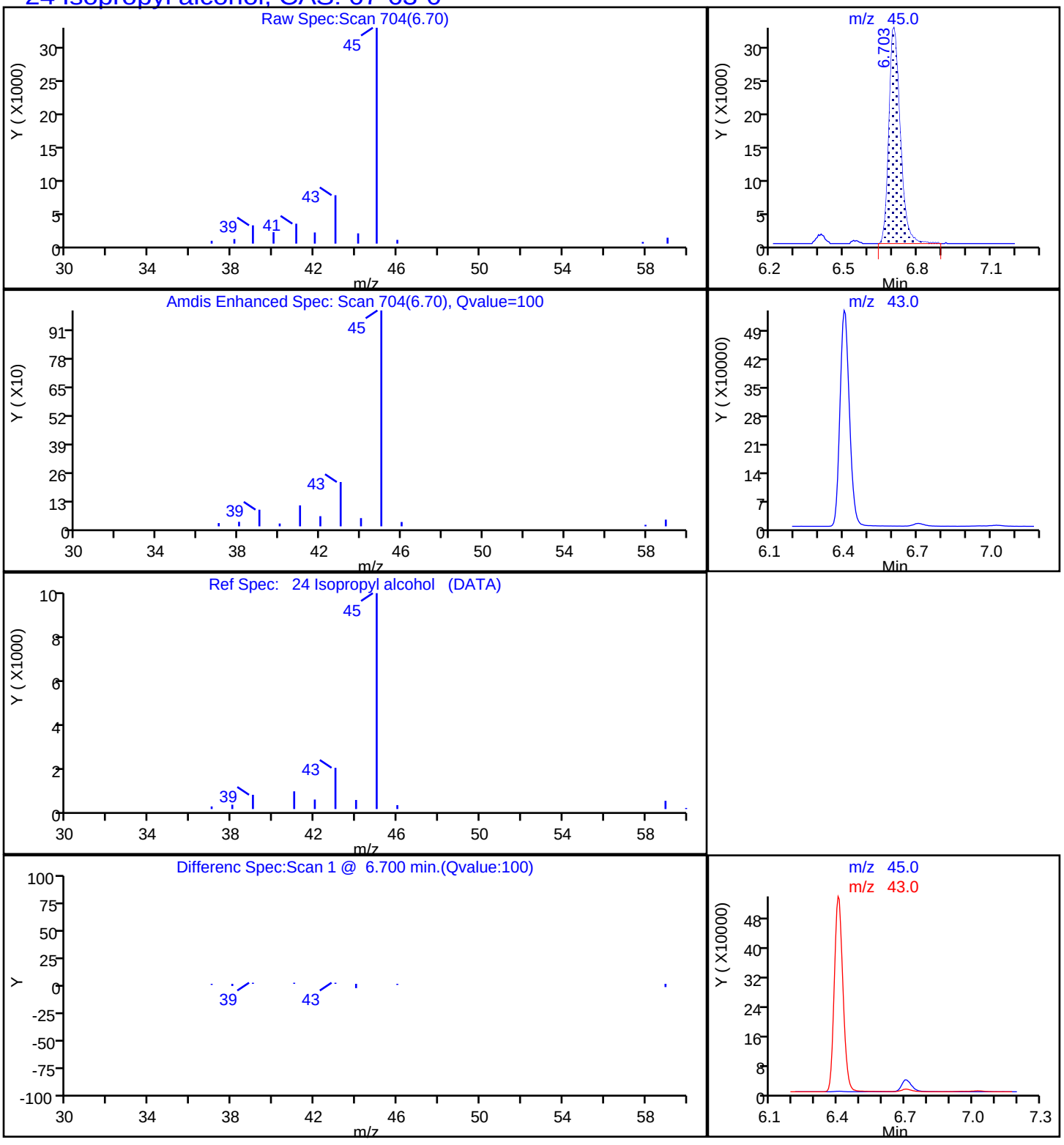
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

24 Isopropyl alcohol, CAS: 67-63-0

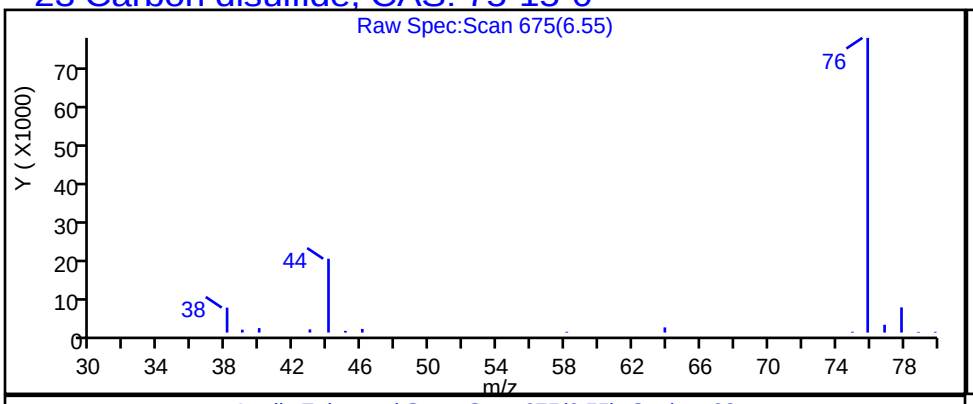


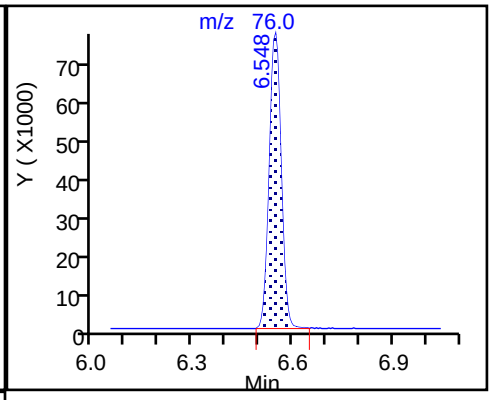
TestAmerica Burlington

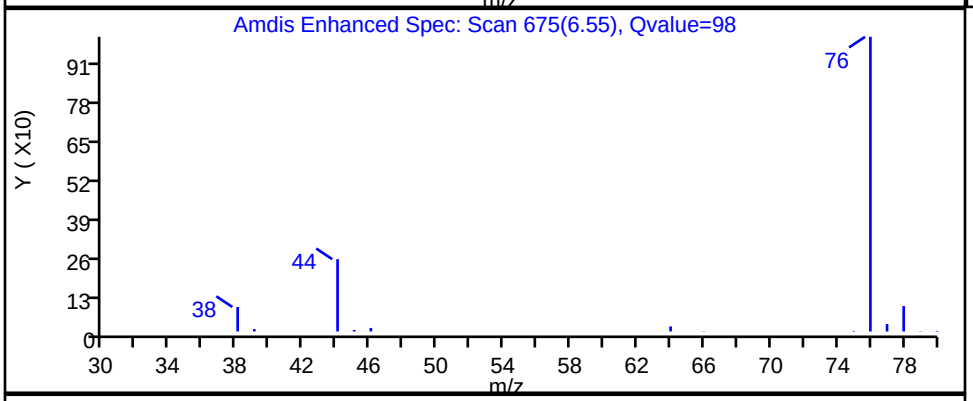
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D

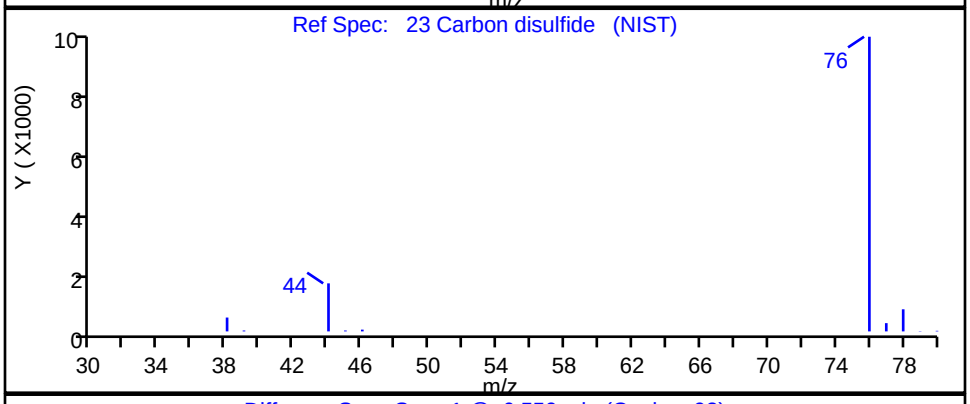
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

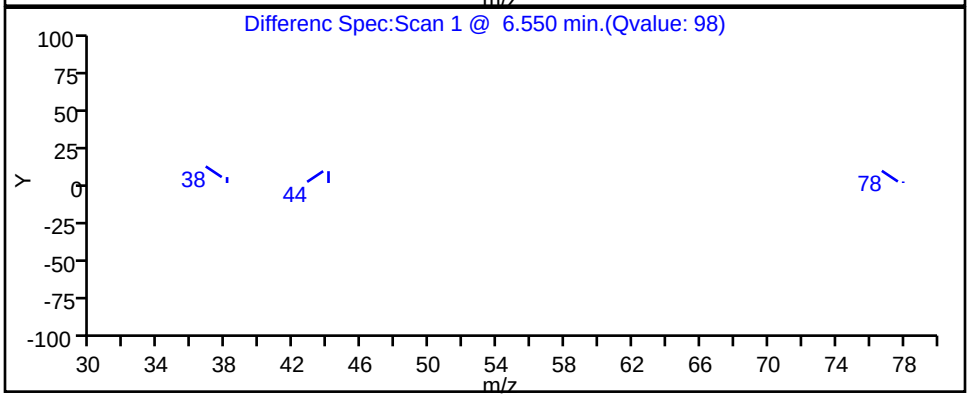
23 Carbon disulfide, CAS: 75-15-0









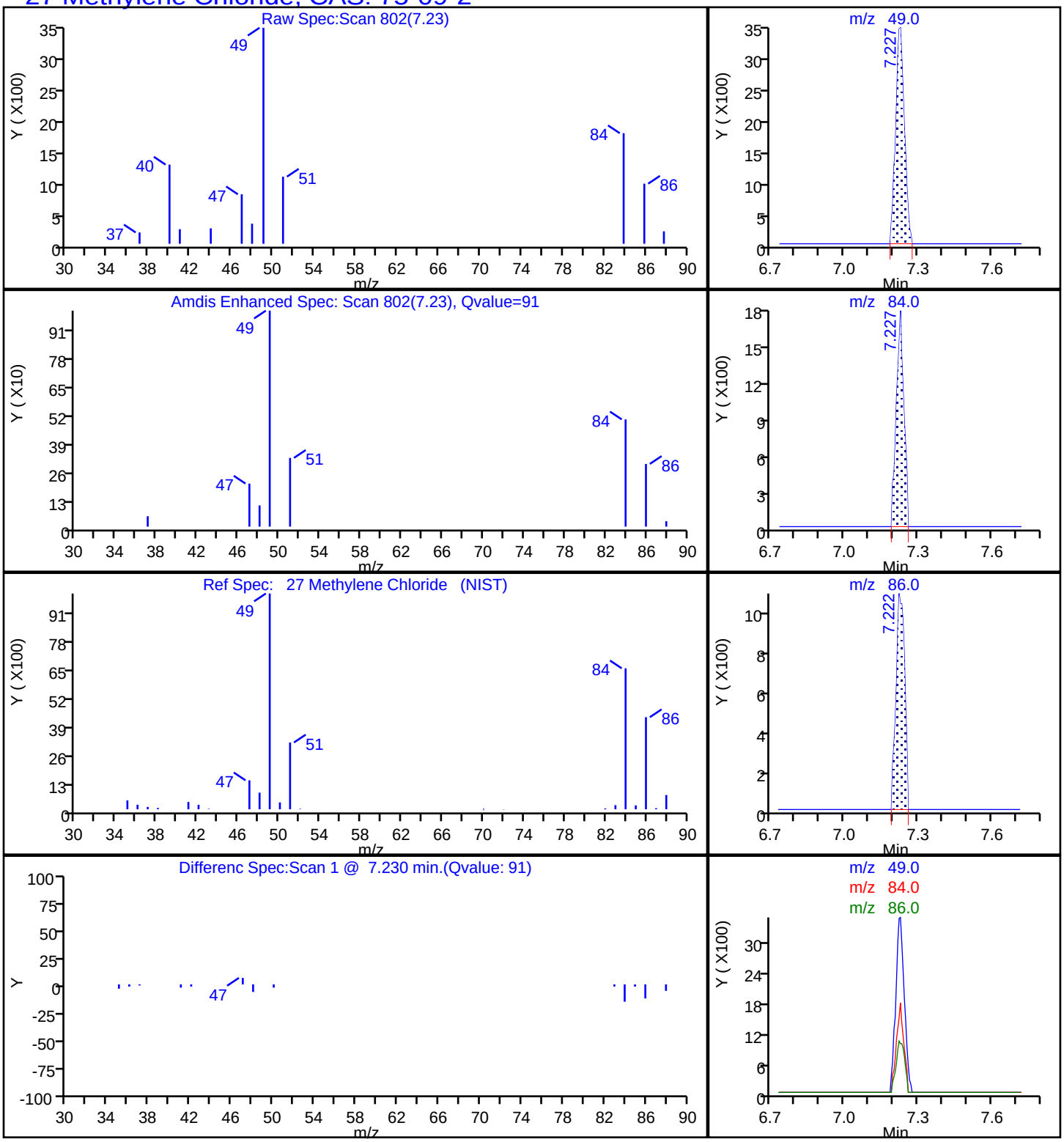


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D

Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

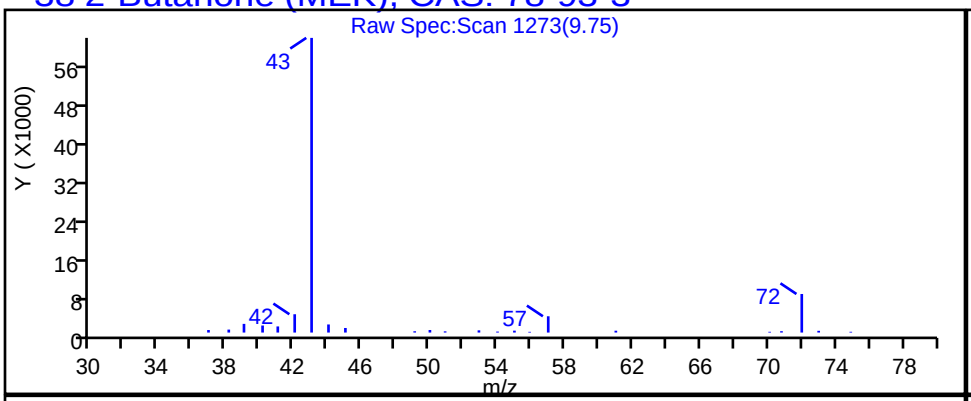
27 Methylene Chloride, CAS: 75-09-2

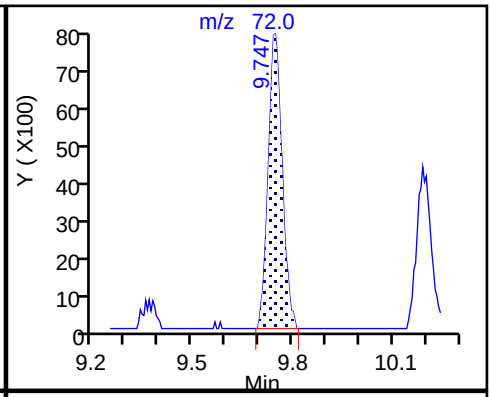


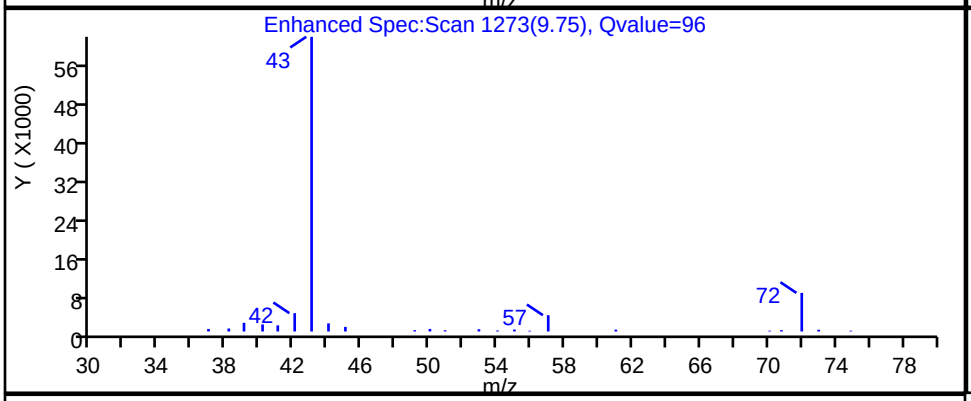
TestAmerica Burlington

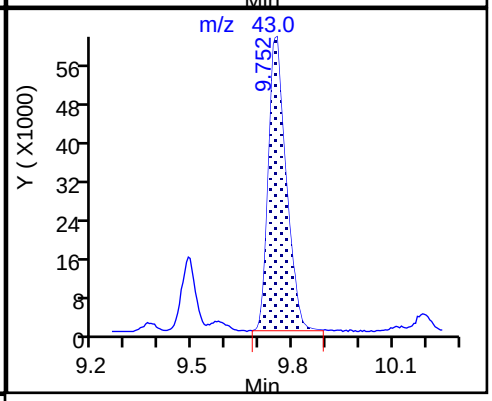
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

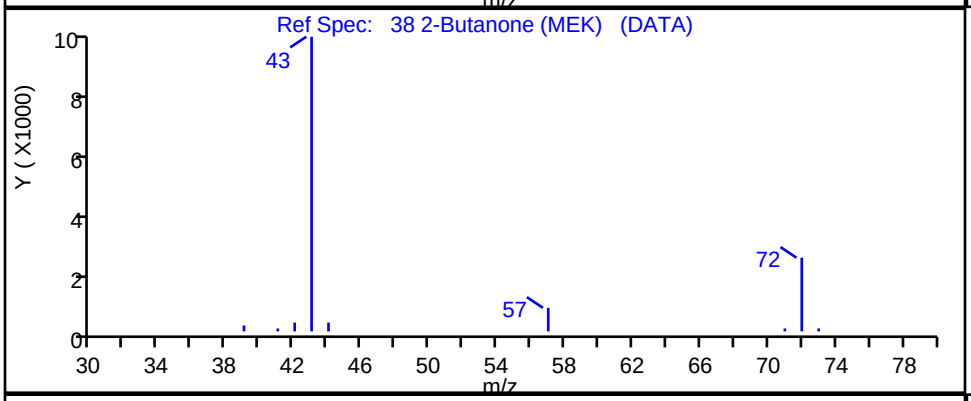
38 2-Butanone (MEK), CAS: 78-93-3

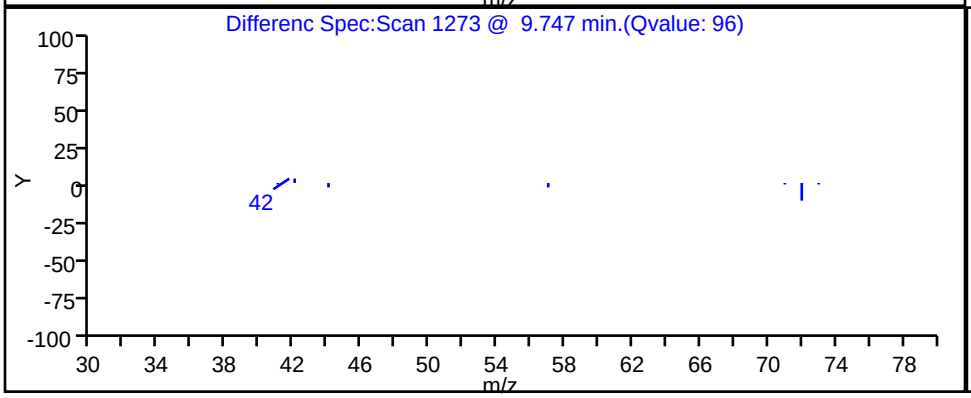


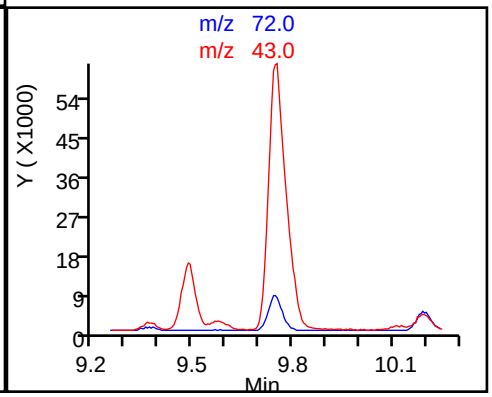












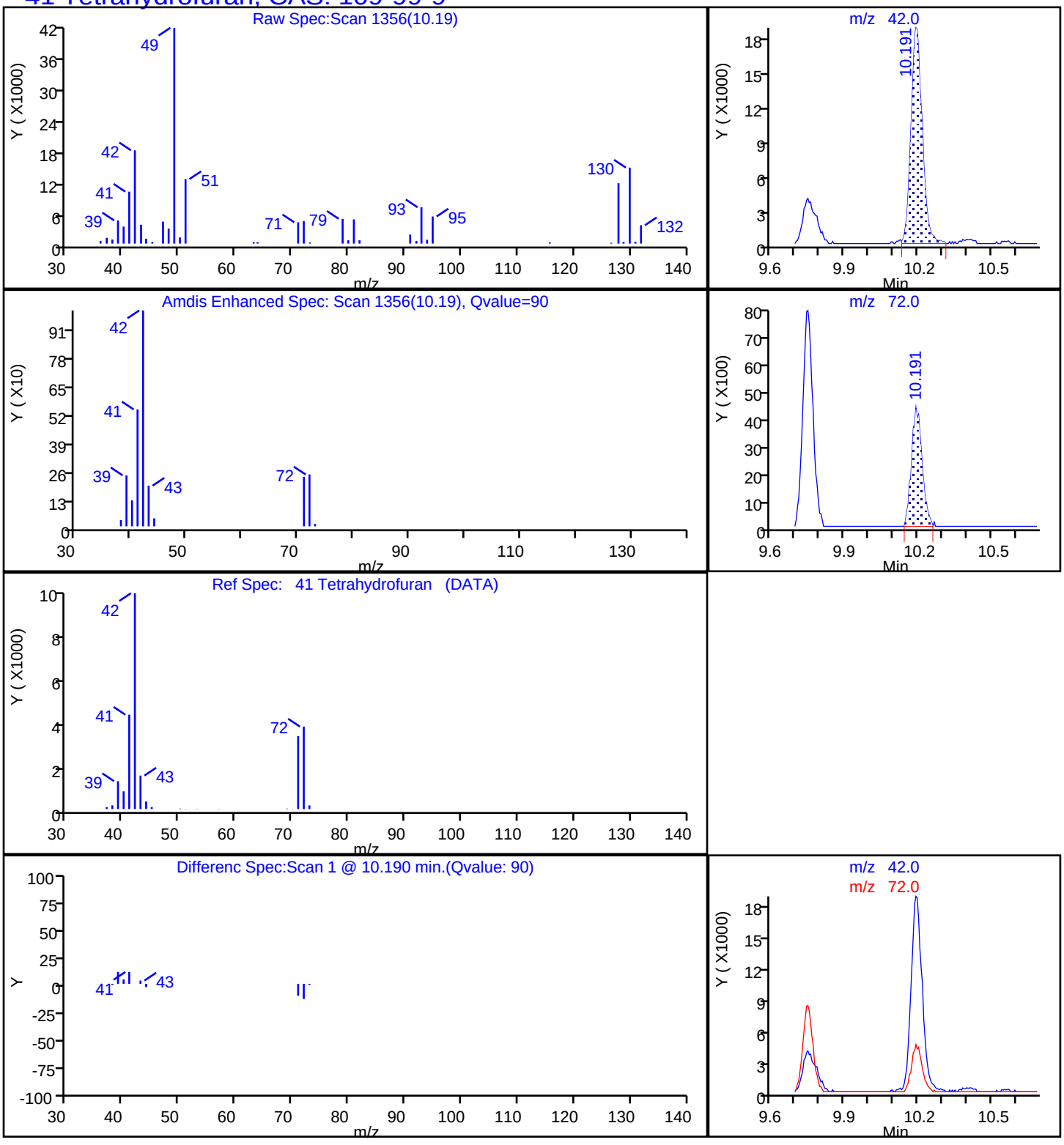
Report Date: 09-Apr-2018 08:34:38 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D

Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

41 Tetrahydrofuran, CAS: 109-99-9

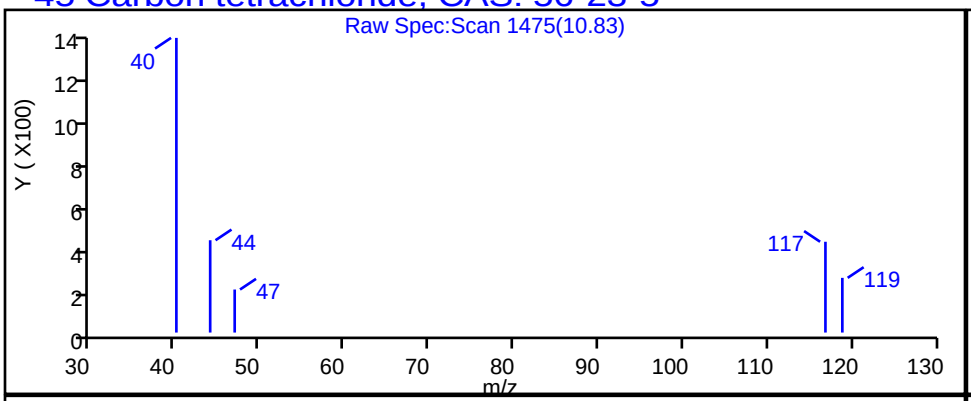


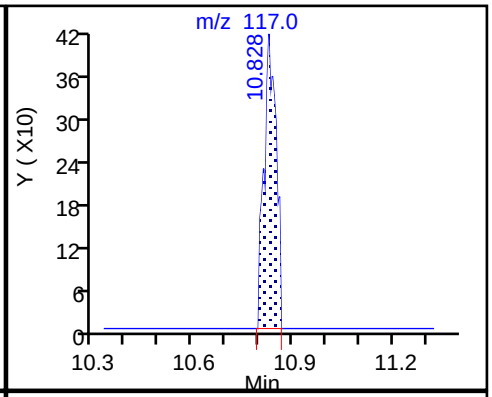
TestAmerica Burlington

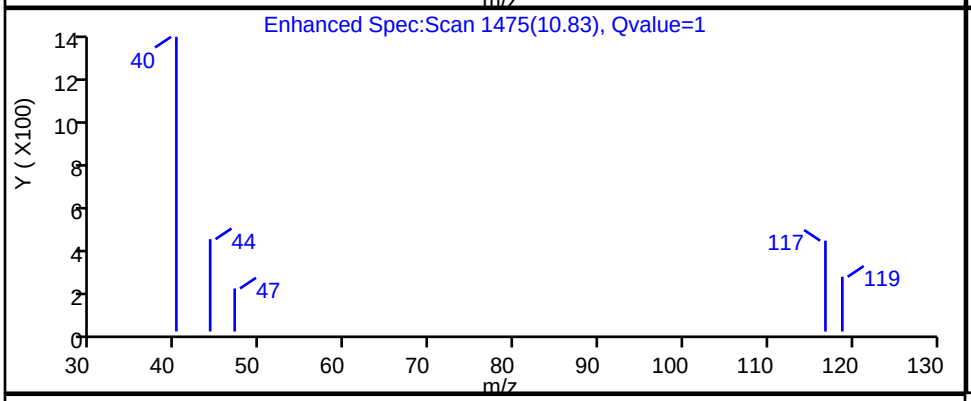
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D

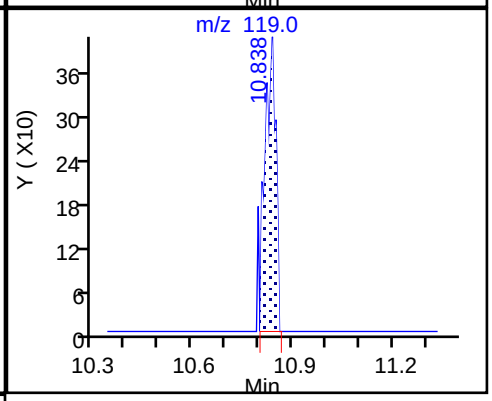
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

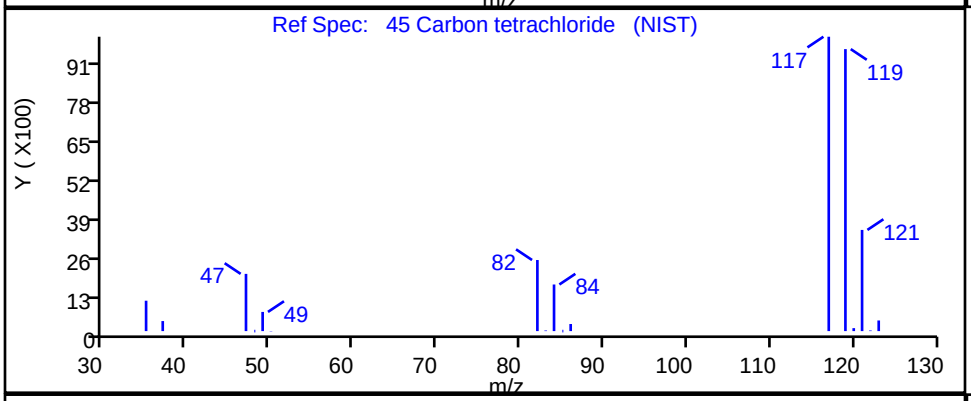
45 Carbon tetrachloride, CAS: 56-23-5

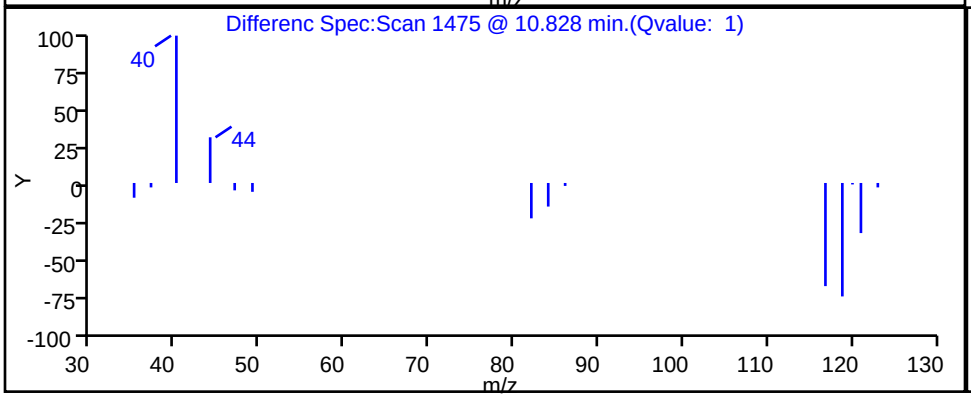


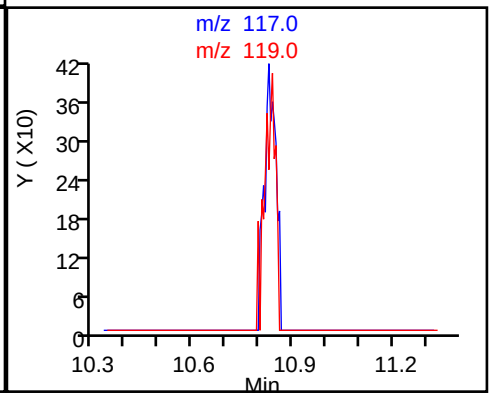








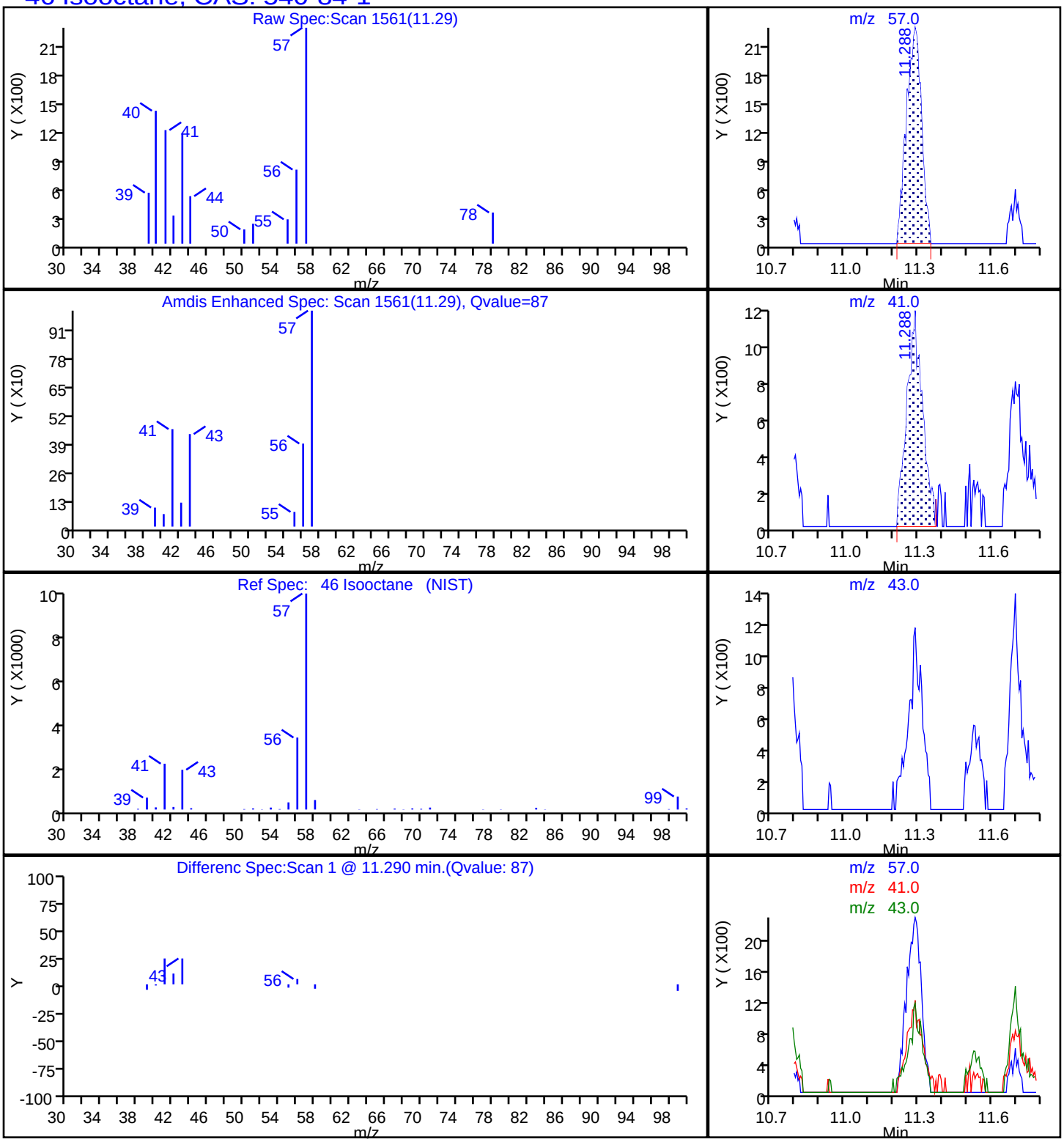




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

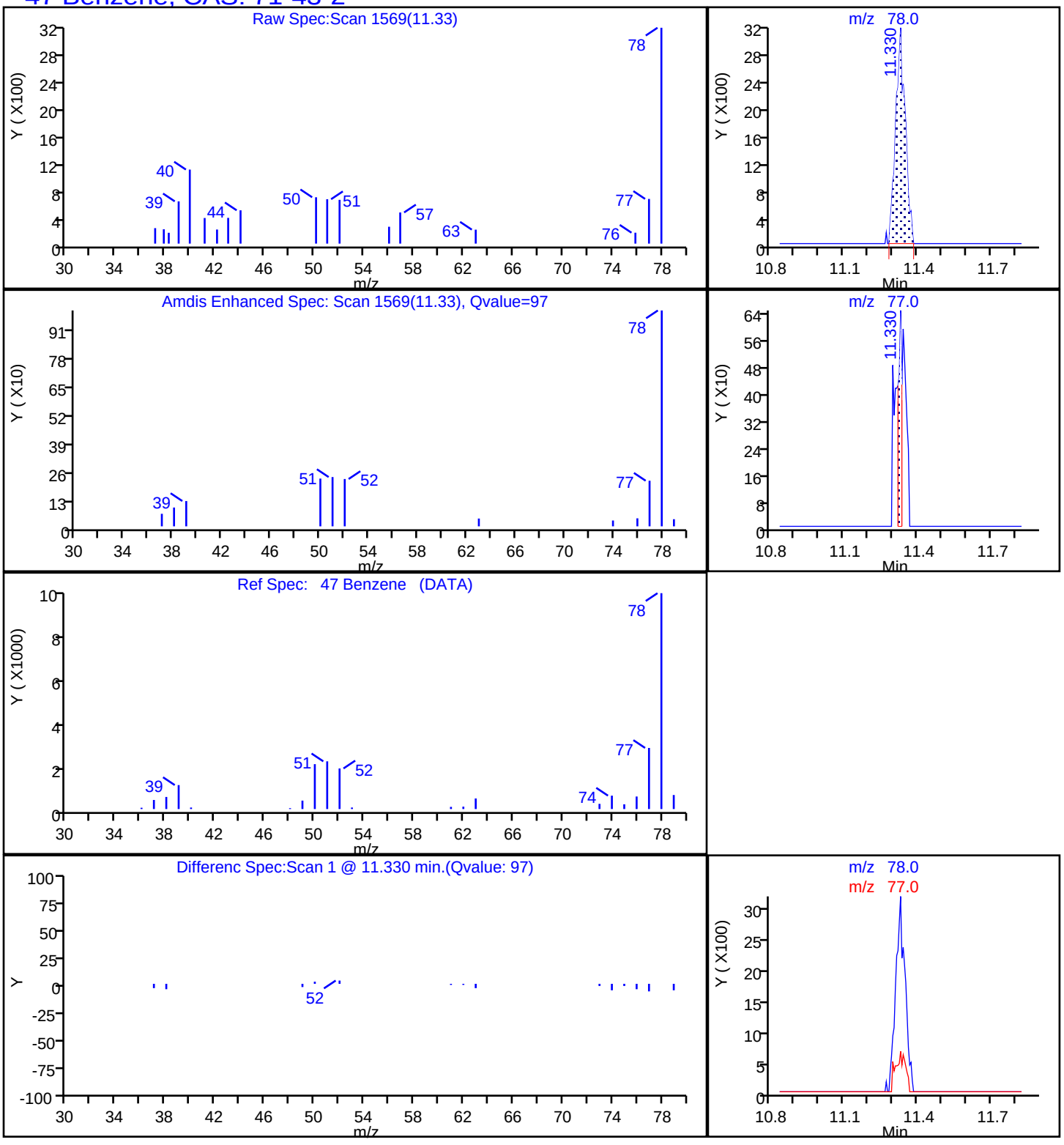
46 Isooctane, CAS: 540-84-1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



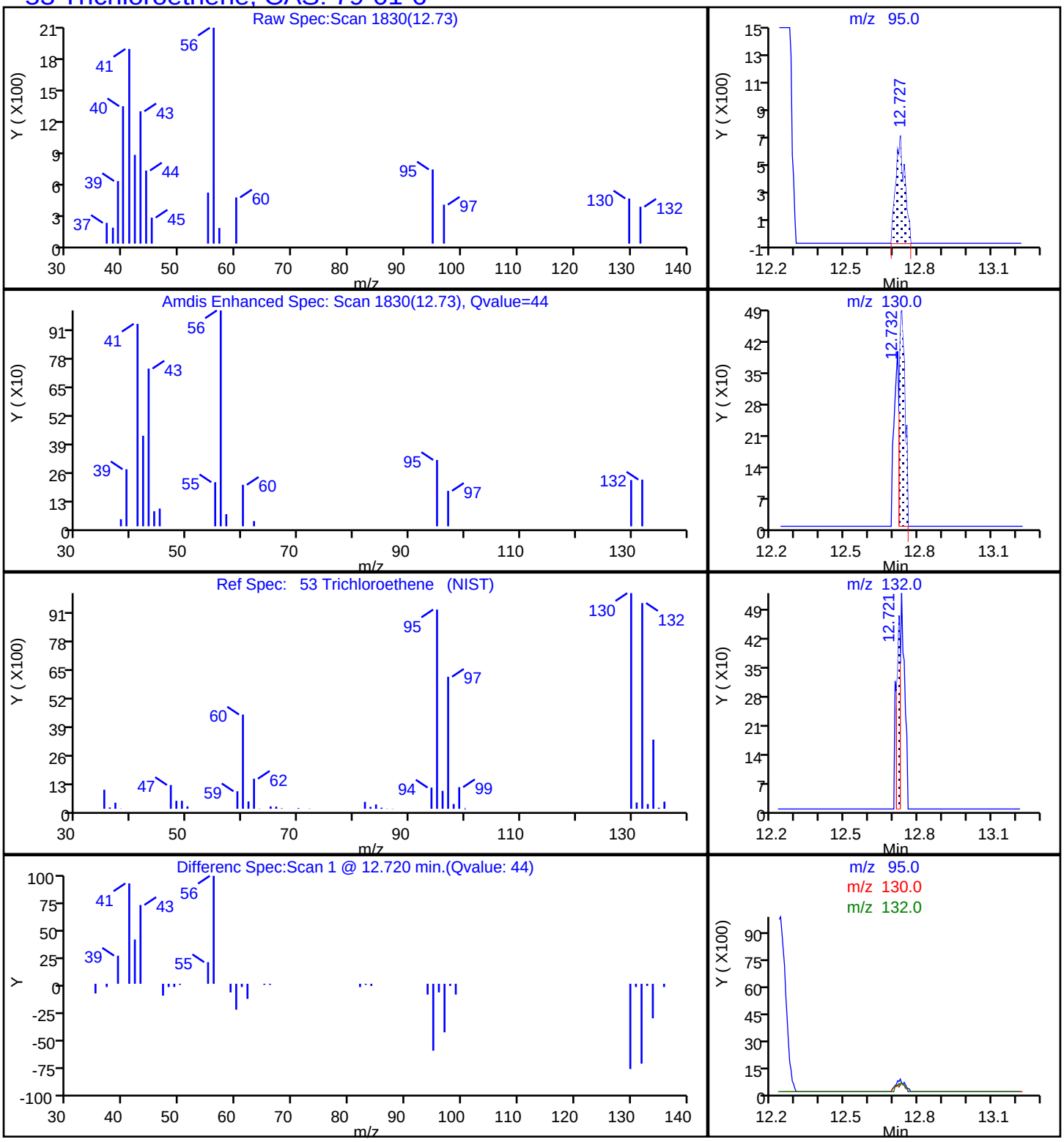
Report Date: 09-Apr-2018 08:34:39 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D

Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

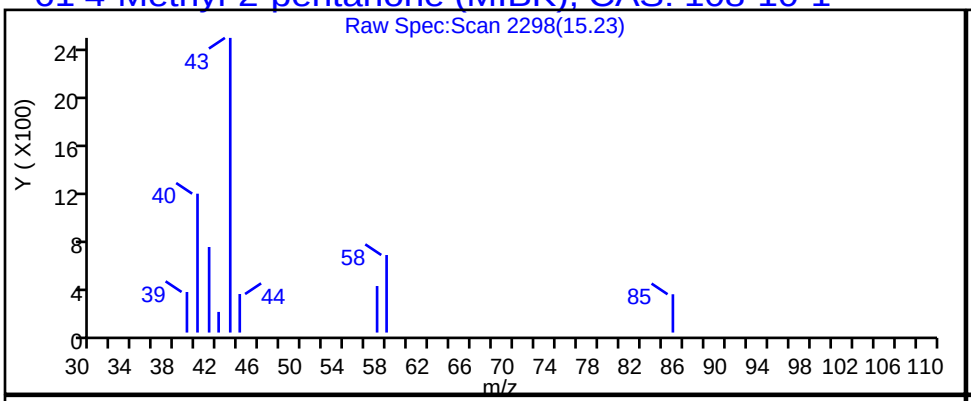
53 Trichloroethene, CAS: 79-01-6

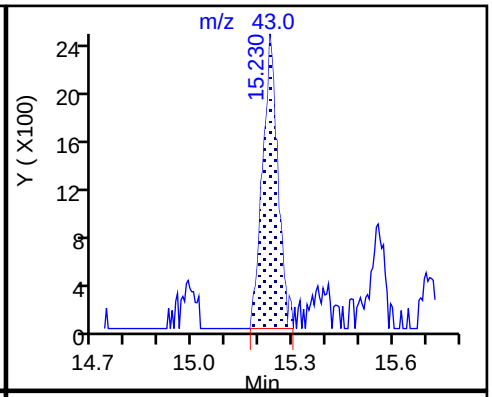


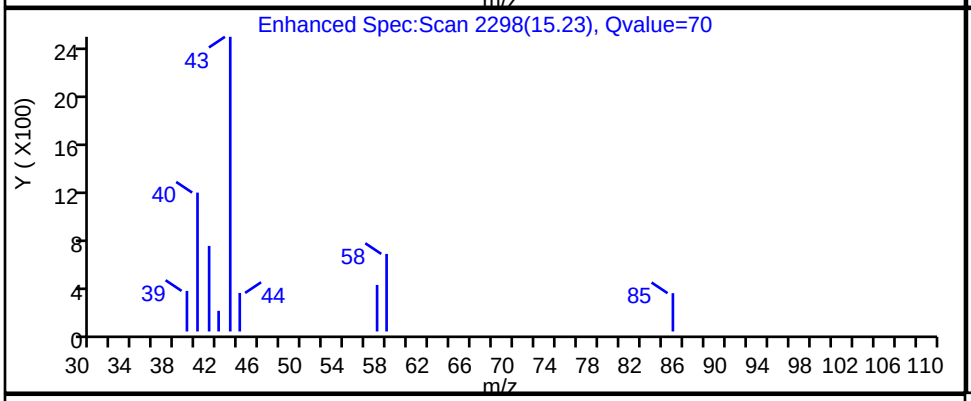
TestAmerica Burlington

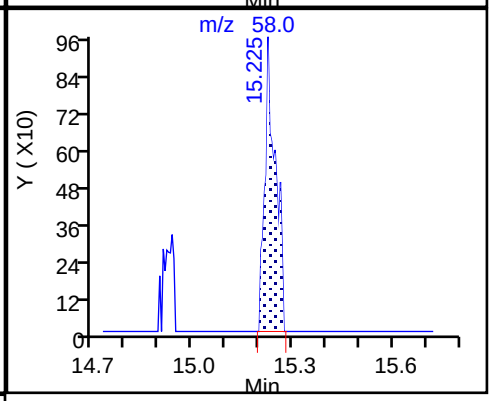
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

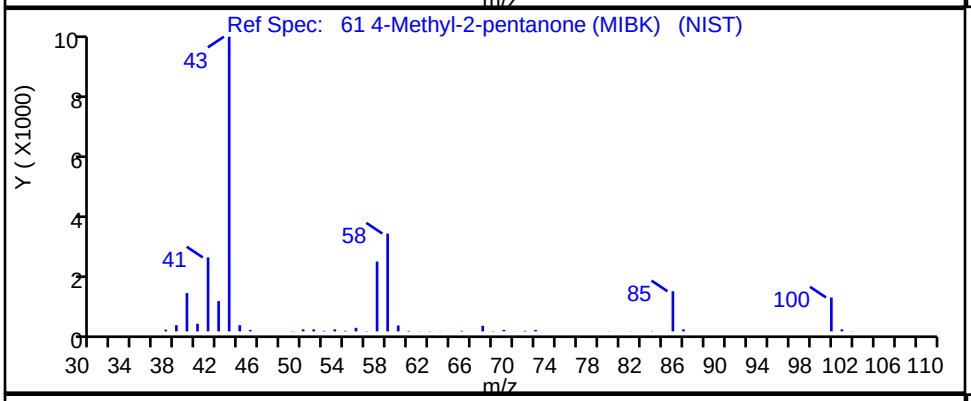
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

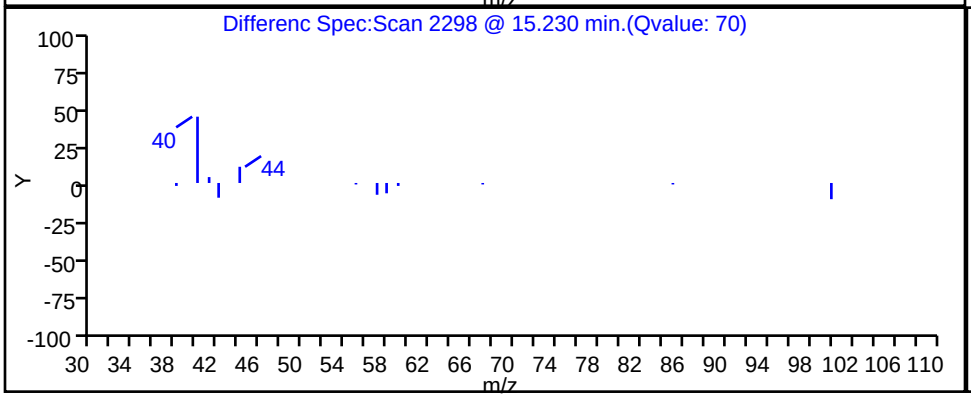


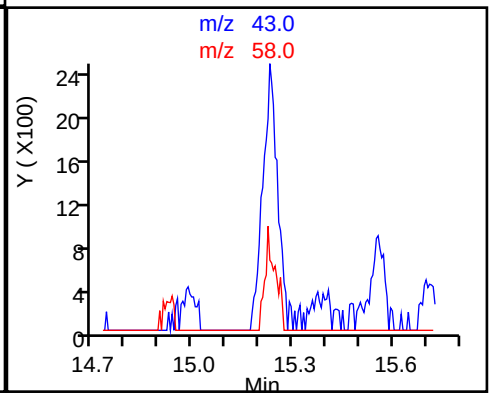








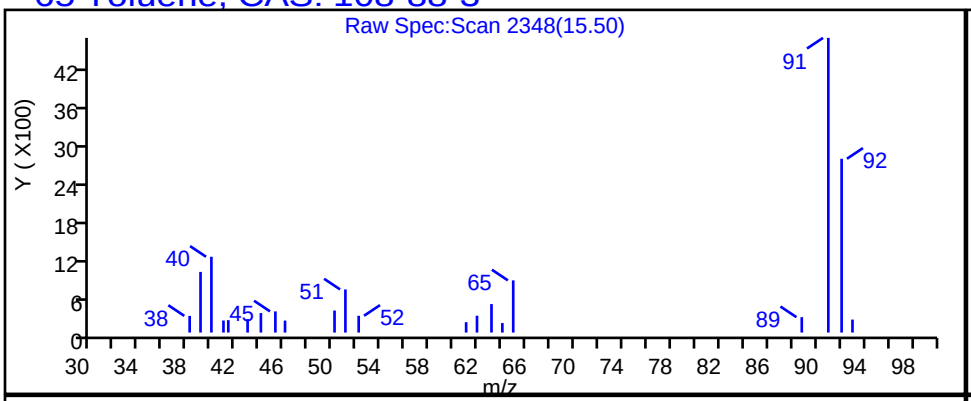


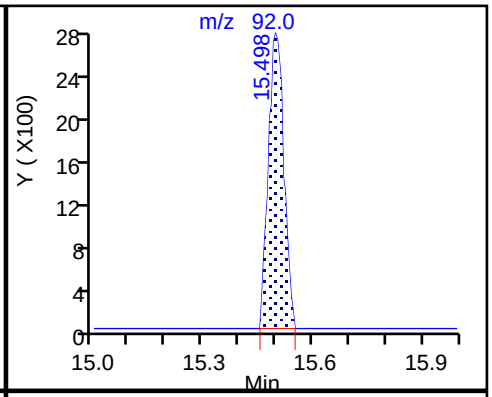


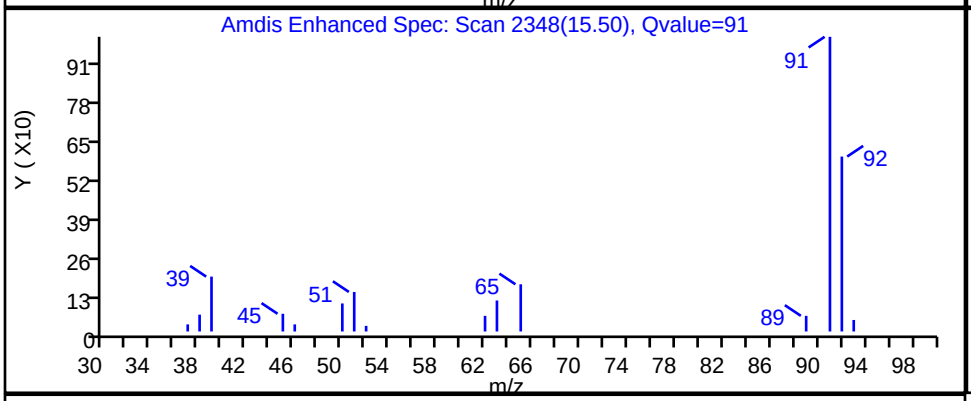
TestAmerica Burlington

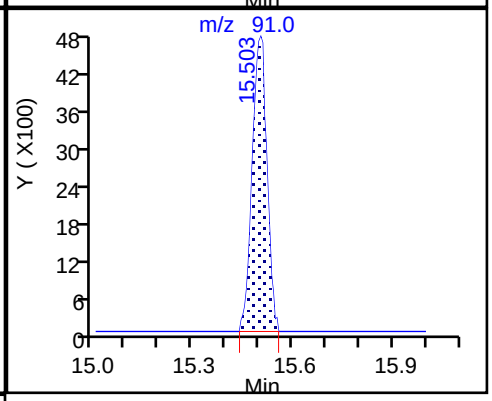
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

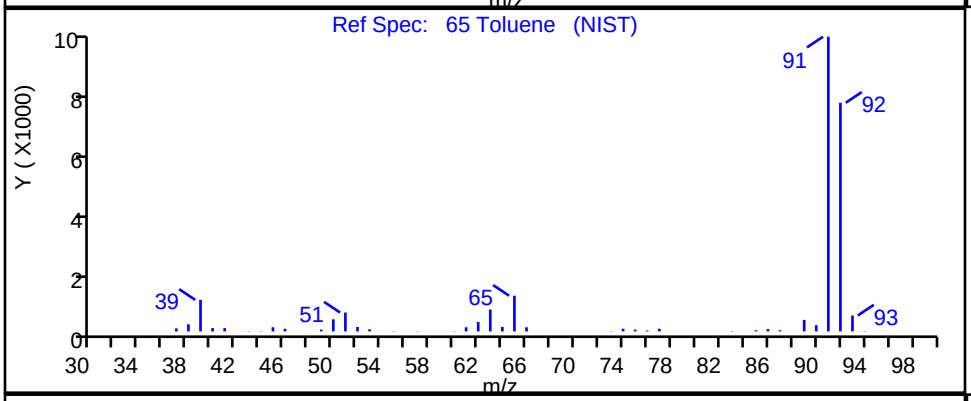
65 Toluene, CAS: 108-88-3

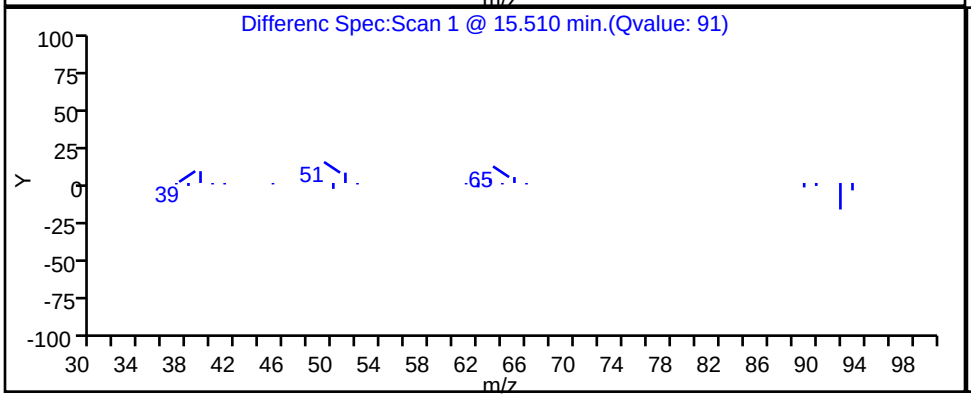


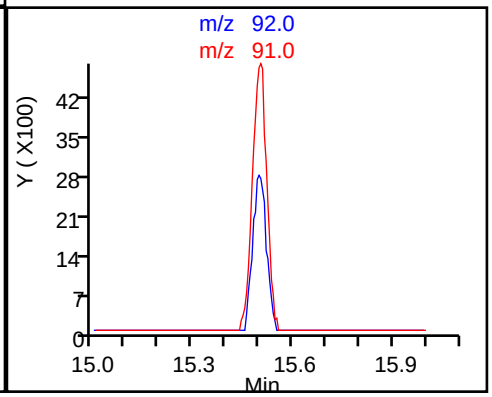






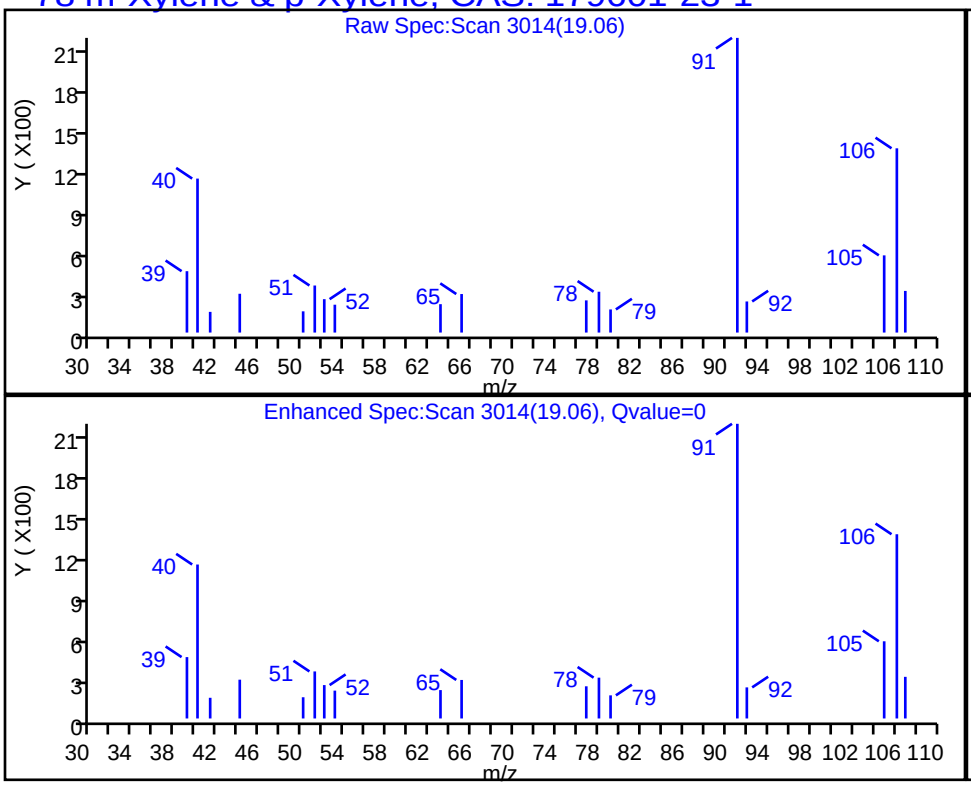


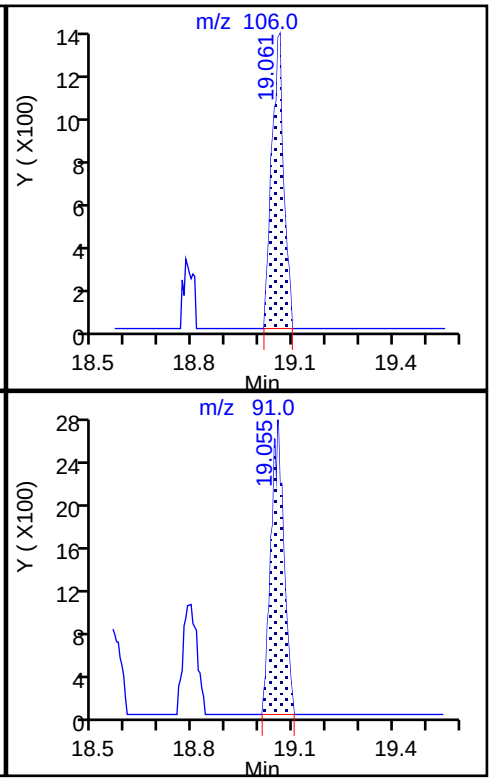


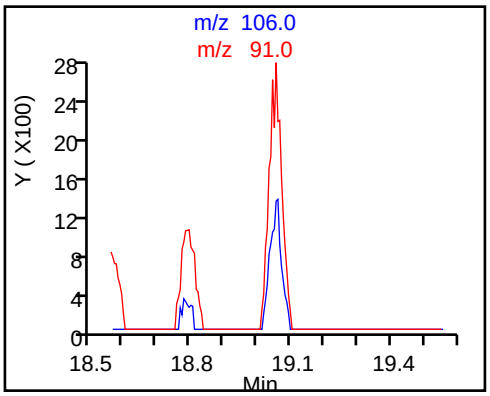


Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D
Injection Date: 06-Apr-2018 08:25:30 Instrument ID: CHX.i
Lims ID: 200-42918-A-11 Lab Sample ID: 200-42918-11
Client ID: GC-IA-106 (AS)
Operator ID: ert ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 200.000 mL Dil. Factor: 2.5000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

78 m-Xylene & p-Xylene, CAS: 179601-23-1







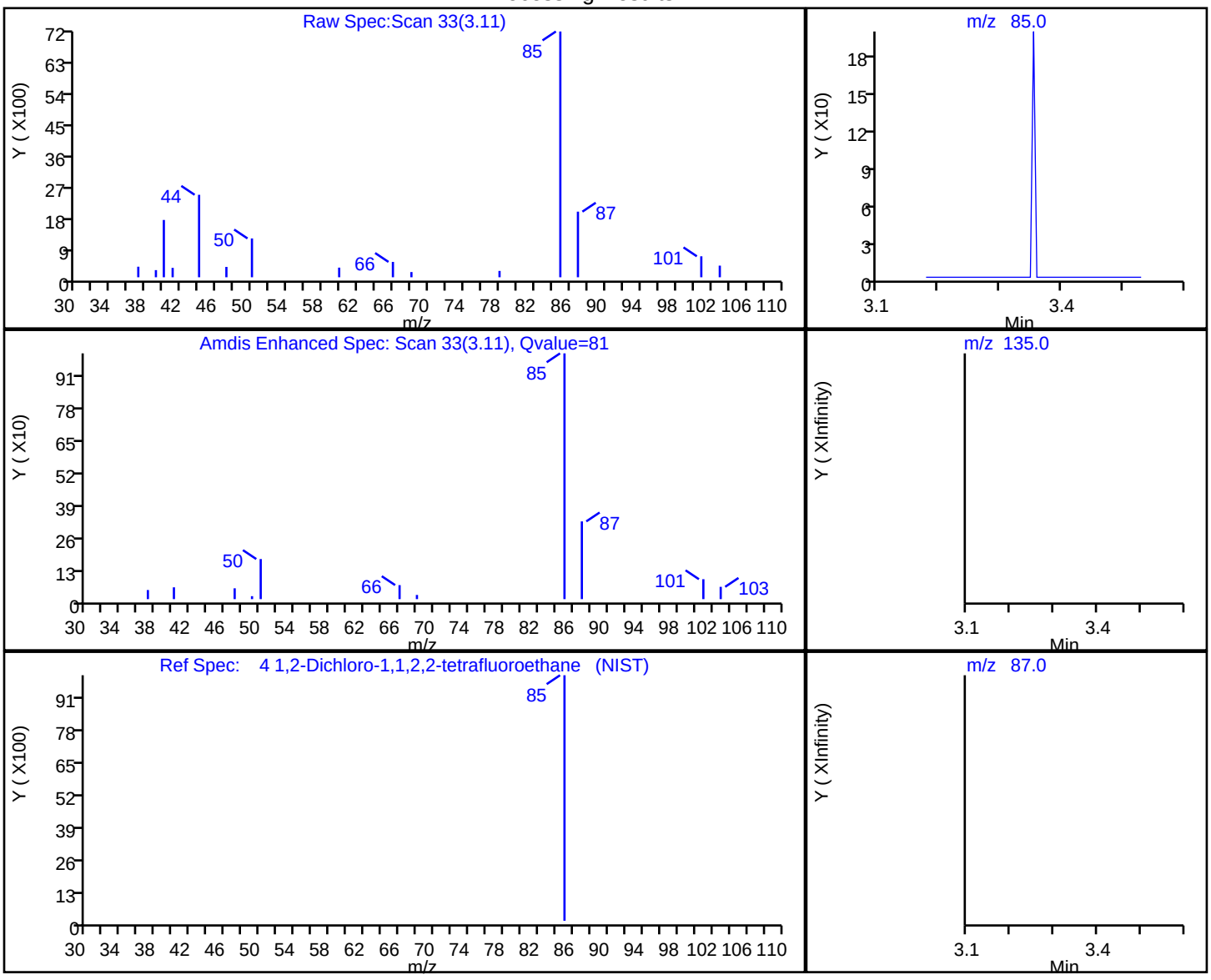
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
3.11	85.00	10452	0.212432
3.35	135.00	0	
3.11	87.00	3384	

Reviewer: puangmaleek, 09-Apr-2018 08:34:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

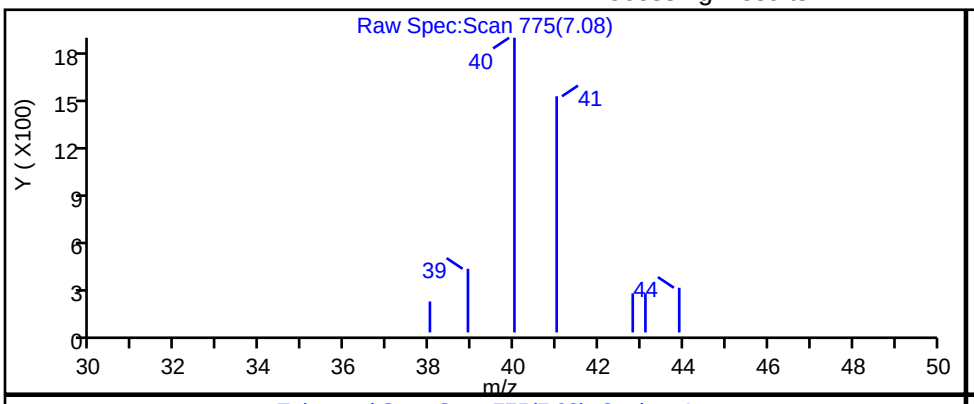
User Disabled Compound Report

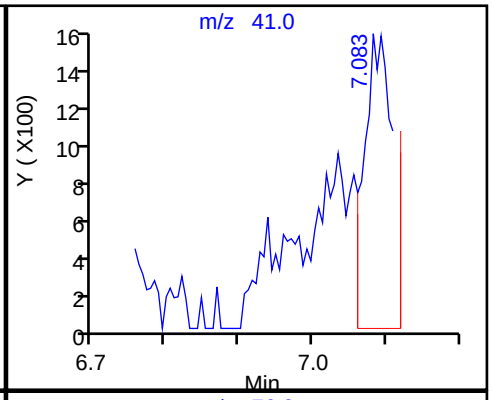
TestAmerica Burlington

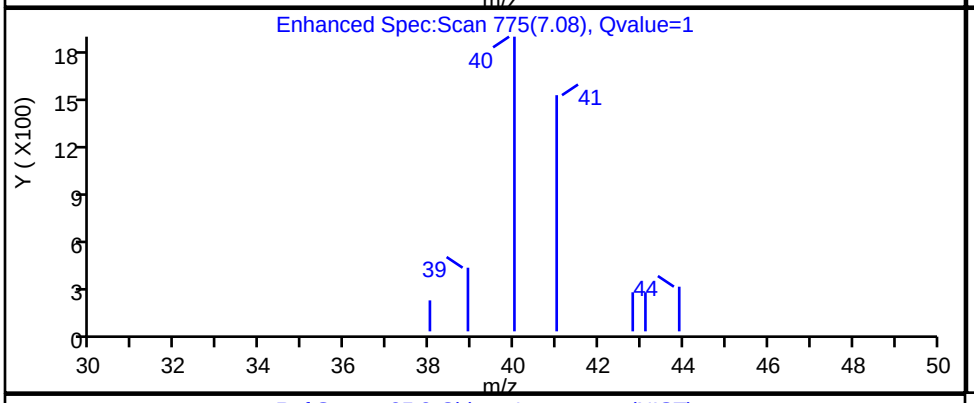
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

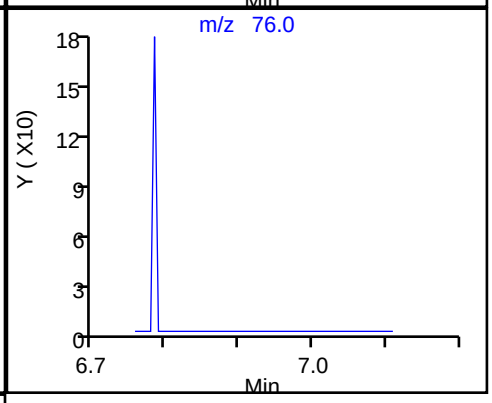
25 3-Chloro-1-propene, CAS: 107-05-1

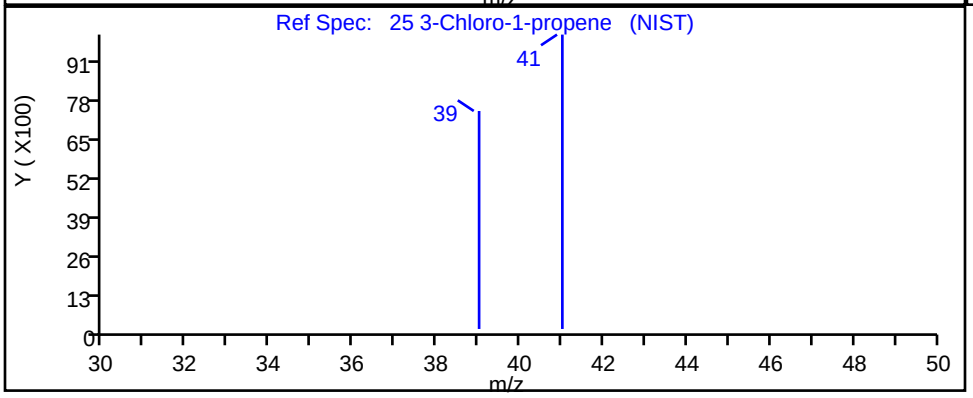
Processing Results











RT	Mass	Response	Amount
7.08	41.00	3990	0.097445
6.93	76.00	0	

Reviewer: puangmaleek, 09-Apr-2018 08:34:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

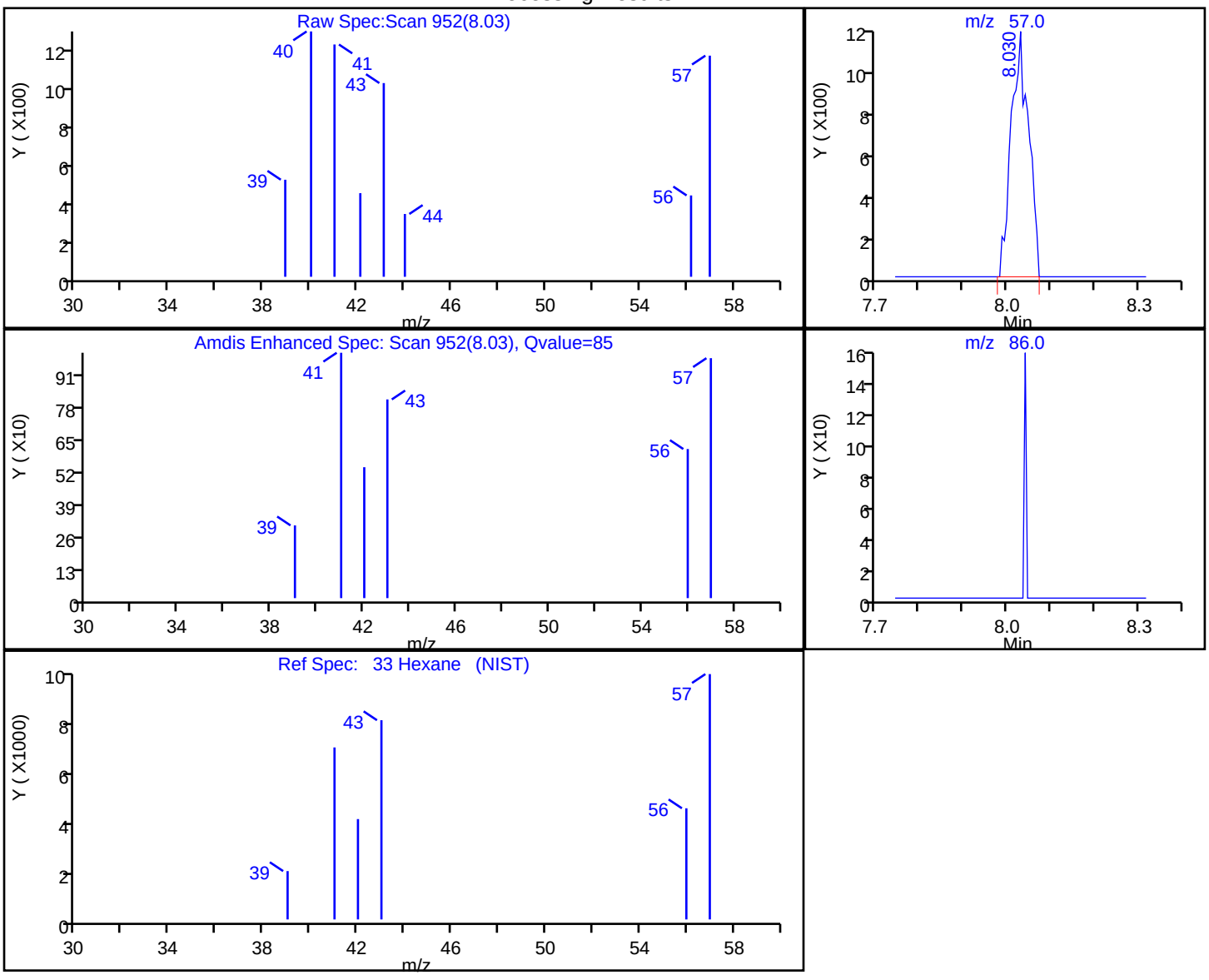
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3

Processing Results



RT	Mass	Response	Amount
8.03	57.00	3258	0.081466
8.03	86.00	0	

Reviewer: puangmaleek, 09-Apr-2018 08:34:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

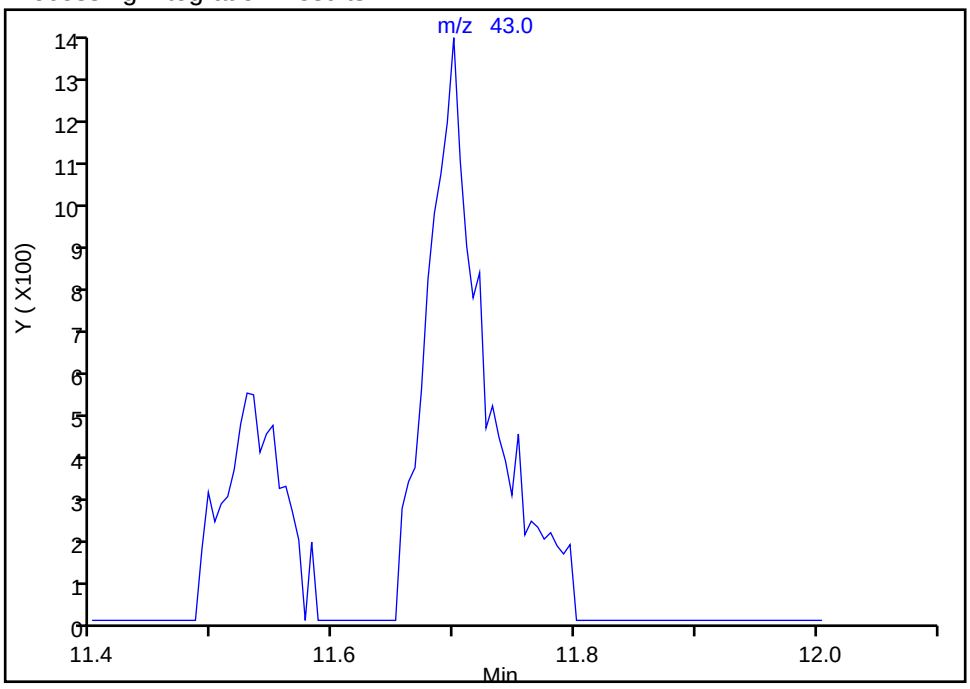
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

49 n-Heptane, CAS: 142-82-5

Signal: 1

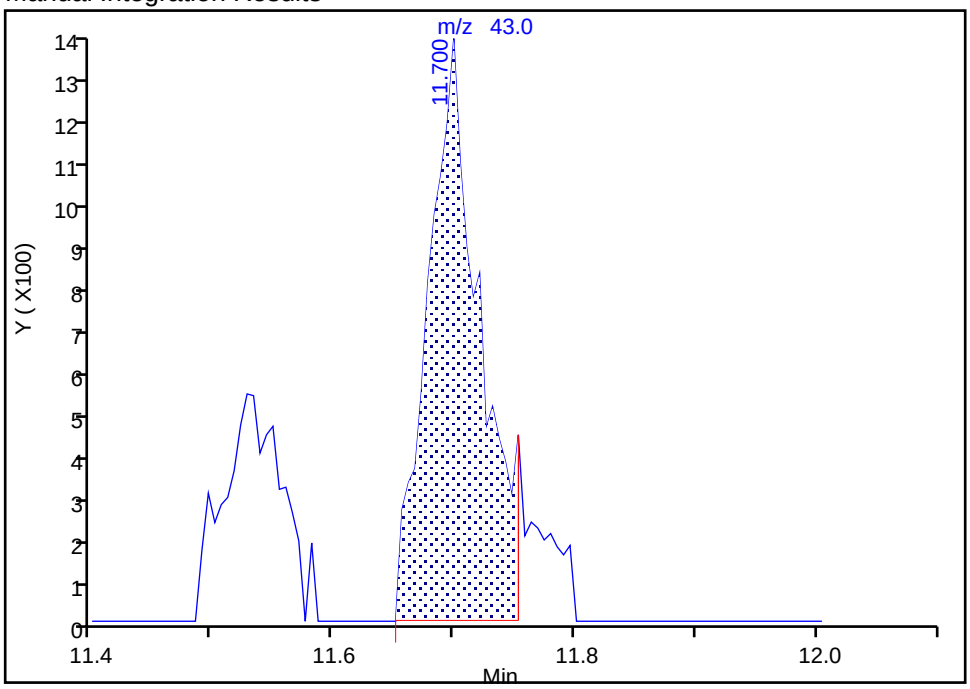
Not Detected
Expected RT: 11.70

Processing Integration Results



Manual Integration Results

RT: 11.70
Area: 4116
Amount: 0.053301
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:32:46
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

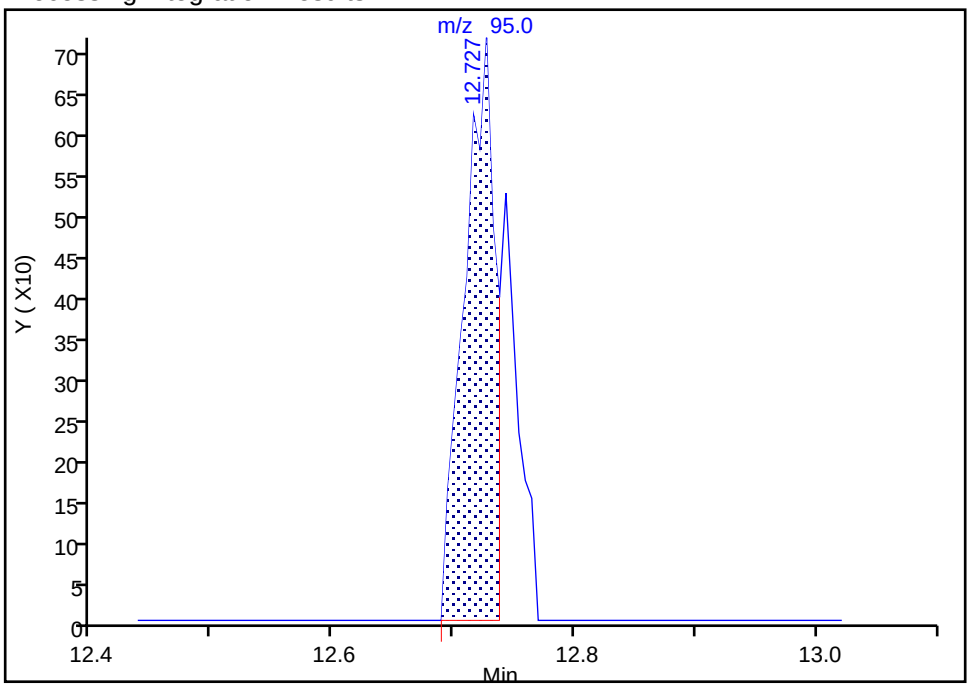
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

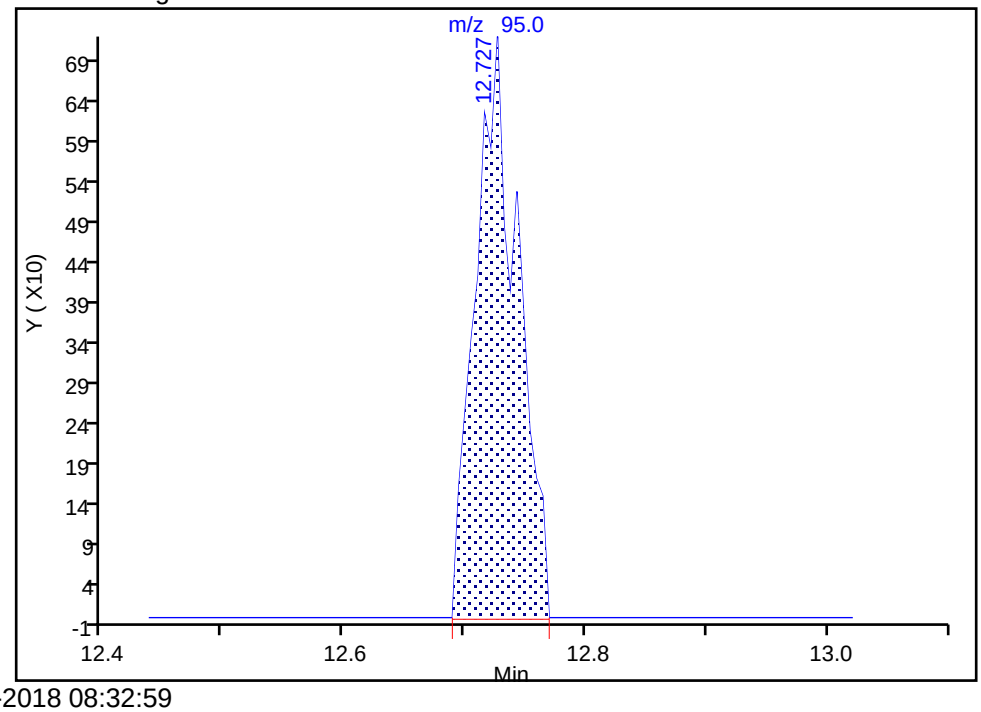
Processing Integration Results

RT: 12.73
Area: 1278
Amount: 0.041179
Amount Units: ppb v/v



Manual Integration Results

RT: 12.73
Area: 1756
Amount: 0.056581
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:32:59

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

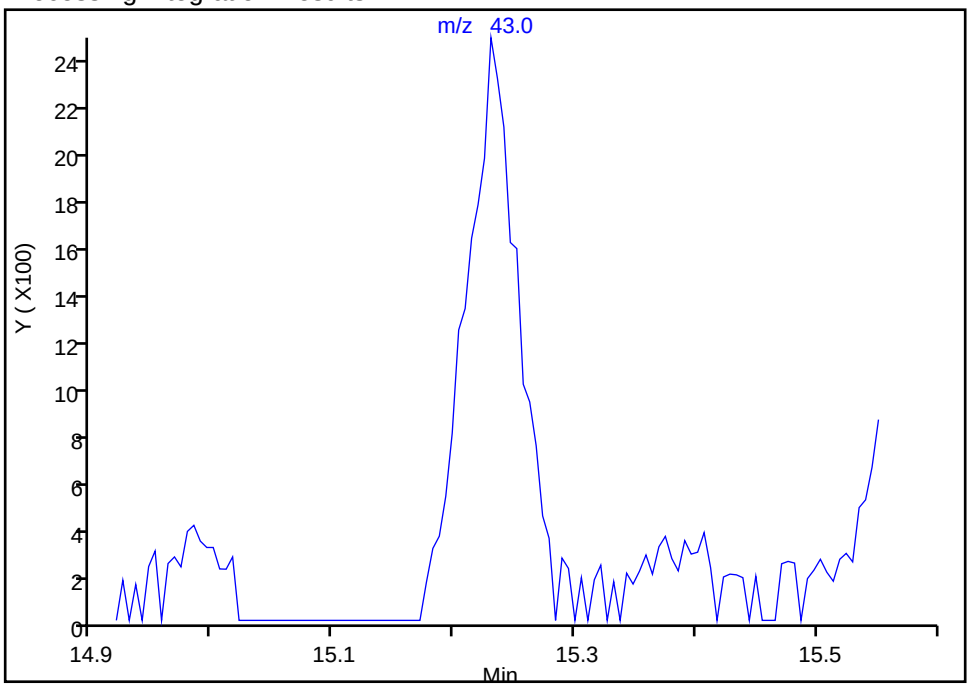
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

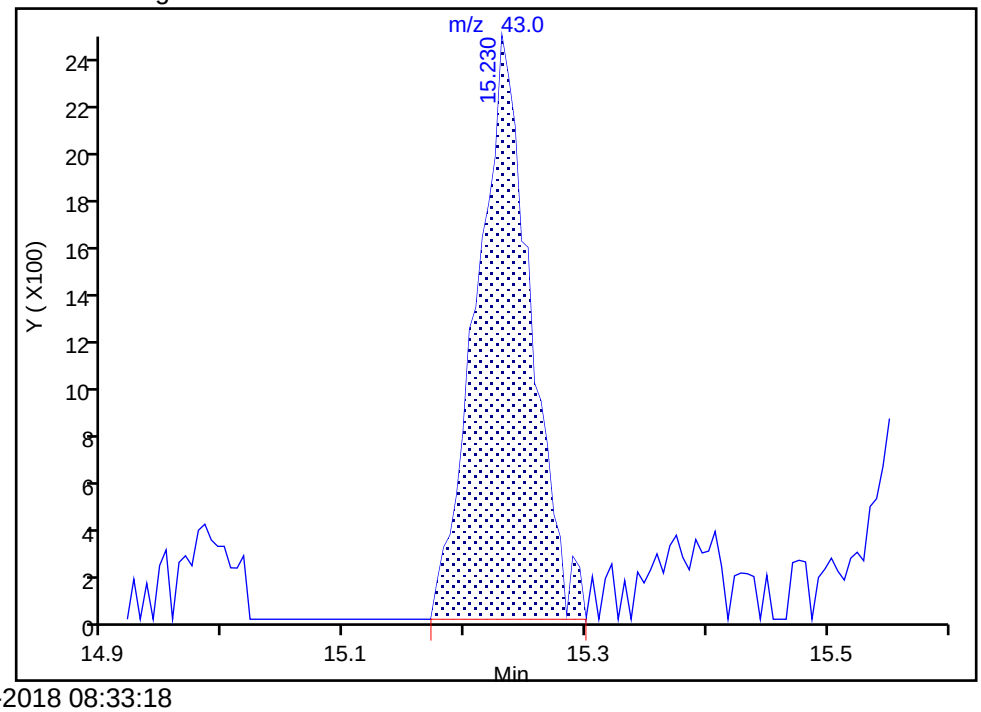
Not Detected
Expected RT: 15.20

Processing Integration Results



Manual Integration Results

RT: 15.23
Area: 7708
Amount: 0.077005
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:33:18
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

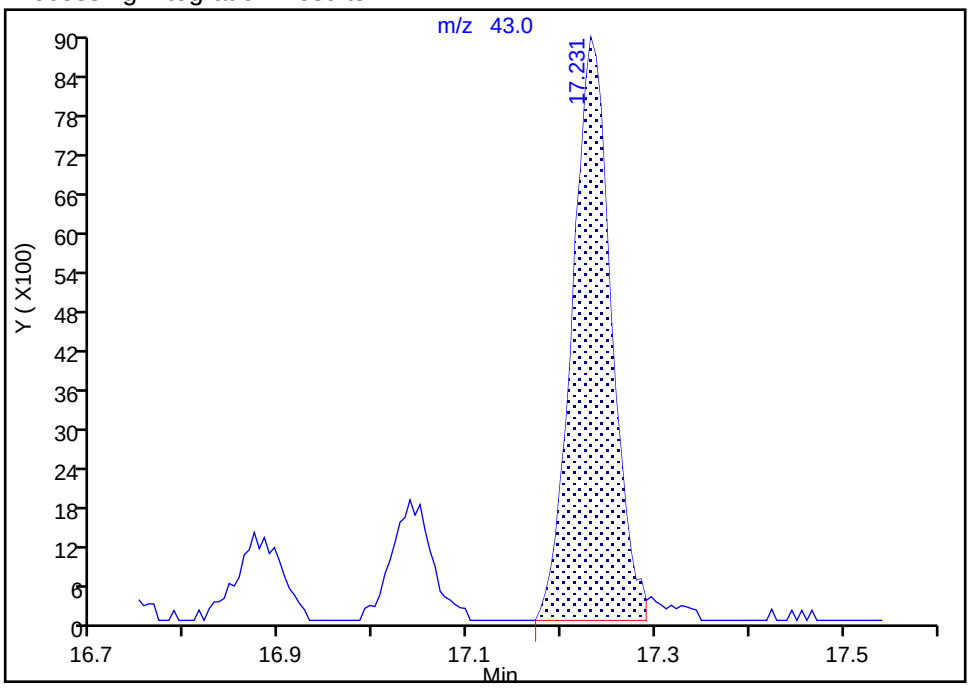
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

69 2-Hexanone, CAS: 591-78-6

Signal: 1

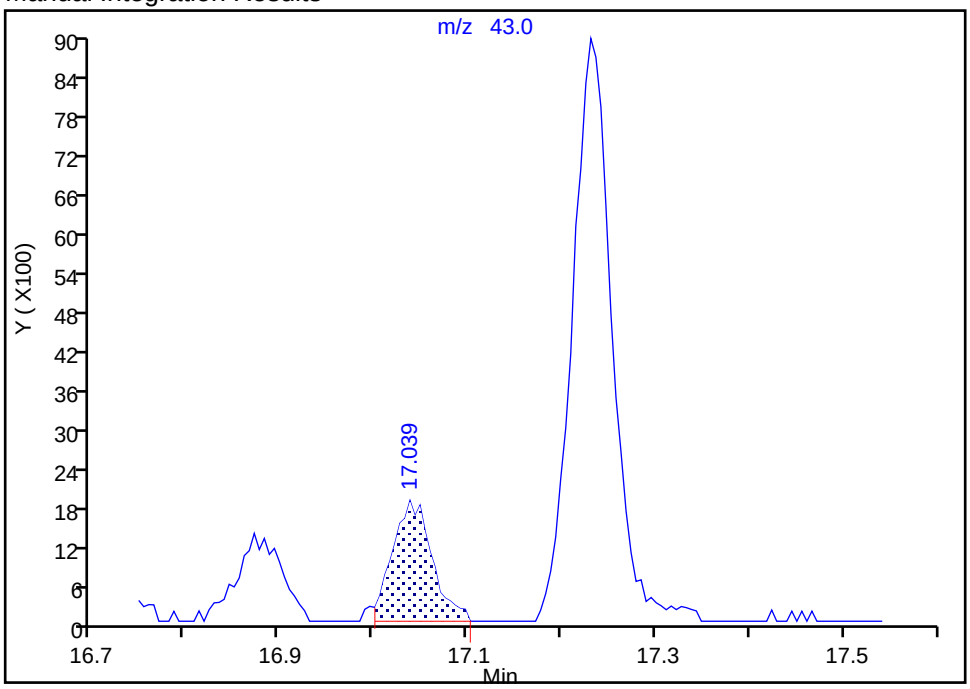
Processing Integration Results

RT: 17.23
Area: 25607
Amount: 0.267211
Amount Units: ppb v/v



Manual Integration Results

RT: 17.04
Area: 5361
Amount: 0.055942
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:33:28

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

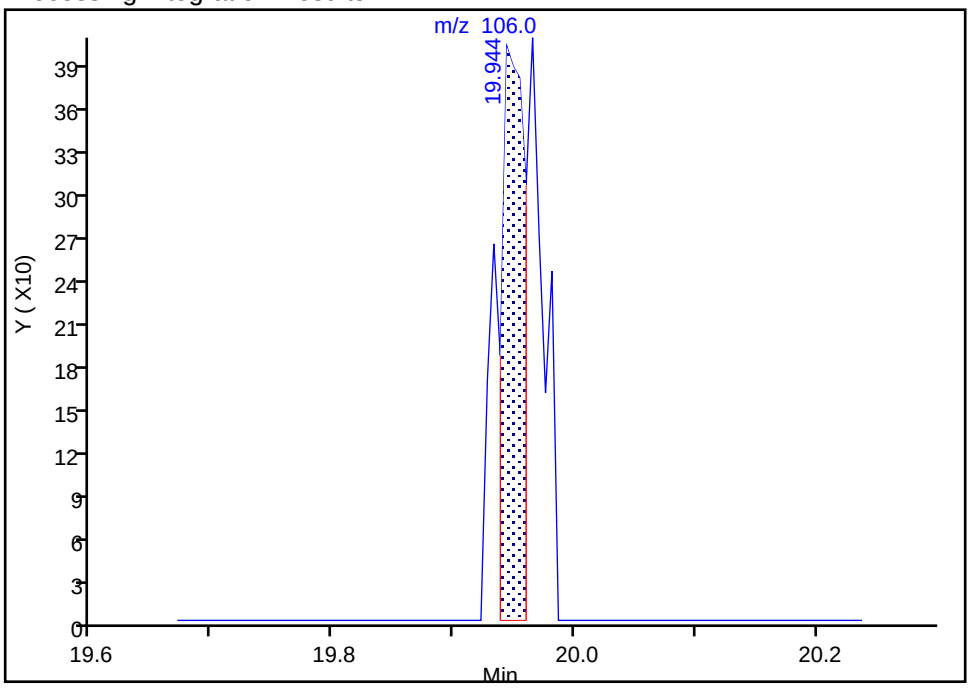
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6

Signal: 1

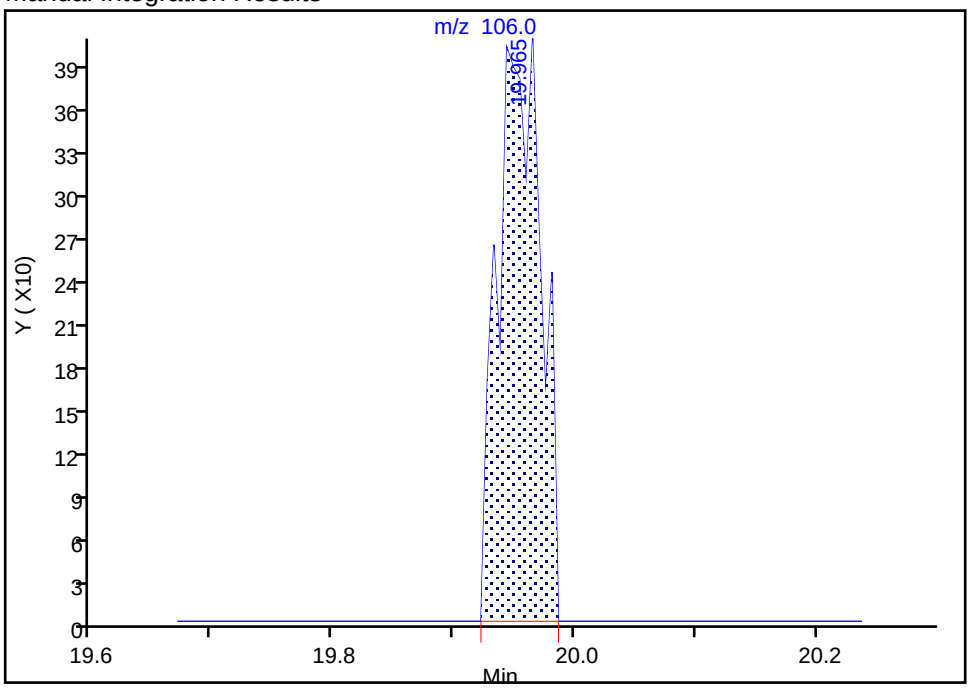
Processing Integration Results

RT: 19.94
Area: 532
Amount: 0.013321
Amount Units: ppb v/v



Manual Integration Results

RT: 19.96
Area: 1017
Amount: 0.025466
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:33:50

Audit Action: Manually Integrated Audit Reason: Assign Peak

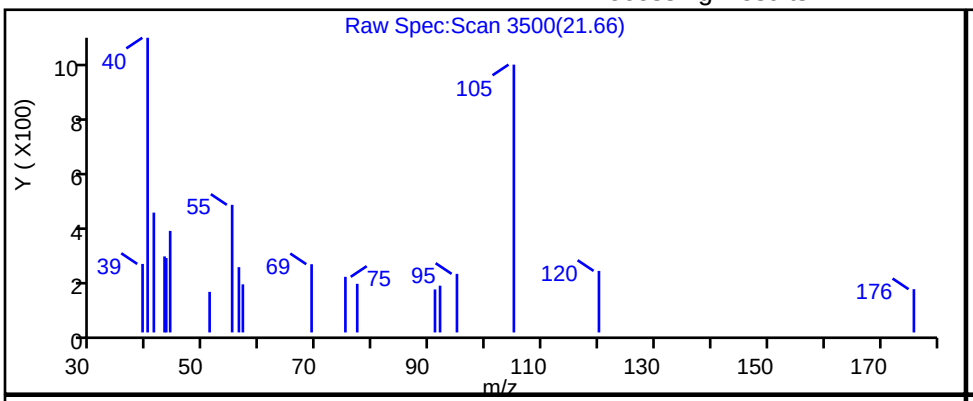
User Disabled Compound Report

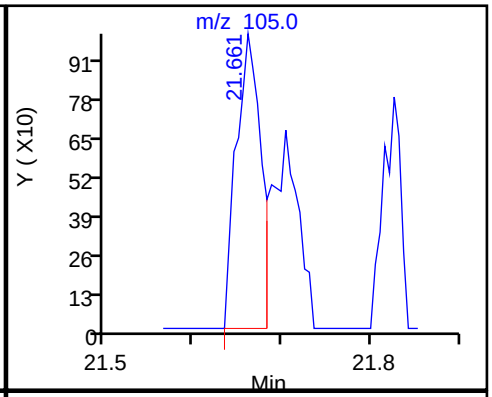
TestAmerica Burlington

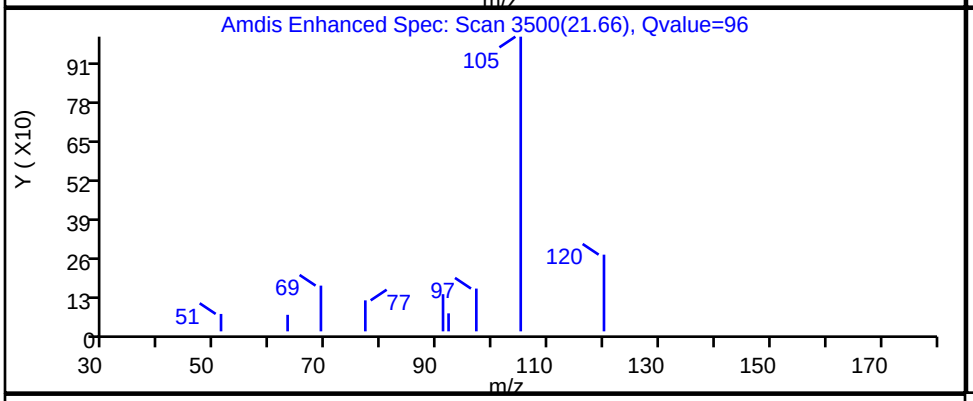
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

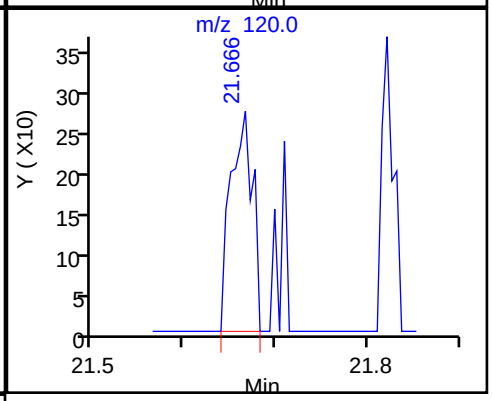
88 4-Ethyltoluene, CAS: 622-96-8

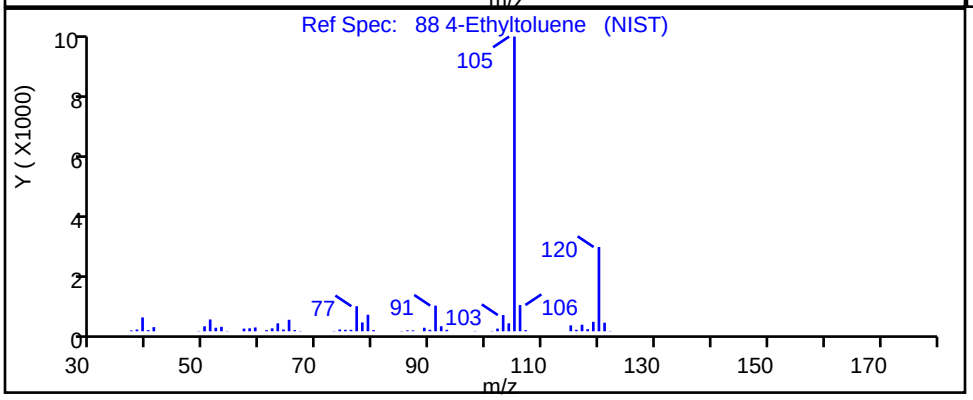
Processing Results











RT	Mass	Response	Amount
21.66	105.00	1920	0.015399
21.67	120.00	453	

Reviewer: puangmaleek, 09-Apr-2018 08:34:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

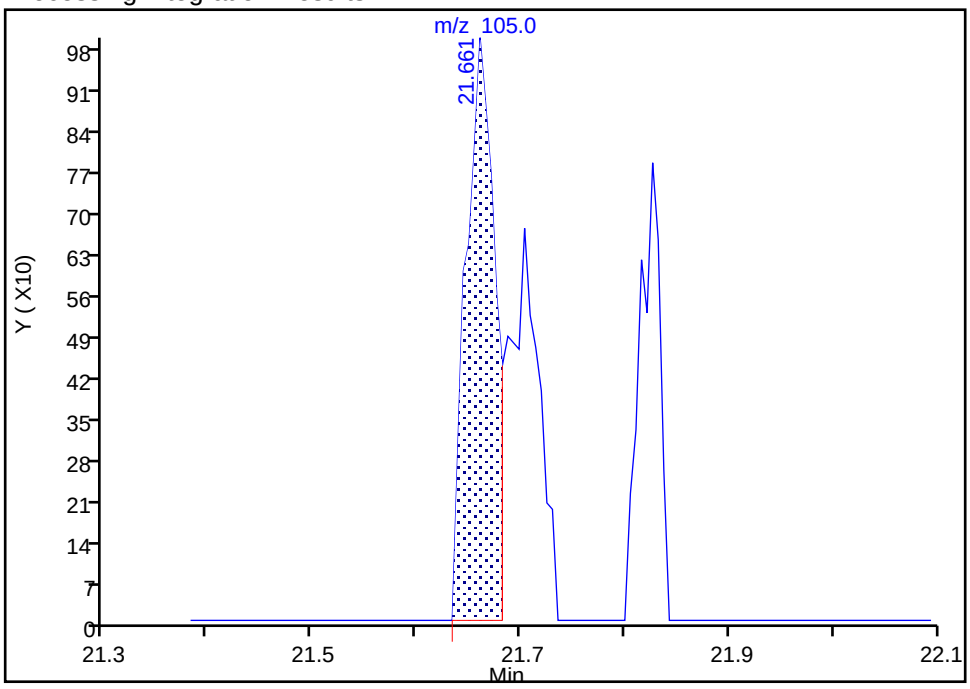
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

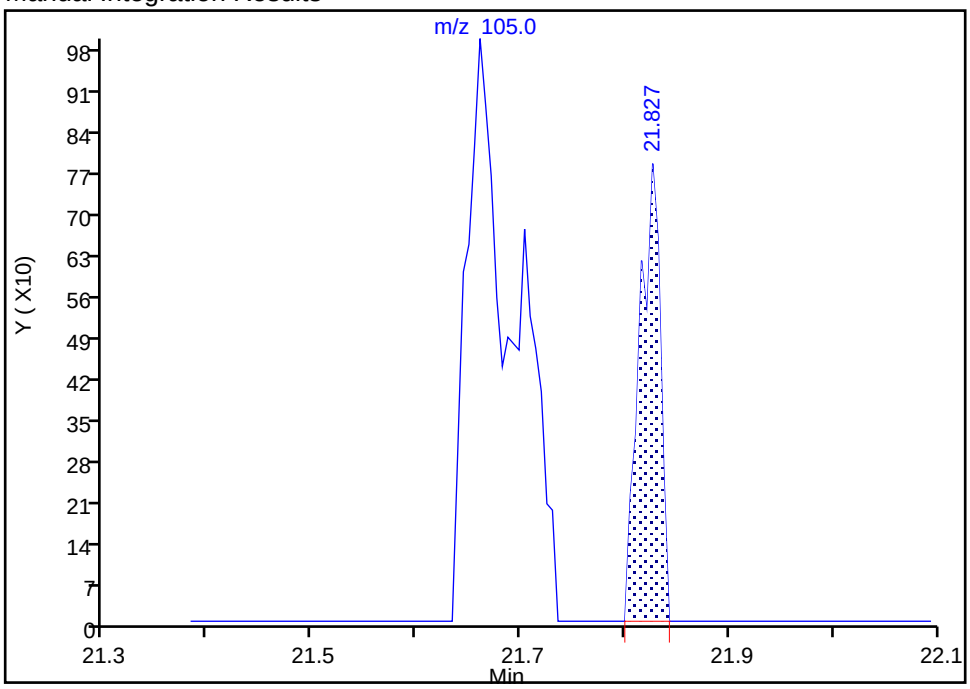
Processing Integration Results

RT: 21.66
Area: 1920
Amount: 0.018567
Amount Units: ppb v/v



Manual Integration Results

RT: 21.83
Area: 1084
Amount: 0.010482
Amount Units: ppb v/v



Reviewer: puangmaleek, 09-Apr-2018 08:34:07

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

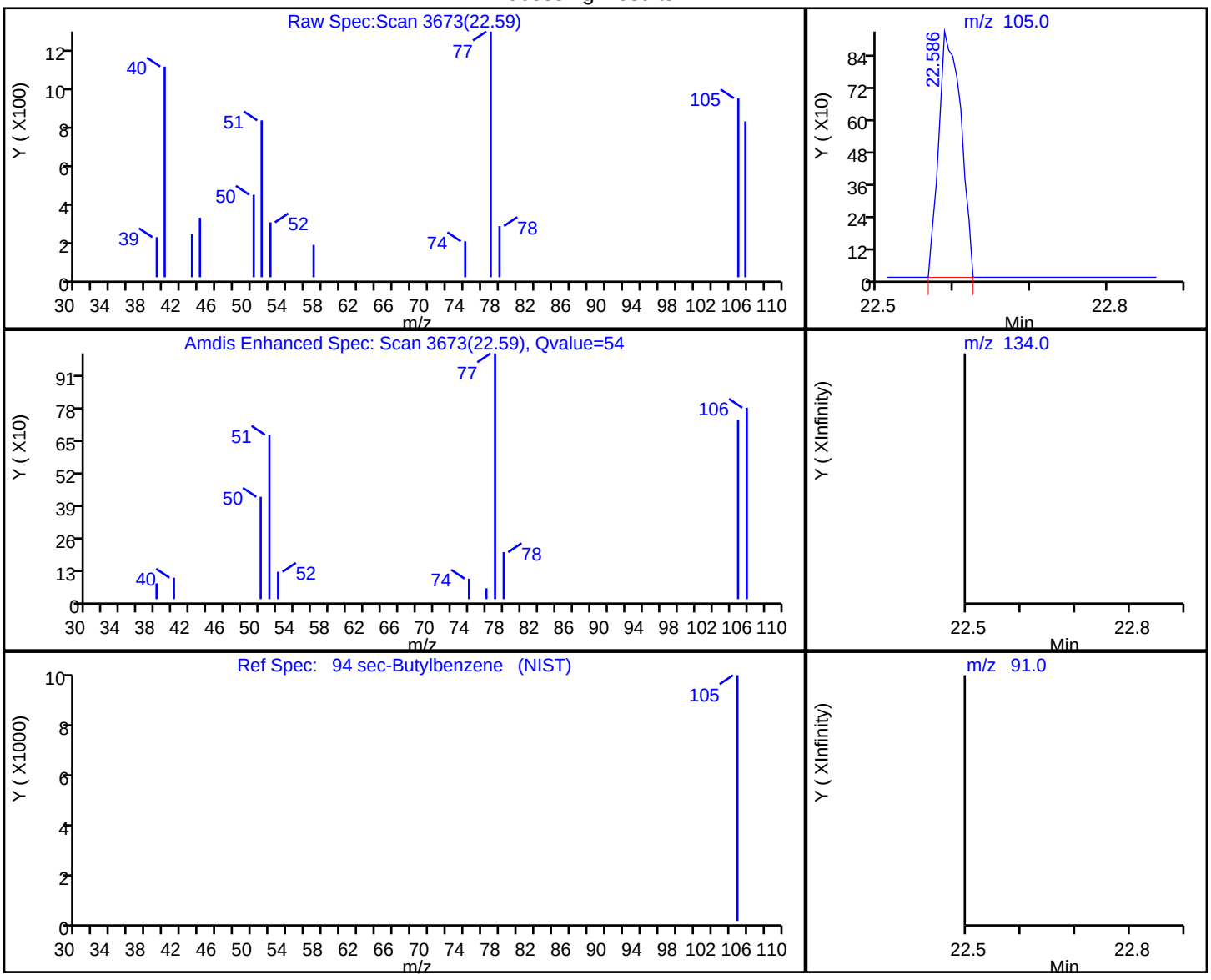
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_24.D				
Injection Date:	06-Apr-2018 08:25:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-11	Lab Sample ID:	200-42918-11		
Client ID:	GC-IA-106 (AS)				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	2.5000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.59	105.00	1860	0.012508
22.69	134.00	0	
22.69	91.00	0	

Reviewer: puangmaleek, 09-Apr-2018 08:34:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) Lab Sample ID: 200-42918-12

Matrix: Air Lab File ID: 30087_18.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 101(mL) Date Analyzed: 04/14/2018 00:14

Soil Aliquot Vol: Dilution Factor: 6

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	3.0	U	3.0	1.2
75-45-6	Freon 22	86.47	3.0	U	3.0	1.6
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.2	U	1.2	0.41
74-87-3	Chloromethane	50.49	3.0	U	3.0	1.5
106-97-8	n-Butane	58.12	3.0	U	3.0	1.9
75-01-4	Vinyl chloride	62.50	1.2	U	1.2	0.25
106-99-0	1,3-Butadiene	54.09	1.2	U	1.2	0.39
74-83-9	Bromomethane	94.94	1.2	U	1.2	0.37
75-00-3	Chloroethane	64.52	3.0	U	3.0	1.3
593-60-2	Bromoethene(Vinyl Bromide)	106.96	1.2	U	1.2	0.34
75-69-4	Trichlorofluoromethane	137.37	1.2	U	1.2	0.37
76-13-1	Freon TF	187.38	1.2	U	1.2	0.19
75-35-4	1,1-Dichloroethene	96.94	1.2	U	1.2	0.20
67-64-1	*Acetone*	*58.08*	*490*	*E*	*30*	*16*
67-63-0	Isopropyl alcohol	60.10	30	U	30	11
75-15-0	Carbon disulfide	76.14	3.0	U	3.0	0.72
107-05-1	3-Chloropropene	76.53	3.0	U	3.0	1.6
75-09-2	Methylene Chloride	84.93	2.3	J	3.0	1.2
75-65-0	tert-Butyl alcohol	74.12	39		30	9.0
1634-04-4	Methyl tert-butyl ether	88.15	1.2	U	1.2	0.37
156-60-5	trans-1,2-Dichloroethene	96.94	1.2	U	1.2	0.44
110-54-3	n-Hexane	86.17	1.0	J	1.2	0.96
75-34-3	1,1-Dichloroethane	98.96	1.2	U	1.2	0.16
78-93-3	Methyl Ethyl Ketone	72.11	1.9	J	3.0	1.2
156-59-2	cis-1,2-Dichloroethene	96.94	1.2	U	1.2	0.22
540-59-0	1,2-Dichloroethene, Total	96.94	2.4	U	2.4	0.67
67-66-3	Chloroform	119.38	1.2	U	1.2	0.31
109-99-9	Tetrahydrofuran	72.11	30	U	30	16
71-55-6	1,1,1-Trichloroethane	133.41	1.2	U	1.2	0.41
110-82-7	Cyclohexane	84.16	1.2	U	1.2	0.38
56-23-5	Carbon tetrachloride	153.81	0.24	U	0.24	0.14
540-84-1	2,2,4-Trimethylpentane	114.23	1.2	U	1.2	0.53
71-43-2	Benzene	78.11	1.2	U	1.2	0.43
107-06-2	1,2-Dichloroethane	98.96	1.2	U	1.2	0.38

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) Lab Sample ID: 200-42918-12

Matrix: Air Lab File ID: 30087_18.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 101(mL) Date Analyzed: 04/14/2018 00:14

Soil Aliquot Vol: Dilution Factor: 6

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	1.2	U	1.2	0.84
79-01-6	Trichloroethene	131.39	0.24	U	0.24	0.18
80-62-6	Methyl methacrylate	100.12	3.0	U	3.0	1.3
78-87-5	1,2-Dichloropropane	112.99	1.2	U	1.2	0.72
123-91-1	1,4-Dioxane	88.11	30	U	30	7.8
75-27-4	Bromodichloromethane	163.83	1.2	U	1.2	0.56
10061-01-5	cis-1,3-Dichloropropene	110.97	1.2	U	1.2	0.59
108-10-1	methyl isobutyl ketone	100.16	3.0	U	3.0	2.2
108-88-3	Toluene	92.14	0.87	J	1.2	0.41
10061-02-6	trans-1,3-Dichloropropene	110.97	1.2	U	1.2	0.72
79-00-5	1,1,2-Trichloroethane	133.41	1.2	U	1.2	0.47
127-18-4	Tetrachloroethene	165.83	0.24	U	0.24	0.17
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	3.0	U	3.0	2.5
124-48-1	Dibromochloromethane	208.29	1.2	U	1.2	0.43
106-93-4	1,2-Dibromoethane	187.87	1.2	U	1.2	0.41
108-90-7	Chlorobenzene	112.56	1.2	U	1.2	0.24
100-41-4	Ethylbenzene	106.17	1.2	U	1.2	0.44
179601-23-1	m,p-Xylene	106.17	3.0	U	3.0	0.42
95-47-6	Xylene, o-	106.17	1.2	U	1.2	0.43
1330-20-7	Xylene (total)	106.17	4.2	U	4.2	0.85
100-42-5	Styrene	104.15	1.2	U	1.2	0.52
75-25-2	Bromoform	252.75	1.2	U	1.2	0.52
98-82-8	Cumene	120.19	1.2	U	1.2	0.35
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.2	U	1.2	0.46
103-65-1	n-Propylbenzene	120.19	1.2	U	1.2	0.41
622-96-8	4-Ethyltoluene	120.20	1.2	U	1.2	0.41
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2	U	1.2	0.35
95-49-8	2-Chlorotoluene	126.59	1.2	U	1.2	0.43
98-06-6	tert-Butylbenzene	134.22	1.2	U	1.2	0.35
95-63-6	1,2,4-Trimethylbenzene	120.20	1.2	U	1.2	0.48
135-98-8	sec-Butylbenzene	134.22	1.2	U	1.2	0.40
99-87-6	4-Isopropyltoluene	134.22	1.2	U	1.2	0.45
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.49
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.39

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) Lab Sample ID: 200-42918-12

Matrix: Air Lab File ID: 30087_18.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 101(mL) Date Analyzed: 04/14/2018 00:14

Soil Aliquot Vol: Dilution Factor: 6

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.2	U	1.2	0.72
104-51-8	n-Butylbenzene	134.22	1.2	U	1.2	0.48
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.43
120-82-1	1,2,4-Trichlorobenzene	181.45	3.0	U	3.0	1.4
87-68-3	Hexachlorobutadiene	260.76	1.2	U	1.2	0.49
91-20-3	Naphthalene	128.17	3.0	U	3.0	1.9

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) Lab Sample ID: 200-42918-12

Matrix: Air Lab File ID: 30087_18.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 101(mL) Date Analyzed: 04/14/2018 00:14

Soil Aliquot Vol: Dilution Factor: 6

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	15	U	15	5.9
75-45-6	Freon 22	86.47	11	U	11	5.5
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	8.4	U	8.4	2.9
74-87-3	Chloromethane	50.49	6.2	U	6.2	3.1
106-97-8	n-Butane	58.12	7.1	U	7.1	4.4
75-01-4	Vinyl chloride	62.50	3.1	U	3.1	0.63
106-99-0	1,3-Butadiene	54.09	2.7	U	2.7	0.86
74-83-9	Bromomethane	94.94	4.7	U	4.7	1.4
75-00-3	Chloroethane	64.52	7.9	U	7.9	3.3
593-60-2	Bromoethene(Vinyl Bromide)	106.96	5.2	U	5.2	1.5
75-69-4	Trichlorofluoromethane	137.37	6.7	U	6.7	2.1
76-13-1	Freon TF	187.38	9.2	U	9.2	1.4
75-35-4	1,1-Dichloroethene	96.94	4.8	U	4.8	0.81
67-64-1	*Acetone*	*58.08*	*1200*	*E*	*71*	*37*
67-63-0	Isopropyl alcohol	60.10	74	U	74	27
75-15-0	Carbon disulfide	76.14	9.3	U	9.3	2.2
107-05-1	3-Chloropropene	76.53	9.4	U	9.4	5.1
75-09-2	Methylene Chloride	84.93	7.9	J	10	4.2
75-65-0	tert-Butyl alcohol	74.12	120		91	27
1634-04-4	Methyl tert-butyl ether	88.15	4.3	U	4.3	1.3
156-60-5	trans-1,2-Dichloroethene	96.94	4.8	U	4.8	1.8
110-54-3	n-Hexane	86.17	3.6	J	4.2	3.4
75-34-3	1,1-Dichloroethane	98.96	4.9	U	4.9	0.63
78-93-3	Methyl Ethyl Ketone	72.11	5.5	J	8.8	3.5
156-59-2	cis-1,2-Dichloroethene	96.94	4.8	U	4.8	0.88
540-59-0	1,2-Dichloroethene, Total	96.94	9.5	U	9.5	2.6
67-66-3	Chloroform	119.38	5.9	U	5.9	1.5
109-99-9	Tetrahydrofuran	72.11	88	U	88	46
71-55-6	1,1,1-Trichloroethane	133.41	6.5	U	6.5	2.2
110-82-7	Cyclohexane	84.16	4.1	U	4.1	1.3
56-23-5	Carbon tetrachloride	153.81	1.5	U	1.5	0.91
540-84-1	2,2,4-Trimethylpentane	114.23	5.6	U	5.6	2.5
71-43-2	Benzene	78.11	3.8	U	3.8	1.4
107-06-2	1,2-Dichloroethane	98.96	4.9	U	4.9	1.5

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) Lab Sample ID: 200-42918-12

Matrix: Air Lab File ID: 30087_18.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 101(mL) Date Analyzed: 04/14/2018 00:14

Soil Aliquot Vol: Dilution Factor: 6

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	4.9	U	4.9	3.4
79-01-6	Trichloroethene	131.39	1.3	U	1.3	0.97
80-62-6	Methyl methacrylate	100.12	12	U	12	5.4
78-87-5	1,2-Dichloropropane	112.99	5.5	U	5.5	3.3
123-91-1	1,4-Dioxane	88.11	110	U	110	28
75-27-4	Bromodichloromethane	163.83	8.0	U	8.0	3.8
10061-01-5	cis-1,3-Dichloropropene	110.97	5.4	U	5.4	2.7
108-10-1	methyl isobutyl ketone	100.16	12	U	12	8.8
108-88-3	Toluene	92.14	3.3	J	4.5	1.6
10061-02-6	trans-1,3-Dichloropropene	110.97	5.4	U	5.4	3.3
79-00-5	1,1,2-Trichloroethane	133.41	6.5	U	6.5	2.6
127-18-4	Tetrachloroethene	165.83	1.6	U	1.6	1.2
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	12	U	12	10
124-48-1	Dibromochloromethane	208.29	10	U	10	3.6
106-93-4	1,2-Dibromoethane	187.87	9.2	U	9.2	3.2
108-90-7	Chlorobenzene	112.56	5.5	U	5.5	1.1
100-41-4	Ethylbenzene	106.17	5.2	U	5.2	1.9
179601-23-1	m,p-Xylene	106.17	13	U	13	1.8
95-47-6	Xylene, o-	106.17	5.2	U	5.2	1.8
1330-20-7	Xylene (total)	106.17	18	U	18	3.7
100-42-5	Styrene	104.15	5.1	U	5.1	2.2
75-25-2	Bromoform	252.75	12	U	12	5.3
98-82-8	Cumene	120.19	5.9	U	5.9	1.7
79-34-5	1,1,2,2-Tetrachloroethane	167.85	8.2	U	8.2	3.1
103-65-1	n-Propylbenzene	120.19	5.9	U	5.9	2.0
622-96-8	4-Ethyltoluene	120.20	5.9	U	5.9	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	5.9	U	5.9	1.7
95-49-8	2-Chlorotoluene	126.59	6.2	U	6.2	2.2
98-06-6	tert-Butylbenzene	134.22	6.6	U	6.6	1.9
95-63-6	1,2,4-Trimethylbenzene	120.20	5.9	U	5.9	2.4
135-98-8	sec-Butylbenzene	134.22	6.6	U	6.6	2.2
99-87-6	4-Isopropyltoluene	134.22	6.6	U	6.6	2.5
541-73-1	1,3-Dichlorobenzene	147.00	7.2	U	7.2	3.0
106-46-7	1,4-Dichlorobenzene	147.00	7.2	U	7.2	2.3

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) Lab Sample ID: 200-42918-12

Matrix: Air Lab File ID: 30087_18.D

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 101(mL) Date Analyzed: 04/14/2018 00:14

Soil Aliquot Vol: Dilution Factor: 6

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	6.2	U	6.2	3.7
104-51-8	n-Butylbenzene	134.22	6.6	U	6.6	2.6
95-50-1	1,2-Dichlorobenzene	147.00	7.2	U	7.2	2.6
120-82-1	1,2,4-Trichlorobenzene	181.45	22	U	22	11
87-68-3	Hexachlorobutadiene	260.76	13	U	13	5.2
91-20-3	Naphthalene	128.17	16	U	16	9.8

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D
Lims ID: 200-42918-A-12
Client ID: GC-SV-106 (AS)
Sample Type: Client
Inject. Date: 14-Apr-2018 00:14:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 6.0000
Sample Info: 200-0030087-018
Operator ID: pad Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Apr-2018 16:33:54 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: daiglep Date: 16-Apr-2018 16:33:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	98	4401	0.0716	
3 Chlorodifluoromethane	51	3.151	3.156	-0.005	96	1685	0.0504	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354				ND	U
5 Chloromethane	50	3.488	3.482	0.006	96	1877	0.0993	
6 Butane	43		3.664				ND	
7 Vinyl chloride	62		3.707				ND	
8 Butadiene	54		3.777				ND	U
10 Bromomethane	94		4.413				ND	
11 Chloroethane	64		4.633				ND	
13 Vinyl bromide	106		4.996				ND	
14 Trichlorofluoromethane	101	5.082	5.087	-0.005	19	1862	0.0278	
20 1,1,2-Trichloro-1,2,2-trif	101		6.104				ND	
21 1,1-Dichloroethene	96		6.163				ND	
22 Acetone	43	6.393	6.403	-0.010	98	2811405	80.9	E
23 Carbon disulfide	76		6.548				ND	
24 Isopropyl alcohol	45	6.703	6.681	0.022	99	15179	0.4299	
25 3-Chloro-1-propene	41		6.928				ND	U
27 Methylene Chloride	49	7.222	7.222	0.000	91	8855	0.3814	
28 2-Methyl-2-propanol	59	7.463	7.446	0.017	94	313184	6.58	
29 Methyl tert-butyl ether	73		7.618				ND	
31 trans-1,2-Dichloroethene	61		7.660				ND	
33 Hexane	57	8.030	8.030	0.000	95	5466	0.1714	
34 1,1-Dichloroethane	63		8.538				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.677				ND	
38 2-Butanone (MEK)	72	9.747	9.736	0.011	100	3922	0.3113	
* 40 Chlorobromomethane	128	10.159	10.164	-0.005	83	280601	10.0	
41 Tetrahydrofuran	42		10.169				ND	
42 Chloroform	83		10.298				ND	
43 Cyclohexane	84	10.528	10.539	-0.011	3	588	0.0164	
44 1,1,1-Trichloroethane	97		10.576				ND	
45 Carbon tetrachloride	117	10.833	10.833	0.000	9	473	0.007496	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	46 Isooctane	57		11.288				ND	
	47 Benzene	78		11.336				ND	U
	48 1,2-Dichloroethane	62		11.539				ND	
	49 n-Heptane	43	11.700	11.700	0.000	91	4864	0.0964	
*	50 1,4-Difluorobenzene	114	12.234	12.234	0.000	93	1468668	10.0	
	53 Trichloroethene	95		12.727				ND	
	54 1,2-Dichloropropane	63		13.326				ND	
	55 Methyl methacrylate	69		13.508				ND	
	56 1,4-Dioxane	88		13.577				ND	
	58 Dichlorobromomethane	83		13.909				ND	
	60 cis-1,3-Dichloropropene	75		14.893				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.204				ND	U
	65 Toluene	92	15.503	15.503	0.000	92	10070	0.1447	M
	66 trans-1,3-Dichloropropene	75		16.145				ND	
	67 1,1,2-Trichloroethane	83		16.541				ND	
	68 Tetrachloroethene	166		16.627				ND	U
	69 2-Hexanone	43		17.022				ND	
	71 Chlorodibromomethane	129		17.338				ND	
	72 Ethylene Dibromide	107		17.616				ND	
*	74 Chlorobenzene-d5	117	18.563	18.563	0.000	84	1358360	10.0	
	75 Chlorobenzene	112		18.627				ND	
	76 Ethylbenzene	91		18.788				ND	U
	78 m-Xylene & p-Xylene	106		19.055				ND	U
S	73 Xylenes, Total	106		19.600				ND	
	79 o-Xylene	106		19.949				ND	
	80 Styrene	104		20.013				ND	
	81 Bromoform	173		20.484				ND	
	82 Isopropylbenzene	105		20.714				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.441				ND	
	85 N-Propylbenzene	91		21.500				ND	
	88 4-Ethyltoluene	105		21.709				ND	
	89 2-Chlorotoluene	91		21.714				ND	
	90 1,3,5-Trimethylbenzene	105		21.821				ND	
	92 tert-Butylbenzene	119		22.345				ND	
	93 1,2,4-Trimethylbenzene	105		22.442				ND	
	94 sec-Butylbenzene	105		22.688				ND	
	95 4-Isopropyltoluene	119		22.902				ND	
	96 1,3-Dichlorobenzene	146		22.929				ND	
	97 1,4-Dichlorobenzene	146		23.073				ND	
	98 Benzyl chloride	91		23.282				ND	
	100 n-Butylbenzene	91		23.496				ND	
	101 1,2-Dichlorobenzene	146		23.624				ND	
	103 1,2,4-Trichlorobenzene	180		26.187				ND	
	104 Hexachlorobutadiene	225		26.374				ND	
	105 Naphthalene	128		26.679				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

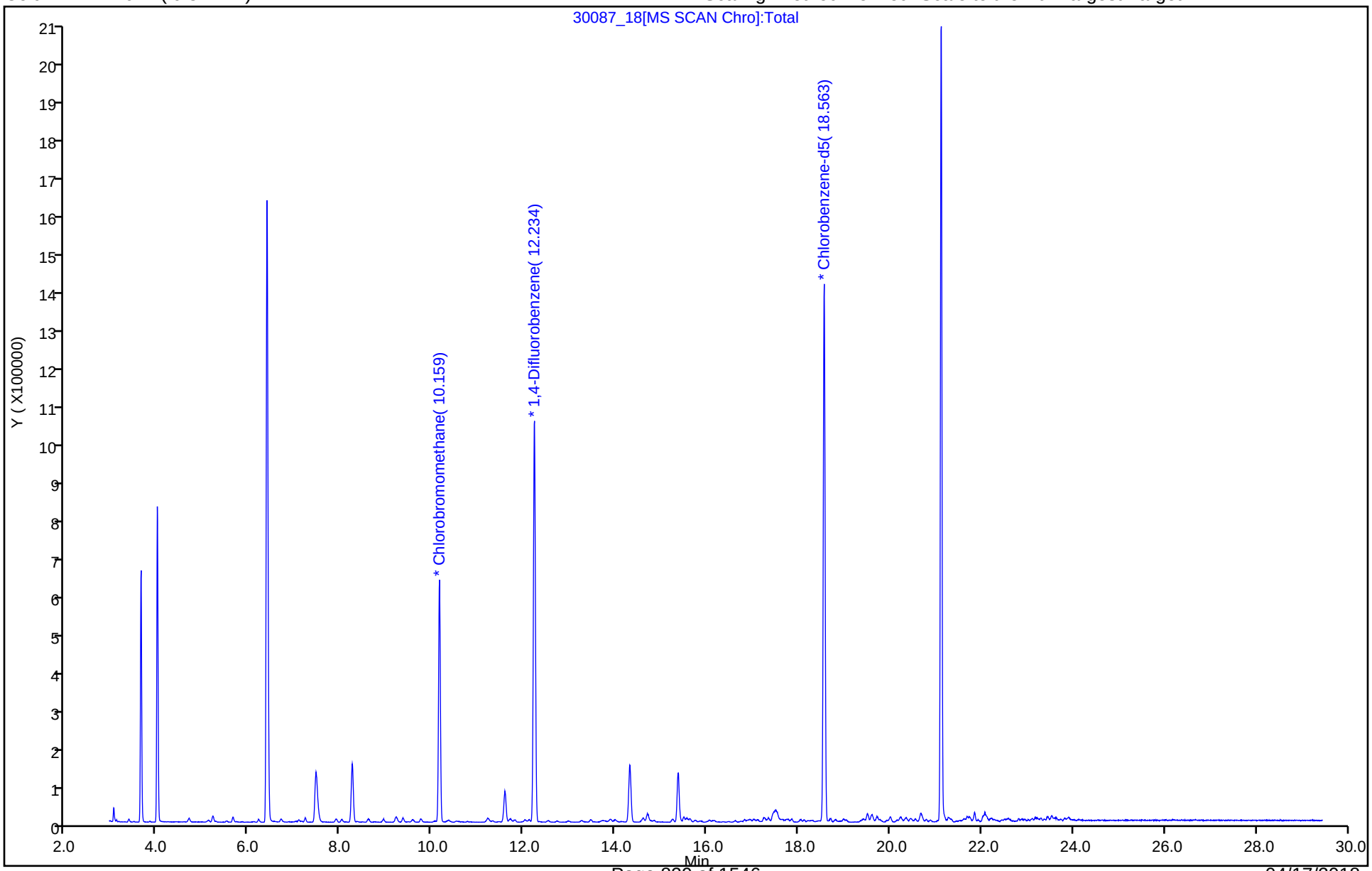
Report Date: 16-Apr-2018 16:34:26 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D

Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12	Worklist Smp#:	18
Client ID:	GC-SV-106 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	6.0000	ALS Bottle#:	17
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

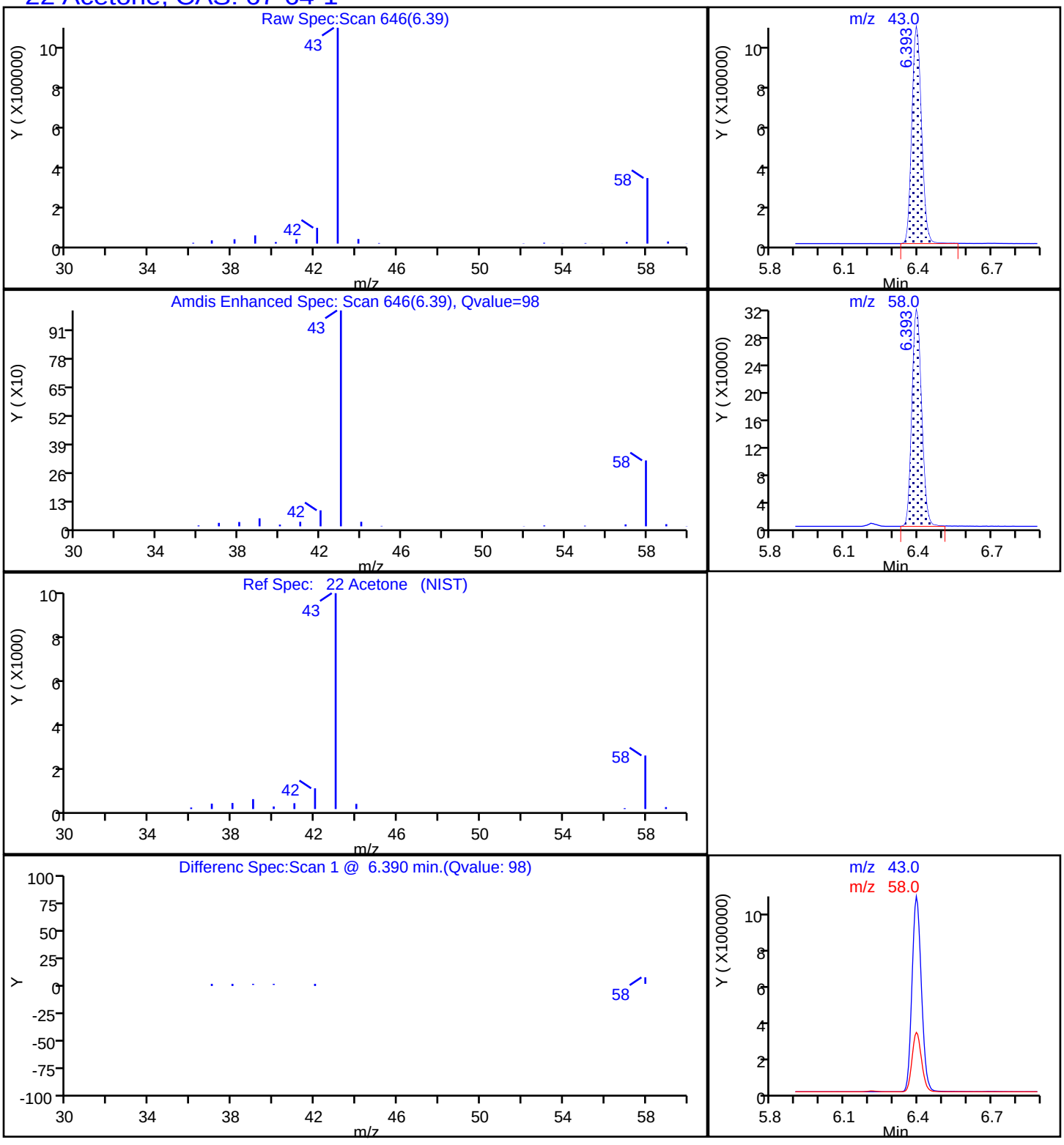
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1

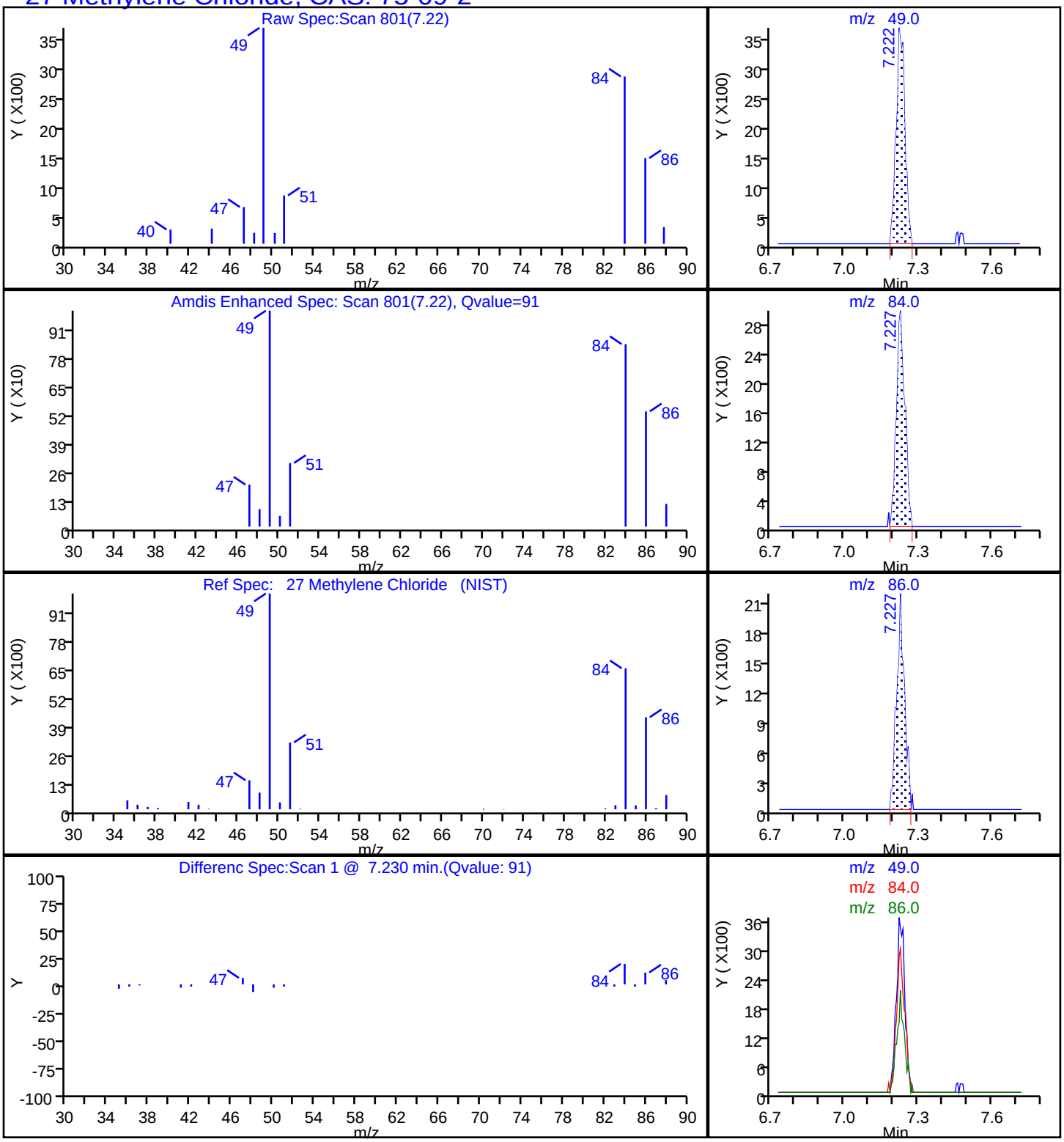


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D

Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

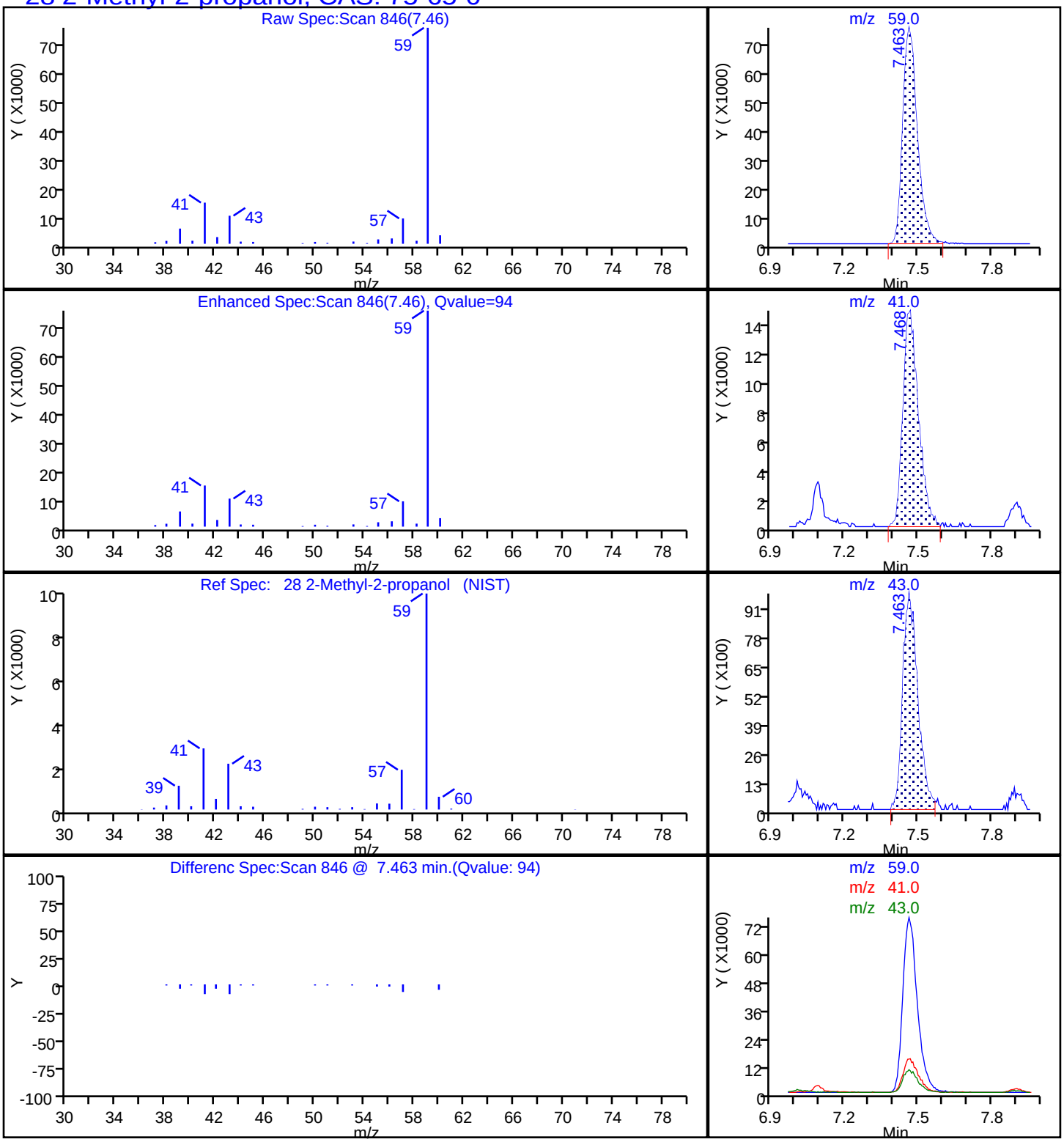
27 Methylene Chloride, CAS: 75-09-2



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

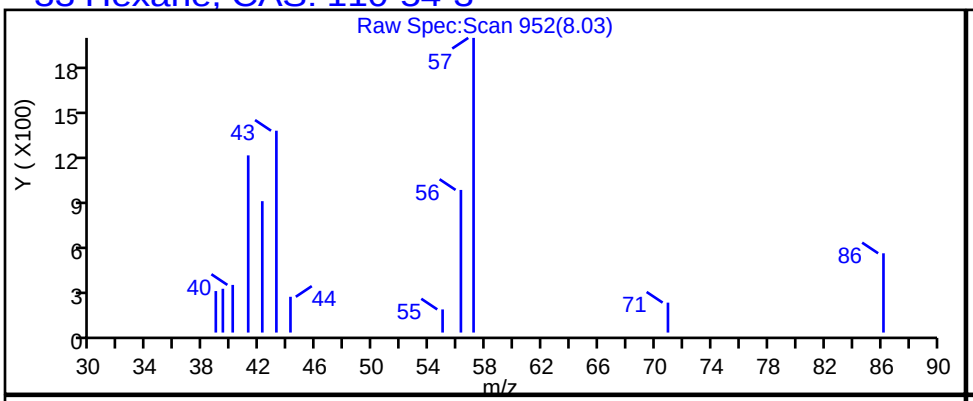
28 2-Methyl-2-propanol, CAS: 75-65-0

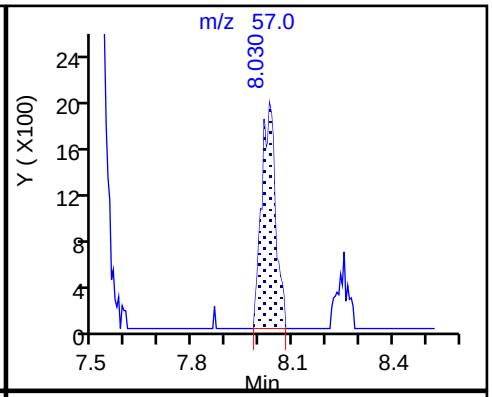


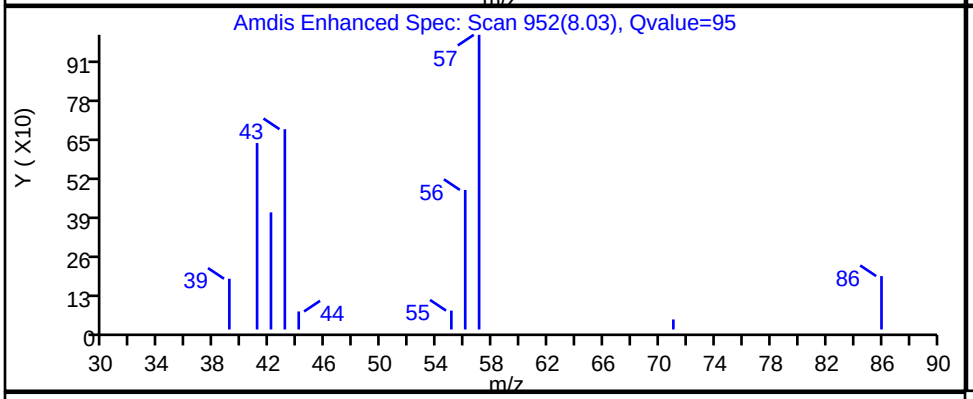
TestAmerica Burlington

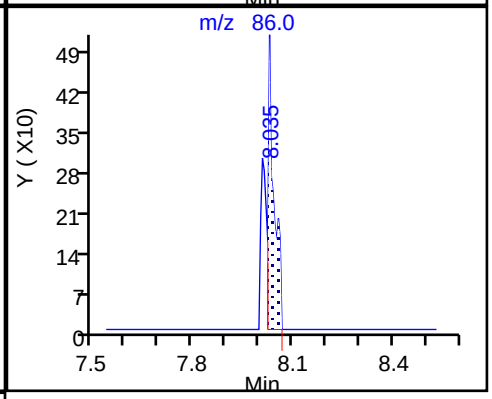
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

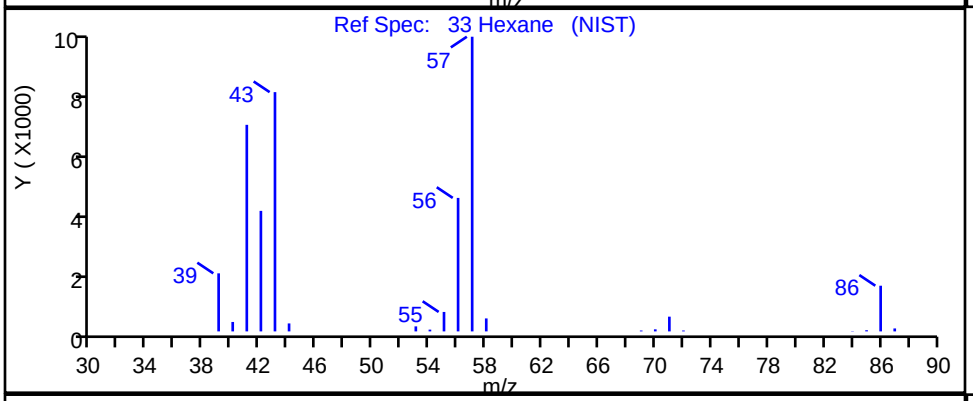
33 Hexane, CAS: 110-54-3

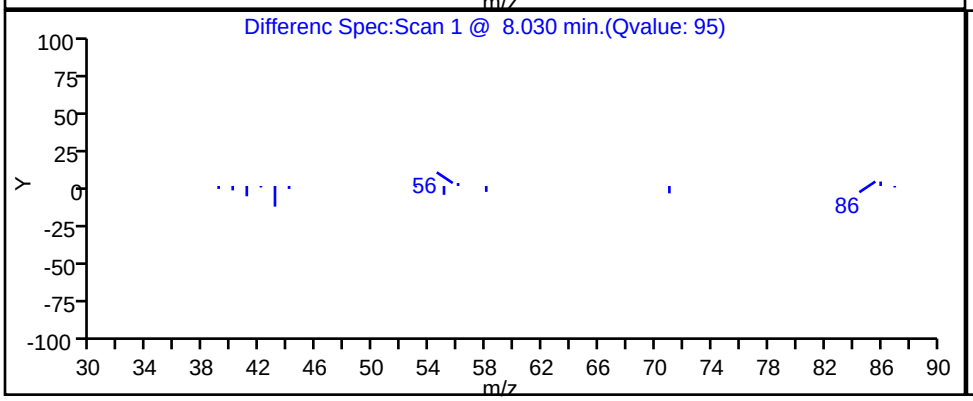


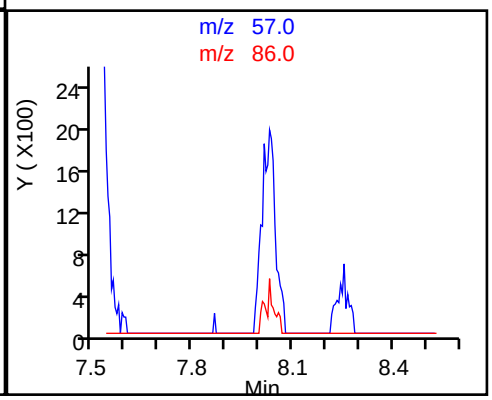








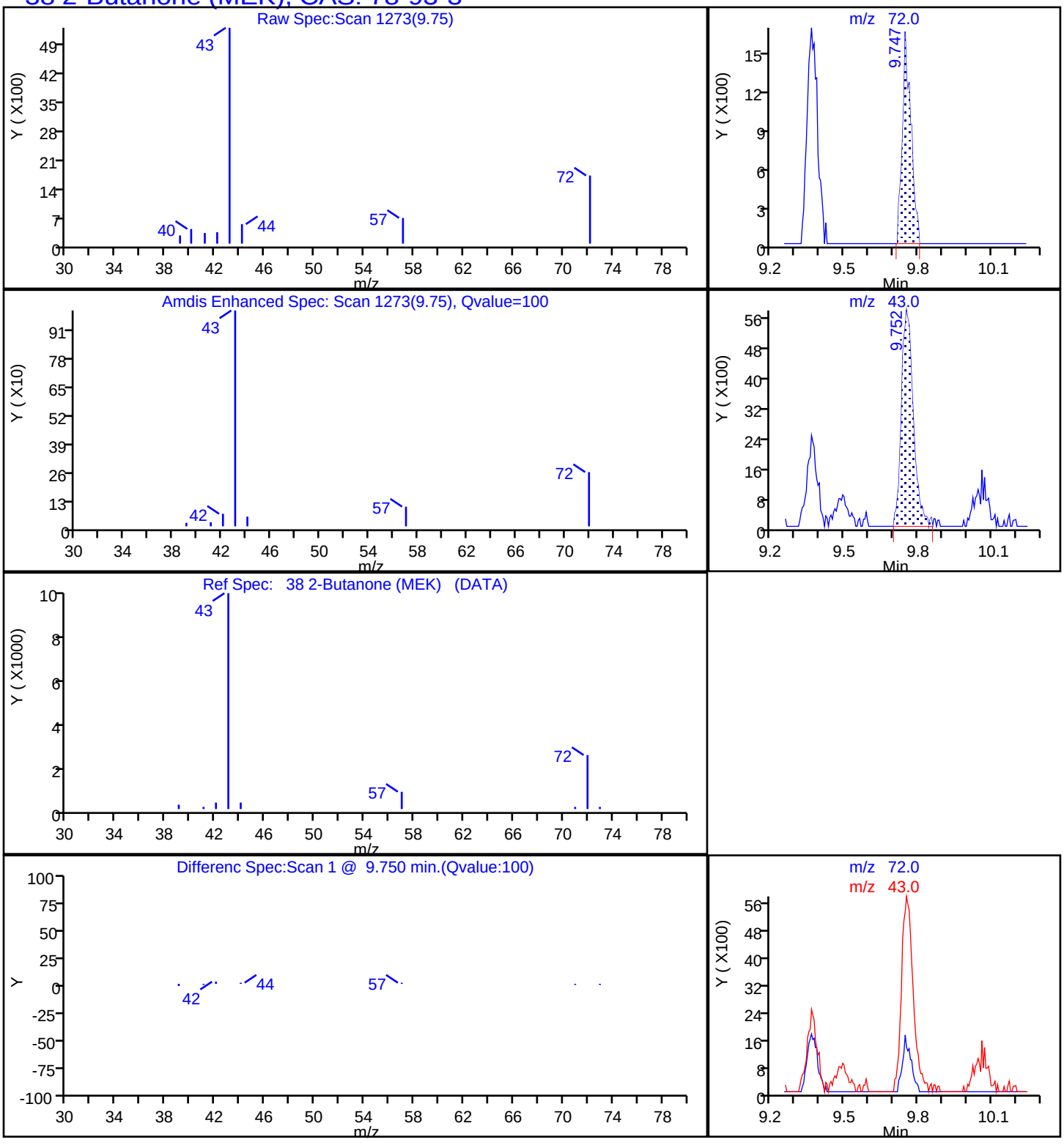




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

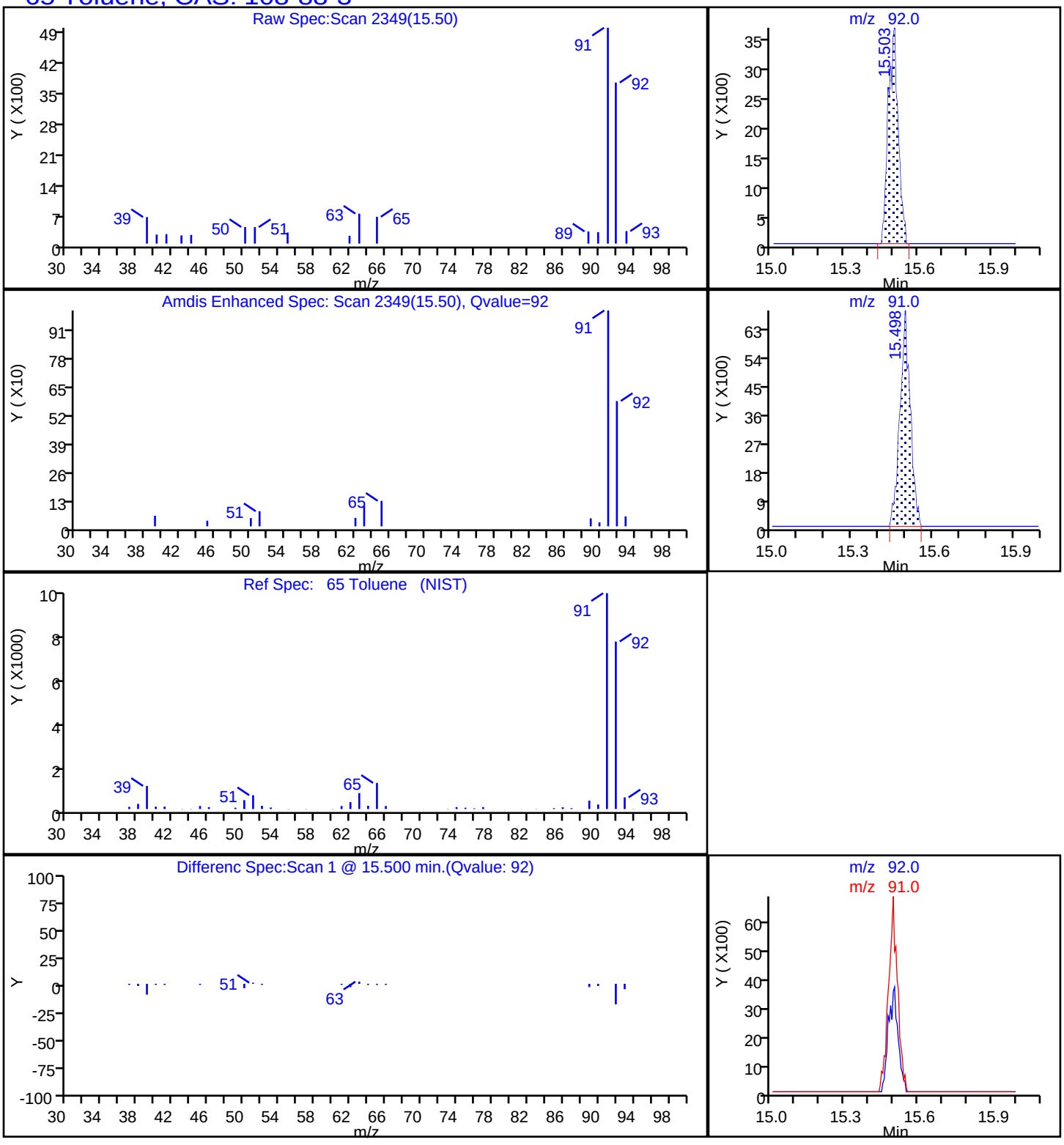
38 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



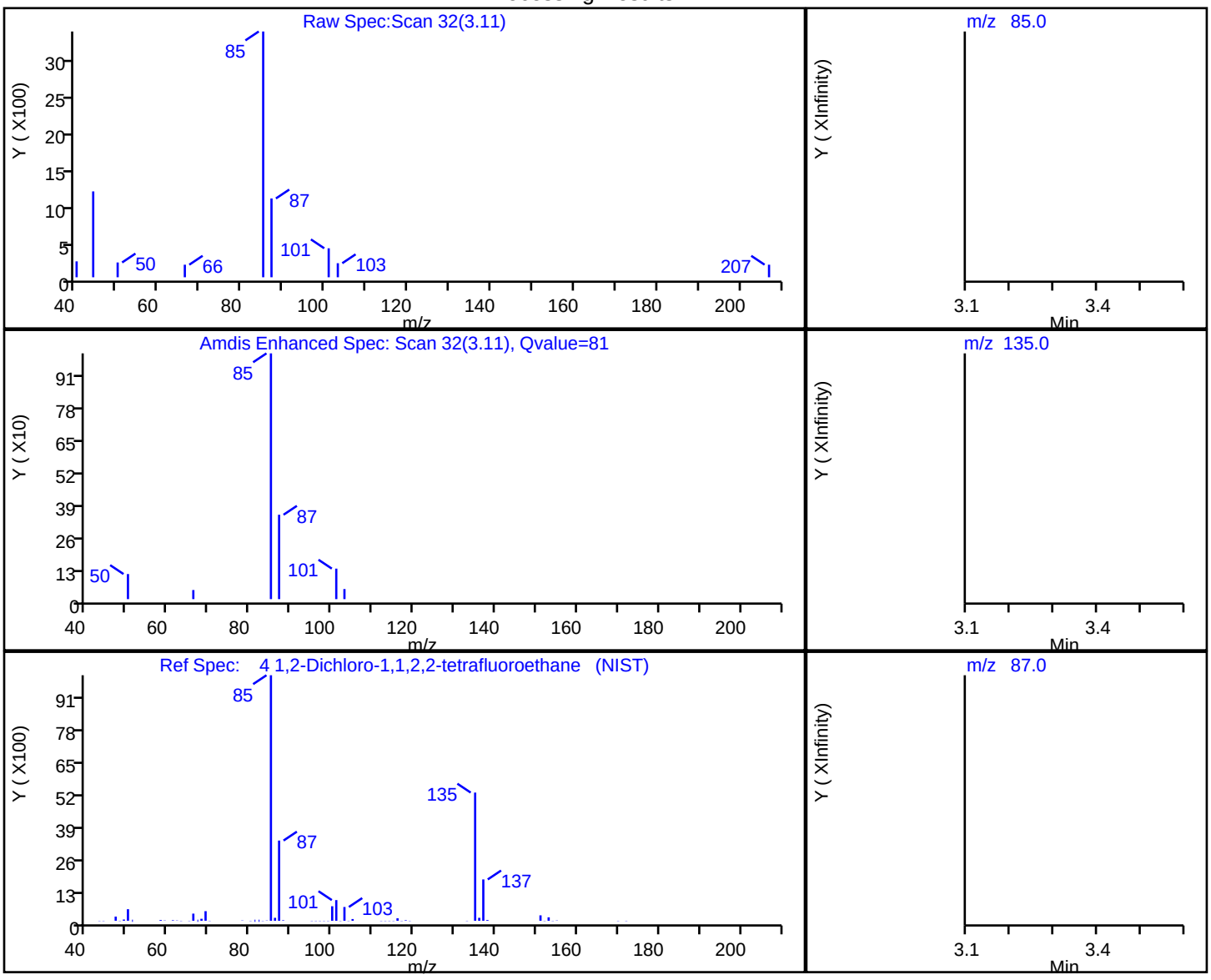
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
3.11	85.00	4401	0.072712
3.11	87.00	1376	
3.35	135.00	0	

Reviewer: daiglep, 16-Apr-2018 16:33:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

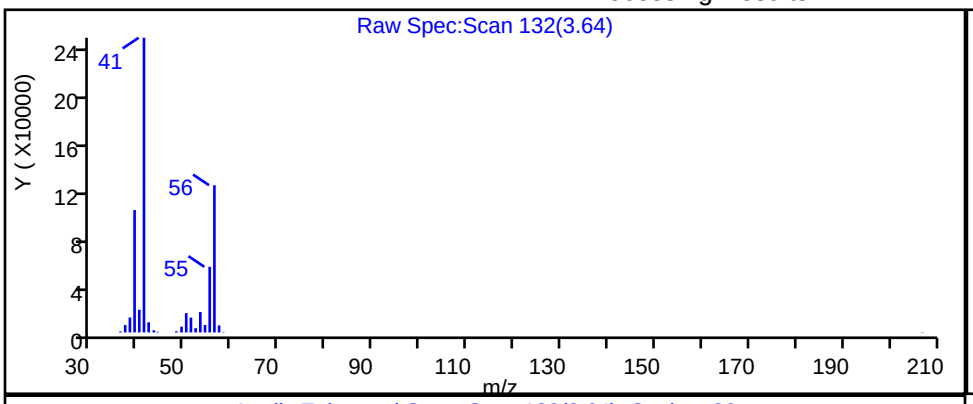
User Disabled Compound Report

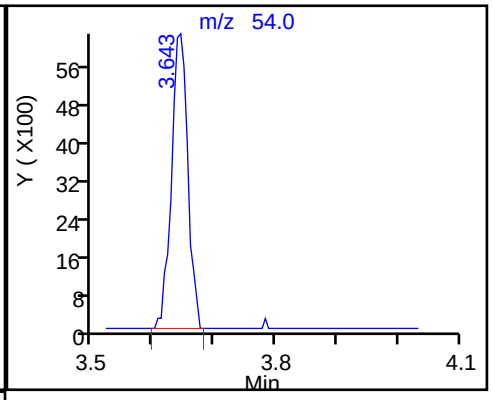
TestAmerica Burlington

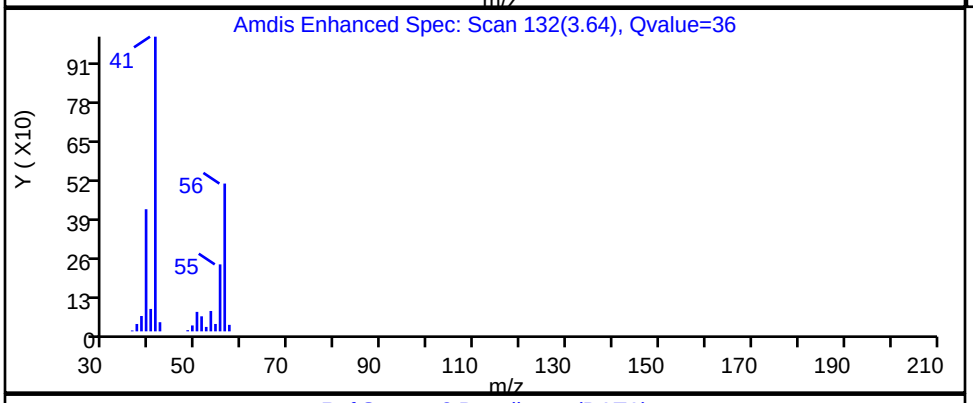
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

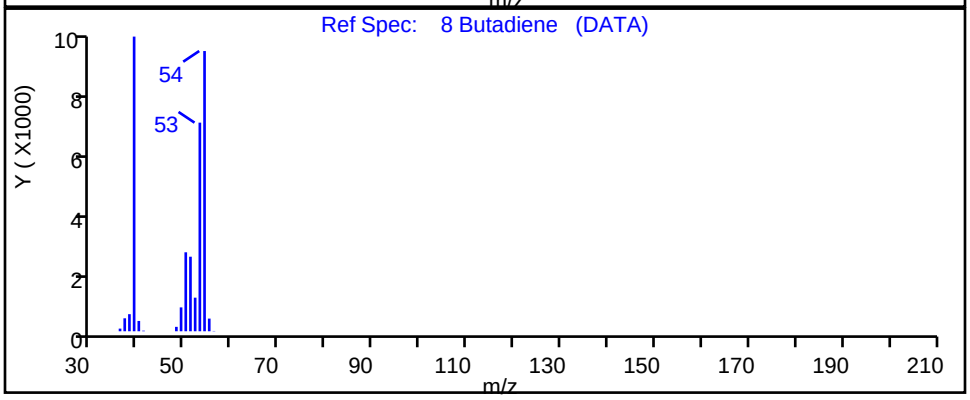
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
3.64	54.00	11653	0.673365

Reviewer: daiglep, 16-Apr-2018 16:33:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

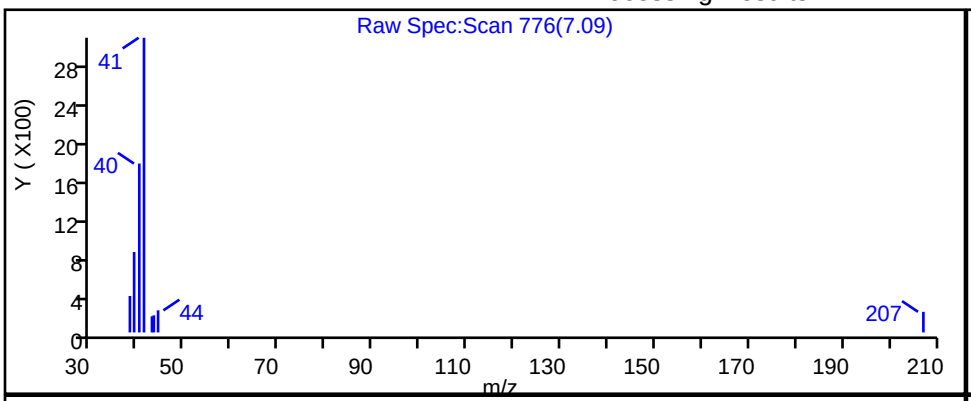
User Disabled Compound Report

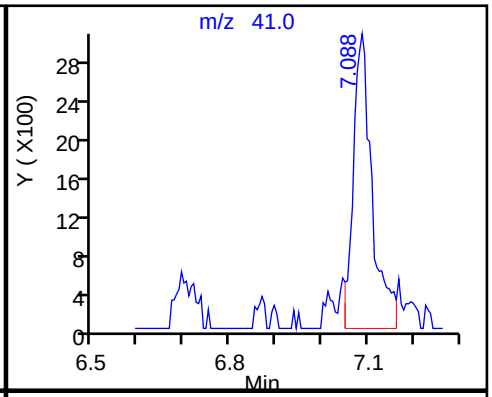
TestAmerica Burlington

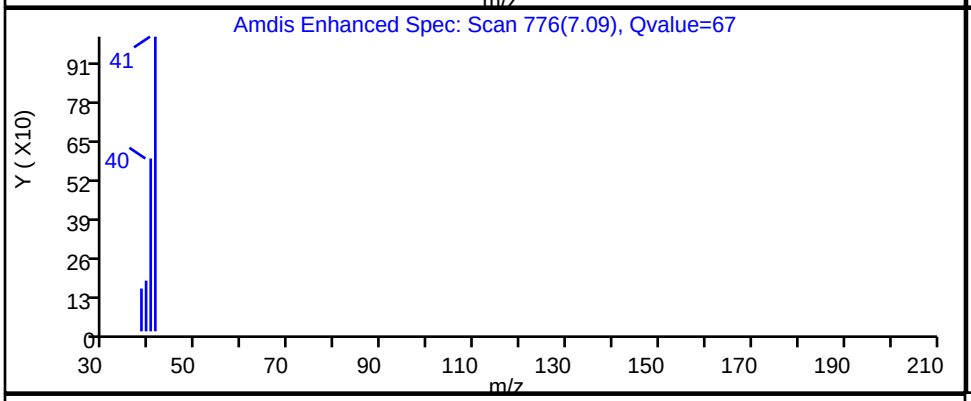
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

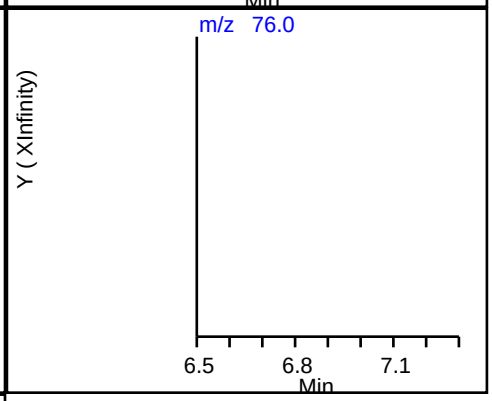
25 3-Chloro-1-propene, CAS: 107-05-1

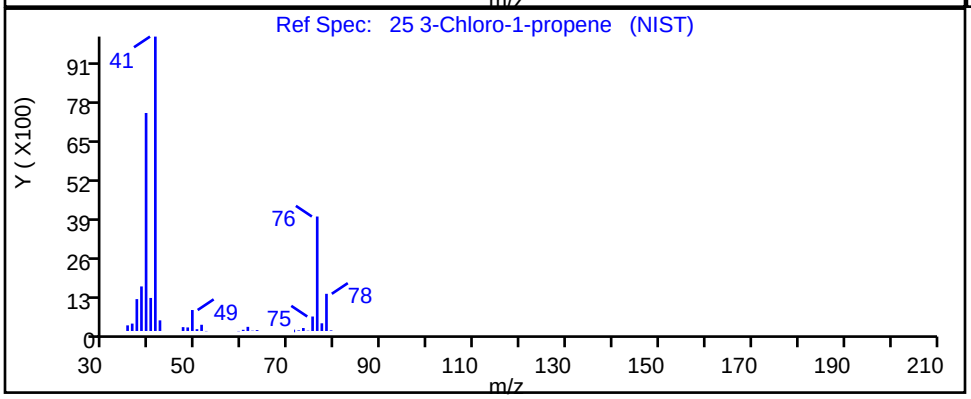
Processing Results











RT	Mass	Response	Amount
7.09	41.00	8590	0.371855
6.93	76.00	0	

Reviewer: daiglep, 16-Apr-2018 16:33:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

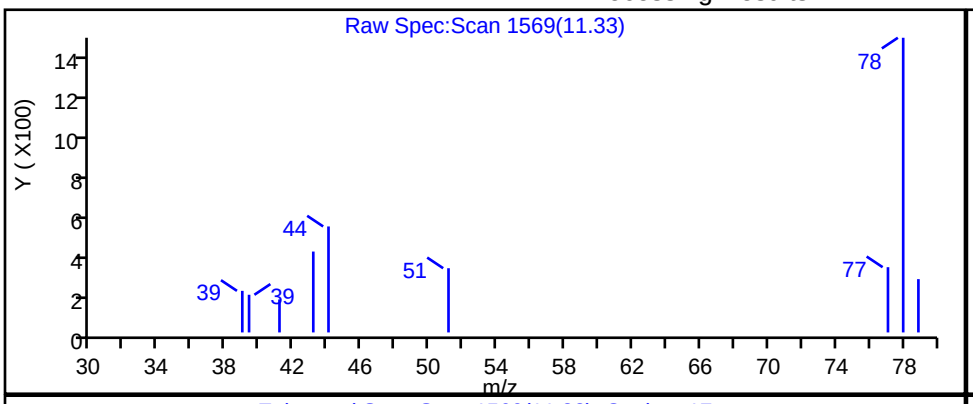
User Disabled Compound Report

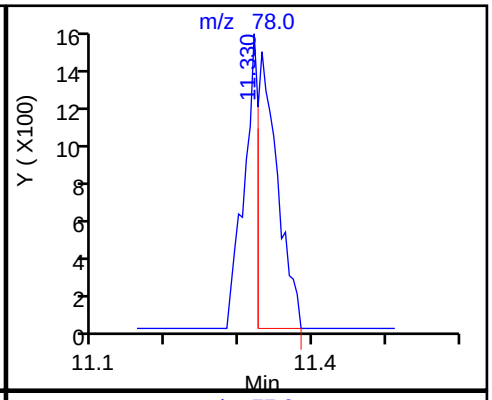
TestAmerica Burlington

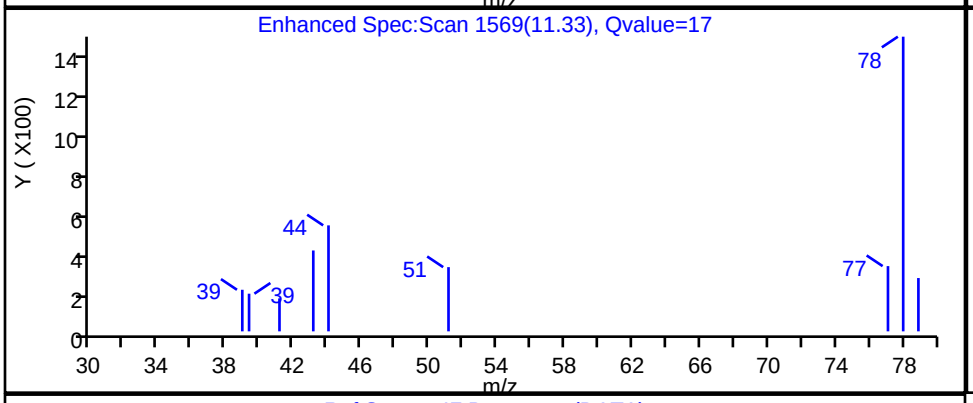
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

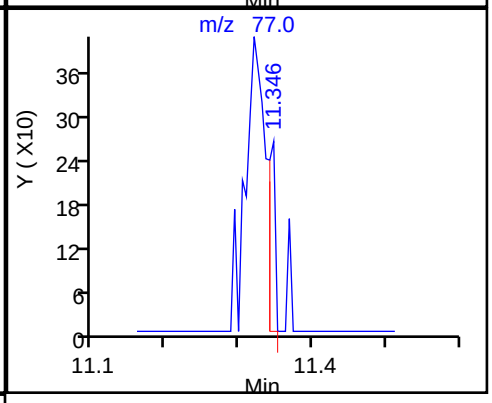
47 Benzene, CAS: 71-43-2

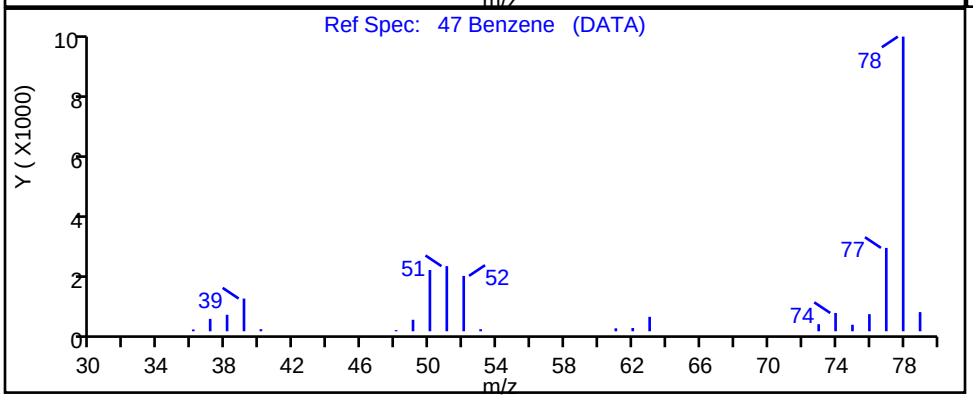
Processing Results











RT	Mass	Response	Amount
11.33	78.00	2692	0.031219
11.35	77.00	161	

Reviewer: daiglep, 16-Apr-2018 16:33:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

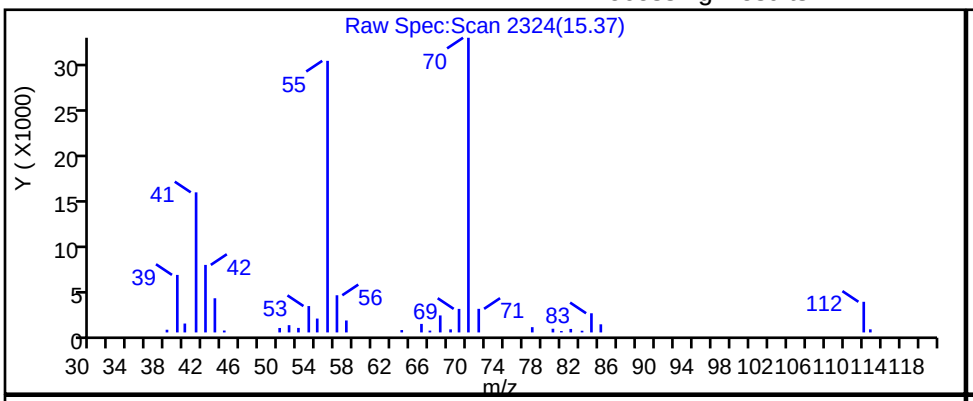
User Disabled Compound Report

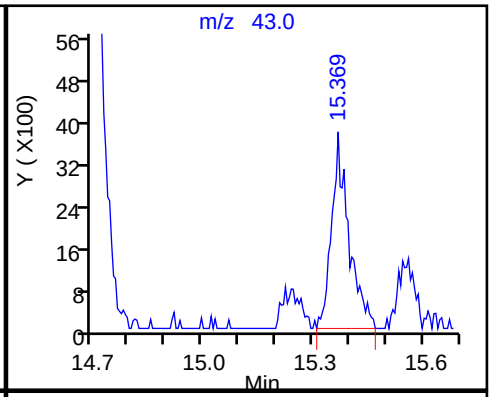
TestAmerica Burlington

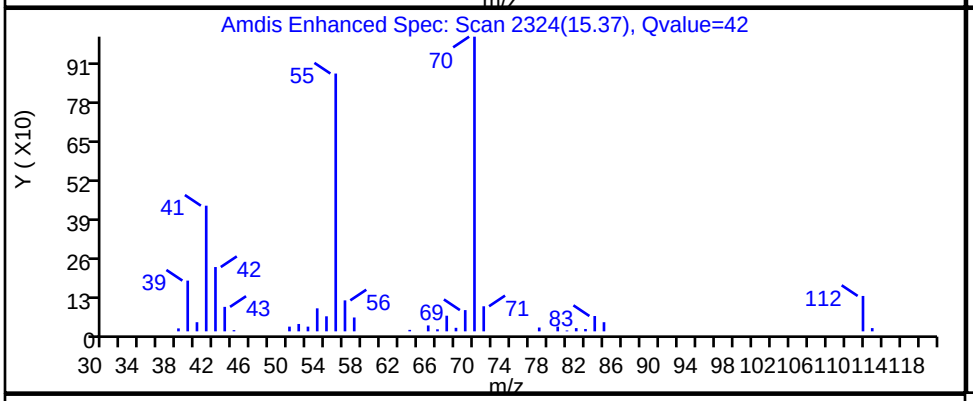
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

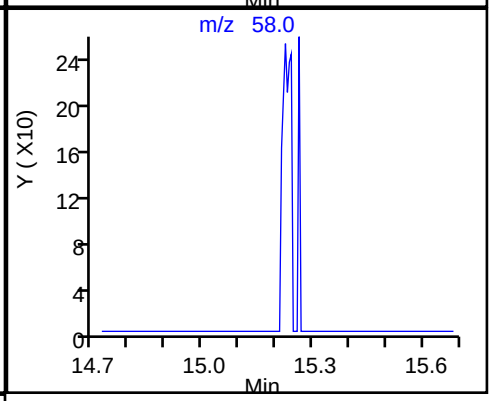
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

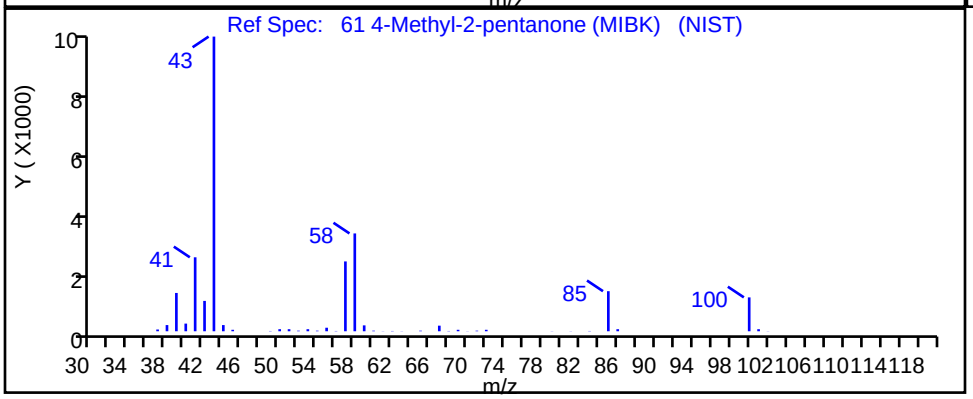
Processing Results











RT	Mass	Response	Amount
15.37	43.00	12333	0.173104
15.20	58.00	0	

Reviewer: daiglep, 16-Apr-2018 16:33:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

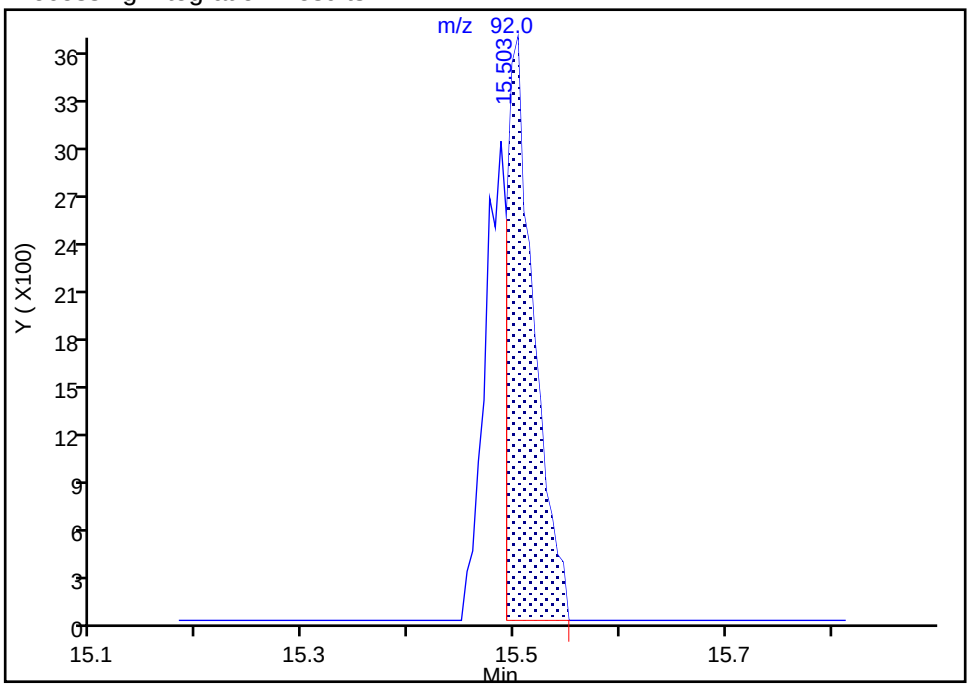
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

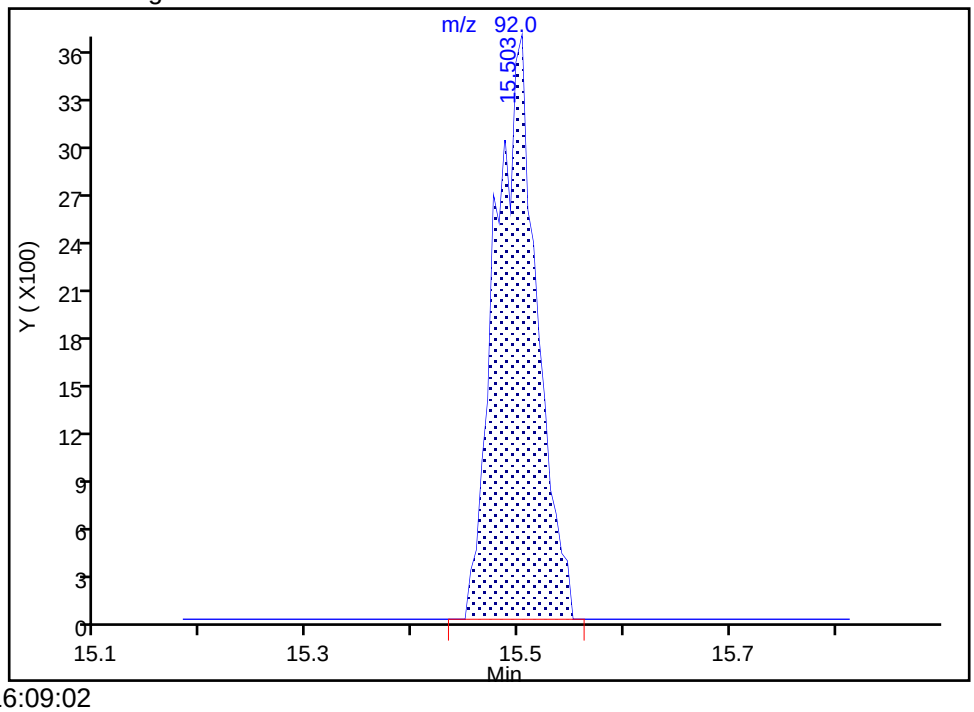
Processing Integration Results

RT: 15.50
Area: 6444
Amount: 0.092584
Amount Units: ppb v/v



Manual Integration Results

RT: 15.50
Area: 10070
Amount: 0.144681
Amount Units: ppb v/v



Reviewer: daiglep, 16-Apr-2018 16:09:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

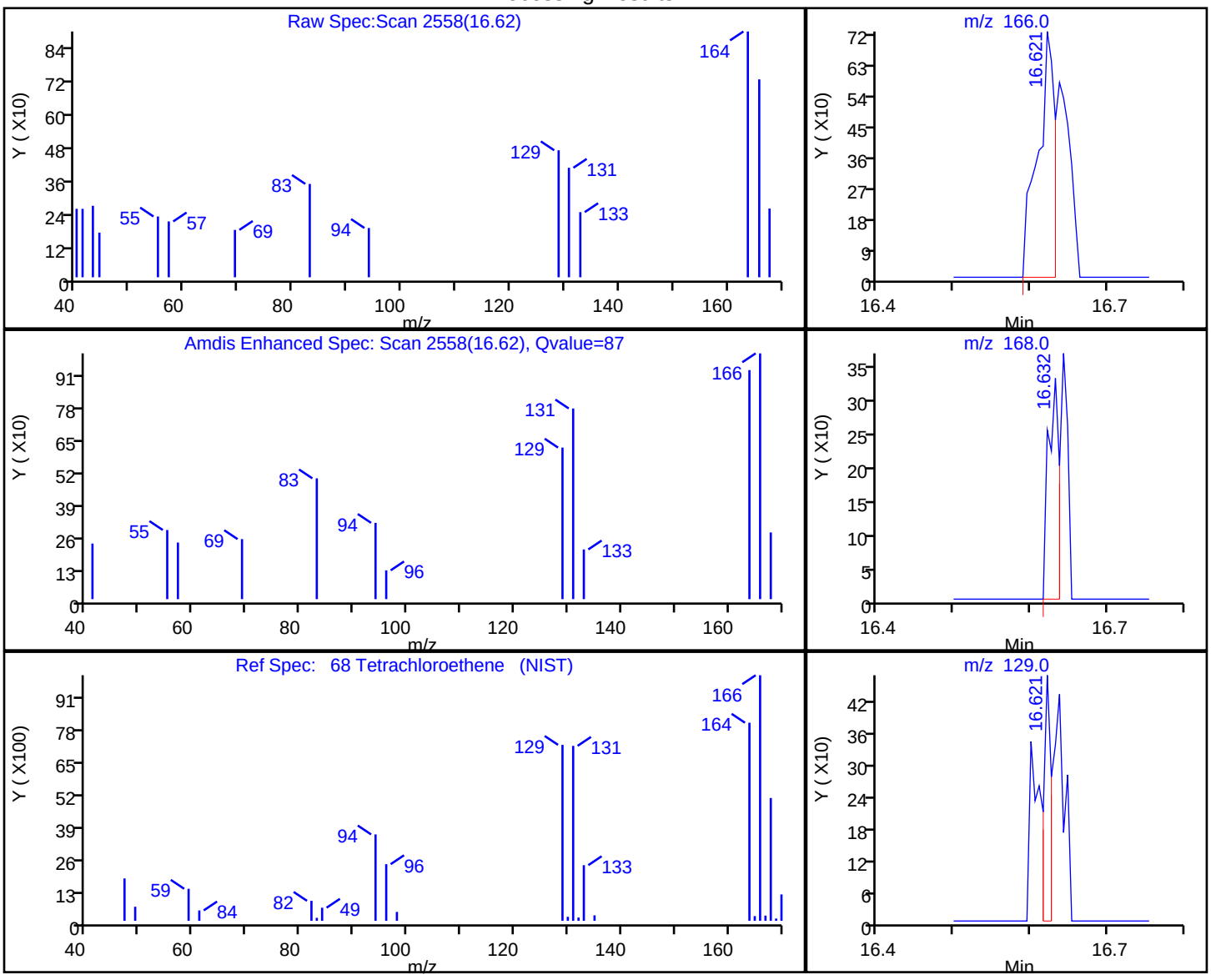
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
16.62	166.00	1102	0.015452
16.63	168.00	320	
16.62	129.00	302	

Reviewer: daiglep, 16-Apr-2018 16:33:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

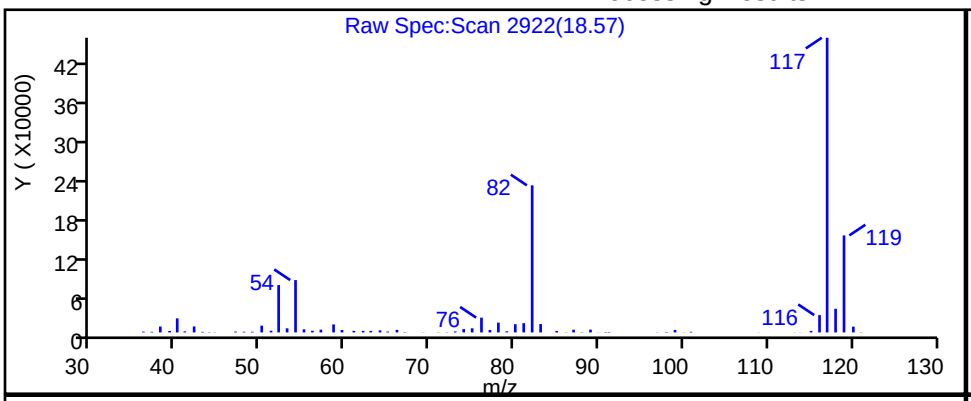
User Disabled Compound Report

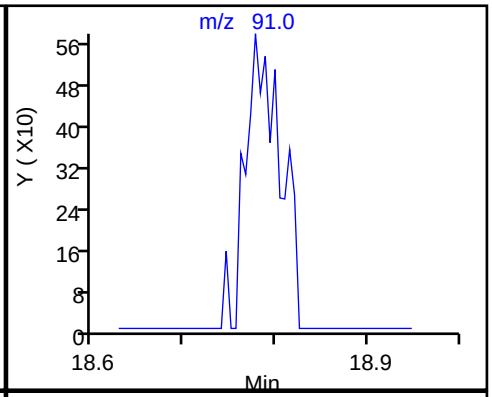
TestAmerica Burlington

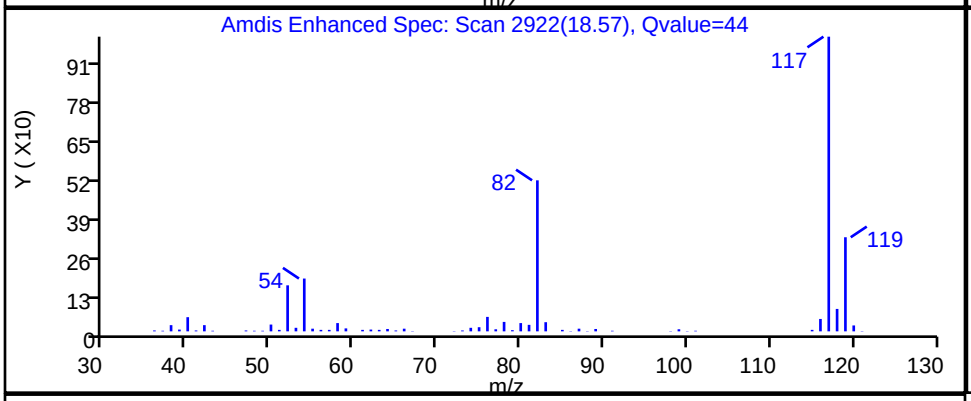
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

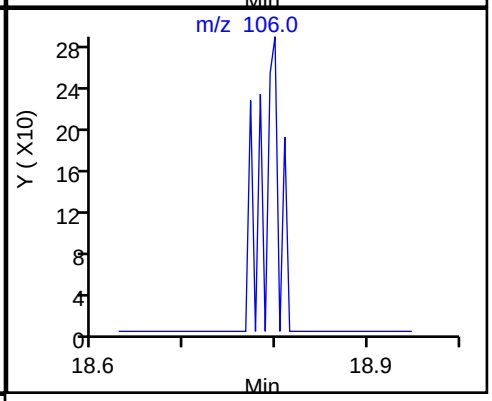
76 Ethylbenzene, CAS: 100-41-4

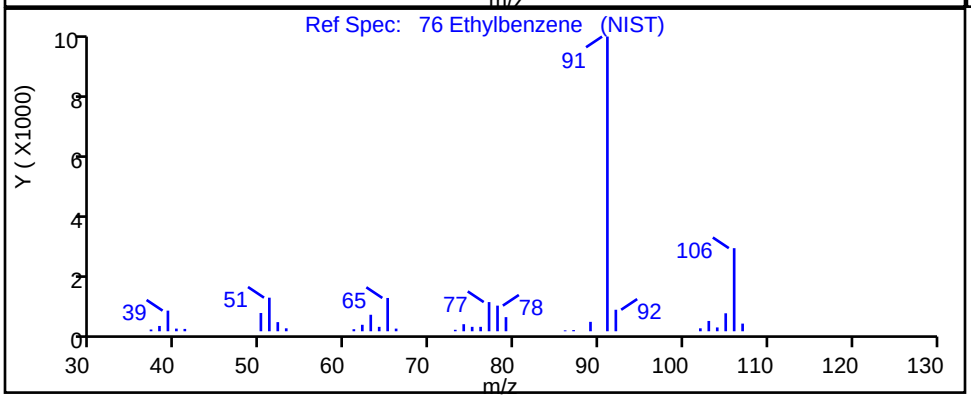
Processing Results











RT	Mass	Response	Amount
18.57	91.00	2599	0.016620
18.79	106.00	0	

Reviewer: daiglep, 16-Apr-2018 16:33:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

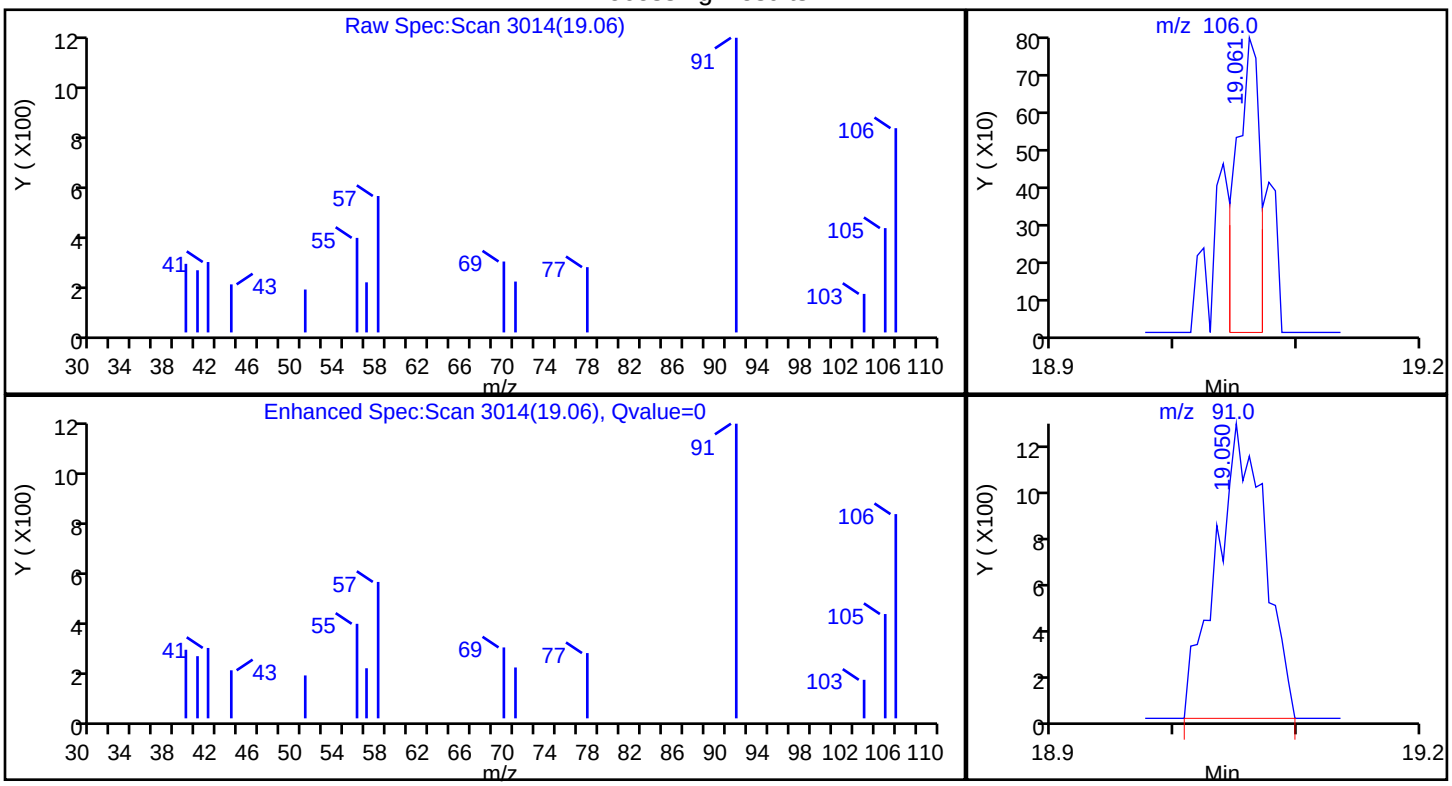
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_18.D				
Injection Date:	14-Apr-2018 00:14:30	Instrument ID:	CHX.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	6.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
19.06	106.00	1051	0.016399
19.05	91.00	3554	

Reviewer: daiglep, 16-Apr-2018 16:33:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) DL | Lab Sample ID: 200-42918-12 DL

Matrix: Air | Lab File ID: 29983-18.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 16:00

Sample wt/vol: 20(mL) | Date Analyzed: 04/07/2018 02:49

Soil Aliquot Vol: | Dilution Factor: 30.3

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	15	U	15	6.1
75-45-6	Freon 22	86.47	15	U	15	7.9
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	6.1	U	6.1	2.1
74-87-3	Chloromethane	50.49	15	U	15	7.6
106-97-8	n-Butane	58.12	15	U	15	9.4
75-01-4	Vinyl chloride	62.50	6.1	U	6.1	1.2
106-99-0	1,3-Butadiene	54.09	6.1	U	6.1	2.0
74-83-9	Bromomethane	94.94	6.1	U	6.1	1.9
75-00-3	Chloroethane	64.52	15	U	15	6.4
593-60-2	Bromoethene(Vinyl Bromide)	106.96	6.1	U	6.1	1.7
75-69-4	Trichlorofluoromethane	137.37	6.1	U	6.1	1.9
76-13-1	Freon TF	187.38	6.1	U	6.1	0.94
75-35-4	1,1-Dichloroethene	96.94	6.1	U	6.1	1.0
67-64-1	Acetone	58.08	810	D	150	79
67-63-0	Isopropyl alcohol	60.10	150	U	150	55
75-15-0	Carbon disulfide	76.14	15	U	15	3.6
107-05-1	3-Chloropropene	76.53	15	U	15	8.2
75-09-2	Methylene Chloride	84.93	6.1	J D	15	6.1
75-65-0	tert-Butyl alcohol	74.12	56	J D	150	45
1634-04-4	Methyl tert-butyl ether	88.15	6.1	U	6.1	1.8
156-60-5	trans-1,2-Dichloroethene	96.94	6.1	U	6.1	2.2
110-54-3	n-Hexane	86.17	6.1	U	6.1	4.8
75-34-3	1,1-Dichloroethane	98.96	6.1	U	6.1	0.79
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15	6.1
156-59-2	cis-1,2-Dichloroethene	96.94	6.1	U	6.1	1.1
540-59-0	1,2-Dichloroethene, Total	96.94	12	U	12	3.4
67-66-3	Chloroform	119.38	6.1	U	6.1	1.6
109-99-9	Tetrahydrofuran	72.11	150	U	150	79
71-55-6	1,1,1-Trichloroethane	133.41	6.1	U	6.1	2.1
110-82-7	Cyclohexane	84.16	6.1	U	6.1	1.9
56-23-5	Carbon tetrachloride	153.81	1.2	U	1.2	0.73
540-84-1	2,2,4-Trimethylpentane	114.23	6.1	U	6.1	2.7
71-43-2	Benzene	78.11	6.1	U	6.1	2.2
107-06-2	1,2-Dichloroethane	98.96	6.1	U	6.1	1.9

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) DL | Lab Sample ID: 200-42918-12 DL

Matrix: Air | Lab File ID: 29983-18.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 16:00

Sample wt/vol: 20(mL) | Date Analyzed: 04/07/2018 02:49

Soil Aliquot Vol: | Dilution Factor: 30.3

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	6.1	U	6.1	4.2
79-01-6	Trichloroethene	131.39	1.2	U	1.2	0.91
80-62-6	Methyl methacrylate	100.12	15	U	15	6.7
78-87-5	1,2-Dichloropropane	112.99	6.1	U	6.1	3.6
123-91-1	1,4-Dioxane	88.11	150	U	150	39
75-27-4	Bromodichloromethane	163.83	6.1	U	6.1	2.8
10061-01-5	cis-1,3-Dichloropropene	110.97	6.1	U	6.1	3.0
108-10-1	methyl isobutyl ketone	100.16	15	U	15	11
108-88-3	Toluene	92.14	6.1	U	6.1	2.1
10061-02-6	trans-1,3-Dichloropropene	110.97	6.1	U	6.1	3.6
79-00-5	1,1,2-Trichloroethane	133.41	6.1	U	6.1	2.4
127-18-4	Tetrachloroethene	165.83	1.2	U	1.2	0.88
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	15	U	15	13
124-48-1	Dibromochloromethane	208.29	6.1	U	6.1	2.2
106-93-4	1,2-Dibromoethane	187.87	6.1	U	6.1	2.1
108-90-7	Chlorobenzene	112.56	6.1	U	6.1	1.2
100-41-4	Ethylbenzene	106.17	6.1	U	6.1	2.2
179601-23-1	m,p-Xylene	106.17	15	U	15	2.1
95-47-6	Xylene, o-	106.17	6.1	U	6.1	2.2
1330-20-7	Xylene (total)	106.17	21	U	21	4.3
100-42-5	Styrene	104.15	6.1	U	6.1	2.6
75-25-2	Bromoform	252.75	6.1	U	6.1	2.6
98-82-8	Cumene	120.19	6.1	U	6.1	1.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	6.1	U	6.1	2.3
103-65-1	n-Propylbenzene	120.19	6.1	U	6.1	2.1
622-96-8	4-Ethyltoluene	120.20	6.1	U	6.1	2.1
108-67-8	1,3,5-Trimethylbenzene	120.20	6.1	U	6.1	1.8
95-49-8	2-Chlorotoluene	126.59	6.1	U	6.1	2.2
98-06-6	tert-Butylbenzene	134.22	6.1	U	6.1	1.8
95-63-6	1,2,4-Trimethylbenzene	120.20	6.1	U	6.1	2.4
135-98-8	sec-Butylbenzene	134.22	6.1	U	6.1	2.0
99-87-6	4-Isopropyltoluene	134.22	6.1	U	6.1	2.3
541-73-1	1,3-Dichlorobenzene	147.00	6.1	U	6.1	2.5
106-46-7	1,4-Dichlorobenzene	147.00	6.1	U	6.1	2.0

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) DL Lab Sample ID: 200-42918-12 DL

Matrix: Air Lab File ID: 29983-18.d

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 20(mL) Date Analyzed: 04/07/2018 02:49

Soil Aliquot Vol: Dilution Factor: 30.3

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*6.1*	*U*	*6.1*	*3.6*
104-51-8	*n-Butylbenzene*	*134.22*	*6.1*	*U*	*6.1*	*2.4*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*6.1*	*U*	*6.1*	*2.2*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*15*	*U*	*15*	*7.3*
87-68-3	*Hexachlorobutadiene*	*260.76*	*6.1*	*U*	*6.1*	*2.5*
91-20-3	*Naphthalene*	*128.17*	*15*	*U*	*15*	*9.4*

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) DL | Lab Sample ID: 200-42918-12 DL

Matrix: Air | Lab File ID: 29983-18.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 16:00

Sample wt/vol: 20(mL) | Date Analyzed: 04/07/2018 02:49

Soil Aliquot Vol: | Dilution Factor: 30.3

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	75	U	75	30
75-45-6	Freon 22	86.47	54	U	54	28
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	42	U	42	14
74-87-3	Chloromethane	50.49	31	U	31	16
106-97-8	n-Butane	58.12	36	U	36	22
75-01-4	Vinyl chloride	62.50	15	U	15	3.2
106-99-0	1,3-Butadiene	54.09	13	U	13	4.4
74-83-9	Bromomethane	94.94	24	U	24	7.3
75-00-3	Chloroethane	64.52	40	U	40	17
593-60-2	Bromoethene(Vinyl Bromide)	106.96	27	U	27	7.4
75-69-4	Trichlorofluoromethane	137.37	34	U	34	11
76-13-1	Freon TF	187.38	46	U	46	7.2
75-35-4	1,1-Dichloroethene	96.94	24	U	24	4.1
67-64-1	Acetone	58.08	1900	D	360	190
67-63-0	Isopropyl alcohol	60.10	370	U	370	130
75-15-0	Carbon disulfide	76.14	47	U	47	11
107-05-1	3-Chloropropene	76.53	47	U	47	26
75-09-2	Methylene Chloride	84.93	21	J D	53	21
75-65-0	tert-Butyl alcohol	74.12	170	J D	460	140
1634-04-4	Methyl tert-butyl ether	88.15	22	U	22	6.7
156-60-5	trans-1,2-Dichloroethene	96.94	24	U	24	8.9
110-54-3	n-Hexane	86.17	21	U	21	17
75-34-3	1,1-Dichloroethane	98.96	25	U	25	3.2
78-93-3	Methyl Ethyl Ketone	72.11	45	U	45	18
156-59-2	cis-1,2-Dichloroethene	96.94	24	U	24	4.4
540-59-0	1,2-Dichloroethene, Total	96.94	48	U	48	13
67-66-3	Chloroform	119.38	30	U	30	7.7
109-99-9	Tetrahydrofuran	72.11	450	U	450	230
71-55-6	1,1,1-Trichloroethane	133.41	33	U	33	11
110-82-7	Cyclohexane	84.16	21	U	21	6.6
56-23-5	Carbon tetrachloride	153.81	7.6	U	7.6	4.6
540-84-1	2,2,4-Trimethylpentane	114.23	28	U	28	12
71-43-2	Benzene	78.11	19	U	19	6.9
107-06-2	1,2-Dichloroethane	98.96	25	U	25	7.7

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) DL | Lab Sample ID: 200-42918-12 DL

Matrix: Air | Lab File ID: 29983-18.d

Analysis Method: TO-15 | Date Collected: 03/28/2018 16:00

Sample wt/vol: 20(mL) | Date Analyzed: 04/07/2018 02:49

Soil Aliquot Vol: | Dilution Factor: 30.3

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 128215 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	25	U	25	17
79-01-6	Trichloroethene	131.39	6.5	U	6.5	4.9
80-62-6	Methyl methacrylate	100.12	62	U	62	27
78-87-5	1,2-Dichloropropane	112.99	28	U	28	17
123-91-1	1,4-Dioxane	88.11	550	U	550	140
75-27-4	Bromodichloromethane	163.83	41	U	41	19
10061-01-5	cis-1,3-Dichloropropene	110.97	28	U	28	13
108-10-1	methyl isobutyl ketone	100.16	62	U	62	45
108-88-3	Toluene	92.14	23	U	23	7.9
10061-02-6	trans-1,3-Dichloropropene	110.97	28	U	28	17
79-00-5	1,1,2-Trichloroethane	133.41	33	U	33	13
127-18-4	Tetrachloroethene	165.83	8.2	U	8.2	6.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	62	U	62	52
124-48-1	Dibromochloromethane	208.29	52	U	52	18
106-93-4	1,2-Dibromoethane	187.87	47	U	47	16
108-90-7	Chlorobenzene	112.56	28	U	28	5.6
100-41-4	Ethylbenzene	106.17	26	U	26	9.6
179601-23-1	m,p-Xylene	106.17	66	U	66	9.2
95-47-6	Xylene, o-	106.17	26	U	26	9.3
1330-20-7	Xylene (total)	106.17	92	U	92	19
100-42-5	Styrene	104.15	26	U	26	11
75-25-2	Bromoform	252.75	63	U	63	27
98-82-8	Cumene	120.19	30	U	30	8.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	42	U	42	16
103-65-1	n-Propylbenzene	120.19	30	U	30	10
622-96-8	4-Ethyltoluene	120.20	30	U	30	10
108-67-8	1,3,5-Trimethylbenzene	120.20	30	U	30	8.6
95-49-8	2-Chlorotoluene	126.59	31	U	31	11
98-06-6	tert-Butylbenzene	134.22	33	U	33	9.6
95-63-6	1,2,4-Trimethylbenzene	120.20	30	U	30	12
135-98-8	sec-Butylbenzene	134.22	33	U	33	11
99-87-6	4-Isopropyltoluene	134.22	33	U	33	12
541-73-1	1,3-Dichlorobenzene	147.00	36	U	36	15
106-46-7	1,4-Dichlorobenzene	147.00	36	U	36	12

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: GC-SV-106 (AS) DL Lab Sample ID: 200-42918-12 DL

Matrix: Air Lab File ID: 29983-18.d

Analysis Method: TO-15 Date Collected: 03/28/2018 16:00

Sample wt/vol: 20(mL) Date Analyzed: 04/07/2018 02:49

Soil Aliquot Vol: Dilution Factor: 30.3

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	*Benzyl chloride*	*126.58*	*31*	*U*	*31*	*19*
104-51-8	*n-Butylbenzene*	*134.22*	*33*	*U*	*33*	*13*
95-50-1	*1,2-Dichlorobenzene*	*147.00*	*36*	*U*	*36*	*13*
120-82-1	*1,2,4-Trichlorobenzene*	*181.45*	*110*	*U*	*110*	*54*
87-68-3	*Hexachlorobutadiene*	*260.76*	*65*	*U*	*65*	*26*
91-20-3	*Naphthalene*	*128.17*	*79*	*U*	*79*	*49*

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d
Lims ID: 200-42918-A-12
Client ID: GC-SV-106 (AS)
Sample Type: Client
Inject. Date: 07-Apr-2018 02:49:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 30.3000
Sample Info: 200-0029983-018
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 19:32:09 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 19:32:09

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	2 Dichlorodifluoromethane	85		5.149				ND	MU
	3 Chlorodifluoromethane	51		5.235				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556				ND	
	5 Chloromethane	50	5.753	5.737	0.005	1	1093	0.0323	
	6 Butane	43		6.026				ND	MU
	7 Vinyl chloride	62		6.080				ND	
	8 Butadiene	54		6.176				ND	U
	9 Bromomethane	94		6.979				ND	
	11 Chloroethane	64		7.225				ND	
	13 Vinyl bromide	106		7.631				ND	
	14 Trichlorofluoromethane	101		7.728				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739				ND	
	21 1,1-Dichloroethene	96		8.803				ND	
	22 Acetone	43	8.990	9.022	-0.011	97	1055517	26.9	
	23 Carbon disulfide	76		9.193				ND	
	24 Isopropyl alcohol	45	9.215	9.204	0.011	97	18635	0.4595	
	25 3-Chloro-1-propene	41		9.493				ND	U
	27 Methylene Chloride	49	9.760	9.755	0.000	90	5197	0.2005	
	28 2-Methyl-2-propanol	59	9.894	9.867	0.005	94	107049	1.85	
	29 Methyl tert-butyl ether	73		10.092				ND	
	30 trans-1,2-Dichloroethene	61		10.156				ND	
S	31 1,2-Dichloroethene, Total	61		10.200				ND	
	33 Hexane	57		10.483				ND	U
	34 1,1-Dichloroethane	63		10.948				ND	
	36 cis-1,2-Dichloroethene	96		11.949				ND	
	37 2-Butanone (MEK)	72	11.970	11.944	0.005	96	974	0.0691	
	39 Tetrahydrofuran	42		12.371				ND	
*	40 Chlorobromomethane	128	12.371	12.377	-0.005	94	196473	10.0	
	41 Chloroform	83		12.467				ND	
	42 Cyclohexane	84		12.724				ND	
	43 1,1,1-Trichloroethane	97		12.740				ND	
	44 Carbon tetrachloride	117		12.965				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Isooctane	57		13.318				ND	
	46 Benzene	78		13.382				ND	U
	47 1,2-Dichloroethane	62		13.532				ND	
	48 n-Heptane	43	13.634	13.607	0.000	82	2266	0.0487	
*	49 1,4-Difluorobenzene	114	14.072	14.078	-0.006	95	1041452	10.0	
	51 Trichloroethene	95		14.500				ND	
	53 1,2-Dichloropropane	63		14.998				ND	
	55 Methyl methacrylate	69		15.078				ND	
	56 1,4-Dioxane	88		15.164				ND	
	58 Dichlorobromomethane	83		15.458				ND	
	59 cis-1,3-Dichloropropene	75		16.282				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.512				ND	
	63 Toluene	92	16.833	16.833	0.011	93	2848	0.0481	M
	64 trans-1,3-Dichloropropene	75		17.352				ND	
	65 1,1,2-Trichloroethane	83		17.699				ND	
	66 Tetrachloroethene	166		17.817				ND	
	67 2-Hexanone	43		18.090				ND	
	68 Chlorodibromomethane	129		18.427				ND	
	69 Ethylene Dibromide	107		18.700				ND	
*	71 Chlorobenzene-d5	117	19.540	19.540	0.000	88	829116	10.0	
	72 Chlorobenzene	112		19.599				ND	
	73 Ethylbenzene	91		19.727				ND	
	75 m-Xylene & p-Xylene	106		19.962				ND	
S	76 Xylenes, Total	106		20.100				ND	
	77 o-Xylene	106		20.738				ND	
	78 Styrene	104		20.781				ND	
	79 Bromoform	173		21.171				ND	
	80 Isopropylbenzene	105		21.343				ND	
	81 1,1,2,2-Tetrachloroethane	83		21.942				ND	
	82 N-Propylbenzene	91		22.011				ND	
	85 4-Ethyltoluene	105		22.193				ND	
	86 2-Chlorotoluene	91		22.209				ND	
	87 1,3,5-Trimethylbenzene	105		22.290				ND	
	89 tert-Butylbenzene	119		22.766				ND	
	90 1,2,4-Trimethylbenzene	105		22.857				ND	
	91 sec-Butylbenzene	105		23.081				ND	
	92 4-Isopropyltoluene	119		23.279				ND	
	93 1,3-Dichlorobenzene	146		23.327				ND	
	94 1,4-Dichlorobenzene	146		23.466				ND	
	95 Benzyl chloride	91		23.670				ND	
	96 n-Butylbenzene	91		23.878				ND	
	98 1,2-Dichlorobenzene	146		24.028				ND	
	100 1,2,4-Trichlorobenzene	180		26.703				ND	
	101 Hexachlorobutadiene	225		26.896				ND	
	102 Naphthalene	128		27.238				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15WISs_00004	Amount Added:	20.00	Units: mL	Run Reagent

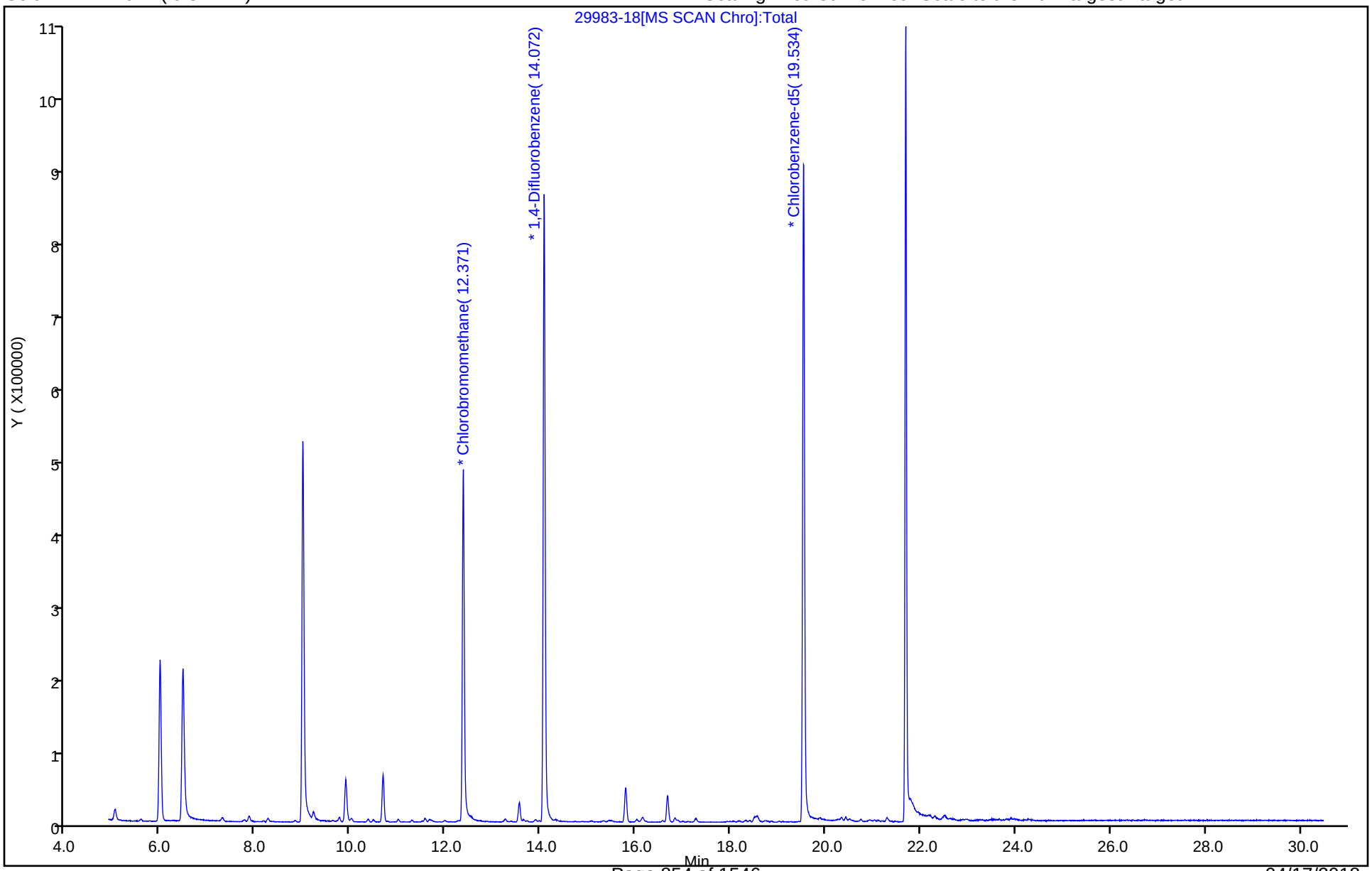
Report Date: 09-Apr-2018 19:32:10 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d

Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12	Worklist Smp#:	18
Client ID:	GC-SV-106 (AS)				
Purge Vol:	200.000 mL	Dil. Factor:	30.3000	ALS Bottle#:	17
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

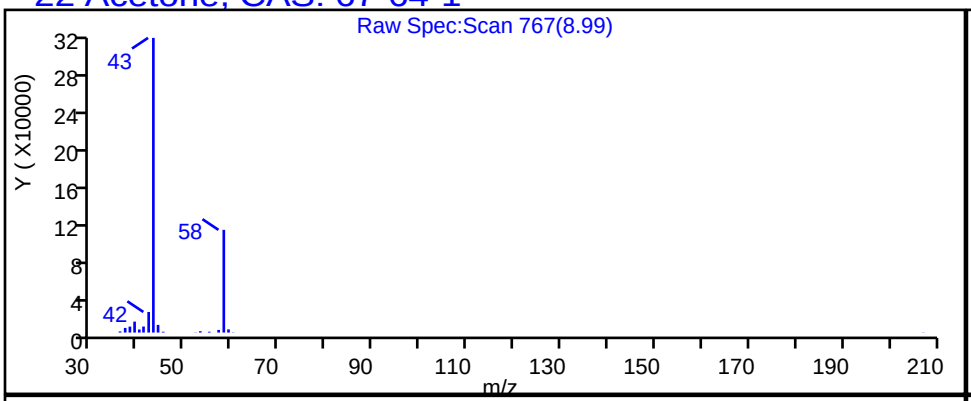
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

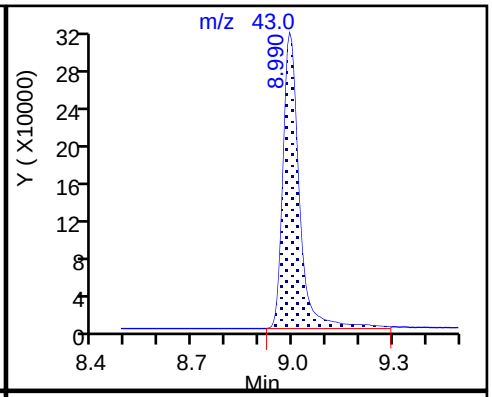


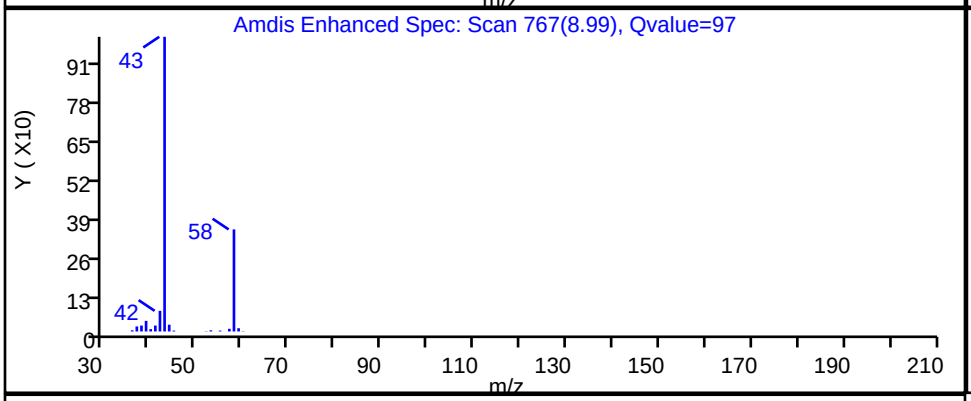
TestAmerica Burlington

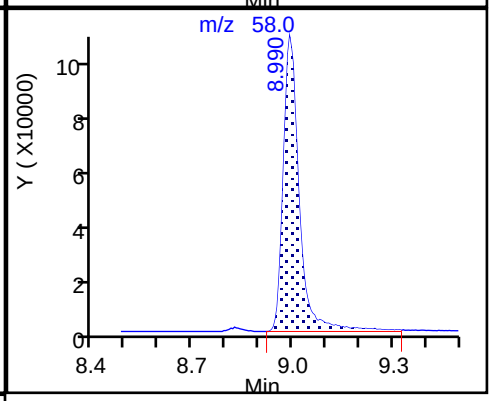
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

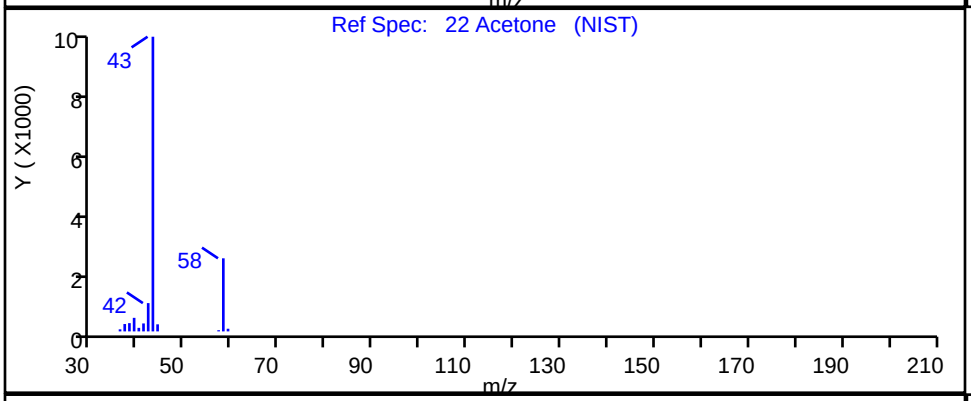
22 Acetone, CAS: 67-64-1

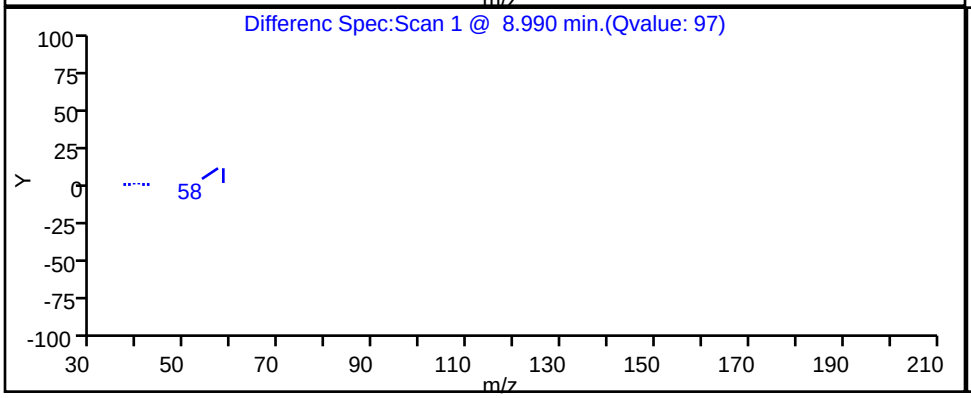


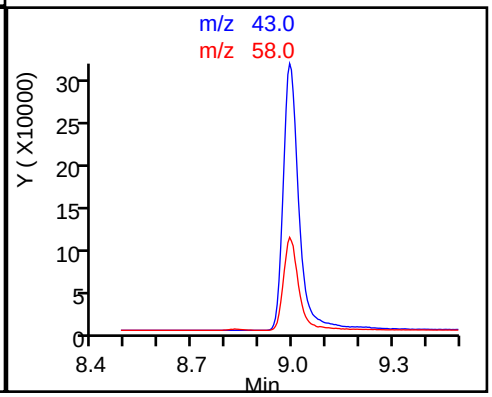








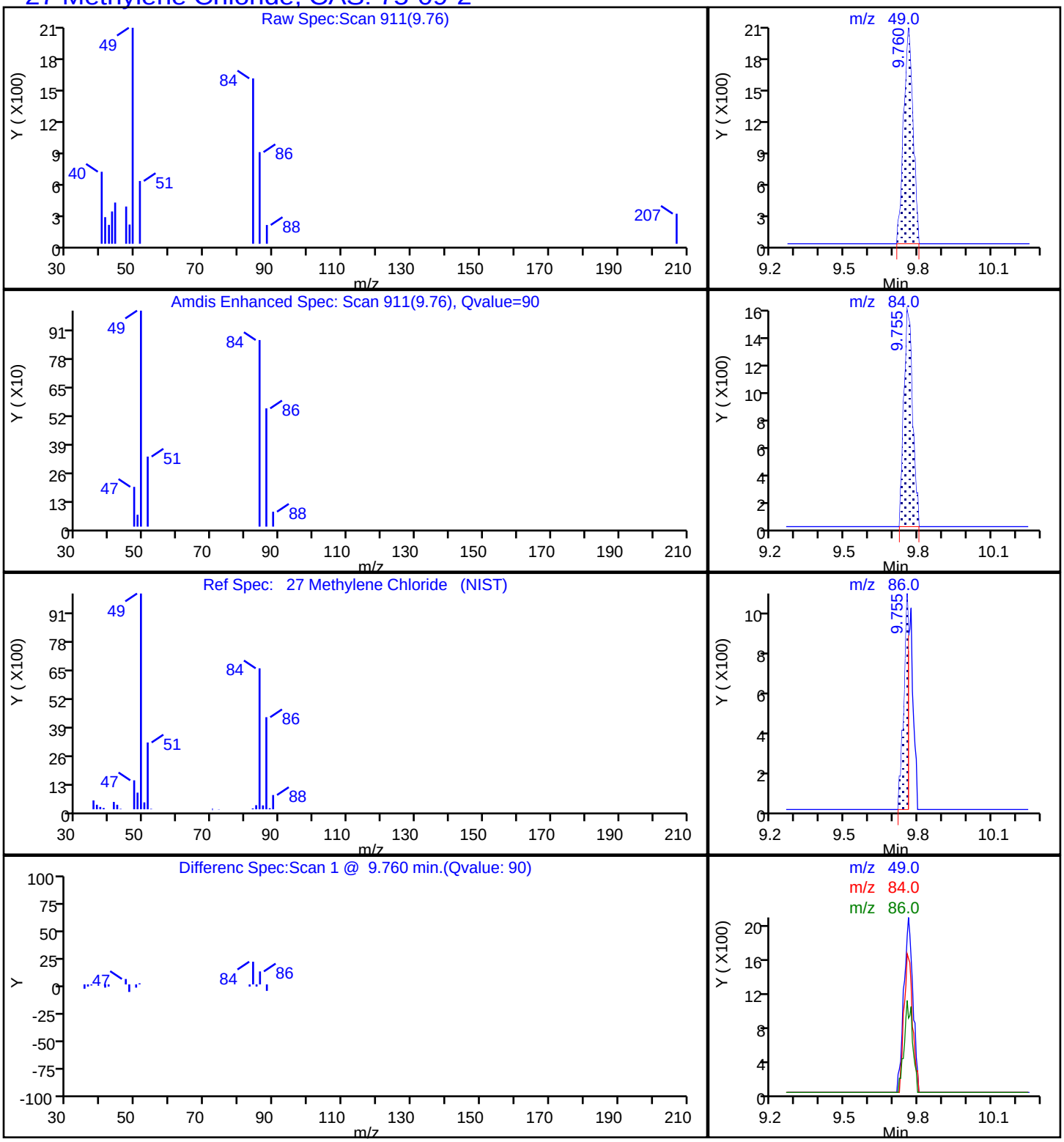




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

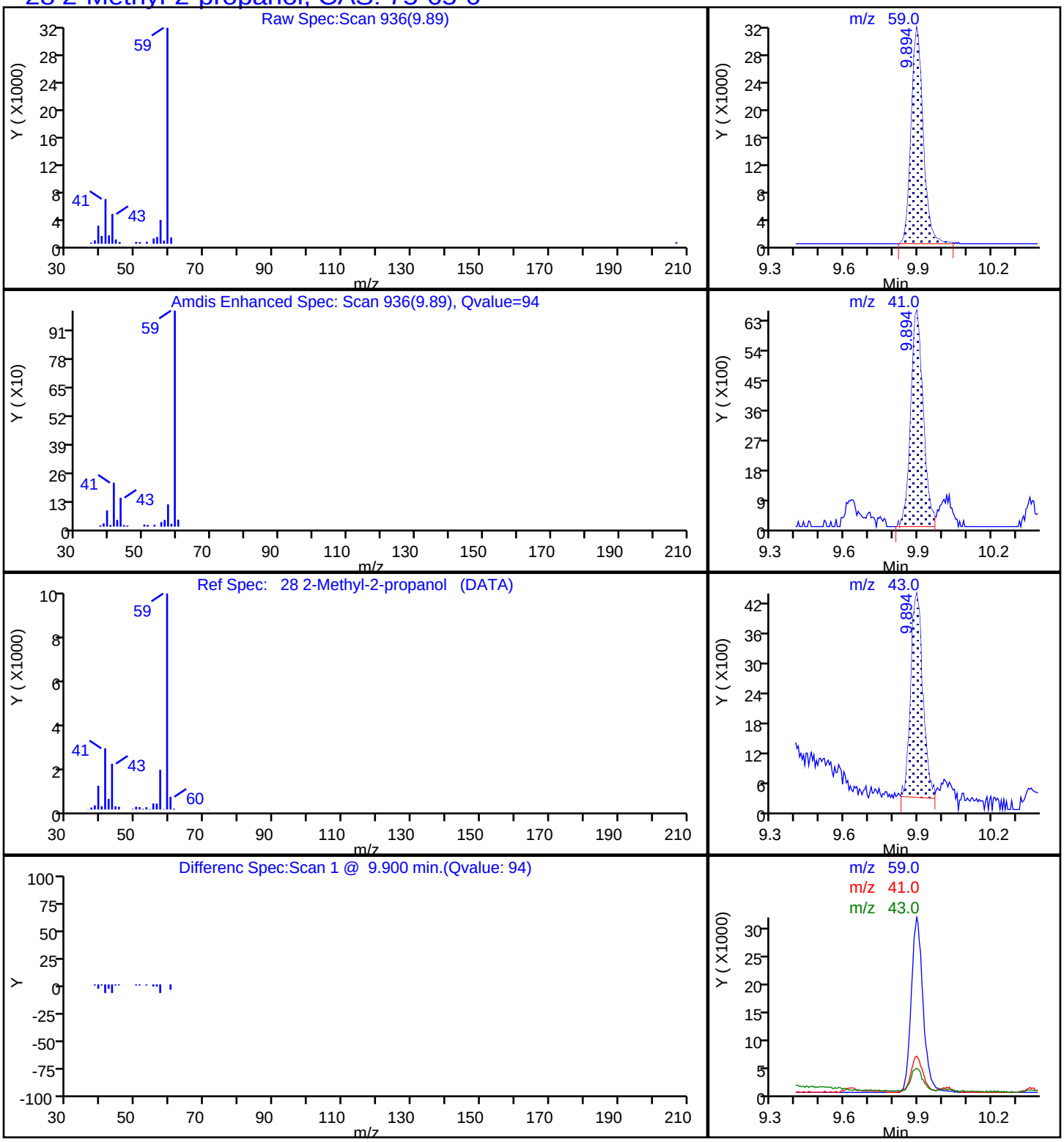
27 Methylene Chloride, CAS: 75-09-2



TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

28 2-Methyl-2-propanol, CAS: 75-65-0



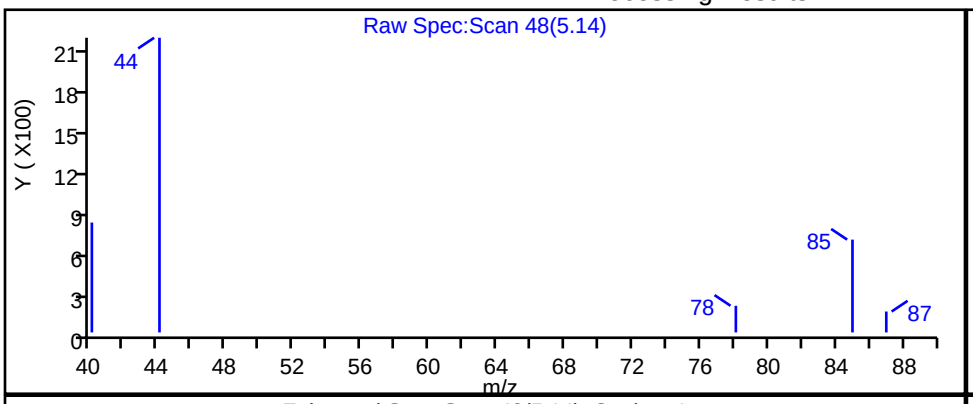
User Disabled Compound Report

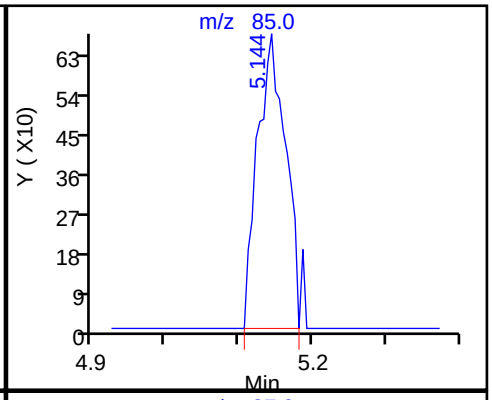
TestAmerica Burlington

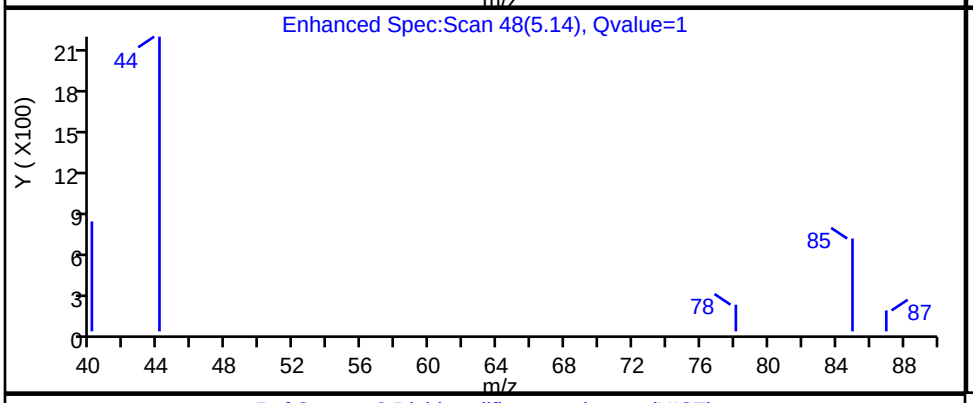
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

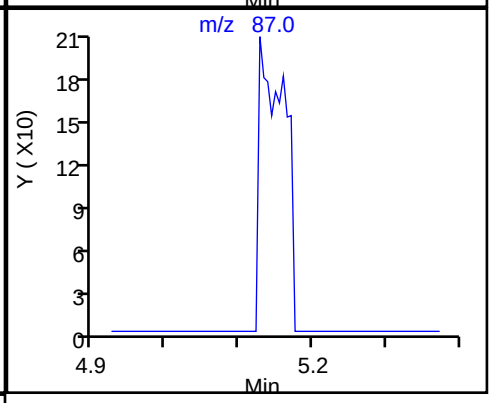
2 Dichlorodifluoromethane, CAS: 75-71-8

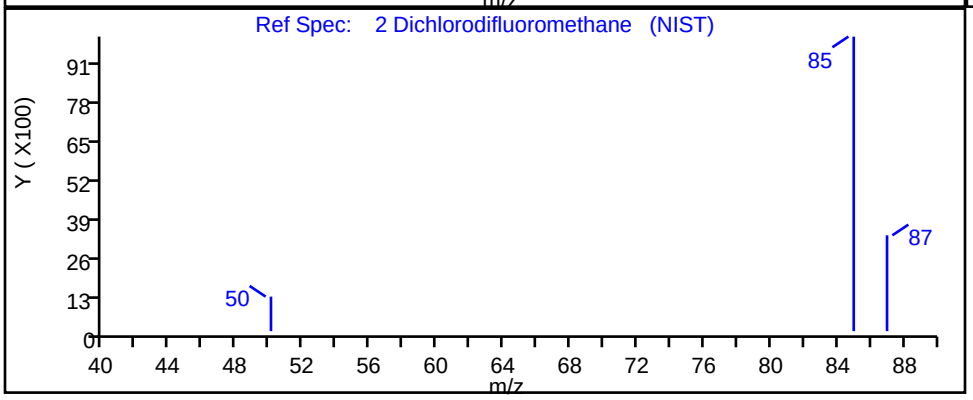
Processing Results











RT	Mass	Response	Amount
5.14	85.00	1809	0.017732
5.15	87.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:32:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

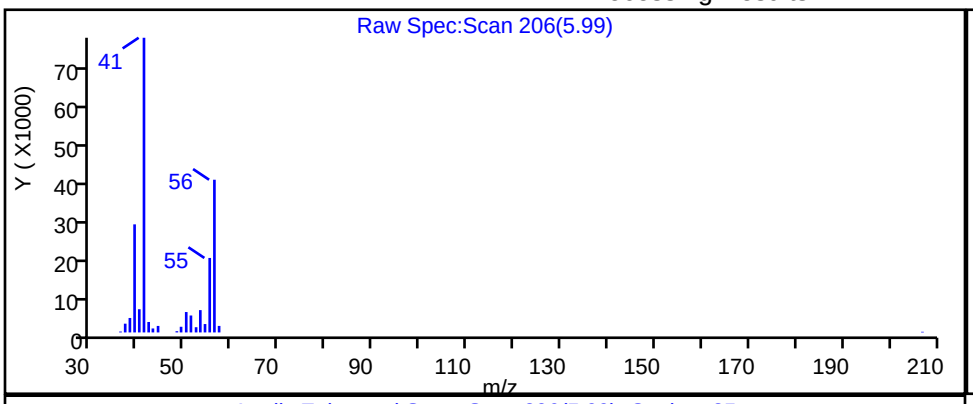
User Disabled Compound Report

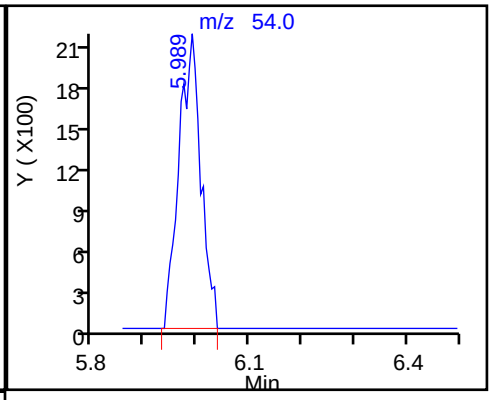
TestAmerica Burlington

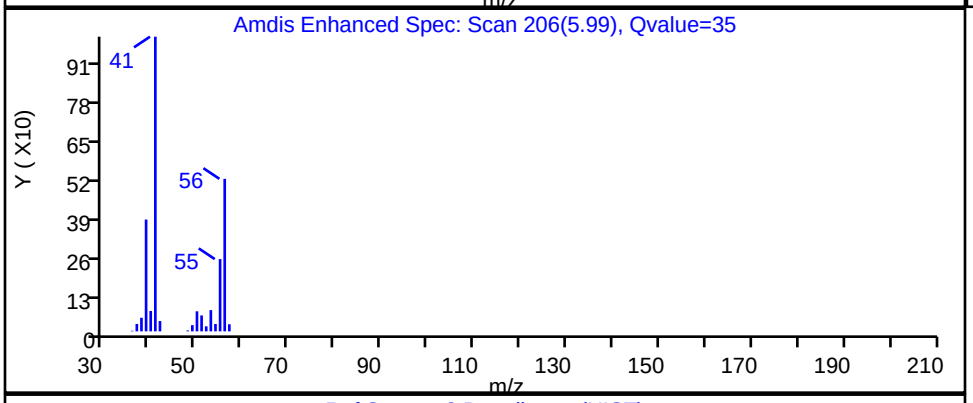
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

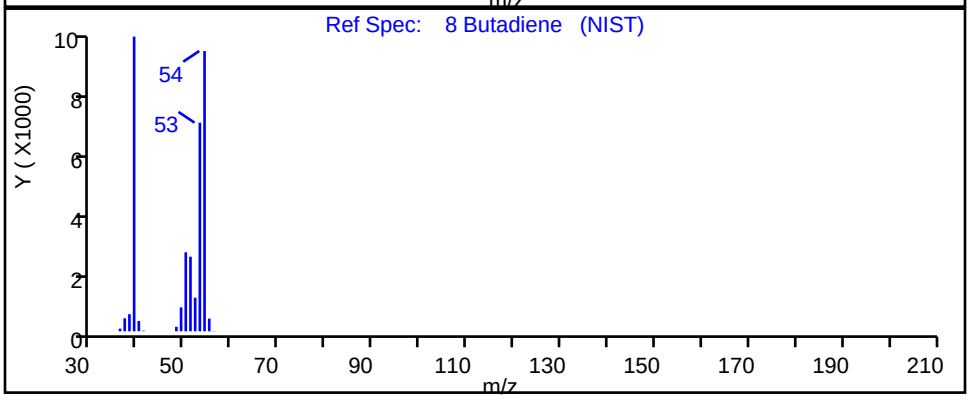
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
5.99	54.00	6373	0.232833

Reviewer: bunmaa, 09-Apr-2018 19:32:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

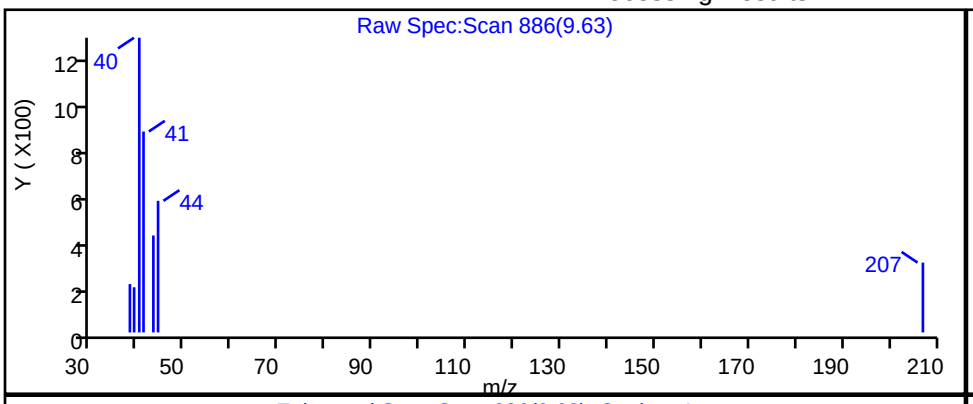
User Disabled Compound Report

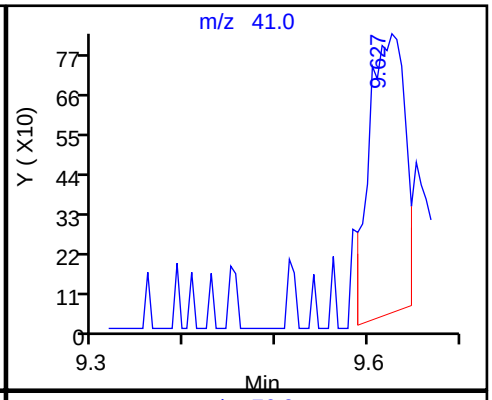
TestAmerica Burlington

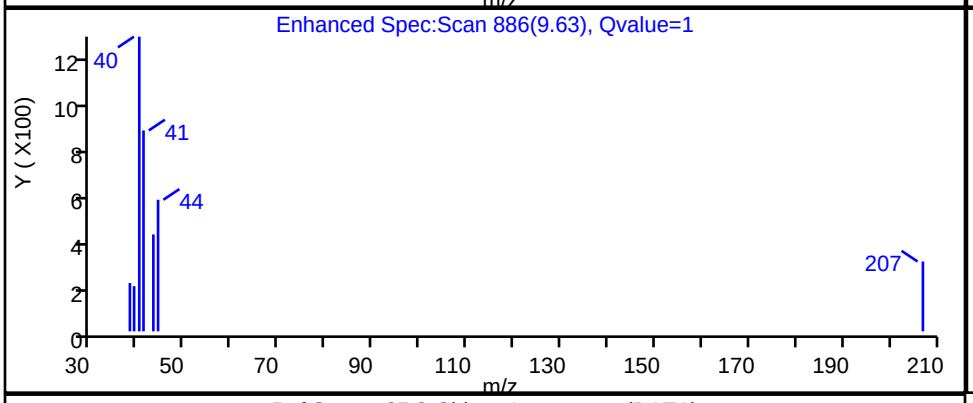
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

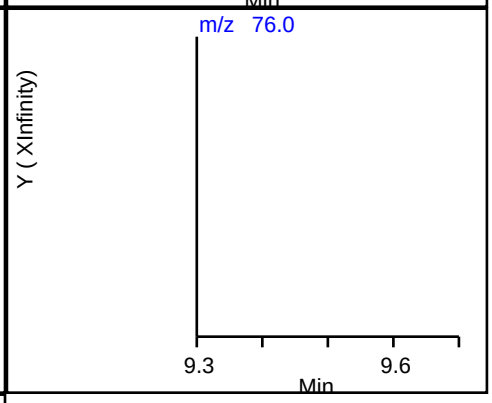
25 3-Chloro-1-propene, CAS: 107-05-1

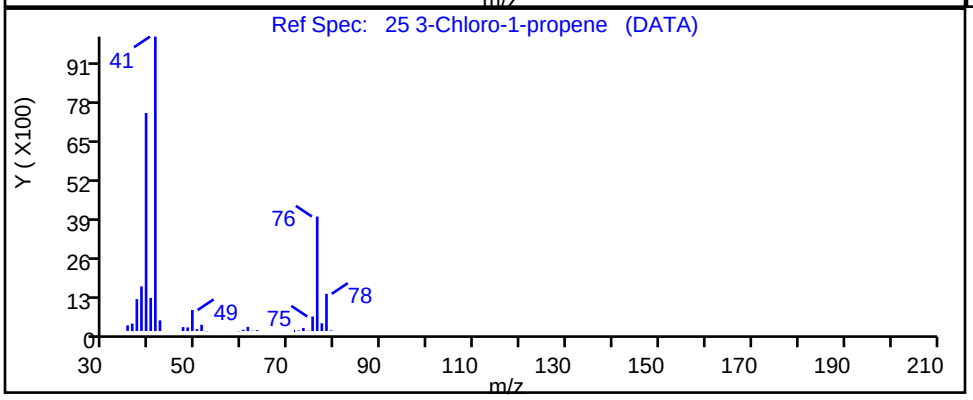
Processing Results











RT	Mass	Response	Amount
9.63	41.00	2171	0.083484
9.49	76.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:32:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

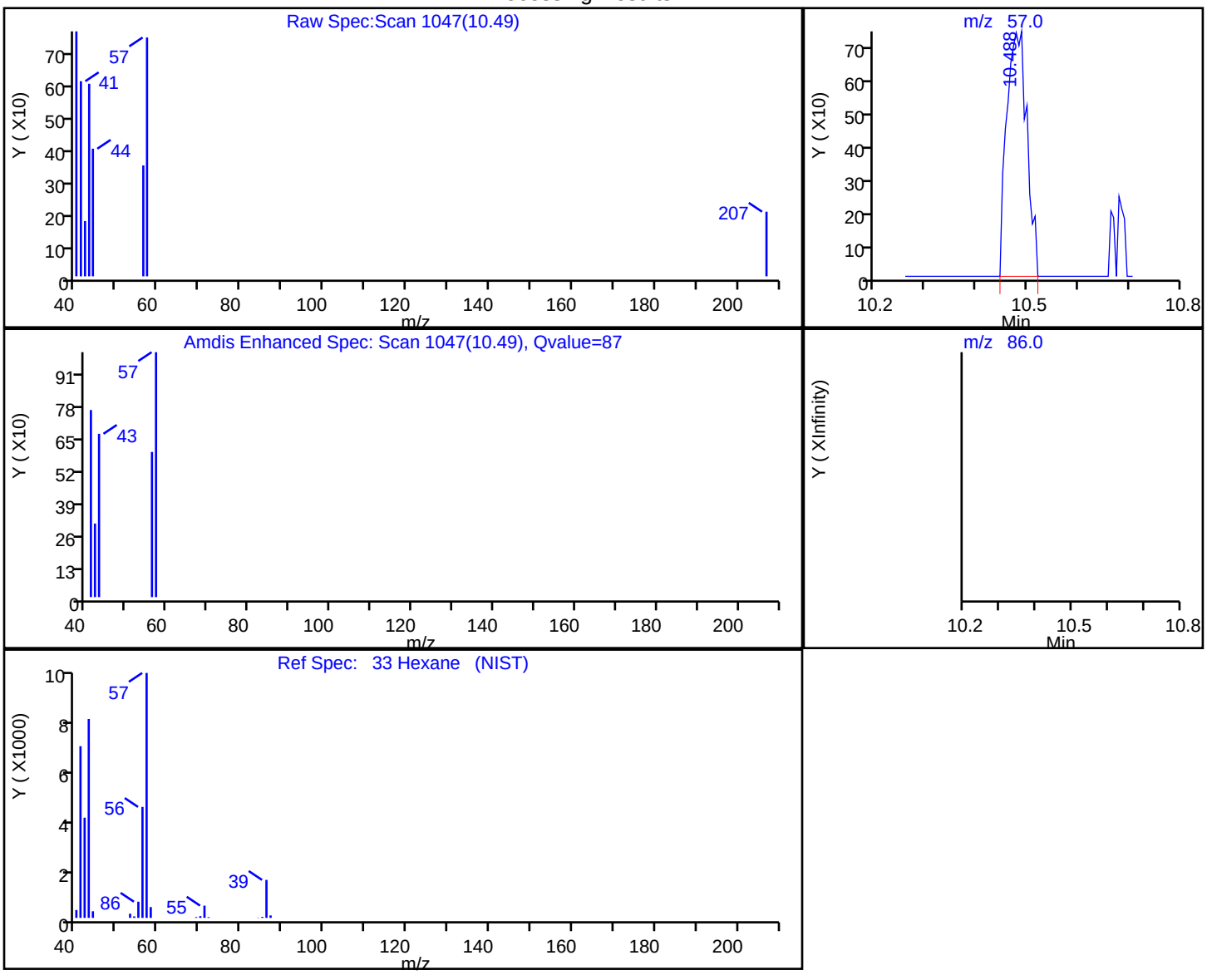
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3

Processing Results



RT	Mass	Response	Amount
10.49	57.00	2055	0.052176
10.48	86.00	0	

Reviewer: bunmaa, 09-Apr-2018 19:32:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

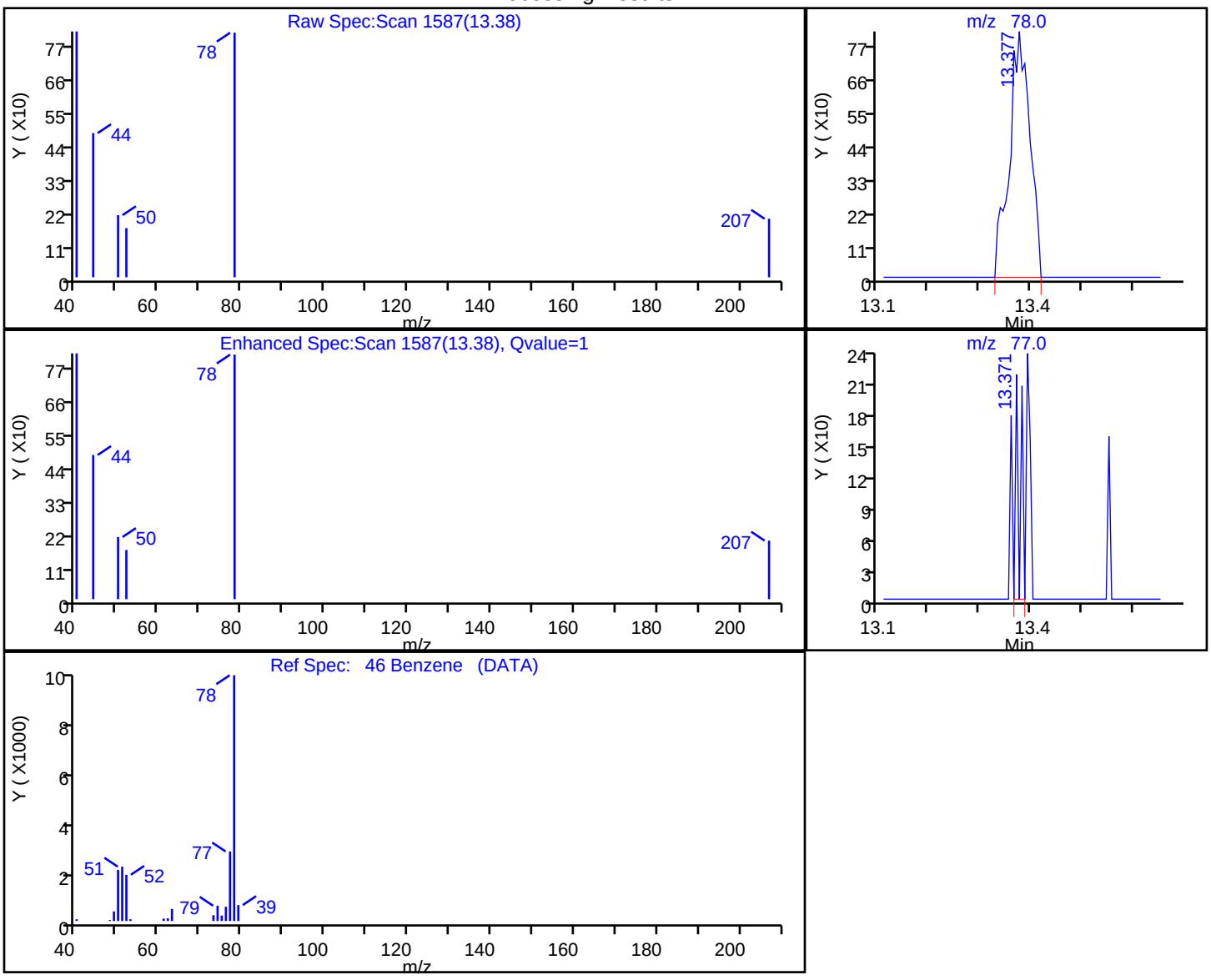
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
13.38	78.00	2266	0.024494
13.37	77.00	134	

Reviewer: bunmaa, 09-Apr-2018 19:32:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

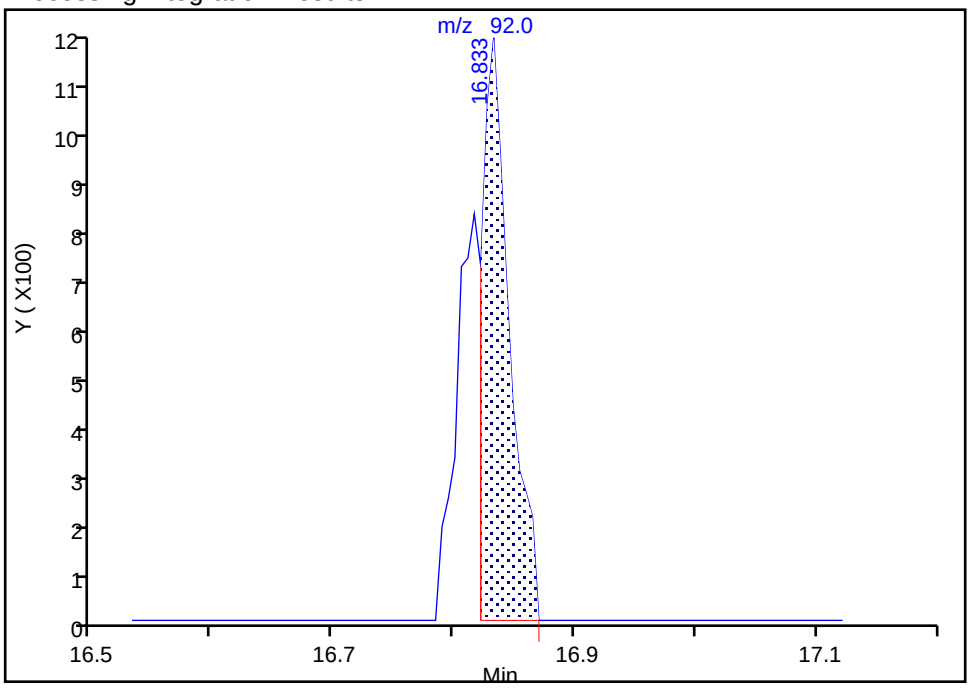
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-18.d				
Injection Date:	07-Apr-2018 02:49:30	Instrument ID:	CHW.i		
Lims ID:	200-42918-A-12	Lab Sample ID:	200-42918-12		
Client ID:	GC-SV-106 (AS)				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3

Signal: 1

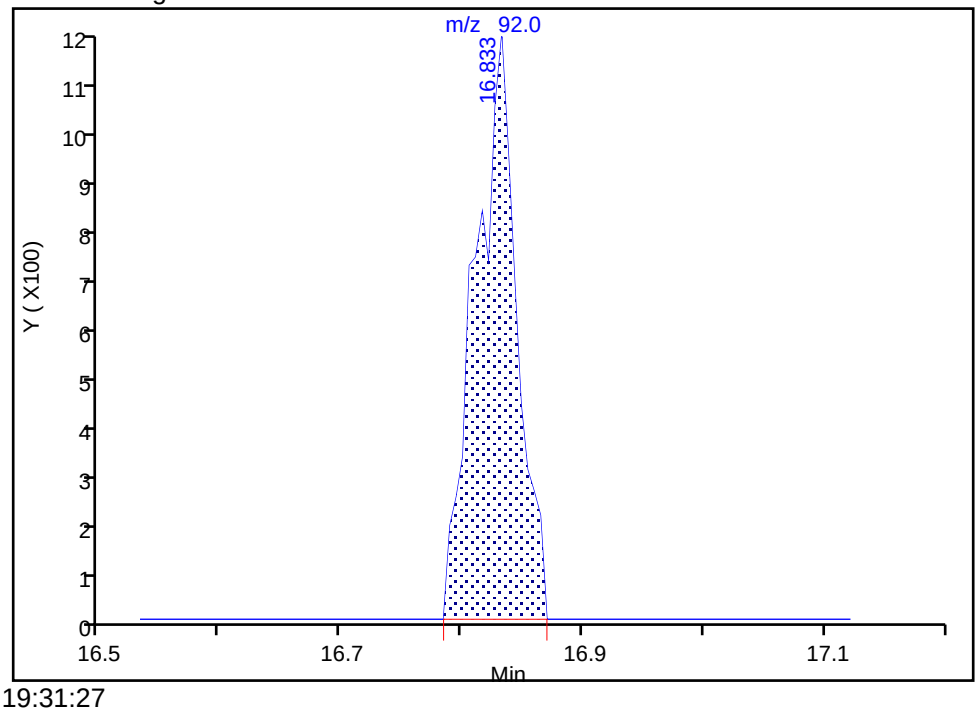
Processing Integration Results

RT: 16.83
Area: 1866
Amount: 0.031490
Amount Units: ppb v/v



Manual Integration Results

RT: 16.83
Area: 2848
Amount: 0.048061
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 19:31:27

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-127372/3	29580-03.d
Level 2	IC 200-127372/4	29580-04.d
Level 3	IC 200-127372/5	29580-05.d
Level 4	IC 200-127372/6	29580-06.d
Level 5	ICIS 200-127372/7	29580-07.d
Level 6	IC 200-127372/8	29580-08.d
Level 7	IC 200-127372/9	29580-09.d
Level 8	IC 200-127372/10	29580-10.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 1.6366	+++++ 1.5669	+++++ 1.4827	1.3534	1.4352	Ave		1.4949				7.4		30.0			
Dichlorodifluoromethane	+++++ 5.5542	+++++ 5.0825	5.6108 4.7302	5.0411	5.1369	Ave		5.1926				6.4		30.0			
Freon 22	+++++ 3.0602	+++++ 2.8723	3.1044 2.7239	2.6605	2.7831	Ave		2.8674				6.3		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 5.5877	5.7217 5.1111	5.7242 4.7325	5.1568	5.2346	Ave		5.3241				6.9		30.0			
Chloromethane	+++++ 1.8322	+++++ 1.7228	1.7721 1.6216	1.7425	1.6438	Ave		1.7225				4.6		30.0			
n-Butane	+++++ 3.1706	+++++ 3.0251	2.8527 2.8695	2.5033	2.6715	Ave		2.8488				8.4		30.0			
Vinyl chloride	2.0427 2.1652	2.0987 2.0587	2.0417 1.9204	1.7628	1.8801	Ave		1.9963				6.6		30.0			
1,3-Butadiene	1.2636 1.5581	1.3827 1.5413	1.3275 1.4717	1.2601	1.3402	Ave		1.3931				8.5		30.0			
Bromomethane	+++++ 1.7014	1.7209 1.6084	1.6675 1.5324	1.5206	1.5151	Ave		1.6095				5.5		30.0			
Chloroethane	+++++ 0.9808	+++++ 0.9683	0.9174 0.9559	0.8401	0.8410	Ave		0.9173				6.9		30.0			
Isopentane	+++++ 1.7932	1.8073 1.8427	1.5985 1.8316	1.4334	1.4844	Ave		1.6845				10.4		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.7795	1.6882 1.6751	1.6817 1.5860	1.6240	1.6044	Ave		1.6627				3.9		30.0			
Trichlorofluoromethane	+++++ 4.4088	4.4003 4.0961	4.4978 3.8501	4.1244	4.0436	Ave		4.2030				5.6		30.0			
n-Pentane	+++++ 2.5899	+++++ 2.6597	2.2457 2.6461	2.1153	2.1540	Ave		2.4018				10.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4766	+++++ 0.4903	0.3309 0.4979	0.3645	0.3428	Ave		0.4172				18.9		30.0			
Ethyl ether	+++++ 1.1320	0.9450 1.1136	0.9335 1.0945	0.9553	0.9668	Ave		1.0201				8.7		30.0			
Acrolein	+++++ 0.4059	+++++ 0.4233	+++++ 0.3760	0.2499	0.2871	Ave		0.3484				21.8		30.0			
Freon TF	+++++ 3.1688	3.1728 2.9625	3.1323 2.7478	2.9773	2.9243	Ave		3.0123				5.2		30.0			
1,1-Dichloroethene	1.3117 1.5539	1.3854 1.4740	1.4445 1.3921	1.3966	1.3951	Ave		1.4192				5.1		30.0			
Acetone	+++++ 2.0032	+++++ 1.9455	+++++ 1.9308	2.3337	1.7835	Ave		1.9993				10.2		30.0			
Carbon disulfide	+++++ 3.7464	+++++ 3.6347	3.4785 3.4647	3.4185	3.3752	Ave		3.5196				4.0		30.0			
Isopropyl alcohol	+++++ 2.1602	+++++ 2.1688	+++++ 2.1439	1.9966	1.8515	Ave		2.0642				6.7		30.0			
3-Chloropropene	+++++ 1.4793	1.2624 1.4617	1.1395 1.4206	1.2367	1.2650	Ave		1.3236				9.8		30.0			
Acetonitrile	+++++ 0.7730	+++++ 0.8072	+++++ 0.8377	0.6598	0.6453	Ave		0.7446				11.7		30.0			
Methylene Chloride	+++++ 1.3685	+++++ 1.3736	1.4294 1.3493	1.1978	1.1960	Ave		1.3191				7.5		30.0			
tert-Butyl alcohol	+++++ 3.1438	+++++ 3.0396	+++++ 2.9580	2.8278	2.7263	Ave		2.9391				5.6		30.0			
Methyl tert-butyl ether	+++++ 4.4622	4.0701 4.2580	4.1350 4.0295	4.1226	4.0559	Ave		4.1619				3.7		30.0			
trans-1,2-Dichloroethene	+++++ 1.9605	1.7339 1.9025	1.7069 1.8605	1.7487	1.7494	Ave		1.8089				5.4		30.0			
Acrylonitrile	+++++ 0.8363	+++++ 0.8754	0.5767 0.9027	0.6377	0.6990	Ave		0.7546				17.9		30.0			
n-Hexane	+++++ 2.1850	1.9010 2.1533	1.8788 2.0762	1.9258	1.9123	Ave		2.0046				6.5		30.0			
1,1-Dichloroethane	2.6291 2.5907	2.4516 2.5280	2.4652 2.4059	2.3414	2.3194	Ave		2.4664				4.5		30.0			
Vinyl acetate	+++++ 2.9893	+++++ 3.0518	+++++ 3.0715	2.4334	2.4960	Ave		2.8084				11.3		30.0			
cis-1,2-Dichloroethene	1.4576 1.5855	1.4617 1.5123	1.4207 1.3980	1.4714	1.4546	Ave		1.4702				3.9		30.0			
Methyl Ethyl Ketone	+++++ 0.7682	+++++ 0.7458	0.6940 0.7015	0.7081	0.6876	Ave		0.7175				4.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1332	+++++ 0.1277	+++++ 0.1201	0.1198	0.1198	Ave		0.1241				4.9		30.0			
Tetrahydrofuran	+++++ 0.2770	+++++ 0.2962	+++++ 0.3004	0.2419	0.2432	Ave		0.2717				10.3		30.0			
Chloroform	+++++ 3.1249	2.9932 2.9458	2.9878 2.7657	2.9263	2.8679	Ave		2.9445				3.8		30.0			
Cyclohexane	+++++ 0.4131	0.3784 0.4062	0.3980 0.3774	0.3845	0.3782	Ave		0.3908				3.8		30.0			
1,1,1-Trichloroethane	+++++ 0.6379	0.6395 0.6064	0.6506 0.5596	0.6240	0.6060	Ave		0.6177				5.0		30.0			
Carbon tetrachloride	0.6535 0.6644	0.6468 0.6301	0.6701 0.5849	0.6562	0.6329	Ave		0.6424				4.2		30.0			
2,2,4-Trimethylpentane	+++++ 1.4096	1.2857 1.4353	1.2454 1.3757	1.2705	1.2632	Ave		1.3265				5.9		30.0			
Benzene	+++++ 0.9218	0.9257 0.9089	0.8825 0.8645	0.8661	0.8486	Ave		0.8883				3.4		30.0			
1,2-Dichloroethane	+++++ 0.3773	0.3300 0.3687	0.3438 0.3556	0.3456	0.3472	Ave		0.3526				4.6		30.0			
n-Heptane	+++++ 0.4819	0.3964 0.4977	0.4140 0.4940	0.4186	0.4249	Ave		0.4468				9.6		30.0			
n-Butanol	+++++ 0.1793	+++++ 0.1791	+++++ 0.1829	0.1635	0.1476	Ave		0.1705				8.7		30.0			
Trichloroethene	0.4176 0.4197	0.3918 0.4027	0.4006 0.3816	0.3882	0.3880	Ave		0.3988				3.5		30.0			
1,2-Dichloropropane	+++++ 0.3341	0.3127 0.3358	0.3190 0.3313	0.2999	0.2995	Ave		0.3189				4.9		30.0			
Methyl methacrylate	+++++ 0.3432	+++++ 0.3416	0.2638 0.3357	0.2930	0.3052	Ave		0.3138				10.2		30.0			
1,4-Dioxane	+++++ 0.2006	+++++ 0.1908	+++++ 0.1819	0.1900	0.1812	Ave		0.1889				4.2		30.0			
Dibromomethane	+++++ 0.4350	0.3980 0.4133	0.4165 0.3842	0.4145	0.4142	Ave		0.4108				3.9		30.0			
Bromodichloromethane	+++++ 0.6886	0.6083 0.6537	0.6388 0.6194	0.6263	0.6302	Ave		0.6379				4.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.5151	0.3931 0.5085	0.3981 0.4955	0.4436	0.4505	Ave		0.4578				11.0		30.0			
methyl isobutyl ketone	+++++ 0.6443	+++++ 0.6584	0.4965 0.6587	0.5559	0.5662	Ave		0.5967				11.3		30.0			
n-Octane	+++++ 0.6883	0.5304 0.6909	0.5648 0.6511	0.6187	0.6216	Ave		0.6237				9.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.7532	0.7080 0.7161	0.7400 0.6558	0.7247	0.7052	Ave		0.7147				4.4		30.0			
trans-1,3-Dichloropropene	+++++ 0.5155	0.3513 0.4987	0.3774 0.4856	0.4283	0.4538	Ave		0.4444				14.0		30.0			
1,1,2-Trichloroethane	+++++ 0.3675	0.3353 0.3562	0.3329 0.3479	0.3356	0.3339	Ave		0.3442				3.9		30.0			
Tetrachloroethene	0.7843 0.7363	0.7791 0.6743	0.8072 0.6188	0.7167	0.7004	Ave		0.7272				8.7		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6666	+++++ 0.6772	0.5454 0.6895	0.5442	0.5696	Ave		0.6154				11.3		30.0			
Dibromochloromethane	+++++ 0.8322	0.7533 0.7615	0.7489 0.6950	0.7569	0.7799	Ave		0.7611				5.4		30.0			
1,2-Dibromoethane	+++++ 0.6834	0.5473 0.6455	0.5775 0.6181	0.6062	0.6198	Ave		0.6140				7.2		30.0			
Chlorobenzene	+++++ 1.0541	1.0548 0.9989	1.0444 0.9328	0.9944	0.9854	Ave		1.0093				4.4		30.0			
Ethylbenzene	+++++ 1.7557	1.6271 1.6660	1.6708 1.5388	1.6550	1.6269	Ave		1.6486				3.9		30.0			
n-Nonane	+++++ 0.8160	0.7050 0.8034	0.7304 0.7695	0.7545	0.7469	Ave		0.7608				5.1		30.0			
m,p-Xylene	+++++ 0.6889	0.6214 0.6444	0.6775 0.5758	0.6703	0.6522	Ave		0.6472				6.0		30.0			
Xylene, o-	+++++ 0.7072	0.6149 0.6597	0.6535 0.6072	0.6670	0.6635	Ave		0.6533				5.2		30.0			
Styrene	+++++ 1.0885	0.7878 1.0207	0.7961 0.9384	0.9691	1.0028	Ave		0.9433				12.0		30.0			
Bromoform	+++++ 0.8924	0.7488 0.7538	0.7364 0.6429	0.7470	0.8386	Ave		0.7657				10.4		30.0			
Cumene	+++++ 2.0555	1.8562 1.9025	1.9612 1.7024	1.9936	1.9610	Ave		1.9189				6.0		30.0			
1,1,2,2-Tetrachloroethane	+++++ 1.0257	0.9772 0.9652	0.9621 0.8936	0.9503	0.9467	Ave		0.9601				4.1		30.0			
n-Propylbenzene	+++++ 2.4982	2.2032 2.3095	2.3179 1.9979	2.3962	2.3685	Ave		2.2988				7.0		30.0			
1,2,3-Trichloropropane	+++++ 0.8002	+++++ 0.7589	0.7484 0.7078	0.7478	0.7423	Ave		0.7509				4.0		30.0			
n-Decane	+++++ 1.1291	+++++ 1.0743	0.9023 0.9804	1.0389	1.0377	Ave		1.0271				7.6		30.0			
4-Ethyltoluene	+++++ 2.0900	1.8078 1.9044	1.9886 1.6162	2.0432	1.9925	Ave		1.9204				8.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.7542	1.5658 1.6184	1.6679 1.4339	1.6838	1.6446	Ave		1.6241				6.3		30.0			
1,3,5-Trimethylbenzene	+++++ 1.8287	1.6537 1.6847	1.8252 1.4905	1.7835	1.7507	Ave		1.7167				7.0		30.0			
Alpha Methyl Styrene	+++++ 0.9285	0.5878 0.8574	0.6608 0.7769	0.8284	0.8619	Ave		0.7859				15.4		30.0			
tert-Butylbenzene	+++++ 1.7985	1.7328 1.6156	1.7901 1.4171	1.7699	1.7413	Ave		1.6950				8.1		30.0			
1,2,4-Trimethylbenzene	+++++ 1.8629	1.5212 1.6874	1.7008 1.4776	1.8124	1.7772	Ave		1.6914				8.6		30.0			
sec-Butylbenzene	+++++ 2.6593	2.3240 2.3909	2.5415 2.0159	2.6325	2.5810	Ave		2.4493				9.3		30.0			
4-Isopropyltoluene	+++++ 2.2838	1.9425 2.0373	2.0400 1.7280	2.2604	2.2125	Ave		2.0721				9.6		30.0			
1,3-Dichlorobenzene	+++++ 1.2602	0.9345 1.1308	0.9974 0.9960	1.1750	1.1799	Ave		1.0963				11.0		30.0			
1,4-Dichlorobenzene	+++++ 1.2453	0.9518 1.1249	0.8802 0.9869	1.0898	1.1259	Ave		1.0578				11.8		30.0			
Benzyl chloride	+++++ 1.4534	0.7216 1.3766	0.8227 1.2380	1.2071	1.2634	Ave		1.1547				23.9		30.0			
n-Butylbenzene	+++++ 1.9428	1.2647 1.7495	1.4137 1.4399	1.8713	1.8651	Ave		1.6496				16.4		30.0			
n-Undecane	+++++ 1.0123	+++++ 0.9317	+++++ 0.8132	0.9309	0.9488	Ave		0.9274				7.8		30.0			
1,2-Dichlorobenzene	+++++ 1.2007	0.9491 1.0791	1.0297 0.9632	1.1148	1.1256	Ave		1.0660				8.5		30.0			
n-Dodecane	+++++ 0.8923	+++++ 0.8323	+++++ 0.7961	0.7708	0.8346	Ave		0.8252				5.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6367	+++++ 0.5824	0.4649 0.5487	0.4969	0.5515	Ave		0.5468				11.1		30.0			
Hexachlorobutadiene	+++++ 0.8063	0.9116 0.6831	0.8683 0.6400	0.7972	0.7855	Ave		0.7846				12.2		30.0			
Naphthalene	+++++ 1.2789	+++++ 1.1933	1.1192 1.1096	0.8790	1.0642	Ave		1.1074				12.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5213	+++++ 0.4794	0.4552 0.4564	0.4499	0.4721	Ave		0.4724				5.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-127372/3	29580-03.d
Level 2	IC 200-127372/4	29580-04.d
Level 3	IC 200-127372/5	29580-05.d
Level 4	IC 200-127372/6	29580-06.d
Level 5	ICIS 200-127372/7	29580-07.d
Level 6	IC 200-127372/8	29580-08.d
Level 7	IC 200-127372/9	29580-09.d
Level 8	IC 200-127372/10	29580-10.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 474327	+++++ 692408	+++++ 1443842	115027	258423	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1609790	+++++ 2245950	47660 4606296	428454	924937	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 886946	+++++ 1269263	26370 2652589	226121	501106	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1619510	20641 2258622	48623 4608549	438282	942523	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 531018	+++++ 761320	15053 1579104	148095	295978	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 918935	+++++ 1336812	24232 2794378	212758	481011	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1442 627540	7571 909732	17343 1870106	149827	338532	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	892 451578	4988 681123	11276 1433132	107100	241316	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 493107	6208 710774	14164 1492288	129238	272800	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 284255	+++++ 427915	7793 930900	71399	151432	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 519722	6520 814306	13578 1783615	121830	267281	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 515753	6090 740244	14285 1544466	138027	288890	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1277807	15874 1810090	38206 3749258	350538	728068	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 750651	+++++ 1175328	19076 2576776	179785	387844	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 184587	+++++ 433384	28140 1212226	62000	92633	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 328086	3409 492118	7929 1065794	81196	174086	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 117633	+++++ 187050	+++++ 366164	21237	51698	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 918423	11446 1309155	26607 2675834	253044	526533	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	926 450378	4998 651373	12270 1355619	118702	251192	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 580603	+++++ 859717	+++++ 1880188	198347	321133	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1085818	+++++ 1606167	29547 3373935	290547	607727	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 626109	+++++ 958402	+++++ 2087745	169697	333375	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 428761	4554 645931	9679 1383396	105108	227764	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 224040	+++++ 356686	+++++ 815795	56081	116190	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 396628	+++++ 606999	12142 1313984	101805	215355	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 911170	+++++ 1343218	+++++ 2880499	240344	490895	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1293294	14683 1881598	35124 3923954	350391	730288	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 568221	6255 840738	14499 1811774	148626	314997	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 242396	+++++ 386840	4899 879038	54198	125858	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 633285	6858 951567	15959 2021835	163674	344319	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1856 750871	8844 1117121	20940 2342931	199000	417627	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 866401	+++++ 1348591	+++++ 2991066	206817	449411	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	1029 459530	5273 668294	12068 1361372	125058	261909	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 222656	+++++ 329549	5895 683100	60185	123814	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 38595	+++++ 56435	+++++ 116943	10186	21576	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 417137	+++++ 660944	+++++ 1467788	106609	226378	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 905703	10798 1301752	25379 2693279	248713	516389	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 622168	7037 906319	17520 1843910	169460	352054	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 960722	11893 1352930	28640 2734179	275045	564014	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2424 1000688	12029 1405946	29495 2857687	289254	589094	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2122917	23912 3202339	54822 6721300	559989	1175738	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1388231	17217 2027829	38846 4224012	381768	789859	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 568258	6137 822629	15135 1737264	152327	323121	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 725740	7372 1110459	18222 2413387	184516	395446	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 269987	+++++ 399688	+++++ 893736	72075	137368	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1549 632068	7287 898478	17633 1864364	171102	361114	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 503190	5815 749240	14043 1618859	132201	278726	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 516834	+++++ 762110	11612 1640213	129155	284101	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 302051	+++++ 425657	+++++ 888822	83758	168612	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 655195	7403 922060	18332 1877010	182717	385513	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1037040	11313 1458551	28119 3026159	276047	586546	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 775789	7311 1134508	17525 2421096	195512	419275	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 970429	+++++ 1468967	21857 3218343	245023	526958	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1036659	9865 1541620	24863 3181396	272691	578529	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1057966	11604 1485649	28770 2928325	296544	611928	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 776443	6534 1112677	16614 2372408	188789	422385	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 516228	5495 738941	12942 1553418	137317	289752	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2476 1034266	12769 1399063	31383 2763433	293277	607764	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 936305	+++++ 1404935	21203 3079067	222695	494274	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1169020	12346 1579988	29113 3103514	309726	676730	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 959926	8970 1339276	22451 2760363	248054	537814	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1480591	17287 2072411	40602 4165620	406917	855074	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2466092	26667 3456473	64954 6871864	677232	1411663	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1146136	11554 1666946	28395 3436076	308744	648101	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1935366	20367 2673806	52677 5142247	548586	1131931	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 993362	10077 1368706	25407 2711553	272921	575739	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1528915	12912 2117792	30950 4190555	396538	870115	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1253447	12273 1564027	28627 2870870	305656	727635	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2887278	30422 3947133	76245 7602043	815762	1701558	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1440732	16016 2002448	37404 3990539	388852	821482	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3509174	36108 4791699	90113 8922031	980522	2055166	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1124072	+++++ 1574626	29095 3160589	305983	644148	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1585939	+++++ 2228991	35078 4378271	425124	900456	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2935721	29628 3951219	77312 7217096	836079	1728912	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2464084	25662 3357746	64842 6403333	688995	1427047	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2568722	27103 3495394	70959 6656080	729802	1519133	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1304255	9634 1778819	25689 3469218	338972	747852	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2526256	28399 3351949	69592 6328197	724238	1510978	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 127372

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/14/2018 16:58 Calibration End Date: 03/14/2018 23:14 Calibration ID: 39087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2616720	24932 3500959	66120 6598373	741614	1542128	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 3735368	38089 4960559	98805 9002250	1077214	2239587	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3207956	31836 4226835	79307 7716525	924951	1919811	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1770123	15315 2346131	38775 4447950	480795	1023840	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1749177	15600 2333982	34220 4407142	445929	976927	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2041550	11826 2856025	31984 5528204	493921	1096308	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2728958	20728 3629787	54960 6430073	765737	1618410	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1421993	+++++ 1932994	+++++ 3631205	380907	823318	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1686548	15555 2238784	40032 4301294	456161	976691	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1253410	+++++ 1726827	+++++ 3555106	315396	724173	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 894316	+++++ 1208370	18074 2450059	203344	478537	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1132620	14941 1417314	33758 2857876	326225	681610	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1796389	+++++ 2475882	43511 4955128	359689	923412	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 732221	+++++ 994711	17695 2038005	184116	409635	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-03.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-Mar-2018 16:58:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-003
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:18 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 09:02:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.026	5.042	-0.016	87	3467	0.0351	0.1152	
2 Dichlorodifluoromethane	85	5.154	5.154	0.000	88	2217	0.0351	0.0212	
3 Chlorodifluoromethane	51	5.229	5.235	-0.006	8	2532	0.0351	0.0439	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.561	5.561	0.000	76	1852	0.0351	0.0173	
5 Chloromethane	50	5.775	5.754	0.021	91	856	0.0351	0.0247	
6 Butane	43	6.016	6.026	-0.010	95	2655	0.0351	0.0463	
7 Vinyl chloride	62	6.096	6.080	0.016	3	1442	0.0351	0.0359	
8 Butadiene	54	6.171	6.181	-0.010	39	892	0.0351	0.0318	
9 Bromomethane	94	6.984	6.984	0.000	1	1318	0.0351	0.0407	
10 BFB									
11 Chloroethane	64	7.230	7.230	0.000	82	619	0.0351	0.0335	
12 2-Methylbutane	43	7.289	7.300	-0.011	81	1353	0.0351	0.0399	
13 Vinyl bromide	106	7.647	7.637	0.010	59	1177	0.0351	0.0352	
14 Trichlorofluoromethane	101	7.738	7.733	0.005	92	3145	0.0351	0.0372	
15 Pentane	43	7.851	7.861	-0.010	92	2179	0.0351	0.0451	
16 Ethanol	45	8.246	8.241	0.005	71	827	0.0702	0.0985	
17 Ethyl ether	59	8.369	8.348	0.021	41	777	0.0351	0.0378	
19 Acrolein	56		8.728				ND	ND	
20 1,1,2-Trichloro-1,2,2-trif	101	8.739	8.739	0.000	91	2306	0.0351	0.0380	
21 1,1-Dichloroethene	96	8.813	8.803	0.010	81	926	0.0351	0.0324	
22 Acetone	43	9.022	9.001	0.021	96	15286	0.0351	0.3799	
23 Carbon disulfide	76	9.193	9.193	0.000	48	2320	0.0351	0.0328	
24 Isopropyl alcohol	45	9.220	9.209	0.011	100	13722	0.0351	0.3303	
25 3-Chloro-1-propene	41	9.493	9.498	-0.005	6	758	0.0351	0.0285	
26 Acetonitrile	41	9.493	9.621	-0.128	55	1167	0.0351	0.0779	
27 Methylene Chloride	49	9.760	9.760	0.000	87	2703	0.0351	0.1018	
28 2-Methyl-2-propanol	59	9.910	9.889	0.021	93	2824	0.0351	0.0477	
29 Methyl tert-butyl ether	73	10.113	10.097	0.016	94	3266	0.0351	0.0390	
30 trans-1,2-Dichloroethene	61	10.156	10.156	0.000	31	622	0.0351	0.0171	
S 31 1,2-Dichloroethene, Total	61				0		0.0702	0.0519	
32 Acrylonitrile	53	10.285	10.290	-0.005	14	53	0.0351	0.003490	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	0.000	87	1386	0.0351	0.0344	
34 1,1-Dichloroethane	63	10.937	10.948	-0.011	87	1856	0.0351	0.0374	
35 Vinyl acetate	43	10.975	10.980	-0.005	62	1338	0.0351	0.0237	
36 cis-1,2-Dichloroethene	96	11.948	11.948	0.000	14	1029	0.0351	0.0348	M
37 2-Butanone (MEK)	72	11.986	11.970	0.016	95	483	0.0351	0.0334	
38 Ethyl acetate	88		11.981				ND	ND	
39 Tetrahydrofuran	42	12.408	12.371	0.037	47	1241	0.0351	0.0432	
* 40 Chlorobromomethane	128	12.371	12.376	-0.005	83	201253	10.0	10.0	
41 Chloroform	83	12.462	12.467	-0.005	90	2076	0.0351	0.0350	
42 Cyclohexane	84	12.735	12.730	0.005	75	630	0.0351	0.0152	
43 1,1,1-Trichloroethane	97	12.756	12.740	0.016	75	2393	0.0351	0.0366	
44 Carbon tetrachloride	117	12.970	12.965	0.005	91	2424	0.0351	0.0357	
45 Isooctane	57	13.323	13.318	0.005	96	5043	0.0351	0.0360	
46 Benzene	78	13.377	13.382	-0.005	93	4448	0.0351	0.0474	
47 1,2-Dichloroethane	62		13.532				ND	ND	
48 n-Heptane	43	13.628	13.639	-0.011	51	952	0.0351	0.0202	
* 49 1,4-Difluorobenzene	114	14.072	14.078	-0.006	94	1057402	10.0	10.0	
50 n-Butanol	56	14.345	14.340	0.005	81	1982	0.0351	0.1099	
51 Trichloroethene	95	14.506	14.506	0.000	87	1549	0.0351	0.0367	M
A 52 GRO	1	14.728	(7.290-22.166)		0	3492390	0.0351	0	
53 1,2-Dichloropropane	63	14.992	14.998	-0.006	81	1087	0.0351	0.0322	
55 Methyl methacrylate	69		15.078				ND	ND	
56 1,4-Dioxane	88	15.174	15.158	0.016	27	1853	0.0351	0.0928	
57 Dibromomethane	174	15.217	15.222	-0.005	54	639	0.0351	0.0147	
58 Dichlorobromomethane	83	15.452	15.458	-0.006	90	1512	0.0351	0.0224	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	81	1388	0.0351	0.0287	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	3835634	0.0351	50.8	
61 4-Methyl-2-pentanone (MIBK	43	16.517	16.512	0.005	88	3154	0.0351	0.0500	
63 Toluene	92	16.833	16.827	0.006	91	1870	0.0351	0.0291	
62 n-Octane	43	16.822	16.827	-0.005	73	2133	0.0351	0.0323	
64 trans-1,3-Dichloropropene	75	17.325	17.346	-0.021	1	173	0.0351	0.003682	
65 1,1,2-Trichloroethane	83		17.699				ND	ND	
66 Tetrachloroethene	166	17.822	17.817	0.005	94	2476	0.0351	0.0378	M
67 2-Hexanone	43	18.101	18.090	0.011	95	4418	0.0351	0.0798	
68 Chlorodibromomethane	129	18.422	18.427	-0.005	80	2310	0.0351	0.0337	
69 Ethylene Dibromide	107	18.705	18.700	0.005	29	1762	0.0351	0.0319	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	85	899994	10.0	10.0	
72 Chlorobenzene	112	19.604	19.599	0.005	18	3507	0.0351	0.0386	
73 Ethylbenzene	91	19.732	19.727	0.005	96	5852	0.0351	0.0394	
74 n-Nonane	57	19.812	19.807	0.005	87	2331	0.0351	0.0340	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	1970	0.0702	0.0338	
S 76 Xylenes, Total	106				0		0.1052	0.0669	
77 o-Xylene	106	20.743	20.738	0.005	95	1942	0.0351	0.0330	
78 Styrene	104	20.786	20.781	0.005	90	2398	0.0351	0.0282	
79 Bromoform	173	21.166	21.171	-0.005	94	2264	0.0351	0.0329	
80 Isopropylbenzene	105	21.348	21.343	0.005	95	5870	0.0351	0.0340	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	94	3189	0.0351	0.0369	
82 N-Propylbenzene	91	22.017	22.011	0.006	98	6395	0.0351	0.0309	
83 1,2,3-Trichloropropane	75	22.049	22.043	0.006	87	3024	0.0351	0.0447	
84 n-Decane	57	22.156	22.156	0.000	80	2325	0.0351	0.0252	
85 4-Ethyltoluene	105	22.193	22.193	0.000	96	4791	0.0351	0.0277	
86 2-Chlorotoluene	91	22.214	22.215	-0.001	95	5384	0.0351	0.0368	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.295	22.289	0.006	93	5296	0.0351	0.0343	
88 Alpha Methyl Styrene	118	22.653	22.648	0.005	88	1555	0.0351	0.0220	
89 tert-Butylbenzene	119	22.765	22.771	-0.006	94	5115	0.0351	0.0335	
90 1,2,4-Trimethylbenzene	105	22.867	22.862	0.005	94	3942	0.0351	0.0259	
91 sec-Butylbenzene	105	23.086	23.087	-0.001	96	6579	0.0351	0.0298	
92 4-Isopropyltoluene	119	23.284	23.284	0.000	96	4918	0.0351	0.0264	
93 1,3-Dichlorobenzene	146	23.333	23.327	0.006	94	2659	0.0351	0.0270	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	92	2720	0.0351	0.0286	
95 Benzyl chloride	91	23.675	23.670	0.005	93	1918	0.0351	0.0185	
96 n-Butylbenzene	91	23.675	23.878	-0.203	74	1918	0.0351	0.0129	
97 Undecane	57	23.889	23.884	0.005	73	1556	0.0351	0.0186	
98 1,2-Dichlorobenzene	146	24.039	24.033	0.006	90	1650	0.0351	0.0172	
99 Dodecane	57	25.574	25.569	0.005	65	1344	0.0351	0.0181	
100 1,2,4-Trichlorobenzene	180	26.730	26.708	0.022	68	1015	0.0351	0.0206	
101 Hexachlorobutadiene	225	26.890	26.901	-0.011	92	3399	0.0351	0.0481	
102 Naphthalene	128	27.281	27.243	0.038	93	1134	0.0351	0.0114	
103 1,2,3-Trichlorobenzene	180	27.778	27.757	0.021	68	1433	0.0351	0.0337	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00184	Amount Added: 35.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

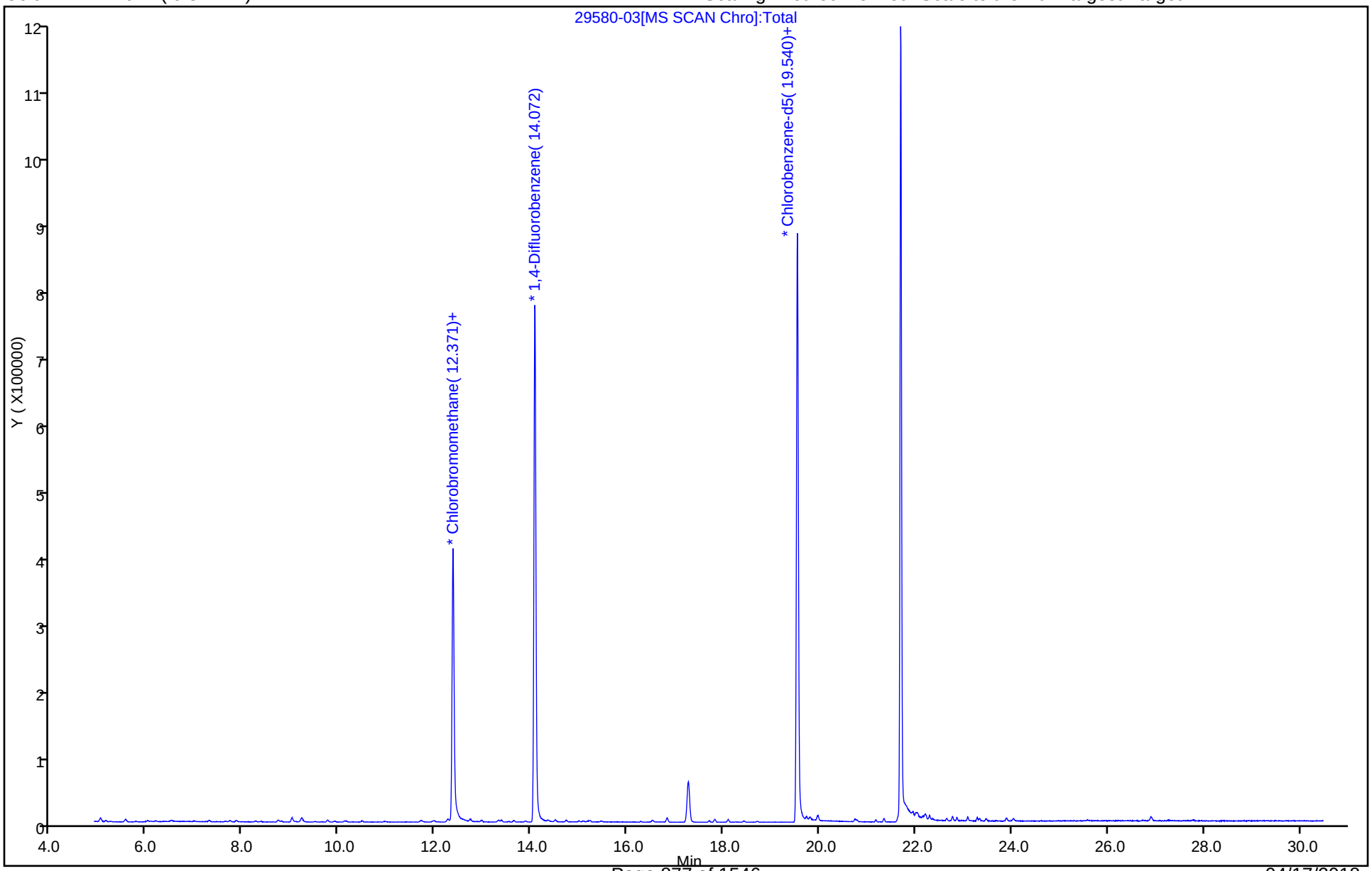
Report Date: 15-Mar-2018 10:07:19 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-03.d

Injection Date:	14-Mar-2018 16:58:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

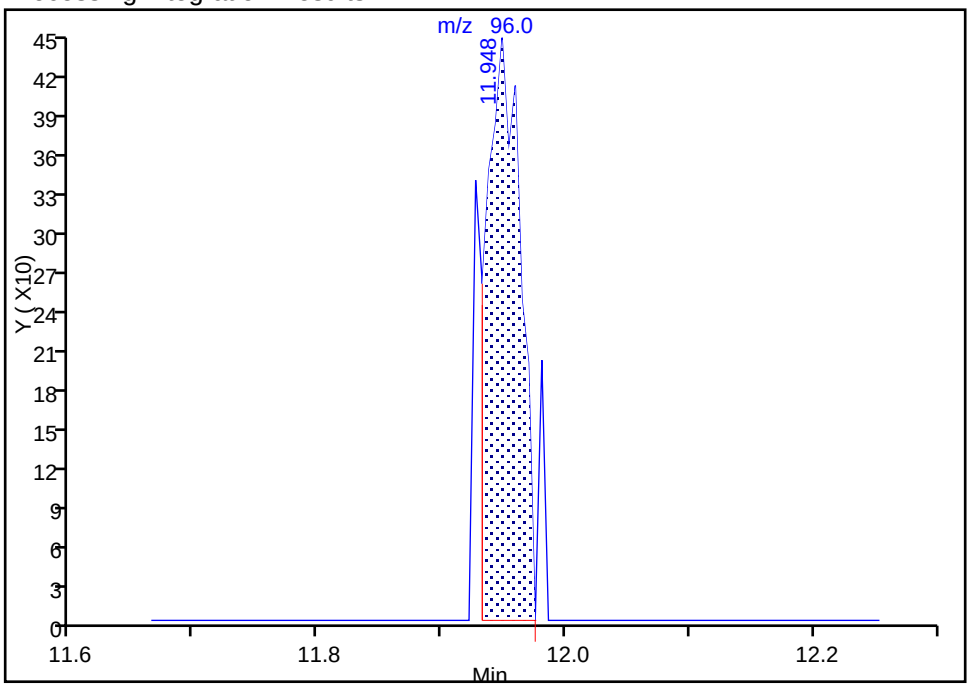
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-03.d				
Injection Date:	14-Mar-2018 16:58:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

36 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

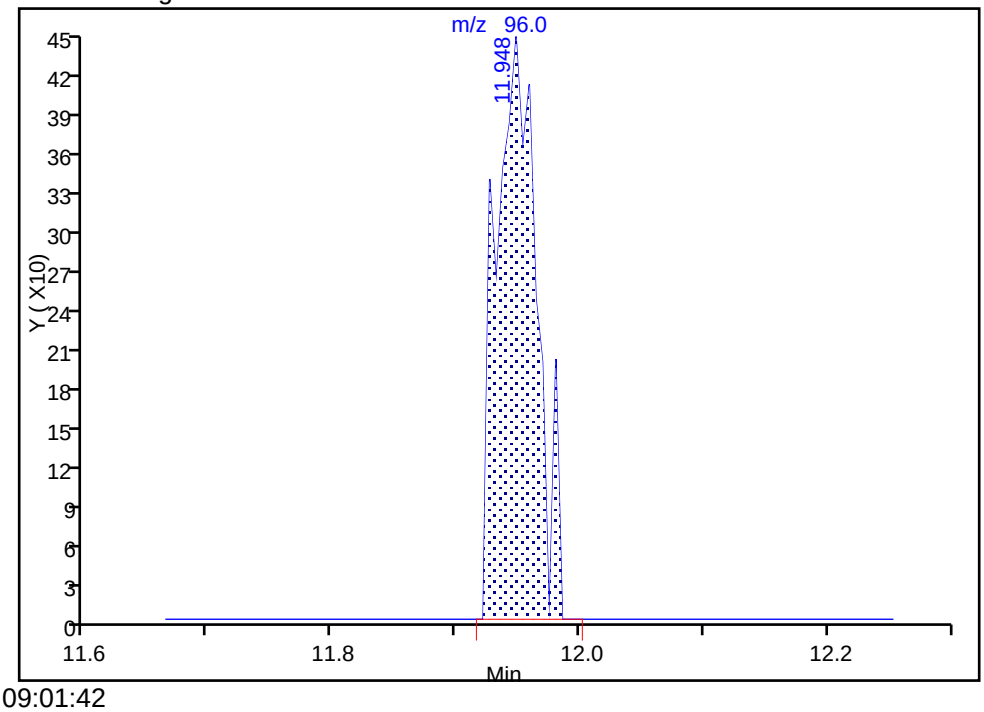
Processing Integration Results

RT: 11.95
Area: 855
Amount: 0.029661
Amount Units: ppb v/v



Manual Integration Results

RT: 11.95
Area: 1029
Amount: 0.034777
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:01:42

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

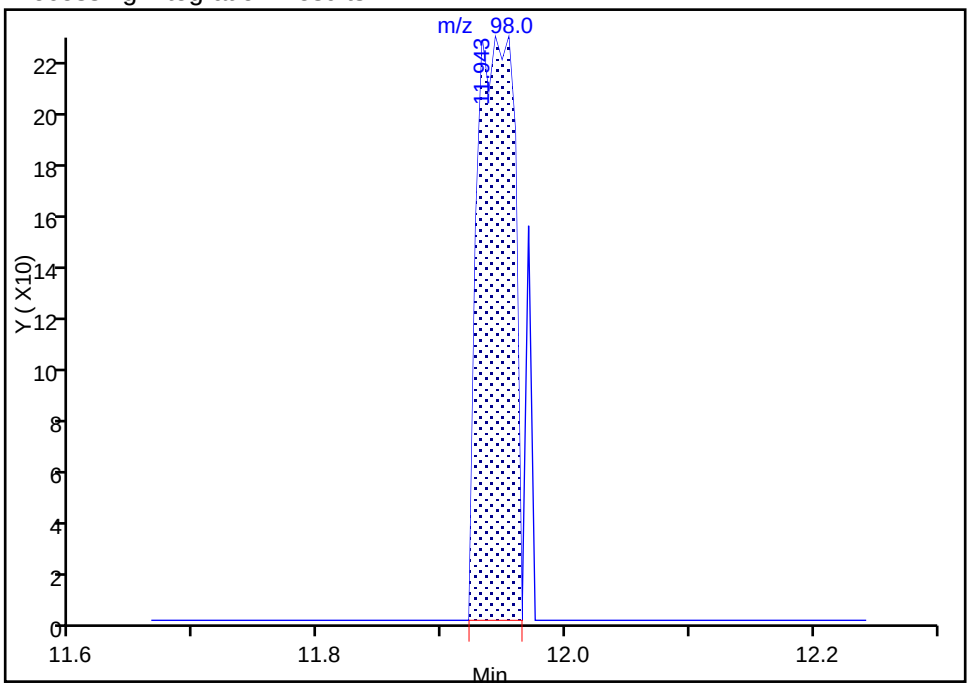
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-03.d
Injection Date: 14-Mar-2018 16:58:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

36 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 2

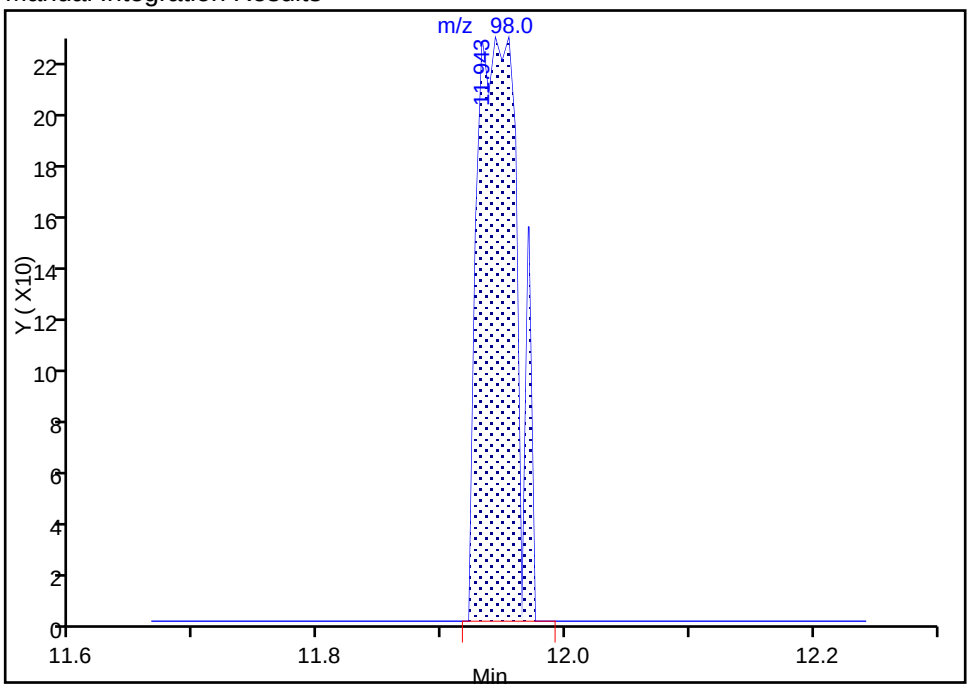
Processing Integration Results

RT: 11.94
Area: 456
Amount: 0.029661
Amount Units: ppb v/v



Manual Integration Results

RT: 11.94
Area: 505
Amount: 0.034777
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:01:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

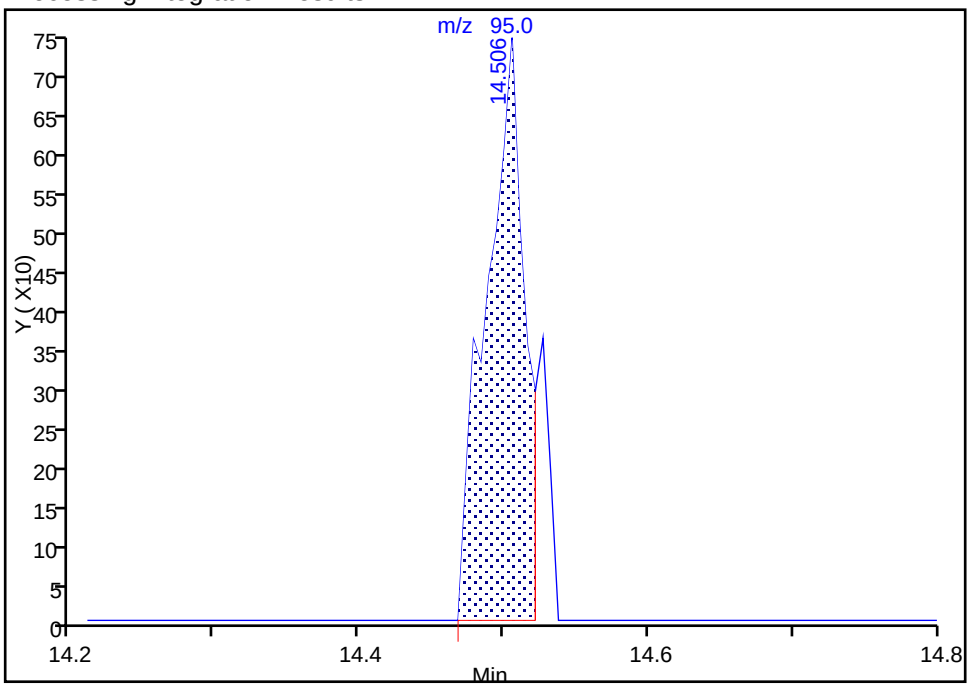
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-03.d
Injection Date: 14-Mar-2018 16:58:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

51 Trichloroethene, CAS: 79-01-6

Signal: 1

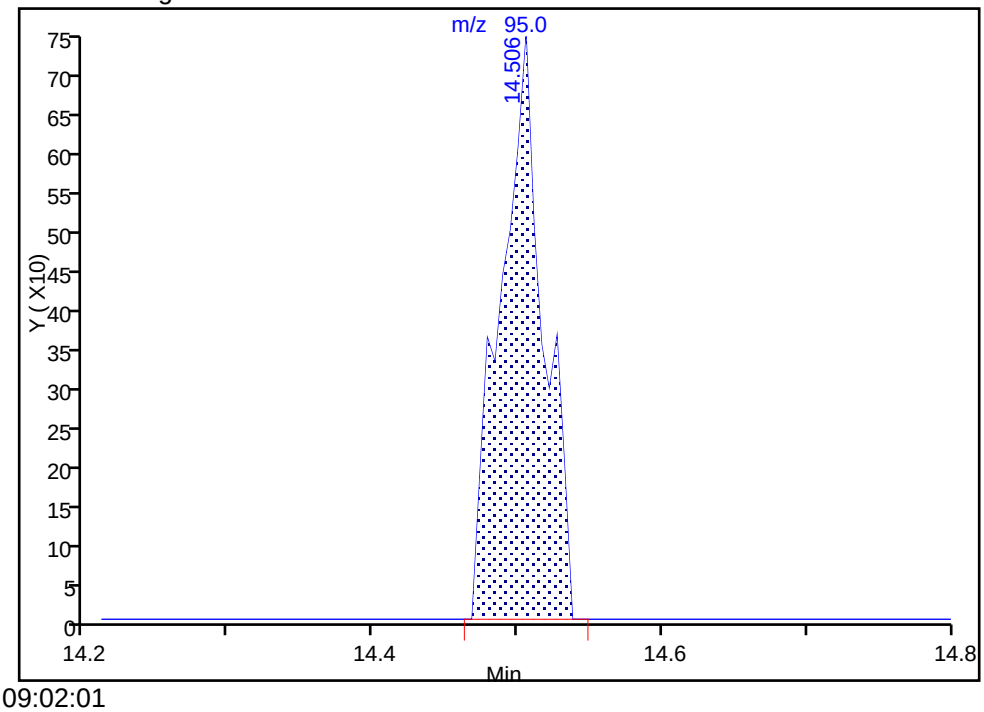
Processing Integration Results

RT: 14.51
Area: 1374
Amount: 0.033108
Amount Units: ppb v/v



Manual Integration Results

RT: 14.51
Area: 1549
Amount: 0.036736
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:02:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

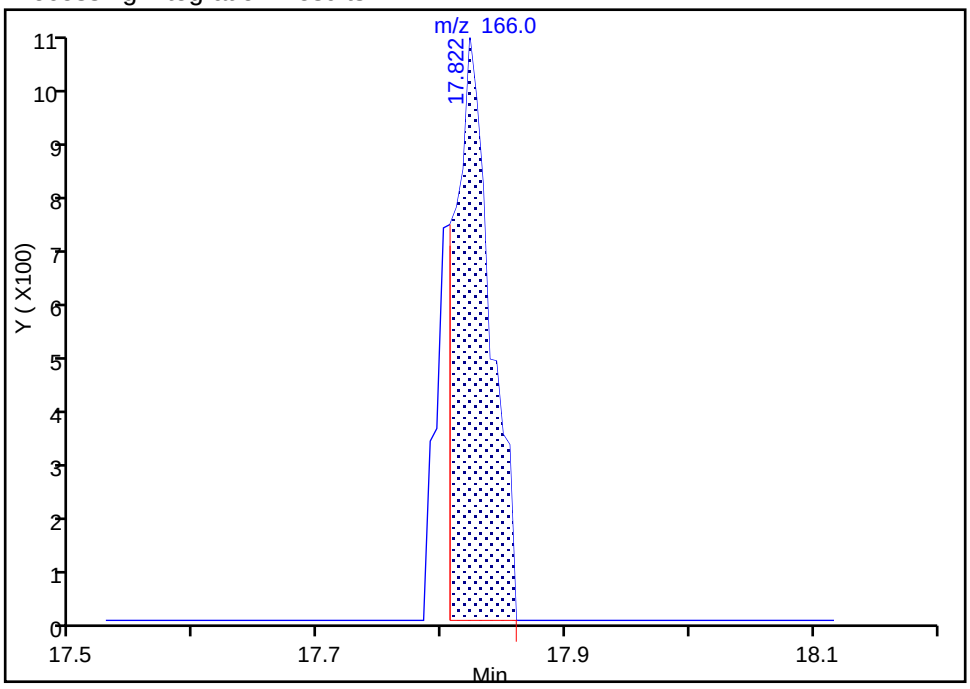
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-03.d				
Injection Date:	14-Mar-2018 16:58:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

66 Tetrachloroethene, CAS: 127-18-4

Signal: 1

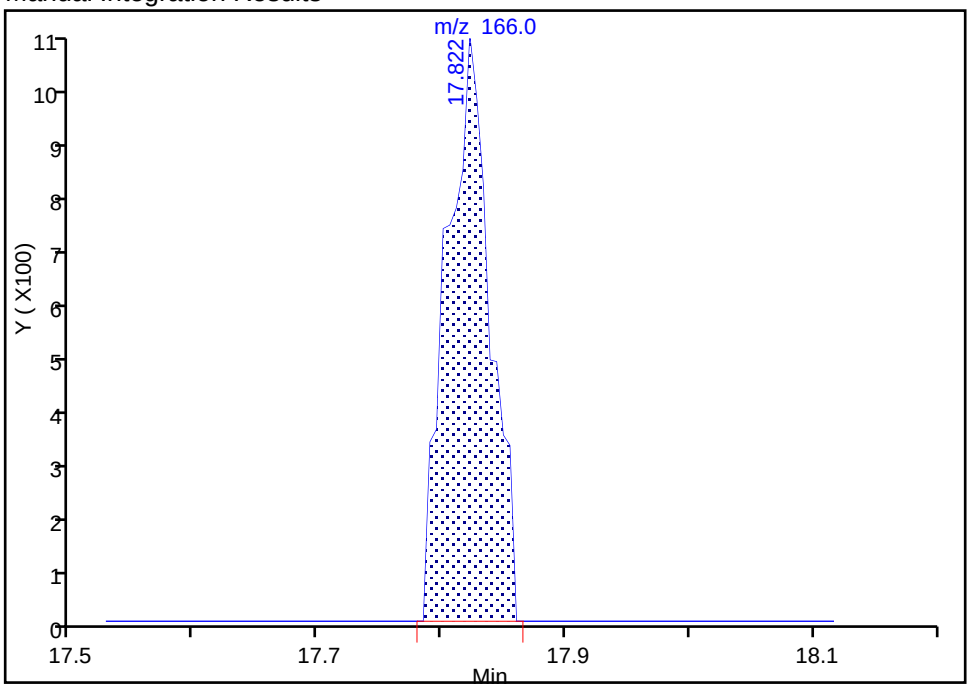
Processing Integration Results

RT: 17.82
Area: 2051
Amount: 0.033716
Amount Units: ppb v/v



Manual Integration Results

RT: 17.82
Area: 2476
Amount: 0.037834
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:02:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

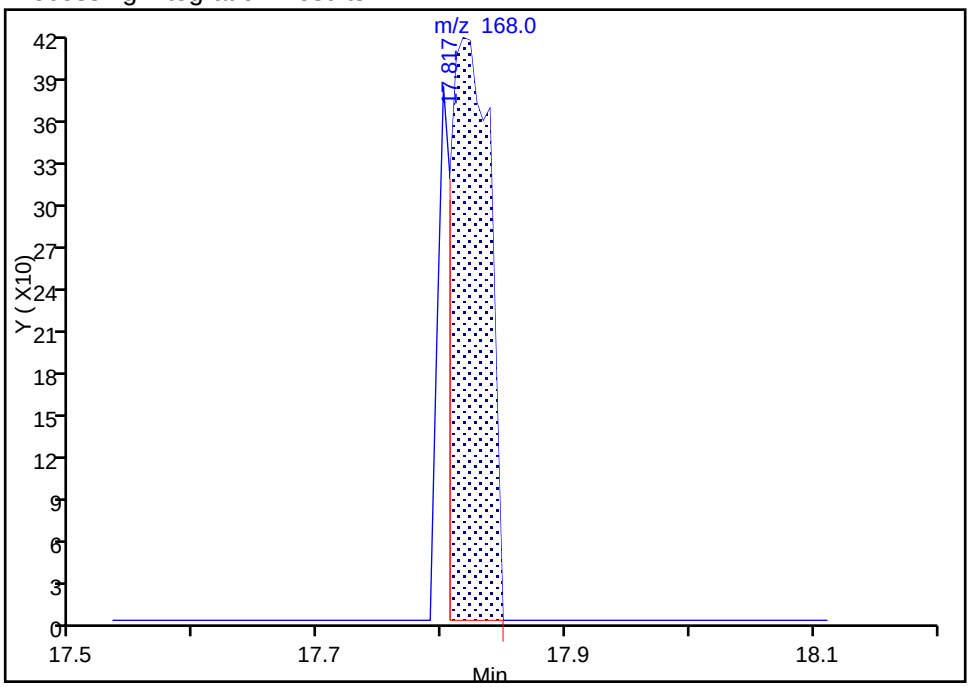
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-03.d
Injection Date: 14-Mar-2018 16:58:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

66 Tetrachloroethene, CAS: 127-18-4

Signal: 2

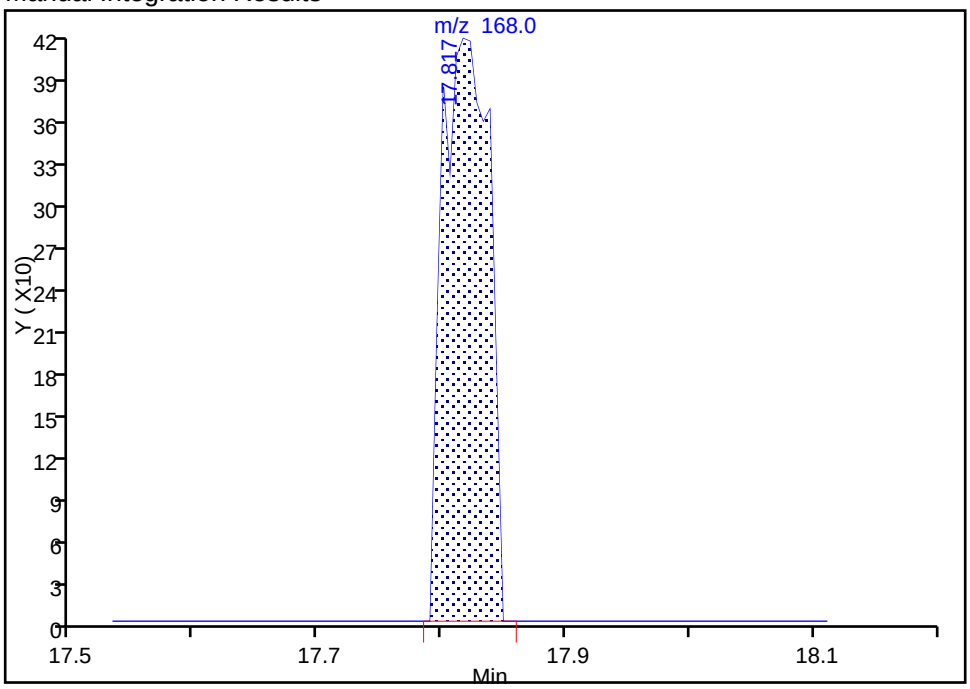
Processing Integration Results

RT: 17.82
Area: 906
Amount: 0.033716
Amount Units: ppb v/v



Manual Integration Results

RT: 17.82
Area: 1093
Amount: 0.037834
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:02:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

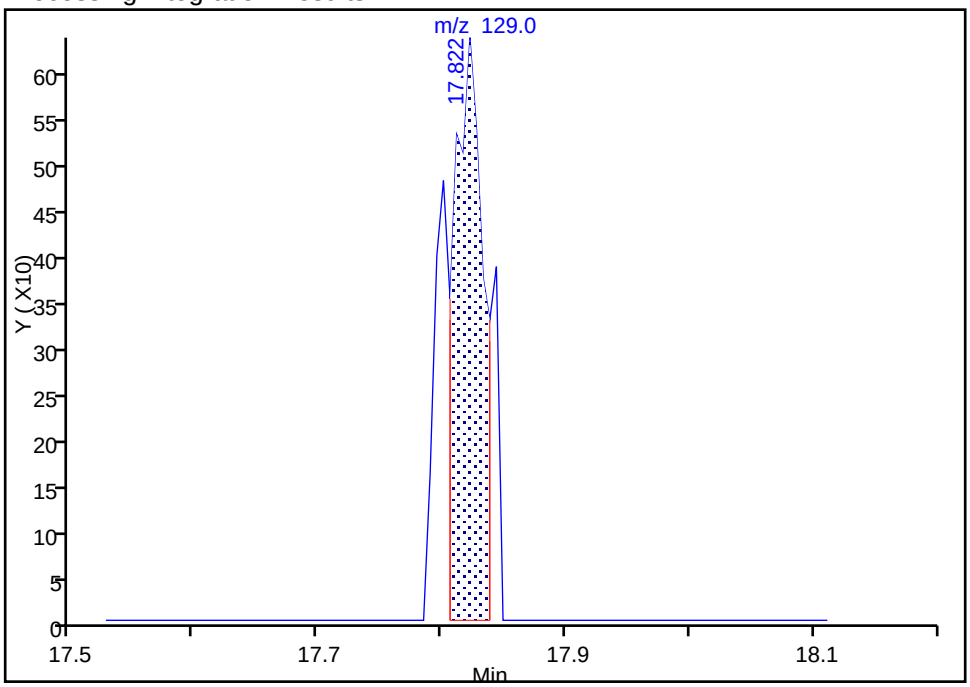
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-03.d
Injection Date: 14-Mar-2018 16:58:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

66 Tetrachloroethene, CAS: 127-18-4

Signal: 3

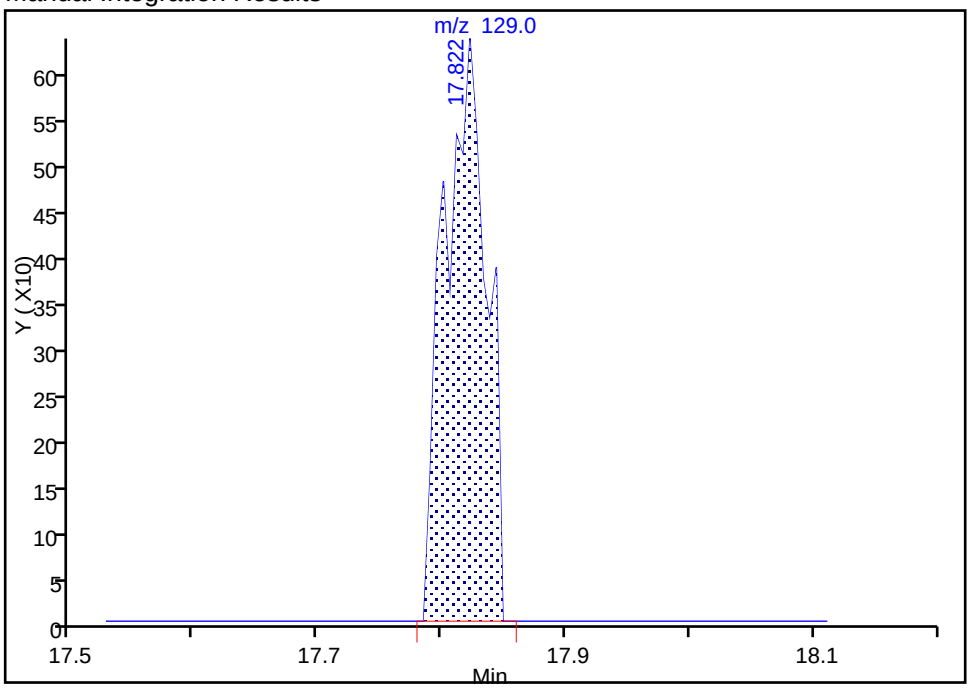
Processing Integration Results

RT: 17.82
Area: 1047
Amount: 0.033716
Amount Units: ppb v/v



Manual Integration Results

RT: 17.82
Area: 1505
Amount: 0.037834
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:02:15
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-Mar-2018 17:52:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-004
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:20 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 09:13:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.037	5.042	-0.005	95	8015	0.2004	0.2979	
2 Dichlorodifluoromethane	85	5.149	5.154	-0.005	99	20886	0.2004	0.2235	
3 Chlorodifluoromethane	51	5.245	5.235	0.010	97	11852	0.2004	0.2297	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.556	5.561	-0.005	86	20641	0.2004	0.2154	
5 Chloromethane	50	5.764	5.754	0.010	97	7651	0.2004	0.2468	
6 Butane	43	6.021	6.026	-0.005	98	11674	0.2004	0.2277	
7 Vinyl chloride	62	6.085	6.080	0.005	96	7571	0.2004	0.2107	
8 Butadiene	54	6.176	6.181	-0.005	92	4988	0.2004	0.1989	
10 BFB									
9 Bromomethane	94	6.979	6.984	-0.005	97	6208	0.2004	0.2143	
11 Chloroethane	64	7.230	7.230	0.000	52	3488	0.2004	0.2113	
12 2-Methylbutane	43	7.294	7.300	-0.006	92	6520	0.2004	0.2151	
13 Vinyl bromide	106	7.637	7.637	0.000	83	6090	0.2004	0.2035	
14 Trichlorofluoromethane	101	7.728	7.733	-0.005	98	15874	0.2004	0.2098	
15 Pentane	43	7.856	7.861	-0.005	97	9094	0.2004	0.2104	
16 Ethanol	45	8.246	8.241	0.005	98	7495	0.4009	1.00	
17 Ethyl ether	59	8.359	8.348	0.011	90	3409	0.2004	0.1857	
19 Acrolein	56	8.733	8.728	0.005	36	1853	0.2004	0.2955	
20 1,1,2-Trichloro-1,2,2-trif	101	8.728	8.739	-0.011	95	11446	0.2004	0.2111	
21 1,1-Dichloroethene	96	8.803	8.803	0.000	96	4998	0.2004	0.1957	
22 Acetone	43	9.006	9.001	0.005	98	24118	0.2004	0.6702	
23 Carbon disulfide	76	9.188	9.193	-0.005	99	12483	0.2004	0.1971	
24 Isopropyl alcohol	45	9.215	9.209	0.006	100	20999	0.2004	0.5652	
25 3-Chloro-1-propene	41	9.498	9.498	0.000	94	4554	0.2004	0.1912	
26 Acetonitrile	41	9.621	9.621	0.000	97	2593	0.2004	0.1935	
27 Methylene Chloride	49	9.760	9.760	0.000	86	6517	0.2004	0.2745	
28 2-Methyl-2-propanol	59	9.889	9.889	0.000	93	11717	0.2004	0.2215	
29 Methyl tert-butyl ether	73	10.103	10.097	0.006	96	14683	0.2004	0.1960	
30 trans-1,2-Dichloroethene	61	10.146	10.156	-0.010	95	6255	0.2004	0.1921	
S 31 1,2-Dichloroethene, Total	61				0		0.4009	0.3914	
32 Acrylonitrile	53	10.290	10.290	0.000	71	2191	0.2004	0.1613	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	0.000	90	6858	0.2004	0.1901	
34 1,1-Dichloroethane	63	10.937	10.948	-0.011	99	8844	0.2004	0.1992	
35 Vinyl acetate	43	10.975	10.980	-0.005	100	6712	0.2004	0.1328	
36 cis-1,2-Dichloroethene	96	11.943	11.948	-0.005	90	5273	0.2004	0.1993	
37 2-Butanone (MEK)	72	11.975	11.970	0.005	97	2685	0.2004	0.2079	
38 Ethyl acetate	88		11.981				ND	ND	
39 Tetrahydrofuran	42	12.392	12.371	0.021	85	5042	0.2004	0.2000	
* 40 Chlorobromomethane	128	12.371	12.376	-0.005	83	179979	10.0	10.0	
41 Chloroform	83	12.457	12.467	-0.010	53	10798	0.2004	0.2038	
42 Cyclohexane	84	12.724	12.730	-0.006	96	7037	0.2004	0.1940	M
43 1,1,1-Trichloroethane	97	12.740	12.740	0.000	94	11893	0.2004	0.2075	
44 Carbon tetrachloride	117	12.960	12.965	-0.005	96	12029	0.2004	0.2018	
45 Isooctane	57	13.313	13.318	-0.005	98	23912	0.2004	0.1943	
46 Benzene	78	13.377	13.382	-0.005	94	17217	0.2004	0.2089	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	94	6137	0.2004	0.1876	
48 n-Heptane	43	13.634	13.639	-0.005	87	7372	0.2004	0.1778	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	93	927896	10.0	10.0	
50 n-Butanol	56	14.340	14.340	0.000	89	7204	0.2004	0.4554	
51 Trichloroethene	95	14.500	14.506	-0.006	97	7287	0.2004	0.1969	
A 52 GRO	1	14.728	(7.290-22.166)		0	5538692	0.2004	0	
53 1,2-Dichloropropane	63	14.992	14.998	-0.006	88	5815	0.2004	0.1965	
55 Methyl methacrylate	69	15.083	15.078	0.005	95	5244	0.2004	0.1801	
56 1,4-Dioxane	88	15.174	15.158	0.016	91	5979	0.2004	0.3411	
57 Dibromomethane	174	15.222	15.222	0.000	89	7403	0.2004	0.1942	M
58 Dichlorobromomethane	83	15.447	15.458	-0.011	98	11313	0.2004	0.1911	
59 cis-1,3-Dichloropropene	75	16.276	16.282	-0.006	89	7311	0.2004	0.1721	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	6945369	0.2004	104.7	
61 4-Methyl-2-pentanone (MIBK	43	16.522	16.512	0.010	94	14873	0.2004	0.2686	
62 n-Octane	43	16.822	16.827	-0.005	77	9865	0.2004	0.1705	
63 Toluene	92	16.827	16.827	0.000	92	11604	0.2004	0.1986	
64 trans-1,3-Dichloropropene	75	17.346	17.346	0.000	47	6534	0.2004	0.1585	M
65 1,1,2-Trichloroethane	83	17.710	17.699	0.011	94	5495	0.2004	0.1953	
66 Tetrachloroethene	166	17.822	17.817	0.005	96	12769	0.2004	0.2148	
67 2-Hexanone	43	18.090	18.090	0.000	98	24291	0.2004	0.4827	
68 Chlorodibromomethane	129	18.432	18.427	0.005	96	12346	0.2004	0.1984	
69 Ethylene Dibromide	107	18.705	18.700	0.005	98	8970	0.2004	0.1787	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	85	817665	10.0	10.0	
72 Chlorobenzene	112	19.599	19.599	0.000	97	17287	0.2004	0.2095	
73 Ethylbenzene	91	19.732	19.727	0.005	98	26667	0.2004	0.1978	
74 n-Nonane	57	19.807	19.807	0.000	85	11554	0.2004	0.1857	
75 m-Xylene & p-Xylene	106	19.968	19.962	0.006	0	20367	0.4009	0.3849	
S 76 Xylenes, Total	106				0		0.6013	0.5735	
77 o-Xylene	106	20.733	20.738	-0.005	98	10077	0.2004	0.1886	
78 Styrene	104	20.781	20.781	0.000	95	12912	0.2004	0.1674	
79 Bromoform	173	21.171	21.171	0.000	98	12273	0.2004	0.1960	
80 Isopropylbenzene	105	21.343	21.343	0.000	95	30422	0.2004	0.1939	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	98	16016	0.2004	0.2040	
82 N-Propylbenzene	91	22.017	22.011	0.006	99	36108	0.2004	0.1921	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	96	13454	0.2004	0.2191	
84 n-Decane	57	22.156	22.156	0.000	92	13113	0.2004	0.1561	
85 4-Ethyltoluene	105	22.193	22.193	0.000	98	29628	0.2004	0.1887	
86 2-Chlorotoluene	91	22.215	22.215	0.000	97	25662	0.2004	0.1932	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.295	22.289	0.006	94	27103	0.2004	0.1931	
88 Alpha Methyl Styrene	118	22.643	22.648	-0.006	87	9634	0.2004	0.1499	
89 tert-Butylbenzene	119	22.766	22.771	-0.005	95	28399	0.2004	0.2049	
90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.000	96	24932	0.2004	0.1803	
91 sec-Butylbenzene	105	23.087	23.087	0.000	98	38089	0.2004	0.1902	
92 4-Isopropyltoluene	119	23.284	23.284	0.000	97	31836	0.2004	0.1879	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	96	15315	0.2004	0.1709	
94 1,4-Dichlorobenzene	146	23.472	23.466	0.006	96	15600	0.2004	0.1804	
95 Benzyl chloride	91	23.675	23.670	0.005	98	11826	0.2004	0.1253	
96 n-Butylbenzene	91	23.884	23.878	0.006	96	20728	0.2004	0.1537	
97 Undecane	57	23.884	23.884	0.000	66	9243	0.2004	0.1219	
98 1,2-Dichlorobenzene	146	24.039	24.033	0.006	97	15555	0.2004	0.1785	
99 Dodecane	57	25.569	25.569	0.000	95	8664	0.2004	0.1284	
100 1,2,4-Trichlorobenzene	180	26.708	26.708	0.000	90	7908	0.2004	0.1769	M
101 Hexachlorobutadiene	225	26.901	26.901	0.000	96	14941	0.2004	0.2329	
102 Naphthalene	128	27.249	27.243	0.006	99	18833	0.2004	0.2080	M
103 1,2,3-Trichlorobenzene	180	27.751	27.757	-0.006	94	9408	0.2004	0.2436	M

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00184	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

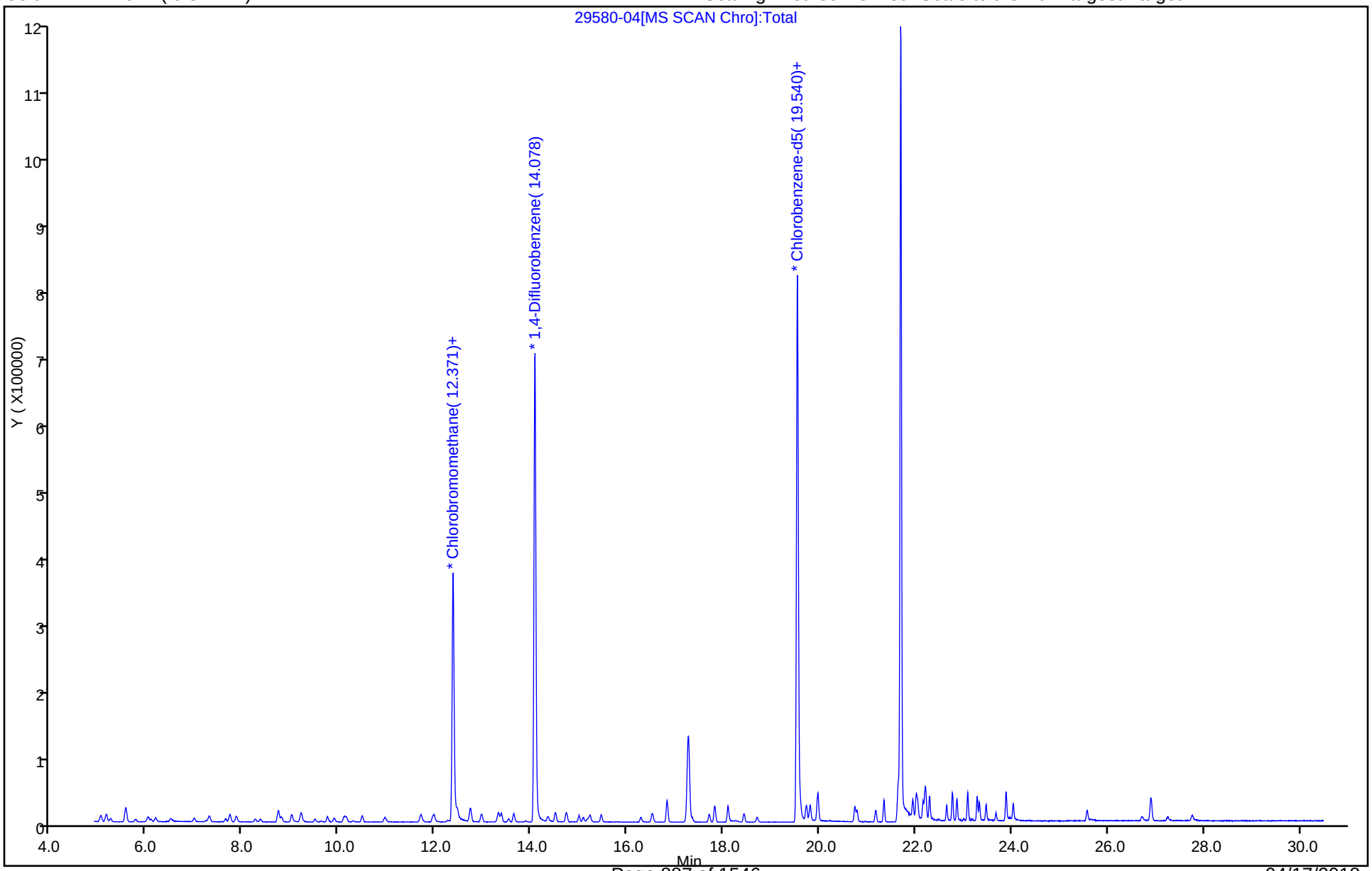
Report Date: 15-Mar-2018 10:07:20 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d

Injection Date:	14-Mar-2018 17:52:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

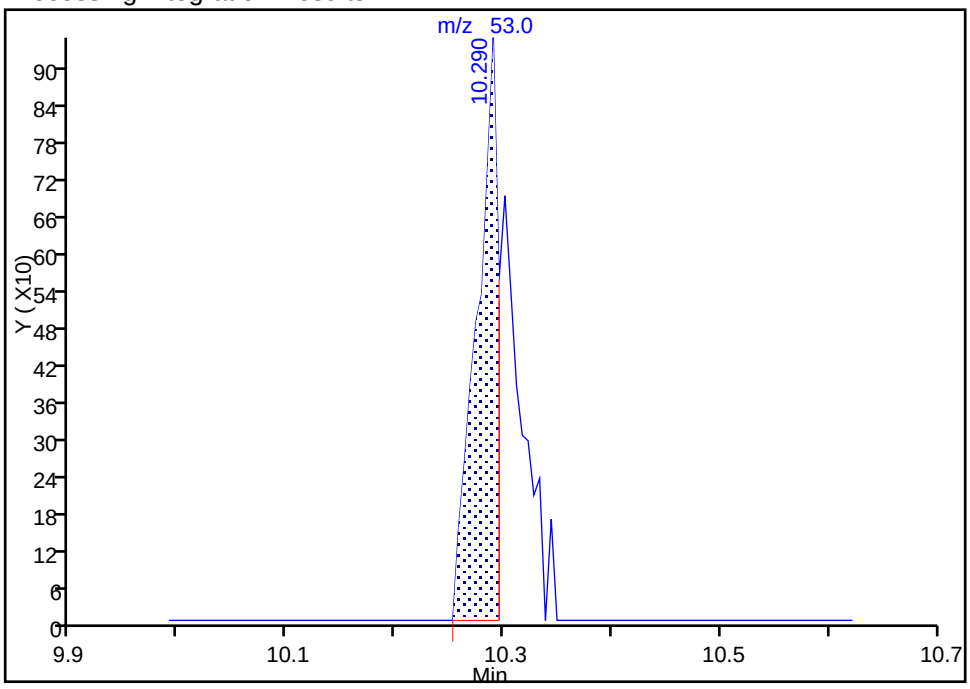
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d				
Injection Date:	14-Mar-2018 17:52:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

32 Acrylonitrile, CAS: 107-13-1

Signal: 1

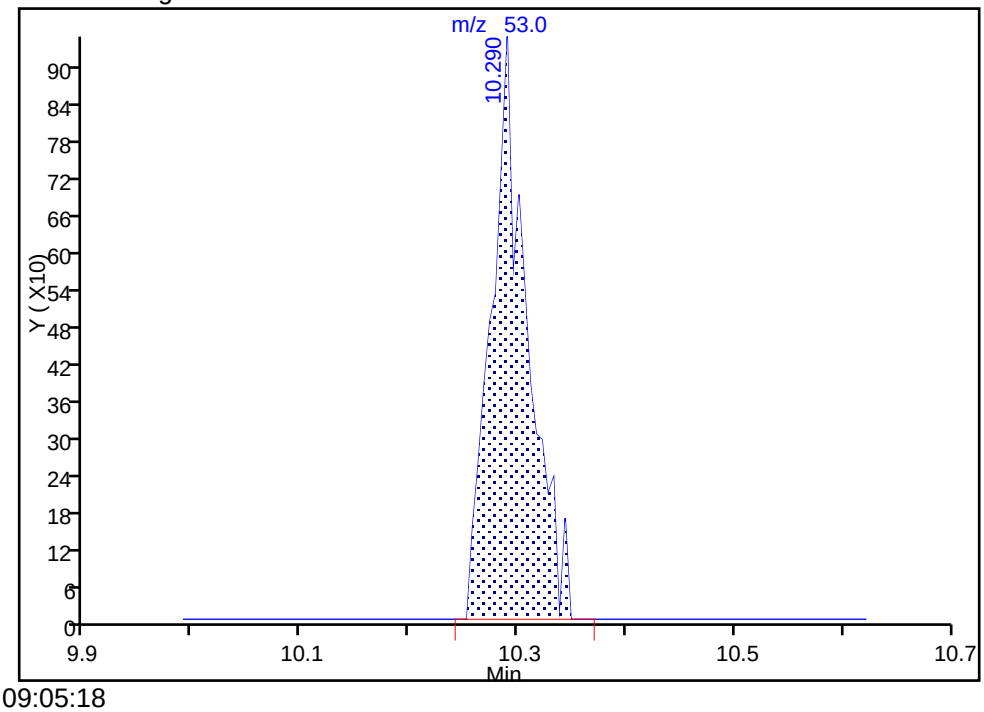
Processing Integration Results

RT: 10.29
Area: 1294
Amount: 0.106091
Amount Units: ppb v/v



Manual Integration Results

RT: 10.29
Area: 2191
Amount: 0.161318
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:05:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

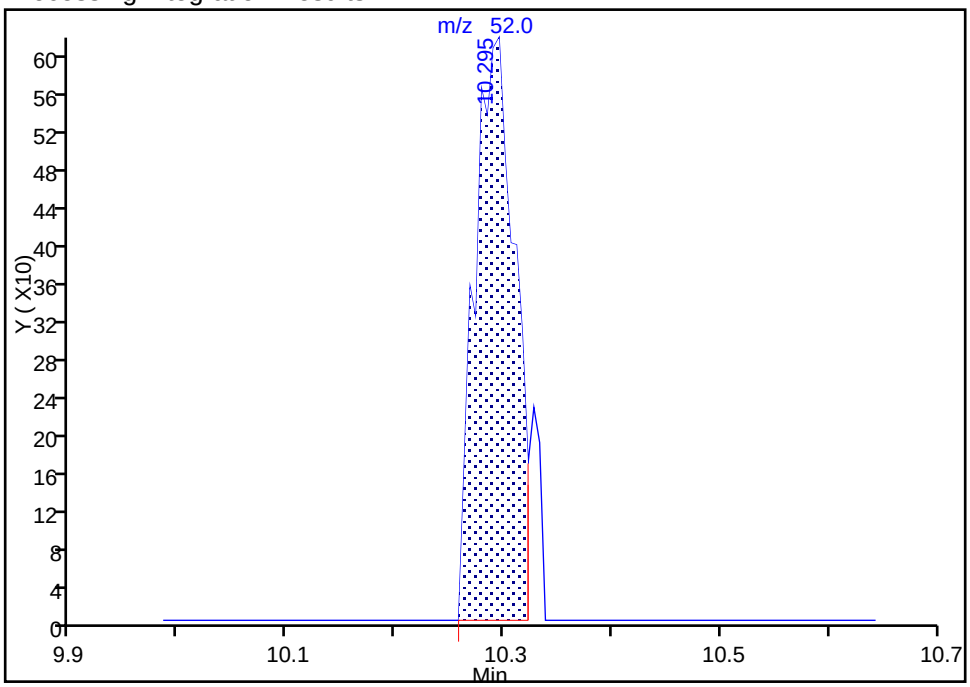
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d
Injection Date: 14-Mar-2018 17:52:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

32 Acrylonitrile, CAS: 107-13-1

Signal: 2

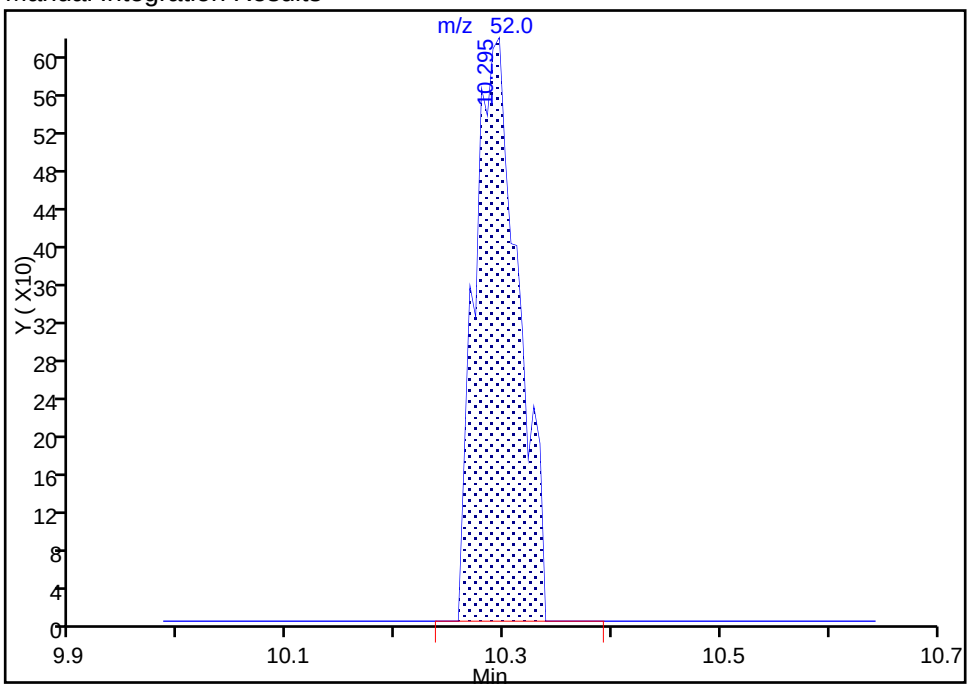
Processing Integration Results

RT: 10.30
Area: 1567
Amount: 0.106091
Amount Units: ppb v/v



Manual Integration Results

RT: 10.30
Area: 1700
Amount: 0.161318
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:05:20
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

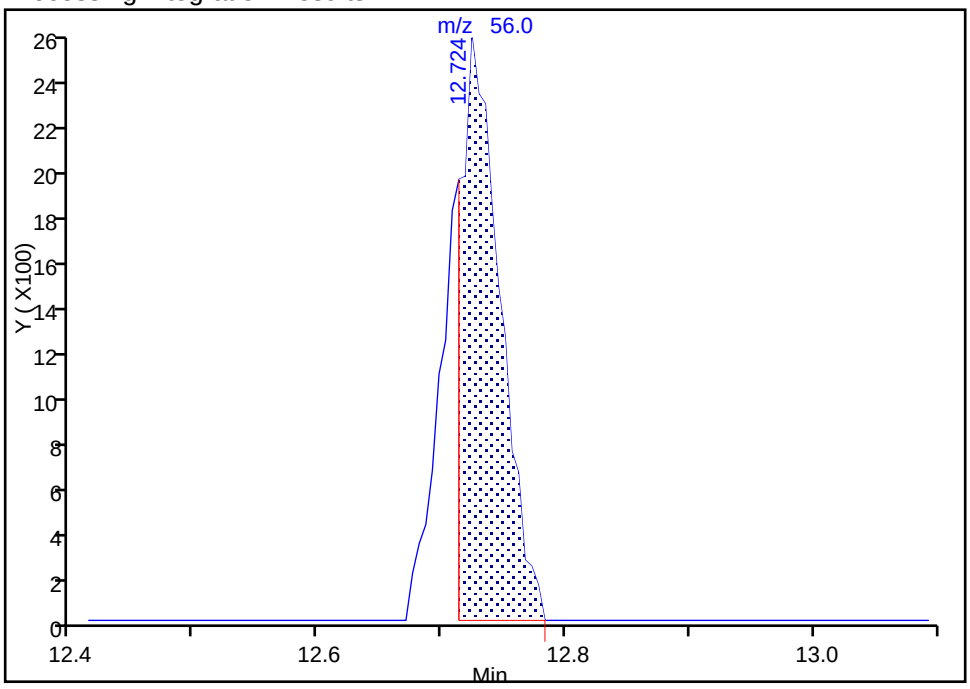
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d				
Injection Date:	14-Mar-2018 17:52:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Cyclohexane, CAS: 110-82-7

Signal: 2

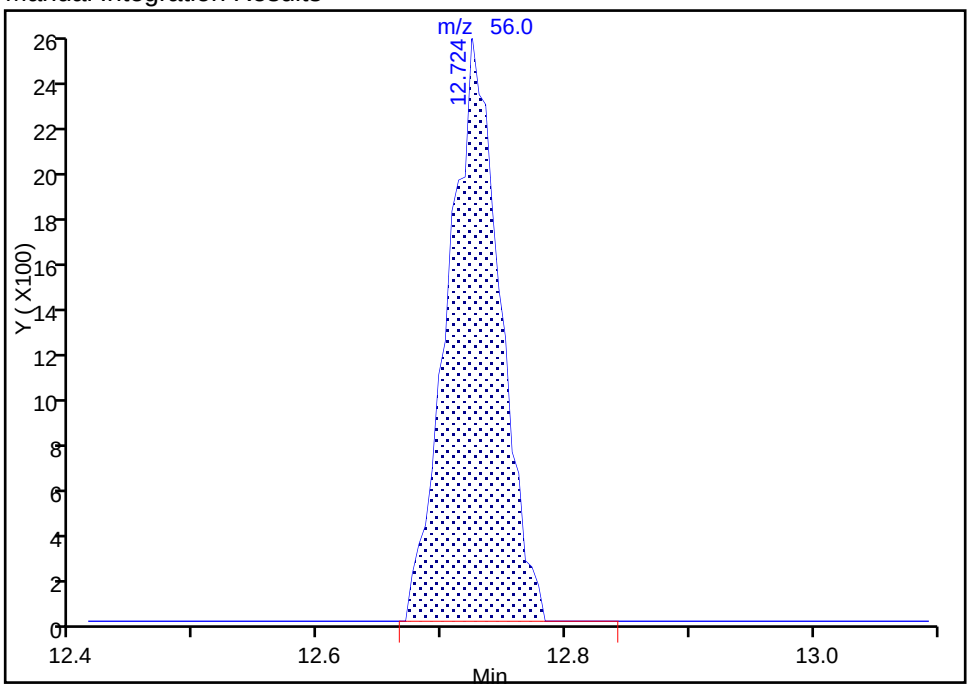
Processing Integration Results

RT: 12.72
Area: 5679
Amount: 0.214316
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 7532
Amount: 0.194045
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:10:44

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

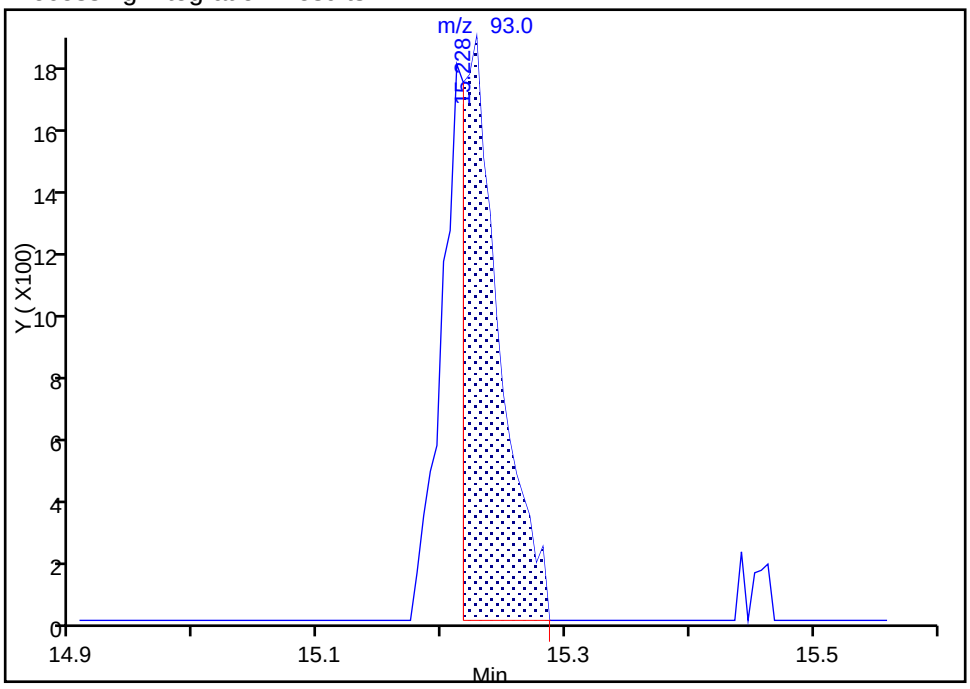
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d				
Injection Date:	14-Mar-2018 17:52:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

57 Dibromomethane, CAS: 74-95-3

Signal: 2

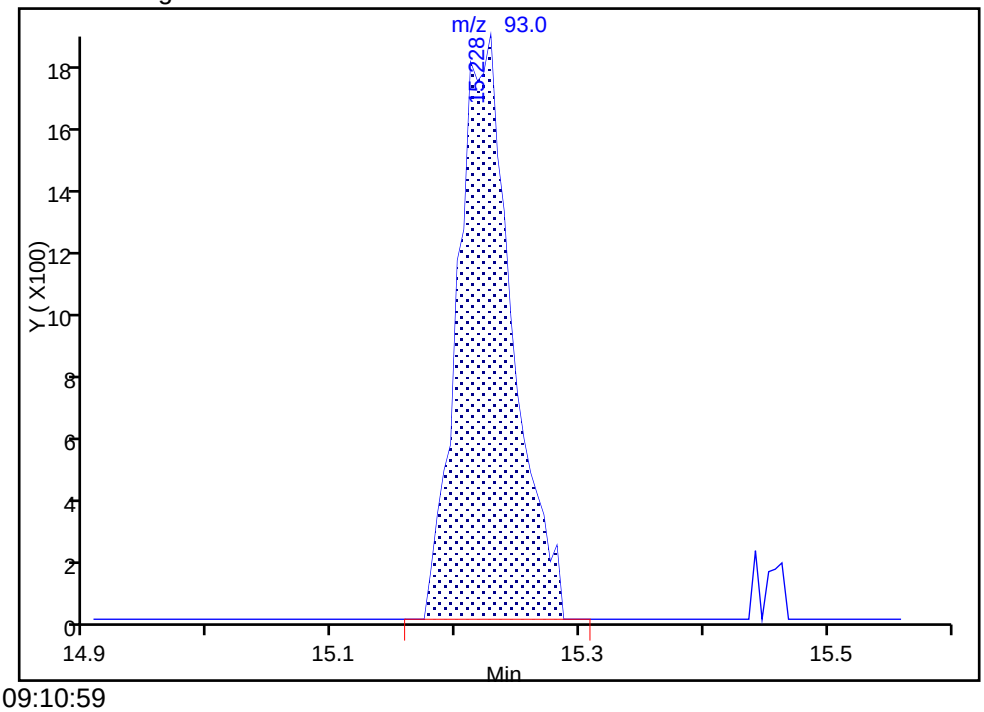
Processing Integration Results

RT: 15.23
Area: 3850
Amount: 0.215922
Amount Units: ppb v/v



Manual Integration Results

RT: 15.23
Area: 5678
Amount: 0.194206
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:10:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

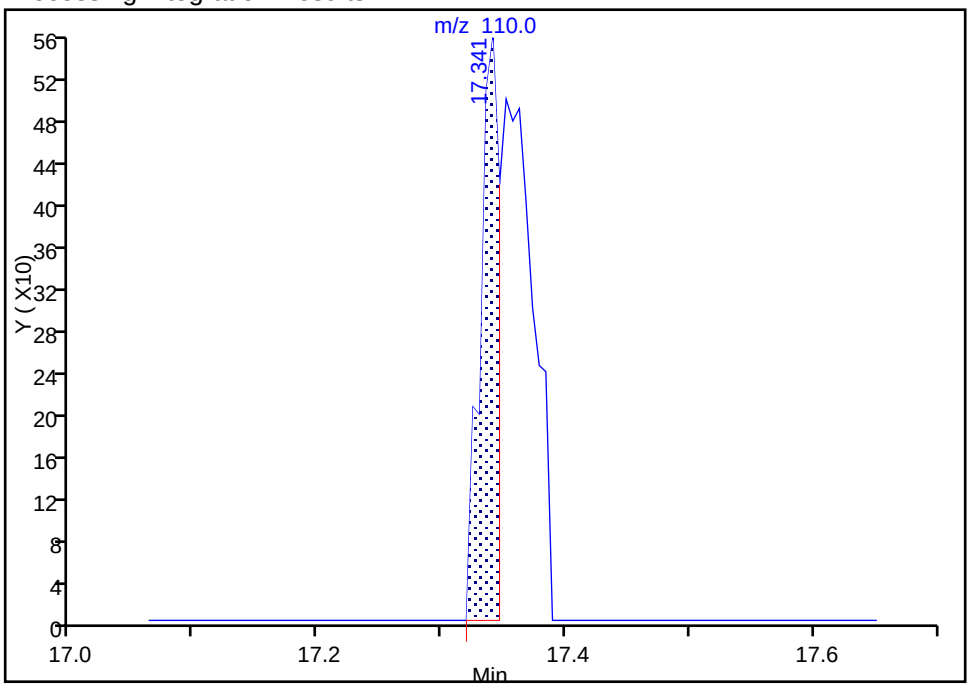
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d
Injection Date: 14-Mar-2018 17:52:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

64 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 2

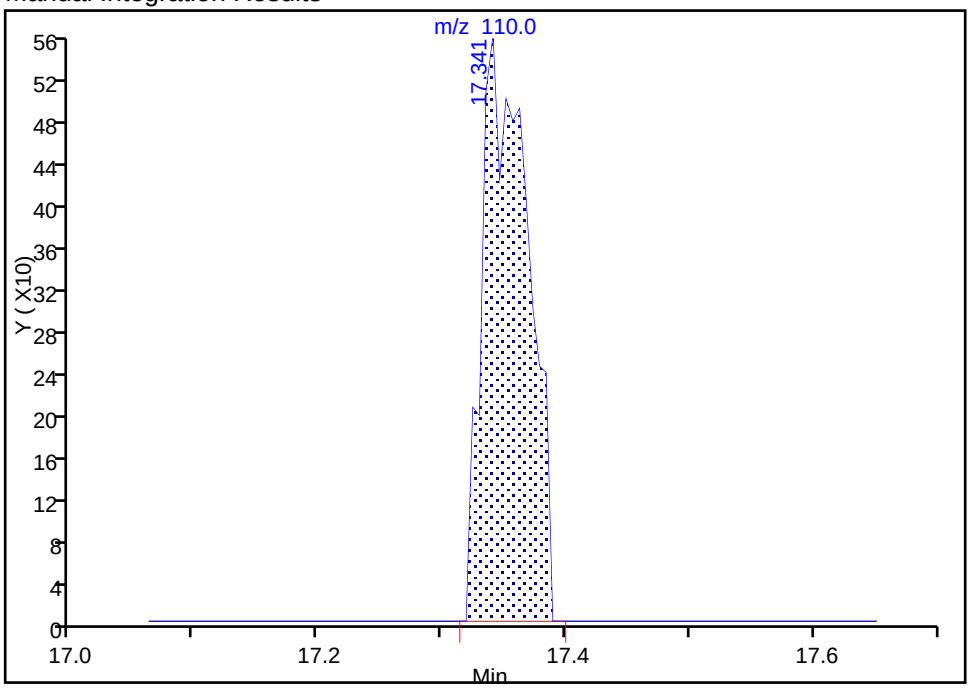
Processing Integration Results

RT: 17.34
Area: 607
Amount: 0.179669
Amount Units: ppb v/v



Manual Integration Results

RT: 17.34
Area: 1461
Amount: 0.158461
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:11:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

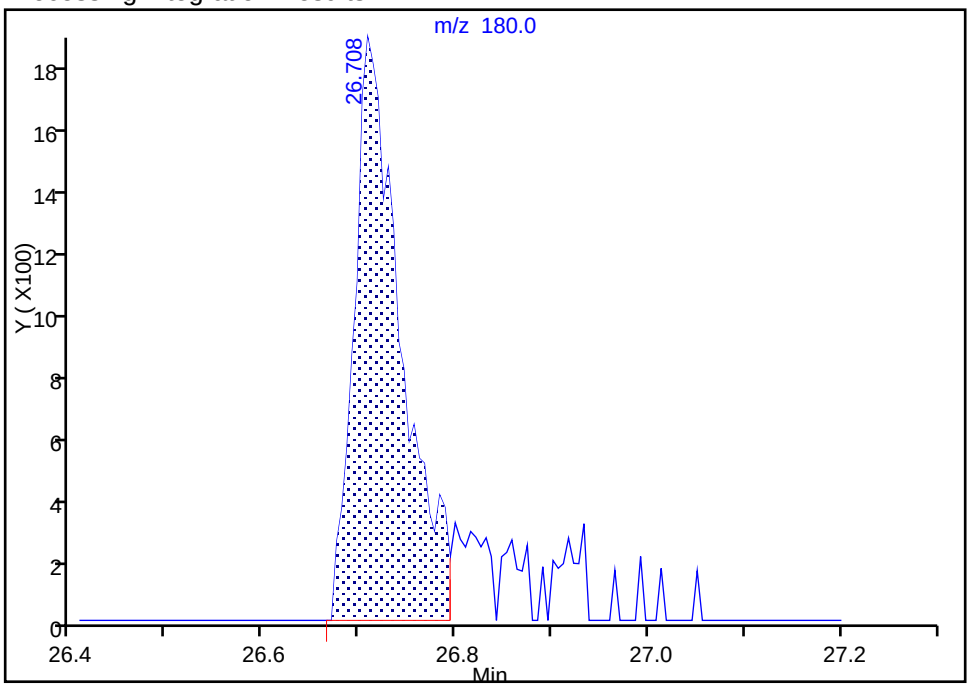
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d				
Injection Date:	14-Mar-2018 17:52:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

100 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

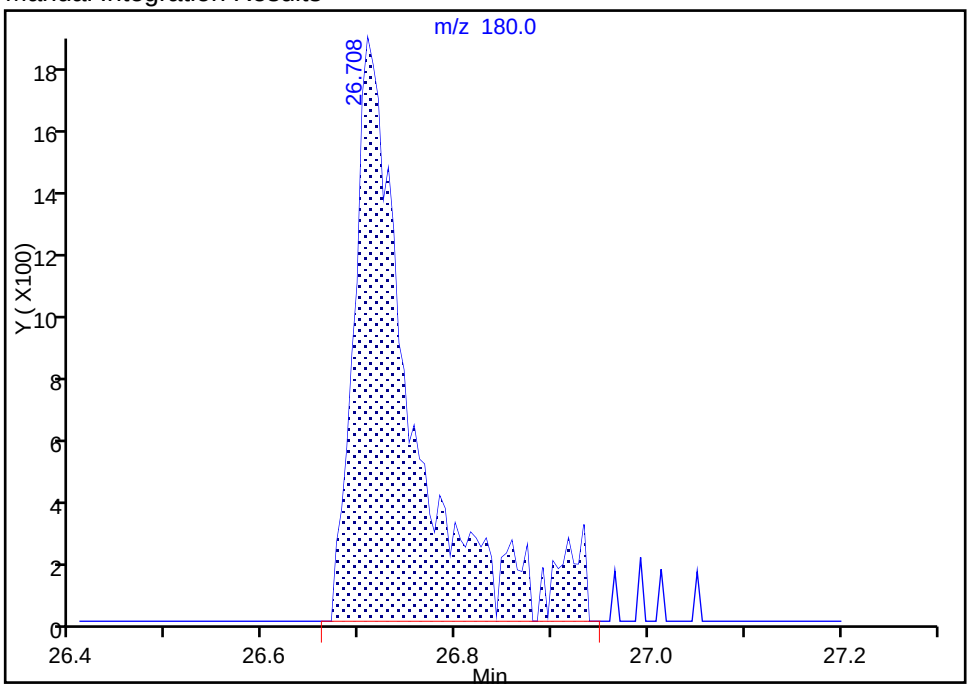
Processing Integration Results

RT: 26.71
Area: 6316
Amount: 0.146254
Amount Units: ppb v/v



Manual Integration Results

RT: 26.71
Area: 7908
Amount: 0.176858
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:11:55

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

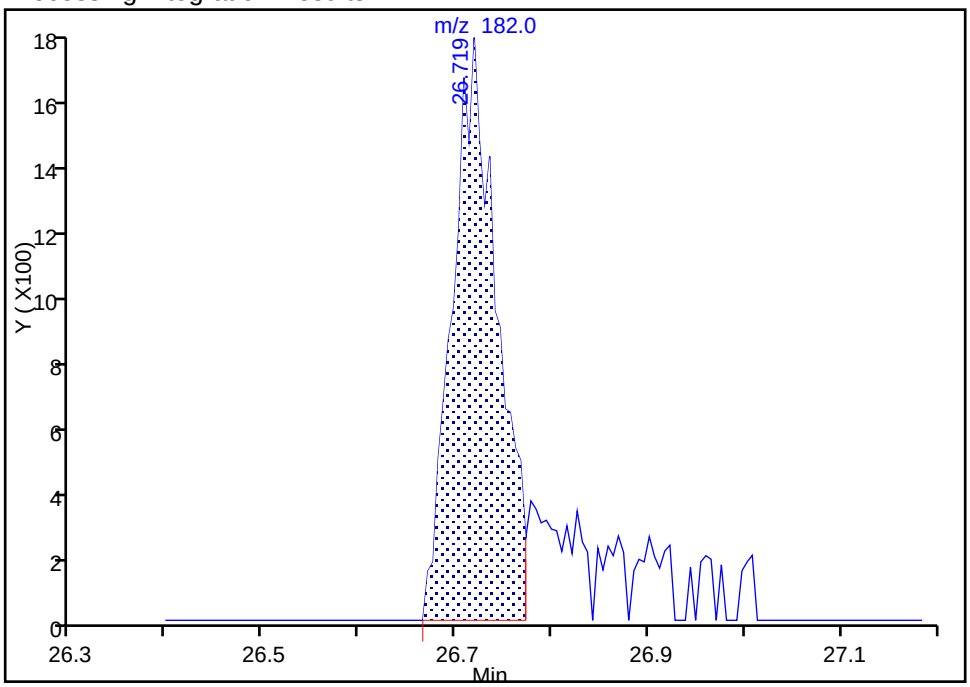
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d				
Injection Date:	14-Mar-2018 17:52:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

100 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 2

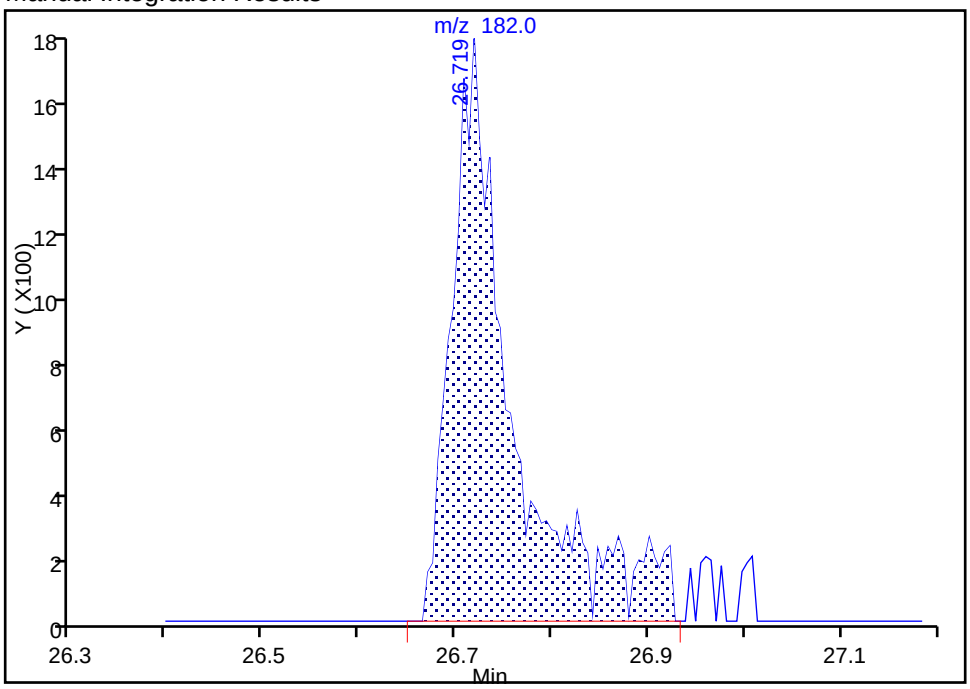
Processing Integration Results

RT: 26.72
Area: 5736
Amount: 0.146254
Amount Units: ppb v/v



Manual Integration Results

RT: 26.72
Area: 7715
Amount: 0.176858
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:12:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

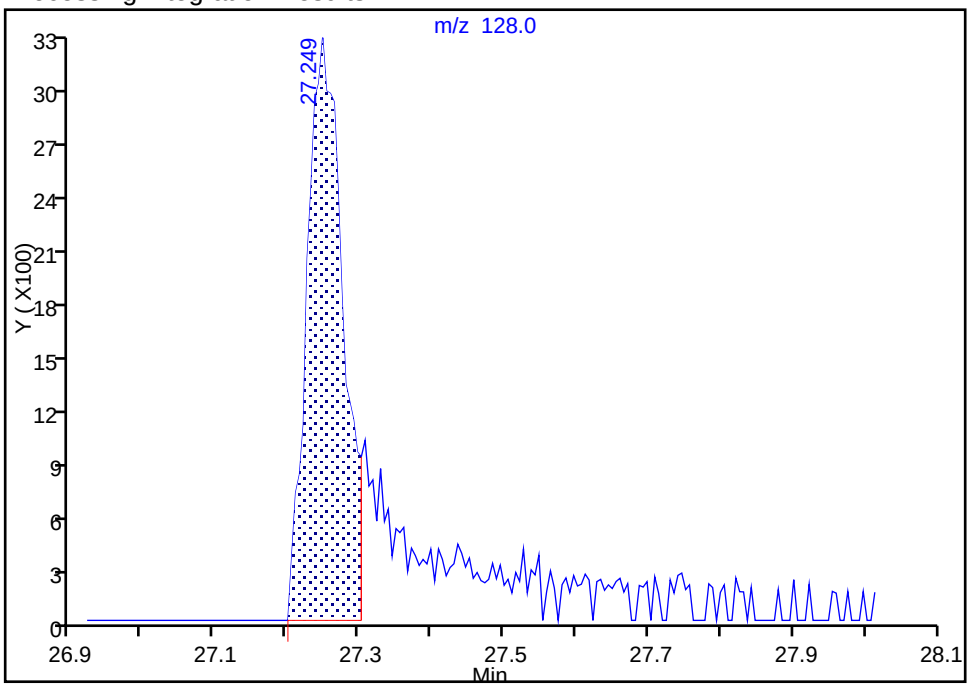
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d				
Injection Date:	14-Mar-2018 17:52:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

102 Naphthalene, CAS: 91-20-3

Signal: 1

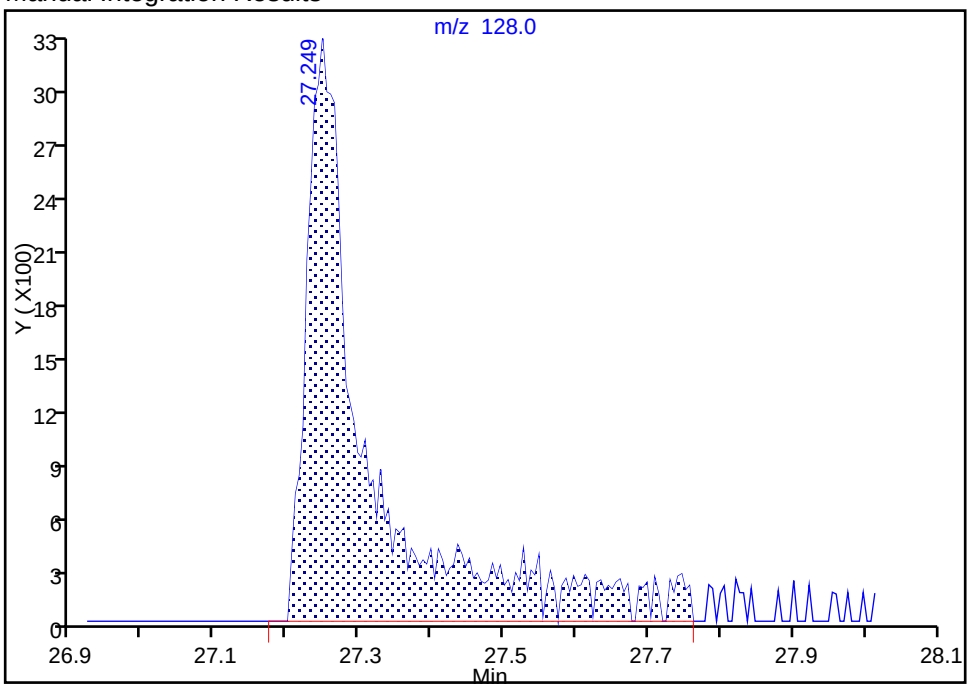
Processing Integration Results

RT: 27.25
Area: 11260
Amount: 0.145154
Amount Units: ppb v/v



Manual Integration Results

RT: 27.25
Area: 18833
Amount: 0.207993
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:12:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

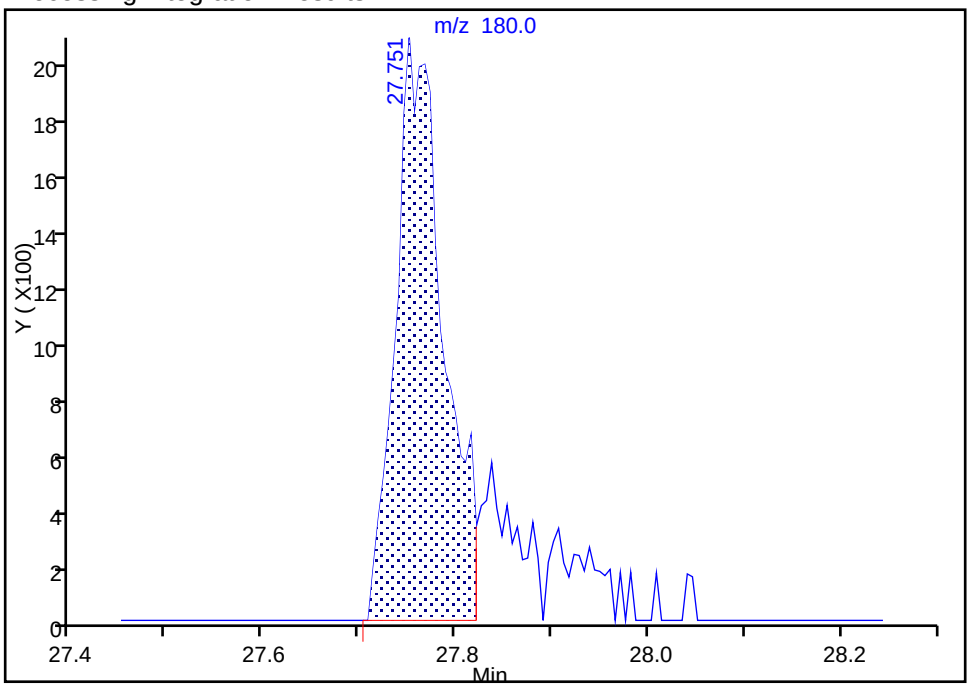
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d				
Injection Date:	14-Mar-2018 17:52:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

103 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

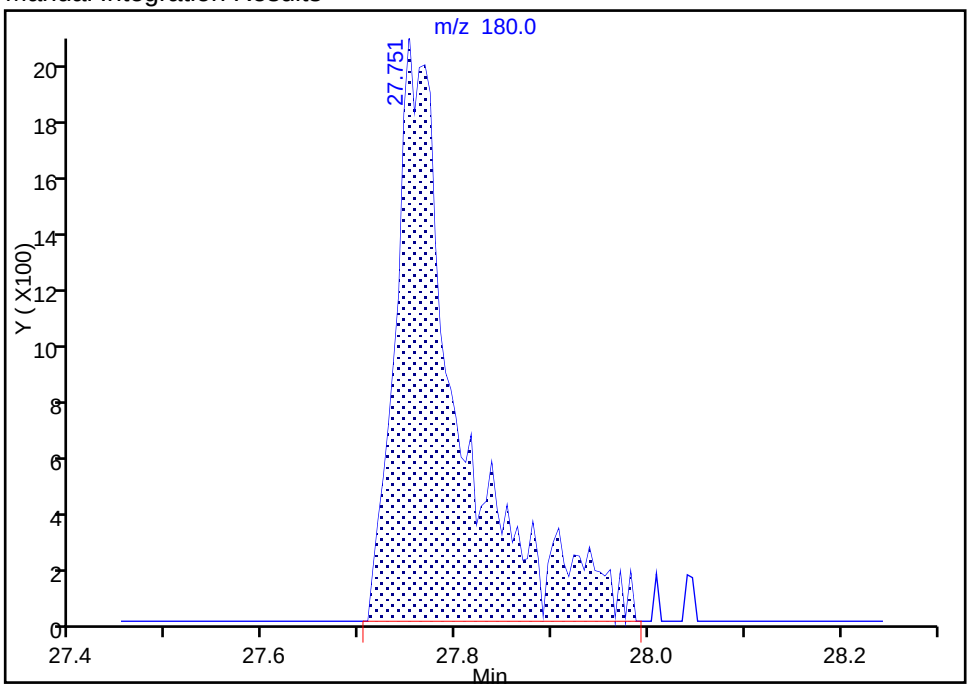
Processing Integration Results

RT: 27.75
Area: 7105
Amount: 0.185102
Amount Units: ppb v/v



Manual Integration Results

RT: 27.75
Area: 9408
Amount: 0.243573
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:12:31

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Burlington

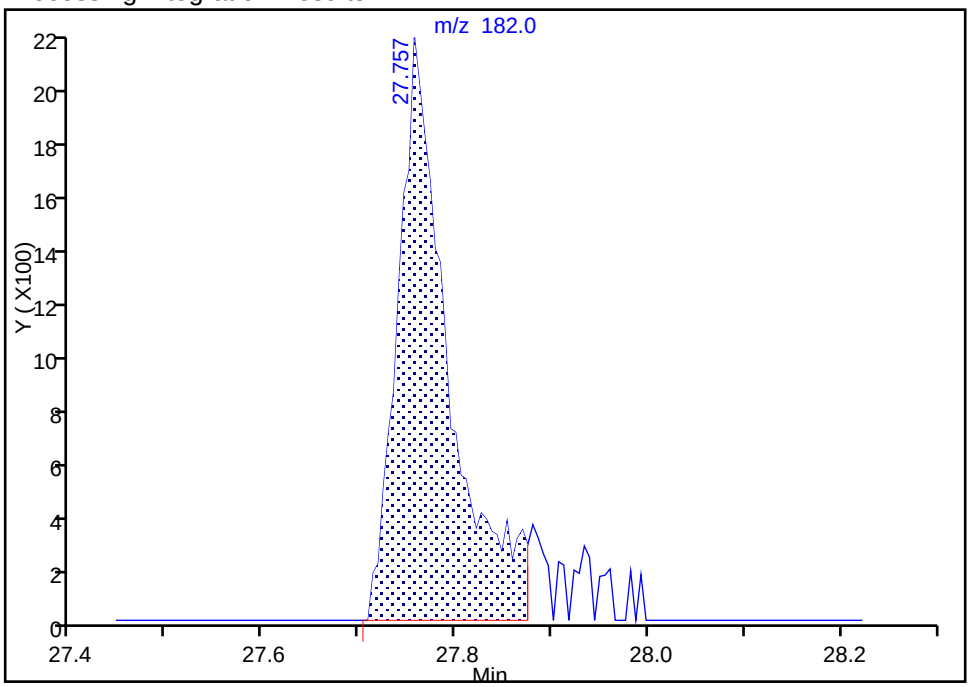
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-04.d
Injection Date: 14-Mar-2018 17:52:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

103 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 2

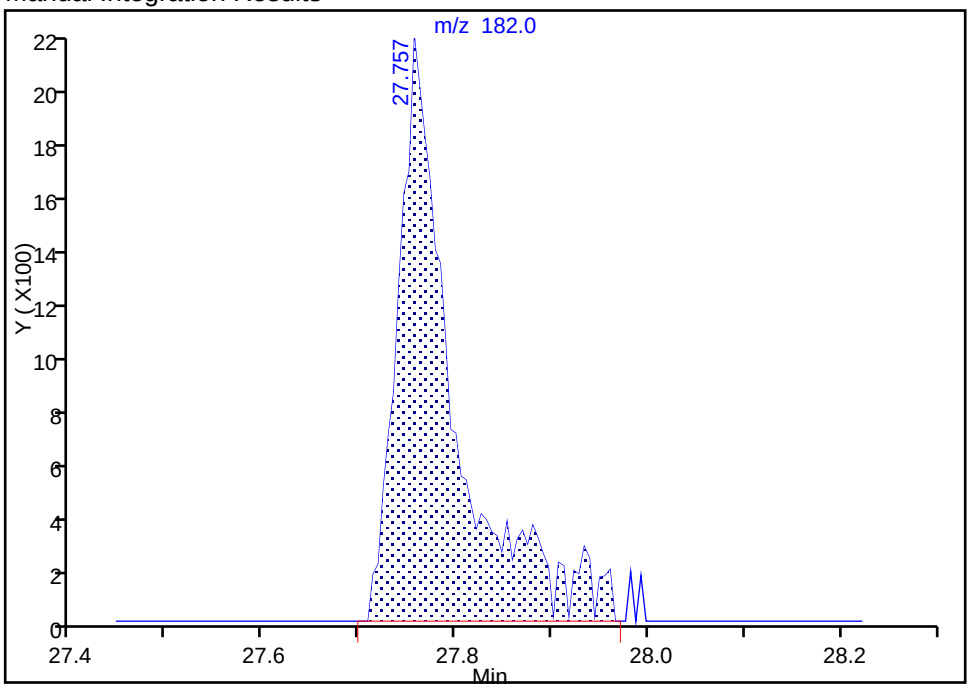
Processing Integration Results

RT: 27.76
Area: 7725
Amount: 0.185102
Amount Units: ppb v/v



Manual Integration Results

RT: 27.76
Area: 8642
Amount: 0.243573
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:12:35
Audit Action: Manually Integrated Audit Reason: Peak Tail

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-05.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-Mar-2018 18:45:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-005
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:22 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 09:15:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.047	5.042	0.005	97	14661	0.5005	0.5778	
2 Dichlorodifluoromethane	85	5.149	5.154	-0.005	99	47660	0.5005	0.5408	
3 Chlorodifluoromethane	51	5.240	5.235	0.005	97	26370	0.5005	0.5418	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.561	5.561	0.000	89	48623	0.5005	0.5381	
5 Chloromethane	50	5.753	5.754	-0.001	99	15053	0.5005	0.5149	
6 Butane	43	6.026	6.026	0.000	97	24232	0.5005	0.5011	
7 Vinyl chloride	62	6.080	6.080	0.000	97	17343	0.5005	0.5118	
8 Butadiene	54	6.187	6.181	0.006	94	11276	0.5005	0.4769	
9 Bromomethane	94	6.973	6.984	-0.011	99	14164	0.5005	0.5185	
10 BFB									
11 Chloroethane	64	7.219	7.230	-0.011	96	7793	0.5005	0.5005	
12 2-Methylbutane	43	7.299	7.300	-0.001	90	13578	0.5005	0.4749	
13 Vinyl bromide	106	7.637	7.637	-0.001	97	14285	0.5005	0.5062	
14 Trichlorofluoromethane	101	7.733	7.733	0.000	98	38206	0.5005	0.5356	
15 Pentane	43	7.861	7.861	0.000	97	19076	0.5005	0.4679	
16 Ethanol	45	8.246	8.241	0.005	99	28140	5.01	3.97	
17 Ethyl ether	59	8.364	8.348	0.016	92	7929	0.5005	0.4579	
19 Acrolein	56	8.739	8.728	0.011	34	2803	0.5005	0.4740	
20 1,1,2-Trichloro-1,2,2-trif	101	8.733	8.739	-0.006	94	26607	0.5005	0.5204	
21 1,1-Dichloroethene	96	8.797	8.803	-0.006	96	12270	0.5005	0.5094	
22 Acetone	43	9.011	9.001	0.010	97	26140	0.5005	0.7703	
23 Carbon disulfide	76	9.193	9.193	0.000	99	29547	0.5005	0.4946	
24 Isopropyl alcohol	45	9.215	9.209	0.006	99	25581	0.5005	0.7301	
25 3-Chloro-1-propene	41	9.504	9.498	0.006	96	9679	0.5005	0.4308	
26 Acetonitrile	41	9.627	9.621	0.006	95	4959	0.5005	0.3924	
27 Methylene Chloride	49	9.760	9.760	0.000	87	12142	0.5005	0.5423	
28 2-Methyl-2-propanol	59	9.894	9.889	0.005	94	23922	0.5005	0.4795	
29 Methyl tert-butyl ether	73	10.097	10.097	0.000	96	35124	0.5005	0.4972	
30 trans-1,2-Dichloroethene	61	10.151	10.156	-0.005	94	14499	0.5005	0.4722	
S 31 1,2-Dichloroethene, Total	61				0		1.00	0.9558	
32 Acrylonitrile	53	10.285	10.290	-0.005	98	4899	0.5005	0.3825	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	0.000	90	15959	0.5005	0.4690	
34 1,1-Dichloroethane	63	10.943	10.948	-0.005	99	20940	0.5005	0.5002	
35 Vinyl acetate	43	10.975	10.980	-0.005	99	17071	0.5005	0.3581	
36 cis-1,2-Dichloroethene	96	11.948	11.948	0.000	91	12068	0.5005	0.4836	
37 2-Butanone (MEK)	72	11.975	11.970	0.005	98	5895	0.5005	0.4840	
38 Ethyl acetate	88	11.986	11.981	0.005	95	842	0.5005	0.3997	
39 Tetrahydrofuran	42	12.387	12.371	0.016	36	10723	0.5005	0.4486	
* 40 Chlorobromomethane	128	12.371	12.376	-0.005	78	169732	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	95	25379	0.5005	0.5078	
42 Cyclohexane	84	12.719	12.730	-0.011	97	17520	0.5005	0.5097	M
43 1,1,1-Trichloroethane	97	12.740	12.740	0.000	93	28640	0.5005	0.5271	
44 Carbon tetrachloride	117	12.970	12.965	0.005	97	29495	0.5005	0.5220	
45 Isooctane	57	13.313	13.318	-0.005	99	54822	0.5005	0.4699	
46 Benzene	78	13.377	13.382	-0.005	95	38846	0.5005	0.4972	
47 1,2-Dichloroethane	62	13.527	13.532	-0.005	97	15135	0.5005	0.4880	
48 n-Heptane	43	13.639	13.639	0.000	86	18222	0.5005	0.4637	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	93	879565	10.0	10.0	
50 n-Butanol	56	14.356	14.340	0.016	87	7562	0.5005	0.5043	
51 Trichloroethene	95	14.500	14.506	-0.006	95	17633	0.5005	0.5027	
A 52 GRO	1	14.728	(7.290-22.166)		0	7713851	0.5005	0	
53 1,2-Dichloropropane	63	14.987	14.998	-0.011	91	14043	0.5005	0.5006	
55 Methyl methacrylate	69	15.083	15.078	0.005	97	11612	0.5005	0.4208	
56 1,4-Dioxane	88	15.169	15.158	0.011	89	8605	0.5005	0.5179	
57 Dibromomethane	174	15.228	15.222	0.006	89	18332	0.5005	0.5073	
58 Dichlorobromomethane	83	15.452	15.458	-0.006	98	28119	0.5005	0.5012	
59 cis-1,3-Dichloropropene	75	16.287	16.282	0.005	90	17525	0.5005	0.4353	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	11031650	0.5005	175.5	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	93	21857	0.5005	0.4165	
63 Toluene	92	16.827	16.827	0.000	93	28770	0.5005	0.5182	
62 n-Octane	43	16.822	16.827	-0.005	77	24863	0.5005	0.4532	
64 trans-1,3-Dichloropropene	75	17.346	17.346	0.000	95	16614	0.5005	0.4251	
65 1,1,2-Trichloroethane	83	17.705	17.699	0.006	95	12942	0.5005	0.4841	
66 Tetrachloroethene	166	17.817	17.817	0.000	95	31383	0.5005	0.5556	
67 2-Hexanone	43	18.101	18.090	0.011	97	21203	0.5005	0.4435	
68 Chlorodibromomethane	129	18.432	18.427	0.005	98	29113	0.5005	0.4924	
69 Ethylene Dibromide	107	18.705	18.700	0.005	98	22451	0.5005	0.4707	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	85	776833	10.0	10.0	
72 Chlorobenzene	112	19.598	19.599	-0.001	97	40602	0.5005	0.5179	
73 Ethylbenzene	91	19.727	19.727	0.000	98	64954	0.5005	0.5072	
74 n-Nonane	57	19.802	19.807	-0.005	85	28395	0.5005	0.4804	
75 m-Xylene & p-Xylene	106	19.968	19.962	0.006	0	52677	1.00	1.05	
S 76 Xylenes, Total	106				0		1.50	1.55	
77 o-Xylene	106	20.738	20.738	0.000	96	25407	0.5005	0.5006	
78 Styrene	104	20.786	20.781	0.005	97	30950	0.5005	0.4223	
79 Bromoform	173	21.171	21.171	0.000	98	28627	0.5005	0.4813	
80 Isopropylbenzene	105	21.342	21.343	-0.001	95	76245	0.5005	0.5115	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	37404	0.5005	0.5015	
82 N-Propylbenzene	91	22.017	22.011	0.006	99	90113	0.5005	0.5046	
83 1,2,3-Trichloropropane	75	22.049	22.043	0.006	96	29095	0.5005	0.4988	
84 n-Decane	57	22.156	22.156	0.000	93	35078	0.5005	0.4396	
85 4-Ethyltoluene	105	22.193	22.193	0.000	98	77312	0.5005	0.5182	
86 2-Chlorotoluene	91	22.214	22.215	-0.001	97	64842	0.5005	0.5139	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.295	22.289	0.006	94	70959	0.5005	0.5321	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	90	25689	0.5005	0.4208	
89 tert-Butylbenzene	119	22.771	22.771	0.000	94	69592	0.5005	0.5285	
90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.000	97	66120	0.5005	0.5032	
91 sec-Butylbenzene	105	23.086	23.087	-0.001	99	98805	0.5005	0.5193	
92 4-Isopropyltoluene	119	23.284	23.284	0.000	98	79307	0.5005	0.4927	
93 1,3-Dichlorobenzene	146	23.333	23.327	0.006	95	38775	0.5005	0.4553	
94 1,4-Dichlorobenzene	146	23.472	23.466	0.006	96	34220	0.5005	0.4164	
95 Benzyl chloride	91	23.675	23.670	0.005	99	31984	0.5005	0.3566	
96 n-Butylbenzene	91	23.884	23.878	0.006	97	54960	0.5005	0.4289	
97 Undecane	57	23.889	23.884	0.005	91	29308	0.5005	0.4068	
98 1,2-Dichlorobenzene	146	24.039	24.033	0.006	97	40032	0.5005	0.4834	
99 Dodecane	57	25.569	25.569	0.000	97	24468	0.5005	0.3817	
100 1,2,4-Trichlorobenzene	180	26.714	26.708	0.006	92	18074	0.5005	0.4255	M
101 Hexachlorobutadiene	225	26.901	26.901	0.000	95	33758	0.5005	0.5539	
102 Naphthalene	128	27.249	27.243	0.006	99	43511	0.5005	0.5058	M
103 1,2,3-Trichlorobenzene	180	27.762	27.757	0.005	96	17695	0.5005	0.4822	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL2w_00254	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

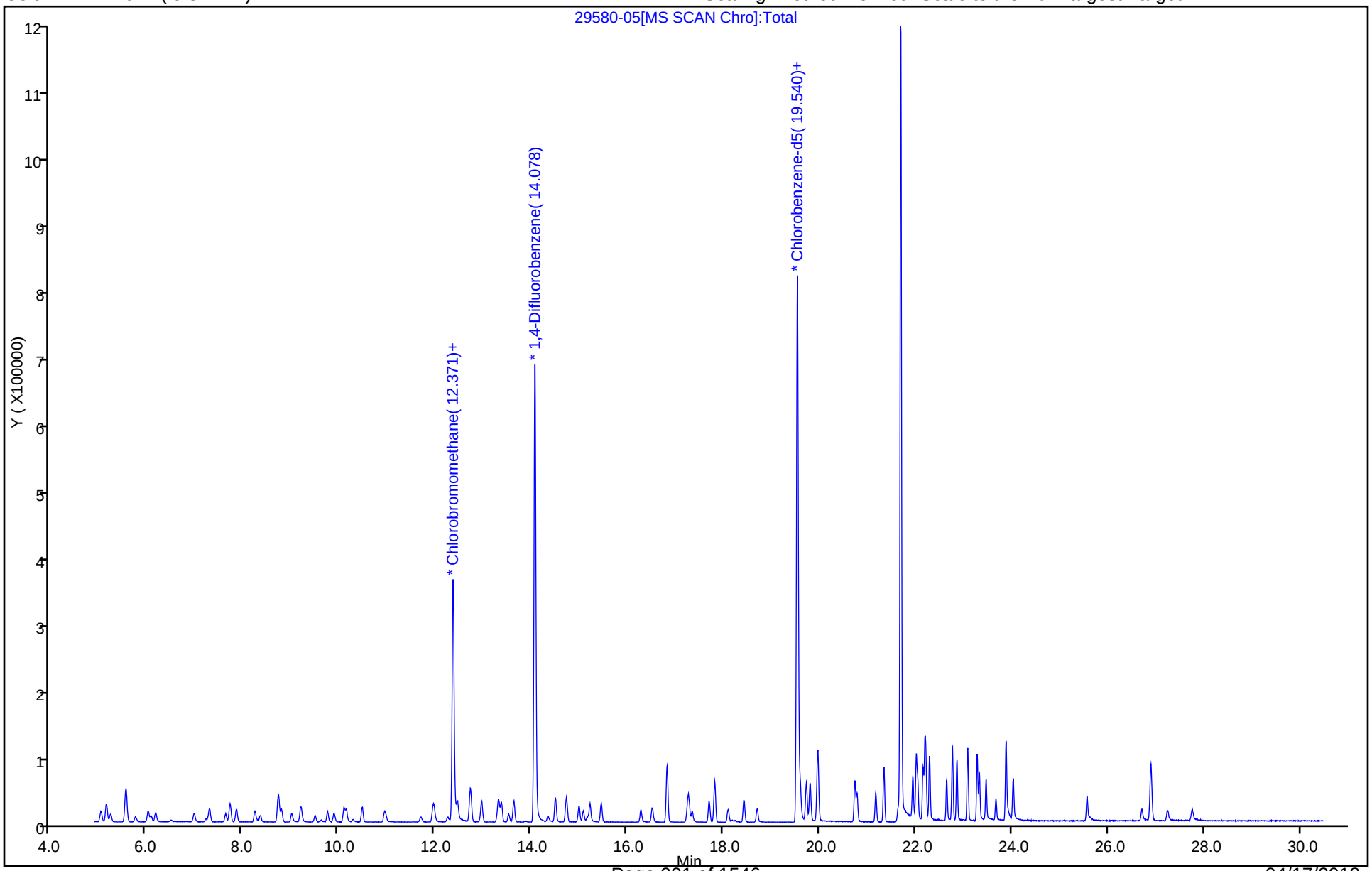
Report Date: 15-Mar-2018 10:07:23 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-05.d

Injection Date:	14-Mar-2018 18:45:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

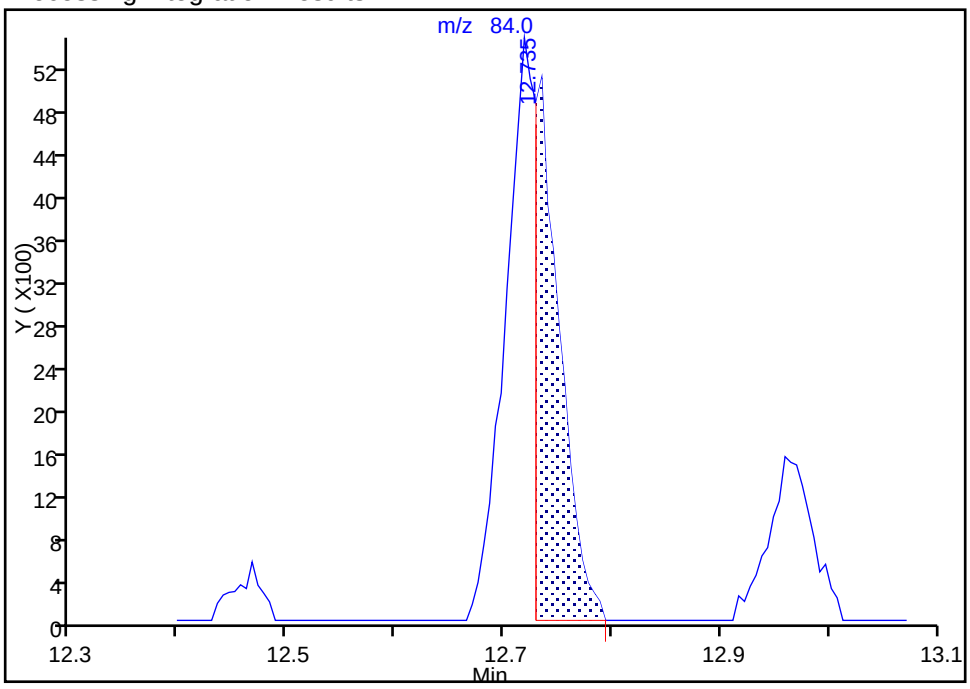
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-05.d
Injection Date: 14-Mar-2018 18:45:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

42 Cyclohexane, CAS: 110-82-7

Signal: 1

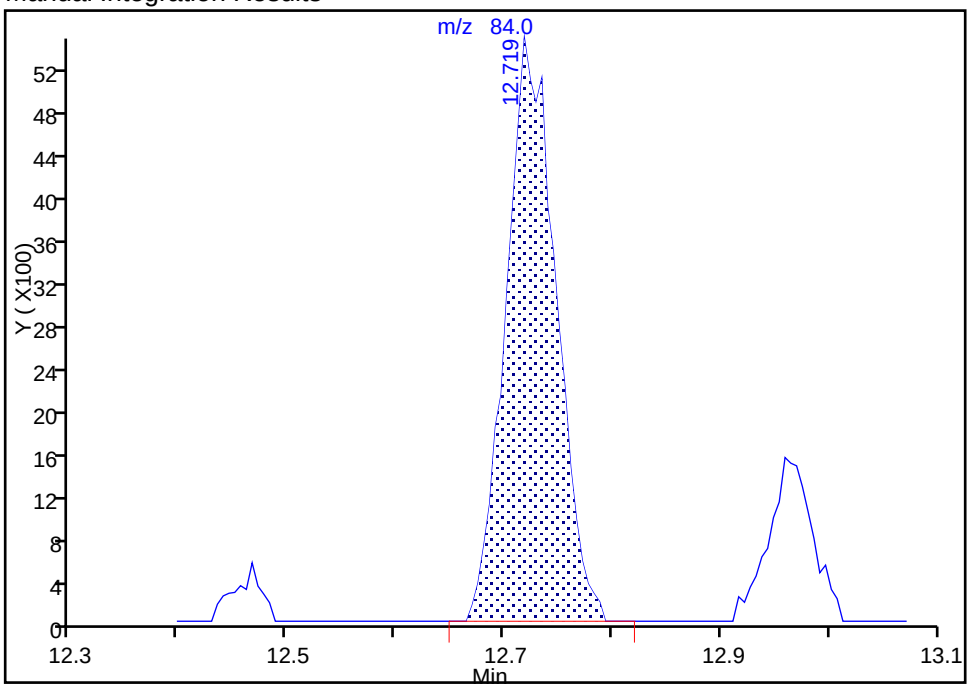
Processing Integration Results

RT: 12.73
Area: 8355
Amount: 0.287478
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 17520
Amount: 0.509661
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:13:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

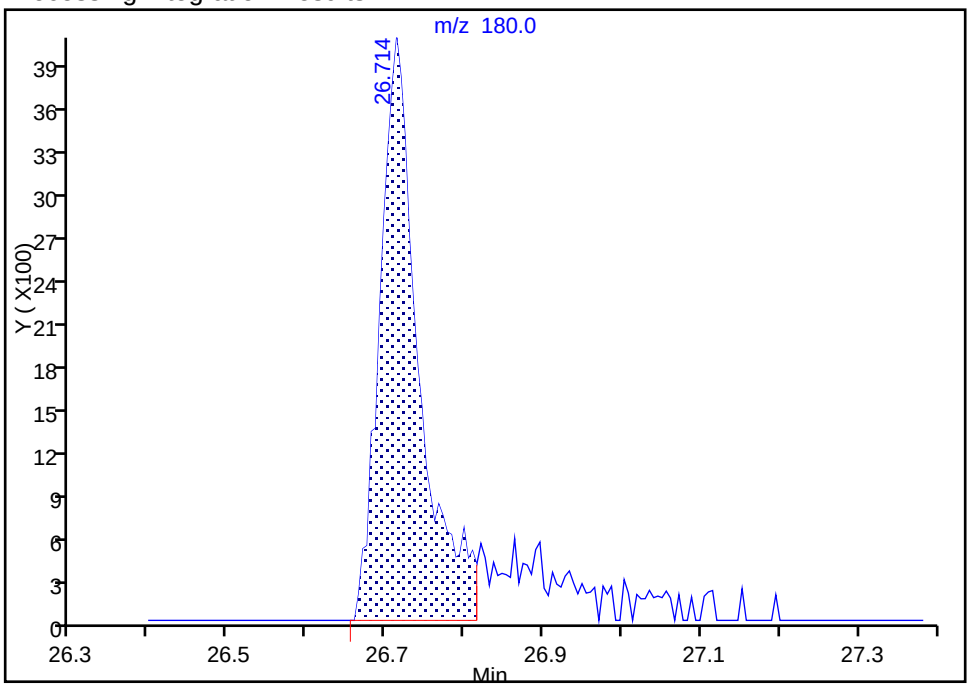
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-05.d				
Injection Date:	14-Mar-2018 18:45:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

100 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

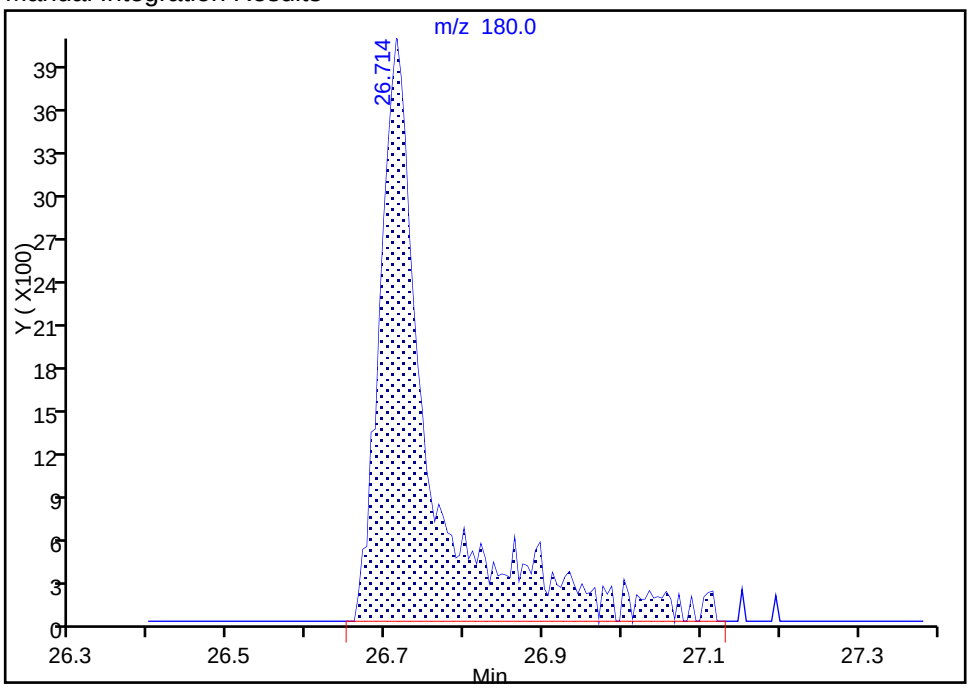
Processing Integration Results

RT: 26.71
Area: 14003
Amount: 0.360401
Amount Units: ppb v/v



Manual Integration Results

RT: 26.71
Area: 18074
Amount: 0.425462
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:15:01

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Burlington

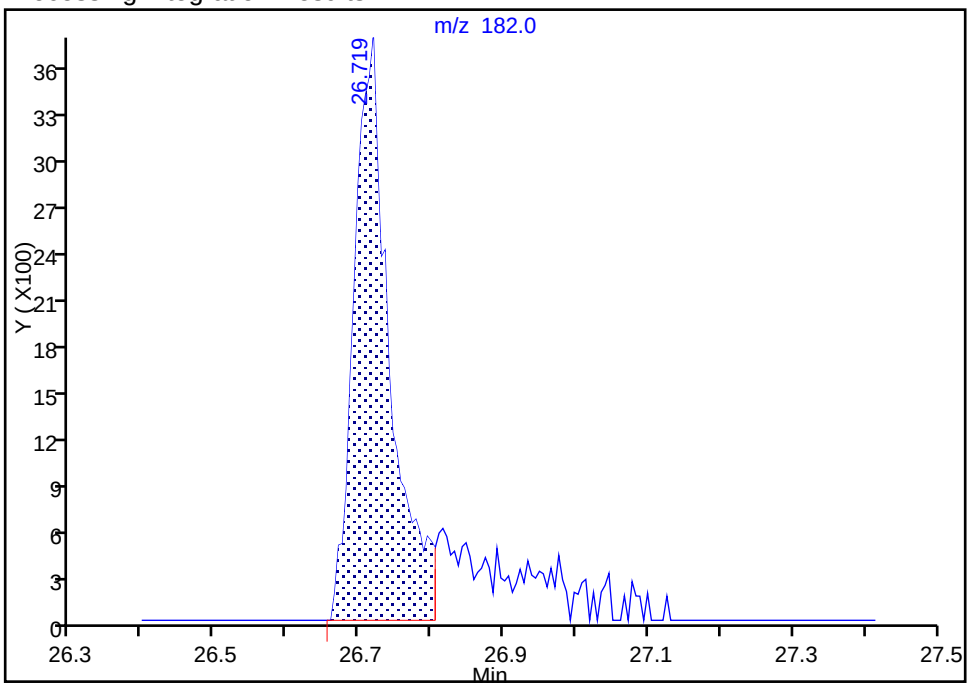
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-05.d				
Injection Date:	14-Mar-2018 18:45:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

100 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 2

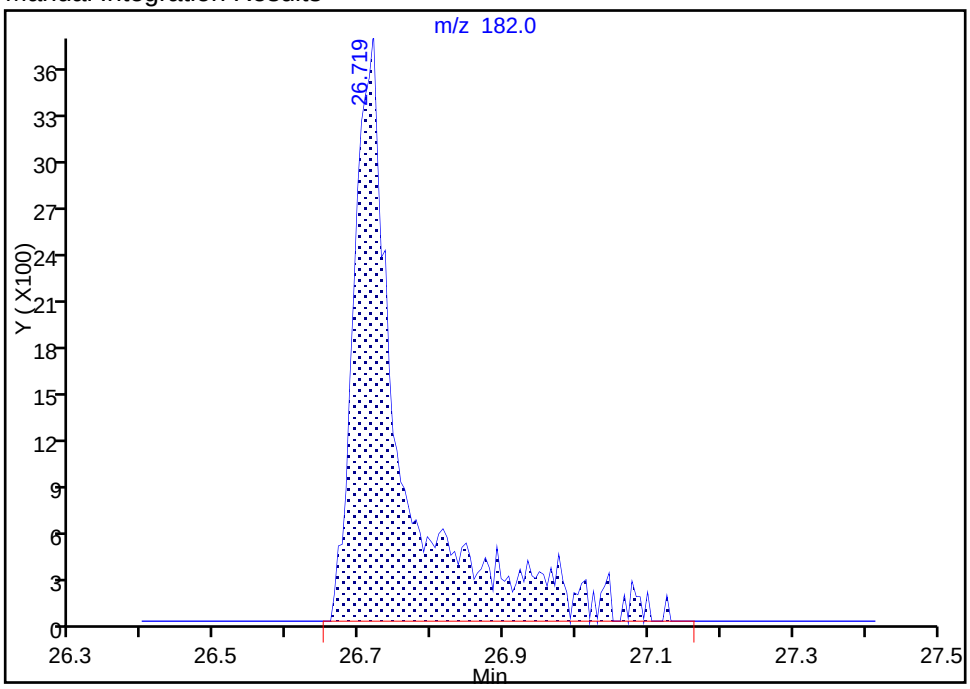
Processing Integration Results

RT: 26.72
Area: 12879
Amount: 0.360401
Amount Units: ppb v/v



Manual Integration Results

RT: 26.72
Area: 17478
Amount: 0.425462
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:15:05

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Burlington

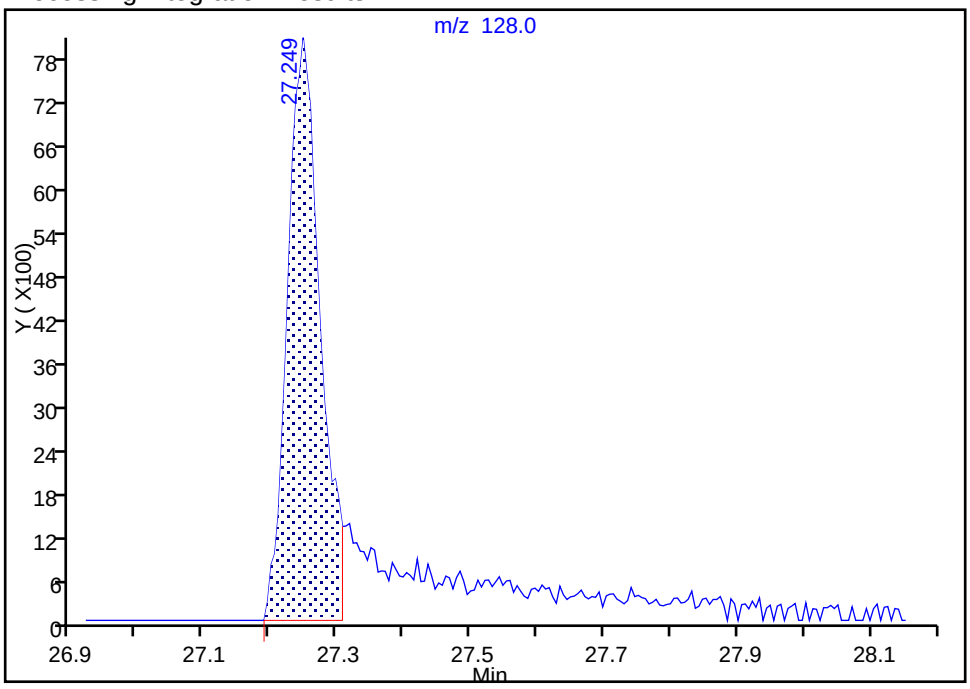
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-05.d				
Injection Date:	14-Mar-2018 18:45:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

102 Naphthalene, CAS: 91-20-3

Signal: 1

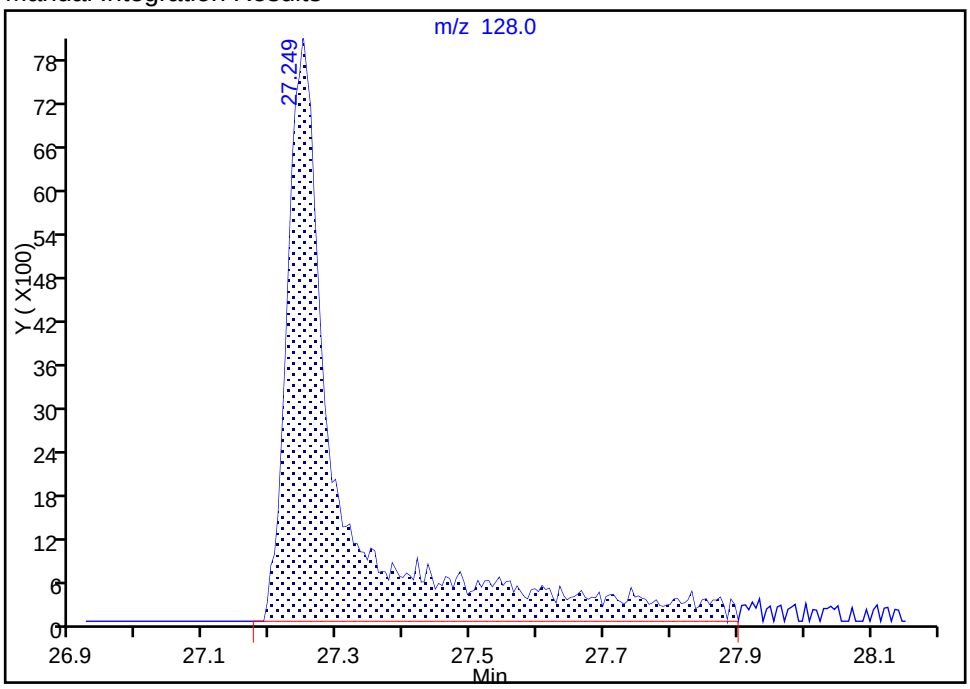
Processing Integration Results

RT: 27.25
Area: 27229
Amount: 0.357940
Amount Units: ppb v/v



Manual Integration Results

RT: 27.25
Area: 43511
Amount: 0.505797
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:15:16

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Burlington

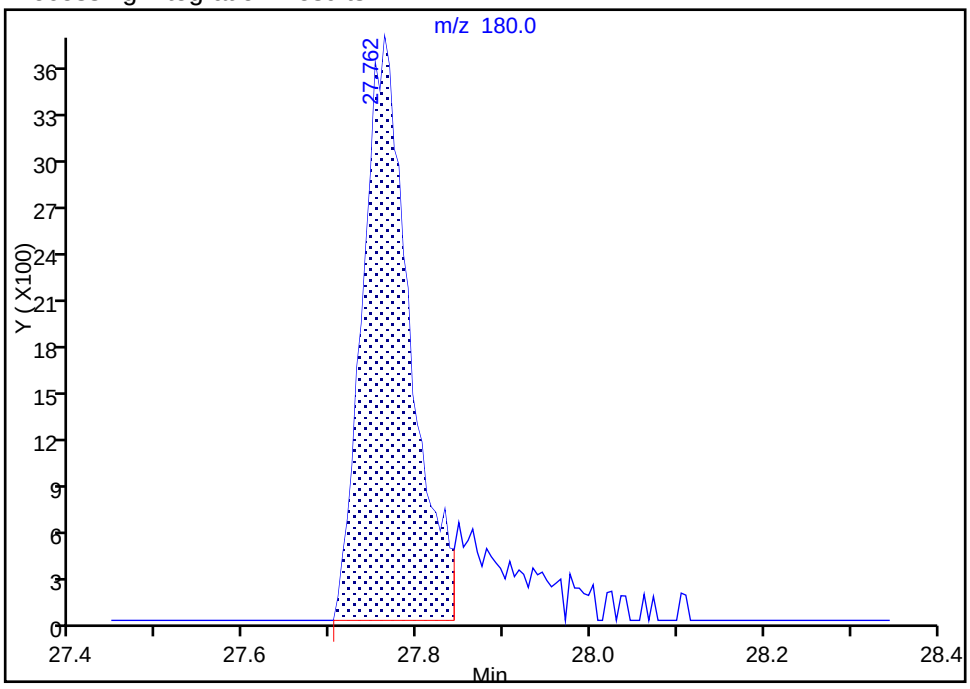
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-05.d				
Injection Date:	14-Mar-2018 18:45:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

103 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

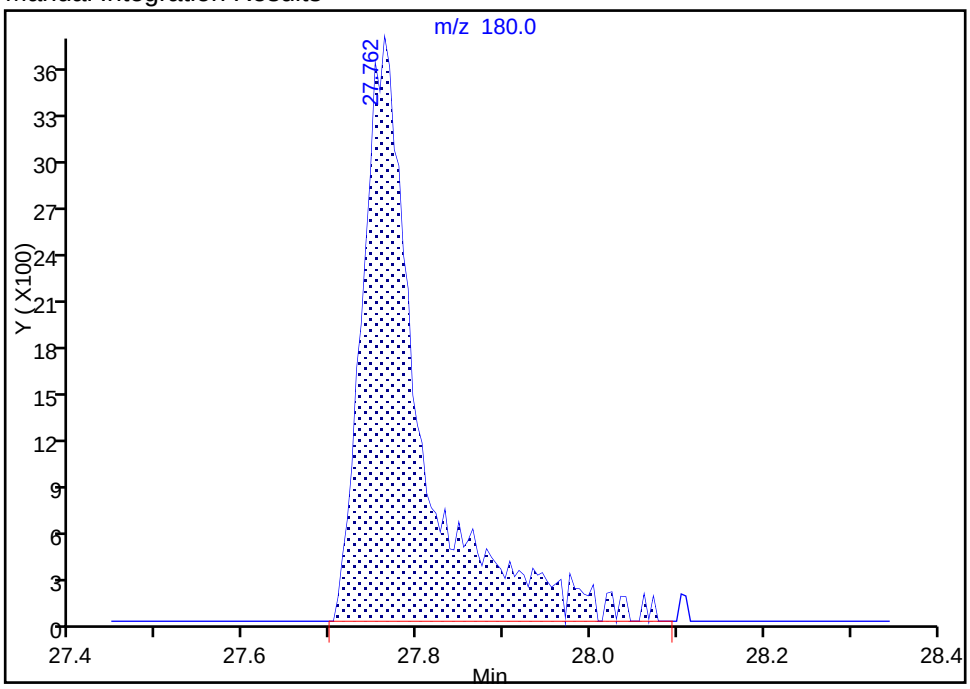
Processing Integration Results

RT: 27.76
Area: 14286
Amount: 0.387204
Amount Units: ppb v/v



Manual Integration Results

RT: 27.76
Area: 17695
Amount: 0.482203
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:15:25

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Burlington

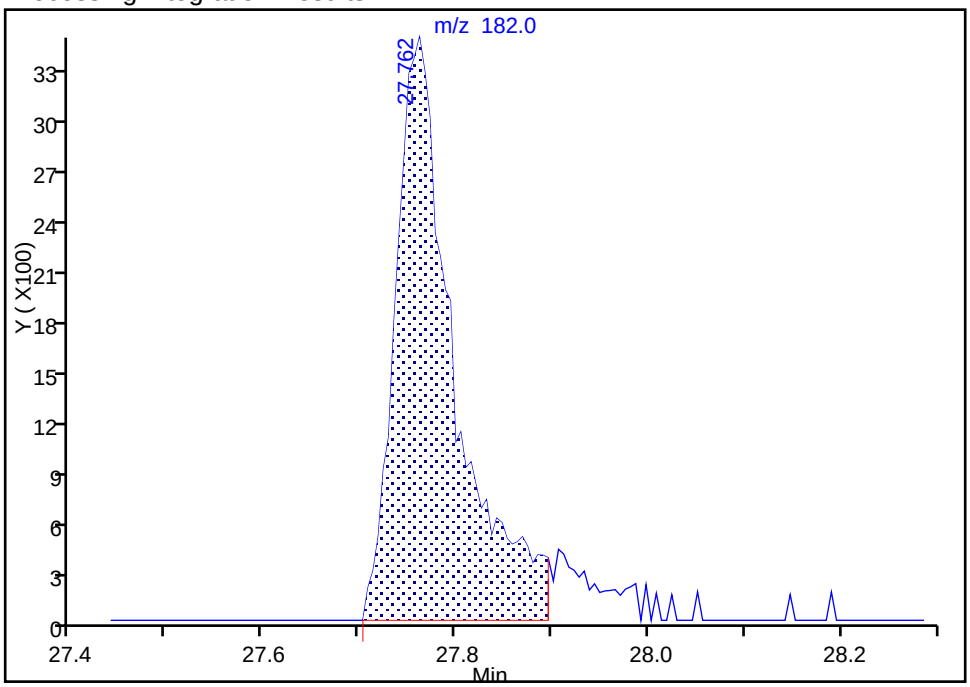
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-05.d
Injection Date: 14-Mar-2018 18:45:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

103 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 2

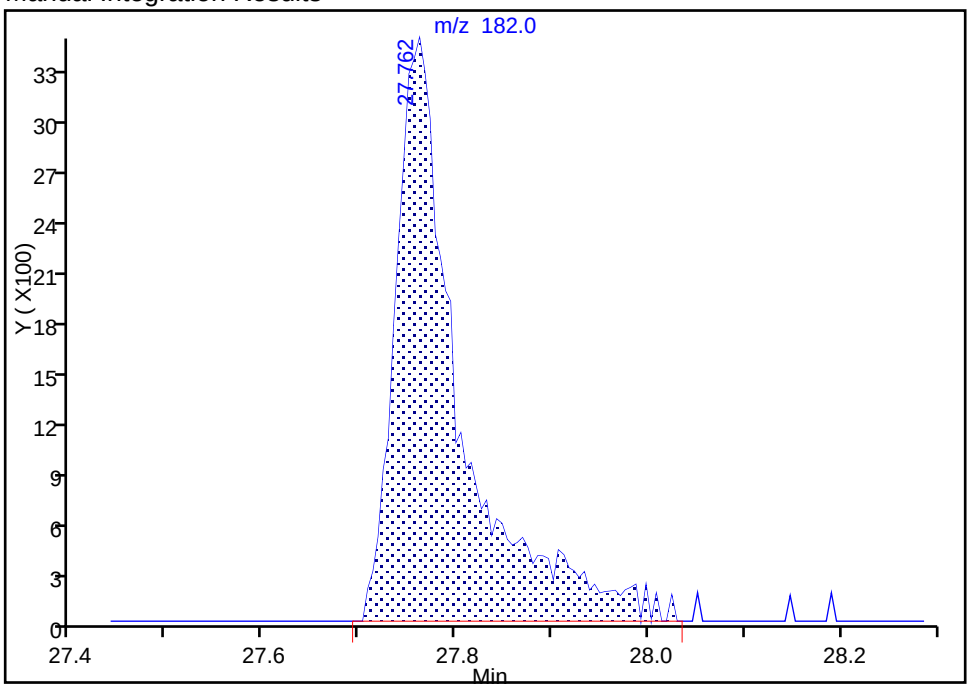
Processing Integration Results

RT: 27.76
Area: 14924
Amount: 0.387204
Amount Units: ppb v/v



Manual Integration Results

RT: 27.76
Area: 16410
Amount: 0.482203
Amount Units: ppb v/v



Reviewer: daiglep, 15-Mar-2018 09:15:29
Audit Action: Manually Integrated Audit Reason: Peak Tail

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-06.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-Mar-2018 19:39:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-006
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:24 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 09:25:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.037	5.042	-0.005	97	115027	4.99	4.52	
2 Dichlorodifluoromethane	85	5.149	5.154	-0.005	99	428454	4.99	4.85	
3 Chlorodifluoromethane	51	5.229	5.235	-0.006	98	226121	4.99	4.63	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.556	5.561	-0.005	88	438282	4.99	4.84	
5 Chloromethane	50	5.753	5.754	-0.001	99	148095	4.99	5.05	
6 Butane	43	6.021	6.026	-0.005	98	212758	4.99	4.39	
7 Vinyl chloride	62	6.074	6.080	-0.006	98	149827	4.99	4.41	
8 Butadiene	54	6.176	6.181	-0.005	92	107100	4.99	4.52	
10 BFB									
9 Bromomethane	94	6.973	6.984	-0.011	99	129238	4.99	4.72	
11 Chloroethane	64	7.230	7.230	0.000	98	71399	4.99	4.57	
12 2-Methylbutane	43	7.300	7.300	0.000	90	121830	4.99	4.25	
13 Vinyl bromide	106	7.631	7.637	-0.006	99	138027	4.99	4.88	
14 Trichlorofluoromethane	101	7.728	7.733	-0.005	98	350538	4.99	4.90	
15 Pentane	43	7.861	7.861	0.000	98	179785	4.99	4.40	
16 Ethanol	45	8.241	8.241	0.000	98	62000	10.0	8.73	
17 Ethyl ether	59	8.343	8.348	-0.005	93	81196	4.99	4.68	
19 Acrolein	56	8.728	8.728	0.000	40	21237	4.99	3.58	
20 1,1,2-Trichloro-1,2,2-trif	101	8.733	8.739	-0.006	96	253044	4.99	4.93	
21 1,1-Dichloroethene	96	8.797	8.803	-0.006	97	118702	4.99	4.91	
22 Acetone	43	9.001	9.001	0.000	97	198347	4.99	5.83	
23 Carbon disulfide	76	9.193	9.193	0.000	99	290547	4.99	4.85	
24 Isopropyl alcohol	45	9.204	9.209	-0.005	100	169697	4.99	4.83	
25 3-Chloro-1-propene	41	9.498	9.498	0.000	96	105108	4.99	4.66	
26 Acetonitrile	41	9.616	9.621	-0.005	99	56081	4.99	4.42	
27 Methylene Chloride	49	9.760	9.760	0.000	86	101805	4.99	4.53	
28 2-Methyl-2-propanol	59	9.889	9.889	0.000	93	240344	4.99	4.80	
29 Methyl tert-butyl ether	73	10.092	10.097	-0.005	96	350391	4.99	4.95	
30 trans-1,2-Dichloroethene	61	10.151	10.156	-0.005	97	148626	4.99	4.83	
S 31 1,2-Dichloroethene, Total	61				0		9.99	9.82	
32 Acrylonitrile	53	10.285	10.290	-0.005	96	54198	4.99	4.22	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.477	10.483	-0.006	90	163674	4.99	4.80	
34 1,1-Dichloroethane	63	10.943	10.948	-0.005	99	199000	4.99	4.74	
35 Vinyl acetate	43	10.975	10.980	-0.005	99	206817	4.99	4.33	
36 cis-1,2-Dichloroethene	96	11.943	11.948	-0.005	90	125058	4.99	5.00	
37 2-Butanone (MEK)	72	11.964	11.970	-0.006	98	60185	4.99	4.93	
38 Ethyl acetate	88	11.981	11.981	0.000	97	10186	4.99	4.82	
39 Tetrahydrofuran	42	12.371	12.371	0.000	70	106609	4.99	4.44	
* 40 Chlorobromomethane	128	12.371	12.376	-0.005	79	170237	10.0	10.0	
41 Chloroform	83	12.462	12.467	-0.005	95	248713	4.99	4.96	
42 Cyclohexane	84	12.724	12.730	-0.006	96	169460	4.99	4.91	
43 1,1,1-Trichloroethane	97	12.740	12.740	0.000	94	275045	4.99	5.04	
44 Carbon tetrachloride	117	12.965	12.965	0.000	98	289254	4.99	5.10	
45 Isooctane	57	13.318	13.318	0.000	99	559989	4.99	4.78	
46 Benzene	78	13.377	13.382	-0.005	95	381768	4.99	4.87	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	98	152327	4.99	4.89	
48 n-Heptane	43	13.634	13.639	-0.005	87	184516	4.99	4.68	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	94	882865	10.0	10.0	
50 n-Butanol	56	14.340	14.340	0.000	84	72075	4.99	4.79	
51 Trichloroethene	95	14.500	14.506	-0.006	98	171102	4.99	4.86	
A 52 GRO	1	14.728	(7.290-22.166)		0	53519335	4.99	0	
53 1,2-Dichloropropane	63	14.992	14.998	-0.006	91	132201	4.99	4.70	
55 Methyl methacrylate	69	15.078	15.078	0.000	96	129155	4.99	4.66	
56 1,4-Dioxane	88	15.158	15.158	0.000	91	83758	4.99	5.02	
57 Dibromomethane	174	15.222	15.222	0.000	90	182717	4.99	5.04	
58 Dichlorobromomethane	83	15.458	15.458	0.000	98	276047	4.99	4.90	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	90	195512	4.99	4.84	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	90642780	4.99	1436.5	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	95	245023	4.99	4.65	
62 n-Octane	43	16.827	16.827	0.000	78	272691	4.99	4.95	
63 Toluene	92	16.827	16.827	0.000	93	296544	4.99	5.06	
64 trans-1,3-Dichloropropene	75	17.346	17.346	0.000	96	188789	4.99	4.81	
65 1,1,2-Trichloroethane	83	17.699	17.699	0.000	96	137317	4.99	4.87	
66 Tetrachloroethene	166	17.817	17.817	0.000	97	293277	4.99	4.92	
67 2-Hexanone	43	18.095	18.090	0.005	97	222695	4.99	4.42	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	309726	4.99	4.97	
69 Ethylene Dibromide	107	18.700	18.700	0.000	99	248054	4.99	4.93	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	84	819605	10.0	10.0	
72 Chlorobenzene	112	19.599	19.599	0.000	96	406917	4.99	4.92	
73 Ethylbenzene	91	19.727	19.727	0.000	97	677232	4.99	5.01	
74 n-Nonane	57	19.802	19.807	-0.005	84	308744	4.99	4.95	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	548586	9.99	10.3	
S 76 Xylenes, Total	106				0		15.0	15.4	
77 o-Xylene	106	20.738	20.738	0.000	99	272921	4.99	5.10	
78 Styrene	104	20.781	20.781	0.000	98	396538	4.99	5.13	
79 Bromoform	173	21.171	21.171	0.000	99	305656	4.99	4.87	
80 Isopropylbenzene	105	21.343	21.343	0.000	95	815762	4.99	5.19	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	388852	4.99	4.94	
82 N-Propylbenzene	91	22.011	22.011	0.000	99	980522	4.99	5.20	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	97	305983	4.99	4.97	
84 n-Decane	57	22.156	22.156	0.000	92	425124	4.99	5.05	
85 4-Ethyltoluene	105	22.193	22.193	0.000	98	836079	4.99	5.31	
86 2-Chlorotoluene	91	22.215	22.215	0.000	96	688995	4.99	5.18	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.289	22.289	0.000	94	729802	4.99	5.19	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	90	338972	4.99	5.26	
89 tert-Butylbenzene	119	22.766	22.771	-0.005	94	724238	4.99	5.21	
90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.000	97	741614	4.99	5.35	
91 sec-Butylbenzene	105	23.087	23.087	0.000	99	1077214	4.99	5.37	
92 4-Isopropyltoluene	119	23.284	23.284	0.000	97	924951	4.99	5.45	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	97	480795	4.99	5.35	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	96	445929	4.99	5.14	
95 Benzyl chloride	91	23.670	23.670	0.000	99	493921	4.99	5.22	
96 n-Butylbenzene	91	23.884	23.878	0.006	98	765737	4.99	5.66	
97 Undecane	57	23.884	23.884	0.000	93	380907	4.99	5.01	
98 1,2-Dichlorobenzene	146	24.033	24.033	0.000	97	456161	4.99	5.22	
99 Dodecane	57	25.569	25.569	0.000	98	315396	4.99	4.66	
100 1,2,4-Trichlorobenzene	180	26.708	26.708	0.000	94	203344	4.99	4.54	
101 Hexachlorobutadiene	225	26.901	26.901	0.000	96	326225	4.99	5.07	
102 Naphthalene	128	27.243	27.243	0.000	99	359689	4.99	3.96	
103 1,2,3-Trichlorobenzene	180	27.757	27.757	0.000	96	184116	4.99	4.76	

Reagents:

ATTO15CAL3w_00194	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

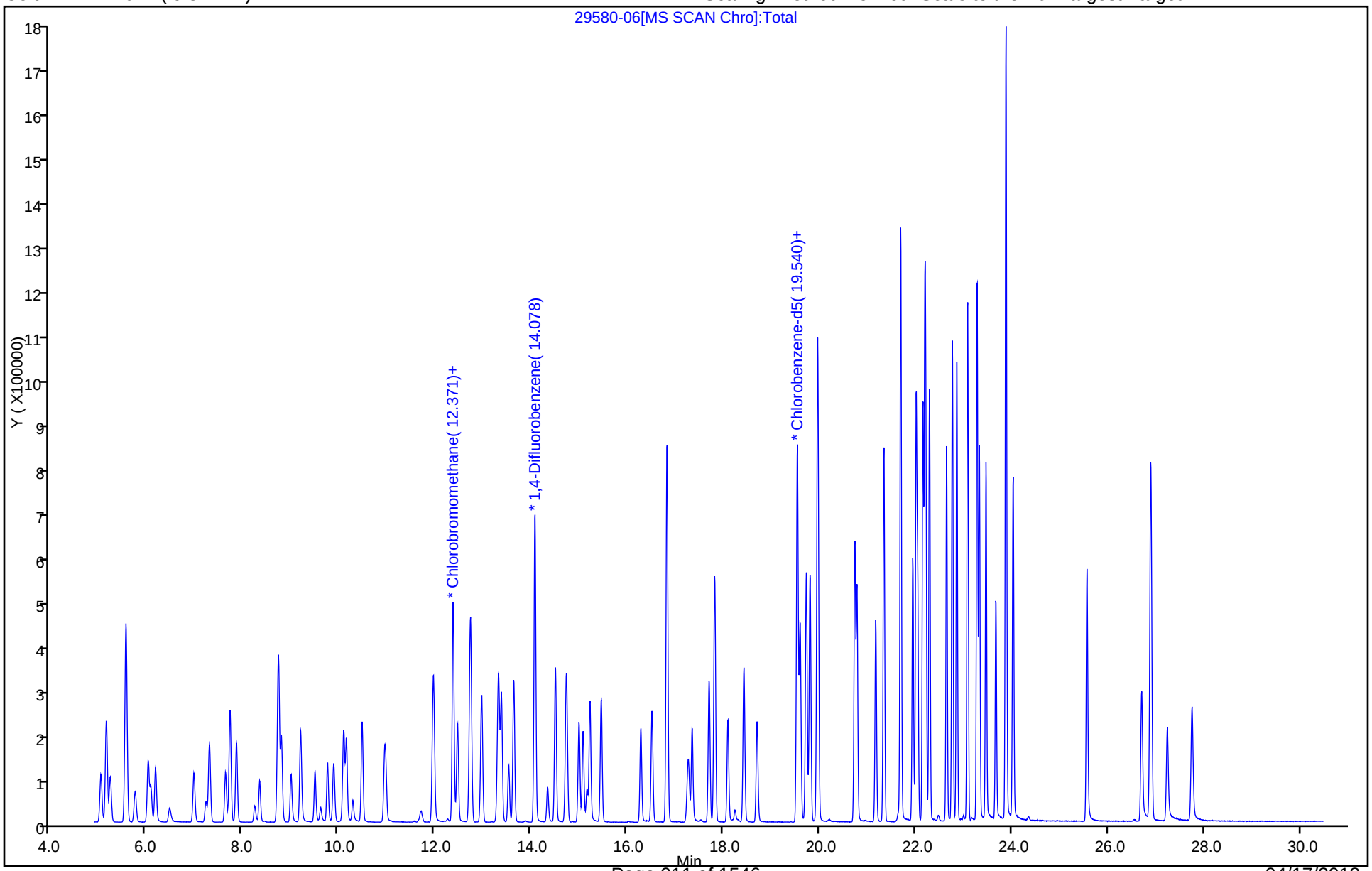
Report Date: 15-Mar-2018 10:07:25 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-06.d

Injection Date:	14-Mar-2018 19:39:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-07.d
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 14-Mar-2018 20:33:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-007
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:26 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 08:58:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.042	5.042	0.000	97	258423	10.0	9.60	
2 Dichlorodifluoromethane	85	5.154	5.154	0.000	99	924937	10.0	9.89	
3 Chlorodifluoromethane	51	5.235	5.235	0.000	97	501106	10.0	9.70	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.561	5.561	0.000	98	942523	10.0	9.83	
5 Chloromethane	50	5.754	5.754	0.000	99	295978	10.0	9.54	
6 Butane	43	6.026	6.026	0.000	98	481011	10.0	9.38	
7 Vinyl chloride	62	6.080	6.080	0.000	98	338532	10.0	9.42	
8 Butadiene	54	6.181	6.181	0.000	93	241316	10.0	9.62	
9 Bromomethane	94	6.984	6.984	0.000	100	272800	10.0	9.41	
10 BFB									
11 Chloroethane	64	7.230	7.230	0.000	99	151432	10.0	9.17	
12 2-Methylbutane	43	7.300	7.300	0.000	93	267281	10.0	8.81	
13 Vinyl bromide	106	7.637	7.637	0.000	100	288890	10.0	9.65	
14 Trichlorofluoromethane	101	7.733	7.733	0.000	98	728068	10.0	9.62	
15 Pentane	43	7.861	7.861	0.000	98	387844	10.0	8.97	
16 Ethanol	45	8.241	8.241	0.000	99	92633	15.0	12.3	
17 Ethyl ether	59	8.348	8.348	0.000	95	174086	10.0	9.48	
19 Acrolein	56	8.728	8.728	0.000	38	51698	10.0	8.24	
20 1,1,2-Trichloro-1,2,2-trif	101	8.739	8.739	0.000	97	526533	10.0	9.71	
21 1,1-Dichloroethene	96	8.803	8.803	0.000	97	251192	10.0	9.83	
22 Acetone	43	9.001	9.001	0.000	97	321133	10.0	8.92	
23 Carbon disulfide	76	9.193	9.193	0.000	99	607727	10.0	9.59	
24 Isopropyl alcohol	45	9.209	9.209	0.000	100	333375	10.0	8.97	
25 3-Chloro-1-propene	41	9.498	9.498	0.000	97	227764	10.0	9.56	
26 Acetonitrile	41	9.621	9.621	0.000	99	116190	10.0	8.66	
27 Methylene Chloride	49	9.760	9.760	0.000	88	215355	10.0	9.07	
28 2-Methyl-2-propanol	59	9.889	9.889	0.000	93	490895	10.0	9.27	
29 Methyl tert-butyl ether	73	10.097	10.097	0.000	96	730288	10.0	9.74	
30 trans-1,2-Dichloroethene	61	10.156	10.156	0.000	97	314997	10.0	9.67	
S 31 1,2-Dichloroethene, Total	61				0		20.0	19.6	
32 Acrylonitrile	53	10.290	10.290	0.000	95	125858	10.0	9.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	0.000	90	344319	10.0	9.54	
34 1,1-Dichloroethane	63	10.948	10.948	0.000	100	417627	10.0	9.40	
35 Vinyl acetate	43	10.980	10.980	0.000	99	449411	10.0	8.89	
36 cis-1,2-Dichloroethene	96	11.948	11.948	0.000	95	261909	10.0	9.89	
37 2-Butanone (MEK)	72	11.970	11.970	0.000	98	123814	10.0	9.58	
38 Ethyl acetate	88	11.981	11.981	0.000	98	21576	10.0	9.65	
39 Tetrahydrofuran	42	12.371	12.371	0.000	88	226378	10.0	8.95	
* 40 Chlorobromomethane	128	12.376	12.376	0.000	79	180091	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	96	516389	10.0	9.74	
42 Cyclohexane	84	12.730	12.730	0.000	97	352054	10.0	9.68	
43 1,1,1-Trichloroethane	97	12.740	12.740	0.000	94	564014	10.0	9.81	
44 Carbon tetrachloride	117	12.965	12.965	0.000	98	589094	10.0	9.85	
45 Isooctane	57	13.318	13.318	0.000	99	1175738	10.0	9.52	
46 Benzene	78	13.382	13.382	0.000	95	789859	10.0	9.55	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	98	323121	10.0	9.84	
48 n-Heptane	43	13.639	13.639	0.000	88	395446	10.0	9.51	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	94	930934	10.0	10.0	
50 n-Butanol	56	14.340	14.340	0.000	84	137368	10.0	8.66	
51 Trichloroethene	95	14.506	14.506	0.000	98	361114	10.0	9.73	
A 52 GRO	1	14.728	(7.290-22.166)		0	109144963	10.0	0	
53 1,2-Dichloropropane	63	14.998	14.998	0.000	92	278726	10.0	9.39	
55 Methyl methacrylate	69	15.078	15.078	0.000	98	284101	10.0	9.73	
56 1,4-Dioxane	88	15.158	15.158	0.000	91	168612	10.0	9.59	
57 Dibromomethane	174	15.222	15.222	0.000	91	385513	10.0	10.1	
58 Dichlorobromomethane	83	15.458	15.458	0.000	98	586546	10.0	9.88	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	91	419275	10.0	9.84	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	188529295	10.0	2833.5	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	94	526958	10.0	9.49	
63 Toluene	92	16.827	16.827	0.000	93	611928	10.0	9.87	
62 n-Octane	43	16.827	16.827	0.000	88	578529	10.0	9.96	
64 trans-1,3-Dichloropropene	75	17.346	17.346	0.000	96	422385	10.0	10.2	
65 1,1,2-Trichloroethane	83	17.699	17.699	0.000	97	289752	10.0	9.70	
66 Tetrachloroethene	166	17.817	17.817	0.000	97	607764	10.0	9.63	
67 2-Hexanone	43	18.090	18.090	0.000	98	494274	10.0	9.25	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	676730	10.0	10.2	
69 Ethylene Dibromide	107	18.700	18.700	0.000	99	537814	10.0	10.1	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	84	867885	10.0	10.0	
72 Chlorobenzene	112	19.599	19.599	0.000	96	855074	10.0	9.76	
73 Ethylbenzene	91	19.727	19.727	0.000	98	1411663	10.0	9.87	
74 n-Nonane	57	19.807	19.807	0.000	85	648101	10.0	9.82	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	1131931	20.0	20.2	
S 76 Xylenes, Total	106				0		30.0	30.3	
77 o-Xylene	106	20.738	20.738	0.000	99	575739	10.0	10.2	
78 Styrene	104	20.781	20.781	0.000	97	870115	10.0	10.6	
79 Bromoform	173	21.171	21.171	0.000	99	727635	10.0	10.9	
80 Isopropylbenzene	105	21.343	21.343	0.000	95	1701558	10.0	10.2	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	821482	10.0	9.86	
82 N-Propylbenzene	91	22.011	22.011	0.000	100	2055166	10.0	10.3	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	97	644148	10.0	9.88	
84 n-Decane	57	22.156	22.156	0.000	92	900456	10.0	10.1	
85 4-Ethyltoluene	105	22.193	22.193	0.000	98	1728912	10.0	10.4	
86 2-Chlorotoluene	91	22.215	22.215	0.000	97	1427047	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.289	22.289	0.000	93	1519133	10.0	10.2	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	91	747852	10.0	11.0	
89 tert-Butylbenzene	119	22.771	22.771	0.000	94	1510978	10.0	10.3	
90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.000	97	1542128	10.0	10.5	
91 sec-Butylbenzene	105	23.087	23.087	0.000	99	2239587	10.0	10.5	
92 4-Isopropyltoluene	119	23.284	23.284	0.000	97	1919811	10.0	10.7	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	96	1023840	10.0	10.8	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	96	976927	10.0	10.6	
95 Benzyl chloride	91	23.670	23.670	0.000	99	1096308	10.0	10.9	
96 n-Butylbenzene	91	23.878	23.878	0.000	99	1618410	10.0	11.3	
97 Undecane	57	23.884	23.884	0.000	94	823318	10.0	10.2	
98 1,2-Dichlorobenzene	146	24.033	24.033	0.000	97	976691	10.0	10.6	
99 Dodecane	57	25.569	25.569	0.000	98	724173	10.0	10.1	
100 1,2,4-Trichlorobenzene	180	26.708	26.708	0.000	94	478537	10.0	10.1	
101 Hexachlorobutadiene	225	26.901	26.901	0.000	96	681610	10.0	10.0	
102 Naphthalene	128	27.243	27.243	0.000	99	923412	10.0	9.61	
103 1,2,3-Trichlorobenzene	180	27.757	27.757	0.000	95	409635	10.0	10.0	

Reagents:

ATTO15CAL4w_00667	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

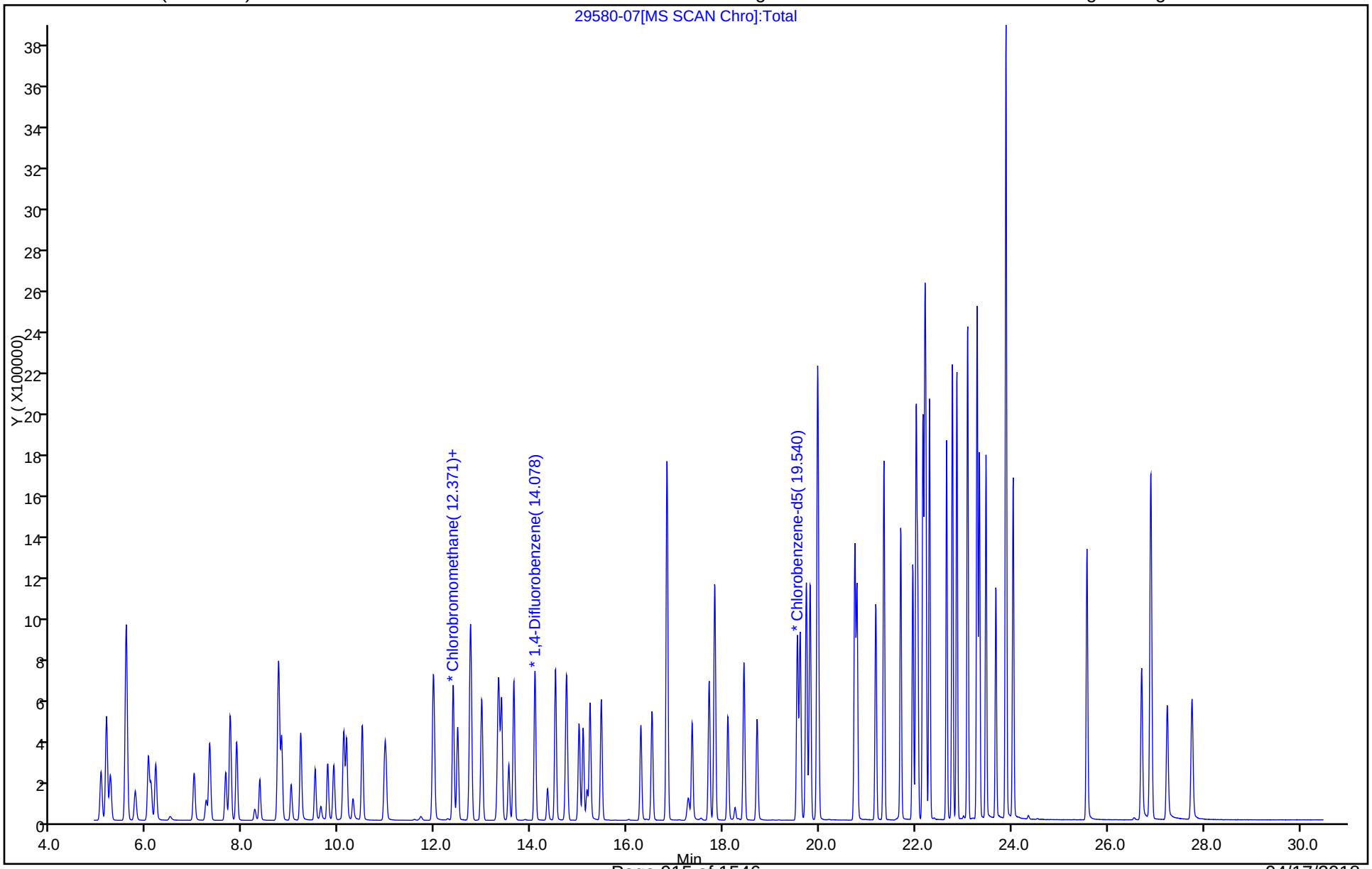
Report Date: 15-Mar-2018 10:07:26 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-07.d

Injection Date:	14-Mar-2018 20:33:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	icis			Worklist Smp#:	7
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-08.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-Mar-2018 21:27:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-008
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:28 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 08:59:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.037	5.042	-0.006	97	474327	15.0	16.4	
2 Dichlorodifluoromethane	85	5.154	5.154	0.000	99	1609790	15.0	16.0	
3 Chlorodifluoromethane	51	5.234	5.235	-0.001	97	886946	15.0	16.0	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.566	5.561	0.005	96	1619510	15.0	15.7	
5 Chloromethane	50	5.759	5.754	0.005	99	531018	15.0	16.0	
6 Butane	43	6.032	6.026	0.006	98	918935	15.0	16.7	
7 Vinyl chloride	62	6.085	6.080	0.005	98	627540	15.0	16.3	
8 Butadiene	54	6.187	6.181	0.006	94	451578	15.0	16.8	
10 BFB									
9 Bromomethane	94	6.984	6.984	0.000	99	493107	15.0	15.9	
11 Chloroethane	64	7.235	7.230	0.005	99	284255	15.0	16.0	
12 2-Methylbutane	43	7.310	7.300	0.010	92	519722	15.0	16.0	
13 Vinyl bromide	106	7.642	7.637	0.005	100	515753	15.0	16.1	
14 Trichlorofluoromethane	101	7.738	7.733	0.005	99	1277807	15.0	15.7	
15 Pentane	43	7.867	7.861	0.005	97	750651	15.0	16.2	
16 Ethanol	45	8.241	8.241	0.000	99	184587	20.0	22.9	
17 Ethyl ether	59	8.348	8.348	0.000	95	328086	15.0	16.6	
19 Acrolein	56	8.728	8.728	0.000	44	117633	15.0	17.5	
20 1,1,2-Trichloro-1,2,2-trif	101	8.744	8.739	0.005	97	918423	15.0	15.8	
21 1,1-Dichloroethene	96	8.808	8.803	0.005	97	450378	15.0	16.4	
22 Acetone	43	9.001	9.001	0.000	96	580603	15.0	15.0	
23 Carbon disulfide	76	9.199	9.193	0.006	99	1085818	15.0	16.0	
24 Isopropyl alcohol	45	9.209	9.209	0.000	100	626109	15.0	15.7	
25 3-Chloro-1-propene	41	9.504	9.498	0.006	96	428761	15.0	16.8	
26 Acetonitrile	41	9.621	9.621	0.000	99	224040	15.0	15.6	
27 Methylene Chloride	49	9.766	9.760	0.006	88	396628	15.0	15.6	
28 2-Methyl-2-propanol	59	9.889	9.889	0.000	93	911170	15.0	16.0	
29 Methyl tert-butyl ether	73	10.097	10.097	0.000	96	1293294	15.0	16.1	
30 trans-1,2-Dichloroethene	61	10.156	10.156	0.000	97	568221	15.0	16.3	
S 31 1,2-Dichloroethene, Total	61				0		30.0	32.4	
32 Acrylonitrile	53	10.290	10.290	0.000	95	242396	15.0	16.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	-0.001	90	633285	15.0	16.4	
34 1,1-Dichloroethane	63	10.948	10.948	0.000	100	750871	15.0	15.8	
35 Vinyl acetate	43	10.980	10.980	0.000	100	866401	15.0	16.0	
36 cis-1,2-Dichloroethene	96	11.948	11.948	0.000	92	459530	15.0	16.2	
37 2-Butanone (MEK)	72	11.970	11.970	0.000	98	222656	15.0	16.1	
38 Ethyl acetate	88	11.980	11.981	-0.001	97	38595	15.0	16.1	
39 Tetrahydrofuran	42	12.371	12.371	0.000	88	417137	15.0	15.3	
* 40 Chlorobromomethane	128	12.376	12.376	0.000	88	193176	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	96	905703	15.0	15.9	
42 Cyclohexane	84	12.729	12.730	-0.001	97	622168	15.0	15.9	
43 1,1,1-Trichloroethane	97	12.745	12.740	0.005	95	960722	15.0	15.5	
44 Carbon tetrachloride	117	12.970	12.965	0.005	99	1000688	15.0	15.5	
45 Isooctane	57	13.323	13.318	0.005	99	2122917	15.0	15.9	
46 Benzene	78	13.382	13.382	0.000	95	1388231	15.0	15.6	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	98	568258	15.0	16.1	
48 n-Heptane	43	13.639	13.639	0.000	89	725740	15.0	16.2	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	94	1003807	10.0	10.0	
50 n-Butanol	56	14.340	14.340	0.000	84	269987	15.0	15.8	
51 Trichloroethene	95	14.505	14.506	-0.001	99	632068	15.0	15.8	
A 52 GRO	1	14.728	(7.290-22.166)		0	191151402	15.0	0	
53 1,2-Dichloropropane	63	14.998	14.998	0.000	92	503190	15.0	15.7	
55 Methyl methacrylate	69	15.083	15.078	0.005	98	516834	15.0	16.4	
56 1,4-Dioxane	88	15.164	15.158	0.006	91	302051	15.0	15.9	
57 Dibromomethane	174	15.222	15.222	0.000	92	655195	15.0	15.9	
58 Dichlorobromomethane	83	15.458	15.458	0.000	98	1037040	15.0	16.2	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	91	775789	15.0	16.9	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	330816641	15.0	4611.1	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	94	970429	15.0	16.2	
62 n-Octane	43	16.827	16.827	0.000	86	1036659	15.0	16.6	
63 Toluene	92	16.827	16.827	0.000	93	1057966	15.0	15.8	
64 trans-1,3-Dichloropropene	75	17.346	17.346	0.000	96	776443	15.0	17.4	
65 1,1,2-Trichloroethane	83	17.705	17.699	0.006	96	516228	15.0	16.0	
66 Tetrachloroethene	166	17.822	17.817	0.005	97	1034266	15.0	15.2	
67 2-Hexanone	43	18.095	18.090	0.005	97	936305	15.0	16.3	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	1169020	15.0	16.4	
69 Ethylene Dibromide	107	18.700	18.700	0.000	99	959926	15.0	16.7	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	85	936214	10.0	10.0	
72 Chlorobenzene	112	19.598	19.599	-0.001	95	1480591	15.0	15.7	
73 Ethylbenzene	91	19.727	19.727	0.000	98	2466092	15.0	16.0	
74 n-Nonane	57	19.807	19.807	0.000	85	1146136	15.0	16.1	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	1935366	30.0	31.9	
S 76 Xylenes, Total	106				0		45.0	48.2	
77 o-Xylene	106	20.738	20.738	0.000	99	993362	15.0	16.2	
78 Styrene	104	20.781	20.781	0.000	98	1528915	15.0	17.3	
79 Bromoform	173	21.171	21.171	0.000	99	1253447	15.0	17.5	
80 Isopropylbenzene	105	21.342	21.343	-0.001	96	2887278	15.0	16.1	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	1440732	15.0	16.0	
82 N-Propylbenzene	91	22.011	22.011	0.000	99	3509174	15.0	16.3	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	97	1124072	15.0	16.0	
84 n-Decane	57	22.156	22.156	0.000	92	1585939	15.0	16.5	
85 4-Ethyltoluene	105	22.193	22.193	0.000	98	2935721	15.0	16.3	
86 2-Chlorotoluene	91	22.214	22.215	-0.001	96	2464084	15.0	16.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.289	22.289	0.000	93	2568722	15.0	16.0	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	90	1304255	15.0	17.7	
89 tert-Butylbenzene	119	22.771	22.771	0.000	94	2526256	15.0	15.9	
90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.000	97	2616720	15.0	16.5	
91 sec-Butylbenzene	105	23.086	23.087	-0.001	98	3735368	15.0	16.3	
92 4-Isopropyltoluene	119	23.284	23.284	0.000	97	3207956	15.0	16.5	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	97	1770123	15.0	17.2	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	96	1749177	15.0	17.7	
95 Benzyl chloride	91	23.675	23.670	0.005	99	2041550	15.0	18.9	
96 n-Butylbenzene	91	23.884	23.878	0.006	99	2728958	15.0	17.7	
97 Undecane	57	23.884	23.884	0.000	93	1421993	15.0	16.4	
98 1,2-Dichlorobenzene	146	24.033	24.033	0.000	97	1686548	15.0	16.9	
99 Dodecane	57	25.569	25.569	0.000	98	1253410	15.0	16.2	
100 1,2,4-Trichlorobenzene	180	26.708	26.708	0.000	94	894316	15.0	17.5	
101 Hexachlorobutadiene	225	26.901	26.901	0.000	97	1132620	15.0	15.4	
102 Naphthalene	128	27.243	27.243	0.000	99	1796389	15.0	17.3	
103 1,2,3-Trichlorobenzene	180	27.757	27.757	0.000	96	732221	15.0	16.6	

Reagents:

ATTO15CAL5w_00073	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

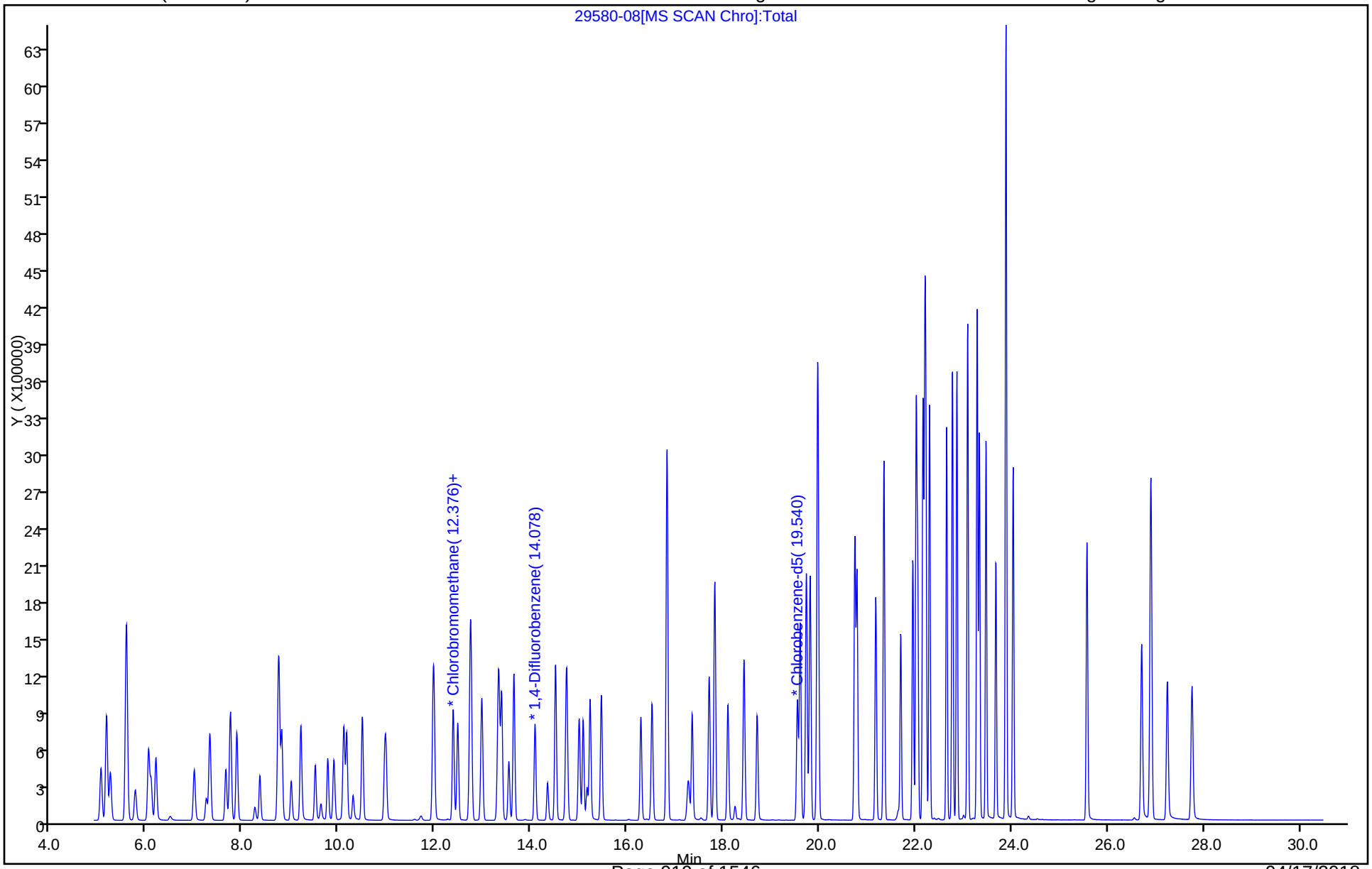
Report Date: 15-Mar-2018 10:07:28 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-08.d

Injection Date:	14-Mar-2018 21:27:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-09.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-Mar-2018 22:20:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-009
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:30 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 08:59:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.042	5.042	0.000	97	692408	20.0	21.0	
2 Dichlorodifluoromethane	85	5.154	5.154	0.000	99	2245950	20.0	19.6	
3 Chlorodifluoromethane	51	5.235	5.235	0.000	97	1269263	20.0	20.0	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.566	5.561	0.005	97	2258622	20.0	19.2	
5 Chloromethane	50	5.754	5.754	0.000	99	761320	20.0	20.0	
6 Butane	43	6.032	6.026	0.006	98	1336812	20.0	21.2	
7 Vinyl chloride	62	6.080	6.080	0.000	98	909732	20.0	20.6	
8 Butadiene	54	6.182	6.181	0.001	95	681123	20.0	22.1	
9 Bromomethane	94	6.984	6.984	0.000	99	710774	20.0	20.0	
10 BFB									
11 Chloroethane	64	7.235	7.230	0.005	99	427915	20.0	21.1	
12 2-Methylbutane	43	7.305	7.300	0.005	92	814306	20.0	21.9	
13 Vinyl bromide	106	7.642	7.637	0.005	100	740244	20.0	20.1	
14 Trichlorofluoromethane	101	7.733	7.733	0.000	99	1810090	20.0	19.5	
15 Pentane	43	7.867	7.861	0.006	97	1175328	20.0	22.1	
16 Ethanol	45	8.246	8.241	0.005	99	433384	40.0	47.0	
17 Ethyl ether	59	8.348	8.348	0.000	95	492118	20.0	21.8	
19 Acrolein	56	8.728	8.728	0.000	94	187050	20.0	24.3	
20 1,1,2-Trichloro-1,2,2-trif	101	8.739	8.739	0.000	98	1309155	20.0	19.7	
21 1,1-Dichloroethene	96	8.803	8.803	0.000	98	651373	20.0	20.8	
22 Acetone	43	9.001	9.001	0.000	97	859717	20.0	19.5	
23 Carbon disulfide	76	9.199	9.193	0.006	99	1606167	20.0	20.6	
24 Isopropyl alcohol	45	9.209	9.209	0.000	99	958402	20.0	21.0	
25 3-Chloro-1-propene	41	9.504	9.498	0.006	96	645931	20.0	22.1	
26 Acetonitrile	41	9.616	9.621	-0.005	100	356686	20.0	21.7	
27 Methylene Chloride	49	9.760	9.760	0.000	90	606999	20.0	20.8	
28 2-Methyl-2-propanol	59	9.889	9.889	0.000	93	1343218	20.0	20.7	
29 Methyl tert-butyl ether	73	10.097	10.097	0.000	97	1881598	20.0	20.5	
30 trans-1,2-Dichloroethene	61	10.156	10.156	0.000	98	840738	20.0	21.0	
S 31 1,2-Dichloroethene, Total	61				0		40.0	41.6	
32 Acrylonitrile	53	10.290	10.290	0.000	95	386840	20.0	23.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	0.000	91	951567	20.0	21.5	
34 1,1-Dichloroethane	63	10.948	10.948	0.000	100	1117121	20.0	20.5	
35 Vinyl acetate	43	10.975	10.980	-0.005	100	1348591	20.0	21.7	
36 cis-1,2-Dichloroethene	96	11.948	11.948	0.000	95	668294	20.0	20.6	
37 2-Butanone (MEK)	72	11.970	11.970	0.000	97	329549	20.0	20.8	
38 Ethyl acetate	88	11.981	11.981	0.000	97	56435	20.0	20.6	
39 Tetrahydrofuran	42	12.371	12.371	0.000	92	660944	20.0	21.8	
* 40 Chlorobromomethane	128	12.376	12.376	0.000	79	220994	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	96	1301752	20.0	20.0	
42 Cyclohexane	84	12.730	12.730	0.000	98	906319	20.0	20.8	
43 1,1,1-Trichloroethane	97	12.746	12.740	0.006	95	1352930	20.0	19.6	
44 Carbon tetrachloride	117	12.970	12.965	0.005	99	1405946	20.0	19.6	
45 Isooctane	57	13.318	13.318	0.000	99	3202339	20.0	21.6	
46 Benzene	78	13.382	13.382	0.000	95	2027829	20.0	20.5	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	98	822629	20.0	20.9	
48 n-Heptane	43	13.639	13.639	0.000	90	1110459	20.0	22.3	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	94	1115809	10.0	10.0	
50 n-Butanol	56	14.340	14.340	0.000	86	399688	20.0	21.0	
51 Trichloroethene	95	14.506	14.506	0.000	99	898478	20.0	20.2	
A 52 GRO	1	14.728	(7.290-22.166)		0	271719731	20.0	0	
53 1,2-Dichloropropane	63	14.998	14.998	0.000	92	749240	20.0	21.1	
55 Methyl methacrylate	69	15.078	15.078	0.000	99	762110	20.0	21.8	
56 1,4-Dioxane	88	15.164	15.158	0.006	92	425657	20.0	20.2	
57 Dibromomethane	174	15.228	15.222	0.006	93	922060	20.0	20.1	
58 Dichlorobromomethane	83	15.458	15.458	0.000	98	1458551	20.0	20.5	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	91	1134508	20.0	22.2	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	461882686	20.0	5791.8	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	95	1468967	20.0	22.1	
63 Toluene	92	16.827	16.827	0.000	93	1485649	20.0	20.0	
62 n-Octane	43	16.827	16.827	0.000	89	1541620	20.0	22.2	
64 trans-1,3-Dichloropropene	75	17.346	17.346	0.000	96	1112677	20.0	22.4	
65 1,1,2-Trichloroethane	83	17.705	17.699	0.006	96	738941	20.0	20.7	
66 Tetrachloroethene	166	17.822	17.817	0.005	98	1399063	20.0	18.5	
67 2-Hexanone	43	18.095	18.090	0.005	97	1404935	20.0	22.0	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	1579988	20.0	20.0	
69 Ethylene Dibromide	107	18.700	18.700	0.000	98	1339276	20.0	21.0	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	86	1037573	10.0	10.0	
72 Chlorobenzene	112	19.599	19.599	0.000	98	2072411	20.0	19.8	
73 Ethylbenzene	91	19.727	19.727	0.000	98	3456473	20.0	20.2	
74 n-Nonane	57	19.807	19.807	0.000	86	1666946	20.0	21.1	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	2673806	40.0	39.8	
S 76 Xylenes, Total	106				0		60.0	60.0	
77 o-Xylene	106	20.738	20.738	0.000	99	1368706	20.0	20.2	
78 Styrene	104	20.781	20.781	0.000	99	2117792	20.0	21.6	
79 Bromoform	173	21.171	21.171	0.000	98	1564027	20.0	19.7	
80 Isopropylbenzene	105	21.343	21.343	0.000	96	3947133	20.0	19.8	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	2002448	20.0	20.1	
82 N-Propylbenzene	91	22.011	22.011	0.000	99	4791699	20.0	20.1	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	97	1574626	20.0	20.2	
84 n-Decane	57	22.156	22.156	0.000	92	2228991	20.0	20.9	
85 4-Ethyltoluene	105	22.193	22.193	0.000	98	3951219	20.0	19.8	
86 2-Chlorotoluene	91	22.215	22.215	0.000	96	3357746	20.0	19.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.289	22.289	0.000	93	3495394	20.0	19.6	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	90	1778819	20.0	21.8	
89 tert-Butylbenzene	119	22.771	22.771	0.000	94	3351949	20.0	19.1	
90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.000	97	3500959	20.0	19.9	
91 sec-Butylbenzene	105	23.087	23.087	0.000	98	4960559	20.0	19.5	
92 4-Isopropyltoluene	119	23.285	23.284	0.001	97	4226835	20.0	19.7	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	98	2346131	20.0	20.6	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	95	2333982	20.0	21.3	
95 Benzyl chloride	91	23.675	23.670	0.005	99	2856025	20.0	23.8	
96 n-Butylbenzene	91	23.884	23.878	0.006	99	3629787	20.0	21.2	
97 Undecane	57	23.884	23.884	0.000	93	1932994	20.0	20.1	
98 1,2-Dichlorobenzene	146	24.033	24.033	0.000	97	2238784	20.0	20.2	
99 Dodecane	57	25.569	25.569	0.000	98	1726827	20.0	20.2	
100 1,2,4-Trichlorobenzene	180	26.708	26.708	0.000	94	1208370	20.0	21.3	
101 Hexachlorobutadiene	225	26.901	26.901	0.000	97	1417314	20.0	17.4	
102 Naphthalene	128	27.243	27.243	0.000	99	2475882	20.0	21.5	
103 1,2,3-Trichlorobenzene	180	27.757	27.757	0.000	96	994711	20.0	20.3	

Reagents:

ATTO15CAL6w_00149	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

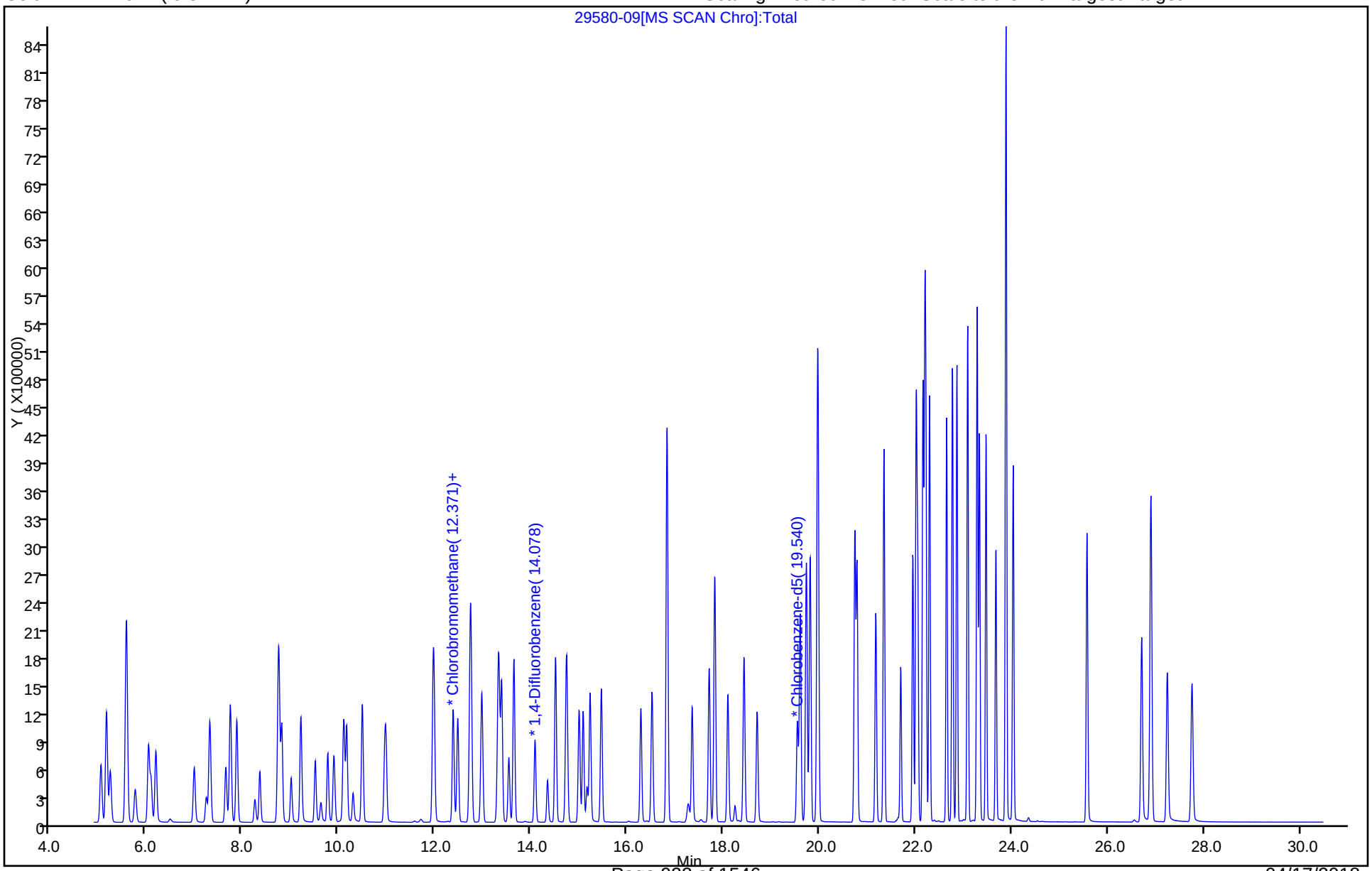
Report Date: 15-Mar-2018 10:07:31 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-09.d

Injection Date:	14-Mar-2018 22:20:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 14-Mar-2018 23:14:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-010
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:32 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 09:00:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.042	5.042	0.000	97	1443842	40.0	39.7	
2 Dichlorodifluoromethane	85	5.160	5.154	0.006	99	4606296	40.0	36.4	
3 Chlorodifluoromethane	51	5.235	5.235	0.000	97	2652589	40.0	38.0	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.572	5.561	0.011	92	4608549	40.0	35.5	
5 Chloromethane	50	5.759	5.754	0.005	99	1579104	40.0	37.6	
6 Butane	43	6.037	6.026	0.011	98	2794378	40.0	40.3	
7 Vinyl chloride	62	6.085	6.080	0.005	98	1870106	40.0	38.5	
8 Butadiene	54	6.187	6.181	0.006	95	1433132	40.0	42.2	
10 BFB									
9 Bromomethane	94	6.989	6.984	0.005	99	1492288	40.0	38.1	
11 Chloroethane	64	7.241	7.230	0.011	99	930900	40.0	41.7	
12 2-Methylbutane	43	7.310	7.300	0.010	93	1783615	40.0	43.5	
13 Vinyl bromide	106	7.642	7.637	0.005	99	1544466	40.0	38.1	
14 Trichlorofluoromethane	101	7.738	7.733	0.005	99	3749258	40.0	36.6	
15 Pentane	43	7.872	7.861	0.011	98	2576776	40.0	44.1	
16 Ethanol	45	8.252	8.241	0.011	99	1212226	100.0	119.3	
17 Ethyl ether	59	8.353	8.348	0.005	96	1065794	40.0	42.9	
19 Acrolein	56	8.733	8.728	0.005	96	366164	40.0	43.2	
20 1,1,2-Trichloro-1,2,2-trif	101	8.744	8.739	0.005	98	2675834	40.0	36.5	
21 1,1-Dichloroethene	96	8.808	8.803	0.005	98	1355619	40.0	39.2	
22 Acetone	43	9.001	9.001	0.000	96	1880188	40.0	38.6	
23 Carbon disulfide	76	9.199	9.193	0.006	99	3373935	40.0	39.4	
24 Isopropyl alcohol	45	9.220	9.209	0.011	99	2087745	40.0	41.5	
25 3-Chloro-1-propene	41	9.504	9.498	0.006	96	1383396	40.0	42.9	
26 Acetonitrile	41	9.621	9.621	0.000	99	815795	40.0	45.0	
27 Methylene Chloride	49	9.766	9.760	0.006	91	1313984	40.0	40.9	
28 2-Methyl-2-propanol	59	9.900	9.889	0.011	93	2880499	40.0	40.2	
29 Methyl tert-butyl ether	73	10.097	10.097	0.000	97	3923954	40.0	38.7	
30 trans-1,2-Dichloroethene	61	10.162	10.156	0.006	99	1811774	40.0	41.1	
S 31 1,2-Dichloroethene, Total	61				0		80.0	79.2	
32 Acrylonitrile	53	10.295	10.290	0.005	95	879038	40.0	47.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	0.000	92	2021835	40.0	41.4	
34 1,1-Dichloroethane	63	10.953	10.948	0.005	100	2342931	40.0	39.0	
35 Vinyl acetate	43	10.980	10.980	0.000	100	2991066	40.0	43.7	
36 cis-1,2-Dichloroethene	96	11.954	11.948	0.006	97	1361372	40.0	38.0	
37 2-Butanone (MEK)	72	11.975	11.970	0.005	97	683100	40.0	39.1	
38 Ethyl acetate	88	11.981	11.981	0.000	96	116943	40.0	38.7	
39 Tetrahydrofuran	42	12.371	12.371	0.000	92	1467788	40.0	44.2	
* 40 Chlorobromomethane	128	12.376	12.376	0.000	85	243500	10.0	10.0	
41 Chloroform	83	12.473	12.467	0.006	96	2693279	40.0	37.6	
42 Cyclohexane	84	12.730	12.730	0.000	99	1843910	40.0	38.6	
43 1,1,1-Trichloroethane	97	12.746	12.740	0.006	96	2734179	40.0	36.2	
44 Carbon tetrachloride	117	12.970	12.965	0.005	99	2857687	40.0	36.4	
45 Isooctane	57	13.323	13.318	0.005	99	6721300	40.0	41.5	
46 Benzene	78	13.382	13.382	0.000	96	4224012	40.0	38.9	
47 1,2-Dichloroethane	62	13.537	13.532	0.005	98	1737264	40.0	40.3	
48 n-Heptane	43	13.639	13.639	0.000	91	2413387	40.0	44.2	
* 49 1,4-Difluorobenzene	114	14.083	14.078	0.005	94	1221708	10.0	10.0	
50 n-Butanol	56	14.340	14.340	0.000	86	893736	40.0	42.9	
51 Trichloroethene	95	14.506	14.506	0.000	98	1864364	40.0	38.3	
A 52 GRO	1	14.728	(7.290-22.166)		0	556705028	40.0	0	
53 1,2-Dichloropropane	63	14.998	14.998	0.000	92	1618859	40.0	41.6	
55 Methyl methacrylate	69	15.083	15.078	0.005	100	1640213	40.0	42.8	
56 1,4-Dioxane	88	15.164	15.158	0.006	94	888822	40.0	38.5	
57 Dibromomethane	174	15.228	15.222	0.006	94	1877010	40.0	37.4	
58 Dichlorobromomethane	83	15.463	15.458	0.005	99	3026159	40.0	38.8	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	92	2421096	40.0	43.3	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	926932200	40.0	10616	
61 4-Methyl-2-pentanone (MIBK	43	16.517	16.512	0.005	95	3218343	40.0	44.1	
62 n-Octane	43	16.827	16.827	0.000	83	3181396	40.0	41.8	
63 Toluene	92	16.827	16.827	0.000	93	2928325	40.0	36.7	
64 trans-1,3-Dichloropropene	75	17.352	17.346	0.006	97	2372408	40.0	43.7	
65 1,1,2-Trichloroethane	83	17.705	17.699	0.006	97	1553418	40.0	40.4	
66 Tetrachloroethene	166	17.822	17.817	0.005	98	2763433	40.0	34.0	
67 2-Hexanone	43	18.095	18.090	0.005	97	3079067	40.0	44.8	
68 Chlorodibromomethane	129	18.432	18.427	0.005	98	3103514	40.0	36.5	
69 Ethylene Dibromide	107	18.705	18.700	0.005	99	2760363	40.0	40.3	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	87	1116616	10.0	10.0	
72 Chlorobenzene	112	19.599	19.599	0.000	94	4165620	40.0	37.0	
73 Ethylbenzene	91	19.727	19.727	0.000	98	6871864	40.0	37.3	
74 n-Nonane	57	19.807	19.807	0.000	87	3436076	40.0	40.4	
75 m-Xylene & p-Xylene	106	19.968	19.962	0.006	0	5142247	80.0	71.2	
S 76 Xylenes, Total	106				0		120.0	108.3	
77 o-Xylene	106	20.738	20.738	0.000	100	2711553	40.0	37.2	
78 Styrene	104	20.781	20.781	0.000	99	4190555	40.0	39.8	
79 Bromoform	173	21.171	21.171	0.000	98	2870870	40.0	33.6	
80 Isopropylbenzene	105	21.343	21.343	0.000	97	7602043	40.0	35.5	
81 1,1,2,2-Tetrachloroethane	83	21.947	21.942	0.005	99	3990539	40.0	37.2	
82 N-Propylbenzene	91	22.017	22.011	0.006	99	8922031	40.0	34.8	
83 1,2,3-Trichloropropane	75	22.049	22.043	0.006	98	3160589	40.0	37.7	
84 n-Decane	57	22.156	22.156	0.000	92	4378271	40.0	38.2	
85 4-Ethyltoluene	105	22.193	22.193	0.000	97	7217096	40.0	33.7	
86 2-Chlorotoluene	91	22.215	22.215	0.000	97	6403333	40.0	35.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.295	22.289	0.006	94	6656080	40.0	34.7	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	89	3469218	40.0	39.5	
89 tert-Butylbenzene	119	22.771	22.771	0.000	93	6328197	40.0	33.4	
90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.000	98	6598373	40.0	34.9	
91 sec-Butylbenzene	105	23.087	23.087	0.000	96	9002250	40.0	32.9	
92 4-Isopropyltoluene	119	23.284	23.284	0.000	96	7716525	40.0	33.4	
93 1,3-Dichlorobenzene	146	23.333	23.327	0.006	98	4447950	40.0	36.3	
94 1,4-Dichlorobenzene	146	23.472	23.466	0.006	94	4407142	40.0	37.3	
95 Benzyl chloride	91	23.675	23.670	0.005	99	5528204	40.0	42.9	
96 n-Butylbenzene	91	23.884	23.878	0.006	100	6430073	40.0	34.9	
97 Undecane	57	23.889	23.884	0.005	95	3631205	40.0	35.1	
98 1,2-Dichlorobenzene	146	24.033	24.033	0.000	95	4301294	40.0	36.1	
99 Dodecane	57	25.569	25.569	0.000	98	3555106	40.0	38.6	
100 1,2,4-Trichlorobenzene	180	26.708	26.708	0.000	94	2450059	40.0	40.1	
101 Hexachlorobutadiene	225	26.901	26.901	0.000	98	2857876	40.0	32.6	
102 Naphthalene	128	27.243	27.243	0.000	99	4955128	40.0	40.1	
103 1,2,3-Trichlorobenzene	180	27.757	27.757	0.000	95	2038005	40.0	38.6	

Reagents:

ATTO15CAL7w_00076	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

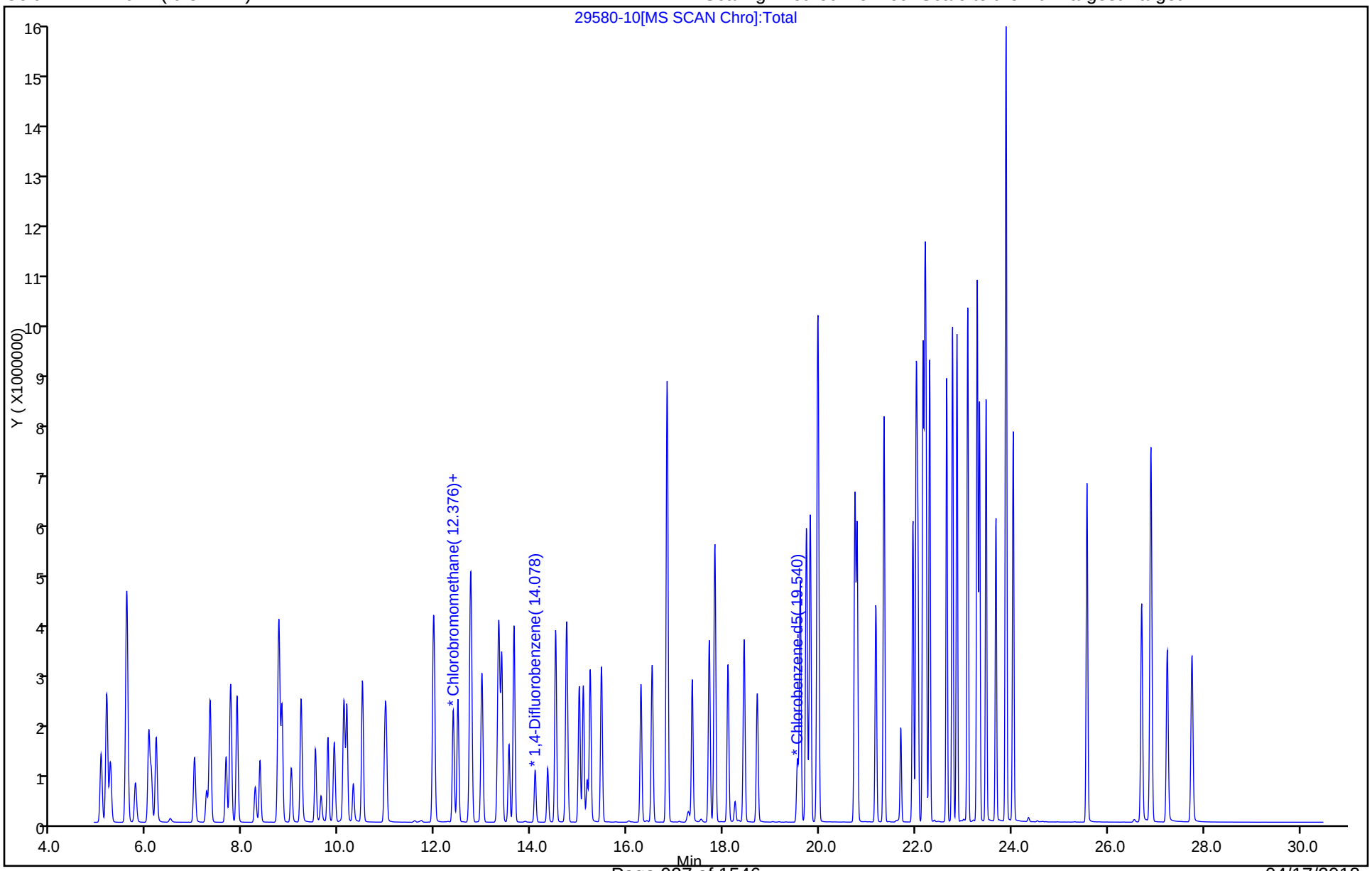
Report Date: 15-Mar-2018 10:07:32 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Injection Date:	14-Mar-2018 23:14:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-126632/5	200-0029291-005.D
Level 2	IC 200-126632/6	200-0029291-006.D
Level 3	IC 200-126632/9	200-0029291-009.D
Level 4	IC 200-126632/10	200-0029291-010.D
Level 5	ICIS 200-126632/11	200-0029291-011.D
Level 6	IC 200-126632/12	200-0029291-012.D
Level 7	IC 200-126632/13	200-0029291-013.D
Level 8	IC 200-126632/14	200-0029291-014.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 2.2560	+++++ 1.8997	+++++ 1.5116	2.2131	2.1547	Ave		2.0070				15.4		30.0			
Dichlorodifluoromethane	+++++ 4.2831	+++++ 3.7525	3.9801 3.3643	4.0245	4.0045	Ave		3.9015				8.0		30.0			
Freon 22	+++++ 3.8376	+++++ 3.2830	3.8341 2.6961	3.6273	3.6246	Ave		3.4838				12.5		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.9081	4.0917 3.4830	3.6285 3.0910	3.5604	3.5925	Ave		3.6222				8.8		30.0			
Chloromethane	+++++ 2.1530	+++++ 1.8353	2.1814 1.5228	2.2158	2.0204	Ave		1.9881				13.4		30.0			
n-Butane	+++++ 4.3252	+++++ 3.6479	4.3669 2.8721	4.0940	4.0768	Ave		3.8971				14.5		30.0			
Vinyl chloride	2.2984 1.9958	2.2102 1.7489	1.8726 1.4874	1.8348	1.8525	Ave		1.9126				13.4		30.0			
1,3-Butadiene	1.8500 1.6845	1.8423 1.4711	1.5754 1.2267	1.5621	1.5575	Ave		1.5962				12.7		30.0			
Bromomethane	+++++ 1.2712	1.4012 1.1413	1.2142 1.0006	1.1335	1.1448	Ave		1.1867				10.6		30.0			
Chloroethane	+++++ 0.9361	+++++ 0.8316	0.8975 0.6940	0.8752	0.8540	Ave		0.8481				9.9		30.0			
Isopentane	+++++ 3.0344	3.5339 2.5710	2.9661 1.9791	2.8659	2.8207	Ave		2.8244				16.8		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.1878	1.2130 1.0981	1.0858 1.0232	1.0569	1.0581	Ave		1.1033				6.4		30.0			
Trichlorofluoromethane	+++++ 3.9502	4.0738 3.5777	3.6453 3.2189	3.5786	3.5341	Ave		3.6541				7.7		30.0			
n-Pentane	+++++ 4.7639	+++++ 4.0746	4.4803 3.3080	4.4296	4.4000	Ave		4.2427				12.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.9488	+++++ 0.8249	1.2305 0.6490	0.8383	0.8066	Ave		0.8830				22.1		30.0			
Ethyl ether	+++++ 1.3472	1.4016 1.1841	1.2209 1.0358	1.2081	1.2041	Ave		1.2288				9.6		30.0			
Acrolein	+++++ 0.6680	+++++ 0.6005	+++++ 0.4709	0.4863	0.4983	Ave		0.5448				15.7		30.0			
Freon TF	+++++ 2.5542	2.5515 2.3434	2.3744 2.1517	2.2891	2.2830	Ave		2.3639				6.2		30.0			
1,1-Dichloroethene	1.0484 1.2039	1.1650 1.1077	1.0890 1.0373	1.0697	1.0693	Ave		1.0988				5.3		30.0			
Acetone	+++++ 4.1601	+++++ 3.4532	+++++ 2.7727	4.7459	3.8930	Ave		3.8050				19.5		30.0			
Carbon disulfide	+++++ 4.1374	+++++ 3.7135	3.7789 3.3241	3.7210	3.6996	Ave		3.7291				6.9		30.0			
Isopropyl alcohol	+++++ 4.4464	+++++ 3.8360	+++++ 3.0896	4.2352	4.1646	Ave		3.9544				13.4		30.0			
3-Chloropropene	+++++ 3.4882	3.1816 2.9174	2.7681 2.3431	3.1913	3.2112	Ave		3.0144				12.4		30.0			
Acetonitrile	+++++ 2.1753	+++++ 1.8690	+++++ 1.4806	2.0996	2.0326	Ave		1.9314				14.3		30.0			
Methylene Chloride	+++++ 2.7718	+++++ 2.3878	2.6880 1.9662	2.5783	2.5602	Ave		2.4921				11.6		30.0			
tert-Butyl alcohol	+++++ 4.5641	+++++ 4.0861	+++++ 3.4568	4.0947	4.1284	Ave		4.0660				9.7		30.0			
Methyl tert-butyl ether	+++++ 5.1367	4.9347 4.6412	4.4070 4.0777	4.5482	4.5869	Ave		4.6189				7.5		30.0			
trans-1,2-Dichloroethene	+++++ 3.0559	3.1179 2.7268	2.7340 2.3003	2.7375	2.7546	Ave		2.7753				9.6		30.0			
Acrylonitrile	+++++ 1.6350	+++++ 1.4244	1.4887 1.2034	1.4895	1.4887	Ave		1.4549				9.7		30.0			
n-Hexane	+++++ 3.1966	3.4459 2.8509	2.8787 2.4124	2.9148	2.9102	Ave		2.9442				10.9		30.0			
1,1-Dichloroethane	3.6014 3.7472	3.8648 3.3065	3.4469 2.8478	3.3679	3.3834	Ave		3.4458				9.0		30.0			
Vinyl acetate	+++++ 7.3430	+++++ 6.3124	+++++ 5.1206	6.5868	6.7323	Ave		6.4190				12.7		30.0			
cis-1,2-Dichloroethene	1.4027 1.4824	1.4132 1.3496	1.3312 1.2812	1.3470	1.3461	Ave		1.3692				4.5		30.0			
Methyl Ethyl Ketone	+++++ 0.9247	+++++ 0.8309	0.9043 0.7613	0.8389	0.8362	Ave		0.8494				6.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1176	+++++ 0.1063	+++++ 0.1001	0.1033	0.1069	Ave		0.1069				6.2		30.0			
Tetrahydrofuran	+++++ 0.6101	+++++ 0.5266	+++++ 0.4606	0.5602	0.5676	Ave		0.5450				10.2		30.0			
Chloroform	+++++ 3.7984	3.4226 3.4111	3.4331 3.1044	3.4184	3.3996	Ave		3.4268				5.9		30.0			
Cyclohexane	+++++ 0.3821	0.3511 0.3485	0.3411 0.3433	0.3316	0.3454	Ave		0.3490				4.5		30.0			
1,1,1-Trichloroethane	+++++ 0.6037	0.5195 0.5563	0.5157 0.5487	0.5209	0.5402	Ave		0.5436				5.7		30.0			
Carbon tetrachloride	0.4559 0.5710	0.4619 0.5336	0.4764 0.5376	0.4919	0.5084	Ave		0.5046				8.0		30.0			
2,2,4-Trimethylpentane	+++++ 2.1567	1.9062 1.9351	1.8678 1.8098	1.8959	1.9566	Ave		1.9326				5.7		30.0			
Benzene	+++++ 0.9902	0.9307 0.9026	0.8985 0.8705	0.8798	0.9020	Ave		0.9106				4.4		30.0			
1,2-Dichloroethane	+++++ 0.5465	0.4826 0.4975	0.4802 0.4673	0.4751	0.4882	Ave		0.4910				5.3		30.0			
n-Heptane	+++++ 1.0272	0.8874 0.9074	0.8681 0.8257	0.9136	0.9404	Ave		0.9100				7.0		30.0			
n-Butanol	+++++ 0.2786	+++++ 0.2476	+++++ 0.2366	0.2555	0.2514	Ave		0.2539				6.1		30.0			
Trichloroethene	0.3958 0.4043	0.3140 0.3737	0.3574 0.3753	0.3439	0.3612	Ave		0.3657				7.9		30.0			
1,2-Dichloropropane	+++++ 0.4884	0.3958 0.4373	0.4266 0.4204	0.4239	0.4417	Ave		0.4334				6.5		30.0			
Methyl methacrylate	+++++ 0.4294	+++++ 0.3872	0.3247 0.3811	0.3581	0.3801	Ave		0.3768				9.2		30.0			
1,4-Dioxane	+++++ 0.2027	+++++ 0.1833	+++++ 0.1749	0.1812	0.1856	Ave		0.1855				5.6		30.0			
Dibromomethane	+++++ 0.2419	0.2075 0.2334	0.2189 0.2513	0.2049	0.2121	Ave		0.2243				8.1		30.0			
Bromodichloromethane	+++++ 0.7765	0.5559 0.7083	0.6127 0.7011	0.6564	0.6949	Ave		0.6723				10.7		30.0			
cis-1,3-Dichloropropene	+++++ 0.6340	0.4470 0.5757	0.5053 0.5692	0.5347	0.5652	Ave		0.5473				10.8		30.0			
methyl isobutyl ketone	+++++ 1.3386	+++++ 1.1724	1.0739 1.0850	1.1813	1.2258	Ave		1.1795				8.3		30.0			
Toluene	+++++ 0.7048	0.6064 0.6647	0.6412 0.6637	0.6324	0.6391	Ave		0.6503				4.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 1.4917	1.0934 1.3201	1.2761 1.2100	1.3246	1.3624	Ave		1.2969				9.6		30.0			
trans-1,3-Dichloropropene	+++++ 0.6580	0.4585 0.6014	0.5454 0.5884	0.5640	0.5841	Ave		0.5714				10.7		30.0			
1,1,2-Trichloroethane	+++++ 0.3983	0.3591 0.3730	0.3526 0.3652	0.3583	0.3624	Ave		0.3670				4.1		30.0			
Tetrachloroethene	0.3143 0.4026	0.3326 0.3910	0.3655 0.4167	0.3541	0.3574	Ave		0.3668				9.5		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 1.3897	+++++ 1.2386	1.1624 1.1398	1.2519	1.2706	Ave		1.2422				7.2		30.0			
Dibromochloromethane	+++++ 0.6421	0.4051 0.6059	0.4448 0.6174	0.5352	0.5701	Ave		0.5458				16.5		30.0			
1,2-Dibromoethane	+++++ 0.6095	0.4915 0.5763	0.5042 0.5730	0.5293	0.5438	Ave		0.5468				7.7		30.0			
Chlorobenzene	+++++ 0.8647	0.7385 0.8255	0.7795 0.8238	0.7729	0.7794	Ave		0.7978				5.3		30.0			
Ethylbenzene	+++++ 1.7066	1.3951 1.6103	1.4734 1.5901	1.5186	1.5459	Ave		1.5486				6.5		30.0			
n-Nonane	+++++ 1.1891	0.8965 1.1060	1.0053 1.0560	1.0645	1.0843	Ave		1.0574				8.6		30.0			
m,p-Xylene	+++++ 0.5970	0.4527 0.5684	0.4956 0.5551	0.5186	0.5352	Ave		0.5318				9.0		30.0			
Xylene, o-	+++++ 0.5742	0.4644 0.5461	0.4790 0.5441	0.5029	0.5129	Ave		0.5177				7.6		30.0			
Styrene	+++++ 0.9187	0.5652 0.8844	0.6548 0.8815	0.7758	0.8163	Ave		0.7853				16.7		30.0			
Bromoform	+++++ 0.5507	0.2278 0.5166	0.2861 0.5271	0.4341	0.4830	Ave		0.4322				29.3		30.0			
Cumene	+++++ 1.7691	1.3818 1.6940	1.4437 1.6377	1.5507	1.5901	Ave		1.5810				8.6		30.0			
1,1,2,2-Tetrachloroethane	+++++ 1.0951	0.8377 1.0355	0.8959 0.9423	0.9718	0.9912	Ave		0.9671				8.9		30.0			
n-Propylbenzene	+++++ 2.4820	1.8872 2.3578	2.0446 2.1442	2.1913	2.2396	Ave		2.1924				8.9		30.0			
1,2,3-Trichloropropane	+++++ 0.9644	+++++ 0.9111	0.8087 0.8296	0.8510	0.8651	Ave		0.8717				6.6		30.0			
n-Decane	+++++ 1.7060	+++++ 1.5000	1.2561 1.1870	1.4709	1.5421	Ave		1.4437				13.3		30.0			
4-Ethyltoluene	+++++ 1.9192	1.2853 1.8053	1.4715 1.4938	1.6312	1.7066	Ave		1.6161				13.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.8323	1.3149 1.7300	1.4335 1.4394	1.5418	1.6222	Ave		1.5592				11.6		30.0			
1,3,5-Trimethylbenzene	+++++ 1.5395	1.1028 1.4422	1.2229 1.3377	1.3498	1.3881	Ave		1.3404				10.7		30.0			
Alpha Methyl Styrene	+++++ 0.6791	0.3536 0.6435	0.4337 0.6004	0.5630	0.6010	Ave		0.5535				21.2		30.0			
tert-Butylbenzene	+++++ 1.3213	0.9685 1.2340	1.0847 1.1585	1.1653	1.2017	Ave		1.1620				9.7		30.0			
1,2,4-Trimethylbenzene	+++++ 1.5501	1.0598 1.4359	1.2343 1.3531	1.3720	1.4094	Ave		1.3449				11.7		30.0			
sec-Butylbenzene	+++++ 2.2064	1.5814 2.0183	1.7879 1.8884	1.9739	2.0365	Ave		1.9275				10.4		30.0			
4-Isopropyltoluene	+++++ 1.6886	1.1300 1.5623	1.3333 1.5372	1.5330	1.5881	Ave		1.4818				12.7		30.0			
1,3-Dichlorobenzene	+++++ 0.8635	0.5974 0.8166	0.6579 0.7572	0.7378	0.7669	Ave		0.7425				12.2		30.0			
1,4-Dichlorobenzene	+++++ 0.8461	0.5979 0.7962	0.6632 0.7546	0.7328	0.7521	Ave		0.7347				11.2		30.0			
Benzyl chloride	+++++ 1.5177	0.9441 1.3811	1.0550 1.3373	1.3500	1.4086	Ave		1.2848				16.0		30.0			
n-Butylbenzene	+++++ 1.8496	1.2996 1.7830	1.4884 1.7049	1.7935	1.8314	Ave		1.6786				12.3		30.0			
n-Undecane	+++++ 1.4818	+++++ 1.4555	+++++ 1.3463	1.4512	1.3701	Ave		1.4210				4.2		30.0			
1,2-Dichlorobenzene	+++++ 0.7854	0.5753 0.7338	0.6212 0.7201	0.6974	0.7226	Ave		0.6937				10.3		30.0			
n-Dodecane	+++++ 1.0095	+++++ 1.0123	+++++ 0.6889	0.9644	0.9692	Ave		0.9289				14.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.5141	+++++ 0.5727	0.3101 0.4527	0.4274	0.4234	Ave		0.4501				19.9		30.0			
Hexachlorobutadiene	+++++ 0.4490	0.3132 0.4913	0.3603 0.4076	0.3868	0.3935	Ave		0.4003				14.5		30.0			
Naphthalene	+++++ 1.3920	+++++ 1.5646	0.6570 1.1184	1.0851	1.1690	Ave		1.1643				26.6		30.0			
1,2,3-Trichlorobenzene	+++++ 0.4652	+++++ 0.5200	0.2745 0.3535	0.3634	0.4128	Ave		0.3982				21.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-126632/5	200-0029291-005.D
Level 2	IC 200-126632/6	200-0029291-006.D
Level 3	IC 200-126632/9	200-0029291-009.D
Level 4	IC 200-126632/10	200-0029291-010.D
Level 5	ICIS 200-126632/11	200-0029291-011.D
Level 6	IC 200-126632/12	200-0029291-012.D
Level 7	IC 200-126632/13	200-0029291-013.D
Level 8	IC 200-126632/14	200-0029291-014.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 948290	+++++ 1267237	+++++ 2425315	270858	564983	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1800375	+++++ 2503175	48504 5397935	492556	1050019	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 1613127	+++++ 2189962	46724 4325821	443937	950406	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1642766	20033 2323388	44219 4959463	435749	941996	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 905027	+++++ 1224288	26584 2443369	271187	529755	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 1818066	+++++ 2433375	53218 4608219	501054	1068981	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	2076 838935	10821 1166655	22821 2386550	224554	485749	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1671 708090	9020 981339	19199 1968237	191184	408390	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 534366	6860 761351	14797 1605460	138726	300190	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 393496	+++++ 554742	10938 1113564	107113	223934	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 1275487	17302 1715004	36146 3175420	350754	739616	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 499272	5939 732487	13232 1641680	129357	277431	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1660462	19945 2386524	44424 5164610	437980	926675	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 2002495	+++++ 2717982	54600 5307696	542134	1153725	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 532939	+++++ 1100719	150140 2603344	205340	317372	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 566281	6862 789836	14879 1661969	147855	315737	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 280780	+++++ 400603	+++++ 755535	59514	130653	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1073638	12492 1563177	28936 3452319	280156	598627	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	947 506062	5704 738932	13271 1664285	130917	280379	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 1748679	+++++ 2303519	+++++ 4448809	580841	1020783	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1739150	+++++ 2477105	46052 5333443	455408	970072	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 1869045	+++++ 2558881	+++++ 4957195	518340	1091986	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 1466273	15577 1946083	33734 3759491	390577	842010	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 914365	+++++ 1246724	+++++ 2375522	256967	532971	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 1165116	+++++ 1592845	32758 3154810	315551	671301	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1918493	+++++ 2725701	+++++ 5546348	501151	1082497	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 2159216	24160 3095976	53706 6542570	556646	1202717	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 1284555	15265 1818922	33318 3690851	335038	722280	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 687285	+++++ 950136	18142 1930800	182293	390344	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 1343674	16871 1901710	35082 3870734	356733	763073	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3253 1575107	18922 2205668	42006 4569280	412198	887162	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 3086609	+++++ 4210734	+++++ 8215865	806152	1765275	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	1267 623107	6919 900244	16223 2055612	164852	352962	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 388692	+++++ 554275	11020 1221571	102674	219247	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 49453	+++++ 70933	+++++ 160666	12646	28028	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 1565516	+++++ 2128184	+++++ 4232608	426273	905244	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1596650	16757 2275438	41838 4980922	418377	891403	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 980440	9992 1408433	25808 3154691	252320	550935	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1548891	14785 2248474	39022 5041568	396374	861520	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2581 1465188	13147 2156747	36049 4940069	374298	810871	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 5533720	54251 7820912	141342 16629783	1442652	3120598	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2540772	26488 3647889	67989 7998641	669473	1438664	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 1402245	13735 2010698	36338 4293558	361493	778643	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 2635471	25257 3667162	65688 7586907	695158	1499918	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 714877	+++++ 1000603	+++++ 2174097	194379	400945	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2241 1037432	8937 1510200	27044 3448837	261708	576028	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 1253015	11265 1767282	32278 3862693	322528	704512	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 1101840	+++++ 1564888	24574 3501846	272471	606157	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 520198	+++++ 740619	+++++ 1607014	137848	295974	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 620620	5905 943111	16564 2308821	155899	338258	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1992386	15822 2862739	46367 6442618	499493	1108258	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1626655	12722 2326698	38237 5230465	406836	901445	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 3434598	+++++ 4738356	81265 9969921	898860	1955091	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1716593	15126 2492614	44381 5656214	439936	953946	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 3827462	31120 5335329	96569 11118497	1007939	2172842	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1688282	13050 2430763	41268 5406948	429161	931556	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 970108	8957 1398613	24407 3112261	249248	541032	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1570 980583	8297 1466082	25302 3550952	246292	533492	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 3384783	+++++ 4644781	80459 9713027	870872	1896600	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1563975	10105 2272191	30789 5261157	372330	850938	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1484594	12259 2161006	34898 4883008	368180	811774	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 2106136	18420 3095411	53957 7020417	537670	1163485	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 4156764	34799 6038555	101988 13550378	1056396	2307683	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 2896291	22363 4147250	69588 8998892	740472	1618528	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2908238	22583 4262917	68603 9460123	721509	1597901	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1398455	11584 2047809	33153 4636496	349865	765676	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2237762	14098 3316471	45326 7511936	539703	1218443	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1341425	5682 1937156	19802 4491570	301947	721025	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 4308947	34466 6352440	99931 13955689	1078703	2373566	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2667430	20895 3882975	62014 8029689	676031	1479586	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 6045351	47074 8841778	141521 18272173	1524351	3343161	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 2348996	+++++ 3416416	55979 7070040	591966	1291396	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 4155409	+++++ 5624748	86947 10115060	1023202	2301947	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 4674476	32061 6769841	101857 12729487	1134751	2547441	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 4462799	32799 6487497	99225 12266055	1072521	2421552	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3749718	27508 5408276	84644 11399339	938974	2072097	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1654113	8819 2413091	30018 5116482	391632	897115	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3218361	24158 4627278	75078 9872509	810602	1793766	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 126632

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/21/2018 19:15 Calibration End Date: 02/22/2018 02:49 Calibration ID: 38910

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3775459	26436 5384473	85438 11531106	954415	2103793	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 5374115	39445 7568405	123757 16092817	1373079	3039942	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 4112830	28185 5858650	92288 13100073	1066437	2370581	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 2103265	14902 3062202	45536 6452287	513211	1144791	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 2060743	14914 2985625	45907 6430790	509736	1122654	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 3696718	23550 5178952	73022 11396424	939139	2102680	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4505111	32416 6686238	103027 14528919	1247645	2733774	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 3609304	+++++ 5457885	+++++ 11472691	1009537	2045165	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1912945	14351 2751538	42999 6136741	485130	1078665	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 2458813	+++++ 3795955	+++++ 5870721	670898	1446745	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1252148	+++++ 2147634	21463 3857917	297303	632050	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1093614	7813 1842491	24940 3473642	269072	587329	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 3390490	+++++ 5867133	45476 9530635	754799	1744994	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1133047	+++++ 1950004	19003 3012367	252826	616237	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 21-Feb-2018 19:15:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-005
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:21:46 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 09:46:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.049	3.044	0.005	93	3278	0.0351	0.0634	
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	98	4243	0.0351	0.0422	
3 Chlorodifluoromethane	51	3.167	3.156	0.011	97	4191	0.0351	0.0467	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.365	3.354	0.011	93	3807	0.0351	0.0408	
5 Chloromethane	50	3.499	3.488	0.011	95	2452	0.0351	0.0479	
6 Butane	43	3.670	3.670	0.000	97	4910	0.0351	0.0489	
7 Vinyl chloride	62	3.723	3.713	0.010	26	2076	0.0351	0.0422	
8 Butadiene	54	3.777	3.782	-0.005	90	1671	0.0351	0.0407	
10 Bromomethane	94	4.424	4.419	0.005	95	1164	0.0351	0.0381	
11 Chloroethane	64	4.644	4.633	0.011	5	744	0.0351	0.0341	
12 2-Methylbutane	43	4.702	4.697	0.005	96	3374	0.0351	0.0464	
13 Vinyl bromide	106	5.007	5.002	0.005	85	764	0.0351	0.0269	
14 Trichlorofluoromethane	101	5.098	5.093	0.005	90	3452	0.0351	0.0367	
16 Pentane	43	5.227	5.221	0.006	92	4585	0.0351	0.0420	
17 Ethanol	45	5.681	5.644	0.037	98	8001	0.0702	0.3519	
18 Ethyl ether	59	5.772	5.719	0.053	93	1157	0.0351	0.0366	
19 Acrolein	56	6.120	6.104	0.016	26	505	0.0351	0.0360	
20 1,1,2-Trichloro-1,2,2-trif	101	6.115	6.109	0.006	31	1961	0.0351	0.0322	
21 1,1-Dichloroethene	96	6.168	6.163	0.005	88	947	0.0351	0.0335	
22 Acetone	43	6.452	6.409	0.043	98	7261	0.0351	0.0741	
23 Carbon disulfide	76	6.553	6.553	0.000	97	3011	0.0351	0.0314	
24 Isopropyl alcohol	45	6.746	6.687	0.059	99	12904	0.0351	0.1267	
25 3-Chloro-1-propene	41	6.944	6.938	0.006	91	2959	0.0351	0.0381	
26 Acetonitrile	41	7.115	7.088	0.027	86	2520	0.0351	0.0507	
27 Methylene Chloride	49	7.227	7.233	-0.006	90	3158	0.0351	0.0492	
28 2-Methyl-2-propanol	59	7.532	7.457	0.075	93	3121	0.0351	0.0298	
29 Methyl tert-butyl ether	73	7.682	7.629	0.053	91	4215	0.0351	0.0354	
31 trans-1,2-Dichloroethene	61	7.677	7.661	0.016	76	809	0.0351	0.0113	
32 Acrylonitrile	53	7.843	7.837	0.006	59	710	0.0351	0.0190	
33 Hexane	57	8.025	8.035	-0.011	85	2878	0.0351	0.0380	
34 1,1-Dichloroethane	63	8.549	8.549	0.000	96	3253	0.0351	0.0367	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.634	8.624	0.010	98	5117	0.0351	0.0310	
S 30 1,2-Dichloroethene, Total	61				0		0.0702	0.0473	
37 cis-1,2-Dichloroethene	96	9.683	9.683	0.000	92	1267	0.0351	0.0359	M
38 2-Butanone (MEK)	72	9.774	9.747	0.027	87	405	0.0351	0.0185	
39 Ethyl acetate	88		9.790				ND	ND	
* 40 Chlorobromomethane	128	10.164	10.170	-0.006	86	257507	10.0	10.0	
41 Tetrahydrofuran	42	10.245	10.180	0.065	80	4021	0.0351	0.0457	
42 Chloroform	83	10.303	10.303	0.000	79	3176	0.0351	0.0360	
43 Cyclohexane	84	10.560	10.544	0.016	79	676	0.0351	0.0120	
44 1,1,1-Trichloroethane	97	10.598	10.582	0.016	72	883	0.0351	0.0101	
45 Carbon tetrachloride	117	10.838	10.838	0.000	90	2581	0.0351	0.0317	
46 Isooctane	57		11.293				ND	ND	
47 Benzene	78	11.341	11.341	0.000	95	5757	0.0351	0.0392	
48 1,2-Dichloroethane	62		11.550				ND	ND	
49 n-Heptane	43	11.705	11.705	0.000	94	3509	0.0351	0.0239	
* 50 1,4-Difluorobenzene	114	12.240	12.245	-0.005	99	1614121	10.0	10.0	
52 n-Butanol	56	12.754	12.695	0.059	79	2216	0.0351	0.0541	
53 Trichloroethene	95	12.722	12.737	-0.015	82	2241	0.0351	0.0380	M
A 51 GRO	1	13.200	(4.687-21.714)		0	6779404	0.0351	0	
54 1,2-Dichloropropane	63	13.337	13.337	0.000	81	1547	0.0351	0.0221	
55 Methyl methacrylate	69		13.519				ND	ND	
56 1,4-Dioxane	88	13.663	13.583	0.080	58	844	0.0351	0.0282	
57 Dibromomethane	174	13.610	13.604	0.006	86	1220	0.0351	0.0337	
58 Dichlorobromomethane	83	13.909	13.920	-0.011	25	1979	0.0351	0.0182	
60 cis-1,3-Dichloropropene	75	14.899	14.899	0.000	93	2355	0.0351	0.0267	
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	7343284	0.0351	0	
61 4-Methyl-2-pentanone (MIBK	43	15.247	15.214	0.033	97	7743	0.0351	0.0407	
65 Toluene	92	15.514	15.509	0.005	97	3402	0.0351	0.0367	
64 n-Octane	43	15.557	15.567	-0.010	97	6882	0.0351	0.0329	
66 trans-1,3-Dichloropropene	75	16.151	16.156	-0.005	69	2782	0.0351	0.0302	
67 1,1,2-Trichloroethane	83	16.536	16.546	-0.010	87	1696	0.0351	0.0324	
68 Tetrachloroethene	166	16.638	16.637	0.001	83	1570	0.0351	0.0301	M
69 2-Hexanone	43	17.060	17.028	0.032	88	7732	0.0351	0.0437	
71 Chlorodibromomethane	129	17.349	17.344	0.005	93	2209	0.0351	0.0284	
72 Ethylene Dibromide	107	17.627	17.627	0.000	97	2451	0.0351	0.0315	
* 74 Chlorobenzene-d5	117	18.574	18.574	0.000	98	1424233	10.0	10.0	
75 Chlorobenzene	112	18.644	18.638	0.006	69	4086	0.0351	0.0360	
76 Ethylbenzene	91	18.793	18.799	-0.006	96	7159	0.0351	0.0325	
77 n-Nonane	57	18.927	18.932	-0.005	94	5000	0.0351	0.0332	
78 m-Xylene & p-Xylene	106	19.061	19.066	-0.005	0	5184	0.0702	0.0684	
S 73 Xylenes, Total	106				0		0.1052	0.1000	
79 o-Xylene	106	19.954	19.960	-0.006	97	2324	0.0351	0.0315	
80 Styrene	104	20.024	20.024	0.000	85	2887	0.0351	0.0258	
81 Bromoform	173	20.489	20.489	0.000	84	916	0.0351	0.0149	
82 Isopropylbenzene	105	20.725	20.719	0.006	98	6785	0.0351	0.0301	
84 1,1,2,2-Tetrachloroethane	83	21.447	21.447	0.000	95	4597	0.0351	0.0334	
85 N-Propylbenzene	91	21.506	21.511	-0.005	96	9295	0.0351	0.0298	
86 1,2,3-Trichloropropane	75	21.543	21.548	-0.005	94	4307	0.0351	0.0347	
87 n-Decane	57	21.704	21.704	0.000	81	5865	0.0351	0.0285	
88 4-Ethyltoluene	105	21.714	21.714	0.000	80	6578	0.0351	0.0286	
89 2-Chlorotoluene	91	21.725	21.720	0.005	67	3674	0.0351	0.0165	
90 1,3,5-Trimethylbenzene	105	21.827	21.832	-0.005	91	5743	0.0351	0.0301	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.228	22.223	0.005	80	1809	0.0351	0.0229	
92 tert-Butylbenzene	119	22.356	22.351	0.005	88	4938	0.0351	0.0298	
93 1,2,4-Trimethylbenzene	105	22.458	22.453	0.005	97	5759	0.0351	0.0301	
94 sec-Butylbenzene	105	22.693	22.693	0.000	96	7263	0.0351	0.0265	
95 4-Isopropyltoluene	119	22.907	22.907	0.000	95	5812	0.0351	0.0275	
96 1,3-Dichlorobenzene	146	22.934	22.934	0.000	87	3323	0.0351	0.0314	
97 1,4-Dichlorobenzene	146	23.079	23.078	0.001	77	3084	0.0351	0.0295	
98 Benzyl chloride	91	23.293	23.287	0.006	95	4191	0.0351	0.0229	
100 n-Butylbenzene	91	23.501	23.501	0.000	97	5862	0.0351	0.0245	
99 Undecane	57	23.528	23.533	-0.005	90	4229	0.0351	0.0209	
101 1,2-Dichlorobenzene	146	23.630	23.629	0.001	81	3073	0.0351	0.0311	
102 Dodecane	57	25.165	25.160	0.005	88	2998	0.0351	0.0227	
103 1,2,4-Trichlorobenzene	180	26.197	26.192	0.005	89	1939	0.0351	0.0302	
104 Hexachlorobutadiene	225	26.385	26.379	0.006	88	1457	0.0351	0.0256	
105 Naphthalene	128	26.690	26.690	0.000	95	6279	0.0351	0.0379	
106 1,2,3-Trichlorobenzene	180	27.171	27.171	0.000	87	1802	0.0351	0.0318	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00185	Amount Added: 35.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

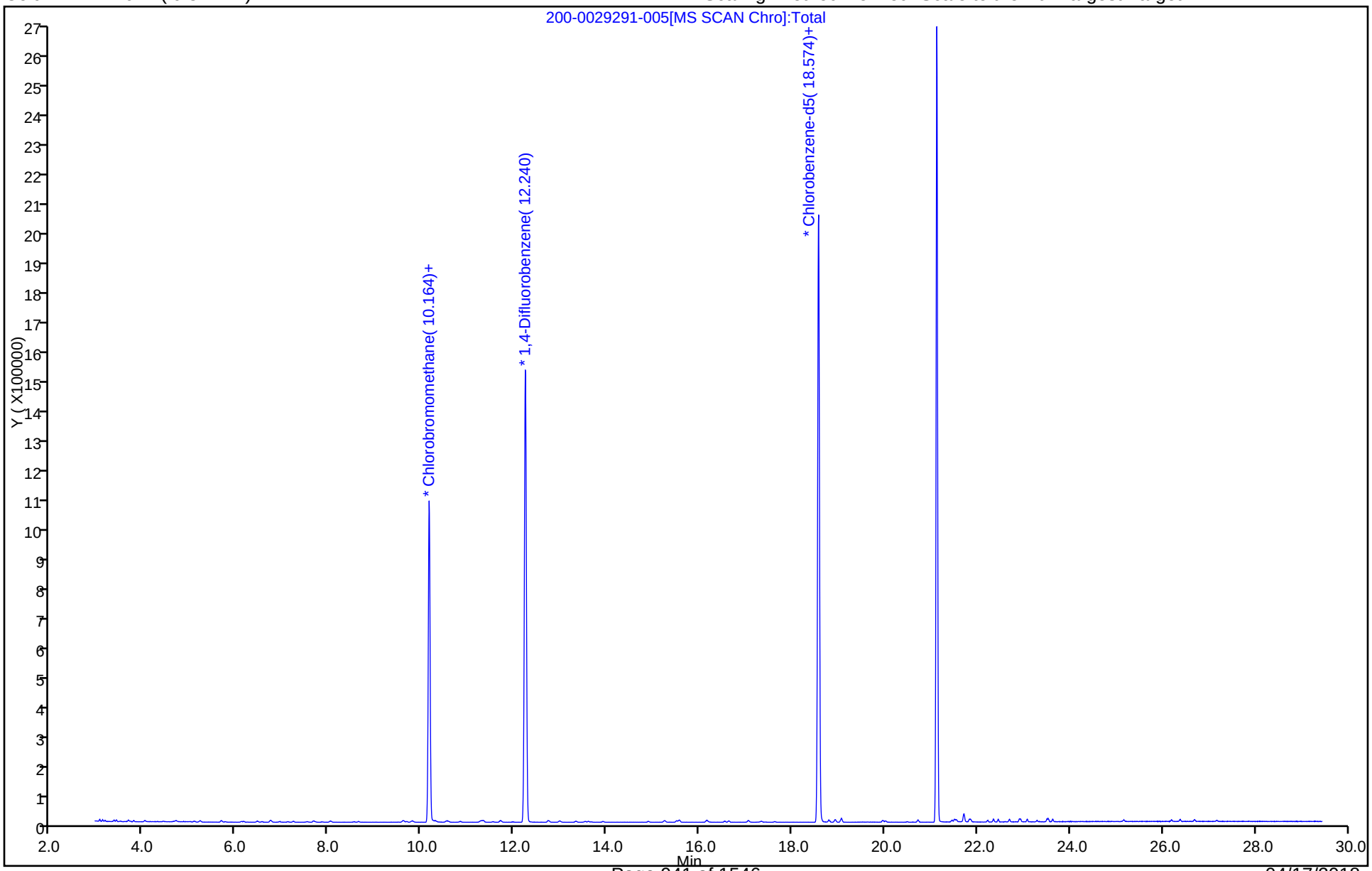
Report Date: 22-Feb-2018 11:21:47 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D

Injection Date:	21-Feb-2018 19:15:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

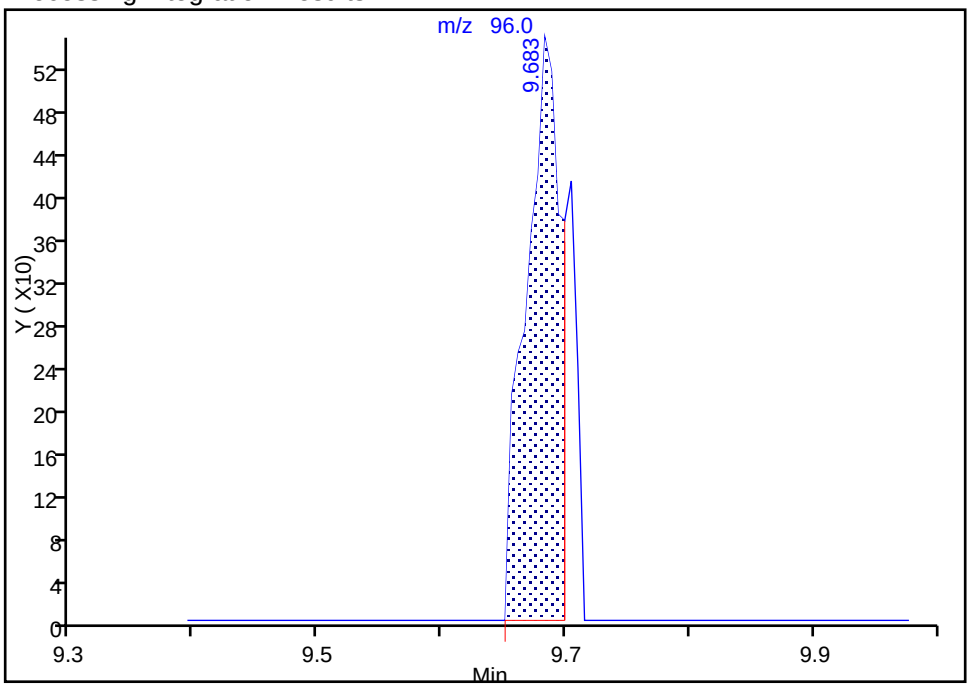
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D				
Injection Date:	21-Feb-2018 19:15:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

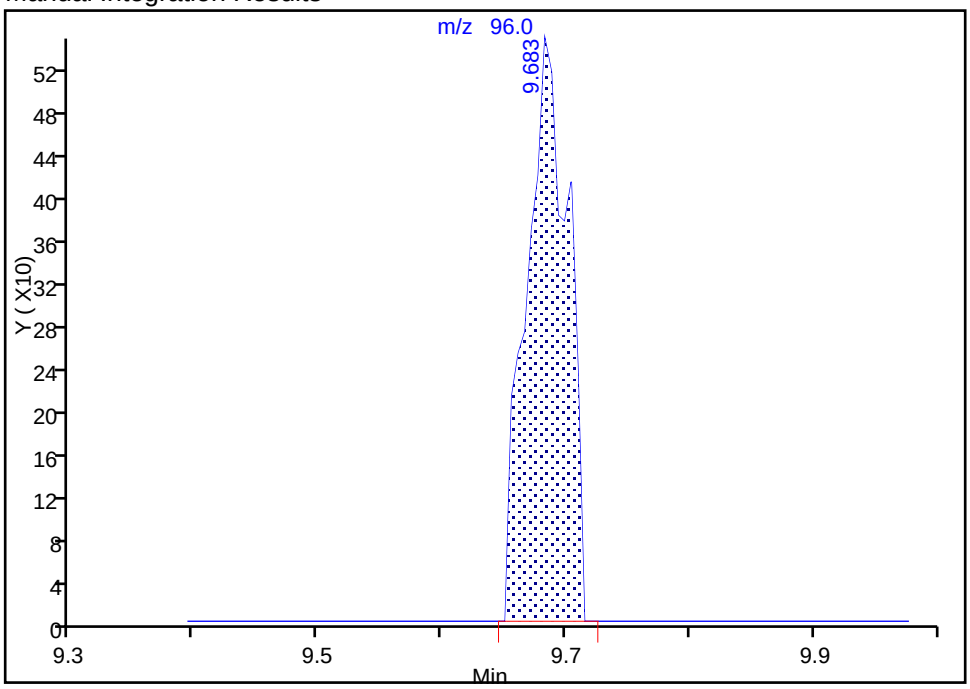
Processing Integration Results

RT: 9.68
Area: 1061
Amount: 0.031055
Amount Units: ppb v/v



Manual Integration Results

RT: 9.68
Area: 1267
Amount: 0.035936
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 09:45:19

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

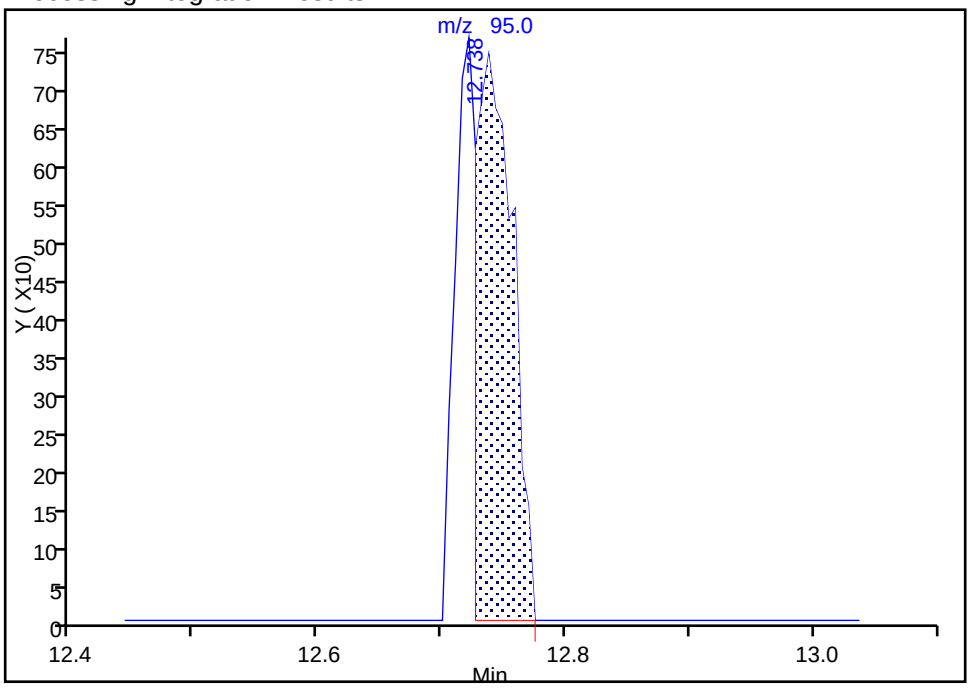
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D				
Injection Date:	21-Feb-2018 19:15:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

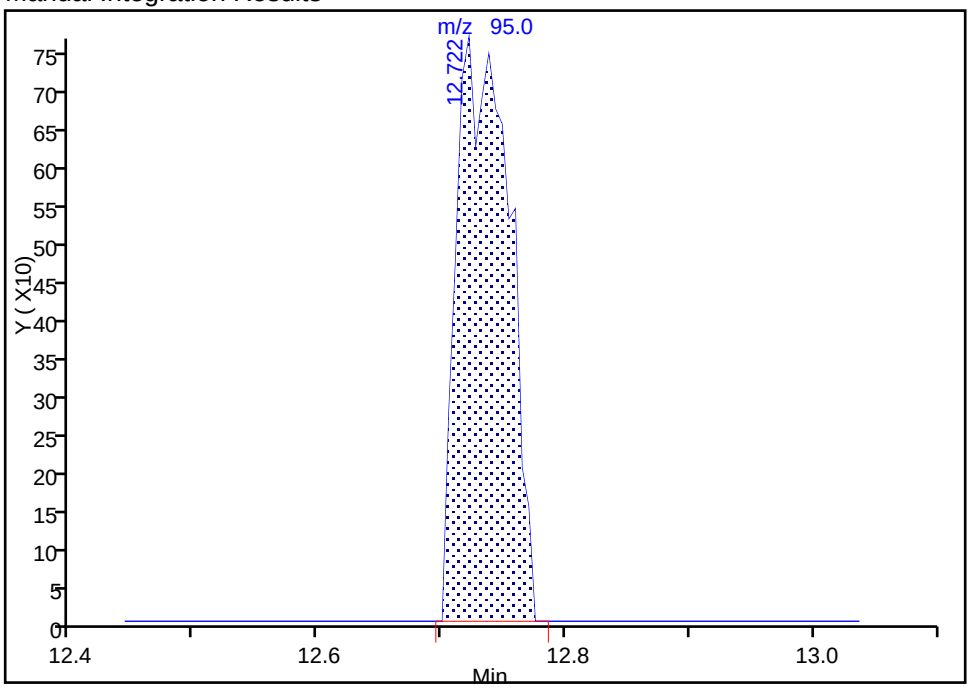
Processing Integration Results

RT: 12.74
Area: 1530
Amount: 0.026556
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 2241
Amount: 0.037964
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 09:45:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

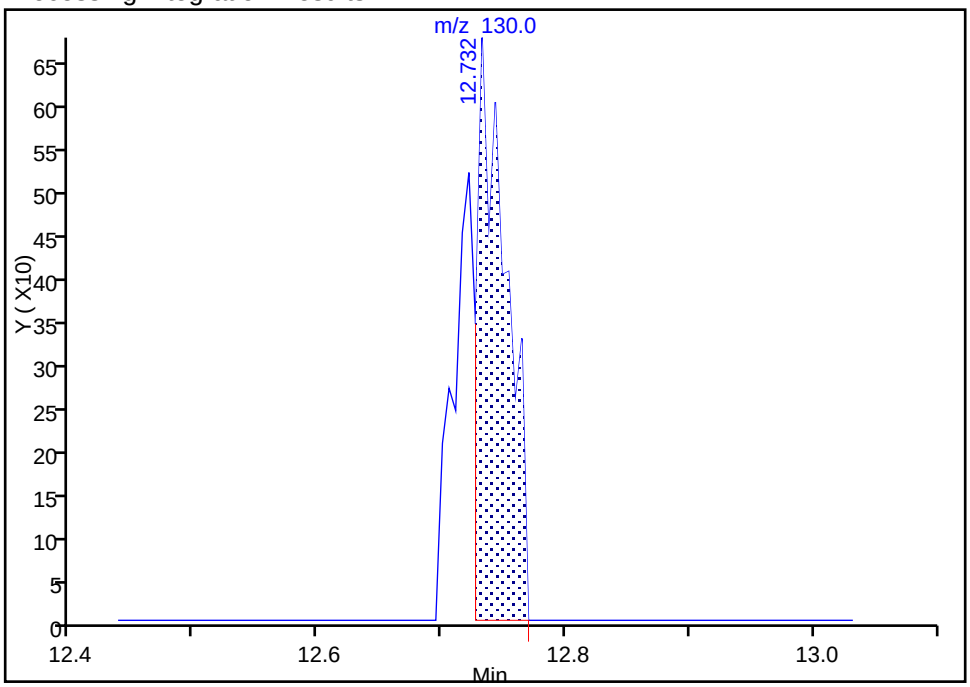
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D
Injection Date: 21-Feb-2018 19:15:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

53 Trichloroethene, CAS: 79-01-6

Signal: 2

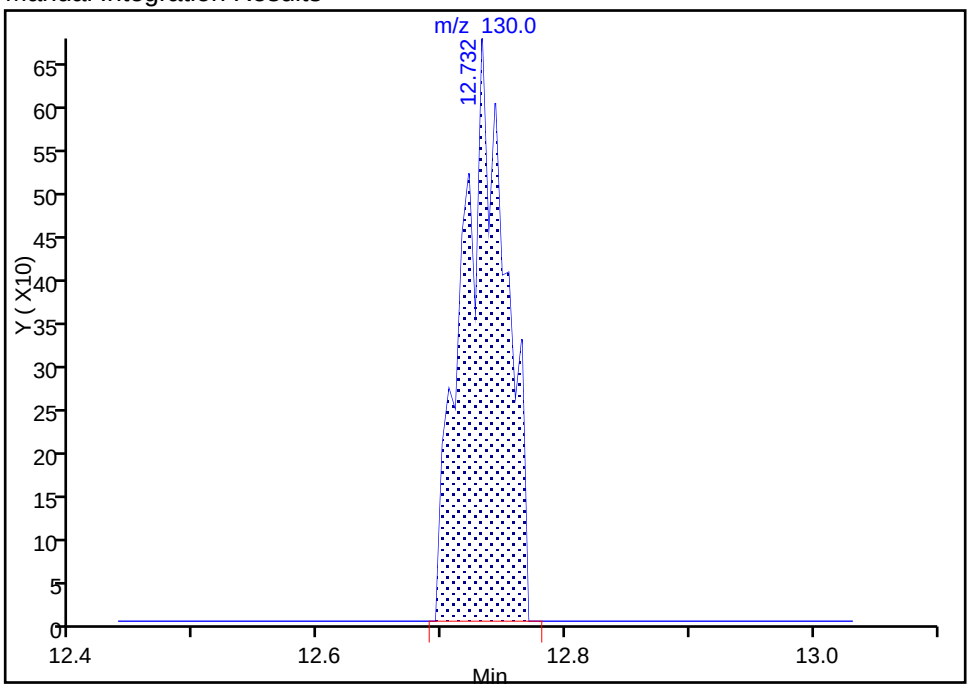
Processing Integration Results

RT: 12.73
Area: 1110
Amount: 0.026556
Amount Units: ppb v/v



Manual Integration Results

RT: 12.73
Area: 1653
Amount: 0.037964
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 09:45:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

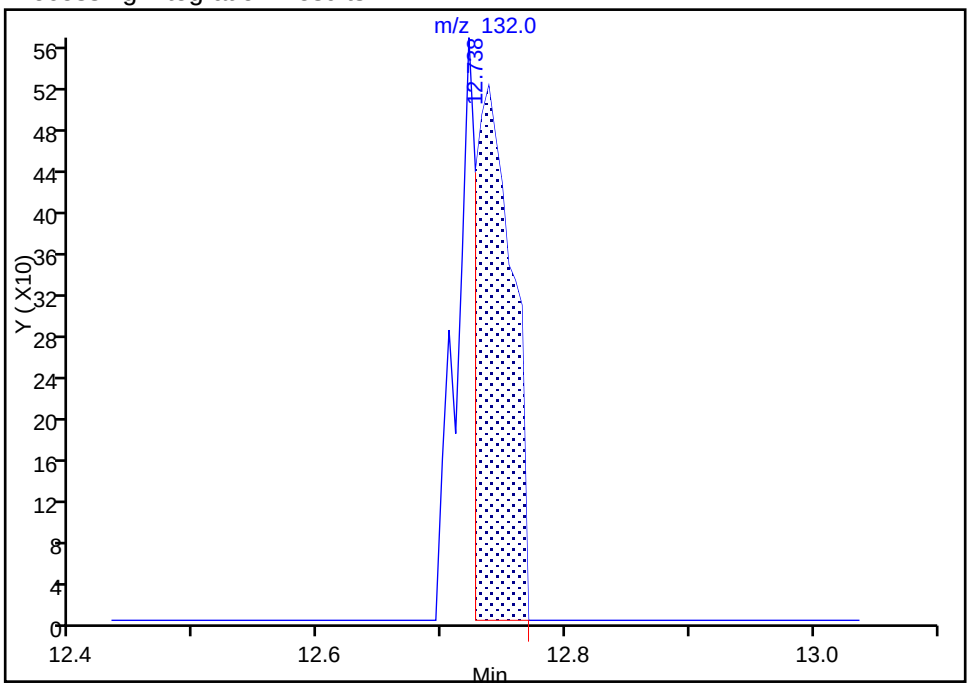
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D
Injection Date: 21-Feb-2018 19:15:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

53 Trichloroethene, CAS: 79-01-6

Signal: 3

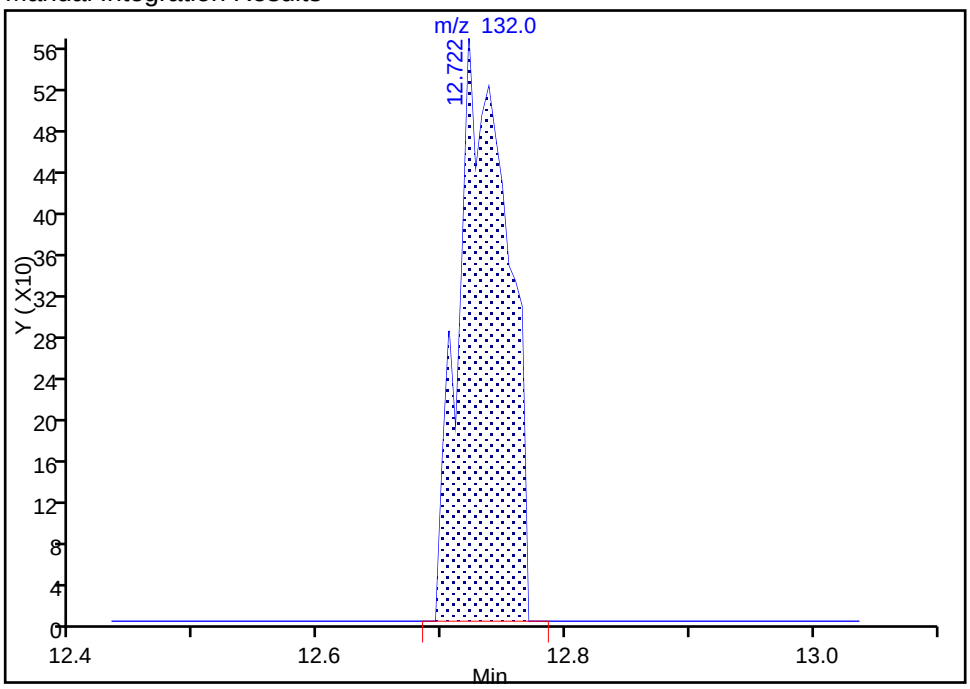
Processing Integration Results

RT: 12.74
Area: 1059
Amount: 0.026556
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 1550
Amount: 0.037964
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 09:45:39
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

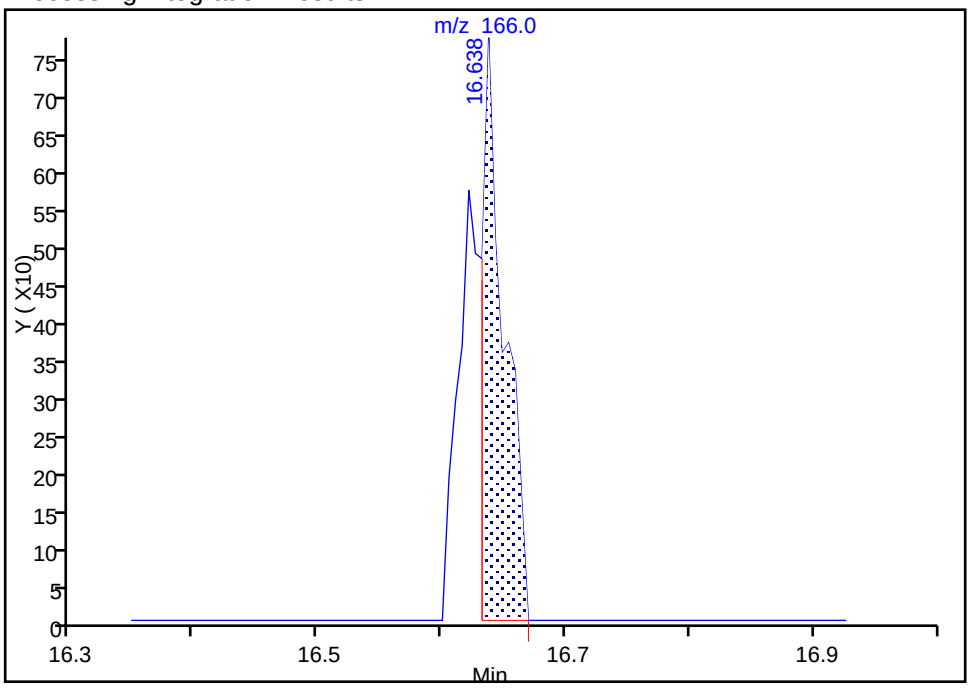
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D				
Injection Date:	21-Feb-2018 19:15:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 1

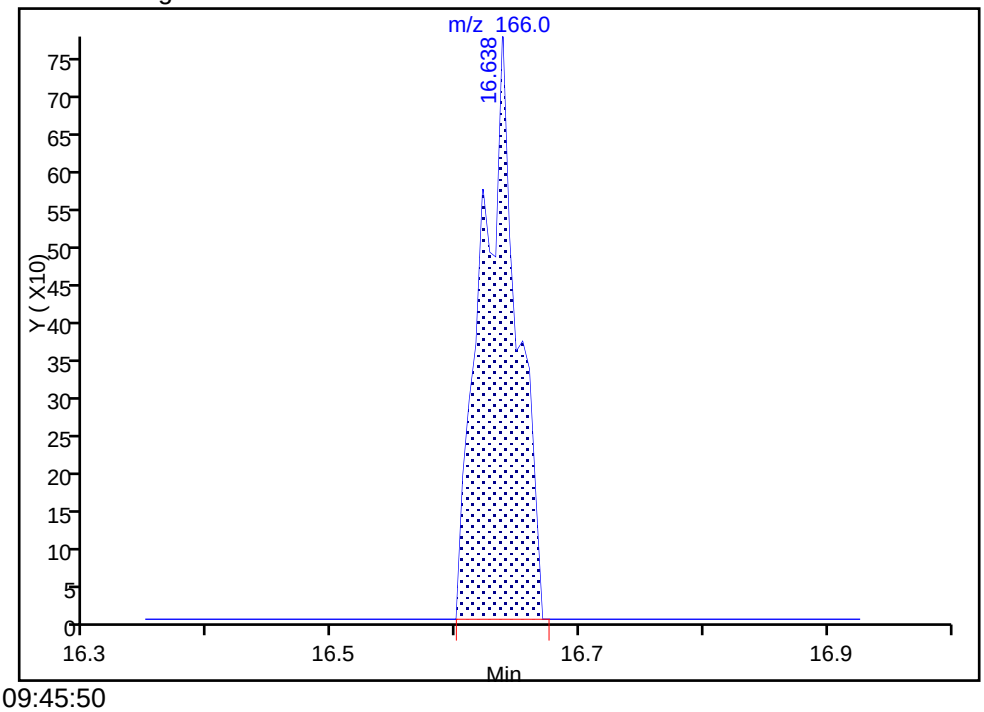
Processing Integration Results

RT: 16.64
Area: 957
Amount: 0.019098
Amount Units: ppb v/v



Manual Integration Results

RT: 16.64
Area: 1570
Amount: 0.030056
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 09:45:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

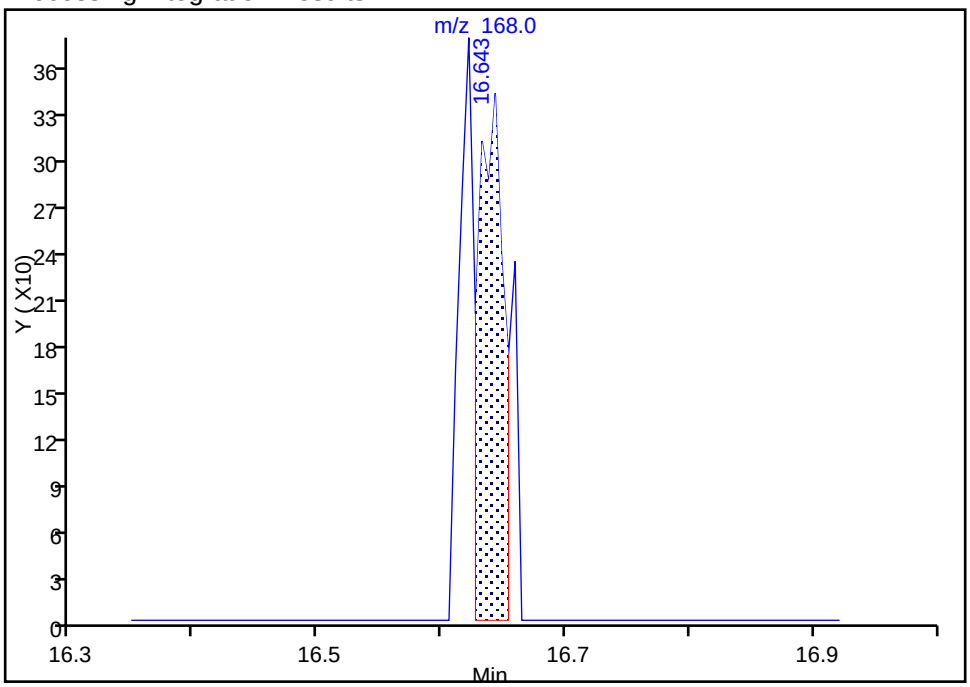
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D
Injection Date: 21-Feb-2018 19:15:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4

Signal: 2

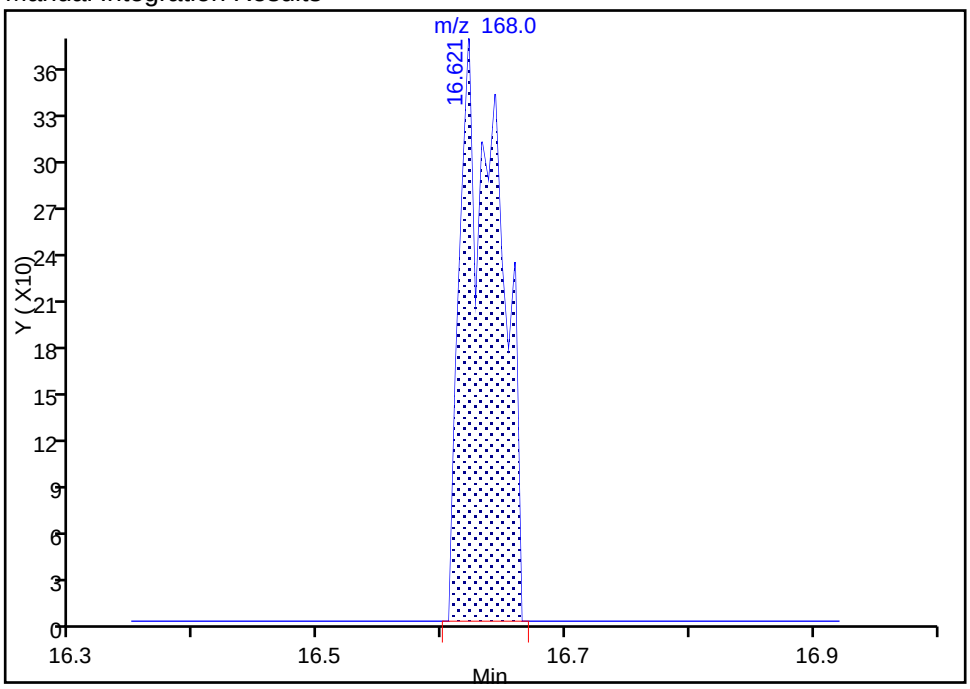
Processing Integration Results

RT: 16.64
Area: 495
Amount: 0.019098
Amount Units: ppb v/v



Manual Integration Results

RT: 16.62
Area: 833
Amount: 0.030056
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 09:45:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

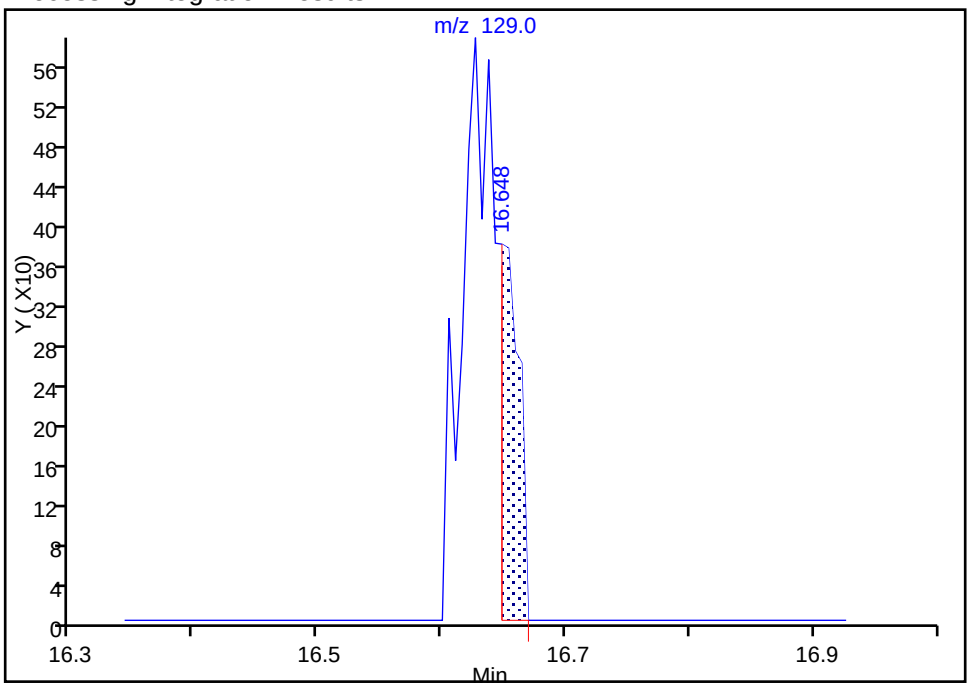
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-005.D
Injection Date: 21-Feb-2018 19:15:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4

Signal: 3

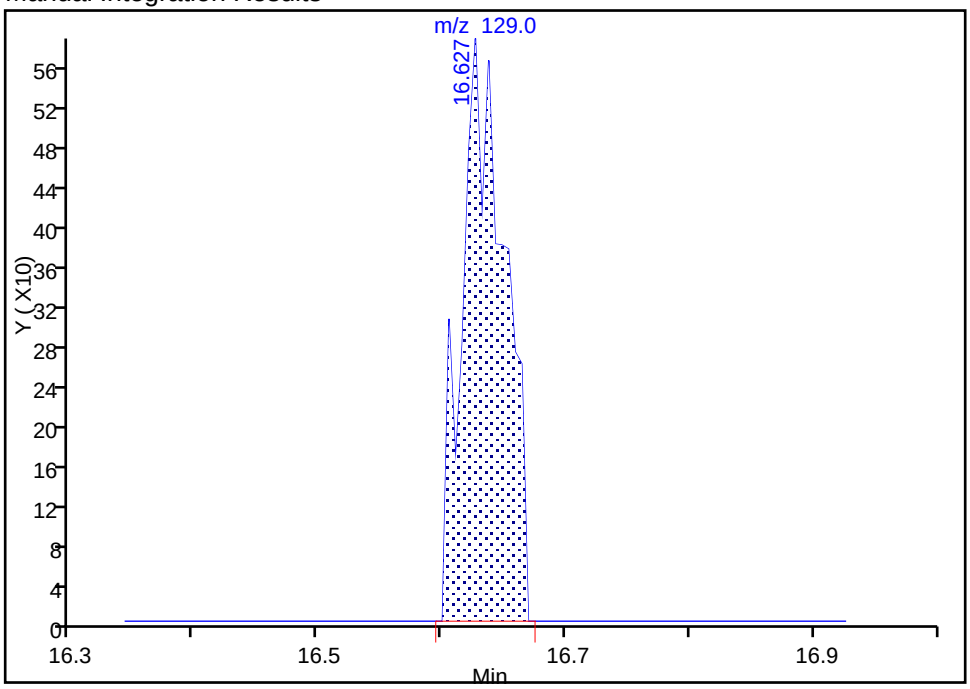
Processing Integration Results

RT: 16.65
Area: 410
Amount: 0.019098
Amount Units: ppb v/v



Manual Integration Results

RT: 16.63
Area: 1418
Amount: 0.030056
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 09:45:54
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-006.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 21-Feb-2018 20:06:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-006
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:21:48 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 09:48:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.049	3.044	0.005	97	12846	0.2004	0.2620	
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	98	22093	0.2004	0.2318	
3 Chlorodifluoromethane	51	3.167	3.156	0.011	98	20298	0.2004	0.2385	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.359	3.354	0.005	95	20033	0.2004	0.2264	
5 Chloromethane	50	3.493	3.488	0.005	99	12677	0.2004	0.2610	
6 Butane	43	3.675	3.670	0.005	98	25191	0.2004	0.2646	
7 Vinyl chloride	62	3.718	3.713	0.005	98	10821	0.2004	0.2316	
8 Butadiene	54	3.787	3.782	0.005	89	9020	0.2004	0.2313	
10 Bromomethane	94	4.419	4.419	0.000	96	6860	0.2004	0.2367	
11 Chloroethane	64	4.643	4.633	0.010	96	5220	0.2004	0.2520	
12 2-Methylbutane	43	4.697	4.697	0.000	93	17302	0.2004	0.2508	
13 Vinyl bromide	106	5.002	5.002	0.000	92	5939	0.2004	0.2204	
14 Trichlorofluoromethane	101	5.093	5.093	0.000	97	19945	0.2004	0.2235	
16 Pentane	43	5.216	5.221	-0.005	97	26662	0.2004	0.2573	
17 Ethanol	45	5.670	5.644	0.026	98	18831	0.4009	0.8731	
18 Ethyl ether	59	5.751	5.719	0.032	89	6862	0.2004	0.2286	
19 Acrolein	56	6.131	6.104	0.027	39	2587	0.2004	0.1944	
20 1,1,2-Trichloro-1,2,2-trif	101	6.115	6.109	0.005	86	12492	0.2004	0.2163	
21 1,1-Dichloroethene	96	6.173	6.163	0.010	84	5704	0.2004	0.2125	
22 Acetone	43	6.446	6.409	0.037	100	31341	0.2004	0.3372	
23 Carbon disulfide	76	6.559	6.553	0.006	98	20422	0.2004	0.2242	
24 Isopropyl alcohol	45	6.724	6.687	0.037	100	34558	0.2004	0.3578	
25 3-Chloro-1-propene	41	6.938	6.938	0.000	94	15577	0.2004	0.2116	
26 Acetonitrile	41	7.104	7.088	0.016	96	13257	0.2004	0.2810	
27 Methylene Chloride	49	7.233	7.233	0.000	88	16070	0.2004	0.2640	
28 2-Methyl-2-propanol	59	7.516	7.457	0.059	97	20692	0.2004	0.2083	
29 Methyl tert-butyl ether	73	7.671	7.629	0.042	89	24160	0.2004	0.2141	
31 trans-1,2-Dichloroethene	61	7.666	7.661	0.005	87	15265	0.2004	0.2252	
32 Acrylonitrile	53	7.853	7.837	0.016	89	7910	0.2004	0.2226	
33 Hexane	57	8.035	8.035	0.000	88	16871	0.2004	0.2346	
34 1,1-Dichloroethane	63	8.549	8.549	0.000	99	18922	0.2004	0.2248	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.634	8.624	0.010	100	32556	0.2004	0.2076	
S 30 1,2-Dichloroethene, Total	61				0		0.4009	0.4321	
37 cis-1,2-Dichloroethene	96	9.688	9.683	0.005	91	6919	0.2004	0.2069	
38 2-Butanone (MEK)	72	9.768	9.747	0.021	98	4552	0.2004	0.2194	
39 Ethyl acetate	88	9.817	9.790	0.026	96	376	0.2004	0.1440	
* 40 Chlorobromomethane	128	10.164	10.170	-0.006	84	244261	10.0	10.0	
41 Tetrahydrofuran	42	10.223	10.180	0.043	83	17492	0.2004	0.2260	
42 Chloroform	83	10.303	10.303	0.000	93	16757	0.2004	0.2002	
43 Cyclohexane	84	10.539	10.544	-0.005	85	9992	0.2004	0.2016	
44 1,1,1-Trichloroethane	97	10.576	10.582	-0.006	92	14785	0.2004	0.1916	
45 Carbon tetrachloride	117	10.833	10.838	-0.005	91	13147	0.2004	0.1835	
46 Isooctane	57	11.288	11.293	-0.005	96	54251	0.2004	0.1977	
47 Benzene	78	11.336	11.341	-0.005	97	26488	0.2004	0.2049	
48 1,2-Dichloroethane	62	11.544	11.550	-0.006	95	13735	0.2004	0.1970	
49 n-Heptane	43	11.710	11.705	0.005	96	25257	0.2004	0.1955	
* 50 1,4-Difluorobenzene	114	12.245	12.245	0.000	99	1419925	10.0	10.0	
52 n-Butanol	56	12.737	12.695	0.042	77	7122	0.2004	0.1975	
53 Trichloroethene	95	12.737	12.737	0.000	84	8937	0.2004	0.1721	
A 51 GRO	1	13.200	(4.687-21.714)		0	9445444	0.2004	0	
54 1,2-Dichloropropane	63	13.331	13.337	-0.006	84	11265	0.2004	0.1830	
55 Methyl methacrylate	69	13.524	13.519	0.005	85	8188	0.2004	0.1531	
56 1,4-Dioxane	88	13.631	13.583	0.048	91	4077	0.2004	0.1548	
57 Dibromomethane	174	13.599	13.604	-0.005	81	5905	0.2004	0.1854	
58 Dichlorobromomethane	83	13.914	13.920	-0.006	94	15822	0.2004	0.1657	
60 cis-1,3-Dichloropropene	75	14.893	14.899	-0.006	96	12722	0.2004	0.1637	M
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	11328496	0.2004	0	
61 4-Methyl-2-pentanone (MIBK	43	15.241	15.214	0.027	97	26679	0.2004	0.1593	
65 Toluene	92	15.509	15.509	0.000	91	15126	0.2004	0.1869	
64 n-Octane	43	15.562	15.567	-0.005	98	31120	0.2004	0.1690	
66 trans-1,3-Dichloropropene	75	16.156	16.156	0.000	91	13050	0.2004	0.1608	M
67 1,1,2-Trichloroethane	83	16.546	16.546	0.000	94	8957	0.2004	0.1961	M
68 Tetrachloroethene	166	16.637	16.637	0.000	85	8297	0.2004	0.1818	
69 2-Hexanone	43	17.049	17.028	0.021	89	23558	0.2004	0.1524	
71 Chlorodibromomethane	129	17.349	17.344	0.005	92	10105	0.2004	0.1488	
72 Ethylene Dibromide	107	17.632	17.627	0.005	95	12259	0.2004	0.1802	
* 74 Chlorobenzene-d5	117	18.574	18.574	0.000	98	1244442	10.0	10.0	
75 Chlorobenzene	112	18.644	18.638	0.006	87	18420	0.2004	0.1855	
76 Ethylbenzene	91	18.799	18.799	0.000	99	34799	0.2004	0.1806	
77 n-Nonane	57	18.932	18.932	0.000	93	22363	0.2004	0.1700	
78 m-Xylene & p-Xylene	106	19.061	19.066	-0.005	0	22583	0.4009	0.3412	
S 73 Xylenes, Total	106				0		0.6013	0.5211	
79 o-Xylene	106	19.954	19.960	-0.006	96	11584	0.2004	0.1798	
80 Styrene	104	20.018	20.024	-0.006	93	14098	0.2004	0.1443	
81 Bromoform	173	20.489	20.489	0.000	83	5682	0.2004	0.1056	
82 Isopropylbenzene	105	20.719	20.719	0.000	98	34466	0.2004	0.1752	
84 1,1,2,2-Tetrachloroethane	83	21.447	21.447	0.000	97	20895	0.2004	0.1736	
85 N-Propylbenzene	91	21.511	21.511	0.000	97	47074	0.2004	0.1725	
86 1,2,3-Trichloropropane	75	21.543	21.548	-0.005	93	19279	0.2004	0.1777	
87 n-Decane	57	21.704	21.704	0.000	86	27054	0.2004	0.1506	
88 4-Ethyltoluene	105	21.714	21.714	0.000	93	32061	0.2004	0.1594	
89 2-Chlorotoluene	91	21.720	21.720	0.000	94	32799	0.2004	0.1690	
90 1,3,5-Trimethylbenzene	105	21.827	21.832	-0.005	89	27508	0.2004	0.1649	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.228	22.223	0.005	79	8819	0.2004	0.1280	
92 tert-Butylbenzene	119	22.346	22.351	-0.005	85	24158	0.2004	0.1671	
93 1,2,4-Trimethylbenzene	105	22.447	22.453	-0.006	98	26436	0.2004	0.1579	
94 sec-Butylbenzene	105	22.693	22.693	0.000	97	39445	0.2004	0.1644	
95 4-Isopropyltoluene	119	22.907	22.907	0.000	94	28185	0.2004	0.1528	
96 1,3-Dichlorobenzene	146	22.939	22.934	0.005	91	14902	0.2004	0.1613	
97 1,4-Dichlorobenzene	146	23.073	23.078	-0.005	84	14914	0.2004	0.1631	
98 Benzyl chloride	91	23.292	23.287	0.005	95	23550	0.2004	0.1473	
100 n-Butylbenzene	91	23.501	23.501	0.000	95	32416	0.2004	0.1552	
99 Undecane	57	23.533	23.533	0.000	91	24768	0.2004	0.1401	
101 1,2-Dichlorobenzene	146	23.624	23.629	-0.005	87	14351	0.2004	0.1662	
102 Dodecane	57	25.165	25.160	0.005	88	16343	0.2004	0.1414	
103 1,2,4-Trichlorobenzene	180	26.192	26.192	0.000	90	7655	0.2004	0.1367	
104 Hexachlorobutadiene	225	26.379	26.379	0.000	88	7813	0.2004	0.1569	
105 Naphthalene	128	26.689	26.690	-0.001	96	19851	0.2004	0.1370	
106 1,2,3-Trichlorobenzene	180	27.166	27.171	-0.005	89	6946	0.2004	0.1402	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00185	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

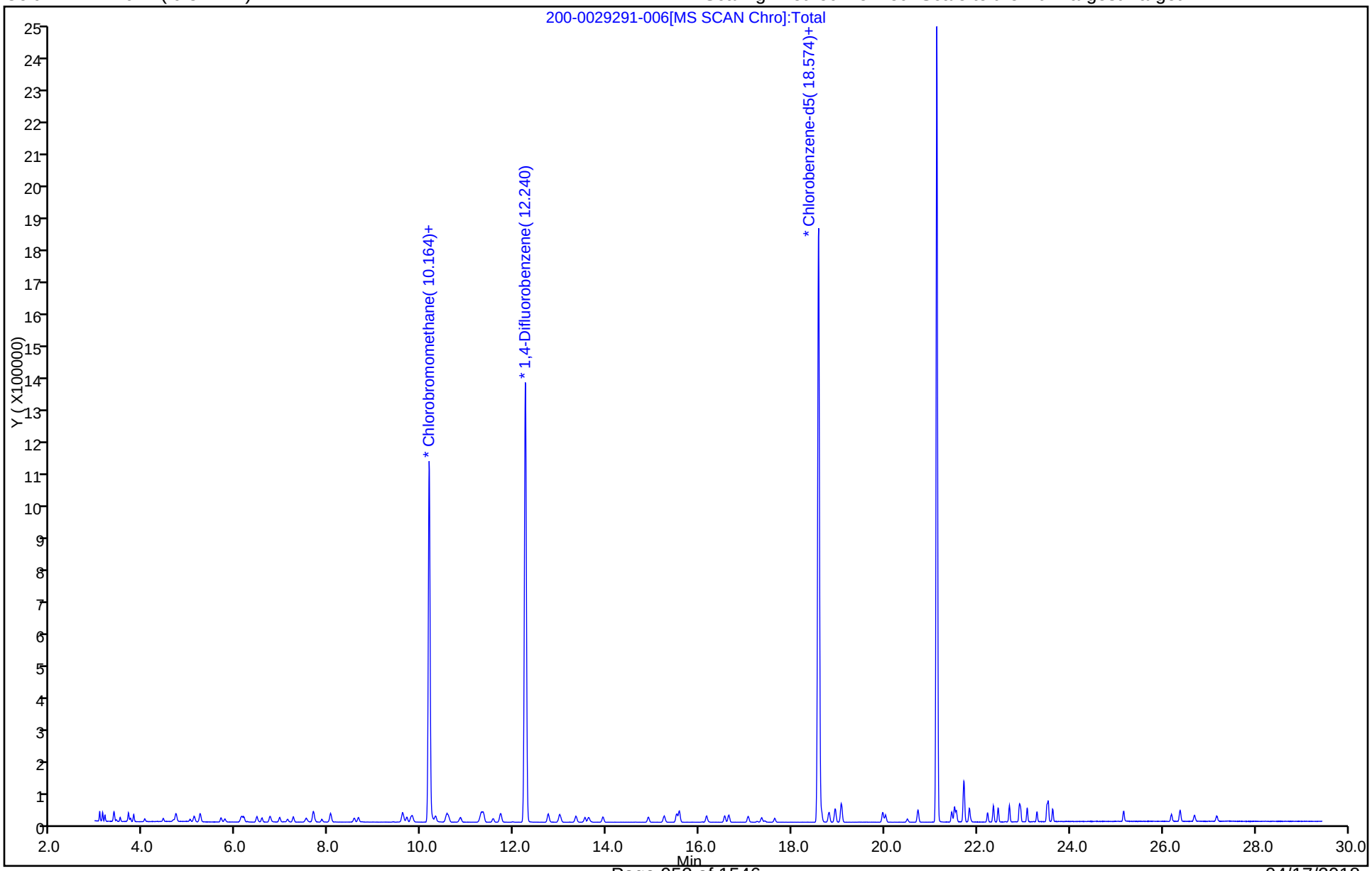
Report Date: 22-Feb-2018 11:21:48 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-006.D

Injection Date:	21-Feb-2018 20:06:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

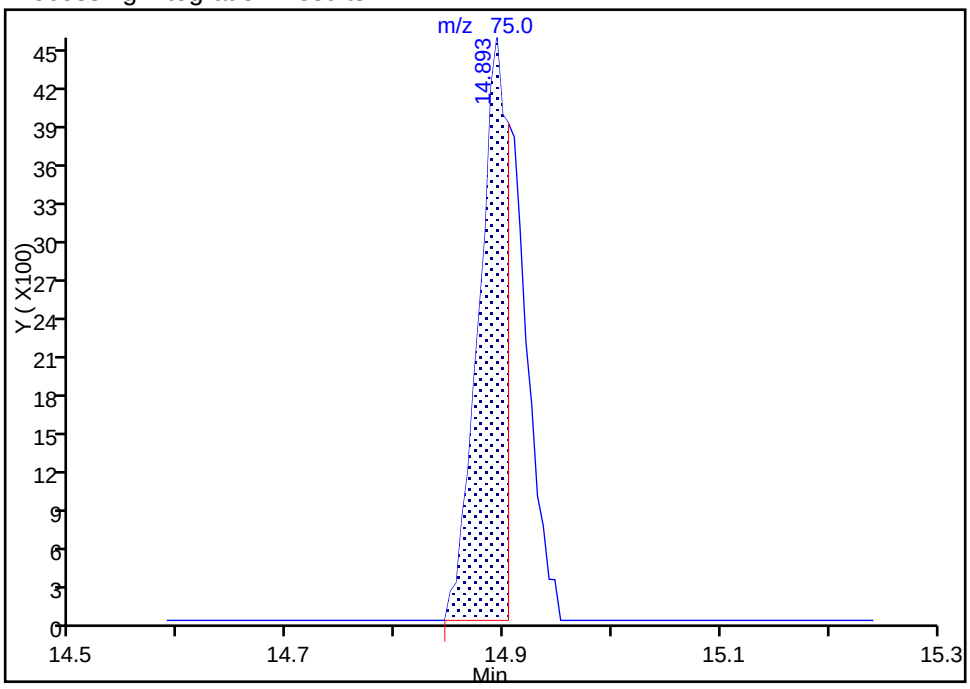
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-006.D				
Injection Date:	21-Feb-2018 20:06:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

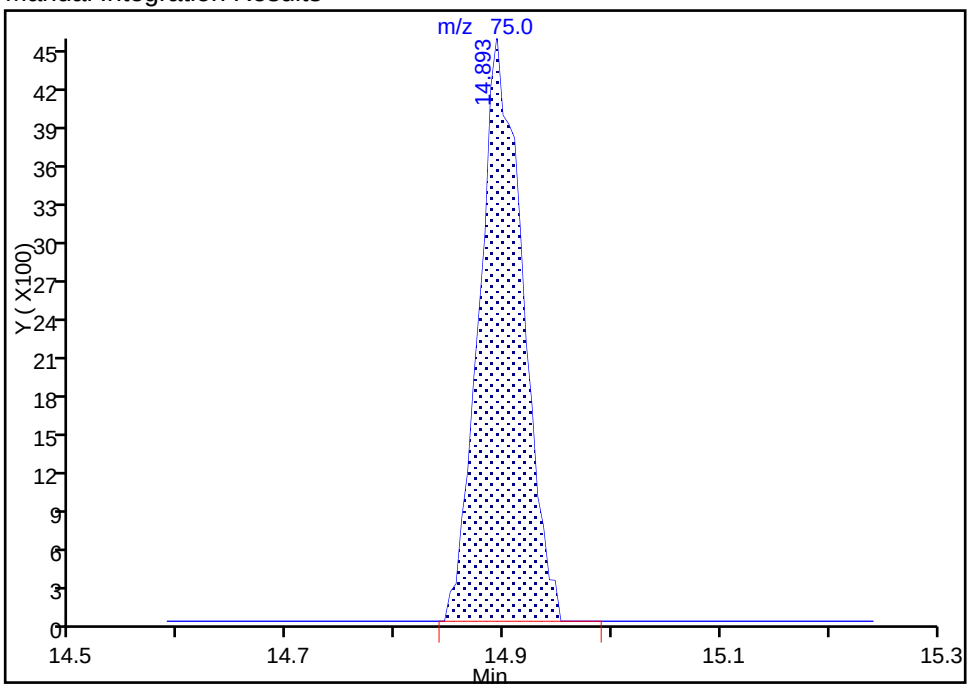
Processing Integration Results

RT: 14.89
Area: 8514
Amount: 0.113957
Amount Units: ppb v/v



Manual Integration Results

RT: 14.89
Area: 12722
Amount: 0.163708
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 11:12:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

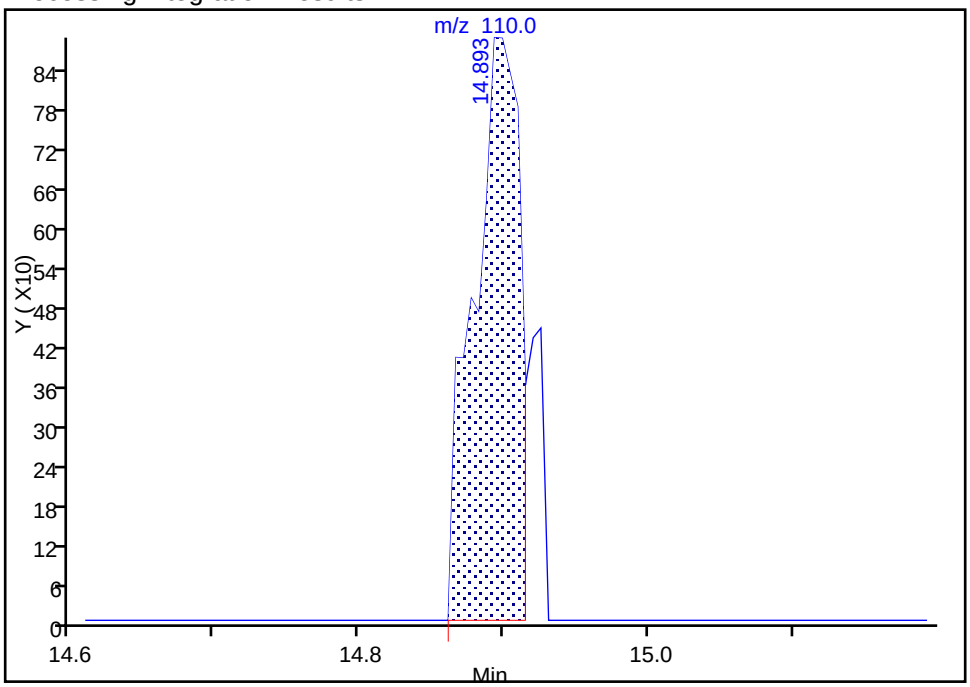
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-006.D				
Injection Date:	21-Feb-2018 20:06:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 2

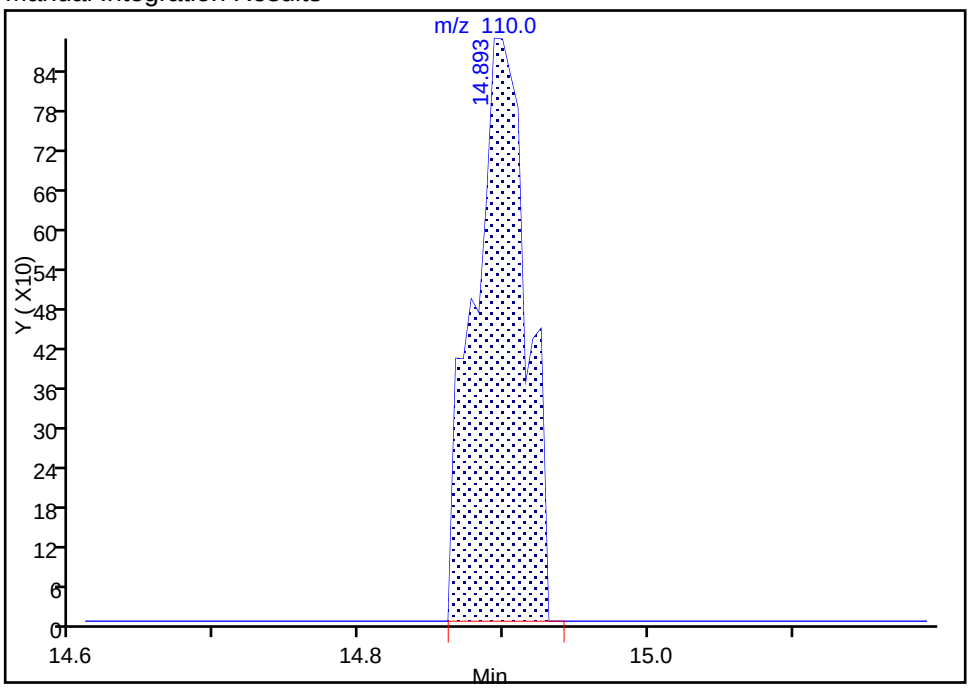
Processing Integration Results

RT: 14.89
Area: 1977
Amount: 0.113957
Amount Units: ppb v/v



Manual Integration Results

RT: 14.89
Area: 2258
Amount: 0.163708
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 11:12:14

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

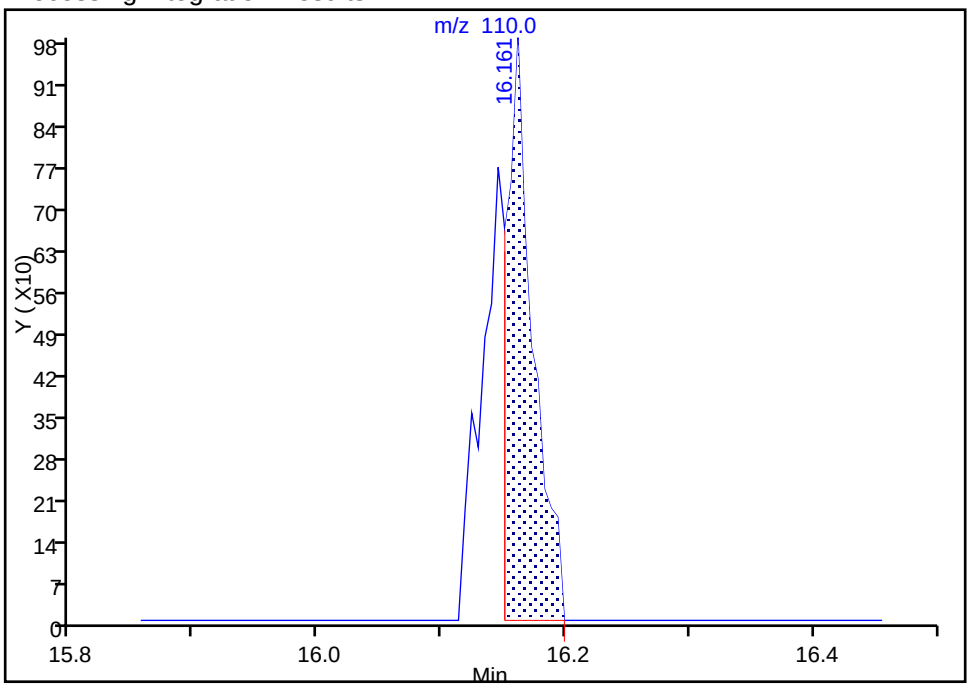
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-006.D				
Injection Date:	21-Feb-2018 20:06:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 2

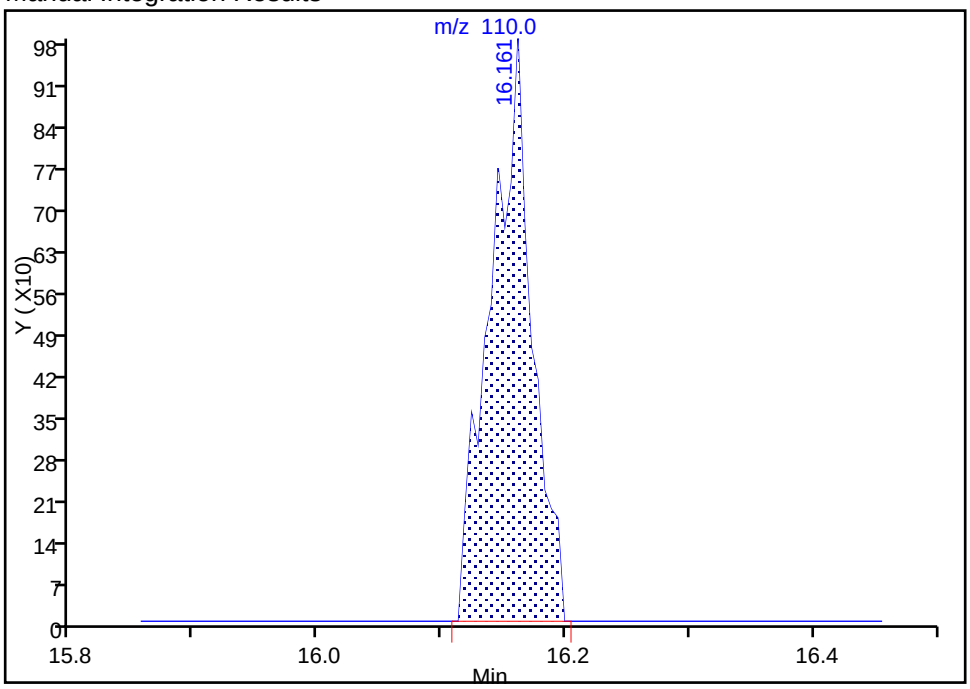
Processing Integration Results

RT: 16.16
Area: 1443
Amount: 0.160843
Amount Units: ppb v/v



Manual Integration Results

RT: 16.16
Area: 2277
Amount: 0.160843
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 11:12:24

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

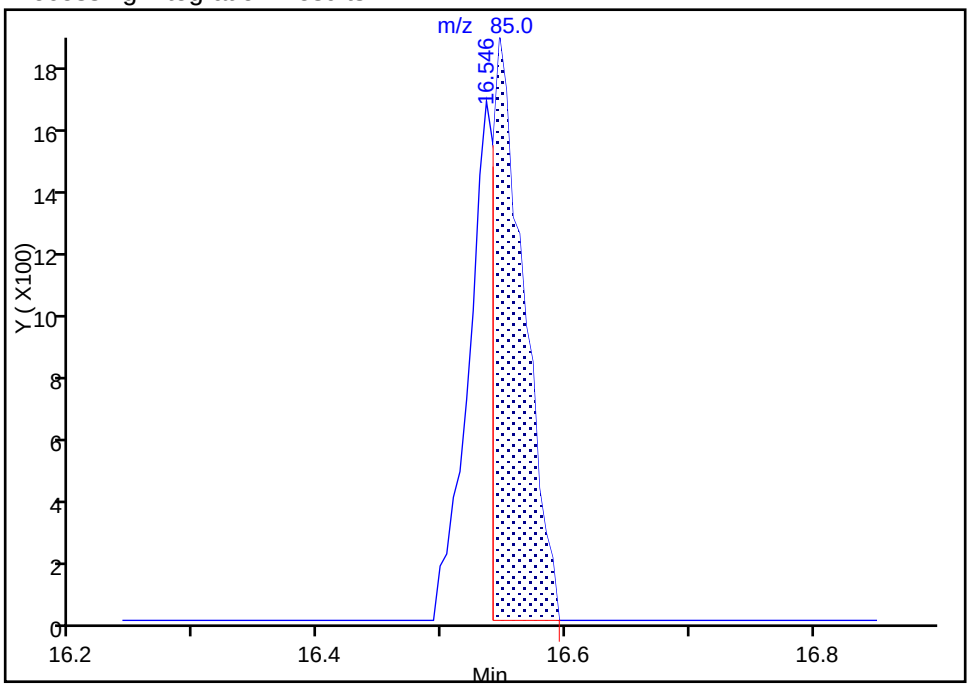
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-006.D
Injection Date: 21-Feb-2018 20:06:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

67 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 3

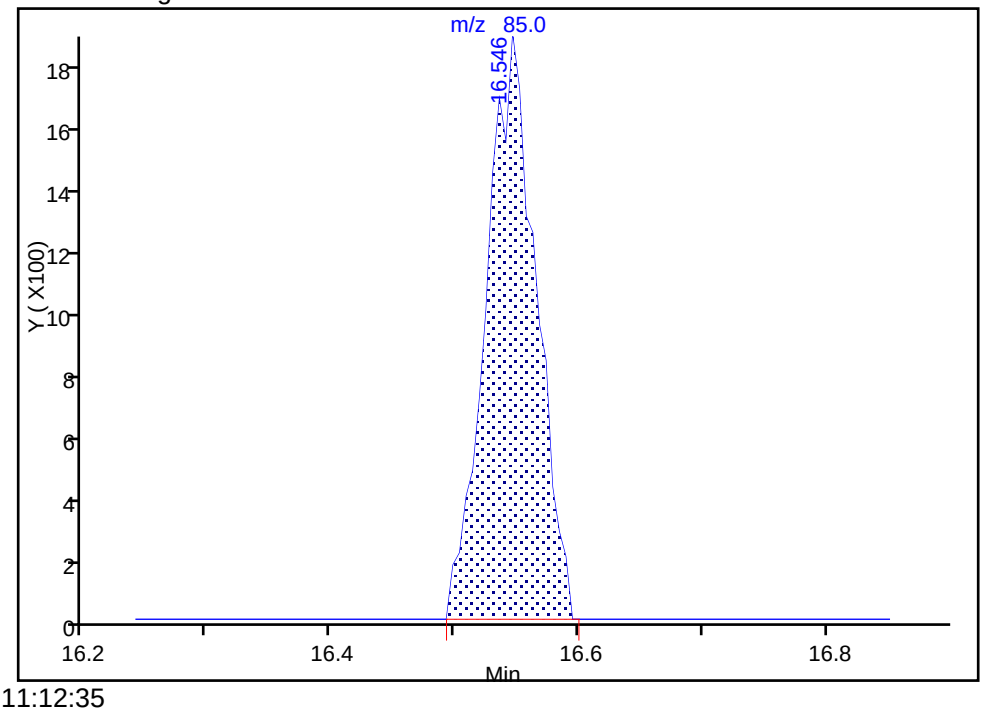
Processing Integration Results

RT: 16.55
Area: 3321
Amount: 0.196126
Amount Units: ppb v/v



Manual Integration Results

RT: 16.55
Area: 5271
Amount: 0.196126
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 11:12:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-009.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 21-Feb-2018 22:37:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-009
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:22:00 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 11:14:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	96	28365	0.5005	0.5804	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	98	48504	0.5005	0.5105	
3 Chlorodifluoromethane	51	3.162	3.156	0.006	97	46724	0.5005	0.5508	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	96	44219	0.5005	0.5013	
5 Chloromethane	50	3.488	3.488	0.000	99	26584	0.5005	0.5491	
6 Butane	43	3.670	3.670	0.000	98	53218	0.5005	0.5608	
7 Vinyl chloride	62	3.713	3.713	0.000	98	22821	0.5005	0.4900	
8 Butadiene	54	3.782	3.782	0.000	87	19199	0.5005	0.4939	
10 Bromomethane	94	4.419	4.419	0.000	96	14797	0.5005	0.5121	
11 Chloroethane	64	4.633	4.633	0.000	95	10938	0.5005	0.5296	
12 2-Methylbutane	43	4.697	4.697	0.000	92	36146	0.5005	0.5255	
13 Vinyl bromide	106	5.002	5.002	0.000	95	13232	0.5005	0.4925	
14 Trichlorofluoromethane	101	5.087	5.093	-0.006	96	44424	0.5005	0.4993	
16 Pentane	43	5.216	5.221	-0.005	96	54600	0.5005	0.5285	
17 Ethanol	45	5.644	5.644	0.000	97	150140	5.01	6.98	
18 Ethyl ether	59	5.735	5.719	0.016	88	14879	0.5005	0.4972	
19 Acrolein	56	6.120	6.104	0.016	62	7401	0.5005	0.5579	
20 1,1,2-Trichloro-1,2,2-trif	101	6.109	6.109	0.000	87	28936	0.5005	0.5027	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	88	13271	0.5005	0.4960	
22 Acetone	43	6.425	6.409	0.016	99	82663	0.5005	0.8922	
23 Carbon disulfide	76	6.553	6.553	0.000	98	46052	0.5005	0.5071	
24 Isopropyl alcohol	45	6.714	6.687	0.027	100	55406	0.5005	0.5754	
25 3-Chloro-1-propene	41	6.933	6.938	-0.005	92	33734	0.5005	0.4596	
26 Acetonitrile	41	7.099	7.088	0.011	98	26901	0.5005	0.5720	
27 Methylene Chloride	49	7.227	7.233	-0.006	89	32758	0.5005	0.5398	
28 2-Methyl-2-propanol	59	7.489	7.457	0.032	97	46855	0.5005	0.4732	
29 Methyl tert-butyl ether	73	7.639	7.629	0.010	92	53706	0.5005	0.4775	
31 trans-1,2-Dichloroethene	61	7.655	7.661	-0.006	88	33318	0.5005	0.4930	
32 Acrylonitrile	53	7.837	7.837	0.000	94	18142	0.5005	0.5121	
33 Hexane	57	8.030	8.035	-0.005	88	35082	0.5005	0.4893	
34 1,1-Dichloroethane	63	8.538	8.549	-0.011	99	42006	0.5005	0.5006	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.629	8.624	0.005	100	75443	0.5005	0.4826	
S 30 1,2-Dichloroethene, Total	61				0		1.00	0.9796	
37 cis-1,2-Dichloroethene	96	9.677	9.683	-0.006	93	16223	0.5005	0.4866	
38 2-Butanone (MEK)	72	9.758	9.747	0.011	97	11020	0.5005	0.5328	
39 Ethyl acetate	88	9.795	9.790	0.005	96	1233	0.5005	0.4738	
* 40 Chlorobromomethane	128	10.164	10.170	-0.006	86	243511	10.0	10.0	
41 Tetrahydrofuran	42	10.207	10.180	0.027	91	42575	0.5005	0.5166	
42 Chloroform	83	10.298	10.303	-0.005	94	41838	0.5005	0.5014	
43 Cyclohexane	84	10.549	10.544	0.005	88	25808	0.5005	0.4890	
44 1,1,1-Trichloroethane	97	10.576	10.582	-0.006	93	39022	0.5005	0.4748	
45 Carbon tetrachloride	117	10.838	10.838	0.000	94	36049	0.5005	0.4725	
46 Isooctane	57	11.293	11.293	0.000	97	141342	0.5005	0.4837	
47 Benzene	78	11.336	11.341	-0.005	98	67989	0.5005	0.4938	
48 1,2-Dichloroethane	62	11.545	11.550	-0.006	96	36338	0.5005	0.4894	
49 n-Heptane	43	11.705	11.705	0.000	97	65688	0.5005	0.4774	
* 50 1,4-Difluorobenzene	114	12.240	12.245	-0.005	99	1512075	10.0	10.0	
52 n-Butanol	56	12.721	12.695	0.026	79	20994	0.5005	0.5468	
53 Trichloroethene	95	12.727	12.737	-0.010	85	27044	0.5005	0.4891	
A 51 GRO	1	13.200	(4.687-21.714)		0	16691784	0.5005	0	
54 1,2-Dichloropropane	63	13.331	13.337	-0.006	88	32278	0.5005	0.4925	M
55 Methyl methacrylate	69	13.524	13.519	0.005	87	24574	0.5005	0.4313	
56 1,4-Dioxane	88	13.609	13.583	0.026	90	13304	0.5005	0.4743	
57 Dibromomethane	174	13.593	13.604	-0.011	83	16564	0.5005	0.4885	
58 Dichlorobromomethane	83	13.914	13.920	-0.006	96	46367	0.5005	0.4561	
60 cis-1,3-Dichloropropene	75	14.893	14.899	-0.006	97	38237	0.5005	0.4621	
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	21887686	0.5005	0	
61 4-Methyl-2-pentanone (MIBK	43	15.225	15.214	0.011	97	81265	0.5005	0.4556	
65 Toluene	92	15.503	15.509	-0.006	91	44381	0.5005	0.4934	
64 n-Octane	43	15.567	15.567	0.000	99	96569	0.5005	0.4924	
66 trans-1,3-Dichloropropene	75	16.151	16.156	-0.005	86	41268	0.5005	0.4776	
67 1,1,2-Trichloroethane	83	16.546	16.546	0.000	91	24407	0.5005	0.4808	
68 Tetrachloroethene	166	16.632	16.637	-0.005	86	25302	0.5005	0.4988	
69 2-Hexanone	43	17.039	17.028	0.011	89	80459	0.5005	0.4683	
71 Chlorodibromomethane	129	17.344	17.344	0.000	93	30789	0.5005	0.4079	
72 Ethylene Dibromide	107	17.622	17.627	-0.005	97	34898	0.5005	0.4614	
* 74 Chlorobenzene-d5	117	18.574	18.574	0.000	98	1383111	10.0	10.0	
75 Chlorobenzene	112	18.633	18.638	-0.005	86	53957	0.5005	0.4890	
76 Ethylbenzene	91	18.799	18.799	0.000	99	101988	0.5005	0.4762	
77 n-Nonane	57	18.932	18.932	0.000	94	69588	0.5005	0.4758	
78 m-Xylene & p-Xylene	106	19.061	19.066	-0.005	0	68603	1.00	0.9327	
S 73 Xylenes, Total	106				0		1.50	1.40	
79 o-Xylene	106	19.954	19.960	-0.006	95	33153	0.5005	0.4630	
80 Styrene	104	20.024	20.024	0.000	94	45326	0.5005	0.4173	
81 Bromoform	173	20.489	20.489	0.000	89	19802	0.5005	0.3313	
82 Isopropylbenzene	105	20.719	20.719	0.000	98	99931	0.5005	0.4570	
84 1,1,2,2-Tetrachloroethane	83	21.447	21.447	0.000	97	62014	0.5005	0.4636	
85 N-Propylbenzene	91	21.506	21.511	-0.005	97	141521	0.5005	0.4667	
86 1,2,3-Trichloropropane	75	21.548	21.548	0.000	94	55979	0.5005	0.4643	
87 n-Decane	57	21.704	21.704	0.000	83	86947	0.5005	0.4354	
88 4-Ethyltoluene	105	21.714	21.714	0.000	97	101857	0.5005	0.4557	
89 2-Chlorotoluene	91	21.720	21.720	0.000	94	99225	0.5005	0.4601	
90 1,3,5-Trimethylbenzene	105	21.827	21.832	-0.005	90	84644	0.5005	0.4566	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.217	22.223	-0.006	82	30018	0.5005	0.3921	
92 tert-Butylbenzene	119	22.351	22.351	0.000	85	75078	0.5005	0.4671	
93 1,2,4-Trimethylbenzene	105	22.447	22.453	-0.006	98	85438	0.5005	0.4593	
94 sec-Butylbenzene	105	22.693	22.693	0.000	97	123757	0.5005	0.4642	
95 4-Isopropyltoluene	119	22.907	22.907	0.000	95	92288	0.5005	0.4503	
96 1,3-Dichlorobenzene	146	22.934	22.934	0.000	92	45536	0.5005	0.4434	
97 1,4-Dichlorobenzene	146	23.078	23.078	0.000	85	45907	0.5005	0.4518	
98 Benzyl chloride	91	23.287	23.287	0.000	95	73022	0.5005	0.4109	
100 n-Butylbenzene	91	23.501	23.501	0.000	96	103027	0.5005	0.4437	
99 Undecane	57	23.528	23.533	-0.005	91	78995	0.5005	0.4019	
101 1,2-Dichlorobenzene	146	23.629	23.629	0.000	88	42999	0.5005	0.4482	
102 Dodecane	57	25.160	25.160	0.000	88	49929	0.5005	0.3886	
103 1,2,4-Trichlorobenzene	180	26.192	26.192	0.000	89	21463	0.5005	0.3448	
104 Hexachlorobutadiene	225	26.379	26.379	0.000	91	24940	0.5005	0.4505	
105 Naphthalene	128	26.684	26.690	-0.006	96	45476	0.5005	0.2824	
106 1,2,3-Trichlorobenzene	180	27.171	27.171	0.000	90	19003	0.5005	0.3450	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL2w_00255	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

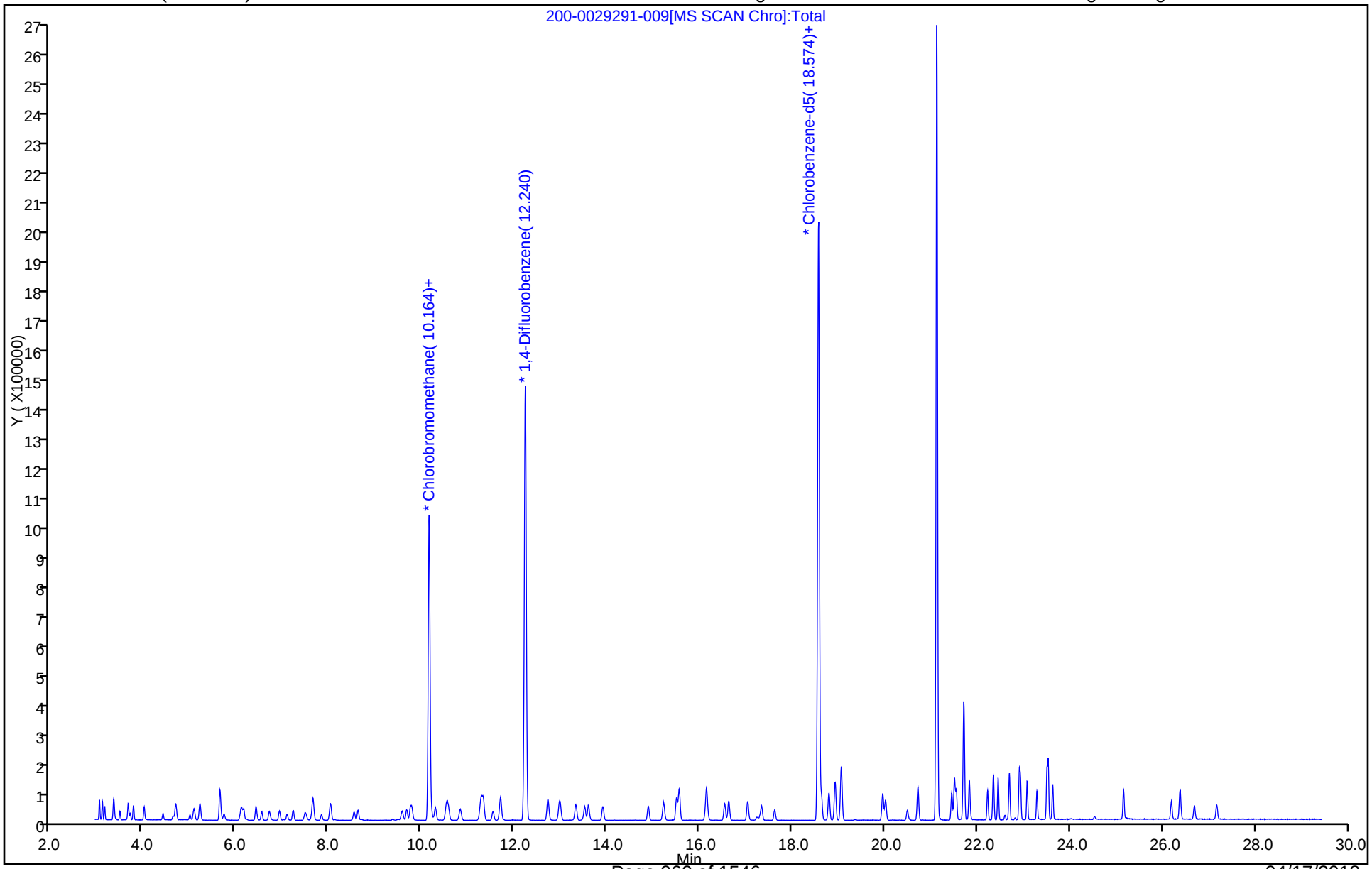
Report Date: 22-Feb-2018 11:22:00 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-009.D

Injection Date:	21-Feb-2018 22:37:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

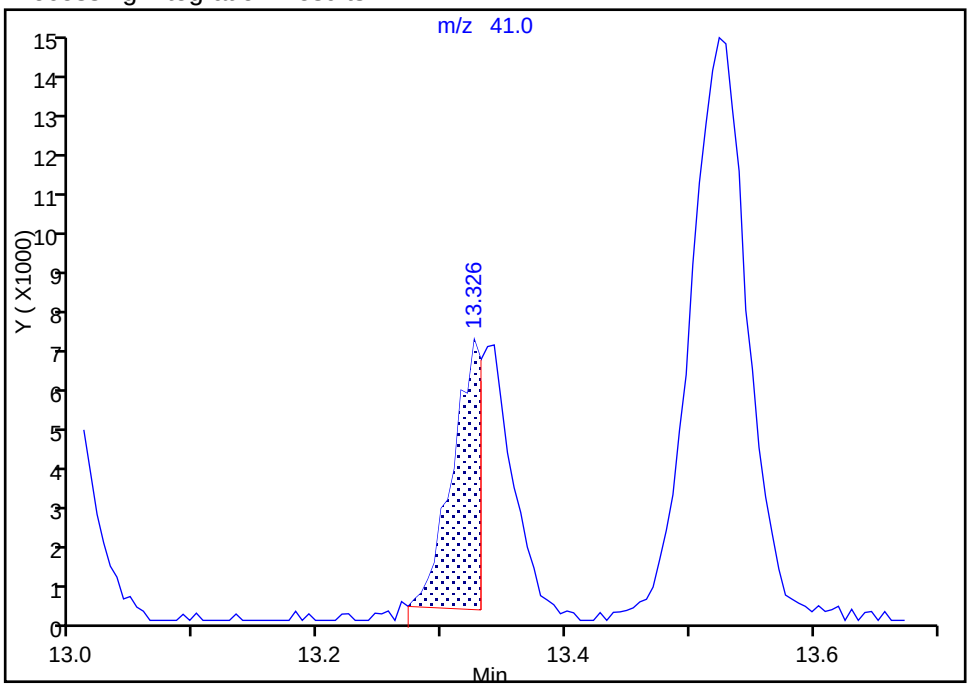
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-009.D				
Injection Date:	21-Feb-2018 22:37:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

54 1,2-Dichloropropane, CAS: 78-87-5

Signal: 2

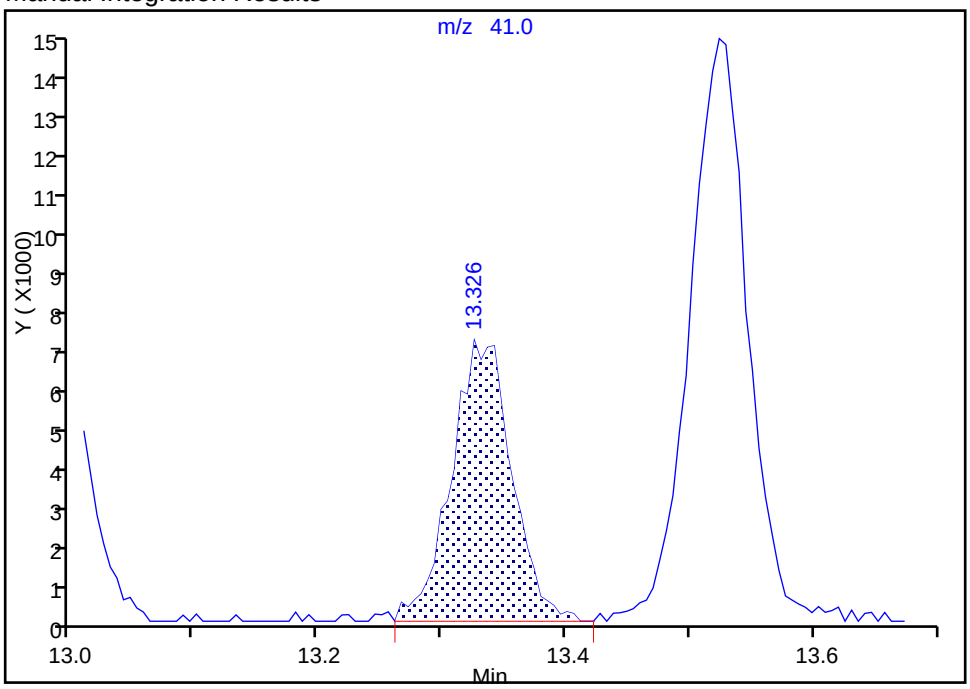
Processing Integration Results

RT: 13.33
Area: 11067
Amount: 0.492521
Amount Units: ppb v/v



Manual Integration Results

RT: 13.33
Area: 23379
Amount: 0.492521
Amount Units: ppb v/v



Reviewer: daiglep, 22-Feb-2018 11:14:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-010.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 21-Feb-2018 23:27:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-010
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:22:01 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 09:50:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	98	270858	4.99	5.51	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	98	492556	4.99	5.15	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	443937	4.99	5.20	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	96	435749	4.99	4.91	
5 Chloromethane	50	3.488	3.488	0.000	99	271187	4.99	5.56	
6 Butane	43	3.670	3.670	0.000	97	501054	4.99	5.24	
7 Vinyl chloride	62	3.713	3.713	0.000	98	224554	4.99	4.79	
8 Butadiene	54	3.777	3.782	-0.005	87	191184	4.99	4.89	
10 Bromomethane	94	4.413	4.419	-0.006	98	138726	4.99	4.77	
11 Chloroethane	64	4.633	4.633	0.000	97	107113	4.99	5.15	
12 2-Methylbutane	43	4.697	4.697	0.000	94	350754	4.99	5.07	
13 Vinyl bromide	106	5.002	5.002	0.000	97	129357	4.99	4.78	
14 Trichlorofluoromethane	101	5.088	5.093	-0.005	97	437980	4.99	4.89	
16 Pentane	43	5.216	5.221	-0.005	97	542134	4.99	5.21	
17 Ethanol	45	5.644	5.644	0.000	99	205340	10.0	9.49	
18 Ethyl ether	59	5.719	5.719	0.000	84	147855	4.99	4.91	
19 Acrolein	56	6.104	6.104	0.000	96	59514	4.99	4.46	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.109	-0.005	87	280156	4.99	4.83	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	87	130917	4.99	4.86	
22 Acetone	43	6.409	6.409	0.000	99	580841	4.99	6.23	
23 Carbon disulfide	76	6.553	6.553	0.000	98	455408	4.99	4.98	
24 Isopropyl alcohol	45	6.687	6.687	0.000	100	518340	4.99	5.35	
25 3-Chloro-1-propene	41	6.933	6.938	-0.005	92	390577	4.99	5.29	
26 Acetonitrile	41	7.088	7.088	0.000	98	256967	4.99	5.43	
27 Methylene Chloride	49	7.227	7.233	-0.006	89	315551	4.99	5.17	
28 2-Methyl-2-propanol	59	7.457	7.457	0.000	98	501151	4.99	5.03	
29 Methyl tert-butyl ether	73	7.634	7.629	0.005	93	556646	4.99	4.92	
31 trans-1,2-Dichloroethene	61	7.661	7.661	0.000	87	335038	4.99	4.92	
32 Acrylonitrile	53	7.837	7.837	0.000	93	182293	4.99	5.11	
33 Hexane	57	8.035	8.035	0.000	90	356733	4.99	4.94	
34 1,1-Dichloroethane	63	8.549	8.549	0.000	99	412198	4.99	4.88	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.624	8.624	0.000	100	806152	4.99	5.12	
S 30 1,2-Dichloroethene, Total	61				0		9.99	9.84	
37 cis-1,2-Dichloroethene	96	9.683	9.683	0.000	92	164852	4.99	4.91	
38 2-Butanone (MEK)	72	9.747	9.747	0.000	98	102674	4.99	4.93	
39 Ethyl acetate	88	9.790	9.790	0.000	98	12646	4.99	4.83	
* 40 Chlorobromomethane	128	10.170	10.170	0.000	86	245142	10.0	10.0	
41 Tetrahydrofuran	42	10.186	10.180	0.006	90	426273	4.99	5.13	
42 Chloroform	83	10.303	10.303	0.000	94	418377	4.99	4.98	
43 Cyclohexane	84	10.544	10.544	0.000	87	252320	4.99	4.74	
44 1,1,1-Trichloroethane	97	10.582	10.582	0.000	92	396374	4.99	4.78	
45 Carbon tetrachloride	117	10.838	10.838	0.000	94	374298	4.99	4.87	
46 Isooctane	57	11.293	11.293	0.000	96	1442652	4.99	4.90	
47 Benzene	78	11.341	11.341	0.000	98	669473	4.99	4.82	
48 1,2-Dichloroethane	62	11.545	11.550	-0.005	95	361493	4.99	4.83	
49 n-Heptane	43	11.705	11.705	0.000	96	695158	4.99	5.01	
* 50 1,4-Difluorobenzene	114	12.245	12.245	0.000	99	1524107	10.0	10.0	
52 n-Butanol	56	12.695	12.695	0.000	97	194379	4.99	5.02	
53 Trichloroethene	95	12.738	12.737	0.001	86	261708	4.99	4.70	
A 51 GRO	1	13.200	(4.687-21.714)		0	112020587	4.99	0	
54 1,2-Dichloropropane	63	13.331	13.337	-0.006	87	322528	4.99	4.88	
55 Methyl methacrylate	69	13.519	13.519	0.000	87	272471	4.99	4.74	
56 1,4-Dioxane	88	13.583	13.583	0.000	91	137848	4.99	4.88	
57 Dibromomethane	174	13.604	13.604	0.000	82	155899	4.99	4.56	
58 Dichlorobromomethane	83	13.915	13.920	-0.005	96	499493	4.99	4.87	
60 cis-1,3-Dichloropropene	75	14.899	14.899	0.000	97	406836	4.99	4.88	
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	167674681	4.99	0	
61 4-Methyl-2-pentanone (MIBK	43	15.215	15.214	0.001	97	898860	4.99	5.00	
65 Toluene	92	15.509	15.509	0.000	92	439936	4.99	4.86	
64 n-Octane	43	15.562	15.567	-0.005	99	1007939	4.99	5.10	
66 trans-1,3-Dichloropropene	75	16.156	16.156	0.000	93	429161	4.99	4.93	
67 1,1,2-Trichloroethane	83	16.547	16.546	0.001	91	249248	4.99	4.87	
68 Tetrachloroethene	166	16.638	16.637	0.001	88	246292	4.99	4.82	
69 2-Hexanone	43	17.033	17.028	0.005	88	870872	4.99	5.03	
71 Chlorodibromomethane	129	17.344	17.344	0.000	94	372330	4.99	4.90	
72 Ethylene Dibromide	107	17.627	17.627	0.000	97	368180	4.99	4.83	
* 74 Chlorobenzene-d5	117	18.574	18.574	0.000	97	1393341	10.0	10.0	
75 Chlorobenzene	112	18.638	18.638	0.000	84	537670	4.99	4.84	
76 Ethylbenzene	91	18.799	18.799	0.000	99	1056396	4.99	4.90	
77 n-Nonane	57	18.933	18.932	0.001	94	740472	4.99	5.03	
78 m-Xylene & p-Xylene	106	19.066	19.066	0.000	0	721509	9.99	9.74	
S 73 Xylenes, Total	106				0		15.0	14.6	
79 o-Xylene	106	19.960	19.960	0.000	95	349865	4.99	4.85	
80 Styrene	104	20.024	20.024	0.000	94	539703	4.99	4.93	
81 Bromoform	173	20.489	20.489	0.000	89	301947	4.99	5.01	
82 Isopropylbenzene	105	20.719	20.719	0.000	98	1078703	4.99	4.90	
84 1,1,2,2-Tetrachloroethane	83	21.447	21.447	0.000	97	676031	4.99	5.02	
85 N-Propylbenzene	91	21.506	21.511	-0.005	97	1524351	4.99	4.99	
86 1,2,3-Trichloropropane	75	21.549	21.548	0.001	94	591966	4.99	4.87	
87 n-Decane	57	21.704	21.704	0.000	83	1023202	4.99	5.09	
88 4-Ethyltoluene	105	21.714	21.714	0.000	97	1134751	4.99	5.04	
89 2-Chlorotoluene	91	21.714	21.720	-0.006	94	1072521	4.99	4.94	
90 1,3,5-Trimethylbenzene	105	21.827	21.832	-0.005	89	938974	4.99	5.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.223	22.223	0.000	79	391632	4.99	5.08	
92 tert-Butylbenzene	119	22.346	22.351	-0.005	85	810602	4.99	5.01	
93 1,2,4-Trimethylbenzene	105	22.453	22.453	0.000	98	954415	4.99	5.09	
94 sec-Butylbenzene	105	22.693	22.693	0.000	97	1373079	4.99	5.11	
95 4-Isopropyltoluene	119	22.907	22.907	0.000	95	1066437	4.99	5.17	
96 1,3-Dichlorobenzene	146	22.934	22.934	0.000	93	513211	4.99	4.96	
97 1,4-Dichlorobenzene	146	23.079	23.078	0.001	90	509736	4.99	4.98	
98 Benzyl chloride	91	23.287	23.287	0.000	96	939139	4.99	5.25	
100 n-Butylbenzene	91	23.501	23.501	0.000	96	1247645	4.99	5.33	
99 Undecane	57	23.533	23.533	0.000	91	1009537	4.99	5.10	
101 1,2-Dichlorobenzene	146	23.630	23.629	0.001	92	485130	4.99	5.02	
102 Dodecane	57	25.160	25.160	0.000	89	670898	4.99	5.18	
103 1,2,4-Trichlorobenzene	180	26.192	26.192	0.000	90	297303	4.99	4.74	
104 Hexachlorobutadiene	225	26.379	26.379	0.000	90	269072	4.99	4.82	
105 Naphthalene	128	26.690	26.690	0.000	97	754799	4.99	4.65	
106 1,2,3-Trichlorobenzene	180	27.171	27.171	0.000	93	252826	4.99	4.56	

Reagents:

ATTO15CAL3w_00194	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

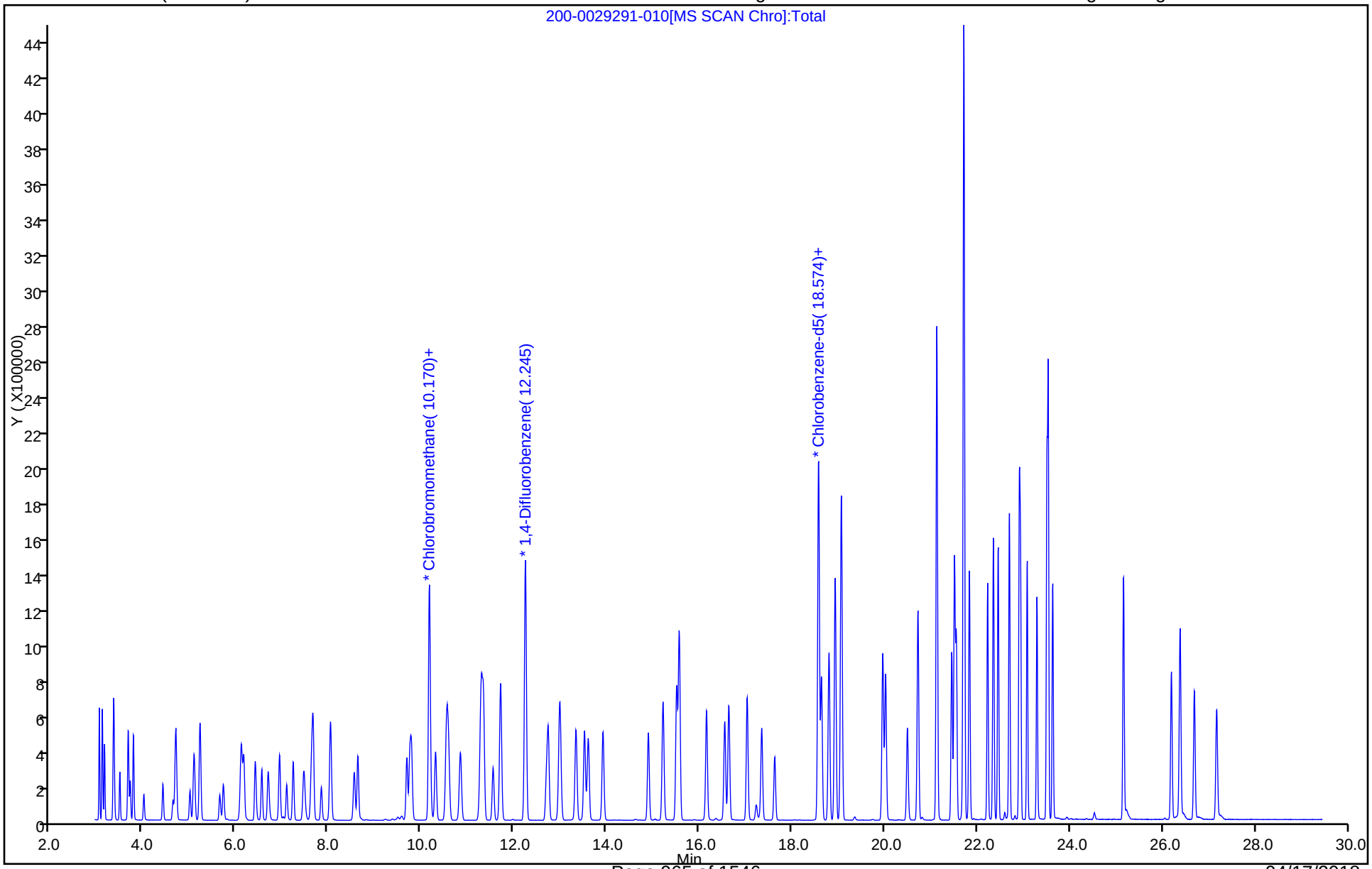
Report Date: 22-Feb-2018 11:22:02 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-010.D

Injection Date:	21-Feb-2018 23:27:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-011.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 22-Feb-2018 00:18:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-011
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:22:04 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 09:42:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	98	564983	10.0	10.7	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	98	1050019	10.0	10.3	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	950406	10.0	10.4	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	97	941996	10.0	9.92	
5 Chloromethane	50	3.488	3.488	0.000	99	529755	10.0	10.2	
6 Butane	43	3.670	3.670	0.000	97	1068981	10.0	10.5	
7 Vinyl chloride	62	3.713	3.713	0.000	98	485749	10.0	9.68	
8 Butadiene	54	3.782	3.782	0.000	87	408390	10.0	9.76	
10 Bromomethane	94	4.419	4.419	0.000	97	300190	10.0	9.65	
11 Chloroethane	64	4.633	4.633	0.000	97	223934	10.0	10.1	
12 2-Methylbutane	43	4.697	4.697	0.000	93	739616	10.0	9.98	
13 Vinyl bromide	106	5.002	5.002	0.000	97	277431	10.0	9.59	
14 Trichlorofluoromethane	101	5.093	5.093	0.000	97	926675	10.0	9.67	
16 Pentane	43	5.221	5.221	0.000	96	1153725	10.0	10.4	
17 Ethanol	45	5.644	5.644	0.000	97	317372	15.0	13.7	
18 Ethyl ether	59	5.719	5.719	0.000	84	315737	10.0	9.80	
19 Acrolein	56	6.104	6.104	0.000	99	130653	10.0	9.14	
20 1,1,2-Trichloro-1,2,2-trif	101	6.109	6.109	0.000	88	598627	10.0	9.66	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	86	280379	10.0	9.73	
22 Acetone	43	6.409	6.409	0.000	99	1020783	10.0	10.2	
23 Carbon disulfide	76	6.553	6.553	0.000	98	970072	10.0	9.92	
24 Isopropyl alcohol	45	6.687	6.687	0.000	100	1091986	10.0	10.5	
25 3-Chloro-1-propene	41	6.938	6.938	0.000	92	842010	10.0	10.7	
26 Acetonitrile	41	7.088	7.088	0.000	99	532971	10.0	10.5	
27 Methylene Chloride	49	7.233	7.233	0.000	89	671301	10.0	10.3	
28 2-Methyl-2-propanol	59	7.457	7.457	0.000	97	1082497	10.0	10.2	
29 Methyl tert-butyl ether	73	7.629	7.629	0.000	93	1202717	10.0	9.93	
31 trans-1,2-Dichloroethene	61	7.661	7.661	0.000	87	722280	10.0	9.92	
32 Acrylonitrile	53	7.837	7.837	0.000	93	390344	10.0	10.2	
33 Hexane	57	8.035	8.035	0.000	90	763073	10.0	9.88	
34 1,1-Dichloroethane	63	8.549	8.549	0.000	98	887162	10.0	9.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.624	8.624	0.000	100	1765275	10.0	10.5	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.8	
37 cis-1,2-Dichloroethene	96	9.683	9.683	0.000	92	352962	10.0	9.83	
38 2-Butanone (MEK)	72	9.747	9.747	0.000	98	219247	10.0	9.84	
39 Ethyl acetate	88	9.790	9.790	0.000	98	28028	10.0	10.0	
* 40 Chlorobromomethane	128	10.170	10.170	0.000	86	262260	10.0	10.0	
41 Tetrahydrofuran	42	10.180	10.180	0.000	90	905244	10.0	10.4	
42 Chloroform	83	10.303	10.303	0.000	94	891403	10.0	9.92	
43 Cyclohexane	84	10.544	10.544	0.000	87	550935	10.0	9.90	
44 1,1,1-Trichloroethane	97	10.582	10.582	0.000	92	861520	10.0	9.94	
45 Carbon tetrachloride	117	10.838	10.838	0.000	96	810871	10.0	10.1	
46 Isooctane	57	11.293	11.293	0.000	96	3120598	10.0	10.1	
47 Benzene	78	11.341	11.341	0.000	98	1438664	10.0	9.90	
48 1,2-Dichloroethane	62	11.550	11.550	0.000	96	778643	10.0	9.94	
49 n-Heptane	43	11.705	11.705	0.000	96	1499918	10.0	10.3	
* 50 1,4-Difluorobenzene	114	12.245	12.245	0.000	99	1595224	10.0	10.0	
52 n-Butanol	56	12.695	12.695	0.000	98	400945	10.0	9.90	
53 Trichloroethene	95	12.737	12.737	0.000	86	576028	10.0	9.87	
A 51 GRO	1	13.200	(4.687-21.714)		0	236460003	10.0	0	
54 1,2-Dichloropropane	63	13.337	13.337	0.000	87	704512	10.0	10.2	
55 Methyl methacrylate	69	13.519	13.519	0.000	86	606157	10.0	10.1	
56 1,4-Dioxane	88	13.583	13.583	0.000	91	295974	10.0	10.0	
57 Dibromomethane	174	13.604	13.604	0.000	82	338258	10.0	9.46	
58 Dichlorobromomethane	83	13.920	13.920	0.000	96	1108258	10.0	10.3	
60 cis-1,3-Dichloropropene	75	14.899	14.899	0.000	97	901445	10.0	10.3	
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	358325066	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.214	15.214	0.000	97	1955091	10.0	10.4	
65 Toluene	92	15.509	15.509	0.000	92	953946	10.0	9.82	
64 n-Octane	43	15.567	15.567	0.000	99	2172842	10.0	10.5	
66 trans-1,3-Dichloropropene	75	16.156	16.156	0.000	93	931556	10.0	10.2	
67 1,1,2-Trichloroethane	83	16.546	16.546	0.000	91	541032	10.0	9.87	
68 Tetrachloroethene	166	16.637	16.637	0.000	83	533492	10.0	9.74	
69 2-Hexanone	43	17.028	17.028	0.000	88	1896600	10.0	10.2	
71 Chlorodibromomethane	129	17.344	17.344	0.000	94	850938	10.0	10.4	
72 Ethylene Dibromide	107	17.627	17.627	0.000	97	811774	10.0	9.94	
* 74 Chlorobenzene-d5	117	18.574	18.574	0.000	97	1493018	10.0	10.0	
75 Chlorobenzene	112	18.638	18.638	0.000	84	1163485	10.0	9.77	
76 Ethylbenzene	91	18.799	18.799	0.000	99	2307683	10.0	9.98	
77 n-Nonane	57	18.932	18.932	0.000	94	1618528	10.0	10.3	
78 m-Xylene & p-Xylene	106	19.066	19.066	0.000	0	1597901	20.0	20.1	
S 73 Xylenes, Total	106				0		30.0	30.0	
79 o-Xylene	106	19.960	19.960	0.000	96	765676	10.0	9.91	
80 Styrene	104	20.024	20.024	0.000	94	1218443	10.0	10.4	
81 Bromoform	173	20.489	20.489	0.000	89	721025	10.0	11.2	
82 Isopropylbenzene	105	20.719	20.719	0.000	98	2373566	10.0	10.1	
84 1,1,2,2-Tetrachloroethane	83	21.447	21.447	0.000	97	1479586	10.0	10.2	
85 N-Propylbenzene	91	21.511	21.511	0.000	97	3343161	10.0	10.2	
86 1,2,3-Trichloropropane	75	21.548	21.548	0.000	94	1291396	10.0	9.92	
87 n-Decane	57	21.704	21.704	0.000	84	2301947	10.0	10.7	
88 4-Ethyltoluene	105	21.714	21.714	0.000	96	2547441	10.0	10.6	
89 2-Chlorotoluene	91	21.720	21.720	0.000	95	2421552	10.0	10.4	
90 1,3,5-Trimethylbenzene	105	21.832	21.832	0.000	89	2072097	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.223	22.223	0.000	79	897115	10.0	10.9	
92 tert-Butylbenzene	119	22.351	22.351	0.000	85	1793766	10.0	10.3	
93 1,2,4-Trimethylbenzene	105	22.453	22.453	0.000	98	2103793	10.0	10.5	
94 sec-Butylbenzene	105	22.693	22.693	0.000	97	3039942	10.0	10.6	
95 4-Isopropyltoluene	119	22.907	22.907	0.000	95	2370581	10.0	10.7	
96 1,3-Dichlorobenzene	146	22.934	22.934	0.000	96	1144791	10.0	10.3	
97 1,4-Dichlorobenzene	146	23.078	23.078	0.000	86	1122654	10.0	10.2	
98 Benzyl chloride	91	23.287	23.287	0.000	96	2102680	10.0	11.0	
100 n-Butylbenzene	91	23.501	23.501	0.000	96	2733774	10.0	10.9	
99 Undecane	57	23.533	23.533	0.000	92	2045165	10.0	9.64	
101 1,2-Dichlorobenzene	146	23.629	23.629	0.000	87	1078665	10.0	10.4	
102 Dodecane	57	25.160	25.160	0.000	89	1446745	10.0	10.4	
103 1,2,4-Trichlorobenzene	180	26.192	26.192	0.000	90	632050	10.0	9.41	
104 Hexachlorobutadiene	225	26.379	26.379	0.000	91	587329	10.0	9.83	
105 Naphthalene	128	26.690	26.690	0.000	97	1744994	10.0	10.0	
106 1,2,3-Trichlorobenzene	180	27.171	27.171	0.000	91	616237	10.0	10.4	

Reagents:

ATTO15CAL4w_00667	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

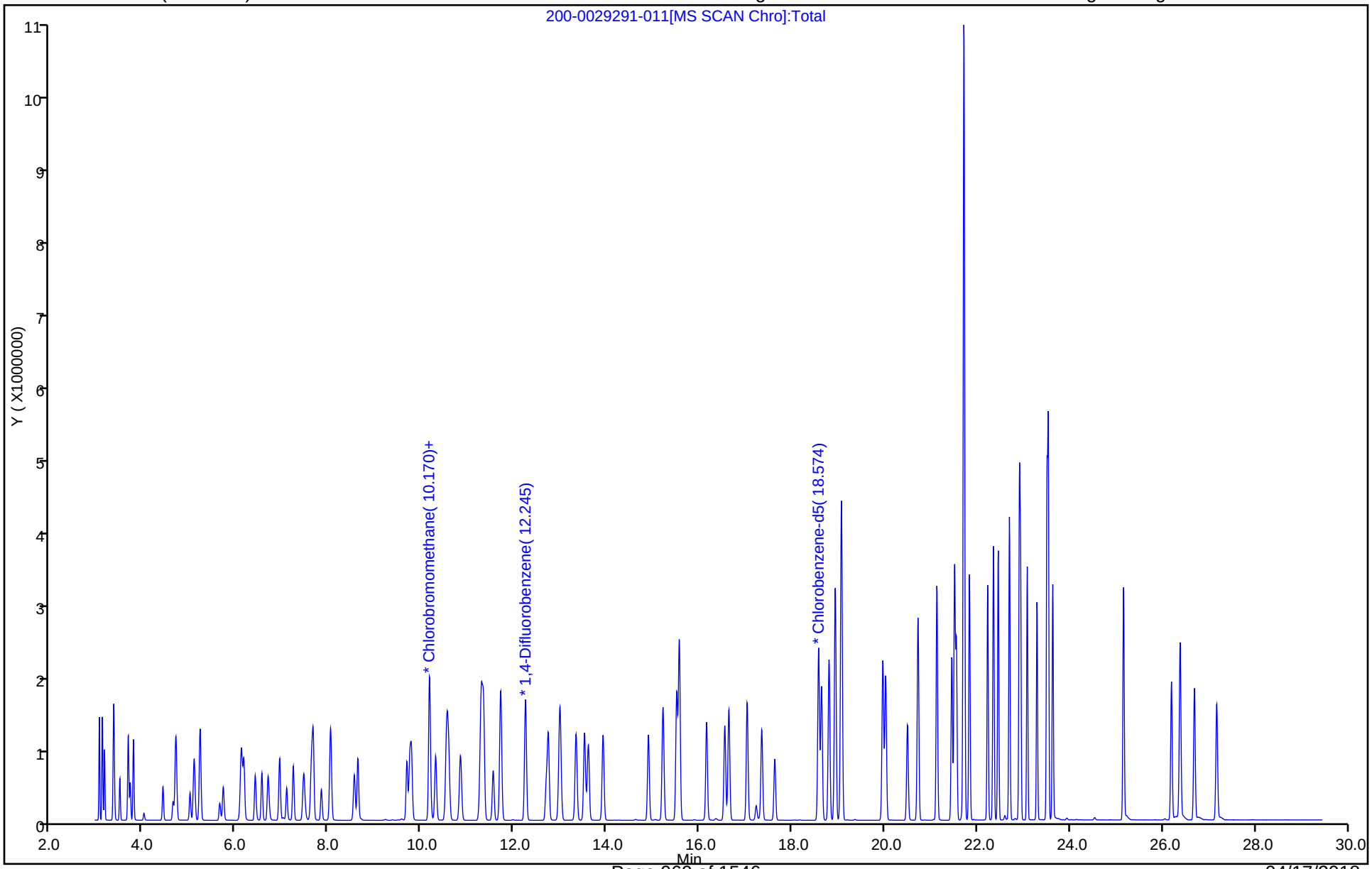
Report Date: 22-Feb-2018 11:22:04 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-011.D

Injection Date:	22-Feb-2018 00:18:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	icis			Worklist Smp#:	11
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-012.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 22-Feb-2018 01:08:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-012
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:22:06 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 09:43:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	98	948290	15.0	16.9	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	98	1800375	15.0	16.5	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	1613127	15.0	16.5	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	97	1642766	15.0	16.2	
5 Chloromethane	50	3.488	3.488	0.000	99	905027	15.0	16.2	
6 Butane	43	3.670	3.670	0.000	97	1818066	15.0	16.7	
7 Vinyl chloride	62	3.712	3.713	-0.001	98	838935	15.0	15.7	
8 Butadiene	54	3.782	3.782	0.000	88	708090	15.0	15.8	
10 Bromomethane	94	4.418	4.419	-0.001	98	534366	15.0	16.1	
11 Chloroethane	64	4.638	4.633	0.005	97	393496	15.0	16.6	
12 2-Methylbutane	43	4.697	4.697	0.000	93	1275487	15.0	16.1	
13 Vinyl bromide	106	5.002	5.002	0.000	97	499272	15.0	16.2	
14 Trichlorofluoromethane	101	5.093	5.093	0.000	97	1660462	15.0	16.2	
16 Pentane	43	5.221	5.221	0.000	97	2002495	15.0	16.8	
17 Ethanol	45	5.644	5.644	0.000	98	532939	20.0	21.5	
18 Ethyl ether	59	5.718	5.719	-0.001	85	566281	15.0	16.4	
19 Acrolein	56	6.104	6.104	0.000	99	280780	15.0	18.4	
20 1,1,2-Trichloro-1,2,2-trif	101	6.109	6.109	0.000	89	1073638	15.0	16.2	
21 1,1-Dichloroethene	96	6.168	6.163	0.005	87	506062	15.0	16.4	
22 Acetone	43	6.409	6.409	0.000	99	1748679	15.0	16.4	
23 Carbon disulfide	76	6.553	6.553	0.000	98	1739150	15.0	16.6	
24 Isopropyl alcohol	45	6.687	6.687	0.000	100	1869045	15.0	16.9	
25 3-Chloro-1-propene	41	6.938	6.938	0.000	92	1466273	15.0	17.4	
26 Acetonitrile	41	7.088	7.088	0.000	98	914365	15.0	16.9	
27 Methylene Chloride	49	7.232	7.233	-0.001	89	1165116	15.0	16.7	
28 2-Methyl-2-propanol	59	7.457	7.457	0.000	97	1918493	15.0	16.8	
29 Methyl tert-butyl ether	73	7.628	7.629	-0.001	94	2159216	15.0	16.7	
31 trans-1,2-Dichloroethene	61	7.666	7.661	0.005	87	1284555	15.0	16.5	
32 Acrylonitrile	53	7.837	7.837	0.000	93	687285	15.0	16.9	
33 Hexane	57	8.035	8.035	0.000	90	1343674	15.0	16.3	
34 1,1-Dichloroethane	63	8.548	8.549	-0.001	98	1575107	15.0	16.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.629	8.624	0.005	100	3086609	15.0	17.2	
S 30 1,2-Dichloroethene, Total	61				0		30.0	32.8	
37 cis-1,2-Dichloroethene	96	9.688	9.683	0.005	92	623107	15.0	16.2	
38 2-Butanone (MEK)	72	9.747	9.747	0.000	99	388692	15.0	16.3	
39 Ethyl acetate	88	9.784	9.790	-0.006	97	49453	15.0	16.5	
* 40 Chlorobromomethane	128	10.169	10.170	-0.001	85	280165	10.0	10.0	
41 Tetrahydrofuran	42	10.180	10.180	0.000	91	1565516	15.0	16.8	
42 Chloroform	83	10.308	10.303	0.005	94	1596650	15.0	16.6	
43 Cyclohexane	84	10.544	10.544	0.000	88	980440	15.0	16.4	
44 1,1,1-Trichloroethane	97	10.587	10.582	0.005	93	1548891	15.0	16.7	
45 Carbon tetrachloride	117	10.843	10.838	0.005	95	1465188	15.0	17.0	
46 Isooctane	57	11.293	11.293	0.000	96	5533720	15.0	16.7	
47 Benzene	78	11.341	11.341	0.000	98	2540772	15.0	16.3	
48 1,2-Dichloroethane	62	11.550	11.550	0.000	96	1402245	15.0	16.7	
49 n-Heptane	43	11.710	11.705	0.005	96	2635471	15.0	16.9	
* 50 1,4-Difluorobenzene	114	12.245	12.245	0.000	99	1710133	10.0	10.0	
52 n-Butanol	56	12.694	12.695	-0.001	97	714877	15.0	16.5	
53 Trichloroethene	95	12.737	12.737	0.000	86	1037432	15.0	16.6	
A 51 GRO	1	13.200	(4.687-21.714)		0	369686239	15.0	0	
54 1,2-Dichloropropane	63	13.336	13.337	-0.001	87	1253015	15.0	16.9	
55 Methyl methacrylate	69	13.518	13.519	-0.001	86	1101840	15.0	17.1	
56 1,4-Dioxane	88	13.583	13.583	-0.001	92	520198	15.0	16.4	
57 Dibromomethane	174	13.609	13.604	0.005	83	620620	15.0	16.2	
58 Dichlorobromomethane	83	13.920	13.920	0.000	96	1992386	15.0	17.3	
60 cis-1,3-Dichloropropene	75	14.899	14.899	0.000	97	1626655	15.0	17.4	
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	632418065	15.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.214	15.214	0.000	97	3434598	15.0	17.0	
65 Toluene	92	15.508	15.509	-0.001	92	1716593	15.0	16.3	
64 n-Octane	43	15.567	15.567	0.000	100	3827462	15.0	17.3	
66 trans-1,3-Dichloropropene	75	16.156	16.156	0.000	94	1688282	15.0	17.3	
67 1,1,2-Trichloroethane	83	16.546	16.546	0.000	92	970108	15.0	16.3	
68 Tetrachloroethene	166	16.637	16.637	0.000	84	980583	15.0	16.5	
69 2-Hexanone	43	17.028	17.028	0.000	89	3384783	15.0	16.8	
71 Chlorodibromomethane	129	17.349	17.344	0.005	94	1563975	15.0	17.7	
72 Ethylene Dibromide	107	17.627	17.627	0.000	98	1484594	15.0	16.7	
* 74 Chlorobenzene-d5	117	18.574	18.574	0.000	98	1623409	10.0	10.0	
75 Chlorobenzene	112	18.638	18.638	0.000	84	2106136	15.0	16.3	
76 Ethylbenzene	91	18.798	18.799	-0.001	99	4156764	15.0	16.5	
77 n-Nonane	57	18.932	18.932	0.000	94	2896291	15.0	16.9	
78 m-Xylene & p-Xylene	106	19.066	19.066	0.000	0	2908238	30.0	33.7	
S 73 Xylenes, Total	106				0		45.0	50.3	
79 o-Xylene	106	19.959	19.960	-0.001	96	1398455	15.0	16.6	
80 Styrene	104	20.024	20.024	0.000	95	2237762	15.0	17.6	
81 Bromoform	173	20.494	20.489	0.005	89	1341425	15.0	19.1	
82 Isopropylbenzene	105	20.724	20.719	0.005	98	4308947	15.0	16.8	
84 1,1,2,2-Tetrachloroethane	83	21.447	21.447	0.000	97	2667430	15.0	17.0	
85 N-Propylbenzene	91	21.511	21.511	0.000	97	6045351	15.0	17.0	
86 1,2,3-Trichloropropane	75	21.548	21.548	0.000	94	2348996	15.0	16.6	
87 n-Decane	57	21.703	21.704	-0.001	84	4155409	15.0	17.7	
88 4-Ethyltoluene	105	21.714	21.714	0.000	96	4674476	15.0	17.8	
89 2-Chlorotoluene	91	21.719	21.720	-0.001	93	4462799	15.0	17.6	
90 1,3,5-Trimethylbenzene	105	21.832	21.832	0.000	89	3749718	15.0	17.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.222	22.223	-0.001	79	1654113	15.0	18.4	
92 tert-Butylbenzene	119	22.351	22.351	0.000	85	3218361	15.0	17.1	
93 1,2,4-Trimethylbenzene	105	22.452	22.453	-0.001	98	3775459	15.0	17.3	
94 sec-Butylbenzene	105	22.693	22.693	0.000	97	5374115	15.0	17.2	
95 4-Isopropyltoluene	119	22.907	22.907	0.000	95	4112830	15.0	17.1	
96 1,3-Dichlorobenzene	146	22.934	22.934	0.000	96	2103265	15.0	17.4	
97 1,4-Dichlorobenzene	146	23.078	23.078	0.000	86	2060743	15.0	17.3	
98 Benzyl chloride	91	23.287	23.287	0.000	96	3696718	15.0	17.7	
100 n-Butylbenzene	91	23.506	23.501	0.005	96	4505111	15.0	16.5	
99 Undecane	57	23.533	23.533	0.000	92	3609304	15.0	15.6	
101 1,2-Dichlorobenzene	146	23.629	23.629	0.000	87	1912945	15.0	17.0	
102 Dodecane	57	25.159	25.160	-0.001	90	2458813	15.0	16.3	
103 1,2,4-Trichlorobenzene	180	26.192	26.192	0.000	90	1252148	15.0	17.1	
104 Hexachlorobutadiene	225	26.379	26.379	0.000	91	1093614	15.0	16.8	
105 Naphthalene	128	26.689	26.690	-0.001	97	3390490	15.0	17.9	
106 1,2,3-Trichlorobenzene	180	27.171	27.171	0.000	95	1133047	15.0	17.5	

Reagents:

ATTO15CAL5w_00073	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

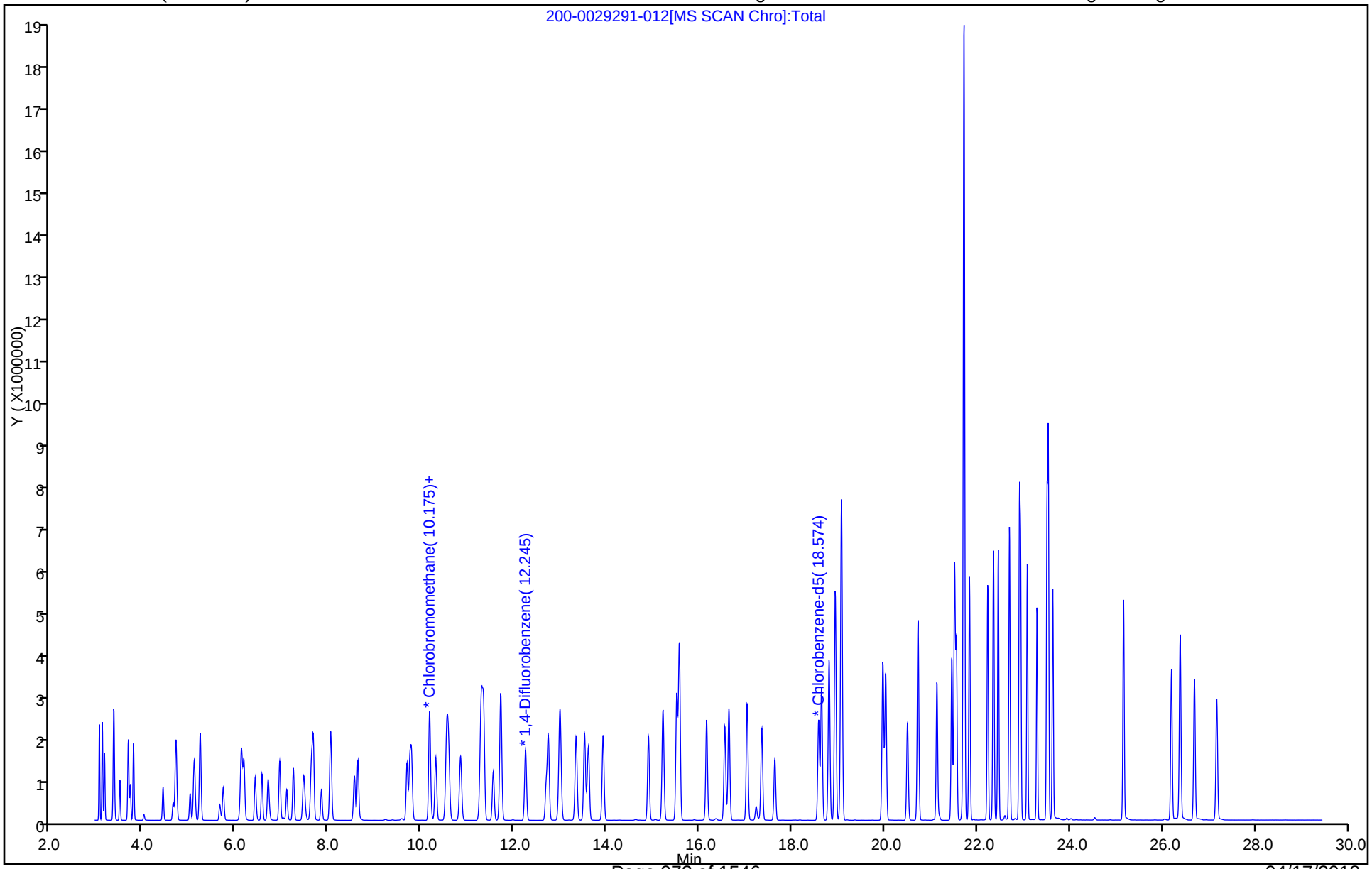
Report Date: 22-Feb-2018 11:22:07 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-012.D

Injection Date:	22-Feb-2018 01:08:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	12
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-013.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 22-Feb-2018 01:59:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-013
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:22:08 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 09:43:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	97	1267237	20.0	18.9	
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	98	2503175	20.0	19.2	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	2189962	20.0	18.8	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.359	3.354	0.005	97	2323388	20.0	19.2	
5 Chloromethane	50	3.488	3.488	0.000	99	1224288	20.0	18.5	
6 Butane	43	3.670	3.670	0.000	97	2433375	20.0	18.7	
7 Vinyl chloride	62	3.713	3.713	0.000	98	1166655	20.0	18.3	
8 Butadiene	54	3.787	3.782	0.005	90	981339	20.0	18.4	
10 Bromomethane	94	4.424	4.419	0.005	97	761351	20.0	19.2	
11 Chloroethane	64	4.638	4.633	0.005	97	554742	20.0	19.6	
12 2-Methylbutane	43	4.702	4.697	0.005	94	1715004	20.0	18.2	
13 Vinyl bromide	106	5.007	5.002	0.005	98	732487	20.0	19.9	
14 Trichlorofluoromethane	101	5.098	5.093	0.005	97	2386524	20.0	19.6	
16 Pentane	43	5.227	5.221	0.006	97	2717982	20.0	19.2	
17 Ethanol	45	5.649	5.644	0.005	98	1100719	40.0	37.4	
18 Ethyl ether	59	5.719	5.719	0.000	88	789836	20.0	19.3	
19 Acrolein	56	6.109	6.104	0.005	99	400603	20.0	22.0	
20 1,1,2-Trichloro-1,2,2-trif	101	6.120	6.109	0.011	90	1563177	20.0	19.8	
21 1,1-Dichloroethene	96	6.168	6.163	0.005	88	738932	20.0	20.2	
22 Acetone	43	6.409	6.409	0.000	100	2303519	20.0	18.1	
23 Carbon disulfide	76	6.559	6.553	0.006	99	2477105	20.0	19.9	
24 Isopropyl alcohol	45	6.692	6.687	0.005	100	2558881	20.0	19.4	
25 3-Chloro-1-propene	41	6.944	6.938	0.006	92	1946083	20.0	19.4	
26 Acetonitrile	41	7.088	7.088	0.000	98	1246724	20.0	19.3	
27 Methylene Chloride	49	7.233	7.233	0.000	91	1592845	20.0	19.2	
28 2-Methyl-2-propanol	59	7.463	7.457	0.006	97	2725701	20.0	20.1	
29 Methyl tert-butyl ether	73	7.629	7.629	0.000	94	3095976	20.0	20.1	
31 trans-1,2-Dichloroethene	61	7.666	7.661	0.005	88	1818922	20.0	19.6	
32 Acrylonitrile	53	7.843	7.837	0.006	93	950136	20.0	19.6	
33 Hexane	57	8.040	8.035	0.005	91	1901710	20.0	19.4	
34 1,1-Dichloroethane	63	8.554	8.549	0.005	99	2205668	20.0	19.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.629	8.624	0.005	100	4210734	20.0	19.7	
S 30 1,2-Dichloroethene, Total	61				0		40.0	39.4	
37 cis-1,2-Dichloroethene	96	9.688	9.683	0.005	93	900244	20.0	19.7	
38 2-Butanone (MEK)	72	9.747	9.747	0.000	99	554275	20.0	19.6	
39 Ethyl acetate	88	9.784	9.790	-0.006	97	70933	20.0	19.9	
* 40 Chlorobromomethane	128	10.175	10.170	0.005	85	333596	10.0	10.0	
41 Tetrahydrofuran	42	10.175	10.180	-0.005	91	2128184	20.0	19.3	
42 Chloroform	83	10.309	10.303	0.006	94	2275438	20.0	19.9	
43 Cyclohexane	84	10.550	10.544	0.006	88	1408433	20.0	20.0	
44 1,1,1-Trichloroethane	97	10.587	10.582	0.005	93	2248474	20.0	20.5	
45 Carbon tetrachloride	117	10.844	10.838	0.006	95	2156747	20.0	21.1	
46 Isooctane	57	11.298	11.293	0.005	97	7820912	20.0	20.0	
47 Benzene	78	11.347	11.341	0.006	98	3647889	20.0	19.8	
48 1,2-Dichloroethane	62	11.550	11.550	0.000	96	2010698	20.0	20.3	
49 n-Heptane	43	11.710	11.705	0.005	97	3667162	20.0	19.9	
* 50 1,4-Difluorobenzene	114	12.245	12.245	0.000	99	2021166	10.0	10.0	
52 n-Butanol	56	12.695	12.695	0.000	96	1000603	20.0	19.5	
53 Trichloroethene	95	12.738	12.737	0.001	86	1510200	20.0	20.4	
A 51 GRO	1	13.200	(4.687-21.714)		0	523552810	20.0	0	
54 1,2-Dichloropropane	63	13.337	13.337	0.000	87	1767282	20.0	20.2	
55 Methyl methacrylate	69	13.524	13.519	0.005	87	1564888	20.0	20.5	
56 1,4-Dioxane	88	13.583	13.583	0.000	93	740619	20.0	19.8	
57 Dibromomethane	174	13.610	13.604	0.006	84	943111	20.0	20.8	
58 Dichlorobromomethane	83	13.920	13.920	0.000	96	2862739	20.0	21.1	
60 cis-1,3-Dichloropropene	75	14.904	14.899	0.005	97	2326698	20.0	21.0	
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	856323709	20.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.214	15.214	0.000	98	4738356	20.0	19.9	
65 Toluene	92	15.514	15.509	0.005	92	2492614	20.0	20.4	
64 n-Octane	43	15.568	15.567	0.001	100	5335329	20.0	20.4	
66 trans-1,3-Dichloropropene	75	16.156	16.156	0.000	94	2430763	20.0	21.0	
67 1,1,2-Trichloroethane	83	16.552	16.546	0.006	92	1398613	20.0	20.3	
68 Tetrachloroethene	166	16.637	16.637	0.000	85	1466082	20.0	21.3	
69 2-Hexanone	43	17.033	17.028	0.005	89	4644781	20.0	19.9	
71 Chlorodibromomethane	129	17.349	17.344	0.005	94	2272191	20.0	22.2	
72 Ethylene Dibromide	107	17.627	17.627	0.000	97	2161006	20.0	21.1	
* 74 Chlorobenzene-d5	117	18.574	18.574	0.000	97	1875332	10.0	10.0	
75 Chlorobenzene	112	18.638	18.638	0.000	84	3095411	20.0	20.7	
76 Ethylbenzene	91	18.804	18.799	0.005	99	6038555	20.0	20.8	
77 n-Nonane	57	18.932	18.932	0.000	95	4147250	20.0	20.9	
78 m-Xylene & p-Xylene	106	19.072	19.066	0.006	0	4262917	40.0	42.7	
S 73 Xylenes, Total	106				0		60.0	63.8	
79 o-Xylene	106	19.965	19.960	0.005	96	2047809	20.0	21.1	
80 Styrene	104	20.024	20.024	0.000	95	3316471	20.0	22.5	
81 Bromoform	173	20.495	20.489	0.006	90	1937156	20.0	23.9	
82 Isopropylbenzene	105	20.719	20.719	0.000	98	6352440	20.0	21.4	
84 1,1,2,2-Tetrachloroethane	83	21.452	21.447	0.005	97	3882975	20.0	21.4	
85 N-Propylbenzene	91	21.511	21.511	0.000	97	8841778	20.0	21.5	
86 1,2,3-Trichloropropane	75	21.548	21.548	0.000	95	3416416	20.0	20.9	
87 n-Decane	57	21.709	21.704	0.005	86	5624748	20.0	20.8	
88 4-Ethyltoluene	105	21.714	21.714	0.000	98	6769841	20.0	22.3	
89 2-Chlorotoluene	91	21.720	21.720	0.000	96	6487497	20.0	22.2	
90 1,3,5-Trimethylbenzene	105	21.832	21.832	0.000	89	5408276	20.0	21.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.228	22.223	0.005	80	2413091	20.0	23.2	
92 tert-Butylbenzene	119	22.351	22.351	0.000	86	4627278	20.0	21.2	
93 1,2,4-Trimethylbenzene	105	22.453	22.453	0.000	98	5384473	20.0	21.3	
94 sec-Butylbenzene	105	22.693	22.693	0.000	97	7568405	20.0	20.9	
95 4-Isopropyltoluene	119	22.913	22.907	0.006	95	5858650	20.0	21.1	
96 1,3-Dichlorobenzene	146	22.934	22.934	0.000	98	3062202	20.0	22.0	
97 1,4-Dichlorobenzene	146	23.079	23.078	0.000	87	2985625	20.0	21.7	
98 Benzyl chloride	91	23.292	23.287	0.005	96	5178952	20.0	21.5	
100 n-Butylbenzene	91	23.506	23.501	0.005	96	6686238	20.0	21.2	
99 Undecane	57	23.533	23.533	0.000	94	5457885	20.0	20.5	
101 1,2-Dichlorobenzene	146	23.630	23.629	0.001	88	2751538	20.0	21.2	
102 Dodecane	57	25.160	25.160	0.000	92	3795955	20.0	21.8	
103 1,2,4-Trichlorobenzene	180	26.192	26.192	0.000	91	2147634	20.0	25.4	
104 Hexachlorobutadiene	225	26.379	26.379	0.000	93	1842491	20.0	24.5	
105 Naphthalene	128	26.690	26.690	0.000	97	5867133	20.0	26.9	
106 1,2,3-Trichlorobenzene	180	27.171	27.171	0.000	96	1950004	20.0	26.1	

Reagents:

ATTO15CAL6w_00149	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

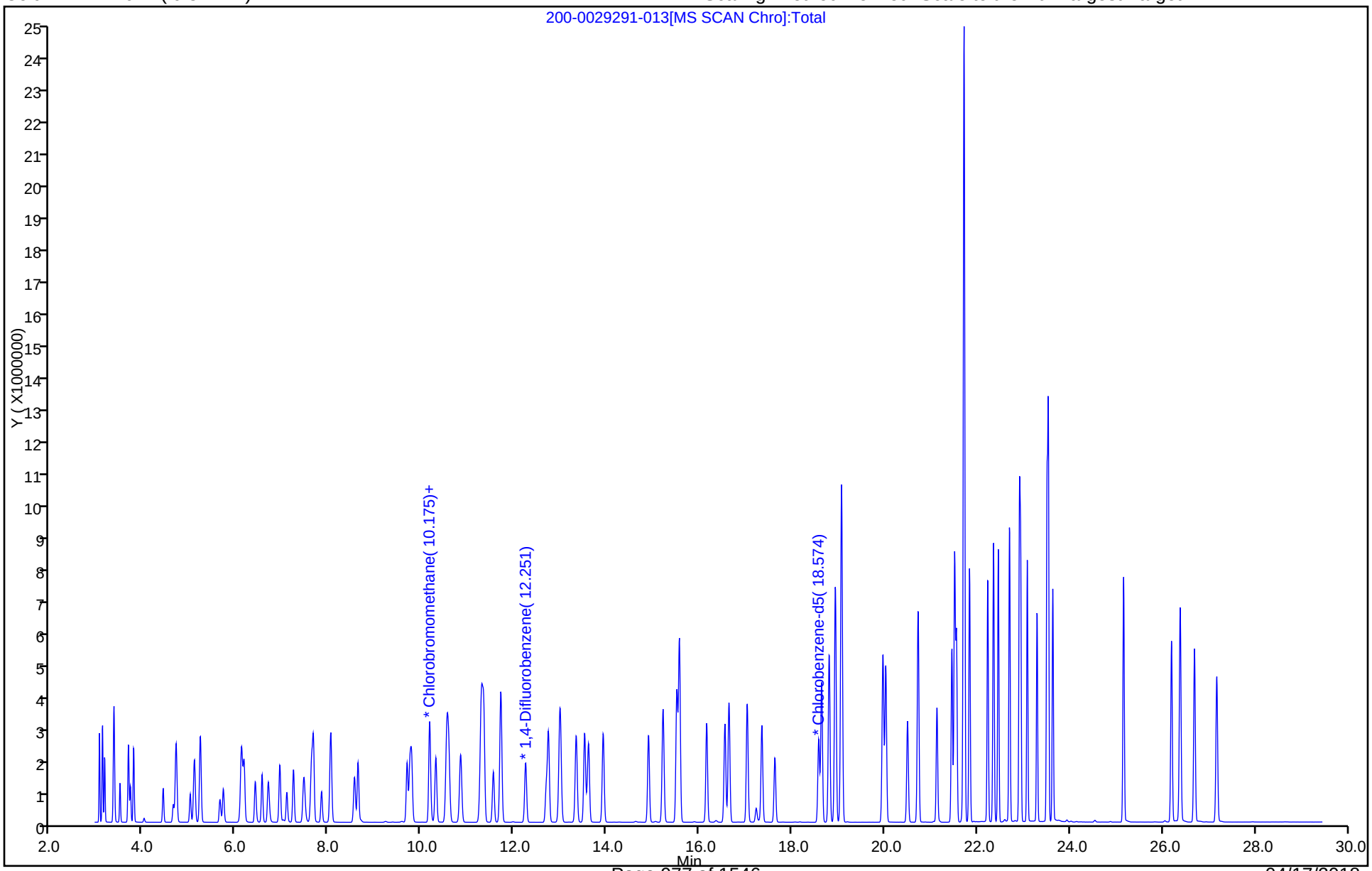
Report Date: 22-Feb-2018 11:22:09 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-013.D

Injection Date:	22-Feb-2018 01:59:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	13
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 22-Feb-2018 02:49:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-014
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:22:10 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 09:44:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	98	2425315	40.0	30.1	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	5397935	40.0	34.5	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	98	4325821	40.0	30.9	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	97	4959463	40.0	34.1	
5 Chloromethane	50	3.488	3.488	0.000	99	2443369	40.0	30.6	
6 Butane	43	3.670	3.670	0.000	98	4608219	40.0	29.5	
7 Vinyl chloride	62	3.712	3.713	-0.001	98	2386550	40.0	31.1	
8 Butadiene	54	3.782	3.782	0.000	92	1968237	40.0	30.7	
10 Bromomethane	94	4.419	4.419	0.000	98	1605460	40.0	33.7	
11 Chloroethane	64	4.638	4.633	0.005	98	1113564	40.0	32.7	
12 2-Methylbutane	43	4.702	4.697	0.005	94	3175420	40.0	28.0	
13 Vinyl bromide	106	5.007	5.002	0.005	98	1641680	40.0	37.1	
14 Trichlorofluoromethane	101	5.098	5.093	0.005	97	5164610	40.0	35.2	
16 Pentane	43	5.226	5.221	0.005	97	5307696	40.0	31.2	
17 Ethanol	45	5.654	5.644	0.010	98	2603344	100.0	73.5	
18 Ethyl ether	59	5.719	5.719	0.000	93	1661969	40.0	33.7	
19 Acrolein	56	6.109	6.104	0.005	98	755535	40.0	34.6	
20 1,1,2-Trichloro-1,2,2-trif	101	6.114	6.109	0.005	92	3452319	40.0	36.4	
21 1,1-Dichloroethene	96	6.168	6.163	0.005	89	1664285	40.0	37.8	
22 Acetone	43	6.409	6.409	0.000	100	4448809	40.0	29.1	
23 Carbon disulfide	76	6.558	6.553	0.005	99	5333443	40.0	35.6	
24 Isopropyl alcohol	45	6.698	6.687	0.011	100	4957195	40.0	31.2	
25 3-Chloro-1-propene	41	6.944	6.938	0.006	92	3759491	40.0	31.1	
26 Acetonitrile	41	7.093	7.088	0.005	98	2375522	40.0	30.7	
27 Methylene Chloride	49	7.238	7.233	0.005	93	3154810	40.0	31.6	
28 2-Methyl-2-propanol	59	7.468	7.457	0.011	96	5546348	40.0	34.0	
29 Methyl tert-butyl ether	73	7.628	7.629	-0.001	96	6542570	40.0	35.3	
31 trans-1,2-Dichloroethene	61	7.666	7.661	0.005	90	3690851	40.0	33.1	
32 Acrylonitrile	53	7.842	7.837	0.005	93	1930800	40.0	33.1	
33 Hexane	57	8.040	8.035	0.005	93	3870734	40.0	32.8	
34 1,1-Dichloroethane	63	8.554	8.549	0.005	99	4569280	40.0	33.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.629	8.624	0.005	100	8215865	40.0	31.9	
S 30 1,2-Dichloroethene, Total	61				0		80.0	70.6	
37 cis-1,2-Dichloroethene	96	9.693	9.683	0.010	94	2055612	40.0	37.4	
38 2-Butanone (MEK)	72	9.752	9.747	0.005	99	1221571	40.0	35.8	
39 Ethyl acetate	88	9.790	9.790	0.000	98	160666	40.0	37.5	
* 40 Chlorobromomethane	128	10.175	10.170	0.005	88	401199	10.0	10.0	
41 Tetrahydrofuran	42	10.180	10.180	0.000	93	4232608	40.0	33.8	
42 Chloroform	83	10.314	10.303	0.011	95	4980922	40.0	36.2	
43 Cyclohexane	84	10.549	10.544	0.005	92	3154691	40.0	39.3	
44 1,1,1-Trichloroethane	97	10.592	10.582	0.010	94	5041568	40.0	40.4	
45 Carbon tetrachloride	117	10.849	10.838	0.011	96	4940069	40.0	42.6	
46 Isooctane	57	11.298	11.293	0.005	97	16629783	40.0	37.5	
47 Benzene	78	11.346	11.341	0.005	98	7998641	40.0	38.2	
48 1,2-Dichloroethane	62	11.555	11.550	0.005	96	4293558	40.0	38.1	
49 n-Heptane	43	11.716	11.705	0.011	97	7586907	40.0	36.3	
* 50 1,4-Difluorobenzene	114	12.251	12.245	0.006	98	2297675	10.0	10.0	
52 n-Butanol	56	12.700	12.695	0.005	95	2174097	40.0	37.3	
53 Trichloroethene	95	12.743	12.737	0.006	88	3448837	40.0	41.0	
A 51 GRO	1	13.200	(4.687-21.714)		0	1102519655	40.0	0	
54 1,2-Dichloropropane	63	13.342	13.337	0.005	88	3862693	40.0	38.8	
55 Methyl methacrylate	69	13.524	13.519	0.005	88	3501846	40.0	40.5	
56 1,4-Dioxane	88	13.588	13.583	0.005	95	1607014	40.0	37.7	
57 Dibromomethane	174	13.615	13.604	0.011	87	2308821	40.0	44.8	
58 Dichlorobromomethane	83	13.925	13.920	0.005	97	6442618	40.0	41.7	
60 cis-1,3-Dichloropropene	75	14.904	14.899	0.005	98	5230465	40.0	41.6	
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	1835686405	40.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.220	15.214	0.006	98	9969921	40.0	36.8	
65 Toluene	92	15.514	15.509	0.005	92	5656214	40.0	40.8	
64 n-Octane	43	15.573	15.567	0.006	99	11118497	40.0	37.3	
66 trans-1,3-Dichloropropene	75	16.161	16.156	0.005	97	5406948	40.0	41.2	
67 1,1,2-Trichloroethane	83	16.552	16.546	0.006	94	3112261	40.0	39.8	
68 Tetrachloroethene	166	16.643	16.637	0.006	92	3550952	40.0	45.4	
69 2-Hexanone	43	17.033	17.028	0.005	90	9713027	40.0	36.7	
71 Chlorodibromomethane	129	17.354	17.344	0.010	95	5261157	40.0	45.2	
72 Ethylene Dibromide	107	17.632	17.627	0.005	97	4883008	40.0	41.9	
* 74 Chlorobenzene-d5	117	18.579	18.574	0.005	95	2130857	10.0	10.0	
75 Chlorobenzene	112	18.643	18.638	0.005	86	7020417	40.0	41.3	
76 Ethylbenzene	91	18.804	18.799	0.005	100	13550378	40.0	41.1	
77 n-Nonane	57	18.938	18.932	0.006	96	8998892	40.0	39.9	
78 m-Xylene & p-Xylene	106	19.071	19.066	0.005	0	9460123	80.0	83.5	
S 73 Xylenes, Total	106				0		120.0	125.5	
79 o-Xylene	106	19.965	19.960	0.005	97	4636496	40.0	42.0	
80 Styrene	104	20.029	20.024	0.005	96	7511936	40.0	44.9	
81 Bromoform	173	20.500	20.489	0.011	92	4491570	40.0	48.8	
82 Isopropylbenzene	105	20.724	20.719	0.005	98	13955689	40.0	41.4	
84 1,1,2,2-Tetrachloroethane	83	21.452	21.447	0.005	97	8029689	40.0	39.0	
85 N-Propylbenzene	91	21.516	21.511	0.005	97	18272173	40.0	39.1	
86 1,2,3-Trichloropropane	75	21.554	21.548	0.006	96	7070040	40.0	38.1	
87 n-Decane	57	21.709	21.704	0.005	89	10115060	40.0	32.9	
88 4-Ethyltoluene	105	21.720	21.714	0.006	98	12729487	40.0	37.0	
89 2-Chlorotoluene	91	21.725	21.720	0.005	95	12266055	40.0	36.9	
90 1,3,5-Trimethylbenzene	105	21.837	21.832	0.005	90	11399339	40.0	39.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.228	22.223	0.005	81	5116482	40.0	43.4	
92 tert-Butylbenzene	119	22.356	22.351	0.005	87	9872509	40.0	39.9	
93 1,2,4-Trimethylbenzene	105	22.458	22.453	0.005	98	11531106	40.0	40.2	
94 sec-Butylbenzene	105	22.699	22.693	0.006	97	16092817	40.0	39.2	
95 4-Isopropyltoluene	119	22.913	22.907	0.005	96	13100073	40.0	41.5	
96 1,3-Dichlorobenzene	146	22.939	22.934	0.005	97	6452287	40.0	40.8	
97 1,4-Dichlorobenzene	146	23.084	23.078	0.006	91	6430790	40.0	41.1	
98 Benzyl chloride	91	23.292	23.287	0.005	96	11396424	40.0	41.6	
100 n-Butylbenzene	91	23.506	23.501	0.005	97	14528919	40.0	40.6	
99 Undecane	57	23.533	23.533	0.000	95	11472691	40.0	37.9	
101 1,2-Dichlorobenzene	146	23.635	23.629	0.006	89	6136741	40.0	41.5	
102 Dodecane	57	25.159	25.160	-0.001	93	5870721	40.0	29.7	
103 1,2,4-Trichlorobenzene	180	26.197	26.192	0.005	92	3857917	40.0	40.2	
104 Hexachlorobutadiene	225	26.384	26.379	0.005	95	3473642	40.0	40.7	
105 Naphthalene	128	26.689	26.690	-0.001	98	9530635	40.0	38.4	
106 1,2,3-Trichlorobenzene	180	27.171	27.171	0.000	92	3012367	40.0	35.5	

Reagents:

ATTO15CAL7w_00076	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

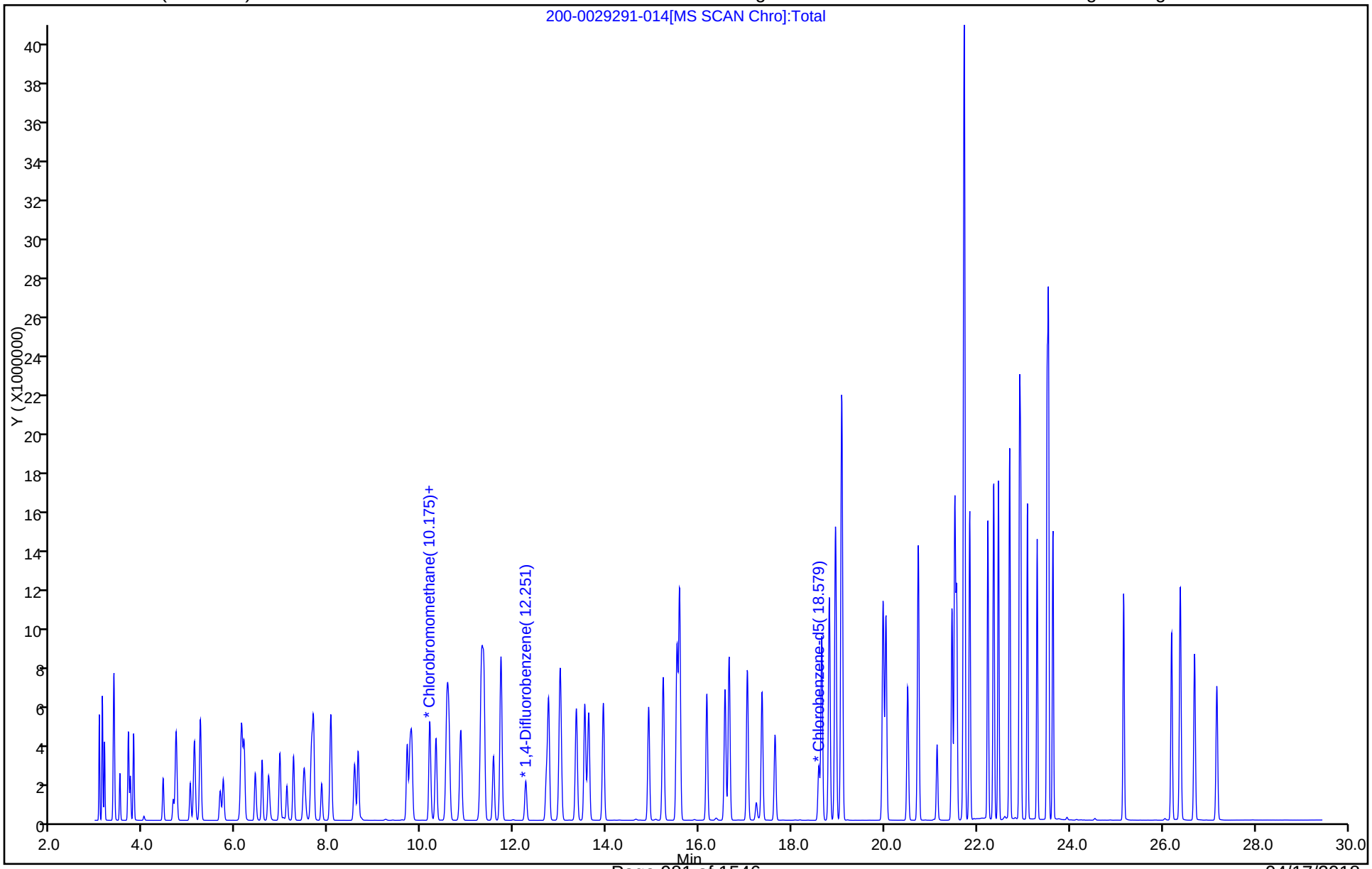
Report Date: 22-Feb-2018 11:22:11 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Injection Date:	22-Feb-2018 02:49:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	14
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-128414/4	30075_04.D
Level 2	IC 200-128414/5	30075_05.D
Level 3	IC 200-128414/6	30075_06.D
Level 4	IC 200-128414/7	30075_07.D
Level 5	ICIS 200-128414/8	30075_08.D
Level 6	IC 200-128414/9	30075_09.D
Level 7	IC 200-128414/10	30075_10.D
Level 8	IC 200-128414/11	30075_11.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.5756	+++++ 0.5133	+++++ 0.4632	0.5791	0.5665	Ave		0.5395				9.3		30.0			
Dichlorodifluoromethane	+++++ 2.3808	+++++ 2.0942	2.4416 1.9381	2.0515	2.2389	Ave		2.1908				9.0		30.0			
Freon 22	+++++ 1.2462	+++++ 1.1364	1.3253 1.0166	1.2108	1.2103	Ave		1.1909				8.8		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.2800	2.2303 2.0951	2.3071 1.9392	2.1030	2.1446	Ave		2.1570				5.9		30.0			
Chloromethane	+++++ 0.6974	+++++ 0.6271	0.7543 0.5674	0.7278	0.6665	Ave		0.6734				10.2		30.0			
n-Butane	+++++ 1.2224	+++++ 1.0885	1.3313 0.9721	1.1969	1.1997	Ave		1.1685				10.6		30.0			
Vinyl chloride	0.7567 0.8497	0.8314 0.7685	0.8883 0.7031	0.8218	0.8271	Ave		0.8058				7.3		30.0			
1,3-Butadiene	0.6842 0.6348	0.5807 0.5738	0.7082 0.5170	0.6097	0.6253	Ave		0.6167				10.0		30.0			
Bromomethane	+++++ 0.8842	0.8425 0.7922	0.8904 0.7492	0.8119	0.8157	Ave		0.8266				6.1		30.0			
Chloroethane	+++++ 0.4103	+++++ 0.3721	0.4253 0.3349	0.3770	0.3885	Ave		0.3847				8.2		30.0			
Isopentane	+++++ 0.8666	0.9726 0.7639	0.9963 0.6603	0.8084	0.8243	Ave		0.8418				13.9		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.9201	0.8926 0.8723	0.9300 0.8308	0.8270	0.8558	Ave		0.8755				4.7		30.0			
Trichlorofluoromethane	+++++ 2.5139	2.4189 2.3463	2.5160 2.2189	2.3177	2.3572	Ave		2.3841				4.5		30.0			
n-Pentane	+++++ 1.3368	+++++ 1.2090	1.4174 1.0918	1.2714	1.2743	Ave		1.2668				8.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.2814	+++++ 0.2556	0.2670 0.2244	0.2531	0.2993	Ave		0.2635				9.8		30.0			
Ethyl ether	+++++ 0.5265	0.4676 0.4970	0.5292 0.4525	0.4879	0.4879	Ave		0.4927				5.7		30.0			
Acrolein	+++++ 0.2162	+++++ 0.2041	+++++ 0.1649	0.1373	0.2440	Ave		0.1933				21.9		30.0			
Freon TF	+++++ 1.7635	1.6770 1.6602	1.7934 1.5633	1.5373	1.5952	Ave		1.6557				5.9		30.0			
1,1-Dichloroethene	0.9549 0.8350	0.8188 0.7943	0.8350 0.7492	0.7404	0.7647	Ave		0.8115				8.5		30.0			
Acetone	+++++ 1.2746	+++++ 1.0947	+++++ 0.9714	1.6148	1.2376	Ave		1.2386				19.6		30.0			
Carbon disulfide	+++++ 2.2035	+++++ 2.0597	2.1762 1.9403	1.9889	2.0322	Ave		2.0668				5.0		30.0			
Isopropyl alcohol	+++++ 1.3486	+++++ 1.2124	+++++ 1.0795	1.2858	1.3653	Ave		1.2583				9.3		30.0			
3-Chloropropene	+++++ 0.9234	0.8582 0.8151	0.8892 0.6941	0.8518	0.7310	Ave		0.8232				10.1		30.0			
Acetonitrile	+++++ 0.5879	+++++ 0.5211	+++++ 0.4626	0.5729	0.5651	Ave		0.5419				9.4		30.0			
Methylene Chloride	+++++ 0.8719	+++++ 0.7831	0.9628 0.7115	0.8037	0.8314	Ave		0.8274				10.3		30.0			
tert-Butyl alcohol	+++++ 1.8204	+++++ 1.6740	+++++ 1.5373	1.6841	1.7690	Ave		1.6970				6.4		30.0			
Methyl tert-butyl ether	+++++ 2.5310	2.3290 2.3580	2.3786 2.1730	2.2687	2.3802	Ave		2.3455				4.7		30.0			
trans-1,2-Dichloroethene	+++++ 1.2043	1.1457 1.1020	1.2252 1.0202	1.1010	1.1210	Ave		1.1313				6.1		30.0			
Acrylonitrile	+++++ 0.5653	+++++ 0.5138	0.5542 0.4735	0.4985	0.5357	Ave		0.5235				6.6		30.0			
n-Hexane	+++++ 1.2090	1.1874 1.1071	1.2317 1.0045	1.0856	1.1303	Ave		1.1365				7.0		30.0			
1,1-Dichloroethane	1.6019 1.5571	1.4477 1.4332	1.5330 1.3259	1.4142	1.4513	Ave		1.4705				6.0		30.0			
Vinyl acetate	+++++ 2.1338	+++++ 1.8955	+++++ 1.7074	1.9336	2.0309	Ave		1.9403				8.2		30.0			
cis-1,2-Dichloroethene	0.8558 1.0290	0.9102 0.9718	1.0243 0.9171	0.9063	0.9559	Ave		0.9463				6.4		30.0			
Methyl Ethyl Ketone	+++++ 0.4769	+++++ 0.4302	0.5067 0.4051	0.4348	0.4403	Ave		0.4490				8.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0718	+++++ 0.0671	+++++ 0.0630	0.0656	0.0681	Ave		0.0671				4.8		30.0			
Tetrahydrofuran	+++++ 0.1982	+++++ 0.1800	+++++ 0.1689	0.1872	0.1913	Ave		0.1851				6.1		30.0			
Chloroform	+++++ 2.1027	2.1058 1.9364	2.0792 1.8050	1.8863	1.9614	Ave		1.9824				5.9		30.0			
Cyclohexane	+++++ 0.2581	0.2414 0.2452	0.2585 0.2415	0.2285	0.2373	Ave		0.2443				4.4		30.0			
1,1,1-Trichloroethane	+++++ 0.4363	0.3911 0.4089	0.4124 0.4037	0.3935	0.4161	Ave		0.4089				3.7		30.0			
Carbon tetrachloride	0.3805 0.4579	0.3977 0.4434	0.4538 0.4363	0.4162	0.4514	Ave		0.4297				6.6		30.0			
2,2,4-Trimethylpentane	+++++ 0.9586	0.9185 0.8956	0.9380 0.8635	0.8660	0.9010	Ave		0.9059				3.9		30.0			
Benzene	+++++ 0.6150	0.5981 0.5802	0.6171 0.5723	0.5527	0.5744	Ave		0.5871				4.1		30.0			
1,2-Dichloroethane	+++++ 0.2755	0.2423 0.2532	0.2878 0.2415	0.2550	0.2639	Ave		0.2599				6.6		30.0			
n-Heptane	+++++ 0.3670	0.3550 0.3326	0.3530 0.3165	0.3334	0.3473	Ave		0.3435				5.0		30.0			
n-Butanol	+++++ 0.1320	+++++ 0.1207	+++++ 0.1166	0.1281	0.1298	Ave		0.1254				5.2		30.0			
Trichloroethene	0.3322 0.2936	0.3048 0.2793	0.2920 0.2760	0.2622	0.2700	Ave		0.2888				7.7		30.0			
1,2-Dichloropropane	+++++ 0.2420	0.2198 0.2265	0.2418 0.2221	0.2175	0.2243	Ave		0.2277				4.4		30.0			
Methyl methacrylate	+++++ 0.2376	+++++ 0.2267	0.2426 0.2202	0.2086	0.2253	Ave		0.2268				5.4		30.0			
1,4-Dioxane	+++++ 0.1420	+++++ 0.1326	+++++ 0.1278	0.1283	0.1415	Ave		0.1344				5.1		30.0			
Dibromomethane	+++++ 0.3379	0.3404 0.3293	0.3355 0.3397	0.2982	0.3169	Ave		0.3283				4.8		30.0			
Bromodichloromethane	+++++ 0.5040	0.4188 0.4674	0.4660 0.4533	0.4274	0.4675	Ave		0.4578				6.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.3792	0.3392 0.3592	0.3610 0.3529	0.3400	0.3549	Ave		0.3552				3.8		30.0			
methyl isobutyl ketone	+++++ 0.5091	+++++ 0.4695	0.5270 0.4426	0.4714	0.4912	Ave		0.4851				6.3		30.0			
Toluene	+++++ 0.5289	0.5234 0.5166	0.5287 0.5076	0.4802	0.5013	Ave		0.5124				3.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.5454	0.4961 0.4980	0.5239 0.4701	0.5065	0.5240	Ave		0.5091				4.8		30.0			
trans-1,3-Dichloropropene	+++++ 0.3898	0.5593 0.3648	0.4034 0.3533	0.3445	0.3642	Ave		0.3971				18.7		30.0			
1,1,2-Trichloroethane	+++++ 0.2562	0.2588 0.2508	0.2542 0.2467	0.2300	0.2468	Ave		0.2491				3.8		30.0			
Tetrachloroethene	0.5748 0.5291	0.5519 0.5193	0.5305 0.5254	0.4724	0.4968	Ave		0.5250				6.0		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.5199	+++++ 0.4917	0.5951 0.4587	0.4853	0.5077	Ave		0.5098				9.2		30.0			
Dibromochloromethane	+++++ 0.6107	0.5352 0.5721	0.5365 0.5534	0.4593	0.5549	Ave		0.5460				8.4		30.0			
1,2-Dibromoethane	+++++ 0.5044	0.4707 0.4927	0.4849 0.4856	0.4526	0.4749	Ave		0.4808				3.5		30.0			
Chlorobenzene	+++++ 0.7676	0.7836 0.7501	0.7375 0.7415	0.6805	0.7251	Ave		0.7408				4.5		30.0			
Ethylbenzene	+++++ 1.2079	1.1525 1.1678	1.1575 1.1525	1.0820	1.1384	Ave		1.1512				3.3		30.0			
n-Nonane	+++++ 0.5398	0.5197 0.5146	0.5300 0.4961	0.4885	0.5128	Ave		0.5145				3.5		30.0			
m,p-Xylene	+++++ 0.4965	0.4702 0.4819	0.4701 0.4748	0.4444	0.4647	Ave		0.4718				3.4		30.0			
Xylene, o-	+++++ 0.4927	0.4816 0.4723	0.4735 0.4662	0.4400	0.4643	Ave		0.4701				3.5		30.0			
Styrene	+++++ 0.7739	0.7212 0.7474	0.6908 0.7302	0.6673	0.7304	Ave		0.7230				4.9		30.0			
Bromoform	+++++ 0.6661	0.4951 0.5933	0.4706 0.5277	0.3430	0.5742	Ave		0.5243				19.7		30.0			
Cumene	+++++ 1.4268	1.3728 1.3794	1.3431 1.3461	1.2638	1.3433	Ave		1.3536				3.7		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.6936	0.6718 0.6676	0.6727 0.6319	0.6168	0.6591	Ave		0.6591				4.0		30.0			
n-Propylbenzene	+++++ 1.7055	1.6039 1.6444	1.6062 1.5407	1.5144	1.6092	Ave		1.6035				3.9		30.0			
1,2,3-Trichloropropane	+++++ 0.5360	+++++ 0.5178	0.5596 0.4786	0.4808	0.5101	Ave		0.5138				6.1		30.0			
n-Decane	+++++ 0.6814	+++++ 0.6332	0.6366 0.5565	0.6434	0.6808	Ave		0.6387				7.1		30.0			
4-Ethyltoluene	+++++ 1.4575	1.3756 1.3896	1.3523 1.2653	1.2843	1.3689	Ave		1.3562				4.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.1802	1.1671 1.1272	1.0878 1.0411	1.0397	1.1114	Ave		1.1078				5.0		30.0			
1,3,5-Trimethylbenzene	+++++ 1.1901	1.1513 1.1286	1.1179 1.0513	1.0733	1.1397	Ave		1.1218				4.2		30.0			
Alpha Methyl Styrene	+++++ 0.6236	0.5919 0.5915	0.5609 0.5447	0.5404	0.5952	Ave		0.5783				5.3		30.0			
tert-Butylbenzene	+++++ 1.1632	1.1311 1.0867	1.1044 1.0270	1.0495	1.1210	Ave		1.0976				4.3		30.0			
1,2,4-Trimethylbenzene	+++++ 1.1839	1.1246 1.1145	1.1215 1.0525	1.0730	1.1421	Ave		1.1160				3.9		30.0			
sec-Butylbenzene	+++++ 1.7014	1.6634 1.5957	1.5885 1.5287	1.5700	1.6596	Ave		1.6153				3.8		30.0			
4-Isopropyltoluene	+++++ 1.4228	1.4408 1.3586	1.3527 1.3766	1.3532	1.4554	Ave		1.3943				3.2		30.0			
1,3-Dichlorobenzene	+++++ 0.9102	0.9426 0.8605	0.8507 0.7990	0.8021	0.8726	Ave		0.8625				6.1		30.0			
1,4-Dichlorobenzene	+++++ 0.9092	1.0282 0.8463	0.8715 0.7955	0.8053	0.8746	Ave		0.8758				8.9		30.0			
Benzyl chloride	+++++ 0.9638	0.9660 0.9088	0.9260 0.8258	0.7930	0.9878	Ave		0.9102				8.2		30.0			
n-Butylbenzene	+++++ 1.2145	1.3343 1.1939	1.2095 1.2084	1.1959	1.2674	Ave		1.2320				4.2		30.0			
n-Undecane	+++++ 0.6351	+++++ 0.6375	+++++ 0.6114	0.6270	0.6067	Ave		0.6235				2.2		30.0			
1,2-Dichlorobenzene	+++++ 0.8268	0.9157 0.7718	0.8172 0.7522	0.7568	0.8183	Ave		0.8084				7.0		30.0			
n-Dodecane	+++++ 0.4295	+++++ 0.4635	+++++ 0.3344	0.4113	0.4768	Ave		0.4231				13.2		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6557	+++++ 0.6908	0.6734 0.5605	0.5072	0.5945	Ave		0.6137				11.7		30.0			
Hexachlorobutadiene	+++++ 0.6588	0.7123 0.6526	0.6014 0.5694	0.5893	0.6130	Ave		0.6281				7.8		30.0			
Naphthalene	+++++ 1.2979	+++++ 1.3925	1.6302 1.0443	0.9545	1.2175	Ave		1.2561				19.4		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5813	+++++ 0.6152	0.5563 0.4520	0.4561	0.5604	Ave		0.5369				12.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-128414/4	30075_04.D
Level 2	IC 200-128414/5	30075_05.D
Level 3	IC 200-128414/6	30075_06.D
Level 4	IC 200-128414/7	30075_07.D
Level 5	ICIS 200-128414/8	30075_08.D
Level 6	IC 200-128414/9	30075_09.D
Level 7	IC 200-128414/10	30075_10.D
Level 8	IC 200-128414/11	30075_11.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 192407	+++++ 261425	+++++ 543847	57075	114388	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 795837	+++++ 1066628	25684 2275489	202190	452052	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 416554	+++++ 578793	13941 1193597	119333	244375	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 762138	10642 1067096	24269 2276751	207267	433020	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 233134	+++++ 319381	7935 666217	71735	134577	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 408604	+++++ 554406	14005 1141351	117966	242230	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	710 284042	3967 391402	9344 825476	80997	167007	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	642 212206	2771 292235	7450 607027	60095	126258	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 295551	4020 403491	9367 879679	80016	164695	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 137159	+++++ 189494	4474 393174	37153	78435	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 289687	4641 389073	10480 775231	79680	166431	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 307565	4259 444290	9783 975416	81508	172788	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 840318	11542 1194996	26467 2605167	228433	475936	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 446862	+++++ 615761	14910 1281918	125309	257297	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 125705	+++++ 260442	28123 658598	49922	90684	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 175980	2231 253143	5567 531266	48090	98519	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 72256	+++++ 103931	+++++ 193552	13530	49262	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 589497	8002 845557	18865 1835447	151511	322077	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	896 279117	3907 404536	8784 879678	72974	154393	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 426054	+++++ 557536	+++++ 1140493	159150	249873	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 736563	+++++ 1049041	22892 2278104	196029	410319	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 450793	+++++ 617511	+++++ 1267380	126727	275660	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 308670	4095 415131	9354 814890	83949	147594	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 196529	+++++ 265384	+++++ 543102	56464	114105	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 291457	+++++ 398839	10128 835301	79214	167858	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 608519	+++++ 852584	+++++ 1804938	165979	357180	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 846025	11113 1200985	25021 2551227	223601	480580	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 402559	5467 561254	12888 1197761	108518	226333	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 188971	+++++ 261685	5830 555970	49128	108159	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 404145	5666 563891	12957 1179388	106993	228217	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1503 520506	6908 729953	16126 1556763	139384	293024	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 713275	+++++ 965420	+++++ 2004662	190575	410059	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	803 343961	4343 494955	10775 1076757	89326	193010	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 159425	+++++ 219103	5330 475631	42850	88891	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 24000	+++++ 34166	+++++ 73933	6468	13741	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 347699	+++++ 473875	+++++ 979584	95949	199955	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 702864	10048 986255	21872 2119261	185908	396014	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 452679	6029 645301	14347 1400728	117107	248048	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 765276	9767 1076185	22892 2341506	201702	434942	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1859 803168	9932 1167203	25189 2530537	213336	471850	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1681511	22935 2357299	52067 5008072	443920	941840	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1078858	14936 1527277	34252 3319157	283337	600452	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 483215	6051 666377	15974 1400621	130720	275884	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 643835	8865 875391	19593 1835666	170895	363074	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 231535	+++++ 317571	+++++ 676292	65677	135675	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1623 515002	7611 735139	16211 1600668	134421	282203	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 424437	5488 596228	13421 1288207	111467	234477	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 416843	+++++ 596720	13469 1277278	106911	235491	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 249062	+++++ 349027	+++++ 741148	65781	147886	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 592686	8499 866843	18624 1970363	152843	331222	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 884079	10458 1230155	25866 2629195	219104	488694	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 665106	8470 945418	20040 2046830	174278	371027	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 893023	+++++ 1235677	29252 2567018	241615	513434	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 890012	11760 1267432	27489 2742318	231738	494850	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 956672	12389 1310676	29079 2726270	259610	547808	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 683819	13967 960317	22395 2048845	176572	380747	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 431052	5814 615243	13217 1332431	111005	243615	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2529 890257	12401 1274020	27582 2838218	227942	490467	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 874889	+++++ 1206455	30943 2478102	234170	501203	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1027664	12026 1403728	27897 2989620	221629	547819	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 848706	10576 1208885	25213 2623088	218422	468831	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1291655	17606 1840306	38343 4005521	328384	715788	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2032550	25895 2865310	60180 6225711	522134	1123789	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 908371	11677 1262539	27555 2680218	235730	506235	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1671016	21129 2364680	48886 5130134	428892	917425	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 829053	10821 1158667	24621 2518584	212302	458309	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1302201	16205 1833853	35919 3944431	322019	720982	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1120908	11124 1455653	24470 2850406	165502	566852	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2400829	30845 3384429	69831 7271421	609836	1326104	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1167071	15096 1637893	34974 3413364	297635	650661	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2869959	36039 4034611	83511 8323146	730773	1588577	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 901999	+++++ 1270537	29095 2585356	232011	503588	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1146677	+++++ 1553526	33101 3006210	310492	672036	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2452627	30908 3409440	70309 6835309	619737	1351356	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1985915	26223 2765483	56561 5624175	501677	1097144	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2002623	25869 2768941	58124 5679391	517937	1125090	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1049374	13299 1451311	29163 2942436	260784	587538	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1957355	25416 2666233	57421 5547970	506436	1106590	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42918-1 Analy Batch No.: 128414

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2018 17:29 Calibration End Date: 04/12/2018 23:23 Calibration ID: 39268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1992092	25269 2734508	58309 5685599	517789	1127402	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2862905	37376 3915057	82594 8258327	757605	1638314	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 2394095	32375 3333203	70333 7436244	652975	1436684	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1531532	21179 2111323	44230 4316366	387060	861373	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1530008	23104 2076405	45310 4297351	388579	863330	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1621739	21706 2229759	48148 4460912	382651	975154	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2043595	29981 2929251	62888 6527850	577070	1251096	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1068770	+++++ 1564109	+++++ 3302557	302543	598874	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1391358	20575 1893620	42489 4063474	365213	807828	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 722659	+++++ 1137211	+++++ 1806393	198483	470675	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1103435	+++++ 1694923	35011 3027658	244735	586862	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1108618	16006 1601213	31270 3076171	284342	605112	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2184000	+++++ 3416470	84759 5641107	460595	1201867	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 978093	+++++ 1509470	28926 2441828	220069	553197	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-Apr-2018 17:29:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-004
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:48 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:45:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.055	3.044	0.010	55	884	0.0351	0.0613	
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	93	2046	0.0351	0.0349	
3 Chlorodifluoromethane	51	3.162	3.156	0.006	30	1123	0.0351	0.0353	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.359	3.354	0.005	85	1975	0.0351	0.0342	
5 Chloromethane	50	3.499	3.488	0.011	6	685	0.0351	0.0380	
6 Butane	43	3.680	3.664	0.016	27	1301	0.0351	0.0416	
7 Vinyl chloride	62	3.723	3.713	0.010	19	710	0.0351	0.0329	M
8 Butadiene	54	3.782	3.782	0.000	21	642	0.0351	0.0389	
10 Bromomethane	94	4.419	4.413	0.006	29	846	0.0351	0.0383	
11 Chloroethane	64		4.633				ND	ND	
12 2-Methylbutane	43	4.692	4.697	-0.005	45	1172	0.0351	0.0521	
13 Vinyl bromide	106	5.007	4.996	0.011	81	806	0.0351	0.0344	
14 Trichlorofluoromethane	101	5.082	5.093	-0.011	18	470	0.0351	0.007370	
16 Pentane	43	5.221	5.221	0.000	57	1183	0.0351	0.0349	
17 Ethanol	45	5.665	5.638	0.027	93	3162	0.0702	0.4487	
18 Ethyl ether	59		5.713				ND	ND	
19 Acrolein	56	6.136	6.104	0.032	1	562	0.0351	0.1087	
20 1,1,2-Trichloro-1,2,2-trif	101	6.098	6.109	-0.011	35	1800	0.0351	0.0406	
21 1,1-Dichloroethene	96	6.168	6.163	0.005	9	896	0.0351	0.0413	M
22 Acetone	43	6.446	6.403	0.043	98	4776	0.0351	0.1442	
23 Carbon disulfide	76	6.553	6.548	0.005	94	1832	0.0351	0.0331	
24 Isopropyl alcohol	45	6.740	6.687	0.053	98	5212	0.0351	0.1548	
25 3-Chloro-1-propene	41	6.928	6.933	-0.005	1	706	0.0351	0.0321	
26 Acetonitrile	41	7.110	7.083	0.027	56	723	0.0351	0.0499	
27 Methylene Chloride	49	7.233	7.227	0.006	41	816	0.0351	0.0369	
28 2-Methyl-2-propanol	59	7.522	7.452	0.070	1	1556	0.0351	0.0343	
29 Methyl tert-butyl ether	73	7.687	7.623	0.064	24	2009	0.0351	0.0320	
31 trans-1,2-Dichloroethene	61	7.666	7.661	0.005	9	918	0.0351	0.0303	
32 Acrylonitrile	53	7.832	7.826	0.006	1	57	0.0351	0.004071	
33 Hexane	57	8.024	8.035	-0.011	40	632	0.0351	0.0208	
34 1,1-Dichloroethane	63	8.533	8.538	-0.005	0	1503	0.0351	0.0382	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.629	8.618	0.011	62	1712	0.0351	0.0330	
S 30 1,2-Dichloroethene, Total	61				0		0.0702	0.0621	
37 cis-1,2-Dichloroethene	96	9.683	9.677	0.006	12	803	0.0351	0.0317	M
38 2-Butanone (MEK)	72	9.779	9.742	0.037	71	624	0.0351	0.0520	
39 Ethyl acetate	88		9.774				ND	ND	
* 40 Chlorobromomethane	128	10.159	10.164	-0.005	78	267490	10.0	10.0	
41 Tetrahydrofuran	42	10.234	10.170	0.064	22	1112	0.0351	0.0431	
42 Chloroform	83	10.298	10.298	0.000	4	888	0.0351	0.0167	
43 Cyclohexane	84	10.539	10.533	0.006	20	267	0.0351	0.007845	
44 1,1,1-Trichloroethane	97	10.587	10.582	0.005	2	764	0.0351	0.0134	
45 Carbon tetrachloride	117	10.822	10.838	-0.016	29	1859	0.0351	0.0311	
46 Isooctane	57	11.293	11.288	0.005	86	4840	0.0351	0.0384	
47 Benzene	78	11.347	11.336	0.011	84	1145	0.0351	0.0140	
48 1,2-Dichloroethane	62		11.539				ND	ND	
49 n-Heptane	43	11.705	11.700	0.005	53	1687	0.0351	0.0353	
* 50 1,4-Difluorobenzene	114	12.235	12.235	0.000	93	1392868	10.0	10.0	
52 n-Butanol	56	12.737	12.689	0.048	77	2221	0.0351	0.1271	
53 Trichloroethene	95	12.721	12.727	-0.006	92	1623	0.0351	0.0404	M
A 51 GRO	1	13.198	(4.687-21.708)		0	5149868	0.0351	0	
54 1,2-Dichloropropane	63		13.326				ND	ND	
55 Methyl methacrylate	69	13.513	13.513	0.000	7	1572	0.0351	0.0498	
56 1,4-Dioxane	88	13.626	13.572	0.054	19	762	0.0351	0.0407	
57 Dibromomethane	174	13.588	13.599	-0.011	42	1413	0.0351	0.0309	
58 Dichlorobromomethane	83	13.920	13.914	0.006	1	995	0.0351	0.0156	
60 cis-1,3-Dichloropropene	75	14.899	14.893	0.006	1	550	0.0351	0.0111	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	5757925	0.0351	0	
61 4-Methyl-2-pentanone (MIBK	43	15.236	15.204	0.032	87	4888	0.0351	0.0723	
65 Toluene	92	15.498	15.503	-0.005	25	2048	0.0351	0.0319	
64 n-Octane	43	15.567	15.557	0.010	85	2653	0.0351	0.0374	
66 trans-1,3-Dichloropropene	75	16.145	16.145	0.000	44	2991	0.0351	0.0541	
67 1,1,2-Trichloroethane	83	16.536	16.541	-0.005	17	534	0.0351	0.0171	
68 Tetrachloroethene	166	16.637	16.632	0.005	58	2529	0.0351	0.0384	M
69 2-Hexanone	43	17.044	17.017	0.027	96	8444	0.0351	0.1321	
71 Chlorodibromomethane	129	17.338	17.338	0.000	12	907	0.0351	0.0132	
72 Ethylene Dibromide	107	17.616	17.616	0.000	26	1729	0.0351	0.0287	
* 74 Chlorobenzene-d5	117	18.563	18.563	0.000	84	1254244	10.0	10.0	
75 Chlorobenzene	112	18.617	18.628	-0.011	81	3961	0.0351	0.0426	
76 Ethylbenzene	91	18.793	18.793	0.000	93	3126	0.0351	0.0216	
77 n-Nonane	57	18.927	18.927	0.000	84	2460	0.0351	0.0381	
78 m-Xylene & p-Xylene	106	19.061	19.061	0.000	0	2658	0.0702	0.0449	
S 73 Xylenes, Total	106				0		0.1052	0.0662	
79 o-Xylene	106	19.954	19.954	0.000	7	1256	0.0351	0.0213	
80 Styrene	104	20.024	20.013	0.011	95	1528	0.0351	0.0168	
81 Bromoform	173	20.479	20.484	-0.006	26	2353	0.0351	0.0358	
82 Isopropylbenzene	105	20.709	20.714	-0.005	94	6185	0.0351	0.0364	
84 1,1,2,2-Tetrachloroethane	83	21.436	21.441	-0.005	94	3408	0.0351	0.0412	
85 N-Propylbenzene	91	21.506	21.500	0.006	80	7296	0.0351	0.0363	
86 1,2,3-Trichloropropane	75	21.538	21.543	-0.005	49	2676	0.0351	0.0415	
87 n-Decane	57	21.698	21.698	0.000	55	1845	0.0351	0.0230	
88 4-Ethyltoluene	105	21.704	21.709	-0.005	89	6710	0.0351	0.0394	
89 2-Chlorotoluene	91	21.709	21.714	-0.005	88	5652	0.0351	0.0407	
90 1,3,5-Trimethylbenzene	105	21.821	21.821	0.000	96	5478	0.0351	0.0389	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.223	22.217	0.005	90	2694	0.0351	0.0371	
92 tert-Butylbenzene	119	22.346	22.346	0.000	97	5263	0.0351	0.0382	
93 1,2,4-Trimethylbenzene	105	22.447	22.447	0.000	95	5697	0.0351	0.0407	
94 sec-Butylbenzene	105	22.688	22.688	0.000	97	7436	0.0351	0.0367	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	96	6541	0.0351	0.0374	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	93	5097	0.0351	0.0471	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	94	5541	0.0351	0.0504	
98 Benzyl chloride	91	23.287	23.282	0.005	98	4695	0.0351	0.0411	
100 n-Butylbenzene	91	23.496	23.496	0.000	97	6804	0.0351	0.0440	
99 Undecane	57	23.528	23.528	0.000	90	3048	0.0351	0.0390	
101 1,2-Dichlorobenzene	146	23.619	23.624	-0.005	91	5424	0.0351	0.0535	
102 Dodecane	57	25.149	25.149	0.000	94	3024	0.0351	0.0570	
103 1,2,4-Trichlorobenzene	180	26.192	26.187	0.005	90	5543	0.0351	0.0720	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	91	4008	0.0351	0.0509	
105 Naphthalene	128	26.684	26.684	0.000	99	15094	0.0351	0.0958	
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	91	5312	0.0351	0.0789	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00190	Amount Added: 35.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

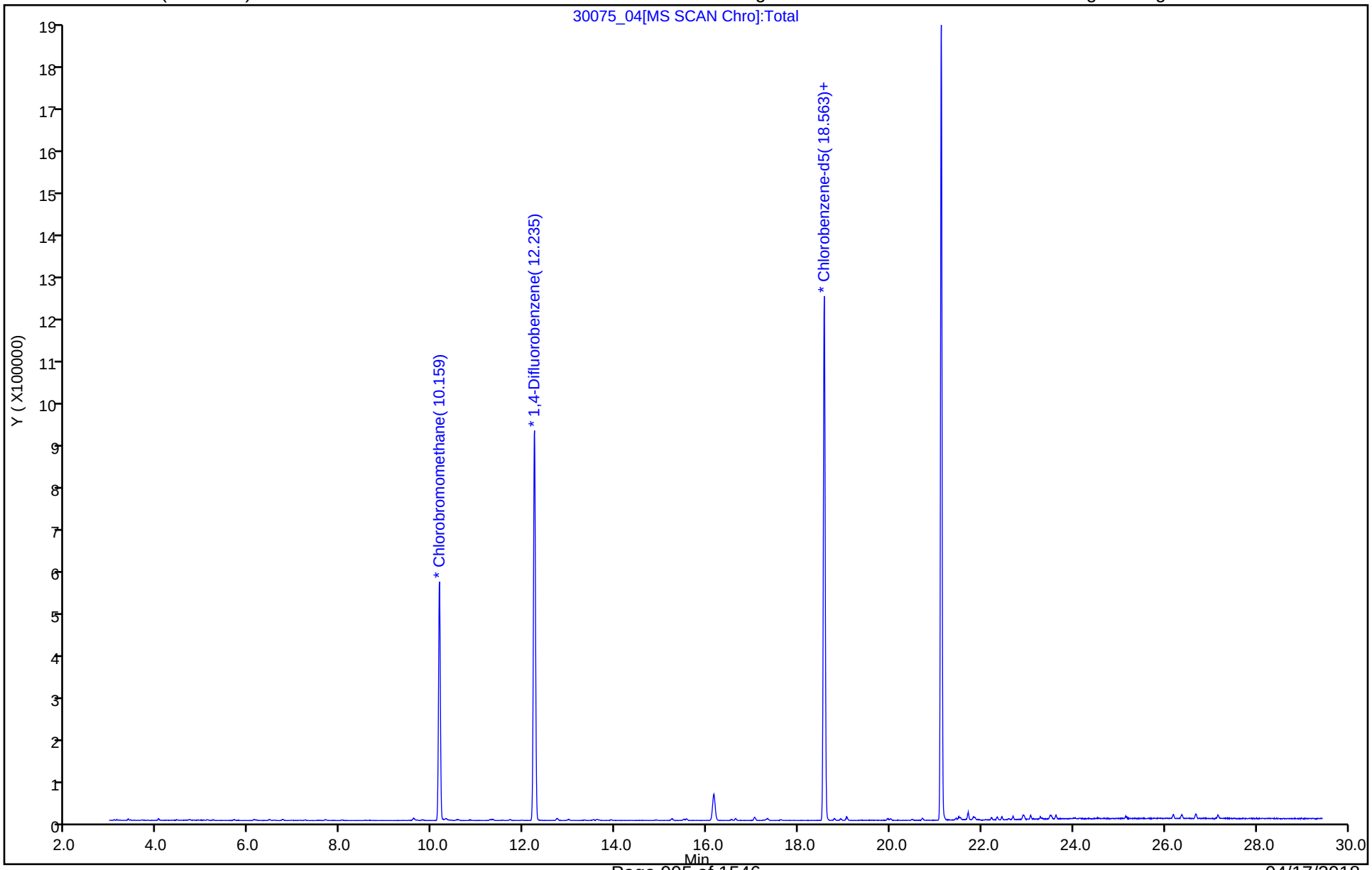
Report Date: 13-Apr-2018 09:12:49 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D

Injection Date:	12-Apr-2018 17:29:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

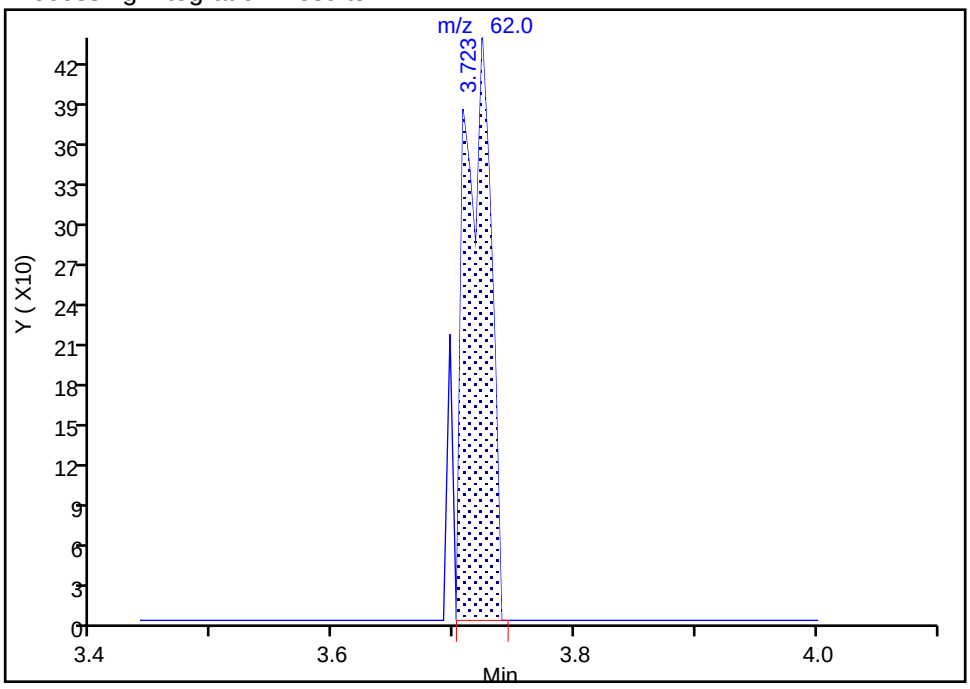
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Injection Date: 12-Apr-2018 17:29:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

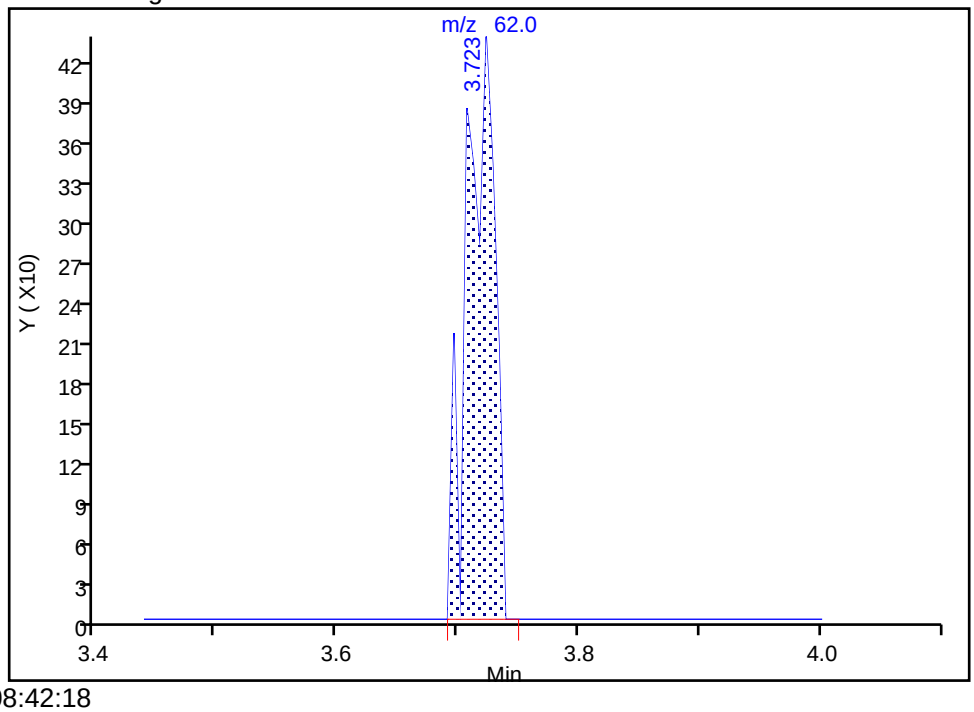
Processing Integration Results

RT: 3.72
Area: 641
Amount: 0.031271
Amount Units: ppb v/v



Manual Integration Results

RT: 3.72
Area: 710
Amount: 0.032939
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:42:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

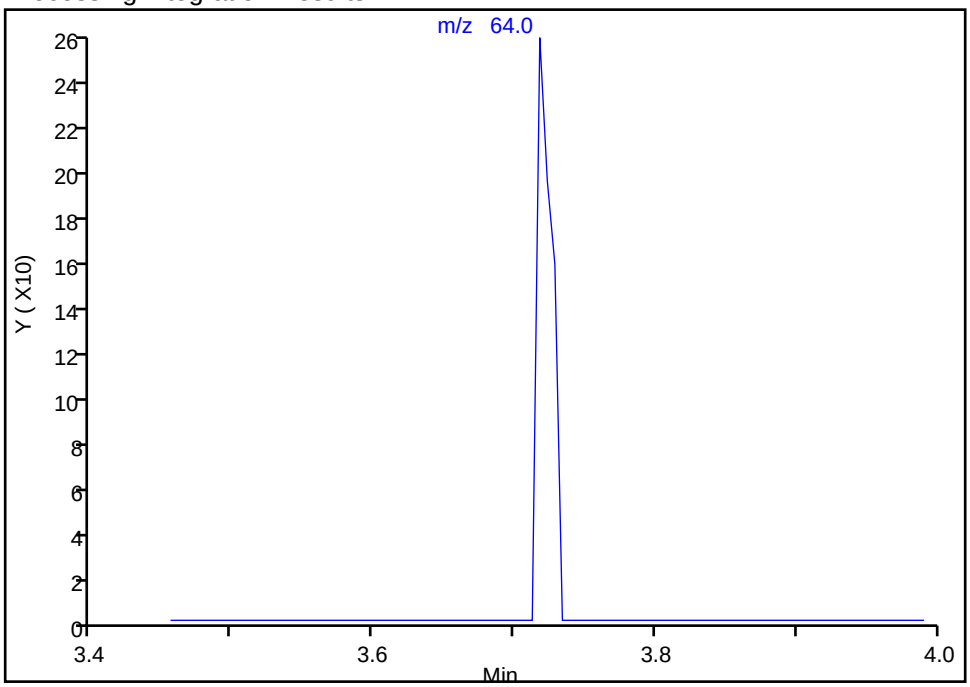
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Injection Date: 12-Apr-2018 17:29:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

7 Vinyl chloride, CAS: 75-01-4

Signal: 2

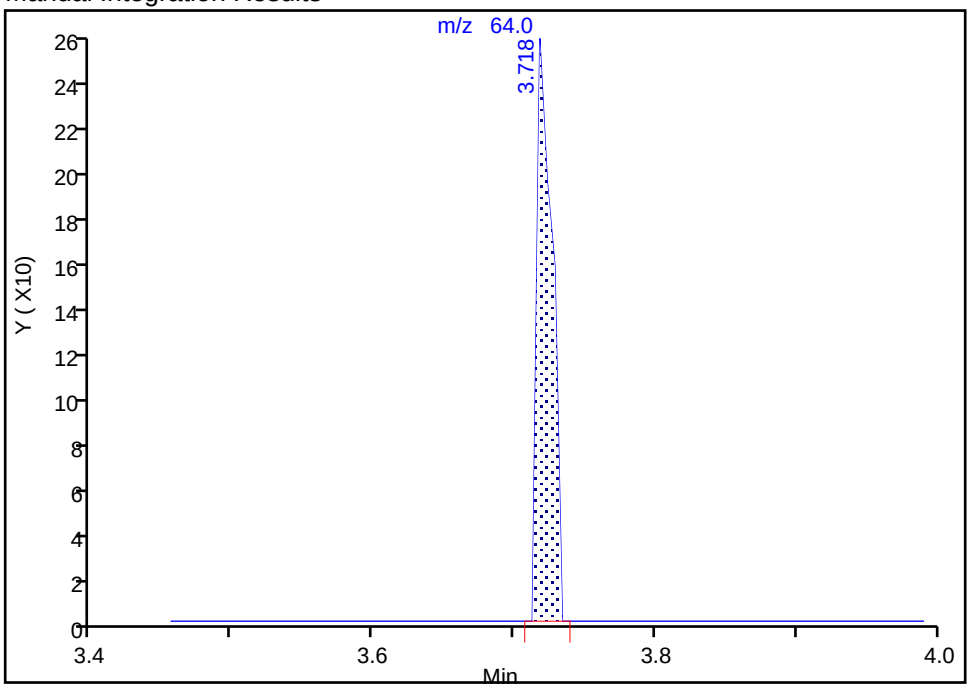
Processing Integration Results

RT: 3.71
Area: 0
Amount: 0.031271
Amount Units: ppb v/v



Manual Integration Results

RT: 3.72
Area: 191
Amount: 0.032939
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:42:20
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

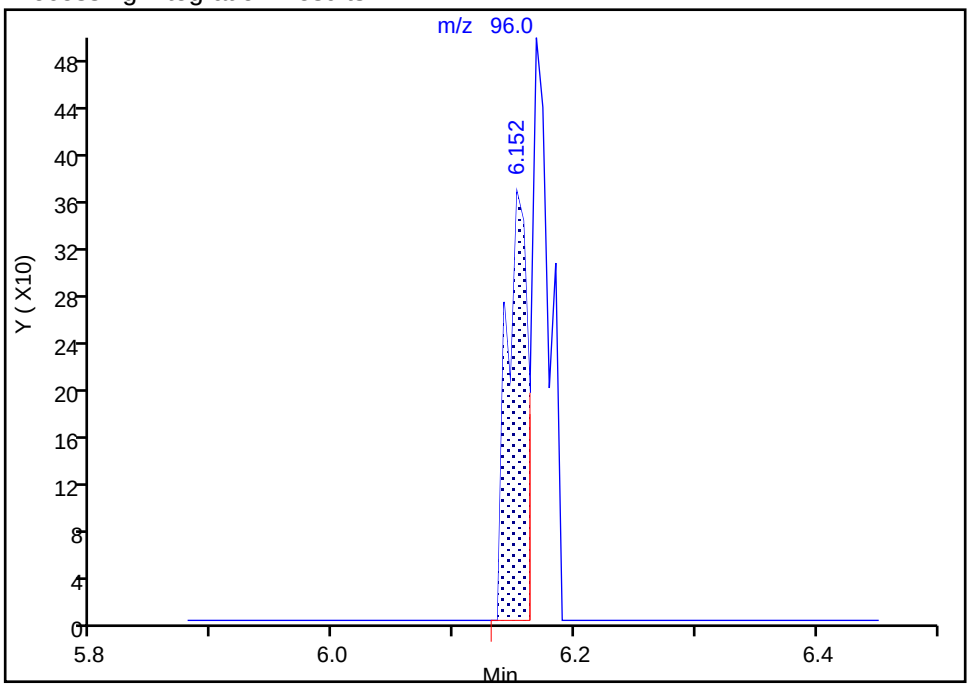
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Injection Date: 12-Apr-2018 17:29:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

21 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

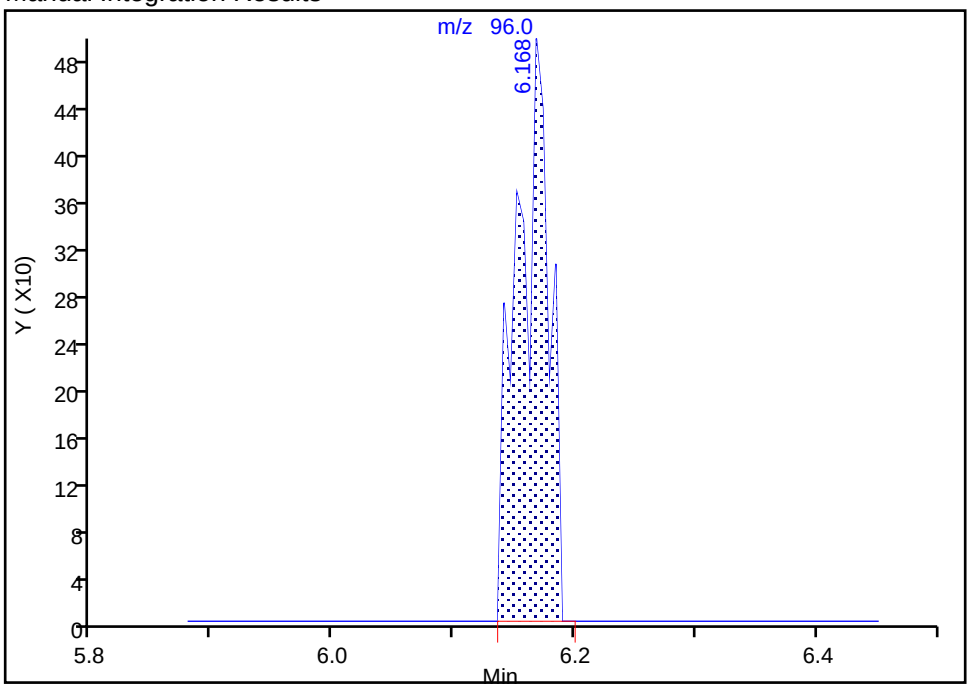
Processing Integration Results

RT: 6.15
Area: 438
Amount: 0.022679
Amount Units: ppb v/v



Manual Integration Results

RT: 6.17
Area: 896
Amount: 0.041275
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:42:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

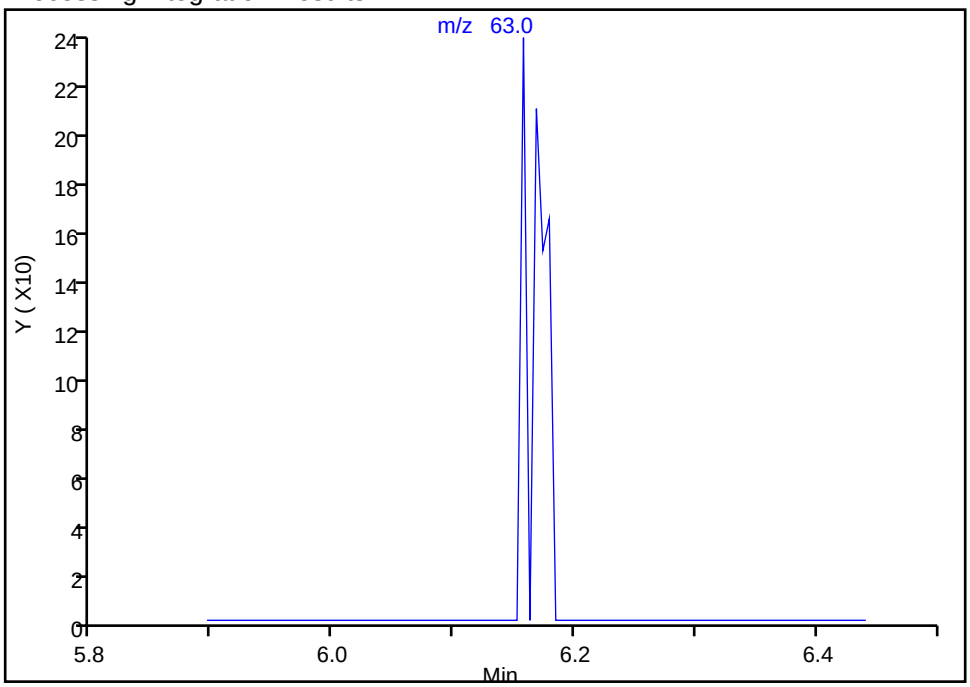
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Injection Date: 12-Apr-2018 17:29:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

21 1,1-Dichloroethene, CAS: 75-35-4

Signal: 3

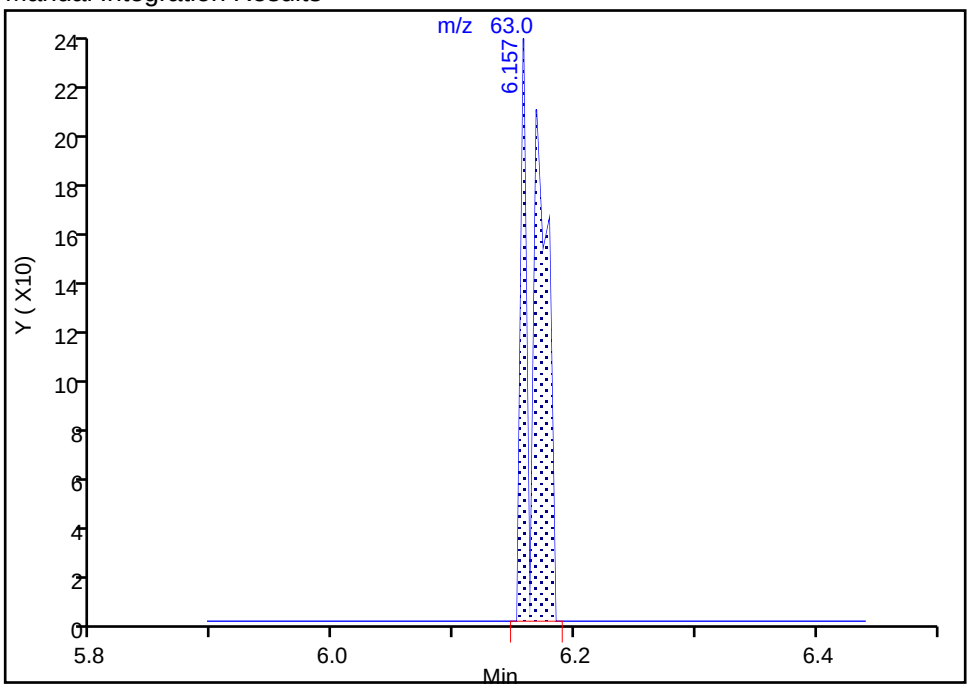
Processing Integration Results

RT: 6.16
Area: 0
Amount: 0.022679
Amount Units: ppb v/v



Manual Integration Results

RT: 6.16
Area: 245
Amount: 0.041275
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:42:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

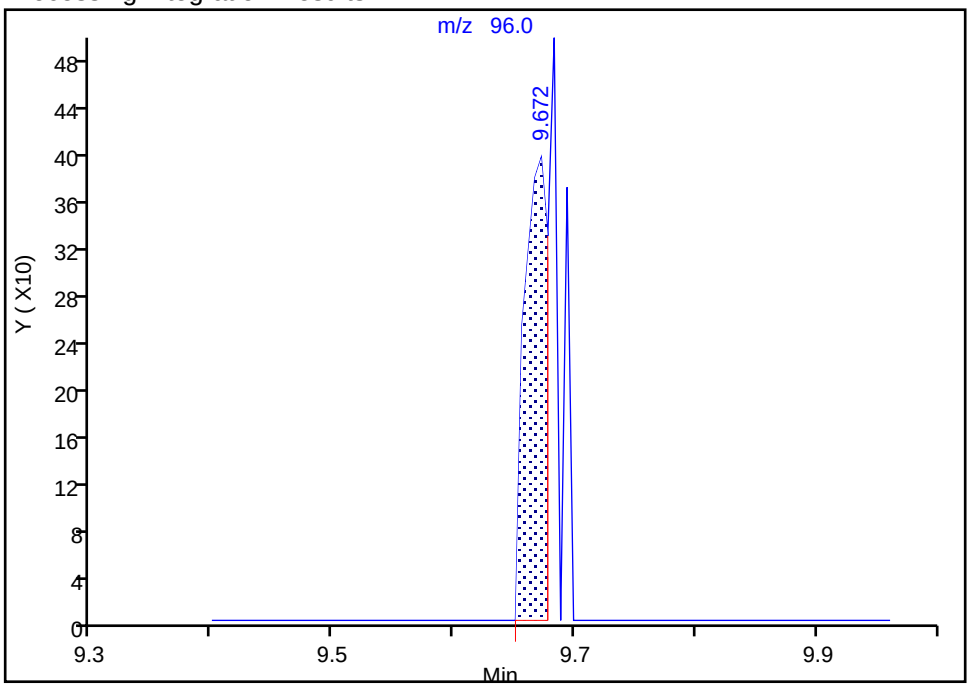
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D				
Injection Date:	12-Apr-2018 17:29:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

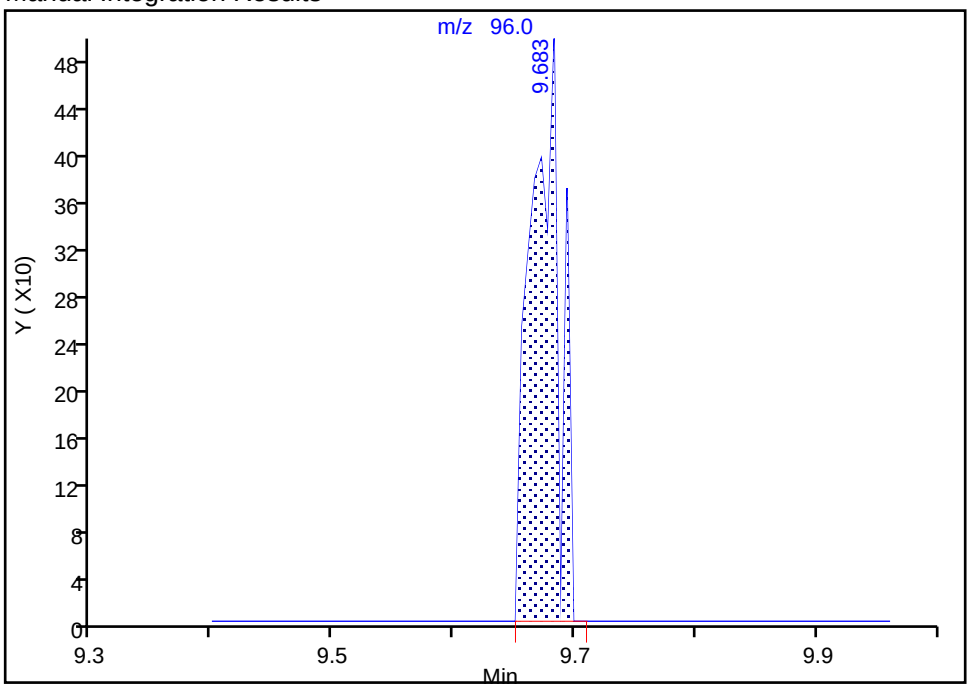
Processing Integration Results

RT: 9.67
Area: 529
Amount: 0.022283
Amount Units: ppb v/v



Manual Integration Results

RT: 9.68
Area: 803
Amount: 0.031723
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:44:28

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

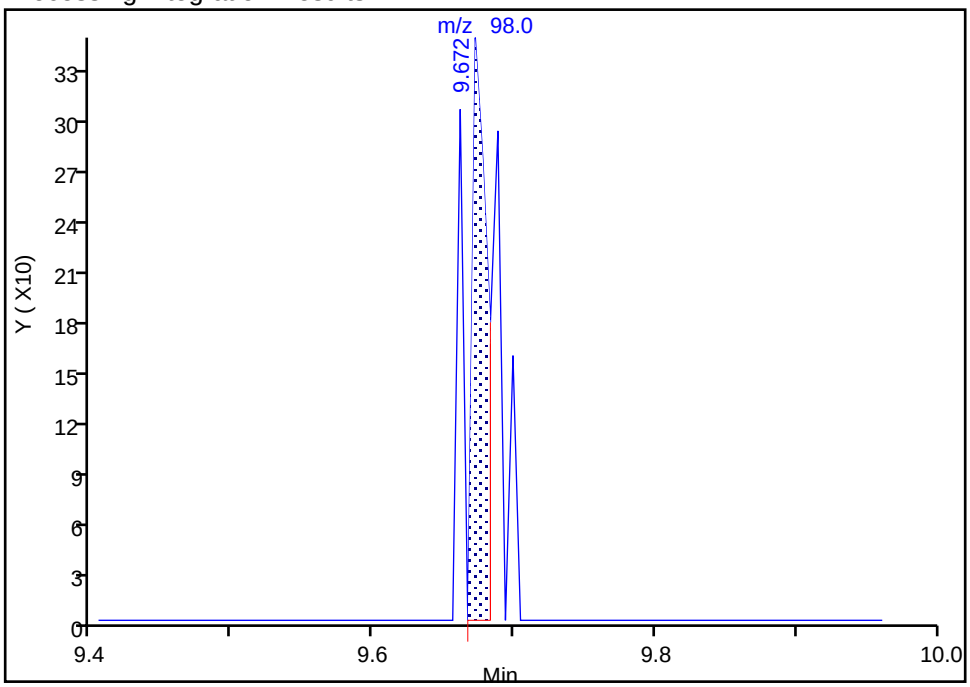
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Injection Date: 12-Apr-2018 17:29:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 2

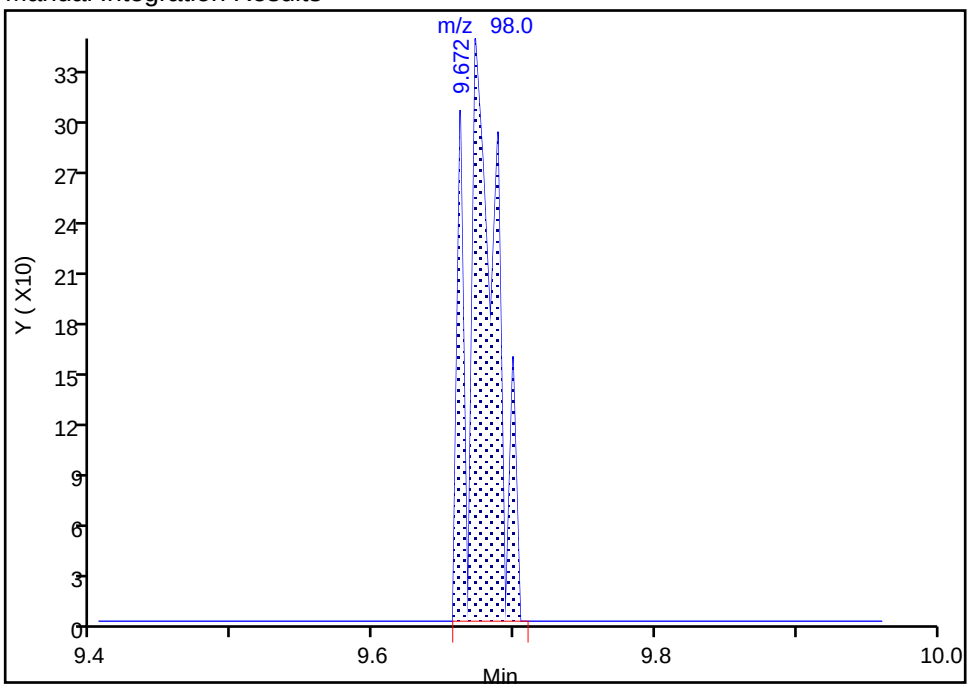
Processing Integration Results

RT: 9.67
Area: 259
Amount: 0.022283
Amount Units: ppb v/v



Manual Integration Results

RT: 9.67
Area: 503
Amount: 0.031723
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:44:31
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

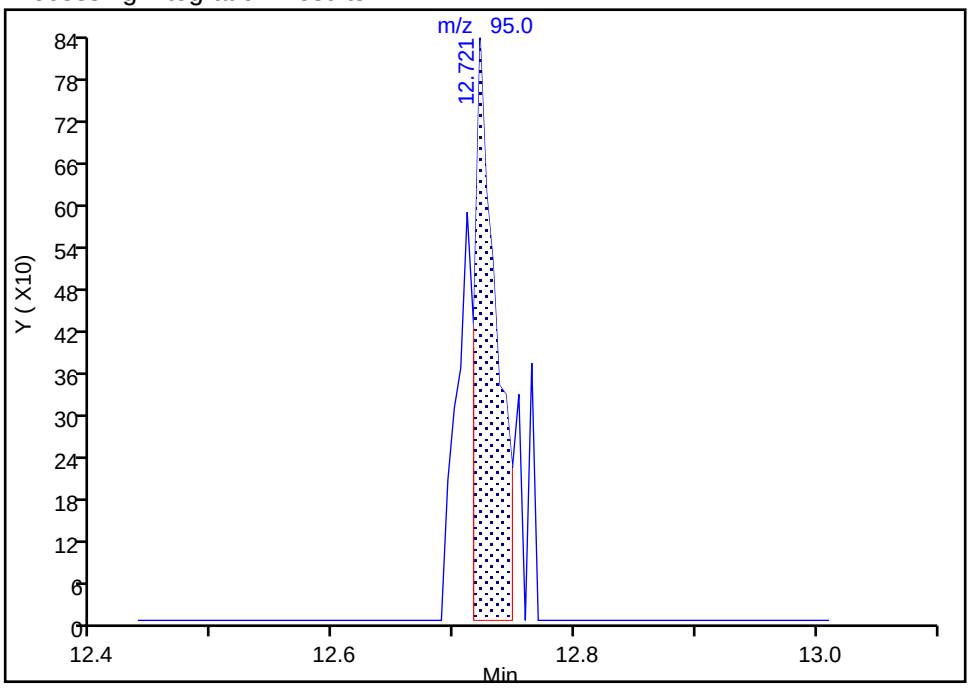
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D				
Injection Date:	12-Apr-2018 17:29:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

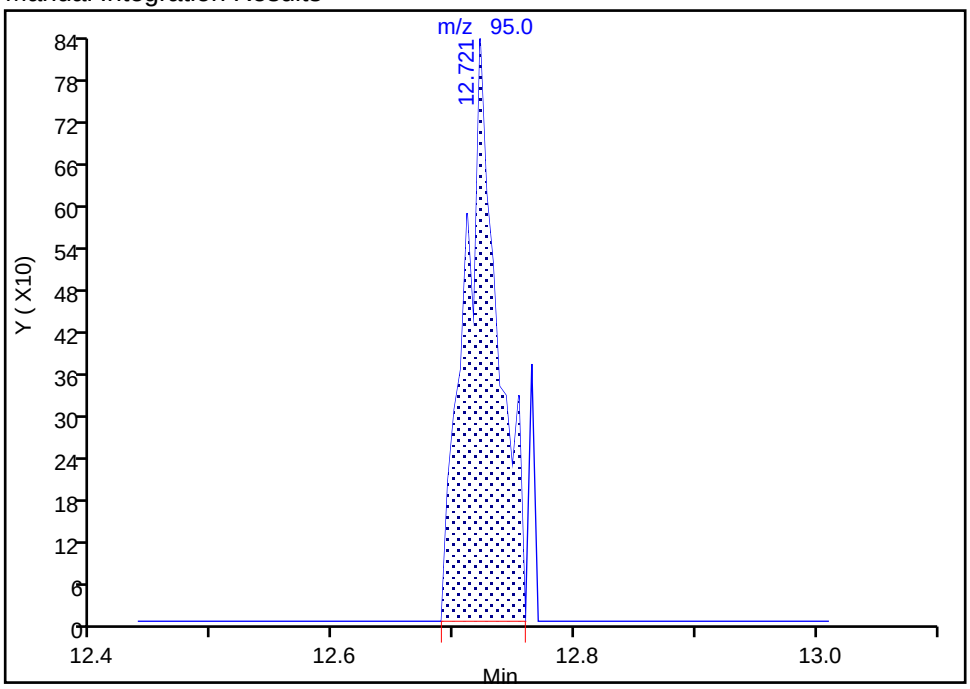
Processing Integration Results

RT: 12.72
Area: 1051
Amount: 0.028283
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 1623
Amount: 0.040352
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:43:31

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

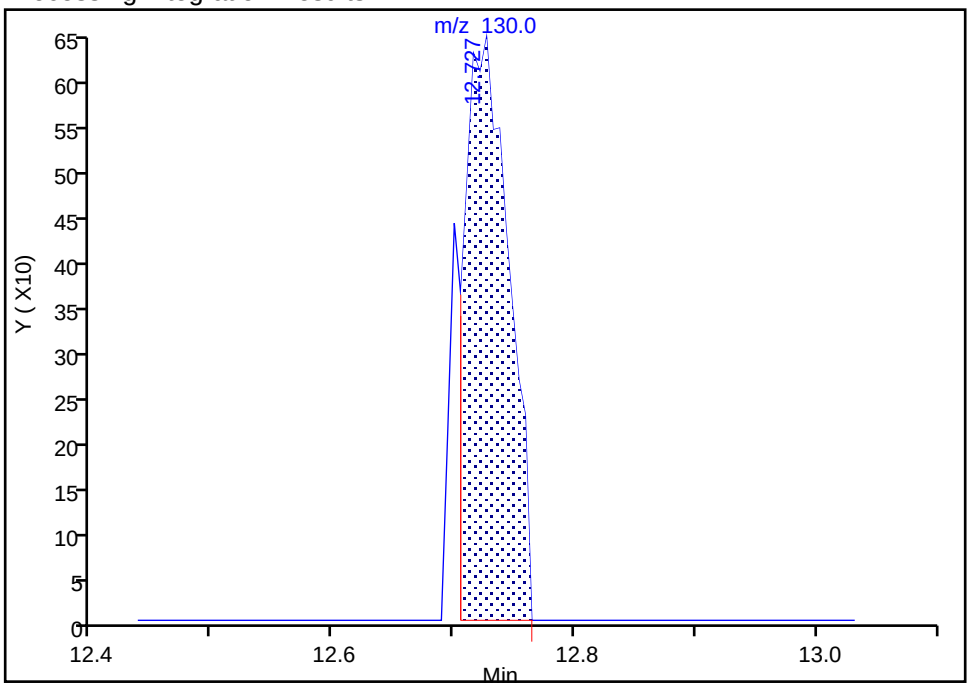
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Injection Date: 12-Apr-2018 17:29:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

53 Trichloroethene, CAS: 79-01-6

Signal: 2

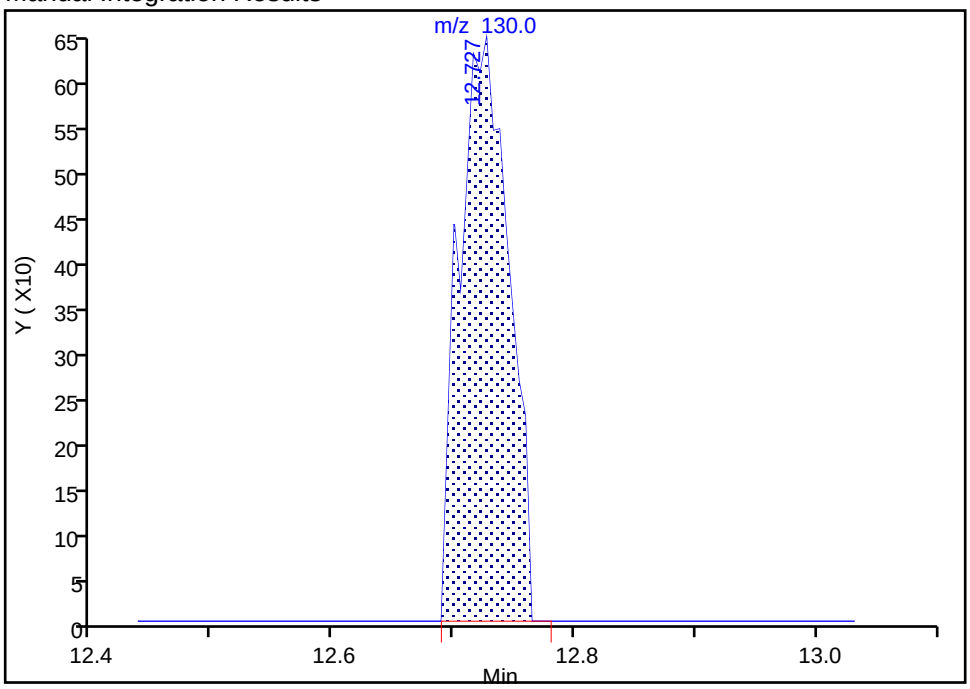
Processing Integration Results

RT: 12.73
Area: 1631
Amount: 0.028283
Amount Units: ppb v/v



Manual Integration Results

RT: 12.73
Area: 1840
Amount: 0.040352
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:43:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

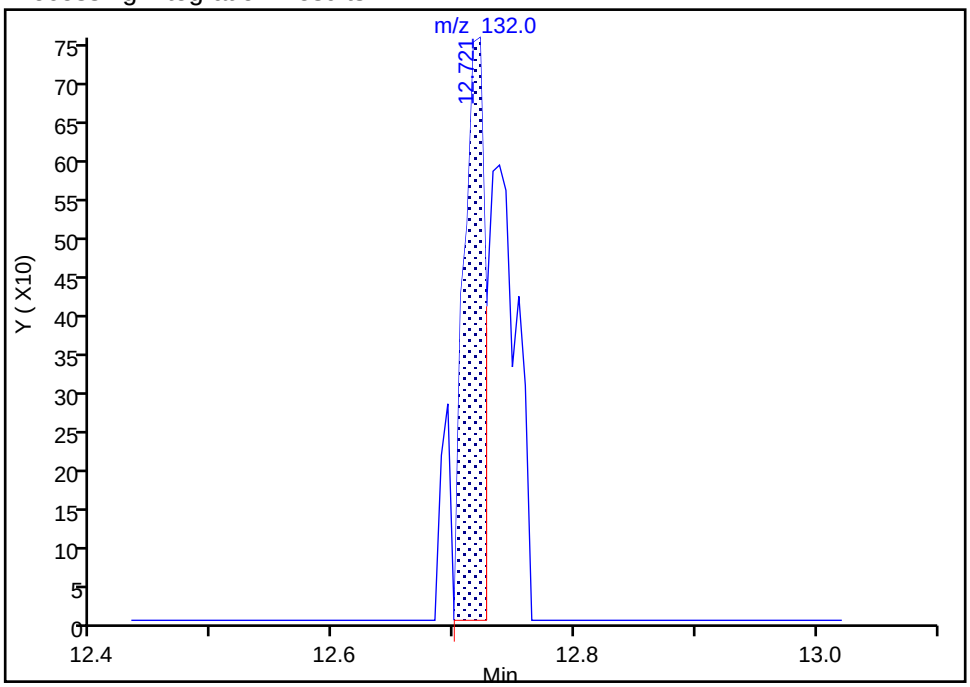
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Injection Date: 12-Apr-2018 17:29:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

53 Trichloroethene, CAS: 79-01-6

Signal: 3

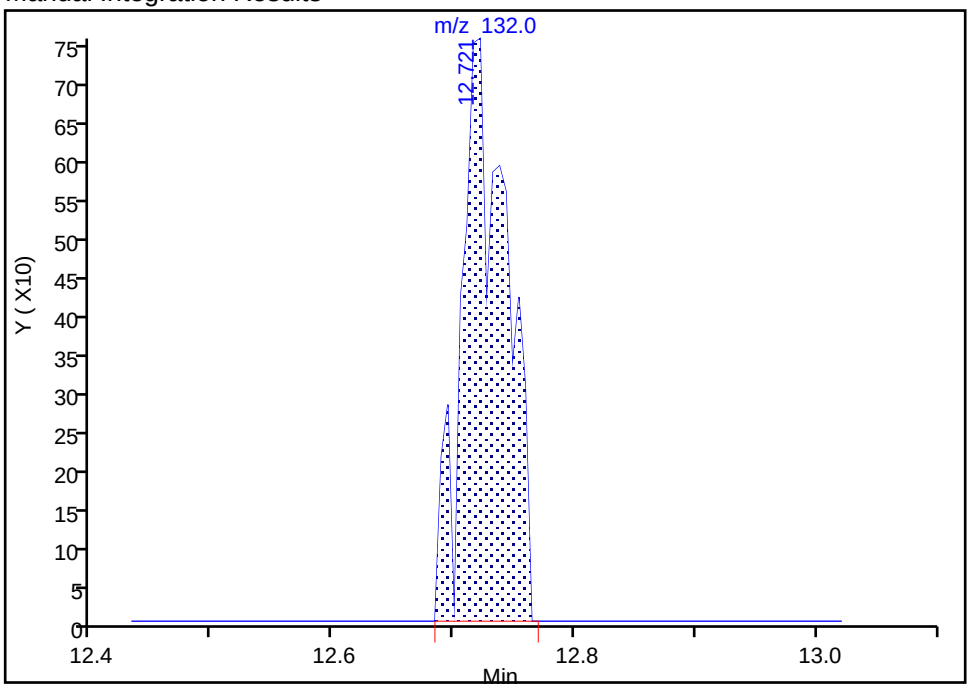
Processing Integration Results

RT: 12.72
Area: 917
Amount: 0.028283
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 1975
Amount: 0.040352
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:43:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

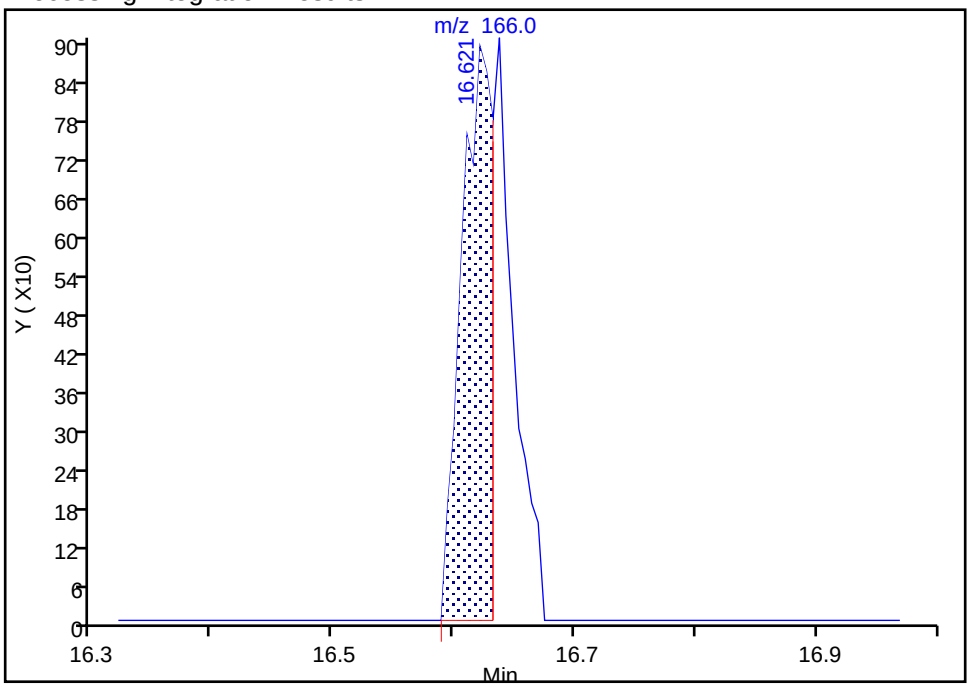
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D				
Injection Date:	12-Apr-2018 17:29:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 1

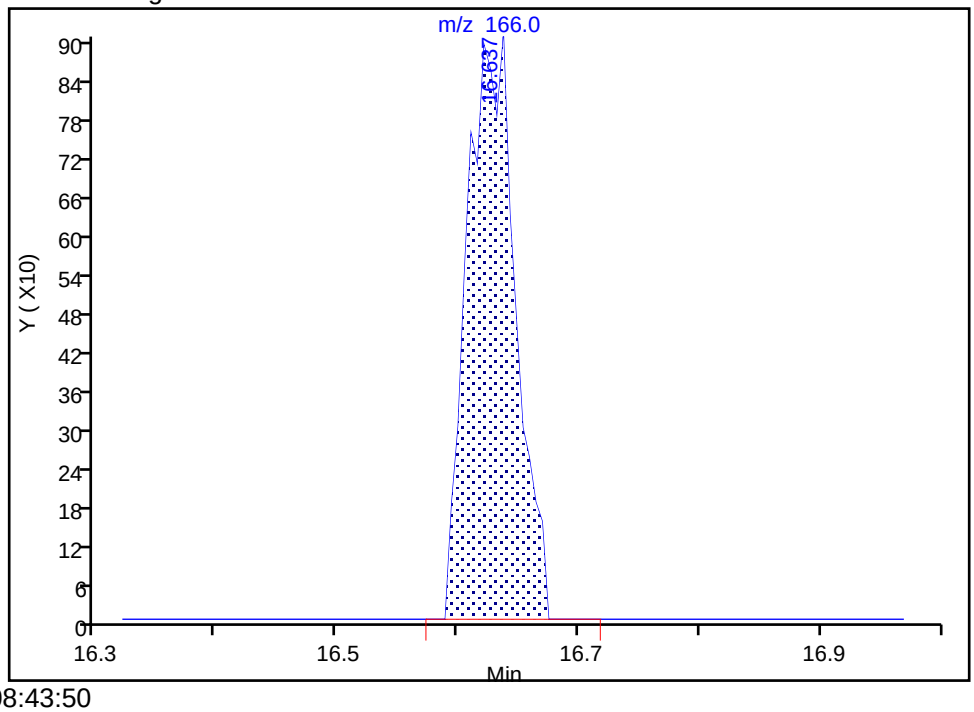
Processing Integration Results

RT: 16.62
Area: 1604
Amount: 0.026258
Amount Units: ppb v/v



Manual Integration Results

RT: 16.64
Area: 2529
Amount: 0.038405
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:43:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

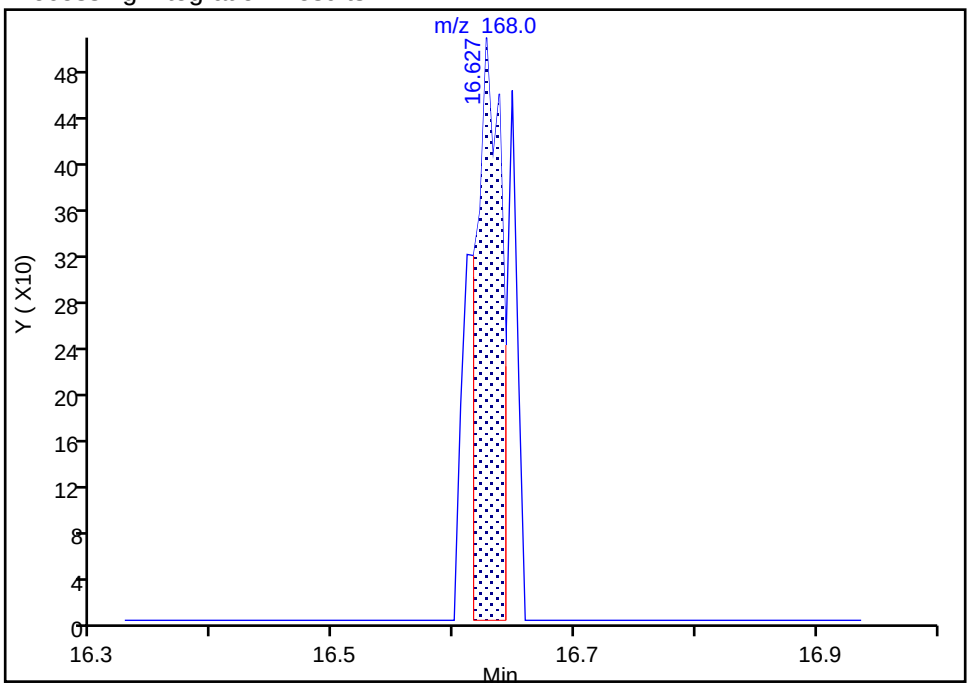
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_04.D
Injection Date: 12-Apr-2018 17:29:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4

Signal: 2

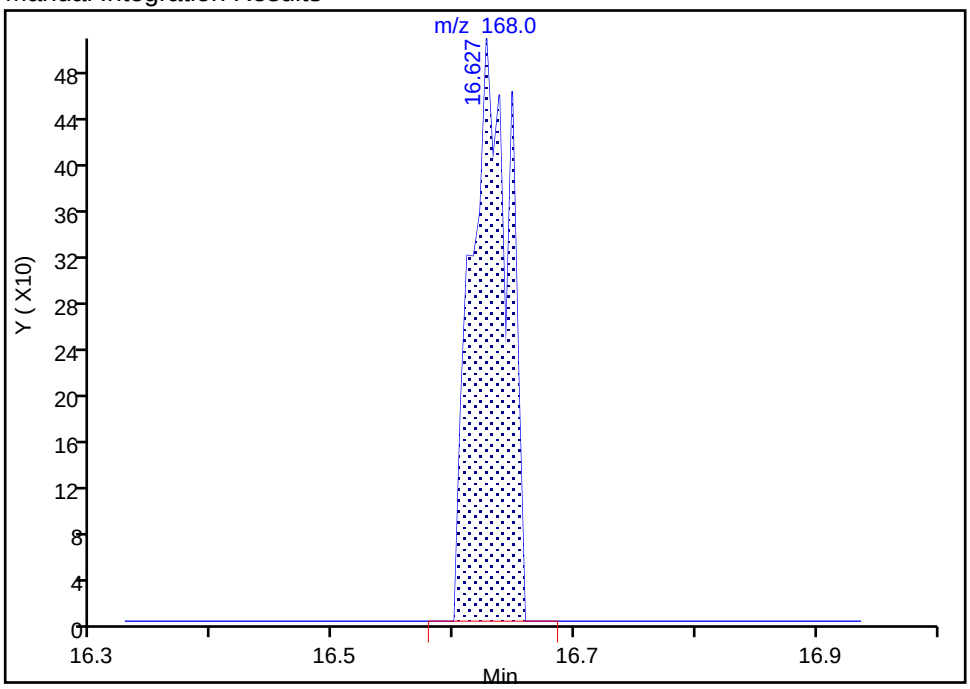
Processing Integration Results

RT: 16.63
Area: 733
Amount: 0.026258
Amount Units: ppb v/v



Manual Integration Results

RT: 16.63
Area: 1111
Amount: 0.038405
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:43:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-Apr-2018 18:21:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-005
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:50 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:50:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.049	3.044	0.005	91	3231	0.2004	0.2516	
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	97	11065	0.2004	0.2122	
3 Chlorodifluoromethane	51	3.161	3.156	0.005	97	5822	0.2004	0.2054	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.359	3.354	0.005	86	10642	0.2004	0.2072	
5 Chloromethane	50	3.493	3.488	0.005	96	3851	0.2004	0.2402	
6 Butane	43	3.670	3.664	0.006	93	5879	0.2004	0.2113	
7 Vinyl chloride	62	3.712	3.713	-0.001	95	3967	0.2004	0.2068	
8 Butadiene	54	3.782	3.782	0.000	91	2771	0.2004	0.1887	
10 Bromomethane	94	4.419	4.413	0.006	96	4020	0.2004	0.2043	
11 Chloroethane	64	4.633	4.633	0.000	96	2039	0.2004	0.2227	
12 2-Methylbutane	43	4.697	4.697	0.000	95	4641	0.2004	0.2316	
13 Vinyl bromide	106	5.002	4.996	0.006	92	4259	0.2004	0.2043	
14 Trichlorofluoromethane	101	5.093	5.093	0.000	98	11542	0.2004	0.2034	
16 Pentane	43	5.216	5.221	-0.005	97	6468	0.2004	0.2145	
17 Ethanol	45	5.665	5.638	0.027	97	7993	0.4009	1.27	
18 Ethyl ether	59	5.745	5.713	0.032	89	2231	0.2004	0.1902	
19 Acrolein	56	6.114	6.104	0.010	74	2560	0.2004	0.5564	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.109	-0.005	72	8002	0.2004	0.2030	M
21 1,1-Dichloroethene	96	6.152	6.163	-0.011	90	3907	0.2004	0.2022	
22 Acetone	43	6.430	6.403	0.027	98	18563	0.2004	0.6296	
23 Carbon disulfide	76	6.548	6.548	0.000	98	9336	0.2004	0.1898	
24 Isopropyl alcohol	45	6.714	6.687	0.027	100	14215	0.2004	0.4745	
25 3-Chloro-1-propene	41	6.933	6.933	0.000	57	4095	0.2004	0.2090	M
26 Acetonitrile	41	7.088	7.083	0.005	97	2877	0.2004	0.2230	
27 Methylene Chloride	49	7.233	7.227	0.006	93	4538	0.2004	0.2304	
28 2-Methyl-2-propanol	59	7.500	7.452	0.048	93	8752	0.2004	0.2166	
29 Methyl tert-butyl ether	73	7.661	7.623	0.037	95	11113	0.2004	0.1990	
31 trans-1,2-Dichloroethene	61	7.655	7.661	-0.006	86	5467	0.2004	0.2030	
32 Acrylonitrile	53	7.837	7.826	0.011	87	2377	0.2004	0.1907	M
33 Hexane	57	8.030	8.035	-0.005	93	5666	0.2004	0.2094	
34 1,1-Dichloroethane	63	8.538	8.538	0.000	90	6908	0.2004	0.1973	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.629	8.618	0.011	98	8627	0.2004	0.1868	
S 30 1,2-Dichloroethene, Total	61				0		0.4009	0.3958	
37 cis-1,2-Dichloroethene	96	9.661	9.677	-0.016	91	4343	0.2004	0.1928	M
38 2-Butanone (MEK)	72	9.758	9.742	0.016	98	2977	0.2004	0.2785	
39 Ethyl acetate	88		9.774				ND	ND	
* 40 Chlorobromomethane	128	10.159	10.164	-0.005	81	238056	10.0	10.0	
41 Tetrahydrofuran	42	10.223	10.170	0.053	86	5290	0.2004	0.2294	
42 Chloroform	83	10.293	10.298	-0.005	97	10048	0.2004	0.2129	M
43 Cyclohexane	84	10.533	10.533	0.000	57	6029	0.2004	0.1981	M
44 1,1,1-Trichloroethane	97	10.576	10.582	-0.006	95	9767	0.2004	0.1918	
45 Carbon tetrachloride	117	10.838	10.838	0.000	97	9932	0.2004	0.1856	
46 Isooctane	57	11.282	11.288	-0.006	98	22935	0.2004	0.2032	
47 Benzene	78	11.336	11.336	0.000	92	14936	0.2004	0.2042	M
48 1,2-Dichloroethane	62	11.528	11.539	-0.011	93	6051	0.2004	0.1869	
49 n-Heptane	43	11.700	11.700	0.000	90	8865	0.2004	0.2071	M
* 50 1,4-Difluorobenzene	114	12.235	12.235	-0.001	93	1245814	10.0	10.0	
52 n-Butanol	56	12.721	12.689	0.032	86	9568	0.2004	0.6123	
53 Trichloroethene	95	12.721	12.727	-0.006	58	7611	0.2004	0.2116	M
A 51 GRO	1	13.198	(4.687-21.708)		0	7620835	0.2004	0	
54 1,2-Dichloropropane	63	13.320	13.326	-0.006	69	5488	0.2004	0.1935	M
55 Methyl methacrylate	69	13.524	13.513	0.011	95	6220	0.2004	0.2201	
56 1,4-Dioxane	88	13.609	13.572	0.037	63	6360	0.2004	0.3797	
57 Dibromomethane	174	13.599	13.599	0.000	87	8499	0.2004	0.2078	M
58 Dichlorobromomethane	83	13.914	13.914	0.000	98	10458	0.2004	0.1834	
60 cis-1,3-Dichloropropene	75	14.883	14.893	-0.010	67	8470	0.2004	0.1914	M
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	9403027	0.2004	0	
61 4-Methyl-2-pentanone (MIBK	43	15.225	15.204	0.021	95	20158	0.2004	0.3335	
65 Toluene	92	15.498	15.503	-0.005	92	11760	0.2004	0.2047	
64 n-Octane	43	15.562	15.557	0.005	89	12389	0.2004	0.1953	
66 trans-1,3-Dichloropropene	75	16.150	16.145	0.005	41	13967	0.2004	0.2824	M
67 1,1,2-Trichloroethane	83	16.536	16.541	-0.005	93	5814	0.2004	0.2082	
68 Tetrachloroethene	166	16.632	16.632	0.000	95	12401	0.2004	0.2107	
69 2-Hexanone	43	17.039	17.017	0.022	96	35728	0.2004	0.6252	
71 Chlorodibromomethane	129	17.338	17.338	0.000	97	12026	0.2004	0.1965	
72 Ethylene Dibromide	107	17.616	17.616	0.000	96	10576	0.2004	0.1962	
* 74 Chlorobenzene-d5	117	18.563	18.563	0.000	84	1121006	10.0	10.0	
75 Chlorobenzene	112	18.622	18.628	-0.006	98	17606	0.2004	0.2120	
76 Ethylbenzene	91	18.783	18.793	-0.010	97	25895	0.2004	0.2007	
77 n-Nonane	57	18.922	18.927	-0.005	91	11677	0.2004	0.2025	
78 m-Xylene & p-Xylene	106	19.061	19.061	0.000	0	21129	0.4009	0.3995	
S 73 Xylenes, Total	106				0		0.6013	0.6048	
79 o-Xylene	106	19.949	19.954	-0.005	98	10821	0.2004	0.2053	M
80 Styrene	104	20.013	20.013	0.000	96	16205	0.2004	0.1999	
81 Bromoform	173	20.478	20.484	-0.006	98	11124	0.2004	0.1893	
82 Isopropylbenzene	105	20.708	20.714	-0.006	95	30845	0.2004	0.2033	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	97	15096	0.2004	0.2043	
85 N-Propylbenzene	91	21.500	21.500	0.000	100	36039	0.2004	0.2005	
86 1,2,3-Trichloropropane	75	21.538	21.543	-0.005	97	13636	0.2004	0.2367	
87 n-Decane	57	21.693	21.698	-0.005	73	14273	0.2004	0.1994	
88 4-Ethyltoluene	105	21.703	21.709	-0.006	95	30908	0.2004	0.2033	
89 2-Chlorotoluene	91	21.714	21.714	0.000	96	26223	0.2004	0.2112	
90 1,3,5-Trimethylbenzene	105	21.821	21.821	0.000	96	25869	0.2004	0.2057	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	90	13299	0.2004	0.2051	
92 tert-Butylbenzene	119	22.345	22.346	-0.001	93	25416	0.2004	0.2066	
93 1,2,4-Trimethylbenzene	105	22.442	22.447	-0.005	97	25269	0.2004	0.2020	
94 sec-Butylbenzene	105	22.688	22.688	0.000	98	37376	0.2004	0.2064	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	97	32375	0.2004	0.2071	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	96	21179	0.2004	0.2190	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	97	23104	0.2004	0.2353	
98 Benzyl chloride	91	23.282	23.282	0.000	99	21706	0.2004	0.2127	
100 n-Butylbenzene	91	23.496	23.496	0.000	98	29981	0.2004	0.2171	
99 Undecane	57	23.528	23.528	0.000	96	14050	0.2004	0.2010	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	98	20575	0.2004	0.2270	
102 Dodecane	57	25.154	25.149	0.005	97	13851	0.2004	0.2920	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	92	19008	0.2004	0.2763	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	94	16006	0.2004	0.2273	
105 Naphthalene	128	26.679	26.684	-0.005	99	41917	0.2004	0.2977	
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	95	17559	0.2004	0.2918	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00190	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

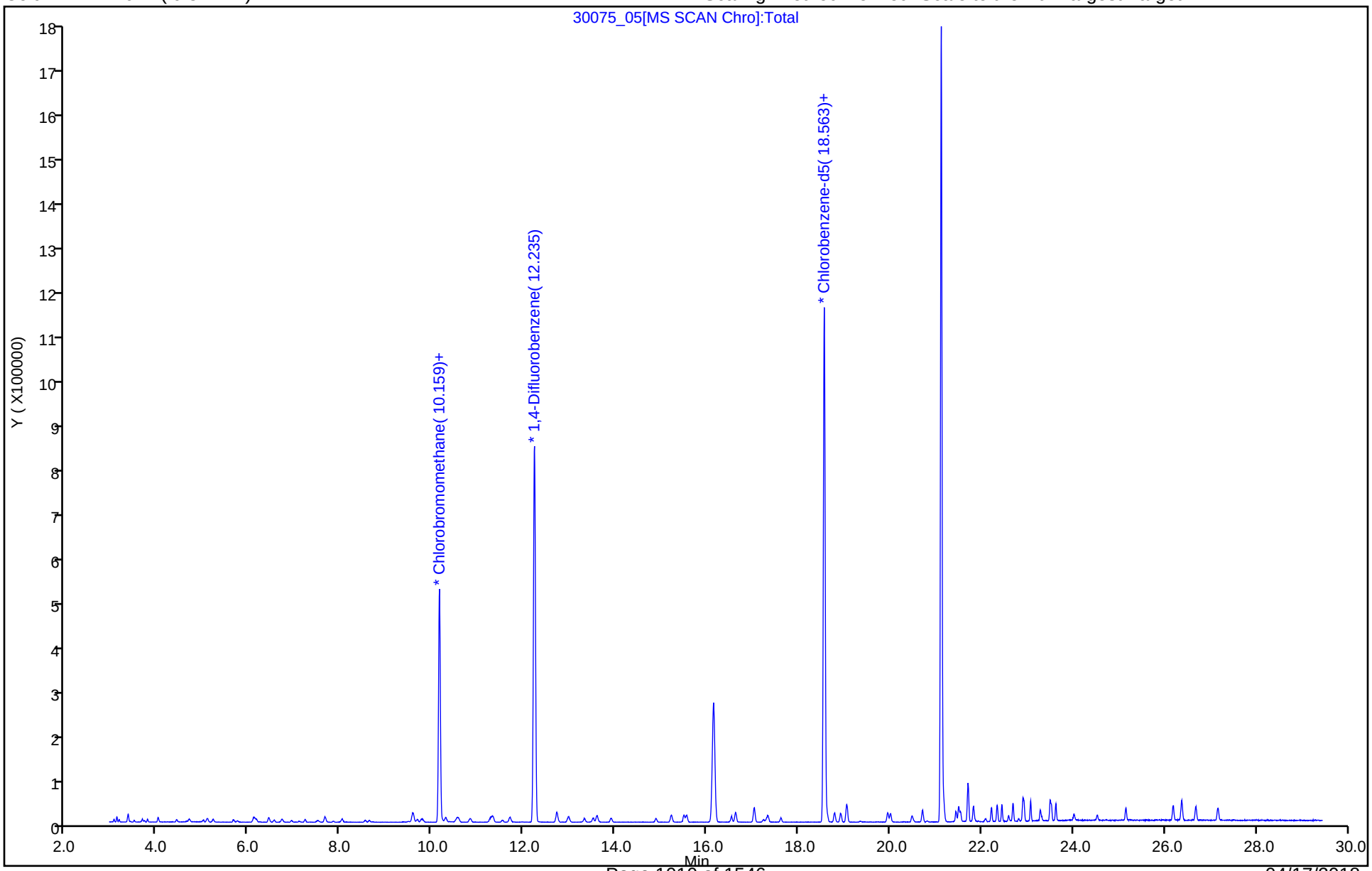
Report Date: 13-Apr-2018 09:12:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D

Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

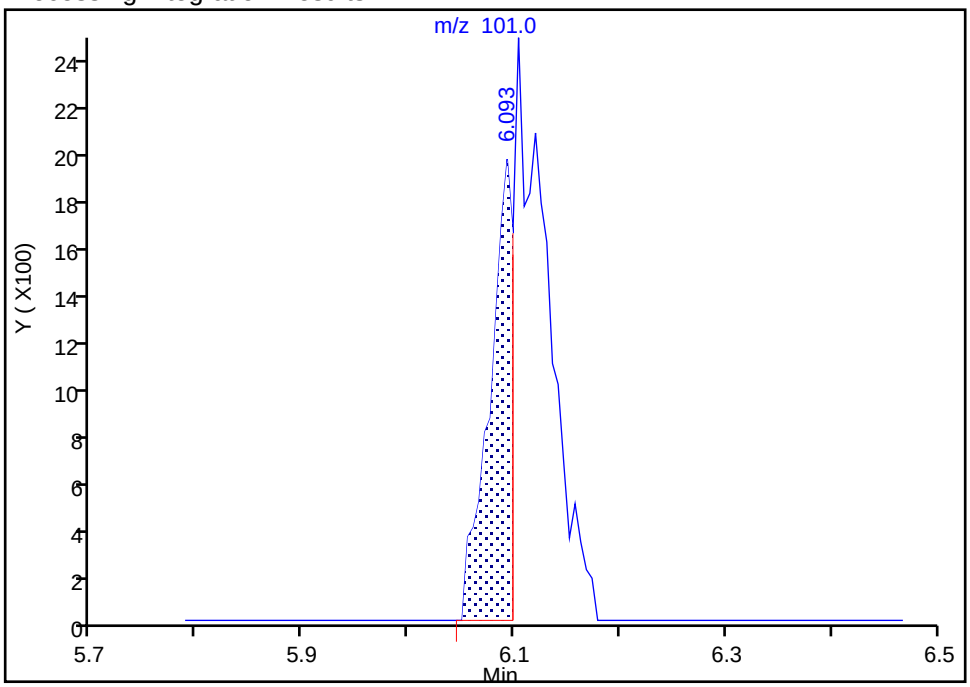
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

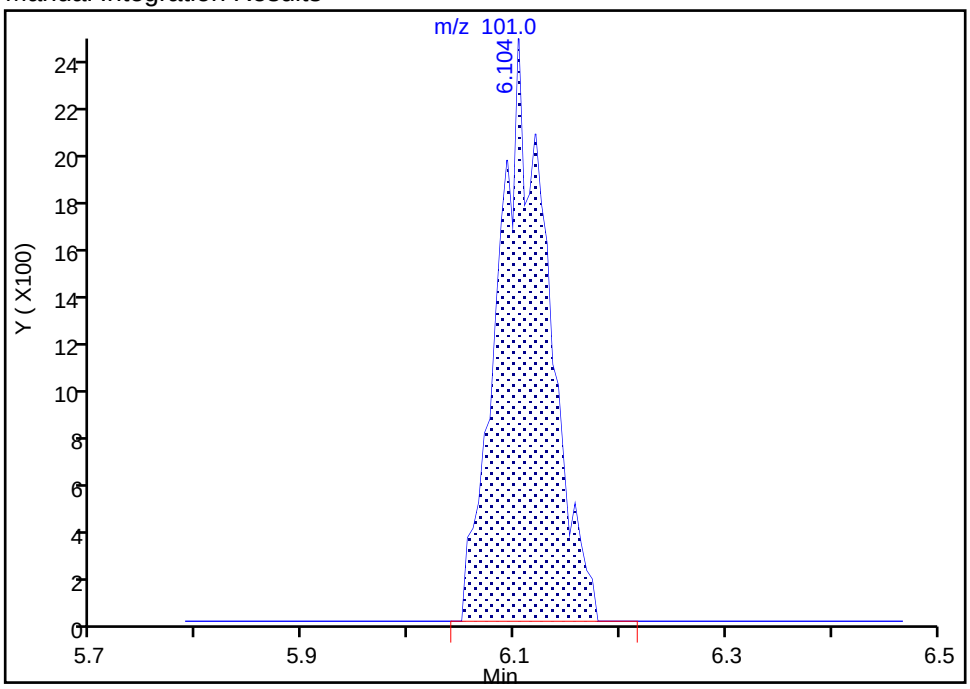
Processing Integration Results

RT: 6.09
Area: 3004
Amount: 0.087489
Amount Units: ppb v/v



Manual Integration Results

RT: 6.10
Area: 8002
Amount: 0.203021
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:46:48

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

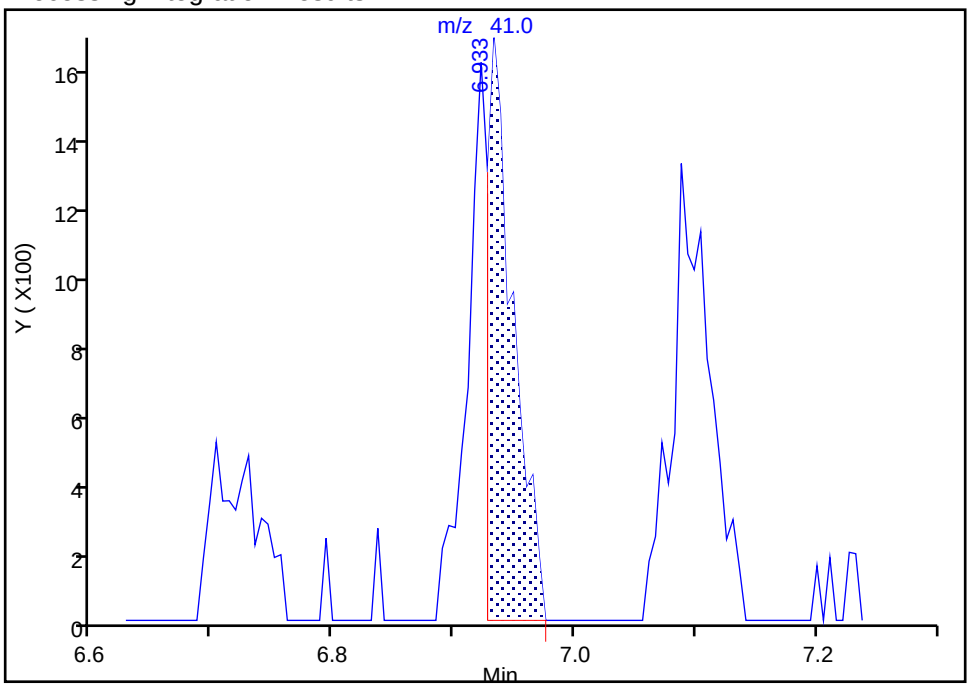
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

25 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

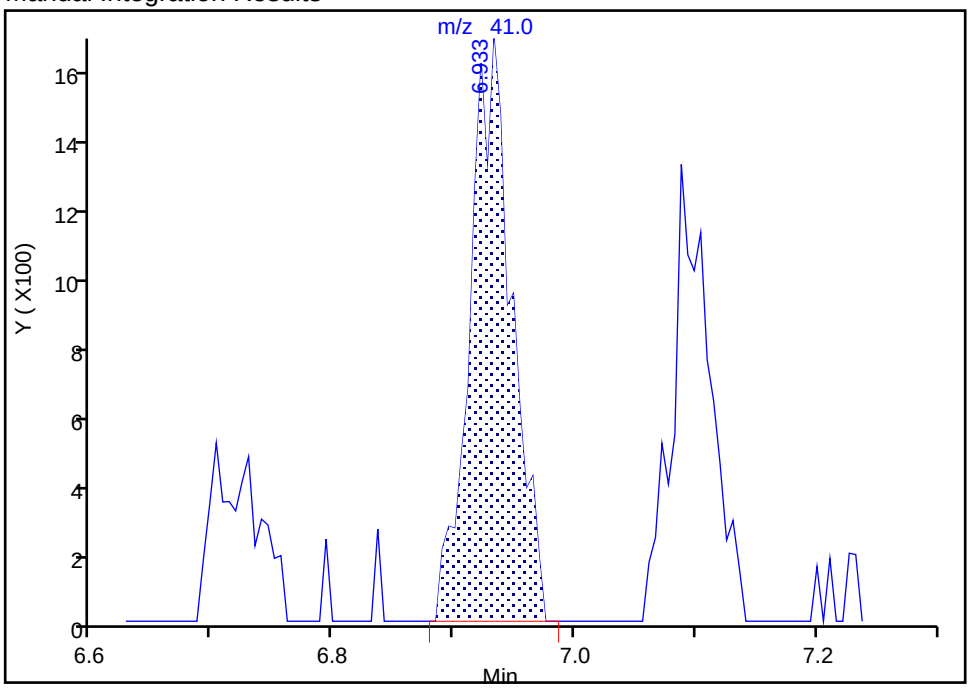
Processing Integration Results

RT: 6.93
Area: 2554
Amount: 0.145028
Amount Units: ppb v/v



Manual Integration Results

RT: 6.93
Area: 4095
Amount: 0.208951
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:04

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

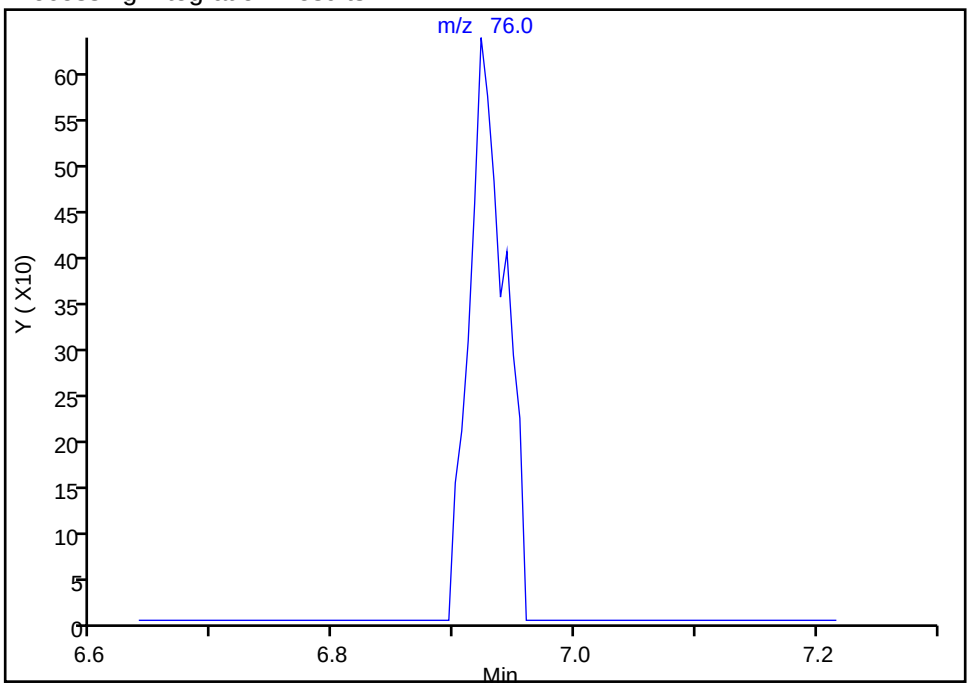
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

25 3-Chloro-1-propene, CAS: 107-05-1

Signal: 2

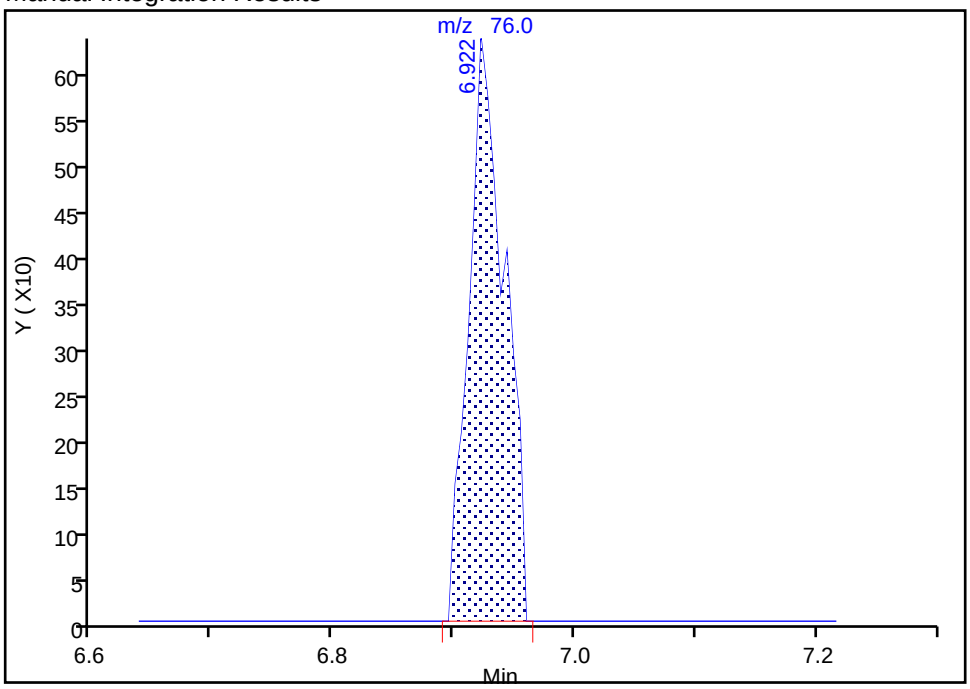
Processing Integration Results

RT: 6.93
Area: 0
Amount: 0.145028
Amount Units: ppb v/v



Manual Integration Results

RT: 6.92
Area: 1314
Amount: 0.208951
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:06
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

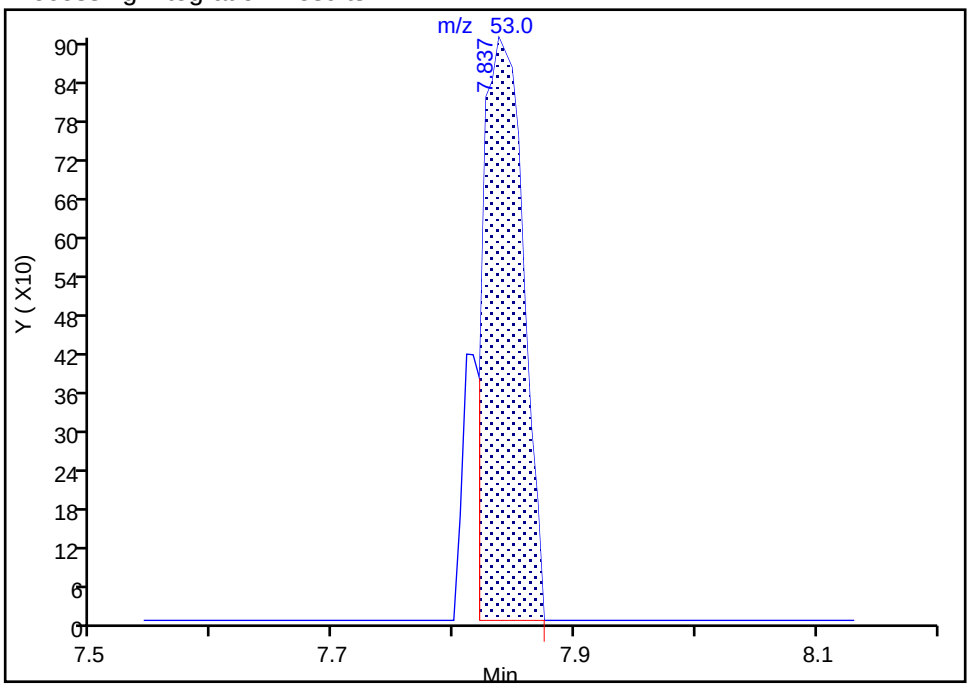
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

32 Acrylonitrile, CAS: 107-13-1

Signal: 1

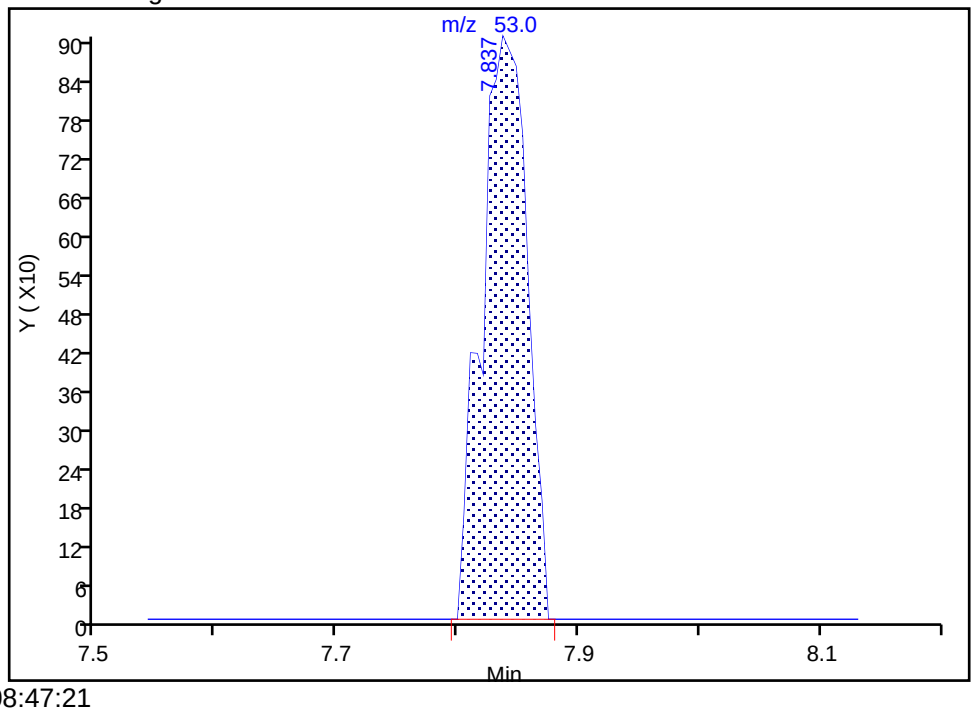
Processing Integration Results

RT: 7.84
Area: 2059
Amount: 0.165667
Amount Units: ppb v/v



Manual Integration Results

RT: 7.84
Area: 2377
Amount: 0.190736
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

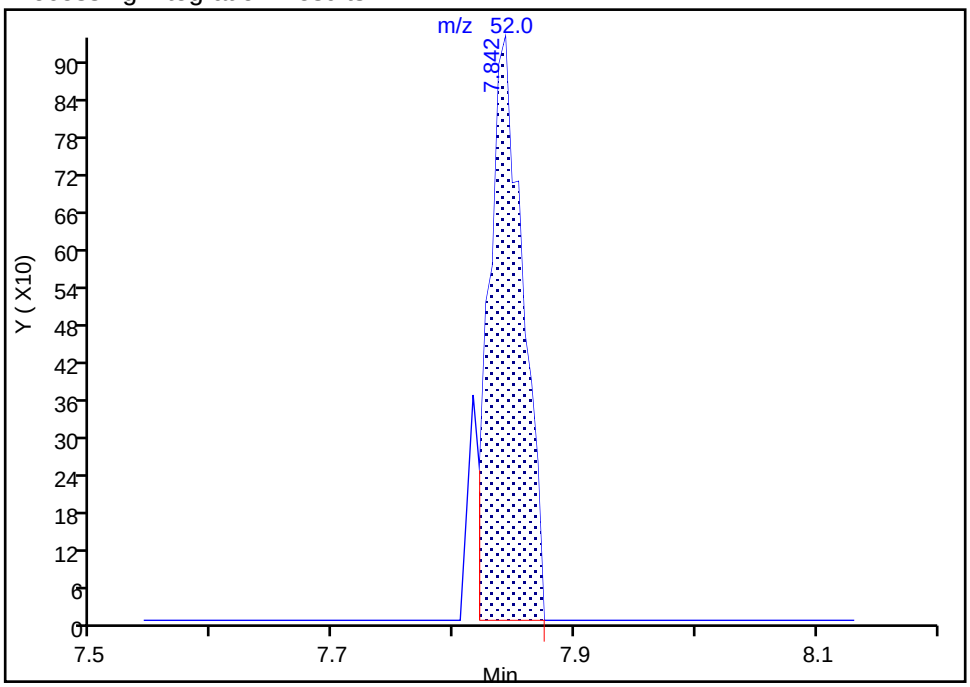
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

32 Acrylonitrile, CAS: 107-13-1

Signal: 2

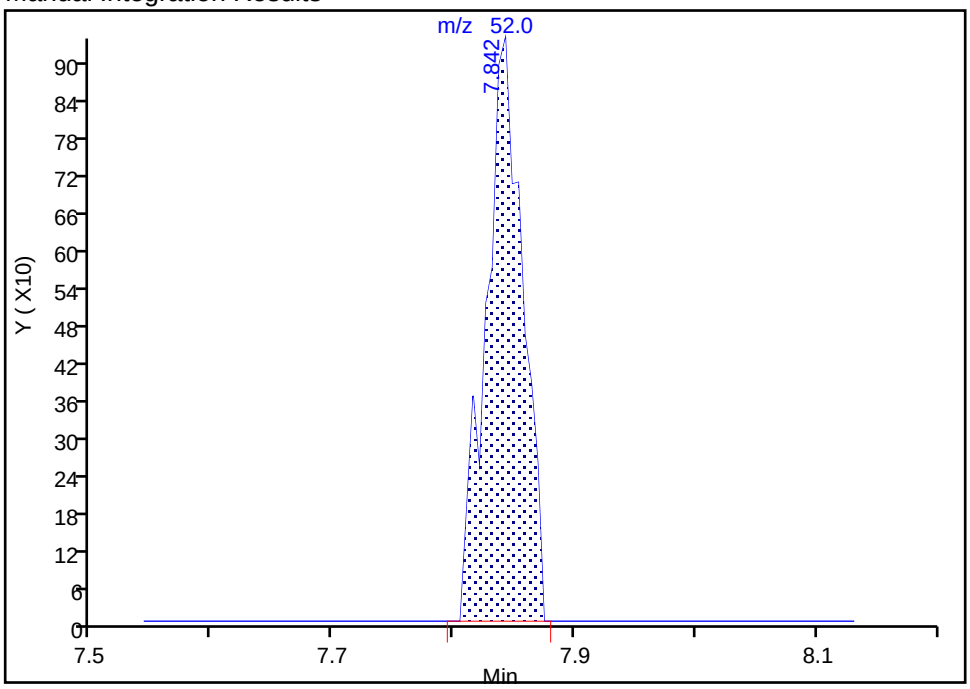
Processing Integration Results

RT: 7.84
Area: 1815
Amount: 0.165667
Amount Units: ppb v/v



Manual Integration Results

RT: 7.84
Area: 1989
Amount: 0.190736
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

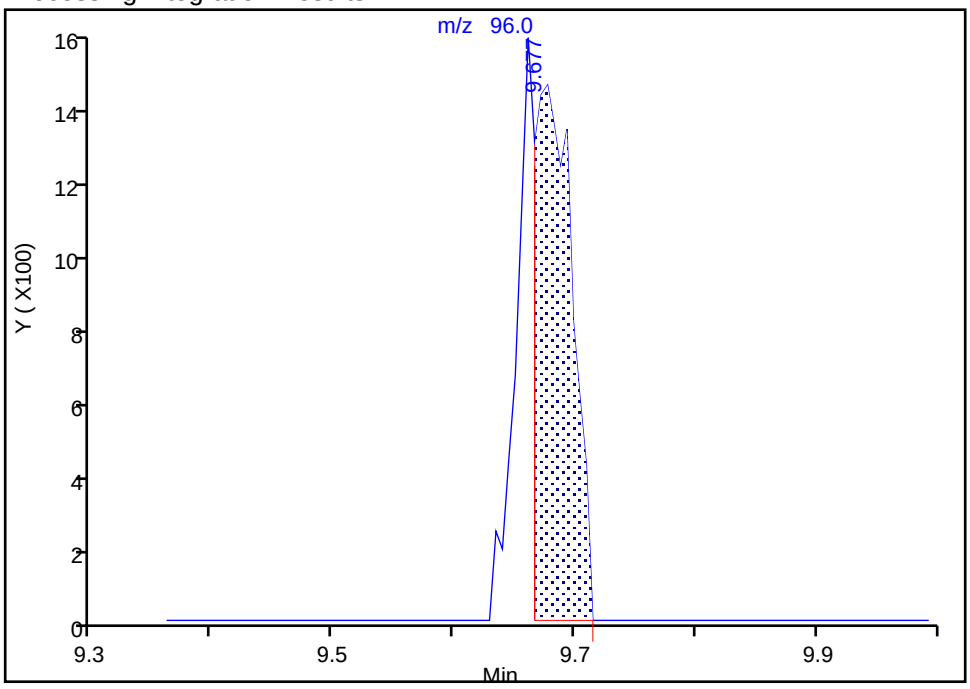
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

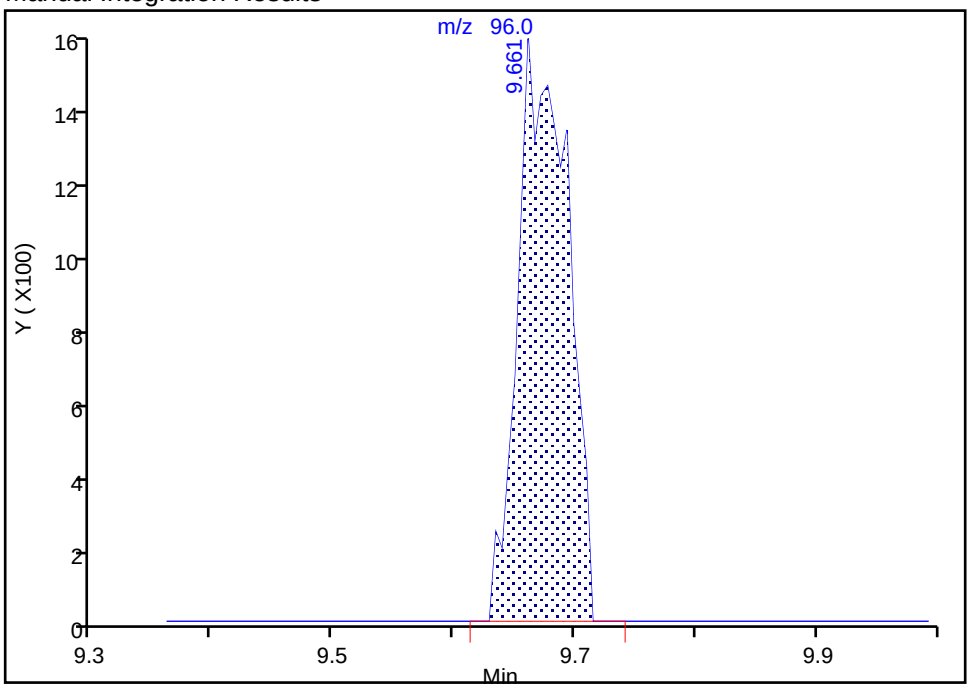
Processing Integration Results

RT: 9.68
Area: 3039
Amount: 0.142728
Amount Units: ppb v/v



Manual Integration Results

RT: 9.66
Area: 4343
Amount: 0.192788
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:33

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

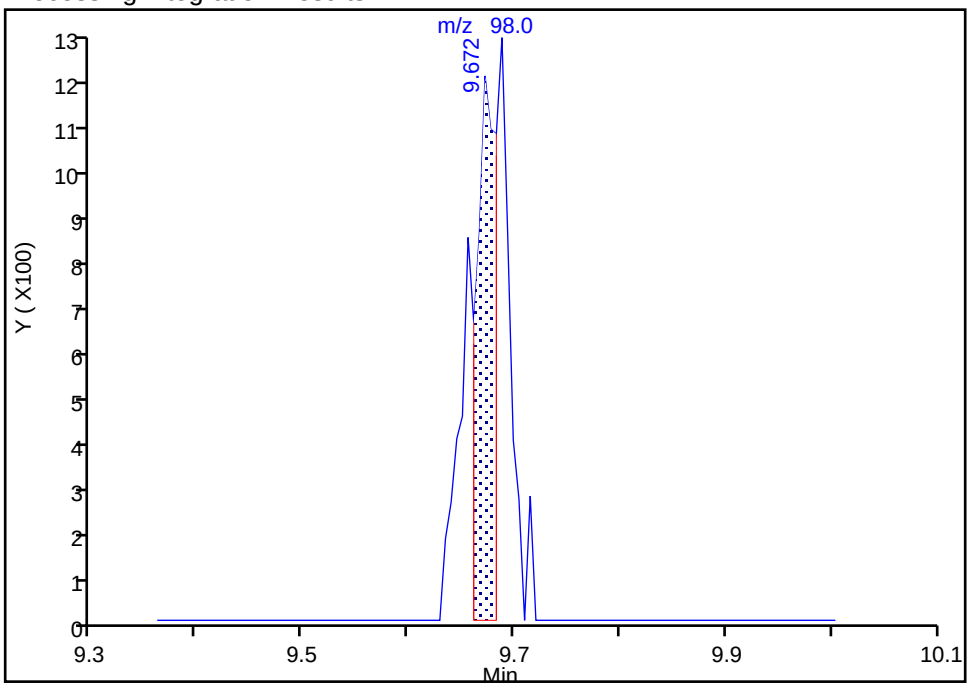
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 2

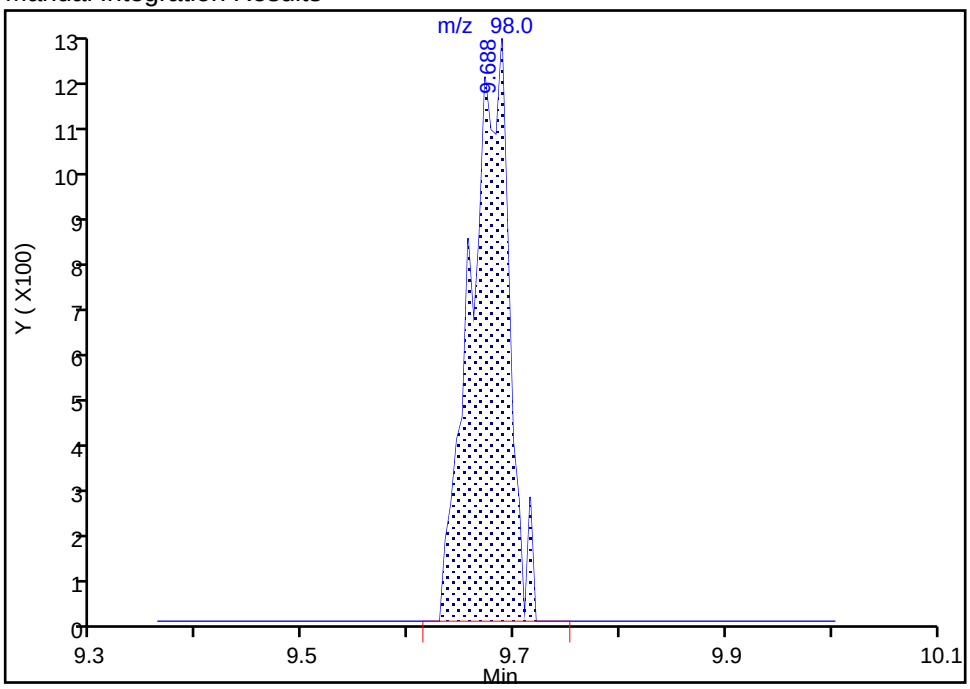
Processing Integration Results

RT: 9.67
Area: 1481
Amount: 0.142728
Amount Units: ppb v/v



Manual Integration Results

RT: 9.69
Area: 3070
Amount: 0.192788
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

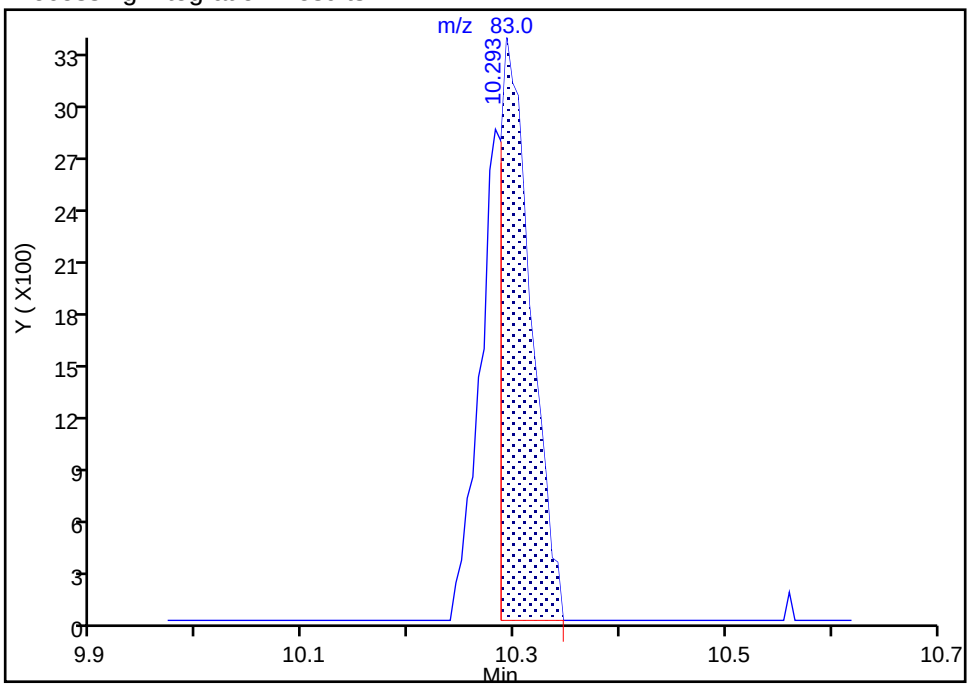
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Chloroform, CAS: 67-66-3

Signal: 1

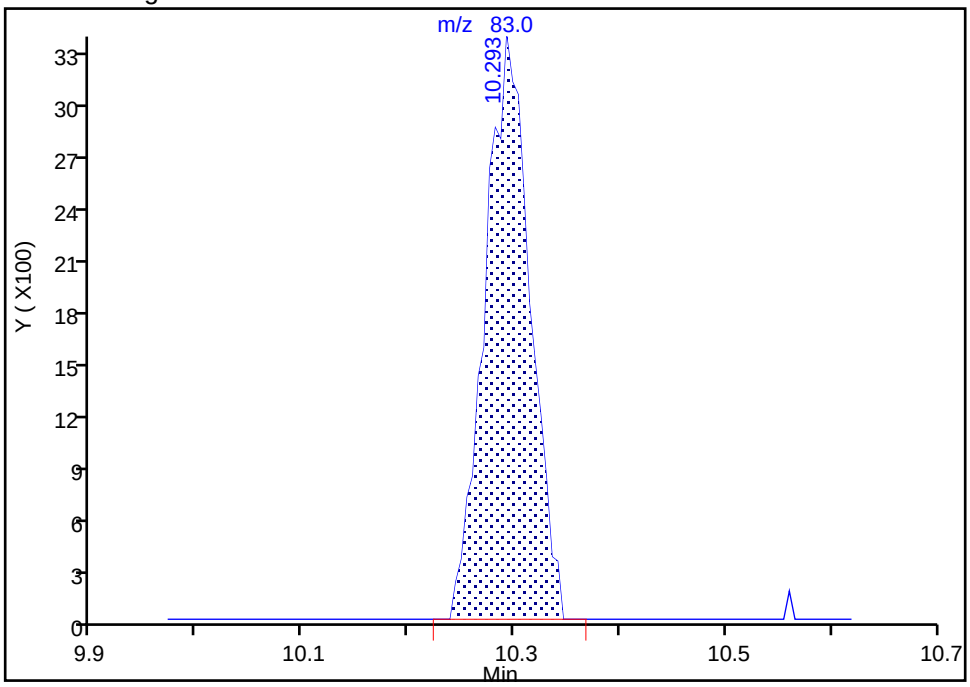
Processing Integration Results

RT: 10.29
Area: 6670
Amount: 0.152220
Amount Units: ppb v/v



Manual Integration Results

RT: 10.29
Area: 10048
Amount: 0.212917
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

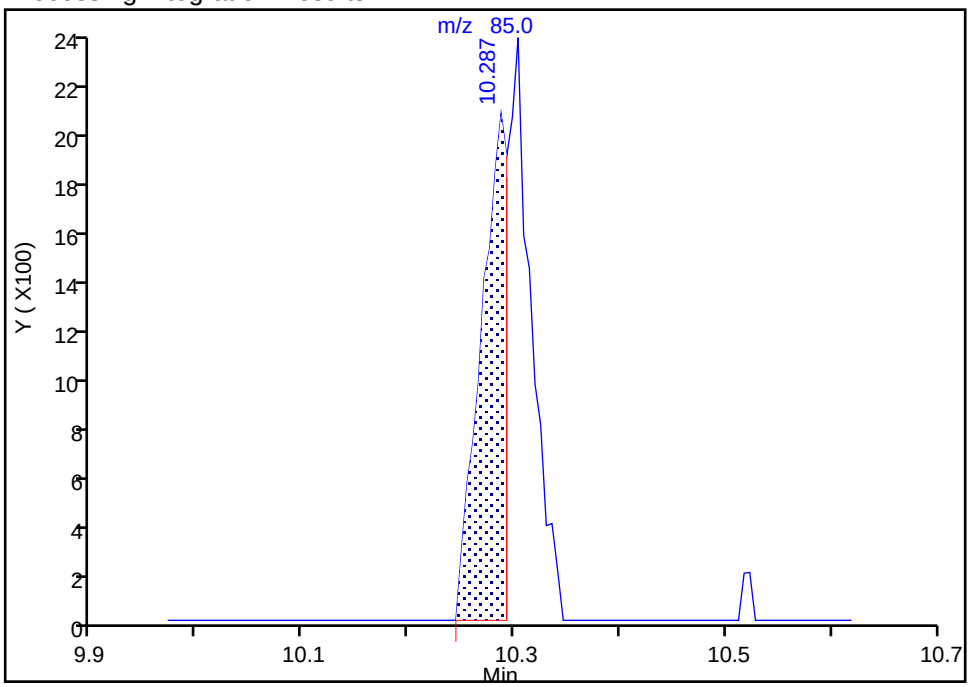
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

42 Chloroform, CAS: 67-66-3

Signal: 2

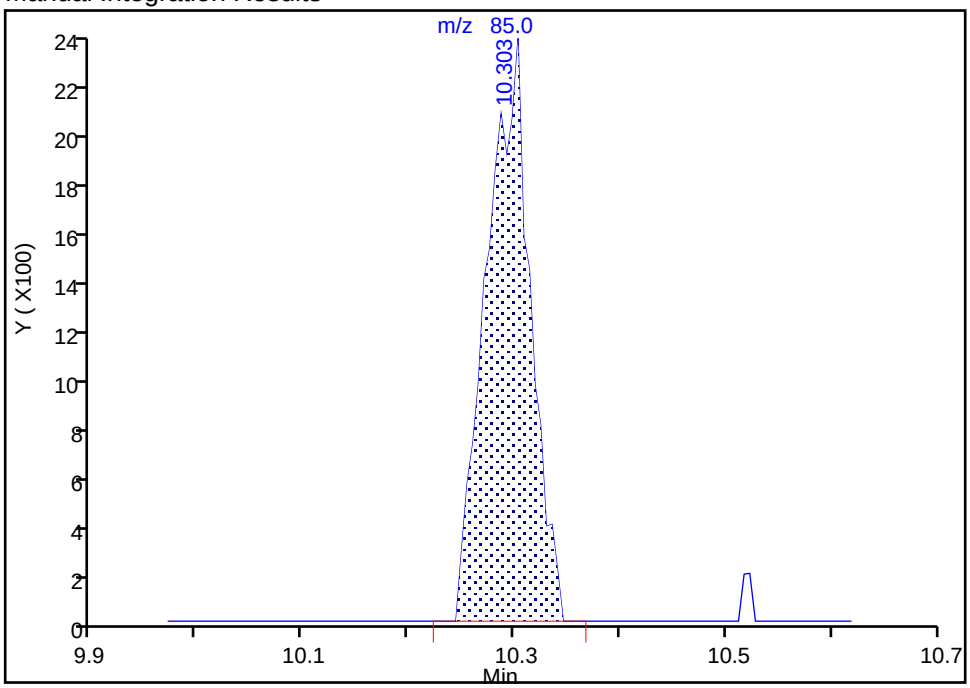
Processing Integration Results

RT: 10.29
Area: 3500
Amount: 0.152220
Amount Units: ppb v/v



Manual Integration Results

RT: 10.30
Area: 6665
Amount: 0.212917
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

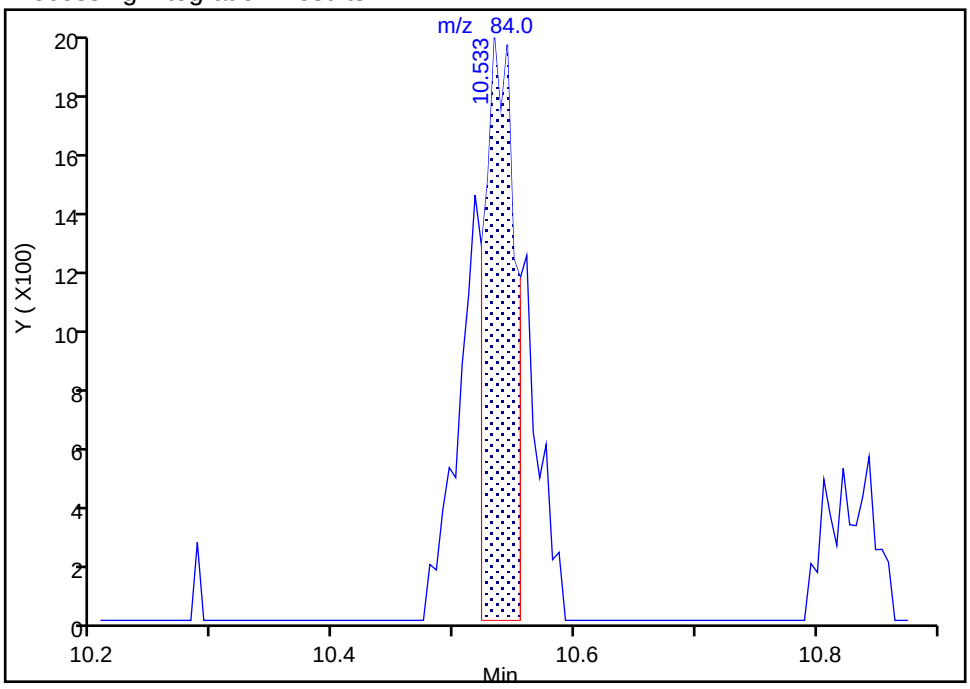
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

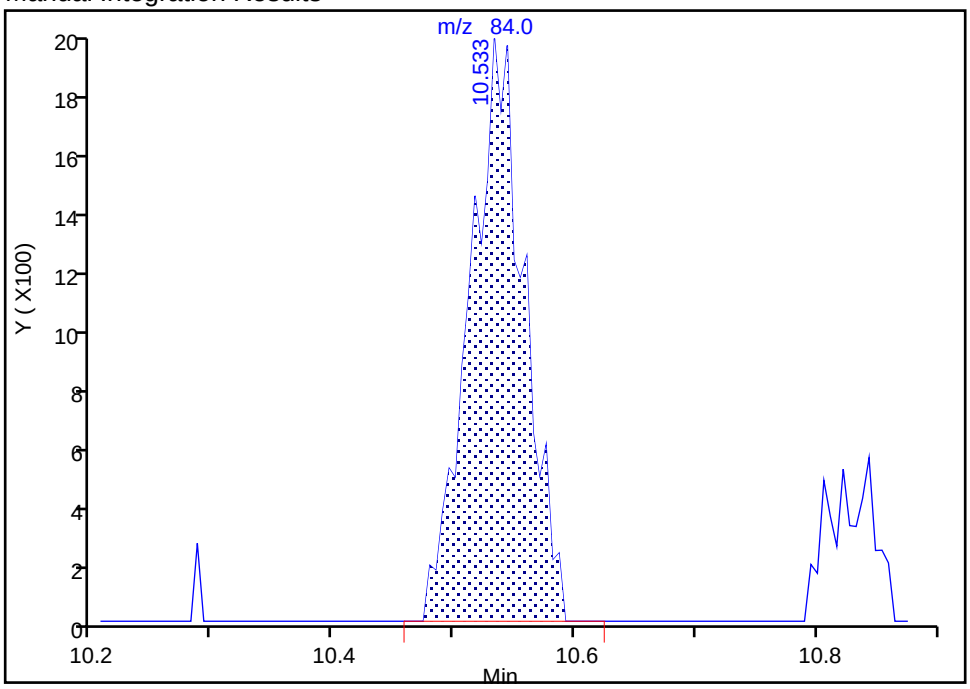
Processing Integration Results

RT: 10.53
Area: 3367
Amount: 0.120993
Amount Units: ppb v/v



Manual Integration Results

RT: 10.53
Area: 6029
Amount: 0.198060
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

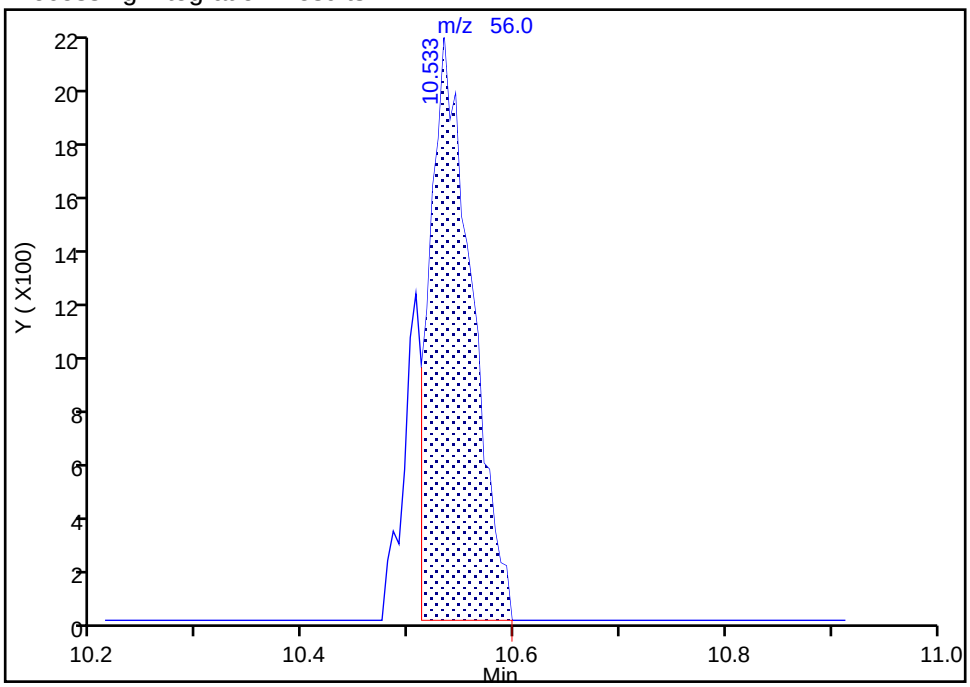
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 2

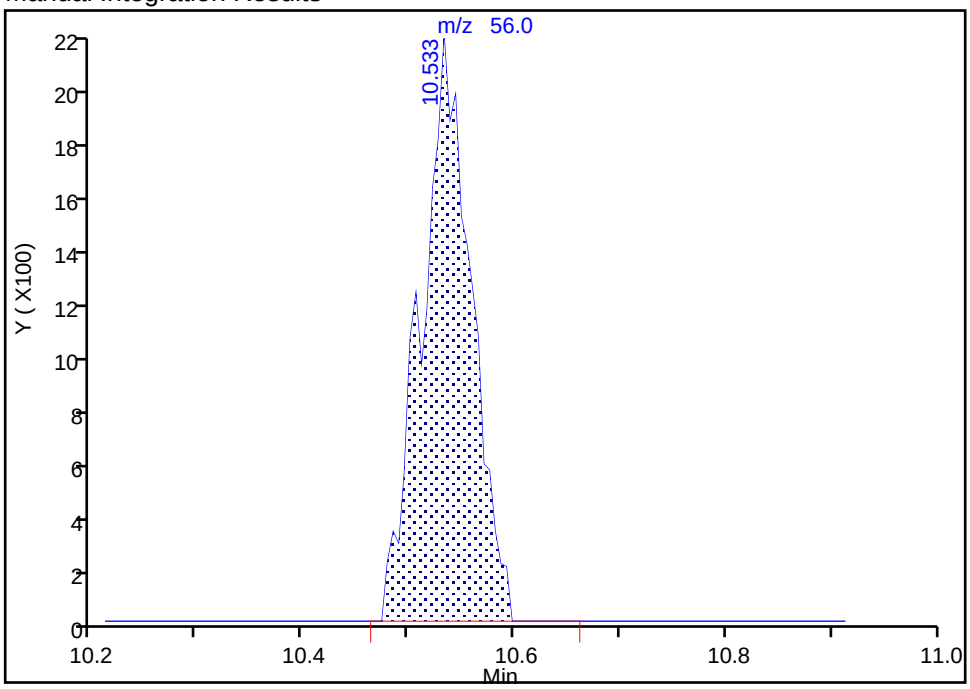
Processing Integration Results

RT: 10.53
Area: 5915
Amount: 0.120993
Amount Units: ppb v/v



Manual Integration Results

RT: 10.53
Area: 7082
Amount: 0.198060
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:47:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

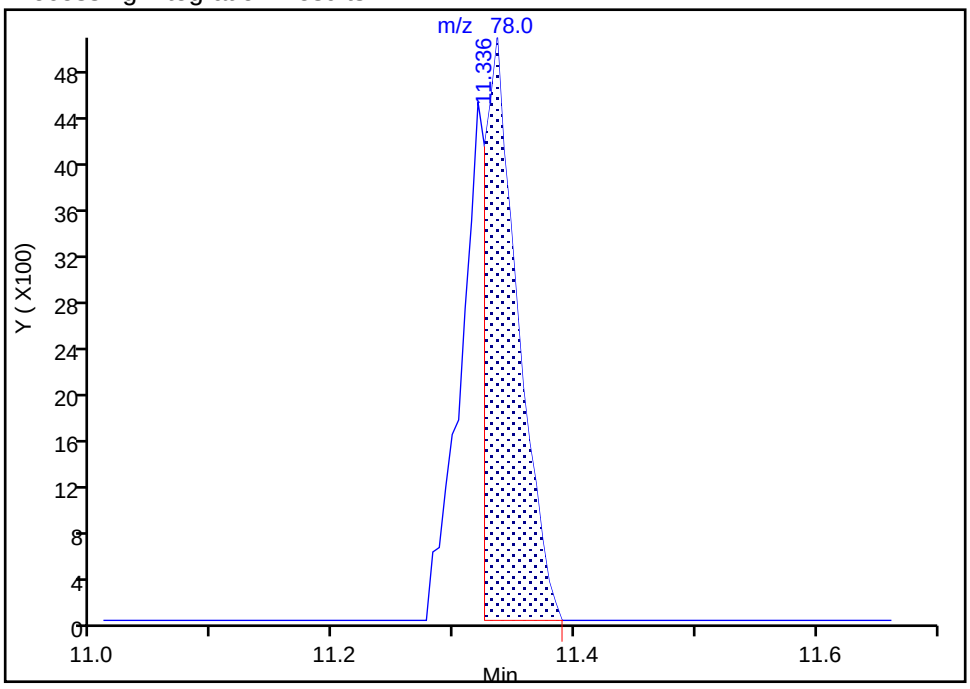
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Signal: 1

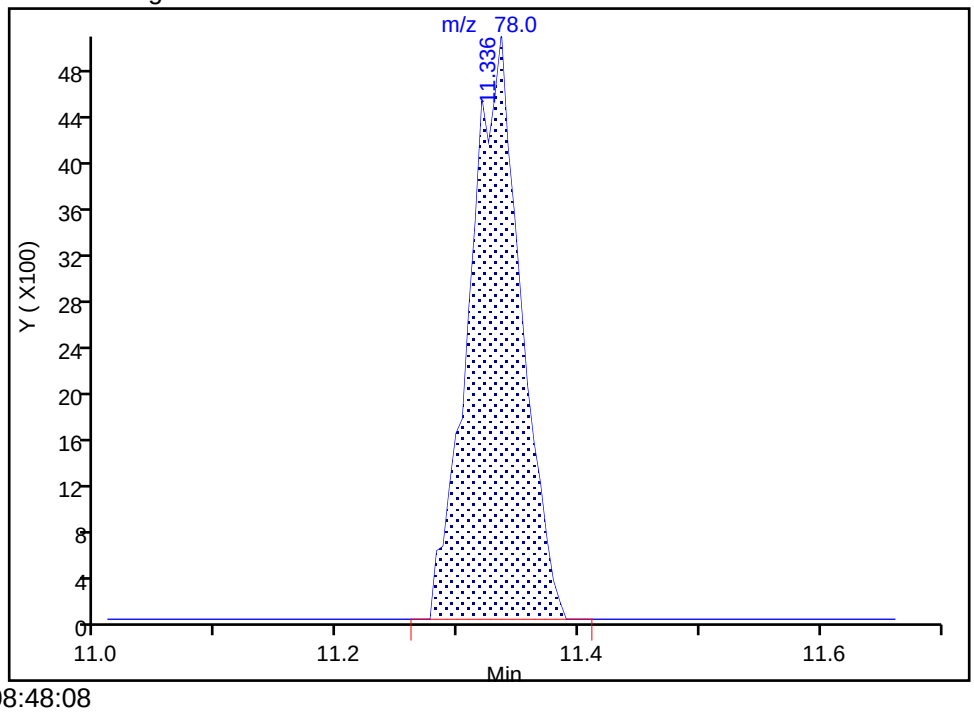
Processing Integration Results

RT: 11.34
Area: 9659
Amount: 0.142063
Amount Units: ppb v/v



Manual Integration Results

RT: 11.34
Area: 14936
Amount: 0.204196
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

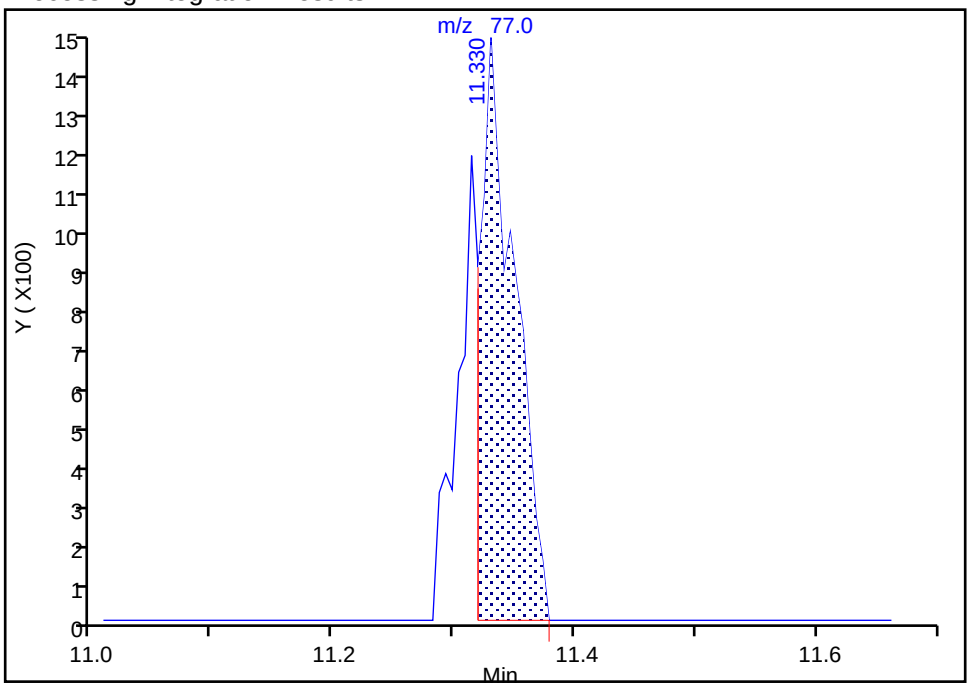
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Signal: 2

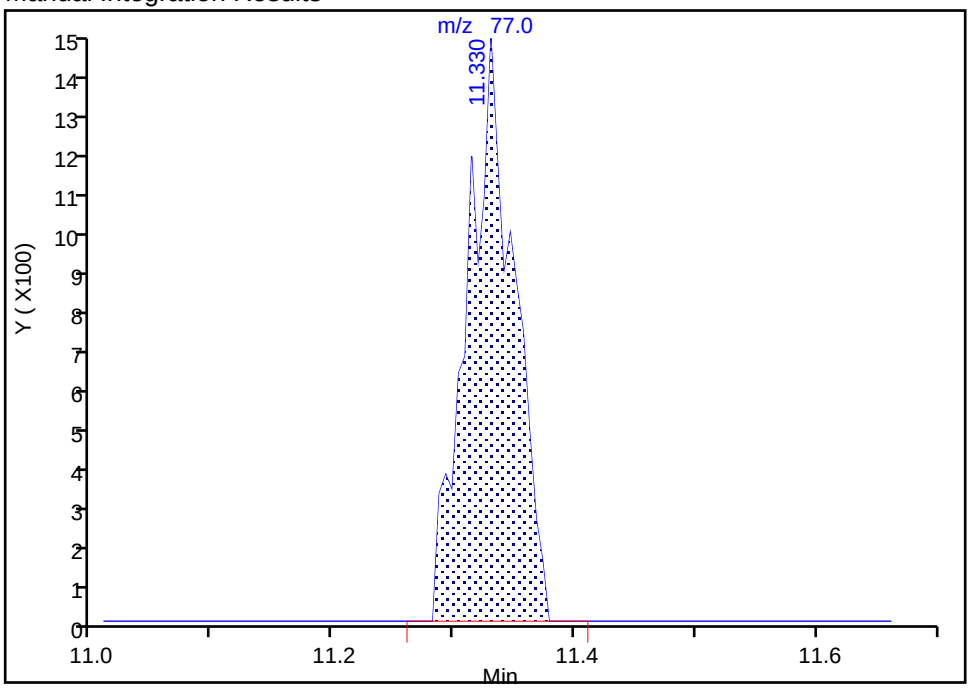
Processing Integration Results

RT: 11.33
Area: 2884
Amount: 0.142063
Amount Units: ppb v/v



Manual Integration Results

RT: 11.33
Area: 4013
Amount: 0.204196
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

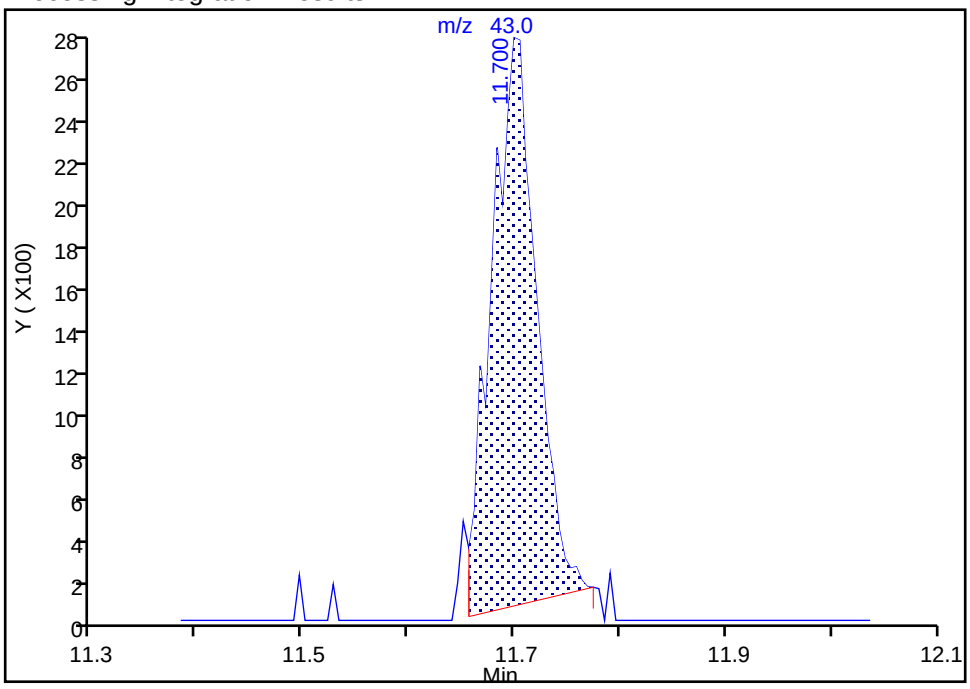
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

49 n-Heptane, CAS: 142-82-5

Signal: 1

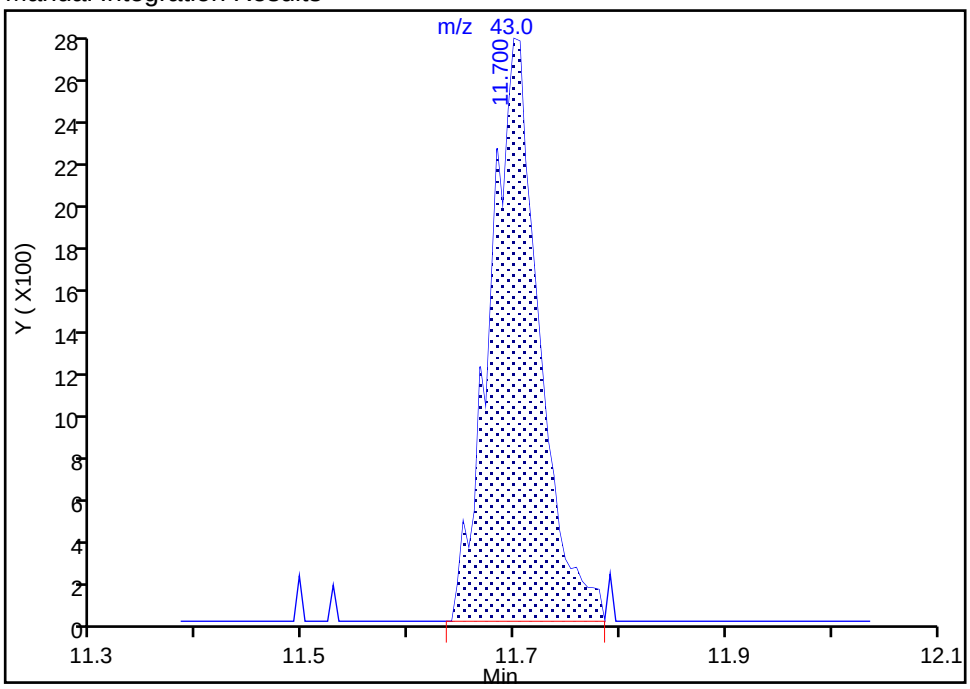
Processing Integration Results

RT: 11.70
Area: 7964
Amount: 0.189988
Amount Units: ppb v/v



Manual Integration Results

RT: 11.70
Area: 8865
Amount: 0.207129
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

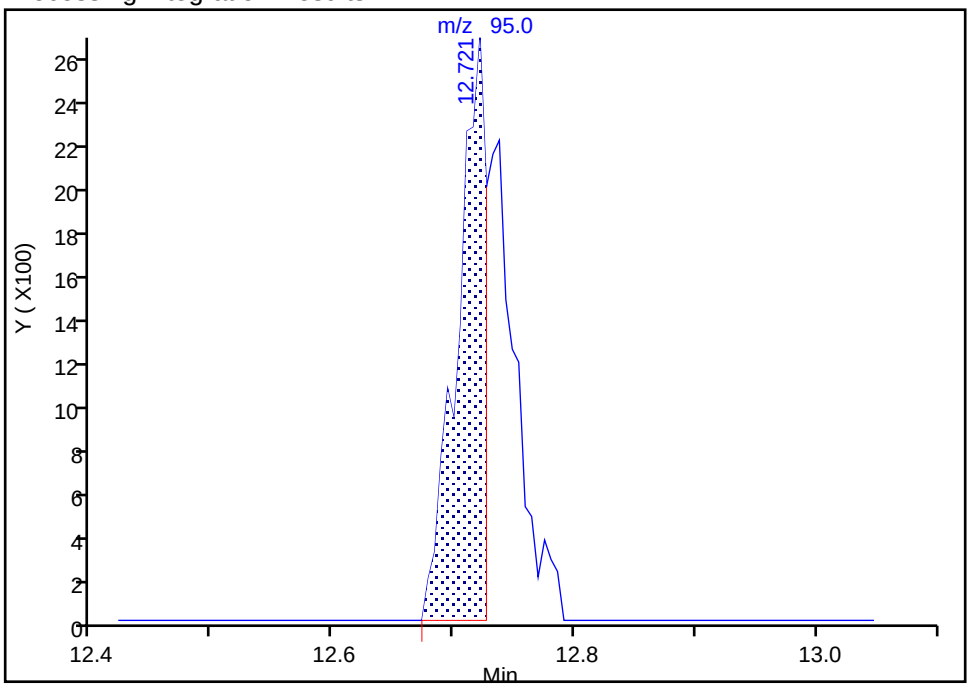
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

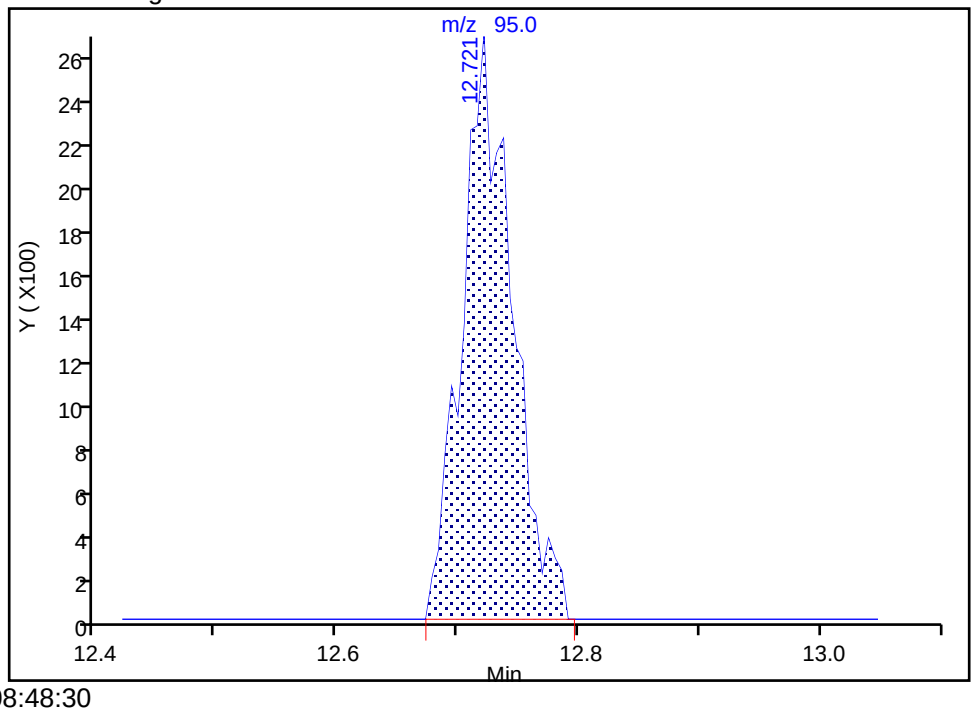
Processing Integration Results

RT: 12.72
Area: 4352
Amount: 0.128959
Amount Units: ppb v/v



Manual Integration Results

RT: 12.72
Area: 7611
Amount: 0.211567
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:30

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

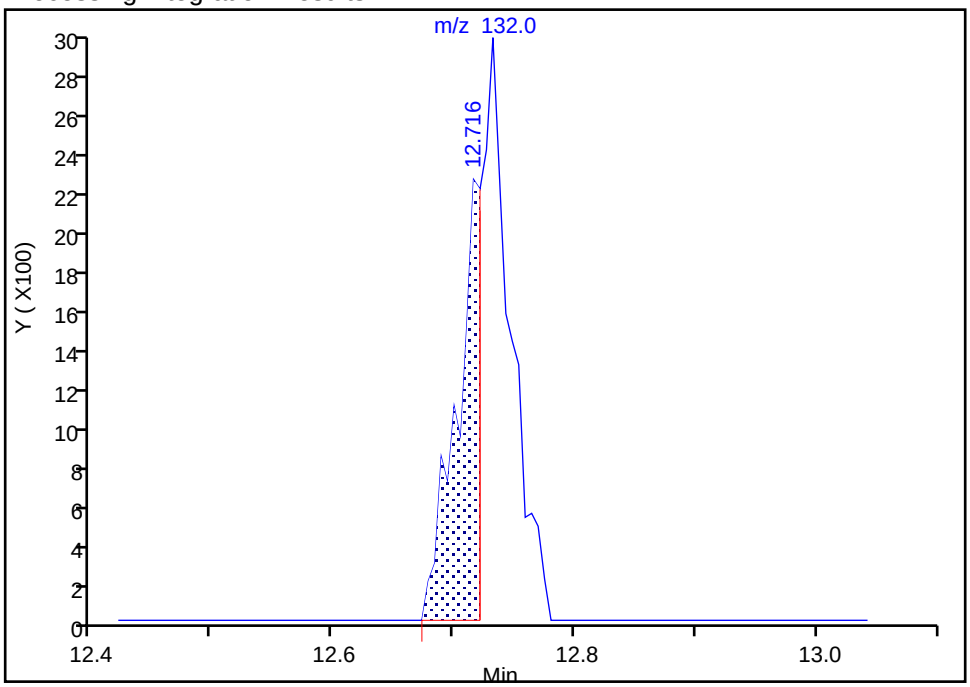
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

53 Trichloroethene, CAS: 79-01-6

Signal: 3

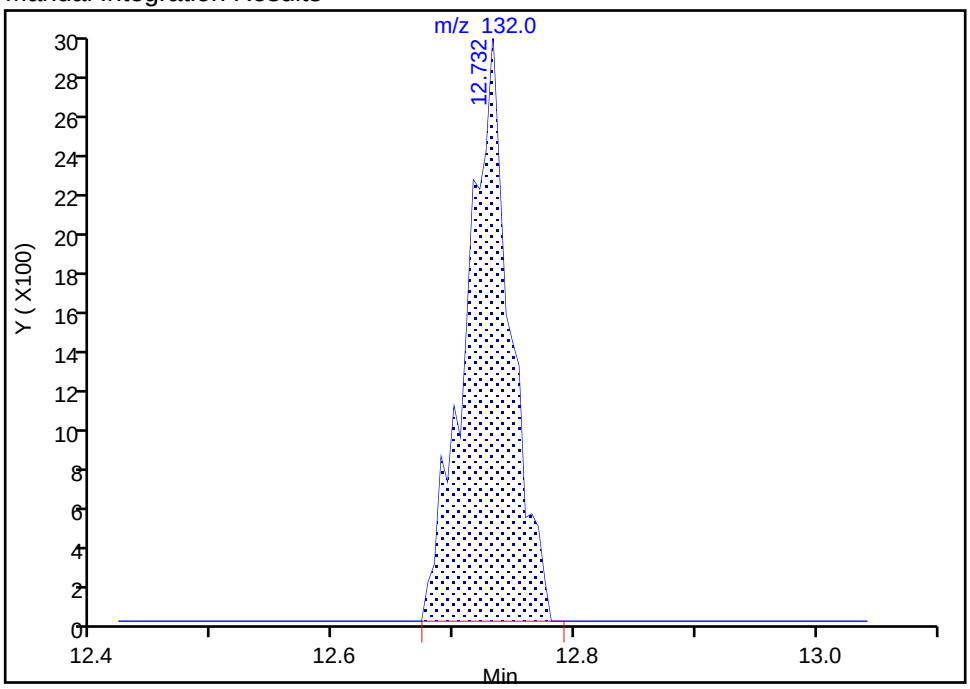
Processing Integration Results

RT: 12.72
Area: 3172
Amount: 0.128959
Amount Units: ppb v/v



Manual Integration Results

RT: 12.73
Area: 7517
Amount: 0.211567
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

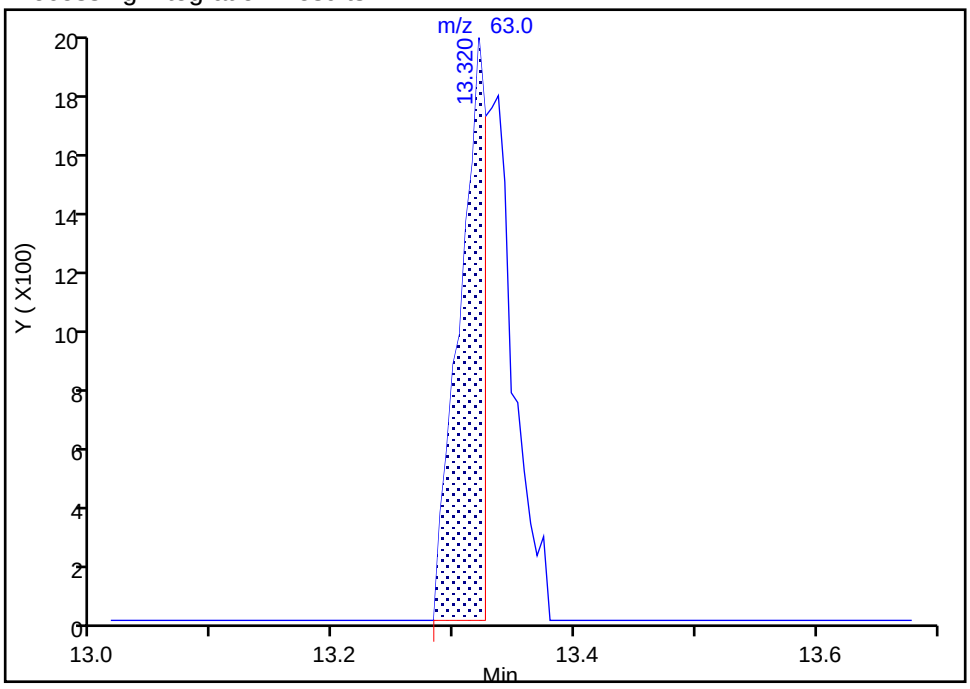
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

54 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

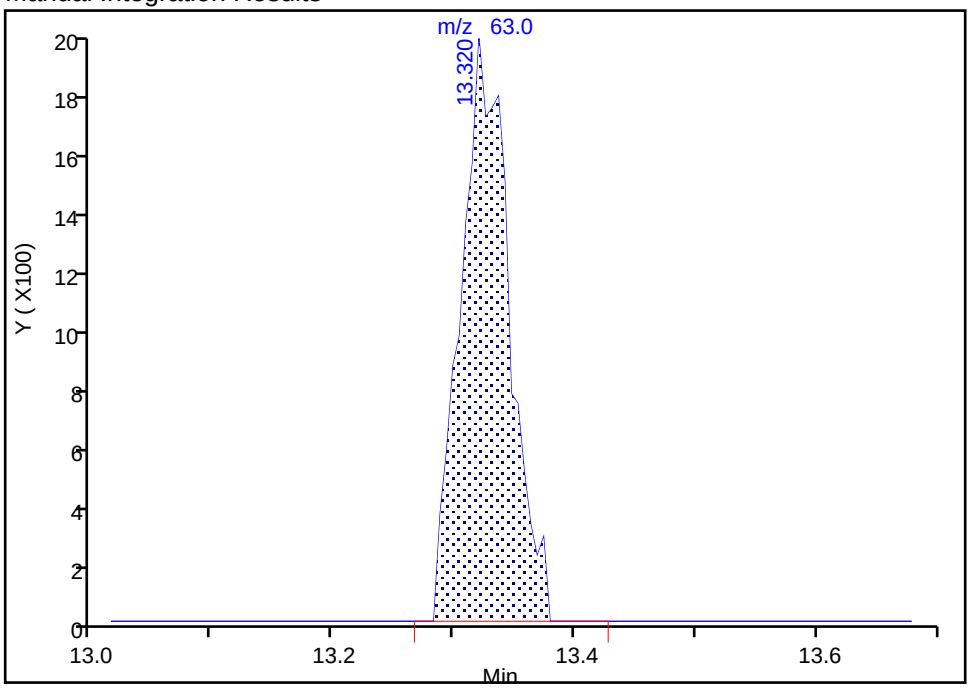
Processing Integration Results

RT: 13.32
Area: 2985
Amount: 0.115813
Amount Units: ppb v/v



Manual Integration Results

RT: 13.32
Area: 5488
Amount: 0.193462
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

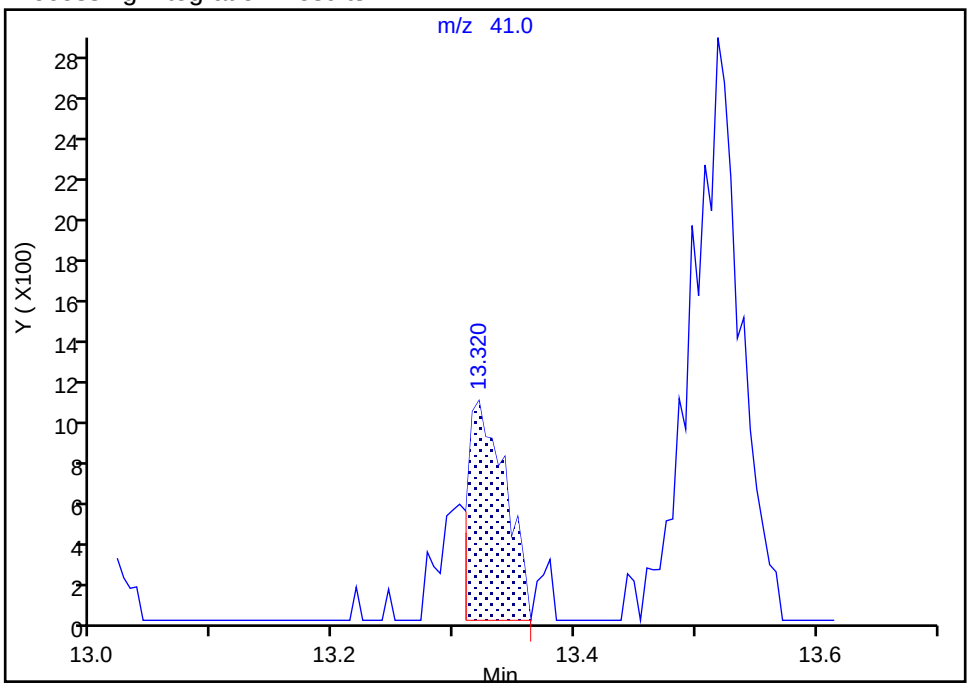
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

54 1,2-Dichloropropane, CAS: 78-87-5

Signal: 2

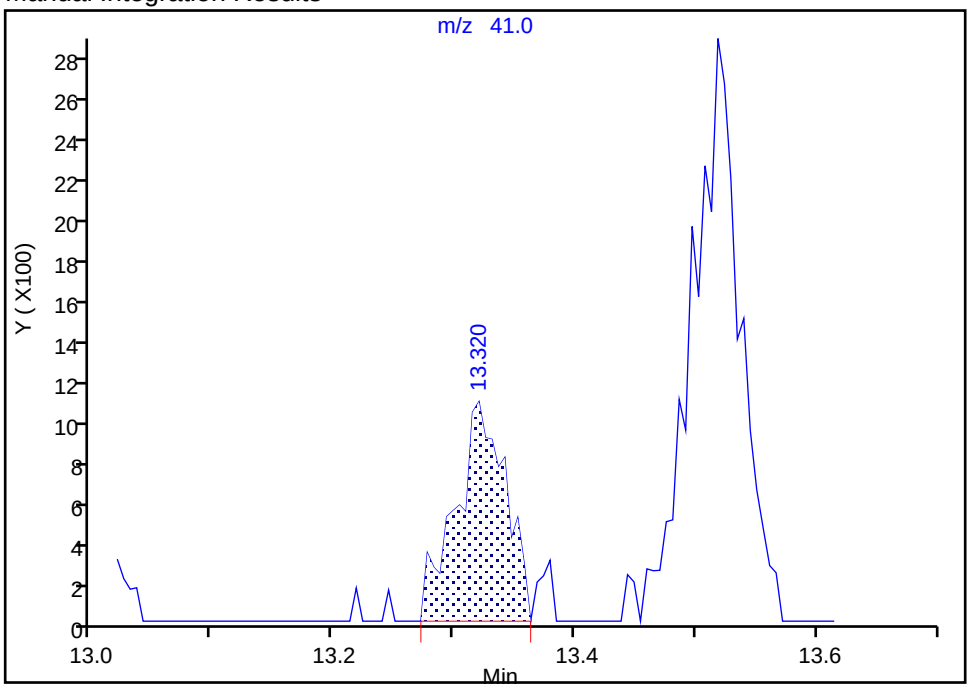
Processing Integration Results

RT: 13.32
Area: 2260
Amount: 0.115813
Amount Units: ppb v/v



Manual Integration Results

RT: 13.32
Area: 3032
Amount: 0.193462
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:48
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

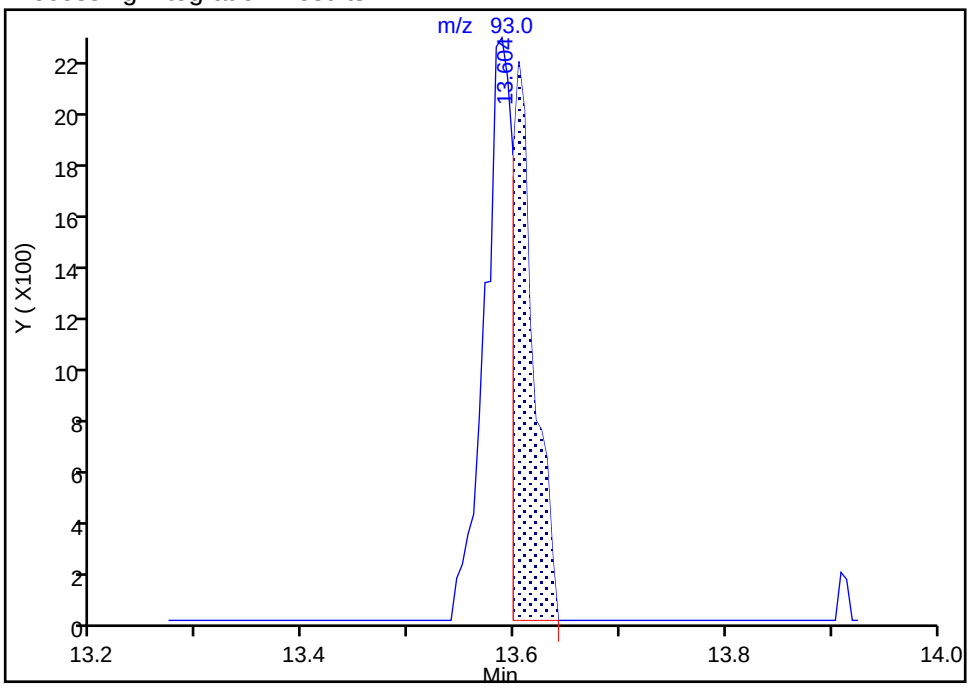
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

57 Dibromomethane, CAS: 74-95-3

Signal: 2

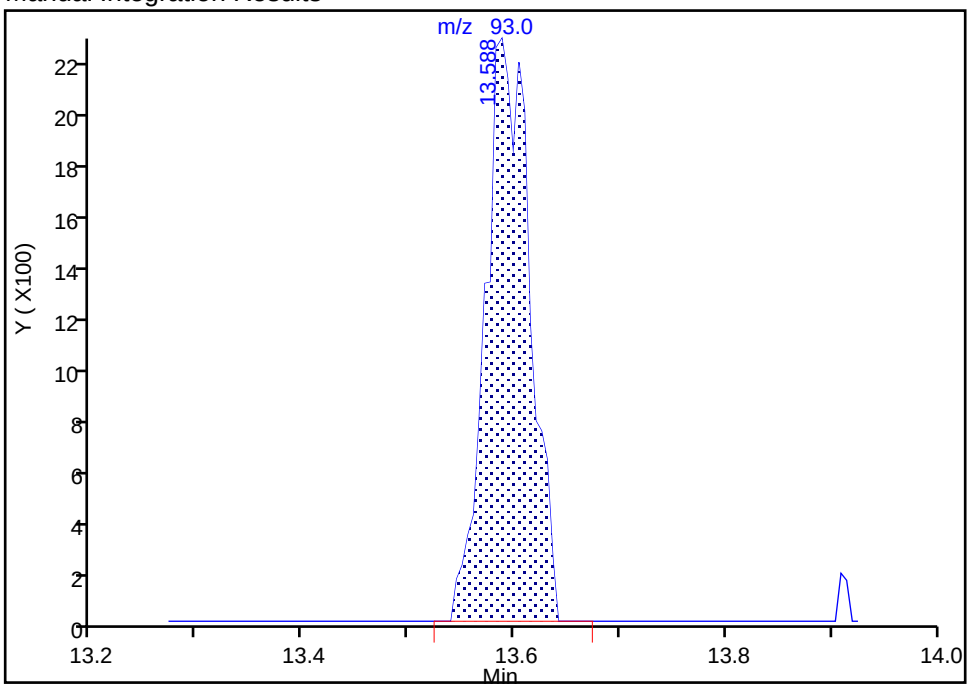
Processing Integration Results

RT: 13.60
Area: 2995
Amount: 0.204971
Amount Units: ppb v/v



Manual Integration Results

RT: 13.59
Area: 6509
Amount: 0.207823
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

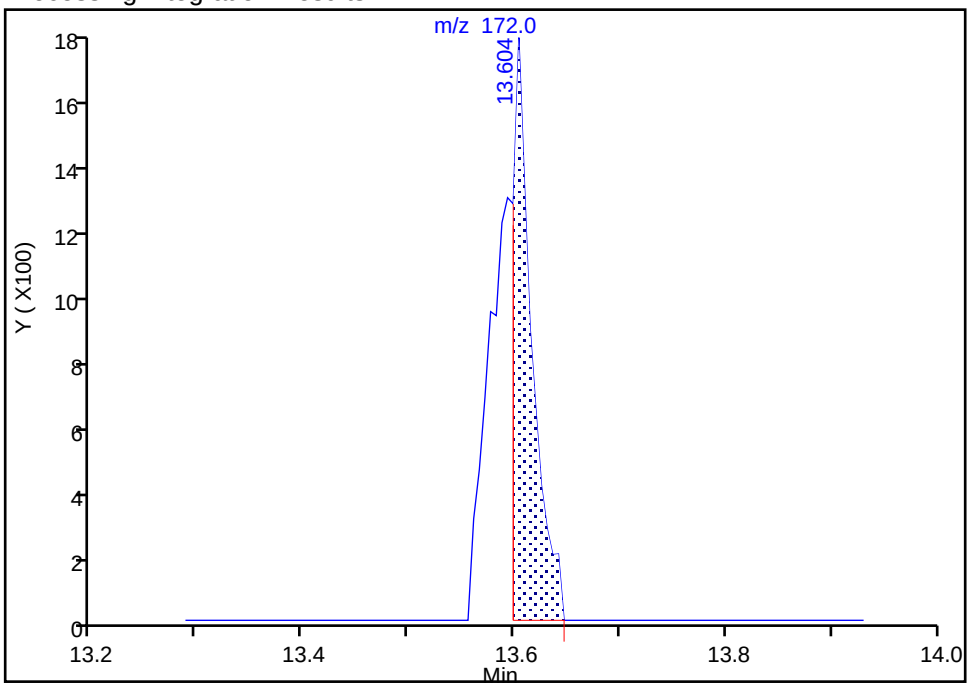
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

57 Dibromomethane, CAS: 74-95-3

Signal: 3

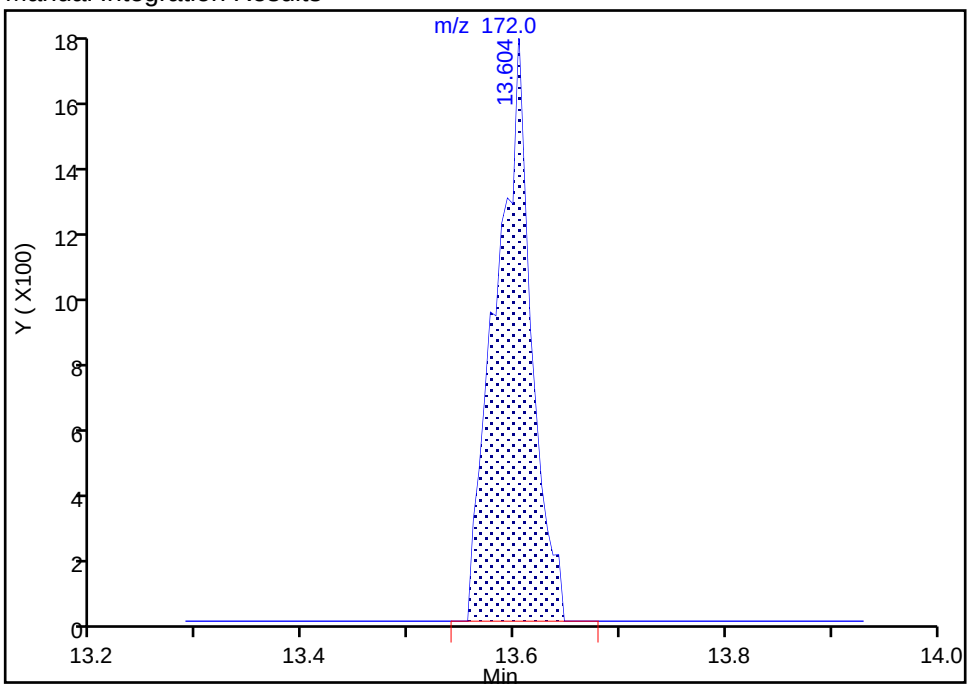
Processing Integration Results

RT: 13.60
Area: 2256
Amount: 0.204971
Amount Units: ppb v/v



Manual Integration Results

RT: 13.60
Area: 4133
Amount: 0.207823
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:48:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

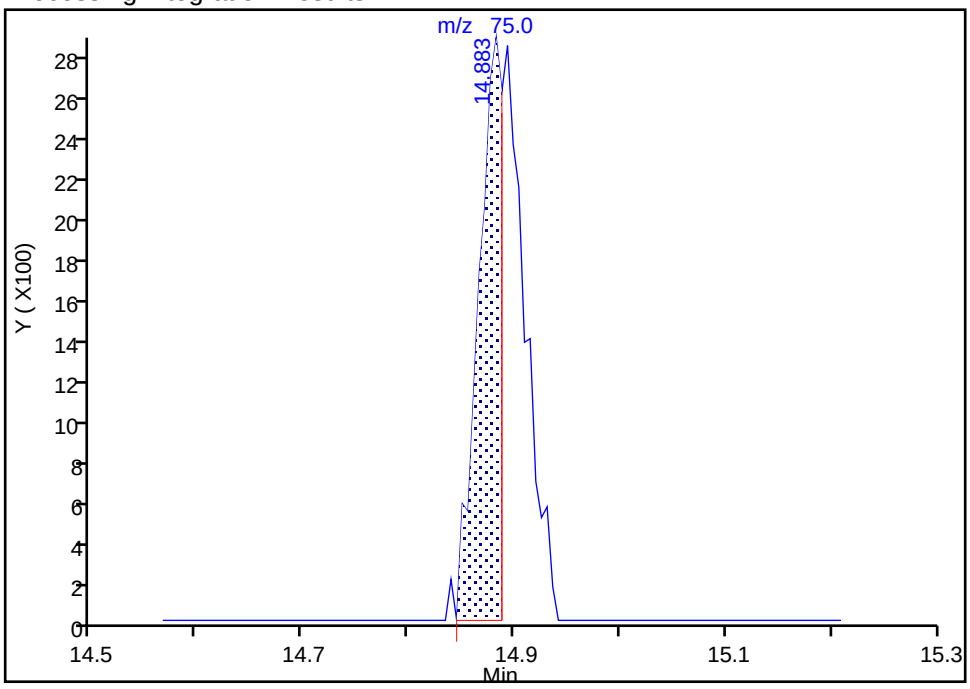
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

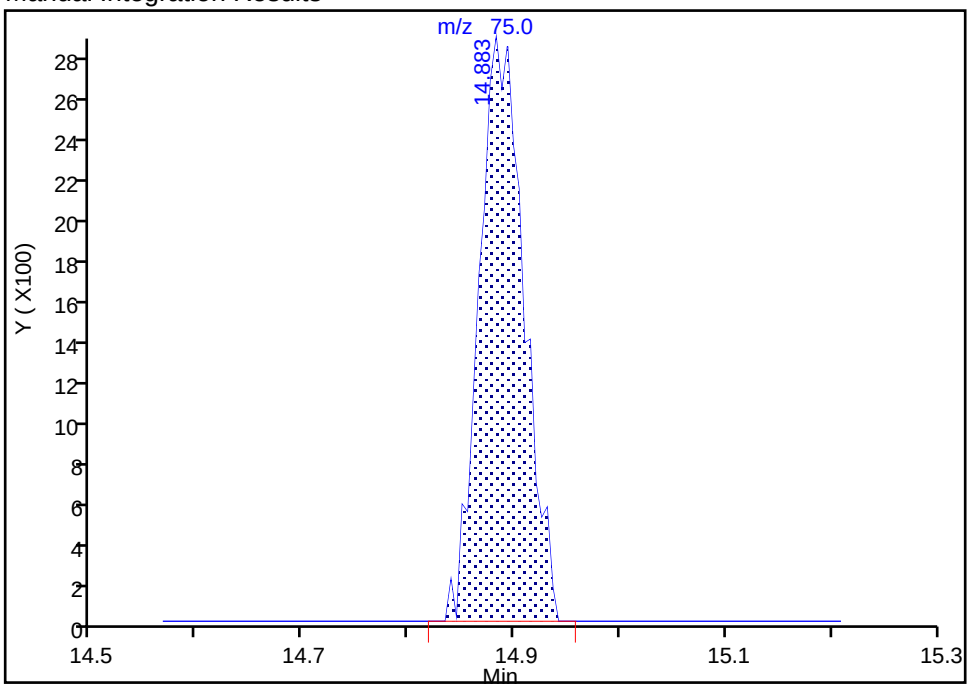
Processing Integration Results

RT: 14.88
Area: 4548
Amount: 0.112098
Amount Units: ppb v/v



Manual Integration Results

RT: 14.88
Area: 8470
Amount: 0.191407
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:49:07

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

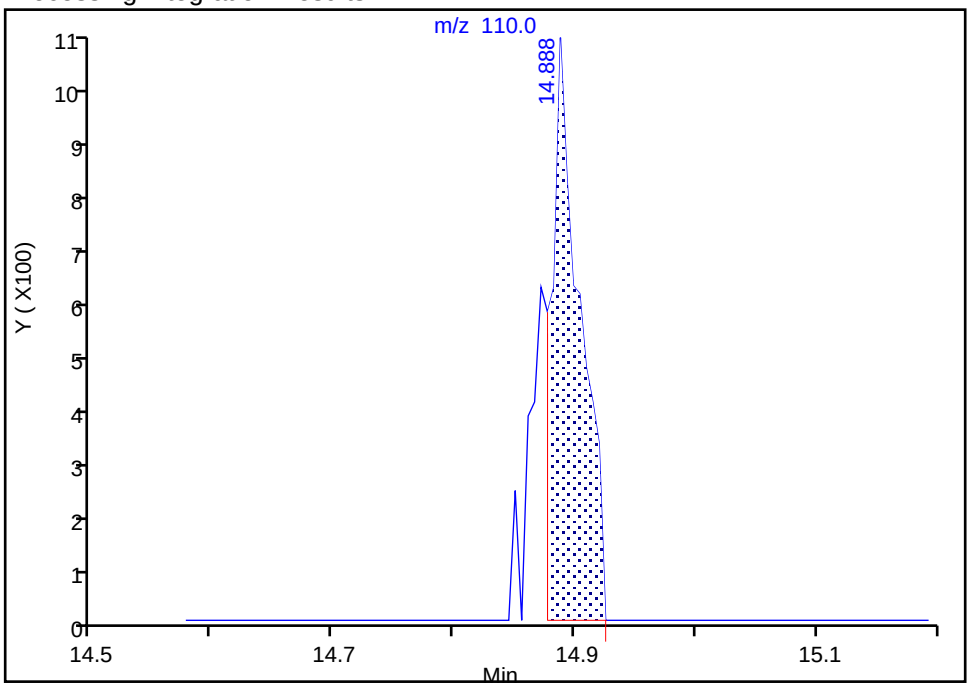
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 2

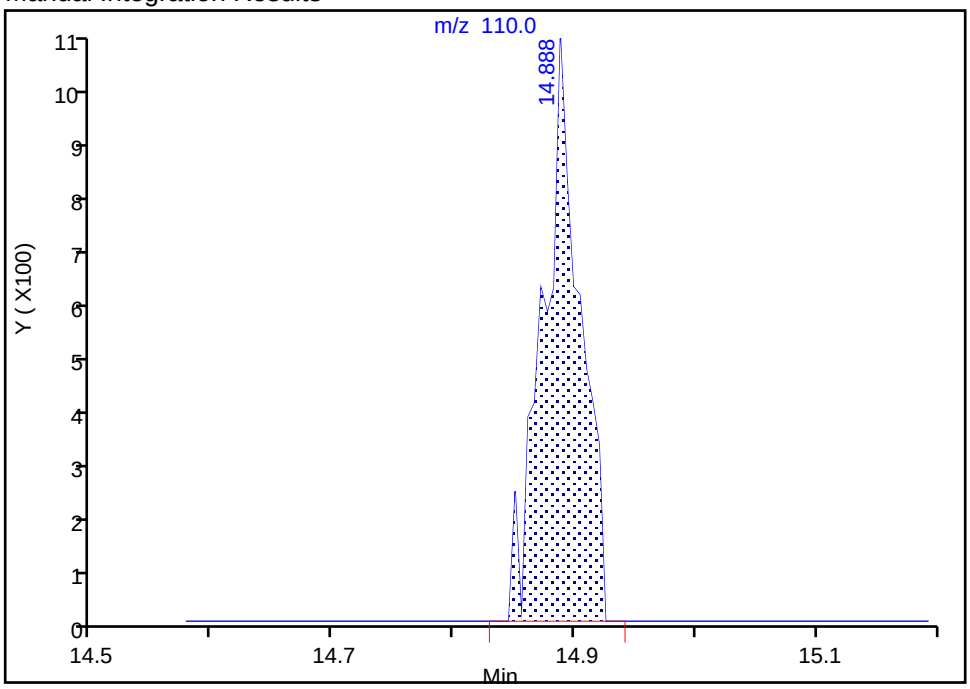
Processing Integration Results

RT: 14.89
Area: 1769
Amount: 0.112098
Amount Units: ppb v/v



Manual Integration Results

RT: 14.89
Area: 2295
Amount: 0.191407
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:49:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington

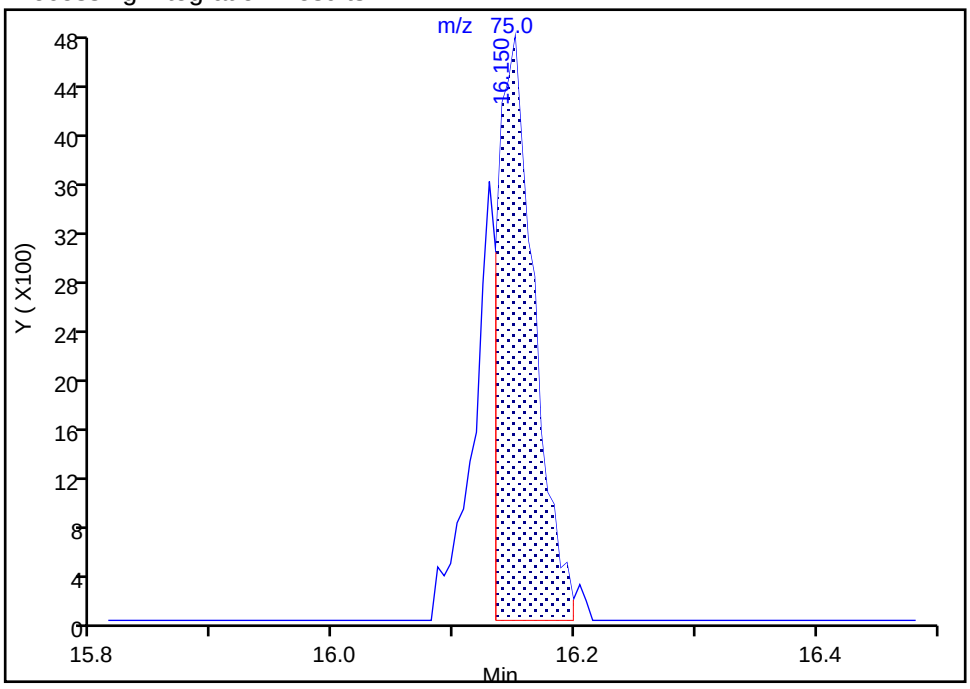
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

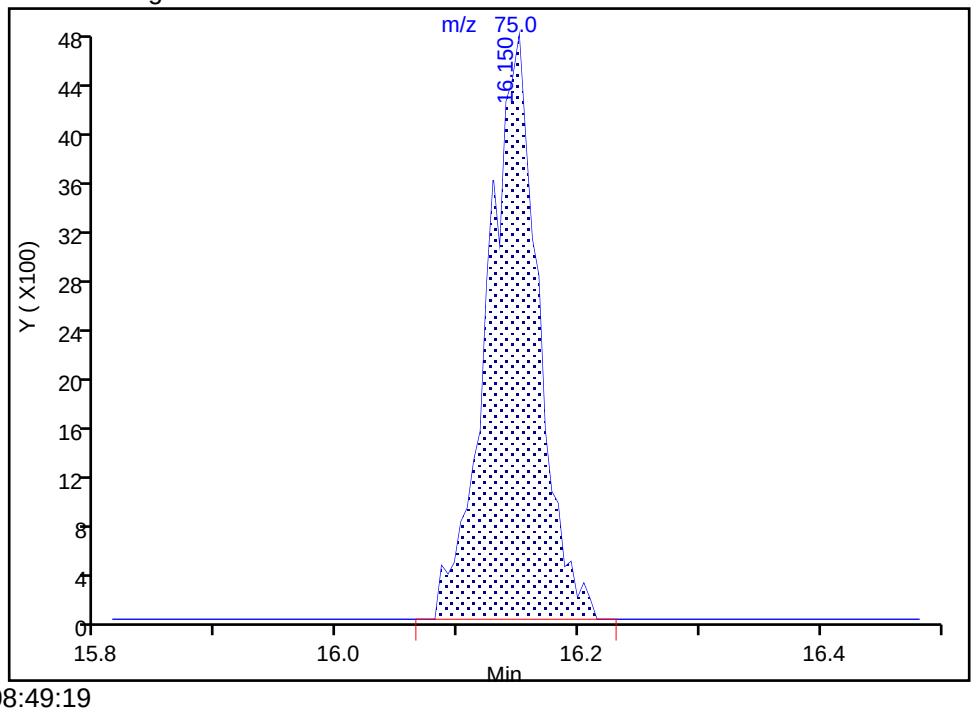
Processing Integration Results

RT: 16.15
Area: 9917
Amount: 0.212920
Amount Units: ppb v/v



Manual Integration Results

RT: 16.15
Area: 13967
Amount: 0.282355
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:49:19
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

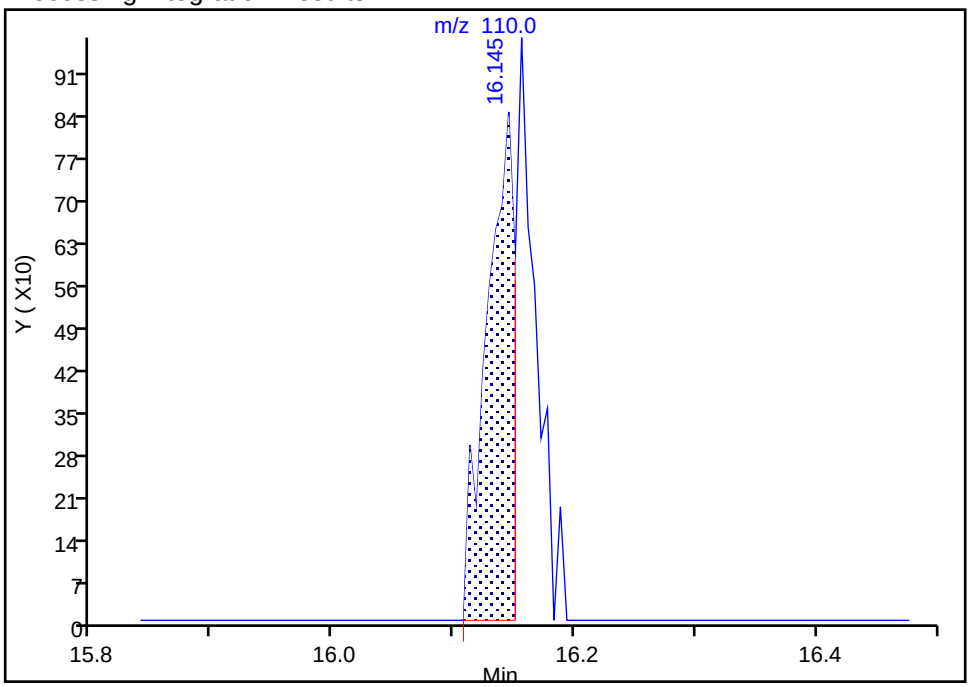
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D
Injection Date: 12-Apr-2018 18:21:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 2

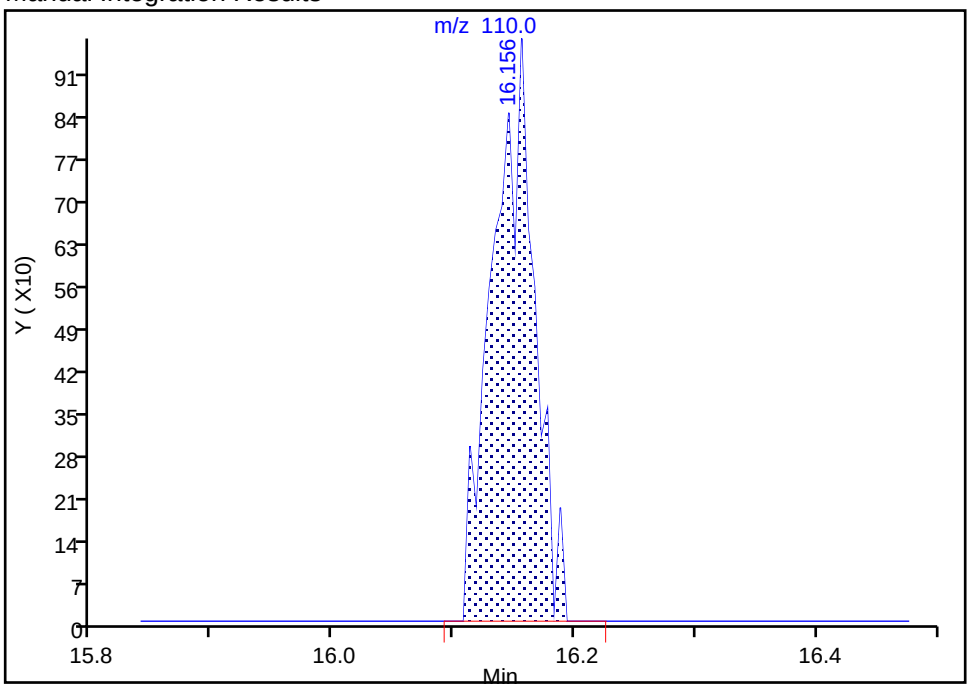
Processing Integration Results

RT: 16.15
Area: 1352
Amount: 0.212920
Amount Units: ppb v/v



Manual Integration Results

RT: 16.16
Area: 2319
Amount: 0.282355
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:49:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

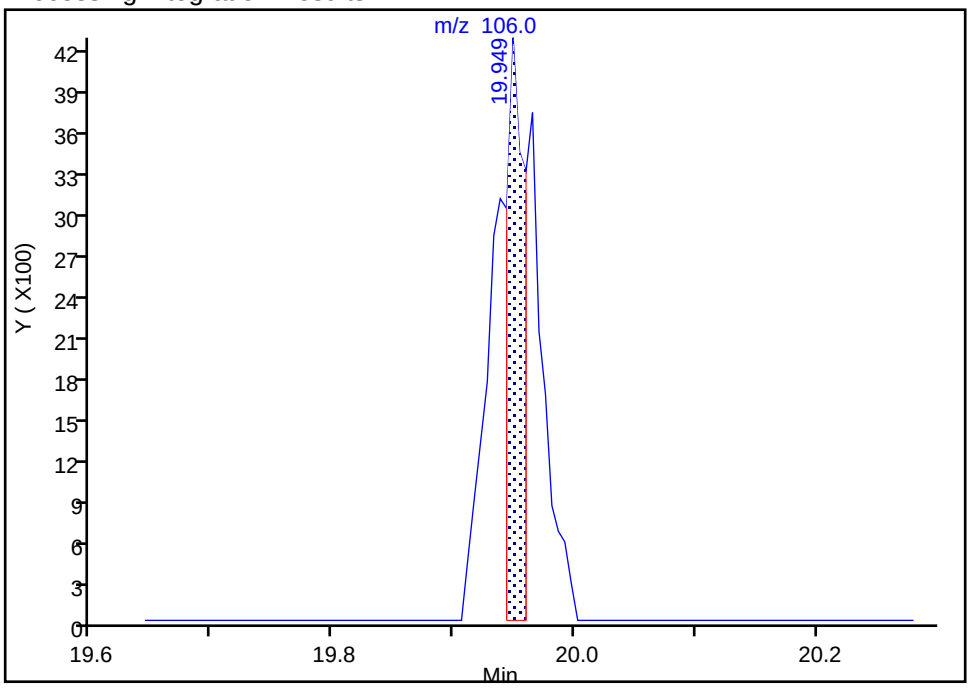
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_05.D				
Injection Date:	12-Apr-2018 18:21:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6

Signal: 1

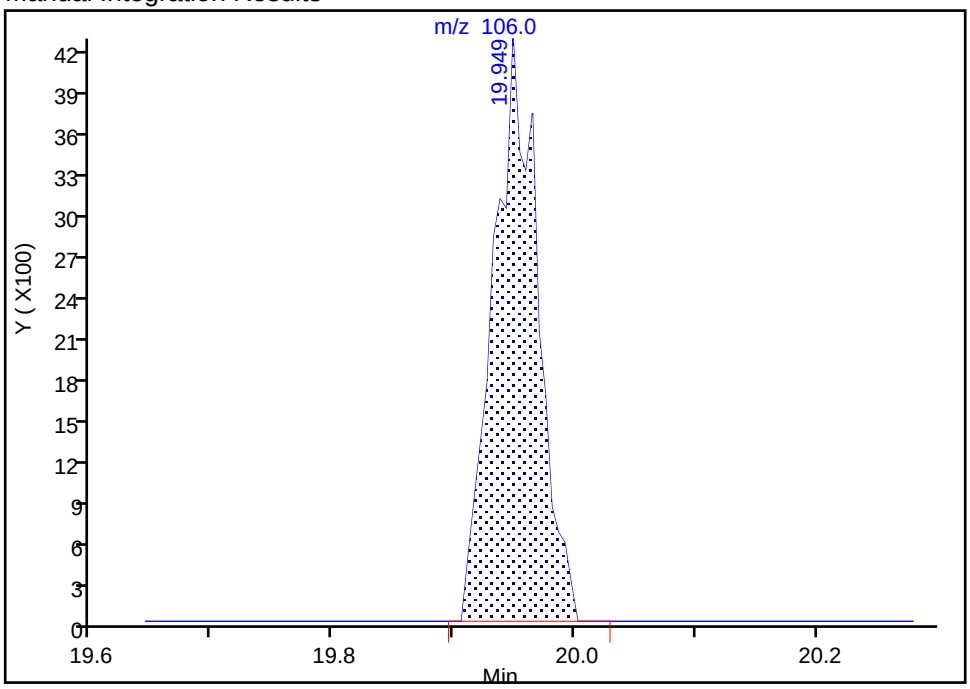
Processing Integration Results

RT: 19.95
Area: 4430
Amount: 0.094424
Amount Units: ppb v/v



Manual Integration Results

RT: 19.95
Area: 10821
Amount: 0.205349
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:49:40

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_06.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-Apr-2018 19:11:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-006
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:51 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:53:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.049	3.044	0.005	92	7473	0.5005	0.6589	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	25684	0.5005	0.5577	
3 Chlorodifluoromethane	51	3.162	3.156	0.006	97	13941	0.5005	0.5569	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	85	24269	0.5005	0.5353	
5 Chloromethane	50	3.493	3.488	0.005	99	7935	0.5005	0.5606	
6 Butane	43	3.664	3.664	0.000	99	14005	0.5005	0.5702	
7 Vinyl chloride	62	3.713	3.713	0.000	97	9344	0.5005	0.5516	
8 Butadiene	54	3.782	3.782	0.000	95	7450	0.5005	0.5747	
10 Bromomethane	94	4.413	4.413	0.000	97	9367	0.5005	0.5391	
11 Chloroethane	64	4.638	4.633	0.005	92	4474	0.5005	0.5533	
12 2-Methylbutane	43	4.686	4.697	-0.011	95	10480	0.5005	0.5923	
13 Vinyl bromide	106	4.997	4.996	0.000	95	9783	0.5005	0.5316	
14 Trichlorofluoromethane	101	5.082	5.093	-0.011	99	26467	0.5005	0.5281	
16 Pentane	43	5.205	5.221	-0.016	97	14910	0.5005	0.5599	
17 Ethanol	45	5.649	5.638	0.011	98	28123	5.01	5.08	
18 Ethyl ether	59	5.735	5.713	0.022	90	5567	0.5005	0.5376	
19 Acrolein	56	6.109	6.104	0.005	38	2920	0.5005	0.7188	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.109	-0.005	95	18865	0.5005	0.5421	
21 1,1-Dichloroethene	96	6.157	6.163	-0.006	98	8784	0.5005	0.5149	
22 Acetone	43	6.430	6.403	0.027	97	18880	0.5005	0.7252	
23 Carbon disulfide	76	6.553	6.548	0.005	97	22892	0.5005	0.5269	
24 Isopropyl alcohol	45	6.714	6.687	0.027	99	19470	0.5005	0.7361	
25 3-Chloro-1-propene	41	6.933	6.933	0.000	77	9354	0.5005	0.5406	M
26 Acetonitrile	41	7.083	7.083	0.000	95	6207	0.5005	0.5449	
27 Methylene Chloride	49	7.222	7.227	-0.005	93	10128	0.5005	0.5824	
28 2-Methyl-2-propanol	59	7.489	7.452	0.037	76	17972	0.5005	0.5038	
29 Methyl tert-butyl ether	73	7.650	7.623	0.027	97	25021	0.5005	0.5075	
31 trans-1,2-Dichloroethene	61	7.650	7.661	-0.011	91	12888	0.5005	0.5420	
32 Acrylonitrile	53	7.837	7.826	0.011	96	5830	0.5005	0.5298	
33 Hexane	57	8.024	8.035	-0.011	92	12957	0.5005	0.5424	
34 1,1-Dichloroethane	63	8.538	8.538	0.000	99	16126	0.5005	0.5217	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.624	8.618	0.006	99	21224	0.5005	0.5204	
S 30 1,2-Dichloroethene, Total	61				0		1.00	1.08	
37 cis-1,2-Dichloroethene	96	9.672	9.677	-0.005	94	10775	0.5005	0.5417	
38 2-Butanone (MEK)	72	9.752	9.742	0.010	97	5330	0.5005	0.5648	
39 Ethyl acetate	88	9.790	9.774	0.016	95	804	0.5005	0.5700	
* 40 Chlorobromomethane	128	10.159	10.164	-0.005	83	210198	10.0	10.0	
41 Tetrahydrofuran	42	10.196	10.170	0.026	93	11937	0.5005	0.5813	
42 Chloroform	83	10.287	10.298	-0.011	97	21872	0.5005	0.5249	
43 Cyclohexane	84	10.539	10.533	0.006	84	14347	0.5005	0.5294	M
44 1,1,1-Trichloroethane	97	10.582	10.582	0.000	95	22892	0.5005	0.5048	
45 Carbon tetrachloride	117	10.833	10.838	-0.005	98	25189	0.5005	0.5286	
46 Isooctane	57	11.282	11.288	-0.006	98	52067	0.5005	0.5182	
47 Benzene	78	11.331	11.336	-0.005	96	34252	0.5005	0.5260	
48 1,2-Dichloroethane	62	11.528	11.539	-0.011	97	15974	0.5005	0.5542	
49 n-Heptane	43	11.694	11.700	-0.006	90	19593	0.5005	0.5142	
* 50 1,4-Difluorobenzene	114	12.235	12.235	0.000	93	1109174	10.0	10.0	
52 n-Butanol	56	12.721	12.689	0.032	53	9213	0.5005	0.6622	
53 Trichloroethene	95	12.727	12.727	0.000	97	16211	0.5005	0.5061	
A 51 GRO	1	13.198	(4.687-21.708)		0	8896516	0.5005	0	
54 1,2-Dichloropropane	63	13.326	13.326	0.000	92	13421	0.5005	0.5314	
55 Methyl methacrylate	69	13.513	13.513	0.000	97	13469	0.5005	0.5353	
56 1,4-Dioxane	88	13.599	13.572	0.027	44	9201	0.5005	0.6171	
57 Dibromomethane	174	13.593	13.599	-0.006	87	18624	0.5005	0.5115	
58 Dichlorobromomethane	83	13.904	13.914	-0.010	99	25866	0.5005	0.5094	
60 cis-1,3-Dichloropropene	75	14.888	14.893	-0.005	93	20040	0.5005	0.5087	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	12179846	0.5005	0	
61 4-Methyl-2-pentanone (MIBK	43	15.220	15.204	0.016	98	29252	0.5005	0.5436	
65 Toluene	92	15.493	15.503	-0.010	93	27489	0.5005	0.5164	
64 n-Octane	43	15.557	15.557	0.000	92	29079	0.5005	0.5149	
66 trans-1,3-Dichloropropene	75	16.140	16.145	-0.005	93	22395	0.5005	0.5085	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	97	13217	0.5005	0.5108	M
68 Tetrachloroethene	166	16.627	16.632	-0.005	96	27582	0.5005	0.5057	
69 2-Hexanone	43	17.039	17.017	0.022	94	30943	0.5005	0.5843	
71 Chlorodibromomethane	129	17.344	17.338	0.006	99	27897	0.5005	0.4918	
72 Ethylene Dibromide	107	17.616	17.616	0.000	100	25213	0.5005	0.5047	
* 74 Chlorobenzene-d5	117	18.563	18.563	0.000	84	1038930	10.0	10.0	
75 Chlorobenzene	112	18.622	18.628	-0.006	96	38343	0.5005	0.4982	
76 Ethylbenzene	91	18.793	18.793	0.000	97	60180	0.5005	0.5032	
77 n-Nonane	57	18.922	18.927	-0.005	88	27555	0.5005	0.5155	
78 m-Xylene & p-Xylene	106	19.050	19.061	-0.011	0	48886	1.00	1.00	
S 73 Xylenes, Total	106				0		1.50	1.50	
79 o-Xylene	106	19.949	19.954	-0.005	97	24621	0.5005	0.5041	
80 Styrene	104	20.008	20.013	-0.005	94	35919	0.5005	0.4782	
81 Bromoform	173	20.484	20.484	0.000	97	24470	0.5005	0.4492	
82 Isopropylbenzene	105	20.709	20.714	-0.005	95	69831	0.5005	0.4966	
84 1,1,2,2-Tetrachloroethane	83	21.436	21.441	-0.005	98	34974	0.5005	0.5108	
85 N-Propylbenzene	91	21.500	21.500	0.000	99	83511	0.5005	0.5013	
86 1,2,3-Trichloropropane	75	21.538	21.543	-0.005	96	29095	0.5005	0.5450	
87 n-Decane	57	21.698	21.698	0.000	92	33101	0.5005	0.4989	
88 4-Ethyltoluene	105	21.704	21.709	-0.005	96	70309	0.5005	0.4990	
89 2-Chlorotoluene	91	21.714	21.714	0.000	95	56561	0.5005	0.4915	
90 1,3,5-Trimethylbenzene	105	21.821	21.821	0.000	93	58124	0.5005	0.4987	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.212	22.217	-0.005	88	29163	0.5005	0.4854	
92 tert-Butylbenzene	119	22.346	22.346	0.000	95	57421	0.5005	0.5036	
93 1,2,4-Trimethylbenzene	105	22.442	22.447	-0.005	97	58309	0.5005	0.5029	
94 sec-Butylbenzene	105	22.688	22.688	0.000	99	82594	0.5005	0.4921	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	97	70333	0.5005	0.4855	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	95	44230	0.5005	0.4936	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	95	45310	0.5005	0.4980	
98 Benzyl chloride	91	23.282	23.282	0.000	100	48148	0.5005	0.5092	
100 n-Butylbenzene	91	23.496	23.496	0.000	96	62888	0.5005	0.4913	
99 Undecane	57	23.528	23.528	0.000	96	31798	0.5005	0.4909	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	97	42489	0.5005	0.5059	
102 Dodecane	57	25.154	25.149	0.005	98	24641	0.5005	0.5606	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	92	35011	0.5005	0.5491	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	97	31270	0.5005	0.4792	
105 Naphthalene	128	26.679	26.684	-0.005	99	84759	0.5005	0.6495	
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	95	28926	0.5005	0.5186	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL2w_00263	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

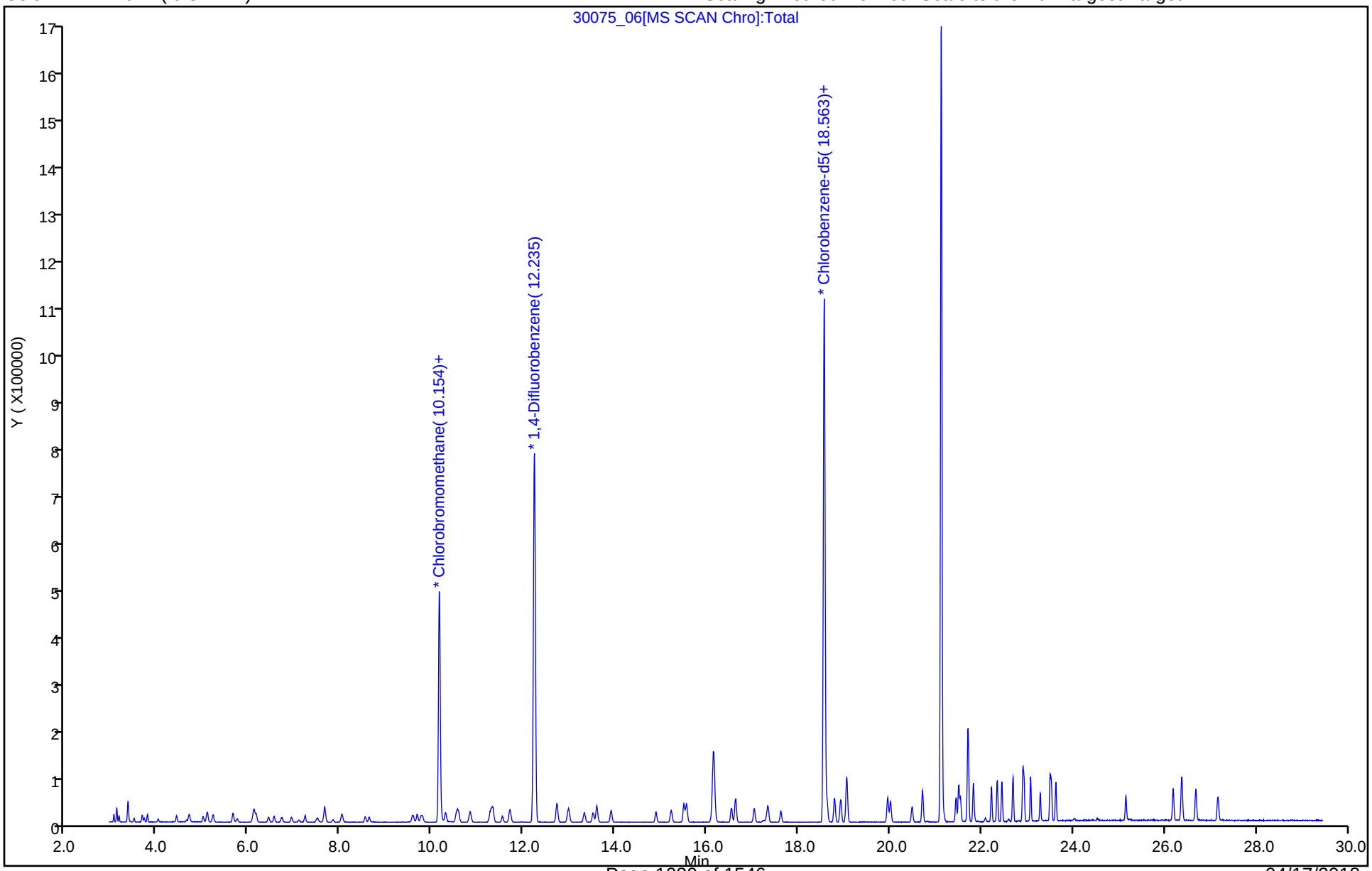
Report Date: 13-Apr-2018 09:12:52 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_06.D

Injection Date:	12-Apr-2018 19:11:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

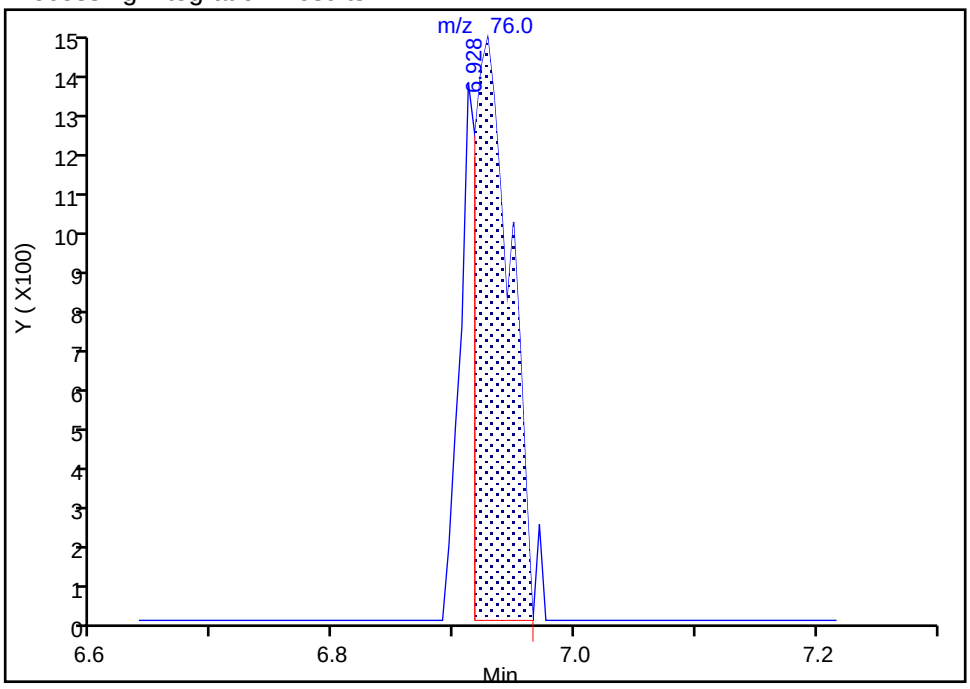
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_06.D				
Injection Date:	12-Apr-2018 19:11:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

25 3-Chloro-1-propene, CAS: 107-05-1

Signal: 2

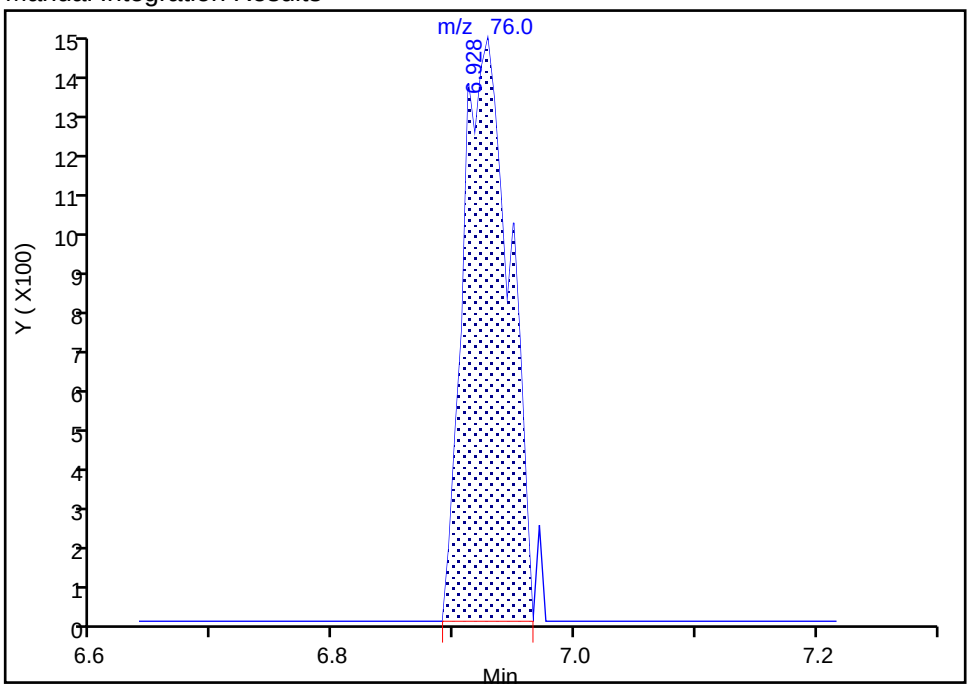
Processing Integration Results

RT: 6.93
Area: 2852
Amount: 0.335355
Amount Units: ppb v/v



Manual Integration Results

RT: 6.93
Area: 3703
Amount: 0.540554
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:51:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

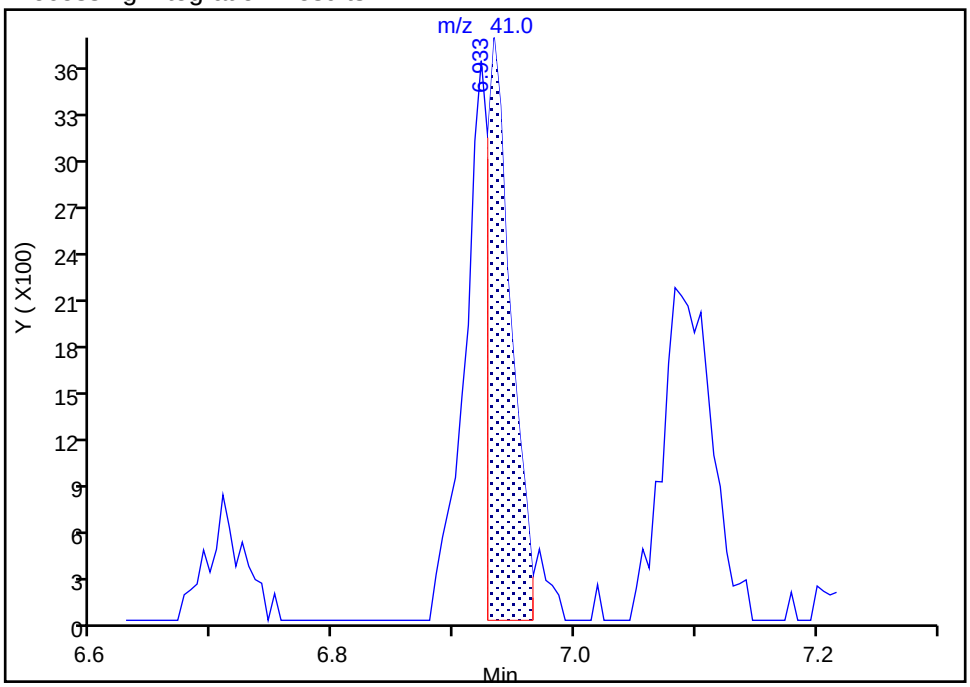
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_06.D
Injection Date: 12-Apr-2018 19:11:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

25 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

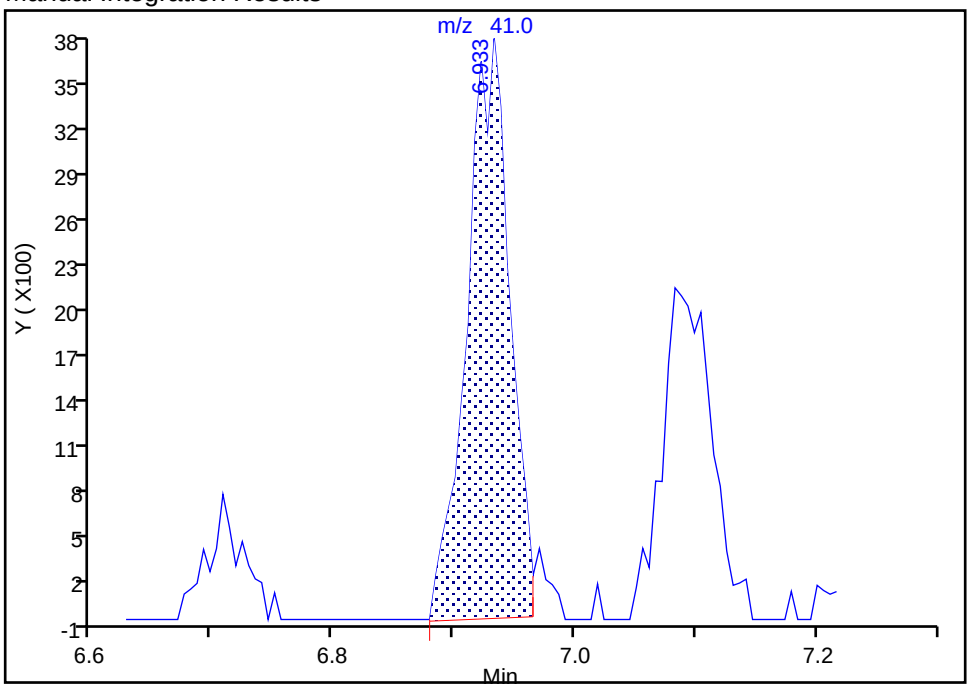
Processing Integration Results

RT: 6.93
Area: 5319
Amount: 0.335355
Amount Units: ppb v/v



Manual Integration Results

RT: 6.93
Area: 9354
Amount: 0.540554
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:51:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

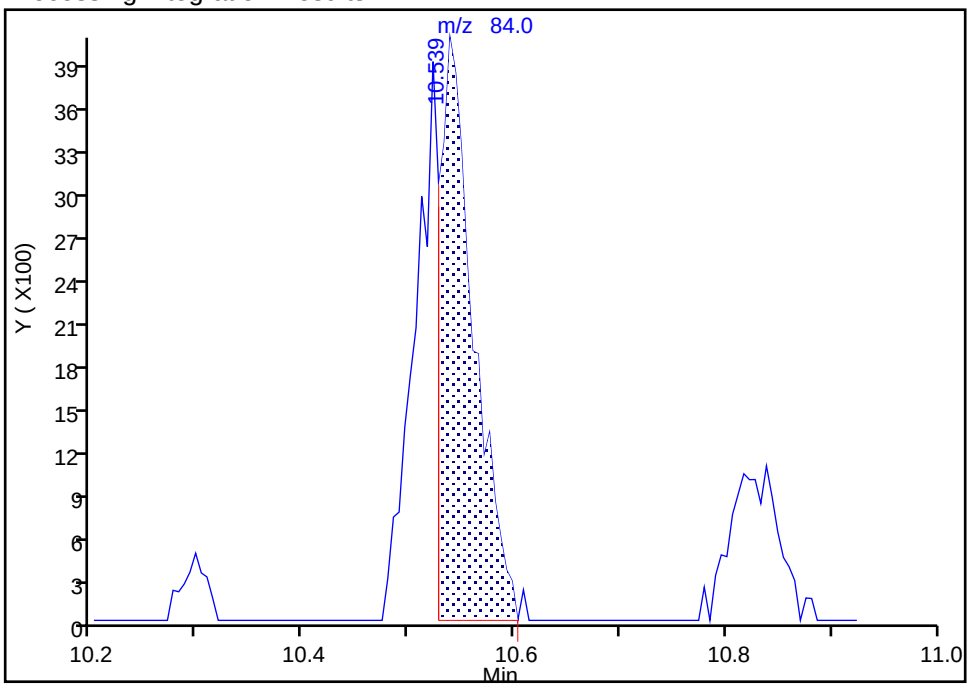
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_06.D
Injection Date: 12-Apr-2018 19:11:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

43 Cyclohexane, CAS: 110-82-7

Signal: 1

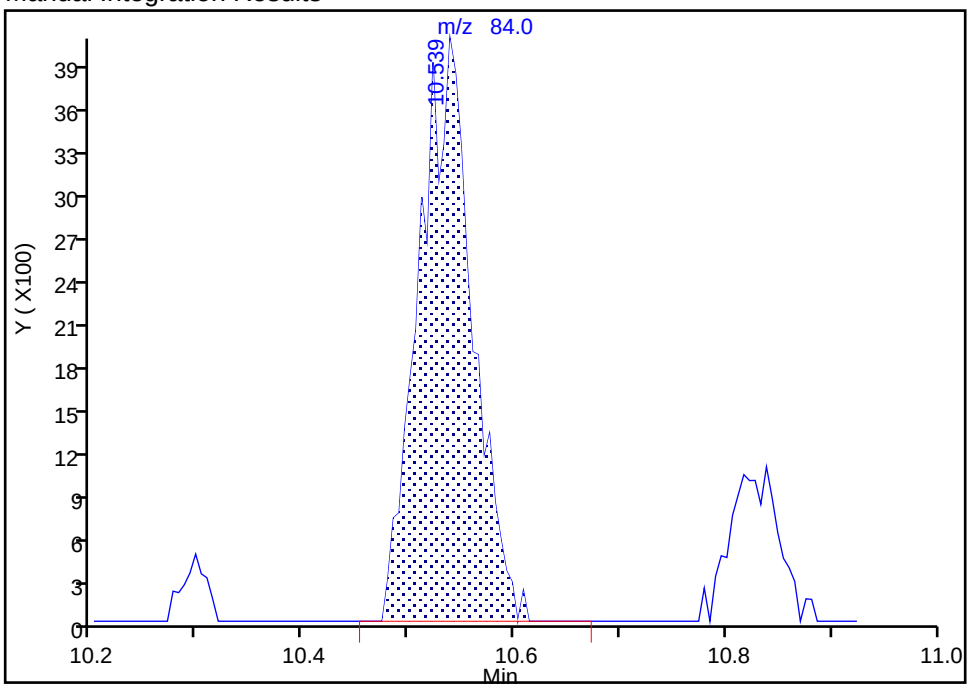
Processing Integration Results

RT: 10.54
Area: 9054
Amount: 0.353223
Amount Units: ppb v/v



Manual Integration Results

RT: 10.54
Area: 14347
Amount: 0.529377
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:52:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

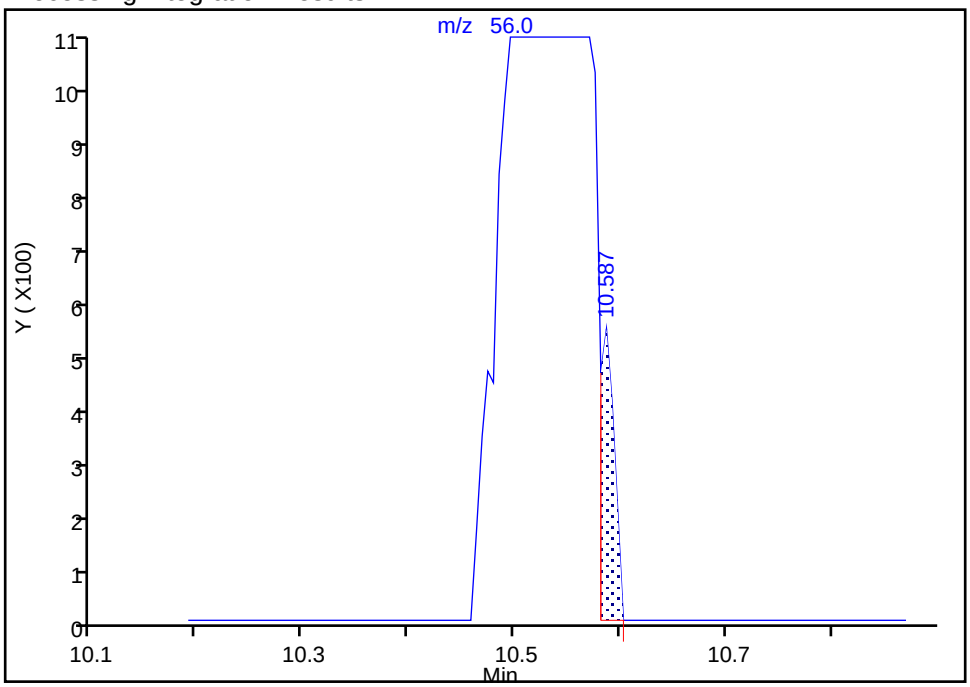
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_06.D				
Injection Date:	12-Apr-2018 19:11:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 2

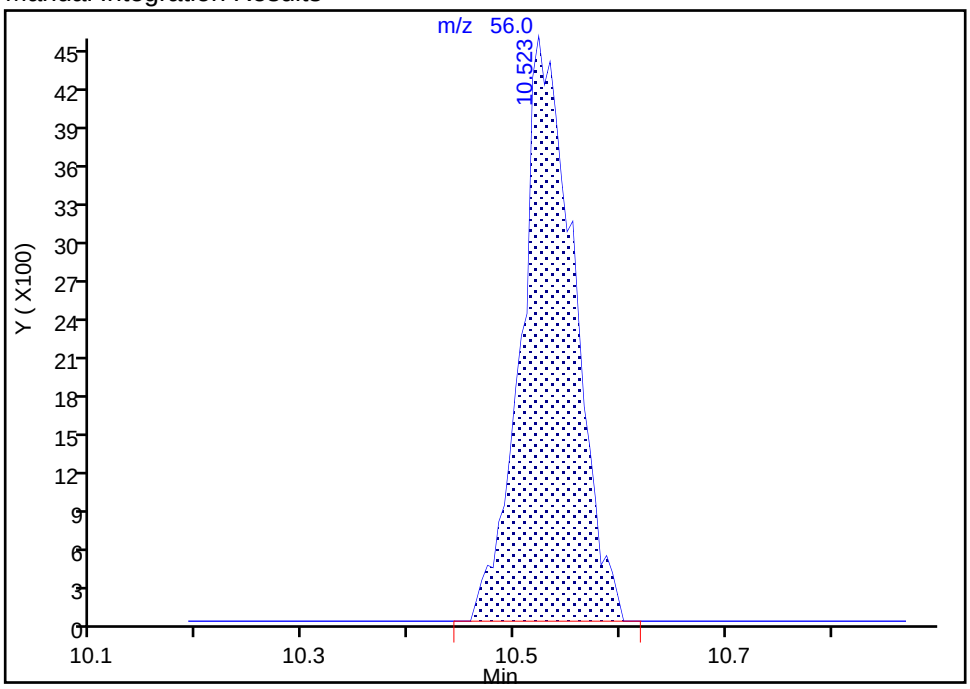
Processing Integration Results

RT: 10.59
Area: 486
Amount: 0.353223
Amount Units: ppb v/v



Manual Integration Results

RT: 10.52
Area: 15993
Amount: 0.529377
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:52:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

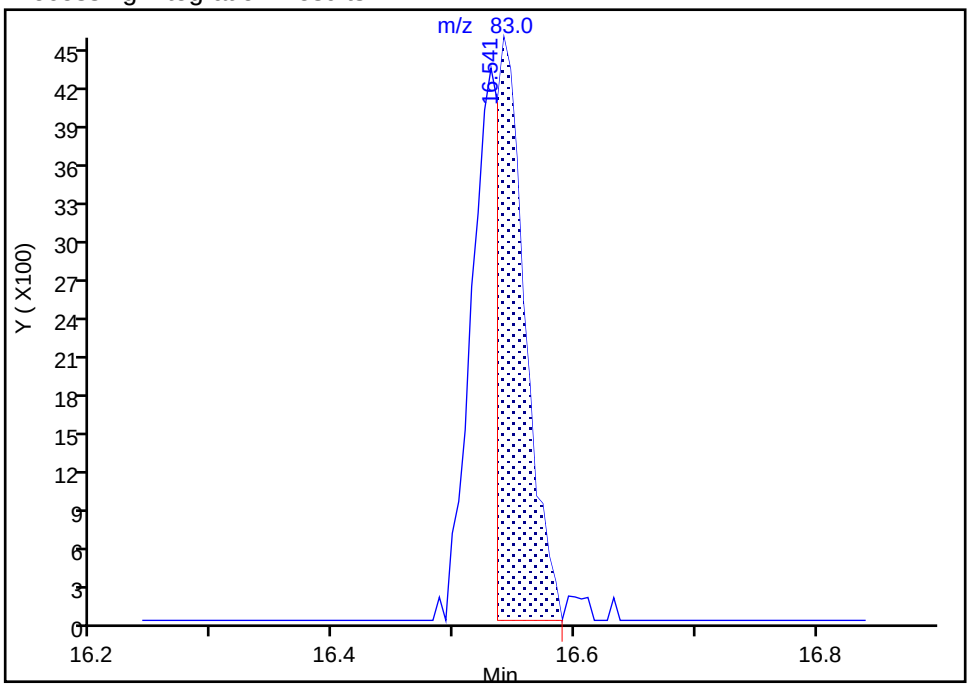
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_06.D				
Injection Date:	12-Apr-2018 19:11:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

67 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

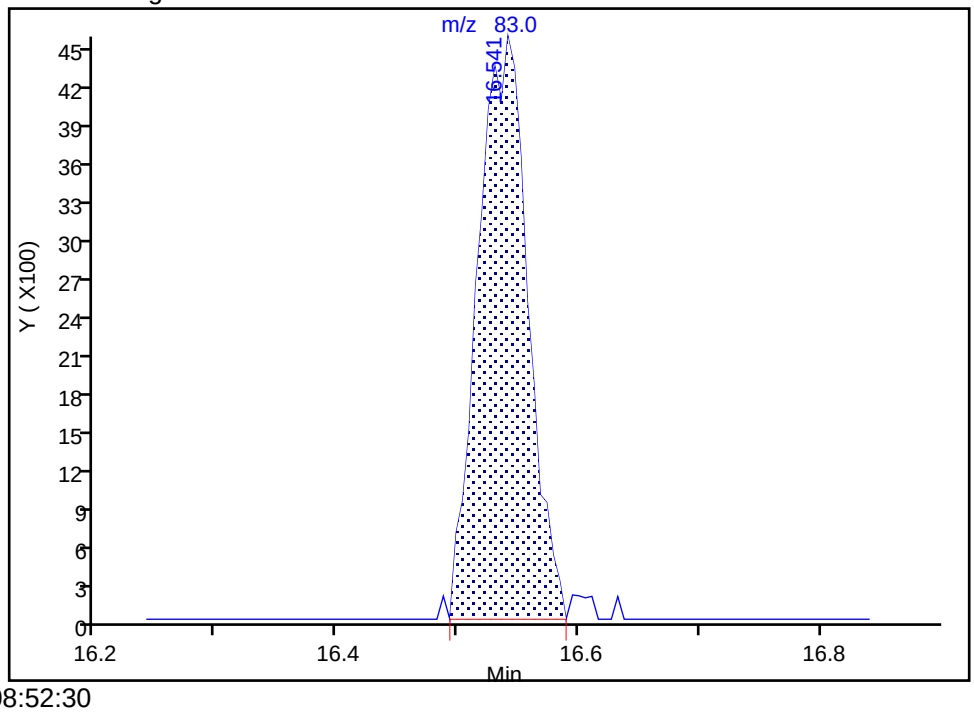
Processing Integration Results

RT: 16.54
Area: 7641
Amount: 0.313839
Amount Units: ppb v/v



Manual Integration Results

RT: 16.54
Area: 13217
Amount: 0.510808
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:52:30

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

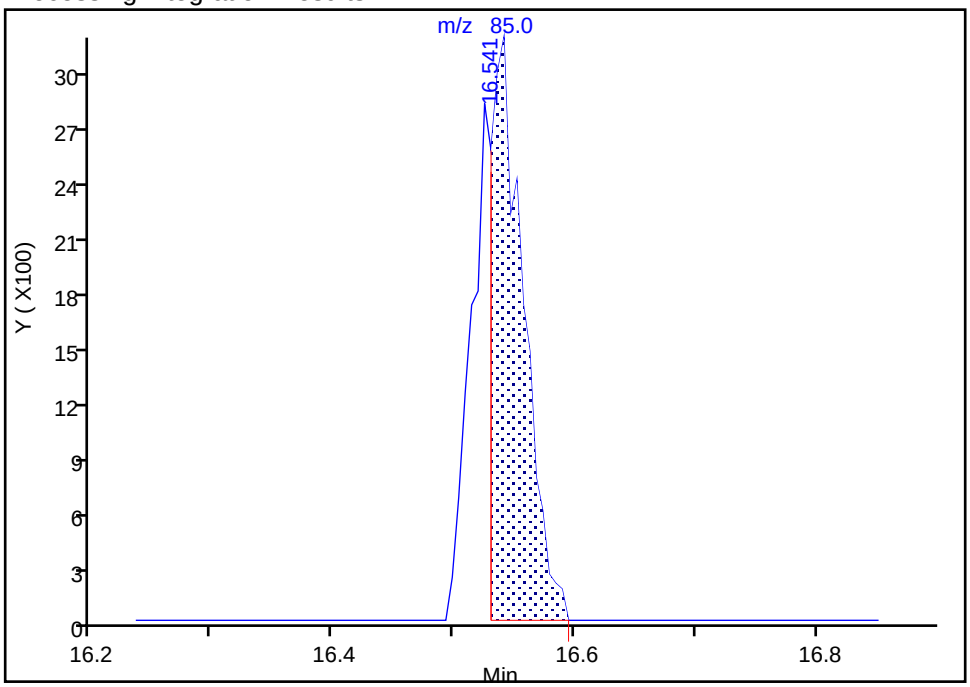
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_06.D				
Injection Date:	12-Apr-2018 19:11:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

67 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 3

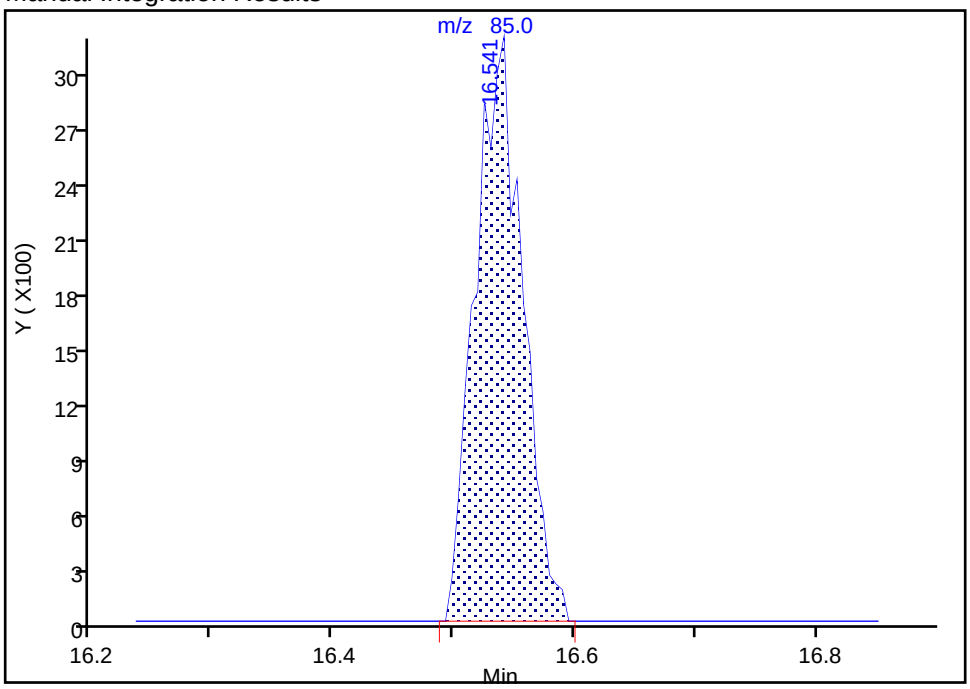
Processing Integration Results

RT: 16.54
Area: 5879
Amount: 0.313839
Amount Units: ppb v/v



Manual Integration Results

RT: 16.54
Area: 8573
Amount: 0.510808
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:52:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_07.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-Apr-2018 20:01:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-007
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:53 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:56:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.049	3.044	0.005	99	57075	4.99	5.36	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	202190	4.99	4.67	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	119333	4.99	5.08	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	91	207267	4.99	4.87	
5 Chloromethane	50	3.488	3.488	0.000	99	71735	4.99	5.40	
6 Butane	43	3.670	3.664	0.006	98	117966	4.99	5.11	
7 Vinyl chloride	62	3.712	3.713	-0.001	98	80997	4.99	5.09	
8 Butadiene	54	3.782	3.782	0.000	97	60095	4.99	4.94	
10 Bromomethane	94	4.419	4.413	0.006	99	80016	4.99	4.90	
11 Chloroethane	64	4.633	4.633	0.000	99	37153	4.99	4.89	
12 2-Methylbutane	43	4.691	4.697	-0.006	92	79680	4.99	4.79	
13 Vinyl bromide	106	4.996	4.996	0.000	99	81508	4.99	4.72	
14 Trichlorofluoromethane	101	5.087	5.093	-0.006	98	228433	4.99	4.85	
16 Pentane	43	5.221	5.221	0.000	98	125309	4.99	5.01	
17 Ethanol	45	5.644	5.638	0.006	98	49922	10.0	9.60	
18 Ethyl ether	59	5.719	5.713	0.006	97	48090	4.99	4.94	
19 Acrolein	56	6.104	6.104	0.000	37	13530	4.99	3.55	
20 1,1,2-Trichloro-1,2,2-trif	101	6.109	6.109	0.000	94	151511	4.99	4.64	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	98	72974	4.99	4.55	
22 Acetone	43	6.409	6.403	0.006	98	159150	4.99	6.51	
23 Carbon disulfide	76	6.548	6.548	0.000	99	196029	4.99	4.80	
24 Isopropyl alcohol	45	6.687	6.687	0.000	100	126727	4.99	5.10	
25 3-Chloro-1-propene	41	6.933	6.933	0.000	98	83949	4.99	5.17	
26 Acetonitrile	41	7.083	7.083	0.000	99	56464	4.99	5.28	
27 Methylene Chloride	49	7.227	7.227	0.000	92	79214	4.99	4.85	
28 2-Methyl-2-propanol	59	7.463	7.452	0.011	94	165979	4.99	4.95	
29 Methyl tert-butyl ether	73	7.628	7.623	0.005	96	223601	4.99	4.83	
31 trans-1,2-Dichloroethene	61	7.655	7.661	-0.006	98	108518	4.99	4.86	
32 Acrylonitrile	53	7.832	7.826	0.006	96	49128	4.99	4.75	
33 Hexane	57	8.035	8.035	0.000	94	106993	4.99	4.77	
34 1,1-Dichloroethane	63	8.543	8.538	0.005	100	139384	4.99	4.80	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.618	8.618	0.000	100	190575	4.99	4.98	
S 30 1,2-Dichloroethene, Total	61				0		9.99	9.64	
37 cis-1,2-Dichloroethene	96	9.677	9.677	0.000	93	89326	4.99	4.78	
38 2-Butanone (MEK)	72	9.742	9.742	0.000	99	42850	4.99	4.83	
39 Ethyl acetate	88	9.774	9.774	0.000	97	6468	4.99	4.88	
* 40 Chlorobromomethane	128	10.159	10.164	-0.005	84	197412	10.0	10.0	
41 Tetrahydrofuran	42	10.180	10.170	0.010	94	95949	4.99	5.05	
42 Chloroform	83	10.298	10.298	0.000	96	185908	4.99	4.75	
43 Cyclohexane	84	10.539	10.533	0.006	97	117107	4.99	4.67	M
44 1,1,1-Trichloroethane	97	10.571	10.582	-0.011	94	201702	4.99	4.80	
45 Carbon tetrachloride	117	10.833	10.838	-0.005	98	213336	4.99	4.84	
46 Isooctane	57	11.282	11.288	-0.006	99	443920	4.99	4.77	
47 Benzene	78	11.330	11.336	-0.006	96	283337	4.99	4.70	
48 1,2-Dichloroethane	62	11.534	11.539	-0.005	98	130720	4.99	4.90	
49 n-Heptane	43	11.700	11.700	0.000	95	170895	4.99	4.84	
* 50 1,4-Difluorobenzene	114	12.234	12.235	-0.001	93	1026725	10.0	10.0	
52 n-Butanol	56	12.695	12.689	0.006	91	65677	4.99	5.10	
53 Trichloroethene	95	12.727	12.727	0.000	97	134421	4.99	4.53	
A 51 GRO	1	13.198	(4.687-21.708)		0	45101290	4.99	0	
54 1,2-Dichloropropane	63	13.320	13.326	-0.006	92	111467	4.99	4.77	
55 Methyl methacrylate	69	13.513	13.513	0.000	95	106911	4.99	4.59	
56 1,4-Dioxane	88	13.577	13.572	0.005	91	65781	4.99	4.77	
57 Dibromomethane	174	13.599	13.599	0.000	91	152843	4.99	4.53	
58 Dichlorobromomethane	83	13.914	13.914	0.000	98	219104	4.99	4.66	
60 cis-1,3-Dichloropropene	75	14.893	14.893	0.000	92	174278	4.99	4.78	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	71002642	4.99	0	
61 4-Methyl-2-pentanone (MIBK	43	15.204	15.204	0.000	97	241615	4.99	4.85	
65 Toluene	92	15.503	15.503	0.000	93	231738	4.99	4.68	
64 n-Octane	43	15.557	15.557	0.000	93	259610	4.99	4.97	
66 trans-1,3-Dichloropropene	75	16.145	16.145	0.000	97	176572	4.99	4.33	
67 1,1,2-Trichloroethane	83	16.536	16.541	-0.005	97	111005	4.99	4.61	
68 Tetrachloroethene	166	16.627	16.632	-0.005	97	227942	4.99	4.49	
69 2-Hexanone	43	17.017	17.017	0.000	93	234170	4.99	4.75	
71 Chlorodibromomethane	129	17.338	17.338	0.000	98	221629	4.99	4.20	
72 Ethylene Dibromide	107	17.616	17.616	0.000	99	218422	4.99	4.70	
* 74 Chlorobenzene-d5	117	18.563	18.563	0.000	85	966525	10.0	10.0	
75 Chlorobenzene	112	18.627	18.628	-0.001	96	328384	4.99	4.59	
76 Ethylbenzene	91	18.793	18.793	0.000	98	522134	4.99	4.69	
77 n-Nonane	57	18.922	18.927	-0.005	91	235730	4.99	4.74	
78 m-Xylene & p-Xylene	106	19.055	19.061	-0.006	0	428892	9.99	9.41	
S 73 Xylenes, Total	106				0		15.0	14.1	
79 o-Xylene	106	19.949	19.954	-0.005	99	212302	4.99	4.67	
80 Styrene	104	20.013	20.013	0.000	96	322019	4.99	4.61	
81 Bromoform	173	20.484	20.484	0.000	99	165502	4.99	3.27	
82 Isopropylbenzene	105	20.714	20.714	0.000	95	609836	4.99	4.66	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	98	297635	4.99	4.67	
85 N-Propylbenzene	91	21.500	21.500	0.000	100	730773	4.99	4.72	
86 1,2,3-Trichloropropane	75	21.538	21.543	-0.005	96	232011	4.99	4.67	
87 n-Decane	57	21.698	21.698	0.000	91	310492	4.99	5.03	
88 4-Ethyltoluene	105	21.709	21.709	0.000	97	619737	4.99	4.73	
89 2-Chlorotoluene	91	21.714	21.714	0.000	96	501677	4.99	4.69	
90 1,3,5-Trimethylbenzene	105	21.821	21.821	0.000	94	517937	4.99	4.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	91	260784	4.99	4.67	
92 tert-Butylbenzene	119	22.345	22.346	-0.001	95	506436	4.99	4.77	
93 1,2,4-Trimethylbenzene	105	22.447	22.447	0.000	97	517789	4.99	4.80	
94 sec-Butylbenzene	105	22.688	22.688	0.000	99	757605	4.99	4.85	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	97	652975	4.99	4.85	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	95	387060	4.99	4.64	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	97	388579	4.99	4.59	
98 Benzyl chloride	91	23.282	23.282	0.000	99	382651	4.99	4.35	
100 n-Butylbenzene	91	23.496	23.496	0.000	98	577070	4.99	4.85	
99 Undecane	57	23.528	23.528	0.000	97	302543	4.99	5.02	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	98	365213	4.99	4.67	
102 Dodecane	57	25.149	25.149	0.000	96	198483	4.99	4.85	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	94	244735	4.99	4.13	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	96	284342	4.99	4.68	
105 Naphthalene	128	26.684	26.684	0.000	99	460595	4.99	3.79	M
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	96	220069	4.99	4.24	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL3w_00194	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

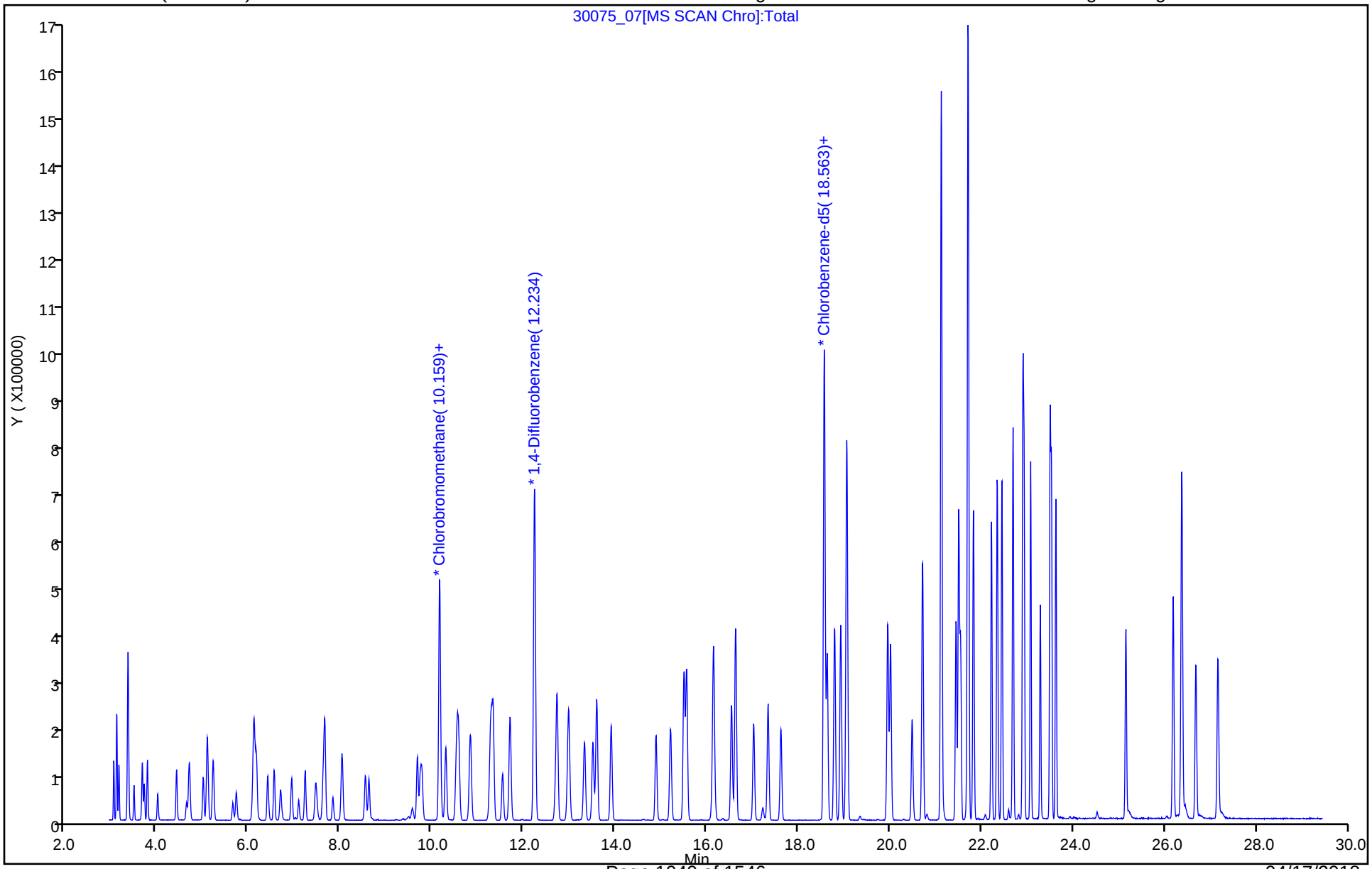
Report Date: 13-Apr-2018 09:12:53 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_07.D

Injection Date:	12-Apr-2018 20:01:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

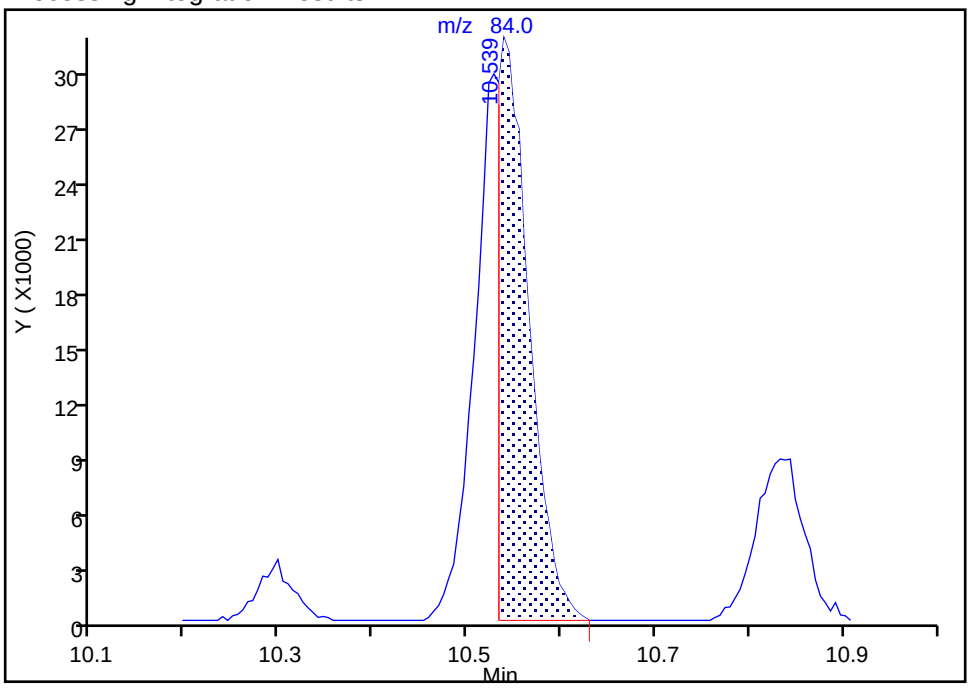
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_07.D
Injection Date: 12-Apr-2018 20:01:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

43 Cyclohexane, CAS: 110-82-7

Signal: 1

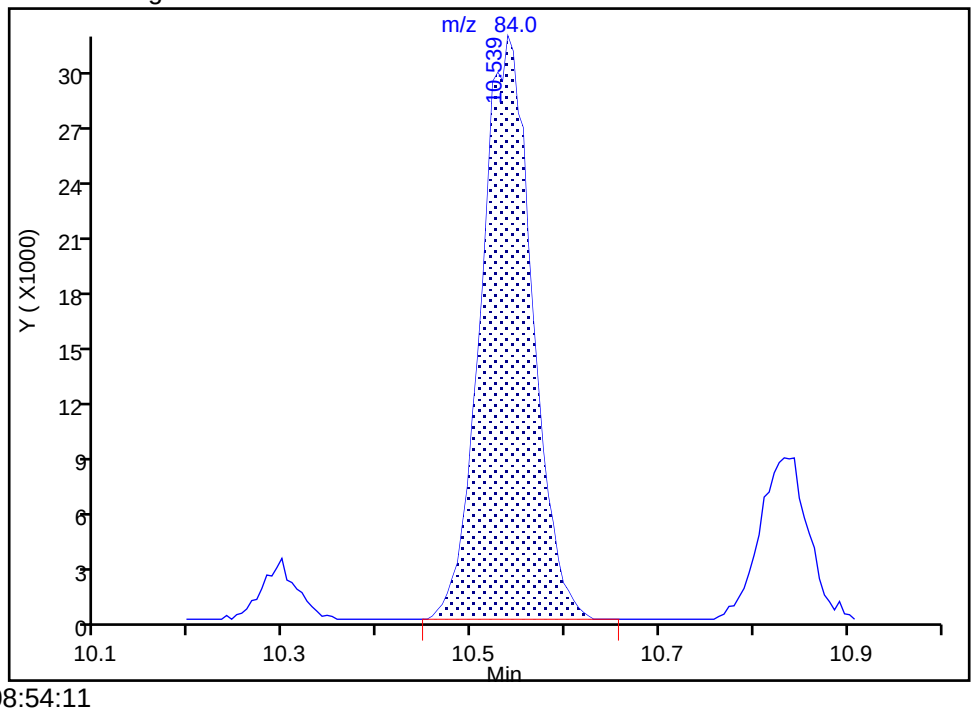
Processing Integration Results

RT: 10.54
Area: 71012
Amount: 2.987698
Amount Units: ppb v/v



Manual Integration Results

RT: 10.54
Area: 117107
Amount: 4.668017
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:54:11
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

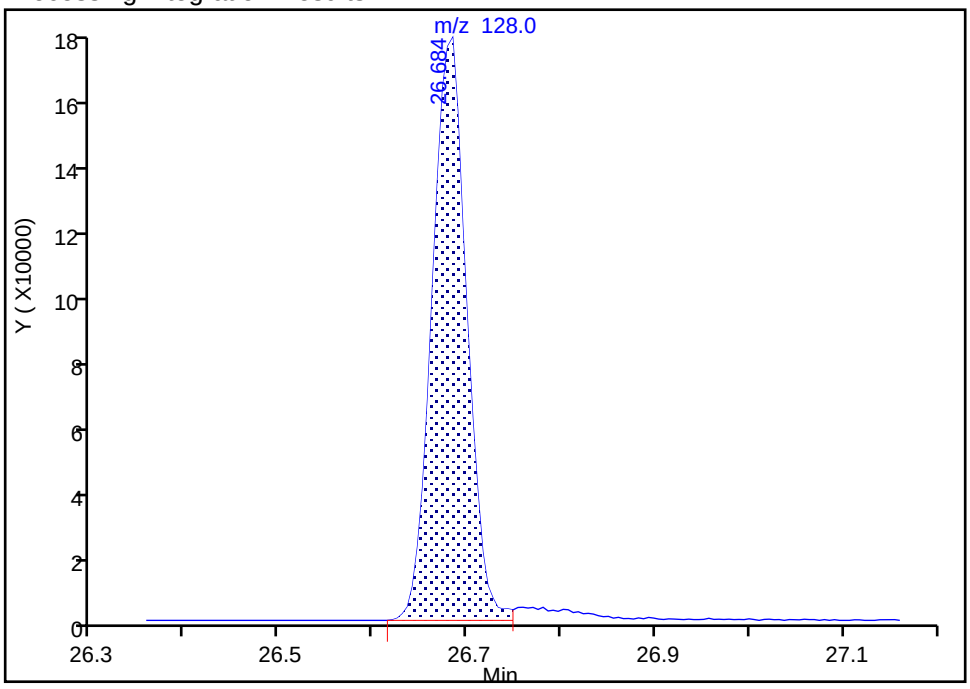
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_07.D				
Injection Date:	12-Apr-2018 20:01:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

Signal: 1

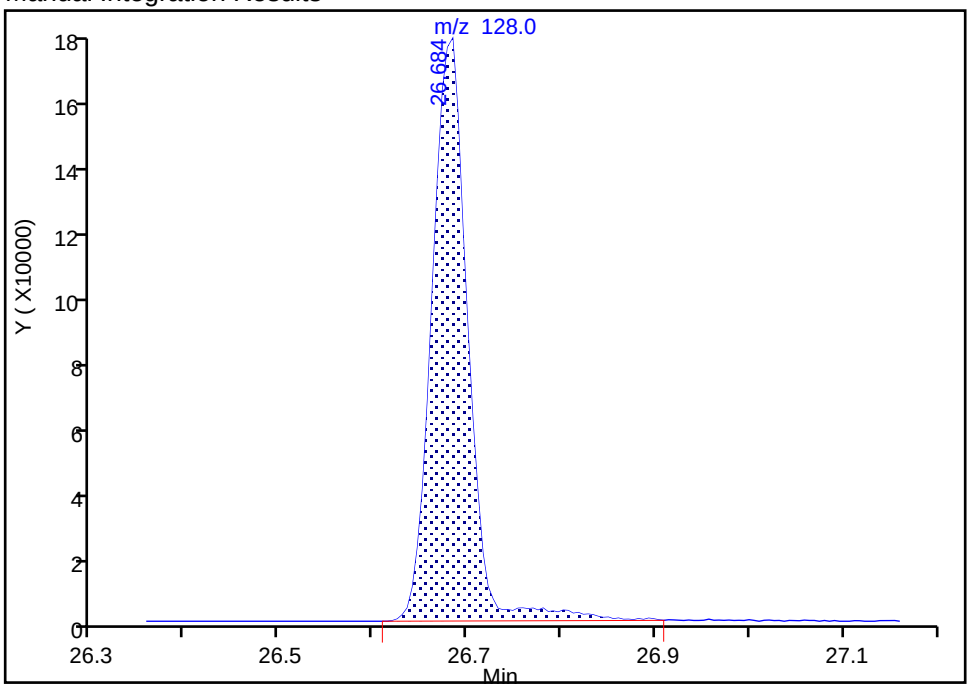
Processing Integration Results

RT: 26.68
Area: 444237
Amount: 3.675544
Amount Units: ppb v/v



Manual Integration Results

RT: 26.68
Area: 460595
Amount: 3.793746
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 08:56:31

Audit Action: Manually Integrated Audit Reason: Peak Tail

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_08.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 12-Apr-2018 20:51:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-008
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:54 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:40:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	98	114388	10.0	10.5	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	452052	10.0	10.2	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	244375	10.0	10.2	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	87	433020	10.0	9.94	
5 Chloromethane	50	3.488	3.488	0.000	99	134577	10.0	9.90	
6 Butane	43	3.664	3.664	0.000	98	242230	10.0	10.3	
7 Vinyl chloride	62	3.713	3.713	0.000	98	167007	10.0	10.3	
8 Butadiene	54	3.782	3.782	0.000	97	126258	10.0	10.1	
10 Bromomethane	94	4.413	4.413	0.000	99	164695	10.0	9.87	
11 Chloroethane	64	4.633	4.633	0.000	99	78435	10.0	10.1	
12 2-Methylbutane	43	4.697	4.697	0.000	93	166431	10.0	9.79	
13 Vinyl bromide	106	4.996	4.996	0.000	98	172788	10.0	9.77	
14 Trichlorofluoromethane	101	5.093	5.093	0.000	99	475936	10.0	9.89	
16 Pentane	43	5.221	5.221	0.000	98	257297	10.0	10.1	
17 Ethanol	45	5.638	5.638	0.000	98	90684	15.0	17.0	
18 Ethyl ether	59	5.713	5.713	0.000	95	98519	10.0	9.90	
19 Acrolein	56	6.104	6.104	0.000	62	49262	10.0	12.6	
20 1,1,2-Trichloro-1,2,2-trif	101	6.109	6.109	0.000	94	322077	10.0	9.63	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	98	154393	10.0	9.42	
22 Acetone	43	6.403	6.403	0.000	99	249873	10.0	9.99	
23 Carbon disulfide	76	6.548	6.548	0.000	99	410319	10.0	9.83	
24 Isopropyl alcohol	45	6.687	6.687	0.000	100	275660	10.0	10.8	
25 3-Chloro-1-propene	41	6.933	6.933	0.000	98	147594	10.0	8.88	
26 Acetonitrile	41	7.083	7.083	0.000	99	114105	10.0	10.4	
27 Methylene Chloride	49	7.227	7.227	0.000	92	167858	10.0	10.0	
28 2-Methyl-2-propanol	59	7.452	7.452	0.000	93	357180	10.0	10.4	
29 Methyl tert-butyl ether	73	7.623	7.623	0.000	96	480580	10.0	10.1	
31 trans-1,2-Dichloroethene	61	7.661	7.661	0.000	97	226333	10.0	9.91	
32 Acrylonitrile	53	7.826	7.826	0.000	96	108159	10.0	10.2	
33 Hexane	57	8.035	8.035	0.000	94	228217	10.0	9.94	
34 1,1-Dichloroethane	63	8.538	8.538	0.000	100	293024	10.0	9.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.618	8.618	0.000	100	410059	10.0	10.5	
S 30 1,2-Dichloroethene, Total	61				0		20.0	20.0	
37 cis-1,2-Dichloroethene	96	9.677	9.677	0.000	92	193010	10.0	10.1	
38 2-Butanone (MEK)	72	9.742	9.742	0.000	99	88891	10.0	9.80	
39 Ethyl acetate	88	9.774	9.774	0.000	98	13741	10.0	10.1	
* 40 Chlorobromomethane	128	10.164	10.164	0.000	86	201948	10.0	10.0	
41 Tetrahydrofuran	42	10.170	10.170	0.000	92	199955	10.0	10.3	
42 Chloroform	83	10.298	10.298	0.000	96	396014	10.0	9.89	
43 Cyclohexane	84	10.533	10.533	0.000	97	248048	10.0	9.71	
44 1,1,1-Trichloroethane	97	10.582	10.582	0.000	94	434942	10.0	10.2	
45 Carbon tetrachloride	117	10.838	10.838	0.000	98	471850	10.0	10.5	
46 Isooctane	57	11.288	11.288	0.000	99	941840	10.0	9.94	
47 Benzene	78	11.336	11.336	0.000	96	600452	10.0	9.78	
48 1,2-Dichloroethane	62	11.539	11.539	0.000	98	275884	10.0	10.2	
49 n-Heptane	43	11.700	11.700	0.000	94	363074	10.0	10.1	
* 50 1,4-Difluorobenzene	114	12.235	12.235	0.000	93	1045546	10.0	10.0	
52 n-Butanol	56	12.689	12.689	0.000	89	135675	10.0	10.3	
53 Trichloroethene	95	12.727	12.727	0.000	98	282203	10.0	9.35	
A 51 GRO	1	13.198	(4.687-21.708)		0	81410951	10.0	0	
54 1,2-Dichloropropane	63	13.326	13.326	0.000	90	234477	10.0	9.85	
55 Methyl methacrylate	69	13.513	13.513	0.000	97	235491	10.0	9.93	
56 1,4-Dioxane	88	13.572	13.572	0.000	94	147886	10.0	10.5	
57 Dibromomethane	174	13.599	13.599	0.000	91	331222	10.0	9.65	
58 Dichlorobromomethane	83	13.914	13.914	0.000	98	488694	10.0	10.2	
60 cis-1,3-Dichloropropene	75	14.893	14.893	0.000	92	371027	10.0	10.0	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	147343123	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.204	15.204	0.000	97	513434	10.0	10.1	
65 Toluene	92	15.503	15.503	0.000	93	494850	10.0	9.78	
64 n-Octane	43	15.557	15.557	0.000	93	547808	10.0	10.3	
66 trans-1,3-Dichloropropene	75	16.145	16.145	0.000	97	380747	10.0	9.17	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	96	243615	10.0	9.91	
68 Tetrachloroethene	166	16.632	16.632	0.000	96	490467	10.0	9.46	
69 2-Hexanone	43	17.017	17.017	0.000	94	501203	10.0	9.96	
71 Chlorodibromomethane	129	17.338	17.338	0.000	98	547819	10.0	10.2	
72 Ethylene Dibromide	107	17.616	17.616	0.000	99	468831	10.0	9.88	
* 74 Chlorobenzene-d5	117	18.563	18.563	0.000	84	987354	10.0	10.0	
75 Chlorobenzene	112	18.628	18.628	0.000	96	715788	10.0	9.79	
76 Ethylbenzene	91	18.793	18.793	0.000	97	1123789	10.0	9.89	
77 n-Nonane	57	18.927	18.927	0.000	92	506235	10.0	9.97	
78 m-Xylene & p-Xylene	106	19.061	19.061	0.000	0	917425	20.0	19.7	
S 73 Xylenes, Total	106				0		30.0	29.6	
79 o-Xylene	106	19.954	19.954	0.000	99	458309	10.0	9.87	
80 Styrene	104	20.013	20.013	0.000	97	720982	10.0	10.1	
81 Bromoform	173	20.484	20.484	0.000	99	566852	10.0	11.0	
82 Isopropylbenzene	105	20.714	20.714	0.000	95	1326104	10.0	9.92	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	99	650661	10.0	10.0	
85 N-Propylbenzene	91	21.500	21.500	0.000	99	1588577	10.0	10.0	
86 1,2,3-Trichloropropane	75	21.543	21.543	0.000	96	503588	10.0	9.93	
87 n-Decane	57	21.698	21.698	0.000	91	672036	10.0	10.7	
88 4-Ethyltoluene	105	21.709	21.709	0.000	98	1351356	10.0	10.1	
89 2-Chlorotoluene	91	21.714	21.714	0.000	95	1097144	10.0	10.0	
90 1,3,5-Trimethylbenzene	105	21.821	21.821	0.000	93	1125090	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	91	587538	10.0	10.3	
92 tert-Butylbenzene	119	22.346	22.346	0.000	95	1106590	10.0	10.2	
93 1,2,4-Trimethylbenzene	105	22.447	22.447	0.000	97	1127402	10.0	10.2	
94 sec-Butylbenzene	105	22.688	22.688	0.000	99	1638314	10.0	10.3	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	97	1436684	10.0	10.4	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	96	861373	10.0	10.1	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	97	863330	10.0	9.98	
98 Benzyl chloride	91	23.282	23.282	0.000	99	975154	10.0	10.9	
100 n-Butylbenzene	91	23.496	23.496	0.000	98	1251096	10.0	10.3	
99 Undecane	57	23.528	23.528	0.000	96	598874	10.0	9.73	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	98	807828	10.0	10.1	
102 Dodecane	57	25.149	25.149	0.000	97	470675	10.0	11.3	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	94	586862	10.0	9.69	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	96	605112	10.0	9.76	
105 Naphthalene	128	26.684	26.684	0.000	99	1201867	10.0	9.69	
106 1,2,3-Trichlorobenzene	180	27.160	27.160	0.000	96	553197	10.0	10.4	

Reagents:

ATTO15CAL4w_00676	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

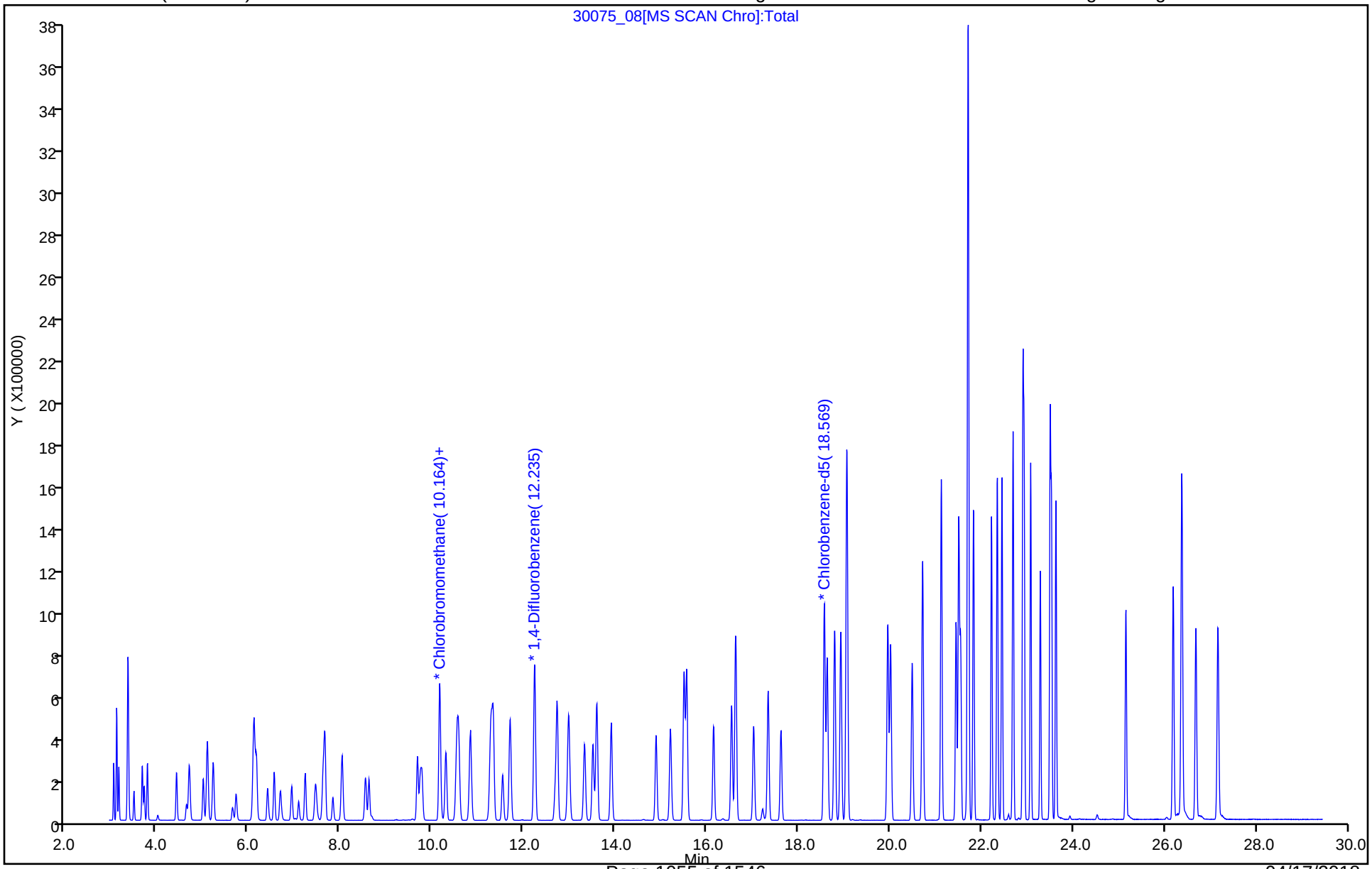
Report Date: 13-Apr-2018 09:12:55 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_08.D

Injection Date:	12-Apr-2018 20:51:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	icis			Worklist Smp#:	8
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_09.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 12-Apr-2018 21:42:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-009
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:56 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:40:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.049	3.044	0.005	99	192407	15.0	16.0	
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	99	795837	15.0	16.3	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	416554	15.0	15.7	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.359	3.354	0.005	86	762138	15.0	15.9	
5 Chloromethane	50	3.488	3.488	0.000	99	233134	15.0	15.5	
6 Butane	43	3.670	3.664	0.006	98	408604	15.0	15.7	
7 Vinyl chloride	62	3.712	3.713	-0.001	98	284042	15.0	15.8	
8 Butadiene	54	3.782	3.782	0.000	97	212206	15.0	15.4	
10 Bromomethane	94	4.419	4.413	0.006	99	295551	15.0	16.0	
11 Chloroethane	64	4.638	4.633	0.005	100	137159	15.0	16.0	
12 2-Methylbutane	43	4.697	4.697	0.000	91	289687	15.0	15.4	
13 Vinyl bromide	106	5.002	4.996	0.006	99	307565	15.0	15.8	
14 Trichlorofluoromethane	101	5.093	5.093	0.000	99	840318	15.0	15.8	
16 Pentane	43	5.221	5.221	0.000	98	446862	15.0	15.8	
17 Ethanol	45	5.644	5.638	0.006	97	125705	20.0	21.4	
18 Ethyl ether	59	5.719	5.713	0.006	94	175980	15.0	16.0	
19 Acrolein	56	6.104	6.104	0.000	97	72256	15.0	16.8	
20 1,1,2-Trichloro-1,2,2-trif	101	6.114	6.109	0.005	94	589497	15.0	16.0	
21 1,1-Dichloroethene	96	6.168	6.163	0.005	98	279117	15.0	15.4	
22 Acetone	43	6.403	6.403	0.000	98	426054	15.0	15.4	
23 Carbon disulfide	76	6.553	6.548	0.005	99	736563	15.0	16.0	
24 Isopropyl alcohol	45	6.687	6.687	0.000	100	450793	15.0	16.1	
25 3-Chloro-1-propene	41	6.938	6.933	0.005	96	308670	15.0	16.8	
26 Acetonitrile	41	7.088	7.083	0.005	99	196529	15.0	16.3	
27 Methylene Chloride	49	7.227	7.227	0.000	91	291457	15.0	15.8	
28 2-Methyl-2-propanol	59	7.452	7.452	0.000	93	608519	15.0	16.1	
29 Methyl tert-butyl ether	73	7.628	7.623	0.005	96	846025	15.0	16.2	
31 trans-1,2-Dichloroethene	61	7.660	7.661	-0.001	97	402559	15.0	16.0	
32 Acrylonitrile	53	7.832	7.826	0.006	95	188971	15.0	16.2	
33 Hexane	57	8.035	8.035	0.000	93	404145	15.0	16.0	
34 1,1-Dichloroethane	63	8.549	8.538	0.011	100	520506	15.0	15.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.623	8.618	0.005	100	713275	15.0	16.5	
S 30 1,2-Dichloroethene, Total	61				0		30.0	32.3	
37 cis-1,2-Dichloroethene	96	9.683	9.677	0.006	91	343961	15.0	16.3	
38 2-Butanone (MEK)	72	9.742	9.742	0.000	100	159425	15.0	15.9	
39 Ethyl acetate	88	9.779	9.774	0.005	99	24000	15.0	16.1	
* 40 Chlorobromomethane	128	10.164	10.164	0.000	88	222793	10.0	10.0	
41 Tetrahydrofuran	42	10.170	10.170	0.000	92	347699	15.0	16.1	
42 Chloroform	83	10.303	10.298	0.005	95	702864	15.0	15.9	
43 Cyclohexane	84	10.544	10.533	0.011	97	452679	15.0	15.8	
44 1,1,1-Trichloroethane	97	10.581	10.582	-0.001	94	765276	15.0	16.0	
45 Carbon tetrachloride	117	10.833	10.838	-0.005	97	803168	15.0	16.0	
46 Isooctane	57	11.288	11.288	0.000	99	1681511	15.0	15.9	
47 Benzene	78	11.341	11.336	0.005	96	1078858	15.0	15.7	
48 1,2-Dichloroethane	62	11.544	11.539	0.005	98	483215	15.0	15.9	
49 n-Heptane	43	11.705	11.700	0.005	94	643835	15.0	16.0	
* 50 1,4-Difluorobenzene	114	12.240	12.235	0.005	93	1169176	10.0	10.0	
52 n-Butanol	56	12.684	12.689	-0.005	88	231535	15.0	15.8	
53 Trichloroethene	95	12.732	12.727	0.005	97	515002	15.0	15.3	
A 51 GRO	1	13.198	(4.687-21.708)		0	145164218	15.0	0	
54 1,2-Dichloropropane	63	13.331	13.326	0.005	91	424437	15.0	15.9	
55 Methyl methacrylate	69	13.513	13.513	0.000	97	416843	15.0	15.7	
56 1,4-Dioxane	88	13.577	13.572	0.005	90	249062	15.0	15.8	
57 Dibromomethane	174	13.604	13.599	0.005	91	592686	15.0	15.4	
58 Dichlorobromomethane	83	13.914	13.914	0.000	98	884079	15.0	16.5	
60 cis-1,3-Dichloropropene	75	14.893	14.893	0.000	92	665106	15.0	16.0	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	260273828	15.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.209	15.204	0.005	97	893023	15.0	15.7	
65 Toluene	92	15.503	15.503	0.000	93	890012	15.0	15.5	
64 n-Octane	43	15.557	15.557	0.000	93	956672	15.0	16.1	
66 trans-1,3-Dichloropropene	75	16.150	16.145	0.005	97	683819	15.0	14.7	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	95	431052	15.0	15.4	
68 Tetrachloroethene	166	16.632	16.632	0.000	96	890257	15.0	15.1	
69 2-Hexanone	43	17.022	17.017	0.005	94	874889	15.0	15.3	
71 Chlorodibromomethane	129	17.338	17.338	0.000	98	1027664	15.0	16.8	
72 Ethylene Dibromide	107	17.622	17.616	0.006	99	848706	15.0	15.7	
* 74 Chlorobenzene-d5	117	18.569	18.563	0.006	84	1121549	10.0	10.0	
75 Chlorobenzene	112	18.627	18.628	-0.001	96	1291655	15.0	15.5	
76 Ethylbenzene	91	18.793	18.793	0.000	97	2032550	15.0	15.7	
77 n-Nonane	57	18.927	18.927	0.000	90	908371	15.0	15.7	
78 m-Xylene & p-Xylene	106	19.061	19.061	0.000	0	1671016	30.0	31.6	
S 73 Xylenes, Total	106				0		45.0	47.3	
79 o-Xylene	106	19.954	19.954	0.000	99	829053	15.0	15.7	
80 Styrene	104	20.013	20.013	0.000	97	1302201	15.0	16.1	
81 Bromoform	173	20.484	20.484	0.000	99	1120908	15.0	19.1	
82 Isopropylbenzene	105	20.714	20.714	0.000	95	2400829	15.0	15.8	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	99	1167071	15.0	15.8	
85 N-Propylbenzene	91	21.506	21.500	0.006	99	2869959	15.0	16.0	
86 1,2,3-Trichloropropane	75	21.543	21.543	0.000	97	901999	15.0	15.7	
87 n-Decane	57	21.698	21.698	0.000	91	1146677	15.0	16.0	
88 4-Ethyltoluene	105	21.709	21.709	0.000	98	2452627	15.0	16.1	
89 2-Chlorotoluene	91	21.714	21.714	0.000	97	1985915	15.0	16.0	
90 1,3,5-Trimethylbenzene	105	21.827	21.821	0.005	94	2002623	15.0	15.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	91	1049374	15.0	16.2	
92 tert-Butylbenzene	119	22.345	22.346	-0.001	95	1957355	15.0	15.9	
93 1,2,4-Trimethylbenzene	105	22.447	22.447	0.000	97	1992092	15.0	15.9	
94 sec-Butylbenzene	105	22.688	22.688	0.000	99	2862905	15.0	15.8	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	97	2394095	15.0	15.3	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	96	1531532	15.0	15.8	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	97	1530008	15.0	15.6	
98 Benzyl chloride	91	23.282	23.282	0.000	99	1621739	15.0	15.9	
100 n-Butylbenzene	91	23.501	23.496	0.005	97	2043595	15.0	14.8	
99 Undecane	57	23.528	23.528	0.000	95	1068770	15.0	15.3	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	98	1391358	15.0	15.3	
102 Dodecane	57	25.154	25.149	0.005	98	722659	15.0	15.2	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	94	1103435	15.0	16.0	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	96	1108618	15.0	15.7	
105 Naphthalene	128	26.684	26.684	0.000	99	2184000	15.0	15.5	
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	95	978093	15.0	16.2	

Reagents:

ATTO15CAL5w_00073	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

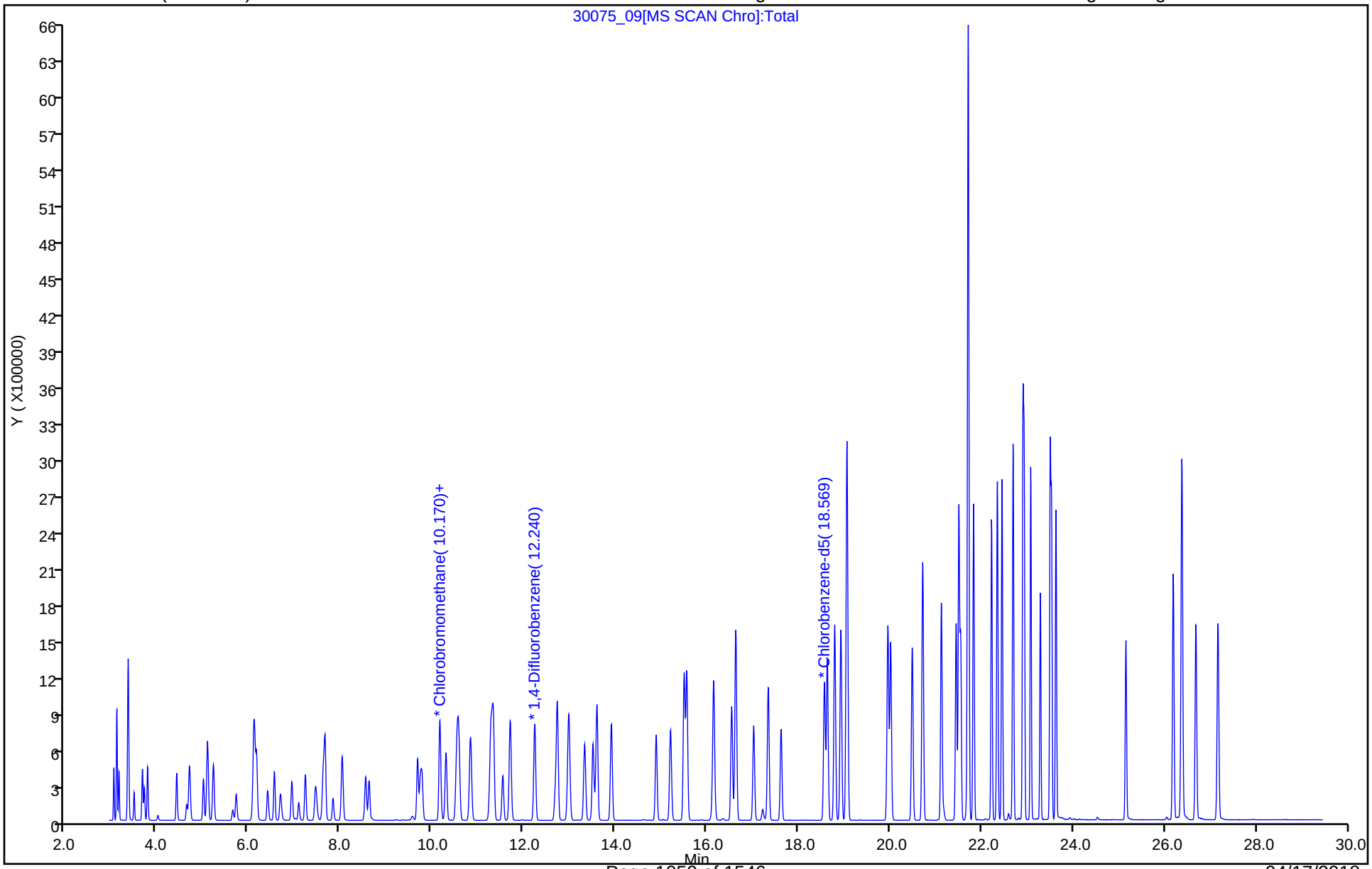
Report Date: 13-Apr-2018 09:12:56 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_09.D

Injection Date:	12-Apr-2018 21:42:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_10.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 12-Apr-2018 22:32:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-010
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:57 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:41:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	98	261425	20.0	19.0	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	1066628	20.0	19.1	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	578793	20.0	19.1	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	98	1067096	20.0	19.4	
5 Chloromethane	50	3.488	3.488	0.000	99	319381	20.0	18.6	
6 Butane	43	3.670	3.664	0.006	98	554406	20.0	18.6	
7 Vinyl chloride	62	3.713	3.713	0.000	98	391402	20.0	19.1	
8 Butadiene	54	3.782	3.782	0.000	97	292235	20.0	18.6	
10 Bromomethane	94	4.419	4.413	0.006	99	403491	20.0	19.2	
11 Chloroethane	64	4.633	4.633	0.000	99	189494	20.0	19.3	
12 2-Methylbutane	43	4.697	4.697	0.000	92	389073	20.0	18.1	
13 Vinyl bromide	106	5.002	4.996	0.006	99	444290	20.0	19.9	
14 Trichlorofluoromethane	101	5.093	5.093	0.000	98	1194996	20.0	19.7	
16 Pentane	43	5.221	5.221	0.000	98	615761	20.0	19.1	
17 Ethanol	45	5.638	5.638	0.000	97	260442	40.0	38.8	
18 Ethyl ether	59	5.713	5.713	0.000	97	253143	20.0	20.2	
19 Acrolein	56	6.104	6.104	0.000	84	103931	20.0	21.1	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.109	-0.005	94	845557	20.0	20.1	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	98	404536	20.0	19.6	
22 Acetone	43	6.403	6.403	0.000	98	557536	20.0	17.7	
23 Carbon disulfide	76	6.553	6.548	0.005	99	1049041	20.0	19.9	
24 Isopropyl alcohol	45	6.687	6.687	0.000	100	617511	20.0	19.3	
25 3-Chloro-1-propene	41	6.933	6.933	0.000	98	415131	20.0	19.8	
26 Acetonitrile	41	7.083	7.083	0.000	99	265384	20.0	19.2	
27 Methylene Chloride	49	7.227	7.227	0.000	90	398839	20.0	18.9	
28 2-Methyl-2-propanol	59	7.452	7.452	0.000	93	852584	20.0	19.7	
29 Methyl tert-butyl ether	73	7.623	7.623	0.000	96	1200985	20.0	20.1	
31 trans-1,2-Dichloroethene	61	7.661	7.661	0.000	96	561254	20.0	19.5	
32 Acrylonitrile	53	7.832	7.826	0.006	95	261685	20.0	19.6	
33 Hexane	57	8.035	8.035	0.000	93	563891	20.0	19.5	
34 1,1-Dichloroethane	63	8.543	8.538	0.005	100	729953	20.0	19.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.618	8.618	0.000	100	965420	20.0	19.5	
S 30 1,2-Dichloroethene, Total	61				0		40.0	40.0	
37 cis-1,2-Dichloroethene	96	9.683	9.677	0.006	91	494955	20.0	20.5	
38 2-Butanone (MEK)	72	9.742	9.742	0.000	100	219103	20.0	19.2	
39 Ethyl acetate	88	9.779	9.774	0.005	99	34166	20.0	20.0	
* 40 Chlorobromomethane	128	10.164	10.164	0.000	85	254710	10.0	10.0	
41 Tetrahydrofuran	42	10.170	10.170	0.000	93	473875	20.0	19.4	
42 Chloroform	83	10.303	10.298	0.005	95	986255	20.0	19.5	
43 Cyclohexane	84	10.544	10.533	0.011	97	645301	20.0	20.1	
44 1,1,1-Trichloroethane	97	10.582	10.582	0.000	94	1076185	20.0	20.0	
45 Carbon tetrachloride	117	10.838	10.838	0.000	97	1167203	20.0	20.6	
46 Isooctane	57	11.288	11.288	0.000	99	2357299	20.0	19.8	
47 Benzene	78	11.336	11.336	0.000	96	1527277	20.0	19.8	
48 1,2-Dichloroethane	62	11.545	11.539	0.006	98	666377	20.0	19.5	
49 n-Heptane	43	11.705	11.700	0.005	92	875391	20.0	19.4	
* 50 1,4-Difluorobenzene	114	12.240	12.235	0.005	93	1316323	10.0	10.0	
52 n-Butanol	56	12.689	12.689	0.000	87	317571	20.0	19.2	
53 Trichloroethene	95	12.732	12.727	0.005	97	735139	20.0	19.3	
A 51 GRO	1	13.198	(4.687-21.708)		0	199537427	20.0	0	
54 1,2-Dichloropropane	63	13.331	13.326	0.005	91	596228	20.0	19.9	
55 Methyl methacrylate	69	13.508	13.513	-0.005	98	596720	20.0	20.0	
56 1,4-Dioxane	88	13.572	13.572	0.000	91	349027	20.0	19.7	
57 Dibromomethane	174	13.604	13.599	0.005	91	866843	20.0	20.1	
58 Dichlorobromomethane	83	13.914	13.914	0.000	98	1230155	20.0	20.4	
60 cis-1,3-Dichloropropene	75	14.893	14.893	0.000	91	945418	20.0	20.2	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	360768504	20.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.204	15.204	0.000	96	1235677	20.0	19.4	
65 Toluene	92	15.503	15.503	0.000	94	1267432	20.0	20.2	
64 n-Octane	43	15.562	15.557	0.005	92	1310676	20.0	19.6	
66 trans-1,3-Dichloropropene	75	16.145	16.145	0.000	96	960317	20.0	18.4	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	94	615243	20.0	20.1	
68 Tetrachloroethene	166	16.632	16.632	0.000	96	1274020	20.0	19.8	
69 2-Hexanone	43	17.023	17.017	0.006	94	1206455	20.0	19.3	
71 Chlorodibromomethane	129	17.344	17.338	0.006	98	1403728	20.0	21.0	
72 Ethylene Dibromide	107	17.622	17.616	0.006	98	1208885	20.0	20.5	
* 74 Chlorobenzene-d5	117	18.569	18.563	0.006	83	1226987	10.0	10.0	
75 Chlorobenzene	112	18.628	18.628	0.000	97	1840306	20.0	20.2	
76 Ethylbenzene	91	18.793	18.793	0.000	97	2865310	20.0	20.3	
77 n-Nonane	57	18.927	18.927	0.000	90	1262539	20.0	20.0	
78 m-Xylene & p-Xylene	106	19.061	19.061	0.000	0	2364680	40.0	40.8	
S 73 Xylenes, Total	106				0		60.0	60.9	
79 o-Xylene	106	19.954	19.954	0.000	99	1158667	20.0	20.1	
80 Styrene	104	20.013	20.013	0.000	97	1833853	20.0	20.7	
81 Bromoform	173	20.484	20.484	0.000	99	1455653	20.0	22.6	
82 Isopropylbenzene	105	20.714	20.714	0.000	95	3384429	20.0	20.4	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	98	1637893	20.0	20.3	
85 N-Propylbenzene	91	21.506	21.500	0.006	100	4034611	20.0	20.5	
86 1,2,3-Trichloropropane	75	21.543	21.543	0.000	97	1270537	20.0	20.2	
87 n-Decane	57	21.698	21.698	0.000	92	1553526	20.0	19.8	
88 4-Ethyltoluene	105	21.709	21.709	0.000	98	3409440	20.0	20.5	
89 2-Chlorotoluene	91	21.714	21.714	0.000	97	2765483	20.0	20.3	
90 1,3,5-Trimethylbenzene	105	21.827	21.821	0.006	94	2768941	20.0	20.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.223	22.217	0.006	91	1451311	20.0	20.5	
92 tert-Butylbenzene	119	22.346	22.346	0.000	95	2666233	20.0	19.8	
93 1,2,4-Trimethylbenzene	105	22.447	22.447	0.000	97	2734508	20.0	20.0	
94 sec-Butylbenzene	105	22.688	22.688	0.000	99	3915057	20.0	19.8	
95 4-Isopropyltoluene	119	22.907	22.902	0.005	98	3333203	20.0	19.5	
96 1,3-Dichlorobenzene	146	22.934	22.929	0.005	95	2111323	20.0	20.0	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	97	2076405	20.0	19.3	
98 Benzyl chloride	91	23.287	23.282	0.005	100	2229759	20.0	20.0	
100 n-Butylbenzene	91	23.501	23.496	0.005	97	2929251	20.0	19.4	
99 Undecane	57	23.528	23.528	0.000	95	1564109	20.0	20.4	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	99	1893620	20.0	19.1	
102 Dodecane	57	25.154	25.149	0.005	97	1137211	20.0	21.9	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	93	1694923	20.0	22.5	
104 Hexachlorobutadiene	225	26.379	26.374	0.005	92	1601213	20.0	20.8	
105 Naphthalene	128	26.684	26.684	0.000	99	3416470	20.0	22.2	
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	95	1509470	20.0	22.9	

Reagents:

ATTO15CAL6w_00149	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

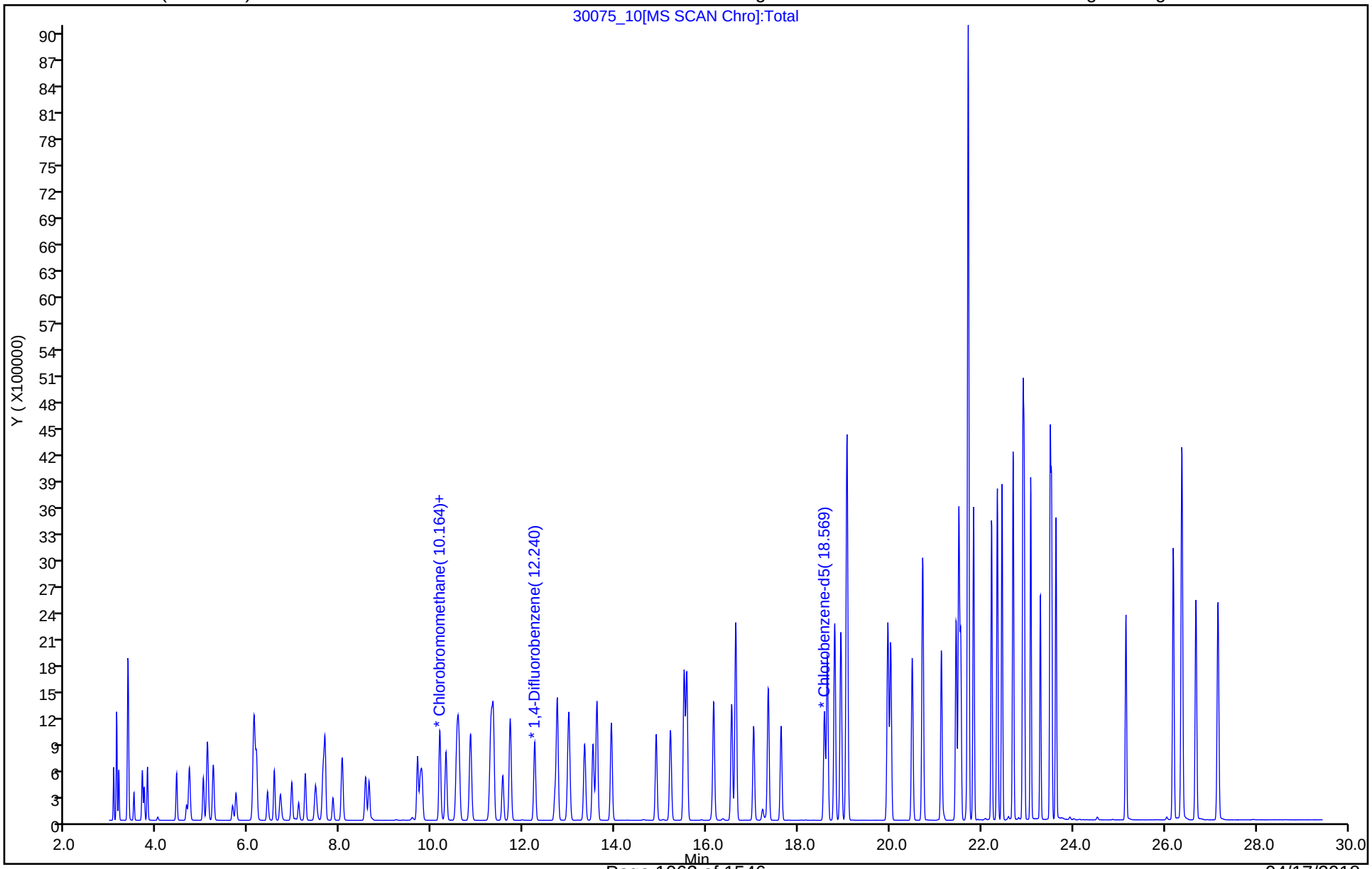
Report Date: 13-Apr-2018 09:12:57 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_10.D

Injection Date:	12-Apr-2018 22:32:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 12-Apr-2018 23:23:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-011
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:58 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:41:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	99	543847	40.0	34.3	
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	99	2275489	40.0	35.4	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	1193597	40.0	34.1	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.359	3.354	0.005	85	2276751	40.0	36.0	
5 Chloromethane	50	3.488	3.488	0.000	99	666217	40.0	33.7	
6 Butane	43	3.670	3.664	0.006	98	1141351	40.0	33.3	
7 Vinyl chloride	62	3.712	3.713	-0.001	98	825476	40.0	34.9	
8 Butadiene	54	3.787	3.782	0.005	96	607027	40.0	33.5	
10 Bromomethane	94	4.419	4.413	0.006	99	879679	40.0	36.3	
11 Chloroethane	64	4.638	4.633	0.005	99	393174	40.0	34.8	
12 2-Methylbutane	43	4.697	4.697	0.000	93	775231	40.0	31.4	
13 Vinyl bromide	106	5.007	4.996	0.011	99	975416	40.0	37.9	
14 Trichlorofluoromethane	101	5.093	5.093	0.000	98	2605167	40.0	37.2	
16 Pentane	43	5.221	5.221	0.000	98	1281918	40.0	34.5	
17 Ethanol	45	5.649	5.638	0.011	98	658598	100.0	85.1	
18 Ethyl ether	59	5.719	5.713	0.006	95	531266	40.0	36.7	
19 Acrolein	56	6.104	6.104	0.000	96	193552	40.0	34.1	
20 1,1,2-Trichloro-1,2,2-trif	101	6.114	6.109	0.005	94	1835447	40.0	37.8	
21 1,1-Dichloroethene	96	6.168	6.163	0.005	97	879678	40.0	36.9	
22 Acetone	43	6.409	6.403	0.006	98	1140493	40.0	31.4	
23 Carbon disulfide	76	6.553	6.548	0.005	99	2278104	40.0	37.5	
24 Isopropyl alcohol	45	6.692	6.687	0.005	100	1267380	40.0	34.3	
25 3-Chloro-1-propene	41	6.938	6.933	0.005	98	814890	40.0	33.7	
26 Acetonitrile	41	7.088	7.083	0.005	98	543102	40.0	34.1	
27 Methylene Chloride	49	7.233	7.227	0.006	88	835301	40.0	34.4	
28 2-Methyl-2-propanol	59	7.463	7.452	0.011	93	1804938	40.0	36.2	
29 Methyl tert-butyl ether	73	7.623	7.623	0.000	96	2551227	40.0	37.1	
31 trans-1,2-Dichloroethene	61	7.666	7.661	0.005	96	1197761	40.0	36.1	
32 Acrylonitrile	53	7.837	7.826	0.011	94	555970	40.0	36.2	
33 Hexane	57	8.035	8.035	0.000	92	1179388	40.0	35.3	
34 1,1-Dichloroethane	63	8.549	8.538	0.011	99	1556763	40.0	36.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.623	8.618	0.005	100	2004662	40.0	35.2	
S 30 1,2-Dichloroethene, Total	61				0		80.0	74.8	
37 cis-1,2-Dichloroethene	96	9.683	9.677	0.006	90	1076757	40.0	38.8	
38 2-Butanone (MEK)	72	9.747	9.742	0.005	99	475631	40.0	36.1	
39 Ethyl acetate	88	9.779	9.774	0.005	100	73933	40.0	37.5	
* 40 Chlorobromomethane	128	10.170	10.164	0.006	79	293577	10.0	10.0	
41 Tetrahydrofuran	42	10.170	10.170	0.000	91	979584	40.0	36.5	
42 Chloroform	83	10.303	10.298	0.005	95	2119261	40.0	36.4	
43 Cyclohexane	84	10.544	10.533	0.011	97	1400728	40.0	39.5	
44 1,1,1-Trichloroethane	97	10.581	10.582	-0.001	94	2341506	40.0	39.5	
45 Carbon tetrachloride	117	10.844	10.838	0.006	89	2530537	40.0	40.6	
46 Isooctane	57	11.293	11.288	0.005	99	5008072	40.0	38.1	
47 Benzene	78	11.341	11.336	0.005	97	3319157	40.0	39.0	
48 1,2-Dichloroethane	62	11.544	11.539	0.005	98	1400621	40.0	37.2	
49 n-Heptane	43	11.705	11.700	0.005	92	1835666	40.0	36.8	
* 50 1,4-Difluorobenzene	114	12.245	12.235	0.010	93	1450201	10.0	10.0	
52 n-Butanol	56	12.689	12.689	0.000	87	676292	40.0	37.2	
53 Trichloroethene	95	12.737	12.727	0.010	96	1600668	40.0	38.2	
A 51 GRO	1	13.198	(4.687-21.708)		0	416843525	40.0	0	
54 1,2-Dichloropropane	63	13.337	13.326	0.011	93	1288207	40.0	39.0	
55 Methyl methacrylate	69	13.518	13.513	0.005	99	1277278	40.0	38.8	
56 1,4-Dioxane	88	13.577	13.572	0.005	89	741148	40.0	38.0	
57 Dibromomethane	174	13.604	13.599	0.005	90	1970363	40.0	41.4	
58 Dichlorobromomethane	83	13.920	13.914	0.006	98	2629195	40.0	39.6	
60 cis-1,3-Dichloropropene	75	14.893	14.893	0.000	90	2046830	40.0	39.7	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	734367094	40.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.209	15.204	0.005	95	2567018	40.0	36.5	
65 Toluene	92	15.503	15.503	0.000	93	2742318	40.0	39.6	
64 n-Octane	43	15.562	15.557	0.005	91	2726270	40.0	36.9	
66 trans-1,3-Dichloropropene	75	16.150	16.145	0.005	95	2048845	40.0	35.6	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	94	1332431	40.0	39.6	
68 Tetrachloroethene	166	16.632	16.632	0.000	96	2838218	40.0	40.0	
69 2-Hexanone	43	17.022	17.017	0.005	96	2478102	40.0	36.0	
71 Chlorodibromomethane	129	17.343	17.338	0.005	98	2989620	40.0	40.5	
72 Ethylene Dibromide	107	17.622	17.616	0.006	98	2623088	40.0	40.4	
* 74 Chlorobenzene-d5	117	18.569	18.563	0.006	86	1350772	10.0	10.0	
75 Chlorobenzene	112	18.633	18.628	0.005	97	4005521	40.0	40.0	
76 Ethylbenzene	91	18.793	18.793	0.000	97	6225711	40.0	40.0	
77 n-Nonane	57	18.932	18.927	0.005	88	2680218	40.0	38.6	
78 m-Xylene & p-Xylene	106	19.066	19.061	0.005	0	5130134	80.0	80.5	
S 73 Xylenes, Total	106				0		120.0	120.2	
79 o-Xylene	106	19.959	19.954	0.005	99	2518584	40.0	39.7	
80 Styrene	104	20.018	20.013	0.005	96	3944431	40.0	40.4	
81 Bromoform	173	20.489	20.484	0.005	99	2850406	40.0	40.2	
82 Isopropylbenzene	105	20.719	20.714	0.005	95	7271421	40.0	39.8	
84 1,1,2,2-Tetrachloroethane	83	21.447	21.441	0.006	98	3413364	40.0	38.3	
85 N-Propylbenzene	91	21.506	21.500	0.006	100	8323146	40.0	38.4	
86 1,2,3-Trichloropropane	75	21.548	21.543	0.005	97	2585356	40.0	37.2	
87 n-Decane	57	21.703	21.698	0.005	92	3006210	40.0	34.8	
88 4-Ethyltoluene	105	21.714	21.709	0.005	97	6835309	40.0	37.3	
89 2-Chlorotoluene	91	21.720	21.714	0.006	97	5624175	40.0	37.6	
90 1,3,5-Trimethylbenzene	105	21.832	21.821	0.011	94	5679391	40.0	37.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.222	22.217	0.005	91	2942436	40.0	37.7	
92 tert-Butylbenzene	119	22.345	22.346	-0.001	95	5547970	40.0	37.4	
93 1,2,4-Trimethylbenzene	105	22.452	22.447	0.005	97	5685599	40.0	37.7	
94 sec-Butylbenzene	105	22.693	22.688	0.005	99	8258327	40.0	37.8	
95 4-Isopropyltoluene	119	22.907	22.902	0.005	98	7436244	40.0	39.5	
96 1,3-Dichlorobenzene	146	22.934	22.929	0.005	96	4316366	40.0	37.0	
97 1,4-Dichlorobenzene	146	23.078	23.073	0.005	97	4297351	40.0	36.3	
98 Benzyl chloride	91	23.287	23.282	0.005	100	4460912	40.0	36.3	
100 n-Butylbenzene	91	23.501	23.496	0.005	97	6527850	40.0	39.2	
99 Undecane	57	23.533	23.528	0.005	94	3302557	40.0	39.2	
101 1,2-Dichlorobenzene	146	23.629	23.624	0.005	99	4063474	40.0	37.2	
102 Dodecane	57	25.154	25.149	0.005	97	1806393	40.0	31.6	
103 1,2,4-Trichlorobenzene	180	26.192	26.187	0.005	93	3027658	40.0	36.5	
104 Hexachlorobutadiene	225	26.379	26.374	0.005	95	3076171	40.0	36.3	
105 Naphthalene	128	26.684	26.684	0.000	99	5641107	40.0	33.2	
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	95	2441828	40.0	33.7	

Reagents:

ATTO15CAL7w_00076	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

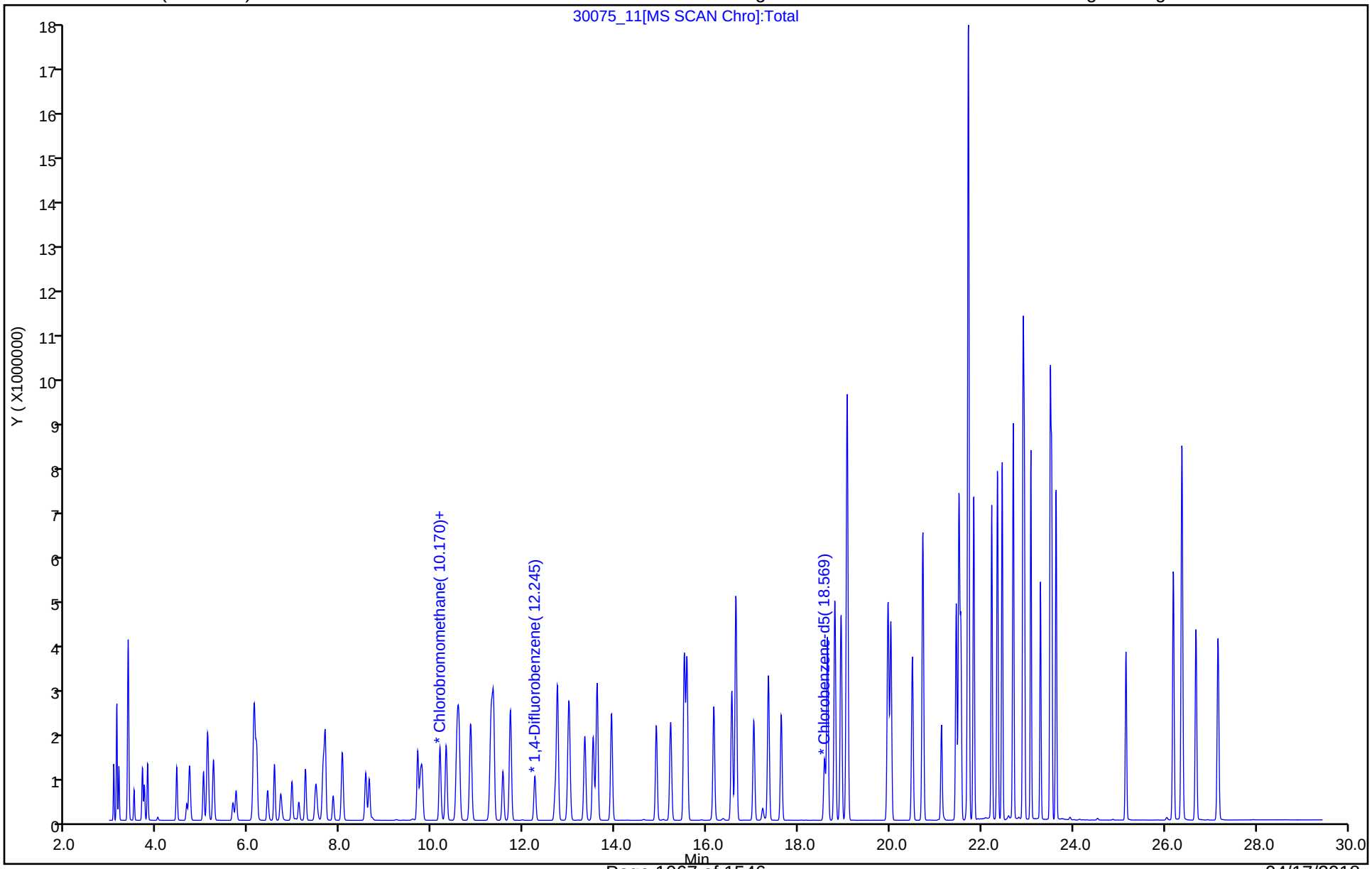
Report Date: 13-Apr-2018 09:12:58 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Injection Date:	12-Apr-2018 23:23:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID (1): CCVIS 200-128434/2 Instrument ID (1): CHX.i

GC Column (1): RTX-624 ID: 0.32(mm) Date Analyzed (1): 04/13/2018 10:48

ANALYTE	RT	RESOLUTION (%)
Xylene (total)		100.0
1,2-Dichloroethene, Total		100.0
Dichlorodifluoromethane	3.11	100.0
Freon 22	3.16	100.0
1,2-Dichlorotetrafluoroethane	3.35	100.0
Chloromethane	3.48	100.0
n-Butane	3.66	100.0
Vinyl chloride	3.71	100.0
1,3-Butadiene	3.78	100.0
Bromomethane	4.41	100.0
Chloroethane	4.63	100.0
Bromoethene(Vinyl Bromide)	5.00	100.0
Trichlorofluoromethane	5.09	100.0
Freon TF	6.10	100.0
1,1-Dichloroethene	6.16	100.0
Acetone	6.40	100.0
Carbon disulfide	6.55	100.0
Isopropyl alcohol	6.68	100.0
3-Chloropropene	6.93	100.0
Methylene Chloride	7.22	100.0
tert-Butyl alcohol	7.45	100.0
Methyl tert-butyl ether	7.62	100.0
trans-1,2-Dichloroethene	7.66	100.0
n-Hexane	8.03	100.0
1,1-Dichloroethane	8.54	100.0
cis-1,2-Dichloroethene	9.68	100.0
Methyl Ethyl Ketone	9.74	100.0
Chloroform	10.30	100.0
Cyclohexane	10.54	100.0
1,1,1-Trichloroethane	10.58	100.0
Carbon tetrachloride	10.83	100.0
2,2,4-Trimethylpentane	11.29	100.0
Benzene	11.34	100.0
1,2-Dichloroethane	11.54	100.0
n-Heptane	11.70	100.0
Trichloroethene	12.73	100.0
1,2-Dichloropropane	13.33	100.0
Methyl methacrylate	13.51	100.0
1,4-Dioxane	13.58	100.0
Bromodichloromethane	13.91	100.0
cis-1,3-Dichloropropene	14.89	100.0
methyl isobutyl ketone	15.20	100.0
Toluene	15.50	100.0
trans-1,3-Dichloropropene	16.15	100.0
1,1,2-Trichloroethane	16.54	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID (1): CCVIS 200-128434/2 Instrument ID (1): CHX.i

GC Column (1): RTX-624 ID: 0.32(mm) Date Analyzed (1): 04/13/2018 10:48

ANALYTE	RT	RESOLUTION (%)
Tetrachloroethene	16.63	100.0
Methyl Butyl Ketone (2-Hexanone)	17.02	100.0
Dibromochloromethane	17.34	100.0
1,2-Dibromoethane	17.62	100.0
Chlorobenzene	18.63	100.0
Ethylbenzene	18.79	100.0
m,p-Xylene	19.06	100.0
Xylene, o-	19.95	100.0
Styrene	20.01	100.0
Bromoform	20.48	100.0
Cumene	20.71	100.0
1,1,2,2-Tetrachloroethane	21.44	100.0
n-Propylbenzene	21.50	100.0
4-Ethyltoluene	21.71	100.0
2-Chlorotoluene	21.71	100.0
1,3,5-Trimethylbenzene	21.82	100.0
tert-Butylbenzene	22.35	100.0
1,2,4-Trimethylbenzene	22.44	100.0
sec-Butylbenzene	22.69	100.0
4-Isopropyltoluene	22.90	100.0
1,3-Dichlorobenzene	22.93	100.0
1,4-Dichlorobenzene	23.07	100.0
Benzyl chloride	23.28	100.0
n-Butylbenzene	23.50	100.0
1,2-Dichlorobenzene	23.62	100.0
1,2,4-Trichlorobenzene	26.19	100.0
Hexachlorobutadiene	26.37	100.0
Naphthalene	26.68	100.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: ICV 200-127372/14 Calibration Date: 03/15/2018 02:48

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29580-14.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	1.495	1.712		11.5	10.0	14.5	30.0
Dichlorodifluoromethane	Ave	5.193	5.525		10.6	10.0	6.4	30.0
Freon 22	Ave	2.867	3.190		11.1	10.0	11.2	30.0
1,2-Dichlorotetrafluoroethane	Ave	5.324	5.608		10.5	10.0	5.3	30.0
Chloromethane	Ave	1.722	1.890		11.0	10.0	9.7	30.0
n-Butane	Ave	2.849	3.257		11.4	10.0	14.3	30.0
Vinyl chloride	Ave	1.996	2.147		10.8	10.0	7.5	30.0
1,3-Butadiene	Ave	1.393	1.594		11.4	10.0	14.4	30.0
Bromomethane	Ave	1.609	1.712		10.6	10.0	6.4	30.0
Chloroethane	Ave	0.9173	1.035		11.3	10.0	12.8	30.0
Isopentane	Ave	1.684	1.944		11.5	10.0	15.4	30.0
Bromoethene(Vinyl Bromide)	Ave	1.663	1.759		10.6	10.0	5.8	30.0
Trichlorofluoromethane	Ave	4.203	4.311		10.3	10.0	2.6	30.0
n-Pentane	Ave	2.402	2.799		11.7	10.0	16.5	30.0
Ethanol	Ave	0.4172	0.4646		16.7	15.0	11.4	30.0
Ethyl ether	Ave	1.020	1.150		11.3	10.0	12.7	30.0
Acrolein	Ave	0.3484	0.4613		13.2	10.0	32.4*	30.0
Freon TF	Ave	3.012	3.144		10.4	10.0	4.4	30.0
1,1-Dichloroethene	Ave	1.419	1.538		10.8	10.0	8.3	30.0
Acetone	Ave	1.999	2.047		10.2	10.0	2.4	30.0
Carbon disulfide	Ave	3.520	3.809		10.8	10.0	8.2	30.0
Isopropyl alcohol	Ave	2.064	2.488		12.1	10.0	20.6	30.0
3-Chloropropene	Ave	1.324	1.607		12.1	10.0	21.4	30.0
Acetonitrile	Ave	0.7446	0.8201		11.0	10.0	10.1	30.0
Methylene Chloride	Ave	1.319	1.402		10.6	10.0	6.2	30.0
tert-Butyl alcohol	Ave	2.939	3.310		11.3	10.0	12.6	30.0
Methyl tert-butyl ether	Ave	4.162	4.411		10.6	10.0	6.0	30.0
trans-1,2-Dichloroethene	Ave	1.809	1.979		10.9	10.0	9.4	30.0
Acrylonitrile	Ave	0.7546	0.8548		11.3	10.0	13.3	30.0
n-Hexane	Ave	2.005	2.229		11.1	10.0	11.2	30.0
1,1-Dichloroethane	Ave	2.466	2.600		10.5	10.0	5.4	30.0
Vinyl acetate	Ave	2.808	3.009		10.7	10.0	7.2	30.0
cis-1,2-Dichloroethene	Ave	1.470	1.552		10.6	10.0	5.6	30.0
Methyl Ethyl Ketone	Ave	0.7175	0.7613		10.6	10.0	6.1	30.0
Ethyl acetate	Ave	0.1241	0.1314		10.6	10.0	5.9	30.0
Tetrahydrofuran	Ave	0.2717	0.2932		10.8	10.0	7.9	30.0
Chloroform	Ave	2.945	3.053		10.4	10.0	3.7	30.0
Cyclohexane	Ave	0.3908	0.4108		10.5	10.0	5.1	30.0
1,1,1-Trichloroethane	Ave	0.6177	0.6165		9.98	10.0	-0.2	30.0
Carbon tetrachloride	Ave	0.6424	0.6414		9.98	10.0	-0.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: ICV 200-127372/14 Calibration Date: 03/15/2018 02:48

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29580-14.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.326	1.446		10.9	10.0	9.0	30.0
Benzene	Ave	0.8883	0.9236		10.4	10.0	4.0	30.0
1,2-Dichloroethane	Ave	0.3526	0.3630		10.3	10.0	2.9	30.0
n-Heptane	Ave	0.4468	0.4964		11.1	10.0	11.1	30.0
n-Butanol	Ave	0.1705	0.1894		11.1	10.0	11.1	30.0
Trichloroethene	Ave	0.3988	0.4047		10.1	10.0	1.5	30.0
1,2-Dichloropropane	Ave	0.3189	0.3354		10.5	10.0	5.2	30.0
Methyl methacrylate	Ave	0.3138	0.3324		10.6	10.0	5.9	30.0
1,4-Dioxane	Ave	0.1889	0.2119		11.2	10.0	12.2	30.0
Dibromomethane	Ave	0.4108	0.4022		9.79	10.0	-2.1	30.0
Bromodichloromethane	Ave	0.6379	0.6575		10.3	10.0	3.1	30.0
cis-1,3-Dichloropropene	Ave	0.4578	0.4907		10.7	10.0	7.2	30.0
methyl isobutyl ketone	Ave	0.5967	0.6428		10.8	10.0	7.7	30.0
n-Octane	Ave	0.6237	0.7068		11.3	10.0	13.3	30.0
Toluene	Ave	0.7147	0.7487		10.5	10.0	4.8	30.0
trans-1,3-Dichloropropene	Ave	0.4444	0.4715		10.6	10.0	6.1	30.0
1,1,2-Trichloroethane	Ave	0.3442	0.3619		10.5	10.0	5.1	30.0
Tetrachloroethene	Ave	0.7272	0.6966		9.58	10.0	-4.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6154	0.6370		10.3	10.0	3.5	30.0
Dibromochloromethane	Ave	0.7611	0.7898		10.4	10.0	3.8	30.0
1,2-Dibromoethane	Ave	0.6140	0.6393		10.4	10.0	4.1	30.0
Chlorobenzene	Ave	1.009	1.008		9.99	10.0	-0.0	30.0
Ethylbenzene	Ave	1.649	1.708		10.4	10.0	3.6	30.0
n-Nonane	Ave	0.7608	0.8262		10.9	10.0	8.6	30.0
m,p-Xylene	Ave	0.6472	0.6674		20.6	20.0	3.1	30.0
Xylene, o-	Ave	0.6533	0.6789		10.4	10.0	3.9	30.0
Styrene	Ave	0.9433	1.013		10.7	10.0	7.3	30.0
Bromoform	Ave	0.7657	0.8304		10.8	10.0	8.5	30.0
Cumene	Ave	1.919	1.987		10.4	10.0	3.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9601	0.998		10.4	10.0	3.9	30.0
n-Propylbenzene	Ave	2.299	2.432		10.6	10.0	5.8	30.0
1,2,3-Trichloropropane	Ave	0.7509	0.7763		10.3	10.0	3.4	30.0
n-Decane	Ave	1.027	1.127		11.0	10.0	9.7	30.0
4-Ethyltoluene	Ave	1.920	2.010		10.5	10.0	4.7	30.0
2-Chlorotoluene	Ave	1.624	1.682		10.4	10.0	3.6	30.0
1,3,5-Trimethylbenzene	Ave	1.717	1.751		10.2	10.0	2.0	30.0
Alpha Methyl Styrene	Ave	0.7859	0.8398		10.7	10.0	6.9	30.0
tert-Butylbenzene	Ave	1.695	1.704		10.1	10.0	0.5	30.0
1,2,4-Trimethylbenzene	Ave	1.691	1.766		10.4	10.0	4.4	30.0
sec-Butylbenzene	Ave	2.449	2.553		10.4	10.0	4.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: ICV 200-127372/14 Calibration Date: 03/15/2018 02:48

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29580-14.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.072	2.163		10.4	10.0	4.4	30.0
1,3-Dichlorobenzene	Ave	1.096	1.125		10.3	10.0	2.6	30.0
1,4-Dichlorobenzene	Ave	1.058	1.091		10.3	10.0	3.1	30.0
Benzyl chloride	Ave	1.155	1.331		11.5	10.0	15.3	30.0
n-Butylbenzene	Ave	1.650	1.878		11.4	10.0	13.9	30.0
n-Undecane	Ave	0.9274	1.021		11.0	10.0	10.1	30.0
1,2-Dichlorobenzene	Ave	1.066	1.086		10.2	10.0	1.8	30.0
n-Dodecane	Ave	0.8252	0.9254		11.2	10.0	12.1	30.0
1,2,4-Trichlorobenzene	Ave	0.5468	0.5499		10.1	10.0	0.6	30.0
Hexachlorobutadiene	Ave	0.7846	0.7597		9.68	10.0	-3.2	30.0
Naphthalene	Ave	1.107	1.150		10.4	10.0	3.9	30.0
1,2,3-Trichlorobenzene	Ave	0.4724	0.4963		10.5	10.0	5.1	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-14.d
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 15-Mar-2018 02:48:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-014
Operator ID: pad Instrument ID: CHW.i
Sublist:

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:32 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: daiglep Date: 15-Mar-2018 09:47:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.026	5.042	-0.016	97	353681	10.0	11.5	
2 Dichlorodifluoromethane	85	5.138	5.154	-0.016	99	1141272	10.0	10.6	
3 Chlorodifluoromethane	51	5.219	5.235	-0.016	97	658865	10.0	11.1	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.550	5.561	-0.011	90	1158334	10.0	10.5	
5 Chloromethane	50	5.743	5.754	-0.011	99	390437	10.0	11.0	
6 Butane	43	6.016	6.026	-0.010	98	672764	10.0	11.4	
7 Vinyl chloride	62	6.069	6.080	-0.011	98	443445	10.0	10.8	
8 Butadiene	54	6.171	6.181	-0.010	94	329280	10.0	11.4	
9 Bromomethane	94	6.968	6.984	-0.016	99	353603	10.0	10.6	
10 BFB									
11 Chloroethane	64	7.219	7.230	-0.011	99	213708	10.0	11.3	
12 2-Methylbutane	43	7.294	7.300	-0.006	93	401553	10.0	11.5	
13 Vinyl bromide	106	7.631	7.637	-0.006	100	363233	10.0	10.6	
14 Trichlorofluoromethane	101	7.722	7.733	-0.011	99	890470	10.0	10.3	
15 Pentane	43	7.861	7.861	0.000	97	578188	10.0	11.7	
16 Ethanol	45	8.247	8.241	0.006	99	143995	15.0	16.7	
17 Ethyl ether	59	8.343	8.348	-0.005	95	237555	10.0	11.3	
19 Acrolein	56	8.723	8.728	-0.005	43	95281	10.0	13.2	
20 1,1,2-Trichloro-1,2,2-trif	101	8.733	8.739	-0.006	97	649394	10.0	10.4	
21 1,1-Dichloroethene	96	8.798	8.803	-0.005	97	317599	10.0	10.8	
22 Acetone	43	8.995	9.001	-0.006	97	422867	10.0	10.2	
23 Carbon disulfide	76	9.188	9.193	-0.005	99	786848	10.0	10.8	
24 Isopropyl alcohol	45	9.204	9.209	-0.005	100	513996	10.0	12.1	
25 3-Chloro-1-propene	41	9.498	9.498	0.000	96	331931	10.0	12.1	
26 Acetonitrile	41	9.616	9.621	-0.005	99	169385	10.0	11.0	
27 Methylene Chloride	49	9.761	9.760	0.000	89	289487	10.0	10.6	
28 2-Methyl-2-propanol	59	9.884	9.889	-0.005	93	683674	10.0	11.3	
29 Methyl tert-butyl ether	73	10.092	10.097	-0.005	97	911065	10.0	10.6	
30 trans-1,2-Dichloroethene	61	10.151	10.156	-0.005	98	408709	10.0	10.9	
S 31 1,2-Dichloroethene, Total	61				0		20.0	21.5	
32 Acrylonitrile	53	10.285	10.290	-0.005	96	176566	10.0	11.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.477	10.483	-0.006	91	460379	10.0	11.1	
34 1,1-Dichloroethane	63	10.948	10.948	0.000	100	537134	10.0	10.5	
35 Vinyl acetate	43	10.975	10.980	-0.005	100	621593	10.0	10.7	
36 cis-1,2-Dichloroethene	96	11.949	11.948	0.001	95	320631	10.0	10.6	
37 2-Butanone (MEK)	72	11.965	11.970	-0.005	97	157239	10.0	10.6	
38 Ethyl acetate	88	11.981	11.981	0.000	97	27145	10.0	10.6	
39 Tetrahydrofuran	42	12.371	12.371	0.000	90	314001	10.0	10.8	
* 40 Chlorobromomethane	128	12.377	12.376	0.000	86	206593	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	96	630606	10.0	10.4	
42 Cyclohexane	84	12.724	12.730	-0.006	98	439825	10.0	10.5	
43 1,1,1-Trichloroethane	97	12.740	12.740	0.000	95	660187	10.0	9.98	
44 Carbon tetrachloride	117	12.965	12.965	0.000	99	686844	10.0	9.98	
45 Isooctane	57	13.318	13.318	0.000	99	1548510	10.0	10.9	
46 Benzene	78	13.382	13.382	0.000	95	989021	10.0	10.4	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	97	388641	10.0	10.3	
48 n-Heptane	43	13.639	13.639	0.000	90	531584	10.0	11.1	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	94	1070993	10.0	10.0	
50 n-Butanol	56	14.340	14.340	0.000	85	202783	10.0	11.1	
51 Trichloroethene	95	14.500	14.506	-0.006	98	433288	10.0	10.1	
A 52 GRO	1	14.728	(7.290-22.166)		0	132460515	10.0	0	
53 1,2-Dichloropropane	63	14.998	14.998	0.000	92	359108	10.0	10.5	
55 Methyl methacrylate	69	15.078	15.078	0.000	99	355900	10.0	10.6	
56 1,4-Dioxane	88	15.158	15.158	0.000	93	226859	10.0	11.2	
57 Dibromomethane	174	15.223	15.222	0.001	93	430629	10.0	9.79	
58 Dichlorobromomethane	83	15.458	15.458	0.000	98	704006	10.0	10.3	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	91	525436	10.0	10.7	
A 60 TVOC as Toluene	92	16.399	(5.032-27.767)		0	225176397	10.0	2941.7	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	95	688302	10.0	10.8	
63 Toluene	92	16.827	16.827	0.000	93	734442	10.0	10.5	
62 n-Octane	43	16.827	16.827	0.000	81	756853	10.0	11.3	
64 trans-1,3-Dichloropropene	75	17.352	17.346	0.006	96	504843	10.0	10.6	
65 1,1,2-Trichloroethane	83	17.699	17.699	0.000	97	354977	10.0	10.5	
66 Tetrachloroethene	166	17.817	17.817	0.000	98	683274	10.0	9.58	
67 2-Hexanone	43	18.095	18.090	0.005	97	624806	10.0	10.3	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	774756	10.0	10.4	
69 Ethylene Dibromide	107	18.700	18.700	0.000	99	627046	10.0	10.4	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	86	981090	10.0	10.0	
72 Chlorobenzene	112	19.599	19.599	0.000	95	989121	10.0	9.99	
73 Ethylbenzene	91	19.727	19.727	0.000	98	1675539	10.0	10.4	
74 n-Nonane	57	19.802	19.807	-0.005	87	810438	10.0	10.9	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	1309312	20.0	20.6	
S 76 Xylenes, Total	106				0		30.0	31.0	
77 o-Xylene	106	20.738	20.738	0.000	99	665926	10.0	10.4	
78 Styrene	104	20.781	20.781	0.000	98	993297	10.0	10.7	
79 Bromoform	173	21.171	21.171	0.000	99	814556	10.0	10.8	
80 Isopropylbenzene	105	21.343	21.343	0.000	96	1948690	10.0	10.4	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	978970	10.0	10.4	
82 N-Propylbenzene	91	22.011	22.011	0.000	99	2386026	10.0	10.6	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	97	761445	10.0	10.3	
84 n-Decane	57	22.156	22.156	0.000	91	1105360	10.0	11.0	
85 4-Ethyltoluene	105	22.193	22.193	0.000	99	1971760	10.0	10.5	
86 2-Chlorotoluene	91	22.215	22.215	0.000	96	1649961	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.290	22.289	0.001	93	1717744	10.0	10.2	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	90	823798	10.0	10.7	
89 tert-Butylbenzene	119	22.766	22.771	-0.005	94	1671502	10.0	10.1	
90 1,2,4-Trimethylbenzene	105	22.862	22.862	0.000	97	1732299	10.0	10.4	
91 sec-Butylbenzene	105	23.087	23.087	0.000	99	2504489	10.0	10.4	
92 4-Isopropyltoluene	119	23.285	23.284	0.001	97	2121685	10.0	10.4	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	97	1103777	10.0	10.3	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	96	1070226	10.0	10.3	
95 Benzyl chloride	91	23.670	23.670	0.000	99	1305827	10.0	11.5	
96 n-Butylbenzene	91	23.884	23.878	0.006	99	1842493	10.0	11.4	
97 Undecane	57	23.884	23.884	0.000	93	1001112	10.0	11.0	
98 1,2-Dichlorobenzene	146	24.034	24.033	0.001	97	1064840	10.0	10.2	
99 Dodecane	57	25.569	25.569	0.000	98	907718	10.0	11.2	
100 1,2,4-Trichlorobenzene	180	26.708	26.708	0.000	94	539371	10.0	10.1	
101 Hexachlorobutadiene	225	26.896	26.901	-0.005	97	745191	10.0	9.68	
102 Naphthalene	128	27.243	27.243	0.000	100	1128399	10.0	10.4	
103 1,2,3-Trichlorobenzene	180	27.757	27.757	0.000	96	486786	10.0	10.5	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00747	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

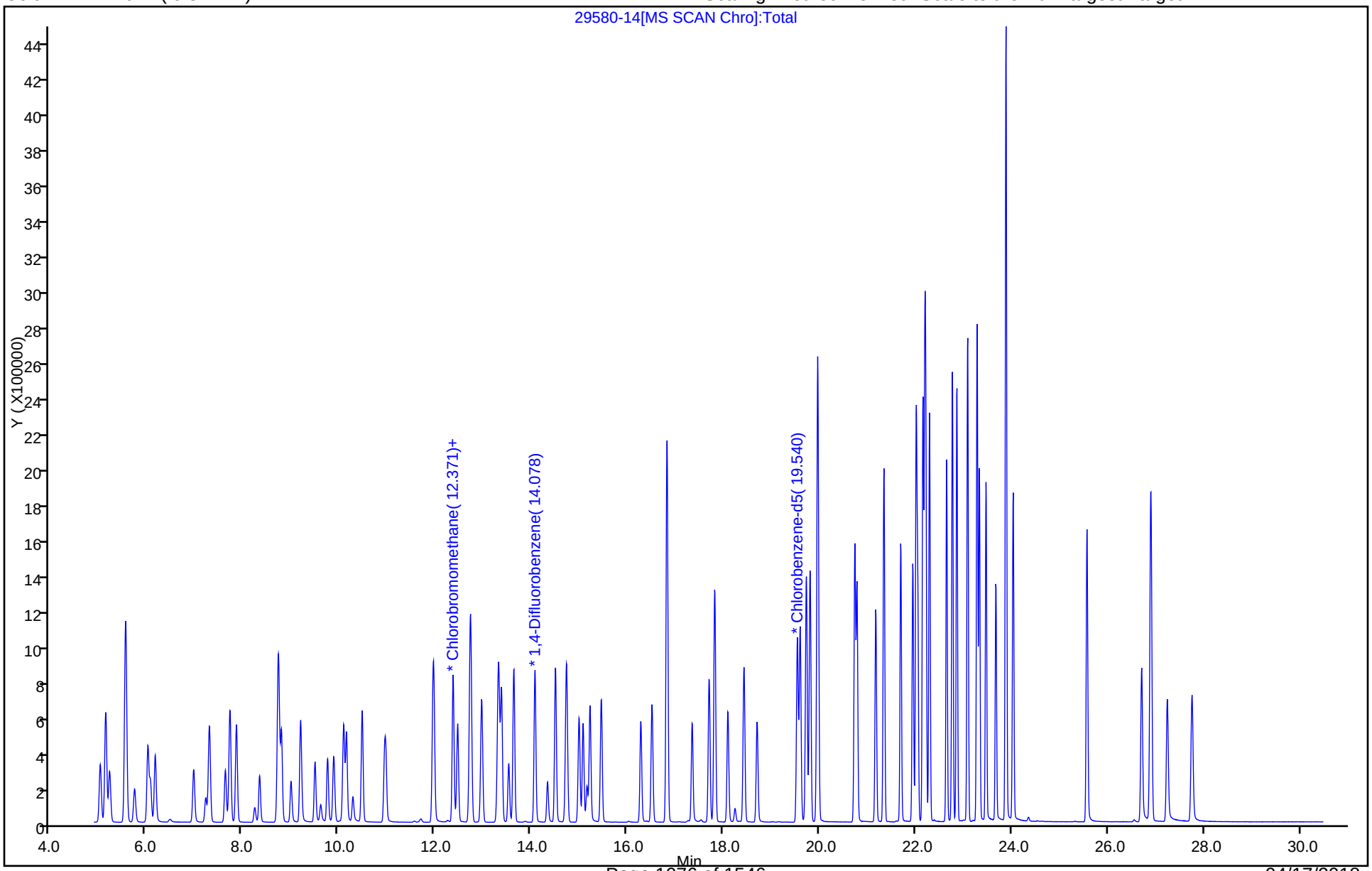
Report Date: 15-Mar-2018 10:07:40 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-14.d

Injection Date:	15-Mar-2018 02:48:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	icv			Worklist Smp#:	14
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128156/2 Calibration Date: 04/05/2018 12:44

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29952-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	1.495	1.576		10.5	10.0	5.4	30.0
Dichlorodifluoromethane	Ave	5.193	5.194		10.0	10.0	0.0	30.0
Freon 22	Ave	2.867	2.944		10.3	10.0	2.7	30.0
1,2-Dichlorotetrafluoroethane	Ave	5.324	5.315		9.98	10.0	-0.2	30.0
Chloromethane	Ave	1.722	1.746		10.1	10.0	1.4	30.0
n-Butane	Ave	2.849	2.765		9.70	10.0	-3.0	30.0
Vinyl chloride	Ave	1.996	1.864		9.33	10.0	-6.6	30.0
1,3-Butadiene	Ave	1.393	1.344		9.64	10.0	-3.5	30.0
Bromomethane	Ave	1.609	1.442		8.96	10.0	-10.4	30.0
Chloroethane	Ave	0.9173	0.8191		8.93	10.0	-10.7	30.0
Isopentane	Ave	1.684	1.449		8.60	10.0	-14.0	30.0
Bromoethene(Vinyl Bromide)	Ave	1.663	1.532		9.21	10.0	-7.9	30.0
Trichlorofluoromethane	Ave	4.203	3.998		9.51	10.0	-4.9	30.0
n-Pentane	Ave	2.402	2.116		8.81	10.0	-11.9	30.0
Ethanol	Ave	0.4172	0.3647		13.1	15.0	-12.6	30.0
Ethyl ether	Ave	1.020	0.9376		9.19	10.0	-8.1	30.0
Acrolein	Ave	0.3484	0.3680		10.6	10.0	5.6	30.0
Freon TF	Ave	3.012	2.847		9.45	10.0	-5.5	30.0
1,1-Dichloroethene	Ave	1.419	1.357		9.56	10.0	-4.4	30.0
Acetone	Ave	1.999	1.789		8.95	10.0	-10.5	30.0
Carbon disulfide	Ave	3.520	3.249		9.23	10.0	-7.7	30.0
Isopropyl alcohol	Ave	2.064	2.025		9.81	10.0	-1.9	30.0
3-Chloropropene	Ave	1.324	1.292		9.76	10.0	-2.4	30.0
Acetonitrile	Ave	0.7446	0.6580		8.84	10.0	-11.6	30.0
Methylene Chloride	Ave	1.319	1.191		9.03	10.0	-9.7	30.0
tert-Butyl alcohol	Ave	2.939	2.916		9.92	10.0	-0.8	30.0
Methyl tert-butyl ether	Ave	4.162	4.012		9.64	10.0	-3.6	30.0
trans-1,2-Dichloroethene	Ave	1.809	1.727		9.55	10.0	-4.5	30.0
Acrylonitrile	Ave	0.7546	0.6854		9.08	10.0	-9.2	30.0
n-Hexane	Ave	2.005	1.879		9.37	10.0	-6.3	30.0
1,1-Dichloroethane	Ave	2.466	2.309		9.36	10.0	-6.4	30.0
Vinyl acetate	Ave	2.808	2.535		9.02	10.0	-9.8	30.0
cis-1,2-Dichloroethene	Ave	1.470	1.418		9.64	10.0	-3.5	30.0
Methyl Ethyl Ketone	Ave	0.7175	0.6628		9.24	10.0	-7.6	30.0
Ethyl acetate	Ave	0.1241	0.1168		9.41	10.0	-5.9	30.0
Tetrahydrofuran	Ave	0.2717	0.2436		8.96	10.0	-10.4	30.0
Chloroform	Ave	2.945	2.835		9.62	10.0	-3.7	30.0
Cyclohexane	Ave	0.3908	0.3734		9.55	10.0	-4.5	30.0
1,1,1-Trichloroethane	Ave	0.6177	0.6104		9.88	10.0	-1.2	30.0
Carbon tetrachloride	Ave	0.6424	0.6543		10.2	10.0	1.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128156/2 Calibration Date: 04/05/2018 12:44

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29952-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.326	1.246		9.39	10.0	-6.1	30.0
Benzene	Ave	0.8883	0.8291		9.33	10.0	-6.7	30.0
1,2-Dichloroethane	Ave	0.3526	0.3577		10.1	10.0	1.5	30.0
n-Heptane	Ave	0.4468	0.4255		9.52	10.0	-4.8	30.0
n-Butanol	Ave	0.1705	0.1614		9.46	10.0	-5.4	30.0
Trichloroethene	Ave	0.3988	0.3801		9.53	10.0	-4.7	30.0
1,2-Dichloropropane	Ave	0.3189	0.2976		9.33	10.0	-6.7	30.0
Methyl methacrylate	Ave	0.3138	0.2980		9.50	10.0	-5.0	30.0
1,4-Dioxane	Ave	0.1889	0.1824		9.65	10.0	-3.5	30.0
Dibromomethane	Ave	0.4108	0.4128		10.0	10.0	0.5	30.0
Bromodichloromethane	Ave	0.6379	0.6372		9.99	10.0	-0.1	30.0
cis-1,3-Dichloropropene	Ave	0.4578	0.4655		10.2	10.0	1.7	30.0
methyl isobutyl ketone	Ave	0.5967	0.5709		9.57	10.0	-4.3	30.0
n-Octane	Ave	0.6237	0.6417		10.3	10.0	2.9	30.0
Toluene	Ave	0.7147	0.6656		9.31	10.0	-6.9	30.0
trans-1,3-Dichloropropene	Ave	0.4444	0.4708		10.6	10.0	5.9	30.0
1,1,2-Trichloroethane	Ave	0.3442	0.3173		9.22	10.0	-7.8	30.0
Tetrachloroethene	Ave	0.7272	0.6542		8.99	10.0	-10.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6154	0.5432		8.82	10.0	-11.7	30.0
Dibromochloromethane	Ave	0.7611	0.7152		9.39	10.0	-6.0	30.0
1,2-Dibromoethane	Ave	0.6140	0.5925		9.65	10.0	-3.5	30.0
Chlorobenzene	Ave	1.009	0.9458		9.37	10.0	-6.3	30.0
Ethylbenzene	Ave	1.649	1.586		9.62	10.0	-3.8	30.0
n-Nonane	Ave	0.7608	0.7345		9.65	10.0	-3.5	30.0
m,p-Xylene	Ave	0.6472	0.6259		19.3	20.0	-3.3	30.0
Xylene, o-	Ave	0.6533	0.6359		9.73	10.0	-2.7	30.0
Styrene	Ave	0.9433	0.9779		10.4	10.0	3.7	30.0
Bromoform	Ave	0.7657	0.6738		8.80	10.0	-12.0	30.0
Cumene	Ave	1.919	1.894		9.87	10.0	-1.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9601	0.9406		9.79	10.0	-2.0	30.0
n-Propylbenzene	Ave	2.299	2.302		10.0	10.0	0.2	30.0
1,2,3-Trichloropropane	Ave	0.7509	0.7464		9.94	10.0	-0.6	30.0
n-Decane	Ave	1.027	1.037		10.1	10.0	0.9	30.0
4-Ethyltoluene	Ave	1.920	1.945		10.1	10.0	1.3	30.0
2-Chlorotoluene	Ave	1.624	1.619		9.97	10.0	-0.3	30.0
1,3,5-Trimethylbenzene	Ave	1.717	1.693		9.86	10.0	-1.4	30.0
Alpha Methyl Styrene	Ave	0.7859	0.8057		10.2	10.0	2.5	30.0
tert-Butylbenzene	Ave	1.695	1.675		9.88	10.0	-1.2	30.0
1,2,4-Trimethylbenzene	Ave	1.691	1.747		10.3	10.0	3.3	30.0
sec-Butylbenzene	Ave	2.449	2.518		10.3	10.0	2.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128156/2 Calibration Date: 04/05/2018 12:44

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29952-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.072	2.145		10.3	10.0	3.5	30.0
1,3-Dichlorobenzene	Ave	1.096	1.158		10.6	10.0	5.6	30.0
1,4-Dichlorobenzene	Ave	1.058	1.121		10.6	10.0	6.0	30.0
Benzyl chloride	Ave	1.155	1.389		12.0	10.0	20.3	30.0
n-Butylbenzene	Ave	1.650	1.870		11.3	10.0	13.4	30.0
n-Undecane	Ave	0.9274	0.9881		10.7	10.0	6.5	30.0
1,2-Dichlorobenzene	Ave	1.066	1.121		10.5	10.0	5.2	30.0
n-Dodecane	Ave	0.8252	0.8645		10.5	10.0	4.8	30.0
1,2,4-Trichlorobenzene	Ave	0.5468	0.5688		10.4	10.0	4.0	30.0
Hexachlorobutadiene	Ave	0.7846	0.7471		9.52	10.0	-4.8	30.0
Naphthalene	Ave	1.107	1.201		10.8	10.0	8.5	30.0
1,2,3-Trichlorobenzene	Ave	0.4724	0.5162		10.9	10.0	9.3	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-02.d
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Apr-2018 12:44:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029952-002
Operator ID: ert Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 14:51:42 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 14:51:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.047	5.047	0.000	96	263496	10.0	10.5	
2 Dichlorodifluoromethane	85	5.160	5.160	0.000	99	868550	10.0	10.0	
3 Chlorodifluoromethane	51	5.240	5.240	0.000	97	492315	10.0	10.3	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.566	5.566	0.000	89	888816	10.0	9.98	
5 Chloromethane	50	5.759	5.759	0.000	99	292008	10.0	10.1	
6 Butane	43	6.032	6.032	0.000	98	462298	10.0	9.70	
7 Vinyl chloride	62	6.085	6.085	0.000	98	311661	10.0	9.33	
8 Butadiene	54	6.181	6.181	0.000	94	224703	10.0	9.64	
10 BFB									
9 Bromomethane	94	6.984	6.984	0.000	99	241136	10.0	8.96	
11 Chloroethane	64	7.230	7.230	0.000	99	136973	10.0	8.93	
12 2-Methylbutane	43	7.305	7.305	0.000	92	242308	10.0	8.60	
13 Vinyl bromide	106	7.637	7.637	0.000	99	256118	10.0	9.21	
14 Trichlorofluoromethane	101	7.733	7.733	0.000	98	668548	10.0	9.51	
15 Pentane	43	7.867	7.867	0.000	98	353920	10.0	8.81	
16 Ethanol	45	8.241	8.241	0.000	100	91512	15.0	13.1	
17 Ethyl ether	59	8.348	8.348	0.000	95	156790	10.0	9.19	
19 Acrolein	56	8.723	8.723	0.000	97	61536	10.0	10.6	
20 1,1,2-Trichloro-1,2,2-trif	101	8.739	8.739	0.000	96	476027	10.0	9.45	
21 1,1-Dichloroethene	96	8.803	8.803	0.000	97	226942	10.0	9.56	
22 Acetone	43	9.001	9.001	0.000	97	299148	10.0	8.95	
23 Carbon disulfide	76	9.193	9.193	0.000	99	543335	10.0	9.23	
24 Isopropyl alcohol	45	9.204	9.204	0.000	100	338590	10.0	9.81	
25 3-Chloro-1-propene	41	9.498	9.498	0.000	98	215996	10.0	9.76	
26 Acetonitrile	41	9.616	9.616	0.000	99	110035	10.0	8.84	
27 Methylene Chloride	49	9.760	9.760	0.000	89	199143	10.0	9.03	
28 2-Methyl-2-propanol	59	9.883	9.883	0.000	94	487628	10.0	9.92	
29 Methyl tert-butyl ether	73	10.097	10.097	0.000	96	670978	10.0	9.64	
30 trans-1,2-Dichloroethene	61	10.151	10.151	0.000	97	288853	10.0	9.55	
S 31 1,2-Dichloroethene, Total	61				0		20.0	19.2	
32 Acrylonitrile	53	10.285	10.285	0.000	95	114618	10.0	9.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	0.000	91	314214	10.0	9.37	
34 1,1-Dichloroethane	63	10.948	10.948	0.000	100	386106	10.0	9.36	
35 Vinyl acetate	43	10.975	10.975	0.000	99	423836	10.0	9.02	
36 cis-1,2-Dichloroethene	96	11.954	11.954	0.000	94	237144	10.0	9.64	
37 2-Butanone (MEK)	72	11.965	11.965	0.000	97	110833	10.0	9.24	
38 Ethyl acetate	88	11.975	11.975	0.000	97	19528	10.0	9.41	
39 Tetrahydrofuran	42	12.371	12.371	0.000	90	208488	10.0	8.96	
* 40 Chlorobromomethane	128	12.376	12.376	0.000	80	167257	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	96	473998	10.0	9.62	
42 Cyclohexane	84	12.724	12.724	0.000	97	319660	10.0	9.55	
43 1,1,1-Trichloroethane	97	12.740	12.740	0.000	95	522534	10.0	9.88	
44 Carbon tetrachloride	117	12.965	12.965	0.000	98	560091	10.0	10.2	
45 Isooctane	57	13.318	13.318	0.000	99	1066459	10.0	9.39	
46 Benzene	78	13.377	13.377	0.000	95	709708	10.0	9.33	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	98	306210	10.0	10.1	
48 n-Heptane	43	13.634	13.634	0.000	88	364252	10.0	9.52	
* 49 1,4-Difluorobenzene	114	14.072	14.072	0.000	94	856200	10.0	10.0	
50 n-Butanol	56	14.334	14.334	0.000	85	138127	10.0	9.46	
51 Trichloroethene	95	14.506	14.506	0.000	98	325379	10.0	9.53	
A 52 GRO	1	14.728	(7.295-22.160)		0	102746100	10.0	0	
53 1,2-Dichloropropane	63	14.992	14.992	0.000	90	254768	10.0	9.33	
55 Methyl methacrylate	69	15.078	15.078	0.000	98	255096	10.0	9.50	
56 1,4-Dioxane	88	15.158	15.158	0.000	91	156105	10.0	9.65	
57 Dibromomethane	174	15.222	15.222	0.000	91	353325	10.0	10.0	
58 Dichlorobromomethane	83	15.458	15.458	0.000	98	545435	10.0	9.99	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	91	398504	10.0	10.2	
A 60 TVOC as Toluene	92	16.399	(5.037-27.761)		0	181167234	10.0	2960.6	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	94	488740	10.0	9.57	
62 n-Octane	43	16.822	16.822	0.000	88	549352	10.0	10.3	
63 Toluene	92	16.822	16.822	0.000	94	568796	10.0	9.31	
64 trans-1,3-Dichloropropene	75	17.346	17.346	0.000	97	403037	10.0	10.6	
65 1,1,2-Trichloroethane	83	17.699	17.699	0.000	97	271125	10.0	9.22	
66 Tetrachloroethene	166	17.817	17.817	0.000	97	559029	10.0	8.99	
67 2-Hexanone	43	18.090	18.090	0.000	97	464149	10.0	8.82	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	611156	10.0	9.39	
69 Ethylene Dibromide	107	18.700	18.700	0.000	99	506303	10.0	9.65	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	85	854695	10.0	10.0	
72 Chlorobenzene	112	19.593	19.593	0.000	95	808180	10.0	9.37	
73 Ethylbenzene	91	19.727	19.727	0.000	98	1355209	10.0	9.62	
74 n-Nonane	57	19.802	19.802	0.000	85	627634	10.0	9.65	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	1069651	20.0	19.3	
S 76 Xylenes, Total	106				0		30.0	29.1	
77 o-Xylene	106	20.738	20.738	0.000	99	543363	10.0	9.73	
78 Styrene	104	20.781	20.781	0.000	97	835672	10.0	10.4	
79 Bromoform	173	21.171	21.171	0.000	99	575820	10.0	8.80	
80 Isopropylbenzene	105	21.343	21.343	0.000	96	1618851	10.0	9.87	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	803739	10.0	9.79	
82 N-Propylbenzene	91	22.011	22.011	0.000	99	1967371	10.0	10.0	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	97	637792	10.0	9.94	
84 n-Decane	57	22.150	22.150	0.000	92	885983	10.0	10.1	
85 4-Ethyltoluene	105	22.188	22.188	0.000	98	1661672	10.0	10.1	
86 2-Chlorotoluene	91	22.215	22.215	0.000	97	1383266	10.0	9.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.289	22.289	0.000	93	1446763	10.0	9.86	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	89	688490	10.0	10.2	
89 tert-Butylbenzene	119	22.766	22.766	0.000	94	1431187	10.0	9.88	
90 1,2,4-Trimethylbenzene	105	22.857	22.857	0.000	97	1492855	10.0	10.3	
91 sec-Butylbenzene	105	23.081	23.081	0.000	98	2152107	10.0	10.3	
92 4-Isopropyltoluene	119	23.279	23.279	0.000	97	1832848	10.0	10.3	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	97	989223	10.0	10.6	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	95	958099	10.0	10.6	
95 Benzyl chloride	91	23.670	23.670	0.000	99	1187112	10.0	12.0	
96 n-Butylbenzene	91	23.878	23.878	0.000	99	1598104	10.0	11.3	
97 Undecane	57	23.884	23.884	0.000	93	844362	10.0	10.7	
98 1,2-Dichlorobenzene	146	24.028	24.028	0.000	97	957951	10.0	10.5	
99 Dodecane	57	25.563	25.563	0.000	98	738761	10.0	10.5	
100 1,2,4-Trichlorobenzene	180	26.703	26.703	0.000	94	486067	10.0	10.4	
101 Hexachlorobutadiene	225	26.896	26.896	0.000	97	638375	10.0	9.52	
102 Naphthalene	128	27.238	27.238	0.000	99	1026478	10.0	10.8	
103 1,2,3-Trichlorobenzene	180	27.751	27.751	0.000	96	441070	10.0	10.9	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00667	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

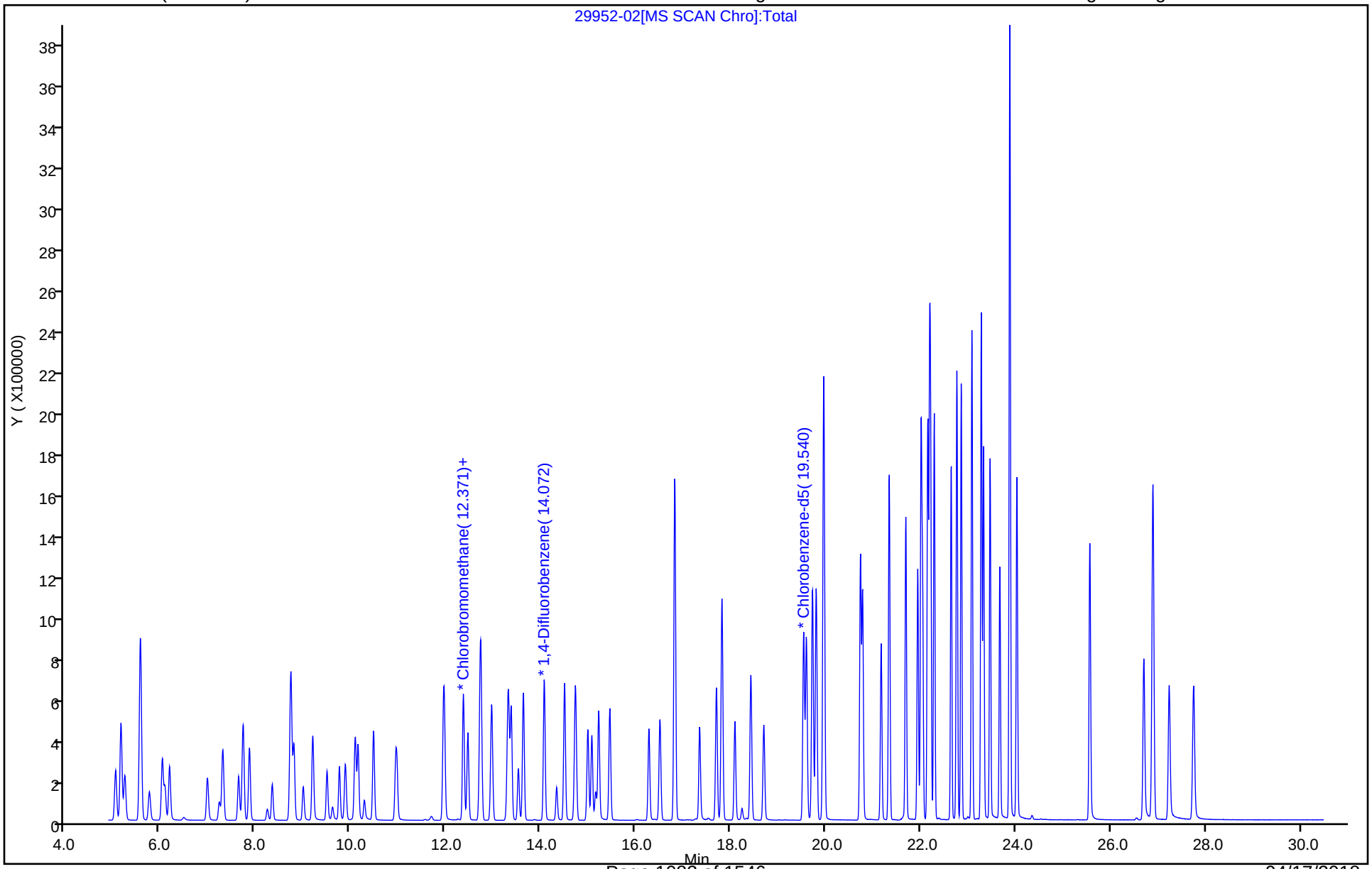
Report Date: 06-Apr-2018 14:51:43 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-02.d

Injection Date:	05-Apr-2018 12:44:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	ccvis			Worklist Smp#:	2
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128215/4 Calibration Date: 04/06/2018 14:56

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29983-04.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	1.495	1.360		9.09	10.0	-9.0	30.0
Dichlorodifluoromethane	Ave	5.193	4.914		9.46	10.0	-5.4	30.0
Freon 22	Ave	2.867	2.639		9.20	10.0	-8.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	5.324	4.922		9.24	10.0	-7.5	30.0
Chloromethane	Ave	1.722	1.584		9.19	10.0	-8.1	30.0
n-Butane	Ave	2.849	2.604		9.14	10.0	-8.6	30.0
Vinyl chloride	Ave	1.996	1.770		8.86	10.0	-11.4	30.0
1,3-Butadiene	Ave	1.393	1.267		9.09	10.0	-9.1	30.0
Bromomethane	Ave	1.609	1.426		8.86	10.0	-11.4	30.0
Chloroethane	Ave	0.9173	0.7901		8.61	10.0	-13.9	30.0
Isopentane	Ave	1.684	1.424		8.45	10.0	-15.5	30.0
Bromoethene(Vinyl Bromide)	Ave	1.663	1.505		9.05	10.0	-9.5	30.0
Trichlorofluoromethane	Ave	4.203	3.972		9.45	10.0	-5.5	30.0
n-Pentane	Ave	2.402	2.031		8.46	10.0	-15.4	30.0
Ethanol	Ave	0.4172	0.4065		14.6	15.0	-2.6	30.0
Ethyl ether	Ave	1.020	0.9257		9.07	10.0	-9.2	30.0
Acrolein	Ave	0.3484	0.3711		10.6	10.0	6.5	30.0
Freon TF	Ave	3.012	2.772		9.20	10.0	-8.0	30.0
1,1-Dichloroethene	Ave	1.419	1.319		9.29	10.0	-7.0	30.0
Acetone	Ave	1.999	1.728		8.64	10.0	-13.6	30.0
Carbon disulfide	Ave	3.520	3.171		9.01	10.0	-9.9	30.0
Isopropyl alcohol	Ave	2.064	1.956		9.47	10.0	-5.3	30.0
3-Chloropropene	Ave	1.324	0.9922		7.49	10.0	-25.0	30.0
Acetonitrile	Ave	0.7446	0.6459		8.67	10.0	-13.3	30.0
Methylene Chloride	Ave	1.319	1.151		8.72	10.0	-12.8	30.0
tert-Butyl alcohol	Ave	2.939	2.937		9.99	10.0	-0.0	30.0
Methyl tert-butyl ether	Ave	4.162	4.026		9.67	10.0	-3.3	30.0
trans-1,2-Dichloroethene	Ave	1.809	1.698		9.39	10.0	-6.1	30.0
Acrylonitrile	Ave	0.7546	0.6995		9.27	10.0	-7.3	30.0
n-Hexane	Ave	2.005	1.828		9.12	10.0	-8.8	30.0
1,1-Dichloroethane	Ave	2.466	2.256		9.14	10.0	-8.5	30.0
Vinyl acetate	Ave	2.808	2.476		8.81	10.0	-11.8	30.0
cis-1,2-Dichloroethene	Ave	1.470	1.361		9.25	10.0	-7.5	30.0
Methyl Ethyl Ketone	Ave	0.7175	0.6523		9.09	10.0	-9.1	30.0
Ethyl acetate	Ave	0.1241	0.1156		9.31	10.0	-6.9	30.0
Tetrahydrofuran	Ave	0.2717	0.2338		8.60	10.0	-14.0	30.0
Chloroform	Ave	2.945	2.815		9.56	10.0	-4.4	30.0
Cyclohexane	Ave	0.3908	0.3637		9.30	10.0	-6.9	30.0
1,1,1-Trichloroethane	Ave	0.6177	0.6126		9.92	10.0	-0.8	30.0
Carbon tetrachloride	Ave	0.6424	0.6506		10.1	10.0	1.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128215/4 Calibration Date: 04/06/2018 14:56

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29983-04.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.326	1.221		9.20	10.0	-7.9	30.0
Benzene	Ave	0.8883	0.8128		9.15	10.0	-8.5	30.0
1,2-Dichloroethane	Ave	0.3526	0.3597		10.2	10.0	2.0	30.0
n-Heptane	Ave	0.4468	0.4187		9.37	10.0	-6.3	30.0
n-Butanol	Ave	0.1705	0.1584		9.29	10.0	-7.1	30.0
Trichloroethene	Ave	0.3988	0.3765		9.44	10.0	-5.6	30.0
1,2-Dichloropropane	Ave	0.3189	0.2891		9.06	10.0	-9.3	30.0
Methyl methacrylate	Ave	0.3138	0.2972		9.47	10.0	-5.3	30.0
1,4-Dioxane	Ave	0.1889	0.1874		9.92	10.0	-0.8	30.0
Dibromomethane	Ave	0.4108	0.4096		9.97	10.0	-0.3	30.0
Bromodichloromethane	Ave	0.6379	0.6274		9.83	10.0	-1.6	30.0
cis-1,3-Dichloropropene	Ave	0.4578	0.4457		9.73	10.0	-2.6	30.0
methyl isobutyl ketone	Ave	0.5967	0.5549		9.30	10.0	-7.0	30.0
n-Octane	Ave	0.6237	0.6209		9.95	10.0	-0.4	30.0
Toluene	Ave	0.7147	0.6828		9.55	10.0	-4.5	30.0
trans-1,3-Dichloropropene	Ave	0.4444	0.4523		10.2	10.0	1.8	30.0
1,1,2-Trichloroethane	Ave	0.3442	0.3220		9.35	10.0	-6.4	30.0
Tetrachloroethene	Ave	0.7272	0.6699		9.21	10.0	-7.9	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6154	0.5588		9.08	10.0	-9.2	30.0
Dibromochloromethane	Ave	0.7611	0.7499		9.85	10.0	-1.5	30.0
1,2-Dibromoethane	Ave	0.6140	0.5931		9.66	10.0	-3.4	30.0
Chlorobenzene	Ave	1.009	0.9494		9.40	10.0	-5.9	30.0
Ethylbenzene	Ave	1.649	1.582		9.60	10.0	-4.0	30.0
n-Nonane	Ave	0.7608	0.7246		9.52	10.0	-4.8	30.0
m,p-Xylene	Ave	0.6472	0.6389		19.7	20.0	-1.3	30.0
Xylene, o-	Ave	0.6533	0.6389		9.78	10.0	-2.2	30.0
Styrene	Ave	0.9433	0.9851		10.4	10.0	4.4	30.0
Bromoform	Ave	0.7657	0.7568		9.88	10.0	-1.2	30.0
Cumene	Ave	1.919	1.912		9.96	10.0	-0.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9601	0.9115		9.49	10.0	-5.1	30.0
n-Propylbenzene	Ave	2.299	2.285		9.94	10.0	-0.6	30.0
1,2,3-Trichloropropane	Ave	0.7509	0.7245		9.65	10.0	-3.5	30.0
n-Decane	Ave	1.027	0.9930		9.67	10.0	-3.3	30.0
4-Ethyltoluene	Ave	1.920	1.955		10.2	10.0	1.8	30.0
2-Chlorotoluene	Ave	1.624	1.632		10.0	10.0	0.5	30.0
1,3,5-Trimethylbenzene	Ave	1.717	1.708		9.95	10.0	-0.5	30.0
Alpha Methyl Styrene	Ave	0.7859	0.8417		10.7	10.0	7.1	30.0
tert-Butylbenzene	Ave	1.695	1.697		10.0	10.0	0.0	30.0
1,2,4-Trimethylbenzene	Ave	1.691	1.755		10.4	10.0	3.8	30.0
sec-Butylbenzene	Ave	2.449	2.527		10.3	10.0	3.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128215/4 Calibration Date: 04/06/2018 14:56

Instrument ID: CHW.i Calib Start Date: 03/14/2018 16:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 03/14/2018 23:14

Lab File ID: 29983-04.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.072	2.176		10.5	10.0	5.0	30.0
1,3-Dichlorobenzene	Ave	1.096	1.171		10.7	10.0	6.8	30.0
1,4-Dichlorobenzene	Ave	1.058	1.116		10.6	10.0	5.5	30.0
Benzyl chloride	Ave	1.155	1.314		11.4	10.0	13.8	30.0
n-Butylbenzene	Ave	1.650	1.829		11.1	10.0	10.9	30.0
n-Undecane	Ave	0.9274	0.9300		10.0	10.0	0.3	30.0
1,2-Dichlorobenzene	Ave	1.066	1.122		10.5	10.0	5.3	30.0
n-Dodecane	Ave	0.8252	0.7631		9.25	10.0	-7.5	30.0
1,2,4-Trichlorobenzene	Ave	0.5468	0.5565		10.2	10.0	1.8	30.0
Hexachlorobutadiene	Ave	0.7846	0.7524		9.59	10.0	-4.1	30.0
Naphthalene	Ave	1.107	1.079		9.74	10.0	-2.6	30.0
1,2,3-Trichlorobenzene	Ave	0.4724	0.4693		9.93	10.0	-0.7	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-04.d
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Apr-2018 14:56:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029983-004
Operator ID: ert Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 17:58:48 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 17:58:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.037	5.037	0.000	98	210035	10.0	9.09	
2 Dichlorodifluoromethane	85	5.149	5.149	0.000	99	759076	10.0	9.46	
3 Chlorodifluoromethane	51	5.235	5.235	0.000	97	407698	10.0	9.20	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.556	5.556	0.000	89	760332	10.0	9.24	
5 Chloromethane	50	5.748	5.748	0.000	99	244648	10.0	9.19	
6 Butane	43	6.026	6.026	0.000	98	402247	10.0	9.14	
7 Vinyl chloride	62	6.080	6.080	0.000	98	273337	10.0	8.86	
8 Butadiene	54	6.176	6.176	0.000	94	195685	10.0	9.09	
10 BFB									
9 Bromomethane	94	6.979	6.979	0.000	99	220303	10.0	8.86	
11 Chloroethane	64	7.225	7.225	0.000	99	122049	10.0	8.61	
12 2-Methylbutane	43	7.300	7.300	0.000	91	219959	10.0	8.45	
13 Vinyl bromide	106	7.631	7.631	0.000	99	232539	10.0	9.05	
14 Trichlorofluoromethane	101	7.728	7.728	0.000	98	613605	10.0	9.45	
15 Pentane	43	7.861	7.861	0.000	98	313780	10.0	8.46	
16 Ethanol	45	8.241	8.241	0.000	100	94222	15.0	14.6	
17 Ethyl ether	59	8.343	8.343	0.000	94	142998	10.0	9.07	
19 Acrolein	56	8.728	8.728	0.000	38	57319	10.0	10.6	
20 1,1,2-Trichloro-1,2,2-trif	101	8.739	8.739	0.000	96	428164	10.0	9.20	
21 1,1-Dichloroethene	96	8.803	8.803	0.000	98	203785	10.0	9.29	
22 Acetone	43	9.001	9.001	0.000	97	266964	10.0	8.64	
23 Carbon disulfide	76	9.193	9.193	0.000	100	489763	10.0	9.01	
24 Isopropyl alcohol	45	9.204	9.204	0.000	100	302069	10.0	9.47	
25 3-Chloro-1-propene	41	9.493	9.493	0.000	99	153266	10.0	7.49	
26 Acetonitrile	41	9.616	9.616	0.000	99	99776	10.0	8.67	
27 Methylene Chloride	49	9.760	9.760	0.000	88	177777	10.0	8.72	
28 2-Methyl-2-propanol	59	9.889	9.889	0.000	93	453661	10.0	10.0	
29 Methyl tert-butyl ether	73	10.092	10.092	0.000	96	621891	10.0	9.67	
30 trans-1,2-Dichloroethene	61	10.156	10.156	0.000	97	262297	10.0	9.39	
S 31 1,2-Dichloroethene, Total	61				0		20.0	18.6	
32 Acrylonitrile	53	10.285	10.285	0.000	94	108051	10.0	9.27	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.483	10.483	0.000	91	282421	10.0	9.12	
34 1,1-Dichloroethane	63	10.948	10.948	0.000	100	348432	10.0	9.14	
35 Vinyl acetate	43	10.975	10.975	0.000	99	382418	10.0	8.81	
36 cis-1,2-Dichloroethene	96	11.949	11.949	0.000	94	210169	10.0	9.25	
37 2-Butanone (MEK)	72	11.965	11.965	0.000	97	100759	10.0	9.09	
38 Ethyl acetate	88	11.975	11.975	0.000	98	17850	10.0	9.31	
39 Tetrahydrofuran	42	12.371	12.371	0.000	88	184282	10.0	8.60	
* 40 Chlorobromomethane	128	12.377	12.377	0.000	79	154498	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	95	434901	10.0	9.56	
42 Cyclohexane	84	12.724	12.724	0.000	98	286612	10.0	9.30	
43 1,1,1-Trichloroethane	97	12.740	12.740	0.000	95	482808	10.0	9.92	
44 Carbon tetrachloride	117	12.965	12.965	0.000	99	512718	10.0	10.1	
45 Isooctane	57	13.318	13.318	0.000	98	962363	10.0	9.20	
46 Benzene	78	13.382	13.382	0.000	95	640566	10.0	9.15	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	98	283450	10.0	10.2	
48 n-Heptane	43	13.634	13.634	0.000	89	329936	10.0	9.37	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	94	788251	10.0	10.0	
50 n-Butanol	56	14.334	14.334	0.000	85	124811	10.0	9.29	
51 Trichloroethene	95	14.500	14.500	0.000	99	296682	10.0	9.44	
A 52 GRO	1	14.725	(7.290-22.160)		0	91506439	10.0	0	
53 1,2-Dichloropropane	63	14.998	14.998	0.000	90	227849	10.0	9.06	
55 Methyl methacrylate	69	15.078	15.078	0.000	98	234238	10.0	9.47	
56 1,4-Dioxane	88	15.164	15.164	0.000	92	147708	10.0	9.92	
57 Dibromomethane	174	15.223	15.223	0.000	91	322786	10.0	9.97	
58 Dichlorobromomethane	83	15.458	15.458	0.000	99	494482	10.0	9.83	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	93	351254	10.0	9.73	
A 60 TVOC as Toluene	92	16.394	(5.027-27.762)		0	158915505	10.0	2820.8	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	94	437322	10.0	9.30	
63 Toluene	92	16.822	16.822	0.000	93	507808	10.0	9.55	
62 n-Octane	43	16.822	16.822	0.000	80	489338	10.0	9.95	
64 trans-1,3-Dichloropropene	75	17.352	17.352	0.000	97	356450	10.0	10.2	
65 1,1,2-Trichloroethane	83	17.699	17.699	0.000	96	239464	10.0	9.35	
66 Tetrachloroethene	166	17.817	17.817	0.000	97	498167	10.0	9.21	
67 2-Hexanone	43	18.090	18.090	0.000	97	415606	10.0	9.08	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	557706	10.0	9.85	
69 Ethylene Dibromide	107	18.700	18.700	0.000	99	441087	10.0	9.66	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	85	743832	10.0	10.0	
72 Chlorobenzene	112	19.599	19.599	0.000	95	706039	10.0	9.40	
73 Ethylbenzene	91	19.727	19.727	0.000	98	1176798	10.0	9.60	
74 n-Nonane	57	19.802	19.802	0.000	85	538862	10.0	9.52	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	950244	20.0	19.7	
S 76 Xylenes, Total	106				0		30.0	29.5	
77 o-Xylene	106	20.738	20.738	0.000	99	475144	10.0	9.78	
78 Styrene	104	20.781	20.781	0.000	98	732636	10.0	10.4	
79 Bromoform	173	21.171	21.171	0.000	99	562794	10.0	9.88	
80 Isopropylbenzene	105	21.343	21.343	0.000	96	1422216	10.0	9.96	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	677880	10.0	9.49	
82 N-Propylbenzene	91	22.011	22.011	0.000	99	1698981	10.0	9.94	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	96	538764	10.0	9.65	
84 n-Decane	57	22.150	22.150	0.000	93	738464	10.0	9.67	
85 4-Ethyltoluene	105	22.193	22.193	0.000	98	1453710	10.0	10.2	
86 2-Chlorotoluene	91	22.209	22.209	0.000	96	1213623	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 1,3,5-Trimethylbenzene	105	22.290	22.290	0.000	93	1270129	10.0	9.95	
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	90	625973	10.0	10.7	
89 tert-Butylbenzene	119	22.766	22.766	0.000	94	1261721	10.0	10.0	
90 1,2,4-Trimethylbenzene	105	22.857	22.857	0.000	97	1305231	10.0	10.4	
91 sec-Butylbenzene	105	23.081	23.081	0.000	98	1879522	10.0	10.3	
92 4-Isopropyltoluene	119	23.279	23.279	0.000	97	1618332	10.0	10.5	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	97	870699	10.0	10.7	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	95	830198	10.0	10.6	
95 Benzyl chloride	91	23.670	23.670	0.000	99	977502	10.0	11.4	
96 n-Butylbenzene	91	23.878	23.878	0.000	100	1360197	10.0	11.1	
97 Undecane	57	23.884	23.884	0.000	93	691661	10.0	10.0	
98 1,2-Dichlorobenzene	146	24.028	24.028	0.000	96	834524	10.0	10.5	
99 Dodecane	57	25.569	25.569	0.000	98	567486	10.0	9.25	
100 1,2,4-Trichlorobenzene	180	26.703	26.703	0.000	94	413870	10.0	10.2	
101 Hexachlorobutadiene	225	26.896	26.896	0.000	97	559516	10.0	9.59	
102 Naphthalene	128	27.238	27.238	0.000	99	802233	10.0	9.74	
103 1,2,3-Trichlorobenzene	180	27.752	27.752	0.000	96	348992	10.0	9.93	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00667	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

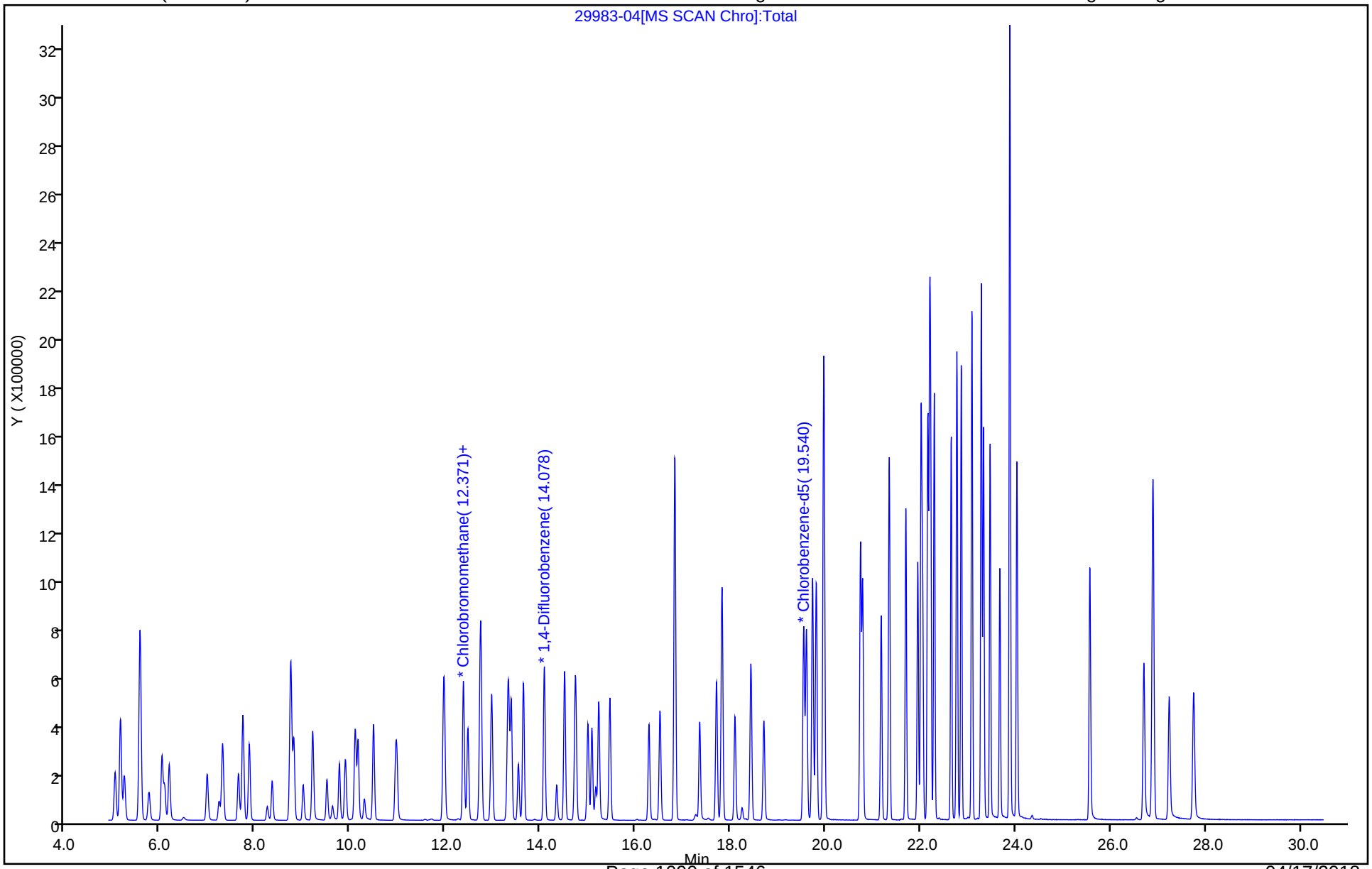
Report Date: 09-Apr-2018 17:58:49 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-04.d

Injection Date:	06-Apr-2018 14:56:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	ccvis			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: ICV 200-126632/18 Calibration Date: 02/22/2018 06:10

Instrument ID: CHX.i Calib Start Date: 02/21/2018 19:15

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/22/2018 02:49

Lab File ID: 200-0029291-018.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	2.007	1.622		8.08	10.0	-19.2	30.0
Dichlorodifluoromethane	Ave	3.902	3.421		8.77	10.0	-12.3	30.0
Freon 22	Ave	3.484	2.954		8.48	10.0	-15.2	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.622	3.573		9.86	10.0	-1.4	30.0
Chloromethane	Ave	1.988	1.629		8.19	10.0	-18.0	30.0
n-Butane	Ave	3.897	3.255		8.35	10.0	-16.5	30.0
Vinyl chloride	Ave	1.913	1.584		8.28	10.0	-17.2	30.0
1,3-Butadiene	Ave	1.596	1.288		8.07	10.0	-19.3	30.0
Bromomethane	Ave	1.187	1.061		8.94	10.0	-10.6	30.0
Chloroethane	Ave	0.8481	0.7535		8.88	10.0	-11.2	30.0
Isopentane	Ave	2.824	2.527		8.94	10.0	-10.5	30.0
Bromoethene(Vinyl Bromide)	Ave	1.103	0.998		9.04	10.0	-9.5	30.0
Trichlorofluoromethane	Ave	3.654	3.263		8.93	10.0	-10.7	30.0
n-Pentane	Ave	4.243	4.112		9.69	10.0	-3.1	30.0
Ethanol	Ave	0.8830	0.6838		11.6	15.0	-22.6	30.0
Ethyl ether	Ave	1.229	1.219		9.92	10.0	-0.8	30.0
Acrolein	Ave	0.5448	0.5926		10.9	10.0	8.8	30.0
Freon TF	Ave	2.364	2.148		9.09	10.0	-9.1	30.0
1,1-Dichloroethene	Ave	1.099	0.997		9.08	10.0	-9.2	30.0
Acetone	Ave	3.805	3.403		8.94	10.0	-10.6	30.0
Carbon disulfide	Ave	3.729	3.921		10.5	10.0	5.1	30.0
Isopropyl alcohol	Ave	3.954	3.124		7.90	10.0	-21.0	30.0
3-Chloropropene	Ave	3.014	2.554		8.47	10.0	-15.3	30.0
Acetonitrile	Ave	1.931	1.785		9.24	10.0	-7.6	30.0
Methylene Chloride	Ave	2.492	2.219		8.90	10.0	-11.0	30.0
tert-Butyl alcohol	Ave	4.066	3.454		8.49	10.0	-15.0	30.0
Methyl tert-butyl ether	Ave	4.619	4.236		9.17	10.0	-8.3	30.0
trans-1,2-Dichloroethene	Ave	2.775	2.633		9.48	10.0	-5.1	30.0
Acrylonitrile	Ave	1.455	1.369		9.41	10.0	-5.9	30.0
n-Hexane	Ave	2.944	2.840		9.64	10.0	-3.5	30.0
1,1-Dichloroethane	Ave	3.446	3.093		8.97	10.0	-10.2	30.0
Vinyl acetate	Ave	6.419	6.066		9.45	10.0	-5.5	30.0
cis-1,2-Dichloroethene	Ave	1.369	1.237		9.03	10.0	-9.7	30.0
Methyl Ethyl Ketone	Ave	0.8494	0.7853		9.24	10.0	-7.5	30.0
Ethyl acetate	Ave	0.1069	0.1051		9.83	10.0	-1.7	30.0
Tetrahydrofuran	Ave	0.5450	0.4897		8.98	10.0	-10.2	30.0
Chloroform	Ave	3.427	3.176		9.27	10.0	-7.3	30.0
Cyclohexane	Ave	0.3490	0.3265		9.35	10.0	-6.5	30.0
1,1,1-Trichloroethane	Ave	0.5436	0.5098		9.38	10.0	-6.2	30.0
Carbon tetrachloride	Ave	0.5046	0.4821		9.55	10.0	-4.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: ICV 200-126632/18 Calibration Date: 02/22/2018 06:10

Instrument ID: CHX.i Calib Start Date: 02/21/2018 19:15

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/22/2018 02:49

Lab File ID: 200-0029291-018.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	1.741		9.01	10.0	-9.9	30.0
Benzene	Ave	0.9106	0.8261		9.07	10.0	-9.3	30.0
1,2-Dichloroethane	Ave	0.4910	0.4502		9.17	10.0	-8.3	30.0
n-Heptane	Ave	0.9100	0.8055		8.85	10.0	-11.5	30.0
n-Butanol	Ave	0.2539	0.2318		9.13	10.0	-8.7	30.0
Trichloroethene	Ave	0.3657	0.3376		9.23	10.0	-7.7	30.0
1,2-Dichloropropane	Ave	0.4334	0.3856		8.89	10.0	-11.0	30.0
Methyl methacrylate	Ave	0.3768	0.3446		9.14	10.0	-8.5	30.0
1,4-Dioxane	Ave	0.1855	0.1569		8.46	10.0	-15.4	30.0
Dibromomethane	Ave	0.2243	0.2027		9.04	10.0	-9.6	30.0
Bromodichloromethane	Ave	0.6723	0.6155		9.15	10.0	-8.4	30.0
cis-1,3-Dichloropropene	Ave	0.5473	0.5147		9.40	10.0	-6.0	30.0
methyl isobutyl ketone	Ave	1.180	0.9933		8.42	10.0	-15.8	30.0
Toluene	Ave	0.6503	0.6130		9.42	10.0	-5.7	30.0
n-Octane	Ave	1.297	1.148		8.85	10.0	-11.5	30.0
trans-1,3-Dichloropropene	Ave	0.5714	0.5357		9.37	10.0	-6.3	30.0
1,1,2-Trichloroethane	Ave	0.3670	0.3474		9.46	10.0	-5.3	30.0
Tetrachloroethene	Ave	0.3668	0.3532		9.63	10.0	-3.7	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	1.242	1.075		8.66	10.0	-13.4	30.0
Dibromochloromethane	Ave	0.5458	0.5184		9.50	10.0	-5.0	30.0
1,2-Dibromoethane	Ave	0.5468	0.5294		9.68	10.0	-3.2	30.0
Chlorobenzene	Ave	0.7978	0.7377		9.24	10.0	-7.5	30.0
Ethylbenzene	Ave	1.549	1.392		8.99	10.0	-10.1	30.0
n-Nonane	Ave	1.057	0.9486		8.97	10.0	-10.3	30.0
m,p-Xylene	Ave	0.5318	0.4822		18.1	20.0	-9.3	30.0
Xylene, o-	Ave	0.5177	0.4712		9.10	10.0	-9.0	30.0
Styrene	Ave	0.7853	0.7518		9.57	10.0	-4.3	30.0
Bromoform	Ave	0.4322	0.4058		9.39	10.0	-6.1	30.0
Cumene	Ave	1.581	1.401		8.86	10.0	-11.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9671	0.9014		9.32	10.0	-6.8	30.0
n-Propylbenzene	Ave	2.192	1.981		9.04	10.0	-9.6	30.0
1,2,3-Trichloropropane	Ave	0.8717	0.7652		8.78	10.0	-12.2	30.0
n-Decane	Ave	1.444	1.332		9.23	10.0	-7.7	30.0
4-Ethyltoluene	Ave	1.616	1.586		9.81	10.0	-1.9	30.0
2-Chlorotoluene	Ave	1.559	1.471		9.43	10.0	-5.7	30.0
1,3,5-Trimethylbenzene	Ave	1.340	1.222		9.12	10.0	-8.8	30.0
Alpha Methyl Styrene	Ave	0.5535	0.5532		9.99	10.0	-0.0	30.0
tert-Butylbenzene	Ave	1.162	1.096		9.43	10.0	-5.7	30.0
1,2,4-Trimethylbenzene	Ave	1.345	1.281		9.52	10.0	-4.7	30.0
sec-Butylbenzene	Ave	1.928	1.836		9.52	10.0	-4.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: ICV 200-126632/18 Calibration Date: 02/22/2018 06:10

Instrument ID: CHX.i Calib Start Date: 02/21/2018 19:15

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/22/2018 02:49

Lab File ID: 200-0029291-018.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.482	1.433		9.67	10.0	-3.3	30.0
1,3-Dichlorobenzene	Ave	0.7425	0.7146		9.62	10.0	-3.8	30.0
1,4-Dichlorobenzene	Ave	0.7347	0.6988		9.51	10.0	-4.9	30.0
Benzyl chloride	Ave	1.285	1.165		9.07	10.0	-9.3	30.0
n-Butylbenzene	Ave	1.679	1.609		9.58	10.0	-4.2	30.0
n-Undecane	Ave	1.421	1.164		8.19	10.0	-18.1	30.0
1,2-Dichlorobenzene	Ave	0.6937	0.6641		9.57	10.0	-4.3	30.0
n-Dodecane	Ave	0.9289	0.7817		8.41	10.0	-15.8	30.0
1,2,4-Trichlorobenzene	Ave	0.4501	0.3518		7.81	10.0	-21.8	30.0
Hexachlorobutadiene	Ave	0.4003	0.3318		8.29	10.0	-17.1	30.0
Naphthalene	Ave	1.164	0.8890		7.63	10.0	-23.6	30.0
1,2,3-Trichlorobenzene	Ave	0.3982	0.3182		7.99	10.0	-20.1	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-018.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 22-Feb-2018 06:10:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-018
Operator ID: pad Instrument ID: CHX.i
Sublist:

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:22:10 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: daiglep Date: 22-Feb-2018 10:16:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.049	3.044	0.005	97	558182	10.0	8.08	
2 Dichlorodifluoromethane	85	3.113	3.108	0.005	98	1177068	10.0	8.77	
3 Chlorodifluoromethane	51	3.161	3.156	0.005	98	1016322	10.0	8.48	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.359	3.354	0.005	97	1229521	10.0	9.86	
5 Chloromethane	50	3.493	3.488	0.005	99	560638	10.0	8.19	
6 Butane	43	3.675	3.670	0.005	98	1120154	10.0	8.35	
7 Vinyl chloride	62	3.718	3.713	0.005	98	545086	10.0	8.28	
8 Butadiene	54	3.787	3.782	0.005	90	443070	10.0	8.07	
10 Bromomethane	94	4.424	4.419	0.005	98	364946	10.0	8.94	
11 Chloroethane	64	4.643	4.633	0.010	97	259275	10.0	8.88	
12 2-Methylbutane	43	4.702	4.697	0.005	94	869420	10.0	8.94	
13 Vinyl bromide	106	5.007	5.002	0.005	97	343398	10.0	9.04	
14 Trichlorofluoromethane	101	5.098	5.093	0.005	97	1122718	10.0	8.93	
16 Pentane	43	5.226	5.221	0.005	97	1414797	10.0	9.69	
17 Ethanol	45	5.649	5.644	0.005	98	353078	15.0	11.6	
18 Ethyl ether	59	5.724	5.719	0.005	87	419406	10.0	9.92	
9 BFB									
19 Acrolein	56	6.115	6.104	0.010	99	203898	10.0	10.9	
20 1,1,2-Trichloro-1,2,2-trif	101	6.115	6.109	0.005	93	739240	10.0	9.09	
21 1,1-Dichloroethene	96	6.173	6.163	0.010	88	343203	10.0	9.08	
22 Acetone	43	6.414	6.409	0.005	100	1171011	10.0	8.94	
23 Carbon disulfide	76	6.559	6.553	0.006	99	1349142	10.0	10.5	
24 Isopropyl alcohol	45	6.692	6.687	0.005	100	1075091	10.0	7.90	
25 3-Chloro-1-propene	41	6.938	6.938	0.000	92	878976	10.0	8.47	
26 Acetonitrile	41	7.094	7.088	0.006	98	614334	10.0	9.24	
27 Methylene Chloride	49	7.233	7.233	0.000	90	763476	10.0	8.90	
28 2-Methyl-2-propanol	59	7.468	7.457	0.011	97	1188625	10.0	8.49	
29 Methyl tert-butyl ether	73	7.634	7.629	0.005	95	1457538	10.0	9.17	
31 trans-1,2-Dichloroethene	61	7.666	7.661	0.005	88	905973	10.0	9.48	
32 Acrylonitrile	53	7.842	7.837	0.005	93	471021	10.0	9.41	
33 Hexane	57	8.040	8.035	0.005	92	977299	10.0	9.64	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	8.554	8.549	0.005	99	1064328	10.0	8.97	
35 Vinyl acetate	43	8.629	8.624	0.005	100	2087327	10.0	9.45	
S 30 1,2-Dichloroethene, Total	61				0		20.0	18.5	
37 cis-1,2-Dichloroethene	96	9.688	9.683	0.005	93	425632	10.0	9.03	
38 2-Butanone (MEK)	72	9.747	9.747	0.000	99	270216	10.0	9.24	
39 Ethyl acetate	88	9.784	9.790	-0.006	98	36152	10.0	9.83	
* 40 Chlorobromomethane	128	10.170	10.170	0.000	88	344168	10.0	10.0	
41 Tetrahydrofuran	42	10.180	10.180	0.000	91	1022370	10.0	8.98	
42 Chloroform	83	10.309	10.303	0.006	94	1092846	10.0	9.27	
43 Cyclohexane	84	10.549	10.544	0.005	89	681696	10.0	9.35	
44 1,1,1-Trichloroethane	97	10.587	10.582	0.005	93	1064311	10.0	9.38	
45 Carbon tetrachloride	117	10.844	10.838	0.006	95	1006608	10.0	9.55	
46 Isooctane	57	11.293	11.293	0.000	97	3634324	10.0	9.01	
47 Benzene	78	11.347	11.341	0.006	98	1724849	10.0	9.07	
48 1,2-Dichloroethane	62	11.550	11.550	0.000	96	940052	10.0	9.17	
49 n-Heptane	43	11.710	11.705	0.005	97	1681715	10.0	8.85	
* 50 1,4-Difluorobenzene	114	12.245	12.245	0.000	99	2088307	10.0	10.0	
52 n-Butanol	56	12.700	12.695	0.005	97	483883	10.0	9.13	
53 Trichloroethene	95	12.737	12.737	0.000	86	704844	10.0	9.23	
A 51 GRO	1	13.200	(4.687-21.714)		0	264554117	10.0	0	
54 1,2-Dichloropropane	63	13.337	13.337	0.000	88	805083	10.0	8.89	
55 Methyl methacrylate	69	13.524	13.519	0.005	87	719475	10.0	9.14	
56 1,4-Dioxane	88	13.583	13.583	0.000	94	327661	10.0	8.46	
57 Dibromomethane	174	13.609	13.604	0.005	83	423219	10.0	9.04	
58 Dichlorobromomethane	83	13.920	13.920	0.000	96	1285119	10.0	9.15	
60 cis-1,3-Dichloropropene	75	14.899	14.899	0.000	97	1074643	10.0	9.40	
A 59 TVOC as Toluene	92	15.107	(3.034-27.181)		0	397071186	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.214	15.214	0.000	98	2073901	10.0	8.42	
65 Toluene	92	15.514	15.509	0.005	96	1149725	10.0	9.42	
64 n-Octane	43	15.567	15.567	0.000	99	2397459	10.0	8.85	
66 trans-1,3-Dichloropropene	75	16.156	16.156	0.000	95	1118379	10.0	9.37	
67 1,1,2-Trichloroethane	83	16.546	16.546	0.000	93	651578	10.0	9.46	
68 Tetrachloroethene	166	16.637	16.637	0.000	84	662464	10.0	9.63	
69 2-Hexanone	43	17.033	17.028	0.005	89	2016978	10.0	8.66	
71 Chlorodibromomethane	129	17.349	17.344	0.005	95	972285	10.0	9.50	
72 Ethylene Dibromide	107	17.627	17.627	0.000	97	993037	10.0	9.68	
* 74 Chlorobenzene-d5	117	18.574	18.574	0.000	97	1876087	10.0	10.0	
75 Chlorobenzene	112	18.638	18.638	0.000	84	1383626	10.0	9.24	
76 Ethylbenzene	91	18.799	18.799	0.000	99	2611685	10.0	8.99	
77 n-Nonane	57	18.932	18.932	0.000	95	1779241	10.0	8.97	
78 m-Xylene & p-Xylene	106	19.066	19.066	0.000	0	1808991	20.0	18.1	
S 73 Xylenes, Total	106				0		30.0	27.2	
79 o-Xylene	106	19.960	19.960	0.000	96	883858	10.0	9.10	
80 Styrene	104	20.024	20.024	0.000	95	1410204	10.0	9.57	
81 Bromoform	173	20.495	20.489	0.005	93	761135	10.0	9.39	
82 Isopropylbenzene	105	20.719	20.719	0.000	98	2627428	10.0	8.86	
84 1,1,2,2-Tetrachloroethane	83	21.447	21.447	0.000	97	1690707	10.0	9.32	
85 N-Propylbenzene	91	21.511	21.511	0.000	97	3716512	10.0	9.04	
86 1,2,3-Trichloropropane	75	21.548	21.548	0.000	95	1435239	10.0	8.78	
87 n-Decane	57	21.704	21.704	0.000	86	2499154	10.0	9.23	
88 4-Ethyltoluene	105	21.714	21.714	0.000	96	2974530	10.0	9.81	
89 2-Chlorotoluene	91	21.720	21.720	0.000	95	2758600	10.0	9.43	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	21.832	21.832	0.000	89	2292329	10.0	9.12	
91 Alpha Methyl Styrene	118	22.222	22.223	-0.001	80	1037674	10.0	10.0	
92 tert-Butylbenzene	119	22.351	22.351	0.000	86	2055469	10.0	9.43	
93 1,2,4-Trimethylbenzene	105	22.453	22.453	-0.001	98	2403375	10.0	9.52	
94 sec-Butylbenzene	105	22.693	22.693	0.000	97	3444263	10.0	9.52	
95 4-Isopropyltoluene	119	22.907	22.907	0.000	95	2687567	10.0	9.67	
96 1,3-Dichlorobenzene	146	22.934	22.934	0.000	97	1340347	10.0	9.62	
97 1,4-Dichlorobenzene	146	23.078	23.078	0.000	86	1310735	10.0	9.51	
98 Benzyl chloride	91	23.287	23.287	0.000	96	2185429	10.0	9.07	
100 n-Butylbenzene	91	23.501	23.501	0.000	96	3017854	10.0	9.58	
99 Undecane	57	23.533	23.533	0.000	93	2182761	10.0	8.19	
101 1,2-Dichlorobenzene	146	23.629	23.629	0.000	88	1245717	10.0	9.57	
102 Dodecane	57	25.159	25.160	-0.001	92	1466331	10.0	8.41	
103 1,2,4-Trichlorobenzene	180	26.192	26.192	0.000	93	659809	10.0	7.81	
104 Hexachlorobutadiene	225	26.379	26.379	0.000	90	622397	10.0	8.29	
105 Naphthalene	128	26.689	26.690	-0.001	97	1667497	10.0	7.63	
106 1,2,3-Trichlorobenzene	180	27.171	27.171	0.000	93	596823	10.0	7.99	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00747	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

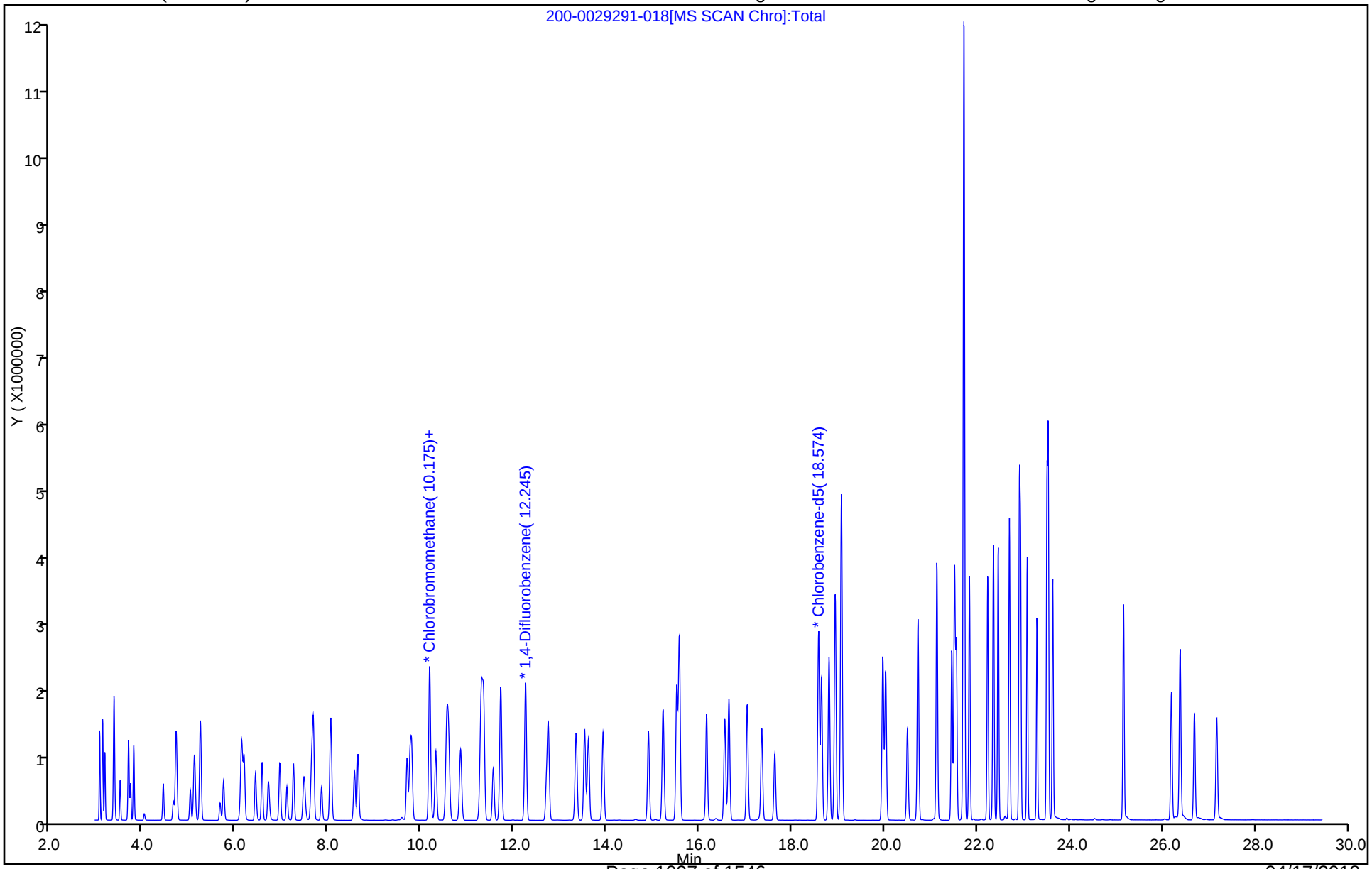
Report Date: 22-Feb-2018 11:22:18 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-018.D

Injection Date:	22-Feb-2018 06:10:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	icv			Worklist Smp#:	18
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128151/3 Calibration Date: 04/05/2018 11:43

Instrument ID: CHX.i Calib Start Date: 02/21/2018 19:15

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/22/2018 02:49

Lab File ID: 29949_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	2.007	2.043		10.2	10.0	1.8	30.0
Dichlorodifluoromethane	Ave	3.902	3.896		9.98	10.0	-0.1	30.0
Freon 22	Ave	3.484	3.483		9.99	10.0	-0.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.622	3.242		8.95	10.0	-10.5	30.0
Chloromethane	Ave	1.988	1.496		7.52	10.0	-24.8	30.0
n-Butane	Ave	3.897	3.851		9.88	10.0	-1.2	30.0
Vinyl chloride	Ave	1.913	1.803		9.42	10.0	-5.7	30.0
1,3-Butadiene	Ave	1.596	1.479		9.26	10.0	-7.3	30.0
Bromomethane	Ave	1.187	1.114		9.39	10.0	-6.1	30.0
Chloroethane	Ave	0.8481	0.7705		9.08	10.0	-9.1	30.0
Isopentane	Ave	2.824	2.531		8.96	10.0	-10.4	30.0
Bromoethene(Vinyl Bromide)	Ave	1.103	1.106		10.0	10.0	0.2	30.0
Trichlorofluoromethane	Ave	3.654	3.747		10.3	10.0	2.6	30.0
n-Pentane	Ave	4.243	4.217		9.94	10.0	-0.6	30.0
Ethanol	Ave	0.8830	0.7798		13.3	15.0	-11.7	30.0
Ethyl ether	Ave	1.229	1.197		9.74	10.0	-2.6	30.0
Acrolein	Ave	0.5448	0.6152		11.3	10.0	12.9	30.0
Freon TF	Ave	2.364	2.368		10.0	10.0	0.2	30.0
1,1-Dichloroethene	Ave	1.099	1.100		10.0	10.0	0.0	30.0
Acetone	Ave	3.805	3.948		10.4	10.0	3.7	30.0
Carbon disulfide	Ave	3.729	3.758		10.1	10.0	0.8	30.0
Isopropyl alcohol	Ave	3.954	4.273		10.8	10.0	8.1	30.0
3-Chloropropene	Ave	3.014	3.241		10.7	10.0	7.5	30.0
Acetonitrile	Ave	1.931	1.999		10.3	10.0	3.5	30.0
Methylene Chloride	Ave	2.492	2.526		10.1	10.0	1.4	30.0
tert-Butyl alcohol	Ave	4.066	4.262		10.5	10.0	4.8	30.0
Methyl tert-butyl ether	Ave	4.619	4.715		10.2	10.0	2.1	30.0
trans-1,2-Dichloroethene	Ave	2.775	2.751		9.91	10.0	-0.9	30.0
Acrylonitrile	Ave	1.455	1.459		10.0	10.0	0.3	30.0
n-Hexane	Ave	2.944	2.871		9.75	10.0	-2.5	30.0
1,1-Dichloroethane	Ave	3.446	3.404		9.88	10.0	-1.2	30.0
Vinyl acetate	Ave	6.419	6.715		10.5	10.0	4.6	30.0
cis-1,2-Dichloroethene	Ave	1.369	1.356		9.90	10.0	-1.0	30.0
Methyl Ethyl Ketone	Ave	0.8494	0.8445		9.94	10.0	-0.6	30.0
Ethyl acetate	Ave	0.1069	0.1047		9.79	10.0	-2.0	30.0
Tetrahydrofuran	Ave	0.5450	0.5746		10.5	10.0	5.4	30.0
Chloroform	Ave	3.427	3.453		10.1	10.0	0.8	30.0
Cyclohexane	Ave	0.3490	0.3427		9.82	10.0	-1.8	30.0
1,1,1-Trichloroethane	Ave	0.5436	0.5586		10.3	10.0	2.8	30.0
Carbon tetrachloride	Ave	0.5046	0.5327		10.6	10.0	5.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128151/3 Calibration Date: 04/05/2018 11:43

Instrument ID: CHX.i Calib Start Date: 02/21/2018 19:15

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/22/2018 02:49

Lab File ID: 29949_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	1.961		10.1	10.0	1.5	30.0
Benzene	Ave	0.9106	0.8951		9.83	10.0	-1.7	30.0
1,2-Dichloroethane	Ave	0.4910	0.5261		10.7	10.0	7.1	30.0
n-Heptane	Ave	0.9100	0.9922		10.9	10.0	9.0	30.0
n-Butanol	Ave	0.2539	0.2640		10.4	10.0	4.0	30.0
Trichloroethene	Ave	0.3657	0.3636		9.94	10.0	-0.6	30.0
1,2-Dichloropropane	Ave	0.4334	0.4491		10.4	10.0	3.6	30.0
Methyl methacrylate	Ave	0.3768	0.3837		10.2	10.0	1.8	30.0
1,4-Dioxane	Ave	0.1855	0.1849		9.97	10.0	-0.3	30.0
Dibromomethane	Ave	0.2243	0.2164		9.65	10.0	-3.5	30.0
Bromodichloromethane	Ave	0.6723	0.7119		10.6	10.0	5.9	30.0
cis-1,3-Dichloropropene	Ave	0.5473	0.5789		10.6	10.0	5.8	30.0
methyl isobutyl ketone	Ave	1.180	1.315		11.1	10.0	11.5	30.0
Toluene	Ave	0.6503	0.6490		9.98	10.0	-0.2	30.0
n-Octane	Ave	1.297	1.466		11.3	10.0	13.0	30.0
trans-1,3-Dichloropropene	Ave	0.5714	0.6027		10.5	10.0	5.5	30.0
1,1,2-Trichloroethane	Ave	0.3670	0.3690		10.1	10.0	0.5	30.0
Tetrachloroethene	Ave	0.3668	0.3611		9.84	10.0	-1.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	1.242	1.363		11.0	10.0	9.8	30.0
Dibromochloromethane	Ave	0.5458	0.5444		9.97	10.0	-0.3	30.0
1,2-Dibromoethane	Ave	0.5468	0.5480		10.0	10.0	0.2	30.0
Chlorobenzene	Ave	0.7978	0.7811		9.79	10.0	-2.1	30.0
Ethylbenzene	Ave	1.549	1.579		10.2	10.0	1.9	30.0
n-Nonane	Ave	1.057	1.129		10.7	10.0	6.8	30.0
m,p-Xylene	Ave	0.5318	0.5254		19.8	20.0	-1.2	30.0
Xylene, o-	Ave	0.5177	0.5171		9.99	10.0	-0.1	30.0
Styrene	Ave	0.7853	0.8195		10.4	10.0	4.4	30.0
Bromoform	Ave	0.4322	0.4037		9.34	10.0	-6.6	30.0
Cumene	Ave	1.581	1.595		10.1	10.0	0.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9671	1.001		10.4	10.0	3.5	30.0
n-Propylbenzene	Ave	2.192	2.262		10.3	10.0	3.2	30.0
1,2,3-Trichloropropane	Ave	0.8717	0.8902		10.2	10.0	2.1	30.0
n-Decane	Ave	1.444	1.554		10.8	10.0	7.7	30.0
4-Ethyltoluene	Ave	1.616	1.670		10.3	10.0	3.3	30.0
2-Chlorotoluene	Ave	1.559	1.616		10.4	10.0	3.6	30.0
1,3,5-Trimethylbenzene	Ave	1.340	1.390		10.4	10.0	3.7	30.0
Alpha Methyl Styrene	Ave	0.5535	0.5761		10.4	10.0	4.1	30.0
tert-Butylbenzene	Ave	1.162	1.196		10.3	10.0	2.9	30.0
1,2,4-Trimethylbenzene	Ave	1.345	1.417		10.5	10.0	5.4	30.0
sec-Butylbenzene	Ave	1.928	2.008		10.4	10.0	4.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128151/3 Calibration Date: 04/05/2018 11:43

Instrument ID: CHX.i Calib Start Date: 02/21/2018 19:15

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/22/2018 02:49

Lab File ID: 29949_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.482	1.568		10.6	10.0	5.8	30.0
1,3-Dichlorobenzene	Ave	0.7425	0.7563		10.2	10.0	1.9	30.0
1,4-Dichlorobenzene	Ave	0.7347	0.7525		10.2	10.0	2.4	30.0
Benzyl chloride	Ave	1.285	1.460		11.4	10.0	13.7	30.0
n-Butylbenzene	Ave	1.679	1.833		10.9	10.0	9.2	30.0
n-Undecane	Ave	1.421	1.400		9.85	10.0	-1.5	30.0
1,2-Dichlorobenzene	Ave	0.6937	0.7171		10.3	10.0	3.4	30.0
n-Dodecane	Ave	0.9289	0.998		10.7	10.0	7.4	30.0
1,2,4-Trichlorobenzene	Ave	0.4501	0.4606		10.2	10.0	2.3	30.0
Hexachlorobutadiene	Ave	0.4003	0.4095		10.2	10.0	2.3	30.0
Naphthalene	Ave	1.164	1.302		11.2	10.0	11.8	30.0
1,2,3-Trichlorobenzene	Ave	0.3982	0.4429		11.1	10.0	11.2	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_03.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Apr-2018 11:43:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029949-003
Operator ID: ert Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 12:57:17 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 12:57:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.038	3.038	0.000	97	391648	10.0	10.2	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	98	746794	10.0	9.98	
3 Chlorodifluoromethane	51	3.151	3.151	0.000	98	667492	10.0	10.0	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	97	621421	10.0	8.95	
5 Chloromethane	50	3.482	3.482	0.000	99	286710	10.0	7.52	
6 Butane	43	3.664	3.664	0.000	97	738178	10.0	9.88	
7 Vinyl chloride	62	3.707	3.707	0.000	98	345549	10.0	9.42	
8 Butadiene	54	3.777	3.777	0.000	87	283492	10.0	9.26	
9 BFB									
10 Bromomethane	94	4.413	4.413	0.000	98	213504	10.0	9.39	
11 Chloroethane	64	4.638	4.638	0.000	97	147685	10.0	9.08	
12 2-Methylbutane	43	4.697	4.697	0.000	93	485195	10.0	8.96	
13 Vinyl bromide	106	4.996	4.996	0.000	97	211908	10.0	10.0	
14 Trichlorofluoromethane	101	5.087	5.087	0.000	97	718235	10.0	10.3	
16 Pentane	43	5.216	5.216	0.000	96	808154	10.0	9.94	
17 Ethanol	45	5.638	5.638	0.000	98	224294	15.0	13.3	
18 Ethyl ether	59	5.713	5.713	0.000	85	229400	10.0	9.74	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.104	0.000	89	453933	10.0	10.0	
19 Acrolein	56	6.104	6.104	0.000	98	117909	10.0	11.3	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	87	210787	10.0	10.0	
22 Acetone	43	6.403	6.403	0.000	99	756604	10.0	10.4	
23 Carbon disulfide	76	6.548	6.548	0.000	98	720219	10.0	10.1	
24 Isopropyl alcohol	45	6.682	6.682	0.000	100	819045	10.0	10.8	
25 3-Chloro-1-propene	41	6.933	6.933	0.000	93	621111	10.0	10.7	
26 Acetonitrile	41	7.083	7.083	0.000	98	383156	10.0	10.3	
27 Methylene Chloride	49	7.227	7.227	0.000	90	484221	10.0	10.1	
28 2-Methyl-2-propanol	59	7.452	7.452	0.000	98	816918	10.0	10.5	
29 Methyl tert-butyl ether	73	7.623	7.623	0.000	93	903770	10.0	10.2	
31 trans-1,2-Dichloroethene	61	7.661	7.661	0.000	88	527239	10.0	9.91	
32 Acrylonitrile	53	7.832	7.832	0.000	93	279718	10.0	10.0	
33 Hexane	57	8.030	8.030	0.000	90	550361	10.0	9.75	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	8.543	8.543	0.000	99	652379	10.0	9.88	
35 Vinyl acetate	43	8.618	8.618	0.000	100	1287036	10.0	10.5	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.8	
37 cis-1,2-Dichloroethene	96	9.677	9.677	0.000	92	259881	10.0	9.90	
38 2-Butanone (MEK)	72	9.742	9.742	0.000	99	161861	10.0	9.94	
39 Ethyl acetate	88	9.779	9.779	0.000	98	20065	10.0	9.79	
* 40 Chlorobromomethane	128	10.159	10.159	0.000	87	191701	10.0	10.0	
41 Tetrahydrofuran	42	10.170	10.170	0.000	90	668527	10.0	10.5	
42 Chloroform	83	10.298	10.298	0.000	93	661869	10.0	10.1	
43 Cyclohexane	84	10.539	10.539	0.000	87	398759	10.0	9.82	
44 1,1,1-Trichloroethane	97	10.576	10.576	0.000	92	649881	10.0	10.3	
45 Carbon tetrachloride	117	10.838	10.838	0.000	94	619829	10.0	10.6	
46 Isooctane	57	11.282	11.282	0.000	96	2281380	10.0	10.1	
47 Benzene	78	11.336	11.336	0.000	97	1041479	10.0	9.83	
48 1,2-Dichloroethane	62	11.539	11.539	0.000	96	612092	10.0	10.7	
49 n-Heptane	43	11.700	11.700	0.000	95	1154453	10.0	10.9	
* 50 1,4-Difluorobenzene	114	12.240	12.240	0.000	98	1163711	10.0	10.0	
52 n-Butanol	56	12.684	12.684	0.000	96	307195	10.0	10.4	
53 Trichloroethene	95	12.732	12.732	0.000	85	423010	10.0	9.94	
A 51 GRO	1	13.198	(4.687-21.708)		0	176261517	10.0	0	
54 1,2-Dichloropropane	63	13.331	13.331	0.000	85	522490	10.0	10.4	
55 Methyl methacrylate	69	13.513	13.513	0.000	85	446411	10.0	10.2	
56 1,4-Dioxane	88	13.572	13.572	0.000	91	215178	10.0	9.97	
57 Dibromomethane	174	13.599	13.599	0.000	82	251805	10.0	9.65	
58 Dichlorobromomethane	83	13.914	13.914	0.000	95	828263	10.0	10.6	
60 cis-1,3-Dichloropropene	75	14.893	14.893	0.000	94	673585	10.0	10.6	
A 59 TVOC as Toluene	92	15.099	(3.028-27.170)		0	267106666	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.204	15.204	0.000	96	1529668	10.0	11.1	
65 Toluene	92	15.503	15.503	0.000	91	701469	10.0	9.98	
64 n-Octane	43	15.557	15.557	0.000	98	1705555	10.0	11.3	
66 trans-1,3-Dichloropropene	75	16.145	16.145	0.000	91	701235	10.0	10.5	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	91	398850	10.0	10.1	
68 Tetrachloroethene	166	16.632	16.632	0.000	82	390258	10.0	9.84	
69 2-Hexanone	43	17.023	17.023	0.000	88	1473750	10.0	11.0	
71 Chlorodibromomethane	129	17.338	17.338	0.000	93	588409	10.0	9.97	
72 Ethylene Dibromide	107	17.622	17.622	0.000	97	592268	10.0	10.0	
* 74 Chlorobenzene-d5	117	18.569	18.569	0.000	98	1081085	10.0	10.0	
75 Chlorobenzene	112	18.627	18.627	0.000	83	844218	10.0	9.79	
76 Ethylbenzene	91	18.793	18.793	0.000	99	1706343	10.0	10.2	
77 n-Nonane	57	18.927	18.927	0.000	92	1220446	10.0	10.7	
78 m-Xylene & p-Xylene	106	19.055	19.055	0.000	0	1135708	20.0	19.8	
S 73 Xylenes, Total	106				0		30.0	29.7	
79 o-Xylene	106	19.954	19.954	0.000	95	558926	10.0	9.99	
80 Styrene	104	20.013	20.013	0.000	93	885730	10.0	10.4	
81 Bromoform	173	20.484	20.484	0.000	89	436384	10.0	9.34	
82 Isopropylbenzene	105	20.714	20.714	0.000	98	1724127	10.0	10.1	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	97	1082179	10.0	10.4	
85 N-Propylbenzene	91	21.500	21.500	0.000	97	2444822	10.0	10.3	
86 1,2,3-Trichloropropane	75	21.543	21.543	0.000	94	962237	10.0	10.2	
87 n-Decane	57	21.698	21.698	0.000	82	1679954	10.0	10.8	
88 4-Ethyltoluene	105	21.709	21.709	0.000	96	1805267	10.0	10.3	
89 2-Chlorotoluene	91	21.714	21.714	0.000	94	1746742	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	21.827	21.827	0.000	89	1502304	10.0	10.4	
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	77	622731	10.0	10.4	
92 tert-Butylbenzene	119	22.346	22.346	0.000	83	1292430	10.0	10.3	
93 1,2,4-Trimethylbenzene	105	22.447	22.447	0.000	98	1531921	10.0	10.5	
94 sec-Butylbenzene	105	22.688	22.688	0.000	97	2170034	10.0	10.4	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	95	1694420	10.0	10.6	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	91	817461	10.0	10.2	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	84	813333	10.0	10.2	
98 Benzyl chloride	91	23.282	23.282	0.000	95	1578328	10.0	11.4	
100 n-Butylbenzene	91	23.496	23.496	0.000	96	1981388	10.0	10.9	
99 Undecane	57	23.528	23.528	0.000	90	1512892	10.0	9.85	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	86	775065	10.0	10.3	
102 Dodecane	57	25.154	25.154	0.000	87	1078662	10.0	10.7	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	89	497836	10.0	10.2	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	90	442631	10.0	10.2	
105 Naphthalene	128	26.684	26.684	0.000	99	1406987	10.0	11.2	
106 1,2,3-Trichlorobenzene	180	27.160	27.160	0.000	90	478667	10.0	11.1	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00668	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

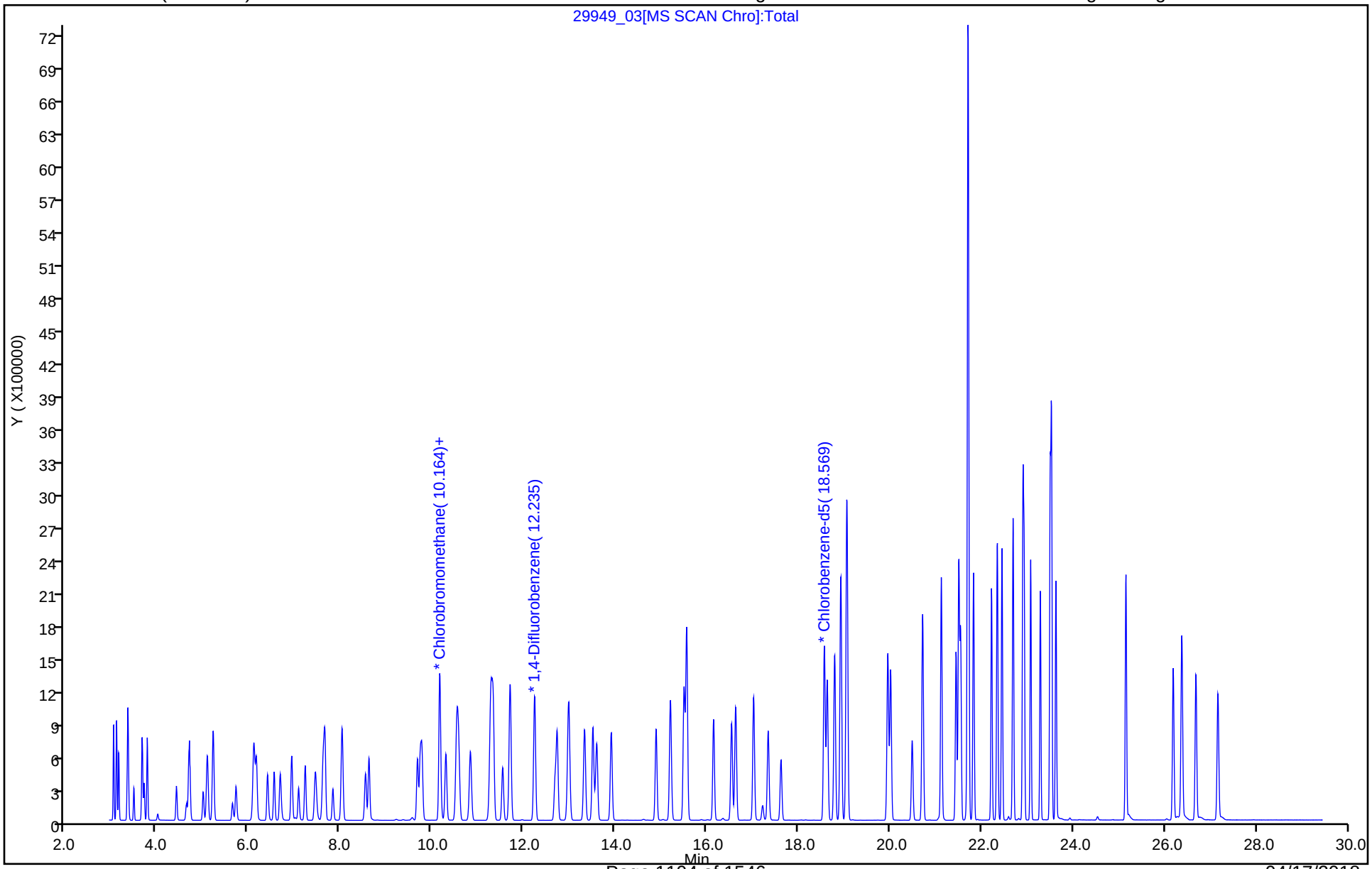
Report Date: 06-Apr-2018 12:57:17 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_03.D

Injection Date:	05-Apr-2018 11:43:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	ccvis			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: ICV 200-128414/16 Calibration Date: 04/13/2018 03:34

Instrument ID: CHX.i Calib Start Date: 04/12/2018 17:29

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/12/2018 23:23

Lab File ID: 30075_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5395	0.4997		9.26	10.0	-7.4	30.0
Dichlorodifluoromethane	Ave	2.191	1.962		8.96	10.0	-10.4	30.0
Freon 22	Ave	1.191	1.146		9.62	10.0	-3.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.157	2.363		11.0	10.0	9.6	30.0
Chloromethane	Ave	0.6734	0.6218		9.23	10.0	-7.7	30.0
n-Butane	Ave	1.168	1.116		9.55	10.0	-4.5	30.0
Vinyl chloride	Ave	0.8058	0.7602		9.43	10.0	-5.7	30.0
1,3-Butadiene	Ave	0.6167	0.5745		9.31	10.0	-6.9	30.0
Bromomethane	Ave	0.8266	0.8130		9.83	10.0	-1.6	30.0
Chloroethane	Ave	0.3847	0.3829		9.95	10.0	-0.5	30.0
Isopentane	Ave	0.8418	0.8574		10.2	10.0	1.9	30.0
Bromoethene(Vinyl Bromide)	Ave	0.8755	0.8720		9.96	10.0	-0.4	30.0
Trichlorofluoromethane	Ave	2.384	2.318		9.72	10.0	-2.8	30.0
n-Pentane	Ave	1.267	1.363		10.8	10.0	7.6	30.0
Ethanol	Ave	0.2635	0.3184		18.1	15.0	20.8	30.0
Ethyl ether	Ave	0.4927	0.5518		11.2	10.0	12.0	30.0
Acrolein	Ave	0.1933	0.2487		12.9	10.0	28.7	30.0
Freon TF	Ave	1.656	1.658		10.0	10.0	0.1	30.0
1,1-Dichloroethene	Ave	0.8115	0.7831		9.65	10.0	-3.5	30.0
Acetone	Ave	1.239	1.156		9.33	10.0	-6.7	30.0
Carbon disulfide	Ave	2.067	2.363		11.4	10.0	14.3	30.0
Isopropyl alcohol	Ave	1.258	1.168		9.28	10.0	-7.2	30.0
3-Chloropropene	Ave	0.8232	0.8032		9.75	10.0	-2.4	30.0
Acetonitrile	Ave	0.5419	0.5704		10.5	10.0	5.3	30.0
Methylene Chloride	Ave	0.8274	0.7885		9.53	10.0	-4.7	30.0
tert-Butyl alcohol	Ave	1.697	1.635		9.63	10.0	-3.7	30.0
Methyl tert-butyl ether	Ave	2.345	2.335		9.95	10.0	-0.5	30.0
trans-1,2-Dichloroethene	Ave	1.131	1.179		10.4	10.0	4.2	30.0
Acrylonitrile	Ave	0.5235	0.5431		10.4	10.0	3.7	30.0
n-Hexane	Ave	1.137	1.195		10.5	10.0	5.2	30.0
1,1-Dichloroethane	Ave	1.471	1.451		9.87	10.0	-1.3	30.0
Vinyl acetate	Ave	1.940	2.051		10.6	10.0	5.7	30.0
cis-1,2-Dichloroethene	Ave	0.9463	0.9520		10.1	10.0	0.6	30.0
Methyl Ethyl Ketone	Ave	0.4490	0.4281		9.53	10.0	-4.7	30.0
Ethyl acetate	Ave	0.0671	0.0717		10.7	10.0	6.9	30.0
Tetrahydrofuran	Ave	0.1851	0.1867		10.1	10.0	0.8	30.0
Chloroform	Ave	1.982	1.946		9.82	10.0	-1.8	30.0
Cyclohexane	Ave	0.2443	0.2442		9.99	10.0	-0.0	30.0
1,1,1-Trichloroethane	Ave	0.4089	0.4019		9.83	10.0	-1.7	30.0
Carbon tetrachloride	Ave	0.4297	0.4236		9.86	10.0	-1.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: ICV 200-128414/16 Calibration Date: 04/13/2018 03:34

Instrument ID: CHX.i Calib Start Date: 04/12/2018 17:29

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/12/2018 23:23

Lab File ID: 30075_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9059	0.8876		9.80	10.0	-2.0	30.0
Benzene	Ave	0.5871	0.5847		9.96	10.0	-0.4	30.0
1,2-Dichloroethane	Ave	0.2599	0.2489		9.58	10.0	-4.2	30.0
n-Heptane	Ave	0.3435	0.3350		9.75	10.0	-2.5	30.0
n-Butanol	Ave	0.1254	0.1321		10.5	10.0	5.3	30.0
Trichloroethene	Ave	0.2888	0.2745		9.51	10.0	-4.9	30.0
1,2-Dichloropropane	Ave	0.2277	0.2227		9.78	10.0	-2.2	30.0
Methyl methacrylate	Ave	0.2268	0.2275		10.0	10.0	0.3	30.0
1,4-Dioxane	Ave	0.1344	0.1316		9.78	10.0	-2.1	30.0
Dibromomethane	Ave	0.3283	0.3129		9.53	10.0	-4.7	30.0
Bromodichloromethane	Ave	0.4578	0.4462		9.75	10.0	-2.5	30.0
cis-1,3-Dichloropropene	Ave	0.3552	0.3522		9.91	10.0	-0.8	30.0
methyl isobutyl ketone	Ave	0.4851	0.4536		9.35	10.0	-6.5	30.0
Toluene	Ave	0.5124	0.5139		10.0	10.0	0.3	30.0
n-Octane	Ave	0.5091	0.5017		9.85	10.0	-1.5	30.0
trans-1,3-Dichloropropene	Ave	0.3971	0.3566		8.98	10.0	-10.2	30.0
1,1,2-Trichloroethane	Ave	0.2491	0.2530		10.2	10.0	1.6	30.0
Tetrachloroethene	Ave	0.5250	0.5051		9.62	10.0	-3.8	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5098	0.4779		9.37	10.0	-6.2	30.0
Dibromochloromethane	Ave	0.5460	0.5164		9.46	10.0	-5.4	30.0
1,2-Dibromoethane	Ave	0.4808	0.4804		9.99	10.0	-0.1	30.0
Chlorobenzene	Ave	0.7408	0.7307		9.86	10.0	-1.4	30.0
Ethylbenzene	Ave	1.151	1.140		9.90	10.0	-0.9	30.0
n-Nonane	Ave	0.5145	0.5130		9.97	10.0	-0.3	30.0
m,p-Xylene	Ave	0.4718	0.4648		19.7	20.0	-1.5	30.0
Xylene, o-	Ave	0.4701	0.4542		9.66	10.0	-3.4	30.0
Styrene	Ave	0.7230	0.7060		9.76	10.0	-2.4	30.0
Bromoform	Ave	0.5243	0.4796		9.15	10.0	-8.5	30.0
Cumene	Ave	1.354	1.306		9.65	10.0	-3.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6591	0.6626		10.1	10.0	0.5	30.0
n-Propylbenzene	Ave	1.603	1.557		9.71	10.0	-2.9	30.0
1,2,3-Trichloropropane	Ave	0.5138	0.4940		9.61	10.0	-3.9	30.0
n-Decane	Ave	0.6387	0.6543		10.2	10.0	2.4	30.0
4-Ethyltoluene	Ave	1.356	1.359		10.0	10.0	0.2	30.0
2-Chlorotoluene	Ave	1.108	1.071		9.67	10.0	-3.3	30.0
1,3,5-Trimethylbenzene	Ave	1.122	1.095		9.76	10.0	-2.4	30.0
Alpha Methyl Styrene	Ave	0.5783	0.5714		9.88	10.0	-1.2	30.0
tert-Butylbenzene	Ave	1.098	1.068		9.72	10.0	-2.7	30.0
1,2,4-Trimethylbenzene	Ave	1.116	1.091		9.77	10.0	-2.3	30.0
sec-Butylbenzene	Ave	1.615	1.590		9.84	10.0	-1.6	30.0

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SDG No.:

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Instrument ID: CHX.i Calib Start Date: 04/12/2018 17:29

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/12/2018 23:23

Lab File ID: 30075_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.394	1.369		9.82	10.0	-1.8	30.0
1,3-Dichlorobenzene	Ave	0.8625	0.8134		9.43	10.0	-5.7	30.0
1,4-Dichlorobenzene	Ave	0.8758	0.8076		9.22	10.0	-7.8	30.0
Benzyl chloride	Ave	0.9102	0.8189		8.99	10.0	-10.0	30.0
n-Butylbenzene	Ave	1.232	1.183		9.60	10.0	-4.0	30.0
n-Undecane	Ave	0.6235	0.5811		9.32	10.0	-6.8	30.0
1,2-Dichlorobenzene	Ave	0.8084	0.7689		9.51	10.0	-4.9	30.0
n-Dodecane	Ave	0.4231	0.4494		10.6	10.0	6.2	30.0
1,2,4-Trichlorobenzene	Ave	0.6137	0.4914		8.01	10.0	-19.9	30.0
Hexachlorobutadiene	Ave	0.6281	0.5592		8.90	10.0	-11.0	30.0
Naphthalene	Ave	1.256	0.8949		7.12	10.0	-28.8	30.0
1,2,3-Trichlorobenzene	Ave	0.5369	0.4575		8.52	10.0	-14.8	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_16.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 13-Apr-2018 03:34:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-016
Operator ID: pad Instrument ID: CHX.i
Sublist:

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:58 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 09:07:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	98	130536	10.0	9.26	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	512700	10.0	8.96	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	299445	10.0	9.62	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	92	617452	10.0	11.0	
5 Chloromethane	50	3.488	3.488	0.000	99	162449	10.0	9.23	
6 Butane	43	3.670	3.664	0.006	99	291634	10.0	9.55	
7 Vinyl chloride	62	3.713	3.713	0.000	98	198614	10.0	9.43	
8 Butadiene	54	3.782	3.782	0.000	96	150085	10.0	9.31	
10 Bromomethane	94	4.419	4.413	0.006	98	212407	10.0	9.83	
11 Chloroethane	64	4.633	4.633	0.000	99	100023	10.0	9.95	
12 2-Methylbutane	43	4.697	4.697	0.000	91	224002	10.0	10.2	
13 Vinyl bromide	106	5.002	4.996	0.006	99	227819	10.0	9.96	
14 Trichlorofluoromethane	101	5.087	5.093	-0.006	98	605671	10.0	9.72	
16 Pentane	43	5.216	5.221	-0.005	99	356185	10.0	10.8	
17 Ethanol	45	5.644	5.638	0.006	97	124820	15.0	18.1	
18 Ethyl ether	59	5.719	5.713	0.006	95	144161	10.0	11.2	
9 BFB									
19 Acrolein	56	6.099	6.104	-0.005	43	64969	10.0	12.9	
20 1,1,2-Trichloro-1,2,2-trif	101	6.109	6.109	0.000	95	433022	10.0	10.0	
21 1,1-Dichloroethene	96	6.157	6.163	-0.006	97	204584	10.0	9.65	
22 Acetone	43	6.404	6.403	0.001	98	301928	10.0	9.33	
23 Carbon disulfide	76	6.548	6.548	0.000	99	617401	10.0	11.4	
24 Isopropyl alcohol	45	6.687	6.687	0.000	100	305138	10.0	9.28	
25 3-Chloro-1-propene	41	6.933	6.933	0.000	98	209834	10.0	9.75	
26 Acetonitrile	41	7.088	7.083	0.005	100	149010	10.0	10.5	
27 Methylene Chloride	49	7.227	7.227	0.000	91	205995	10.0	9.53	
28 2-Methyl-2-propanol	59	7.457	7.452	0.005	93	427105	10.0	9.63	
29 Methyl tert-butyl ether	73	7.623	7.623	0.000	96	609930	10.0	9.95	
31 trans-1,2-Dichloroethene	61	7.661	7.661	0.000	97	307887	10.0	10.4	
32 Acrylonitrile	53	7.832	7.826	0.006	92	141883	10.0	10.4	
33 Hexane	57	8.035	8.035	0.000	93	312276	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	8.543	8.538	0.005	99	379070	10.0	9.87	
35 Vinyl acetate	43	8.624	8.618	0.006	100	535940	10.0	10.6	
S 30 1,2-Dichloroethene, Total	61				0		20.0	20.5	
37 cis-1,2-Dichloroethene	96	9.683	9.677	0.006	94	248712	10.0	10.1	
38 2-Butanone (MEK)	72	9.742	9.742	0.000	100	111837	10.0	9.53	
39 Ethyl acetate	88	9.779	9.774	0.005	98	18734	10.0	10.7	
* 40 Chlorobromomethane	128	10.164	10.164	0.000	85	261301	10.0	10.0	
41 Tetrahydrofuran	42	10.170	10.170	0.000	98	253049	10.0	10.1	
42 Chloroform	83	10.298	10.298	0.000	96	508452	10.0	9.82	
43 Cyclohexane	84	10.539	10.533	0.006	97	331046	10.0	10.0	
44 1,1,1-Trichloroethane	97	10.576	10.582	-0.006	94	544911	10.0	9.83	
45 Carbon tetrachloride	117	10.833	10.838	-0.005	97	574279	10.0	9.86	
46 Isooctane	57	11.282	11.288	-0.006	99	1203380	10.0	9.80	
47 Benzene	78	11.336	11.336	0.000	95	792634	10.0	9.96	
48 1,2-Dichloroethane	62	11.539	11.539	0.000	98	337430	10.0	9.58	
49 n-Heptane	43	11.700	11.700	0.000	94	454157	10.0	9.75	
* 50 1,4-Difluorobenzene	114	12.235	12.235	0.000	93	1356008	10.0	10.0	
52 n-Butanol	56	12.689	12.689	0.000	86	179131	10.0	10.5	
53 Trichloroethene	95	12.732	12.727	0.005	97	372200	10.0	9.51	
A 51 GRO	1	13.198	(4.687-21.708)		0	101063605	10.0	0	
54 1,2-Dichloropropane	63	13.326	13.326	0.000	92	301929	10.0	9.78	
55 Methyl methacrylate	69	13.513	13.513	0.000	98	308415	10.0	10.0	
56 1,4-Dioxane	88	13.577	13.572	0.005	89	178367	10.0	9.78	
57 Dibromomethane	174	13.604	13.599	0.005	93	424166	10.0	9.53	
58 Dichlorobromomethane	83	13.909	13.914	-0.005	98	604926	10.0	9.75	
60 cis-1,3-Dichloropropene	75	14.893	14.893	0.000	91	477473	10.0	9.91	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	176059086	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.204	15.204	0.000	97	614940	10.0	9.35	
65 Toluene	92	15.498	15.503	-0.005	93	636583	10.0	10.0	
64 n-Octane	43	15.557	15.557	0.000	93	680104	10.0	9.85	
66 trans-1,3-Dichloropropene	75	16.151	16.145	0.006	96	483481	10.0	8.98	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	95	313356	10.0	10.2	
68 Tetrachloroethene	166	16.627	16.632	-0.005	96	625588	10.0	9.62	
69 2-Hexanone	43	17.023	17.017	0.006	94	591974	10.0	9.37	
71 Chlorodibromomethane	129	17.338	17.338	0.000	98	639634	10.0	9.46	
72 Ethylene Dibromide	107	17.616	17.616	0.000	99	595023	10.0	9.99	
* 74 Chlorobenzene-d5	117	18.569	18.563	0.006	84	1238907	10.0	10.0	
75 Chlorobenzene	112	18.628	18.628	0.000	97	905138	10.0	9.86	
76 Ethylbenzene	91	18.788	18.793	-0.005	97	1412540	10.0	9.90	
77 n-Nonane	57	18.927	18.927	0.000	90	635383	10.0	9.97	
78 m-Xylene & p-Xylene	106	19.061	19.061	0.000	0	1151410	20.0	19.7	
S 73 Xylenes, Total	106				0		30.0	29.4	
79 o-Xylene	106	19.949	19.954	-0.005	99	562590	10.0	9.66	
80 Styrene	104	20.013	20.013	0.000	96	874512	10.0	9.76	
81 Bromoform	173	20.484	20.484	0.000	99	594066	10.0	9.15	
82 Isopropylbenzene	105	20.714	20.714	0.000	95	1617977	10.0	9.65	
84 1,1,2,2-Tetrachloroethane	83	21.442	21.441	0.001	98	820680	10.0	10.1	
85 N-Propylbenzene	91	21.500	21.500	0.000	100	1928126	10.0	9.71	
86 1,2,3-Trichloropropane	75	21.543	21.543	0.000	96	611855	10.0	9.61	
87 n-Decane	57	21.698	21.698	0.000	91	810425	10.0	10.2	
88 4-Ethyltoluene	105	21.709	21.709	0.000	98	1683196	10.0	10.0	
89 2-Chlorotoluene	91	21.714	21.714	0.000	95	1327053	10.0	9.67	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	21.827	21.821	0.006	94	1356771	10.0	9.76	
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	92	707793	10.0	9.88	
92 tert-Butylbenzene	119	22.346	22.346	0.000	95	1322312	10.0	9.72	
93 1,2,4-Trimethylbenzene	105	22.447	22.447	0.000	97	1350951	10.0	9.77	
94 sec-Butylbenzene	105	22.688	22.688	0.000	99	1969832	10.0	9.84	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	97	1696141	10.0	9.82	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	96	1007574	10.0	9.43	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	97	1000340	10.0	9.22	
98 Benzyl chloride	91	23.282	23.282	0.000	99	1014296	10.0	8.99	
100 n-Butylbenzene	91	23.496	23.496	0.000	98	1465638	10.0	9.60	
99 Undecane	57	23.528	23.528	0.000	95	719769	10.0	9.32	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	98	952439	10.0	9.51	
102 Dodecane	57	25.149	25.149	0.000	97	556705	10.0	10.6	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	93	608659	10.0	8.01	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	96	692647	10.0	8.90	
105 Naphthalene	128	26.679	26.684	-0.005	99	1108434	10.0	7.12	M
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	96	566714	10.0	8.52	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15LCSW_00763	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

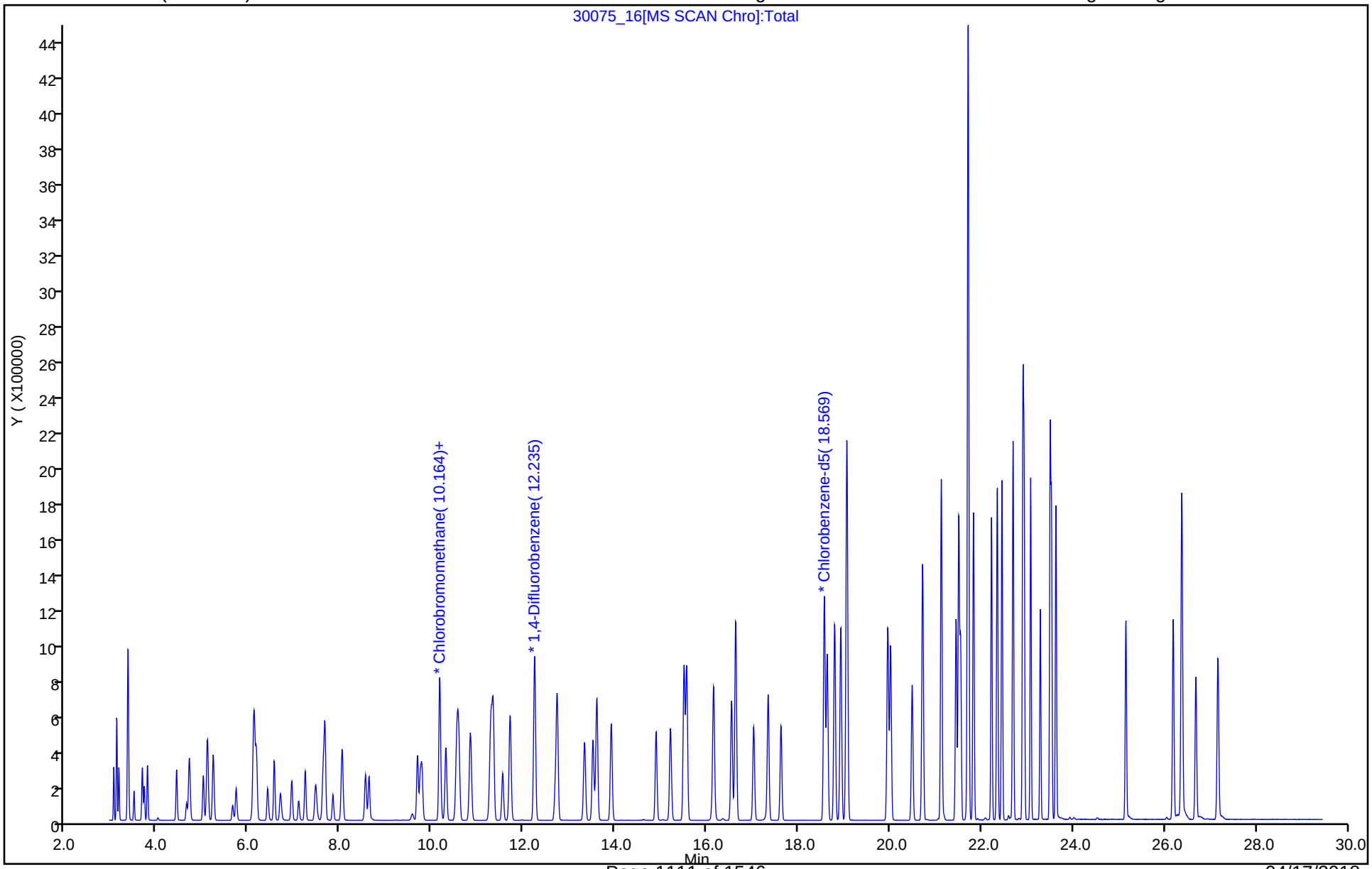
Report Date: 13-Apr-2018 09:13:09 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_16.D

Injection Date:	13-Apr-2018 03:34:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	icv			Worklist Smp#:	16
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

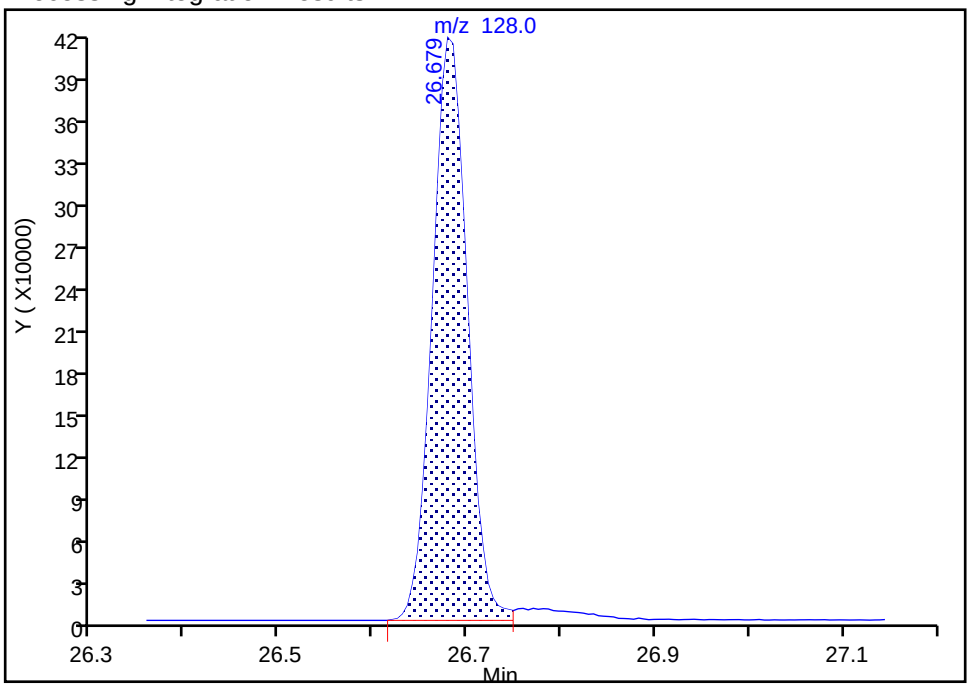
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_16.D				
Injection Date:	13-Apr-2018 03:34:30	Instrument ID:	CHX.i		
Lims ID:	icv				
Client ID:					
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

Signal: 1

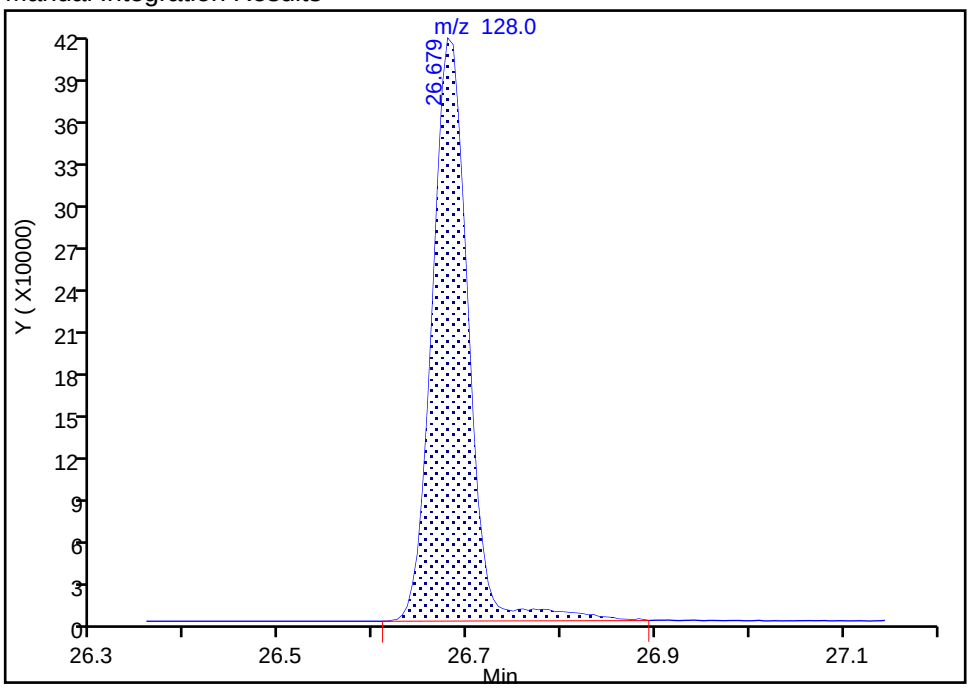
Processing Integration Results

RT: 26.68
Area: 1071307
Amount: 6.883945
Amount Units: ppb v/v



Manual Integration Results

RT: 26.68
Area: 1108434
Amount: 7.122514
Amount Units: ppb v/v



Reviewer: daiglep, 13-Apr-2018 09:06:18

Audit Action: Manually Integrated Audit Reason: Peak Tail

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128434/2 Calibration Date: 04/13/2018 10:48

Instrument ID: CHX.i Calib Start Date: 04/12/2018 17:29

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/12/2018 23:23

Lab File ID: 30087_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5395	0.5327		9.87	10.0	-1.3	30.0
Dichlorodifluoromethane	Ave	2.191	2.122		9.68	10.0	-3.1	30.0
Freon 22	Ave	1.191	1.170		9.82	10.0	-1.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.157	2.115		9.80	10.0	-1.9	30.0
Chloromethane	Ave	0.6734	0.6509		9.66	10.0	-3.4	30.0
n-Butane	Ave	1.168	1.131		9.68	10.0	-3.2	30.0
Vinyl chloride	Ave	0.8058	0.7928		9.84	10.0	-1.6	30.0
1,3-Butadiene	Ave	0.6167	0.5948		9.64	10.0	-3.6	30.0
Bromomethane	Ave	0.8266	0.8326		10.1	10.0	0.7	30.0
Chloroethane	Ave	0.3847	0.3903		10.1	10.0	1.5	30.0
Isopentane	Ave	0.8418	0.8009		9.51	10.0	-4.9	30.0
Bromoethene(Vinyl Bromide)	Ave	0.8755	0.8852		10.1	10.0	1.1	30.0
Trichlorofluoromethane	Ave	2.384	2.339		9.81	10.0	-1.9	30.0
n-Pentane	Ave	1.267	1.263		9.97	10.0	-0.3	30.0
Ethanol	Ave	0.2635	0.2899		16.5	15.0	10.0	30.0
Ethyl ether	Ave	0.4927	0.5000		10.1	10.0	1.5	30.0
Acrolein	Ave	0.1933	0.2444		12.6	10.0	26.5	30.0
Freon TF	Ave	1.656	1.634		9.87	10.0	-1.3	30.0
1,1-Dichloroethene	Ave	0.8115	0.7916		9.75	10.0	-2.5	30.0
Acetone	Ave	1.239	1.177		9.50	10.0	-5.0	30.0
Carbon disulfide	Ave	2.067	2.054		9.94	10.0	-0.6	30.0
Isopropyl alcohol	Ave	1.258	1.305		10.4	10.0	3.7	30.0
3-Chloropropene	Ave	0.8232	0.7062		8.58	10.0	-14.2	30.0
Acetonitrile	Ave	0.5419	0.5455		10.1	10.0	0.7	30.0
Methylene Chloride	Ave	0.8274	0.7968		9.63	10.0	-3.7	30.0
tert-Butyl alcohol	Ave	1.697	1.744		10.3	10.0	2.7	30.0
Methyl tert-butyl ether	Ave	2.345	2.322		9.90	10.0	-1.0	30.0
trans-1,2-Dichloroethene	Ave	1.131	1.117		9.88	10.0	-1.2	30.0
Acrylonitrile	Ave	0.5235	0.5163		9.86	10.0	-1.4	30.0
n-Hexane	Ave	1.137	1.111		9.78	10.0	-2.2	30.0
1,1-Dichloroethane	Ave	1.471	1.436		9.76	10.0	-2.4	30.0
Vinyl acetate	Ave	1.940	1.936		9.98	10.0	-0.2	30.0
cis-1,2-Dichloroethene	Ave	0.9463	0.9523		10.1	10.0	0.6	30.0
Methyl Ethyl Ketone	Ave	0.4490	0.4336		9.65	10.0	-3.4	30.0
Ethyl acetate	Ave	0.0671	0.0670		9.98	10.0	-0.2	30.0
Tetrahydrofuran	Ave	0.1851	0.1810		9.78	10.0	-2.2	30.0
Chloroform	Ave	1.982	1.892		9.54	10.0	-4.6	30.0
Cyclohexane	Ave	0.2443	0.2368		9.69	10.0	-3.1	30.0
1,1,1-Trichloroethane	Ave	0.4089	0.3924		9.60	10.0	-4.0	30.0
Carbon tetrachloride	Ave	0.4297	0.4290		9.98	10.0	-0.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128434/2 Calibration Date: 04/13/2018 10:48

Instrument ID: CHX.i Calib Start Date: 04/12/2018 17:29

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/12/2018 23:23

Lab File ID: 30087_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9059	0.8725		9.63	10.0	-3.7	30.0
Benzene	Ave	0.5871	0.5665		9.65	10.0	-3.5	30.0
1,2-Dichloroethane	Ave	0.2599	0.2441		9.39	10.0	-6.1	30.0
n-Heptane	Ave	0.3435	0.3291		9.58	10.0	-4.2	30.0
n-Butanol	Ave	0.1254	0.1271		10.1	10.0	1.3	30.0
Trichloroethene	Ave	0.2888	0.2646		9.16	10.0	-8.4	30.0
1,2-Dichloropropane	Ave	0.2277	0.2223		9.76	10.0	-2.4	30.0
Methyl methacrylate	Ave	0.2268	0.2175		9.59	10.0	-4.1	30.0
1,4-Dioxane	Ave	0.1344	0.1426		10.6	10.0	6.1	30.0
Dibromomethane	Ave	0.3283	0.3069		9.35	10.0	-6.5	30.0
Bromodichloromethane	Ave	0.4578	0.4479		9.78	10.0	-2.2	30.0
cis-1,3-Dichloropropene	Ave	0.3552	0.3442		9.69	10.0	-3.1	30.0
methyl isobutyl ketone	Ave	0.4851	0.4605		9.49	10.0	-5.1	30.0
Toluene	Ave	0.5124	0.5133		10.0	10.0	0.2	30.0
n-Octane	Ave	0.5091	0.4897		9.62	10.0	-3.8	30.0
trans-1,3-Dichloropropene	Ave	0.3971	0.3476		8.75	10.0	-12.5	30.0
1,1,2-Trichloroethane	Ave	0.2491	0.2479		9.95	10.0	-0.5	30.0
Tetrachloroethene	Ave	0.5250	0.5025		9.57	10.0	-4.3	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5098	0.4897		9.60	10.0	-3.9	30.0
Dibromochloromethane	Ave	0.5460	0.5582		10.2	10.0	2.2	30.0
1,2-Dibromoethane	Ave	0.4808	0.4791		9.96	10.0	-0.4	30.0
Chlorobenzene	Ave	0.7408	0.7344		9.91	10.0	-0.9	30.0
Ethylbenzene	Ave	1.151	1.146		9.95	10.0	-0.5	30.0
n-Nonane	Ave	0.5145	0.5109		9.93	10.0	-0.7	30.0
m,p-Xylene	Ave	0.4718	0.4663		19.8	20.0	-1.2	30.0
Xylene, o-	Ave	0.4701	0.4668		9.93	10.0	-0.7	30.0
Styrene	Ave	0.7230	0.7271		10.1	10.0	0.6	30.0
Bromoform	Ave	0.5243	0.5685		10.8	10.0	8.4	30.0
Cumene	Ave	1.354	1.340		9.90	10.0	-1.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6591	0.6600		10.0	10.0	0.1	30.0
n-Propylbenzene	Ave	1.603	1.603		10.0	10.0	-0.0	30.0
1,2,3-Trichloropropane	Ave	0.5138	0.5075		9.87	10.0	-1.2	30.0
n-Decane	Ave	0.6387	0.6715		10.5	10.0	5.1	30.0
4-Ethyltoluene	Ave	1.356	1.361		10.0	10.0	0.3	30.0
2-Chlorotoluene	Ave	1.108	1.104		9.96	10.0	-0.3	30.0
1,3,5-Trimethylbenzene	Ave	1.122	1.121		9.99	10.0	-0.1	30.0
Alpha Methyl Styrene	Ave	0.5783	0.5856		10.1	10.0	1.3	30.0
tert-Butylbenzene	Ave	1.098	1.098		10.0	10.0	0.0	30.0
1,2,4-Trimethylbenzene	Ave	1.116	1.122		10.0	10.0	0.5	30.0
sec-Butylbenzene	Ave	1.615	1.645		10.2	10.0	1.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Lab Sample ID: CCVIS 200-128434/2 Calibration Date: 04/13/2018 10:48

Instrument ID: CHX.i Calib Start Date: 04/12/2018 17:29

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 04/12/2018 23:23

Lab File ID: 30087_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.394	1.425		10.2	10.0	2.2	30.0
1,3-Dichlorobenzene	Ave	0.8625	0.8497		9.85	10.0	-1.5	30.0
1,4-Dichlorobenzene	Ave	0.8758	0.8590		9.81	10.0	-1.9	30.0
Benzyl chloride	Ave	0.9102	0.9569		10.5	10.0	5.1	30.0
n-Butylbenzene	Ave	1.232	1.258		10.2	10.0	2.1	30.0
n-Undecane	Ave	0.6235	0.6296		10.1	10.0	1.0	30.0
1,2-Dichlorobenzene	Ave	0.8084	0.7978		9.87	10.0	-1.3	30.0
n-Dodecane	Ave	0.4231	0.5041		11.9	10.0	19.1	30.0
1,2,4-Trichlorobenzene	Ave	0.6137	0.5766		9.39	10.0	-6.0	30.0
Hexachlorobutadiene	Ave	0.6281	0.5945		9.46	10.0	-5.4	30.0
Naphthalene	Ave	1.256	1.183		9.42	10.0	-5.8	30.0
1,2,3-Trichlorobenzene	Ave	0.5369	0.5408		10.1	10.0	0.7	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_02.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 13-Apr-2018 10:48:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030087-002
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Apr-2018 16:33:54 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK029

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	99	143455	10.0	9.87	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	571362	10.0	9.68	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	97	315047	10.0	9.82	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	97	569544	10.0	9.80	
5 Chloromethane	50	3.482	3.482	0.000	99	175263	10.0	9.66	
6 Butane	43	3.664	3.664	0.000	98	304525	10.0	9.68	
7 Vinyl chloride	62	3.707	3.707	0.000	99	213482	10.0	9.84	
8 Butadiene	54	3.777	3.777	0.000	98	160158	10.0	9.64	
9 BFB									
10 Bromomethane	94	4.413	4.413	0.000	99	224187	10.0	10.1	
11 Chloroethane	64	4.633	4.633	0.000	100	105098	10.0	10.1	
12 2-Methylbutane	43	4.697	4.697	0.000	94	215669	10.0	9.51	
13 Vinyl bromide	106	4.996	4.996	0.000	98	238375	10.0	10.1	
14 Trichlorofluoromethane	101	5.087	5.087	0.000	98	629818	10.0	9.81	
16 Pentane	43	5.210	5.210	0.000	97	340151	10.0	9.97	
17 Ethanol	45	5.633	5.633	0.000	98	117163	15.0	16.5	
18 Ethyl ether	59	5.713	5.713	0.000	96	134624	10.0	10.1	
20 1,1,2-Trichloro-1,2,2-trif	101	6.104	6.104	0.000	95	440039	10.0	9.87	
19 Acrolein	56	6.104	6.104	0.000	44	65816	10.0	12.6	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	97	213169	10.0	9.75	
22 Acetone	43	6.403	6.403	0.000	98	316994	10.0	9.50	
23 Carbon disulfide	76	6.548	6.548	0.000	99	553110	10.0	9.94	
24 Isopropyl alcohol	45	6.681	6.681	0.000	100	351325	10.0	10.4	
25 3-Chloro-1-propene	41	6.928	6.928	0.000	97	190174	10.0	8.58	
26 Acetonitrile	41	7.077	7.077	0.000	99	146878	10.0	10.1	
27 Methylene Chloride	49	7.222	7.222	0.000	90	214561	10.0	9.63	
28 2-Methyl-2-propanol	59	7.446	7.446	0.000	95	469492	10.0	10.3	
29 Methyl tert-butyl ether	73	7.618	7.618	0.000	96	625299	10.0	9.90	
31 trans-1,2-Dichloroethene	61	7.660	7.660	0.000	97	300903	10.0	9.88	
32 Acrylonitrile	53	7.832	7.832	0.000	94	139014	10.0	9.86	
33 Hexane	57	8.030	8.030	0.000	93	299238	10.0	9.78	
34 1,1-Dichloroethane	63	8.538	8.538	0.000	99	386607	10.0	9.76	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.618	8.618	0.000	100	521378	10.0	9.98	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.9	
37 cis-1,2-Dichloroethene	96	9.677	9.677	0.000	91	256425	10.0	10.1	
38 2-Butanone (MEK)	72	9.736	9.736	0.000	100	116753	10.0	9.65	
39 Ethyl acetate	88	9.774	9.774	0.000	99	18032	10.0	9.98	
* 40 Chlorobromomethane	128	10.164	10.164	0.000	91	269329	10.0	10.0	
41 Tetrahydrofuran	42	10.169	10.169	0.000	93	254517	10.0	9.78	
42 Chloroform	83	10.298	10.298	0.000	95	509414	10.0	9.54	
43 Cyclohexane	84	10.539	10.539	0.000	97	333008	10.0	9.69	
44 1,1,1-Trichloroethane	97	10.576	10.576	0.000	94	551833	10.0	9.60	
45 Carbon tetrachloride	117	10.833	10.833	0.000	97	603200	10.0	9.98	
46 Isooctane	57	11.288	11.288	0.000	99	1226901	10.0	9.63	
47 Benzene	78	11.336	11.336	0.000	95	796679	10.0	9.65	
48 1,2-Dichloroethane	62	11.539	11.539	0.000	98	343246	10.0	9.39	
49 n-Heptane	43	11.700	11.700	0.000	93	462731	10.0	9.58	
* 50 1,4-Difluorobenzene	114	12.234	12.234	0.000	93	1406480	10.0	10.0	
52 n-Butanol	56	12.689	12.689	0.000	88	178760	10.0	10.1	
53 Trichloroethene	95	12.727	12.727	0.000	97	372016	10.0	9.16	
A 51 GRO	1	13.197	(4.687-21.708)		0	117012093	10.0	0	
54 1,2-Dichloropropane	63	13.326	13.326	0.000	92	312654	10.0	9.76	
55 Methyl methacrylate	69	13.508	13.508	0.000	97	305809	10.0	9.59	
56 1,4-Dioxane	88	13.577	13.577	0.000	90	200500	10.0	10.6	
57 Dibromomethane	174	13.599	13.599	0.000	91	431612	10.0	9.35	
58 Dichlorobromomethane	83	13.909	13.909	0.000	98	629814	10.0	9.78	
60 cis-1,3-Dichloropropene	75	14.893	14.893	0.000	91	484039	10.0	9.69	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	188392193	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.204	15.204	0.000	96	647543	10.0	9.49	
65 Toluene	92	15.503	15.503	0.000	93	651385	10.0	10.0	
64 n-Octane	43	15.557	15.557	0.000	92	688606	10.0	9.62	
66 trans-1,3-Dichloropropene	75	16.145	16.145	0.000	96	488788	10.0	8.75	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	96	314503	10.0	9.95	
68 Tetrachloroethene	166	16.627	16.627	0.000	97	637629	10.0	9.57	
69 2-Hexanone	43	17.022	17.022	0.000	95	621390	10.0	9.60	
71 Chlorodibromomethane	129	17.338	17.338	0.000	98	708308	10.0	10.2	
72 Ethylene Dibromide	107	17.616	17.616	0.000	99	607885	10.0	9.96	
* 74 Chlorobenzene-d5	117	18.563	18.563	0.000	84	1269150	10.0	10.0	
75 Chlorobenzene	112	18.627	18.627	0.000	97	931910	10.0	9.91	
76 Ethylbenzene	91	18.788	18.788	0.000	97	1454149	10.0	9.95	
77 n-Nonane	57	18.927	18.927	0.000	90	648223	10.0	9.93	
78 m-Xylene & p-Xylene	106	19.055	19.055	0.000	0	1183357	20.0	19.8	
S 73 Xylenes, Total	106				0		30.0	29.7	
79 o-Xylene	106	19.949	19.949	0.000	99	592351	10.0	9.93	
80 Styrene	104	20.013	20.013	0.000	97	922551	10.0	10.1	
81 Bromoform	173	20.484	20.484	0.000	99	721337	10.0	10.8	
82 Isopropylbenzene	105	20.714	20.714	0.000	95	1700769	10.0	9.90	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	98	837504	10.0	10.0	
85 N-Propylbenzene	91	21.500	21.500	0.000	99	2034548	10.0	10.0	
86 1,2,3-Trichloropropane	75	21.543	21.543	0.000	98	643947	10.0	9.87	
87 n-Decane	57	21.698	21.698	0.000	91	852124	10.0	10.5	
88 4-Ethyltoluene	105	21.709	21.709	0.000	98	1726739	10.0	10.0	
89 2-Chlorotoluene	91	21.714	21.714	0.000	95	1400987	10.0	9.96	
90 1,3,5-Trimethylbenzene	105	21.821	21.821	0.000	94	1422045	10.0	9.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	91	743068	10.0	10.1	
92 tert-Butylbenzene	119	22.345	22.345	0.000	95	1393435	10.0	10.0	
93 1,2,4-Trimethylbenzene	105	22.442	22.442	0.000	97	1423354	10.0	10.0	
94 sec-Butylbenzene	105	22.688	22.688	0.000	99	2087457	10.0	10.2	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	97	1808095	10.0	10.2	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	95	1078163	10.0	9.85	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	97	1090041	10.0	9.81	
98 Benzyl chloride	91	23.282	23.282	0.000	100	1214162	10.0	10.5	
100 n-Butylbenzene	91	23.496	23.496	0.000	98	1595804	10.0	10.2	
99 Undecane	57	23.528	23.528	0.000	95	798917	10.0	10.1	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	98	1012293	10.0	9.87	
102 Dodecane	57	25.149	25.149	0.000	98	639627	10.0	11.9	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	93	731652	10.0	9.39	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	96	754372	10.0	9.46	
105 Naphthalene	128	26.679	26.679	0.000	99	1501104	10.0	9.42	
106 1,2,3-Trichlorobenzene	180	27.160	27.160	0.000	95	686169	10.0	10.1	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00676	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

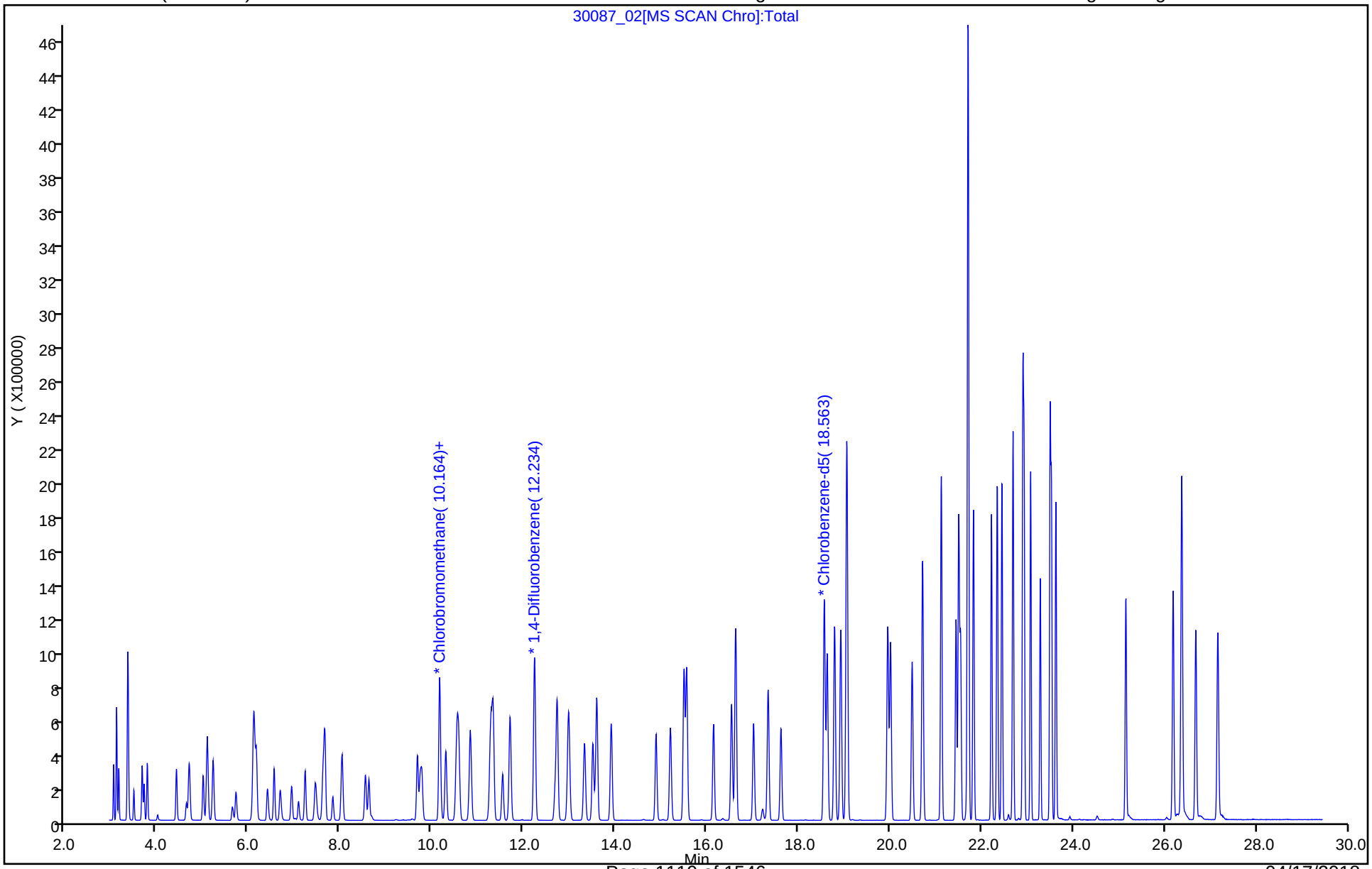
Report Date: 16-Apr-2018 16:33:55 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_02.D

Injection Date:	13-Apr-2018 10:48:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ccvis			Worklist Smp#:	2
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-01.d
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 14-Mar-2018 15:16:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0029580-001
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 10:07:15 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK028

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
10 BFB									
* 40 Chlorobromomethane	128		12.376				10.0	ND	
* 49 1,4-Difluorobenzene	114		14.078				10.0	ND	
* 71 Chlorobenzene-d5	117		19.540				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

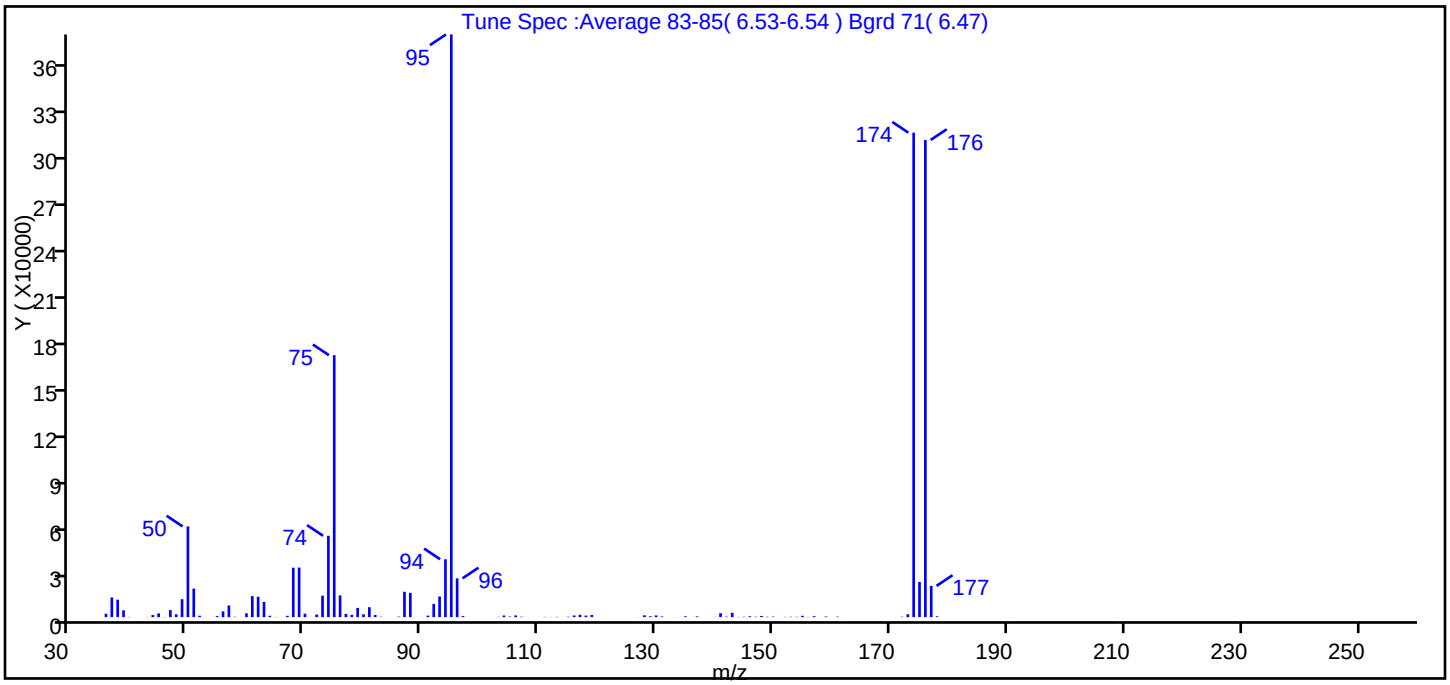
ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-01.d
Injection Date: 14-Mar-2018 15:16:30 Instrument ID: CHW.i
Lims ID: bfb
Client ID:
Operator ID: pad ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	15.6
75	30.0 to 66.0 Percent of m/e 95	45.0
96	5.0 to 9.0 Percent of m/e 95	6.7
173	Less than 2.0 Percent of m/e 174	0.5 (0.6)
174	50.0 to 120.0 Percent of m/e 95	83.2
175	4.0 to 9.0 Percent of m/e 174	6.0 (7.3)
176	93.0 to 101.0 Percent of m/e 174	81.9 (98.5)
177	5.0 to 9.0 Percent of m/e 176	5.4 (6.6)

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-01.d\TO15_MasterMethod_(v1).rslt\s
Injection Date: 14-Mar-2018 15:16:30
Spectrum: Tune Spec :Average 83-85(6.53-6.54) Bgrd 71(6.47)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2212	67.00	856	103.00	180	145.00	241
37.00	12780	68.00	32040	104.00	1070	146.00	559
38.00	11297	69.00	32128	105.00	371	147.00	255
39.00	4415	70.00	2228	106.00	1094	148.00	781
40.00	137	72.00	1675	107.00	277	149.00	264
41.00	7	73.00	13908	111.00	167	150.00	321
43.00	115	74.00	52736	112.00	104	152.00	173
44.00	1368	75.00	169792	113.00	172	153.00	234
45.00	2431	76.00	14076	115.00	277	154.00	213
46.00	113	77.00	2101	116.00	1077	155.00	880
47.00	4569	78.00	1432	117.00	1550	156.00	155
48.00	1826	79.00	5967	118.00	998	157.00	638
49.00	11625	80.00	1866	119.00	1393	159.00	419
50.00	58800	81.00	6457	127.00	64	161.00	302
51.00	18512	82.00	1379	128.00	1184	172.00	273
52.00	900	83.00	233	129.00	580	173.00	1865
55.00	663	86.00	332	130.00	1124	174.00	314048
56.00	3763	87.00	16464	131.00	447	175.00	22792
57.00	7542	88.00	15731	134.00	55	176.00	309312
58.00	243	91.00	990	135.00	554	177.00	20264
60.00	2476	92.00	8601	137.00	475	178.00	548
61.00	13621	93.00	13401	140.00	125	191.00	77
62.00	13195	94.00	37536	141.00	2569	209.00	52
63.00	9888	95.00	377664	142.00	306	260.00	64
64.00	889	96.00	25136	143.00	2823		
65.00	129	97.00	674	144.00	140		

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-01.d
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 05-Apr-2018 11:48:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0029952-001
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 14:20:34 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 14:20:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
10 BFB									
* 40 Chlorobromomethane	128		12.376				10.0	ND	
* 49 1,4-Difluorobenzene	114		14.072				10.0	ND	
* 71 Chlorobenzene-d5	117		19.540				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

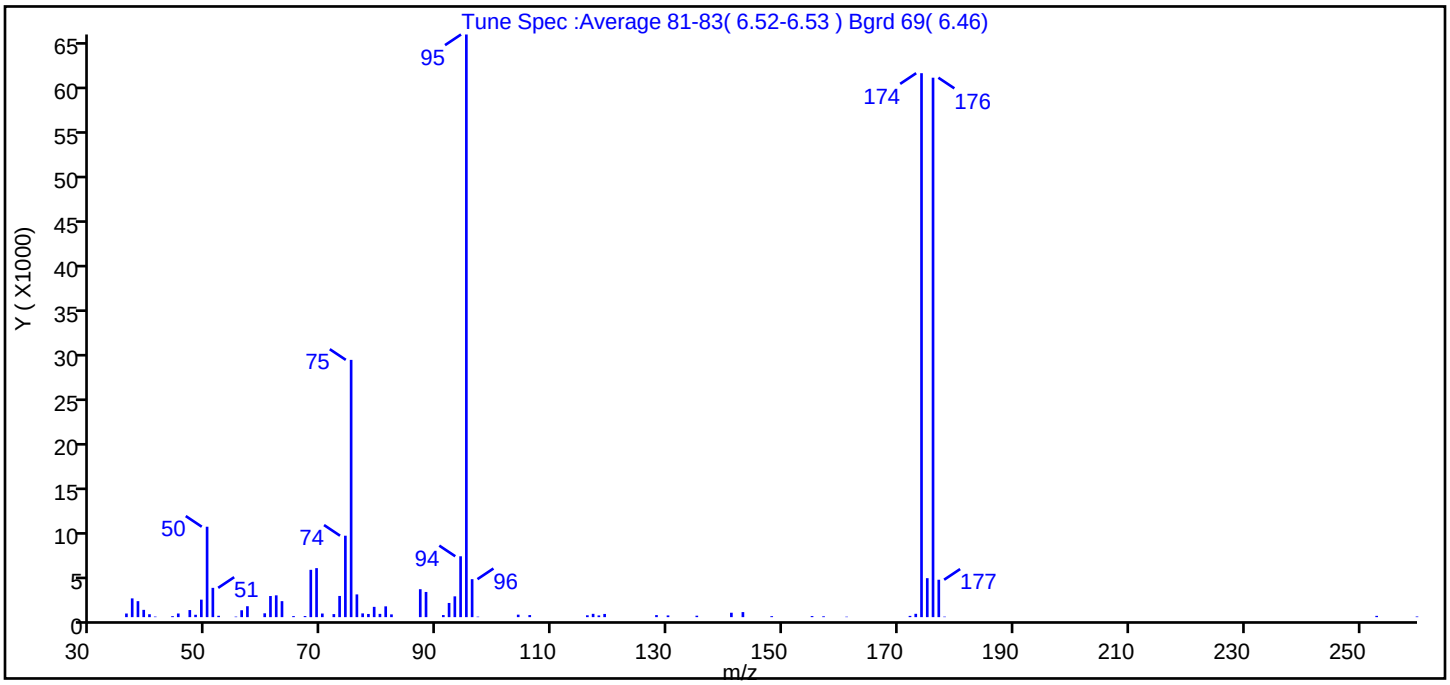
ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-01.d
Injection Date: 05-Apr-2018 11:48:30 Instrument ID: CHW.i
Lims ID: bfb
Client ID:
Operator ID: ert ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	15.5
75	30.0 to 66.0 Percent of m/e 95	44.2
96	5.0 to 9.0 Percent of m/e 95	6.5
173	Less than 2.0 Percent of m/e 174	0.6 (0.6)
174	50.0 to 120.0 Percent of m/e 95	93.4
175	4.0 to 9.0 Percent of m/e 174	6.7 (7.2)
176	93.0 to 101.0 Percent of m/e 174	92.6 (99.2)
177	5.0 to 9.0 Percent of m/e 176	6.4 (6.9)

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-01.d\TO15_MasterMethod_(v1).rslt\s
Injection Date: 05-Apr-2018 11:48:30
Spectrum: Tune Spec :Average 81-83(6.52-6.53) Bgrd 69(6.46)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	407	61.00	2361	82.00	309	135.00	162
37.00	2097	62.00	2438	87.00	3123	141.00	493
38.00	1787	63.00	1788	88.00	2815	143.00	566
39.00	815	65.00	115	91.00	232	148.00	108
40.00	325	67.00	123	92.00	1586	155.00	120
41.00	63	68.00	5290	93.00	2325	157.00	93
44.00	108	69.00	5479	94.00	6804	161.00	50
45.00	408	70.00	405	95.00	65136	172.00	140
47.00	794	72.00	341	96.00	4246	173.00	373
48.00	265	73.00	2369	97.00	54	174.00	60808
49.00	1958	74.00	9103	104.00	278	175.00	4358
50.00	10108	75.00	28760	106.00	232	176.00	60304
51.00	3275	76.00	2542	116.00	208	177.00	4182
52.00	152	77.00	419	117.00	371	178.00	56
55.00	59	78.00	356	118.00	191	253.00	143
56.00	771	79.00	1150	119.00	358	260.00	73
57.00	1221	80.00	365	128.00	228		
60.00	429	81.00	1207	130.00	191		

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-01.d
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 06-Apr-2018 12:06:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0029983-001
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 17:57:03 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 17:57:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
10 BFB									
* 40 Chlorobromomethane	128		12.377				10.0	ND	
* 49 1,4-Difluorobenzene	114		14.078				10.0	ND	
* 71 Chlorobenzene-d5	117		19.540				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

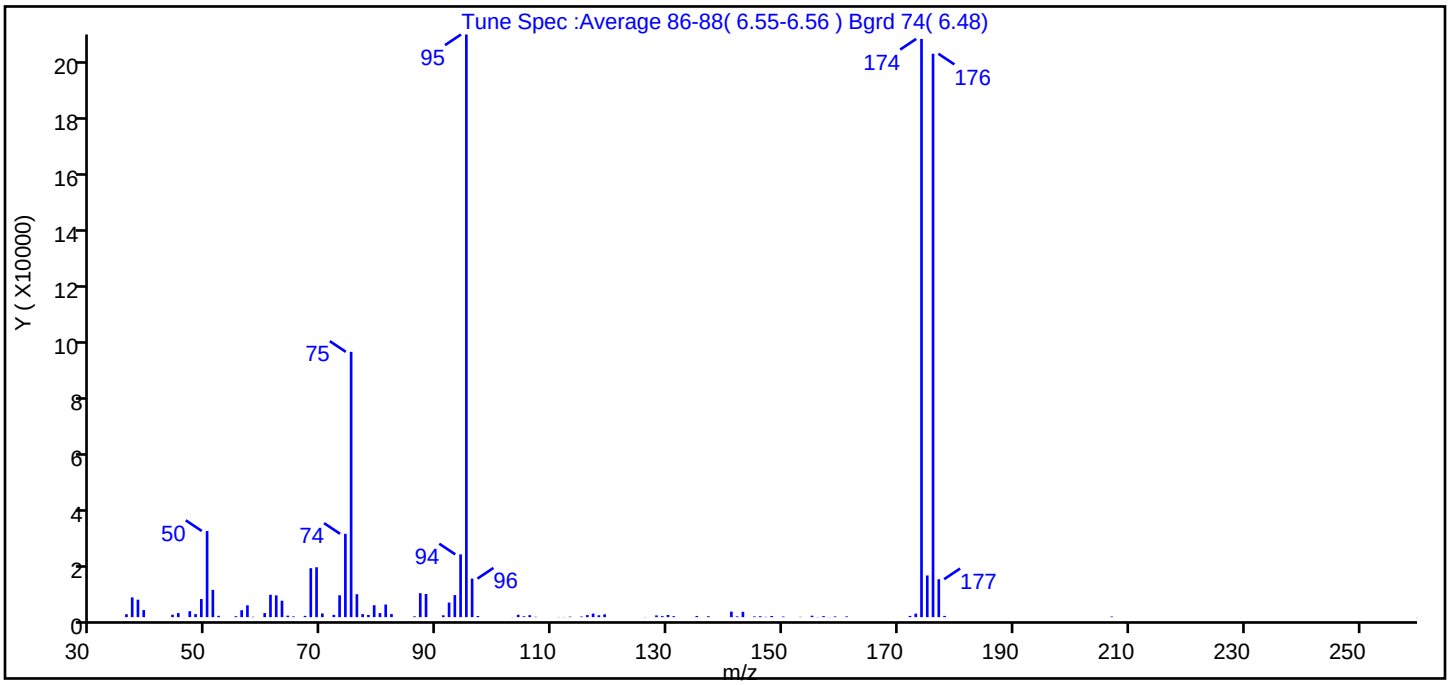
ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-01.d
Injection Date: 06-Apr-2018 12:06:30 Instrument ID: CHW.i
Lims ID: bfb
Client ID:
Operator ID: ert ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	14.8
75	30.0 to 66.0 Percent of m/e 95	45.5
96	5.0 to 9.0 Percent of m/e 95	6.6
173	Less than 2.0 Percent of m/e 174	0.6 (0.6)
174	50.0 to 120.0 Percent of m/e 95	99.2
175	4.0 to 9.0 Percent of m/e 174	7.2 (7.2)
176	93.0 to 101.0 Percent of m/e 174	96.7 (97.4)
177	5.0 to 9.0 Percent of m/e 176	6.5 (6.7)

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-01.d\TO15_MasterMethod_(v1).rslt\s
Injection Date: 06-Apr-2018 12:06:30
Spectrum: Tune Spec :Average 86-88(6.55-6.56) Bgrd 74(6.48)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1023	67.00	446	96.00	13316	142.00	267
37.00	6819	68.00	16920	97.00	401	143.00	1838
38.00	6032	69.00	17232	103.00	50	145.00	244
39.00	2457	70.00	1275	104.00	813	146.00	322
40.00	5	72.00	796	105.00	295	147.00	107
44.00	822	73.00	7558	106.00	683	148.00	402
45.00	1400	74.00	28800	107.00	130	150.00	209
47.00	2063	75.00	91680	111.00	58	153.00	106
48.00	1035	76.00	7921	112.00	58	155.00	485
49.00	6256	77.00	1056	113.00	178	156.00	53
50.00	29776	78.00	755	115.00	210	157.00	357
51.00	9428	79.00	4123	116.00	717	158.00	50
52.00	457	80.00	1398	117.00	1237	159.00	254
55.00	335	81.00	4363	118.00	655	161.00	258
56.00	2395	82.00	1075	119.00	973	172.00	431
57.00	4079	86.00	276	126.00	58	173.00	1213
58.00	129	87.00	8284	128.00	594	174.00	199808
60.00	1407	88.00	7999	129.00	355	175.00	14405
61.00	7732	91.00	631	130.00	761	176.00	194688
62.00	7523	92.00	5039	131.00	337	177.00	13113
63.00	5684	93.00	7624	135.00	408	178.00	426
64.00	506	94.00	21688	137.00	319	207.00	209
65.00	249	95.00	201344	141.00	1909	260.00	51

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-001.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 21-Feb-2018 15:47:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0029291-001
Operator ID: pad Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 22-Feb-2018 11:21:40 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
	9 BFB									
*	40 Chlorobromomethane	128		10.170				10.0	ND	
*	50 1,4-Difluorobenzene	114		12.245				10.0	ND	
*	74 Chlorobenzene-d5	117		18.574				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

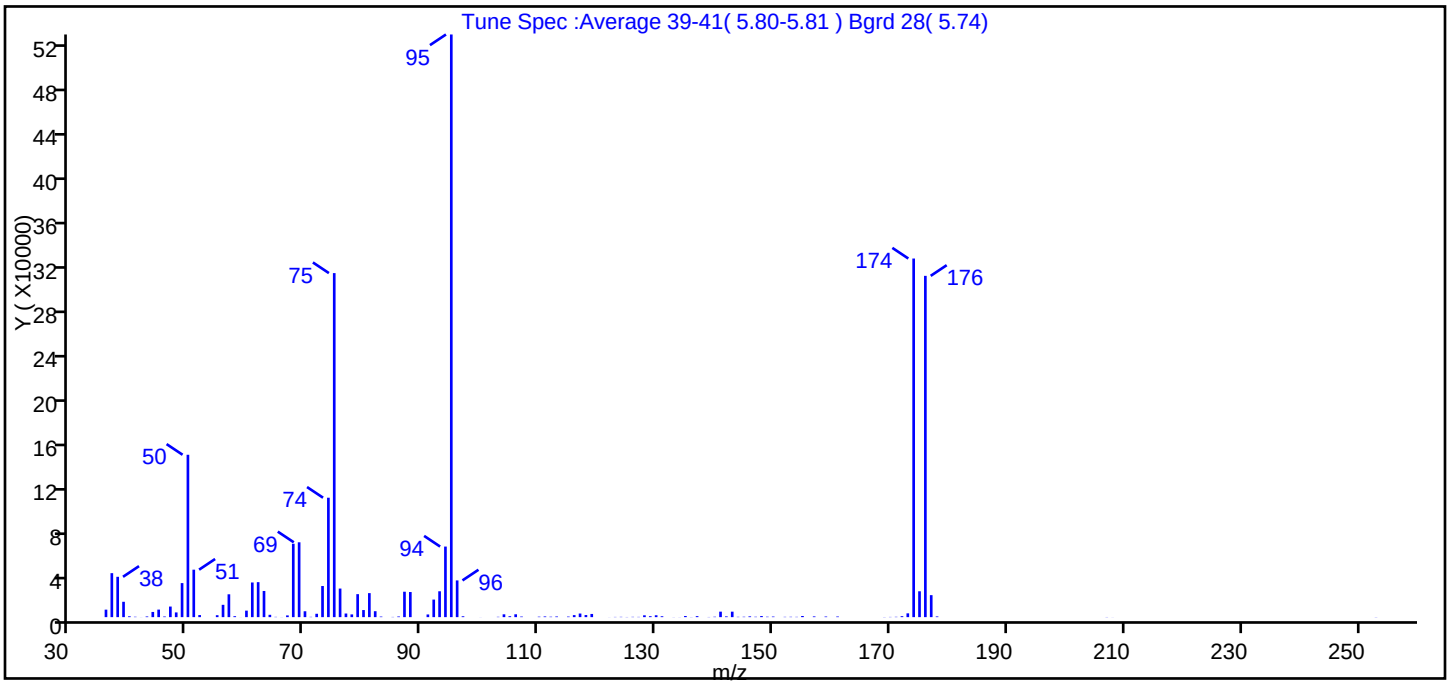
ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-001.D
Injection Date: 21-Feb-2018 15:47:30 Instrument ID: CHX.i
Lims ID: bfb
Client ID:
Operator ID: pad ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	27.9
75	30.0 to 66.0 Percent of m/e 95	59.0
96	5.0 to 9.0 Percent of m/e 95	6.3
173	Less than 2.0 Percent of m/e 174	0.7 (1.1)
174	50.0 to 120.0 Percent of m/e 95	61.5
175	4.0 to 9.0 Percent of m/e 174	4.4 (7.2)
176	93.0 to 101.0 Percent of m/e 174	58.6 (95.2)
177	5.0 to 9.0 Percent of m/e 176	3.8 (6.4)

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-001.D\TO15_MasterMethod_X
Injection Date: 21-Feb-2018 15:47:30
Spectrum: Tune Spec :Average 39-41(5.80-5.81) Bgrd 28(5.74)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6816	68.00	66696	105.00	824	142.00	670
37.00	39976	69.00	68024	106.00	2601	143.00	4983
38.00	36664	70.00	5346	107.00	528	144.00	298
39.00	13961	71.00	258	110.00	429	145.00	359
40.00	747	72.00	3067	111.00	632	146.00	707
41.00	348	73.00	28288	112.00	393	147.00	352
42.00	57	74.00	108552	113.00	601	148.00	979
43.00	615	75.00	312704	115.00	509	149.00	381
44.00	4722	76.00	25984	116.00	1846	150.00	519
45.00	6849	77.00	3298	117.00	3288	152.00	274
46.00	578	78.00	2495	118.00	1905	153.00	318
47.00	9622	79.00	20896	119.00	2902	154.00	266
48.00	4296	80.00	6450	122.00	54	155.00	1039
49.00	30944	81.00	21832	123.00	203	157.00	668
50.00	147584	82.00	5395	124.00	267	159.00	557
51.00	43144	83.00	513	125.00	146	161.00	572
52.00	1893	85.00	195	126.00	272	169.00	133
55.00	1757	86.00	588	127.00	226	170.00	203
56.00	11204	87.00	23104	128.00	1667	171.00	302
57.00	20768	88.00	22824	129.00	843	172.00	859
58.00	853	91.00	2438	130.00	1702	173.00	3462
59.00	50	92.00	15974	131.00	793	174.00	325952
60.00	5914	93.00	23512	133.00	83	175.00	23512
61.00	31504	94.00	64152	134.00	78	176.00	310208
62.00	31800	95.00	529600	135.00	1030	177.00	19992
63.00	23784	96.00	33384	136.00	108	178.00	640
64.00	2124	97.00	784	137.00	907	207.00	138
65.00	248	100.00	57	139.00	155	208.00	54
66.00	67	103.00	299	140.00	372	253.00	126
67.00	1571	104.00	2574	141.00	4991		

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_01.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 05-Apr-2018 10:03:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0029949-001
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 12:56:31 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 12:56:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		10.159				10.0	ND	
* 50 1,4-Difluorobenzene	114		12.240				10.0	ND	
* 74 Chlorobenzene-d5	117		18.569				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

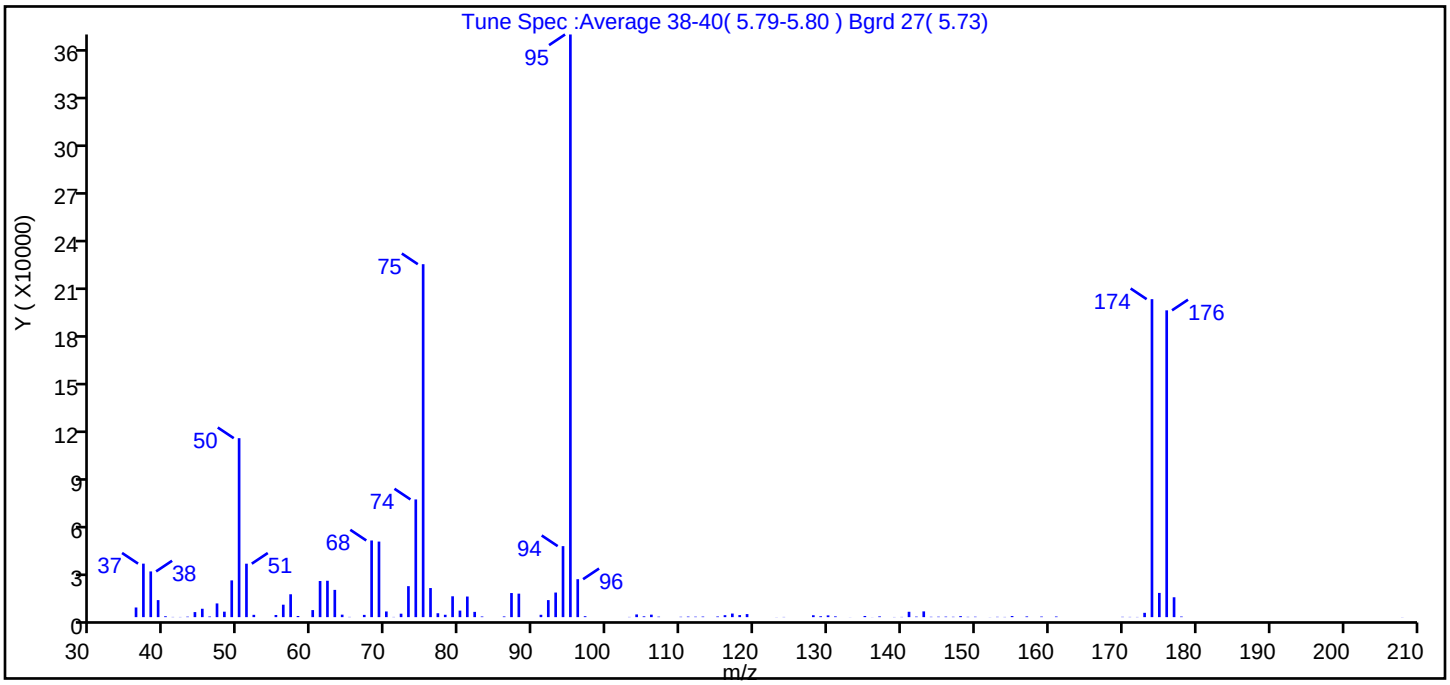
ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_01.D
Injection Date: 05-Apr-2018 10:03:30 Instrument ID: CHX.i
Lims ID: bfb
Client ID:
Operator ID: ert ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	30.7
75	30.0 to 66.0 Percent of m/e 95	60.6
96	5.0 to 9.0 Percent of m/e 95	6.5
173	Less than 2.0 Percent of m/e 174	0.7 (1.4)
174	50.0 to 120.0 Percent of m/e 95	54.6
175	4.0 to 9.0 Percent of m/e 174	4.2 (7.6)
176	93.0 to 101.0 Percent of m/e 174	52.7 (96.5)
177	5.0 to 9.0 Percent of m/e 176	3.4 (6.5)

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_01.D\TO15_MasterMethod_X.m.rslt\s
Injection Date: 05-Apr-2018 10:03:30
Spectrum: Tune Spec :Average 38-40(5.79-5.80) Bgrd 27(5.73)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5975	67.00	1397	103.00	138	142.00	336
37.00	33096	68.00	47424	104.00	1678	143.00	3560
38.00	28280	69.00	46736	105.00	504	144.00	217
39.00	10532	70.00	3520	106.00	1540	145.00	274
40.00	551	71.00	132	107.00	289	146.00	322
41.00	134	72.00	2138	110.00	227	147.00	225
42.00	117	73.00	19168	111.00	349	148.00	620
43.00	295	74.00	72808	112.00	286	149.00	188
44.00	3130	75.00	218304	113.00	352	150.00	265
45.00	5185	76.00	18000	115.00	414	152.00	61
46.00	379	77.00	2416	116.00	1211	153.00	199
47.00	8485	78.00	1469	117.00	2219	154.00	132
48.00	3379	79.00	12901	118.00	1282	155.00	681
49.00	22736	80.00	4046	119.00	1890	157.00	453
50.00	110688	81.00	12750	123.00	63	159.00	353
51.00	33064	82.00	3257	124.00	128	161.00	396
52.00	1433	83.00	401	128.00	1172	170.00	198
55.00	1329	86.00	433	129.00	549	171.00	146
56.00	7704	87.00	14914	130.00	1086	172.00	119
57.00	14149	88.00	14536	131.00	483	173.00	2671
58.00	695	91.00	1455	133.00	51	174.00	196672
60.00	4364	92.00	10535	135.00	714	175.00	14993
61.00	22344	93.00	15213	136.00	55	176.00	189760
62.00	22504	94.00	43920	137.00	466	177.00	12298
63.00	16864	95.00	360384	139.00	106	178.00	363
64.00	1543	96.00	23472	140.00	137	208.00	66
65.00	148	97.00	580	141.00	3321		

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_01.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 12-Apr-2018 15:03:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0030075-001
Operator ID: pad Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Apr-2018 09:12:45 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: daiglep Date: 13-Apr-2018 08:42:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		10.164				10.0	ND	
* 50 1,4-Difluorobenzene	114		12.235				10.0	ND	
* 74 Chlorobenzene-d5	117		18.563				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

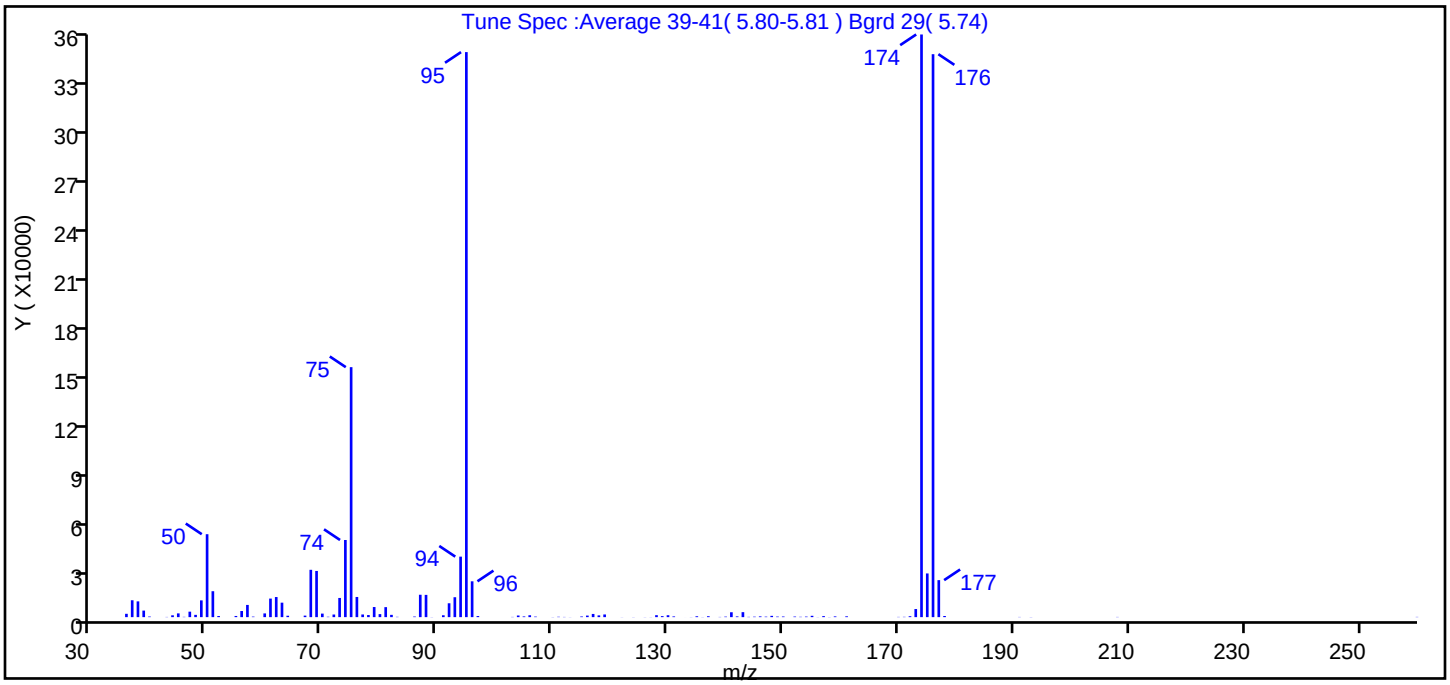
ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_01.D				
Injection Date:	12-Apr-2018 15:03:30	Instrument ID:	CHX.i		
Lims ID:	bfb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	200.0 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Tune Method:	BFB Method TO-15				

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	14.7
75	30.0 to 66.0 Percent of m/e 95	44.2
96	5.0 to 9.0 Percent of m/e 95	6.3
173	Less than 2.0 Percent of m/e 174	1.4 (1.4)
174	50.0 to 120.0 Percent of m/e 95	103.1
175	4.0 to 9.0 Percent of m/e 174	7.7 (7.5)
176	93.0 to 101.0 Percent of m/e 174	99.6 (96.6)
177	5.0 to 9.0 Percent of m/e 176	6.5 (6.6)

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_01.D\TO15_MasterMethod_X.m.rslt\s
Injection Date: 12-Apr-2018 15:03:30
Spectrum: Tune Spec :Average 39-41(5.80-5.81) Bgrd 29(5.74)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 113

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2053	72.00	1616	111.00	225	147.00	306
37.00	10366	73.00	11775	112.00	128	148.00	797
38.00	9679	74.00	47344	113.00	56	149.00	338
39.00	4016	75.00	153408	115.00	408	150.00	383
40.00	362	76.00	12377	116.00	959	152.00	359
43.00	124	77.00	1642	117.00	1964	153.00	209
44.00	1128	78.00	1292	118.00	1080	154.00	340
45.00	2303	79.00	6204	119.00	1646	155.00	822
46.00	176	80.00	1858	122.00	53	156.00	56
47.00	3361	81.00	6137	124.00	69	157.00	627
48.00	1402	82.00	1409	126.00	62	158.00	77
49.00	10293	83.00	185	127.00	58	159.00	454
50.00	50896	86.00	362	128.00	1203	161.00	507
51.00	15911	87.00	13740	129.00	621	170.00	145
52.00	680	88.00	13659	130.00	1172	171.00	187
55.00	717	89.00	74	131.00	443	172.00	563
56.00	3759	91.00	1152	133.00	10	173.00	4973
57.00	7495	92.00	8514	134.00	63	174.00	357568
58.00	323	93.00	12223	135.00	537	175.00	26816
60.00	2291	94.00	37128	136.00	67	176.00	345472
61.00	11395	95.00	346752	137.00	559	177.00	22704
62.00	12339	96.00	21992	139.00	132	178.00	699
63.00	8885	97.00	664	140.00	314	191.00	123
64.00	861	103.00	137	141.00	3002	193.00	82
67.00	939	104.00	1004	142.00	442	208.00	128
68.00	29048	105.00	437	143.00	3060	260.00	149
69.00	28344	106.00	1166	144.00	168		
70.00	2173	107.00	332	145.00	286		
71.00	237	110.00	77	146.00	462		

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_01.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 13-Apr-2018 09:59:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0030087-001
Operator ID: pad Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Apr-2018 16:33:52 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK029

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		10.164				10.0	ND	
* 50 1,4-Difluorobenzene	114		12.234				10.0	ND	
* 74 Chlorobenzene-d5	117		18.563				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

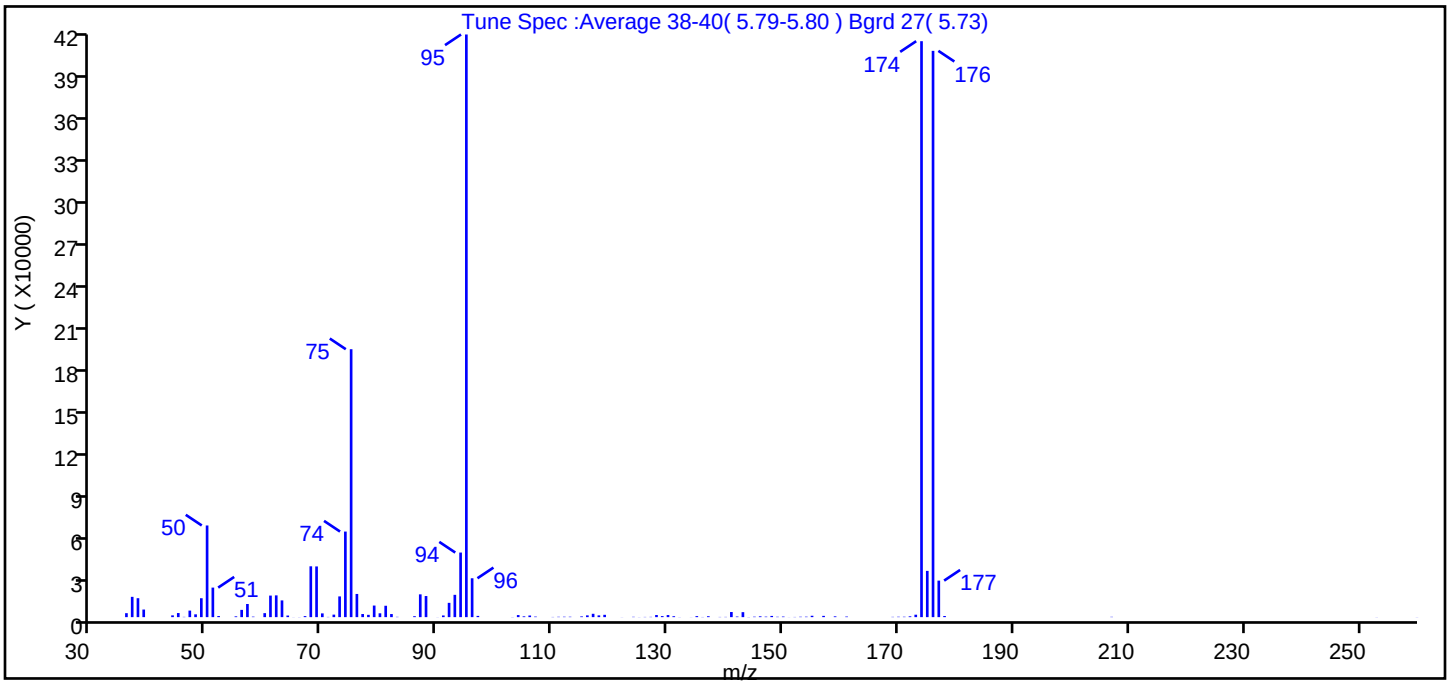
ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_01.D
Injection Date: 13-Apr-2018 09:59:30 Instrument ID: CHX.i
Lims ID: bfb
Client ID:
Operator ID: pad ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	15.7
75	30.0 to 66.0 Percent of m/e 95	46.0
96	5.0 to 9.0 Percent of m/e 95	6.7
173	Less than 2.0 Percent of m/e 174	0.4 (0.4)
174	50.0 to 120.0 Percent of m/e 95	98.8
175	4.0 to 9.0 Percent of m/e 174	7.9 (8.0)
176	93.0 to 101.0 Percent of m/e 174	97.2 (98.3)
177	5.0 to 9.0 Percent of m/e 176	6.3 (6.4)

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_01.D\TO15_MasterMethod_X.m.rslt\s
Injection Date: 13-Apr-2018 09:59:30
Spectrum: Tune Spec :Average 38-40(5.79-5.80) Bgrd 27(5.73)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 113

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2845	72.00	1807	111.00	253	146.00	586
37.00	14518	73.00	14830	112.00	299	147.00	361
38.00	13548	74.00	61208	113.00	298	148.00	876
39.00	5438	75.00	191616	115.00	527	149.00	264
44.00	1277	76.00	16584	116.00	1269	150.00	410
45.00	2931	77.00	2237	117.00	2404	151.00	51
46.00	187	78.00	1655	118.00	1265	152.00	141
47.00	4677	79.00	8291	119.00	1663	153.00	291
48.00	2008	80.00	2752	122.00	57	154.00	331
49.00	13522	81.00	8139	124.00	236	155.00	987
50.00	65560	82.00	2212	125.00	75	157.00	907
51.00	21128	83.00	211	126.00	156	159.00	573
52.00	780	86.00	668	127.00	197	161.00	424
55.00	566	87.00	16298	128.00	1518	169.00	201
56.00	5198	88.00	15099	129.00	742	170.00	291
57.00	9404	90.00	57	130.00	1491	171.00	288
58.00	357	91.00	1195	131.00	659	172.00	586
60.00	2860	92.00	10224	132.00	80	173.00	1743
61.00	15415	93.00	15955	134.00	54	174.00	411904
62.00	15573	94.00	46192	135.00	738	175.00	33080
63.00	11975	95.00	416704	136.00	118	176.00	404992
64.00	1141	96.00	27808	137.00	652	177.00	26120
65.00	59	97.00	894	139.00	150	178.00	799
66.00	84	103.00	99	140.00	175	207.00	228
67.00	742	104.00	1479	141.00	3665	253.00	67
68.00	36360	105.00	568	142.00	421	260.00	69
69.00	36264	106.00	1166	143.00	3566		
70.00	2689	107.00	396	144.00	99		
71.00	158	110.00	142	145.00	328		

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128151/5

Matrix: Air Lab File ID: 29949_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	0.047
75-45-6	Freon 22	86.47	0.50	U	0.50	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.041
74-87-3	Chloromethane	50.49	0.50	U	0.50	0.16
106-97-8	n-Butane	58.12	0.50	U	0.50	0.046
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.018
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.037
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.036
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.13
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.022
75-69-4	Trichlorofluoromethane	137.37	0.20	U	0.20	0.031
76-13-1	Freon TF	187.38	0.20	U	0.20	0.027
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.035
67-64-1	Acetone	58.08	5.0	U	5.0	1.3
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	0.13
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.028
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.063
75-09-2	Methylene Chloride	84.93	0.50	U	0.50	0.068
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.7
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.050
110-54-3	n-Hexane	86.17	0.20	U	0.20	0.046
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.017
78-93-3	Methyl Ethyl Ketone	72.11	0.50	U	0.50	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.029
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.029
67-66-3	Chloroform	119.38	0.20	U	0.20	0.025
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	1.2
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.026
110-82-7	Cyclohexane	84.16	0.20	U	0.20	0.045
56-23-5	Carbon tetrachloride	153.81	0.040	U	0.040	0.011
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	0.043
71-43-2	Benzene	78.11	0.20	U	0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.034

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128151/5

Matrix: Air Lab File ID: 29949_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.20	U	0.20	0.068
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.0091
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.11
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.035
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	0.76
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.059
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.036
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.065
108-88-3	Toluene	92.14	0.20	U	0.20	0.035
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.038
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.017
127-18-4	Tetrachloroethene	165.83	0.040	U	0.040	0.0098
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.086
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.017
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.023
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.20	U	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.50	U	0.50	0.077
95-47-6	Xylene, o-	106.17	0.20	U	0.20	0.040
1330-20-7	Xylene (total)	106.17	0.70	U	0.70	0.040
100-42-5	Styrene	104.15	0.20	U	0.20	0.035
75-25-2	Bromoform	252.75	0.20	U	0.20	0.035
98-82-8	Cumene	120.19	0.20	U	0.20	0.039
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.026
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.040
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.040
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.035
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.037
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20	0.057
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.037
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.052
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.050
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128151/5

Matrix: Air Lab File ID: 29949_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.067
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.068
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.045
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.19
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.064
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128151/5

Matrix: Air Lab File ID: 29949_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	0.23
75-45-6	Freon 22	86.47	1.8	U	1.8	0.71
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.29
74-87-3	Chloromethane	50.49	1.0	U	1.0	0.33
106-97-8	n-Butane	58.12	1.2	U	1.2	0.11
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.046
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.082
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.14
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.34
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.096
75-69-4	Trichlorofluoromethane	137.37	1.1	U	1.1	0.17
76-13-1	Freon TF	187.38	1.5	U	1.5	0.21
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.14
67-64-1	Acetone	58.08	12	U	12	3.1
67-63-0	Isopropyl alcohol	60.10	12	U	12	0.32
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.087
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.20
75-09-2	Methylene Chloride	84.93	1.7	U	1.7	0.24
75-65-0	tert-Butyl alcohol	74.12	15	U	15	5.2
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.20
110-54-3	n-Hexane	86.17	0.70	U	0.70	0.16
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.069
78-93-3	Methyl Ethyl Ketone	72.11	1.5	U	1.5	0.32
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.11
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.11
67-66-3	Chloroform	119.38	0.98	U	0.98	0.12
109-99-9	Tetrahydrofuran	72.11	15	U	15	3.5
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.14
110-82-7	Cyclohexane	84.16	0.69	U	0.69	0.15
56-23-5	Carbon tetrachloride	153.81	0.25	U	0.25	0.069
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93	0.20
71-43-2	Benzene	78.11	0.64	U	0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128151/5

Matrix: Air Lab File ID: 29949_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.82	U	0.82	0.28
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.049
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.45
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.16
123-91-1	1,4-Dioxane	88.11	18	U	18	2.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.16
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	0.27
108-88-3	Toluene	92.14	0.75	U	0.75	0.13
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.17
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.093
127-18-4	Tetrachloroethene	165.83	0.27	U	0.27	0.066
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	0.35
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.14
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.18
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.87	U	0.87	0.15
179601-23-1	m,p-Xylene	106.17	2.2	U	2.2	0.33
95-47-6	Xylene, o-	106.17	0.87	U	0.87	0.17
1330-20-7	Xylene (total)	106.17	3.0	U	3.0	0.17
100-42-5	Styrene	104.15	0.85	U	0.85	0.15
75-25-2	Bromoform	252.75	2.1	U	2.1	0.36
98-82-8	Cumene	120.19	0.98	U	0.98	0.19
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.18
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.20
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.20
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.18
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98	0.28
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.20
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.29
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.30
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.38

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128151/5

Matrix: Air Lab File ID: 29949_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.35
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.37
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.27
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.68
91-20-3	Naphthalene	128.17	2.6	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_05.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2018 13:24:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029949-005
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 13:16:00 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 13:16:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.038					ND	
2 Dichlorodifluoromethane	85		3.108					ND	
3 Chlorodifluoromethane	51		3.151					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354					ND	
5 Chloromethane	50		3.482					ND	
6 Butane	43		3.664					ND	
7 Vinyl chloride	62		3.707					ND	
8 Butadiene	54		3.777					ND	
10 Bromomethane	94		4.413					ND	
11 Chloroethane	64		4.638					ND	
12 2-Methylbutane	43		4.697					ND	
13 Vinyl bromide	106		4.996					ND	
14 Trichlorofluoromethane	101		5.087					ND	
16 Pentane	43		5.216					ND	
17 Ethanol	45	5.671	5.638	0.033	99	3848		0.2040	
18 Ethyl ether	59		5.713					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.104					ND	
19 Acrolein	56		6.104					ND	
21 1,1-Dichloroethene	96		6.163					ND	
22 Acetone	43		6.403					ND	
23 Carbon disulfide	76		6.548					ND	
24 Isopropyl alcohol	45	6.735	6.682	0.053	98	6556		0.0776	
25 3-Chloro-1-propene	41		6.933					ND	
26 Acetonitrile	41		7.083					ND	
27 Methylene Chloride	49		7.227					ND	
28 2-Methyl-2-propanol	59		7.452					ND	
29 Methyl tert-butyl ether	73		7.623					ND	
31 trans-1,2-Dichloroethene	61		7.661					ND	
32 Acrylonitrile	53		7.832					ND	
33 Hexane	57		8.030					ND	
34 1,1-Dichloroethane	63		8.543					ND	
35 Vinyl acetate	43		8.618					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
37 cis-1,2-Dichloroethene	96		9.677					ND	
38 2-Butanone (MEK)	72		9.742					ND	
39 Ethyl acetate	88		9.779					ND	
* 40 Chlorobromomethane	128	10.154	10.159	-0.005	87	213586	10.0	10.0	
41 Tetrahydrofuran	42		10.170					ND	
42 Chloroform	83		10.298					ND	
43 Cyclohexane	84		10.539					ND	
44 1,1,1-Trichloroethane	97		10.576					ND	
45 Carbon tetrachloride	117		10.838					ND	
46 Isooctane	57		11.282					ND	
47 Benzene	78		11.336					ND	
48 1,2-Dichloroethane	62		11.539					ND	
49 n-Heptane	43		11.700					ND	
* 50 1,4-Difluorobenzene	114	12.235	12.240	-0.005	98	1325247	10.0	10.0	
52 n-Butanol	56		12.684					ND	
53 Trichloroethene	95		12.732					ND	
A 51 GRO	1	13.198	(4.687-21.708)		0	4926981		0	
54 1,2-Dichloropropane	63		13.331					ND	
55 Methyl methacrylate	69		13.513					ND	
56 1,4-Dioxane	88		13.572					ND	
57 Dibromomethane	174		13.599					ND	
58 Dichlorobromomethane	83		13.914					ND	
60 cis-1,3-Dichloropropene	75		14.893					ND	
A 59 TVOC as Toluene	92	15.099	(3.028-27.170)		0	5123964		0	
61 4-Methyl-2-pentanone (MIBK	43		15.204					ND	
65 Toluene	92		15.503					ND	
64 n-Octane	43		15.557					ND	
66 trans-1,3-Dichloropropene	75		16.145					ND	
67 1,1,2-Trichloroethane	83		16.541					ND	
68 Tetrachloroethene	166		16.632					ND	
69 2-Hexanone	43		17.023					ND	
71 Chlorodibromomethane	129		17.338					ND	
72 Ethylene Dibromide	107		17.622					ND	
* 74 Chlorobenzene-d5	117	18.563	18.569	-0.006	98	1179917	10.0	10.0	
75 Chlorobenzene	112		18.627					ND	
76 Ethylbenzene	91		18.793					ND	U
77 n-Nonane	57		18.927					ND	
78 m-Xylene & p-Xylene	106		19.055					ND	
S 73 Xylenes, Total	106		19.600					ND	
79 o-Xylene	106		19.954					ND	
80 Styrene	104		20.013					ND	
81 Bromoform	173		20.484					ND	
82 Isopropylbenzene	105		20.714					ND	
84 1,1,2,2-Tetrachloroethane	83		21.441					ND	
85 N-Propylbenzene	91		21.500					ND	
86 1,2,3-Trichloropropane	75		21.543					ND	
87 n-Decane	57		21.698					ND	
88 4-Ethyltoluene	105		21.709					ND	
89 2-Chlorotoluene	91		21.714					ND	
90 1,3,5-Trimethylbenzene	105		21.827					ND	
91 Alpha Methyl Styrene	118		22.217					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
92 tert-Butylbenzene	119		22.346					ND	
93 1,2,4-Trimethylbenzene	105		22.447					ND	
94 sec-Butylbenzene	105		22.688					ND	
95 4-Isopropyltoluene	119		22.902					ND	
96 1,3-Dichlorobenzene	146		22.929					ND	
97 1,4-Dichlorobenzene	146		23.073					ND	
98 Benzyl chloride	91		23.282					ND	
100 n-Butylbenzene	91		23.496					ND	
99 Undecane	57		23.528					ND	
101 1,2-Dichlorobenzene	146		23.624					ND	
102 Dodecane	57		25.154					ND	
103 1,2,4-Trichlorobenzene	180		26.187					ND	
104 Hexachlorobutadiene	225		26.374					ND	
105 Naphthalene	128		26.684					ND	
106 1,2,3-Trichlorobenzene	180		27.160					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 36 Methyl cyclohexane TIC	55		0.000					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

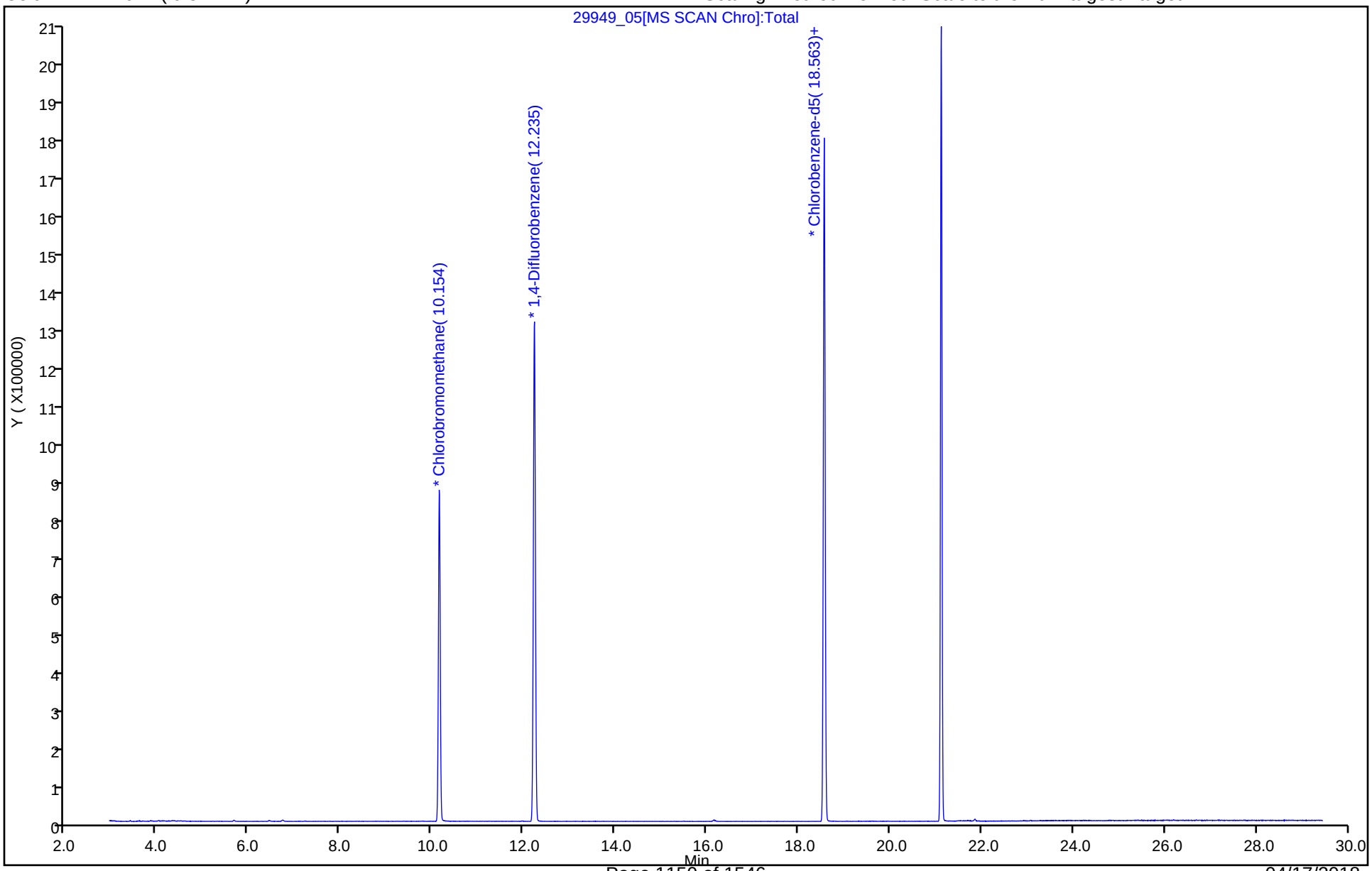
Report Date: 06-Apr-2018 13:16:02 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_05.D

Injection Date:	05-Apr-2018 13:24:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



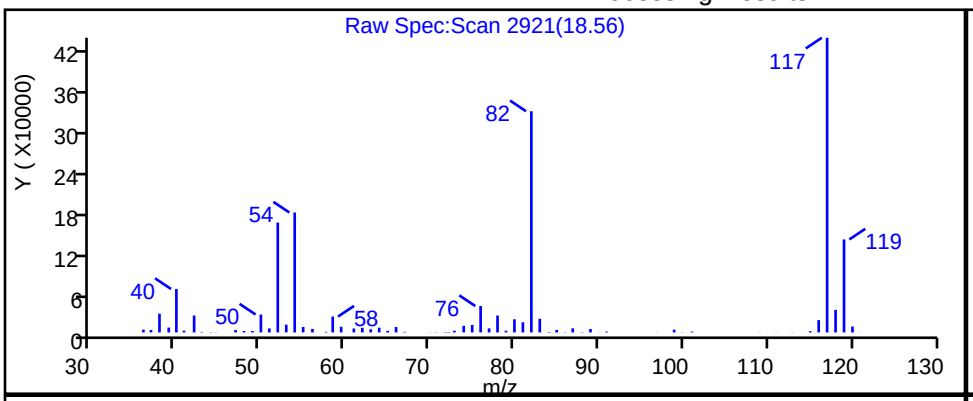
User Disabled Compound Report

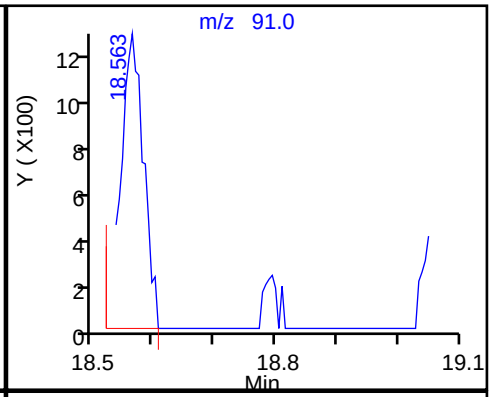
TestAmerica Burlington

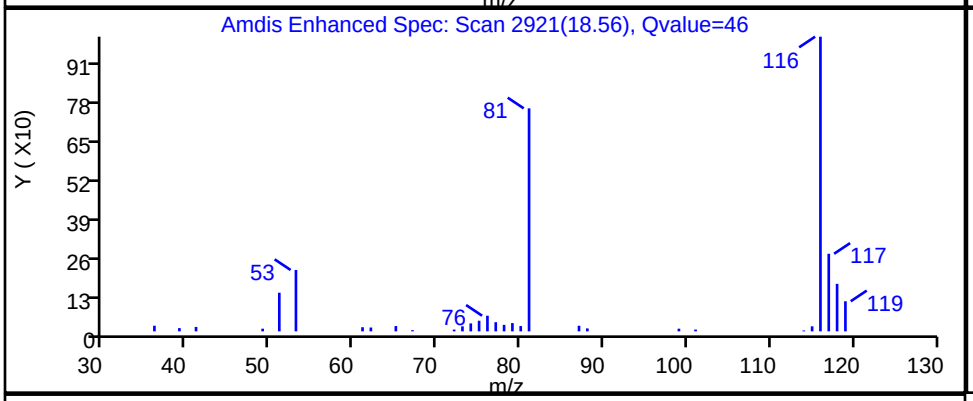
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_05.D				
Injection Date:	05-Apr-2018 13:24:30	Instrument ID:	CHX.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

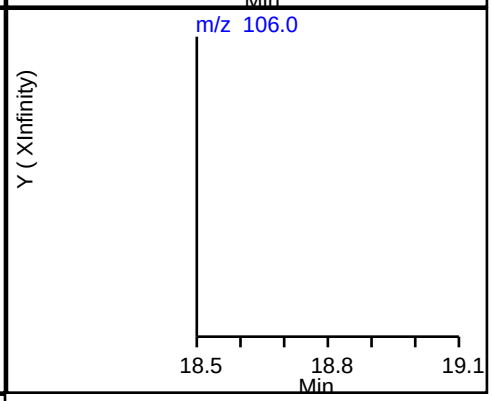
76 Ethylbenzene, CAS: 100-41-4

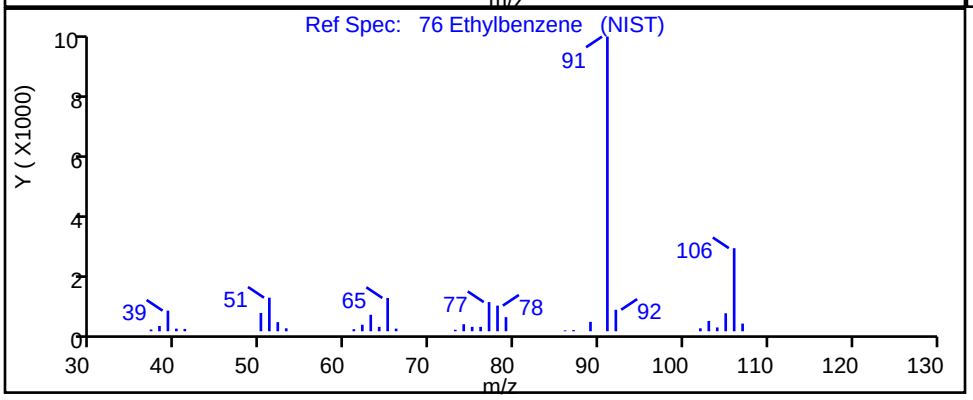
Processing Results











RT	Mass	Response	Amount
18.56	91.00	3126	0.017108
18.79	106.00	0	

Reviewer: puangmaleek, 06-Apr-2018 13:16:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128156/4

Matrix: Air Lab File ID: 29952-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 14:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	0.20
75-45-6	Freon 22	86.47	0.50	U	0.50	0.26
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.068
74-87-3	Chloromethane	50.49	0.50	U	0.50	0.25
106-97-8	n-Butane	58.12	0.50	U	0.50	0.31
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.041
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.065
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.062
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.21
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.056
75-69-4	Trichlorofluoromethane	137.37	0.20	U	0.20	0.062
76-13-1	Freon TF	187.38	0.20	U	0.20	0.031
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.034
67-64-1	Acetone	58.08	5.0	U	5.0	2.6
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	1.8
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.12
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.27
75-09-2	Methylene Chloride	84.93	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.5
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.061
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.074
110-54-3	n-Hexane	86.17	0.20	U	0.20	0.16
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.026
78-93-3	Methyl Ethyl Ketone	72.11	0.50	U	0.50	0.20
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.037
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.11
67-66-3	Chloroform	119.38	0.20	U	0.20	0.052
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	2.6
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.068
110-82-7	Cyclohexane	84.16	0.20	U	0.20	0.063
56-23-5	Carbon tetrachloride	153.81	0.040	U	0.040	0.024
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	0.088
71-43-2	Benzene	78.11	0.20	U	0.20	0.071
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128156/4

Matrix: Air Lab File ID: 29952-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 14:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.20	U	0.20	0.14
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.030
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.22
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.12
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	1.3
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.094
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.098
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.36
108-88-3	Toluene	92.14	0.20	U	0.20	0.069
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.12
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.078
127-18-4	Tetrachloroethene	165.83	0.040	U	0.040	0.029
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.42
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.071
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.069
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.040
100-41-4	Ethylbenzene	106.17	0.20	U	0.20	0.073
179601-23-1	m,p-Xylene	106.17	0.50	U	0.50	0.070
95-47-6	Xylene, o-	106.17	0.20	U	0.20	0.071
1330-20-7	Xylene (total)	106.17	0.70	U	0.70	0.14
100-42-5	Styrene	104.15	0.20	U	0.20	0.086
75-25-2	Bromoform	252.75	0.20	U	0.20	0.086
98-82-8	Cumene	120.19	0.20	U	0.20	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.076
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.069
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.069
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.058
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.071
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.058
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20	0.080
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.066
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.075
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.082
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.065

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128156/4

Matrix: Air Lab File ID: 29952-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 14:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.12
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.080
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.071
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.24
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.082
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.31

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128156/4

Matrix: Air Lab File ID: 29952-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 14:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	0.99
75-45-6	Freon 22	86.47	1.8	U	1.8	0.92
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.48
74-87-3	Chloromethane	50.49	1.0	U	1.0	0.52
106-97-8	n-Butane	58.12	1.2	U	1.2	0.74
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.10
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.14
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.24
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.55
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.24
75-69-4	Trichlorofluoromethane	137.37	1.1	U	1.1	0.35
76-13-1	Freon TF	187.38	1.5	U	1.5	0.24
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.13
67-64-1	Acetone	58.08	12	U	12	6.2
67-63-0	Isopropyl alcohol	60.10	12	U	12	4.4
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.37
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.85
75-09-2	Methylene Chloride	84.93	1.7	U	1.7	0.69
75-65-0	tert-Butyl alcohol	74.12	15	U	15	4.5
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.22
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.29
110-54-3	n-Hexane	86.17	0.70	U	0.70	0.56
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.11
78-93-3	Methyl Ethyl Ketone	72.11	1.5	U	1.5	0.59
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.15
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.44
67-66-3	Chloroform	119.38	0.98	U	0.98	0.25
109-99-9	Tetrahydrofuran	72.11	15	U	15	7.7
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.37
110-82-7	Cyclohexane	84.16	0.69	U	0.69	0.22
56-23-5	Carbon tetrachloride	153.81	0.25	U	0.25	0.15
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93	0.41
71-43-2	Benzene	78.11	0.64	U	0.64	0.23
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.25

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128156/4

Matrix: Air Lab File ID: 29952-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 14:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.82	U	0.82	0.57
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.16
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.90
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.55
123-91-1	1,4-Dioxane	88.11	18	U	18	4.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.63
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.44
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	1.5
108-88-3	Toluene	92.14	0.75	U	0.75	0.26
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.54
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.43
127-18-4	Tetrachloroethene	165.83	0.27	U	0.27	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	1.7
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.60
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.53
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.18
100-41-4	Ethylbenzene	106.17	0.87	U	0.87	0.32
179601-23-1	m,p-Xylene	106.17	2.2	U	2.2	0.30
95-47-6	Xylene, o-	106.17	0.87	U	0.87	0.31
1330-20-7	Xylene (total)	106.17	3.0	U	3.0	0.61
100-42-5	Styrene	104.15	0.85	U	0.85	0.37
75-25-2	Bromoform	252.75	2.1	U	2.1	0.89
98-82-8	Cumene	120.19	0.98	U	0.98	0.29
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.52
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.34
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.34
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.29
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.32
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98	0.39
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.36
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.41
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.49
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.39

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128156/4

Matrix: Air Lab File ID: 29952-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 14:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.62
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.44
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.43
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.8
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.87
91-20-3	Naphthalene	128.17	2.6	U	2.6	1.6

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-04.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2018 14:31:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029952-004
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 14:54:10 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 14:54:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		5.047					ND	U
2 Dichlorodifluoromethane	85		5.160					ND	
3 Chlorodifluoromethane	51		5.240					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.566					ND	
5 Chloromethane	50		5.759					ND	
6 Butane	43		6.032					ND	
7 Vinyl chloride	62		6.085					ND	
8 Butadiene	54		6.181					ND	
9 Bromomethane	94		6.984					ND	
11 Chloroethane	64		7.230					ND	
12 2-Methylbutane	43		7.305					ND	
13 Vinyl bromide	106		7.637					ND	
14 Trichlorofluoromethane	101		7.733					ND	
15 Pentane	43		7.867					ND	
16 Ethanol	45		8.241					ND	U
17 Ethyl ether	59		8.348					ND	
T 18 Methyl Acetate TIC	43		8.560					ND	
19 Acrolein	56		8.723					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.739					ND	
21 1,1-Dichloroethene	96		8.803					ND	
22 Acetone	43	9.017	9.001	0.016	95	12893		0.3583	
23 Carbon disulfide	76		9.193					ND	
24 Isopropyl alcohol	45	9.225	9.204	0.021	98	11083		0.2983	
25 3-Chloro-1-propene	41		9.498					ND	
26 Acetonitrile	41		9.616					ND	
27 Methylene Chloride	49	9.766	9.766	0.006	37	1655		0.0697	Ma
28 2-Methyl-2-propanol	59		9.883					ND	
29 Methyl tert-butyl ether	73		10.097					ND	
30 trans-1,2-Dichloroethene	61		10.151					ND	
S 31 1,2-Dichloroethene, Total	61		10.200					ND	
32 Acrylonitrile	53		10.285					ND	
33 Hexane	57		10.483					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63		10.948					ND	
35 Vinyl acetate	43		10.975					ND	
36 cis-1,2-Dichloroethene	96		11.954					ND	
37 2-Butanone (MEK)	72		11.965					ND	
38 Ethyl acetate	88		11.975					ND	
39 Tetrahydrofuran	42		12.371					ND	
* 40 Chlorobromomethane	128	12.371	12.376	-0.005	86	179970	10.0	10.0	
41 Chloroform	83		12.467					ND	
42 Cyclohexane	84		12.724					ND	
43 1,1,1-Trichloroethane	97		12.740					ND	
44 Carbon tetrachloride	117		12.965					ND	
45 Isooctane	57		13.318					ND	
46 Benzene	78		13.377					ND	
47 1,2-Dichloroethane	62		13.532					ND	
48 n-Heptane	43		13.634					ND	
* 49 1,4-Difluorobenzene	114	14.078	14.072	0.006	94	963789	10.0	10.0	
50 n-Butanol	56		14.334					ND	
51 Trichloroethene	95		14.506					ND	
A 52 GRO	1	14.728	(7.295-22.160)		0	2885403		0	
53 1,2-Dichloropropane	63		14.992					ND	
T 54 Methyl cyclohexane TIC	55		15.012					ND	
55 Methyl methacrylate	69		15.078					ND	
56 1,4-Dioxane	88		15.158					ND	
57 Dibromomethane	174		15.222					ND	
58 Dichlorobromomethane	83		15.458					ND	
59 cis-1,3-Dichloropropene	75		16.282					ND	
A 60 TVOC as Toluene	92	16.399	(5.037-27.761)		0	3074598		44.6	
61 4-Methyl-2-pentanone (MIBK	43		16.512					ND	
62 n-Octane	43		16.822					ND	
63 Toluene	92	16.822	16.822	0.000	95	948		0.0156	
64 trans-1,3-Dichloropropene	75		17.346					ND	
65 1,1,2-Trichloroethane	83		17.699					ND	
66 Tetrachloroethene	166		17.817					ND	
67 2-Hexanone	43		18.090					ND	
68 Chlorodibromomethane	129		18.427					ND	
69 Ethylene Dibromide	107		18.700					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		19.141					ND	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	86	850754	10.0	10.0	
72 Chlorobenzene	112		19.593					ND	
73 Ethylbenzene	91		19.727					ND	
74 n-Nonane	57		19.802					ND	
75 m-Xylene & p-Xylene	106		19.962					ND	
S 76 Xylenes, Total	106		20.100					ND	
77 o-Xylene	106		20.738					ND	
78 Styrene	104		20.781					ND	
79 Bromoform	173		21.171					ND	
80 Isopropylbenzene	105		21.343					ND	
81 1,1,2,2-Tetrachloroethane	83		21.942					ND	
82 N-Propylbenzene	91		22.011					ND	
83 1,2,3-Trichloropropane	75		22.043					ND	
84 n-Decane	57		22.150					ND	
85 4-Ethyltoluene	105		22.188					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 2-Chlorotoluene	91		22.215					ND	
87 1,3,5-Trimethylbenzene	105		22.289					ND	
88 Alpha Methyl Styrene	118		22.648					ND	
89 tert-Butylbenzene	119		22.766					ND	
90 1,2,4-Trimethylbenzene	105		22.857					ND	
91 sec-Butylbenzene	105		23.081					ND	
92 4-Isopropyltoluene	119		23.279					ND	
93 1,3-Dichlorobenzene	146		23.327					ND	
94 1,4-Dichlorobenzene	146		23.466					ND	
95 Benzyl chloride	91		23.670					ND	
96 n-Butylbenzene	91		23.878					ND	
97 Undecane	57		23.884					ND	
98 1,2-Dichlorobenzene	146		24.028					ND	
99 Dodecane	57		25.563					ND	
100 1,2,4-Trichlorobenzene	180		26.703					ND	
101 Hexachlorobutadiene	225		26.896					ND	
102 Naphthalene	128		27.238					ND	
103 1,2,3-Trichlorobenzene	180		27.751					ND	
T 109 Difluoroethane TIC	1		0.000					ND	
T 108 Freon 115 TIC	1		0.000					ND	
T 111 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 110 Chlorotrifluoroethene TIC	1		0.000					ND	
T 105 Methyl acetylene TIC	1		0.000					ND	
T 104 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 1,3-Dichloropropane TIC	1		0.000					ND	
106 Total Alkanes	1		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

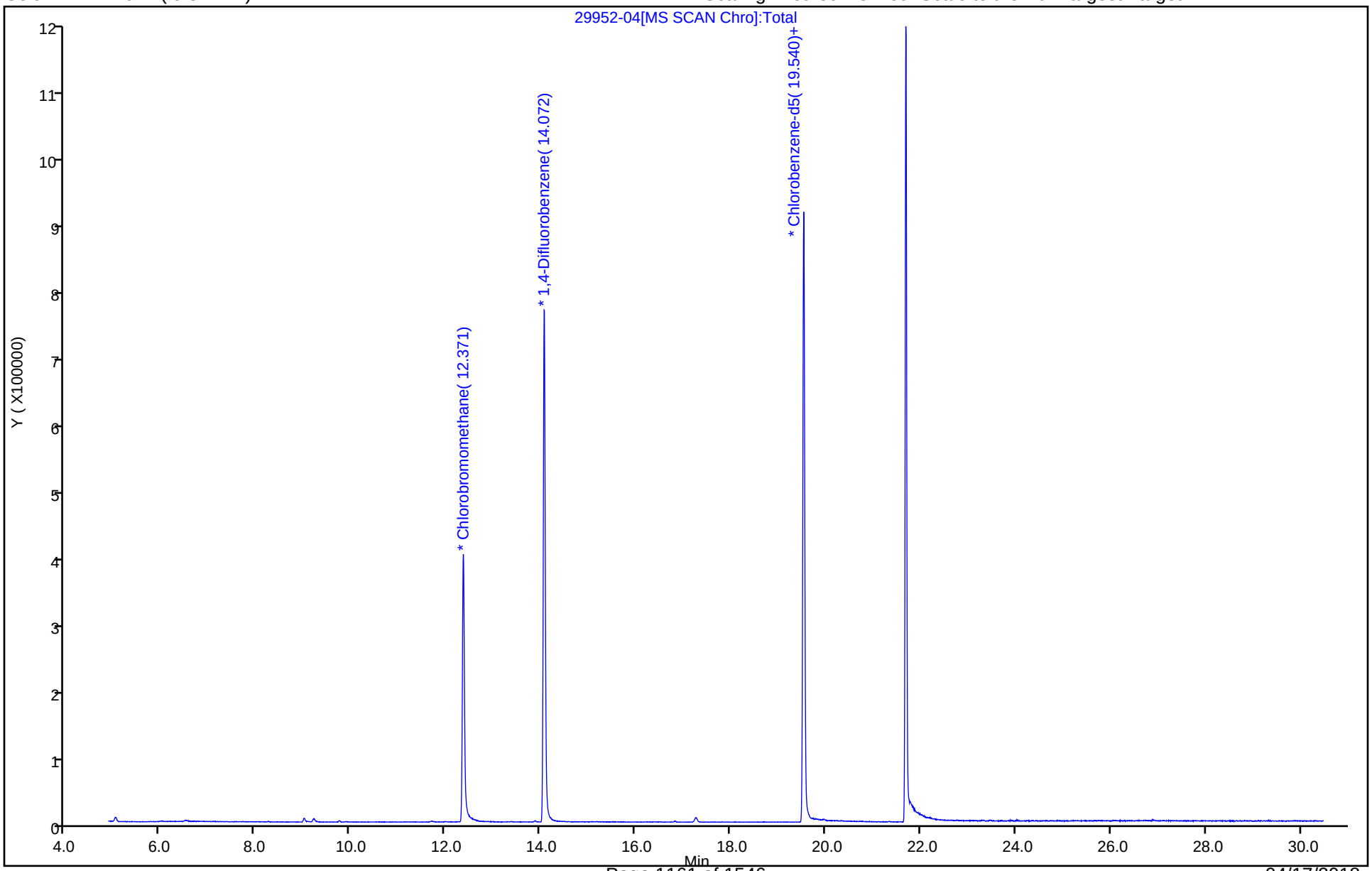
Report Date: 06-Apr-2018 14:54:10 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-04.d

Injection Date:	05-Apr-2018 14:31:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

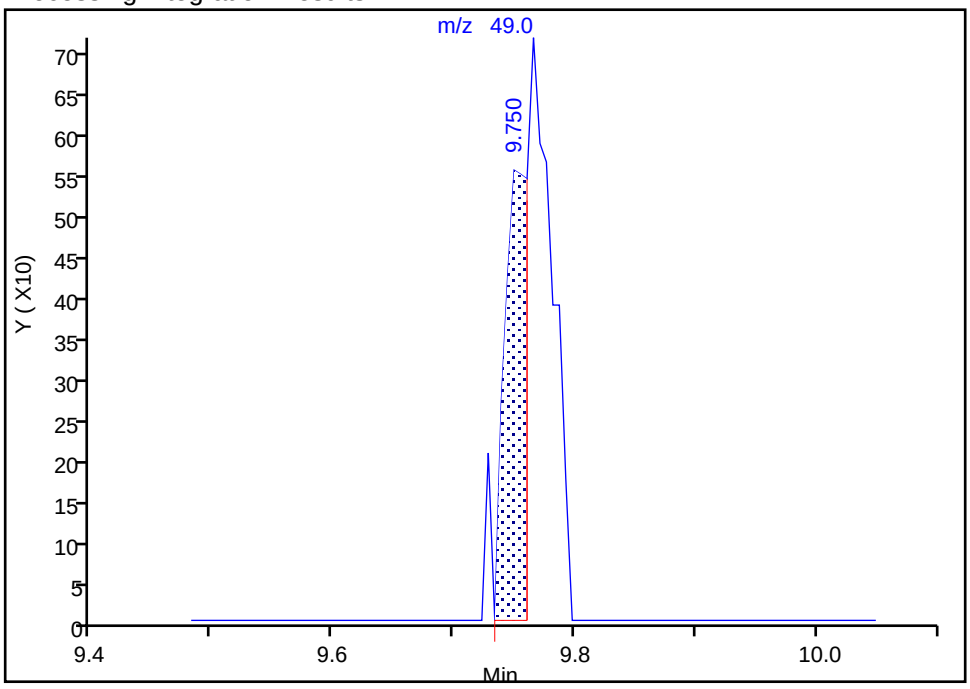
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-04.d				
Injection Date:	05-Apr-2018 14:31:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

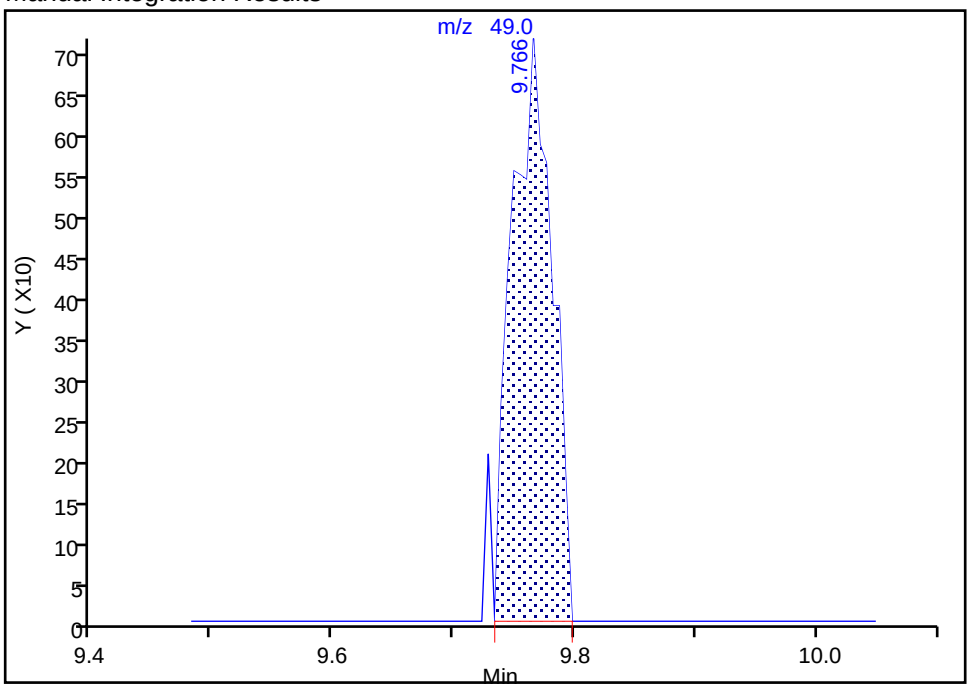
Processing Integration Results

RT: 9.75
Area: 750
Amount: 0.031592
Amount Units: ppb v/v



Manual Integration Results

RT: 9.77
Area: 1655
Amount: 0.069713
Amount Units: ppb v/v



Reviewer: puangmaleek, 06-Apr-2018 14:53:15

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128215/6

Matrix: Air Lab File ID: 29983-06.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 16:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	0.047
75-45-6	Freon 22	86.47	0.50	U	0.50	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.041
74-87-3	Chloromethane	50.49	0.50	U	0.50	0.16
106-97-8	n-Butane	58.12	0.50	U	0.50	0.046
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.018
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.037
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.036
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.13
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.022
75-69-4	Trichlorofluoromethane	137.37	0.20	U	0.20	0.031
76-13-1	Freon TF	187.38	0.20	U	0.20	0.027
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.035
67-64-1	Acetone	58.08	5.0	U	5.0	1.3
67-63-0	Isopropyl alcohol	60.10	0.251	J	5.0	0.13
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.028
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.063
75-09-2	Methylene Chloride	84.93	0.50	U	0.50	0.068
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.7
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.050
110-54-3	n-Hexane	86.17	0.20	U	0.20	0.046
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.017
78-93-3	Methyl Ethyl Ketone	72.11	0.50	U	0.50	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.029
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.029
67-66-3	Chloroform	119.38	0.20	U	0.20	0.025
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	1.2
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.026
110-82-7	Cyclohexane	84.16	0.20	U	0.20	0.045
56-23-5	Carbon tetrachloride	153.81	0.040	U	0.040	0.011
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	0.043
71-43-2	Benzene	78.11	0.20	U	0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.034

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128215/6

Matrix: Air Lab File ID: 29983-06.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 16:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.20	U	0.20	0.068
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.0091
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.11
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.035
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	0.76
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.059
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.036
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.065
108-88-3	Toluene	92.14	0.20	U	0.20	0.035
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.038
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.017
127-18-4	Tetrachloroethene	165.83	0.040	U	0.040	0.0098
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.086
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.017
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.023
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.20	U	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.50	U	0.50	0.077
95-47-6	Xylene, o-	106.17	0.20	U	0.20	0.040
1330-20-7	Xylene (total)	106.17	0.70	U	0.70	0.040
100-42-5	Styrene	104.15	0.20	U	0.20	0.035
75-25-2	Bromoform	252.75	0.20	U	0.20	0.035
98-82-8	Cumene	120.19	0.20	U	0.20	0.039
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.026
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.040
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.040
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.035
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.037
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20	0.057
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.037
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.052
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.050
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128215/6

Matrix: Air Lab File ID: 29983-06.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 16:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.067
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.068
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.045
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.19
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.064
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128215/6

Matrix: Air Lab File ID: 29983-06.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 16:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	0.23
75-45-6	Freon 22	86.47	1.8	U	1.8	0.71
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.29
74-87-3	Chloromethane	50.49	1.0	U	1.0	0.33
106-97-8	n-Butane	58.12	1.2	U	1.2	0.11
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.046
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.082
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.14
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.34
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.096
75-69-4	Trichlorofluoromethane	137.37	1.1	U	1.1	0.17
76-13-1	Freon TF	187.38	1.5	U	1.5	0.21
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.14
67-64-1	Acetone	58.08	12	U	12	3.1
67-63-0	Isopropyl alcohol	60.10	0.618	J	12	0.32
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.087
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.20
75-09-2	Methylene Chloride	84.93	1.7	U	1.7	0.24
75-65-0	tert-Butyl alcohol	74.12	15	U	15	5.2
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.20
110-54-3	n-Hexane	86.17	0.70	U	0.70	0.16
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.069
78-93-3	Methyl Ethyl Ketone	72.11	1.5	U	1.5	0.32
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.11
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.11
67-66-3	Chloroform	119.38	0.98	U	0.98	0.12
109-99-9	Tetrahydrofuran	72.11	15	U	15	3.5
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.14
110-82-7	Cyclohexane	84.16	0.69	U	0.69	0.15
56-23-5	Carbon tetrachloride	153.81	0.25	U	0.25	0.069
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93	0.20
71-43-2	Benzene	78.11	0.64	U	0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128215/6

Matrix: Air Lab File ID: 29983-06.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 16:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.82	U	0.82	0.28
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.049
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.45
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.16
123-91-1	1,4-Dioxane	88.11	18	U	18	2.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.16
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	0.27
108-88-3	Toluene	92.14	0.75	U	0.75	0.13
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.17
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.093
127-18-4	Tetrachloroethene	165.83	0.27	U	0.27	0.066
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	0.35
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.14
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.18
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.87	U	0.87	0.15
179601-23-1	m,p-Xylene	106.17	2.2	U	2.2	0.33
95-47-6	Xylene, o-	106.17	0.87	U	0.87	0.17
1330-20-7	Xylene (total)	106.17	3.0	U	3.0	0.17
100-42-5	Styrene	104.15	0.85	U	0.85	0.15
75-25-2	Bromoform	252.75	2.1	U	2.1	0.36
98-82-8	Cumene	120.19	0.98	U	0.98	0.19
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.18
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.20
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.20
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.18
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98	0.28
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.20
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.29
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.30
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.38

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128215/6

Matrix: Air Lab File ID: 29983-06.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 16:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.35
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.37
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.27
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.4
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.68
91-20-3	Naphthalene	128.17	2.6	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 06-Apr-2018 16:42:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029983-006
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 18:04:39 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 18:04:39

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
	1 Propene	41		5.037					ND	Ua
	2 Dichlorodifluoromethane	85		5.149					ND	
	3 Chlorodifluoromethane	51		5.235					ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.556					ND	
	5 Chloromethane	50		5.748					ND	
	6 Butane	43		6.026					ND	
	7 Vinyl chloride	62		6.080					ND	
	8 Butadiene	54		6.176					ND	
	9 Bromomethane	94		6.979					ND	
	11 Chloroethane	64		7.225					ND	
	12 2-Methylbutane	43		7.300					ND	
	13 Vinyl bromide	106		7.631					ND	
	14 Trichlorofluoromethane	101		7.728					ND	
	15 Pentane	43		7.861					ND	
	16 Ethanol	45		8.241					ND	U
	17 Ethyl ether	59		8.343					ND	
T	18 Methyl Acetate TIC	43		8.560					ND	
	19 Acrolein	56		8.728					ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.739					ND	
	21 1,1-Dichloroethene	96		8.803					ND	
	22 Acetone	43		9.001					ND	Ua
	23 Carbon disulfide	76		9.193					ND	
	24 Isopropyl alcohol	45	9.220	9.204	0.016	99	8594		0.2513	
	25 3-Chloro-1-propene	41		9.493					ND	
	26 Acetonitrile	41		9.616					ND	
	27 Methylene Chloride	49	9.760	9.760	0.000	86	1387		0.0635	
	28 2-Methyl-2-propanol	59		9.889					ND	
	29 Methyl tert-butyl ether	73		10.092					ND	
	30 trans-1,2-Dichloroethene	61		10.156					ND	
S	31 1,2-Dichloroethene, Total	61		10.200					ND	
	32 Acrylonitrile	53		10.285					ND	
	33 Hexane	57		10.483					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63		10.948					ND	
35 Vinyl acetate	43		10.975					ND	
36 cis-1,2-Dichloroethene	96		11.949					ND	
37 2-Butanone (MEK)	72		11.965					ND	
38 Ethyl acetate	88		11.975					ND	
39 Tetrahydrofuran	42		12.371					ND	
* 40 Chlorobromomethane	128	12.366	12.377	-0.010	83	165675	10.0	10.0	
41 Chloroform	83		12.467					ND	
42 Cyclohexane	84		12.724					ND	
43 1,1,1-Trichloroethane	97		12.740					ND	
44 Carbon tetrachloride	117		12.965					ND	
45 Isooctane	57		13.318					ND	
46 Benzene	78		13.382					ND	
47 1,2-Dichloroethane	62		13.532					ND	
48 n-Heptane	43		13.634					ND	
* 49 1,4-Difluorobenzene	114	14.072	14.078	-0.006	94	864909	10.0	10.0	
50 n-Butanol	56		14.334					ND	
51 Trichloroethene	95		14.500					ND	
A 52 GRO	1	14.725	(7.290-22.160)		0	2395608		0	
53 1,2-Dichloropropane	63		14.998					ND	
T 54 Methyl cyclohexane TIC	55		15.012					ND	
55 Methyl methacrylate	69		15.078					ND	
56 1,4-Dioxane	88		15.164					ND	
57 Dibromomethane	174		15.223					ND	
58 Dichlorobromomethane	83		15.458					ND	
59 cis-1,3-Dichloropropene	75		16.282					ND	
A 60 TVOC as Toluene	92	16.394	(5.027-27.762)		0	2535006		41.0	
61 4-Methyl-2-pentanone (MIBK	43		16.512					ND	
63 Toluene	92	16.833	16.833	0.011	1	806		0.0155	M
62 n-Octane	43		16.822					ND	
64 trans-1,3-Dichloropropene	75		17.352					ND	
65 1,1,2-Trichloroethane	83		17.699					ND	
66 Tetrachloroethene	166		17.817					ND	
67 2-Hexanone	43		18.090					ND	
68 Chlorodibromomethane	129		18.427					ND	
69 Ethylene Dibromide	107		18.700					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		19.141					ND	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	86	725815	10.0	10.0	
72 Chlorobenzene	112		19.599					ND	MU
73 Ethylbenzene	91		19.727					ND	U
74 n-Nonane	57		19.802					ND	
75 m-Xylene & p-Xylene	106		19.962					ND	
S 76 Xylenes, Total	106		20.100					ND	
77 o-Xylene	106		20.738					ND	
78 Styrene	104		20.781					ND	
79 Bromoform	173		21.171					ND	
80 Isopropylbenzene	105		21.343					ND	
81 1,1,2,2-Tetrachloroethane	83		21.942					ND	MU
82 N-Propylbenzene	91		22.011					ND	MU
83 1,2,3-Trichloropropane	75		22.043					ND	
84 n-Decane	57		22.150					ND	
85 4-Ethyltoluene	105		22.193					ND	Ua

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 2-Chlorotoluene	91		22.209					ND	
87 1,3,5-Trimethylbenzene	105		22.290					ND	
88 Alpha Methyl Styrene	118		22.648					ND	
89 tert-Butylbenzene	119		22.766					ND	
90 1,2,4-Trimethylbenzene	105		22.857					ND	
91 sec-Butylbenzene	105		23.081					ND	
92 4-Isopropyltoluene	119		23.279					ND	
93 1,3-Dichlorobenzene	146	23.338	23.338	0.011	78	914		0.0115	Ma
94 1,4-Dichlorobenzene	146	23.472	23.466	0.006	79	1103		0.0144	
95 Benzyl chloride	91		23.670					ND	
96 n-Butylbenzene	91		23.878					ND	
97 Undecane	57		23.884					ND	
98 1,2-Dichlorobenzene	146	24.028	24.028	0.000	1	845		0.0109	
99 Dodecane	57		25.569					ND	
100 1,2,4-Trichlorobenzene	180		26.703					ND	
101 Hexachlorobutadiene	225	26.895	26.895	-0.001	1	1011		0.0178	7a
102 Naphthalene	128		27.238					ND	
103 1,2,3-Trichlorobenzene	180		27.752					ND	U
T 109 Difluoroethane TIC	1		0.000					ND	
T 108 Freon 115 TIC	1		0.000					ND	
T 111 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 110 Chlorotrifluoroethene TIC	1		0.000					ND	
T 105 Methyl acetylene TIC	1		0.000					ND	
T 104 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 1,3-Dichloropropane TIC	1		0.000					ND	
106 Total Alkanes	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

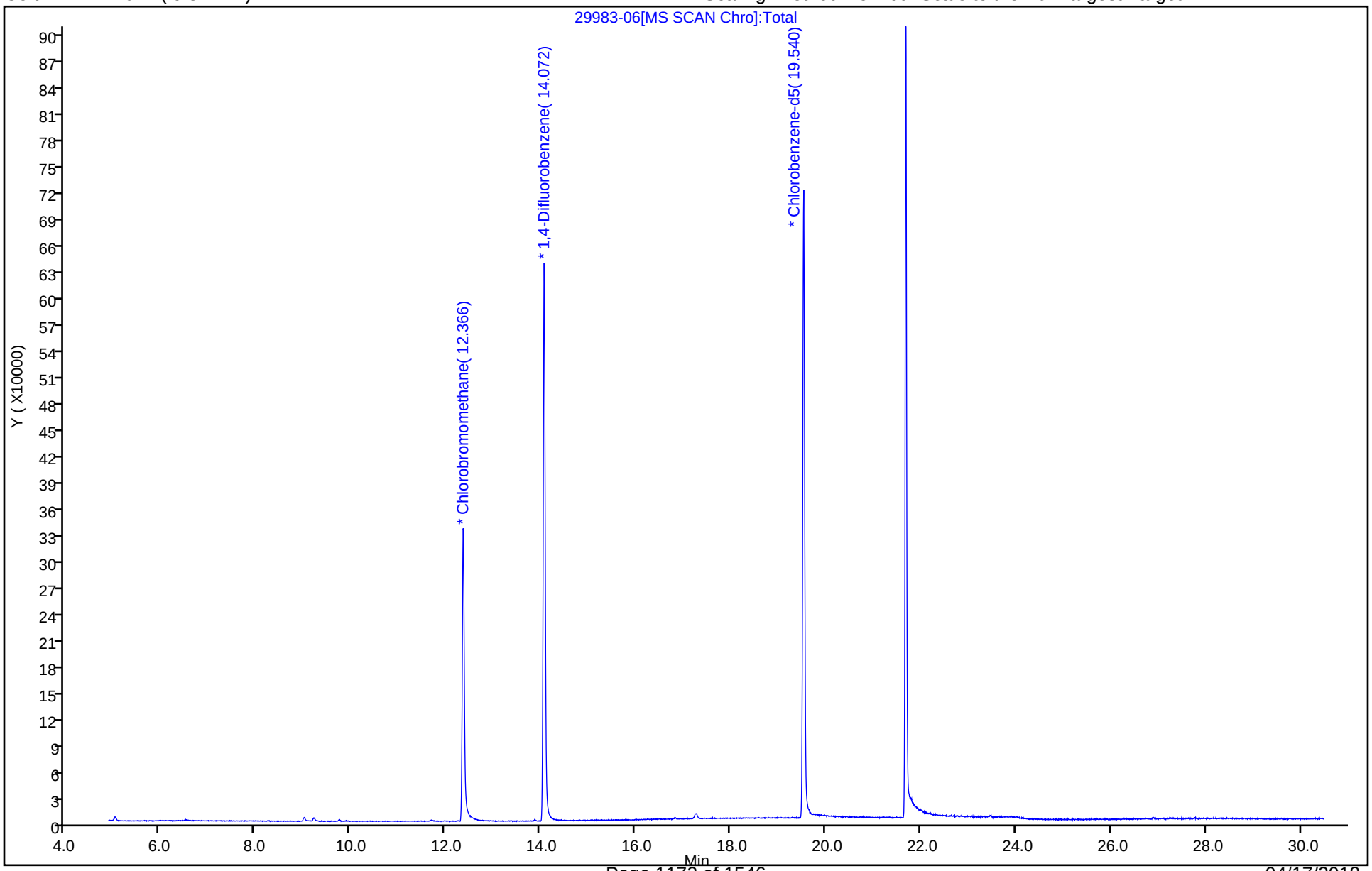
Report Date: 09-Apr-2018 18:04:40 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d

Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

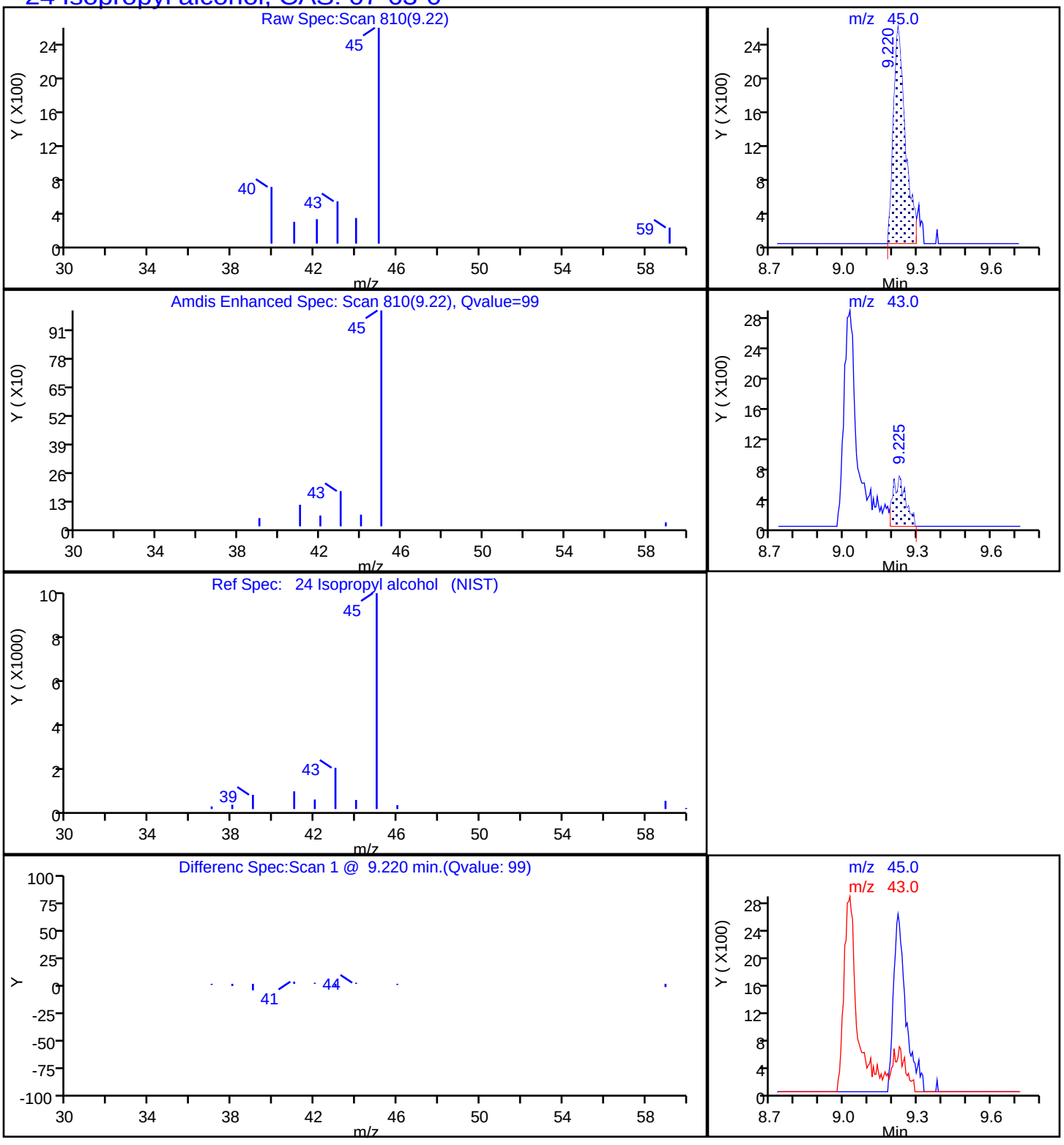
Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d
Injection Date: 06-Apr-2018 16:42:30 Instrument ID: CHW.i
Lims ID: mb
Client ID:
Operator ID: ert ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

24 Isopropyl alcohol, CAS: 67-63-0



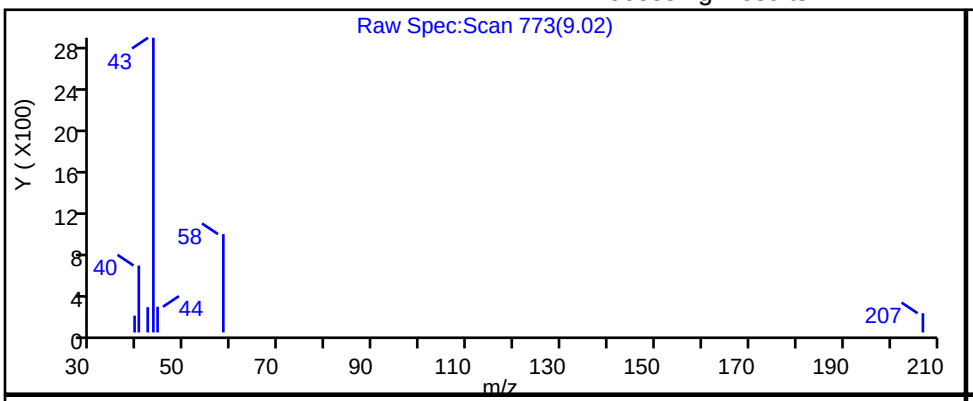
User Disabled Compound Report

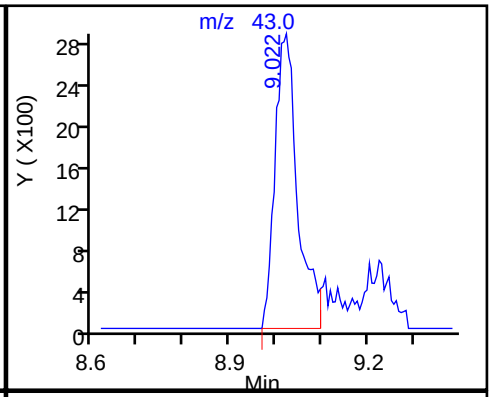
TestAmerica Burlington

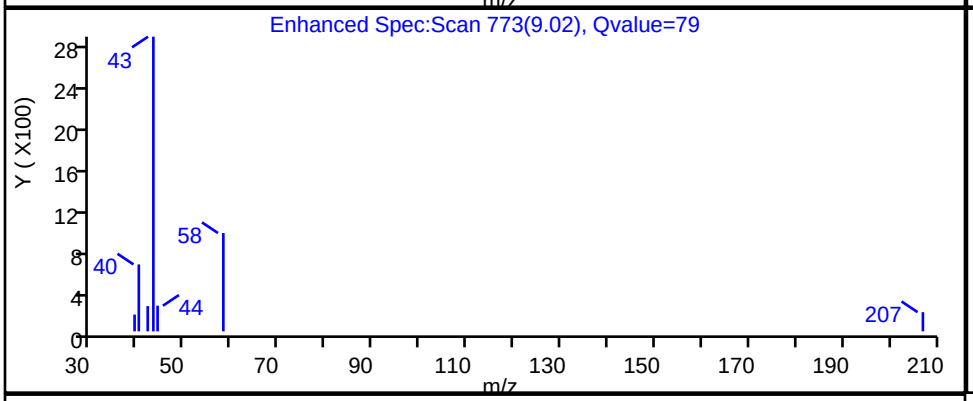
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

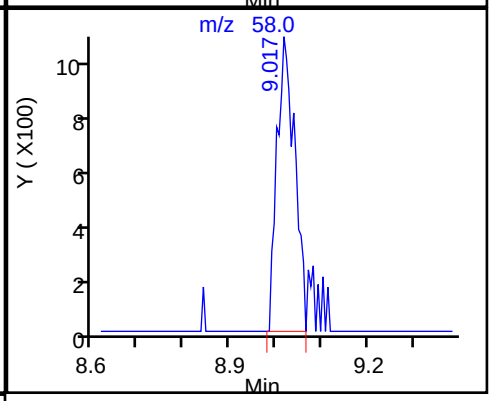
22 Acetone, CAS: 67-64-1

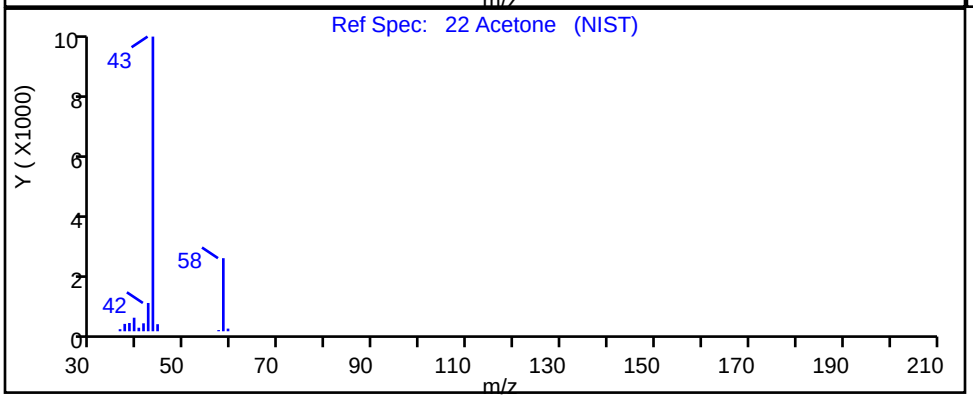
Processing Results











RT	Mass	Response	Amount
9.02	43.00	9711	0.293170
9.02	58.00	2738	

Reviewer: bunmaa, 09-Apr-2018 18:04:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

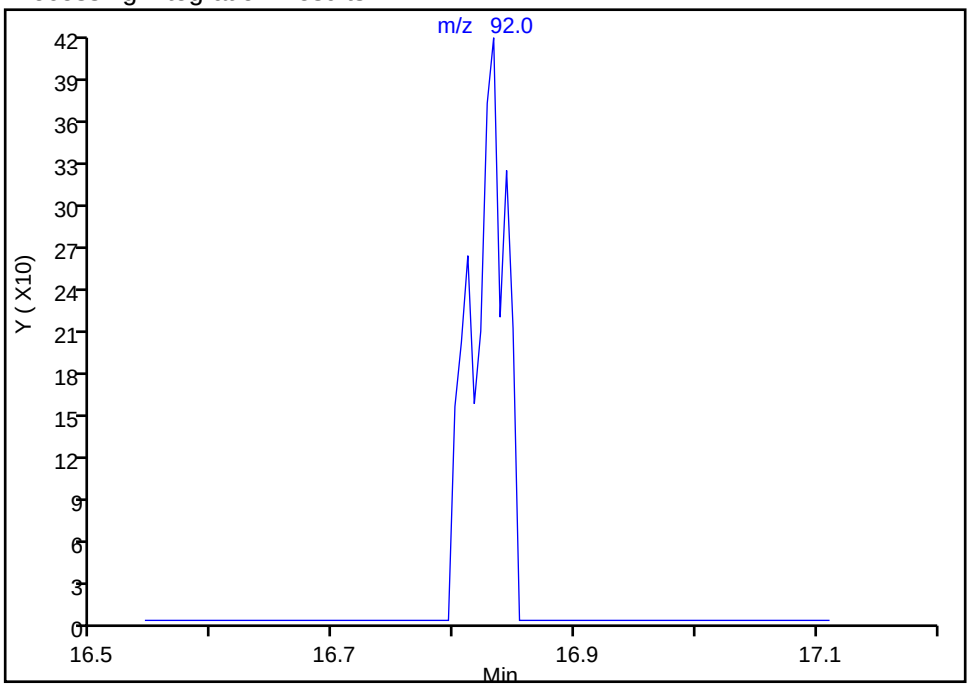
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

63 Toluene, CAS: 108-88-3

Signal: 1

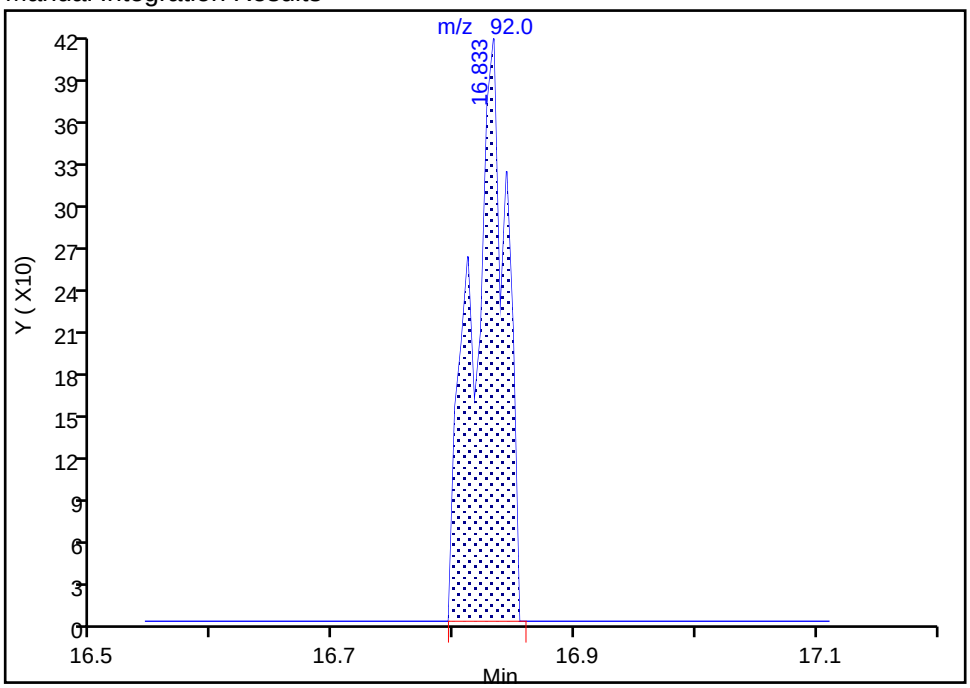
Not Detected
Expected RT: 16.82

Processing Integration Results



Manual Integration Results

RT: 16.83
Area: 806
Amount: 0.015537
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:02:05
Audit Action: Manually Integrated Audit Reason: Assign Peak

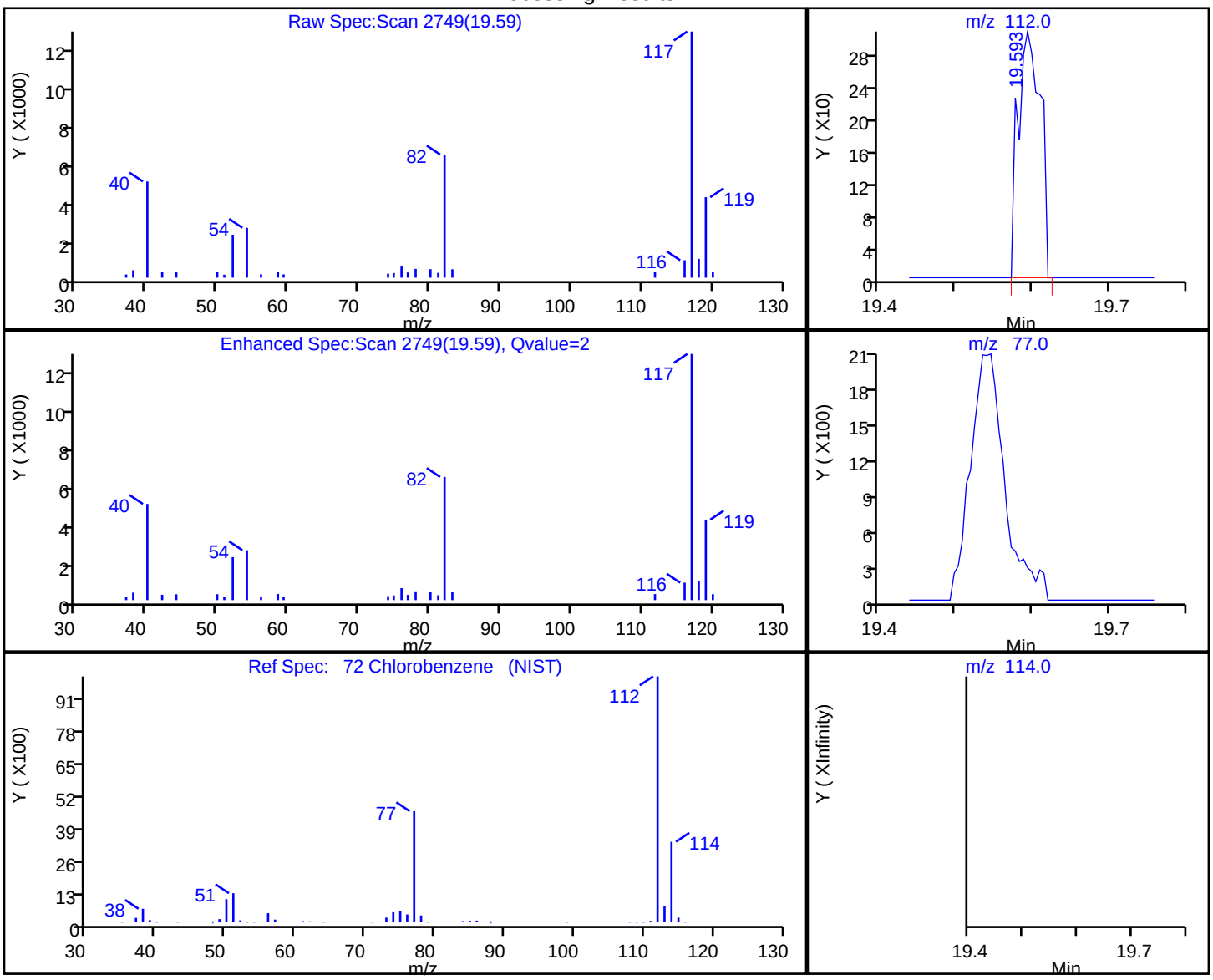
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

72 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
19.59	112.00	625	0.008532
19.60	77.00	0	
19.60	114.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:04:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

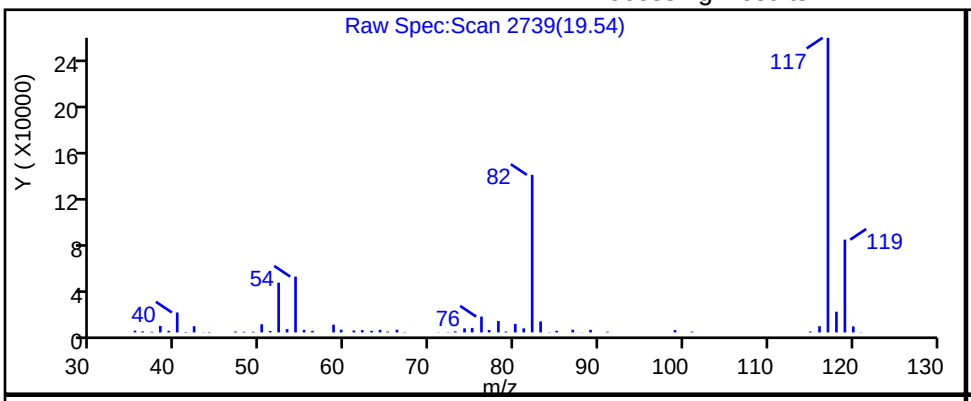
User Disabled Compound Report

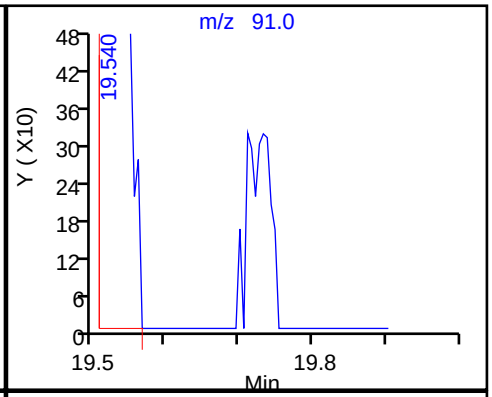
TestAmerica Burlington

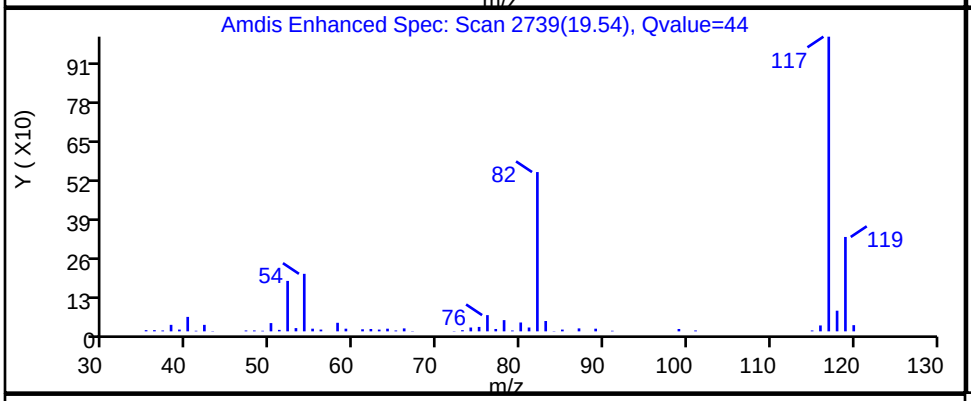
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

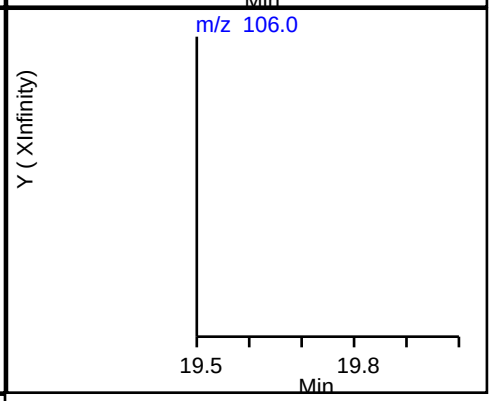
73 Ethylbenzene, CAS: 100-41-4

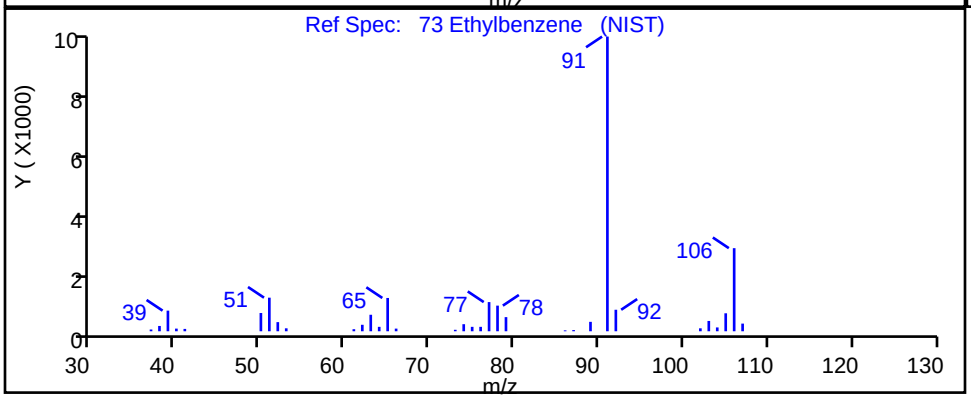
Processing Results











RT	Mass	Response	Amount
19.54	91.00	1245	0.010405
19.73	106.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:04:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

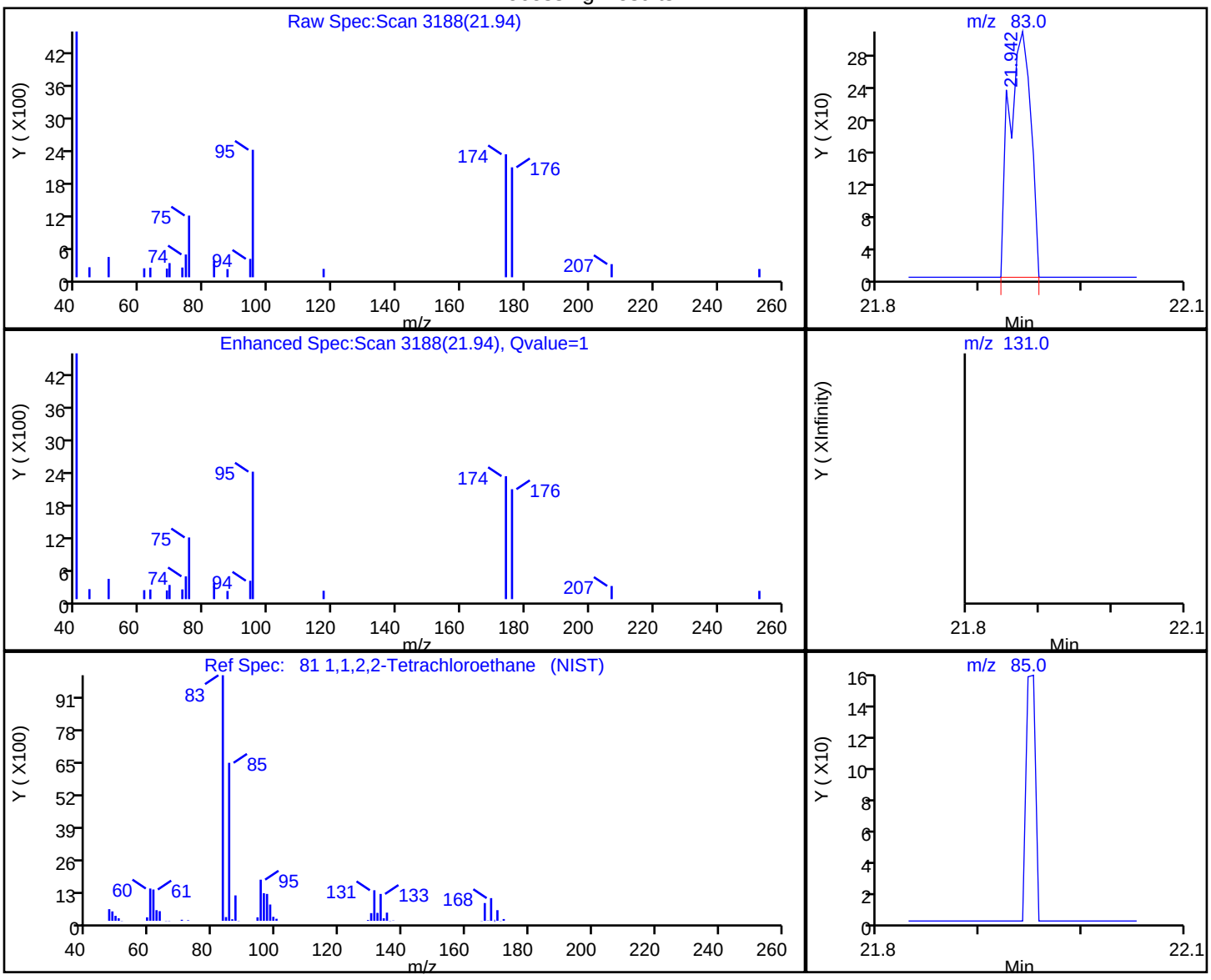
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.94	83.00	442	0.006343
21.94	131.00	0	
21.94	85.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:04:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

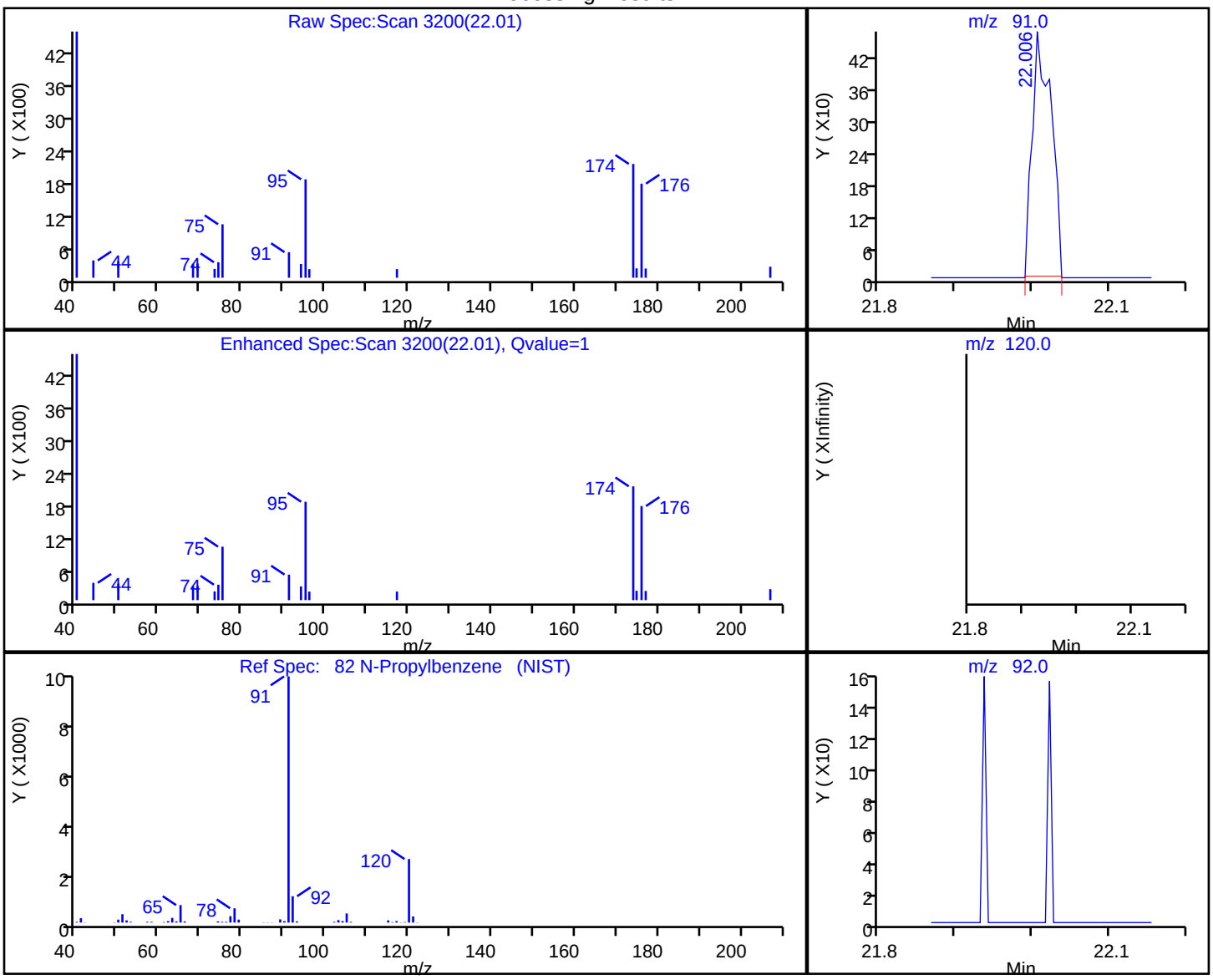
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

82 N-Propylbenzene, CAS: 103-65-1

Processing Results



RT	Mass	Response	Amount
22.01	91.00	801	0.004801
22.01	120.00	0	
22.01	92.00	0	

Reviewer: bunmaa, 09-Apr-2018 18:04:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

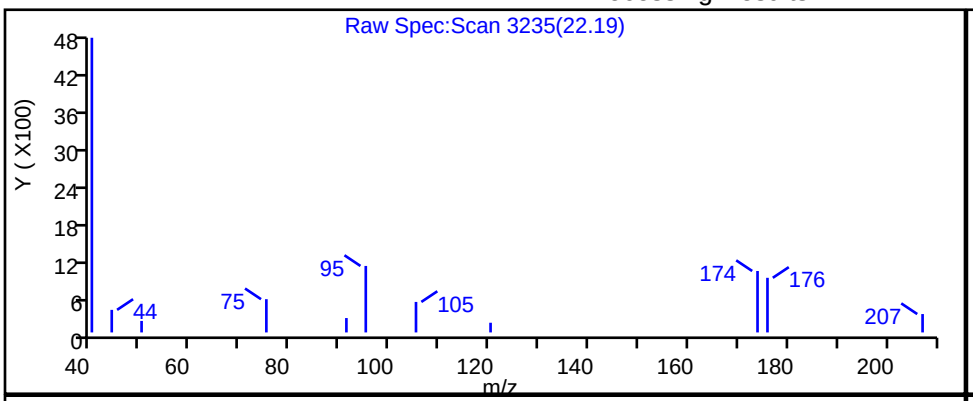
User Disabled Compound Report

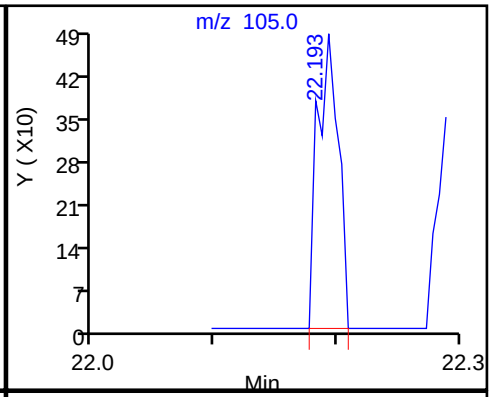
TestAmerica Burlington

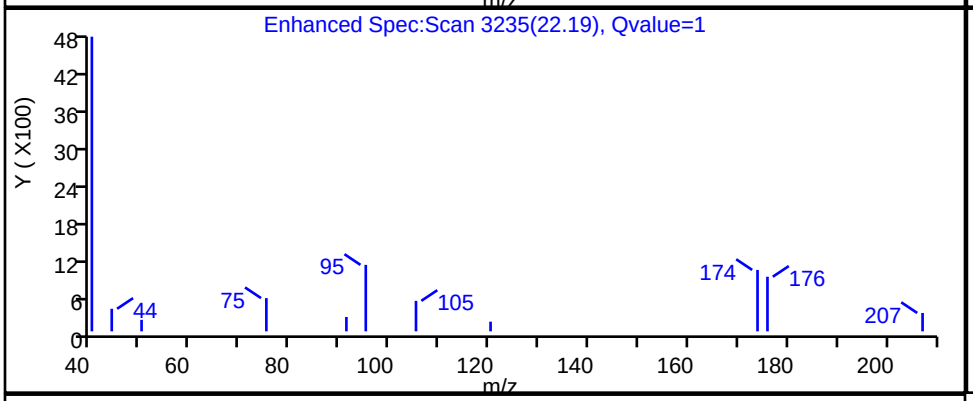
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

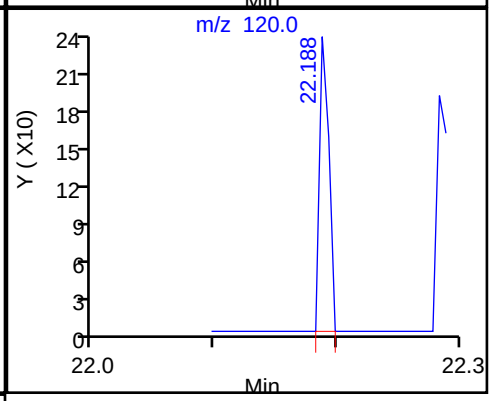
85 4-Ethyltoluene, CAS: 622-96-8

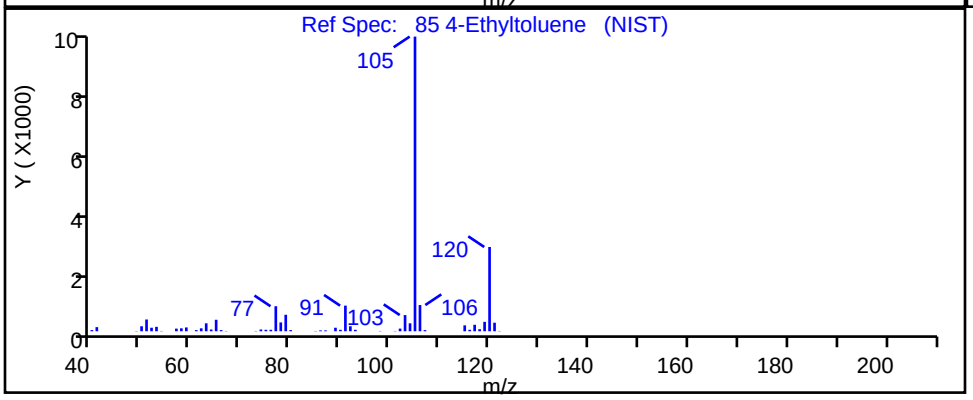
Processing Results











RT	Mass	Response	Amount
22.19	105.00	579	0.004154
22.19	120.00	125	

Reviewer: bunmaa, 09-Apr-2018 18:04:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

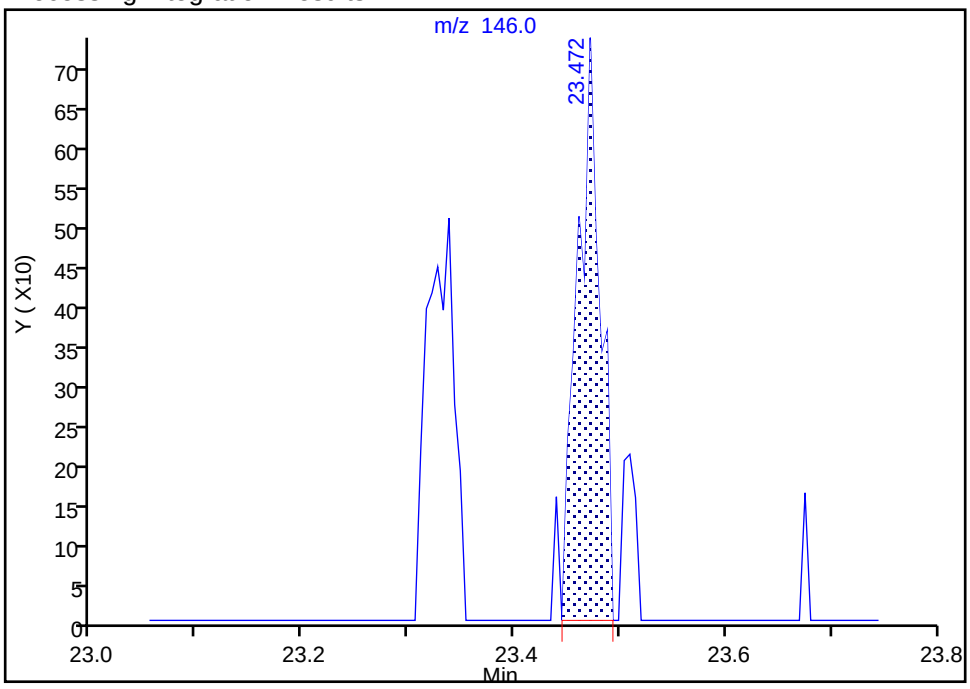
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

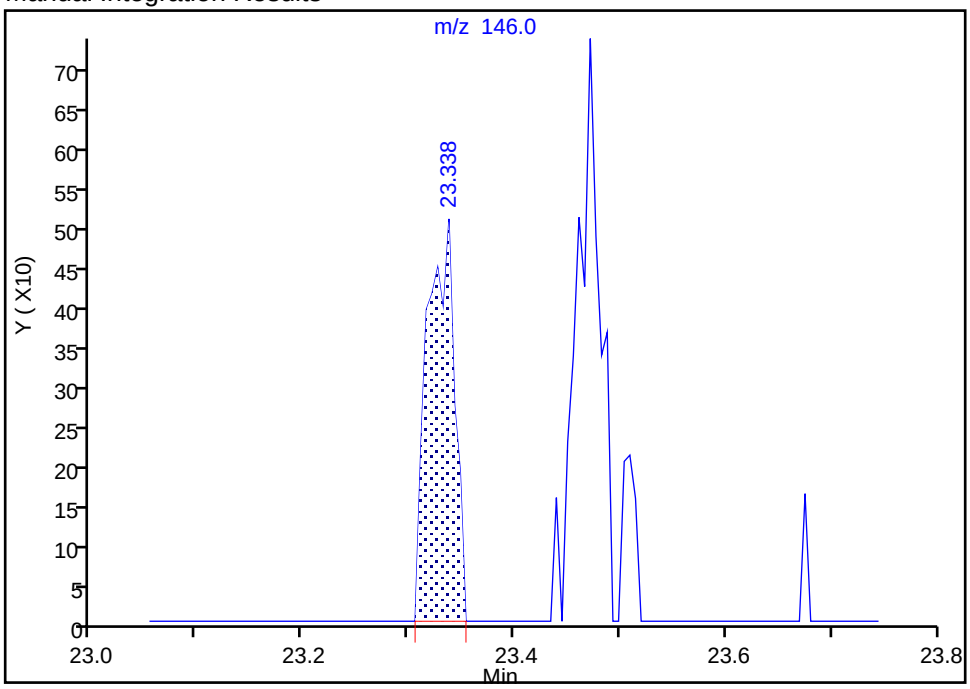
Processing Integration Results

RT: 23.47
Area: 1103
Amount: 0.013862
Amount Units: ppb v/v



Manual Integration Results

RT: 23.34
Area: 914
Amount: 0.011487
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:03:48

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

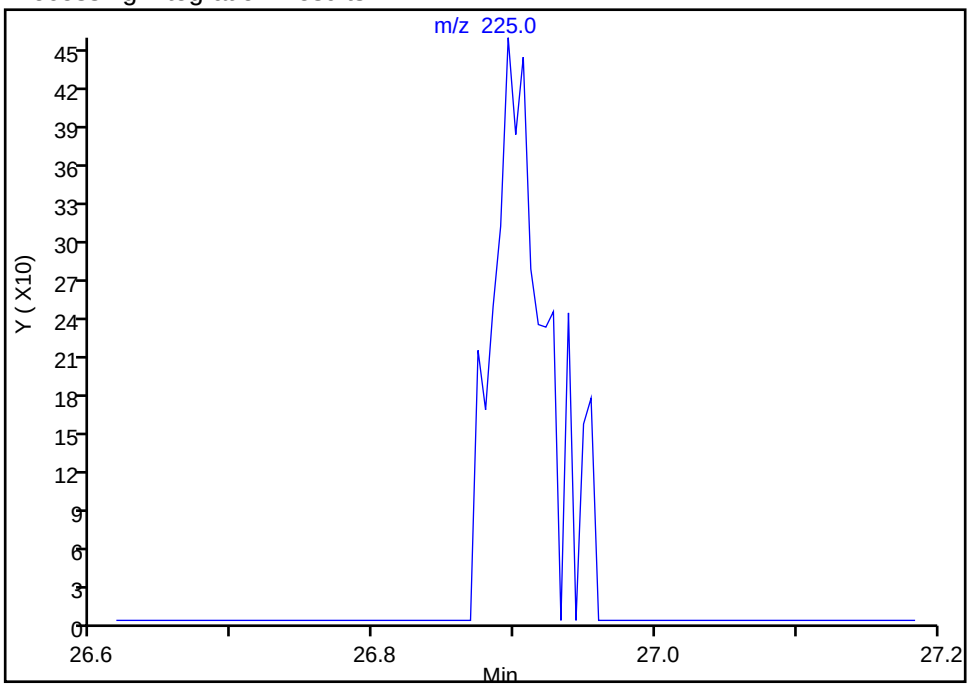
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-06.d				
Injection Date:	06-Apr-2018 16:42:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

101 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

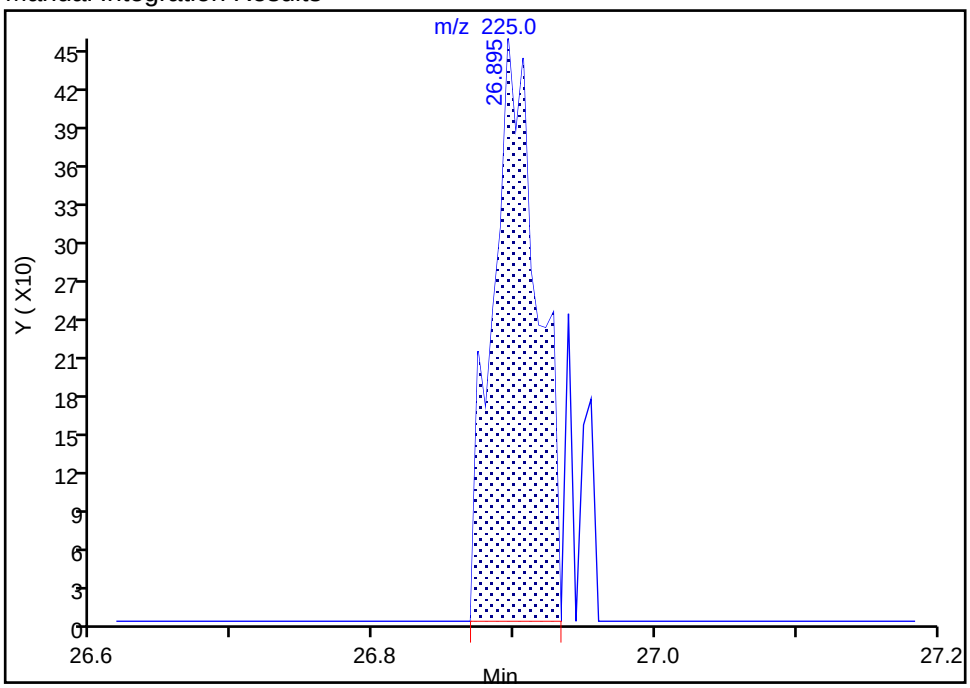
Not Detected
Expected RT: 26.90

Processing Integration Results



Manual Integration Results

RT: 26.90
Area: 1011
Amount: 0.017753
Amount Units: ppb v/v



Reviewer: bunmaa, 09-Apr-2018 18:04:15
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128434/5

Matrix: Air Lab File ID: 30087_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 13:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	0.20
75-45-6	Freon 22	86.47	0.50	U	0.50	0.26
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	0.068
74-87-3	Chloromethane	50.49	0.50	U	0.50	0.25
106-97-8	n-Butane	58.12	0.50	U	0.50	0.31
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	0.041
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	0.065
74-83-9	Bromomethane	94.94	0.20	U	0.20	0.062
75-00-3	Chloroethane	64.52	0.50	U	0.50	0.21
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	0.056
75-69-4	Trichlorofluoromethane	137.37	0.20	U	0.20	0.062
76-13-1	Freon TF	187.38	0.20	U	0.20	0.031
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	0.034
67-64-1	Acetone	58.08	5.0	U	5.0	2.6
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	1.8
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	0.12
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	0.27
75-09-2	Methylene Chloride	84.93	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	1.5
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	0.061
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	0.074
110-54-3	n-Hexane	86.17	0.20	U	0.20	0.16
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	0.026
78-93-3	Methyl Ethyl Ketone	72.11	0.50	U	0.50	0.20
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	0.037
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	0.11
67-66-3	Chloroform	119.38	0.20	U	0.20	0.052
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	2.6
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	0.068
110-82-7	Cyclohexane	84.16	0.20	U	0.20	0.063
56-23-5	Carbon tetrachloride	153.81	0.040	U	0.040	0.024
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	0.088
71-43-2	Benzene	78.11	0.20	U	0.20	0.071
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128434/5

Matrix: Air Lab File ID: 30087_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 13:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.20	U	0.20	0.14
79-01-6	Trichloroethene	131.39	0.040	U	0.040	0.030
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	0.22
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	0.12
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	1.3
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	0.094
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	0.098
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	0.36
108-88-3	Toluene	92.14	0.20	U	0.20	0.069
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	0.12
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	0.078
127-18-4	Tetrachloroethene	165.83	0.040	U	0.040	0.029
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	0.42
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	0.071
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	0.069
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	0.040
100-41-4	Ethylbenzene	106.17	0.20	U	0.20	0.073
179601-23-1	m,p-Xylene	106.17	0.50	U	0.50	0.070
95-47-6	Xylene, o-	106.17	0.20	U	0.20	0.071
1330-20-7	Xylene (total)	106.17	0.70	U	0.70	0.14
100-42-5	Styrene	104.15	0.20	U	0.20	0.086
75-25-2	Bromoform	252.75	0.20	U	0.20	0.086
98-82-8	Cumene	120.19	0.20	U	0.20	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	0.076
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	0.069
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	0.069
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	0.058
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	0.071
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	0.058
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20	0.080
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	0.066
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	0.075
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	0.082
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	0.065

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128434/5

Matrix: Air Lab File ID: 30087_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 13:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	0.12
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	0.080
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	0.071
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	0.24
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	0.082
91-20-3	Naphthalene	128.17	0.50	U	0.50	0.31

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128434/5

Matrix: Air Lab File ID: 30087_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 13:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	0.99
75-45-6	Freon 22	86.47	1.8	U	1.8	0.92
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	0.48
74-87-3	Chloromethane	50.49	1.0	U	1.0	0.52
106-97-8	n-Butane	58.12	1.2	U	1.2	0.74
75-01-4	Vinyl chloride	62.50	0.51	U	0.51	0.10
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	0.14
74-83-9	Bromomethane	94.94	0.78	U	0.78	0.24
75-00-3	Chloroethane	64.52	1.3	U	1.3	0.55
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	0.24
75-69-4	Trichlorofluoromethane	137.37	1.1	U	1.1	0.35
76-13-1	Freon TF	187.38	1.5	U	1.5	0.24
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	0.13
67-64-1	Acetone	58.08	12	U	12	6.2
67-63-0	Isopropyl alcohol	60.10	12	U	12	4.4
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	0.37
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	0.85
75-09-2	Methylene Chloride	84.93	1.7	U	1.7	0.69
75-65-0	tert-Butyl alcohol	74.12	15	U	15	4.5
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	0.22
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	0.29
110-54-3	n-Hexane	86.17	0.70	U	0.70	0.56
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	0.11
78-93-3	Methyl Ethyl Ketone	72.11	1.5	U	1.5	0.59
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	0.15
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	0.44
67-66-3	Chloroform	119.38	0.98	U	0.98	0.25
109-99-9	Tetrahydrofuran	72.11	15	U	15	7.7
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	0.37
110-82-7	Cyclohexane	84.16	0.69	U	0.69	0.22
56-23-5	Carbon tetrachloride	153.81	0.25	U	0.25	0.15
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93	0.41
71-43-2	Benzene	78.11	0.64	U	0.64	0.23
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	0.25

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128434/5

Matrix: Air Lab File ID: 30087_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 13:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	0.82	U	0.82	0.57
79-01-6	Trichloroethene	131.39	0.21	U	0.21	0.16
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	0.90
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	0.55
123-91-1	1,4-Dioxane	88.11	18	U	18	4.7
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	0.63
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	0.44
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	1.5
108-88-3	Toluene	92.14	0.75	U	0.75	0.26
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	0.54
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	0.43
127-18-4	Tetrachloroethene	165.83	0.27	U	0.27	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	1.7
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	0.60
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	0.53
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	0.18
100-41-4	Ethylbenzene	106.17	0.87	U	0.87	0.32
179601-23-1	m,p-Xylene	106.17	2.2	U	2.2	0.30
95-47-6	Xylene, o-	106.17	0.87	U	0.87	0.31
1330-20-7	Xylene (total)	106.17	3.0	U	3.0	0.61
100-42-5	Styrene	104.15	0.85	U	0.85	0.37
75-25-2	Bromoform	252.75	2.1	U	2.1	0.89
98-82-8	Cumene	120.19	0.98	U	0.98	0.29
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	0.52
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	0.34
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	0.34
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	0.29
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	0.32
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98	0.39
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	0.36
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	0.41
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	0.49
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	0.39

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-128434/5

Matrix: Air Lab File ID: 30087_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 13:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	0.62
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	0.44
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	0.43
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	1.8
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	0.87
91-20-3	Naphthalene	128.17	2.6	U	2.6	1.6

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_05.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 13-Apr-2018 13:18:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030087-005
Operator ID: pad Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Apr-2018 16:33:54 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: daiglep Date: 16-Apr-2018 15:58:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.044					ND	
2 Dichlorodifluoromethane	85		3.108					ND	
3 Chlorodifluoromethane	51		3.156					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354					ND	
5 Chloromethane	50		3.482					ND	
6 Butane	43		3.664					ND	
7 Vinyl chloride	62		3.707					ND	
8 Butadiene	54		3.777					ND	
10 Bromomethane	94		4.413					ND	
11 Chloroethane	64		4.633					ND	
12 2-Methylbutane	43		4.697					ND	
13 Vinyl bromide	106		4.996					ND	
14 Trichlorofluoromethane	101		5.087					ND	
16 Pentane	43		5.210					ND	
17 Ethanol	45	5.681	5.633	0.048	76	1431		0.1863	
18 Ethyl ether	59		5.713					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.104					ND	
19 Acrolein	56		6.104					ND	
21 1,1-Dichloroethene	96		6.163					ND	
22 Acetone	43		6.403					ND	
23 Carbon disulfide	76		6.548					ND	
24 Isopropyl alcohol	45		6.681					ND	
25 3-Chloro-1-propene	41		6.928					ND	
26 Acetonitrile	41		7.077					ND	
27 Methylene Chloride	49		7.222					ND	
28 2-Methyl-2-propanol	59		7.446					ND	
29 Methyl tert-butyl ether	73		7.618					ND	
31 trans-1,2-Dichloroethene	61		7.660					ND	
32 Acrylonitrile	53		7.832					ND	
33 Hexane	57		8.030					ND	
34 1,1-Dichloroethane	63		8.538					ND	
35 Vinyl acetate	43		8.618					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
37 cis-1,2-Dichloroethene	96		9.677					ND	
38 2-Butanone (MEK)	72		9.736					ND	
39 Ethyl acetate	88		9.774					ND	
* 40 Chlorobromomethane	128	10.159	10.164	-0.005	80	291609	10.0	10.0	
41 Tetrahydrofuran	42		10.169					ND	
42 Chloroform	83		10.298					ND	
43 Cyclohexane	84		10.539					ND	
44 1,1,1-Trichloroethane	97		10.576					ND	
45 Carbon tetrachloride	117		10.833					ND	
46 Isooctane	57		11.288					ND	
47 Benzene	78		11.336					ND	
48 1,2-Dichloroethane	62		11.539					ND	
49 n-Heptane	43		11.700					ND	
* 50 1,4-Difluorobenzene	114	12.235	12.234	0.001	93	1536889	10.0	10.0	
52 n-Butanol	56		12.689					ND	
53 Trichloroethene	95		12.727					ND	
A 51 GRO	1	13.197	(4.687-21.708)		0	4623551		0	
54 1,2-Dichloropropane	63		13.326					ND	
55 Methyl methacrylate	69		13.508					ND	
56 1,4-Dioxane	88		13.577					ND	
57 Dibromomethane	174		13.599					ND	
58 Dichlorobromomethane	83		13.909					ND	
60 cis-1,3-Dichloropropene	75		14.893					ND	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	4913796		0	
61 4-Methyl-2-pentanone (MIBK	43		15.204					ND	
65 Toluene	92		15.503					ND	
64 n-Octane	43		15.557					ND	
66 trans-1,3-Dichloropropene	75		16.145					ND	
67 1,1,2-Trichloroethane	83		16.541					ND	
68 Tetrachloroethene	166		16.627					ND	
69 2-Hexanone	43		17.022					ND	
71 Chlorodibromomethane	129		17.338					ND	
72 Ethylene Dibromide	107		17.616					ND	
* 74 Chlorobenzene-d5	117	18.563	18.563	0.000	84	1384162	10.0	10.0	
75 Chlorobenzene	112		18.627					ND	
76 Ethylbenzene	91		18.788					ND	U
77 n-Nonane	57		18.927					ND	
78 m-Xylene & p-Xylene	106		19.055					ND	
S 73 Xylenes, Total	106		19.600					ND	
79 o-Xylene	106		19.949					ND	
80 Styrene	104		20.013					ND	
81 Bromoform	173		20.484					ND	
82 Isopropylbenzene	105		20.714					ND	
84 1,1,2,2-Tetrachloroethane	83		21.441					ND	
85 N-Propylbenzene	91		21.500					ND	
86 1,2,3-Trichloropropane	75		21.543					ND	
87 n-Decane	57		21.698					ND	
88 4-Ethyltoluene	105		21.709					ND	
89 2-Chlorotoluene	91		21.714					ND	
90 1,3,5-Trimethylbenzene	105		21.821					ND	
91 Alpha Methyl Styrene	118		22.217					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
92 tert-Butylbenzene	119		22.345					ND	
93 1,2,4-Trimethylbenzene	105		22.442					ND	
94 sec-Butylbenzene	105		22.688					ND	
95 4-Isopropyltoluene	119		22.902					ND	
96 1,3-Dichlorobenzene	146		22.929					ND	
97 1,4-Dichlorobenzene	146		23.073					ND	
98 Benzyl chloride	91		23.282					ND	
100 n-Butylbenzene	91		23.496					ND	
99 Undecane	57		23.528					ND	
101 1,2-Dichlorobenzene	146		23.624					ND	
102 Dodecane	57		25.149					ND	
103 1,2,4-Trichlorobenzene	180		26.187					ND	
104 Hexachlorobutadiene	225		26.374					ND	
105 Naphthalene	128		26.679					ND	
106 1,2,3-Trichlorobenzene	180		27.160					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 36 Methyl cyclohexane TIC	55		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

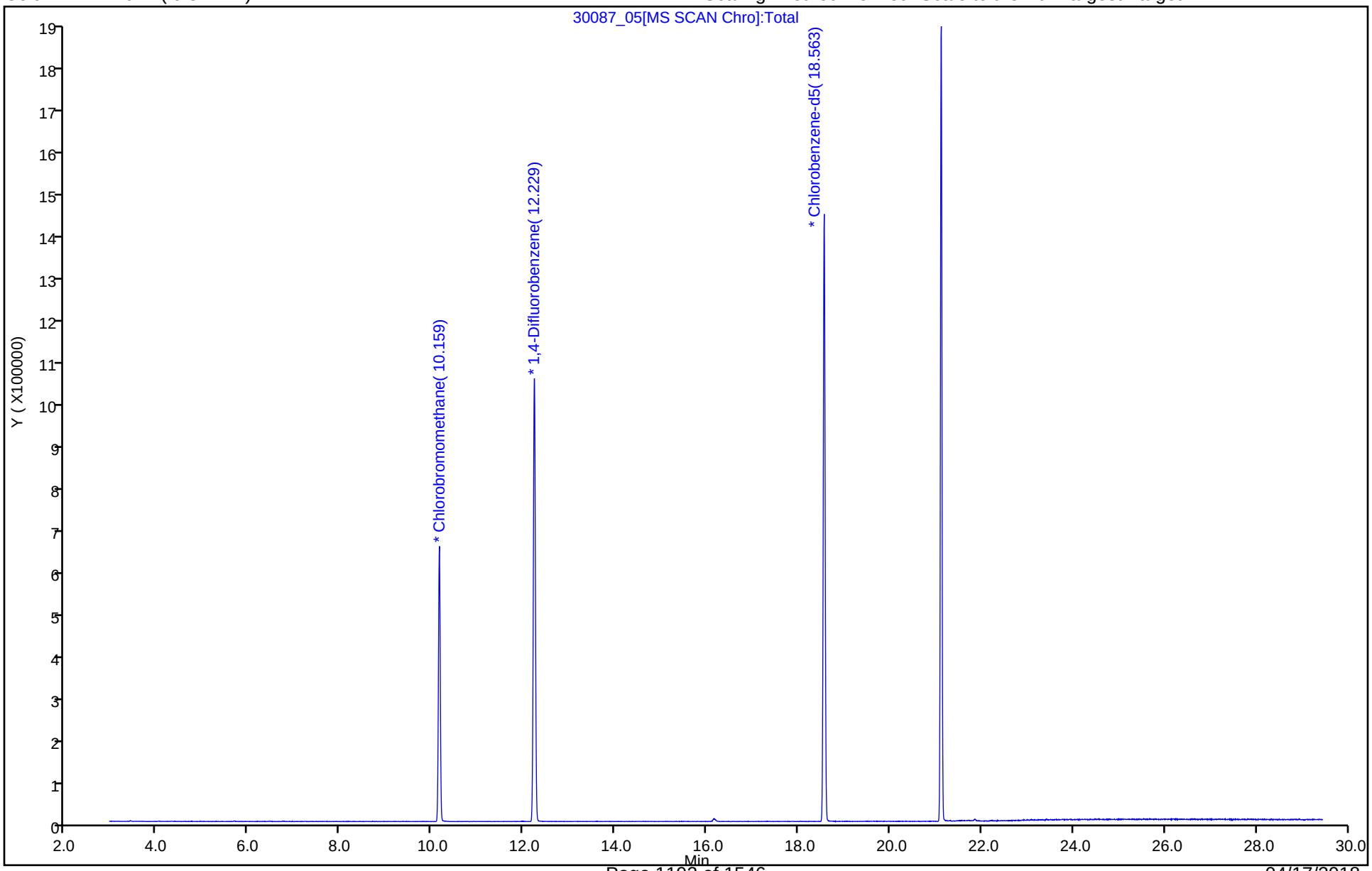
Report Date: 16-Apr-2018 16:34:01 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_05.D

Injection Date:	13-Apr-2018 13:18:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



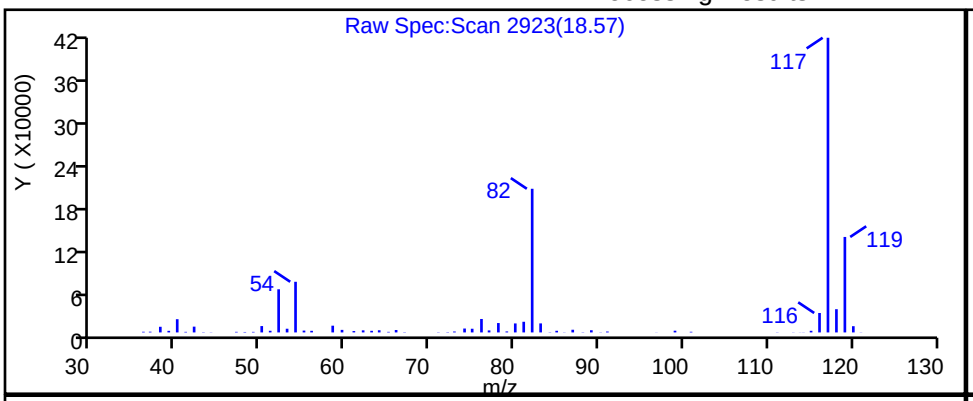
User Disabled Compound Report

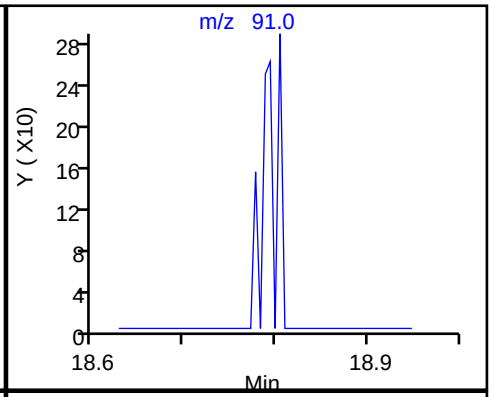
TestAmerica Burlington

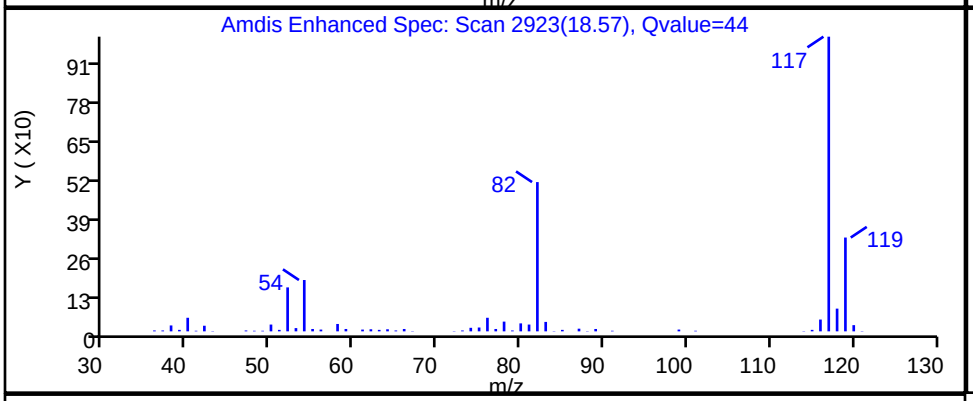
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_05.D				
Injection Date:	13-Apr-2018 13:18:30	Instrument ID:	CHX.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

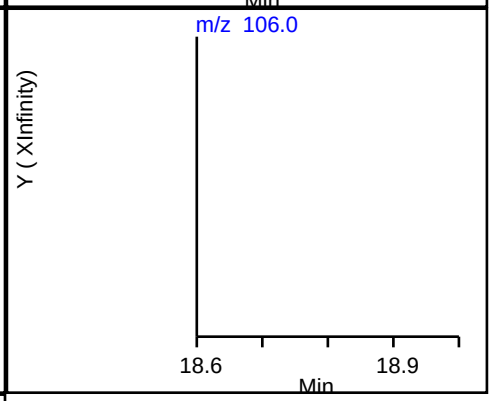
76 Ethylbenzene, CAS: 100-41-4

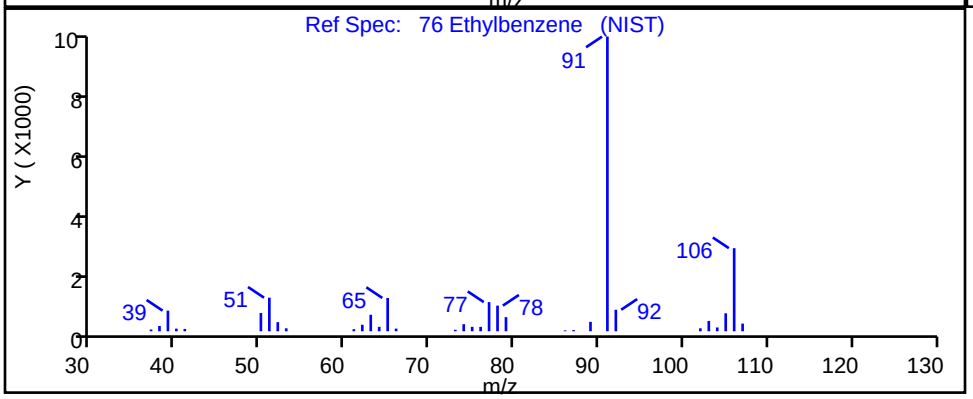
Processing Results











RT	Mass	Response	Amount
18.57	91.00	2390	0.014999
18.79	106.00	0	

Reviewer: daiglep, 16-Apr-2018 15:58:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128151/4

Matrix: Air Lab File ID: 29949_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 12:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	8.42		0.50	0.047
75-45-6	Freon 22	86.47	7.21		0.50	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	8.19		0.20	0.041
74-87-3	Chloromethane	50.49	8.67		0.50	0.16
106-97-8	n-Butane	58.12	9.06		0.50	0.046
75-01-4	Vinyl chloride	62.50	8.26		0.20	0.018
106-99-0	1,3-Butadiene	54.09	8.19		0.20	0.037
74-83-9	Bromomethane	94.94	9.50		0.20	0.036
75-00-3	Chloroethane	64.52	9.78		0.50	0.13
593-60-2	Bromoethene(Vinyl Bromide)	106.96	9.59		0.20	0.022
75-69-4	Trichlorofluoromethane	137.37	9.20		0.20	0.031
76-13-1	Freon TF	187.38	9.27		0.20	0.027
75-35-4	1,1-Dichloroethene	96.94	9.16		0.20	0.035
67-64-1	Acetone	58.08	9.18		5.0	1.3
67-63-0	Isopropyl alcohol	60.10	8.31		5.0	0.13
75-15-0	Carbon disulfide	76.14	10.6		0.50	0.028
107-05-1	3-Chloropropene	76.53	9.05		0.50	0.063
75-09-2	Methylene Chloride	84.93	8.99		0.50	0.068
75-65-0	tert-Butyl alcohol	74.12	8.83		5.0	1.7
1634-04-4	Methyl tert-butyl ether	88.15	9.29		0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	9.44		0.20	0.050
110-54-3	n-Hexane	86.17	9.49		0.20	0.046
75-34-3	1,1-Dichloroethane	98.96	9.06		0.20	0.017
78-93-3	Methyl Ethyl Ketone	72.11	9.23		0.50	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	9.03		0.20	0.029
540-59-0	1,2-Dichloroethene, Total	96.94	18.5		0.40	0.029
67-66-3	Chloroform	119.38	9.40		0.20	0.025
109-99-9	Tetrahydrofuran	72.11	9.85		5.0	1.2
71-55-6	1,1,1-Trichloroethane	133.41	9.70		0.20	0.026
110-82-7	Cyclohexane	84.16	9.30		0.20	0.045
56-23-5	Carbon tetrachloride	153.81	9.89		0.040	0.011
540-84-1	2,2,4-Trimethylpentane	114.23	9.37		0.20	0.043
71-43-2	Benzene	78.11	9.19		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	10.1		0.20	0.034

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128151/4

Matrix: Air Lab File ID: 29949_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 12:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	9.99		0.20	0.068
79-01-6	Trichloroethene	131.39	9.46		0.040	0.0091
80-62-6	Methyl methacrylate	100.12	9.75		0.50	0.11
78-87-5	1,2-Dichloropropane	112.99	9.50		0.20	0.035
123-91-1	1,4-Dioxane	88.11	8.81		5.0	0.76
75-27-4	Bromodichloromethane	163.83	9.80		0.20	0.059
10061-01-5	cis-1,3-Dichloropropene	110.97	9.93		0.20	0.036
108-10-1	methyl isobutyl ketone	100.16	10.2		0.50	0.065
108-88-3	Toluene	92.14	9.33		0.20	0.035
10061-02-6	trans-1,3-Dichloropropene	110.97	9.99		0.20	0.038
79-00-5	1,1,2-Trichloroethane	133.41	9.35		0.20	0.017
127-18-4	Tetrachloroethene	165.83	9.30		0.040	0.0098
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	10.2		0.50	0.086
124-48-1	Dibromochloromethane	208.29	9.30		0.20	0.017
106-93-4	1,2-Dibromoethane	187.87	9.34		0.20	0.023
108-90-7	Chlorobenzene	112.56	9.11		0.20	0.025
100-41-4	Ethylbenzene	106.17	9.37		0.20	0.034
179601-23-1	m,p-Xylene	106.17	18.2		0.50	0.077
95-47-6	Xylene, o-	106.17	9.00		0.20	0.040
1330-20-7	Xylene (total)	106.17	27.2		0.70	0.040
100-42-5	Styrene	104.15	9.45		0.20	0.035
75-25-2	Bromoform	252.75	9.71		0.20	0.035
98-82-8	Cumene	120.19	9.01		0.20	0.039
79-34-5	1,1,2,2-Tetrachloroethane	167.85	9.45		0.20	0.026
103-65-1	n-Propylbenzene	120.19	9.19		0.20	0.040
622-96-8	4-Ethyltoluene	120.20	9.43		0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	9.31		0.20	0.040
95-49-8	2-Chlorotoluene	126.59	9.25		0.20	0.035
98-06-6	tert-Butylbenzene	134.22	9.22		0.20	0.037
95-63-6	1,2,4-Trimethylbenzene	120.20	9.34		0.20	0.057
135-98-8	sec-Butylbenzene	134.22	9.24		0.20	0.037
99-87-6	4-Isopropyltoluene	134.22	9.48		0.20	0.052
541-73-1	1,3-Dichlorobenzene	147.00	9.10		0.20	0.050
106-46-7	1,4-Dichlorobenzene	147.00	9.08		0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128151/4

Matrix: Air Lab File ID: 29949_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 12:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128151 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	9.17		0.20	0.067
104-51-8	n-Butylbenzene	134.22	9.67		0.20	0.068
95-50-1	1,2-Dichlorobenzene	147.00	9.12		0.20	0.045
120-82-1	1,2,4-Trichlorobenzene	181.45	7.69		0.50	0.19
87-68-3	Hexachlorobutadiene	260.76	8.92		0.20	0.064
91-20-3	Naphthalene	128.17	6.71		0.50	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_04.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2018 12:33:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029949-004
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 12:57:17 Calib Date: 22-Feb-2018 02:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180221-29291.b\200-0029291-014.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 13:14:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.038	0.006	97	360549	10.0	8.64	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	682990	10.0	8.42	
3 Chlorodifluoromethane	51	3.151	3.151	0.000	97	522419	10.0	7.21	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	96	616360	10.0	8.19	
5 Chloromethane	50	3.482	3.482	0.000	99	358362	10.0	8.67	
6 Butane	43	3.664	3.664	0.000	97	733946	10.0	9.06	
7 Vinyl chloride	62	3.707	3.707	0.000	98	328343	10.0	8.26	
8 Butadiene	54	3.777	3.777	0.000	88	271618	10.0	8.19	
9 BFB									
10 Bromomethane	94	4.413	4.413	0.000	97	234315	10.0	9.50	
11 Chloroethane	64	4.633	4.638	-0.005	97	172427	10.0	9.78	
12 2-Methylbutane	43	4.692	4.697	-0.005	93	617436	10.0	10.5	
13 Vinyl bromide	106	4.996	4.996	0.000	97	219896	10.0	9.59	
14 Trichlorofluoromethane	101	5.087	5.087	0.000	97	698577	10.0	9.20	
16 Pentane	43	5.221	5.216	0.005	96	714643	10.0	8.10	
17 Ethanol	45	5.633	5.638	-0.005	98	260296	15.0	14.2	
18 Ethyl ether	59	5.713	5.713	0.000	86	242699	10.0	9.50	
20 1,1,2-Trichloro-1,2,2-trif	101	6.109	6.104	0.005	91	455631	10.0	9.27	
19 Acrolein	56	6.098	6.104	-0.006	99	123651	10.0	10.9	
21 1,1-Dichloroethene	96	6.157	6.163	-0.006	87	209158	10.0	9.16	
22 Acetone	43	6.403	6.403	0.000	99	725769	10.0	9.18	
23 Carbon disulfide	76	6.548	6.548	0.000	98	819084	10.0	10.6	
24 Isopropyl alcohol	45	6.682	6.682	0.000	100	682982	10.0	8.31	
25 3-Chloro-1-propene	41	6.933	6.933	0.000	94	566961	10.0	9.05	
26 Acetonitrile	41	7.083	7.083	0.000	98	381142	10.0	9.49	
27 Methylene Chloride	49	7.227	7.227	0.000	90	465471	10.0	8.99	
28 2-Methyl-2-propanol	59	7.447	7.452	-0.005	97	745962	10.0	8.83	
29 Methyl tert-butyl ether	73	7.623	7.623	0.000	94	891840	10.0	9.29	
31 trans-1,2-Dichloroethene	61	7.655	7.661	-0.006	89	544334	10.0	9.44	
32 Acrylonitrile	53	7.826	7.832	-0.006	93	287939	10.0	9.52	
33 Hexane	57	8.030	8.030	0.000	90	580468	10.0	9.49	
34 1,1-Dichloroethane	63	8.543	8.543	0.000	99	648692	10.0	9.06	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.618	8.618	0.000	100	1308521	10.0	9.81	
S 30 1,2-Dichloroethene, Total	61				0		20.0	18.5	
37 cis-1,2-Dichloroethene	96	9.677	9.677	0.000	93	257036	10.0	9.03	
38 2-Butanone (MEK)	72	9.736	9.742	-0.006	99	163015	10.0	9.23	
39 Ethyl acetate	88	9.774	9.779	-0.005	98	22026	10.0	9.92	
* 40 Chlorobromomethane	128	10.164	10.159	0.005	87	207842	10.0	10.0	
41 Tetrahydrofuran	42	10.170	10.170	0.000	90	668048	10.0	9.85	
42 Chloroform	83	10.298	10.298	0.000	93	669429	10.0	9.40	
43 Cyclohexane	84	10.533	10.539	-0.006	86	403850	10.0	9.30	
44 1,1,1-Trichloroethane	97	10.576	10.576	0.000	93	656105	10.0	9.70	
45 Carbon tetrachloride	117	10.838	10.838	0.000	94	621456	10.0	9.89	
46 Isooctane	57	11.282	11.282	0.000	96	2255124	10.0	9.37	
47 Benzene	78	11.336	11.336	0.000	97	1042137	10.0	9.19	
48 1,2-Dichloroethane	62	11.539	11.539	0.000	96	616555	10.0	10.1	
49 n-Heptane	43	11.700	11.700	0.000	95	1131246	10.0	9.99	
* 50 1,4-Difluorobenzene	114	12.235	12.240	-0.005	98	1244860	10.0	10.0	
52 n-Butanol	56	12.684	12.684	0.000	96	326456	10.0	10.3	
53 Trichloroethene	95	12.727	12.732	-0.005	85	430722	10.0	9.46	
A 51 GRO	1	13.198	(4.687-21.708)		0	170679027	10.0	0	
54 1,2-Dichloropropane	63	13.326	13.331	-0.005	85	512447	10.0	9.50	
55 Methyl methacrylate	69	13.508	13.513	-0.005	84	457284	10.0	9.75	
56 1,4-Dioxane	88	13.572	13.572	0.000	90	203391	10.0	8.81	
57 Dibromomethane	174	13.599	13.599	0.000	82	250908	10.0	8.99	
58 Dichlorobromomethane	83	13.909	13.914	-0.005	96	820023	10.0	9.80	
60 cis-1,3-Dichloropropene	75	14.888	14.893	-0.005	95	676672	10.0	9.93	
A 59 TVOC as Toluene	92	15.099	(3.028-27.170)		0	254316762	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.204	15.204	0.000	97	1494549	10.0	10.2	
65 Toluene	92	15.503	15.503	0.000	91	708478	10.0	9.33	
64 n-Octane	43	15.557	15.557	0.000	99	1668542	10.0	10.3	
66 trans-1,3-Dichloropropene	75	16.145	16.145	0.000	92	710456	10.0	9.99	
67 1,1,2-Trichloroethane	83	16.541	16.541	0.000	91	400735	10.0	9.35	
68 Tetrachloroethene	166	16.627	16.632	-0.005	83	398571	10.0	9.30	
69 2-Hexanone	43	17.023	17.023	0.000	88	1474588	10.0	10.2	
71 Chlorodibromomethane	129	17.338	17.338	0.000	96	593076	10.0	9.30	
72 Ethylene Dibromide	107	17.616	17.622	-0.006	97	596365	10.0	9.34	
* 74 Chlorobenzene-d5	117	18.569	18.569	0.000	98	1168092	10.0	10.0	
75 Chlorobenzene	112	18.627	18.627	0.000	83	849133	10.0	9.11	
76 Ethylbenzene	91	18.793	18.793	0.000	99	1694368	10.0	9.37	
77 n-Nonane	57	18.927	18.927	0.000	93	1205399	10.0	9.76	
78 m-Xylene & p-Xylene	106	19.061	19.055	0.006	0	1130172	20.0	18.2	
S 73 Xylenes, Total	106				0		30.0	27.2	
79 o-Xylene	106	19.954	19.954	0.000	95	543988	10.0	9.00	
80 Styrene	104	20.013	20.013	0.000	93	866906	10.0	9.45	
81 Bromoform	173	20.484	20.484	0.000	89	490052	10.0	9.71	
82 Isopropylbenzene	105	20.714	20.714	0.000	98	1663889	10.0	9.01	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	97	1067292	10.0	9.45	
85 N-Propylbenzene	91	21.500	21.500	0.000	97	2352847	10.0	9.19	
86 1,2,3-Trichloropropane	75	21.543	21.543	0.000	95	921034	10.0	9.05	
87 n-Decane	57	21.698	21.698	0.000	83	1617837	10.0	9.59	
88 4-Ethyltoluene	105	21.709	21.709	0.000	96	1780040	10.0	9.43	
89 2-Chlorotoluene	91	21.714	21.714	0.000	94	1684541	10.0	9.25	
90 1,3,5-Trimethylbenzene	105	21.827	21.827	0.000	89	1457626	10.0	9.31	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	79	632425	10.0	9.78	
92 tert-Butylbenzene	119	22.346	22.346	0.000	84	1250852	10.0	9.22	
93 1,2,4-Trimethylbenzene	105	22.447	22.447	0.000	98	1467095	10.0	9.34	
94 sec-Butylbenzene	105	22.688	22.688	0.000	97	2079503	10.0	9.24	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	95	1640118	10.0	9.48	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	92	789025	10.0	9.10	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	90	779440	10.0	9.08	
98 Benzyl chloride	91	23.282	23.282	0.000	95	1376587	10.0	9.17	
100 n-Butylbenzene	91	23.496	23.496	0.000	96	1897067	10.0	9.67	
99 Undecane	57	23.528	23.528	0.000	90	1478474	10.0	8.91	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	86	739187	10.0	9.12	
102 Dodecane	57	25.154	25.154	0.000	88	982373	10.0	9.05	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.000	89	404045	10.0	7.69	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	95	417182	10.0	8.92	
105 Naphthalene	128	26.684	26.684	0.000	97	913028	10.0	6.71	
106 1,2,3-Trichlorobenzene	180	27.166	27.160	0.006	90	363013	10.0	7.80	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00766	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

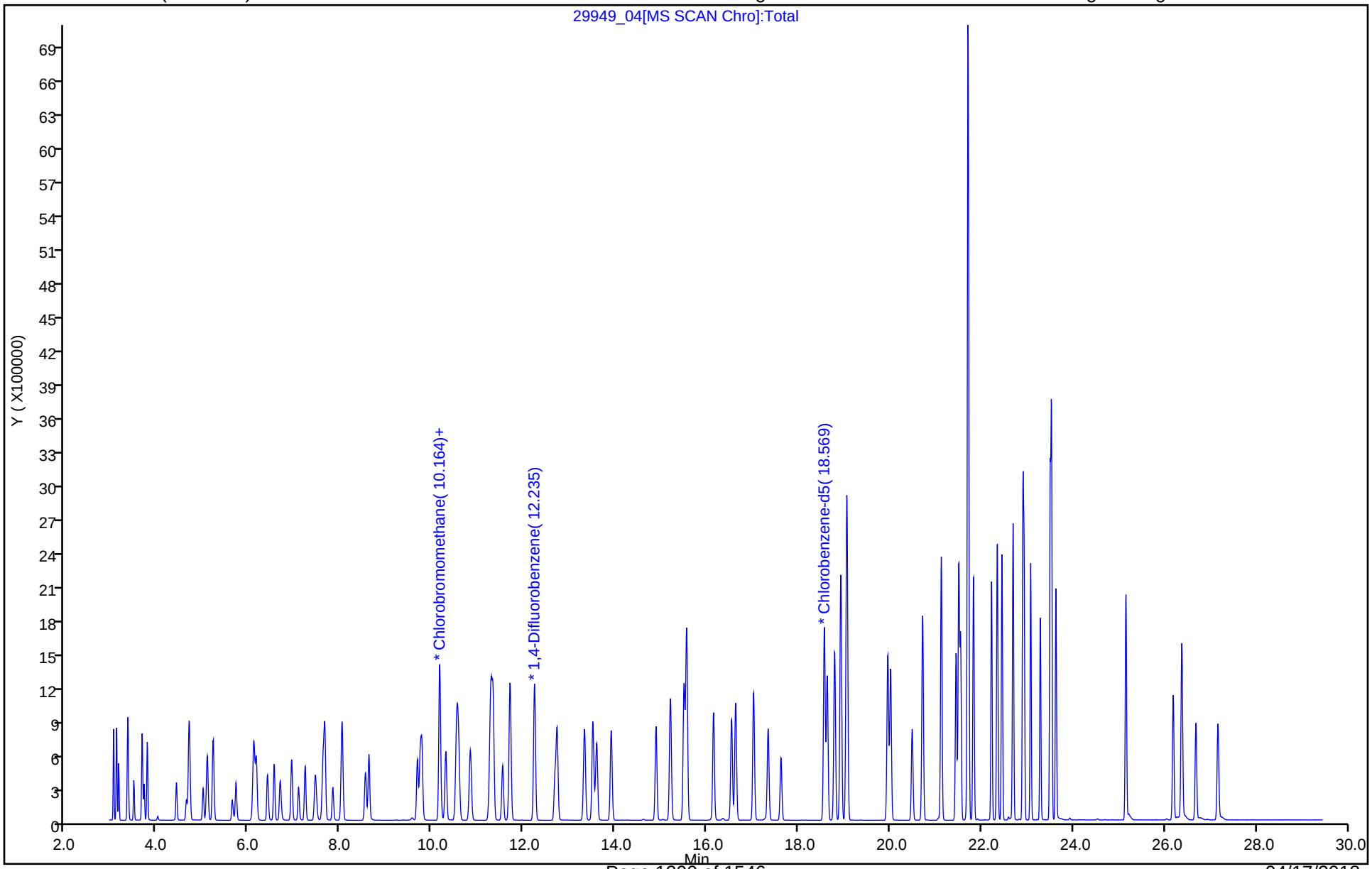
Report Date: 06-Apr-2018 13:14:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180405-29949.b\29949_04.D

Injection Date:	05-Apr-2018 12:33:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128156/3

Matrix: Air Lab File ID: 29952-03.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	11.0		0.50	0.20
75-45-6	Freon 22	86.47	11.6		0.50	0.26
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	12.2		0.20	0.068
74-87-3	Chloromethane	50.49	11.6		0.50	0.25
106-97-8	n-Butane	58.12	12.2		0.50	0.31
75-01-4	Vinyl chloride	62.50	10.9		0.20	0.041
106-99-0	1,3-Butadiene	54.09	11.4		0.20	0.065
74-83-9	Bromomethane	94.94	10.5		0.20	0.062
75-00-3	Chloroethane	64.52	10.7		0.50	0.21
593-60-2	Bromoethene(Vinyl Bromide)	106.96	10.3		0.20	0.056
75-69-4	Trichlorofluoromethane	137.37	10.3		0.20	0.062
76-13-1	Freon TF	187.38	10.6		0.20	0.031
75-35-4	1,1-Dichloroethene	96.94	10.7		0.20	0.034
67-64-1	Acetone	58.08	11.0		5.0	2.6
67-63-0	Isopropyl alcohol	60.10	10.1		5.0	1.8
75-15-0	Carbon disulfide	76.14	12.2		0.50	0.12
107-05-1	3-Chloropropene	76.53	11.1		0.50	0.27
75-09-2	Methylene Chloride	84.93	10.4		0.50	0.20
75-65-0	tert-Butyl alcohol	74.12	9.93		5.0	1.5
1634-04-4	Methyl tert-butyl ether	88.15	10.4		0.20	0.061
156-60-5	trans-1,2-Dichloroethene	96.94	11.2		0.20	0.074
110-54-3	n-Hexane	86.17	11.6		0.20	0.16
75-34-3	1,1-Dichloroethane	98.96	10.6		0.20	0.026
78-93-3	Methyl Ethyl Ketone	72.11	10.8		0.50	0.20
156-59-2	cis-1,2-Dichloroethene	96.94	10.3		0.20	0.037
540-59-0	1,2-Dichloroethene, Total	96.94	21.5		0.40	0.11
67-66-3	Chloroform	119.38	10.5		0.20	0.052
109-99-9	Tetrahydrofuran	72.11	10.7		5.0	2.6
71-55-6	1,1,1-Trichloroethane	133.41	10.5		0.20	0.068
110-82-7	Cyclohexane	84.16	10.5		0.20	0.063
56-23-5	Carbon tetrachloride	153.81	10.4		0.040	0.024
540-84-1	2,2,4-Trimethylpentane	114.23	10.7		0.20	0.088
71-43-2	Benzene	78.11	10.4		0.20	0.071
107-06-2	1,2-Dichloroethane	98.96	11.0		0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128156/3

Matrix: Air Lab File ID: 29952-03.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	11.1		0.20	0.14
79-01-6	Trichloroethene	131.39	10.8		0.040	0.030
80-62-6	Methyl methacrylate	100.12	10.9		0.50	0.22
78-87-5	1,2-Dichloropropane	112.99	10.3		0.20	0.12
123-91-1	1,4-Dioxane	88.11	10.1		5.0	1.3
75-27-4	Bromodichloromethane	163.83	10.3		0.20	0.094
10061-01-5	cis-1,3-Dichloropropene	110.97	11.1		0.20	0.098
108-10-1	methyl isobutyl ketone	100.16	11.0		0.50	0.36
108-88-3	Toluene	92.14	10.2		0.20	0.069
10061-02-6	trans-1,3-Dichloropropene	110.97	11.3		0.20	0.12
79-00-5	1,1,2-Trichloroethane	133.41	10.3		0.20	0.078
127-18-4	Tetrachloroethene	165.83	9.40		0.040	0.029
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	10.3		0.50	0.42
124-48-1	Dibromochloromethane	208.29	9.16		0.20	0.071
106-93-4	1,2-Dibromoethane	187.87	10.4		0.20	0.069
108-90-7	Chlorobenzene	112.56	9.96		0.20	0.040
100-41-4	Ethylbenzene	106.17	10.3		0.20	0.073
179601-23-1	m,p-Xylene	106.17	20.4		0.50	0.070
95-47-6	Xylene, o-	106.17	10.2		0.20	0.071
1330-20-7	Xylene (total)	106.17	30.6		0.70	0.14
100-42-5	Styrene	104.15	10.8		0.20	0.086
75-25-2	Bromoform	252.75	7.99		0.20	0.086
98-82-8	Cumene	120.19	10.2		0.20	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	10.1		0.20	0.076
103-65-1	n-Propylbenzene	120.19	10.3		0.20	0.069
622-96-8	4-Ethyltoluene	120.20	10.6		0.20	0.069
108-67-8	1,3,5-Trimethylbenzene	120.20	10.1		0.20	0.058
95-49-8	2-Chlorotoluene	126.59	10.2		0.20	0.071
98-06-6	tert-Butylbenzene	134.22	9.90		0.20	0.058
95-63-6	1,2,4-Trimethylbenzene	120.20	10.3		0.20	0.080
135-98-8	sec-Butylbenzene	134.22	10.3		0.20	0.066
99-87-6	4-Isopropyltoluene	134.22	10.3		0.20	0.075
541-73-1	1,3-Dichlorobenzene	147.00	10.3		0.20	0.082
106-46-7	1,4-Dichlorobenzene	147.00	10.4		0.20	0.065

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128156/3

Matrix: Air Lab File ID: 29952-03.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/05/2018 13:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	10.6		0.20	0.12
104-51-8	n-Butylbenzene	134.22	11.2		0.20	0.080
95-50-1	1,2-Dichlorobenzene	147.00	10.1		0.20	0.071
120-82-1	1,2,4-Trichlorobenzene	181.45	7.96		0.50	0.24
87-68-3	Hexachlorobutadiene	260.76	8.63		0.20	0.082
91-20-3	Naphthalene	128.17	7.05		0.50	0.31

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-03.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2018 13:37:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029952-003
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 06-Apr-2018 14:51:42 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 06-Apr-2018 14:52:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.042	5.047	-0.005	97	332157	10.0	12.2	
2 Dichlorodifluoromethane	85	5.160	5.160	0.000	99	1046119	10.0	11.0	
3 Chlorodifluoromethane	51	5.235	5.240	-0.005	98	609467	10.0	11.6	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.566	5.566	0.000	94	1187595	10.0	12.2	
5 Chloromethane	50	5.753	5.759	-0.006	99	363940	10.0	11.6	
6 Butane	43	6.032	6.032	0.000	98	635671	10.0	12.2	
7 Vinyl chloride	62	6.085	6.085	0.000	98	397592	10.0	10.9	
8 Butadiene	54	6.181	6.181	0.000	95	289666	10.0	11.4	
10 BFB									
9 Bromomethane	94	6.984	6.984	0.000	99	308060	10.0	10.5	
11 Chloroethane	64	7.230	7.230	0.000	99	178936	10.0	10.7	
12 2-Methylbutane	43	7.305	7.305	0.000	93	367344	10.0	11.9	
13 Vinyl bromide	106	7.637	7.637	0.000	99	313750	10.0	10.3	
14 Trichlorofluoromethane	101	7.733	7.733	0.000	98	787386	10.0	10.3	
15 Pentane	43	7.867	7.867	0.000	97	531207	10.0	12.1	
16 Ethanol	45	8.246	8.241	0.005	99	157263	15.0	20.7	
17 Ethyl ether	59	8.343	8.348	-0.005	96	224733	10.0	12.1	
19 Acrolein	56	8.728	8.723	0.005	97	69891	10.0	11.0	
20 1,1,2-Trichloro-1,2,2-trif	101	8.739	8.739	0.000	98	580425	10.0	10.6	
21 1,1-Dichloroethene	96	8.803	8.803	0.000	98	277407	10.0	10.7	
22 Acetone	43	9.001	9.001	0.000	97	400715	10.0	11.0	
23 Carbon disulfide	76	9.193	9.193	0.000	99	781609	10.0	12.2	
24 Isopropyl alcohol	45	9.209	9.204	0.005	100	381566	10.0	10.1	
25 3-Chloro-1-propene	41	9.498	9.498	0.000	97	268837	10.0	11.1	
26 Acetonitrile	41	9.616	9.616	0.000	99	150244	10.0	11.1	
27 Methylene Chloride	49	9.755	9.760	-0.005	90	250587	10.0	10.4	
28 2-Methyl-2-propanol	59	9.889	9.883	0.006	94	532702	10.0	9.93	
29 Methyl tert-butyl ether	73	10.097	10.097	0.000	97	791332	10.0	10.4	
30 trans-1,2-Dichloroethene	61	10.156	10.151	0.005	98	368467	10.0	11.2	
S 31 1,2-Dichloroethene, Total	61				0		20.0	21.5	
32 Acrylonitrile	53	10.285	10.285	0.000	95	157357	10.0	11.4	
33 Hexane	57	10.483	10.483	0.000	91	425126	10.0	11.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	10.948	10.948	0.000	100	477317	10.0	10.6	
35 Vinyl acetate	43	10.975	10.975	0.000	99	507505	10.0	9.90	
36 cis-1,2-Dichloroethene	96	11.948	11.954	-0.006	92	277374	10.0	10.3	
37 2-Butanone (MEK)	72	11.970	11.965	0.006	96	141775	10.0	10.8	
38 Ethyl acetate	88	11.975	11.975	0.000	96	24849	10.0	11.0	
39 Tetrahydrofuran	42	12.371	12.371	0.000	97	275372	10.0	10.7	
* 40 Chlorobromomethane	128	12.376	12.376	0.000	85	182511	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	95	563882	10.0	10.5	
42 Cyclohexane	84	12.724	12.724	0.000	98	388965	10.0	10.5	
43 1,1,1-Trichloroethane	97	12.740	12.740	0.000	95	613344	10.0	10.5	
44 Carbon tetrachloride	117	12.970	12.965	0.005	98	634683	10.0	10.4	
45 Isooctane	57	13.318	13.318	0.000	99	1344104	10.0	10.7	
46 Benzene	78	13.382	13.377	0.005	95	872457	10.0	10.4	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	98	367426	10.0	11.0	
48 n-Heptane	43	13.634	13.634	0.000	90	469166	10.0	11.1	
* 49 1,4-Difluorobenzene	114	14.078	14.072	0.006	94	948281	10.0	10.0	
50 n-Butanol	56	14.340	14.334	0.006	85	179921	10.0	11.1	
51 Trichloroethene	95	14.500	14.506	-0.006	98	408817	10.0	10.8	
A 52 GRO	1	14.728	(7.295-22.160)		0	118609167	10.0	0	
53 1,2-Dichloropropane	63	14.998	14.992	0.006	91	312866	10.0	10.3	
55 Methyl methacrylate	69	15.078	15.078	0.000	99	324450	10.0	10.9	
56 1,4-Dioxane	88	15.164	15.158	0.006	92	180552	10.0	10.1	
57 Dibromomethane	174	15.222	15.222	0.000	93	403680	10.0	10.4	
58 Dichlorobromomethane	83	15.458	15.458	0.000	98	621642	10.0	10.3	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	92	483486	10.0	11.1	
A 60 TVOC as Toluene	92	16.399	(5.037-27.761)		0	202308359	10.0	2985.0	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	95	624283	10.0	11.0	
62 n-Octane	43	16.822	16.822	0.000	88	689030	10.0	11.7	
63 Toluene	92	16.822	16.822	0.000	96	672734	10.0	10.2	
64 trans-1,3-Dichloropropene	75	17.352	17.346	0.006	97	478142	10.0	11.3	
65 1,1,2-Trichloroethane	83	17.705	17.699	0.006	97	328410	10.0	10.3	
66 Tetrachloroethene	166	17.817	17.817	0.000	97	631060	10.0	9.40	
67 2-Hexanone	43	18.090	18.090	0.000	97	585131	10.0	10.3	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	643413	10.0	9.16	
69 Ethylene Dibromide	107	18.700	18.700	0.000	99	588798	10.0	10.4	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	86	923213	10.0	10.0	
72 Chlorobenzene	112	19.599	19.593	0.006	95	928194	10.0	9.96	
73 Ethylbenzene	91	19.727	19.727	0.000	98	1561435	10.0	10.3	
74 n-Nonane	57	19.807	19.802	0.005	87	750342	10.0	10.7	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	1219715	20.0	20.4	
S 76 Xylenes, Total	106				0		30.0	30.6	
77 o-Xylene	106	20.738	20.738	0.000	99	614634	10.0	10.2	
78 Styrene	104	20.781	20.781	0.000	98	937235	10.0	10.8	
79 Bromoform	173	21.171	21.171	0.000	98	564688	10.0	7.99	
80 Isopropylbenzene	105	21.343	21.343	0.000	96	1807717	10.0	10.2	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	891178	10.0	10.1	
82 N-Propylbenzene	91	22.011	22.011	0.000	99	2186743	10.0	10.3	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	97	706218	10.0	10.2	
84 n-Decane	57	22.150	22.150	0.000	91	1024334	10.0	10.8	
85 4-Ethyltoluene	105	22.193	22.188	0.005	98	1870785	10.0	10.6	
86 2-Chlorotoluene	91	22.215	22.215	0.000	97	1526533	10.0	10.2	
87 1,3,5-Trimethylbenzene	105	22.289	22.289	0.000	93	1595630	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	89	783158	10.0	10.8	
89 tert-Butylbenzene	119	22.766	22.766	0.000	94	1549355	10.0	9.90	
90 1,2,4-Trimethylbenzene	105	22.856	22.857	0.000	98	1613520	10.0	10.3	
91 sec-Butylbenzene	105	23.081	23.081	0.000	98	2336385	10.0	10.3	
92 4-Isopropyltoluene	119	23.279	23.279	0.000	97	1973961	10.0	10.3	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	97	1040904	10.0	10.3	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	95	1018962	10.0	10.4	
95 Benzyl chloride	91	23.670	23.670	0.000	99	1129489	10.0	10.6	
96 n-Butylbenzene	91	23.878	23.878	0.000	100	1703633	10.0	11.2	
97 Undecane	57	23.884	23.884	0.000	94	917807	10.0	10.7	
98 1,2-Dichlorobenzene	146	24.028	24.028	0.000	96	992328	10.0	10.1	
99 Dodecane	57	25.563	25.563	0.000	98	674561	10.0	8.85	
100 1,2,4-Trichlorobenzene	180	26.703	26.703	0.000	94	401953	10.0	7.96	
101 Hexachlorobutadiene	225	26.896	26.896	0.000	97	625082	10.0	8.63	
102 Naphthalene	128	27.238	27.238	0.000	99	720493	10.0	7.05	
103 1,2,3-Trichlorobenzene	180	27.751	27.751	0.000	95	323886	10.0	7.43	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00765	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

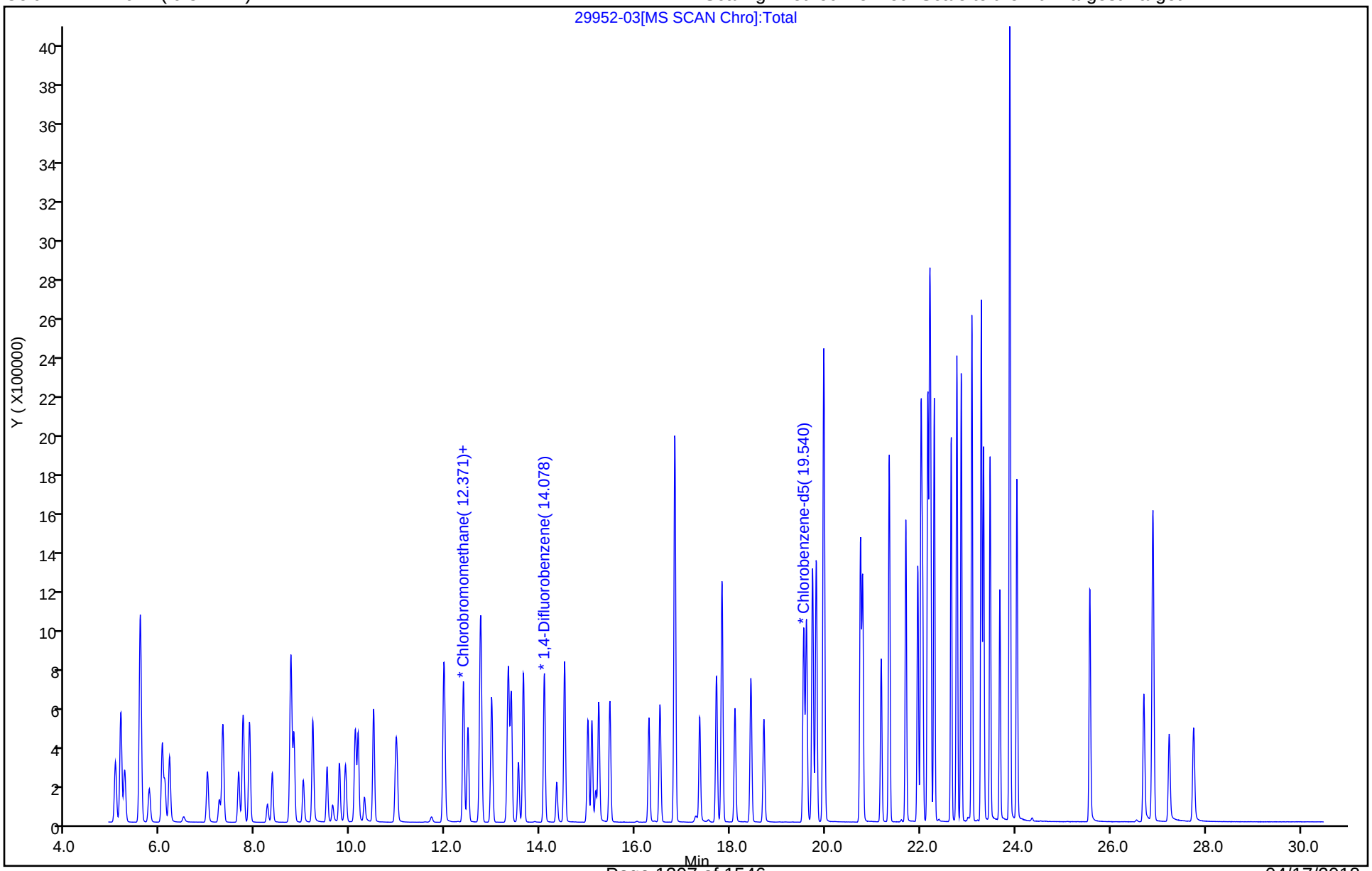
Report Date: 06-Apr-2018 14:52:18 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180405-29952.b\29952-03.d

Injection Date:	05-Apr-2018 13:37:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128215/5

Matrix: Air Lab File ID: 29983-05.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 15:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	11.1		0.50	0.047
75-45-6	Freon 22	86.47	11.3		0.50	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	12.2		0.20	0.041
74-87-3	Chloromethane	50.49	11.2		0.50	0.16
106-97-8	n-Butane	58.12	11.3		0.50	0.046
75-01-4	Vinyl chloride	62.50	10.7		0.20	0.018
106-99-0	1,3-Butadiene	54.09	11.0		0.20	0.037
74-83-9	Bromomethane	94.94	10.6		0.20	0.036
75-00-3	Chloroethane	64.52	10.5		0.50	0.13
593-60-2	Bromoethene(Vinyl Bromide)	106.96	10.6		0.20	0.022
75-69-4	Trichlorofluoromethane	137.37	10.8		0.20	0.031
76-13-1	Freon TF	187.38	10.8		0.20	0.027
75-35-4	1,1-Dichloroethene	96.94	10.8		0.20	0.035
67-64-1	Acetone	58.08	11.0		5.0	1.3
67-63-0	Isopropyl alcohol	60.10	10.2		5.0	0.13
75-15-0	Carbon disulfide	76.14	12.3		0.50	0.028
107-05-1	3-Chloropropene	76.53	10.8		0.50	0.063
75-09-2	Methylene Chloride	84.93	10.7		0.50	0.068
75-65-0	tert-Butyl alcohol	74.12	10.6		5.0	1.7
1634-04-4	Methyl tert-butyl ether	88.15	11.2		0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	12.0		0.20	0.050
110-54-3	n-Hexane	86.17	12.0		0.20	0.046
75-34-3	1,1-Dichloroethane	98.96	11.0		0.20	0.017
78-93-3	Methyl Ethyl Ketone	72.11	10.9		0.50	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	10.8		0.20	0.029
540-59-0	1,2-Dichloroethene, Total	96.94	22.8		0.40	0.029
67-66-3	Chloroform	119.38	11.1		0.20	0.025
109-99-9	Tetrahydrofuran	72.11	10.8		5.0	1.2
71-55-6	1,1,1-Trichloroethane	133.41	11.5		0.20	0.026
110-82-7	Cyclohexane	84.16	11.2		0.20	0.045
56-23-5	Carbon tetrachloride	153.81	11.6		0.040	0.011
540-84-1	2,2,4-Trimethylpentane	114.23	11.1		0.20	0.043
71-43-2	Benzene	78.11	11.0		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	12.0		0.20	0.034

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128215/5

Matrix: Air Lab File ID: 29983-05.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 15:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	11.3		0.20	0.068
79-01-6	Trichloroethene	131.39	11.7		0.040	0.0091
80-62-6	Methyl methacrylate	100.12	11.3		0.50	0.11
78-87-5	1,2-Dichloropropane	112.99	10.7		0.20	0.035
123-91-1	1,4-Dioxane	88.11	10.7		5.0	0.76
75-27-4	Bromodichloromethane	163.83	11.1		0.20	0.059
10061-01-5	cis-1,3-Dichloropropene	110.97	11.6		0.20	0.036
108-10-1	methyl isobutyl ketone	100.16	11.2		0.50	0.065
108-88-3	Toluene	92.14	11.2		0.20	0.035
10061-02-6	trans-1,3-Dichloropropene	110.97	12.2		0.20	0.038
79-00-5	1,1,2-Trichloroethane	133.41	11.1		0.20	0.017
127-18-4	Tetrachloroethene	165.83	10.6		0.040	0.0098
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	10.8		0.50	0.086
124-48-1	Dibromochloromethane	208.29	10.2		0.20	0.017
106-93-4	1,2-Dibromoethane	187.87	11.4		0.20	0.023
108-90-7	Chlorobenzene	112.56	11.0		0.20	0.025
100-41-4	Ethylbenzene	106.17	11.2		0.20	0.034
179601-23-1	m,p-Xylene	106.17	22.6		0.50	0.077
95-47-6	Xylene, o-	106.17	11.1		0.20	0.040
1330-20-7	Xylene (total)	106.17	33.7		0.70	0.040
100-42-5	Styrene	104.15	11.9		0.20	0.035
75-25-2	Bromoform	252.75	8.97		0.20	0.035
98-82-8	Cumene	120.19	11.2		0.20	0.039
79-34-5	1,1,2,2-Tetrachloroethane	167.85	10.7		0.20	0.026
103-65-1	n-Propylbenzene	120.19	11.3		0.20	0.040
622-96-8	4-Ethyltoluene	120.20	11.7		0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	11.3		0.20	0.040
95-49-8	2-Chlorotoluene	126.59	11.4		0.20	0.035
98-06-6	tert-Butylbenzene	134.22	11.2		0.20	0.037
95-63-6	1,2,4-Trimethylbenzene	120.20	11.6		0.20	0.057
135-98-8	sec-Butylbenzene	134.22	11.6		0.20	0.037
99-87-6	4-Isopropyltoluene	134.22	11.7		0.20	0.052
541-73-1	1,3-Dichlorobenzene	147.00	11.7		0.20	0.050
106-46-7	1,4-Dichlorobenzene	147.00	11.7		0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128215/5

Matrix: Air Lab File ID: 29983-05.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/06/2018 15:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128215 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	11.7		0.20	0.067
104-51-8	n-Butylbenzene	134.22	12.5		0.20	0.068
95-50-1	1,2-Dichlorobenzene	147.00	11.6		0.20	0.045
120-82-1	1,2,4-Trichlorobenzene	181.45	9.70		0.50	0.19
87-68-3	Hexachlorobutadiene	260.76	10.2		0.20	0.064
91-20-3	Naphthalene	128.17	8.06		0.50	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-05.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 06-Apr-2018 15:49:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029983-005
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Apr-2018 17:58:48 Calib Date: 14-Mar-2018 23:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20180314-29580.b\29580-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bunmaa Date: 09-Apr-2018 17:59:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.053	5.037	0.016	97	268182	10.0	11.6	
2 Dichlorodifluoromethane	85	5.165	5.149	0.016	99	889893	10.0	11.1	
3 Chlorodifluoromethane	51	5.245	5.235	0.010	97	501731	10.0	11.3	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.572	5.556	0.016	93	1002640	10.0	12.2	
5 Chloromethane	50	5.764	5.748	0.016	99	298418	10.0	11.2	
6 Butane	43	6.037	6.026	0.011	98	498424	10.0	11.3	
7 Vinyl chloride	62	6.090	6.080	0.010	98	330200	10.0	10.7	
8 Butadiene	54	6.192	6.176	0.016	94	237930	10.0	11.0	
10 BFB									
9 Bromomethane	94	6.989	6.979	0.010	99	265251	10.0	10.6	
11 Chloroethane	64	7.235	7.225	0.010	99	149310	10.0	10.5	
12 2-Methylbutane	43	7.310	7.300	0.010	92	301411	10.0	11.6	
13 Vinyl bromide	106	7.642	7.631	0.011	98	271614	10.0	10.6	
14 Trichlorofluoromethane	101	7.738	7.728	0.010	98	700910	10.0	10.8	
15 Pentane	43	7.872	7.861	0.011	98	433873	10.0	11.7	
16 Ethanol	45	8.246	8.241	0.005	99	131952	15.0	20.4	
17 Ethyl ether	59	8.353	8.343	0.010	95	190278	10.0	12.1	
19 Acrolein	56	8.728	8.728	0.000	45	55985	10.0	10.4	
20 1,1,2-Trichloro-1,2,2-trif	101	8.744	8.739	0.005	96	505342	10.0	10.8	
21 1,1-Dichloroethene	96	8.808	8.803	0.005	98	237994	10.0	10.8	
22 Acetone	43	9.001	9.001	0.000	97	339973	10.0	11.0	
23 Carbon disulfide	76	9.199	9.193	0.006	99	672093	10.0	12.3	
24 Isopropyl alcohol	45	9.209	9.204	0.005	100	325081	10.0	10.2	
25 3-Chloro-1-propene	41	9.504	9.493	0.011	98	222013	10.0	10.8	
26 Acetonitrile	41	9.621	9.616	0.005	99	125785	10.0	10.9	
27 Methylene Chloride	49	9.766	9.760	0.006	89	218163	10.0	10.7	
28 2-Methyl-2-propanol	59	9.889	9.889	0.000	93	484455	10.0	10.6	
29 Methyl tert-butyl ether	73	10.097	10.092	0.005	96	720155	10.0	11.2	
30 trans-1,2-Dichloroethene	61	10.156	10.156	0.000	98	335287	10.0	12.0	
S 31 1,2-Dichloroethene, Total	61				0		20.0	22.8	
32 Acrylonitrile	53	10.295	10.285	0.010	95	134552	10.0	11.5	
33 Hexane	57	10.483	10.483	0.000	92	371109	10.0	12.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	10.948	10.948	0.000	100	419039	10.0	11.0	
35 Vinyl acetate	43	10.975	10.975	0.000	99	440713	10.0	10.1	
36 cis-1,2-Dichloroethene	96	11.954	11.949	0.005	95	245887	10.0	10.8	
37 2-Butanone (MEK)	72	11.970	11.965	0.005	97	121267	10.0	10.9	
38 Ethyl acetate	88	11.981	11.975	0.006	97	22487	10.0	11.7	
39 Tetrahydrofuran	42	12.371	12.371	0.000	91	229676	10.0	10.8	
* 40 Chlorobromomethane	128	12.376	12.377	0.000	88	154773	10.0	10.0	
41 Chloroform	83	12.467	12.467	0.000	95	505752	10.0	11.1	
42 Cyclohexane	84	12.729	12.724	0.005	97	343598	10.0	11.2	
43 1,1,1-Trichloroethane	97	12.746	12.740	0.006	94	555972	10.0	11.5	
44 Carbon tetrachloride	117	12.970	12.965	0.005	99	580884	10.0	11.6	
45 Isooctane	57	13.318	13.318	0.000	99	1152643	10.0	11.1	
46 Benzene	78	13.382	13.382	0.000	95	764849	10.0	11.0	
47 1,2-Dichloroethane	62	13.532	13.532	0.000	98	331896	10.0	12.0	
48 n-Heptane	43	13.639	13.634	0.005	89	394831	10.0	11.3	
* 49 1,4-Difluorobenzene	114	14.078	14.078	0.000	94	782402	10.0	10.0	
50 n-Butanol	56	14.334	14.334	0.000	86	152693	10.0	11.4	
51 Trichloroethene	95	14.500	14.500	0.000	99	363491	10.0	11.7	
A 52 GRO	1	14.725	(7.290-22.160)		0	104170912	10.0	0	
53 1,2-Dichloropropane	63	14.998	14.998	0.000	90	266745	10.0	10.7	
55 Methyl methacrylate	69	15.083	15.078	0.005	99	278136	10.0	11.3	
56 1,4-Dioxane	88	15.158	15.164	-0.006	92	157399	10.0	10.7	
57 Dibromomethane	174	15.222	15.223	-0.001	92	366662	10.0	11.4	
58 Dichlorobromomethane	83	15.458	15.458	0.000	98	552493	10.0	11.1	
59 cis-1,3-Dichloropropene	75	16.282	16.282	0.000	92	417146	10.0	11.6	
A 60 TVOC as Toluene	92	16.394	(5.027-27.762)		0	179201630	10.0	3204.7	
61 4-Methyl-2-pentanone (MIBK	43	16.512	16.512	0.000	95	525083	10.0	11.2	
63 Toluene	92	16.827	16.822	0.005	93	598281	10.0	11.2	
62 n-Octane	43	16.827	16.822	0.005	80	580790	10.0	11.9	
64 trans-1,3-Dichloropropene	75	17.352	17.352	0.000	97	423486	10.0	12.2	
65 1,1,2-Trichloroethane	83	17.705	17.699	0.006	96	285040	10.0	11.1	
66 Tetrachloroethene	166	17.817	17.817	0.000	97	572395	10.0	10.6	
67 2-Hexanone	43	18.090	18.090	0.000	97	495675	10.0	10.8	
68 Chlorodibromomethane	129	18.427	18.427	0.000	98	579879	10.0	10.2	
69 Ethylene Dibromide	107	18.700	18.700	0.000	99	522806	10.0	11.4	
* 71 Chlorobenzene-d5	117	19.540	19.540	0.000	86	746002	10.0	10.0	
72 Chlorobenzene	112	19.599	19.599	-0.001	95	825349	10.0	11.0	
73 Ethylbenzene	91	19.727	19.727	0.000	98	1375792	10.0	11.2	
74 n-Nonane	57	19.802	19.802	0.000	86	646919	10.0	11.4	
75 m-Xylene & p-Xylene	106	19.962	19.962	0.000	0	1091776	20.0	22.6	
S 76 Xylenes, Total	106				0		30.0	33.7	
77 o-Xylene	106	20.738	20.738	0.000	99	542452	10.0	11.1	
78 Styrene	104	20.781	20.781	0.000	98	835287	10.0	11.9	
79 Bromoform	173	21.171	21.171	0.000	99	512169	10.0	8.97	
80 Isopropylbenzene	105	21.343	21.343	-0.001	96	1608510	10.0	11.2	
81 1,1,2,2-Tetrachloroethane	83	21.942	21.942	0.000	99	766489	10.0	10.7	
82 N-Propylbenzene	91	22.011	22.011	0.000	99	1935220	10.0	11.3	
83 1,2,3-Trichloropropane	75	22.043	22.043	0.000	96	620377	10.0	11.1	
84 n-Decane	57	22.150	22.150	0.000	92	880631	10.0	11.5	
85 4-Ethyltoluene	105	22.193	22.193	0.000	98	1674949	10.0	11.7	
86 2-Chlorotoluene	91	22.209	22.209	0.000	96	1378135	10.0	11.4	
87 1,3,5-Trimethylbenzene	105	22.289	22.290	-0.001	93	1442188	10.0	11.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 Alpha Methyl Styrene	118	22.648	22.648	0.000	90	709350	10.0	12.1	
89 tert-Butylbenzene	119	22.766	22.766	0.000	94	1414521	10.0	11.2	
90 1,2,4-Trimethylbenzene	105	22.856	22.857	-0.001	97	1468258	10.0	11.6	
91 sec-Butylbenzene	105	23.081	23.081	0.000	98	2117940	10.0	11.6	
92 4-Isopropyltoluene	119	23.279	23.279	0.000	97	1805511	10.0	11.7	
93 1,3-Dichlorobenzene	146	23.327	23.327	0.000	97	960901	10.0	11.7	
94 1,4-Dichlorobenzene	146	23.466	23.466	0.000	98	922816	10.0	11.7	
95 Benzyl chloride	91	23.670	23.670	0.000	99	1008581	10.0	11.7	
96 n-Butylbenzene	91	23.878	23.878	0.000	99	1543829	10.0	12.5	
97 Undecane	57	23.884	23.884	0.000	93	811598	10.0	11.7	
98 1,2-Dichlorobenzene	146	24.028	24.028	0.000	98	922384	10.0	11.6	
99 Dodecane	57	25.569	25.569	0.000	98	605943	10.0	9.84	
100 1,2,4-Trichlorobenzene	180	26.703	26.703	0.000	94	395775	10.0	9.70	
101 Hexachlorobutadiene	225	26.895	26.896	-0.001	97	594810	10.0	10.2	
102 Naphthalene	128	27.238	27.238	0.000	99	665752	10.0	8.06	
103 1,2,3-Trichlorobenzene	180	27.757	27.752	0.005	95	307045	10.0	8.71	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00765	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

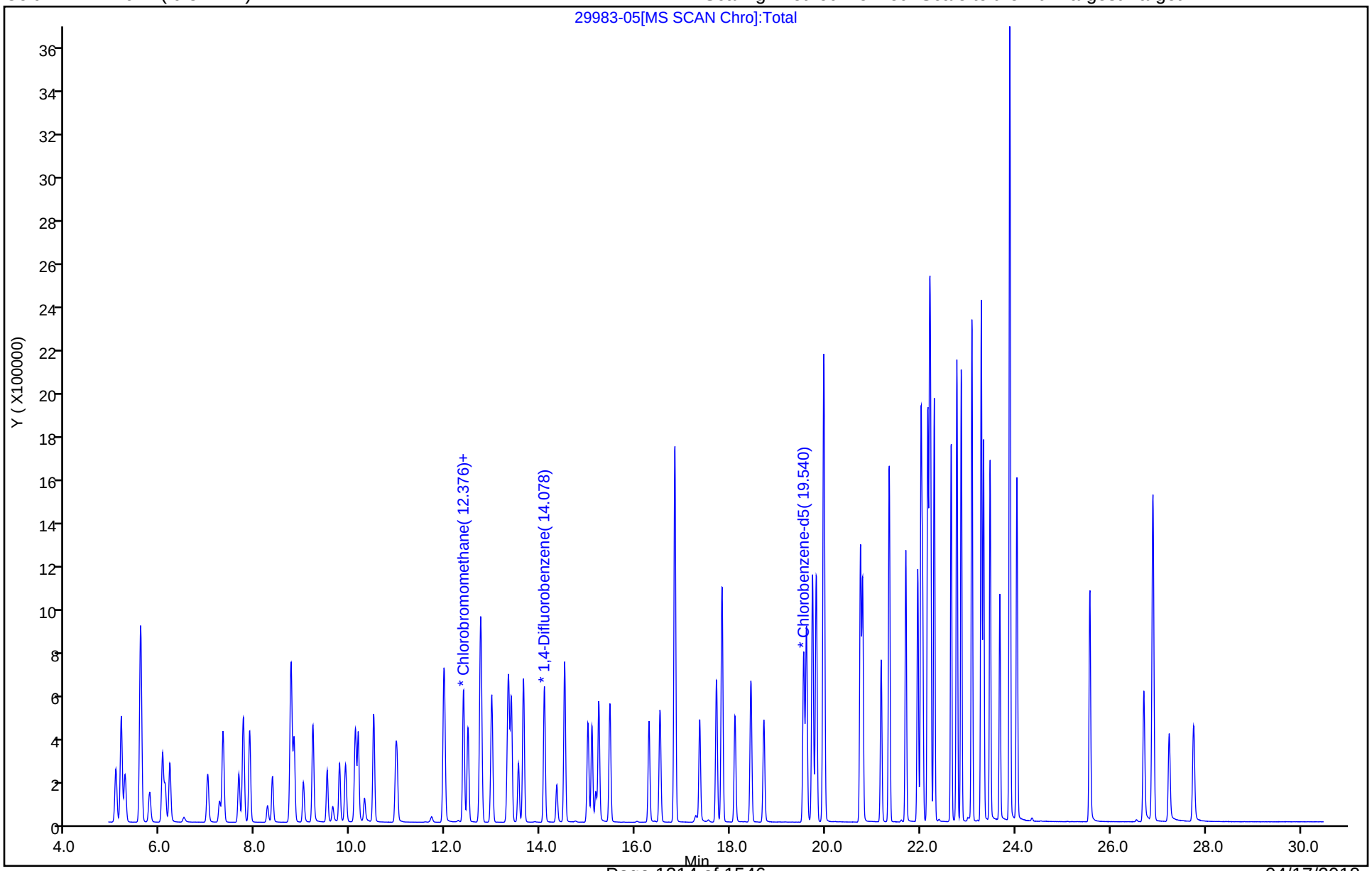
Report Date: 09-Apr-2018 17:59:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20180406-29983.b\29983-05.d

Injection Date:	06-Apr-2018 15:49:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	lcs			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128434/3

Matrix: Air Lab File ID: 30087_03.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 11:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	120.91	8.46		0.50	0.20
75-45-6	Freon 22	86.47	9.21		0.50	0.26
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	10.5		0.20	0.068
74-87-3	Chloromethane	50.49	8.85		0.50	0.25
106-97-8	n-Butane	58.12	9.04		0.50	0.31
75-01-4	Vinyl chloride	62.50	9.17		0.20	0.041
106-99-0	1,3-Butadiene	54.09	8.75		0.20	0.065
74-83-9	Bromomethane	94.94	9.74		0.20	0.062
75-00-3	Chloroethane	64.52	9.45		0.50	0.21
593-60-2	Bromoethene(Vinyl Bromide)	106.96	9.82		0.20	0.056
75-69-4	Trichlorofluoromethane	137.37	9.44		0.20	0.062
76-13-1	Freon TF	187.38	9.75		0.20	0.031
75-35-4	1,1-Dichloroethene	96.94	9.32		0.20	0.034
67-64-1	Acetone	58.08	9.00		5.0	2.6
67-63-0	Isopropyl alcohol	60.10	8.87		5.0	1.8
75-15-0	Carbon disulfide	76.14	11.1		0.50	0.12
107-05-1	3-Chloropropene	76.53	9.46		0.50	0.27
75-09-2	Methylene Chloride	84.93	9.27		0.50	0.20
75-65-0	tert-Butyl alcohol	74.12	9.50		5.0	1.5
1634-04-4	Methyl tert-butyl ether	88.15	9.78		0.20	0.061
156-60-5	trans-1,2-Dichloroethene	96.94	10.1		0.20	0.074
110-54-3	n-Hexane	86.17	10.1		0.20	0.16
75-34-3	1,1-Dichloroethane	98.96	9.59		0.20	0.026
78-93-3	Methyl Ethyl Ketone	72.11	9.49		0.50	0.20
156-59-2	cis-1,2-Dichloroethene	96.94	9.77		0.20	0.037
540-59-0	1,2-Dichloroethene, Total	96.94	19.9		0.40	0.11
67-66-3	Chloroform	119.38	9.44		0.20	0.052
109-99-9	Tetrahydrofuran	72.11	9.60		5.0	2.6
71-55-6	1,1,1-Trichloroethane	133.41	9.57		0.20	0.068
110-82-7	Cyclohexane	84.16	9.64		0.20	0.063
56-23-5	Carbon tetrachloride	153.81	9.60		0.040	0.024
540-84-1	2,2,4-Trimethylpentane	114.23	9.45		0.20	0.088
71-43-2	Benzene	78.11	9.62		0.20	0.071
107-06-2	1,2-Dichloroethane	98.96	9.24		0.20	0.063

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128434/3

Matrix: Air Lab File ID: 30087_03.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 11:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
142-82-5	n-Heptane	100.21	9.28		0.20	0.14
79-01-6	Trichloroethene	131.39	9.25		0.040	0.030
80-62-6	Methyl methacrylate	100.12	9.77		0.50	0.22
78-87-5	1,2-Dichloropropane	112.99	9.45		0.20	0.12
123-91-1	1,4-Dioxane	88.11	9.52		5.0	1.3
75-27-4	Bromodichloromethane	163.83	9.45		0.20	0.094
10061-01-5	cis-1,3-Dichloropropene	110.97	9.71		0.20	0.098
108-10-1	methyl isobutyl ketone	100.16	8.99		0.50	0.36
108-88-3	Toluene	92.14	9.64		0.20	0.069
10061-02-6	trans-1,3-Dichloropropene	110.97	8.71		0.20	0.12
79-00-5	1,1,2-Trichloroethane	133.41	9.71		0.20	0.078
127-18-4	Tetrachloroethene	165.83	9.34		0.040	0.029
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	8.94		0.50	0.42
124-48-1	Dibromochloromethane	208.29	9.17		0.20	0.071
106-93-4	1,2-Dibromoethane	187.87	9.66		0.20	0.069
108-90-7	Chlorobenzene	112.56	9.51		0.20	0.040
100-41-4	Ethylbenzene	106.17	9.55		0.20	0.073
179601-23-1	m,p-Xylene	106.17	18.8		0.50	0.070
95-47-6	Xylene, o-	106.17	9.31		0.20	0.071
1330-20-7	Xylene (total)	106.17	28.1		0.70	0.14
100-42-5	Styrene	104.15	9.27		0.20	0.086
75-25-2	Bromoform	252.75	8.78		0.20	0.086
98-82-8	Cumene	120.19	9.28		0.20	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	9.63		0.20	0.076
103-65-1	n-Propylbenzene	120.19	9.30		0.20	0.069
622-96-8	4-Ethyltoluene	120.20	9.54		0.20	0.069
108-67-8	1,3,5-Trimethylbenzene	120.20	9.41		0.20	0.058
95-49-8	2-Chlorotoluene	126.59	9.26		0.20	0.071
98-06-6	tert-Butylbenzene	134.22	9.32		0.20	0.058
95-63-6	1,2,4-Trimethylbenzene	120.20	9.48		0.20	0.080
135-98-8	sec-Butylbenzene	134.22	9.48		0.20	0.066
99-87-6	4-Isopropyltoluene	134.22	9.58		0.20	0.075
541-73-1	1,3-Dichlorobenzene	147.00	9.17		0.20	0.082
106-46-7	1,4-Dichlorobenzene	147.00	8.93		0.20	0.065

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 200-128434/3

Matrix: Air Lab File ID: 30087_03.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 04/13/2018 11:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 128434 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-44-7	Benzyl chloride	126.58	8.61		0.20	0.12
104-51-8	n-Butylbenzene	134.22	9.33		0.20	0.080
95-50-1	1,2-Dichlorobenzene	147.00	9.24		0.20	0.071
120-82-1	1,2,4-Trichlorobenzene	181.45	8.00		0.50	0.24
87-68-3	Hexachlorobutadiene	260.76	8.76		0.20	0.082
91-20-3	Naphthalene	128.17	7.05		0.50	0.31

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_03.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 13-Apr-2018 11:38:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0030087-003
Operator ID: pad Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Apr-2018 16:33:54 Calib Date: 12-Apr-2018 23:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20180412-30075.b\30075_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK029

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.044	3.044	0.000	98	135899	10.0	9.03	
2 Dichlorodifluoromethane	85	3.108	3.108	0.000	99	516509	10.0	8.46	
3 Chlorodifluoromethane	51	3.156	3.156	0.000	98	305848	10.0	9.21	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.354	3.354	0.000	90	629277	10.0	10.5	
5 Chloromethane	50	3.488	3.482	0.006	99	166093	10.0	8.85	
6 Butane	43	3.670	3.664	0.006	98	294620	10.0	9.04	
7 Vinyl chloride	62	3.713	3.707	0.005	98	206087	10.0	9.17	
8 Butadiene	54	3.782	3.777	0.005	97	150512	10.0	8.75	
9 BFB									
10 Bromomethane	94	4.419	4.413	0.006	98	224484	10.0	9.74	
11 Chloroethane	64	4.638	4.633	0.005	100	101339	10.0	9.45	
12 2-Methylbutane	43	4.702	4.697	0.005	94	232254	10.0	9.90	
13 Vinyl bromide	106	5.002	4.996	0.006	99	239715	10.0	9.82	
14 Trichlorofluoromethane	101	5.087	5.087	0.000	98	627149	10.0	9.44	
16 Pentane	43	5.216	5.210	0.006	98	364952	10.0	10.3	
17 Ethanol	45	5.638	5.633	0.005	97	127027	15.0	17.3	
18 Ethyl ether	59	5.719	5.713	0.006	96	149036	10.0	10.9	
20 1,1,2-Trichloro-1,2,2-trif	101	6.109	6.104	0.005	94	450238	10.0	9.75	
19 Acrolein	56	6.104	6.104	0.000	44	65564	10.0	12.2	
21 1,1-Dichloroethene	96	6.163	6.163	0.000	97	210915	10.0	9.32	
22 Acetone	43	6.403	6.403	0.000	98	310933	10.0	9.00	
23 Carbon disulfide	76	6.553	6.548	0.005	99	641767	10.0	11.1	
24 Isopropyl alcohol	45	6.687	6.681	0.006	100	311038	10.0	8.87	
25 3-Chloro-1-propene	41	6.928	6.928	0.000	97	217155	10.0	9.46	
26 Acetonitrile	41	7.083	7.077	0.006	100	148555	10.0	9.83	
27 Methylene Chloride	49	7.227	7.222	0.005	90	213910	10.0	9.27	
28 2-Methyl-2-propanol	59	7.452	7.446	0.006	93	449556	10.0	9.50	
29 Methyl tert-butyl ether	73	7.623	7.618	0.005	96	639235	10.0	9.78	
31 trans-1,2-Dichloroethene	61	7.661	7.660	0.001	97	318254	10.0	10.1	
32 Acrylonitrile	53	7.826	7.832	-0.006	98	145630	10.0	9.98	
33 Hexane	57	8.030	8.030	0.000	94	320614	10.0	10.1	
34 1,1-Dichloroethane	63	8.543	8.538	0.005	100	393350	10.0	9.59	
35 Vinyl acetate	43	8.618	8.618	0.000	100	544784	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.9	
37 cis-1,2-Dichloroethene	96	9.677	9.677	0.000	91	257704	10.0	9.77	
38 2-Butanone (MEK)	72	9.742	9.736	0.006	100	118787	10.0	9.49	
39 Ethyl acetate	88	9.779	9.774	0.005	99	20415	10.0	10.9	
* 40 Chlorobromomethane	128	10.159	10.164	-0.005	83	278784	10.0	10.0	
41 Tetrahydrofuran	42	10.170	10.169	0.001	92	260763	10.0	9.60	
42 Chloroform	83	10.298	10.298	0.000	95	521850	10.0	9.44	
43 Cyclohexane	84	10.539	10.539	0.000	97	345583	10.0	9.64	
44 1,1,1-Trichloroethane	97	10.576	10.576	0.000	93	574292	10.0	9.57	
45 Carbon tetrachloride	117	10.833	10.833	0.000	97	605506	10.0	9.60	
46 Isooctane	57	11.288	11.288	0.000	99	1256800	10.0	9.45	
47 Benzene	78	11.336	11.336	0.000	95	829368	10.0	9.62	
48 1,2-Dichloroethane	62	11.539	11.539	0.000	98	352646	10.0	9.24	
49 n-Heptane	43	11.700	11.700	0.000	93	467822	10.0	9.28	
* 50 1,4-Difluorobenzene	114	12.235	12.234	0.001	93	1467824	10.0	10.0	
52 n-Butanol	56	12.689	12.689	0.000	88	188864	10.0	10.3	
53 Trichloroethene	95	12.727	12.727	0.000	98	392057	10.0	9.25	
A 51 GRO	1	13.197	(4.687-21.708)		0	116764427	10.0	0	
54 1,2-Dichloropropane	63	13.331	13.326	0.005	91	315864	10.0	9.45	
55 Methyl methacrylate	69	13.508	13.508	0.000	98	325242	10.0	9.77	
56 1,4-Dioxane	88	13.572	13.577	-0.005	90	187791	10.0	9.52	
57 Dibromomethane	174	13.599	13.599	0.000	92	449912	10.0	9.34	
58 Dichlorobromomethane	83	13.909	13.909	0.000	97	635123	10.0	9.45	
60 cis-1,3-Dichloropropene	75	14.888	14.893	-0.005	91	506107	10.0	9.71	
A 59 TVOC as Toluene	92	15.102	(3.034-27.170)		0	185810403	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.204	15.204	0.000	96	640351	10.0	8.99	
65 Toluene	92	15.498	15.503	-0.005	93	671756	10.0	9.64	
64 n-Octane	43	15.557	15.557	0.000	92	700054	10.0	9.37	
66 trans-1,3-Dichloropropene	75	16.145	16.145	0.000	96	507620	10.0	8.71	
67 1,1,2-Trichloroethane	83	16.536	16.541	-0.005	95	328987	10.0	9.71	
68 Tetrachloroethene	166	16.627	16.627	0.000	96	667017	10.0	9.34	
69 2-Hexanone	43	17.023	17.022	0.001	94	619773	10.0	8.94	
71 Chlorodibromomethane	129	17.338	17.338	0.000	98	681527	10.0	9.17	
72 Ethylene Dibromide	107	17.622	17.616	0.006	98	631682	10.0	9.66	
* 74 Chlorobenzene-d5	117	18.563	18.563	0.000	84	1360609	10.0	10.0	
75 Chlorobenzene	112	18.633	18.627	0.006	96	958922	10.0	9.51	
76 Ethylbenzene	91	18.793	18.788	0.005	97	1495530	10.0	9.55	
77 n-Nonane	57	18.922	18.927	-0.005	89	668113	10.0	9.54	
78 m-Xylene & p-Xylene	106	19.055	19.055	0.000	0	1207986	20.0	18.8	
S 73 Xylenes, Total	106				0		30.0	28.1	
79 o-Xylene	106	19.949	19.949	0.000	99	595763	10.0	9.31	
80 Styrene	104	20.013	20.013	0.000	96	912235	10.0	9.27	
81 Bromoform	173	20.484	20.484	0.000	99	626468	10.0	8.78	
82 Isopropylbenzene	105	20.714	20.714	0.000	95	1708261	10.0	9.28	
84 1,1,2,2-Tetrachloroethane	83	21.441	21.441	0.000	98	863948	10.0	9.63	
85 N-Propylbenzene	91	21.500	21.500	0.000	100	2029272	10.0	9.30	
86 1,2,3-Trichloropropane	75	21.538	21.543	-0.005	98	643849	10.0	9.21	
87 n-Decane	57	21.698	21.698	0.000	91	850047	10.0	9.78	
88 4-Ethyltoluene	105	21.709	21.709	0.000	98	1759674	10.0	9.54	
89 2-Chlorotoluene	91	21.709	21.714	-0.005	95	1396117	10.0	9.26	
90 1,3,5-Trimethylbenzene	105	21.821	21.821	0.000	93	1435961	10.0	9.41	
91 Alpha Methyl Styrene	118	22.217	22.217	0.000	91	755443	10.0	9.60	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
92 tert-Butylbenzene	119	22.340	22.345	-0.005	95	1391825	10.0	9.32	
93 1,2,4-Trimethylbenzene	105	22.447	22.442	0.005	97	1439485	10.0	9.48	
94 sec-Butylbenzene	105	22.688	22.688	0.000	99	2083363	10.0	9.48	
95 4-Isopropyltoluene	119	22.902	22.902	0.000	98	1817761	10.0	9.58	
96 1,3-Dichlorobenzene	146	22.929	22.929	0.000	95	1075577	10.0	9.17	
97 1,4-Dichlorobenzene	146	23.073	23.073	0.000	97	1063947	10.0	8.93	
98 Benzyl chloride	91	23.282	23.282	0.000	99	1065869	10.0	8.61	
100 n-Butylbenzene	91	23.496	23.496	0.000	98	1564263	10.0	9.33	
99 Undecane	57	23.528	23.528	0.000	95	785821	10.0	9.26	
101 1,2-Dichlorobenzene	146	23.624	23.624	0.000	98	1015993	10.0	9.24	
102 Dodecane	57	25.149	25.149	0.000	98	605943	10.0	10.5	
103 1,2,4-Trichlorobenzene	180	26.187	26.187	0.001	94	668274	10.0	8.00	
104 Hexachlorobutadiene	225	26.374	26.374	0.000	96	748600	10.0	8.76	
105 Naphthalene	128	26.679	26.679	0.000	99	1204364	10.0	7.05	
106 1,2,3-Trichlorobenzene	180	27.160	27.160	0.000	96	619142	10.0	8.48	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00763	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

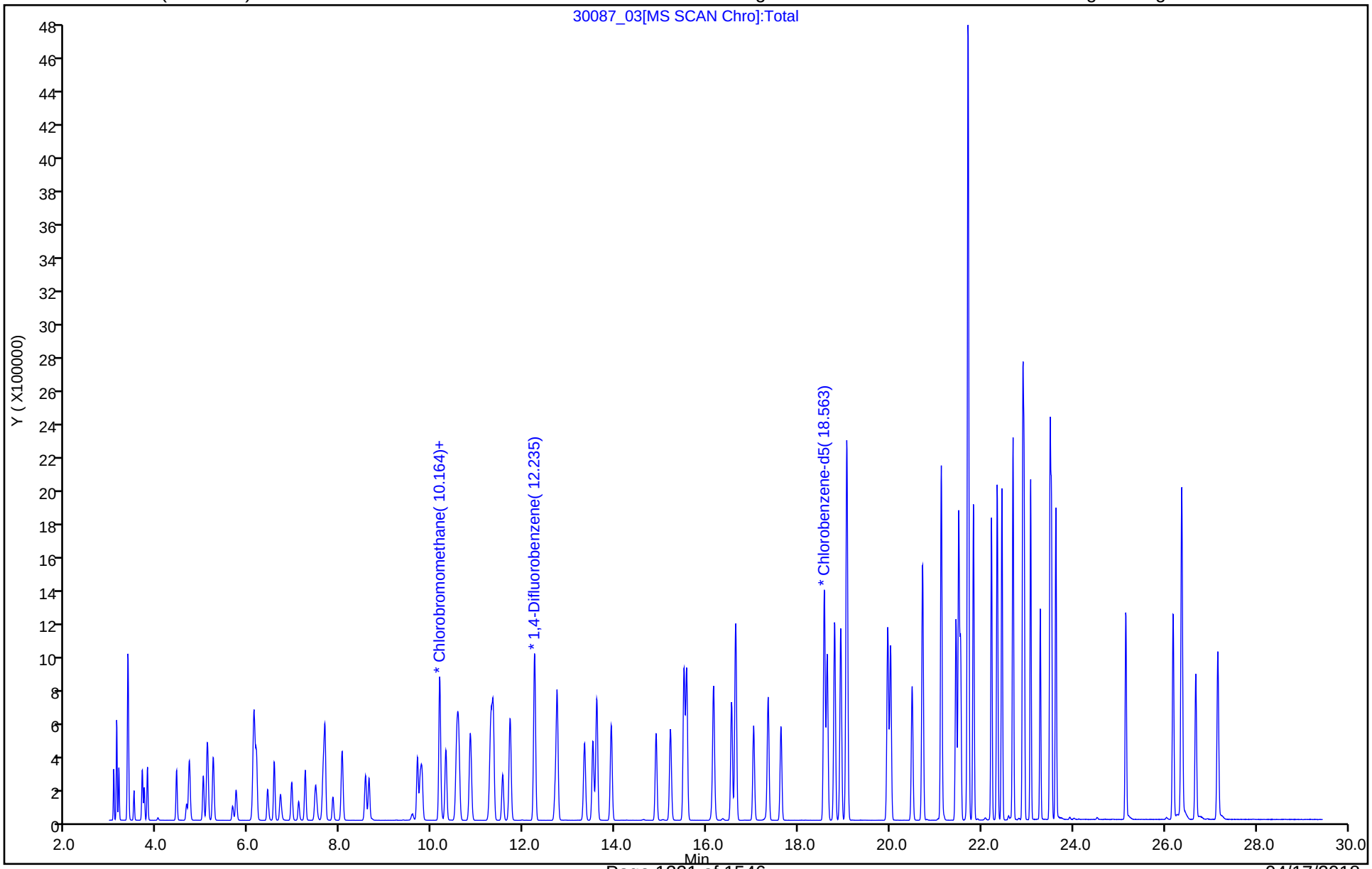
Report Date: 16-Apr-2018 16:33:57 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20180413-30087.b\30087_03.D

Injection Date:	13-Apr-2018 11:38:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Instrument ID: CHW.i Start Date: 03/14/2018 15:16

Analysis Batch Number: 127372 End Date: 03/15/2018 05:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-127372/1		03/14/2018 15:16	1	29580-01.d	RTX-624 0.32(mm)
VIBLK 200-127372/2		03/14/2018 16:09	1		RTX-624 0.32(mm)
IC 200-127372/3		03/14/2018 16:58	1	29580-03.d	RTX-624 0.32(mm)
IC 200-127372/4		03/14/2018 17:52	1	29580-04.d	RTX-624 0.32(mm)
IC 200-127372/5		03/14/2018 18:45	1	29580-05.d	RTX-624 0.32(mm)
IC 200-127372/6		03/14/2018 19:39	1	29580-06.d	RTX-624 0.32(mm)
ICIS 200-127372/7		03/14/2018 20:33	1	29580-07.d	RTX-624 0.32(mm)
IC 200-127372/8		03/14/2018 21:27	1	29580-08.d	RTX-624 0.32(mm)
IC 200-127372/9		03/14/2018 22:20	1	29580-09.d	RTX-624 0.32(mm)
IC 200-127372/10		03/14/2018 23:14	1	29580-10.d	RTX-624 0.32(mm)
VIBLK 200-127372/11		03/15/2018 00:08	1		RTX-624 0.32(mm)
VIBLK 200-127372/12		03/15/2018 01:01	1		RTX-624 0.32(mm)
VIBLK 200-127372/13		03/15/2018 01:55	1		RTX-624 0.32(mm)
ICV 200-127372/14		03/15/2018 02:48	1	29580-14.d	RTX-624 0.32(mm)
ZZZZZ		03/15/2018 03:42	1		RTX-624 0.32(mm)
ZZZZZ		03/15/2018 04:35	1		RTX-624 0.32(mm)
VIBLK 200-127372/17		03/15/2018 05:29	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Instrument ID: CHW.i Start Date: 04/05/2018 11:48

Analysis Batch Number: 128156 End Date: 04/06/2018 10:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-128156/1		04/05/2018 11:48	1	29952-01.d	RTX-624 0.32(mm)
CCVIS 200-128156/2		04/05/2018 12:44	1	29952-02.d	RTX-624 0.32(mm)
LCS 200-128156/3		04/05/2018 13:37	1	29952-03.d	RTX-624 0.32(mm)
MB 200-128156/4		04/05/2018 14:31	1	29952-04.d	RTX-624 0.32(mm)
ZZZZZ		04/05/2018 15:25	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 16:19	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 17:13	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 18:07	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 19:01	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 19:57	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 20:51	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 21:48	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 22:42	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 23:37	1		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 00:31	1		RTX-624 0.32(mm)
200-42918-7		04/06/2018 01:26	1	29952-16.d	RTX-624 0.32(mm)
200-42918-9		04/06/2018 02:20	1	29952-17.d	RTX-624 0.32(mm)
200-42918-10		04/06/2018 03:14	1	29952-18.d	RTX-624 0.32(mm)
ZZZZZ		04/06/2018 04:09	1		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 05:03	1		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 05:57	1		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 06:50	10		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 07:44	1		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 08:43	1.33		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 09:35	2.99		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 10:29	2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Instrument ID: CHW.i Start Date: 04/06/2018 12:06

Analysis Batch Number: 128215 End Date: 04/07/2018 12:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-128215/1		04/06/2018 12:06	1	29983-01.d	RTX-624 0.32(mm)
CCVIS 200-128215/4		04/06/2018 14:56	1	29983-04.d	RTX-624 0.32(mm)
LCS 200-128215/5		04/06/2018 15:49	1	29983-05.d	RTX-624 0.32(mm)
MB 200-128215/6		04/06/2018 16:42	1	29983-06.d	RTX-624 0.32(mm)
ZZZZZ		04/06/2018 17:34	3		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 18:27	2		RTX-624 0.32(mm)
200-42918-7 DL		04/06/2018 19:18	107	29983-09.d	RTX-624 0.32(mm)
200-42918-9 DL		04/06/2018 20:08	84.8	29983-10.d	RTX-624 0.32(mm)
200-42918-10 DL		04/06/2018 20:59	301	29983-11.d	RTX-624 0.32(mm)
200-42918-3		04/06/2018 21:49	5	29983-12.d	RTX-624 0.32(mm)
200-42918-5		04/06/2018 22:39	5	29983-13.d	RTX-624 0.32(mm)
200-42918-8		04/06/2018 23:30	5	29983-14.d	RTX-624 0.32(mm)
200-42918-6 DL		04/07/2018 00:20	10.02	29983-15.d	RTX-624 0.32(mm)
200-42918-6 DL		04/07/2018 01:10	39.6	29983-16.d	RTX-624 0.32(mm)
ZZZZZ		04/07/2018 02:00	6		RTX-624 0.32(mm)
200-42918-12 DL		04/07/2018 02:49	30.3	29983-18.d	RTX-624 0.32(mm)
ZZZZZ		04/07/2018 03:44	1		RTX-624 0.32(mm)
ZZZZZ		04/07/2018 04:38	1		RTX-624 0.32(mm)
ZZZZZ		04/07/2018 05:28	79.77		RTX-624 0.32(mm)
ZZZZZ		04/07/2018 06:22	1		RTX-624 0.32(mm)
ZZZZZ		04/07/2018 07:14	2		RTX-624 0.32(mm)
ZZZZZ		04/07/2018 08:04	41.05		RTX-624 0.32(mm)
ZZZZZ		04/07/2018 11:42	41.05		RTX-624 0.32(mm)
CCVC 200-128215/28		04/07/2018 12:35	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Instrument ID: CHX.i Start Date: 02/21/2018 15:47

Analysis Batch Number: 126632 End Date: 02/22/2018 08:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-126632/1		02/21/2018 15:47	1	200-0029291-001.D	RTX-624 0.32(mm)
VIBLK 200-126632/2		02/21/2018 16:44	1		RTX-624 0.32(mm)
VIBLK 200-126632/3		02/21/2018 17:34	1		RTX-624 0.32(mm)
VIBLK 200-126632/4		02/21/2018 18:25	1		RTX-624 0.32(mm)
IC 200-126632/5		02/21/2018 19:15	1	200-0029291-005.D	RTX-624 0.32(mm)
IC 200-126632/6		02/21/2018 20:06	1	200-0029291-006.D	RTX-624 0.32(mm)
ZZZZZ		02/21/2018 20:56	1		RTX-624 0.32(mm)
ZZZZZ		02/21/2018 21:47	1		RTX-624 0.32(mm)
IC 200-126632/9		02/21/2018 22:37	1	200-0029291-009.D	RTX-624 0.32(mm)
IC 200-126632/10		02/21/2018 23:27	1	200-0029291-010.D	RTX-624 0.32(mm)
ICIS 200-126632/11		02/22/2018 00:18	1	200-0029291-011.D	RTX-624 0.32(mm)
IC 200-126632/12		02/22/2018 01:08	1	200-0029291-012.D	RTX-624 0.32(mm)
IC 200-126632/13		02/22/2018 01:59	1	200-0029291-013.D	RTX-624 0.32(mm)
IC 200-126632/14		02/22/2018 02:49	1	200-0029291-014.D	RTX-624 0.32(mm)
VIBLK 200-126632/15		02/22/2018 03:39	1		RTX-624 0.32(mm)
VIBLK 200-126632/16		02/22/2018 04:29	1		RTX-624 0.32(mm)
VIBLK 200-126632/17		02/22/2018 05:20	1		RTX-624 0.32(mm)
ICV 200-126632/18		02/22/2018 06:10	1	200-0029291-018.D	RTX-624 0.32(mm)
ZZZZZ		02/22/2018 07:02	1		RTX-624 0.32(mm)
ZZZZZ		02/22/2018 07:51	1		RTX-624 0.32(mm)
VIBLK 200-126632/21		02/22/2018 08:42	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Instrument ID: CHX.i Start Date: 04/05/2018 10:03

Analysis Batch Number: 128151 End Date: 04/06/2018 09:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-128151/1		04/05/2018 10:03	1	29949_01.D	RTX-624 0.32(mm)
ZZZZZ		04/05/2018 10:52	1		RTX-624 0.32(mm)
CCVIS 200-128151/3		04/05/2018 11:43	1	29949_03.D	RTX-624 0.32(mm)
LCS 200-128151/4		04/05/2018 12:33	1	29949_04.D	RTX-624 0.32(mm)
MB 200-128151/5		04/05/2018 13:24	1	29949_05.D	RTX-624 0.32(mm)
ZZZZZ		04/05/2018 14:14	2		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 15:04	2		RTX-624 0.32(mm)
200-42918-11		04/05/2018 15:55	1	29949_08.D	RTX-624 0.32(mm)
200-42918-2		04/05/2018 16:45	1	29949_09.D	RTX-624 0.32(mm)
200-42918-1		04/05/2018 17:36	1	29949_10.D	RTX-624 0.32(mm)
200-42918-4		04/05/2018 18:26	1	29949_11.D	RTX-624 0.32(mm)
ZZZZZ		04/05/2018 19:17	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 20:08	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 20:59	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 21:49	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 22:40	1		RTX-624 0.32(mm)
ZZZZZ		04/05/2018 23:32	2		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 00:23	2		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 01:13	2		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 02:04	2		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 02:54	10		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 03:44	10		RTX-624 0.32(mm)
ZZZZZ		04/06/2018 04:35	10		RTX-624 0.32(mm)
200-42918-11 DL		04/06/2018 08:25	2.5	29949_24.D	RTX-624 0.32(mm)
200-42918-2 DL		04/06/2018 09:15	2	29949_25.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Instrument ID: CHX.i Start Date: 04/12/2018 15:03

Analysis Batch Number: 128414 End Date: 04/13/2018 05:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-128414/1		04/12/2018 15:03	1	30075_01.D	RTX-624 0.32(mm)
VIBLK 200-128414/2		04/12/2018 15:47	1		RTX-624 0.32(mm)
VIBLK 200-128414/3		04/12/2018 16:38	1		RTX-624 0.32(mm)
IC 200-128414/4		04/12/2018 17:29	1	30075_04.D	RTX-624 0.32(mm)
IC 200-128414/5		04/12/2018 18:21	1	30075_05.D	RTX-624 0.32(mm)
IC 200-128414/6		04/12/2018 19:11	1	30075_06.D	RTX-624 0.32(mm)
IC 200-128414/7		04/12/2018 20:01	1	30075_07.D	RTX-624 0.32(mm)
ICIS 200-128414/8		04/12/2018 20:51	1	30075_08.D	RTX-624 0.32(mm)
IC 200-128414/9		04/12/2018 21:42	1	30075_09.D	RTX-624 0.32(mm)
IC 200-128414/10		04/12/2018 22:32	1	30075_10.D	RTX-624 0.32(mm)
IC 200-128414/11		04/12/2018 23:23	1	30075_11.D	RTX-624 0.32(mm)
VIBLK 200-128414/12		04/13/2018 00:13	1		RTX-624 0.32(mm)
VIBLK 200-128414/13		04/13/2018 01:03	1		RTX-624 0.32(mm)
VIBLK 200-128414/14		04/13/2018 01:54	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 02:44	1		RTX-624 0.32(mm)
ICV 200-128414/16		04/13/2018 03:34	1	30075_16.D	RTX-624 0.32(mm)
ZZZZZ		04/13/2018 04:25	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 05:15	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Instrument ID: CHX.i Start Date: 04/13/2018 09:59

Analysis Batch Number: 128434 End Date: 04/14/2018 09:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-128434/1		04/13/2018 09:59	1	30087_01.D	RTX-624 0.32(mm)
CCVIS 200-128434/2		04/13/2018 10:48	1	30087_02.D	RTX-624 0.32(mm)
LCS 200-128434/3		04/13/2018 11:38	1	30087_03.D	RTX-624 0.32(mm)
ZZZZZ		04/13/2018 12:28	1		RTX-624 0.32(mm)
MB 200-128434/5		04/13/2018 13:18	1	30087_05.D	RTX-624 0.32(mm)
ZZZZZ		04/13/2018 14:09	2.99		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 15:00	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 15:51	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 16:41	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 17:31	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 18:21	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 19:12	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 20:03	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 20:53	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 21:43	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 22:34	1		RTX-624 0.32(mm)
ZZZZZ		04/13/2018 23:24	1		RTX-624 0.32(mm)
200-42918-12		04/14/2018 00:14	6	30087_18.D	RTX-624 0.32(mm)
ZZZZZ		04/14/2018 09:19	1		RTX-624 0.32(mm)

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 126632 Batch Start Date: 02/21/18 15:47 Batch Analyst: Daigle, Paul A

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialPressure	FinalPressure	InitialAmount	FinalAmount	ATTO15CAL1w 00185	ATTO15CAL2w 00255
BFB 200-126632/1		TO-15		1	1	200 mL	200 mL		
IC 200-126632/5		TO-15		1	1	200 mL	200 mL	35 mL	
IC 200-126632/6		TO-15		1	1	200 mL	200 mL	200 mL	
IC 200-126632/9		TO-15		1	1	200 mL	200 mL		200 mL
IC 200-126632/10		TO-15		1	1	200 mL	200 mL		
ICIS 200-126632/11		TO-15		1	1	200 mL	200 mL		
IC 200-126632/12		TO-15		1	1	200 mL	200 mL		
IC 200-126632/13		TO-15		1	1	200 mL	200 mL		
IC 200-126632/14		TO-15		1	1	200 mL	200 mL		
ICV 200-126632/18		TO-15		1	1	200 mL	200 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15CAL3w 00194	ATTO15CAL4w 00667	ATTO15CAL5w 00073	ATTO15CAL6w 00149	ATTO15CAL7w 00076	ATTO15LCSW 00747
BFB 200-126632/1		TO-15							
IC 200-126632/5		TO-15							
IC 200-126632/6		TO-15							
IC 200-126632/9		TO-15							
IC 200-126632/10		TO-15		200 mL					
ICIS 200-126632/11		TO-15			200 mL				
IC 200-126632/12		TO-15				200 mL			
IC 200-126632/13		TO-15					200 mL		
IC 200-126632/14		TO-15						200 mL	
ICV 200-126632/18		TO-15							200 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 126632 Batch Start Date: 02/21/18 15:47 Batch Analyst: Daigle, Paul A

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15XISs 00002					
BFB 200-126632/1		TO-15		20 mL					
IC 200-126632/5		TO-15		20 mL					
IC 200-126632/6		TO-15		20 mL					
IC 200-126632/9		TO-15		20 mL					
IC 200-126632/10		TO-15		20 mL					
ICIS 200-126632/11		TO-15		20 mL					
IC 200-126632/12		TO-15		20 mL					
IC 200-126632/13		TO-15		20 mL					
IC 200-126632/14		TO-15		20 mL					
ICV 200-126632/18		TO-15		20 mL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 127372 Batch Start Date: 03/14/18 15:16 Batch Analyst: Daigle, Paul A

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialPressure	FinalPressure	InitialAmount	FinalAmount	ATTO15CAL1w 00184	ATTO15CAL2w 00254
BFB 200-127372/1		TO-15		1	1	200 mL	200 mL		
IC 200-127372/3		TO-15		1	1	200 mL	200 mL	35 mL	
IC 200-127372/4		TO-15		1	1	200 mL	200 mL	200 mL	
IC 200-127372/5		TO-15		1	1	200 mL	200 mL		200 mL
IC 200-127372/6		TO-15		1	1	200 mL	200 mL		
ICIS 200-127372/7		TO-15		1	1	200 mL	200 mL		
IC 200-127372/8		TO-15		1	1	200 mL	200 mL		
IC 200-127372/9		TO-15		1	1	200 mL	200 mL		
IC 200-127372/10		TO-15		1	1	200 mL	200 mL		
ICV 200-127372/14		TO-15		1	1	200 mL	200 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15CAL3w 00194	ATTO15CAL4w 00667	ATTO15CAL5w 00073	ATTO15CAL6w 00149	ATTO15CAL7w 00076	ATTO15LCSW 00747
BFB 200-127372/1		TO-15							
IC 200-127372/3		TO-15							
IC 200-127372/4		TO-15							
IC 200-127372/5		TO-15							
IC 200-127372/6		TO-15		200 mL					
ICIS 200-127372/7		TO-15			200 mL				
IC 200-127372/8		TO-15				200 mL			
IC 200-127372/9		TO-15					200 mL		
IC 200-127372/10		TO-15						200 mL	
ICV 200-127372/14		TO-15							200 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15WISs 00004
BFB 200-127372/1		TO-15		20 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 127372 Batch Start Date: 03/14/18 15:16 Batch Analyst: Daigle, Paul A

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15WISs 00004					
IC 200-127372/3		TO-15		20 mL					
IC 200-127372/4		TO-15		20 mL					
IC 200-127372/5		TO-15		20 mL					
IC 200-127372/6		TO-15		20 mL					
ICIS 200-127372/7		TO-15		20 mL					
IC 200-127372/8		TO-15		20 mL					
IC 200-127372/9		TO-15		20 mL					
IC 200-127372/10		TO-15		20 mL					
ICV 200-127372/14		TO-15		20 mL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 128151 Batch Start Date: 04/05/18 10:03 Batch Analyst: Puangmalee, Kesanee 1

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialPressure	FinalPressure	InitialAmount	FinalAmount	ATTO15CAL4w 00668	ATTO15LCSW 00766
BFB 200-128151/1		TO-15		1	1	200 mL	200 mL		
CCVIS 200-128151/3		TO-15		1	1	200 mL	200 mL	200 mL	
LCS 200-128151/4		TO-15		1	1	200 mL	200 mL		200 mL
MB 200-128151/5		TO-15		1	1	200 mL	200 mL		
200-42918-A-11	GC-IA-106 (AS)	TO-15	T	1	1	200 mL	200 mL		
200-42918-A-2	GC-IA-102 (AS)	TO-15	T	1	1	200 mL	200 mL		
200-42918-A-1	GC-AA-01 (AS)	TO-15	T	1	1	200 mL	200 mL		
200-42918-A-4	GC-IA-103 (AS)	TO-15	T	1	1	200 mL	200 mL		
200-42918-A-11	GC-IA-106 (AS)	TO-15	T	1	1	80 mL	200 mL		
200-42918-A-2	GC-IA-102 (AS)	TO-15	T	1	1	100 mL	200 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15XISs 00002					
BFB 200-128151/1		TO-15		20 mL					
CCVIS 200-128151/3		TO-15		20 mL					
LCS 200-128151/4		TO-15		20 mL					
MB 200-128151/5		TO-15		20 mL					
200-42918-A-11	GC-IA-106 (AS)	TO-15	T	20 mL					
200-42918-A-2	GC-IA-102 (AS)	TO-15	T	20 mL					
200-42918-A-1	GC-AA-01 (AS)	TO-15	T	20 mL					
200-42918-A-4	GC-IA-103 (AS)	TO-15	T	20 mL					
200-42918-A-11	GC-IA-106 (AS)	TO-15	T	20 mL					
200-42918-A-2	GC-IA-102 (AS)	TO-15	T	20 mL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 128151 Batch Start Date: 04/05/18 10:03 Batch Analyst: Puangmalee, Kesanee 1

Batch Method: TO-15 Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 128156 Batch Start Date: 04/05/18 11:48 Batch Analyst: Puangmalee, Kesanee 1

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialPressure	FinalPressure	InitialAmount	FinalAmount	ATTO15CAL4w 00667	ATTO15LCSW 00765
BFB 200-128156/1		TO-15		1	1	200 mL	200 mL		
CCVIS 200-128156/2		TO-15		1	1	200 mL	200 mL	200 mL	
LCS 200-128156/3		TO-15		1	1	200 mL	200 mL		200 mL
MB 200-128156/4		TO-15		1	1	200 mL	200 mL		
200-42918-A-7	GC-IA-105 (AS)	TO-15	T	1	1	200 mL	200 mL		
200-42918-A-9	GC-IA-104 (AS)	TO-15	T	1	1	200 mL	200 mL		
200-42918-A-10	GC-IA-108 (AS)	TO-15	T	1	1	200 mL	200 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15WISs 00004					
BFB 200-128156/1		TO-15		20 mL					
CCVIS 200-128156/2		TO-15		20 mL					
LCS 200-128156/3		TO-15		20 mL					
MB 200-128156/4		TO-15		20 mL					
200-42918-A-7	GC-IA-105 (AS)	TO-15	T	20 mL					
200-42918-A-9	GC-IA-104 (AS)	TO-15	T	20 mL					
200-42918-A-10	GC-IA-108 (AS)	TO-15	T	20 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 128215 Batch Start Date: 04/06/18 12:06 Batch Analyst: Bunma, Arthit 1

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialPressure	FinalPressure	InitialAmount	FinalAmount	ATTO15CAL4w 00667	ATTO15LCSW 00765
BFB 200-128215/1		TO-15		1	1	200 mL	200 mL		
CCVIS 200-128215/4		TO-15		1	1	200 mL	200 mL	200 mL	
LCS 200-128215/5		TO-15		1	1	200 mL	200 mL		200 mL
MB 200-128215/6		TO-15		1	1	200 mL	200 mL		
200-42918-A-7	GC-IA-105 (AS)	TO-15	T	1	1	20 mL	200 mL		
200-42918-A-9	GC-IA-104 (AS)	TO-15	T	1	1	20 mL	200 mL		
200-42918-A-10	GC-IA-108 (AS)	TO-15	T	1	1	20 mL	200 mL		
200-42918-A-3	GC-SV-102 (AS)	TO-15	T	1	1	40 mL	200 mL		
200-42918-A-5	GC-SV-103 (AS)	TO-15	T	1	1	40 mL	200 mL		
200-42918-A-8	GC-SV-104 (AS)	TO-15	T	1	1	40 mL	200 mL		
200-42918-A-6	GC-SV-105 (AS)	TO-15	T	1	1	79 mL	200 mL		
200-42918-A-6	GC-SV-105 (AS)	TO-15	T	1	1	20 mL	200 mL		
200-42918-A-12	GC-SV-106 (AS)	TO-15	T	1	1	20 mL	200 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15WISs 00004					
BFB 200-128215/1		TO-15		20 mL					
CCVIS 200-128215/4		TO-15		20 mL					
LCS 200-128215/5		TO-15		20 mL					
MB 200-128215/6		TO-15		20 mL					
200-42918-A-7	GC-IA-105 (AS)	TO-15	T	20 mL					
200-42918-A-9	GC-IA-104 (AS)	TO-15	T	20 mL					
200-42918-A-10	GC-IA-108 (AS)	TO-15	T	20 mL					
200-42918-A-3	GC-SV-102 (AS)	TO-15	T	20 mL					
200-42918-A-5	GC-SV-103 (AS)	TO-15	T	20 mL					
200-42918-A-8	GC-SV-104 (AS)	TO-15	T	20 mL					
200-42918-A-6	GC-SV-105 (AS)	TO-15	T	20 mL					
200-42918-A-6	GC-SV-105 (AS)	TO-15	T	20 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 128215 Batch Start Date: 04/06/18 12:06 Batch Analyst: Bunma, Arthit 1

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15WISs 00004					
200-42918-A-12	GC-SV-106 (AS)	TO-15	T	20 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 128414 Batch Start Date: 04/12/18 15:03 Batch Analyst: Daigle, Paul A

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialPressure	FinalPressure	InitialAmount	FinalAmount	ATTO15CAL1w 00190	ATTO15CAL2w 00263
BFB 200-128414/1		TO-15		1	1	200 mL	200 mL		
IC 200-128414/4		TO-15		1	1	200 mL	200 mL	35 mL	
IC 200-128414/5		TO-15		1	1	200 mL	200 mL	200 mL	
IC 200-128414/6		TO-15		1	1	200 mL	200 mL		200 mL
IC 200-128414/7		TO-15		1	1	200 mL	200 mL		
ICIS 200-128414/8		TO-15		1	1	200 mL	200 mL		
IC 200-128414/9		TO-15		1	1	200 mL	200 mL		
IC 200-128414/10		TO-15		1	1	200 mL	200 mL		
IC 200-128414/11		TO-15		1	1	200 mL	200 mL		
ICV 200-128414/16		TO-15		1	1	200 mL	200 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15CAL3w 00194	ATTO15CAL4w 00676	ATTO15CAL5w 00073	ATTO15CAL6w 00149	ATTO15CAL7w 00076	ATTO15LCSW 00763
BFB 200-128414/1		TO-15							
IC 200-128414/4		TO-15							
IC 200-128414/5		TO-15							
IC 200-128414/6		TO-15							
IC 200-128414/7		TO-15		200 mL					
ICIS 200-128414/8		TO-15			200 mL				
IC 200-128414/9		TO-15				200 mL			
IC 200-128414/10		TO-15					200 mL		
IC 200-128414/11		TO-15						200 mL	
ICV 200-128414/16		TO-15							200 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15XISs 00002

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 128414 Batch Start Date: 04/12/18 15:03 Batch Analyst: Daigle, Paul A

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15XISs 00002					
BFB 200-128414/1		TO-15		20 mL					
IC 200-128414/4		TO-15		20 mL					
IC 200-128414/5		TO-15		20 mL					
IC 200-128414/6		TO-15		20 mL					
IC 200-128414/7		TO-15		20 mL					
ICIS 200-128414/8		TO-15		20 mL					
IC 200-128414/9		TO-15		20 mL					
IC 200-128414/10		TO-15		20 mL					
IC 200-128414/11		TO-15		20 mL					
ICV 200-128414/16		TO-15		20 mL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-42918-1

SDG No.:

Batch Number: 128434 Batch Start Date: 04/13/18 09:59 Batch Analyst: Tober, Elizabeth R

Batch Method: TO-15 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialPressure	FinalPressure	InitialAmount	FinalAmount	ATTO15CAL4w 00676	ATTO15LCSW 00763
BFB 200-128434/1		TO-15		1	1	200 mL	200 mL		
CCVIS 200-128434/2		TO-15		1	1	200 mL	200 mL	200 mL	
LCS 200-128434/3		TO-15		1	1	200 mL	200 mL		200 mL
MB 200-128434/5		TO-15		1	1	200 mL	200 mL		
200-42918-A-12	GC-SV-106 (AS)	TO-15	T	1	1	101 mL	200 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	ATTO15XISs 00002					
BFB 200-128434/1		TO-15		20 mL					
CCVIS 200-128434/2		TO-15		20 mL					
LCS 200-128434/3		TO-15		20 mL					
MB 200-128434/5		TO-15		20 mL					
200-42918-A-12	GC-SV-106 (AS)	TO-15	T	20 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Top Rack	1	25	3/10/2018	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	2866	.04	.04	0	-29.9	G25	3/12/2018	1055	EE	22	G25	3.16.18	11:20	EE	22
2	4327	.04	.04	0	-29.5	G25	3/15/18	15:14	EE	22	G25	3/16/18	15:23	EE	22
3	2540	.04	.04	0	-29.9	G25	3/12/18	1055	EE	22	G25	3/19/18	11:20	EE	22
4	4018		.04	0		G25					G25				
5	4472		.16	.12		G25					G25				
6	2734		.04	0		G25					G25				
7	5068		.04	0		G25					G25				
8	2538		.05	.01		G25					G25				
9	4344		.04	0		G25					G25				
10	3686		.09	.05		G25					G25				
11	6164		.04	0		G25					G25				
12	3507		.07	.03		G25					G25				

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
4327		29535	EKF		XXXX				3/13/18	EKF

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

Form ID: FAI023:11
Revision Date: 11-15-2017

TestAmerica Burlington

200-42567-A-2
4327

Bottle: Summa Canister 6L
Sampled: 3/12/2018 12:00 AM 200-113078

Loc: 200
42567
#2
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Oven 1/2	2195	50	3/10/2018	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	3374	.04	.07	.03	-29.9	G25	3/12/18	14:59	EE	22	G25	3.19.18	15:57	EE	23
2	3460		.04	0		G25					G25				
3	3345		.04	0		G25					G25				
4	2568		.04	0		G25					G25				
5	2885	.04	.04	0	-29.5	G25	3.16.18	15:14	EE	23	G25	3.16.18	15:23	EE	22
6	6168	.04	.04	0	-29.9	G25	3/12/18	14:59	EE	22	G25	3.19.18	15:57	EE	23
7	3267					G25					G25				
8	4822		.04	0		G25					G25				
9	4573		.04	0		G25					G25				
10	5722		.04	0		G25					G25				
11	6268		.04	0		G25					G25				
12	5387		.05	.01		G25					G25				

EE 3.19

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
2885	3/12/18	29535	BR		XXXX				3/13/18	

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

Page 1242 of 1546

04/11/2018

Form ID: FAI023:11
Revision Date: 11-15-2017

TestAmerica Burlington

200-42570-A-5
2885
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 3/12/2013 12:00 AM 200-1130827

Loc: 200
42570
#5
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Bottom Rack	1	20	3/12/2018	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	4791	.03	.04	.01	-29.8	G25	3/12/2018	9:04	EJE	22	G25	3-19-18	14:48	EE	23
2	2754	"	.03	0	"	G25	"	"	"	"	G25	"	"	"	"
3	5420	"	.03	0	"	G25	"	"	"	"	G25	"	"	"	"
4	3212	"	.03	0	"	G25	"	"	"	"	G25	"	"	"	"
5	4352	"	.04	.01	"	G25	"	"	"	"	G25	"	"	"	"
6	5656	.04	.04	0	-29.6	G25	3.15.18	16:14	EE	22	G25	3.16.18	15:25	EE	22
7	5043	.03	.03	0	-29.8	G25	3/12/2018	9:04	EJE	22	G25	3-19-18	14:48	EE	23
8	2601	"	.05	.02	"	G25	"	"	"	"	G25	"	"	"	"
9	5419	"	.17	.14	"	G25	"	"	"	"	G25	"	"	"	"
10	4874	"	.03	0	"	G25	"	"	"	"	G25	"	"	"	"
11	2566	"	.03	0	"	G25	"	"	"	"	G25	"	"	"	"
12	3502	"	.03	0	"	G25	"	"	"	"	G25	"	"	"	"

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
5656	03/14/18	29551	AB		XXXX				03/14/18	PAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

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04/11/2018

Form ID: FAI023:11
Revision Date: 11-15-2017

TestAmerica Burlington

200-42575-A-6
5656
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled 3/12/2018 12:00 AM 200-1131003

Loc: 200
42575
#6
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Bottom Rack	1	20	3/13/2018	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	4557	.04	.04	0	-29.9	G25	3/14/18	822	EE	22	G25	3.20.18	819	EE	22
2	6259	1	.04	0	1	G25	1	1	1	1	G25	1	1	1	1
3	8118	.04	.09	.05	-29.9	G25					G25	3.19.18	10:44	EE	23
4	3513	.04	.05	.01	-29.9	G25	3/14/18	822	EE	22	G25	3.20.18	819	EE	22
5	4546	1	.04	0	1	G25	1	1	1	1	G25	1	1	1	1
6	5056	1	.04	0	1	G25	1	1	1	1	G25	1	1	1	1
7	4927	1	.04	0	1	G25	1	1	1	1	G25	1	1	1	1
8	4387	1	.04	0	1	G25	1	1	1	1	G25	1	1	1	1
9	3253	1	.09	.05	1	G25	1	1	1	1	G25	1	1	1	1
10	2632	1	.05	.01	1	G25	1	1	1	1	G25	1	1	1	1
11	5150	1	.04	0	1	G25	1	1	1	1	G25	1	1	1	1
12	5031	1	.06	.02	1	G25	1	1	1	1	G25	1	1	1	1

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
8118	03/15/18	29574	AB		XXXX				03/15/18	PAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

Form ID: FAI023:11
Revision Date: 11-15-2017

TestAmerica Burlington

04/17/2018

200-42592-A-3
8118
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 3/13/2018 12:00 AM 200-1131373

Loc: 200
42592
#3
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Top Rack	85	20	3/15/2018	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	3207	-.04	-.04	0	-29.9	G25	3/16-18	831	EE	22	G25	3.20.18	9:33	EE	23
2	3011	"	-.14	-.10	"	G25	"	"	"	"	G25	"	"	"	"
3	3074	"	-.10	-.06	"	G25	"	"	"	"	G25	"	"	"	"
4	5051	"	-.04	0	"	G25	"	"	"	"	G25	"	"	"	"
5	5674	-.04	-.04	0	-29.7	G25	3.16.18	11:11	EE	23	G25	3.16.18	1340	EE	23
6	5695	-.04	-.07	-.03	-29.9	G25	3.16.18	831	EE	22	G25	3.20.18	9:33	EE	23
7	4853 48cf	"	-.04	0	"	G25	"	"	"	"	G25	"	"	"	"
8	5665	"	-.04	0	"	G25	"	"	"	"	G25	"	"	"	"
9	5022	"	-.04	0	"	G25	"	"	"	"	G25	"	"	"	"
10	4340	"	-.04	0	"	G25	"	"	"	"	G25	"	"	"	"
11	5085	"	-.04	0	"	G25	"	"	"	"	G25	"	"	"	"
12	4781	"	-.04	0	"	G25	"	"	"	"	G25	"	"	"	"

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
5674	03/19/18	29611	AB		XXXX				03/19/18	RAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

200-42621-A-5
5674
Location: Air-Storage
Bottle: Summa Canister 6L
Sample: 3/15/2018 12:00 AM 200-1132500
Loc: 200
42621
#5
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Bottom Rack	1	20	3/15/2018	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	2699	.04	.04	0	-29.9	G25	3/16/18	0831	EE	22	G25	3/20/18	9:00	EE	23
2	4158	"	.06	.02	"	G25	"	"	"	"	G25	"	"	"	"
3	3482	"	.05	.01	"	G25	"	"	"	"	G25	"	"	"	"
4	3369	"	.04	0	"	G25	"	"	"	"	G25	"	"	"	"
5	4308	"	.04	0	"	G25	"	"	"	"	G25	"	"	"	"
6	4908	.04	.04	0	-29.7	G25	3/20/18	11:11	EE	23	G25	3/21/18	13:40	EE	23
7	3072	.04	.04	0	-29.9	G25	3/16/18	0831	EE	22	G25	3/20/18	9:00	EE	23
8	5692	"	.04	0	"	G25	"	"	"	"	G25	"	"	"	"
9	4325	"	.04	0	"	G25	"	"	"	"	G25	"	"	"	"
10	3341	"	.04	0	"	G25	"	"	"	"	G25	"	"	"	"
11	5072	"	.04	0	"	G25	"	"	"	"	G25	"	"	"	"
12	4086	"	.04	0	"	G25	"	"	"	"	G25	"	"	"	"

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
4908	03/19/18	29611	AB		XXXX				03/19/18	PAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

Form ID: FAI023:11
Revision Date: 11-15-2017

200-42622-A-6
4908
Location: Air-Storage
Bottle: Summa Canister 6L
Sampleo 3/15/2018 12:00 AM 200-1132514

Loc: 200
42622
#6
A

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29535_03.D

Lab ID: LCS 200-127266/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	11.6	116	58-129	
Dichlorodifluoromethane	10.0	9.33	93	68-128	
Freon 22	10.0	11.6	116	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.9	119	78-138	
Chloromethane	10.0	10.6	106	57-126	
n-Butane	10.0	11.2	112	56-130	
Vinyl chloride	10.0	10.3	103	62-125	
1,3-Butadiene	10.0	10.9	109	59-125	
Bromomethane	10.0	10.2	102	68-128	
Chloroethane	10.0	10.5	105	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.1	101	67-127	
Trichlorofluoromethane	10.0	11.6	116	67-127	
Ethanol	15.0	13.9	92	28-168	
Freon TF	10.0	10.7	107	68-128	
1,1-Dichloroethene	10.0	10.4	104	67-127	
Acetone	10.0	13.9	139	64-136	*
Isopropyl alcohol	10.0	11.0	110	55-124	
Carbon disulfide	10.0	12.1	121	81-141	
3-Chloropropene	10.0	12.4	124	53-133	
Methylene Chloride	10.0	11.6	116	62-122	
tert-Butyl alcohol	10.0	11.4	114	64-124	
Methyl tert-butyl ether	10.0	11.7	117	67-127	
trans-1,2-Dichloroethene	10.0	12.3	123	72-132	
n-Hexane	10.0	11.6	116	71-131	
1,1-Dichloroethane	10.0	11.5	116	66-126	
Vinyl acetate	10.0	12.7	127	62-130	
Ethyl acetate	10.0	11.0	110	75-135	
Methyl Ethyl Ketone	10.0	10.8	108	62-122	
cis-1,2-Dichloroethene	10.0	10.1	101	67-127	
Chloroform	10.0	11.2	112	69-129	
Tetrahydrofuran	10.0	12.2	122	61-136	
1,1,1-Trichloroethane	10.0	11.7	117	70-130	
Cyclohexane	10.0	10.7	107	69-129	
Carbon tetrachloride	10.0	12.3	123	62-143	
2,2,4-Trimethylpentane	10.0	11.3	113	67-127	
Benzene	10.0	10.5	105	67-127	
1,2-Dichloroethane	10.0	12.7	127	67-132	
n-Heptane	10.0	11.8	118	62-130	
Trichloroethene	10.0	10.2	102	68-128	
Methyl methacrylate	10.0	11.4	114	70-130	
1,2-Dichloropropane	10.0	10.9	109	67-127	
1,4-Dioxane	10.0	10.2	102	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29535_03.D

Lab ID: LCS 200-127266/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.5	115	69-129	
cis-1,3-Dichloropropene	10.0	11.3	113	70-130	
methyl isobutyl ketone	10.0	12.6	126	62-130	
Toluene	10.0	10.4	104	67-127	
trans-1,3-Dichloropropene	10.0	11.3	113	69-129	
1,1,2-Trichloroethane	10.0	10.6	106	69-129	
Tetrachloroethene	10.0	9.49	95	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.7	127	61-127	
Dibromochloromethane	10.0	10.4	105	66-130	
1,2-Dibromoethane	10.0	9.98	100	70-130	
Chlorobenzene	10.0	9.90	99	68-128	
Ethylbenzene	10.0	10.5	105	68-128	
m,p-Xylene	20.0	20.2	101	68-128	
Xylene, o-	10.0	10.0	100	67-127	
Styrene	10.0	10.2	102	68-128	
Bromoform	10.0	11.4	114	34-170	
Cumene	10.0	9.99	100	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	69-129	
n-Propylbenzene	10.0	10.1	101	67-127	
4-Ethyltoluene	10.0	10.1	101	69-129	
1,3,5-Trimethylbenzene	10.0	10.1	101	65-125	
2-Chlorotoluene	10.0	10.1	101	67-127	
tert-Butylbenzene	10.0	9.81	98	63-125	
1,2,4-Trimethylbenzene	10.0	10.0	100	65-125	
sec-Butylbenzene	10.0	9.78	98	66-126	
4-Isopropyltoluene	10.0	9.68	97	67-129	
1,3-Dichlorobenzene	10.0	9.23	92	67-127	
1,4-Dichlorobenzene	10.0	8.97	90	66-126	
Benzyl chloride	10.0	9.51	95	54-135	
n-Butylbenzene	10.0	9.76	98	67-127	
1,2-Dichlorobenzene	10.0	8.98	90	67-127	
1,2,4-Trichlorobenzene	10.0	7.32	73	59-126	
Hexachlorobutadiene	10.0	8.54	85	62-130	
Naphthalene	10.0	6.91	69	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29535_03.D

Lab ID: LCS 200-127266/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	11.6	116	58-129	
Dichlorodifluoromethane	10.0	9.33	93	68-128	
Freon 22	10.0	11.6	116	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.9	119	78-138	
Chloromethane	10.0	10.6	106	57-126	
n-Butane	10.0	11.2	112	56-130	
Vinyl chloride	10.0	10.3	103	62-125	
1,3-Butadiene	10.0	10.9	109	59-125	
Bromomethane	10.0	10.2	102	68-128	
Chloroethane	10.0	10.5	105	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.1	101	67-127	
Trichlorofluoromethane	10.0	11.6	116	67-127	
Ethanol	15.0	13.9	92	28-168	
Freon TF	10.0	10.7	107	68-128	
1,1-Dichloroethene	10.0	10.4	104	67-127	
Acetone	10.0	13.9	139	64-136	*
Isopropyl alcohol	10.0	11.0	110	55-124	
Carbon disulfide	10.0	12.1	121	81-141	
3-Chloropropene	10.0	12.4	124	53-133	
Methylene Chloride	10.0	11.6	116	62-122	
tert-Butyl alcohol	10.0	11.4	114	64-124	
Methyl tert-butyl ether	10.0	11.7	117	67-127	
trans-1,2-Dichloroethene	10.0	12.3	123	72-132	
n-Hexane	10.0	11.6	116	71-131	
1,1-Dichloroethane	10.0	11.5	116	66-126	
Vinyl acetate	10.0	12.7	127	62-130	
Ethyl acetate	10.0	11.0	110	75-135	
Methyl Ethyl Ketone	10.0	10.8	108	62-122	
cis-1,2-Dichloroethene	10.0	10.1	101	67-127	
Chloroform	10.0	11.2	112	69-129	
Tetrahydrofuran	10.0	12.2	122	61-136	
1,1,1-Trichloroethane	10.0	11.7	117	70-130	
Cyclohexane	10.0	10.7	107	69-129	
Carbon tetrachloride	10.0	12.3	123	62-143	
2,2,4-Trimethylpentane	10.0	11.3	113	67-127	
Benzene	10.0	10.5	105	67-127	
1,2-Dichloroethane	10.0	12.7	127	67-132	
n-Heptane	10.0	11.8	118	62-130	
Trichloroethene	10.0	10.2	102	68-128	
Methyl methacrylate	10.0	11.4	114	70-130	
1,2-Dichloropropane	10.0	10.9	109	67-127	
1,4-Dioxane	10.0	10.2	102	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29535_03.D

Lab ID: LCS 200-127266/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.5	115	69-129	
cis-1,3-Dichloropropene	10.0	11.3	113	70-130	
methyl isobutyl ketone	10.0	12.6	126	62-130	
Toluene	10.0	10.4	104	67-127	
trans-1,3-Dichloropropene	10.0	11.3	113	69-129	
1,1,2-Trichloroethane	10.0	10.6	106	69-129	
Tetrachloroethene	10.0	9.49	95	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.7	127	61-127	
Dibromochloromethane	10.0	10.4	105	66-130	
1,2-Dibromoethane	10.0	9.98	100	70-130	
Chlorobenzene	10.0	9.90	99	68-128	
Ethylbenzene	10.0	10.5	105	68-128	
m,p-Xylene	20.0	20.2	101	68-128	
Xylene, o-	10.0	10.0	100	67-127	
Styrene	10.0	10.2	102	68-128	
Bromoform	10.0	11.4	114	34-170	
Cumene	10.0	9.99	100	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	69-129	
n-Propylbenzene	10.0	10.1	101	67-127	
4-Ethyltoluene	10.0	10.1	101	69-129	
1,3,5-Trimethylbenzene	10.0	10.1	101	65-125	
2-Chlorotoluene	10.0	10.1	101	67-127	
tert-Butylbenzene	10.0	9.81	98	63-125	
1,2,4-Trimethylbenzene	10.0	10.0	100	65-125	
sec-Butylbenzene	10.0	9.78	98	66-126	
4-Isopropyltoluene	10.0	9.68	97	67-129	
1,3-Dichlorobenzene	10.0	9.23	92	67-127	
1,4-Dichlorobenzene	10.0	8.97	90	66-126	
Benzyl chloride	10.0	9.51	95	54-135	
n-Butylbenzene	10.0	9.76	98	67-127	
1,2-Dichlorobenzene	10.0	8.98	90	67-127	
1,2,4-Trichlorobenzene	10.0	7.32	73	59-126	
Hexachlorobutadiene	10.0	8.54	85	62-130	
Naphthalene	10.0	6.91	69	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29551_03.D

Lab ID: LCS 200-127298/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	11.8	118	58-129	
Dichlorodifluoromethane	10.0	8.97	90	68-128	
Freon 22	10.0	12.0	120	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.9	119	78-138	
Chloromethane	10.0	10.7	107	57-126	
n-Butane	10.0	11.4	114	56-130	
Vinyl chloride	10.0	10.6	106	62-125	
1,3-Butadiene	10.0	11.1	111	59-125	
Bromomethane	10.0	10.4	104	68-128	
Chloroethane	10.0	10.8	108	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.4	104	67-127	
Trichlorofluoromethane	10.0	11.9	119	67-127	
Ethanol	15.0	13.7	91	28-168	
Freon TF	10.0	10.8	108	68-128	
1,1-Dichloroethene	10.0	10.7	107	67-127	
Acetone	10.0	14.2	142	64-136	*
Isopropyl alcohol	10.0	11.0	110	55-124	
Carbon disulfide	10.0	12.2	122	81-141	
3-Chloropropene	10.0	12.5	126	53-133	
Methylene Chloride	10.0	11.7	117	62-122	
tert-Butyl alcohol	10.0	11.4	114	64-124	
Methyl tert-butyl ether	10.0	11.8	118	67-127	
trans-1,2-Dichloroethene	10.0	12.3	123	72-132	
n-Hexane	10.0	11.7	117	71-131	
1,1-Dichloroethane	10.0	11.6	116	66-126	
Vinyl acetate	10.0	12.7	127	62-130	
Ethyl acetate	10.0	11.0	110	75-135	
Methyl Ethyl Ketone	10.0	10.9	109	62-122	
cis-1,2-Dichloroethene	10.0	10.2	102	67-127	
Chloroform	10.0	11.2	112	69-129	
Tetrahydrofuran	10.0	12.1	122	61-136	
1,1,1-Trichloroethane	10.0	11.7	117	70-130	
Cyclohexane	10.0	10.6	106	69-129	
Carbon tetrachloride	10.0	12.3	123	62-143	
2,2,4-Trimethylpentane	10.0	11.1	111	67-127	
Benzene	10.0	10.5	105	67-127	
1,2-Dichloroethane	10.0	12.8	128	67-132	
n-Heptane	10.0	11.7	117	62-130	
Trichloroethene	10.0	10.2	102	68-128	
Methyl methacrylate	10.0	11.3	113	70-130	
1,2-Dichloropropane	10.0	10.9	109	67-127	
1,4-Dioxane	10.0	10.1	101	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29551_03.D

Lab ID: LCS 200-127298/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.5	115	69-129	
cis-1,3-Dichloropropene	10.0	11.3	113	70-130	
methyl isobutyl ketone	10.0	12.6	126	62-130	
Toluene	10.0	10.5	105	67-127	
trans-1,3-Dichloropropene	10.0	11.3	113	69-129	
1,1,2-Trichloroethane	10.0	10.6	106	69-129	
Tetrachloroethene	10.0	9.55	95	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.8	128	61-127	*
Dibromochloromethane	10.0	10.6	106	66-130	
1,2-Dibromoethane	10.0	10.1	101	70-130	
Chlorobenzene	10.0	10.1	101	68-128	
Ethylbenzene	10.0	10.6	106	68-128	
m,p-Xylene	20.0	20.5	103	68-128	
Xylene, o-	10.0	10.1	101	67-127	
Styrene	10.0	10.4	104	68-128	
Bromoform	10.0	11.6	116	34-170	
Cumene	10.0	10.3	103	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	69-129	
n-Propylbenzene	10.0	10.2	102	67-127	
4-Ethyltoluene	10.0	10.2	102	69-129	
1,3,5-Trimethylbenzene	10.0	10.3	103	65-125	
2-Chlorotoluene	10.0	10.4	104	67-127	
tert-Butylbenzene	10.0	10.1	101	63-125	
1,2,4-Trimethylbenzene	10.0	10.3	103	65-125	
sec-Butylbenzene	10.0	10.0	100	66-126	
4-Isopropyltoluene	10.0	9.93	99	67-129	
1,3-Dichlorobenzene	10.0	9.42	94	67-127	
1,4-Dichlorobenzene	10.0	9.22	92	66-126	
Benzyl chloride	10.0	9.78	98	54-135	
n-Butylbenzene	10.0	10.1	101	67-127	
1,2-Dichlorobenzene	10.0	9.26	93	67-127	
1,2,4-Trichlorobenzene	10.0	7.70	77	59-126	
Hexachlorobutadiene	10.0	8.92	89	62-130	
Naphthalene	10.0	7.22	72	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29574-04.D

Lab ID: LCS 200-127358/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	12.0	120	58-129	
Dichlorodifluoromethane	10.0	10.5	105	68-128	
Freon 22	10.0	11.3	113	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.7	117	78-138	
Chloromethane	10.0	10.9	109	57-126	
n-Butane	10.0	11.2	112	56-130	
Vinyl chloride	10.0	10.7	107	62-125	
1,3-Butadiene	10.0	10.8	108	59-125	
Bromomethane	10.0	10.5	105	68-128	
Chloroethane	10.0	11.3	113	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.4	104	67-127	
Trichlorofluoromethane	10.0	10.2	102	67-127	
Ethanol	15.0	21.4	142	28-168	
Freon TF	10.0	10.2	102	68-128	
1,1-Dichloroethene	10.0	10.0	100	67-127	
Acetone	10.0	12.3	123	64-136	
Isopropyl alcohol	10.0	10.9	109	55-124	
Carbon disulfide	10.0	11.7	117	81-141	
3-Chloropropene	10.0	11.4	114	53-133	
Methylene Chloride	10.0	11.4	114	62-122	
tert-Butyl alcohol	10.0	10.7	108	64-124	
Methyl tert-butyl ether	10.0	10.3	103	67-127	
trans-1,2-Dichloroethene	10.0	11.3	113	72-132	
n-Hexane	10.0	10.8	109	71-131	
1,1-Dichloroethane	10.0	10.5	105	66-126	
Vinyl acetate	10.0	12.0	120	62-130	
Ethyl acetate	10.0	12.7	127	75-135	
Methyl Ethyl Ketone	10.0	11.3	113	62-122	
cis-1,2-Dichloroethene	10.0	9.91	99	67-127	
Chloroform	10.0	10.3	103	69-129	
Tetrahydrofuran	10.0	13.0	130	61-136	
1,1,1-Trichloroethane	10.0	11.1	111	70-130	
Cyclohexane	10.0	11.2	112	69-129	
Carbon tetrachloride	10.0	10.7	107	62-143	
2,2,4-Trimethylpentane	10.0	10.9	109	67-127	
Benzene	10.0	10.4	104	67-127	
1,2-Dichloroethane	10.0	11.8	118	67-132	
n-Heptane	10.0	11.8	118	62-130	
Trichloroethene	10.0	10.8	108	68-128	
Methyl methacrylate	10.0	11.8	118	70-130	
1,2-Dichloropropane	10.0	11.6	116	67-127	
1,4-Dioxane	10.0	11.6	117	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29574-04.D

Lab ID: LCS 200-127358/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.0	110	69-129	
cis-1,3-Dichloropropene	10.0	11.3	113	70-130	
methyl isobutyl ketone	10.0	11.9	119	62-130	
Toluene	10.0	10.5	105	67-127	
trans-1,3-Dichloropropene	10.0	11.3	113	69-129	
1,1,2-Trichloroethane	10.0	11.5	115	69-129	
Tetrachloroethene	10.0	10.0	100	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	11.8	118	61-127	
Dibromochloromethane	10.0	10.2	102	66-130	
1,2-Dibromoethane	10.0	10.7	107	70-130	
Chlorobenzene	10.0	10.1	101	68-128	
Ethylbenzene	10.0	9.99	100	68-128	
m,p-Xylene	20.0	19.9	99	68-128	
Xylene, o-	10.0	10.0	100	67-127	
Styrene	10.0	10.2	102	68-128	
Bromoform	10.0	10.4	104	34-170	
Cumene	10.0	9.67	97	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.8	108	69-129	
n-Propylbenzene	10.0	10.0	100	67-127	
4-Ethyltoluene	10.0	10.0	100	69-129	
1,3,5-Trimethylbenzene	10.0	9.78	98	65-125	
2-Chlorotoluene	10.0	10.1	101	67-127	
tert-Butylbenzene	10.0	9.68	97	63-125	
1,2,4-Trimethylbenzene	10.0	9.73	97	65-125	
sec-Butylbenzene	10.0	9.54	95	66-126	
4-Isopropyltoluene	10.0	9.11	91	67-129	
1,3-Dichlorobenzene	10.0	9.88	99	67-127	
1,4-Dichlorobenzene	10.0	9.81	98	66-126	
Benzyl chloride	10.0	9.65	96	54-135	
n-Butylbenzene	10.0	9.53	95	67-127	
1,2-Dichlorobenzene	10.0	9.74	97	67-127	
1,2,4-Trichlorobenzene	10.0	9.98	100	59-126	
Hexachlorobutadiene	10.0	9.91	99	62-130	
Naphthalene	10.0	8.97	90	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29611_03.D

Lab ID: LCS 200-127437/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	11.4	114	58-129	
Dichlorodifluoromethane	10.0	12.0	120	68-128	
Freon 22	10.0	11.4	114	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.6	116	78-138	
Chloromethane	10.0	10.5	105	57-126	
n-Butane	10.0	11.0	110	56-130	
Vinyl chloride	10.0	10.1	101	62-125	
1,3-Butadiene	10.0	10.7	107	59-125	
Bromomethane	10.0	9.97	100	68-128	
Chloroethane	10.0	10.3	103	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.75	98	67-127	
Trichlorofluoromethane	10.0	11.3	113	67-127	
Ethanol	15.0	17.9	119	28-168	
Freon TF	10.0	10.3	103	68-128	
1,1-Dichloroethene	10.0	10.1	101	67-127	
Acetone	10.0	12.6	126	64-136	
Isopropyl alcohol	10.0	10.1	101	55-124	
Carbon disulfide	10.0	11.8	118	81-141	
3-Chloropropene	10.0	11.3	113	53-133	
Methylene Chloride	10.0	11.5	115	62-122	
tert-Butyl alcohol	10.0	10.6	107	64-124	
Methyl tert-butyl ether	10.0	11.4	114	67-127	
trans-1,2-Dichloroethene	10.0	11.9	119	72-132	
n-Hexane	10.0	11.2	113	71-131	
1,1-Dichloroethane	10.0	11.2	112	66-126	
Vinyl acetate	10.0	12.6	126	62-130	
Ethyl acetate	10.0	10.3	103	75-135	
Methyl Ethyl Ketone	10.0	10.5	106	62-122	
cis-1,2-Dichloroethene	10.0	9.76	98	67-127	
Chloroform	10.0	10.8	108	69-129	
Tetrahydrofuran	10.0	11.8	118	61-136	
1,1,1-Trichloroethane	10.0	11.0	110	70-130	
Cyclohexane	10.0	10.0	100	69-129	
Carbon tetrachloride	10.0	11.6	116	62-143	
2,2,4-Trimethylpentane	10.0	10.7	107	67-127	
Benzene	10.0	9.93	99	67-127	
1,2-Dichloroethane	10.0	12.2	122	67-132	
n-Heptane	10.0	11.4	114	62-130	
Trichloroethene	10.0	9.75	97	68-128	
Methyl methacrylate	10.0	10.9	109	70-130	
1,2-Dichloropropane	10.0	10.4	104	67-127	
1,4-Dioxane	10.0	8.99	90	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29611_03.D

Lab ID: LCS 200-127437/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.8	108	69-129	
cis-1,3-Dichloropropene	10.0	10.9	109	70-130	
methyl isobutyl ketone	10.0	12.1	121	62-130	
Toluene	10.0	9.82	98	67-127	
trans-1,3-Dichloropropene	10.0	10.5	105	69-129	
1,1,2-Trichloroethane	10.0	10.1	101	69-129	
Tetrachloroethene	10.0	8.83	88	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.0	120	61-127	
Dibromochloromethane	10.0	9.24	92	66-130	
1,2-Dibromoethane	10.0	9.52	95	70-130	
Chlorobenzene	10.0	9.40	94	68-128	
Ethylbenzene	10.0	9.99	100	68-128	
m,p-Xylene	20.0	19.2	96	68-128	
Xylene, o-	10.0	9.41	94	67-127	
Styrene	10.0	9.68	97	68-128	
Bromoform	10.0	8.24	82	34-170	
Cumene	10.0	9.53	95	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.75	97	69-129	
n-Propylbenzene	10.0	9.68	97	67-127	
4-Ethyltoluene	10.0	9.67	97	69-129	
1,3,5-Trimethylbenzene	10.0	9.63	96	65-125	
2-Chlorotoluene	10.0	9.77	98	67-127	
tert-Butylbenzene	10.0	9.30	93	63-125	
1,2,4-Trimethylbenzene	10.0	9.58	96	65-125	
sec-Butylbenzene	10.0	9.29	93	66-126	
4-Isopropyltoluene	10.0	9.23	92	67-129	
1,3-Dichlorobenzene	10.0	8.70	87	67-127	
1,4-Dichlorobenzene	10.0	8.53	85	66-126	
Benzyl chloride	10.0	9.27	93	54-135	
n-Butylbenzene	10.0	9.54	95	67-127	
1,2-Dichlorobenzene	10.0	8.56	86	67-127	
1,2,4-Trichlorobenzene	10.0	7.44	74	59-126	
Hexachlorobutadiene	10.0	8.33	83	62-130	
Naphthalene	10.0	6.74	67	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29611_03.D

Lab ID: LCS 200-127437/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	11.4	114	58-129	
Dichlorodifluoromethane	10.0	12.0	120	68-128	
Freon 22	10.0	11.4	114	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.6	116	78-138	
Chloromethane	10.0	10.5	105	57-126	
n-Butane	10.0	11.0	110	56-130	
Vinyl chloride	10.0	10.1	101	62-125	
1,3-Butadiene	10.0	10.7	107	59-125	
Bromomethane	10.0	9.97	100	68-128	
Chloroethane	10.0	10.3	103	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.75	98	67-127	
Trichlorofluoromethane	10.0	11.3	113	67-127	
Ethanol	15.0	17.9	119	28-168	
Freon TF	10.0	10.3	103	68-128	
1,1-Dichloroethene	10.0	10.1	101	67-127	
Acetone	10.0	12.6	126	64-136	
Isopropyl alcohol	10.0	10.1	101	55-124	
Carbon disulfide	10.0	11.8	118	81-141	
3-Chloropropene	10.0	11.3	113	53-133	
Methylene Chloride	10.0	11.5	115	62-122	
tert-Butyl alcohol	10.0	10.6	107	64-124	
Methyl tert-butyl ether	10.0	11.4	114	67-127	
trans-1,2-Dichloroethene	10.0	11.9	119	72-132	
n-Hexane	10.0	11.2	113	71-131	
1,1-Dichloroethane	10.0	11.2	112	66-126	
Vinyl acetate	10.0	12.6	126	62-130	
Ethyl acetate	10.0	10.3	103	75-135	
Methyl Ethyl Ketone	10.0	10.5	106	62-122	
cis-1,2-Dichloroethene	10.0	9.76	98	67-127	
Chloroform	10.0	10.8	108	69-129	
Tetrahydrofuran	10.0	11.8	118	61-136	
1,1,1-Trichloroethane	10.0	11.0	110	70-130	
Cyclohexane	10.0	10.0	100	69-129	
Carbon tetrachloride	10.0	11.6	116	62-143	
2,2,4-Trimethylpentane	10.0	10.7	107	67-127	
Benzene	10.0	9.93	99	67-127	
1,2-Dichloroethane	10.0	12.2	122	67-132	
n-Heptane	10.0	11.4	114	62-130	
Trichloroethene	10.0	9.75	97	68-128	
Methyl methacrylate	10.0	10.9	109	70-130	
1,2-Dichloropropane	10.0	10.4	104	67-127	
1,4-Dioxane	10.0	8.99	90	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 29611_03.D

Lab ID: LCS 200-127437/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.8	108	69-129	
cis-1,3-Dichloropropene	10.0	10.9	109	70-130	
methyl isobutyl ketone	10.0	12.1	121	62-130	
Toluene	10.0	9.82	98	67-127	
trans-1,3-Dichloropropene	10.0	10.5	105	69-129	
1,1,2-Trichloroethane	10.0	10.1	101	69-129	
Tetrachloroethene	10.0	8.83	88	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.0	120	61-127	
Dibromochloromethane	10.0	9.24	92	66-130	
1,2-Dibromoethane	10.0	9.52	95	70-130	
Chlorobenzene	10.0	9.40	94	68-128	
Ethylbenzene	10.0	9.99	100	68-128	
m,p-Xylene	20.0	19.2	96	68-128	
Xylene, o-	10.0	9.41	94	67-127	
Styrene	10.0	9.68	97	68-128	
Bromoform	10.0	8.24	82	34-170	
Cumene	10.0	9.53	95	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.75	97	69-129	
n-Propylbenzene	10.0	9.68	97	67-127	
4-Ethyltoluene	10.0	9.67	97	69-129	
1,3,5-Trimethylbenzene	10.0	9.63	96	65-125	
2-Chlorotoluene	10.0	9.77	98	67-127	
tert-Butylbenzene	10.0	9.30	93	63-125	
1,2,4-Trimethylbenzene	10.0	9.58	96	65-125	
sec-Butylbenzene	10.0	9.29	93	66-126	
4-Isopropyltoluene	10.0	9.23	92	67-129	
1,3-Dichlorobenzene	10.0	8.70	87	67-127	
1,4-Dichlorobenzene	10.0	8.53	85	66-126	
Benzyl chloride	10.0	9.27	93	54-135	
n-Butylbenzene	10.0	9.54	95	67-127	
1,2-Dichlorobenzene	10.0	8.56	86	67-127	
1,2,4-Trichlorobenzene	10.0	7.44	74	59-126	
Hexachlorobutadiene	10.0	8.33	83	62-130	
Naphthalene	10.0	6.74	67	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab File ID: 29535_04.D Lab Sample ID: MB 200-127266/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 03/12/2018 12:37

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-127266/3	29535_03.D	03/12/2018 11:44
4327	200-42567-2	29535_13.D	03/12/2018 21:10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42567-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-127266/4

Matrix: Air | Lab File ID: 29535_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 03/12/2018 12:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127266 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127266/4

Matrix: Air Lab File ID: 29535_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/12/2018 12:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127266/4

Matrix: Air Lab File ID: 29535_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/12/2018 12:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 12-Mar-2018 12:37:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029535-004
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Mar-2018 11:23:51 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 13-Mar-2018 11:23:51

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1	Propene	41		2.967					ND	
2	Dichlorodifluoromethane	85		3.037					ND	
3	Chlorodifluoromethane	51		3.085					ND	
4	1,2-Dichloro-1,1,2,2-tetra	85		3.298					ND	
5	Chloromethane	50		3.426					ND	
6	Butane	43		3.629					ND	
7	Vinyl chloride	62		3.666					ND	
8	Butadiene	54		3.747					ND	
10	Bromomethane	94		4.414					ND	
11	Chloroethane	64		4.659					ND	
12	2-Methylbutane	43		4.739					ND	
13	Vinyl bromide	106		5.043					ND	
14	Trichlorofluoromethane	101		5.155					ND	
16	Pentane	43		5.305					ND	
17	Ethanol	45		5.737					ND	U
18	Ethyl ether	59		5.823					ND	
19	Acrolein	56		6.196					ND	
20	1,1,2-Trichloro-1,2,2-trif	101		6.250					ND	
21	1,1-Dichloroethene	96		6.282					ND	
22	Acetone	43		6.506					ND	
23	Carbon disulfide	76		6.655					ND	
24	Isopropyl alcohol	45		6.826					ND	
25	3-Chloro-1-propene	41		7.071					ND	
26	Acetonitrile	41		7.178					ND	
T 15	Methyl Acetate TIC	43		7.237					ND	
27	Methylene Chloride	49		7.370					ND	
28	2-Methyl-2-propanol	59		7.600					ND	
29	Methyl tert-butyl ether	73		7.781					ND	
31	trans-1,2-Dichloroethene	61		7.819					ND	
32	Acrylonitrile	53		7.947					ND	
33	Hexane	57		8.224					ND	
34	1,1-Dichloroethane	63		8.689					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.774				ND		
37 cis-1,2-Dichloroethene	96		9.809				ND		
38 2-Butanone (MEK)	72		9.847				ND		
39 Ethyl acetate	88		9.916				ND		
S 30 1,2-Dichloroethene, Total	61		10.200				ND		
41 Tetrahydrofuran	42		10.274				ND		
* 40 Chlorobromomethane	128	10.268	10.274	-0.006	89	204420	10.0	10.0	
42 Chloroform	83		10.418				ND		
43 Cyclohexane	84		10.663				ND		
44 1,1,1-Trichloroethane	97		10.679				ND		
45 Carbon tetrachloride	117		10.941				ND		
46 Isooctane	57		11.394				ND		
47 Benzene	78		11.400				ND		
48 1,2-Dichloroethane	62		11.581				ND		
49 n-Heptane	43		11.800				ND		
* 50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1110626	10.0	10.0	
52 n-Butanol	56		12.670				ND		
53 Trichloroethene	95		12.729				ND		
A 51 GRO	1	12.995	(4.729-21.262)		0	4658181		0	
T 36 Methyl cyclohexane TIC	55		13.179				ND		
54 1,2-Dichloropropane	63		13.278				ND		
55 Methyl methacrylate	69		13.465				ND		
56 1,4-Dioxane	88		13.508				ND		
57 Dibromomethane	174		13.540				ND		
58 Dichlorobromomethane	83		13.855				ND		
A 59 TVOC as Toluene	1	14.685	(2.957-26.412)		0	4799173		0	
60 cis-1,3-Dichloropropene	75		14.799				ND		
61 4-Methyl-2-pentanone (MIBK	43		15.082				ND		
65 Toluene	92		15.397				ND		
64 n-Octane	43		15.488				ND		
66 trans-1,3-Dichloropropene	75		16.000				ND		
67 1,1,2-Trichloroethane	83		16.368				ND		
68 Tetrachloroethene	166		16.491				ND		
69 2-Hexanone	43		16.817				ND		
71 Chlorodibromomethane	129		17.137				ND		
72 Ethylene Dibromide	107		17.393				ND		
* 74 Chlorobenzene-d5	117	18.300	18.300	0.000	97	1121310	10.0	10.0	
75 Chlorobenzene	112		18.359				ND		
76 Ethylbenzene	91		18.514				ND		U
77 n-Nonane	57		18.674				ND		
78 m-Xylene & p-Xylene	106		18.770				ND		
T 70 1,2-Dibromo-3-Chloropropan	75		18.823				ND		
79 o-Xylene	106		19.602				ND		
80 Styrene	104		19.656				ND		
81 Bromoform	173		20.088				ND		
S 73 Xylenes, Total	106		20.100				ND		
82 Isopropylbenzene	105		20.312				ND		
84 1,1,2,2-Tetrachloroethane	83		20.979				ND		
85 N-Propylbenzene	91		21.049				ND		
86 1,2,3-Trichloropropane	75		21.070				ND		
88 4-Ethyltoluene	105		21.246				ND		
89 2-Chlorotoluene	91		21.246				ND		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57		21.252					ND	
90 1,3,5-Trimethylbenzene	105		21.353					ND	
91 Alpha Methyl Styrene	118		21.727					ND	
92 tert-Butylbenzene	119		21.849					ND	
93 1,2,4-Trimethylbenzene	105		21.945					ND	
94 sec-Butylbenzene	105		22.180					ND	
95 4-Isopropyltoluene	119		22.383					ND	
96 1,3-Dichlorobenzene	146		22.410					ND	
97 1,4-Dichlorobenzene	146		22.548					ND	
98 Benzyl chloride	91		22.735					ND	
100 n-Butylbenzene	91		22.949					ND	
99 Undecane	57		22.986					ND	
101 1,2-Dichlorobenzene	146		23.066					ND	
102 Dodecane	57		24.528					ND	
103 1,2,4-Trichlorobenzene	180		25.489					ND	
104 Hexachlorobutadiene	225		25.676					ND	
105 Naphthalene	128		25.943					ND	
106 1,2,3-Trichlorobenzene	180		26.402					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

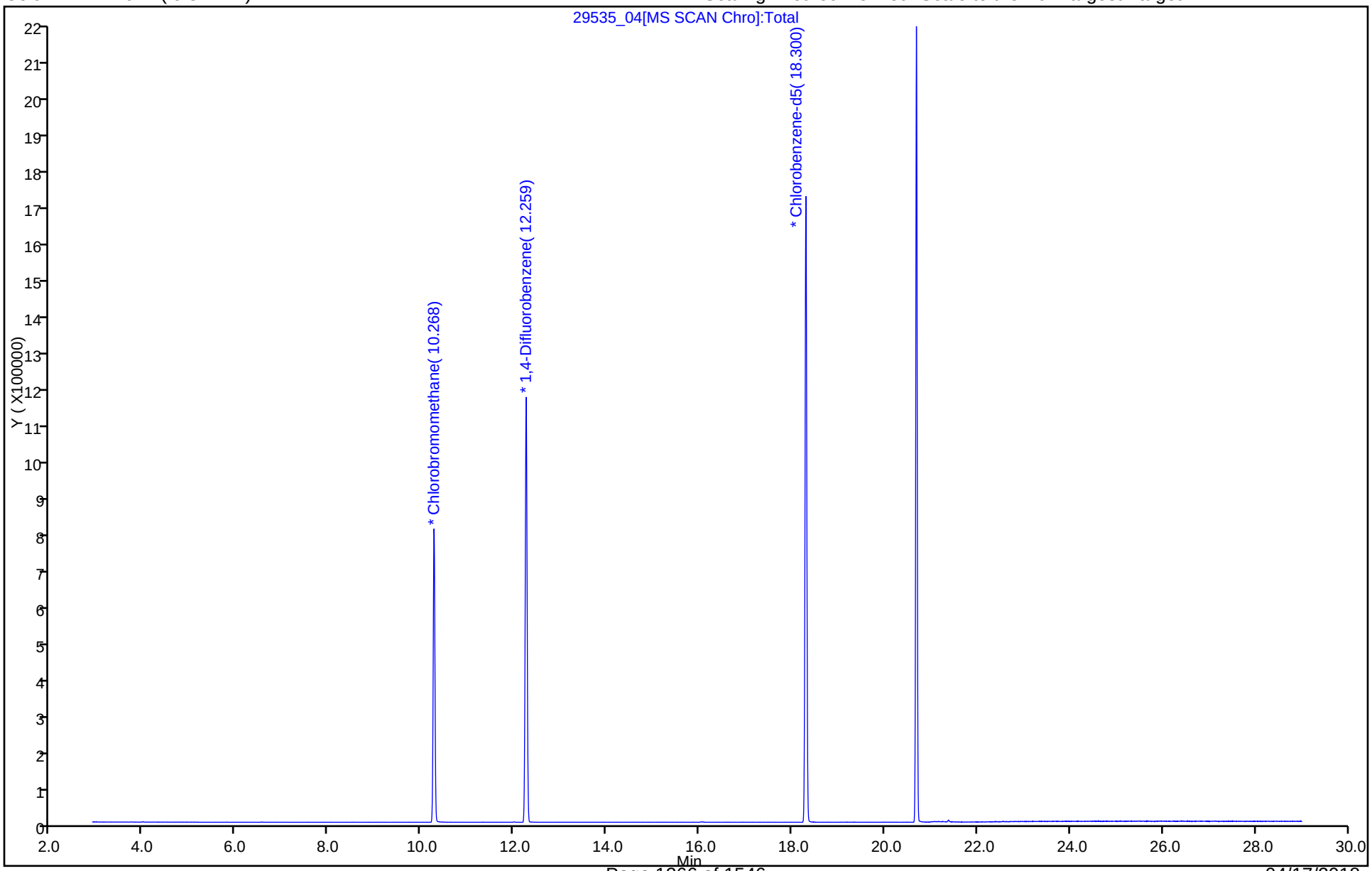
Report Date: 13-Mar-2018 11:23:52 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_04.D

Injection Date:	12-Mar-2018 12:37:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



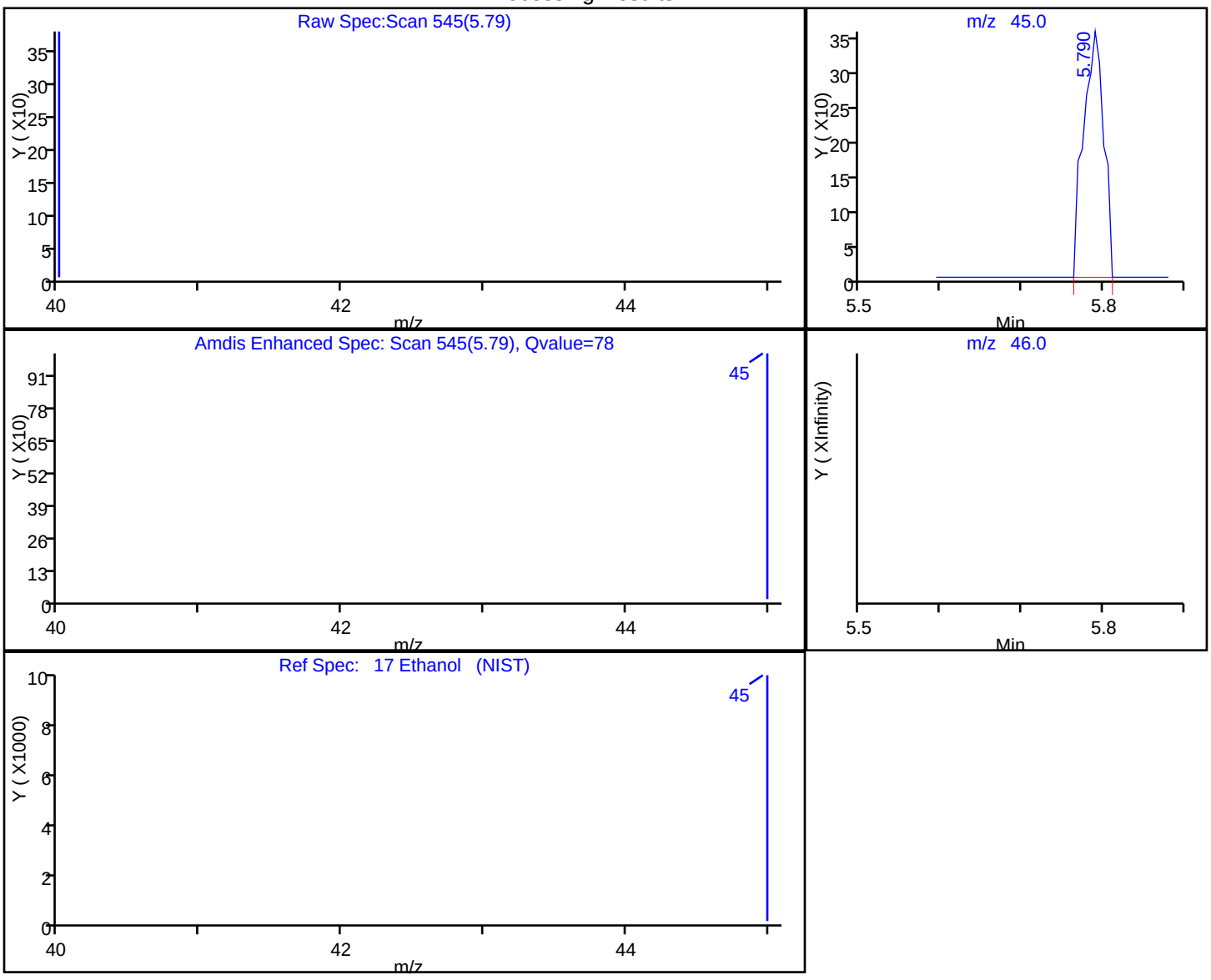
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_04.D				
Injection Date:	12-Mar-2018 12:37:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Processing Results



RT	Mass	Response	Amount
5.79	45.00	614	0.080647
5.74	46.00	0	

Reviewer: puangmaleek, 13-Mar-2018 11:23:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

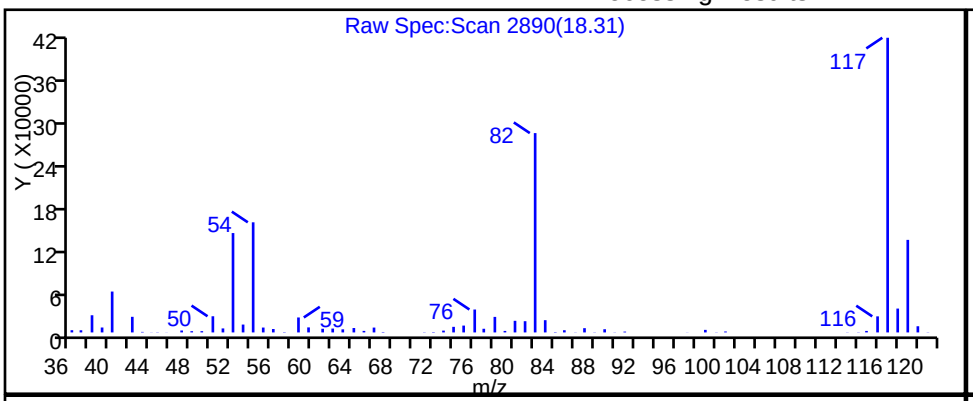
User Disabled Compound Report

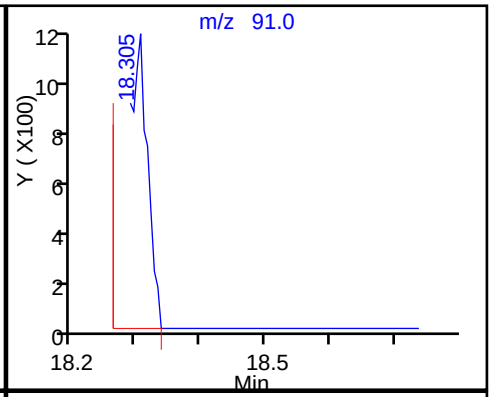
TestAmerica Burlington

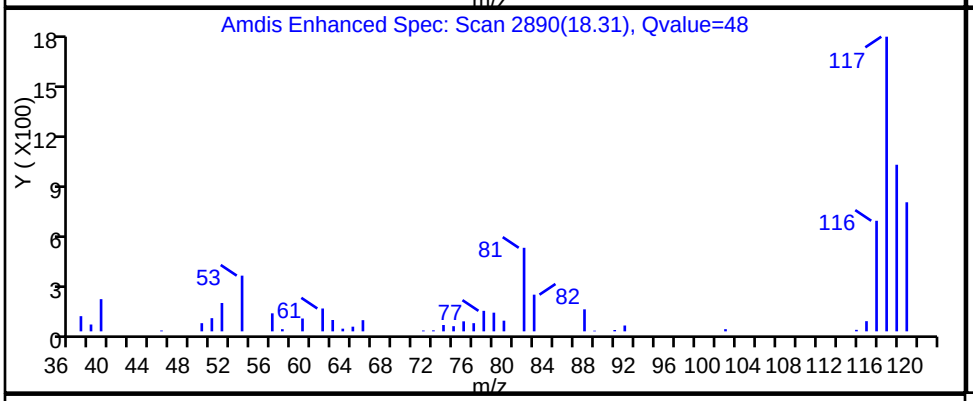
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_04.D				
Injection Date:	12-Mar-2018 12:37:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

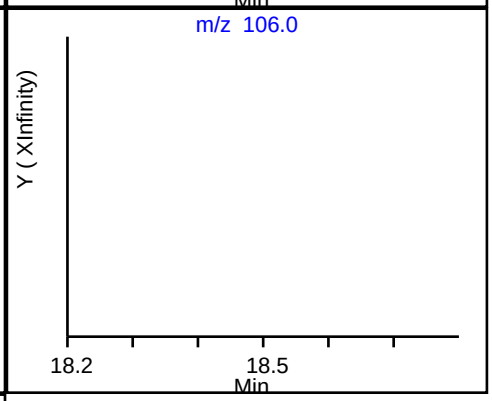
76 Ethylbenzene, CAS: 100-41-4

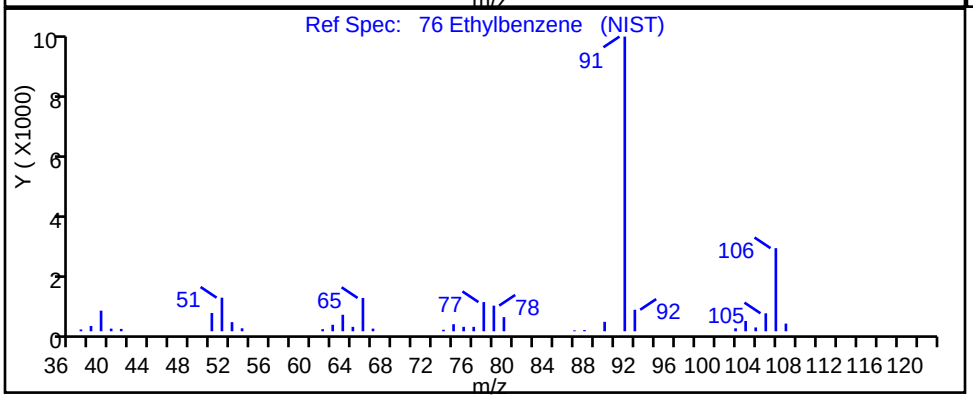
Processing Results











RT	Mass	Response	Amount
18.31	91.00	2636	0.030498
18.51	106.00	0	

Reviewer: puangmaleek, 13-Mar-2018 11:23:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab File ID: 29535_04.D Lab Sample ID: MB 200-127266/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 03/12/2018 12:37

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-127266/3	29535_03.D	03/12/2018 11:44
2885	200-42570-5	29535_14.D	03/12/2018 22:08

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42570-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-127266/4

Matrix: Air | Lab File ID: 29535_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 03/12/2018 12:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127266 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127266/4

Matrix: Air Lab File ID: 29535_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/12/2018 12:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127266/4

Matrix: Air Lab File ID: 29535_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/12/2018 12:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 12-Mar-2018 12:37:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029535-004
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Mar-2018 11:23:51 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 13-Mar-2018 11:23:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967					ND	
2 Dichlorodifluoromethane	85		3.037					ND	
3 Chlorodifluoromethane	51		3.085					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.298					ND	
5 Chloromethane	50		3.426					ND	
6 Butane	43		3.629					ND	
7 Vinyl chloride	62		3.666					ND	
8 Butadiene	54		3.747					ND	
10 Bromomethane	94		4.414					ND	
11 Chloroethane	64		4.659					ND	
12 2-Methylbutane	43		4.739					ND	
13 Vinyl bromide	106		5.043					ND	
14 Trichlorofluoromethane	101		5.155					ND	
16 Pentane	43		5.305					ND	
17 Ethanol	45		5.737					ND	U
18 Ethyl ether	59		5.823					ND	
19 Acrolein	56		6.196					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.250					ND	
21 1,1-Dichloroethene	96		6.282					ND	
22 Acetone	43		6.506					ND	
23 Carbon disulfide	76		6.655					ND	
24 Isopropyl alcohol	45		6.826					ND	
25 3-Chloro-1-propene	41		7.071					ND	
26 Acetonitrile	41		7.178					ND	
T 15 Methyl Acetate TIC	43		7.237					ND	
27 Methylene Chloride	49		7.370					ND	
28 2-Methyl-2-propanol	59		7.600					ND	
29 Methyl tert-butyl ether	73		7.781					ND	
31 trans-1,2-Dichloroethene	61		7.819					ND	
32 Acrylonitrile	53		7.947					ND	
33 Hexane	57		8.224					ND	
34 1,1-Dichloroethane	63		8.689					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.774				ND		
37 cis-1,2-Dichloroethene	96		9.809				ND		
38 2-Butanone (MEK)	72		9.847				ND		
39 Ethyl acetate	88		9.916				ND		
S 30 1,2-Dichloroethene, Total	61		10.200				ND		
41 Tetrahydrofuran	42		10.274				ND		
* 40 Chlorobromomethane	128	10.268	10.274	-0.006	89	204420	10.0	10.0	
42 Chloroform	83		10.418				ND		
43 Cyclohexane	84		10.663				ND		
44 1,1,1-Trichloroethane	97		10.679				ND		
45 Carbon tetrachloride	117		10.941				ND		
46 Isooctane	57		11.394				ND		
47 Benzene	78		11.400				ND		
48 1,2-Dichloroethane	62		11.581				ND		
49 n-Heptane	43		11.800				ND		
* 50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1110626	10.0	10.0	
52 n-Butanol	56		12.670				ND		
53 Trichloroethene	95		12.729				ND		
A 51 GRO	1	12.995	(4.729-21.262)		0	4658181		0	
T 36 Methyl cyclohexane TIC	55		13.179				ND		
54 1,2-Dichloropropane	63		13.278				ND		
55 Methyl methacrylate	69		13.465				ND		
56 1,4-Dioxane	88		13.508				ND		
57 Dibromomethane	174		13.540				ND		
58 Dichlorobromomethane	83		13.855				ND		
A 59 TVOC as Toluene	1	14.685	(2.957-26.412)		0	4799173		0	
60 cis-1,3-Dichloropropene	75		14.799				ND		
61 4-Methyl-2-pentanone (MIBK	43		15.082				ND		
65 Toluene	92		15.397				ND		
64 n-Octane	43		15.488				ND		
66 trans-1,3-Dichloropropene	75		16.000				ND		
67 1,1,2-Trichloroethane	83		16.368				ND		
68 Tetrachloroethene	166		16.491				ND		
69 2-Hexanone	43		16.817				ND		
71 Chlorodibromomethane	129		17.137				ND		
72 Ethylene Dibromide	107		17.393				ND		
* 74 Chlorobenzene-d5	117	18.300	18.300	0.000	97	1121310	10.0	10.0	
75 Chlorobenzene	112		18.359				ND		
76 Ethylbenzene	91		18.514				ND		U
77 n-Nonane	57		18.674				ND		
78 m-Xylene & p-Xylene	106		18.770				ND		
T 70 1,2-Dibromo-3-Chloropropan	75		18.823				ND		
79 o-Xylene	106		19.602				ND		
80 Styrene	104		19.656				ND		
81 Bromoform	173		20.088				ND		
S 73 Xylenes, Total	106		20.100				ND		
82 Isopropylbenzene	105		20.312				ND		
84 1,1,2,2-Tetrachloroethane	83		20.979				ND		
85 N-Propylbenzene	91		21.049				ND		
86 1,2,3-Trichloropropane	75		21.070				ND		
88 4-Ethyltoluene	105		21.246				ND		
89 2-Chlorotoluene	91		21.246				ND		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57		21.252					ND	
90 1,3,5-Trimethylbenzene	105		21.353					ND	
91 Alpha Methyl Styrene	118		21.727					ND	
92 tert-Butylbenzene	119		21.849					ND	
93 1,2,4-Trimethylbenzene	105		21.945					ND	
94 sec-Butylbenzene	105		22.180					ND	
95 4-Isopropyltoluene	119		22.383					ND	
96 1,3-Dichlorobenzene	146		22.410					ND	
97 1,4-Dichlorobenzene	146		22.548					ND	
98 Benzyl chloride	91		22.735					ND	
100 n-Butylbenzene	91		22.949					ND	
99 Undecane	57		22.986					ND	
101 1,2-Dichlorobenzene	146		23.066					ND	
102 Dodecane	57		24.528					ND	
103 1,2,4-Trichlorobenzene	180		25.489					ND	
104 Hexachlorobutadiene	225		25.676					ND	
105 Naphthalene	128		25.943					ND	
106 1,2,3-Trichlorobenzene	180		26.402					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

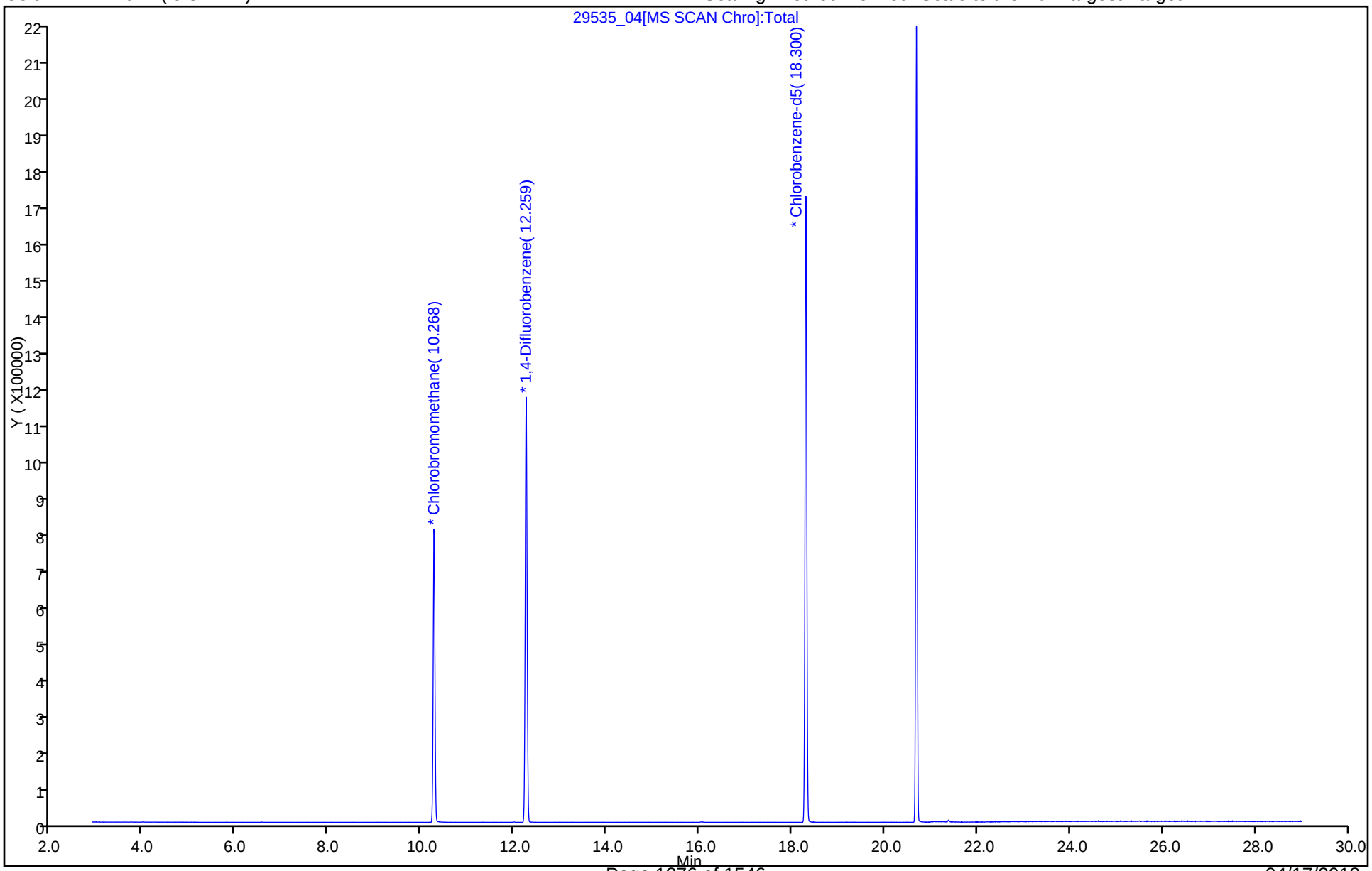
Report Date: 13-Mar-2018 11:23:52 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_04.D

Injection Date:	12-Mar-2018 12:37:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



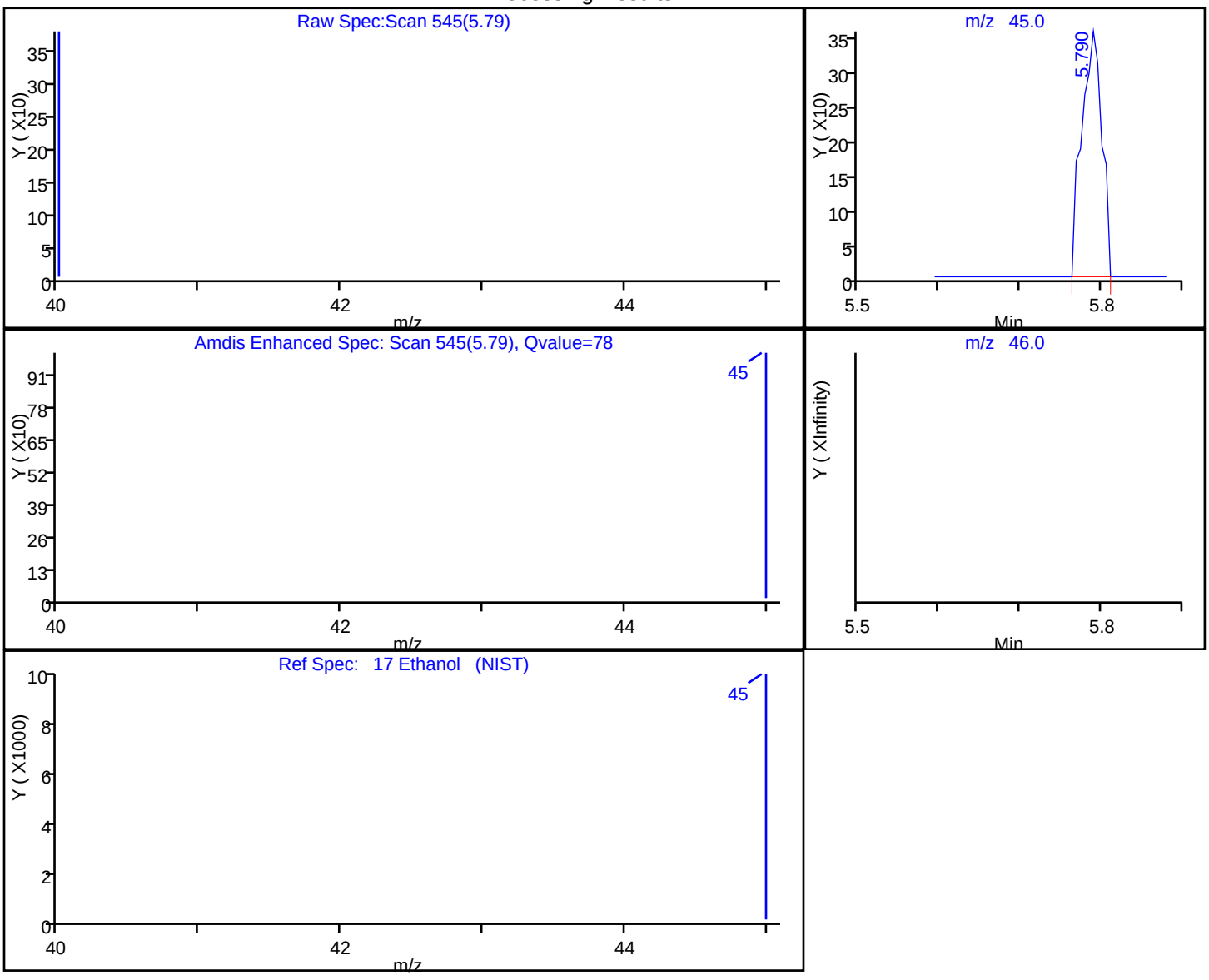
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_04.D				
Injection Date:	12-Mar-2018 12:37:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Processing Results



RT	Mass	Response	Amount
5.79	45.00	614	0.080647
5.74	46.00	0	

Reviewer: puangmaleek, 13-Mar-2018 11:23:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

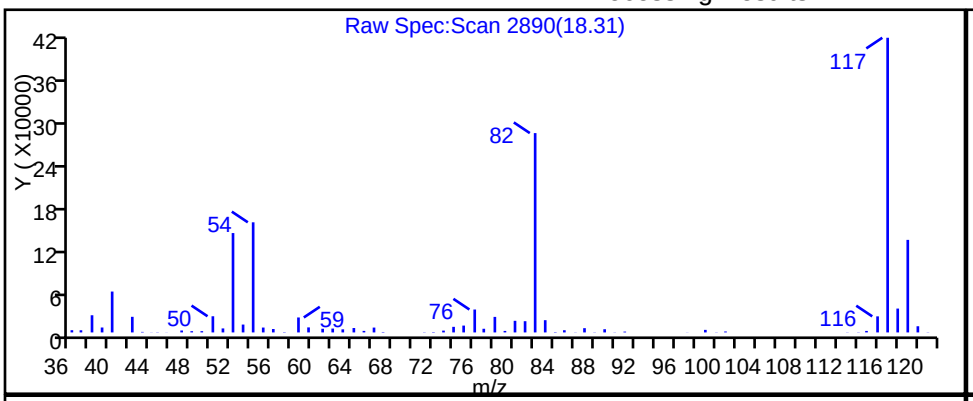
User Disabled Compound Report

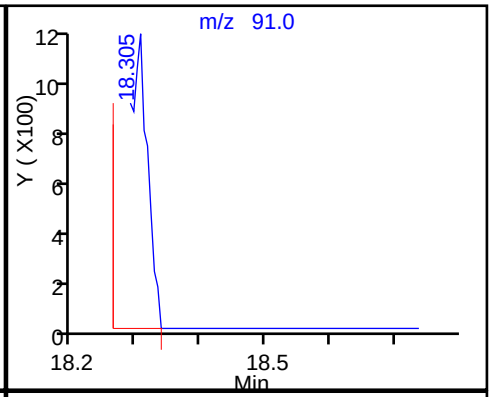
TestAmerica Burlington

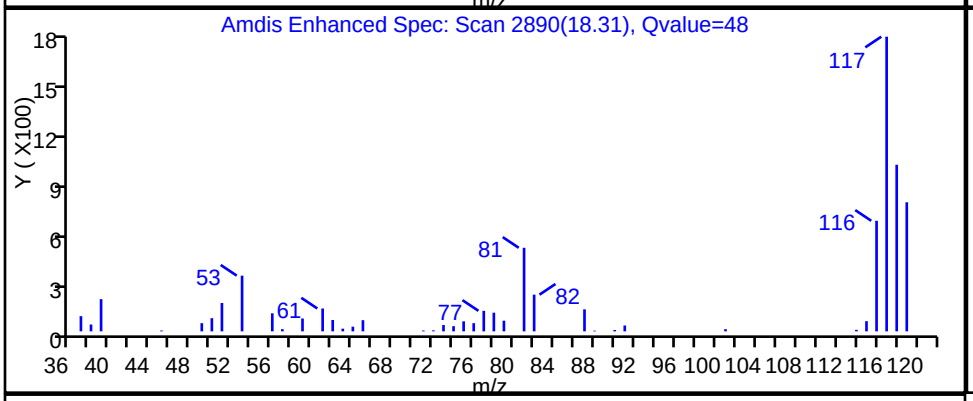
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_04.D				
Injection Date:	12-Mar-2018 12:37:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

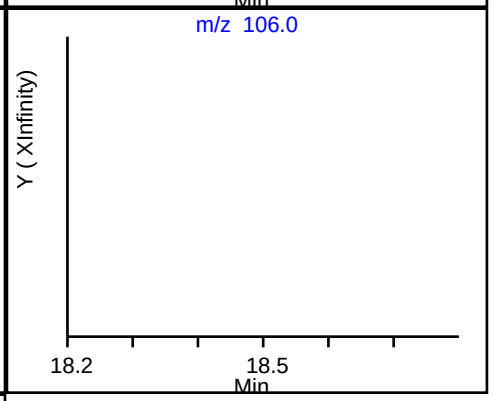
76 Ethylbenzene, CAS: 100-41-4

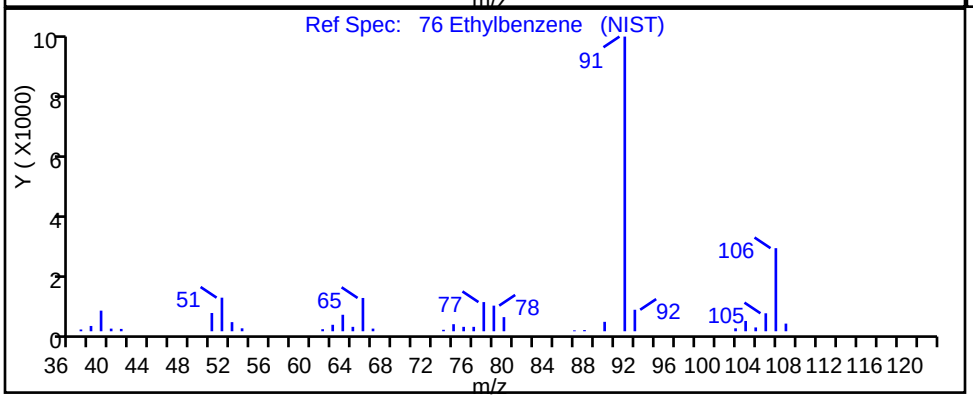
Processing Results











RT	Mass	Response	Amount
18.31	91.00	2636	0.030498
18.51	106.00	0	

Reviewer: puangmaleek, 13-Mar-2018 11:23:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab File ID: 29551_04.D Lab Sample ID: MB 200-127298/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 03/13/2018 12:15

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-127298/3	29551_03.D	03/13/2018 11:22
5656	200-42575-6	29551_22.D	03/14/2018 04:23

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127298/4

Matrix: Air Lab File ID: 29551_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/13/2018 12:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127298 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127298/4

Matrix: Air Lab File ID: 29551_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/13/2018 12:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127298 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127298/4

Matrix: Air Lab File ID: 29551_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/13/2018 12:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127298 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 13-Mar-2018 12:15:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029551-004
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 14-Mar-2018 15:41:31 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: bunmaa Date: 14-Mar-2018 15:41:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967					ND	
2 Dichlorodifluoromethane	85		3.031					ND	
3 Chlorodifluoromethane	51		3.085					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.293					ND	
5 Chloromethane	50		3.426					ND	
6 Butane	43		3.629					ND	
7 Vinyl chloride	62		3.666					ND	
8 Butadiene	54		3.741					ND	
10 Bromomethane	94		4.414					ND	
11 Chloroethane	64		4.654					ND	
12 2-Methylbutane	43		4.739					ND	
13 Vinyl bromide	106		5.043					ND	
14 Trichlorofluoromethane	101		5.155					ND	
16 Pentane	43		5.299					ND	
17 Ethanol	45		5.732					ND	
18 Ethyl ether	59		5.822					ND	
19 Acrolein	56		6.191					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.249					ND	
21 1,1-Dichloroethene	96		6.276					ND	
22 Acetone	43		6.500					ND	
23 Carbon disulfide	76		6.655					ND	
24 Isopropyl alcohol	45		6.826					ND	
25 3-Chloro-1-propene	41		7.071					ND	
26 Acetonitrile	41		7.178					ND	
T 15 Methyl Acetate TIC	43		7.237					ND	
27 Methylene Chloride	49		7.365					ND	
28 2-Methyl-2-propanol	59		7.600					ND	
29 Methyl tert-butyl ether	73		7.781					ND	
31 trans-1,2-Dichloroethene	61		7.818					ND	
32 Acrylonitrile	53		7.947					ND	
33 Hexane	57		8.219					ND	
34 1,1-Dichloroethane	63		8.688					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.774					ND	
37 cis-1,2-Dichloroethene	96		9.809					ND	
38 2-Butanone (MEK)	72		9.846					ND	
39 Ethyl acetate	88		9.911					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
41 Tetrahydrofuran	42		10.273					ND	
* 40 Chlorobromomethane	128	10.274	10.273	0.001	90	199450	10.0	10.0	
42 Chloroform	83		10.418					ND	
43 Cyclohexane	84		10.658					ND	
44 1,1,1-Trichloroethane	97		10.679					ND	
45 Carbon tetrachloride	117		10.941					ND	
46 Isooctane	57		11.394					ND	
47 Benzene	78		11.400					ND	
48 1,2-Dichloroethane	62		11.581					ND	
49 n-Heptane	43		11.800					ND	
* 50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1070947	10.0	10.0	
52 n-Butanol	56		12.670					ND	
53 Trichloroethene	95		12.734					ND	
A 51 GRO	1	12.995	(4.729-21.261)		0	4443144		0	
T 36 Methyl cyclohexane TIC	55		13.179					ND	
54 1,2-Dichloropropane	63		13.273					ND	
55 Methyl methacrylate	69		13.465					ND	
56 1,4-Dioxane	88		13.508					ND	
57 Dibromomethane	174		13.534					ND	
58 Dichlorobromomethane	83		13.849					ND	
A 59 TVOC as Toluene	1	14.684	(2.957-26.412)		0	4582864		0	
60 cis-1,3-Dichloropropene	75		14.799					ND	
61 4-Methyl-2-pentanone (MIBK	43		15.082					ND	
65 Toluene	92		15.397					ND	
64 n-Octane	43		15.488					ND	
66 trans-1,3-Dichloropropene	75		16.000					ND	
67 1,1,2-Trichloroethane	83		16.368					ND	
68 Tetrachloroethene	166		16.491					ND	
69 2-Hexanone	43		16.816					ND	
71 Chlorodibromomethane	129		17.137					ND	
72 Ethylene Dibromide	107		17.393					ND	
* 74 Chlorobenzene-d5	117	18.300	18.300	0.000	97	1064942	10.0	10.0	
75 Chlorobenzene	112		18.359					ND	
76 Ethylbenzene	91		18.519					ND	U
77 n-Nonane	57		18.674					ND	
78 m-Xylene & p-Xylene	106		18.764					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		18.823					ND	
79 o-Xylene	106		19.602					ND	
80 Styrene	104		19.656					ND	
81 Bromoform	173		20.088					ND	
S 73 Xylenes, Total	106		20.100					ND	
82 Isopropylbenzene	105		20.312					ND	
84 1,1,2,2-Tetrachloroethane	83		20.979					ND	
85 N-Propylbenzene	91		21.049					ND	
86 1,2,3-Trichloropropane	75		21.070					ND	
88 4-Ethyltoluene	105		21.246					ND	
89 2-Chlorotoluene	91		21.246					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57		21.251					ND	
90 1,3,5-Trimethylbenzene	105		21.353					ND	
91 Alpha Methyl Styrene	118		21.726					ND	
92 tert-Butylbenzene	119		21.849					ND	
93 1,2,4-Trimethylbenzene	105		21.945					ND	
94 sec-Butylbenzene	105		22.180					ND	
95 4-Isopropyltoluene	119		22.383					ND	
96 1,3-Dichlorobenzene	146		22.410					ND	U
97 1,4-Dichlorobenzene	146		22.548					ND	U
98 Benzyl chloride	91		22.740					ND	
100 n-Butylbenzene	91		22.949					ND	
99 Undecane	57		22.991					ND	
101 1,2-Dichlorobenzene	146		23.071					ND	
102 Dodecane	57		24.528					ND	
103 1,2,4-Trichlorobenzene	180		25.489					ND	
104 Hexachlorobutadiene	225		25.681					ND	
105 Naphthalene	128		25.943					ND	MU
106 1,2,3-Trichlorobenzene	180		26.402					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

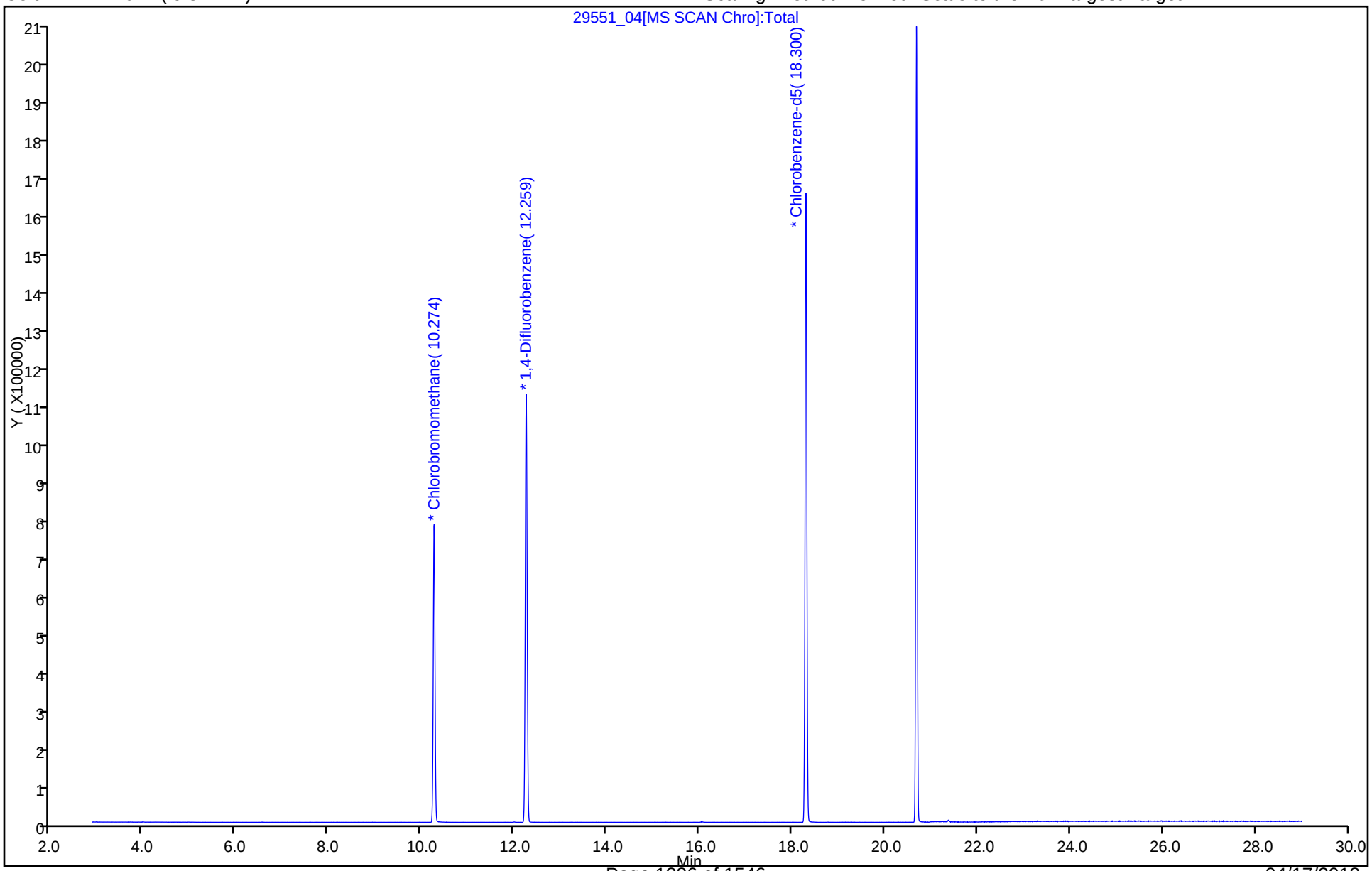
Report Date: 14-Mar-2018 15:41:31 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_04.D

Injection Date:	13-Mar-2018 12:15:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



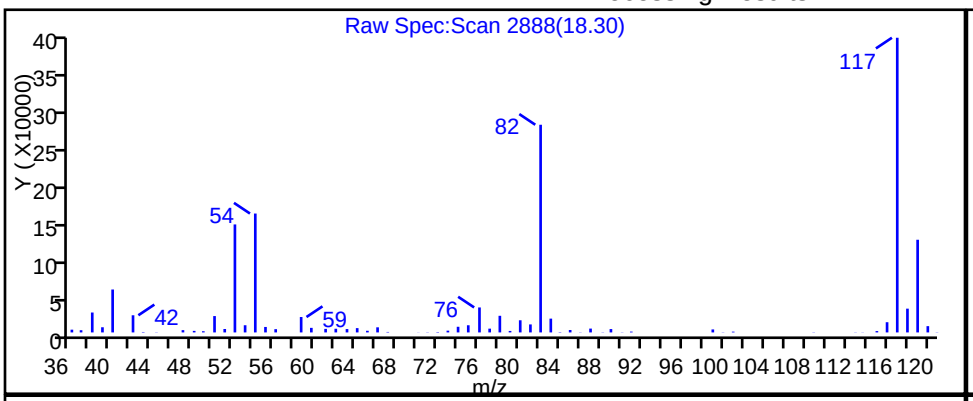
User Disabled Compound Report

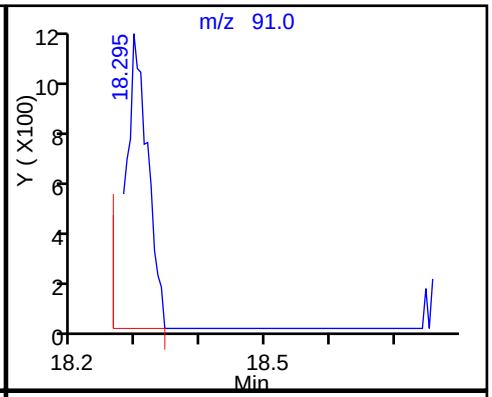
TestAmerica Burlington

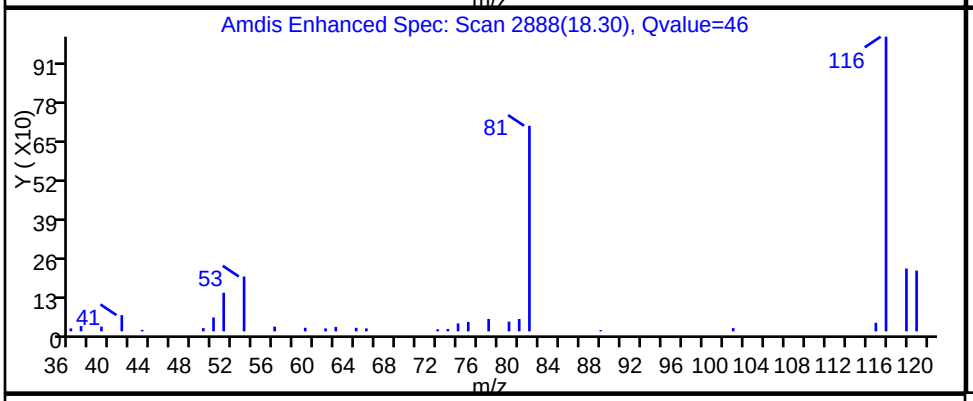
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_04.D				
Injection Date:	13-Mar-2018 12:15:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

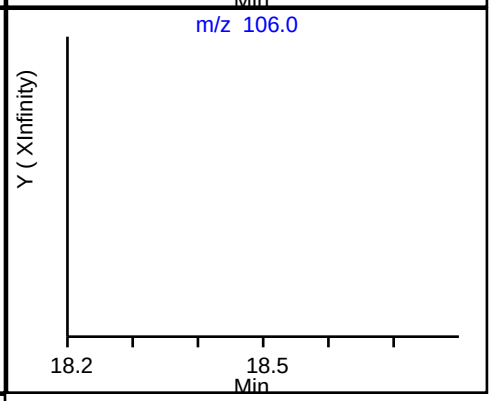
76 Ethylbenzene, CAS: 100-41-4

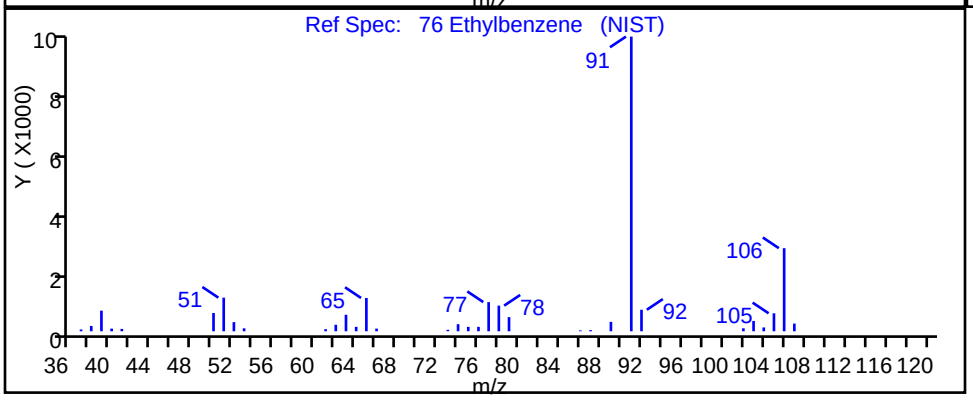
Processing Results











RT	Mass	Response	Amount
18.30	91.00	2680	0.032649
18.52	106.00	0	

Reviewer: bunmaa, 14-Mar-2018 15:41:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

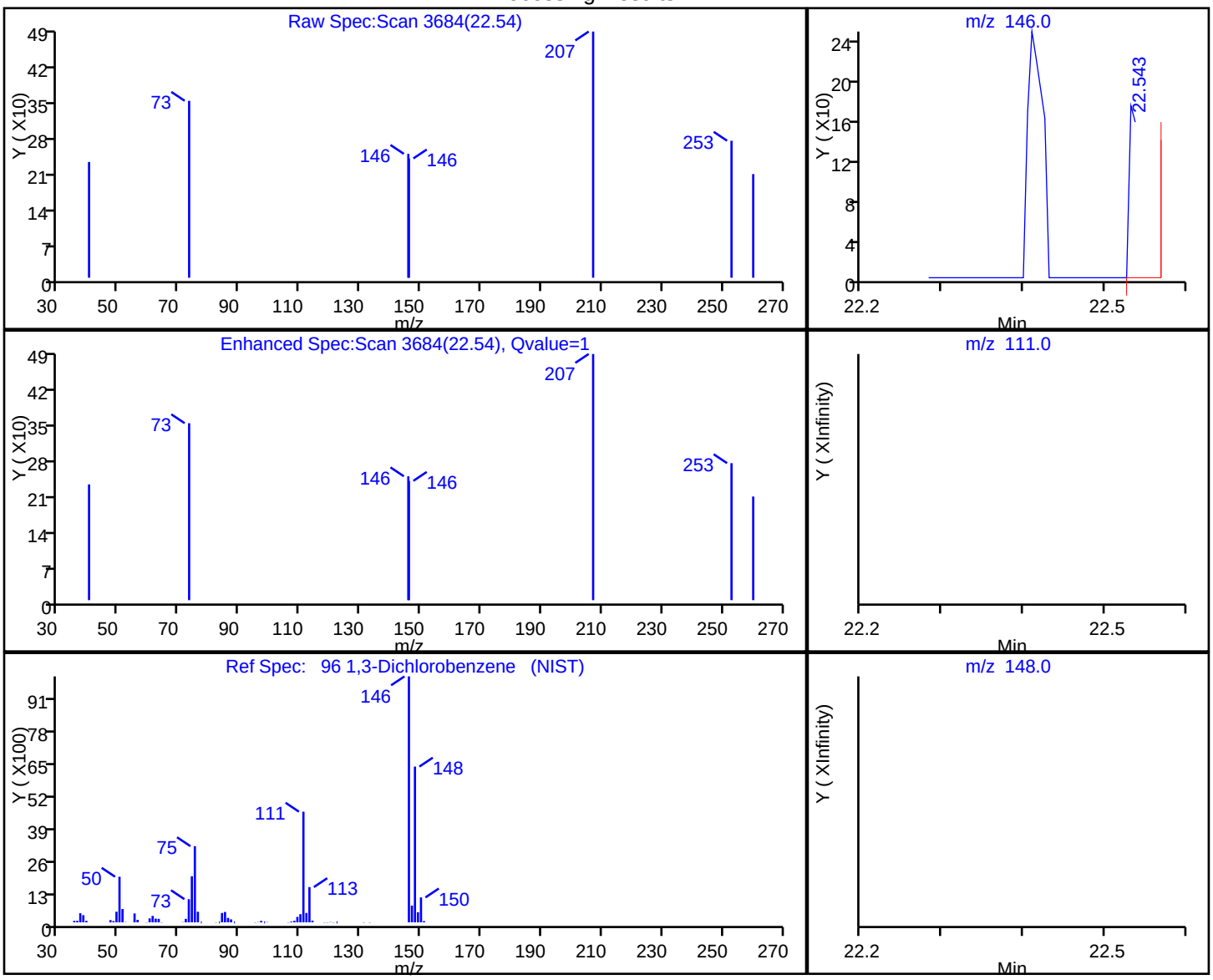
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_04.D				
Injection Date:	13-Mar-2018 12:15:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
22.54	146.00	532	0.010827
22.41	111.00	0	
22.56	148.00	118	

Reviewer: bunmaa, 14-Mar-2018 15:41:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

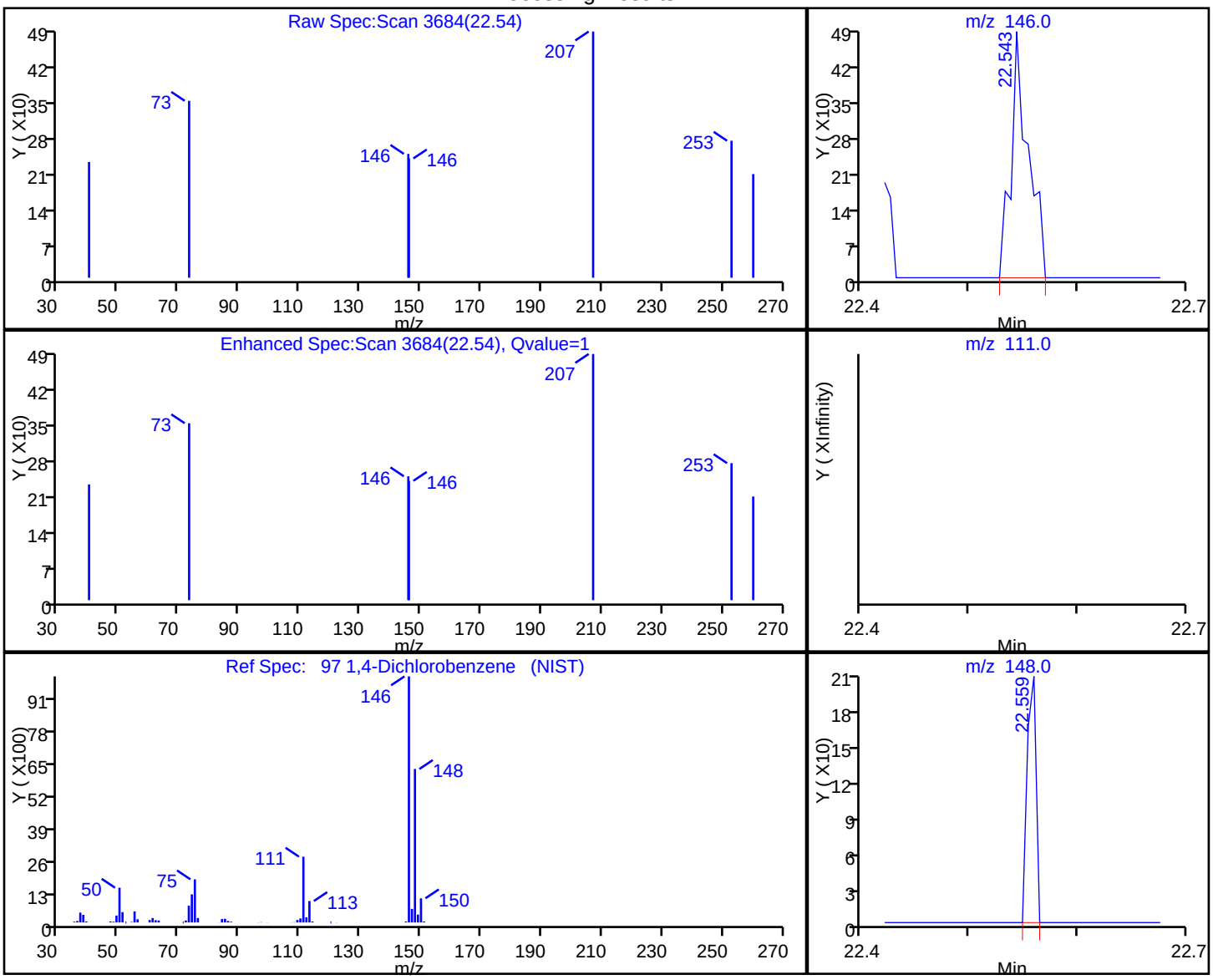
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_04.D				
Injection Date:	13-Mar-2018 12:15:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

97 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
22.54	146.00	532	0.010959
22.55	111.00	0	
22.56	148.00	118	

Reviewer: bunmaa, 14-Mar-2018 15:41:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

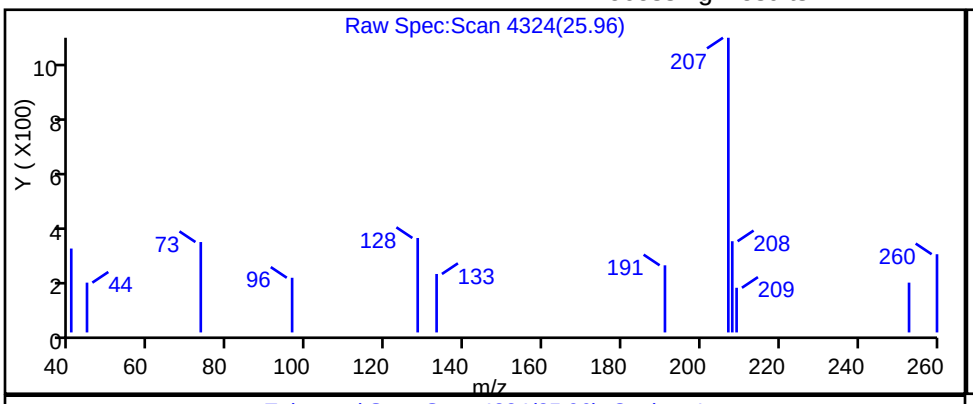
User Disabled Compound Report

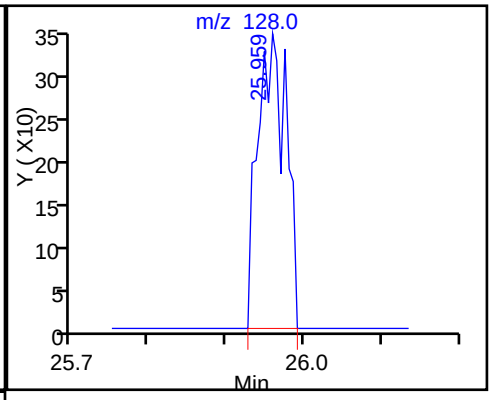
TestAmerica Burlington

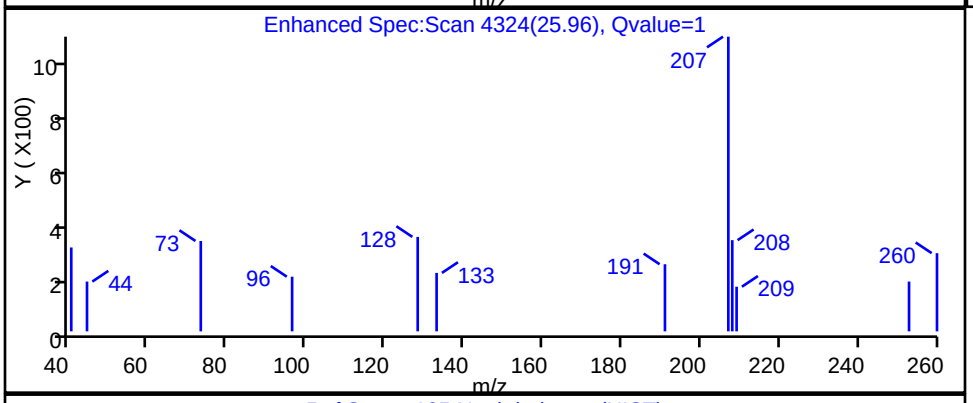
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_04.D				
Injection Date:	13-Mar-2018 12:15:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

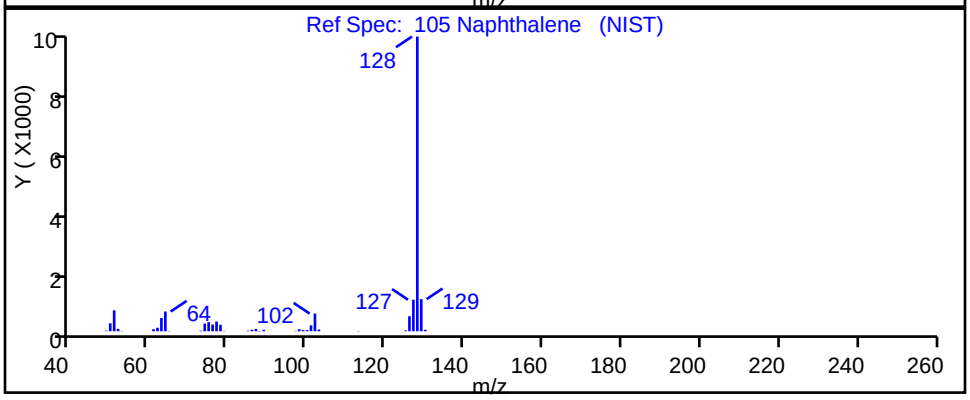
105 Naphthalene, CAS: 91-20-3

Processing Results









RT	Mass	Response	Amount
25.96	128.00	889	0.011889

Reviewer: bunmaa, 14-Mar-2018 15:41:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab File ID: 29574-06.D Lab Sample ID: MB 200-127358/6

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHB.i Date Analyzed: 03/14/2018 15:32

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-127358/4	29574-04.D	03/14/2018 13:47
8118	200-42592-3	29574-14.D	03/14/2018 23:03

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42592-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-127358/6

Matrix: Air | Lab File ID: 29574-06.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 03/14/2018 15:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127358 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42592-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-127358/6

Matrix: Air | Lab File ID: 29574-06.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 03/14/2018 15:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127358 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127358/6

Matrix: Air Lab File ID: 29574-06.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/14/2018 15:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127358 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 14-Mar-2018 15:32:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029574-006
Operator ID: pad Instrument ID: CHB.i

Method: \\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\TO15_LLNJ_TO3.m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 16:53:11 Calib Date: 13-Feb-2018 10:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20180212-29154.b\29154-20.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: suwannatrais Date: 15-Mar-2018 09:55:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.134					ND	
2 Dichlorodifluoromethane	85		3.193					ND	
3 Chlorodifluoromethane	51		3.225					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.412					ND	
5 Chloromethane	50		3.535					ND	
6 Butane	43		3.706					ND	Ua
7 Vinyl chloride	62		3.743					ND	
8 Butadiene	54		3.812					ND	
10 Bromomethane	94		4.474					ND	
11 Chloroethane	64		4.704					ND	
12 2-Methylbutane	43		4.784					ND	
13 Vinyl bromide	106		5.109					ND	
14 Trichlorofluoromethane	101		5.211					ND	
15 Pentane	43		5.349					ND	Ua
16 Ethanol	45		5.664					ND	
17 Ethyl ether	59		5.819					ND	
18 Acrolein	56		6.182					ND	
19 1,1,2-Trichloro-1,2,2-trif	101		6.241					ND	
20 1,1-Dichloroethene	96		6.305					ND	
21 Acetone	43		6.454					ND	
22 Isopropyl alcohol	45		6.673					ND	
23 Carbon disulfide	76		6.737					ND	
24 3-Chloro-1-propene	41		7.009					ND	
26 Acetonitrile	41		7.062					ND	
T 25 Methyl Acetate TIC	43		7.200					ND	
27 Methylene Chloride	49		7.265					ND	Ua
28 2-Methyl-2-propanol	59		7.377					ND	
29 Methyl tert-butyl ether	73		7.617					ND	
30 trans-1,2-Dichloroethene	61		7.676					ND	
31 Acrylonitrile	53		7.740					ND	
32 Hexane	57	8.012	8.012	0.005	75	6132		0.0796	7a
33 1,1-Dichloroethane	63		8.418					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 Vinyl acetate	43		8.423					ND	
36 2-Butanone (MEK)	72		9.304					ND	
37 cis-1,2-Dichloroethene	96		9.320					ND	
35 Ethyl acetate	88		9.320					ND	
* 39 Chlorobromomethane	128	9.683	9.688	-0.005	79	498252	10.0	10.0	
38 Tetrahydrofuran	42		9.699					ND	
40 Chloroform	83		9.763					ND	
S 41 1,2-Dichloroethene, Total	61		10.000					ND	
42 1,1,1-Trichloroethane	97		10.019					ND	
43 Cyclohexane	84		10.035					ND	
44 Carbon tetrachloride	117		10.233					ND	
45 Isooctane	57		10.510					ND	
46 Benzene	78	10.547	10.547	-0.006	8	4014		0.0245	7a
47 1,2-Dichloroethane	62		10.649					ND	
48 n-Heptane	43		10.761					ND	
A 49 GRO	1	10.857	(4.774-16.940)		0	6704843		0	
* 50 1,4-Difluorobenzene	114	11.086	11.092	-0.006	93	2240297	10.0	10.0	
51 n-Butanol	56		11.279					ND	
53 Trichloroethene	95		11.465					ND	
T 52 Methyl cyclohexane TIC	55		11.500					ND	
54 1,2-Dichloropropane	63		11.834					ND	
55 Methyl methacrylate	69		11.871					ND	
56 1,4-Dioxane	88		11.956					ND	
57 Dibromomethane	174		12.020					ND	Ua
58 Dichlorobromomethane	83		12.191					ND	
A 59 TVOC as Toluene	1	12.477	(3.124-21.829)		0	7024163		0	
60 cis-1,3-Dichloropropene	75		12.816					ND	
61 4-Methyl-2-pentanone (MIBK	43		12.965					ND	
63 n-Octane	43		13.237					ND	
64 Toluene	92	13.253	13.253	0.005	39	3618		0.0297	7a
66 trans-1,3-Dichloropropene	75		13.611					ND	
67 1,1,2-Trichloroethane	83		13.883					ND	
68 Tetrachloroethene	166		14.022					ND	
69 2-Hexanone	43		14.139					ND	
70 Chlorodibromomethane	129		14.438					ND	
71 Ethylene Dibromide	107		14.641					ND	Ua
* 72 Chlorobenzene-d5	117	15.201	15.201	0.000	83	1944378	10.0	10.0	
73 Chlorobenzene	112		15.244					ND	Ua
74 Ethylbenzene	91	15.308	15.308	0.000	94	8114		0.0310	
75 n-Nonane	57		15.335					ND	
76 m-Xylene & p-Xylene	106		15.457					ND	Ua
78 o-Xylene	106	15.975	15.975	0.005	39	2804		0.0259	7a
79 Styrene	104		15.991					ND	Ua
S 77 Xylenes, Total	106				0			0.0259	7
80 Bromoform	173		16.285					ND	MU
81 Isopropylbenzene	105		16.381					ND	MU
83 1,1,2,2-Tetrachloroethane	83		16.786					ND	MUa
84 N-Propylbenzene	91		16.861					ND	Ua
85 1,2,3-Trichloropropane	75		16.872					ND	U
86 n-Decane	57		16.930					ND	
87 4-Ethyltoluene	105		16.989					ND	Ua
88 2-Chlorotoluene	91		17.026					ND	Ua

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 1,3,5-Trimethylbenzene	105		17.053					ND	Ua
90 Alpha Methyl Styrene	118		17.325					ND	Ua
91 tert-Butylbenzene	119		17.427					ND	
92 1,2,4-Trimethylbenzene	105		17.501					ND	Ua
93 sec-Butylbenzene	105		17.683					ND	Ua
94 4-Isopropyltoluene	119		17.838					ND	Ua
95 1,3-Dichlorobenzene	146		17.918					ND	Ua
96 1,4-Dichlorobenzene	146		18.024					ND	MUa
97 Benzyl chloride	91		18.174					ND	
98 Undecane	57		18.313					ND	
99 n-Butylbenzene	91		18.345					ND	Ua
100 1,2-Dichlorobenzene	146		18.510					ND	Ua
T 101 1,2-Dibromo-3-Chloropropan	75		19.300					ND	
102 Dodecane	57		19.764					ND	
103 1,2,4-Trichlorobenzene	180		20.869					ND	Ua
104 Hexachlorobutadiene	225		21.034					ND	Ua
105 Naphthalene	128		21.344					ND	MUa
106 1,2,3-Trichlorobenzene	180		21.819					ND	Ua
T 119 Freon 115 TIC	1		0.000					ND	
T 120 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 121 1,3-Dichloropropane TIC	1		0.000					ND	
T 118 Difluoroethane TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 117 Chlorotrifluoroethene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

ATTO15BISs_00006 Amount Added: 20.00 Units: mL Run Reagent

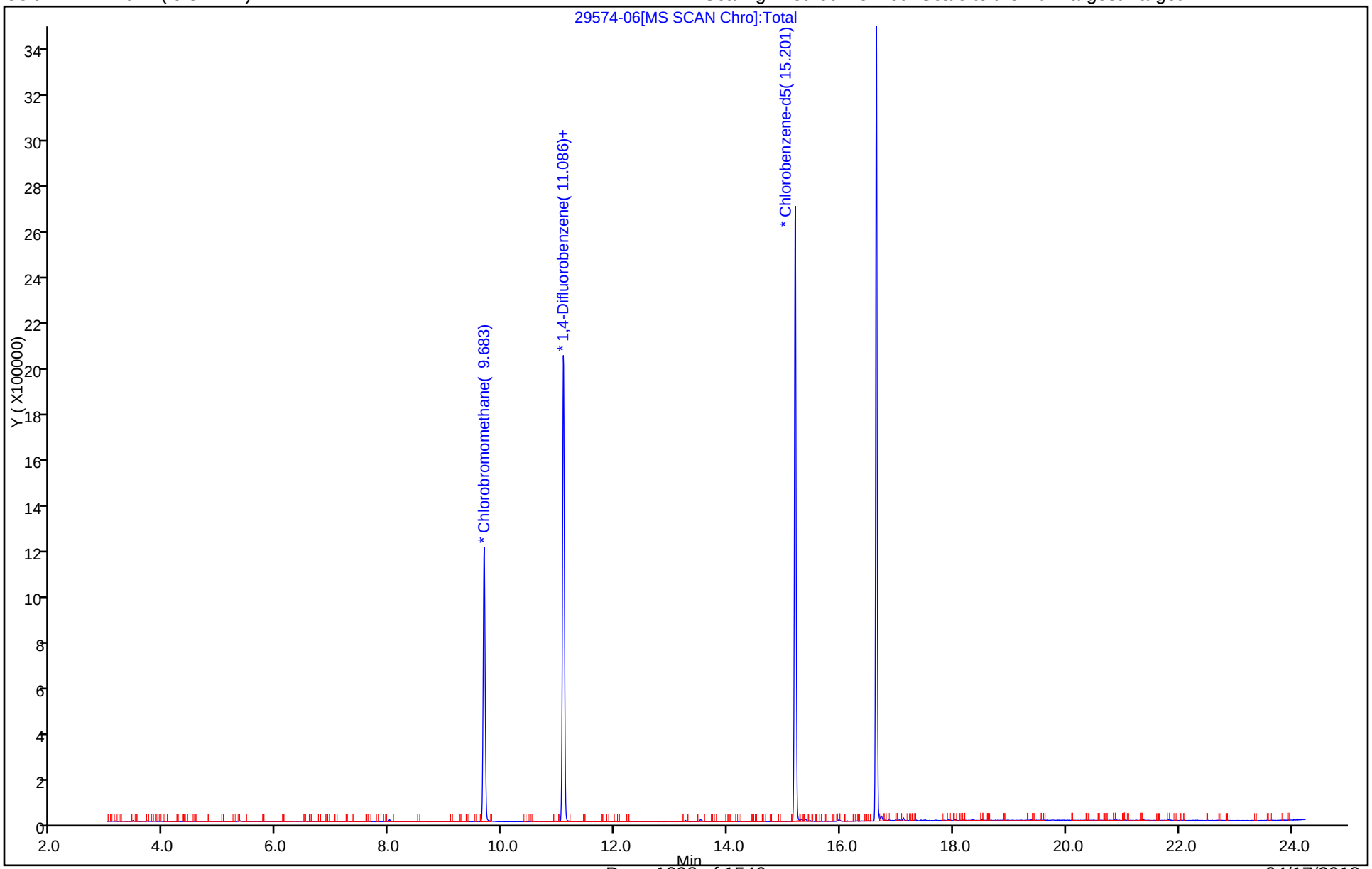
Report Date: 15-Mar-2018 16:53:12 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D

Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



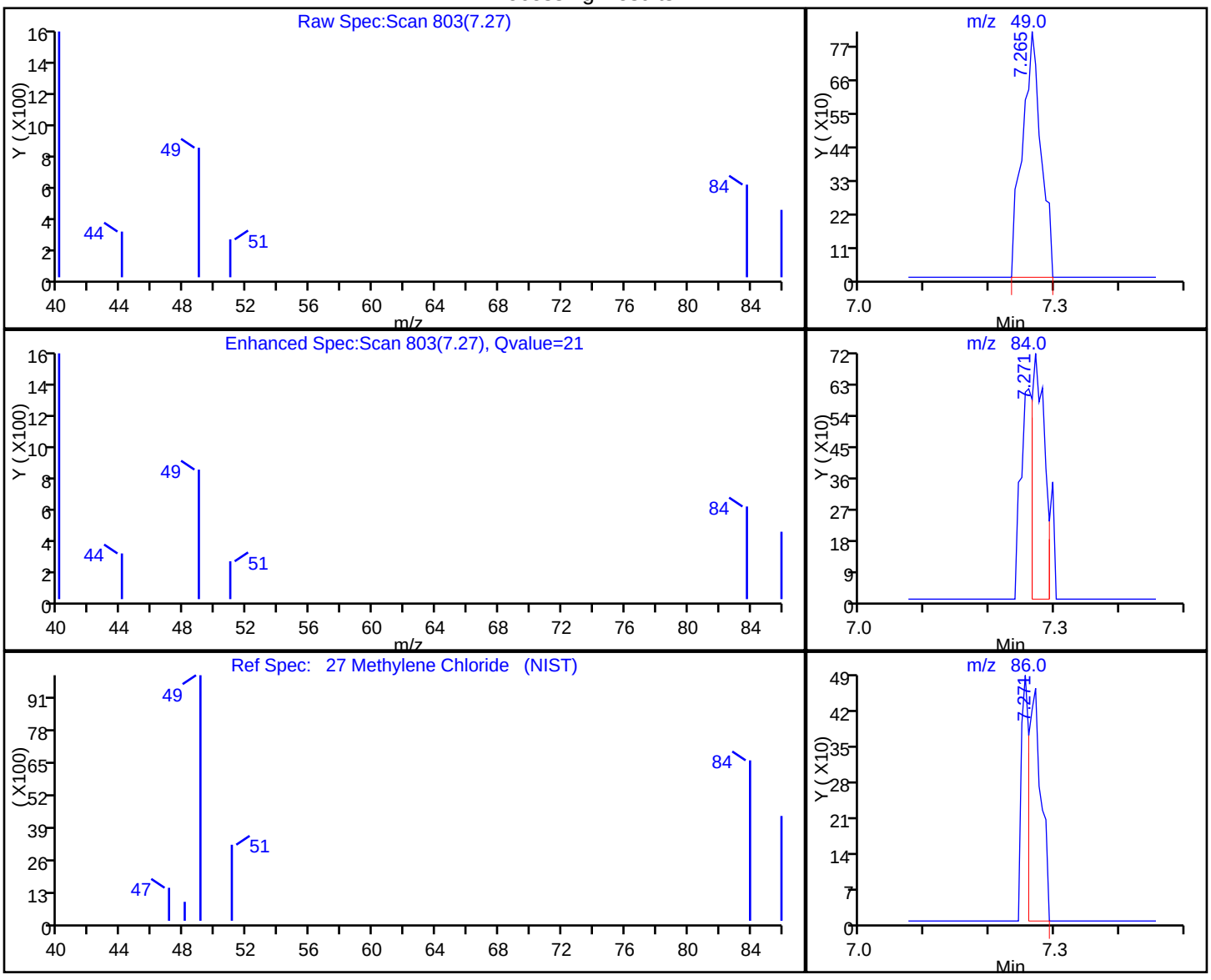
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
7.27	49.00	1620	0.036788
7.27	84.00	990	
7.27	86.00	624	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

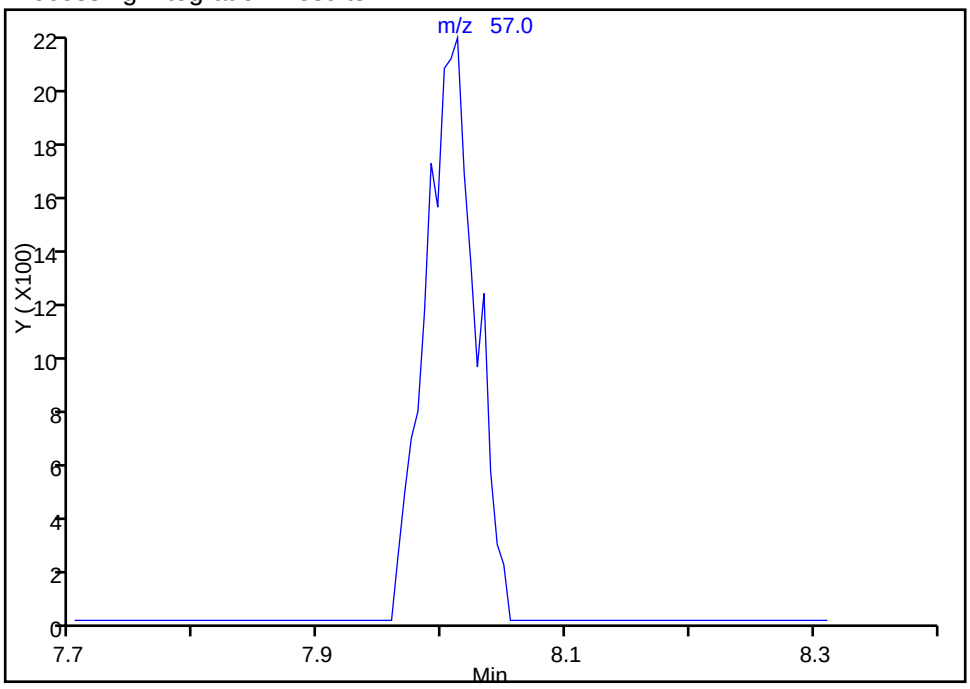
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

32 Hexane, CAS: 110-54-3

Signal: 1

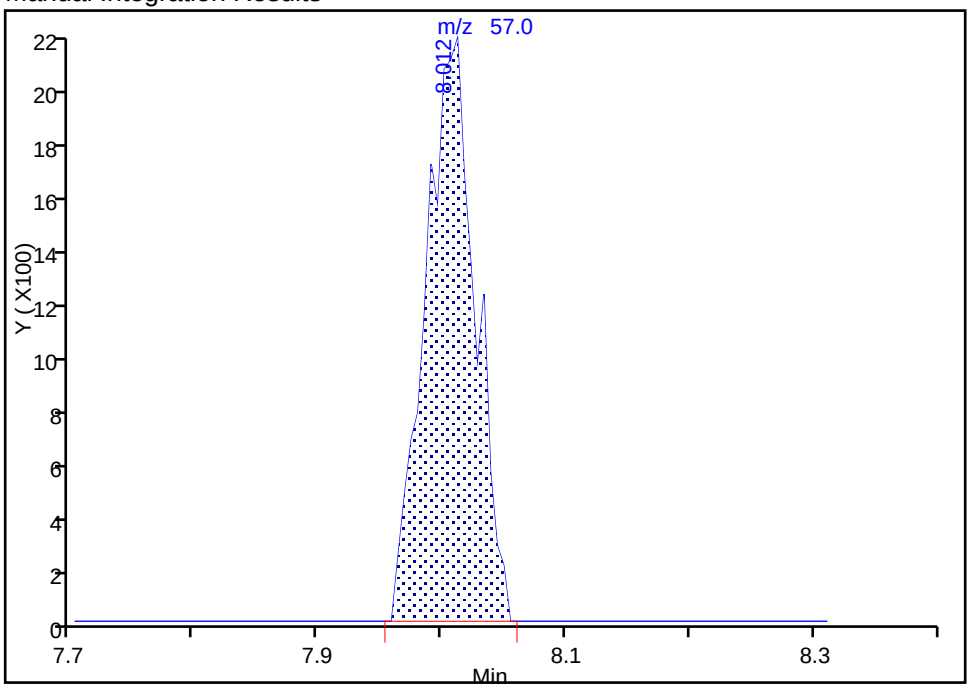
Not Detected
Expected RT: 8.01

Processing Integration Results



Manual Integration Results

RT: 8.01
Area: 6132
Amount: 0.079590
Amount Units: ppb v/v



Reviewer: bunmaa, 15-Mar-2018 16:47:48
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Burlington

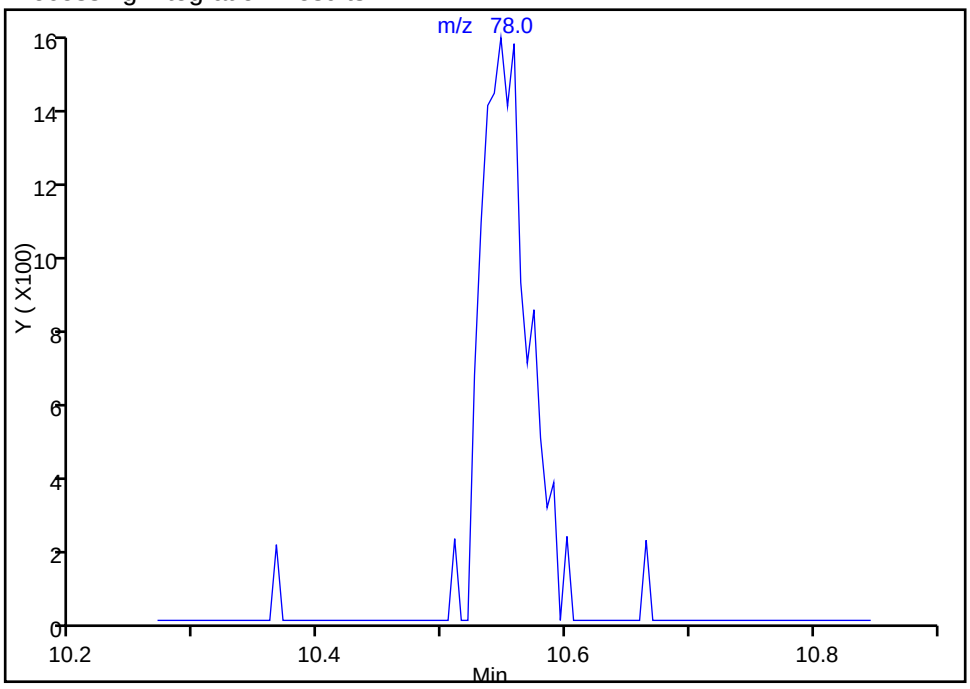
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Benzene, CAS: 71-43-2

Signal: 1

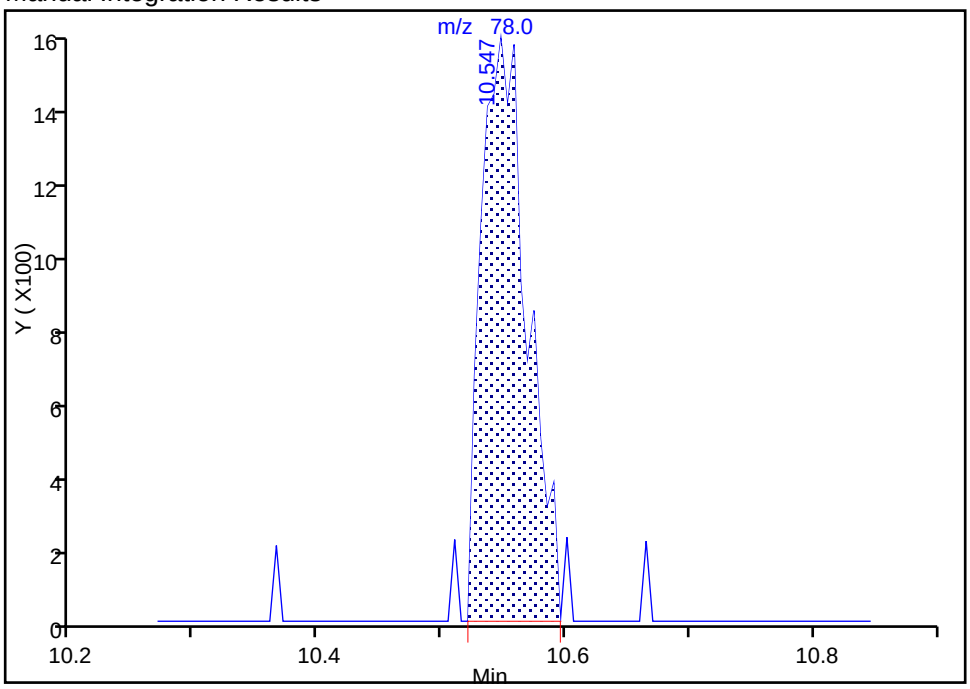
Not Detected
Expected RT: 10.55

Processing Integration Results



Manual Integration Results

RT: 10.55
Area: 4014
Amount: 0.024497
Amount Units: ppb v/v



Reviewer: bunmaa, 15-Mar-2018 16:48:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Burlington

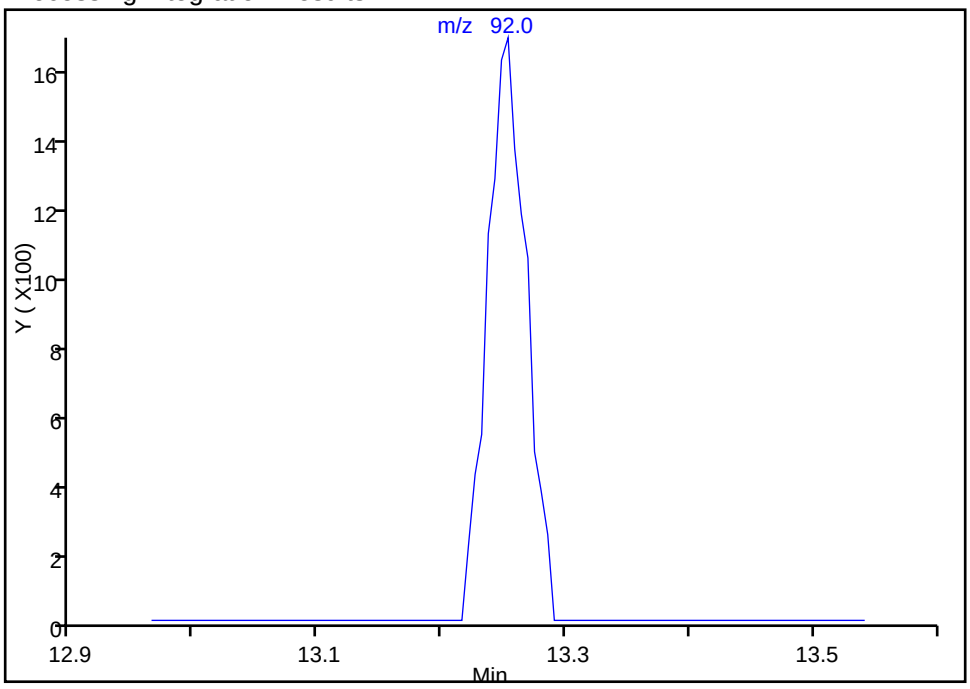
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

64 Toluene, CAS: 108-88-3

Signal: 1

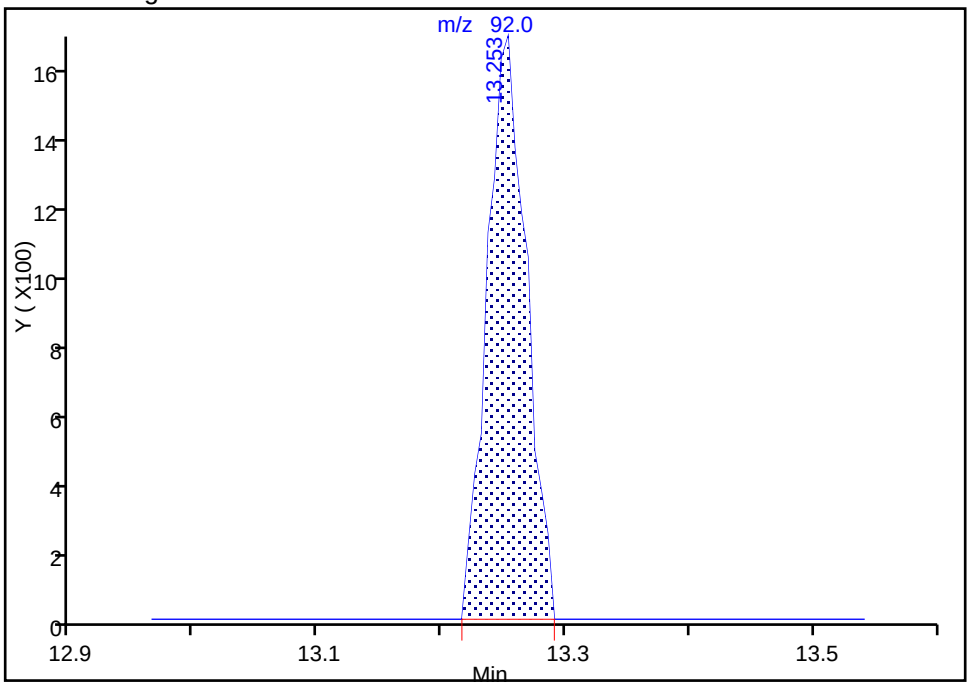
Not Detected
Expected RT: 13.25

Processing Integration Results



Manual Integration Results

RT: 13.25
Area: 3618
Amount: 0.029746
Amount Units: ppb v/v



Reviewer: bunmaa, 15-Mar-2018 16:48:42
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

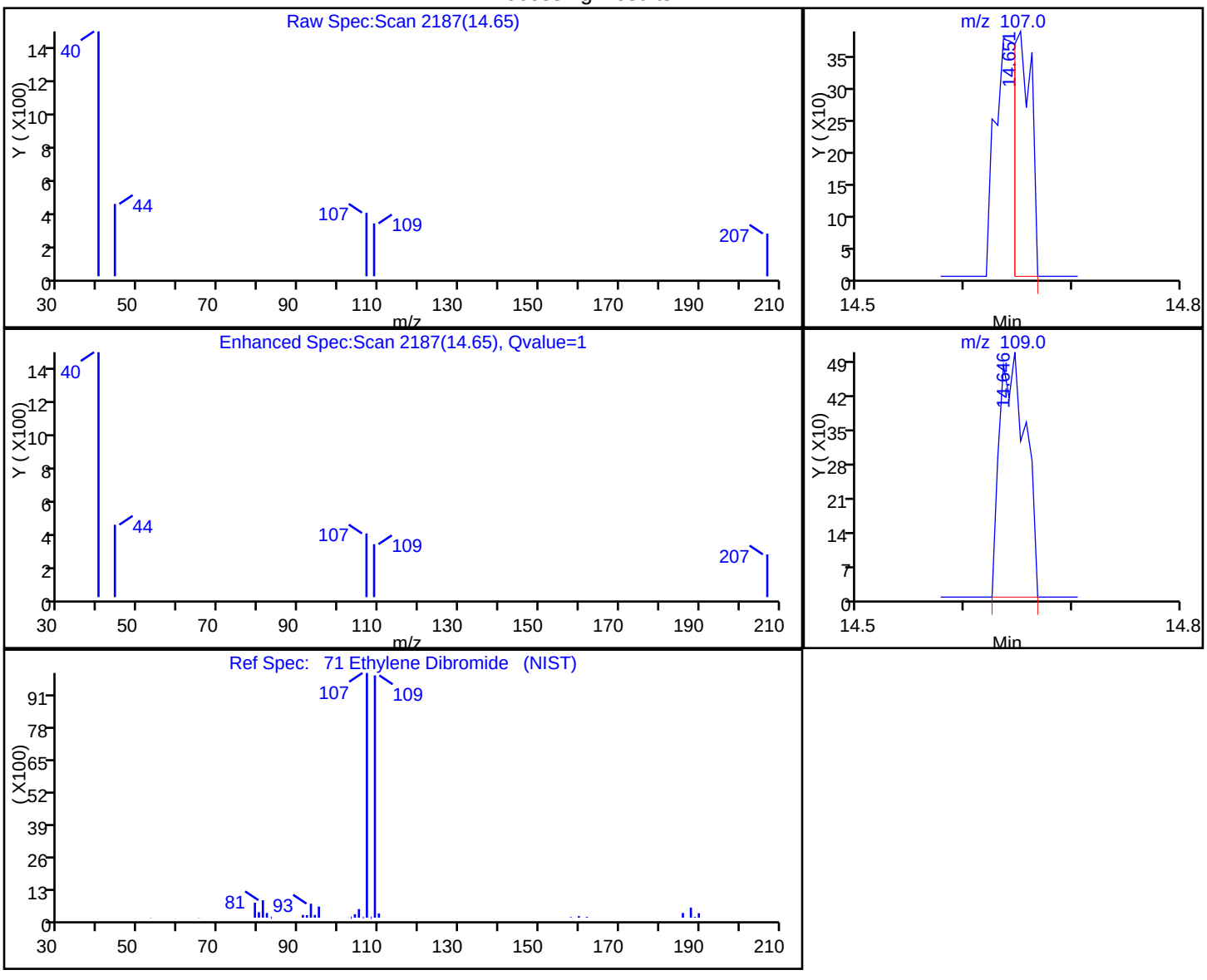
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

71 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
14.65	107.00	439	0.003919
14.65	109.00	845	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

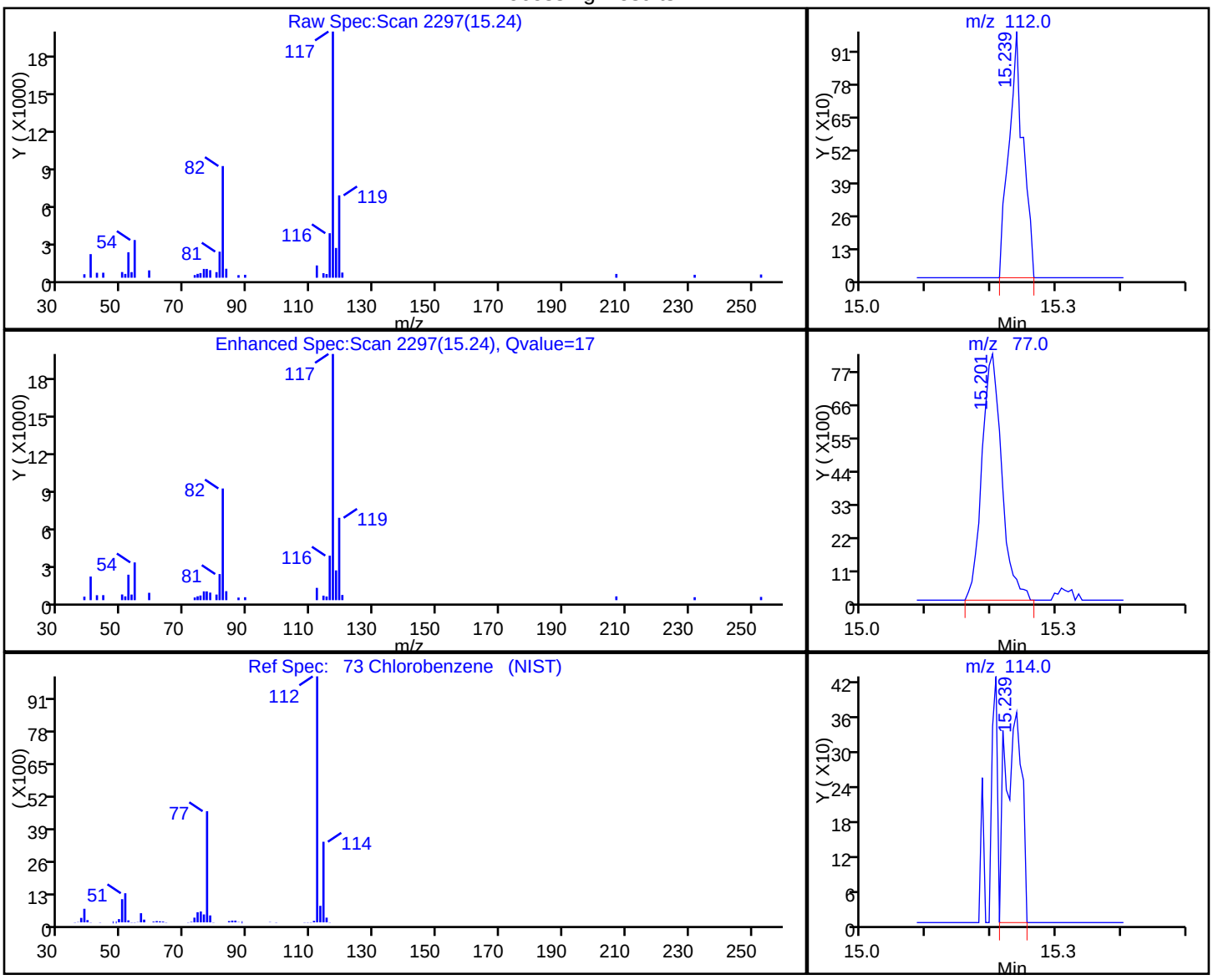
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

73 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
15.24	112.00	1503	0.008794
15.20	77.00	17632	
15.24	114.00	633	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

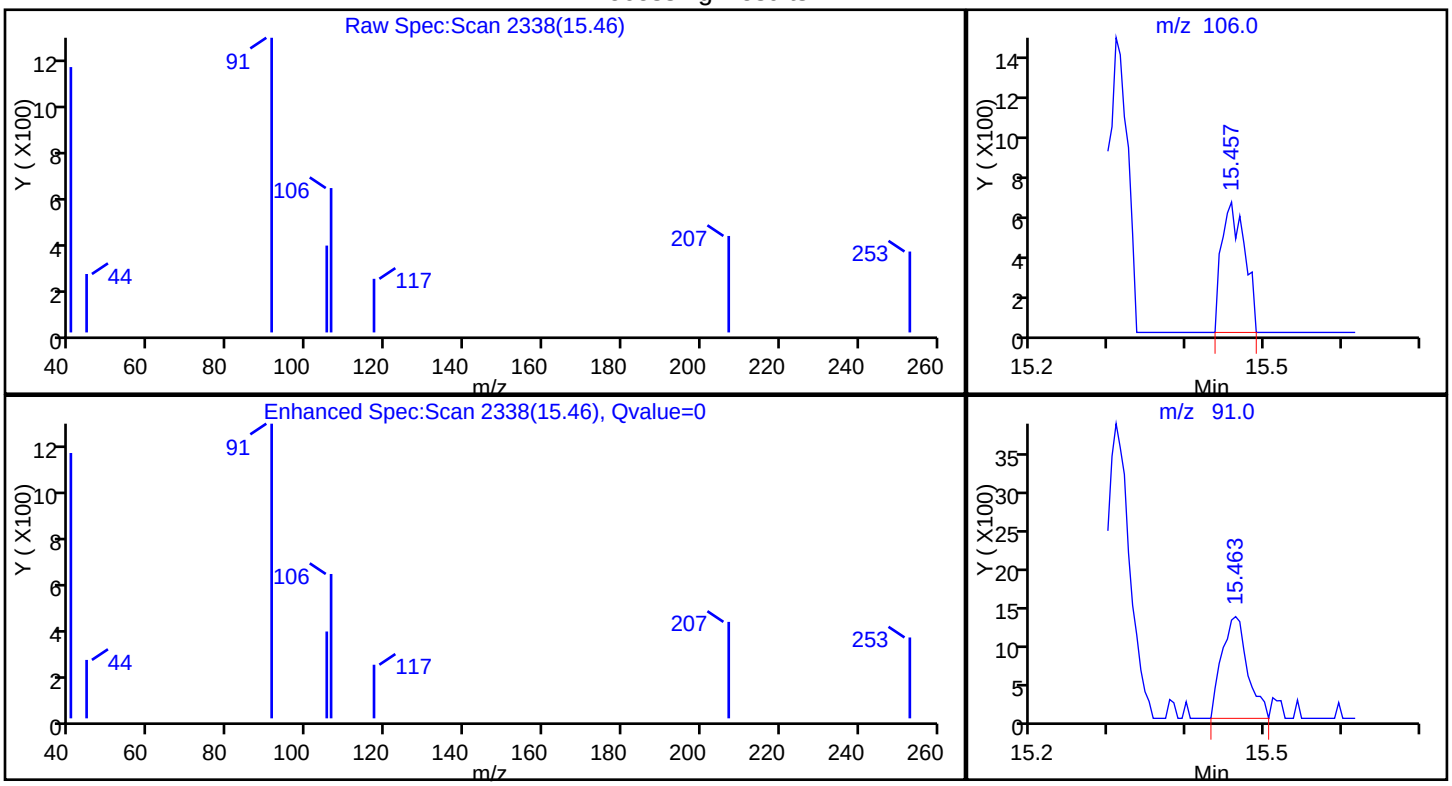
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
15.46	106.00	1303	0.012010
15.46	91.00	3075	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

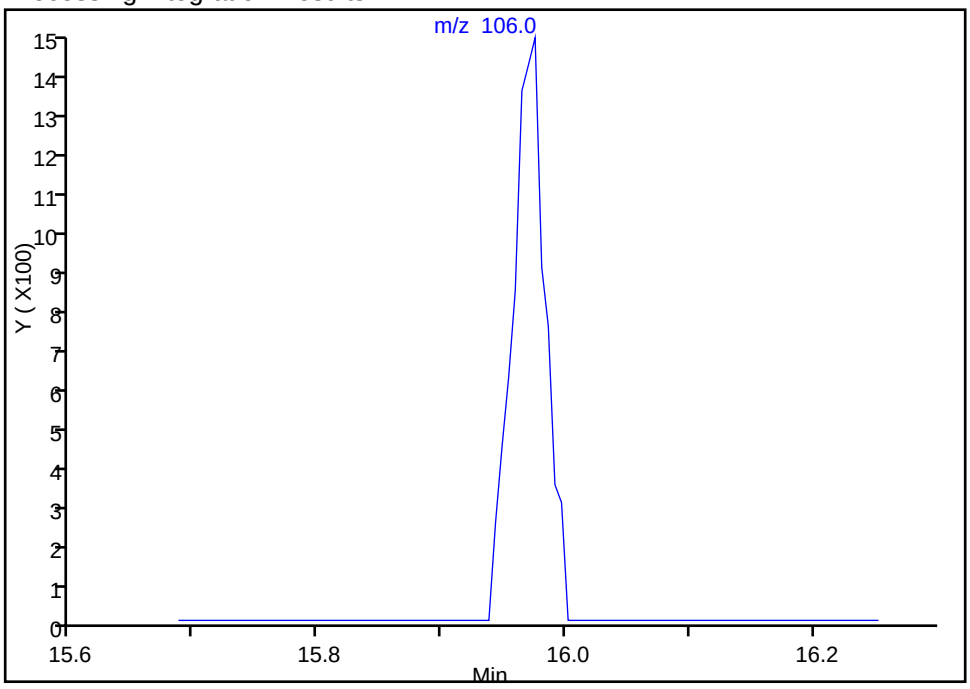
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 o-Xylene, CAS: 95-47-6

Signal: 1

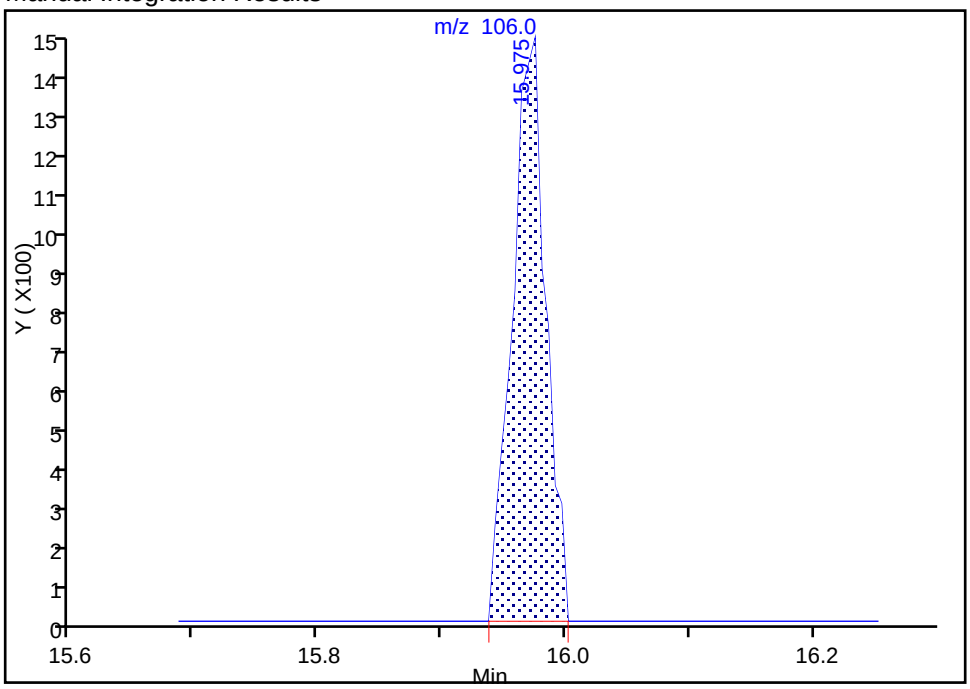
Processing Integration Results

Not Detected
Expected RT: 15.97



Manual Integration Results

RT: 15.98
Area: 2804
Amount: 0.025934
Amount Units: ppb v/v



Reviewer: bunmaa, 15-Mar-2018 16:49:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

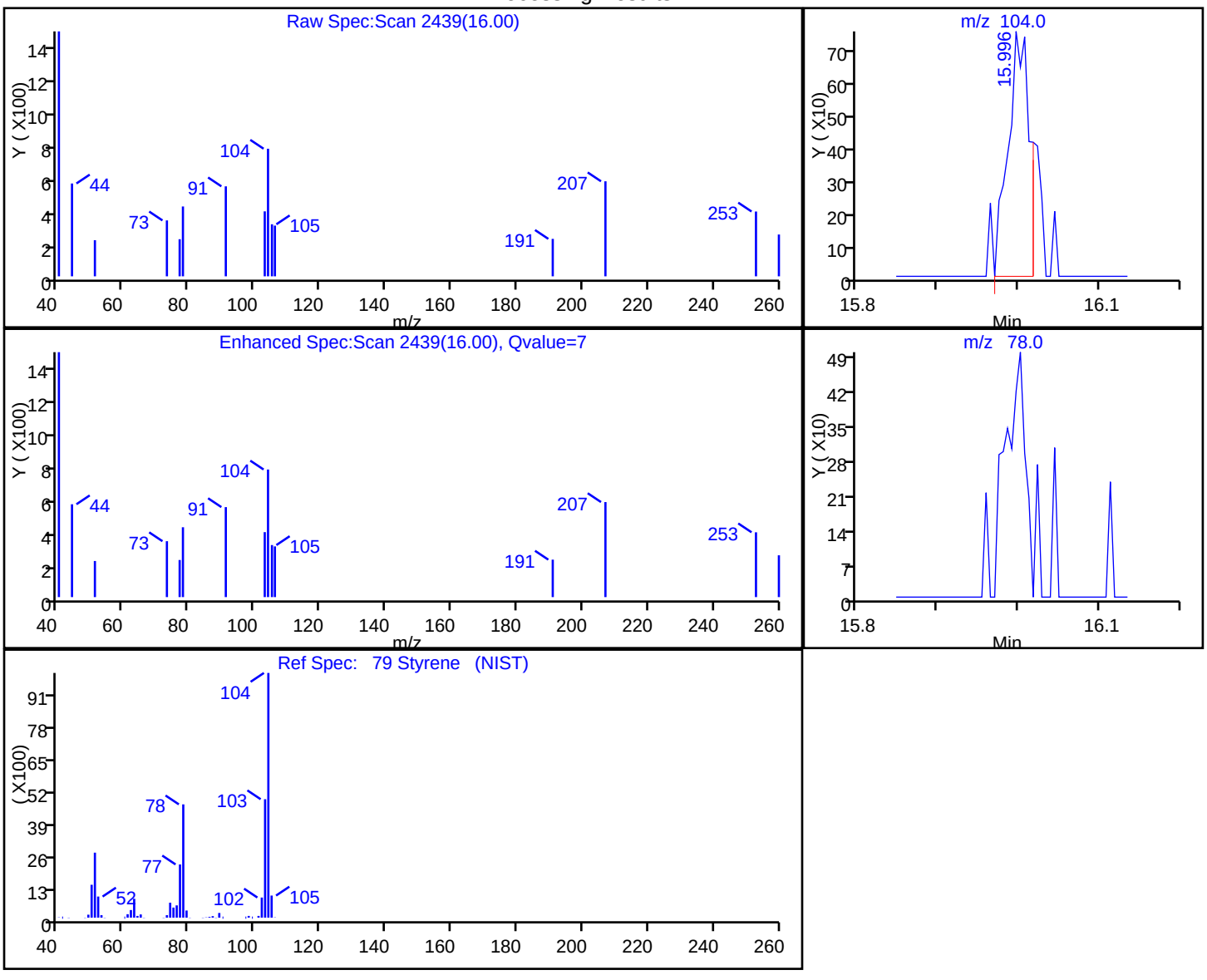
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
16.00	104.00	1393	0.008270
16.01	78.00	0	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

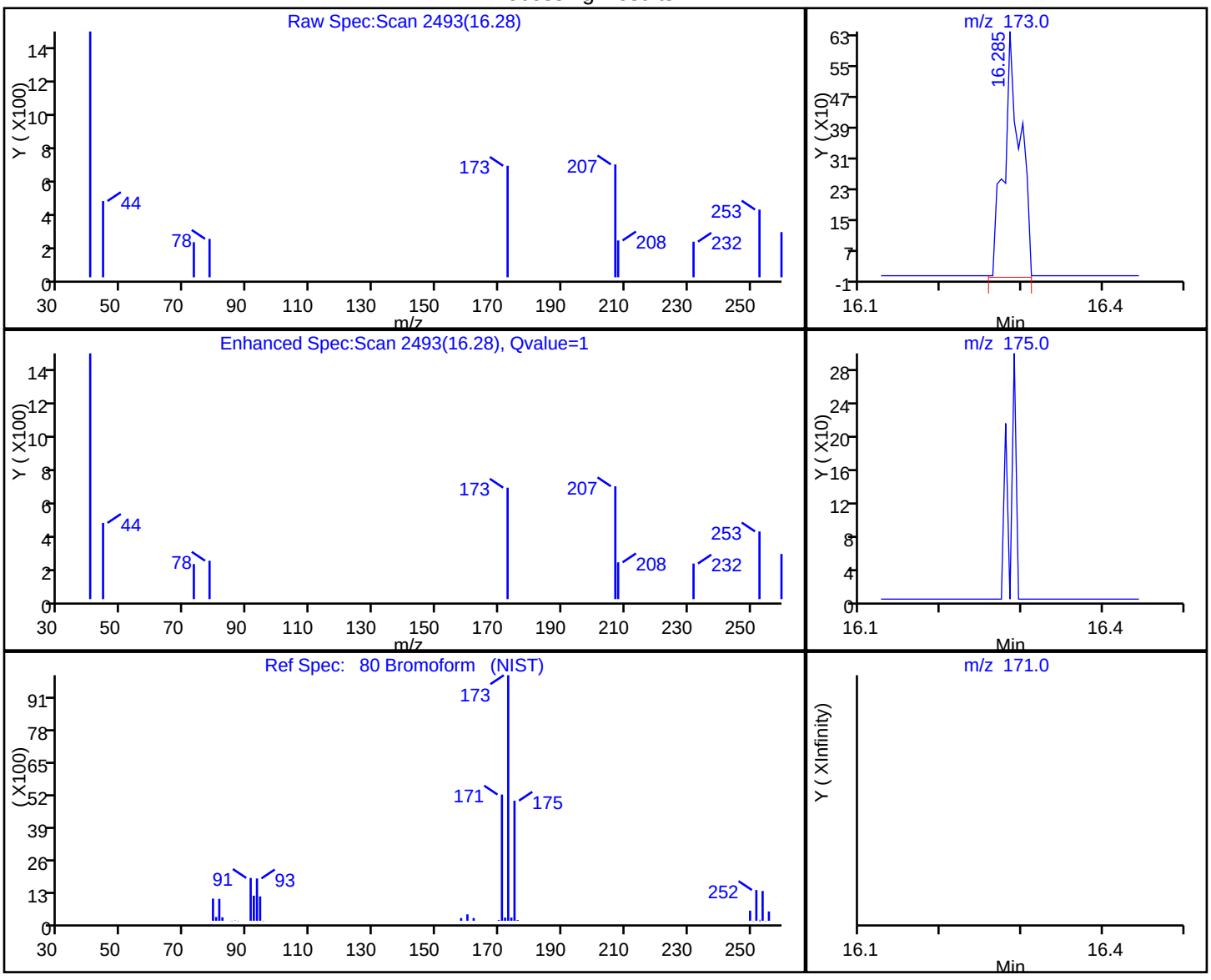
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

80 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
16.28	173.00	901	0.007185
16.28	175.00	0	
16.28	171.00	0	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

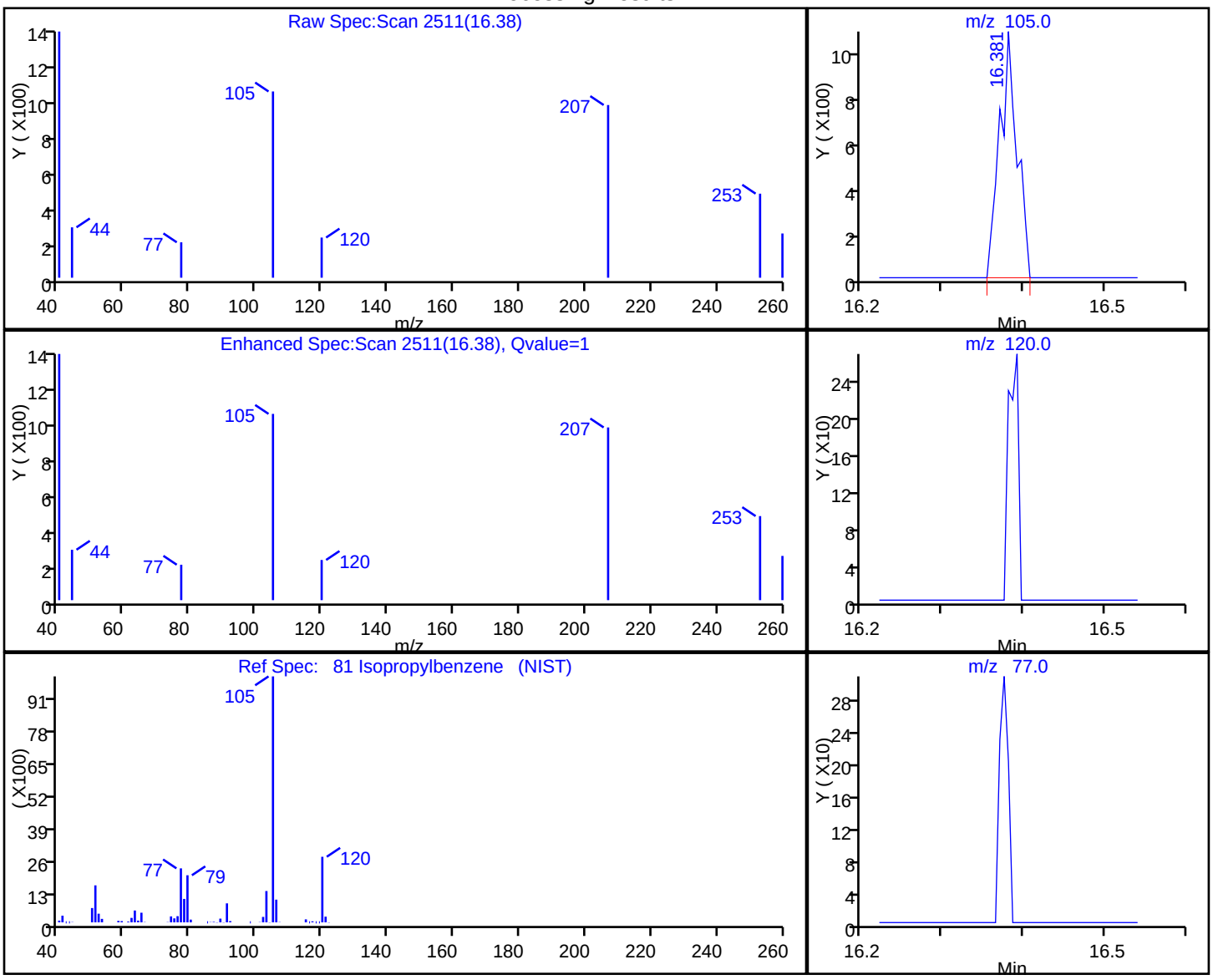
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 Isopropylbenzene, CAS: 98-82-8

Processing Results



RT	Mass	Response	Amount
16.38	105.00	1581	0.005285
16.38	120.00	0	
16.38	77.00	0	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

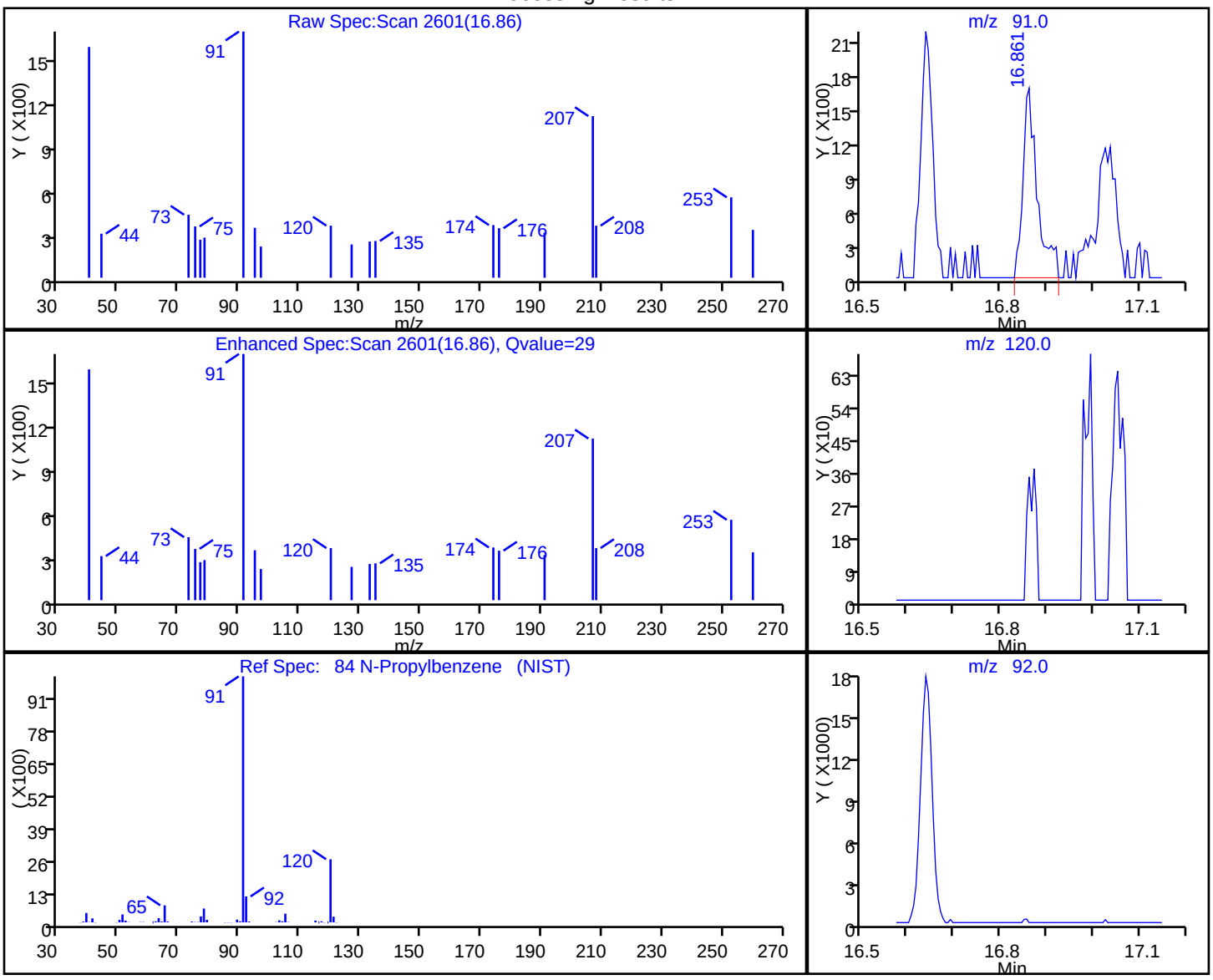
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

84 N-Propylbenzene, CAS: 103-65-1

Processing Results



RT	Mass	Response	Amount
16.86	91.00	3526	0.010093
16.87	120.00	0	
16.87	92.00	0	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

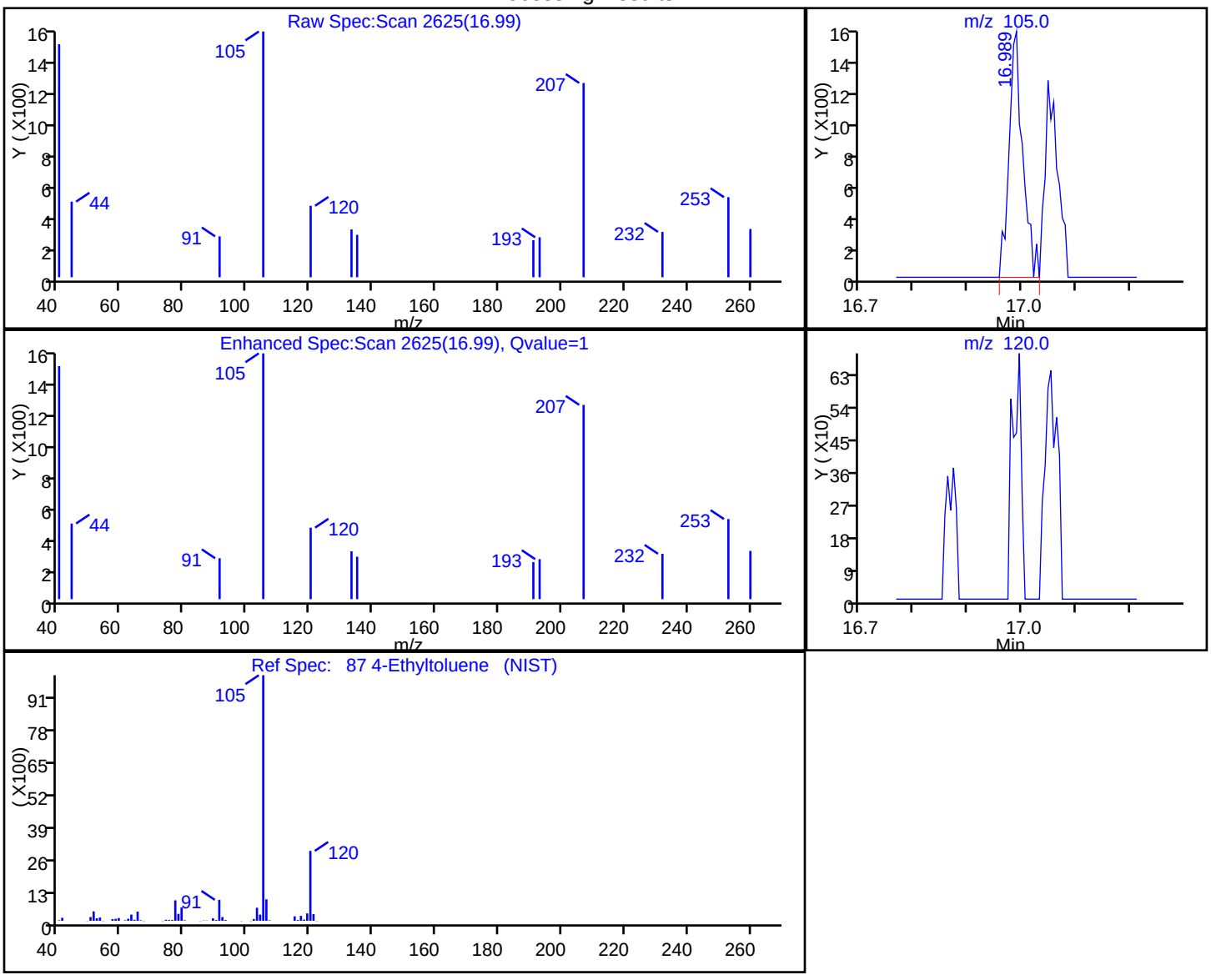
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

87 4-Ethyltoluene, CAS: 622-96-8

Processing Results



RT	Mass	Response	Amount
16.99	105.00	2806	0.009384
17.00	120.00	0	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

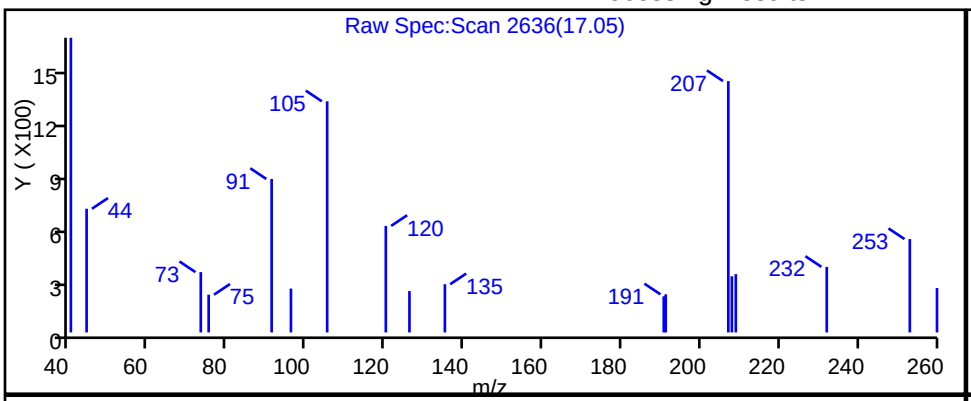
User Disabled Compound Report

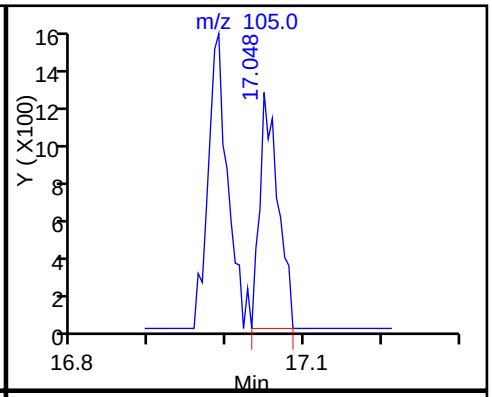
TestAmerica Burlington

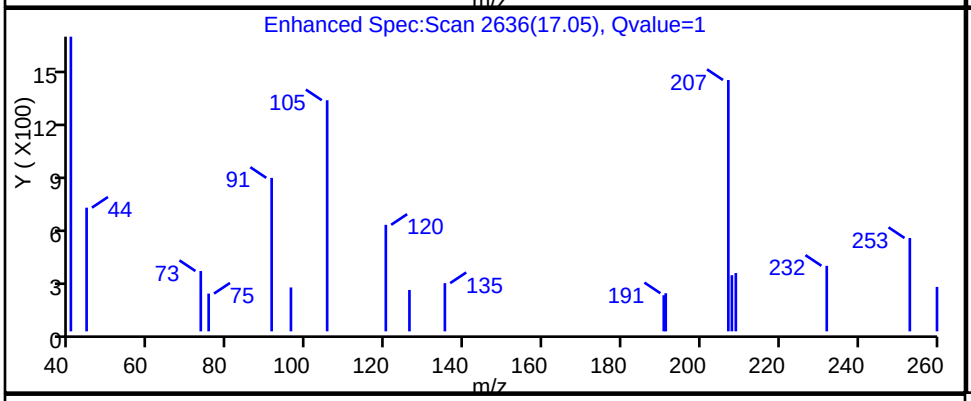
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

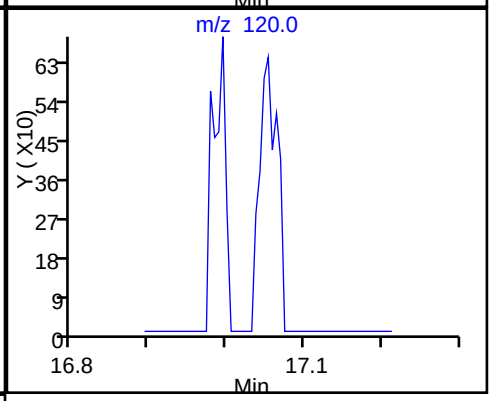
89 1,3,5-Trimethylbenzene, CAS: 108-67-8

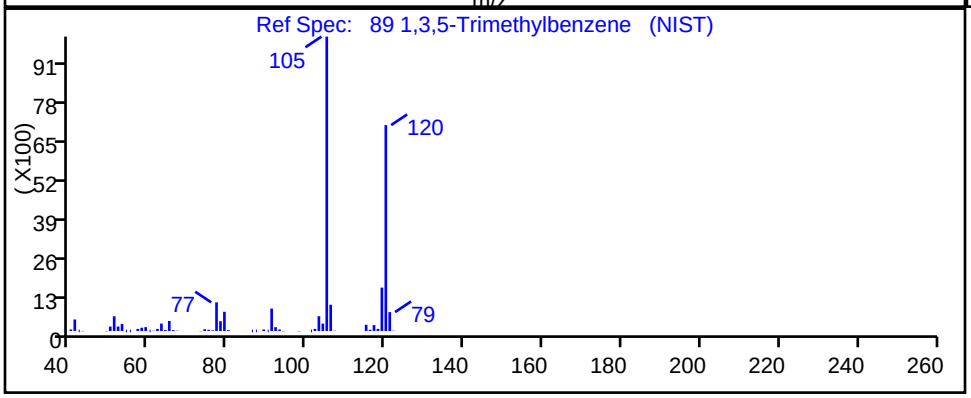
Processing Results











RT	Mass	Response	Amount
17.05	105.00	2101	0.008526
17.05	120.00	0	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

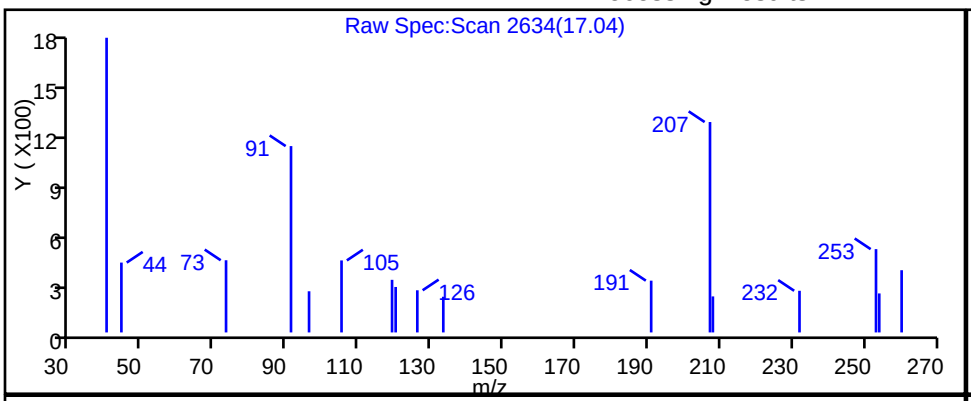
User Disabled Compound Report

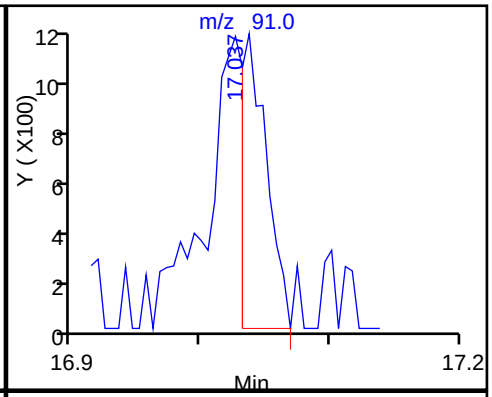
TestAmerica Burlington

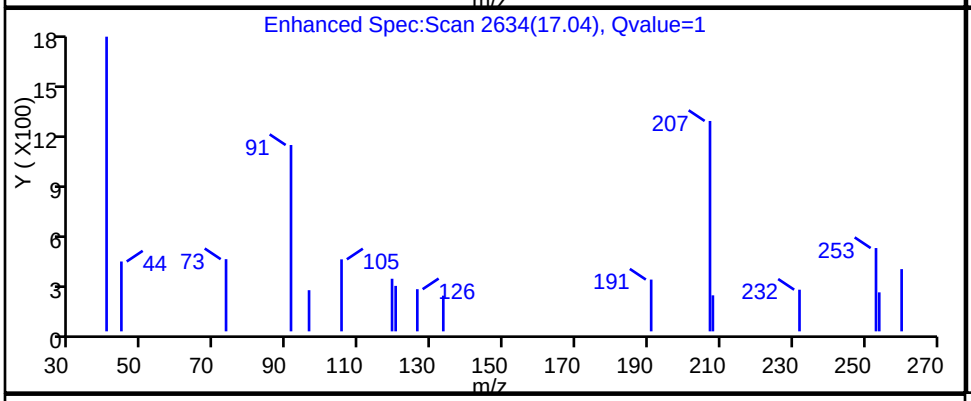
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

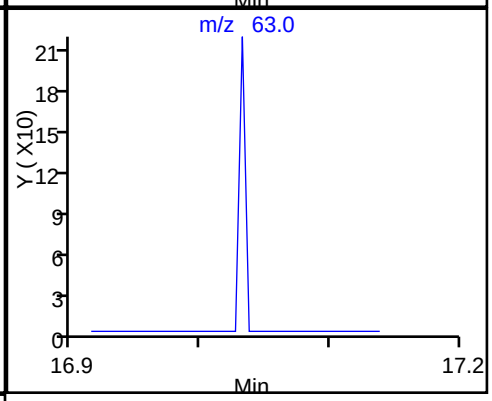
88 2-Chlorotoluene, CAS: 95-49-8

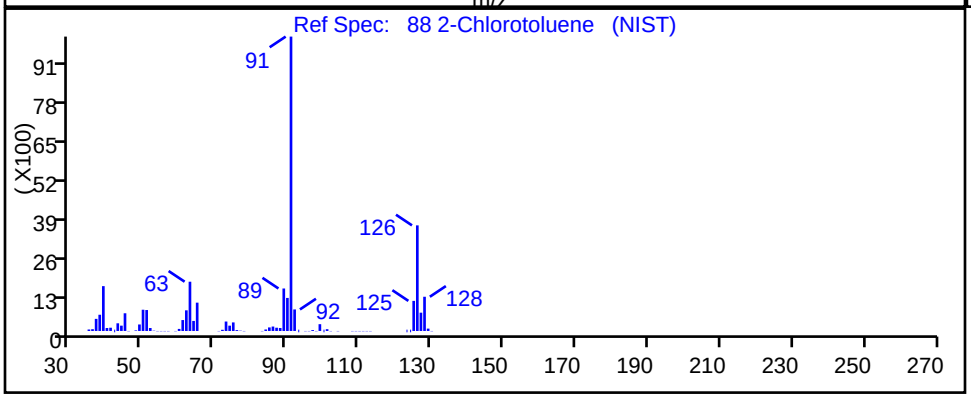
Processing Results











RT	Mass	Response	Amount
17.04	91.00	1550	0.006669
17.03	63.00	0	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

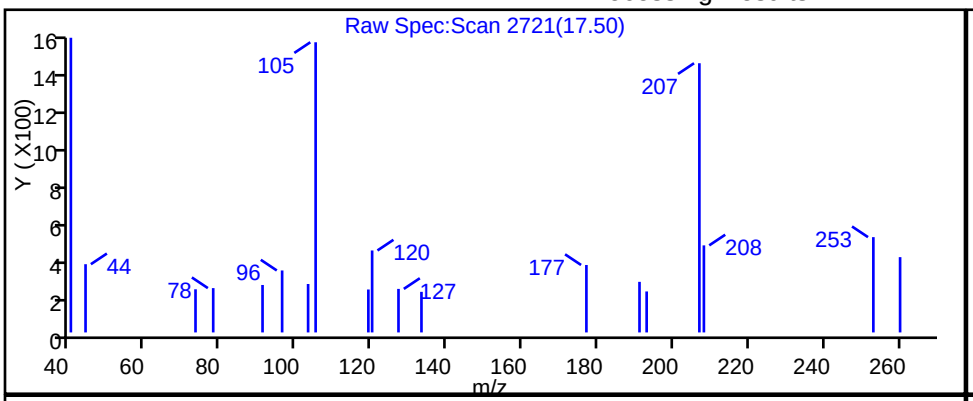
User Disabled Compound Report

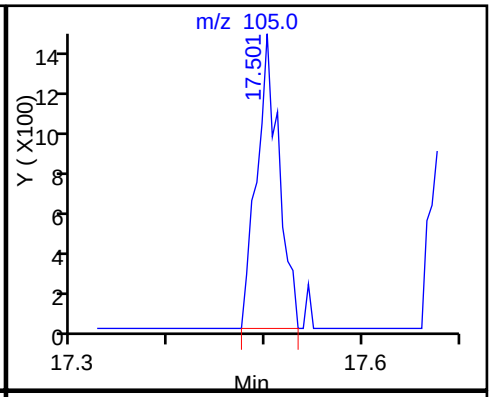
TestAmerica Burlington

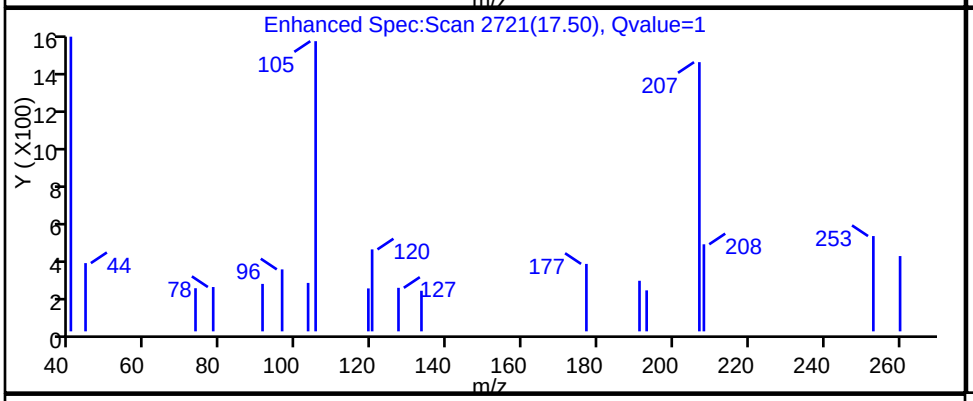
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

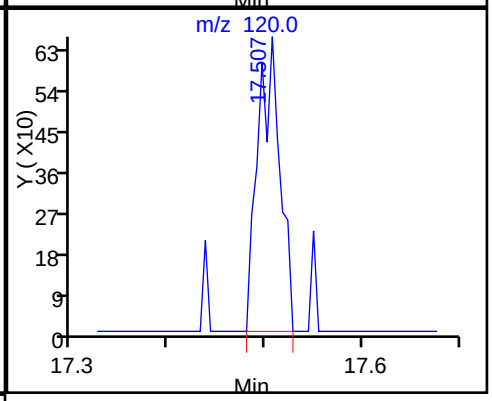
92 1,2,4-Trimethylbenzene, CAS: 95-63-6

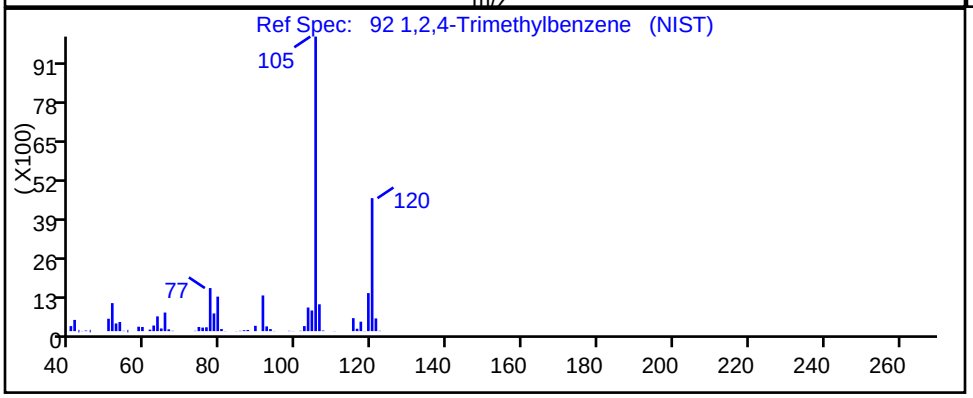
Processing Results











RT	Mass	Response	Amount
17.50	105.00	2351	0.009589
17.51	120.00	1030	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

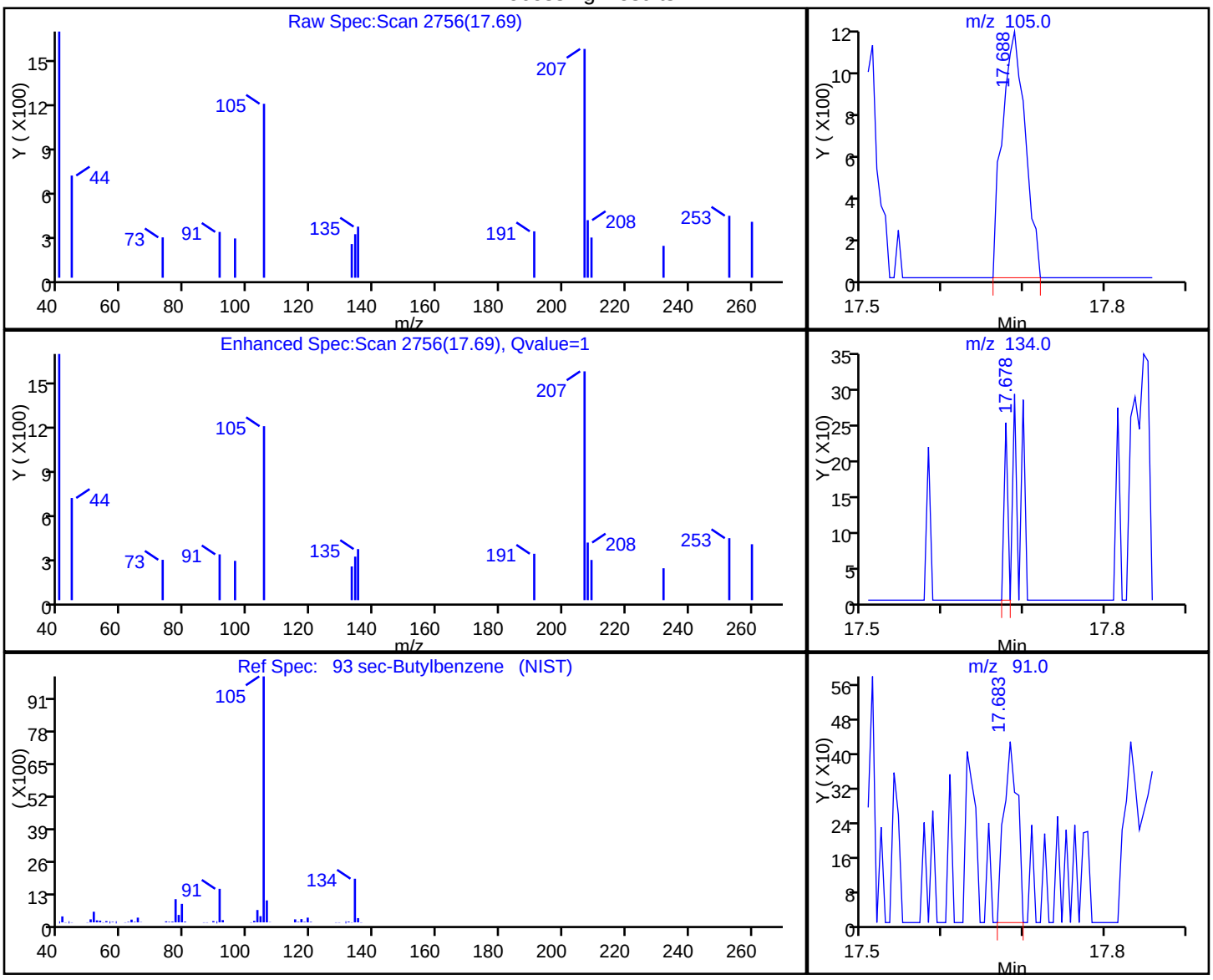
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
17.69	105.00	2262	0.006214
17.68	134.00	79	
17.68	91.00	490	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

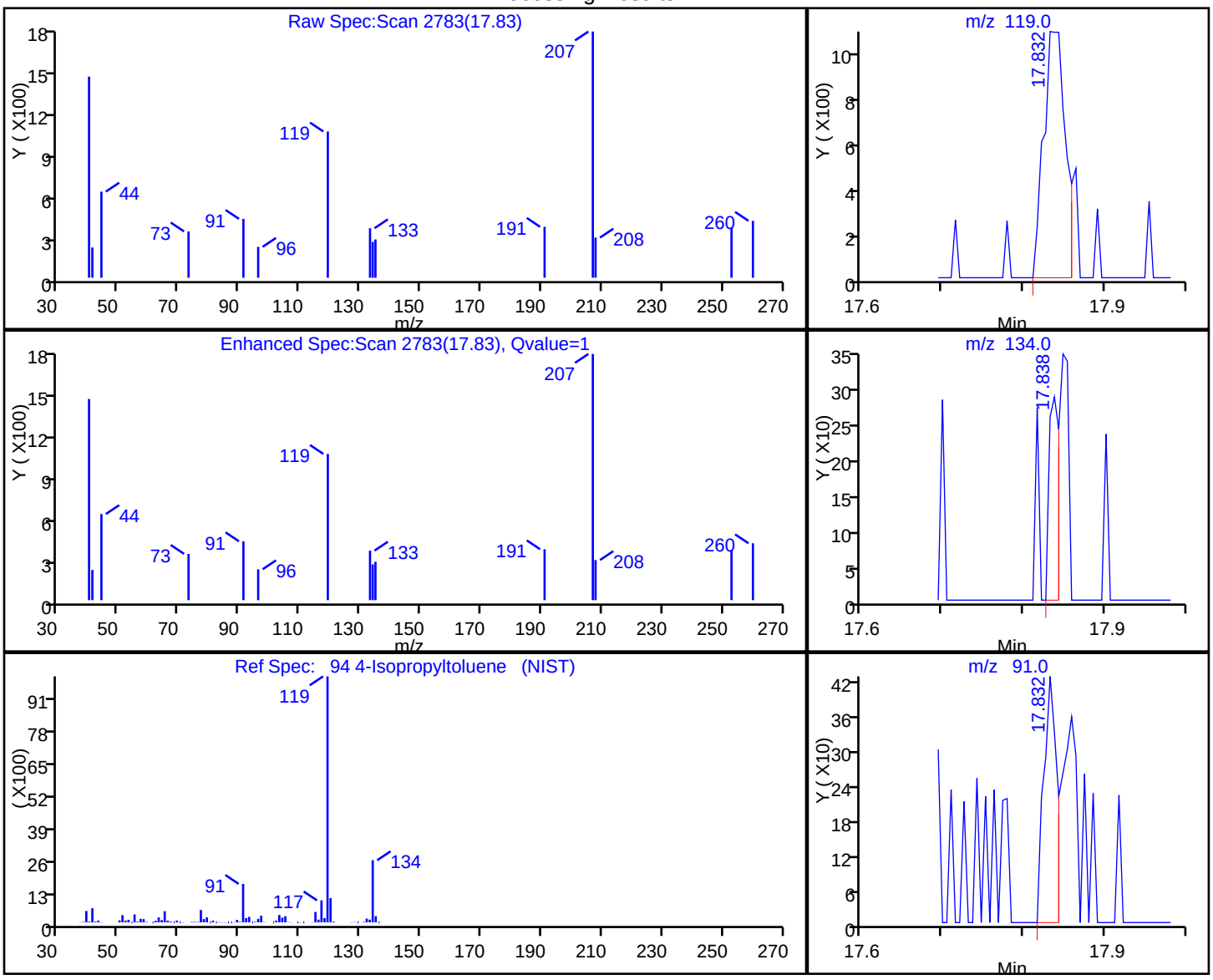
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
17.83	119.00	1973	0.006292
17.84	134.00	250	
17.83	91.00	468	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

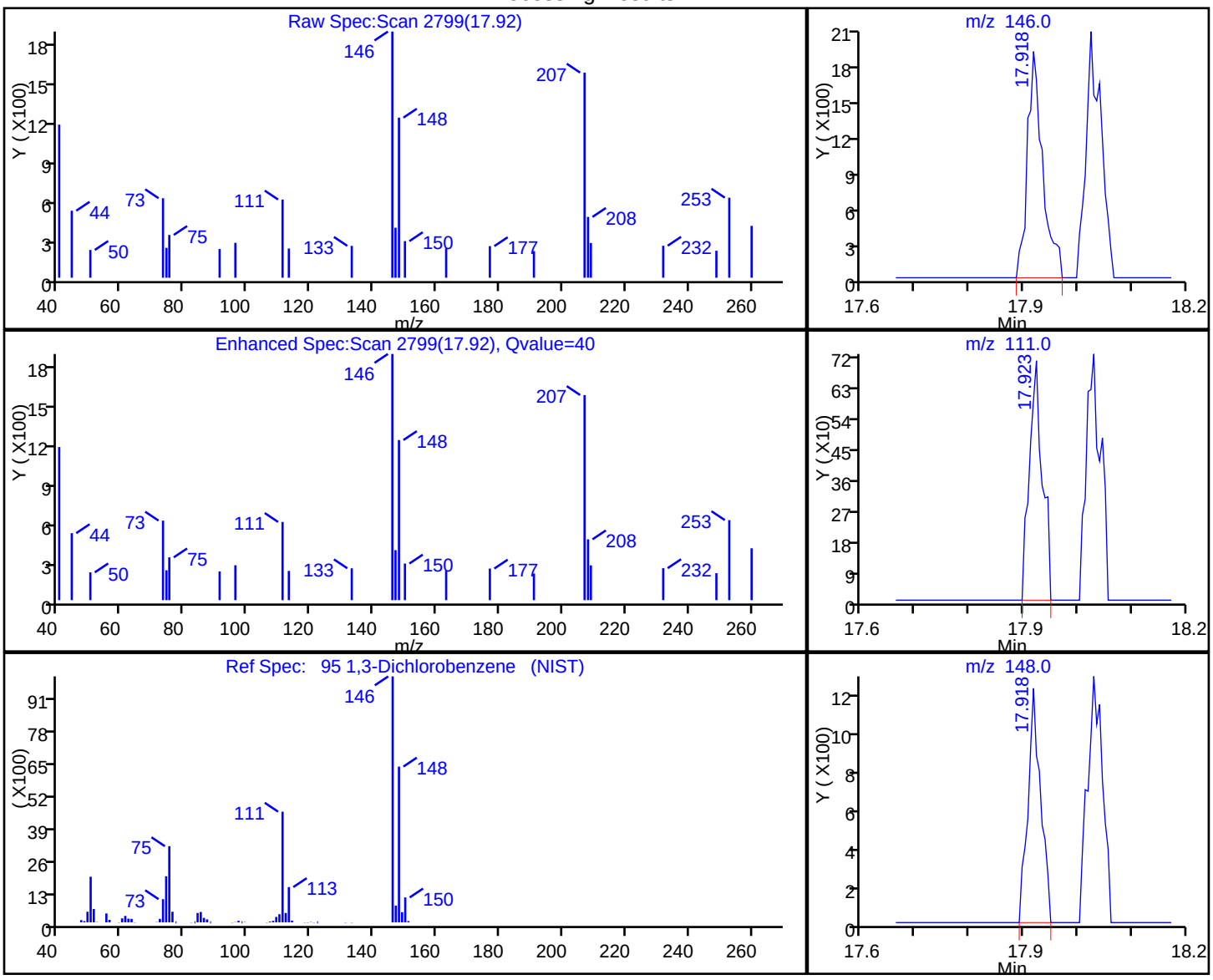
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
17.92	146.00	3683	0.019691
17.92	111.00	1182	
17.92	148.00	1981	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

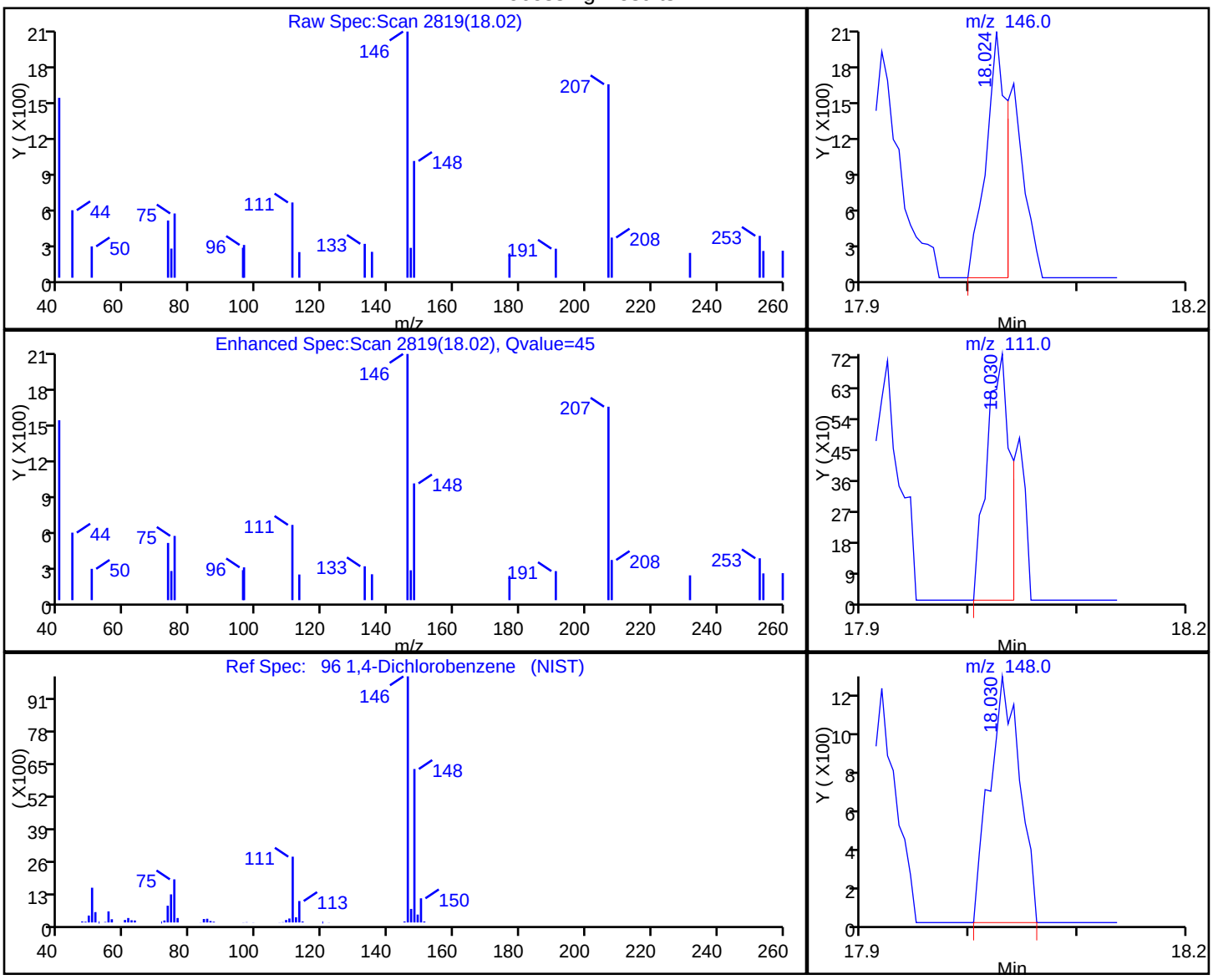
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
18.02	146.00	2644	0.014061
18.03	111.00	1081	
18.03	148.00	2489	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

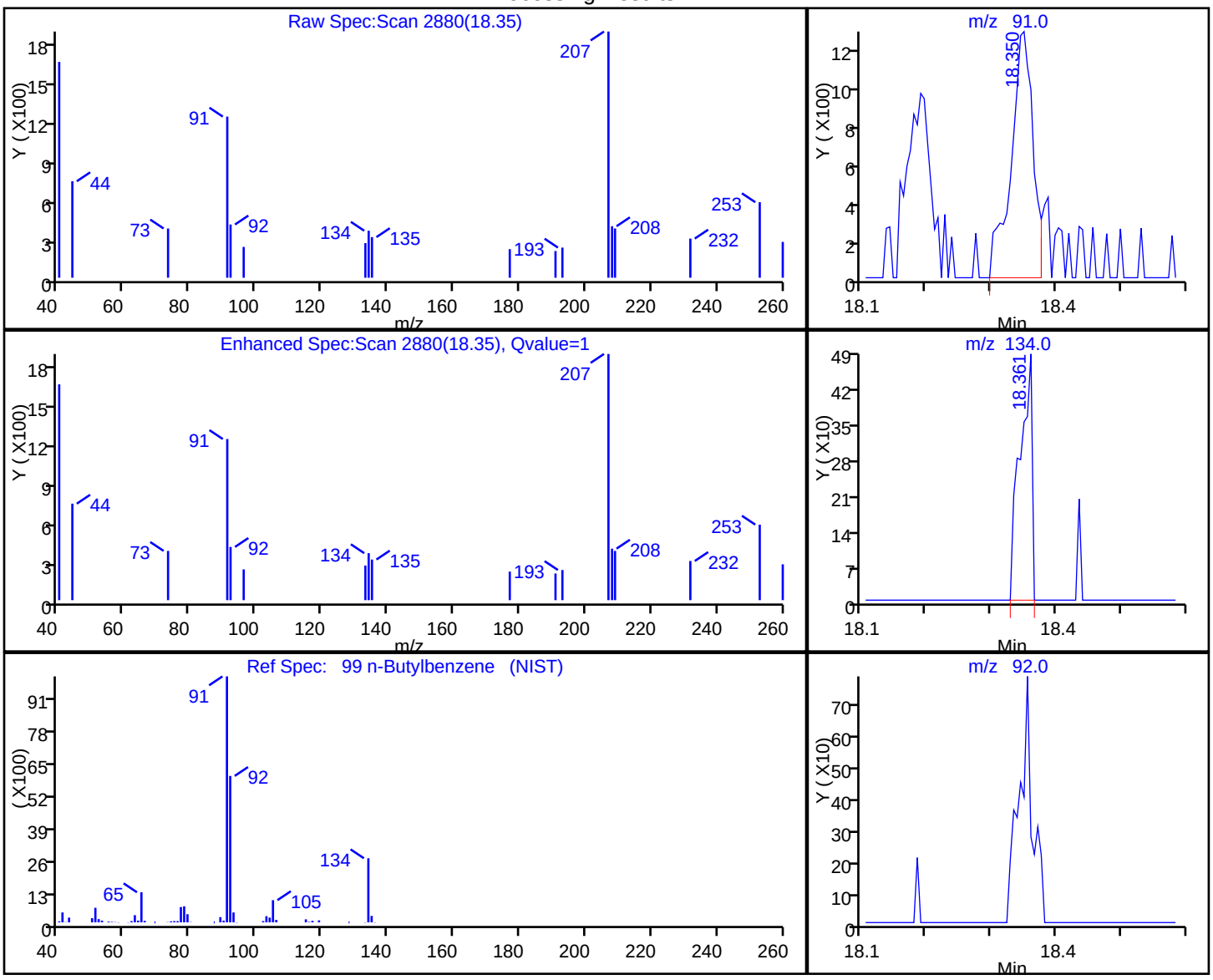
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

99 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
18.35	91.00	2880	0.010639
18.36	134.00	633	
18.35	92.00	0	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

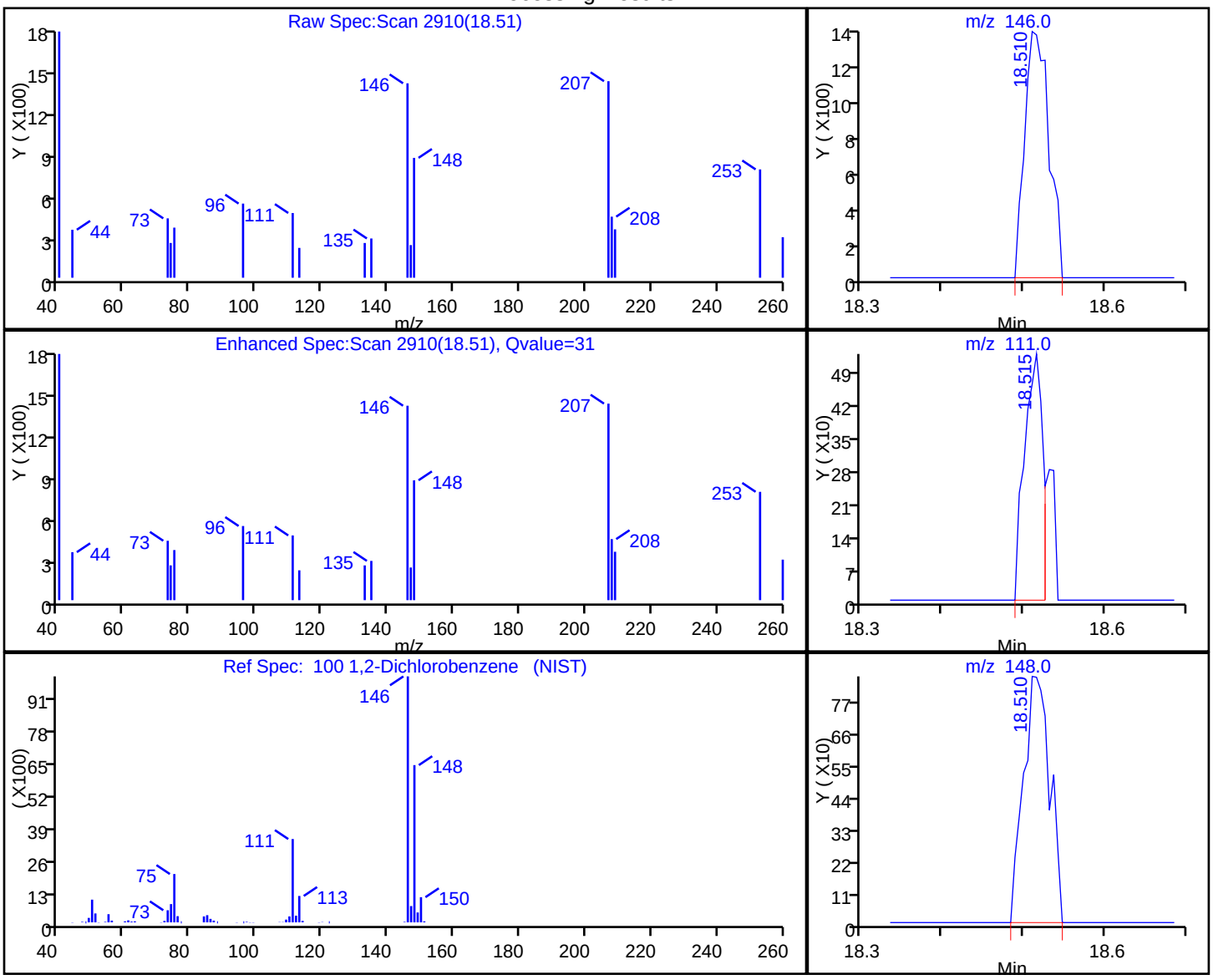
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

100 1,2-Dichlorobenzene, CAS: 95-50-1

Processing Results



RT	Mass	Response	Amount
18.51	146.00	2875	0.016351
18.52	111.00	822	
18.51	148.00	1933	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

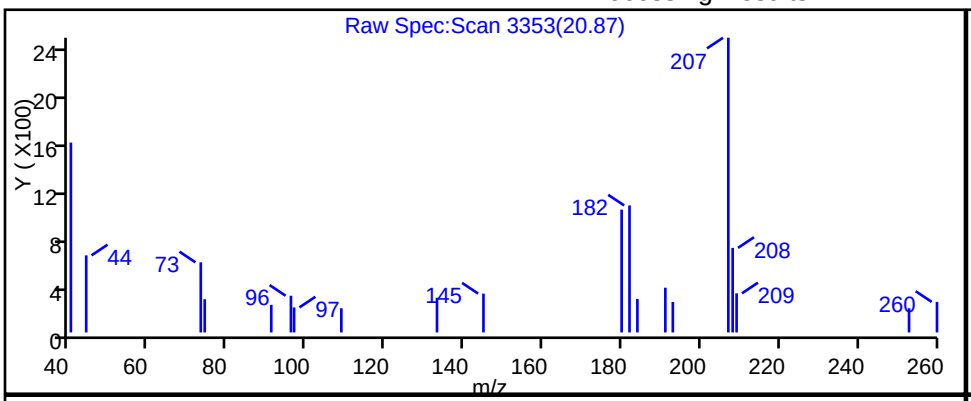
User Disabled Compound Report

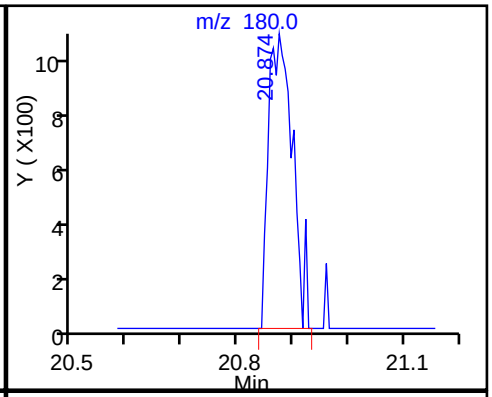
TestAmerica Burlington

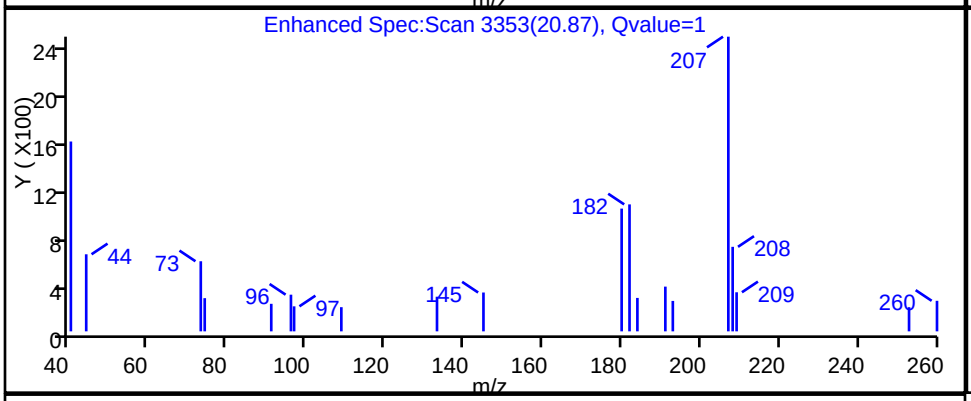
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

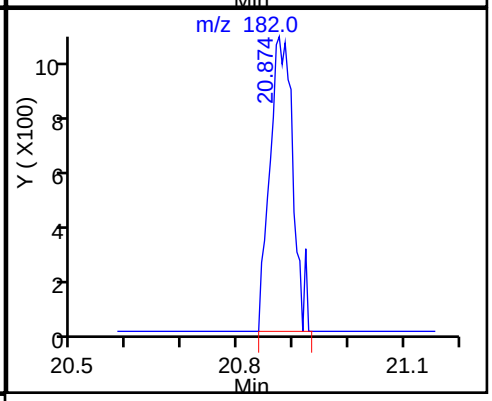
103 1,2,4-Trichlorobenzene, CAS: 120-82-1

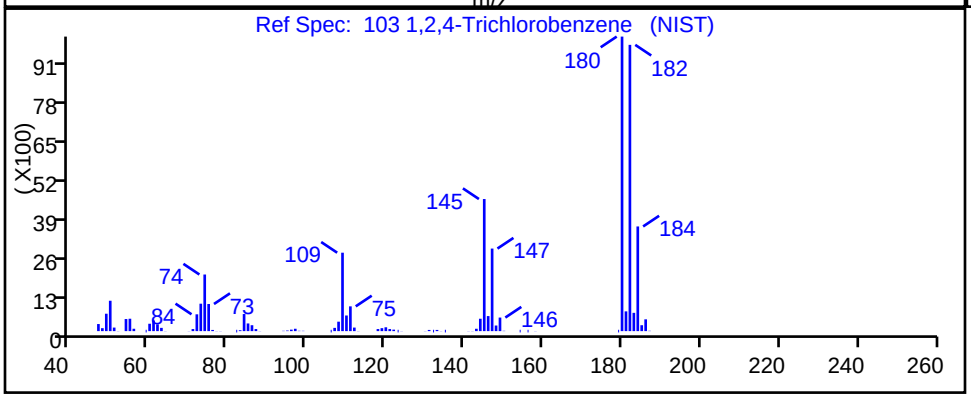
Processing Results











RT	Mass	Response	Amount
20.87	180.00	3088	0.022048
20.87	182.00	3053	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

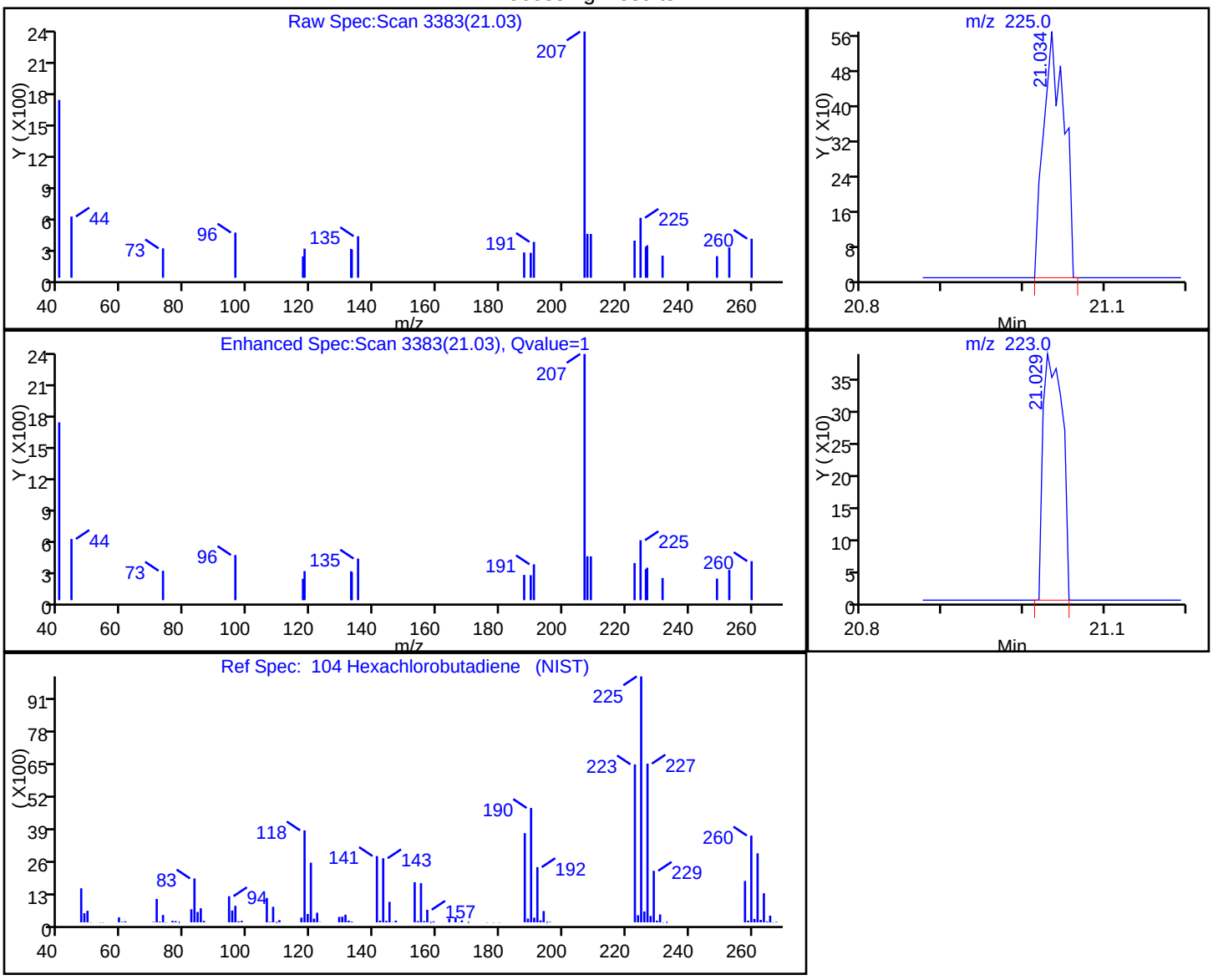
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

104 Hexachlorobutadiene, CAS: 87-68-3

Processing Results



RT	Mass	Response	Amount
21.03	225.00	999	0.008116
21.03	223.00	641	

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

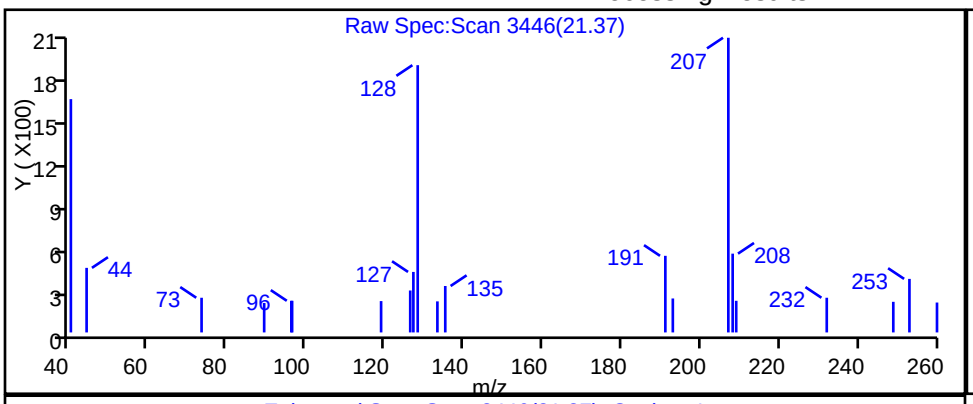
User Disabled Compound Report

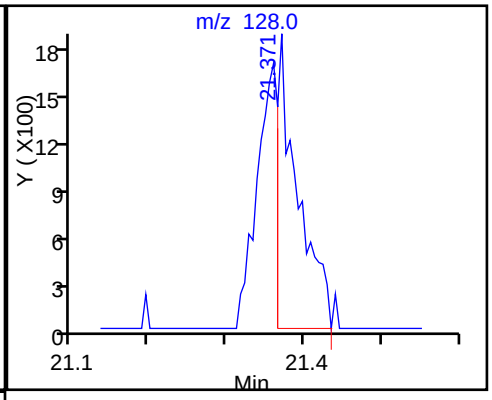
TestAmerica Burlington

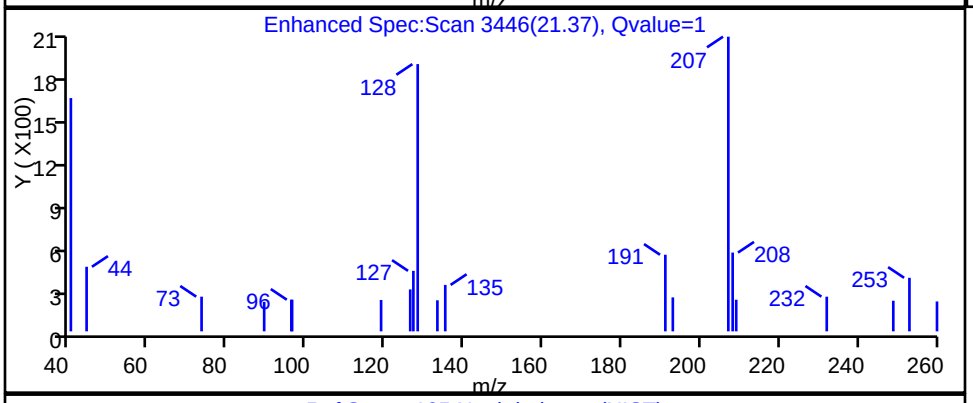
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-06.D				
Injection Date:	14-Mar-2018 15:32:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

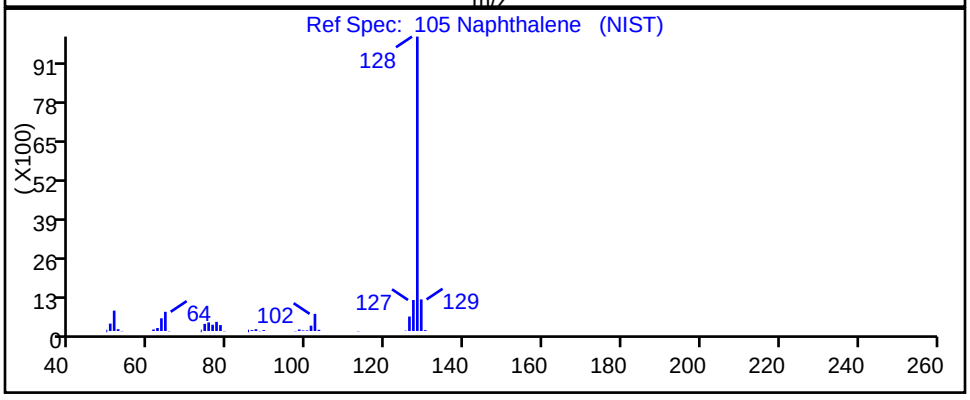
105 Naphthalene, CAS: 91-20-3

Processing Results









RT	Mass	Response	Amount
21.37	128.00	3381	0.012044

Reviewer: bunmaa, 15-Mar-2018 16:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab File ID: 29611_04.D Lab Sample ID: MB 200-127437/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 03/16/2018 11:29

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-127437/3	29611_03.D	03/16/2018 10:35
5674	200-42621-5	29611_11.D	03/16/2018 18:25

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42621-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-127437/4

Matrix: Air | Lab File ID: 29611_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 03/16/2018 11:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127437 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127437/4

Matrix: Air Lab File ID: 29611_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/16/2018 11:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127437 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127437/4

Matrix: Air Lab File ID: 29611_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/16/2018 11:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127437 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 16-Mar-2018 11:29:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029611-004
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Mar-2018 11:38:53 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: bunmaa Date: 19-Mar-2018 11:38:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967					ND	
2 Dichlorodifluoromethane	85		3.037					ND	
3 Chlorodifluoromethane	51		3.090					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.298					ND	
5 Chloromethane	50		3.426					ND	
6 Butane	43		3.629					ND	
7 Vinyl chloride	62		3.667					ND	
8 Butadiene	54		3.747					ND	
10 Bromomethane	94		4.414					ND	
11 Chloroethane	64		4.659					ND	
12 2-Methylbutane	43		4.739					ND	
13 Vinyl bromide	106		5.049					ND	
14 Trichlorofluoromethane	101		5.156					ND	
16 Pentane	43		5.305					ND	
17 Ethanol	45		5.737					ND	
18 Ethyl ether	59		5.823					ND	
19 Acrolein	56		6.196					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.250					ND	
21 1,1-Dichloroethene	96		6.282					ND	
22 Acetone	43		6.500					ND	
23 Carbon disulfide	76		6.655					ND	
24 Isopropyl alcohol	45		6.826					ND	
25 3-Chloro-1-propene	41		7.071					ND	
26 Acetonitrile	41		7.178					ND	
T 15 Methyl Acetate TIC	43		7.237					ND	
27 Methylene Chloride	49		7.370					ND	
28 2-Methyl-2-propanol	59		7.605					ND	
29 Methyl tert-butyl ether	73		7.781					ND	
31 trans-1,2-Dichloroethene	61		7.819					ND	
32 Acrylonitrile	53		7.952					ND	
33 Hexane	57		8.224					ND	
34 1,1-Dichloroethane	63		8.689					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.779					ND	
37 cis-1,2-Dichloroethene	96		9.809					ND	
38 2-Butanone (MEK)	72		9.847					ND	
39 Ethyl acetate	88		9.916					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
* 40 Chlorobromomethane	128	10.268	10.274	-0.006	89	200460	10.0	10.0	
41 Tetrahydrofuran	42		10.274					ND	
42 Chloroform	83		10.418					ND	
43 Cyclohexane	84		10.663					ND	
44 1,1,1-Trichloroethane	97		10.685					ND	
45 Carbon tetrachloride	117		10.946					ND	
46 Isooctane	57		11.389					ND	
47 Benzene	78		11.400					ND	
48 1,2-Dichloroethane	62		11.581					ND	
49 n-Heptane	43		11.800					ND	
* 50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1083012	10.0	10.0	
52 n-Butanol	56		12.670					ND	
53 Trichloroethene	95		12.729					ND	
A 51 GRO	1	12.995	(4.729-21.262)		0	4542633		0	
T 36 Methyl cyclohexane TIC	55		13.179					ND	
54 1,2-Dichloropropane	63		13.273					ND	
55 Methyl methacrylate	69		13.465					ND	
56 1,4-Dioxane	88		13.508					ND	
57 Dibromomethane	174		13.540					ND	
58 Dichlorobromomethane	83		13.849					ND	
A 59 TVOC as Toluene	1	14.687	(2.957-26.417)		0	4699990		0	
60 cis-1,3-Dichloropropene	75		14.799					ND	
61 4-Methyl-2-pentanone (MIBK	43		15.082					ND	
65 Toluene	92		15.392					ND	
64 n-Octane	43		15.488					ND	
66 trans-1,3-Dichloropropene	75		16.000					ND	
67 1,1,2-Trichloroethane	83		16.368					ND	
68 Tetrachloroethene	166		16.491					ND	
69 2-Hexanone	43		16.817					ND	
71 Chlorodibromomethane	129		17.137					ND	
72 Ethylene Dibromide	107		17.393					ND	
* 74 Chlorobenzene-d5	117	18.300	18.300	0.000	97	1084965	10.0	10.0	
75 Chlorobenzene	112		18.359					ND	
76 Ethylbenzene	91		18.519					ND	U
77 n-Nonane	57		18.674					ND	
78 m-Xylene & p-Xylene	106		18.770					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		18.823					ND	
79 o-Xylene	106		19.603					ND	
80 Styrene	104		19.656					ND	
81 Bromoform	173		20.088					ND	
S 73 Xylenes, Total	106		20.100					ND	
82 Isopropylbenzene	105		20.312					ND	
84 1,1,2,2-Tetrachloroethane	83		20.979					ND	
85 N-Propylbenzene	91		21.049					ND	
86 1,2,3-Trichloropropane	75		21.070					ND	
88 4-Ethyltoluene	105		21.246					ND	
89 2-Chlorotoluene	91		21.246					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57		21.252					ND	
90 1,3,5-Trimethylbenzene	105		21.353					ND	
91 Alpha Methyl Styrene	118		21.727					ND	
92 tert-Butylbenzene	119		21.849					ND	
93 1,2,4-Trimethylbenzene	105		21.945					ND	
94 sec-Butylbenzene	105		22.180					ND	
95 4-Isopropyltoluene	119		22.383					ND	
96 1,3-Dichlorobenzene	146		22.410					ND	Ua
97 1,4-Dichlorobenzene	146	22.548	22.548	0.000	83	728		0.0147	
98 Benzyl chloride	91		22.735					ND	
100 n-Butylbenzene	91		22.954					ND	
99 Undecane	57		22.991					ND	
101 1,2-Dichlorobenzene	146		23.066					ND	Ua
102 Dodecane	57		24.528					ND	
103 1,2,4-Trichlorobenzene	180		25.489					ND	Ua
104 Hexachlorobutadiene	225		25.681					ND	
105 Naphthalene	128		25.943					ND	
106 1,2,3-Trichlorobenzene	180	26.423	26.407	0.016	1	611		0.0199	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

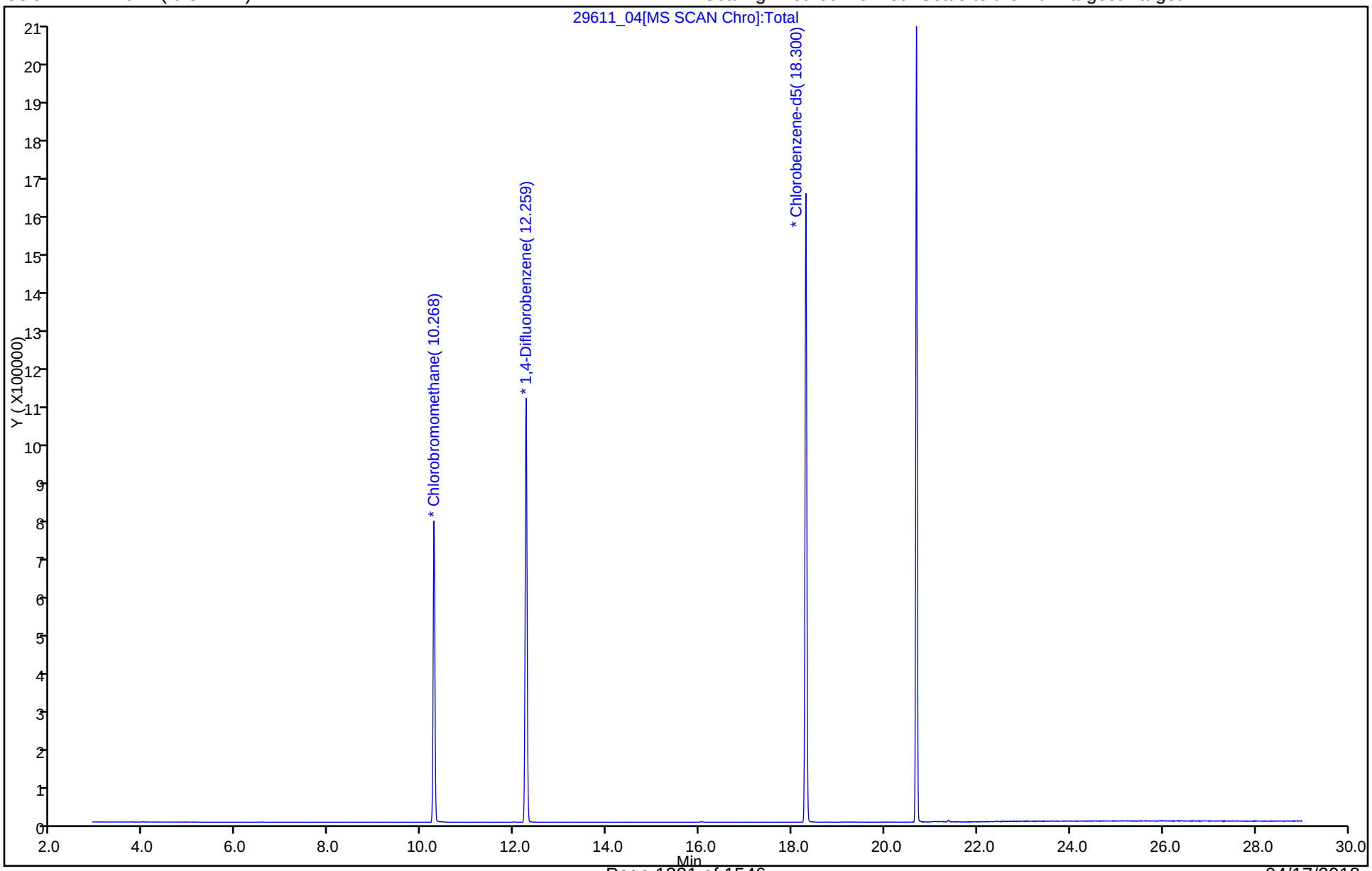
Report Date: 19-Mar-2018 11:38:54 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D

Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



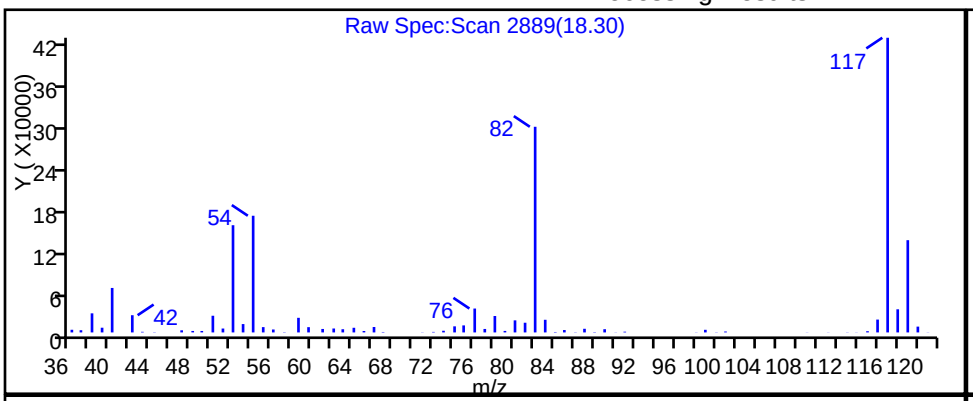
User Disabled Compound Report

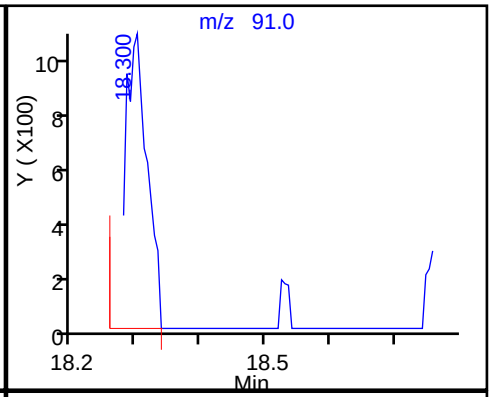
TestAmerica Burlington

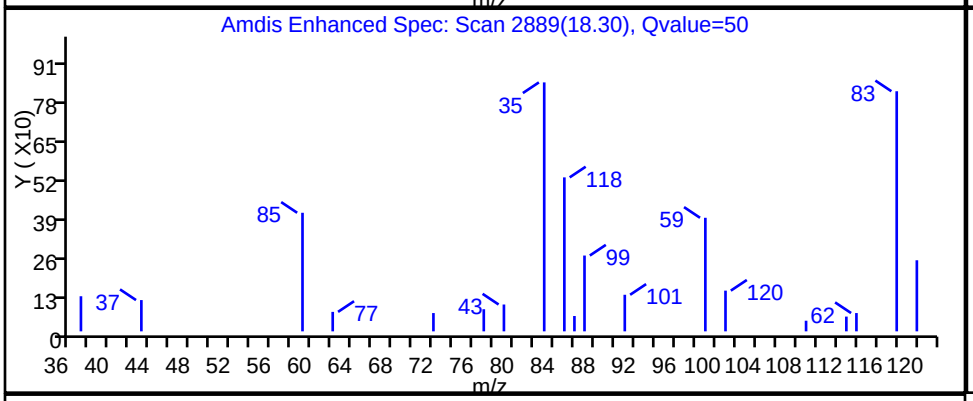
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D				
Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

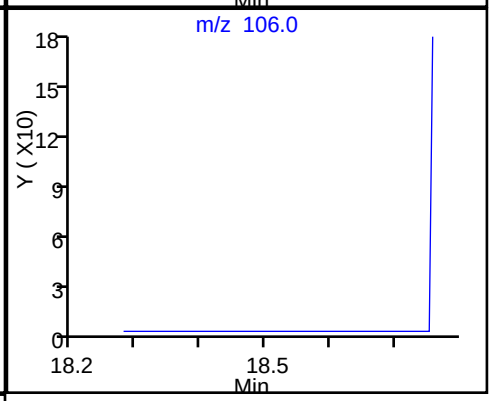
76 Ethylbenzene, CAS: 100-41-4

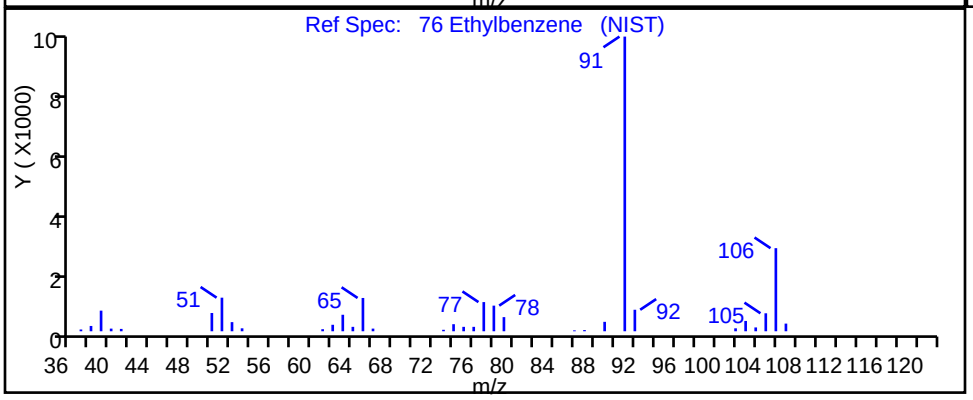
Processing Results











RT	Mass	Response	Amount
18.30	91.00	2575	0.030791
18.52	106.00	0	

Reviewer: bunmaa, 19-Mar-2018 11:38:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

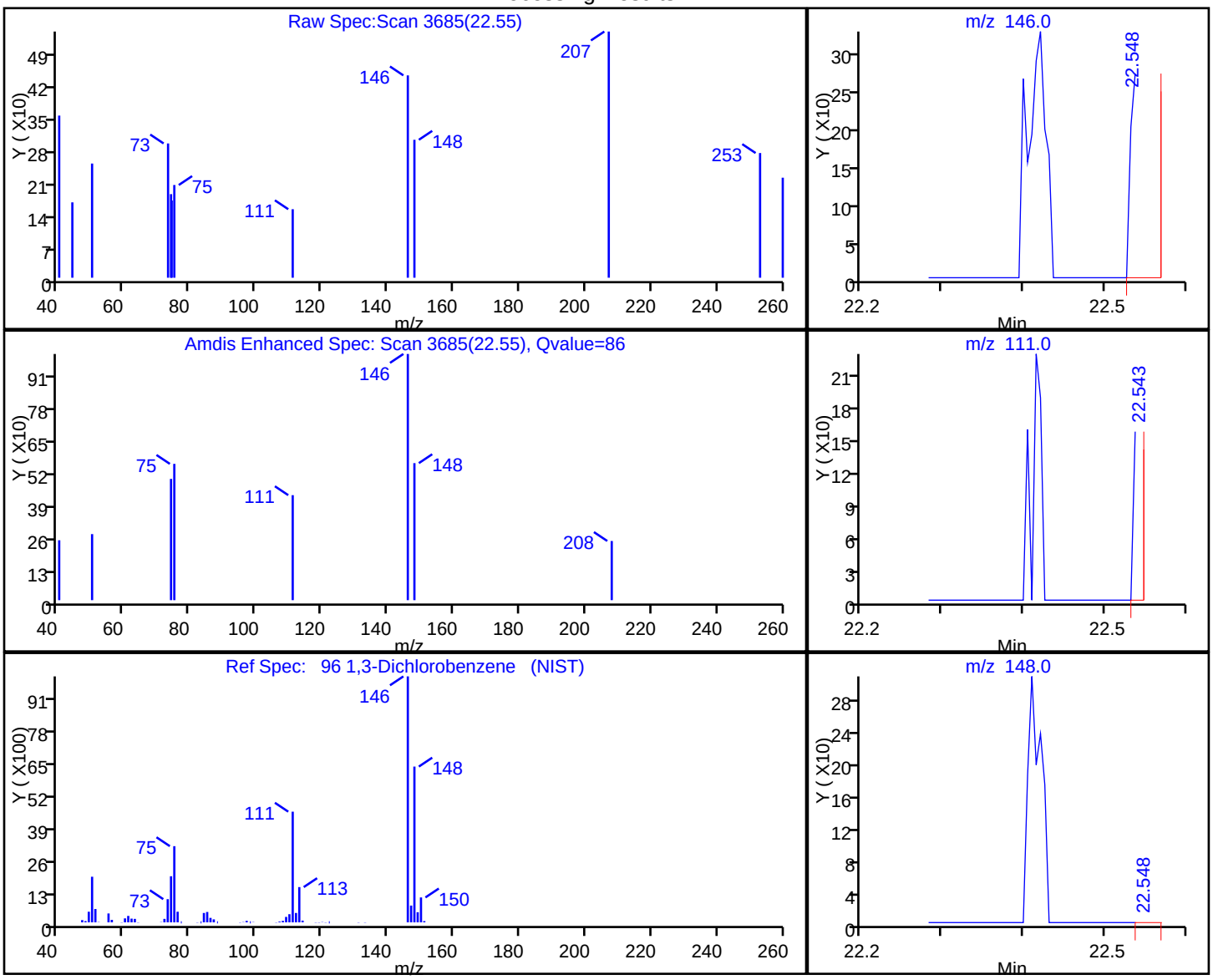
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D				
Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
22.55	146.00	728	0.014543
22.54	111.00	152	
22.55	148.00	353	

Reviewer: bunmaa, 19-Mar-2018 11:38:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

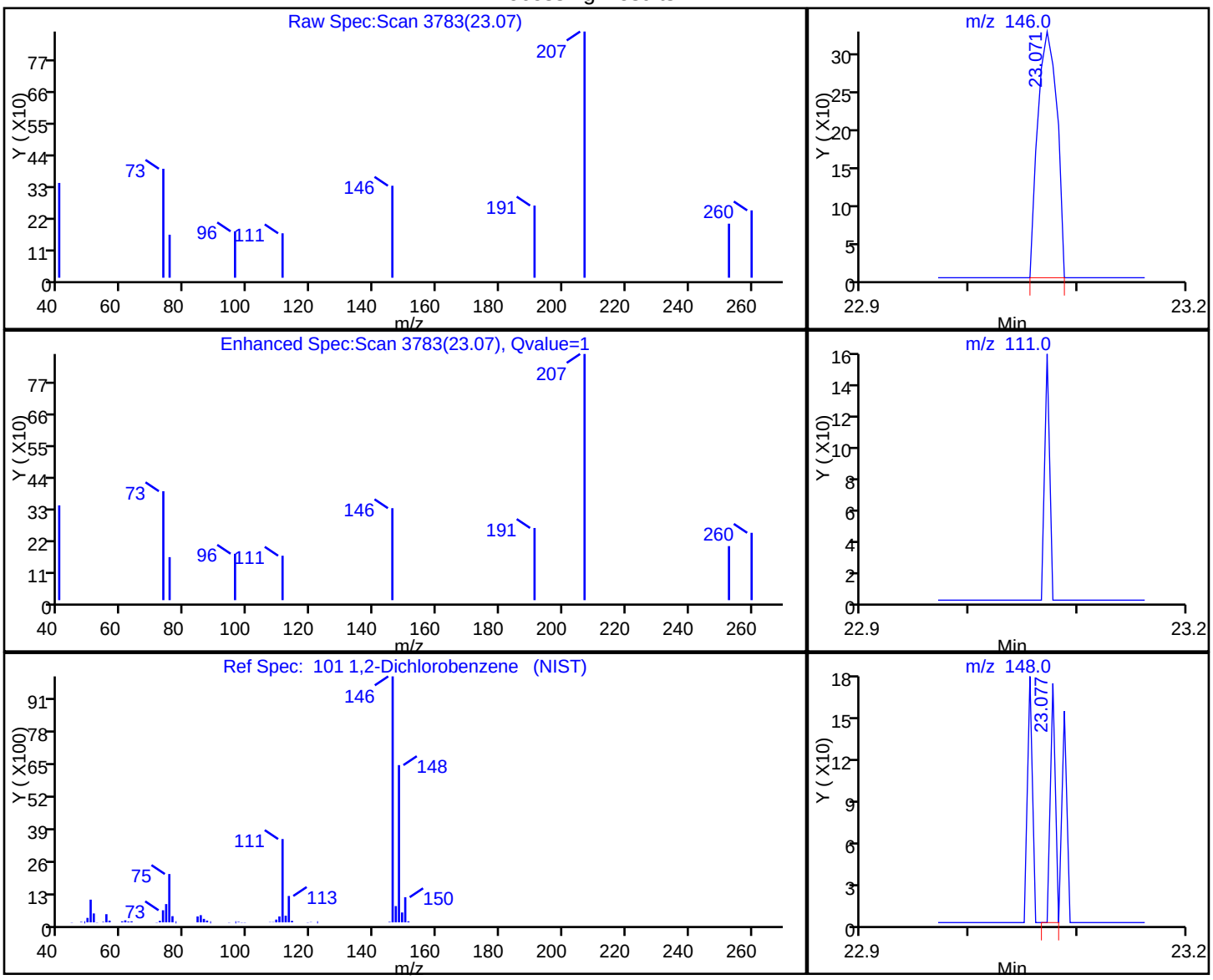
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D				
Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

101 1,2-Dichlorobenzene, CAS: 95-50-1

Processing Results



RT	Mass	Response	Amount
23.07	146.00	401	0.008654
23.07	111.00	0	
23.08	148.00	55	

Reviewer: bunmaa, 19-Mar-2018 11:38:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

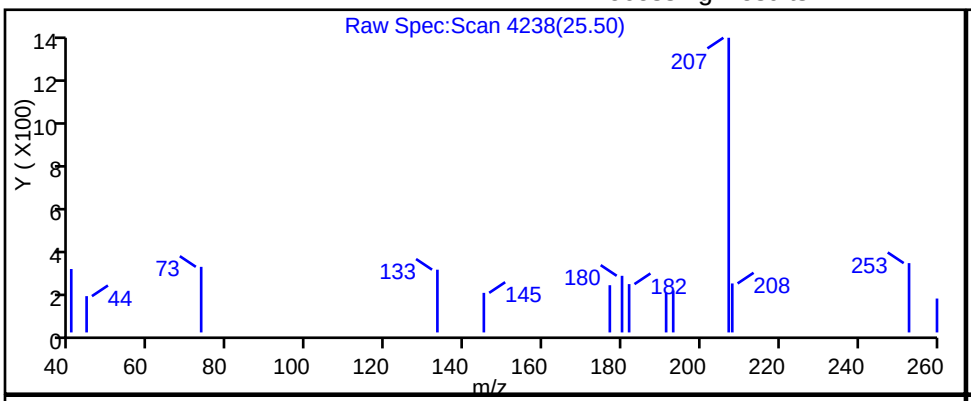
User Disabled Compound Report

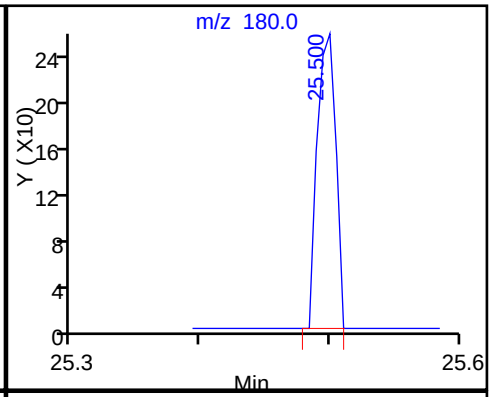
TestAmerica Burlington

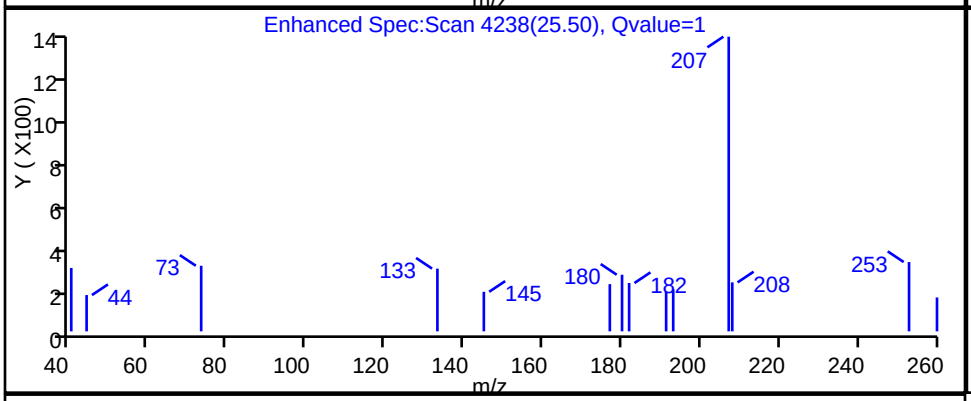
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D				
Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

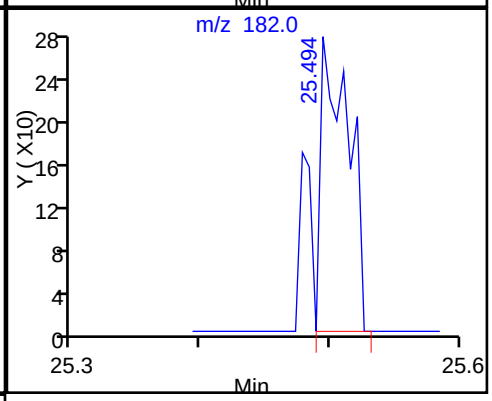
103 1,2,4-Trichlorobenzene, CAS: 120-82-1

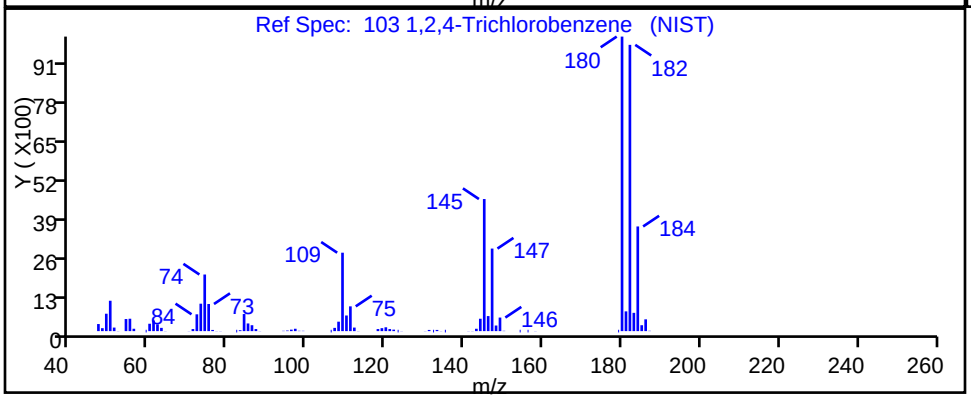
Processing Results











RT	Mass	Response	Amount
25.50	180.00	258	0.007447
25.49	182.00	418	

Reviewer: bunmaa, 19-Mar-2018 11:38:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab File ID: 29611_04.D Lab Sample ID: MB 200-127437/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 03/16/2018 11:29

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-127437/3	29611_03.D	03/16/2018 10:35
4908	200-42622-6	29611_10.D	03/16/2018 17:26

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127437/4

Matrix: Air Lab File ID: 29611_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/16/2018 11:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127437 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127437/4

Matrix: Air Lab File ID: 29611_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/16/2018 11:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127437 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-127437/4

Matrix: Air Lab File ID: 29611_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 03/16/2018 11:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127437 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 16-Mar-2018 11:29:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0029611-004
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Mar-2018 11:38:53 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: bunmaa Date: 19-Mar-2018 11:38:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967					ND	
2 Dichlorodifluoromethane	85		3.037					ND	
3 Chlorodifluoromethane	51		3.090					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.298					ND	
5 Chloromethane	50		3.426					ND	
6 Butane	43		3.629					ND	
7 Vinyl chloride	62		3.667					ND	
8 Butadiene	54		3.747					ND	
10 Bromomethane	94		4.414					ND	
11 Chloroethane	64		4.659					ND	
12 2-Methylbutane	43		4.739					ND	
13 Vinyl bromide	106		5.049					ND	
14 Trichlorofluoromethane	101		5.156					ND	
16 Pentane	43		5.305					ND	
17 Ethanol	45		5.737					ND	
18 Ethyl ether	59		5.823					ND	
19 Acrolein	56		6.196					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.250					ND	
21 1,1-Dichloroethene	96		6.282					ND	
22 Acetone	43		6.500					ND	
23 Carbon disulfide	76		6.655					ND	
24 Isopropyl alcohol	45		6.826					ND	
25 3-Chloro-1-propene	41		7.071					ND	
26 Acetonitrile	41		7.178					ND	
T 15 Methyl Acetate TIC	43		7.237					ND	
27 Methylene Chloride	49		7.370					ND	
28 2-Methyl-2-propanol	59		7.605					ND	
29 Methyl tert-butyl ether	73		7.781					ND	
31 trans-1,2-Dichloroethene	61		7.819					ND	
32 Acrylonitrile	53		7.952					ND	
33 Hexane	57		8.224					ND	
34 1,1-Dichloroethane	63		8.689					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.779					ND	
37 cis-1,2-Dichloroethene	96		9.809					ND	
38 2-Butanone (MEK)	72		9.847					ND	
39 Ethyl acetate	88		9.916					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
* 40 Chlorobromomethane	128	10.268	10.274	-0.006	89	200460	10.0	10.0	
41 Tetrahydrofuran	42		10.274					ND	
42 Chloroform	83		10.418					ND	
43 Cyclohexane	84		10.663					ND	
44 1,1,1-Trichloroethane	97		10.685					ND	
45 Carbon tetrachloride	117		10.946					ND	
46 Isooctane	57		11.389					ND	
47 Benzene	78		11.400					ND	
48 1,2-Dichloroethane	62		11.581					ND	
49 n-Heptane	43		11.800					ND	
* 50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1083012	10.0	10.0	
52 n-Butanol	56		12.670					ND	
53 Trichloroethene	95		12.729					ND	
A 51 GRO	1	12.995	(4.729-21.262)		0	4542633		0	
T 36 Methyl cyclohexane TIC	55		13.179					ND	
54 1,2-Dichloropropane	63		13.273					ND	
55 Methyl methacrylate	69		13.465					ND	
56 1,4-Dioxane	88		13.508					ND	
57 Dibromomethane	174		13.540					ND	
58 Dichlorobromomethane	83		13.849					ND	
A 59 TVOC as Toluene	1	14.687	(2.957-26.417)		0	4699990		0	
60 cis-1,3-Dichloropropene	75		14.799					ND	
61 4-Methyl-2-pentanone (MIBK	43		15.082					ND	
65 Toluene	92		15.392					ND	
64 n-Octane	43		15.488					ND	
66 trans-1,3-Dichloropropene	75		16.000					ND	
67 1,1,2-Trichloroethane	83		16.368					ND	
68 Tetrachloroethene	166		16.491					ND	
69 2-Hexanone	43		16.817					ND	
71 Chlorodibromomethane	129		17.137					ND	
72 Ethylene Dibromide	107		17.393					ND	
* 74 Chlorobenzene-d5	117	18.300	18.300	0.000	97	1084965	10.0	10.0	
75 Chlorobenzene	112		18.359					ND	
76 Ethylbenzene	91		18.519					ND	U
77 n-Nonane	57		18.674					ND	
78 m-Xylene & p-Xylene	106		18.770					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		18.823					ND	
79 o-Xylene	106		19.603					ND	
80 Styrene	104		19.656					ND	
81 Bromoform	173		20.088					ND	
S 73 Xylenes, Total	106		20.100					ND	
82 Isopropylbenzene	105		20.312					ND	
84 1,1,2,2-Tetrachloroethane	83		20.979					ND	
85 N-Propylbenzene	91		21.049					ND	
86 1,2,3-Trichloropropane	75		21.070					ND	
88 4-Ethyltoluene	105		21.246					ND	
89 2-Chlorotoluene	91		21.246					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57		21.252					ND	
90 1,3,5-Trimethylbenzene	105		21.353					ND	
91 Alpha Methyl Styrene	118		21.727					ND	
92 tert-Butylbenzene	119		21.849					ND	
93 1,2,4-Trimethylbenzene	105		21.945					ND	
94 sec-Butylbenzene	105		22.180					ND	
95 4-Isopropyltoluene	119		22.383					ND	
96 1,3-Dichlorobenzene	146		22.410					ND	Ua
97 1,4-Dichlorobenzene	146	22.548	22.548	0.000	83	728		0.0147	
98 Benzyl chloride	91		22.735					ND	
100 n-Butylbenzene	91		22.954					ND	
99 Undecane	57		22.991					ND	
101 1,2-Dichlorobenzene	146		23.066					ND	Ua
102 Dodecane	57		24.528					ND	
103 1,2,4-Trichlorobenzene	180		25.489					ND	Ua
104 Hexachlorobutadiene	225		25.681					ND	
105 Naphthalene	128		25.943					ND	
106 1,2,3-Trichlorobenzene	180	26.423	26.407	0.016	1	611		0.0199	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

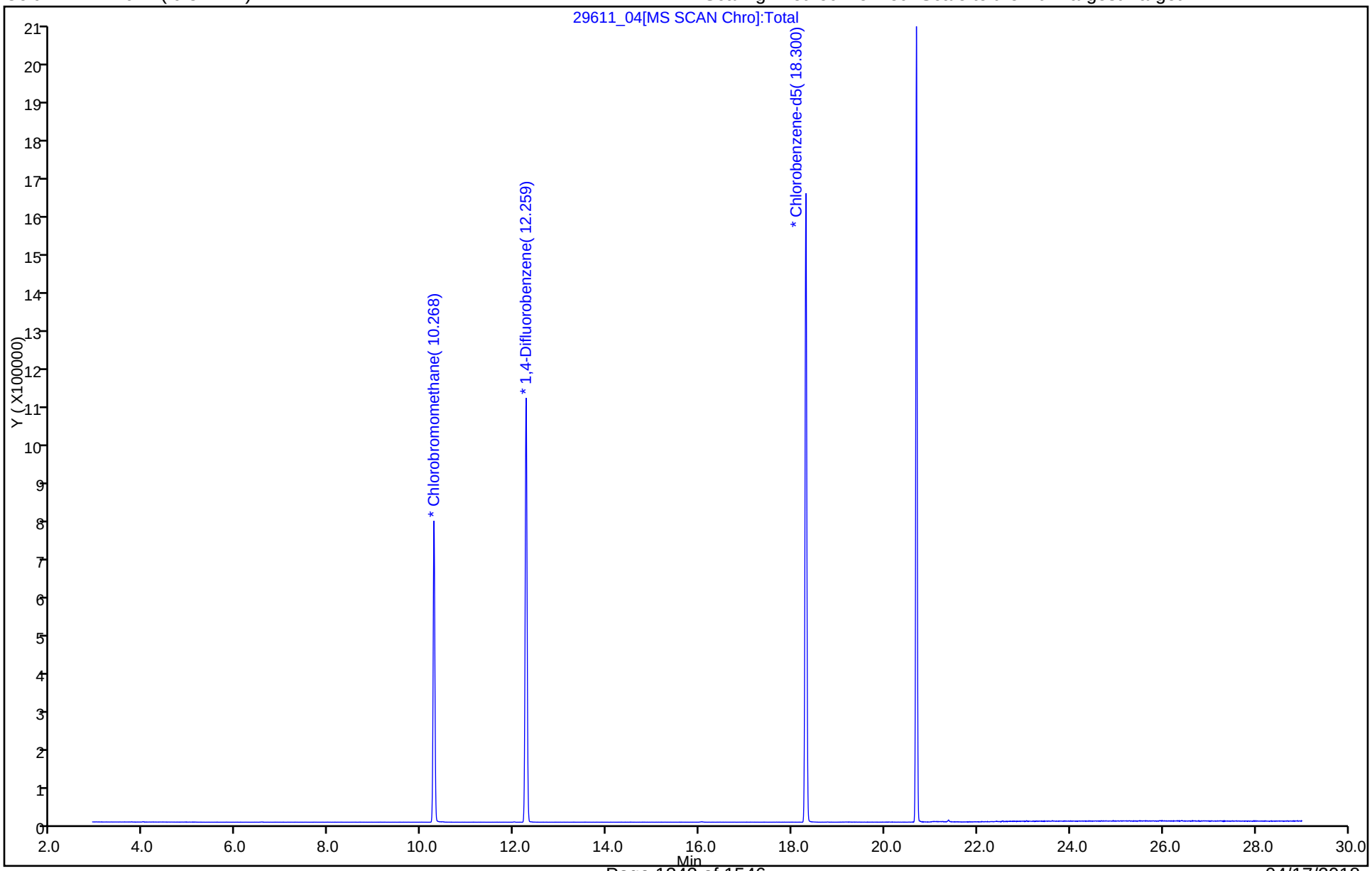
Report Date: 19-Mar-2018 11:38:54 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D

Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



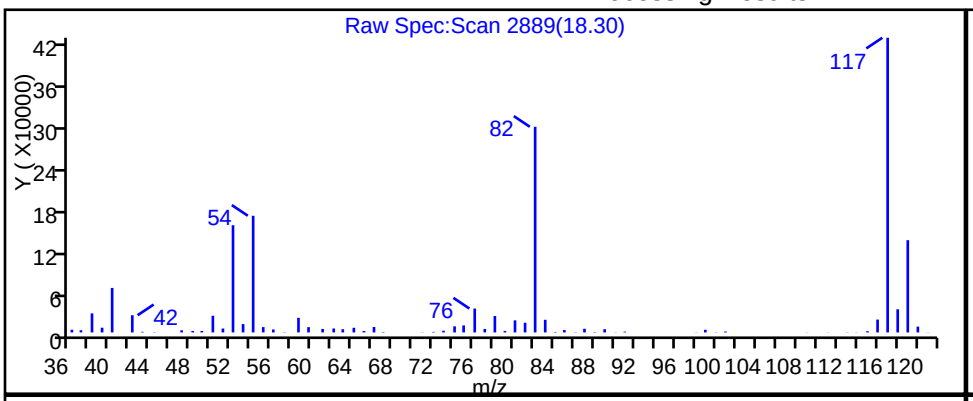
User Disabled Compound Report

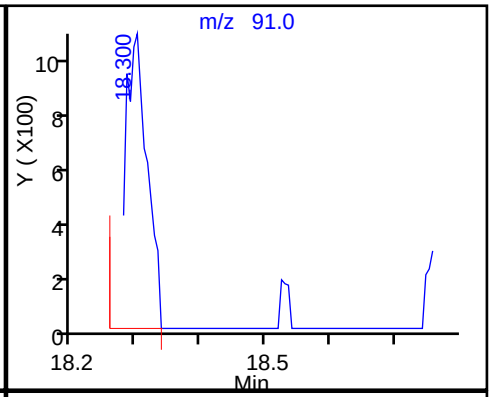
TestAmerica Burlington

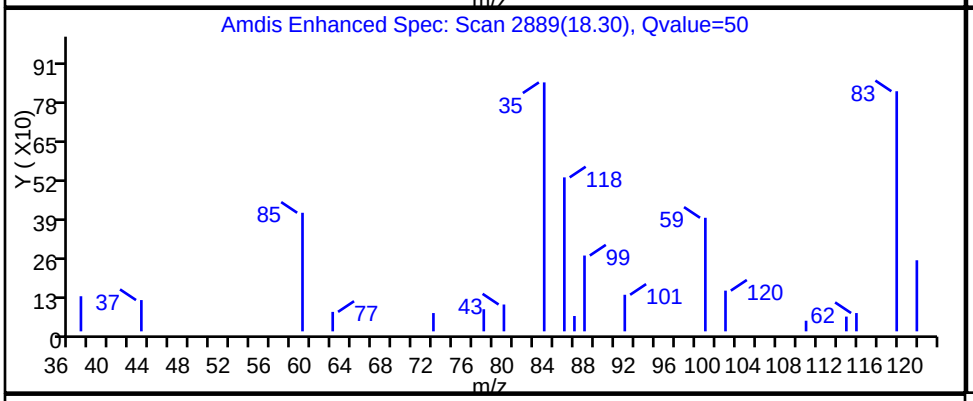
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D				
Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

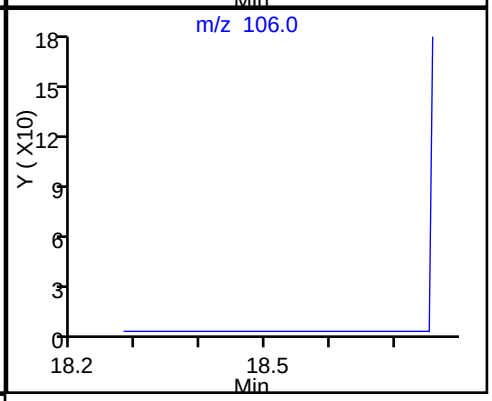
76 Ethylbenzene, CAS: 100-41-4

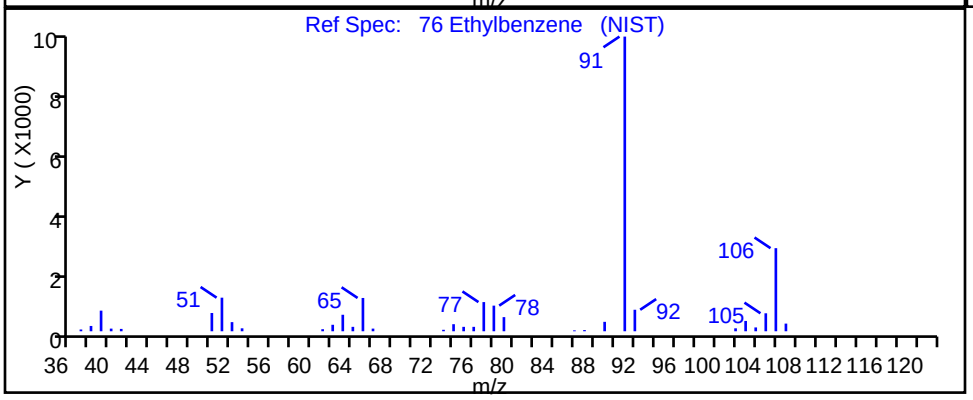
Processing Results











RT	Mass	Response	Amount
18.30	91.00	2575	0.030791
18.52	106.00	0	

Reviewer: bunmaa, 19-Mar-2018 11:38:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

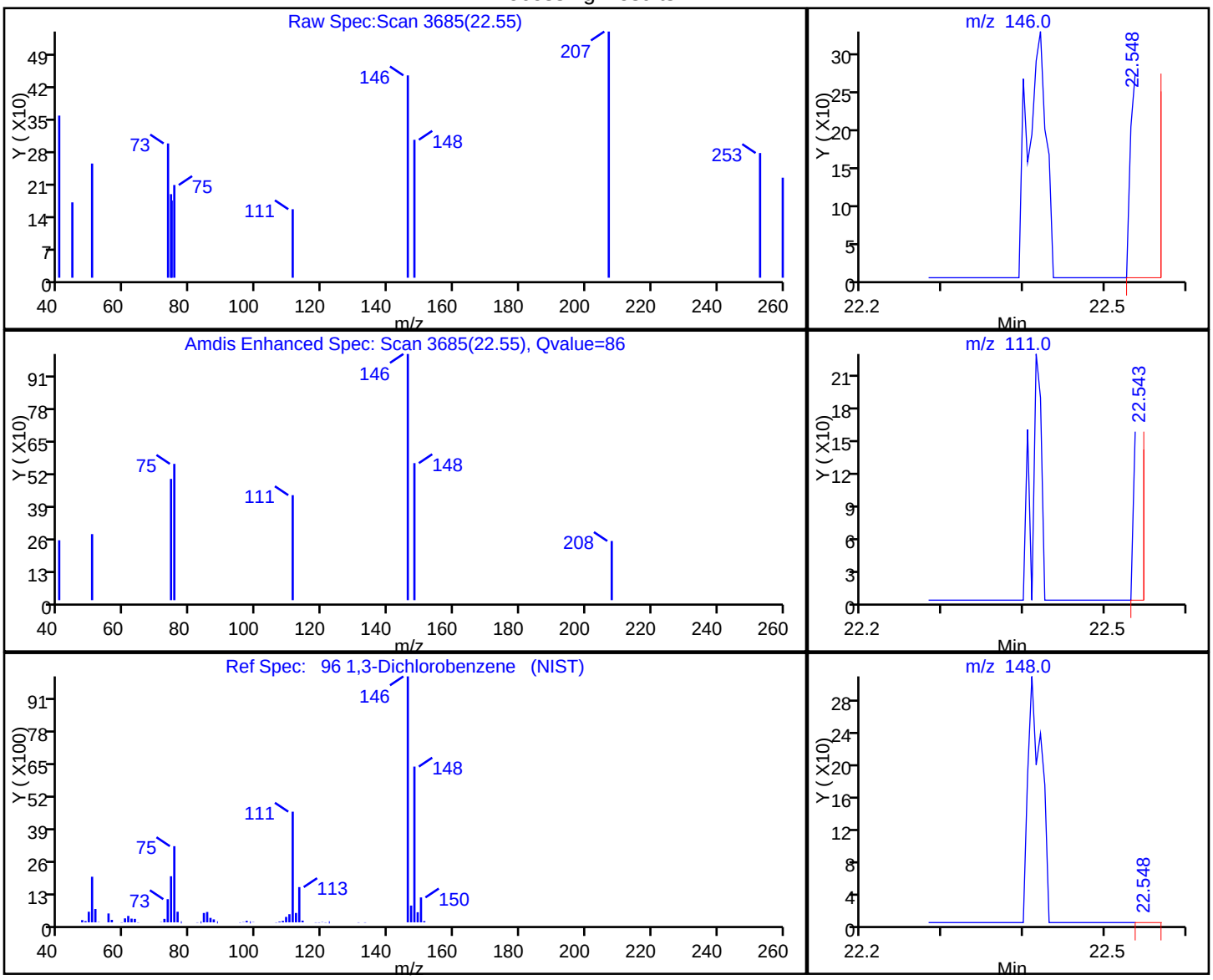
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D				
Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
22.55	146.00	728	0.014543
22.54	111.00	152	
22.55	148.00	353	

Reviewer: bunmaa, 19-Mar-2018 11:38:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

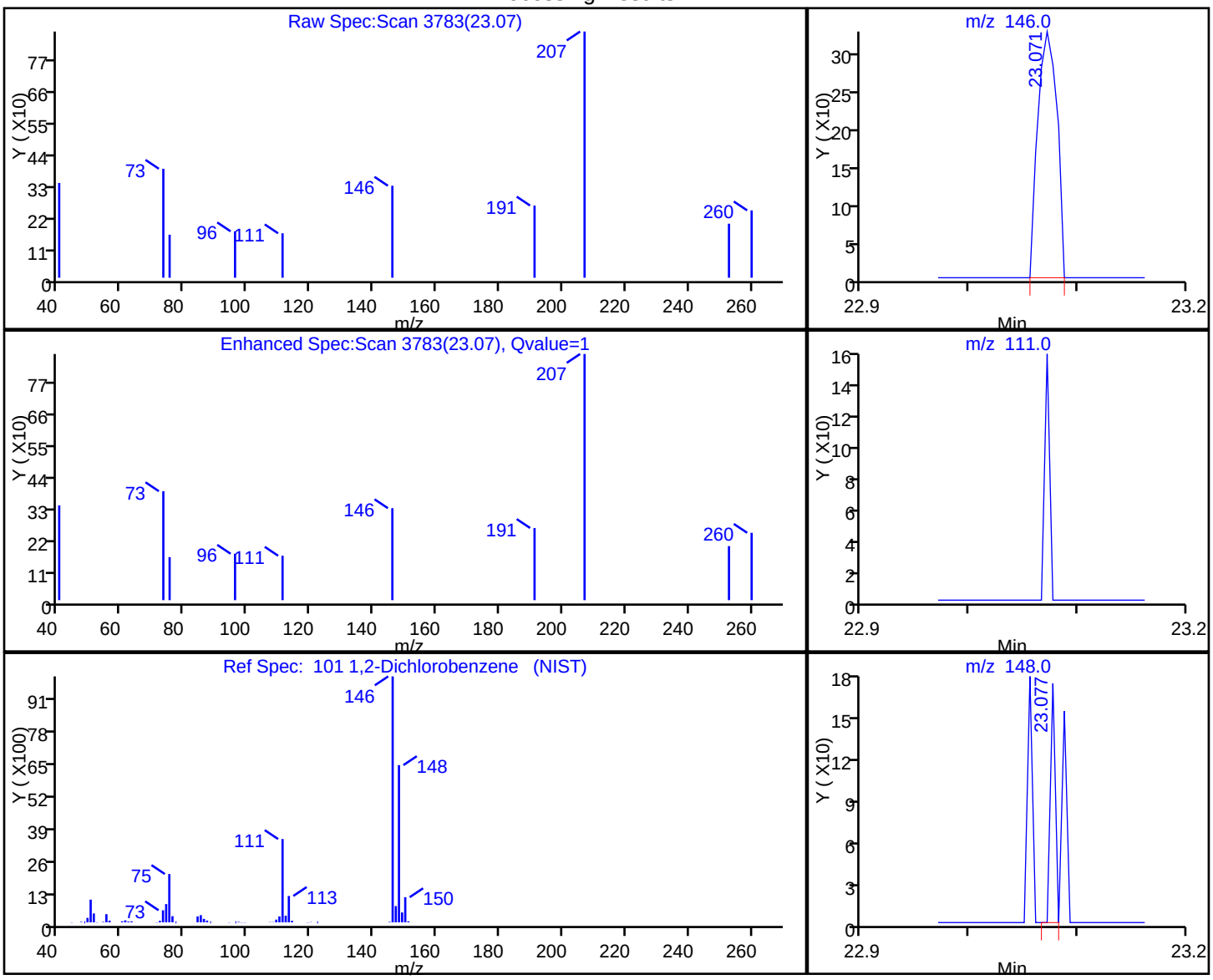
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D				
Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

101 1,2-Dichlorobenzene, CAS: 95-50-1

Processing Results



RT	Mass	Response	Amount
23.07	146.00	401	0.008654
23.07	111.00	0	
23.08	148.00	55	

Reviewer: bunmaa, 19-Mar-2018 11:38:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

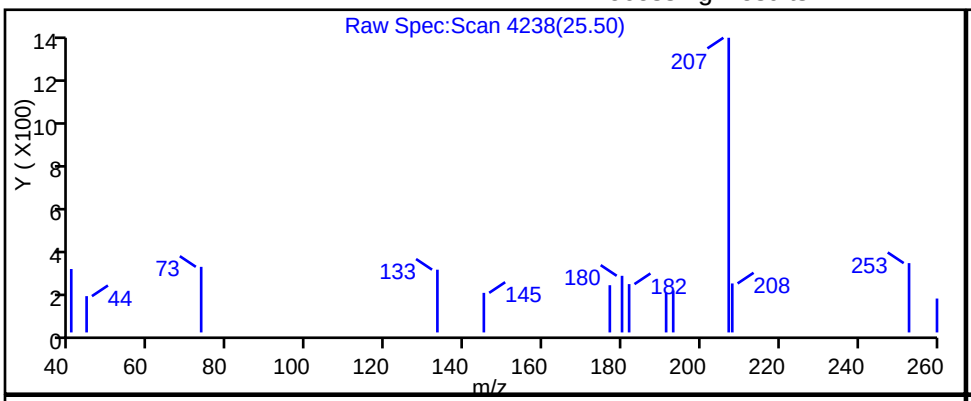
User Disabled Compound Report

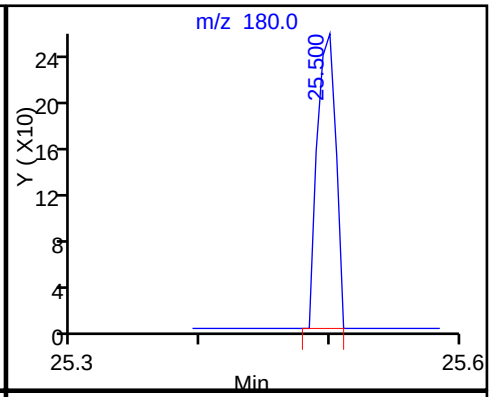
TestAmerica Burlington

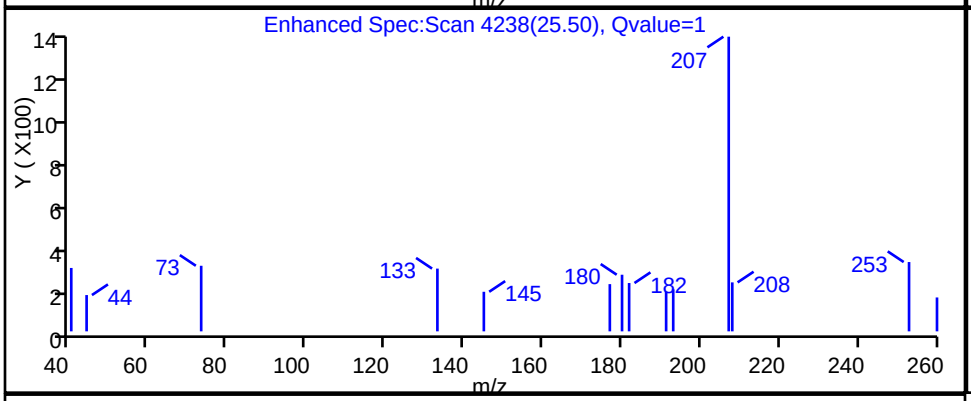
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_04.D				
Injection Date:	16-Mar-2018 11:29:30	Instrument ID:	CHC.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

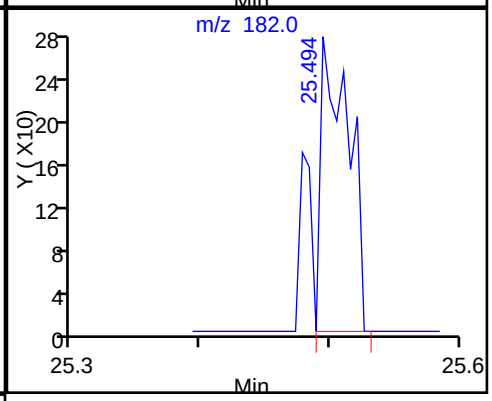
103 1,2,4-Trichlorobenzene, CAS: 120-82-1

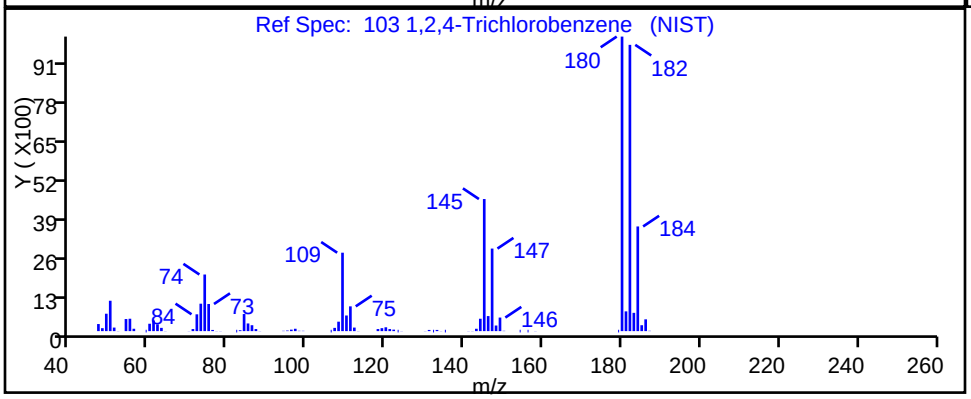
Processing Results











RT	Mass	Response	Amount
25.50	180.00	258	0.007447
25.49	182.00	418	

Reviewer: bunmaa, 19-Mar-2018 11:38:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab File ID: 28916_01.D BFB Injection Date: 01/25/2018

Instrument ID: CHC.i BFB Injection Time: 15:56

Analysis Batch No.: 125830

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	24.3	
75	30.0 - 66.0% of mass 95	51.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	83.6	
175	4.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	93.0 - 101.0% of mass 174	80.9	(96.8) 1
177	5.0 - 9.0% of mass 176	5.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-125830/3	28916_03.D	01/25/2018	17:38
	IC 200-125830/4	28916_04.D	01/25/2018	18:31
	IC 200-125830/6	28916_06.D	01/25/2018	20:17
	IC 200-125830/8	28916_08.D	01/25/2018	22:04
	ICIS 200-125830/9	28916_09.D	01/25/2018	22:56
	IC 200-125830/10	28916_10.D	01/25/2018	23:49
	IC 200-125830/11	28916_11.D	01/26/2018	00:42
	IC 200-125830/12	28916_12.D	01/26/2018	01:35
	ICV 200-125830/16	28916_16.D	01/26/2018	05:08

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab File ID: 29535_01.D BFB Injection Date: 03/12/2018

Instrument ID: CHC.i BFB Injection Time: 10:00

Analysis Batch No.: 127266

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	29.5	
75	30.0 - 66.0% of mass 95	57.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	75.8	
175	4.0 - 9.0 % of mass 174	6.0	(7.9) 1
176	93.0 - 101.0% of mass 174	74.0	(97.6) 1
177	5.0 - 9.0% of mass 176	4.8	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-127266/2	29535_02.D	03/12/2018	10:51
	LCS 200-127266/3	29535_03.D	03/12/2018	11:44
	MB 200-127266/4	29535_04.D	03/12/2018	12:37
4327	200-42567-2	29535_13.D	03/12/2018	21:10

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab File ID: 28916_01.D BFB Injection Date: 01/25/2018

Instrument ID: CHC.i BFB Injection Time: 15:56

Analysis Batch No.: 125830

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	24.3	
75	30.0 - 66.0% of mass 95	51.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	83.6	
175	4.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	93.0 - 101.0% of mass 174	80.9	(96.8) 1
177	5.0 - 9.0% of mass 176	5.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-125830/3	28916_03.D	01/25/2018	17:38
	IC 200-125830/4	28916_04.D	01/25/2018	18:31
	IC 200-125830/6	28916_06.D	01/25/2018	20:17
	IC 200-125830/8	28916_08.D	01/25/2018	22:04
	ICIS 200-125830/9	28916_09.D	01/25/2018	22:56
	IC 200-125830/10	28916_10.D	01/25/2018	23:49
	IC 200-125830/11	28916_11.D	01/26/2018	00:42
	IC 200-125830/12	28916_12.D	01/26/2018	01:35
	ICV 200-125830/16	28916_16.D	01/26/2018	05:08

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab File ID: 29535_01.D BFB Injection Date: 03/12/2018

Instrument ID: CHC.i BFB Injection Time: 10:00

Analysis Batch No.: 127266

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	29.5	
75	30.0 - 66.0% of mass 95	57.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	75.8	
175	4.0 - 9.0 % of mass 174	6.0	(7.9) 1
176	93.0 - 101.0% of mass 174	74.0	(97.6) 1
177	5.0 - 9.0% of mass 176	4.8	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-127266/2	29535_02.D	03/12/2018	10:51
	LCS 200-127266/3	29535_03.D	03/12/2018	11:44
	MB 200-127266/4	29535_04.D	03/12/2018	12:37
2885	200-42570-5	29535_14.D	03/12/2018	22:08

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab File ID: 28916_01.D BFB Injection Date: 01/25/2018

Instrument ID: CHC.i BFB Injection Time: 15:56

Analysis Batch No.: 125830

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	24.3	
75	30.0 - 66.0% of mass 95	51.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	83.6	
175	4.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	93.0 - 101.0% of mass 174	80.9	(96.8) 1
177	5.0 - 9.0% of mass 176	5.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-125830/3	28916_03.D	01/25/2018	17:38
	IC 200-125830/4	28916_04.D	01/25/2018	18:31
	IC 200-125830/6	28916_06.D	01/25/2018	20:17
	IC 200-125830/8	28916_08.D	01/25/2018	22:04
	ICIS 200-125830/9	28916_09.D	01/25/2018	22:56
	IC 200-125830/10	28916_10.D	01/25/2018	23:49
	IC 200-125830/11	28916_11.D	01/26/2018	00:42
	IC 200-125830/12	28916_12.D	01/26/2018	01:35
	ICV 200-125830/16	28916_16.D	01/26/2018	05:08

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab File ID: 29551_01.D BFB Injection Date: 03/13/2018

Instrument ID: CHC.i BFB Injection Time: 09:37

Analysis Batch No.: 127298

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	31.4	
75	30.0 - 66.0% of mass 95	59.9	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	76.5	
175	4.0 - 9.0 % of mass 174	5.6	(7.3) 1
176	93.0 - 101.0% of mass 174	74.0	(96.8) 1
177	5.0 - 9.0% of mass 176	4.8	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-127298/2	29551_02.D	03/13/2018	10:28
	LCS 200-127298/3	29551_03.D	03/13/2018	11:22
	MB 200-127298/4	29551_04.D	03/13/2018	12:15
5656	200-42575-6	29551_22.D	03/14/2018	04:23

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab File ID: 29154-01.D BFB Injection Date: 02/12/2018

Instrument ID: CHB.i BFB Injection Time: 14:44

Analysis Batch No.: 126321

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	10.2	
75	30.0 - 66.0% of mass 95	36.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	108.6	
175	4.0 - 9.0 % of mass 174	7.7	(7.1) 1
176	93.0 - 101.0% of mass 174	105.9	(97.5) 1
177	5.0 - 9.0% of mass 176	6.8	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-126321/3	29154-03.D	02/12/2018	16:32
	IC 200-126321/4	29154-04.D	02/12/2018	17:25
	IC 200-126321/6	29154-06.D	02/12/2018	19:10
	ICIS 200-126321/9	29154-09.D	02/12/2018	21:47
	IC 200-126321/10	29154-10.D	02/12/2018	22:39
	IC 200-126321/11	29154-11.D	02/12/2018	23:31
	IC 200-126321/12	29154-12.D	02/13/2018	00:23
	IC 200-126321/20	29154-20.D	02/13/2018	10:27
	ICV 200-126321/21	29154-21.D	02/13/2018	11:41

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab File ID: 29574-01.D BFB Injection Date: 03/14/2018

Instrument ID: CHB.i BFB Injection Time: 11:06

Analysis Batch No.: 127358

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	14.2	
75	30.0 - 66.0% of mass 95	41.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	99.9	
175	4.0 - 9.0 % of mass 174	8.3	(8.3) 1
176	93.0 - 101.0% of mass 174	99.0	(99.1) 1
177	5.0 - 9.0% of mass 176	7.5	(7.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-127358/3	29574-03.D	03/14/2018	12:54
	LCS 200-127358/4	29574-04.D	03/14/2018	13:47
	MB 200-127358/6	29574-06.D	03/14/2018	15:32
8118	200-42592-3	29574-14.D	03/14/2018	23:03

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab File ID: 28916_01.D BFB Injection Date: 01/25/2018

Instrument ID: CHC.i BFB Injection Time: 15:56

Analysis Batch No.: 125830

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	24.3	
75	30.0 - 66.0% of mass 95	51.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	83.6	
175	4.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	93.0 - 101.0% of mass 174	80.9	(96.8) 1
177	5.0 - 9.0% of mass 176	5.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-125830/3	28916_03.D	01/25/2018	17:38
	IC 200-125830/4	28916_04.D	01/25/2018	18:31
	IC 200-125830/6	28916_06.D	01/25/2018	20:17
	IC 200-125830/8	28916_08.D	01/25/2018	22:04
	ICIS 200-125830/9	28916_09.D	01/25/2018	22:56
	IC 200-125830/10	28916_10.D	01/25/2018	23:49
	IC 200-125830/11	28916_11.D	01/26/2018	00:42
	IC 200-125830/12	28916_12.D	01/26/2018	01:35
	ICV 200-125830/16	28916_16.D	01/26/2018	05:08

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab File ID: 29611_01.D BFB Injection Date: 03/16/2018

Instrument ID: CHC.i BFB Injection Time: 08:41

Analysis Batch No.: 127437

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	31.3	
75	30.0 - 66.0% of mass 95	60.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	73.3	
175	4.0 - 9.0 % of mass 174	5.4	(7.4) 1
176	93.0 - 101.0% of mass 174	71.3	(97.2) 1
177	5.0 - 9.0% of mass 176	4.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-127437/2	29611_02.D	03/16/2018	09:43
	LCS 200-127437/3	29611_03.D	03/16/2018	10:35
	MB 200-127437/4	29611_04.D	03/16/2018	11:29
5674	200-42621-5	29611_11.D	03/16/2018	18:25

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab File ID: 28916_01.D BFB Injection Date: 01/25/2018

Instrument ID: CHC.i BFB Injection Time: 15:56

Analysis Batch No.: 125830

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	24.3	
75	30.0 - 66.0% of mass 95	51.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	83.6	
175	4.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	93.0 - 101.0% of mass 174	80.9	(96.8) 1
177	5.0 - 9.0% of mass 176	5.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-125830/3	28916_03.D	01/25/2018	17:38
	IC 200-125830/4	28916_04.D	01/25/2018	18:31
	IC 200-125830/6	28916_06.D	01/25/2018	20:17
	IC 200-125830/8	28916_08.D	01/25/2018	22:04
	ICIS 200-125830/9	28916_09.D	01/25/2018	22:56
	IC 200-125830/10	28916_10.D	01/25/2018	23:49
	IC 200-125830/11	28916_11.D	01/26/2018	00:42
	IC 200-125830/12	28916_12.D	01/26/2018	01:35
	ICV 200-125830/16	28916_16.D	01/26/2018	05:08

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab File ID: 29611_01.D BFB Injection Date: 03/16/2018

Instrument ID: CHC.i BFB Injection Time: 08:41

Analysis Batch No.: 127437

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	31.3	
75	30.0 - 66.0% of mass 95	60.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	73.3	
175	4.0 - 9.0 % of mass 174	5.4	(7.4) 1
176	93.0 - 101.0% of mass 174	71.3	(97.2) 1
177	5.0 - 9.0% of mass 176	4.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-127437/2	29611_02.D	03/16/2018	09:43
	LCS 200-127437/3	29611_03.D	03/16/2018	10:35
	MB 200-127437/4	29611_04.D	03/16/2018	11:29
4908	200-42622-6	29611_10.D	03/16/2018	17:26

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Sample No.: ICIS 200-125830/9 Date Analyzed: 01/25/2018 22:56

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 28916_09.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		252774	10.28	1312768	12.27	1331721	18.31
UPPER LIMIT		353884	10.61	1837875	12.60	1864409	18.64
LOWER LIMIT		151664	9.95	787661	11.94	799033	17.98
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-125830/16		331430	10.27	1730309	12.26	1688534	18.31

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Sample No.: CCVIS 200-127266/2 Date Analyzed: 03/12/2018 10:51

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29535_02.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		206995	10.27	1080134	12.26	1043375	18.30
UPPER LIMIT		289793	10.60	1512188	12.59	1460725	18.63
LOWER LIMIT		124197	9.94	648080	11.93	626025	17.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-127266/3		179576	10.27	934215	12.26	943118	18.30
MB 200-127266/4		204420	10.27	1110626	12.26	1121310	18.30
200-42567-2	4327	191214	10.27	1007603	12.26	1028077	18.30

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Sample No.: ICIS 200-125830/9 Date Analyzed: 01/25/2018 22:56

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 28916_09.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		252774	10.28	1312768	12.27	1331721	18.31
UPPER LIMIT		353884	10.61	1837875	12.60	1864409	18.64
LOWER LIMIT		151664	9.95	787661	11.94	799033	17.98
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-125830/16		331430	10.27	1730309	12.26	1688534	18.31

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Sample No.: CCVIS 200-127266/2 Date Analyzed: 03/12/2018 10:51

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29535_02.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		206995	10.27	1080134	12.26	1043375	18.30
UPPER LIMIT		289793	10.60	1512188	12.59	1460725	18.63
LOWER LIMIT		124197	9.94	648080	11.93	626025	17.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-127266/3		179576	10.27	934215	12.26	943118	18.30
MB 200-127266/4		204420	10.27	1110626	12.26	1121310	18.30
200-42570-5	2885	193601	10.27	1012090	12.26	1030257	18.30

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Sample No.: ICIS 200-125830/9 Date Analyzed: 01/25/2018 22:56

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 28916_09.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		252774	10.28	1312768	12.27	1331721	18.31
UPPER LIMIT		353884	10.61	1837875	12.60	1864409	18.64
LOWER LIMIT		151664	9.95	787661	11.94	799033	17.98
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-125830/16		331430	10.27	1730309	12.26	1688534	18.31

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Sample No.: CCVIS 200-127298/2 Date Analyzed: 03/13/2018 10:28

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29551_02.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		181744	10.27	943506	12.26	932918	18.30
UPPER LIMIT		254442	10.60	1320908	12.59	1306085	18.63
LOWER LIMIT		109046	9.94	566104	11.93	559751	17.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-127298/3		168800	10.27	885183	12.26	883904	18.30
MB 200-127298/4		199450	10.27	1070947	12.26	1064942	18.30
200-42575-6	5656	216671	10.27	1149831	12.26	1148964	18.30

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Sample No.: ICIS 200-126321/9 Date Analyzed: 02/12/2018 21:47

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29154-09.D Heated Purge: (Y/N) N

Calibration ID: 38874

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		456317	9.69	2194419	11.10	1939268	15.20
UPPER LIMIT		638844	10.02	3072187	11.43	2714975	15.53
LOWER LIMIT		273790	9.36	1316651	10.77	1163561	14.87
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-126321/21		500821	9.69	2413502	11.09	2131198	15.21

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Sample No.: CCVIS 200-127358/3 Date Analyzed: 03/14/2018 12:54

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29574-03.D Heated Purge: (Y/N) N

Calibration ID: 38874

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		454170	9.69	1992081	11.09	1739668	15.20
UPPER LIMIT		635838	10.02	2788913	11.42	2435535	15.53
LOWER LIMIT		272502	9.36	1195249	10.76	1043801	14.87
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-127358/4		476735	9.69	2118589	11.09	1881262	15.20
MB 200-127358/6		498252	9.68	2240297	11.09	1944378	15.20
200-42592-3	8118	488415	9.68	2174543	11.09	1881101	15.20

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Sample No.: ICIS 200-125830/9 Date Analyzed: 01/25/2018 22:56

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 28916_09.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		252774	10.28	1312768	12.27	1331721	18.31
UPPER LIMIT		353884	10.61	1837875	12.60	1864409	18.64
LOWER LIMIT		151664	9.95	787661	11.94	799033	17.98
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-125830/16		331430	10.27	1730309	12.26	1688534	18.31

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Sample No.: CCVIS 200-127437/2 Date Analyzed: 03/16/2018 09:43

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29611_02.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		194478	10.27	1003065	12.26	997455	18.30
UPPER LIMIT		272269	10.60	1404291	12.59	1396437	18.63
LOWER LIMIT		116687	9.94	601839	11.93	598473	17.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-127437/3		190481	10.27	1010077	12.26	1016387	18.30
MB 200-127437/4		200460	10.27	1083012	12.26	1084965	18.30
200-42621-5	5674	194573	10.27	1024886	12.26	1029966	18.30

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Sample No.: ICIS 200-125830/9 Date Analyzed: 01/25/2018 22:56

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 28916_09.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		252774	10.28	1312768	12.27	1331721	18.31
UPPER LIMIT		353884	10.61	1837875	12.60	1864409	18.64
LOWER LIMIT		151664	9.95	787661	11.94	799033	17.98
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-125830/16		331430	10.27	1730309	12.26	1688534	18.31

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Sample No.: CCVIS 200-127437/2 Date Analyzed: 03/16/2018 09:43

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 29611_02.D Heated Purge: (Y/N) N

Calibration ID: 38779

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		194478	10.27	1003065	12.26	997455	18.30
UPPER LIMIT		272269	10.60	1404291	12.59	1396437	18.63
LOWER LIMIT		116687	9.94	601839	11.93	598473	17.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-127437/3		190481	10.27	1010077	12.26	1016387	18.30
MB 200-127437/4		200460	10.27	1083012	12.26	1084965	18.30
200-42622-6	4908	208723	10.27	1097133	12.26	1100888	18.30

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Client Sample ID: 4327 Lab Sample ID: 200-42567-2

Matrix: Air Lab File ID: 29535_13.D

Analysis Method: TO-15 Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/12/2018 21:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U *	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Client Sample ID: 4327 Lab Sample ID: 200-42567-2

Matrix: Air Lab File ID: 29535_13.D

Analysis Method: TO-15 Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/12/2018 21:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Client Sample ID: 4327 Lab Sample ID: 200-42567-2

Matrix: Air Lab File ID: 29535_13.D

Analysis Method: TO-15 Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/12/2018 21:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_13.D
Lims ID: 200-42567-A-2
Client ID: 4327
Sample Type: Client
Inject. Date: 12-Mar-2018 21:10:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0029535-013
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Mar-2018 12:27:41 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 13-Mar-2018 12:35:30

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		2.967				ND	
	2 Dichlorodifluoromethane	85		3.037				ND	
	3 Chlorodifluoromethane	51		3.085				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		3.298				ND	
	5 Chloromethane	50		3.426				ND	
	6 Butane	43		3.629				ND	
	7 Vinyl chloride	62		3.666				ND	
	8 Butadiene	54		3.747				ND	
	10 Bromomethane	94		4.414				ND	
	11 Chloroethane	64		4.659				ND	
	13 Vinyl bromide	106		5.043				ND	
	14 Trichlorofluoromethane	101		5.155				ND	
	17 Ethanol	45		5.737				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		6.250				ND	
	21 1,1-Dichloroethene	96		6.282				ND	
	22 Acetone	43		6.506				ND	
	23 Carbon disulfide	76		6.655				ND	
	24 Isopropyl alcohol	45		6.826				ND	
	25 3-Chloro-1-propene	41		7.071				ND	
	27 Methylene Chloride	49		7.370				ND	
	28 2-Methyl-2-propanol	59		7.600				ND	
	29 Methyl tert-butyl ether	73		7.781				ND	
	31 trans-1,2-Dichloroethene	61		7.819				ND	
	33 Hexane	57		8.224				ND	
	34 1,1-Dichloroethane	63		8.689				ND	
	35 Vinyl acetate	43		8.774				ND	
	37 cis-1,2-Dichloroethene	96		9.809				ND	
	38 2-Butanone (MEK)	72		9.847				ND	
	39 Ethyl acetate	88		9.916				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	41 Tetrahydrofuran	42		10.274				ND	
*	40 Chlorobromomethane	128	10.268	10.274	-0.006	90	191214	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		10.418				ND	
	43 Cyclohexane	84		10.663				ND	
	44 1,1,1-Trichloroethane	97		10.679				ND	
	45 Carbon tetrachloride	117		10.941				ND	
	46 Isooctane	57		11.394				ND	
	47 Benzene	78		11.400				ND	
	48 1,2-Dichloroethane	62		11.581				ND	
	49 n-Heptane	43		11.800				ND	
*	50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1007603	10.0	
	53 Trichloroethene	95		12.729				ND	
	54 1,2-Dichloropropane	63		13.278				ND	
	55 Methyl methacrylate	69		13.465				ND	
	56 1,4-Dioxane	88		13.508				ND	
	57 Dibromomethane	174		13.540				ND	
	58 Dichlorobromomethane	83		13.855				ND	
	60 cis-1,3-Dichloropropene	75		14.799				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.082				ND	
	65 Toluene	92		15.397				ND	
	66 trans-1,3-Dichloropropene	75		16.000				ND	
	67 1,1,2-Trichloroethane	83		16.368				ND	
	68 Tetrachloroethene	166		16.491				ND	
	69 2-Hexanone	43		16.817				ND	
	71 Chlorodibromomethane	129		17.137				ND	
	72 Ethylene Dibromide	107		17.393				ND	
*	74 Chlorobenzene-d5	117	18.300	18.300	0.000	96	1028077	10.0	
	75 Chlorobenzene	112		18.359				ND	
	76 Ethylbenzene	91		18.514				ND	U
	78 m-Xylene & p-Xylene	106		18.770				ND	
	79 o-Xylene	106		19.602				ND	
	80 Styrene	104		19.656				ND	
	81 Bromoform	173		20.088				ND	
S	73 Xylenes, Total	106		20.100				ND	
	82 Isopropylbenzene	105		20.312				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.979				ND	
	85 N-Propylbenzene	91		21.049				ND	
	88 4-Ethyltoluene	105		21.246				ND	
	89 2-Chlorotoluene	91		21.246				ND	
	90 1,3,5-Trimethylbenzene	105		21.353				ND	
	92 tert-Butylbenzene	119		21.849				ND	
	93 1,2,4-Trimethylbenzene	105		21.945				ND	
	94 sec-Butylbenzene	105		22.180				ND	
	95 4-Isopropyltoluene	119		22.383				ND	
	96 1,3-Dichlorobenzene	146		22.410				ND	
	97 1,4-Dichlorobenzene	146		22.548				ND	
	98 Benzyl chloride	91		22.735				ND	
	100 n-Butylbenzene	91		22.949				ND	
	101 1,2-Dichlorobenzene	146		23.066				ND	
	103 1,2,4-Trichlorobenzene	180		25.489				ND	
	104 Hexachlorobutadiene	225		25.676				ND	
	105 Naphthalene	128		25.943				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

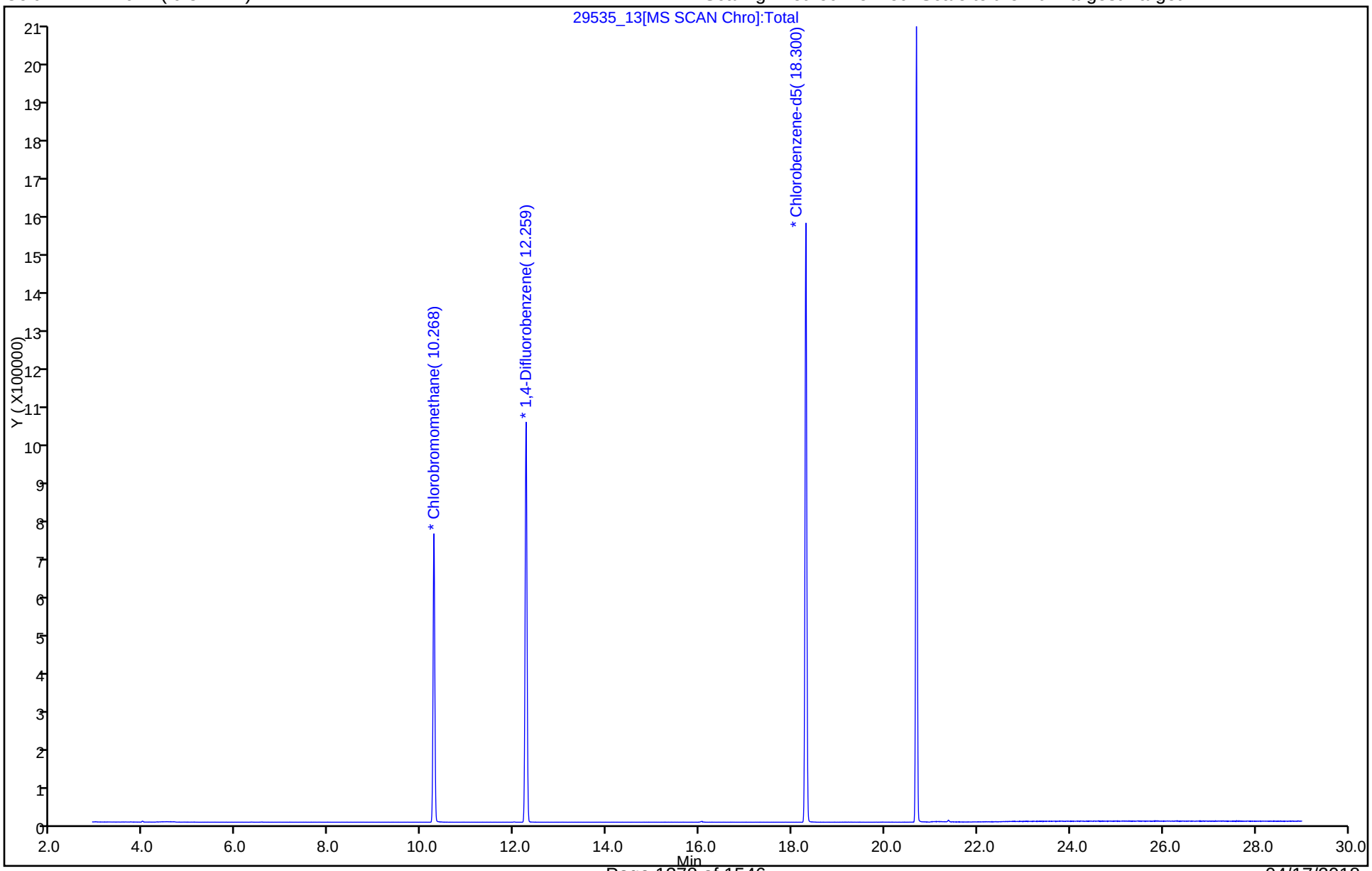
Report Date: 13-Mar-2018 12:35:31 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_13.D

Injection Date:	12-Mar-2018 21:10:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-42567-A-2	Lab Sample ID:	200-42567-2	Worklist Smp#:	13
Client ID:	4327				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	13
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



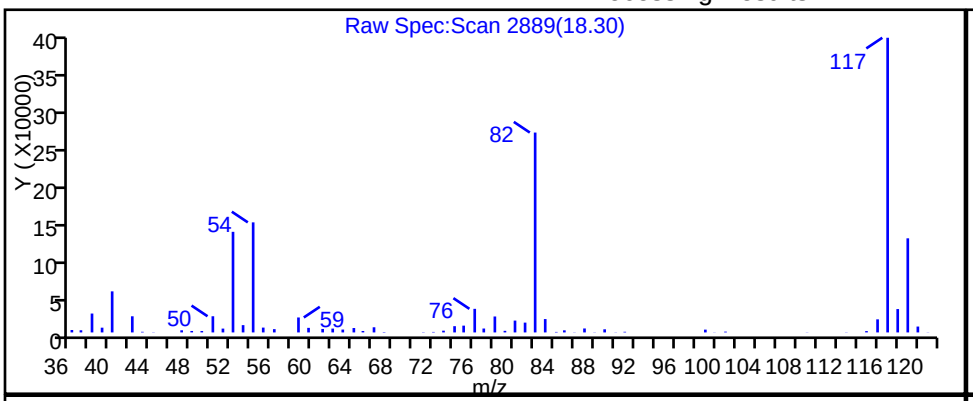
User Disabled Compound Report

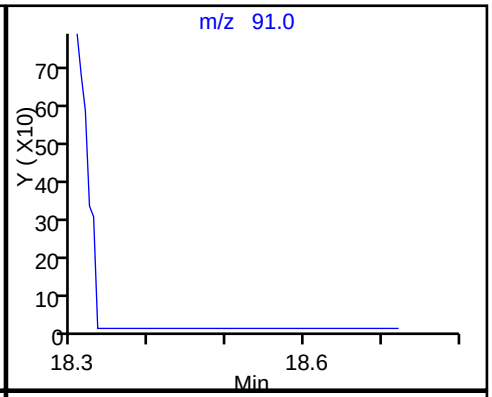
TestAmerica Burlington

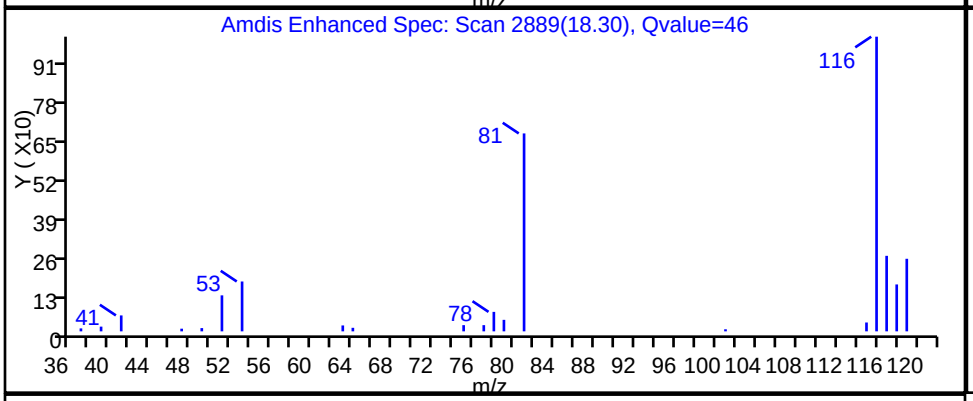
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_13.D				
Injection Date:	12-Mar-2018 21:10:30	Instrument ID:	CHC.i		
Lims ID:	200-42567-A-2	Lab Sample ID:	200-42567-2		
Client ID:	4327				
Operator ID:	pad	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

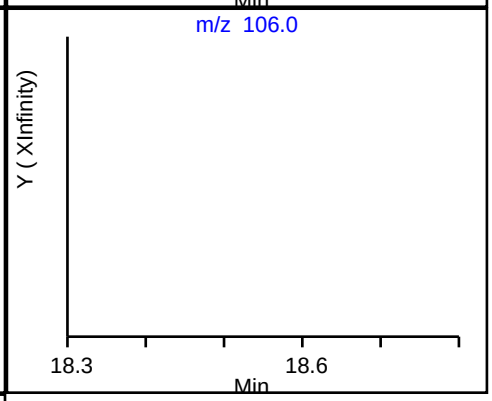
76 Ethylbenzene, CAS: 100-41-4

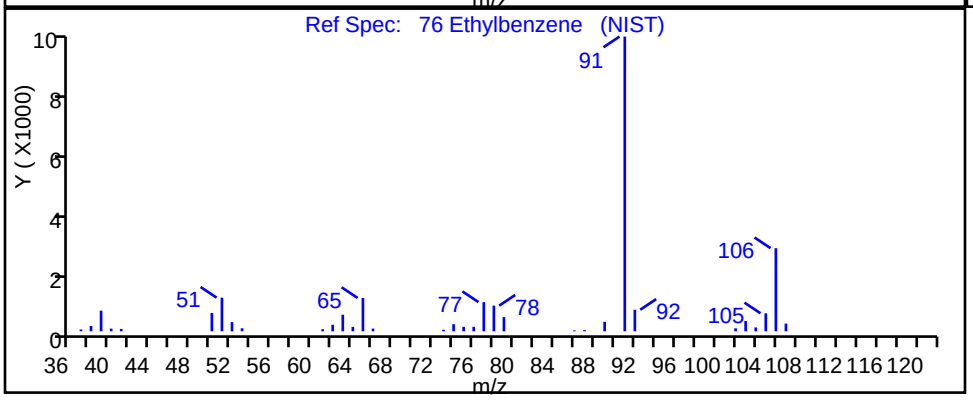
Processing Results











RT	Mass	Response	Amount
18.30	91.00	2225	0.028078
18.51	106.00	0	

Reviewer: puangmaleek, 13-Mar-2018 12:35:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42570-1

SDG No.:

Client Sample ID: 2885 | Lab Sample ID: 200-42570-5

Matrix: Air | Lab File ID: 29535_14.D

Analysis Method: TO-15 | Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 03/12/2018 22:08

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127266 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U *	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Client Sample ID: 2885 Lab Sample ID: 200-42570-5

Matrix: Air Lab File ID: 29535_14.D

Analysis Method: TO-15 Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/12/2018 22:08

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Client Sample ID: 2885 Lab Sample ID: 200-42570-5

Matrix: Air Lab File ID: 29535_14.D

Analysis Method: TO-15 Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/12/2018 22:08

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127266 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_14.D
Lims ID: 200-42570-A-5
Client ID: 2885
Sample Type: Client
Inject. Date: 12-Mar-2018 22:08:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0029535-014
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Mar-2018 12:36:50 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 13-Mar-2018 12:36:50

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		2.967				ND	
	2 Dichlorodifluoromethane	85		3.037				ND	
	3 Chlorodifluoromethane	51		3.085				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		3.298				ND	
	5 Chloromethane	50		3.426				ND	
	6 Butane	43		3.629				ND	
	7 Vinyl chloride	62		3.666				ND	
	8 Butadiene	54		3.747				ND	
	10 Bromomethane	94		4.414				ND	
	11 Chloroethane	64		4.659				ND	
	13 Vinyl bromide	106		5.043				ND	
	14 Trichlorofluoromethane	101		5.155				ND	
	17 Ethanol	45		5.737				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		6.250				ND	
	21 1,1-Dichloroethene	96		6.282				ND	
	22 Acetone	43		6.506				ND	
	23 Carbon disulfide	76		6.655				ND	
	24 Isopropyl alcohol	45		6.826				ND	
	25 3-Chloro-1-propene	41		7.071				ND	
	27 Methylene Chloride	49		7.370				ND	
	28 2-Methyl-2-propanol	59		7.600				ND	
	29 Methyl tert-butyl ether	73		7.781				ND	
	31 trans-1,2-Dichloroethene	61		7.819				ND	
	33 Hexane	57		8.224				ND	
	34 1,1-Dichloroethane	63		8.689				ND	
	35 Vinyl acetate	43		8.774				ND	
	37 cis-1,2-Dichloroethene	96		9.809				ND	
	38 2-Butanone (MEK)	72		9.847				ND	
	39 Ethyl acetate	88		9.916				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	41 Tetrahydrofuran	42		10.274				ND	
*	40 Chlorobromomethane	128	10.268	10.274	-0.006	90	193601	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		10.418				ND	
	43 Cyclohexane	84		10.663				ND	
	44 1,1,1-Trichloroethane	97		10.679				ND	
	45 Carbon tetrachloride	117		10.941				ND	
	46 Isooctane	57		11.394				ND	
	47 Benzene	78		11.400				ND	
	48 1,2-Dichloroethane	62		11.581				ND	
	49 n-Heptane	43		11.800				ND	
*	50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1012090	10.0	
	53 Trichloroethene	95		12.729				ND	
	54 1,2-Dichloropropane	63		13.278				ND	
	55 Methyl methacrylate	69		13.465				ND	
	56 1,4-Dioxane	88		13.508				ND	
	57 Dibromomethane	174		13.540				ND	
	58 Dichlorobromomethane	83		13.855				ND	
	60 cis-1,3-Dichloropropene	75		14.799				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.082				ND	
	65 Toluene	92		15.397				ND	
	66 trans-1,3-Dichloropropene	75		16.000				ND	
	67 1,1,2-Trichloroethane	83		16.368				ND	
	68 Tetrachloroethene	166	16.480	16.491	-0.011	69	533	0.0215	
	69 2-Hexanone	43		16.817				ND	
	71 Chlorodibromomethane	129		17.137				ND	
	72 Ethylene Dibromide	107		17.393				ND	
*	74 Chlorobenzene-d5	117	18.300	18.300	0.000	96	1030257	10.0	
	75 Chlorobenzene	112		18.359				ND	
	76 Ethylbenzene	91		18.514				ND	U
	78 m-Xylene & p-Xylene	106		18.770				ND	
	79 o-Xylene	106		19.602				ND	
	80 Styrene	104		19.656				ND	
	81 Bromoform	173		20.088				ND	
S	73 Xylenes, Total	106		20.100				ND	
	82 Isopropylbenzene	105		20.312				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.979				ND	
	85 N-Propylbenzene	91		21.049				ND	
	88 4-Ethyltoluene	105		21.246				ND	
	89 2-Chlorotoluene	91		21.246				ND	
	90 1,3,5-Trimethylbenzene	105		21.353				ND	
	92 tert-Butylbenzene	119		21.849				ND	
	93 1,2,4-Trimethylbenzene	105		21.945				ND	
	94 sec-Butylbenzene	105		22.180				ND	
	95 4-Isopropyltoluene	119		22.383				ND	
	96 1,3-Dichlorobenzene	146		22.410				ND	
	97 1,4-Dichlorobenzene	146		22.548				ND	
	98 Benzyl chloride	91		22.735				ND	
	100 n-Butylbenzene	91		22.949				ND	
	101 1,2-Dichlorobenzene	146		23.066				ND	
	103 1,2,4-Trichlorobenzene	180		25.489				ND	
	104 Hexachlorobutadiene	225		25.676				ND	
	105 Naphthalene	128		25.943				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

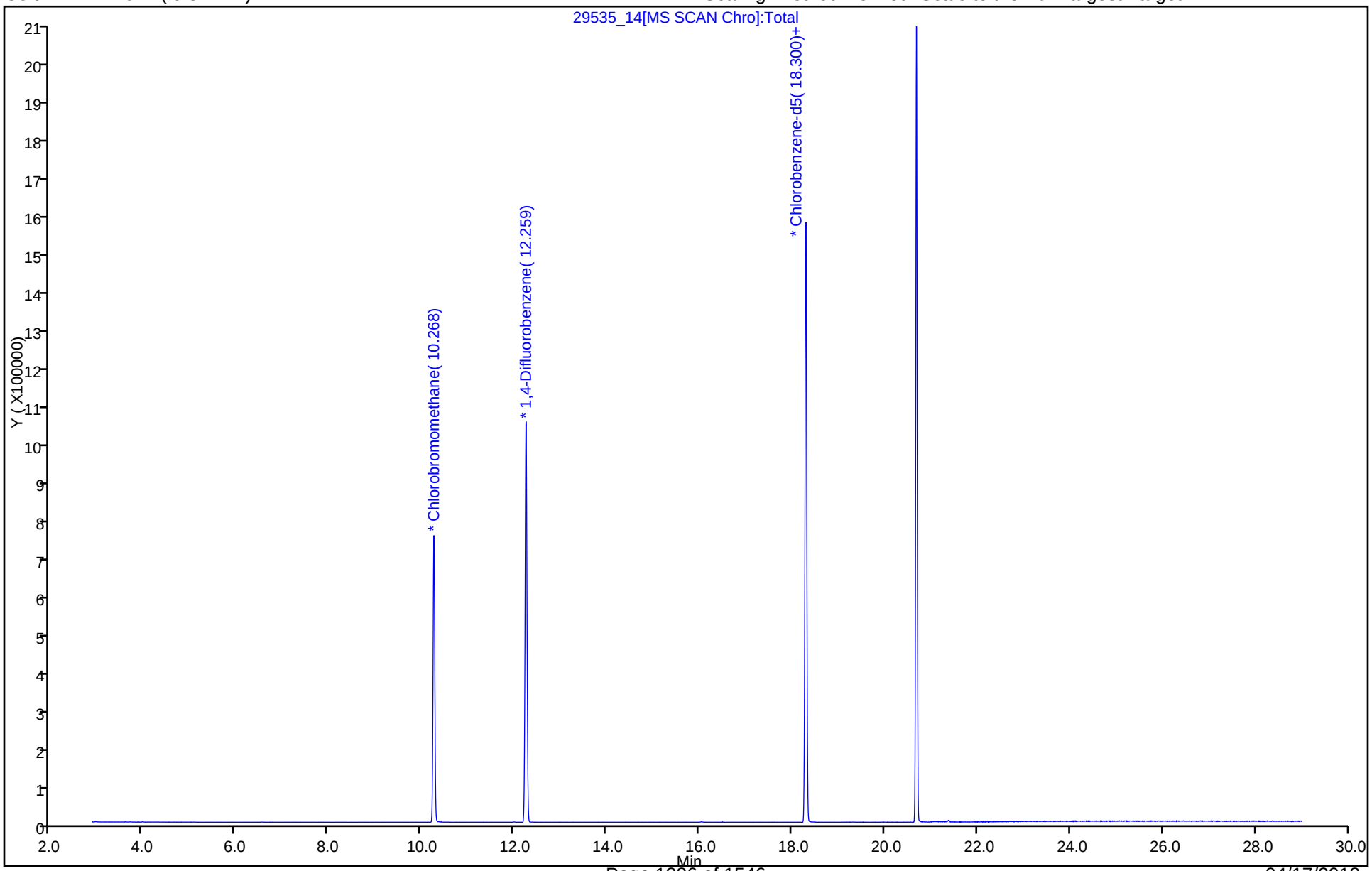
Report Date: 13-Mar-2018 12:36:51 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_14.D

Injection Date:	12-Mar-2018 22:08:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-42570-A-5	Lab Sample ID:	200-42570-5	Worklist Smp#:	14
Client ID:	2885				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	14
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



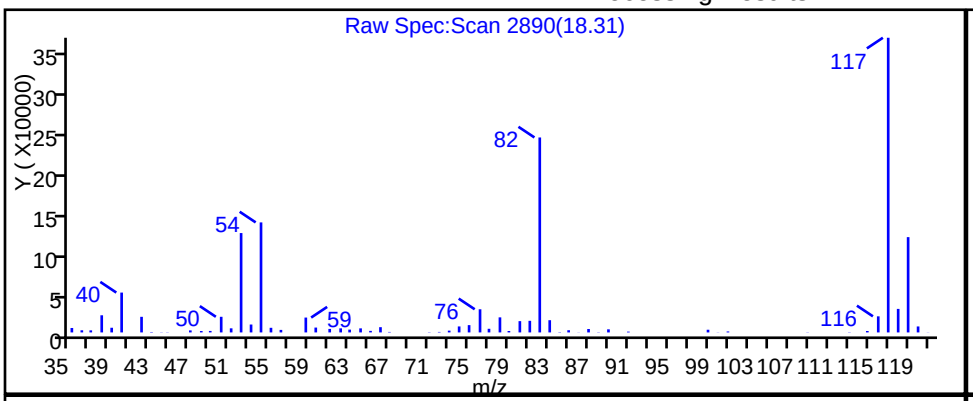
User Disabled Compound Report

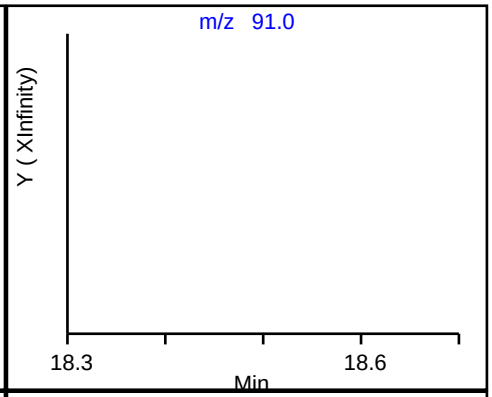
TestAmerica Burlington

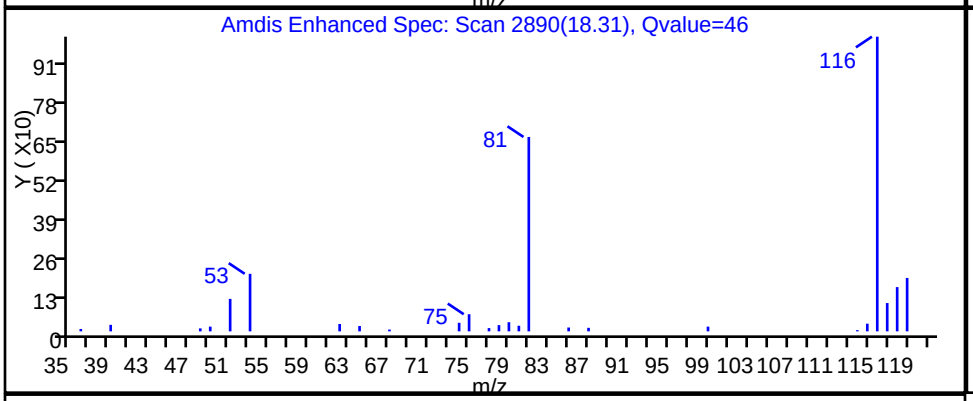
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180312-29535.b\29535_14.D				
Injection Date:	12-Mar-2018 22:08:30	Instrument ID:	CHC.i		
Lims ID:	200-42570-A-5	Lab Sample ID:	200-42570-5		
Client ID:	2885				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

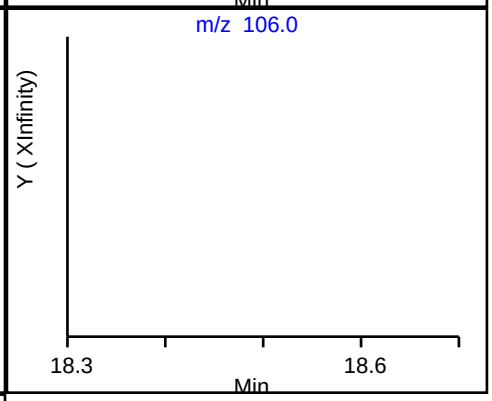
76 Ethylbenzene, CAS: 100-41-4

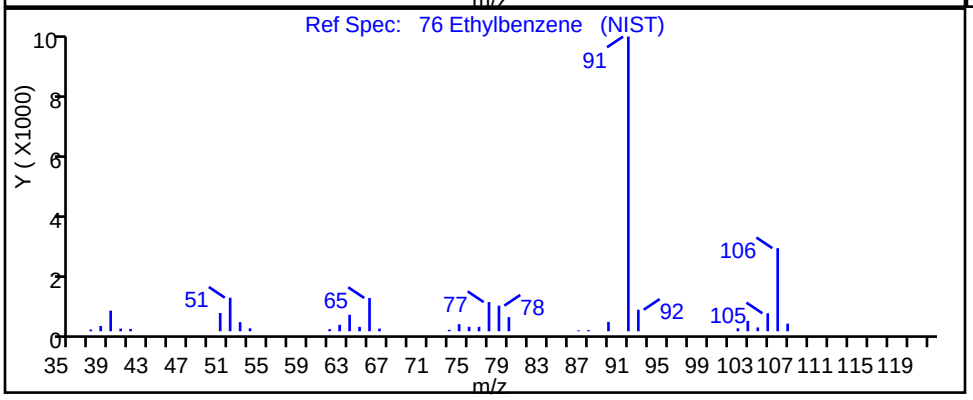
Processing Results











RT	Mass	Response	Amount
18.31	91.00	1476	0.018586
18.51	106.00	0	

Reviewer: puangmaleek, 13-Mar-2018 12:36:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42575-1

SDG No.:

Client Sample ID: 5656 | Lab Sample ID: 200-42575-6

Matrix: Air | Lab File ID: 29551_22.D

Analysis Method: TO-15 | Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 03/14/2018 04:23

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127298 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U *	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42575-1

SDG No.:

Client Sample ID: 5656 | Lab Sample ID: 200-42575-6

Matrix: Air | Lab File ID: 29551_22.D

Analysis Method: TO-15 | Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 03/14/2018 04:23

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127298 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U *	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Client Sample ID: 5656 Lab Sample ID: 200-42575-6

Matrix: Air Lab File ID: 29551_22.D

Analysis Method: TO-15 Date Collected: 03/12/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/14/2018 04:23

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127298 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_22.D
Lims ID: 200-42575-A-6
Client ID: 5656
Sample Type: Client
Inject. Date: 14-Mar-2018 04:23:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0029551-022
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 14-Mar-2018 16:56:04 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: bunmaa Date: 14-Mar-2018 16:56:04

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		2.967				ND	
	2 Dichlorodifluoromethane	85		3.031				ND	
	3 Chlorodifluoromethane	51		3.085				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		3.293				ND	
	5 Chloromethane	50		3.426				ND	Ua
	6 Butane	43		3.629				ND	
	7 Vinyl chloride	62		3.666				ND	
	8 Butadiene	54		3.741				ND	
	10 Bromomethane	94		4.414				ND	
	11 Chloroethane	64		4.654				ND	
	13 Vinyl bromide	106		5.043				ND	
	14 Trichlorofluoromethane	101		5.155				ND	
	17 Ethanol	45		5.732				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		6.249				ND	
	21 1,1-Dichloroethene	96		6.276				ND	
	22 Acetone	43		6.500				ND	
	23 Carbon disulfide	76		6.655				ND	
	24 Isopropyl alcohol	45		6.826				ND	
	25 3-Chloro-1-propene	41		7.071				ND	
	27 Methylene Chloride	49		7.365				ND	
	28 2-Methyl-2-propanol	59		7.600				ND	
	29 Methyl tert-butyl ether	73		7.781				ND	
	31 trans-1,2-Dichloroethene	61		7.818				ND	
	33 Hexane	57		8.219				ND	
	34 1,1-Dichloroethane	63		8.688				ND	
	35 Vinyl acetate	43		8.774				ND	
	37 cis-1,2-Dichloroethene	96		9.809				ND	
	38 2-Butanone (MEK)	72		9.846				ND	
	39 Ethyl acetate	88		9.911				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	41 Tetrahydrofuran	42		10.273				ND	
*	40 Chlorobromomethane	128	10.268	10.273	-0.005	90	216671	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		10.418				ND	
	43 Cyclohexane	84		10.658				ND	
	44 1,1,1-Trichloroethane	97		10.679				ND	
	45 Carbon tetrachloride	117		10.941				ND	
	46 Isooctane	57		11.394				ND	
	47 Benzene	78		11.400				ND	
	48 1,2-Dichloroethane	62		11.581				ND	
	49 n-Heptane	43		11.800				ND	
*	50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1149831	10.0	
	53 Trichloroethene	95		12.734				ND	
	54 1,2-Dichloropropane	63		13.273				ND	
	55 Methyl methacrylate	69		13.465				ND	
	56 1,4-Dioxane	88		13.508				ND	
	57 Dibromomethane	174		13.534				ND	
	58 Dichlorobromomethane	83		13.849				ND	
	60 cis-1,3-Dichloropropene	75		14.799				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.082				ND	
	65 Toluene	92		15.397				ND	
	66 trans-1,3-Dichloropropene	75		16.000				ND	
	67 1,1,2-Trichloroethane	83		16.368				ND	
	68 Tetrachloroethene	166		16.491				ND	
	69 2-Hexanone	43		16.816				ND	
	71 Chlorodibromomethane	129		17.137				ND	
	72 Ethylene Dibromide	107		17.393				ND	
*	74 Chlorobenzene-d5	117	18.300	18.300	0.000	96	1148964	10.0	
	75 Chlorobenzene	112		18.359				ND	
	76 Ethylbenzene	91		18.519				ND	U
	78 m-Xylene & p-Xylene	106		18.764				ND	
	79 o-Xylene	106		19.602				ND	
	80 Styrene	104		19.656				ND	
	81 Bromoform	173		20.088				ND	
S	73 Xylenes, Total	106		20.100				ND	
	82 Isopropylbenzene	105		20.312				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.979				ND	
	85 N-Propylbenzene	91		21.049				ND	
	88 4-Ethyltoluene	105		21.246				ND	
	89 2-Chlorotoluene	91		21.246				ND	
	90 1,3,5-Trimethylbenzene	105		21.353				ND	
	92 tert-Butylbenzene	119		21.849				ND	
	93 1,2,4-Trimethylbenzene	105		21.945				ND	
	94 sec-Butylbenzene	105		22.180				ND	
	95 4-Isopropyltoluene	119		22.383				ND	
	96 1,3-Dichlorobenzene	146		22.410				ND	
	97 1,4-Dichlorobenzene	146		22.548				ND	
	98 Benzyl chloride	91		22.740				ND	
	100 n-Butylbenzene	91		22.949				ND	
	101 1,2-Dichlorobenzene	146		23.071				ND	
	103 1,2,4-Trichlorobenzene	180		25.489				ND	
	104 Hexachlorobutadiene	225		25.681				ND	
	105 Naphthalene	128		25.943				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15CISs_00010	Amount Added:	20.00	Units: mL	Run Reagent

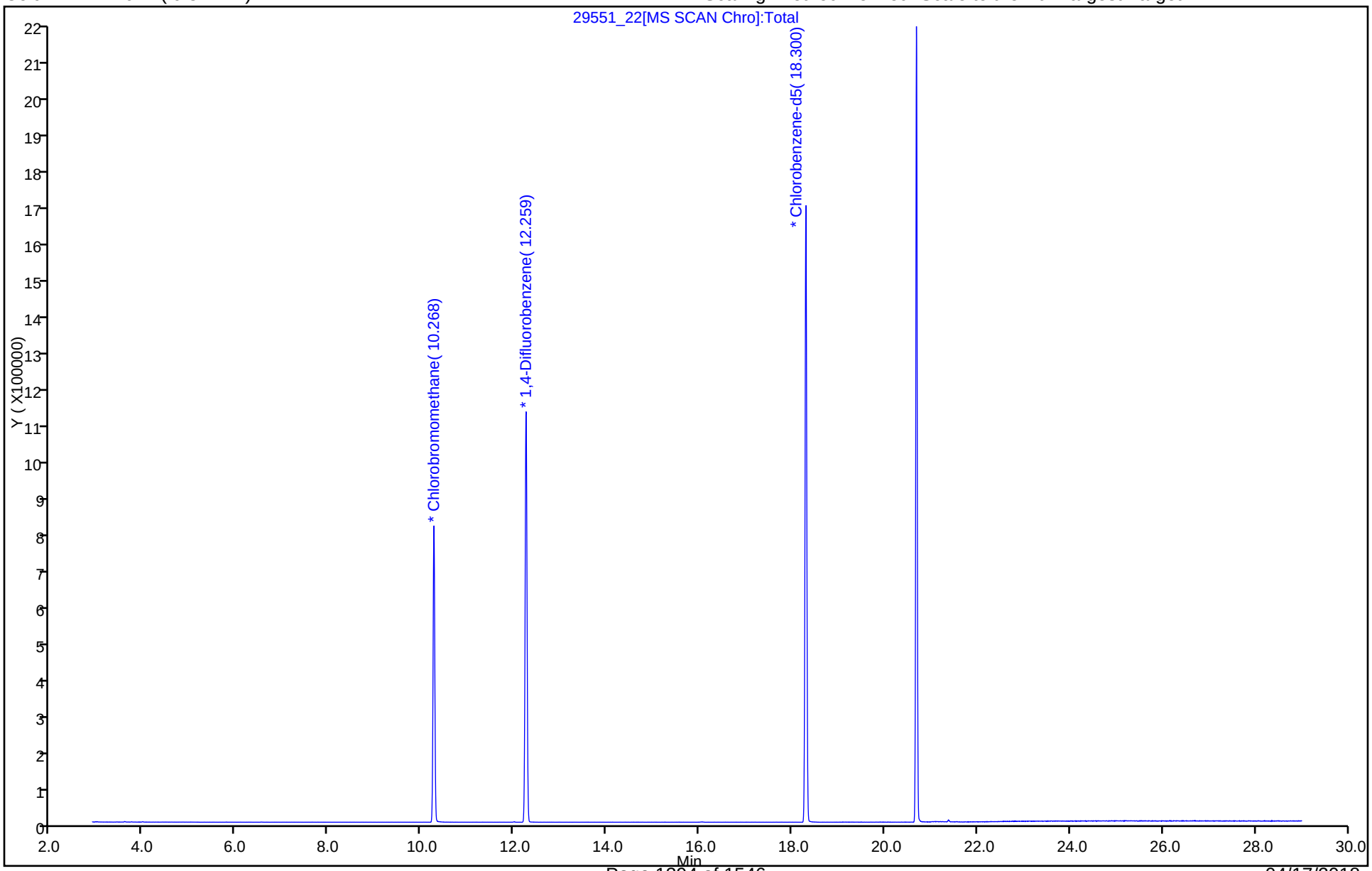
Report Date: 14-Mar-2018 16:56:04 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_22.D

Injection Date:	14-Mar-2018 04:23:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-42575-A-6	Lab Sample ID:	200-42575-6	Worklist Smp#:	22
Client ID:	5656				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	22
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



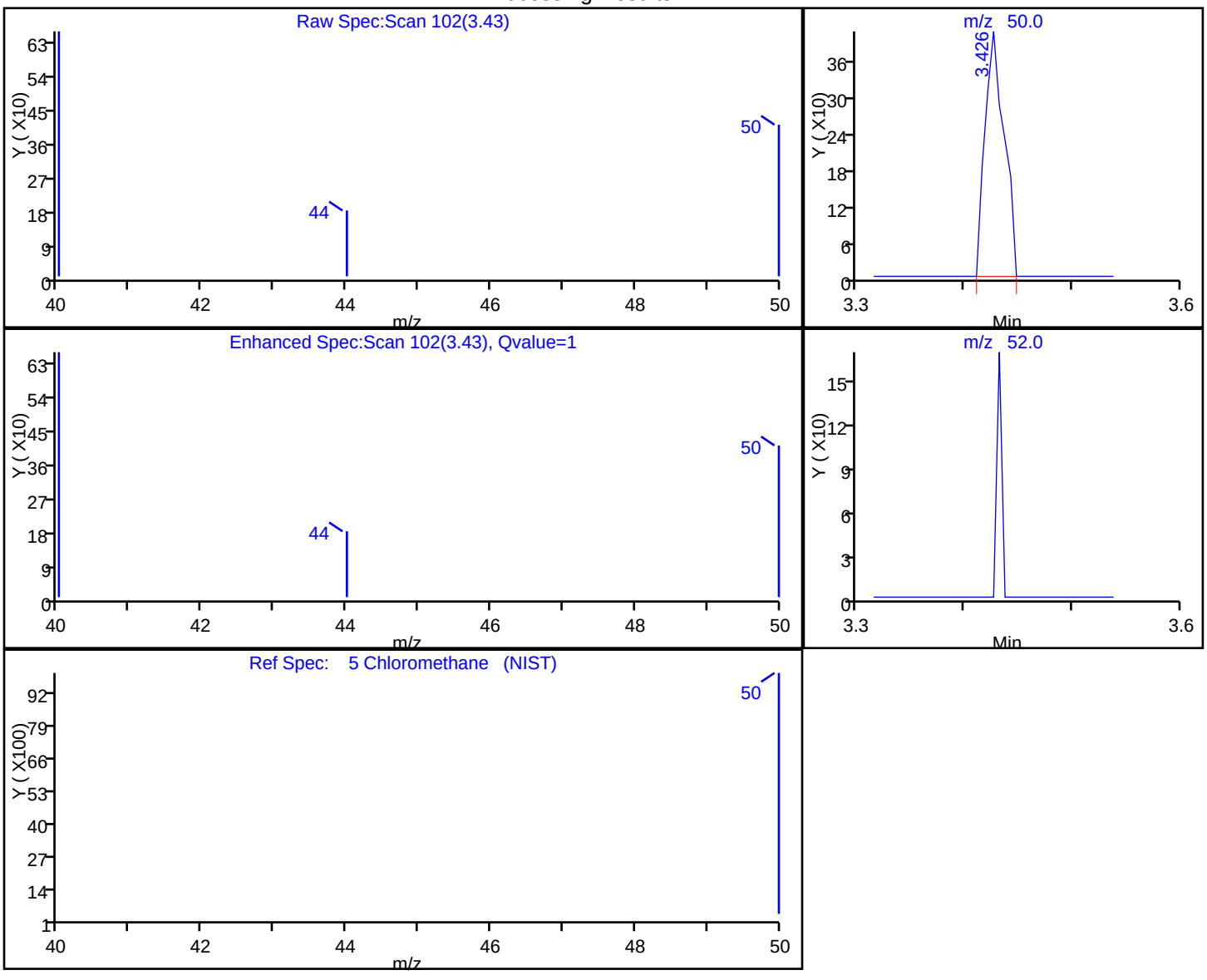
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_22.D				
Injection Date:	14-Mar-2018 04:23:30	Instrument ID:	CHC.i		
Lims ID:	200-42575-A-6	Lab Sample ID:	200-42575-6		
Client ID:	5656				
Operator ID:	pad	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
3.43	50.00	506	0.026374
3.42	52.00	0	

Reviewer: bunmaa, 14-Mar-2018 16:56:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

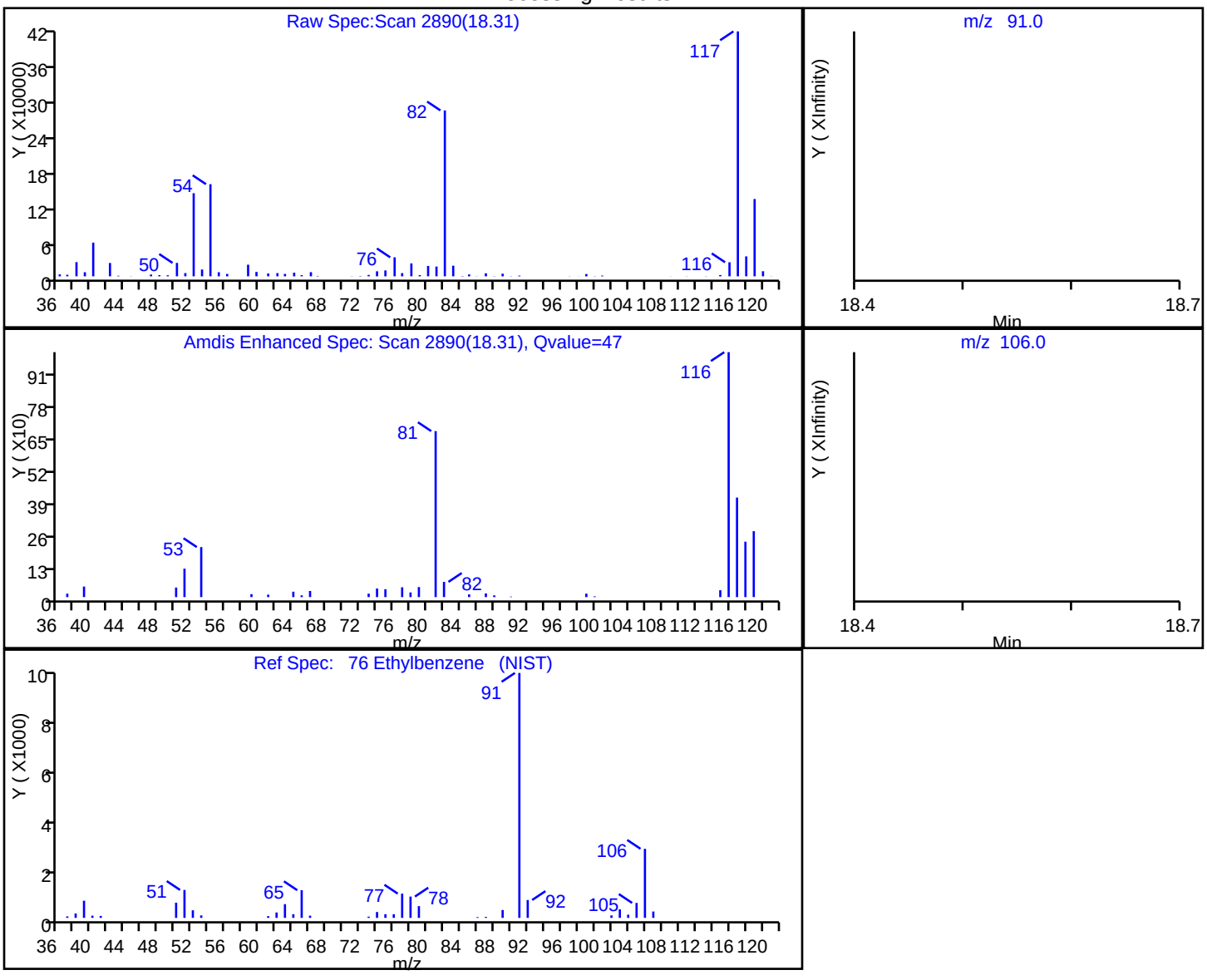
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180313-29551.b\29551_22.D				
Injection Date:	14-Mar-2018 04:23:30	Instrument ID:	CHC.i		
Lims ID:	200-42575-A-6	Lab Sample ID:	200-42575-6		
Client ID:	5656				
Operator ID:	pad	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
18.31	91.00	1507	0.017016
18.52	106.00	0	

Reviewer: bunmaa, 14-Mar-2018 16:56:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42592-1

SDG No.:

Client Sample ID: 8118 | Lab Sample ID: 200-42592-3

Matrix: Air | Lab File ID: 29574-14.D

Analysis Method: TO-15 | Date Collected: 03/13/2018 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 03/14/2018 23:03

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127358 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Client Sample ID: 8118 Lab Sample ID: 200-42592-3

Matrix: Air Lab File ID: 29574-14.D

Analysis Method: TO-15 Date Collected: 03/13/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/14/2018 23:03

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127358 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Client Sample ID: 8118 Lab Sample ID: 200-42592-3

Matrix: Air Lab File ID: 29574-14.D

Analysis Method: TO-15 Date Collected: 03/13/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/14/2018 23:03

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127358 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D
Lims ID: 200-42592-A-3
Client ID: 8118
Sample Type: Client
Inject. Date: 14-Mar-2018 23:03:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0029574-014
Operator ID: pad Instrument ID: CHB.i

Method: \\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\TO15_LLNJ_TO3.m
Limit Group: AI_TO15_ICAL
Last Update: 15-Mar-2018 17:27:01 Calib Date: 13-Feb-2018 10:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20180212-29154.b\29154-20.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: suwannatrais Date: 15-Mar-2018 11:30:31

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		3.134				ND	
2	Dichlorodifluoromethane	85		3.193				ND	
3	Chlorodifluoromethane	51		3.225				ND	
4	1,2-Dichloro-1,1,2,2-tetra	85		3.412				ND	
5	Chloromethane	50		3.535				ND	
6	Butane	43		3.706				ND	Ua
7	Vinyl chloride	62		3.743				ND	
8	Butadiene	54		3.812				ND	
10	Bromomethane	94		4.474				ND	
11	Chloroethane	64		4.704				ND	
13	Vinyl bromide	106		5.109				ND	
14	Trichlorofluoromethane	101		5.211				ND	
16	Ethanol	45		5.664				ND	
19	1,1,2-Trichloro-1,2,2-trif	101		6.241				ND	
20	1,1-Dichloroethene	96		6.305				ND	
21	Acetone	43		6.454				ND	Ua
22	Isopropyl alcohol	45		6.673				ND	
23	Carbon disulfide	76		6.737				ND	
24	3-Chloro-1-propene	41		7.009				ND	
27	Methylene Chloride	49		7.265				ND	Ua
28	2-Methyl-2-propanol	59		7.377				ND	
29	Methyl tert-butyl ether	73		7.617				ND	
30	trans-1,2-Dichloroethene	61		7.676				ND	
32	Hexane	57	8.002	8.002	-0.005	73	5507	0.0729	7a
33	1,1-Dichloroethane	63		8.418				ND	
34	Vinyl acetate	43		8.423				ND	
36	2-Butanone (MEK)	72		9.304				ND	
37	cis-1,2-Dichloroethene	96		9.320				ND	
35	Ethyl acetate	88		9.320				ND	
* 39	Chlorobromomethane	128	9.683	9.688	-0.005	79	488415	10.0	
38	Tetrahydrofuran	42		9.699				ND	
40	Chloroform	83		9.763				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
S 41 1,2-Dichloroethene, Total	61		10.000				ND	
42 1,1,1-Trichloroethane	97		10.019				ND	
43 Cyclohexane	84		10.035				ND	
44 Carbon tetrachloride	117		10.233				ND	
45 Isooctane	57		10.510				ND	
46 Benzene	78	10.547	10.547	-0.006	1	3549	0.0223	7a
47 1,2-Dichloroethane	62		10.649				ND	
48 n-Heptane	43		10.761				ND	
* 50 1,4-Difluorobenzene	114	11.086	11.092	-0.006	93	2174543	10.0	
53 Trichloroethene	95		11.465				ND	
54 1,2-Dichloropropane	63		11.834				ND	
55 Methyl methacrylate	69		11.871				ND	
56 1,4-Dioxane	88		11.956				ND	
57 Dibromomethane	174		12.020				ND	MUa
58 Dichlorobromomethane	83		12.191				ND	
60 cis-1,3-Dichloropropene	75		12.816				ND	
61 4-Methyl-2-pentanone (MIBK	43		12.965				ND	
64 Toluene	92	13.259	13.259	0.011	37	2488	0.0211	7a
66 trans-1,3-Dichloropropene	75		13.611				ND	
67 1,1,2-Trichloroethane	83		13.883				ND	
68 Tetrachloroethene	166		14.022				ND	
69 2-Hexanone	43		14.139				ND	
70 Chlorodibromomethane	129		14.438				ND	
71 Ethylene Dibromide	107		14.641				ND	
* 72 Chlorobenzene-d5	117	15.196	15.201	-0.005	83	1881101	10.0	
73 Chlorobenzene	112		15.244				ND	
74 Ethylbenzene	91	15.308	15.308	0.000	22	6623	0.0262	7a
76 m-Xylene & p-Xylene	106		15.457				ND	
78 o-Xylene	106		15.970				ND	Ua
79 Styrene	104		15.991				ND	
S 77 Xylenes, Total	106		16.000				ND	
80 Bromoform	173		16.285				ND	
81 Isopropylbenzene	105		16.381				ND	
83 1,1,2,2-Tetrachloroethane	83		16.786				ND	
84 N-Propylbenzene	91		16.861				ND	
87 4-Ethyltoluene	105		16.989				ND	
88 2-Chlorotoluene	91		17.026				ND	
89 1,3,5-Trimethylbenzene	105		17.053				ND	
91 tert-Butylbenzene	119		17.427				ND	
92 1,2,4-Trimethylbenzene	105		17.501				ND	
93 sec-Butylbenzene	105		17.683				ND	
94 4-Isopropyltoluene	119		17.838				ND	
95 1,3-Dichlorobenzene	146		17.918				ND	
96 1,4-Dichlorobenzene	146		18.024				ND	
97 Benzyl chloride	91		18.174				ND	
99 n-Butylbenzene	91		18.345				ND	
100 1,2-Dichlorobenzene	146		18.510				ND	
103 1,2,4-Trichlorobenzene	180		20.869				ND	
104 Hexachlorobutadiene	225		21.034				ND	
105 Naphthalene	128		21.344				ND	MU

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15BISs_00006 Amount Added: 20.00 Units: mL Run Reagent

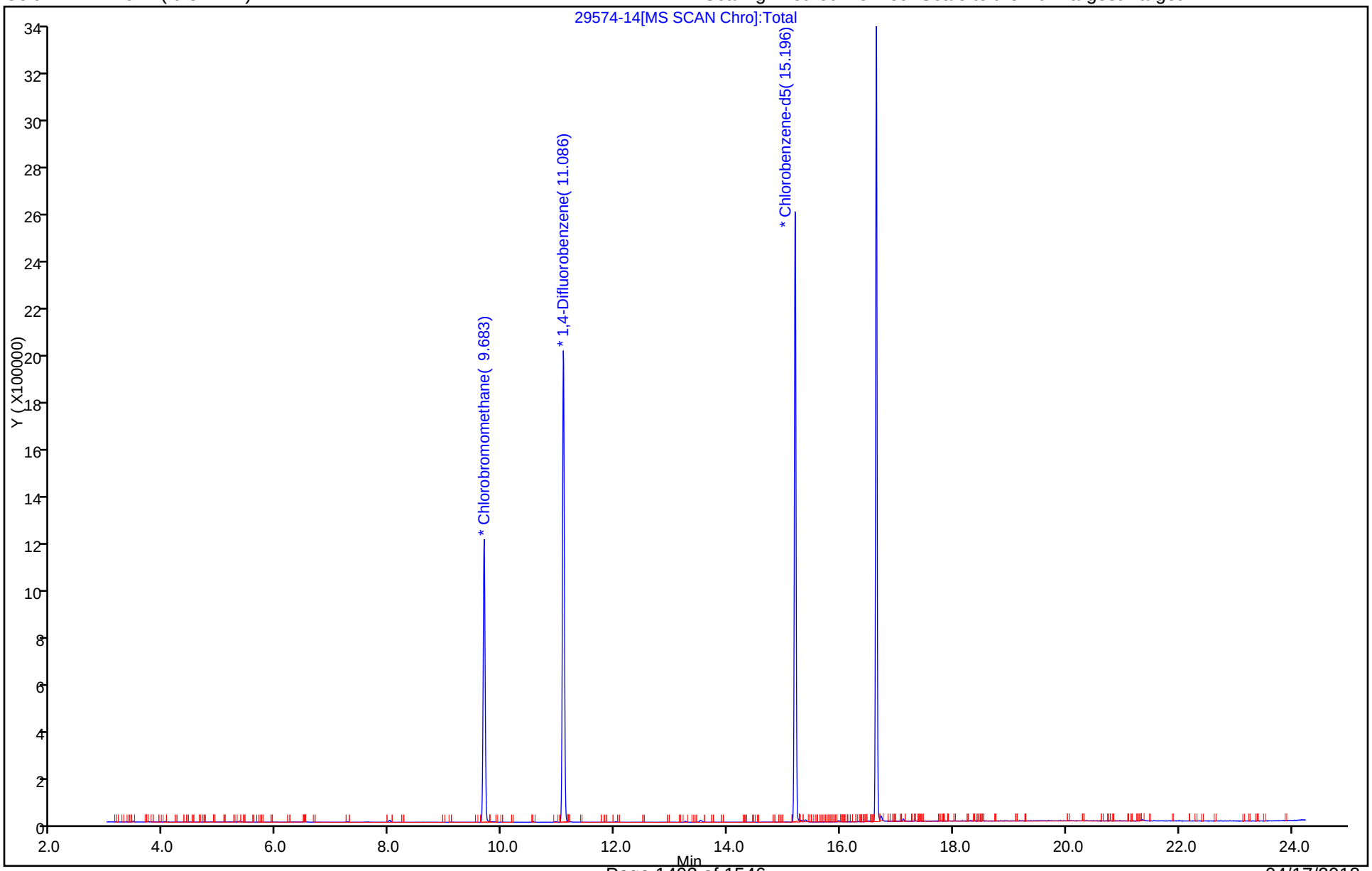
Report Date: 15-Mar-2018 17:27:02 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D

Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i	Operator ID:	pad
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3	Worklist Smp#:	14
Client ID:	8118				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	14
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



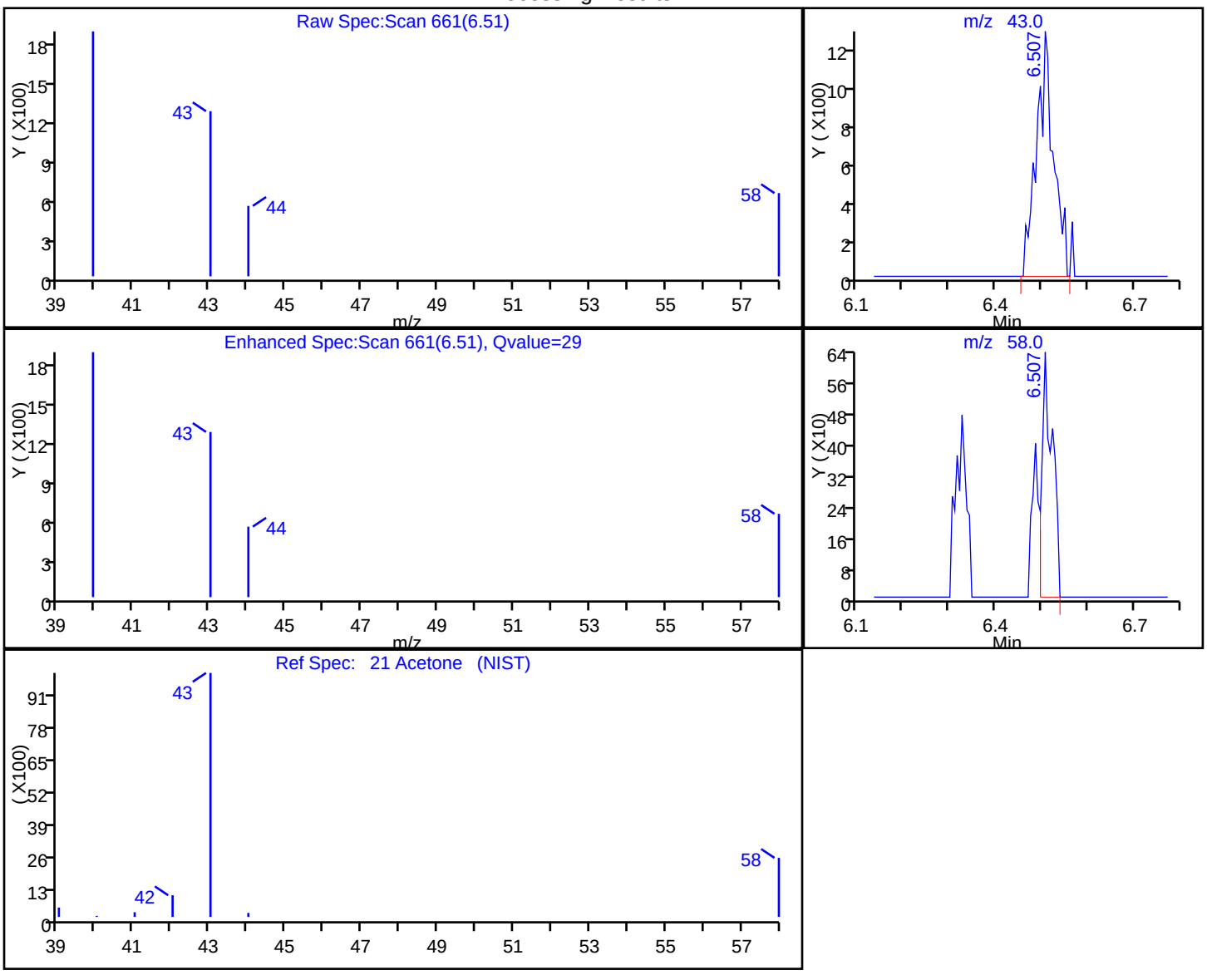
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D				
Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i		
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3		
Client ID:	8118				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

21 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
6.51	43.00	3196	0.063207
6.51	58.00	980	

Reviewer: bunmaa, 15-Mar-2018 17:27:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

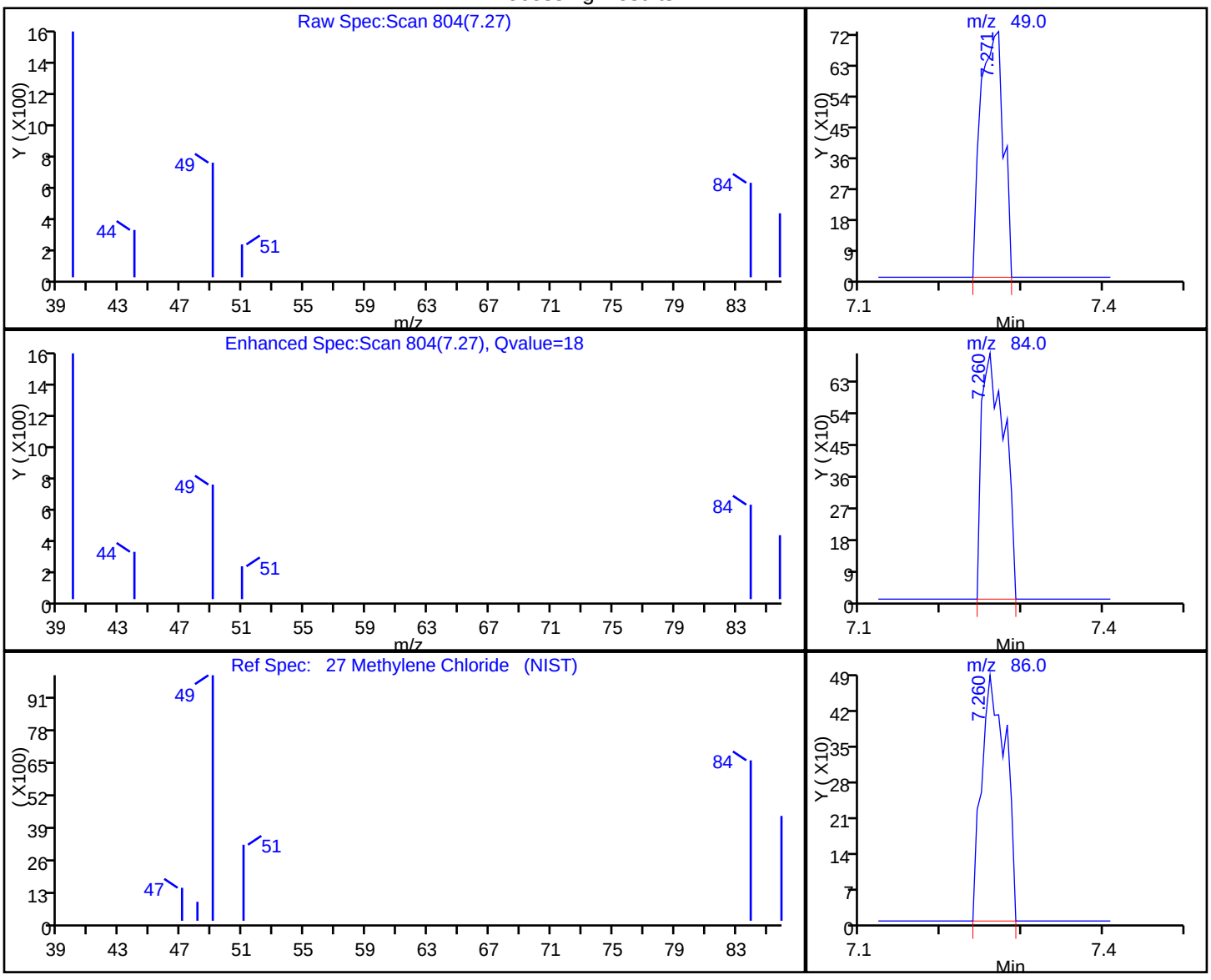
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D				
Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i		
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3		
Client ID:	8118				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
7.27	49.00	1420	0.032895
7.26	84.00	1399	
7.26	86.00	999	

Reviewer: bunmaa, 15-Mar-2018 17:27:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

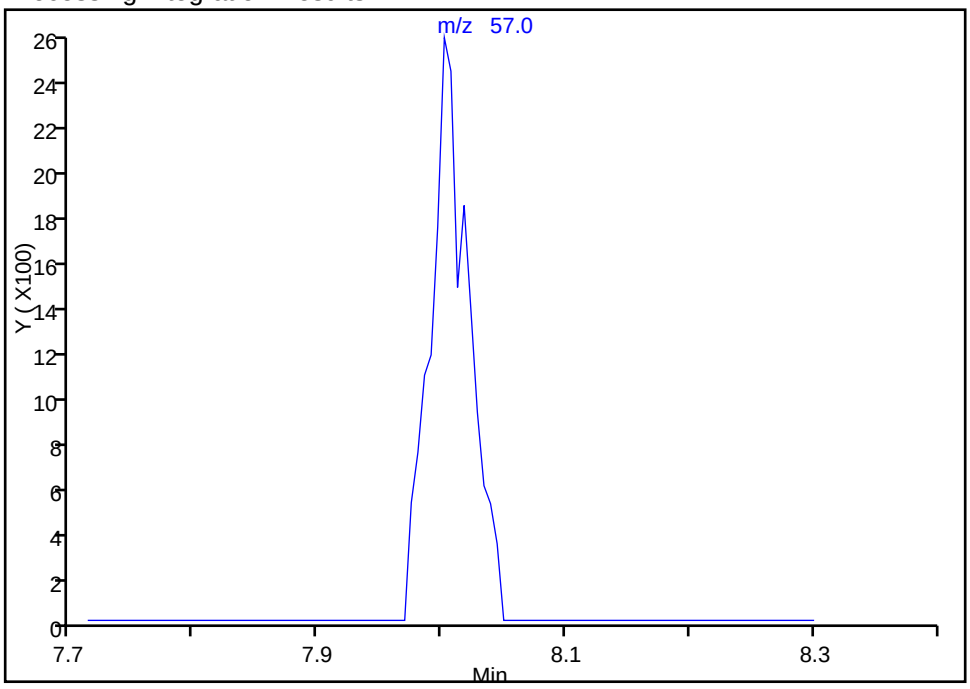
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D				
Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i		
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3		
Client ID:	8118				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

32 Hexane, CAS: 110-54-3

Signal: 1

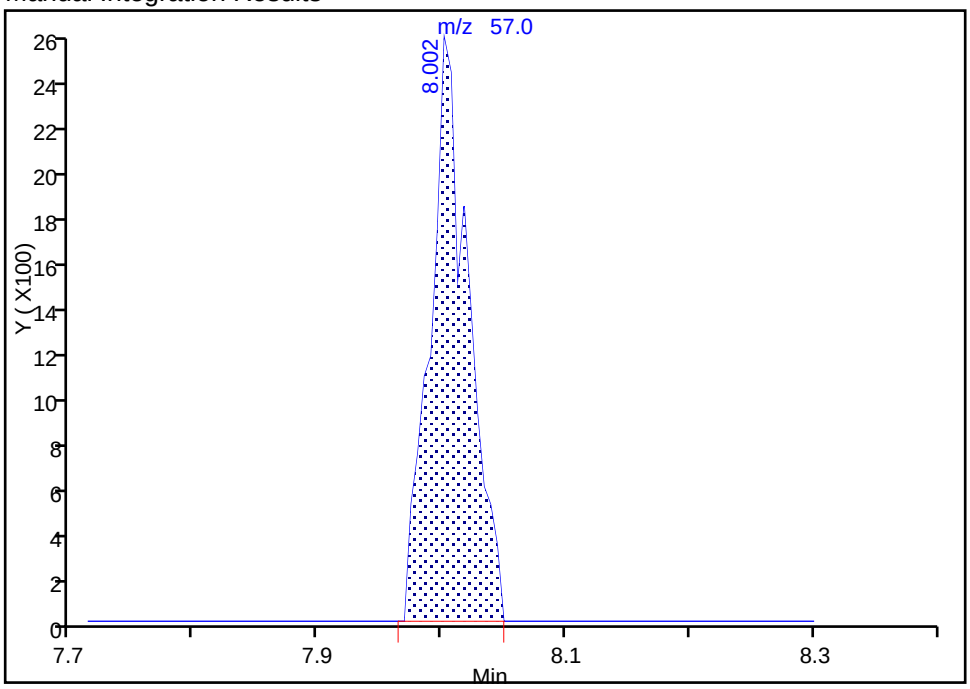
Processing Integration Results

Not Detected
Expected RT: 8.01



Manual Integration Results

RT: 8.00
Area: 5507
Amount: 0.072918
Amount Units: ppb v/v



Reviewer: bunmaa, 15-Mar-2018 17:24:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Burlington

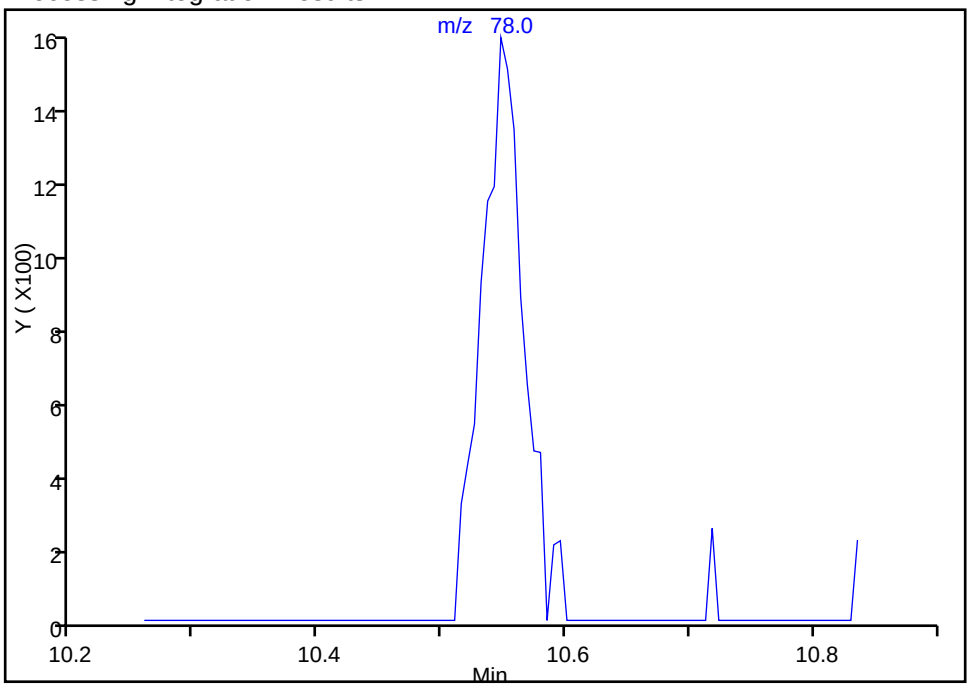
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D				
Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i		
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3		
Client ID:	8118				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Benzene, CAS: 71-43-2

Signal: 1

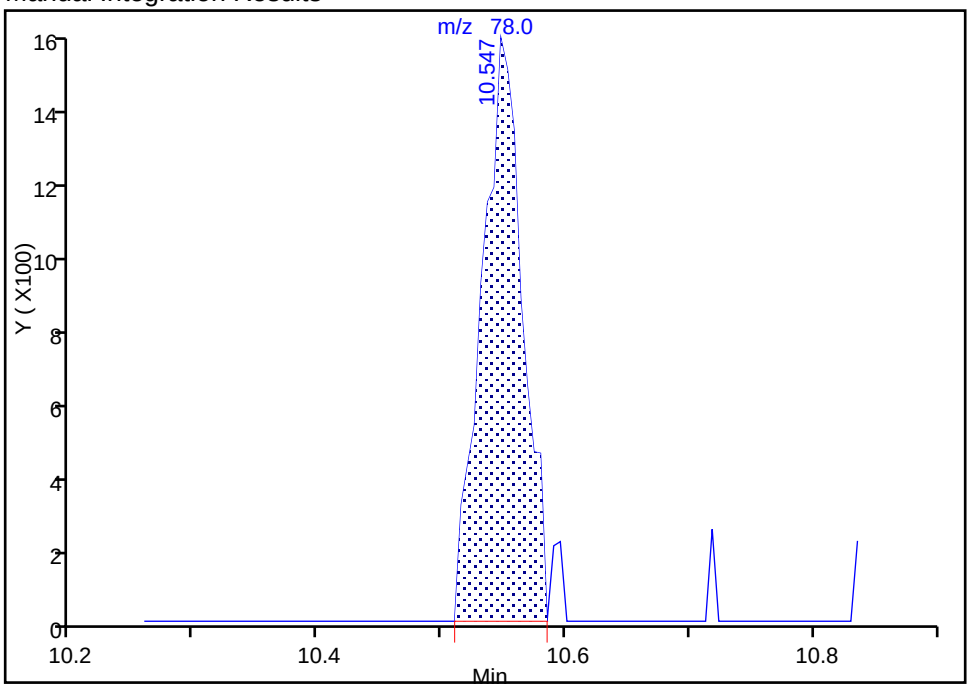
Not Detected
Expected RT: 10.55

Processing Integration Results



Manual Integration Results

RT: 10.55
Area: 3549
Amount: 0.022314
Amount Units: ppb v/v



Reviewer: bunmaa, 15-Mar-2018 17:25:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Burlington

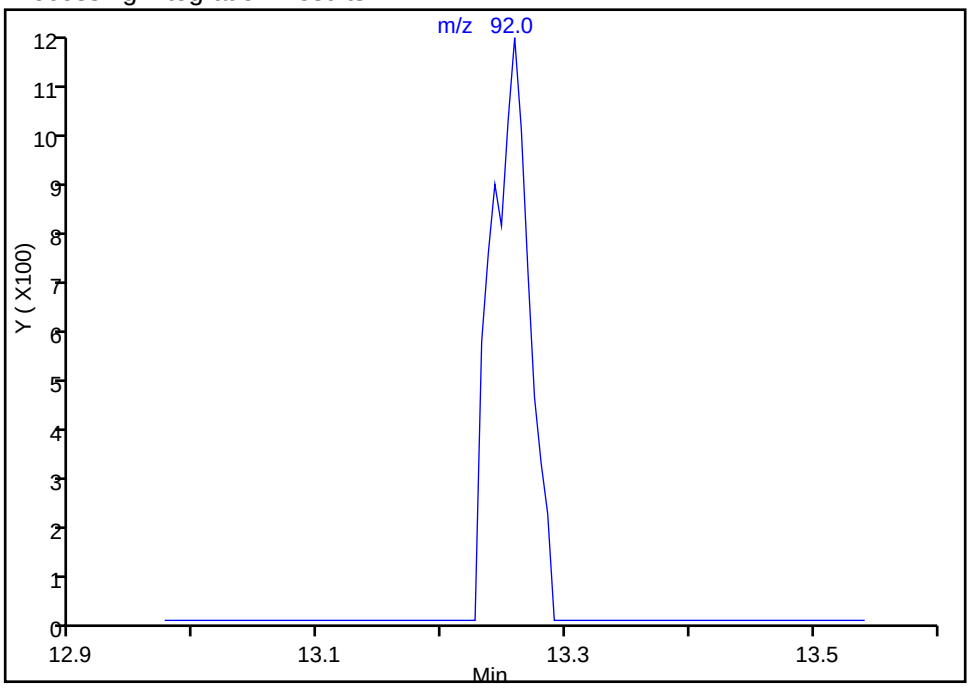
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D				
Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i		
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3		
Client ID:	8118				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

64 Toluene, CAS: 108-88-3

Signal: 1

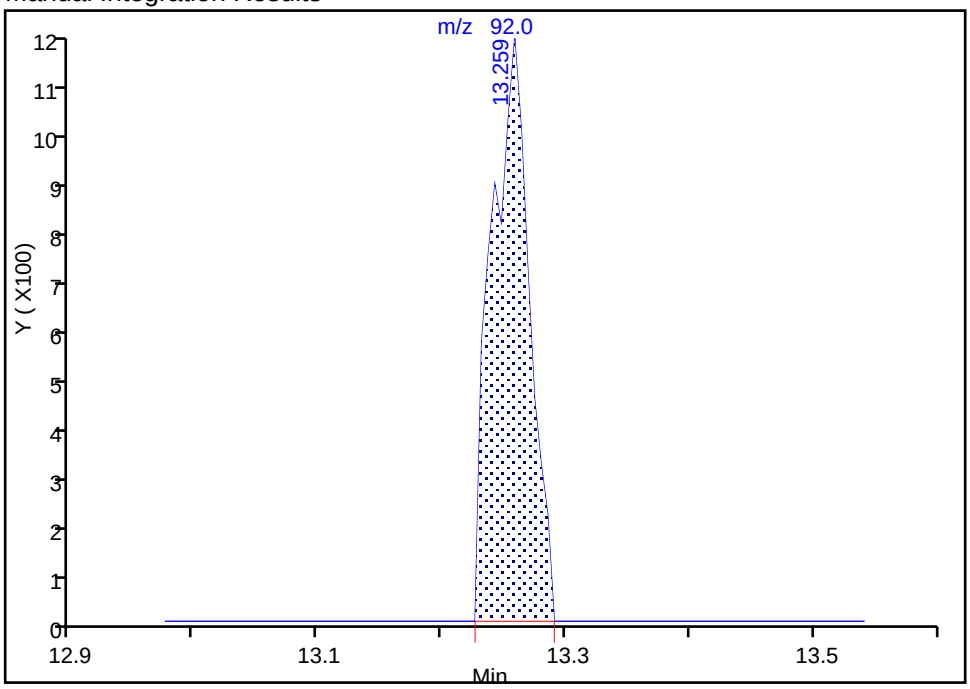
Not Detected
Expected RT: 13.25

Processing Integration Results



Manual Integration Results

RT: 13.26
Area: 2488
Amount: 0.021143
Amount Units: ppb v/v



Reviewer: bunmaa, 15-Mar-2018 17:25:33
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

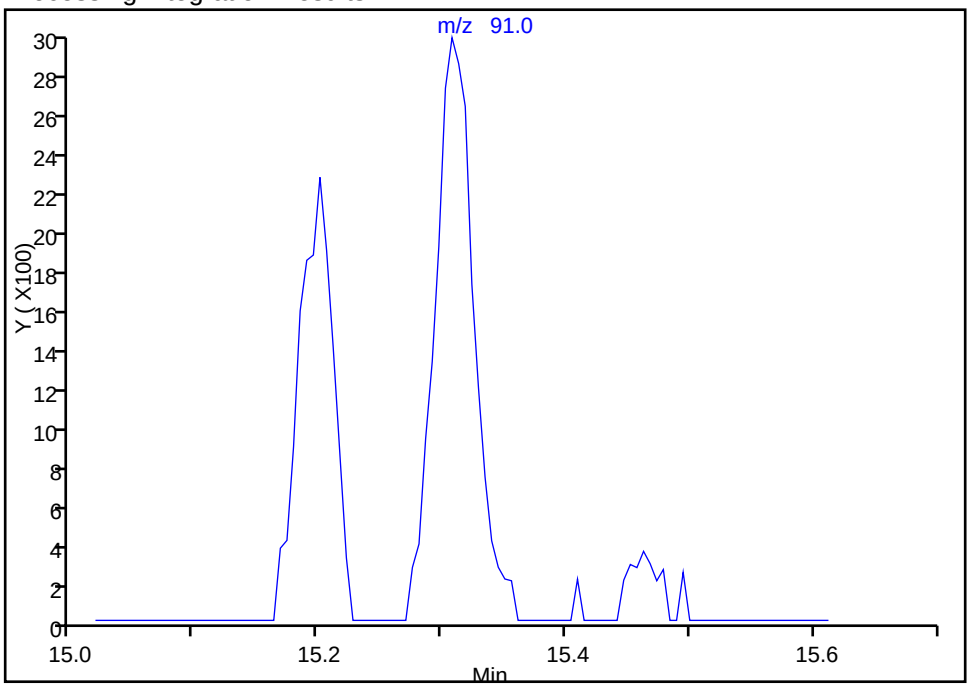
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D				
Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i		
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3		
Client ID:	8118				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

74 Ethylbenzene, CAS: 100-41-4

Signal: 1

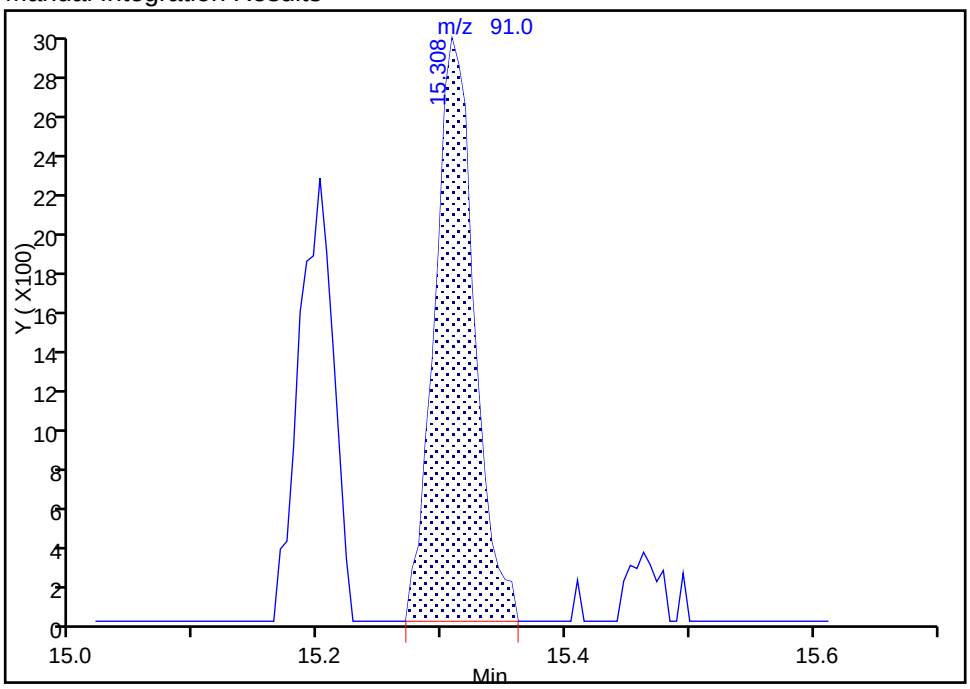
Not Detected
Expected RT: 15.31

Processing Integration Results



Manual Integration Results

RT: 15.31
Area: 6623
Amount: 0.026159
Amount Units: ppb v/v



Reviewer: bunmaa, 15-Mar-2018 17:25:51
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

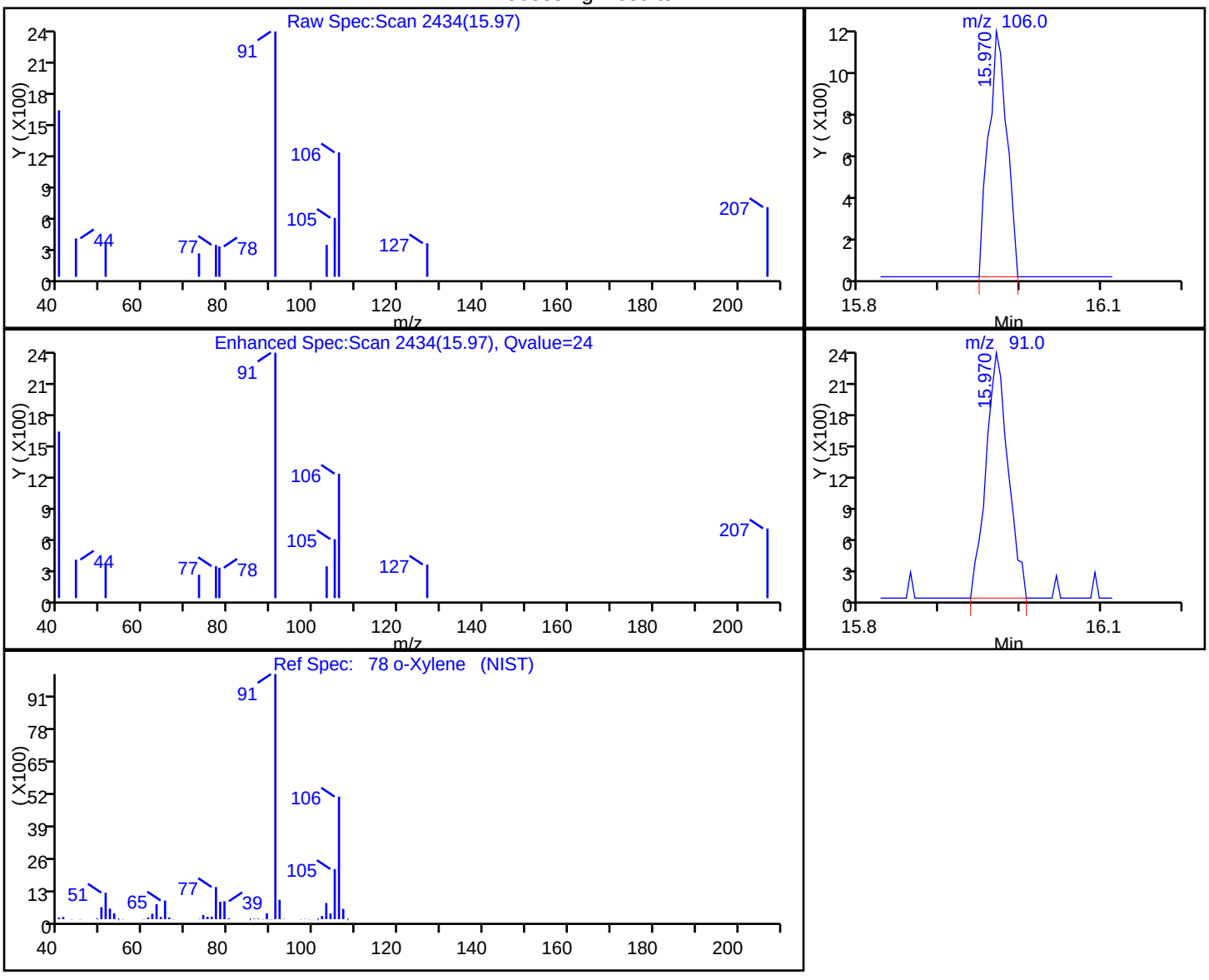
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D				
Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i		
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3		
Client ID:	8118				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
15.97	106.00	1851	0.017695
15.97	91.00	4428	

Reviewer: bunmaa, 15-Mar-2018 17:27:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

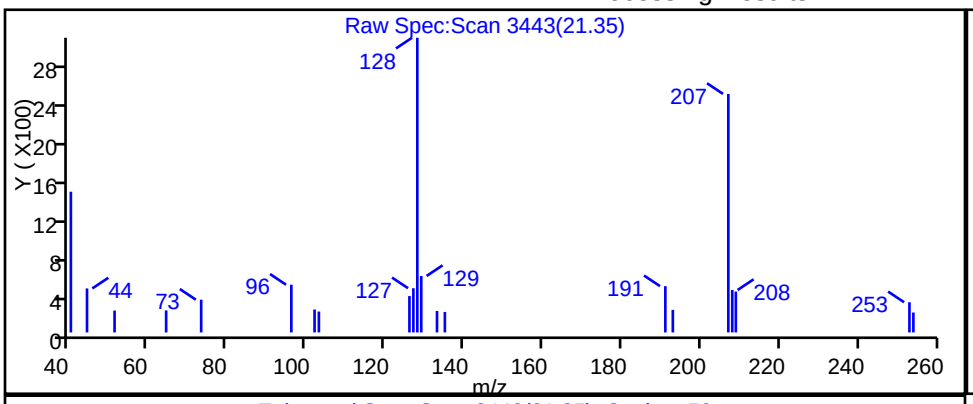
User Disabled Compound Report

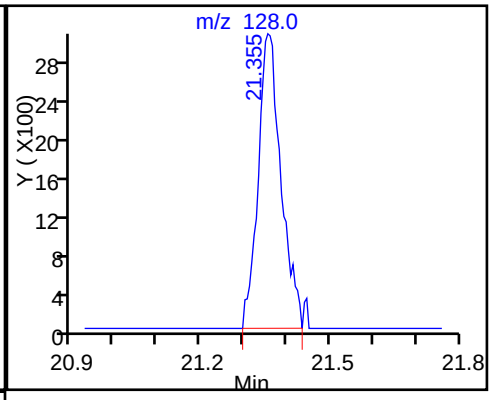
TestAmerica Burlington

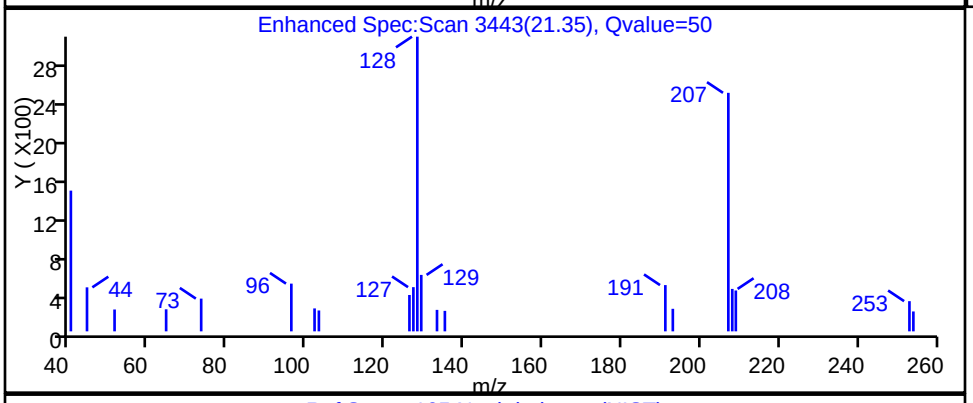
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20180314-29574.b\29574-14.D				
Injection Date:	14-Mar-2018 23:03:30	Instrument ID:	CHB.i		
Lims ID:	200-42592-A-3	Lab Sample ID:	200-42592-3		
Client ID:	8118				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

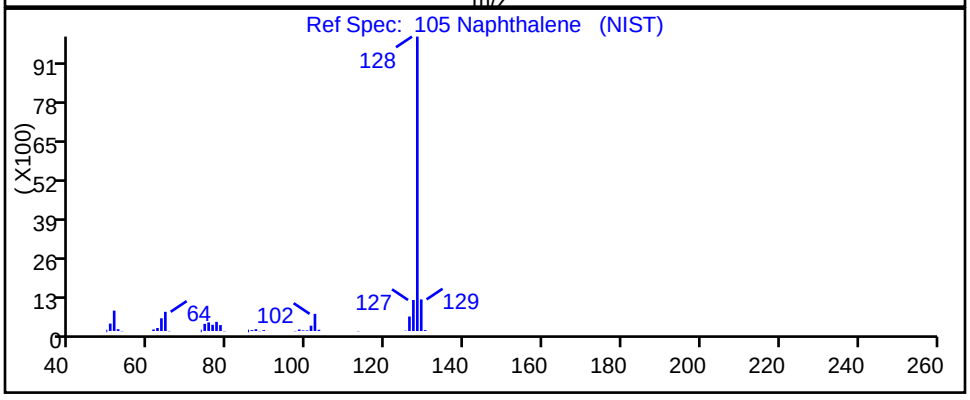
105 Naphthalene, CAS: 91-20-3

Processing Results









RT	Mass	Response	Amount
21.35	128.00	11097	0.040859

Reviewer: bunmaa, 15-Mar-2018 17:27:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42621-1

SDG No.:

Client Sample ID: 5674 | Lab Sample ID: 200-42621-5

Matrix: Air | Lab File ID: 29611_11.D

Analysis Method: TO-15 | Date Collected: 03/15/2018 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 03/16/2018 18:25

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127437 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Client Sample ID: 5674 Lab Sample ID: 200-42621-5

Matrix: Air Lab File ID: 29611_11.D

Analysis Method: TO-15 Date Collected: 03/15/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/16/2018 18:25

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127437 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Client Sample ID: 5674 Lab Sample ID: 200-42621-5

Matrix: Air Lab File ID: 29611_11.D

Analysis Method: TO-15 Date Collected: 03/15/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/16/2018 18:25

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127437 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_11.D
Lims ID: 200-42621-A-5
Client ID: 5674
Sample Type: Client
Inject. Date: 16-Mar-2018 18:25:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0029611-011
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Mar-2018 11:49:54 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: bunmaa Date: 19-Mar-2018 11:49:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967				ND	
2 Dichlorodifluoromethane	85		3.037				ND	
3 Chlorodifluoromethane	51		3.090				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.298				ND	
5 Chloromethane	50		3.426				ND	
6 Butane	43		3.629				ND	
7 Vinyl chloride	62		3.667				ND	
8 Butadiene	54		3.747				ND	
10 Bromomethane	94		4.414				ND	
11 Chloroethane	64		4.659				ND	
13 Vinyl bromide	106		5.049				ND	
14 Trichlorofluoromethane	101		5.156				ND	
17 Ethanol	45		5.737				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.250				ND	
21 1,1-Dichloroethene	96		6.282				ND	
22 Acetone	43		6.500				ND	Ua
23 Carbon disulfide	76	6.655	6.652	0.000	98	2749	0.0793	
24 Isopropyl alcohol	45		6.826				ND	
25 3-Chloro-1-propene	41		7.071				ND	
27 Methylene Chloride	49		7.370				ND	
28 2-Methyl-2-propanol	59		7.605				ND	
29 Methyl tert-butyl ether	73		7.781				ND	
31 trans-1,2-Dichloroethene	61		7.819				ND	
33 Hexane	57		8.224				ND	
34 1,1-Dichloroethane	63		8.689				ND	
35 Vinyl acetate	43		8.779				ND	
37 cis-1,2-Dichloroethene	96	9.799	9.804	-0.010	93	722	0.0534	
38 2-Butanone (MEK)	72		9.847				ND	
39 Ethyl acetate	88		9.916				ND	
S 30 1,2-Dichloroethene, Total	61				0		0.0534	
* 40 Chlorobromomethane	128	10.268	10.274	-0.006	89	194573	10.0	
41 Tetrahydrofuran	42		10.274				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		10.418				ND	
	43 Cyclohexane	84		10.663				ND	
	44 1,1,1-Trichloroethane	97		10.685				ND	
	45 Carbon tetrachloride	117		10.946				ND	
	46 Isooctane	57		11.389				ND	
	47 Benzene	78		11.400				ND	
	48 1,2-Dichloroethane	62		11.581				ND	
	49 n-Heptane	43		11.800				ND	
*	50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1024886	10.0	
	53 Trichloroethene	95	12.728	12.728	-0.001	81	1021	0.0513	M
	54 1,2-Dichloropropane	63		13.273				ND	
	55 Methyl methacrylate	69		13.465				ND	
	56 1,4-Dioxane	88		13.508				ND	
	57 Dibromomethane	174		13.540				ND	
	58 Dichlorobromomethane	83		13.849				ND	
	60 cis-1,3-Dichloropropene	75		14.799				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.082				ND	
	65 Toluene	92		15.392				ND	
	66 trans-1,3-Dichloropropene	75		16.000				ND	
	67 1,1,2-Trichloroethane	83		16.368				ND	
	68 Tetrachloroethene	166	16.496	16.486	0.005	85	1327	0.0535	
	69 2-Hexanone	43		16.817				ND	
	71 Chlorodibromomethane	129		17.137				ND	
	72 Ethylene Dibromide	107		17.393				ND	
*	74 Chlorobenzene-d5	117	18.300	18.300	0.000	97	1029966	10.0	
	75 Chlorobenzene	112		18.359				ND	
	76 Ethylbenzene	91		18.519				ND	U
	78 m-Xylene & p-Xylene	106		18.770				ND	
	79 o-Xylene	106		19.603				ND	
	80 Styrene	104		19.656				ND	
	81 Bromoform	173		20.088				ND	
S	73 Xylenes, Total	106		20.100				ND	
	82 Isopropylbenzene	105		20.312				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.979				ND	
	85 N-Propylbenzene	91		21.049				ND	
	88 4-Ethyltoluene	105		21.246				ND	
	89 2-Chlorotoluene	91		21.246				ND	
	90 1,3,5-Trimethylbenzene	105		21.353				ND	
	92 tert-Butylbenzene	119		21.849				ND	
	93 1,2,4-Trimethylbenzene	105		21.945				ND	
	94 sec-Butylbenzene	105		22.180				ND	
	95 4-Isopropyltoluene	119		22.383				ND	
	96 1,3-Dichlorobenzene	146		22.410				ND	
	97 1,4-Dichlorobenzene	146		22.548				ND	
	98 Benzyl chloride	91		22.735				ND	
	100 n-Butylbenzene	91		22.954				ND	
	101 1,2-Dichlorobenzene	146		23.066				ND	
	103 1,2,4-Trichlorobenzene	180		25.489				ND	
	104 Hexachlorobutadiene	225		25.681				ND	
	105 Naphthalene	128		25.943				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

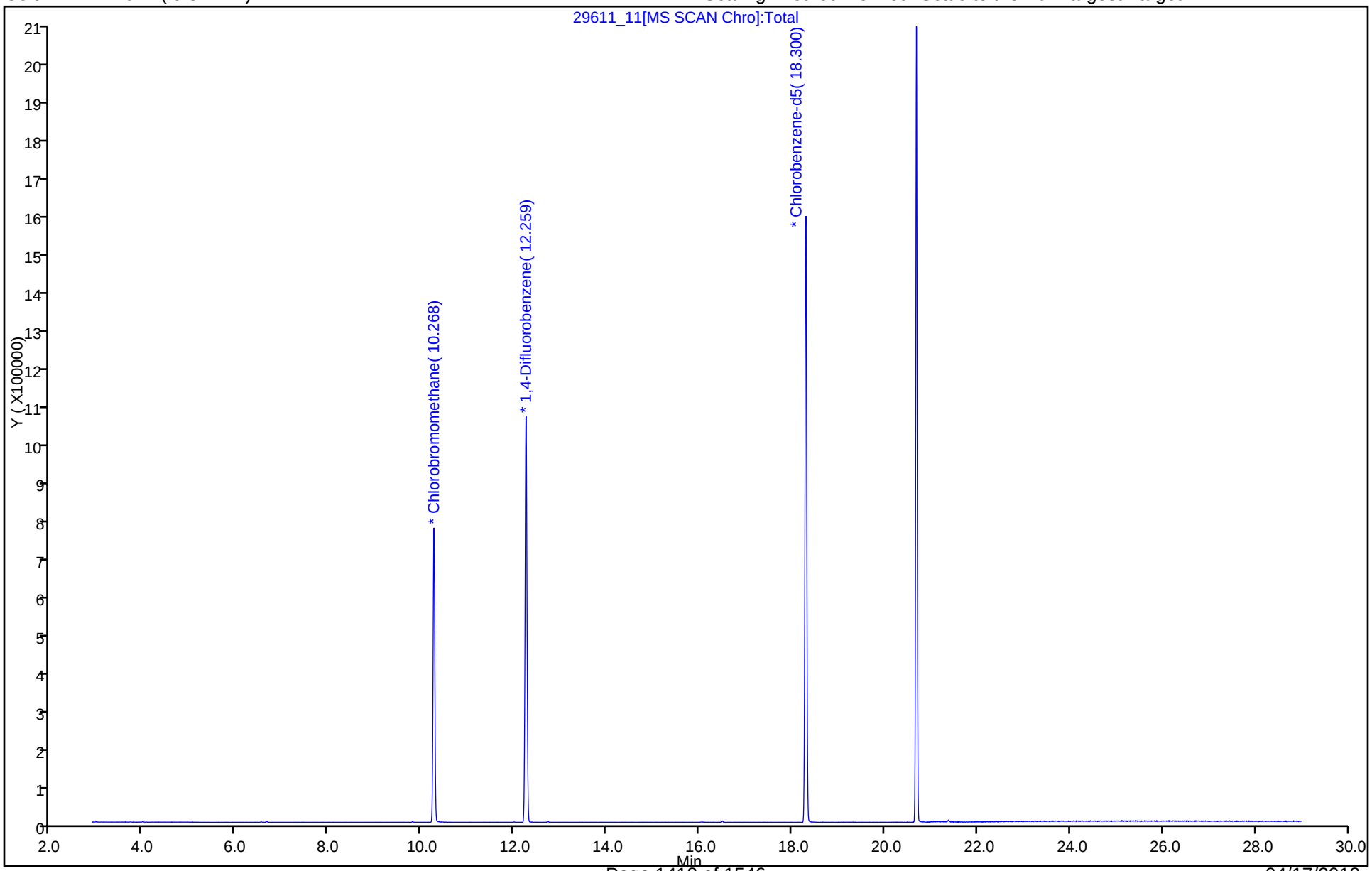
Report Date: 19-Mar-2018 11:49:55 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_11.D

Injection Date:	16-Mar-2018 18:25:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-42621-A-5	Lab Sample ID:	200-42621-5	Worklist Smp#:	11
Client ID:	5674				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



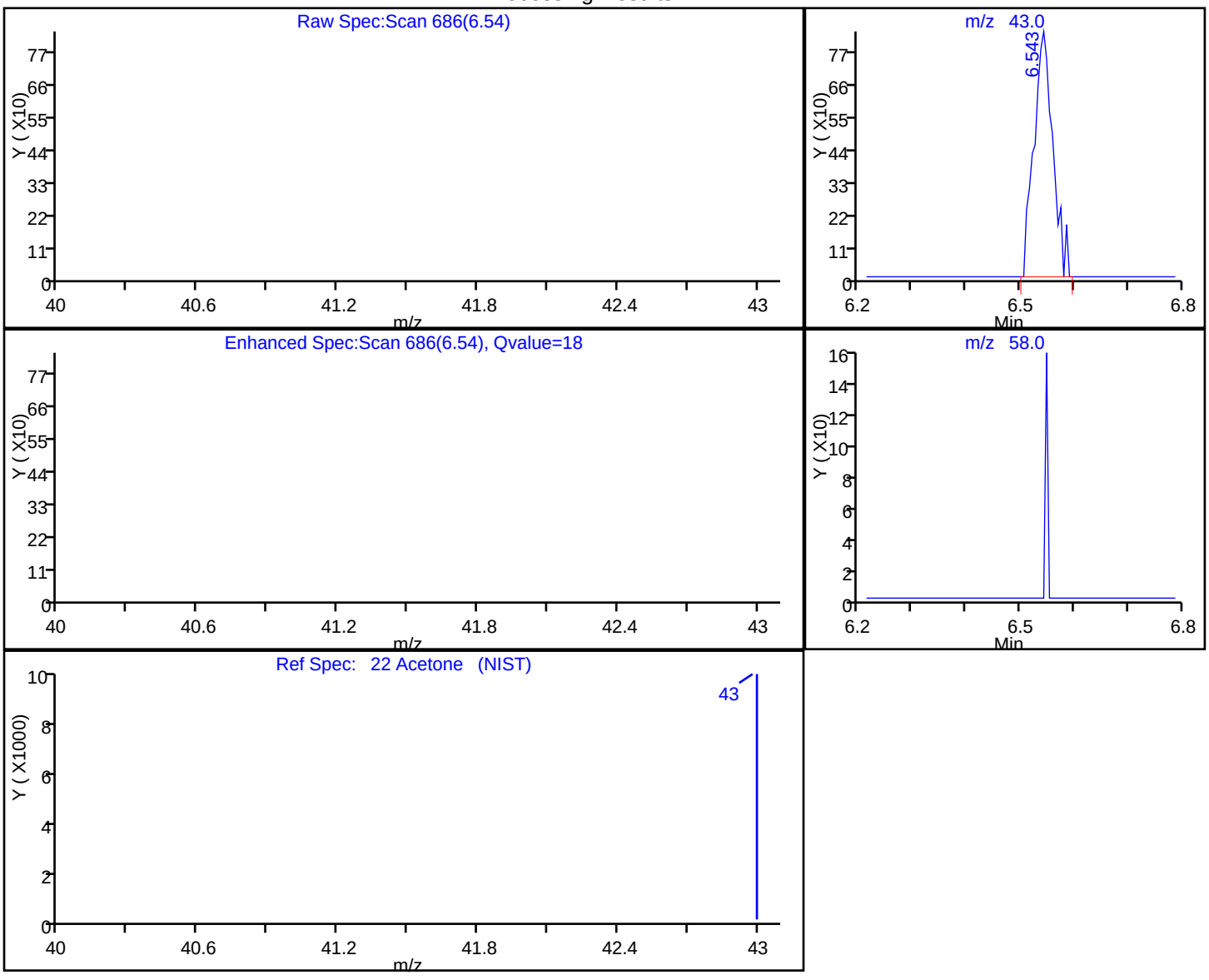
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_11.D				
Injection Date:	16-Mar-2018 18:25:30	Instrument ID:	CHC.i		
Lims ID:	200-42621-A-5	Lab Sample ID:	200-42621-5		
Client ID:	5674				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
6.54	43.00	2050	0.069988
6.52	58.00	0	

Reviewer: bunmaa, 19-Mar-2018 11:49:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

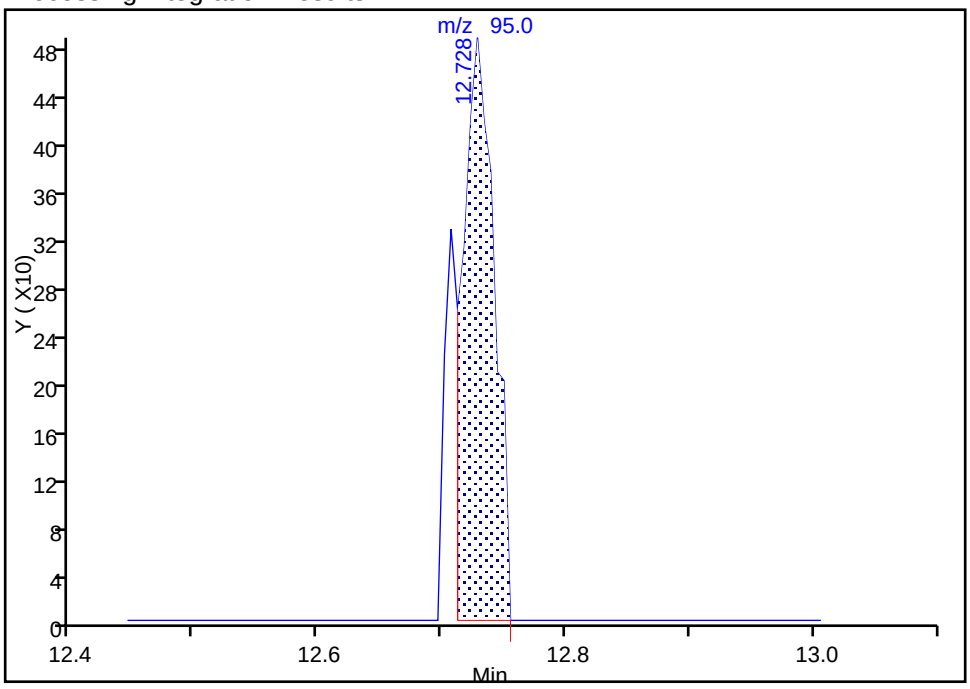
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_11.D				
Injection Date:	16-Mar-2018 18:25:30	Instrument ID:	CHC.i		
Lims ID:	200-42621-A-5	Lab Sample ID:	200-42621-5		
Client ID:	5674				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

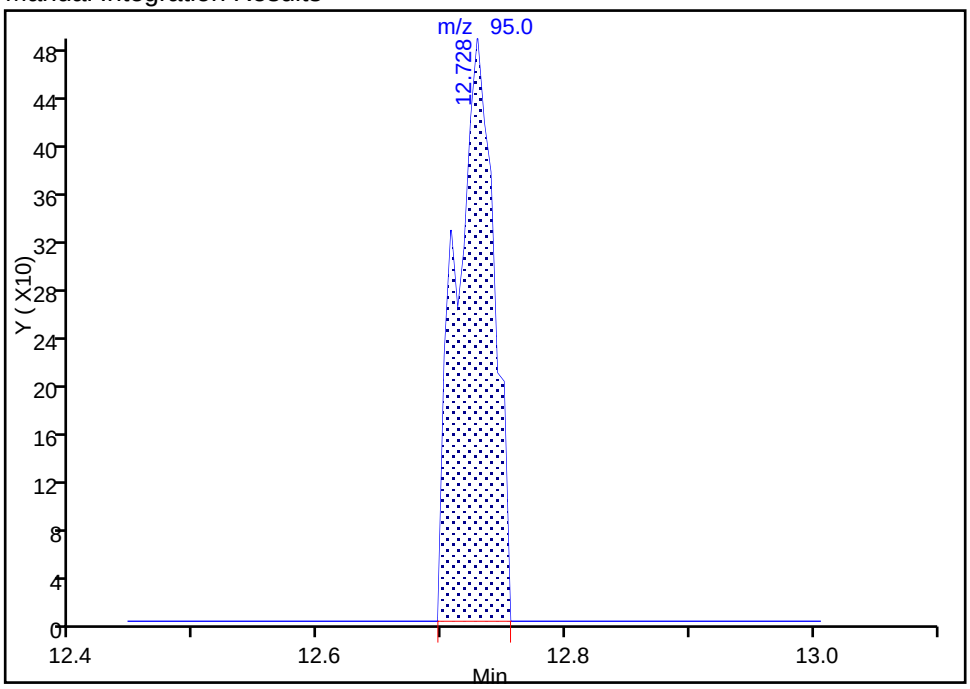
Processing Integration Results

RT: 12.73
Area: 847
Amount: 0.042558
Amount Units: ppb v/v



Manual Integration Results

RT: 12.73
Area: 1021
Amount: 0.051301
Amount Units: ppb v/v



Reviewer: bunmaa, 19-Mar-2018 11:49:13

Audit Action: Manually Integrated Audit Reason: Assign Peak

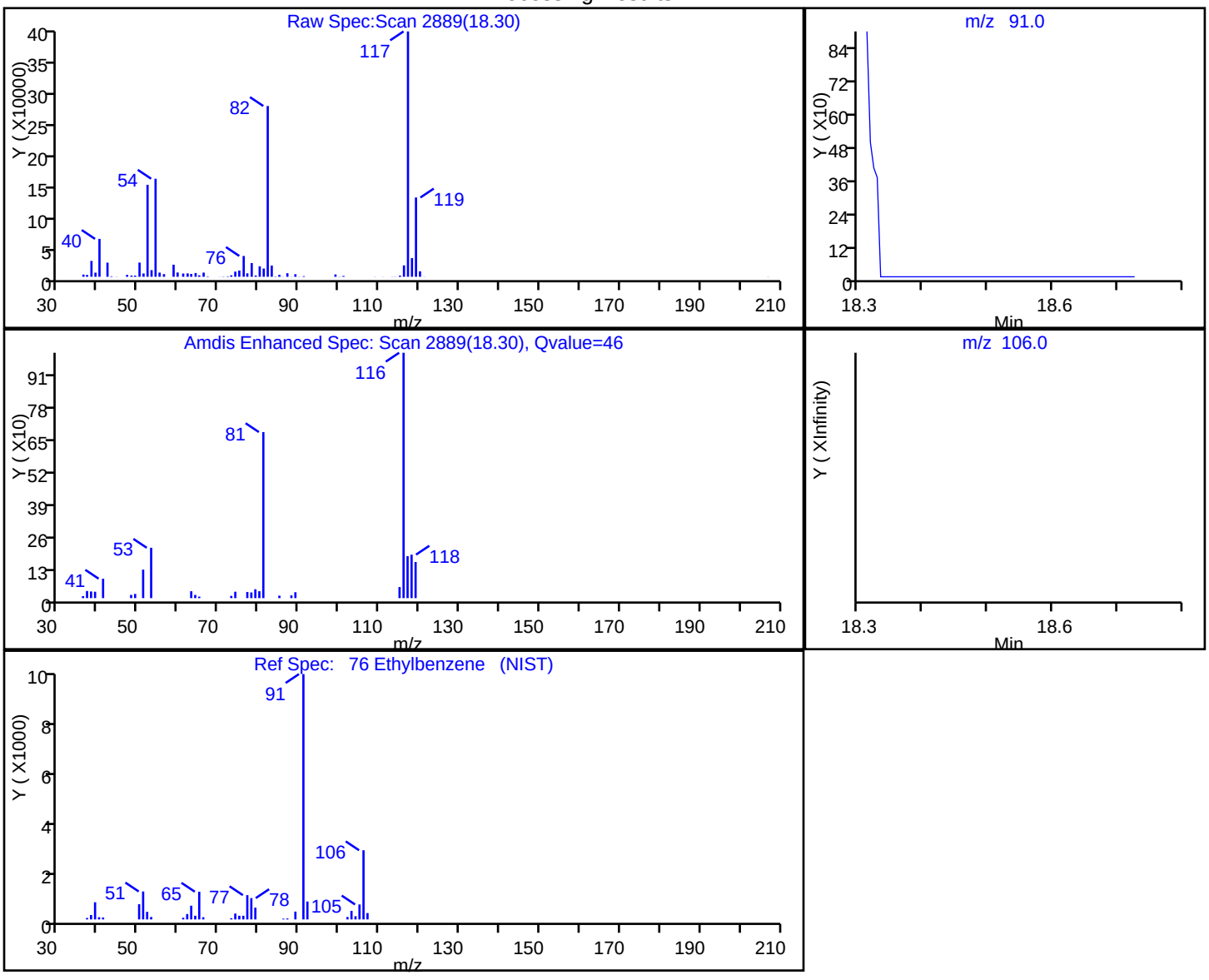
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_11.D				
Injection Date:	16-Mar-2018 18:25:30	Instrument ID:	CHC.i		
Lims ID:	200-42621-A-5	Lab Sample ID:	200-42621-5		
Client ID:	5674				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
18.30	91.00	2500	0.031490
18.52	106.00	0	

Reviewer: bunmaa, 19-Mar-2018 11:49:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42622-1

SDG No.:

Client Sample ID: 4908 | Lab Sample ID: 200-42622-6

Matrix: Air | Lab File ID: 29611_10.D

Analysis Method: TO-15 | Date Collected: 03/15/2018 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 03/16/2018 17:26

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127437 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-42622-1

SDG No.:

Client Sample ID: 4908 | Lab Sample ID: 200-42622-6

Matrix: Air | Lab File ID: 29611_10.D

Analysis Method: TO-15 | Date Collected: 03/15/2018 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 03/16/2018 17:26

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 127437 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Client Sample ID: 4908 Lab Sample ID: 200-42622-6

Matrix: Air Lab File ID: 29611_10.D

Analysis Method: TO-15 Date Collected: 03/15/2018 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 03/16/2018 17:26

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 127437 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_10.D
Lims ID: 200-42622-A-6
Client ID: 4908
Sample Type: Client
Inject. Date: 16-Mar-2018 17:26:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0029611-010
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Mar-2018 11:47:55 Calib Date: 26-Jan-2018 01:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20180125-28916.b\28916_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: bunmaa Date: 19-Mar-2018 11:47:55

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		2.967				ND	
	2 Dichlorodifluoromethane	85		3.037				ND	
	3 Chlorodifluoromethane	51		3.090				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		3.298				ND	
	5 Chloromethane	50		3.426				ND	
	6 Butane	43		3.629				ND	
	7 Vinyl chloride	62		3.667				ND	
	8 Butadiene	54		3.747				ND	
	10 Bromomethane	94		4.414				ND	
	11 Chloroethane	64		4.659				ND	
	13 Vinyl bromide	106		5.049				ND	
	14 Trichlorofluoromethane	101		5.156				ND	
	17 Ethanol	45		5.737				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		6.250				ND	
	21 1,1-Dichloroethene	96		6.282				ND	
	22 Acetone	43		6.500				ND	Ua
	23 Carbon disulfide	76		6.655				ND	
	24 Isopropyl alcohol	45		6.826				ND	
	25 3-Chloro-1-propene	41		7.071				ND	
	27 Methylene Chloride	49		7.370				ND	
	28 2-Methyl-2-propanol	59		7.605				ND	
	29 Methyl tert-butyl ether	73		7.781				ND	
	31 trans-1,2-Dichloroethene	61		7.819				ND	
	33 Hexane	57		8.224				ND	
	34 1,1-Dichloroethane	63		8.689				ND	
	35 Vinyl acetate	43		8.779				ND	
	37 cis-1,2-Dichloroethene	96		9.809				ND	
	38 2-Butanone (MEK)	72		9.847				ND	
	39 Ethyl acetate	88		9.916				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
*	40 Chlorobromomethane	128	10.268	10.274	-0.006	89	208723	10.0	
	41 Tetrahydrofuran	42		10.274				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		10.418				ND	
	43 Cyclohexane	84		10.663				ND	
	44 1,1,1-Trichloroethane	97		10.685				ND	
	45 Carbon tetrachloride	117		10.946				ND	
	46 Isooctane	57		11.389				ND	
	47 Benzene	78		11.400				ND	
	48 1,2-Dichloroethane	62		11.581				ND	
	49 n-Heptane	43		11.800				ND	
*	50 1,4-Difluorobenzene	114	12.259	12.259	0.000	98	1097133	10.0	
	53 Trichloroethene	95		12.729				ND	
	54 1,2-Dichloropropane	63		13.273				ND	
	55 Methyl methacrylate	69		13.465				ND	
	56 1,4-Dioxane	88		13.508				ND	
	57 Dibromomethane	174		13.540				ND	
	58 Dichlorobromomethane	83		13.849				ND	
	60 cis-1,3-Dichloropropene	75		14.799				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.082				ND	
	65 Toluene	92		15.392				ND	
	66 trans-1,3-Dichloropropene	75		16.000				ND	
	67 1,1,2-Trichloroethane	83		16.368				ND	
	68 Tetrachloroethene	166		16.491				ND	
	69 2-Hexanone	43		16.817				ND	
	71 Chlorodibromomethane	129		17.137				ND	
	72 Ethylene Dibromide	107		17.393				ND	
*	74 Chlorobenzene-d5	117	18.295	18.300	-0.005	97	1100888	10.0	
	75 Chlorobenzene	112		18.359				ND	
	76 Ethylbenzene	91		18.519				ND	U
	78 m-Xylene & p-Xylene	106		18.770				ND	
	79 o-Xylene	106		19.603				ND	
	80 Styrene	104		19.656				ND	
	81 Bromoform	173		20.088				ND	
S	73 Xylenes, Total	106		20.100				ND	
	82 Isopropylbenzene	105		20.312				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.979				ND	
	85 N-Propylbenzene	91		21.049				ND	
	88 4-Ethyltoluene	105		21.246				ND	
	89 2-Chlorotoluene	91		21.246				ND	
	90 1,3,5-Trimethylbenzene	105		21.353				ND	
	92 tert-Butylbenzene	119		21.849				ND	
	93 1,2,4-Trimethylbenzene	105		21.945				ND	
	94 sec-Butylbenzene	105		22.180				ND	
	95 4-Isopropyltoluene	119		22.383				ND	
	96 1,3-Dichlorobenzene	146		22.410				ND	
	97 1,4-Dichlorobenzene	146		22.548				ND	
	98 Benzyl chloride	91		22.735				ND	
	100 n-Butylbenzene	91		22.954				ND	
	101 1,2-Dichlorobenzene	146		23.066				ND	
	103 1,2,4-Trichlorobenzene	180		25.489				ND	
	104 Hexachlorobutadiene	225		25.681				ND	
	105 Naphthalene	128		25.943				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15CISs_00010	Amount Added:	20.00	Units: mL	Run Reagent

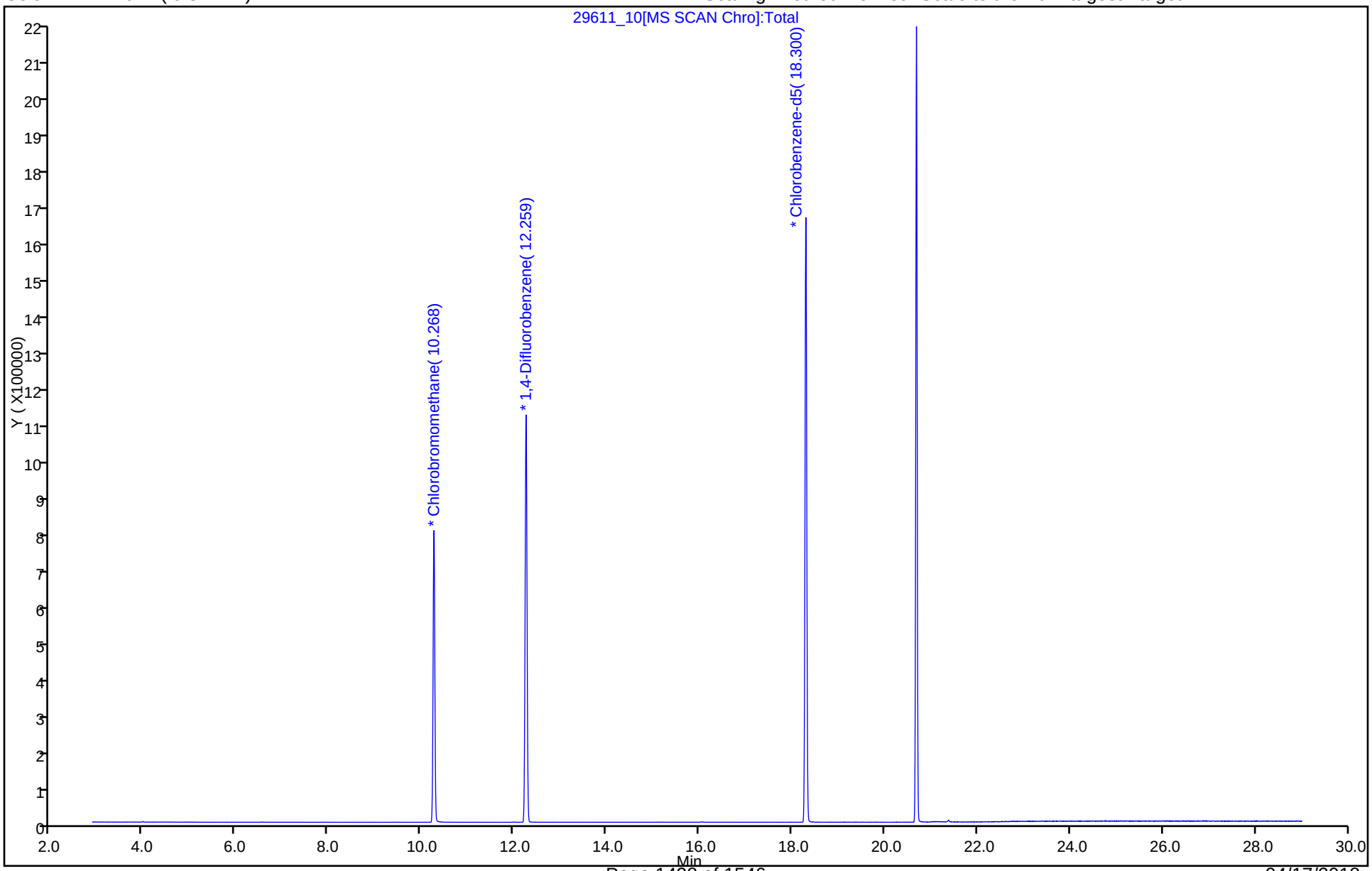
Report Date: 19-Mar-2018 11:47:55 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_10.D

Injection Date:	16-Mar-2018 17:26:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-42622-A-6	Lab Sample ID:	200-42622-6	Worklist Smp#:	10
Client ID:	4908				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	10
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



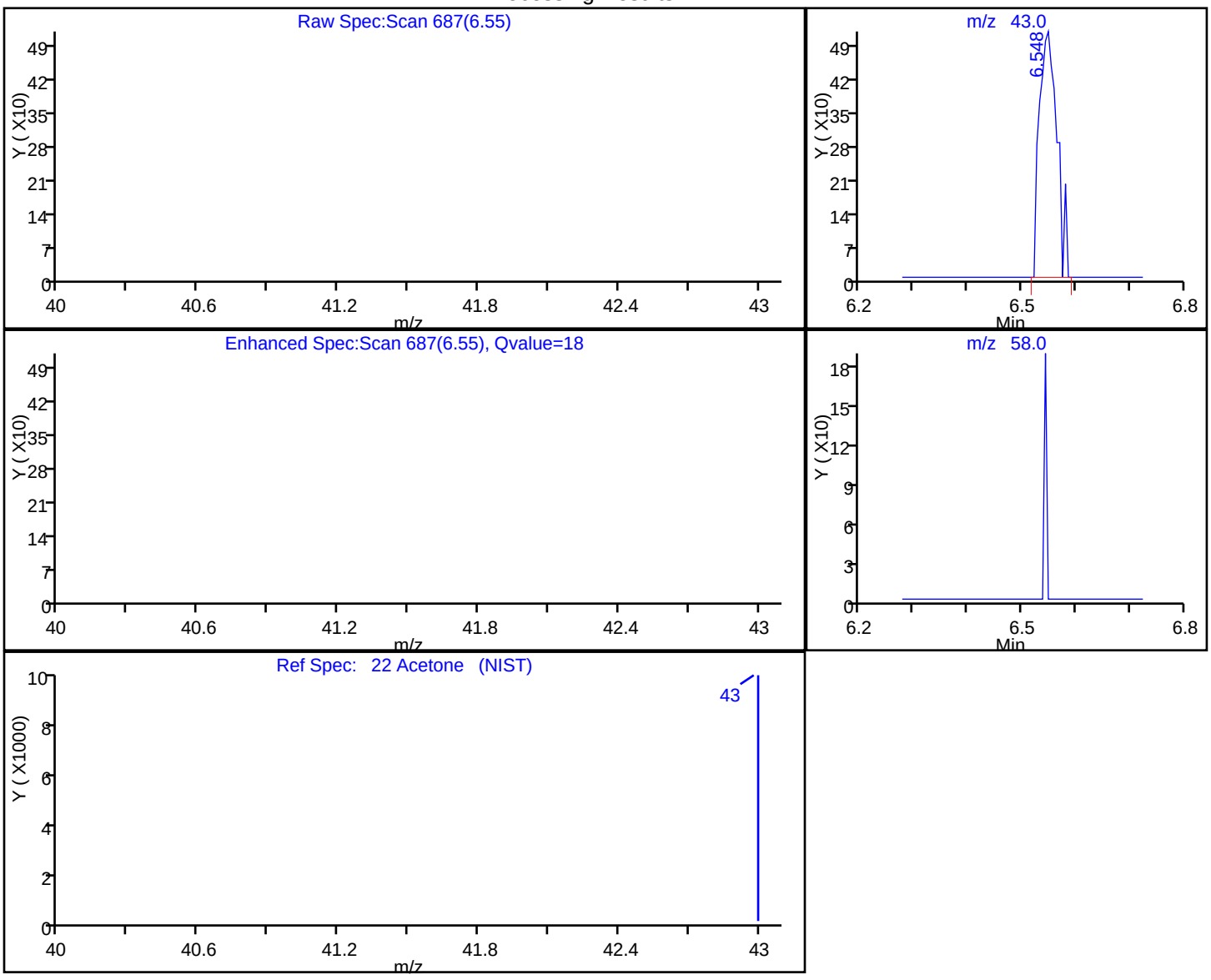
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_10.D				
Injection Date:	16-Mar-2018 17:26:30	Instrument ID:	CHC.i		
Lims ID:	200-42622-A-6	Lab Sample ID:	200-42622-6		
Client ID:	4908				
Operator ID:	pad	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
6.55	43.00	1169	0.037205
6.55	58.00	0	

Reviewer: bunmaa, 19-Mar-2018 11:47:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

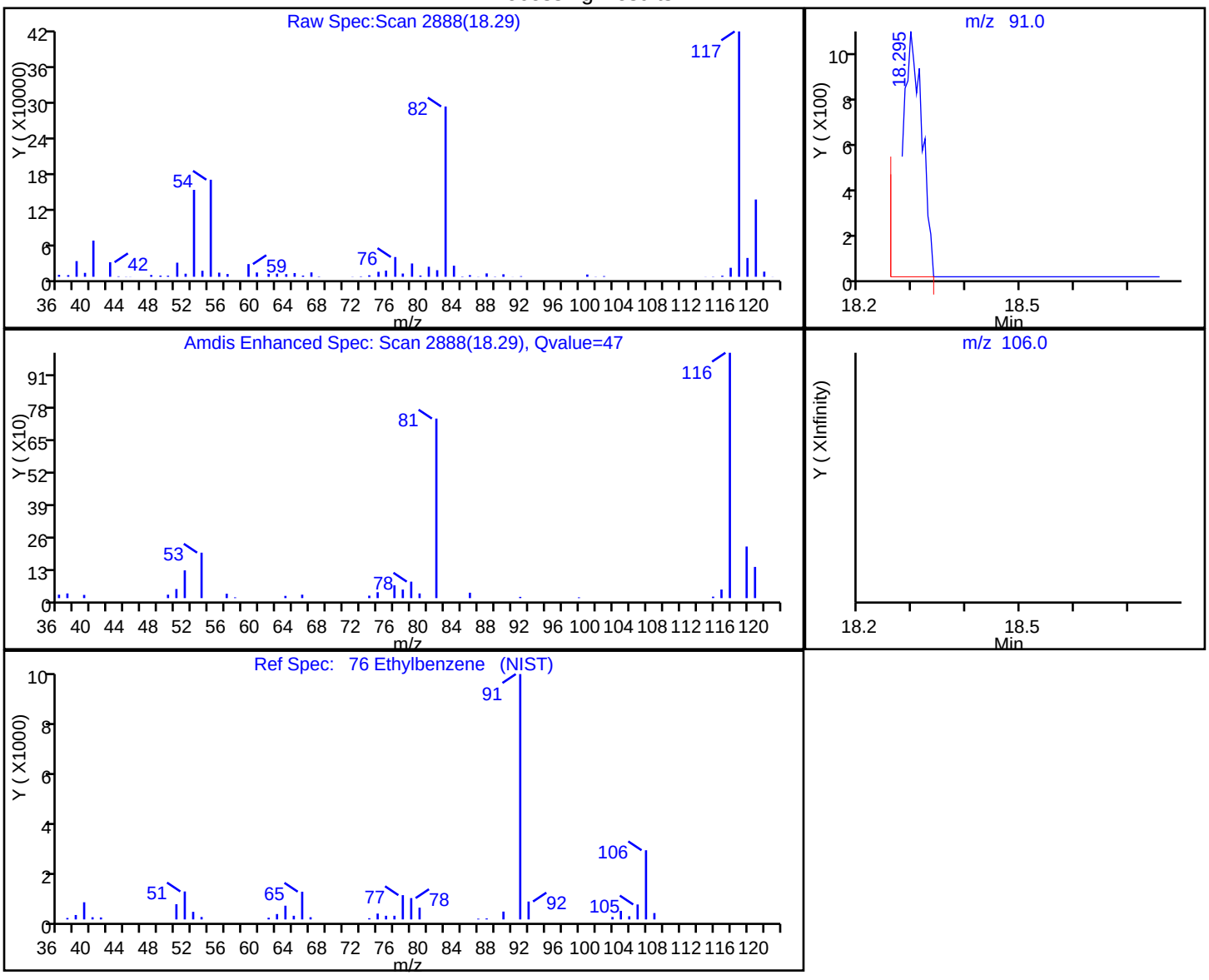
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20180316-29611.b\29611_10.D				
Injection Date:	16-Mar-2018 17:26:30	Instrument ID:	CHC.i		
Lims ID:	200-42622-A-6	Lab Sample ID:	200-42622-6		
Client ID:	4908				
Operator ID:	pad	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
18.29	91.00	2674	0.031512
18.52	106.00	0	

Reviewer: bunmaa, 19-Mar-2018 11:47:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.8870	+++++ 0.8392	+++++ 0.7895	0.9364	0.8702	Ave		0.8645				6.3		30.0			
Dichlorodifluoromethane	+++++ 1.8038	+++++ 1.8004	1.5839 1.8463	1.9116	1.9609	Ave		1.8178				7.2		30.0			
Freon 22	+++++ 1.5598	+++++ 1.4881	1.5889 1.4177	1.6643	1.5057	Ave		1.5374				5.6		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.8686	1.7415 1.8055	1.8516 1.7647	1.9736	1.8211	Ave		1.8324				4.2		30.0			
Chloromethane	+++++ 0.8829	+++++ 0.8536	0.9707 0.8090	0.9348	0.8617	Ave		0.8855				6.6		30.0			
n-Butane	+++++ 1.6890	+++++ 1.6112	2.0324 1.5169	1.8003	1.6375	Ave		1.7145				10.6		30.0			
Vinyl chloride	0.9905 0.8650	0.8632 0.8251	0.8929 0.7895	0.9086	0.8474	Ave		0.8728				6.9		30.0			
1,3-Butadiene	0.6540 0.7123	0.6914 0.6811	0.6829 0.6444	0.7484	0.6879	Ave		0.6878				4.7		30.0			
Bromomethane	+++++ 0.6484	0.6147 0.6301	0.6350 0.6090	0.6781	0.6274	Ave		0.6347				3.6		30.0			
Chloroethane	+++++ 0.3907	+++++ 0.3753	0.3767 0.3614	0.3935	0.3708	Ave		0.3780				3.2		30.0			
Isopentane	+++++ 1.0470	1.0854 0.9998	1.1035 0.9435	1.0825	0.9973	Ave		1.0370				5.7		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.5974	0.5546 0.5841	0.5591 0.5708	0.6059	0.5551	Ave		0.5753				3.6		30.0			
Trichlorofluoromethane	+++++ 1.6925	1.4970 1.6552	1.6454 1.5976	1.7516	1.6063	Ave		1.6351				4.9		30.0			
n-Pentane	+++++ 1.6515	+++++ 1.5939	1.8235 1.5196	1.7104	1.5663	Ave		1.6442				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4188	+++++ 0.3822	0.3180 0.3528	0.4229	0.3399	Ave		0.3724				11.5		30.0			
Ethyl ether	+++++ 0.5284	0.4752 0.5161	0.4954 0.4951	0.5435	0.4976	Ave		0.5073				4.6		30.0			
Acrolein	+++++ 0.2432	+++++ 0.2201	+++++ 0.2044	0.2470	0.2380	Ave		0.2305				7.8		30.0			
Freon TF	+++++ 1.1994	1.0781 1.1676	1.1452 1.1461	1.2592	1.1391	Ave		1.1621				4.8		30.0			
1,1-Dichloroethene	0.5009 0.5802	0.5293 0.5659	0.5710 0.5546	0.6110	0.5503	Ave		0.5579				5.9		30.0			
Acetone	+++++ 1.5187	+++++ 1.4781	+++++ 1.3951	1.6676	1.4673	Ave		1.5054				6.7		30.0			
Carbon disulfide	+++++ 1.8060	+++++ 1.7653	1.7982 1.7002	1.8949	1.7236	Ave		1.7814				3.9		30.0			
Isopropyl alcohol	+++++ 1.6712	+++++ 1.5753	+++++ 1.5020	1.7289	1.6634	Ave		1.6282				5.5		30.0			
3-Chloropropene	+++++ 1.2994	1.2499 1.0859	1.3000 1.0592	1.3664	1.1193	Ave		1.2115				10.0		30.0			
Acetonitrile	+++++ 0.7890	+++++ 0.7628	+++++ 0.7173	0.8160	0.7710	Ave		0.7712				4.7		30.0			
Methylene Chloride	+++++ 1.0295	+++++ 0.9883	1.0123 0.9444	1.0682	0.9787	Ave		1.0036				4.3		30.0			
tert-Butyl alcohol	+++++ 1.8873	+++++ 1.8087	+++++ 1.7404	1.9410	1.8222	Ave		1.8399				4.2		30.0			
Methyl tert-butyl ether	+++++ 2.1478	1.8969 2.0855	1.9925 2.0075	2.2030	2.0242	Ave		2.0511				5.0		30.0			
trans-1,2-Dichloroethene	+++++ 1.1583	1.0925 1.1353	1.1466 1.0831	1.2133	1.1070	Ave		1.1337				4.0		30.0			
Acrylonitrile	+++++ 0.6246	+++++ 0.6096	0.6261 0.5855	0.6446	0.5913	Ave		0.6136				3.7		30.0			
n-Hexane	+++++ 1.2371	1.4180 1.1988	1.3340 1.1402	1.2812	1.1679	Ave		1.2539				7.8		30.0			
1,1-Dichloroethane	1.3535 1.4916	1.3598 1.4482	1.4712 1.3968	1.5318	1.4102	Ave		1.4329				4.4		30.0			
Vinyl acetate	+++++ 2.7774	+++++ 2.7038	+++++ 2.5383	2.8445	2.6063	Ave		2.6941				4.6		30.0			
cis-1,2-Dichloroethene	0.6597 0.7196	0.6528 0.6987	0.6987 0.6804	0.7714	0.6828	Ave		0.6955				5.4		30.0			
Methyl Ethyl Ketone	+++++ 0.3908	+++++ 0.3813	0.3704 0.3686	0.4097	0.3711	Ave		0.3820				4.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0545	+++++ 0.0533	+++++ 0.0522	0.0553	0.0526	Ave		0.0536				2.4		30.0			
Tetrahydrofuran	+++++ 0.2652	+++++ 0.2560	+++++ 0.2449	0.2850	0.2599	Ave		0.2622				5.6		30.0			
Chloroform	+++++ 1.5743	1.4253 1.5453	1.5193 1.5021	1.6426	1.4990	Ave		1.5297				4.4		30.0			
Cyclohexane	+++++ 0.1857	0.1734 0.1814	0.1899 0.1794	0.2018	0.1786	Ave		0.1843				5.1		30.0			
1,1,1-Trichloroethane	+++++ 0.2931	0.2693 0.2855	0.2918 0.2840	0.3146	0.2822	Ave		0.2886				4.8		30.0			
Carbon tetrachloride	0.2112 0.2708	0.2186 0.2694	0.2644 0.2681	0.2937	0.2687	Ave		0.2581				10.9		30.0			
2,2,4-Trimethylpentane	+++++ 0.9251	0.8809 0.9066	0.8968 0.8936	0.9600	0.8835	Ave		0.9066				3.1		30.0			
Benzene	+++++ 0.4672	0.4664 0.4590	0.4819 0.4568	0.4935	0.4482	Ave		0.4676				3.3		30.0			
1,2-Dichloroethane	+++++ 0.2400	0.2202 0.2329	0.2386 0.2317	0.2512	0.2307	Ave		0.2350				4.1		30.0			
n-Heptane	+++++ 0.4500	0.4853 0.4388	0.4716 0.4288	0.4693	0.4314	Ave		0.4536				4.9		30.0			
n-Butanol	+++++ 0.1264	+++++ 0.1229	+++++ 0.1271	0.1295	0.1272	Ave		0.1266				1.9		30.0			
Trichloroethene	0.2130 0.2035	0.1853 0.1886	0.1871 0.1910	0.2020	0.1830	Ave		0.1942				5.5		30.0			
1,2-Dichloropropane	+++++ 0.2104	0.2042 0.2092	0.2068 0.2094	0.2200	0.2033	Ave		0.2091				2.6		30.0			
Methyl methacrylate	+++++ 0.1937	+++++ 0.1928	0.1633 0.1968	0.1922	0.1805	Ave		0.1865				6.8		30.0			
1,4-Dioxane	+++++ 0.0968	+++++ 0.0927	+++++ 0.0944	0.1062	0.0971	Ave		0.0975				5.3		30.0			
Dibromomethane	+++++ 0.1596	0.1513 0.1591	0.1661 0.1642	0.1695	0.1561	Ave		0.1608				3.9		30.0			
Bromodichloromethane	+++++ 0.3622	0.2795 0.3566	0.3264 0.3596	0.3728	0.3430	Ave		0.3429				9.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.2899	0.2516 0.2862	0.2753 0.2899	0.2978	0.2748	Ave		0.2808				5.4		30.0			
methyl isobutyl ketone	+++++ 0.6258	+++++ 0.6062	0.5552 0.6089	0.6395	0.5796	Ave		0.6025				5.1		30.0			
Toluene	+++++ 0.3490	0.3254 0.3390	0.3365 0.3451	0.3598	0.3209	Ave		0.3394				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.6704	0.6758 0.6542	0.6721 0.6491	0.6971	0.6470	Ave		0.6665				2.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.3056	0.3199 0.3009	0.3224 0.3061	0.3225	0.2878	Ave		0.3093				4.2		30.0			
1,1,2-Trichloroethane	+++++ 0.1827	0.1617 0.1763	0.1733 0.1796	0.1888	0.1705	Ave		0.1761				5.0		30.0			
Tetrachloroethene	0.2487 0.2439	0.2308 0.2319	0.2457 0.2380	0.2591	0.2268	Ave		0.2406				4.5		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6215	+++++ 0.5923	0.5338 0.6065	0.6244	0.5480	Ave		0.5878				6.5		30.0			
Dibromochloromethane	+++++ 0.3045	0.2191 0.2947	0.2625 0.2957	0.3155	0.2712	Ave		0.2805				11.7		30.0			
1,2-Dibromoethane	+++++ 0.2952	0.2592 0.2874	0.2733 0.2923	0.3054	0.2747	Ave		0.2840				5.5		30.0			
Chlorobenzene	+++++ 0.4242	0.4065 0.4106	0.4232 0.4211	0.4493	0.3948	Ave		0.4185				4.1		30.0			
Ethylbenzene	+++++ 0.8016	0.6959 0.7817	0.7440 0.7993	0.8270	0.7461	Ave		0.7708				5.8		30.0			
n-Nonane	+++++ 0.5097	0.4745 0.4967	0.4886 0.5073	0.5272	0.4742	Ave		0.4969				3.9		30.0			
m,p-Xylene	+++++ 0.3004	0.2567 0.2935	0.2726 0.3042	0.3132	0.2814	Ave		0.2889				6.8		30.0			
Xylene, o-	+++++ 0.2931	0.2483 0.2831	0.2668 0.2928	0.3015	0.2726	Ave		0.2797				6.6		30.0			
Styrene	+++++ 0.4762	0.3624 0.4621	0.3749 0.4830	0.4661	0.4314	Ave		0.4366				11.3		30.0			
Bromoform	+++++ 0.2787	0.1594 0.2660	0.2147 0.2607	0.2964	0.2206	Ave		0.2423				19.4		30.0			
Cumene	+++++ 0.8583	0.7309 0.8305	0.7973 0.8522	0.8833	0.8041	Ave		0.8224				6.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.4552	0.4391 0.4718	0.4494 0.4871	0.5036	0.4576	Ave		0.4663				4.9		30.0			
n-Propylbenzene	+++++ 1.1347	0.9665 1.1065	1.0085 1.1416	1.1601	1.0568	Ave		1.0821				6.8		30.0			
1,2,3-Trichloropropane	+++++ 0.4133	+++++ 0.4029	0.4092 0.4199	0.4194	0.3822	Ave		0.4078				3.5		30.0			
4-Ethyltoluene	+++++ 0.9112	0.7405 0.8872	0.7684 0.9085	0.9126	0.8385	Ave		0.8524				8.5		30.0			
2-Chlorotoluene	+++++ 0.8180	0.6685 0.7949	0.6914 0.8136	0.8183	0.7536	Ave		0.7655				8.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Decane	+++++ 0.7217	+++++ 0.6923	0.6285 0.6783	0.7180	0.6632	Ave		0.6836				5.1		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7393	0.5924 0.7145	0.6443 0.7450	0.7471	0.6826	Ave		0.6950				8.5		30.0			
Alpha Methyl Styrene	+++++ 0.3521	0.2429 0.3397	0.2638 0.3559	0.3465	0.3125	Ave		0.3162				14.4		30.0			
tert-Butylbenzene	+++++ 0.6656	0.5430 0.6416	0.5860 0.6704	0.6853	0.6223	Ave		0.6306				8.1		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7597	0.5994 0.7275	0.6409 0.7604	0.7715	0.7011	Ave		0.7086				9.3		30.0			
sec-Butylbenzene	+++++ 1.0907	0.8763 1.0440	0.9628 1.0945	1.1163	1.0121	Ave		1.0281				8.3		30.0			
4-Isopropyltoluene	+++++ 0.8932	0.7038 0.8496	0.7619 0.9170	0.9022	0.8200	Ave		0.8354				9.5		30.0			
1,3-Dichlorobenzene	+++++ 0.4847	0.4306 0.4624	0.4260 0.4886	0.4902	0.4473	Ave		0.4614				5.9		30.0			
1,4-Dichlorobenzene	+++++ 0.4718	0.4527 0.4435	0.4376 0.4740	0.4779	0.4335	Ave		0.4559				4.1		30.0			
Benzyl chloride	+++++ 0.7273	0.5215 0.6980	0.6500 0.7587	0.7109	0.6541	Ave		0.6743				11.5		30.0			
n-Butylbenzene	+++++ 0.9238	0.8380 0.8659	0.8046 0.9486	0.9453	0.8598	Ave		0.8837				6.3		30.0			
n-Undecane	+++++ 0.7361	+++++ 0.6948	+++++ 0.7480	0.7700	0.6846	Ave		0.7267				5.0		30.0			
1,2-Dichlorobenzene	+++++ 0.4449	0.4082 0.4161	0.3969 0.4496	0.4609	0.4128	Ave		0.4271				5.7		30.0			
n-Dodecane	+++++ 0.6323	+++++ 0.5489	+++++ 0.5726	0.6234	0.5826	Ave		0.5920				5.9		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3361	+++++ 0.3048	0.3264 0.3392	0.3154	0.2941	Ave		0.3193				5.6		30.0			
Hexachlorobutadiene	+++++ 0.2846	0.2622 0.2654	0.2800 0.2801	0.3042	0.2620	Ave		0.2769				5.5		30.0			
Naphthalene	+++++ 0.7799	+++++ 0.6364	0.7646 0.7503	0.6132	0.6684	Ave		0.7021				10.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3033	+++++ 0.2618	0.3061 0.2850	0.2791	0.2628	Ave		0.2830				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 353877	+++++ 483509	+++++ 977093	113320	219919	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 719635	+++++ 1037247	18687 2284982	231333	495574	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 622275	+++++ 857341	18746 1754621	201404	380532	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 745451	9367 1040162	21846 2184022	238840	460250	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 352245	+++++ 491783	11453 1001236	113130	217772	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 673810	+++++ 928248	23979 1877345	217861	413839	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1048 345103	4643 475347	10535 977107	109960	214158	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	692 284179	3719 392412	8057 797535	90563	173842	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 258695	3306 363007	7492 753745	82055	158565	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 155858	+++++ 216212	4444 447266	47617	93699	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 417703	5838 575987	13019 1167693	130997	252052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 238327	2983 336507	6597 706387	73318	140295	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 675219	8052 953592	19413 1977174	211971	405947	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 658866	+++++ 918273	21515 1880686	206987	395841	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 223240	+++++ 440445	37568 1091690	102428	128897	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 210816	2556 297361	5845 612700	65771	125749	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97011	+++++ 126806	+++++ 252930	29892	60161	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 478477	5799 672696	13512 1418425	152379	287885	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	530 231450	2847 326020	6737 686398	73934	139063	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 605870	+++++ 851583	+++++ 1726650	201808	370824	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 720496	+++++ 1017035	21216 2104138	229309	435588	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 666734	+++++ 907558	+++++ 1858919	209222	420388	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 518407	6723 625630	15338 1310825	165352	282882	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 314750	+++++ 439448	+++++ 887788	98750	194856	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 410731	+++++ 569402	11944 1168766	129262	247353	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 752941	+++++ 1042044	+++++ 2153957	234889	460516	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 856853	10203 1201499	23508 2484537	266590	511570	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 462081	5876 654055	13528 1340400	146832	279770	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 249171	+++++ 351178	7387 724576	78010	149428	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 493533	7627 690644	15739 1411080	155042	295148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1432 595053	7314 834343	17358 1728738	185369	356405	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1108031	+++++ 1557692	+++++ 3141483	344229	658677	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	698 287077	3511 402541	8243 842126	93347	172552	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 155899	+++++ 219661	4370 456166	49585	93775	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 21734	+++++ 30682	+++++ 64640	6694	13289	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 562442	+++++ 785803	+++++ 1590949	176657	341073	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 628050	7666 890256	17925 1859003	198780	378841	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 393823	4821 556920	11303 1165069	125086	234424	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 621615	7486 876321	17368 1844982	194948	370397	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1154 574398	6078 826964	15737 1741803	182037	352691	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1962084	24490 2782697	53376 5804651	594960	1159654	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 990941	12966 1408757	28684 2967508	305871	588244	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 509002	6123 714770	14199 1505338	155700	302793	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 954467	13492 1347004	28070 2785284	290860	566249	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 268047	+++++ 377356	+++++ 825710	80287	166893	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1164 431632	5151 578895	11138 1240808	125178	240170	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 446206	5677 642017	12311 1360263	136361	266899	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 410746	+++++ 591854	9721 1278411	119113	236888	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 205342	+++++ 284662	+++++ 613215	65816	127498	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 338436	4206 488358	9889 1066627	105056	204827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 768223	7771 1094617	19425 2336166	231011	450139	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 614747	6996 878639	16385 1882847	184539	360714	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1327292	+++++ 1860626	33045 3955208	396322	760764	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 724707	8845 1028583	20013 2206609	220025	427318	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1421753	18788 2008006	40001 4216481	432046	849145	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 648118	8894 923500	19188 1988086	199847	377682	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 379306	4396 534768	10309 1148428	115450	227011	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1344 506522	6273 703705	14615 1521882	158427	302018	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1290630	+++++ 1796945	31752 3878692	381761	729662	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 632364	5954 894163	15616 1891119	192925	361052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 613021	7044 872076	16259 1869551	186748	365767	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 880833	11049 1245781	25172 2692702	274701	525599	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 1664681	18915 2371508	44251 5111609	505656	993414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1058360	12895 1506922	29064 3244294	322334	631437	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1247595	13952 1780646	32432 3890932	383015	749442	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 608732	6749 858753	15872 1872597	184343	362908	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 988897	9849 1401893	22300 3088981	285003	574359	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 578705	4332 807109	12773 1666980	181205	293658	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 1782391	19864 2519760	47427 5449466	540065	1070589	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 945272	11935 1431429	26731 3114692	307934	609279	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2356358	26267 3356883	59987 7300756	709322	1407056	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 858266	+++++ 1222340	24341 2685226	256414	508920	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 1892216	20126 2691531	45708 5809594	557993	1116469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1698746	18168 2411519	41127 5203188	500344	1003366	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1498628	+++++ 2100262	37383 4337795	438992	882978	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1535305	16101 2167805	38325 4764065	456808	908890	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 731154	6602 1030534	15690 2275903	211838	416148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1382193	14757 1946514	34858 4287142	419011	828515	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42567-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1577522	16291 2207208	38120 4862877	471711	933500	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2265025	23817 3167373	57269 6999017	682554	1347612	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 1854890	19129 2577509	45320 5863967	551645	1091844	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1006513	11703 1402778	25338 3124432	299725	595511	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 979815	12304 1345440	26031 3031052	292182	577188	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1510235	14174 2117632	38662 4851619	434676	870855	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 1918386	22775 2626905	47861 6066478	577987	1144745	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1528664	+++++ 2108069	+++++ 4783728	470826	911535	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 923941	11094 1262347	23609 2875290	281843	549672	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1312980	+++++ 1665407	+++++ 3661884	381167	775656	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 697956	+++++ 924755	19412 2169339	192828	391570	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 590923	7125 805175	16655 1791455	186030	348905	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1619614	+++++ 1930679	45477 4798312	374943	889926	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 629903	+++++ 794240	18205 1822818	170627	349922	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.8870	+++++ 0.8392	+++++ 0.7895	0.9364	0.8702	Ave		0.8645				6.3		30.0			
Dichlorodifluoromethane	+++++ 1.8038	+++++ 1.8004	1.5839 1.8463	1.9116	1.9609	Ave		1.8178				7.2		30.0			
Freon 22	+++++ 1.5598	+++++ 1.4881	1.5889 1.4177	1.6643	1.5057	Ave		1.5374				5.6		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.8686	1.7415 1.8055	1.8516 1.7647	1.9736	1.8211	Ave		1.8324				4.2		30.0			
Chloromethane	+++++ 0.8829	+++++ 0.8536	0.9707 0.8090	0.9348	0.8617	Ave		0.8855				6.6		30.0			
n-Butane	+++++ 1.6890	+++++ 1.6112	2.0324 1.5169	1.8003	1.6375	Ave		1.7145				10.6		30.0			
Vinyl chloride	0.9905 0.8650	0.8632 0.8251	0.8929 0.7895	0.9086	0.8474	Ave		0.8728				6.9		30.0			
1,3-Butadiene	0.6540 0.7123	0.6914 0.6811	0.6829 0.6444	0.7484	0.6879	Ave		0.6878				4.7		30.0			
Bromomethane	+++++ 0.6484	0.6147 0.6301	0.6350 0.6090	0.6781	0.6274	Ave		0.6347				3.6		30.0			
Chloroethane	+++++ 0.3907	+++++ 0.3753	0.3767 0.3614	0.3935	0.3708	Ave		0.3780				3.2		30.0			
Isopentane	+++++ 1.0470	1.0854 0.9998	1.1035 0.9435	1.0825	0.9973	Ave		1.0370				5.7		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.5974	0.5546 0.5841	0.5591 0.5708	0.6059	0.5551	Ave		0.5753				3.6		30.0			
Trichlorofluoromethane	+++++ 1.6925	1.4970 1.6552	1.6454 1.5976	1.7516	1.6063	Ave		1.6351				4.9		30.0			
n-Pentane	+++++ 1.6515	+++++ 1.5939	1.8235 1.5196	1.7104	1.5663	Ave		1.6442				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4188	+++++ 0.3822	0.3180 0.3528	0.4229	0.3399	Ave		0.3724				11.5		30.0			
Ethyl ether	+++++ 0.5284	0.4752 0.5161	0.4954 0.4951	0.5435	0.4976	Ave		0.5073				4.6		30.0			
Acrolein	+++++ 0.2432	+++++ 0.2201	+++++ 0.2044	0.2470	0.2380	Ave		0.2305				7.8		30.0			
Freon TF	+++++ 1.1994	1.0781 1.1676	1.1452 1.1461	1.2592	1.1391	Ave		1.1621				4.8		30.0			
1,1-Dichloroethene	0.5009 0.5802	0.5293 0.5659	0.5710 0.5546	0.6110	0.5503	Ave		0.5579				5.9		30.0			
Acetone	+++++ 1.5187	+++++ 1.4781	+++++ 1.3951	1.6676	1.4673	Ave		1.5054				6.7		30.0			
Carbon disulfide	+++++ 1.8060	+++++ 1.7653	1.7982 1.7002	1.8949	1.7236	Ave		1.7814				3.9		30.0			
Isopropyl alcohol	+++++ 1.6712	+++++ 1.5753	+++++ 1.5020	1.7289	1.6634	Ave		1.6282				5.5		30.0			
3-Chloropropene	+++++ 1.2994	1.2499 1.0859	1.3000 1.0592	1.3664	1.1193	Ave		1.2115				10.0		30.0			
Acetonitrile	+++++ 0.7890	+++++ 0.7628	+++++ 0.7173	0.8160	0.7710	Ave		0.7712				4.7		30.0			
Methylene Chloride	+++++ 1.0295	+++++ 0.9883	1.0123 0.9444	1.0682	0.9787	Ave		1.0036				4.3		30.0			
tert-Butyl alcohol	+++++ 1.8873	+++++ 1.8087	+++++ 1.7404	1.9410	1.8222	Ave		1.8399				4.2		30.0			
Methyl tert-butyl ether	+++++ 2.1478	1.8969 2.0855	1.9925 2.0075	2.2030	2.0242	Ave		2.0511				5.0		30.0			
trans-1,2-Dichloroethene	+++++ 1.1583	1.0925 1.1353	1.1466 1.0831	1.2133	1.1070	Ave		1.1337				4.0		30.0			
Acrylonitrile	+++++ 0.6246	+++++ 0.6096	0.6261 0.5855	0.6446	0.5913	Ave		0.6136				3.7		30.0			
n-Hexane	+++++ 1.2371	1.4180 1.1988	1.3340 1.1402	1.2812	1.1679	Ave		1.2539				7.8		30.0			
1,1-Dichloroethane	1.3535 1.4916	1.3598 1.4482	1.4712 1.3968	1.5318	1.4102	Ave		1.4329				4.4		30.0			
Vinyl acetate	+++++ 2.7774	+++++ 2.7038	+++++ 2.5383	2.8445	2.6063	Ave		2.6941				4.6		30.0			
cis-1,2-Dichloroethene	0.6597 0.7196	0.6528 0.6987	0.6987 0.6804	0.7714	0.6828	Ave		0.6955				5.4		30.0			
Methyl Ethyl Ketone	+++++ 0.3908	+++++ 0.3813	0.3704 0.3686	0.4097	0.3711	Ave		0.3820				4.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0545	+++++ 0.0533	+++++ 0.0522	0.0553	0.0526	Ave		0.0536				2.4		30.0			
Tetrahydrofuran	+++++ 0.2652	+++++ 0.2560	+++++ 0.2449	0.2850	0.2599	Ave		0.2622				5.6		30.0			
Chloroform	+++++ 1.5743	1.4253 1.5453	1.5193 1.5021	1.6426	1.4990	Ave		1.5297				4.4		30.0			
Cyclohexane	+++++ 0.1857	0.1734 0.1814	0.1899 0.1794	0.2018	0.1786	Ave		0.1843				5.1		30.0			
1,1,1-Trichloroethane	+++++ 0.2931	0.2693 0.2855	0.2918 0.2840	0.3146	0.2822	Ave		0.2886				4.8		30.0			
Carbon tetrachloride	0.2112 0.2708	0.2186 0.2694	0.2644 0.2681	0.2937	0.2687	Ave		0.2581				10.9		30.0			
2,2,4-Trimethylpentane	+++++ 0.9251	0.8809 0.9066	0.8968 0.8936	0.9600	0.8835	Ave		0.9066				3.1		30.0			
Benzene	+++++ 0.4672	0.4664 0.4590	0.4819 0.4568	0.4935	0.4482	Ave		0.4676				3.3		30.0			
1,2-Dichloroethane	+++++ 0.2400	0.2202 0.2329	0.2386 0.2317	0.2512	0.2307	Ave		0.2350				4.1		30.0			
n-Heptane	+++++ 0.4500	0.4853 0.4388	0.4716 0.4288	0.4693	0.4314	Ave		0.4536				4.9		30.0			
n-Butanol	+++++ 0.1264	+++++ 0.1229	+++++ 0.1271	0.1295	0.1272	Ave		0.1266				1.9		30.0			
Trichloroethene	0.2130 0.2035	0.1853 0.1886	0.1871 0.1910	0.2020	0.1830	Ave		0.1942				5.5		30.0			
1,2-Dichloropropane	+++++ 0.2104	0.2042 0.2092	0.2068 0.2094	0.2200	0.2033	Ave		0.2091				2.6		30.0			
Methyl methacrylate	+++++ 0.1937	+++++ 0.1928	0.1633 0.1968	0.1922	0.1805	Ave		0.1865				6.8		30.0			
1,4-Dioxane	+++++ 0.0968	+++++ 0.0927	+++++ 0.0944	0.1062	0.0971	Ave		0.0975				5.3		30.0			
Dibromomethane	+++++ 0.1596	0.1513 0.1591	0.1661 0.1642	0.1695	0.1561	Ave		0.1608				3.9		30.0			
Bromodichloromethane	+++++ 0.3622	0.2795 0.3566	0.3264 0.3596	0.3728	0.3430	Ave		0.3429				9.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.2899	0.2516 0.2862	0.2753 0.2899	0.2978	0.2748	Ave		0.2808				5.4		30.0			
methyl isobutyl ketone	+++++ 0.6258	+++++ 0.6062	0.5552 0.6089	0.6395	0.5796	Ave		0.6025				5.1		30.0			
Toluene	+++++ 0.3490	0.3254 0.3390	0.3365 0.3451	0.3598	0.3209	Ave		0.3394				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.6704	0.6758 0.6542	0.6721 0.6491	0.6971	0.6470	Ave		0.6665				2.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.3056	0.3199 0.3009	0.3224 0.3061	0.3225	0.2878	Ave		0.3093				4.2		30.0			
1,1,2-Trichloroethane	+++++ 0.1827	0.1617 0.1763	0.1733 0.1796	0.1888	0.1705	Ave		0.1761				5.0		30.0			
Tetrachloroethene	0.2487 0.2439	0.2308 0.2319	0.2457 0.2380	0.2591	0.2268	Ave		0.2406				4.5		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6215	+++++ 0.5923	0.5338 0.6065	0.6244	0.5480	Ave		0.5878				6.5		30.0			
Dibromochloromethane	+++++ 0.3045	0.2191 0.2947	0.2625 0.2957	0.3155	0.2712	Ave		0.2805				11.7		30.0			
1,2-Dibromoethane	+++++ 0.2952	0.2592 0.2874	0.2733 0.2923	0.3054	0.2747	Ave		0.2840				5.5		30.0			
Chlorobenzene	+++++ 0.4242	0.4065 0.4106	0.4232 0.4211	0.4493	0.3948	Ave		0.4185				4.1		30.0			
Ethylbenzene	+++++ 0.8016	0.6959 0.7817	0.7440 0.7993	0.8270	0.7461	Ave		0.7708				5.8		30.0			
n-Nonane	+++++ 0.5097	0.4745 0.4967	0.4886 0.5073	0.5272	0.4742	Ave		0.4969				3.9		30.0			
m,p-Xylene	+++++ 0.3004	0.2567 0.2935	0.2726 0.3042	0.3132	0.2814	Ave		0.2889				6.8		30.0			
Xylene, o-	+++++ 0.2931	0.2483 0.2831	0.2668 0.2928	0.3015	0.2726	Ave		0.2797				6.6		30.0			
Styrene	+++++ 0.4762	0.3624 0.4621	0.3749 0.4830	0.4661	0.4314	Ave		0.4366				11.3		30.0			
Bromoform	+++++ 0.2787	0.1594 0.2660	0.2147 0.2607	0.2964	0.2206	Ave		0.2423				19.4		30.0			
Cumene	+++++ 0.8583	0.7309 0.8305	0.7973 0.8522	0.8833	0.8041	Ave		0.8224				6.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.4552	0.4391 0.4718	0.4494 0.4871	0.5036	0.4576	Ave		0.4663				4.9		30.0			
n-Propylbenzene	+++++ 1.1347	0.9665 1.1065	1.0085 1.1416	1.1601	1.0568	Ave		1.0821				6.8		30.0			
1,2,3-Trichloropropane	+++++ 0.4133	+++++ 0.4029	0.4092 0.4199	0.4194	0.3822	Ave		0.4078				3.5		30.0			
4-Ethyltoluene	+++++ 0.9112	0.7405 0.8872	0.7684 0.9085	0.9126	0.8385	Ave		0.8524				8.5		30.0			
2-Chlorotoluene	+++++ 0.8180	0.6685 0.7949	0.6914 0.8136	0.8183	0.7536	Ave		0.7655				8.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Decane	+++++ 0.7217	+++++ 0.6923	0.6285 0.6783	0.7180	0.6632	Ave		0.6836				5.1		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7393	0.5924 0.7145	0.6443 0.7450	0.7471	0.6826	Ave		0.6950				8.5		30.0			
Alpha Methyl Styrene	+++++ 0.3521	0.2429 0.3397	0.2638 0.3559	0.3465	0.3125	Ave		0.3162				14.4		30.0			
tert-Butylbenzene	+++++ 0.6656	0.5430 0.6416	0.5860 0.6704	0.6853	0.6223	Ave		0.6306				8.1		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7597	0.5994 0.7275	0.6409 0.7604	0.7715	0.7011	Ave		0.7086				9.3		30.0			
sec-Butylbenzene	+++++ 1.0907	0.8763 1.0440	0.9628 1.0945	1.1163	1.0121	Ave		1.0281				8.3		30.0			
4-Isopropyltoluene	+++++ 0.8932	0.7038 0.8496	0.7619 0.9170	0.9022	0.8200	Ave		0.8354				9.5		30.0			
1,3-Dichlorobenzene	+++++ 0.4847	0.4306 0.4624	0.4260 0.4886	0.4902	0.4473	Ave		0.4614				5.9		30.0			
1,4-Dichlorobenzene	+++++ 0.4718	0.4527 0.4435	0.4376 0.4740	0.4779	0.4335	Ave		0.4559				4.1		30.0			
Benzyl chloride	+++++ 0.7273	0.5215 0.6980	0.6500 0.7587	0.7109	0.6541	Ave		0.6743				11.5		30.0			
n-Butylbenzene	+++++ 0.9238	0.8380 0.8659	0.8046 0.9486	0.9453	0.8598	Ave		0.8837				6.3		30.0			
n-Undecane	+++++ 0.7361	+++++ 0.6948	+++++ 0.7480	0.7700	0.6846	Ave		0.7267				5.0		30.0			
1,2-Dichlorobenzene	+++++ 0.4449	0.4082 0.4161	0.3969 0.4496	0.4609	0.4128	Ave		0.4271				5.7		30.0			
n-Dodecane	+++++ 0.6323	+++++ 0.5489	+++++ 0.5726	0.6234	0.5826	Ave		0.5920				5.9		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3361	+++++ 0.3048	0.3264 0.3392	0.3154	0.2941	Ave		0.3193				5.6		30.0			
Hexachlorobutadiene	+++++ 0.2846	0.2622 0.2654	0.2800 0.2801	0.3042	0.2620	Ave		0.2769				5.5		30.0			
Naphthalene	+++++ 0.7799	+++++ 0.6364	0.7646 0.7503	0.6132	0.6684	Ave		0.7021				10.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3033	+++++ 0.2618	0.3061 0.2850	0.2791	0.2628	Ave		0.2830				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 353877	+++++ 483509	+++++ 977093	113320	219919	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 719635	+++++ 1037247	18687 2284982	231333	495574	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 622275	+++++ 857341	18746 1754621	201404	380532	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 745451	9367 1040162	21846 2184022	238840	460250	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 352245	+++++ 491783	11453 1001236	113130	217772	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 673810	+++++ 928248	23979 1877345	217861	413839	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1048 345103	4643 475347	10535 977107	109960	214158	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	692 284179	3719 392412	8057 797535	90563	173842	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 258695	3306 363007	7492 753745	82055	158565	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 155858	+++++ 216212	4444 447266	47617	93699	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 417703	5838 575987	13019 1167693	130997	252052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 238327	2983 336507	6597 706387	73318	140295	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 675219	8052 953592	19413 1977174	211971	405947	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 658866	+++++ 918273	21515 1880686	206987	395841	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 223240	+++++ 440445	37568 1091690	102428	128897	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 210816	2556 297361	5845 612700	65771	125749	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97011	+++++ 126806	+++++ 252930	29892	60161	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 478477	5799 672696	13512 1418425	152379	287885	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	530 231450	2847 326020	6737 686398	73934	139063	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 605870	+++++ 851583	+++++ 1726650	201808	370824	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 720496	+++++ 1017035	21216 2104138	229309	435588	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 666734	+++++ 907558	+++++ 1858919	209222	420388	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 518407	6723 625630	15338 1310825	165352	282882	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 314750	+++++ 439448	+++++ 887788	98750	194856	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 410731	+++++ 569402	11944 1168766	129262	247353	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 752941	+++++ 1042044	+++++ 2153957	234889	460516	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 856853	10203 1201499	23508 2484537	266590	511570	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 462081	5876 654055	13528 1340400	146832	279770	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 249171	+++++ 351178	7387 724576	78010	149428	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 493533	7627 690644	15739 1411080	155042	295148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1432 595053	7314 834343	17358 1728738	185369	356405	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1108031	+++++ 1557692	+++++ 3141483	344229	658677	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	698 287077	3511 402541	8243 842126	93347	172552	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 155899	+++++ 219661	4370 456166	49585	93775	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 21734	+++++ 30682	+++++ 64640	6694	13289	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 562442	+++++ 785803	+++++ 1590949	176657	341073	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 628050	7666 890256	17925 1859003	198780	378841	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 393823	4821 556920	11303 1165069	125086	234424	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 621615	7486 876321	17368 1844982	194948	370397	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1154 574398	6078 826964	15737 1741803	182037	352691	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1962084	24490 2782697	53376 5804651	594960	1159654	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 990941	12966 1408757	28684 2967508	305871	588244	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 509002	6123 714770	14199 1505338	155700	302793	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 954467	13492 1347004	28070 2785284	290860	566249	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 268047	+++++ 377356	+++++ 825710	80287	166893	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1164 431632	5151 578895	11138 1240808	125178	240170	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 446206	5677 642017	12311 1360263	136361	266899	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 410746	+++++ 591854	9721 1278411	119113	236888	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 205342	+++++ 284662	+++++ 613215	65816	127498	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 338436	4206 488358	9889 1066627	105056	204827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 768223	7771 1094617	19425 2336166	231011	450139	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 614747	6996 878639	16385 1882847	184539	360714	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1327292	+++++ 1860626	33045 3955208	396322	760764	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 724707	8845 1028583	20013 2206609	220025	427318	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1421753	18788 2008006	40001 4216481	432046	849145	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 648118	8894 923500	19188 1988086	199847	377682	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 379306	4396 534768	10309 1148428	115450	227011	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1344 506522	6273 703705	14615 1521882	158427	302018	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1290630	+++++ 1796945	31752 3878692	381761	729662	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 632364	5954 894163	15616 1891119	192925	361052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 613021	7044 872076	16259 1869551	186748	365767	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 880833	11049 1245781	25172 2692702	274701	525599	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 1664681	18915 2371508	44251 5111609	505656	993414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1058360	12895 1506922	29064 3244294	322334	631437	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1247595	13952 1780646	32432 3890932	383015	749442	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 608732	6749 858753	15872 1872597	184343	362908	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 988897	9849 1401893	22300 3088981	285003	574359	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 578705	4332 807109	12773 1666980	181205	293658	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 1782391	19864 2519760	47427 5449466	540065	1070589	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 945272	11935 1431429	26731 3114692	307934	609279	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2356358	26267 3356883	59987 7300756	709322	1407056	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 858266	+++++ 1222340	24341 2685226	256414	508920	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 1892216	20126 2691531	45708 5809594	557993	1116469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1698746	18168 2411519	41127 5203188	500344	1003366	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1498628	+++++ 2100262	37383 4337795	438992	882978	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1535305	16101 2167805	38325 4764065	456808	908890	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 731154	6602 1030534	15690 2275903	211838	416148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1382193	14757 1946514	34858 4287142	419011	828515	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42570-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1577522	16291 2207208	38120 4862877	471711	933500	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2265025	23817 3167373	57269 6999017	682554	1347612	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 1854890	19129 2577509	45320 5863967	551645	1091844	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1006513	11703 1402778	25338 3124432	299725	595511	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 979815	12304 1345440	26031 3031052	292182	577188	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1510235	14174 2117632	38662 4851619	434676	870855	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 1918386	22775 2626905	47861 6066478	577987	1144745	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1528664	+++++ 2108069	+++++ 4783728	470826	911535	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 923941	11094 1262347	23609 2875290	281843	549672	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1312980	+++++ 1665407	+++++ 3661884	381167	775656	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 697956	+++++ 924755	19412 2169339	192828	391570	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 590923	7125 805175	16655 1791455	186030	348905	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1619614	+++++ 1930679	45477 4798312	374943	889926	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 629903	+++++ 794240	18205 1822818	170627	349922	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.8870	+++++ 0.8392	+++++ 0.7895	0.9364	0.8702	Ave		0.8645				6.3		30.0			
Dichlorodifluoromethane	+++++ 1.8038	+++++ 1.8004	1.5839 1.8463	1.9116	1.9609	Ave		1.8178				7.2		30.0			
Freon 22	+++++ 1.5598	+++++ 1.4881	1.5889 1.4177	1.6643	1.5057	Ave		1.5374				5.6		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.8686	1.7415 1.8055	1.8516 1.7647	1.9736	1.8211	Ave		1.8324				4.2		30.0			
Chloromethane	+++++ 0.8829	+++++ 0.8536	0.9707 0.8090	0.9348	0.8617	Ave		0.8855				6.6		30.0			
n-Butane	+++++ 1.6890	+++++ 1.6112	2.0324 1.5169	1.8003	1.6375	Ave		1.7145				10.6		30.0			
Vinyl chloride	0.9905 0.8650	0.8632 0.8251	0.8929 0.7895	0.9086	0.8474	Ave		0.8728				6.9		30.0			
1,3-Butadiene	0.6540 0.7123	0.6914 0.6811	0.6829 0.6444	0.7484	0.6879	Ave		0.6878				4.7		30.0			
Bromomethane	+++++ 0.6484	0.6147 0.6301	0.6350 0.6090	0.6781	0.6274	Ave		0.6347				3.6		30.0			
Chloroethane	+++++ 0.3907	+++++ 0.3753	0.3767 0.3614	0.3935	0.3708	Ave		0.3780				3.2		30.0			
Isopentane	+++++ 1.0470	1.0854 0.9998	1.1035 0.9435	1.0825	0.9973	Ave		1.0370				5.7		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.5974	0.5546 0.5841	0.5591 0.5708	0.6059	0.5551	Ave		0.5753				3.6		30.0			
Trichlorofluoromethane	+++++ 1.6925	1.4970 1.6552	1.6454 1.5976	1.7516	1.6063	Ave		1.6351				4.9		30.0			
n-Pentane	+++++ 1.6515	+++++ 1.5939	1.8235 1.5196	1.7104	1.5663	Ave		1.6442				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4188	+++++ 0.3822	0.3180 0.3528	0.4229	0.3399	Ave		0.3724				11.5		30.0			
Ethyl ether	+++++ 0.5284	0.4752 0.5161	0.4954 0.4951	0.5435	0.4976	Ave		0.5073				4.6		30.0			
Acrolein	+++++ 0.2432	+++++ 0.2201	+++++ 0.2044	0.2470	0.2380	Ave		0.2305				7.8		30.0			
Freon TF	+++++ 1.1994	1.0781 1.1676	1.1452 1.1461	1.2592	1.1391	Ave		1.1621				4.8		30.0			
1,1-Dichloroethene	0.5009 0.5802	0.5293 0.5659	0.5710 0.5546	0.6110	0.5503	Ave		0.5579				5.9		30.0			
Acetone	+++++ 1.5187	+++++ 1.4781	+++++ 1.3951	1.6676	1.4673	Ave		1.5054				6.7		30.0			
Carbon disulfide	+++++ 1.8060	+++++ 1.7653	1.7982 1.7002	1.8949	1.7236	Ave		1.7814				3.9		30.0			
Isopropyl alcohol	+++++ 1.6712	+++++ 1.5753	+++++ 1.5020	1.7289	1.6634	Ave		1.6282				5.5		30.0			
3-Chloropropene	+++++ 1.2994	1.2499 1.0859	1.3000 1.0592	1.3664	1.1193	Ave		1.2115				10.0		30.0			
Acetonitrile	+++++ 0.7890	+++++ 0.7628	+++++ 0.7173	0.8160	0.7710	Ave		0.7712				4.7		30.0			
Methylene Chloride	+++++ 1.0295	+++++ 0.9883	1.0123 0.9444	1.0682	0.9787	Ave		1.0036				4.3		30.0			
tert-Butyl alcohol	+++++ 1.8873	+++++ 1.8087	+++++ 1.7404	1.9410	1.8222	Ave		1.8399				4.2		30.0			
Methyl tert-butyl ether	+++++ 2.1478	1.8969 2.0855	1.9925 2.0075	2.2030	2.0242	Ave		2.0511				5.0		30.0			
trans-1,2-Dichloroethene	+++++ 1.1583	1.0925 1.1353	1.1466 1.0831	1.2133	1.1070	Ave		1.1337				4.0		30.0			
Acrylonitrile	+++++ 0.6246	+++++ 0.6096	0.6261 0.5855	0.6446	0.5913	Ave		0.6136				3.7		30.0			
n-Hexane	+++++ 1.2371	1.4180 1.1988	1.3340 1.1402	1.2812	1.1679	Ave		1.2539				7.8		30.0			
1,1-Dichloroethane	1.3535 1.4916	1.3598 1.4482	1.4712 1.3968	1.5318	1.4102	Ave		1.4329				4.4		30.0			
Vinyl acetate	+++++ 2.7774	+++++ 2.7038	+++++ 2.5383	2.8445	2.6063	Ave		2.6941				4.6		30.0			
cis-1,2-Dichloroethene	0.6597 0.7196	0.6528 0.6987	0.6987 0.6804	0.7714	0.6828	Ave		0.6955				5.4		30.0			
Methyl Ethyl Ketone	+++++ 0.3908	+++++ 0.3813	0.3704 0.3686	0.4097	0.3711	Ave		0.3820				4.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0545	+++++ 0.0533	+++++ 0.0522	0.0553	0.0526	Ave		0.0536				2.4		30.0			
Tetrahydrofuran	+++++ 0.2652	+++++ 0.2560	+++++ 0.2449	0.2850	0.2599	Ave		0.2622				5.6		30.0			
Chloroform	+++++ 1.5743	1.4253 1.5453	1.5193 1.5021	1.6426	1.4990	Ave		1.5297				4.4		30.0			
Cyclohexane	+++++ 0.1857	0.1734 0.1814	0.1899 0.1794	0.2018	0.1786	Ave		0.1843				5.1		30.0			
1,1,1-Trichloroethane	+++++ 0.2931	0.2693 0.2855	0.2918 0.2840	0.3146	0.2822	Ave		0.2886				4.8		30.0			
Carbon tetrachloride	0.2112 0.2708	0.2186 0.2694	0.2644 0.2681	0.2937	0.2687	Ave		0.2581				10.9		30.0			
2,2,4-Trimethylpentane	+++++ 0.9251	0.8809 0.9066	0.8968 0.8936	0.9600	0.8835	Ave		0.9066				3.1		30.0			
Benzene	+++++ 0.4672	0.4664 0.4590	0.4819 0.4568	0.4935	0.4482	Ave		0.4676				3.3		30.0			
1,2-Dichloroethane	+++++ 0.2400	0.2202 0.2329	0.2386 0.2317	0.2512	0.2307	Ave		0.2350				4.1		30.0			
n-Heptane	+++++ 0.4500	0.4853 0.4388	0.4716 0.4288	0.4693	0.4314	Ave		0.4536				4.9		30.0			
n-Butanol	+++++ 0.1264	+++++ 0.1229	+++++ 0.1271	0.1295	0.1272	Ave		0.1266				1.9		30.0			
Trichloroethene	0.2130 0.2035	0.1853 0.1886	0.1871 0.1910	0.2020	0.1830	Ave		0.1942				5.5		30.0			
1,2-Dichloropropane	+++++ 0.2104	0.2042 0.2092	0.2068 0.2094	0.2200	0.2033	Ave		0.2091				2.6		30.0			
Methyl methacrylate	+++++ 0.1937	+++++ 0.1928	0.1633 0.1968	0.1922	0.1805	Ave		0.1865				6.8		30.0			
1,4-Dioxane	+++++ 0.0968	+++++ 0.0927	+++++ 0.0944	0.1062	0.0971	Ave		0.0975				5.3		30.0			
Dibromomethane	+++++ 0.1596	0.1513 0.1591	0.1661 0.1642	0.1695	0.1561	Ave		0.1608				3.9		30.0			
Bromodichloromethane	+++++ 0.3622	0.2795 0.3566	0.3264 0.3596	0.3728	0.3430	Ave		0.3429				9.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.2899	0.2516 0.2862	0.2753 0.2899	0.2978	0.2748	Ave		0.2808				5.4		30.0			
methyl isobutyl ketone	+++++ 0.6258	+++++ 0.6062	0.5552 0.6089	0.6395	0.5796	Ave		0.6025				5.1		30.0			
Toluene	+++++ 0.3490	0.3254 0.3390	0.3365 0.3451	0.3598	0.3209	Ave		0.3394				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.6704	0.6758 0.6542	0.6721 0.6491	0.6971	0.6470	Ave		0.6665				2.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.3056	0.3199 0.3009	0.3224 0.3061	0.3225	0.2878	Ave		0.3093				4.2		30.0			
1,1,2-Trichloroethane	+++++ 0.1827	0.1617 0.1763	0.1733 0.1796	0.1888	0.1705	Ave		0.1761				5.0		30.0			
Tetrachloroethene	0.2487 0.2439	0.2308 0.2319	0.2457 0.2380	0.2591	0.2268	Ave		0.2406				4.5		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6215	+++++ 0.5923	0.5338 0.6065	0.6244	0.5480	Ave		0.5878				6.5		30.0			
Dibromochloromethane	+++++ 0.3045	0.2191 0.2947	0.2625 0.2957	0.3155	0.2712	Ave		0.2805				11.7		30.0			
1,2-Dibromoethane	+++++ 0.2952	0.2592 0.2874	0.2733 0.2923	0.3054	0.2747	Ave		0.2840				5.5		30.0			
Chlorobenzene	+++++ 0.4242	0.4065 0.4106	0.4232 0.4211	0.4493	0.3948	Ave		0.4185				4.1		30.0			
Ethylbenzene	+++++ 0.8016	0.6959 0.7817	0.7440 0.7993	0.8270	0.7461	Ave		0.7708				5.8		30.0			
n-Nonane	+++++ 0.5097	0.4745 0.4967	0.4886 0.5073	0.5272	0.4742	Ave		0.4969				3.9		30.0			
m,p-Xylene	+++++ 0.3004	0.2567 0.2935	0.2726 0.3042	0.3132	0.2814	Ave		0.2889				6.8		30.0			
Xylene, o-	+++++ 0.2931	0.2483 0.2831	0.2668 0.2928	0.3015	0.2726	Ave		0.2797				6.6		30.0			
Styrene	+++++ 0.4762	0.3624 0.4621	0.3749 0.4830	0.4661	0.4314	Ave		0.4366				11.3		30.0			
Bromoform	+++++ 0.2787	0.1594 0.2660	0.2147 0.2607	0.2964	0.2206	Ave		0.2423				19.4		30.0			
Cumene	+++++ 0.8583	0.7309 0.8305	0.7973 0.8522	0.8833	0.8041	Ave		0.8224				6.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.4552	0.4391 0.4718	0.4494 0.4871	0.5036	0.4576	Ave		0.4663				4.9		30.0			
n-Propylbenzene	+++++ 1.1347	0.9665 1.1065	1.0085 1.1416	1.1601	1.0568	Ave		1.0821				6.8		30.0			
1,2,3-Trichloropropane	+++++ 0.4133	+++++ 0.4029	0.4092 0.4199	0.4194	0.3822	Ave		0.4078				3.5		30.0			
4-Ethyltoluene	+++++ 0.9112	0.7405 0.8872	0.7684 0.9085	0.9126	0.8385	Ave		0.8524				8.5		30.0			
2-Chlorotoluene	+++++ 0.8180	0.6685 0.7949	0.6914 0.8136	0.8183	0.7536	Ave		0.7655				8.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Decane	+++++ 0.7217	+++++ 0.6923	0.6285 0.6783	0.7180	0.6632	Ave		0.6836				5.1		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7393	0.5924 0.7145	0.6443 0.7450	0.7471	0.6826	Ave		0.6950				8.5		30.0			
Alpha Methyl Styrene	+++++ 0.3521	0.2429 0.3397	0.2638 0.3559	0.3465	0.3125	Ave		0.3162				14.4		30.0			
tert-Butylbenzene	+++++ 0.6656	0.5430 0.6416	0.5860 0.6704	0.6853	0.6223	Ave		0.6306				8.1		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7597	0.5994 0.7275	0.6409 0.7604	0.7715	0.7011	Ave		0.7086				9.3		30.0			
sec-Butylbenzene	+++++ 1.0907	0.8763 1.0440	0.9628 1.0945	1.1163	1.0121	Ave		1.0281				8.3		30.0			
4-Isopropyltoluene	+++++ 0.8932	0.7038 0.8496	0.7619 0.9170	0.9022	0.8200	Ave		0.8354				9.5		30.0			
1,3-Dichlorobenzene	+++++ 0.4847	0.4306 0.4624	0.4260 0.4886	0.4902	0.4473	Ave		0.4614				5.9		30.0			
1,4-Dichlorobenzene	+++++ 0.4718	0.4527 0.4435	0.4376 0.4740	0.4779	0.4335	Ave		0.4559				4.1		30.0			
Benzyl chloride	+++++ 0.7273	0.5215 0.6980	0.6500 0.7587	0.7109	0.6541	Ave		0.6743				11.5		30.0			
n-Butylbenzene	+++++ 0.9238	0.8380 0.8659	0.8046 0.9486	0.9453	0.8598	Ave		0.8837				6.3		30.0			
n-Undecane	+++++ 0.7361	+++++ 0.6948	+++++ 0.7480	0.7700	0.6846	Ave		0.7267				5.0		30.0			
1,2-Dichlorobenzene	+++++ 0.4449	0.4082 0.4161	0.3969 0.4496	0.4609	0.4128	Ave		0.4271				5.7		30.0			
n-Dodecane	+++++ 0.6323	+++++ 0.5489	+++++ 0.5726	0.6234	0.5826	Ave		0.5920				5.9		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3361	+++++ 0.3048	0.3264 0.3392	0.3154	0.2941	Ave		0.3193				5.6		30.0			
Hexachlorobutadiene	+++++ 0.2846	0.2622 0.2654	0.2800 0.2801	0.3042	0.2620	Ave		0.2769				5.5		30.0			
Naphthalene	+++++ 0.7799	+++++ 0.6364	0.7646 0.7503	0.6132	0.6684	Ave		0.7021				10.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3033	+++++ 0.2618	0.3061 0.2850	0.2791	0.2628	Ave		0.2830				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 353877	+++++ 483509	+++++ 977093	113320	219919	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 719635	+++++ 1037247	18687 2284982	231333	495574	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 622275	+++++ 857341	18746 1754621	201404	380532	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 745451	9367 1040162	21846 2184022	238840	460250	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 352245	+++++ 491783	11453 1001236	113130	217772	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 673810	+++++ 928248	23979 1877345	217861	413839	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1048 345103	4643 475347	10535 977107	109960	214158	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	692 284179	3719 392412	8057 797535	90563	173842	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 258695	3306 363007	7492 753745	82055	158565	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 155858	+++++ 216212	4444 447266	47617	93699	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 417703	5838 575987	13019 1167693	130997	252052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 238327	2983 336507	6597 706387	73318	140295	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 675219	8052 953592	19413 1977174	211971	405947	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 658866	+++++ 918273	21515 1880686	206987	395841	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 223240	+++++ 440445	37568 1091690	102428	128897	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 210816	2556 297361	5845 612700	65771	125749	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97011	+++++ 126806	+++++ 252930	29892	60161	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 478477	5799 672696	13512 1418425	152379	287885	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	530 231450	2847 326020	6737 686398	73934	139063	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 605870	+++++ 851583	+++++ 1726650	201808	370824	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 720496	+++++ 1017035	21216 2104138	229309	435588	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 666734	+++++ 907558	+++++ 1858919	209222	420388	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 518407	6723 625630	15338 1310825	165352	282882	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 314750	+++++ 439448	+++++ 887788	98750	194856	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 410731	+++++ 569402	11944 1168766	129262	247353	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 752941	+++++ 1042044	+++++ 2153957	234889	460516	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 856853	10203 1201499	23508 2484537	266590	511570	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 462081	5876 654055	13528 1340400	146832	279770	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 249171	+++++ 351178	7387 724576	78010	149428	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 493533	7627 690644	15739 1411080	155042	295148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1432 595053	7314 834343	17358 1728738	185369	356405	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1108031	+++++ 1557692	+++++ 3141483	344229	658677	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	698 287077	3511 402541	8243 842126	93347	172552	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 155899	+++++ 219661	4370 456166	49585	93775	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 21734	+++++ 30682	+++++ 64640	6694	13289	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 562442	+++++ 785803	+++++ 1590949	176657	341073	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 628050	7666 890256	17925 1859003	198780	378841	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 393823	4821 556920	11303 1165069	125086	234424	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 621615	7486 876321	17368 1844982	194948	370397	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1154 574398	6078 826964	15737 1741803	182037	352691	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1962084	24490 2782697	53376 5804651	594960	1159654	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 990941	12966 1408757	28684 2967508	305871	588244	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 509002	6123 714770	14199 1505338	155700	302793	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 954467	13492 1347004	28070 2785284	290860	566249	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 268047	+++++ 377356	+++++ 825710	80287	166893	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1164 431632	5151 578895	11138 1240808	125178	240170	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 446206	5677 642017	12311 1360263	136361	266899	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 410746	+++++ 591854	9721 1278411	119113	236888	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 205342	+++++ 284662	+++++ 613215	65816	127498	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 338436	4206 488358	9889 1066627	105056	204827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 768223	7771 1094617	19425 2336166	231011	450139	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 614747	6996 878639	16385 1882847	184539	360714	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1327292	+++++ 1860626	33045 3955208	396322	760764	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 724707	8845 1028583	20013 2206609	220025	427318	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1421753	18788 2008006	40001 4216481	432046	849145	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 648118	8894 923500	19188 1988086	199847	377682	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 379306	4396 534768	10309 1148428	115450	227011	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1344 506522	6273 703705	14615 1521882	158427	302018	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1290630	+++++ 1796945	31752 3878692	381761	729662	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 632364	5954 894163	15616 1891119	192925	361052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 613021	7044 872076	16259 1869551	186748	365767	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 880833	11049 1245781	25172 2692702	274701	525599	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 1664681	18915 2371508	44251 5111609	505656	993414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1058360	12895 1506922	29064 3244294	322334	631437	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1247595	13952 1780646	32432 3890932	383015	749442	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 608732	6749 858753	15872 1872597	184343	362908	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 988897	9849 1401893	22300 3088981	285003	574359	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 578705	4332 807109	12773 1666980	181205	293658	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 1782391	19864 2519760	47427 5449466	540065	1070589	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 945272	11935 1431429	26731 3114692	307934	609279	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2356358	26267 3356883	59987 7300756	709322	1407056	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 858266	+++++ 1222340	24341 2685226	256414	508920	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 1892216	20126 2691531	45708 5809594	557993	1116469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1698746	18168 2411519	41127 5203188	500344	1003366	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1498628	+++++ 2100262	37383 4337795	438992	882978	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1535305	16101 2167805	38325 4764065	456808	908890	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 731154	6602 1030534	15690 2275903	211838	416148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1382193	14757 1946514	34858 4287142	419011	828515	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42575-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1577522	16291 2207208	38120 4862877	471711	933500	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2265025	23817 3167373	57269 6999017	682554	1347612	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 1854890	19129 2577509	45320 5863967	551645	1091844	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1006513	11703 1402778	25338 3124432	299725	595511	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 979815	12304 1345440	26031 3031052	292182	577188	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1510235	14174 2117632	38662 4851619	434676	870855	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 1918386	22775 2626905	47861 6066478	577987	1144745	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1528664	+++++ 2108069	+++++ 4783728	470826	911535	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 923941	11094 1262347	23609 2875290	281843	549672	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1312980	+++++ 1665407	+++++ 3661884	381167	775656	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 697956	+++++ 924755	19412 2169339	192828	391570	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 590923	7125 805175	16655 1791455	186030	348905	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1619614	+++++ 1930679	45477 4798312	374943	889926	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 629903	+++++ 794240	18205 1822818	170627	349922	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-126321/3	29154-03.D
Level 2	IC 200-126321/4	29154-04.D
Level 3	IC 200-126321/6	29154-06.D
Level 4	IC 200-126321/20	29154-20.D
Level 5	ICIS 200-126321/9	29154-09.D
Level 6	IC 200-126321/10	29154-10.D
Level 7	IC 200-126321/11	29154-11.D
Level 8	IC 200-126321/12	29154-12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.3580	+++++ 0.3342	+++++ 0.3064	0.3556	0.3541	Ave		0.3417				6.4		30.0			
Dichlorodifluoromethane	+++++ 1.8349	+++++ 1.7245	1.9019 1.5796	1.7461	1.7637	Ave		1.7585				6.2		30.0			
Freon 22	+++++ 0.8451	+++++ 0.7883	0.8753 0.7266	0.8070	0.8259	Ave		0.8114				6.3		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.0599	2.0006 1.9383	2.1281 1.6868	1.9633	1.9878	Ave		1.9664				7.1		30.0			
Chloromethane	+++++ 0.5685	+++++ 0.5361	0.6026 0.4964	0.5812	0.5533	Ave		0.5564				6.7		30.0			
n-Butane	+++++ 0.8853	+++++ 0.8362	0.9873 0.7647	0.8552	0.8761	Ave		0.8675				8.4		30.0			
Vinyl chloride	0.8396 0.8186	0.7981 0.7744	0.8300 0.7187	0.7746	0.7893	Ave		0.7929				4.9		30.0			
1,3-Butadiene	0.6911 0.5729	0.5461 0.5342	0.5737 0.4950	0.5427	0.5521	Ave		0.5635				10.1		30.0			
Bromomethane	+++++ 1.0529	1.0240 1.0054	1.0661 0.9403	0.9892	0.9929	Ave		1.0101				4.2		30.0			
Chloroethane	+++++ 0.5362	+++++ 0.5104	0.5262 0.4769	0.5082	0.5184	Ave		0.5127				4.0		30.0			
Isopentane	+++++ 0.8588	0.9728 0.8066	0.9448 0.7447	0.8142	0.8544	Ave		0.8566				9.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.1767	1.1087 1.1276	1.1404 1.0594	1.1031	1.1093	Ave		1.1179				3.2		30.0			
Trichlorofluoromethane	+++++ 2.3342	2.2262 2.2068	2.3146 2.0545	2.1705	2.2099	Ave		2.2167				4.2		30.0			
n-Pentane	+++++ 1.3420	+++++ 1.2667	1.5354 1.1587	1.2740	1.3284	Ave		1.3175				9.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.3063	+++++ 0.2728	0.3917 0.2503	0.2663	0.2721	Ave		0.2932				17.6		30.0			
Ethyl ether	+++++ 0.6554	0.5920 0.6248	0.6499 0.5818	0.6239	0.6279	Ave		0.6222				4.4		30.0			
Acrolein	+++++ 0.3200	+++++ 0.3074	+++++ 0.2752	0.2599	0.3120	Ave		0.2949				8.8		30.0			
Freon TF	+++++ 2.1596	2.1298 2.0605	2.1507 1.9418	2.0123	2.0197	Ave		2.0678				4.0		30.0			
1,1-Dichloroethene	1.2815 1.0817	0.9919 1.0375	1.0692 0.9762	1.0081	1.0199	Ave		1.0582				9.2		30.0			
Acetone	+++++ 1.0644	+++++ 0.9843	+++++ 0.9010	1.1765	1.0501	Ave		1.0353				9.9		30.0			
Isopropyl alcohol	+++++ 1.3494	+++++ 1.2059	+++++ 1.1213	1.3277	1.2997	Ave		1.2608				7.6		30.0			
Carbon disulfide	+++++ 2.7896	+++++ 2.6537	2.7773 2.4849	2.6247	2.6567	Ave		2.6645				4.2		30.0			
3-Chloropropene	+++++ 0.9702	0.9476 0.9257	0.8672 0.8611	0.9431	0.9898	Ave		0.9292				5.3		30.0			
Acetonitrile	+++++ 0.6570	+++++ 0.6297	+++++ 0.5688	0.6306	0.6178	Ave		0.6208				5.2		30.0			
Methylene Chloride	+++++ 0.9140	+++++ 0.8582	0.9742 0.7983	0.8663	0.8919	Ave		0.8838				6.7		30.0			
tert-Butyl alcohol	+++++ 1.9539	+++++ 1.7927	+++++ 1.6755	1.8915	1.8599	Ave		1.8347				5.8		30.0			
Methyl tert-butyl ether	+++++ 2.8250	2.6726 2.6868	2.7862 2.5058	2.6574	2.6822	Ave		2.6880				3.8		30.0			
trans-1,2-Dichloroethene	+++++ 1.3381	1.3264 1.2749	1.3260 1.1872	1.2526	1.2951	Ave		1.2858				4.1		30.0			
Acrylonitrile	+++++ 0.6958	+++++ 0.6550	0.6797 0.6132	0.6515	0.6682	Ave		0.6606				4.3		30.0			
n-Hexane	+++++ 1.5103	1.9456 1.4302	1.7142 1.3189	1.4429	1.4619	Ave		1.5463				13.8		30.0			
1,1-Dichloroethane	2.0086 1.7631	1.7197 1.6700	1.7863 1.5423	1.6571	1.7064	Ave		1.7317				7.8		30.0			
Vinyl acetate	+++++ 2.0223	+++++ 1.8930	+++++ 1.7104	1.9113	1.9936	Ave		1.9061				6.4		30.0			
Methyl Ethyl Ketone	+++++ 0.5735	+++++ 0.5414	0.6093 0.4971	0.5424	0.5436	Ave		0.5512				6.8		30.0			
cis-1,2-Dichloroethene	1.4388 1.2646	1.2247 1.2071	1.2218 1.1342	1.1622	1.1798	Ave		1.2292				7.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1038	+++++ 0.0994	+++++ 0.0923	0.0941	0.0977	Ave		0.0975				4.6		30.0			
Tetrahydrofuran	+++++ 0.1987	+++++ 0.1887	+++++ 0.1790	0.1835	0.1956	Ave		0.1891				4.3		30.0			
Chloroform	+++++ 2.0570	2.0284 1.9596	2.0652 1.8304	1.9217	1.9566	Ave		1.9741				4.2		30.0			
1,1,1-Trichloroethane	+++++ 0.4209	0.3943 0.4082	0.4097 0.3954	0.3832	0.3982	Ave		0.4014				3.1		30.0			
Cyclohexane	+++++ 0.3413	0.3093 0.3290	0.3270 0.3212	0.3094	0.3199	Ave		0.3224				3.5		30.0			
Carbon tetrachloride	0.4621 0.4594	0.4047 0.4434	0.4242 0.4337	0.4122	0.4282	Ave		0.4335				4.8		30.0			
2,2,4-Trimethylpentane	+++++ 1.0740	1.0237 1.0312	1.0542 0.9871	0.9844	1.0340	Ave		1.0270				3.2		30.0			
Benzene	+++++ 0.7423	0.8093 0.7187	0.7668 0.6969	0.6824	0.7035	Ave		0.7314				6.1		30.0			
1,2-Dichloroethane	+++++ 0.2209	0.2073 0.2122	0.2129 0.2036	0.2027	0.2121	Ave		0.2102				3.0		30.0			
n-Heptane	+++++ 0.3369	0.3473 0.3193	0.3511 0.2988	0.3127	0.3308	Ave		0.3281				5.8		30.0			
n-Butanol	+++++ 0.1448	+++++ 0.1305	+++++ 0.1290	0.1402	0.1358	Ave		0.1361				4.8		30.0			
Trichloroethene	0.3883 0.3296	0.3118 0.3195	0.3169 0.3113	0.2980	0.3077	Ave		0.3229				8.7		30.0			
1,2-Dichloropropane	+++++ 0.2662	0.2492 0.2557	0.2569 0.2450	0.2417	0.2549	Ave		0.2528				3.3		30.0			
Methyl methacrylate	+++++ 0.2664	+++++ 0.2563	0.2539 0.2469	0.2429	0.2524	Ave		0.2531				3.2		30.0			
1,4-Dioxane	+++++ 0.1624	+++++ 0.1479	+++++ 0.1417	0.1559	0.1516	Ave		0.1519				5.2		30.0			
Dibromomethane	+++++ 0.3666	0.3617 0.3617	0.3573 0.3634	0.3275	0.3370	Ave		0.3536				4.3		30.0			
Bromodichloromethane	+++++ 0.4878	0.4318 0.4725	0.4582 0.4558	0.4427	0.4626	Ave		0.4587				4.0		30.0			
cis-1,3-Dichloropropene	+++++ 0.4131	0.3689 0.3985	0.3855 0.3867	0.3740	0.3922	Ave		0.3884				3.8		30.0			
methyl isobutyl ketone	+++++ 0.4249	+++++ 0.4023	0.4168 0.3805	0.3923	0.4169	Ave		0.4056				4.2		30.0			
n-Octane	+++++ 0.4610	0.4714 0.4301	0.4923 0.3783	0.4354	0.4606	Ave		0.4470				8.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.6530	0.6590 0.6289	0.6505 0.5988	0.5822	0.6065	Ave		0.6256				4.8		30.0			
trans-1,3-Dichloropropene	+++++ 0.4020	0.3483 0.3867	0.3662 0.3728	0.3617	0.3825	Ave		0.3743				4.7		30.0			
1,1,2-Trichloroethane	+++++ 0.3125	0.2841 0.3031	0.3052 0.2907	0.2818	0.2951	Ave		0.2961				3.8		30.0			
Tetrachloroethene	0.6687 0.6177	0.5334 0.6049	0.5640 0.6064	0.5348	0.5604	Ave		0.5863				7.9		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.4763	+++++ 0.4450	0.4613 0.4167	0.4304	0.4581	Ave		0.4480				4.9		30.0			
Dibromochloromethane	+++++ 0.7028	0.5326 0.6824	0.5860 0.6678	0.6056	0.6469	Ave		0.6320				9.5		30.0			
1,2-Dibromoethane	+++++ 0.6192	0.5492 0.5995	0.5670 0.5791	0.5448	0.5740	Ave		0.5761				4.6		30.0			
Chlorobenzene	+++++ 0.9416	0.8511 0.9122	0.8770 0.8839	0.8208	0.8662	Ave		0.8790				4.5		30.0			
Ethylbenzene	+++++ 1.4091	1.4047 1.3547	1.3979 1.2860	1.2574	1.3119	Ave		1.3459				4.6		30.0			
n-Nonane	+++++ 0.5935	0.5702 0.5628	0.5967 0.5096	0.5429	0.5750	Ave		0.5644				5.4		30.0			
m,p-Xylene	+++++ 0.6032	0.5394 0.5834	0.5528 0.5484	0.5244	0.5544	Ave		0.5580				4.8		30.0			
Xylene, o-	+++++ 0.5892	0.5584 0.5731	0.5616 0.5460	0.5182	0.5461	Ave		0.5561				4.1		30.0			
Styrene	+++++ 0.9463	0.8052 0.9173	0.8281 0.8734	0.8239	0.8695	Ave		0.8663				6.0		30.0			
Bromoform	+++++ 0.7796	0.4198 0.7387	0.5150 0.7321	0.6395	0.6898	Ave		0.6449				20.4		30.0			
Cumene	+++++ 1.6599	1.4751 1.6074	1.5368 1.5066	1.4497	1.5339	Ave		1.5385				4.8		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.8369	0.7821 0.8003	0.8040 0.7436	0.7441	0.7884	Ave		0.7856				4.3		30.0			
n-Propylbenzene	+++++ 1.9486	1.7375 1.8514	1.8270 1.6590	1.7287	1.8249	Ave		1.7967				5.3		30.0			
1,2,3-Trichloropropane	+++++ 0.5953	+++++ 0.5662	0.5932 0.5044	0.5362	0.5692	Ave		0.5607				6.2		30.0			
n-Decane	+++++ 0.7554	+++++ 0.7137	0.7592 0.6585	0.7004	0.7410	Ave		0.7214				5.3		30.0			
4-Ethyltoluene	+++++ 1.6661	1.4659 1.5857	1.5239 1.5054	1.4670	1.5510	Ave		1.5378				4.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.2858	1.1448 1.2402	1.1972 1.1565	1.1449	1.1985	Ave		1.1954				4.4		30.0			
1,3,5-Trimethylbenzene	+++++ 1.3530	1.1800 1.3063	1.2774 1.2732	1.2047	1.2766	Ave		1.2673				4.6		30.0			
Alpha Methyl Styrene	+++++ 0.7362	0.6187 0.7135	0.6369 0.7030	0.6500	0.6908	Ave		0.6784				6.4		30.0			
tert-Butylbenzene	+++++ 1.3236	1.1924 1.2741	1.2476 1.2531	1.1784	1.2442	Ave		1.2448				3.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.3351	1.1916 1.2968	1.2722 1.2649	1.2023	1.2638	Ave		1.2610				4.0		30.0			
sec-Butylbenzene	+++++ 1.9816	1.7838 1.9277	1.9070 1.8428	1.7818	1.8798	Ave		1.8721				4.0		30.0			
4-Isopropyltoluene	+++++ 1.7236	1.5205 1.6908	1.6118 1.6272	1.5313	1.5847	Ave		1.6128				4.7		30.0			
1,3-Dichlorobenzene	+++++ 1.0339	0.9094 1.0119	0.9094 1.0073	0.9047	0.9570	Ave		0.9619				5.8		30.0			
1,4-Dichlorobenzene	+++++ 1.0341	0.9282 1.0171	0.9092 1.0124	0.9101	0.9588	Ave		0.9671				5.5		30.0			
Benzyl chloride	+++++ 1.2018	1.0003 1.1847	1.0448 1.1246	1.0944	1.1435	Ave		1.1134				6.5		30.0			
n-Undecane	+++++ 0.8276	+++++ 0.7769	+++++ 0.6214	0.7606	0.7995	Ave		0.7572				10.6		30.0			
n-Butylbenzene	+++++ 1.4847	1.3681 1.4453	1.3747 1.3575	1.3423	1.3733	Ave		1.3923				3.7		30.0			
1,2-Dichlorobenzene	+++++ 0.9603	0.8552 0.9501	0.8790 0.9468	0.8485	0.8903	Ave		0.9043				5.2		30.0			
n-Dodecane	+++++ 0.7129	0.4958 0.6301	0.5933 +++++	0.6491	0.6940	Ave		0.6292				12.4		30.0			
1,2,4-Trichlorobenzene	+++++ 0.8623	0.6244 0.8313	0.5601 +++++	0.6912	0.7526	Ave		0.7203				16.3		30.0			
Hexachlorobutadiene	+++++ 0.7120	0.5748 0.6757	0.6067 +++++	0.6038	0.6256	Ave		0.6331				8.1		30.0			
Naphthalene	+++++ 1.8076	1.1866 1.7491	0.9669 +++++	1.3962	1.5563	Ave		1.4438				22.6		30.0			
1,2,3-Trichlorobenzene	+++++ 0.7671	0.5522 0.7259	0.5064 +++++	0.6196	0.6668	Ave		0.6397				15.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-126321/3	29154-03.D
Level 2	IC 200-126321/4	29154-04.D
Level 3	IC 200-126321/6	29154-06.D
Level 4	IC 200-126321/20	29154-20.D
Level 5	ICIS 200-126321/9	29154-09.D
Level 6	IC 200-126321/10	29154-10.D
Level 7	IC 200-126321/11	29154-11.D
Level 8	IC 200-126321/12	29154-12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 260569	+++++ 331625	+++++ 627005	88118	161547	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1335470	+++++ 1711105	43348 3232538	432689	804662	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 615076	+++++ 782145	19950 1487020	199972	376792	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1499223	18116 1923296	48503 3451863	486511	906888	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 413779	+++++ 531960	13735 1015869	144035	252451	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 644319	+++++ 829736	22502 1564956	211930	399682	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1425 595740	7227 768370	18917 1470887	191950	360086	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1173 416952	4945 530098	13076 1013096	134491	251883	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 766334	9273 997643	24299 1924326	245135	452997	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 390231	+++++ 506450	11993 976049	125939	236492	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 625058	8809 800378	21534 1524020	201773	389794	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 856369	10040 1118879	25993 2167952	273349	506095	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1698800	20159 2189708	52755 4204469	537858	1008220	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 976699	+++++ 1256834	34994 2371308	315709	606045	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 297832	+++++ 541458	89376 1280412	132084	186263	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 476974	5361 619909	14813 1190701	154599	286455	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 232881	+++++ 305026	+++++ 563196	64395	142365	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1571752	19286 2044490	49019 3973785	498654	921425	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	2175 787240	8982 1029472	24368 1997747	249812	465309	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 774678	+++++ 976678	+++++ 1843873	291535	479095	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 982114	+++++ 1196590	+++++ 2294611	329013	592962	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 2030286	+++++ 2633059	63301 5085238	650412	1212057	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 706076	8581 918515	19765 1762131	233710	451593	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 478198	+++++ 624795	+++++ 1164057	156277	281849	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 665223	+++++ 851574	22203 1633702	214665	406920	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1422078	+++++ 1778769	+++++ 3428770	468708	848545	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 2056057	24201 2665908	63502 5128033	658512	1223688	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 973833	12011 1265007	30222 2429522	310405	590878	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 506402	+++++ 649884	15491 1254880	161444	304843	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 1099187	17618 1419144	39070 2699022	357555	666983	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3409 1283164	15572 1657072	40713 3156274	410647	778491	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1471834	+++++ 1878326	+++++ 3500282	473628	909521	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 417373	+++++ 537228	13886 1017220	134400	247996	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	2442 920399	11090 1197777	27848 2321137	287999	538238	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 75553	+++++ 98668	+++++ 188978	23320	44570	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 694681	+++++ 886614	+++++ 1672225	222485	429074	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1497063	18368 1944401	47069 3745736	476201	892669	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1471783	17530 1918507	45871 3694683	464707	873623	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 1193412	13753 1546342	36605 3001051	375261	701776	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	3835 1606411	17993 2083704	47494 4052243	499815	939400	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3755462	45513 4846280	118029 9223703	1193794	2268595	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2595748	35978 3377523	85852 6511683	827489	1543478	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 772534	9216 997299	23833 1901994	245860	465312	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1178149	15439 1500570	39309 2791526	379151	725788	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 506465	+++++ 613503	+++++ 1205364	169979	298013	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	3223 1152475	13862 1501544	35475 2909169	361318	675131	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 931011	11078 1201718	28766 2289355	293125	559343	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 931601	+++++ 1204614	28421 2306805	294501	553669	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 567894	+++++ 695094	+++++ 1324322	189083	332596	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 1281867	16080 1699944	40001 3395236	397134	739319	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1705824	19196 2220355	51294 4258530	536857	1014842	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1444444	16402 1872519	43163 3613711	453489	860448	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1485943	+++++ 1890470	46665 3555427	475748	914619	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1611899	20958 2021351	55118 3535195	528024	1010462	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 2013411	26035 2611081	64043 4973219	628169	1175892	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1405737	15484 1817377	40996 3483042	438614	839173	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 963477	11222 1258489	30044 2414514	304089	572178	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	4842 1904523	21075 2511748	55525 5035981	577032	1086495	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1468587	+++++ 1847506	45414 3460682	464373	888299	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 2166851	21041 2833231	57696 5546342	653391	1254365	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1908912	21697 2489295	55821 4809968	587829	1112888	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 2902905	33624 3787441	86342 7341023	885678	1679406	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 4344501	55496 5624785	137626 10680288	1356679	2543549	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1829817	22526 2336701	58747 4232703	585734	1114858	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 3719255	42618 4844503	108850 9108551	1131624	2149932	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1816554	22060 2379331	55288 4534736	559184	1058747	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2917591	31813 3808748	81526 7253721	889013	1685863	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 2403605	16586 3066967	50703 6080178	690042	1337455	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 5117597	58278 6673782	151299 12513155	1564220	2973971	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2580279	30899 3322773	79154 6175547	802873	1528580	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 6007686	68643 7687090	179872 13778896	1865236	3538243	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1835352	+++++ 2350818	58405 4189023	578518	1103571	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2329082	+++++ 2963260	74743 5468777	755756	1436661	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 5136677	57912 6584037	150027 12502578	1582880	3007197	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3964219	45229 5149431	117865 9604859	1235361	2323782	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 4171355	46620 5423768	125760 10574783	1299841	2475272	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 2269839	24443 2962439	62700 5838641	701299	1339360	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 4080661	47108 5290142	122825 10407262	1271533	2412321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42592-1 Analy Batch No.: 126321

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/12/2018 16:32 Calibration End Date: 02/13/2018 10:27 Calibration ID: 38874

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 4116242	47078 5384352	125251 10505266	1297300	2450389	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 6109521	70474 8003889	187749 15305013	1922593	3644646	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 5313964	60069 7020112	158681 13514625	1652238	3072624	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 3187725	35926 4201227	89530 8366386	976143	1855526	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 3188119	36670 4223137	89511 8408544	981942	1858990	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 3705121	39518 4918952	102864 9339898	1180840	2217078	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2551722	+++++ 3225780	+++++ 5160766	820667	1550176	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4577330	54051 6000852	135344 11274189	1448349	2662620	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2960591	33785 3944986	86538 7863240	915540	1726237	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 2198082	19589 2616034	58414 +++++	700370	1345556	+++++ 15.0	0.200 20.0	0.500 +++++	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 2658660	24667 3451609	55140 +++++	745792	1459152	+++++ 15.0	0.200 20.0	0.500 +++++	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 2195022	22707 2805562	59734 +++++	651445	1212896	+++++ 15.0	0.200 20.0	0.500 +++++	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 5572930	46879 7262313	95195 +++++	1506490	3017501	+++++ 15.0	0.200 20.0	0.500 +++++	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 2365056	21815 3013883	49860 +++++	668555	1292812	+++++ 15.0	0.200 20.0	0.500 +++++	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.8870	+++++ 0.8392	+++++ 0.7895	0.9364	0.8702	Ave		0.8645				6.3		30.0			
Dichlorodifluoromethane	+++++ 1.8038	+++++ 1.8004	1.5839 1.8463	1.9116	1.9609	Ave		1.8178				7.2		30.0			
Freon 22	+++++ 1.5598	+++++ 1.4881	1.5889 1.4177	1.6643	1.5057	Ave		1.5374				5.6		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.8686	1.7415 1.8055	1.8516 1.7647	1.9736	1.8211	Ave		1.8324				4.2		30.0			
Chloromethane	+++++ 0.8829	+++++ 0.8536	0.9707 0.8090	0.9348	0.8617	Ave		0.8855				6.6		30.0			
n-Butane	+++++ 1.6890	+++++ 1.6112	2.0324 1.5169	1.8003	1.6375	Ave		1.7145				10.6		30.0			
Vinyl chloride	0.9905 0.8650	0.8632 0.8251	0.8929 0.7895	0.9086	0.8474	Ave		0.8728				6.9		30.0			
1,3-Butadiene	0.6540 0.7123	0.6914 0.6811	0.6829 0.6444	0.7484	0.6879	Ave		0.6878				4.7		30.0			
Bromomethane	+++++ 0.6484	0.6147 0.6301	0.6350 0.6090	0.6781	0.6274	Ave		0.6347				3.6		30.0			
Chloroethane	+++++ 0.3907	+++++ 0.3753	0.3767 0.3614	0.3935	0.3708	Ave		0.3780				3.2		30.0			
Isopentane	+++++ 1.0470	1.0854 0.9998	1.1035 0.9435	1.0825	0.9973	Ave		1.0370				5.7		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.5974	0.5546 0.5841	0.5591 0.5708	0.6059	0.5551	Ave		0.5753				3.6		30.0			
Trichlorofluoromethane	+++++ 1.6925	1.4970 1.6552	1.6454 1.5976	1.7516	1.6063	Ave		1.6351				4.9		30.0			
n-Pentane	+++++ 1.6515	+++++ 1.5939	1.8235 1.5196	1.7104	1.5663	Ave		1.6442				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4188	+++++ 0.3822	0.3180 0.3528	0.4229	0.3399	Ave		0.3724				11.5		30.0			
Ethyl ether	+++++ 0.5284	0.4752 0.5161	0.4954 0.4951	0.5435	0.4976	Ave		0.5073				4.6		30.0			
Acrolein	+++++ 0.2432	+++++ 0.2201	+++++ 0.2044	0.2470	0.2380	Ave		0.2305				7.8		30.0			
Freon TF	+++++ 1.1994	1.0781 1.1676	1.1452 1.1461	1.2592	1.1391	Ave		1.1621				4.8		30.0			
1,1-Dichloroethene	0.5009 0.5802	0.5293 0.5659	0.5710 0.5546	0.6110	0.5503	Ave		0.5579				5.9		30.0			
Acetone	+++++ 1.5187	+++++ 1.4781	+++++ 1.3951	1.6676	1.4673	Ave		1.5054				6.7		30.0			
Carbon disulfide	+++++ 1.8060	+++++ 1.7653	1.7982 1.7002	1.8949	1.7236	Ave		1.7814				3.9		30.0			
Isopropyl alcohol	+++++ 1.6712	+++++ 1.5753	+++++ 1.5020	1.7289	1.6634	Ave		1.6282				5.5		30.0			
3-Chloropropene	+++++ 1.2994	1.2499 1.0859	1.3000 1.0592	1.3664	1.1193	Ave		1.2115				10.0		30.0			
Acetonitrile	+++++ 0.7890	+++++ 0.7628	+++++ 0.7173	0.8160	0.7710	Ave		0.7712				4.7		30.0			
Methylene Chloride	+++++ 1.0295	+++++ 0.9883	1.0123 0.9444	1.0682	0.9787	Ave		1.0036				4.3		30.0			
tert-Butyl alcohol	+++++ 1.8873	+++++ 1.8087	+++++ 1.7404	1.9410	1.8222	Ave		1.8399				4.2		30.0			
Methyl tert-butyl ether	+++++ 2.1478	1.8969 2.0855	1.9925 2.0075	2.2030	2.0242	Ave		2.0511				5.0		30.0			
trans-1,2-Dichloroethene	+++++ 1.1583	1.0925 1.1353	1.1466 1.0831	1.2133	1.1070	Ave		1.1337				4.0		30.0			
Acrylonitrile	+++++ 0.6246	+++++ 0.6096	0.6261 0.5855	0.6446	0.5913	Ave		0.6136				3.7		30.0			
n-Hexane	+++++ 1.2371	1.4180 1.1988	1.3340 1.1402	1.2812	1.1679	Ave		1.2539				7.8		30.0			
1,1-Dichloroethane	1.3535 1.4916	1.3598 1.4482	1.4712 1.3968	1.5318	1.4102	Ave		1.4329				4.4		30.0			
Vinyl acetate	+++++ 2.7774	+++++ 2.7038	+++++ 2.5383	2.8445	2.6063	Ave		2.6941				4.6		30.0			
cis-1,2-Dichloroethene	0.6597 0.7196	0.6528 0.6987	0.6987 0.6804	0.7714	0.6828	Ave		0.6955				5.4		30.0			
Methyl Ethyl Ketone	+++++ 0.3908	+++++ 0.3813	0.3704 0.3686	0.4097	0.3711	Ave		0.3820				4.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0545	+++++ 0.0533	+++++ 0.0522	0.0553	0.0526	Ave		0.0536				2.4		30.0			
Tetrahydrofuran	+++++ 0.2652	+++++ 0.2560	+++++ 0.2449	0.2850	0.2599	Ave		0.2622				5.6		30.0			
Chloroform	+++++ 1.5743	1.4253 1.5453	1.5193 1.5021	1.6426	1.4990	Ave		1.5297				4.4		30.0			
Cyclohexane	+++++ 0.1857	0.1734 0.1814	0.1899 0.1794	0.2018	0.1786	Ave		0.1843				5.1		30.0			
1,1,1-Trichloroethane	+++++ 0.2931	0.2693 0.2855	0.2918 0.2840	0.3146	0.2822	Ave		0.2886				4.8		30.0			
Carbon tetrachloride	0.2112 0.2708	0.2186 0.2694	0.2644 0.2681	0.2937	0.2687	Ave		0.2581				10.9		30.0			
2,2,4-Trimethylpentane	+++++ 0.9251	0.8809 0.9066	0.8968 0.8936	0.9600	0.8835	Ave		0.9066				3.1		30.0			
Benzene	+++++ 0.4672	0.4664 0.4590	0.4819 0.4568	0.4935	0.4482	Ave		0.4676				3.3		30.0			
1,2-Dichloroethane	+++++ 0.2400	0.2202 0.2329	0.2386 0.2317	0.2512	0.2307	Ave		0.2350				4.1		30.0			
n-Heptane	+++++ 0.4500	0.4853 0.4388	0.4716 0.4288	0.4693	0.4314	Ave		0.4536				4.9		30.0			
n-Butanol	+++++ 0.1264	+++++ 0.1229	+++++ 0.1271	0.1295	0.1272	Ave		0.1266				1.9		30.0			
Trichloroethene	0.2130 0.2035	0.1853 0.1886	0.1871 0.1910	0.2020	0.1830	Ave		0.1942				5.5		30.0			
1,2-Dichloropropane	+++++ 0.2104	0.2042 0.2092	0.2068 0.2094	0.2200	0.2033	Ave		0.2091				2.6		30.0			
Methyl methacrylate	+++++ 0.1937	+++++ 0.1928	0.1633 0.1968	0.1922	0.1805	Ave		0.1865				6.8		30.0			
1,4-Dioxane	+++++ 0.0968	+++++ 0.0927	+++++ 0.0944	0.1062	0.0971	Ave		0.0975				5.3		30.0			
Dibromomethane	+++++ 0.1596	0.1513 0.1591	0.1661 0.1642	0.1695	0.1561	Ave		0.1608				3.9		30.0			
Bromodichloromethane	+++++ 0.3622	0.2795 0.3566	0.3264 0.3596	0.3728	0.3430	Ave		0.3429				9.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.2899	0.2516 0.2862	0.2753 0.2899	0.2978	0.2748	Ave		0.2808				5.4		30.0			
methyl isobutyl ketone	+++++ 0.6258	+++++ 0.6062	0.5552 0.6089	0.6395	0.5796	Ave		0.6025				5.1		30.0			
Toluene	+++++ 0.3490	0.3254 0.3390	0.3365 0.3451	0.3598	0.3209	Ave		0.3394				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.6704	0.6758 0.6542	0.6721 0.6491	0.6971	0.6470	Ave		0.6665				2.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.3056	0.3199 0.3009	0.3224 0.3061	0.3225	0.2878	Ave		0.3093				4.2		30.0			
1,1,2-Trichloroethane	+++++ 0.1827	0.1617 0.1763	0.1733 0.1796	0.1888	0.1705	Ave		0.1761				5.0		30.0			
Tetrachloroethene	0.2487 0.2439	0.2308 0.2319	0.2457 0.2380	0.2591	0.2268	Ave		0.2406				4.5		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6215	+++++ 0.5923	0.5338 0.6065	0.6244	0.5480	Ave		0.5878				6.5		30.0			
Dibromochloromethane	+++++ 0.3045	0.2191 0.2947	0.2625 0.2957	0.3155	0.2712	Ave		0.2805				11.7		30.0			
1,2-Dibromoethane	+++++ 0.2952	0.2592 0.2874	0.2733 0.2923	0.3054	0.2747	Ave		0.2840				5.5		30.0			
Chlorobenzene	+++++ 0.4242	0.4065 0.4106	0.4232 0.4211	0.4493	0.3948	Ave		0.4185				4.1		30.0			
Ethylbenzene	+++++ 0.8016	0.6959 0.7817	0.7440 0.7993	0.8270	0.7461	Ave		0.7708				5.8		30.0			
n-Nonane	+++++ 0.5097	0.4745 0.4967	0.4886 0.5073	0.5272	0.4742	Ave		0.4969				3.9		30.0			
m,p-Xylene	+++++ 0.3004	0.2567 0.2935	0.2726 0.3042	0.3132	0.2814	Ave		0.2889				6.8		30.0			
Xylene, o-	+++++ 0.2931	0.2483 0.2831	0.2668 0.2928	0.3015	0.2726	Ave		0.2797				6.6		30.0			
Styrene	+++++ 0.4762	0.3624 0.4621	0.3749 0.4830	0.4661	0.4314	Ave		0.4366				11.3		30.0			
Bromoform	+++++ 0.2787	0.1594 0.2660	0.2147 0.2607	0.2964	0.2206	Ave		0.2423				19.4		30.0			
Cumene	+++++ 0.8583	0.7309 0.8305	0.7973 0.8522	0.8833	0.8041	Ave		0.8224				6.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.4552	0.4391 0.4718	0.4494 0.4871	0.5036	0.4576	Ave		0.4663				4.9		30.0			
n-Propylbenzene	+++++ 1.1347	0.9665 1.1065	1.0085 1.1416	1.1601	1.0568	Ave		1.0821				6.8		30.0			
1,2,3-Trichloropropane	+++++ 0.4133	+++++ 0.4029	0.4092 0.4199	0.4194	0.3822	Ave		0.4078				3.5		30.0			
4-Ethyltoluene	+++++ 0.9112	0.7405 0.8872	0.7684 0.9085	0.9126	0.8385	Ave		0.8524				8.5		30.0			
2-Chlorotoluene	+++++ 0.8180	0.6685 0.7949	0.6914 0.8136	0.8183	0.7536	Ave		0.7655				8.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Decane	+++++ 0.7217	+++++ 0.6923	0.6285 0.6783	0.7180	0.6632	Ave		0.6836				5.1		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7393	0.5924 0.7145	0.6443 0.7450	0.7471	0.6826	Ave		0.6950				8.5		30.0			
Alpha Methyl Styrene	+++++ 0.3521	0.2429 0.3397	0.2638 0.3559	0.3465	0.3125	Ave		0.3162				14.4		30.0			
tert-Butylbenzene	+++++ 0.6656	0.5430 0.6416	0.5860 0.6704	0.6853	0.6223	Ave		0.6306				8.1		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7597	0.5994 0.7275	0.6409 0.7604	0.7715	0.7011	Ave		0.7086				9.3		30.0			
sec-Butylbenzene	+++++ 1.0907	0.8763 1.0440	0.9628 1.0945	1.1163	1.0121	Ave		1.0281				8.3		30.0			
4-Isopropyltoluene	+++++ 0.8932	0.7038 0.8496	0.7619 0.9170	0.9022	0.8200	Ave		0.8354				9.5		30.0			
1,3-Dichlorobenzene	+++++ 0.4847	0.4306 0.4624	0.4260 0.4886	0.4902	0.4473	Ave		0.4614				5.9		30.0			
1,4-Dichlorobenzene	+++++ 0.4718	0.4527 0.4435	0.4376 0.4740	0.4779	0.4335	Ave		0.4559				4.1		30.0			
Benzyl chloride	+++++ 0.7273	0.5215 0.6980	0.6500 0.7587	0.7109	0.6541	Ave		0.6743				11.5		30.0			
n-Butylbenzene	+++++ 0.9238	0.8380 0.8659	0.8046 0.9486	0.9453	0.8598	Ave		0.8837				6.3		30.0			
n-Undecane	+++++ 0.7361	+++++ 0.6948	+++++ 0.7480	0.7700	0.6846	Ave		0.7267				5.0		30.0			
1,2-Dichlorobenzene	+++++ 0.4449	0.4082 0.4161	0.3969 0.4496	0.4609	0.4128	Ave		0.4271				5.7		30.0			
n-Dodecane	+++++ 0.6323	+++++ 0.5489	+++++ 0.5726	0.6234	0.5826	Ave		0.5920				5.9		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3361	+++++ 0.3048	0.3264 0.3392	0.3154	0.2941	Ave		0.3193				5.6		30.0			
Hexachlorobutadiene	+++++ 0.2846	0.2622 0.2654	0.2800 0.2801	0.3042	0.2620	Ave		0.2769				5.5		30.0			
Naphthalene	+++++ 0.7799	+++++ 0.6364	0.7646 0.7503	0.6132	0.6684	Ave		0.7021				10.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3033	+++++ 0.2618	0.3061 0.2850	0.2791	0.2628	Ave		0.2830				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 353877	+++++ 483509	+++++ 977093	113320	219919	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 719635	+++++ 1037247	18687 2284982	231333	495574	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 622275	+++++ 857341	18746 1754621	201404	380532	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 745451	9367 1040162	21846 2184022	238840	460250	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 352245	+++++ 491783	11453 1001236	113130	217772	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 673810	+++++ 928248	23979 1877345	217861	413839	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1048 345103	4643 475347	10535 977107	109960	214158	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	692 284179	3719 392412	8057 797535	90563	173842	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 258695	3306 363007	7492 753745	82055	158565	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 155858	+++++ 216212	4444 447266	47617	93699	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 417703	5838 575987	13019 1167693	130997	252052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 238327	2983 336507	6597 706387	73318	140295	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 675219	8052 953592	19413 1977174	211971	405947	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 658866	+++++ 918273	21515 1880686	206987	395841	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 223240	+++++ 440445	37568 1091690	102428	128897	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 210816	2556 297361	5845 612700	65771	125749	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97011	+++++ 126806	+++++ 252930	29892	60161	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 478477	5799 672696	13512 1418425	152379	287885	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	530 231450	2847 326020	6737 686398	73934	139063	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 605870	+++++ 851583	+++++ 1726650	201808	370824	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 720496	+++++ 1017035	21216 2104138	229309	435588	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 666734	+++++ 907558	+++++ 1858919	209222	420388	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 518407	6723 625630	15338 1310825	165352	282882	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 314750	+++++ 439448	+++++ 887788	98750	194856	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 410731	+++++ 569402	11944 1168766	129262	247353	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 752941	+++++ 1042044	+++++ 2153957	234889	460516	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 856853	10203 1201499	23508 2484537	266590	511570	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 462081	5876 654055	13528 1340400	146832	279770	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 249171	+++++ 351178	7387 724576	78010	149428	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 493533	7627 690644	15739 1411080	155042	295148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1432 595053	7314 834343	17358 1728738	185369	356405	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1108031	+++++ 1557692	+++++ 3141483	344229	658677	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	698 287077	3511 402541	8243 842126	93347	172552	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 155899	+++++ 219661	4370 456166	49585	93775	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 21734	+++++ 30682	+++++ 64640	6694	13289	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 562442	+++++ 785803	+++++ 1590949	176657	341073	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 628050	7666 890256	17925 1859003	198780	378841	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 393823	4821 556920	11303 1165069	125086	234424	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 621615	7486 876321	17368 1844982	194948	370397	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1154 574398	6078 826964	15737 1741803	182037	352691	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1962084	24490 2782697	53376 5804651	594960	1159654	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 990941	12966 1408757	28684 2967508	305871	588244	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 509002	6123 714770	14199 1505338	155700	302793	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 954467	13492 1347004	28070 2785284	290860	566249	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 268047	+++++ 377356	+++++ 825710	80287	166893	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1164 431632	5151 578895	11138 1240808	125178	240170	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 446206	5677 642017	12311 1360263	136361	266899	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 410746	+++++ 591854	9721 1278411	119113	236888	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 205342	+++++ 284662	+++++ 613215	65816	127498	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 338436	4206 488358	9889 1066627	105056	204827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 768223	7771 1094617	19425 2336166	231011	450139	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 614747	6996 878639	16385 1882847	184539	360714	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1327292	+++++ 1860626	33045 3955208	396322	760764	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 724707	8845 1028583	20013 2206609	220025	427318	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1421753	18788 2008006	40001 4216481	432046	849145	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 648118	8894 923500	19188 1988086	199847	377682	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 379306	4396 534768	10309 1148428	115450	227011	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1344 506522	6273 703705	14615 1521882	158427	302018	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1290630	+++++ 1796945	31752 3878692	381761	729662	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 632364	5954 894163	15616 1891119	192925	361052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 613021	7044 872076	16259 1869551	186748	365767	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 880833	11049 1245781	25172 2692702	274701	525599	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 1664681	18915 2371508	44251 5111609	505656	993414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1058360	12895 1506922	29064 3244294	322334	631437	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1247595	13952 1780646	32432 3890932	383015	749442	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 608732	6749 858753	15872 1872597	184343	362908	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 988897	9849 1401893	22300 3088981	285003	574359	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 578705	4332 807109	12773 1666980	181205	293658	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 1782391	19864 2519760	47427 5449466	540065	1070589	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 945272	11935 1431429	26731 3114692	307934	609279	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2356358	26267 3356883	59987 7300756	709322	1407056	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 858266	+++++ 1222340	24341 2685226	256414	508920	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 1892216	20126 2691531	45708 5809594	557993	1116469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1698746	18168 2411519	41127 5203188	500344	1003366	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1498628	+++++ 2100262	37383 4337795	438992	882978	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1535305	16101 2167805	38325 4764065	456808	908890	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 731154	6602 1030534	15690 2275903	211838	416148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1382193	14757 1946514	34858 4287142	419011	828515	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42621-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1577522	16291 2207208	38120 4862877	471711	933500	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2265025	23817 3167373	57269 6999017	682554	1347612	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 1854890	19129 2577509	45320 5863967	551645	1091844	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1006513	11703 1402778	25338 3124432	299725	595511	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 979815	12304 1345440	26031 3031052	292182	577188	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1510235	14174 2117632	38662 4851619	434676	870855	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 1918386	22775 2626905	47861 6066478	577987	1144745	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1528664	+++++ 2108069	+++++ 4783728	470826	911535	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 923941	11094 1262347	23609 2875290	281843	549672	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1312980	+++++ 1665407	+++++ 3661884	381167	775656	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 697956	+++++ 924755	19412 2169339	192828	391570	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 590923	7125 805175	16655 1791455	186030	348905	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1619614	+++++ 1930679	45477 4798312	374943	889926	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 629903	+++++ 794240	18205 1822818	170627	349922	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.8870	+++++ 0.8392	+++++ 0.7895	0.9364	0.8702	Ave		0.8645				6.3		30.0			
Dichlorodifluoromethane	+++++ 1.8038	+++++ 1.8004	1.5839 1.8463	1.9116	1.9609	Ave		1.8178				7.2		30.0			
Freon 22	+++++ 1.5598	+++++ 1.4881	1.5889 1.4177	1.6643	1.5057	Ave		1.5374				5.6		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.8686	1.7415 1.8055	1.8516 1.7647	1.9736	1.8211	Ave		1.8324				4.2		30.0			
Chloromethane	+++++ 0.8829	+++++ 0.8536	0.9707 0.8090	0.9348	0.8617	Ave		0.8855				6.6		30.0			
n-Butane	+++++ 1.6890	+++++ 1.6112	2.0324 1.5169	1.8003	1.6375	Ave		1.7145				10.6		30.0			
Vinyl chloride	0.9905 0.8650	0.8632 0.8251	0.8929 0.7895	0.9086	0.8474	Ave		0.8728				6.9		30.0			
1,3-Butadiene	0.6540 0.7123	0.6914 0.6811	0.6829 0.6444	0.7484	0.6879	Ave		0.6878				4.7		30.0			
Bromomethane	+++++ 0.6484	0.6147 0.6301	0.6350 0.6090	0.6781	0.6274	Ave		0.6347				3.6		30.0			
Chloroethane	+++++ 0.3907	+++++ 0.3753	0.3767 0.3614	0.3935	0.3708	Ave		0.3780				3.2		30.0			
Isopentane	+++++ 1.0470	1.0854 0.9998	1.1035 0.9435	1.0825	0.9973	Ave		1.0370				5.7		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.5974	0.5546 0.5841	0.5591 0.5708	0.6059	0.5551	Ave		0.5753				3.6		30.0			
Trichlorofluoromethane	+++++ 1.6925	1.4970 1.6552	1.6454 1.5976	1.7516	1.6063	Ave		1.6351				4.9		30.0			
n-Pentane	+++++ 1.6515	+++++ 1.5939	1.8235 1.5196	1.7104	1.5663	Ave		1.6442				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4188	+++++ 0.3822	0.3180 0.3528	0.4229	0.3399	Ave		0.3724				11.5		30.0			
Ethyl ether	+++++ 0.5284	0.4752 0.5161	0.4954 0.4951	0.5435	0.4976	Ave		0.5073				4.6		30.0			
Acrolein	+++++ 0.2432	+++++ 0.2201	+++++ 0.2044	0.2470	0.2380	Ave		0.2305				7.8		30.0			
Freon TF	+++++ 1.1994	1.0781 1.1676	1.1452 1.1461	1.2592	1.1391	Ave		1.1621				4.8		30.0			
1,1-Dichloroethene	0.5009 0.5802	0.5293 0.5659	0.5710 0.5546	0.6110	0.5503	Ave		0.5579				5.9		30.0			
Acetone	+++++ 1.5187	+++++ 1.4781	+++++ 1.3951	1.6676	1.4673	Ave		1.5054				6.7		30.0			
Carbon disulfide	+++++ 1.8060	+++++ 1.7653	1.7982 1.7002	1.8949	1.7236	Ave		1.7814				3.9		30.0			
Isopropyl alcohol	+++++ 1.6712	+++++ 1.5753	+++++ 1.5020	1.7289	1.6634	Ave		1.6282				5.5		30.0			
3-Chloropropene	+++++ 1.2994	1.2499 1.0859	1.3000 1.0592	1.3664	1.1193	Ave		1.2115				10.0		30.0			
Acetonitrile	+++++ 0.7890	+++++ 0.7628	+++++ 0.7173	0.8160	0.7710	Ave		0.7712				4.7		30.0			
Methylene Chloride	+++++ 1.0295	+++++ 0.9883	1.0123 0.9444	1.0682	0.9787	Ave		1.0036				4.3		30.0			
tert-Butyl alcohol	+++++ 1.8873	+++++ 1.8087	+++++ 1.7404	1.9410	1.8222	Ave		1.8399				4.2		30.0			
Methyl tert-butyl ether	+++++ 2.1478	1.8969 2.0855	1.9925 2.0075	2.2030	2.0242	Ave		2.0511				5.0		30.0			
trans-1,2-Dichloroethene	+++++ 1.1583	1.0925 1.1353	1.1466 1.0831	1.2133	1.1070	Ave		1.1337				4.0		30.0			
Acrylonitrile	+++++ 0.6246	+++++ 0.6096	0.6261 0.5855	0.6446	0.5913	Ave		0.6136				3.7		30.0			
n-Hexane	+++++ 1.2371	1.4180 1.1988	1.3340 1.1402	1.2812	1.1679	Ave		1.2539				7.8		30.0			
1,1-Dichloroethane	1.3535 1.4916	1.3598 1.4482	1.4712 1.3968	1.5318	1.4102	Ave		1.4329				4.4		30.0			
Vinyl acetate	+++++ 2.7774	+++++ 2.7038	+++++ 2.5383	2.8445	2.6063	Ave		2.6941				4.6		30.0			
cis-1,2-Dichloroethene	0.6597 0.7196	0.6528 0.6987	0.6987 0.6804	0.7714	0.6828	Ave		0.6955				5.4		30.0			
Methyl Ethyl Ketone	+++++ 0.3908	+++++ 0.3813	0.3704 0.3686	0.4097	0.3711	Ave		0.3820				4.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0545	+++++ 0.0533	+++++ 0.0522	0.0553	0.0526	Ave		0.0536				2.4		30.0			
Tetrahydrofuran	+++++ 0.2652	+++++ 0.2560	+++++ 0.2449	0.2850	0.2599	Ave		0.2622				5.6		30.0			
Chloroform	+++++ 1.5743	1.4253 1.5453	1.5193 1.5021	1.6426	1.4990	Ave		1.5297				4.4		30.0			
Cyclohexane	+++++ 0.1857	0.1734 0.1814	0.1899 0.1794	0.2018	0.1786	Ave		0.1843				5.1		30.0			
1,1,1-Trichloroethane	+++++ 0.2931	0.2693 0.2855	0.2918 0.2840	0.3146	0.2822	Ave		0.2886				4.8		30.0			
Carbon tetrachloride	0.2112 0.2708	0.2186 0.2694	0.2644 0.2681	0.2937	0.2687	Ave		0.2581				10.9		30.0			
2,2,4-Trimethylpentane	+++++ 0.9251	0.8809 0.9066	0.8968 0.8936	0.9600	0.8835	Ave		0.9066				3.1		30.0			
Benzene	+++++ 0.4672	0.4664 0.4590	0.4819 0.4568	0.4935	0.4482	Ave		0.4676				3.3		30.0			
1,2-Dichloroethane	+++++ 0.2400	0.2202 0.2329	0.2386 0.2317	0.2512	0.2307	Ave		0.2350				4.1		30.0			
n-Heptane	+++++ 0.4500	0.4853 0.4388	0.4716 0.4288	0.4693	0.4314	Ave		0.4536				4.9		30.0			
n-Butanol	+++++ 0.1264	+++++ 0.1229	+++++ 0.1271	0.1295	0.1272	Ave		0.1266				1.9		30.0			
Trichloroethene	0.2130 0.2035	0.1853 0.1886	0.1871 0.1910	0.2020	0.1830	Ave		0.1942				5.5		30.0			
1,2-Dichloropropane	+++++ 0.2104	0.2042 0.2092	0.2068 0.2094	0.2200	0.2033	Ave		0.2091				2.6		30.0			
Methyl methacrylate	+++++ 0.1937	+++++ 0.1928	0.1633 0.1968	0.1922	0.1805	Ave		0.1865				6.8		30.0			
1,4-Dioxane	+++++ 0.0968	+++++ 0.0927	+++++ 0.0944	0.1062	0.0971	Ave		0.0975				5.3		30.0			
Dibromomethane	+++++ 0.1596	0.1513 0.1591	0.1661 0.1642	0.1695	0.1561	Ave		0.1608				3.9		30.0			
Bromodichloromethane	+++++ 0.3622	0.2795 0.3566	0.3264 0.3596	0.3728	0.3430	Ave		0.3429				9.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.2899	0.2516 0.2862	0.2753 0.2899	0.2978	0.2748	Ave		0.2808				5.4		30.0			
methyl isobutyl ketone	+++++ 0.6258	+++++ 0.6062	0.5552 0.6089	0.6395	0.5796	Ave		0.6025				5.1		30.0			
Toluene	+++++ 0.3490	0.3254 0.3390	0.3365 0.3451	0.3598	0.3209	Ave		0.3394				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.6704	0.6758 0.6542	0.6721 0.6491	0.6971	0.6470	Ave		0.6665				2.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.3056	0.3199 0.3009	0.3224 0.3061	0.3225	0.2878	Ave		0.3093				4.2		30.0			
1,1,2-Trichloroethane	+++++ 0.1827	0.1617 0.1763	0.1733 0.1796	0.1888	0.1705	Ave		0.1761				5.0		30.0			
Tetrachloroethene	0.2487 0.2439	0.2308 0.2319	0.2457 0.2380	0.2591	0.2268	Ave		0.2406				4.5		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6215	+++++ 0.5923	0.5338 0.6065	0.6244	0.5480	Ave		0.5878				6.5		30.0			
Dibromochloromethane	+++++ 0.3045	0.2191 0.2947	0.2625 0.2957	0.3155	0.2712	Ave		0.2805				11.7		30.0			
1,2-Dibromoethane	+++++ 0.2952	0.2592 0.2874	0.2733 0.2923	0.3054	0.2747	Ave		0.2840				5.5		30.0			
Chlorobenzene	+++++ 0.4242	0.4065 0.4106	0.4232 0.4211	0.4493	0.3948	Ave		0.4185				4.1		30.0			
Ethylbenzene	+++++ 0.8016	0.6959 0.7817	0.7440 0.7993	0.8270	0.7461	Ave		0.7708				5.8		30.0			
n-Nonane	+++++ 0.5097	0.4745 0.4967	0.4886 0.5073	0.5272	0.4742	Ave		0.4969				3.9		30.0			
m,p-Xylene	+++++ 0.3004	0.2567 0.2935	0.2726 0.3042	0.3132	0.2814	Ave		0.2889				6.8		30.0			
Xylene, o-	+++++ 0.2931	0.2483 0.2831	0.2668 0.2928	0.3015	0.2726	Ave		0.2797				6.6		30.0			
Styrene	+++++ 0.4762	0.3624 0.4621	0.3749 0.4830	0.4661	0.4314	Ave		0.4366				11.3		30.0			
Bromoform	+++++ 0.2787	0.1594 0.2660	0.2147 0.2607	0.2964	0.2206	Ave		0.2423				19.4		30.0			
Cumene	+++++ 0.8583	0.7309 0.8305	0.7973 0.8522	0.8833	0.8041	Ave		0.8224				6.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.4552	0.4391 0.4718	0.4494 0.4871	0.5036	0.4576	Ave		0.4663				4.9		30.0			
n-Propylbenzene	+++++ 1.1347	0.9665 1.1065	1.0085 1.1416	1.1601	1.0568	Ave		1.0821				6.8		30.0			
1,2,3-Trichloropropane	+++++ 0.4133	+++++ 0.4029	0.4092 0.4199	0.4194	0.3822	Ave		0.4078				3.5		30.0			
4-Ethyltoluene	+++++ 0.9112	0.7405 0.8872	0.7684 0.9085	0.9126	0.8385	Ave		0.8524				8.5		30.0			
2-Chlorotoluene	+++++ 0.8180	0.6685 0.7949	0.6914 0.8136	0.8183	0.7536	Ave		0.7655				8.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Decane	+++++ 0.7217	+++++ 0.6923	0.6285 0.6783	0.7180	0.6632	Ave		0.6836				5.1		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7393	0.5924 0.7145	0.6443 0.7450	0.7471	0.6826	Ave		0.6950				8.5		30.0			
Alpha Methyl Styrene	+++++ 0.3521	0.2429 0.3397	0.2638 0.3559	0.3465	0.3125	Ave		0.3162				14.4		30.0			
tert-Butylbenzene	+++++ 0.6656	0.5430 0.6416	0.5860 0.6704	0.6853	0.6223	Ave		0.6306				8.1		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7597	0.5994 0.7275	0.6409 0.7604	0.7715	0.7011	Ave		0.7086				9.3		30.0			
sec-Butylbenzene	+++++ 1.0907	0.8763 1.0440	0.9628 1.0945	1.1163	1.0121	Ave		1.0281				8.3		30.0			
4-Isopropyltoluene	+++++ 0.8932	0.7038 0.8496	0.7619 0.9170	0.9022	0.8200	Ave		0.8354				9.5		30.0			
1,3-Dichlorobenzene	+++++ 0.4847	0.4306 0.4624	0.4260 0.4886	0.4902	0.4473	Ave		0.4614				5.9		30.0			
1,4-Dichlorobenzene	+++++ 0.4718	0.4527 0.4435	0.4376 0.4740	0.4779	0.4335	Ave		0.4559				4.1		30.0			
Benzyl chloride	+++++ 0.7273	0.5215 0.6980	0.6500 0.7587	0.7109	0.6541	Ave		0.6743				11.5		30.0			
n-Butylbenzene	+++++ 0.9238	0.8380 0.8659	0.8046 0.9486	0.9453	0.8598	Ave		0.8837				6.3		30.0			
n-Undecane	+++++ 0.7361	+++++ 0.6948	+++++ 0.7480	0.7700	0.6846	Ave		0.7267				5.0		30.0			
1,2-Dichlorobenzene	+++++ 0.4449	0.4082 0.4161	0.3969 0.4496	0.4609	0.4128	Ave		0.4271				5.7		30.0			
n-Dodecane	+++++ 0.6323	+++++ 0.5489	+++++ 0.5726	0.6234	0.5826	Ave		0.5920				5.9		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3361	+++++ 0.3048	0.3264 0.3392	0.3154	0.2941	Ave		0.3193				5.6		30.0			
Hexachlorobutadiene	+++++ 0.2846	0.2622 0.2654	0.2800 0.2801	0.3042	0.2620	Ave		0.2769				5.5		30.0			
Naphthalene	+++++ 0.7799	+++++ 0.6364	0.7646 0.7503	0.6132	0.6684	Ave		0.7021				10.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3033	+++++ 0.2618	0.3061 0.2850	0.2791	0.2628	Ave		0.2830				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-125830/3	28916_03.D
Level 2	IC 200-125830/4	28916_04.D
Level 3	IC 200-125830/6	28916_06.D
Level 4	IC 200-125830/8	28916_08.D
Level 5	ICIS 200-125830/9	28916_09.D
Level 6	IC 200-125830/10	28916_10.D
Level 7	IC 200-125830/11	28916_11.D
Level 8	IC 200-125830/12	28916_12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 353877	+++++ 483509	+++++ 977093	113320	219919	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 719635	+++++ 1037247	18687 2284982	231333	495574	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 622275	+++++ 857341	18746 1754621	201404	380532	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 745451	9367 1040162	21846 2184022	238840	460250	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 352245	+++++ 491783	11453 1001236	113130	217772	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 673810	+++++ 928248	23979 1877345	217861	413839	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1048 345103	4643 475347	10535 977107	109960	214158	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	692 284179	3719 392412	8057 797535	90563	173842	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 258695	3306 363007	7492 753745	82055	158565	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 155858	+++++ 216212	4444 447266	47617	93699	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 417703	5838 575987	13019 1167693	130997	252052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 238327	2983 336507	6597 706387	73318	140295	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 675219	8052 953592	19413 1977174	211971	405947	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 658866	+++++ 918273	21515 1880686	206987	395841	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 223240	+++++ 440445	37568 1091690	102428	128897	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 210816	2556 297361	5845 612700	65771	125749	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97011	+++++ 126806	+++++ 252930	29892	60161	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 478477	5799 672696	13512 1418425	152379	287885	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	530 231450	2847 326020	6737 686398	73934	139063	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 605870	+++++ 851583	+++++ 1726650	201808	370824	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 720496	+++++ 1017035	21216 2104138	229309	435588	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 666734	+++++ 907558	+++++ 1858919	209222	420388	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 518407	6723 625630	15338 1310825	165352	282882	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 314750	+++++ 439448	+++++ 887788	98750	194856	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 410731	+++++ 569402	11944 1168766	129262	247353	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 752941	+++++ 1042044	+++++ 2153957	234889	460516	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 856853	10203 1201499	23508 2484537	266590	511570	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 462081	5876 654055	13528 1340400	146832	279770	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 249171	+++++ 351178	7387 724576	78010	149428	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 493533	7627 690644	15739 1411080	155042	295148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1432 595053	7314 834343	17358 1728738	185369	356405	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1108031	+++++ 1557692	+++++ 3141483	344229	658677	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	698 287077	3511 402541	8243 842126	93347	172552	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 155899	+++++ 219661	4370 456166	49585	93775	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 21734	+++++ 30682	+++++ 64640	6694	13289	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 562442	+++++ 785803	+++++ 1590949	176657	341073	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 628050	7666 890256	17925 1859003	198780	378841	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 393823	4821 556920	11303 1165069	125086	234424	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 621615	7486 876321	17368 1844982	194948	370397	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1154 574398	6078 826964	15737 1741803	182037	352691	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1962084	24490 2782697	53376 5804651	594960	1159654	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 990941	12966 1408757	28684 2967508	305871	588244	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 509002	6123 714770	14199 1505338	155700	302793	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 954467	13492 1347004	28070 2785284	290860	566249	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 268047	+++++ 377356	+++++ 825710	80287	166893	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1164 431632	5151 578895	11138 1240808	125178	240170	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 446206	5677 642017	12311 1360263	136361	266899	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 410746	+++++ 591854	9721 1278411	119113	236888	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 205342	+++++ 284662	+++++ 613215	65816	127498	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 338436	4206 488358	9889 1066627	105056	204827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 768223	7771 1094617	19425 2336166	231011	450139	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 614747	6996 878639	16385 1882847	184539	360714	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1327292	+++++ 1860626	33045 3955208	396322	760764	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 724707	8845 1028583	20013 2206609	220025	427318	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1421753	18788 2008006	40001 4216481	432046	849145	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 648118	8894 923500	19188 1988086	199847	377682	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 379306	4396 534768	10309 1148428	115450	227011	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1344 506522	6273 703705	14615 1521882	158427	302018	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1290630	+++++ 1796945	31752 3878692	381761	729662	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 632364	5954 894163	15616 1891119	192925	361052	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 613021	7044 872076	16259 1869551	186748	365767	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 880833	11049 1245781	25172 2692702	274701	525599	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 1664681	18915 2371508	44251 5111609	505656	993414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1058360	12895 1506922	29064 3244294	322334	631437	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1247595	13952 1780646	32432 3890932	383015	749442	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 608732	6749 858753	15872 1872597	184343	362908	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 988897	9849 1401893	22300 3088981	285003	574359	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 578705	4332 807109	12773 1666980	181205	293658	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 1782391	19864 2519760	47427 5449466	540065	1070589	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 945272	11935 1431429	26731 3114692	307934	609279	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2356358	26267 3356883	59987 7300756	709322	1407056	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 858266	+++++ 1222340	24341 2685226	256414	508920	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 1892216	20126 2691531	45708 5809594	557993	1116469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1698746	18168 2411519	41127 5203188	500344	1003366	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1498628	+++++ 2100262	37383 4337795	438992	882978	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1535305	16101 2167805	38325 4764065	456808	908890	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 731154	6602 1030534	15690 2275903	211838	416148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1382193	14757 1946514	34858 4287142	419011	828515	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-42622-1 Analy Batch No.: 125830

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/25/2018 17:38 Calibration End Date: 01/26/2018 01:35 Calibration ID: 38779

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1577522	16291 2207208	38120 4862877	471711	933500	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2265025	23817 3167373	57269 6999017	682554	1347612	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 1854890	19129 2577509	45320 5863967	551645	1091844	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1006513	11703 1402778	25338 3124432	299725	595511	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 979815	12304 1345440	26031 3031052	292182	577188	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1510235	14174 2117632	38662 4851619	434676	870855	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 1918386	22775 2626905	47861 6066478	577987	1144745	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1528664	+++++ 2108069	+++++ 4783728	470826	911535	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 923941	11094 1262347	23609 2875290	281843	549672	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1312980	+++++ 1665407	+++++ 3661884	381167	775656	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 697956	+++++ 924755	19412 2169339	192828	391570	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 590923	7125 805175	16655 1791455	186030	348905	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1619614	+++++ 1930679	45477 4798312	374943	889926	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 629903	+++++ 794240	18205 1822818	170627	349922	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	0.6961		8.05	10.0	-19.5	30.0
Dichlorodifluoromethane	Ave	1.818	1.676		9.22	10.0	-7.8	30.0
Freon 22	Ave	1.537	1.318		8.57	10.0	-14.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	1.905		10.4	10.0	4.0	30.0
Chloromethane	Ave	0.8855	0.7697		8.69	10.0	-13.1	30.0
n-Butane	Ave	1.715	1.469		8.57	10.0	-14.3	30.0
Vinyl chloride	Ave	0.8728	0.7758		8.89	10.0	-11.1	30.0
1,3-Butadiene	Ave	0.6878	0.6223		9.05	10.0	-9.5	30.0
Bromomethane	Ave	0.6347	0.5988		9.43	10.0	-5.7	30.0
Chloroethane	Ave	0.3780	0.3538		9.36	10.0	-6.4	30.0
Isopentane	Ave	1.037	0.9887		9.53	10.0	-4.7	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5485		9.53	10.0	-4.7	30.0
Trichlorofluoromethane	Ave	1.635	1.468		8.98	10.0	-10.2	30.0
n-Pentane	Ave	1.644	1.625		9.88	10.0	-1.2	30.0
Ethanol	Ave	0.3724	0.2731		11.0	15.0	-26.7	30.0
Ethyl ether	Ave	0.5073	0.5391		10.6	10.0	6.3	30.0
Acrolein	Ave	0.2305	0.2749		11.9	10.0	19.2	30.0
Freon TF	Ave	1.162	1.124		9.67	10.0	-3.2	30.0
1,1-Dichloroethene	Ave	0.5579	0.5374		9.63	10.0	-3.7	30.0
Acetone	Ave	1.505	1.424		9.46	10.0	-5.4	30.0
Carbon disulfide	Ave	1.781	1.939		10.9	10.0	8.8	30.0
Isopropyl alcohol	Ave	1.628	1.364		8.38	10.0	-16.2	30.0
3-Chloropropene	Ave	1.211	1.136		9.38	10.0	-6.2	30.0
Acetonitrile	Ave	0.7712	0.7415		9.61	10.0	-3.9	30.0
Methylene Chloride	Ave	1.004	0.9105		9.07	10.0	-9.3	30.0
tert-Butyl alcohol	Ave	1.840	1.626		8.84	10.0	-11.6	30.0
Methyl tert-butyl ether	Ave	2.051	1.935		9.43	10.0	-5.7	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.118		9.86	10.0	-1.4	30.0
Acrylonitrile	Ave	0.6136	0.6007		9.79	10.0	-2.1	30.0
n-Hexane	Ave	1.254	1.222		9.74	10.0	-2.6	30.0
1,1-Dichloroethane	Ave	1.433	1.363		9.51	10.0	-4.9	30.0
Vinyl acetate	Ave	2.694	2.591		9.62	10.0	-3.8	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.6659		9.57	10.0	-4.3	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.3655		9.57	10.0	-4.3	30.0
Ethyl acetate	Ave	0.0536	0.0563		10.5	10.0	5.2	30.0
Tetrahydrofuran	Ave	0.2622	0.2441		9.31	10.0	-6.9	30.0
Chloroform	Ave	1.530	1.430		9.35	10.0	-6.5	30.0
Cyclohexane	Ave	0.1843	0.1785		9.68	10.0	-3.2	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.2662		9.22	10.0	-7.8	30.0
Carbon tetrachloride	Ave	0.2581	0.2550		9.88	10.0	-1.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	0.8561		9.44	10.0	-5.6	30.0
Benzene	Ave	0.4676	0.4428		9.47	10.0	-5.3	30.0
1,2-Dichloroethane	Ave	0.2350	0.2165		9.21	10.0	-7.9	30.0
n-Heptane	Ave	0.4536	0.4073		8.98	10.0	-10.2	30.0
n-Butanol	Ave	0.1266	0.1366		10.8	10.0	7.9	30.0
Trichloroethene	Ave	0.1942	0.1785		9.19	10.0	-8.1	30.0
1,2-Dichloropropane	Ave	0.2091	0.1925		9.21	10.0	-7.9	30.0
Methyl methacrylate	Ave	0.1865	0.1810		9.70	10.0	-3.0	30.0
1,4-Dioxane	Ave	0.0975	0.0920		9.43	10.0	-5.6	30.0
Dibromomethane	Ave	0.1608	0.1465		9.10	10.0	-8.9	30.0
Bromodichloromethane	Ave	0.3429	0.3230		9.42	10.0	-5.8	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.2682		9.55	10.0	-4.5	30.0
methyl isobutyl ketone	Ave	0.6025	0.5432		9.01	10.0	-9.9	30.0
Toluene	Ave	0.3394	0.3255		9.59	10.0	-4.1	30.0
n-Octane	Ave	0.6665	0.5999		9.00	10.0	-10.0	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.2822		9.12	10.0	-8.8	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1693		9.61	10.0	-3.8	30.0
Tetrachloroethene	Ave	0.2406	0.2298		9.55	10.0	-4.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.5515		9.38	10.0	-6.2	30.0
Dibromochloromethane	Ave	0.2805	0.2741		9.77	10.0	-2.3	30.0
1,2-Dibromoethane	Ave	0.2840	0.2708		9.54	10.0	-4.6	30.0
Chlorobenzene	Ave	0.4185	0.3928		9.38	10.0	-6.2	30.0
Ethylbenzene	Ave	0.7708	0.7226		9.37	10.0	-6.3	30.0
n-Nonane	Ave	0.4969	0.4608		9.27	10.0	-7.3	30.0
m,p-Xylene	Ave	0.2889	0.2697		18.7	20.0	-6.6	30.0
Xylene, o-	Ave	0.2797	0.2577		9.21	10.0	-7.9	30.0
Styrene	Ave	0.4366	0.4156		9.52	10.0	-4.8	30.0
Bromoform	Ave	0.2423	0.2677		11.0	10.0	10.5	30.0
Cumene	Ave	0.8224	0.7529		9.15	10.0	-8.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4335		9.29	10.0	-7.0	30.0
n-Propylbenzene	Ave	1.082	0.9729		8.99	10.0	-10.1	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.3502		8.59	10.0	-14.1	30.0
4-Ethyltoluene	Ave	0.8524	0.7887		9.25	10.0	-7.5	30.0
2-Chlorotoluene	Ave	0.7655	0.6824		8.91	10.0	-10.9	30.0
n-Decane	Ave	0.6836	0.6015		8.80	10.0	-12.0	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.6320		9.09	10.0	-9.1	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3002		9.49	10.0	-5.1	30.0
tert-Butylbenzene	Ave	0.6306	0.5670		8.99	10.0	-10.1	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.6323		8.92	10.0	-10.8	30.0
sec-Butylbenzene	Ave	1.028	0.9156		8.90	10.0	-10.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.7444		8.91	10.0	-10.9	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4092		8.87	10.0	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.3984		8.74	10.0	-12.6	30.0
Benzyl chloride	Ave	0.6743	0.5955		8.83	10.0	-11.7	30.0
n-Butylbenzene	Ave	0.8837	0.7626		8.63	10.0	-13.7	30.0
n-Undecane	Ave	0.7267	0.6200		8.53	10.0	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3736		8.75	10.0	-12.5	30.0
n-Dodecane	Ave	0.5920	0.5166		8.73	10.0	-12.7	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2456		7.69	10.0	-23.1	30.0
Hexachlorobutadiene	Ave	0.2769	0.2304		8.32	10.0	-16.8	30.0
Naphthalene	Ave	0.7021	0.5127		7.30	10.0	-27.0	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2048		7.23	10.0	-27.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab Sample ID: CCVIS 200-127266/2 Calibration Date: 03/12/2018 10:51

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29535_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	1.134		13.1	10.0	31.1*	30.0
Dichlorodifluoromethane	Ave	1.818	2.355		13.0	10.0	29.5	30.0
Freon 22	Ave	1.537	1.893		12.3	10.0	23.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	2.100		11.5	10.0	14.6	30.0
Chloromethane	Ave	0.8855	1.057		11.9	10.0	19.4	30.0
n-Butane	Ave	1.715	2.051		12.0	10.0	19.6	30.0
Vinyl chloride	Ave	0.8728	1.005		11.5	10.0	15.1	30.0
1,3-Butadiene	Ave	0.6878	0.8357		12.1	10.0	21.5	30.0
Bromomethane	Ave	0.6347	0.6592		10.4	10.0	3.9	30.0
Chloroethane	Ave	0.3780	0.4127		10.9	10.0	9.2	30.0
Isopentane	Ave	1.037	1.193		11.5	10.0	15.0	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5872		10.2	10.0	2.1	30.0
Trichlorofluoromethane	Ave	1.635	1.901		11.6	10.0	16.3	30.0
n-Pentane	Ave	1.644	1.855		11.3	10.0	12.8	30.0
Ethanol	Ave	0.3724	0.3573		14.4	15.0	-4.1	30.0
Ethyl ether	Ave	0.5073	0.5720		11.3	10.0	12.7	30.0
Acrolein	Ave	0.2305	0.2414		10.5	10.0	4.7	30.0
Freon TF	Ave	1.162	1.234		10.6	10.0	6.2	30.0
1,1-Dichloroethene	Ave	0.5579	0.5945		10.7	10.0	6.6	30.0
Acetone	Ave	1.505	2.112		14.0	10.0	40.3*	30.0
Carbon disulfide	Ave	1.781	1.895		10.6	10.0	6.4	30.0
Isopropyl alcohol	Ave	1.628	1.910		11.7	10.0	17.3	30.0
3-Chloropropene	Ave	1.211	1.362		11.2	10.0	12.5	30.0
Acetonitrile	Ave	0.7712	0.9102		11.8	10.0	18.0	30.0
Methylene Chloride	Ave	1.004	1.165		11.6	10.0	16.1	30.0
tert-Butyl alcohol	Ave	1.840	2.158		11.7	10.0	17.3	30.0
Methyl tert-butyl ether	Ave	2.051	2.364		11.5	10.0	15.2	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.291		11.4	10.0	13.9	30.0
Acrylonitrile	Ave	0.6136	0.6708		10.9	10.0	9.3	30.0
n-Hexane	Ave	1.254	1.340		10.7	10.0	6.8	30.0
1,1-Dichloroethane	Ave	1.433	1.621		11.3	10.0	13.2	30.0
Vinyl acetate	Ave	2.694	3.097		11.5	10.0	14.9	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.7280		10.5	10.0	4.7	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.4203		11.0	10.0	10.0	30.0
Ethyl acetate	Ave	0.0536	0.0552		10.3	10.0	3.1	30.0
Tetrahydrofuran	Ave	0.2622	0.3055		11.7	10.0	16.5	30.0
Chloroform	Ave	1.530	1.700		11.1	10.0	11.1	30.0
Cyclohexane	Ave	0.1843	0.1966		10.7	10.0	6.7	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.3276		11.3	10.0	13.5	30.0
Carbon tetrachloride	Ave	0.2581	0.2547		9.86	10.0	-1.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab Sample ID: CCVIS 200-127266/2 Calibration Date: 03/12/2018 10:51

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29535_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	1.014		11.2	10.0	11.9	30.0
Benzene	Ave	0.4676	0.4903		10.5	10.0	4.9	30.0
1,2-Dichloroethane	Ave	0.2350	0.2861		12.2	10.0	21.7	30.0
n-Heptane	Ave	0.4536	0.5237		11.5	10.0	15.5	30.0
n-Butanol	Ave	0.1266	0.1423		11.2	10.0	12.3	30.0
Trichloroethene	Ave	0.1942	0.1943		10.0	10.0	0.0	30.0
1,2-Dichloropropane	Ave	0.2091	0.2239		10.7	10.0	7.1	30.0
Methyl methacrylate	Ave	0.1865	0.1993		10.7	10.0	6.8	30.0
1,4-Dioxane	Ave	0.0975	0.1024		10.5	10.0	5.1	30.0
Dibromomethane	Ave	0.1608	0.1518		9.44	10.0	-5.6	30.0
Bromodichloromethane	Ave	0.3429	0.3752		10.9	10.0	9.4	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.3020		10.8	10.0	7.6	30.0
methyl isobutyl ketone	Ave	0.6025	0.7382		12.2	10.0	22.5	30.0
Toluene	Ave	0.3394	0.3620		10.7	10.0	6.7	30.0
n-Octane	Ave	0.6665	0.7868		11.8	10.0	18.1	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.3257		10.5	10.0	5.3	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1846		10.5	10.0	4.8	30.0
Tetrachloroethene	Ave	0.2406	0.2354		9.78	10.0	-2.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.7429		12.6	10.0	26.4	30.0
Dibromochloromethane	Ave	0.2805	0.2958		10.5	10.0	5.5	30.0
1,2-Dibromoethane	Ave	0.2840	0.2839		9.99	10.0	-0.0	30.0
Chlorobenzene	Ave	0.4185	0.4179		9.98	10.0	-0.2	30.0
Ethylbenzene	Ave	0.7708	0.8043		10.4	10.0	4.3	30.0
n-Nonane	Ave	0.4969	0.5506		11.1	10.0	10.8	30.0
m,p-Xylene	Ave	0.2889	0.2939		20.3	20.0	1.7	30.0
Xylene, o-	Ave	0.2797	0.2829		10.1	10.0	1.1	30.0
Styrene	Ave	0.4366	0.4521		10.4	10.0	3.5	30.0
Bromoform	Ave	0.2423	0.2591		10.7	10.0	6.9	30.0
Cumene	Ave	0.8224	0.8348		10.1	10.0	1.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4597		9.86	10.0	-1.4	30.0
n-Propylbenzene	Ave	1.082	1.094		10.1	10.0	1.1	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.4063		9.96	10.0	-0.4	30.0
2-Chlorotoluene	Ave	0.7655	0.7743		10.1	10.0	1.2	30.0
4-Ethyltoluene	Ave	0.8524	0.8527		10.0	10.0	0.0	30.0
n-Decane	Ave	0.6836	0.7299		10.7	10.0	6.8	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.6980		10.0	10.0	0.4	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3175		10.0	10.0	0.4	30.0
tert-Butylbenzene	Ave	0.6306	0.6280		9.96	10.0	-0.4	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.7192		10.1	10.0	1.5	30.0
sec-Butylbenzene	Ave	1.028	1.023		9.95	10.0	-0.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Lab Sample ID: CCVIS 200-127266/2 Calibration Date: 03/12/2018 10:51

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29535_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.8250		9.87	10.0	-1.2	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4271		9.25	10.0	-7.4	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.4145		9.09	10.0	-9.1	30.0
Benzyl chloride	Ave	0.6743	0.6832		10.1	10.0	1.3	30.0
n-Butylbenzene	Ave	0.8837	0.8813		9.97	10.0	-0.3	30.0
n-Undecane	Ave	0.7267	0.7446		10.2	10.0	2.5	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3926		9.19	10.0	-8.1	30.0
n-Dodecane	Ave	0.5920	0.6158		10.4	10.0	4.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2746		8.60	10.0	-14.0	30.0
Hexachlorobutadiene	Ave	0.2769	0.2545		9.19	10.0	-8.1	30.0
Naphthalene	Ave	0.7021	0.6218		8.85	10.0	-11.4	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2380		8.41	10.0	-15.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	0.6961		8.05	10.0	-19.5	30.0
Dichlorodifluoromethane	Ave	1.818	1.676		9.22	10.0	-7.8	30.0
Freon 22	Ave	1.537	1.318		8.57	10.0	-14.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	1.905		10.4	10.0	4.0	30.0
Chloromethane	Ave	0.8855	0.7697		8.69	10.0	-13.1	30.0
n-Butane	Ave	1.715	1.469		8.57	10.0	-14.3	30.0
Vinyl chloride	Ave	0.8728	0.7758		8.89	10.0	-11.1	30.0
1,3-Butadiene	Ave	0.6878	0.6223		9.05	10.0	-9.5	30.0
Bromomethane	Ave	0.6347	0.5988		9.43	10.0	-5.7	30.0
Chloroethane	Ave	0.3780	0.3538		9.36	10.0	-6.4	30.0
Isopentane	Ave	1.037	0.9887		9.53	10.0	-4.7	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5485		9.53	10.0	-4.7	30.0
Trichlorofluoromethane	Ave	1.635	1.468		8.98	10.0	-10.2	30.0
n-Pentane	Ave	1.644	1.625		9.88	10.0	-1.2	30.0
Ethanol	Ave	0.3724	0.2731		11.0	15.0	-26.7	30.0
Ethyl ether	Ave	0.5073	0.5391		10.6	10.0	6.3	30.0
Acrolein	Ave	0.2305	0.2749		11.9	10.0	19.2	30.0
Freon TF	Ave	1.162	1.124		9.67	10.0	-3.2	30.0
1,1-Dichloroethene	Ave	0.5579	0.5374		9.63	10.0	-3.7	30.0
Acetone	Ave	1.505	1.424		9.46	10.0	-5.4	30.0
Carbon disulfide	Ave	1.781	1.939		10.9	10.0	8.8	30.0
Isopropyl alcohol	Ave	1.628	1.364		8.38	10.0	-16.2	30.0
3-Chloropropene	Ave	1.211	1.136		9.38	10.0	-6.2	30.0
Acetonitrile	Ave	0.7712	0.7415		9.61	10.0	-3.9	30.0
Methylene Chloride	Ave	1.004	0.9105		9.07	10.0	-9.3	30.0
tert-Butyl alcohol	Ave	1.840	1.626		8.84	10.0	-11.6	30.0
Methyl tert-butyl ether	Ave	2.051	1.935		9.43	10.0	-5.7	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.118		9.86	10.0	-1.4	30.0
Acrylonitrile	Ave	0.6136	0.6007		9.79	10.0	-2.1	30.0
n-Hexane	Ave	1.254	1.222		9.74	10.0	-2.6	30.0
1,1-Dichloroethane	Ave	1.433	1.363		9.51	10.0	-4.9	30.0
Vinyl acetate	Ave	2.694	2.591		9.62	10.0	-3.8	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.6659		9.57	10.0	-4.3	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.3655		9.57	10.0	-4.3	30.0
Ethyl acetate	Ave	0.0536	0.0563		10.5	10.0	5.2	30.0
Tetrahydrofuran	Ave	0.2622	0.2441		9.31	10.0	-6.9	30.0
Chloroform	Ave	1.530	1.430		9.35	10.0	-6.5	30.0
Cyclohexane	Ave	0.1843	0.1785		9.68	10.0	-3.2	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.2662		9.22	10.0	-7.8	30.0
Carbon tetrachloride	Ave	0.2581	0.2550		9.88	10.0	-1.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	0.8561		9.44	10.0	-5.6	30.0
Benzene	Ave	0.4676	0.4428		9.47	10.0	-5.3	30.0
1,2-Dichloroethane	Ave	0.2350	0.2165		9.21	10.0	-7.9	30.0
n-Heptane	Ave	0.4536	0.4073		8.98	10.0	-10.2	30.0
n-Butanol	Ave	0.1266	0.1366		10.8	10.0	7.9	30.0
Trichloroethene	Ave	0.1942	0.1785		9.19	10.0	-8.1	30.0
1,2-Dichloropropane	Ave	0.2091	0.1925		9.21	10.0	-7.9	30.0
Methyl methacrylate	Ave	0.1865	0.1810		9.70	10.0	-3.0	30.0
1,4-Dioxane	Ave	0.0975	0.0920		9.43	10.0	-5.6	30.0
Dibromomethane	Ave	0.1608	0.1465		9.10	10.0	-8.9	30.0
Bromodichloromethane	Ave	0.3429	0.3230		9.42	10.0	-5.8	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.2682		9.55	10.0	-4.5	30.0
methyl isobutyl ketone	Ave	0.6025	0.5432		9.01	10.0	-9.9	30.0
Toluene	Ave	0.3394	0.3255		9.59	10.0	-4.1	30.0
n-Octane	Ave	0.6665	0.5999		9.00	10.0	-10.0	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.2822		9.12	10.0	-8.8	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1693		9.61	10.0	-3.8	30.0
Tetrachloroethene	Ave	0.2406	0.2298		9.55	10.0	-4.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.5515		9.38	10.0	-6.2	30.0
Dibromochloromethane	Ave	0.2805	0.2741		9.77	10.0	-2.3	30.0
1,2-Dibromoethane	Ave	0.2840	0.2708		9.54	10.0	-4.6	30.0
Chlorobenzene	Ave	0.4185	0.3928		9.38	10.0	-6.2	30.0
Ethylbenzene	Ave	0.7708	0.7226		9.37	10.0	-6.3	30.0
n-Nonane	Ave	0.4969	0.4608		9.27	10.0	-7.3	30.0
m,p-Xylene	Ave	0.2889	0.2697		18.7	20.0	-6.6	30.0
Xylene, o-	Ave	0.2797	0.2577		9.21	10.0	-7.9	30.0
Styrene	Ave	0.4366	0.4156		9.52	10.0	-4.8	30.0
Bromoform	Ave	0.2423	0.2677		11.0	10.0	10.5	30.0
Cumene	Ave	0.8224	0.7529		9.15	10.0	-8.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4335		9.29	10.0	-7.0	30.0
n-Propylbenzene	Ave	1.082	0.9729		8.99	10.0	-10.1	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.3502		8.59	10.0	-14.1	30.0
4-Ethyltoluene	Ave	0.8524	0.7887		9.25	10.0	-7.5	30.0
2-Chlorotoluene	Ave	0.7655	0.6824		8.91	10.0	-10.9	30.0
n-Decane	Ave	0.6836	0.6015		8.80	10.0	-12.0	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.6320		9.09	10.0	-9.1	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3002		9.49	10.0	-5.1	30.0
tert-Butylbenzene	Ave	0.6306	0.5670		8.99	10.0	-10.1	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.6323		8.92	10.0	-10.8	30.0
sec-Butylbenzene	Ave	1.028	0.9156		8.90	10.0	-10.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.7444		8.91	10.0	-10.9	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4092		8.87	10.0	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.3984		8.74	10.0	-12.6	30.0
Benzyl chloride	Ave	0.6743	0.5955		8.83	10.0	-11.7	30.0
n-Butylbenzene	Ave	0.8837	0.7626		8.63	10.0	-13.7	30.0
n-Undecane	Ave	0.7267	0.6200		8.53	10.0	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3736		8.75	10.0	-12.5	30.0
n-Dodecane	Ave	0.5920	0.5166		8.73	10.0	-12.7	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2456		7.69	10.0	-23.1	30.0
Hexachlorobutadiene	Ave	0.2769	0.2304		8.32	10.0	-16.8	30.0
Naphthalene	Ave	0.7021	0.5127		7.30	10.0	-27.0	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2048		7.23	10.0	-27.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab Sample ID: CCVIS 200-127266/2 Calibration Date: 03/12/2018 10:51

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29535_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	1.134		13.1	10.0	31.1*	30.0
Dichlorodifluoromethane	Ave	1.818	2.355		13.0	10.0	29.5	30.0
Freon 22	Ave	1.537	1.893		12.3	10.0	23.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	2.100		11.5	10.0	14.6	30.0
Chloromethane	Ave	0.8855	1.057		11.9	10.0	19.4	30.0
n-Butane	Ave	1.715	2.051		12.0	10.0	19.6	30.0
Vinyl chloride	Ave	0.8728	1.005		11.5	10.0	15.1	30.0
1,3-Butadiene	Ave	0.6878	0.8357		12.1	10.0	21.5	30.0
Bromomethane	Ave	0.6347	0.6592		10.4	10.0	3.9	30.0
Chloroethane	Ave	0.3780	0.4127		10.9	10.0	9.2	30.0
Isopentane	Ave	1.037	1.193		11.5	10.0	15.0	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5872		10.2	10.0	2.1	30.0
Trichlorofluoromethane	Ave	1.635	1.901		11.6	10.0	16.3	30.0
n-Pentane	Ave	1.644	1.855		11.3	10.0	12.8	30.0
Ethanol	Ave	0.3724	0.3573		14.4	15.0	-4.1	30.0
Ethyl ether	Ave	0.5073	0.5720		11.3	10.0	12.7	30.0
Acrolein	Ave	0.2305	0.2414		10.5	10.0	4.7	30.0
Freon TF	Ave	1.162	1.234		10.6	10.0	6.2	30.0
1,1-Dichloroethene	Ave	0.5579	0.5945		10.7	10.0	6.6	30.0
Acetone	Ave	1.505	2.112		14.0	10.0	40.3*	30.0
Carbon disulfide	Ave	1.781	1.895		10.6	10.0	6.4	30.0
Isopropyl alcohol	Ave	1.628	1.910		11.7	10.0	17.3	30.0
3-Chloropropene	Ave	1.211	1.362		11.2	10.0	12.5	30.0
Acetonitrile	Ave	0.7712	0.9102		11.8	10.0	18.0	30.0
Methylene Chloride	Ave	1.004	1.165		11.6	10.0	16.1	30.0
tert-Butyl alcohol	Ave	1.840	2.158		11.7	10.0	17.3	30.0
Methyl tert-butyl ether	Ave	2.051	2.364		11.5	10.0	15.2	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.291		11.4	10.0	13.9	30.0
Acrylonitrile	Ave	0.6136	0.6708		10.9	10.0	9.3	30.0
n-Hexane	Ave	1.254	1.340		10.7	10.0	6.8	30.0
1,1-Dichloroethane	Ave	1.433	1.621		11.3	10.0	13.2	30.0
Vinyl acetate	Ave	2.694	3.097		11.5	10.0	14.9	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.7280		10.5	10.0	4.7	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.4203		11.0	10.0	10.0	30.0
Ethyl acetate	Ave	0.0536	0.0552		10.3	10.0	3.1	30.0
Tetrahydrofuran	Ave	0.2622	0.3055		11.7	10.0	16.5	30.0
Chloroform	Ave	1.530	1.700		11.1	10.0	11.1	30.0
Cyclohexane	Ave	0.1843	0.1966		10.7	10.0	6.7	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.3276		11.3	10.0	13.5	30.0
Carbon tetrachloride	Ave	0.2581	0.2547		9.86	10.0	-1.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab Sample ID: CCVIS 200-127266/2 Calibration Date: 03/12/2018 10:51

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29535_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	1.014		11.2	10.0	11.9	30.0
Benzene	Ave	0.4676	0.4903		10.5	10.0	4.9	30.0
1,2-Dichloroethane	Ave	0.2350	0.2861		12.2	10.0	21.7	30.0
n-Heptane	Ave	0.4536	0.5237		11.5	10.0	15.5	30.0
n-Butanol	Ave	0.1266	0.1423		11.2	10.0	12.3	30.0
Trichloroethene	Ave	0.1942	0.1943		10.0	10.0	0.0	30.0
1,2-Dichloropropane	Ave	0.2091	0.2239		10.7	10.0	7.1	30.0
Methyl methacrylate	Ave	0.1865	0.1993		10.7	10.0	6.8	30.0
1,4-Dioxane	Ave	0.0975	0.1024		10.5	10.0	5.1	30.0
Dibromomethane	Ave	0.1608	0.1518		9.44	10.0	-5.6	30.0
Bromodichloromethane	Ave	0.3429	0.3752		10.9	10.0	9.4	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.3020		10.8	10.0	7.6	30.0
methyl isobutyl ketone	Ave	0.6025	0.7382		12.2	10.0	22.5	30.0
Toluene	Ave	0.3394	0.3620		10.7	10.0	6.7	30.0
n-Octane	Ave	0.6665	0.7868		11.8	10.0	18.1	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.3257		10.5	10.0	5.3	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1846		10.5	10.0	4.8	30.0
Tetrachloroethene	Ave	0.2406	0.2354		9.78	10.0	-2.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.7429		12.6	10.0	26.4	30.0
Dibromochloromethane	Ave	0.2805	0.2958		10.5	10.0	5.5	30.0
1,2-Dibromoethane	Ave	0.2840	0.2839		9.99	10.0	-0.0	30.0
Chlorobenzene	Ave	0.4185	0.4179		9.98	10.0	-0.2	30.0
Ethylbenzene	Ave	0.7708	0.8043		10.4	10.0	4.3	30.0
n-Nonane	Ave	0.4969	0.5506		11.1	10.0	10.8	30.0
m,p-Xylene	Ave	0.2889	0.2939		20.3	20.0	1.7	30.0
Xylene, o-	Ave	0.2797	0.2829		10.1	10.0	1.1	30.0
Styrene	Ave	0.4366	0.4521		10.4	10.0	3.5	30.0
Bromoform	Ave	0.2423	0.2591		10.7	10.0	6.9	30.0
Cumene	Ave	0.8224	0.8348		10.1	10.0	1.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4597		9.86	10.0	-1.4	30.0
n-Propylbenzene	Ave	1.082	1.094		10.1	10.0	1.1	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.4063		9.96	10.0	-0.4	30.0
2-Chlorotoluene	Ave	0.7655	0.7743		10.1	10.0	1.2	30.0
4-Ethyltoluene	Ave	0.8524	0.8527		10.0	10.0	0.0	30.0
n-Decane	Ave	0.6836	0.7299		10.7	10.0	6.8	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.6980		10.0	10.0	0.4	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3175		10.0	10.0	0.4	30.0
tert-Butylbenzene	Ave	0.6306	0.6280		9.96	10.0	-0.4	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.7192		10.1	10.0	1.5	30.0
sec-Butylbenzene	Ave	1.028	1.023		9.95	10.0	-0.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Lab Sample ID: CCVIS 200-127266/2 Calibration Date: 03/12/2018 10:51

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29535_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.8250		9.87	10.0	-1.2	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4271		9.25	10.0	-7.4	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.4145		9.09	10.0	-9.1	30.0
Benzyl chloride	Ave	0.6743	0.6832		10.1	10.0	1.3	30.0
n-Butylbenzene	Ave	0.8837	0.8813		9.97	10.0	-0.3	30.0
n-Undecane	Ave	0.7267	0.7446		10.2	10.0	2.5	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3926		9.19	10.0	-8.1	30.0
n-Dodecane	Ave	0.5920	0.6158		10.4	10.0	4.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2746		8.60	10.0	-14.0	30.0
Hexachlorobutadiene	Ave	0.2769	0.2545		9.19	10.0	-8.1	30.0
Naphthalene	Ave	0.7021	0.6218		8.85	10.0	-11.4	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2380		8.41	10.0	-15.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	0.6961		8.05	10.0	-19.5	30.0
Dichlorodifluoromethane	Ave	1.818	1.676		9.22	10.0	-7.8	30.0
Freon 22	Ave	1.537	1.318		8.57	10.0	-14.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	1.905		10.4	10.0	4.0	30.0
Chloromethane	Ave	0.8855	0.7697		8.69	10.0	-13.1	30.0
n-Butane	Ave	1.715	1.469		8.57	10.0	-14.3	30.0
Vinyl chloride	Ave	0.8728	0.7758		8.89	10.0	-11.1	30.0
1,3-Butadiene	Ave	0.6878	0.6223		9.05	10.0	-9.5	30.0
Bromomethane	Ave	0.6347	0.5988		9.43	10.0	-5.7	30.0
Chloroethane	Ave	0.3780	0.3538		9.36	10.0	-6.4	30.0
Isopentane	Ave	1.037	0.9887		9.53	10.0	-4.7	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5485		9.53	10.0	-4.7	30.0
Trichlorofluoromethane	Ave	1.635	1.468		8.98	10.0	-10.2	30.0
n-Pentane	Ave	1.644	1.625		9.88	10.0	-1.2	30.0
Ethanol	Ave	0.3724	0.2731		11.0	15.0	-26.7	30.0
Ethyl ether	Ave	0.5073	0.5391		10.6	10.0	6.3	30.0
Acrolein	Ave	0.2305	0.2749		11.9	10.0	19.2	30.0
Freon TF	Ave	1.162	1.124		9.67	10.0	-3.2	30.0
1,1-Dichloroethene	Ave	0.5579	0.5374		9.63	10.0	-3.7	30.0
Acetone	Ave	1.505	1.424		9.46	10.0	-5.4	30.0
Carbon disulfide	Ave	1.781	1.939		10.9	10.0	8.8	30.0
Isopropyl alcohol	Ave	1.628	1.364		8.38	10.0	-16.2	30.0
3-Chloropropene	Ave	1.211	1.136		9.38	10.0	-6.2	30.0
Acetonitrile	Ave	0.7712	0.7415		9.61	10.0	-3.9	30.0
Methylene Chloride	Ave	1.004	0.9105		9.07	10.0	-9.3	30.0
tert-Butyl alcohol	Ave	1.840	1.626		8.84	10.0	-11.6	30.0
Methyl tert-butyl ether	Ave	2.051	1.935		9.43	10.0	-5.7	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.118		9.86	10.0	-1.4	30.0
Acrylonitrile	Ave	0.6136	0.6007		9.79	10.0	-2.1	30.0
n-Hexane	Ave	1.254	1.222		9.74	10.0	-2.6	30.0
1,1-Dichloroethane	Ave	1.433	1.363		9.51	10.0	-4.9	30.0
Vinyl acetate	Ave	2.694	2.591		9.62	10.0	-3.8	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.6659		9.57	10.0	-4.3	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.3655		9.57	10.0	-4.3	30.0
Ethyl acetate	Ave	0.0536	0.0563		10.5	10.0	5.2	30.0
Tetrahydrofuran	Ave	0.2622	0.2441		9.31	10.0	-6.9	30.0
Chloroform	Ave	1.530	1.430		9.35	10.0	-6.5	30.0
Cyclohexane	Ave	0.1843	0.1785		9.68	10.0	-3.2	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.2662		9.22	10.0	-7.8	30.0
Carbon tetrachloride	Ave	0.2581	0.2550		9.88	10.0	-1.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	0.8561		9.44	10.0	-5.6	30.0
Benzene	Ave	0.4676	0.4428		9.47	10.0	-5.3	30.0
1,2-Dichloroethane	Ave	0.2350	0.2165		9.21	10.0	-7.9	30.0
n-Heptane	Ave	0.4536	0.4073		8.98	10.0	-10.2	30.0
n-Butanol	Ave	0.1266	0.1366		10.8	10.0	7.9	30.0
Trichloroethene	Ave	0.1942	0.1785		9.19	10.0	-8.1	30.0
1,2-Dichloropropane	Ave	0.2091	0.1925		9.21	10.0	-7.9	30.0
Methyl methacrylate	Ave	0.1865	0.1810		9.70	10.0	-3.0	30.0
1,4-Dioxane	Ave	0.0975	0.0920		9.43	10.0	-5.6	30.0
Dibromomethane	Ave	0.1608	0.1465		9.10	10.0	-8.9	30.0
Bromodichloromethane	Ave	0.3429	0.3230		9.42	10.0	-5.8	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.2682		9.55	10.0	-4.5	30.0
methyl isobutyl ketone	Ave	0.6025	0.5432		9.01	10.0	-9.9	30.0
Toluene	Ave	0.3394	0.3255		9.59	10.0	-4.1	30.0
n-Octane	Ave	0.6665	0.5999		9.00	10.0	-10.0	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.2822		9.12	10.0	-8.8	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1693		9.61	10.0	-3.8	30.0
Tetrachloroethene	Ave	0.2406	0.2298		9.55	10.0	-4.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.5515		9.38	10.0	-6.2	30.0
Dibromochloromethane	Ave	0.2805	0.2741		9.77	10.0	-2.3	30.0
1,2-Dibromoethane	Ave	0.2840	0.2708		9.54	10.0	-4.6	30.0
Chlorobenzene	Ave	0.4185	0.3928		9.38	10.0	-6.2	30.0
Ethylbenzene	Ave	0.7708	0.7226		9.37	10.0	-6.3	30.0
n-Nonane	Ave	0.4969	0.4608		9.27	10.0	-7.3	30.0
m,p-Xylene	Ave	0.2889	0.2697		18.7	20.0	-6.6	30.0
Xylene, o-	Ave	0.2797	0.2577		9.21	10.0	-7.9	30.0
Styrene	Ave	0.4366	0.4156		9.52	10.0	-4.8	30.0
Bromoform	Ave	0.2423	0.2677		11.0	10.0	10.5	30.0
Cumene	Ave	0.8224	0.7529		9.15	10.0	-8.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4335		9.29	10.0	-7.0	30.0
n-Propylbenzene	Ave	1.082	0.9729		8.99	10.0	-10.1	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.3502		8.59	10.0	-14.1	30.0
4-Ethyltoluene	Ave	0.8524	0.7887		9.25	10.0	-7.5	30.0
2-Chlorotoluene	Ave	0.7655	0.6824		8.91	10.0	-10.9	30.0
n-Decane	Ave	0.6836	0.6015		8.80	10.0	-12.0	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.6320		9.09	10.0	-9.1	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3002		9.49	10.0	-5.1	30.0
tert-Butylbenzene	Ave	0.6306	0.5670		8.99	10.0	-10.1	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.6323		8.92	10.0	-10.8	30.0
sec-Butylbenzene	Ave	1.028	0.9156		8.90	10.0	-10.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.7444		8.91	10.0	-10.9	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4092		8.87	10.0	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.3984		8.74	10.0	-12.6	30.0
Benzyl chloride	Ave	0.6743	0.5955		8.83	10.0	-11.7	30.0
n-Butylbenzene	Ave	0.8837	0.7626		8.63	10.0	-13.7	30.0
n-Undecane	Ave	0.7267	0.6200		8.53	10.0	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3736		8.75	10.0	-12.5	30.0
n-Dodecane	Ave	0.5920	0.5166		8.73	10.0	-12.7	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2456		7.69	10.0	-23.1	30.0
Hexachlorobutadiene	Ave	0.2769	0.2304		8.32	10.0	-16.8	30.0
Naphthalene	Ave	0.7021	0.5127		7.30	10.0	-27.0	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2048		7.23	10.0	-27.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab Sample ID: CCVIS 200-127298/2 Calibration Date: 03/13/2018 10:28

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29551_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	1.161		13.4	10.0	34.4*	30.0
Dichlorodifluoromethane	Ave	1.818	2.422		13.3	10.0	33.2*	30.0
Freon 22	Ave	1.537	1.930		12.5	10.0	25.5	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	2.082		11.4	10.0	13.6	30.0
Chloromethane	Ave	0.8855	1.056		11.9	10.0	19.2	30.0
n-Butane	Ave	1.715	2.055		12.0	10.0	19.9	30.0
Vinyl chloride	Ave	0.8728	0.9916		11.4	10.0	13.6	30.0
1,3-Butadiene	Ave	0.6878	0.8196		11.9	10.0	19.2	30.0
Bromomethane	Ave	0.6347	0.6682		10.5	10.0	5.3	30.0
Chloroethane	Ave	0.3780	0.4097		10.8	10.0	8.4	30.0
Isopentane	Ave	1.037	1.195		11.5	10.0	15.2	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5899		10.3	10.0	2.5	30.0
Trichlorofluoromethane	Ave	1.635	1.949		11.9	10.0	19.2	30.0
n-Pentane	Ave	1.644	1.832		11.1	10.0	11.4	30.0
Ethanol	Ave	0.3724	0.3589		14.5	15.0	-3.6	30.0
Ethyl ether	Ave	0.5073	0.5693		11.2	10.0	12.2	30.0
Acrolein	Ave	0.2305	0.2399		10.4	10.0	4.0	30.0
Freon TF	Ave	1.162	1.250		10.8	10.0	7.6	30.0
1,1-Dichloroethene	Ave	0.5579	0.5881		10.5	10.0	5.4	30.0
Acetone	Ave	1.505	2.175		14.4	10.0	44.5*	30.0
Carbon disulfide	Ave	1.781	1.876		10.5	10.0	5.3	30.0
Isopropyl alcohol	Ave	1.628	1.941		11.9	10.0	19.2	30.0
3-Chloropropene	Ave	1.211	1.357		11.2	10.0	12.0	30.0
Acetonitrile	Ave	0.7712	0.9160		11.9	10.0	18.8	30.0
Methylene Chloride	Ave	1.004	1.165		11.6	10.0	16.1	30.0
tert-Butyl alcohol	Ave	1.840	2.176		11.8	10.0	18.2	30.0
Methyl tert-butyl ether	Ave	2.051	2.387		11.6	10.0	16.4	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.303		11.5	10.0	14.9	30.0
Acrylonitrile	Ave	0.6136	0.6698		10.9	10.0	9.2	30.0
n-Hexane	Ave	1.254	1.327		10.6	10.0	5.8	30.0
1,1-Dichloroethane	Ave	1.433	1.619		11.3	10.0	13.0	30.0
Vinyl acetate	Ave	2.694	3.147		11.7	10.0	16.8	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.7211		10.4	10.0	3.7	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.4150		10.9	10.0	8.6	30.0
Ethyl acetate	Ave	0.0536	0.0546		10.2	10.0	1.9	30.0
Tetrahydrofuran	Ave	0.2622	0.3115		11.9	10.0	18.8	30.0
Chloroform	Ave	1.530	1.716		11.2	10.0	12.2	30.0
Cyclohexane	Ave	0.1843	0.1949		10.6	10.0	5.7	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.3352		11.6	10.0	16.1	30.0
Carbon tetrachloride	Ave	0.2581	0.2583		10.0	10.0	0.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab Sample ID: CCVIS 200-127298/2 Calibration Date: 03/13/2018 10:28

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29551_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	1.003		11.1	10.0	10.6	30.0
Benzene	Ave	0.4676	0.4881		10.4	10.0	4.4	30.0
1,2-Dichloroethane	Ave	0.2350	0.2937		12.5	10.0	24.9	30.0
n-Heptane	Ave	0.4536	0.5236		11.5	10.0	15.4	30.0
n-Butanol	Ave	0.1266	0.1391		11.0	10.0	9.8	30.0
Trichloroethene	Ave	0.1942	0.1918		9.87	10.0	-1.2	30.0
1,2-Dichloropropane	Ave	0.2091	0.2226		10.6	10.0	6.5	30.0
Methyl methacrylate	Ave	0.1865	0.2004		10.7	10.0	7.4	30.0
1,4-Dioxane	Ave	0.0975	0.1008		10.3	10.0	3.4	30.0
Dibromomethane	Ave	0.1608	0.1508		9.37	10.0	-6.3	30.0
Bromodichloromethane	Ave	0.3429	0.3839		11.2	10.0	12.0	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.3053		10.9	10.0	8.7	30.0
methyl isobutyl ketone	Ave	0.6025	0.7547		12.5	10.0	25.3	30.0
Toluene	Ave	0.3394	0.3539		10.4	10.0	4.3	30.0
n-Octane	Ave	0.6665	0.8037		12.1	10.0	20.6	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.3299		10.7	10.0	6.7	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1811		10.3	10.0	2.8	30.0
Tetrachloroethene	Ave	0.2406	0.2301		9.56	10.0	-4.4	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.7495		12.7	10.0	27.5	30.0
Dibromochloromethane	Ave	0.2805	0.2945		10.5	10.0	5.0	30.0
1,2-Dibromoethane	Ave	0.2840	0.2803		9.87	10.0	-1.3	30.0
Chlorobenzene	Ave	0.4185	0.4121		9.85	10.0	-1.5	30.0
Ethylbenzene	Ave	0.7708	0.8064		10.5	10.0	4.6	30.0
n-Nonane	Ave	0.4969	0.5521		11.1	10.0	11.1	30.0
m,p-Xylene	Ave	0.2889	0.2954		20.4	20.0	2.3	30.0
Xylene, o-	Ave	0.2797	0.2859		10.2	10.0	2.2	30.0
Styrene	Ave	0.4366	0.4607		10.6	10.0	5.5	30.0
Bromoform	Ave	0.2423	0.2627		10.8	10.0	8.4	30.0
Cumene	Ave	0.8224	0.8528		10.4	10.0	3.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4735		10.2	10.0	1.6	30.0
n-Propylbenzene	Ave	1.082	1.124		10.4	10.0	3.8	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.4204		10.3	10.0	3.1	30.0
2-Chlorotoluene	Ave	0.7655	0.8046		10.5	10.0	5.1	30.0
4-Ethyltoluene	Ave	0.8524	0.8759		10.3	10.0	2.8	30.0
n-Decane	Ave	0.6836	0.7497		11.0	10.0	9.7	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.7232		10.4	10.0	4.1	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3278		10.4	10.0	3.7	30.0
tert-Butylbenzene	Ave	0.6306	0.6486		10.3	10.0	2.9	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.7508		10.6	10.0	6.0	30.0
sec-Butylbenzene	Ave	1.028	1.068		10.4	10.0	3.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Lab Sample ID: CCVIS 200-127298/2 Calibration Date: 03/13/2018 10:28

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29551_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.8587		10.3	10.0	2.8	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4519		9.79	10.0	-2.1	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.4351		9.54	10.0	-4.6	30.0
Benzyl chloride	Ave	0.6743	0.7160		10.6	10.0	6.2	30.0
n-Butylbenzene	Ave	0.8837	0.9325		10.5	10.0	5.5	30.0
n-Undecane	Ave	0.7267	0.7877		10.8	10.0	8.4	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.4152		9.72	10.0	-2.8	30.0
n-Dodecane	Ave	0.5920	0.6607		11.2	10.0	11.6	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2902		9.09	10.0	-9.1	30.0
Hexachlorobutadiene	Ave	0.2769	0.2692		9.72	10.0	-2.8	30.0
Naphthalene	Ave	0.7021	0.6551		9.33	10.0	-6.7	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2556		9.03	10.0	-9.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab Sample ID: ICV 200-126321/21 Calibration Date: 02/13/2018 11:41

Instrument ID: CHB.i Calib Start Date: 02/12/2018 16:32

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/13/2018 10:27

Lab File ID: 29154-21.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.3417	0.3140		9.19	10.0	-8.1	30.0
Dichlorodifluoromethane	Ave	1.758	1.640		9.33	10.0	-6.7	30.0
Freon 22	Ave	0.8114	0.7577		9.34	10.0	-6.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.966	2.083		10.6	10.0	6.0	30.0
Chloromethane	Ave	0.5564	0.4998		8.98	10.0	-10.2	30.0
n-Butane	Ave	0.8675	0.8014		9.24	10.0	-7.6	30.0
Vinyl chloride	Ave	0.7929	0.7287		9.19	10.0	-8.1	30.0
1,3-Butadiene	Ave	0.5635	0.5013		8.89	10.0	-11.0	30.0
Bromomethane	Ave	1.010	0.9419		9.32	10.0	-6.8	30.0
Chloroethane	Ave	0.5127	0.4809		9.38	10.0	-6.2	30.0
Isopentane	Ave	0.8566	0.8461		9.87	10.0	-1.2	30.0
Bromoethene(Vinyl Bromide)	Ave	1.118	1.036		9.26	10.0	-7.4	30.0
Trichlorofluoromethane	Ave	2.217	2.062		9.30	10.0	-7.0	30.0
n-Pentane	Ave	1.318	1.332		10.1	10.0	1.1	30.0
Ethanol	Ave	0.2932	0.2478		12.7	15.0	-15.5	30.0
Ethyl ether	Ave	0.6222	0.6536		10.5	10.0	5.0	30.0
Acrolein	Ave	0.2949	0.3286		11.1	10.0	11.4	30.0
Freon TF	Ave	2.068	1.947		9.41	10.0	-5.9	30.0
1,1-Dichloroethene	Ave	1.058	0.9542		9.02	10.0	-9.8	30.0
Acetone	Ave	1.035	0.997		9.63	10.0	-3.7	30.0
Isopropyl alcohol	Ave	1.261	1.103		8.75	10.0	-12.5	30.0
Carbon disulfide	Ave	2.664	2.876		10.8	10.0	7.9	30.0
3-Chloropropene	Ave	0.9292	0.8431		9.07	10.0	-9.3	30.0
Acetonitrile	Ave	0.6208	0.6488		10.4	10.0	4.5	30.0
Methylene Chloride	Ave	0.8838	0.8231		9.31	10.0	-6.9	30.0
tert-Butyl alcohol	Ave	1.835	1.682		9.16	10.0	-8.3	30.0
Methyl tert-butyl ether	Ave	2.688	2.529		9.41	10.0	-5.9	30.0
trans-1,2-Dichloroethene	Ave	1.286	1.279		9.95	10.0	-0.5	30.0
Acrylonitrile	Ave	0.6606	0.6495		9.83	10.0	-1.7	30.0
n-Hexane	Ave	1.546	1.457		9.42	10.0	-5.8	30.0
1,1-Dichloroethane	Ave	1.732	1.601		9.25	10.0	-7.5	30.0
Vinyl acetate	Ave	1.906	1.945		10.2	10.0	2.0	30.0
Methyl Ethyl Ketone	Ave	0.5512	0.5183		9.40	10.0	-6.0	30.0
cis-1,2-Dichloroethene	Ave	1.229	1.107		9.01	10.0	-9.9	30.0
Ethyl acetate	Ave	0.0975	0.0992		10.2	10.0	1.8	30.0
Tetrahydrofuran	Ave	0.1891	0.1804		9.54	10.0	-4.6	30.0
Chloroform	Ave	1.974	1.855		9.40	10.0	-6.0	30.0
1,1,1-Trichloroethane	Ave	0.4014	0.3762		9.37	10.0	-6.3	30.0
Cyclohexane	Ave	0.3224	0.3084		9.56	10.0	-4.4	30.0
Carbon tetrachloride	Ave	0.4335	0.4021		9.27	10.0	-7.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab Sample ID: ICV 200-126321/21 Calibration Date: 02/13/2018 11:41

Instrument ID: CHB.i Calib Start Date: 02/12/2018 16:32

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/13/2018 10:27

Lab File ID: 29154-21.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.027	0.9500		9.25	10.0	-7.5	30.0
Benzene	Ave	0.7314	0.6639		9.08	10.0	-9.2	30.0
1,2-Dichloroethane	Ave	0.2102	0.1982		9.43	10.0	-5.7	30.0
n-Heptane	Ave	0.3281	0.3005		9.16	10.0	-8.4	30.0
n-Butanol	Ave	0.1361	0.1408		10.3	10.0	3.5	30.0
Trichloroethene	Ave	0.3229	0.2944		9.11	10.0	-8.8	30.0
1,2-Dichloropropane	Ave	0.2528	0.2339		9.25	10.0	-7.5	30.0
Methyl methacrylate	Ave	0.2531	0.2417		9.55	10.0	-4.5	30.0
1,4-Dioxane	Ave	0.1519	0.1411		9.29	10.0	-7.1	30.0
Dibromomethane	Ave	0.3536	0.3242		9.17	10.0	-8.3	30.0
Bromodichloromethane	Ave	0.4587	0.4236		9.23	10.0	-7.7	30.0
cis-1,3-Dichloropropene	Ave	0.3884	0.3695		9.51	10.0	-4.9	30.0
methyl isobutyl ketone	Ave	0.4056	0.3738		9.21	10.0	-7.8	30.0
n-Octane	Ave	0.4470	0.4168		9.32	10.0	-6.8	30.0
Toluene	Ave	0.6256	0.5736		9.17	10.0	-8.3	30.0
trans-1,3-Dichloropropene	Ave	0.3743	0.3581		9.57	10.0	-4.3	30.0
1,1,2-Trichloroethane	Ave	0.2961	0.2786		9.41	10.0	-5.9	30.0
Tetrachloroethene	Ave	0.5863	0.5373		9.16	10.0	-8.4	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4480	0.4179		9.33	10.0	-6.7	30.0
Dibromochloromethane	Ave	0.6320	0.5698		9.01	10.0	-9.8	30.0
1,2-Dibromoethane	Ave	0.5761	0.5441		9.44	10.0	-5.6	30.0
Chlorobenzene	Ave	0.8790	0.8195		9.32	10.0	-6.8	30.0
Ethylbenzene	Ave	1.346	1.237		9.19	10.0	-8.1	30.0
n-Nonane	Ave	0.5644	0.5293		9.38	10.0	-6.2	30.0
m,p-Xylene	Ave	0.5580	0.5204		18.6	20.0	-6.7	30.0
Xylene, o-	Ave	0.5561	0.5012		9.01	10.0	-9.9	30.0
Styrene	Ave	0.8663	0.8040		9.28	10.0	-7.2	30.0
Bromoform	Ave	0.6449	0.5566		8.63	10.0	-13.7	30.0
Cumene	Ave	1.538	1.411		9.17	10.0	-8.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7856	0.7385		9.40	10.0	-6.0	30.0
n-Propylbenzene	Ave	1.797	1.670		9.29	10.0	-7.1	30.0
1,2,3-Trichloropropane	Ave	0.5607	0.5195		9.26	10.0	-7.4	30.0
n-Decane	Ave	0.7214	0.6676		9.25	10.0	-7.4	30.0
4-Ethyltoluene	Ave	1.538	1.465		9.53	10.0	-4.7	30.0
2-Chlorotoluene	Ave	1.195	1.091		9.13	10.0	-8.7	30.0
1,3,5-Trimethylbenzene	Ave	1.267	1.167		9.21	10.0	-7.9	30.0
Alpha Methyl Styrene	Ave	0.6784	0.6443		9.49	10.0	-5.0	30.0
tert-Butylbenzene	Ave	1.245	1.145		9.19	10.0	-8.0	30.0
1,2,4-Trimethylbenzene	Ave	1.261	1.155		9.16	10.0	-8.4	30.0
sec-Butylbenzene	Ave	1.872	1.715		9.16	10.0	-8.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab Sample ID: ICV 200-126321/21 Calibration Date: 02/13/2018 11:41

Instrument ID: CHB.i Calib Start Date: 02/12/2018 16:32

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/13/2018 10:27

Lab File ID: 29154-21.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.613	1.444		8.95	10.0	-10.4	30.0
1,3-Dichlorobenzene	Ave	0.9619	0.8882		9.23	10.0	-7.7	30.0
1,4-Dichlorobenzene	Ave	0.9671	0.8872		9.17	10.0	-8.3	30.0
Benzyl chloride	Ave	1.113	0.9889		8.88	10.0	-11.2	30.0
n-Undecane	Ave	0.7572	0.7194		9.50	10.0	-5.0	30.0
n-Butylbenzene	Ave	1.392	1.236		8.87	10.0	-11.3	30.0
1,2-Dichlorobenzene	Ave	0.9043	0.8228		9.10	10.0	-9.0	30.0
n-Dodecane	Ave	0.6292	0.5787		9.20	10.0	-8.0	30.0
1,2,4-Trichlorobenzene	Ave	0.7203	0.6150		8.54	10.0	-14.6	30.0
Hexachlorobutadiene	Ave	0.6331	0.5457		8.62	10.0	-13.8	30.0
Naphthalene	Ave	1.444	1.091		7.55	10.0	-24.5	30.0
1,2,3-Trichlorobenzene	Ave	0.6397	0.5024		7.85	10.0	-21.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab Sample ID: CCVIS 200-127358/3 Calibration Date: 03/14/2018 12:54

Instrument ID: CHB.i Calib Start Date: 02/12/2018 16:32

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/13/2018 10:27

Lab File ID: 29574-03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.3417	0.3885		11.4	10.0	13.7	30.0
Dichlorodifluoromethane	Ave	1.758	1.600		9.10	10.0	-9.0	30.0
Freon 22	Ave	0.8114	0.8413		10.4	10.0	3.7	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.966	1.845		9.38	10.0	-6.2	30.0
Chloromethane	Ave	0.5564	0.5700		10.2	10.0	2.4	30.0
n-Butane	Ave	0.8675	0.8911		10.3	10.0	2.7	30.0
Vinyl chloride	Ave	0.7929	0.7787		9.82	10.0	-1.8	30.0
1,3-Butadiene	Ave	0.5635	0.5591		9.92	10.0	-0.8	30.0
Bromomethane	Ave	1.010	0.9386		9.29	10.0	-7.1	30.0
Chloroethane	Ave	0.5127	0.5201		10.1	10.0	1.4	30.0
Isopentane	Ave	0.8566	0.8886		10.4	10.0	3.7	30.0
Bromoethene(Vinyl Bromide)	Ave	1.118	1.020		9.12	10.0	-8.8	30.0
Trichlorofluoromethane	Ave	2.217	2.013		9.08	10.0	-9.2	30.0
n-Pentane	Ave	1.318	1.350		10.2	10.0	2.4	30.0
Ethanol	Ave	0.2932	0.2935		15.0	15.0	0.0	30.0
Ethyl ether	Ave	0.6222	0.6295		10.1	10.0	1.2	30.0
Acrolein	Ave	0.2949	0.2960		10.0	10.0	0.4	30.0
Freon TF	Ave	2.068	1.822		8.81	10.0	-11.9	30.0
1,1-Dichloroethene	Ave	1.058	0.9315		8.80	10.0	-12.0	30.0
Acetone	Ave	1.035	1.104		10.7	10.0	6.7	30.0
Isopropyl alcohol	Ave	1.261	1.318		10.4	10.0	4.5	30.0
Carbon disulfide	Ave	2.664	2.370		8.89	10.0	-11.1	30.0
3-Chloropropene	Ave	0.9292	0.9680		10.4	10.0	4.2	30.0
Acetonitrile	Ave	0.6208	0.7069		11.4	10.0	13.9	30.0
Methylene Chloride	Ave	0.8838	0.8997		10.2	10.0	1.8	30.0
tert-Butyl alcohol	Ave	1.835	1.778		9.69	10.0	-3.1	30.0
Methyl tert-butyl ether	Ave	2.688	2.437		9.06	10.0	-9.3	30.0
trans-1,2-Dichloroethene	Ave	1.286	1.224		9.51	10.0	-4.8	30.0
Acrylonitrile	Ave	0.6606	0.6790		10.3	10.0	2.8	30.0
n-Hexane	Ave	1.546	1.381		8.93	10.0	-10.7	30.0
1,1-Dichloroethane	Ave	1.732	1.592		9.19	10.0	-8.0	30.0
Vinyl acetate	Ave	1.906	1.957		10.3	10.0	2.6	30.0
Methyl Ethyl Ketone	Ave	0.5512	0.5341		9.69	10.0	-3.1	30.0
cis-1,2-Dichloroethene	Ave	1.229	1.071		8.71	10.0	-12.9	30.0
Ethyl acetate	Ave	0.0975	0.0991		10.2	10.0	1.6	30.0
Tetrahydrofuran	Ave	0.1891	0.2205		11.7	10.0	16.6	30.0
Chloroform	Ave	1.974	1.771		8.97	10.0	-10.3	30.0
1,1,1-Trichloroethane	Ave	0.4014	0.3917		9.75	10.0	-2.4	30.0
Cyclohexane	Ave	0.3224	0.3144		9.75	10.0	-2.5	30.0
Carbon tetrachloride	Ave	0.4335	0.4043		9.32	10.0	-6.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab Sample ID: CCVIS 200-127358/3 Calibration Date: 03/14/2018 12:54

Instrument ID: CHB.i Calib Start Date: 02/12/2018 16:32

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/13/2018 10:27

Lab File ID: 29574-03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.027	1.019		9.92	10.0	-0.8	30.0
Benzene	Ave	0.7314	0.6724		9.19	10.0	-8.1	30.0
1,2-Dichloroethane	Ave	0.2102	0.2228		10.6	10.0	6.0	30.0
n-Heptane	Ave	0.3281	0.3571		10.9	10.0	8.8	30.0
n-Butanol	Ave	0.1361	0.1448		10.6	10.0	6.4	30.0
Trichloroethene	Ave	0.3229	0.3186		9.87	10.0	-1.3	30.0
1,2-Dichloropropane	Ave	0.2528	0.2654		10.5	10.0	5.0	30.0
Methyl methacrylate	Ave	0.2531	0.2585		10.2	10.0	2.1	30.0
1,4-Dioxane	Ave	0.1519	0.1548		10.2	10.0	1.9	30.0
Dibromomethane	Ave	0.3536	0.3168		8.96	10.0	-10.4	30.0
Bromodichloromethane	Ave	0.4587	0.4554		9.93	10.0	-0.7	30.0
cis-1,3-Dichloropropene	Ave	0.3884	0.3817		9.82	10.0	-1.7	30.0
methyl isobutyl ketone	Ave	0.4056	0.4464		11.0	10.0	10.0	30.0
n-Octane	Ave	0.4470	0.4871		10.9	10.0	9.0	30.0
Toluene	Ave	0.6256	0.5848		9.35	10.0	-6.5	30.0
trans-1,3-Dichloropropene	Ave	0.3743	0.3674		9.81	10.0	-1.9	30.0
1,1,2-Trichloroethane	Ave	0.2961	0.3007		10.2	10.0	1.6	30.0
Tetrachloroethene	Ave	0.5863	0.5154		8.79	10.0	-12.1	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4480	0.4956		11.1	10.0	10.6	30.0
Dibromochloromethane	Ave	0.6320	0.5906		9.34	10.0	-6.5	30.0
1,2-Dibromoethane	Ave	0.5761	0.5450		9.46	10.0	-5.4	30.0
Chlorobenzene	Ave	0.8790	0.7934		9.03	10.0	-9.7	30.0
Ethylbenzene	Ave	1.346	1.212		9.00	10.0	-10.0	30.0
n-Nonane	Ave	0.5644	0.5829		10.3	10.0	3.3	30.0
m,p-Xylene	Ave	0.5580	0.5000		17.9	20.0	-10.4	30.0
Xylene, o-	Ave	0.5561	0.5069		9.11	10.0	-8.8	30.0
Styrene	Ave	0.8663	0.7930		9.15	10.0	-8.5	30.0
Bromoform	Ave	0.6449	0.5988		9.28	10.0	-7.2	30.0
Cumene	Ave	1.538	1.367		8.88	10.0	-11.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7856	0.7215		9.18	10.0	-8.2	30.0
n-Propylbenzene	Ave	1.797	1.656		9.21	10.0	-7.8	30.0
1,2,3-Trichloropropane	Ave	0.5607	0.5615		10.0	10.0	0.1	30.0
n-Decane	Ave	0.7214	0.7362		10.2	10.0	2.1	30.0
4-Ethyltoluene	Ave	1.538	1.378		8.96	10.0	-10.4	30.0
2-Chlorotoluene	Ave	1.195	1.112		9.30	10.0	-6.9	30.0
1,3,5-Trimethylbenzene	Ave	1.267	1.134		8.95	10.0	-10.5	30.0
Alpha Methyl Styrene	Ave	0.6784	0.6180		9.11	10.0	-8.9	30.0
tert-Butylbenzene	Ave	1.245	1.105		8.88	10.0	-11.2	30.0
1,2,4-Trimethylbenzene	Ave	1.261	1.142		9.06	10.0	-9.4	30.0
sec-Butylbenzene	Ave	1.872	1.672		8.93	10.0	-10.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Lab Sample ID: CCVIS 200-127358/3 Calibration Date: 03/14/2018 12:54

Instrument ID: CHB.i Calib Start Date: 02/12/2018 16:32

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 02/13/2018 10:27

Lab File ID: 29574-03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.613	1.385		8.59	10.0	-14.1	30.0
1,3-Dichlorobenzene	Ave	0.9619	0.8530		8.87	10.0	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.9671	0.8509		8.80	10.0	-12.0	30.0
Benzyl chloride	Ave	1.113	1.015		9.11	10.0	-8.9	30.0
n-Undecane	Ave	0.7572	0.7989		10.5	10.0	5.5	30.0
n-Butylbenzene	Ave	1.392	1.258		9.03	10.0	-9.7	30.0
1,2-Dichlorobenzene	Ave	0.9043	0.8021		8.87	10.0	-11.3	30.0
n-Dodecane	Ave	0.6292	0.7080		11.3	10.0	12.5	30.0
1,2,4-Trichlorobenzene	Ave	0.7203	0.6861		9.52	10.0	-4.8	30.0
Hexachlorobutadiene	Ave	0.6331	0.5896		9.31	10.0	-6.9	30.0
Naphthalene	Ave	1.444	1.378		9.54	10.0	-4.5	30.0
1,2,3-Trichlorobenzene	Ave	0.6397	0.6360		9.94	10.0	-0.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	0.6961		8.05	10.0	-19.5	30.0
Dichlorodifluoromethane	Ave	1.818	1.676		9.22	10.0	-7.8	30.0
Freon 22	Ave	1.537	1.318		8.57	10.0	-14.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	1.905		10.4	10.0	4.0	30.0
Chloromethane	Ave	0.8855	0.7697		8.69	10.0	-13.1	30.0
n-Butane	Ave	1.715	1.469		8.57	10.0	-14.3	30.0
Vinyl chloride	Ave	0.8728	0.7758		8.89	10.0	-11.1	30.0
1,3-Butadiene	Ave	0.6878	0.6223		9.05	10.0	-9.5	30.0
Bromomethane	Ave	0.6347	0.5988		9.43	10.0	-5.7	30.0
Chloroethane	Ave	0.3780	0.3538		9.36	10.0	-6.4	30.0
Isopentane	Ave	1.037	0.9887		9.53	10.0	-4.7	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5485		9.53	10.0	-4.7	30.0
Trichlorofluoromethane	Ave	1.635	1.468		8.98	10.0	-10.2	30.0
n-Pentane	Ave	1.644	1.625		9.88	10.0	-1.2	30.0
Ethanol	Ave	0.3724	0.2731		11.0	15.0	-26.7	30.0
Ethyl ether	Ave	0.5073	0.5391		10.6	10.0	6.3	30.0
Acrolein	Ave	0.2305	0.2749		11.9	10.0	19.2	30.0
Freon TF	Ave	1.162	1.124		9.67	10.0	-3.2	30.0
1,1-Dichloroethene	Ave	0.5579	0.5374		9.63	10.0	-3.7	30.0
Acetone	Ave	1.505	1.424		9.46	10.0	-5.4	30.0
Carbon disulfide	Ave	1.781	1.939		10.9	10.0	8.8	30.0
Isopropyl alcohol	Ave	1.628	1.364		8.38	10.0	-16.2	30.0
3-Chloropropene	Ave	1.211	1.136		9.38	10.0	-6.2	30.0
Acetonitrile	Ave	0.7712	0.7415		9.61	10.0	-3.9	30.0
Methylene Chloride	Ave	1.004	0.9105		9.07	10.0	-9.3	30.0
tert-Butyl alcohol	Ave	1.840	1.626		8.84	10.0	-11.6	30.0
Methyl tert-butyl ether	Ave	2.051	1.935		9.43	10.0	-5.7	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.118		9.86	10.0	-1.4	30.0
Acrylonitrile	Ave	0.6136	0.6007		9.79	10.0	-2.1	30.0
n-Hexane	Ave	1.254	1.222		9.74	10.0	-2.6	30.0
1,1-Dichloroethane	Ave	1.433	1.363		9.51	10.0	-4.9	30.0
Vinyl acetate	Ave	2.694	2.591		9.62	10.0	-3.8	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.6659		9.57	10.0	-4.3	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.3655		9.57	10.0	-4.3	30.0
Ethyl acetate	Ave	0.0536	0.0563		10.5	10.0	5.2	30.0
Tetrahydrofuran	Ave	0.2622	0.2441		9.31	10.0	-6.9	30.0
Chloroform	Ave	1.530	1.430		9.35	10.0	-6.5	30.0
Cyclohexane	Ave	0.1843	0.1785		9.68	10.0	-3.2	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.2662		9.22	10.0	-7.8	30.0
Carbon tetrachloride	Ave	0.2581	0.2550		9.88	10.0	-1.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	0.8561		9.44	10.0	-5.6	30.0
Benzene	Ave	0.4676	0.4428		9.47	10.0	-5.3	30.0
1,2-Dichloroethane	Ave	0.2350	0.2165		9.21	10.0	-7.9	30.0
n-Heptane	Ave	0.4536	0.4073		8.98	10.0	-10.2	30.0
n-Butanol	Ave	0.1266	0.1366		10.8	10.0	7.9	30.0
Trichloroethene	Ave	0.1942	0.1785		9.19	10.0	-8.1	30.0
1,2-Dichloropropane	Ave	0.2091	0.1925		9.21	10.0	-7.9	30.0
Methyl methacrylate	Ave	0.1865	0.1810		9.70	10.0	-3.0	30.0
1,4-Dioxane	Ave	0.0975	0.0920		9.43	10.0	-5.6	30.0
Dibromomethane	Ave	0.1608	0.1465		9.10	10.0	-8.9	30.0
Bromodichloromethane	Ave	0.3429	0.3230		9.42	10.0	-5.8	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.2682		9.55	10.0	-4.5	30.0
methyl isobutyl ketone	Ave	0.6025	0.5432		9.01	10.0	-9.9	30.0
Toluene	Ave	0.3394	0.3255		9.59	10.0	-4.1	30.0
n-Octane	Ave	0.6665	0.5999		9.00	10.0	-10.0	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.2822		9.12	10.0	-8.8	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1693		9.61	10.0	-3.8	30.0
Tetrachloroethene	Ave	0.2406	0.2298		9.55	10.0	-4.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.5515		9.38	10.0	-6.2	30.0
Dibromochloromethane	Ave	0.2805	0.2741		9.77	10.0	-2.3	30.0
1,2-Dibromoethane	Ave	0.2840	0.2708		9.54	10.0	-4.6	30.0
Chlorobenzene	Ave	0.4185	0.3928		9.38	10.0	-6.2	30.0
Ethylbenzene	Ave	0.7708	0.7226		9.37	10.0	-6.3	30.0
n-Nonane	Ave	0.4969	0.4608		9.27	10.0	-7.3	30.0
m,p-Xylene	Ave	0.2889	0.2697		18.7	20.0	-6.6	30.0
Xylene, o-	Ave	0.2797	0.2577		9.21	10.0	-7.9	30.0
Styrene	Ave	0.4366	0.4156		9.52	10.0	-4.8	30.0
Bromoform	Ave	0.2423	0.2677		11.0	10.0	10.5	30.0
Cumene	Ave	0.8224	0.7529		9.15	10.0	-8.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4335		9.29	10.0	-7.0	30.0
n-Propylbenzene	Ave	1.082	0.9729		8.99	10.0	-10.1	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.3502		8.59	10.0	-14.1	30.0
4-Ethyltoluene	Ave	0.8524	0.7887		9.25	10.0	-7.5	30.0
2-Chlorotoluene	Ave	0.7655	0.6824		8.91	10.0	-10.9	30.0
n-Decane	Ave	0.6836	0.6015		8.80	10.0	-12.0	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.6320		9.09	10.0	-9.1	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3002		9.49	10.0	-5.1	30.0
tert-Butylbenzene	Ave	0.6306	0.5670		8.99	10.0	-10.1	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.6323		8.92	10.0	-10.8	30.0
sec-Butylbenzene	Ave	1.028	0.9156		8.90	10.0	-10.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.7444		8.91	10.0	-10.9	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4092		8.87	10.0	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.3984		8.74	10.0	-12.6	30.0
Benzyl chloride	Ave	0.6743	0.5955		8.83	10.0	-11.7	30.0
n-Butylbenzene	Ave	0.8837	0.7626		8.63	10.0	-13.7	30.0
n-Undecane	Ave	0.7267	0.6200		8.53	10.0	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3736		8.75	10.0	-12.5	30.0
n-Dodecane	Ave	0.5920	0.5166		8.73	10.0	-12.7	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2456		7.69	10.0	-23.1	30.0
Hexachlorobutadiene	Ave	0.2769	0.2304		8.32	10.0	-16.8	30.0
Naphthalene	Ave	0.7021	0.5127		7.30	10.0	-27.0	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2048		7.23	10.0	-27.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab Sample ID: CCVIS 200-127437/2 Calibration Date: 03/16/2018 09:43

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29611_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	1.153		13.3	10.0	33.3*	30.0
Dichlorodifluoromethane	Ave	1.818	2.306		12.7	10.0	26.9	30.0
Freon 22	Ave	1.537	1.928		12.5	10.0	25.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	2.083		11.4	10.0	13.7	30.0
Chloromethane	Ave	0.8855	1.071		12.1	10.0	20.9	30.0
n-Butane	Ave	1.715	2.137		12.5	10.0	24.6	30.0
Vinyl chloride	Ave	0.8728	1.007		11.5	10.0	15.4	30.0
1,3-Butadiene	Ave	0.6878	0.8384		12.2	10.0	21.9	30.0
Bromomethane	Ave	0.6347	0.6645		10.5	10.0	4.7	30.0
Chloroethane	Ave	0.3780	0.4202		11.1	10.0	11.1	30.0
Isopentane	Ave	1.037	1.256		12.1	10.0	21.2	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5898		10.2	10.0	2.5	30.0
Trichlorofluoromethane	Ave	1.635	1.952		11.9	10.0	19.4	30.0
n-Pentane	Ave	1.644	1.945		11.8	10.0	18.3	30.0
Ethanol	Ave	0.3724	0.3828		15.4	15.0	2.8	30.0
Ethyl ether	Ave	0.5073	0.5905		11.6	10.0	16.4	30.0
Acrolein	Ave	0.2305	0.2457		10.7	10.0	6.6	30.0
Freon TF	Ave	1.162	1.259		10.8	10.0	8.3	30.0
1,1-Dichloroethene	Ave	0.5579	0.6029		10.8	10.0	8.1	30.0
Acetone	Ave	1.505	2.246		14.9	10.0	49.2*	30.0
Carbon disulfide	Ave	1.781	1.922		10.8	10.0	7.9	30.0
Isopropyl alcohol	Ave	1.628	2.048		12.6	10.0	25.8	30.0
3-Chloropropene	Ave	1.211	1.419		11.7	10.0	17.1	30.0
Acetonitrile	Ave	0.7712	0.9393		12.2	10.0	21.8	30.0
Methylene Chloride	Ave	1.004	1.214		12.1	10.0	20.9	30.0
tert-Butyl alcohol	Ave	1.840	2.243		12.2	10.0	21.9	30.0
Methyl tert-butyl ether	Ave	2.051	2.455		12.0	10.0	19.7	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.348		11.9	10.0	18.9	30.0
Acrylonitrile	Ave	0.6136	0.6949		11.3	10.0	13.2	30.0
n-Hexane	Ave	1.254	1.396		11.1	10.0	11.4	30.0
1,1-Dichloroethane	Ave	1.433	1.683		11.7	10.0	17.5	30.0
Vinyl acetate	Ave	2.694	3.296		12.2	10.0	22.4	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.7268		10.4	10.0	4.5	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.4246		11.1	10.0	11.2	30.0
Ethyl acetate	Ave	0.0536	0.0571		10.7	10.0	6.6	30.0
Tetrahydrofuran	Ave	0.2622	0.3284		12.5	10.0	25.2	30.0
Chloroform	Ave	1.530	1.723		11.3	10.0	12.6	30.0
Cyclohexane	Ave	0.1843	0.1997		10.8	10.0	8.4	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.3358		11.6	10.0	16.3	30.0
Carbon tetrachloride	Ave	0.2581	0.2447		9.48	10.0	-5.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab Sample ID: CCVIS 200-127437/2 Calibration Date: 03/16/2018 09:43

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29611_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	1.048		11.6	10.0	15.5	30.0
Benzene	Ave	0.4676	0.4983		10.7	10.0	6.6	30.0
1,2-Dichloroethane	Ave	0.2350	0.3019		12.8	10.0	28.4	30.0
n-Heptane	Ave	0.4536	0.5538		12.2	10.0	22.1	30.0
n-Butanol	Ave	0.1266	0.1481		11.7	10.0	16.9	30.0
Trichloroethene	Ave	0.1942	0.1978		10.2	10.0	1.9	30.0
1,2-Dichloropropane	Ave	0.2091	0.2321		11.1	10.0	11.0	30.0
Methyl methacrylate	Ave	0.1865	0.2063		11.1	10.0	10.6	30.0
1,4-Dioxane	Ave	0.0975	0.1037		10.6	10.0	6.3	30.0
Dibromomethane	Ave	0.1608	0.1479		9.19	10.0	-8.0	30.0
Bromodichloromethane	Ave	0.3429	0.3901		11.4	10.0	13.8	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.3137		11.2	10.0	11.7	30.0
methyl isobutyl ketone	Ave	0.6025	0.7945		13.2	10.0	31.9*	30.0
Toluene	Ave	0.3394	0.3603		10.6	10.0	6.1	30.0
n-Octane	Ave	0.6665	0.8402		12.6	10.0	26.1	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.3374		10.9	10.0	9.1	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1853		10.5	10.0	5.2	30.0
Tetrachloroethene	Ave	0.2406	0.2262		9.40	10.0	-6.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.7819		13.3	10.0	33.0*	30.0
Dibromochloromethane	Ave	0.2805	0.2916		10.4	10.0	4.0	30.0
1,2-Dibromoethane	Ave	0.2840	0.2825		9.95	10.0	-0.5	30.0
Chlorobenzene	Ave	0.4185	0.4151		9.92	10.0	-0.8	30.0
Ethylbenzene	Ave	0.7708	0.8168		10.6	10.0	6.0	30.0
n-Nonane	Ave	0.4969	0.5690		11.4	10.0	14.5	30.0
m,p-Xylene	Ave	0.2889	0.2967		20.5	20.0	2.7	30.0
Xylene, o-	Ave	0.2797	0.2841		10.2	10.0	1.6	30.0
Styrene	Ave	0.4366	0.4571		10.5	10.0	4.7	30.0
Bromoform	Ave	0.2423	0.2516		10.4	10.0	3.8	30.0
Cumene	Ave	0.8224	0.8495		10.3	10.0	3.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4757		10.2	10.0	2.0	30.0
n-Propylbenzene	Ave	1.082	1.134		10.5	10.0	4.8	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.4248		10.4	10.0	4.2	30.0
2-Chlorotoluene	Ave	0.7655	0.8061		10.5	10.0	5.3	30.0
4-Ethyltoluene	Ave	0.8524	0.8681		10.2	10.0	1.8	30.0
n-Decane	Ave	0.6836	0.7648		11.2	10.0	11.9	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.7190		10.3	10.0	3.4	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3202		10.1	10.0	1.3	30.0
tert-Butylbenzene	Ave	0.6306	0.6364		10.1	10.0	0.9	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.7380		10.4	10.0	4.1	30.0
sec-Butylbenzene	Ave	1.028	1.047		10.2	10.0	1.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Lab Sample ID: CCVIS 200-127437/2 Calibration Date: 03/16/2018 09:43

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29611_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.8397		10.0	10.0	0.5	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4325		9.37	10.0	-6.3	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.4179		9.17	10.0	-8.3	30.0
Benzyl chloride	Ave	0.6743	0.6994		10.4	10.0	3.7	30.0
n-Butylbenzene	Ave	0.8837	0.9144		10.3	10.0	3.5	30.0
n-Undecane	Ave	0.7267	0.7850		10.8	10.0	8.0	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3962		9.27	10.0	-7.2	30.0
n-Dodecane	Ave	0.5920	0.6482		10.9	10.0	9.5	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2796		8.75	10.0	-12.4	30.0
Hexachlorobutadiene	Ave	0.2769	0.2569		9.28	10.0	-7.2	30.0
Naphthalene	Ave	0.7021	0.6300		8.97	10.0	-10.3	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2441		8.62	10.0	-13.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	0.6961		8.05	10.0	-19.5	30.0
Dichlorodifluoromethane	Ave	1.818	1.676		9.22	10.0	-7.8	30.0
Freon 22	Ave	1.537	1.318		8.57	10.0	-14.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	1.905		10.4	10.0	4.0	30.0
Chloromethane	Ave	0.8855	0.7697		8.69	10.0	-13.1	30.0
n-Butane	Ave	1.715	1.469		8.57	10.0	-14.3	30.0
Vinyl chloride	Ave	0.8728	0.7758		8.89	10.0	-11.1	30.0
1,3-Butadiene	Ave	0.6878	0.6223		9.05	10.0	-9.5	30.0
Bromomethane	Ave	0.6347	0.5988		9.43	10.0	-5.7	30.0
Chloroethane	Ave	0.3780	0.3538		9.36	10.0	-6.4	30.0
Isopentane	Ave	1.037	0.9887		9.53	10.0	-4.7	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5485		9.53	10.0	-4.7	30.0
Trichlorofluoromethane	Ave	1.635	1.468		8.98	10.0	-10.2	30.0
n-Pentane	Ave	1.644	1.625		9.88	10.0	-1.2	30.0
Ethanol	Ave	0.3724	0.2731		11.0	15.0	-26.7	30.0
Ethyl ether	Ave	0.5073	0.5391		10.6	10.0	6.3	30.0
Acrolein	Ave	0.2305	0.2749		11.9	10.0	19.2	30.0
Freon TF	Ave	1.162	1.124		9.67	10.0	-3.2	30.0
1,1-Dichloroethene	Ave	0.5579	0.5374		9.63	10.0	-3.7	30.0
Acetone	Ave	1.505	1.424		9.46	10.0	-5.4	30.0
Carbon disulfide	Ave	1.781	1.939		10.9	10.0	8.8	30.0
Isopropyl alcohol	Ave	1.628	1.364		8.38	10.0	-16.2	30.0
3-Chloropropene	Ave	1.211	1.136		9.38	10.0	-6.2	30.0
Acetonitrile	Ave	0.7712	0.7415		9.61	10.0	-3.9	30.0
Methylene Chloride	Ave	1.004	0.9105		9.07	10.0	-9.3	30.0
tert-Butyl alcohol	Ave	1.840	1.626		8.84	10.0	-11.6	30.0
Methyl tert-butyl ether	Ave	2.051	1.935		9.43	10.0	-5.7	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.118		9.86	10.0	-1.4	30.0
Acrylonitrile	Ave	0.6136	0.6007		9.79	10.0	-2.1	30.0
n-Hexane	Ave	1.254	1.222		9.74	10.0	-2.6	30.0
1,1-Dichloroethane	Ave	1.433	1.363		9.51	10.0	-4.9	30.0
Vinyl acetate	Ave	2.694	2.591		9.62	10.0	-3.8	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.6659		9.57	10.0	-4.3	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.3655		9.57	10.0	-4.3	30.0
Ethyl acetate	Ave	0.0536	0.0563		10.5	10.0	5.2	30.0
Tetrahydrofuran	Ave	0.2622	0.2441		9.31	10.0	-6.9	30.0
Chloroform	Ave	1.530	1.430		9.35	10.0	-6.5	30.0
Cyclohexane	Ave	0.1843	0.1785		9.68	10.0	-3.2	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.2662		9.22	10.0	-7.8	30.0
Carbon tetrachloride	Ave	0.2581	0.2550		9.88	10.0	-1.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	0.8561		9.44	10.0	-5.6	30.0
Benzene	Ave	0.4676	0.4428		9.47	10.0	-5.3	30.0
1,2-Dichloroethane	Ave	0.2350	0.2165		9.21	10.0	-7.9	30.0
n-Heptane	Ave	0.4536	0.4073		8.98	10.0	-10.2	30.0
n-Butanol	Ave	0.1266	0.1366		10.8	10.0	7.9	30.0
Trichloroethene	Ave	0.1942	0.1785		9.19	10.0	-8.1	30.0
1,2-Dichloropropane	Ave	0.2091	0.1925		9.21	10.0	-7.9	30.0
Methyl methacrylate	Ave	0.1865	0.1810		9.70	10.0	-3.0	30.0
1,4-Dioxane	Ave	0.0975	0.0920		9.43	10.0	-5.6	30.0
Dibromomethane	Ave	0.1608	0.1465		9.10	10.0	-8.9	30.0
Bromodichloromethane	Ave	0.3429	0.3230		9.42	10.0	-5.8	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.2682		9.55	10.0	-4.5	30.0
methyl isobutyl ketone	Ave	0.6025	0.5432		9.01	10.0	-9.9	30.0
Toluene	Ave	0.3394	0.3255		9.59	10.0	-4.1	30.0
n-Octane	Ave	0.6665	0.5999		9.00	10.0	-10.0	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.2822		9.12	10.0	-8.8	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1693		9.61	10.0	-3.8	30.0
Tetrachloroethene	Ave	0.2406	0.2298		9.55	10.0	-4.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.5515		9.38	10.0	-6.2	30.0
Dibromochloromethane	Ave	0.2805	0.2741		9.77	10.0	-2.3	30.0
1,2-Dibromoethane	Ave	0.2840	0.2708		9.54	10.0	-4.6	30.0
Chlorobenzene	Ave	0.4185	0.3928		9.38	10.0	-6.2	30.0
Ethylbenzene	Ave	0.7708	0.7226		9.37	10.0	-6.3	30.0
n-Nonane	Ave	0.4969	0.4608		9.27	10.0	-7.3	30.0
m,p-Xylene	Ave	0.2889	0.2697		18.7	20.0	-6.6	30.0
Xylene, o-	Ave	0.2797	0.2577		9.21	10.0	-7.9	30.0
Styrene	Ave	0.4366	0.4156		9.52	10.0	-4.8	30.0
Bromoform	Ave	0.2423	0.2677		11.0	10.0	10.5	30.0
Cumene	Ave	0.8224	0.7529		9.15	10.0	-8.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4335		9.29	10.0	-7.0	30.0
n-Propylbenzene	Ave	1.082	0.9729		8.99	10.0	-10.1	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.3502		8.59	10.0	-14.1	30.0
4-Ethyltoluene	Ave	0.8524	0.7887		9.25	10.0	-7.5	30.0
2-Chlorotoluene	Ave	0.7655	0.6824		8.91	10.0	-10.9	30.0
n-Decane	Ave	0.6836	0.6015		8.80	10.0	-12.0	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.6320		9.09	10.0	-9.1	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3002		9.49	10.0	-5.1	30.0
tert-Butylbenzene	Ave	0.6306	0.5670		8.99	10.0	-10.1	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.6323		8.92	10.0	-10.8	30.0
sec-Butylbenzene	Ave	1.028	0.9156		8.90	10.0	-10.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab Sample ID: ICV 200-125830/16 Calibration Date: 01/26/2018 05:08

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 28916_16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.7444		8.91	10.0	-10.9	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4092		8.87	10.0	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.3984		8.74	10.0	-12.6	30.0
Benzyl chloride	Ave	0.6743	0.5955		8.83	10.0	-11.7	30.0
n-Butylbenzene	Ave	0.8837	0.7626		8.63	10.0	-13.7	30.0
n-Undecane	Ave	0.7267	0.6200		8.53	10.0	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3736		8.75	10.0	-12.5	30.0
n-Dodecane	Ave	0.5920	0.5166		8.73	10.0	-12.7	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2456		7.69	10.0	-23.1	30.0
Hexachlorobutadiene	Ave	0.2769	0.2304		8.32	10.0	-16.8	30.0
Naphthalene	Ave	0.7021	0.5127		7.30	10.0	-27.0	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2048		7.23	10.0	-27.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab Sample ID: CCVIS 200-127437/2 Calibration Date: 03/16/2018 09:43

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29611_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.8645	1.153		13.3	10.0	33.3*	30.0
Dichlorodifluoromethane	Ave	1.818	2.306		12.7	10.0	26.9	30.0
Freon 22	Ave	1.537	1.928		12.5	10.0	25.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.832	2.083		11.4	10.0	13.7	30.0
Chloromethane	Ave	0.8855	1.071		12.1	10.0	20.9	30.0
n-Butane	Ave	1.715	2.137		12.5	10.0	24.6	30.0
Vinyl chloride	Ave	0.8728	1.007		11.5	10.0	15.4	30.0
1,3-Butadiene	Ave	0.6878	0.8384		12.2	10.0	21.9	30.0
Bromomethane	Ave	0.6347	0.6645		10.5	10.0	4.7	30.0
Chloroethane	Ave	0.3780	0.4202		11.1	10.0	11.1	30.0
Isopentane	Ave	1.037	1.256		12.1	10.0	21.2	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5753	0.5898		10.2	10.0	2.5	30.0
Trichlorofluoromethane	Ave	1.635	1.952		11.9	10.0	19.4	30.0
n-Pentane	Ave	1.644	1.945		11.8	10.0	18.3	30.0
Ethanol	Ave	0.3724	0.3828		15.4	15.0	2.8	30.0
Ethyl ether	Ave	0.5073	0.5905		11.6	10.0	16.4	30.0
Acrolein	Ave	0.2305	0.2457		10.7	10.0	6.6	30.0
Freon TF	Ave	1.162	1.259		10.8	10.0	8.3	30.0
1,1-Dichloroethene	Ave	0.5579	0.6029		10.8	10.0	8.1	30.0
Acetone	Ave	1.505	2.246		14.9	10.0	49.2*	30.0
Carbon disulfide	Ave	1.781	1.922		10.8	10.0	7.9	30.0
Isopropyl alcohol	Ave	1.628	2.048		12.6	10.0	25.8	30.0
3-Chloropropene	Ave	1.211	1.419		11.7	10.0	17.1	30.0
Acetonitrile	Ave	0.7712	0.9393		12.2	10.0	21.8	30.0
Methylene Chloride	Ave	1.004	1.214		12.1	10.0	20.9	30.0
tert-Butyl alcohol	Ave	1.840	2.243		12.2	10.0	21.9	30.0
Methyl tert-butyl ether	Ave	2.051	2.455		12.0	10.0	19.7	30.0
trans-1,2-Dichloroethene	Ave	1.134	1.348		11.9	10.0	18.9	30.0
Acrylonitrile	Ave	0.6136	0.6949		11.3	10.0	13.2	30.0
n-Hexane	Ave	1.254	1.396		11.1	10.0	11.4	30.0
1,1-Dichloroethane	Ave	1.433	1.683		11.7	10.0	17.5	30.0
Vinyl acetate	Ave	2.694	3.296		12.2	10.0	22.4	30.0
cis-1,2-Dichloroethene	Ave	0.6955	0.7268		10.4	10.0	4.5	30.0
Methyl Ethyl Ketone	Ave	0.3820	0.4246		11.1	10.0	11.2	30.0
Ethyl acetate	Ave	0.0536	0.0571		10.7	10.0	6.6	30.0
Tetrahydrofuran	Ave	0.2622	0.3284		12.5	10.0	25.2	30.0
Chloroform	Ave	1.530	1.723		11.3	10.0	12.6	30.0
Cyclohexane	Ave	0.1843	0.1997		10.8	10.0	8.4	30.0
1,1,1-Trichloroethane	Ave	0.2886	0.3358		11.6	10.0	16.3	30.0
Carbon tetrachloride	Ave	0.2581	0.2447		9.48	10.0	-5.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab Sample ID: CCVIS 200-127437/2 Calibration Date: 03/16/2018 09:43

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29611_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9066	1.048		11.6	10.0	15.5	30.0
Benzene	Ave	0.4676	0.4983		10.7	10.0	6.6	30.0
1,2-Dichloroethane	Ave	0.2350	0.3019		12.8	10.0	28.4	30.0
n-Heptane	Ave	0.4536	0.5538		12.2	10.0	22.1	30.0
n-Butanol	Ave	0.1266	0.1481		11.7	10.0	16.9	30.0
Trichloroethene	Ave	0.1942	0.1978		10.2	10.0	1.9	30.0
1,2-Dichloropropane	Ave	0.2091	0.2321		11.1	10.0	11.0	30.0
Methyl methacrylate	Ave	0.1865	0.2063		11.1	10.0	10.6	30.0
1,4-Dioxane	Ave	0.0975	0.1037		10.6	10.0	6.3	30.0
Dibromomethane	Ave	0.1608	0.1479		9.19	10.0	-8.0	30.0
Bromodichloromethane	Ave	0.3429	0.3901		11.4	10.0	13.8	30.0
cis-1,3-Dichloropropene	Ave	0.2808	0.3137		11.2	10.0	11.7	30.0
methyl isobutyl ketone	Ave	0.6025	0.7945		13.2	10.0	31.9*	30.0
Toluene	Ave	0.3394	0.3603		10.6	10.0	6.1	30.0
n-Octane	Ave	0.6665	0.8402		12.6	10.0	26.1	30.0
trans-1,3-Dichloropropene	Ave	0.3093	0.3374		10.9	10.0	9.1	30.0
1,1,2-Trichloroethane	Ave	0.1761	0.1853		10.5	10.0	5.2	30.0
Tetrachloroethene	Ave	0.2406	0.2262		9.40	10.0	-6.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5878	0.7819		13.3	10.0	33.0*	30.0
Dibromochloromethane	Ave	0.2805	0.2916		10.4	10.0	4.0	30.0
1,2-Dibromoethane	Ave	0.2840	0.2825		9.95	10.0	-0.5	30.0
Chlorobenzene	Ave	0.4185	0.4151		9.92	10.0	-0.8	30.0
Ethylbenzene	Ave	0.7708	0.8168		10.6	10.0	6.0	30.0
n-Nonane	Ave	0.4969	0.5690		11.4	10.0	14.5	30.0
m,p-Xylene	Ave	0.2889	0.2967		20.5	20.0	2.7	30.0
Xylene, o-	Ave	0.2797	0.2841		10.2	10.0	1.6	30.0
Styrene	Ave	0.4366	0.4571		10.5	10.0	4.7	30.0
Bromoform	Ave	0.2423	0.2516		10.4	10.0	3.8	30.0
Cumene	Ave	0.8224	0.8495		10.3	10.0	3.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4663	0.4757		10.2	10.0	2.0	30.0
n-Propylbenzene	Ave	1.082	1.134		10.5	10.0	4.8	30.0
1,2,3-Trichloropropane	Ave	0.4078	0.4248		10.4	10.0	4.2	30.0
2-Chlorotoluene	Ave	0.7655	0.8061		10.5	10.0	5.3	30.0
4-Ethyltoluene	Ave	0.8524	0.8681		10.2	10.0	1.8	30.0
n-Decane	Ave	0.6836	0.7648		11.2	10.0	11.9	30.0
1,3,5-Trimethylbenzene	Ave	0.6950	0.7190		10.3	10.0	3.4	30.0
Alpha Methyl Styrene	Ave	0.3162	0.3202		10.1	10.0	1.3	30.0
tert-Butylbenzene	Ave	0.6306	0.6364		10.1	10.0	0.9	30.0
1,2,4-Trimethylbenzene	Ave	0.7086	0.7380		10.4	10.0	4.1	30.0
sec-Butylbenzene	Ave	1.028	1.047		10.2	10.0	1.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Lab Sample ID: CCVIS 200-127437/2 Calibration Date: 03/16/2018 09:43

Instrument ID: CHC.i Calib Start Date: 01/25/2018 17:38

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 01/26/2018 01:35

Lab File ID: 29611_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8354	0.8397		10.0	10.0	0.5	30.0
1,3-Dichlorobenzene	Ave	0.4614	0.4325		9.37	10.0	-6.3	30.0
1,4-Dichlorobenzene	Ave	0.4559	0.4179		9.17	10.0	-8.3	30.0
Benzyl chloride	Ave	0.6743	0.6994		10.4	10.0	3.7	30.0
n-Butylbenzene	Ave	0.8837	0.9144		10.3	10.0	3.5	30.0
n-Undecane	Ave	0.7267	0.7850		10.8	10.0	8.0	30.0
1,2-Dichlorobenzene	Ave	0.4271	0.3962		9.27	10.0	-7.2	30.0
n-Dodecane	Ave	0.5920	0.6482		10.9	10.0	9.5	30.0
1,2,4-Trichlorobenzene	Ave	0.3193	0.2796		8.75	10.0	-12.4	30.0
Hexachlorobutadiene	Ave	0.2769	0.2569		9.28	10.0	-7.2	30.0
Naphthalene	Ave	0.7021	0.6300		8.97	10.0	-10.3	30.0
1,2,3-Trichlorobenzene	Ave	0.2830	0.2441		8.62	10.0	-13.7	30.0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Instrument ID: CHC.i Start Date: 01/25/2018 15:56

Analysis Batch Number: 125830 End Date: 01/26/2018 07:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-125830/1		01/25/2018 15:56	1	28916_01.D	RTX-624 0.32(mm)
VIBLK 200-125830/2		01/25/2018 16:45	1		RTX-624 0.32(mm)
IC 200-125830/3		01/25/2018 17:38	1	28916_03.D	RTX-624 0.32(mm)
IC 200-125830/4		01/25/2018 18:31	1	28916_04.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 19:24	1		RTX-624 0.32(mm)
IC 200-125830/6		01/25/2018 20:17	1	28916_06.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 21:10	1		RTX-624 0.32(mm)
IC 200-125830/8		01/25/2018 22:04	1	28916_08.D	RTX-624 0.32(mm)
ICIS 200-125830/9		01/25/2018 22:56	1	28916_09.D	RTX-624 0.32(mm)
IC 200-125830/10		01/25/2018 23:49	1	28916_10.D	RTX-624 0.32(mm)
IC 200-125830/11		01/26/2018 00:42	1	28916_11.D	RTX-624 0.32(mm)
IC 200-125830/12		01/26/2018 01:35	1	28916_12.D	RTX-624 0.32(mm)
VIBLK 200-125830/13		01/26/2018 02:28	1		RTX-624 0.32(mm)
VIBLK 200-125830/14		01/26/2018 03:21	1		RTX-624 0.32(mm)
VIBLK 200-125830/15		01/26/2018 04:15	1		RTX-624 0.32(mm)
ICV 200-125830/16		01/26/2018 05:08	1	28916_16.D	RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:01	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:53	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 07:47	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42567-1

SDG No.:

Instrument ID: CHC.i Start Date: 03/12/2018 10:00

Analysis Batch Number: 127266 End Date: 03/12/2018 23:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-127266/1		03/12/2018 10:00	1	29535_01.D	RTX-624 0.32(mm)
CCVIS 200-127266/2		03/12/2018 10:51	1	29535_02.D	RTX-624 0.32(mm)
LCS 200-127266/3		03/12/2018 11:44	1	29535_03.D	RTX-624 0.32(mm)
MB 200-127266/4		03/12/2018 12:37	1	29535_04.D	RTX-624 0.32(mm)
ZZZZZ		03/12/2018 13:37	10		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 14:31	10		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 15:24	10		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 16:17	10		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 17:15	0.2		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 18:14	0.2		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 19:13	0.2		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 20:11	0.2		RTX-624 0.32(mm)
200-42567-2		03/12/2018 21:10	0.2	29535_13.D	RTX-624 0.32(mm)
ZZZZZ		03/12/2018 22:08	0.2		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 23:01	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Instrument ID: CHC.i Start Date: 01/25/2018 15:56

Analysis Batch Number: 125830 End Date: 01/26/2018 07:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-125830/1		01/25/2018 15:56	1	28916_01.D	RTX-624 0.32(mm)
VIBLK 200-125830/2		01/25/2018 16:45	1		RTX-624 0.32(mm)
IC 200-125830/3		01/25/2018 17:38	1	28916_03.D	RTX-624 0.32(mm)
IC 200-125830/4		01/25/2018 18:31	1	28916_04.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 19:24	1		RTX-624 0.32(mm)
IC 200-125830/6		01/25/2018 20:17	1	28916_06.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 21:10	1		RTX-624 0.32(mm)
IC 200-125830/8		01/25/2018 22:04	1	28916_08.D	RTX-624 0.32(mm)
ICIS 200-125830/9		01/25/2018 22:56	1	28916_09.D	RTX-624 0.32(mm)
IC 200-125830/10		01/25/2018 23:49	1	28916_10.D	RTX-624 0.32(mm)
IC 200-125830/11		01/26/2018 00:42	1	28916_11.D	RTX-624 0.32(mm)
IC 200-125830/12		01/26/2018 01:35	1	28916_12.D	RTX-624 0.32(mm)
VIBLK 200-125830/13		01/26/2018 02:28	1		RTX-624 0.32(mm)
VIBLK 200-125830/14		01/26/2018 03:21	1		RTX-624 0.32(mm)
VIBLK 200-125830/15		01/26/2018 04:15	1		RTX-624 0.32(mm)
ICV 200-125830/16		01/26/2018 05:08	1	28916_16.D	RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:01	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:53	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 07:47	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42570-1

SDG No.:

Instrument ID: CHC.i Start Date: 03/12/2018 10:00

Analysis Batch Number: 127266 End Date: 03/12/2018 23:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-127266/1		03/12/2018 10:00	1	29535_01.D	RTX-624 0.32(mm)
CCVIS 200-127266/2		03/12/2018 10:51	1	29535_02.D	RTX-624 0.32(mm)
LCS 200-127266/3		03/12/2018 11:44	1	29535_03.D	RTX-624 0.32(mm)
MB 200-127266/4		03/12/2018 12:37	1	29535_04.D	RTX-624 0.32(mm)
ZZZZZ		03/12/2018 13:37	10		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 14:31	10		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 15:24	10		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 16:17	10		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 17:15	0.2		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 18:14	0.2		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 19:13	0.2		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 20:11	0.2		RTX-624 0.32(mm)
ZZZZZ		03/12/2018 21:10	0.2		RTX-624 0.32(mm)
200-42570-5		03/12/2018 22:08	0.2	29535_14.D	RTX-624 0.32(mm)
ZZZZZ		03/12/2018 23:01	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Instrument ID: CHC.i Start Date: 01/25/2018 15:56

Analysis Batch Number: 125830 End Date: 01/26/2018 07:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-125830/1		01/25/2018 15:56	1	28916_01.D	RTX-624 0.32(mm)
VIBLK 200-125830/2		01/25/2018 16:45	1		RTX-624 0.32(mm)
IC 200-125830/3		01/25/2018 17:38	1	28916_03.D	RTX-624 0.32(mm)
IC 200-125830/4		01/25/2018 18:31	1	28916_04.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 19:24	1		RTX-624 0.32(mm)
IC 200-125830/6		01/25/2018 20:17	1	28916_06.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 21:10	1		RTX-624 0.32(mm)
IC 200-125830/8		01/25/2018 22:04	1	28916_08.D	RTX-624 0.32(mm)
ICIS 200-125830/9		01/25/2018 22:56	1	28916_09.D	RTX-624 0.32(mm)
IC 200-125830/10		01/25/2018 23:49	1	28916_10.D	RTX-624 0.32(mm)
IC 200-125830/11		01/26/2018 00:42	1	28916_11.D	RTX-624 0.32(mm)
IC 200-125830/12		01/26/2018 01:35	1	28916_12.D	RTX-624 0.32(mm)
VIBLK 200-125830/13		01/26/2018 02:28	1		RTX-624 0.32(mm)
VIBLK 200-125830/14		01/26/2018 03:21	1		RTX-624 0.32(mm)
VIBLK 200-125830/15		01/26/2018 04:15	1		RTX-624 0.32(mm)
ICV 200-125830/16		01/26/2018 05:08	1	28916_16.D	RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:01	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:53	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 07:47	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42575-1

SDG No.:

Instrument ID: CHC.i Start Date: 03/13/2018 09:37

Analysis Batch Number: 127298 End Date: 03/14/2018 04:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-127298/1		03/13/2018 09:37	1	29551_01.D	RTX-624 0.32(mm)
CCVIS 200-127298/2		03/13/2018 10:28	1	29551_02.D	RTX-624 0.32(mm)
LCS 200-127298/3		03/13/2018 11:22	1	29551_03.D	RTX-624 0.32(mm)
MB 200-127298/4		03/13/2018 12:15	1	29551_04.D	RTX-624 0.32(mm)
ZZZZZ		03/13/2018 13:08	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 14:01	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 14:54	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 15:47	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 16:40	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 17:34	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 18:27	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 19:20	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 20:13	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 21:06	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 21:59	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 22:52	1		RTX-624 0.32(mm)
ZZZZZ		03/13/2018 23:46	1		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 00:39	1		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 01:32	1		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 02:26	1		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 03:24	0.2		RTX-624 0.32(mm)
200-42575-6		03/14/2018 04:23	0.2	29551_22.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Instrument ID: CHB.i Start Date: 02/12/2018 14:44

Analysis Batch Number: 126321 End Date: 02/13/2018 11:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-126321/1		02/12/2018 14:44	1	29154-01.D	RTX-624 0.32(mm)
VIBLK 200-126321/2		02/12/2018 15:40	1		RTX-624 0.32(mm)
IC 200-126321/3		02/12/2018 16:32	1	29154-03.D	RTX-624 0.32(mm)
IC 200-126321/4		02/12/2018 17:25	1	29154-04.D	RTX-624 0.32(mm)
ZZZZZ		02/12/2018 18:18	1		RTX-624 0.32(mm)
IC 200-126321/6		02/12/2018 19:10	1	29154-06.D	RTX-624 0.32(mm)
ZZZZZ		02/12/2018 20:03	1		RTX-624 0.32(mm)
ZZZZZ		02/12/2018 20:55	1		RTX-624 0.32(mm)
ICIS 200-126321/9		02/12/2018 21:47	1	29154-09.D	RTX-624 0.32(mm)
IC 200-126321/10		02/12/2018 22:39	1	29154-10.D	RTX-624 0.32(mm)
IC 200-126321/11		02/12/2018 23:31	1	29154-11.D	RTX-624 0.32(mm)
IC 200-126321/12		02/13/2018 00:23	1	29154-12.D	RTX-624 0.32(mm)
VIBLK 200-126321/13		02/13/2018 01:15	1		RTX-624 0.32(mm)
VIBLK 200-126321/14		02/13/2018 02:08	1		RTX-624 0.32(mm)
VIBLK 200-126321/15		02/13/2018 03:01	1		RTX-624 0.32(mm)
ZZZZZ		02/13/2018 03:54	1		RTX-624 0.32(mm)
ZZZZZ		02/13/2018 04:46	1		RTX-624 0.32(mm)
ZZZZZ		02/13/2018 05:38	1		RTX-624 0.32(mm)
VIBLK 200-126321/19		02/13/2018 06:31	1		RTX-624 0.32(mm)
IC 200-126321/20		02/13/2018 10:27	1	29154-20.D	RTX-624 0.32(mm)
ICV 200-126321/21		02/13/2018 11:41	1	29154-21.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42592-1

SDG No.:

Instrument ID: CHB.i Start Date: 03/14/2018 11:06

Analysis Batch Number: 127358 End Date: 03/15/2018 10:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-127358/1		03/14/2018 11:06	1	29574-01.D	RTX-624 0.32(mm)
ZZZZZ		03/14/2018 12:02	1		RTX-624 0.32(mm)
CCVIS 200-127358/3		03/14/2018 12:54	1	29574-03.D	RTX-624 0.32(mm)
LCS 200-127358/4		03/14/2018 13:47	1	29574-04.D	RTX-624 0.32(mm)
ZZZZZ		03/14/2018 14:40	1		RTX-624 0.32(mm)
MB 200-127358/6		03/14/2018 15:32	1	29574-06.D	RTX-624 0.32(mm)
ZZZZZ		03/14/2018 16:25	60300		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 17:18	10		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 18:11	1		RTX-624 0.32(mm)
VIBLK 200-127358/10		03/14/2018 19:03	1		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 19:56	1		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 20:58	0.2		RTX-624 0.32(mm)
ZZZZZ		03/14/2018 22:00	0.2		RTX-624 0.32(mm)
200-42592-3		03/14/2018 23:03	0.2	29574-14.D	RTX-624 0.32(mm)
ZZZZZ		03/15/2018 09:07	2050000		RTX-624 0.32(mm)
ZZZZZ		03/15/2018 10:00	1030000		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Instrument ID: CHC.i Start Date: 01/25/2018 15:56

Analysis Batch Number: 125830 End Date: 01/26/2018 07:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-125830/1		01/25/2018 15:56	1	28916_01.D	RTX-624 0.32(mm)
VIBLK 200-125830/2		01/25/2018 16:45	1		RTX-624 0.32(mm)
IC 200-125830/3		01/25/2018 17:38	1	28916_03.D	RTX-624 0.32(mm)
IC 200-125830/4		01/25/2018 18:31	1	28916_04.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 19:24	1		RTX-624 0.32(mm)
IC 200-125830/6		01/25/2018 20:17	1	28916_06.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 21:10	1		RTX-624 0.32(mm)
IC 200-125830/8		01/25/2018 22:04	1	28916_08.D	RTX-624 0.32(mm)
ICIS 200-125830/9		01/25/2018 22:56	1	28916_09.D	RTX-624 0.32(mm)
IC 200-125830/10		01/25/2018 23:49	1	28916_10.D	RTX-624 0.32(mm)
IC 200-125830/11		01/26/2018 00:42	1	28916_11.D	RTX-624 0.32(mm)
IC 200-125830/12		01/26/2018 01:35	1	28916_12.D	RTX-624 0.32(mm)
VIBLK 200-125830/13		01/26/2018 02:28	1		RTX-624 0.32(mm)
VIBLK 200-125830/14		01/26/2018 03:21	1		RTX-624 0.32(mm)
VIBLK 200-125830/15		01/26/2018 04:15	1		RTX-624 0.32(mm)
ICV 200-125830/16		01/26/2018 05:08	1	28916_16.D	RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:01	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:53	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 07:47	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42621-1

SDG No.:

Instrument ID: CHC.i Start Date: 03/16/2018 08:41

Analysis Batch Number: 127437 End Date: 03/16/2018 19:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-127437/1		03/16/2018 08:41	1	29611_01.D	RTX-624 0.32(mm)
CCVIS 200-127437/2		03/16/2018 09:43	1	29611_02.D	RTX-624 0.32(mm)
LCS 200-127437/3		03/16/2018 10:35	1	29611_03.D	RTX-624 0.32(mm)
MB 200-127437/4		03/16/2018 11:29	1	29611_04.D	RTX-624 0.32(mm)
ZZZZZ		03/16/2018 12:39	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 13:38	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 14:36	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 15:35	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 16:28	1		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 17:26	0.2		RTX-624 0.32(mm)
200-42621-5		03/16/2018 18:25	0.2	29611_11.D	RTX-624 0.32(mm)
ZZZZZ		03/16/2018 19:23	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Instrument ID: CHC.i Start Date: 01/25/2018 15:56

Analysis Batch Number: 125830 End Date: 01/26/2018 07:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-125830/1		01/25/2018 15:56	1	28916_01.D	RTX-624 0.32(mm)
VIBLK 200-125830/2		01/25/2018 16:45	1		RTX-624 0.32(mm)
IC 200-125830/3		01/25/2018 17:38	1	28916_03.D	RTX-624 0.32(mm)
IC 200-125830/4		01/25/2018 18:31	1	28916_04.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 19:24	1		RTX-624 0.32(mm)
IC 200-125830/6		01/25/2018 20:17	1	28916_06.D	RTX-624 0.32(mm)
ZZZZZ		01/25/2018 21:10	1		RTX-624 0.32(mm)
IC 200-125830/8		01/25/2018 22:04	1	28916_08.D	RTX-624 0.32(mm)
ICIS 200-125830/9		01/25/2018 22:56	1	28916_09.D	RTX-624 0.32(mm)
IC 200-125830/10		01/25/2018 23:49	1	28916_10.D	RTX-624 0.32(mm)
IC 200-125830/11		01/26/2018 00:42	1	28916_11.D	RTX-624 0.32(mm)
IC 200-125830/12		01/26/2018 01:35	1	28916_12.D	RTX-624 0.32(mm)
VIBLK 200-125830/13		01/26/2018 02:28	1		RTX-624 0.32(mm)
VIBLK 200-125830/14		01/26/2018 03:21	1		RTX-624 0.32(mm)
VIBLK 200-125830/15		01/26/2018 04:15	1		RTX-624 0.32(mm)
ICV 200-125830/16		01/26/2018 05:08	1	28916_16.D	RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:01	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 06:53	1		RTX-624 0.32(mm)
ZZZZZ		01/26/2018 07:47	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-42622-1

SDG No.:

Instrument ID: CHC.i Start Date: 03/16/2018 08:41

Analysis Batch Number: 127437 End Date: 03/16/2018 19:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-127437/1		03/16/2018 08:41	1	29611_01.D	RTX-624 0.32(mm)
CCVIS 200-127437/2		03/16/2018 09:43	1	29611_02.D	RTX-624 0.32(mm)
LCS 200-127437/3		03/16/2018 10:35	1	29611_03.D	RTX-624 0.32(mm)
MB 200-127437/4		03/16/2018 11:29	1	29611_04.D	RTX-624 0.32(mm)
ZZZZZ		03/16/2018 12:39	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 13:38	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 14:36	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 15:35	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 16:28	1		RTX-624 0.32(mm)
200-42622-6		03/16/2018 17:26	0.2	29611_10.D	RTX-624 0.32(mm)
ZZZZZ		03/16/2018 18:25	0.2		RTX-624 0.32(mm)
ZZZZZ		03/16/2018 19:23	0.2		RTX-624 0.32(mm)

Shipping and Receiving Documents

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802-660-1990 fax 802-660-1919

Canister Samples Chain of Custody Record

8h5.

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Manager: EMILY EBERT	Samples Collected By:	1 of 2 COCs
Company: TRC ENGINEERS	Phone: 212-221-7822		
Address: 1430 BROADWAY	Email: EEBERT@TRCSOLUTIONS.COM		
City/State/Zip NEW YORK, NY 10018			
Phone: 212-221-7822	Site Contact: JOE MENNITI		
FAX: 212-221-7840	TA Contact:		
Project Name: GEM CHEMICALS	Analysis Turnaround Time		
Site:	Standard (Specify)		
PO #	Rush (Specify)		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	MA-APH	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
GC-AA-01 (AS)	3-28-18	0800	1545	-30	-1	4247	2637	X							X	X			
GC-IA-102 (AS)		0815	1600	-30	-5	3752	5150	X							X				
GC-SV-102 (AS)		0900	1700	-30	-4	3695	3072	X								X			
GC-IA-103 (AS)		0850	1645	-30	-5	4793	4573	X							X				
GC-SV-103 (AS)		0900	1700	-30	-1	5163	3482	X								X			
GC-SV-104 (AS)		1095		-30		3922	2734	X								X			

Temperature (Fahrenheit)	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	
Start			
Stop			

200-42918 Chain of Custody

Special Instructions/QC Requirements & Comments:

Samples Shipped by: JOE MENNITI	Date/Time: 3/27/18 0845	Samples Received by:	
Samples Relinquished by:	Date/Time: 3/29/18 1038	Received by:	
Relinquished by:	Date/Time: 3/29/18 1940	Received by: TAEDN	

Lab Use Only Shipper Name: TAEDN 3/30/18 1800 Opened by: Condition: Rec'd By: Stott IABW 4/2/18 0940

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04/17/2018

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802-660-1990 fax 802-660-1919

Canister Samples Chain of Custody Record

8hr.

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Manager: EMILY EBERT	**Samples Collected By:**	2 of 2 COCs
Company: TRC ENGINEERS	Phone: 912-221-7822		
Address:	Email: EEBERT@TRCSOLUTIONS.COM		
City/State/Zip			
Phone:	Site Contact: JOE MENNITI		
FAX:	TA Contact:		
Project Name:	**Analysis Turnaround Time**		
Site:	Standard (Specify)		
PO #	Rush (Specify)		

SV-105
IA-105

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	MA-APH	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
-IA-104 (AS)	3/28	1045		-30		2889	5820	X							X				
-SV-105 (AS)		1000	1750	-30	-5	2831	3353	X									X		
-IA-105 (AS)		1000	1750	-30	-5	4557	3369	X							X				
-IA-106 (AS)		1045		-30		6154	6164	X							X				
-IA-106 (AS)				-30		2913	3460	X							X				
-SV-108 (AS)				-30		5802	5802	X									X		

Temperature (Fahrenheit)	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	
Start			
Stop			

Special Instructions/QC Requirements & Comments:

3/29/0945

Samples Shipped by: JOE MENNITI	Date/Time:	Samples Received by:	
Samples Relinquished by:	Date/Time: 3/29/18 1078	Received by:	
Relinquished by:	Date/Time: 3/30/18 10:40	Received by: TAEDJ	

Lab Use Only Shipper Name: TAEDJ 3/30/18 1800 Opened by: Condition: Rec'd By: Scott TABL 4/2/18 09W

04/17/2018

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

24 hr. Summa

CHAIN OF CUSTODY / ANALYSIS REQUEST

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

30 Community Dr. Suite 11 S. Burlington, VT 05403

Page 1 of 1

Name (for report and invoice) TRC Engineers	Samplers Name (Printed) Joe Kennedy	Site/Project Identification GEM Cleaners	
Company EMILE BERT	P. O. # 120097	State (Location of site): NJ: ☐ NY: ☑ Other:	
Address 1430 Broadway	Analysis Turnaround Time Standard ☒	Regulatory Program:	DKQP: ☐
City NY State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐		
Phone 212-221-7821 Fax 212-221-7840			

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Collection Date	Start Time	Finish Time	Matrix	No. of Cont.	FIN	Flow Control	Can ID								LAB USE ONLY Sample Numbers
GC-SV-104 (AS)	3.28.18	0820	0900	-30	-5	4017	2632			X					Soil Gas	
GC-IA-104 (AS)		1045	0930	-30	-5	2889	5420			X					Indoor	
GC-IA-108 (AS)		1045	0945	-30	-5	6184	6654			X					Indoor	
GC-IA-106 (AS)		1545	1545	-30	-5	2943	3410			X					Indoor	
GC-SV-106 (AS)		1600	1600	-30	-5	5602	5022			X					Soil Gas	
*Collected on 3.29.18																

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:
6 = Other _____, 7 = Other _____ — Water:

Special Instructions Please batch with other air samples for project

Water Metals Filtered (Yes/No)? _____

	Company	Date / Time		Company
Relinquished by 1) Joe Kennedy	TRC	3.29.18 | 1610	Received by 1)	TRC
Relinquished by 2)	TRC	3/30/18 10:36	Received by 2)	
Relinquished by 3)	T. A	3/30/18 17:00	Received by 3)	
Relinquished by 4)		|	Received by 4)	TAL 4/2/18 0900

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

Please provide Cat B deliverable & NYS DEC Equis EDD

TA PM: David Franklin

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04/17/2018

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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ORIGIN ID:AIVA (646) 745-0906
TESTAMERICA NYC
47-32 32ND PLACE,
SUITE 1141
LONG ISLAND CITY, NY 11101
UNITED STATES US

SHIP DATE: 30MAR18
ACTWGT: 40.00 LB
CAD: 10190557/INET3980
DIMS: 26x20x18 IN
BILL RECIPIENT

TO SAMPLING RECEIVING BVT
TESTAMERICA
30 COMMUNITY DR STE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990
INV:
PO:
REF:
DEPT

552J1/07F5/DCA6

FedEx Express

J181118012601uv

MON - 02 APR 3:00P
STANDARD OVERNIGHT

TRK# 0201 7718 8236 4600

K9 BTVA

05403
VT-US BTV

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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ORIGIN ID:LDJA (732) 549-3900
SAMPLE CONTROL - BRIAN BORDIERI
TESTAMERICA INC.
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 30MAR18
ACTWGT: 33.45 LB
CAD: 0358159/CAFE3111

BILL RECIPIENT

TO **SAMPLE CUSTODY**
TEST AMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 655-1203 REF:
INV:
PO: DEPT:

J17016102001uv

FedEx Express

2 of 2
MPS# 0263 4137 2533 7694
Mstr# 4137 2533 7683

MON - 02 APR 3:00P
STANDARD OVERNIGHT

0201

K9 BTVA

05403
VT-US BTV

Page 1545 of 1546

ORIGIN ID:LDJA (732) 549-3900
SAMPLE CONTROL - BRIAN BORDIERI
TESTAMERICA INC.
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 30MAR18
ACTWGT: 34.20 LB
CAD: 0358159/CAFE3111

BILL RECIPIENT

TO **SAMPLE CUSTODY**
TEST AMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 655-1203 REF:
INV:
PO: DEPT:

FedEx Express

1 of 2
TRK# 0201 4137 2533 7683
MASTER

MON - 02 APR 3:00P
STANDARD OVERNIGHT

K9 BTVA

05403
VT-US BTV

04/17/2018

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 200-42918-1

Login Number: 42918
List Number: 1
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 460-152211-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Emily Ebert

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
5/5/2018 12:20 AM

Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
05/05/2018
Revision: 1

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

Job Number: 460-152211-1

Job Description: GEM Cleaners

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
5/5/2018 12:20 AM

Jannel O Franklin

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 460-152211-1, Revision 1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

REVISION 1
The following report(s) required a revision: 460-152211-1. Details are as follows: Reporting Formatter changed from 8g to 8b per client request 5/2/18. The following Client sample IDs have changed per request:
Sample: 460-152604-2 had its Client Sample ID GC-MW-107(SO)-15-17 changed to GC-MW-107D(SO)-15-17 for VOCs.
Sample: 460-153022-1 had its Client Sample ID GC-MW-107(SO)-97-99 changed to GC-MW-107D(SO)-97-99 for VOCs.
Sample: 460-153082-1 had its Client Sample ID GC-MW-109D(SO)-33-35 changed to GC-MW-109M(SO)-33-35 for VOCs.
Sample: 460-153018-1 had its Client Sample ID GC-MW-109(SO)-15-17 changed to GC-MW-109M(SO)-15-17 for VOCs.

RECEIPT
The samples were received on 3/19/2018 8:00 PM, 3/20/2018 7:40 PM, 3/26/2018 8:30 PM, 3/30/2018 7:00 PM, 4/2/2018 7:40 PM, 4/3/2018 8:33 PM, 4/4/2018 6:00 PM, 4/5/2018 8:00 PM, 4/6/2018 7:20 PM, 4/10/2018 8:00 PM and 4/12/2018 6:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 12 coolers at receipt time were 0.5º C, 0.5º C, 0.5º C, 0.5º C, 0.6º C, 0.6º C, 1.0º C, 1.0º C, 1.2º C, 1.4º C, 1.6º C and 2.1º C.

Receipt Exceptions
The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): GC-MW-105(SO) -0.5-2.5 (460-152331-5) and GC-MW-105(SO)-7-9 (460-152331-6). #5 - Sample ID on the 60ml container matches sample ID of #6, but has correct sample time. Per client 3/21/18, please proceed with COC times.

The following sample was activated for VOCs by the client on 3/28/18: GC-MW-107(SO)-15-17 (460-152604-2).

The following sample was canceled for VOCs by the client on 3/21/18: GC-MW-103(SO)-10-12 (460-152211-6).

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed.

*The client did not enter "X" to indicate request for any analysis written on the COC. All analyses for this sample were put on hold except for the preps. See internal comment.

The following sample was analyzed outside of analytical holding time for VOCs per client request 4/19/2018: GC-MW-109(SO)-15-17 (460-153018-1).

The following sample was activated for VOCs by the client on 4/19/18: GC-MW-110D(SO)-15-17 (460-153389-1).

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples GC-SB-101(SO)-3-5 (460-152211-1), GC-MW-103(SO)-12-14 (460-152331-1), GC-MW-109(SO)-15-17 (460-153018-1), GC-MW-107(SO)-97-99 (460-153022-1), GC-MW-109D(SO)-33-35 (460-153082-1), GC-MW-106(SO)-15-17 (460-153163-1), GC-MW-108D(SO)-33-35 (460-153254-1), GC-MW-110D(SO)-15-17 (460-153389-1), GE-MW-110D(SO)-(69-70) (460-153515-1), GC-MW-101D(SO)-14-15 (460-153682-1), GC-MW-101D(SO)(99.2-100) (460-153878-1), GC-SB-101(SO)-15.5-17.5 (460-152211-2), GC-MW-103(SO)-15-17 (460-152331-2), GC-MW-107(SO)-15-17 (460-152604-2), GC-MW-108D(SO)-15-17 (460-153163-2),

GC-MW-108D(SO)-59-60.5 (460-153254-2), GC-MW-102(SO)-3-5 (460-152211-3), GC-MW-104(SO)-0.5-2.5 (460-152331-3), GC-MW-102(SO)-9-11 (460-152211-4), GC-MW-104(SO)-7-9 (460-152331-4), GC-MW-103(SO)-3-5 (460-152211-5), GC-MW-105(SO)-0.5-2.5 (460-152331-5), GC-MW-105(SO)-7-9 (460-152331-6) and GC-Drain-02(SO) (460-152331-7) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C. The samples were prepared on 03/20/2018, 03/21/2018, 03/27/2018, 03/31/2018, 04/03/2018, 04/04/2018, 04/06/2018, 04/08/2018, 04/11/2018 and 04/13/2018 and analyzed on 03/21/2018, 03/24/2018, 03/25/2018, 03/31/2018, 04/11/2018, 04/13/2018, 04/14/2018, 04/16/2018, 04/17/2018, 04/19/2018, 04/20/2018 and 04/23/2018.

The continuing calibration verification (CCV) associated with batch 460-505873 recovered above the upper control limit for Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 460-504873 recovered above the upper control limit for 1,1-Dichloroethane, Chloromethane, Methyl acetate and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 460-510972 recovered above the upper control limit for 1,1,1-Trichloroethane, Carbon tetrachloride, Bromoform and Methyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 460-510660 recovered above the upper control limit for Bromoform, Methyl acetate and Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 460-511293 recovered above the upper control limit for Carbon tetrachloride, Bromoform, 1,1,1-Trichloroethane and Methyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-510106 & batch 460-513435 was outside the method criteria for the following analytes: Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-511471 was outside the method criteria for the following analytes: 1,1,2,2-Tetrachloroethane (biased low) and Bromoform and Carbon tetrachloride (biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-511498 & 460-512623 was outside the method criteria for the following analytes: Bromoform and Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Methyl acetate failed the recovery criteria high for LCS 460-504873/4. 2-Hexanone failed the recovery criteria low for LCS 460-507466/5. 1,2-Dibromo-3-Chloropropane failed the recovery criteria high. Dichlorodifluoromethane failed the recovery criteria low for LCS 460-510106/3. Carbon tetrachloride failed the recovery criteria high for LCS 460-510972/3. 1,1,1-Trichloroethane and Carbon tetrachloride failed the recovery criteria high for LCS 460-511293/4. Carbon tetrachloride and Methyl acetate failed the recovery criteria high for LCS 460-511471/5. Acetone failed the recovery criteria low for LCS 460-511498/4. Acetone failed the recovery criteria low for LCS 460-512479/4. Dichlorodifluoromethane failed the recovery criteria low for LCS 460-513435/3. Methyl acetate failed the recovery criteria high for LCSD 460-504873/5. 2-Hexanone and 4-Methyl-2-pentanone (MIBK) failed the recovery criteria low for LCSD 460-507466/6. Dichlorodifluoromethane failed the recovery criteria low for LCSD 460-510106/4. Methyl acetate failed the recovery criteria high for LCSD 460-510972/4. 1,1,1-Trichloroethane and Carbon tetrachloride failed the recovery criteria high for LCSD 460-511293/5. Acetone failed the recovery criteria low for LCSD 460-511498/5. Dichlorodifluoromethane failed the recovery criteria low for LCSD 460-513435/4.

Methylene Chloride was detected in method blank MB 460-505749/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Methylene Chloride was detected in method blank MB 460-510106/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Acetone was detected in method blank MB 460-511471/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Methylene Chloride was detected in method blank MB 460-512479/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,1,1-Trichloroethane, Acetone and Carbon tetrachloride failed the recovery criteria high for the MS/MSD (matrix spike/matrix spike duplicate) of sample GE-MW-110D(SO)-(69-70)MS (460-153515-1) in batch 460-511471.

Several analytes failed the recovery criteria low for the MS/MSD of sample GC-SB-101(SO)-15.5-17.5MS (460-152211-2) in batch

460-504873.

Refer to the QC report for details.

Internal standard (ISTD) response for the following sample was outside of acceptance limits: GC-MW-103(SO)-3-5 (460-152211-5). The second low level aliquot was analyzed but is not reportable due to a bad purge.

Internal standard (ISTD) response for 1,4-Dioxane-d8 for the following sample was outside acceptance criteria: GC-Drain-02(SO) (460-152331-7). This ISTD does not correspond to any of the detected target compounds; therefore, the data have been reported.

The following sample had a peak at 12.350 min that is a GC carryover; therefore, it was not reported as TIC. GC-MW-103(SO)-15-17 (460-152331-2)

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Samples GC-SB-101(SO)-3-5 (460-152211-1), GC-MW-103(SO)-12-14 (460-152331-1), GC-MW-109(SO)-15-17 (460-153018-1), GC-MW-107(SO)-97-99 (460-153022-1), GC-MW-109D(SO)-33-35 (460-153082-1), GC-MW-106(SO)-15-17 (460-153163-1), GC-MW-108D(SO)-33-35 (460-153254-1), GC-MW-110D(SO)-15-17 (460-153389-1), GE-MW-110D(SO)-(69-70) (460-153515-1), GC-MW-101D(SO)-14-15 (460-153682-1), GC-MW-101D(SO)(99.2-100) (460-153878-1), GC-SB-101(SO)-15.5-17.5 (460-152211-2), GC-MW-103(SO)-15-17 (460-152331-2), GC-MW-107(SO)-15-17 (460-152604-2), GC-MW-108D(SO)-15-17 (460-153163-2), GC-MW-108D(SO)-59-60.5 (460-153254-2), GC-MW-102(SO)-3-5 (460-152211-3), GC-MW-104(SO)-0.5-2.5 (460-152331-3), GC-MW-102(SO)-9-11 (460-152211-4), GC-MW-104(SO)-7-9 (460-152331-4), GC-MW-103(SO)-3-5 (460-152211-5), GC-MW-105(SO)-0.5-2.5 (460-152331-5), GC-MW-105(SO)-7-9 (460-152331-6) and GC-Drain-02(SO) (460-152331-7) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 03/20/2018, 03/23/2018, 03/29/2018, 04/05/2018, 04/10/2018, 04/11/2018, 04/13/2018 and 04/20/2018.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-152211-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-152211-1	GC-SB-101(SO)-3-5	Solid	03/19/18 09:10	03/19/18 20:00
460-152211-2	GC-SB-101(SO)-15.5-17.5	Solid	03/19/18 09:20	03/19/18 20:00
460-152211-3	GC-MW-102(SO)-3-5	Solid	03/19/18 11:35	03/19/18 20:00
460-152211-4	GC-MW-102(SO)-9-11	Solid	03/19/18 11:30	03/19/18 20:00
460-152211-5	GC-MW-103(SO)-3-5	Solid	03/19/18 14:00	03/19/18 20:00
460-152331-1	GC-MW-103(SO)-12-14	Solid	03/20/18 09:10	03/20/18 19:40
460-152331-2	GC-MW-103(SO)-15-17	Solid	03/20/18 09:45	03/20/18 19:40
460-152331-3	GC-MW-104(SO)-0.5-2.5	Solid	03/20/18 10:40	03/20/18 19:40
460-152331-4	GC-MW-104(SO)-7-9	Solid	03/20/18 10:45	03/20/18 19:40
460-152331-5	GC-MW-105(SO)-0.5-2.5	Solid	03/20/18 12:20	03/20/18 19:40
460-152331-6	GC-MW-105(SO)-7-9	Solid	03/20/18 12:25	03/20/18 19:40
460-152331-7	GC-Drain-02(SO)	Solid	03/20/18 13:35	03/20/18 19:40
460-152604-2	GC-MW-107D(SO)-15-17	Solid	03/26/18 11:00	03/26/18 20:30
460-153018-1	GC-MW-109M(SO)-15-17	Solid	03/30/18 09:25	03/30/18 19:00
460-153022-1	GC-MW-107D(SO)-97-99	Solid	03/29/18 12:15	03/30/18 19:00
460-153082-1	GC-MW-109M(SO)-33-35	Solid	04/02/18 10:00	04/02/18 19:40
460-153163-1	GC-MW-106(SO)-15-17	Solid	04/03/18 08:40	04/03/18 20:33
460-153163-2	GC-MW-108D(SO)-15-17	Solid	04/03/18 11:10	04/03/18 20:33
460-153254-1	GC-MW-108D(SO)-33-35	Solid	04/04/18 08:00	04/04/18 18:00
460-153254-2	GC-MW-108D(SO)-59-60.5	Solid	04/04/18 10:00	04/04/18 18:00
460-153389-1	GC-MW-110D(SO)-15-17	Solid	04/05/18 08:00	04/05/18 20:00
460-153515-1	GE-MW-110D(SO)-(69-70)	Solid	04/06/18 10:25	04/06/18 19:20
460-153682-1	GC-MW-101D(SO)-14-15	Solid	04/09/18 13:10	04/10/18 20:00
460-153878-1	GC-MW-101D(SO)(99.2-100)	Solid	04/11/18 13:15	04/12/18 18:00

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-152211-1

Client Sample ID: GC-SB-101(SO)-3-5 — Lab Sample ID: 460-152211-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.022		0.0046	0.0035	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.00029	J	0.00092	0.00018	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00043	J	0.00092	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0012		0.00092	0.00016	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00037	J	0.00092	0.000087	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-SB-101(SO)-15.5-17.5 — Lab Sample ID: 460-152211-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0023	J	0.0047	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.034		0.0047	0.0036	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.0024		0.00095	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00039	J	0.00095	0.00017	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00015	J	0.00095	0.000090	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-102(SO)-3-5 — Lab Sample ID: 460-152211-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0092		0.0046	0.0035	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00033	J	0.00092	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00032	J	0.00092	0.00016	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00012	J	0.00092	0.000088	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.00083	J	0.00092	0.00013	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-102(SO)-9-11 — Lab Sample ID: 460-152211-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0021	J	0.0048	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.015		0.0048	0.0037	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00099		0.00097	0.00016	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00036	J	0.00097	0.00017	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00017	J	0.00097	0.000092	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0042		0.00097	0.00014	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-103(SO)-3-5 — Lab Sample ID: 460-152211-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0030	J *	0.0046	0.0010	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.032	*	0.0046	0.0035	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.0065	*	0.00092	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00073	J *	0.00092	0.00016	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00031	J *	0.00092	0.000088	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-103(SO)-12-14 — Lab Sample ID: 460-152331-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0022	J	0.0051	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.018		0.0051	0.0039	mg/Kg	1	☼	8260C	Total/NA
Carbon disulfide	0.00057	J	0.0010	0.00027	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00045	J B	0.0010	0.00017	mg/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-MW-103(SO)-12-14 (Continued) — Lab Sample ID: 460-152331-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m-Xylene & p-Xylene	0.00035	J	0.0010	0.00018	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00016	J	0.0010	0.000097	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.00022	J	0.0010	0.00015	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-103(SO)-15-17 — Lab Sample ID: 460-152331-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.022		0.0056	0.0042	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.0011		0.0011	0.00018	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00046	J	0.0011	0.00019	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00024	J	0.0011	0.00011	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-104(SO)-0.5-2.5 — Lab Sample ID: 460-152331-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0027	J	0.0051	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.030		0.0051	0.0039	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00030	J	0.0010	0.00018	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00017	J	0.0010	0.000098	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.00021	J	0.0010	0.00015	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-104(SO)-7-9 — Lab Sample ID: 460-152331-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0028	J	0.0046	0.0010	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.031		0.0046	0.0035	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00023	J B	0.00091	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00041	J	0.00091	0.00016	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00021	J	0.00091	0.000087	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-105(SO)-0.5-2.5 — Lab Sample ID: 460-152331-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0022	J	0.0046	0.0010	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.019		0.0046	0.0035	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00028	J B	0.00092	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00038	J	0.00092	0.00016	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00019	J	0.00092	0.000088	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-105(SO)-7-9 — Lab Sample ID: 460-152331-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0029	J	0.0048	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.029		0.0048	0.0037	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00022	J B	0.00096	0.00016	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00053	J	0.00096	0.00017	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00023	J	0.00096	0.000092	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-Drain-02(SO) — Lab Sample ID: 460-152331-7

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-Drain-02(SO) (Continued) — Lab Sample ID: 460-152331-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.18		0.018	0.0039	mg/Kg	1	☼	8260C	Total/NA
4-Methyl-2-pentanone (MIBK)	0.0037	J	0.018	0.0023	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.80		0.018	0.013	mg/Kg	1	☼	8260C	Total/NA
Carbon disulfide	0.0087		0.0035	0.00094	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.011		0.0035	0.00053	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.00075	J	0.0035	0.00070	mg/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	0.00083	J	0.0035	0.00056	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0019	J	0.0035	0.00061	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00075	J	0.0035	0.00033	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0011	J	0.0035	0.00050	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0028	J	0.0035	0.0022	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-107D(SO)-15-17 — Lab Sample ID: 460-152604-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.050		0.0048	0.0036	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.0042		0.00096	0.00016	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00027	J	0.00096	0.00017	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00011	J	0.00096	0.000091	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-109M(SO)-15-17 — Lab Sample ID: 460-153018-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.018	H	0.0032	0.0024	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.00025	J H	0.00063	0.00013	mg/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	0.00035	J H	0.00063	0.00010	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00023	J H	0.00063	0.00010	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00087	H	0.00063	0.00011	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00035	J H	0.00063	0.000060	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.00048	J H	0.00063	0.00040	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-107D(SO)-97-99 — Lab Sample ID: 460-153022-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0015	J	0.0046	0.0010	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.016		0.0046	0.0035	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00026	J B	0.00092	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00043	J	0.00092	0.00016	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00014	J	0.00092	0.000088	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-109M(SO)-33-35 — Lab Sample ID: 460-153082-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0026	J	0.0050	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.036		0.0050	0.0038	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.0020		0.0010	0.00016	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00030	J	0.0010	0.00017	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00015	J	0.0010	0.000095	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0014		0.0010	0.00014	mg/Kg	1	☼	8260C	Total/NA
Trichloroethene	0.00015	J	0.0010	0.00014	mg/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-152211-1

Client Sample ID: GC-MW-106(SO)-15-17 — Lab Sample ID: 460-153163-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0022	J	0.0048	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.031		0.0048	0.0036	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00029	J	0.00096	0.00016	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00038	J	0.00096	0.00017	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00020	J	0.00096	0.000091	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-108D(SO)-15-17 — Lab Sample ID: 460-153163-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0024	J	0.0051	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.041		0.0051	0.0039	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00024	J	0.0010	0.00017	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00040	J	0.0010	0.00018	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00015	J	0.0010	0.000097	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-108D(SO)-33-35 — Lab Sample ID: 460-153254-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0021	J	0.0051	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.040		0.0051	0.0039	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00086	J	0.0010	0.00017	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00044	J	0.0010	0.00018	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00017	J	0.0010	0.000097	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.014		0.0010	0.00015	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-108D(SO)-59-60.5 — Lab Sample ID: 460-153254-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0016	J	0.0028	0.00062	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.020		0.0028	0.0021	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00027	J	0.00056	0.000091	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00020	J	0.00056	0.000098	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.000080	J	0.00056	0.000053	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-110D(SO)-15-17 — Lab Sample ID: 460-153389-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0020	J	0.0042	0.00094	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.018	*	0.0042	0.0032	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00024	J B	0.00085	0.00014	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00019	J	0.00085	0.00015	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GE-MW-110D(SO)-(69-70) — Lab Sample ID: 460-153515-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0045	B	0.0034	0.0026	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00065	J	0.00068	0.00011	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00021	J	0.00068	0.00012	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.000094	J	0.00068	0.000064	mg/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-152211-1

Client Sample ID: GC-MW-101D(SO)-14-15 — Lab Sample ID: 460-153682-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m-Xylene & p-Xylene	0.00031	J	0.00093	0.00016	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-MW-101D(SO)(99.2-100) — Lab Sample ID: 460-153878-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0028	J	0.0047	0.0011	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.017		0.0047	0.0036	mg/Kg	1	☼	8260C	Total/NA
Methylene Chloride	0.00023	J	0.00095	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00088	J	0.00095	0.00017	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00030	J	0.00095	0.000090	mg/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-152211-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI
5035	Closed System Purge and Trap	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: GC-SB-101(SO)-3-5

Date Collected: 03/19/18 09:10
Date Received: 03/19/18 20:00

Lab Sample ID: 460-152211-1

Matrix: Solid
Percent Solids: 95.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00092	U	0.00092	0.00021	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,1-Dichloroethane	0.00092	U	0.00092	0.00019	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,1-Dichloroethene	0.00092	U	0.00092	0.00021	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000084	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00042	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,2-Dichloroethane	0.00092	U	0.00092	0.00027	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,2-Dichloropropane	0.00092	U	0.00092	0.00039	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
1,4-Dioxane	0.018	U	0.018	0.0084	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
2-Butanone (MEK)	0.0046	U	0.0046	0.0010	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
2-Hexanone	0.0046	U	0.0046	0.00072	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Acetone	**0.022**		0.0046	0.0035	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Benzene	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Bromoform	0.00092	U	0.00092	0.00039	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Bromomethane	0.00092	U	0.00092	0.00043	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Carbon disulfide	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Carbon tetrachloride	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Chlorobenzene	0.00092	U	0.00092	0.00016	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Chlorobromomethane	0.00092	U	0.00092	0.00026	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Chlorodibromomethane	0.00092	U	0.00092	0.00018	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Chloroethane	0.00092	U	0.00092	0.00048	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Chloroform	0.00092	U	0.00092	0.00029	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Chloromethane	0.00092	U	0.00092	0.00040	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Cyclohexane	0.00092	U	0.00092	0.00020	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Dichlorobromomethane	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Dichlorodifluoromethane	0.00092	U	0.00092	0.00031	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Ethylbenzene	**0.00029**	**J**	0.00092	0.00018	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Ethylene Dibromide	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Isopropylbenzene	0.00092	U	0.00092	0.00012	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Methyl acetate	0.0046	U *	0.0046	0.0039	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Methyl tert-butyl ether	0.00092	U	0.00092	0.00011	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Methylcyclohexane	0.00092	U	0.00092	0.00015	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Methylene Chloride	**0.00043**	**J**	0.00092	0.00015	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
m-Xylene & p-Xylene	**0.0012**		0.00092	0.00016	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
o-Xylene	**0.00037**	**J**	0.00092	0.000087	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Styrene	0.00092	U	0.00092	0.00011	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Tetrachloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Toluene	0.00092	U	0.00092	0.00057	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1

Client Sample ID: GC-SB-101(SO)-3-5

Lab Sample ID: 460-152211-1
Date Collected: 03/19/18 09:10
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 95.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Trichlorofluoromethane	0.00092	U	0.00092	0.00037	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1
Vinyl chloride	0.00092	U	0.00092	0.00050	mg/Kg	☼	03/20/18 10:02	03/21/18 04:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*03/20/18 10:02*	*03/21/18 04:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*78 - 135*	*03/20/18 10:02*	*03/21/18 04:44*	*1*
4-Bromofluorobenzene	*108*		*67 - 126*	*03/20/18 10:02*	*03/21/18 04:44*	*1*
Dibromofluoromethane (Surr)	*113*		*61 - 149*	*03/20/18 10:02*	*03/21/18 04:44*	*1*
Toluene-d8 (Surr)	*104*		*73 - 121*	*03/20/18 10:02*	*03/21/18 04:44*	*1*

Client Sample ID: GC-SB-101(SO)-15.5-17.5

Lab Sample ID: 460-152211-2
Date Collected: 03/19/18 09:20
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 92.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00095	U	0.00095	0.00022	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,1,2,2-Tetrachloroethane	0.00095	U	0.00095	0.00020	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00095	U	0.00095	0.00029	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,1,2-Trichloroethane	0.00095	U	0.00095	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,1-Dichloroethane	0.00095	U	0.00095	0.00020	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,1-Dichloroethene	0.00095	U	0.00095	0.00021	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,2,3-Trichlorobenzene	0.00095	U	0.00095	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,2,4-Trichlorobenzene	0.00095	U	0.00095	0.000087	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,2-Dibromo-3-Chloropropane	0.00095	U	0.00095	0.00044	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,2-Dichlorobenzene	0.00095	U	0.00095	0.00014	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,2-Dichloroethane	0.00095	U	0.00095	0.00028	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,2-Dichloropropane	0.00095	U	0.00095	0.00040	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,3-Dichlorobenzene	0.00095	U	0.00095	0.00015	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,4-Dichlorobenzene	0.00095	U	0.00095	0.000095	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
1,4-Dioxane	0.019	U	0.019	0.0087	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
2-Butanone (MEK)	**0.0023**	**J**	0.0047	0.0011	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
2-Hexanone	0.0047	U	0.0047	0.00074	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00063	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Acetone	**0.034**		0.0047	0.0036	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Benzene	0.00095	U	0.00095	0.00025	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Bromoform	0.00095	U	0.00095	0.00040	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Bromomethane	0.00095	U	0.00095	0.00045	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Carbon disulfide	0.00095	U	0.00095	0.00025	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Carbon tetrachloride	0.00095	U	0.00095	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Chlorobenzene	0.00095	U	0.00095	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Chlorobromomethane	0.00095	U	0.00095	0.00027	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Chlorodibromomethane	0.00095	U	0.00095	0.00018	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Chloroethane	0.00095	U	0.00095	0.00050	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Chloroform	0.00095	U	0.00095	0.00030	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Chloromethane	0.00095	U	0.00095	0.00041	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
cis-1,2-Dichloroethene	0.00095	U	0.00095	0.00014	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1

Client Sample ID: GC-SB-101(SO)-15.5-17.5

Date Collected: 03/19/18 09:20
Date Received: 03/19/18 20:00

Lab Sample ID: 460-152211-2

Matrix: Solid
Percent Solids: 92.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.00095	U	0.00095	0.00026	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Cyclohexane	0.00095	U	0.00095	0.00021	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Dichlorobromomethane	0.00095	U	0.00095	0.00024	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Dichlorodifluoromethane	0.00095	U	0.00095	0.00032	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Ethylbenzene	0.00095	U	0.00095	0.00019	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Ethylene Dibromide	0.00095	U	0.00095	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Isopropylbenzene	0.00095	U	0.00095	0.00012	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Methyl acetate	0.0047	U *	0.0047	0.0041	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Methyl tert-butyl ether	0.00095	U	0.00095	0.00012	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Methylcyclohexane	0.00095	U	0.00095	0.00015	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Methylene Chloride	**0.0024**		0.00095	0.00015	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
m-Xylene & p-Xylene	**0.00039**	**J**	0.00095	0.00017	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
o-Xylene	**0.00015**	**J**	0.00095	0.000090	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Styrene	0.00095	U	0.00095	0.00012	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Tetrachloroethene	0.00095	U	0.00095	0.00014	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Toluene	0.00095	U	0.00095	0.00059	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
trans-1,2-Dichloroethene	0.00095	U	0.00095	0.00023	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
trans-1,3-Dichloropropene	0.00095	U	0.00095	0.00025	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Trichloroethene	0.00095	U	0.00095	0.00014	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Trichlorofluoromethane	0.00095	U	0.00095	0.00039	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1
Vinyl chloride	0.00095	U	0.00095	0.00052	mg/Kg	☼	03/20/18 10:02	03/21/18 02:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,2,4-Trimethylbenzene	*0.00011*	*J*	*mg/Kg*	☼	*11.16*	*95-63-6*	*03/20/18 10:02*	*03/21/18 02:43*	*1*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*03/20/18 10:02*	*03/21/18 02:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*78 - 135*	*03/20/18 10:02*	*03/21/18 02:43*	*1*
4-Bromofluorobenzene	*107*		*67 - 126*	*03/20/18 10:02*	*03/21/18 02:43*	*1*
Dibromofluoromethane (Surr)	*116*		*61 - 149*	*03/20/18 10:02*	*03/21/18 02:43*	*1*
Toluene-d8 (Surr)	*107*		*73 - 121*	*03/20/18 10:02*	*03/21/18 02:43*	*1*

Client Sample ID: GC-MW-102(SO)-3-5

Date Collected: 03/19/18 11:35
Date Received: 03/19/18 20:00

Lab Sample ID: 460-152211-3

Matrix: Solid
Percent Solids: 95.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,1-Dichloroethane	0.00092	U	0.00092	0.00019	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,1-Dichloroethene	0.00092	U	0.00092	0.00021	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,2-Dichloroethane	0.00092	U	0.00092	0.00027	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,2-Dichloropropane	0.00092	U	0.00092	0.00039	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1

Client Sample ID: GC-MW-102(SO)-3-5

Date Collected: 03/19/18 11:35
Date Received: 03/19/18 20:00

Lab Sample ID: 460-152211-3

Matrix: Solid
Percent Solids: 95.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
1,4-Dioxane	0.018	U	0.018	0.0085	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
2-Butanone (MEK)	0.0046	U	0.0046	0.0010	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
2-Hexanone	0.0046	U	0.0046	0.00072	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Acetone	**0.0092**		0.0046	0.0035	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Benzene	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Bromoform	0.00092	U	0.00092	0.00039	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Bromomethane	0.00092	U	0.00092	0.00044	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Carbon disulfide	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Carbon tetrachloride	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Chlorobenzene	0.00092	U	0.00092	0.00016	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Chlorobromomethane	0.00092	U	0.00092	0.00026	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Chlorodibromomethane	0.00092	U	0.00092	0.00018	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Chloroethane	0.00092	U	0.00092	0.00048	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Chloroform	0.00092	U	0.00092	0.00029	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Chloromethane	0.00092	U	0.00092	0.00040	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Cyclohexane	0.00092	U	0.00092	0.00020	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Dichlorobromomethane	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Dichlorodifluoromethane	0.00092	U	0.00092	0.00031	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Ethylbenzene	0.00092	U	0.00092	0.00018	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Ethylene Dibromide	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Isopropylbenzene	0.00092	U	0.00092	0.00012	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Methyl acetate	0.0046	U *	0.0046	0.0040	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Methyl tert-butyl ether	0.00092	U	0.00092	0.00012	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Methylcyclohexane	0.00092	U	0.00092	0.00015	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Methylene Chloride	**0.00033**	**J**	0.00092	0.00015	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
m-Xylene & p-Xylene	**0.00032**	**J**	0.00092	0.00016	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
o-Xylene	**0.00012**	**J**	0.00092	0.000088	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Styrene	0.00092	U	0.00092	0.00011	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Tetrachloroethene	**0.00083**	**J**	0.00092	0.00013	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Toluene	0.00092	U	0.00092	0.00058	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Trichloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Trichlorofluoromethane	0.00092	U	0.00092	0.00038	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1
Vinyl chloride	0.00092	U	0.00092	0.00050	mg/Kg	☼	03/20/18 10:04	03/21/18 05:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	*0.0082*	*J N*	*mg/Kg*	☼	*14.80*	*54935-00-1*	*03/20/18 10:04*	*03/21/18 05:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*		*78 - 135*	*03/20/18 10:04*	*03/21/18 05:09*	*1*
4-Bromofluorobenzene	*107*		*67 - 126*	*03/20/18 10:04*	*03/21/18 05:09*	*1*
Dibromofluoromethane (Surr)	*117*		*61 - 149*	*03/20/18 10:04*	*03/21/18 05:09*	*1*
Toluene-d8 (Surr)	*107*		*73 - 121*	*03/20/18 10:04*	*03/21/18 05:09*	*1*

Client Sample ID: GC-MW-102(SO)-9-11

Date Collected: 03/19/18 11:30
Date Received: 03/19/18 20:00

Lab Sample ID: 460-152211-4

Matrix: Solid
Percent Solids: 84.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00097	U	0.00097	0.00023	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,1,2,2-Tetrachloroethane	0.00097	U	0.00097	0.00021	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00097	U	0.00097	0.00029	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,1,2-Trichloroethane	0.00097	U	0.00097	0.00017	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,1-Dichloroethane	0.00097	U	0.00097	0.00020	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,1-Dichloroethene	0.00097	U	0.00097	0.00022	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,2,3-Trichlorobenzene	0.00097	U	0.00097	0.00018	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,2,4-Trichlorobenzene	0.00097	U	0.00097	0.000089	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,2-Dibromo-3-Chloropropane	0.00097	U	0.00097	0.00044	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,2-Dichlorobenzene	0.00097	U	0.00097	0.00014	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,2-Dichloroethane	0.00097	U	0.00097	0.00029	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,2-Dichloropropane	0.00097	U	0.00097	0.00041	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,3-Dichlorobenzene	0.00097	U	0.00097	0.00015	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,4-Dichlorobenzene	0.00097	U	0.00097	0.000097	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
1,4-Dioxane	0.019	U	0.019	0.0089	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
2-Butanone (MEK)	**0.0021**	**J**	0.0048	0.0011	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
2-Hexanone	0.0048	U	0.0048	0.00075	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Acetone	**0.015**		0.0048	0.0037	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Benzene	0.00097	U	0.00097	0.00025	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Bromoform	0.00097	U	0.00097	0.00041	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Bromomethane	0.00097	U	0.00097	0.00046	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Carbon disulfide	0.00097	U	0.00097	0.00026	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Carbon tetrachloride	0.00097	U	0.00097	0.00018	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Chlorobenzene	0.00097	U	0.00097	0.00017	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Chlorobromomethane	0.00097	U	0.00097	0.00027	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Chlorodibromomethane	0.00097	U	0.00097	0.00019	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Chloroethane	0.00097	U	0.00097	0.00050	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Chloroform	0.00097	U	0.00097	0.00031	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Chloromethane	0.00097	U	0.00097	0.00042	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
cis-1,2-Dichloroethene	0.00097	U	0.00097	0.00015	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
cis-1,3-Dichloropropene	0.00097	U	0.00097	0.00026	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Cyclohexane	0.00097	U	0.00097	0.00021	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Dichlorobromomethane	0.00097	U	0.00097	0.00025	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Dichlorodifluoromethane	0.00097	U	0.00097	0.00033	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Ethylbenzene	0.00097	U	0.00097	0.00019	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Ethylene Dibromide	0.00097	U	0.00097	0.00017	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Isopropylbenzene	0.00097	U	0.00097	0.00012	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Methyl acetate	0.0048	U *	0.0048	0.0042	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Methyl tert-butyl ether	0.00097	U	0.00097	0.00012	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Methylcyclohexane	0.00097	U	0.00097	0.00015	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Methylene Chloride	**0.00099**		0.00097	0.00016	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
m-Xylene & p-Xylene	**0.00036**	**J**	0.00097	0.00017	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
o-Xylene	**0.00017**	**J**	0.00097	0.000092	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Styrene	0.00097	U	0.00097	0.00012	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Tetrachloroethene	**0.0042**		0.00097	0.00014	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Toluene	0.00097	U	0.00097	0.00060	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
trans-1,2-Dichloroethene	0.00097	U	0.00097	0.00024	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
trans-1,3-Dichloropropene	0.00097	U	0.00097	0.00026	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1

Client Sample ID: GC-MW-102(SO)-9-11

Lab Sample ID: 460-152211-4

Date Collected: 03/19/18 11:30
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 84.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.00097	U	0.00097	0.00014	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Trichlorofluoromethane	0.00097	U	0.00097	0.00039	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1
Vinyl chloride	0.00097	U	0.00097	0.00053	mg/Kg	☼	03/20/18 10:05	03/21/18 05:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	*0.017*	*J N*	*mg/Kg*	☼	*14.80*	*54935-00-1*	*03/20/18 10:05*	*03/21/18 05:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*127*		*78 - 135*	*03/20/18 10:05*	*03/21/18 05:33*	*1*
4-Bromofluorobenzene	*105*		*67 - 126*	*03/20/18 10:05*	*03/21/18 05:33*	*1*
Dibromofluoromethane (Surr)	*115*		*61 - 149*	*03/20/18 10:05*	*03/21/18 05:33*	*1*
Toluene-d8 (Surr)	*105*		*73 - 121*	*03/20/18 10:05*	*03/21/18 05:33*	*1*

Client Sample ID: GC-MW-103(SO)-3-5

Lab Sample ID: 460-152211-5

Date Collected: 03/19/18 14:00
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 95.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00092	U *	0.00092	0.00022	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,1,2,2-Tetrachloroethane	0.00092	U *	0.00092	0.00020	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U *	0.00092	0.00028	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,1,2-Trichloroethane	0.00092	U *	0.00092	0.00016	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,1-Dichloroethane	0.00092	U *	0.00092	0.00019	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,1-Dichloroethene	0.00092	U *	0.00092	0.00021	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,2,3-Trichlorobenzene	0.00092	U *	0.00092	0.00017	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,2,4-Trichlorobenzene	0.00092	U *	0.00092	0.000085	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,2-Dibromo-3-Chloropropane	0.00092	U *	0.00092	0.00043	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,2-Dichlorobenzene	0.00092	U *	0.00092	0.00013	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,2-Dichloroethane	0.00092	U *	0.00092	0.00027	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,2-Dichloropropane	0.00092	U *	0.00092	0.00039	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,3-Dichlorobenzene	0.00092	U *	0.00092	0.00015	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,4-Dichlorobenzene	0.00092	U *	0.00092	0.000092	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
1,4-Dioxane	0.018	U *	0.018	0.0085	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
2-Butanone (MEK)	**0.0030**	**J ***	0.0046	0.0010	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
2-Hexanone	0.0046	U *	0.0046	0.00072	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
4-Methyl-2-pentanone (MIBK)	0.0046	U *	0.0046	0.00061	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Acetone	**0.032**	*	0.0046	0.0035	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Benzene	0.00092	U *	0.00092	0.00024	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Bromoform	0.00092	U *	0.00092	0.00039	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Bromomethane	0.00092	U *	0.00092	0.00044	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Carbon disulfide	0.00092	U *	0.00092	0.00025	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Carbon tetrachloride	0.00092	U *	0.00092	0.00017	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Chlorobenzene	0.00092	U *	0.00092	0.00016	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Chlorobromomethane	0.00092	U *	0.00092	0.00026	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Chlorodibromomethane	0.00092	U *	0.00092	0.00018	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Chloroethane	0.00092	U *	0.00092	0.00048	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Chloroform	0.00092	U *	0.00092	0.00029	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Chloromethane	0.00092	U *	0.00092	0.00040	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1

Client Sample ID: GC-MW-103(SO)-3-5

Lab Sample ID: 460-152211-5
Date Collected: 03/19/18 14:00
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 95.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.00092	U *	0.00092	0.00014	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
cis-1,3-Dichloropropene	0.00092	U *	0.00092	0.00025	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Cyclohexane	0.00092	U *	0.00092	0.00020	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Dichlorobromomethane	0.00092	U *	0.00092	0.00024	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Dichlorodifluoromethane	0.00092	U *	0.00092	0.00031	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Ethylbenzene	0.00092	U *	0.00092	0.00018	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Ethylene Dibromide	0.00092	U *	0.00092	0.00017	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Isopropylbenzene	0.00092	U *	0.00092	0.00012	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Methyl acetate	0.0046	U *	0.0046	0.0040	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Methyl tert-butyl ether	0.00092	U *	0.00092	0.00012	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Methylcyclohexane	0.00092	U *	0.00092	0.00015	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Methylene Chloride	**0.0065**	*	0.00092	0.00015	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
m-Xylene & p-Xylene	**0.00073**	J *	0.00092	0.00016	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
o-Xylene	**0.00031**	J *	0.00092	0.000088	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Styrene	0.00092	U *	0.00092	0.00011	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Tetrachloroethene	0.00092	U *	0.00092	0.00013	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Toluene	0.00092	U *	0.00092	0.00058	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
trans-1,2-Dichloroethene	0.00092	U *	0.00092	0.00023	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
trans-1,3-Dichloropropene	0.00092	U *	0.00092	0.00025	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Trichloroethene	0.00092	U *	0.00092	0.00013	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Trichlorofluoromethane	0.00092	U *	0.00092	0.00038	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1
Vinyl chloride	0.00092	U *	0.00092	0.00050	mg/Kg	☼	03/20/18 10:06	03/21/18 05:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	*0.0070*	*J N*	*mg/Kg*	☼	*14.80*	*54935-00-1*	*03/20/18 10:06*	*03/21/18 05:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*132*	*	*78 - 135*	*03/20/18 10:06*	*03/21/18 05:57*	*1*
4-Bromofluorobenzene	*105*	*	*67 - 126*	*03/20/18 10:06*	*03/21/18 05:57*	*1*
Dibromofluoromethane (Surr)	*115*	*	*61 - 149*	*03/20/18 10:06*	*03/21/18 05:57*	*1*
Toluene-d8 (Surr)	*102*	*	*73 - 121*	*03/20/18 10:06*	*03/21/18 05:57*	*1*

Client Sample ID: GC-MW-103(SO)-12-14

Lab Sample ID: 460-152331-1
Date Collected: 03/20/18 09:10
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 74.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000094	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1

Client Sample ID: GC-MW-103(SO)-12-14
Date Collected: 03/20/18 09:10
Date Received: 03/20/18 19:40

Lab Sample ID: 460-152331-1
Matrix: Solid
Percent Solids: 74.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	0.0010	U	0.0010	0.00043	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
1,4-Dioxane	0.020	U	0.020	0.0094	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
2-Butanone (MEK)	**0.0022**	**J**	0.0051	0.0011	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
2-Hexanone	0.0051	U	0.0051	0.00080	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Acetone	**0.018**		0.0051	0.0039	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Bromoform	0.0010	U	0.0010	0.00044	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Bromomethane	0.0010	U	0.0010	0.00049	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Carbon disulfide	**0.00057**	**J**	0.0010	0.00027	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Carbon tetrachloride	0.0010	U	0.0010	0.00019	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Chlorobromomethane	0.0010	U	0.0010	0.00029	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Chlorodibromomethane	0.0010	U	0.0010	0.00020	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Chloroethane	0.0010	U	0.0010	0.00053	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Chloroform	0.0010	U	0.0010	0.00033	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Chloromethane	0.0010	U	0.0010	0.00045	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Cyclohexane	0.0010	U	0.0010	0.00023	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00035	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Methyl acetate	0.0051	U	0.0051	0.0044	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Methylene Chloride	**0.00045**	**J B**	0.0010	0.00017	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
m-Xylene & p-Xylene	**0.00035**	**J**	0.0010	0.00018	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
o-Xylene	**0.00016**	**J**	0.0010	0.000097	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Styrene	0.0010	U	0.0010	0.00013	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Tetrachloroethene	**0.00022**	**J**	0.0010	0.00015	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Toluene	0.0010	U	0.0010	0.00064	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Trichloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00042	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1
Vinyl chloride	0.0010	U	0.0010	0.00056	mg/Kg	☼	03/21/18 07:50	03/24/18 10:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Naphthalene, decahydro-, trans-	*0.27*	*J N*	*mg/Kg*	☼	*11.77*	*493-02-7*	*03/21/18 07:50*	*03/24/18 10:37*	*1*
Undecane	*0.28*	*J N*	*mg/Kg*	☼	*11.83*	*1120-21-4*	*03/21/18 07:50*	*03/24/18 10:37*	*1*
Unknown	*0.30*	*J*	*mg/Kg*	☼	*11.99*		*03/21/18 07:50*	*03/24/18 10:37*	*1*
trans-Decalin, 2-methyl-	*0.33*	*J N*	*mg/Kg*	☼	*12.30*	*1000152-47-3*	*03/21/18 07:50*	*03/24/18 10:37*	*1*
Unknown	*0.34*	*J*	*mg/Kg*	☼	*12.47*		*03/21/18 07:50*	*03/24/18 10:37*	*1*
Dodecane	*0.31*	*J N*	*mg/Kg*	☼	*12.69*	*112-40-3*	*03/21/18 07:50*	*03/24/18 10:37*	*1*

Client Sample ID: GC-MW-103(SO)-12-14

Lab Sample ID: 460-152331-1
Date Collected: 03/20/18 09:10
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 74.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Dodecane, 6-methyl-	0.54	J N	mg/Kg	☼	12.81	6044-71-9	03/21/18 07:50	03/24/18 10:37	1
Unknown	0.56	J	mg/Kg	☼	13.18		03/21/18 07:50	03/24/18 10:37	1
Octane, 2,6-dimethyl-	0.38	J N	mg/Kg	☼	13.25	2051-30-1	03/21/18 07:50	03/24/18 10:37	1
Unknown	0.30	J	mg/Kg	☼	13.59		03/21/18 07:50	03/24/18 10:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		78 - 135	03/21/18 07:50	03/24/18 10:37	1
4-Bromofluorobenzene	102		67 - 126	03/21/18 07:50	03/24/18 10:37	1
Dibromofluoromethane (Surr)	103		61 - 149	03/21/18 07:50	03/24/18 10:37	1
Toluene-d8 (Surr)	107		73 - 121	03/21/18 07:50	03/24/18 10:37	1

Client Sample ID: GC-MW-103(SO)-15-17

Lab Sample ID: 460-152331-2
Date Collected: 03/20/18 09:45
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 78.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0011	U	0.0011	0.00026	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,1,2,2-Tetrachloroethane	0.0011	U	0.0011	0.00024	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0011	U	0.0011	0.00034	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,1,2-Trichloroethane	0.0011	U	0.0011	0.00020	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,1-Dichloroethane	0.0011	U	0.0011	0.00023	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,1-Dichloroethene	0.0011	U	0.0011	0.00025	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,2,3-Trichlorobenzene	0.0011	U	0.0011	0.00020	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,2,4-Trichlorobenzene	0.0011	U	0.0011	0.00010	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,2-Dibromo-3-Chloropropane	0.0011	U	0.0011	0.00051	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,2-Dichlorobenzene	0.0011	U	0.0011	0.00016	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,2-Dichloroethane	0.0011	U	0.0011	0.00033	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,2-Dichloropropane	0.0011	U	0.0011	0.00047	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,3-Dichlorobenzene	0.0011	U	0.0011	0.00018	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,4-Dichlorobenzene	0.0011	U	0.0011	0.00011	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
1,4-Dioxane	0.022	U	0.022	0.010	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
2-Butanone (MEK)	0.0056	U	0.0056	0.0012	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
2-Hexanone	0.0056	U	0.0056	0.00087	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
4-Methyl-2-pentanone (MIBK)	0.0056	U	0.0056	0.00074	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Acetone	**0.022**		0.0056	0.0042	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Benzene	0.0011	U	0.0011	0.00029	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Bromoform	0.0011	U	0.0011	0.00047	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Bromomethane	0.0011	U	0.0011	0.00053	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Carbon disulfide	0.0011	U	0.0011	0.00030	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Carbon tetrachloride	0.0011	U	0.0011	0.00020	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Chlorobenzene	0.0011	U	0.0011	0.00020	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Chlorobromomethane	0.0011	U	0.0011	0.00031	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Chlorodibromomethane	0.0011	U	0.0011	0.00022	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Chloroethane	0.0011	U	0.0011	0.00058	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Chloroform	0.0011	U	0.0011	0.00036	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Chloromethane	0.0011	U	0.0011	0.00048	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
cis-1,2-Dichloroethene	0.0011	U	0.0011	0.00017	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
cis-1,3-Dichloropropene	0.0011	U	0.0011	0.00030	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1

Client Sample ID: GC-MW-103(SO)-15-17

Lab Sample ID: 460-152331-2
Date Collected: 03/20/18 09:45
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 78.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.0011	U	0.0011	0.00025	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Dichlorobromomethane	0.0011	U	0.0011	0.00029	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Dichlorodifluoromethane	0.0011	U	0.0011	0.00038	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Ethylbenzene	0.0011	U	0.0011	0.00022	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Ethylene Dibromide	0.0011	U	0.0011	0.00020	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Isopropylbenzene	0.0011	U	0.0011	0.00014	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Methyl acetate	0.0056	U	0.0056	0.0048	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Methyl tert-butyl ether	0.0011	U	0.0011	0.00014	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Methylcyclohexane	0.0011	U	0.0011	0.00018	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Methylene Chloride	**0.0011**		0.0011	0.00018	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
m-Xylene & p-Xylene	**0.00046**	**J**	0.0011	0.00019	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
o-Xylene	**0.00024**	**J**	0.0011	0.00011	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Styrene	0.0011	U	0.0011	0.00014	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Tetrachloroethene	0.0011	U	0.0011	0.00016	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Toluene	0.0011	U	0.0011	0.00070	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
trans-1,2-Dichloroethene	0.0011	U	0.0011	0.00027	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
trans-1,3-Dichloropropene	0.0011	U	0.0011	0.00030	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Trichloroethene	0.0011	U	0.0011	0.00016	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Trichlorofluoromethane	0.0011	U	0.0011	0.00045	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1
Vinyl chloride	0.0011	U	0.0011	0.00061	mg/Kg	☼	03/21/18 07:50	03/25/18 13:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.0083*	*J*	*mg/Kg*	☼	*11.94*		*03/21/18 07:50*	*03/25/18 13:30*	*1*
Unknown alkane	*0.0099*	*J*	*mg/Kg*	☼	*13.28*		*03/21/18 07:50*	*03/25/18 13:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 135*	*03/21/18 07:50*	*03/25/18 13:30*	*1*
4-Bromofluorobenzene	*96*		*67 - 126*	*03/21/18 07:50*	*03/25/18 13:30*	*1*
Dibromofluoromethane (Surr)	*97*		*61 - 149*	*03/21/18 07:50*	*03/25/18 13:30*	*1*
Toluene-d8 (Surr)	*99*		*73 - 121*	*03/21/18 07:50*	*03/25/18 13:30*	*1*

Client Sample ID: GC-MW-104(SO)-0.5-2.5

Lab Sample ID: 460-152331-3
Date Collected: 03/20/18 10:40
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 96.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000095	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00044	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1

Client Sample ID: GC-MW-104(SO)-0.5-2.5

Date Collected: 03/20/18 10:40
Date Received: 03/20/18 19:40

Lab Sample ID: 460-152331-3

Matrix: Solid
Percent Solids: 96.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
1,4-Dioxane	0.021	U	0.021	0.0095	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
2-Butanone (MEK)	**0.0027**	**J**	0.0051	0.0011	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
2-Hexanone	0.0051	U	0.0051	0.00080	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Acetone	**0.030**		0.0051	0.0039	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Benzene	0.0010	U	0.0010	0.00027	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Bromoform	0.0010	U	0.0010	0.00044	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Bromomethane	0.0010	U	0.0010	0.00049	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Carbon tetrachloride	0.0010	U	0.0010	0.00019	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Chlorobromomethane	0.0010	U	0.0010	0.00029	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Chlorodibromomethane	0.0010	U	0.0010	0.00020	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Chloroethane	0.0010	U	0.0010	0.00054	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Chloroform	0.0010	U	0.0010	0.00033	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Chloromethane	0.0010	U	0.0010	0.00045	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Cyclohexane	0.0010	U	0.0010	0.00023	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00035	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Ethylene Dibromide	0.0010	U	0.0010	0.00019	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Methyl acetate	0.0051	U	0.0051	0.0044	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Methylene Chloride	0.0010	U	0.0010	0.00017	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
m-Xylene & p-Xylene	**0.00030**	**J**	0.0010	0.00018	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
o-Xylene	**0.00017**	**J**	0.0010	0.000098	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Styrene	0.0010	U	0.0010	0.00013	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Tetrachloroethene	**0.00021**	**J**	0.0010	0.00015	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Toluene	0.0010	U	0.0010	0.00064	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Trichloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00042	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1
Vinyl chloride	0.0010	U	0.0010	0.00056	mg/Kg	☼	03/21/18 07:51	03/24/18 08:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*03/21/18 07:51*	*03/24/18 08:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*78 - 135*	*03/21/18 07:51*	*03/24/18 08:36*	*1*
4-Bromofluorobenzene	*99*		*67 - 126*	*03/21/18 07:51*	*03/24/18 08:36*	*1*
Dibromofluoromethane (Surr)	*105*		*61 - 149*	*03/21/18 07:51*	*03/24/18 08:36*	*1*
Toluene-d8 (Surr)	*103*		*73 - 121*	*03/21/18 07:51*	*03/24/18 08:36*	*1*

Client Sample ID: GC-MW-104(SO)-7-9

Date Collected: 03/20/18 10:45
Date Received: 03/20/18 19:40

Lab Sample ID: 460-152331-4

Matrix: Solid
Percent Solids: 93.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00091	U	0.00091	0.00021	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,1,2,2-Tetrachloroethane	0.00091	U	0.00091	0.00020	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00091	U	0.00091	0.00028	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,1,2-Trichloroethane	0.00091	U	0.00091	0.00016	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,1-Dichloroethane	0.00091	U	0.00091	0.00019	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,1-Dichloroethene	0.00091	U	0.00091	0.00021	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,2,3-Trichlorobenzene	0.00091	U	0.00091	0.00017	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,2,4-Trichlorobenzene	0.00091	U	0.00091	0.000084	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,2-Dibromo-3-Chloropropane	0.00091	U	0.00091	0.00042	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,2-Dichlorobenzene	0.00091	U	0.00091	0.00013	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,2-Dichloroethane	0.00091	U	0.00091	0.00027	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,2-Dichloropropane	0.00091	U	0.00091	0.00039	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,3-Dichlorobenzene	0.00091	U	0.00091	0.00015	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,4-Dichlorobenzene	0.00091	U	0.00091	0.000091	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
1,4-Dioxane	0.018	U	0.018	0.0084	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
2-Butanone (MEK)	**0.0028**	**J**	0.0046	0.0010	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
2-Hexanone	0.0046	U	0.0046	0.00071	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Acetone	**0.031**		0.0046	0.0035	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Benzene	0.00091	U	0.00091	0.00024	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Bromoform	0.00091	U	0.00091	0.00039	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Bromomethane	0.00091	U	0.00091	0.00043	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Carbon disulfide	0.00091	U	0.00091	0.00024	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Carbon tetrachloride	0.00091	U	0.00091	0.00017	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Chlorobenzene	0.00091	U	0.00091	0.00016	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Chlorobromomethane	0.00091	U	0.00091	0.00026	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Chlorodibromomethane	0.00091	U	0.00091	0.00018	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Chloroethane	0.00091	U	0.00091	0.00048	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Chloroform	0.00091	U	0.00091	0.00029	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Chloromethane	0.00091	U	0.00091	0.00040	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
cis-1,2-Dichloroethene	0.00091	U	0.00091	0.00014	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
cis-1,3-Dichloropropene	0.00091	U	0.00091	0.00025	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Cyclohexane	0.00091	U	0.00091	0.00020	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Dichlorobromomethane	0.00091	U	0.00091	0.00023	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Dichlorodifluoromethane	0.00091	U	0.00091	0.00031	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Ethylbenzene	0.00091	U	0.00091	0.00018	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Ethylene Dibromide	0.00091	U	0.00091	0.00016	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Isopropylbenzene	0.00091	U	0.00091	0.00012	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Methyl acetate	0.0046	U	0.0046	0.0039	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Methyl tert-butyl ether	0.00091	U	0.00091	0.00011	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Methylcyclohexane	0.00091	U	0.00091	0.00015	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Methylene Chloride	**0.00023**	**J B**	0.00091	0.00015	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
m-Xylene & p-Xylene	**0.00041**	**J**	0.00091	0.00016	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
o-Xylene	**0.00021**	**J**	0.00091	0.000087	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Styrene	0.00091	U	0.00091	0.00011	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Tetrachloroethene	0.00091	U	0.00091	0.00013	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Toluene	0.00091	U	0.00091	0.00057	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
trans-1,2-Dichloroethene	0.00091	U	0.00091	0.00022	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
trans-1,3-Dichloropropene	0.00091	U	0.00091	0.00024	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1

Client Sample ID: GC-MW-104(SO)-7-9

Date Collected: 03/20/18 10:45
Date Received: 03/20/18 19:40

Lab Sample ID: 460-152331-4

Matrix: Solid
Percent Solids: 93.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.00091	U	0.00091	0.00013	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Trichlorofluoromethane	0.00091	U	0.00091	0.00037	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1
Vinyl chloride	0.00091	U	0.00091	0.00050	mg/Kg	☼	03/21/18 07:51	03/24/18 09:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*03/21/18 07:51*	*03/24/18 09:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*78 - 135*	*03/21/18 07:51*	*03/24/18 09:01*	*1*
4-Bromofluorobenzene	*102*		*67 - 126*	*03/21/18 07:51*	*03/24/18 09:01*	*1*
Dibromofluoromethane (Surr)	*104*		*61 - 149*	*03/21/18 07:51*	*03/24/18 09:01*	*1*
Toluene-d8 (Surr)	*104*		*73 - 121*	*03/21/18 07:51*	*03/24/18 09:01*	*1*

Client Sample ID: GC-MW-105(SO)-0.5-2.5

Date Collected: 03/20/18 12:20
Date Received: 03/20/18 19:40

Lab Sample ID: 460-152331-5

Matrix: Solid
Percent Solids: 97.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,1-Dichloroethane	0.00092	U	0.00092	0.00019	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,1-Dichloroethene	0.00092	U	0.00092	0.00021	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,2-Dichloroethane	0.00092	U	0.00092	0.00027	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,2-Dichloropropane	0.00092	U	0.00092	0.00039	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
1,4-Dioxane	0.018	U	0.018	0.0085	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
2-Butanone (MEK)	**0.0022**	**J**	0.0046	0.0010	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
2-Hexanone	0.0046	U	0.0046	0.00072	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Acetone	**0.019**		0.0046	0.0035	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Benzene	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Bromoform	0.00092	U	0.00092	0.00039	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Bromomethane	0.00092	U	0.00092	0.00044	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Carbon disulfide	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Carbon tetrachloride	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Chlorobenzene	0.00092	U	0.00092	0.00016	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Chlorobromomethane	0.00092	U	0.00092	0.00026	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Chlorodibromomethane	0.00092	U	0.00092	0.00018	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Chloroethane	0.00092	U	0.00092	0.00048	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Chloroform	0.00092	U	0.00092	0.00029	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Chloromethane	0.00092	U	0.00092	0.00040	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1

Client Sample ID: GC-MW-105(SO)-0.5-2.5

Lab Sample ID: 460-152331-5
Date Collected: 03/20/18 12:20
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 97.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Cyclohexane	0.00092	U	0.00092	0.00020	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Dichlorobromomethane	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Dichlorodifluoromethane	0.00092	U	0.00092	0.00031	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Ethylbenzene	0.00092	U	0.00092	0.00018	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Ethylene Dibromide	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Isopropylbenzene	0.00092	U	0.00092	0.00012	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Methyl acetate	0.0046	U	0.0046	0.0040	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Methyl tert-butyl ether	0.00092	U	0.00092	0.00012	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Methylcyclohexane	0.00092	U	0.00092	0.00015	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Methylene Chloride	**0.00028**	**J B**	0.00092	0.00015	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
m-Xylene & p-Xylene	**0.00038**	**J**	0.00092	0.00016	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
o-Xylene	**0.00019**	**J**	0.00092	0.000088	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Styrene	0.00092	U	0.00092	0.00011	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Tetrachloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Toluene	0.00092	U	0.00092	0.00058	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Trichloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Trichlorofluoromethane	0.00092	U	0.00092	0.00038	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1
Vinyl chloride	0.00092	U	0.00092	0.00050	mg/Kg	☼	03/21/18 07:52	03/24/18 09:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*03/21/18 07:52*	*03/24/18 09:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*78 - 135*	*03/21/18 07:52*	*03/24/18 09:24*	*1*
4-Bromofluorobenzene	*101*		*67 - 126*	*03/21/18 07:52*	*03/24/18 09:24*	*1*
Dibromofluoromethane (Surr)	*105*		*61 - 149*	*03/21/18 07:52*	*03/24/18 09:24*	*1*
Toluene-d8 (Surr)	*104*		*73 - 121*	*03/21/18 07:52*	*03/24/18 09:24*	*1*

Client Sample ID: GC-MW-105(SO)-7-9

Lab Sample ID: 460-152331-6
Date Collected: 03/20/18 12:25
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 93.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,1-Dichloroethane	0.00096	U	0.00096	0.00020	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,1-Dichloroethene	0.00096	U	0.00096	0.00022	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000089	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,2-Dibromo-3-Chloropropane	0.00096	U	0.00096	0.00044	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,2-Dichloroethane	0.00096	U	0.00096	0.00029	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,2-Dichloropropane	0.00096	U	0.00096	0.00041	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1

Client Sample ID: GC-MW-105(SO)-7-9

Date Collected: 03/20/18 12:25
Date Received: 03/20/18 19:40

Lab Sample ID: 460-152331-6

Matrix: Solid
Percent Solids: 93.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
1,4-Dioxane	0.019	U	0.019	0.0089	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
2-Butanone (MEK)	**0.0029**	**J**	0.0048	0.0011	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
2-Hexanone	0.0048	U	0.0048	0.00075	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Acetone	**0.029**		0.0048	0.0037	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Benzene	0.00096	U	0.00096	0.00025	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Bromoform	0.00096	U	0.00096	0.00041	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Bromomethane	0.00096	U	0.00096	0.00046	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Carbon disulfide	0.00096	U	0.00096	0.00026	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Carbon tetrachloride	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Chlorobenzene	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Chlorobromomethane	0.00096	U	0.00096	0.00027	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Chlorodibromomethane	0.00096	U	0.00096	0.00019	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Chloroethane	0.00096	U	0.00096	0.00050	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Chloroform	0.00096	U	0.00096	0.00031	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Chloromethane	0.00096	U	0.00096	0.00042	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Cyclohexane	0.00096	U	0.00096	0.00021	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Dichlorobromomethane	0.00096	U	0.00096	0.00025	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Dichlorodifluoromethane	0.00096	U	0.00096	0.00033	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Ethylbenzene	0.00096	U	0.00096	0.00019	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Ethylene Dibromide	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Isopropylbenzene	0.00096	U	0.00096	0.00012	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Methyl acetate	0.0048	U	0.0048	0.0041	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Methyl tert-butyl ether	0.00096	U	0.00096	0.00012	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Methylcyclohexane	0.00096	U	0.00096	0.00015	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Methylene Chloride	**0.00022**	**J B**	0.00096	0.00016	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
m-Xylene & p-Xylene	**0.00053**	**J**	0.00096	0.00017	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
o-Xylene	**0.00023**	**J**	0.00096	0.000092	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Styrene	0.00096	U	0.00096	0.00012	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Tetrachloroethene	0.00096	U	0.00096	0.00014	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Toluene	0.00096	U	0.00096	0.00060	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00026	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Trichloroethene	0.00096	U	0.00096	0.00014	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Trichlorofluoromethane	0.00096	U	0.00096	0.00039	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1
Vinyl chloride	0.00096	U	0.00096	0.00053	mg/Kg	☼	03/21/18 07:52	03/24/18 09:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*03/21/18 07:52*	*03/24/18 09:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*78 - 135*	*03/21/18 07:52*	*03/24/18 09:49*	*1*
4-Bromofluorobenzene	*100*		*67 - 126*	*03/21/18 07:52*	*03/24/18 09:49*	*1*
Dibromofluoromethane (Surr)	*102*		*61 - 149*	*03/21/18 07:52*	*03/24/18 09:49*	*1*
Toluene-d8 (Surr)	*105*		*73 - 121*	*03/21/18 07:52*	*03/24/18 09:49*	*1*

Client Sample ID: GC-Drain-02(SO)

Date Collected: 03/20/18 13:35
Date Received: 03/20/18 19:40

Lab Sample ID: 460-152331-7

Matrix: Solid
Percent Solids: 34.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0035	U	0.0035	0.00082	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,1,2,2-Tetrachloroethane	0.0035	U	0.0035	0.00075	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0035	U	0.0035	0.0011	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,1,2-Trichloroethane	0.0035	U	0.0035	0.00063	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,1-Dichloroethane	0.0035	U	0.0035	0.00072	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,1-Dichloroethene	0.0035	U	0.0035	0.00079	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,2,3-Trichlorobenzene	0.0035	U	0.0035	0.00064	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,2,4-Trichlorobenzene	0.0035	U	0.0035	0.00032	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,2-Dibromo-3-Chloropropane	0.0035	U	0.0035	0.0016	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,2-Dichlorobenzene	0.0035	U	0.0035	0.00051	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,2-Dichloroethane	0.0035	U	0.0035	0.0010	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,2-Dichloropropane	0.0035	U	0.0035	0.0015	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,3-Dichlorobenzene	0.0035	U	0.0035	0.00056	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,4-Dichlorobenzene	0.0035	U	0.0035	0.00035	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
1,4-Dioxane	0.070	U *	0.070	0.032	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
2-Butanone (MEK)	**0.18**		0.018	0.0039	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
2-Hexanone	0.018	U	0.018	0.0027	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
4-Methyl-2-pentanone (MIBK)	**0.0037**	**J**	0.018	0.0023	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Acetone	**0.80**		0.018	0.013	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Benzene	0.0035	U	0.0035	0.00091	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Bromoform	0.0035	U	0.0035	0.0015	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Bromomethane	0.0035	U	0.0035	0.0017	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Carbon disulfide	**0.0087**		0.0035	0.00094	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Carbon tetrachloride	0.0035	U	0.0035	0.00064	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Chlorobenzene	0.0035	U	0.0035	0.00062	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Chlorobromomethane	0.0035	U	0.0035	0.00099	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Chlorodibromomethane	0.0035	U	0.0035	0.00068	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Chloroethane	0.0035	U	0.0035	0.0018	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Chloroform	0.0035	U	0.0035	0.0011	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Chloromethane	0.0035	U	0.0035	0.0015	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
cis-1,2-Dichloroethene	**0.011**		0.0035	0.00053	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
cis-1,3-Dichloropropene	0.0035	U	0.0035	0.00096	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Cyclohexane	0.0035	U	0.0035	0.00078	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Dichlorobromomethane	0.0035	U	0.0035	0.00090	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Dichlorodifluoromethane	0.0035	U	0.0035	0.0012	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Ethylbenzene	**0.00075**	**J**	0.0035	0.00070	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Ethylene Dibromide	0.0035	U	0.0035	0.00063	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Isopropylbenzene	0.0035	U	0.0035	0.00044	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Methyl acetate	0.018	U	0.018	0.015	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Methyl tert-butyl ether	0.0035	U	0.0035	0.00044	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Methylcyclohexane	**0.00083**	**J**	0.0035	0.00056	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Methylene Chloride	0.0035	U	0.0035	0.00057	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
m-Xylene & p-Xylene	**0.0019**	**J**	0.0035	0.00061	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
o-Xylene	**0.00075**	**J**	0.0035	0.00033	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Styrene	0.0035	U	0.0035	0.00043	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Tetrachloroethene	**0.0011**	**J**	0.0035	0.00050	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Toluene	**0.0028**	**J**	0.0035	0.0022	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
trans-1,2-Dichloroethene	0.0035	U	0.0035	0.00086	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
trans-1,3-Dichloropropene	0.0035	U	0.0035	0.00094	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1

Client Sample ID: GC-Drain-02(SO)

Date Collected: 03/20/18 13:35
Date Received: 03/20/18 19:40

Lab Sample ID: 460-152331-7

Matrix: Solid
Percent Solids: 34.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.0035	U	0.0035	0.00051	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Trichlorofluoromethane	0.0035	U	0.0035	0.0014	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1
Vinyl chloride	0.0035	U	0.0035	0.0019	mg/Kg	☼	03/21/18 07:53	03/24/18 10:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.029*	*J*	*mg/Kg*	☼	*10.70*		*03/21/18 07:53*	*03/24/18 10:13*	*1*
Unknown alkane	*0.028*	*J*	*mg/Kg*	☼	*11.05*		*03/21/18 07:53*	*03/24/18 10:13*	*1*
Unknown	*0.069*	*J*	*mg/Kg*	☼	*11.28*		*03/21/18 07:53*	*03/24/18 10:13*	*1*
Unknown	*0.065*	*J*	*mg/Kg*	☼	*11.69*		*03/21/18 07:53*	*03/24/18 10:13*	*1*
Unknown alkane	*0.023*	*J*	*mg/Kg*	☼	*11.83*		*03/21/18 07:53*	*03/24/18 10:13*	*1*
Unknown alkane	*0.030*	*J*	*mg/Kg*	☼	*11.89*		*03/21/18 07:53*	*03/24/18 10:13*	*1*
Decane, 2,2,6-trimethyl-	*0.023*	*J N*	*mg/Kg*	☼	*12.06*	*62237-97-2*	*03/21/18 07:53*	*03/24/18 10:13*	*1*
Unknown	*0.028*	*J*	*mg/Kg*	☼	*12.23*		*03/21/18 07:53*	*03/24/18 10:13*	*1*
Unknown	*0.074*	*J*	*mg/Kg*	☼	*12.47*		*03/21/18 07:53*	*03/24/18 10:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*78 - 135*	*03/21/18 07:53*	*03/24/18 10:13*	*1*
4-Bromofluorobenzene	*92*		*67 - 126*	*03/21/18 07:53*	*03/24/18 10:13*	*1*
Dibromofluoromethane (Surr)	*102*		*61 - 149*	*03/21/18 07:53*	*03/24/18 10:13*	*1*
Toluene-d8 (Surr)	*109*		*73 - 121*	*03/21/18 07:53*	*03/24/18 10:13*	*1*

Client Sample ID: GC-MW-107D(SO)-15-17

Date Collected: 03/26/18 11:00
Date Received: 03/26/18 20:30

Lab Sample ID: 460-152604-2

Matrix: Solid
Percent Solids: 91.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,1-Dichloroethane	0.00096	U	0.00096	0.00020	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,1-Dichloroethene	0.00096	U	0.00096	0.00022	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000088	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,2-Dibromo-3-Chloropropane	0.00096	U *	0.00096	0.00044	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,2-Dichloroethane	0.00096	U	0.00096	0.00028	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,2-Dichloropropane	0.00096	U	0.00096	0.00041	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
1,4-Dioxane	0.019	U	0.019	0.0088	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
2-Butanone (MEK)	0.0048	U	0.0048	0.0011	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
2-Hexanone	0.0048	U *	0.0048	0.00075	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
4-Methyl-2-pentanone (MIBK)	0.0048	U *	0.0048	0.00064	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Acetone	**0.050**		0.0048	0.0036	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Benzene	0.00096	U	0.00096	0.00025	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Bromoform	0.00096	U	0.00096	0.00041	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Bromomethane	0.00096	U	0.00096	0.00045	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Carbon disulfide	0.00096	U	0.00096	0.00025	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1

Client Sample ID: GC-MW-107D(SO)-15-17

Lab Sample ID: 460-152604-2
Date Collected: 03/26/18 11:00
Matrix: Solid
Date Received: 03/26/18 20:30
Percent Solids: 91.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Chlorobenzene	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Chlorobromomethane	0.00096	U	0.00096	0.00027	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Chlorodibromomethane	0.00096	U	0.00096	0.00019	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Chloroethane	0.00096	U	0.00096	0.00050	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Chloroform	0.00096	U	0.00096	0.00031	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Chloromethane	0.00096	U	0.00096	0.00042	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Cyclohexane	0.00096	U	0.00096	0.00021	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Dichlorobromomethane	0.00096	U	0.00096	0.00025	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Dichlorodifluoromethane	0.00096	U	0.00096	0.00032	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Ethylbenzene	0.00096	U	0.00096	0.00019	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Ethylene Dibromide	0.00096	U	0.00096	0.00017	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Isopropylbenzene	0.00096	U	0.00096	0.00012	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Methyl acetate	0.0048	U	0.0048	0.0041	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Methyl tert-butyl ether	0.00096	U	0.00096	0.00012	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Methylcyclohexane	0.00096	U	0.00096	0.00015	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Methylene Chloride	**0.0042**		0.00096	0.00016	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
m-Xylene & p-Xylene	**0.00027**	**J**	0.00096	0.00017	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
o-Xylene	**0.00011**	**J**	0.00096	0.000091	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Styrene	0.00096	U	0.00096	0.00012	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Tetrachloroethene	0.00096	U	0.00096	0.00014	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Toluene	0.00096	U	0.00096	0.00060	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00025	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Trichloroethene	0.00096	U	0.00096	0.00014	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Trichlorofluoromethane	0.00096	U	0.00096	0.00039	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1
Vinyl chloride	0.00096	U	0.00096	0.00052	mg/Kg	☼	03/27/18 02:29	03/31/18 19:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.0088*	*J*	*mg/Kg*	☼	*2.63*		*03/27/18 02:29*	*03/31/18 19:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*		*78 - 135*	*03/27/18 02:29*	*03/31/18 19:59*	*1*
4-Bromofluorobenzene	*93*		*67 - 126*	*03/27/18 02:29*	*03/31/18 19:59*	*1*
Dibromofluoromethane (Surr)	*124*		*61 - 149*	*03/27/18 02:29*	*03/31/18 19:59*	*1*
Toluene-d8 (Surr)	*86*		*73 - 121*	*03/27/18 02:29*	*03/31/18 19:59*	*1*

Client Sample ID: GC-MW-109M(SO)-15-17

Lab Sample ID: 460-153018-1
Date Collected: 03/30/18 09:25
Matrix: Solid
Date Received: 03/30/18 19:00
Percent Solids: 97.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00063	U H	0.00063	0.00015	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,1,2,2-Tetrachloroethane	0.00063	U H	0.00063	0.00014	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00063	U H	0.00063	0.00019	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,1,2-Trichloroethane	0.00063	U H	0.00063	0.00011	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,1-Dichloroethane	0.00063	U H	0.00063	0.00013	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1

Client Sample ID: GC-MW-109M(SO)-15-17
Date Collected: 03/30/18 09:25
Date Received: 03/30/18 19:00

Lab Sample ID: 460-153018-1
Matrix: Solid
Percent Solids: 97.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.00063	U H	0.00063	0.00014	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,2,3-Trichlorobenzene	0.00063	U H	0.00063	0.00011	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,2,4-Trichlorobenzene	0.00063	U H	0.00063	0.000058	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,2-Dibromo-3-Chloropropane	0.00063	U H	0.00063	0.00029	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,2-Dichlorobenzene	0.00063	U H	0.00063	0.000091	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,2-Dichloroethane	0.00063	U H	0.00063	0.00019	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,2-Dichloropropane	0.00063	U H	0.00063	0.00027	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,3-Dichlorobenzene	0.00063	U H	0.00063	0.00010	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,4-Dichlorobenzene	0.00063	U H	0.00063	0.000063	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
1,4-Dioxane	0.013	U H	0.013	0.0058	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
2-Butanone (MEK)	0.0032	U H	0.0032	0.00070	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
2-Hexanone	0.0032	U H	0.0032	0.00049	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
4-Methyl-2-pentanone (MIBK)	0.0032	U H	0.0032	0.00042	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Acetone	**0.018**	**H**	0.0032	0.0024	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Benzene	0.00063	U H	0.00063	0.00016	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Bromoform	0.00063	U H	0.00063	0.00027	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Bromomethane	0.00063	U H	0.00063	0.00030	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Carbon disulfide	0.00063	U H	0.00063	0.00017	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Carbon tetrachloride	0.00063	U H	0.00063	0.00011	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Chlorobenzene	0.00063	U H	0.00063	0.00011	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Chlorobromomethane	0.00063	U H	0.00063	0.00018	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Chlorodibromomethane	0.00063	U H	0.00063	0.00012	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Chloroethane	0.00063	U H	0.00063	0.00033	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Chloroform	0.00063	U H	0.00063	0.00020	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Chloromethane	0.00063	U H	0.00063	0.00028	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
cis-1,2-Dichloroethene	0.00063	U H	0.00063	0.000096	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
cis-1,3-Dichloropropene	0.00063	U H	0.00063	0.00017	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Cyclohexane	0.00063	U H	0.00063	0.00014	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Dichlorobromomethane	0.00063	U H	0.00063	0.00016	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Dichlorodifluoromethane	0.00063	U H *	0.00063	0.00021	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Ethylbenzene	**0.00025**	**J H**	0.00063	0.00013	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Ethylene Dibromide	0.00063	U H	0.00063	0.00011	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Isopropylbenzene	0.00063	U H	0.00063	0.000080	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Methyl acetate	0.0032	U H	0.0032	0.0027	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Methyl tert-butyl ether	0.00063	U H	0.00063	0.000079	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Methylcyclohexane	**0.00035**	**J H**	0.00063	0.00010	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Methylene Chloride	**0.00023**	**J H**	0.00063	0.00010	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
m-Xylene & p-Xylene	**0.00087**	**H**	0.00063	0.00011	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
o-Xylene	**0.00035**	**J H**	0.00063	0.000060	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Styrene	0.00063	U H	0.00063	0.000078	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Tetrachloroethene	0.00063	U H	0.00063	0.000090	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Toluene	**0.00048**	**J H**	0.00063	0.00040	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
trans-1,2-Dichloroethene	0.00063	U H	0.00063	0.00016	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
trans-1,3-Dichloropropene	0.00063	U H	0.00063	0.00017	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Trichloroethene	0.00063	U H	0.00063	0.000091	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Trichlorofluoromethane	0.00063	U H	0.00063	0.00026	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1
Vinyl chloride	0.00063	U H	0.00063	0.00035	mg/Kg	☼	03/31/18 00:38	04/23/18 21:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*	*H*	*mg/Kg*	☼			*03/31/18 00:38*	*04/23/18 21:10*	*1*

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		78 - 135	03/31/18 00:38	04/23/18 21:10	1
4-Bromofluorobenzene	104		67 - 126	03/31/18 00:38	04/23/18 21:10	1
Dibromofluoromethane (Surr)	105		61 - 149	03/31/18 00:38	04/23/18 21:10	1
Toluene-d8 (Surr)	97		73 - 121	03/31/18 00:38	04/23/18 21:10	1

Client Sample ID: GC-MW-107D(SO)-97-99

Date Collected: 03/29/18 12:15
Date Received: 03/30/18 19:00

Lab Sample ID: 460-153022-1

Matrix: Solid
Percent Solids: 82.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,1-Dichloroethane	0.00092	U	0.00092	0.00019	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,1-Dichloroethene	0.00092	U	0.00092	0.00021	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,2-Dichloroethane	0.00092	U	0.00092	0.00027	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,2-Dichloropropane	0.00092	U	0.00092	0.00039	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
1,4-Dioxane	0.018	U	0.018	0.0085	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
2-Butanone (MEK)	**0.0015**	**J**	0.0046	0.0010	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
2-Hexanone	0.0046	U	0.0046	0.00072	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Acetone	**0.016**		0.0046	0.0035	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Benzene	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Bromoform	0.00092	U	0.00092	0.00039	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Bromomethane	0.00092	U	0.00092	0.00044	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Carbon disulfide	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Carbon tetrachloride	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Chlorobenzene	0.00092	U	0.00092	0.00016	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Chlorobromomethane	0.00092	U	0.00092	0.00026	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Chlorodibromomethane	0.00092	U	0.00092	0.00018	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Chloroethane	0.00092	U	0.00092	0.00048	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Chloroform	0.00092	U	0.00092	0.00029	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Chloromethane	0.00092	U	0.00092	0.00040	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Cyclohexane	0.00092	U	0.00092	0.00020	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Dichlorobromomethane	0.00092	U	0.00092	0.00024	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Dichlorodifluoromethane	0.00092	U *	0.00092	0.00031	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Ethylbenzene	0.00092	U	0.00092	0.00018	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Ethylene Dibromide	0.00092	U	0.00092	0.00017	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Isopropylbenzene	0.00092	U	0.00092	0.00012	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Methyl acetate	0.0046	U	0.0046	0.0040	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Methyl tert-butyl ether	0.00092	U	0.00092	0.00012	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Methylcyclohexane	0.00092	U	0.00092	0.00015	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Methylene Chloride	**0.00026**	**J B**	0.00092	0.00015	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
m-Xylene & p-Xylene	**0.00043**	**J**	0.00092	0.00016	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1

Client Sample ID: GC-MW-107D(SO)-97-99

Lab Sample ID: 460-153022-1
Date Collected: 03/29/18 12:15
Matrix: Solid
Date Received: 03/30/18 19:00
Percent Solids: 82.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	**0.00014**	**J**	0.00092	0.000088	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Styrene	0.00092	U	0.00092	0.00011	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Tetrachloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Toluene	0.00092	U	0.00092	0.00058	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Trichloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Trichlorofluoromethane	0.00092	U	0.00092	0.00038	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1
Vinyl chloride	0.00092	U	0.00092	0.00050	mg/Kg	☼	03/31/18 00:38	04/11/18 13:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*03/31/18 00:38*	*04/11/18 13:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*78 - 135*	*03/31/18 00:38*	*04/11/18 13:45*	*1*
4-Bromofluorobenzene	*101*		*67 - 126*	*03/31/18 00:38*	*04/11/18 13:45*	*1*
Dibromofluoromethane (Surr)	*79*		*61 - 149*	*03/31/18 00:38*	*04/11/18 13:45*	*1*
Toluene-d8 (Surr)	*95*		*73 - 121*	*03/31/18 00:38*	*04/11/18 13:45*	*1*

Client Sample ID: GC-MW-109M(SO)-33-35

Lab Sample ID: 460-153082-1
Date Collected: 04/02/18 10:00
Matrix: Solid
Date Received: 04/02/18 19:40
Percent Solids: 75.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00022	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
2-Butanone (MEK)	**0.0026**	**J**	0.0050	0.0011	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Acetone	**0.036**		0.0050	0.0038	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Bromoform	0.0010	U	0.0010	0.00042	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1

Client Sample ID: GC-MW-109M(SO)-33-35

Date Collected: 04/02/18 10:00
Date Received: 04/02/18 19:40

Lab Sample ID: 460-153082-1

Matrix: Solid
Percent Solids: 75.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Chloromethane	0.0010	U	0.0010	0.00043	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00012	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Methylene Chloride	**0.0020**		0.0010	0.00016	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
m-Xylene & p-Xylene	**0.00030**	**J**	0.0010	0.00017	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
o-Xylene	**0.00015**	**J**	0.0010	0.000095	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Tetrachloroethene	**0.0014**		0.0010	0.00014	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Toluene	0.0010	U	0.0010	0.00062	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Trichloroethene	**0.00015**	**J**	0.0010	0.00014	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00040	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1
Vinyl chloride	0.0010	U	0.0010	0.00054	mg/Kg	☼	04/03/18 01:29	04/13/18 03:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dodecane	*0.016*	*J N*	*mg/Kg*	☼	*12.69*	*112-40-3*	*04/03/18 01:29*	*04/13/18 03:26*	*1*
Octane, 4-ethyl-	*0.0079*	*J N*	*mg/Kg*	☼	*13.10*	*15869-86-0*	*04/03/18 01:29*	*04/13/18 03:26*	*1*
Unknown	*0.0075*	*J*	*mg/Kg*	☼	*13.18*		*04/03/18 01:29*	*04/13/18 03:26*	*1*
Unknown alkane	*0.010*	*J*	*mg/Kg*	☼	*13.24*		*04/03/18 01:29*	*04/13/18 03:26*	*1*
Tridecane	*0.047*	*J N*	*mg/Kg*	☼	*13.44*	*629-50-5*	*04/03/18 01:29*	*04/13/18 03:26*	*1*
Unknown	*0.0061*	*J*	*mg/Kg*	☼	*13.53*		*04/03/18 01:29*	*04/13/18 03:26*	*1*
Unknown alkane	*0.0060*	*J*	*mg/Kg*	☼	*13.59*		*04/03/18 01:29*	*04/13/18 03:26*	*1*
Unknown	*0.0068*	*J*	*mg/Kg*	☼	*14.00*		*04/03/18 01:29*	*04/13/18 03:26*	*1*
Dodecane, 2,6,11-trimethyl-	*0.0059*	*J N*	*mg/Kg*	☼	*14.05*	*31295-56-4*	*04/03/18 01:29*	*04/13/18 03:26*	*1*
Tetradecane	*0.022*	*J N*	*mg/Kg*	☼	*14.22*	*629-59-4*	*04/03/18 01:29*	*04/13/18 03:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*78 - 135*	*04/03/18 01:29*	*04/13/18 03:26*	*1*
4-Bromofluorobenzene	*117*		*67 - 126*	*04/03/18 01:29*	*04/13/18 03:26*	*1*
Dibromofluoromethane (Surr)	*126*		*61 - 149*	*04/03/18 01:29*	*04/13/18 03:26*	*1*
Toluene-d8 (Surr)	*102*		*73 - 121*	*04/03/18 01:29*	*04/13/18 03:26*	*1*

Client Sample ID: GC-MW-106(SO)-15-17

Date Collected: 04/03/18 08:40
Date Received: 04/03/18 20:33

Lab Sample ID: 460-153163-1

Matrix: Solid
Percent Solids: 93.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,1-Dichloroethane	0.00096	U	0.00096	0.00020	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,1-Dichloroethene	0.00096	U	0.00096	0.00022	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000088	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,2-Dibromo-3-Chloropropane	0.00096	U	0.00096	0.00044	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,2-Dichloroethane	0.00096	U	0.00096	0.00028	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,2-Dichloropropane	0.00096	U	0.00096	0.00041	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
1,4-Dioxane	0.019	U	0.019	0.0088	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
2-Butanone (MEK)	**0.0022**	**J**	0.0048	0.0011	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
2-Hexanone	0.0048	U	0.0048	0.00075	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Acetone	**0.031**		0.0048	0.0036	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Benzene	0.00096	U	0.00096	0.00025	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Bromoform	0.00096	U	0.00096	0.00041	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Bromomethane	0.00096	U	0.00096	0.00046	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Carbon disulfide	0.00096	U	0.00096	0.00026	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Carbon tetrachloride	0.00096	U	0.00096	0.00017	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Chlorobenzene	0.00096	U	0.00096	0.00017	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Chlorobromomethane	0.00096	U	0.00096	0.00027	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Chlorodibromomethane	0.00096	U	0.00096	0.00019	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Chloroethane	0.00096	U	0.00096	0.00050	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Chloroform	0.00096	U	0.00096	0.00031	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Chloromethane	0.00096	U	0.00096	0.00042	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Cyclohexane	0.00096	U	0.00096	0.00021	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Dichlorobromomethane	0.00096	U	0.00096	0.00025	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Dichlorodifluoromethane	0.00096	U	0.00096	0.00033	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Ethylbenzene	0.00096	U	0.00096	0.00019	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Ethylene Dibromide	0.00096	U	0.00096	0.00017	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Isopropylbenzene	0.00096	U	0.00096	0.00012	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Methyl acetate	0.0048	U	0.0048	0.0041	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Methyl tert-butyl ether	0.00096	U	0.00096	0.00012	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Methylcyclohexane	0.00096	U	0.00096	0.00015	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Methylene Chloride	**0.00029**	**J**	0.00096	0.00016	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
m-Xylene & p-Xylene	**0.00038**	**J**	0.00096	0.00017	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
o-Xylene	**0.00020**	**J**	0.00096	0.000091	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Styrene	0.00096	U	0.00096	0.00012	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Tetrachloroethene	0.00096	U	0.00096	0.00014	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Toluene	0.00096	U	0.00096	0.00060	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00026	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1

Client Sample ID: GC-MW-106(SO)-15-17

Lab Sample ID: 460-153163-1

Date Collected: 04/03/18 08:40
Matrix: Solid
Date Received: 04/03/18 20:33
Percent Solids: 93.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.00096	U	0.00096	0.00014	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Trichlorofluoromethane	0.00096	U	0.00096	0.00039	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1
Vinyl chloride	0.00096	U	0.00096	0.00053	mg/Kg	☼	04/03/18 23:04	04/13/18 03:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/03/18 23:04*	*04/13/18 03:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*78 - 135*	*04/03/18 23:04*	*04/13/18 03:51*	*1*
4-Bromofluorobenzene	*111*		*67 - 126*	*04/03/18 23:04*	*04/13/18 03:51*	*1*
Dibromofluoromethane (Surr)	*121*		*61 - 149*	*04/03/18 23:04*	*04/13/18 03:51*	*1*
Toluene-d8 (Surr)	*98*		*73 - 121*	*04/03/18 23:04*	*04/13/18 03:51*	*1*

Client Sample ID: GC-MW-108D(SO)-15-17

Lab Sample ID: 460-153163-2

Date Collected: 04/03/18 11:10
Matrix: Solid
Date Received: 04/03/18 20:33
Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000093	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00043	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
1,4-Dioxane	0.020	U	0.020	0.0093	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
2-Butanone (MEK)	**0.0024**	**J**	0.0051	0.0011	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
2-Hexanone	0.0051	U	0.0051	0.00079	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00067	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Acetone	**0.041**		0.0051	0.0039	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Bromomethane	0.0010	U	0.0010	0.00048	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Chlorobromomethane	0.0010	U	0.0010	0.00029	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Chlorodibromomethane	0.0010	U	0.0010	0.00020	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Chloroethane	0.0010	U	0.0010	0.00053	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1

Client Sample ID: GC-MW-108D(SO)-15-17

Lab Sample ID: 460-153163-2
Date Collected: 04/03/18 11:10
Matrix: Solid
Date Received: 04/03/18 20:33
Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Methyl acetate	0.0051	U	0.0051	0.0044	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Methylene Chloride	**0.00024**	**J**	0.0010	0.00017	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
m-Xylene & p-Xylene	**0.00040**	**J**	0.0010	0.00018	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
o-Xylene	**0.00015**	**J**	0.0010	0.000097	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Tetrachloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Trichloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg	☼	04/03/18 23:04	04/13/18 04:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/03/18 23:04*	*04/13/18 04:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*78 - 135*	*04/03/18 23:04*	*04/13/18 04:15*	*1*
4-Bromofluorobenzene	*114*		*67 - 126*	*04/03/18 23:04*	*04/13/18 04:15*	*1*
Dibromofluoromethane (Surr)	*121*		*61 - 149*	*04/03/18 23:04*	*04/13/18 04:15*	*1*
Toluene-d8 (Surr)	*99*		*73 - 121*	*04/03/18 23:04*	*04/13/18 04:15*	*1*

Client Sample ID: GC-MW-108D(SO)-33-35

Lab Sample ID: 460-153254-1
Date Collected: 04/04/18 08:00
Matrix: Solid
Date Received: 04/04/18 18:00
Percent Solids: 75.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U *	0.0010	0.00024	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000094	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00043	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1

Client Sample ID: GC-MW-108D(SO)-33-35

Date Collected: 04/04/18 08:00
Date Received: 04/04/18 18:00

Lab Sample ID: 460-153254-1

Matrix: Solid
Percent Solids: 75.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
1,4-Dioxane	0.020	U	0.020	0.0094	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
2-Butanone (MEK)	**0.0021**	**J**	0.0051	0.0011	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
2-Hexanone	0.0051	U	0.0051	0.00080	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Acetone	**0.040**		0.0051	0.0039	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Bromomethane	0.0010	U	0.0010	0.00049	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Carbon tetrachloride	0.0010	U *	0.0010	0.00019	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Chlorobromomethane	0.0010	U	0.0010	0.00029	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Chlorodibromomethane	0.0010	U	0.0010	0.00020	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Chloroethane	0.0010	U	0.0010	0.00053	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Chloroform	0.0010	U	0.0010	0.00033	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Chloromethane	0.0010	U	0.0010	0.00045	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Cyclohexane	0.0010	U	0.0010	0.00023	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00035	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Methyl acetate	0.0051	U	0.0051	0.0044	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Methylene Chloride	**0.00086**	**J**	0.0010	0.00017	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
m-Xylene & p-Xylene	**0.00044**	**J**	0.0010	0.00018	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
o-Xylene	**0.00017**	**J**	0.0010	0.000097	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Styrene	0.0010	U	0.0010	0.00013	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Tetrachloroethene	**0.014**		0.0010	0.00015	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Toluene	0.0010	U	0.0010	0.00064	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Trichloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00042	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1
Vinyl chloride	0.0010	U	0.0010	0.00056	mg/Kg	☼	04/04/18 22:37	04/16/18 10:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/04/18 22:37*	*04/16/18 10:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*78 - 135*	*04/04/18 22:37*	*04/16/18 10:34*	*1*
4-Bromofluorobenzene	*113*		*67 - 126*	*04/04/18 22:37*	*04/16/18 10:34*	*1*
Dibromofluoromethane (Surr)	*127*		*61 - 149*	*04/04/18 22:37*	*04/16/18 10:34*	*1*
Toluene-d8 (Surr)	*101*		*73 - 121*	*04/04/18 22:37*	*04/16/18 10:34*	*1*

Client Sample ID: GC-MW-108D(SO)-59-60.5

Date Collected: 04/04/18 10:00
Date Received: 04/04/18 18:00

Lab Sample ID: 460-153254-2

Matrix: Solid
Percent Solids: 88.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00056	U	0.00056	0.00013	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,1,2,2-Tetrachloroethane	0.00056	U	0.00056	0.00012	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00056	U	0.00056	0.00017	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,1,2-Trichloroethane	0.00056	U	0.00056	0.00010	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,1-Dichloroethane	0.00056	U	0.00056	0.00012	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,1-Dichloroethene	0.00056	U	0.00056	0.00013	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,2,3-Trichlorobenzene	0.00056	U	0.00056	0.00010	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,2,4-Trichlorobenzene	0.00056	U	0.00056	0.000052	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,2-Dibromo-3-Chloropropane	0.00056	U	0.00056	0.00026	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,2-Dichlorobenzene	0.00056	U	0.00056	0.000081	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,2-Dichloroethane	0.00056	U	0.00056	0.00017	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,2-Dichloropropane	0.00056	U	0.00056	0.00024	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,3-Dichlorobenzene	0.00056	U	0.00056	0.000089	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,4-Dichlorobenzene	0.00056	U	0.00056	0.000056	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
1,4-Dioxane	0.011	U	0.011	0.0052	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
2-Butanone (MEK)	**0.0016**	**J**	0.0028	0.00062	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
2-Hexanone	0.0028	U	0.0028	0.00044	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
4-Methyl-2-pentanone (MIBK)	0.0028	U	0.0028	0.00037	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Acetone	**0.020**		0.0028	0.0021	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Benzene	0.00056	U	0.00056	0.00014	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Bromoform	0.00056	U	0.00056	0.00024	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Bromomethane	0.00056	U	0.00056	0.00027	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Carbon disulfide	0.00056	U	0.00056	0.00015	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Carbon tetrachloride	0.00056	U *	0.00056	0.00010	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Chlorobenzene	0.00056	U	0.00056	0.000099	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Chlorobromomethane	0.00056	U	0.00056	0.00016	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Chlorodibromomethane	0.00056	U	0.00056	0.00011	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Chloroethane	0.00056	U	0.00056	0.00029	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Chloroform	0.00056	U	0.00056	0.00018	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Chloromethane	0.00056	U	0.00056	0.00024	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
cis-1,2-Dichloroethene	0.00056	U	0.00056	0.000085	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
cis-1,3-Dichloropropene	0.00056	U	0.00056	0.00015	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Cyclohexane	0.00056	U	0.00056	0.00012	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Dichlorobromomethane	0.00056	U	0.00056	0.00014	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Dichlorodifluoromethane	0.00056	U	0.00056	0.00019	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Ethylbenzene	0.00056	U	0.00056	0.00011	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Ethylene Dibromide	0.00056	U	0.00056	0.00010	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Isopropylbenzene	0.00056	U	0.00056	0.000071	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Methyl acetate	0.0028	U *	0.0028	0.0024	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Methyl tert-butyl ether	0.00056	U	0.00056	0.000070	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Methylcyclohexane	0.00056	U	0.00056	0.000090	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Methylene Chloride	**0.00027**	**J**	0.00056	0.000091	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
m-Xylene & p-Xylene	**0.00020**	**J**	0.00056	0.000098	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
o-Xylene	**0.000080**	**J**	0.00056	0.000053	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Styrene	0.00056	U	0.00056	0.000069	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Tetrachloroethene	0.00056	U	0.00056	0.000080	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Toluene	0.00056	U	0.00056	0.00035	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
trans-1,2-Dichloroethene	0.00056	U	0.00056	0.00014	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
trans-1,3-Dichloropropene	0.00056	U	0.00056	0.00015	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1

Client Sample ID: GC-MW-108D(SO)-59-60.5

Date Collected: 04/04/18 10:00
Date Received: 04/04/18 18:00

Lab Sample ID: 460-153254-2

Matrix: Solid
Percent Solids: 88.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.00056	U	0.00056	0.000081	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Trichlorofluoromethane	0.00056	U	0.00056	0.00023	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1
Vinyl chloride	0.00056	U	0.00056	0.00031	mg/Kg	☼	04/04/18 22:37	04/14/18 01:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/04/18 22:37*	*04/14/18 01:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*78 - 135*	*04/04/18 22:37*	*04/14/18 01:15*	*1*
4-Bromofluorobenzene	*115*		*67 - 126*	*04/04/18 22:37*	*04/14/18 01:15*	*1*
Dibromofluoromethane (Surr)	*122*		*61 - 149*	*04/04/18 22:37*	*04/14/18 01:15*	*1*
Toluene-d8 (Surr)	*102*		*73 - 121*	*04/04/18 22:37*	*04/14/18 01:15*	*1*

Client Sample ID: GC-MW-110D(SO)-15-17

Date Collected: 04/05/18 08:00
Date Received: 04/05/18 20:00

Lab Sample ID: 460-153389-1

Matrix: Solid
Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00085	U	0.00085	0.00020	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,1,2,2-Tetrachloroethane	0.00085	U	0.00085	0.00018	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00085	U	0.00085	0.00025	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,1,2-Trichloroethane	0.00085	U	0.00085	0.00015	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,1-Dichloroethane	0.00085	U	0.00085	0.00017	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,1-Dichloroethene	0.00085	U	0.00085	0.00019	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,2,3-Trichlorobenzene	0.00085	U	0.00085	0.00015	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,2,4-Trichlorobenzene	0.00085	U	0.00085	0.000078	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,2-Dibromo-3-Chloropropane	0.00085	U	0.00085	0.00039	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,2-Dichlorobenzene	0.00085	U	0.00085	0.00012	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,2-Dichloroethane	0.00085	U	0.00085	0.00025	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,2-Dichloropropane	0.00085	U	0.00085	0.00036	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,3-Dichlorobenzene	0.00085	U	0.00085	0.00013	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,4-Dichlorobenzene	0.00085	U	0.00085	0.000085	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
1,4-Dioxane	0.017	U	0.017	0.0078	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
2-Butanone (MEK)	**0.0020**	**J**	0.0042	0.00094	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
2-Hexanone	0.0042	U	0.0042	0.00066	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
4-Methyl-2-pentanone (MIBK)	0.0042	U	0.0042	0.00056	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Acetone	**0.018**	*****	0.0042	0.0032	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Benzene	0.00085	U	0.00085	0.00022	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Bromoform	0.00085	U	0.00085	0.00036	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Bromomethane	0.00085	U	0.00085	0.00040	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Carbon disulfide	0.00085	U	0.00085	0.00023	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Carbon tetrachloride	0.00085	U	0.00085	0.00015	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Chlorobenzene	0.00085	U	0.00085	0.00015	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Chlorobromomethane	0.00085	U	0.00085	0.00024	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Chlorodibromomethane	0.00085	U	0.00085	0.00016	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Chloroethane	0.00085	U	0.00085	0.00044	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Chloroform	0.00085	U	0.00085	0.00027	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Chloromethane	0.00085	U	0.00085	0.00037	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
cis-1,2-Dichloroethene	0.00085	U	0.00085	0.00013	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1

Client Sample ID: GC-MW-110D(SO)-15-17

Date Collected: 04/05/18 08:00
Date Received: 04/05/18 20:00

Lab Sample ID: 460-153389-1

Matrix: Solid
Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.00085	U	0.00085	0.00023	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Cyclohexane	0.00085	U	0.00085	0.00019	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Dichlorobromomethane	0.00085	U	0.00085	0.00022	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Dichlorodifluoromethane	0.00085	U	0.00085	0.00029	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Ethylbenzene	0.00085	U	0.00085	0.00017	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Ethylene Dibromide	0.00085	U	0.00085	0.00015	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Isopropylbenzene	0.00085	U	0.00085	0.00011	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Methyl acetate	0.0042	U	0.0042	0.0036	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Methyl tert-butyl ether	0.00085	U	0.00085	0.00011	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Methylcyclohexane	0.00085	U	0.00085	0.00014	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Methylene Chloride	**0.00024**	**J B**	0.00085	0.00014	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
m-Xylene & p-Xylene	**0.00019**	**J**	0.00085	0.00015	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
o-Xylene	0.00085	U	0.00085	0.000080	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Styrene	0.00085	U	0.00085	0.00010	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Tetrachloroethene	0.00085	U	0.00085	0.00012	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Toluene	0.00085	U	0.00085	0.00053	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
trans-1,2-Dichloroethene	0.00085	U	0.00085	0.00021	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
trans-1,3-Dichloropropene	0.00085	U	0.00085	0.00023	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Trichloroethene	0.00085	U	0.00085	0.00012	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Trichlorofluoromethane	0.00085	U	0.00085	0.00034	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1
Vinyl chloride	0.00085	U	0.00085	0.00046	mg/Kg	☼	04/06/18 00:35	04/19/18 21:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/06/18 00:35*	*04/19/18 21:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*78 - 135*	*04/06/18 00:35*	*04/19/18 21:03*	*1*
4-Bromofluorobenzene	*97*		*67 - 126*	*04/06/18 00:35*	*04/19/18 21:03*	*1*
Dibromofluoromethane (Surr)	*80*		*61 - 149*	*04/06/18 00:35*	*04/19/18 21:03*	*1*
Toluene-d8 (Surr)	*97*		*73 - 121*	*04/06/18 00:35*	*04/19/18 21:03*	*1*

Client Sample ID: GE-MW-110D(SO)-(69-70)

Date Collected: 04/06/18 10:25
Date Received: 04/06/18 19:20

Lab Sample ID: 460-153515-1

Matrix: Solid
Percent Solids: 85.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00068	U	0.00068	0.00016	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,1,2,2-Tetrachloroethane	0.00068	U	0.00068	0.00015	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00068	U	0.00068	0.00020	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,1,2-Trichloroethane	0.00068	U	0.00068	0.00012	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,1-Dichloroethane	0.00068	U	0.00068	0.00014	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,1-Dichloroethene	0.00068	U	0.00068	0.00015	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,2,3-Trichlorobenzene	0.00068	U	0.00068	0.00012	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,2,4-Trichlorobenzene	0.00068	U	0.00068	0.000062	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,2-Dibromo-3-Chloropropane	0.00068	U	0.00068	0.00031	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,2-Dichlorobenzene	0.00068	U	0.00068	0.000098	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,2-Dichloroethane	0.00068	U	0.00068	0.00020	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,2-Dichloropropane	0.00068	U	0.00068	0.00029	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,3-Dichlorobenzene	0.00068	U	0.00068	0.00011	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1

Client Sample ID: GE-MW-110D(SO)-(69-70)

Date Collected: 04/06/18 10:25
Date Received: 04/06/18 19:20

Lab Sample ID: 460-153515-1

Matrix: Solid
Percent Solids: 85.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.00068	U	0.00068	0.000068	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
1,4-Dioxane	0.014	U	0.014	0.0062	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
2-Butanone (MEK)	0.0034	U	0.0034	0.00075	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
2-Hexanone	0.0034	U	0.0034	0.00053	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
4-Methyl-2-pentanone (MIBK)	0.0034	U	0.0034	0.00045	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Acetone	**0.0045**	**B**	0.0034	0.0026	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Benzene	0.00068	U	0.00068	0.00017	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Bromoform	0.00068	U	0.00068	0.00029	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Bromomethane	0.00068	U	0.00068	0.00032	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Carbon disulfide	0.00068	U	0.00068	0.00018	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Carbon tetrachloride	0.00068	U *	0.00068	0.00012	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Chlorobenzene	0.00068	U	0.00068	0.00012	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Chlorobromomethane	0.00068	U	0.00068	0.00019	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Chlorodibromomethane	0.00068	U	0.00068	0.00013	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Chloroethane	0.00068	U	0.00068	0.00035	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Chloroform	0.00068	U	0.00068	0.00022	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Chloromethane	0.00068	U	0.00068	0.00029	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
cis-1,2-Dichloroethene	0.00068	U	0.00068	0.00010	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
cis-1,3-Dichloropropene	0.00068	U	0.00068	0.00019	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Cyclohexane	0.00068	U	0.00068	0.00015	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Dichlorobromomethane	0.00068	U	0.00068	0.00017	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Dichlorodifluoromethane	0.00068	U	0.00068	0.00023	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Ethylbenzene	0.00068	U	0.00068	0.00013	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Ethylene Dibromide	0.00068	U	0.00068	0.00012	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Isopropylbenzene	0.00068	U	0.00068	0.000085	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Methyl acetate	0.0034	U *	0.0034	0.0029	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Methyl tert-butyl ether	0.00068	U	0.00068	0.000085	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Methylcyclohexane	0.00068	U	0.00068	0.00011	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Methylene Chloride	**0.00065**	**J**	0.00068	0.00011	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
m-Xylene & p-Xylene	**0.00021**	**J**	0.00068	0.00012	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
o-Xylene	**0.000094**	**J**	0.00068	0.000064	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Styrene	0.00068	U	0.00068	0.000083	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Tetrachloroethene	0.00068	U	0.00068	0.000097	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Toluene	0.00068	U	0.00068	0.00042	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
trans-1,2-Dichloroethene	0.00068	U	0.00068	0.00017	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
trans-1,3-Dichloropropene	0.00068	U	0.00068	0.00018	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Trichloroethene	0.00068	U	0.00068	0.000098	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Trichlorofluoromethane	0.00068	U	0.00068	0.00028	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1
Vinyl chloride	0.00068	U	0.00068	0.00037	mg/Kg	☼	04/08/18 08:35	04/16/18 21:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/08/18 08:35*	*04/16/18 21:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*78 - 135*	*04/08/18 08:35*	*04/16/18 21:52*	*1*
4-Bromofluorobenzene	*114*		*67 - 126*	*04/08/18 08:35*	*04/16/18 21:52*	*1*
Dibromofluoromethane (Surr)	*126*		*61 - 149*	*04/08/18 08:35*	*04/16/18 21:52*	*1*
Toluene-d8 (Surr)	*100*		*73 - 121*	*04/08/18 08:35*	*04/16/18 21:52*	*1*

Client Sample ID: GC-MW-101D(SO)-14-15

Date Collected: 04/09/18 13:10
Date Received: 04/10/18 20:00

Lab Sample ID: 460-153682-1

Matrix: Solid
Percent Solids: 96.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00093	U	0.00093	0.00022	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,1,2,2-Tetrachloroethane	0.00093	U	0.00093	0.00020	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00093	U	0.00093	0.00028	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,1,2-Trichloroethane	0.00093	U	0.00093	0.00017	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,1-Dichloroethane	0.00093	U	0.00093	0.00019	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,1-Dichloroethene	0.00093	U	0.00093	0.00021	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,2,3-Trichlorobenzene	0.00093	U	0.00093	0.00017	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,2,4-Trichlorobenzene	0.00093	U	0.00093	0.000086	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,2-Dibromo-3-Chloropropane	0.00093	U	0.00093	0.00043	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,2-Dichlorobenzene	0.00093	U	0.00093	0.00013	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,2-Dichloroethane	0.00093	U	0.00093	0.00028	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,2-Dichloropropane	0.00093	U	0.00093	0.00039	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,3-Dichlorobenzene	0.00093	U	0.00093	0.00015	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,4-Dichlorobenzene	0.00093	U	0.00093	0.000093	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
1,4-Dioxane	0.019	U	0.019	0.0086	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
2-Butanone (MEK)	0.0047	U	0.0047	0.0010	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
2-Hexanone	0.0047	U	0.0047	0.00073	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00062	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Acetone	0.0047	U *	0.0047	0.0035	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Benzene	0.00093	U	0.00093	0.00024	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Bromoform	0.00093	U	0.00093	0.00040	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Bromomethane	0.00093	U	0.00093	0.00044	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Carbon disulfide	0.00093	U	0.00093	0.00025	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Carbon tetrachloride	0.00093	U	0.00093	0.00017	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Chlorobenzene	0.00093	U	0.00093	0.00016	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Chlorobromomethane	0.00093	U	0.00093	0.00026	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Chlorodibromomethane	0.00093	U	0.00093	0.00018	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Chloroethane	0.00093	U	0.00093	0.00049	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Chloroform	0.00093	U	0.00093	0.00030	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Chloromethane	0.00093	U	0.00093	0.00041	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
cis-1,2-Dichloroethene	0.00093	U	0.00093	0.00014	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
cis-1,3-Dichloropropene	0.00093	U	0.00093	0.00025	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Cyclohexane	0.00093	U	0.00093	0.00021	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Dichlorobromomethane	0.00093	U	0.00093	0.00024	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Dichlorodifluoromethane	0.00093	U	0.00093	0.00031	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Ethylbenzene	0.00093	U	0.00093	0.00019	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Ethylene Dibromide	0.00093	U	0.00093	0.00017	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Isopropylbenzene	0.00093	U	0.00093	0.00012	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Methyl acetate	0.0047	U	0.0047	0.0040	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Methyl tert-butyl ether	0.00093	U	0.00093	0.00012	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Methylcyclohexane	0.00093	U	0.00093	0.00015	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Methylene Chloride	0.00093	U	0.00093	0.00015	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
m-Xylene & p-Xylene	**0.00031**	**J**	0.00093	0.00016	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
o-Xylene	0.00093	U	0.00093	0.000089	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Styrene	0.00093	U	0.00093	0.00011	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Tetrachloroethene	0.00093	U	0.00093	0.00013	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Toluene	0.00093	U	0.00093	0.00058	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
trans-1,2-Dichloroethene	0.00093	U	0.00093	0.00023	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
trans-1,3-Dichloropropene	0.00093	U	0.00093	0.00025	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1

Client Sample ID: GC-MW-101D(SO)-14-15

Lab Sample ID: 460-153682-1

Date Collected: 04/09/18 13:10
Matrix: Solid
Date Received: 04/10/18 20:00
Percent Solids: 96.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.00093	U	0.00093	0.00013	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Trichlorofluoromethane	0.00093	U	0.00093	0.00038	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1
Vinyl chloride	0.00093	U	0.00093	0.00051	mg/Kg	☼	04/11/18 00:38	04/17/18 04:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/11/18 00:38*	*04/17/18 04:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*78 - 135*	*04/11/18 00:38*	*04/17/18 04:24*	*1*
4-Bromofluorobenzene	*95*		*67 - 126*	*04/11/18 00:38*	*04/17/18 04:24*	*1*
Dibromofluoromethane (Surr)	*85*		*61 - 149*	*04/11/18 00:38*	*04/17/18 04:24*	*1*
Toluene-d8 (Surr)	*97*		*73 - 121*	*04/11/18 00:38*	*04/17/18 04:24*	*1*

Client Sample ID: GC-MW-101D(SO)(99.2-100)

Lab Sample ID: 460-153878-1

Date Collected: 04/11/18 13:15
Matrix: Solid
Date Received: 04/12/18 18:00
Percent Solids: 84.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00095	U	0.00095	0.00022	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,1,2,2-Tetrachloroethane	0.00095	U	0.00095	0.00020	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00095	U	0.00095	0.00029	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,1,2-Trichloroethane	0.00095	U	0.00095	0.00017	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,1-Dichloroethane	0.00095	U	0.00095	0.00020	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,1-Dichloroethene	0.00095	U	0.00095	0.00021	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,2,3-Trichlorobenzene	0.00095	U	0.00095	0.00017	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,2,4-Trichlorobenzene	0.00095	U	0.00095	0.000087	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,2-Dibromo-3-Chloropropane	0.00095	U	0.00095	0.00044	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,2-Dichlorobenzene	0.00095	U	0.00095	0.00014	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,2-Dichloroethane	0.00095	U	0.00095	0.00028	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,2-Dichloropropane	0.00095	U	0.00095	0.00040	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,3-Dichlorobenzene	0.00095	U	0.00095	0.00015	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,4-Dichlorobenzene	0.00095	U	0.00095	0.000095	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
1,4-Dioxane	0.019	U	0.019	0.0087	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
2-Butanone (MEK)	**0.0028**	**J**	0.0047	0.0011	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
2-Hexanone	0.0047	U	0.0047	0.00074	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00063	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Acetone	**0.017**		0.0047	0.0036	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Benzene	0.00095	U	0.00095	0.00024	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Bromoform	0.00095	U	0.00095	0.00040	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Bromomethane	0.00095	U	0.00095	0.00045	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Carbon disulfide	0.00095	U	0.00095	0.00025	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Carbon tetrachloride	0.00095	U	0.00095	0.00017	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Chlorobenzene	0.00095	U	0.00095	0.00017	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Chlorobromomethane	0.00095	U	0.00095	0.00027	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Chlorodibromomethane	0.00095	U	0.00095	0.00018	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Chloroethane	0.00095	U	0.00095	0.00050	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Chloroform	0.00095	U	0.00095	0.00030	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Chloromethane	0.00095	U	0.00095	0.00041	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
cis-1,2-Dichloroethene	0.00095	U	0.00095	0.00014	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1

Client Sample ID: GC-MW-101D(SO)(99.2-100)

Date Collected: 04/11/18 13:15
Date Received: 04/12/18 18:00

Lab Sample ID: 460-153878-1

Matrix: Solid
Percent Solids: 84.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.00095	U	0.00095	0.00026	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Cyclohexane	0.00095	U	0.00095	0.00021	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Dichlorobromomethane	0.00095	U	0.00095	0.00024	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Dichlorodifluoromethane	0.00095	U	0.00095	0.00032	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Ethylbenzene	0.00095	U	0.00095	0.00019	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Ethylene Dibromide	0.00095	U	0.00095	0.00017	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Isopropylbenzene	0.00095	U	0.00095	0.00012	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Methyl acetate	0.0047	U	0.0047	0.0041	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Methyl tert-butyl ether	0.00095	U	0.00095	0.00012	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Methylcyclohexane	0.00095	U	0.00095	0.00015	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Methylene Chloride	**0.00023**	**J**	0.00095	0.00015	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
m-Xylene & p-Xylene	**0.00088**	**J**	0.00095	0.00017	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
o-Xylene	**0.00030**	**J**	0.00095	0.000090	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Styrene	0.00095	U	0.00095	0.00012	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Tetrachloroethene	0.00095	U	0.00095	0.00014	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Toluene	0.00095	U	0.00095	0.00059	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
trans-1,2-Dichloroethene	0.00095	U	0.00095	0.00023	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
trans-1,3-Dichloropropene	0.00095	U	0.00095	0.00025	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Trichloroethene	0.00095	U	0.00095	0.00014	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Trichlorofluoromethane	0.00095	U	0.00095	0.00039	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1
Vinyl chloride	0.00095	U	0.00095	0.00052	mg/Kg	☼	04/13/18 00:00	04/20/18 16:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/13/18 00:00*	*04/20/18 16:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*78 - 135*	*04/13/18 00:00*	*04/20/18 16:23*	*1*
4-Bromofluorobenzene	*98*		*67 - 126*	*04/13/18 00:00*	*04/20/18 16:23*	*1*
Dibromofluoromethane (Surr)	*77*		*61 - 149*	*04/13/18 00:00*	*04/20/18 16:23*	*1*
Toluene-d8 (Surr)	*97*		*73 - 121*	*04/13/18 00:00*	*04/20/18 16:23*	*1*

Surrogate Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-152211-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(78-135)	(67-126)	(61-149)	(73-121)
460-152211-1	GC-SB-101(SO)-3-5	125	108	113	104
460-152211-2	GC-SB-101(SO)-15.5-17.5	126	107	116	107
460-152211-2 MS	GC-SB-101(SO)-15.5-17.5	117	108	114	108
460-152211-2 MSD	GC-SB-101(SO)-15.5-17.5	120	109	115	109
460-152211-3	GC-MW-102(SO)-3-5	129	107	117	107
460-152211-4	GC-MW-102(SO)-9-11	127	105	115	105
460-152211-5	GC-MW-103(SO)-3-5	132 *	105 *	115 *	102 *
460-152331-1	GC-MW-103(SO)-12-14	111	102	103	107
460-152331-2	GC-MW-103(SO)-15-17	105	96	97	99
460-152331-3	GC-MW-104(SO)-0.5-2.5	111	99	105	103
460-152331-4	GC-MW-104(SO)-7-9	112	102	104	104
460-152331-5	GC-MW-105(SO)-0.5-2.5	114	101	105	104
460-152331-6	GC-MW-105(SO)-7-9	111	100	102	105
460-152331-7	GC-Drain-02(SO)	107	92	102	109
460-152604-2	GC-MW-107D(SO)-15-17	129	93	124	86
460-153018-1	GC-MW-109M(SO)-15-17	102	104	105	97
460-153022-1	GC-MW-107D(SO)-97-99	82	101	79	95
460-153082-1	GC-MW-109M(SO)-33-35	121	117	126	102
460-153163-1	GC-MW-106(SO)-15-17	121	111	121	98
460-153163-2	GC-MW-108D(SO)-15-17	122	114	121	99
460-153254-1	GC-MW-108D(SO)-33-35	123	113	127	101
460-153254-2	GC-MW-108D(SO)-59-60.5	119	115	122	102
460-153389-1	GC-MW-110D(SO)-15-17	80	97	80	97
460-153515-1	GE-MW-110D(SO)-(69-70)	121	114	126	100
460-153515-1 MS	GE-MW-110D(SO)-(69-70)	118	113	123	104
460-153515-1MSD	GE-MW-110D(SO)-(69-70)	115	109	123	102
460-153682-1	GC-MW-101D(SO)-14-15	90	95	85	97
460-153878-1	GC-MW-101D(SO)(99.2-100)	82	98	77	97
LCS 460-504873/4	Lab Control Sample	114	103	108	104
LCS 460-505749/3	Lab Control Sample	104	97	101	103
LCS 460-505873/3	Lab Control Sample	108	101	104	105
LCS 460-507466/5	Lab Control Sample	112	82	104	101
LCS 460-510106/3	Lab Control Sample	85	102	81	99
LCS 460-510660/4	Lab Control Sample	112	112	116	98
LCS 460-510972/3	Lab Control Sample	112	109	115	98
LCS 460-511293/4	Lab Control Sample	119	112	119	100
LCS 460-511471/5	Lab Control Sample	116	112	119	100
LCS 460-511498/4	Lab Control Sample	89	95	85	101
LCS 460-512479/4	Lab Control Sample	84	98	81	98
LCS 460-512623/3	Lab Control Sample	80	102	79	100
LCS 460-513435/3	Lab Control Sample	96	102	102	100
LCSD 460-504873/5	Lab Control Sample Dup	115	103	108	105
LCSD 460-505749/4	Lab Control Sample Dup	104	97	99	102
LCSD 460-505873/4	Lab Control Sample Dup	107	100	105	105
LCSD 460-507466/6	Lab Control Sample Dup	106	76	98	94
LCSD 460-510106/4	Lab Control Sample Dup	86	101	81	100
LCSD 460-510660/5	Lab Control Sample Dup	114	114	116	98
LCSD 460-510972/4	Lab Control Sample Dup	106	100	106	88
LCSD 460-511293/5	Lab Control Sample Dup	107	101	111	91

Surrogate Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-152211-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(78-135)	(67-126)	(61-149)	(73-121)
LCSD 460-511498/5	Lab Control Sample Dup	88	96	85	102
LCSD 460-512479/5	Lab Control Sample Dup	82	100	80	98
LCSD 460-512623/4	Lab Control Sample Dup	81	99	80	99
LCSD 460-513435/4	Lab Control Sample Dup	97	101	101	100
MB 460-504873/8	Method Blank	123	103	111	103
MB 460-505749/7	Method Blank	96	93	96	98
MB 460-505873/7	Method Blank	99	92	97	95
MB 460-507466/9	Method Blank	115	83	114	94
MB 460-510106/7	Method Blank	81	102	78	97
MB 460-510660/8	Method Blank	118	112	120	99
MB 460-510972/7	Method Blank	113	113	120	101
MB 460-511293/8	Method Blank	114	109	120	99
MB 460-511471/8	Method Blank	115	112	122	98
MB 460-511498/8	Method Blank	85	95	83	100
MB 460-512479/8	Method Blank	82	97	80	97
MB 460-512623/7	Method Blank	78	98	77	97
MB 460-513435/7	Method Blank	92	100	97	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: 460-152211-2 MS
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: GC-SB-101(SO)-15.5-17.5
Prep Type: Total/NA
Prep Batch: 504769

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.00095	U	0.0186	0.0157		mg/Kg	☼	84	80 - 125
1,1,2,2-Tetrachloroethane	0.00095	U	0.0186	0.0142		mg/Kg	☼	77	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00095	U	0.0186	0.0154		mg/Kg	☼	83	78 - 132
1,1,2-Trichloroethane	0.00095	U	0.0186	0.0140	*	mg/Kg	☼	75	76 - 124
1,1-Dichloroethane	0.00095	U	0.0186	0.0179		mg/Kg	☼	97	80 - 124
1,1-Dichloroethene	0.00095	U	0.0186	0.0147		mg/Kg	☼	79	79 - 132
1,2,3-Trichlorobenzene	0.00095	U	0.0186	0.0125	*	mg/Kg	☼	67	75 - 123
1,2,4-Trichlorobenzene	0.00095	U	0.0186	0.0133	*	mg/Kg	☼	72	74 - 124
1,2-Dibromo-3-Chloropropane	0.00095	U	0.0186	0.0124		mg/Kg	☼	67	65 - 129
1,2-Dichlorobenzene	0.00095	U	0.0186	0.0136	*	mg/Kg	☼	73	80 - 121
1,2-Dichloroethane	0.00095	U	0.0186	0.0150		mg/Kg	☼	81	68 - 120
1,2-Dichloropropane	0.00095	U	0.0186	0.0166		mg/Kg	☼	89	77 - 124
1,3-Dichlorobenzene	0.00095	U	0.0186	0.0136	*	mg/Kg	☼	73	79 - 124
1,4-Dichlorobenzene	0.00095	U	0.0186	0.0135	*	mg/Kg	☼	73	79 - 121
1,4-Dioxane	0.019	U	0.371	0.226	*	mg/Kg	☼	61	67 - 150
2-Butanone (MEK)	0.0023	J	0.0929	0.0527	*	mg/Kg	☼	54	61 - 140
2-Hexanone	0.0047	U	0.0929	0.0680	*	mg/Kg	☼	73	78 - 120
4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0929	0.0722	*	mg/Kg	☼	78	80 - 120
Acetone	0.034		0.0929	0.0775	*	mg/Kg	☼	46	75 - 120
Benzene	0.00095	U	0.0186	0.0167		mg/Kg	☼	90	75 - 127
Bromoform	0.00095	U	0.0186	0.0121		mg/Kg	☼	65	19 - 150
Bromomethane	0.00095	U	0.0186	0.0162		mg/Kg	☼	87	59 - 136
Carbon disulfide	0.00095	U	0.0186	0.0169		mg/Kg	☼	91	74 - 130
Carbon tetrachloride	0.00095	U	0.0186	0.0151		mg/Kg	☼	81	77 - 138
Chlorobenzene	0.00095	U	0.0186	0.0134	*	mg/Kg	☼	72	80 - 120
Chlorobromomethane	0.00095	U	0.0186	0.0140	*	mg/Kg	☼	75	80 - 125
Chlorodibromomethane	0.00095	U	0.0186	0.0123	*	mg/Kg	☼	66	67 - 143
Chloroethane	0.00095	U	0.0186	0.0185		mg/Kg	☼	99	50 - 139
Chloroform	0.00095	U	0.0186	0.0161		mg/Kg	☼	87	80 - 122
Chloromethane	0.00095	U	0.0186	0.0201		mg/Kg	☼	108	66 - 128
cis-1,2-Dichloroethene	0.00095	U	0.0186	0.0150		mg/Kg	☼	81	80 - 123
cis-1,3-Dichloropropene	0.00095	U	0.0186	0.0146		mg/Kg	☼	79	75 - 124
Cyclohexane	0.00095	U	0.0186	0.0151		mg/Kg	☼	81	67 - 135
Dichlorobromomethane	0.00095	U	0.0186	0.0146		mg/Kg	☼	79	76 - 129
Dichlorodifluoromethane	0.00095	U	0.0186	0.0163		mg/Kg	☼	88	72 - 127
Ethylbenzene	0.00095	U	0.0186	0.0140	*	mg/Kg	☼	75	79 - 124
Ethylene Dibromide	0.00095	U	0.0186	0.0124	*	mg/Kg	☼	67	80 - 122
Isopropylbenzene	0.00095	U	0.0186	0.0138	*	mg/Kg	☼	74	80 - 125
Methyl acetate	0.0047	U *	0.0929	0.0904		mg/Kg	☼	97	73 - 123
Methyl tert-butyl ether	0.00095	U	0.0186	0.0142	*	mg/Kg	☼	77	80 - 120
Methylcyclohexane	0.00095	U	0.0186	0.0151		mg/Kg	☼	82	71 - 137
Methylene Chloride	0.0024		0.0186	0.0174		mg/Kg	☼	81	79 - 128
m-Xylene & p-Xylene	0.00039	J	0.0186	0.0144	*	mg/Kg	☼	75	79 - 121
o-Xylene	0.00015	J	0.0186	0.0141	*	mg/Kg	☼	75	79 - 123
Styrene	0.00095	U	0.0186	0.0137	*	mg/Kg	☼	74	78 - 123
Tetrachloroethene	0.00095	U	0.0186	0.0139		mg/Kg	☼	75	73 - 130
Toluene	0.00095	U	0.0186	0.0148		mg/Kg	☼	80	75 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-152211-2 MS
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: GC-SB-101(SO)-15.5-17.5
Prep Type: Total/NA
Prep Batch: 504769

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	0.00095	U	0.0186	0.0159		mg/Kg	☼	85	80 - 129
trans-1,3-Dichloropropene	0.00095	U	0.0186	0.0145		mg/Kg	☼	78	72 - 121
Trichloroethene	0.00095	U	0.0186	0.0152		mg/Kg	☼	82	79 - 122
Trichlorofluoromethane	0.00095	U	0.0186	0.0172		mg/Kg	☼	93	68 - 136
Vinyl chloride	0.00095	U	0.0186	0.0194		mg/Kg	☼	104	70 - 134

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*117*		*78 - 135*
4-Bromofluorobenzene	*108*		*67 - 126*
Dibromofluoromethane (Surr)	*114*		*61 - 149*
Toluene-d8 (Surr)	*108*		*73 - 121*

Lab Sample ID: 460-152211-2 MSD
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: GC-SB-101(SO)-15.5-17.5
Prep Type: Total/NA
Prep Batch: 504769

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.00095	U	0.0204	0.0156	*	mg/Kg	☼	76	80 - 125	1	30
1,1,2,2-Tetrachloroethane	0.00095	U	0.0204	0.0158		mg/Kg	☼	78	72 - 131	11	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00095	U	0.0204	0.0147	*	mg/Kg	☼	72	78 - 132	5	30
1,1,2-Trichloroethane	0.00095	U	0.0204	0.0150	*	mg/Kg	☼	73	76 - 124	7	30
1,1-Dichloroethane	0.00095	U	0.0204	0.0174		mg/Kg	☼	85	80 - 124	3	30
1,1-Dichloroethene	0.00095	U	0.0204	0.0146	*	mg/Kg	☼	72	79 - 132	1	30
1,2,3-Trichlorobenzene	0.00095	U	0.0204	0.0136	*	mg/Kg	☼	67	75 - 123	9	30
1,2,4-Trichlorobenzene	0.00095	U	0.0204	0.0140	*	mg/Kg	☼	68	74 - 124	5	30
1,2-Dibromo-3-Chloropropane	0.00095	U	0.0204	0.0151		mg/Kg	☼	74	65 - 129	20	30
1,2-Dichlorobenzene	0.00095	U	0.0204	0.0136	*	mg/Kg	☼	67	80 - 121	0	30
1,2-Dichloroethane	0.00095	U	0.0204	0.0156		mg/Kg	☼	76	68 - 120	4	30
1,2-Dichloropropane	0.00095	U	0.0204	0.0172		mg/Kg	☼	84	77 - 124	4	30
1,3-Dichlorobenzene	0.00095	U	0.0204	0.0135	*	mg/Kg	☼	66	79 - 124	0	30
1,4-Dichlorobenzene	0.00095	U	0.0204	0.0138	*	mg/Kg	☼	68	79 - 121	2	30
1,4-Dioxane	0.019	U	0.408	0.250	*	mg/Kg	☼	61	67 - 150	10	30
2-Butanone (MEK)	0.0023	J	0.102	0.0614	*	mg/Kg	☼	58	61 - 140	15	30
2-Hexanone	0.0047	U	0.102	0.0786	*	mg/Kg	☼	77	78 - 120	14	30
4-Methyl-2-pentanone (MIBK)	0.0047	U	0.102	0.0810	*	mg/Kg	☼	79	80 - 120	12	30
Acetone	0.034		0.102	0.0752	*	mg/Kg	☼	40	75 - 120	3	30
Benzene	0.00095	U	0.0204	0.0157		mg/Kg	☼	77	75 - 127	6	30
Bromoform	0.00095	U	0.0204	0.0128		mg/Kg	☼	63	19 - 150	5	30
Bromomethane	0.00095	U	0.0204	0.0137		mg/Kg	☼	67	59 - 136	17	30
Carbon disulfide	0.00095	U	0.0204	0.0163		mg/Kg	☼	80	74 - 130	3	30
Carbon tetrachloride	0.00095	U	0.0204	0.0144	*	mg/Kg	☼	71	77 - 138	5	30
Chlorobenzene	0.00095	U	0.0204	0.0132	*	mg/Kg	☼	65	80 - 120	1	30
Chlorobromomethane	0.00095	U	0.0204	0.0147	*	mg/Kg	☼	72	80 - 125	5	30
Chlorodibromomethane	0.00095	U	0.0204	0.0129	*	mg/Kg	☼	63	67 - 143	5	30
Chloroethane	0.00095	U	0.0204	0.0154		mg/Kg	☼	75	50 - 139	18	30
Chloroform	0.00095	U	0.0204	0.0160	*	mg/Kg	☼	78	80 - 122	1	30
Chloromethane	0.00095	U	0.0204	0.0170		mg/Kg	☼	83	66 - 128	17	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-152211-2 MSD
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: GC-SB-101(SO)-15.5-17.5
Prep Type: Total/NA
Prep Batch: 504769

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.00095	U	0.0204	0.0149	*	mg/Kg	☼	73	80 - 123	1	30
cis-1,3-Dichloropropene	0.00095	U	0.0204	0.0150	*	mg/Kg	☼	74	75 - 124	3	30
Cyclohexane	0.00095	U	0.0204	0.0147		mg/Kg	☼	72	67 - 135	3	30
Dichlorobromomethane	0.00095	U	0.0204	0.0150	*	mg/Kg	☼	73	76 - 129	3	30
Dichlorodifluoromethane	0.00095	U	0.0204	0.0133	*	mg/Kg	☼	65	72 - 127	21	30
Ethylbenzene	0.00095	U	0.0204	0.0139	*	mg/Kg	☼	68	79 - 124	0	30
Ethylene Dibromide	0.00095	U	0.0204	0.0143	*	mg/Kg	☼	70	80 - 122	14	30
Isopropylbenzene	0.00095	U	0.0204	0.0135	*	mg/Kg	☼	66	80 - 125	2	30
Methyl acetate	0.0047	U *	0.102	0.105		mg/Kg	☼	103	73 - 123	15	30
Methyl tert-butyl ether	0.00095	U	0.0204	0.0155	*	mg/Kg	☼	76	80 - 120	9	30
Methylcyclohexane	0.00095	U	0.0204	0.0146		mg/Kg	☼	71	71 - 137	4	30
Methylene Chloride	0.0024		0.0204	0.0201		mg/Kg	☼	87	79 - 128	14	30
m-Xylene & p-Xylene	0.00039	J	0.0204	0.0142	*	mg/Kg	☼	68	79 - 121	1	30
o-Xylene	0.00015	J	0.0204	0.0146	*	mg/Kg	☼	71	79 - 123	4	30
Styrene	0.00095	U	0.0204	0.0141	*	mg/Kg	☼	69	78 - 123	2	30
Tetrachloroethene	0.00095	U	0.0204	0.0133	*	mg/Kg	☼	65	73 - 130	4	30
Toluene	0.00095	U	0.0204	0.0144	*	mg/Kg	☼	71	75 - 122	3	30
trans-1,2-Dichloroethene	0.00095	U	0.0204	0.0156	*	mg/Kg	☼	76	80 - 129	2	30
trans-1,3-Dichloropropene	0.00095	U	0.0204	0.0146		mg/Kg	☼	72	72 - 121	1	30
Trichloroethene	0.00095	U	0.0204	0.0151	*	mg/Kg	☼	74	79 - 122	1	30
Trichlorofluoromethane	0.00095	U	0.0204	0.0139		mg/Kg	☼	68	68 - 136	21	30
Vinyl chloride	0.00095	U	0.0204	0.0141	*	mg/Kg	☼	69	70 - 134	31	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*120*		*78 - 135*
4-Bromofluorobenzene	*109*		*67 - 126*
Dibromofluoromethane (Surr)	*115*		*61 - 149*
Toluene-d8 (Surr)	*109*		*73 - 121*

Lab Sample ID: MB 460-504873/8
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			03/21/18 01:16	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			03/21/18 01:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			03/21/18 01:16	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			03/21/18 01:16	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			03/21/18 01:16	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			03/21/18 01:16	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			03/21/18 01:16	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			03/21/18 01:16	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			03/21/18 01:16	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			03/21/18 01:16	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			03/21/18 01:16	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			03/21/18 01:16	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			03/21/18 01:16	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			03/21/18 01:16	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-504873/8
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			03/21/18 01:16	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			03/21/18 01:16	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			03/21/18 01:16	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			03/21/18 01:16	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			03/21/18 01:16	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			03/21/18 01:16	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			03/21/18 01:16	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			03/21/18 01:16	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			03/21/18 01:16	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			03/21/18 01:16	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			03/21/18 01:16	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			03/21/18 01:16	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			03/21/18 01:16	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			03/21/18 01:16	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			03/21/18 01:16	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			03/21/18 01:16	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			03/21/18 01:16	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			03/21/18 01:16	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			03/21/18 01:16	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			03/21/18 01:16	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			03/21/18 01:16	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			03/21/18 01:16	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			03/21/18 01:16	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			03/21/18 01:16	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			03/21/18 01:16	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			03/21/18 01:16	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			03/21/18 01:16	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			03/21/18 01:16	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			03/21/18 01:16	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			03/21/18 01:16	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			03/21/18 01:16	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			03/21/18 01:16	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			03/21/18 01:16	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			03/21/18 01:16	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			03/21/18 01:16	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			03/21/18 01:16	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			03/21/18 01:16	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			03/21/18 01:16	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*03/21/18 01:16*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*78 - 135*		*03/21/18 01:16*	*1*
4-Bromofluorobenzene	*103*		*67 - 126*		*03/21/18 01:16*	*1*
Dibromofluoromethane (Surr)	*111*		*61 - 149*		*03/21/18 01:16*	*1*
Toluene-d8 (Surr)	*103*		*73 - 121*		*03/21/18 01:16*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-504873/4
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0203		mg/Kg		101	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0207		mg/Kg		103	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0193		mg/Kg		97	78 - 132
1,1,2-Trichloroethane	0.0200	0.0184		mg/Kg		92	76 - 124
1,1-Dichloroethane	0.0200	0.0228		mg/Kg		114	80 - 124
1,1-Dichloroethene	0.0200	0.0194		mg/Kg		97	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0192		mg/Kg		96	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0199		mg/Kg		99	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0181		mg/Kg		91	65 - 129
1,2-Dichlorobenzene	0.0200	0.0184		mg/Kg		92	80 - 121
1,2-Dichloroethane	0.0200	0.0197		mg/Kg		99	68 - 120
1,2-Dichloropropane	0.0200	0.0217		mg/Kg		109	77 - 124
1,3-Dichlorobenzene	0.0200	0.0187		mg/Kg		93	79 - 124
1,4-Dichlorobenzene	0.0200	0.0185		mg/Kg		92	79 - 121
1,4-Dioxane	0.400	0.307		mg/Kg		77	67 - 150
2-Butanone (MEK)	0.100	0.0711		mg/Kg		71	61 - 140
2-Hexanone	0.100	0.0899		mg/Kg		90	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0933		mg/Kg		93	80 - 120
Acetone	0.100	0.0802		mg/Kg		80	75 - 120
Benzene	0.0200	0.0213		mg/Kg		107	75 - 127
Bromoform	0.0200	0.0161		mg/Kg		81	19 - 150
Bromomethane	0.0200	0.0179		mg/Kg		89	59 - 136
Carbon disulfide	0.0200	0.0218		mg/Kg		109	74 - 130
Carbon tetrachloride	0.0200	0.0194		mg/Kg		97	77 - 138
Chlorobenzene	0.0200	0.0181		mg/Kg		90	80 - 120
Chlorobromomethane	0.0200	0.0181		mg/Kg		91	80 - 125
Chlorodibromomethane	0.0200	0.0165		mg/Kg		83	67 - 143
Chloroethane	0.0200	0.0198		mg/Kg		99	50 - 139
Chloroform	0.0200	0.0206		mg/Kg		103	80 - 122
Chloromethane	0.0200	0.0219		mg/Kg		109	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0196		mg/Kg		98	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0198		mg/Kg		99	75 - 124
Cyclohexane	0.0200	0.0204		mg/Kg		102	67 - 135
Dichlorobromomethane	0.0200	0.0190		mg/Kg		95	76 - 129
Dichlorodifluoromethane	0.0200	0.0177		mg/Kg		88	72 - 127
Ethylbenzene	0.0200	0.0185		mg/Kg		93	79 - 124
Ethylene Dibromide	0.0200	0.0180		mg/Kg		90	80 - 122
Isopropylbenzene	0.0200	0.0184		mg/Kg		92	80 - 125
Methyl acetate	0.100	0.124	*	mg/Kg		124	73 - 123
Methyl tert-butyl ether	0.0200	0.0198		mg/Kg		99	80 - 120
Methylcyclohexane	0.0200	0.0204		mg/Kg		102	71 - 137
Methylene Chloride	0.0200	0.0195		mg/Kg		98	79 - 128
m-Xylene & p-Xylene	0.0200	0.0187		mg/Kg		93	79 - 121
o-Xylene	0.0200	0.0187		mg/Kg		94	79 - 123
Styrene	0.0200	0.0185		mg/Kg		92	78 - 123
Tetrachloroethene	0.0200	0.0182		mg/Kg		91	73 - 130
Toluene	0.0200	0.0195		mg/Kg		97	75 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-504873/4
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	0.0200	0.0201		mg/Kg		101	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0198		mg/Kg		99	72 - 121
Trichloroethene	0.0200	0.0198		mg/Kg		99	79 - 122
Trichlorofluoromethane	0.0200	0.0169		mg/Kg		84	68 - 136
Vinyl chloride	0.0200	0.0210		mg/Kg		105	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*78 - 135*
4-Bromofluorobenzene	*103*		*67 - 126*
Dibromofluoromethane (Surr)	*108*		*61 - 149*
Toluene-d8 (Surr)	*104*		*73 - 121*

Lab Sample ID: LCSD 460-504873/5
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0193		mg/Kg		97	80 - 125	5	30
1,1,2,2-Tetrachloroethane	0.0200	0.0200		mg/Kg		100	72 - 131	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0193		mg/Kg		97	78 - 132	0	30
1,1,2-Trichloroethane	0.0200	0.0197		mg/Kg		99	76 - 124	7	30
1,1-Dichloroethane	0.0200	0.0224		mg/Kg		112	80 - 124	2	30
1,1-Dichloroethene	0.0200	0.0191		mg/Kg		96	79 - 132	1	30
1,2,3-Trichlorobenzene	0.0200	0.0178		mg/Kg		89	75 - 123	8	30
1,2,4-Trichlorobenzene	0.0200	0.0186		mg/Kg		93	74 - 124	6	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0181		mg/Kg		91	65 - 129	0	30
1,2-Dichlorobenzene	0.0200	0.0179		mg/Kg		89	80 - 121	3	30
1,2-Dichloroethane	0.0200	0.0196		mg/Kg		98	68 - 120	1	30
1,2-Dichloropropane	0.0200	0.0213		mg/Kg		106	77 - 124	2	30
1,3-Dichlorobenzene	0.0200	0.0178		mg/Kg		89	79 - 124	5	30
1,4-Dichlorobenzene	0.0200	0.0181		mg/Kg		90	79 - 121	2	30
1,4-Dioxane	0.400	0.294		mg/Kg		74	67 - 150	4	30
2-Butanone (MEK)	0.100	0.0717		mg/Kg		72	61 - 140	1	30
2-Hexanone	0.100	0.0935		mg/Kg		94	78 - 120	4	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0957		mg/Kg		96	80 - 120	3	30
Acetone	0.100	0.0807		mg/Kg		81	75 - 120	1	30
Benzene	0.0200	0.0212		mg/Kg		106	75 - 127	1	30
Bromoform	0.0200	0.0162		mg/Kg		81	19 - 150	1	30
Bromomethane	0.0200	0.0186		mg/Kg		93	59 - 136	4	30
Carbon disulfide	0.0200	0.0209		mg/Kg		104	74 - 130	4	30
Carbon tetrachloride	0.0200	0.0193		mg/Kg		96	77 - 138	1	30
Chlorobenzene	0.0200	0.0179		mg/Kg		90	80 - 120	1	30
Chlorobromomethane	0.0200	0.0173		mg/Kg		86	80 - 125	5	30
Chlorodibromomethane	0.0200	0.0168		mg/Kg		84	67 - 143	2	30
Chloroethane	0.0200	0.0205		mg/Kg		103	50 - 139	4	30
Chloroform	0.0200	0.0205		mg/Kg		102	80 - 122	0	30
Chloromethane	0.0200	0.0223		mg/Kg		111	66 - 128	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-504873/5
Matrix: Solid
Analysis Batch: 504873

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.0200	0.0193		mg/Kg		96	80 - 123	2	30
cis-1,3-Dichloropropene	0.0200	0.0196		mg/Kg		98	75 - 124	1	30
Cyclohexane	0.0200	0.0195		mg/Kg		97	67 - 135	5	30
Dichlorobromomethane	0.0200	0.0191		mg/Kg		95	76 - 129	0	30
Dichlorodifluoromethane	0.0200	0.0183		mg/Kg		91	72 - 127	3	30
Ethylbenzene	0.0200	0.0187		mg/Kg		94	79 - 124	1	30
Ethylene Dibromide	0.0200	0.0178		mg/Kg		89	80 - 122	1	30
Isopropylbenzene	0.0200	0.0182		mg/Kg		91	80 - 125	1	30
Methyl acetate	0.100	0.127	*	mg/Kg		127	73 - 123	2	30
Methyl tert-butyl ether	0.0200	0.0193		mg/Kg		97	80 - 120	2	30
Methylcyclohexane	0.0200	0.0193		mg/Kg		96	71 - 137	5	30
Methylene Chloride	0.0200	0.0190		mg/Kg		95	79 - 128	3	30
m-Xylene & p-Xylene	0.0200	0.0184		mg/Kg		92	79 - 121	2	30
o-Xylene	0.0200	0.0181		mg/Kg		91	79 - 123	3	30
Styrene	0.0200	0.0186		mg/Kg		93	78 - 123	1	30
Tetrachloroethene	0.0200	0.0180		mg/Kg		90	73 - 130	1	30
Toluene	0.0200	0.0193		mg/Kg		96	75 - 122	1	30
trans-1,2-Dichloroethene	0.0200	0.0198		mg/Kg		99	80 - 129	2	30
trans-1,3-Dichloropropene	0.0200	0.0195		mg/Kg		98	72 - 121	1	30
Trichloroethene	0.0200	0.0195		mg/Kg		98	79 - 122	1	30
Trichlorofluoromethane	0.0200	0.0175		mg/Kg		87	68 - 136	4	30
Vinyl chloride	0.0200	0.0204		mg/Kg		102	70 - 134	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*78 - 135*
4-Bromofluorobenzene	*103*		*67 - 126*
Dibromofluoromethane (Surr)	*108*		*61 - 149*
Toluene-d8 (Surr)	*105*		*73 - 121*

Lab Sample ID: MB 460-505749/7
Matrix: Solid
Analysis Batch: 505749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			03/24/18 08:10	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			03/24/18 08:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			03/24/18 08:10	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			03/24/18 08:10	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			03/24/18 08:10	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			03/24/18 08:10	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			03/24/18 08:10	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			03/24/18 08:10	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			03/24/18 08:10	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			03/24/18 08:10	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			03/24/18 08:10	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			03/24/18 08:10	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			03/24/18 08:10	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			03/24/18 08:10	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-505749/7
Matrix: Solid
Analysis Batch: 505749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			03/24/18 08:10	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			03/24/18 08:10	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			03/24/18 08:10	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			03/24/18 08:10	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			03/24/18 08:10	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			03/24/18 08:10	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			03/24/18 08:10	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			03/24/18 08:10	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			03/24/18 08:10	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			03/24/18 08:10	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			03/24/18 08:10	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			03/24/18 08:10	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			03/24/18 08:10	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			03/24/18 08:10	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			03/24/18 08:10	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			03/24/18 08:10	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			03/24/18 08:10	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			03/24/18 08:10	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			03/24/18 08:10	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			03/24/18 08:10	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			03/24/18 08:10	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			03/24/18 08:10	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			03/24/18 08:10	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			03/24/18 08:10	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			03/24/18 08:10	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			03/24/18 08:10	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			03/24/18 08:10	1
Methylene Chloride	0.000370	J	0.0010	0.00016	mg/Kg			03/24/18 08:10	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			03/24/18 08:10	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			03/24/18 08:10	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			03/24/18 08:10	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			03/24/18 08:10	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			03/24/18 08:10	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			03/24/18 08:10	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			03/24/18 08:10	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			03/24/18 08:10	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			03/24/18 08:10	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			03/24/18 08:10	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*03/24/18 08:10*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 135*		*03/24/18 08:10*	*1*
4-Bromofluorobenzene	*93*		*67 - 126*		*03/24/18 08:10*	*1*
Dibromofluoromethane (Surr)	*96*		*61 - 149*		*03/24/18 08:10*	*1*
Toluene-d8 (Surr)	*98*		*73 - 121*		*03/24/18 08:10*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-505749/3
Matrix: Solid
Analysis Batch: 505749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0202		mg/Kg		101	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0191		mg/Kg		95	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0206		mg/Kg		103	78 - 132
1,1,2-Trichloroethane	0.0200	0.0198		mg/Kg		99	76 - 124
1,1-Dichloroethane	0.0200	0.0204		mg/Kg		102	80 - 124
1,1-Dichloroethene	0.0200	0.0205		mg/Kg		102	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0200		mg/Kg		100	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0208		mg/Kg		104	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0196		mg/Kg		98	65 - 129
1,2-Dichlorobenzene	0.0200	0.0200		mg/Kg		100	80 - 121
1,2-Dichloroethane	0.0200	0.0195		mg/Kg		98	68 - 120
1,2-Dichloropropane	0.0200	0.0196		mg/Kg		98	77 - 124
1,3-Dichlorobenzene	0.0200	0.0205		mg/Kg		103	79 - 124
1,4-Dichlorobenzene	0.0200	0.0201		mg/Kg		101	79 - 121
1,4-Dioxane	0.400	0.416		mg/Kg		104	67 - 150
2-Butanone (MEK)	0.100	0.0901		mg/Kg		90	61 - 140
2-Hexanone	0.100	0.0968		mg/Kg		97	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0962		mg/Kg		96	80 - 120
Acetone	0.100	0.0917		mg/Kg		92	75 - 120
Benzene	0.0200	0.0202		mg/Kg		101	75 - 127
Bromoform	0.0200	0.0174		mg/Kg		87	19 - 150
Bromomethane	0.0200	0.0202		mg/Kg		101	59 - 136
Carbon disulfide	0.0200	0.0202		mg/Kg		101	74 - 130
Carbon tetrachloride	0.0200	0.0212		mg/Kg		106	77 - 138
Chlorobenzene	0.0200	0.0200		mg/Kg		100	80 - 120
Chlorobromomethane	0.0200	0.0187		mg/Kg		93	80 - 125
Chlorodibromomethane	0.0200	0.0186		mg/Kg		93	67 - 143
Chloroethane	0.0200	0.0212		mg/Kg		106	50 - 139
Chloroform	0.0200	0.0199		mg/Kg		100	80 - 122
Chloromethane	0.0200	0.0228		mg/Kg		114	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0193		mg/Kg		97	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0203		mg/Kg		101	75 - 124
Cyclohexane	0.0200	0.0210		mg/Kg		105	67 - 135
Dichlorobromomethane	0.0200	0.0191		mg/Kg		96	76 - 129
Dichlorodifluoromethane	0.0200	0.0220		mg/Kg		110	72 - 127
Ethylbenzene	0.0200	0.0195		mg/Kg		98	79 - 124
Ethylene Dibromide	0.0200	0.0185		mg/Kg		93	80 - 122
Isopropylbenzene	0.0200	0.0200		mg/Kg		100	80 - 125
Methyl acetate	0.100	0.100		mg/Kg		100	73 - 123
Methyl tert-butyl ether	0.0200	0.0197		mg/Kg		98	80 - 120
Methylcyclohexane	0.0200	0.0212		mg/Kg		106	71 - 137
Methylene Chloride	0.0200	0.0192		mg/Kg		96	79 - 128
m-Xylene & p-Xylene	0.0200	0.0196		mg/Kg		98	79 - 121
o-Xylene	0.0200	0.0195		mg/Kg		97	79 - 123
Styrene	0.0200	0.0201		mg/Kg		100	78 - 123
Tetrachloroethene	0.0200	0.0194		mg/Kg		97	73 - 130
Toluene	0.0200	0.0202		mg/Kg		101	75 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-505749/3
Matrix: Solid
Analysis Batch: 505749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	0.0200	0.0202		mg/Kg		101	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0200		mg/Kg		100	72 - 121
Trichloroethene	0.0200	0.0197		mg/Kg		99	79 - 122
Trichlorofluoromethane	0.0200	0.0237		mg/Kg		118	68 - 136
Vinyl chloride	0.0200	0.0230		mg/Kg		115	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 135*
4-Bromofluorobenzene	*97*		*67 - 126*
Dibromofluoromethane (Surr)	*101*		*61 - 149*
Toluene-d8 (Surr)	*103*		*73 - 121*

Lab Sample ID: LCSD 460-505749/4
Matrix: Solid
Analysis Batch: 505749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0219		mg/Kg		110	80 - 125	8	30
1,1,2,2-Tetrachloroethane	0.0200	0.0197		mg/Kg		98	72 - 131	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0221		mg/Kg		111	78 - 132	7	30
1,1,2-Trichloroethane	0.0200	0.0195		mg/Kg		98	76 - 124	1	30
1,1-Dichloroethane	0.0200	0.0217		mg/Kg		109	80 - 124	6	30
1,1-Dichloroethene	0.0200	0.0213		mg/Kg		107	79 - 132	4	30
1,2,3-Trichlorobenzene	0.0200	0.0205		mg/Kg		103	75 - 123	2	30
1,2,4-Trichlorobenzene	0.0200	0.0211		mg/Kg		106	74 - 124	1	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0191		mg/Kg		96	65 - 129	3	30
1,2-Dichlorobenzene	0.0200	0.0206		mg/Kg		103	80 - 121	3	30
1,2-Dichloroethane	0.0200	0.0206		mg/Kg		103	68 - 120	5	30
1,2-Dichloropropane	0.0200	0.0207		mg/Kg		104	77 - 124	5	30
1,3-Dichlorobenzene	0.0200	0.0212		mg/Kg		106	79 - 124	3	30
1,4-Dichlorobenzene	0.0200	0.0209		mg/Kg		104	79 - 121	4	30
1,4-Dioxane	0.400	0.438		mg/Kg		110	67 - 150	5	30
2-Butanone (MEK)	0.100	0.0914		mg/Kg		91	61 - 140	1	30
2-Hexanone	0.100	0.100		mg/Kg		100	78 - 120	3	30
4-Methyl-2-pentanone (MIBK)	0.100	0.100		mg/Kg		100	80 - 120	4	30
Acetone	0.100	0.0935		mg/Kg		94	75 - 120	2	30
Benzene	0.0200	0.0213		mg/Kg		106	75 - 127	5	30
Bromoform	0.0200	0.0186		mg/Kg		93	19 - 150	7	30
Bromomethane	0.0200	0.0204		mg/Kg		102	59 - 136	1	30
Carbon disulfide	0.0200	0.0215		mg/Kg		108	74 - 130	6	30
Carbon tetrachloride	0.0200	0.0226		mg/Kg		113	77 - 138	7	30
Chlorobenzene	0.0200	0.0209		mg/Kg		105	80 - 120	5	30
Chlorobromomethane	0.0200	0.0189		mg/Kg		95	80 - 125	1	30
Chlorodibromomethane	0.0200	0.0190		mg/Kg		95	67 - 143	2	30
Chloroethane	0.0200	0.0217		mg/Kg		108	50 - 139	2	30
Chloroform	0.0200	0.0210		mg/Kg		105	80 - 122	5	30
Chloromethane	0.0200	0.0226		mg/Kg		113	66 - 128	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-505749/4
Matrix: Solid
Analysis Batch: 505749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.0200	0.0209		mg/Kg		104	80 - 123	8	30
cis-1,3-Dichloropropene	0.0200	0.0207		mg/Kg		103	75 - 124	2	30
Cyclohexane	0.0200	0.0227		mg/Kg		114	67 - 135	8	30
Dichlorobromomethane	0.0200	0.0200		mg/Kg		100	76 - 129	5	30
Dichlorodifluoromethane	0.0200	0.0229		mg/Kg		115	72 - 127	4	30
Ethylbenzene	0.0200	0.0217		mg/Kg		108	79 - 124	10	30
Ethylene Dibromide	0.0200	0.0192		mg/Kg		96	80 - 122	3	30
Isopropylbenzene	0.0200	0.0215		mg/Kg		108	80 - 125	7	30
Methyl acetate	0.100	0.104		mg/Kg		104	73 - 123	3	30
Methyl tert-butyl ether	0.0200	0.0200		mg/Kg		100	80 - 120	2	30
Methylcyclohexane	0.0200	0.0226		mg/Kg		113	71 - 137	6	30
Methylene Chloride	0.0200	0.0198		mg/Kg		99	79 - 128	3	30
m-Xylene & p-Xylene	0.0200	0.0210		mg/Kg		105	79 - 121	7	30
o-Xylene	0.0200	0.0209		mg/Kg		104	79 - 123	7	30
Styrene	0.0200	0.0209		mg/Kg		105	78 - 123	4	30
Tetrachloroethene	0.0200	0.0206		mg/Kg		103	73 - 130	6	30
Toluene	0.0200	0.0216		mg/Kg		108	75 - 122	7	30
trans-1,2-Dichloroethene	0.0200	0.0216		mg/Kg		108	80 - 129	7	30
trans-1,3-Dichloropropene	0.0200	0.0207		mg/Kg		104	72 - 121	4	30
Trichloroethene	0.0200	0.0212		mg/Kg		106	79 - 122	7	30
Trichlorofluoromethane	0.0200	0.0227		mg/Kg		114	68 - 136	4	30
Vinyl chloride	0.0200	0.0233		mg/Kg		116	70 - 134	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 135*
4-Bromofluorobenzene	*97*		*67 - 126*
Dibromofluoromethane (Surr)	*99*		*61 - 149*
Toluene-d8 (Surr)	*102*		*73 - 121*

Lab Sample ID: MB 460-505873/7
Matrix: Solid
Analysis Batch: 505873

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			03/25/18 06:54	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			03/25/18 06:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			03/25/18 06:54	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			03/25/18 06:54	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			03/25/18 06:54	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			03/25/18 06:54	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			03/25/18 06:54	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			03/25/18 06:54	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			03/25/18 06:54	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			03/25/18 06:54	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			03/25/18 06:54	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			03/25/18 06:54	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			03/25/18 06:54	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			03/25/18 06:54	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-505873/7
Matrix: Solid
Analysis Batch: 505873

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			03/25/18 06:54	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			03/25/18 06:54	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			03/25/18 06:54	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			03/25/18 06:54	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			03/25/18 06:54	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			03/25/18 06:54	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			03/25/18 06:54	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			03/25/18 06:54	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			03/25/18 06:54	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			03/25/18 06:54	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			03/25/18 06:54	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			03/25/18 06:54	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			03/25/18 06:54	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			03/25/18 06:54	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			03/25/18 06:54	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			03/25/18 06:54	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			03/25/18 06:54	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			03/25/18 06:54	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			03/25/18 06:54	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			03/25/18 06:54	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			03/25/18 06:54	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			03/25/18 06:54	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			03/25/18 06:54	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			03/25/18 06:54	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			03/25/18 06:54	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			03/25/18 06:54	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			03/25/18 06:54	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			03/25/18 06:54	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			03/25/18 06:54	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			03/25/18 06:54	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			03/25/18 06:54	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			03/25/18 06:54	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			03/25/18 06:54	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			03/25/18 06:54	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			03/25/18 06:54	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			03/25/18 06:54	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			03/25/18 06:54	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			03/25/18 06:54	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*03/25/18 06:54*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*78 - 135*		*03/25/18 06:54*	*1*
4-Bromofluorobenzene	*92*		*67 - 126*		*03/25/18 06:54*	*1*
Dibromofluoromethane (Surr)	*97*		*61 - 149*		*03/25/18 06:54*	*1*
Toluene-d8 (Surr)	*95*		*73 - 121*		*03/25/18 06:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-505873/3
Matrix: Solid
Analysis Batch: 505873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0222		mg/Kg		111	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0196		mg/Kg		98	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0222		mg/Kg		111	78 - 132
1,1,2-Trichloroethane	0.0200	0.0199		mg/Kg		99	76 - 124
1,1-Dichloroethane	0.0200	0.0214		mg/Kg		107	80 - 124
1,1-Dichloroethene	0.0200	0.0215		mg/Kg		108	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0205		mg/Kg		103	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0216		mg/Kg		108	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0195		mg/Kg		97	65 - 129
1,2-Dichlorobenzene	0.0200	0.0206		mg/Kg		103	80 - 121
1,2-Dichloroethane	0.0200	0.0205		mg/Kg		103	68 - 120
1,2-Dichloropropane	0.0200	0.0203		mg/Kg		101	77 - 124
1,3-Dichlorobenzene	0.0200	0.0210		mg/Kg		105	79 - 124
1,4-Dichlorobenzene	0.0200	0.0205		mg/Kg		103	79 - 121
1,4-Dioxane	0.400	0.411		mg/Kg		103	67 - 150
2-Butanone (MEK)	0.100	0.0949		mg/Kg		95	61 - 140
2-Hexanone	0.100	0.101		mg/Kg		101	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0981		mg/Kg		98	80 - 120
Acetone	0.100	0.0955		mg/Kg		96	75 - 120
Benzene	0.0200	0.0213		mg/Kg		106	75 - 127
Bromoform	0.0200	0.0203		mg/Kg		102	19 - 150
Bromomethane	0.0200	0.0208		mg/Kg		104	59 - 136
Carbon disulfide	0.0200	0.0209		mg/Kg		105	74 - 130
Carbon tetrachloride	0.0200	0.0238		mg/Kg		119	77 - 138
Chlorobenzene	0.0200	0.0209		mg/Kg		104	80 - 120
Chlorobromomethane	0.0200	0.0186		mg/Kg		93	80 - 125
Chlorodibromomethane	0.0200	0.0202		mg/Kg		101	67 - 143
Chloroethane	0.0200	0.0220		mg/Kg		110	50 - 139
Chloroform	0.0200	0.0208		mg/Kg		104	80 - 122
Chloromethane	0.0200	0.0230		mg/Kg		115	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0207		mg/Kg		104	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0206		mg/Kg		103	75 - 124
Cyclohexane	0.0200	0.0228		mg/Kg		114	67 - 135
Dichlorobromomethane	0.0200	0.0203		mg/Kg		101	76 - 129
Dichlorodifluoromethane	0.0200	0.0230		mg/Kg		115	72 - 127
Ethylbenzene	0.0200	0.0211		mg/Kg		105	79 - 124
Ethylene Dibromide	0.0200	0.0191		mg/Kg		95	80 - 122
Isopropylbenzene	0.0200	0.0216		mg/Kg		108	80 - 125
Methyl acetate	0.100	0.104		mg/Kg		104	73 - 123
Methyl tert-butyl ether	0.0200	0.0204		mg/Kg		102	80 - 120
Methylcyclohexane	0.0200	0.0230		mg/Kg		115	71 - 137
Methylene Chloride	0.0200	0.0196		mg/Kg		98	79 - 128
m-Xylene & p-Xylene	0.0200	0.0210		mg/Kg		105	79 - 121
o-Xylene	0.0200	0.0208		mg/Kg		104	79 - 123
Styrene	0.0200	0.0211		mg/Kg		106	78 - 123
Tetrachloroethene	0.0200	0.0206		mg/Kg		103	73 - 130
Toluene	0.0200	0.0210		mg/Kg		105	75 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-505873/3
Matrix: Solid
Analysis Batch: 505873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	0.0200	0.0209		mg/Kg		105	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0210		mg/Kg		105	72 - 121
Trichloroethene	0.0200	0.0208		mg/Kg		104	79 - 122
Trichlorofluoromethane	0.0200	0.0237		mg/Kg		119	68 - 136
Vinyl chloride	0.0200	0.0233		mg/Kg		117	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*78 - 135*
4-Bromofluorobenzene	*101*		*67 - 126*
Dibromofluoromethane (Surr)	*104*		*61 - 149*
Toluene-d8 (Surr)	*105*		*73 - 121*

Lab Sample ID: LCSD 460-505873/4
Matrix: Solid
Analysis Batch: 505873

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0220		mg/Kg		110	80 - 125	1	30
1,1,2,2-Tetrachloroethane	0.0200	0.0187		mg/Kg		94	72 - 131	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0218		mg/Kg		109	78 - 132	2	30
1,1,2-Trichloroethane	0.0200	0.0185		mg/Kg		92	76 - 124	7	30
1,1-Dichloroethane	0.0200	0.0213		mg/Kg		107	80 - 124	0	30
1,1-Dichloroethene	0.0200	0.0209		mg/Kg		105	79 - 132	3	30
1,2,3-Trichlorobenzene	0.0200	0.0203		mg/Kg		101	75 - 123	1	30
1,2,4-Trichlorobenzene	0.0200	0.0206		mg/Kg		103	74 - 124	5	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0192		mg/Kg		96	65 - 129	1	30
1,2-Dichlorobenzene	0.0200	0.0198		mg/Kg		99	80 - 121	4	30
1,2-Dichloroethane	0.0200	0.0197		mg/Kg		99	68 - 120	4	30
1,2-Dichloropropane	0.0200	0.0200		mg/Kg		100	77 - 124	1	30
1,3-Dichlorobenzene	0.0200	0.0210		mg/Kg		105	79 - 124	0	30
1,4-Dichlorobenzene	0.0200	0.0204		mg/Kg		102	79 - 121	1	30
1,4-Dioxane	0.400	0.427		mg/Kg		107	67 - 150	4	30
2-Butanone (MEK)	0.100	0.0887		mg/Kg		89	61 - 140	7	30
2-Hexanone	0.100	0.0971		mg/Kg		97	78 - 120	3	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0975		mg/Kg		97	80 - 120	1	30
Acetone	0.100	0.102		mg/Kg		102	75 - 120	6	30
Benzene	0.0200	0.0209		mg/Kg		104	75 - 127	2	30
Bromoform	0.0200	0.0196		mg/Kg		98	19 - 150	4	30
Bromomethane	0.0200	0.0200		mg/Kg		100	59 - 136	4	30
Carbon disulfide	0.0200	0.0209		mg/Kg		105	74 - 130	0	30
Carbon tetrachloride	0.0200	0.0231		mg/Kg		115	77 - 138	3	30
Chlorobenzene	0.0200	0.0202		mg/Kg		101	80 - 120	3	30
Chlorobromomethane	0.0200	0.0186		mg/Kg		93	80 - 125	0	30
Chlorodibromomethane	0.0200	0.0188		mg/Kg		94	67 - 143	7	30
Chloroethane	0.0200	0.0204		mg/Kg		102	50 - 139	7	30
Chloroform	0.0200	0.0205		mg/Kg		102	80 - 122	2	30
Chloromethane	0.0200	0.0223		mg/Kg		112	66 - 128	3	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-505873/4
Matrix: Solid
Analysis Batch: 505873

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.0200	0.0207		mg/Kg		103	80 - 123	0	30
cis-1,3-Dichloropropene	0.0200	0.0197		mg/Kg		99	75 - 124	5	30
Cyclohexane	0.0200	0.0225		mg/Kg		112	67 - 135	1	30
Dichlorobromomethane	0.0200	0.0198		mg/Kg		99	76 - 129	2	30
Dichlorodifluoromethane	0.0200	0.0228		mg/Kg		114	72 - 127	1	30
Ethylbenzene	0.0200	0.0207		mg/Kg		104	79 - 124	2	30
Ethylene Dibromide	0.0200	0.0184		mg/Kg		92	80 - 122	4	30
Isopropylbenzene	0.0200	0.0211		mg/Kg		105	80 - 125	2	30
Methyl acetate	0.100	0.0981		mg/Kg		98	73 - 123	6	30
Methyl tert-butyl ether	0.0200	0.0199		mg/Kg		100	80 - 120	2	30
Methylcyclohexane	0.0200	0.0225		mg/Kg		113	71 - 137	2	30
Methylene Chloride	0.0200	0.0195		mg/Kg		97	79 - 128	1	30
m-Xylene & p-Xylene	0.0200	0.0201		mg/Kg		101	79 - 121	4	30
o-Xylene	0.0200	0.0200		mg/Kg		100	79 - 123	4	30
Styrene	0.0200	0.0204		mg/Kg		102	78 - 123	3	30
Tetrachloroethene	0.0200	0.0197		mg/Kg		99	73 - 130	5	30
Toluene	0.0200	0.0206		mg/Kg		103	75 - 122	2	30
trans-1,2-Dichloroethene	0.0200	0.0211		mg/Kg		105	80 - 129	1	30
trans-1,3-Dichloropropene	0.0200	0.0198		mg/Kg		99	72 - 121	6	30
Trichloroethene	0.0200	0.0201		mg/Kg		100	79 - 122	4	30
Trichlorofluoromethane	0.0200	0.0237		mg/Kg		118	68 - 136	0	30
Vinyl chloride	0.0200	0.0231		mg/Kg		115	70 - 134	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*78 - 135*
4-Bromofluorobenzene	*100*		*67 - 126*
Dibromofluoromethane (Surr)	*105*		*61 - 149*
Toluene-d8 (Surr)	*105*		*73 - 121*

Lab Sample ID: MB 460-507466/9
Matrix: Solid
Analysis Batch: 507466

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			03/31/18 14:28	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			03/31/18 14:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			03/31/18 14:28	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			03/31/18 14:28	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			03/31/18 14:28	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			03/31/18 14:28	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			03/31/18 14:28	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			03/31/18 14:28	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			03/31/18 14:28	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			03/31/18 14:28	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			03/31/18 14:28	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			03/31/18 14:28	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			03/31/18 14:28	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			03/31/18 14:28	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-507466/9
Matrix: Solid
Analysis Batch: 507466

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			03/31/18 14:28	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			03/31/18 14:28	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			03/31/18 14:28	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			03/31/18 14:28	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			03/31/18 14:28	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			03/31/18 14:28	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			03/31/18 14:28	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			03/31/18 14:28	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			03/31/18 14:28	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			03/31/18 14:28	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			03/31/18 14:28	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			03/31/18 14:28	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			03/31/18 14:28	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			03/31/18 14:28	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			03/31/18 14:28	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			03/31/18 14:28	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			03/31/18 14:28	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			03/31/18 14:28	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			03/31/18 14:28	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			03/31/18 14:28	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			03/31/18 14:28	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			03/31/18 14:28	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			03/31/18 14:28	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			03/31/18 14:28	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			03/31/18 14:28	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			03/31/18 14:28	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			03/31/18 14:28	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			03/31/18 14:28	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			03/31/18 14:28	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			03/31/18 14:28	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			03/31/18 14:28	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			03/31/18 14:28	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			03/31/18 14:28	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			03/31/18 14:28	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			03/31/18 14:28	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			03/31/18 14:28	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			03/31/18 14:28	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			03/31/18 14:28	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*03/31/18 14:28*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*78 - 135*		*03/31/18 14:28*	*1*
4-Bromofluorobenzene	*83*		*67 - 126*		*03/31/18 14:28*	*1*
Dibromofluoromethane (Surr)	*114*		*61 - 149*		*03/31/18 14:28*	*1*
Toluene-d8 (Surr)	*94*		*73 - 121*		*03/31/18 14:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-507466/5
Matrix: Solid
Analysis Batch: 507466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0219		mg/Kg		110	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0219		mg/Kg		109	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0181		mg/Kg		90	78 - 132
1,1,2-Trichloroethane	0.0200	0.0210		mg/Kg		105	76 - 124
1,1-Dichloroethane	0.0200	0.0176		mg/Kg		88	80 - 124
1,1-Dichloroethene	0.0200	0.0173		mg/Kg		86	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0209		mg/Kg		105	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0230		mg/Kg		115	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0262	*	mg/Kg		131	65 - 129
1,2-Dichlorobenzene	0.0200	0.0204		mg/Kg		102	80 - 121
1,2-Dichloroethane	0.0200	0.0209		mg/Kg		105	68 - 120
1,2-Dichloropropane	0.0200	0.0210		mg/Kg		105	77 - 124
1,3-Dichlorobenzene	0.0200	0.0202		mg/Kg		101	79 - 124
1,4-Dichlorobenzene	0.0200	0.0202		mg/Kg		101	79 - 121
1,4-Dioxane	0.400	0.504		mg/Kg		126	67 - 150
2-Butanone (MEK)	0.100	0.0991		mg/Kg		99	61 - 140
2-Hexanone	0.100	0.0737	*	mg/Kg		74	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0960		mg/Kg		96	80 - 120
Acetone	0.100	0.0772		mg/Kg		77	75 - 120
Benzene	0.0200	0.0215		mg/Kg		107	75 - 127
Bromoform	0.0200	0.0225		mg/Kg		113	19 - 150
Bromomethane	0.0200	0.0188		mg/Kg		94	59 - 136
Carbon disulfide	0.0200	0.0175		mg/Kg		87	74 - 130
Carbon tetrachloride	0.0200	0.0213		mg/Kg		107	77 - 138
Chlorobenzene	0.0200	0.0212		mg/Kg		106	80 - 120
Chlorobromomethane	0.0200	0.0202		mg/Kg		101	80 - 125
Chlorodibromomethane	0.0200	0.0224		mg/Kg		112	67 - 143
Chloroethane	0.0200	0.0169		mg/Kg		85	50 - 139
Chloroform	0.0200	0.0216		mg/Kg		108	80 - 122
Chloromethane	0.0200	0.0228		mg/Kg		114	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0195		mg/Kg		97	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0208		mg/Kg		104	75 - 124
Cyclohexane	0.0200	0.0202		mg/Kg		101	67 - 135
Dichlorobromomethane	0.0200	0.0217		mg/Kg		108	76 - 129
Dichlorodifluoromethane	0.0200	0.0196		mg/Kg		98	72 - 127
Ethylbenzene	0.0200	0.0199		mg/Kg		99	79 - 124
Ethylene Dibromide	0.0200	0.0220		mg/Kg		110	80 - 122
Isopropylbenzene	0.0200	0.0211		mg/Kg		106	80 - 125
Methyl acetate	0.100	0.0814		mg/Kg		81	73 - 123
Methyl tert-butyl ether	0.0200	0.0173		mg/Kg		86	80 - 120
Methylcyclohexane	0.0200	0.0196		mg/Kg		98	71 - 137
Methylene Chloride	0.0200	0.0169		mg/Kg		85	79 - 128
m-Xylene & p-Xylene	0.0200	0.0197		mg/Kg		98	79 - 121
o-Xylene	0.0200	0.0201		mg/Kg		100	79 - 123
Styrene	0.0200	0.0213		mg/Kg		107	78 - 123
Tetrachloroethene	0.0200	0.0215		mg/Kg		107	73 - 130
Toluene	0.0200	0.0204		mg/Kg		102	75 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-507466/5
Matrix: Solid
Analysis Batch: 507466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	0.0200	0.0189		mg/Kg		95	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0198		mg/Kg		99	72 - 121
Trichloroethene	0.0200	0.0198		mg/Kg		99	79 - 122
Trichlorofluoromethane	0.0200	0.0172		mg/Kg		86	68 - 136
Vinyl chloride	0.0200	0.0197		mg/Kg		98	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*78 - 135*
4-Bromofluorobenzene	*82*		*67 - 126*
Dibromofluoromethane (Surr)	*104*		*61 - 149*
Toluene-d8 (Surr)	*101*		*73 - 121*

Lab Sample ID: LCSD 460-507466/6
Matrix: Solid
Analysis Batch: 507466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0220		mg/Kg		110	80 - 125	0	30
1,1,2,2-Tetrachloroethane	0.0200	0.0170		mg/Kg		85	72 - 131	25	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0221		mg/Kg		111	78 - 132	20	30
1,1,2-Trichloroethane	0.0200	0.0193		mg/Kg		96	76 - 124	9	30
1,1-Dichloroethane	0.0200	0.0206		mg/Kg		103	80 - 124	16	30
1,1-Dichloroethene	0.0200	0.0200		mg/Kg		100	79 - 132	14	30
1,2,3-Trichlorobenzene	0.0200	0.0218		mg/Kg		109	75 - 123	4	30
1,2,4-Trichlorobenzene	0.0200	0.0229		mg/Kg		115	74 - 124	0	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0239		mg/Kg		119	65 - 129	9	30
1,2-Dichlorobenzene	0.0200	0.0194		mg/Kg		97	80 - 121	5	30
1,2-Dichloroethane	0.0200	0.0201		mg/Kg		101	68 - 120	4	30
1,2-Dichloropropane	0.0200	0.0171		mg/Kg		85	77 - 124	21	30
1,3-Dichlorobenzene	0.0200	0.0190		mg/Kg		95	79 - 124	6	30
1,4-Dichlorobenzene	0.0200	0.0191		mg/Kg		95	79 - 121	6	30
1,4-Dioxane	0.400	0.420		mg/Kg		105	67 - 150	18	30
2-Butanone (MEK)	0.100	0.0948		mg/Kg		95	61 - 140	4	30
2-Hexanone	0.100	0.0552	*	mg/Kg		55	78 - 120	29	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0745	*	mg/Kg		74	80 - 120	25	30
Acetone	0.100	0.101		mg/Kg		101	75 - 120	27	30
Benzene	0.0200	0.0234		mg/Kg		117	75 - 127	9	30
Bromoform	0.0200	0.0214		mg/Kg		107	19 - 150	5	30
Bromomethane	0.0200	0.0182		mg/Kg		91	59 - 136	3	30
Carbon disulfide	0.0200	0.0209		mg/Kg		105	74 - 130	18	30
Carbon tetrachloride	0.0200	0.0214		mg/Kg		107	77 - 138	0	30
Chlorobenzene	0.0200	0.0205		mg/Kg		103	80 - 120	3	30
Chlorobromomethane	0.0200	0.0194		mg/Kg		97	80 - 125	4	30
Chlorodibromomethane	0.0200	0.0209		mg/Kg		104	67 - 143	7	30
Chloroethane	0.0200	0.0167		mg/Kg		83	50 - 139	2	30
Chloroform	0.0200	0.0212		mg/Kg		106	80 - 122	2	30
Chloromethane	0.0200	0.0229		mg/Kg		114	66 - 128	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-507466/6
Matrix: Solid
Analysis Batch: 507466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.0200	0.0194		mg/Kg		97	80 - 123	0	30
cis-1,3-Dichloropropene	0.0200	0.0185		mg/Kg		92	75 - 124	12	30
Cyclohexane	0.0200	0.0203		mg/Kg		102	67 - 135	1	30
Dichlorobromomethane	0.0200	0.0177		mg/Kg		89	76 - 129	20	30
Dichlorodifluoromethane	0.0200	0.0185		mg/Kg		92	72 - 127	6	30
Ethylbenzene	0.0200	0.0195		mg/Kg		98	79 - 124	2	30
Ethylene Dibromide	0.0200	0.0202		mg/Kg		101	80 - 122	9	30
Isopropylbenzene	0.0200	0.0215		mg/Kg		107	80 - 125	2	30
Methyl acetate	0.100	0.0970		mg/Kg		97	73 - 123	17	30
Methyl tert-butyl ether	0.0200	0.0193		mg/Kg		96	80 - 120	11	30
Methylcyclohexane	0.0200	0.0179		mg/Kg		90	71 - 137	9	30
Methylene Chloride	0.0200	0.0200		mg/Kg		100	79 - 128	17	30
m-Xylene & p-Xylene	0.0200	0.0194		mg/Kg		97	79 - 121	1	30
o-Xylene	0.0200	0.0196		mg/Kg		98	79 - 123	2	30
Styrene	0.0200	0.0209		mg/Kg		104	78 - 123	2	30
Tetrachloroethene	0.0200	0.0221		mg/Kg		110	73 - 130	3	30
Toluene	0.0200	0.0191		mg/Kg		95	75 - 122	7	30
trans-1,2-Dichloroethene	0.0200	0.0210		mg/Kg		105	80 - 129	10	30
trans-1,3-Dichloropropene	0.0200	0.0186		mg/Kg		93	72 - 121	6	30
Trichloroethene	0.0200	0.0189		mg/Kg		94	79 - 122	5	30
Trichlorofluoromethane	0.0200	0.0201		mg/Kg		101	68 - 136	16	30
Vinyl chloride	0.0200	0.0184		mg/Kg		92	70 - 134	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*78 - 135*
4-Bromofluorobenzene	*76*		*67 - 126*
Dibromofluoromethane (Surr)	*98*		*61 - 149*
Toluene-d8 (Surr)	*94*		*73 - 121*

Lab Sample ID: 460-153515-1 MS
Matrix: Solid
Analysis Batch: 511471

Client Sample ID: GE-MW-110D(SO)-(69-70)
Prep Type: Total/NA
Prep Batch: 509399

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.00068	U	0.0164	0.0218	*	mg/Kg	☼	133	80 - 125
1,1,2,2-Tetrachloroethane	0.00068	U	0.0164	0.0144		mg/Kg	☼	88	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00068	U	0.0164	0.0194		mg/Kg	☼	118	78 - 132
1,1,2-Trichloroethane	0.00068	U	0.0164	0.0152		mg/Kg	☼	93	76 - 124
1,1-Dichloroethane	0.00068	U	0.0164	0.0193		mg/Kg	☼	117	80 - 124
1,1-Dichloroethene	0.00068	U	0.0164	0.0184		mg/Kg	☼	112	79 - 132
1,2,3-Trichlorobenzene	0.00068	U	0.0164	0.0157		mg/Kg	☼	95	75 - 123
1,2,4-Trichlorobenzene	0.00068	U	0.0164	0.0166		mg/Kg	☼	101	74 - 124
1,2-Dibromo-3-Chloropropane	0.00068	U	0.0164	0.0163		mg/Kg	☼	100	65 - 129
1,2-Dichlorobenzene	0.00068	U	0.0164	0.0157		mg/Kg	☼	96	80 - 121
1,2-Dichloroethane	0.00068	U	0.0164	0.0176		mg/Kg	☼	107	68 - 120
1,2-Dichloropropane	0.00068	U	0.0164	0.0172		mg/Kg	☼	105	77 - 124
1,3-Dichlorobenzene	0.00068	U	0.0164	0.0157		mg/Kg	☼	95	79 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-153515-1 MS
Matrix: Solid
Analysis Batch: 511471

Client Sample ID: GE-MW-110D(SO)-(69-70)
Prep Type: Total/NA
Prep Batch: 509399

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.00068	U	0.0164	0.0156		mg/Kg	☼	95	79 - 121
1,4-Dioxane	0.014	U	0.328	0.313		mg/Kg	☼	95	67 - 150
2-Butanone (MEK)	0.0034	U	0.0821	0.0698		mg/Kg	☼	85	61 - 140
2-Hexanone	0.0034	U	0.0821	0.0837		mg/Kg	☼	102	78 - 120
4-Methyl-2-pentanone (MIBK)	0.0034	U	0.0821	0.0868		mg/Kg	☼	106	80 - 120
Acetone	0.0045	B	0.0821	0.107	*	mg/Kg	☼	125	75 - 120
Benzene	0.00068	U	0.0164	0.0164		mg/Kg	☼	100	75 - 127
Bromoform	0.00068	U	0.0164	0.0226		mg/Kg	☼	138	19 - 150
Bromomethane	0.00068	U	0.0164	0.0134		mg/Kg	☼	81	59 - 136
Carbon disulfide	0.00068	U	0.0164	0.0182		mg/Kg	☼	111	74 - 130
Carbon tetrachloride	0.00068	U *	0.0164	0.0248	*	mg/Kg	☼	151	77 - 138
Chlorobenzene	0.00068	U	0.0164	0.0158		mg/Kg	☼	96	80 - 120
Chlorobromomethane	0.00068	U	0.0164	0.0179		mg/Kg	☼	109	80 - 125
Chlorodibromomethane	0.00068	U	0.0164	0.0188		mg/Kg	☼	115	67 - 143
Chloroethane	0.00068	U	0.0164	0.0134		mg/Kg	☼	82	50 - 139
Chloroform	0.00068	U	0.0164	0.0185		mg/Kg	☼	112	80 - 122
Chloromethane	0.00068	U	0.0164	0.0121		mg/Kg	☼	73	66 - 128
cis-1,2-Dichloroethene	0.00068	U	0.0164	0.0177		mg/Kg	☼	108	80 - 123
cis-1,3-Dichloropropene	0.00068	U	0.0164	0.0163		mg/Kg	☼	99	75 - 124
Cyclohexane	0.00068	U	0.0164	0.0183		mg/Kg	☼	112	67 - 135
Dichlorobromomethane	0.00068	U	0.0164	0.0186		mg/Kg	☼	113	76 - 129
Dichlorodifluoromethane	0.00068	U	0.0164	0.0125		mg/Kg	☼	76	72 - 127
Ethylbenzene	0.00068	U	0.0164	0.0168		mg/Kg	☼	102	79 - 124
Ethylene Dibromide	0.00068	U	0.0164	0.0162		mg/Kg	☼	98	80 - 122
Isopropylbenzene	0.00068	U	0.0164	0.0174		mg/Kg	☼	106	80 - 125
Methyl acetate	0.0034	U *	0.0821	0.0977		mg/Kg	☼	119	73 - 123
Methyl tert-butyl ether	0.00068	U	0.0164	0.0177		mg/Kg	☼	108	80 - 120
Methylcyclohexane	0.00068	U	0.0164	0.0187		mg/Kg	☼	114	71 - 137
Methylene Chloride	0.00065	J	0.0164	0.0171		mg/Kg	☼	100	79 - 128
m-Xylene & p-Xylene	0.00021	J	0.0164	0.0162		mg/Kg	☼	97	79 - 121
o-Xylene	0.000094	J	0.0164	0.0166		mg/Kg	☼	101	79 - 123
Styrene	0.00068	U	0.0164	0.0159		mg/Kg	☼	97	78 - 123
Tetrachloroethene	0.00068	U	0.0164	0.0186		mg/Kg	☼	113	73 - 130
Toluene	0.00068	U	0.0164	0.0161		mg/Kg	☼	98	75 - 122
trans-1,2-Dichloroethene	0.00068	U	0.0164	0.0179		mg/Kg	☼	109	80 - 129
trans-1,3-Dichloropropene	0.00068	U	0.0164	0.0176		mg/Kg	☼	107	72 - 121
Trichloroethene	0.00068	U	0.0164	0.0183		mg/Kg	☼	112	79 - 122
Trichlorofluoromethane	0.00068	U	0.0164	0.0143		mg/Kg	☼	87	68 - 136
Vinyl chloride	0.00068	U	0.0164	0.0126		mg/Kg	☼	77	70 - 134

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*118*		*78 - 135*
4-Bromofluorobenzene	*113*		*67 - 126*
Dibromofluoromethane (Surr)	*123*		*61 - 149*
Toluene-d8 (Surr)	*104*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-153515-1MSD
Matrix: Solid
Analysis Batch: 511471

Client Sample ID: GE-MW-110D(SO)-(69-70)
Prep Type: Total/NA
Prep Batch: 509399

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.00068	U	0.0172	0.0231	*	mg/Kg	☼	134	80 - 125	6	30
1,1,2,2-Tetrachloroethane	0.00068	U	0.0172	0.0147		mg/Kg	☼	85	72 - 131	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00068	U	0.0172	0.0203		mg/Kg	☼	118	78 - 132	4	30
1,1,2-Trichloroethane	0.00068	U	0.0172	0.0158		mg/Kg	☼	92	76 - 124	3	30
1,1-Dichloroethane	0.00068	U	0.0172	0.0204		mg/Kg	☼	119	80 - 124	6	30
1,1-Dichloroethene	0.00068	U	0.0172	0.0200		mg/Kg	☼	116	79 - 132	8	30
1,2,3-Trichlorobenzene	0.00068	U	0.0172	0.0160		mg/Kg	☼	93	75 - 123	2	30
1,2,4-Trichlorobenzene	0.00068	U	0.0172	0.0165		mg/Kg	☼	96	74 - 124	1	30
1,2-Dibromo-3-Chloropropane	0.00068	U	0.0172	0.0165		mg/Kg	☼	96	65 - 129	1	30
1,2-Dichlorobenzene	0.00068	U	0.0172	0.0165		mg/Kg	☼	96	80 - 121	5	30
1,2-Dichloroethane	0.00068	U	0.0172	0.0182		mg/Kg	☼	106	68 - 120	3	30
1,2-Dichloropropane	0.00068	U	0.0172	0.0182		mg/Kg	☼	106	77 - 124	6	30
1,3-Dichlorobenzene	0.00068	U	0.0172	0.0161		mg/Kg	☼	94	79 - 124	3	30
1,4-Dichlorobenzene	0.00068	U	0.0172	0.0161		mg/Kg	☼	93	79 - 121	3	30
1,4-Dioxane	0.014	U	0.344	0.419		mg/Kg	☼	122	67 - 150	29	30
2-Butanone (MEK)	0.0034	U	0.0860	0.0753		mg/Kg	☼	88	61 - 140	8	30
2-Hexanone	0.0034	U	0.0860	0.0872		mg/Kg	☼	101	78 - 120	4	30
4-Methyl-2-pentanone (MIBK)	0.0034	U	0.0860	0.0930		mg/Kg	☼	108	80 - 120	7	30
Acetone	0.0045	B	0.0860	0.124	*	mg/Kg	☼	139	75 - 120	15	30
Benzene	0.00068	U	0.0172	0.0172		mg/Kg	☼	100	75 - 127	5	30
Bromoform	0.00068	U	0.0172	0.0230		mg/Kg	☼	134	19 - 150	2	30
Bromomethane	0.00068	U	0.0172	0.0134		mg/Kg	☼	78	59 - 136	0	30
Carbon disulfide	0.00068	U	0.0172	0.0194		mg/Kg	☼	113	74 - 130	6	30
Carbon tetrachloride	0.00068	U *	0.0172	0.0264	*	mg/Kg	☼	153	77 - 138	6	30
Chlorobenzene	0.00068	U	0.0172	0.0165		mg/Kg	☼	96	80 - 120	5	30
Chlorobromomethane	0.00068	U	0.0172	0.0190		mg/Kg	☼	111	80 - 125	6	30
Chlorodibromomethane	0.00068	U	0.0172	0.0201		mg/Kg	☼	117	67 - 143	7	30
Chloroethane	0.00068	U	0.0172	0.0139		mg/Kg	☼	81	50 - 139	4	30
Chloroform	0.00068	U	0.0172	0.0199		mg/Kg	☼	116	80 - 122	8	30
Chloromethane	0.00068	U	0.0172	0.0122		mg/Kg	☼	71	66 - 128	1	30
cis-1,2-Dichloroethene	0.00068	U	0.0172	0.0187		mg/Kg	☼	109	80 - 123	6	30
cis-1,3-Dichloropropene	0.00068	U	0.0172	0.0170		mg/Kg	☼	99	75 - 124	5	30
Cyclohexane	0.00068	U	0.0172	0.0192		mg/Kg	☼	111	67 - 135	4	30
Dichlorobromomethane	0.00068	U	0.0172	0.0198		mg/Kg	☼	115	76 - 129	6	30
Dichlorodifluoromethane	0.00068	U	0.0172	0.0124		mg/Kg	☼	72	72 - 127	1	30
Ethylbenzene	0.00068	U	0.0172	0.0175		mg/Kg	☼	102	79 - 124	4	30
Ethylene Dibromide	0.00068	U	0.0172	0.0165		mg/Kg	☼	96	80 - 122	2	30
Isopropylbenzene	0.00068	U	0.0172	0.0180		mg/Kg	☼	105	80 - 125	3	30
Methyl acetate	0.0034	U *	0.0860	0.0996		mg/Kg	☼	116	73 - 123	2	30
Methyl tert-butyl ether	0.00068	U	0.0172	0.0183		mg/Kg	☼	106	80 - 120	3	30
Methylcyclohexane	0.00068	U	0.0172	0.0192		mg/Kg	☼	112	71 - 137	3	30
Methylene Chloride	0.00065	J	0.0172	0.0187		mg/Kg	☼	105	79 - 128	9	30
m-Xylene & p-Xylene	0.00021	J	0.0172	0.0168		mg/Kg	☼	96	79 - 121	4	30
o-Xylene	0.000094	J	0.0172	0.0174		mg/Kg	☼	101	79 - 123	4	30
Styrene	0.00068	U	0.0172	0.0163		mg/Kg	☼	95	78 - 123	3	30
Tetrachloroethene	0.00068	U	0.0172	0.0191		mg/Kg	☼	111	73 - 130	3	30
Toluene	0.00068	U	0.0172	0.0169		mg/Kg	☼	99	75 - 122	5	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-153515-1MSD
Matrix: Solid
Analysis Batch: 511471

Client Sample ID: GE-MW-110D(SO)-(69-70)
Prep Type: Total/NA
Prep Batch: 509399

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	0.00068	U	0.0172	0.0194		mg/Kg	☼	113	80 - 129	8	30
trans-1,3-Dichloropropene	0.00068	U	0.0172	0.0182		mg/Kg	☼	106	72 - 121	3	30
Trichloroethene	0.00068	U	0.0172	0.0188		mg/Kg	☼	109	79 - 122	2	30
Trichlorofluoromethane	0.00068	U	0.0172	0.0141		mg/Kg	☼	82	68 - 136	2	30
Vinyl chloride	0.00068	U	0.0172	0.0126		mg/Kg	☼	73	70 - 134	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*78 - 135*
4-Bromofluorobenzene	*109*		*67 - 126*
Dibromofluoromethane (Surr)	*123*		*61 - 149*
Toluene-d8 (Surr)	*102*		*73 - 121*

Lab Sample ID: MB 460-510106/7
Matrix: Solid
Analysis Batch: 510106

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/11/18 10:54	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/11/18 10:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/11/18 10:54	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/11/18 10:54	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/11/18 10:54	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/11/18 10:54	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/11/18 10:54	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/11/18 10:54	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/11/18 10:54	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/11/18 10:54	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/11/18 10:54	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/11/18 10:54	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/11/18 10:54	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/11/18 10:54	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/11/18 10:54	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/11/18 10:54	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/11/18 10:54	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/11/18 10:54	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			04/11/18 10:54	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/11/18 10:54	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/11/18 10:54	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/11/18 10:54	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/11/18 10:54	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/11/18 10:54	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/11/18 10:54	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/11/18 10:54	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/11/18 10:54	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/11/18 10:54	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/11/18 10:54	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/11/18 10:54	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/11/18 10:54	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-510106/7
Matrix: Solid
Analysis Batch: 510106

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/11/18 10:54	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/11/18 10:54	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/11/18 10:54	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/11/18 10:54	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/11/18 10:54	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/11/18 10:54	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/11/18 10:54	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/11/18 10:54	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/11/18 10:54	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/11/18 10:54	1
Methylene Chloride	0.000211	J	0.0010	0.00016	mg/Kg			04/11/18 10:54	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/11/18 10:54	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/11/18 10:54	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/11/18 10:54	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/11/18 10:54	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/11/18 10:54	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/11/18 10:54	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/11/18 10:54	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/11/18 10:54	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/11/18 10:54	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/11/18 10:54	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/11/18 10:54*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*78 - 135*		*04/11/18 10:54*	*1*
4-Bromofluorobenzene	*102*		*67 - 126*		*04/11/18 10:54*	*1*
Dibromofluoromethane (Surr)	*78*		*61 - 149*		*04/11/18 10:54*	*1*
Toluene-d8 (Surr)	*97*		*73 - 121*		*04/11/18 10:54*	*1*

Lab Sample ID: LCS 460-510106/3
Matrix: Solid
Analysis Batch: 510106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0175		mg/Kg		88	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0211		mg/Kg		105	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0172		mg/Kg		86	78 - 132
1,1,2-Trichloroethane	0.0200	0.0208		mg/Kg		104	76 - 124
1,1-Dichloroethane	0.0200	0.0192		mg/Kg		96	80 - 124
1,1-Dichloroethene	0.0200	0.0178		mg/Kg		89	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0203		mg/Kg		102	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0204		mg/Kg		102	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0175		mg/Kg		87	65 - 129
1,2-Dichlorobenzene	0.0200	0.0199		mg/Kg		99	80 - 121
1,2-Dichloroethane	0.0200	0.0179		mg/Kg		89	68 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-510106/3
Matrix: Solid
Analysis Batch: 510106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0200	0.0192		mg/Kg		96	77 - 124
1,3-Dichlorobenzene	0.0200	0.0204		mg/Kg		102	79 - 124
1,4-Dichlorobenzene	0.0200	0.0205		mg/Kg		102	79 - 121
1,4-Dioxane	0.400	0.438		mg/Kg		110	67 - 150
2-Butanone (MEK)	0.100	0.0796		mg/Kg		80	61 - 140
2-Hexanone	0.100	0.0909		mg/Kg		91	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0929		mg/Kg		93	80 - 120
Acetone	0.100	0.0829		mg/Kg		83	75 - 120
Benzene	0.0200	0.0208		mg/Kg		104	75 - 127
Bromoform	0.0200	0.0162		mg/Kg		81	19 - 150
Bromomethane	0.0200	0.0170		mg/Kg		85	59 - 136
Carbon disulfide	0.0200	0.0173		mg/Kg		87	74 - 130
Carbon tetrachloride	0.0200	0.0170		mg/Kg		85	77 - 138
Chlorobenzene	0.0200	0.0202		mg/Kg		101	80 - 120
Chlorobromomethane	0.0200	0.0174		mg/Kg		87	80 - 125
Chlorodibromomethane	0.0200	0.0183		mg/Kg		91	67 - 143
Chloroethane	0.0200	0.0171		mg/Kg		86	50 - 139
Chloroform	0.0200	0.0182		mg/Kg		91	80 - 122
Chloromethane	0.0200	0.0162		mg/Kg		81	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0173		mg/Kg		86	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0209		mg/Kg		104	75 - 124
Cyclohexane	0.0200	0.0185		mg/Kg		93	67 - 135
Dichlorobromomethane	0.0200	0.0172		mg/Kg		86	76 - 129
Dichlorodifluoromethane	0.0200	0.0132	*	mg/Kg		66	72 - 127
Ethylbenzene	0.0200	0.0203		mg/Kg		101	79 - 124
Ethylene Dibromide	0.0200	0.0195		mg/Kg		98	80 - 122
Isopropylbenzene	0.0200	0.0200		mg/Kg		100	80 - 125
Methyl acetate	0.100	0.0983		mg/Kg		98	73 - 123
Methyl tert-butyl ether	0.0200	0.0188		mg/Kg		94	80 - 120
Methylcyclohexane	0.0200	0.0185		mg/Kg		93	71 - 137
Methylene Chloride	0.0200	0.0187		mg/Kg		93	79 - 128
m-Xylene & p-Xylene	0.0200	0.0204		mg/Kg		102	79 - 121
o-Xylene	0.0200	0.0203		mg/Kg		102	79 - 123
Styrene	0.0200	0.0201		mg/Kg		101	78 - 123
Tetrachloroethene	0.0200	0.0192		mg/Kg		96	73 - 130
Toluene	0.0200	0.0207		mg/Kg		104	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0182		mg/Kg		91	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0206		mg/Kg		103	72 - 121
Trichloroethene	0.0200	0.0179		mg/Kg		89	79 - 122
Trichlorofluoromethane	0.0200	0.0150		mg/Kg		75	68 - 136
Vinyl chloride	0.0200	0.0148		mg/Kg		74	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*78 - 135*
4-Bromofluorobenzene	*102*		*67 - 126*
Dibromofluoromethane (Surr)	*81*		*61 - 149*
Toluene-d8 (Surr)	*99*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-510106/4
Matrix: Solid
Analysis Batch: 510106

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0187		mg/Kg		94	80 - 125	6	30
1,1,2,2-Tetrachloroethane	0.0200	0.0217		mg/Kg		109	72 - 131	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0187		mg/Kg		94	78 - 132	9	30
1,1,2-Trichloroethane	0.0200	0.0211		mg/Kg		105	76 - 124	1	30
1,1-Dichloroethane	0.0200	0.0195		mg/Kg		98	80 - 124	2	30
1,1-Dichloroethene	0.0200	0.0186		mg/Kg		93	79 - 132	4	30
1,2,3-Trichlorobenzene	0.0200	0.0208		mg/Kg		104	75 - 123	2	30
1,2,4-Trichlorobenzene	0.0200	0.0210		mg/Kg		105	74 - 124	3	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0177		mg/Kg		88	65 - 129	1	30
1,2-Dichlorobenzene	0.0200	0.0205		mg/Kg		103	80 - 121	3	30
1,2-Dichloroethane	0.0200	0.0184		mg/Kg		92	68 - 120	3	30
1,2-Dichloropropane	0.0200	0.0196		mg/Kg		98	77 - 124	2	30
1,3-Dichlorobenzene	0.0200	0.0208		mg/Kg		104	79 - 124	2	30
1,4-Dichlorobenzene	0.0200	0.0208		mg/Kg		104	79 - 121	1	30
1,4-Dioxane	0.400	0.439		mg/Kg		110	67 - 150	0	30
2-Butanone (MEK)	0.100	0.0819		mg/Kg		82	61 - 140	3	30
2-Hexanone	0.100	0.0936		mg/Kg		94	78 - 120	3	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0971		mg/Kg		97	80 - 120	4	30
Acetone	0.100	0.0836		mg/Kg		84	75 - 120	1	30
Benzene	0.0200	0.0215		mg/Kg		107	75 - 127	3	30
Bromoform	0.0200	0.0162		mg/Kg		81	19 - 150	0	30
Bromomethane	0.0200	0.0164		mg/Kg		82	59 - 136	4	30
Carbon disulfide	0.0200	0.0184		mg/Kg		92	74 - 130	6	30
Carbon tetrachloride	0.0200	0.0182		mg/Kg		91	77 - 138	7	30
Chlorobenzene	0.0200	0.0206		mg/Kg		103	80 - 120	2	30
Chlorobromomethane	0.0200	0.0178		mg/Kg		89	80 - 125	2	30
Chlorodibromomethane	0.0200	0.0184		mg/Kg		92	67 - 143	1	30
Chloroethane	0.0200	0.0169		mg/Kg		84	50 - 139	1	30
Chloroform	0.0200	0.0186		mg/Kg		93	80 - 122	2	30
Chloromethane	0.0200	0.0162		mg/Kg		81	66 - 128	0	30
cis-1,2-Dichloroethene	0.0200	0.0175		mg/Kg		87	80 - 123	1	30
cis-1,3-Dichloropropene	0.0200	0.0213		mg/Kg		106	75 - 124	2	30
Cyclohexane	0.0200	0.0201		mg/Kg		101	67 - 135	8	30
Dichlorobromomethane	0.0200	0.0174		mg/Kg		87	76 - 129	1	30
Dichlorodifluoromethane	0.0200	0.0141	*	mg/Kg		70	72 - 127	6	30
Ethylbenzene	0.0200	0.0211		mg/Kg		106	79 - 124	4	30
Ethylene Dibromide	0.0200	0.0202		mg/Kg		101	80 - 122	4	30
Isopropylbenzene	0.0200	0.0212		mg/Kg		106	80 - 125	6	30
Methyl acetate	0.100	0.0984		mg/Kg		98	73 - 123	0	30
Methyl tert-butyl ether	0.0200	0.0193		mg/Kg		96	80 - 120	3	30
Methylcyclohexane	0.0200	0.0205		mg/Kg		103	71 - 137	10	30
Methylene Chloride	0.0200	0.0189		mg/Kg		94	79 - 128	1	30
m-Xylene & p-Xylene	0.0200	0.0209		mg/Kg		105	79 - 121	3	30
o-Xylene	0.0200	0.0206		mg/Kg		103	79 - 123	2	30
Styrene	0.0200	0.0204		mg/Kg		102	78 - 123	1	30
Tetrachloroethene	0.0200	0.0206		mg/Kg		103	73 - 130	7	30
Toluene	0.0200	0.0210		mg/Kg		105	75 - 122	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-510106/4
Matrix: Solid
Analysis Batch: 510106

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene			0.0200	0.0189		mg/Kg		94	80 - 129	3	30
trans-1,3-Dichloropropene			0.0200	0.0207		mg/Kg		103	72 - 121	1	30
Trichloroethene			0.0200	0.0181		mg/Kg		91	79 - 122	1	30
Trichlorofluoromethane			0.0200	0.0154		mg/Kg		77	68 - 136	3	30
Vinyl chloride			0.0200	0.0148		mg/Kg		74	70 - 134	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*78 - 135*
4-Bromofluorobenzene	*101*		*67 - 126*
Dibromofluoromethane (Surr)	*81*		*61 - 149*
Toluene-d8 (Surr)	*100*		*73 - 121*

Lab Sample ID: MB 460-510660/8
Matrix: Solid
Analysis Batch: 510660

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/12/18 23:48	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/12/18 23:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/12/18 23:48	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/12/18 23:48	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/12/18 23:48	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/12/18 23:48	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/12/18 23:48	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/12/18 23:48	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/12/18 23:48	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/12/18 23:48	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/12/18 23:48	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/12/18 23:48	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/12/18 23:48	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/12/18 23:48	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/12/18 23:48	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/12/18 23:48	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/12/18 23:48	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/12/18 23:48	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			04/12/18 23:48	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/12/18 23:48	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/12/18 23:48	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/12/18 23:48	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/12/18 23:48	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/12/18 23:48	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/12/18 23:48	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/12/18 23:48	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/12/18 23:48	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/12/18 23:48	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/12/18 23:48	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/12/18 23:48	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/12/18 23:48	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-510660/8
Matrix: Solid
Analysis Batch: 510660

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/12/18 23:48	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/12/18 23:48	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/12/18 23:48	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/12/18 23:48	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/12/18 23:48	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/12/18 23:48	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/12/18 23:48	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/12/18 23:48	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/12/18 23:48	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/12/18 23:48	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			04/12/18 23:48	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/12/18 23:48	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/12/18 23:48	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/12/18 23:48	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/12/18 23:48	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/12/18 23:48	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/12/18 23:48	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/12/18 23:48	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/12/18 23:48	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/12/18 23:48	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/12/18 23:48	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/12/18 23:48*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*78 - 135*		*04/12/18 23:48*	*1*
4-Bromofluorobenzene	*112*		*67 - 126*		*04/12/18 23:48*	*1*
Dibromofluoromethane (Surr)	*120*		*61 - 149*		*04/12/18 23:48*	*1*
Toluene-d8 (Surr)	*99*		*73 - 121*		*04/12/18 23:48*	*1*

Lab Sample ID: LCS 460-510660/4
Matrix: Solid
Analysis Batch: 510660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0236		mg/Kg		118	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0173		mg/Kg		86	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0211		mg/Kg		105	78 - 132
1,1,2-Trichloroethane	0.0200	0.0180		mg/Kg		90	76 - 124
1,1-Dichloroethane	0.0200	0.0210		mg/Kg		105	80 - 124
1,1-Dichloroethene	0.0200	0.0193		mg/Kg		96	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0181		mg/Kg		91	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0192		mg/Kg		96	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0207		mg/Kg		104	65 - 129
1,2-Dichlorobenzene	0.0200	0.0187		mg/Kg		93	80 - 121
1,2-Dichloroethane	0.0200	0.0206		mg/Kg		103	68 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-510660/4
Matrix: Solid
Analysis Batch: 510660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0200	0.0194		mg/Kg		97	77 - 124
1,3-Dichlorobenzene	0.0200	0.0182		mg/Kg		91	79 - 124
1,4-Dichlorobenzene	0.0200	0.0178		mg/Kg		89	79 - 121
1,4-Dioxane	0.400	0.363		mg/Kg		91	67 - 150
2-Butanone (MEK)	0.100	0.0801		mg/Kg		80	61 - 140
2-Hexanone	0.100	0.0990		mg/Kg		99	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.101		mg/Kg		101	80 - 120
Acetone	0.100	0.0965		mg/Kg		97	75 - 120
Benzene	0.0200	0.0177		mg/Kg		89	75 - 127
Bromoform	0.0200	0.0266		mg/Kg		133	19 - 150
Bromomethane	0.0200	0.0200		mg/Kg		100	59 - 136
Carbon disulfide	0.0200	0.0192		mg/Kg		96	74 - 130
Carbon tetrachloride	0.0200	0.0267		mg/Kg		134	77 - 138
Chlorobenzene	0.0200	0.0180		mg/Kg		90	80 - 120
Chlorobromomethane	0.0200	0.0204		mg/Kg		102	80 - 125
Chlorodibromomethane	0.0200	0.0227		mg/Kg		114	67 - 143
Chloroethane	0.0200	0.0203		mg/Kg		102	50 - 139
Chloroform	0.0200	0.0212		mg/Kg		106	80 - 122
Chloromethane	0.0200	0.0182		mg/Kg		91	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0193		mg/Kg		97	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0184		mg/Kg		92	75 - 124
Cyclohexane	0.0200	0.0201		mg/Kg		100	67 - 135
Dichlorobromomethane	0.0200	0.0214		mg/Kg		107	76 - 129
Dichlorodifluoromethane	0.0200	0.0182		mg/Kg		91	72 - 127
Ethylbenzene	0.0200	0.0187		mg/Kg		93	79 - 124
Ethylene Dibromide	0.0200	0.0194		mg/Kg		97	80 - 122
Isopropylbenzene	0.0200	0.0191		mg/Kg		96	80 - 125
Methyl acetate	0.100	0.118		mg/Kg		118	73 - 123
Methyl tert-butyl ether	0.0200	0.0200		mg/Kg		100	80 - 120
Methylcyclohexane	0.0200	0.0200		mg/Kg		100	71 - 137
Methylene Chloride	0.0200	0.0187		mg/Kg		94	79 - 128
m-Xylene & p-Xylene	0.0200	0.0180		mg/Kg		90	79 - 121
o-Xylene	0.0200	0.0185		mg/Kg		93	79 - 123
Styrene	0.0200	0.0183		mg/Kg		92	78 - 123
Tetrachloroethene	0.0200	0.0198		mg/Kg		99	73 - 130
Toluene	0.0200	0.0178		mg/Kg		89	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0191		mg/Kg		96	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0203		mg/Kg		101	72 - 121
Trichloroethene	0.0200	0.0192		mg/Kg		96	79 - 122
Trichlorofluoromethane	0.0200	0.0232		mg/Kg		116	68 - 136
Vinyl chloride	0.0200	0.0180		mg/Kg		90	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*78 - 135*
4-Bromofluorobenzene	*112*		*67 - 126*
Dibromofluoromethane (Surr)	*116*		*61 - 149*
Toluene-d8 (Surr)	*98*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-510660/5
Matrix: Solid
Analysis Batch: 510660

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0239		mg/Kg		119	80 - 125	1	30
1,1,2,2-Tetrachloroethane	0.0200	0.0169		mg/Kg		85	72 - 131	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0214		mg/Kg		107	78 - 132	2	30
1,1,2-Trichloroethane	0.0200	0.0174		mg/Kg		87	76 - 124	3	30
1,1-Dichloroethane	0.0200	0.0212		mg/Kg		106	80 - 124	1	30
1,1-Dichloroethene	0.0200	0.0197		mg/Kg		98	79 - 132	2	30
1,2,3-Trichlorobenzene	0.0200	0.0176		mg/Kg		88	75 - 123	3	30
1,2,4-Trichlorobenzene	0.0200	0.0191		mg/Kg		95	74 - 124	1	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0196		mg/Kg		98	65 - 129	6	30
1,2-Dichlorobenzene	0.0200	0.0184		mg/Kg		92	80 - 121	2	30
1,2-Dichloroethane	0.0200	0.0202		mg/Kg		101	68 - 120	2	30
1,2-Dichloropropane	0.0200	0.0196		mg/Kg		98	77 - 124	1	30
1,3-Dichlorobenzene	0.0200	0.0181		mg/Kg		91	79 - 124	0	30
1,4-Dichlorobenzene	0.0200	0.0179		mg/Kg		90	79 - 121	0	30
1,4-Dioxane	0.400	0.371		mg/Kg		93	67 - 150	2	30
2-Butanone (MEK)	0.100	0.0768		mg/Kg		77	61 - 140	4	30
2-Hexanone	0.100	0.0967		mg/Kg		97	78 - 120	2	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0986		mg/Kg		99	80 - 120	3	30
Acetone	0.100	0.0900		mg/Kg		90	75 - 120	7	30
Benzene	0.0200	0.0181		mg/Kg		90	75 - 127	2	30
Bromoform	0.0200	0.0263		mg/Kg		132	19 - 150	1	30
Bromomethane	0.0200	0.0208		mg/Kg		104	59 - 136	4	30
Carbon disulfide	0.0200	0.0199		mg/Kg		100	74 - 130	4	30
Carbon tetrachloride	0.0200	0.0270		mg/Kg		135	77 - 138	1	30
Chlorobenzene	0.0200	0.0182		mg/Kg		91	80 - 120	1	30
Chlorobromomethane	0.0200	0.0204		mg/Kg		102	80 - 125	0	30
Chlorodibromomethane	0.0200	0.0218		mg/Kg		109	67 - 143	4	30
Chloroethane	0.0200	0.0209		mg/Kg		104	50 - 139	3	30
Chloroform	0.0200	0.0210		mg/Kg		105	80 - 122	1	30
Chloromethane	0.0200	0.0190		mg/Kg		95	66 - 128	5	30
cis-1,2-Dichloroethene	0.0200	0.0197		mg/Kg		99	80 - 123	2	30
cis-1,3-Dichloropropene	0.0200	0.0180		mg/Kg		90	75 - 124	2	30
Cyclohexane	0.0200	0.0198		mg/Kg		99	67 - 135	2	30
Dichlorobromomethane	0.0200	0.0210		mg/Kg		105	76 - 129	2	30
Dichlorodifluoromethane	0.0200	0.0188		mg/Kg		94	72 - 127	4	30
Ethylbenzene	0.0200	0.0188		mg/Kg		94	79 - 124	1	30
Ethylene Dibromide	0.0200	0.0189		mg/Kg		94	80 - 122	3	30
Isopropylbenzene	0.0200	0.0189		mg/Kg		94	80 - 125	1	30
Methyl acetate	0.100	0.116		mg/Kg		116	73 - 123	2	30
Methyl tert-butyl ether	0.0200	0.0202		mg/Kg		101	80 - 120	1	30
Methylcyclohexane	0.0200	0.0195		mg/Kg		98	71 - 137	3	30
Methylene Chloride	0.0200	0.0188		mg/Kg		94	79 - 128	1	30
m-Xylene & p-Xylene	0.0200	0.0181		mg/Kg		91	79 - 121	1	30
o-Xylene	0.0200	0.0185		mg/Kg		92	79 - 123	0	30
Styrene	0.0200	0.0183		mg/Kg		91	78 - 123	0	30
Tetrachloroethene	0.0200	0.0193		mg/Kg		96	73 - 130	3	30
Toluene	0.0200	0.0179		mg/Kg		90	75 - 122	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-510660/5
Matrix: Solid
Analysis Batch: 510660

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene			0.0200	0.0194		mg/Kg		97	80 - 129	2	30
trans-1,3-Dichloropropene			0.0200	0.0195		mg/Kg		98	72 - 121	4	30
Trichloroethene			0.0200	0.0196		mg/Kg		98	79 - 122	2	30
Trichlorofluoromethane			0.0200	0.0223		mg/Kg		112	68 - 136	4	30
Vinyl chloride			0.0200	0.0191		mg/Kg		95	70 - 134	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*78 - 135*
4-Bromofluorobenzene	*114*		*67 - 126*
Dibromofluoromethane (Surr)	*116*		*61 - 149*
Toluene-d8 (Surr)	*98*		*73 - 121*

Lab Sample ID: MB 460-510972/7
Matrix: Solid
Analysis Batch: 510972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/13/18 22:23	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/13/18 22:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/13/18 22:23	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/13/18 22:23	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/13/18 22:23	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/13/18 22:23	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/13/18 22:23	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/13/18 22:23	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/13/18 22:23	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/13/18 22:23	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/13/18 22:23	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/13/18 22:23	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/13/18 22:23	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/13/18 22:23	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/13/18 22:23	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/13/18 22:23	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/13/18 22:23	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/13/18 22:23	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			04/13/18 22:23	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/13/18 22:23	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/13/18 22:23	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/13/18 22:23	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/13/18 22:23	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/13/18 22:23	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/13/18 22:23	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/13/18 22:23	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/13/18 22:23	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/13/18 22:23	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/13/18 22:23	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/13/18 22:23	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/13/18 22:23	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-510972/7
Matrix: Solid
Analysis Batch: 510972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/13/18 22:23	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/13/18 22:23	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/13/18 22:23	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/13/18 22:23	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/13/18 22:23	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/13/18 22:23	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/13/18 22:23	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/13/18 22:23	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/13/18 22:23	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/13/18 22:23	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			04/13/18 22:23	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/13/18 22:23	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/13/18 22:23	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/13/18 22:23	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/13/18 22:23	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/13/18 22:23	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/13/18 22:23	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/13/18 22:23	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/13/18 22:23	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/13/18 22:23	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/13/18 22:23	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/13/18 22:23*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*78 - 135*		*04/13/18 22:23*	*1*
4-Bromofluorobenzene	*113*		*67 - 126*		*04/13/18 22:23*	*1*
Dibromofluoromethane (Surr)	*120*		*61 - 149*		*04/13/18 22:23*	*1*
Toluene-d8 (Surr)	*101*		*73 - 121*		*04/13/18 22:23*	*1*

Lab Sample ID: LCS 460-510972/3
Matrix: Solid
Analysis Batch: 510972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0249		mg/Kg		124	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0179		mg/Kg		89	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0226		mg/Kg		113	78 - 132
1,1,2-Trichloroethane	0.0200	0.0192		mg/Kg		96	76 - 124
1,1-Dichloroethane	0.0200	0.0229		mg/Kg		114	80 - 124
1,1-Dichloroethene	0.0200	0.0213		mg/Kg		107	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0194		mg/Kg		97	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0205		mg/Kg		103	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0214		mg/Kg		107	65 - 129
1,2-Dichlorobenzene	0.0200	0.0195		mg/Kg		98	80 - 121
1,2-Dichloroethane	0.0200	0.0218		mg/Kg		109	68 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-510972/3
Matrix: Solid
Analysis Batch: 510972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0200	0.0210		mg/Kg		105	77 - 124
1,3-Dichlorobenzene	0.0200	0.0191		mg/Kg		95	79 - 124
1,4-Dichlorobenzene	0.0200	0.0189		mg/Kg		94	79 - 121
1,4-Dioxane	0.400	0.391		mg/Kg		98	67 - 150
2-Butanone (MEK)	0.100	0.0855		mg/Kg		85	61 - 140
2-Hexanone	0.100	0.0974		mg/Kg		97	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.103		mg/Kg		103	80 - 120
Acetone	0.100	0.0992		mg/Kg		99	75 - 120
Benzene	0.0200	0.0198		mg/Kg		99	75 - 127
Bromoform	0.0200	0.0260		mg/Kg		130	19 - 150
Bromomethane	0.0200	0.0190		mg/Kg		95	59 - 136
Carbon disulfide	0.0200	0.0212		mg/Kg		106	74 - 130
Carbon tetrachloride	0.0200	0.0279	*	mg/Kg		140	77 - 138
Chlorobenzene	0.0200	0.0192		mg/Kg		96	80 - 120
Chlorobromomethane	0.0200	0.0210		mg/Kg		105	80 - 125
Chlorodibromomethane	0.0200	0.0232		mg/Kg		116	67 - 143
Chloroethane	0.0200	0.0197		mg/Kg		99	50 - 139
Chloroform	0.0200	0.0224		mg/Kg		112	80 - 122
Chloromethane	0.0200	0.0171		mg/Kg		86	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0207		mg/Kg		103	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0202		mg/Kg		101	75 - 124
Cyclohexane	0.0200	0.0218		mg/Kg		109	67 - 135
Dichlorobromomethane	0.0200	0.0227		mg/Kg		113	76 - 129
Dichlorodifluoromethane	0.0200	0.0173		mg/Kg		87	72 - 127
Ethylbenzene	0.0200	0.0199		mg/Kg		100	79 - 124
Ethylene Dibromide	0.0200	0.0203		mg/Kg		102	80 - 122
Isopropylbenzene	0.0200	0.0204		mg/Kg		102	80 - 125
Methyl acetate	0.100	0.122		mg/Kg		122	73 - 123
Methyl tert-butyl ether	0.0200	0.0212		mg/Kg		106	80 - 120
Methylcyclohexane	0.0200	0.0217		mg/Kg		108	71 - 137
Methylene Chloride	0.0200	0.0199		mg/Kg		99	79 - 128
m-Xylene & p-Xylene	0.0200	0.0190		mg/Kg		95	79 - 121
o-Xylene	0.0200	0.0196		mg/Kg		98	79 - 123
Styrene	0.0200	0.0193		mg/Kg		96	78 - 123
Tetrachloroethene	0.0200	0.0212		mg/Kg		106	73 - 130
Toluene	0.0200	0.0193		mg/Kg		96	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0210		mg/Kg		105	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0214		mg/Kg		107	72 - 121
Trichloroethene	0.0200	0.0213		mg/Kg		106	79 - 122
Trichlorofluoromethane	0.0200	0.0208		mg/Kg		104	68 - 136
Vinyl chloride	0.0200	0.0173		mg/Kg		87	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*78 - 135*
4-Bromofluorobenzene	*109*		*67 - 126*
Dibromofluoromethane (Surr)	*115*		*61 - 149*
Toluene-d8 (Surr)	*98*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-510972/4
Matrix: Solid
Analysis Batch: 510972

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0243		mg/Kg		122	80 - 125	2	30
1,1,2,2-Tetrachloroethane	0.0200	0.0180		mg/Kg		90	72 - 131	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0217		mg/Kg		109	78 - 132	4	30
1,1,2-Trichloroethane	0.0200	0.0183		mg/Kg		91	76 - 124	5	30
1,1-Dichloroethane	0.0200	0.0222		mg/Kg		111	80 - 124	3	30
1,1-Dichloroethene	0.0200	0.0204		mg/Kg		102	79 - 132	5	30
1,2,3-Trichlorobenzene	0.0200	0.0187		mg/Kg		94	75 - 123	4	30
1,2,4-Trichlorobenzene	0.0200	0.0198		mg/Kg		99	74 - 124	4	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0214		mg/Kg		107	65 - 129	0	30
1,2-Dichlorobenzene	0.0200	0.0190		mg/Kg		95	80 - 121	3	30
1,2-Dichloroethane	0.0200	0.0208		mg/Kg		104	68 - 120	5	30
1,2-Dichloropropane	0.0200	0.0199		mg/Kg		99	77 - 124	5	30
1,3-Dichlorobenzene	0.0200	0.0188		mg/Kg		94	79 - 124	2	30
1,4-Dichlorobenzene	0.0200	0.0183		mg/Kg		92	79 - 121	3	30
1,4-Dioxane	0.400	0.375		mg/Kg		94	67 - 150	4	30
2-Butanone (MEK)	0.100	0.0753		mg/Kg		75	61 - 140	13	30
2-Hexanone	0.100	0.0917		mg/Kg		92	78 - 120	6	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0959		mg/Kg		96	80 - 120	7	30
Acetone	0.100	0.0937		mg/Kg		94	75 - 120	6	30
Benzene	0.0200	0.0188		mg/Kg		94	75 - 127	5	30
Bromoform	0.0200	0.0268		mg/Kg		134	19 - 150	3	30
Bromomethane	0.0200	0.0199		mg/Kg		100	59 - 136	5	30
Carbon disulfide	0.0200	0.0204		mg/Kg		102	74 - 130	4	30
Carbon tetrachloride	0.0200	0.0269		mg/Kg		134	77 - 138	4	30
Chlorobenzene	0.0200	0.0184		mg/Kg		92	80 - 120	4	30
Chlorobromomethane	0.0200	0.0211		mg/Kg		106	80 - 125	0	30
Chlorodibromomethane	0.0200	0.0225		mg/Kg		113	67 - 143	3	30
Chloroethane	0.0200	0.0208		mg/Kg		104	50 - 139	5	30
Chloroform	0.0200	0.0218		mg/Kg		109	80 - 122	3	30
Chloromethane	0.0200	0.0178		mg/Kg		89	66 - 128	4	30
cis-1,2-Dichloroethene	0.0200	0.0205		mg/Kg		102	80 - 123	1	30
cis-1,3-Dichloropropene	0.0200	0.0188		mg/Kg		94	75 - 124	7	30
Cyclohexane	0.0200	0.0209		mg/Kg		104	67 - 135	4	30
Dichlorobromomethane	0.0200	0.0210		mg/Kg		105	76 - 129	7	30
Dichlorodifluoromethane	0.0200	0.0181		mg/Kg		90	72 - 127	4	30
Ethylbenzene	0.0200	0.0191		mg/Kg		96	79 - 124	4	30
Ethylene Dibromide	0.0200	0.0193		mg/Kg		97	80 - 122	5	30
Isopropylbenzene	0.0200	0.0197		mg/Kg		99	80 - 125	3	30
Methyl acetate	0.100	0.127	*	mg/Kg		127	73 - 123	4	30
Methyl tert-butyl ether	0.0200	0.0208		mg/Kg		104	80 - 120	2	30
Methylcyclohexane	0.0200	0.0208		mg/Kg		104	71 - 137	4	30
Methylene Chloride	0.0200	0.0196		mg/Kg		98	79 - 128	1	30
m-Xylene & p-Xylene	0.0200	0.0186		mg/Kg		93	79 - 121	2	30
o-Xylene	0.0200	0.0188		mg/Kg		94	79 - 123	4	30
Styrene	0.0200	0.0187		mg/Kg		94	78 - 123	3	30
Tetrachloroethene	0.0200	0.0198		mg/Kg		99	73 - 130	7	30
Toluene	0.0200	0.0184		mg/Kg		92	75 - 122	4	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-510972/4
Matrix: Solid
Analysis Batch: 510972

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene			0.0200	0.0205		mg/Kg		103	80 - 129	3	30
trans-1,3-Dichloropropene			0.0200	0.0204		mg/Kg		102	72 - 121	5	30
Trichloroethene			0.0200	0.0202		mg/Kg		101	79 - 122	5	30
Trichlorofluoromethane			0.0200	0.0233		mg/Kg		116	68 - 136	11	30
Vinyl chloride			0.0200	0.0182		mg/Kg		91	70 - 134	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*78 - 135*
4-Bromofluorobenzene	*100*		*67 - 126*
Dibromofluoromethane (Surr)	*106*		*61 - 149*
Toluene-d8 (Surr)	*88*		*73 - 121*

Lab Sample ID: MB 460-511293/8
Matrix: Solid
Analysis Batch: 511293

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/16/18 07:18	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/16/18 07:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/16/18 07:18	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 07:18	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/16/18 07:18	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/16/18 07:18	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 07:18	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/16/18 07:18	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/16/18 07:18	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 07:18	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/16/18 07:18	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/16/18 07:18	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 07:18	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/16/18 07:18	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/16/18 07:18	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/16/18 07:18	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/16/18 07:18	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/16/18 07:18	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			04/16/18 07:18	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/16/18 07:18	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/16/18 07:18	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/16/18 07:18	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 07:18	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 07:18	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 07:18	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/16/18 07:18	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/16/18 07:18	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/16/18 07:18	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/16/18 07:18	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/16/18 07:18	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/16/18 07:18	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-511293/8
Matrix: Solid
Analysis Batch: 511293

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 07:18	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/16/18 07:18	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/16/18 07:18	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/16/18 07:18	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/16/18 07:18	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 07:18	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/16/18 07:18	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/16/18 07:18	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/16/18 07:18	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 07:18	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 07:18	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/16/18 07:18	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/16/18 07:18	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/16/18 07:18	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 07:18	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/16/18 07:18	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/16/18 07:18	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 07:18	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 07:18	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/16/18 07:18	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/16/18 07:18	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/16/18 07:18*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*78 - 135*		*04/16/18 07:18*	*1*
4-Bromofluorobenzene	*109*		*67 - 126*		*04/16/18 07:18*	*1*
Dibromofluoromethane (Surr)	*120*		*61 - 149*		*04/16/18 07:18*	*1*
Toluene-d8 (Surr)	*99*		*73 - 121*		*04/16/18 07:18*	*1*

Lab Sample ID: LCS 460-511293/4
Matrix: Solid
Analysis Batch: 511293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0256	*	mg/Kg		128	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0170		mg/Kg		85	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0233		mg/Kg		116	78 - 132
1,1,2-Trichloroethane	0.0200	0.0186		mg/Kg		93	76 - 124
1,1-Dichloroethane	0.0200	0.0226		mg/Kg		113	80 - 124
1,1-Dichloroethene	0.0200	0.0214		mg/Kg		107	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0197		mg/Kg		98	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0205		mg/Kg		103	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0206		mg/Kg		103	65 - 129
1,2-Dichlorobenzene	0.0200	0.0191		mg/Kg		96	80 - 121
1,2-Dichloroethane	0.0200	0.0215		mg/Kg		108	68 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-511293/4
Matrix: Solid
Analysis Batch: 511293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0200	0.0205		mg/Kg		103	77 - 124
1,3-Dichlorobenzene	0.0200	0.0189		mg/Kg		94	79 - 124
1,4-Dichlorobenzene	0.0200	0.0186		mg/Kg		93	79 - 121
1,4-Dioxane	0.400	0.381		mg/Kg		95	67 - 150
2-Butanone (MEK)	0.100	0.0834		mg/Kg		83	61 - 140
2-Hexanone	0.100	0.0964		mg/Kg		96	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.101		mg/Kg		101	80 - 120
Acetone	0.100	0.100		mg/Kg		100	75 - 120
Benzene	0.0200	0.0192		mg/Kg		96	75 - 127
Bromoform	0.0200	0.0259		mg/Kg		130	19 - 150
Bromomethane	0.0200	0.0223		mg/Kg		111	59 - 136
Carbon disulfide	0.0200	0.0210		mg/Kg		105	74 - 130
Carbon tetrachloride	0.0200	0.0283	*	mg/Kg		142	77 - 138
Chlorobenzene	0.0200	0.0189		mg/Kg		95	80 - 120
Chlorobromomethane	0.0200	0.0218		mg/Kg		109	80 - 125
Chlorodibromomethane	0.0200	0.0226		mg/Kg		113	67 - 143
Chloroethane	0.0200	0.0229		mg/Kg		114	50 - 139
Chloroform	0.0200	0.0223		mg/Kg		112	80 - 122
Chloromethane	0.0200	0.0200		mg/Kg		100	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0206		mg/Kg		103	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0193		mg/Kg		96	75 - 124
Cyclohexane	0.0200	0.0219		mg/Kg		109	67 - 135
Dichlorobromomethane	0.0200	0.0216		mg/Kg		108	76 - 129
Dichlorodifluoromethane	0.0200	0.0197		mg/Kg		98	72 - 127
Ethylbenzene	0.0200	0.0190		mg/Kg		95	79 - 124
Ethylene Dibromide	0.0200	0.0198		mg/Kg		99	80 - 122
Isopropylbenzene	0.0200	0.0199		mg/Kg		100	80 - 125
Methyl acetate	0.100	0.123		mg/Kg		123	73 - 123
Methyl tert-butyl ether	0.0200	0.0214		mg/Kg		107	80 - 120
Methylcyclohexane	0.0200	0.0216		mg/Kg		108	71 - 137
Methylene Chloride	0.0200	0.0205		mg/Kg		102	79 - 128
m-Xylene & p-Xylene	0.0200	0.0187		mg/Kg		93	79 - 121
o-Xylene	0.0200	0.0190		mg/Kg		95	79 - 123
Styrene	0.0200	0.0189		mg/Kg		95	78 - 123
Tetrachloroethene	0.0200	0.0215		mg/Kg		108	73 - 130
Toluene	0.0200	0.0187		mg/Kg		93	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0212		mg/Kg		106	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0213		mg/Kg		107	72 - 121
Trichloroethene	0.0200	0.0207		mg/Kg		103	79 - 122
Trichlorofluoromethane	0.0200	0.0253		mg/Kg		126	68 - 136
Vinyl chloride	0.0200	0.0204		mg/Kg		102	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*119*		*78 - 135*
4-Bromofluorobenzene	*112*		*67 - 126*
Dibromofluoromethane (Surr)	*119*		*61 - 149*
Toluene-d8 (Surr)	*100*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-511293/5
Matrix: Solid
Analysis Batch: 511293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0258	*	mg/Kg		129	80 - 125	1	30
1,1,2,2-Tetrachloroethane	0.0200	0.0169		mg/Kg		84	72 - 131	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0246		mg/Kg		123	78 - 132	5	30
1,1,2-Trichloroethane	0.0200	0.0179		mg/Kg		90	76 - 124	4	30
1,1-Dichloroethane	0.0200	0.0229		mg/Kg		115	80 - 124	1	30
1,1-Dichloroethene	0.0200	0.0222		mg/Kg		111	79 - 132	3	30
1,2,3-Trichlorobenzene	0.0200	0.0193		mg/Kg		96	75 - 123	2	30
1,2,4-Trichlorobenzene	0.0200	0.0206		mg/Kg		103	74 - 124	0	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0199		mg/Kg		100	65 - 129	3	30
1,2-Dichlorobenzene	0.0200	0.0191		mg/Kg		96	80 - 121	0	30
1,2-Dichloroethane	0.0200	0.0210		mg/Kg		105	68 - 120	3	30
1,2-Dichloropropane	0.0200	0.0202		mg/Kg		101	77 - 124	2	30
1,3-Dichlorobenzene	0.0200	0.0193		mg/Kg		96	79 - 124	2	30
1,4-Dichlorobenzene	0.0200	0.0186		mg/Kg		93	79 - 121	0	30
1,4-Dioxane	0.400	0.386		mg/Kg		96	67 - 150	1	30
2-Butanone (MEK)	0.100	0.0824		mg/Kg		82	61 - 140	1	30
2-Hexanone	0.100	0.0972		mg/Kg		97	78 - 120	1	30
4-Methyl-2-pentanone (MIBK)	0.100	0.100		mg/Kg		100	80 - 120	1	30
Acetone	0.100	0.102		mg/Kg		102	75 - 120	1	30
Benzene	0.0200	0.0193		mg/Kg		97	75 - 127	1	30
Bromoform	0.0200	0.0258		mg/Kg		129	19 - 150	1	30
Bromomethane	0.0200	0.0226		mg/Kg		113	59 - 136	1	30
Carbon disulfide	0.0200	0.0217		mg/Kg		108	74 - 130	3	30
Carbon tetrachloride	0.0200	0.0296	*	mg/Kg		148	77 - 138	4	30
Chlorobenzene	0.0200	0.0188		mg/Kg		94	80 - 120	1	30
Chlorobromomethane	0.0200	0.0212		mg/Kg		106	80 - 125	3	30
Chlorodibromomethane	0.0200	0.0219		mg/Kg		109	67 - 143	3	30
Chloroethane	0.0200	0.0223		mg/Kg		112	50 - 139	2	30
Chloroform	0.0200	0.0222		mg/Kg		111	80 - 122	0	30
Chloromethane	0.0200	0.0198		mg/Kg		99	66 - 128	1	30
cis-1,2-Dichloroethene	0.0200	0.0208		mg/Kg		104	80 - 123	1	30
cis-1,3-Dichloropropene	0.0200	0.0188		mg/Kg		94	75 - 124	2	30
Cyclohexane	0.0200	0.0225		mg/Kg		113	67 - 135	3	30
Dichlorobromomethane	0.0200	0.0213		mg/Kg		106	76 - 129	1	30
Dichlorodifluoromethane	0.0200	0.0199		mg/Kg		100	72 - 127	1	30
Ethylbenzene	0.0200	0.0199		mg/Kg		100	79 - 124	4	30
Ethylene Dibromide	0.0200	0.0195		mg/Kg		97	80 - 122	2	30
Isopropylbenzene	0.0200	0.0204		mg/Kg		102	80 - 125	2	30
Methyl acetate	0.100	0.122		mg/Kg		122	73 - 123	1	30
Methyl tert-butyl ether	0.0200	0.0207		mg/Kg		104	80 - 120	3	30
Methylcyclohexane	0.0200	0.0224		mg/Kg		112	71 - 137	4	30
Methylene Chloride	0.0200	0.0197		mg/Kg		98	79 - 128	4	30
m-Xylene & p-Xylene	0.0200	0.0191		mg/Kg		96	79 - 121	2	30
o-Xylene	0.0200	0.0196		mg/Kg		98	79 - 123	3	30
Styrene	0.0200	0.0187		mg/Kg		94	78 - 123	1	30
Tetrachloroethene	0.0200	0.0222		mg/Kg		111	73 - 130	3	30
Toluene	0.0200	0.0189		mg/Kg		95	75 - 122	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-511293/5
Matrix: Solid
Analysis Batch: 511293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene			0.0200	0.0216		mg/Kg		108	80 - 129	2	30
trans-1,3-Dichloropropene			0.0200	0.0203		mg/Kg		101	72 - 121	5	30
Trichloroethene			0.0200	0.0207		mg/Kg		103	79 - 122	0	30
Trichlorofluoromethane			0.0200	0.0228		mg/Kg		114	68 - 136	10	30
Vinyl chloride			0.0200	0.0205		mg/Kg		102	70 - 134	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*78 - 135*
4-Bromofluorobenzene	*101*		*67 - 126*
Dibromofluoromethane (Surr)	*111*		*61 - 149*
Toluene-d8 (Surr)	*91*		*73 - 121*

Lab Sample ID: MB 460-511471/8
Matrix: Solid
Analysis Batch: 511471

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/16/18 20:33	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/16/18 20:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/16/18 20:33	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 20:33	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/16/18 20:33	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/16/18 20:33	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 20:33	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/16/18 20:33	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/16/18 20:33	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 20:33	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/16/18 20:33	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/16/18 20:33	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 20:33	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/16/18 20:33	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/16/18 20:33	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/16/18 20:33	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/16/18 20:33	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/16/18 20:33	1
Acetone	0.00455	J	0.0050	0.0038	mg/Kg			04/16/18 20:33	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/16/18 20:33	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/16/18 20:33	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/16/18 20:33	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 20:33	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 20:33	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 20:33	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/16/18 20:33	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/16/18 20:33	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/16/18 20:33	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/16/18 20:33	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/16/18 20:33	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/16/18 20:33	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-511471/8
Matrix: Solid
Analysis Batch: 511471

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 20:33	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/16/18 20:33	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/16/18 20:33	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/16/18 20:33	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/16/18 20:33	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 20:33	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/16/18 20:33	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/16/18 20:33	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/16/18 20:33	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 20:33	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 20:33	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/16/18 20:33	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/16/18 20:33	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/16/18 20:33	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 20:33	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/16/18 20:33	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/16/18 20:33	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 20:33	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 20:33	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/16/18 20:33	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/16/18 20:33	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/16/18 20:33*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*78 - 135*		*04/16/18 20:33*	*1*
4-Bromofluorobenzene	*112*		*67 - 126*		*04/16/18 20:33*	*1*
Dibromofluoromethane (Surr)	*122*		*61 - 149*		*04/16/18 20:33*	*1*
Toluene-d8 (Surr)	*98*		*73 - 121*		*04/16/18 20:33*	*1*

Lab Sample ID: LCS 460-511471/5
Matrix: Solid
Analysis Batch: 511471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0249		mg/Kg		125	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0182		mg/Kg		91	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0217		mg/Kg		108	78 - 132
1,1,2-Trichloroethane	0.0200	0.0184		mg/Kg		92	76 - 124
1,1-Dichloroethane	0.0200	0.0220		mg/Kg		110	80 - 124
1,1-Dichloroethene	0.0200	0.0210		mg/Kg		105	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0184		mg/Kg		92	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0193		mg/Kg		96	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0222		mg/Kg		111	65 - 129
1,2-Dichlorobenzene	0.0200	0.0190		mg/Kg		95	80 - 121
1,2-Dichloroethane	0.0200	0.0210		mg/Kg		105	68 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-511471/5
Matrix: Solid
Analysis Batch: 511471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0200	0.0202		mg/Kg		101	77 - 124
1,3-Dichlorobenzene	0.0200	0.0187		mg/Kg		94	79 - 124
1,4-Dichlorobenzene	0.0200	0.0181		mg/Kg		90	79 - 121
1,4-Dioxane	0.400	0.364		mg/Kg		91	67 - 150
2-Butanone (MEK)	0.100	0.0799		mg/Kg		80	61 - 140
2-Hexanone	0.100	0.0965		mg/Kg		97	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.101		mg/Kg		101	80 - 120
Acetone	0.100	0.0952		mg/Kg		95	75 - 120
Benzene	0.0200	0.0187		mg/Kg		93	75 - 127
Bromoform	0.0200	0.0285		mg/Kg		143	19 - 150
Bromomethane	0.0200	0.0195		mg/Kg		98	59 - 136
Carbon disulfide	0.0200	0.0206		mg/Kg		103	74 - 130
Carbon tetrachloride	0.0200	0.0280	*	mg/Kg		140	77 - 138
Chlorobenzene	0.0200	0.0185		mg/Kg		93	80 - 120
Chlorobromomethane	0.0200	0.0209		mg/Kg		104	80 - 125
Chlorodibromomethane	0.0200	0.0228		mg/Kg		114	67 - 143
Chloroethane	0.0200	0.0197		mg/Kg		98	50 - 139
Chloroform	0.0200	0.0214		mg/Kg		107	80 - 122
Chloromethane	0.0200	0.0177		mg/Kg		88	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0207		mg/Kg		103	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0193		mg/Kg		97	75 - 124
Cyclohexane	0.0200	0.0209		mg/Kg		105	67 - 135
Dichlorobromomethane	0.0200	0.0218		mg/Kg		109	76 - 129
Dichlorodifluoromethane	0.0200	0.0174		mg/Kg		87	72 - 127
Ethylbenzene	0.0200	0.0194		mg/Kg		97	79 - 124
Ethylene Dibromide	0.0200	0.0198		mg/Kg		99	80 - 122
Isopropylbenzene	0.0200	0.0196		mg/Kg		98	80 - 125
Methyl acetate	0.100	0.132	*	mg/Kg		132	73 - 123
Methyl tert-butyl ether	0.0200	0.0213		mg/Kg		107	80 - 120
Methylcyclohexane	0.0200	0.0210		mg/Kg		105	71 - 137
Methylene Chloride	0.0200	0.0199		mg/Kg		100	79 - 128
m-Xylene & p-Xylene	0.0200	0.0189		mg/Kg		94	79 - 121
o-Xylene	0.0200	0.0194		mg/Kg		97	79 - 123
Styrene	0.0200	0.0188		mg/Kg		94	78 - 123
Tetrachloroethene	0.0200	0.0208		mg/Kg		104	73 - 130
Toluene	0.0200	0.0184		mg/Kg		92	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0209		mg/Kg		104	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0207		mg/Kg		104	72 - 121
Trichloroethene	0.0200	0.0203		mg/Kg		101	79 - 122
Trichlorofluoromethane	0.0200	0.0204		mg/Kg		102	68 - 136
Vinyl chloride	0.0200	0.0182		mg/Kg		91	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*78 - 135*
4-Bromofluorobenzene	*112*		*67 - 126*
Dibromofluoromethane (Surr)	*119*		*61 - 149*
Toluene-d8 (Surr)	*100*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-511498/8
Matrix: Solid
Analysis Batch: 511498

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/16/18 21:36	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/16/18 21:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/16/18 21:36	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 21:36	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/16/18 21:36	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/16/18 21:36	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 21:36	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/16/18 21:36	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/16/18 21:36	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 21:36	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/16/18 21:36	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/16/18 21:36	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 21:36	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/16/18 21:36	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/16/18 21:36	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/16/18 21:36	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/16/18 21:36	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/16/18 21:36	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			04/16/18 21:36	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/16/18 21:36	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/16/18 21:36	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/16/18 21:36	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 21:36	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 21:36	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 21:36	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/16/18 21:36	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/16/18 21:36	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/16/18 21:36	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/16/18 21:36	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/16/18 21:36	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/16/18 21:36	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 21:36	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/16/18 21:36	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/16/18 21:36	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/16/18 21:36	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/16/18 21:36	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/16/18 21:36	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/16/18 21:36	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/16/18 21:36	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/16/18 21:36	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 21:36	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			04/16/18 21:36	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/16/18 21:36	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/16/18 21:36	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/16/18 21:36	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 21:36	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/16/18 21:36	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/16/18 21:36	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-511498/8
Matrix: Solid
Analysis Batch: 511498

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/16/18 21:36	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/16/18 21:36	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/16/18 21:36	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/16/18 21:36	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/16/18 21:36*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*78 - 135*		*04/16/18 21:36*	*1*
4-Bromofluorobenzene	*95*		*67 - 126*		*04/16/18 21:36*	*1*
Dibromofluoromethane (Surr)	*83*		*61 - 149*		*04/16/18 21:36*	*1*
Toluene-d8 (Surr)	*100*		*73 - 121*		*04/16/18 21:36*	*1*

Lab Sample ID: LCS 460-511498/4
Matrix: Solid
Analysis Batch: 511498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0171		mg/Kg		85	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0214		mg/Kg		107	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0185		mg/Kg		93	78 - 132
1,1,2-Trichloroethane	0.0200	0.0207		mg/Kg		104	76 - 124
1,1-Dichloroethane	0.0200	0.0187		mg/Kg		93	80 - 124
1,1-Dichloroethene	0.0200	0.0181		mg/Kg		91	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0197		mg/Kg		99	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0203		mg/Kg		102	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0177		mg/Kg		89	65 - 129
1,2-Dichlorobenzene	0.0200	0.0199		mg/Kg		99	80 - 121
1,2-Dichloroethane	0.0200	0.0170		mg/Kg		85	68 - 120
1,2-Dichloropropane	0.0200	0.0190		mg/Kg		95	77 - 124
1,3-Dichlorobenzene	0.0200	0.0200		mg/Kg		100	79 - 124
1,4-Dichlorobenzene	0.0200	0.0203		mg/Kg		102	79 - 121
1,4-Dioxane	0.400	0.418		mg/Kg		104	67 - 150
2-Butanone (MEK)	0.100	0.0770		mg/Kg		77	61 - 140
2-Hexanone	0.100	0.0836		mg/Kg		84	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0870		mg/Kg		87	80 - 120
Acetone	0.100	0.0695	*	mg/Kg		69	75 - 120
Benzene	0.0200	0.0210		mg/Kg		105	75 - 127
Bromoform	0.0200	0.0152		mg/Kg		76	19 - 150
Bromomethane	0.0200	0.0211		mg/Kg		106	59 - 136
Carbon disulfide	0.0200	0.0171		mg/Kg		86	74 - 130
Carbon tetrachloride	0.0200	0.0169		mg/Kg		85	77 - 138
Chlorobenzene	0.0200	0.0203		mg/Kg		102	80 - 120
Chlorobromomethane	0.0200	0.0173		mg/Kg		86	80 - 125
Chlorodibromomethane	0.0200	0.0176		mg/Kg		88	67 - 143
Chloroethane	0.0200	0.0203		mg/Kg		102	50 - 139

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-511498/4
Matrix: Solid
Analysis Batch: 511498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.0200	0.0177		mg/Kg		89	80 - 122
Chloromethane	0.0200	0.0217		mg/Kg		108	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0169		mg/Kg		84	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0200		mg/Kg		100	75 - 124
Cyclohexane	0.0200	0.0189		mg/Kg		95	67 - 135
Dichlorobromomethane	0.0200	0.0165		mg/Kg		83	76 - 129
Dichlorodifluoromethane	0.0200	0.0152		mg/Kg		76	72 - 127
Ethylbenzene	0.0200	0.0207		mg/Kg		103	79 - 124
Ethylene Dibromide	0.0200	0.0193		mg/Kg		97	80 - 122
Isopropylbenzene	0.0200	0.0206		mg/Kg		103	80 - 125
Methyl acetate	0.100	0.0994		mg/Kg		99	73 - 123
Methyl tert-butyl ether	0.0200	0.0176		mg/Kg		88	80 - 120
Methylcyclohexane	0.0200	0.0192		mg/Kg		96	71 - 137
Methylene Chloride	0.0200	0.0180		mg/Kg		90	79 - 128
m-Xylene & p-Xylene	0.0200	0.0201		mg/Kg		101	79 - 121
o-Xylene	0.0200	0.0201		mg/Kg		101	79 - 123
Styrene	0.0200	0.0198		mg/Kg		99	78 - 123
Tetrachloroethene	0.0200	0.0200		mg/Kg		100	73 - 130
Toluene	0.0200	0.0200		mg/Kg		100	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0181		mg/Kg		90	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0187		mg/Kg		94	72 - 121
Trichloroethene	0.0200	0.0175		mg/Kg		88	79 - 122
Trichlorofluoromethane	0.0200	0.0183		mg/Kg		91	68 - 136
Vinyl chloride	0.0200	0.0200		mg/Kg		100	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*78 - 135*
4-Bromofluorobenzene	*95*		*67 - 126*
Dibromofluoromethane (Surr)	*85*		*61 - 149*
Toluene-d8 (Surr)	*101*		*73 - 121*

Lab Sample ID: LCSD 460-511498/5
Matrix: Solid
Analysis Batch: 511498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0171		mg/Kg		86	80 - 125	1	30
1,1,2,2-Tetrachloroethane	0.0200	0.0217		mg/Kg		109	72 - 131	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0178		mg/Kg		89	78 - 132	4	30
1,1,2-Trichloroethane	0.0200	0.0207		mg/Kg		103	76 - 124	0	30
1,1-Dichloroethane	0.0200	0.0187		mg/Kg		93	80 - 124	0	30
1,1-Dichloroethene	0.0200	0.0181		mg/Kg		90	79 - 132	0	30
1,2,3-Trichlorobenzene	0.0200	0.0207		mg/Kg		103	75 - 123	5	30
1,2,4-Trichlorobenzene	0.0200	0.0205		mg/Kg		103	74 - 124	1	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0192		mg/Kg		96	65 - 129	8	30
1,2-Dichlorobenzene	0.0200	0.0201		mg/Kg		101	80 - 121	1	30
1,2-Dichloroethane	0.0200	0.0169		mg/Kg		85	68 - 120	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-511498/5
Matrix: Solid
Analysis Batch: 511498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane	0.0200	0.0186		mg/Kg		93	77 - 124	2	30
1,3-Dichlorobenzene	0.0200	0.0201		mg/Kg		100	79 - 124	0	30
1,4-Dichlorobenzene	0.0200	0.0201		mg/Kg		101	79 - 121	1	30
1,4-Dioxane	0.400	0.501		mg/Kg		125	67 - 150	18	30
2-Butanone (MEK)	0.100	0.0784		mg/Kg		78	61 - 140	2	30
2-Hexanone	0.100	0.0835		mg/Kg		83	78 - 120	0	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0895		mg/Kg		89	80 - 120	3	30
Acetone	0.100	0.0720	*	mg/Kg		72	75 - 120	4	30
Benzene	0.0200	0.0215		mg/Kg		107	75 - 127	2	30
Bromoform	0.0200	0.0160		mg/Kg		80	19 - 150	5	30
Bromomethane	0.0200	0.0213		mg/Kg		107	59 - 136	1	30
Carbon disulfide	0.0200	0.0172		mg/Kg		86	74 - 130	0	30
Carbon tetrachloride	0.0200	0.0169		mg/Kg		84	77 - 138	0	30
Chlorobenzene	0.0200	0.0204		mg/Kg		102	80 - 120	0	30
Chlorobromomethane	0.0200	0.0176		mg/Kg		88	80 - 125	2	30
Chlorodibromomethane	0.0200	0.0180		mg/Kg		90	67 - 143	2	30
Chloroethane	0.0200	0.0205		mg/Kg		102	50 - 139	1	30
Chloroform	0.0200	0.0178		mg/Kg		89	80 - 122	0	30
Chloromethane	0.0200	0.0223		mg/Kg		111	66 - 128	3	30
cis-1,2-Dichloroethene	0.0200	0.0170		mg/Kg		85	80 - 123	0	30
cis-1,3-Dichloropropene	0.0200	0.0199		mg/Kg		100	75 - 124	1	30
Cyclohexane	0.0200	0.0193		mg/Kg		97	67 - 135	2	30
Dichlorobromomethane	0.0200	0.0162		mg/Kg		81	76 - 129	2	30
Dichlorodifluoromethane	0.0200	0.0155		mg/Kg		77	72 - 127	1	30
Ethylbenzene	0.0200	0.0206		mg/Kg		103	79 - 124	0	30
Ethylene Dibromide	0.0200	0.0199		mg/Kg		99	80 - 122	3	30
Isopropylbenzene	0.0200	0.0209		mg/Kg		105	80 - 125	1	30
Methyl acetate	0.100	0.101		mg/Kg		101	73 - 123	1	30
Methyl tert-butyl ether	0.0200	0.0179		mg/Kg		89	80 - 120	2	30
Methylcyclohexane	0.0200	0.0191		mg/Kg		95	71 - 137	1	30
Methylene Chloride	0.0200	0.0176		mg/Kg		88	79 - 128	2	30
m-Xylene & p-Xylene	0.0200	0.0204		mg/Kg		102	79 - 121	1	30
o-Xylene	0.0200	0.0204		mg/Kg		102	79 - 123	2	30
Styrene	0.0200	0.0200		mg/Kg		100	78 - 123	1	30
Tetrachloroethene	0.0200	0.0203		mg/Kg		102	73 - 130	2	30
Toluene	0.0200	0.0203		mg/Kg		102	75 - 122	2	30
trans-1,2-Dichloroethene	0.0200	0.0180		mg/Kg		90	80 - 129	1	30
trans-1,3-Dichloropropene	0.0200	0.0191		mg/Kg		96	72 - 121	2	30
Trichloroethene	0.0200	0.0179		mg/Kg		89	79 - 122	2	30
Trichlorofluoromethane	0.0200	0.0184		mg/Kg		92	68 - 136	1	30
Vinyl chloride	0.0200	0.0208		mg/Kg		104	70 - 134	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*78 - 135*
4-Bromofluorobenzene	*96*		*67 - 126*
Dibromofluoromethane (Surr)	*85*		*61 - 149*
Toluene-d8 (Surr)	*102*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-512479/8
Matrix: Solid
Analysis Batch: 512479

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/19/18 20:38	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/19/18 20:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/19/18 20:38	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/19/18 20:38	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/19/18 20:38	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/19/18 20:38	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/19/18 20:38	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/19/18 20:38	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/19/18 20:38	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/19/18 20:38	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/19/18 20:38	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/19/18 20:38	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/19/18 20:38	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/19/18 20:38	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/19/18 20:38	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/19/18 20:38	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/19/18 20:38	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/19/18 20:38	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			04/19/18 20:38	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/19/18 20:38	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/19/18 20:38	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/19/18 20:38	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/19/18 20:38	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/19/18 20:38	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/19/18 20:38	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/19/18 20:38	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/19/18 20:38	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/19/18 20:38	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/19/18 20:38	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/19/18 20:38	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/19/18 20:38	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/19/18 20:38	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/19/18 20:38	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/19/18 20:38	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/19/18 20:38	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/19/18 20:38	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/19/18 20:38	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/19/18 20:38	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/19/18 20:38	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/19/18 20:38	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/19/18 20:38	1
Methylene Chloride	0.000267	J	0.0010	0.00016	mg/Kg			04/19/18 20:38	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/19/18 20:38	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/19/18 20:38	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/19/18 20:38	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/19/18 20:38	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/19/18 20:38	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/19/18 20:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-512479/8
Matrix: Solid
Analysis Batch: 512479

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/19/18 20:38	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/19/18 20:38	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/19/18 20:38	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/19/18 20:38	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/19/18 20:38*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*78 - 135*		*04/19/18 20:38*	*1*
4-Bromofluorobenzene	*97*		*67 - 126*		*04/19/18 20:38*	*1*
Dibromofluoromethane (Surr)	*80*		*61 - 149*		*04/19/18 20:38*	*1*
Toluene-d8 (Surr)	*97*		*73 - 121*		*04/19/18 20:38*	*1*

Lab Sample ID: LCS 460-512479/4
Matrix: Solid
Analysis Batch: 512479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0176		mg/Kg		88	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0226		mg/Kg		113	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0183		mg/Kg		92	78 - 132
1,1,2-Trichloroethane	0.0200	0.0215		mg/Kg		107	76 - 124
1,1-Dichloroethane	0.0200	0.0188		mg/Kg		94	80 - 124
1,1-Dichloroethene	0.0200	0.0186		mg/Kg		93	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0211		mg/Kg		105	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0197		mg/Kg		98	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0188		mg/Kg		94	65 - 129
1,2-Dichlorobenzene	0.0200	0.0201		mg/Kg		100	80 - 121
1,2-Dichloroethane	0.0200	0.0171		mg/Kg		85	68 - 120
1,2-Dichloropropane	0.0200	0.0187		mg/Kg		94	77 - 124
1,3-Dichlorobenzene	0.0200	0.0203		mg/Kg		102	79 - 124
1,4-Dichlorobenzene	0.0200	0.0201		mg/Kg		101	79 - 121
1,4-Dioxane	0.400	0.483		mg/Kg		121	67 - 150
2-Butanone (MEK)	0.100	0.0788		mg/Kg		79	61 - 140
2-Hexanone	0.100	0.0827		mg/Kg		83	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0884		mg/Kg		88	80 - 120
Acetone	0.100	0.0739	*	mg/Kg		74	75 - 120
Benzene	0.0200	0.0224		mg/Kg		112	75 - 127
Bromoform	0.0200	0.0157		mg/Kg		79	19 - 150
Bromomethane	0.0200	0.0229		mg/Kg		115	59 - 136
Carbon disulfide	0.0200	0.0179		mg/Kg		89	74 - 130
Carbon tetrachloride	0.0200	0.0172		mg/Kg		86	77 - 138
Chlorobenzene	0.0200	0.0202		mg/Kg		101	80 - 120
Chlorobromomethane	0.0200	0.0181		mg/Kg		91	80 - 125
Chlorodibromomethane	0.0200	0.0180		mg/Kg		90	67 - 143
Chloroethane	0.0200	0.0220		mg/Kg		110	50 - 139

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-512479/4
Matrix: Solid
Analysis Batch: 512479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.0200	0.0178		mg/Kg		89	80 - 122
Chloromethane	0.0200	0.0246		mg/Kg		123	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0173		mg/Kg		87	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0202		mg/Kg		101	75 - 124
Cyclohexane	0.0200	0.0191		mg/Kg		95	67 - 135
Dichlorobromomethane	0.0200	0.0173		mg/Kg		87	76 - 129
Dichlorodifluoromethane	0.0200	0.0174		mg/Kg		87	72 - 127
Ethylbenzene	0.0200	0.0205		mg/Kg		102	79 - 124
Ethylene Dibromide	0.0200	0.0201		mg/Kg		100	80 - 122
Isopropylbenzene	0.0200	0.0201		mg/Kg		100	80 - 125
Methyl acetate	0.0400	0.0430		mg/Kg		107	73 - 123
Methyl tert-butyl ether	0.0200	0.0188		mg/Kg		94	80 - 120
Methylcyclohexane	0.0200	0.0188		mg/Kg		94	71 - 137
Methylene Chloride	0.0200	0.0190		mg/Kg		95	79 - 128
m-Xylene & p-Xylene	0.0200	0.0202		mg/Kg		101	79 - 121
o-Xylene	0.0200	0.0205		mg/Kg		103	79 - 123
Styrene	0.0200	0.0206		mg/Kg		103	78 - 123
Tetrachloroethene	0.0200	0.0201		mg/Kg		101	73 - 130
Toluene	0.0200	0.0207		mg/Kg		103	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0187		mg/Kg		94	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0195		mg/Kg		98	72 - 121
Trichloroethene	0.0200	0.0181		mg/Kg		91	79 - 122
Trichlorofluoromethane	0.0200	0.0195		mg/Kg		97	68 - 136
Vinyl chloride	0.0200	0.0232		mg/Kg		116	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*78 - 135*
4-Bromofluorobenzene	*98*		*67 - 126*
Dibromofluoromethane (Surr)	*81*		*61 - 149*
Toluene-d8 (Surr)	*98*		*73 - 121*

Lab Sample ID: LCSD 460-512479/5
Matrix: Solid
Analysis Batch: 512479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0188		mg/Kg		94	80 - 125	7	30
1,1,2,2-Tetrachloroethane	0.0200	0.0219		mg/Kg		110	72 - 131	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0205		mg/Kg		103	78 - 132	11	30
1,1,2-Trichloroethane	0.0200	0.0210		mg/Kg		105	76 - 124	2	30
1,1-Dichloroethane	0.0200	0.0192		mg/Kg		96	80 - 124	2	30
1,1-Dichloroethene	0.0200	0.0196		mg/Kg		98	79 - 132	6	30
1,2,3-Trichlorobenzene	0.0200	0.0227		mg/Kg		113	75 - 123	7	30
1,2,4-Trichlorobenzene	0.0200	0.0224		mg/Kg		112	74 - 124	13	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0181		mg/Kg		90	65 - 129	4	30
1,2-Dichlorobenzene	0.0200	0.0217		mg/Kg		109	80 - 121	8	30
1,2-Dichloroethane	0.0200	0.0171		mg/Kg		85	68 - 120	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-512479/5
Matrix: Solid
Analysis Batch: 512479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane			0.0200	0.0191		mg/Kg		96	77 - 124	2	30
1,3-Dichlorobenzene			0.0200	0.0223		mg/Kg		112	79 - 124	10	30
1,4-Dichlorobenzene			0.0200	0.0221		mg/Kg		110	79 - 121	9	30
1,4-Dioxane			0.400	0.436		mg/Kg		109	67 - 150	10	30
2-Butanone (MEK)			0.100	0.0799		mg/Kg		80	61 - 140	1	30
2-Hexanone			0.100	0.0845		mg/Kg		84	78 - 120	2	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0908		mg/Kg		91	80 - 120	3	30
Acetone			0.100	0.0751		mg/Kg		75	75 - 120	2	30
Benzene			0.0200	0.0229		mg/Kg		114	75 - 127	2	30
Bromoform			0.0200	0.0153		mg/Kg		77	19 - 150	3	30
Bromomethane			0.0200	0.0232		mg/Kg		116	59 - 136	1	30
Carbon disulfide			0.0200	0.0188		mg/Kg		94	74 - 130	5	30
Carbon tetrachloride			0.0200	0.0189		mg/Kg		94	77 - 138	9	30
Chlorobenzene			0.0200	0.0214		mg/Kg		107	80 - 120	6	30
Chlorobromomethane			0.0200	0.0180		mg/Kg		90	80 - 125	1	30
Chlorodibromomethane			0.0200	0.0179		mg/Kg		89	67 - 143	1	30
Chloroethane			0.0200	0.0221		mg/Kg		111	50 - 139	1	30
Chloroform			0.0200	0.0184		mg/Kg		92	80 - 122	3	30
Chloromethane			0.0200	0.0248		mg/Kg		124	66 - 128	1	30
cis-1,2-Dichloroethene			0.0200	0.0177		mg/Kg		89	80 - 123	2	30
cis-1,3-Dichloropropene			0.0200	0.0204		mg/Kg		102	75 - 124	1	30
Cyclohexane			0.0200	0.0216		mg/Kg		108	67 - 135	12	30
Dichlorobromomethane			0.0200	0.0178		mg/Kg		89	76 - 129	2	30
Dichlorodifluoromethane			0.0200	0.0181		mg/Kg		91	72 - 127	4	30
Ethylbenzene			0.0200	0.0219		mg/Kg		110	79 - 124	7	30
Ethylene Dibromide			0.0200	0.0203		mg/Kg		102	80 - 122	1	30
Isopropylbenzene			0.0200	0.0229		mg/Kg		114	80 - 125	13	30
Methyl acetate			0.0400	0.0398		mg/Kg		100	73 - 123	8	30
Methyl tert-butyl ether			0.0200	0.0184		mg/Kg		92	80 - 120	2	30
Methylcyclohexane			0.0200	0.0221		mg/Kg		111	71 - 137	16	30
Methylene Chloride			0.0200	0.0192		mg/Kg		96	79 - 128	1	30
m-Xylene & p-Xylene			0.0200	0.0222		mg/Kg		111	79 - 121	9	30
o-Xylene			0.0200	0.0219		mg/Kg		109	79 - 123	6	30
Styrene			0.0200	0.0211		mg/Kg		106	78 - 123	3	30
Tetrachloroethene			0.0200	0.0229		mg/Kg		114	73 - 130	13	30
Toluene			0.0200	0.0220		mg/Kg		110	75 - 122	6	30
trans-1,2-Dichloroethene			0.0200	0.0189		mg/Kg		94	80 - 129	1	30
trans-1,3-Dichloropropene			0.0200	0.0194		mg/Kg		97	72 - 121	1	30
Trichloroethene			0.0200	0.0192		mg/Kg		96	79 - 122	6	30
Trichlorofluoromethane			0.0200	0.0200		mg/Kg		100	68 - 136	2	30
Vinyl chloride			0.0200	0.0240		mg/Kg		120	70 - 134	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*78 - 135*
4-Bromofluorobenzene	*100*		*67 - 126*
Dibromofluoromethane (Surr)	*80*		*61 - 149*
Toluene-d8 (Surr)	*98*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-512623/7
Matrix: Solid
Analysis Batch: 512623

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/20/18 08:59	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/20/18 08:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/20/18 08:59	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/20/18 08:59	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/20/18 08:59	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/20/18 08:59	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/20/18 08:59	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/20/18 08:59	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/20/18 08:59	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/20/18 08:59	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/20/18 08:59	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/20/18 08:59	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/20/18 08:59	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/20/18 08:59	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/20/18 08:59	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/20/18 08:59	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/20/18 08:59	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/20/18 08:59	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			04/20/18 08:59	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/20/18 08:59	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/20/18 08:59	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/20/18 08:59	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/20/18 08:59	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/20/18 08:59	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/20/18 08:59	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/20/18 08:59	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/20/18 08:59	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/20/18 08:59	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/20/18 08:59	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/20/18 08:59	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/20/18 08:59	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/20/18 08:59	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/20/18 08:59	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/20/18 08:59	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/20/18 08:59	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/20/18 08:59	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/20/18 08:59	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/20/18 08:59	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/20/18 08:59	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/20/18 08:59	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/20/18 08:59	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			04/20/18 08:59	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/20/18 08:59	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/20/18 08:59	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/20/18 08:59	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/20/18 08:59	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/20/18 08:59	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/20/18 08:59	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-512623/7
Matrix: Solid
Analysis Batch: 512623

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/20/18 08:59	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/20/18 08:59	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/20/18 08:59	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/20/18 08:59	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/20/18 08:59*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*78 - 135*		*04/20/18 08:59*	*1*
4-Bromofluorobenzene	*98*		*67 - 126*		*04/20/18 08:59*	*1*
Dibromofluoromethane (Surr)	*77*		*61 - 149*		*04/20/18 08:59*	*1*
Toluene-d8 (Surr)	*97*		*73 - 121*		*04/20/18 08:59*	*1*

Lab Sample ID: LCS 460-512623/3
Matrix: Solid
Analysis Batch: 512623

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0192		mg/Kg		96	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0205		mg/Kg		102	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0208		mg/Kg		104	78 - 132
1,1,2-Trichloroethane	0.0200	0.0200		mg/Kg		100	76 - 124
1,1-Dichloroethane	0.0200	0.0197		mg/Kg		99	80 - 124
1,1-Dichloroethene	0.0200	0.0205		mg/Kg		103	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0216		mg/Kg		108	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0222		mg/Kg		111	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0153		mg/Kg		77	65 - 129
1,2-Dichlorobenzene	0.0200	0.0214		mg/Kg		107	80 - 121
1,2-Dichloroethane	0.0200	0.0162		mg/Kg		81	68 - 120
1,2-Dichloropropane	0.0200	0.0188		mg/Kg		94	77 - 124
1,3-Dichlorobenzene	0.0200	0.0221		mg/Kg		111	79 - 124
1,4-Dichlorobenzene	0.0200	0.0221		mg/Kg		110	79 - 121
1,4-Dioxane	0.400	0.448		mg/Kg		112	67 - 150
2-Butanone (MEK)	0.100	0.0771		mg/Kg		77	61 - 140
2-Hexanone	0.100	0.0808		mg/Kg		81	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0874		mg/Kg		87	80 - 120
Acetone	0.100	0.0863		mg/Kg		86	75 - 120
Benzene	0.0200	0.0237		mg/Kg		119	75 - 127
Bromoform	0.0200	0.0136		mg/Kg		68	19 - 150
Bromomethane	0.0200	0.0236		mg/Kg		118	59 - 136
Carbon disulfide	0.0200	0.0192		mg/Kg		96	74 - 130
Carbon tetrachloride	0.0200	0.0188		mg/Kg		94	77 - 138
Chlorobenzene	0.0200	0.0212		mg/Kg		106	80 - 120
Chlorobromomethane	0.0200	0.0172		mg/Kg		86	80 - 125
Chlorodibromomethane	0.0200	0.0169		mg/Kg		85	67 - 143
Chloroethane	0.0200	0.0243		mg/Kg		121	50 - 139

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-512623/3
Matrix: Solid
Analysis Batch: 512623

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.0200	0.0184		mg/Kg		92	80 - 122
Chloromethane	0.0200	0.0256		mg/Kg		128	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0178		mg/Kg		89	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0200		mg/Kg		100	75 - 124
Cyclohexane	0.0200	0.0221		mg/Kg		110	67 - 135
Dichlorobromomethane	0.0200	0.0169		mg/Kg		84	76 - 129
Dichlorodifluoromethane	0.0200	0.0190		mg/Kg		95	72 - 127
Ethylbenzene	0.0200	0.0223		mg/Kg		112	79 - 124
Ethylene Dibromide	0.0200	0.0184		mg/Kg		92	80 - 122
Isopropylbenzene	0.0200	0.0233		mg/Kg		116	80 - 125
Methyl acetate	0.0400	0.0383		mg/Kg		96	73 - 123
Methyl tert-butyl ether	0.0200	0.0179		mg/Kg		90	80 - 120
Methylcyclohexane	0.0200	0.0226		mg/Kg		113	71 - 137
Methylene Chloride	0.0200	0.0189		mg/Kg		95	79 - 128
m-Xylene & p-Xylene	0.0200	0.0227		mg/Kg		114	79 - 121
o-Xylene	0.0200	0.0222		mg/Kg		111	79 - 123
Styrene	0.0200	0.0211		mg/Kg		105	78 - 123
Tetrachloroethene	0.0200	0.0231		mg/Kg		116	73 - 130
Toluene	0.0200	0.0225		mg/Kg		113	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0199		mg/Kg		99	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0188		mg/Kg		94	72 - 121
Trichloroethene	0.0200	0.0192		mg/Kg		96	79 - 122
Trichlorofluoromethane	0.0200	0.0196		mg/Kg		98	68 - 136
Vinyl chloride	0.0200	0.0245		mg/Kg		123	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*78 - 135*
4-Bromofluorobenzene	*102*		*67 - 126*
Dibromofluoromethane (Surr)	*79*		*61 - 149*
Toluene-d8 (Surr)	*100*		*73 - 121*

Lab Sample ID: LCSD 460-512623/4
Matrix: Solid
Analysis Batch: 512623

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0178		mg/Kg		89	80 - 125	7	30
1,1,2,2-Tetrachloroethane	0.0200	0.0213		mg/Kg		107	72 - 131	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0191		mg/Kg		95	78 - 132	9	30
1,1,2-Trichloroethane	0.0200	0.0207		mg/Kg		103	76 - 124	3	30
1,1-Dichloroethane	0.0200	0.0187		mg/Kg		93	80 - 124	6	30
1,1-Dichloroethene	0.0200	0.0187		mg/Kg		94	79 - 132	9	30
1,2,3-Trichlorobenzene	0.0200	0.0205		mg/Kg		102	75 - 123	5	30
1,2,4-Trichlorobenzene	0.0200	0.0207		mg/Kg		103	74 - 124	7	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0165		mg/Kg		83	65 - 129	8	30
1,2-Dichlorobenzene	0.0200	0.0205		mg/Kg		103	80 - 121	4	30
1,2-Dichloroethane	0.0200	0.0165		mg/Kg		83	68 - 120	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-512623/4
Matrix: Solid
Analysis Batch: 512623

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane			0.0200	0.0185		mg/Kg		93	77 - 124	1	30
1,3-Dichlorobenzene			0.0200	0.0215		mg/Kg		107	79 - 124	3	30
1,4-Dichlorobenzene			0.0200	0.0215		mg/Kg		108	79 - 121	3	30
1,4-Dioxane			0.400	0.400		mg/Kg		100	67 - 150	11	30
2-Butanone (MEK)			0.100	0.0774		mg/Kg		77	61 - 140	0	30
2-Hexanone			0.100	0.0845		mg/Kg		84	78 - 120	4	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0887		mg/Kg		89	80 - 120	1	30
Acetone			0.100	0.0846		mg/Kg		85	75 - 120	2	30
Benzene			0.0200	0.0224		mg/Kg		112	75 - 127	6	30
Bromoform			0.0200	0.0145		mg/Kg		73	19 - 150	7	30
Bromomethane			0.0200	0.0196		mg/Kg		98	59 - 136	18	30
Carbon disulfide			0.0200	0.0173		mg/Kg		87	74 - 130	10	30
Carbon tetrachloride			0.0200	0.0172		mg/Kg		86	77 - 138	9	30
Chlorobenzene			0.0200	0.0205		mg/Kg		102	80 - 120	3	30
Chlorobromomethane			0.0200	0.0172		mg/Kg		86	80 - 125	0	30
Chlorodibromomethane			0.0200	0.0166		mg/Kg		83	67 - 143	2	30
Chloroethane			0.0200	0.0195		mg/Kg		97	50 - 139	22	30
Chloroform			0.0200	0.0177		mg/Kg		88	80 - 122	4	30
Chloromethane			0.0200	0.0202		mg/Kg		101	66 - 128	23	30
cis-1,2-Dichloroethene			0.0200	0.0170		mg/Kg		85	80 - 123	5	30
cis-1,3-Dichloropropene			0.0200	0.0197		mg/Kg		98	75 - 124	2	30
Cyclohexane			0.0200	0.0203		mg/Kg		102	67 - 135	8	30
Dichlorobromomethane			0.0200	0.0167		mg/Kg		83	76 - 129	1	30
Dichlorodifluoromethane			0.0200	0.0153		mg/Kg		76	72 - 127	22	30
Ethylbenzene			0.0200	0.0215		mg/Kg		107	79 - 124	4	30
Ethylene Dibromide			0.0200	0.0194		mg/Kg		97	80 - 122	5	30
Isopropylbenzene			0.0200	0.0218		mg/Kg		109	80 - 125	7	30
Methyl acetate			0.0400	0.0411		mg/Kg		103	73 - 123	7	30
Methyl tert-butyl ether			0.0200	0.0177		mg/Kg		89	80 - 120	1	30
Methylcyclohexane			0.0200	0.0211		mg/Kg		105	71 - 137	7	30
Methylene Chloride			0.0200	0.0182		mg/Kg		91	79 - 128	4	30
m-Xylene & p-Xylene			0.0200	0.0216		mg/Kg		108	79 - 121	5	30
o-Xylene			0.0200	0.0209		mg/Kg		105	79 - 123	6	30
Styrene			0.0200	0.0208		mg/Kg		104	78 - 123	1	30
Tetrachloroethene			0.0200	0.0217		mg/Kg		109	73 - 130	6	30
Toluene			0.0200	0.0214		mg/Kg		107	75 - 122	5	30
trans-1,2-Dichloroethene			0.0200	0.0189		mg/Kg		94	80 - 129	5	30
trans-1,3-Dichloropropene			0.0200	0.0185		mg/Kg		92	72 - 121	2	30
Trichloroethene			0.0200	0.0182		mg/Kg		91	79 - 122	6	30
Trichlorofluoromethane			0.0200	0.0164		mg/Kg		82	68 - 136	18	30
Vinyl chloride			0.0200	0.0196		mg/Kg		98	70 - 134	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*78 - 135*
4-Bromofluorobenzene	*99*		*67 - 126*
Dibromofluoromethane (Surr)	*80*		*61 - 149*
Toluene-d8 (Surr)	*99*		*73 - 121*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-513435/7
Matrix: Solid
Analysis Batch: 513435

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			04/23/18 19:41	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/23/18 19:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/23/18 19:41	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			04/23/18 19:41	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			04/23/18 19:41	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			04/23/18 19:41	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/23/18 19:41	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			04/23/18 19:41	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			04/23/18 19:41	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			04/23/18 19:41	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			04/23/18 19:41	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			04/23/18 19:41	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			04/23/18 19:41	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			04/23/18 19:41	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			04/23/18 19:41	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			04/23/18 19:41	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			04/23/18 19:41	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			04/23/18 19:41	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			04/23/18 19:41	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			04/23/18 19:41	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			04/23/18 19:41	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			04/23/18 19:41	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			04/23/18 19:41	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			04/23/18 19:41	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			04/23/18 19:41	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			04/23/18 19:41	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			04/23/18 19:41	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			04/23/18 19:41	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			04/23/18 19:41	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			04/23/18 19:41	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			04/23/18 19:41	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/23/18 19:41	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			04/23/18 19:41	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			04/23/18 19:41	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			04/23/18 19:41	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			04/23/18 19:41	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			04/23/18 19:41	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			04/23/18 19:41	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			04/23/18 19:41	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			04/23/18 19:41	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			04/23/18 19:41	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			04/23/18 19:41	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			04/23/18 19:41	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			04/23/18 19:41	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			04/23/18 19:41	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/23/18 19:41	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			04/23/18 19:41	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			04/23/18 19:41	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-513435/7
Matrix: Solid
Analysis Batch: 513435

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			04/23/18 19:41	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			04/23/18 19:41	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			04/23/18 19:41	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			04/23/18 19:41	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*04/23/18 19:41*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 135*		*04/23/18 19:41*	*1*
4-Bromofluorobenzene	*100*		*67 - 126*		*04/23/18 19:41*	*1*
Dibromofluoromethane (Surr)	*97*		*61 - 149*		*04/23/18 19:41*	*1*
Toluene-d8 (Surr)	*92*		*73 - 121*		*04/23/18 19:41*	*1*

Lab Sample ID: LCS 460-513435/3
Matrix: Solid
Analysis Batch: 513435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0186		mg/Kg		93	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0189		mg/Kg		94	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0167		mg/Kg		83	78 - 132
1,1,2-Trichloroethane	0.0200	0.0179		mg/Kg		90	76 - 124
1,1-Dichloroethane	0.0200	0.0184		mg/Kg		92	80 - 124
1,1-Dichloroethene	0.0200	0.0179		mg/Kg		90	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0173		mg/Kg		86	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0169		mg/Kg		85	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0179		mg/Kg		90	65 - 129
1,2-Dichlorobenzene	0.0200	0.0183		mg/Kg		91	80 - 121
1,2-Dichloroethane	0.0200	0.0180		mg/Kg		90	68 - 120
1,2-Dichloropropane	0.0200	0.0180		mg/Kg		90	77 - 124
1,3-Dichlorobenzene	0.0200	0.0181		mg/Kg		91	79 - 124
1,4-Dichlorobenzene	0.0200	0.0176		mg/Kg		88	79 - 121
1,4-Dioxane	0.400	0.471		mg/Kg		118	67 - 150
2-Butanone (MEK)	0.100	0.0902		mg/Kg		90	61 - 140
2-Hexanone	0.100	0.0952		mg/Kg		95	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0930		mg/Kg		93	80 - 120
Acetone	0.100	0.0839		mg/Kg		84	75 - 120
Benzene	0.0200	0.0181		mg/Kg		91	75 - 127
Bromoform	0.0200	0.0184		mg/Kg		92	19 - 150
Bromomethane	0.0200	0.0185		mg/Kg		93	59 - 136
Carbon disulfide	0.0200	0.0179		mg/Kg		89	74 - 130
Carbon tetrachloride	0.0200	0.0186		mg/Kg		93	77 - 138
Chlorobenzene	0.0200	0.0184		mg/Kg		92	80 - 120
Chlorobromomethane	0.0200	0.0187		mg/Kg		94	80 - 125
Chlorodibromomethane	0.0200	0.0183		mg/Kg		91	67 - 143
Chloroethane	0.0200	0.0192		mg/Kg		96	50 - 139

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-513435/3
Matrix: Solid
Analysis Batch: 513435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.0200	0.0188		mg/Kg		94	80 - 122
Chloromethane	0.0200	0.0178		mg/Kg		89	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0184		mg/Kg		92	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0175		mg/Kg		88	75 - 124
Cyclohexane	0.0200	0.0170		mg/Kg		85	67 - 135
Dichlorobromomethane	0.0200	0.0185		mg/Kg		93	76 - 129
Dichlorodifluoromethane	0.0200	0.0126	*	mg/Kg		63	72 - 127
Ethylbenzene	0.0200	0.0185		mg/Kg		93	79 - 124
Ethylene Dibromide	0.0200	0.0184		mg/Kg		92	80 - 122
Isopropylbenzene	0.0200	0.0184		mg/Kg		92	80 - 125
Methyl acetate	0.0400	0.0344		mg/Kg		86	73 - 123
Methyl tert-butyl ether	0.0200	0.0178		mg/Kg		89	80 - 120
Methylcyclohexane	0.0200	0.0168		mg/Kg		84	71 - 137
Methylene Chloride	0.0200	0.0176		mg/Kg		88	79 - 128
m-Xylene & p-Xylene	0.0200	0.0185		mg/Kg		93	79 - 121
o-Xylene	0.0200	0.0184		mg/Kg		92	79 - 123
Styrene	0.0200	0.0186		mg/Kg		93	78 - 123
Tetrachloroethene	0.0200	0.0186		mg/Kg		93	73 - 130
Toluene	0.0200	0.0184		mg/Kg		92	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0186		mg/Kg		93	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0174		mg/Kg		87	72 - 121
Trichloroethene	0.0200	0.0184		mg/Kg		92	79 - 122
Trichlorofluoromethane	0.0200	0.0196		mg/Kg		98	68 - 136
Vinyl chloride	0.0200	0.0197		mg/Kg		99	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 135*
4-Bromofluorobenzene	*102*		*67 - 126*
Dibromofluoromethane (Surr)	*102*		*61 - 149*
Toluene-d8 (Surr)	*100*		*73 - 121*

Lab Sample ID: LCSD 460-513435/4
Matrix: Solid
Analysis Batch: 513435

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0200		mg/Kg		100	80 - 125	7	30
1,1,2,2-Tetrachloroethane	0.0200	0.0210		mg/Kg		105	72 - 131	10	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0182		mg/Kg		91	78 - 132	9	30
1,1,2-Trichloroethane	0.0200	0.0198		mg/Kg		99	76 - 124	10	30
1,1-Dichloroethane	0.0200	0.0200		mg/Kg		100	80 - 124	9	30
1,1-Dichloroethene	0.0200	0.0195		mg/Kg		97	79 - 132	8	30
1,2,3-Trichlorobenzene	0.0200	0.0197		mg/Kg		98	75 - 123	13	30
1,2,4-Trichlorobenzene	0.0200	0.0192		mg/Kg		96	74 - 124	13	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0200		mg/Kg		100	65 - 129	11	30
1,2-Dichlorobenzene	0.0200	0.0200		mg/Kg		100	80 - 121	9	30
1,2-Dichloroethane	0.0200	0.0193		mg/Kg		96	68 - 120	7	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-513435/4
Matrix: Solid
Analysis Batch: 513435

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane			0.0200	0.0197		mg/Kg		98	77 - 124	9	30
1,3-Dichlorobenzene			0.0200	0.0198		mg/Kg		99	79 - 124	9	30
1,4-Dichlorobenzene			0.0200	0.0195		mg/Kg		97	79 - 121	10	30
1,4-Dioxane			0.400	0.452		mg/Kg		113	67 - 150	4	30
2-Butanone (MEK)			0.100	0.0939		mg/Kg		94	61 - 140	4	30
2-Hexanone			0.100	0.0933		mg/Kg		93	78 - 120	2	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0957		mg/Kg		96	80 - 120	3	30
Acetone			0.100	0.0926		mg/Kg		93	75 - 120	10	30
Benzene			0.0200	0.0203		mg/Kg		101	75 - 127	11	30
Bromoform			0.0200	0.0201		mg/Kg		101	19 - 150	9	30
Bromomethane			0.0200	0.0166		mg/Kg		83	59 - 136	11	30
Carbon disulfide			0.0200	0.0192		mg/Kg		96	74 - 130	7	30
Carbon tetrachloride			0.0200	0.0199		mg/Kg		100	77 - 138	7	30
Chlorobenzene			0.0200	0.0197		mg/Kg		98	80 - 120	7	30
Chlorobromomethane			0.0200	0.0205		mg/Kg		102	80 - 125	9	30
Chlorodibromomethane			0.0200	0.0198		mg/Kg		99	67 - 143	8	30
Chloroethane			0.0200	0.0175		mg/Kg		87	50 - 139	10	30
Chloroform			0.0200	0.0202		mg/Kg		101	80 - 122	7	30
Chloromethane			0.0200	0.0159		mg/Kg		79	66 - 128	11	30
cis-1,2-Dichloroethene			0.0200	0.0198		mg/Kg		99	80 - 123	7	30
cis-1,3-Dichloropropene			0.0200	0.0191		mg/Kg		96	75 - 124	9	30
Cyclohexane			0.0200	0.0184		mg/Kg		92	67 - 135	8	30
Dichlorobromomethane			0.0200	0.0197		mg/Kg		98	76 - 129	6	30
Dichlorodifluoromethane			0.0200	0.0114	*	mg/Kg		57	72 - 127	11	30
Ethylbenzene			0.0200	0.0205		mg/Kg		102	79 - 124	10	30
Ethylene Dibromide			0.0200	0.0200		mg/Kg		100	80 - 122	9	30
Isopropylbenzene			0.0200	0.0205		mg/Kg		102	80 - 125	10	30
Methyl acetate			0.0400	0.0373		mg/Kg		93	73 - 123	8	30
Methyl tert-butyl ether			0.0200	0.0190		mg/Kg		95	80 - 120	7	30
Methylcyclohexane			0.0200	0.0186		mg/Kg		93	71 - 137	10	30
Methylene Chloride			0.0200	0.0193		mg/Kg		97	79 - 128	9	30
m-Xylene & p-Xylene			0.0200	0.0202		mg/Kg		101	79 - 121	8	30
o-Xylene			0.0200	0.0202		mg/Kg		101	79 - 123	9	30
Styrene			0.0200	0.0199		mg/Kg		100	78 - 123	7	30
Tetrachloroethene			0.0200	0.0207		mg/Kg		103	73 - 130	11	30
Toluene			0.0200	0.0200		mg/Kg		100	75 - 122	8	30
trans-1,2-Dichloroethene			0.0200	0.0199		mg/Kg		100	80 - 129	7	30
trans-1,3-Dichloropropene			0.0200	0.0186		mg/Kg		93	72 - 121	6	30
Trichloroethene			0.0200	0.0198		mg/Kg		99	79 - 122	8	30
Trichlorofluoromethane			0.0200	0.0181		mg/Kg		90	68 - 136	8	30
Vinyl chloride			0.0200	0.0174		mg/Kg		87	70 - 134	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 135*
4-Bromofluorobenzene	*101*		*67 - 126*
Dibromofluoromethane (Surr)	*101*		*61 - 149*
Toluene-d8 (Surr)	*100*		*73 - 121*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
J	Indicates an estimated value.
*	LCS or LCSD is outside acceptance limits.
*	MS or MSD is outside acceptance limits.
*	Duplicate RPD exceeds control limits
*	ISTD response or retention time outside acceptable limits
B	The analyte was found in an associated blank, as well as in the sample.
H	Sample was prepped or analyzed beyond the specified holding time

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an estimated value.
N	This flag indicates the presumptive evidence of a compound.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Prep Batch: 504769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152211-1	GC-SB-101(SO)-3-5	Total/NA	Solid	5035	
460-152211-2	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	5035	
460-152211-3	GC-MW-102(SO)-3-5	Total/NA	Solid	5035	
460-152211-4	GC-MW-102(SO)-9-11	Total/NA	Solid	5035	
460-152211-5	GC-MW-103(SO)-3-5	Total/NA	Solid	5035	
460-152211-2 MS	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	5035	
460-152211-2 MSD	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	5035	

Analysis Batch: 504873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152211-1	GC-SB-101(SO)-3-5	Total/NA	Solid	8260C	504769
460-152211-2	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	8260C	504769
460-152211-3	GC-MW-102(SO)-3-5	Total/NA	Solid	8260C	504769
460-152211-4	GC-MW-102(SO)-9-11	Total/NA	Solid	8260C	504769
460-152211-5	GC-MW-103(SO)-3-5	Total/NA	Solid	8260C	504769
MB 460-504873/8	Method Blank	Total/NA	Solid	8260C	
LCS 460-504873/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-504873/5	Lab Control Sample Dup	Total/NA	Solid	8260C	
460-152211-2 MS	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	8260C	504769
460-152211-2 MSD	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	8260C	504769

Prep Batch: 505001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152331-1	GC-MW-103(SO)-12-14	Total/NA	Solid	5035	
460-152331-2	GC-MW-103(SO)-15-17	Total/NA	Solid	5035	
460-152331-3	GC-MW-104(SO)-0.5-2.5	Total/NA	Solid	5035	
460-152331-4	GC-MW-104(SO)-7-9	Total/NA	Solid	5035	
460-152331-5	GC-MW-105(SO)-0.5-2.5	Total/NA	Solid	5035	
460-152331-6	GC-MW-105(SO)-7-9	Total/NA	Solid	5035	
460-152331-7	GC-Drain-02(SO)	Total/NA	Solid	5035	

Analysis Batch: 505749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152331-1	GC-MW-103(SO)-12-14	Total/NA	Solid	8260C	505001
460-152331-3	GC-MW-104(SO)-0.5-2.5	Total/NA	Solid	8260C	505001
460-152331-4	GC-MW-104(SO)-7-9	Total/NA	Solid	8260C	505001
460-152331-5	GC-MW-105(SO)-0.5-2.5	Total/NA	Solid	8260C	505001
460-152331-6	GC-MW-105(SO)-7-9	Total/NA	Solid	8260C	505001
460-152331-7	GC-Drain-02(SO)	Total/NA	Solid	8260C	505001
MB 460-505749/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-505749/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-505749/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 505873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152331-2	GC-MW-103(SO)-15-17	Total/NA	Solid	8260C	505001
MB 460-505873/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-505873/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-505873/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

GC/MS VOA (Continued)

Prep Batch: 506215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152604-2	GC-MW-107D(SO)-15-17	Total/NA	Solid	5035	

Prep Batch: 507385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153018-1	GC-MW-109M(SO)-15-17	Total/NA	Solid	5035	
460-153022-1	GC-MW-107D(SO)-97-99	Total/NA	Solid	5035	

Analysis Batch: 507466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152604-2	GC-MW-107D(SO)-15-17	Total/NA	Solid	8260C	506215
MB 460-507466/9	Method Blank	Total/NA	Solid	8260C	
LCS 460-507466/5	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-507466/6	Lab Control Sample Dup	Total/NA	Solid	8260C	

Prep Batch: 507938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153082-1	GC-MW-109M(SO)-33-35	Total/NA	Solid	5035	

Prep Batch: 508211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153163-1	GC-MW-106(SO)-15-17	Total/NA	Solid	5035	
460-153163-2	GC-MW-108D(SO)-15-17	Total/NA	Solid	5035	

Prep Batch: 508550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153254-1	GC-MW-108D(SO)-33-35	Total/NA	Solid	5035	
460-153254-2	GC-MW-108D(SO)-59-60.5	Total/NA	Solid	5035	

Prep Batch: 508892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153389-1	GC-MW-110D(SO)-15-17	Total/NA	Solid	5035	

Prep Batch: 509399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153515-1	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	5035	
460-153515-1 MS	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	5035	
460-153515-1MSD	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	5035	

Prep Batch: 510009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153682-1	GC-MW-101D(SO)-14-15	Total/NA	Solid	5035	

Analysis Batch: 510106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153022-1	GC-MW-107D(SO)-97-99	Total/NA	Solid	8260C	507385
MB 460-510106/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-510106/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-510106/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

GC/MS VOA (Continued)

Analysis Batch: 510660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153082-1	GC-MW-109M(SO)-33-35	Total/NA	Solid	8260C	507938
460-153163-1	GC-MW-106(SO)-15-17	Total/NA	Solid	8260C	508211
460-153163-2	GC-MW-108D(SO)-15-17	Total/NA	Solid	8260C	508211
MB 460-510660/8	Method Blank	Total/NA	Solid	8260C	
LCS 460-510660/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-510660/5	Lab Control Sample Dup	Total/NA	Solid	8260C	

Prep Batch: 510729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153878-1	GC-MW-101D(SO)(99.2-100)	Total/NA	Solid	5035	

Analysis Batch: 510972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153254-2	GC-MW-108D(SO)-59-60.5	Total/NA	Solid	8260C	508550
MB 460-510972/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-510972/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-510972/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 511293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153254-1	GC-MW-108D(SO)-33-35	Total/NA	Solid	8260C	508550
MB 460-511293/8	Method Blank	Total/NA	Solid	8260C	
LCS 460-511293/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-511293/5	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 511471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153515-1	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	8260C	509399
MB 460-511471/8	Method Blank	Total/NA	Solid	8260C	
LCS 460-511471/5	Lab Control Sample	Total/NA	Solid	8260C	
460-153515-1 MS	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	8260C	509399
460-153515-1MSD	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	8260C	509399

Analysis Batch: 511498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153682-1	GC-MW-101D(SO)-14-15	Total/NA	Solid	8260C	510009
MB 460-511498/8	Method Blank	Total/NA	Solid	8260C	
LCS 460-511498/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-511498/5	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 512479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153389-1	GC-MW-110D(SO)-15-17	Total/NA	Solid	8260C	508892
MB 460-512479/8	Method Blank	Total/NA	Solid	8260C	
LCS 460-512479/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-512479/5	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 512623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153878-1	GC-MW-101D(SO)(99.2-100)	Total/NA	Solid	8260C	510729
MB 460-512623/7	Method Blank	Total/NA	Solid	8260C	

GC/MS VOA (Continued)

Analysis Batch: 512623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-512623/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-512623/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 513435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153018-1	GC-MW-109M(SO)-15-17	Total/NA	Solid	8260C	507385
MB 460-513435/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-513435/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-513435/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

General Chemistry

Analysis Batch: 504785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152211-1	GC-SB-101(SO)-3-5	Total/NA	Solid	Moisture	
460-152211-2	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	Moisture	
460-152211-3	GC-MW-102(SO)-3-5	Total/NA	Solid	Moisture	
460-152211-4	GC-MW-102(SO)-9-11	Total/NA	Solid	Moisture	
460-152211-5	GC-MW-103(SO)-3-5	Total/NA	Solid	Moisture	
460-152211-2 MS	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	Moisture	
460-152211-2 MSD	GC-SB-101(SO)-15.5-17.5	Total/NA	Solid	Moisture	
460-152227-A-4 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 505544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152331-1	GC-MW-103(SO)-12-14	Total/NA	Solid	Moisture	
460-152331-2	GC-MW-103(SO)-15-17	Total/NA	Solid	Moisture	
460-152331-3	GC-MW-104(SO)-0.5-2.5	Total/NA	Solid	Moisture	
460-152331-4	GC-MW-104(SO)-7-9	Total/NA	Solid	Moisture	
460-152331-5	GC-MW-105(SO)-0.5-2.5	Total/NA	Solid	Moisture	
460-152331-6	GC-MW-105(SO)-7-9	Total/NA	Solid	Moisture	
460-152331-7	GC-Drain-02(SO)	Total/NA	Solid	Moisture	
460-152436-D-5 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 506862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-152604-2	GC-MW-107D(SO)-15-17	Total/NA	Solid	Moisture	
460-152796-E-8 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 508742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153254-1	GC-MW-108D(SO)-33-35	Total/NA	Solid	Moisture	
460-153254-2	GC-MW-108D(SO)-59-60.5	Total/NA	Solid	Moisture	
460-153244-A-5 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 508755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153022-1	GC-MW-107D(SO)-97-99	Total/NA	Solid	Moisture	
460-153082-1	GC-MW-109M(SO)-33-35	Total/NA	Solid	Moisture	
460-153163-1	GC-MW-106(SO)-15-17	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 508755 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153163-2	GC-MW-108D(SO)-15-17	Total/NA	Solid	Moisture	
460-153266-A-7 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 509861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153515-1	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	Moisture	
460-153515-1 MS	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	Moisture	
460-153515-1MSD	GE-MW-110D(SO)-(69-70)	Total/NA	Solid	Moisture	
460-153588-A-1 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 510083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153682-1	GC-MW-101D(SO)-14-15	Total/NA	Solid	Moisture	
460-153702-A-1 MS	Matrix Spike	Total/NA	Solid	Moisture	

Analysis Batch: 510842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153878-1	GC-MW-101D(SO)(99.2-100)	Total/NA	Solid	Moisture	
460-153876-C-2 MS	Matrix Spike	Total/NA	Solid	Moisture	
460-153876-C-2 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 512605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153018-1	GC-MW-109M(SO)-15-17	Total/NA	Solid	Moisture	
460-154343-E-1 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 512677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-153389-1	GC-MW-110D(SO)-15-17	Total/NA	Solid	Moisture	

Client Sample ID: GC-SB-101(SO)-3-5
Lab Sample ID: 460-152211-1
Date Collected: 03/19/18 09:10
Matrix: Solid
Date Received: 03/19/18 20:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	504785	03/20/18 11:16	BJP	TAL EDI

Client Sample ID: GC-SB-101(SO)-3-5
Lab Sample ID: 460-152211-1
Date Collected: 03/19/18 09:10
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			504769	03/20/18 10:02	DBM	TAL EDI
Total/NA	Analysis	8260C		1	504873	03/21/18 04:44	MZS	TAL EDI

Client Sample ID: GC-SB-101(SO)-15.5-17.5
Lab Sample ID: 460-152211-2
Date Collected: 03/19/18 09:20
Matrix: Solid
Date Received: 03/19/18 20:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	504785	03/20/18 11:16	BJP	TAL EDI

Client Sample ID: GC-SB-101(SO)-15.5-17.5
Lab Sample ID: 460-152211-2
Date Collected: 03/19/18 09:20
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			504769	03/20/18 10:02	DBM	TAL EDI
Total/NA	Analysis	8260C		1	504873	03/21/18 02:43	MZS	TAL EDI

Client Sample ID: GC-MW-102(SO)-3-5
Lab Sample ID: 460-152211-3
Date Collected: 03/19/18 11:35
Matrix: Solid
Date Received: 03/19/18 20:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	504785	03/20/18 11:16	BJP	TAL EDI

Client Sample ID: GC-MW-102(SO)-3-5
Lab Sample ID: 460-152211-3
Date Collected: 03/19/18 11:35
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			504769	03/20/18 10:04	DBM	TAL EDI
Total/NA	Analysis	8260C		1	504873	03/21/18 05:09	MZS	TAL EDI

Client Sample ID: GC-MW-102(SO)-9-11
Lab Sample ID: 460-152211-4
Date Collected: 03/19/18 11:30
Matrix: Solid
Date Received: 03/19/18 20:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	504785	03/20/18 11:16	BJP	TAL EDI

Client Sample ID: GC-MW-102(SO)-9-11
Lab Sample ID: 460-152211-4
Date Collected: 03/19/18 11:30
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			504769	03/20/18 10:05	DBM	TAL EDI
Total/NA	Analysis	8260C		1	504873	03/21/18 05:33	MZS	TAL EDI

Client Sample ID: GC-MW-103(SO)-3-5
Lab Sample ID: 460-152211-5
Date Collected: 03/19/18 14:00
Matrix: Solid
Date Received: 03/19/18 20:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	504785	03/20/18 11:16	BJP	TAL EDI

Client Sample ID: GC-MW-103(SO)-3-5
Lab Sample ID: 460-152211-5
Date Collected: 03/19/18 14:00
Matrix: Solid
Date Received: 03/19/18 20:00
Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			504769	03/20/18 10:06	DBM	TAL EDI
Total/NA	Analysis	8260C		1	504873	03/21/18 05:57	MZS	TAL EDI

Client Sample ID: GC-MW-103(SO)-12-14
Lab Sample ID: 460-152331-1
Date Collected: 03/20/18 09:10
Matrix: Solid
Date Received: 03/20/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	505544	03/23/18 09:13	BJP	TAL EDI

Client Sample ID: GC-MW-103(SO)-12-14
Lab Sample ID: 460-152331-1
Date Collected: 03/20/18 09:10
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			505001	03/21/18 07:50	DBM	TAL EDI
Total/NA	Analysis	8260C		1	505749	03/24/18 10:37	AAT	TAL EDI

Client Sample ID: GC-MW-103(SO)-15-17
Lab Sample ID: 460-152331-2
Date Collected: 03/20/18 09:45
Matrix: Solid
Date Received: 03/20/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	505544	03/23/18 09:13	BJP	TAL EDI

Client Sample ID: GC-MW-103(SO)-15-17
Lab Sample ID: 460-152331-2
Date Collected: 03/20/18 09:45
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			505001	03/21/18 07:50	DBM	TAL EDI
Total/NA	Analysis	8260C		1	505873	03/25/18 13:30	JXC	TAL EDI

Client Sample ID: GC-MW-104(SO)-0.5-2.5
Lab Sample ID: 460-152331-3
Date Collected: 03/20/18 10:40
Matrix: Solid
Date Received: 03/20/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	505544	03/23/18 09:13	BJP	TAL EDI

Client Sample ID: GC-MW-104(SO)-0.5-2.5
Lab Sample ID: 460-152331-3
Date Collected: 03/20/18 10:40
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 96.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			505001	03/21/18 07:51	DBM	TAL EDI
Total/NA	Analysis	8260C		1	505749	03/24/18 08:36	AAT	TAL EDI

Client Sample ID: GC-MW-104(SO)-7-9
Lab Sample ID: 460-152331-4
Date Collected: 03/20/18 10:45
Matrix: Solid
Date Received: 03/20/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	505544	03/23/18 09:13	BJP	TAL EDI

Client Sample ID: GC-MW-104(SO)-7-9
Lab Sample ID: 460-152331-4
Date Collected: 03/20/18 10:45
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			505001	03/21/18 07:51	DBM	TAL EDI
Total/NA	Analysis	8260C		1	505749	03/24/18 09:01	AAT	TAL EDI

Client Sample ID: GC-MW-105(SO)-0.5-2.5
Lab Sample ID: 460-152331-5
Date Collected: 03/20/18 12:20
Matrix: Solid
Date Received: 03/20/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	505544	03/23/18 09:13	BJP	TAL EDI

Client Sample ID: GC-MW-105(SO)-0.5-2.5
Lab Sample ID: 460-152331-5
Date Collected: 03/20/18 12:20
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			505001	03/21/18 07:52	DBM	TAL EDI
Total/NA	Analysis	8260C		1	505749	03/24/18 09:24	AAT	TAL EDI

Client Sample ID: GC-MW-105(SO)-7-9
Lab Sample ID: 460-152331-6
Date Collected: 03/20/18 12:25
Matrix: Solid
Date Received: 03/20/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	505544	03/23/18 09:13	BJP	TAL EDI

Client Sample ID: GC-MW-105(SO)-7-9
Lab Sample ID: 460-152331-6
Date Collected: 03/20/18 12:25
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			505001	03/21/18 07:52	DBM	TAL EDI
Total/NA	Analysis	8260C		1	505749	03/24/18 09:49	AAT	TAL EDI

Client Sample ID: GC-Drain-02(SO)
Lab Sample ID: 460-152331-7
Date Collected: 03/20/18 13:35
Matrix: Solid
Date Received: 03/20/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	505544	03/23/18 09:13	BJP	TAL EDI

Client Sample ID: GC-Drain-02(SO)
Lab Sample ID: 460-152331-7
Date Collected: 03/20/18 13:35
Matrix: Solid
Date Received: 03/20/18 19:40
Percent Solids: 34.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			505001	03/21/18 07:53	DBM	TAL EDI
Total/NA	Analysis	8260C		1	505749	03/24/18 10:13	AAT	TAL EDI

Client Sample ID: GC-MW-107D(SO)-15-17
Lab Sample ID: 460-152604-2
Date Collected: 03/26/18 11:00
Matrix: Solid
Date Received: 03/26/18 20:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506862	03/29/18 07:45	BJP	TAL EDI

Client Sample ID: GC-MW-107D(SO)-15-17
Lab Sample ID: 460-152604-2
Date Collected: 03/26/18 11:00
Matrix: Solid
Date Received: 03/26/18 20:30
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506215	03/27/18 02:29	AVM	TAL EDI
Total/NA	Analysis	8260C		1	507466	03/31/18 19:59	AAT	TAL EDI

Client Sample ID: GC-MW-109M(SO)-15-17
Lab Sample ID: 460-153018-1
Date Collected: 03/30/18 09:25
Matrix: Solid
Date Received: 03/30/18 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	512605	04/20/18 01:09	VMI	TAL EDI

Client Sample ID: GC-MW-109M(SO)-15-17
Lab Sample ID: 460-153018-1
Date Collected: 03/30/18 09:25
Matrix: Solid
Date Received: 03/30/18 19:00
Percent Solids: 97.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			507385	03/31/18 00:38	AVM	TAL EDI
Total/NA	Analysis	8260C		1	513435	04/23/18 21:10	XXC	TAL EDI

Client Sample ID: GC-MW-107D(SO)-97-99
Lab Sample ID: 460-153022-1
Date Collected: 03/29/18 12:15
Matrix: Solid
Date Received: 03/30/18 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	508755	04/05/18 12:07	BJP	TAL EDI

Client Sample ID: GC-MW-107D(SO)-97-99
Lab Sample ID: 460-153022-1
Date Collected: 03/29/18 12:15
Matrix: Solid
Date Received: 03/30/18 19:00
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			507385	03/31/18 00:38	AVM	TAL EDI
Total/NA	Analysis	8260C		1	510106	04/11/18 13:45	EMM	TAL EDI

Client Sample ID: GC-MW-109M(SO)-33-35
Lab Sample ID: 460-153082-1
Date Collected: 04/02/18 10:00
Matrix: Solid
Date Received: 04/02/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	508755	04/05/18 12:07	BJP	TAL EDI

Client Sample ID: GC-MW-109M(SO)-33-35
Lab Sample ID: 460-153082-1
Date Collected: 04/02/18 10:00
Matrix: Solid
Date Received: 04/02/18 19:40
Percent Solids: 75.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			507938	04/03/18 01:29	AVM	TAL EDI
Total/NA	Analysis	8260C		1	510660	04/13/18 03:26	AAT	TAL EDI

Client Sample ID: GC-MW-106(SO)-15-17
Lab Sample ID: 460-153163-1
Date Collected: 04/03/18 08:40
Matrix: Solid
Date Received: 04/03/18 20:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	508755	04/05/18 12:07	BJP	TAL EDI

Client Sample ID: GC-MW-106(SO)-15-17
Lab Sample ID: 460-153163-1
Date Collected: 04/03/18 08:40
Matrix: Solid
Date Received: 04/03/18 20:33
Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			508211	04/03/18 23:04	AVM	TAL EDI
Total/NA	Analysis	8260C		1	510660	04/13/18 03:51	AAT	TAL EDI

Client Sample ID: GC-MW-108D(SO)-15-17
Lab Sample ID: 460-153163-2
Date Collected: 04/03/18 11:10
Matrix: Solid
Date Received: 04/03/18 20:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	508755	04/05/18 12:07	BJP	TAL EDI

Client Sample ID: GC-MW-108D(SO)-15-17
Lab Sample ID: 460-153163-2
Date Collected: 04/03/18 11:10
Matrix: Solid
Date Received: 04/03/18 20:33
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			508211	04/03/18 23:04	AVM	TAL EDI
Total/NA	Analysis	8260C		1	510660	04/13/18 04:15	AAT	TAL EDI

Client Sample ID: GC-MW-108D(SO)-33-35
Lab Sample ID: 460-153254-1
Date Collected: 04/04/18 08:00
Matrix: Solid
Date Received: 04/04/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	508742	04/05/18 11:38	BJP	TAL EDI

Client Sample ID: GC-MW-108D(SO)-33-35
Lab Sample ID: 460-153254-1
Date Collected: 04/04/18 08:00
Matrix: Solid
Date Received: 04/04/18 18:00
Percent Solids: 75.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			508550	04/04/18 22:37	AVM	TAL EDI
Total/NA	Analysis	8260C		1	511293	04/16/18 10:34	AAT	TAL EDI

Client Sample ID: GC-MW-108D(SO)-59-60.5
Lab Sample ID: 460-153254-2
Date Collected: 04/04/18 10:00
Matrix: Solid
Date Received: 04/04/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	508742	04/05/18 11:38	BJP	TAL EDI

Client Sample ID: GC-MW-108D(SO)-59-60.5
Lab Sample ID: 460-153254-2
Date Collected: 04/04/18 10:00
Matrix: Solid
Date Received: 04/04/18 18:00
Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			508550	04/04/18 22:37	AVM	TAL EDI
Total/NA	Analysis	8260C		1	510972	04/14/18 01:15	AAT	TAL EDI

Client Sample ID: GC-MW-110D(SO)-15-17
Lab Sample ID: 460-153389-1
Date Collected: 04/05/18 08:00
Matrix: Solid
Date Received: 04/05/18 20:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	512677	04/20/18 07:26	BJP	TAL EDI

Client Sample ID: GC-MW-110D(SO)-15-17
Lab Sample ID: 460-153389-1
Date Collected: 04/05/18 08:00
Matrix: Solid
Date Received: 04/05/18 20:00
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			508892	04/06/18 00:35	AVM	TAL EDI
Total/NA	Analysis	8260C		1	512479	04/19/18 21:03	EMM	TAL EDI

Client Sample ID: GE-MW-110D(SO)-(69-70)

Lab Sample ID: 460-153515-1
Date Collected: 04/06/18 10:25
Matrix: Solid
Date Received: 04/06/18 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	509861	04/10/18 10:47	BJP	TAL EDI

Client Sample ID: GE-MW-110D(SO)-(69-70)

Lab Sample ID: 460-153515-1
Date Collected: 04/06/18 10:25
Matrix: Solid
Date Received: 04/06/18 19:20
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			509399	04/08/18 08:35	DBM	TAL EDI
Total/NA	Analysis	8260C		1	511471	04/16/18 21:52	AAT	TAL EDI

Client Sample ID: GC-MW-101D(SO)-14-15

Lab Sample ID: 460-153682-1
Date Collected: 04/09/18 13:10
Matrix: Solid
Date Received: 04/10/18 20:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	510083	04/11/18 07:20	BJP	TAL EDI

Client Sample ID: GC-MW-101D(SO)-14-15

Lab Sample ID: 460-153682-1
Date Collected: 04/09/18 13:10
Matrix: Solid
Date Received: 04/10/18 20:00
Percent Solids: 96.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			510009	04/11/18 00:38	AVM	TAL EDI
Total/NA	Analysis	8260C		1	511498	04/17/18 04:24	AAT	TAL EDI

Client Sample ID: GC-MW-101D(SO)(99.2-100)

Lab Sample ID: 460-153878-1
Date Collected: 04/11/18 13:15
Matrix: Solid
Date Received: 04/12/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	510842	04/13/18 08:43	BJP	TAL EDI

Client Sample ID: GC-MW-101D(SO)(99.2-100)

Lab Sample ID: 460-153878-1
Date Collected: 04/11/18 13:15
Matrix: Solid
Date Received: 04/12/18 18:00
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			510729	04/13/18 00:00	AVM	TAL EDI
Total/NA	Analysis	8260C		1	512623	04/20/18 16:23	AAT	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: TRC Environmental Corporation
TestAmerica Job ID: 460-152211-1
Project/Site: GEM Cleaners

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

New York	NELAP	2	11452	04-01-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

8260C

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
GC-SB-101(SO)-3-5	460-152211-1	113	125	104	108
GC-SB-101(SO) -15.5-17.5	460-152211-2	116	126	107	107
GC-MW-102(SO)-3-5	460-152211-3	117	129	107	107
GC-MW-102(SO)-9-11	460-152211-4	115	127	105	105
GC-MW-103(SO)-3-5	460-152211-5	115 *	132 *	102 *	105 *
GC-MW-103(SO) -12-14	460-152331-1	103	111	107	102
GC-MW-103(SO) -15-17	460-152331-2	97	105	99	96
GC-MW-104(SO) -0.5-2.5	460-152331-3	105	111	103	99
GC-MW-104(SO)-7-9	460-152331-4	104	112	104	102
GC-MW-105(SO) -0.5-2.5	460-152331-5	105	114	104	101
GC-MW-105(SO)-7-9	460-152331-6	102	111	105	100
GC-Drain-02(SO)	460-152331-7	102	107	109	92
GC-MW-107D(SO) -15-17	460-152604-2	124	129	86	93
GC-MW-109M(SO) -15-17	460-153018-1	105	102	97	104
GC-MW-107D(SO) -97-99	460-153022-1	79	82	95	101
GC-MW-109M(SO) -33-35	460-153082-1	126	121	102	117
GC-MW-106(SO) -15-17	460-153163-1	121	121	98	111
GC-MW-108D(SO) -15-17	460-153163-2	121	122	99	114
GC-MW-108D(SO) -33-35	460-153254-1	127	123	101	113
GC-MW-108D(SO) -59-60.5	460-153254-2	122	119	102	115
GC-MW-110D(SO) -15-17	460-153389-1	80	80	97	97
GE-MW-110D(SO)- (69-70)	460-153515-1	126	121	100	114
GC-MW-101D(SO) -14-15	460-153682-1	85	90	97	95
GC-MW-101D(SO) (99.2-100)	460-153878-1	77	82	97	98
	MB 460-504873/8	111	123	103	103
	MB 460-505749/7	96	96	98	93
	MB 460-505873/7	97	99	95	92

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	61-149
DCA = 1,2-Dichloroethane-d4 (Surr)	78-135
TOL = Toluene-d8 (Surr)	73-121
BFB = 4-Bromofluorobenzene	67-126

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	MB 460-507466/9	114	115	94	83
	MB 460-510106/7	78	81	97	102
	MB 460-510660/8	120	118	99	112
	MB 460-510972/7	120	113	101	113
	MB 460-511293/8	120	114	99	109
	MB 460-511471/8	122	115	98	112
	MB 460-511498/8	83	85	100	95
	MB 460-512479/8	80	82	97	97
	MB 460-512623/7	77	78	97	98
	MB 460-513435/7	97	92	92	100
	LCS 460-504873/4	108	114	104	103
	LCS 460-505749/3	101	104	103	97
	LCS 460-505873/3	104	108	105	101
	LCS 460-507466/5	104	112	101	82
	LCS 460-510106/3	81	85	99	102
	LCS 460-510660/4	116	112	98	112
	LCS 460-510972/3	115	112	98	109
	LCS 460-511293/4	119	119	100	112
	LCS 460-511471/5	119	116	100	112
	LCS 460-511498/4	85	89	101	95
	LCS 460-512479/4	81	84	98	98
	LCS 460-512623/3	79	80	100	102
	LCS 460-513435/3	102	96	100	102
	LCSD 460-504873/5	108	115	105	103
	LCSD 460-505749/4	99	104	102	97
	LCSD 460-505873/4	105	107	105	100
	LCSD 460-507466/6	98	106	94	76
	LCSD 460-510106/4	81	86	100	101
	LCSD 460-510660/5	116	114	98	114
	LCSD 460-510972/4	106	106	88	100
	LCSD 460-511293/5	111	107	91	101

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	61-149
DCA = 1,2-Dichloroethane-d4 (Surr)	78-135
TOL = Toluene-d8 (Surr)	73-121
BFB = 4-Bromofluorobenzene	67-126

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	LCSD 460-511498/5	85	88	102	96
	LCSD 460-512479/5	80	82	98	100
	LCSD 460-512623/4	80	81	99	99
	LCSD 460-513435/4	101	97	100	101
GC-SB-101(SO) -15.5-17.5 MS	460-152211-2 MS	114	117	108	108
GE-MW-110D(SO)- (69-70) MS	460-153515-1 MS	123	118	104	113
GC-SB-101(SO) -15.5-17.5 MSD	460-152211-2 MSD	115	120	109	109
GE-MW-110D(SO)- (69-70) MSD	460-153515-1 MSD	123	115	102	109

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	61-149
DCA = 1,2-Dichloroethane-d4 (Surr)	78-135
TOL = Toluene-d8 (Surr)	73-121
BFB = 4-Bromofluorobenzene	67-126

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81012.D

Lab ID: LCS 460-504873/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0203	101	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0207	103	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0193	97	78-132	
1,1,2-Trichloroethane	0.0200	0.0184	92	76-124	
1,1-Dichloroethane	0.0200	0.0228	114	80-124	
1,1-Dichloroethene	0.0200	0.0194	97	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0192	96	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0199	99	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0181	91	65-129	
1,2-Dichlorobenzene	0.0200	0.0184	92	80-121	
1,2-Dichloroethane	0.0200	0.0197	99	68-120	
1,2-Dichloropropane	0.0200	0.0217	109	77-124	
1,3-Dichlorobenzene	0.0200	0.0187	93	79-124	
1,4-Dichlorobenzene	0.0200	0.0185	92	79-121	
1,4-Dioxane	0.400	0.307	77	67-150	
2-Butanone (MEK)	0.100	0.0711	71	61-140	
2-Hexanone	0.100	0.0899	90	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0933	93	80-120	
Acetone	0.100	0.0802	80	75-120	
Benzene	0.0200	0.0213	107	75-127	
Bromoform	0.0200	0.0161	81	19-150	
Bromomethane	0.0200	0.0179	89	59-136	
Carbon disulfide	0.0200	0.0218	109	74-130	
Carbon tetrachloride	0.0200	0.0194	97	77-138	
Chlorobenzene	0.0200	0.0181	90	80-120	
Chlorobromomethane	0.0200	0.0181	91	80-125	
Chlorodibromomethane	0.0200	0.0165	83	67-143	
Chloroethane	0.0200	0.0198	99	50-139	
Chloroform	0.0200	0.0206	103	80-122	
Chloromethane	0.0200	0.0219	109	66-128	
cis-1,2-Dichloroethene	0.0200	0.0196	98	80-123	
cis-1,3-Dichloropropene	0.0200	0.0198	99	75-124	
Cyclohexane	0.0200	0.0204	102	67-135	
Dichlorobromomethane	0.0200	0.0190	95	76-129	
Dichlorodifluoromethane	0.0200	0.0177	88	72-127	
Ethylbenzene	0.0200	0.0185	93	79-124	
Ethylene Dibromide	0.0200	0.0180	90	80-122	
Isopropylbenzene	0.0200	0.0184	92	80-125	
Methyl acetate	0.100	0.124	124	73-123	*
Methyl tert-butyl ether	0.0200	0.0198	99	80-120	
Methylcyclohexane	0.0200	0.0204	102	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81012.D

Lab ID: LCS 460-504873/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0195	98	79-128	
m-Xylene & p-Xylene	0.0200	0.0187	93	79-121	
o-Xylene	0.0200	0.0187	94	79-123	
Styrene	0.0200	0.0185	92	78-123	
Tetrachloroethene	0.0200	0.0182	91	73-130	
Toluene	0.0200	0.0195	97	75-122	
trans-1,2-Dichloroethene	0.0200	0.0201	101	80-129	
trans-1,3-Dichloropropene	0.0200	0.0198	99	72-121	
Trichloroethene	0.0200	0.0198	99	79-122	
Trichlorofluoromethane	0.0200	0.0169	84	68-136	
Vinyl chloride	0.0200	0.0210	105	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81119.D

Lab ID: LCS 460-505749/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0202	101	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0191	95	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0206	103	78-132	
1,1,2-Trichloroethane	0.0200	0.0198	99	76-124	
1,1-Dichloroethane	0.0200	0.0204	102	80-124	
1,1-Dichloroethene	0.0200	0.0205	102	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0200	100	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0208	104	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0196	98	65-129	
1,2-Dichlorobenzene	0.0200	0.0200	100	80-121	
1,2-Dichloroethane	0.0200	0.0195	98	68-120	
1,2-Dichloropropane	0.0200	0.0196	98	77-124	
1,3-Dichlorobenzene	0.0200	0.0205	103	79-124	
1,4-Dichlorobenzene	0.0200	0.0201	101	79-121	
1,4-Dioxane	0.400	0.416	104	67-150	
2-Butanone (MEK)	0.100	0.0901	90	61-140	
2-Hexanone	0.100	0.0968	97	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0962	96	80-120	
Acetone	0.100	0.0917	92	75-120	
Benzene	0.0200	0.0202	101	75-127	
Bromoform	0.0200	0.0174	87	19-150	
Bromomethane	0.0200	0.0202	101	59-136	
Carbon disulfide	0.0200	0.0202	101	74-130	
Carbon tetrachloride	0.0200	0.0212	106	77-138	
Chlorobenzene	0.0200	0.0200	100	80-120	
Chlorobromomethane	0.0200	0.0187	93	80-125	
Chlorodibromomethane	0.0200	0.0186	93	67-143	
Chloroethane	0.0200	0.0212	106	50-139	
Chloroform	0.0200	0.0199	100	80-122	
Chloromethane	0.0200	0.0228	114	66-128	
cis-1,2-Dichloroethene	0.0200	0.0193	97	80-123	
cis-1,3-Dichloropropene	0.0200	0.0203	101	75-124	
Cyclohexane	0.0200	0.0210	105	67-135	
Dichlorobromomethane	0.0200	0.0191	96	76-129	
Dichlorodifluoromethane	0.0200	0.0220	110	72-127	
Ethylbenzene	0.0200	0.0195	98	79-124	
Ethylene Dibromide	0.0200	0.0185	93	80-122	
Isopropylbenzene	0.0200	0.0200	100	80-125	
Methyl acetate	0.100	0.100	100	73-123	
Methyl tert-butyl ether	0.0200	0.0197	98	80-120	
Methylcyclohexane	0.0200	0.0212	106	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81119.D

Lab ID: LCS 460-505749/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0192	96	79-128	
m-Xylene & p-Xylene	0.0200	0.0196	98	79-121	
o-Xylene	0.0200	0.0195	97	79-123	
Styrene	0.0200	0.0201	100	78-123	
Tetrachloroethene	0.0200	0.0194	97	73-130	
Toluene	0.0200	0.0202	101	75-122	
trans-1,2-Dichloroethene	0.0200	0.0202	101	80-129	
trans-1,3-Dichloropropene	0.0200	0.0200	100	72-121	
Trichloroethene	0.0200	0.0197	99	79-122	
Trichlorofluoromethane	0.0200	0.0237	118	68-136	
Vinyl chloride	0.0200	0.0230	115	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81148.D

Lab ID: LCS 460-505873/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0222	111	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0196	98	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0222	111	78-132	
1,1,2-Trichloroethane	0.0200	0.0199	99	76-124	
1,1-Dichloroethane	0.0200	0.0214	107	80-124	
1,1-Dichloroethene	0.0200	0.0215	108	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0205	103	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0216	108	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0195	97	65-129	
1,2-Dichlorobenzene	0.0200	0.0206	103	80-121	
1,2-Dichloroethane	0.0200	0.0205	103	68-120	
1,2-Dichloropropane	0.0200	0.0203	101	77-124	
1,3-Dichlorobenzene	0.0200	0.0210	105	79-124	
1,4-Dichlorobenzene	0.0200	0.0205	103	79-121	
1,4-Dioxane	0.400	0.411	103	67-150	
2-Butanone (MEK)	0.100	0.0949	95	61-140	
2-Hexanone	0.100	0.101	101	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0981	98	80-120	
Acetone	0.100	0.0955	96	75-120	
Benzene	0.0200	0.0213	106	75-127	
Bromoform	0.0200	0.0203	102	19-150	
Bromomethane	0.0200	0.0208	104	59-136	
Carbon disulfide	0.0200	0.0209	105	74-130	
Carbon tetrachloride	0.0200	0.0238	119	77-138	
Chlorobenzene	0.0200	0.0209	104	80-120	
Chlorobromomethane	0.0200	0.0186	93	80-125	
Chlorodibromomethane	0.0200	0.0202	101	67-143	
Chloroethane	0.0200	0.0220	110	50-139	
Chloroform	0.0200	0.0208	104	80-122	
Chloromethane	0.0200	0.0230	115	66-128	
cis-1,2-Dichloroethene	0.0200	0.0207	104	80-123	
cis-1,3-Dichloropropene	0.0200	0.0206	103	75-124	
Cyclohexane	0.0200	0.0228	114	67-135	
Dichlorobromomethane	0.0200	0.0203	101	76-129	
Dichlorodifluoromethane	0.0200	0.0230	115	72-127	
Ethylbenzene	0.0200	0.0211	105	79-124	
Ethylene Dibromide	0.0200	0.0191	95	80-122	
Isopropylbenzene	0.0200	0.0216	108	80-125	
Methyl acetate	0.100	0.104	104	73-123	
Methyl tert-butyl ether	0.0200	0.0204	102	80-120	
Methylcyclohexane	0.0200	0.0230	115	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81148.D

Lab ID: LCS 460-505873/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0196	98	79-128	
m-Xylene & p-Xylene	0.0200	0.0210	105	79-121	
o-Xylene	0.0200	0.0208	104	79-123	
Styrene	0.0200	0.0211	106	78-123	
Tetrachloroethene	0.0200	0.0206	103	73-130	
Toluene	0.0200	0.0210	105	75-122	
trans-1,2-Dichloroethene	0.0200	0.0209	105	80-129	
trans-1,3-Dichloropropene	0.0200	0.0210	105	72-121	
Trichloroethene	0.0200	0.0208	104	79-122	
Trichlorofluoromethane	0.0200	0.0237	119	68-136	
Vinyl chloride	0.0200	0.0233	117	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: B28116.D

Lab ID: LCS 460-507466/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0219	110	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0219	109	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0181	90	78-132	
1,1,2-Trichloroethane	0.0200	0.0210	105	76-124	
1,1-Dichloroethane	0.0200	0.0176	88	80-124	
1,1-Dichloroethene	0.0200	0.0173	86	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0209	105	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0230	115	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0262	131	65-129	*
1,2-Dichlorobenzene	0.0200	0.0204	102	80-121	
1,2-Dichloroethane	0.0200	0.0209	105	68-120	
1,2-Dichloropropane	0.0200	0.0210	105	77-124	
1,3-Dichlorobenzene	0.0200	0.0202	101	79-124	
1,4-Dichlorobenzene	0.0200	0.0202	101	79-121	
1,4-Dioxane	0.400	0.504	126	67-150	
2-Butanone (MEK)	0.100	0.0991	99	61-140	
2-Hexanone	0.100	0.0737	74	78-120	*
4-Methyl-2-pentanone (MIBK)	0.100	0.0960	96	80-120	
Acetone	0.100	0.0772	77	75-120	
Benzene	0.0200	0.0215	107	75-127	
Bromoform	0.0200	0.0225	113	19-150	
Bromomethane	0.0200	0.0188	94	59-136	
Carbon disulfide	0.0200	0.0175	87	74-130	
Carbon tetrachloride	0.0200	0.0213	107	77-138	
Chlorobenzene	0.0200	0.0212	106	80-120	
Chlorobromomethane	0.0200	0.0202	101	80-125	
Chlorodibromomethane	0.0200	0.0224	112	67-143	
Chloroethane	0.0200	0.0169	85	50-139	
Chloroform	0.0200	0.0216	108	80-122	
Chloromethane	0.0200	0.0228	114	66-128	
cis-1,2-Dichloroethene	0.0200	0.0195	97	80-123	
cis-1,3-Dichloropropene	0.0200	0.0208	104	75-124	
Cyclohexane	0.0200	0.0202	101	67-135	
Dichlorobromomethane	0.0200	0.0217	108	76-129	
Dichlorodifluoromethane	0.0200	0.0196	98	72-127	
Ethylbenzene	0.0200	0.0199	99	79-124	
Ethylene Dibromide	0.0200	0.0220	110	80-122	
Isopropylbenzene	0.0200	0.0211	106	80-125	
Methyl acetate	0.100	0.0814	81	73-123	
Methyl tert-butyl ether	0.0200	0.0173	86	80-120	
Methylcyclohexane	0.0200	0.0196	98	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: B28116.D

Lab ID: LCS 460-507466/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0169	85	79-128	
m-Xylene & p-Xylene	0.0200	0.0197	98	79-121	
o-Xylene	0.0200	0.0201	100	79-123	
Styrene	0.0200	0.0213	107	78-123	
Tetrachloroethene	0.0200	0.0215	107	73-130	
Toluene	0.0200	0.0204	102	75-122	
trans-1,2-Dichloroethene	0.0200	0.0189	95	80-129	
trans-1,3-Dichloropropene	0.0200	0.0198	99	72-121	
Trichloroethene	0.0200	0.0198	99	79-122	
Trichlorofluoromethane	0.0200	0.0172	86	68-136	
Vinyl chloride	0.0200	0.0197	98	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48511.D

Lab ID: LCS 460-510106/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0175	88	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0211	105	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0172	86	78-132	
1,1,2-Trichloroethane	0.0200	0.0208	104	76-124	
1,1-Dichloroethane	0.0200	0.0192	96	80-124	
1,1-Dichloroethene	0.0200	0.0178	89	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0203	102	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0204	102	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0175	87	65-129	
1,2-Dichlorobenzene	0.0200	0.0199	99	80-121	
1,2-Dichloroethane	0.0200	0.0179	89	68-120	
1,2-Dichloropropane	0.0200	0.0192	96	77-124	
1,3-Dichlorobenzene	0.0200	0.0204	102	79-124	
1,4-Dichlorobenzene	0.0200	0.0205	102	79-121	
1,4-Dioxane	0.400	0.438	110	67-150	
2-Butanone (MEK)	0.100	0.0796	80	61-140	
2-Hexanone	0.100	0.0909	91	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0929	93	80-120	
Acetone	0.100	0.0829	83	75-120	
Benzene	0.0200	0.0208	104	75-127	
Bromoform	0.0200	0.0162	81	19-150	
Bromomethane	0.0200	0.0170	85	59-136	
Carbon disulfide	0.0200	0.0173	87	74-130	
Carbon tetrachloride	0.0200	0.0170	85	77-138	
Chlorobenzene	0.0200	0.0202	101	80-120	
Chlorobromomethane	0.0200	0.0174	87	80-125	
Chlorodibromomethane	0.0200	0.0183	91	67-143	
Chloroethane	0.0200	0.0171	86	50-139	
Chloroform	0.0200	0.0182	91	80-122	
Chloromethane	0.0200	0.0162	81	66-128	
cis-1,2-Dichloroethene	0.0200	0.0173	86	80-123	
cis-1,3-Dichloropropene	0.0200	0.0209	104	75-124	
Cyclohexane	0.0200	0.0185	93	67-135	
Dichlorobromomethane	0.0200	0.0172	86	76-129	
Dichlorodifluoromethane	0.0200	0.0132	66	72-127	*
Ethylbenzene	0.0200	0.0203	101	79-124	
Ethylene Dibromide	0.0200	0.0195	98	80-122	
Isopropylbenzene	0.0200	0.0200	100	80-125	
Methyl acetate	0.100	0.0983	98	73-123	
Methyl tert-butyl ether	0.0200	0.0188	94	80-120	
Methylcyclohexane	0.0200	0.0185	93	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48511.D

Lab ID: LCS 460-510106/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0187	93	79-128	
m-Xylene & p-Xylene	0.0200	0.0204	102	79-121	
o-Xylene	0.0200	0.0203	102	79-123	
Styrene	0.0200	0.0201	101	78-123	
Tetrachloroethene	0.0200	0.0192	96	73-130	
Toluene	0.0200	0.0207	104	75-122	
trans-1,2-Dichloroethene	0.0200	0.0182	91	80-129	
trans-1,3-Dichloropropene	0.0200	0.0206	103	72-121	
Trichloroethene	0.0200	0.0179	89	79-122	
Trichlorofluoromethane	0.0200	0.0150	75	68-136	
Vinyl chloride	0.0200	0.0148	74	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81911.D

Lab ID: LCS 460-510660/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0236	118	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0173	86	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0211	105	78-132	
1,1,2-Trichloroethane	0.0200	0.0180	90	76-124	
1,1-Dichloroethane	0.0200	0.0210	105	80-124	
1,1-Dichloroethene	0.0200	0.0193	96	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0181	91	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0192	96	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0207	104	65-129	
1,2-Dichlorobenzene	0.0200	0.0187	93	80-121	
1,2-Dichloroethane	0.0200	0.0206	103	68-120	
1,2-Dichloropropane	0.0200	0.0194	97	77-124	
1,3-Dichlorobenzene	0.0200	0.0182	91	79-124	
1,4-Dichlorobenzene	0.0200	0.0178	89	79-121	
1,4-Dioxane	0.400	0.363	91	67-150	
2-Butanone (MEK)	0.100	0.0801	80	61-140	
2-Hexanone	0.100	0.0990	99	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.101	101	80-120	
Acetone	0.100	0.0965	97	75-120	
Benzene	0.0200	0.0177	89	75-127	
Bromoform	0.0200	0.0266	133	19-150	
Bromomethane	0.0200	0.0200	100	59-136	
Carbon disulfide	0.0200	0.0192	96	74-130	
Carbon tetrachloride	0.0200	0.0267	134	77-138	
Chlorobenzene	0.0200	0.0180	90	80-120	
Chlorobromomethane	0.0200	0.0204	102	80-125	
Chlorodibromomethane	0.0200	0.0227	114	67-143	
Chloroethane	0.0200	0.0203	102	50-139	
Chloroform	0.0200	0.0212	106	80-122	
Chloromethane	0.0200	0.0182	91	66-128	
cis-1,2-Dichloroethene	0.0200	0.0193	97	80-123	
cis-1,3-Dichloropropene	0.0200	0.0184	92	75-124	
Cyclohexane	0.0200	0.0201	100	67-135	
Dichlorobromomethane	0.0200	0.0214	107	76-129	
Dichlorodifluoromethane	0.0200	0.0182	91	72-127	
Ethylbenzene	0.0200	0.0187	93	79-124	
Ethylene Dibromide	0.0200	0.0194	97	80-122	
Isopropylbenzene	0.0200	0.0191	96	80-125	
Methyl acetate	0.100	0.118	118	73-123	
Methyl tert-butyl ether	0.0200	0.0200	100	80-120	
Methylcyclohexane	0.0200	0.0200	100	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81911.D

Lab ID: LCS 460-510660/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0187	94	79-128	
m-Xylene & p-Xylene	0.0200	0.0180	90	79-121	
o-Xylene	0.0200	0.0185	93	79-123	
Styrene	0.0200	0.0183	92	78-123	
Tetrachloroethene	0.0200	0.0198	99	73-130	
Toluene	0.0200	0.0178	89	75-122	
trans-1,2-Dichloroethene	0.0200	0.0191	96	80-129	
trans-1,3-Dichloropropene	0.0200	0.0203	101	72-121	
Trichloroethene	0.0200	0.0192	96	79-122	
Trichlorofluoromethane	0.0200	0.0232	116	68-136	
Vinyl chloride	0.0200	0.0180	90	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81964.D

Lab ID: LCS 460-510972/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0249	124	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0179	89	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0226	113	78-132	
1,1,2-Trichloroethane	0.0200	0.0192	96	76-124	
1,1-Dichloroethane	0.0200	0.0229	114	80-124	
1,1-Dichloroethene	0.0200	0.0213	107	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0194	97	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0205	103	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0214	107	65-129	
1,2-Dichlorobenzene	0.0200	0.0195	98	80-121	
1,2-Dichloroethane	0.0200	0.0218	109	68-120	
1,2-Dichloropropane	0.0200	0.0210	105	77-124	
1,3-Dichlorobenzene	0.0200	0.0191	95	79-124	
1,4-Dichlorobenzene	0.0200	0.0189	94	79-121	
1,4-Dioxane	0.400	0.391	98	67-150	
2-Butanone (MEK)	0.100	0.0855	85	61-140	
2-Hexanone	0.100	0.0974	97	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.103	103	80-120	
Acetone	0.100	0.0992	99	75-120	
Benzene	0.0200	0.0198	99	75-127	
Bromoform	0.0200	0.0260	130	19-150	
Bromomethane	0.0200	0.0190	95	59-136	
Carbon disulfide	0.0200	0.0212	106	74-130	
Carbon tetrachloride	0.0200	0.0279	140	77-138	*
Chlorobenzene	0.0200	0.0192	96	80-120	
Chlorobromomethane	0.0200	0.0210	105	80-125	
Chlorodibromomethane	0.0200	0.0232	116	67-143	
Chloroethane	0.0200	0.0197	99	50-139	
Chloroform	0.0200	0.0224	112	80-122	
Chloromethane	0.0200	0.0171	86	66-128	
cis-1,2-Dichloroethene	0.0200	0.0207	103	80-123	
cis-1,3-Dichloropropene	0.0200	0.0202	101	75-124	
Cyclohexane	0.0200	0.0218	109	67-135	
Dichlorobromomethane	0.0200	0.0227	113	76-129	
Dichlorodifluoromethane	0.0200	0.0173	87	72-127	
Ethylbenzene	0.0200	0.0199	100	79-124	
Ethylene Dibromide	0.0200	0.0203	102	80-122	
Isopropylbenzene	0.0200	0.0204	102	80-125	
Methyl acetate	0.100	0.122	122	73-123	
Methyl tert-butyl ether	0.0200	0.0212	106	80-120	
Methylcyclohexane	0.0200	0.0217	108	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81964.D

Lab ID: LCS 460-510972/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0199	99	79-128	
m-Xylene & p-Xylene	0.0200	0.0190	95	79-121	
o-Xylene	0.0200	0.0196	98	79-123	
Styrene	0.0200	0.0193	96	78-123	
Tetrachloroethene	0.0200	0.0212	106	73-130	
Toluene	0.0200	0.0193	96	75-122	
trans-1,2-Dichloroethene	0.0200	0.0210	105	80-129	
trans-1,3-Dichloropropene	0.0200	0.0214	107	72-121	
Trichloroethene	0.0200	0.0213	106	79-122	
Trichlorofluoromethane	0.0200	0.0208	104	68-136	
Vinyl chloride	0.0200	0.0173	87	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82034.D

Lab ID: LCS 460-511293/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0256	128	80-125	*
1,1,2,2-Tetrachloroethane	0.0200	0.0170	85	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0233	116	78-132	
1,1,2-Trichloroethane	0.0200	0.0186	93	76-124	
1,1-Dichloroethane	0.0200	0.0226	113	80-124	
1,1-Dichloroethene	0.0200	0.0214	107	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0197	98	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0205	103	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0206	103	65-129	
1,2-Dichlorobenzene	0.0200	0.0191	96	80-121	
1,2-Dichloroethane	0.0200	0.0215	108	68-120	
1,2-Dichloropropane	0.0200	0.0205	103	77-124	
1,3-Dichlorobenzene	0.0200	0.0189	94	79-124	
1,4-Dichlorobenzene	0.0200	0.0186	93	79-121	
1,4-Dioxane	0.400	0.381	95	67-150	
2-Butanone (MEK)	0.100	0.0834	83	61-140	
2-Hexanone	0.100	0.0964	96	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.101	101	80-120	
Acetone	0.100	0.100	100	75-120	
Benzene	0.0200	0.0192	96	75-127	
Bromoform	0.0200	0.0259	130	19-150	
Bromomethane	0.0200	0.0223	111	59-136	
Carbon disulfide	0.0200	0.0210	105	74-130	
Carbon tetrachloride	0.0200	0.0283	142	77-138	*
Chlorobenzene	0.0200	0.0189	95	80-120	
Chlorobromomethane	0.0200	0.0218	109	80-125	
Chlorodibromomethane	0.0200	0.0226	113	67-143	
Chloroethane	0.0200	0.0229	114	50-139	
Chloroform	0.0200	0.0223	112	80-122	
Chloromethane	0.0200	0.0200	100	66-128	
cis-1,2-Dichloroethene	0.0200	0.0206	103	80-123	
cis-1,3-Dichloropropene	0.0200	0.0193	96	75-124	
Cyclohexane	0.0200	0.0219	109	67-135	
Dichlorobromomethane	0.0200	0.0216	108	76-129	
Dichlorodifluoromethane	0.0200	0.0197	98	72-127	
Ethylbenzene	0.0200	0.0190	95	79-124	
Ethylene Dibromide	0.0200	0.0198	99	80-122	
Isopropylbenzene	0.0200	0.0199	100	80-125	
Methyl acetate	0.100	0.123	123	73-123	
Methyl tert-butyl ether	0.0200	0.0214	107	80-120	
Methylcyclohexane	0.0200	0.0216	108	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82034.D

Lab ID: LCS 460-511293/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0205	102	79-128	
m-Xylene & p-Xylene	0.0200	0.0187	93	79-121	
o-Xylene	0.0200	0.0190	95	79-123	
Styrene	0.0200	0.0189	95	78-123	
Tetrachloroethene	0.0200	0.0215	108	73-130	
Toluene	0.0200	0.0187	93	75-122	
trans-1,2-Dichloroethene	0.0200	0.0212	106	80-129	
trans-1,3-Dichloropropene	0.0200	0.0213	107	72-121	
Trichloroethene	0.0200	0.0207	103	79-122	
Trichlorofluoromethane	0.0200	0.0253	126	68-136	
Vinyl chloride	0.0200	0.0204	102	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82064.D

Lab ID: LCS 460-511471/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0249	125	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0182	91	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0217	108	78-132	
1,1,2-Trichloroethane	0.0200	0.0184	92	76-124	
1,1-Dichloroethane	0.0200	0.0220	110	80-124	
1,1-Dichloroethene	0.0200	0.0210	105	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0184	92	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0193	96	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0222	111	65-129	
1,2-Dichlorobenzene	0.0200	0.0190	95	80-121	
1,2-Dichloroethane	0.0200	0.0210	105	68-120	
1,2-Dichloropropane	0.0200	0.0202	101	77-124	
1,3-Dichlorobenzene	0.0200	0.0187	94	79-124	
1,4-Dichlorobenzene	0.0200	0.0181	90	79-121	
1,4-Dioxane	0.400	0.364	91	67-150	
2-Butanone (MEK)	0.100	0.0799	80	61-140	
2-Hexanone	0.100	0.0965	97	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.101	101	80-120	
Acetone	0.100	0.0952	95	75-120	
Benzene	0.0200	0.0187	93	75-127	
Bromoform	0.0200	0.0285	143	19-150	
Bromomethane	0.0200	0.0195	98	59-136	
Carbon disulfide	0.0200	0.0206	103	74-130	
Carbon tetrachloride	0.0200	0.0280	140	77-138	*
Chlorobenzene	0.0200	0.0185	93	80-120	
Chlorobromomethane	0.0200	0.0209	104	80-125	
Chlorodibromomethane	0.0200	0.0228	114	67-143	
Chloroethane	0.0200	0.0197	98	50-139	
Chloroform	0.0200	0.0214	107	80-122	
Chloromethane	0.0200	0.0177	88	66-128	
cis-1,2-Dichloroethene	0.0200	0.0207	103	80-123	
cis-1,3-Dichloropropene	0.0200	0.0193	97	75-124	
Cyclohexane	0.0200	0.0209	105	67-135	
Dichlorobromomethane	0.0200	0.0218	109	76-129	
Dichlorodifluoromethane	0.0200	0.0174	87	72-127	
Ethylbenzene	0.0200	0.0194	97	79-124	
Ethylene Dibromide	0.0200	0.0198	99	80-122	
Isopropylbenzene	0.0200	0.0196	98	80-125	
Methyl acetate	0.100	0.132	132	73-123	*
Methyl tert-butyl ether	0.0200	0.0213	107	80-120	
Methylcyclohexane	0.0200	0.0210	105	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82064.D

Lab ID: LCS 460-511471/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0199	100	79-128	
m-Xylene & p-Xylene	0.0200	0.0189	94	79-121	
o-Xylene	0.0200	0.0194	97	79-123	
Styrene	0.0200	0.0188	94	78-123	
Tetrachloroethene	0.0200	0.0208	104	73-130	
Toluene	0.0200	0.0184	92	75-122	
trans-1,2-Dichloroethene	0.0200	0.0209	104	80-129	
trans-1,3-Dichloropropene	0.0200	0.0207	104	72-121	
Trichloroethene	0.0200	0.0203	101	79-122	
Trichlorofluoromethane	0.0200	0.0204	102	68-136	
Vinyl chloride	0.0200	0.0182	91	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48760.D

Lab ID: LCS 460-511498/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0171	85	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0214	107	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0185	93	78-132	
1,1,2-Trichloroethane	0.0200	0.0207	104	76-124	
1,1-Dichloroethane	0.0200	0.0187	93	80-124	
1,1-Dichloroethene	0.0200	0.0181	91	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0197	99	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0203	102	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0177	89	65-129	
1,2-Dichlorobenzene	0.0200	0.0199	99	80-121	
1,2-Dichloroethane	0.0200	0.0170	85	68-120	
1,2-Dichloropropane	0.0200	0.0190	95	77-124	
1,3-Dichlorobenzene	0.0200	0.0200	100	79-124	
1,4-Dichlorobenzene	0.0200	0.0203	102	79-121	
1,4-Dioxane	0.400	0.418	104	67-150	
2-Butanone (MEK)	0.100	0.0770	77	61-140	
2-Hexanone	0.100	0.0836	84	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0870	87	80-120	
Acetone	0.100	0.0695	69	75-120	*
Benzene	0.0200	0.0210	105	75-127	
Bromoform	0.0200	0.0152	76	19-150	
Bromomethane	0.0200	0.0211	106	59-136	
Carbon disulfide	0.0200	0.0171	86	74-130	
Carbon tetrachloride	0.0200	0.0169	85	77-138	
Chlorobenzene	0.0200	0.0203	102	80-120	
Chlorobromomethane	0.0200	0.0173	86	80-125	
Chlorodibromomethane	0.0200	0.0176	88	67-143	
Chloroethane	0.0200	0.0203	102	50-139	
Chloroform	0.0200	0.0177	89	80-122	
Chloromethane	0.0200	0.0217	108	66-128	
cis-1,2-Dichloroethene	0.0200	0.0169	84	80-123	
cis-1,3-Dichloropropene	0.0200	0.0200	100	75-124	
Cyclohexane	0.0200	0.0189	95	67-135	
Dichlorobromomethane	0.0200	0.0165	83	76-129	
Dichlorodifluoromethane	0.0200	0.0152	76	72-127	
Ethylbenzene	0.0200	0.0207	103	79-124	
Ethylene Dibromide	0.0200	0.0193	97	80-122	
Isopropylbenzene	0.0200	0.0206	103	80-125	
Methyl acetate	0.100	0.0994	99	73-123	
Methyl tert-butyl ether	0.0200	0.0176	88	80-120	
Methylcyclohexane	0.0200	0.0192	96	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48760.D

Lab ID: LCS 460-511498/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0180	90	79-128	
m-Xylene & p-Xylene	0.0200	0.0201	101	79-121	
o-Xylene	0.0200	0.0201	101	79-123	
Styrene	0.0200	0.0198	99	78-123	
Tetrachloroethene	0.0200	0.0200	100	73-130	
Toluene	0.0200	0.0200	100	75-122	
trans-1,2-Dichloroethene	0.0200	0.0181	90	80-129	
trans-1,3-Dichloropropene	0.0200	0.0187	94	72-121	
Trichloroethene	0.0200	0.0175	88	79-122	
Trichlorofluoromethane	0.0200	0.0183	91	68-136	
Vinyl chloride	0.0200	0.0200	100	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48920.D

Lab ID: LCS 460-512479/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0176	88	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0226	113	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0183	92	78-132	
1,1,2-Trichloroethane	0.0200	0.0215	107	76-124	
1,1-Dichloroethane	0.0200	0.0188	94	80-124	
1,1-Dichloroethene	0.0200	0.0186	93	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0211	105	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0197	98	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0188	94	65-129	
1,2-Dichlorobenzene	0.0200	0.0201	100	80-121	
1,2-Dichloroethane	0.0200	0.0171	85	68-120	
1,2-Dichloropropane	0.0200	0.0187	94	77-124	
1,3-Dichlorobenzene	0.0200	0.0203	102	79-124	
1,4-Dichlorobenzene	0.0200	0.0201	101	79-121	
1,4-Dioxane	0.400	0.483	121	67-150	
2-Butanone (MEK)	0.100	0.0788	79	61-140	
2-Hexanone	0.100	0.0827	83	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0884	88	80-120	
Acetone	0.100	0.0739	74	75-120	*
Benzene	0.0200	0.0224	112	75-127	
Bromoform	0.0200	0.0157	79	19-150	
Bromomethane	0.0200	0.0229	115	59-136	
Carbon disulfide	0.0200	0.0179	89	74-130	
Carbon tetrachloride	0.0200	0.0172	86	77-138	
Chlorobenzene	0.0200	0.0202	101	80-120	
Chlorobromomethane	0.0200	0.0181	91	80-125	
Chlorodibromomethane	0.0200	0.0180	90	67-143	
Chloroethane	0.0200	0.0220	110	50-139	
Chloroform	0.0200	0.0178	89	80-122	
Chloromethane	0.0200	0.0246	123	66-128	
cis-1,2-Dichloroethene	0.0200	0.0173	87	80-123	
cis-1,3-Dichloropropene	0.0200	0.0202	101	75-124	
Cyclohexane	0.0200	0.0191	95	67-135	
Dichlorobromomethane	0.0200	0.0173	87	76-129	
Dichlorodifluoromethane	0.0200	0.0174	87	72-127	
Ethylbenzene	0.0200	0.0205	102	79-124	
Ethylene Dibromide	0.0200	0.0201	100	80-122	
Isopropylbenzene	0.0200	0.0201	100	80-125	
Methyl acetate	0.0400	0.0430	107	73-123	
Methyl tert-butyl ether	0.0200	0.0188	94	80-120	
Methylcyclohexane	0.0200	0.0188	94	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48920.D

Lab ID: LCS 460-512479/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0190	95	79-128	
m-Xylene & p-Xylene	0.0200	0.0202	101	79-121	
o-Xylene	0.0200	0.0205	103	79-123	
Styrene	0.0200	0.0206	103	78-123	
Tetrachloroethene	0.0200	0.0201	101	73-130	
Toluene	0.0200	0.0207	103	75-122	
trans-1,2-Dichloroethene	0.0200	0.0187	94	80-129	
trans-1,3-Dichloropropene	0.0200	0.0195	98	72-121	
Trichloroethene	0.0200	0.0181	91	79-122	
Trichlorofluoromethane	0.0200	0.0195	97	68-136	
Vinyl chloride	0.0200	0.0232	116	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48946.D

Lab ID: LCS 460-512623/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0192	96	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0205	102	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0208	104	78-132	
1,1,2-Trichloroethane	0.0200	0.0200	100	76-124	
1,1-Dichloroethane	0.0200	0.0197	99	80-124	
1,1-Dichloroethene	0.0200	0.0205	103	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0216	108	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0222	111	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0153	77	65-129	
1,2-Dichlorobenzene	0.0200	0.0214	107	80-121	
1,2-Dichloroethane	0.0200	0.0162	81	68-120	
1,2-Dichloropropane	0.0200	0.0188	94	77-124	
1,3-Dichlorobenzene	0.0200	0.0221	111	79-124	
1,4-Dichlorobenzene	0.0200	0.0221	110	79-121	
1,4-Dioxane	0.400	0.448	112	67-150	
2-Butanone (MEK)	0.100	0.0771	77	61-140	
2-Hexanone	0.100	0.0808	81	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0874	87	80-120	
Acetone	0.100	0.0863	86	75-120	
Benzene	0.0200	0.0237	119	75-127	
Bromoform	0.0200	0.0136	68	19-150	
Bromomethane	0.0200	0.0236	118	59-136	
Carbon disulfide	0.0200	0.0192	96	74-130	
Carbon tetrachloride	0.0200	0.0188	94	77-138	
Chlorobenzene	0.0200	0.0212	106	80-120	
Chlorobromomethane	0.0200	0.0172	86	80-125	
Chlorodibromomethane	0.0200	0.0169	85	67-143	
Chloroethane	0.0200	0.0243	121	50-139	
Chloroform	0.0200	0.0184	92	80-122	
Chloromethane	0.0200	0.0256	128	66-128	
cis-1,2-Dichloroethene	0.0200	0.0178	89	80-123	
cis-1,3-Dichloropropene	0.0200	0.0200	100	75-124	
Cyclohexane	0.0200	0.0221	110	67-135	
Dichlorobromomethane	0.0200	0.0169	84	76-129	
Dichlorodifluoromethane	0.0200	0.0190	95	72-127	
Ethylbenzene	0.0200	0.0223	112	79-124	
Ethylene Dibromide	0.0200	0.0184	92	80-122	
Isopropylbenzene	0.0200	0.0233	116	80-125	
Methyl acetate	0.0400	0.0383	96	73-123	
Methyl tert-butyl ether	0.0200	0.0179	90	80-120	
Methylcyclohexane	0.0200	0.0226	113	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48946.D

Lab ID: LCS 460-512623/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0189	95	79-128	
m-Xylene & p-Xylene	0.0200	0.0227	114	79-121	
o-Xylene	0.0200	0.0222	111	79-123	
Styrene	0.0200	0.0211	105	78-123	
Tetrachloroethene	0.0200	0.0231	116	73-130	
Toluene	0.0200	0.0225	113	75-122	
trans-1,2-Dichloroethene	0.0200	0.0199	99	80-129	
trans-1,3-Dichloropropene	0.0200	0.0188	94	72-121	
Trichloroethene	0.0200	0.0192	96	79-122	
Trichlorofluoromethane	0.0200	0.0196	98	68-136	
Vinyl chloride	0.0200	0.0245	123	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82436.D

Lab ID: LCS 460-513435/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0186	93	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0189	94	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0167	83	78-132	
1,1,2-Trichloroethane	0.0200	0.0179	90	76-124	
1,1-Dichloroethane	0.0200	0.0184	92	80-124	
1,1-Dichloroethene	0.0200	0.0179	90	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0173	86	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0169	85	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0179	90	65-129	
1,2-Dichlorobenzene	0.0200	0.0183	91	80-121	
1,2-Dichloroethane	0.0200	0.0180	90	68-120	
1,2-Dichloropropane	0.0200	0.0180	90	77-124	
1,3-Dichlorobenzene	0.0200	0.0181	91	79-124	
1,4-Dichlorobenzene	0.0200	0.0176	88	79-121	
1,4-Dioxane	0.400	0.471	118	67-150	
2-Butanone (MEK)	0.100	0.0902	90	61-140	
2-Hexanone	0.100	0.0952	95	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0930	93	80-120	
Acetone	0.100	0.0839	84	75-120	
Benzene	0.0200	0.0181	91	75-127	
Bromoform	0.0200	0.0184	92	19-150	
Bromomethane	0.0200	0.0185	93	59-136	
Carbon disulfide	0.0200	0.0179	89	74-130	
Carbon tetrachloride	0.0200	0.0186	93	77-138	
Chlorobenzene	0.0200	0.0184	92	80-120	
Chlorobromomethane	0.0200	0.0187	94	80-125	
Chlorodibromomethane	0.0200	0.0183	91	67-143	
Chloroethane	0.0200	0.0192	96	50-139	
Chloroform	0.0200	0.0188	94	80-122	
Chloromethane	0.0200	0.0178	89	66-128	
cis-1,2-Dichloroethene	0.0200	0.0184	92	80-123	
cis-1,3-Dichloropropene	0.0200	0.0175	88	75-124	
Cyclohexane	0.0200	0.0170	85	67-135	
Dichlorobromomethane	0.0200	0.0185	93	76-129	
Dichlorodifluoromethane	0.0200	0.0126	63	72-127	*
Ethylbenzene	0.0200	0.0185	93	79-124	
Ethylene Dibromide	0.0200	0.0184	92	80-122	
Isopropylbenzene	0.0200	0.0184	92	80-125	
Methyl acetate	0.0400	0.0344	86	73-123	
Methyl tert-butyl ether	0.0200	0.0178	89	80-120	
Methylcyclohexane	0.0200	0.0168	84	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82436.D

Lab ID: LCS 460-513435/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0176	88	79-128	
m-Xylene & p-Xylene	0.0200	0.0185	93	79-121	
o-Xylene	0.0200	0.0184	92	79-123	
Styrene	0.0200	0.0186	93	78-123	
Tetrachloroethene	0.0200	0.0186	93	73-130	
Toluene	0.0200	0.0184	92	75-122	
trans-1,2-Dichloroethene	0.0200	0.0186	93	80-129	
trans-1,3-Dichloropropene	0.0200	0.0174	87	72-121	
Trichloroethene	0.0200	0.0184	92	79-122	
Trichlorofluoromethane	0.0200	0.0196	98	68-136	
Vinyl chloride	0.0200	0.0197	99	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81013.D

Lab ID: LCSD 460-504873/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0193	97	5	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0200	100	3	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0193	97	0	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0197	99	7	30	76-124	
1,1-Dichloroethane	0.0200	0.0224	112	2	30	80-124	
1,1-Dichloroethene	0.0200	0.0191	96	1	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0178	89	8	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0186	93	6	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0181	91	0	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0179	89	3	30	80-121	
1,2-Dichloroethane	0.0200	0.0196	98	1	30	68-120	
1,2-Dichloropropane	0.0200	0.0213	106	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0178	89	5	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0181	90	2	30	79-121	
1,4-Dioxane	0.400	0.294	74	4	30	67-150	
2-Butanone (MEK)	0.100	0.0717	72	1	30	61-140	
2-Hexanone	0.100	0.0935	94	4	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0957	96	3	30	80-120	
Acetone	0.100	0.0807	81	1	30	75-120	
Benzene	0.0200	0.0212	106	1	30	75-127	
Bromoform	0.0200	0.0162	81	1	30	19-150	
Bromomethane	0.0200	0.0186	93	4	30	59-136	
Carbon disulfide	0.0200	0.0209	104	4	30	74-130	
Carbon tetrachloride	0.0200	0.0193	96	1	30	77-138	
Chlorobenzene	0.0200	0.0179	90	1	30	80-120	
Chlorobromomethane	0.0200	0.0173	86	5	30	80-125	
Chlorodibromomethane	0.0200	0.0168	84	2	30	67-143	
Chloroethane	0.0200	0.0205	103	4	30	50-139	
Chloroform	0.0200	0.0205	102	0	30	80-122	
Chloromethane	0.0200	0.0223	111	2	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0193	96	2	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0196	98	1	30	75-124	
Cyclohexane	0.0200	0.0195	97	5	30	67-135	
Dichlorobromomethane	0.0200	0.0191	95	0	30	76-129	
Dichlorodifluoromethane	0.0200	0.0183	91	3	30	72-127	
Ethylbenzene	0.0200	0.0187	94	1	30	79-124	
Ethylene Dibromide	0.0200	0.0178	89	1	30	80-122	
Isopropylbenzene	0.0200	0.0182	91	1	30	80-125	
Methyl acetate	0.100	0.127	127	2	30	73-123	*
Methyl tert-butyl ether	0.0200	0.0193	97	2	30	80-120	
Methylcyclohexane	0.0200	0.0193	96	5	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81013.D

Lab ID: LCSD 460-504873/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0190	95	3	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0184	92	2	30	79-121	
o-Xylene	0.0200	0.0181	91	3	30	79-123	
Styrene	0.0200	0.0186	93	1	30	78-123	
Tetrachloroethene	0.0200	0.0180	90	1	30	73-130	
Toluene	0.0200	0.0193	96	1	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0198	99	2	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0195	98	1	30	72-121	
Trichloroethene	0.0200	0.0195	98	1	30	79-122	
Trichlorofluoromethane	0.0200	0.0175	87	4	30	68-136	
Vinyl chloride	0.0200	0.0204	102	3	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81120.D

Lab ID: LCSD 460-505749/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0219	110	8	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0197	98	3	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0221	111	7	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0195	98	1	30	76-124	
1,1-Dichloroethane	0.0200	0.0217	109	6	30	80-124	
1,1-Dichloroethene	0.0200	0.0213	107	4	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0205	103	2	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0211	106	1	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0191	96	3	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0206	103	3	30	80-121	
1,2-Dichloroethane	0.0200	0.0206	103	5	30	68-120	
1,2-Dichloropropane	0.0200	0.0207	104	5	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0212	106	3	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0209	104	4	30	79-121	
1,4-Dioxane	0.400	0.438	110	5	30	67-150	
2-Butanone (MEK)	0.100	0.0914	91	1	30	61-140	
2-Hexanone	0.100	0.100	100	3	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.100	100	4	30	80-120	
Acetone	0.100	0.0935	94	2	30	75-120	
Benzene	0.0200	0.0213	106	5	30	75-127	
Bromoform	0.0200	0.0186	93	7	30	19-150	
Bromomethane	0.0200	0.0204	102	1	30	59-136	
Carbon disulfide	0.0200	0.0215	108	6	30	74-130	
Carbon tetrachloride	0.0200	0.0226	113	7	30	77-138	
Chlorobenzene	0.0200	0.0209	105	5	30	80-120	
Chlorobromomethane	0.0200	0.0189	95	1	30	80-125	
Chlorodibromomethane	0.0200	0.0190	95	2	30	67-143	
Chloroethane	0.0200	0.0217	108	2	30	50-139	
Chloroform	0.0200	0.0210	105	5	30	80-122	
Chloromethane	0.0200	0.0226	113	1	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0209	104	8	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0207	103	2	30	75-124	
Cyclohexane	0.0200	0.0227	114	8	30	67-135	
Dichlorobromomethane	0.0200	0.0200	100	5	30	76-129	
Dichlorodifluoromethane	0.0200	0.0229	115	4	30	72-127	
Ethylbenzene	0.0200	0.0217	108	10	30	79-124	
Ethylene Dibromide	0.0200	0.0192	96	3	30	80-122	
Isopropylbenzene	0.0200	0.0215	108	7	30	80-125	
Methyl acetate	0.100	0.104	104	3	30	73-123	
Methyl tert-butyl ether	0.0200	0.0200	100	2	30	80-120	
Methylcyclohexane	0.0200	0.0226	113	6	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81120.D

Lab ID: LCSD 460-505749/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0198	99	3	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0210	105	7	30	79-121	
o-Xylene	0.0200	0.0209	104	7	30	79-123	
Styrene	0.0200	0.0209	105	4	30	78-123	
Tetrachloroethene	0.0200	0.0206	103	6	30	73-130	
Toluene	0.0200	0.0216	108	7	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0216	108	7	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0207	104	4	30	72-121	
Trichloroethene	0.0200	0.0212	106	7	30	79-122	
Trichlorofluoromethane	0.0200	0.0227	114	4	30	68-136	
Vinyl chloride	0.0200	0.0233	116	1	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81149.D

Lab ID: LCSD 460-505873/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0220	110	1	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0187	94	5	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0218	109	2	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0185	92	7	30	76-124	
1,1-Dichloroethane	0.0200	0.0213	107	0	30	80-124	
1,1-Dichloroethene	0.0200	0.0209	105	3	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0203	101	1	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0206	103	5	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0192	96	1	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0198	99	4	30	80-121	
1,2-Dichloroethane	0.0200	0.0197	99	4	30	68-120	
1,2-Dichloropropane	0.0200	0.0200	100	1	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0210	105	0	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0204	102	1	30	79-121	
1,4-Dioxane	0.400	0.427	107	4	30	67-150	
2-Butanone (MEK)	0.100	0.0887	89	7	30	61-140	
2-Hexanone	0.100	0.0971	97	3	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0975	97	1	30	80-120	
Acetone	0.100	0.102	102	6	30	75-120	
Benzene	0.0200	0.0209	104	2	30	75-127	
Bromoform	0.0200	0.0196	98	4	30	19-150	
Bromomethane	0.0200	0.0200	100	4	30	59-136	
Carbon disulfide	0.0200	0.0209	105	0	30	74-130	
Carbon tetrachloride	0.0200	0.0231	115	3	30	77-138	
Chlorobenzene	0.0200	0.0202	101	3	30	80-120	
Chlorobromomethane	0.0200	0.0186	93	0	30	80-125	
Chlorodibromomethane	0.0200	0.0188	94	7	30	67-143	
Chloroethane	0.0200	0.0204	102	7	30	50-139	
Chloroform	0.0200	0.0205	102	2	30	80-122	
Chloromethane	0.0200	0.0223	112	3	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0207	103	0	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0197	99	5	30	75-124	
Cyclohexane	0.0200	0.0225	112	1	30	67-135	
Dichlorobromomethane	0.0200	0.0198	99	2	30	76-129	
Dichlorodifluoromethane	0.0200	0.0228	114	1	30	72-127	
Ethylbenzene	0.0200	0.0207	104	2	30	79-124	
Ethylene Dibromide	0.0200	0.0184	92	4	30	80-122	
Isopropylbenzene	0.0200	0.0211	105	2	30	80-125	
Methyl acetate	0.100	0.0981	98	6	30	73-123	
Methyl tert-butyl ether	0.0200	0.0199	100	2	30	80-120	
Methylcyclohexane	0.0200	0.0225	113	2	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81149.D

Lab ID: LCSD 460-505873/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0195	97	1	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0201	101	4	30	79-121	
o-Xylene	0.0200	0.0200	100	4	30	79-123	
Styrene	0.0200	0.0204	102	3	30	78-123	
Tetrachloroethene	0.0200	0.0197	99	5	30	73-130	
Toluene	0.0200	0.0206	103	2	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0211	105	1	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0198	99	6	30	72-121	
Trichloroethene	0.0200	0.0201	100	4	30	79-122	
Trichlorofluoromethane	0.0200	0.0237	118	0	30	68-136	
Vinyl chloride	0.0200	0.0231	115	1	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: B28117.D

Lab ID: LCSD 460-507466/6 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0220	110	0	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0170	85	25	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0221	111	20	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0193	96	9	30	76-124	
1,1-Dichloroethane	0.0200	0.0206	103	16	30	80-124	
1,1-Dichloroethene	0.0200	0.0200	100	14	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0218	109	4	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0229	115	0	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0239	119	9	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0194	97	5	30	80-121	
1,2-Dichloroethane	0.0200	0.0201	101	4	30	68-120	
1,2-Dichloropropane	0.0200	0.0171	85	21	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0190	95	6	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0191	95	6	30	79-121	
1,4-Dioxane	0.400	0.420	105	18	30	67-150	
2-Butanone (MEK)	0.100	0.0948	95	4	30	61-140	
2-Hexanone	0.100	0.0552	55	29	30	78-120	*
4-Methyl-2-pentanone (MIBK)	0.100	0.0745	74	25	30	80-120	*
Acetone	0.100	0.101	101	27	30	75-120	
Benzene	0.0200	0.0234	117	9	30	75-127	
Bromoform	0.0200	0.0214	107	5	30	19-150	
Bromomethane	0.0200	0.0182	91	3	30	59-136	
Carbon disulfide	0.0200	0.0209	105	18	30	74-130	
Carbon tetrachloride	0.0200	0.0214	107	0	30	77-138	
Chlorobenzene	0.0200	0.0205	103	3	30	80-120	
Chlorobromomethane	0.0200	0.0194	97	4	30	80-125	
Chlorodibromomethane	0.0200	0.0209	104	7	30	67-143	
Chloroethane	0.0200	0.0167	83	2	30	50-139	
Chloroform	0.0200	0.0212	106	2	30	80-122	
Chloromethane	0.0200	0.0229	114	0	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0194	97	0	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0185	92	12	30	75-124	
Cyclohexane	0.0200	0.0203	102	1	30	67-135	
Dichlorobromomethane	0.0200	0.0177	89	20	30	76-129	
Dichlorodifluoromethane	0.0200	0.0185	92	6	30	72-127	
Ethylbenzene	0.0200	0.0195	98	2	30	79-124	
Ethylene Dibromide	0.0200	0.0202	101	9	30	80-122	
Isopropylbenzene	0.0200	0.0215	107	2	30	80-125	
Methyl acetate	0.100	0.0970	97	17	30	73-123	
Methyl tert-butyl ether	0.0200	0.0193	96	11	30	80-120	
Methylcyclohexane	0.0200	0.0179	90	9	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: B28117.D

Lab ID: LCSD 460-507466/6 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0200	100	17	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0194	97	1	30	79-121	
o-Xylene	0.0200	0.0196	98	2	30	79-123	
Styrene	0.0200	0.0209	104	2	30	78-123	
Tetrachloroethene	0.0200	0.0221	110	3	30	73-130	
Toluene	0.0200	0.0191	95	7	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0210	105	10	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0186	93	6	30	72-121	
Trichloroethene	0.0200	0.0189	94	5	30	79-122	
Trichlorofluoromethane	0.0200	0.0201	101	16	30	68-136	
Vinyl chloride	0.0200	0.0184	92	7	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48512.D

Lab ID: LCSD 460-510106/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0187	94	6	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0217	109	3	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0187	94	9	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0211	105	1	30	76-124	
1,1-Dichloroethane	0.0200	0.0195	98	2	30	80-124	
1,1-Dichloroethene	0.0200	0.0186	93	4	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0208	104	2	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0210	105	3	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0177	88	1	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0205	103	3	30	80-121	
1,2-Dichloroethane	0.0200	0.0184	92	3	30	68-120	
1,2-Dichloropropane	0.0200	0.0196	98	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0208	104	2	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0208	104	1	30	79-121	
1,4-Dioxane	0.400	0.439	110	0	30	67-150	
2-Butanone (MEK)	0.100	0.0819	82	3	30	61-140	
2-Hexanone	0.100	0.0936	94	3	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0971	97	4	30	80-120	
Acetone	0.100	0.0836	84	1	30	75-120	
Benzene	0.0200	0.0215	107	3	30	75-127	
Bromoform	0.0200	0.0162	81	0	30	19-150	
Bromomethane	0.0200	0.0164	82	4	30	59-136	
Carbon disulfide	0.0200	0.0184	92	6	30	74-130	
Carbon tetrachloride	0.0200	0.0182	91	7	30	77-138	
Chlorobenzene	0.0200	0.0206	103	2	30	80-120	
Chlorobromomethane	0.0200	0.0178	89	2	30	80-125	
Chlorodibromomethane	0.0200	0.0184	92	1	30	67-143	
Chloroethane	0.0200	0.0169	84	1	30	50-139	
Chloroform	0.0200	0.0186	93	2	30	80-122	
Chloromethane	0.0200	0.0162	81	0	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0175	87	1	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0213	106	2	30	75-124	
Cyclohexane	0.0200	0.0201	101	8	30	67-135	
Dichlorobromomethane	0.0200	0.0174	87	1	30	76-129	
Dichlorodifluoromethane	0.0200	0.0141	70	6	30	72-127	*
Ethylbenzene	0.0200	0.0211	106	4	30	79-124	
Ethylene Dibromide	0.0200	0.0202	101	4	30	80-122	
Isopropylbenzene	0.0200	0.0212	106	6	30	80-125	
Methyl acetate	0.100	0.0984	98	0	30	73-123	
Methyl tert-butyl ether	0.0200	0.0193	96	3	30	80-120	
Methylcyclohexane	0.0200	0.0205	103	10	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48512.D

Lab ID: LCSD 460-510106/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0189	94	1	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0209	105	3	30	79-121	
o-Xylene	0.0200	0.0206	103	2	30	79-123	
Styrene	0.0200	0.0204	102	1	30	78-123	
Tetrachloroethene	0.0200	0.0206	103	7	30	73-130	
Toluene	0.0200	0.0210	105	2	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0189	94	3	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0207	103	1	30	72-121	
Trichloroethene	0.0200	0.0181	91	1	30	79-122	
Trichlorofluoromethane	0.0200	0.0154	77	3	30	68-136	
Vinyl chloride	0.0200	0.0148	74	0	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81912.D

Lab ID: LCSD 460-510660/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0239	119	1	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0169	85	2	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0214	107	2	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0174	87	3	30	76-124	
1,1-Dichloroethane	0.0200	0.0212	106	1	30	80-124	
1,1-Dichloroethene	0.0200	0.0197	98	2	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0176	88	3	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0191	95	1	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0196	98	6	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0184	92	2	30	80-121	
1,2-Dichloroethane	0.0200	0.0202	101	2	30	68-120	
1,2-Dichloropropane	0.0200	0.0196	98	1	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0181	91	0	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0179	90	0	30	79-121	
1,4-Dioxane	0.400	0.371	93	2	30	67-150	
2-Butanone (MEK)	0.100	0.0768	77	4	30	61-140	
2-Hexanone	0.100	0.0967	97	2	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0986	99	3	30	80-120	
Acetone	0.100	0.0900	90	7	30	75-120	
Benzene	0.0200	0.0181	90	2	30	75-127	
Bromoform	0.0200	0.0263	132	1	30	19-150	
Bromomethane	0.0200	0.0208	104	4	30	59-136	
Carbon disulfide	0.0200	0.0199	100	4	30	74-130	
Carbon tetrachloride	0.0200	0.0270	135	1	30	77-138	
Chlorobenzene	0.0200	0.0182	91	1	30	80-120	
Chlorobromomethane	0.0200	0.0204	102	0	30	80-125	
Chlorodibromomethane	0.0200	0.0218	109	4	30	67-143	
Chloroethane	0.0200	0.0209	104	3	30	50-139	
Chloroform	0.0200	0.0210	105	1	30	80-122	
Chloromethane	0.0200	0.0190	95	5	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0197	99	2	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0180	90	2	30	75-124	
Cyclohexane	0.0200	0.0198	99	2	30	67-135	
Dichlorobromomethane	0.0200	0.0210	105	2	30	76-129	
Dichlorodifluoromethane	0.0200	0.0188	94	4	30	72-127	
Ethylbenzene	0.0200	0.0188	94	1	30	79-124	
Ethylene Dibromide	0.0200	0.0189	94	3	30	80-122	
Isopropylbenzene	0.0200	0.0189	94	1	30	80-125	
Methyl acetate	0.100	0.116	116	2	30	73-123	
Methyl tert-butyl ether	0.0200	0.0202	101	1	30	80-120	
Methylcyclohexane	0.0200	0.0195	98	3	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81912.D

Lab ID: LCSD 460-510660/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0188	94	1	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0181	91	1	30	79-121	
o-Xylene	0.0200	0.0185	92	0	30	79-123	
Styrene	0.0200	0.0183	91	0	30	78-123	
Tetrachloroethene	0.0200	0.0193	96	3	30	73-130	
Toluene	0.0200	0.0179	90	1	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0194	97	2	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0195	98	4	30	72-121	
Trichloroethene	0.0200	0.0196	98	2	30	79-122	
Trichlorofluoromethane	0.0200	0.0223	112	4	30	68-136	
Vinyl chloride	0.0200	0.0191	95	6	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81965.D

Lab ID: LCSD 460-510972/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0243	122	2	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0180	90	1	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0217	109	4	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0183	91	5	30	76-124	
1,1-Dichloroethane	0.0200	0.0222	111	3	30	80-124	
1,1-Dichloroethene	0.0200	0.0204	102	5	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0187	94	4	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0198	99	4	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0214	107	0	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0190	95	3	30	80-121	
1,2-Dichloroethane	0.0200	0.0208	104	5	30	68-120	
1,2-Dichloropropane	0.0200	0.0199	99	5	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0188	94	2	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0183	92	3	30	79-121	
1,4-Dioxane	0.400	0.375	94	4	30	67-150	
2-Butanone (MEK)	0.100	0.0753	75	13	30	61-140	
2-Hexanone	0.100	0.0917	92	6	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0959	96	7	30	80-120	
Acetone	0.100	0.0937	94	6	30	75-120	
Benzene	0.0200	0.0188	94	5	30	75-127	
Bromoform	0.0200	0.0268	134	3	30	19-150	
Bromomethane	0.0200	0.0199	100	5	30	59-136	
Carbon disulfide	0.0200	0.0204	102	4	30	74-130	
Carbon tetrachloride	0.0200	0.0269	134	4	30	77-138	
Chlorobenzene	0.0200	0.0184	92	4	30	80-120	
Chlorobromomethane	0.0200	0.0211	106	0	30	80-125	
Chlorodibromomethane	0.0200	0.0225	113	3	30	67-143	
Chloroethane	0.0200	0.0208	104	5	30	50-139	
Chloroform	0.0200	0.0218	109	3	30	80-122	
Chloromethane	0.0200	0.0178	89	4	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0205	102	1	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0188	94	7	30	75-124	
Cyclohexane	0.0200	0.0209	104	4	30	67-135	
Dichlorobromomethane	0.0200	0.0210	105	7	30	76-129	
Dichlorodifluoromethane	0.0200	0.0181	90	4	30	72-127	
Ethylbenzene	0.0200	0.0191	96	4	30	79-124	
Ethylene Dibromide	0.0200	0.0193	97	5	30	80-122	
Isopropylbenzene	0.0200	0.0197	99	3	30	80-125	
Methyl acetate	0.100	0.127	127	4	30	73-123	*
Methyl tert-butyl ether	0.0200	0.0208	104	2	30	80-120	
Methylcyclohexane	0.0200	0.0208	104	4	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81965.D

Lab ID: LCSD 460-510972/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0196	98	1	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0186	93	2	30	79-121	
o-Xylene	0.0200	0.0188	94	4	30	79-123	
Styrene	0.0200	0.0187	94	3	30	78-123	
Tetrachloroethene	0.0200	0.0198	99	7	30	73-130	
Toluene	0.0200	0.0184	92	4	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0205	103	3	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0204	102	5	30	72-121	
Trichloroethene	0.0200	0.0202	101	5	30	79-122	
Trichlorofluoromethane	0.0200	0.0233	116	11	30	68-136	
Vinyl chloride	0.0200	0.0182	91	5	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82035.D

Lab ID: LCSD 460-511293/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0258	129	1	30	80-125	*
1,1,2,2-Tetrachloroethane	0.0200	0.0169	84	1	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0246	123	5	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0179	90	4	30	76-124	
1,1-Dichloroethane	0.0200	0.0229	115	1	30	80-124	
1,1-Dichloroethene	0.0200	0.0222	111	3	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0193	96	2	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0206	103	0	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0199	100	3	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0191	96	0	30	80-121	
1,2-Dichloroethane	0.0200	0.0210	105	3	30	68-120	
1,2-Dichloropropane	0.0200	0.0202	101	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0193	96	2	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0186	93	0	30	79-121	
1,4-Dioxane	0.400	0.386	96	1	30	67-150	
2-Butanone (MEK)	0.100	0.0824	82	1	30	61-140	
2-Hexanone	0.100	0.0972	97	1	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.100	100	1	30	80-120	
Acetone	0.100	0.102	102	1	30	75-120	
Benzene	0.0200	0.0193	97	1	30	75-127	
Bromoform	0.0200	0.0258	129	1	30	19-150	
Bromomethane	0.0200	0.0226	113	1	30	59-136	
Carbon disulfide	0.0200	0.0217	108	3	30	74-130	
Carbon tetrachloride	0.0200	0.0296	148	4	30	77-138	*
Chlorobenzene	0.0200	0.0188	94	1	30	80-120	
Chlorobromomethane	0.0200	0.0212	106	3	30	80-125	
Chlorodibromomethane	0.0200	0.0219	109	3	30	67-143	
Chloroethane	0.0200	0.0223	112	2	30	50-139	
Chloroform	0.0200	0.0222	111	0	30	80-122	
Chloromethane	0.0200	0.0198	99	1	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0208	104	1	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0188	94	2	30	75-124	
Cyclohexane	0.0200	0.0225	113	3	30	67-135	
Dichlorobromomethane	0.0200	0.0213	106	1	30	76-129	
Dichlorodifluoromethane	0.0200	0.0199	100	1	30	72-127	
Ethylbenzene	0.0200	0.0199	100	4	30	79-124	
Ethylene Dibromide	0.0200	0.0195	97	2	30	80-122	
Isopropylbenzene	0.0200	0.0204	102	2	30	80-125	
Methyl acetate	0.100	0.122	122	1	30	73-123	
Methyl tert-butyl ether	0.0200	0.0207	104	3	30	80-120	
Methylcyclohexane	0.0200	0.0224	112	4	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82035.D

Lab ID: LCSD 460-511293/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0197	98	4	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0191	96	2	30	79-121	
o-Xylene	0.0200	0.0196	98	3	30	79-123	
Styrene	0.0200	0.0187	94	1	30	78-123	
Tetrachloroethene	0.0200	0.0222	111	3	30	73-130	
Toluene	0.0200	0.0189	95	1	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0216	108	2	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0203	101	5	30	72-121	
Trichloroethene	0.0200	0.0207	103	0	30	79-122	
Trichlorofluoromethane	0.0200	0.0228	114	10	30	68-136	
Vinyl chloride	0.0200	0.0205	102	0	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48761.D

Lab ID: LCSD 460-511498/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0171	86	1	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0217	109	2	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0178	89	4	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0207	103	0	30	76-124	
1,1-Dichloroethane	0.0200	0.0187	93	0	30	80-124	
1,1-Dichloroethene	0.0200	0.0181	90	0	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0207	103	5	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0205	103	1	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0192	96	8	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0201	101	1	30	80-121	
1,2-Dichloroethane	0.0200	0.0169	85	1	30	68-120	
1,2-Dichloropropane	0.0200	0.0186	93	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0201	100	0	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0201	101	1	30	79-121	
1,4-Dioxane	0.400	0.501	125	18	30	67-150	
2-Butanone (MEK)	0.100	0.0784	78	2	30	61-140	
2-Hexanone	0.100	0.0835	83	0	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0895	89	3	30	80-120	
Acetone	0.100	0.0720	72	4	30	75-120	*
Benzene	0.0200	0.0215	107	2	30	75-127	
Bromoform	0.0200	0.0160	80	5	30	19-150	
Bromomethane	0.0200	0.0213	107	1	30	59-136	
Carbon disulfide	0.0200	0.0172	86	0	30	74-130	
Carbon tetrachloride	0.0200	0.0169	84	0	30	77-138	
Chlorobenzene	0.0200	0.0204	102	0	30	80-120	
Chlorobromomethane	0.0200	0.0176	88	2	30	80-125	
Chlorodibromomethane	0.0200	0.0180	90	2	30	67-143	
Chloroethane	0.0200	0.0205	102	1	30	50-139	
Chloroform	0.0200	0.0178	89	0	30	80-122	
Chloromethane	0.0200	0.0223	111	3	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0170	85	0	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0199	100	1	30	75-124	
Cyclohexane	0.0200	0.0193	97	2	30	67-135	
Dichlorobromomethane	0.0200	0.0162	81	2	30	76-129	
Dichlorodifluoromethane	0.0200	0.0155	77	1	30	72-127	
Ethylbenzene	0.0200	0.0206	103	0	30	79-124	
Ethylene Dibromide	0.0200	0.0199	99	3	30	80-122	
Isopropylbenzene	0.0200	0.0209	105	1	30	80-125	
Methyl acetate	0.100	0.101	101	1	30	73-123	
Methyl tert-butyl ether	0.0200	0.0179	89	2	30	80-120	
Methylcyclohexane	0.0200	0.0191	95	1	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48761.D

Lab ID: LCSD 460-511498/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0176	88	2	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0204	102	1	30	79-121	
o-Xylene	0.0200	0.0204	102	2	30	79-123	
Styrene	0.0200	0.0200	100	1	30	78-123	
Tetrachloroethene	0.0200	0.0203	102	2	30	73-130	
Toluene	0.0200	0.0203	102	2	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0180	90	1	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0191	96	2	30	72-121	
Trichloroethene	0.0200	0.0179	89	2	30	79-122	
Trichlorofluoromethane	0.0200	0.0184	92	1	30	68-136	
Vinyl chloride	0.0200	0.0208	104	4	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48921.D

Lab ID: LCSD 460-512479/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0188	94	7	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0219	110	3	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0205	103	11	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0210	105	2	30	76-124	
1,1-Dichloroethane	0.0200	0.0192	96	2	30	80-124	
1,1-Dichloroethene	0.0200	0.0196	98	6	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0227	113	7	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0224	112	13	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0181	90	4	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0217	109	8	30	80-121	
1,2-Dichloroethane	0.0200	0.0171	85	0	30	68-120	
1,2-Dichloropropane	0.0200	0.0191	96	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0223	112	10	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0221	110	9	30	79-121	
1,4-Dioxane	0.400	0.436	109	10	30	67-150	
2-Butanone (MEK)	0.100	0.0799	80	1	30	61-140	
2-Hexanone	0.100	0.0845	84	2	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0908	91	3	30	80-120	
Acetone	0.100	0.0751	75	2	30	75-120	
Benzene	0.0200	0.0229	114	2	30	75-127	
Bromoform	0.0200	0.0153	77	3	30	19-150	
Bromomethane	0.0200	0.0232	116	1	30	59-136	
Carbon disulfide	0.0200	0.0188	94	5	30	74-130	
Carbon tetrachloride	0.0200	0.0189	94	9	30	77-138	
Chlorobenzene	0.0200	0.0214	107	6	30	80-120	
Chlorobromomethane	0.0200	0.0180	90	1	30	80-125	
Chlorodibromomethane	0.0200	0.0179	89	1	30	67-143	
Chloroethane	0.0200	0.0221	111	1	30	50-139	
Chloroform	0.0200	0.0184	92	3	30	80-122	
Chloromethane	0.0200	0.0248	124	1	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0177	89	2	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0204	102	1	30	75-124	
Cyclohexane	0.0200	0.0216	108	12	30	67-135	
Dichlorobromomethane	0.0200	0.0178	89	2	30	76-129	
Dichlorodifluoromethane	0.0200	0.0181	91	4	30	72-127	
Ethylbenzene	0.0200	0.0219	110	7	30	79-124	
Ethylene Dibromide	0.0200	0.0203	102	1	30	80-122	
Isopropylbenzene	0.0200	0.0229	114	13	30	80-125	
Methyl acetate	0.0400	0.0398	100	8	30	73-123	
Methyl tert-butyl ether	0.0200	0.0184	92	2	30	80-120	
Methylcyclohexane	0.0200	0.0221	111	16	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48921.D

Lab ID: LCSD 460-512479/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0192	96	1	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0222	111	9	30	79-121	
o-Xylene	0.0200	0.0219	109	6	30	79-123	
Styrene	0.0200	0.0211	106	3	30	78-123	
Tetrachloroethene	0.0200	0.0229	114	13	30	73-130	
Toluene	0.0200	0.0220	110	6	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0189	94	1	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0194	97	1	30	72-121	
Trichloroethene	0.0200	0.0192	96	6	30	79-122	
Trichlorofluoromethane	0.0200	0.0200	100	2	30	68-136	
Vinyl chloride	0.0200	0.0240	120	3	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48947.D

Lab ID: LCSD 460-512623/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0178	89	7	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0213	107	4	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0191	95	9	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0207	103	3	30	76-124	
1,1-Dichloroethane	0.0200	0.0187	93	6	30	80-124	
1,1-Dichloroethene	0.0200	0.0187	94	9	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0205	102	5	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0207	103	7	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0165	83	8	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0205	103	4	30	80-121	
1,2-Dichloroethane	0.0200	0.0165	83	2	30	68-120	
1,2-Dichloropropane	0.0200	0.0185	93	1	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0215	107	3	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0215	108	3	30	79-121	
1,4-Dioxane	0.400	0.400	100	11	30	67-150	
2-Butanone (MEK)	0.100	0.0774	77	0	30	61-140	
2-Hexanone	0.100	0.0845	84	4	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0887	89	1	30	80-120	
Acetone	0.100	0.0846	85	2	30	75-120	
Benzene	0.0200	0.0224	112	6	30	75-127	
Bromoform	0.0200	0.0145	73	7	30	19-150	
Bromomethane	0.0200	0.0196	98	18	30	59-136	
Carbon disulfide	0.0200	0.0173	87	10	30	74-130	
Carbon tetrachloride	0.0200	0.0172	86	9	30	77-138	
Chlorobenzene	0.0200	0.0205	102	3	30	80-120	
Chlorobromomethane	0.0200	0.0172	86	0	30	80-125	
Chlorodibromomethane	0.0200	0.0166	83	2	30	67-143	
Chloroethane	0.0200	0.0195	97	22	30	50-139	
Chloroform	0.0200	0.0177	88	4	30	80-122	
Chloromethane	0.0200	0.0202	101	23	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0170	85	5	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0197	98	2	30	75-124	
Cyclohexane	0.0200	0.0203	102	8	30	67-135	
Dichlorobromomethane	0.0200	0.0167	83	1	30	76-129	
Dichlorodifluoromethane	0.0200	0.0153	76	22	30	72-127	
Ethylbenzene	0.0200	0.0215	107	4	30	79-124	
Ethylene Dibromide	0.0200	0.0194	97	5	30	80-122	
Isopropylbenzene	0.0200	0.0218	109	7	30	80-125	
Methyl acetate	0.0400	0.0411	103	7	30	73-123	
Methyl tert-butyl ether	0.0200	0.0177	89	1	30	80-120	
Methylcyclohexane	0.0200	0.0211	105	7	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48947.D

Lab ID: LCSD 460-512623/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0182	91	4	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0216	108	5	30	79-121	
o-Xylene	0.0200	0.0209	105	6	30	79-123	
Styrene	0.0200	0.0208	104	1	30	78-123	
Tetrachloroethene	0.0200	0.0217	109	6	30	73-130	
Toluene	0.0200	0.0214	107	5	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0189	94	5	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0185	92	2	30	72-121	
Trichloroethene	0.0200	0.0182	91	6	30	79-122	
Trichlorofluoromethane	0.0200	0.0164	82	18	30	68-136	
Vinyl chloride	0.0200	0.0196	98	22	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82437.D

Lab ID: LCSD 460-513435/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0200	100	7	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0210	105	10	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0182	91	9	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0198	99	10	30	76-124	
1,1-Dichloroethane	0.0200	0.0200	100	9	30	80-124	
1,1-Dichloroethene	0.0200	0.0195	97	8	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0197	98	13	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0192	96	13	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0200	100	11	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0200	100	9	30	80-121	
1,2-Dichloroethane	0.0200	0.0193	96	7	30	68-120	
1,2-Dichloropropane	0.0200	0.0197	98	9	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0198	99	9	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0195	97	10	30	79-121	
1,4-Dioxane	0.400	0.452	113	4	30	67-150	
2-Butanone (MEK)	0.100	0.0939	94	4	30	61-140	
2-Hexanone	0.100	0.0933	93	2	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0957	96	3	30	80-120	
Acetone	0.100	0.0926	93	10	30	75-120	
Benzene	0.0200	0.0203	101	11	30	75-127	
Bromoform	0.0200	0.0201	101	9	30	19-150	
Bromomethane	0.0200	0.0166	83	11	30	59-136	
Carbon disulfide	0.0200	0.0192	96	7	30	74-130	
Carbon tetrachloride	0.0200	0.0199	100	7	30	77-138	
Chlorobenzene	0.0200	0.0197	98	7	30	80-120	
Chlorobromomethane	0.0200	0.0205	102	9	30	80-125	
Chlorodibromomethane	0.0200	0.0198	99	8	30	67-143	
Chloroethane	0.0200	0.0175	87	10	30	50-139	
Chloroform	0.0200	0.0202	101	7	30	80-122	
Chloromethane	0.0200	0.0159	79	11	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0198	99	7	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0191	96	9	30	75-124	
Cyclohexane	0.0200	0.0184	92	8	30	67-135	
Dichlorobromomethane	0.0200	0.0197	98	6	30	76-129	
Dichlorodifluoromethane	0.0200	0.0114	57	11	30	72-127	*
Ethylbenzene	0.0200	0.0205	102	10	30	79-124	
Ethylene Dibromide	0.0200	0.0200	100	9	30	80-122	
Isopropylbenzene	0.0200	0.0205	102	10	30	80-125	
Methyl acetate	0.0400	0.0373	93	8	30	73-123	
Methyl tert-butyl ether	0.0200	0.0190	95	7	30	80-120	
Methylcyclohexane	0.0200	0.0186	93	10	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82437.D

Lab ID: LCSD 460-513435/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0193	97	9	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0202	101	8	30	79-121	
o-Xylene	0.0200	0.0202	101	9	30	79-123	
Styrene	0.0200	0.0199	100	7	30	78-123	
Tetrachloroethene	0.0200	0.0207	103	11	30	73-130	
Toluene	0.0200	0.0200	100	8	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0199	100	7	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0186	93	6	30	72-121	
Trichloroethene	0.0200	0.0198	99	8	30	79-122	
Trichlorofluoromethane	0.0200	0.0181	90	8	30	68-136	
Vinyl chloride	0.0200	0.0174	87	12	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81020.D

Lab ID: 460-152211-2 MS Client ID: GC-SB-101(SO)-15.5-17.5 MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0186	0.00095 U	0.0157	84	80-125	
1,1,2,2-Tetrachloroethane	0.0186	0.00095 U	0.0142	77	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0186	0.00095 U	0.0154	83	78-132	
1,1,2-Trichloroethane	0.0186	0.00095 U	0.0140	75	76-124	*
1,1-Dichloroethane	0.0186	0.00095 U	0.0179	97	80-124	
1,1-Dichloroethene	0.0186	0.00095 U	0.0147	79	79-132	
1,2,3-Trichlorobenzene	0.0186	0.00095 U	0.0125	67	75-123	*
1,2,4-Trichlorobenzene	0.0186	0.00095 U	0.0133	72	74-124	*
1,2-Dibromo-3-Chloropropane	0.0186	0.00095 U	0.0124	67	65-129	
1,2-Dichlorobenzene	0.0186	0.00095 U	0.0136	73	80-121	*
1,2-Dichloroethane	0.0186	0.00095 U	0.0150	81	68-120	
1,2-Dichloropropane	0.0186	0.00095 U	0.0166	89	77-124	
1,3-Dichlorobenzene	0.0186	0.00095 U	0.0136	73	79-124	*
1,4-Dichlorobenzene	0.0186	0.00095 U	0.0135	73	79-121	*
1,4-Dioxane	0.371	0.019 U	0.226	61	67-150	*
2-Butanone (MEK)	0.0929	0.0023 J	0.0527	54	61-140	*
2-Hexanone	0.0929	0.0047 U	0.0680	73	78-120	*
4-Methyl-2-pentanone (MIBK)	0.0929	0.0047 U	0.0722	78	80-120	*
Acetone	0.0929	0.034	0.0775	46	75-120	*
Benzene	0.0186	0.00095 U	0.0167	90	75-127	
Bromoform	0.0186	0.00095 U	0.0121	65	19-150	
Bromomethane	0.0186	0.00095 U	0.0162	87	59-136	
Carbon disulfide	0.0186	0.00095 U	0.0169	91	74-130	
Carbon tetrachloride	0.0186	0.00095 U	0.0151	81	77-138	
Chlorobenzene	0.0186	0.00095 U	0.0134	72	80-120	*
Chlorobromomethane	0.0186	0.00095 U	0.0140	75	80-125	*
Chlorodibromomethane	0.0186	0.00095 U	0.0123	66	67-143	*
Chloroethane	0.0186	0.00095 U	0.0185	99	50-139	
Chloroform	0.0186	0.00095 U	0.0161	87	80-122	
Chloromethane	0.0186	0.00095 U	0.0201	108	66-128	
cis-1,2-Dichloroethene	0.0186	0.00095 U	0.0150	81	80-123	
cis-1,3-Dichloropropene	0.0186	0.00095 U	0.0146	79	75-124	
Cyclohexane	0.0186	0.00095 U	0.0151	81	67-135	
Dichlorobromomethane	0.0186	0.00095 U	0.0146	79	76-129	
Dichlorodifluoromethane	0.0186	0.00095 U	0.0163	88	72-127	
Ethylbenzene	0.0186	0.00095 U	0.0140	75	79-124	*
Ethylene Dibromide	0.0186	0.00095 U	0.0124	67	80-122	*
Isopropylbenzene	0.0186	0.00095 U	0.0138	74	80-125	*
Methyl acetate	0.0929	0.0047 U	0.0904	97	73-123	
Methyl tert-butyl ether	0.0186	0.00095 U	0.0142	77	80-120	*
Methylcyclohexane	0.0186	0.00095 U	0.0151	82	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81020.D

Lab ID: 460-152211-2 MS Client ID: GC-SB-101(SO)-15.5-17.5 MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Methylene Chloride	0.0186	0.0024	0.0174	81	79-128	
m-Xylene & p-Xylene	0.0186	0.00039 J	0.0144	75	79-121	*
o-Xylene	0.0186	0.00015 J	0.0141	75	79-123	*
Styrene	0.0186	0.00095 U	0.0137	74	78-123	*
Tetrachloroethene	0.0186	0.00095 U	0.0139	75	73-130	
Toluene	0.0186	0.00095 U	0.0148	80	75-122	
trans-1,2-Dichloroethene	0.0186	0.00095 U	0.0159	85	80-129	
trans-1,3-Dichloropropene	0.0186	0.00095 U	0.0145	78	72-121	
Trichloroethene	0.0186	0.00095 U	0.0152	82	79-122	
Trichlorofluoromethane	0.0186	0.00095 U	0.0172	93	68-136	
Vinyl chloride	0.0186	0.00095 U	0.0194	104	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82072.D

Lab ID: 460-153515-1 MS Client ID: GE-MW-110D(SO)-(69-70) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0164	0.00068 U	0.0218	133	80-125	*
1,1,2,2-Tetrachloroethane	0.0164	0.00068 U	0.0144	88	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0164	0.00068 U	0.0194	118	78-132	
1,1,2-Trichloroethane	0.0164	0.00068 U	0.0152	93	76-124	
1,1-Dichloroethane	0.0164	0.00068 U	0.0193	117	80-124	
1,1-Dichloroethene	0.0164	0.00068 U	0.0184	112	79-132	
1,2,3-Trichlorobenzene	0.0164	0.00068 U	0.0157	95	75-123	
1,2,4-Trichlorobenzene	0.0164	0.00068 U	0.0166	101	74-124	
1,2-Dibromo-3-Chloropropane	0.0164	0.00068 U	0.0163	100	65-129	
1,2-Dichlorobenzene	0.0164	0.00068 U	0.0157	96	80-121	
1,2-Dichloroethane	0.0164	0.00068 U	0.0176	107	68-120	
1,2-Dichloropropane	0.0164	0.00068 U	0.0172	105	77-124	
1,3-Dichlorobenzene	0.0164	0.00068 U	0.0157	95	79-124	
1,4-Dichlorobenzene	0.0164	0.00068 U	0.0156	95	79-121	
1,4-Dioxane	0.328	0.014 U	0.313	95	67-150	
2-Butanone (MEK)	0.0821	0.0034 U	0.0698	85	61-140	
2-Hexanone	0.0821	0.0034 U	0.0837	102	78-120	
4-Methyl-2-pentanone (MIBK)	0.0821	0.0034 U	0.0868	106	80-120	
Acetone	0.0821	0.0045	0.107	125	75-120	*
Benzene	0.0164	0.00068 U	0.0164	100	75-127	
Bromoform	0.0164	0.00068 U	0.0226	138	19-150	
Bromomethane	0.0164	0.00068 U	0.0134	81	59-136	
Carbon disulfide	0.0164	0.00068 U	0.0182	111	74-130	
Carbon tetrachloride	0.0164	0.00068 U	0.0248	151	77-138	*
Chlorobenzene	0.0164	0.00068 U	0.0158	96	80-120	
Chlorobromomethane	0.0164	0.00068 U	0.0179	109	80-125	
Chlorodibromomethane	0.0164	0.00068 U	0.0188	115	67-143	
Chloroethane	0.0164	0.00068 U	0.0134	82	50-139	
Chloroform	0.0164	0.00068 U	0.0185	112	80-122	
Chloromethane	0.0164	0.00068 U	0.0121	73	66-128	
cis-1,2-Dichloroethene	0.0164	0.00068 U	0.0177	108	80-123	
cis-1,3-Dichloropropene	0.0164	0.00068 U	0.0163	99	75-124	
Cyclohexane	0.0164	0.00068 U	0.0183	112	67-135	
Dichlorobromomethane	0.0164	0.00068 U	0.0186	113	76-129	
Dichlorodifluoromethane	0.0164	0.00068 U	0.0125	76	72-127	
Ethylbenzene	0.0164	0.00068 U	0.0168	102	79-124	
Ethylene Dibromide	0.0164	0.00068 U	0.0162	98	80-122	
Isopropylbenzene	0.0164	0.00068 U	0.0174	106	80-125	
Methyl acetate	0.0821	0.0034 U	0.0977	119	73-123	
Methyl tert-butyl ether	0.0164	0.00068 U	0.0177	108	80-120	
Methylcyclohexane	0.0164	0.00068 U	0.0187	114	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82072.D

Lab ID: 460-153515-1 MS Client ID: GE-MW-110D(SO)-(69-70) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Methylene Chloride	0.0164	0.00065 J	0.0171	100	79-128	
m-Xylene & p-Xylene	0.0164	0.00021 J	0.0162	97	79-121	
o-Xylene	0.0164	0.000094 J	0.0166	101	79-123	
Styrene	0.0164	0.00068 U	0.0159	97	78-123	
Tetrachloroethene	0.0164	0.00068 U	0.0186	113	73-130	
Toluene	0.0164	0.00068 U	0.0161	98	75-122	
trans-1,2-Dichloroethene	0.0164	0.00068 U	0.0179	109	80-129	
trans-1,3-Dichloropropene	0.0164	0.00068 U	0.0176	107	72-121	
Trichloroethene	0.0164	0.00068 U	0.0183	112	79-122	
Trichlorofluoromethane	0.0164	0.00068 U	0.0143	87	68-136	
Vinyl chloride	0.0164	0.00068 U	0.0126	77	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81021.D

Lab ID: 460-152211-2 MSD Client ID: GC-SB-101(SO)-15.5-17.5 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0204	0.0156	76	1	30	80-125	*
1,1,2,2-Tetrachloroethane	0.0204	0.0158	78	11	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0204	0.0147	72	5	30	78-132	*
1,1,2-Trichloroethane	0.0204	0.0150	73	7	30	76-124	*
1,1-Dichloroethane	0.0204	0.0174	85	3	30	80-124	
1,1-Dichloroethene	0.0204	0.0146	72	1	30	79-132	*
1,2,3-Trichlorobenzene	0.0204	0.0136	67	9	30	75-123	*
1,2,4-Trichlorobenzene	0.0204	0.0140	68	5	30	74-124	*
1,2-Dibromo-3-Chloropropane	0.0204	0.0151	74	20	30	65-129	
1,2-Dichlorobenzene	0.0204	0.0136	67	0	30	80-121	*
1,2-Dichloroethane	0.0204	0.0156	76	4	30	68-120	
1,2-Dichloropropane	0.0204	0.0172	84	4	30	77-124	
1,3-Dichlorobenzene	0.0204	0.0135	66	0	30	79-124	*
1,4-Dichlorobenzene	0.0204	0.0138	68	2	30	79-121	*
1,4-Dioxane	0.408	0.250	61	10	30	67-150	*
2-Butanone (MEK)	0.102	0.0614	58	15	30	61-140	*
2-Hexanone	0.102	0.0786	77	14	30	78-120	*
4-Methyl-2-pentanone (MIBK)	0.102	0.0810	79	12	30	80-120	*
Acetone	0.102	0.0752	40	3	30	75-120	*
Benzene	0.0204	0.0157	77	6	30	75-127	
Bromoform	0.0204	0.0128	63	5	30	19-150	
Bromomethane	0.0204	0.0137	67	17	30	59-136	
Carbon disulfide	0.0204	0.0163	80	3	30	74-130	
Carbon tetrachloride	0.0204	0.0144	71	5	30	77-138	*
Chlorobenzene	0.0204	0.0132	65	1	30	80-120	*
Chlorobromomethane	0.0204	0.0147	72	5	30	80-125	*
Chlorodibromomethane	0.0204	0.0129	63	5	30	67-143	*
Chloroethane	0.0204	0.0154	75	18	30	50-139	
Chloroform	0.0204	0.0160	78	1	30	80-122	*
Chloromethane	0.0204	0.0170	83	17	30	66-128	
cis-1,2-Dichloroethene	0.0204	0.0149	73	1	30	80-123	*
cis-1,3-Dichloropropene	0.0204	0.0150	74	3	30	75-124	*
Cyclohexane	0.0204	0.0147	72	3	30	67-135	
Dichlorobromomethane	0.0204	0.0150	73	3	30	76-129	*
Dichlorodifluoromethane	0.0204	0.0133	65	21	30	72-127	*
Ethylbenzene	0.0204	0.0139	68	0	30	79-124	*
Ethylene Dibromide	0.0204	0.0143	70	14	30	80-122	*
Isopropylbenzene	0.0204	0.0135	66	2	30	80-125	*
Methyl acetate	0.102	0.105	103	15	30	73-123	
Methyl tert-butyl ether	0.0204	0.0155	76	9	30	80-120	*
Methylcyclohexane	0.0204	0.0146	71	4	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81021.D

Lab ID: 460-152211-2 MSD Client ID: GC-SB-101(SO)-15.5-17.5 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0204	0.0201	87	14	30	79-128	
m-Xylene & p-Xylene	0.0204	0.0142	68	1	30	79-121	*
o-Xylene	0.0204	0.0146	71	4	30	79-123	*
Styrene	0.0204	0.0141	69	2	30	78-123	*
Tetrachloroethene	0.0204	0.0133	65	4	30	73-130	*
Toluene	0.0204	0.0144	71	3	30	75-122	*
trans-1,2-Dichloroethene	0.0204	0.0156	76	2	30	80-129	*
trans-1,3-Dichloropropene	0.0204	0.0146	72	1	30	72-121	
Trichloroethene	0.0204	0.0151	74	1	30	79-122	*
Trichlorofluoromethane	0.0204	0.0139	68	21	30	68-136	
Vinyl chloride	0.0204	0.0141	69	31	30	70-134	*

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82073.D

Lab ID: 460-153515-1 MSD Client ID: GE-MW-110D(SO)-(69-70) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0172	0.0231	134	6	30	80-125	*
1,1,2,2-Tetrachloroethane	0.0172	0.0147	85	2	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0172	0.0203	118	4	30	78-132	
1,1,2-Trichloroethane	0.0172	0.0158	92	3	30	76-124	
1,1-Dichloroethane	0.0172	0.0204	119	6	30	80-124	
1,1-Dichloroethene	0.0172	0.0200	116	8	30	79-132	
1,2,3-Trichlorobenzene	0.0172	0.0160	93	2	30	75-123	
1,2,4-Trichlorobenzene	0.0172	0.0165	96	1	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0172	0.0165	96	1	30	65-129	
1,2-Dichlorobenzene	0.0172	0.0165	96	5	30	80-121	
1,2-Dichloroethane	0.0172	0.0182	106	3	30	68-120	
1,2-Dichloropropane	0.0172	0.0182	106	6	30	77-124	
1,3-Dichlorobenzene	0.0172	0.0161	94	3	30	79-124	
1,4-Dichlorobenzene	0.0172	0.0161	93	3	30	79-121	
1,4-Dioxane	0.344	0.419	122	29	30	67-150	
2-Butanone (MEK)	0.0860	0.0753	88	8	30	61-140	
2-Hexanone	0.0860	0.0872	101	4	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.0860	0.0930	108	7	30	80-120	
Acetone	0.0860	0.124	139	15	30	75-120	*
Benzene	0.0172	0.0172	100	5	30	75-127	
Bromoform	0.0172	0.0230	134	2	30	19-150	
Bromomethane	0.0172	0.0134	78	0	30	59-136	
Carbon disulfide	0.0172	0.0194	113	6	30	74-130	
Carbon tetrachloride	0.0172	0.0264	153	6	30	77-138	*
Chlorobenzene	0.0172	0.0165	96	5	30	80-120	
Chlorobromomethane	0.0172	0.0190	111	6	30	80-125	
Chlorodibromomethane	0.0172	0.0201	117	7	30	67-143	
Chloroethane	0.0172	0.0139	81	4	30	50-139	
Chloroform	0.0172	0.0199	116	8	30	80-122	
Chloromethane	0.0172	0.0122	71	1	30	66-128	
cis-1,2-Dichloroethene	0.0172	0.0187	109	6	30	80-123	
cis-1,3-Dichloropropene	0.0172	0.0170	99	5	30	75-124	
Cyclohexane	0.0172	0.0192	111	4	30	67-135	
Dichlorobromomethane	0.0172	0.0198	115	6	30	76-129	
Dichlorodifluoromethane	0.0172	0.0124	72	1	30	72-127	
Ethylbenzene	0.0172	0.0175	102	4	30	79-124	
Ethylene Dibromide	0.0172	0.0165	96	2	30	80-122	
Isopropylbenzene	0.0172	0.0180	105	3	30	80-125	
Methyl acetate	0.0860	0.0996	116	2	30	73-123	
Methyl tert-butyl ether	0.0172	0.0183	106	3	30	80-120	
Methylcyclohexane	0.0172	0.0192	112	3	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82073.D

Lab ID: 460-153515-1 MSD Client ID: GE-MW-110D(SO)-(69-70) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0172	0.0187	105	9	30	79-128	
m-Xylene & p-Xylene	0.0172	0.0168	96	4	30	79-121	
o-Xylene	0.0172	0.0174	101	4	30	79-123	
Styrene	0.0172	0.0163	95	3	30	78-123	
Tetrachloroethene	0.0172	0.0191	111	3	30	73-130	
Toluene	0.0172	0.0169	99	5	30	75-122	
trans-1,2-Dichloroethene	0.0172	0.0194	113	8	30	80-129	
trans-1,3-Dichloropropene	0.0172	0.0182	106	3	30	72-121	
Trichloroethene	0.0172	0.0188	109	2	30	79-122	
Trichlorofluoromethane	0.0172	0.0141	82	2	30	68-136	
Vinyl chloride	0.0172	0.0126	73	0	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: B28120.D Lab Sample ID: MB 460-507466/9

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS2 Date Analyzed: 03/31/2018 14:28

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-507466/5	B28116.D	03/31/2018 12:53
	LCSD 460-507466/6	B28117.D	03/31/2018 13:17
GC-MW-107D(SO)-15-17	460-152604-2	B28134.D	03/31/2018 19:59

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D48515.D Lab Sample ID: MB 460-510106/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS4 Date Analyzed: 04/11/2018 10:54

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-510106/3	D48511.D	04/11/2018 09:14
	LCSD 460-510106/4	D48512.D	04/11/2018 09:39
GC-MW-107D(SO)-97-99	460-153022-1	D48522.D	04/11/2018 13:45

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D48764.D Lab Sample ID: MB 460-511498/8

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS4 Date Analyzed: 04/16/2018 21:36

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-511498/4	D48760.D	04/16/2018 19:40
	LCSD 460-511498/5	D48761.D	04/16/2018 20:04
GC-MW-101D(SO)-14-15	460-153682-1	D48780.D	04/17/2018 04:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D48924.D Lab Sample ID: MB 460-512479/8

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS4 Date Analyzed: 04/19/2018 20:38

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-512479/4	D48920.D	04/19/2018 19:00
	LCSD 460-512479/5	D48921.D	04/19/2018 19:25
GC-MW-110D(SO)-15-17	460-153389-1	D48925.D	04/19/2018 21:03

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D48950.D Lab Sample ID: MB 460-512623/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS4 Date Analyzed: 04/20/2018 08:59

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-512623/3	D48946.D	04/20/2018 07:20
	LCSD 460-512623/4	D48947.D	04/20/2018 07:45
GC-MW-101D(SO)(99.2-100)	460-153878-1	D48968.D	04/20/2018 16:23

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81016.D Lab Sample ID: MB 460-504873/8

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 03/21/2018 01:16

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-504873/4	K81012.D	03/20/2018 23:38
	LCSD 460-504873/5	K81013.D	03/21/2018 00:03
GC-SB-101(SO)-15.5-17.5	460-152211-2	K81019.D	03/21/2018 02:43
GC-SB-101(SO)-15.5-17.5 MS	460-152211-2 MS	K81020.D	03/21/2018 03:08
GC-SB-101(SO)-15.5-17.5 MSD	460-152211-2 MSD	K81021.D	03/21/2018 03:32
GC-SB-101(SO)-3-5	460-152211-1	K81024.D	03/21/2018 04:44
GC-MW-102(SO)-3-5	460-152211-3	K81025.D	03/21/2018 05:09
GC-MW-102(SO)-9-11	460-152211-4	K81026.D	03/21/2018 05:33
GC-MW-103(SO)-3-5	460-152211-5	K81027.D	03/21/2018 05:57

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81123.D Lab Sample ID: MB 460-505749/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 03/24/2018 08:10

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-505749/3	K81119.D	03/24/2018 06:19
	LCSD 460-505749/4	K81120.D	03/24/2018 06:43
GC-MW-104(SO)-0.5-2.5	460-152331-3	K81124.D	03/24/2018 08:36
GC-MW-104(SO)-7-9	460-152331-4	K81125.D	03/24/2018 09:01
GC-MW-105(SO)-0.5-2.5	460-152331-5	K81126.D	03/24/2018 09:24
GC-MW-105(SO)-7-9	460-152331-6	K81127.D	03/24/2018 09:49
GC-Drain-02(SO)	460-152331-7	K81128.D	03/24/2018 10:13
GC-MW-103(SO)-12-14	460-152331-1	K81129.D	03/24/2018 10:37

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81152.D Lab Sample ID: MB 460-505873/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 03/25/2018 06:54

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-505873/3	K81148.D	03/25/2018 04:55
	LCSD 460-505873/4	K81149.D	03/25/2018 05:19
GC-MW-103(SO)-15-17	460-152331-2	K81168.D	03/25/2018 13:30

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81915.D Lab Sample ID: MB 460-510660/8

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 04/12/2018 23:48

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-510660/4	K81911.D	04/12/2018 22:11
	LCSD 460-510660/5	K81912.D	04/12/2018 22:35
GC-MW-109M(SO)-33-35	460-153082-1	K81924.D	04/13/2018 03:26
GC-MW-106(SO)-15-17	460-153163-1	K81925.D	04/13/2018 03:51
GC-MW-108D(SO)-15-17	460-153163-2	K81926.D	04/13/2018 04:15

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81968.D Lab Sample ID: MB 460-510972/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 04/13/2018 22:23

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-510972/3	K81964.D	04/13/2018 20:46
	LCSD 460-510972/4	K81965.D	04/13/2018 21:10
GC-MW-108D(SO)-59-60.5	460-153254-2	K81975.D	04/14/2018 01:15

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K82038.D Lab Sample ID: MB 460-511293/8

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 04/16/2018 07:18

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-511293/4	K82034.D	04/16/2018 05:14
	LCSD 460-511293/5	K82035.D	04/16/2018 05:51
GC-MW-108D(SO)-33-35	460-153254-1	K82046.D	04/16/2018 10:34

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K82067.D Lab Sample ID: MB 460-511471/8

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 04/16/2018 20:33

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-511471/5	K82064.D	04/16/2018 19:12
GE-MW-110D(SO)-(69-70)	460-153515-1	K82069.D	04/16/2018 21:52
GE-MW-110D(SO)-(69-70) MS	460-153515-1 MS	K82072.D	04/16/2018 23:39
GE-MW-110D(SO)-(69-70) MSD	460-153515-1 MSD	K82073.D	04/17/2018 00:03

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K82440.D Lab Sample ID: MB 460-513435/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 04/23/2018 19:41

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-513435/3	K82436.D	04/23/2018 17:51
	LCSD 460-513435/4	K82437.D	04/23/2018 18:16
GC-MW-109M(SO)-15-17	460-153018-1	K82442.D	04/23/2018 21:10

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: B27889.D BFB Injection Date: 03/26/2018

Instrument ID: CVOAMS2 BFB Injection Time: 03:14

Analysis Batch No.: 505957

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.1	
75	30.0 - 60.0 % of mass 95	50.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.6	(0.6) 1
174	50.0 - 120.00 % of mass 95	93.0	
175	5.0 - 9.0 % of mass 174	6.7	(7.2) 1
176	95.0 - 101.0 % of mass 174	89.5	(96.3) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD1 460-505957/3	B27891.D	03/26/2018	04:03
	STD5 460-505957/4	B27892.D	03/26/2018	04:33
	STD20 460-505957/5	B27893.D	03/26/2018	04:57
	STD50 460-505957/6	B27894.D	03/26/2018	05:20
	STD200 460-505957/7	B27895.D	03/26/2018	05:44
	STD500 460-505957/8	B27896.D	03/26/2018	06:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: B28112.D BFB Injection Date: 03/31/2018

Instrument ID: CVOAMS2 BFB Injection Time: 10:48

Analysis Batch No.: 507466

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.0	
75	30.0 - 60.0 % of mass 95	46.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	50.0 - 120.00 % of mass 95	84.8	
175	5.0 - 9.0 % of mass 174	6.1	(7.1) 1
176	95.0 - 101.0 % of mass 174	84.1	(99.1) 1
177	5.0 - 9.0 % of mass 176	6.6	(7.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-507466/4	B28115.D	03/31/2018	12:11
	LCS 460-507466/5	B28116.D	03/31/2018	12:53
	LCSD 460-507466/6	B28117.D	03/31/2018	13:17
	MB 460-507466/9	B28120.D	03/31/2018	14:28
GC-MW-107D(SO)-15-17	460-152604-2	B28134.D	03/31/2018	19:59

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D47903.D BFB Injection Date: 03/28/2018

Instrument ID: CVOAMS4 BFB Injection Time: 09:56

Analysis Batch No.: 506606

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.5	
75	30.0 - 60.0 % of mass 95	52.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	65.3	
175	5.0 - 9.0 % of mass 174	5.4	(8.3) 1
176	95.0 - 101.0 % of mass 174	63.9	(97.9) 1
177	5.0 - 9.0 % of mass 176	4.2	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 460-506606/9	D47911.D	03/28/2018	13:30
	STD20 460-506606/10	D47912.D	03/28/2018	13:54
	STD50 460-506606/11	D47913.D	03/28/2018	14:19
	STD200 460-506606/12	D47914.D	03/28/2018	14:43
	STD500 460-506606/13	D47915.D	03/28/2018	15:08
	STD1 460-506606/18	D47920a.D	03/28/2018	19:22

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D48509.D BFB Injection Date: 04/11/2018

Instrument ID: CVOAMS4 BFB Injection Time: 08:11

Analysis Batch No.: 510106

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.1	
75	30.0 - 60.0 % of mass 95	53.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	67.6	
175	5.0 - 9.0 % of mass 174	5.4	(8.0) 1
176	95.0 - 101.0 % of mass 174	66.0	(97.6) 1
177	5.0 - 9.0 % of mass 176	4.2	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-510106/2	D48510.D	04/11/2018	08:49
	LCS 460-510106/3	D48511.D	04/11/2018	09:14
	LCSD 460-510106/4	D48512.D	04/11/2018	09:39
	MB 460-510106/7	D48515.D	04/11/2018	10:54
GC-MW-107D(SO)-97-99	460-153022-1	D48522.D	04/11/2018	13:45

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D48757.D BFB Injection Date: 04/16/2018

Instrument ID: CVOAMS4 BFB Injection Time: 18:25

Analysis Batch No.: 511498

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.0	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	64.1	
175	5.0 - 9.0 % of mass 174	5.0	(7.9) 1
176	95.0 - 101.0 % of mass 174	61.2	(95.5) 1
177	5.0 - 9.0 % of mass 176	4.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-511498/3	D48759.D	04/16/2018	19:15
	LCS 460-511498/4	D48760.D	04/16/2018	19:40
	LCSD 460-511498/5	D48761.D	04/16/2018	20:04
	MB 460-511498/8	D48764.D	04/16/2018	21:36
GC-MW-101D(SO)-14-15	460-153682-1	D48780.D	04/17/2018	04:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D48917.D BFB Injection Date: 04/19/2018

Instrument ID: CVOAMS4 BFB Injection Time: 17:40

Analysis Batch No.: 512479

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.5	
75	30.0 - 60.0 % of mass 95	51.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	67.3	
175	5.0 - 9.0 % of mass 174	5.4	(8.0) 1
176	95.0 - 101.0 % of mass 174	64.8	(96.3) 1
177	5.0 - 9.0 % of mass 176	4.2	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-512479/3	D48919.D	04/19/2018	18:35
	LCS 460-512479/4	D48920.D	04/19/2018	19:00
	LCSD 460-512479/5	D48921.D	04/19/2018	19:25
	MB 460-512479/8	D48924.D	04/19/2018	20:38
GC-MW-110D(SO)-15-17	460-153389-1	D48925.D	04/19/2018	21:03

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: D48944.D BFB Injection Date: 04/20/2018

Instrument ID: CVOAMS4 BFB Injection Time: 05:30

Analysis Batch No.: 512623

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.4	
75	30.0 - 60.0 % of mass 95	53.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	65.0	
175	5.0 - 9.0 % of mass 174	5.1	(7.8) 1
176	95.0 - 101.0 % of mass 174	63.1	(96.9) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-512623/2	D48945.D	04/20/2018	06:44
	LCS 460-512623/3	D48946.D	04/20/2018	07:20
	LCSD 460-512623/4	D48947.D	04/20/2018	07:45
	MB 460-512623/7	D48950.D	04/20/2018	08:59
GC-MW-101D(SO)(99.2-100)	460-153878-1	D48968.D	04/20/2018	16:23

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K80593.D BFB Injection Date: 03/09/2018

Instrument ID: CVOAMS9 BFB Injection Time: 21:58

Analysis Batch No.: 502604

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.4	
75	30.0 - 60.0 % of mass 95	44.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.8	
173	Less than 2.0 % of mass 174	1.3	(1.3) 1
174	50.0 - 120.00 % of mass 95	96.9	
175	5.0 - 9.0 % of mass 174	7.8	(8.0) 1
176	95.0 - 101.0 % of mass 174	95.8	(98.9) 1
177	5.0 - 9.0 % of mass 176	6.0	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD1 460-502604/2	K80594.D	03/09/2018	22:30
	STD5 460-502604/3	K80595.D	03/09/2018	22:54
	STD20 460-502604/4	K80596.D	03/09/2018	23:18
	STD50 460-502604/5	K80597.D	03/09/2018	23:43
	STD200 460-502604/6	K80598.D	03/10/2018	00:07
	STD500 460-502604/7	K80599.D	03/10/2018	00:31

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81009.D BFB Injection Date: 03/20/2018

Instrument ID: CVOAMS9 BFB Injection Time: 21:17

Analysis Batch No.: 504873

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	1.6	(1.7) 1
174	50.0 - 120.00 % of mass 95	93.8	
175	5.0 - 9.0 % of mass 174	6.3	(6.7) 1
176	95.0 - 101.0 % of mass 174	90.4	(96.4) 1
177	5.0 - 9.0 % of mass 176	5.0	(5.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-504873/3	K81011.D	03/20/2018	23:13
	LCS 460-504873/4	K81012.D	03/20/2018	23:38
	LCSD 460-504873/5	K81013.D	03/21/2018	00:03
	MB 460-504873/8	K81016.D	03/21/2018	01:16
GC-SB-101(SO)-15.5-17.5	460-152211-2	K81019.D	03/21/2018	02:43
GC-SB-101(SO)-15.5-17.5 MS	460-152211-2 MS	K81020.D	03/21/2018	03:08
GC-SB-101(SO)-15.5-17.5 MSD	460-152211-2 MSD	K81021.D	03/21/2018	03:32
GC-SB-101(SO)-3-5	460-152211-1	K81024.D	03/21/2018	04:44
GC-MW-102(SO)-3-5	460-152211-3	K81025.D	03/21/2018	05:09
GC-MW-102(SO)-9-11	460-152211-4	K81026.D	03/21/2018	05:33
GC-MW-103(SO)-3-5	460-152211-5	K81027.D	03/21/2018	05:57

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81080.D BFB Injection Date: 03/23/2018

Instrument ID: CVOAMS9 BFB Injection Time: 12:02

Analysis Batch No.: 505429

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.4	
75	30.0 - 60.0 % of mass 95	49.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	79.2	
175	5.0 - 9.0 % of mass 174	6.9	(8.7) 1
176	95.0 - 101.0 % of mass 174	76.5	(96.6) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD1 460-505429/3	K81082.D	03/23/2018	12:53
	STD5 460-505429/4	K81083.D	03/23/2018	13:18
	STD20 460-505429/5	K81084.D	03/23/2018	13:42
	STD50 460-505429/6	K81085.D	03/23/2018	14:07
	STD200 460-505429/7	K81086.D	03/23/2018	14:31
	STD500 460-505429/8	K81087.D	03/23/2018	14:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81117.D BFB Injection Date: 03/24/2018

Instrument ID: CVOAMS9 BFB Injection Time: 05:27

Analysis Batch No.: 505749

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.1	
75	30.0 - 60.0 % of mass 95	50.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.9	(1.3) 1
174	50.0 - 120.00 % of mass 95	66.0	
175	5.0 - 9.0 % of mass 174	5.3	(8.1) 1
176	95.0 - 101.0 % of mass 174	63.3	(95.9) 1
177	5.0 - 9.0 % of mass 176	5.1	(8.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-505749/2	K81118.D	03/24/2018	05:54
	LCS 460-505749/3	K81119.D	03/24/2018	06:19
	LCSD 460-505749/4	K81120.D	03/24/2018	06:43
	MB 460-505749/7	K81123.D	03/24/2018	08:10
GC-MW-104(SO)-0.5-2.5	460-152331-3	K81124.D	03/24/2018	08:36
GC-MW-104(SO)-7-9	460-152331-4	K81125.D	03/24/2018	09:01
GC-MW-105(SO)-0.5-2.5	460-152331-5	K81126.D	03/24/2018	09:24
GC-MW-105(SO)-7-9	460-152331-6	K81127.D	03/24/2018	09:49
GC-Drain-02(SO)	460-152331-7	K81128.D	03/24/2018	10:13
GC-MW-103(SO)-12-14	460-152331-1	K81129.D	03/24/2018	10:37

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81146.D BFB Injection Date: 03/25/2018

Instrument ID: CVOAMS9 BFB Injection Time: 04:01

Analysis Batch No.: 505873

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.1	
75	30.0 - 60.0 % of mass 95	48.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	66.6	
175	5.0 - 9.0 % of mass 174	5.8	(8.7) 1
176	95.0 - 101.0 % of mass 174	63.3	(95.1) 1
177	5.0 - 9.0 % of mass 176	3.9	(6.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-505873/2	K81147.D	03/25/2018	04:30
	LCS 460-505873/3	K81148.D	03/25/2018	04:55
	LCSD 460-505873/4	K81149.D	03/25/2018	05:19
	MB 460-505873/7	K81152.D	03/25/2018	06:54
GC-MW-103(SO)-15-17	460-152331-2	K81168.D	03/25/2018	13:30

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81443.D BFB Injection Date: 04/03/2018

Instrument ID: CVOAMS9 BFB Injection Time: 06:47

Analysis Batch No.: 507960

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.4	
75	30.0 - 60.0 % of mass 95	37.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	57.1	
175	5.0 - 9.0 % of mass 174	3.2	(5.7) 1
176	95.0 - 101.0 % of mass 174	55.7	(97.5) 1
177	5.0 - 9.0 % of mass 176	3.7	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD1 460-507960/3	K81445.D	04/03/2018	07:38
	STD20 460-507960/5	K81447.D	04/03/2018	10:54
	STD50 460-507960/6	K81448.D	04/03/2018	11:18
	STD200 460-507960/7	K81449.D	04/03/2018	11:42
	STD500 460-507960/8	K81450.D	04/03/2018	12:07
	STD5 460-507960/13	K81455.D	04/03/2018	15:21

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81908.D BFB Injection Date: 04/12/2018

Instrument ID: CVOAMS9 BFB Injection Time: 20:13

Analysis Batch No.: 510660

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.4	
75	30.0 - 60.0 % of mass 95	45.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	81.6	
175	5.0 - 9.0 % of mass 174	7.0	(8.6) 1
176	95.0 - 101.0 % of mass 174	78.3	(95.9) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-510660/3	K81910.D	04/12/2018	21:47
	LCS 460-510660/4	K81911.D	04/12/2018	22:11
	LCSD 460-510660/5	K81912.D	04/12/2018	22:35
	MB 460-510660/8	K81915.D	04/12/2018	23:48
GC-MW-109M(SO)-33-35	460-153082-1	K81924.D	04/13/2018	03:26
GC-MW-106(SO)-15-17	460-153163-1	K81925.D	04/13/2018	03:51
GC-MW-108D(SO)-15-17	460-153163-2	K81926.D	04/13/2018	04:15

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K81962.D BFB Injection Date: 04/13/2018

Instrument ID: CVOAMS9 BFB Injection Time: 19:50

Analysis Batch No.: 510972

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.9	
75	30.0 - 60.0 % of mass 95	42.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	81.0	
175	5.0 - 9.0 % of mass 174	5.7	(7.0) 1
176	95.0 - 101.0 % of mass 174	78.2	(96.6) 1
177	5.0 - 9.0 % of mass 176	6.8	(8.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-510972/2	K81963.D	04/13/2018	20:21
	LCS 460-510972/3	K81964.D	04/13/2018	20:46
	LCSD 460-510972/4	K81965.D	04/13/2018	21:10
	MB 460-510972/7	K81968.D	04/13/2018	22:23
GC-MW-108D(SO)-59-60.5	460-153254-2	K81975.D	04/14/2018	01:15

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K82031.D BFB Injection Date: 04/16/2018

Instrument ID: CVOAMS9 BFB Injection Time: 03:56

Analysis Batch No.: 511293

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.2	
75	30.0 - 60.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	86.9	
175	5.0 - 9.0 % of mass 174	6.9	(7.9) 1
176	95.0 - 101.0 % of mass 174	85.5	(98.3) 1
177	5.0 - 9.0 % of mass 176	5.8	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-511293/3	K82033.D	04/16/2018	04:50
	LCS 460-511293/4	K82034.D	04/16/2018	05:14
	LCSD 460-511293/5	K82035.D	04/16/2018	05:51
	MB 460-511293/8	K82038.D	04/16/2018	07:18
GC-MW-108D(SO)-33-35	460-153254-1	K82046.D	04/16/2018	10:34

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K82060.D BFB Injection Date: 04/16/2018

Instrument ID: CVOAMS9 BFB Injection Time: 17:18

Analysis Batch No.: 511471

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.2	
75	30.0 - 60.0 % of mass 95	44.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.2	(0.2) 1
174	50.0 - 120.00 % of mass 95	82.8	
175	5.0 - 9.0 % of mass 174	5.6	(6.8) 1
176	95.0 - 101.0 % of mass 174	80.9	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-511471/4	K82063.D	04/16/2018	18:36
	LCS 460-511471/5	K82064.D	04/16/2018	19:12
	MB 460-511471/8	K82067.D	04/16/2018	20:33
GE-MW-110D(SO)-(69-70)	460-153515-1	K82069.D	04/16/2018	21:52
GE-MW-110D(SO)-(69-70) MS	460-153515-1 MS	K82072.D	04/16/2018	23:39
GE-MW-110D(SO)-(69-70) MSD	460-153515-1 MSD	K82073.D	04/17/2018	00:03

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K82294.D BFB Injection Date: 04/21/2018

Instrument ID: CVOAMS9 BFB Injection Time: 05:15

Analysis Batch No.: 512949

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.5	
75	30.0 - 60.0 % of mass 95	44.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	50.0 - 120.00 % of mass 95	92.2	
175	5.0 - 9.0 % of mass 174	7.1	(7.7) 1
176	95.0 - 101.0 % of mass 174	91.6	(99.4) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD1 460-512949/3	K82296.D	04/21/2018	06:04
	STD5 460-512949/4	K82297.D	04/21/2018	06:29
	STD20 460-512949/5	K82298.D	04/21/2018	06:54
	STD50 460-512949/6	K82299.D	04/21/2018	07:18
	STD200 460-512949/7	K82300.D	04/21/2018	07:42
	STD500 460-512949/8	K82301.D	04/21/2018	08:07

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab File ID: K82434.D BFB Injection Date: 04/23/2018

Instrument ID: CVOAMS9 BFB Injection Time: 17:01

Analysis Batch No.: 513435

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.5	
75	30.0 - 60.0 % of mass 95	49.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	50.0 - 120.00 % of mass 95	99.4	
175	5.0 - 9.0 % of mass 174	8.4	(8.4) 1
176	95.0 - 101.0 % of mass 174	98.1	(98.7) 1
177	5.0 - 9.0 % of mass 176	5.8	(5.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-513435/2	K82435.D	04/23/2018	17:27
	LCS 460-513435/3	K82436.D	04/23/2018	17:51
	LCSD 460-513435/4	K82437.D	04/23/2018	18:16
	MB 460-513435/7	K82440.D	04/23/2018	19:41
GC-MW-109M(SO)-15-17	460-153018-1	K82442.D	04/23/2018	21:10

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-507466/4 Date Analyzed: 03/31/2018 12:11

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): B28115.D Heated Purge: (Y/N) Y

Calibration ID: 67235

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		264091	2.72	237049	3.83	461194	5.00
UPPER LIMIT		528182	3.22	474098	4.33	922388	5.50
LOWER LIMIT		132046	2.22	118525	3.33	230597	4.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-507466/5		225688	2.72	247366	3.83	476380	5.00
LCSD 460-507466/6		231792	2.72	218649	3.82	474153	5.00
MB 460-507466/9		219446	2.74	183312	3.83	390759	5.00
460-152604-2	GC-MW-107D(SO)-15-17	233642	2.72	191422	3.83	383335	5.00

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-507466/4 Date Analyzed: 03/31/2018 12:11

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): B28115.D Heated Purge: (Y/N) Y

Calibration ID: 67235

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		16990	5.84	310562	8.41	197262	10.28
UPPER LIMIT		33980	6.34	621124	8.91	394524	10.78
LOWER LIMIT		8495	5.34	155281	7.91	98631	9.78
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-507466/5		16070	5.85	347541	8.41	198906	10.28
LCSD 460-507466/6		13572	5.84	312168	8.41	187976	10.28
MB 460-507466/9		11274	5.86	288320	8.41	132875	10.28
460-152604-2	GC-MW-107D(SO)-15-17	10124	5.84	283556	8.41	137726	10.28

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-510106/2 Date Analyzed: 04/11/2018 08:49

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D48510.D Heated Purge: (Y/N) Y

Calibration ID: 67312

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		566249	3.57	455543	4.87	811877	6.22
UPPER LIMIT		1132498	4.07	911086	5.37	1623754	6.72
LOWER LIMIT		283125	3.07	227772	4.37	405939	5.72
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-510106/3		532807	3.56	438969	4.87	817333	6.22
LCSD 460-510106/4		515037	3.56	415125	4.86	777306	6.22
MB 460-510106/7		483043	3.56	388889	4.86	722662	6.22
460-153022-1	GC-MW-107D(SO)-97-99	502072	3.57	447298	4.87	838409	6.23

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-510106/2 Date Analyzed: 04/11/2018 08:49

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D48510.D Heated Purge: (Y/N) Y

Calibration ID: 67312

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		33224	7.07	513816	9.35	252099	11.17
UPPER LIMIT		66448	7.57	1027632	9.85	504198	11.67
LOWER LIMIT		16612	6.57	256908	8.85	126050	10.67
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-510106/3		33499	7.07	518373	9.35	257121	11.17
LCSD 460-510106/4		32575	7.06	496335	9.35	246416	11.17
MB 460-510106/7		30254	7.07	466354	9.35	234864	11.17
460-153022-1	GC-MW-107D(SO)-97-99	26148	7.08	542453	9.36	269560	11.17

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-511498/3 Date Analyzed: 04/16/2018 19:15

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D48759.D Heated Purge: (Y/N) Y

Calibration ID: 67312

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		417821	3.60	385669	4.90	695303	6.26
UPPER LIMIT		835642	4.10	771338	5.40	1390606	6.76
LOWER LIMIT		208911	3.10	192835	4.40	347652	5.76
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-511498/4		445354	3.60	407762	4.91	709811	6.27
LCSD 460-511498/5		453782	3.60	407806	4.91	698588	6.26
MB 460-511498/8		398416	3.59	357262	4.90	659898	6.26
460-153682-1	GC-MW-101D(SO)-14-15	466538	3.59	424180	4.90	667772	6.26

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-511498/3 Date Analyzed: 04/16/2018 19:15

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D48759.D Heated Purge: (Y/N) Y

Calibration ID: 67312

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		25719	7.11	433312	9.37	221965	11.20
UPPER LIMIT		51438	7.61	866624	9.87	443930	11.70
LOWER LIMIT		12860	6.61	216656	8.87	110983	10.70
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-511498/4		26970	7.11	439723	9.38	221875	11.20
LCSD 460-511498/5		25315	7.11	423079	9.37	214118	11.19
MB 460-511498/8		24197	7.10	413114	9.37	213070	11.19
460-153682-1	GC-MW-101D(SO)-14-15	25579	7.10	428402	9.37	222054	11.19

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-512479/3 Date Analyzed: 04/19/2018 18:35

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D48919.D Heated Purge: (Y/N) Y

Calibration ID: 67312

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		324389	3.58	284665	4.89	496282	6.24
UPPER LIMIT		648778	4.08	569330	5.39	992564	6.74
LOWER LIMIT		162195	3.08	142333	4.39	248141	5.74
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-512479/4		328090	3.58	294359	4.89	502352	6.25
LCSD 460-512479/5		322590	3.57	281908	4.88	505310	6.24
MB 460-512479/8		349488	3.58	304112	4.88	486578	6.24
460-153389-1	GC-MW-110D(SO)-15-17	338676	3.57	291209	4.88	511265	6.23

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-512479/3 Date Analyzed: 04/19/2018 18:35

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D48919.D Heated Purge: (Y/N) Y

Calibration ID: 67312

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		19568	7.09	298563	9.36	149265	11.18
UPPER LIMIT		39136	7.59	597126	9.86	298530	11.68
LOWER LIMIT		9784	6.59	149282	8.86	74633	10.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-512479/4		19581	7.09	306437	9.36	151678	11.18
LCSD 460-512479/5		20062	7.09	310817	9.36	153162	11.18
MB 460-512479/8		19688	7.08	289338	9.36	148897	11.18
460-153389-1	GC-MW-110D(SO)-15-17	19800	7.08	302983	9.36	157216	11.18

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-512623/2 Date Analyzed: 04/20/2018 06:44

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D48945.D Heated Purge: (Y/N) Y

Calibration ID: 67312

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		364176	3.58	310605	4.87	549209	6.23
UPPER LIMIT		728352	4.08	621210	5.37	1098418	6.73
LOWER LIMIT		182088	3.08	155303	4.37	274605	5.73
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-512623/3		308461	3.57	265991	4.87	521080	6.23
LCSD 460-512623/4		322316	3.57	294162	4.87	539658	6.23
MB 460-512623/7		285783	3.56	264915	4.87	528236	6.23
460-153878-1	GC-MW-101D(SO) (99.2-100)	336718	3.56	323217	4.87	555019	6.22

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-512623/2 Date Analyzed: 04/20/2018 06:44

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D48945.D Heated Purge: (Y/N) Y

Calibration ID: 67312

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		22740	7.08	331396	9.36	163802	11.17
UPPER LIMIT		45480	7.58	662792	9.86	327604	11.67
LOWER LIMIT		11370	6.58	165698	8.86	81901	10.67
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-512623/3		19865	7.08	312276	9.35	152179	11.17
LCSD 460-512623/4		21391	7.07	329159	9.35	162538	11.17
MB 460-512623/7		17701	7.07	320679	9.35	161864	11.17
460-153878-1	GC-MW-101D(SO) (99.2-100)	15171	7.07	329680	9.35	165640	11.17

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-504873/3 Date Analyzed: 03/20/2018 23:13

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81011.D Heated Purge: (Y/N) Y

Calibration ID: 66902

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		273445	3.35	215412	4.45	404301	5.58
UPPER LIMIT		546890	3.85	430824	4.95	808602	6.08
LOWER LIMIT		136723	2.85	107706	3.95	202151	5.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-504873/4		261087	3.36	211174	4.46	409087	5.58
LCSD 460-504873/5		268924	3.35	212666	4.46	414234	5.58
MB 460-504873/8		298716	3.36	232585	4.46	372123	5.58
460-152211-2	GC-SB-101(SO) -15.5-17.5	289957	3.37	221031	4.46	377510	5.58
460-152211-2 MS	GC-SB-101(SO) -15.5-17.5 MS	237621	3.36	183114	4.46	390713	5.58
460-152211-2 MSD	GC-SB-101(SO) -15.5-17.5 MSD	253765	3.37	189426	4.46	393561	5.58
460-152211-1	GC-SB-101(SO)-3-5	266659	3.36	218542	4.46	378926	5.58
460-152211-3	GC-MW-102(SO)-3-5	299223	3.35	233629	4.46	364292	5.58
460-152211-4	GC-MW-102(SO)-9-11	296160	3.38	222314	4.46	372709	5.58
460-152211-5	GC-MW-103(SO)-3-5	81983*	3.35	56659*	4.45	81031*	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-504873/3 Date Analyzed: 03/20/2018 23:13

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81011.D Heated Purge: (Y/N) Y

Calibration ID: 66902

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		21225	6.28	348271	9.07	202741	11.52
UPPER LIMIT		42450	6.78	696542	9.57	405482	12.02
LOWER LIMIT		10613	5.78	174136	8.57	101371	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-504873/4		19254	6.28	332511	9.07	191757	11.52
LCSD 460-504873/5		20013	6.28	342674	9.07	203136	11.52
MB 460-504873/8		20993	6.28	316845	9.07	188411	11.52
460-152211-2	GC-SB-101(SO) -15.5-17.5	21166	6.28	312120	9.08	190414	11.52
460-152211-2 MS	GC-SB-101(SO) -15.5-17.5 MS	16993	6.28	321892	9.08	193433	11.52
460-152211-2 MSD	GC-SB-101(SO) -15.5-17.5 MSD	18931	6.28	330742	9.08	198205	11.52
460-152211-1	GC-SB-101(SO)-3-5	16828	6.28	323781	9.08	190770	11.52
460-152211-3	GC-MW-102(SO)-3-5	18608	6.29	303096	9.07	175297	11.52
460-152211-4	GC-MW-102(SO)-9-11	20180	6.29	312348	9.07	183108	11.52
460-152211-5	GC-MW-103(SO)-3-5	7600*	6.28	73048*	9.07	43974*	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-505749/2 Date Analyzed: 03/24/2018 05:54

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81118.D Heated Purge: (Y/N) Y

Calibration ID: 67199

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		350803	3.35	279183	4.45	385266	5.58
UPPER LIMIT		701606	3.85	558366	4.95	770532	6.08
LOWER LIMIT		175402	2.85	139592	3.95	192633	5.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-505749/3		337486	3.35	272907	4.45	396334	5.58
LCSD 460-505749/4		335498	3.35	272097	4.45	397852	5.58
MB 460-505749/7		297855	3.35	249083	4.45	394098	5.58
460-152331-3	GC-MW-104(SO)-0.5-2.5	335946	3.35	289064	4.46	384602	5.58
460-152331-4	GC-MW-104(SO)-7-9	381864	3.35	303691	4.45	374393	5.58
460-152331-5	GC-MW-105(SO)-0.5-2.5	407138	3.36	325772	4.46	383888	5.58
460-152331-6	GC-MW-105(SO)-7-9	359696	3.35	310742	4.45	386225	5.58
460-152331-7	GC-Drain-02(SO)	242368	3.35	245892	4.46	358865	5.58
460-152331-1	GC-MW-103(SO)-12-14	372302	3.35	300890	4.45	380287	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-505749/2 Date Analyzed: 03/24/2018 05:54

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81118.D Heated Purge: (Y/N) Y

Calibration ID: 67199

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		24910	6.28	308230	9.08	166464	11.52
UPPER LIMIT		49820	6.78	616460	9.58	332928	12.02
LOWER LIMIT		12455	5.78	154115	8.58	83232	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-505749/3		24779	6.28	319139	9.07	173369	11.52
LCSD 460-505749/4		23899	6.28	321481	9.07	175332	11.52
MB 460-505749/7		18993	6.29	310933	9.08	170017	11.52
460-152331-3	GC-MW-104(SO)-0.5-2.5	19160	6.28	312066	9.08	174499	11.52
460-152331-4	GC-MW-104(SO)-7-9	23743	6.28	306870	9.07	166910	11.52
460-152331-5	GC-MW-105(SO)-0.5-2.5	22245	6.28	307008	9.08	169774	11.52
460-152331-6	GC-MW-105(SO)-7-9	20818	6.28	312175	9.08	175911	11.52
460-152331-7	GC-Drain-02(SO)	12345*	6.28	268367	9.08	130231	11.52
460-152331-1	GC-MW-103(SO)-12-14	23010	6.29	306545	9.08	183270	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-505873/2 Date Analyzed: 03/25/2018 04:30

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81147.D Heated Purge: (Y/N) Y

Calibration ID: 67199

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		383632	3.36	303300	4.46	419830	5.58
UPPER LIMIT		767264	3.86	606600	4.96	839660	6.08
LOWER LIMIT		191816	2.86	151650	3.96	209915	5.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-505873/3		381591	3.35	290236	4.45	417693	5.58
LCSD 460-505873/4		334359	3.36	262320	4.46	395853	5.58
MB 460-505873/7		327472	3.36	264587	4.46	402985	5.58
460-152331-2	GC-MW-103(SO)-15-17	343008	3.35	259846	4.46	320724	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-505873/2 Date Analyzed: 03/25/2018 04:30

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81147.D Heated Purge: (Y/N) Y

Calibration ID: 67199

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		23281	6.28	329816	9.07	182490	11.52
UPPER LIMIT		46562	6.78	659632	9.57	364980	12.02
LOWER LIMIT		11641	5.78	164908	8.57	91245	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-505873/3		26462	6.28	333689	9.07	185227	11.52
LCSD 460-505873/4		23149	6.28	318618	9.07	174465	11.52
MB 460-505873/7		19740	6.28	314287	9.08	177430	11.52
460-152331-2	GC-MW-103(SO)-15-17	21274	6.29	264102	9.08	151676	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-510660/3 Date Analyzed: 04/12/2018 21:47

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81910.D Heated Purge: (Y/N) Y

Calibration ID: 67510

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		326959	3.38	237833	4.46	482322	5.58
UPPER LIMIT		653918	3.88	475666	4.96	964644	6.08
LOWER LIMIT		163480	2.88	118917	3.96	241161	5.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-510660/4		318881	3.37	225482	4.46	468502	5.58
LCSD 460-510660/5		320650	3.39	225552	4.46	468407	5.58
MB 460-510660/8		306522	3.36	216470	4.46	453158	5.58
460-153082-1	GC-MW-109M(SO)-33-35	337583	3.38	240628	4.47	462430	5.59
460-153163-1	GC-MW-106(SO)-15-17	426997	3.37	289270	4.46	476958	5.59
460-153163-2	GC-MW-108D(SO)-15-17	409746	3.38	279707	4.46	463690	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-510660/3 Date Analyzed: 04/12/2018 21:47

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81910.D Heated Purge: (Y/N) Y

Calibration ID: 67510

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		31785	6.28	386940	9.08	219983	11.52
UPPER LIMIT		63570	6.78	773880	9.58	439966	12.02
LOWER LIMIT		15893	5.78	193470	8.58	109992	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-510660/4		30941	6.28	396109	9.08	235241	11.52
LCSD 460-510660/5		29471	6.30	392556	9.08	233322	11.52
MB 460-510660/8		28202	6.28	367485	9.08	211471	11.52
460-153082-1	GC-MW-109M(SO)-33-35	29604	6.30	375624	9.08	222835	11.52
460-153163-1	GC-MW-106(SO)-15-17	37862	6.28	383861	9.08	227920	11.52
460-153163-2	GC-MW-108D(SO)-15-17	37933	6.29	371290	9.08	220802	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-510972/2 Date Analyzed: 04/13/2018 20:21

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81963.D Heated Purge: (Y/N) Y

Calibration ID: 67510

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		361320	3.39	258670	4.46	510559	5.58
UPPER LIMIT		722640	3.89	517340	4.96	1021118	6.08
LOWER LIMIT		180660	2.89	129335	3.96	255280	5.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-510972/3		346072	3.38	246240	4.46	508191	5.58
LCSD 460-510972/4		397409	3.39	276114	4.47	525958	5.59
MB 460-510972/7		320238	3.38	215141	4.46	477305	5.59
460-153254-2	GC-MW-108D(SO) -59-60.5	379809	3.38	263991	4.46	507664	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-510972/2 Date Analyzed: 04/13/2018 20:21

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81963.D Heated Purge: (Y/N) Y

Calibration ID: 67510

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		35083	6.30	420250	9.08	241383	11.52
UPPER LIMIT		70166	6.80	840500	9.58	482766	12.02
LOWER LIMIT		17542	5.80	210125	8.58	120692	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-510972/3		32399	6.28	412478	9.08	238694	11.52
LCSD 460-510972/4		31972	6.30	433761	9.08	249659	11.52
MB 460-510972/7		28409	6.29	383448	9.08	227702	11.52
460-153254-2	GC-MW-108D(SO) -59-60.5	33321	6.29	422759	9.08	248683	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-511293/3 Date Analyzed: 04/16/2018 04:50

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K82033.D Heated Purge: (Y/N) Y

Calibration ID: 67510

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		342573	3.37	232043	4.46	468854	5.59
UPPER LIMIT		685146	3.87	464086	4.96	937708	6.09
LOWER LIMIT		171287	2.87	116022	3.96	234427	5.09
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-511293/4		324495	3.37	216399	4.46	460607	5.58
LCSD 460-511293/5		338062	3.39	225033	4.47	464589	5.59
MB 460-511293/8		272392	3.37	184494	4.46	441313	5.58
460-153254-1	GC-MW-108D(SO)-33-35	326972	3.36	229724	4.46	446585	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-511293/3 Date Analyzed: 04/16/2018 04:50

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K82033.D Heated Purge: (Y/N) Y

Calibration ID: 67510

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		31363	6.28	389129	9.08	227987	11.52
UPPER LIMIT		62726	6.78	778258	9.58	455974	12.02
LOWER LIMIT		15682	5.78	194565	8.58	113994	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-511293/4		29646	6.29	377102	9.08	222065	11.52
LCSD 460-511293/5		29858	6.30	382396	9.08	220810	11.52
MB 460-511293/8		26167	6.29	373386	9.08	217563	11.52
460-153254-1	GC-MW-108D(SO)-33-35	28301	6.29	382900	9.08	226855	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-511471/4 Date Analyzed: 04/16/2018 18:36

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K82063.D Heated Purge: (Y/N) Y

Calibration ID: 67510

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		370468	3.38	246808	4.46	499068	5.58
UPPER LIMIT		740936	3.88	493616	4.96	998136	6.08
LOWER LIMIT		185234	2.88	123404	3.96	249534	5.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-511471/5		427219	3.39	270815	4.47	511955	5.59
MB 460-511471/8		355957	3.38	232211	4.47	512821	5.59
460-153515-1	GE-MW-110D(SO)-(69-70)	409884	3.39	257216	4.46	514131	5.58
460-153515-1 MS	GE-MW-110D(SO)-(69-70) MS	351450	3.39	234079	4.46	509371	5.58
460-153515-1 MSD	GE-MW-110D(SO)-(69-70) MSD	316915	3.39	218911	4.47	508906	5.59

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-511471/4 Date Analyzed: 04/16/2018 18:36

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K82063.D Heated Purge: (Y/N) Y

Calibration ID: 67510

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		34607	6.28	411715	9.08	230580	11.52
UPPER LIMIT		69214	6.78	823430	9.58	461160	12.02
LOWER LIMIT		17304	5.78	205858	8.58	115290	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-511471/5		35661	6.30	427287	9.08	248929	11.52
MB 460-511471/8		28576	6.30	432832	9.08	258668	11.52
460-153515-1	GE-MW-110D(SO)-(69-70)	33066	6.30	437114	9.08	260247	11.52
460-153515-1 MS	GE-MW-110D(SO)-(69-70) MS	30947	6.29	421548	9.08	245516	11.52
460-153515-1 MSD	GE-MW-110D(SO)-(69-70) MSD	24418	6.30	420802	9.08	245160	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-513435/2 Date Analyzed: 04/23/2018 17:27

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K82435.D Heated Purge: (Y/N) Y

Calibration ID: 67825

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		353303	3.38	213013	4.46	443682	5.58
UPPER LIMIT		706606	3.88	426026	4.96	887364	6.08
LOWER LIMIT		176652	2.88	106507	3.96	221841	5.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-513435/3		346668	3.38	213768	4.46	452776	5.58
LCSD 460-513435/4		366942	3.38	223206	4.46	456467	5.59
MB 460-513435/7		319720	3.37	206415	4.46	471420	5.58
460-153018-1	GC-MW-109M(SO)-15-17	365434	3.38	227978	4.46	457818	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-513435/2 Date Analyzed: 04/23/2018 17:27

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K82435.D Heated Purge: (Y/N) Y

Calibration ID: 67825

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		29956	6.30	406104	9.08	248231	11.52
UPPER LIMIT		59912	6.80	812208	9.58	496462	12.02
LOWER LIMIT		14978	5.80	203052	8.58	124116	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-513435/3		28038	6.29	416474	9.08	254777	11.52
LCSD 460-513435/4		30097	6.30	405076	9.08	246535	11.52
MB 460-513435/7		27604	6.28	434847	9.08	274523	11.52
460-153018-1	GC-MW-109M(SO)-15-17	30588	6.28	413408	9.08	266047	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-3-5 | Lab Sample ID: 460-152211-1

Matrix: Solid | Lab File ID: K81024.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:10

Sample wt/vol: 5.726(g) | Date Analyzed: 03/21/2018 04:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00021
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000084
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00042
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0084
78-93-3	2-Butanone (MEK)	0.0046	U	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.022		0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00043
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00024
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-3-5 | Lab Sample ID: 460-152211-1

Matrix: Solid | Lab File ID: K81024.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:10

Sample wt/vol: 5.726(g) | Date Analyzed: 03/21/2018 04:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00029	J	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U *	0.0046	0.0039
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00011
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00043	J	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.0012		0.00092	0.00016
95-47-6	o-Xylene	0.00037	J	0.00092	0.000087
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00057
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00024
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00037
75-01-4	Vinyl chloride	0.00092	U	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	125		78-135
460-00-4	4-Bromofluorobenzene	108		67-126
1868-53-7	Dibromofluoromethane (Surr)	113		61-149
2037-26-5	Toluene-d8 (Surr)	104		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-3-5 Lab Sample ID: 460-152211-1

Matrix: Solid Lab File ID: K81024.D

Analysis Method: 8260C Date Collected: 03/19/2018 09:10

Sample wt/vol: 5.726(g) Date Analyzed: 03/21/2018 04:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 Level: (low/med) Low

Analysis Batch No.: 504873 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D
Lims ID: 460-152211-B-1-A
Client ID: GC-SB-101(SO)-3-5
Sample Type: Client
Inject. Date: 21-Mar-2018 04:44:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152211-B-1-A
Misc. Info.: 460-0069055-016
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Mar-2018 17:16:12 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: moroneyc Date: 21-Mar-2018 10:37:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.004	3.004	0.000	82	24146	23.5	M
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	266659	1000.0	
26 Methylene Chloride	84	3.370	3.370	0.000	30	1364	0.4727	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	218542	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	147814	56.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.302	0.000	0	161446	62.6	
* 61 Fluorobenzene	96	5.577	5.577	0.000	99	378926	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	16828	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.265	0.007	98	485579	51.9	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	85	323781	50.0	
92 Ethylbenzene	106	9.210	9.198	0.012	96	1188	0.3198	
93 m-Xylene & p-Xylene	106	9.344	9.344	0.000	0	5742	1.26	
95 o-Xylene	106	9.820	9.814	0.006	90	1925	0.4089	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	94	172234	54.0	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	95	190770	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

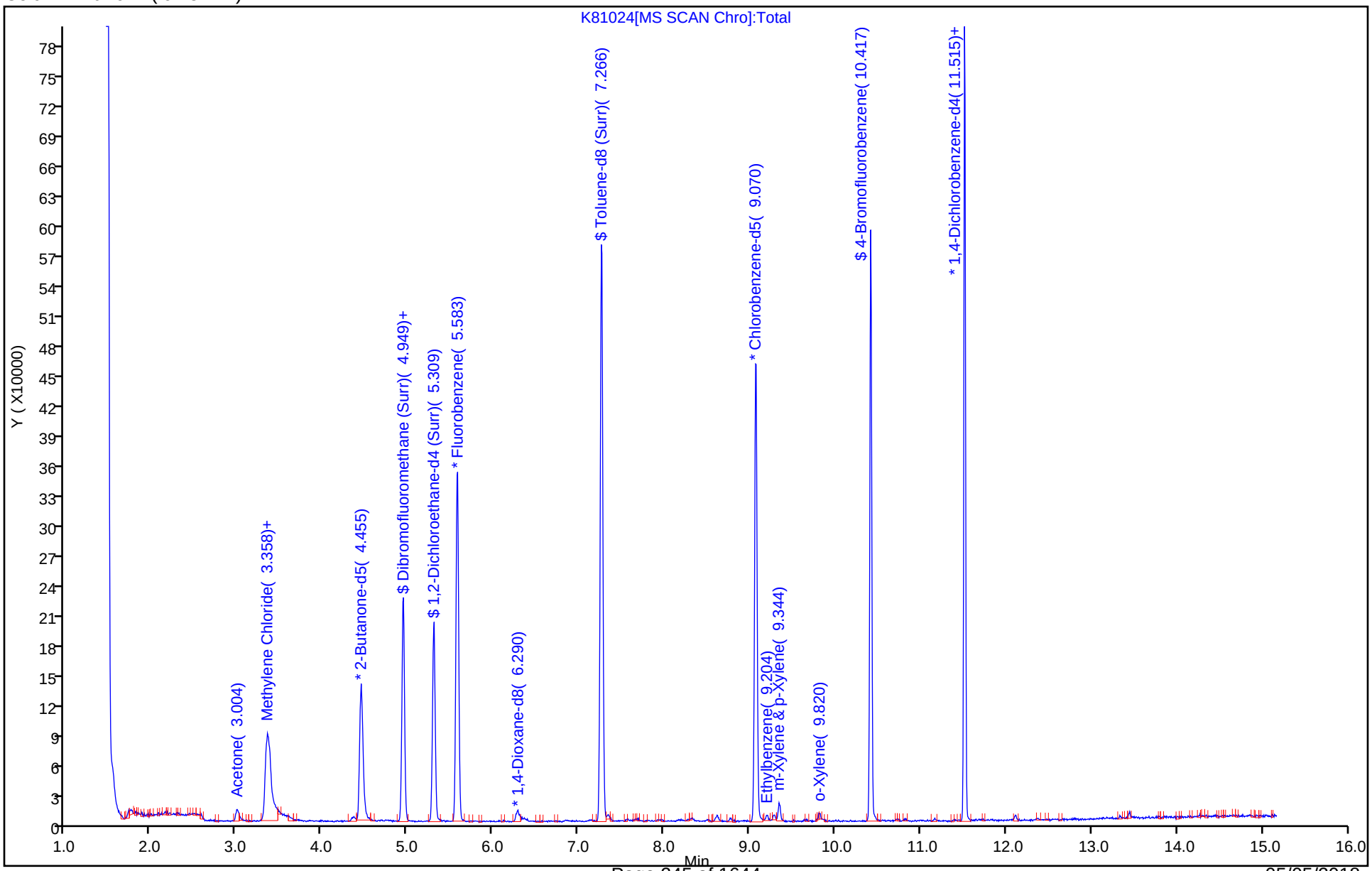
Report Date: 22-Mar-2018 17:16:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D

Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1	Worklist Smp#:	16
Client ID:	GC-SB-101(SO)-3-5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

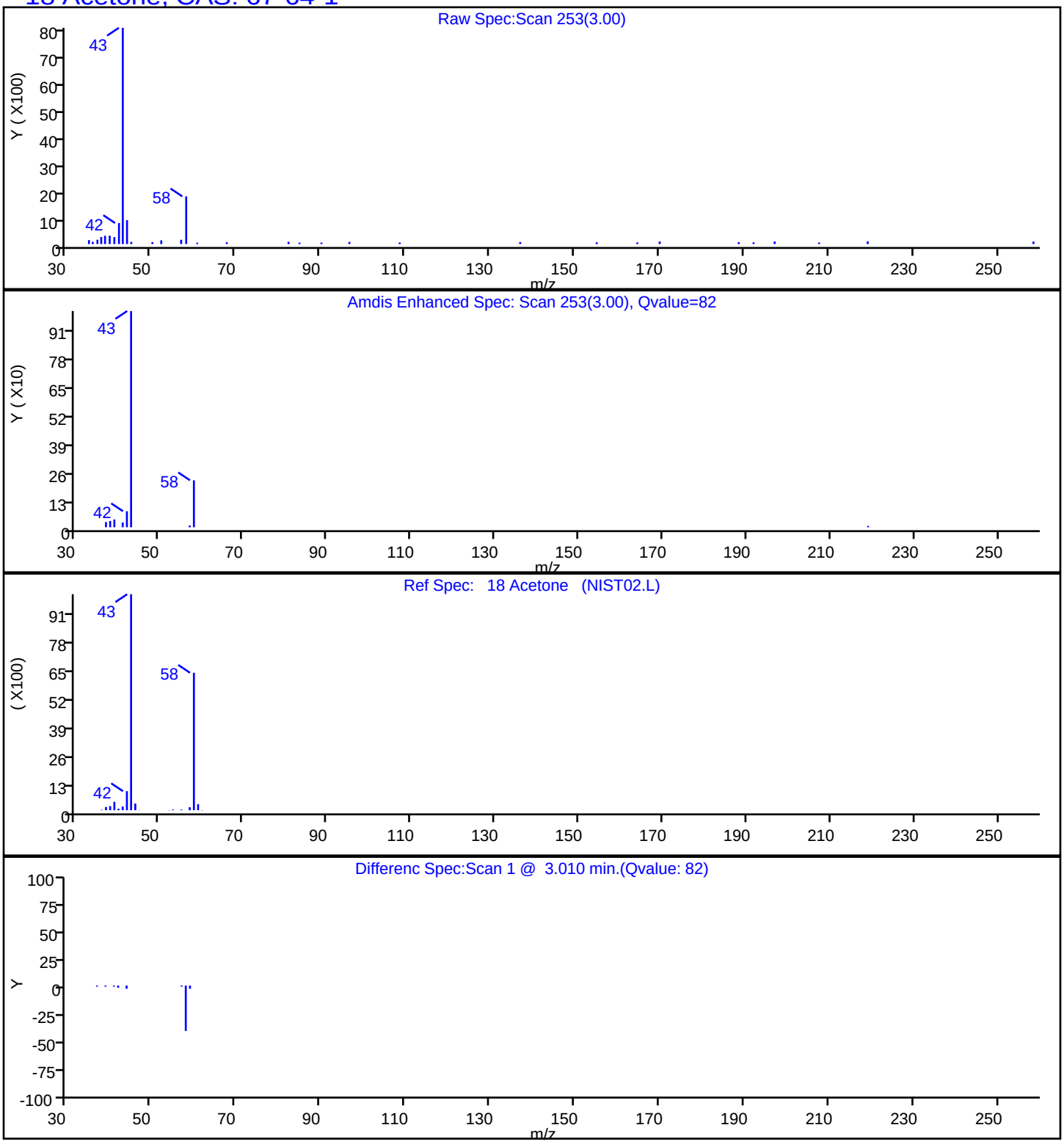
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D				
Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1		
Client ID:	GC-SB-101(SO)-3-5				
Operator ID:		ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

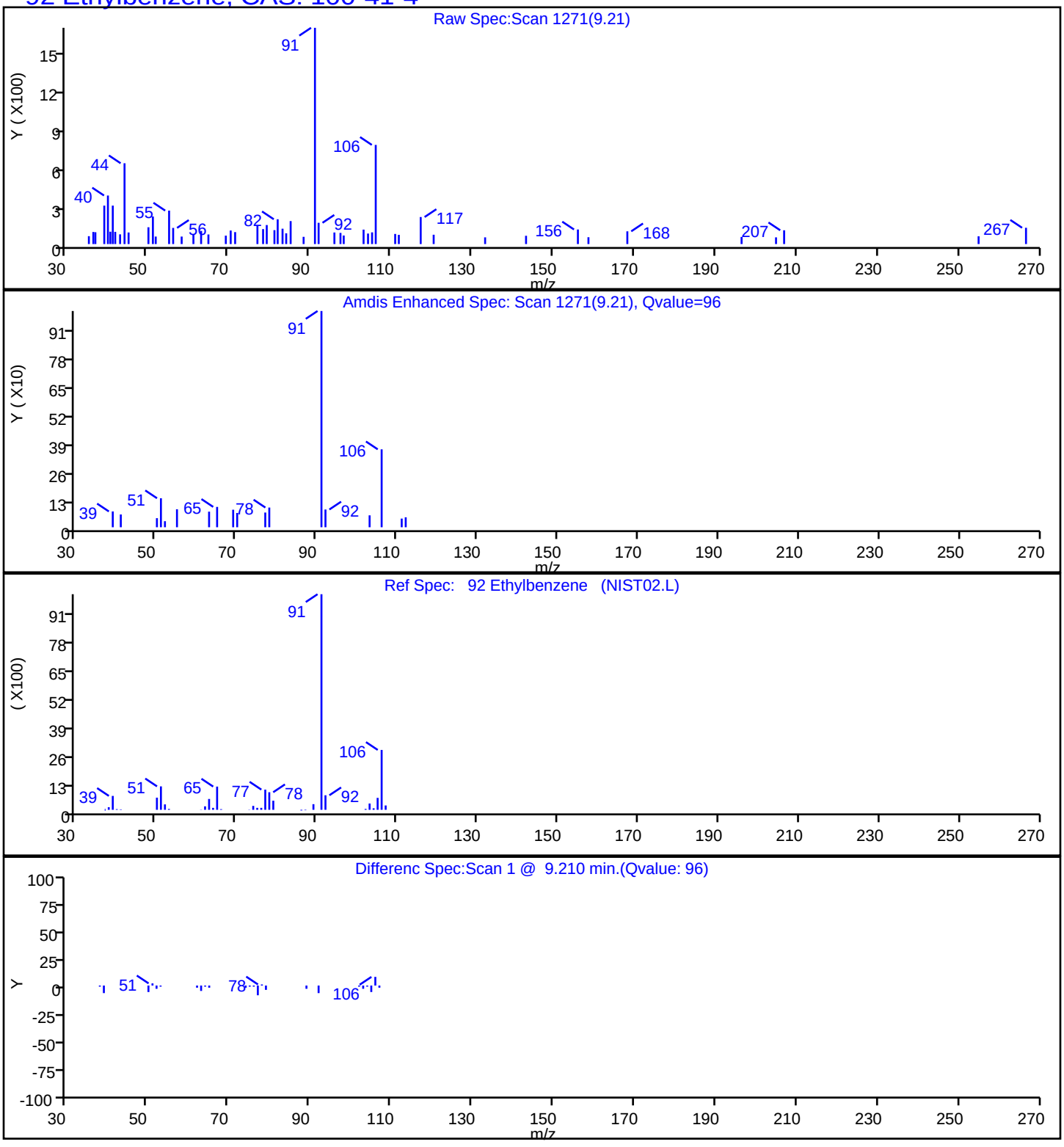
18 Acetone, CAS: 67-64-1



TestAmerica Edison

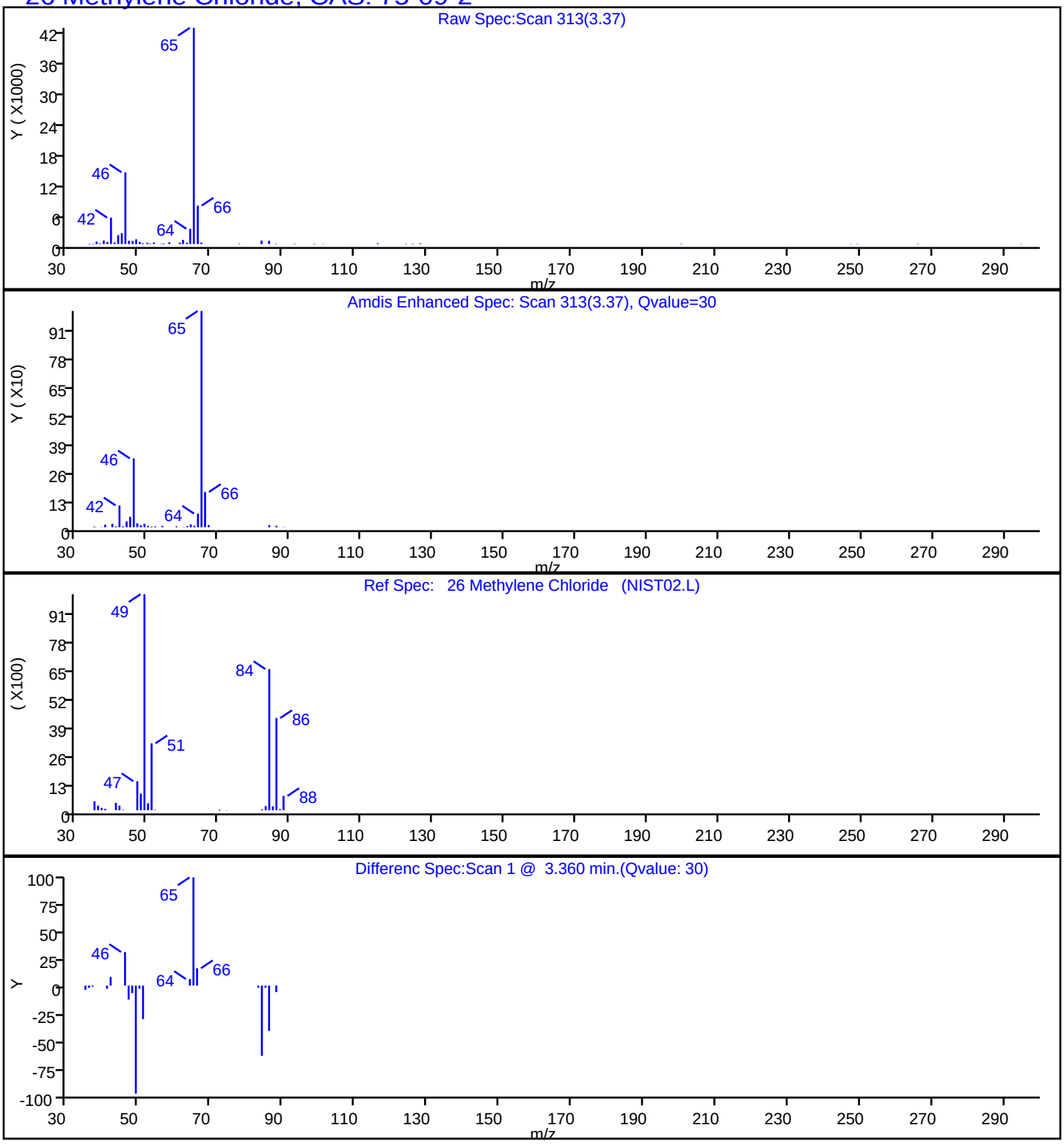
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D		
Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1
Client ID:	GC-SB-101(SO)-3-5		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D
Injection Date: 21-Mar-2018 04:44:30 Instrument ID: CVOAMS9
Lims ID: 460-152211-B-1-A Lab Sample ID: 460-152211-1
Client ID: GC-SB-101(SO)-3-5
Operator ID: ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

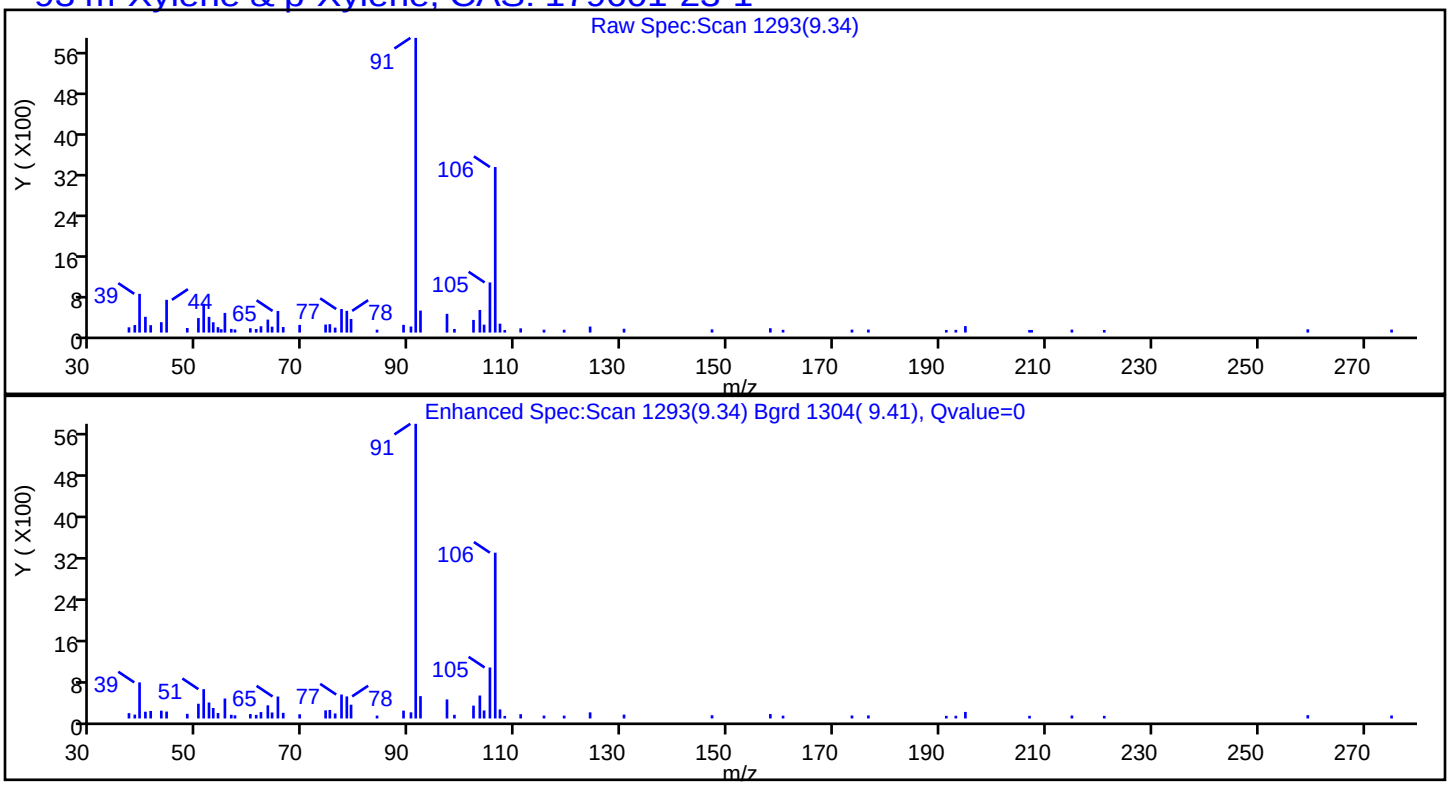
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D				
Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1		
Client ID:	GC-SB-101(SO)-3-5				
Operator ID:		ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

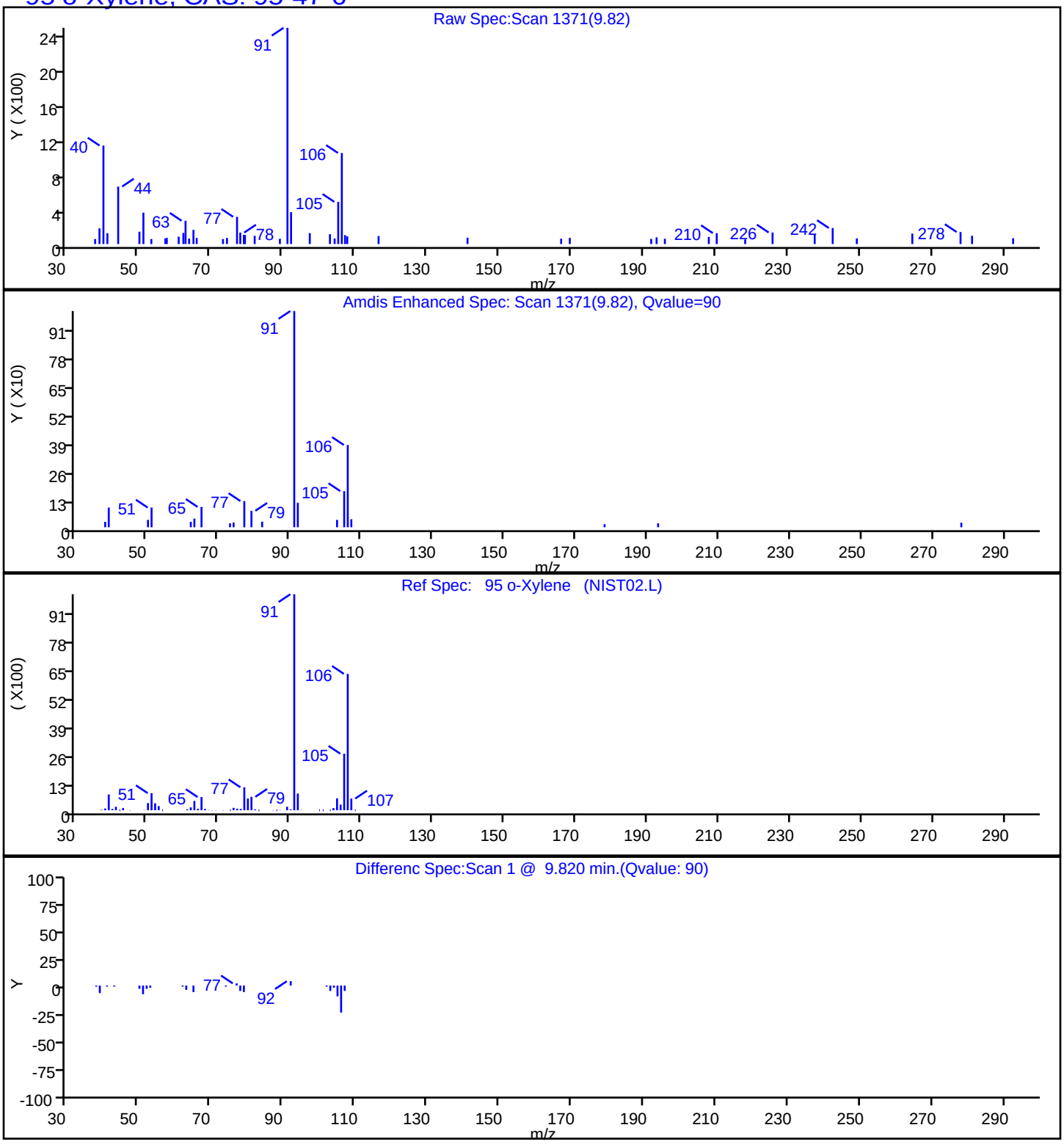
93 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D		
Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1
Client ID:	GC-SB-101(SO)-3-5		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

95 o-Xylene, CAS: 95-47-6



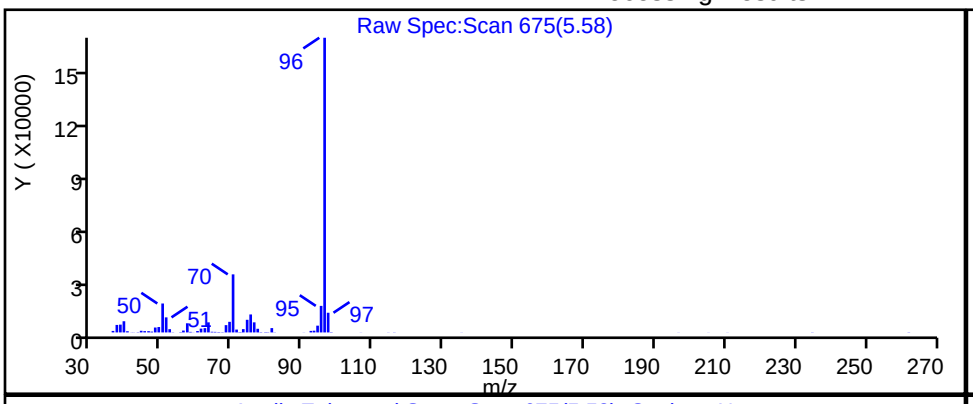
User Disabled Compound Report

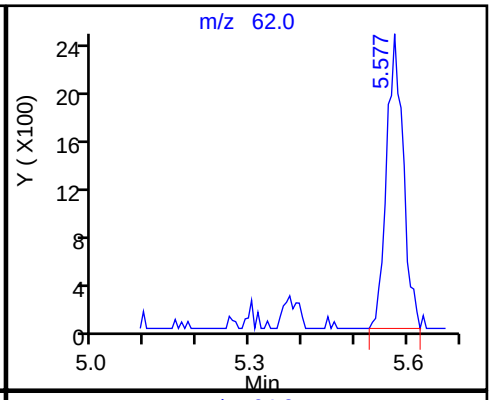
TestAmerica Edison

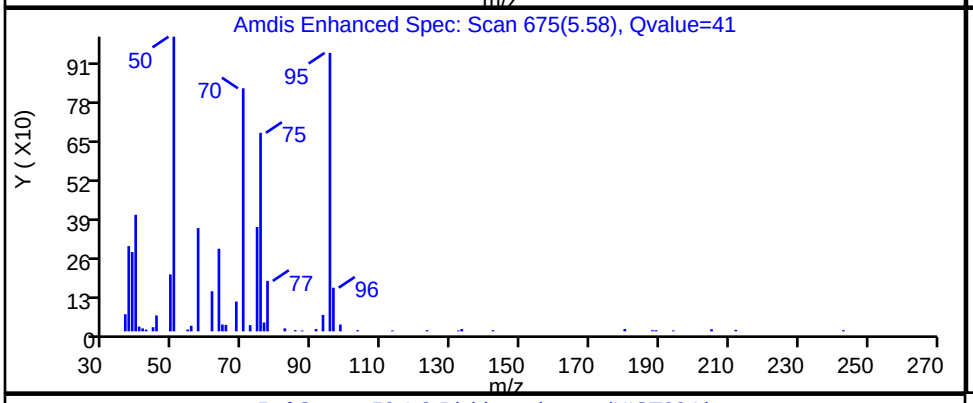
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D		
Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1
Client ID:	GC-SB-101(SO)-3-5		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

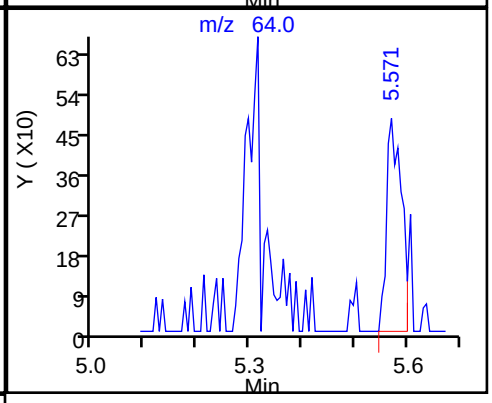
59 1,2-Dichloroethane, CAS: 107-06-2

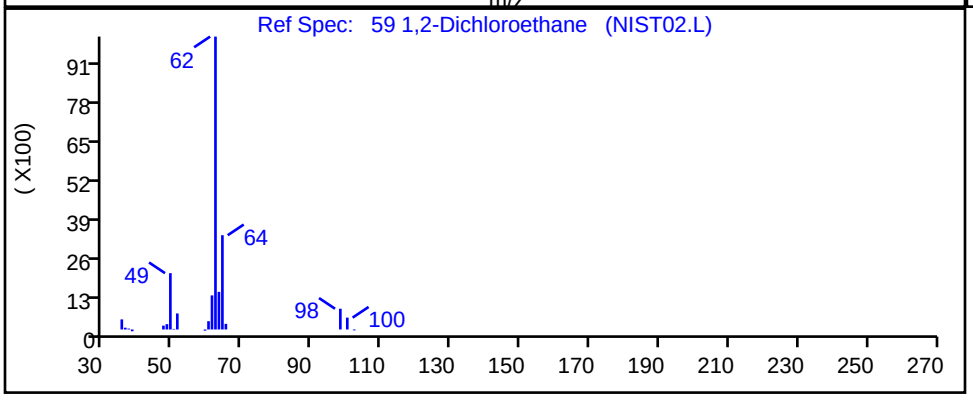
Processing Results











RT	Mass	Response	Amount
5.58	62.00	5382	1.568048
5.57	64.00	955	

Reviewer: moroneyc, 21-Mar-2018 10:37:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

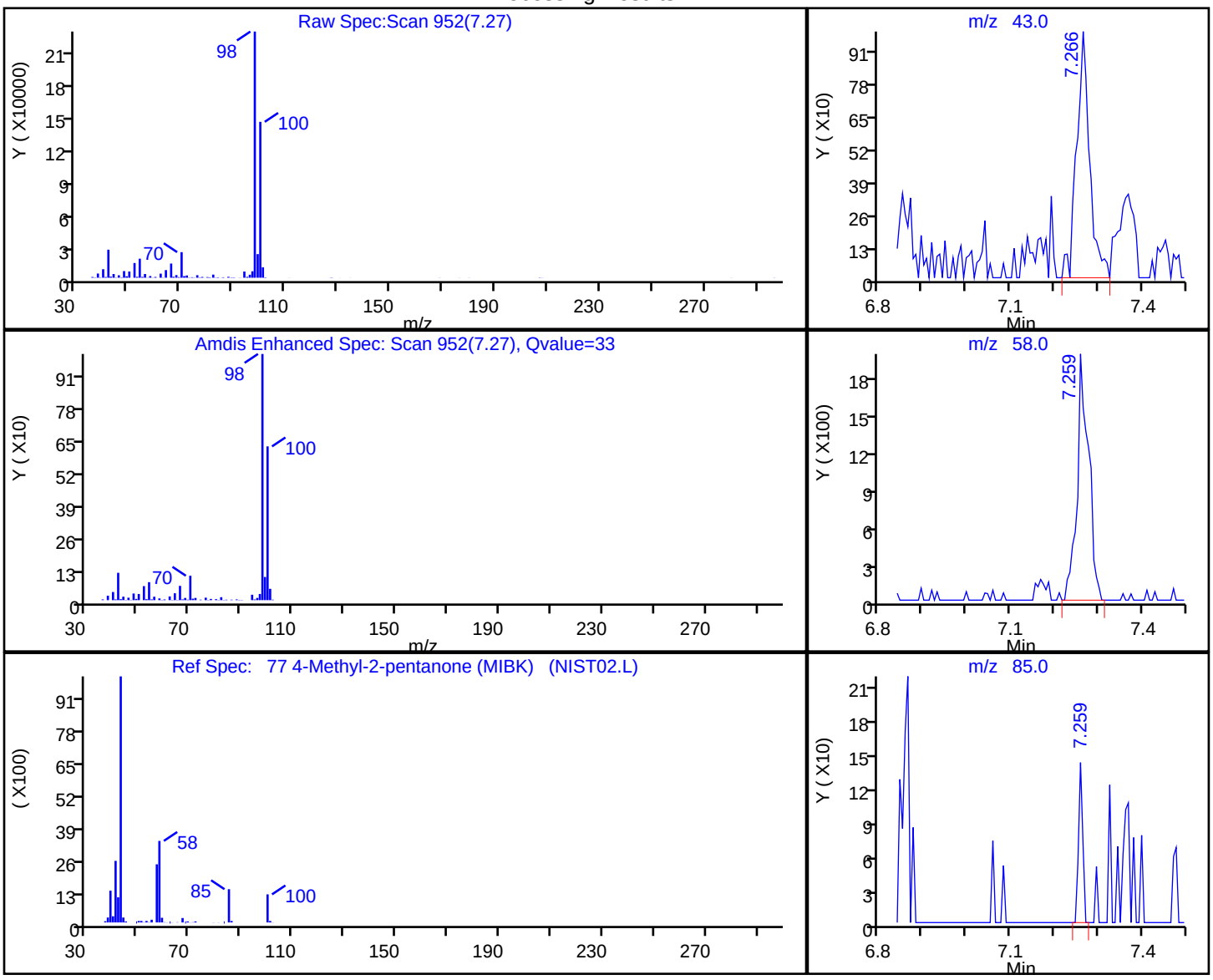
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D		
Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1
Client ID:	GC-SB-101(SO)-3-5		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

77 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.27	43.00	2058	0.762597
7.26	58.00	3602	
7.26	85.00	96	
7.27	100.00	295851	

Reviewer: moroneyc, 21-Mar-2018 10:37:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

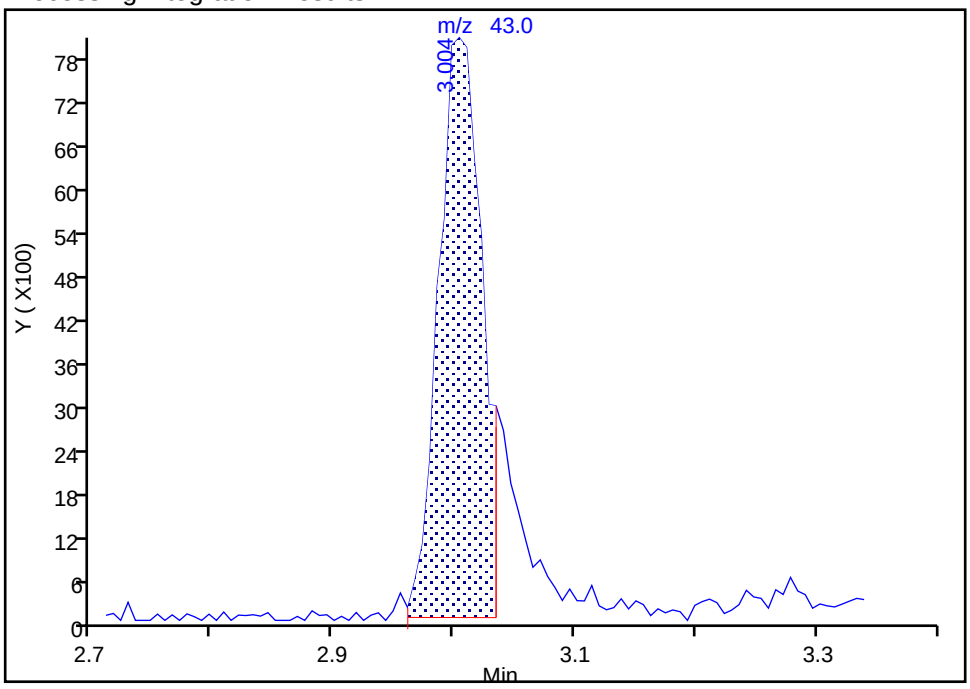
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D		
Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1
Client ID:	GC-SB-101(SO)-3-5		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

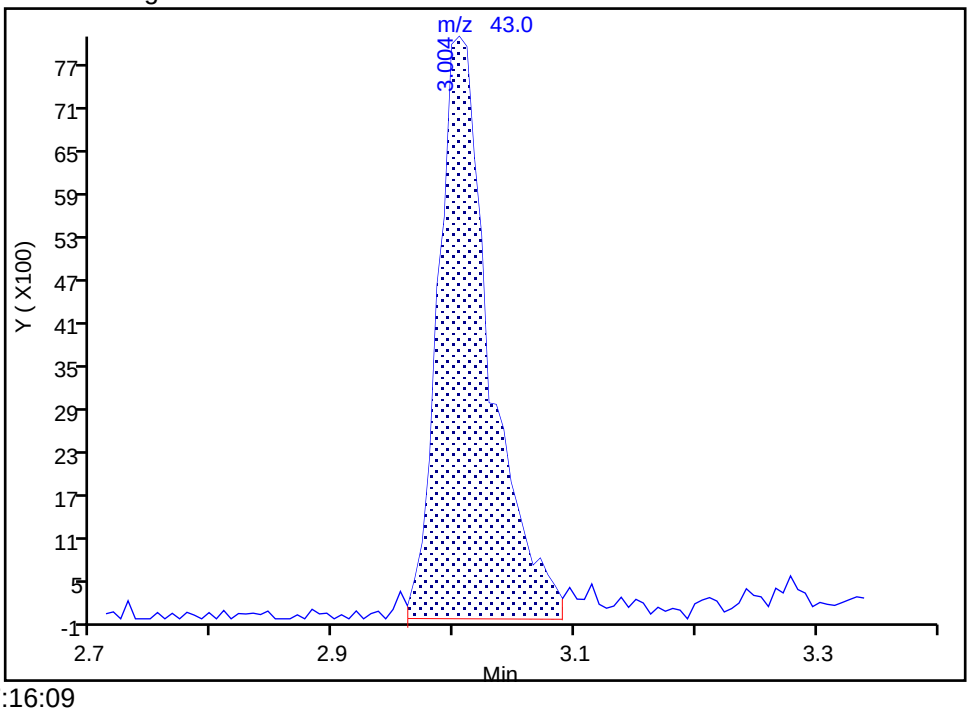
Processing Integration Results

RT: 3.00
Area: 20259
Amount: 19.756757
Amount Units: ug/l



Manual Integration Results

RT: 3.00
Area: 24146
Amount: 23.544237
Amount Units: ug/l



Reviewer: xuyvo, 22-Mar-2018 17:16:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

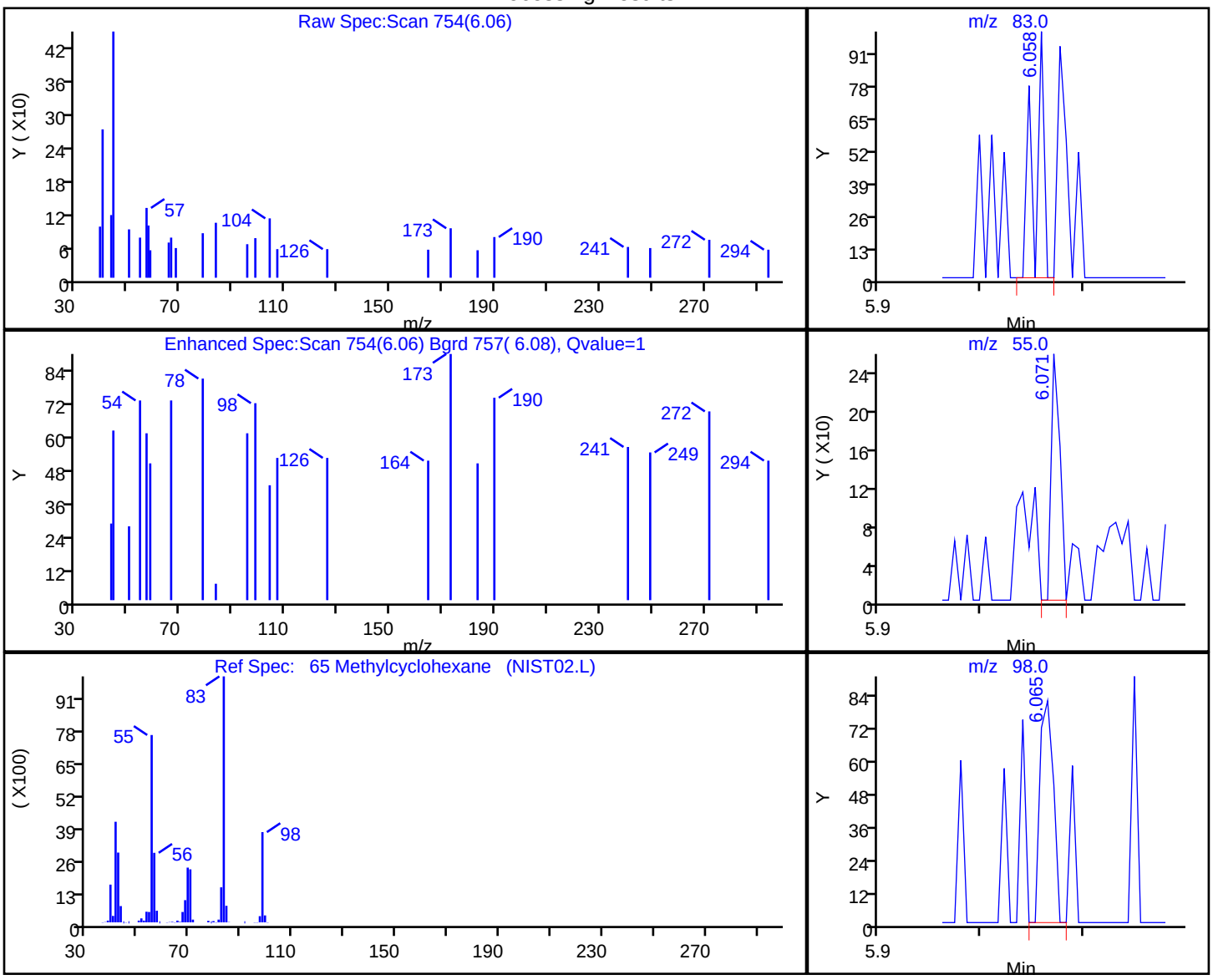
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81024.D		
Injection Date:	21-Mar-2018 04:44:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-1-A	Lab Sample ID:	460-152211-1
Client ID:	GC-SB-101(SO)-3-5		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

65 Methylcyclohexane, CAS: 108-87-2

Processing Results



RT	Mass	Response	Amount
6.06	83.00	65	0.512480
6.07	55.00	150	
6.06	98.00	75	

Reviewer: moroneyc, 21-Mar-2018 10:37:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 | Lab Sample ID: 460-152211-2

Matrix: Solid | Lab File ID: K81019.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.715(g) | Date Analyzed: 03/21/2018 02:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00095	U	0.00095	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00095	U	0.00095	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00095	U	0.00095	0.00029
79-00-5	1,1,2-Trichloroethane	0.00095	U	0.00095	0.00017
75-34-3	1,1-Dichloroethane	0.00095	U	0.00095	0.00020
75-35-4	1,1-Dichloroethene	0.00095	U	0.00095	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00095	U	0.00095	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00095	U	0.00095	0.000087
96-12-8	1,2-Dibromo-3-Chloropropane	0.00095	U	0.00095	0.00044
95-50-1	1,2-Dichlorobenzene	0.00095	U	0.00095	0.00014
107-06-2	1,2-Dichloroethane	0.00095	U	0.00095	0.00028
78-87-5	1,2-Dichloropropane	0.00095	U	0.00095	0.00040
541-73-1	1,3-Dichlorobenzene	0.00095	U	0.00095	0.00015
106-46-7	1,4-Dichlorobenzene	0.00095	U	0.00095	0.000095
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0087
78-93-3	2-Butanone (MEK)	0.0023	J	0.0047	0.0011
591-78-6	2-Hexanone	0.0047	U	0.0047	0.00074
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00063
67-64-1	Acetone	0.034		0.0047	0.0036
71-43-2	Benzene	0.00095	U	0.00095	0.00025
75-25-2	Bromoform	0.00095	U	0.00095	0.00040
74-83-9	Bromomethane	0.00095	U	0.00095	0.00045
75-15-0	Carbon disulfide	0.00095	U	0.00095	0.00025
56-23-5	Carbon tetrachloride	0.00095	U	0.00095	0.00017
108-90-7	Chlorobenzene	0.00095	U	0.00095	0.00017
74-97-5	Chlorobromomethane	0.00095	U	0.00095	0.00027
124-48-1	Chlorodibromomethane	0.00095	U	0.00095	0.00018
75-00-3	Chloroethane	0.00095	U	0.00095	0.00050
67-66-3	Chloroform	0.00095	U	0.00095	0.00030
74-87-3	Chloromethane	0.00095	U	0.00095	0.00041
156-59-2	cis-1,2-Dichloroethene	0.00095	U	0.00095	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00095	U	0.00095	0.00026
110-82-7	Cyclohexane	0.00095	U	0.00095	0.00021
75-27-4	Dichlorobromomethane	0.00095	U	0.00095	0.00024
75-71-8	Dichlorodifluoromethane	0.00095	U	0.00095	0.00032

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 | Lab Sample ID: 460-152211-2

Matrix: Solid | Lab File ID: K81019.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.715(g) | Date Analyzed: 03/21/2018 02:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00095	U	0.00095	0.00019
106-93-4	Ethylene Dibromide	0.00095	U	0.00095	0.00017
98-82-8	Isopropylbenzene	0.00095	U	0.00095	0.00012
79-20-9	Methyl acetate	0.0047	U *	0.0047	0.0041
1634-04-4	Methyl tert-butyl ether	0.00095	U	0.00095	0.00012
108-87-2	Methylcyclohexane	0.00095	U	0.00095	0.00015
75-09-2	Methylene Chloride	0.0024		0.00095	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00039	J	0.00095	0.00017
95-47-6	o-Xylene	0.00015	J	0.00095	0.000090
100-42-5	Styrene	0.00095	U	0.00095	0.00012
127-18-4	Tetrachloroethene	0.00095	U	0.00095	0.00014
108-88-3	Toluene	0.00095	U	0.00095	0.00059
156-60-5	trans-1,2-Dichloroethene	0.00095	U	0.00095	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00095	U	0.00095	0.00025
79-01-6	Trichloroethene	0.00095	U	0.00095	0.00014
75-69-4	Trichlorofluoromethane	0.00095	U	0.00095	0.00039
75-01-4	Vinyl chloride	0.00095	U	0.00095	0.00052

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	126		78-135
460-00-4	4-Bromofluorobenzene	107		67-126
1868-53-7	Dibromofluoromethane (Surr)	116		61-149
2037-26-5	Toluene-d8 (Surr)	107		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 | Lab Sample ID: 460-152211-2

Matrix: Solid | Lab File ID: K81019.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.715(g) | Date Analyzed: 03/21/2018 02:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

Number TICs Found: 1 | TIC Result Total: 0.00011

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
95-63-6	1,2,4-Trimethylbenzene	11.16	0.00011	J	94%

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D
Lims ID: 460-152211-B-2-A
Client ID: GC-SB-101(SO)-15.5-17.5
Sample Type: Client
Inject. Date: 21-Mar-2018 02:43:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152211-B-2-A
Misc. Info.: 460-0069055-011
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 21-Mar-2018 10:41:00 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: moroneyc Date: 21-Mar-2018 10:33:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.010	3.004	0.006	84	37533	36.2	
* 25 TBA-d9 (IS)	65	3.370	3.352	0.018	0	289957	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	38	7207	2.51	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	221031	250.0	
42 2-Butanone (MEK)	72	4.516	4.504	0.012	98	953	2.39	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	150924	58.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.302	0.007	0	161431	62.8	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	377510	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	21166	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.265	0.007	98	481209	53.3	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	86	312120	50.0	
93 m-Xylene & p-Xylene	106	9.357	9.344	0.012	0	1821	0.4154	
95 o-Xylene	106	9.814	9.814	0.000	30	720	0.1587	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	94	164069	53.4	
112 1,2,4-Trimethylbenzene	105	11.161	11.161	0.000	94	1412	0.1199	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	94	190414	50.0	
S 131 Xylenes, Total	100				0		0.5741	
S 132 Total BTEX	1				0		0.5741	

Reagents:

8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

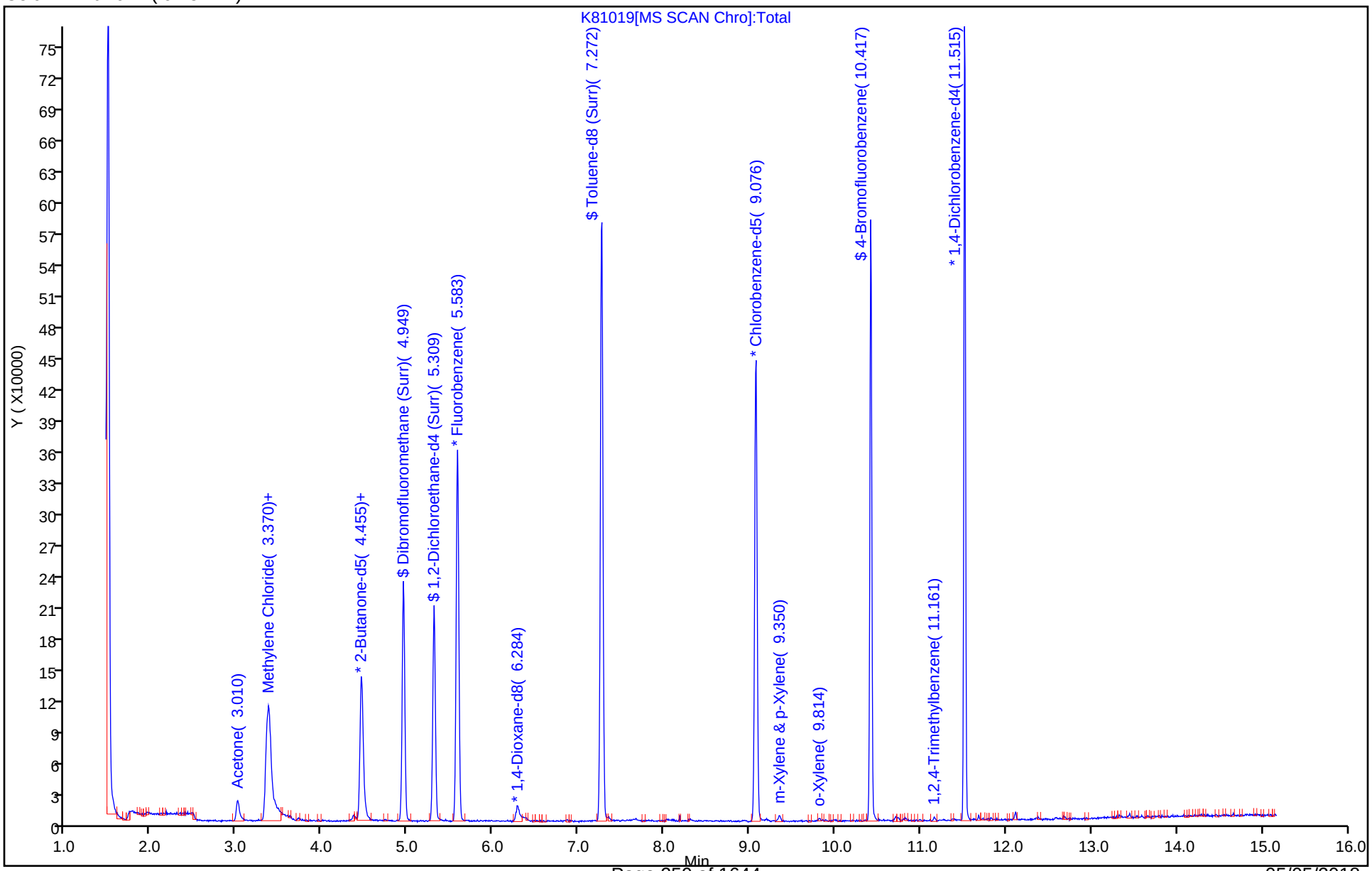
Report Date: 21-Mar-2018 10:41:24 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D

Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2	Worklist Smp#:	11
Client ID:	GC-SB-101(SO)-15.5-17.5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

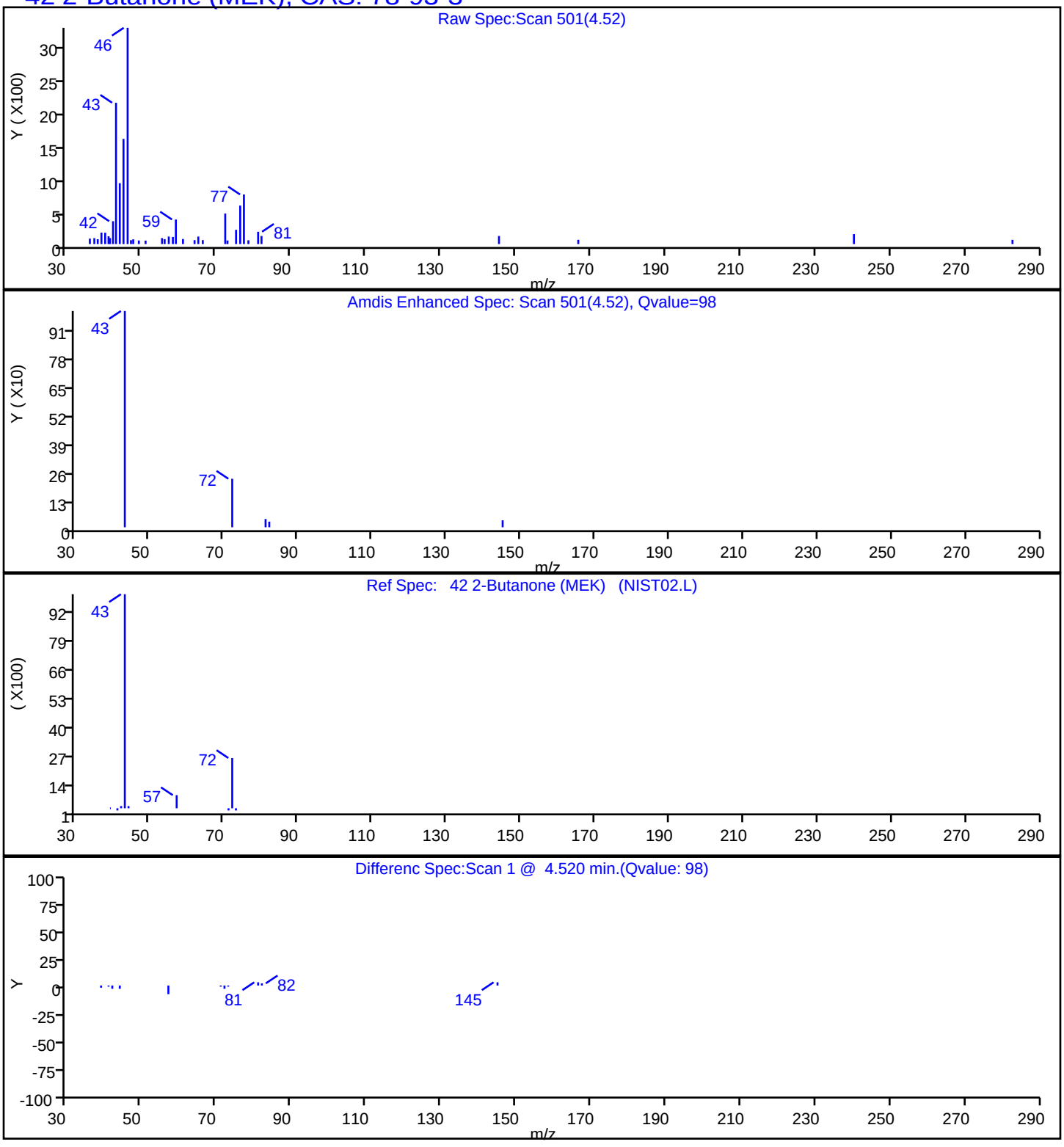
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D				
Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2		
Client ID:	GC-SB-101(SO)-15.5-17.5				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

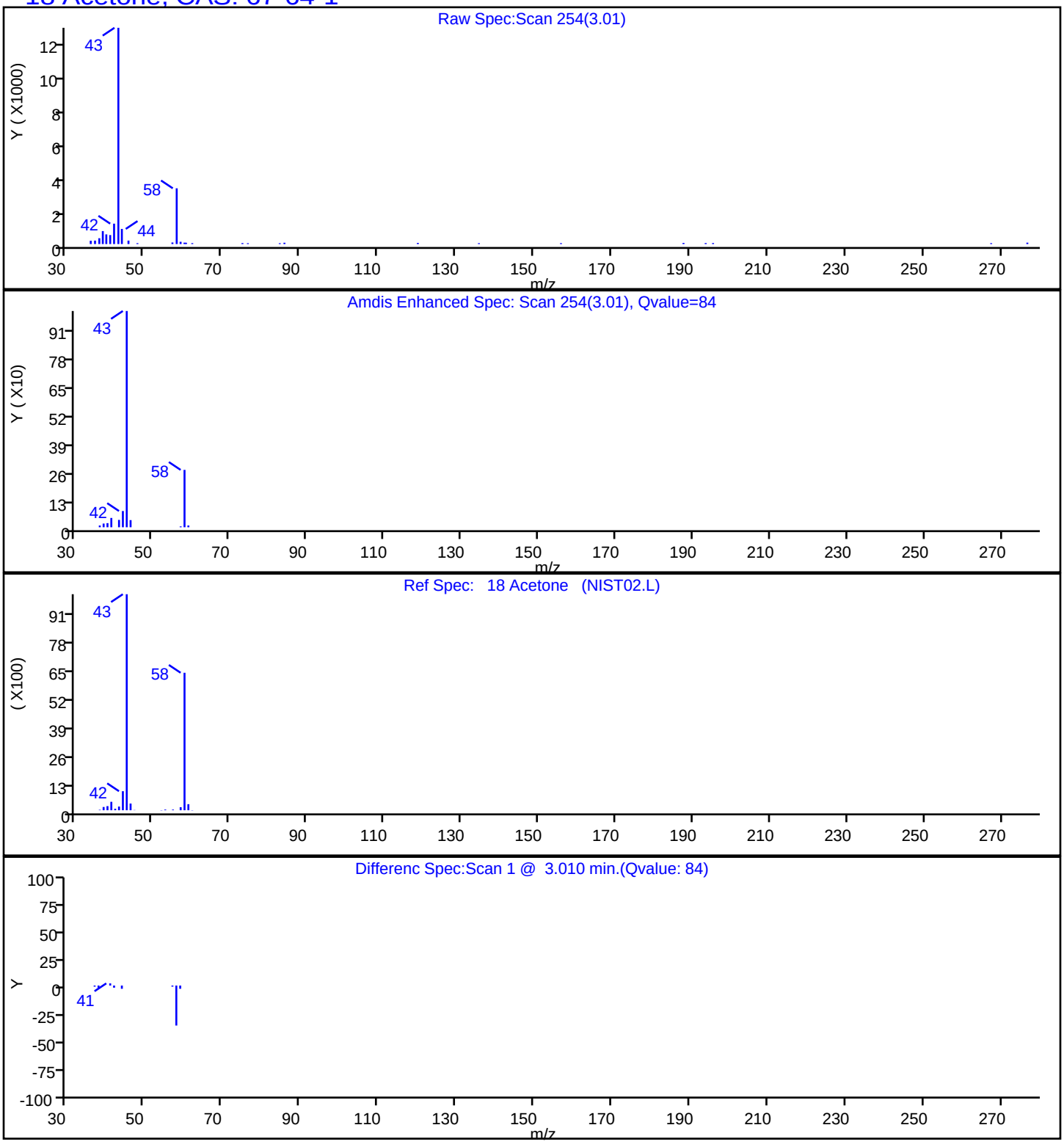
42 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D				
Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2		
Client ID:	GC-SB-101(SO)-15.5-17.5				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

18 Acetone, CAS: 67-64-1

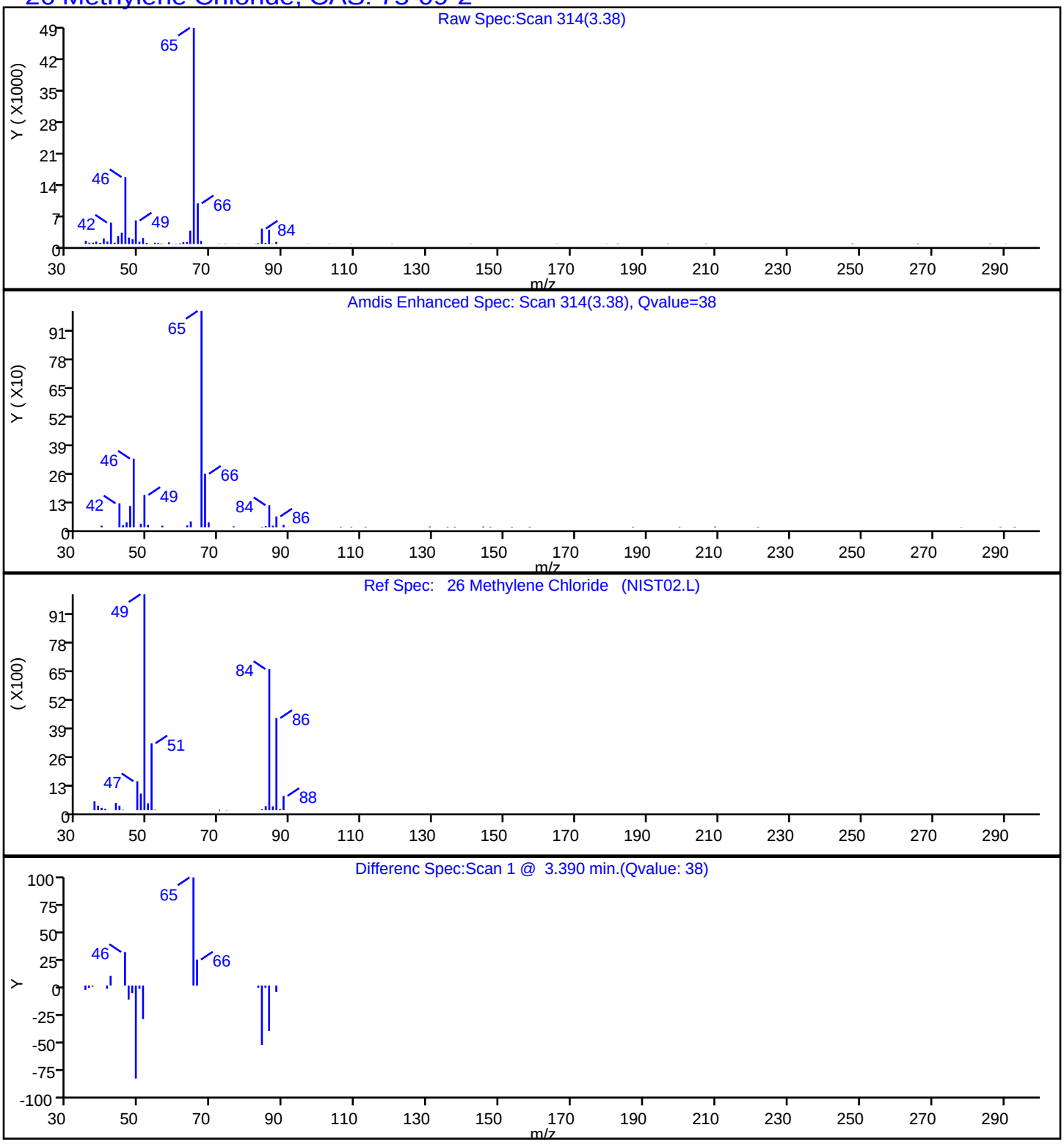


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D

Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2
Client ID:	GC-SB-101(SO)-15.5-17.5		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

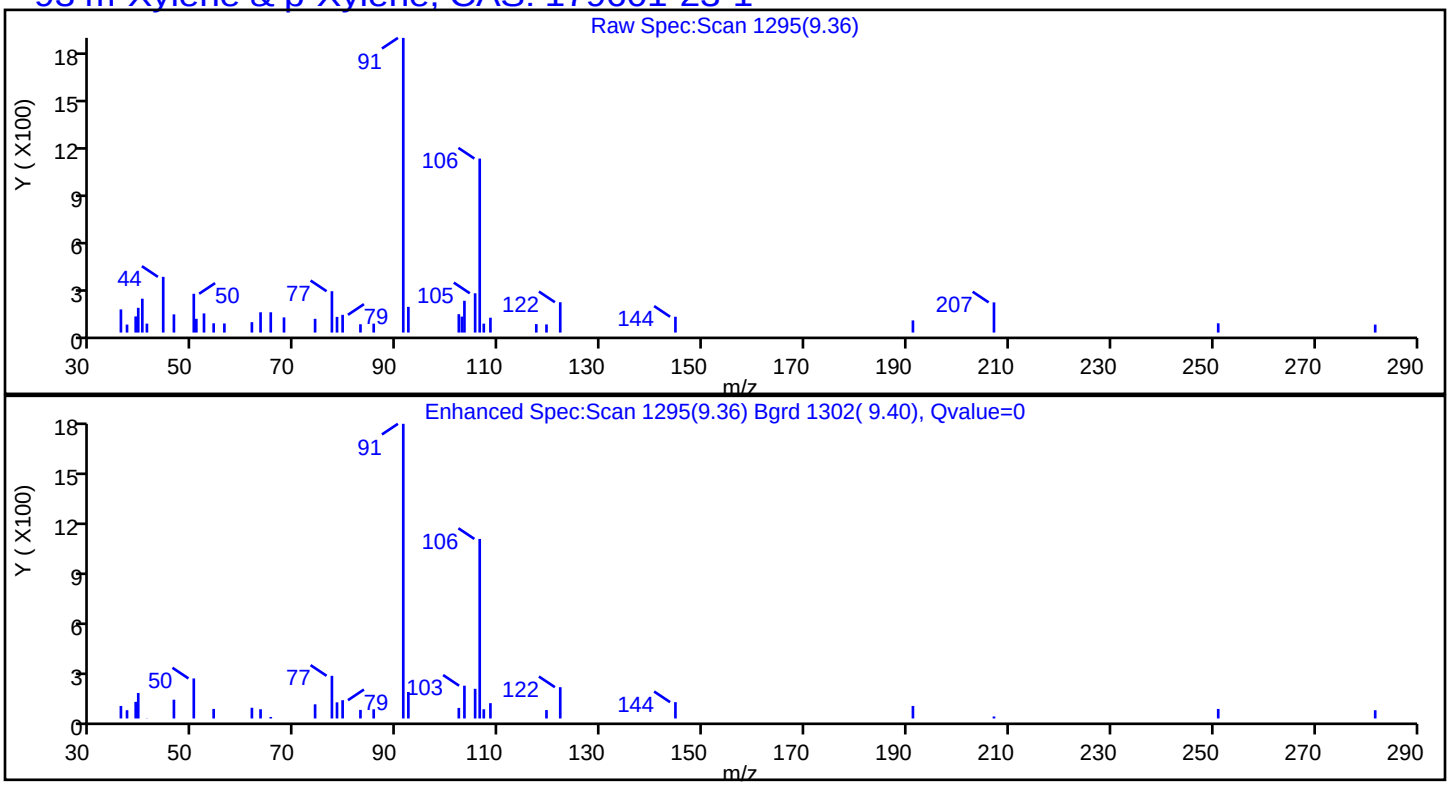
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D				
Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2		
Client ID:	GC-SB-101(SO)-15.5-17.5				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

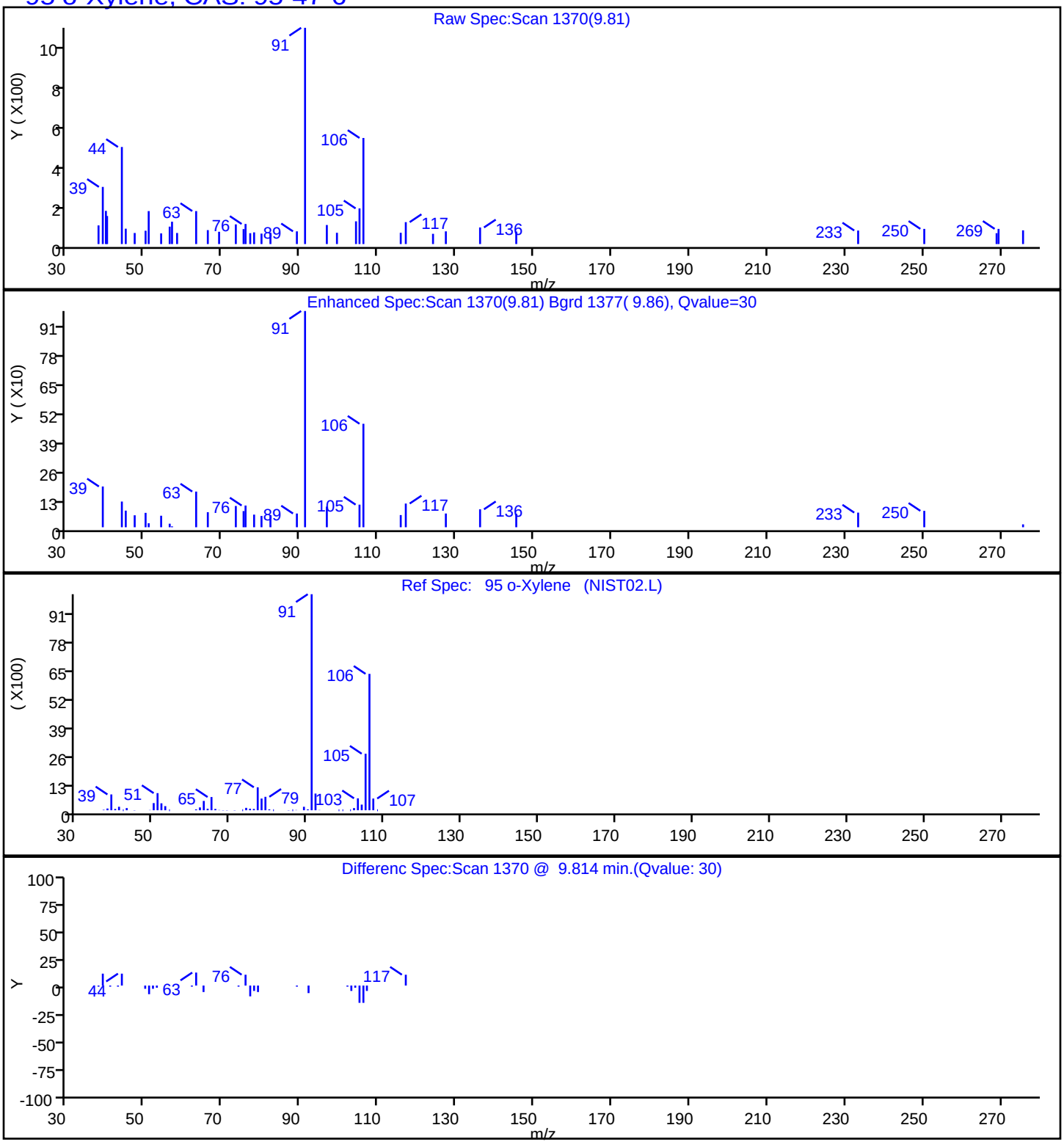
93 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

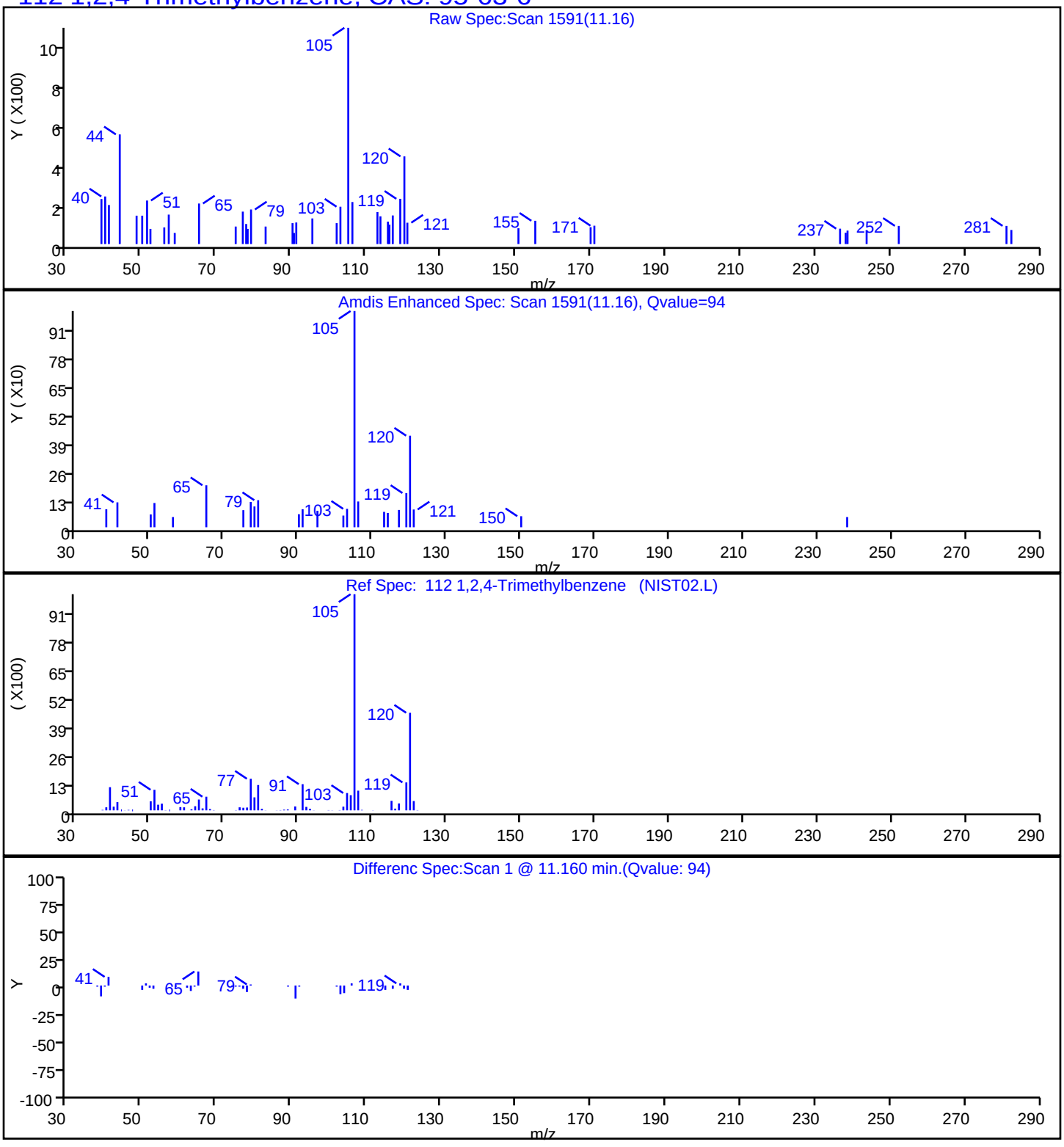
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D		
Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2
Client ID:	GC-SB-101(SO)-15.5-17.5		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

95 o-Xylene, CAS: 95-47-6



Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D				
Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2		
Client ID:	GC-SB-101(SO)-15.5-17.5				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

112 1,2,4-Trimethylbenzene, CAS: 95-63-6



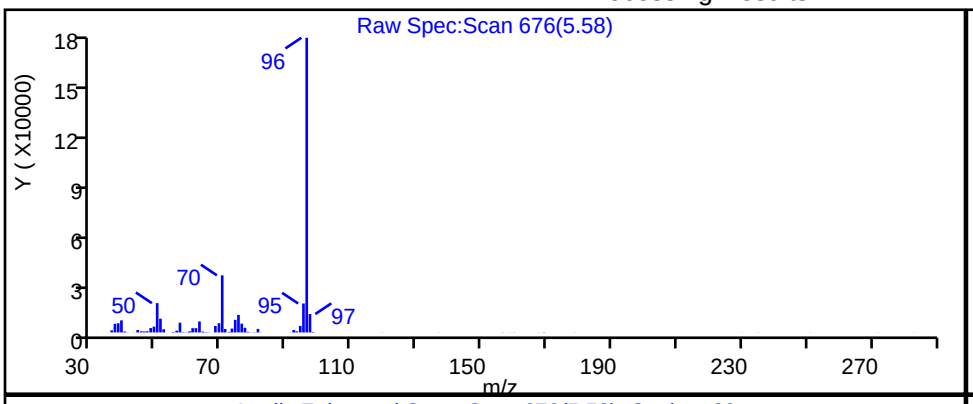
User Disabled Compound Report

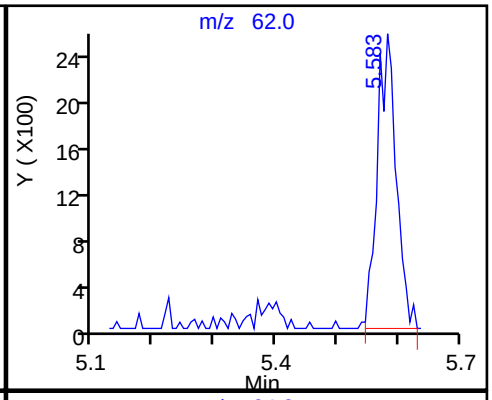
TestAmerica Edison

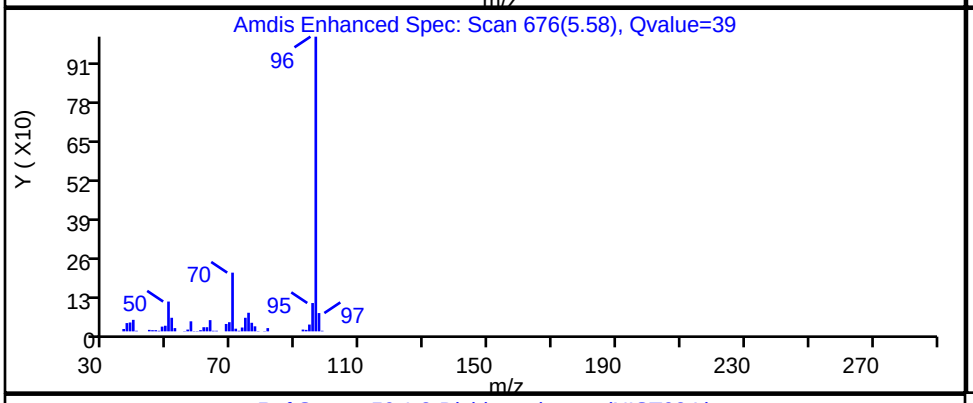
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D				
Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2		
Client ID:	GC-SB-101(SO)-15.5-17.5				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

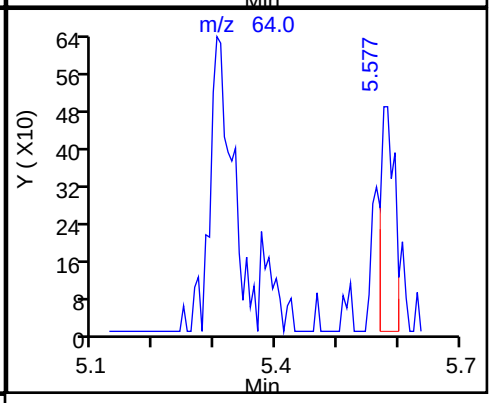
59 1,2-Dichloroethane, CAS: 107-06-2

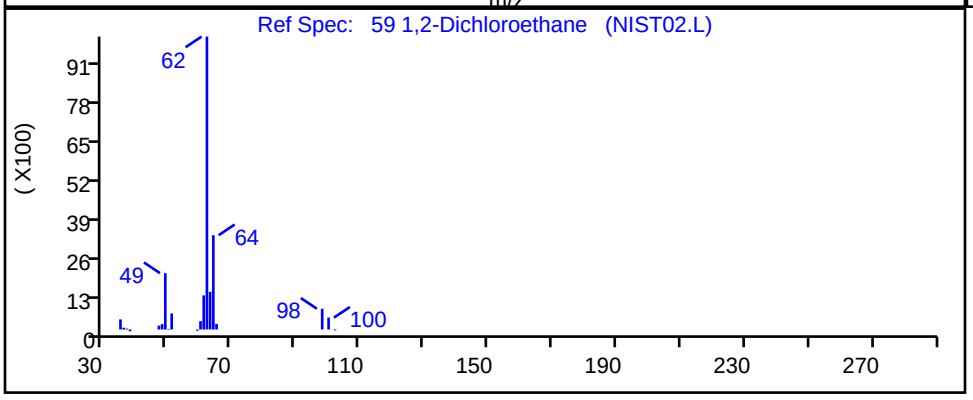
Processing Results











RT	Mass	Response	Amount
5.58	62.00	5437	1.590014
5.58	64.00	755	

Reviewer: moroneyc, 21-Mar-2018 10:33:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

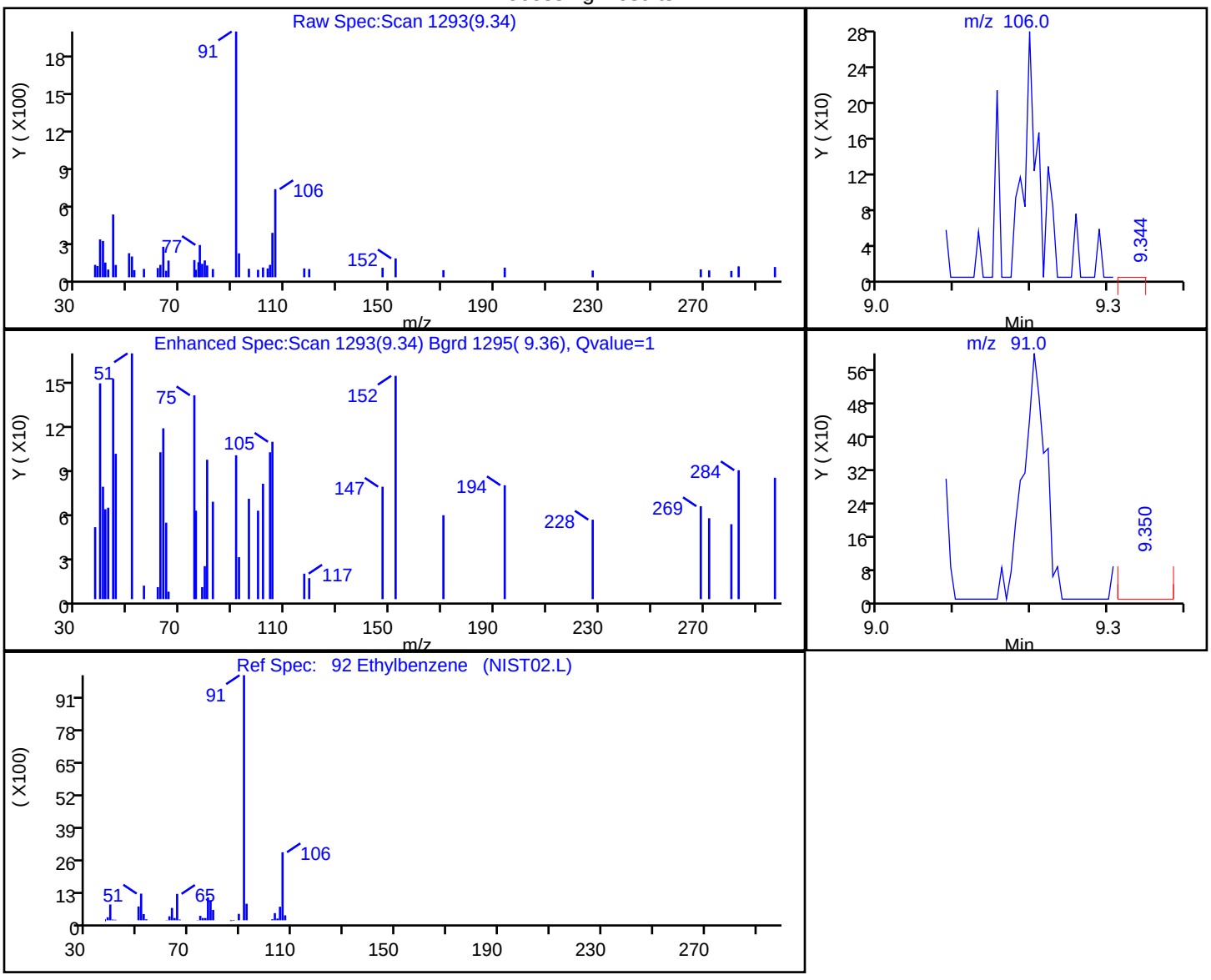
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81019.D		
Injection Date:	21-Mar-2018 02:43:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-2-A	Lab Sample ID:	460-152211-2
Client ID:	GC-SB-101(SO)-15.5-17.5		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.34	106.00	935	0.261110
9.35	91.00	3924	

Reviewer: moroneyc, 21-Mar-2018 10:33:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-3-5 | Lab Sample ID: 460-152211-3

Matrix: Solid | Lab File ID: K81025.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:35

Sample wt/vol: 5.683(g) | Date Analyzed: 03/21/2018 05:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0085
78-93-3	2-Butanone (MEK)	0.0046	U	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.0092		0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00044
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00025
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-3-5 | Lab Sample ID: 460-152211-3

Matrix: Solid | Lab File ID: K81025.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:35

Sample wt/vol: 5.683(g) | Date Analyzed: 03/21/2018 05:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U *	0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00012
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00033	J	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00032	J	0.00092	0.00016
95-47-6	o-Xylene	0.00012	J	0.00092	0.000088
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00083	J	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00038
75-01-4	Vinyl chloride	0.00092	U	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	129		78-135
460-00-4	4-Bromofluorobenzene	107		67-126
1868-53-7	Dibromofluoromethane (Surr)	117		61-149
2037-26-5	Toluene-d8 (Surr)	107		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-3-5 | Lab Sample ID: 460-152211-3

Matrix: Solid | Lab File ID: K81025.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:35

Sample wt/vol: 5.683(g) | Date Analyzed: 03/21/2018 05:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

Number TICs Found: 1 | TIC Result Total: 0.0082

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
54935-00-1	Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	14.80	0.0082	J N	95%

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D
Lims ID: 460-152211-B-3-A
Client ID: GC-MW-102(SO)-3-5
Sample Type: Client
Inject. Date: 21-Mar-2018 05:09:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152211-B-3-A
Misc. Info.: 460-0069055-017
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 21-Mar-2018 10:41:33 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: moroneyc Date: 21-Mar-2018 10:37:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.004	3.004	0.000	85	10926	9.97	
* 25 TBA-d9 (IS)	65	3.352	3.352	0.000	0	299223	1000.0	
26 Methylene Chloride	84	3.364	3.370	-0.006	29	993	0.3579	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	233629	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	96	146188	58.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.302	0.001	0	160014	64.5	
* 61 Fluorobenzene	96	5.583	5.577	0.006	98	364292	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.278	0.012	0	18608	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.266	7.265	0.001	98	466809	53.3	
83 Tetrachloroethene	166	7.973	7.967	0.006	94	2678	0.9021	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	86	303096	50.0	
93 m-Xylene & p-Xylene	106	9.351	9.344	0.007	0	1486	0.3491	
95 o-Xylene	106	9.814	9.814	0.000	88	593	0.1346	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	93	160331	53.7	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	95	175297	50.0	

Reagents:

8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

TestAmerica Edison
Tentatively Identified Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D				
Lims ID:	460-152211-B-3-A				
Client ID:	GC-MW-102(SO)-3-5				
Sample Type:	Client				
Inject. Date:	21-Mar-2018 05:09:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-152211-B-3-A				
Misc. Info.:	460-0069055-017				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	21-Mar-2018 10:41:33	Calib Date:	10-Mar-2018 00:31:30		
Tic RT Window:	0.000 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\ChromNA\Edison\Database\NIST02.L				
Min. Match:	70				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK022				
First Level Reviewer: moroneyc		Date:	21-Mar-2018 10:37:41		

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
54935-00-1 Benzene, 1,4-dichloro-2-(2-chloroethenyl)-								
14.801	158769	8.90	89	95	60523	C8H5Cl3	206	

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 89 Chlorobenzene-d5	9.070	892291	50.0

QC Flag Legend

Processing Flags

Reagents:

8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

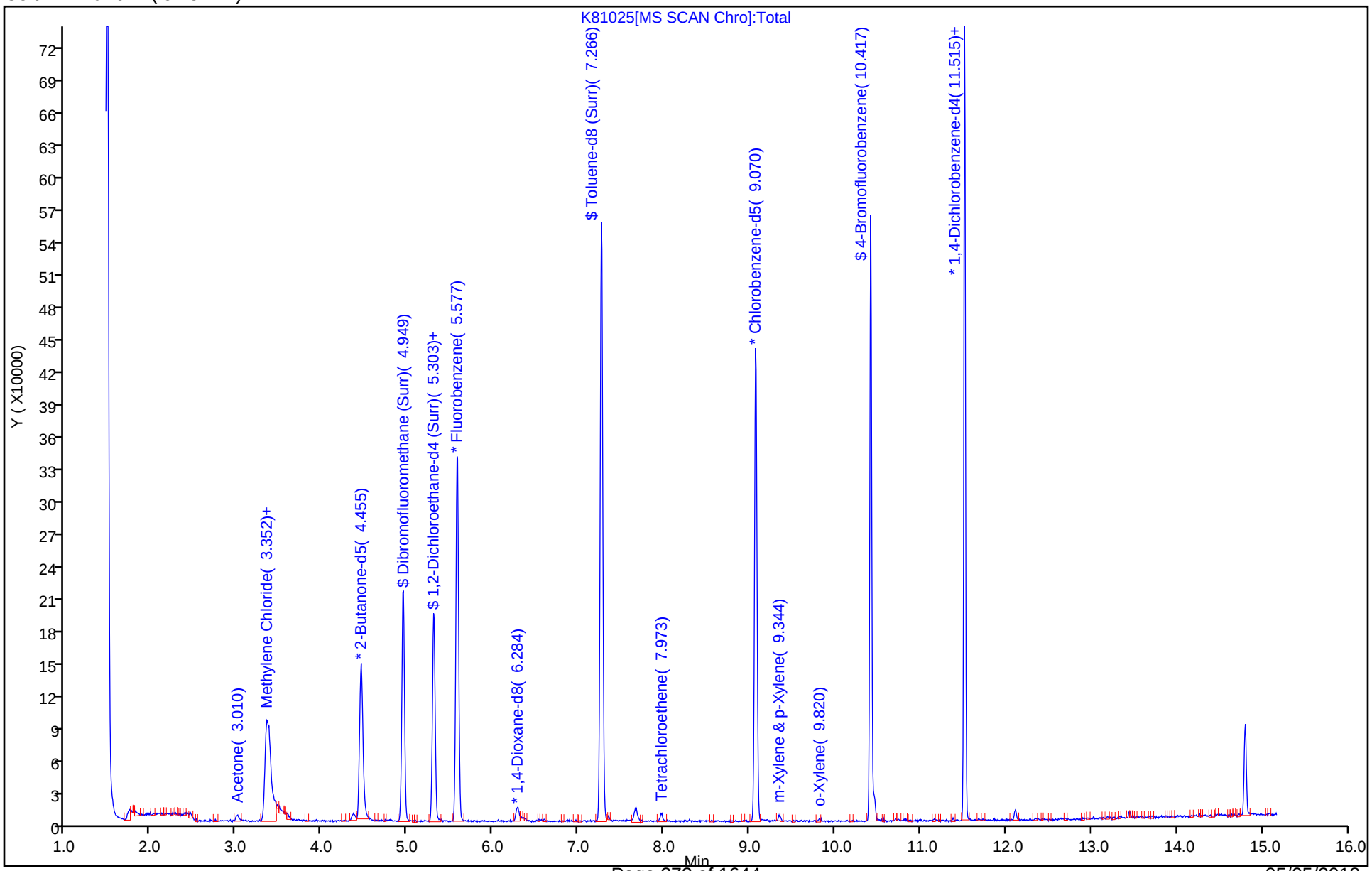
Report Date: 21-Mar-2018 10:41:56 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D

Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3	Worklist Smp#:	17
Client ID:	GC-MW-102(SO)-3-5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

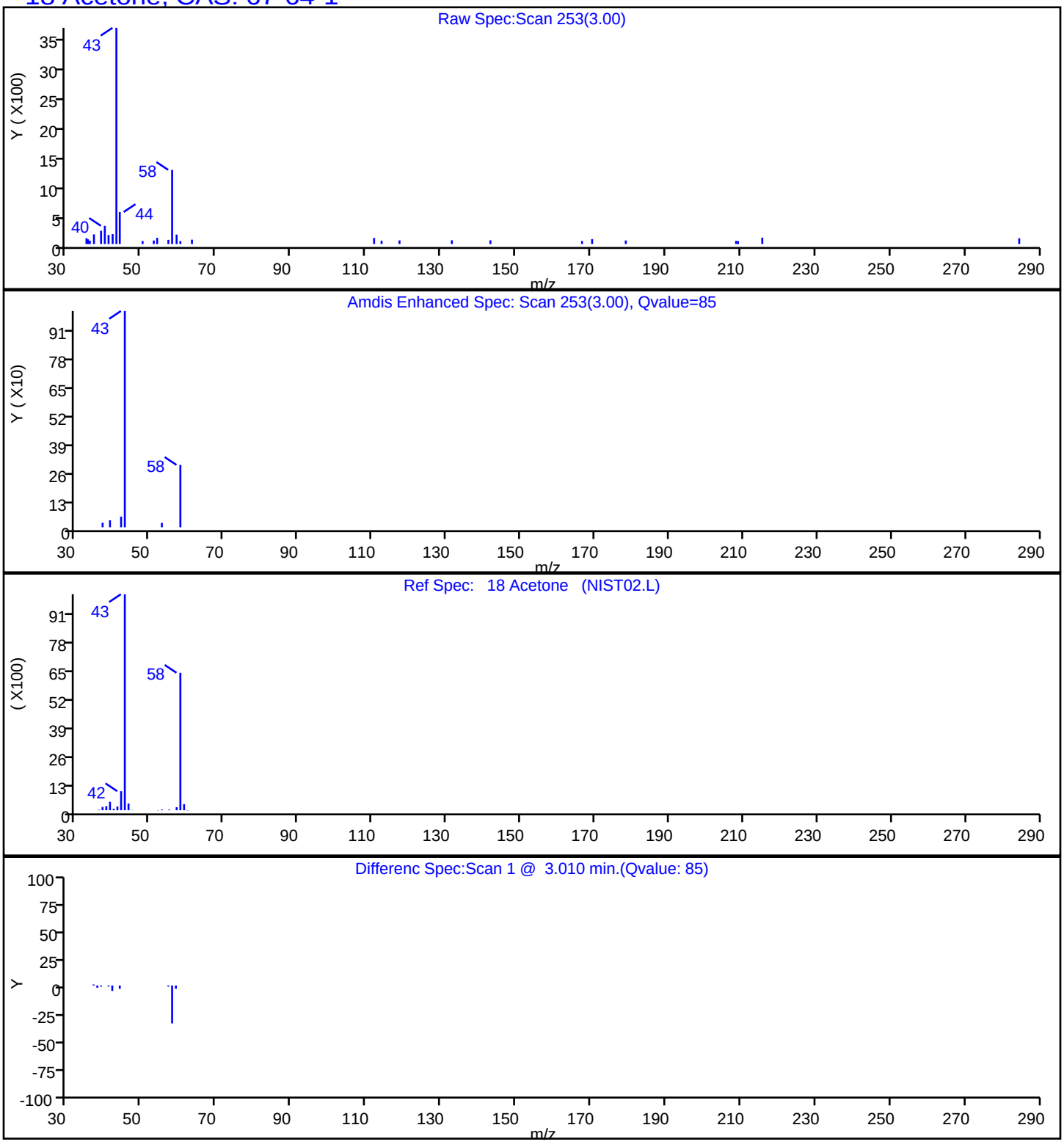
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D		
Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3
Client ID:	GC-MW-102(SO)-3-5		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

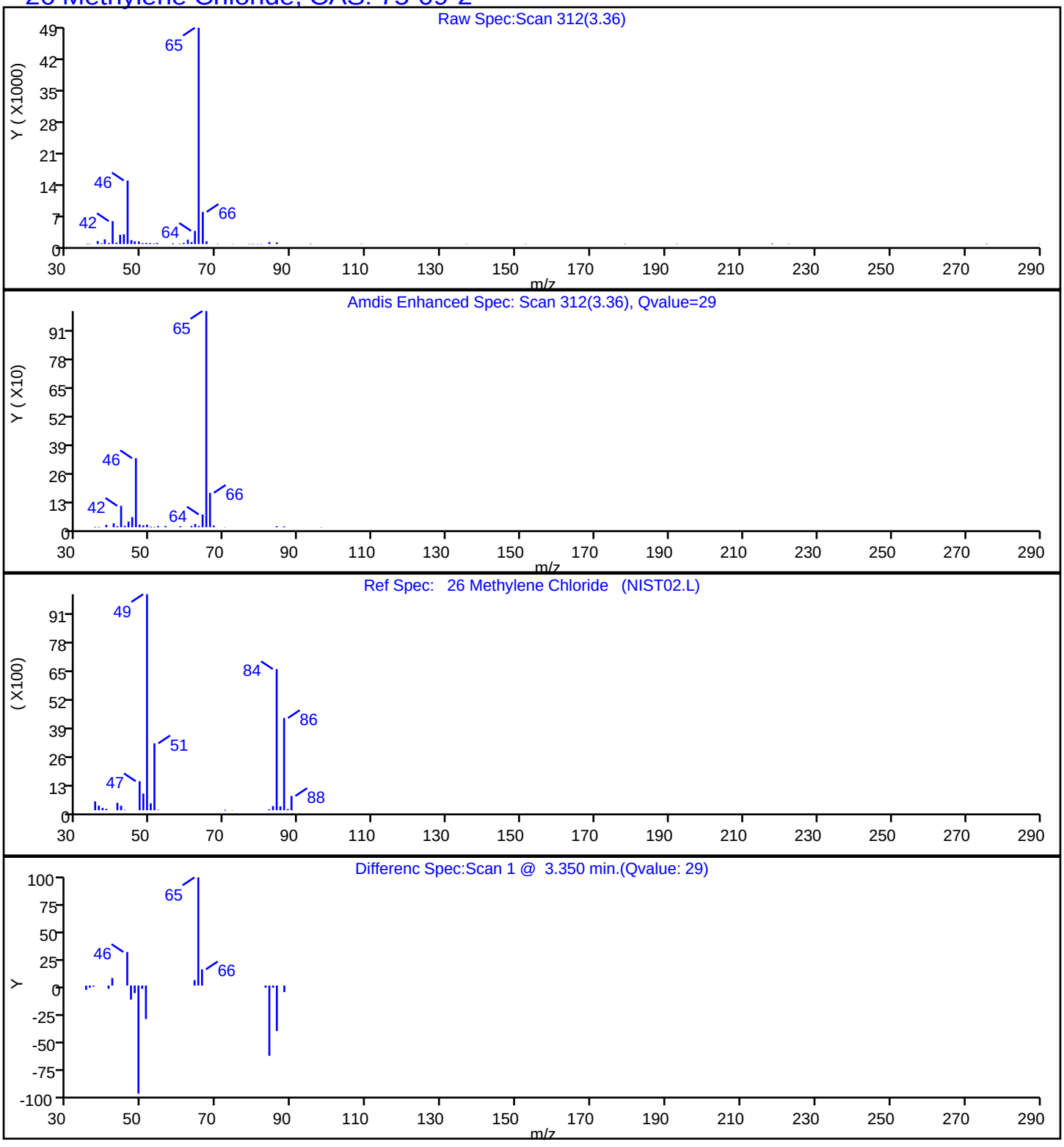
18 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D		
Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3
Client ID:	GC-MW-102(SO)-3-5		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

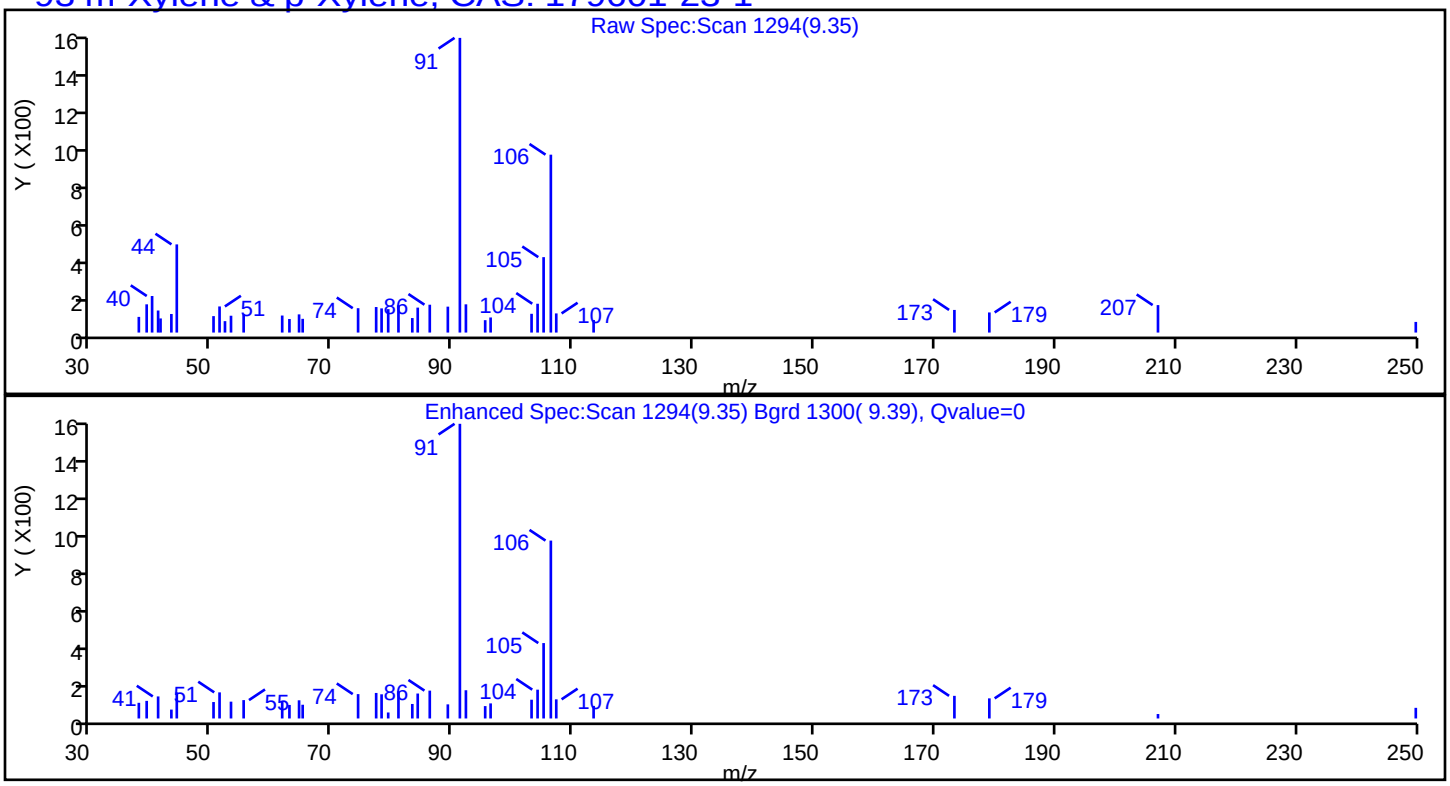
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D				
Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3		
Client ID:	GC-MW-102(SO)-3-5				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

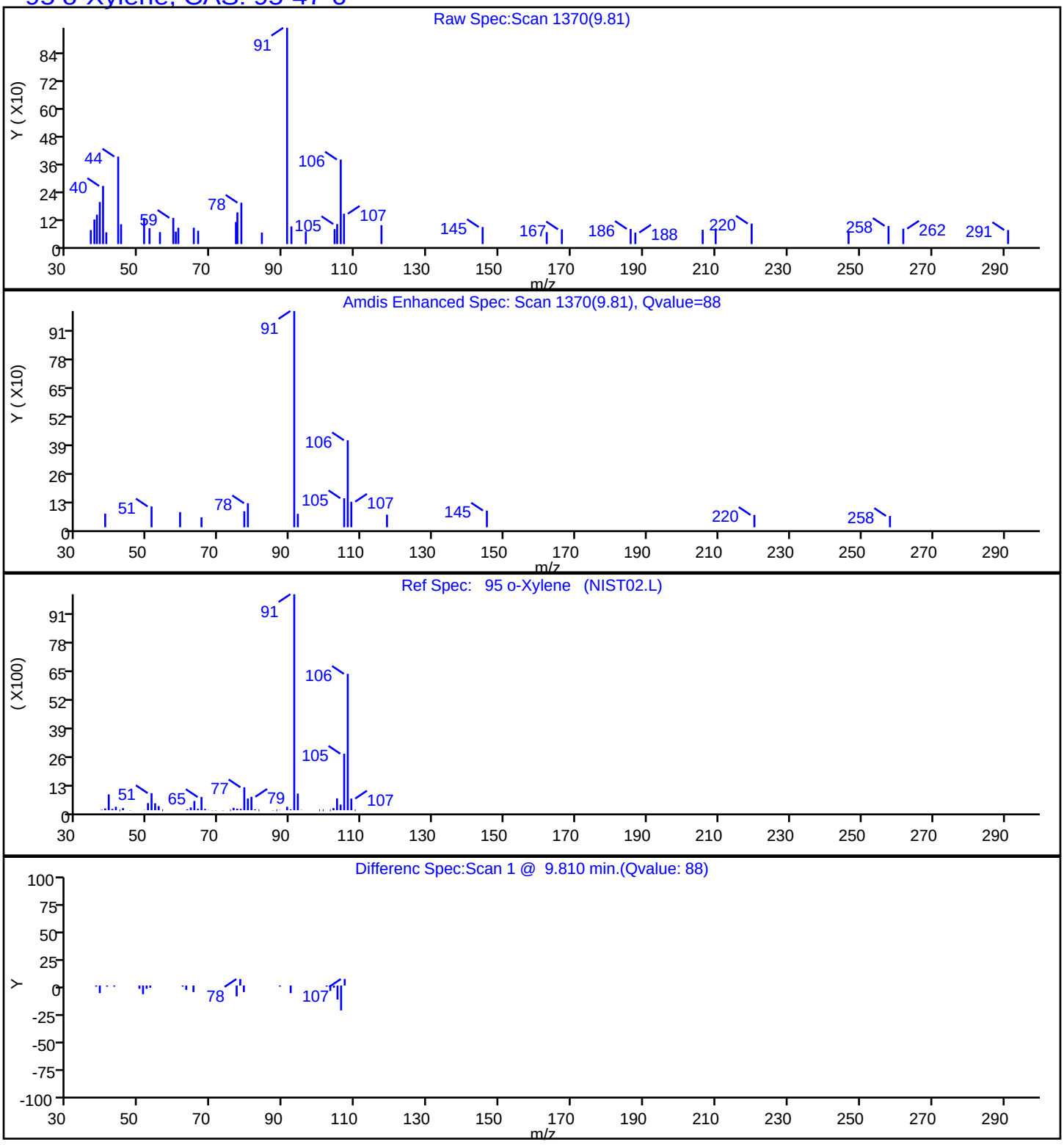


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D

Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3
Client ID:	GC-MW-102(SO)-3-5		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

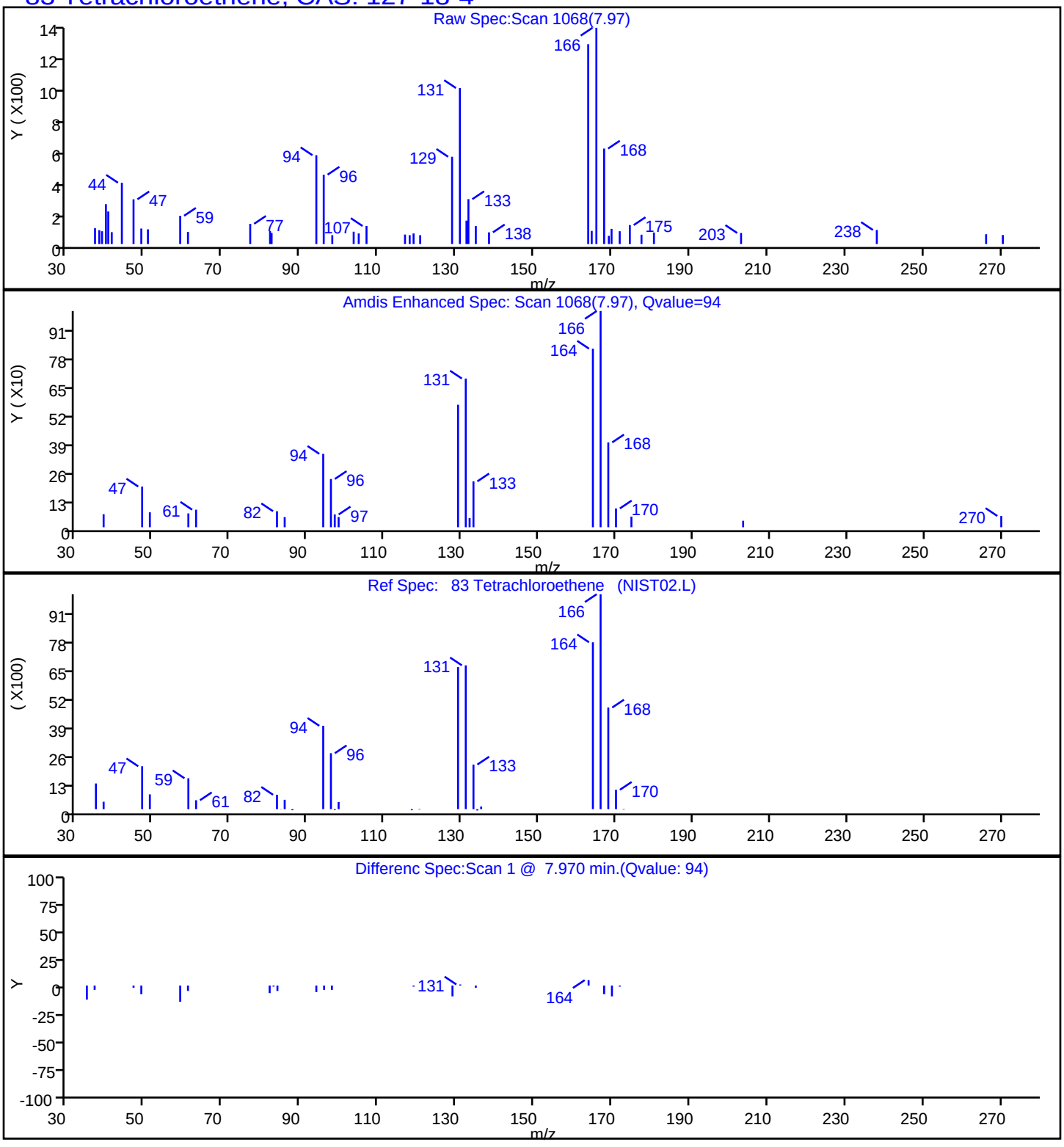
95 o-Xylene, CAS: 95-47-6



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D		
Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3
Client ID:	GC-MW-102(SO)-3-5		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



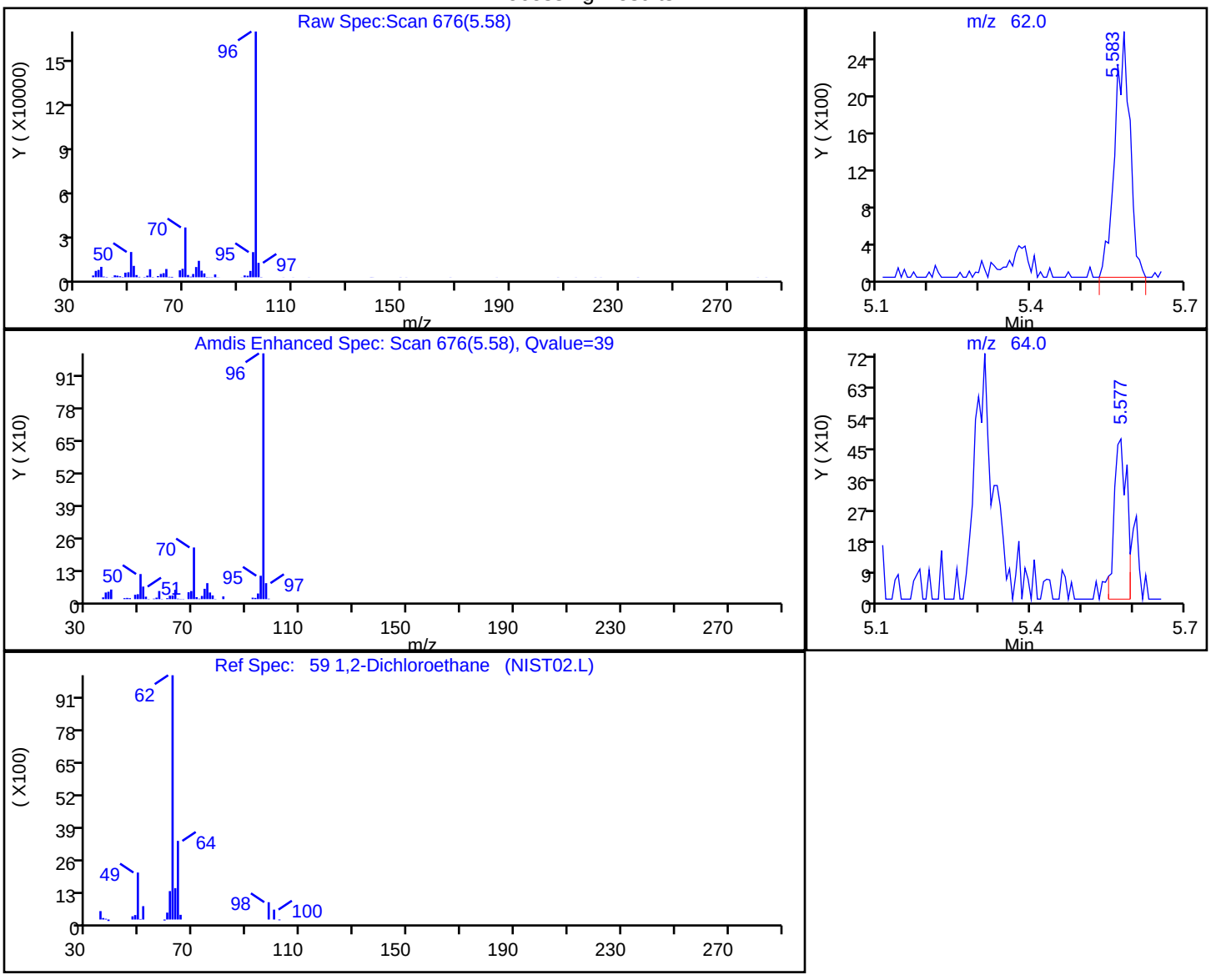
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D				
Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3		
Client ID:	GC-MW-102(SO)-3-5				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.58	62.00	5427	1.644676
5.58	64.00	823	

Reviewer: moroneyc, 21-Mar-2018 10:37:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

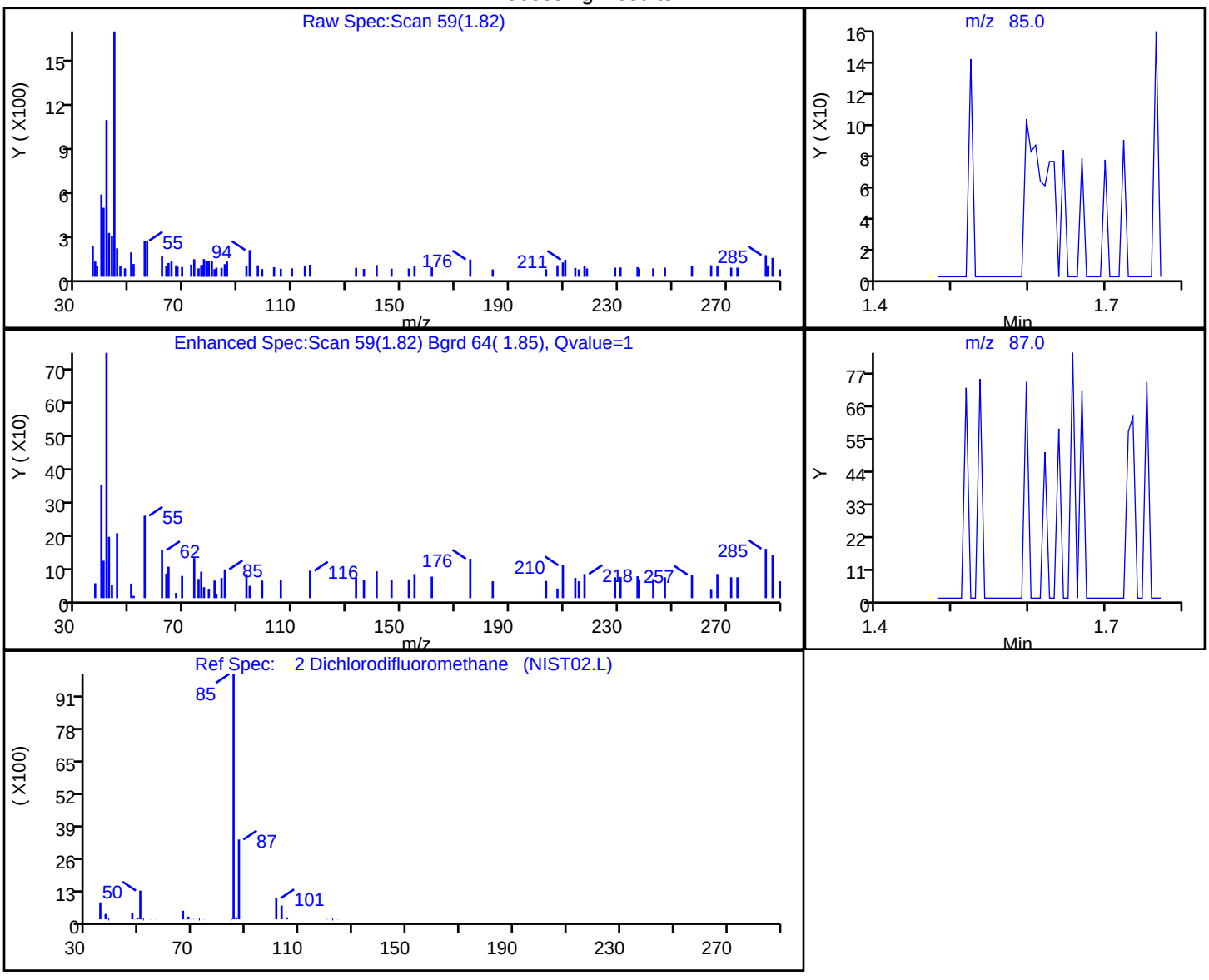
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D				
Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3		
Client ID:	GC-MW-102(SO)-3-5				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.82	85.00	196	0.466592
1.83	87.00	142	

Reviewer: moroneyc, 21-Mar-2018 10:37:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

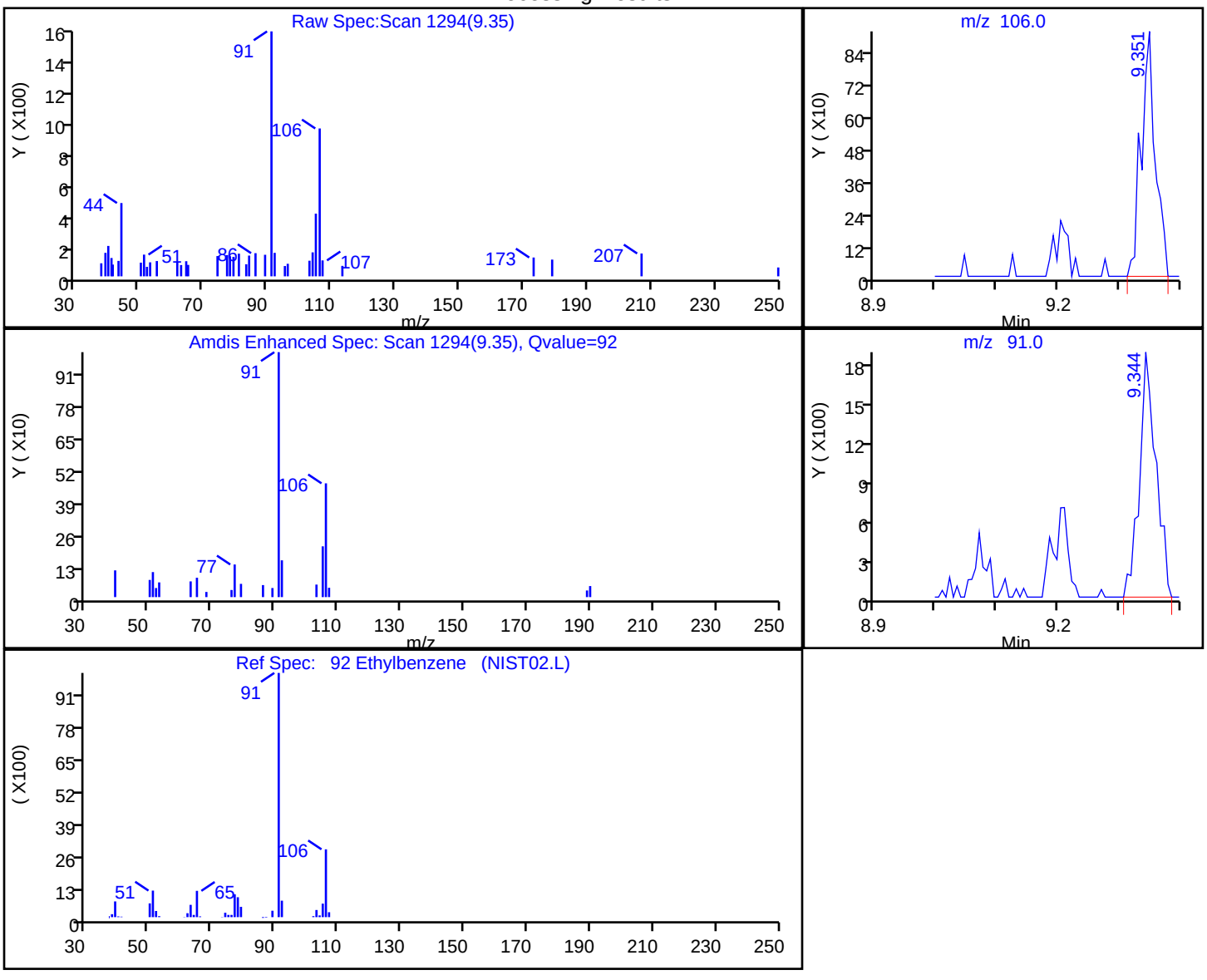
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D		
Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3
Client ID:	GC-MW-102(SO)-3-5		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.35	106.00	1486	0.427339
9.34	91.00	3426	

Reviewer: moroneyc, 21-Mar-2018 10:37:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

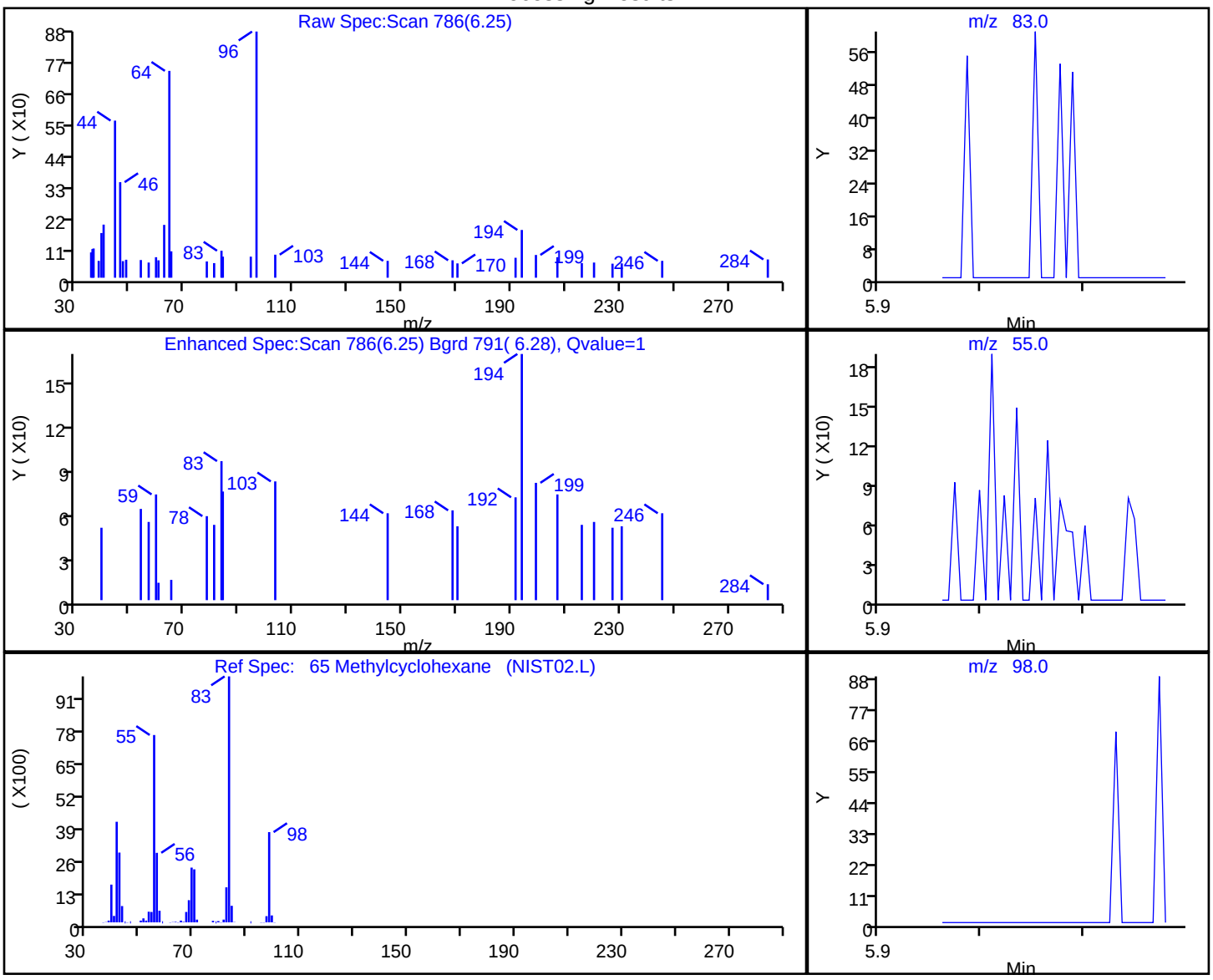
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D		
Injection Date:	21-Mar-2018 05:09:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-3-A	Lab Sample ID:	460-152211-3
Client ID:	GC-MW-102(SO)-3-5		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

65 Methylcyclohexane, CAS: 108-87-2

Processing Results



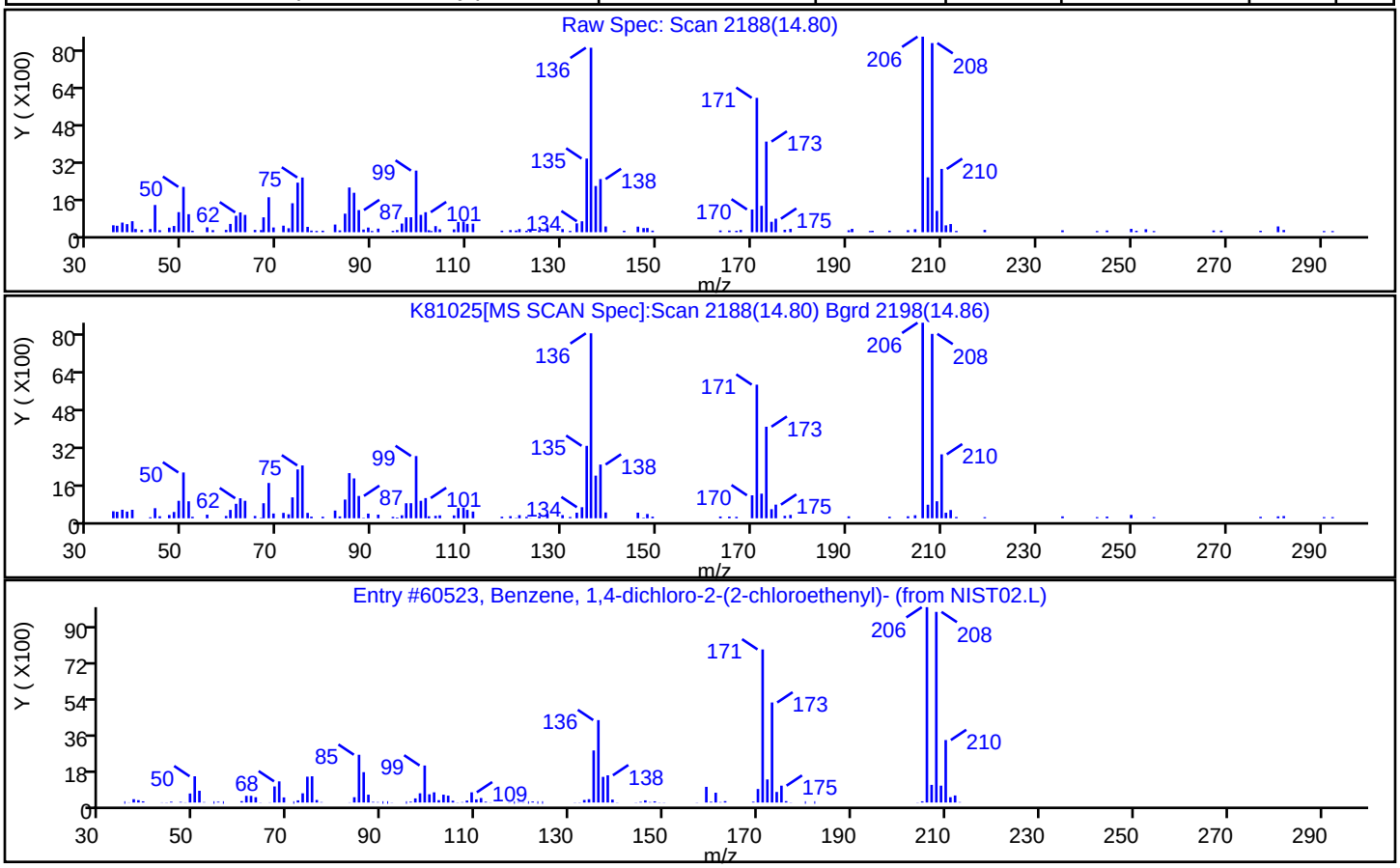
RT	Mass	Response	Amount
6.25	83.00	62	0.512372
6.24	55.00	112	
6.27	98.00	58	

Reviewer: moroneyc, 21-Mar-2018 10:37:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81025.D
Injection Date: 21-Mar-2018 05:09:30 Instrument ID: CVOAMS9
Lims ID: 460-152211-B-3-A Lab Sample ID: 460-152211-3
Client ID: GC-MW-102(SO)-3-5
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	54935-00-1	NIST02.L	60523	C8H5Cl3	206	95



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-9-11 | Lab Sample ID: 460-152211-4

Matrix: Solid | Lab File ID: K81026.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:30

Sample wt/vol: 6.135(g) | Date Analyzed: 03/21/2018 05:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.7 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00097	U	0.00097	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.00097	U	0.00097	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00097	U	0.00097	0.00029
79-00-5	1,1,2-Trichloroethane	0.00097	U	0.00097	0.00017
75-34-3	1,1-Dichloroethane	0.00097	U	0.00097	0.00020
75-35-4	1,1-Dichloroethene	0.00097	U	0.00097	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00097	U	0.00097	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.00097	U	0.00097	0.000089
96-12-8	1,2-Dibromo-3-Chloropropane	0.00097	U	0.00097	0.00044
95-50-1	1,2-Dichlorobenzene	0.00097	U	0.00097	0.00014
107-06-2	1,2-Dichloroethane	0.00097	U	0.00097	0.00029
78-87-5	1,2-Dichloropropane	0.00097	U	0.00097	0.00041
541-73-1	1,3-Dichlorobenzene	0.00097	U	0.00097	0.00015
106-46-7	1,4-Dichlorobenzene	0.00097	U	0.00097	0.000097
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0089
78-93-3	2-Butanone (MEK)	0.0021	J	0.0048	0.0011
591-78-6	2-Hexanone	0.0048	U	0.0048	0.00075
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064
67-64-1	Acetone	0.015		0.0048	0.0037
71-43-2	Benzene	0.00097	U	0.00097	0.00025
75-25-2	Bromoform	0.00097	U	0.00097	0.00041
74-83-9	Bromomethane	0.00097	U	0.00097	0.00046
75-15-0	Carbon disulfide	0.00097	U	0.00097	0.00026
56-23-5	Carbon tetrachloride	0.00097	U	0.00097	0.00018
108-90-7	Chlorobenzene	0.00097	U	0.00097	0.00017
74-97-5	Chlorobromomethane	0.00097	U	0.00097	0.00027
124-48-1	Chlorodibromomethane	0.00097	U	0.00097	0.00019
75-00-3	Chloroethane	0.00097	U	0.00097	0.00050
67-66-3	Chloroform	0.00097	U	0.00097	0.00031
74-87-3	Chloromethane	0.00097	U	0.00097	0.00042
156-59-2	cis-1,2-Dichloroethene	0.00097	U	0.00097	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00097	U	0.00097	0.00026
110-82-7	Cyclohexane	0.00097	U	0.00097	0.00021
75-27-4	Dichlorobromomethane	0.00097	U	0.00097	0.00025
75-71-8	Dichlorodifluoromethane	0.00097	U	0.00097	0.00033

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-9-11 | Lab Sample ID: 460-152211-4

Matrix: Solid | Lab File ID: K81026.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:30

Sample wt/vol: 6.135(g) | Date Analyzed: 03/21/2018 05:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.7 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00097	U	0.00097	0.00019
106-93-4	Ethylene Dibromide	0.00097	U	0.00097	0.00017
98-82-8	Isopropylbenzene	0.00097	U	0.00097	0.00012
79-20-9	Methyl acetate	0.0048	U *	0.0048	0.0042
1634-04-4	Methyl tert-butyl ether	0.00097	U	0.00097	0.00012
108-87-2	Methylcyclohexane	0.00097	U	0.00097	0.00015
75-09-2	Methylene Chloride	0.00099		0.00097	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00036	J	0.00097	0.00017
95-47-6	o-Xylene	0.00017	J	0.00097	0.000092
100-42-5	Styrene	0.00097	U	0.00097	0.00012
127-18-4	Tetrachloroethene	0.0042		0.00097	0.00014
108-88-3	Toluene	0.00097	U	0.00097	0.00060
156-60-5	trans-1,2-Dichloroethene	0.00097	U	0.00097	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00097	U	0.00097	0.00026
79-01-6	Trichloroethene	0.00097	U	0.00097	0.00014
75-69-4	Trichlorofluoromethane	0.00097	U	0.00097	0.00039
75-01-4	Vinyl chloride	0.00097	U	0.00097	0.00053

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	127		78-135
460-00-4	4-Bromofluorobenzene	105		67-126
1868-53-7	Dibromofluoromethane (Surr)	115		61-149
2037-26-5	Toluene-d8 (Surr)	105		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-9-11 | Lab Sample ID: 460-152211-4

Matrix: Solid | Lab File ID: K81026.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:30

Sample wt/vol: 6.135(g) | Date Analyzed: 03/21/2018 05:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.7 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

Number TICs Found: 1 | TIC Result Total: 0.017

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
54935-00-1	Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	14.80	0.017	J N	98%

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D
Lims ID: 460-152211-B-4-A
Client ID: GC-MW-102(SO)-9-11
Sample Type: Client
Inject. Date: 21-Mar-2018 05:33:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152211-B-4-A
Misc. Info.: 460-0069055-018
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 21-Mar-2018 10:41:33 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: moroneyc Date: 21-Mar-2018 10:38:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.004	3.004	0.000	86	15905	15.2	
* 25 TBA-d9 (IS)	65	3.376	3.352	0.024	0	296160	1000.0	
26 Methylene Chloride	84	3.382	3.370	0.012	33	2915	1.03	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	222314	250.0	
42 2-Butanone (MEK)	72	4.516	4.504	0.012	37	880	2.19	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	97	147341	57.4	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.302	0.000	0	160712	63.3	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	372709	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.278	0.012	0	20180	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.265	7.265	0.000	97	475284	52.6	
83 Tetrachloroethene	166	7.967	7.967	0.000	98	13290	4.34	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	86	312348	50.0	
93 m-Xylene & p-Xylene	106	9.350	9.344	0.006	0	1647	0.3755	
95 o-Xylene	106	9.826	9.814	0.012	94	785	0.1729	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	94	161741	52.6	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	95	183108	50.0	

Reagents:

8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

TestAmerica Edison
Tentatively Identified Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D				
Lims ID:	460-152211-B-4-A				
Client ID:	GC-MW-102(SO)-9-11				
Sample Type:	Client				
Inject. Date:	21-Mar-2018 05:33:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-152211-B-4-A				
Misc. Info.:	460-0069055-018				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	21-Mar-2018 10:41:33	Calib Date:	10-Mar-2018 00:31:30		
Tic RT Window:	0.000 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\ChromNA\Edison\Database\NIST02.L				
Min. Match:	70				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK022				
First Level Reviewer: moroneyc		Date:	21-Mar-2018 10:38:15		

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
54935-00-1 Benzene, 1,4-dichloro-2-(2-chloroethenyl)-								
14.801	319608	17.6	89	98	60523	C8H5Cl3	206	

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 89 Chlorobenzene-d5	9.070	909238	50.0

QC Flag Legend

Processing Flags

Reagents:

8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

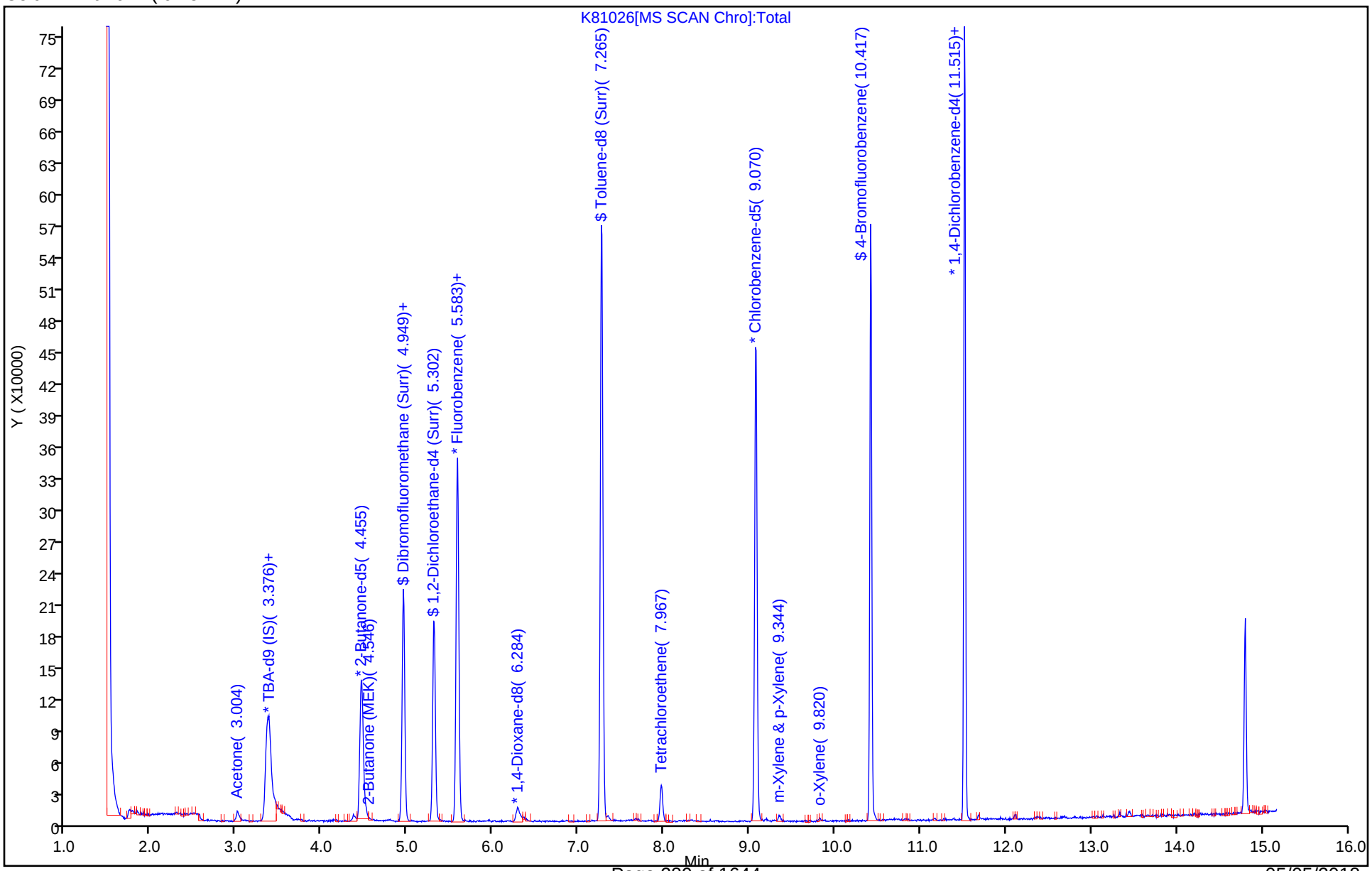
Report Date: 21-Mar-2018 10:41:58 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D

Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4	Worklist Smp#:	18
Client ID:	GC-MW-102(SO)-9-11				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

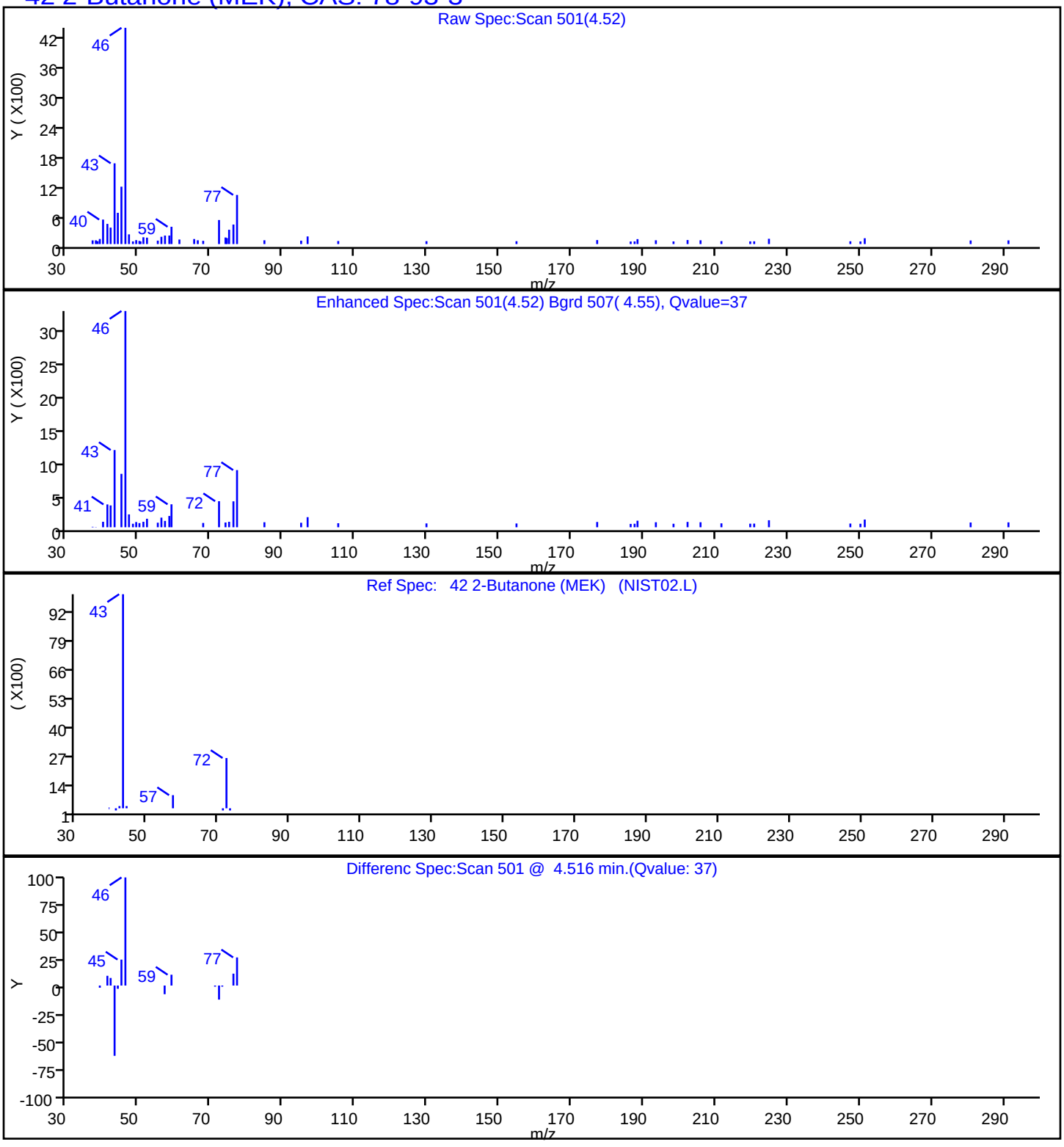
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D		
Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4
Client ID:	GC-MW-102(SO)-9-11		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

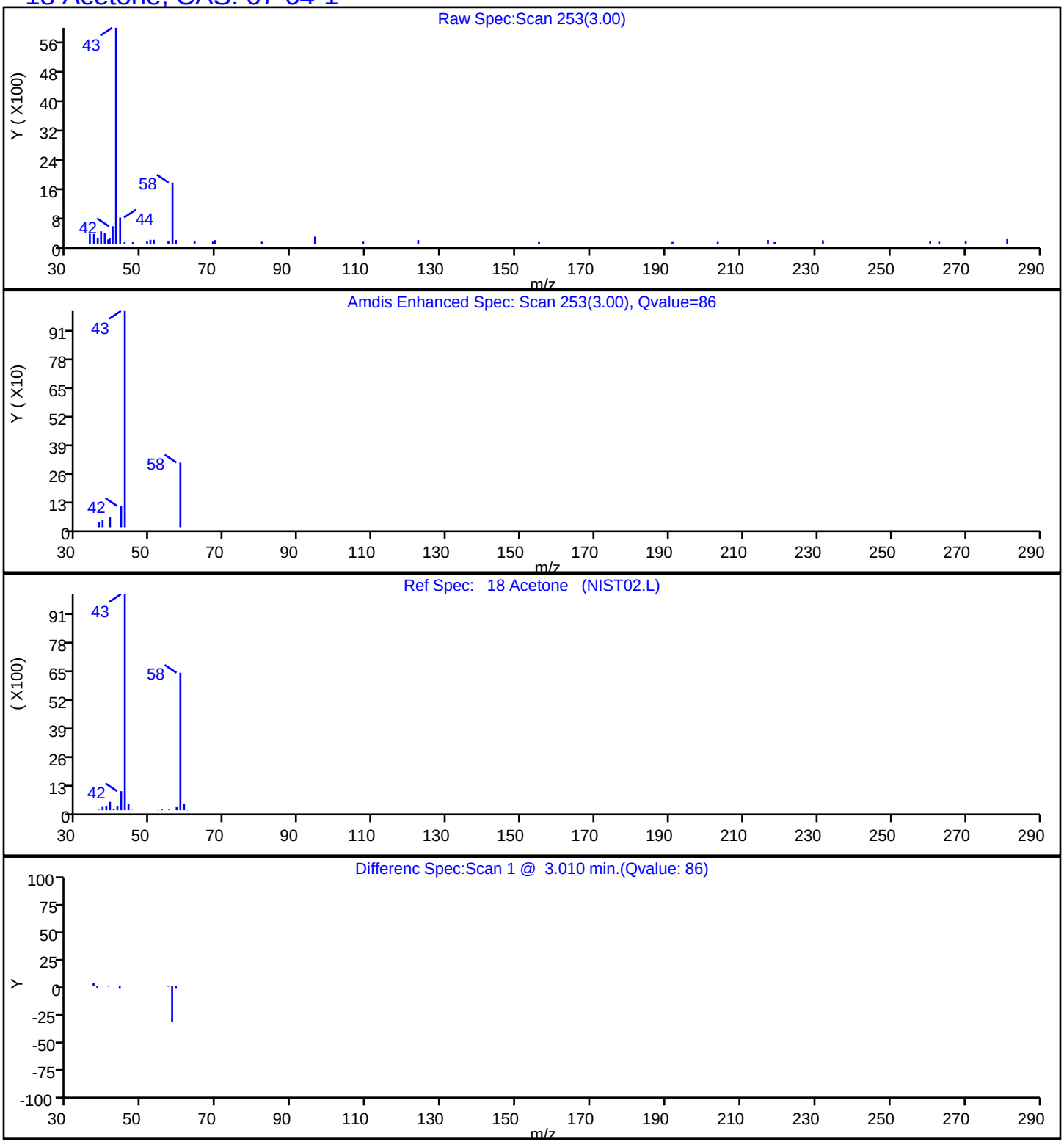
42 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D		
Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4
Client ID:	GC-MW-102(SO)-9-11		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

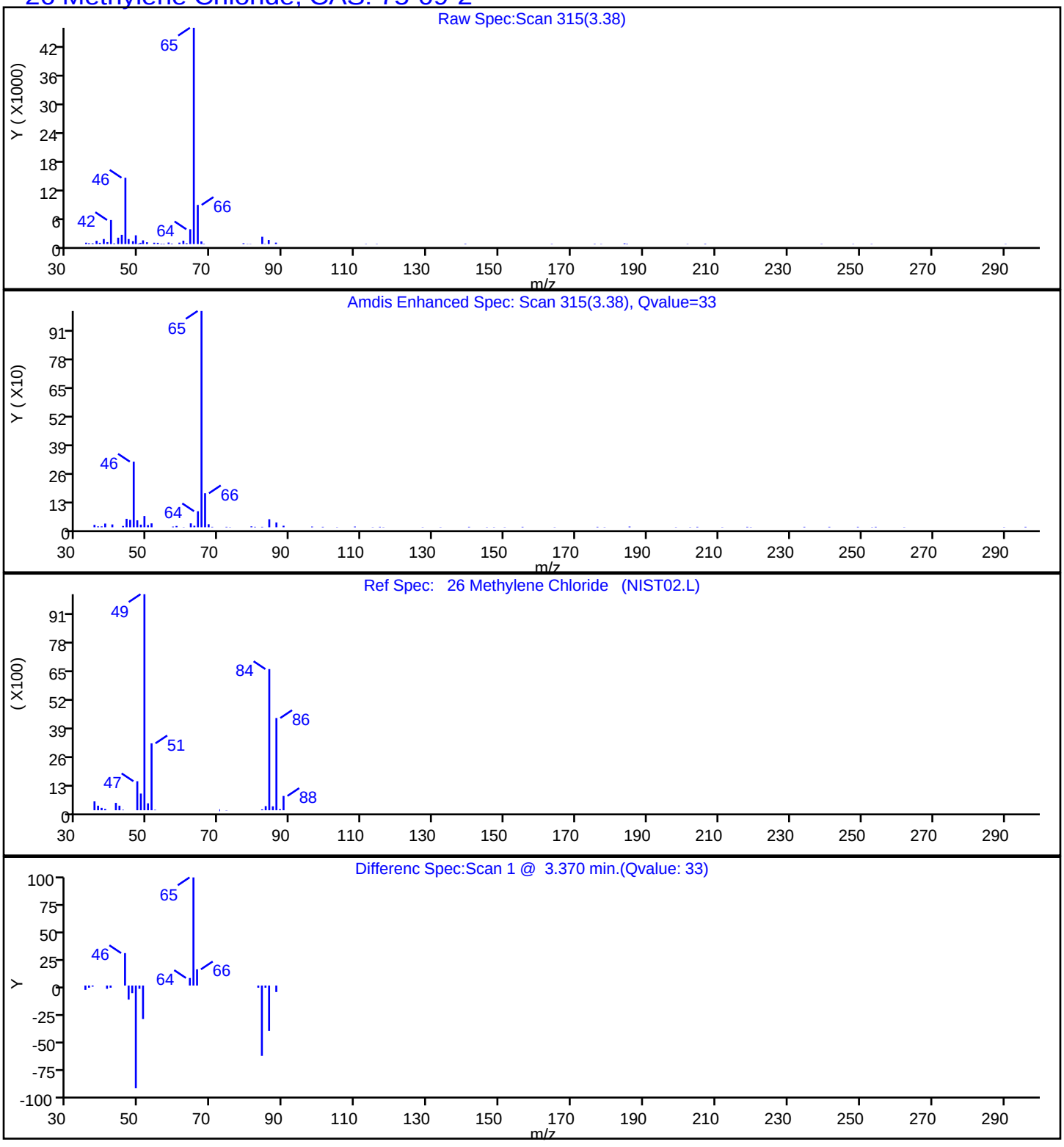
18 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D		
Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4
Client ID:	GC-MW-102(SO)-9-11		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

26 Methylene Chloride, CAS: 75-09-2



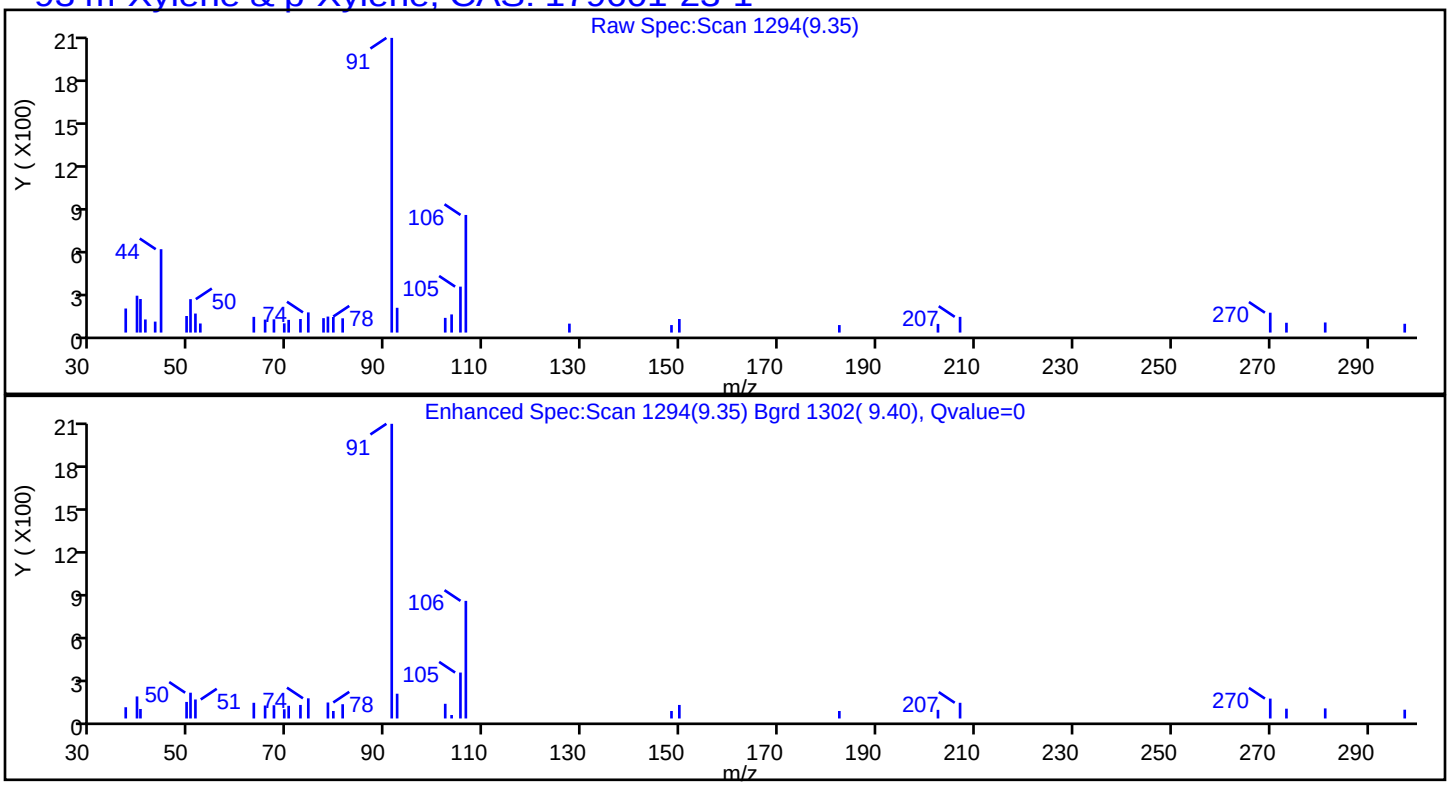
Report Date: 21-Mar-2018 10:41:58 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D

Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4		
Client ID:	GC-MW-102(SO)-9-11				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

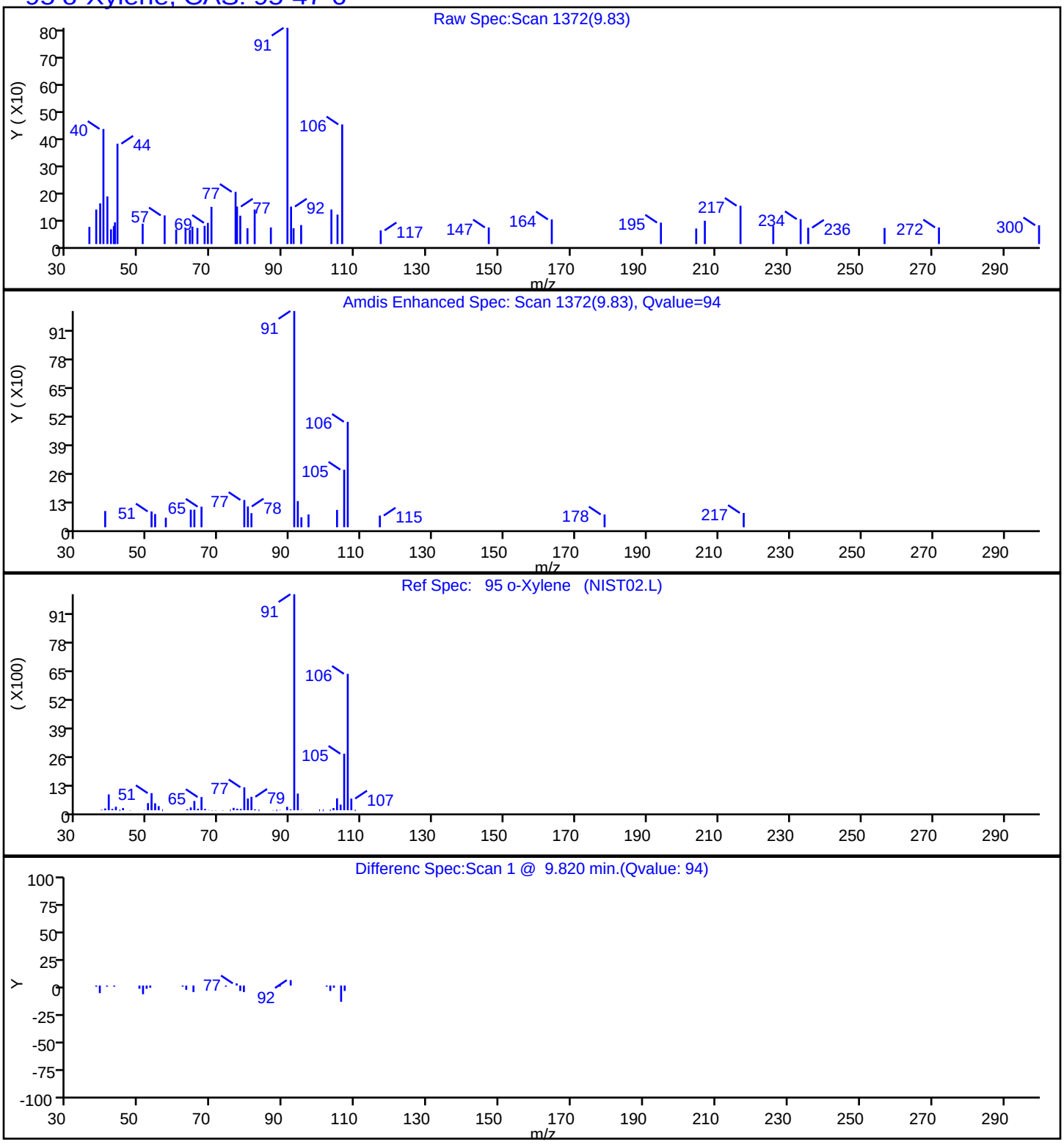
93 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D		
Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4
Client ID:	GC-MW-102(SO)-9-11		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

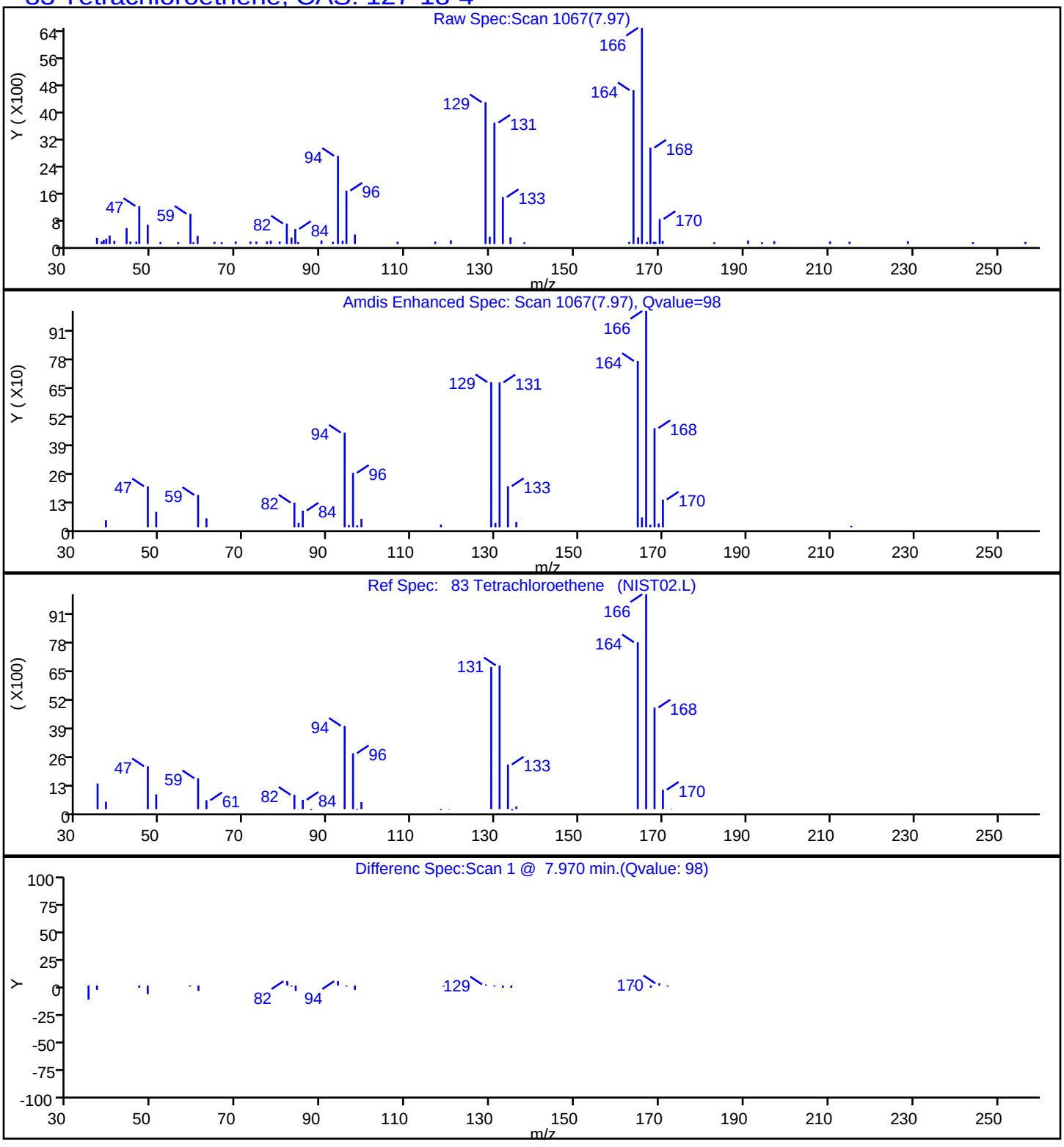
95 o-Xylene, CAS: 95-47-6



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D		
Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4
Client ID:	GC-MW-102(SO)-9-11		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



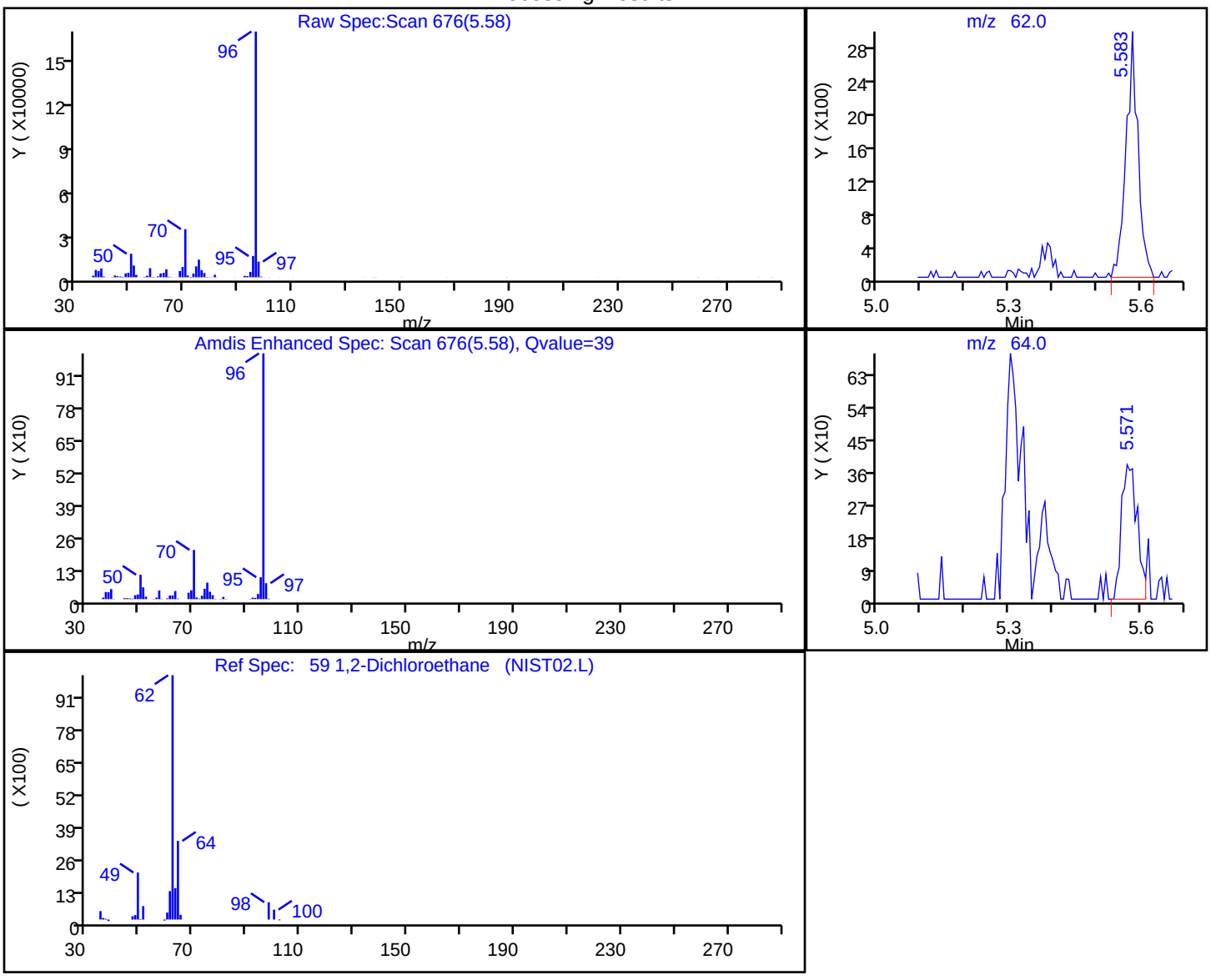
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D				
Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4		
Client ID:	GC-MW-102(SO)-9-11				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.58	62.00	5676	1.681290
5.57	64.00	934	

Reviewer: moroneyc, 21-Mar-2018 10:38:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

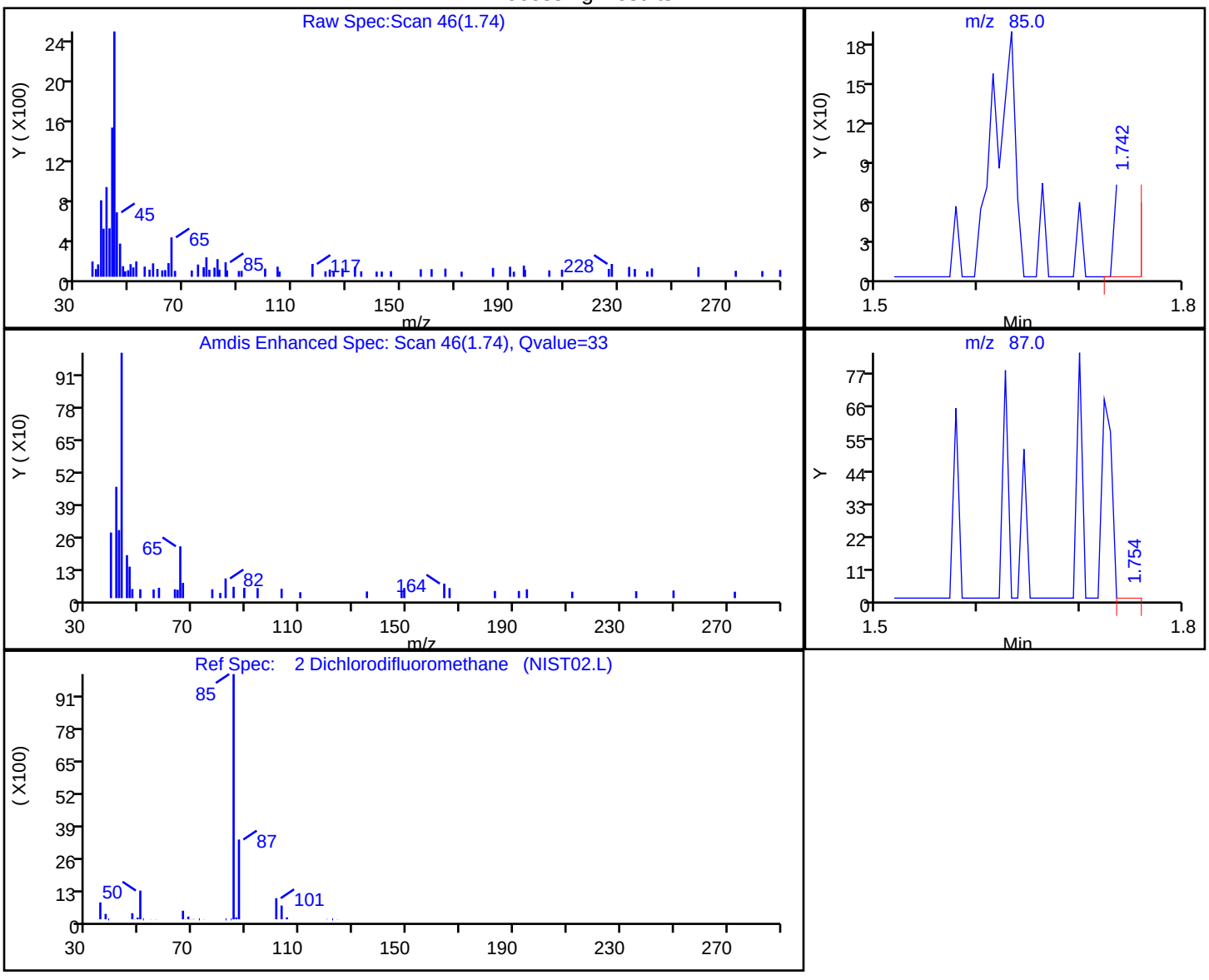
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D		
Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4
Client ID:	GC-MW-102(SO)-9-11		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.74	85.00	139	0.452122
1.75	87.00	37	

Reviewer: moroneyc, 21-Mar-2018 10:38:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

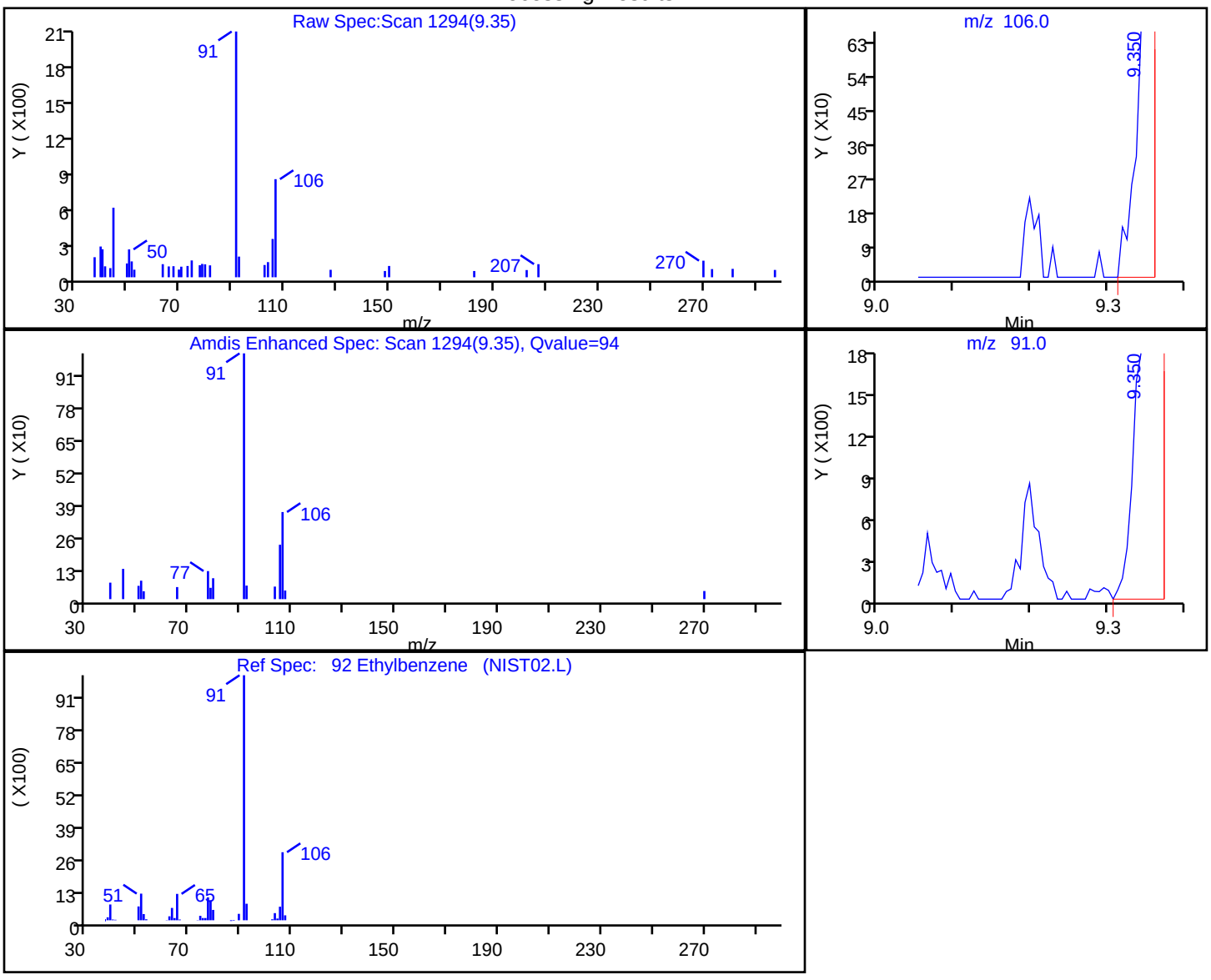
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D				
Injection Date:	21-Mar-2018 05:33:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-4-A	Lab Sample ID:	460-152211-4		
Client ID:	GC-MW-102(SO)-9-11				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.35	106.00	1259	0.351335
9.35	91.00	3671	

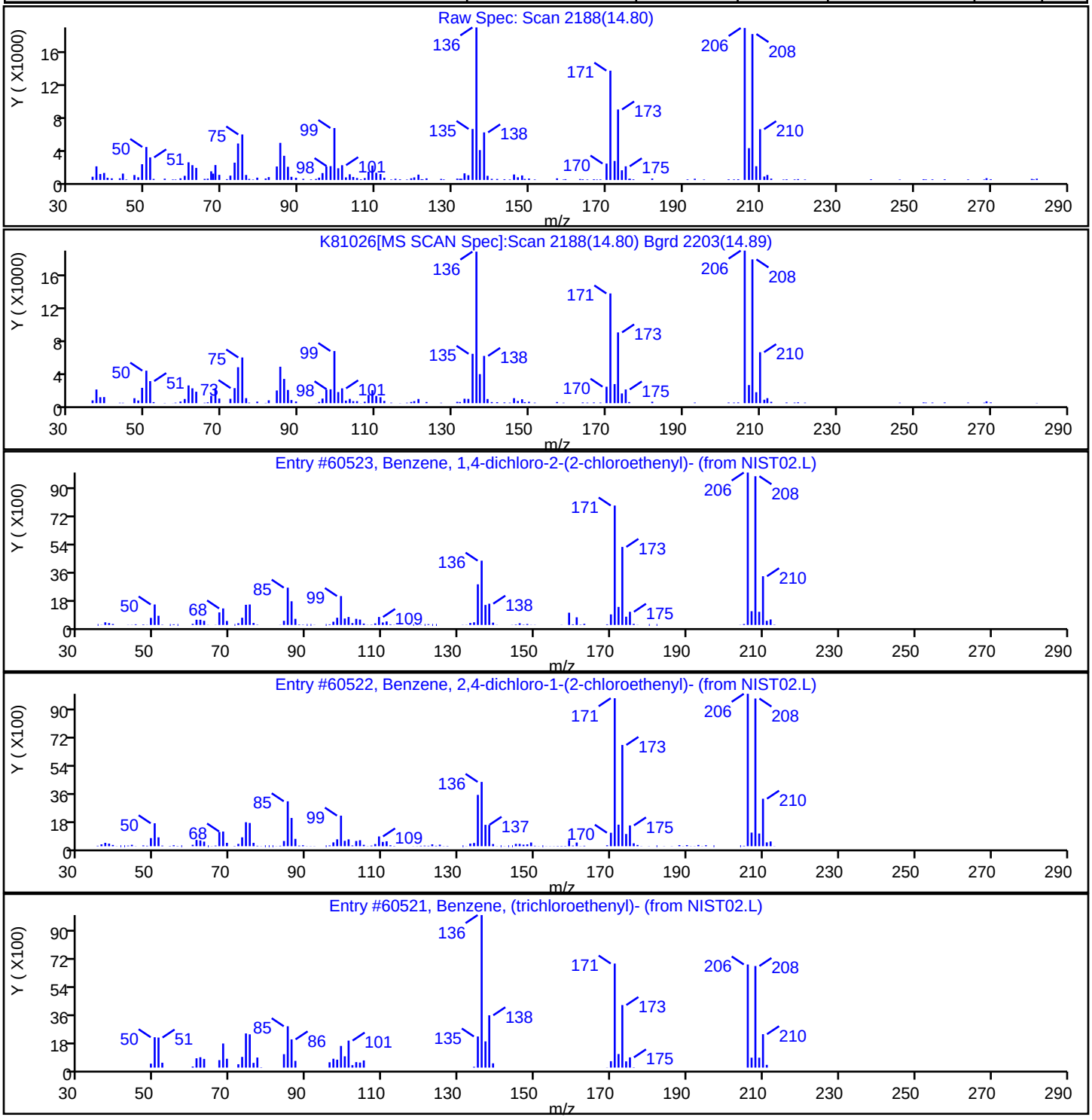
Reviewer: moroneyc, 21-Mar-2018 10:38:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81026.D
Injection Date: 21-Mar-2018 05:33:30 Instrument ID: CVOAMS9
Lims ID: 460-152211-B-4-A Lab Sample ID: 460-152211-4
Client ID: GC-MW-102(SO)-9-11
Operator ID: ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	54935-00-1	NIST02.L	60523	C8H5Cl3	206	98
Benzene, 2,4-dichloro-1-(2-chloroethenyl)-	45892-47-5	NIST02.L	60522	C8H5Cl3	206	96
Benzene, (trichloroethenyl)-	700-60-7	NIST02.L	60521	C8H5Cl3	206	93



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-3-5 | Lab Sample ID: 460-152211-5

Matrix: Solid | Lab File ID: K81027.D

Analysis Method: 8260C | Date Collected: 03/19/2018 14:00

Sample wt/vol: 5.692(g) | Date Analyzed: 03/21/2018 05:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 5.0 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U *	0.00092	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U *	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U *	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U *	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U *	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U *	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U *	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U *	0.00092	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U *	0.00092	0.00043
95-50-1	1,2-Dichlorobenzene	0.00092	U *	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U *	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U *	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U *	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U *	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U *	0.018	0.0085
78-93-3	2-Butanone (MEK)	0.0030	J *	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U *	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U *	0.0046	0.00061
67-64-1	Acetone	0.032	*	0.0046	0.0035
71-43-2	Benzene	0.00092	U *	0.00092	0.00024
75-25-2	Bromoform	0.00092	U *	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U *	0.00092	0.00044
75-15-0	Carbon disulfide	0.00092	U *	0.00092	0.00025
56-23-5	Carbon tetrachloride	0.00092	U *	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U *	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U *	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U *	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U *	0.00092	0.00048
67-66-3	Chloroform	0.00092	U *	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U *	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U *	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U *	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U *	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U *	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U *	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-3-5 | Lab Sample ID: 460-152211-5

Matrix: Solid | Lab File ID: K81027.D

Analysis Method: 8260C | Date Collected: 03/19/2018 14:00

Sample wt/vol: 5.692(g) | Date Analyzed: 03/21/2018 05:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 5.0 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U *	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U *	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U *	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U *	0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.00092	U *	0.00092	0.00012
108-87-2	Methylcyclohexane	0.00092	U *	0.00092	0.00015
75-09-2	Methylene Chloride	0.0065	*	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00073	J *	0.00092	0.00016
95-47-6	o-Xylene	0.00031	J *	0.00092	0.000088
100-42-5	Styrene	0.00092	U *	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U *	0.00092	0.00013
108-88-3	Toluene	0.00092	U *	0.00092	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00092	U *	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U *	0.00092	0.00025
79-01-6	Trichloroethene	0.00092	U *	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U *	0.00092	0.00038
75-01-4	Vinyl chloride	0.00092	U *	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	132	*	78-135
460-00-4	4-Bromofluorobenzene	105	*	67-126
1868-53-7	Dibromofluoromethane (Surr)	115	*	61-149
2037-26-5	Toluene-d8 (Surr)	102	*	73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-3-5 | Lab Sample ID: 460-152211-5

Matrix: Solid | Lab File ID: K81027.D

Analysis Method: 8260C | Date Collected: 03/19/2018 14:00

Sample wt/vol: 5.692(g) | Date Analyzed: 03/21/2018 05:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 5.0 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

Number TICs Found: 1 | TIC Result Total: 0.007

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
54935-00-1	Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	14.80	0.0070	J N	81%

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D
Lims ID: 460-152211-B-5-A
Client ID: GC-MW-103(SO)-3-5
Sample Type: Client
Inject. Date: 21-Mar-2018 05:57:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152211-B-5-A
Misc. Info.: 460-0069055-019
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 24-Mar-2018 10:41:12 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: baronm Date: 24-Mar-2018 10:41:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	2.986	3.004	-0.018	86	9124	34.3	
* 25 TBA-d9 (IS)	65	3.346	3.352	-0.006	0	81983	1000.0	s
26 Methylene Chloride	84	3.364	3.370	-0.006	40	4308	6.98	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	56659	250.0	s
42 2-Butanone (MEK)	72	4.516	4.504	0.012	74	336	3.28	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	96	32009	57.4	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.302	0.000	0	36514	66.2	
* 61 Fluorobenzene	96	5.577	5.577	0.000	98	81031	50.0	s
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	7600	1000.0	s
$ 78 Toluene-d8 (Surr)	98	7.266	7.265	0.001	97	107797	51.1	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	86	73048	50.0	s
93 m-Xylene & p-Xylene	106	9.351	9.344	0.006	0	806	0.7857	
95 o-Xylene	106	9.814	9.814	0.000	24	358	0.3371	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	37768	52.5	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	95	43974	50.0	s

QC Flag Legend

Processing Flags
s - Failed ISTD Recovery Test

Reagents:

8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

TestAmerica Edison
Tentatively Identified Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D				
Lims ID:	460-152211-B-5-A				
Client ID:	GC-MW-103(SO)-3-5				
Sample Type:	Client				
Inject. Date:	21-Mar-2018 05:57:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-152211-B-5-A				
Misc. Info.:	460-0069055-019				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	24-Mar-2018 10:41:12	Calib Date:	10-Mar-2018 00:31:30		
Tic RT Window:	0.000 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\ChromNA\Edison\Database\NIST02.L				
Min. Match:	70				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK023				
First Level Reviewer: baronm		Date:	24-Mar-2018 10:41:12		

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
54935-00-1 Benzene, 1,4-dichloro-2-(2-chloroethenyl)-								
14.801	32810	7.54	89	81	60523	C8H5Cl3	206	

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 89 Chlorobenzene-d5	9.076	217596	50.0

QC Flag Legend

Processing Flags

Reagents:

8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

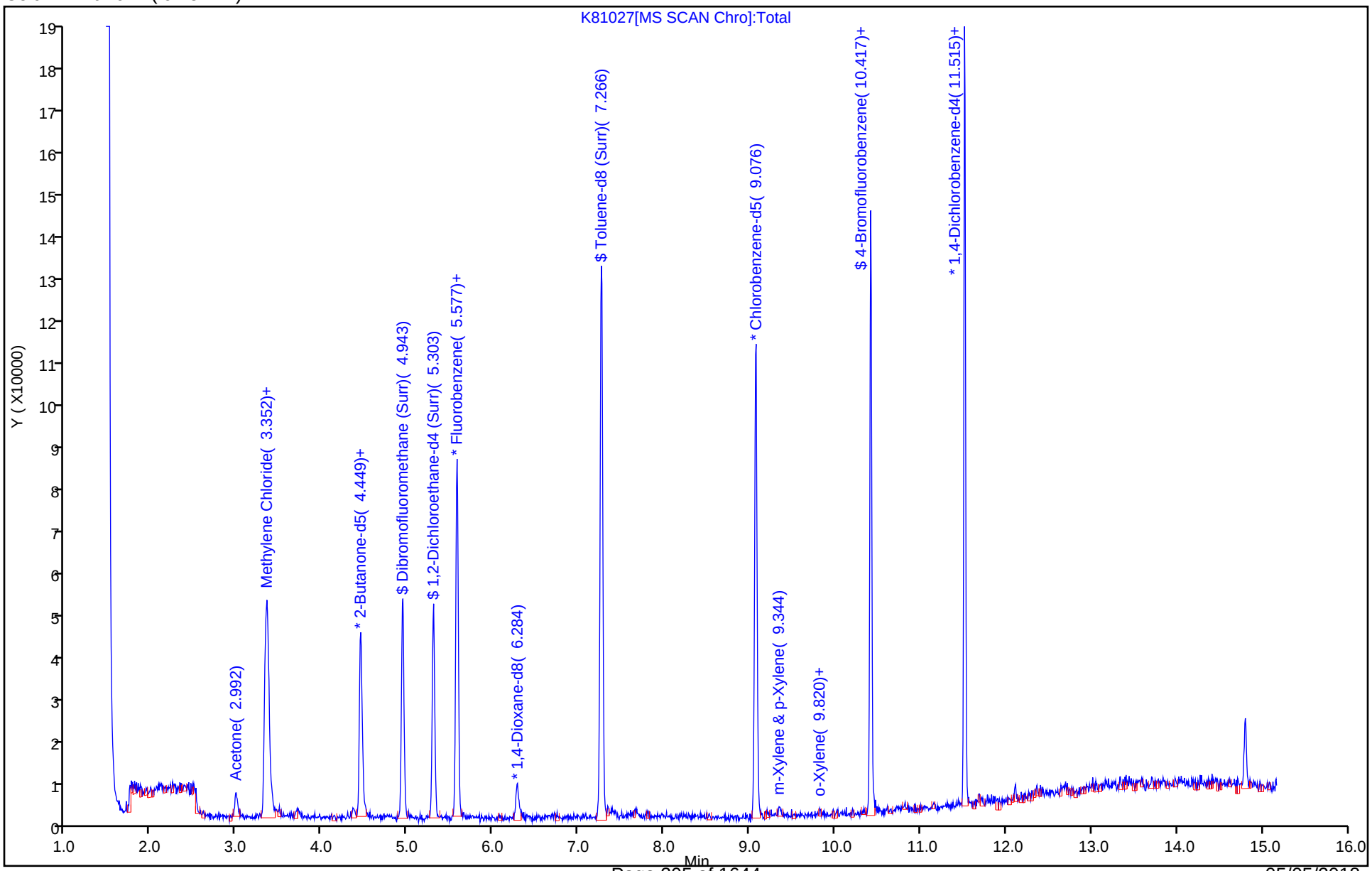
Report Date: 24-Mar-2018 10:41:37 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D

Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5	Worklist Smp#:	19
Client ID:	GC-MW-103(SO)-3-5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

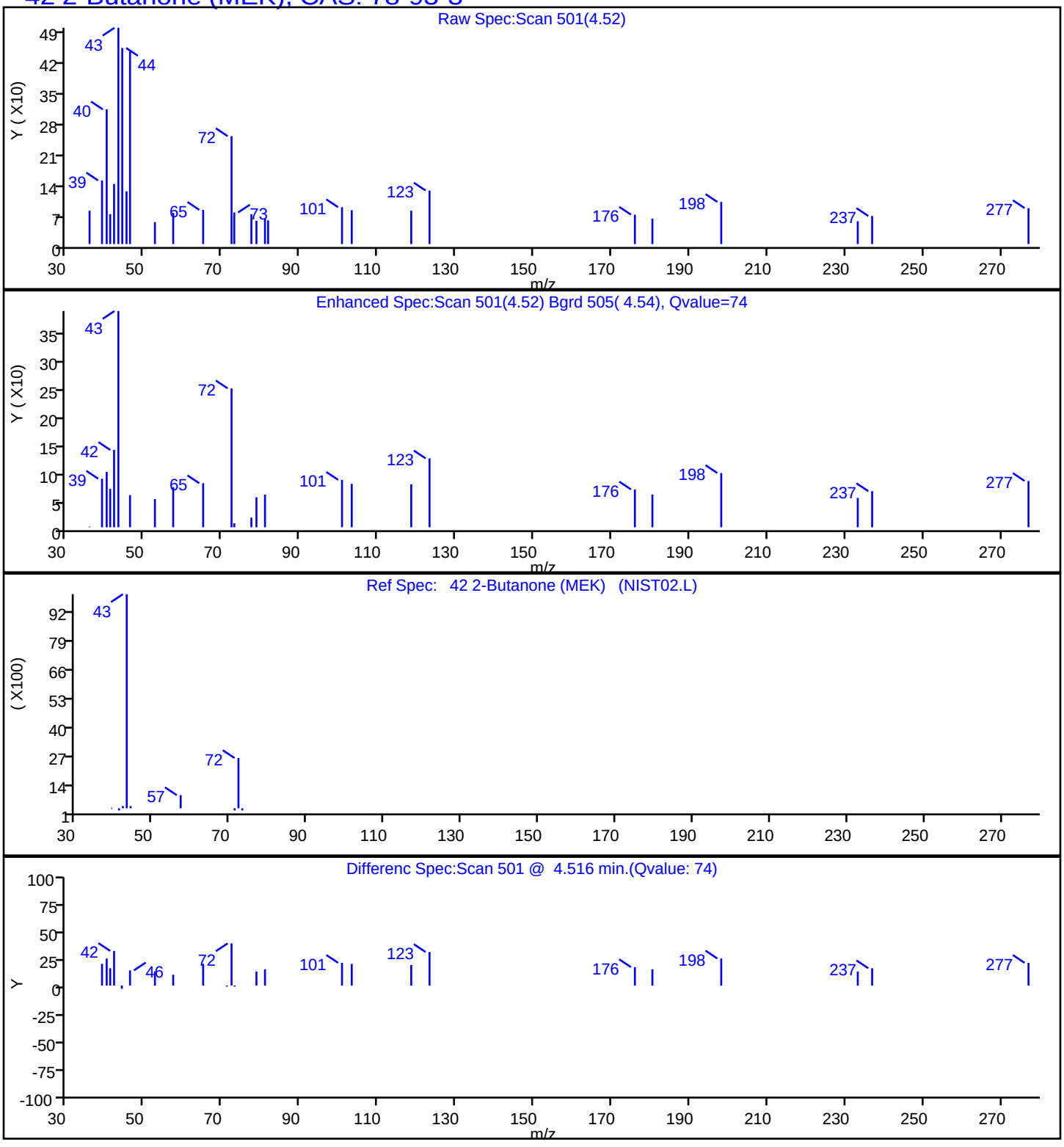
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D		
Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5
Client ID:	GC-MW-103(SO)-3-5		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

42 2-Butanone (MEK), CAS: 78-93-3



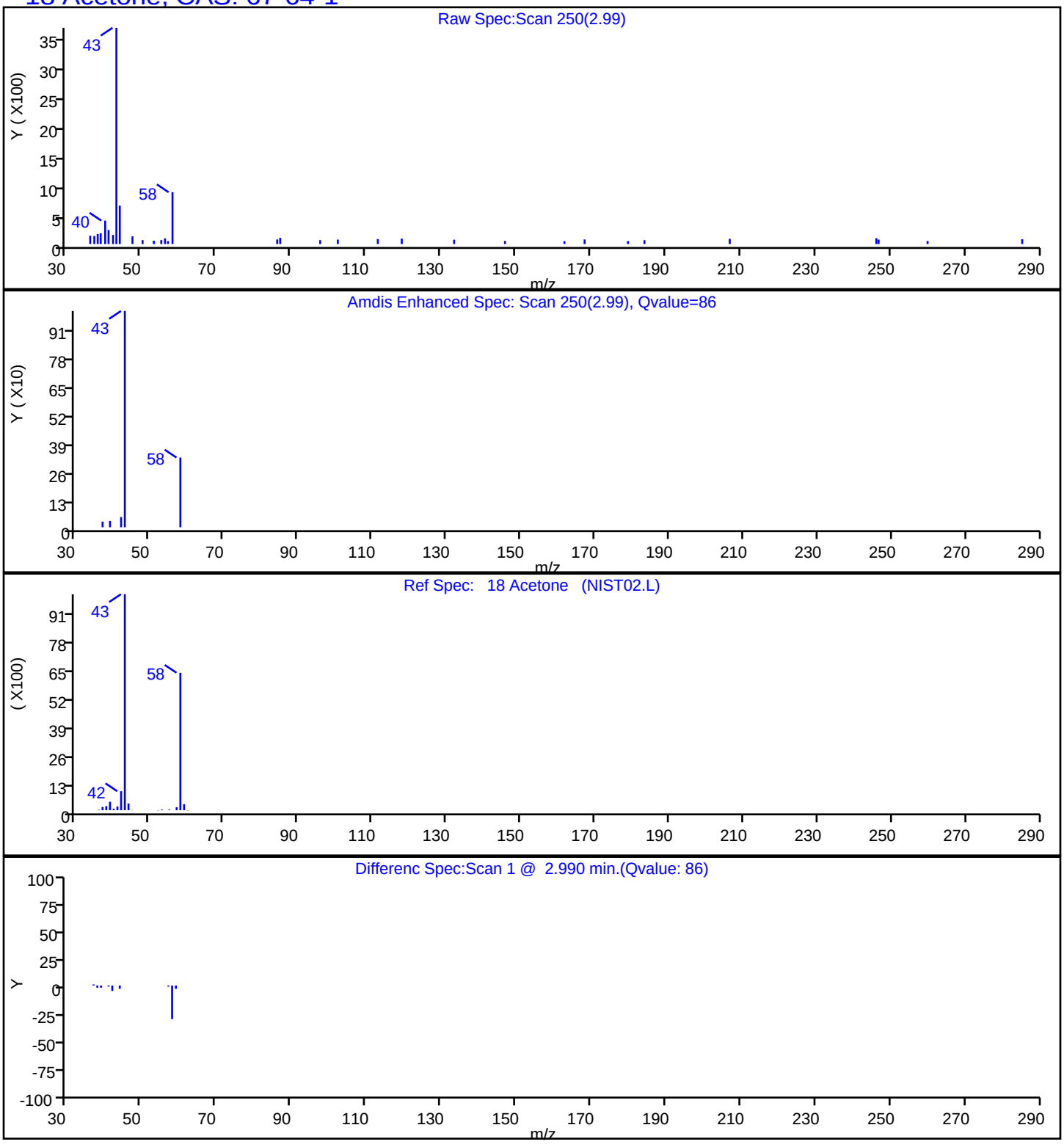
Report Date: 24-Mar-2018 10:41:37 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D

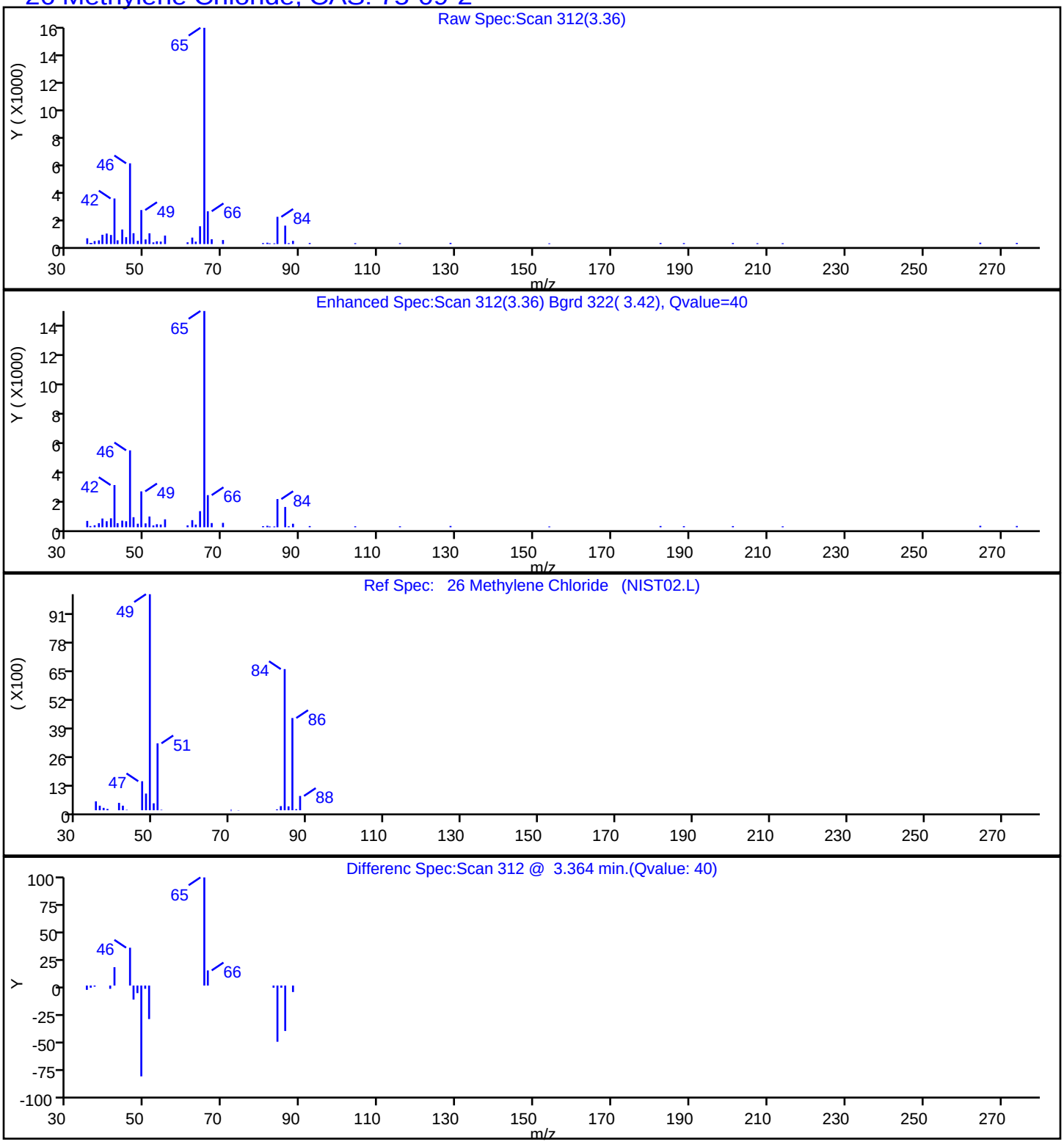
Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5		
Client ID:	GC-MW-103(SO)-3-5				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D
Injection Date: 21-Mar-2018 05:57:30 Instrument ID: CVOAMS9
Lims ID: 460-152211-B-5-A Lab Sample ID: 460-152211-5
Client ID: GC-MW-103(SO)-3-5
Operator ID: ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methylene Chloride, CAS: 75-09-2

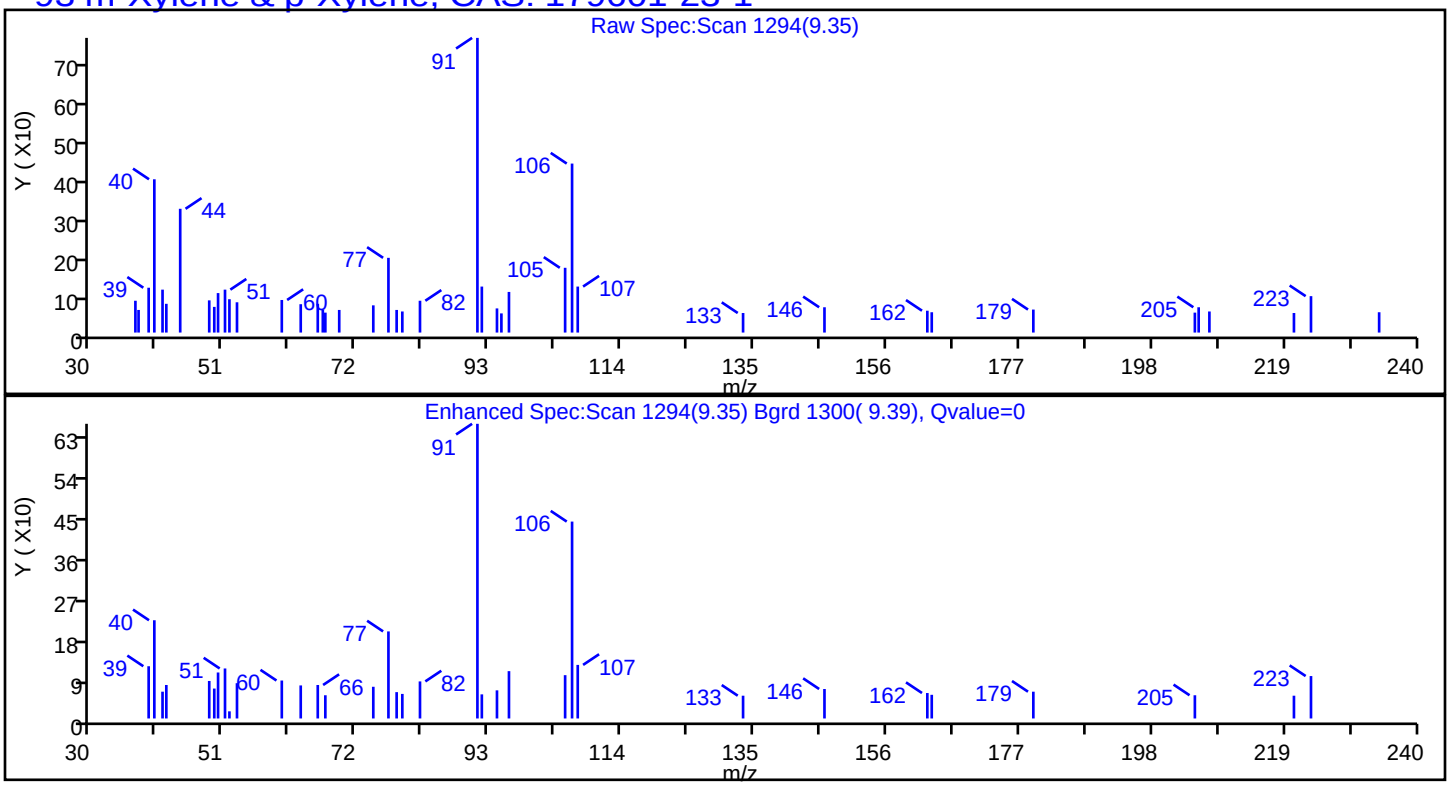


Report Date: 24-Mar-2018 10:41:37 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D				
Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5		
Client ID:	GC-MW-103(SO)-3-5				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

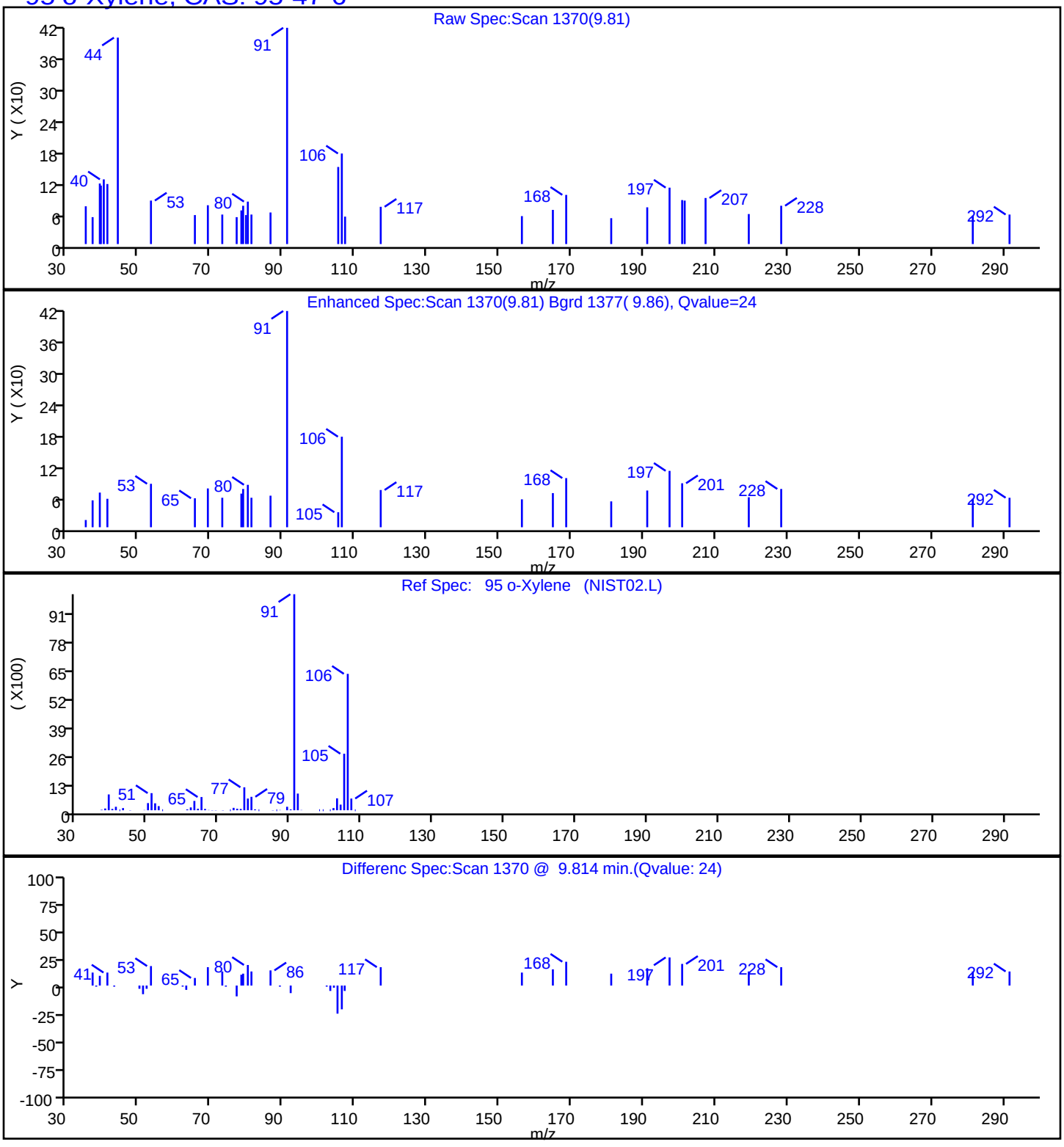


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D

Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5		
Client ID:	GC-MW-103(SO)-3-5				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6



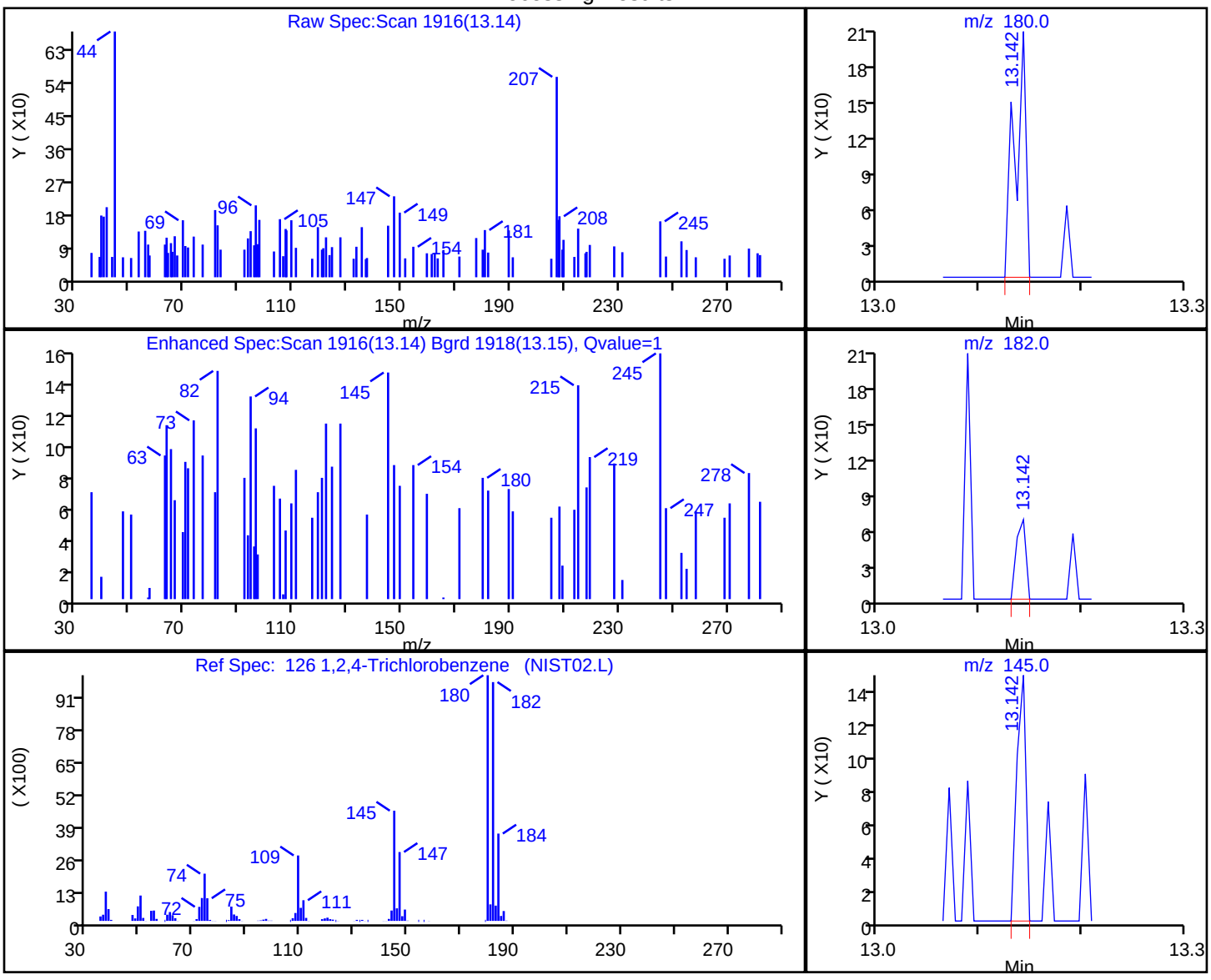
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D		
Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5
Client ID:	GC-MW-103(SO)-3-5		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

126 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
13.14	180.00	153	0.113008
13.14	182.00	44	
13.14	145.00	87	

Reviewer: baronm, 24-Mar-2018 10:41:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

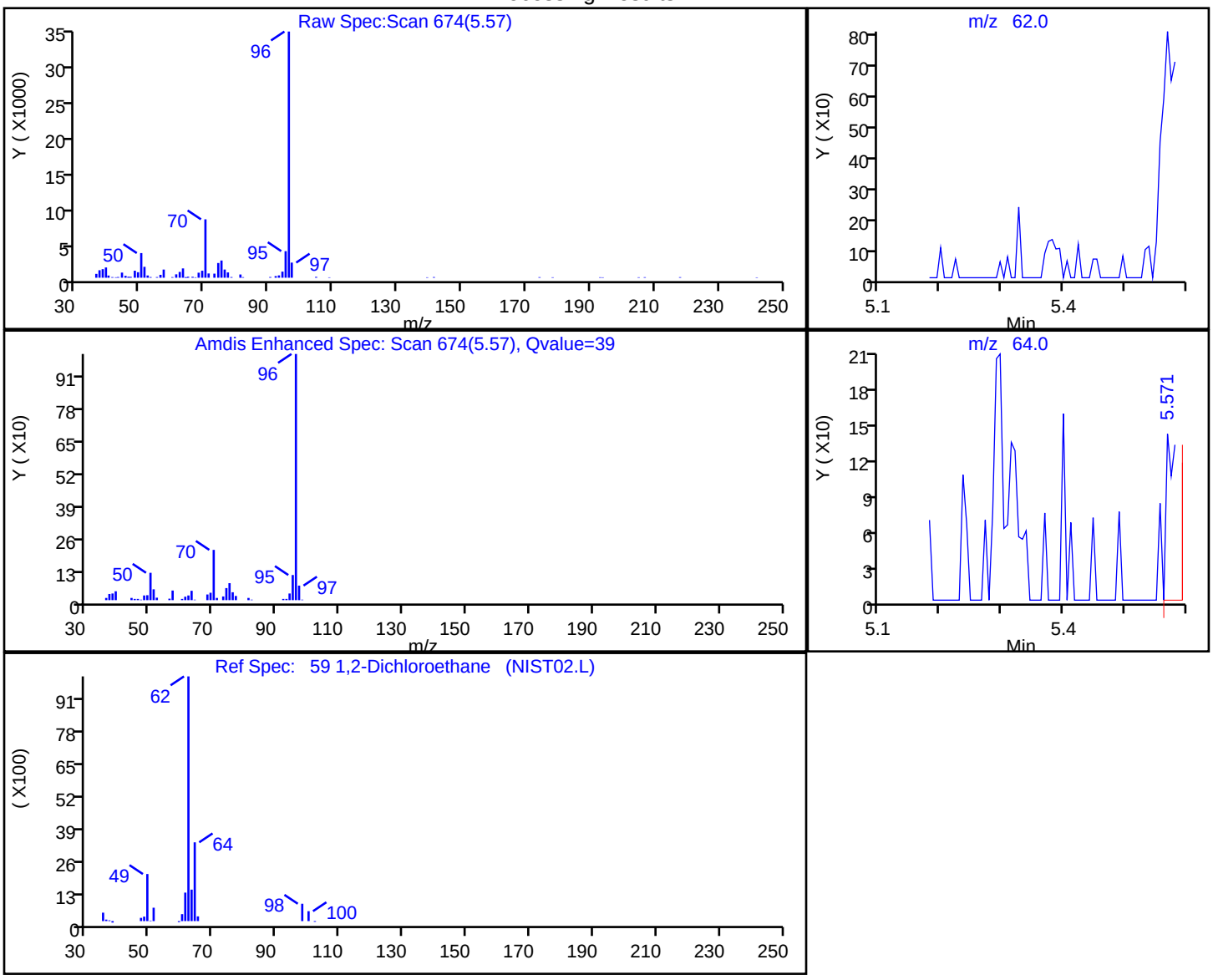
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D				
Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5		
Client ID:	GC-MW-103(SO)-3-5				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.57	62.00	1618	2.204436
5.57	64.00	157	

Reviewer: baronm, 24-Mar-2018 10:41:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

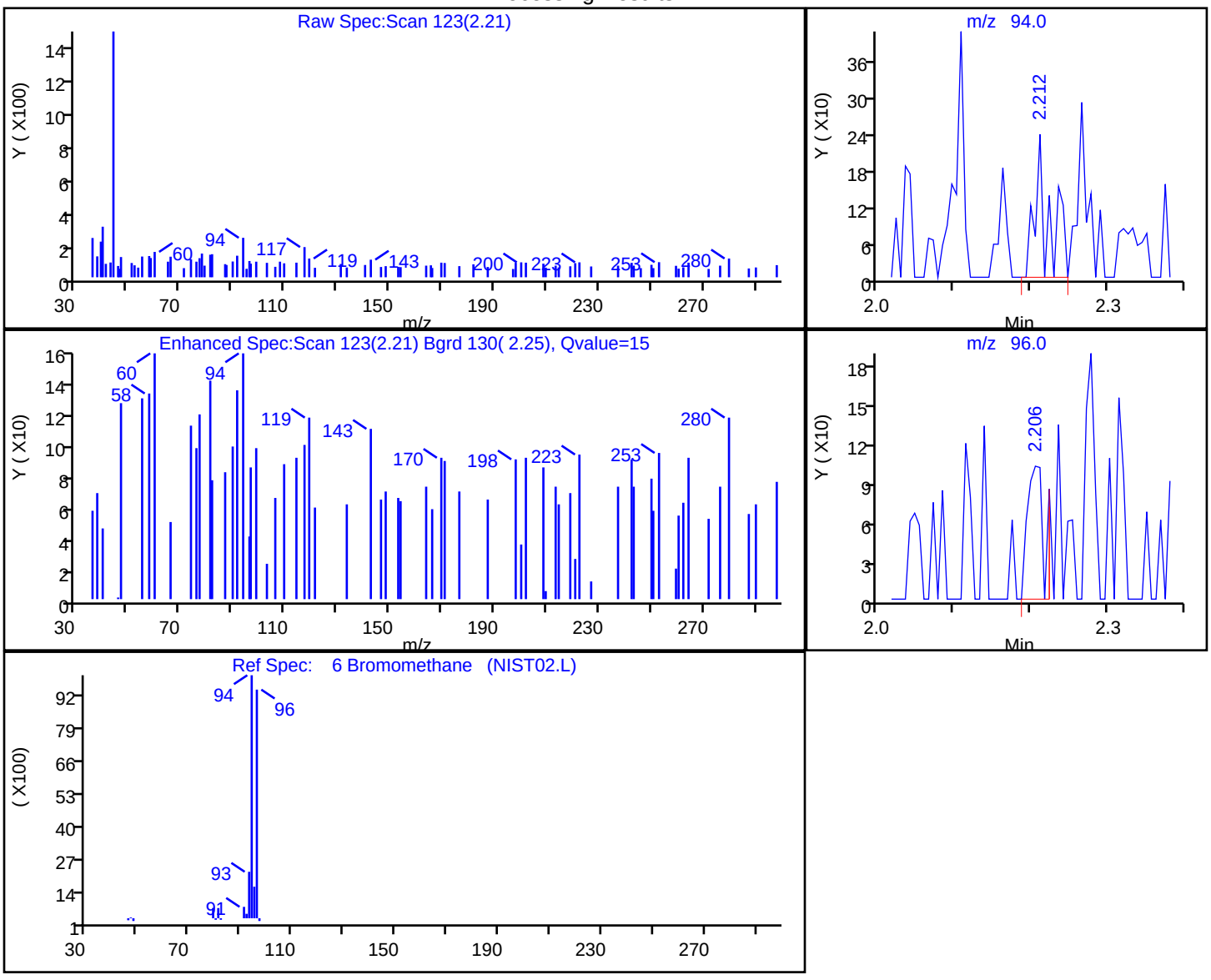
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D		
Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5
Client ID:	GC-MW-103(SO)-3-5		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

6 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.21	94.00	304	0.515999
2.21	96.00	155	

Reviewer: baronm, 24-Mar-2018 10:41:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

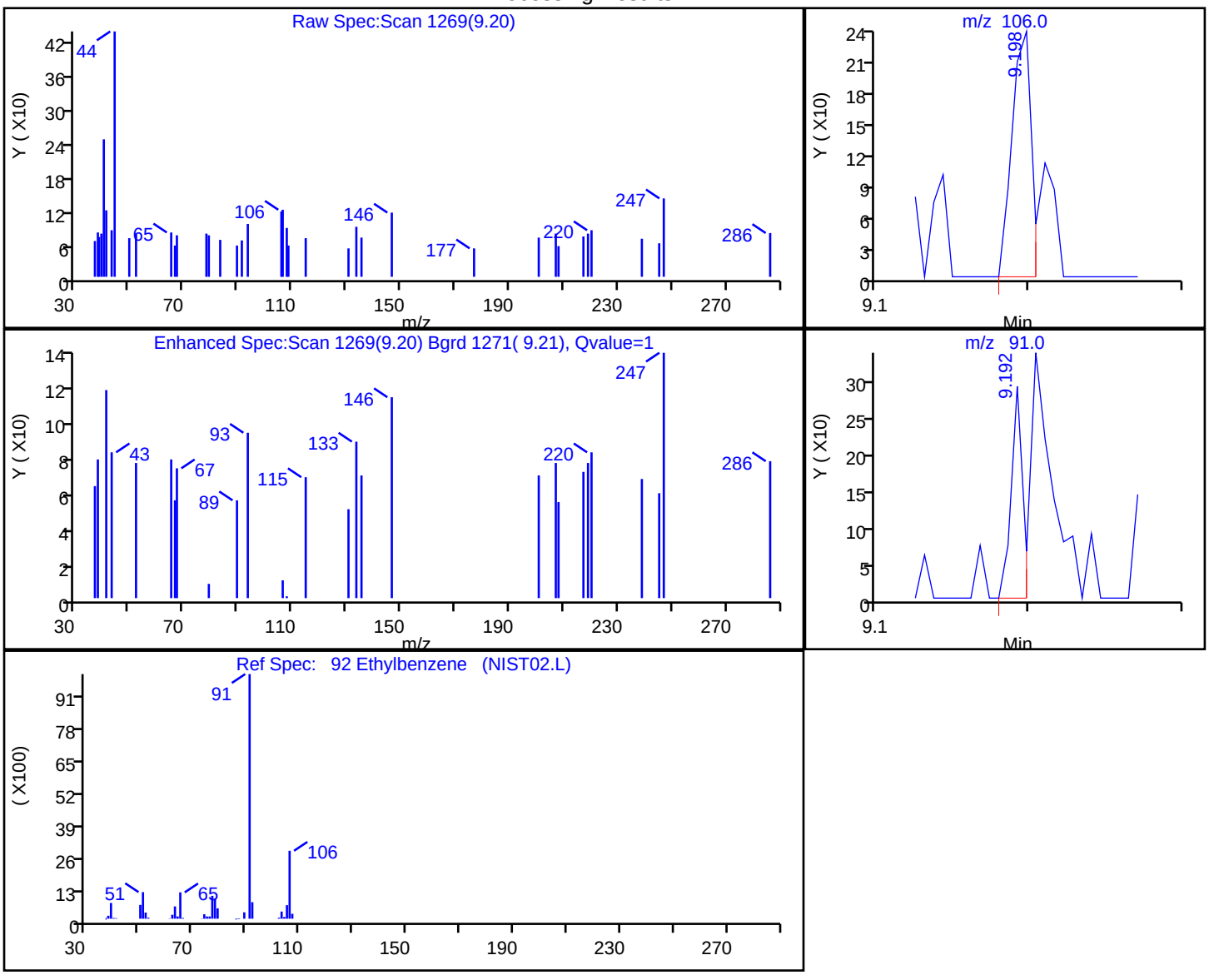
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D				
Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5		
Client ID:	GC-MW-103(SO)-3-5				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.20	106.00	208	0.248193
9.19	91.00	156	

Reviewer: baronm, 24-Mar-2018 10:41:12

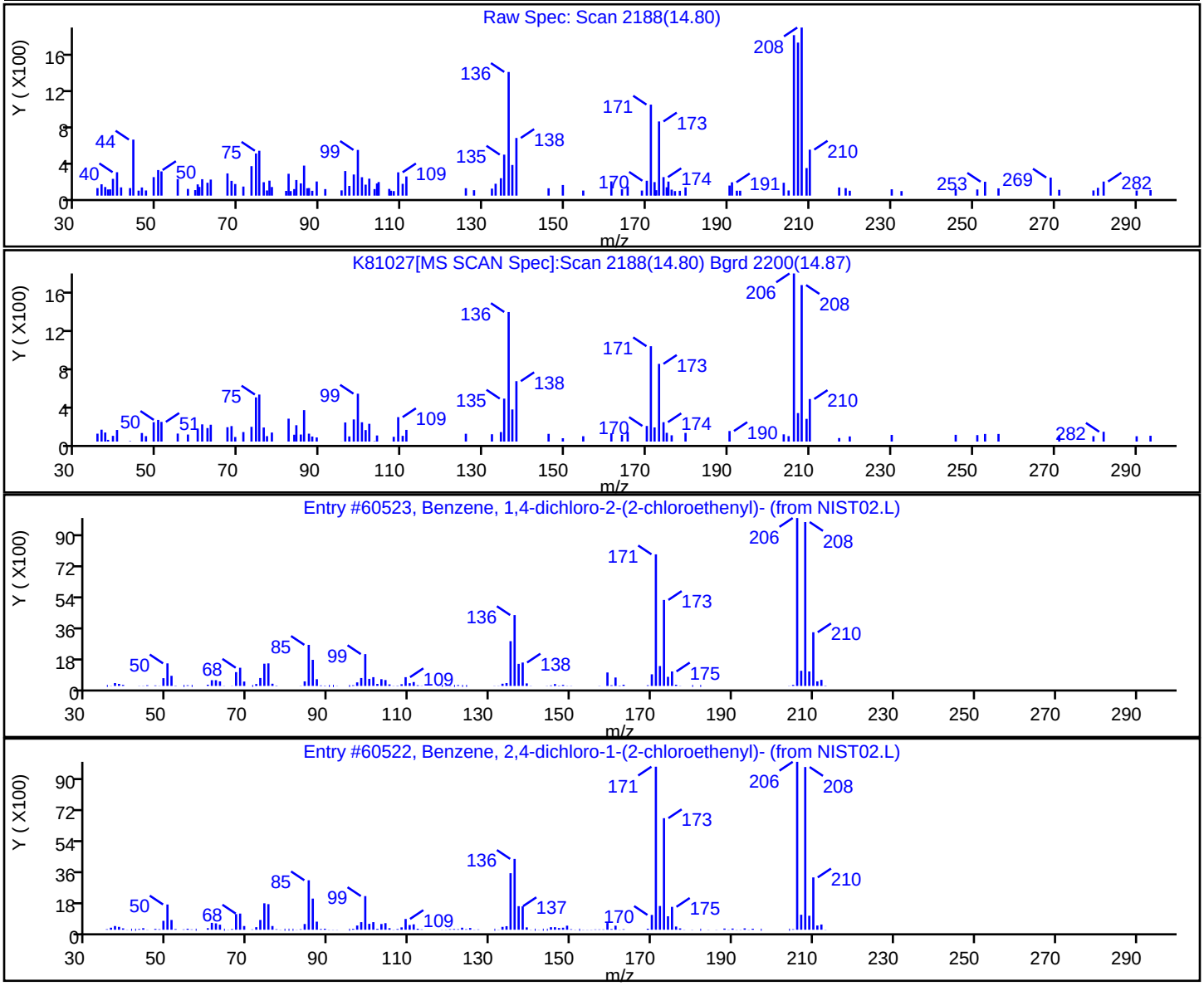
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81027.D

Injection Date:	21-Mar-2018 05:57:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152211-B-5-A	Lab Sample ID:	460-152211-5		
Client ID:	GC-MW-103(SO)-3-5				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	54935-00-1	NIST02.L	60523	C8H5Cl3	206	81
Benzene, 2,4-dichloro-1-(2-chloroethenyl)-	45892-47-5	NIST02.L	60522	C8H5Cl3	206	76



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-12-14 | Lab Sample ID: 460-152331-1

Matrix: Solid | Lab File ID: K81129.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:10

Sample wt/vol: 6.531(g) | Date Analyzed: 03/24/2018 10:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 25.3 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000094
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00043
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0094
78-93-3	2-Butanone (MEK)	0.0022	J	0.0051	0.0011
591-78-6	2-Hexanone	0.0051	U	0.0051	0.00080
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068
67-64-1	Acetone	0.018		0.0051	0.0039
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00044
74-83-9	Bromomethane	0.0010	U	0.0010	0.00049
75-15-0	Carbon disulfide	0.00057	J	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00019
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00020
75-00-3	Chloroethane	0.0010	U	0.0010	0.00053
67-66-3	Chloroform	0.0010	U	0.0010	0.00033
74-87-3	Chloromethane	0.0010	U	0.0010	0.00045
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00023
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-12-14 | Lab Sample ID: 460-152331-1

Matrix: Solid | Lab File ID: K81129.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:10

Sample wt/vol: 6.531(g) | Date Analyzed: 03/24/2018 10:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 25.3 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0051	U	0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.00045	J B	0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.00035	J	0.0010	0.00018
95-47-6	o-Xylene	0.00016	J	0.0010	0.000097
100-42-5	Styrene	0.0010	U	0.0010	0.00013
127-18-4	Tetrachloroethene	0.00022	J	0.0010	0.00015
108-88-3	Toluene	0.0010	U	0.0010	0.00064
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00042
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00056

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	103		61-149
2037-26-5	Toluene-d8 (Surr)	107		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-12-14 | Lab Sample ID: 460-152331-1

Matrix: Solid | Lab File ID: K81129.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:10

Sample wt/vol: 6.531(g) | Date Analyzed: 03/24/2018 10:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 25.3 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

Number TICs Found: 10 | TIC Result Total: 3.61

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
493-02-7	Naphthalene, decahydro-, trans-	11.77	0.27	J N	97%
1120-21-4	Undecane	11.83	0.28	J N	91%
	Unknown	11.99	0.30	J	
1000152-47-3	trans-Decalin, 2-methyl-	12.30	0.33	J N	86%
	Unknown	12.47	0.34	J	
112-40-3	Dodecane	12.69	0.31	J N	91%
6044-71-9	Dodecane, 6-methyl-	12.81	0.54	J N	94%
	Unknown	13.18	0.56	J	
2051-30-1	Octane, 2,6-dimethyl-	13.25	0.38	J N	87%
	Unknown	13.59	0.30	J	

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D
Lims ID: 460-152331-B-1-A
Client ID: GC-MW-103(SO)-12-14
Sample Type: Client
Inject. Date: 24-Mar-2018 10:37:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152331-B-1-A
Misc. Info.: 460-0069230-013
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:12:33 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:12:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	2.998	2.998	0.000	84	25089	17.6	
20 Carbon disulfide	76	3.114	3.108	0.006	100	6196	0.5554	
* 25 TBA-d9 (IS)	65	3.346	3.352	-0.006	0	372302	1000.0	
26 Methylene Chloride	84	3.364	3.370	-0.006	91	2452	0.4346	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	300890	250.0	
42 2-Butanone (MEK)	72	4.516	4.504	0.012	96	881	2.13	M
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	95	132668	51.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	166198	55.6	
* 61 Fluorobenzene	96	5.577	5.577	0.000	97	380287	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.278	0.012	0	23010	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	97	523007	53.4	
83 Tetrachloroethene	166	7.979	7.967	0.012	59	585	0.2116	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	90	306545	50.0	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	1630	0.3395	
95 o-Xylene	106	9.826	9.814	0.012	46	763	0.1535	
$ 100 4-Bromofluorobenzene	174	10.418	10.417	0.001	85	144285	51.2	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	98	183270	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

TestAmerica Edison
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D
Lims ID: 460-152331-B-1-A
Client ID: GC-MW-103(SO)-12-14
Sample Type: Client
Inject. Date: 24-Mar-2018 10:37:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152331-B-1-A
Misc. Info.: 460-0069230-013
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:12:33 Calib Date: 23-Mar-2018 14:55:30
Tic RT Window: 0.000 -0.000 Response: area
Quant By: Nearest ISTD Quant LOD: 10.00000
MS Library: \\ChromNA\Edison\Database\NIST02.L
Min. Match: 70

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:12:33

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
493-02-7 Naphthalene, decahydro-, trans-								
11.765	5772274	261.4	89	97	16319	C10H18	138	
1120-21-4 Undecane								
11.826	6126373	277.5	89	91	27121	C11H24	156	
Unknown								
11.990	6565524	297.4	89					
1000152-47-3 trans-Decalin, 2-methyl-								
12.301	7043346	319.0	89	86	24310	C11H20	152	
Unknown								
12.472	7356076	333.2	89					
112-40-3 Dodecane								
12.691	6666963	301.9	89	91	36156	C12H26	170	
6044-71-9 Dodecane, 6-methyl-								
12.807	11550096	523.1	89	94	45556	C13H28	184	
Unknown								
13.179	11977807	542.5	89					
2051-30-1 Octane, 2,6-dimethyl-								
13.246	8133911	368.4	89	87	18460	C10H22	142	
Unknown								
13.588	6492622	294.1	89					

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 89 Chlorobenzene-d5	9.076	1103985	50.0

QC Flag Legend

Processing Flags

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

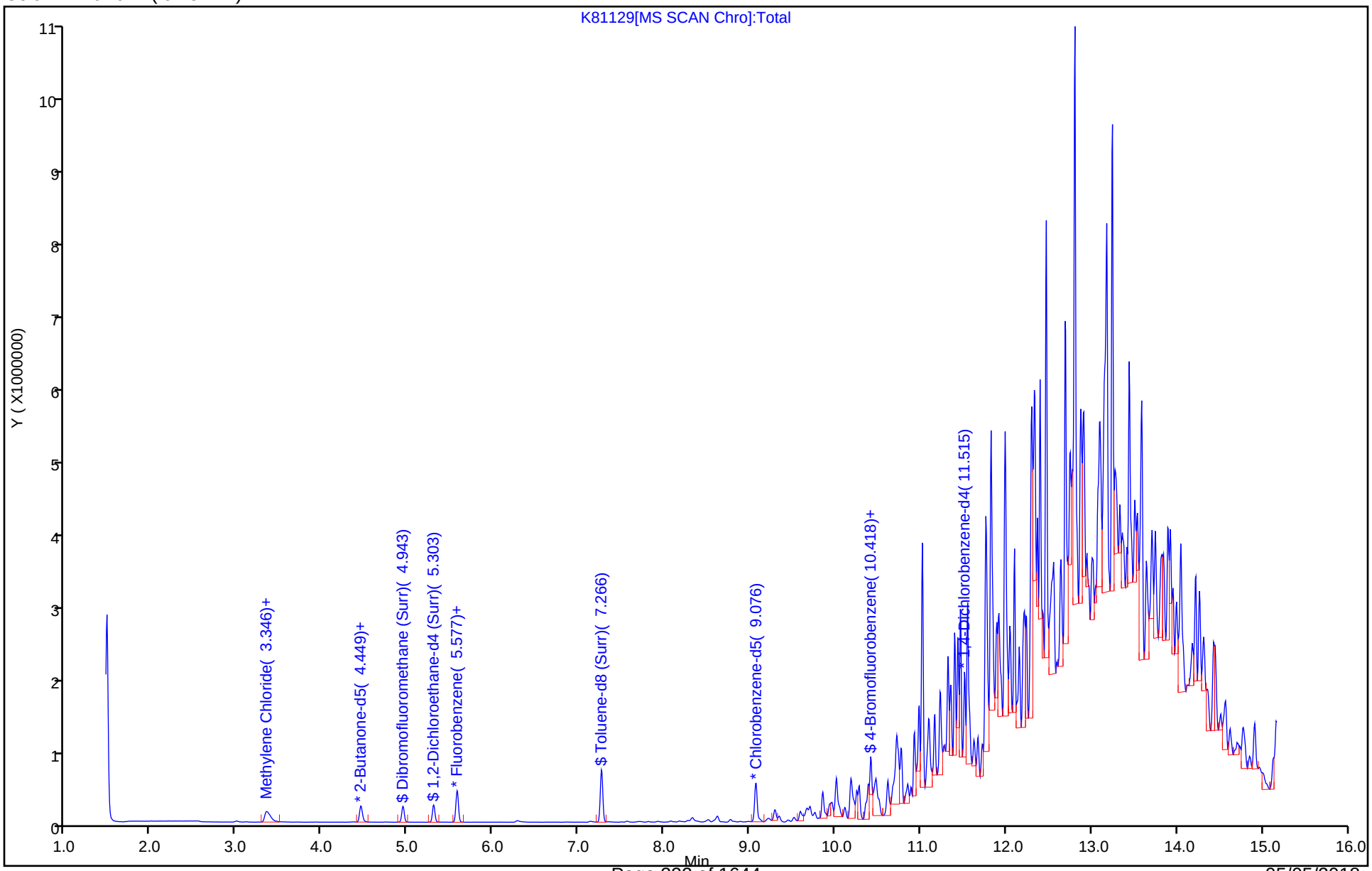
Report Date: 26-Mar-2018 13:12:34 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D

Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1	Worklist Smp#:	13
Client ID:	GC-MW-103(SO)-12-14				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

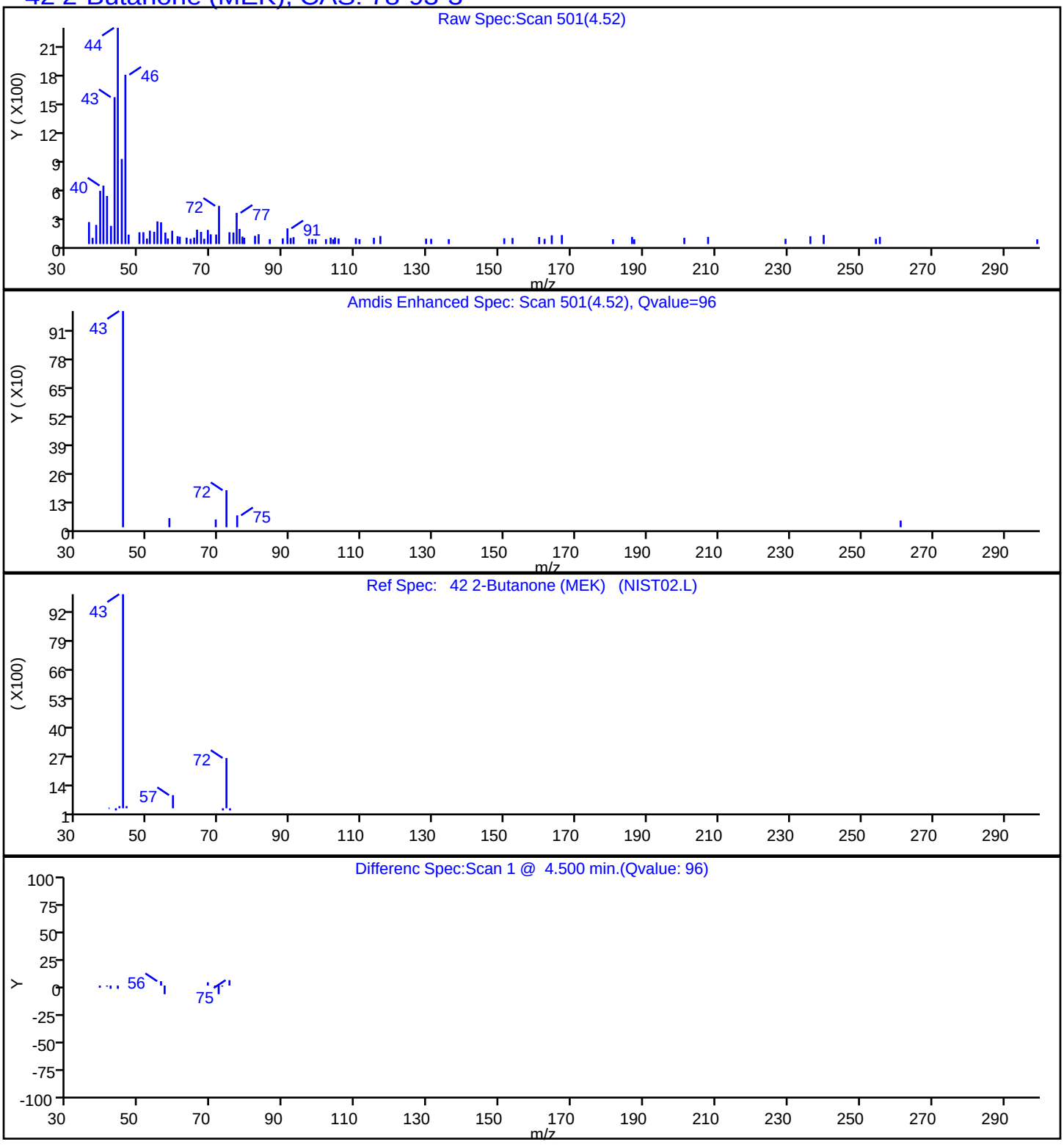
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

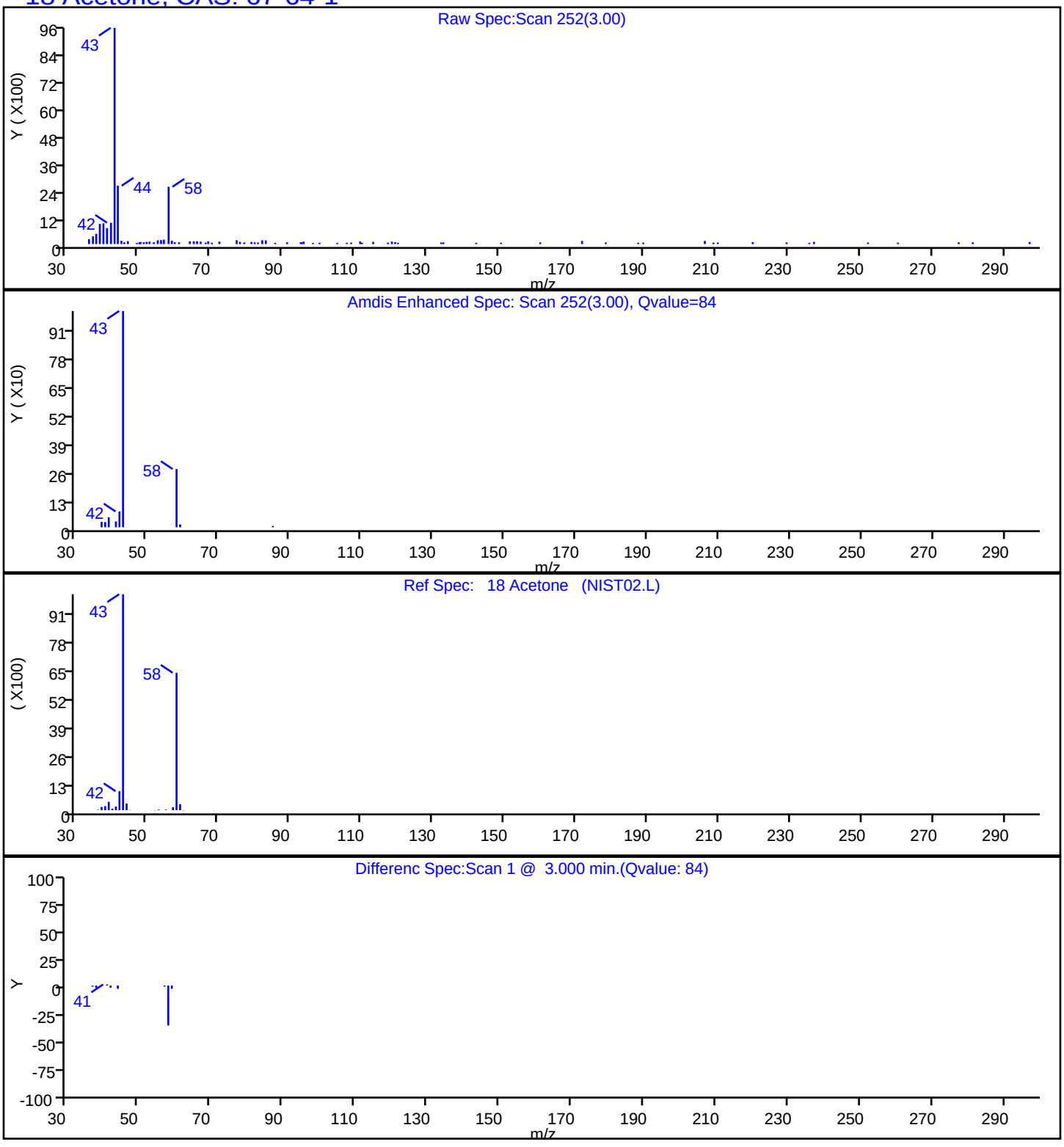
42 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

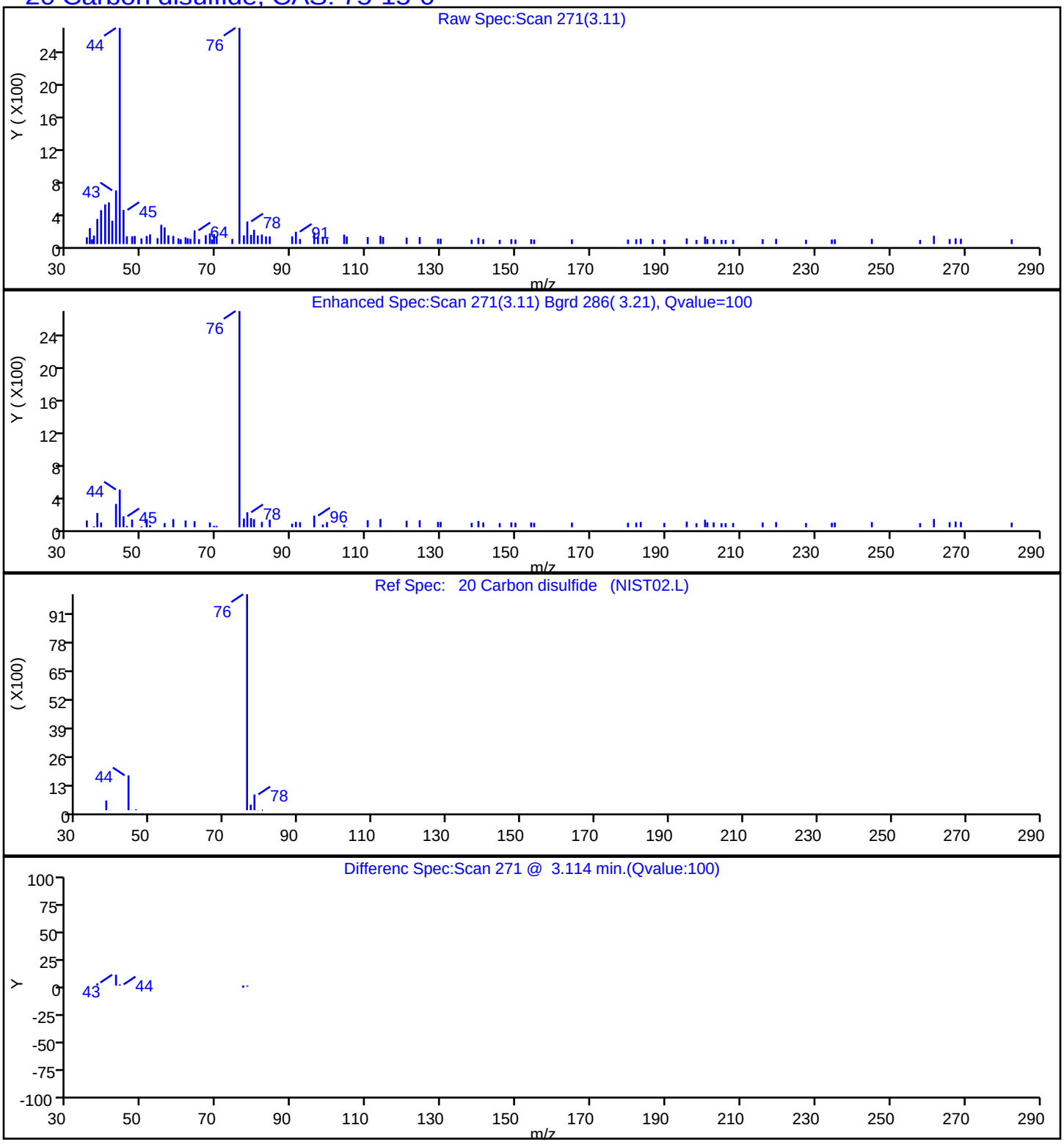
18 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

20 Carbon disulfide, CAS: 75-15-0

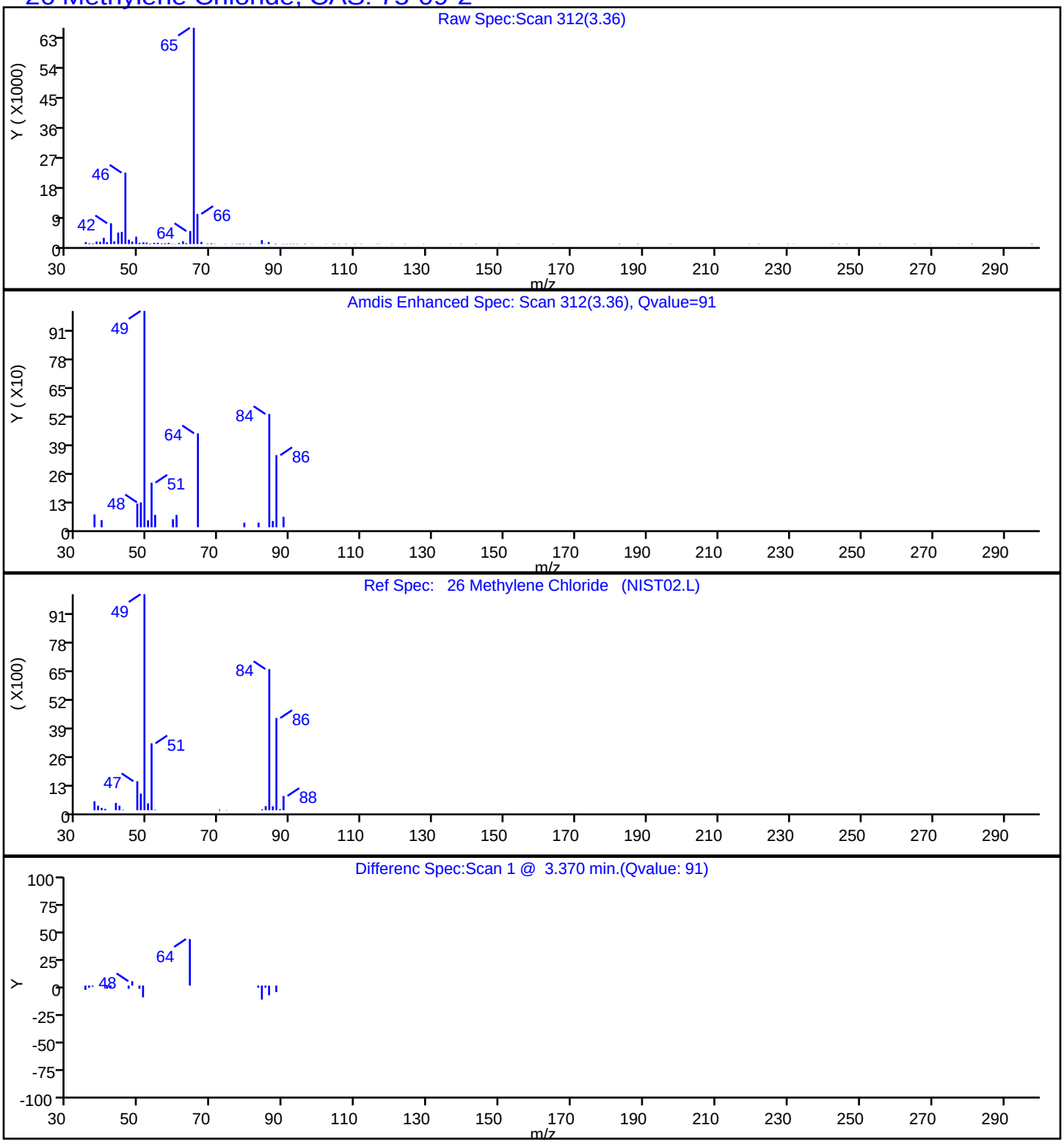


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D

Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1
Client ID:	GC-MW-103(SO)-12-14		
Operator ID:		ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

26 Methylene Chloride, CAS: 75-09-2

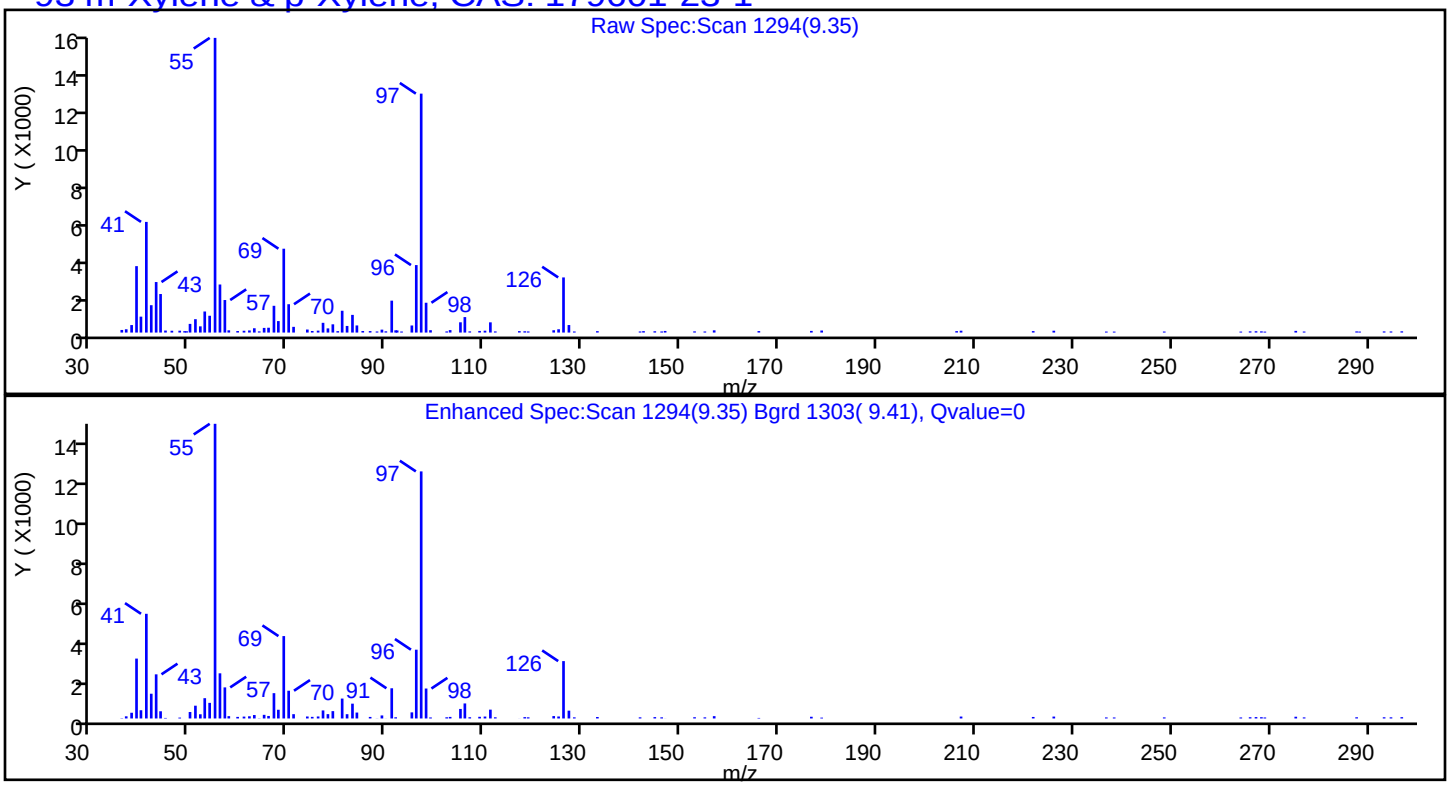


Report Date: 26-Mar-2018 13:12:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

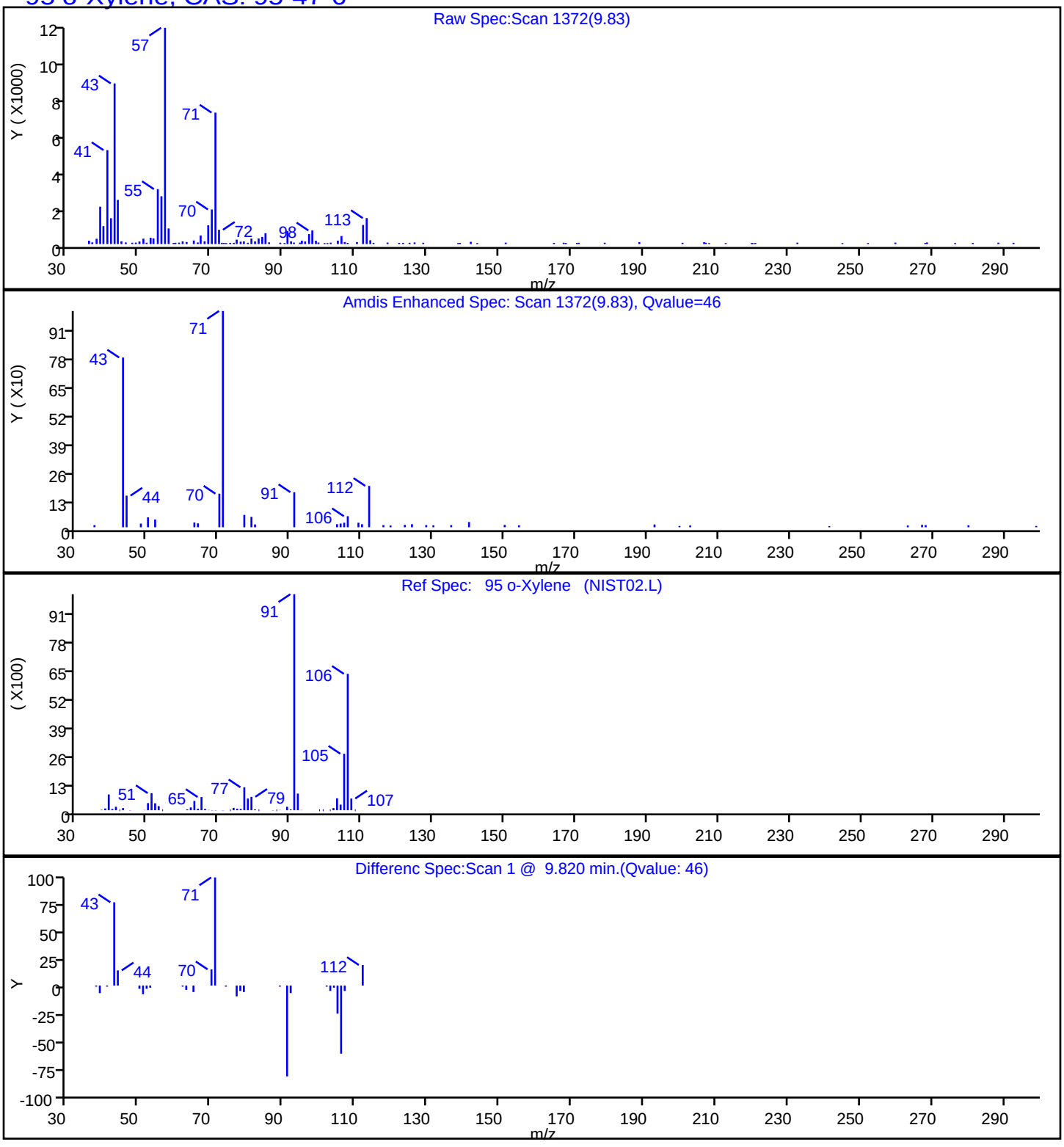


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D

Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

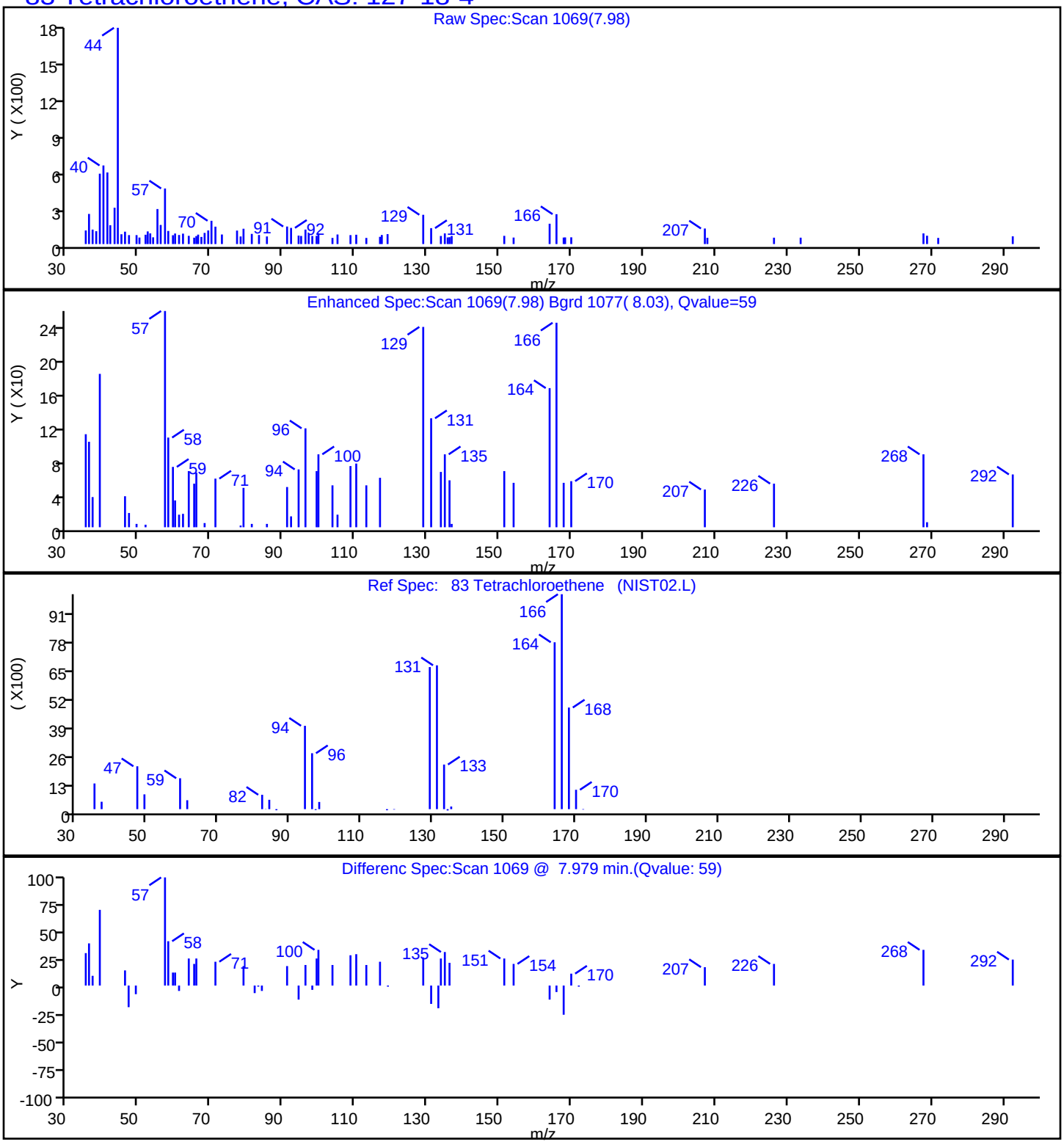
95 o-Xylene, CAS: 95-47-6



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D		
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1
Client ID:	GC-MW-103(SO)-12-14		
Operator ID:		ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



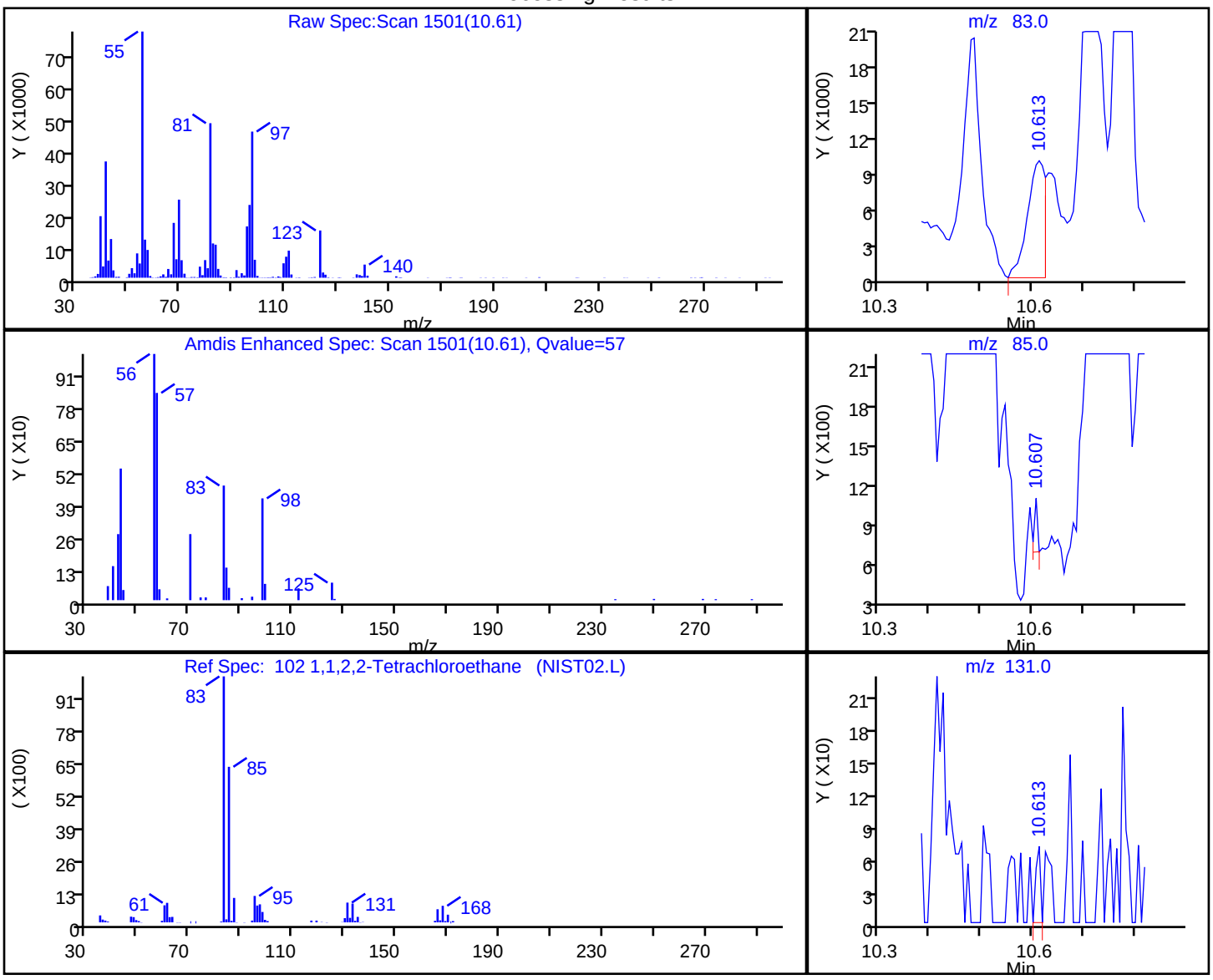
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

102 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
10.61	83.00	22789	5.688777
10.61	85.00	177	
10.61	131.00	44	

Reviewer: delpolitov, 26-Mar-2018 13:12:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

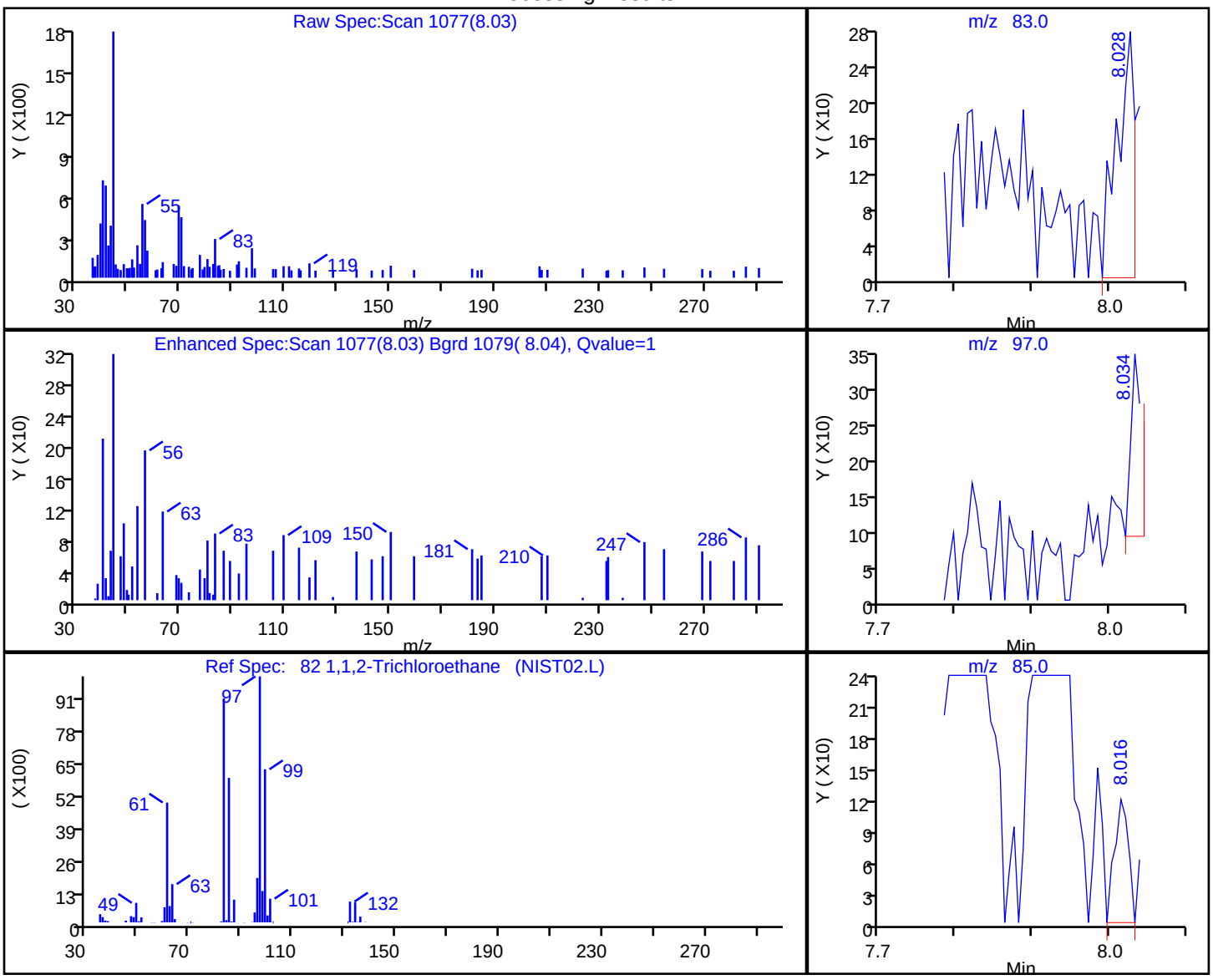
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

82 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
8.03	83.00	445	0.201678
8.03	97.00	260	
8.02	85.00	149	

Reviewer: delpolitov, 26-Mar-2018 13:12:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

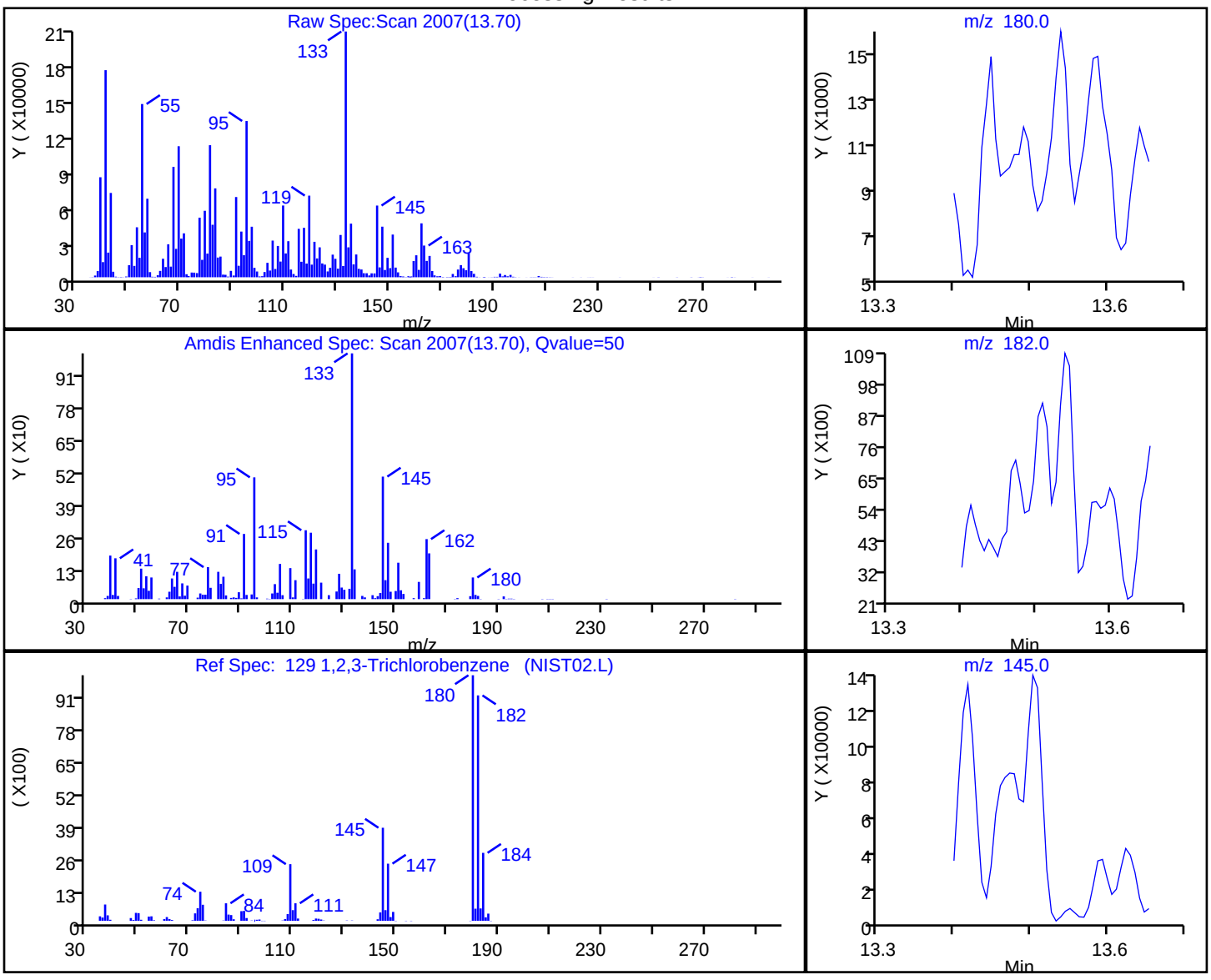
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

129 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results



RT	Mass	Response	Amount
13.70	180.00	43170	7.633742
13.70	182.00	4974	
13.71	145.00	229033	

Reviewer: delpolitov, 26-Mar-2018 13:12:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

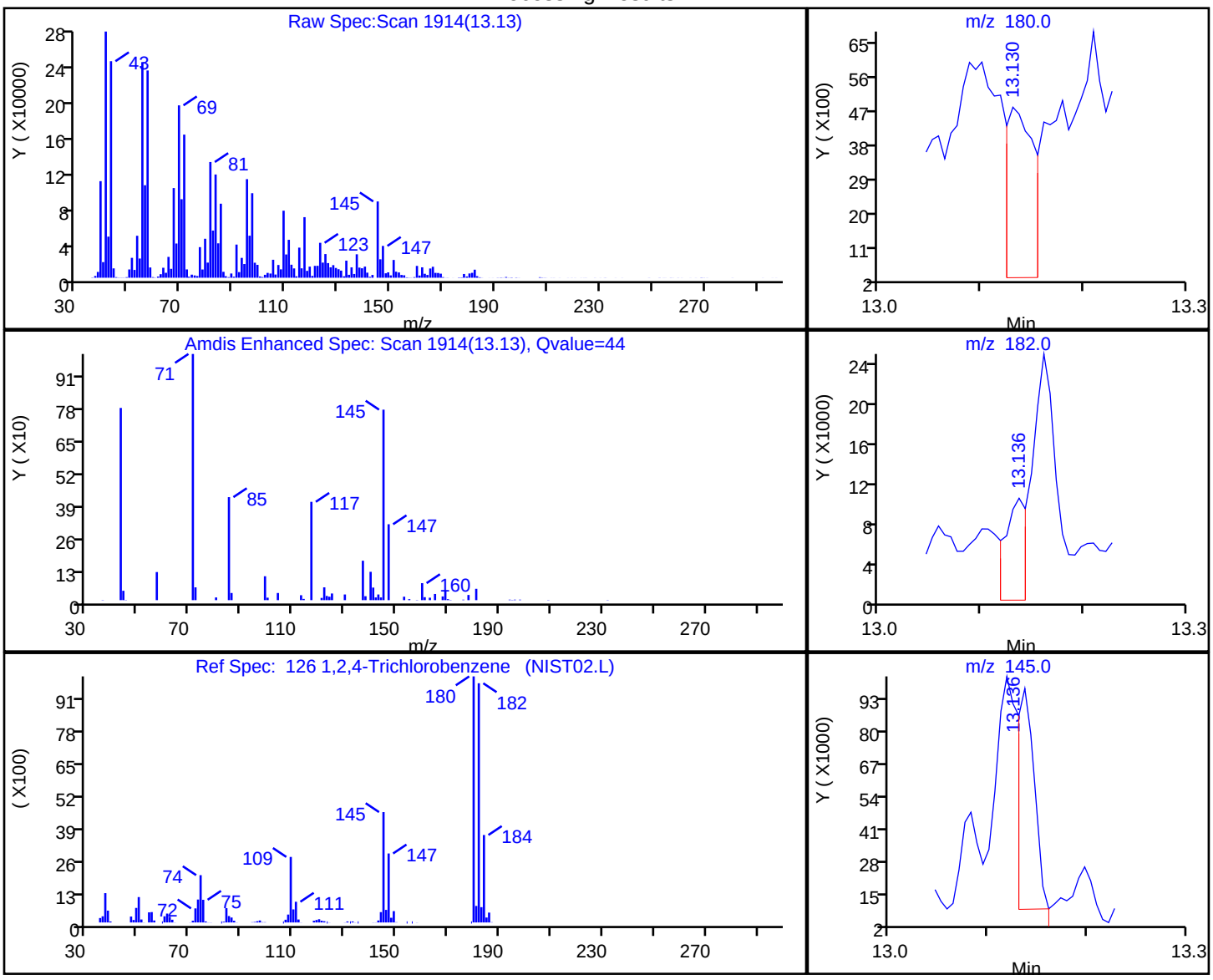
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D		
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1
Client ID:	GC-MW-103(SO)-12-14		
Operator ID:		ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

126 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
13.13	180.00	8724	1.573138
13.14	182.00	14749	
13.14	145.00	104459	

Reviewer: delpolitov, 26-Mar-2018 13:12:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

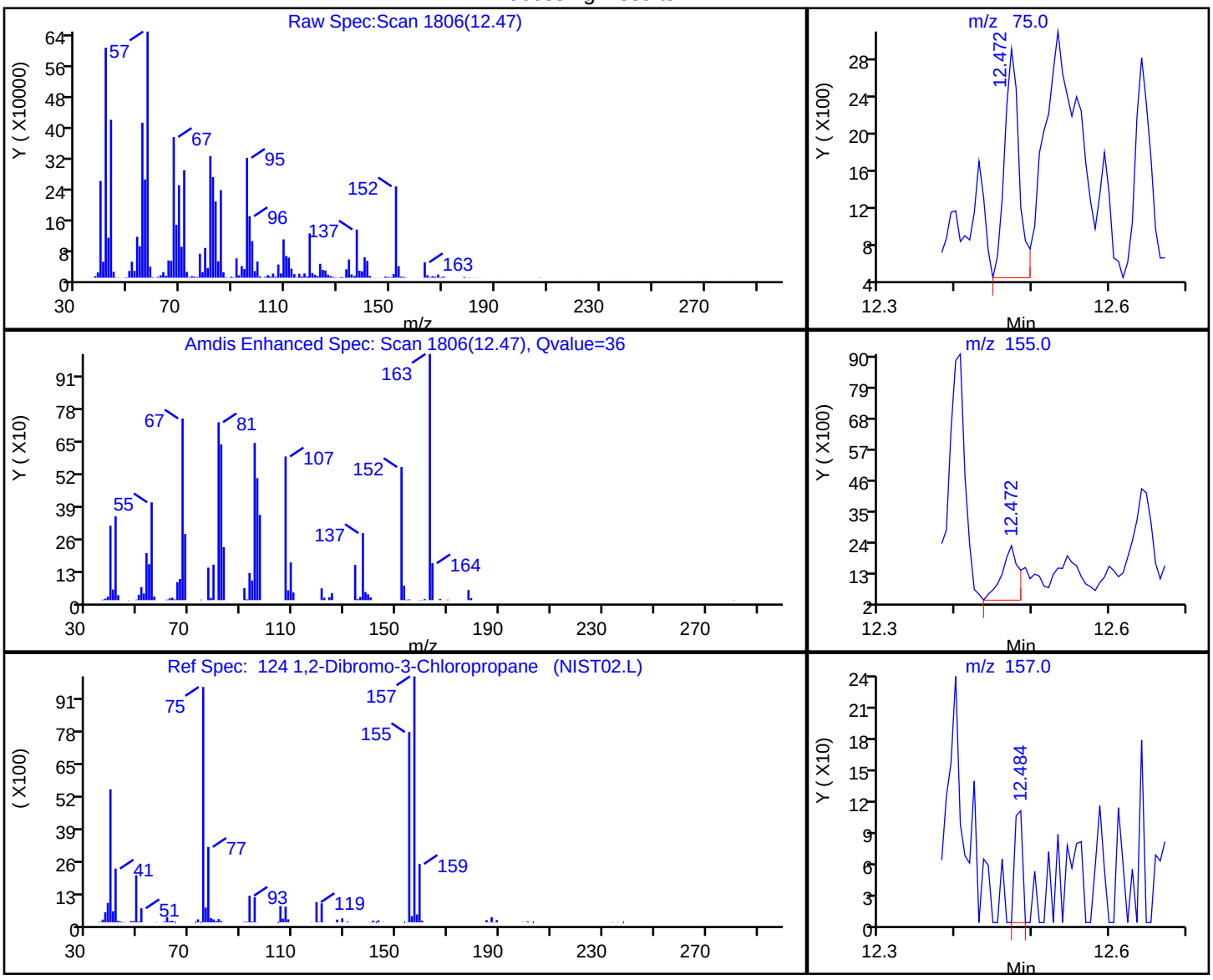
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D		
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1
Client ID:	GC-MW-103(SO)-12-14		
Operator ID:		ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

124 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results



RT	Mass	Response	Amount
12.47	75.00	3198	3.954000
12.47	155.00	2912	
12.48	157.00	78	

Reviewer: delpolitov, 26-Mar-2018 13:12:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

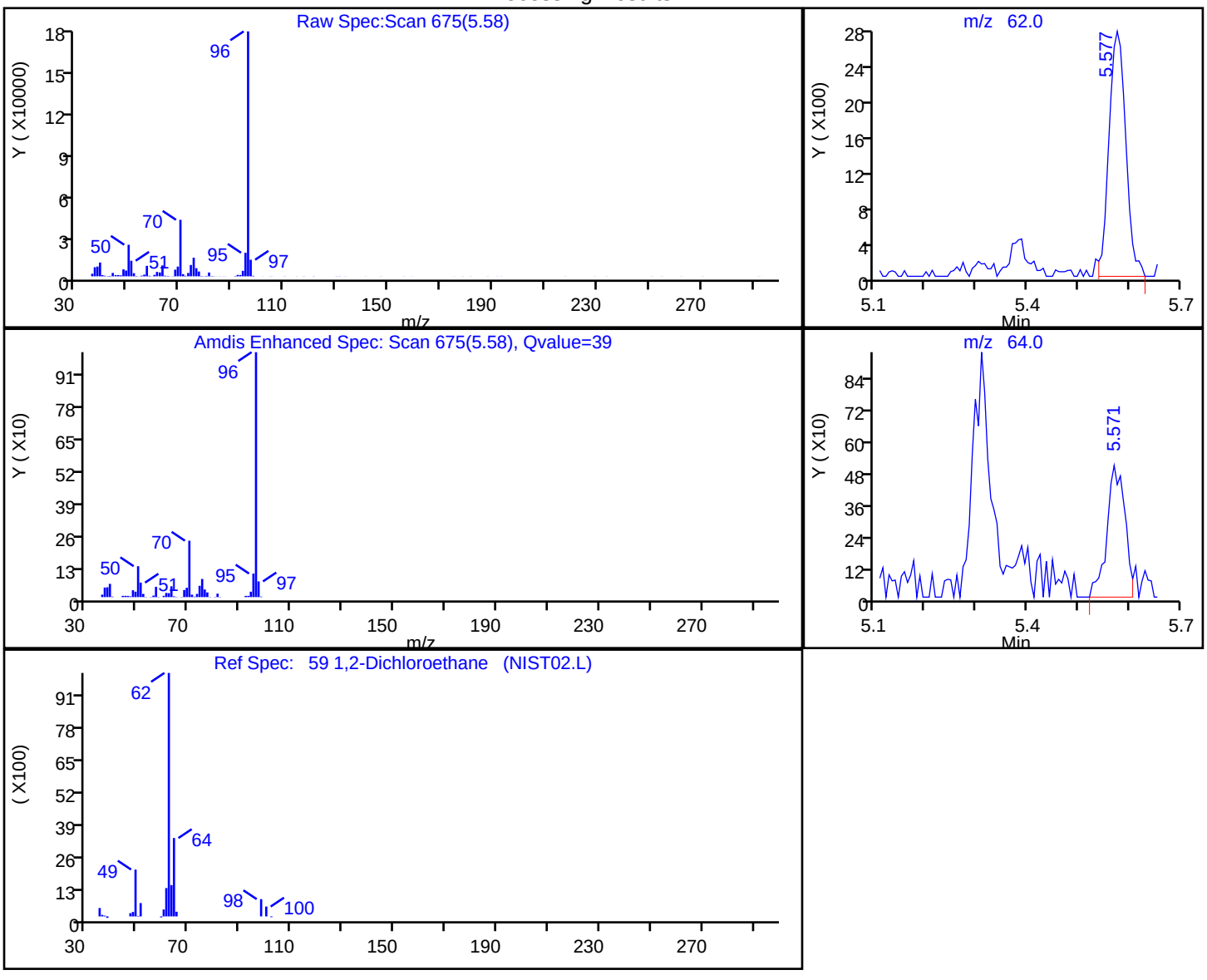
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.58	62.00	6454	1.508327
5.57	64.00	1249	

Reviewer: delpolitov, 26-Mar-2018 13:12:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

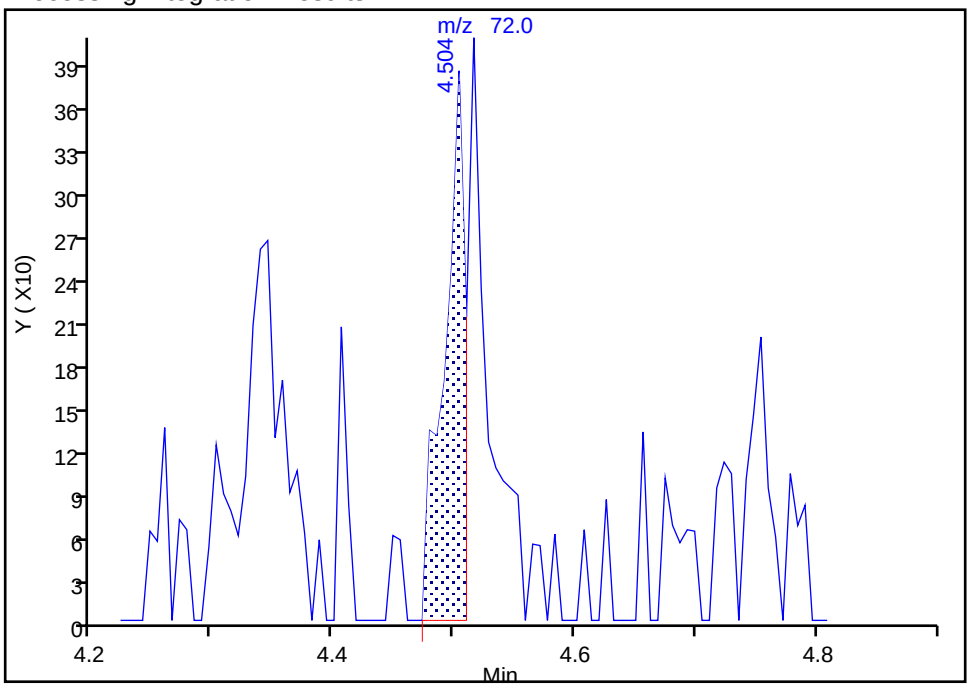
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

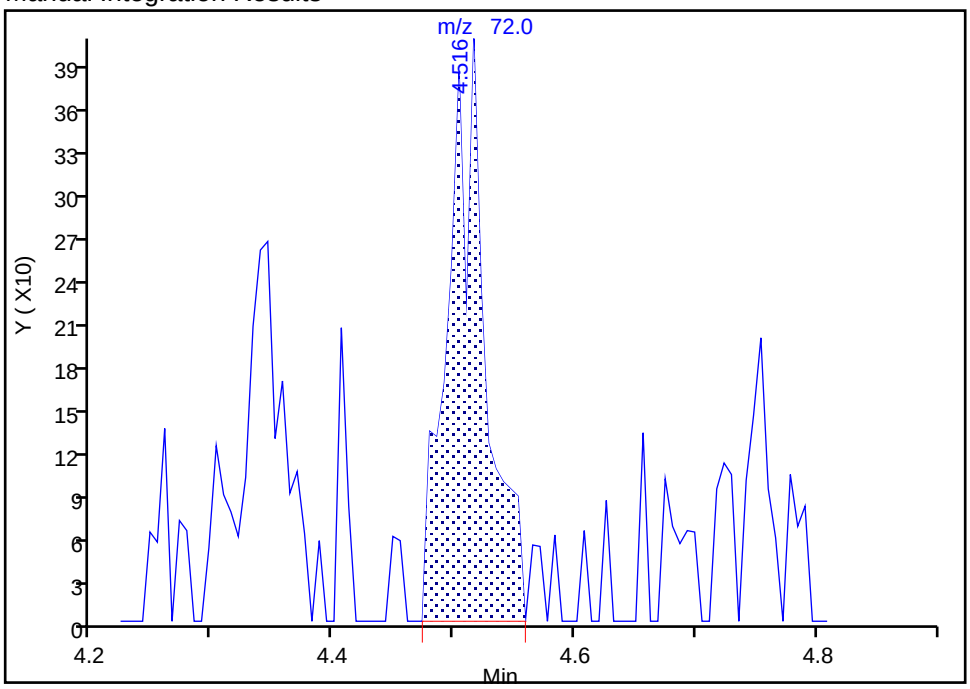
Processing Integration Results

RT: 4.50
Area: 463
Amount: 1.121694
Amount Units: ug/l



Manual Integration Results

RT: 4.52
Area: 881
Amount: 2.134369
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 13:11:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

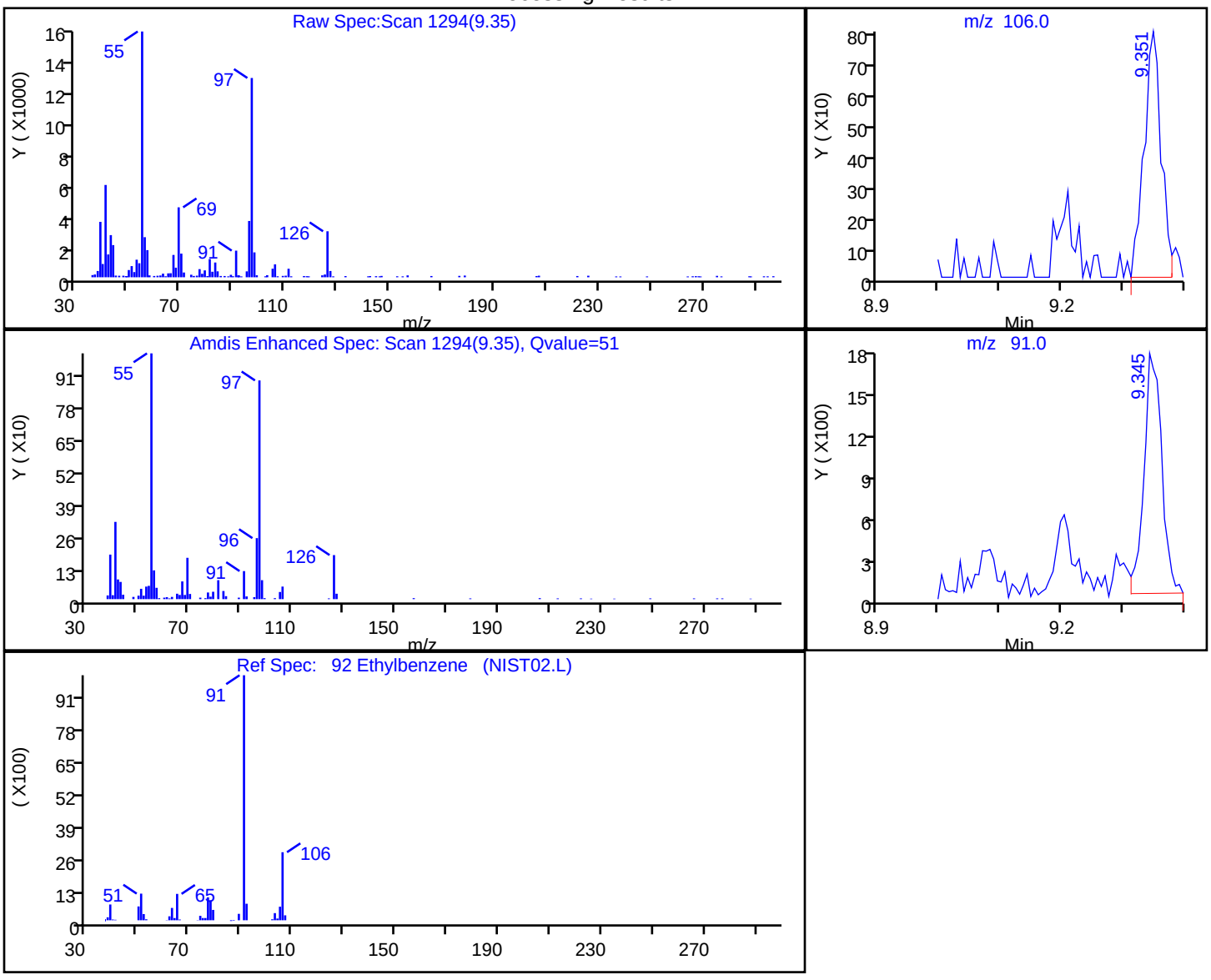
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.35	106.00	1570	0.407793
9.34	91.00	3331	

Reviewer: delpolitov, 26-Mar-2018 13:12:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

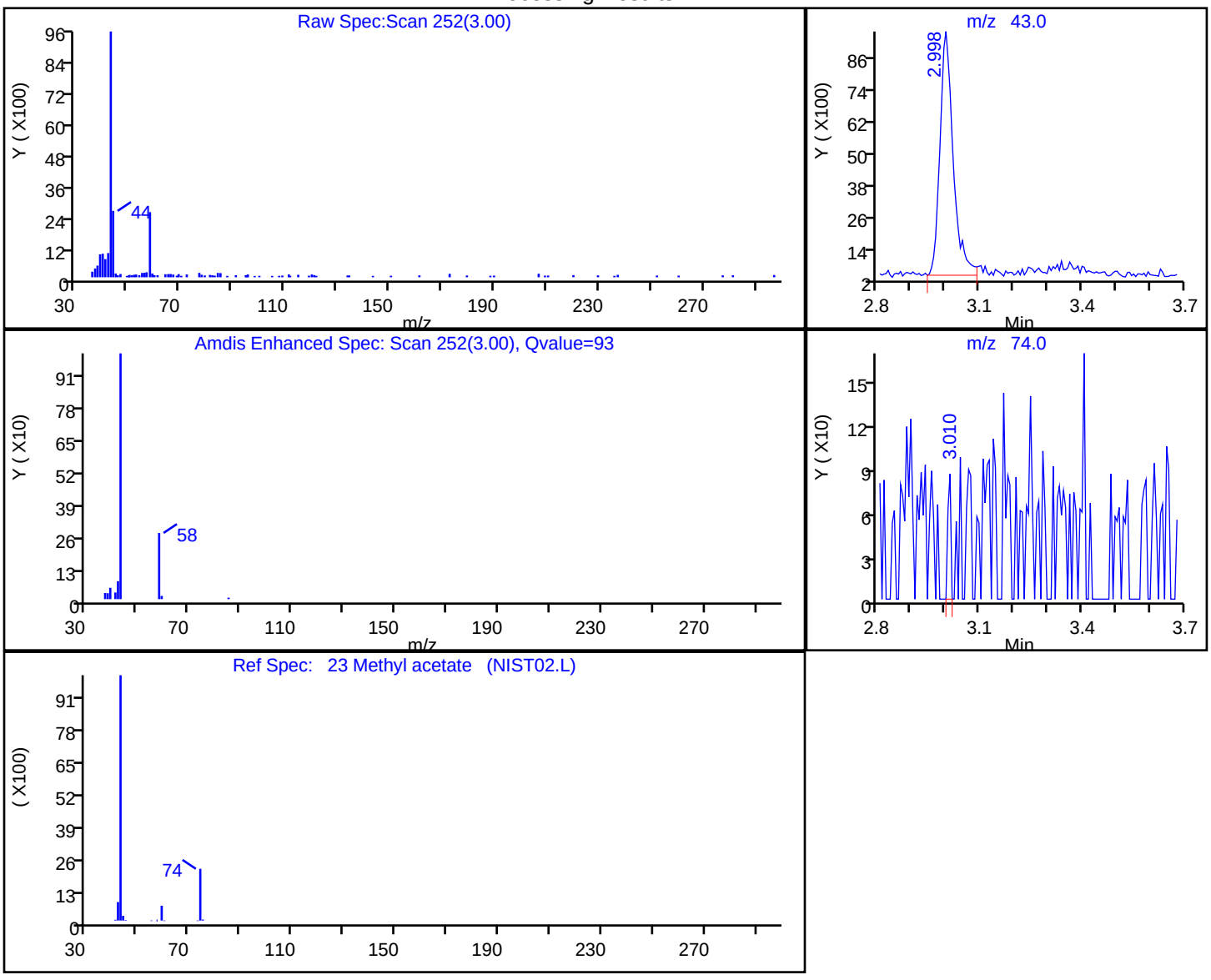
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

23 Methyl acetate, CAS: 79-20-9

Processing Results



RT	Mass	Response	Amount
3.00	43.00	25089	9.182177
3.01	74.00	52	

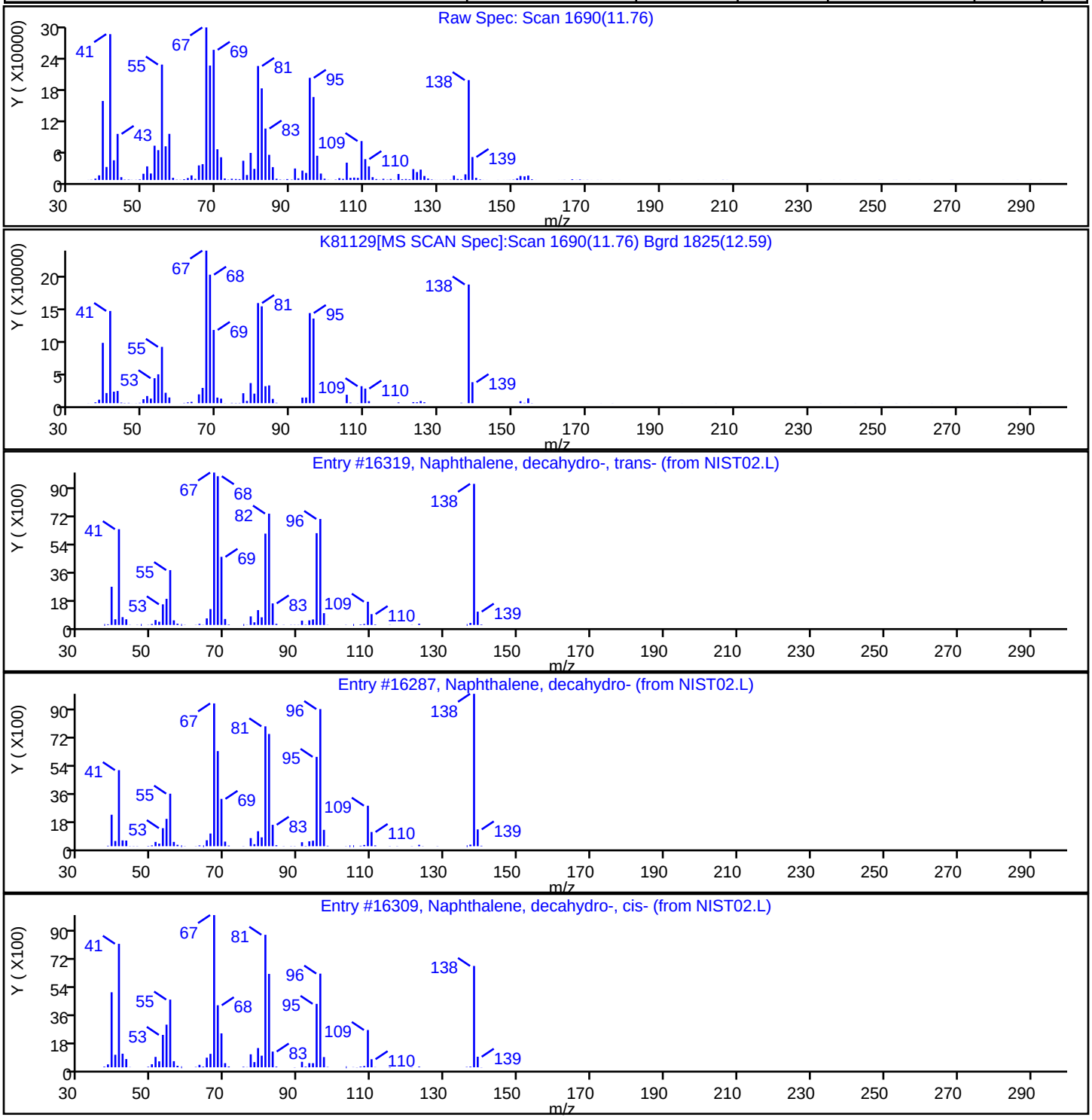
Reviewer: delpolitov, 26-Mar-2018 13:12:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D
Injection Date: 24-Mar-2018 10:37:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-1-A Lab Sample ID: 460-152331-1
Client ID: GC-MW-103(SO)-12-14
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

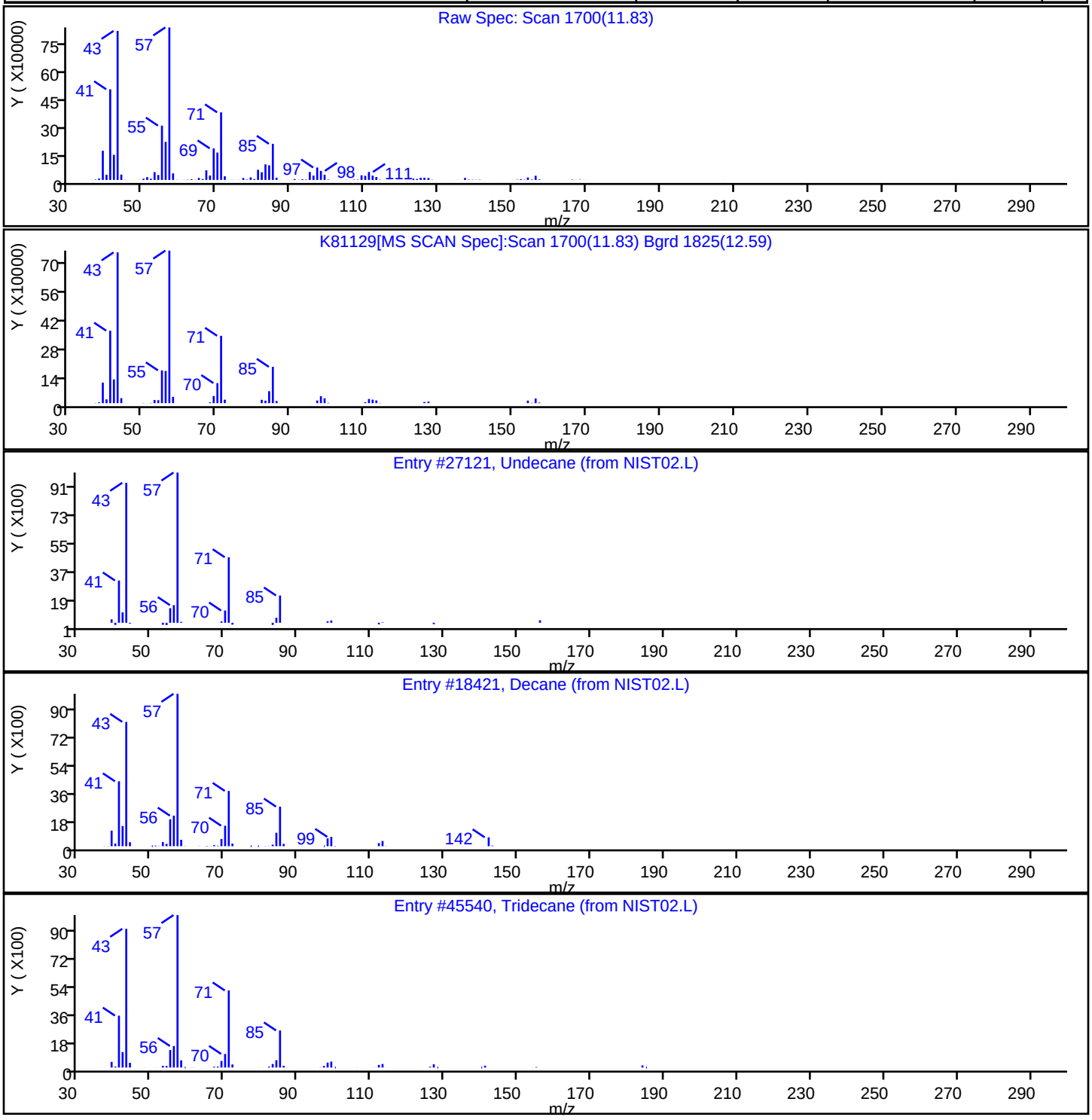
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Naphthalene, decahydro-, trans-	493-02-7	NIST02.L	16319	C10H18	138	97
Naphthalene, decahydro-	91-17-8	NIST02.L	16287	C10H18	138	93
Naphthalene, decahydro-, cis-	493-01-6	NIST02.L	16309	C10H18	138	76



TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D
Injection Date: 24-Mar-2018 10:37:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-1-A Lab Sample ID: 460-152331-1
Client ID: GC-MW-103(SO)-12-14
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Undecane	1120-21-4	NIST02.L	27121	C11H24	156	91
Decane	124-18-5	NIST02.L	18421	C10H22	142	83
Tridecane	629-50-5	NIST02.L	45540	C13H28	184	80



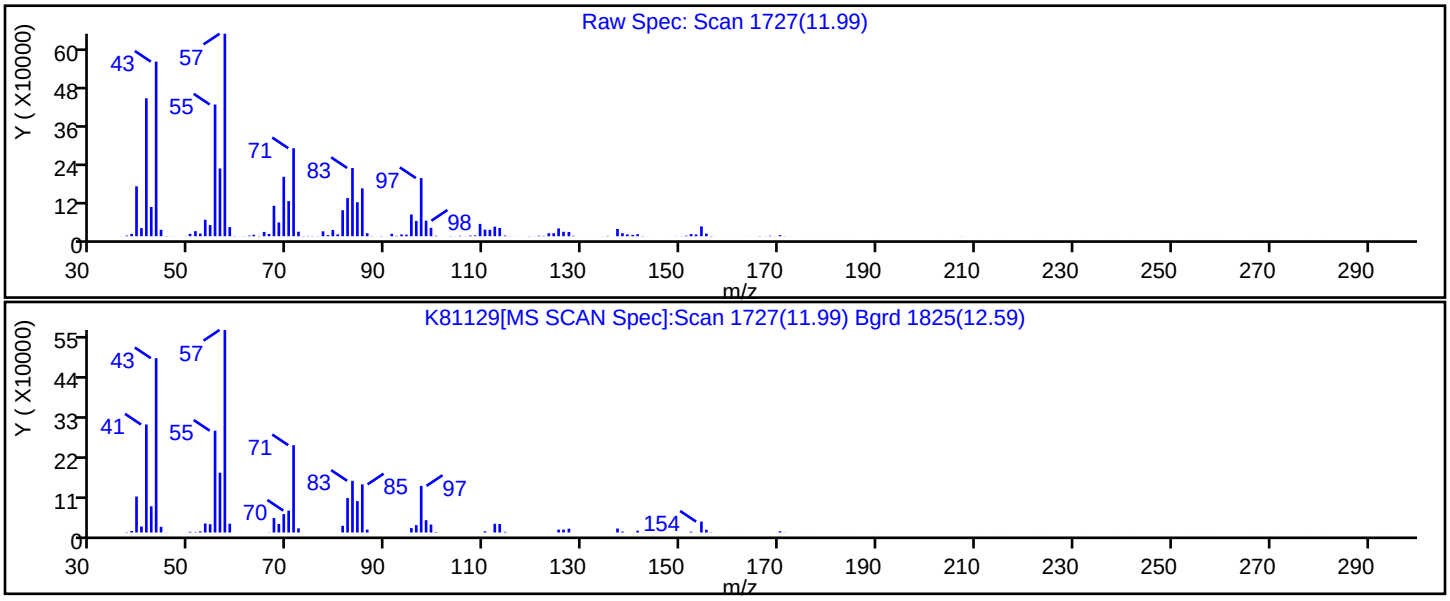
Report Date: 26-Mar-2018 13:12:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D

Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

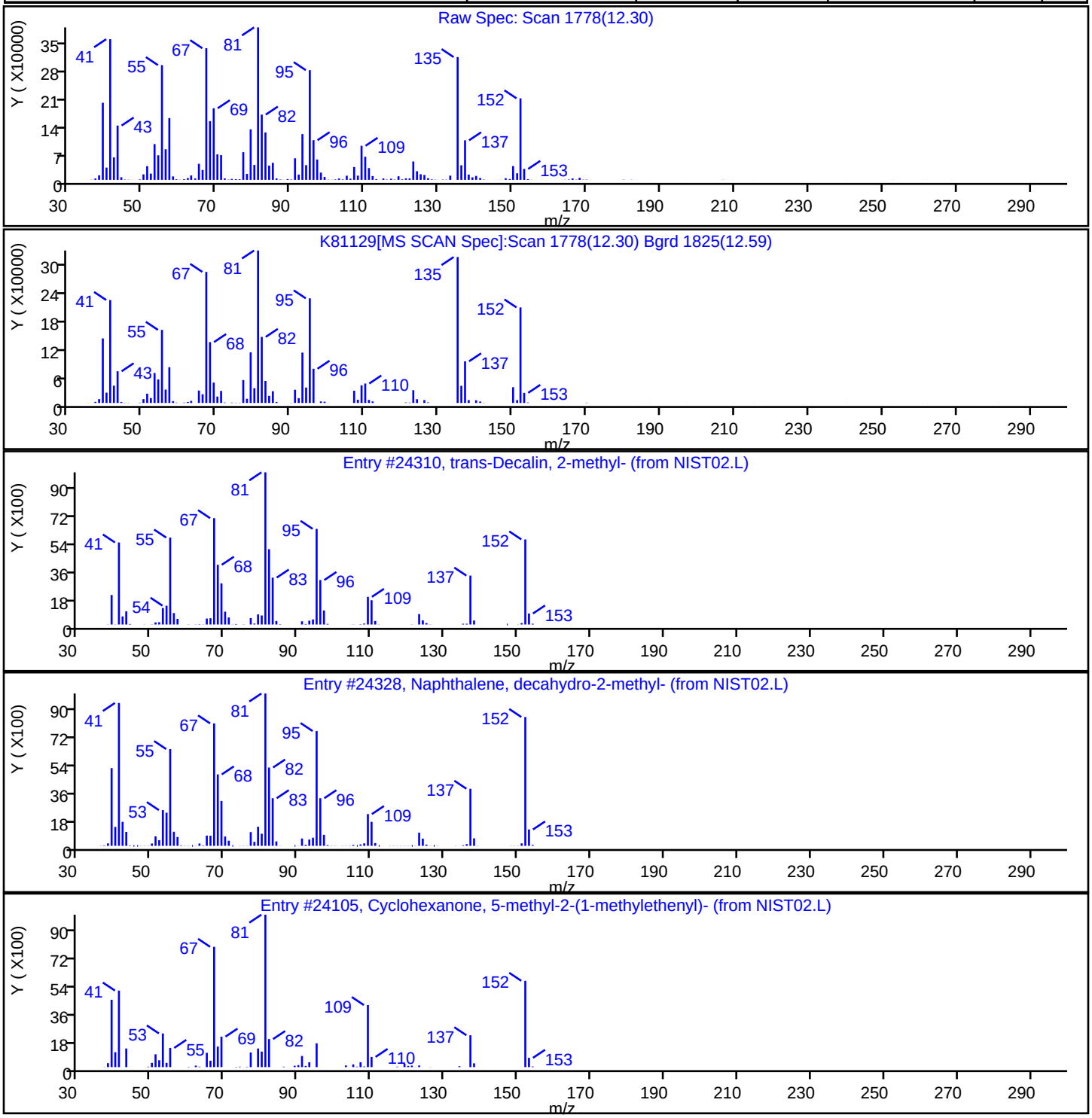
No Library Matches Found above the Threshold: 70



TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D
Injection Date: 24-Mar-2018 10:37:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-1-A Lab Sample ID: 460-152331-1
Client ID: GC-MW-103(SO)-12-14
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
trans-Decalin, 2-methyl-	1000152-47-3	NIST02.L	24310	C11H20	152	86
Naphthalene, decahydro-2-methyl-	2958-76-1	NIST02.L	24328	C11H20	152	70
Cyclohexanone, 5-methyl-2-(1-methylethenyl)-	529-00-0	NIST02.L	24105	C10H16O	152	70



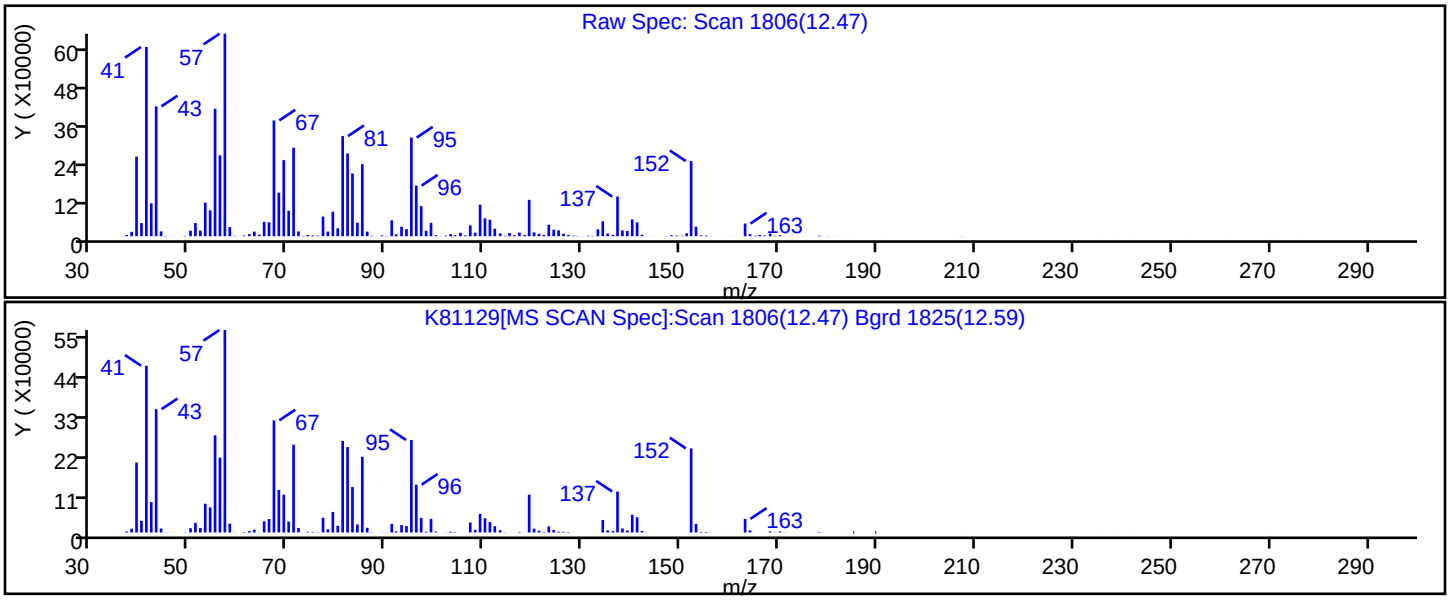
Report Date: 26-Mar-2018 13:12:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D

Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70



Report Date: 26-Mar-2018 13:12:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D

Injection Date: 24-Mar-2018 10:37:30 Instrument ID: CVOAMS9

Lims ID: 460-152331-B-1-A Lab Sample ID: 460-152331-1

Client ID: GC-MW-103(SO)-12-14

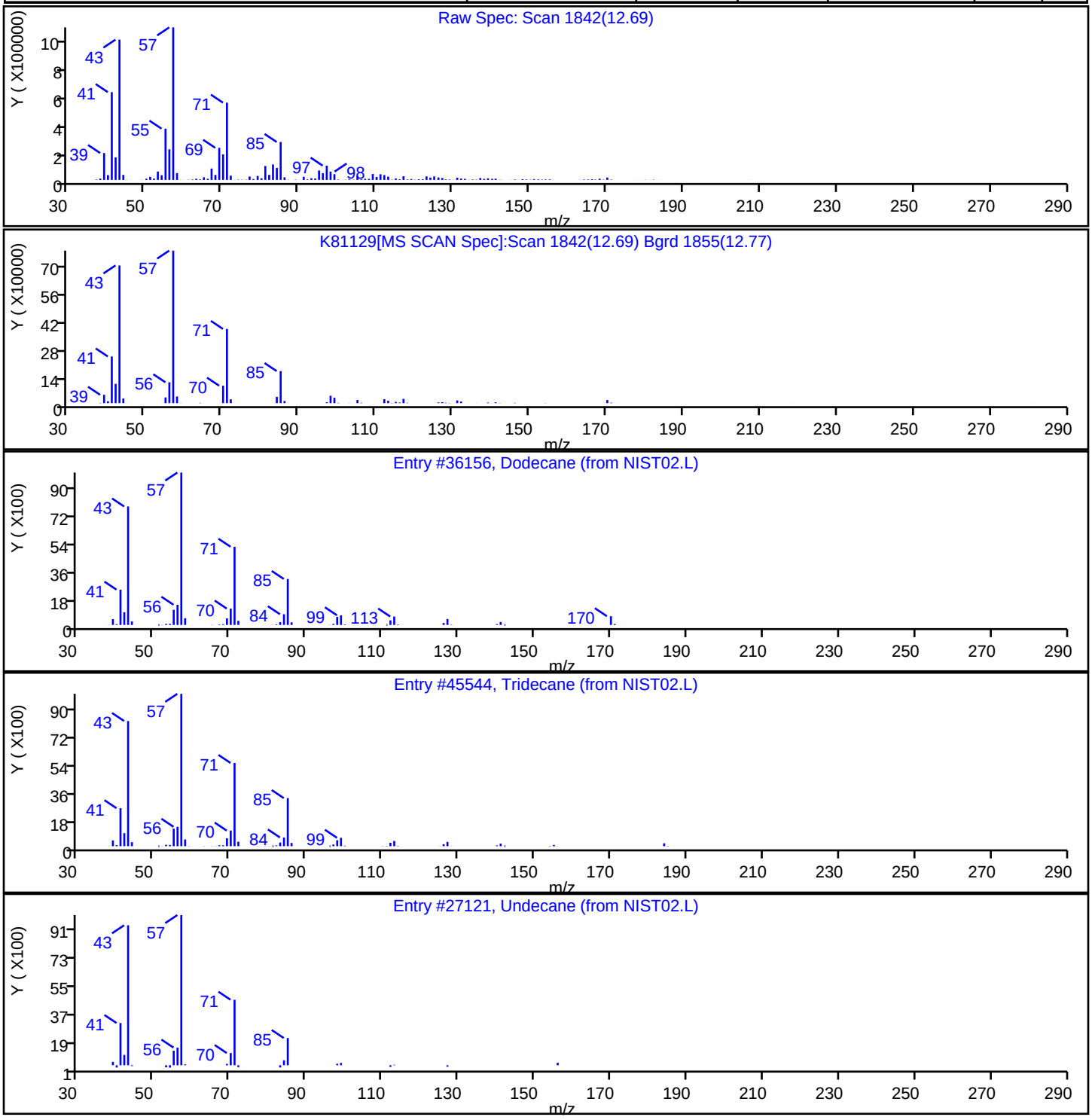
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Dodecane	112-40-3	NIST02.L	36156	C12H26	170	91
Tridecane	629-50-5	NIST02.L	45544	C13H28	184	83
Undecane	1120-21-4	NIST02.L	27121	C11H24	156	78



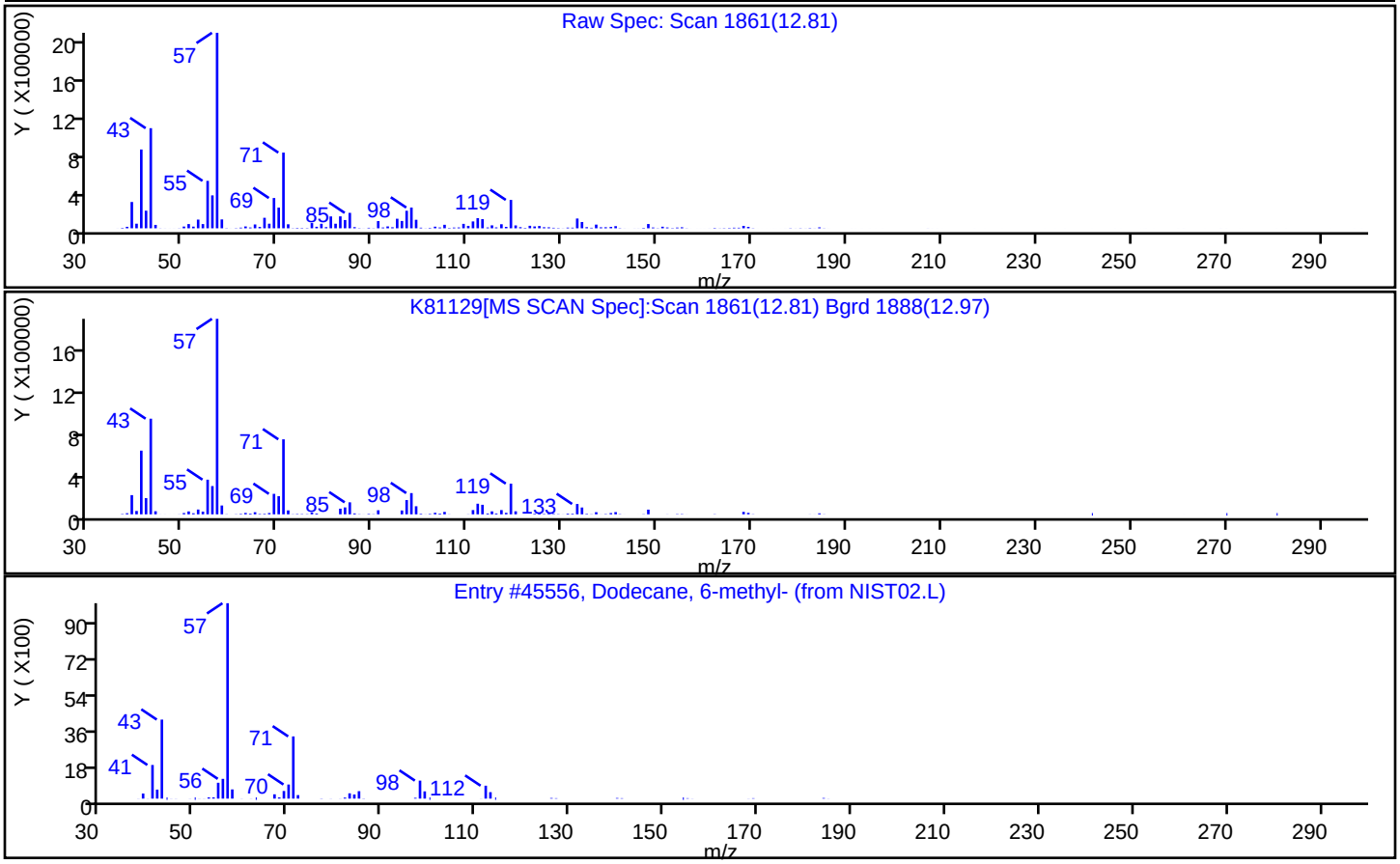
Report Date: 26-Mar-2018 13:12:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D

Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Dodecane, 6-methyl-	6044-71-9	NIST02.L	45556	C13H28	184	94



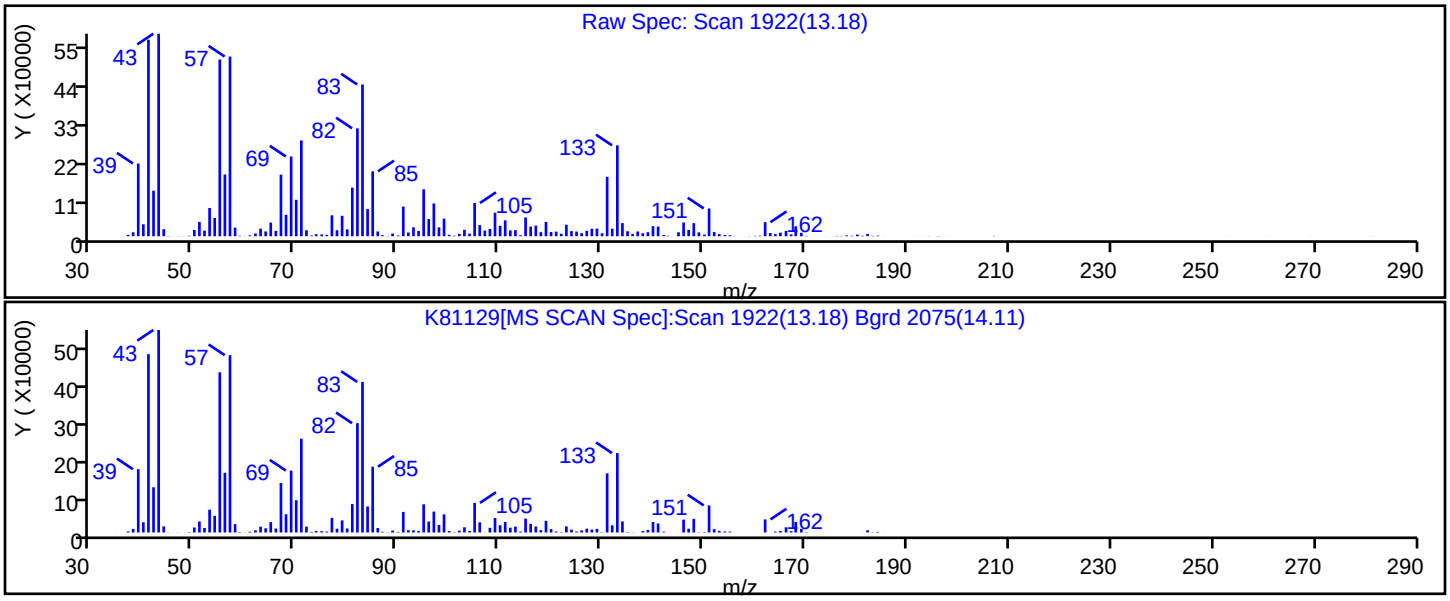
Report Date: 26-Mar-2018 13:12:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D

Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

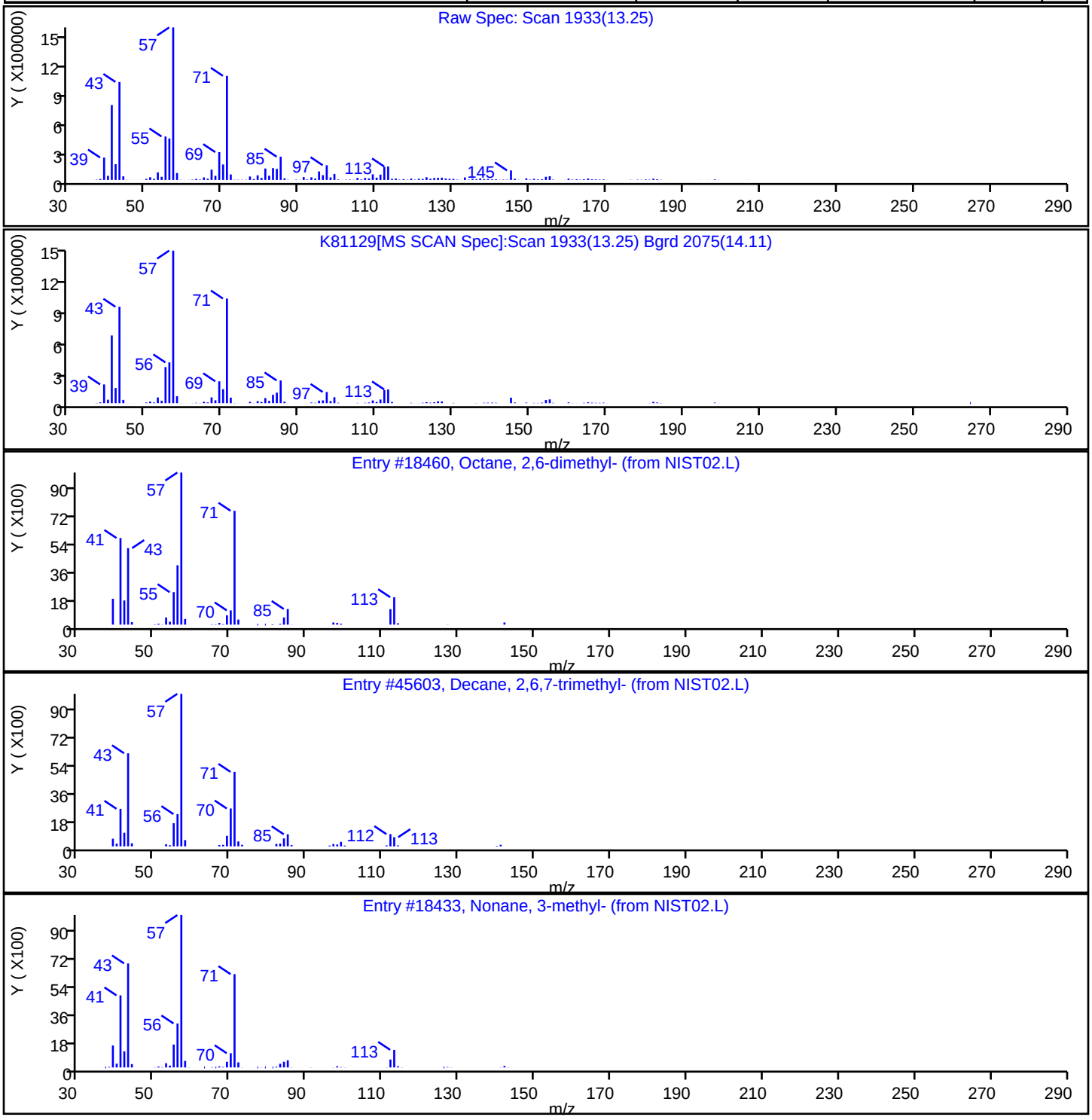
No Library Matches Found above the Threshold: 70



TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D
Injection Date: 24-Mar-2018 10:37:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-1-A Lab Sample ID: 460-152331-1
Client ID: GC-MW-103(SO)-12-14
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Octane, 2,6-dimethyl-	2051-30-1	NIST02.L	18460	C10H22	142	87
Decane, 2,6,7-trimethyl-	62108-25-2	NIST02.L	45603	C13H28	184	86
Nonane, 3-methyl-	5911-04-6	NIST02.L	18433	C10H22	142	72

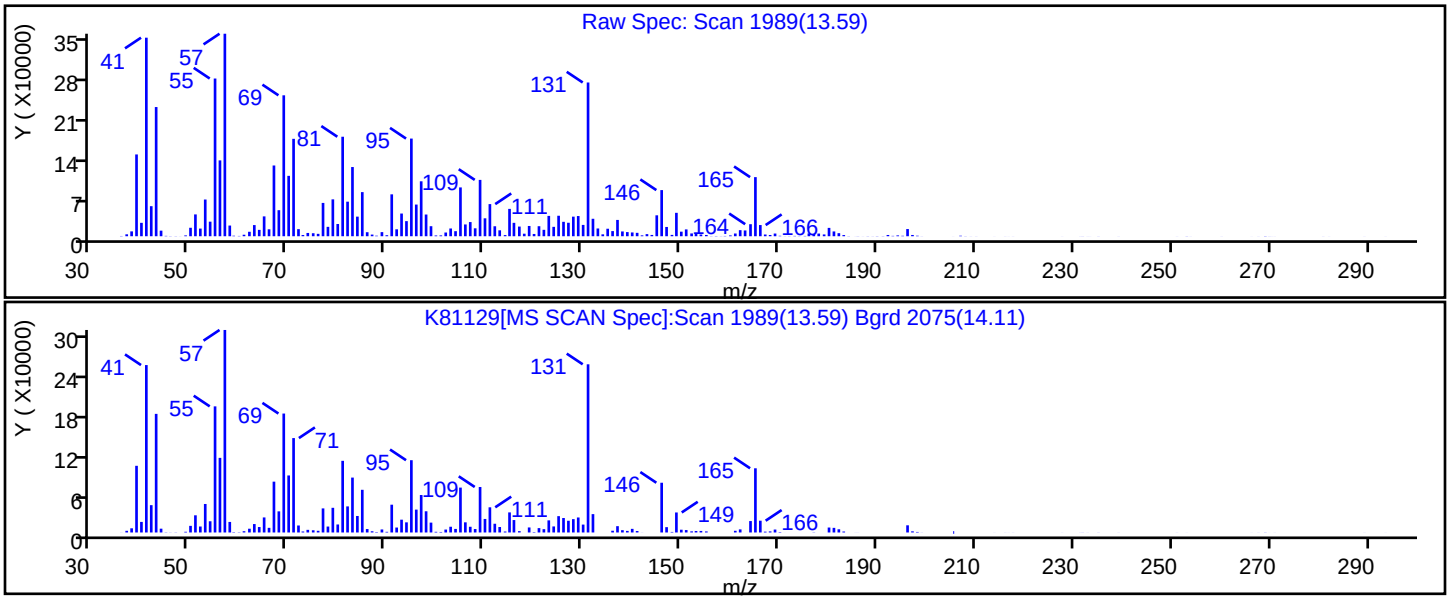


Report Date: 26-Mar-2018 13:12:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81129.D				
Injection Date:	24-Mar-2018 10:37:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-1-A	Lab Sample ID:	460-152331-1		
Client ID:	GC-MW-103(SO)-12-14				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-15-17 | Lab Sample ID: 460-152331-2

Matrix: Solid | Lab File ID: K81168.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:45

Sample wt/vol: 5.723(g) | Date Analyzed: 03/25/2018 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 21.6 | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0011	U	0.0011	0.00026
79-34-5	1,1,2,2-Tetrachloroethane	0.0011	U	0.0011	0.00024
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0011	U	0.0011	0.00034
79-00-5	1,1,2-Trichloroethane	0.0011	U	0.0011	0.00020
75-34-3	1,1-Dichloroethane	0.0011	U	0.0011	0.00023
75-35-4	1,1-Dichloroethene	0.0011	U	0.0011	0.00025
87-61-6	1,2,3-Trichlorobenzene	0.0011	U	0.0011	0.00020
120-82-1	1,2,4-Trichlorobenzene	0.0011	U	0.0011	0.00010
96-12-8	1,2-Dibromo-3-Chloropropane	0.0011	U	0.0011	0.00051
95-50-1	1,2-Dichlorobenzene	0.0011	U	0.0011	0.00016
107-06-2	1,2-Dichloroethane	0.0011	U	0.0011	0.00033
78-87-5	1,2-Dichloropropane	0.0011	U	0.0011	0.00047
541-73-1	1,3-Dichlorobenzene	0.0011	U	0.0011	0.00018
106-46-7	1,4-Dichlorobenzene	0.0011	U	0.0011	0.00011
123-91-1	1,4-Dioxane	0.022	U	0.022	0.010
78-93-3	2-Butanone (MEK)	0.0056	U	0.0056	0.0012
591-78-6	2-Hexanone	0.0056	U	0.0056	0.00087
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0056	U	0.0056	0.00074
67-64-1	Acetone	0.022		0.0056	0.0042
71-43-2	Benzene	0.0011	U	0.0011	0.00029
75-25-2	Bromoform	0.0011	U	0.0011	0.00047
74-83-9	Bromomethane	0.0011	U	0.0011	0.00053
75-15-0	Carbon disulfide	0.0011	U	0.0011	0.00030
56-23-5	Carbon tetrachloride	0.0011	U	0.0011	0.00020
108-90-7	Chlorobenzene	0.0011	U	0.0011	0.00020
74-97-5	Chlorobromomethane	0.0011	U	0.0011	0.00031
124-48-1	Chlorodibromomethane	0.0011	U	0.0011	0.00022
75-00-3	Chloroethane	0.0011	U	0.0011	0.00058
67-66-3	Chloroform	0.0011	U	0.0011	0.00036
74-87-3	Chloromethane	0.0011	U	0.0011	0.00048
156-59-2	cis-1,2-Dichloroethene	0.0011	U	0.0011	0.00017
10061-01-5	cis-1,3-Dichloropropene	0.0011	U	0.0011	0.00030
110-82-7	Cyclohexane	0.0011	U	0.0011	0.00025
75-27-4	Dichlorobromomethane	0.0011	U	0.0011	0.00029
75-71-8	Dichlorodifluoromethane	0.0011	U	0.0011	0.00038

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-15-17 | Lab Sample ID: 460-152331-2

Matrix: Solid | Lab File ID: K81168.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:45

Sample wt/vol: 5.723(g) | Date Analyzed: 03/25/2018 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 21.6 | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0011	U	0.0011	0.00022
106-93-4	Ethylene Dibromide	0.0011	U	0.0011	0.00020
98-82-8	Isopropylbenzene	0.0011	U	0.0011	0.00014
79-20-9	Methyl acetate	0.0056	U	0.0056	0.0048
1634-04-4	Methyl tert-butyl ether	0.0011	U	0.0011	0.00014
108-87-2	Methylcyclohexane	0.0011	U	0.0011	0.00018
75-09-2	Methylene Chloride	0.0011		0.0011	0.00018
179601-23-1	m-Xylene & p-Xylene	0.00046	J	0.0011	0.00019
95-47-6	o-Xylene	0.00024	J	0.0011	0.00011
100-42-5	Styrene	0.0011	U	0.0011	0.00014
127-18-4	Tetrachloroethene	0.0011	U	0.0011	0.00016
108-88-3	Toluene	0.0011	U	0.0011	0.00070
156-60-5	trans-1,2-Dichloroethene	0.0011	U	0.0011	0.00027
10061-02-6	trans-1,3-Dichloropropene	0.0011	U	0.0011	0.00030
79-01-6	Trichloroethene	0.0011	U	0.0011	0.00016
75-69-4	Trichlorofluoromethane	0.0011	U	0.0011	0.00045
75-01-4	Vinyl chloride	0.0011	U	0.0011	0.00061

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		78-135
460-00-4	4-Bromofluorobenzene	96		67-126
1868-53-7	Dibromofluoromethane (Surr)	97		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-15-17 | Lab Sample ID: 460-152331-2

Matrix: Solid | Lab File ID: K81168.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:45

Sample wt/vol: 5.723(g) | Date Analyzed: 03/25/2018 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 21.6 | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

Number TICs Found: 2 | TIC Result Total: 0.0182

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	11.94	0.0083	J	
	Unknown alkane	13.28	0.0099	J	

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D				
Lims ID:	460-152331-C-2-A				
Client ID:	GC-MW-103(SO)-15-17				
Sample Type:	Client				
Inject. Date:	25-Mar-2018 13:30:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-152331-C-2-A				
Misc. Info.:	460-0069264-023				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	26-Mar-2018 12:25:49	Calib Date:	23-Mar-2018 14:55:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK024				
First Level Reviewer: delpolitov		Date:	26-Mar-2018 12:28:33		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.004	3.004	0.000	83	24433	19.8	
* 25 TBA-d9 (IS)	65	3.352	3.358	-0.006	0	343008	1000.0	
26 Methylene Chloride	84	3.370	3.376	-0.006	36	3724	0.9878	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	259846	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	95	104876	48.5	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.303	-0.001	0	132487	52.6	
* 61 Fluorobenzene	96	5.577	5.583	-0.006	97	320724	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.278	0.012	0	21274	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.265	7.266	-0.001	97	415845	49.3	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	90	264102	50.0	
93 m-Xylene & p-Xylene	106	9.344	9.351	-0.007	0	1697	0.4102	
95 o-Xylene	106	9.820	9.820	0.000	90	940	0.2195	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	84	116391	48.0	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	98	151676	50.0	

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

TestAmerica Edison
Tentatively Identified Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D				
Lims ID:	460-152331-C-2-A				
Client ID:	GC-MW-103(SO)-15-17				
Sample Type:	Client				
Inject. Date:	25-Mar-2018 13:30:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-152331-C-2-A				
Misc. Info.:	460-0069264-023				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	26-Mar-2018 12:25:49	Calib Date:	23-Mar-2018 14:55:30		
Tic RT Window:	0.000 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\ChromNA\Edison\Database\NIST02.L				
Min. Match:	70				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK024				
First Level Reviewer: delpolitov		Date:	26-Mar-2018 12:28:33		

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
		Unknown						
11.935	128869	7.46	89					
		Unknown alkane						
13.283	153060	8.86	89	0	0		0	

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 89 Chlorobenzene-d5	9.076	864127	50.0

QC Flag Legend

Processing Flags

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

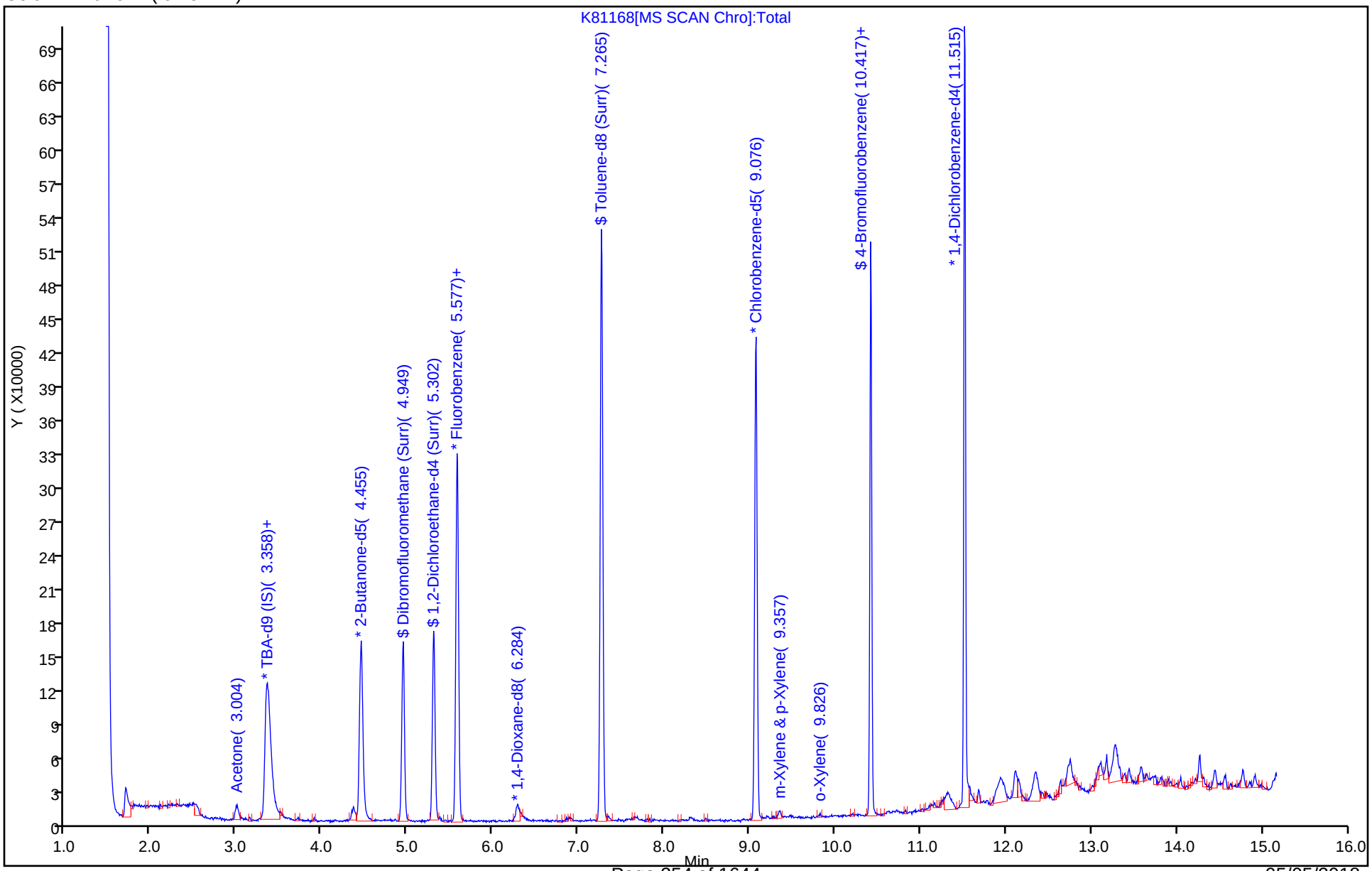
Report Date: 26-Mar-2018 12:28:33 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D

Injection Date:	25-Mar-2018 13:30:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152331-C-2-A	Lab Sample ID:	460-152331-2	Worklist Smp#:	23
Client ID:	GC-MW-103(SO)-15-17				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

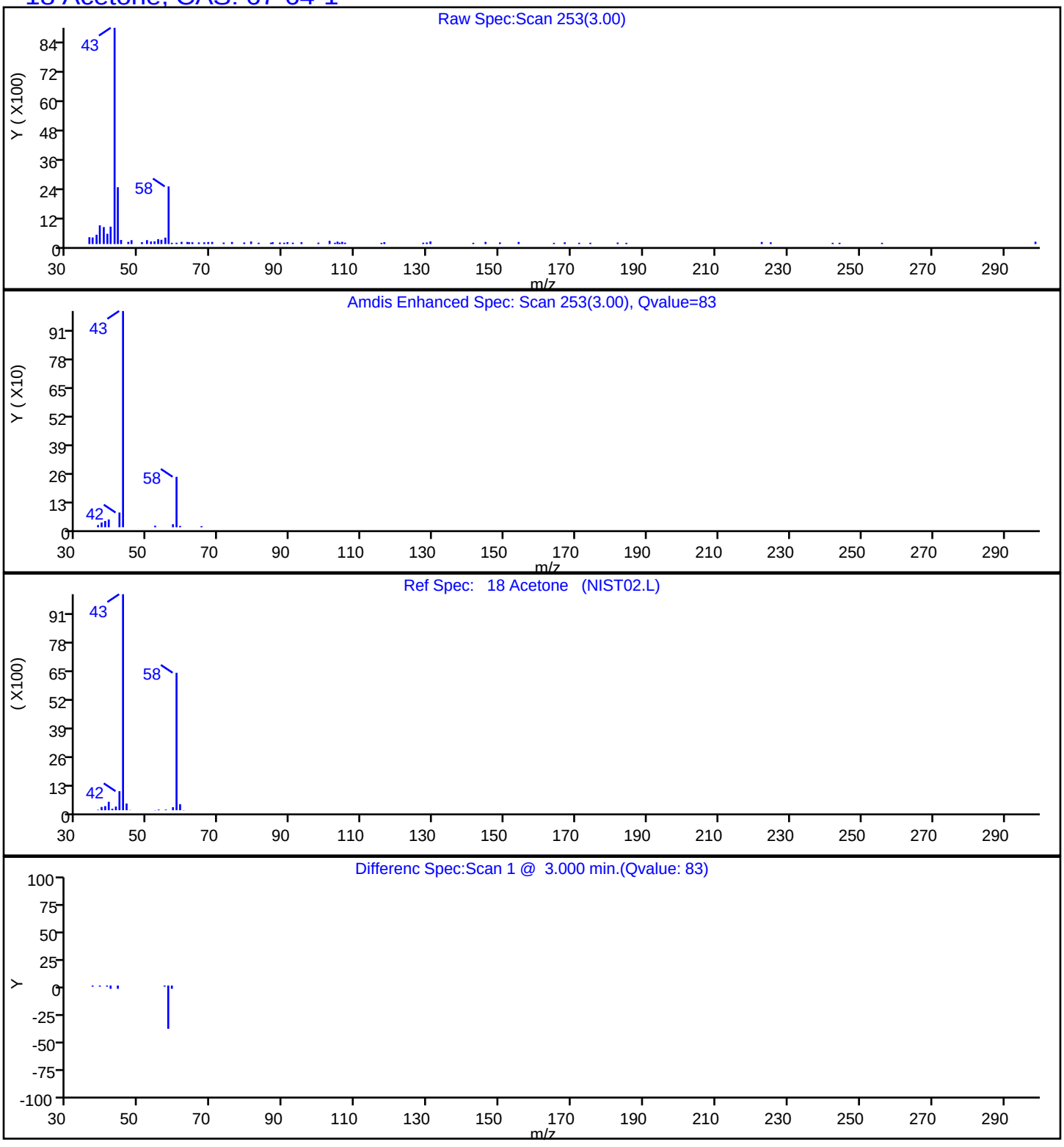
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D				
Injection Date:	25-Mar-2018 13:30:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-C-2-A	Lab Sample ID:	460-152331-2		
Client ID:	GC-MW-103(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

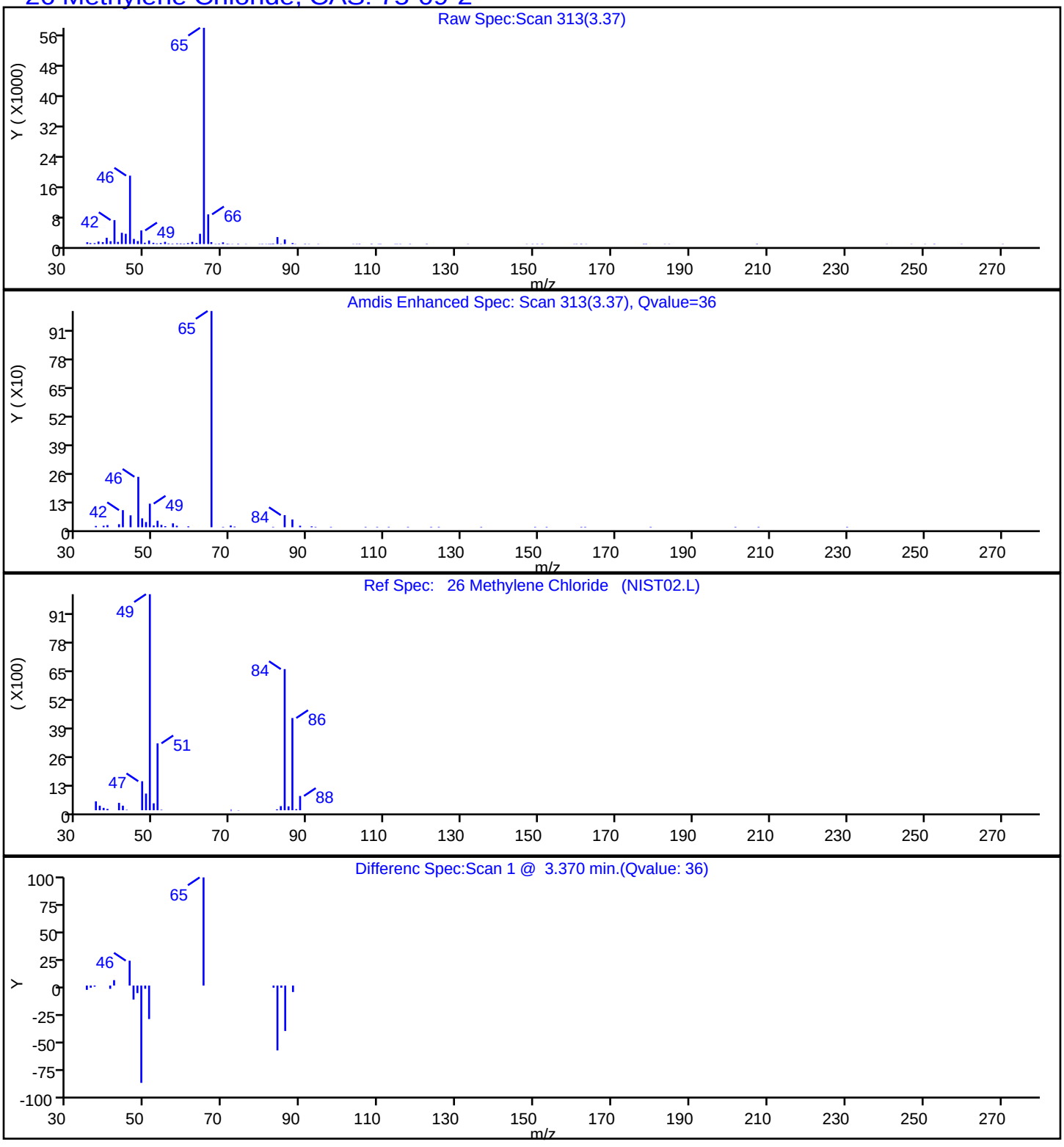
18 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D				
Injection Date:	25-Mar-2018 13:30:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-C-2-A	Lab Sample ID:	460-152331-2		
Client ID:	GC-MW-103(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

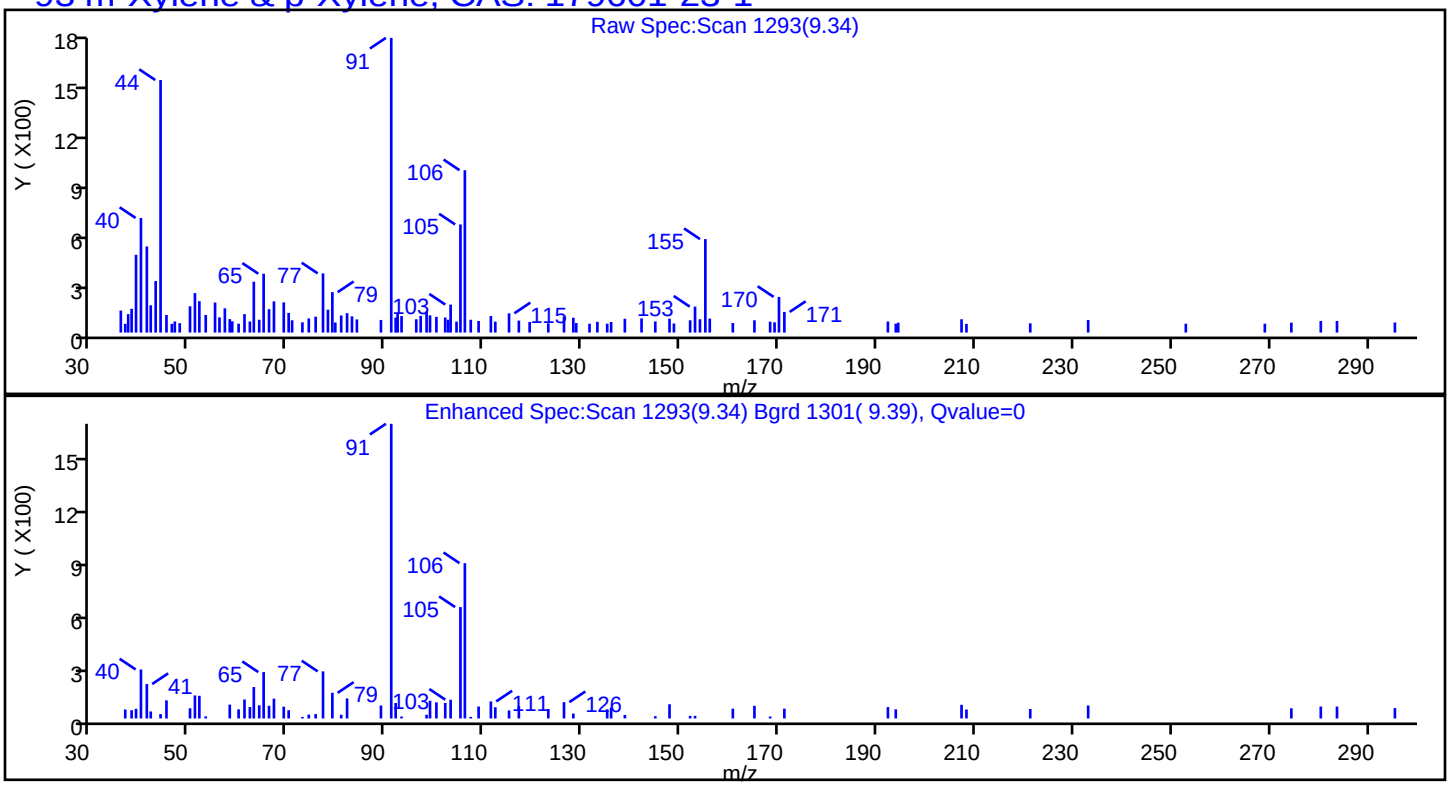
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

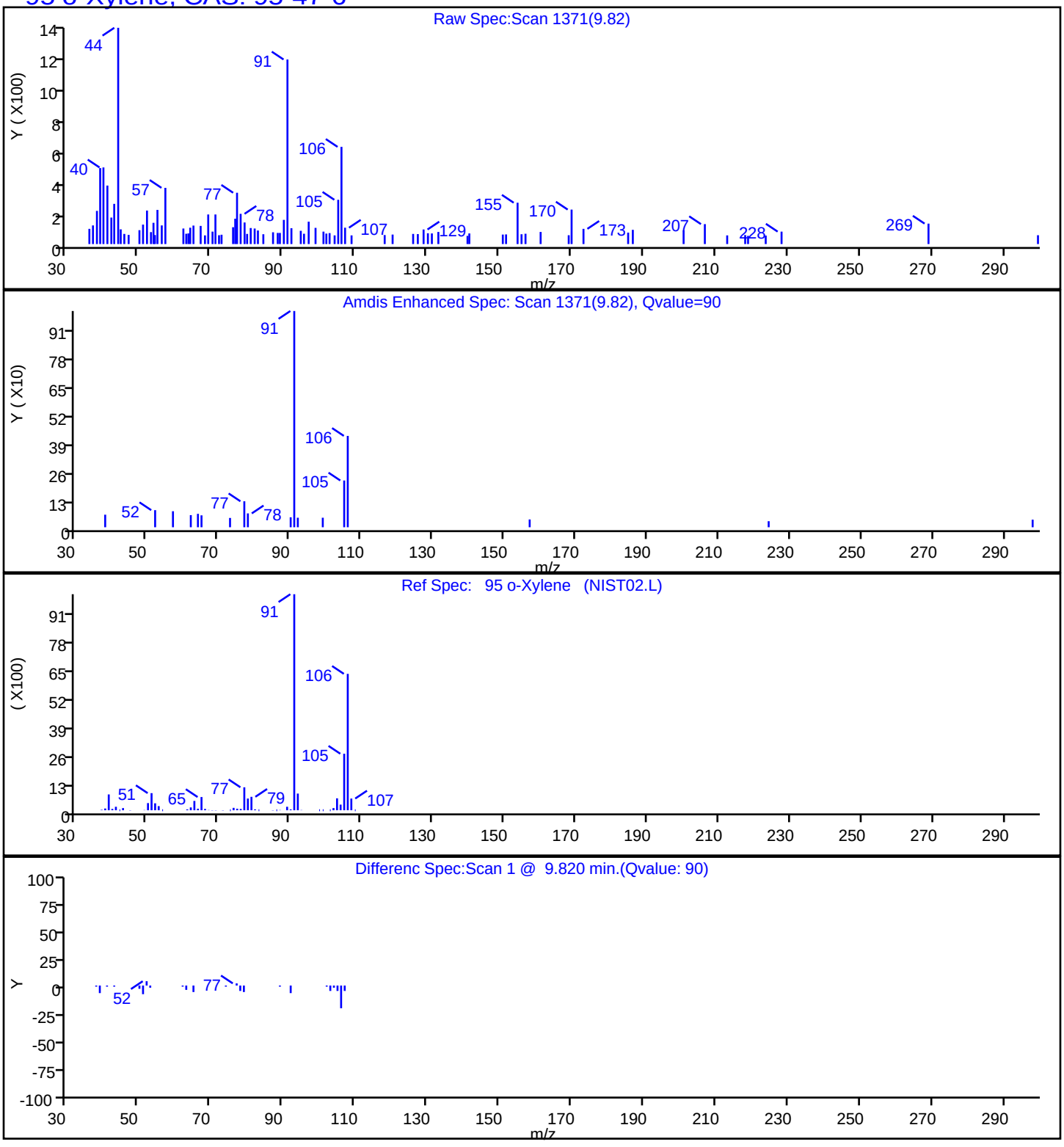
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D		
Injection Date:	25-Mar-2018 13:30:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-C-2-A	Lab Sample ID:	460-152331-2
Client ID:	GC-MW-103(SO)-15-17		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

93 m-Xylene & p-Xylene, CAS: 179601-23-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D
Injection Date: 25-Mar-2018 13:30:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-C-2-A Lab Sample ID: 460-152331-2
Client ID: GC-MW-103(SO)-15-17
Operator ID: ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 o-Xylene, CAS: 95-47-6



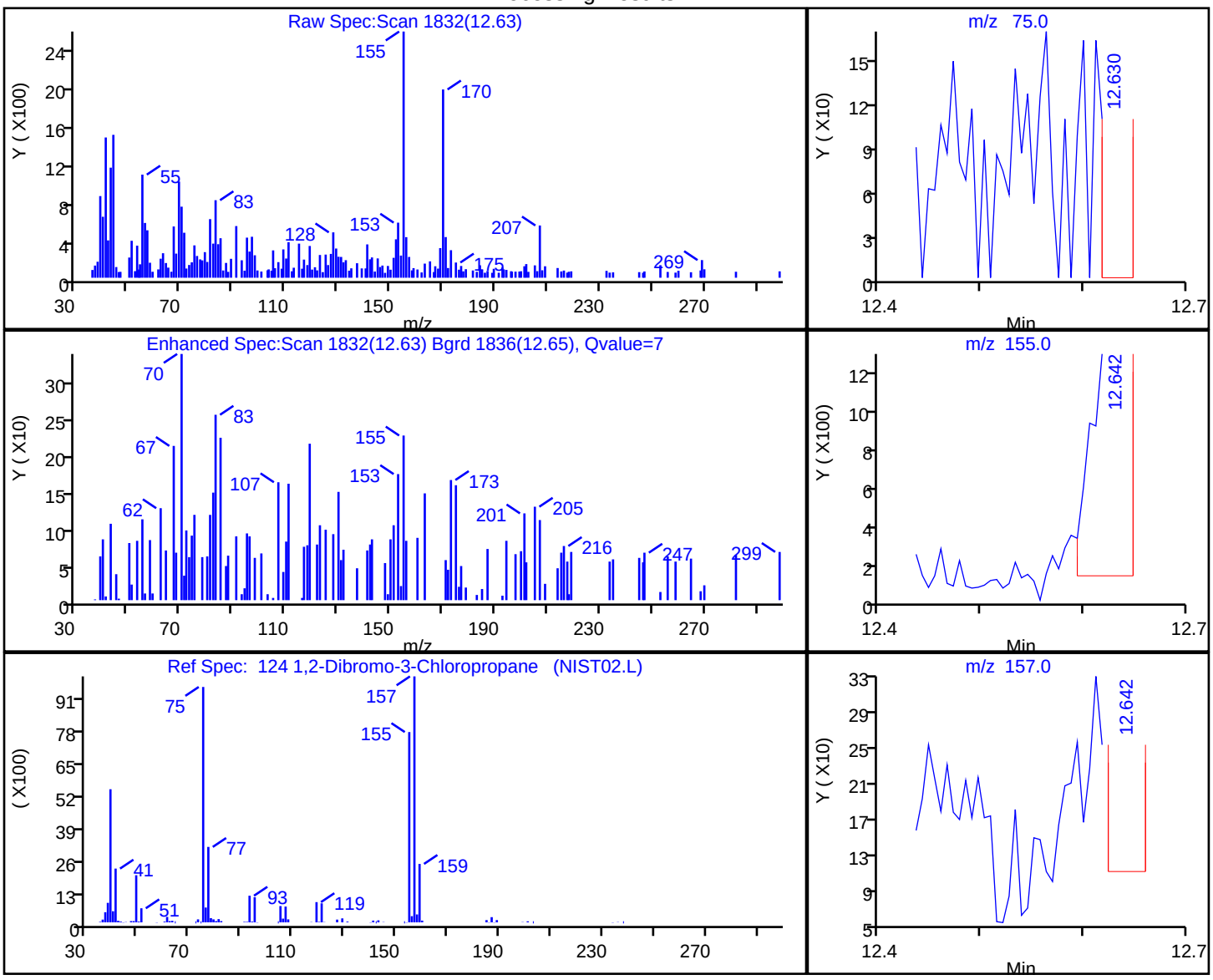
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D				
Injection Date:	25-Mar-2018 13:30:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-C-2-A	Lab Sample ID:	460-152331-2		
Client ID:	GC-MW-103(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

124 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results



RT	Mass	Response	Amount
12.63	75.00	356	0.531842
12.64	155.00	5271	
12.64	157.00	610	

Reviewer: delpolitov, 26-Mar-2018 12:25:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D

Injection Date: 25-Mar-2018 13:30:30 Instrument ID: CVOAMS9

Lims ID: 460-152331-C-2-A Lab Sample ID: 460-152331-2

Client ID: GC-MW-103(SO)-15-17

Operator ID: ALS Bottle#: 22 Worklist Smp#: 23

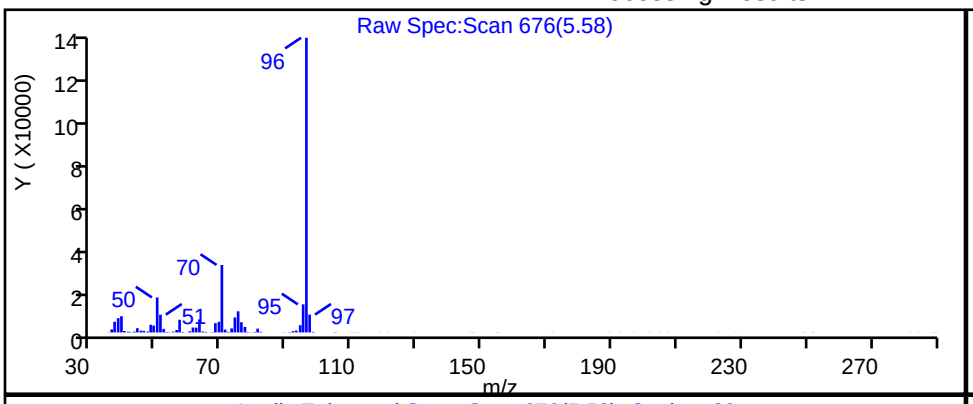
Purge Vol: 5.000 mL Dil. Factor: 1.0000

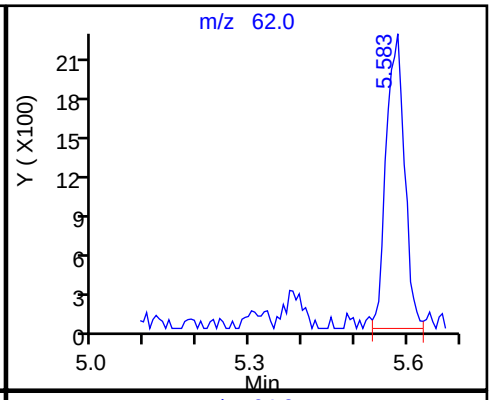
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

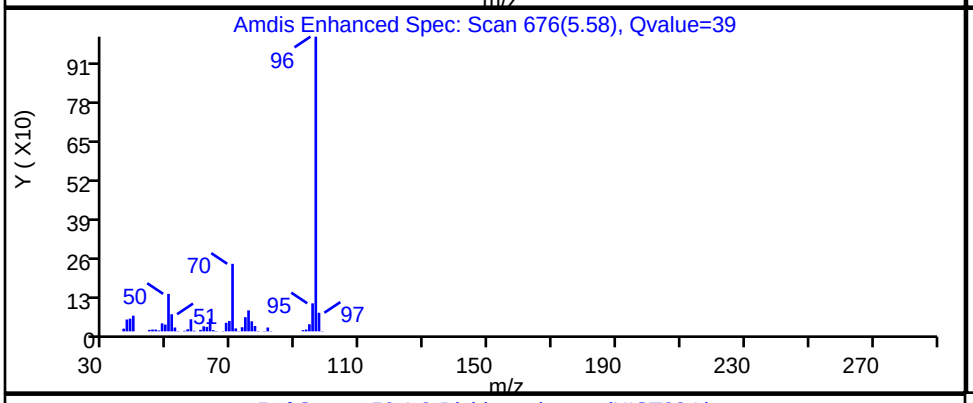
Column: Rtx-624 (0.25 mm) Detector MS SCAN

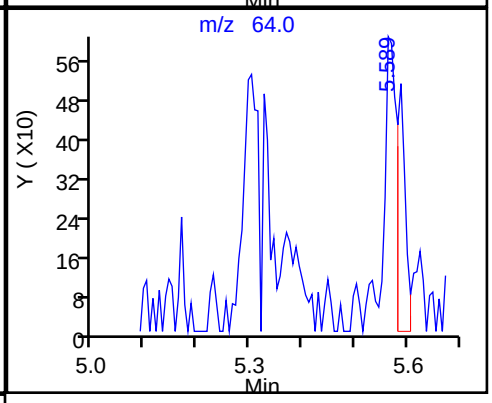
59 1,2-Dichloroethane, CAS: 107-06-2

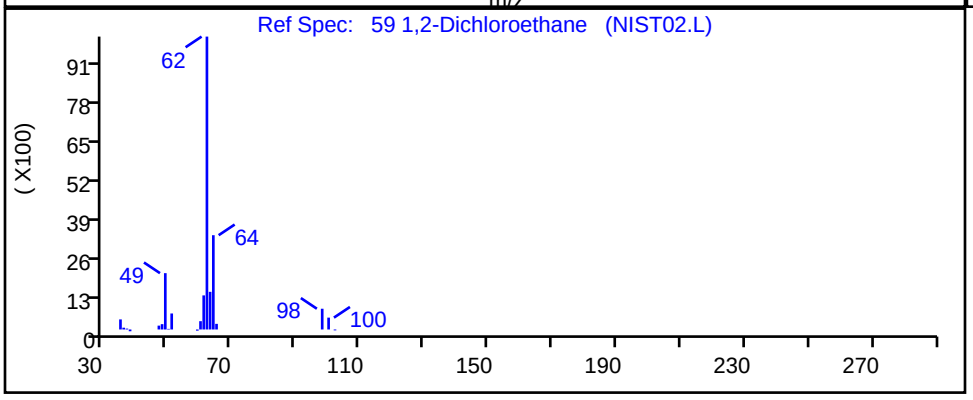
Processing Results











RT	Mass	Response	Amount
5.58	62.00	5497	1.523253
5.59	64.00	555	

Reviewer: delpolitov, 26-Mar-2018 12:25:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

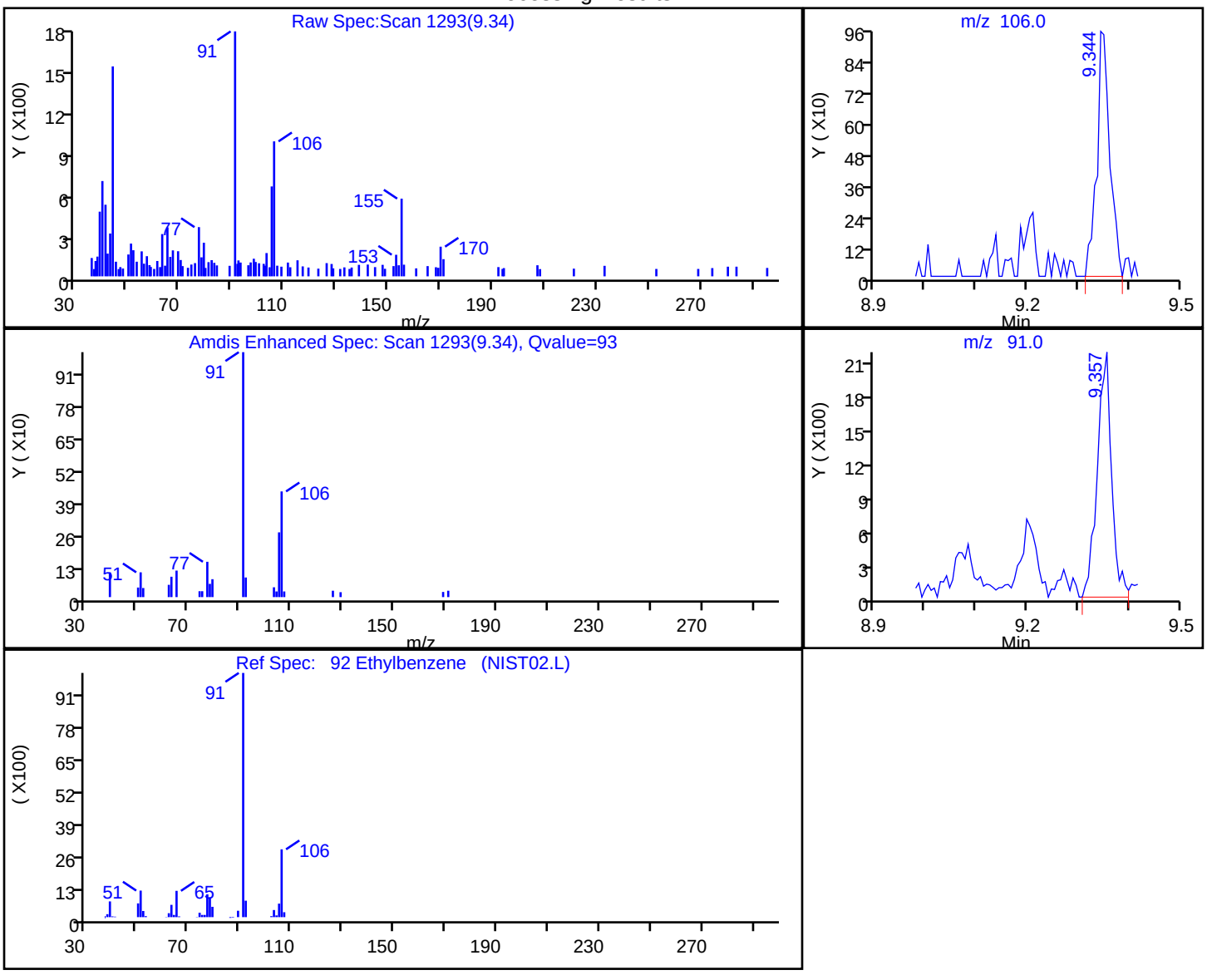
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D				
Injection Date:	25-Mar-2018 13:30:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-C-2-A	Lab Sample ID:	460-152331-2		
Client ID:	GC-MW-103(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.34	106.00	1697	0.511617
9.36	91.00	4138	

Reviewer: delpolitov, 26-Mar-2018 12:25:49

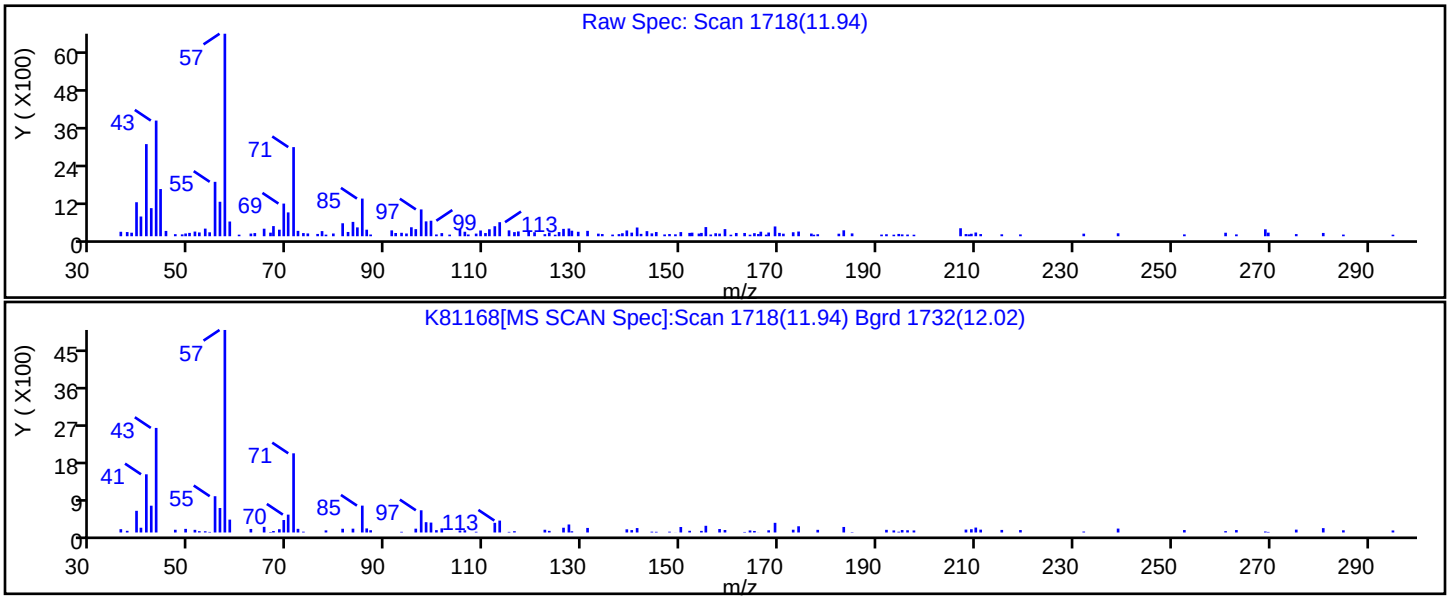
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Report Date: 26-Mar-2018 12:28:34 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D				
Injection Date:	25-Mar-2018 13:30:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-C-2-A	Lab Sample ID:	460-152331-2		
Client ID:	GC-MW-103(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70

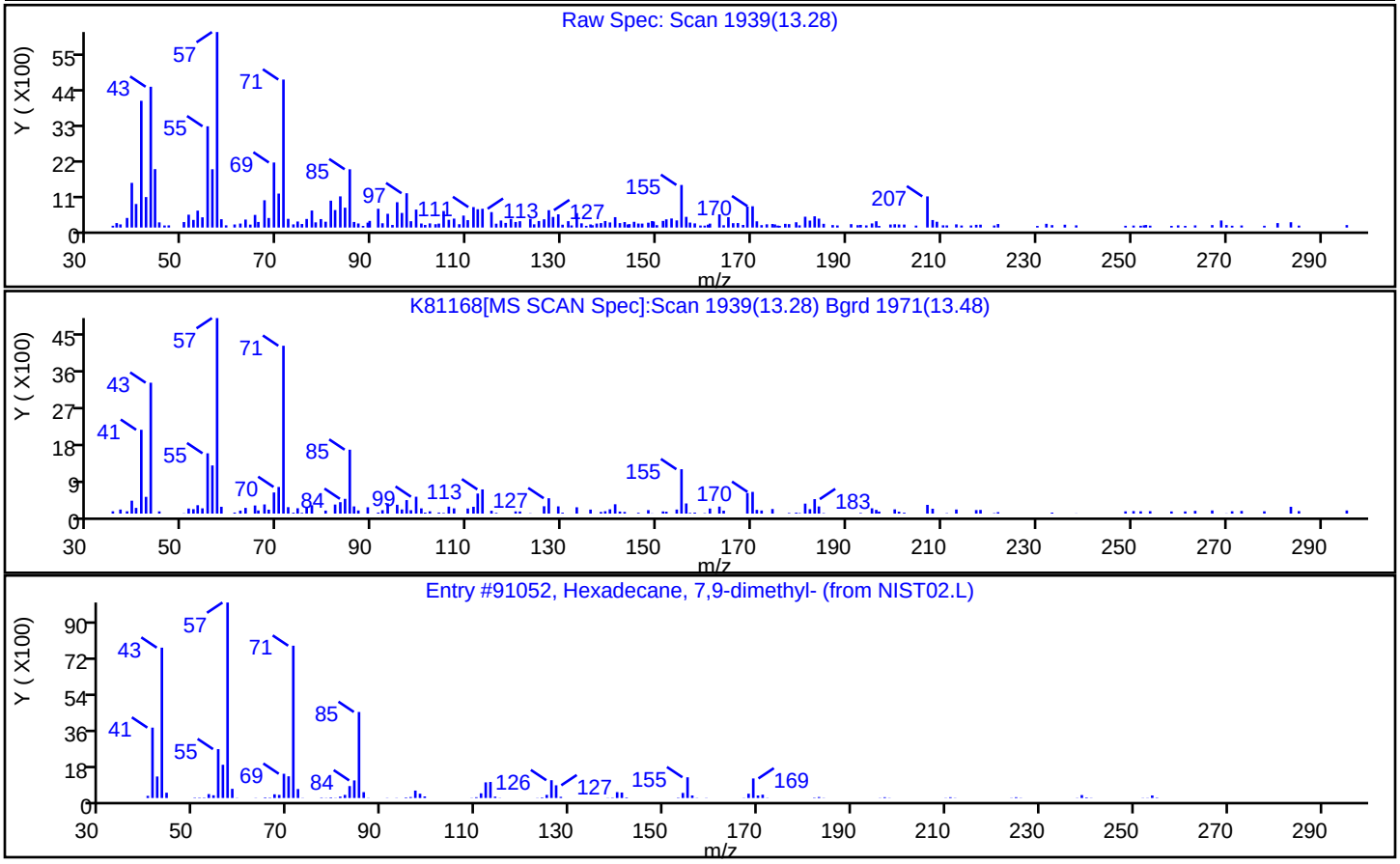


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81168.D

Injection Date:	25-Mar-2018 13:30:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-C-2-A	Lab Sample ID:	460-152331-2
Client ID:	GC-MW-103(SO)-15-17		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:		Detector	MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Unknown alkane						
Hexadecane, 7,9-dimethyl-	21164-95-4	NIST02.L	91052	C18H38	254	70



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-0.5-2.5 | Lab Sample ID: 460-152331-3

Matrix: Solid | Lab File ID: K81124.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:40

Sample wt/vol: 5.01(g) | Date Analyzed: 03/24/2018 08:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000095
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00044
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.021	U	0.021	0.0095
78-93-3	2-Butanone (MEK)	0.0027	J	0.0051	0.0011
591-78-6	2-Hexanone	0.0051	U	0.0051	0.00080
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068
67-64-1	Acetone	0.030		0.0051	0.0039
71-43-2	Benzene	0.0010	U	0.0010	0.00027
75-25-2	Bromoform	0.0010	U	0.0010	0.00044
74-83-9	Bromomethane	0.0010	U	0.0010	0.00049
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00019
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00020
75-00-3	Chloroethane	0.0010	U	0.0010	0.00054
67-66-3	Chloroform	0.0010	U	0.0010	0.00033
74-87-3	Chloromethane	0.0010	U	0.0010	0.00045
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00023
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-0.5-2.5 | Lab Sample ID: 460-152331-3

Matrix: Solid | Lab File ID: K81124.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:40

Sample wt/vol: 5.01(g) | Date Analyzed: 03/24/2018 08:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00019
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0051	U	0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.00030	J	0.0010	0.00018
95-47-6	o-Xylene	0.00017	J	0.0010	0.000098
100-42-5	Styrene	0.0010	U	0.0010	0.00013
127-18-4	Tetrachloroethene	0.00021	J	0.0010	0.00015
108-88-3	Toluene	0.0010	U	0.0010	0.00064
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00042
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00056

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		78-135
460-00-4	4-Bromofluorobenzene	99		67-126
1868-53-7	Dibromofluoromethane (Surr)	105		61-149
2037-26-5	Toluene-d8 (Surr)	103		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-0.5-2.5 Lab Sample ID: 460-152331-3

Matrix: Solid Lab File ID: K81124.D

Analysis Method: 8260C Date Collected: 03/20/2018 10:40

Sample wt/vol: 5.01(g) Date Analyzed: 03/24/2018 08:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.1 Level: (low/med) Low

Analysis Batch No.: 505749 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D
Lims ID: 460-152331-B-3-A
Client ID: GC-MW-104(SO)-0.5-2.5
Sample Type: Client
Inject. Date: 24-Mar-2018 08:36:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152331-B-3-A
Misc. Info.: 460-0069230-008
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:07:53 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:07:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.004	2.998	0.006	84	40394	29.5	
* 25 TBA-d9 (IS)	65	3.352	3.352	0.000	0	335946	1000.0	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	289064	250.0	
42 2-Butanone (MEK)	72	4.516	4.504	0.012	96	1025	2.58	M
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	95	136287	52.5	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.308	5.303	0.005	0	167978	55.6	
* 61 Fluorobenzene	96	5.583	5.577	0.006	97	384602	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	19160	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	97	515581	51.7	
83 Tetrachloroethene	166	7.967	7.967	-0.001	57	564	0.2004	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	90	312066	50.0	
93 m-Xylene & p-Xylene	106	9.344	9.351	-0.007	0	1412	0.2889	
95 o-Xylene	106	9.820	9.814	0.006	87	819	0.1619	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	83	142608	49.7	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	98	174499	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

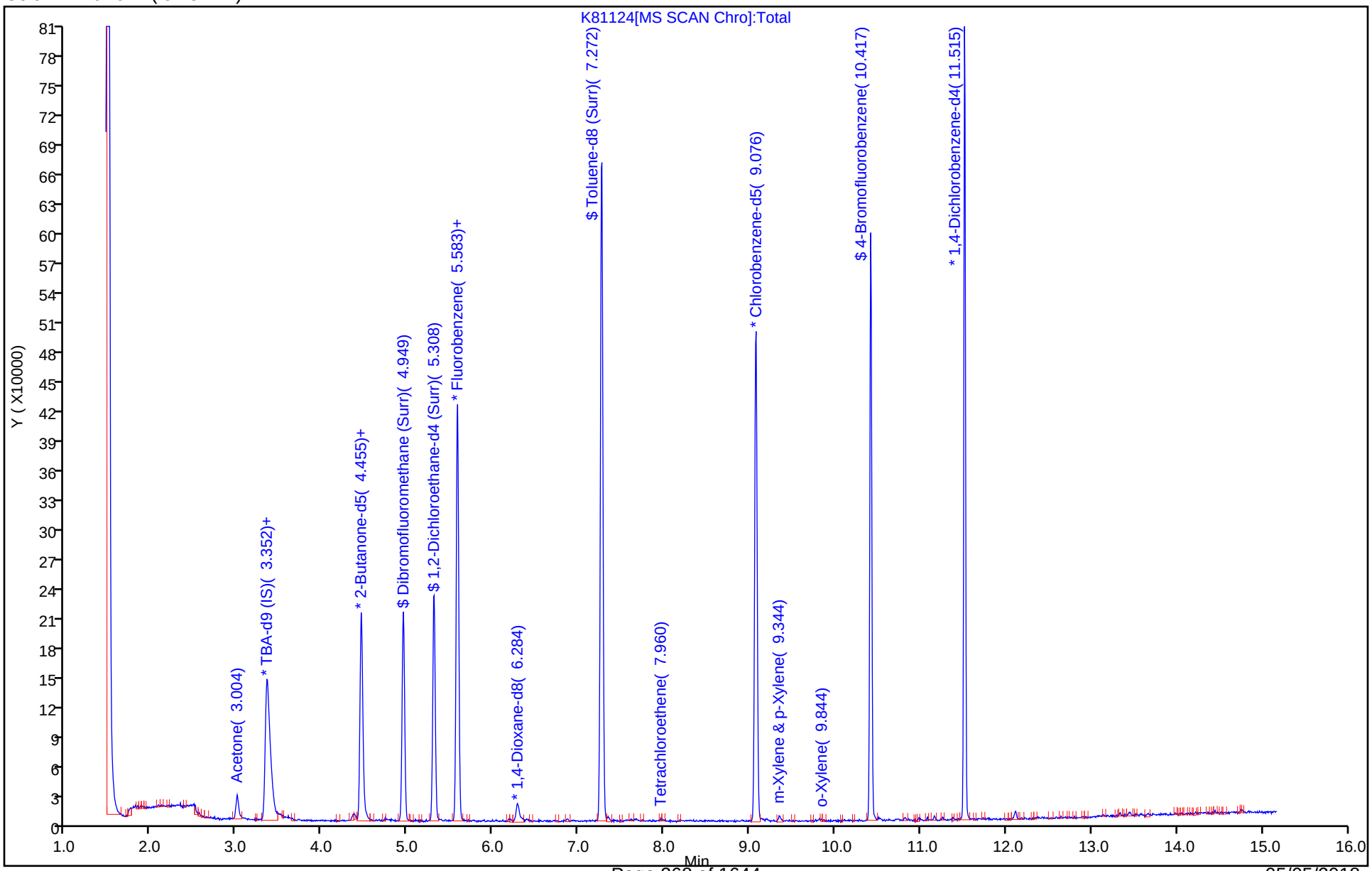
Report Date: 26-Mar-2018 13:07:54 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D

Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3	Worklist Smp#:	8
Client ID:	GC-MW-104(SO)-0.5-2.5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

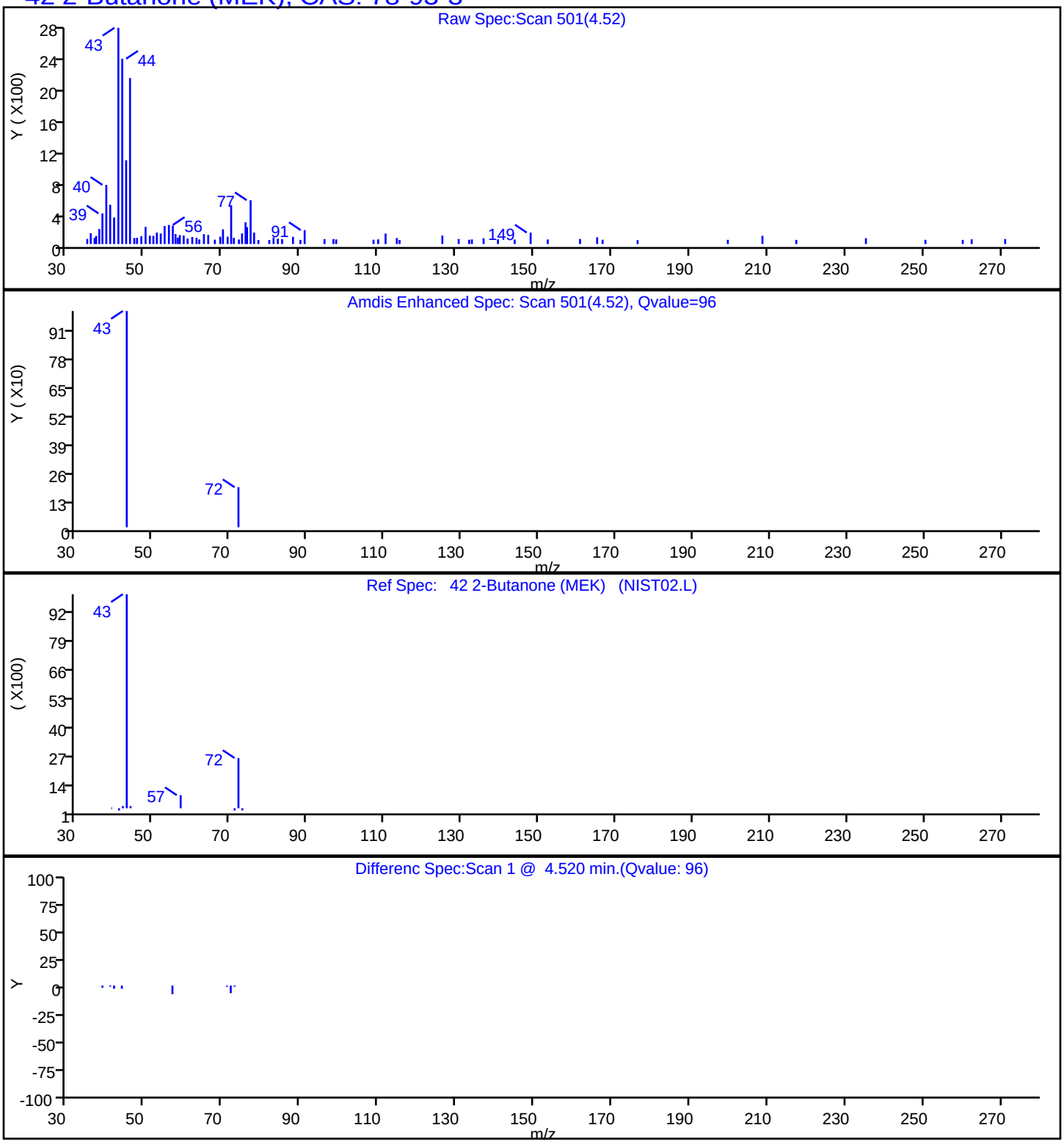
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D				
Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3		
Client ID:	GC-MW-104(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3



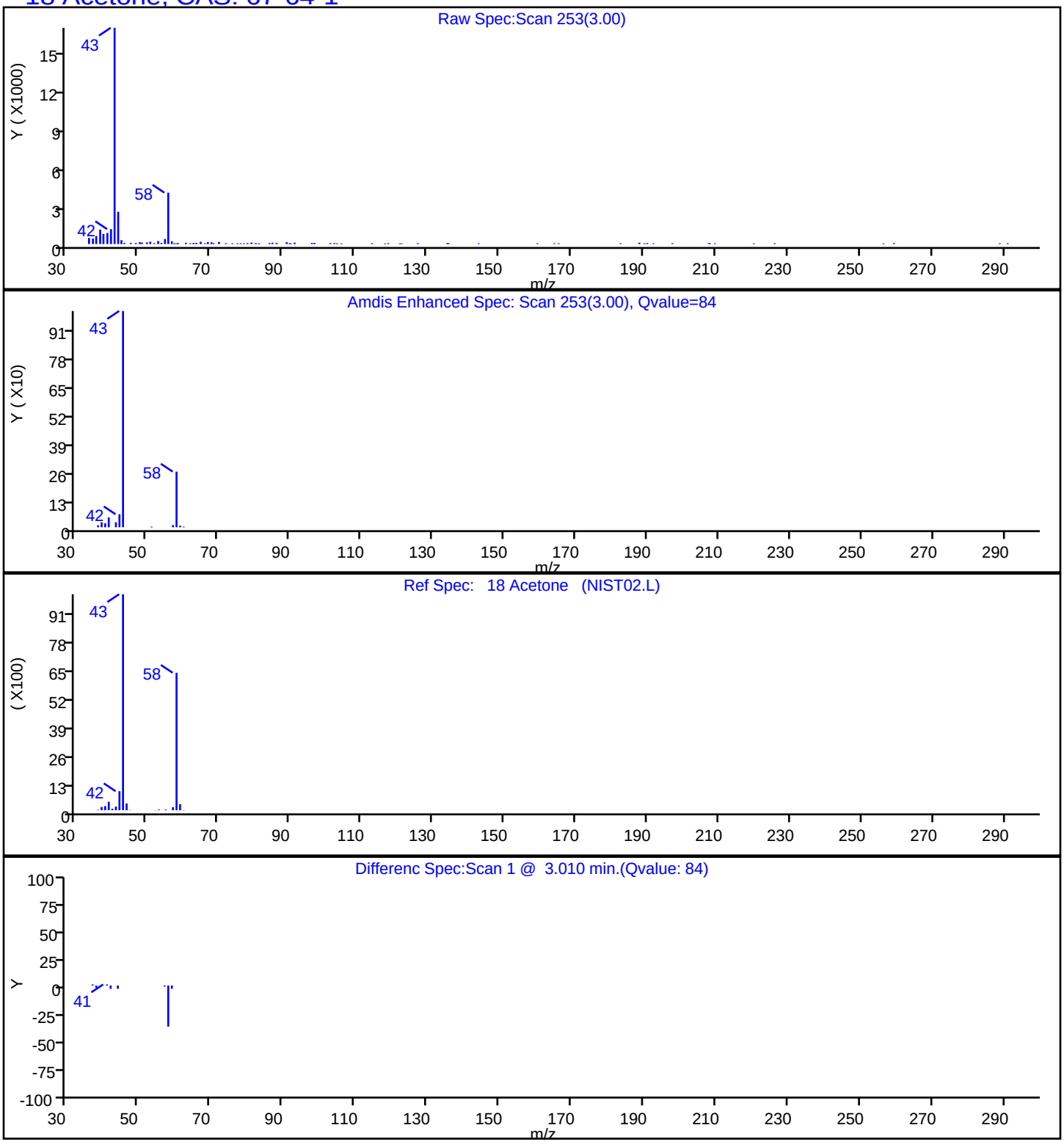
Report Date: 26-Mar-2018 13:07:54 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D

Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3
Client ID:	GC-MW-104(SO)-0.5-2.5		
Operator ID:		ALS Bottle#:	7 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

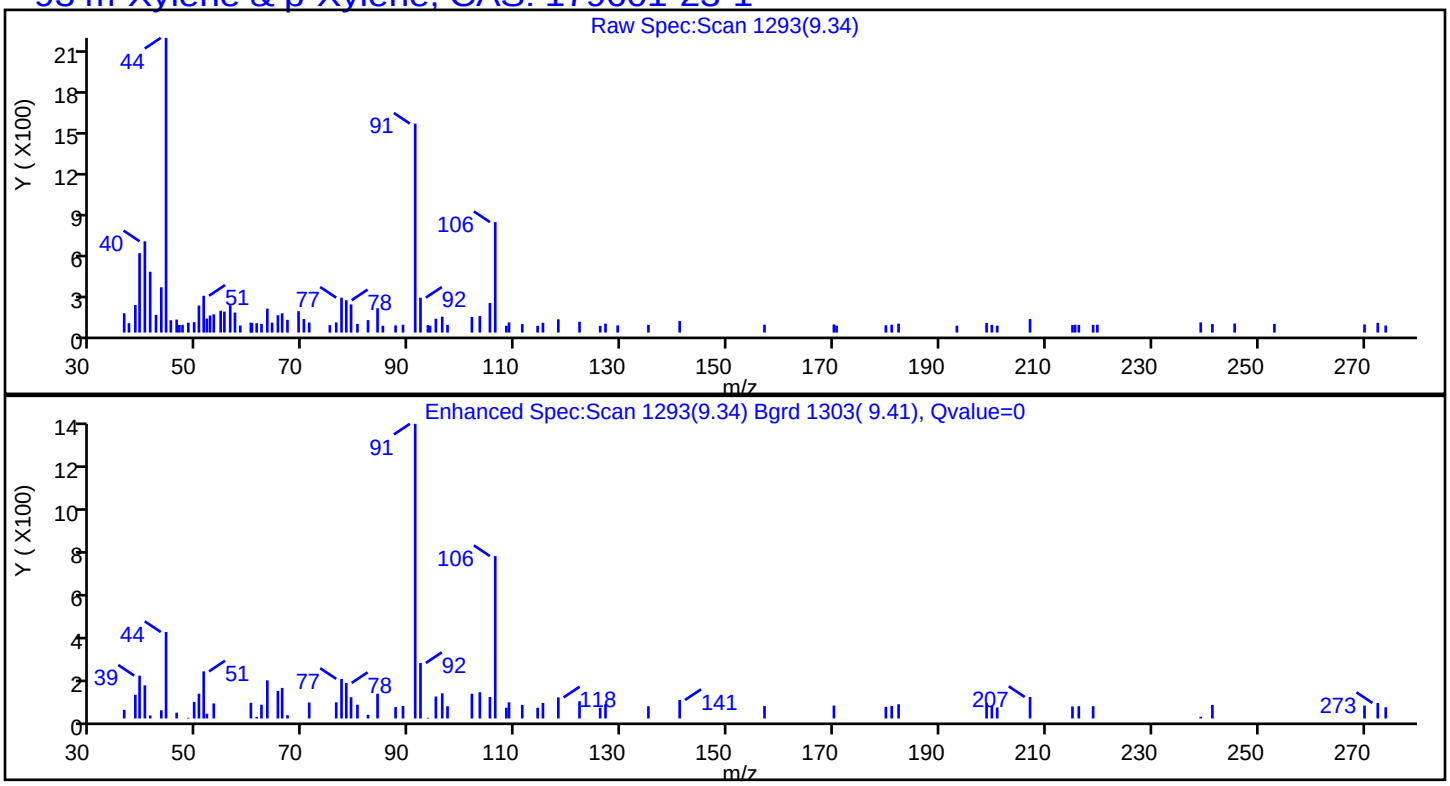


Report Date: 26-Mar-2018 13:07:54 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D				
Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3		
Client ID:	GC-MW-104(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1



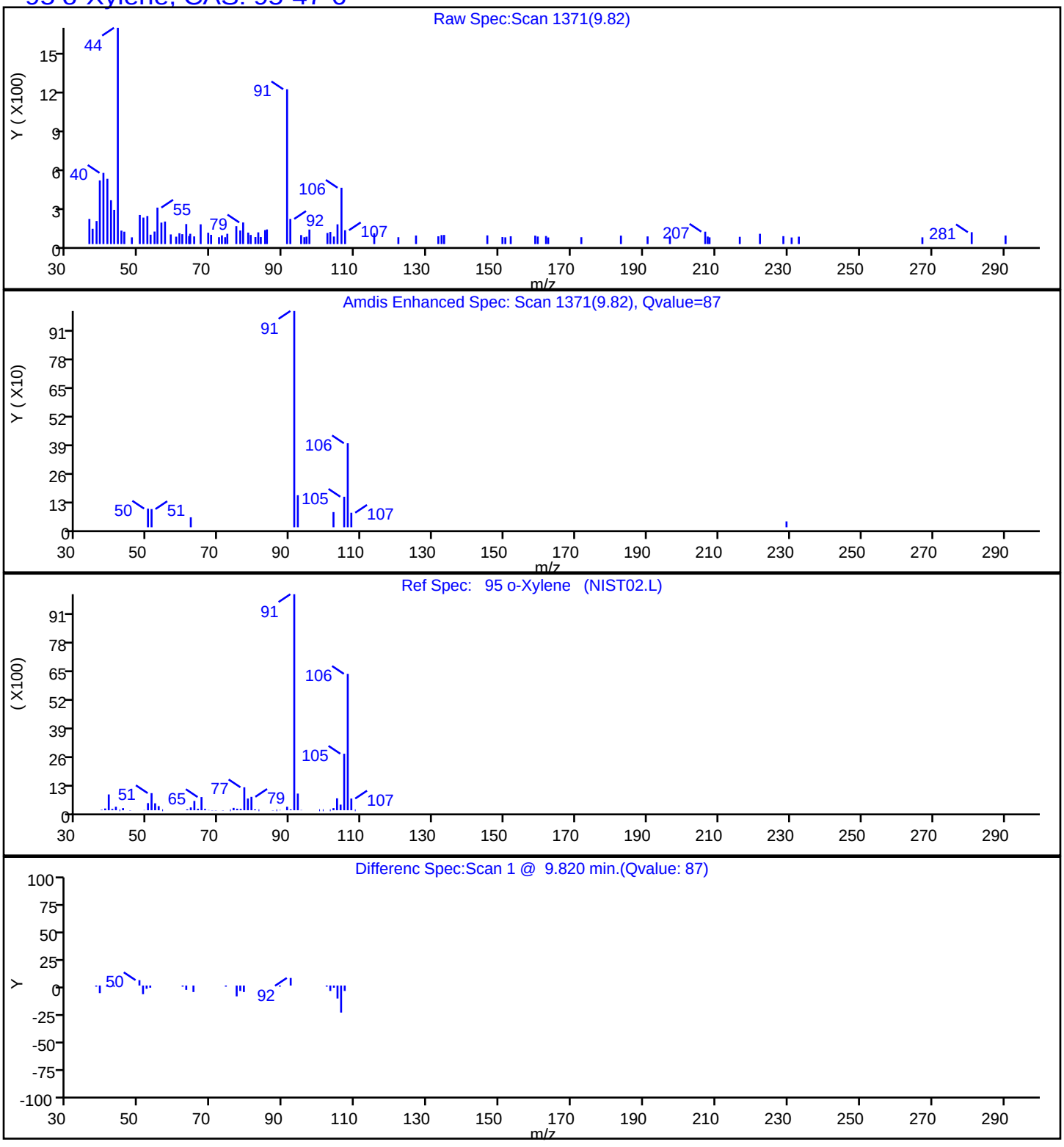
Report Date: 26-Mar-2018 13:07:54 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D

Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3		
Client ID:	GC-MW-104(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6

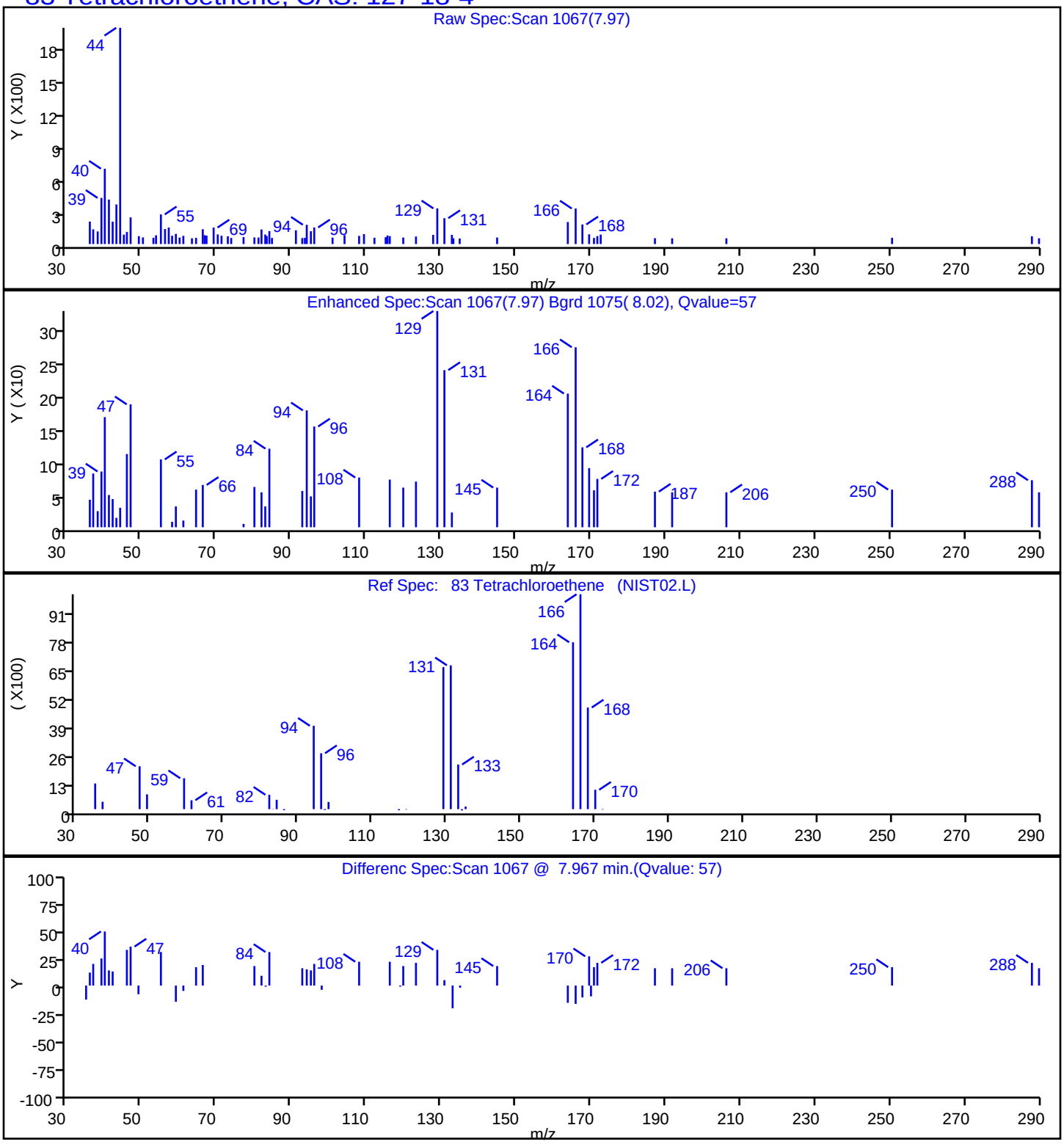


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D

Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3
Client ID:	GC-MW-104(SO)-0.5-2.5		
Operator ID:		ALS Bottle#:	7 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



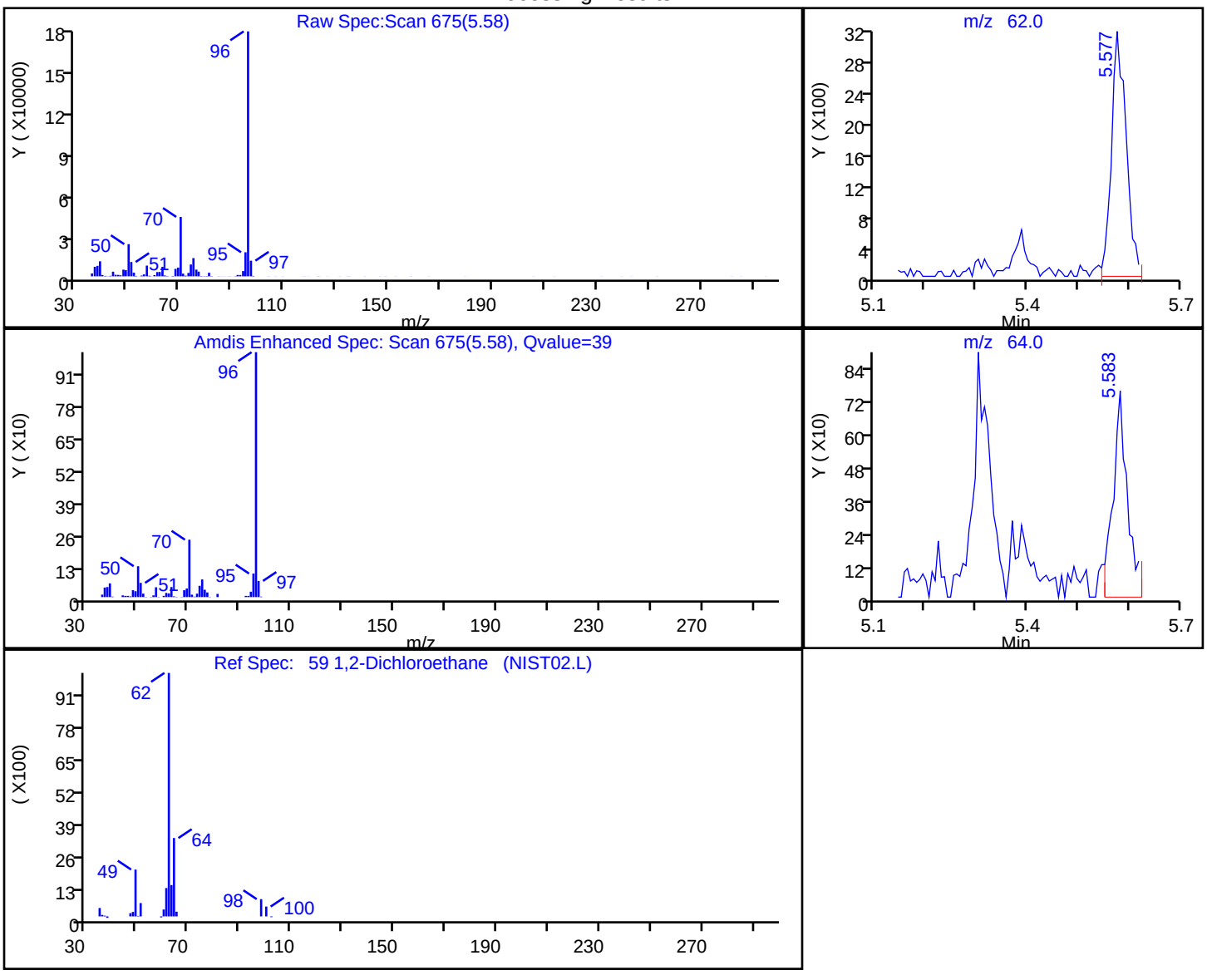
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D				
Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3		
Client ID:	GC-MW-104(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.58	62.00	6265	1.447730
5.58	64.00	1467	

Reviewer: delpolitov, 26-Mar-2018 13:07:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

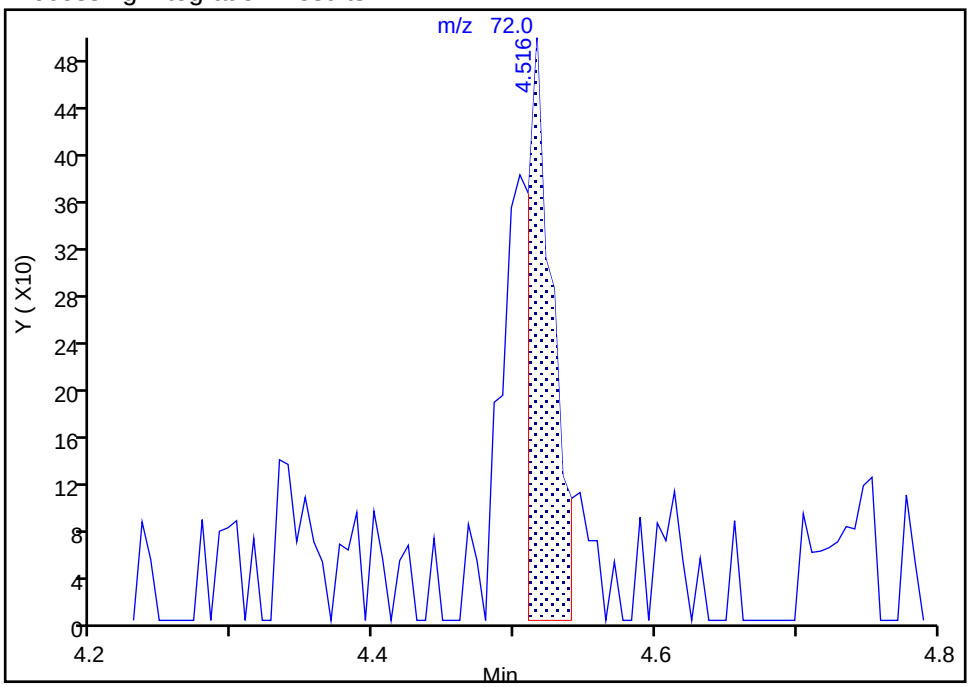
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D				
Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3		
Client ID:	GC-MW-104(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

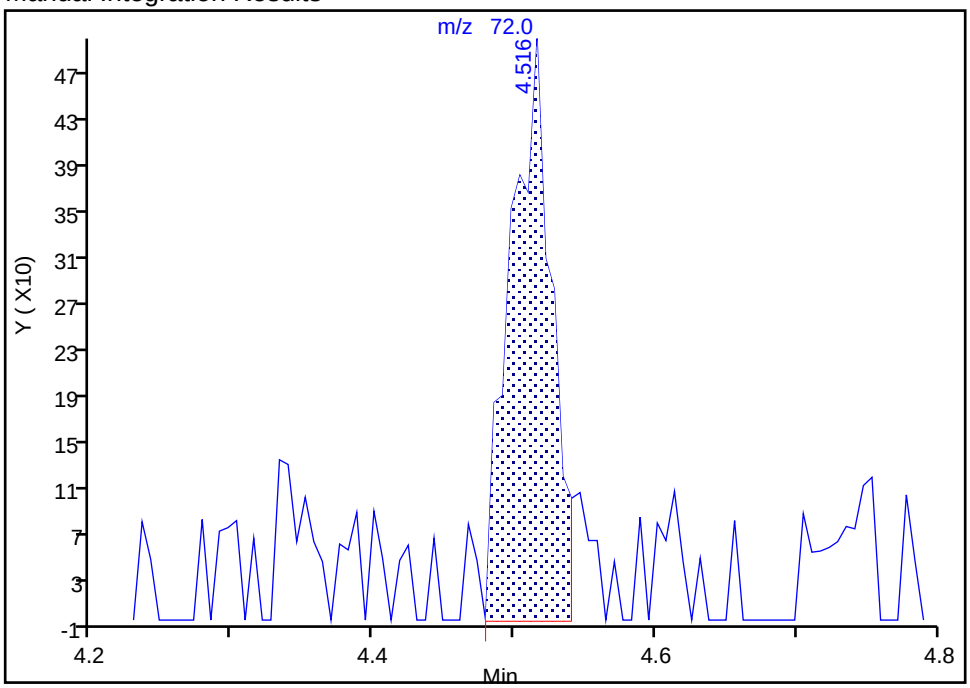
Processing Integration Results

RT: 4.52
Area: 615
Amount: 1.550895
Amount Units: ug/l



Manual Integration Results

RT: 4.52
Area: 1025
Amount: 2.584825
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 13:07:08

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

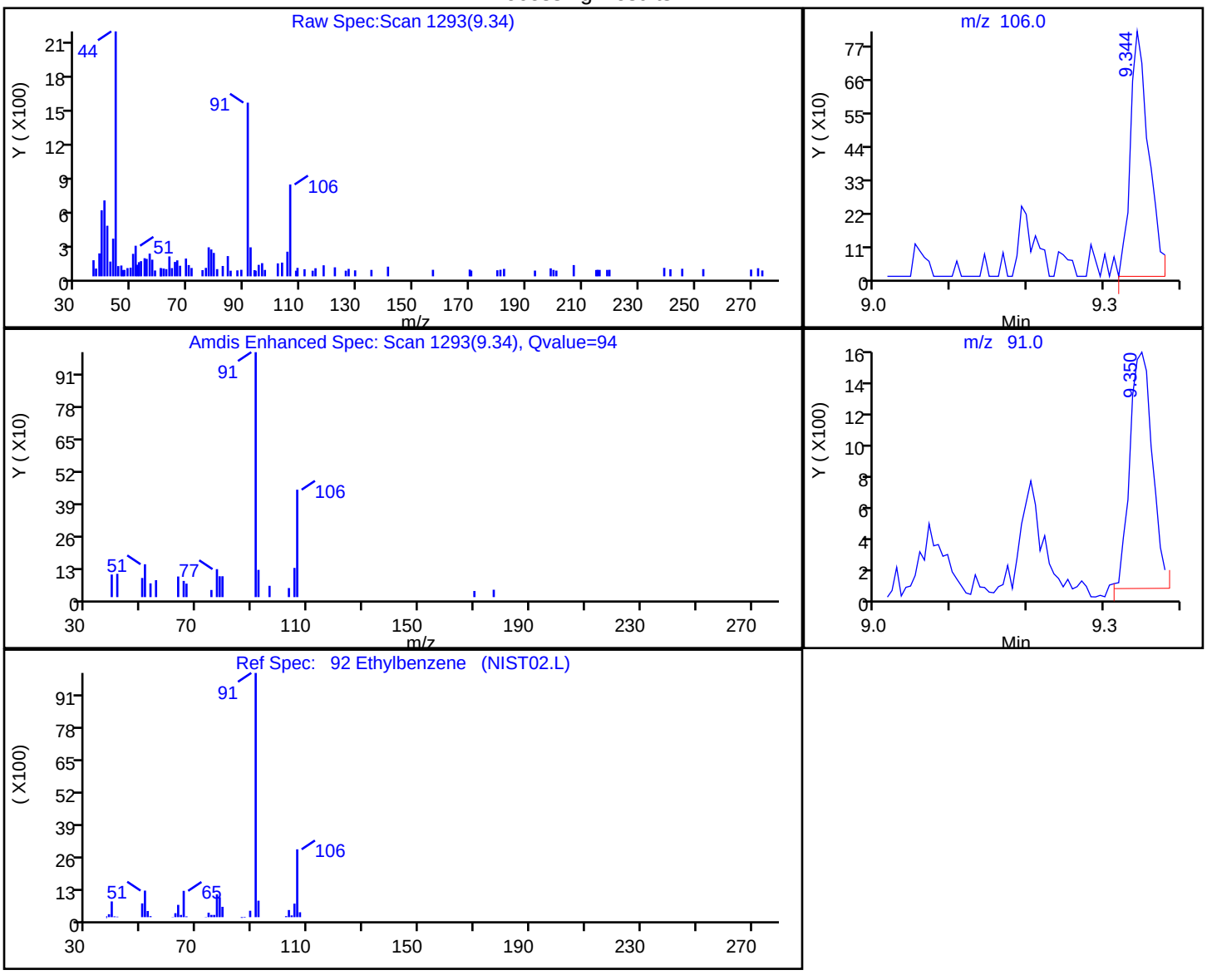
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D				
Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3		
Client ID:	GC-MW-104(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.34	106.00	1358	0.346488
9.35	91.00	3018	

Reviewer: delpolitov, 26-Mar-2018 13:07:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

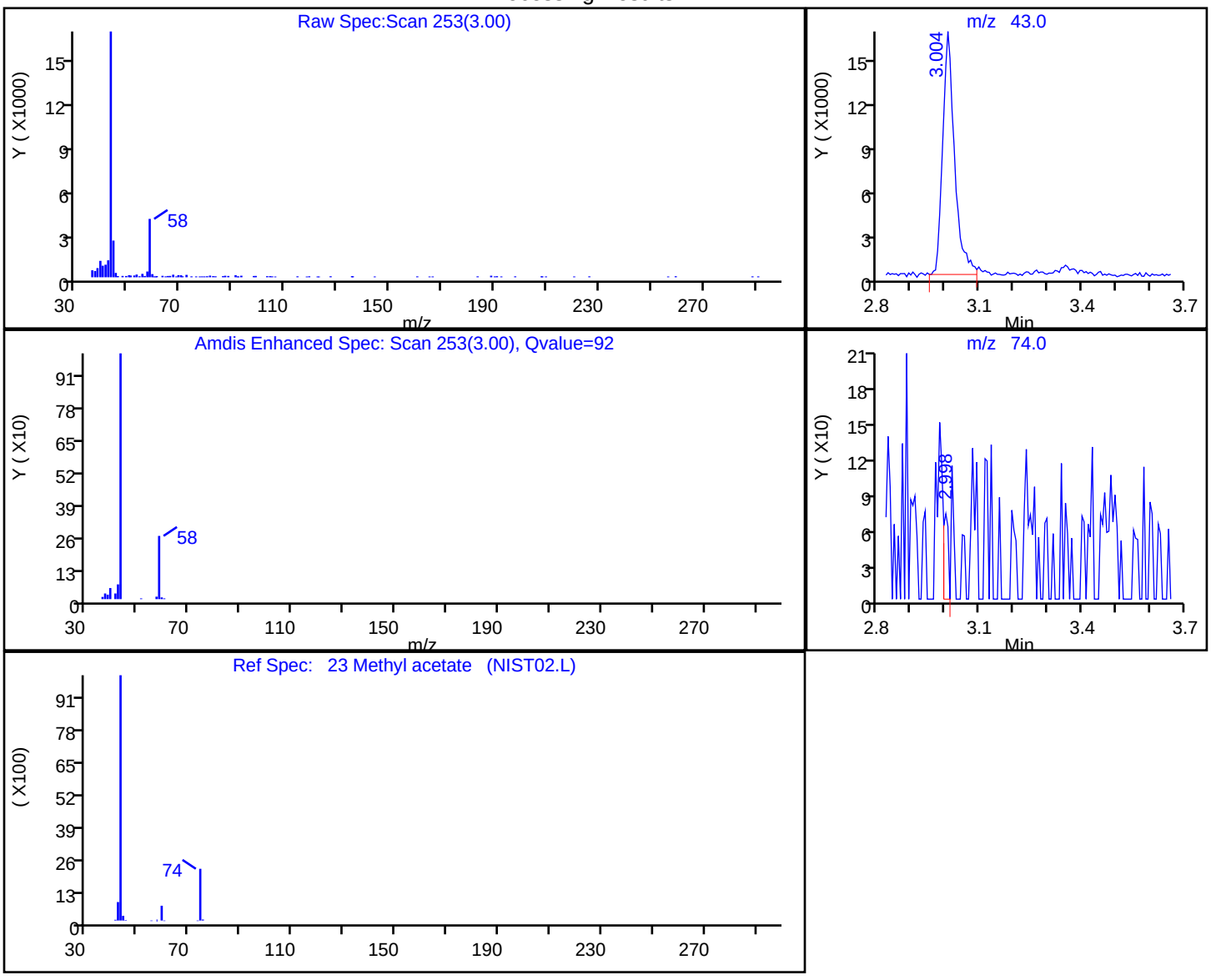
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81124.D				
Injection Date:	24-Mar-2018 08:36:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-3-A	Lab Sample ID:	460-152331-3		
Client ID:	GC-MW-104(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

23 Methyl acetate, CAS: 79-20-9

Processing Results



RT	Mass	Response	Amount
3.00	43.00	40394	14.617703
3.00	74.00	72	

Reviewer: delpolitov, 26-Mar-2018 13:07:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-7-9 | Lab Sample ID: 460-152331-4

Matrix: Solid | Lab File ID: K81125.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:45

Sample wt/vol: 5.88(g) | Date Analyzed: 03/24/2018 09:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.9 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00091	U	0.00091	0.00021
79-34-5	1,1,2,2-Tetrachloroethane	0.00091	U	0.00091	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00091	U	0.00091	0.00028
79-00-5	1,1,2-Trichloroethane	0.00091	U	0.00091	0.00016
75-34-3	1,1-Dichloroethane	0.00091	U	0.00091	0.00019
75-35-4	1,1-Dichloroethene	0.00091	U	0.00091	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00091	U	0.00091	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00091	U	0.00091	0.000084
96-12-8	1,2-Dibromo-3-Chloropropane	0.00091	U	0.00091	0.00042
95-50-1	1,2-Dichlorobenzene	0.00091	U	0.00091	0.00013
107-06-2	1,2-Dichloroethane	0.00091	U	0.00091	0.00027
78-87-5	1,2-Dichloropropane	0.00091	U	0.00091	0.00039
541-73-1	1,3-Dichlorobenzene	0.00091	U	0.00091	0.00015
106-46-7	1,4-Dichlorobenzene	0.00091	U	0.00091	0.000091
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0084
78-93-3	2-Butanone (MEK)	0.0028	J	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00071
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.031		0.0046	0.0035
71-43-2	Benzene	0.00091	U	0.00091	0.00024
75-25-2	Bromoform	0.00091	U	0.00091	0.00039
74-83-9	Bromomethane	0.00091	U	0.00091	0.00043
75-15-0	Carbon disulfide	0.00091	U	0.00091	0.00024
56-23-5	Carbon tetrachloride	0.00091	U	0.00091	0.00017
108-90-7	Chlorobenzene	0.00091	U	0.00091	0.00016
74-97-5	Chlorobromomethane	0.00091	U	0.00091	0.00026
124-48-1	Chlorodibromomethane	0.00091	U	0.00091	0.00018
75-00-3	Chloroethane	0.00091	U	0.00091	0.00048
67-66-3	Chloroform	0.00091	U	0.00091	0.00029
74-87-3	Chloromethane	0.00091	U	0.00091	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00091	U	0.00091	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00091	U	0.00091	0.00025
110-82-7	Cyclohexane	0.00091	U	0.00091	0.00020
75-27-4	Dichlorobromomethane	0.00091	U	0.00091	0.00023
75-71-8	Dichlorodifluoromethane	0.00091	U	0.00091	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-7-9 | Lab Sample ID: 460-152331-4

Matrix: Solid | Lab File ID: K81125.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:45

Sample wt/vol: 5.88(g) | Date Analyzed: 03/24/2018 09:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.9 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00091	U	0.00091	0.00018
106-93-4	Ethylene Dibromide	0.00091	U	0.00091	0.00016
98-82-8	Isopropylbenzene	0.00091	U	0.00091	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0039
1634-04-4	Methyl tert-butyl ether	0.00091	U	0.00091	0.00011
108-87-2	Methylcyclohexane	0.00091	U	0.00091	0.00015
75-09-2	Methylene Chloride	0.00023	J B	0.00091	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00041	J	0.00091	0.00016
95-47-6	o-Xylene	0.00021	J	0.00091	0.000087
100-42-5	Styrene	0.00091	U	0.00091	0.00011
127-18-4	Tetrachloroethene	0.00091	U	0.00091	0.00013
108-88-3	Toluene	0.00091	U	0.00091	0.00057
156-60-5	trans-1,2-Dichloroethene	0.00091	U	0.00091	0.00022
10061-02-6	trans-1,3-Dichloropropene	0.00091	U	0.00091	0.00024
79-01-6	Trichloroethene	0.00091	U	0.00091	0.00013
75-69-4	Trichlorofluoromethane	0.00091	U	0.00091	0.00037
75-01-4	Vinyl chloride	0.00091	U	0.00091	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	104		61-149
2037-26-5	Toluene-d8 (Surr)	104		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-7-9 Lab Sample ID: 460-152331-4

Matrix: Solid Lab File ID: K81125.D

Analysis Method: 8260C Date Collected: 03/20/2018 10:45

Sample wt/vol: 5.88(g) Date Analyzed: 03/24/2018 09:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.9 Level: (low/med) Low

Analysis Batch No.: 505749 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D
Lims ID: 460-152331-B-4-A
Client ID: GC-MW-104(SO)-7-9
Sample Type: Client
Inject. Date: 24-Mar-2018 09:01:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152331-B-4-A
Misc. Info.: 460-0069230-009
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:08:40 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:08:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	2.998	2.998	0.000	85	48653	33.8	
* 25 TBA-d9 (IS)	65	3.345	3.352	-0.007	0	381864	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	61	1773	0.2512	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	303691	250.0	
42 2-Butanone (MEK)	72	4.510	4.504	0.006	97	1256	3.01	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	95	131367	52.0	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.303	-0.001	0	164768	56.0	
* 61 Fluorobenzene	96	5.577	5.577	0.000	97	374393	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	23743	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.265	7.266	-0.001	97	509080	51.9	
* 89 Chlorobenzene-d5	117	9.070	9.076	-0.006	90	306870	50.0	
93 m-Xylene & p-Xylene	106	9.344	9.351	-0.007	0	2142	0.4456	
95 o-Xylene	106	9.826	9.814	0.012	94	1121	0.2253	M
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	84	143522	50.9	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	98	166910	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

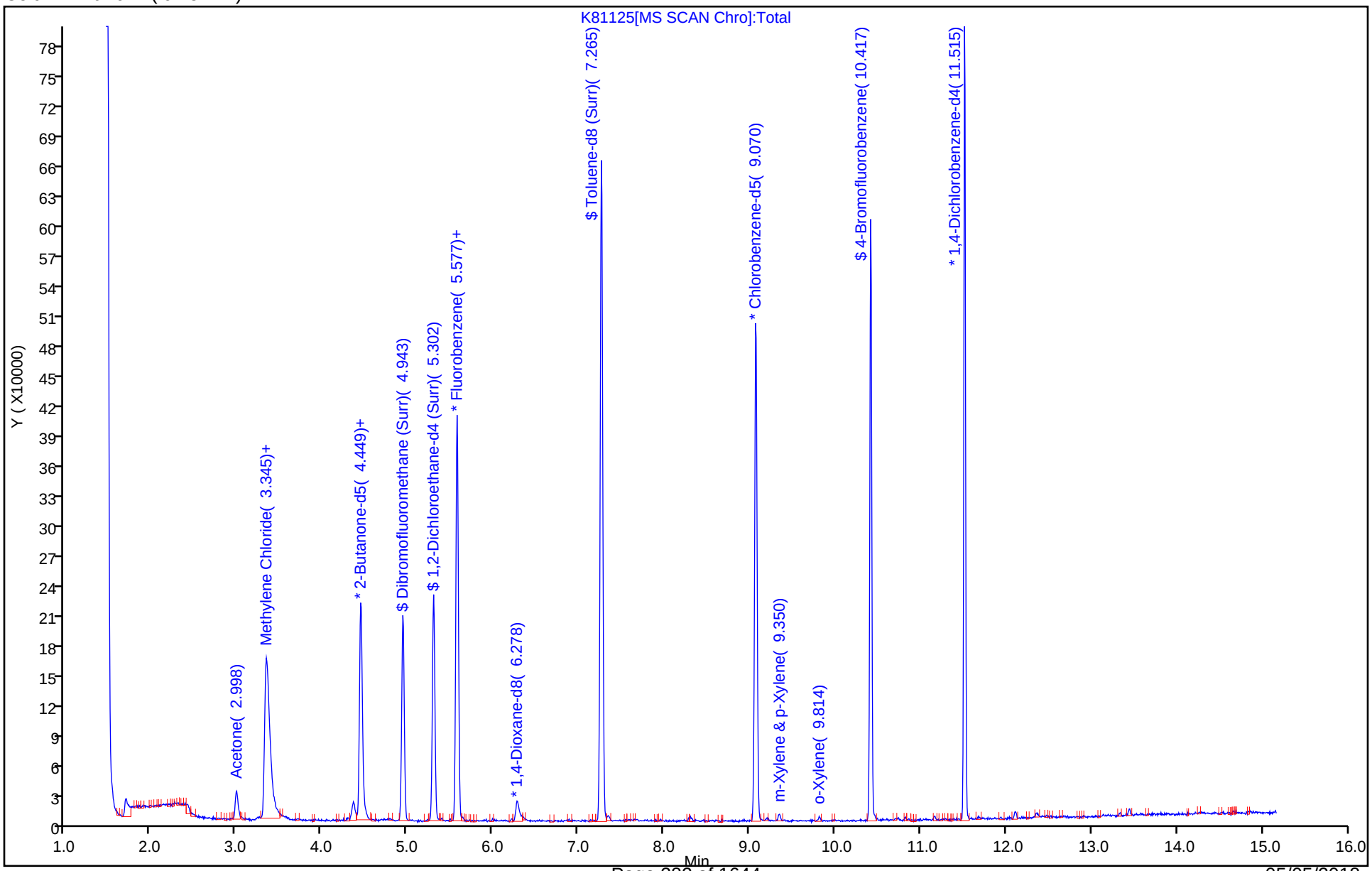
Report Date: 26-Mar-2018 13:08:41 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D

Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4	Worklist Smp#:	9
Client ID:	GC-MW-104(SO)-7-9				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

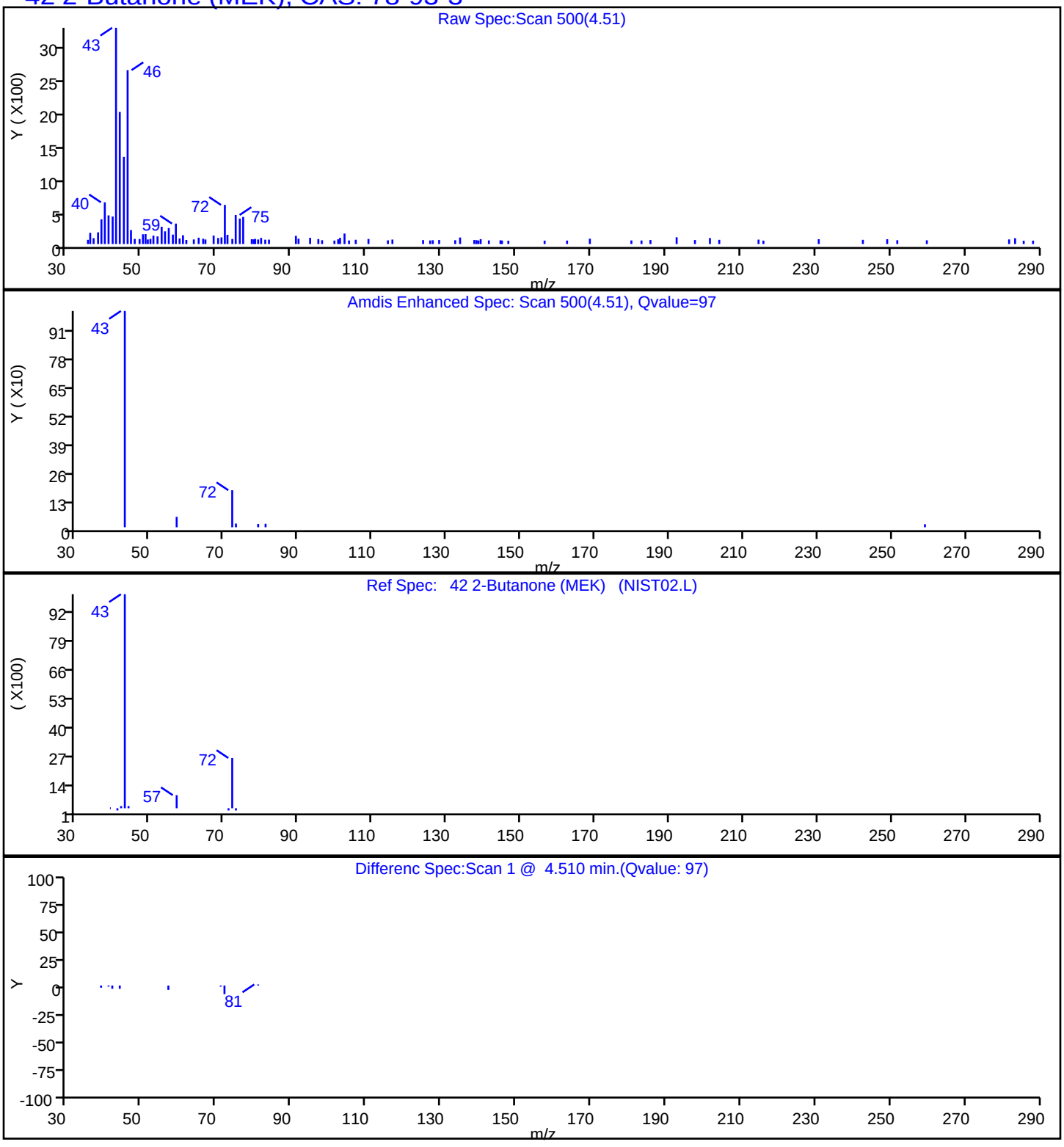
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D				
Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4		
Client ID:	GC-MW-104(SO)-7-9				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3



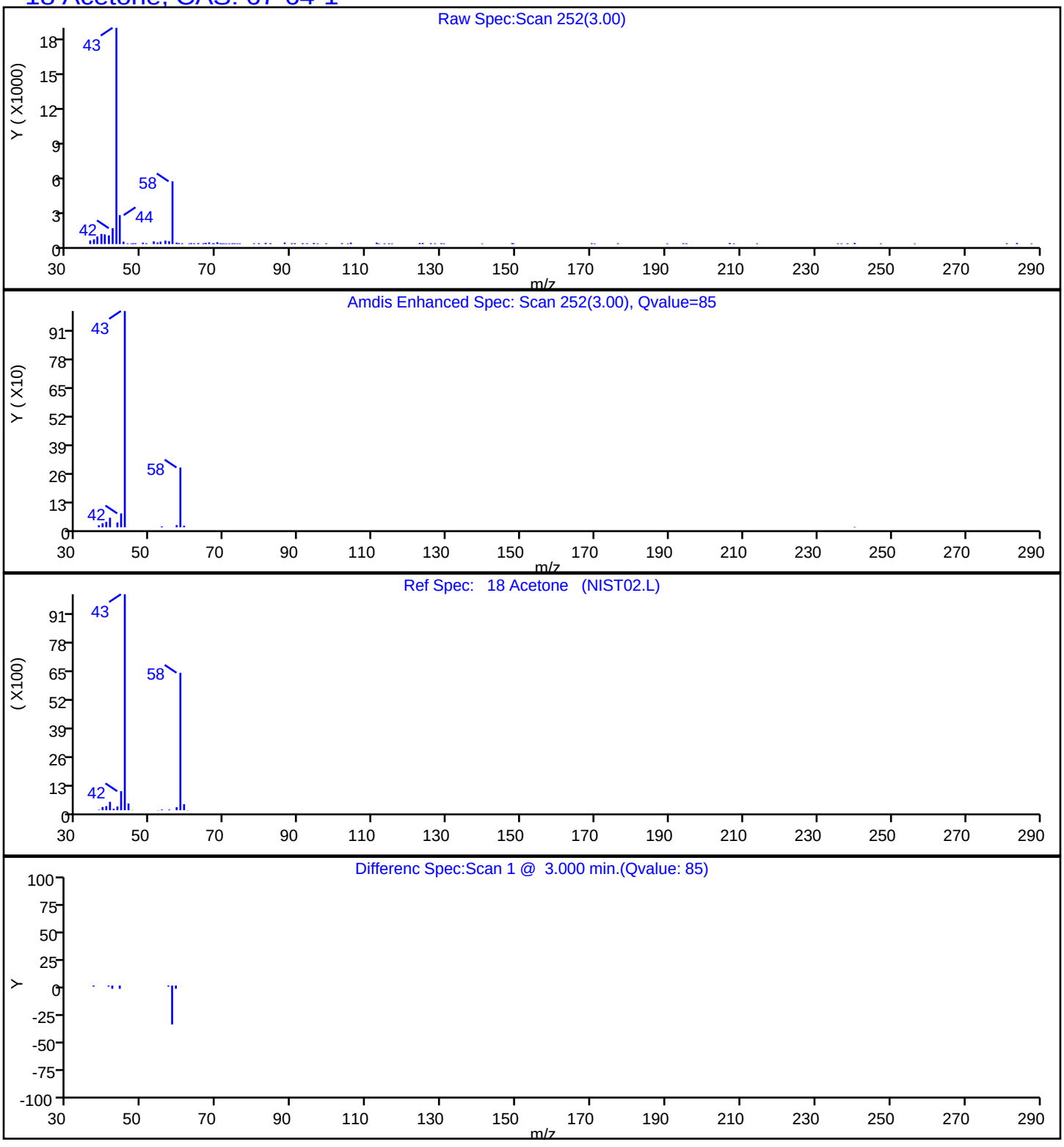
Report Date: 26-Mar-2018 13:08:41 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D

Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4
Client ID:	GC-MW-104(SO)-7-9		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

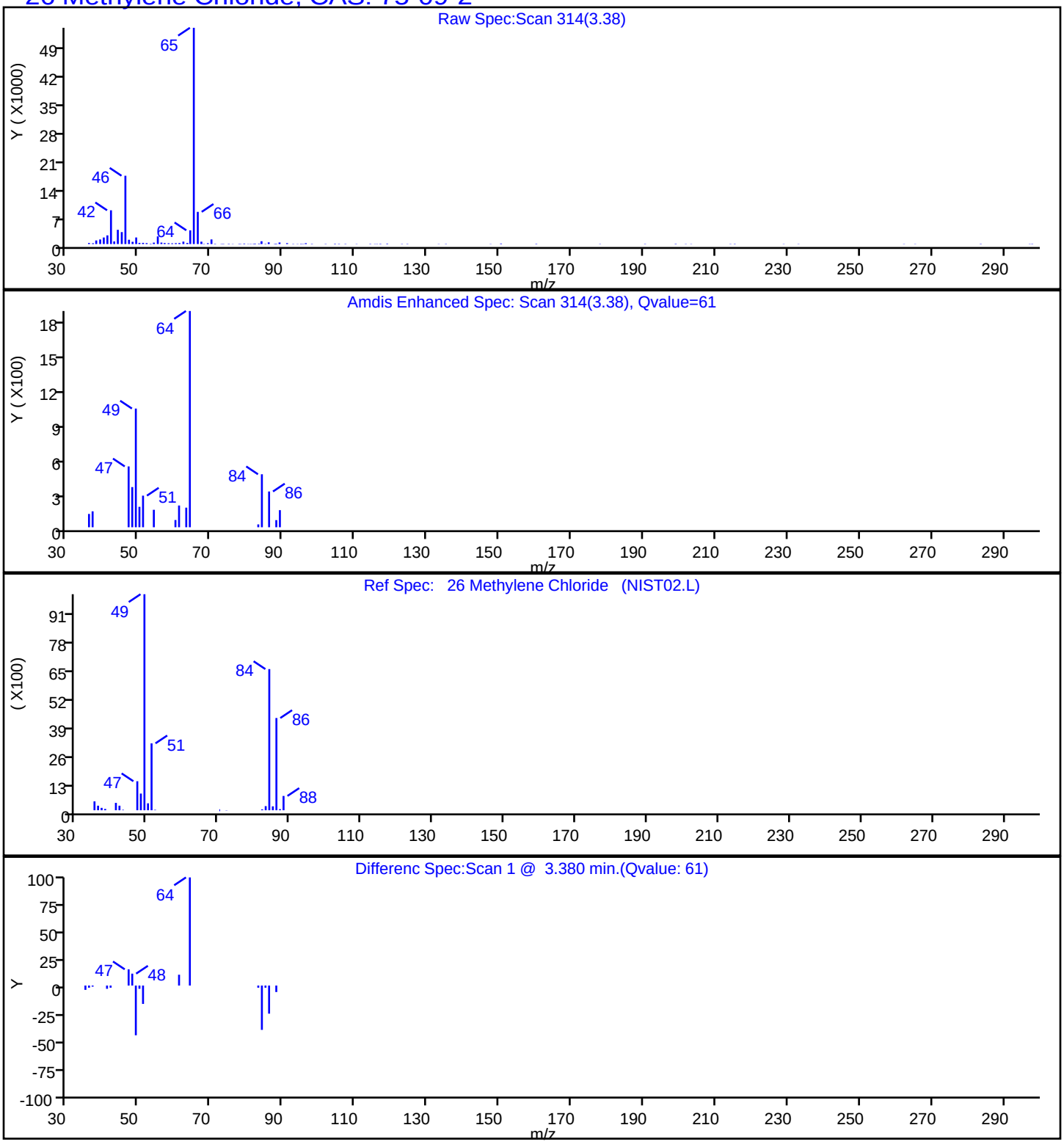


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D

Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4		
Client ID:	GC-MW-104(SO)-7-9				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

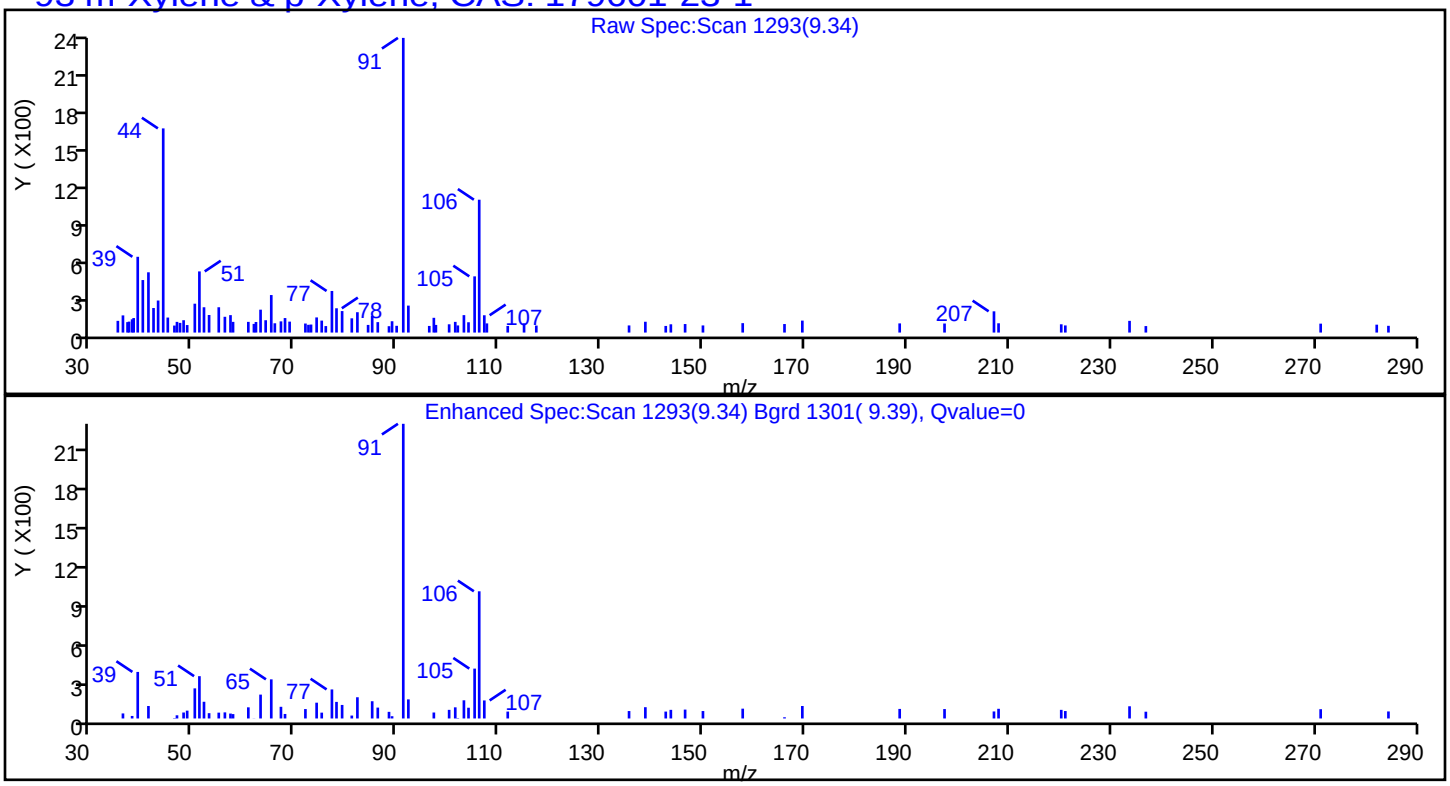
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D				
Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4		
Client ID:	GC-MW-104(SO)-7-9				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

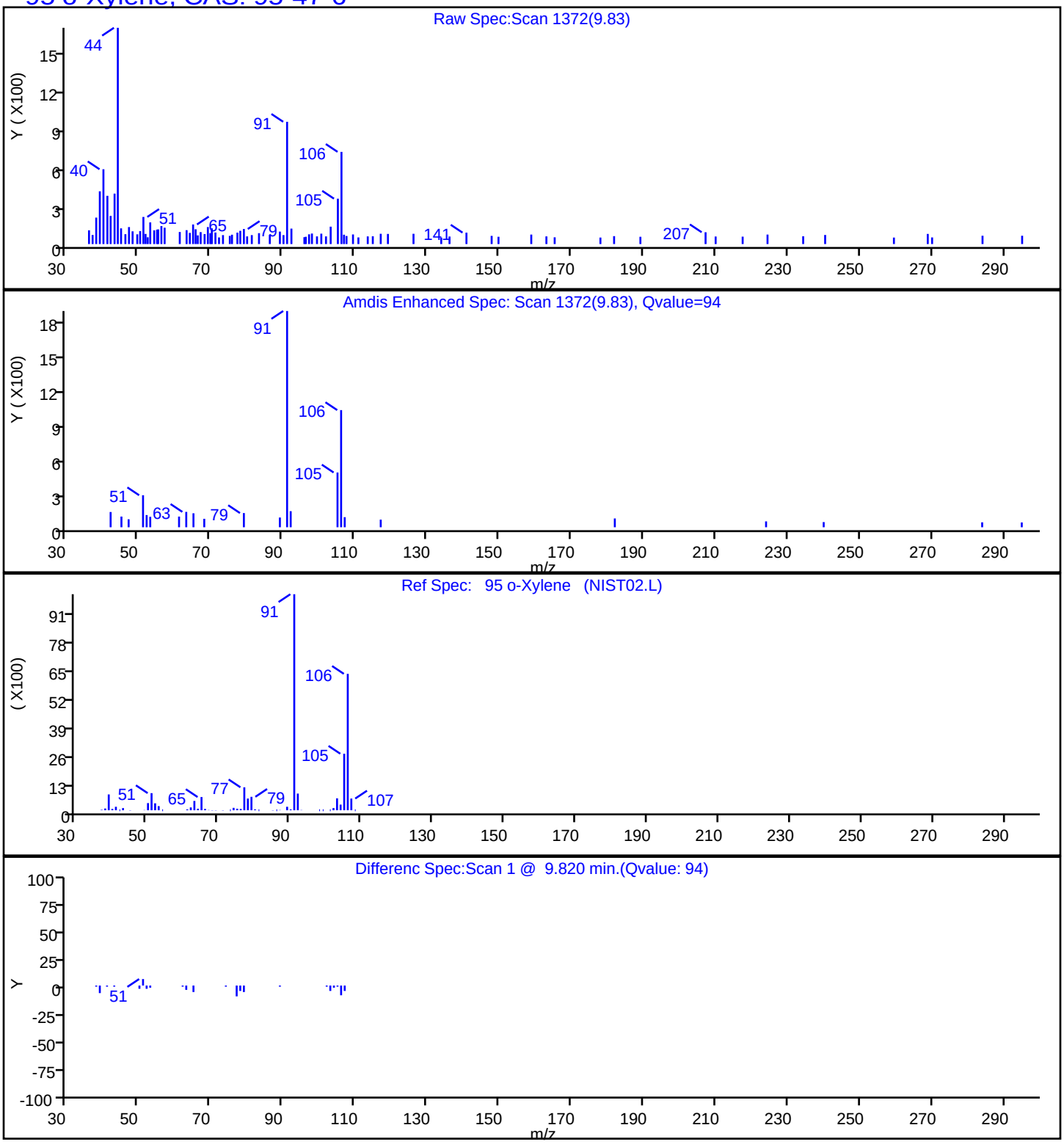
93 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D				
Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4		
Client ID:	GC-MW-104(SO)-7-9				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6



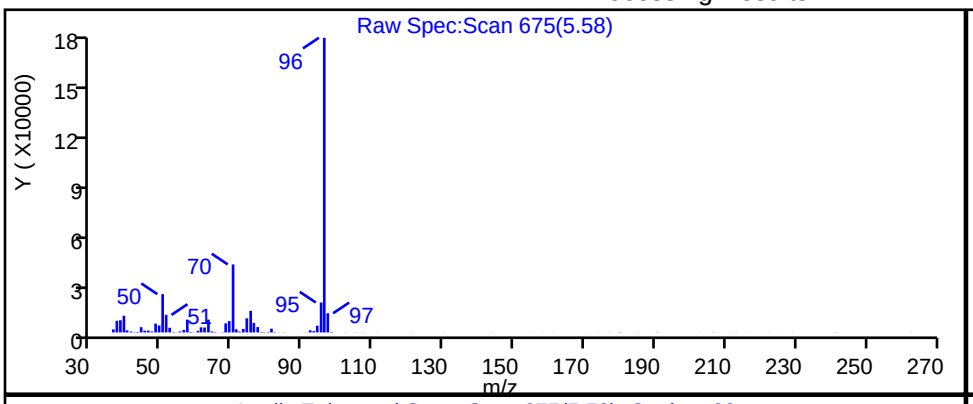
User Disabled Compound Report

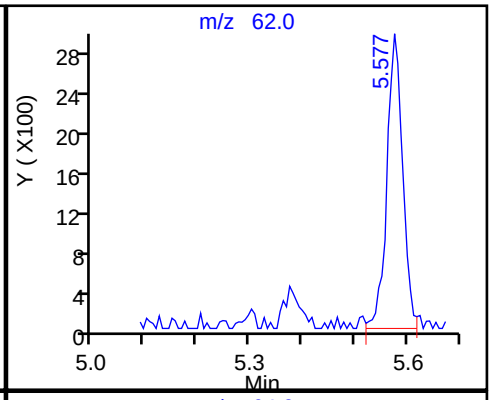
TestAmerica Edison

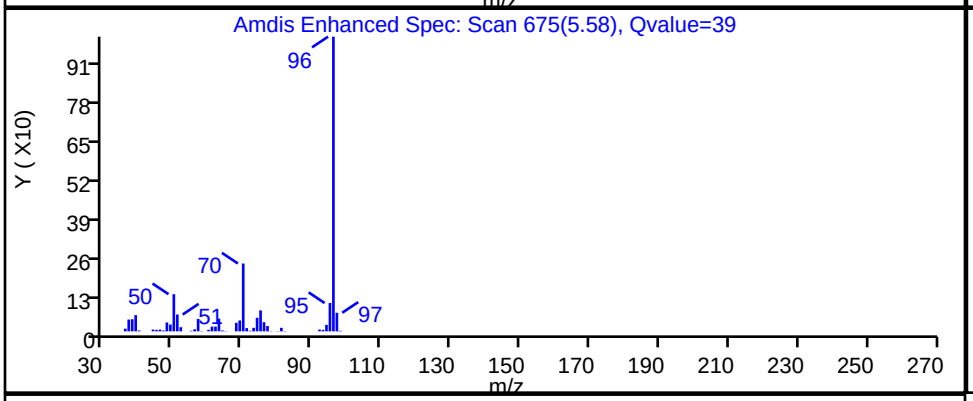
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D				
Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4		
Client ID:	GC-MW-104(SO)-7-9				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

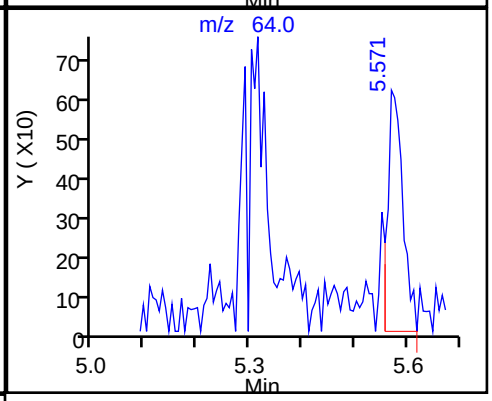
59 1,2-Dichloroethane, CAS: 107-06-2

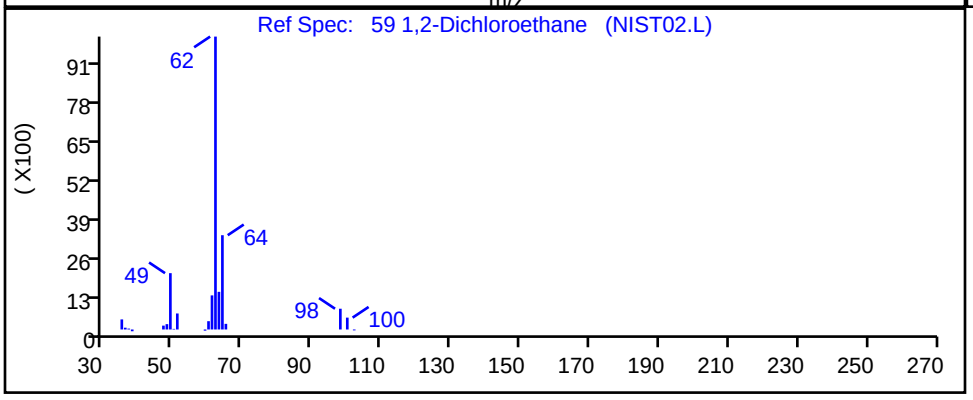
Processing Results











RT	Mass	Response	Amount
5.58	62.00	6158	1.461806
5.57	64.00	1233	

Reviewer: delpolitov, 26-Mar-2018 13:08:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

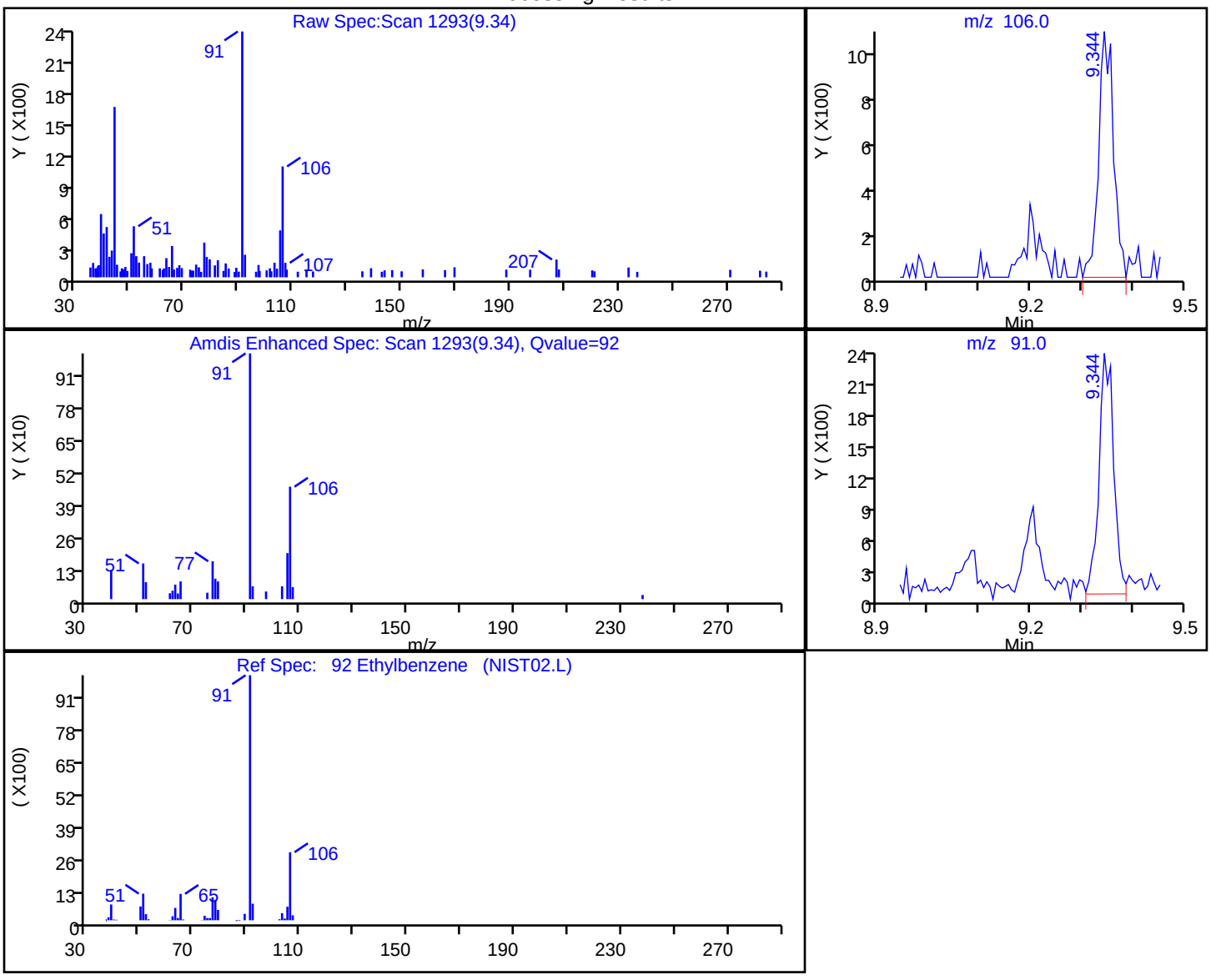
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D				
Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4		
Client ID:	GC-MW-104(SO)-7-9				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.34	106.00	2113	0.548251
9.34	91.00	4557	

Reviewer: delpolitov, 26-Mar-2018 13:08:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

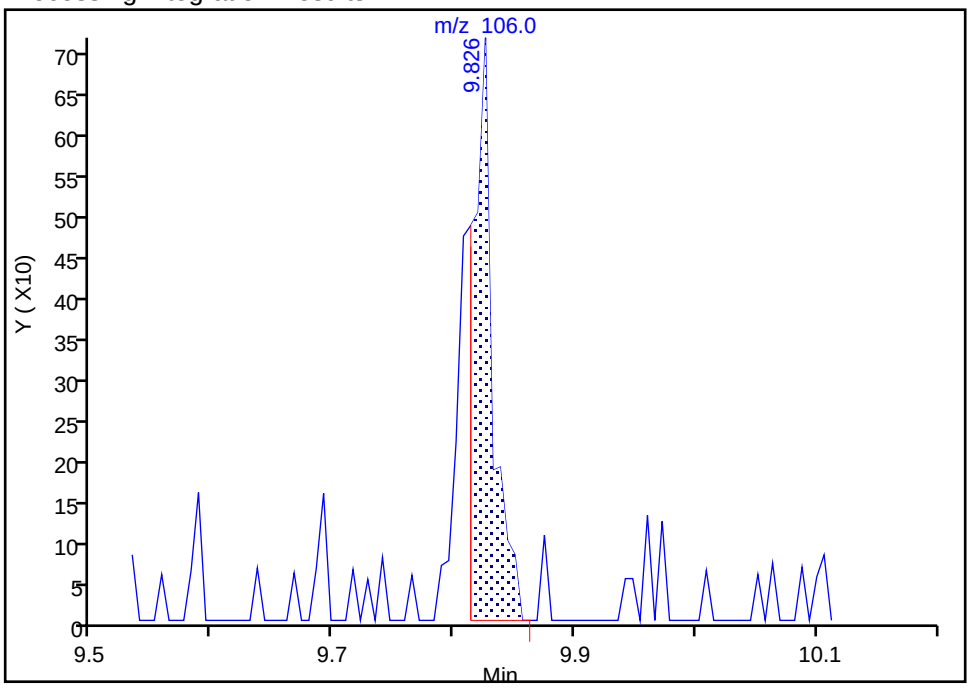
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81125.D				
Injection Date:	24-Mar-2018 09:01:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-4-A	Lab Sample ID:	460-152331-4		
Client ID:	GC-MW-104(SO)-7-9				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6

Signal: 1

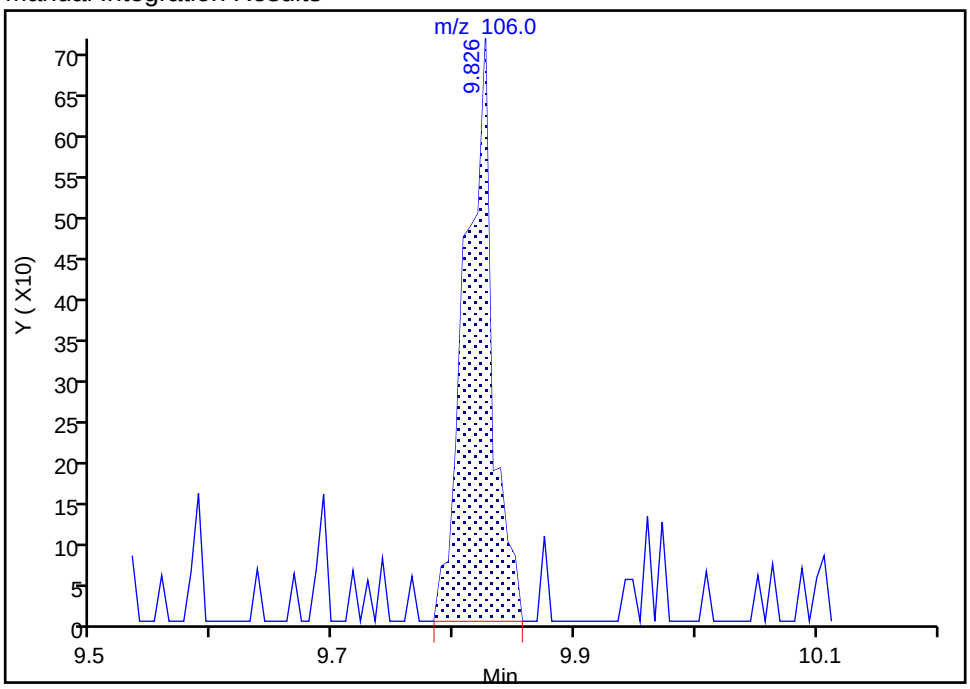
Processing Integration Results

RT: 9.83
Area: 819
Amount: 0.164603
Amount Units: ug/l



Manual Integration Results

RT: 9.83
Area: 1121
Amount: 0.225299
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 13:08:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-0.5-2.5 | Lab Sample ID: 460-152331-5

Matrix: Solid | Lab File ID: K81126.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:20

Sample wt/vol: 5.526(g) | Date Analyzed: 03/24/2018 09:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0085
78-93-3	2-Butanone (MEK)	0.0022	J	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.019		0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00044
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00025
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-0.5-2.5 | Lab Sample ID: 460-152331-5

Matrix: Solid | Lab File ID: K81126.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:20

Sample wt/vol: 5.526(g) | Date Analyzed: 03/24/2018 09:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00012
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00028	J B	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00038	J	0.00092	0.00016
95-47-6	o-Xylene	0.00019	J	0.00092	0.000088
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00038
75-01-4	Vinyl chloride	0.00092	U	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		78-135
460-00-4	4-Bromofluorobenzene	101		67-126
1868-53-7	Dibromofluoromethane (Surr)	105		61-149
2037-26-5	Toluene-d8 (Surr)	104		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-0.5-2.5 Lab Sample ID: 460-152331-5

Matrix: Solid Lab File ID: K81126.D

Analysis Method: 8260C Date Collected: 03/20/2018 12:20

Sample wt/vol: 5.526(g) Date Analyzed: 03/24/2018 09:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.1 Level: (low/med) Low

Analysis Batch No.: 505749 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D
Lims ID: 460-152331-B-5-A
Client ID: GC-MW-105(SO)-0.5-2.5
Sample Type: Client
Inject. Date: 24-Mar-2018 09:24:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152331-B-5-A
Misc. Info.: 460-0069230-010
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:09:18 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:09:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.004	2.998	0.006	83	32474	21.0	
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	407138	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	30	2012	0.3053	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	325772	250.0	
42 2-Butanone (MEK)	72	4.510	4.504	0.006	57	1071	2.40	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	95	135372	52.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.303	0.006	0	171540	56.9	
* 61 Fluorobenzene	96	5.583	5.577	0.006	97	383888	50.0	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	22245	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	97	511834	52.1	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	90	307008	50.0	
93 m-Xylene & p-Xylene	106	9.357	9.351	0.006	0	1968	0.4092	
95 o-Xylene	106	9.814	9.814	0.000	93	1007	0.2023	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	84	142127	50.4	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	97	169774	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

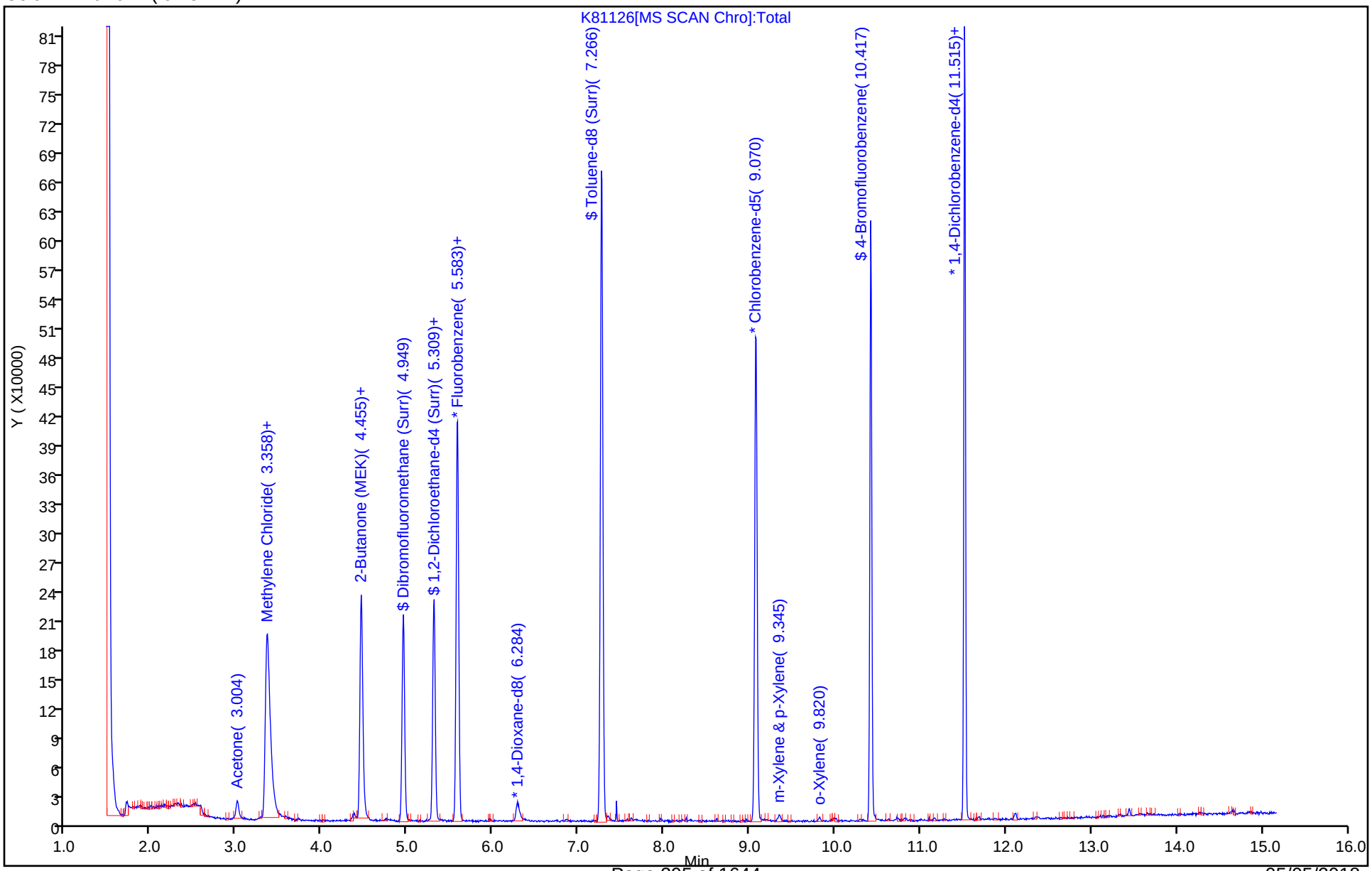
Report Date: 26-Mar-2018 13:09:19 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D

Injection Date:	24-Mar-2018 09:24:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152331-B-5-A	Lab Sample ID:	460-152331-5	Worklist Smp#:	10
Client ID:	GC-MW-105(SO)-0.5-2.5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

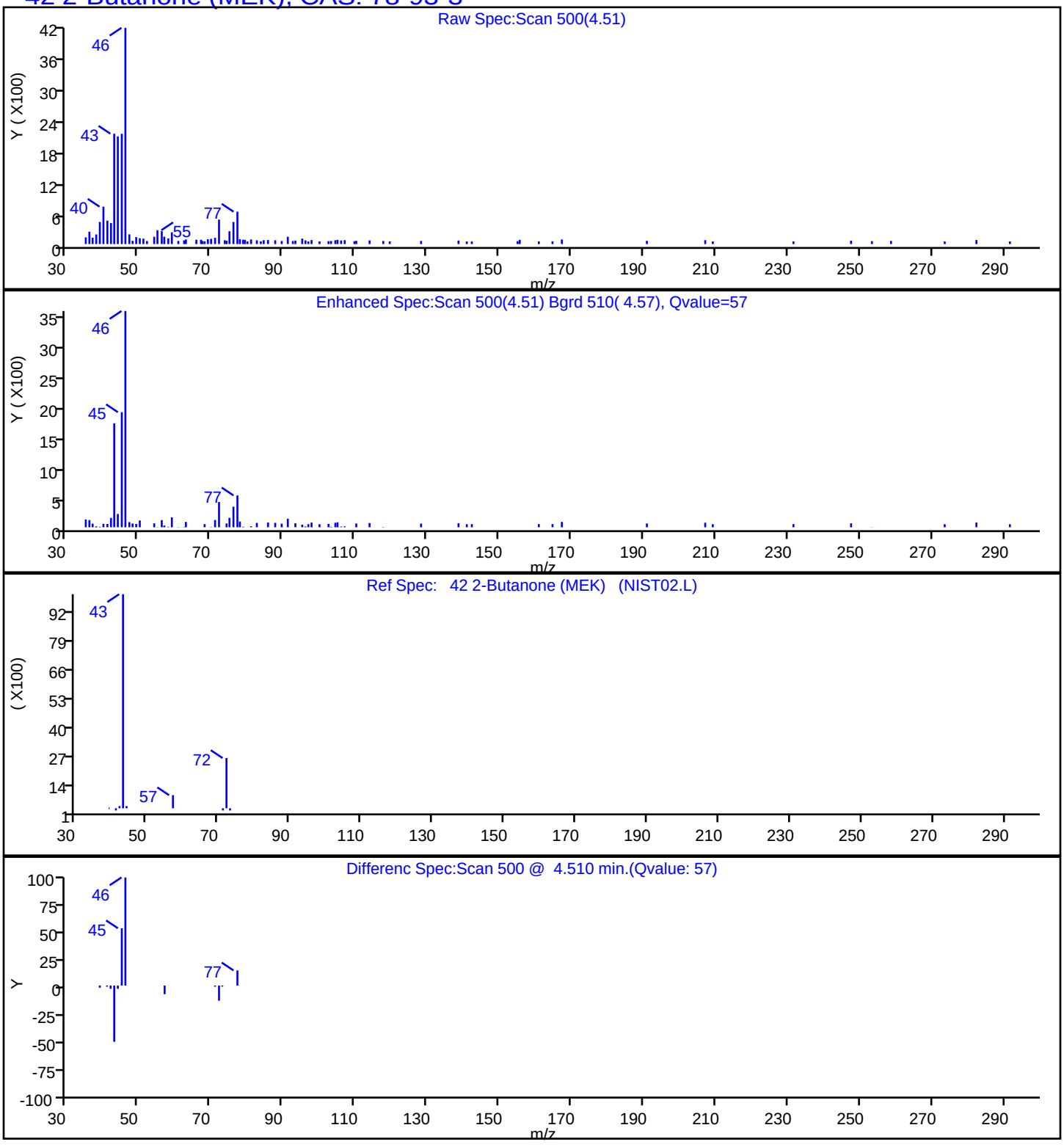
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D				
Injection Date:	24-Mar-2018 09:24:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-5-A	Lab Sample ID:	460-152331-5		
Client ID:	GC-MW-105(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3



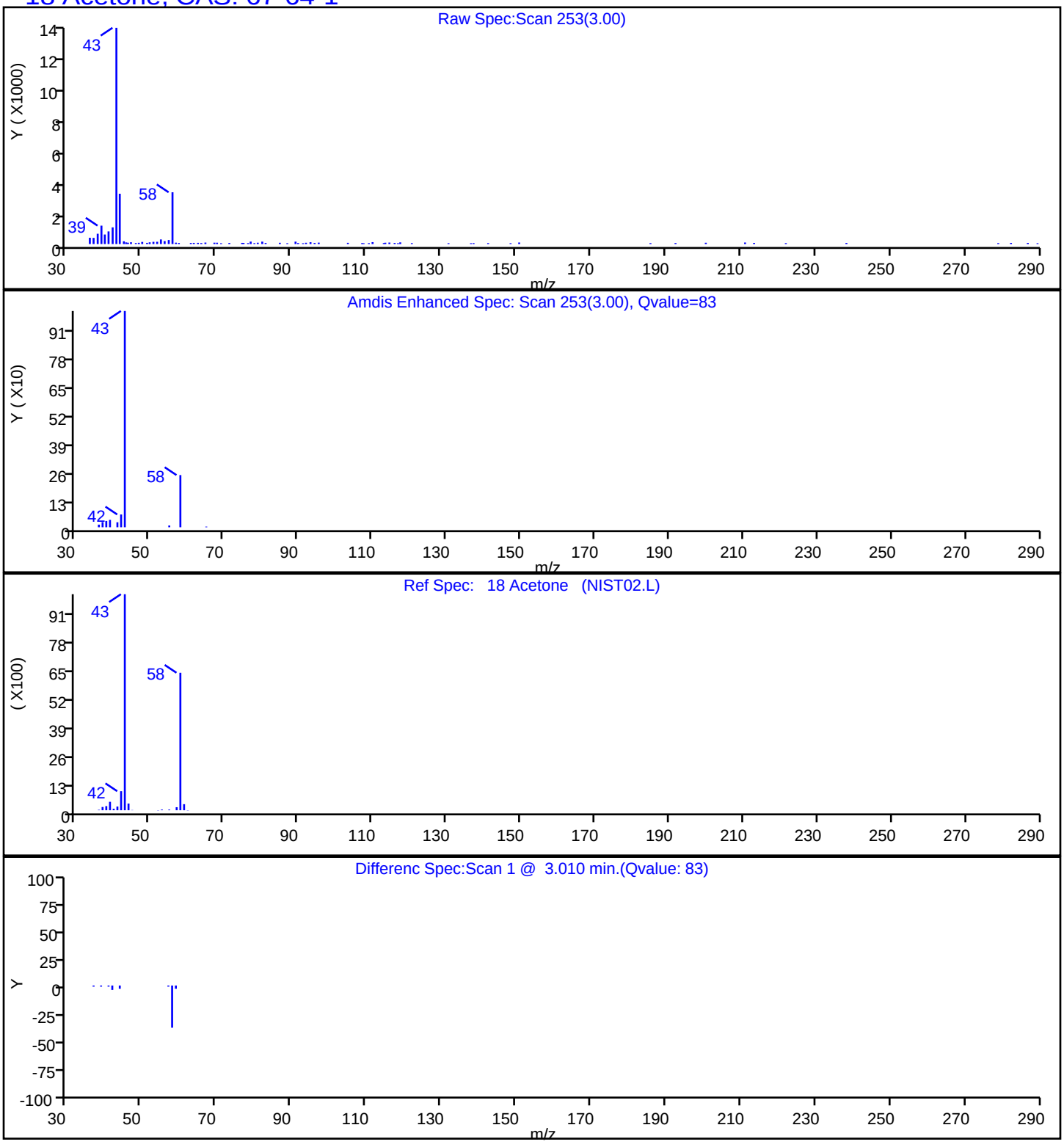
Report Date: 26-Mar-2018 13:09:19 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D

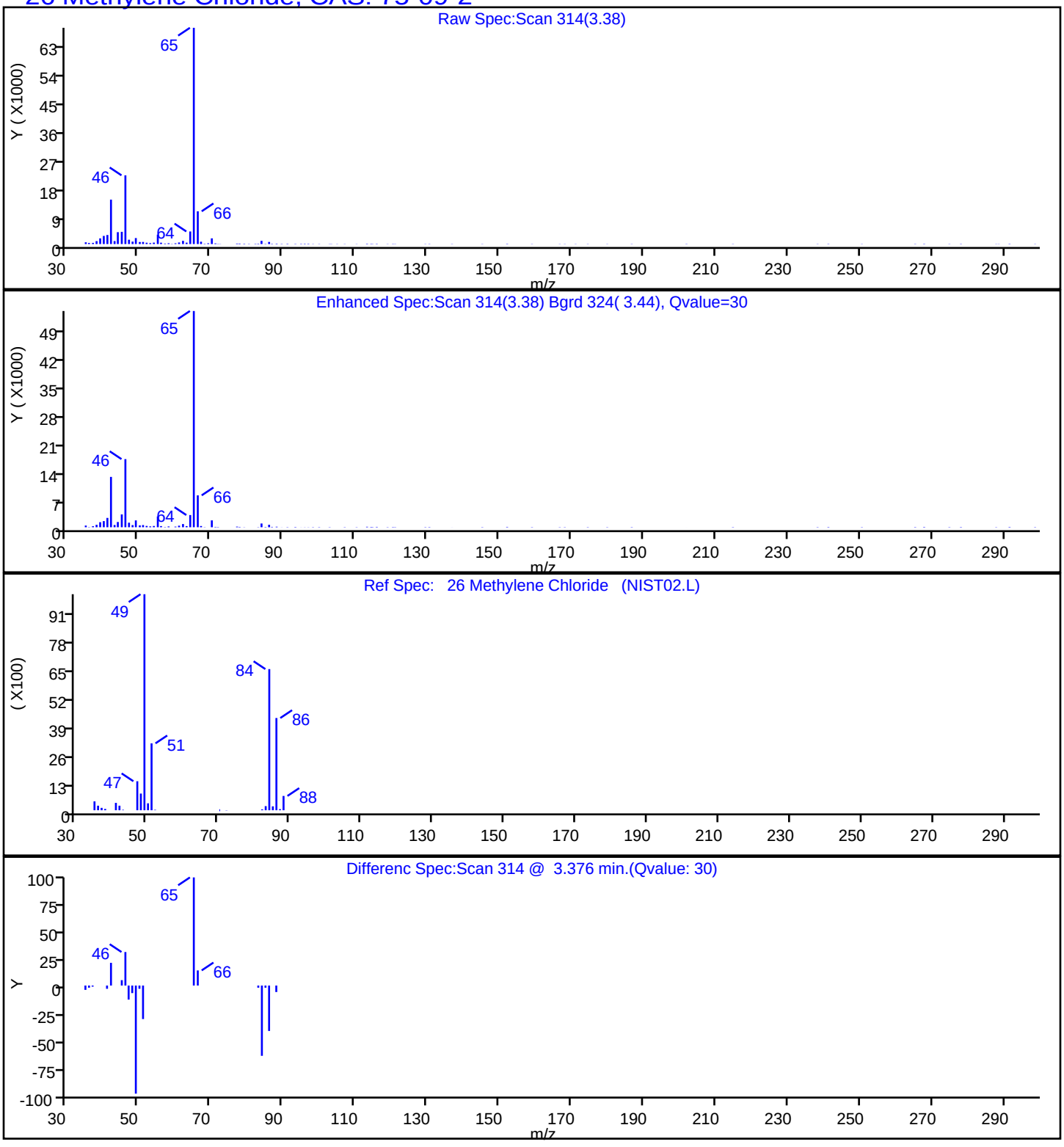
Injection Date:	24-Mar-2018 09:24:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-5-A	Lab Sample ID:	460-152331-5
Client ID:	GC-MW-105(SO)-0.5-2.5		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1



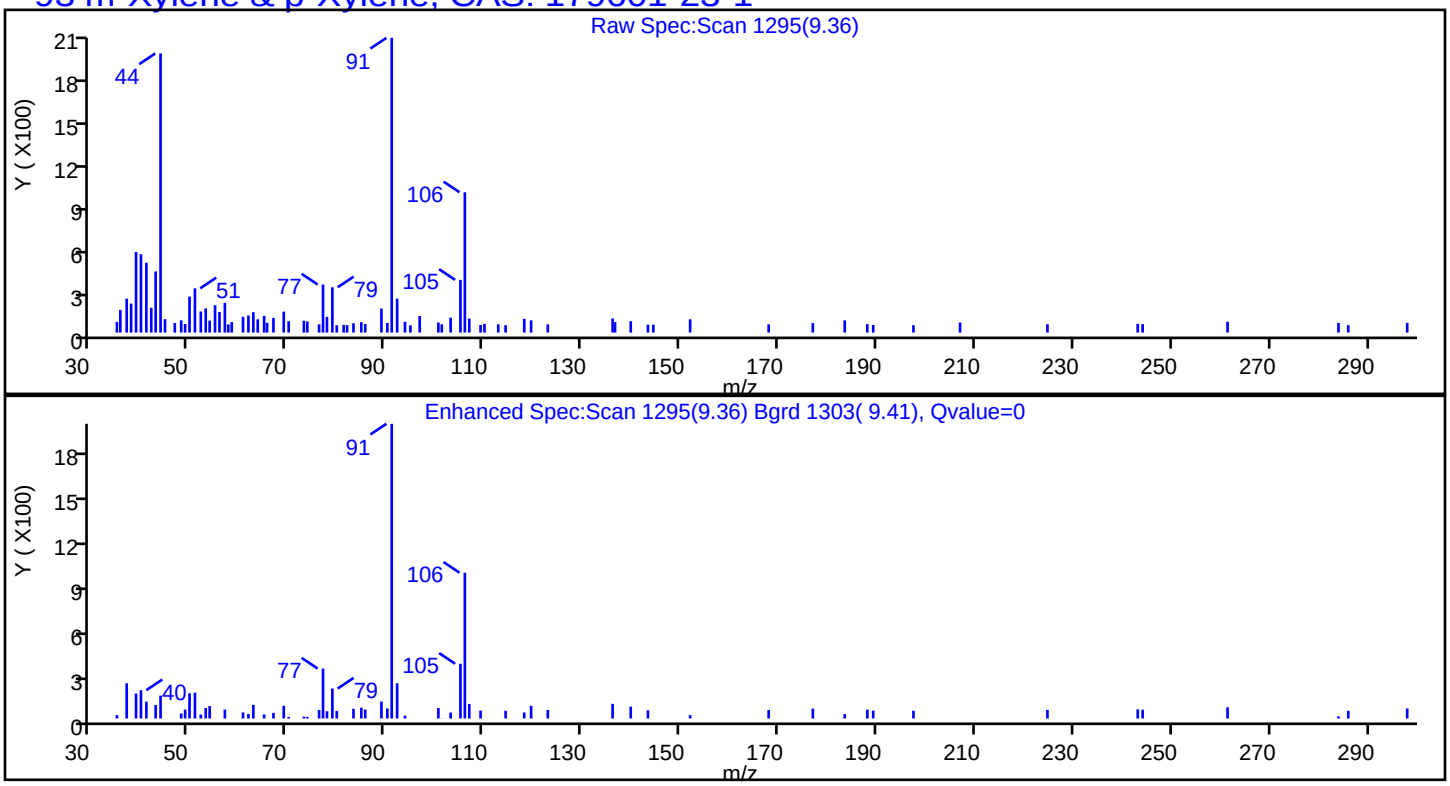
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D
Injection Date: 24-Mar-2018 09:24:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-5-A Lab Sample ID: 460-152331-5
Client ID: GC-MW-105(SO)-0.5-2.5
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methylene Chloride, CAS: 75-09-2



Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D				
Injection Date:	24-Mar-2018 09:24:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-5-A	Lab Sample ID:	460-152331-5		
Client ID:	GC-MW-105(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

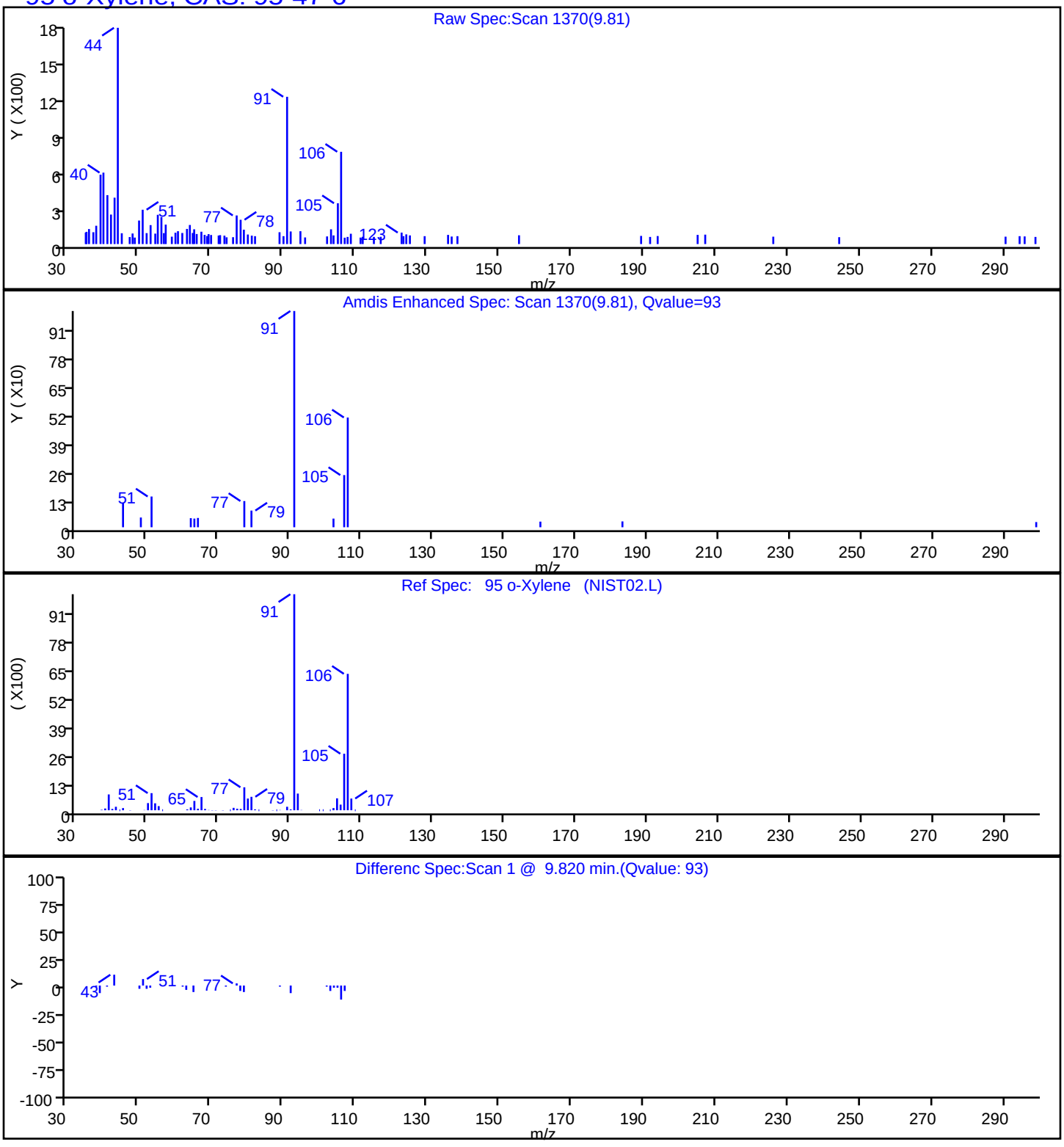


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D

Injection Date:	24-Mar-2018 09:24:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-5-A	Lab Sample ID:	460-152331-5		
Client ID:	GC-MW-105(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6



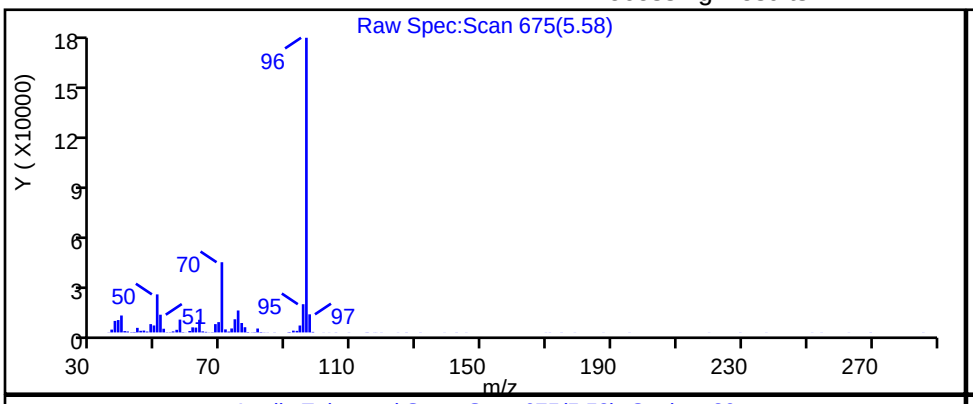
User Disabled Compound Report

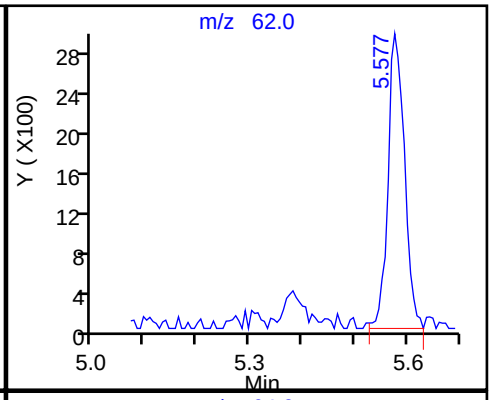
TestAmerica Edison

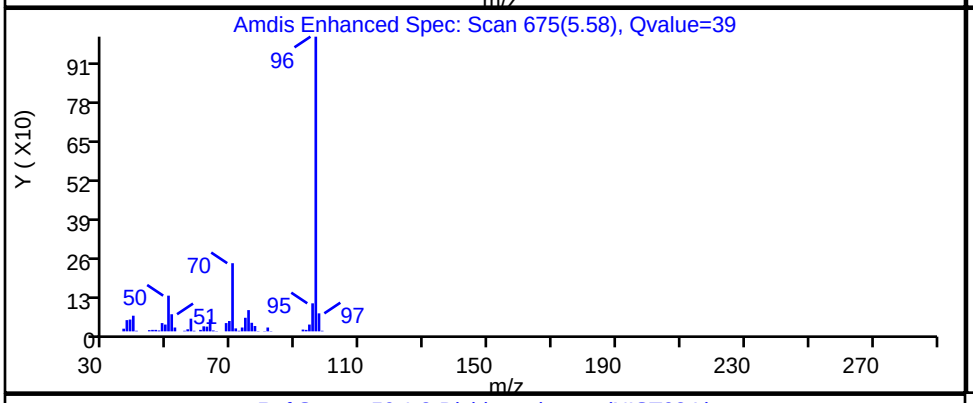
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D				
Injection Date:	24-Mar-2018 09:24:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-5-A	Lab Sample ID:	460-152331-5		
Client ID:	GC-MW-105(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

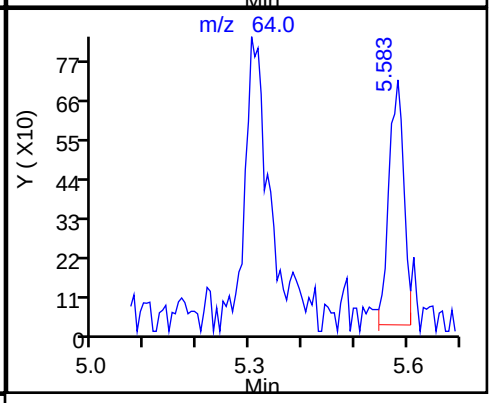
59 1,2-Dichloroethane, CAS: 107-06-2

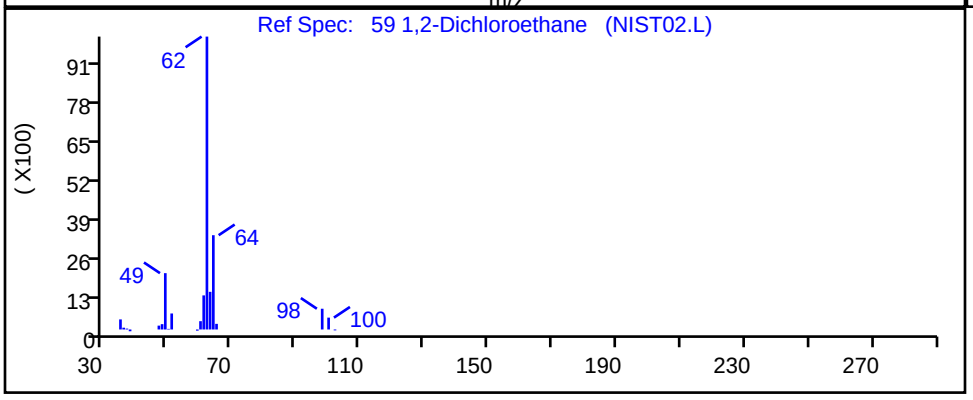
Processing Results











RT	Mass	Response	Amount
5.58	62.00	6418	1.485843
5.58	64.00	1385	

Reviewer: delpolitov, 26-Mar-2018 13:09:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

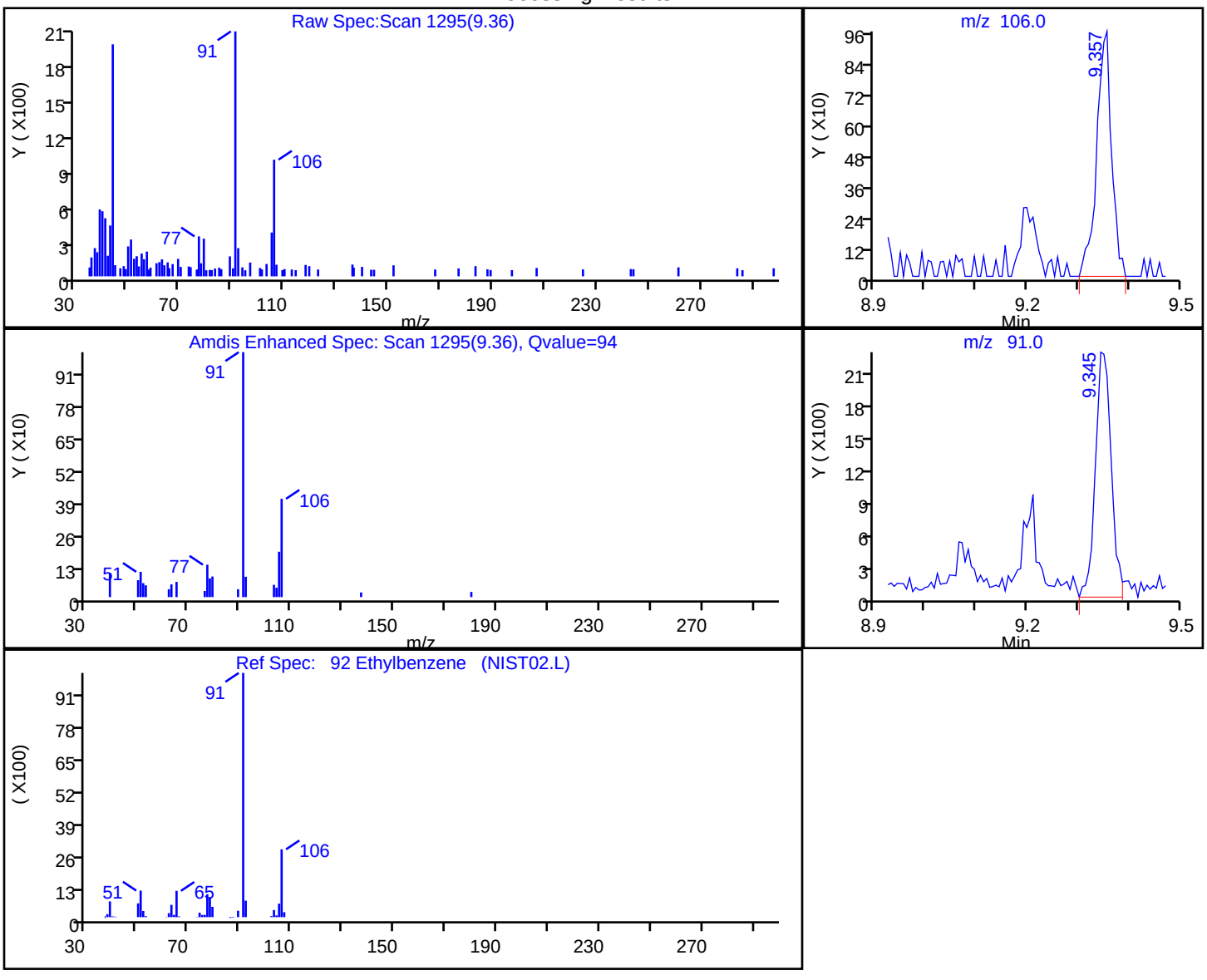
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81126.D				
Injection Date:	24-Mar-2018 09:24:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-5-A	Lab Sample ID:	460-152331-5		
Client ID:	GC-MW-105(SO)-0.5-2.5				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.36	106.00	1968	0.510399
9.34	91.00	4851	

Reviewer: delpolitov, 26-Mar-2018 13:09:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-7-9 | Lab Sample ID: 460-152331-6

Matrix: Solid | Lab File ID: K81127.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:25

Sample wt/vol: 5.548(g) | Date Analyzed: 03/24/2018 09:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.5 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029
79-00-5	1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017
75-34-3	1,1-Dichloroethane	0.00096	U	0.00096	0.00020
75-35-4	1,1-Dichloroethene	0.00096	U	0.00096	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000089
96-12-8	1,2-Dibromo-3-Chloropropane	0.00096	U	0.00096	0.00044
95-50-1	1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014
107-06-2	1,2-Dichloroethane	0.00096	U	0.00096	0.00029
78-87-5	1,2-Dichloropropane	0.00096	U	0.00096	0.00041
541-73-1	1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015
106-46-7	1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0089
78-93-3	2-Butanone (MEK)	0.0029	J	0.0048	0.0011
591-78-6	2-Hexanone	0.0048	U	0.0048	0.00075
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064
67-64-1	Acetone	0.029		0.0048	0.0037
71-43-2	Benzene	0.00096	U	0.00096	0.00025
75-25-2	Bromoform	0.00096	U	0.00096	0.00041
74-83-9	Bromomethane	0.00096	U	0.00096	0.00046
75-15-0	Carbon disulfide	0.00096	U	0.00096	0.00026
56-23-5	Carbon tetrachloride	0.00096	U	0.00096	0.00017
108-90-7	Chlorobenzene	0.00096	U	0.00096	0.00017
74-97-5	Chlorobromomethane	0.00096	U	0.00096	0.00027
124-48-1	Chlorodibromomethane	0.00096	U	0.00096	0.00019
75-00-3	Chloroethane	0.00096	U	0.00096	0.00050
67-66-3	Chloroform	0.00096	U	0.00096	0.00031
74-87-3	Chloromethane	0.00096	U	0.00096	0.00042
156-59-2	cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
110-82-7	Cyclohexane	0.00096	U	0.00096	0.00021
75-27-4	Dichlorobromomethane	0.00096	U	0.00096	0.00025
75-71-8	Dichlorodifluoromethane	0.00096	U	0.00096	0.00033

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-7-9 | Lab Sample ID: 460-152331-6

Matrix: Solid | Lab File ID: K81127.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:25

Sample wt/vol: 5.548(g) | Date Analyzed: 03/24/2018 09:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.5 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00096	U	0.00096	0.00019
106-93-4	Ethylene Dibromide	0.00096	U	0.00096	0.00017
98-82-8	Isopropylbenzene	0.00096	U	0.00096	0.00012
79-20-9	Methyl acetate	0.0048	U	0.0048	0.0041
1634-04-4	Methyl tert-butyl ether	0.00096	U	0.00096	0.00012
108-87-2	Methylcyclohexane	0.00096	U	0.00096	0.00015
75-09-2	Methylene Chloride	0.00022	J B	0.00096	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00053	J	0.00096	0.00017
95-47-6	o-Xylene	0.00023	J	0.00096	0.000092
100-42-5	Styrene	0.00096	U	0.00096	0.00012
127-18-4	Tetrachloroethene	0.00096	U	0.00096	0.00014
108-88-3	Toluene	0.00096	U	0.00096	0.00060
156-60-5	trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
79-01-6	Trichloroethene	0.00096	U	0.00096	0.00014
75-69-4	Trichlorofluoromethane	0.00096	U	0.00096	0.00039
75-01-4	Vinyl chloride	0.00096	U	0.00096	0.00053

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		78-135
460-00-4	4-Bromofluorobenzene	100		67-126
1868-53-7	Dibromofluoromethane (Surr)	102		61-149
2037-26-5	Toluene-d8 (Surr)	105		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-7-9 | Lab Sample ID: 460-152331-6

Matrix: Solid | Lab File ID: K81127.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:25

Sample wt/vol: 5.548(g) | Date Analyzed: 03/24/2018 09:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.5 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D
Lims ID: 460-152331-B-6-A
Client ID: GC-MW-105(SO)-7-9
Sample Type: Client
Inject. Date: 24-Mar-2018 09:49:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152331-B-6-A
Misc. Info.: 460-0069230-011
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:09:43 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:09:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	2.998	2.998	0.000	84	44766	30.4	
* 25 TBA-d9 (IS)	65	3.345	3.352	-0.007	0	359696	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	96	1729	0.2234	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	310742	250.0	
42 2-Butanone (MEK)	72	4.504	4.504	0.000	97	1274	2.99	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	95	133166	51.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.303	-0.001	0	168821	55.6	
* 61 Fluorobenzene	96	5.577	5.577	0.000	97	386225	50.0	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	20818	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.265	7.266	-0.001	97	522974	52.4	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	90	312175	50.0	
93 m-Xylene & p-Xylene	106	9.344	9.351	-0.007	0	2698	0.5517	
95 o-Xylene	106	9.820	9.814	0.006	92	1204	0.2379	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	83	144105	50.2	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	98	175911	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

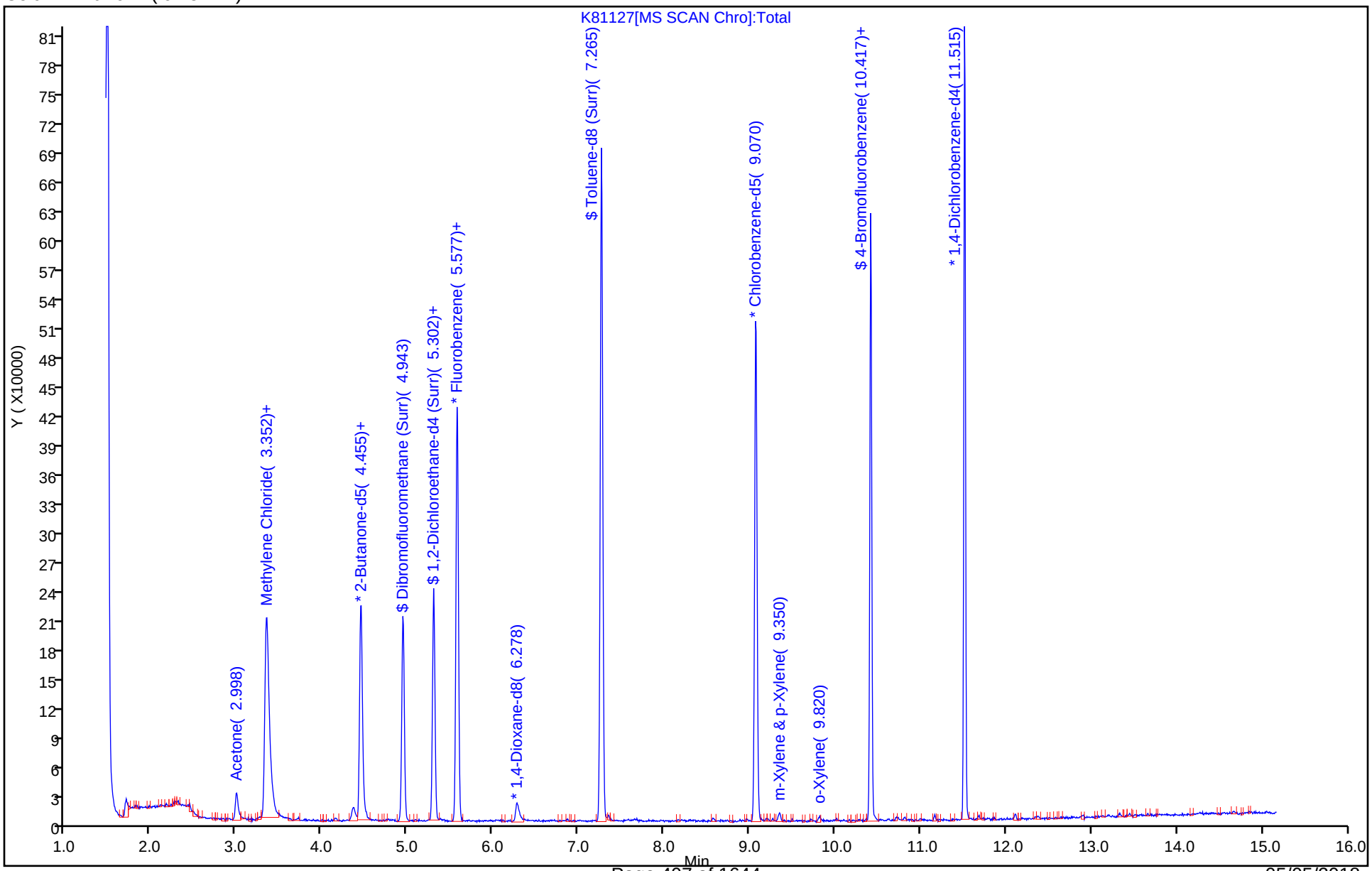
Report Date: 26-Mar-2018 13:09:44 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D

Injection Date:	24-Mar-2018 09:49:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152331-B-6-A	Lab Sample ID:	460-152331-6	Worklist Smp#:	11
Client ID:	GC-MW-105(SO)-7-9				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

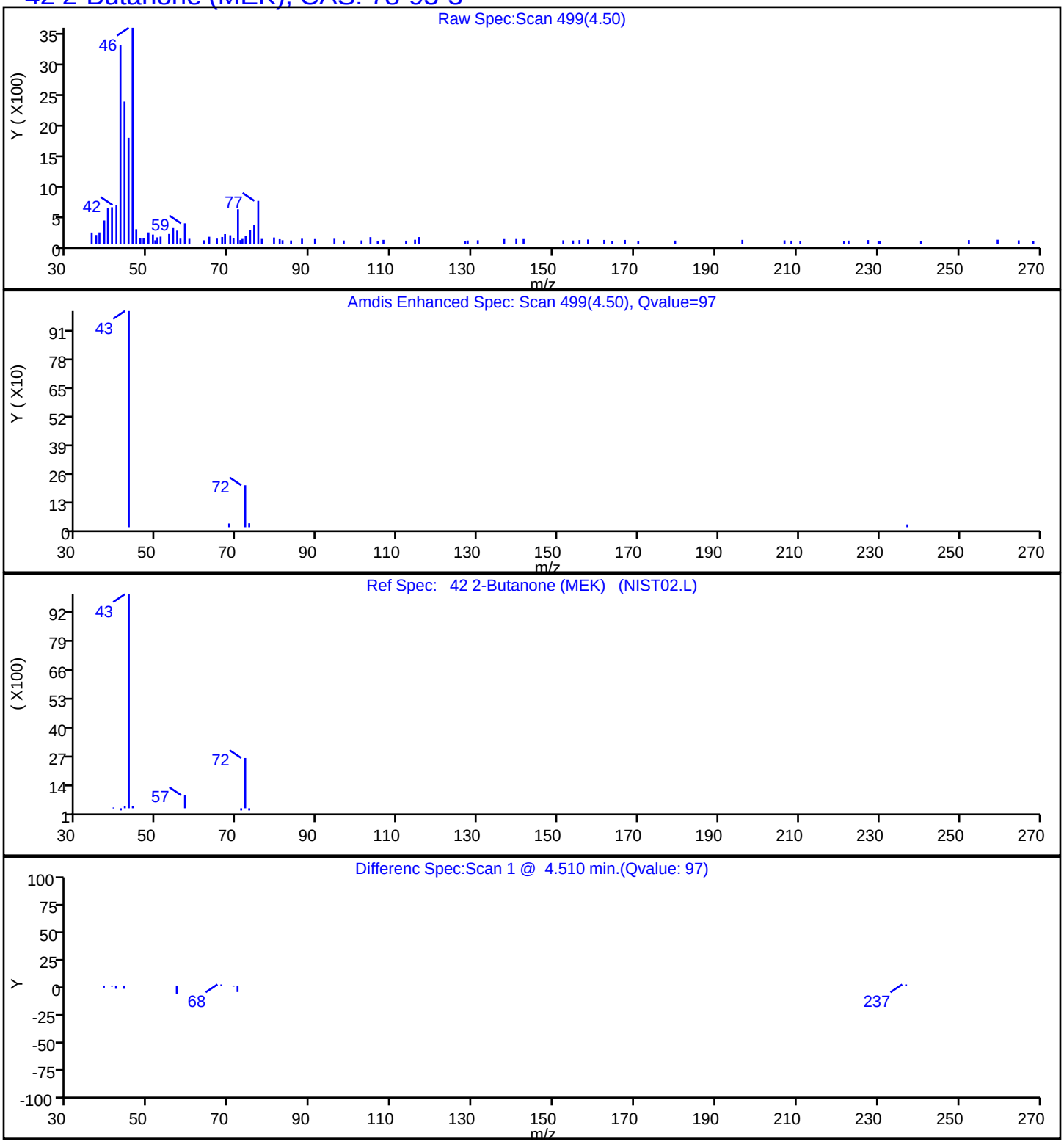
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D				
Injection Date:	24-Mar-2018 09:49:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-6-A	Lab Sample ID:	460-152331-6		
Client ID:	GC-MW-105(SO)-7-9				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

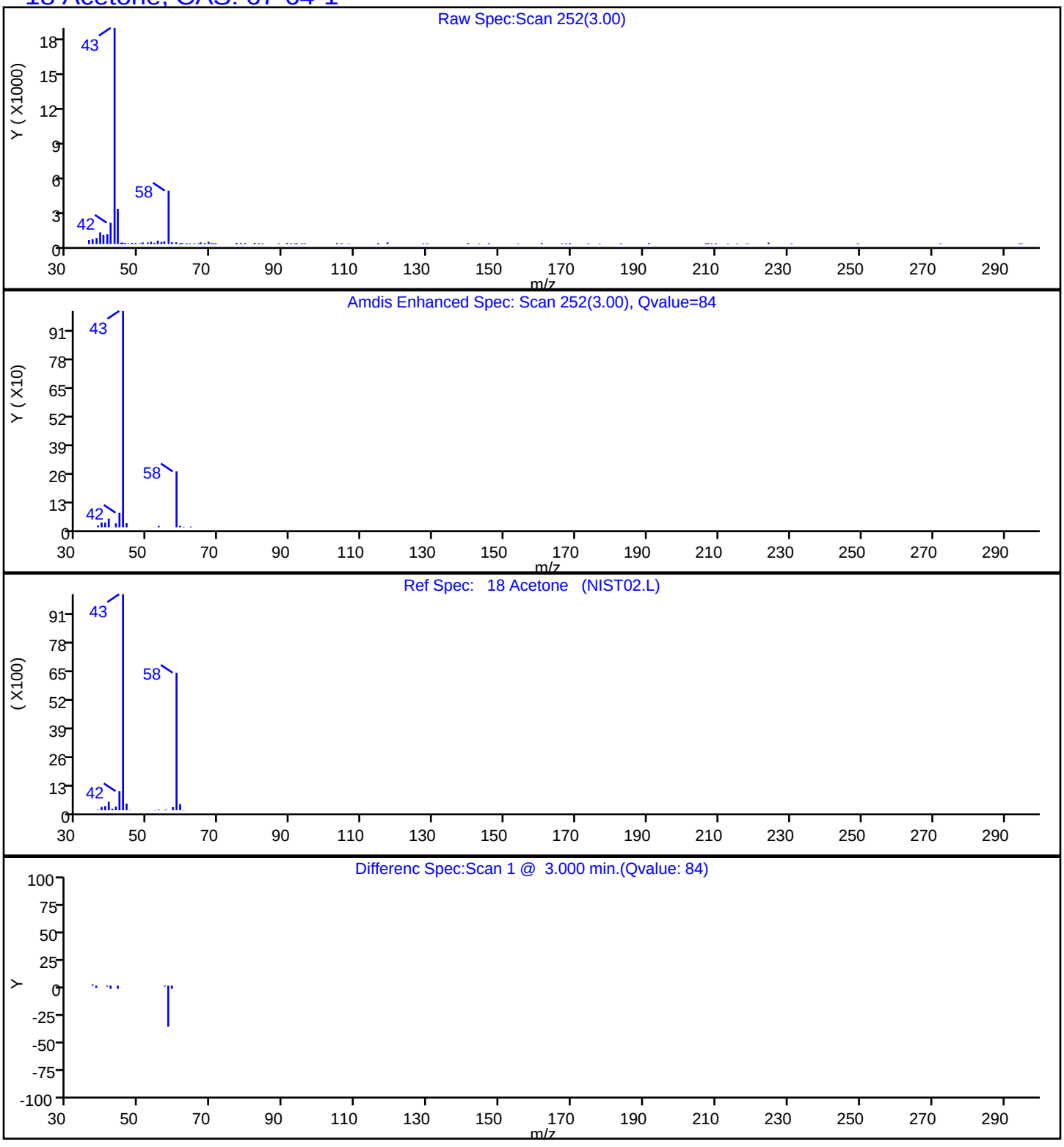
42 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Edison

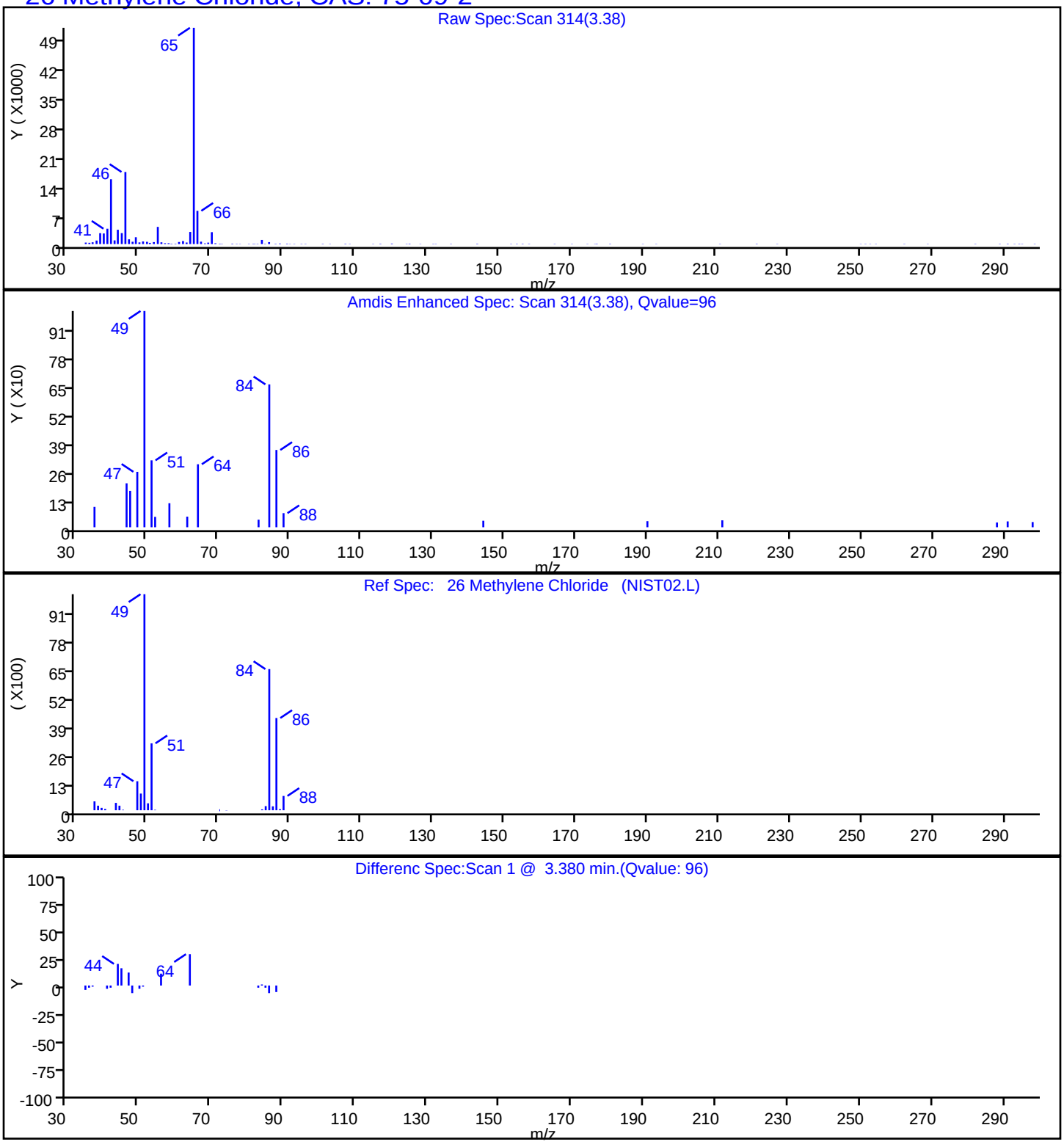
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D		
Injection Date:	24-Mar-2018 09:49:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-6-A	Lab Sample ID:	460-152331-6
Client ID:	GC-MW-105(SO)-7-9		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D
Injection Date: 24-Mar-2018 09:49:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-6-A Lab Sample ID: 460-152331-6
Client ID: GC-MW-105(SO)-7-9
Operator ID: ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

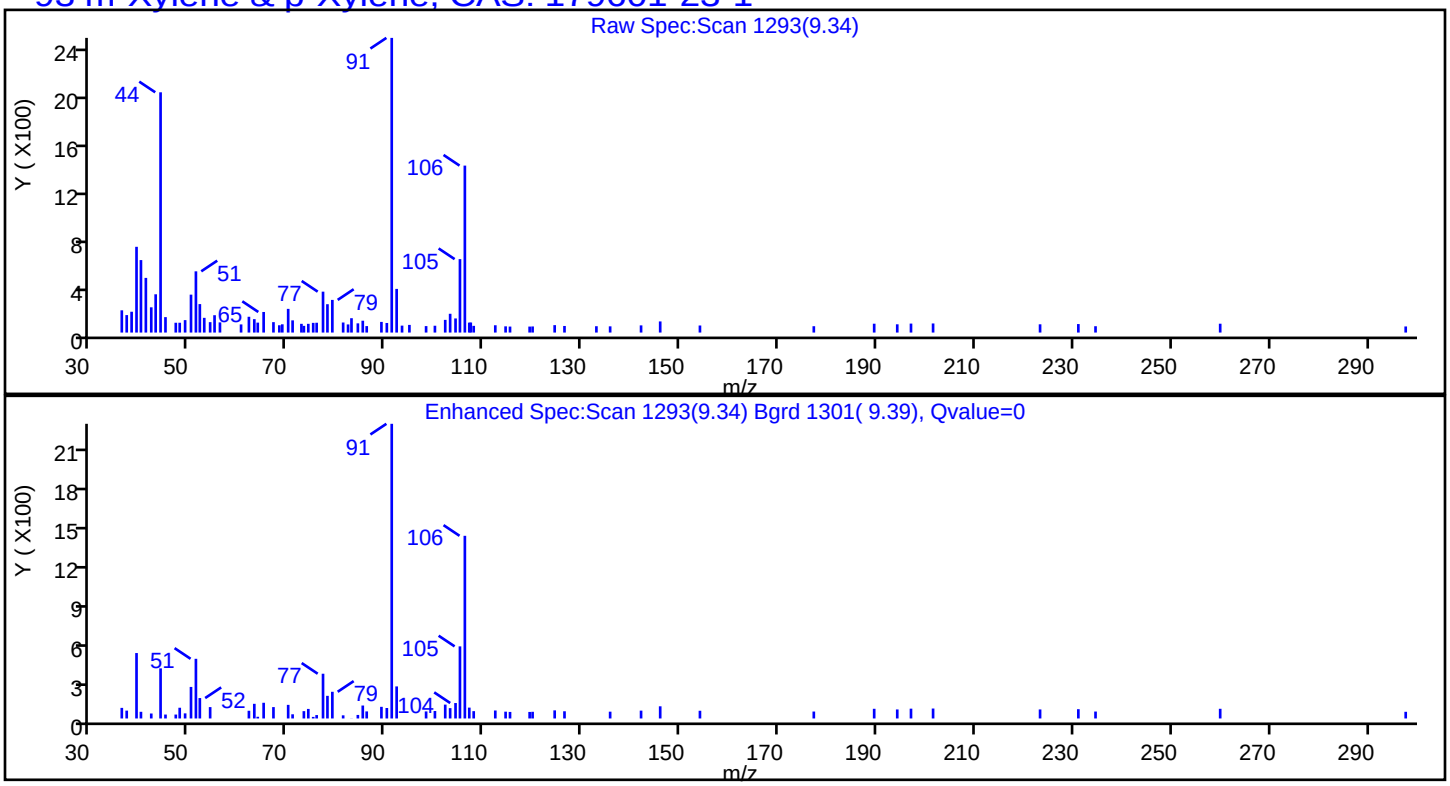
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

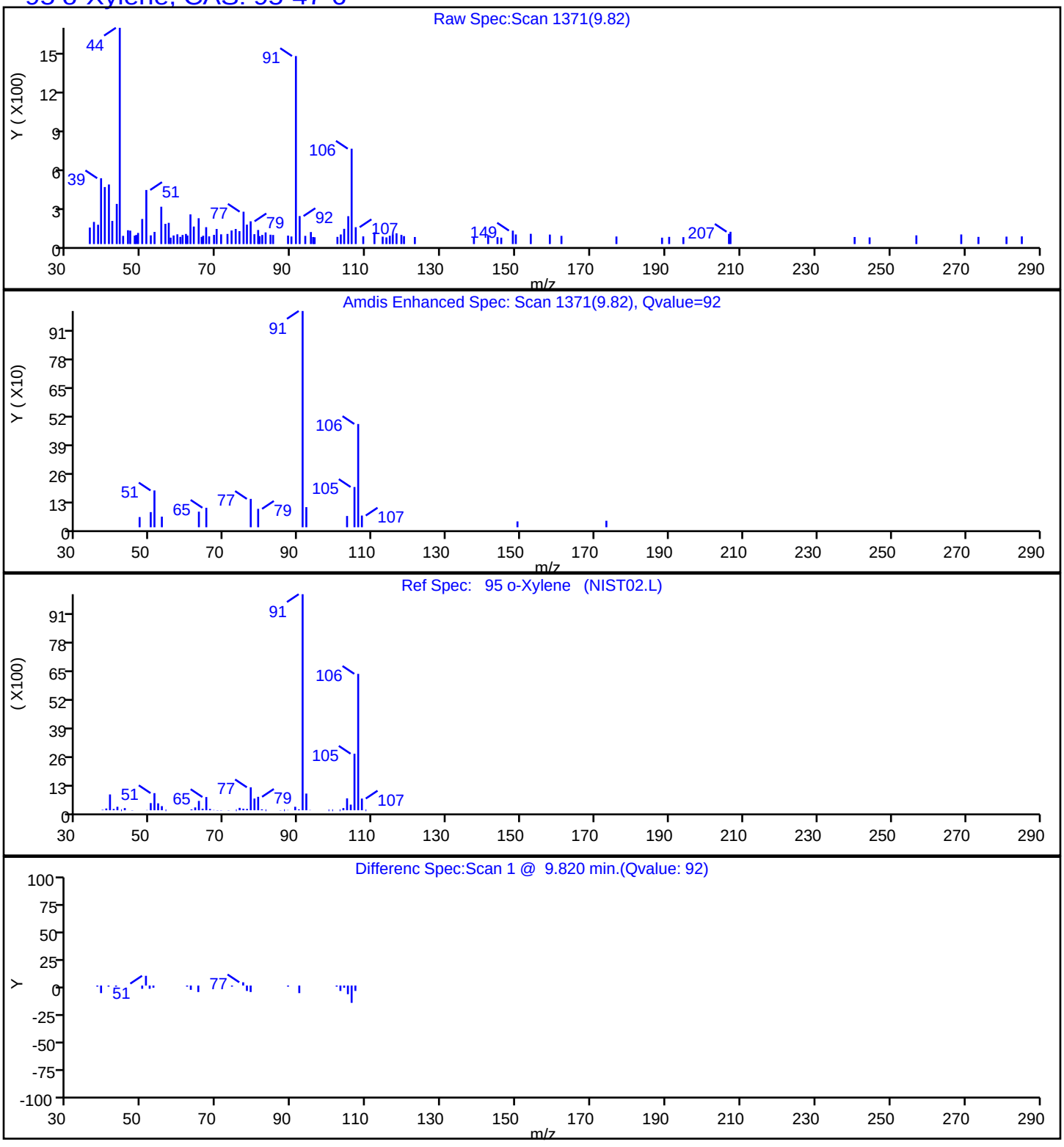
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D				
Injection Date:	24-Mar-2018 09:49:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-6-A	Lab Sample ID:	460-152331-6		
Client ID:	GC-MW-105(SO)-7-9				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D
Injection Date: 24-Mar-2018 09:49:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-6-A Lab Sample ID: 460-152331-6
Client ID: GC-MW-105(SO)-7-9
Operator ID: ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 o-Xylene, CAS: 95-47-6



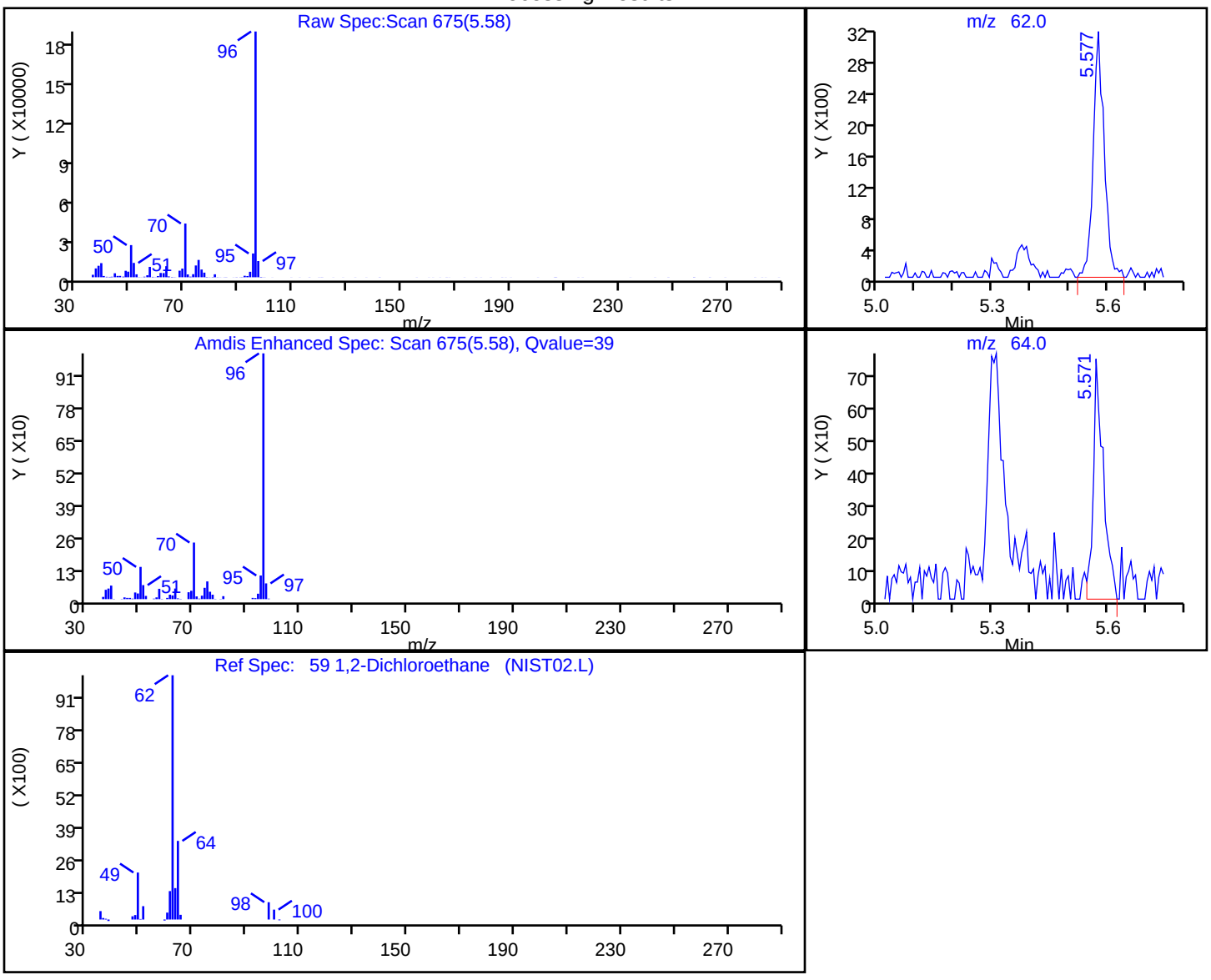
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D		
Injection Date:	24-Mar-2018 09:49:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-6-A	Lab Sample ID:	460-152331-6
Client ID:	GC-MW-105(SO)-7-9		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.58	62.00	6349	1.460975
5.57	64.00	1370	

Reviewer: delpolitov, 26-Mar-2018 13:09:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

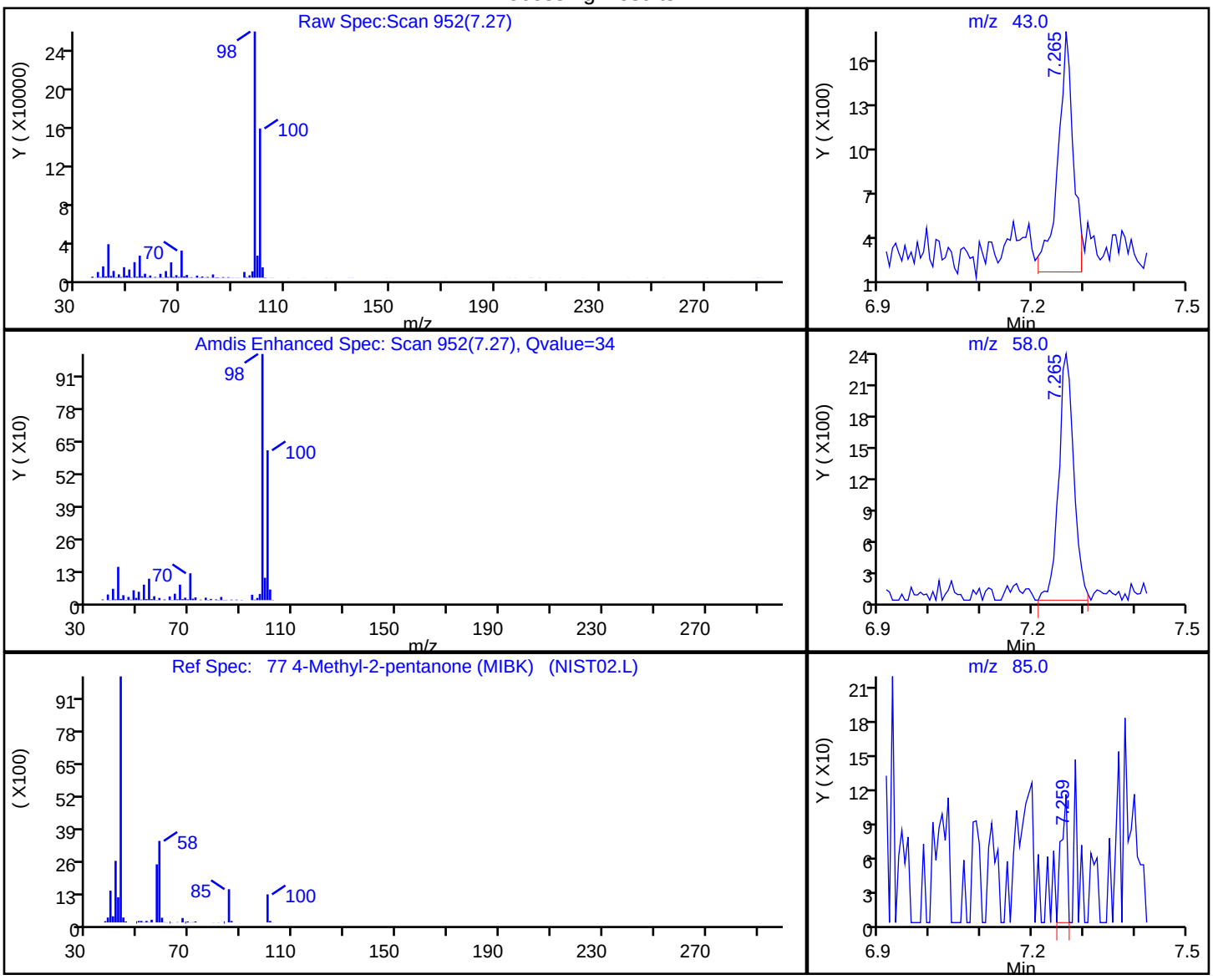
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D				
Injection Date:	24-Mar-2018 09:49:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-6-A	Lab Sample ID:	460-152331-6		
Client ID:	GC-MW-105(SO)-7-9				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

77 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.27	43.00	3329	0.716441
7.27	58.00	4894	
7.26	85.00	93	
7.27	100.00	317080	

Reviewer: delpolitov, 26-Mar-2018 13:09:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

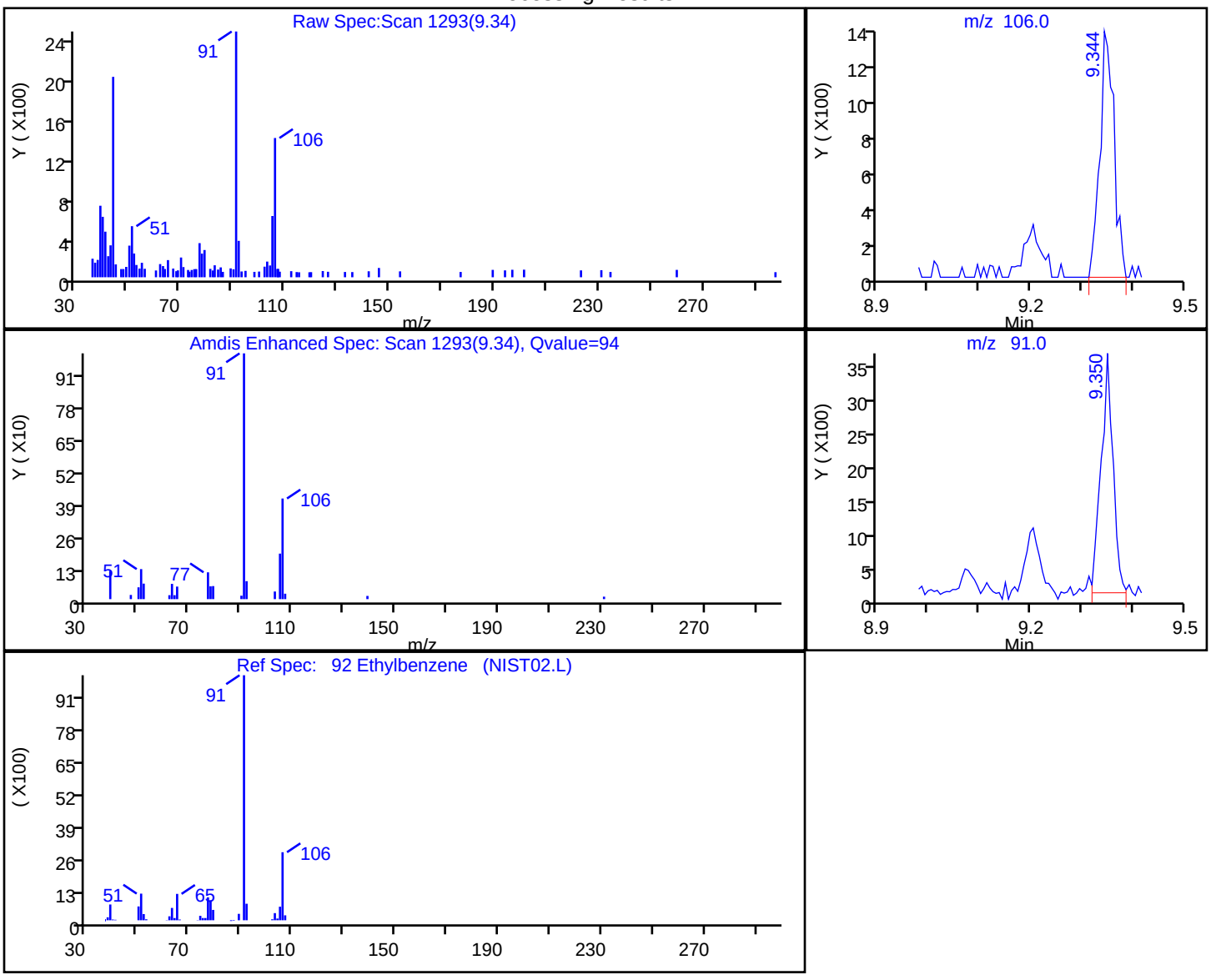
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81127.D		
Injection Date:	24-Mar-2018 09:49:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-6-A	Lab Sample ID:	460-152331-6
Client ID:	GC-MW-105(SO)-7-9		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.34	106.00	2698	0.688143
9.35	91.00	5761	

Reviewer: delpolitov, 26-Mar-2018 13:09:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-Drain-02(SO) | Lab Sample ID: 460-152331-7

Matrix: Solid | Lab File ID: K81128.D

Analysis Method: 8260C | Date Collected: 03/20/2018 13:35

Sample wt/vol: 4.143(g) | Date Analyzed: 03/24/2018 10:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 65.7 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0035	U	0.0035	0.00082
79-34-5	1,1,2,2-Tetrachloroethane	0.0035	U	0.0035	0.00075
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0035	U	0.0035	0.0011
79-00-5	1,1,2-Trichloroethane	0.0035	U	0.0035	0.00063
75-34-3	1,1-Dichloroethane	0.0035	U	0.0035	0.00072
75-35-4	1,1-Dichloroethene	0.0035	U	0.0035	0.00079
87-61-6	1,2,3-Trichlorobenzene	0.0035	U	0.0035	0.00064
120-82-1	1,2,4-Trichlorobenzene	0.0035	U	0.0035	0.00032
96-12-8	1,2-Dibromo-3-Chloropropane	0.0035	U	0.0035	0.0016
95-50-1	1,2-Dichlorobenzene	0.0035	U	0.0035	0.00051
107-06-2	1,2-Dichloroethane	0.0035	U	0.0035	0.0010
78-87-5	1,2-Dichloropropane	0.0035	U	0.0035	0.0015
541-73-1	1,3-Dichlorobenzene	0.0035	U	0.0035	0.00056
106-46-7	1,4-Dichlorobenzene	0.0035	U	0.0035	0.00035
123-91-1	1,4-Dioxane	0.070	U *	0.070	0.032
78-93-3	2-Butanone (MEK)	0.18		0.018	0.0039
591-78-6	2-Hexanone	0.018	U	0.018	0.0027
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0037	J	0.018	0.0023
67-64-1	Acetone	0.80		0.018	0.013
71-43-2	Benzene	0.0035	U	0.0035	0.00091
75-25-2	Bromoform	0.0035	U	0.0035	0.0015
74-83-9	Bromomethane	0.0035	U	0.0035	0.0017
75-15-0	Carbon disulfide	0.0087		0.0035	0.00094
56-23-5	Carbon tetrachloride	0.0035	U	0.0035	0.00064
108-90-7	Chlorobenzene	0.0035	U	0.0035	0.00062
74-97-5	Chlorobromomethane	0.0035	U	0.0035	0.00099
124-48-1	Chlorodibromomethane	0.0035	U	0.0035	0.00068
75-00-3	Chloroethane	0.0035	U	0.0035	0.0018
67-66-3	Chloroform	0.0035	U	0.0035	0.0011
74-87-3	Chloromethane	0.0035	U	0.0035	0.0015
156-59-2	cis-1,2-Dichloroethene	0.011		0.0035	0.00053
10061-01-5	cis-1,3-Dichloropropene	0.0035	U	0.0035	0.00096
110-82-7	Cyclohexane	0.0035	U	0.0035	0.00078
75-27-4	Dichlorobromomethane	0.0035	U	0.0035	0.00090
75-71-8	Dichlorodifluoromethane	0.0035	U	0.0035	0.0012

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-Drain-02(SO) | Lab Sample ID: 460-152331-7

Matrix: Solid | Lab File ID: K81128.D

Analysis Method: 8260C | Date Collected: 03/20/2018 13:35

Sample wt/vol: 4.143(g) | Date Analyzed: 03/24/2018 10:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 65.7 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00075	J	0.0035	0.00070
106-93-4	Ethylene Dibromide	0.0035	U	0.0035	0.00063
98-82-8	Isopropylbenzene	0.0035	U	0.0035	0.00044
79-20-9	Methyl acetate	0.018	U	0.018	0.015
1634-04-4	Methyl tert-butyl ether	0.0035	U	0.0035	0.00044
108-87-2	Methylcyclohexane	0.00083	J	0.0035	0.00056
75-09-2	Methylene Chloride	0.0035	U	0.0035	0.00057
179601-23-1	m-Xylene & p-Xylene	0.0019	J	0.0035	0.00061
95-47-6	o-Xylene	0.00075	J	0.0035	0.00033
100-42-5	Styrene	0.0035	U	0.0035	0.00043
127-18-4	Tetrachloroethene	0.0011	J	0.0035	0.00050
108-88-3	Toluene	0.0028	J	0.0035	0.0022
156-60-5	trans-1,2-Dichloroethene	0.0035	U	0.0035	0.00086
10061-02-6	trans-1,3-Dichloropropene	0.0035	U	0.0035	0.00094
79-01-6	Trichloroethene	0.0035	U	0.0035	0.00051
75-69-4	Trichlorofluoromethane	0.0035	U	0.0035	0.0014
75-01-4	Vinyl chloride	0.0035	U	0.0035	0.0019

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		78-135
460-00-4	4-Bromofluorobenzene	92		67-126
1868-53-7	Dibromofluoromethane (Surr)	102		61-149
2037-26-5	Toluene-d8 (Surr)	109		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-Drain-02(SO) | Lab Sample ID: 460-152331-7

Matrix: Solid | Lab File ID: K81128.D

Analysis Method: 8260C | Date Collected: 03/20/2018 13:35

Sample wt/vol: 4.143(g) | Date Analyzed: 03/24/2018 10:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 65.7 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

Number TICs Found: 9 | TIC Result Total: 0.369

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	10.70	0.029	J	
	Unknown alkane	11.05	0.028	J	
	Unknown	11.28	0.069	J	
	Unknown	11.69	0.065	J	
	Unknown alkane	11.83	0.023	J	
	Unknown alkane	11.89	0.030	J	
62237-97-2	Decane, 2,2,6-trimethyl-	12.06	0.023	J N	90%
	Unknown	12.23	0.028	J	
	Unknown	12.47	0.074	J	

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D
Lims ID: 460-152331-B-7-A
Client ID: GC-Drain-02(SO)
Sample Type: Client
Inject. Date: 24-Mar-2018 10:13:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152331-B-7-A
Misc. Info.: 460-0069230-012
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:10:49 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:10:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	2.998	2.998	0.000	84	263359	228.5	
20 Carbon disulfide	76	3.114	3.108	0.006	100	26141	2.48	
* 25 TBA-d9 (IS)	65	3.352	3.352	0.000	0	242368	1000.0	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	245892	250.0	
42 2-Butanone (MEK)	72	4.510	4.504	0.006	98	17605	52.2	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	89	9883	3.12	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	95	123260	50.9	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.303	-0.001	0	150616	53.4	
* 61 Fluorobenzene	96	5.577	5.577	0.000	97	358865	50.0	
65 Methylcyclohexane	83	6.077	6.071	0.006	67	1247	0.2367	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	12345	1000.0	s
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	66	3822	1.04	a
$ 78 Toluene-d8 (Surr)	98	7.265	7.266	-0.001	97	467241	54.5	
79 Toluene	91	7.345	7.345	0.000	89	8664	0.8048	
83 Tetrachloroethene	166	7.967	7.967	0.000	51	780	0.3222	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	90	268367	50.0	
92 Ethylbenzene	106	9.204	9.198	0.006	94	722	0.2142	
93 m-Xylene & p-Xylene	106	9.356	9.351	0.005	0	2310	0.5495	
95 o-Xylene	106	9.820	9.814	0.006	89	931	0.2140	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	86	112979	45.8	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	97	130231	50.0	

QC Flag Legend

Processing Flags
s - Failed ISTD Recovery Test
Review Flags
a - User Assigned ID

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

TestAmerica Edison
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D
Lims ID: 460-152331-B-7-A
Client ID: GC-Drain-02(SO)
Sample Type: Client
Inject. Date: 24-Mar-2018 10:13:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152331-B-7-A
Misc. Info.: 460-0069230-012
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:10:49 Calib Date: 23-Mar-2018 14:55:30
Tic RT Window: 0.000 -0.000 Response: area
Quant By: Nearest ISTD Quant LOD: 10.00000
MS Library: \\ChromNA\Edison\Database\NIST02.L
Min. Match: 70

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:10:49

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
		Unknown						
10.704	144862	8.24	89					
		Unknown alkane						
11.045	141377	8.04	89	0	0		0	
		Unknown						
11.277	345182	19.6	89					
		Unknown						
11.685	323847	18.4	89					
		Unknown alkane						
11.832	116072	6.60	89	0	0		0	
		Unknown alkane						
11.886	150610	8.57	89	0	0		0	
	62237-97-2	Decane, 2,2,6-trimethyl-						
12.063	115038	6.54	89	90	45611	C13H28	184	
		Unknown						
12.228	138617	7.88	89					
		Unknown						
12.466	370761	21.1	89					

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 89 Chlorobenzene-d5	9.076	879156	50.0

QC Flag Legend

Processing Flags

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

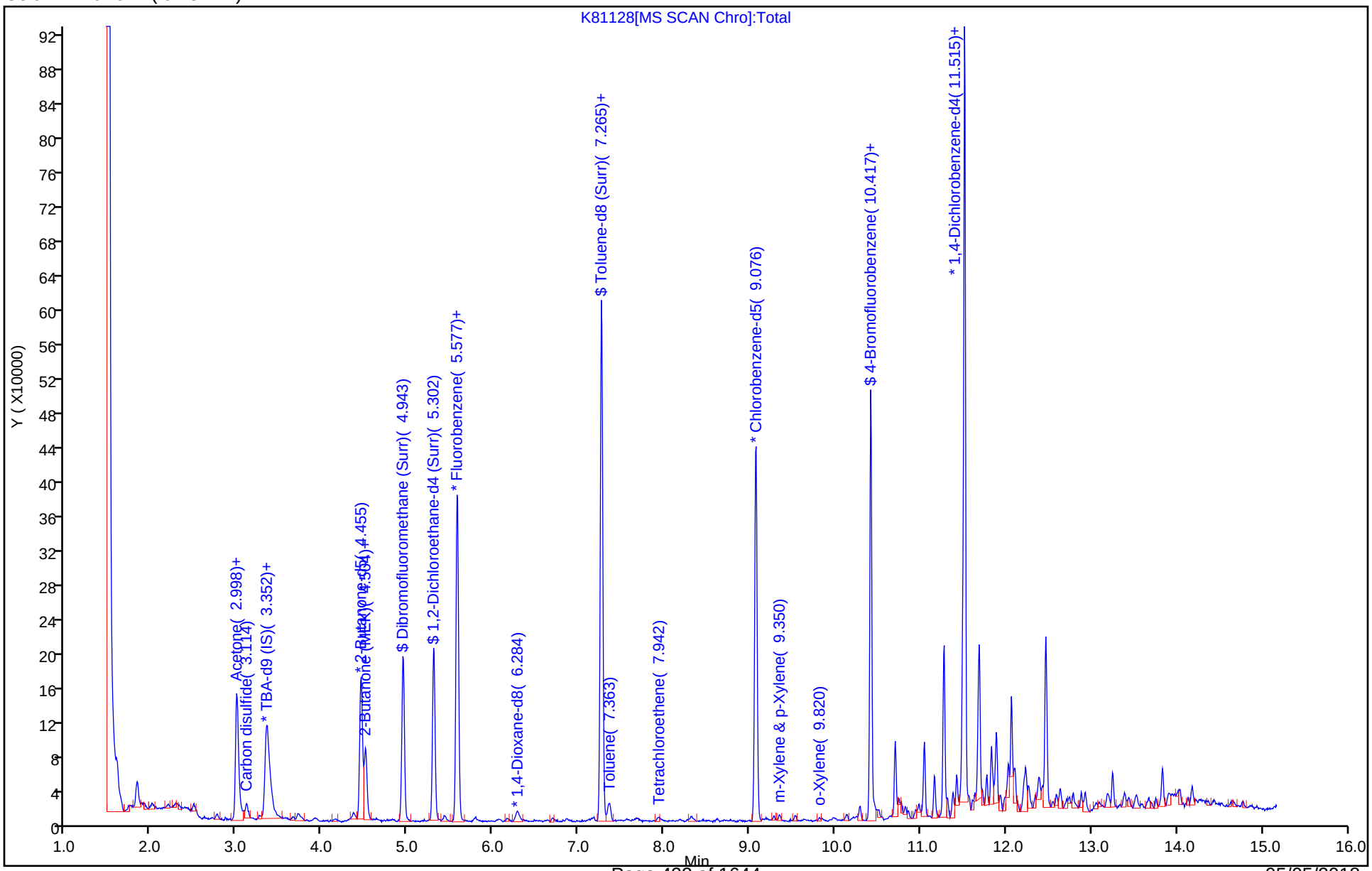
Report Date: 26-Mar-2018 13:10:51 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7	Worklist Smp#:	12
Client ID:	GC-Drain-02(SO)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

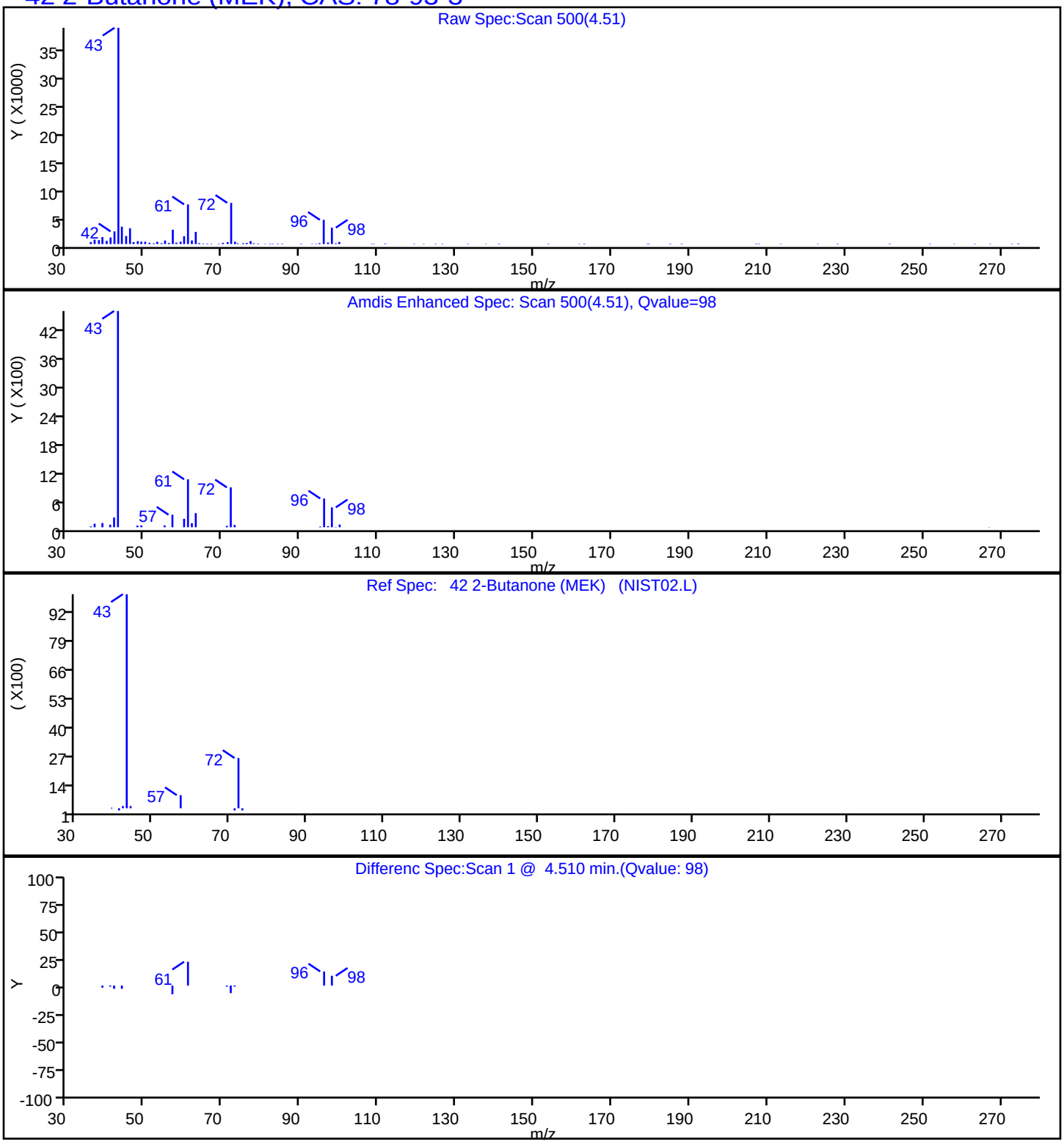
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

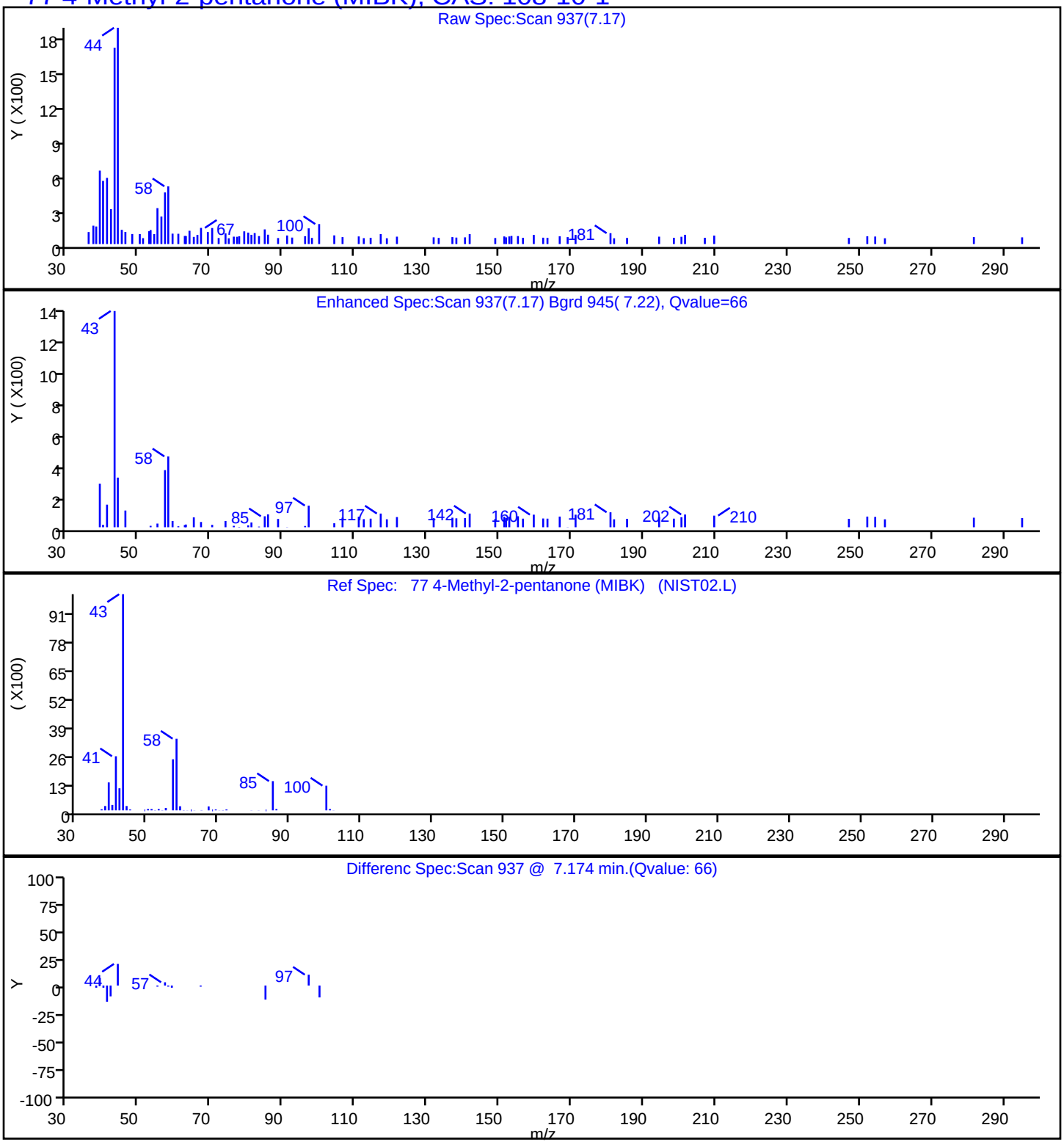
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D				
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D
Injection Date: 24-Mar-2018 10:13:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-7-A Lab Sample ID: 460-152331-7
Client ID: GC-Drain-02(SO)
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

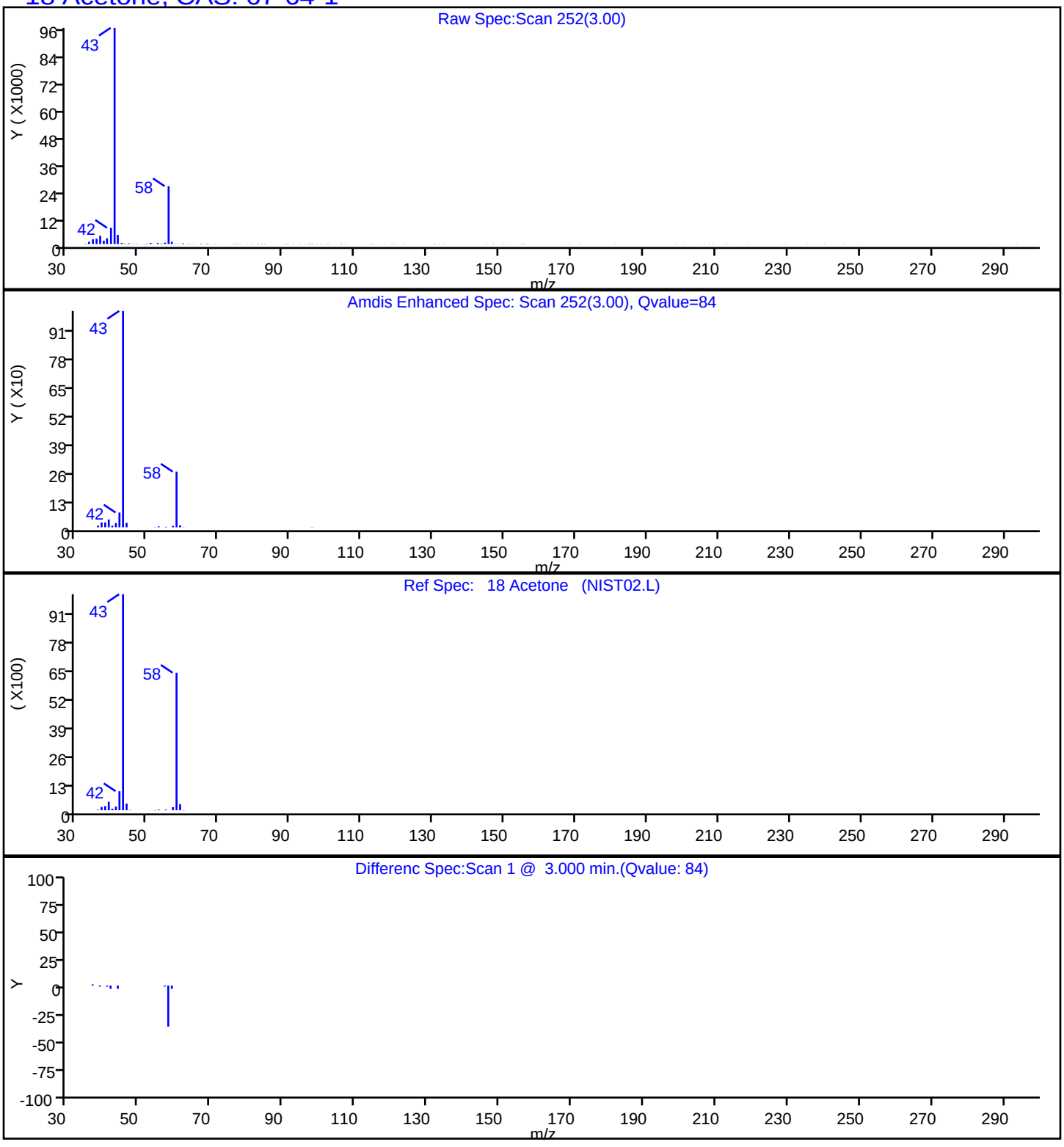
77 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D		
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7
Client ID:	GC-Drain-02(SO)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

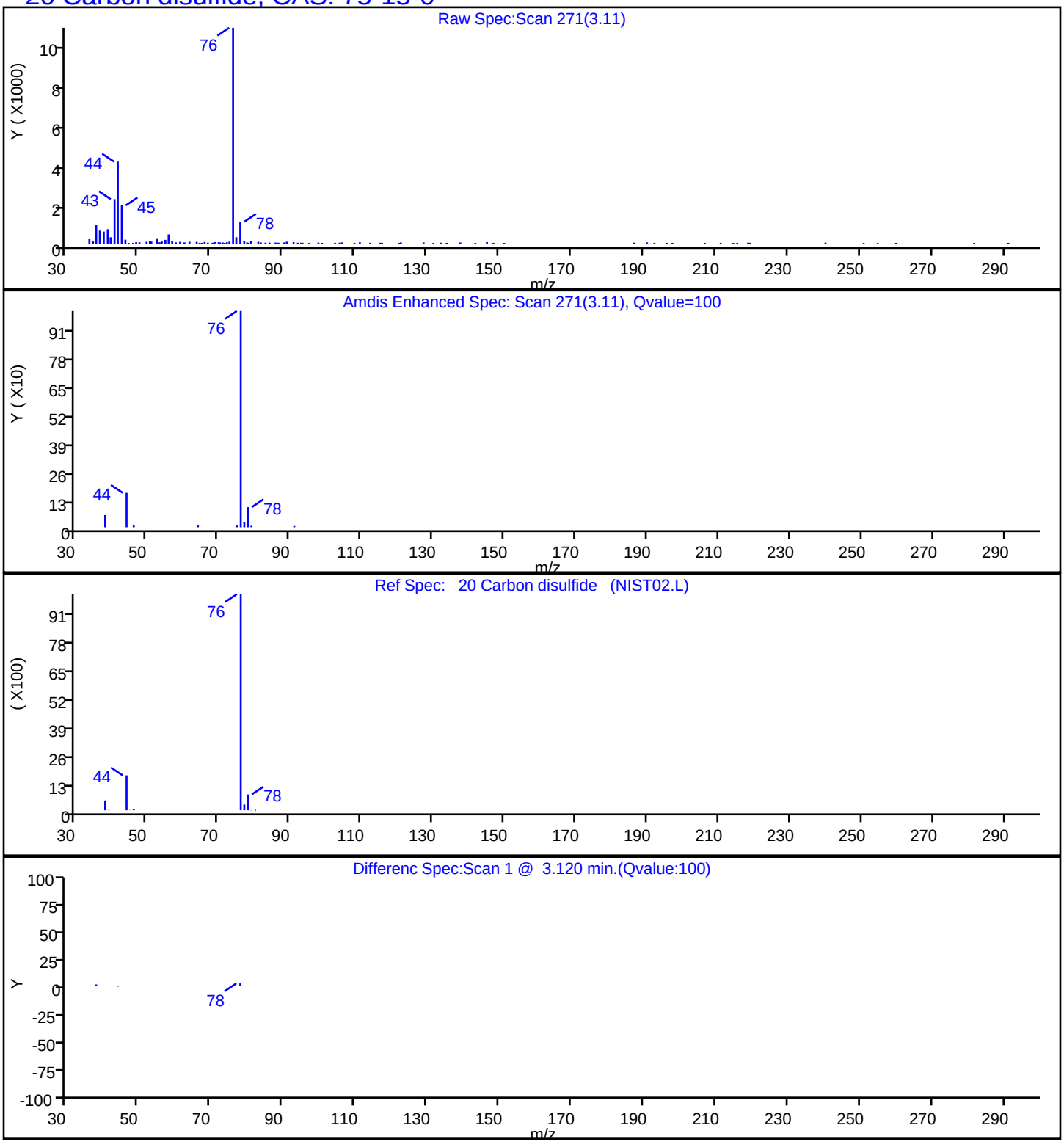
18 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D				
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

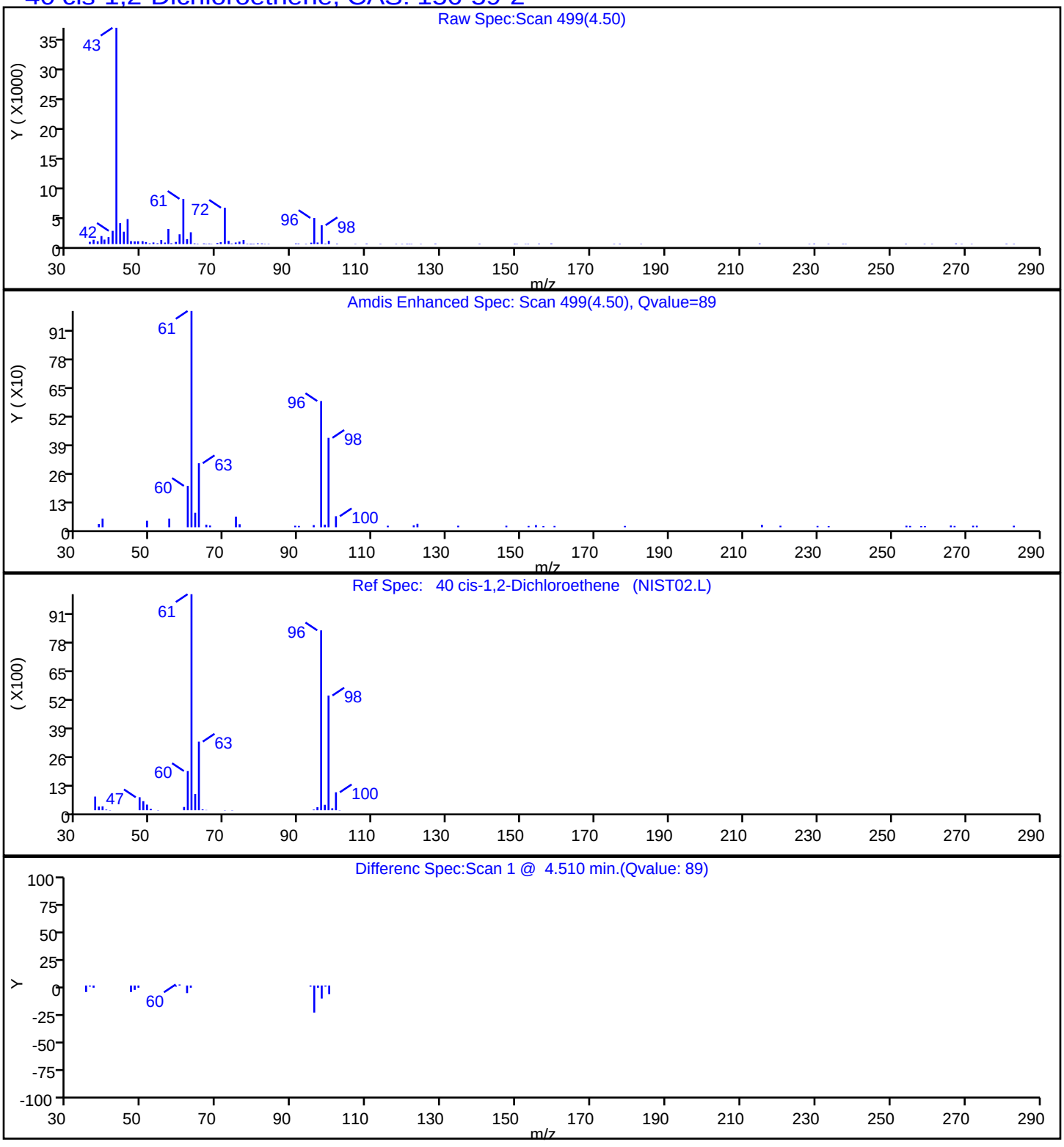
20 Carbon disulfide, CAS: 75-15-0



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D				
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

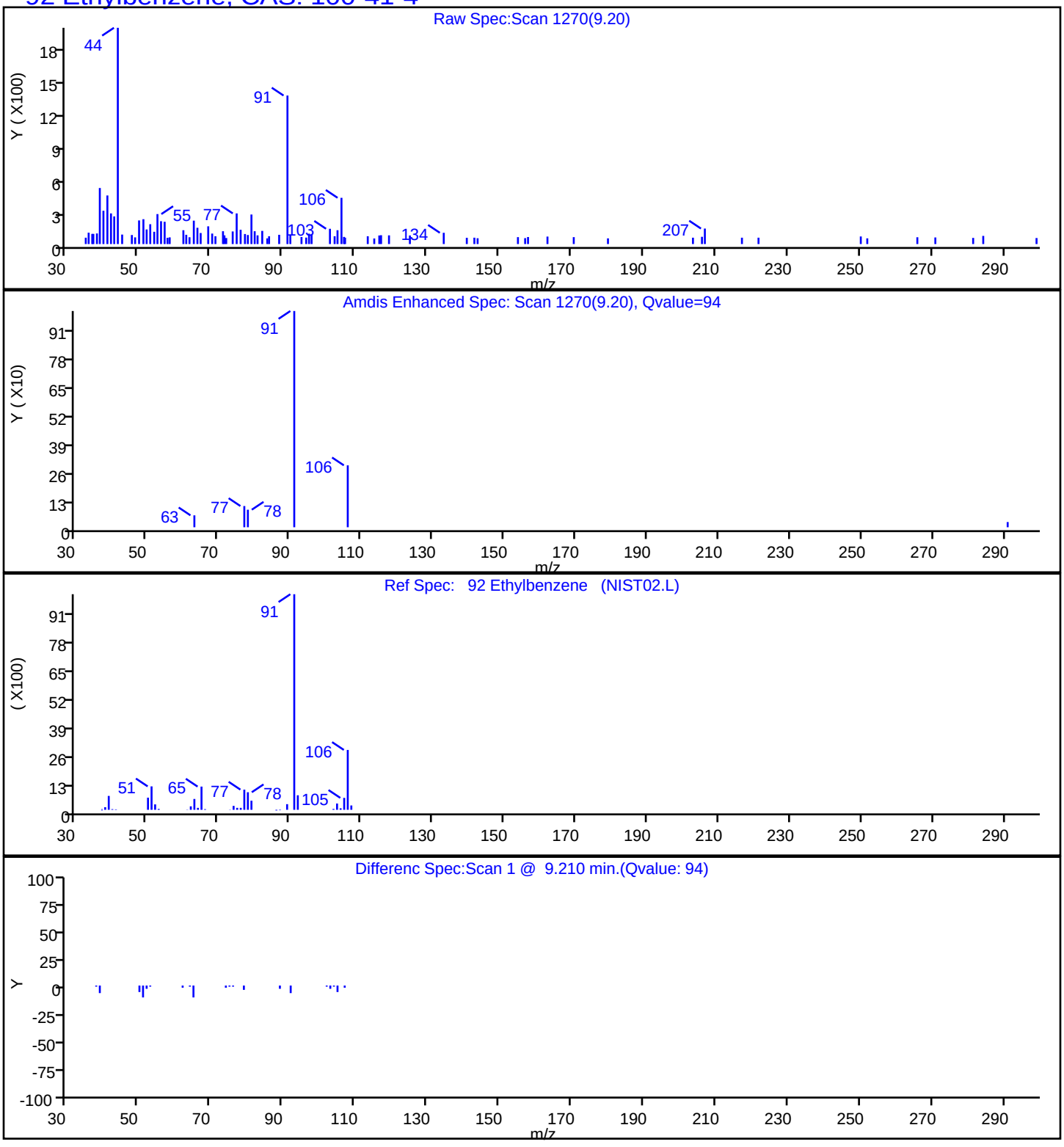
40 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Edison

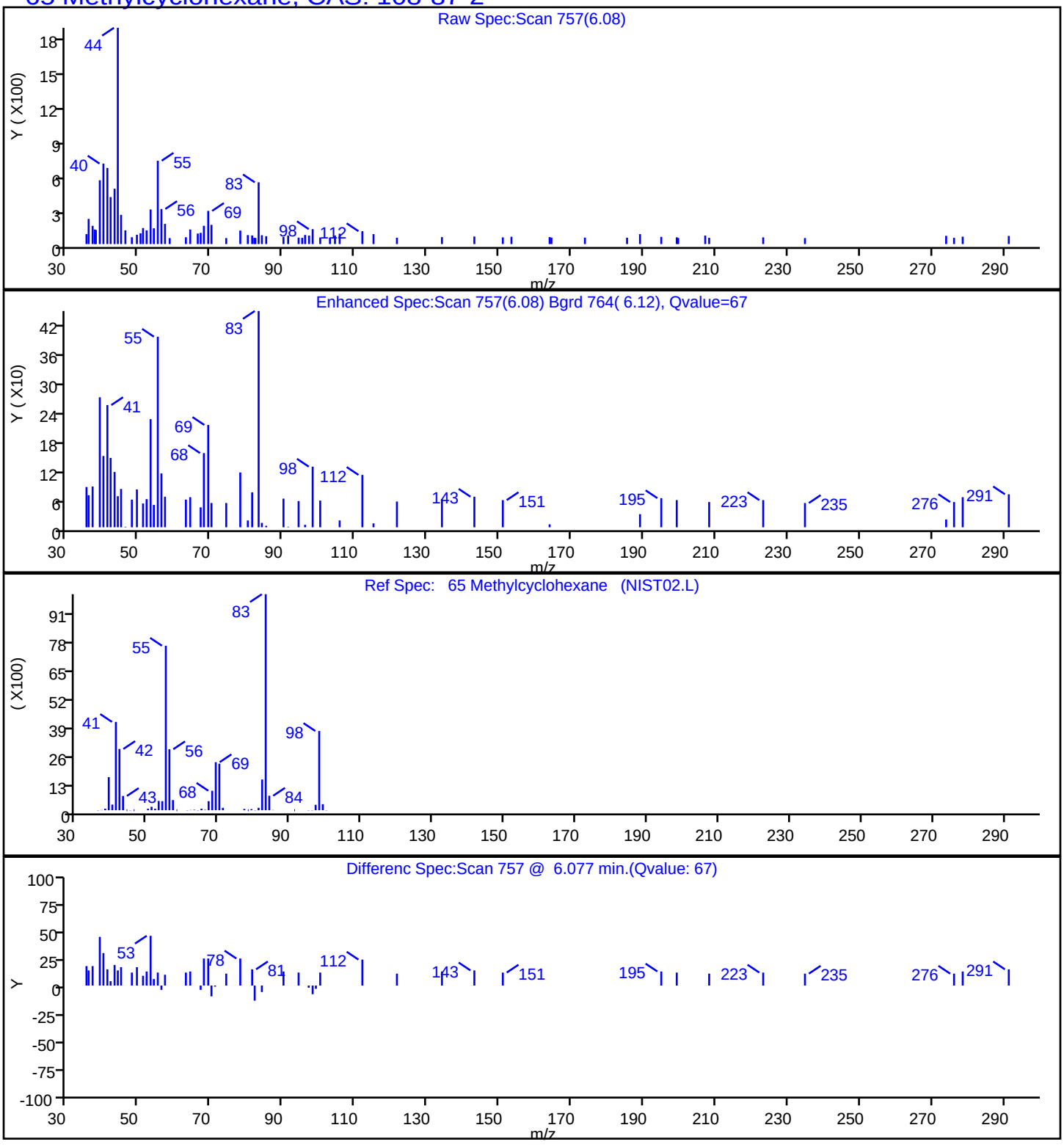
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D		
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7
Client ID:	GC-Drain-02(SO)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D
Injection Date: 24-Mar-2018 10:13:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-7-A Lab Sample ID: 460-152331-7
Client ID: GC-Drain-02(SO)
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

65 Methylcyclohexane, CAS: 108-87-2



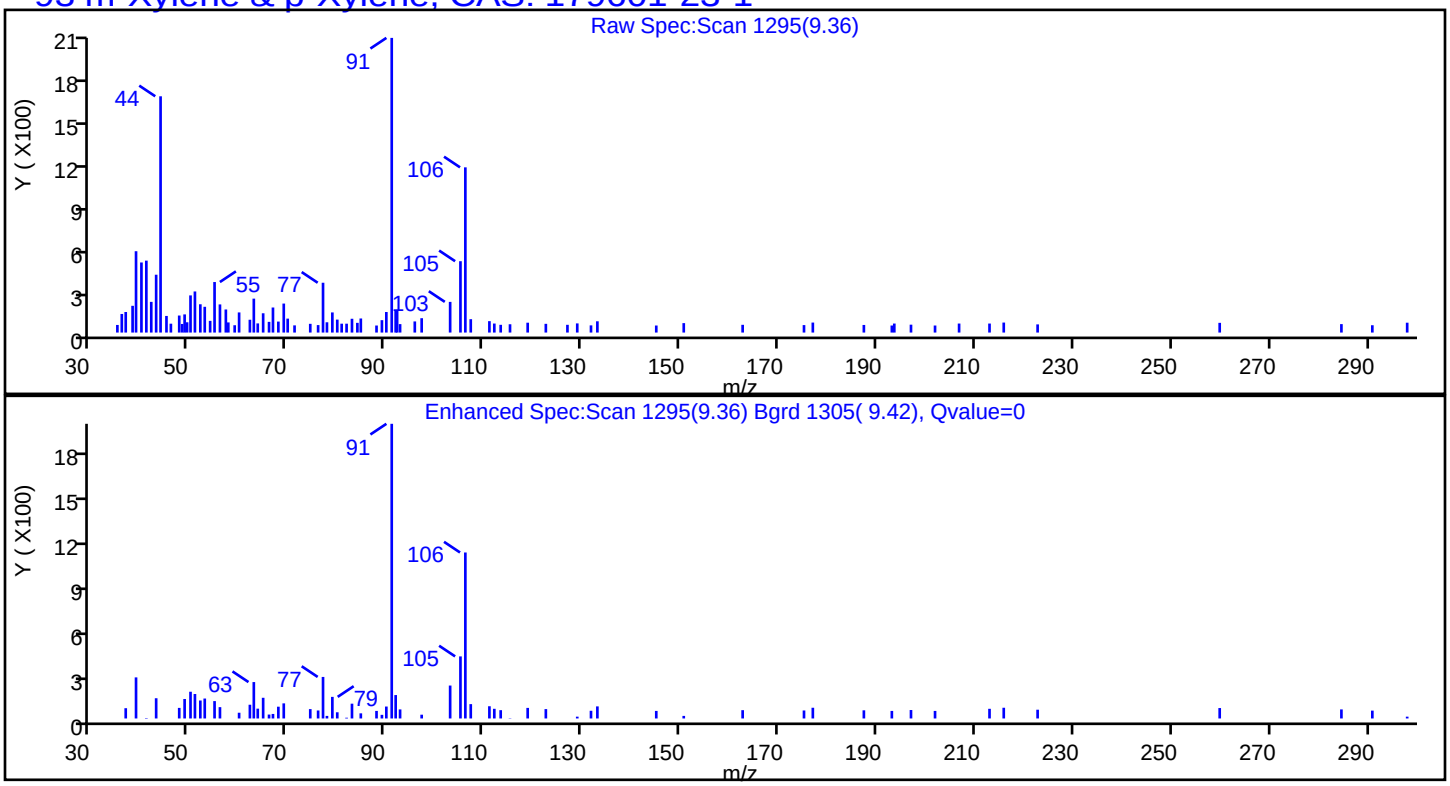
Report Date: 26-Mar-2018 13:10:51 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

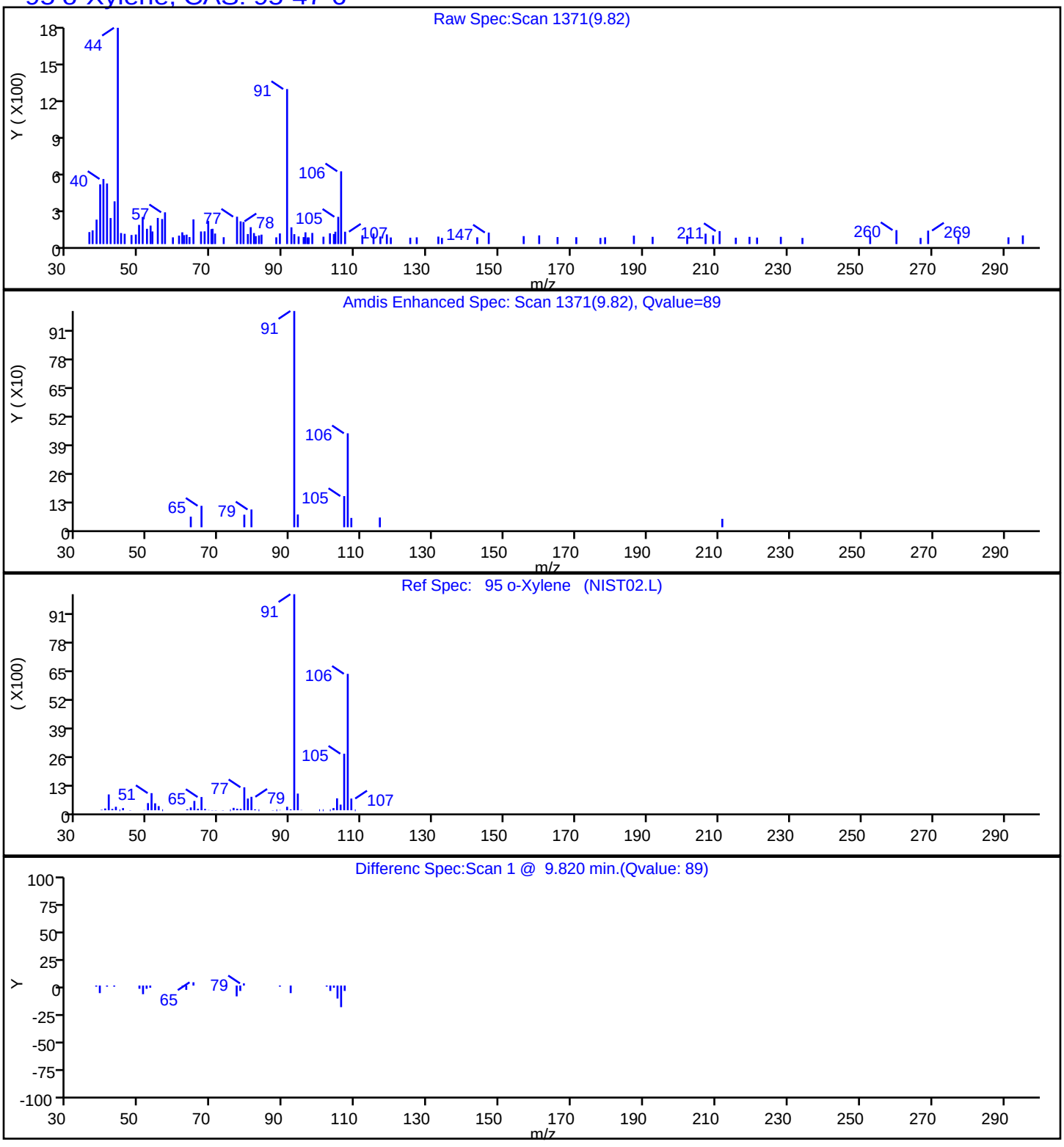
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D
Injection Date: 24-Mar-2018 10:13:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-7-A Lab Sample ID: 460-152331-7
Client ID: GC-Drain-02(SO)
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

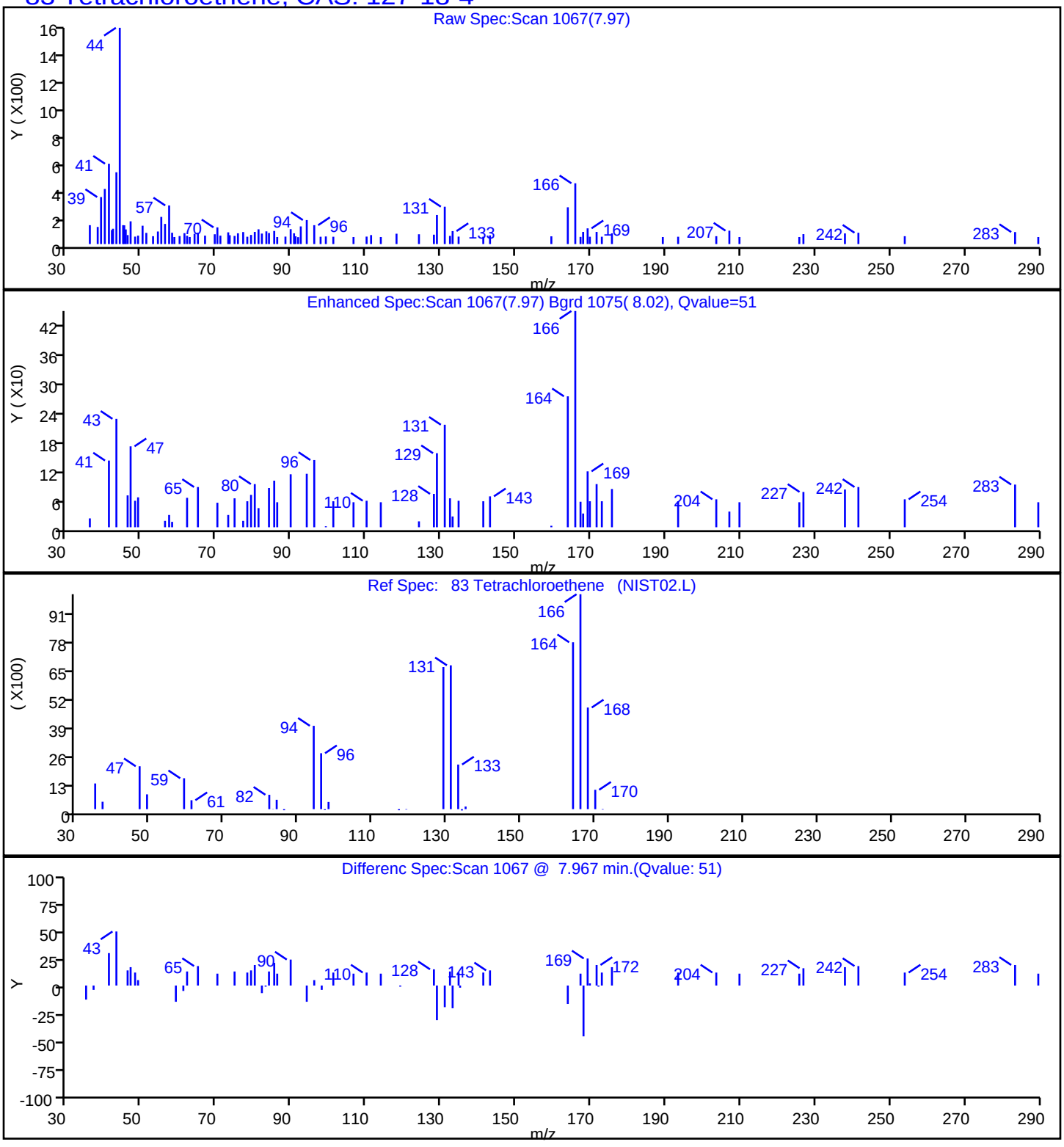
95 o-Xylene, CAS: 95-47-6



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D		
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7
Client ID:	GC-Drain-02(SO)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

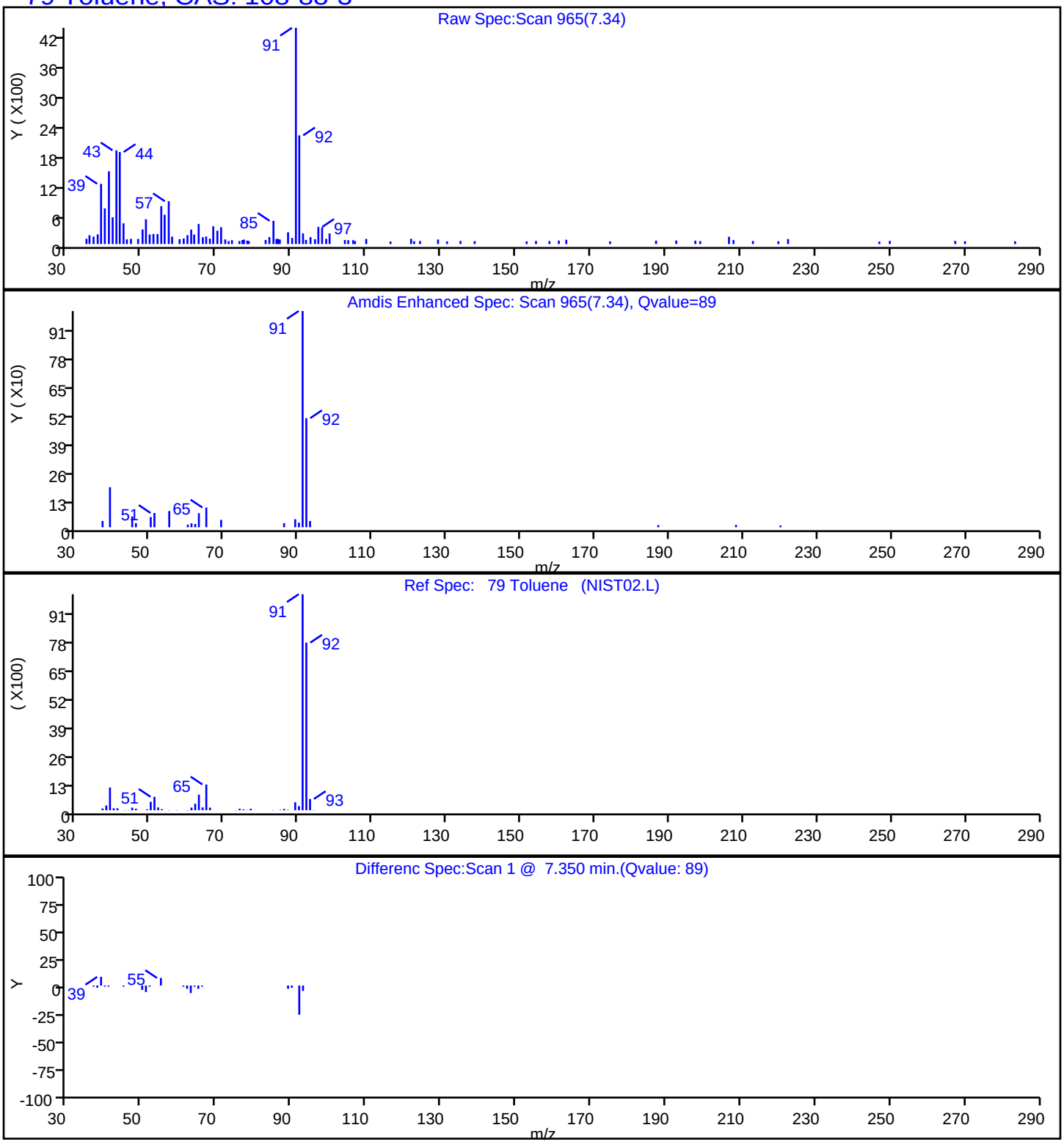
83 Tetrachloroethene, CAS: 127-18-4



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

79 Toluene, CAS: 108-88-3



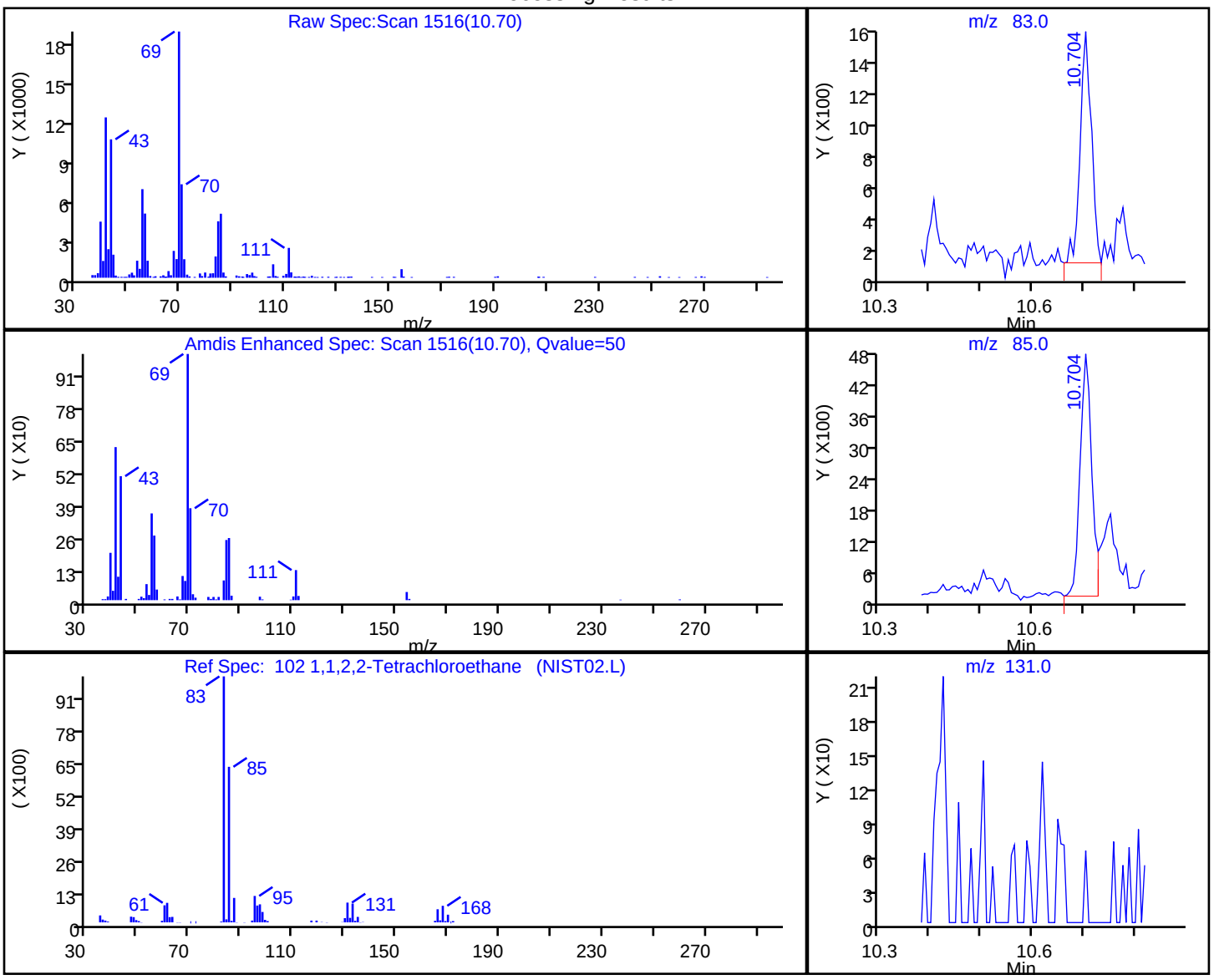
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D				
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

102 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
10.70	83.00	2256	0.792519
10.70	85.00	7410	
10.60	131.00	0	

Reviewer: delpolitov, 26-Mar-2018 13:10:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

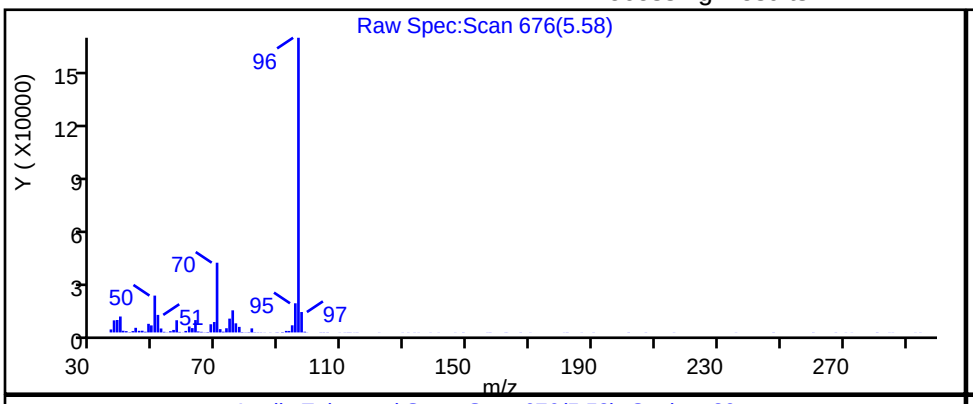
User Disabled Compound Report

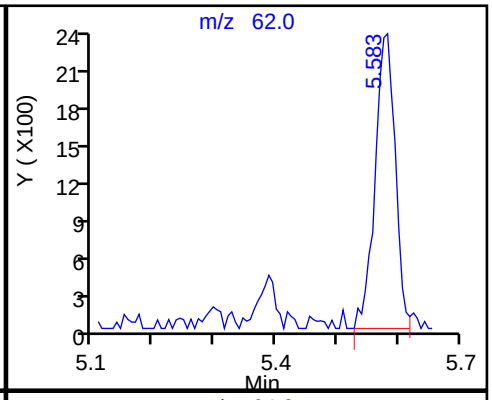
TestAmerica Edison

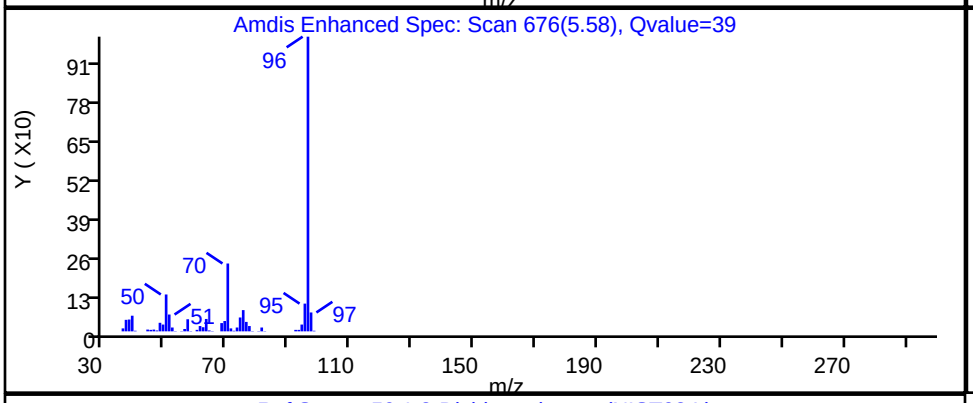
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D		
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7
Client ID:	GC-Drain-02(SO)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

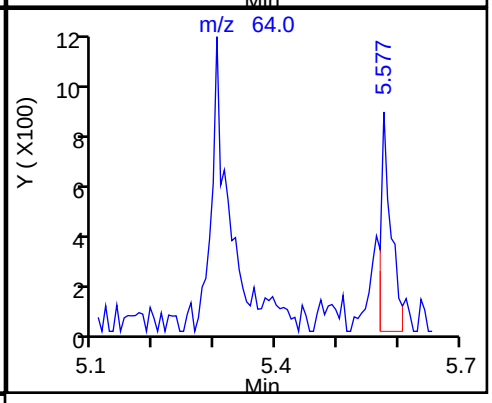
59 1,2-Dichloroethane, CAS: 107-06-2

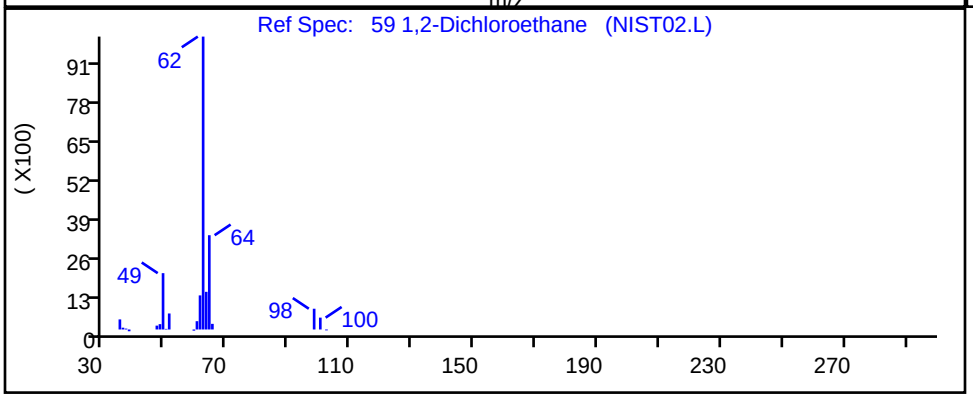
Processing Results











RT	Mass	Response	Amount
5.58	62.00	5445	1.348480
5.58	64.00	998	

Reviewer: delpolitov, 26-Mar-2018 13:10:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

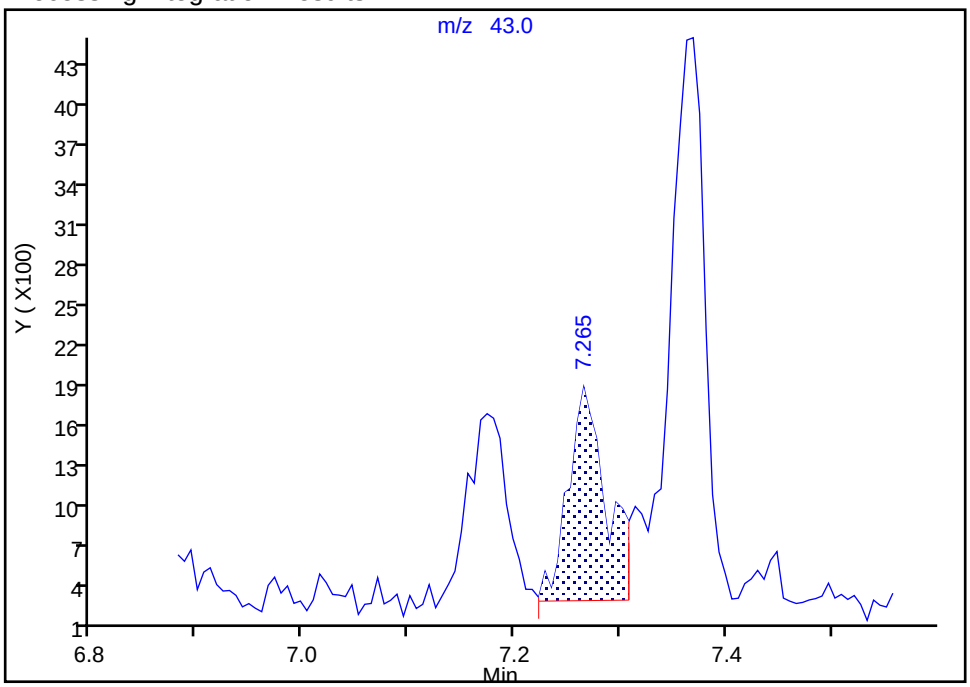
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D				
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

77 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

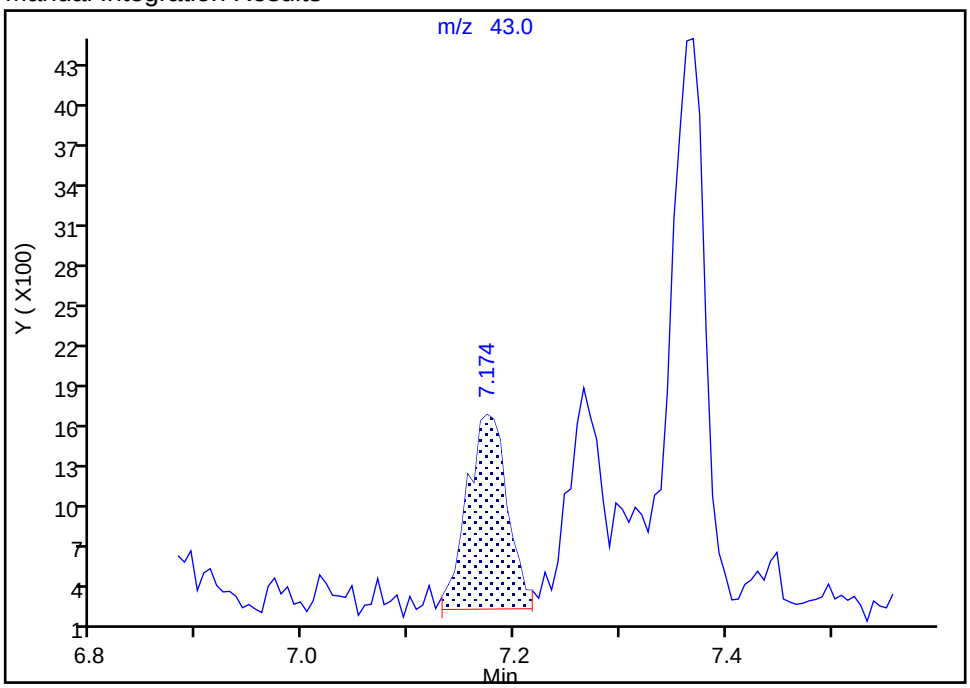
Processing Integration Results

RT: 7.27
Area: 3978
Amount: 1.081900
Amount Units: ug/l



Manual Integration Results

RT: 7.17
Area: 3822
Amount: 1.039472
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 13:10:14

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

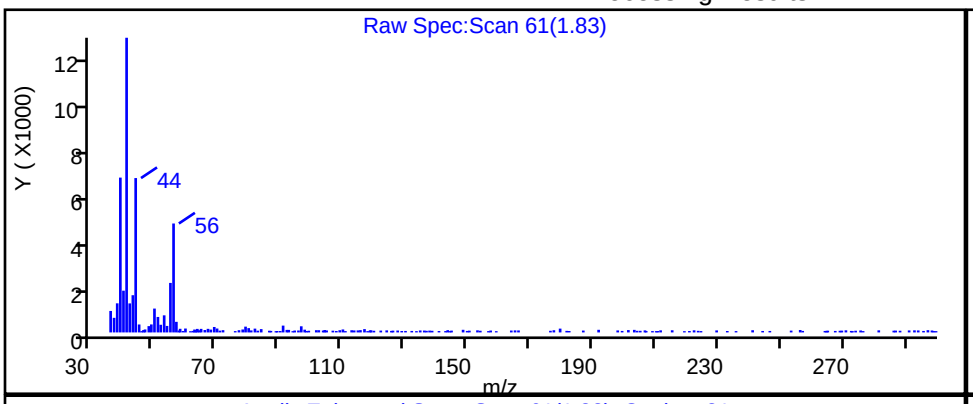
User Disabled Compound Report

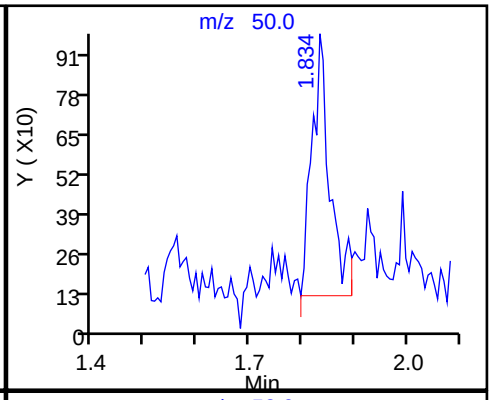
TestAmerica Edison

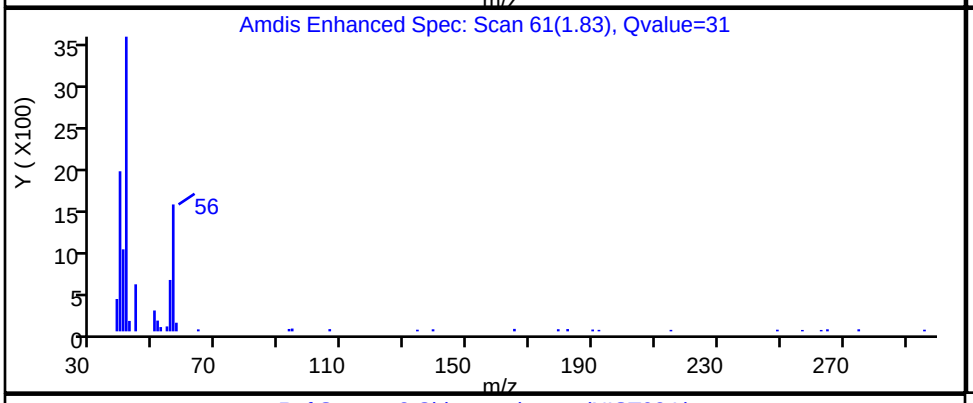
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D		
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7
Client ID:	GC-Drain-02(SO)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

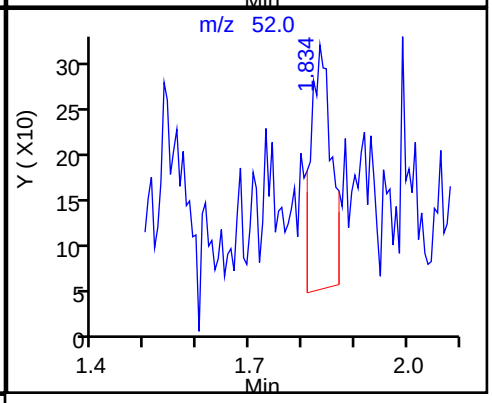
3 Chloromethane, CAS: 74-87-3

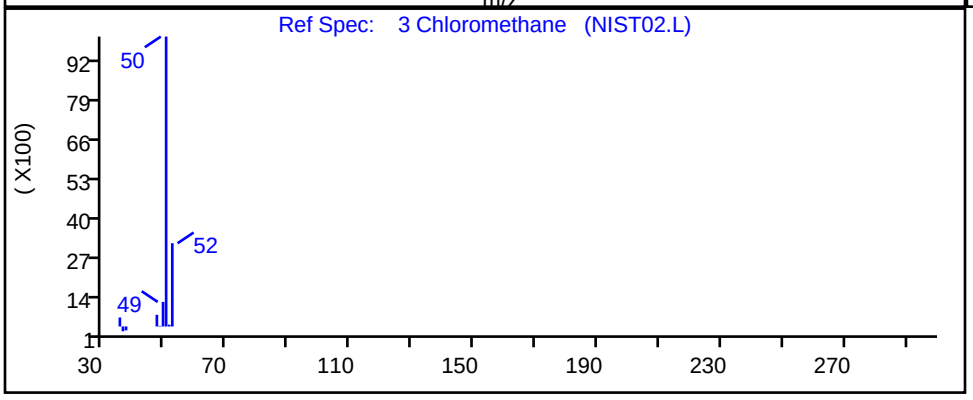
Processing Results











RT	Mass	Response	Amount
1.83	50.00	2064	0.481997
1.83	52.00	713	

Reviewer: delpolitov, 26-Mar-2018 13:10:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

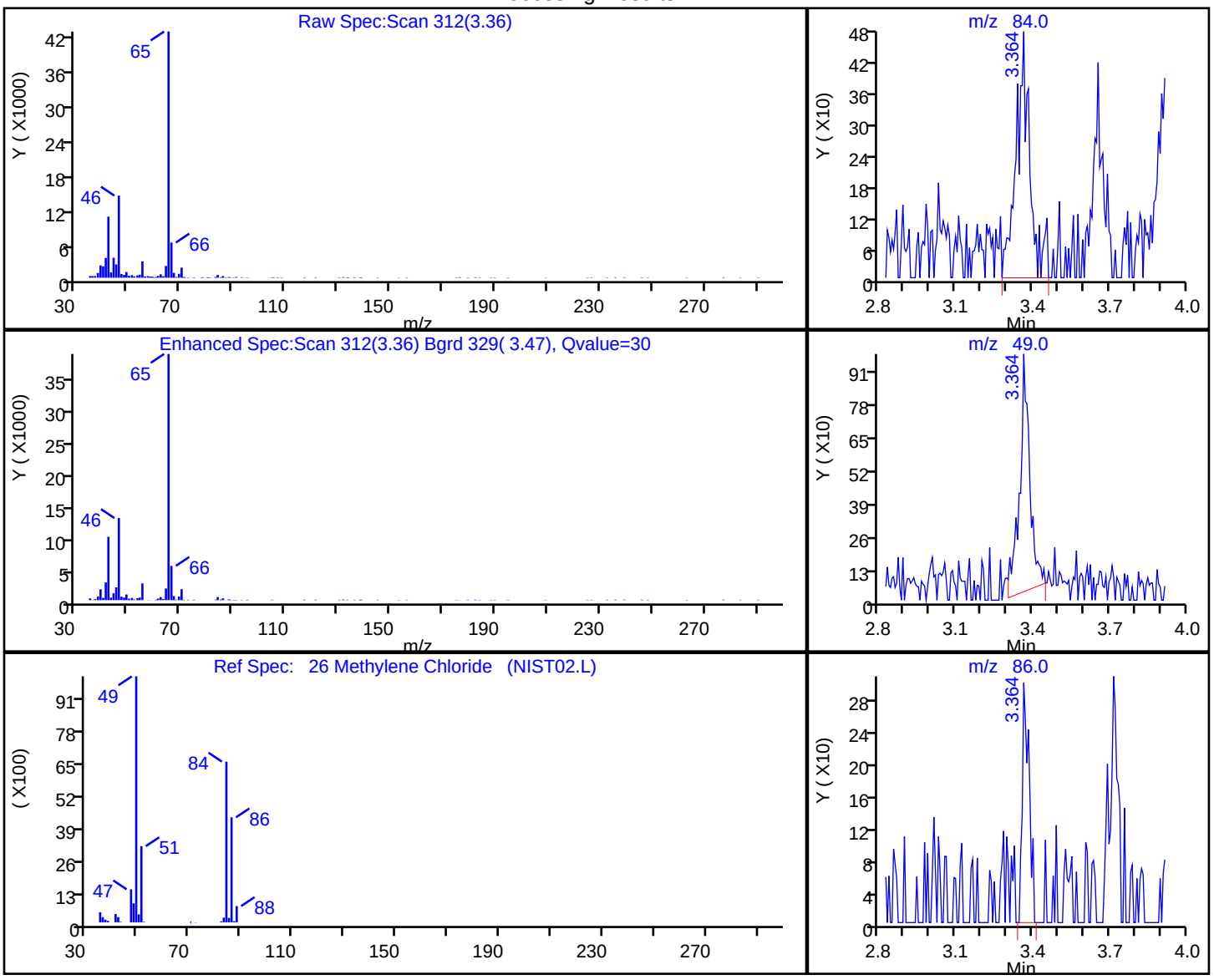
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D				
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

26 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
3.36	84.00	1776	0.274028
3.36	49.00	2613	
3.36	86.00	550	

Reviewer: delpolitov, 26-Mar-2018 13:10:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

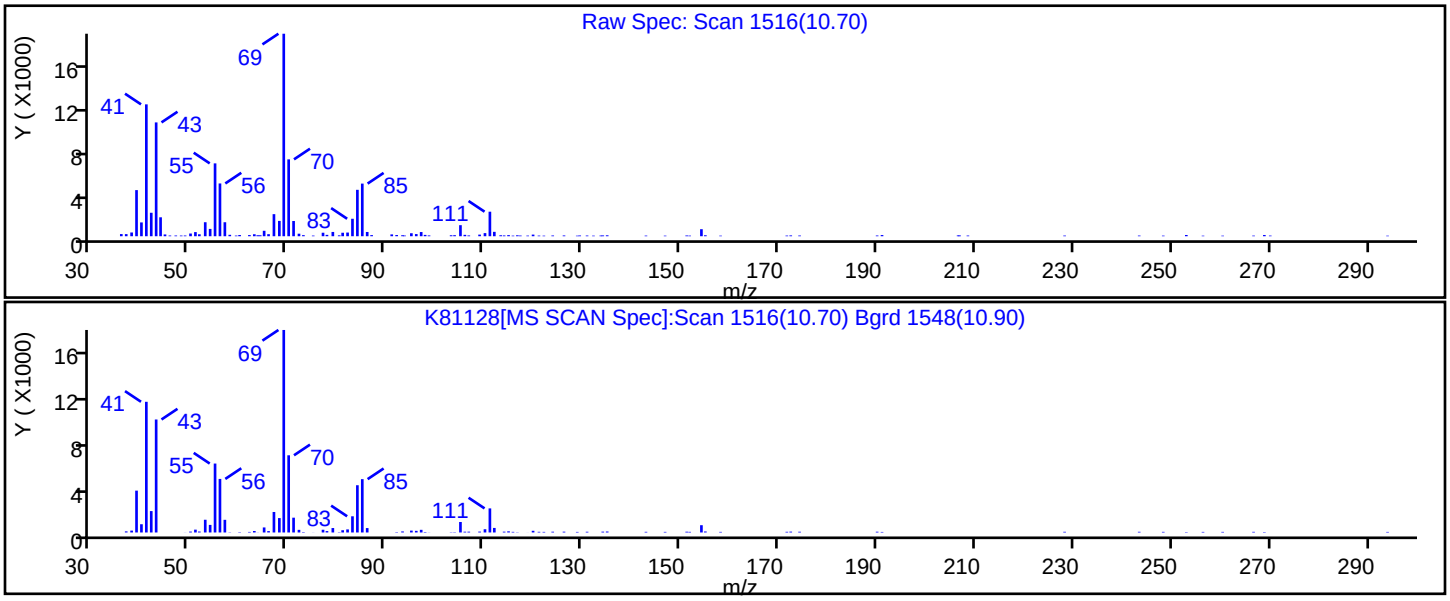
Report Date: 26-Mar-2018 13:10:51 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70



Report Date: 26-Mar-2018 13:10:51 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date: 24-Mar-2018 10:13:30 Instrument ID: CVOAMS9

Lims ID: 460-152331-B-7-A Lab Sample ID: 460-152331-7

Client ID: GC-Drain-02(SO)

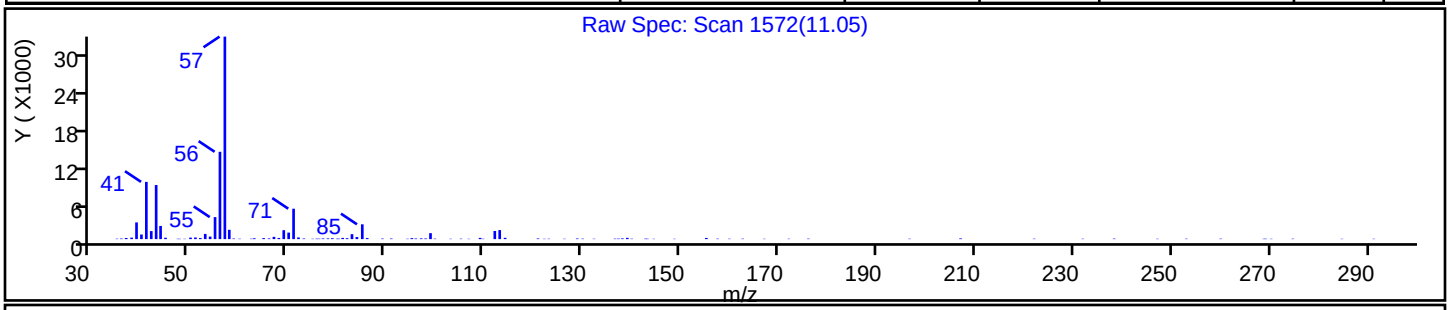
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12

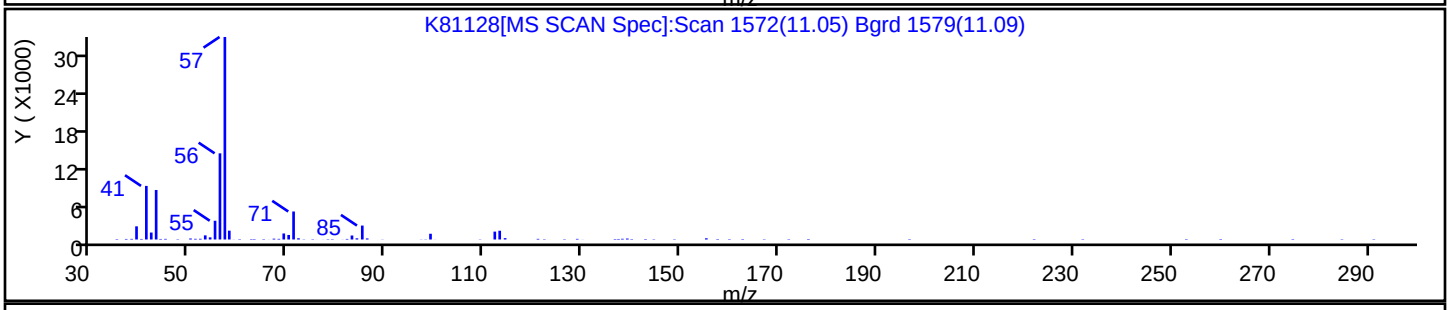
Purge Vol: 5.000 mL Dil. Factor: 1.0000

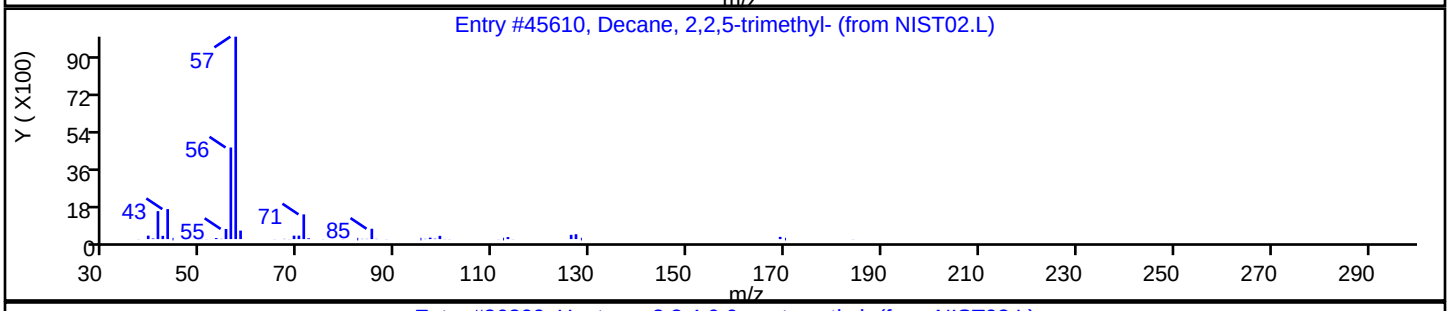
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

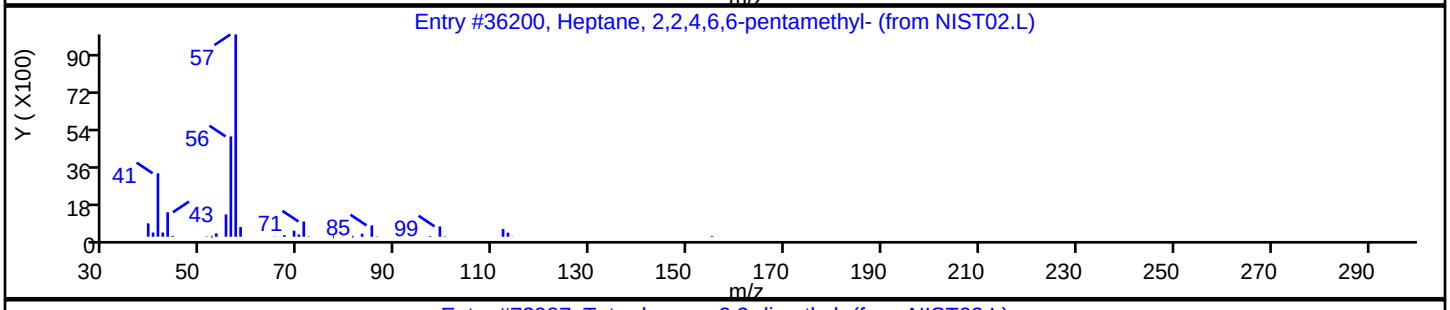
Column: Detector MS SCAN

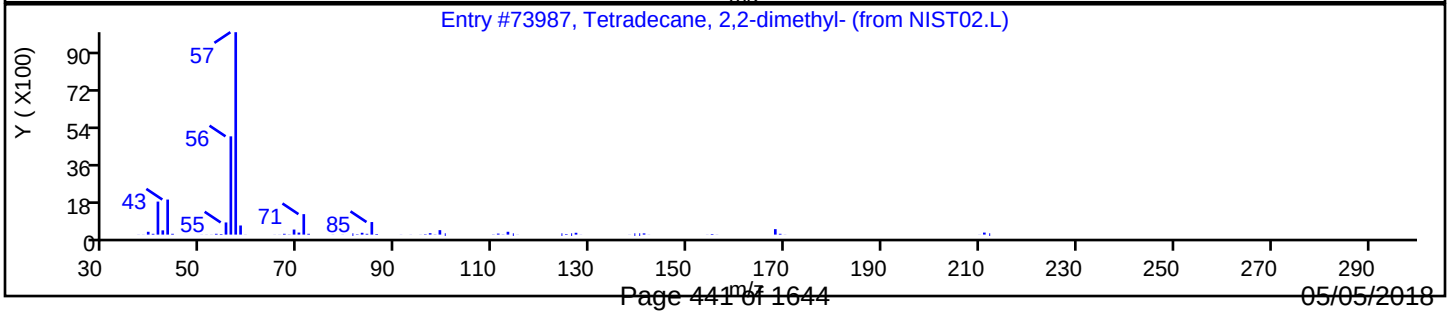
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Unknown alkane						
Decane, 2,2,5-trimethyl-	62237-96-1	NIST02.L	45610	C13H28	184	78
Heptane, 2,2,4,6,6-pentamethyl-	13475-82-6	NIST02.L	36200	C12H26	170	78
Tetradecane, 2,2-dimethyl-	59222-86-5	NIST02.L	73987	C16H34	226	78











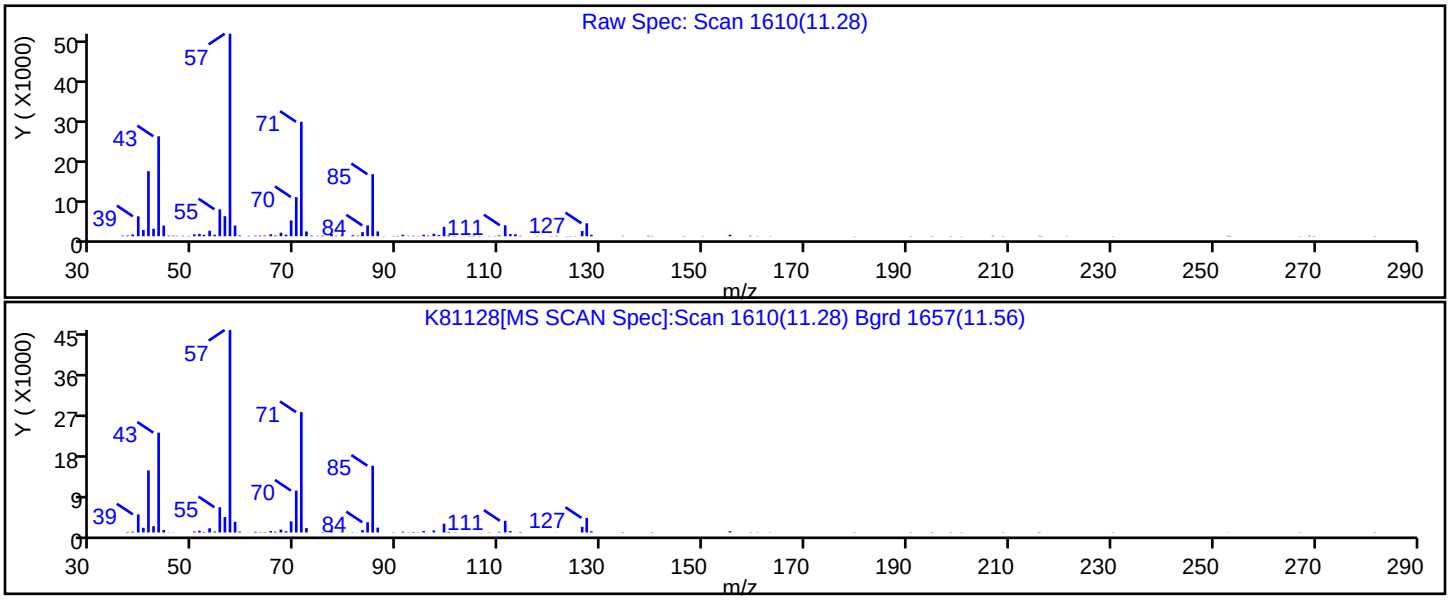
Report Date: 26-Mar-2018 13:10:52 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70



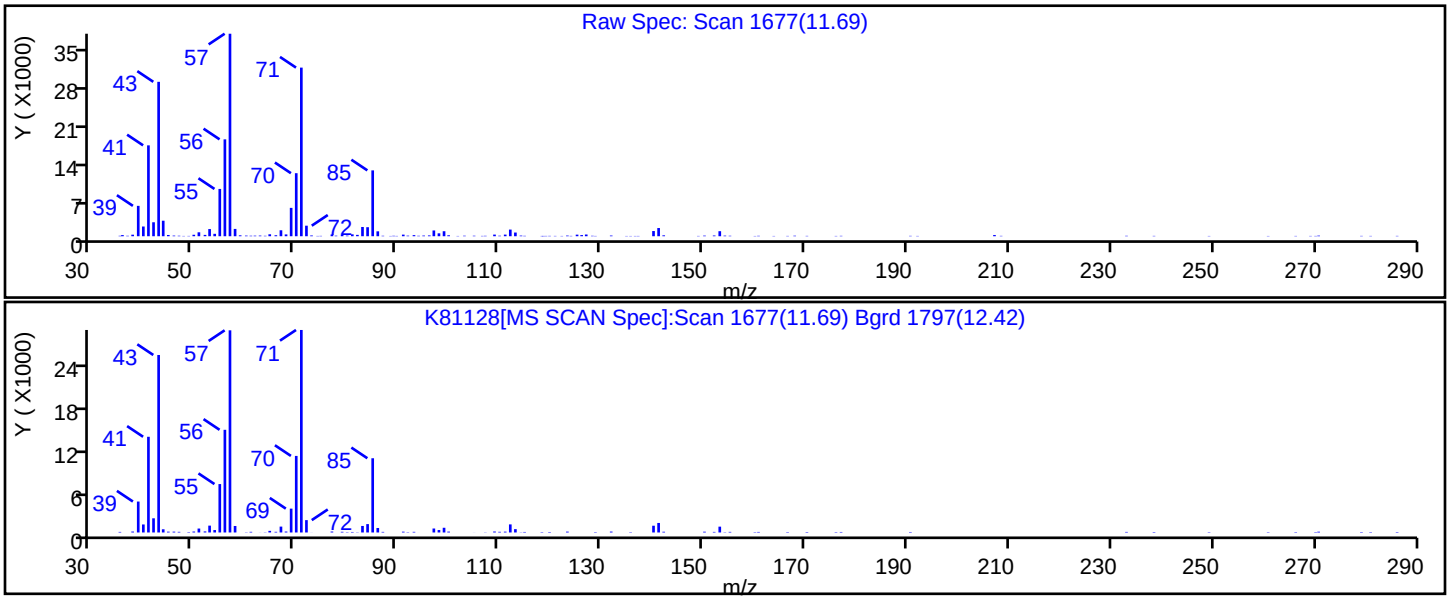
Report Date: 26-Mar-2018 13:10:52 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70



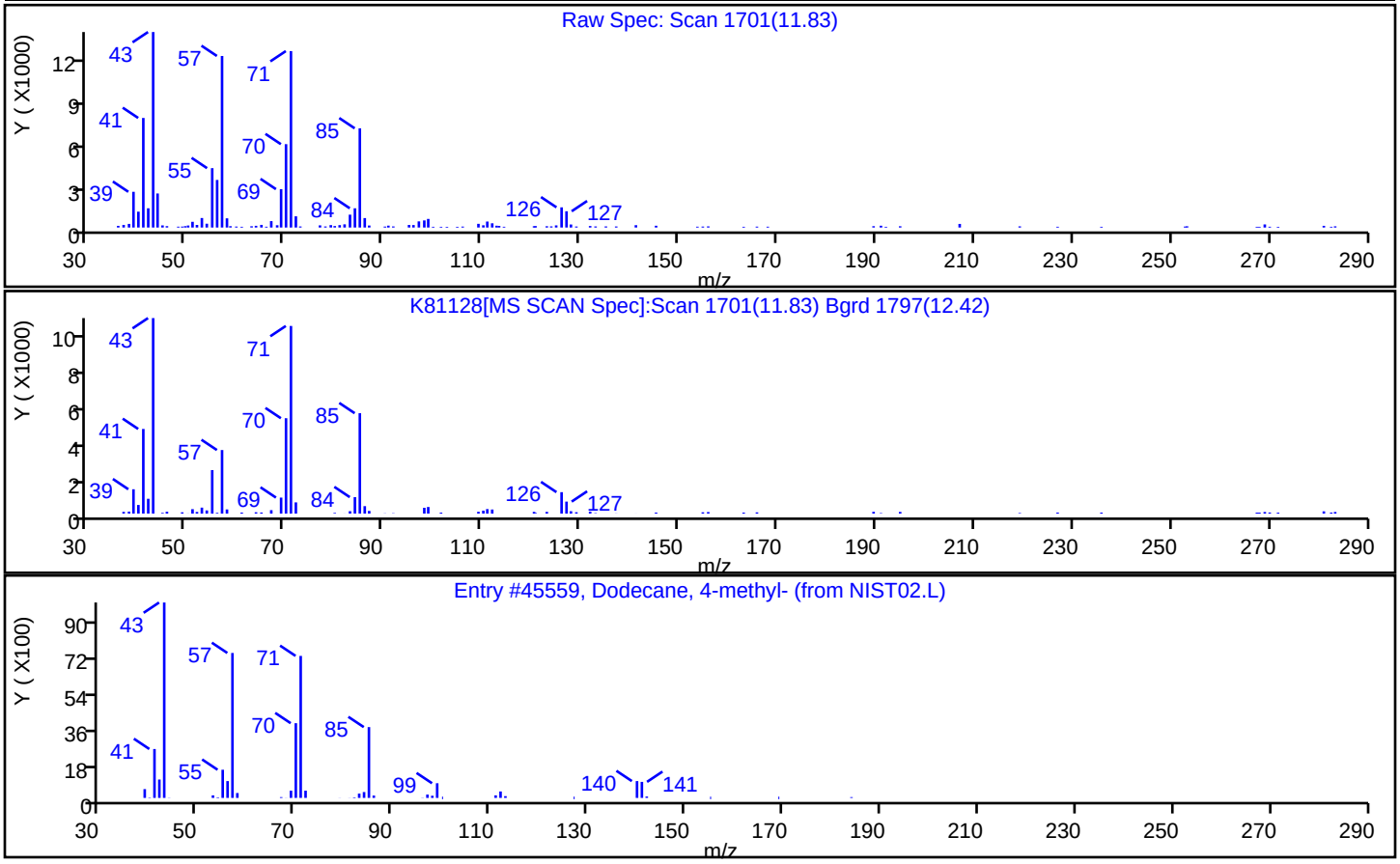
Report Date: 26-Mar-2018 13:10:52 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7
Client ID:	GC-Drain-02(SO)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:		Detector	MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Unknown alkane						
Dodecane, 4-methyl-	6117-97-1	NIST02.L	45559	C13H28	184	78



Report Date: 26-Mar-2018 13:10:52 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date: 24-Mar-2018 10:13:30 Instrument ID: CVOAMS9

Lims ID: 460-152331-B-7-A Lab Sample ID: 460-152331-7

Client ID: GC-Drain-02(SO)

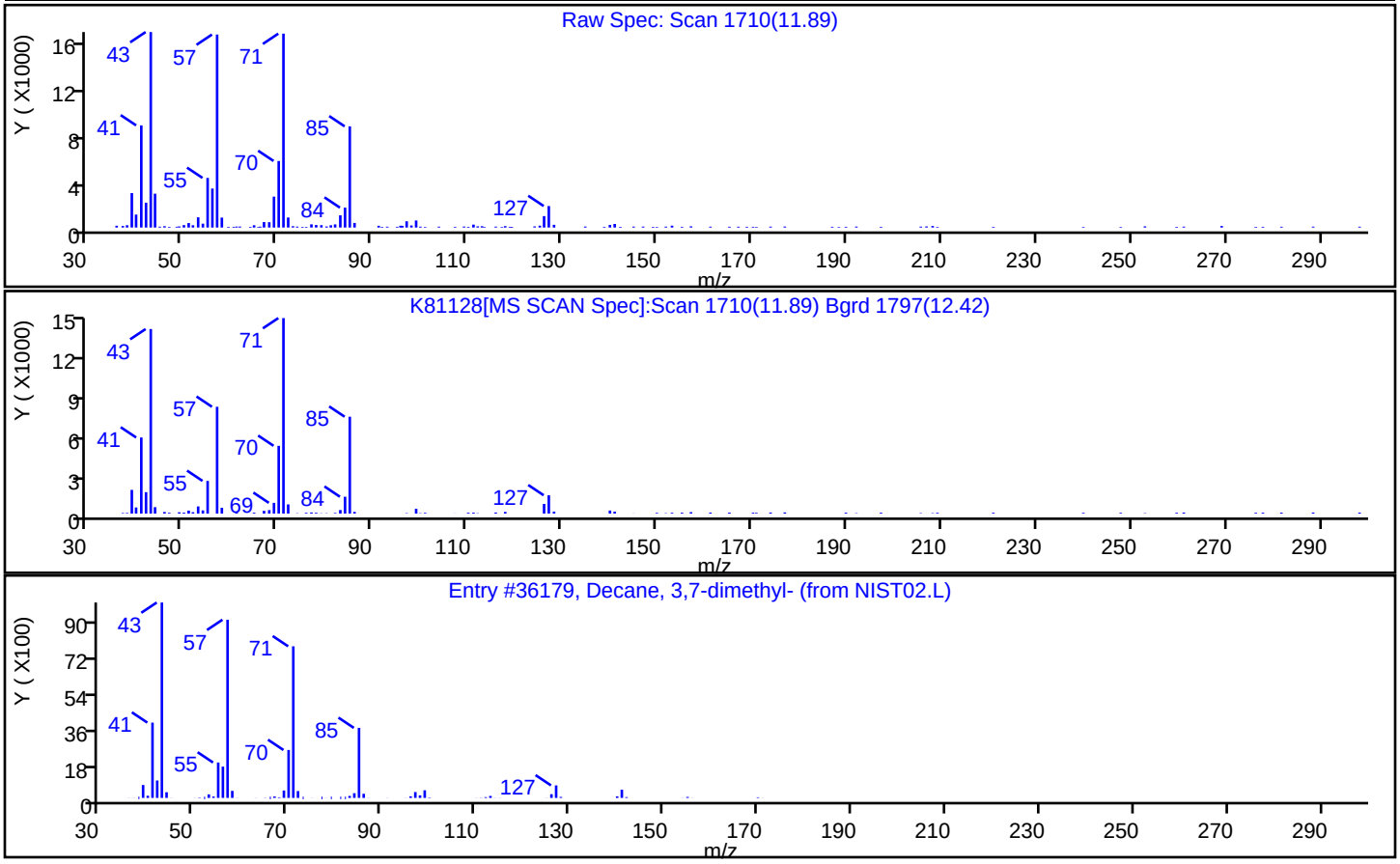
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Detector MS SCAN

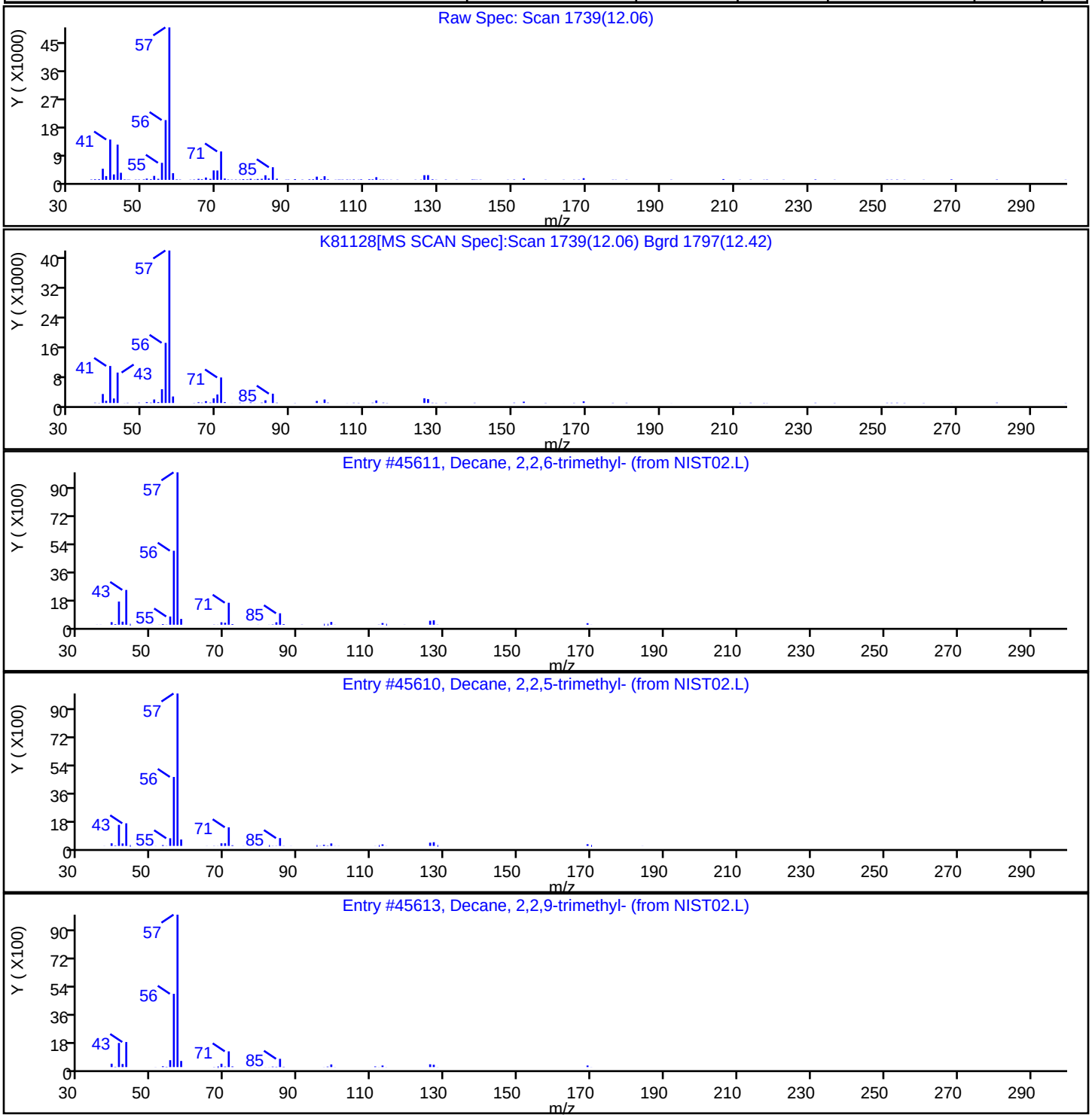
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Unknown alkane						
Decane, 3,7-dimethyl-	17312-54-8	NIST02.L	36179	C12H26	170	80



TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D
Injection Date: 24-Mar-2018 10:13:30 Instrument ID: CVOAMS9
Lims ID: 460-152331-B-7-A Lab Sample ID: 460-152331-7
Client ID: GC-Drain-02(SO)
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Decane, 2,2,6-trimethyl-	62237-97-2	NIST02.L	45611	C13H28	184	90
Decane, 2,2,5-trimethyl-	62237-96-1	NIST02.L	45610	C13H28	184	83
Decane, 2,2,9-trimethyl-	62238-00-0	NIST02.L	45613	C13H28	184	83



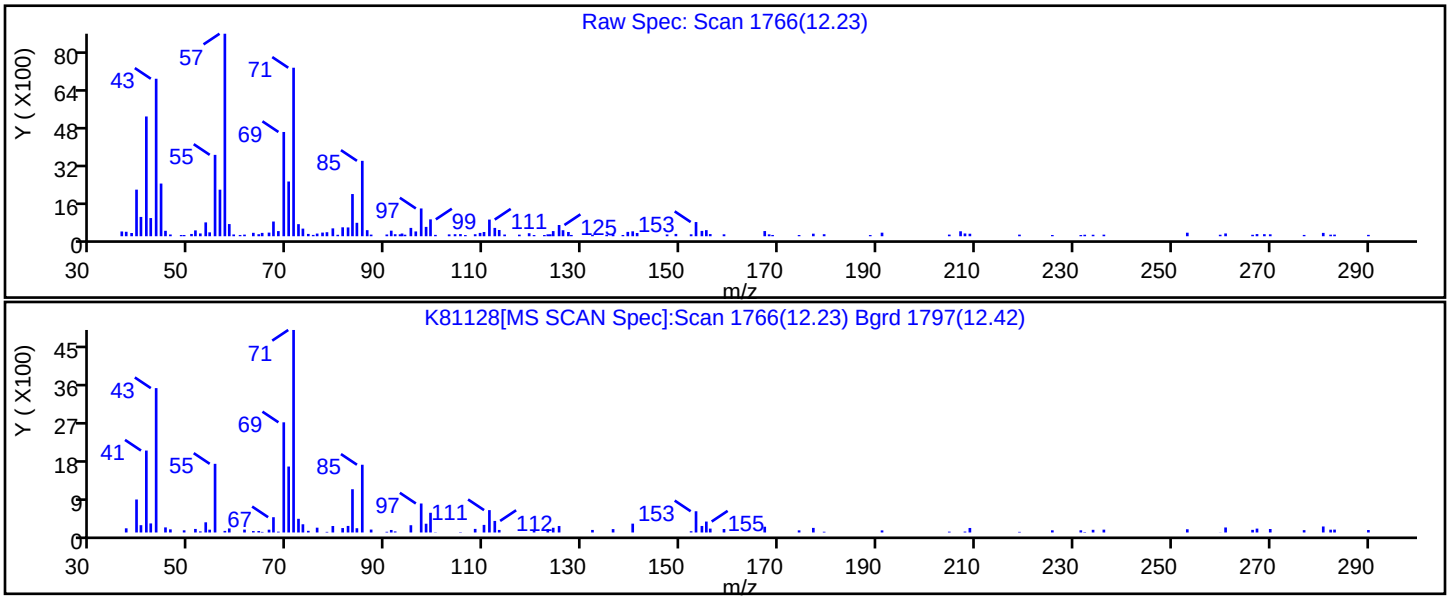
Report Date: 26-Mar-2018 13:10:52 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D

Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70

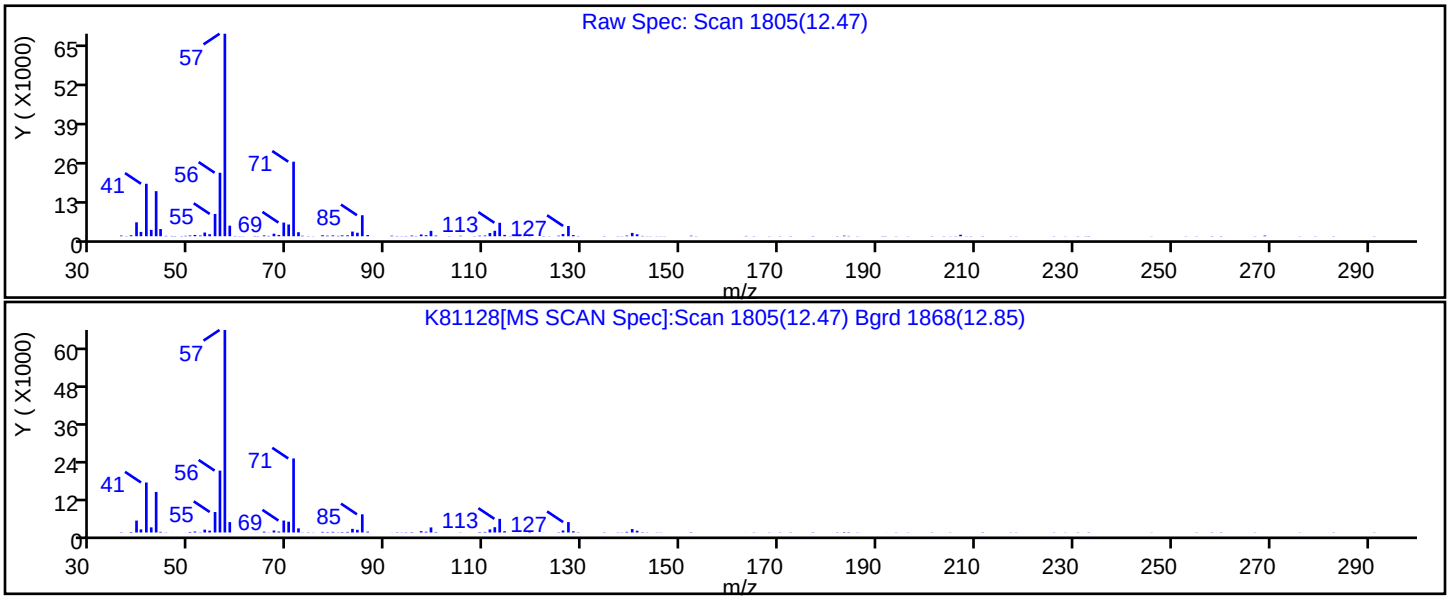


Report Date: 26-Mar-2018 13:10:52 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81128.D				
Injection Date:	24-Mar-2018 10:13:30	Instrument ID:	CVOAMS9		
Lims ID:	460-152331-B-7-A	Lab Sample ID:	460-152331-7		
Client ID:	GC-Drain-02(SO)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-15-17 | Lab Sample ID: 460-152604-2

Matrix: Solid | Lab File ID: B28134.D

Analysis Method: 8260C | Date Collected: 03/26/2018 11:00

Sample wt/vol: 5.702(g) | Date Analyzed: 03/31/2018 19:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 8.5 | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029
79-00-5	1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017
75-34-3	1,1-Dichloroethane	0.00096	U	0.00096	0.00020
75-35-4	1,1-Dichloroethene	0.00096	U	0.00096	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000088
96-12-8	1,2-Dibromo-3-Chloropropane	0.00096	U *	0.00096	0.00044
95-50-1	1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014
107-06-2	1,2-Dichloroethane	0.00096	U	0.00096	0.00028
78-87-5	1,2-Dichloropropane	0.00096	U	0.00096	0.00041
541-73-1	1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015
106-46-7	1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0088
78-93-3	2-Butanone (MEK)	0.0048	U	0.0048	0.0011
591-78-6	2-Hexanone	0.0048	U *	0.0048	0.00075
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0048	U *	0.0048	0.00064
67-64-1	Acetone	0.050		0.0048	0.0036
71-43-2	Benzene	0.00096	U	0.00096	0.00025
75-25-2	Bromoform	0.00096	U	0.00096	0.00041
74-83-9	Bromomethane	0.00096	U	0.00096	0.00045
75-15-0	Carbon disulfide	0.00096	U	0.00096	0.00025
56-23-5	Carbon tetrachloride	0.00096	U	0.00096	0.00017
108-90-7	Chlorobenzene	0.00096	U	0.00096	0.00017
74-97-5	Chlorobromomethane	0.00096	U	0.00096	0.00027
124-48-1	Chlorodibromomethane	0.00096	U	0.00096	0.00019
75-00-3	Chloroethane	0.00096	U	0.00096	0.00050
67-66-3	Chloroform	0.00096	U	0.00096	0.00031
74-87-3	Chloromethane	0.00096	U	0.00096	0.00042
156-59-2	cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
110-82-7	Cyclohexane	0.00096	U	0.00096	0.00021
75-27-4	Dichlorobromomethane	0.00096	U	0.00096	0.00025
75-71-8	Dichlorodifluoromethane	0.00096	U	0.00096	0.00032

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-15-17 | Lab Sample ID: 460-152604-2

Matrix: Solid | Lab File ID: B28134.D

Analysis Method: 8260C | Date Collected: 03/26/2018 11:00

Sample wt/vol: 5.702(g) | Date Analyzed: 03/31/2018 19:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 8.5 | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00096	U	0.00096	0.00019
106-93-4	Ethylene Dibromide	0.00096	U	0.00096	0.00017
98-82-8	Isopropylbenzene	0.00096	U	0.00096	0.00012
79-20-9	Methyl acetate	0.0048	U	0.0048	0.0041
1634-04-4	Methyl tert-butyl ether	0.00096	U	0.00096	0.00012
108-87-2	Methylcyclohexane	0.00096	U	0.00096	0.00015
75-09-2	Methylene Chloride	0.0042		0.00096	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00027	J	0.00096	0.00017
95-47-6	o-Xylene	0.00011	J	0.00096	0.000091
100-42-5	Styrene	0.00096	U	0.00096	0.00012
127-18-4	Tetrachloroethene	0.00096	U	0.00096	0.00014
108-88-3	Toluene	0.00096	U	0.00096	0.00060
156-60-5	trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00025
79-01-6	Trichloroethene	0.00096	U	0.00096	0.00014
75-69-4	Trichlorofluoromethane	0.00096	U	0.00096	0.00039
75-01-4	Vinyl chloride	0.00096	U	0.00096	0.00052

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	129		78-135
460-00-4	4-Bromofluorobenzene	93		67-126
1868-53-7	Dibromofluoromethane (Surr)	124		61-149
2037-26-5	Toluene-d8 (Surr)	86		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-15-17 | Lab Sample ID: 460-152604-2

Matrix: Solid | Lab File ID: B28134.D

Analysis Method: 8260C | Date Collected: 03/26/2018 11:00

Sample wt/vol: 5.702(g) | Date Analyzed: 03/31/2018 19:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 8.5 | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

Number TICs Found: 1 | TIC Result Total: 0.0088

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	2.63	0.0088	J	

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D
Lims ID: 460-152604-B-2-A
Client ID: GC-MW-107D(SO)-15-17
Sample Type: Client
Inject. Date: 31-Mar-2018 19:59:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152604-B-2-A
Misc. Info.: 460-0069609-023
Operator ID: Instrument ID: CVOAMS2

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-Apr-2018 10:19:54 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: kaewink Date: 02-Apr-2018 10:50:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
17 Acetone	43	2.347	2.347	0.000	86	36030	52.1	
23 Methylene Chloride	84	2.678	2.678	0.000	98	14942	4.41	
* 24 TBA-d9 (IS)	65	2.724	2.724	0.000	0	233642	1000.0	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	191422	250.0	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	97	133402	61.9	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.702	4.701	0.001	0	145539	64.4	
* 55 Fluorobenzene	96	4.999	4.999	0.000	98	383335	50.0	
* 61 1,4-Dioxane-d8	96	5.844	5.844	0.000	0	10124	1000.0	
$ 70 Toluene-d8 (Surr)	98	6.907	6.907	0.000	98	362392	42.8	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	87	283556	50.0	
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	1366	0.2857	
84 o-Xylene	106	8.965	8.953	0.012	95	514	0.1108	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	93	116044	46.6	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	96	137726	50.0	

Reagents:

8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent

TestAmerica Edison
Tentatively Identified Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D				
Lims ID:	460-152604-B-2-A				
Client ID:	GC-MW-107D(SO)-15-17				
Sample Type:	Client				
Inject. Date:	31-Mar-2018 19:59:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-152604-B-2-A				
Misc. Info.:	460-0069609-023				
Operator ID:		Instrument ID:	CVOAMS2		
Method:	\\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\8260S_2.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	03-Apr-2018 10:19:54	Calib Date:	26-Mar-2018 06:08:30		
Tic RT Window:	0.000 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\ChromNA\Edison\Database\NIST02.L				
Min. Match:	85				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK008				
First Level Reviewer: kaewink		Date:	02-Apr-2018 10:50:16		

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
		Unknown						
2.633	156549	9.15	55					

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 55 Fluorobenzene	4.999	855377	50.0

QC Flag Legend

Processing Flags

Reagents:

8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

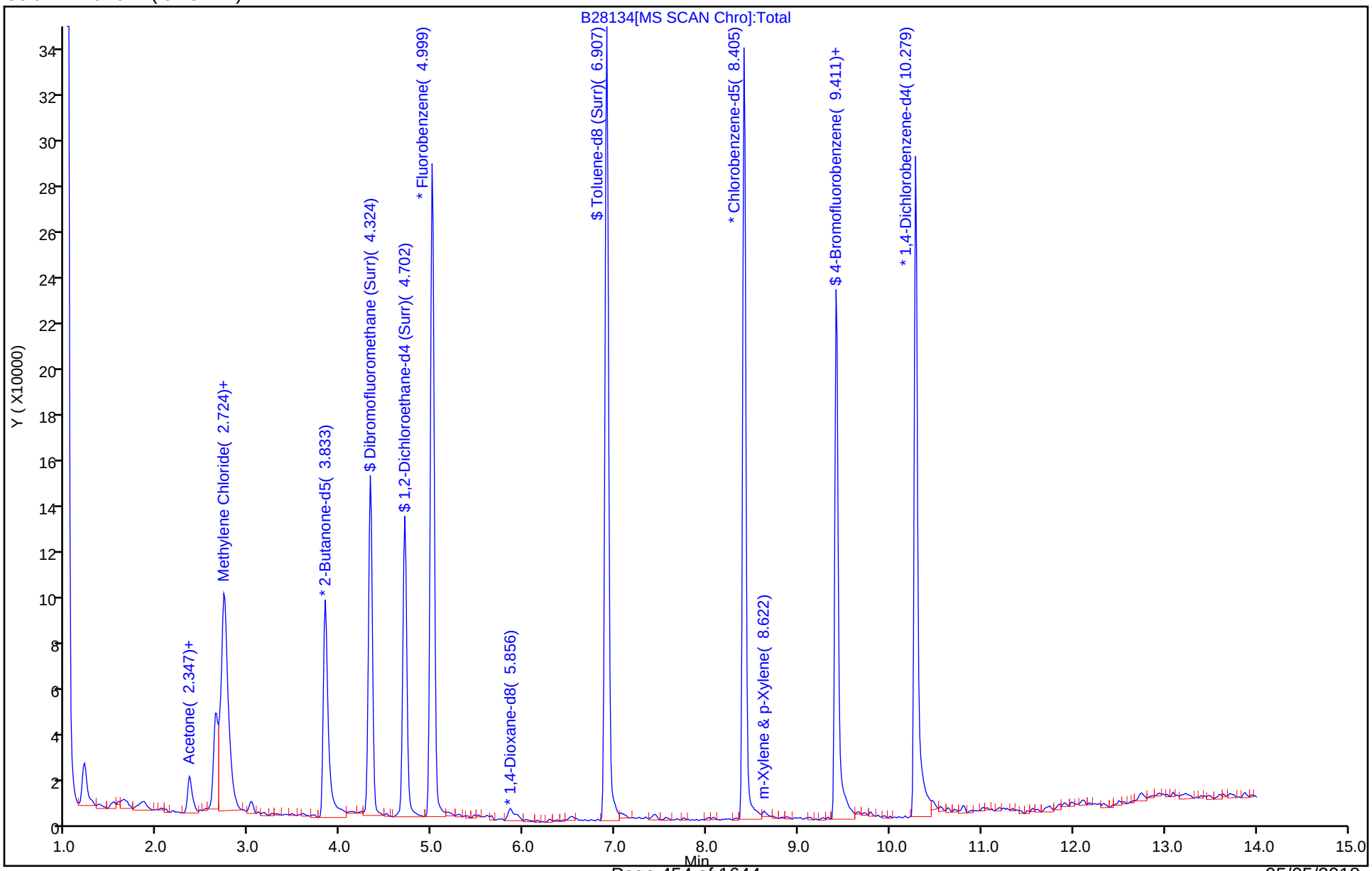
Report Date: 04-May-2018 11:19:15 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D

Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2	Operator ID:	
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2	Worklist Smp#:	23
Client ID:	GC-MW-107D(SO)-15-17				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



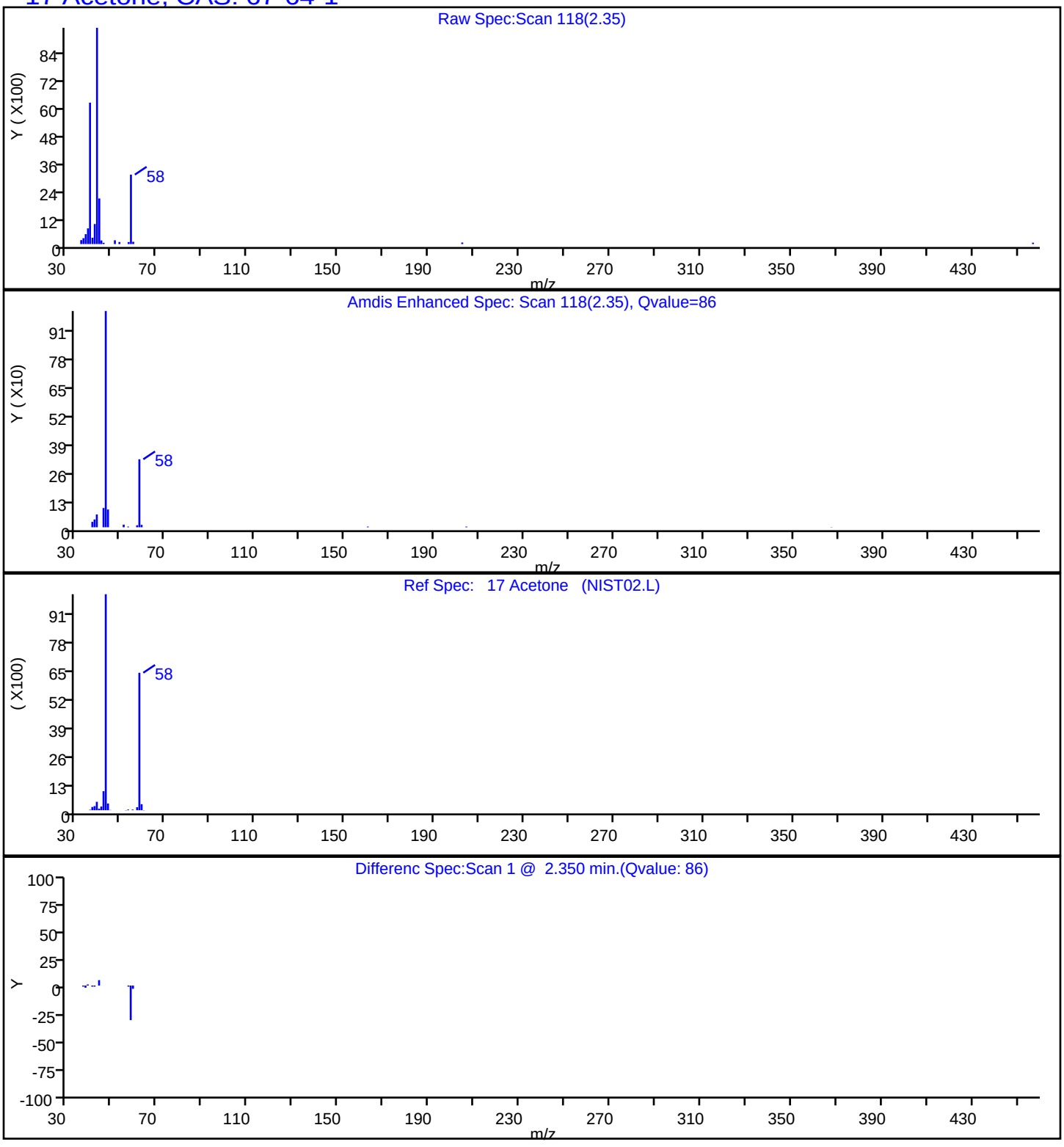
Report Date: 04-May-2018 11:19:15 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D

Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2		
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2		
Client ID:	GC-MW-107D(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

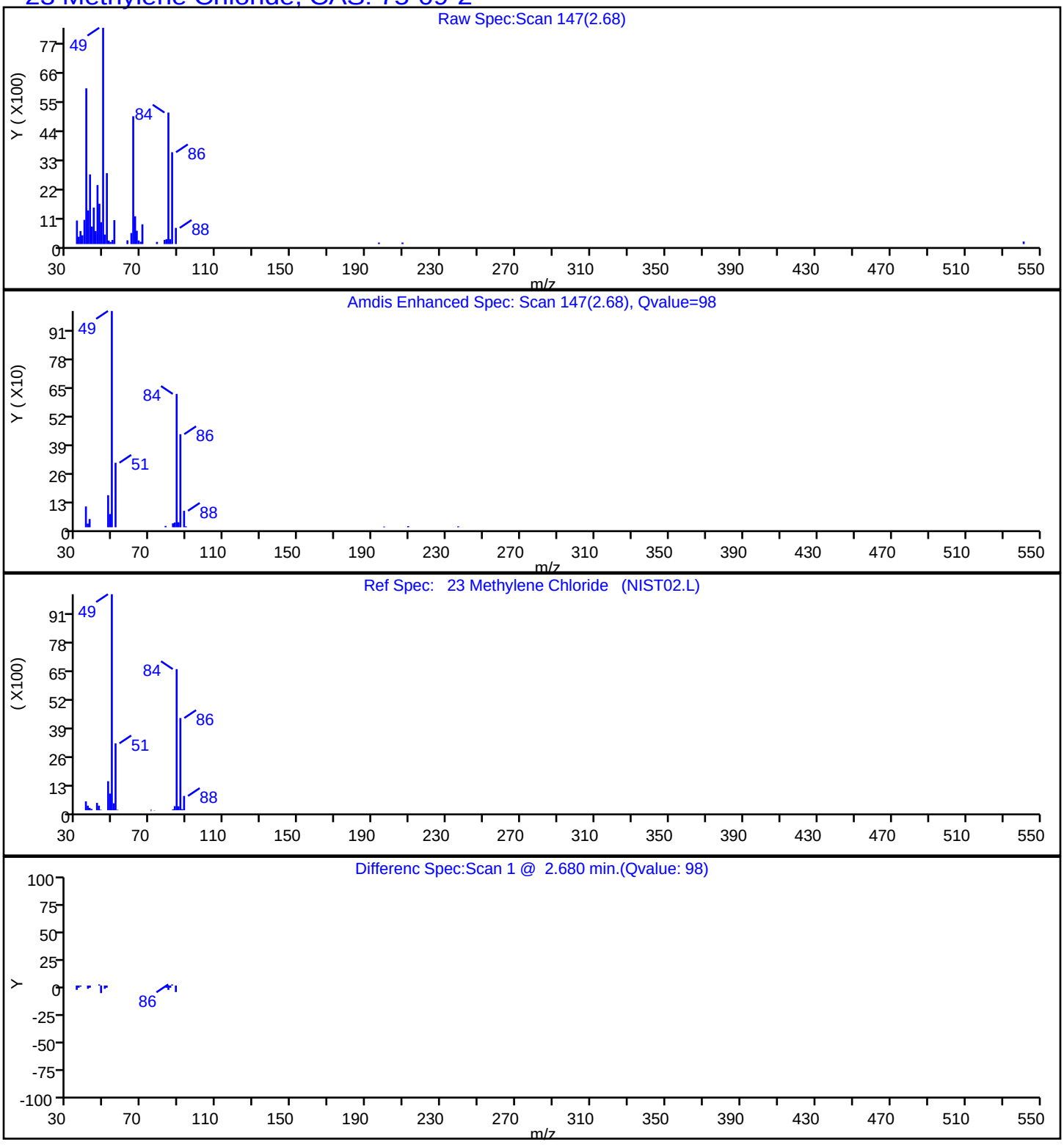
17 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D

Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2		
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2		
Client ID:	GC-MW-107D(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

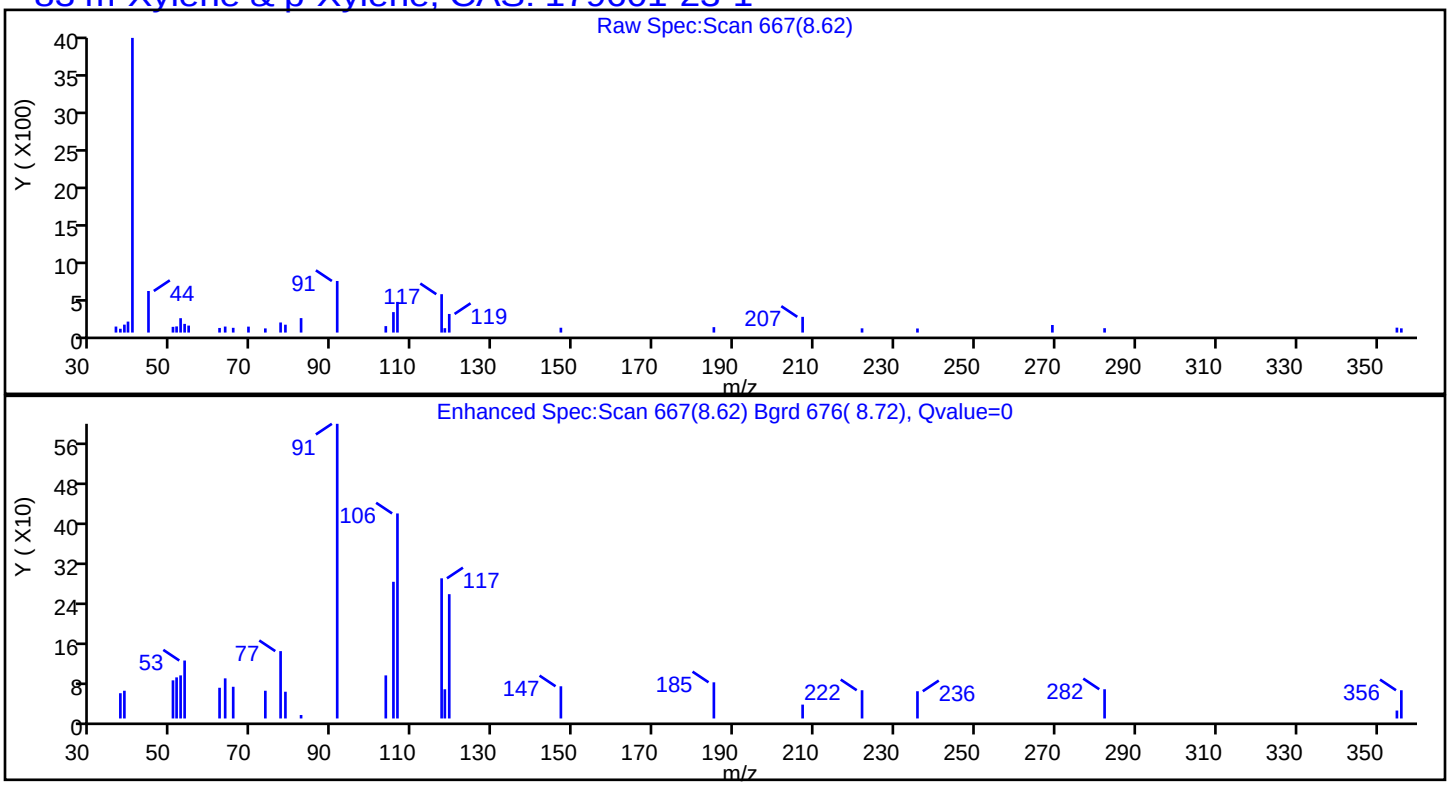
23 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D				
Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2		
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2		
Client ID:	GC-MW-107D(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

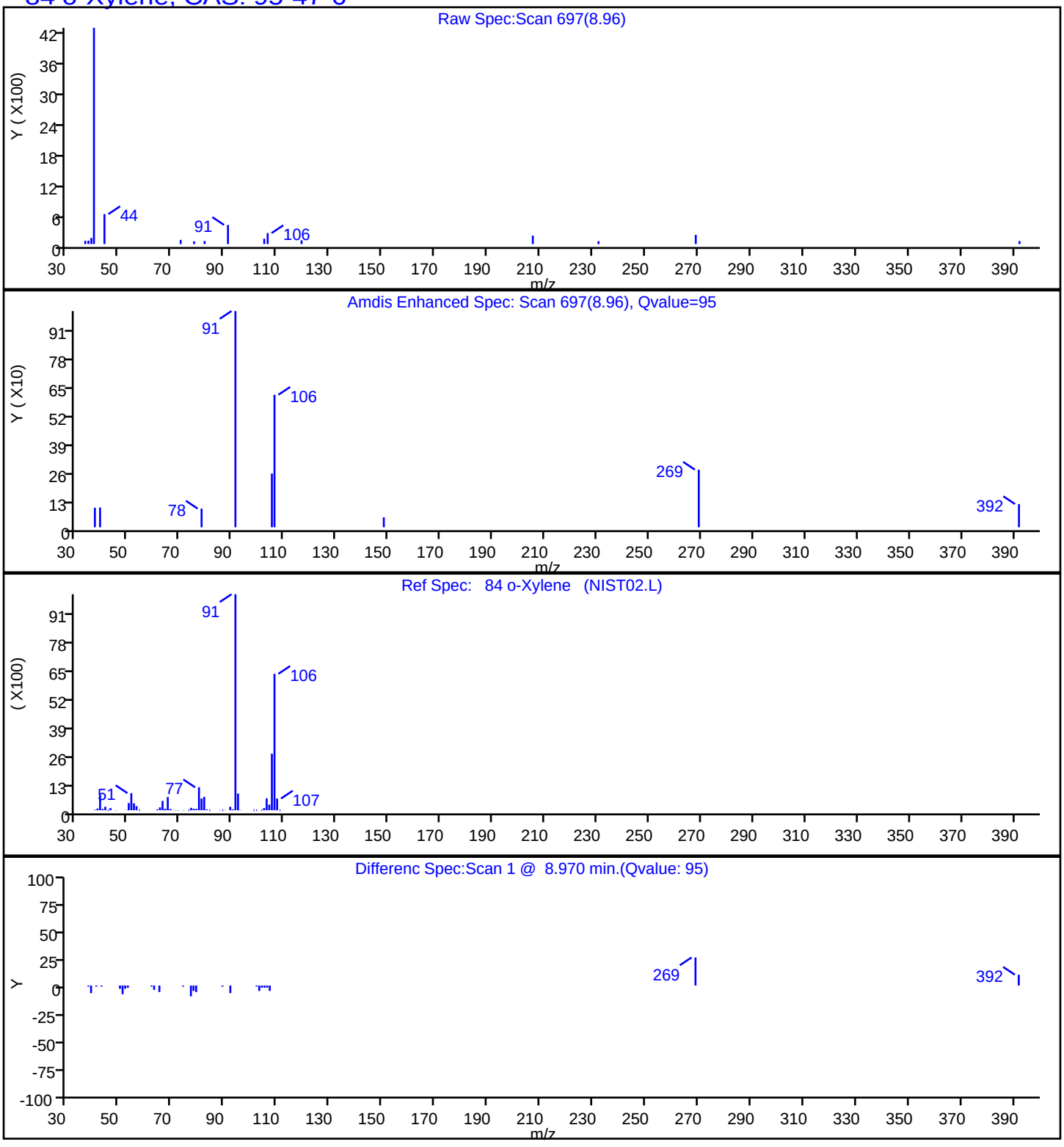
83 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D				
Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2		
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2		
Client ID:	GC-MW-107D(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

84 o-Xylene, CAS: 95-47-6



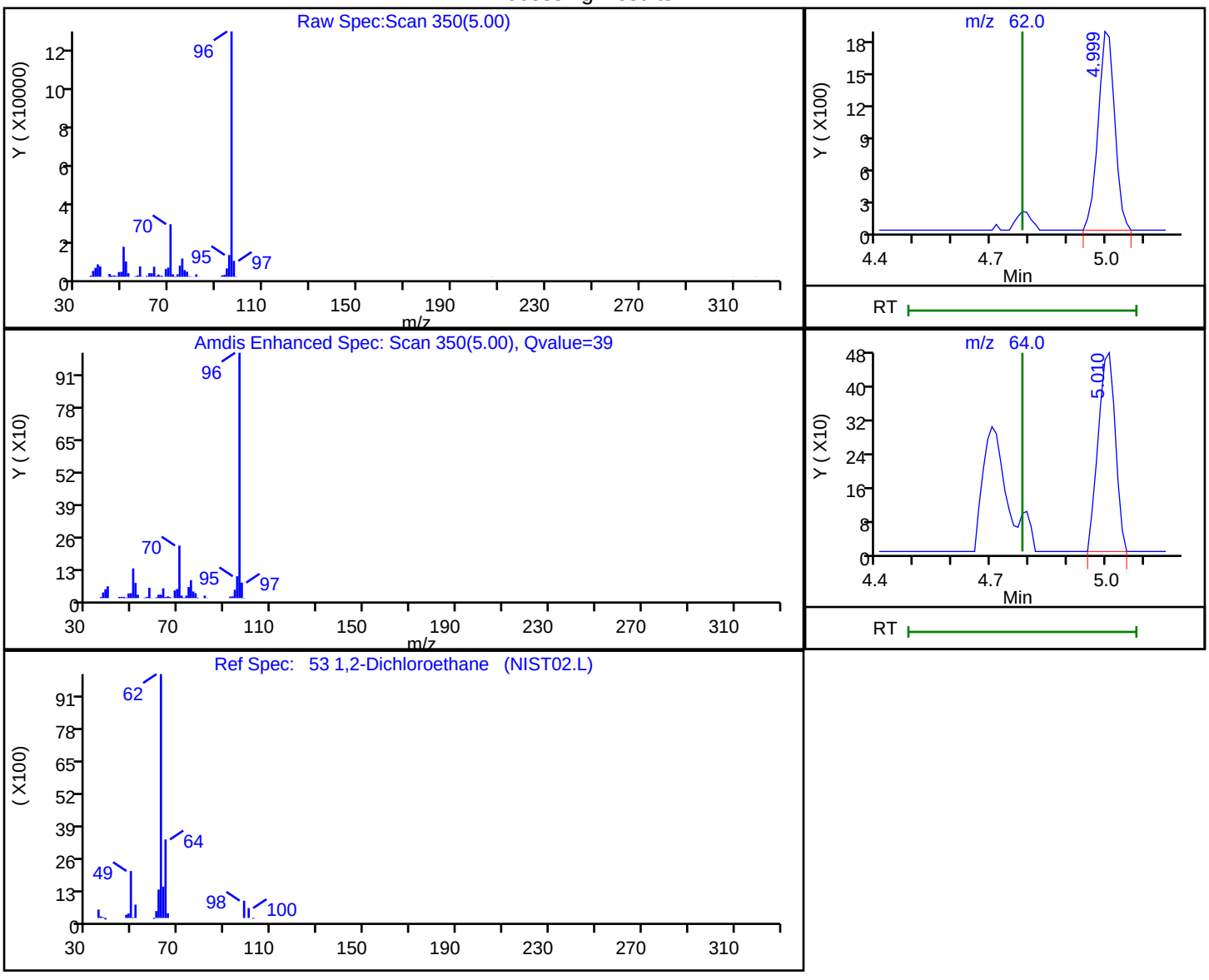
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D		
Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2
Client ID:	GC-MW-107D(SO)-15-17		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

53 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.00	62.00	5487	1.453343
5.01	64.00	1486	

Reviewer: kaewink, 02-Apr-2018 10:48:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

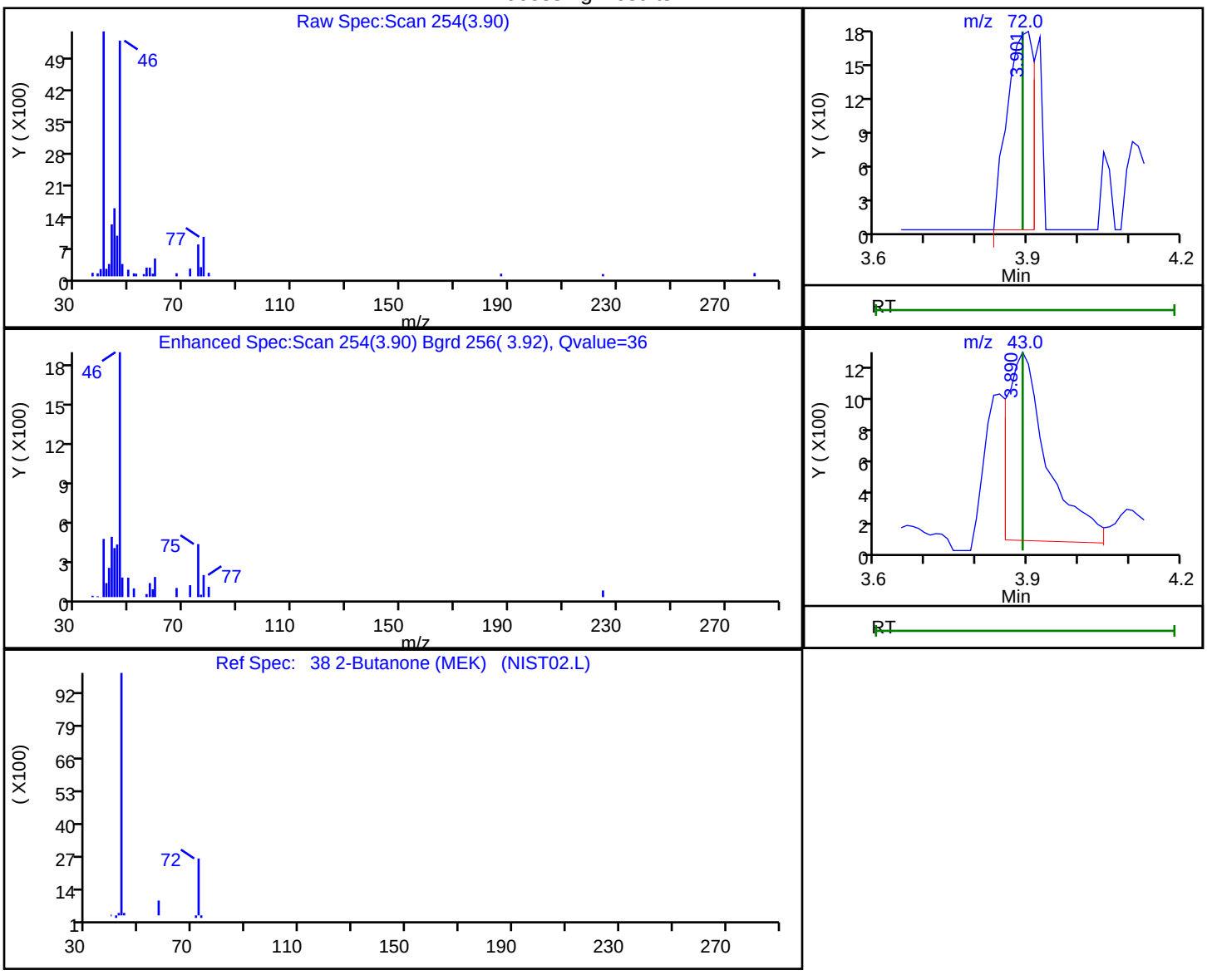
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D				
Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2		
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2		
Client ID:	GC-MW-107D(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

38 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.90	72.00	633	2.465253
3.89	43.00	6428	

Reviewer: kaewink, 02-Apr-2018 10:48:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

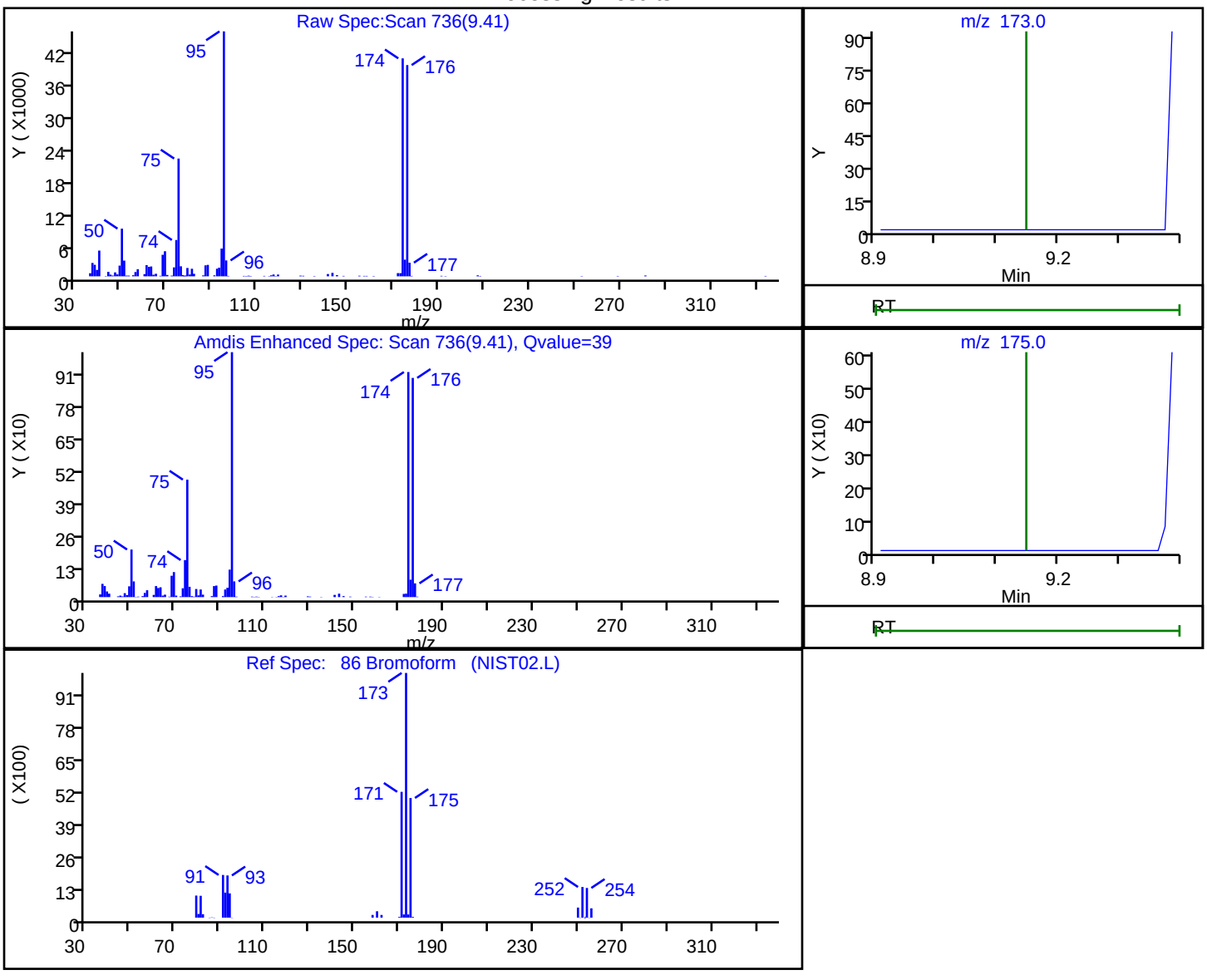
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D				
Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2		
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2		
Client ID:	GC-MW-107D(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

86 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
9.41	173.00	1441	0.943522
9.41	175.00	8257	

Reviewer: kaewink, 02-Apr-2018 10:48:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

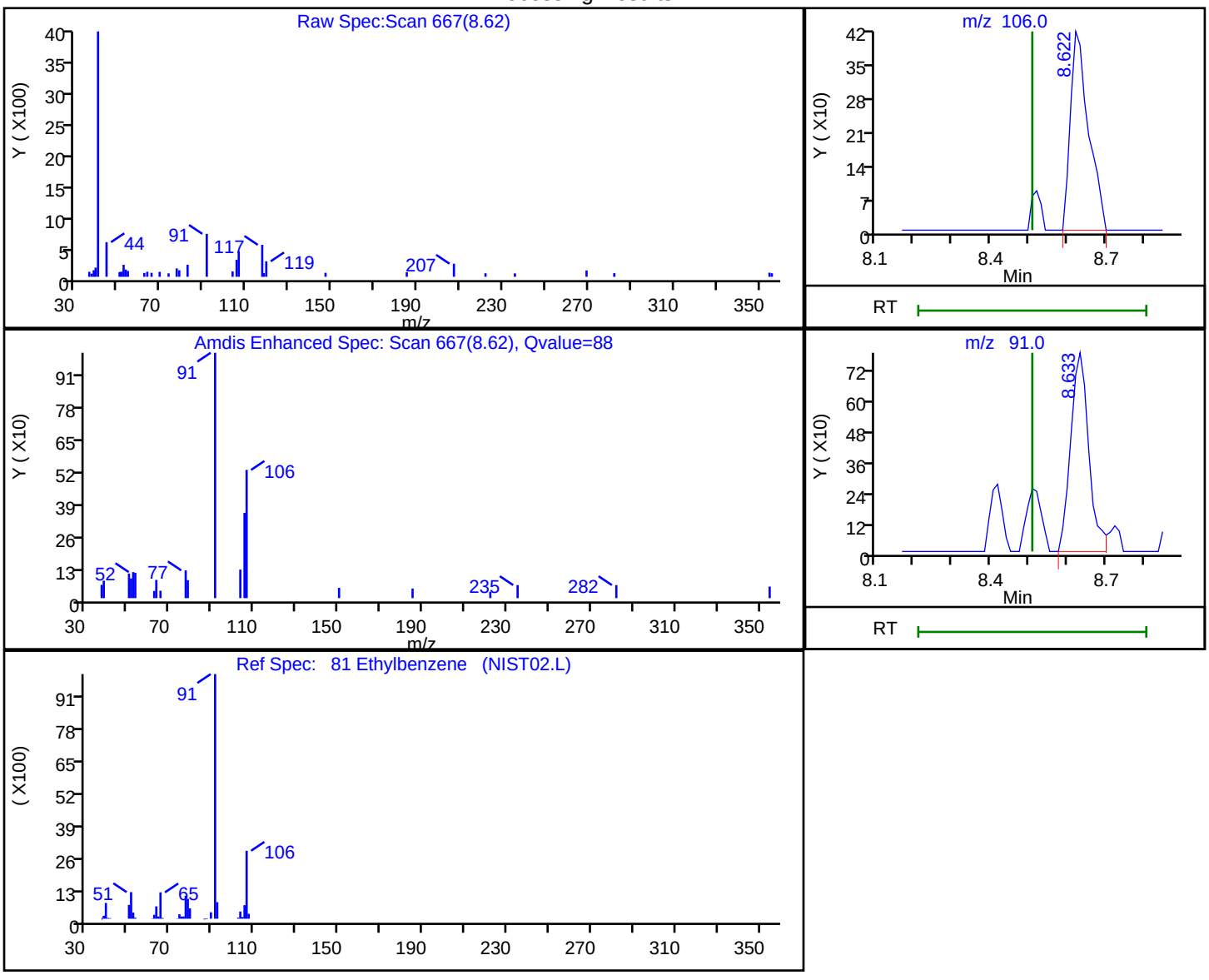
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D		
Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2
Client ID:	GC-MW-107D(SO)-15-17		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

81 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
8.62	106.00	1366	0.339934
8.63	91.00	2592	

Reviewer: kaewink, 02-Apr-2018 10:48:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

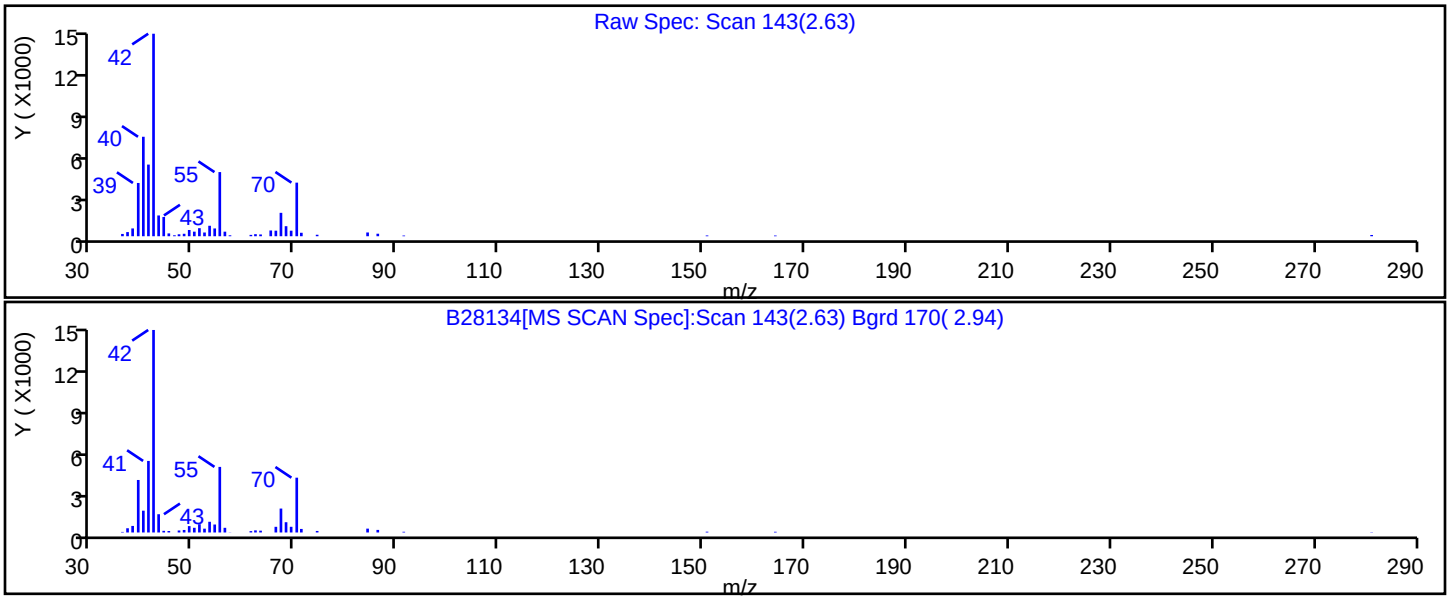
Report Date: 04-May-2018 11:19:15 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28134.D

Injection Date:	31-Mar-2018 19:59:30	Instrument ID:	CVOAMS2		
Lims ID:	460-152604-B-2-A	Lab Sample ID:	460-152604-2		
Client ID:	GC-MW-107D(SO)-15-17				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-15-17 | Lab Sample ID: 460-153018-1

Matrix: Solid | Lab File ID: K82442.D

Analysis Method: 8260C | Date Collected: 03/30/2018 09:25

Sample wt/vol: 8.12(g) | Date Analyzed: 04/23/2018 21:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.7 | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00063	U H	0.00063	0.00015
79-34-5	1,1,2,2-Tetrachloroethane	0.00063	U H	0.00063	0.00014
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00063	U H	0.00063	0.00019
79-00-5	1,1,2-Trichloroethane	0.00063	U H	0.00063	0.00011
75-34-3	1,1-Dichloroethane	0.00063	U H	0.00063	0.00013
75-35-4	1,1-Dichloroethene	0.00063	U H	0.00063	0.00014
87-61-6	1,2,3-Trichlorobenzene	0.00063	U H	0.00063	0.00011
120-82-1	1,2,4-Trichlorobenzene	0.00063	U H	0.00063	0.000058
96-12-8	1,2-Dibromo-3-Chloropropane	0.00063	U H	0.00063	0.00029
95-50-1	1,2-Dichlorobenzene	0.00063	U H	0.00063	0.000091
107-06-2	1,2-Dichloroethane	0.00063	U H	0.00063	0.00019
78-87-5	1,2-Dichloropropane	0.00063	U H	0.00063	0.00027
541-73-1	1,3-Dichlorobenzene	0.00063	U H	0.00063	0.00010
106-46-7	1,4-Dichlorobenzene	0.00063	U H	0.00063	0.000063
123-91-1	1,4-Dioxane	0.013	U H	0.013	0.0058
78-93-3	2-Butanone (MEK)	0.0032	U H	0.0032	0.00070
591-78-6	2-Hexanone	0.0032	U H	0.0032	0.00049
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0032	U H	0.0032	0.00042
67-64-1	Acetone	0.018	H	0.0032	0.0024
71-43-2	Benzene	0.00063	U H	0.00063	0.00016
75-25-2	Bromoform	0.00063	U H	0.00063	0.00027
74-83-9	Bromomethane	0.00063	U H	0.00063	0.00030
75-15-0	Carbon disulfide	0.00063	U H	0.00063	0.00017
56-23-5	Carbon tetrachloride	0.00063	U H	0.00063	0.00011
108-90-7	Chlorobenzene	0.00063	U H	0.00063	0.00011
74-97-5	Chlorobromomethane	0.00063	U H	0.00063	0.00018
124-48-1	Chlorodibromomethane	0.00063	U H	0.00063	0.00012
75-00-3	Chloroethane	0.00063	U H	0.00063	0.00033
67-66-3	Chloroform	0.00063	U H	0.00063	0.00020
74-87-3	Chloromethane	0.00063	U H	0.00063	0.00028
156-59-2	cis-1,2-Dichloroethene	0.00063	U H	0.00063	0.000096
10061-01-5	cis-1,3-Dichloropropene	0.00063	U H	0.00063	0.00017
110-82-7	Cyclohexane	0.00063	U H	0.00063	0.00014
75-27-4	Dichlorobromomethane	0.00063	U H	0.00063	0.00016
75-71-8	Dichlorodifluoromethane	0.00063	U H *	0.00063	0.00021

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-15-17 | Lab Sample ID: 460-153018-1

Matrix: Solid | Lab File ID: K82442.D

Analysis Method: 8260C | Date Collected: 03/30/2018 09:25

Sample wt/vol: 8.12(g) | Date Analyzed: 04/23/2018 21:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.7 | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00025	J H	0.00063	0.00013
106-93-4	Ethylene Dibromide	0.00063	U H	0.00063	0.00011
98-82-8	Isopropylbenzene	0.00063	U H	0.00063	0.000080
79-20-9	Methyl acetate	0.0032	U H	0.0032	0.0027
1634-04-4	Methyl tert-butyl ether	0.00063	U H	0.00063	0.000079
108-87-2	Methylcyclohexane	0.00035	J H	0.00063	0.00010
75-09-2	Methylene Chloride	0.00023	J H	0.00063	0.00010
179601-23-1	m-Xylene & p-Xylene	0.00087	H	0.00063	0.00011
95-47-6	o-Xylene	0.00035	J H	0.00063	0.000060
100-42-5	Styrene	0.00063	U H	0.00063	0.000078
127-18-4	Tetrachloroethene	0.00063	U H	0.00063	0.000090
108-88-3	Toluene	0.00048	J H	0.00063	0.00040
156-60-5	trans-1,2-Dichloroethene	0.00063	U H	0.00063	0.00016
10061-02-6	trans-1,3-Dichloropropene	0.00063	U H	0.00063	0.00017
79-01-6	Trichloroethene	0.00063	U H	0.00063	0.000091
75-69-4	Trichlorofluoromethane	0.00063	U H	0.00063	0.00026
75-01-4	Vinyl chloride	0.00063	U H	0.00063	0.00035

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		78-135
460-00-4	4-Bromofluorobenzene	104		67-126
1868-53-7	Dibromofluoromethane (Surr)	105		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-15-17 Lab Sample ID: 460-153018-1

Matrix: Solid Lab File ID: K82442.D

Analysis Method: 8260C Date Collected: 03/30/2018 09:25

Sample wt/vol: 8.12(g) Date Analyzed: 04/23/2018 21:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.7 Level: (low/med) Low

Analysis Batch No.: 513435 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None	H	

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D
Lims ID: 460-153018-B-1-A
Client ID: GC-MW-109M(SO)-15-17
Sample Type: Client
Inject. Date: 23-Apr-2018 21:10:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153018-B-1-A
Misc. Info.: 460-0070876-009
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Apr-2018 16:44:56 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: colladox Date: 23-Apr-2018 21:53:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.010	3.016	-0.006	86	32779	29.2	
* 25 TBA-d9 (IS)	65	3.376	3.376	0.000	0	365434	1000.0	
26 Methylene Chloride	84	3.376	3.388	-0.012	30	1540	0.3595	
* 38 2-Butanone-d5	46	4.455	4.467	-0.012	0	227978	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.955	-0.006	97	191873	52.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	173517	50.9	
* 61 Fluorobenzene	96	5.583	5.589	-0.006	100	457818	50.0	
65 Methylcyclohexane	83	6.077	6.077	0.000	71	770	0.5503	M
* 67 1,4-Dioxane-d8	96	6.284	6.290	-0.006	0	30588	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	616876	48.7	
79 Toluene	91	7.345	7.351	-0.006	93	11617	0.7513	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	413408	50.0	
92 Ethylbenzene	106	9.204	9.210	-0.006	97	2264	0.4026	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	9422	1.37	
95 o-Xylene	106	9.820	9.820	0.000	95	3936	0.5491	
$ 100 4-Bromofluorobenzene	174	10.417	10.423	-0.006	97	213864	52.2	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	266047	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

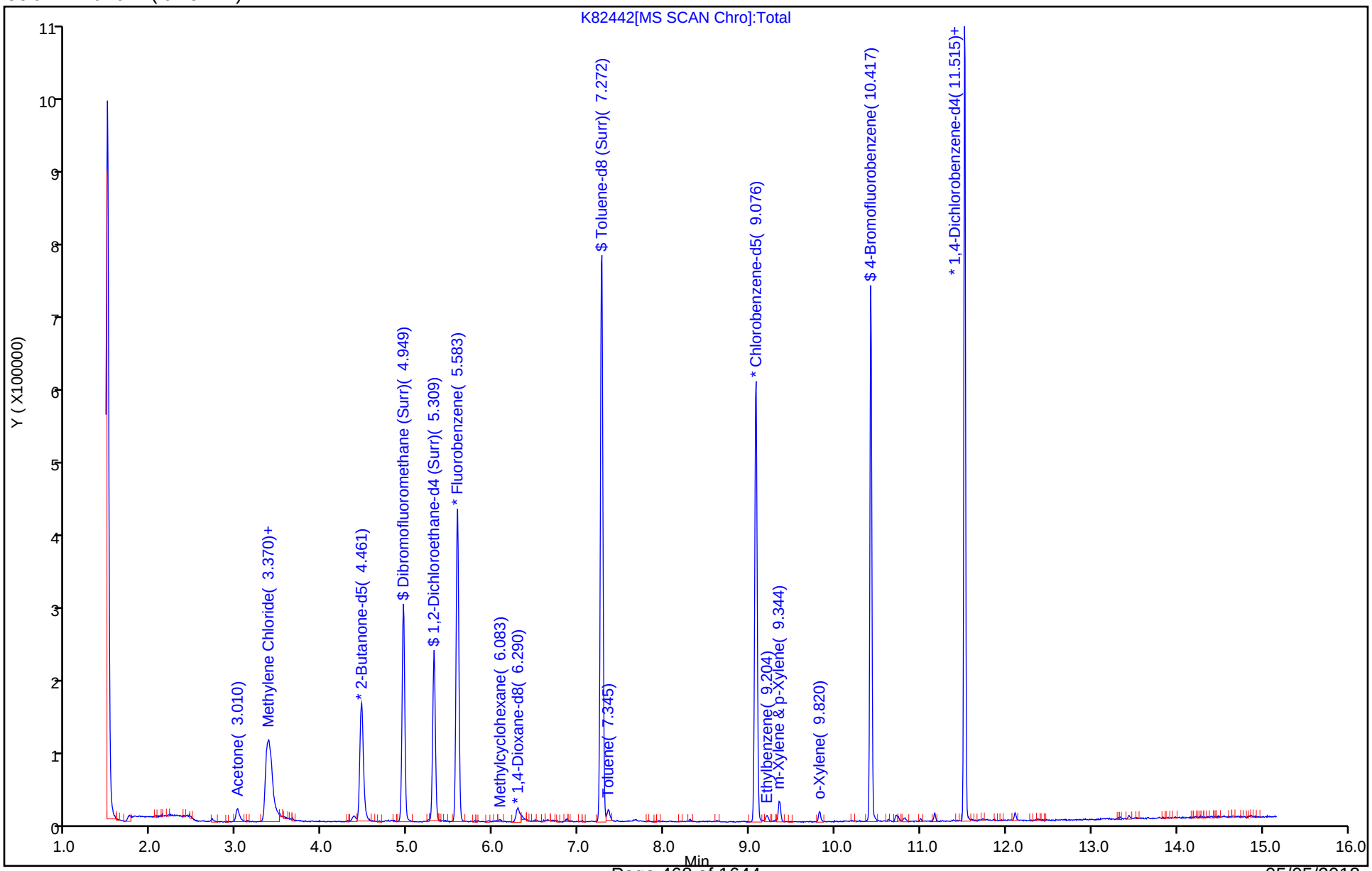
Report Date: 04-May-2018 11:19:54 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D

Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1	Worklist Smp#:	9
Client ID:	GC-MW-109M(SO)-15-17				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

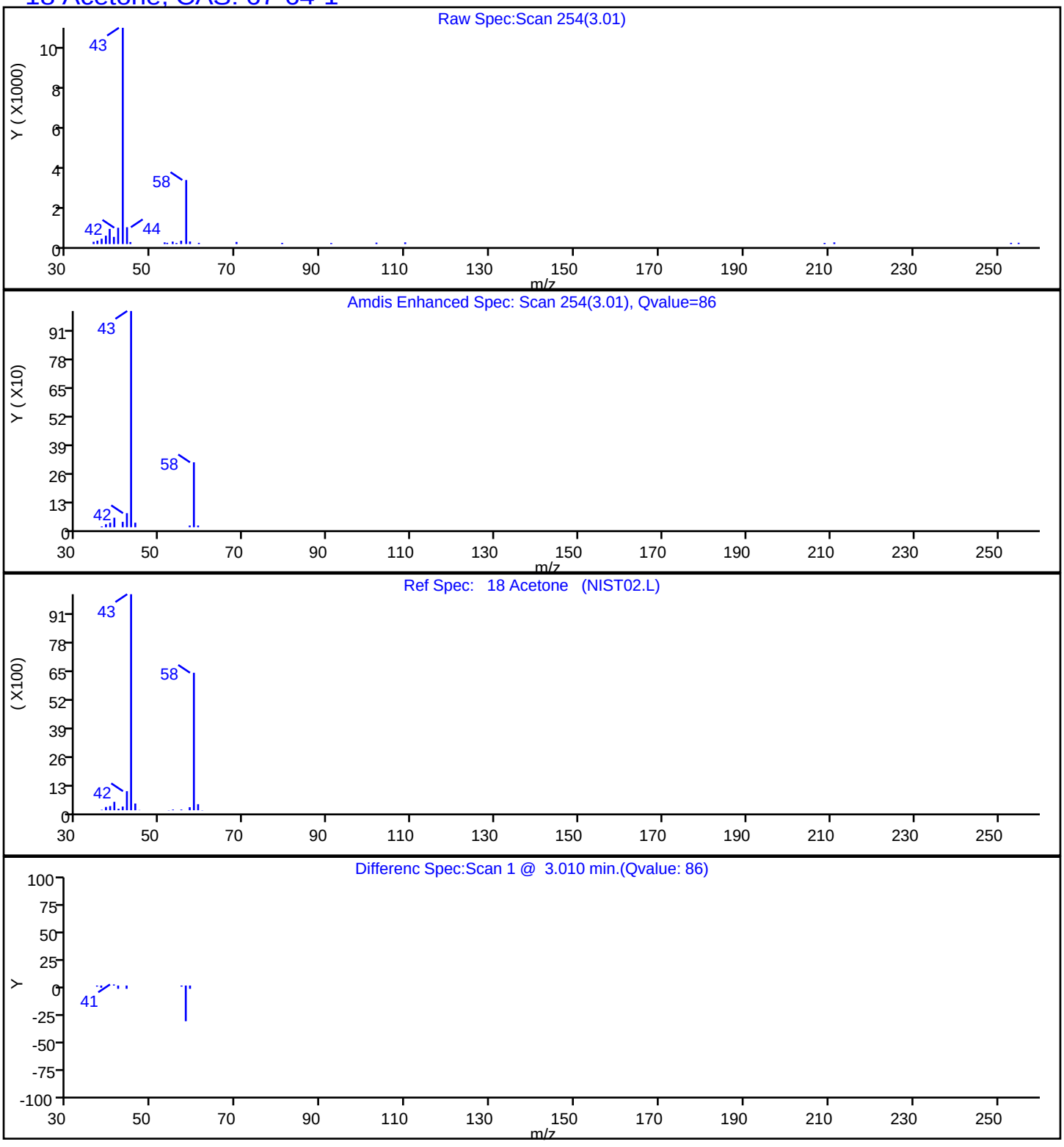
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D				
Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1		
Client ID:	GC-MW-109M(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

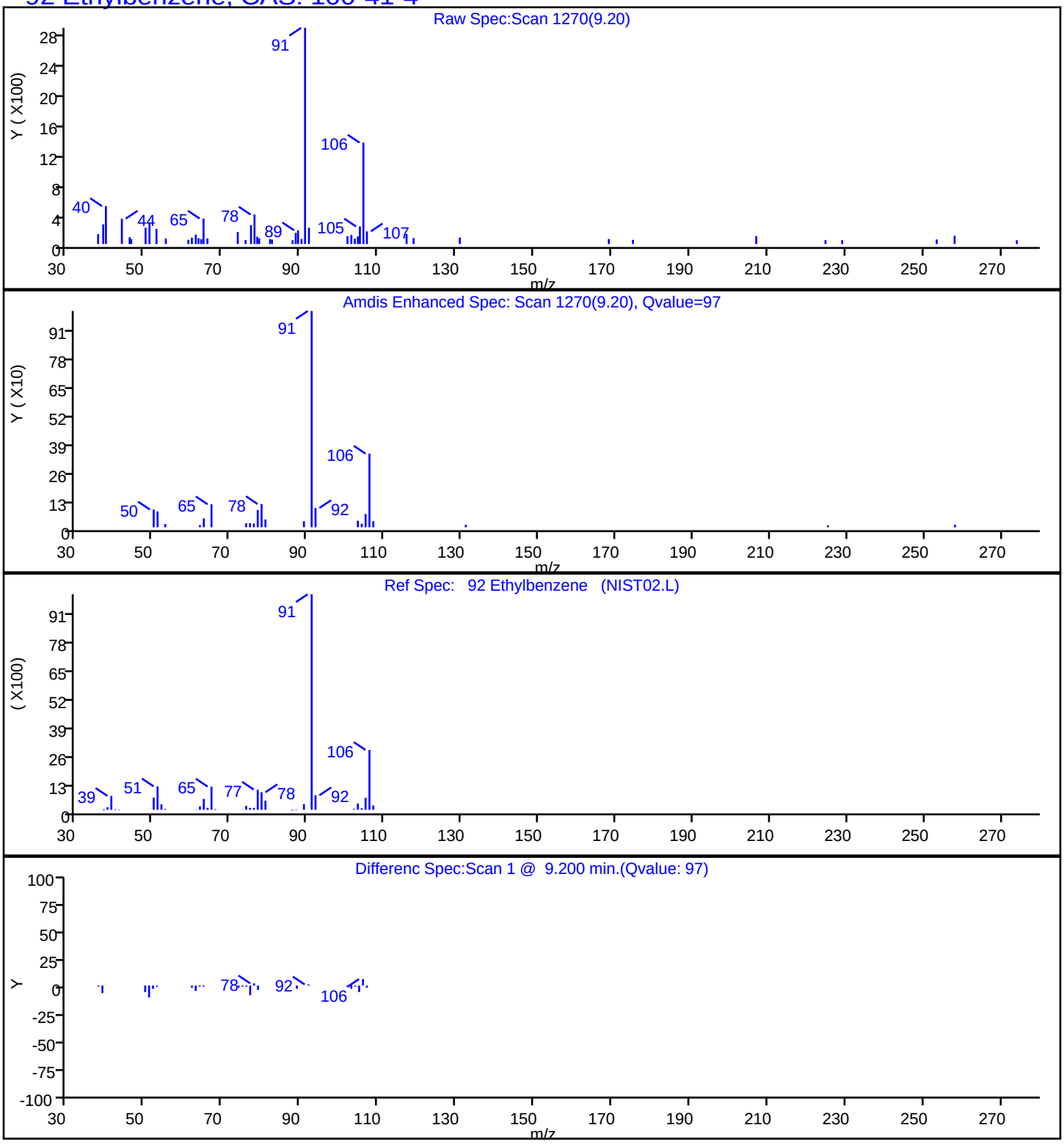
18 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D				
Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1		
Client ID:	GC-MW-109M(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

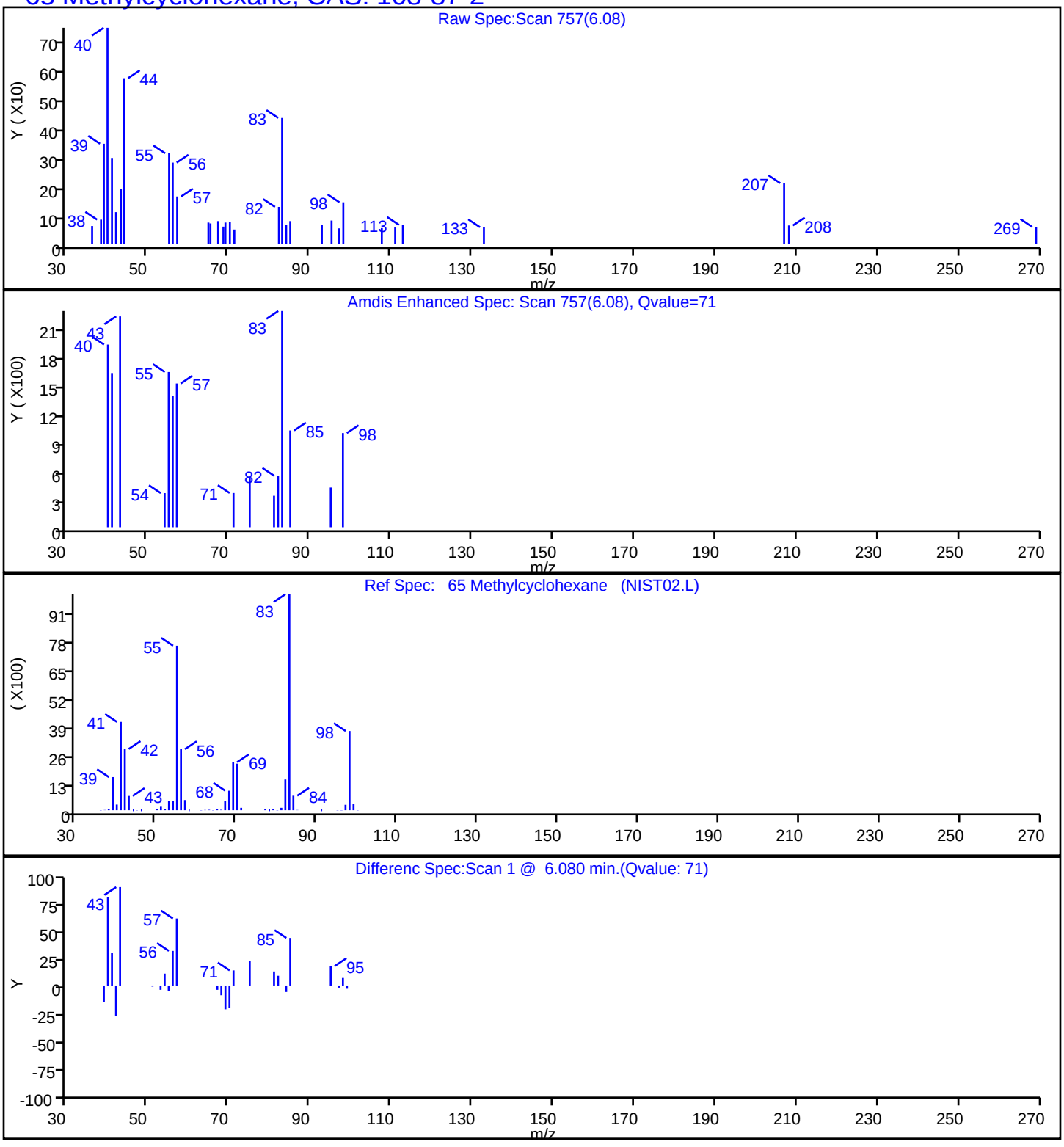


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D

Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1		
Client ID:	GC-MW-109M(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

65 Methylcyclohexane, CAS: 108-87-2



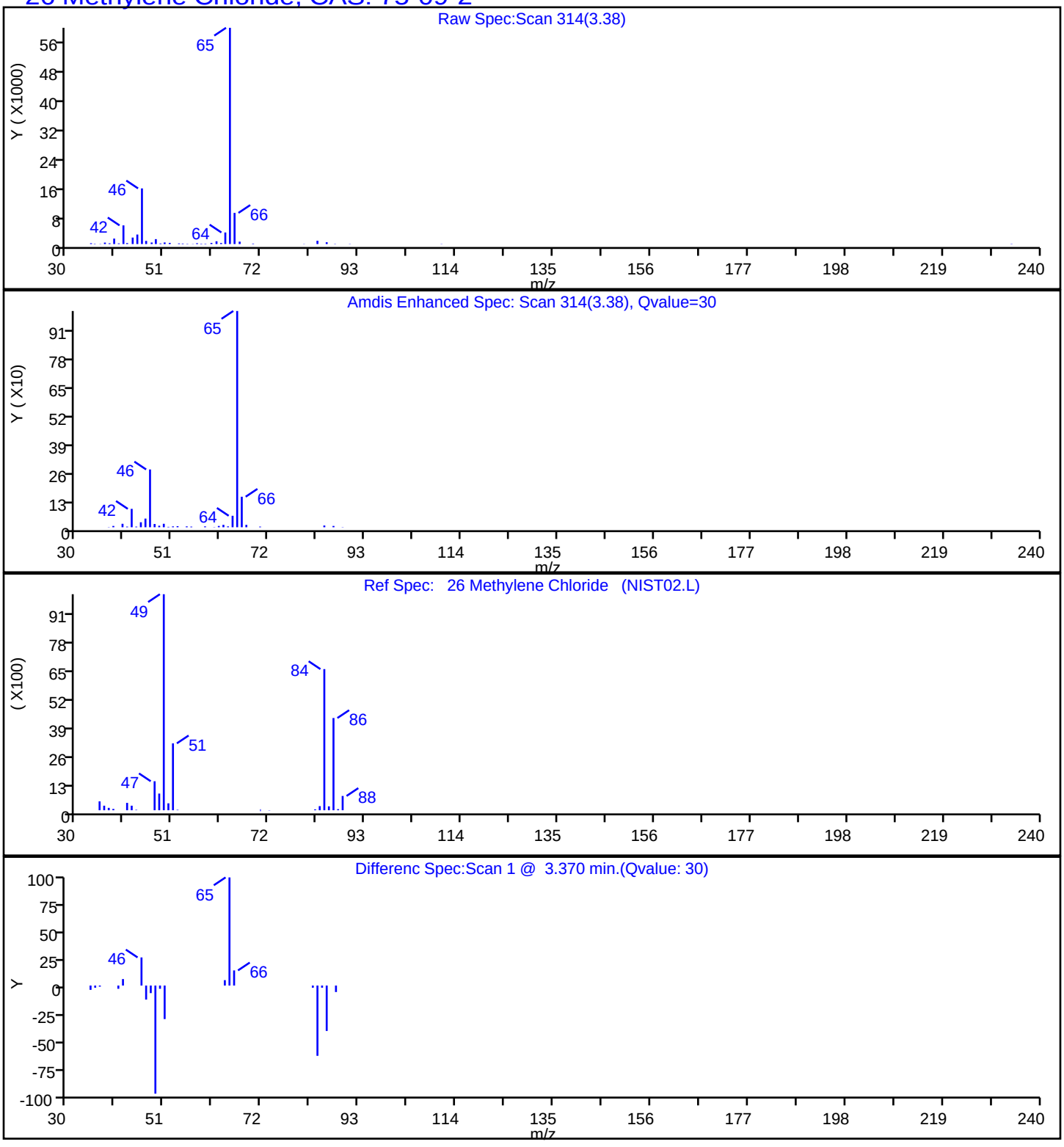
Report Date: 04-May-2018 11:19:54 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D

Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1		
Client ID:	GC-MW-109M(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

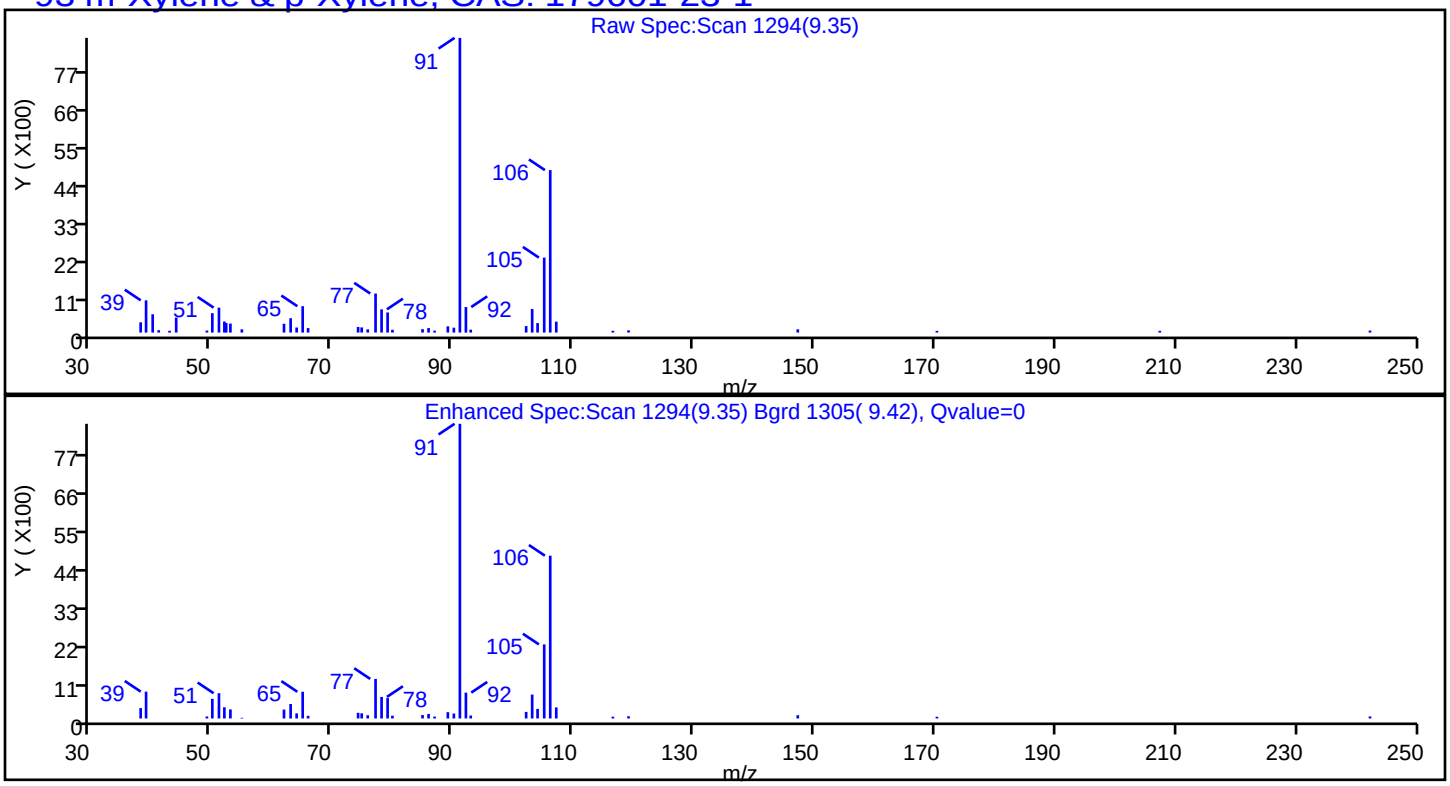
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D				
Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1		
Client ID:	GC-MW-109M(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

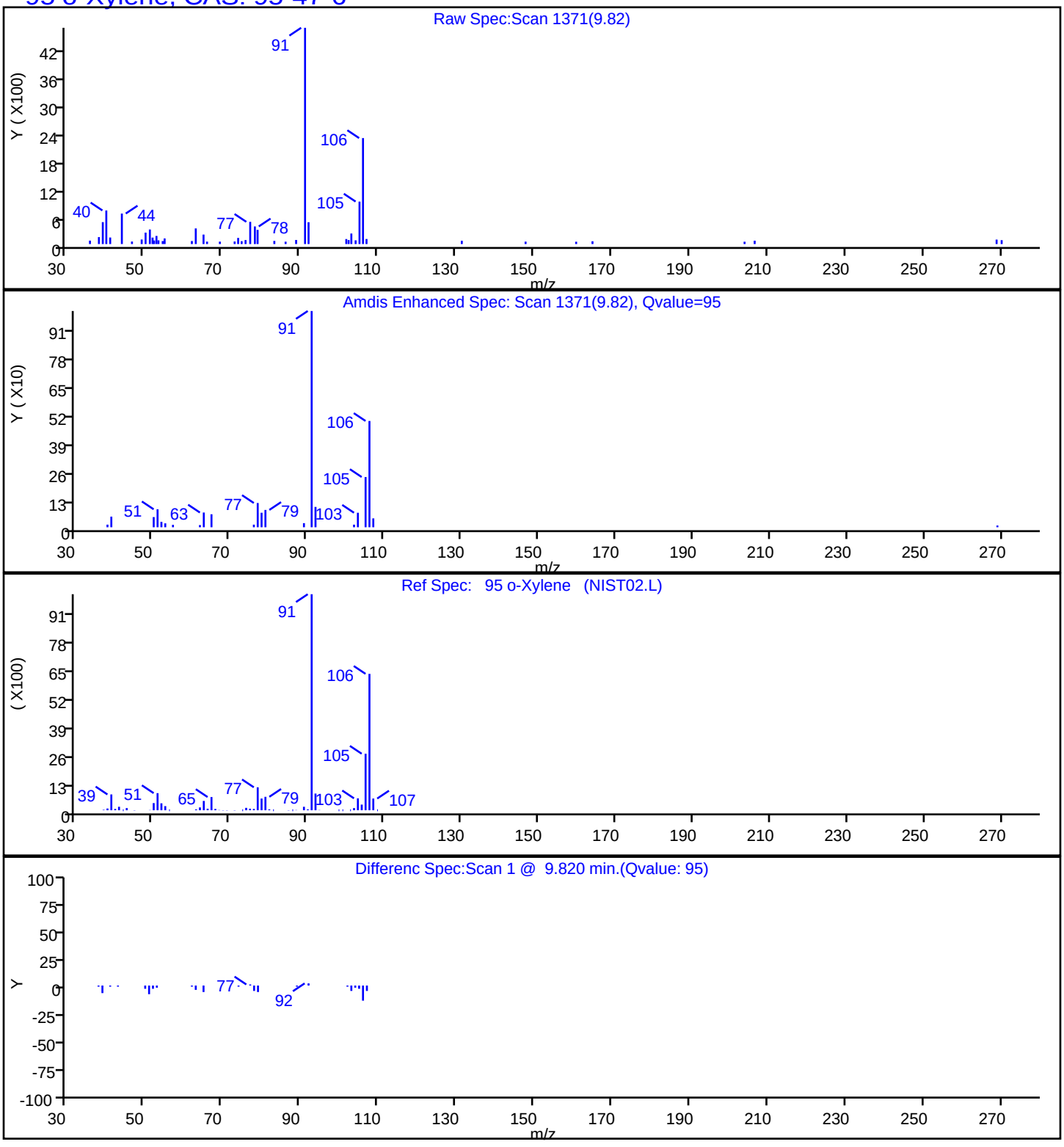
93 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D				
Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1		
Client ID:	GC-MW-109M(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

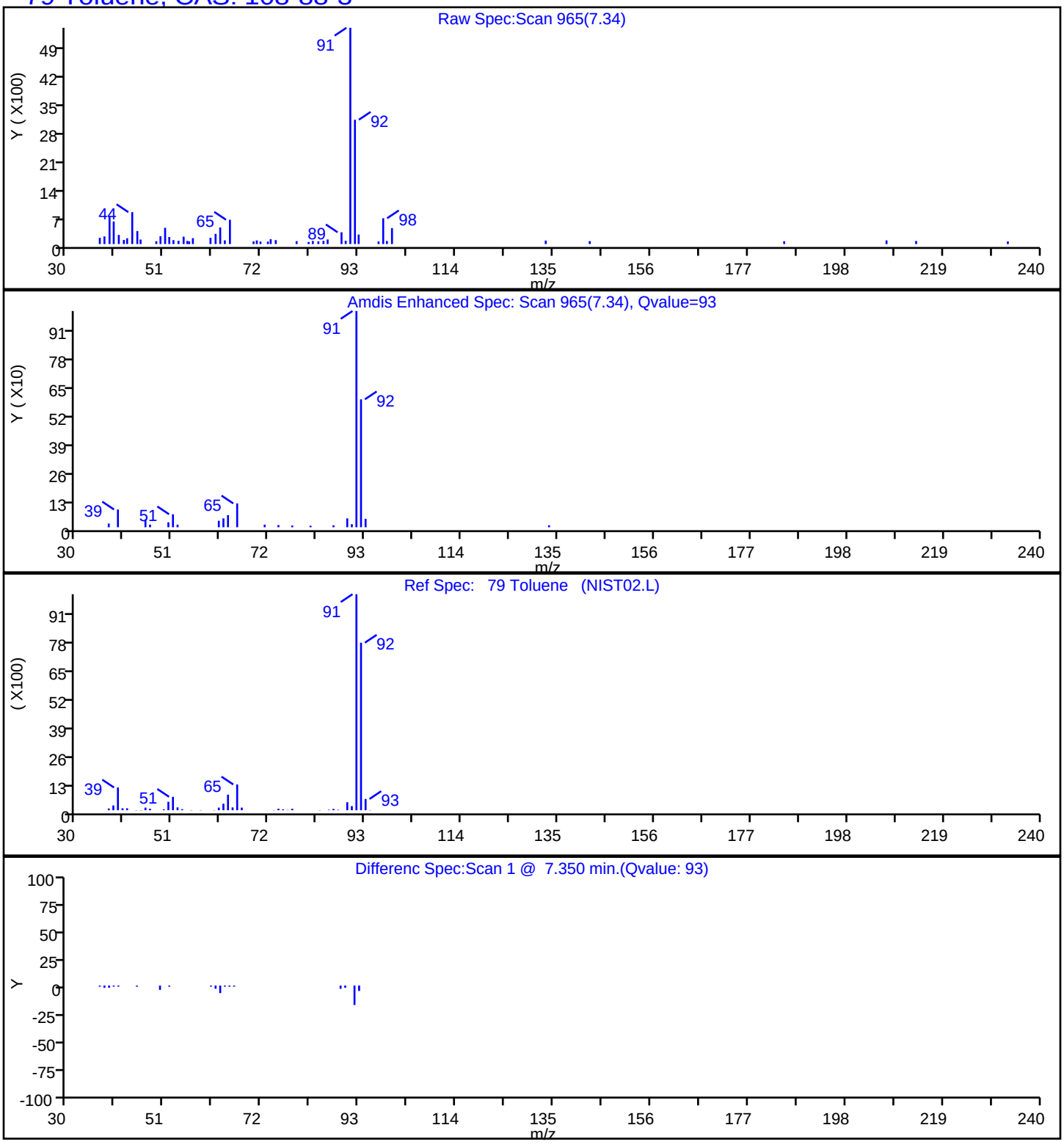
95 o-Xylene, CAS: 95-47-6



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D		
Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1
Client ID:	GC-MW-109M(SO)-15-17		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

79 Toluene, CAS: 108-88-3



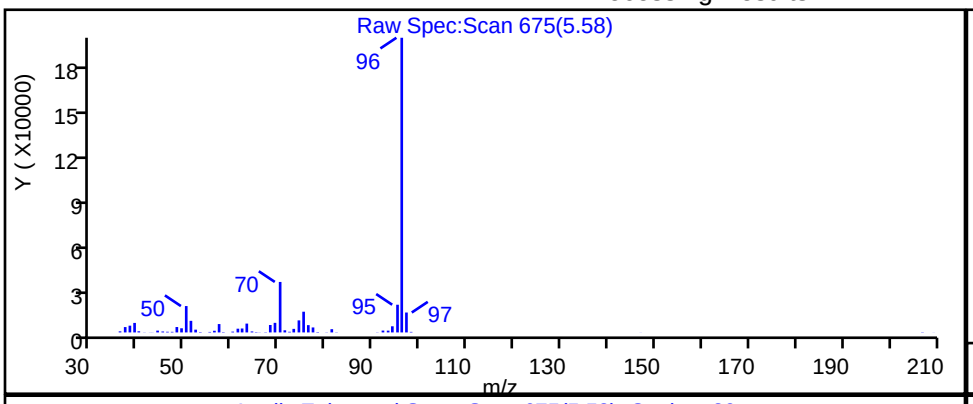
User Disabled Compound Report

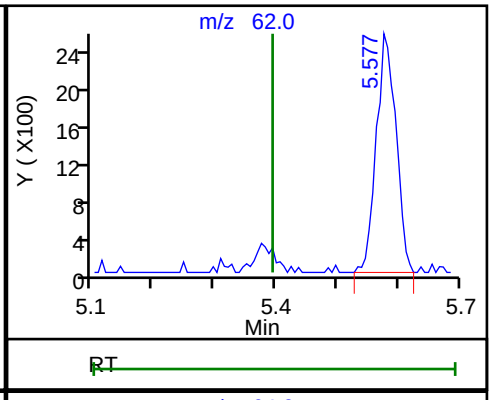
TestAmerica Edison

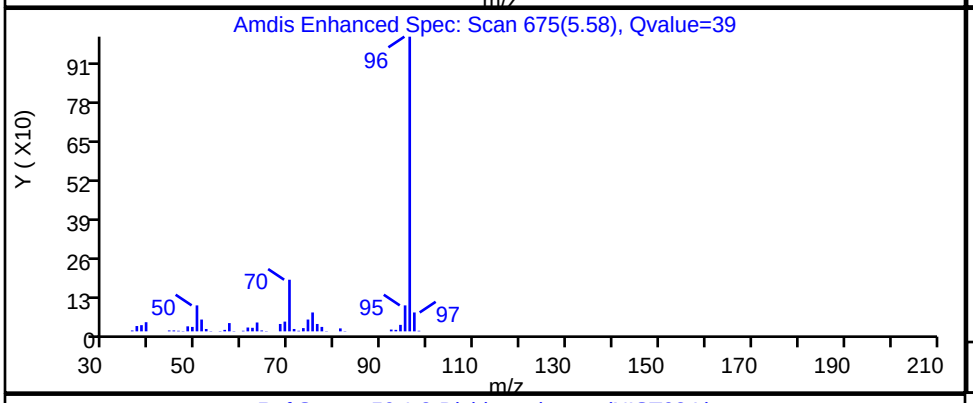
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D				
Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1		
Client ID:	GC-MW-109M(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

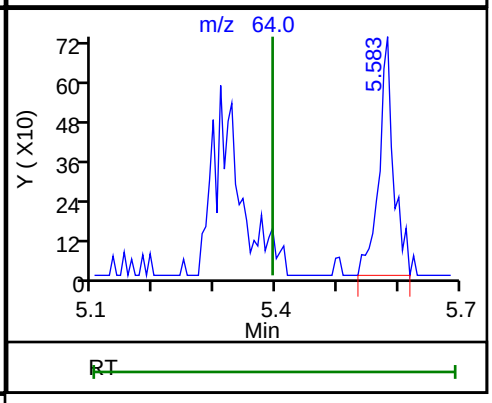
59 1,2-Dichloroethane, CAS: 107-06-2

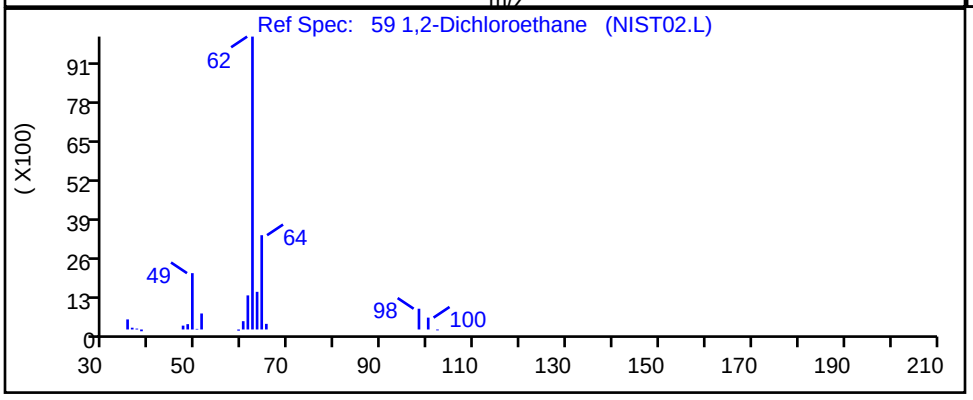
Processing Results











RT	Mass	Response	Amount
5.58	62.00	5761	1.302658
5.58	64.00	1223	

Reviewer: tupayachia, 24-Apr-2018 05:49:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

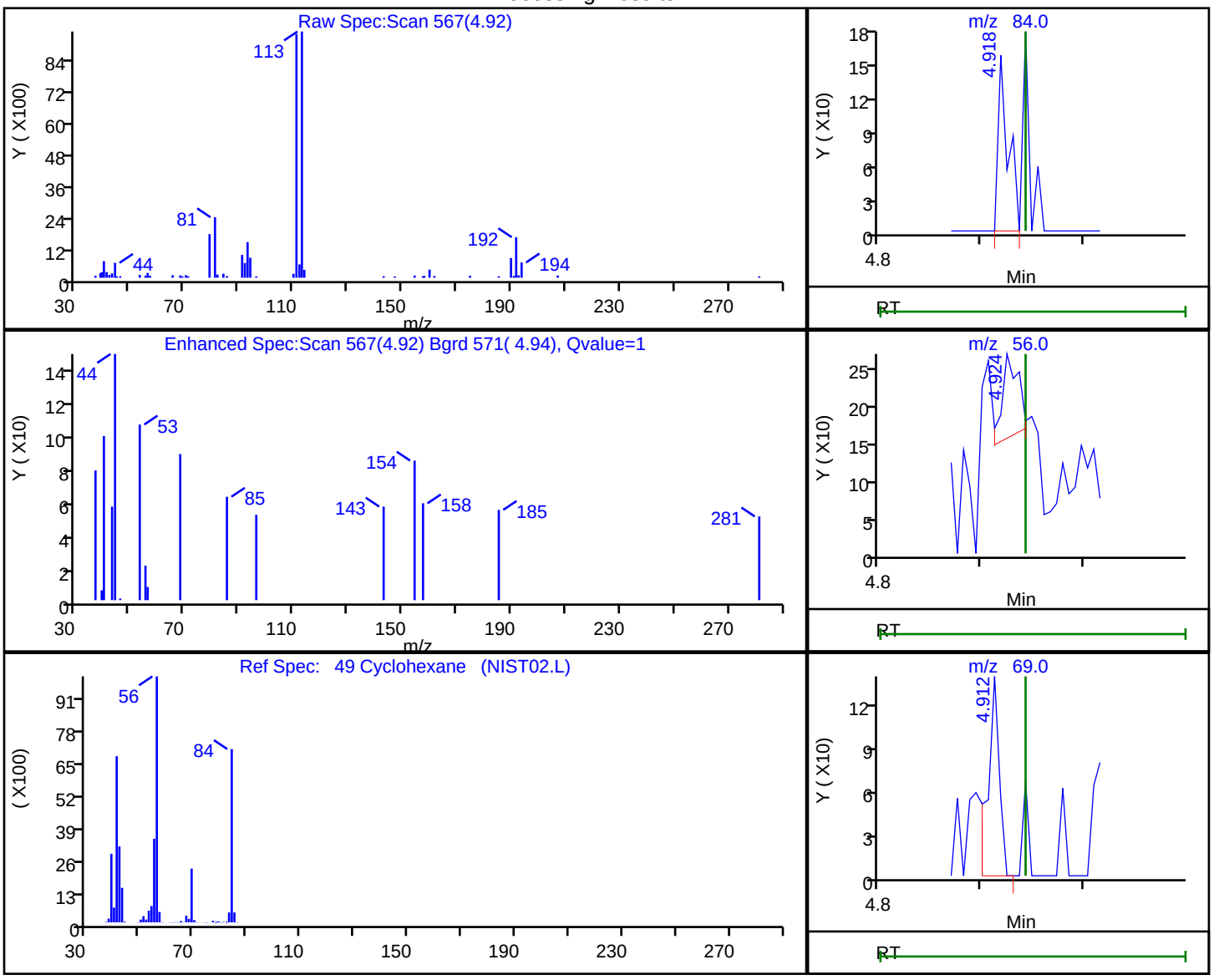
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D		
Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1
Client ID:	GC-MW-109M(SO)-15-17		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

49 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
4.92	84.00	107	0.452537
4.92	56.00	123	
4.91	69.00	108	

Reviewer: tupayachia, 24-Apr-2018 05:49:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

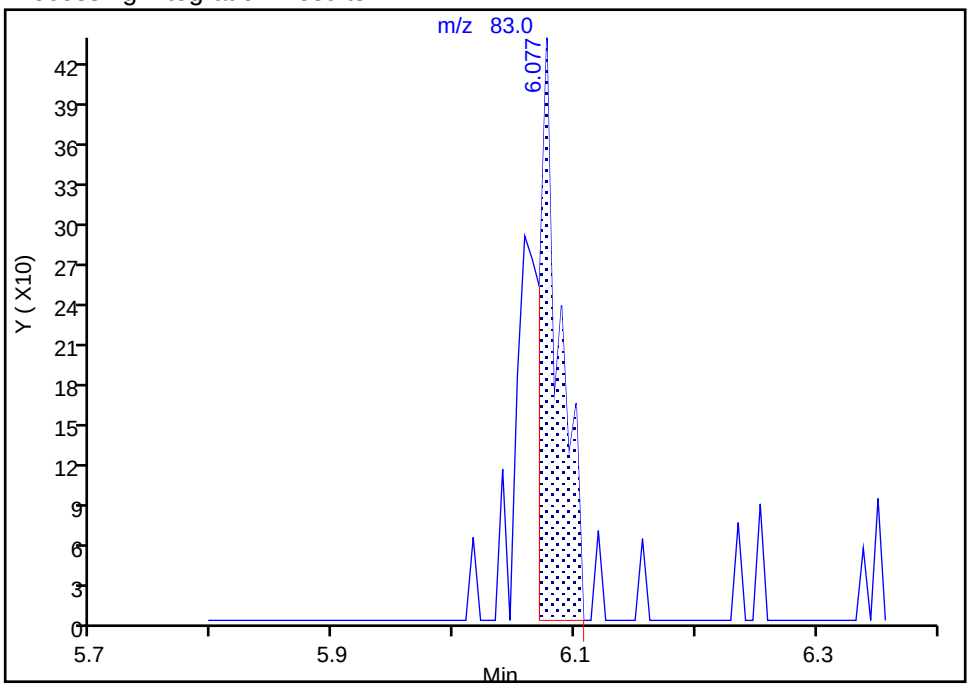
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82442.D				
Injection Date:	23-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153018-B-1-A	Lab Sample ID:	460-153018-1		
Client ID:	GC-MW-109M(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

65 Methylcyclohexane, CAS: 108-87-2

Signal: 1

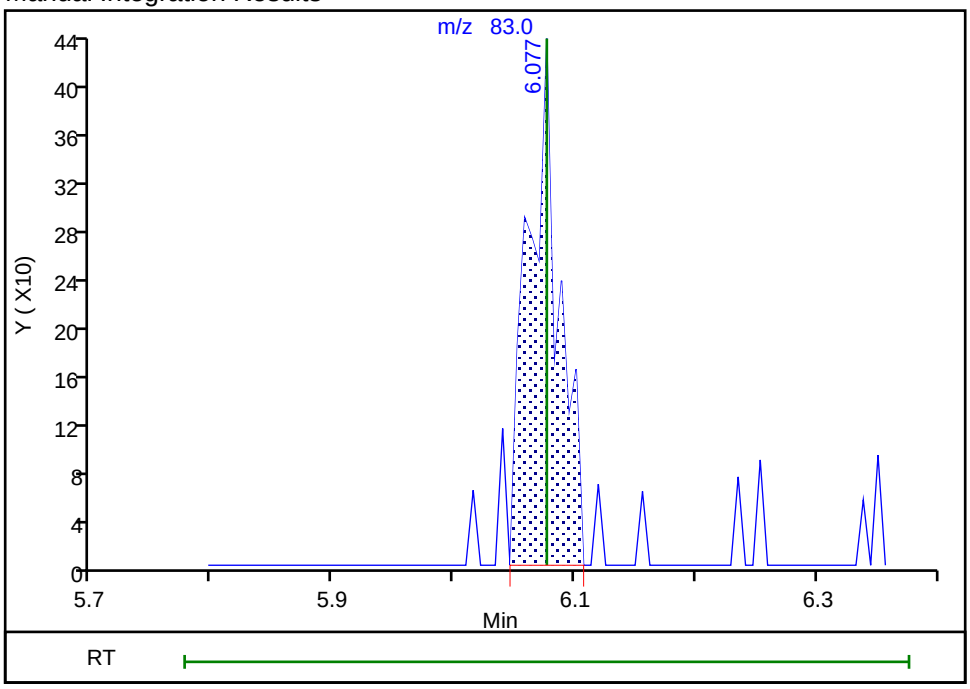
Processing Integration Results

RT: 6.08
Area: 500
Amount: 0.517435
Amount Units: ug/l



Manual Integration Results

RT: 6.08
Area: 770
Amount: 0.550295
Amount Units: ug/l



Reviewer: baronm, 24-Apr-2018 11:43:20

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-97-99 | Lab Sample ID: 460-153022-1

Matrix: Solid | Lab File ID: D48522.D

Analysis Method: 8260C | Date Collected: 03/29/2018 12:15

Sample wt/vol: 6.586(g) | Date Analyzed: 04/11/2018 13:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 17.9 | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0085
78-93-3	2-Butanone (MEK)	0.0015	J	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.016		0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00044
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00025
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U *	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-97-99 | Lab Sample ID: 460-153022-1

Matrix: Solid | Lab File ID: D48522.D

Analysis Method: 8260C | Date Collected: 03/29/2018 12:15

Sample wt/vol: 6.586(g) | Date Analyzed: 04/11/2018 13:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 17.9 | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00012
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00026	J B	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00043	J	0.00092	0.00016
95-47-6	o-Xylene	0.00014	J	0.00092	0.000088
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00038
75-01-4	Vinyl chloride	0.00092	U	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		78-135
460-00-4	4-Bromofluorobenzene	101		67-126
1868-53-7	Dibromofluoromethane (Surr)	79		61-149
2037-26-5	Toluene-d8 (Surr)	95		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-97-99 Lab Sample ID: 460-153022-1

Matrix: Solid Lab File ID: D48522.D

Analysis Method: 8260C Date Collected: 03/29/2018 12:15

Sample wt/vol: 6.586(g) Date Analyzed: 04/11/2018 13:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 17.9 Level: (low/med) Low

Analysis Batch No.: 510106 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D				
Lims ID:	460-153022-C-1-A				
Client ID:	GC-MW-107D(SO)-97-99				
Sample Type:	Client				
Inject. Date:	11-Apr-2018 13:45:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-153022-C-1-A				
Misc. Info.:	460-0070170-014				
Operator ID:		Instrument ID:	CVOAMS4		
Method:	\\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\8260S_4.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	12-Apr-2018 20:39:35	Calib Date:	28-Mar-2018 19:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK008				
First Level Reviewer: baronm		Date:	11-Apr-2018 14:53:42		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.130	3.124	0.006	86	32757	17.7	
26 Methylene Chloride	84	3.563	3.551	0.012	36	1904	0.2837	
* 27 TBA-d9 (IS)	65	3.569	3.569	0.000	87	502072	1000.0	
* 38 2-Butanone-d5	46	4.874	4.868	0.006	0	447298	250.0	
41 2-Butanone (MEK)	72	4.947	4.935	0.012	99	935	1.66	
$ 51 Dibromofluoromethane (Surr	113	5.459	5.453	0.006	95	229056	39.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.892	5.880	0.012	97	247607	41.0	
* 61 Fluorobenzene	96	6.227	6.221	0.006	98	838409	50.0	
* 67 1,4-Dioxane-d8	96	7.075	7.069	0.006	0	26148	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.014	8.008	0.006	98	797136	47.7	
* 89 Chlorobenzene-d5	117	9.355	9.349	0.006	89	542453	50.0	
93 m-Xylene & p-Xylene	106	9.538	9.538	0.000	97	2994	0.4647	
95 o-Xylene	106	9.867	9.861	0.006	90	1013	0.1512	
$ 100 4-Bromofluorobenzene	174	10.312	10.306	0.006	0	212659	50.7	
* 116 1,4-Dichlorobenzene-d4	152	11.171	11.172	-0.001	98	269560	50.0	

Reagents:

8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

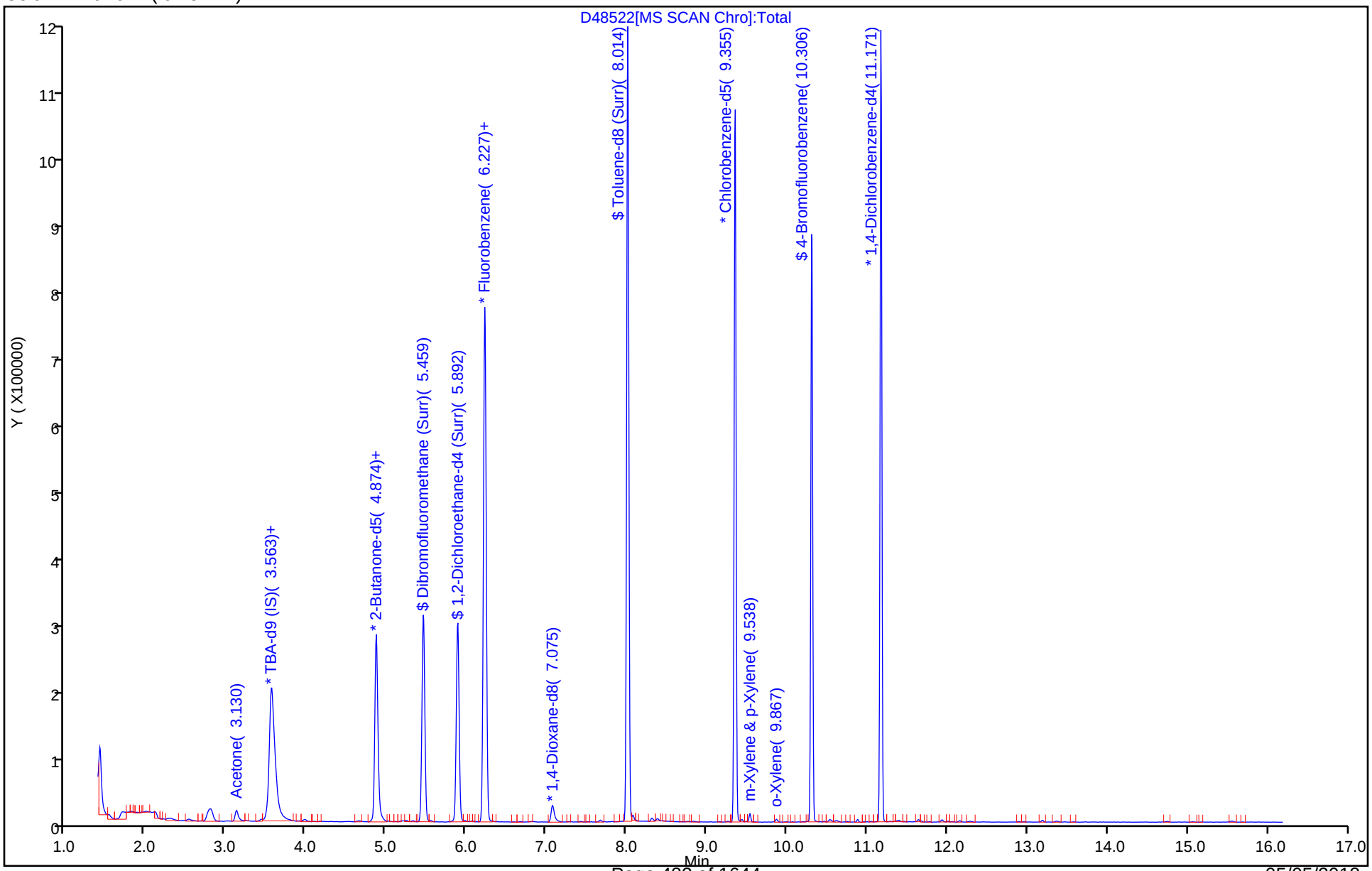
Report Date: 04-May-2018 11:20:26 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D

Injection Date:	11-Apr-2018 13:45:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	460-153022-C-1-A	Lab Sample ID:	460-153022-1	Worklist Smp#:	14
Client ID:	GC-MW-107D(SO)-97-99				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

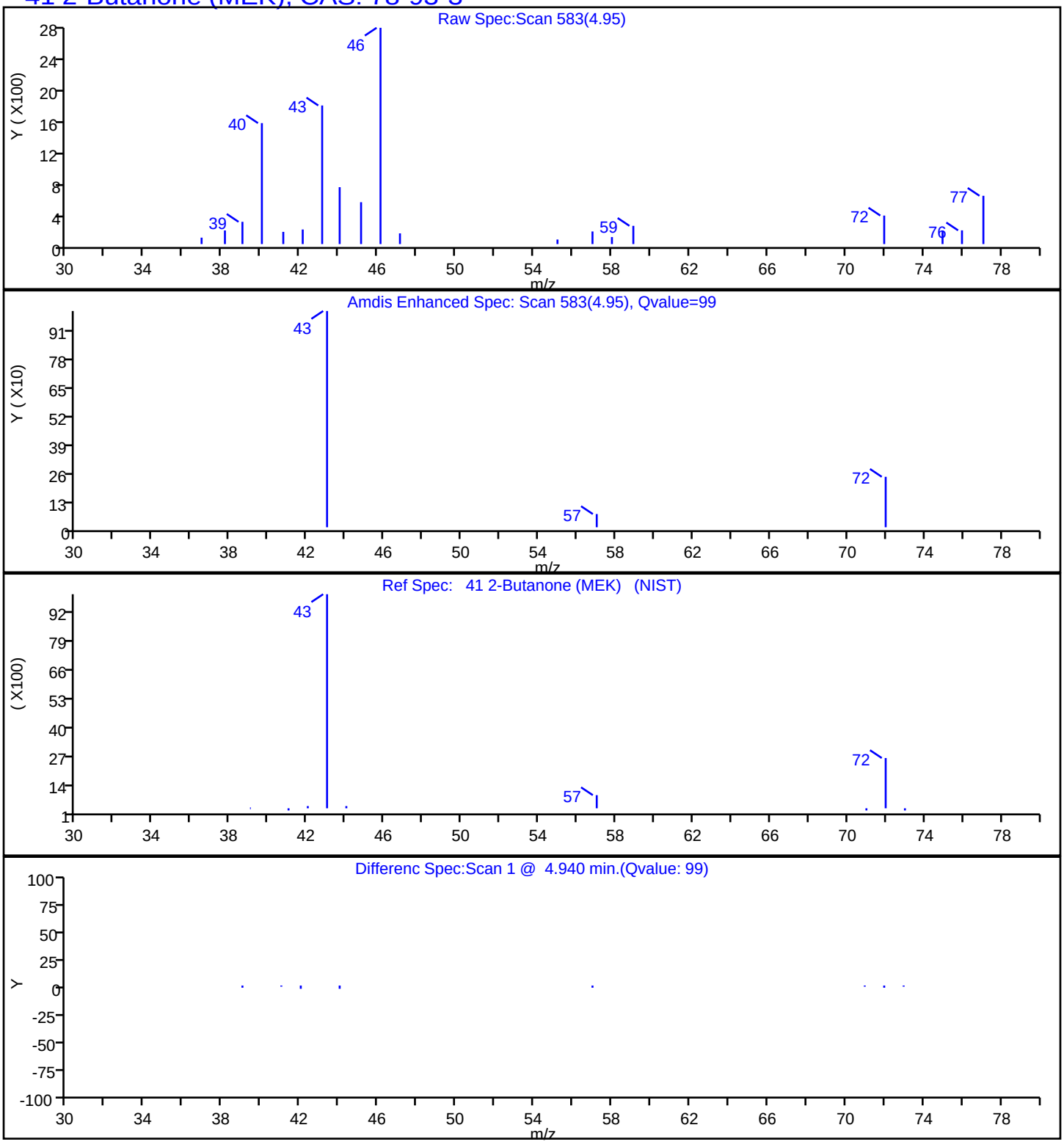
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D		
Injection Date:	11-Apr-2018 13:45:30	Instrument ID:	CVOAMS4
Lims ID:	460-153022-C-1-A	Lab Sample ID:	460-153022-1
Client ID:	GC-MW-107D(SO)-97-99		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

41 2-Butanone (MEK), CAS: 78-93-3

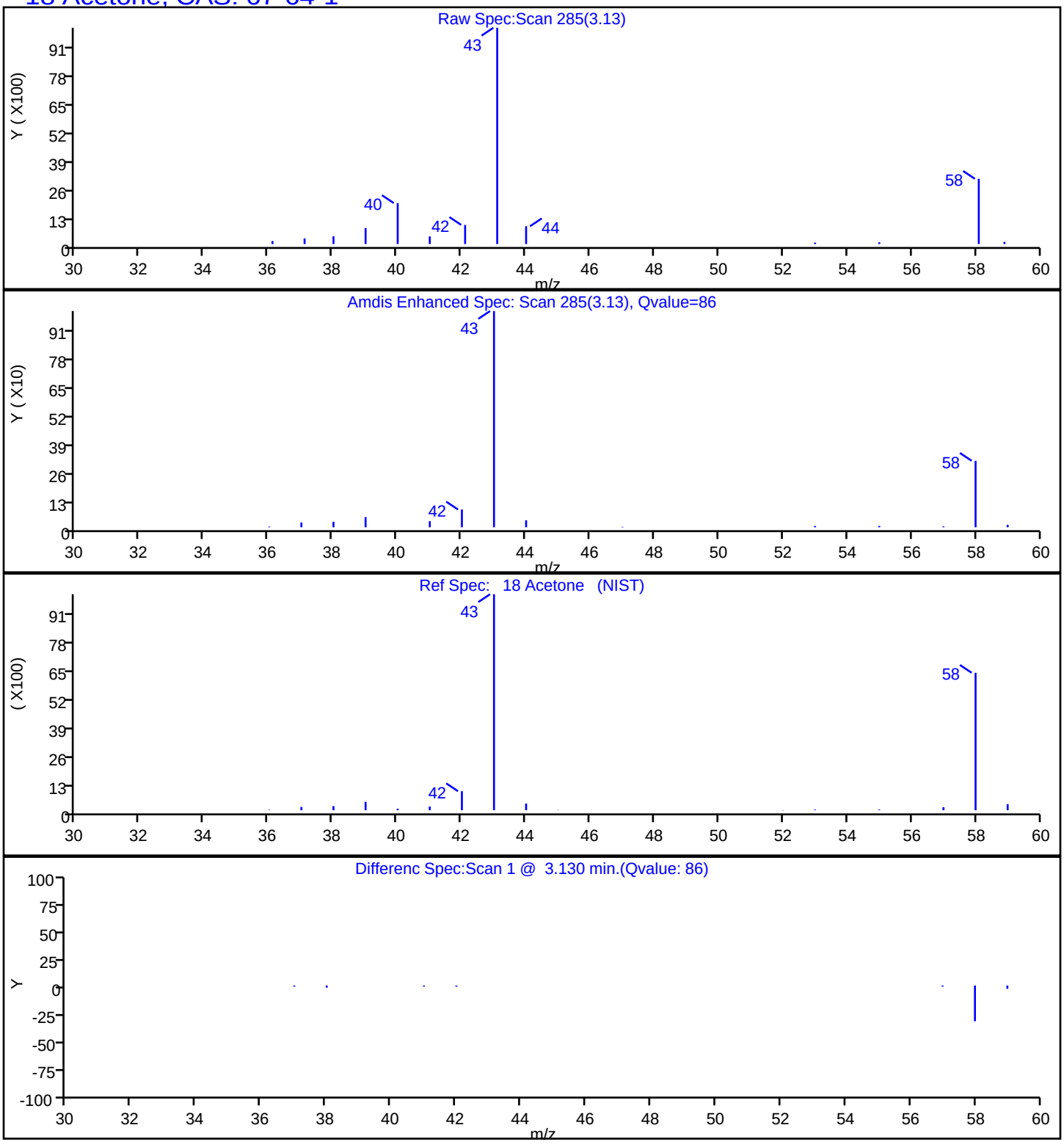


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D

Injection Date:	11-Apr-2018 13:45:30	Instrument ID:	CVOAMS4
Lims ID:	460-153022-C-1-A	Lab Sample ID:	460-153022-1
Client ID:	GC-MW-107D(SO)-97-99		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

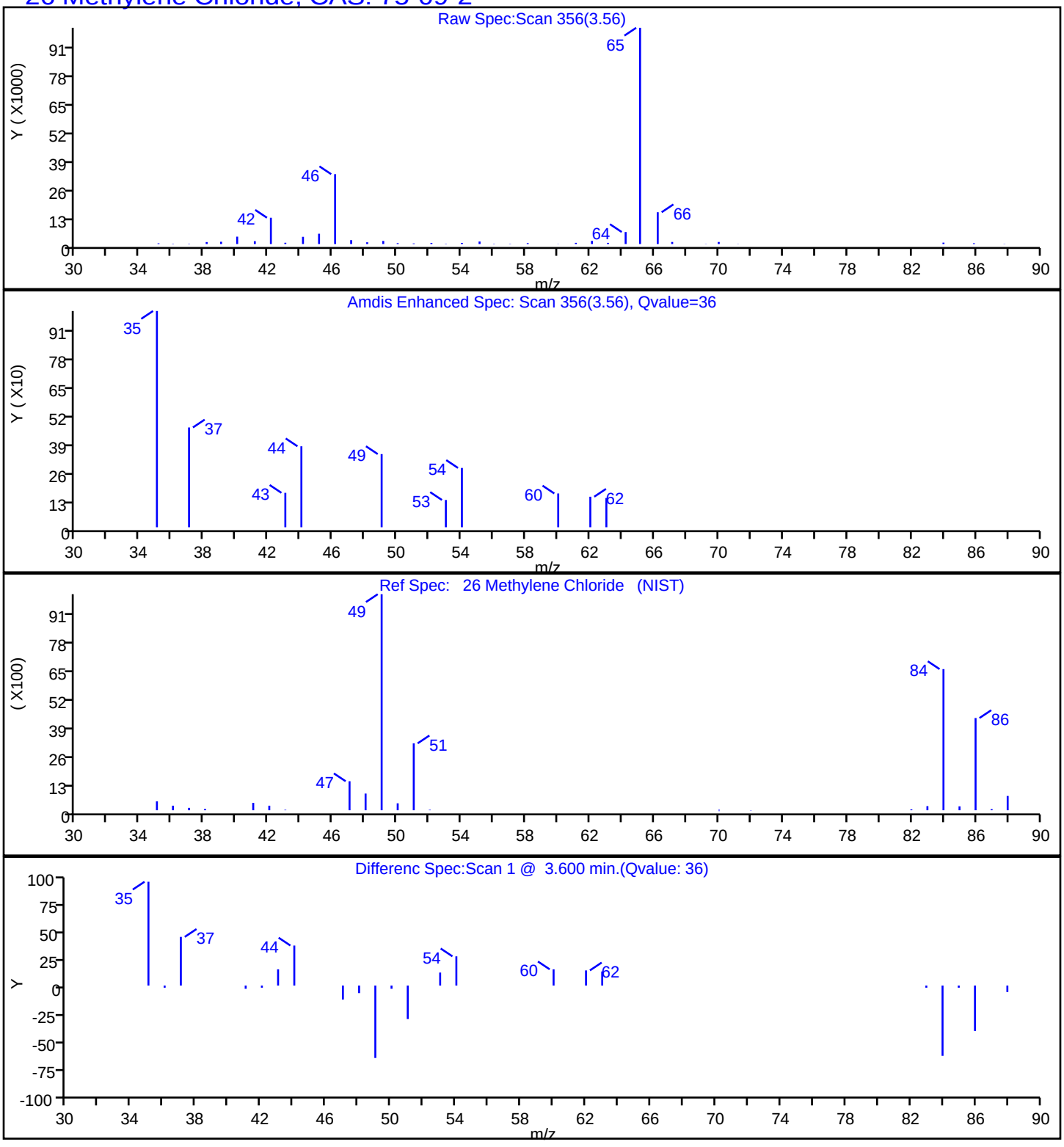
18 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D		
Injection Date:	11-Apr-2018 13:45:30	Instrument ID:	CVOAMS4
Lims ID:	460-153022-C-1-A	Lab Sample ID:	460-153022-1
Client ID:	GC-MW-107D(SO)-97-99		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

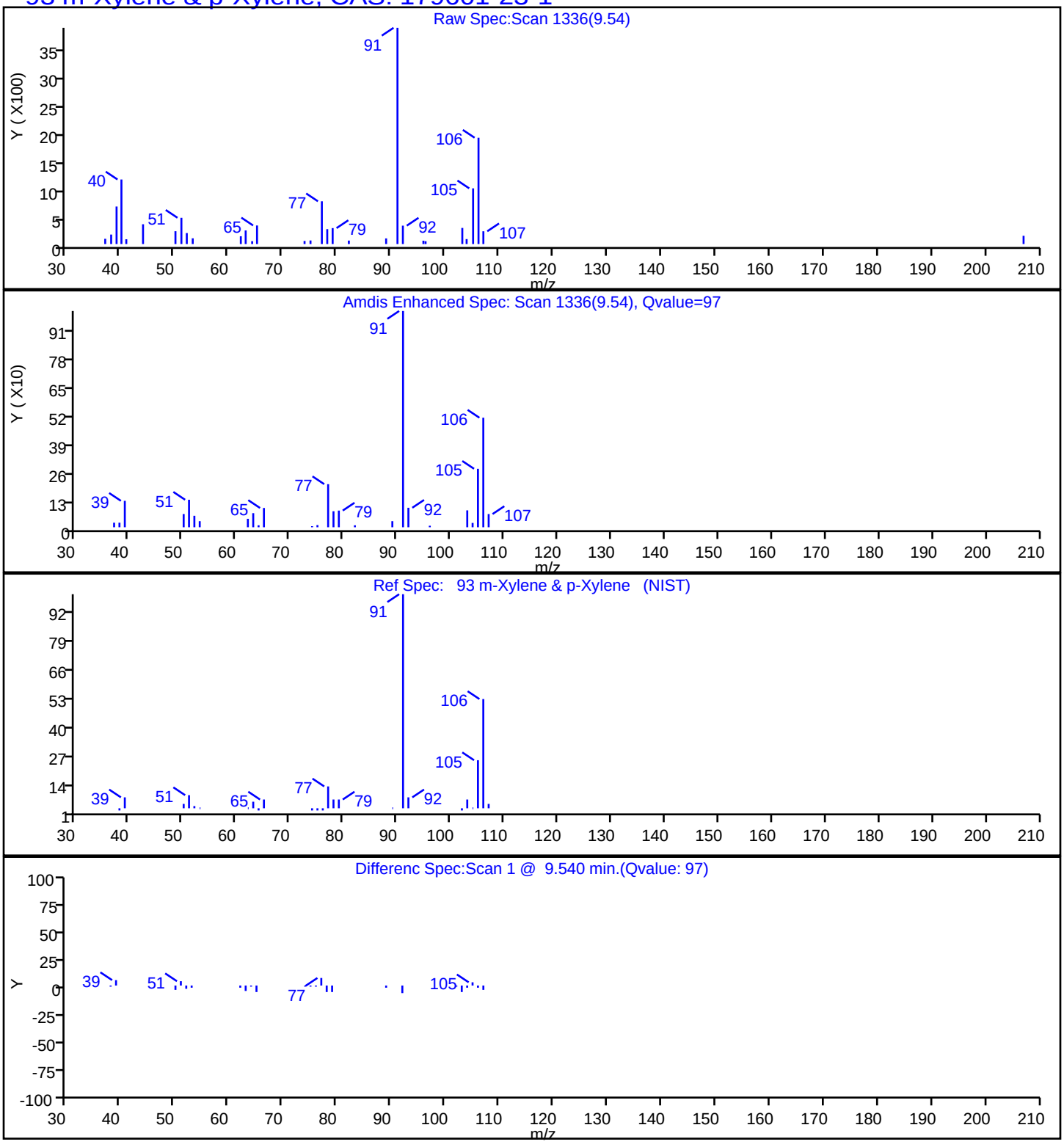
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

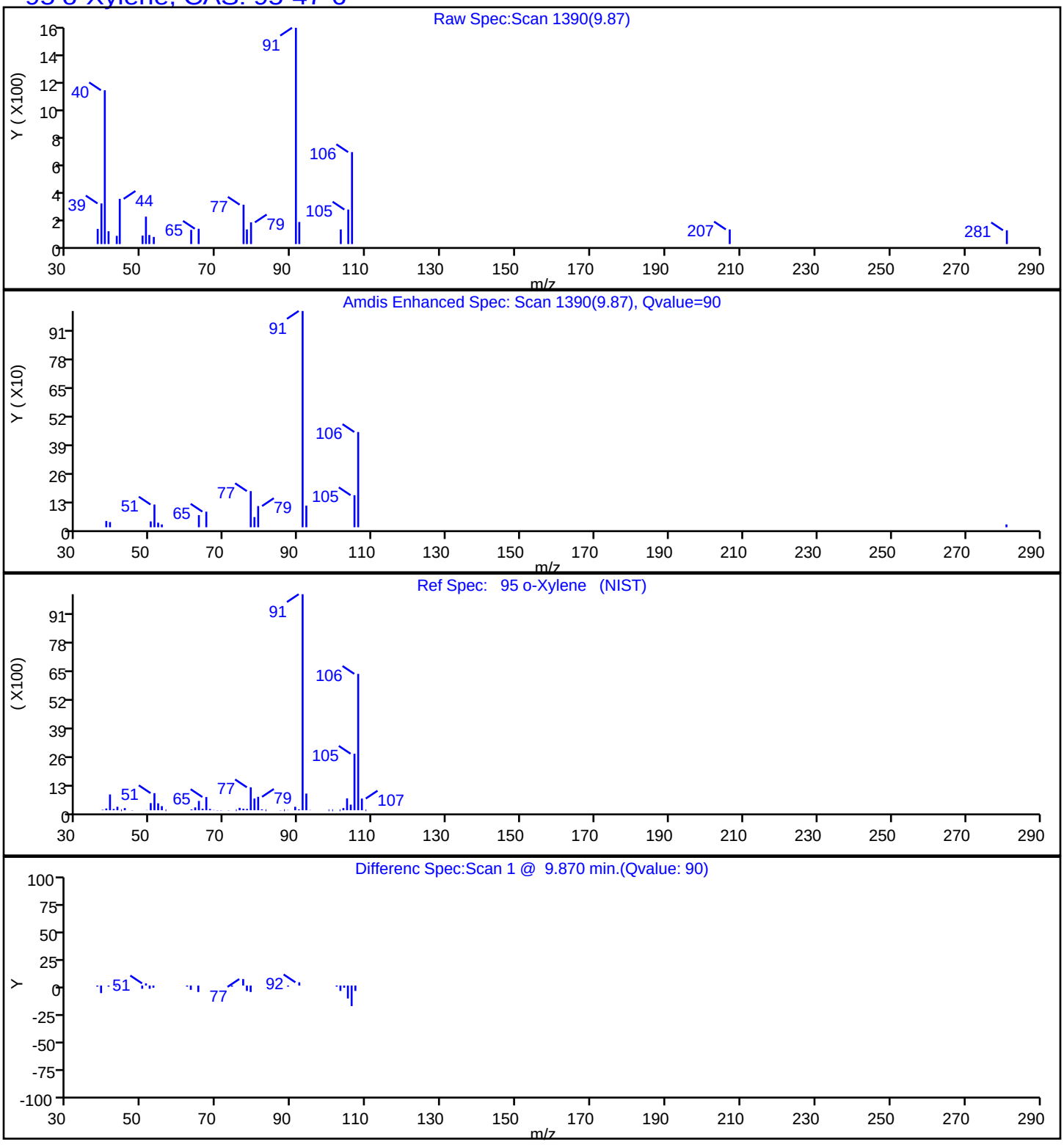
Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D		
Injection Date:	11-Apr-2018 13:45:30	Instrument ID:	CVOAMS4
Lims ID:	460-153022-C-1-A	Lab Sample ID:	460-153022-1
Client ID:	GC-MW-107D(SO)-97-99		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

93 m-Xylene & p-Xylene, CAS: 179601-23-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D
Injection Date: 11-Apr-2018 13:45:30 Instrument ID: CVOAMS4
Lims ID: 460-153022-C-1-A Lab Sample ID: 460-153022-1
Client ID: GC-MW-107D(SO)-97-99
Operator ID: ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 o-Xylene, CAS: 95-47-6



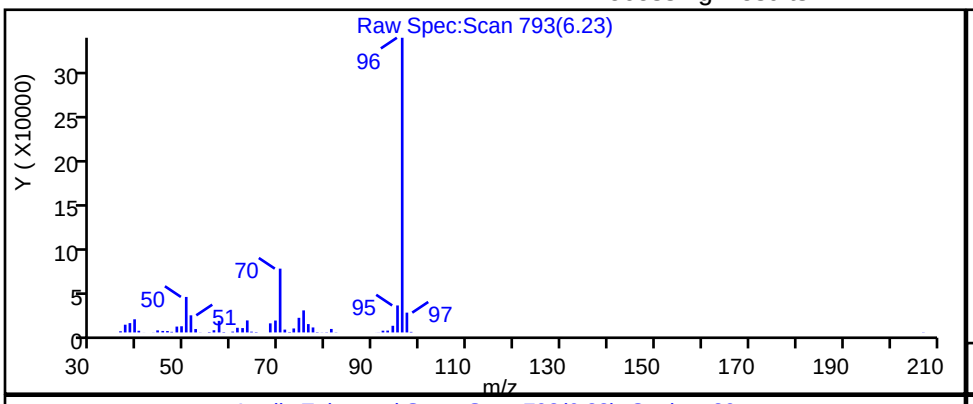
User Disabled Compound Report

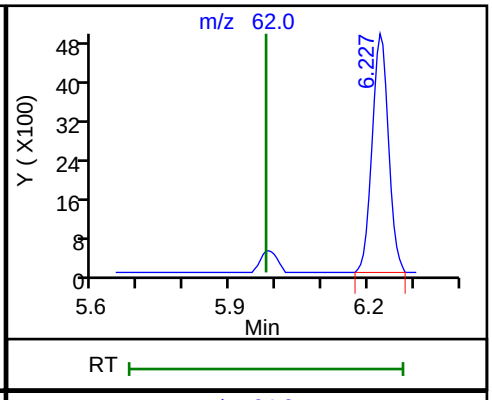
TestAmerica Edison

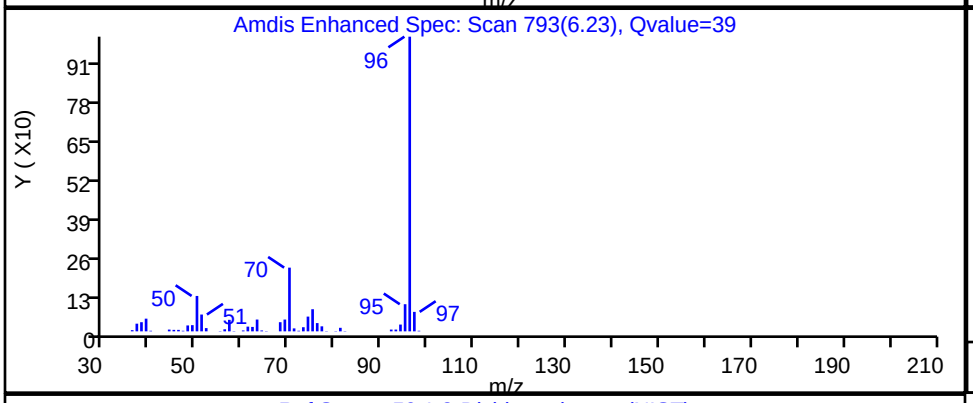
Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D				
Injection Date:	11-Apr-2018 13:45:30	Instrument ID:	CVOAMS4		
Lims ID:	460-153022-C-1-A	Lab Sample ID:	460-153022-1		
Client ID:	GC-MW-107D(SO)-97-99				
Operator ID:		ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

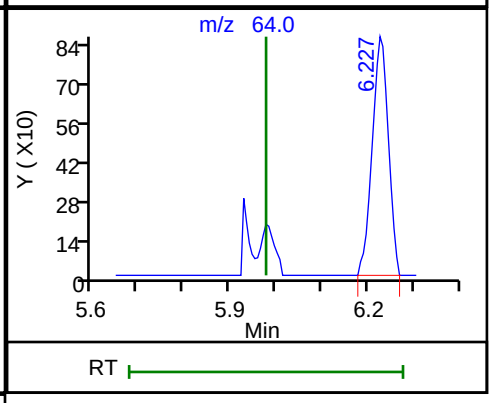
59 1,2-Dichloroethane, CAS: 107-06-2

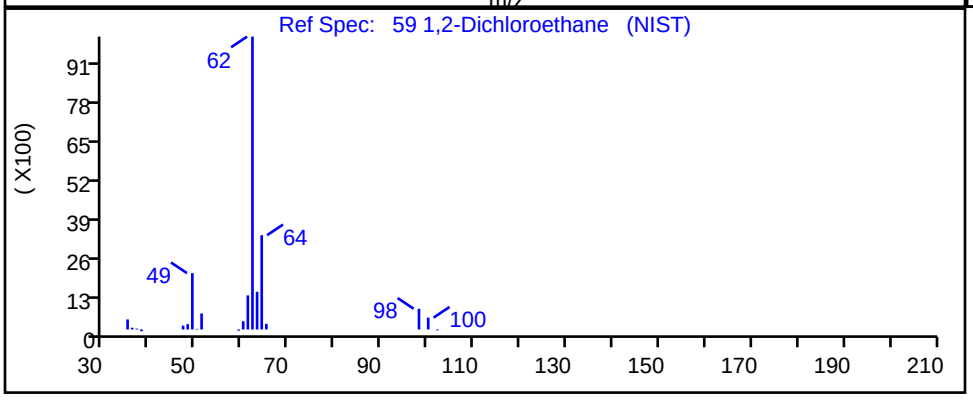
Processing Results











RT	Mass	Response	Amount
6.23	62.00	12432	1.914356
6.23	64.00	2135	

Reviewer: baronm, 11-Apr-2018 14:53:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

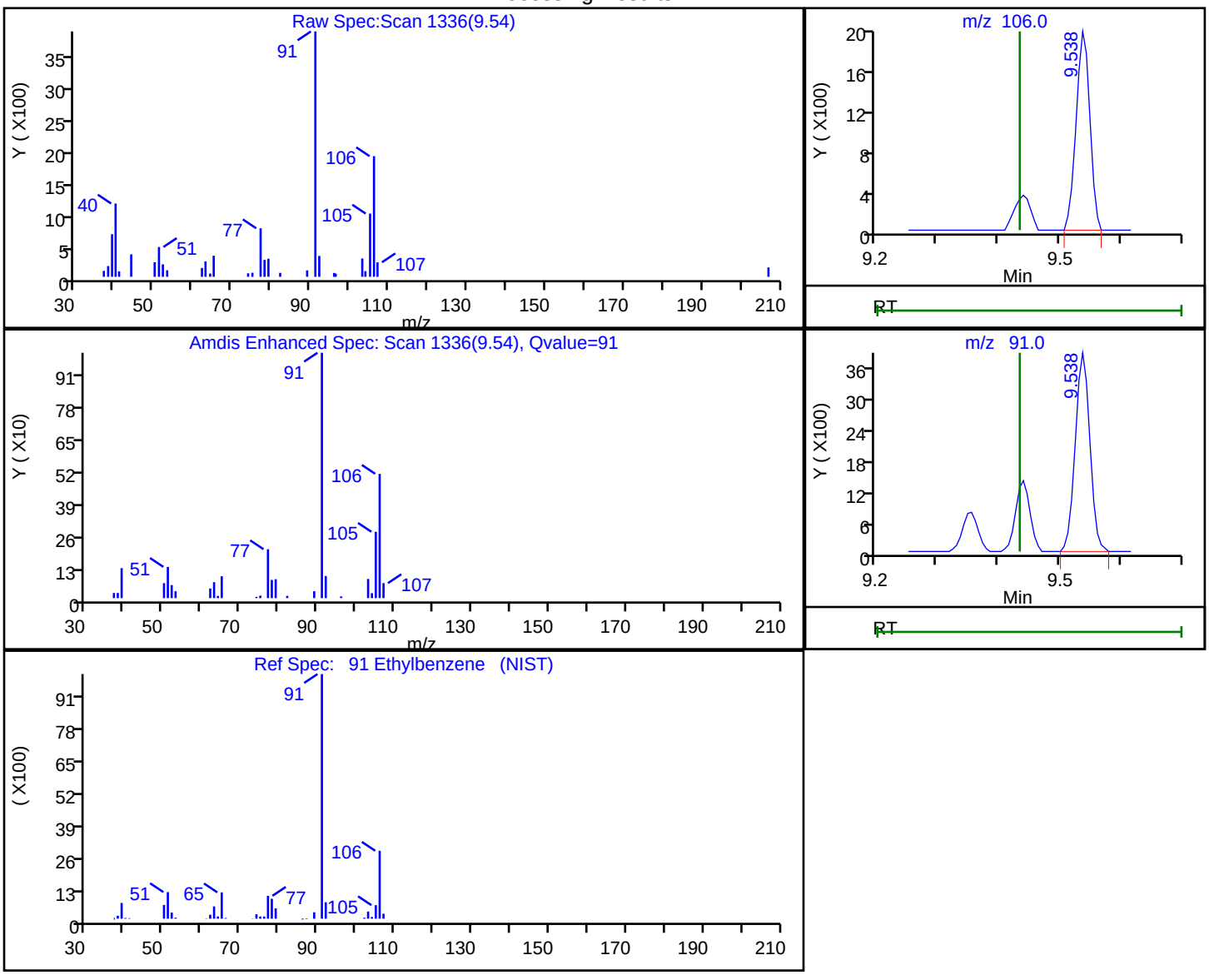
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48522.D		
Injection Date:	11-Apr-2018 13:45:30	Instrument ID:	CVOAMS4
Lims ID:	460-153022-C-1-A	Lab Sample ID:	460-153022-1
Client ID:	GC-MW-107D(SO)-97-99		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

91 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.54	106.00	2993	0.560391
9.54	91.00	6488	

Reviewer: baronm, 11-Apr-2018 14:53:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-33-35 | Lab Sample ID: 460-153082-1

Matrix: Solid | Lab File ID: K81924.D

Analysis Method: 8260C | Date Collected: 04/02/2018 10:00

Sample wt/vol: 6.643(g) | Date Analyzed: 04/13/2018 03:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.5 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0026	J	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.036		0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00042
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00043
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-33-35 | Lab Sample ID: 460-153082-1

Matrix: Solid | Lab File ID: K81924.D

Analysis Method: 8260C | Date Collected: 04/02/2018 10:00

Sample wt/vol: 6.643(g) | Date Analyzed: 04/13/2018 03:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.5 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00012
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0020		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00030	J	0.0010	0.00017
95-47-6	o-Xylene	0.00015	J	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0014		0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00062
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.00015	J	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00040
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00054

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		78-135
460-00-4	4-Bromofluorobenzene	117		67-126
1868-53-7	Dibromofluoromethane (Surr)	126		61-149
2037-26-5	Toluene-d8 (Surr)	102		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-33-35 | Lab Sample ID: 460-153082-1

Matrix: Solid | Lab File ID: K81924.D

Analysis Method: 8260C | Date Collected: 04/02/2018 10:00

Sample wt/vol: 6.643(g) | Date Analyzed: 04/13/2018 03:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.5 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

Number TICs Found: 10 | TIC Result Total: 0.1352

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
112-40-3	Dodecane	12.69	0.016	J N	91%
15869-86-0	Octane, 4-ethyl-	13.10	0.0079	J N	87%
	Unknown	13.18	0.0075	J	
	Unknown alkane	13.24	0.010	J	
629-50-5	Tridecane	13.44	0.047	J N	94%
	Unknown	13.53	0.0061	J	
	Unknown alkane	13.59	0.0060	J	
	Unknown	14.00	0.0068	J	
31295-56-4	Dodecane, 2,6,11-trimethyl-	14.05	0.0059	J N	90%
629-59-4	Tetradecane	14.22	0.022	J N	94%

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D
Lims ID: 460-153082-B-1-A
Client ID: GC-MW-109M(SO)-33-35
Sample Type: Client
Inject. Date: 13-Apr-2018 03:26:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153082-B-1-A
Misc. Info.: 460-0070288-017
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 10:56:01 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 13-Apr-2018 06:56:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.023	3.004	0.019	86	36632	35.6	
* 25 TBA-d9 (IS)	65	3.376	3.376	0.000	0	337583	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	88	7792	1.97	
* 38 2-Butanone-d5	46	4.467	4.455	0.012	0	240628	250.0	
42 2-Butanone (MEK)	72	4.534	4.504	0.030	1	1216	2.57	M
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	182133	62.9	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.309	0.006	0	167553	60.7	
* 61 Fluorobenzene	96	5.589	5.577	0.012	99	462430	50.0	
63 Trichloroethene	95	5.949	5.943	0.006	19	491	0.1486	
* 67 1,4-Dioxane-d8	96	6.296	6.278	0.018	0	29604	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	99	595006	50.9	
83 Tetrachloroethene	166	7.973	7.967	0.006	95	4500	1.39	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	375624	50.0	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	1922	0.3026	
95 o-Xylene	106	9.820	9.820	0.000	51	950	0.1462	
$ 100 4-Bromofluorobenzene	174	10.424	10.417	0.007	92	185992	58.6	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	222835	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

TestAmerica Edison
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D
Lims ID: 460-153082-B-1-A
Client ID: GC-MW-109M(SO)-33-35
Sample Type: Client
Inject. Date: 13-Apr-2018 03:26:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153082-B-1-A
Misc. Info.: 460-0070288-017
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 10:56:01 Calib Date: 03-Apr-2018 15:21:30
Tic RT Window: 0.000 -0.000 Response: area
Quant By: Nearest ISTD Quant LOD: 10.00000
MS Library: \\ChromNA\Edison\Database\NIST02.L
Min. Match: 70

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 13-Apr-2018 06:56:00

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
112-40-3	Dodecane							
12.691	342785	16.0	89	91	36156	C12H26	170	
15869-86-0	Octane, 4-ethyl-							
13.100	169741	7.92	89	87	18424	C10H22	142	
	Unknown							
13.179	160786	7.51	89					
	Unknown alkane							
13.240	223506	10.4	89	0	0		0	
629-50-5	Tridecane							
13.441	1004213	46.9	89	94	45544	C13H28	184	
	Unknown							
13.533	130473	6.09	89					
	Unknown alkane							
13.588	128963	6.02	89	0	0		0	
	Unknown							
13.996	146431	6.84	89					
31295-56-4	Dodecane, 2,6,11-trimethyl-							
14.045	126092	5.89	89	90	64586	C15H32	212	
629-59-4	Tetradecane							
14.222	478551	22.3	89	94	55007	C14H30	198	

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 89 Chlorobenzene-d5	9.076	1070966	50.0

QC Flag Legend

Processing Flags

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

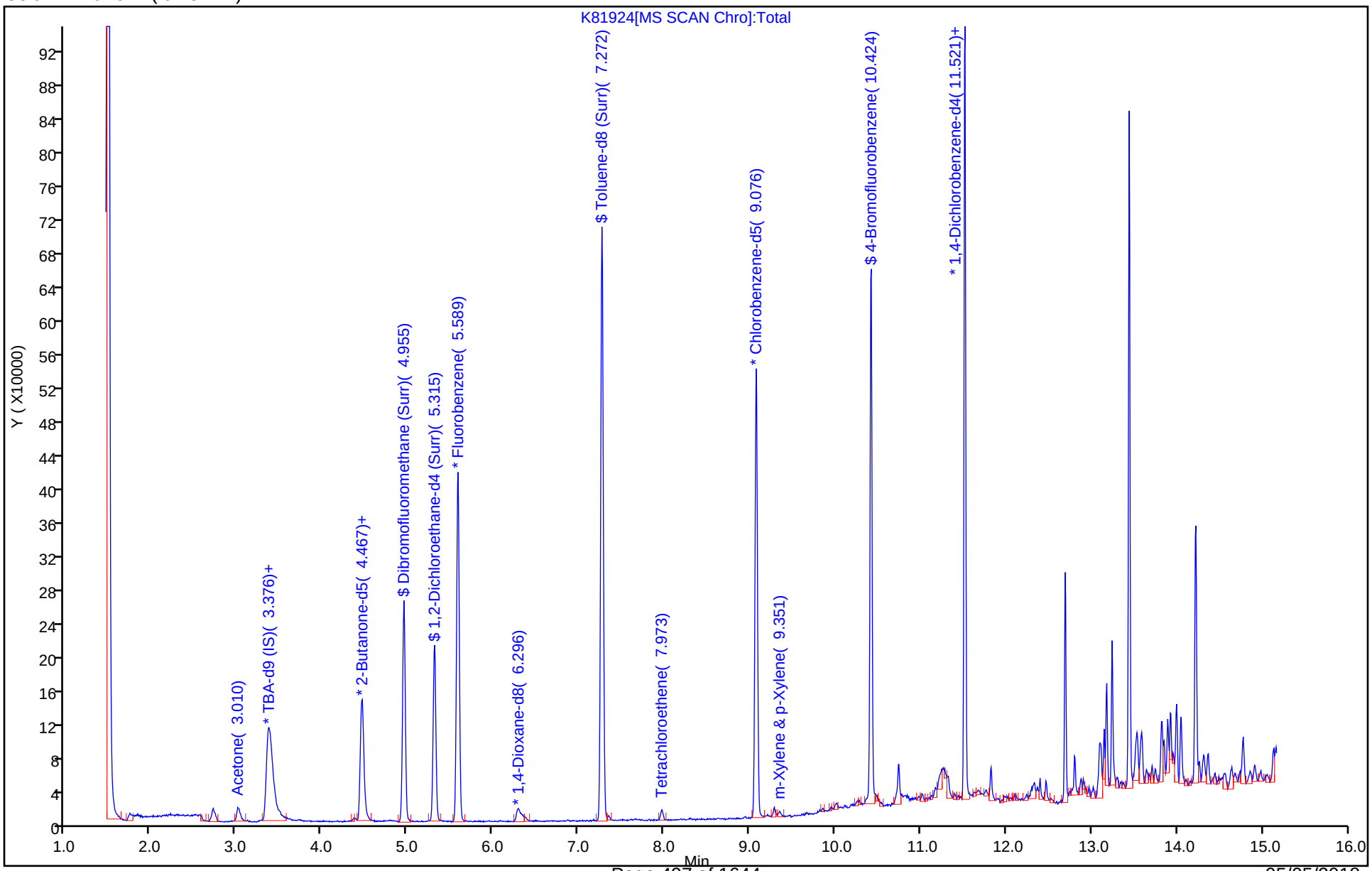
Report Date: 04-May-2018 11:20:47 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1	Worklist Smp#:	17
Client ID:	GC-MW-109M(SO)-33-35				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

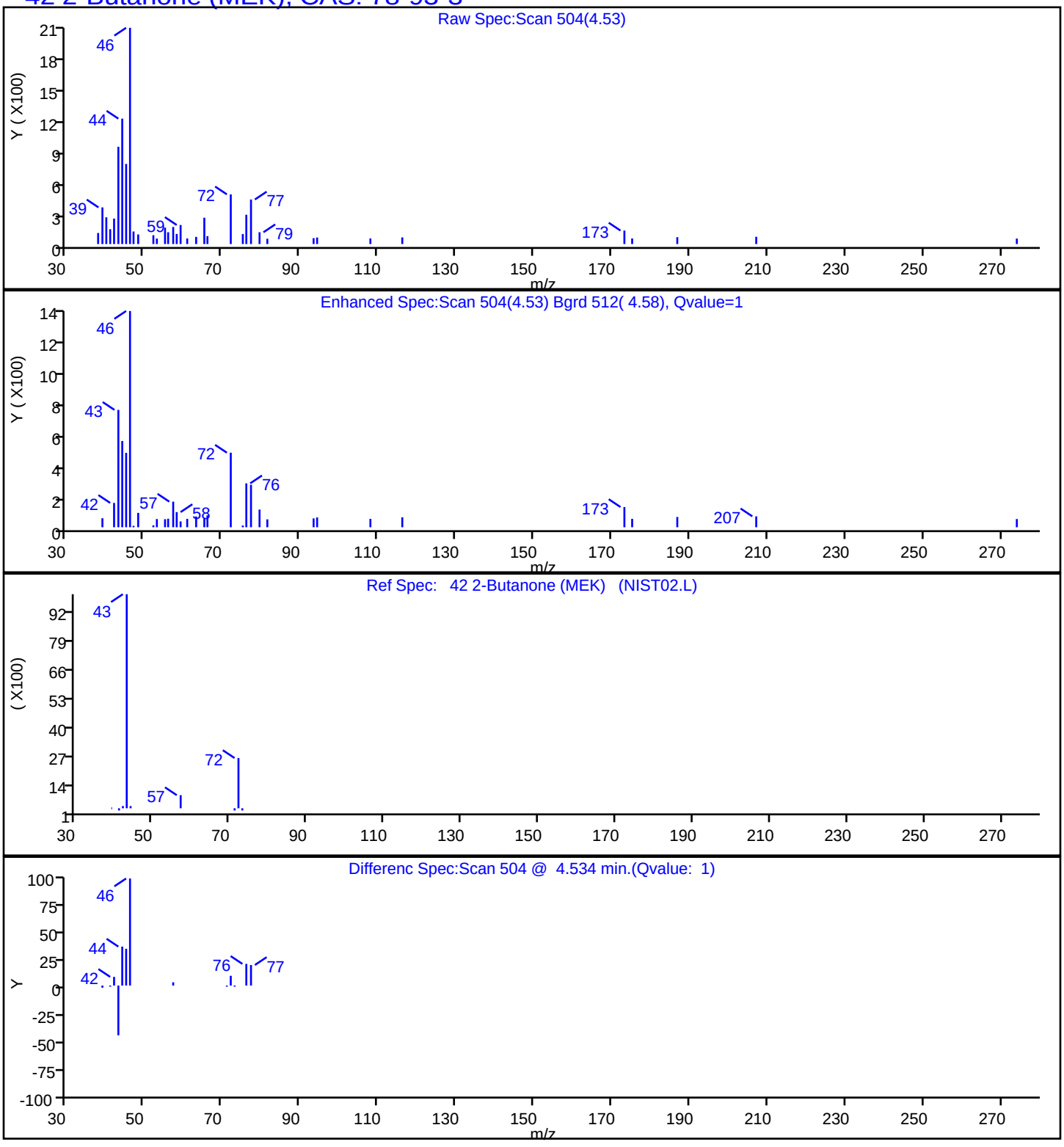
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D				
Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1		
Client ID:	GC-MW-109M(SO)-33-35				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3

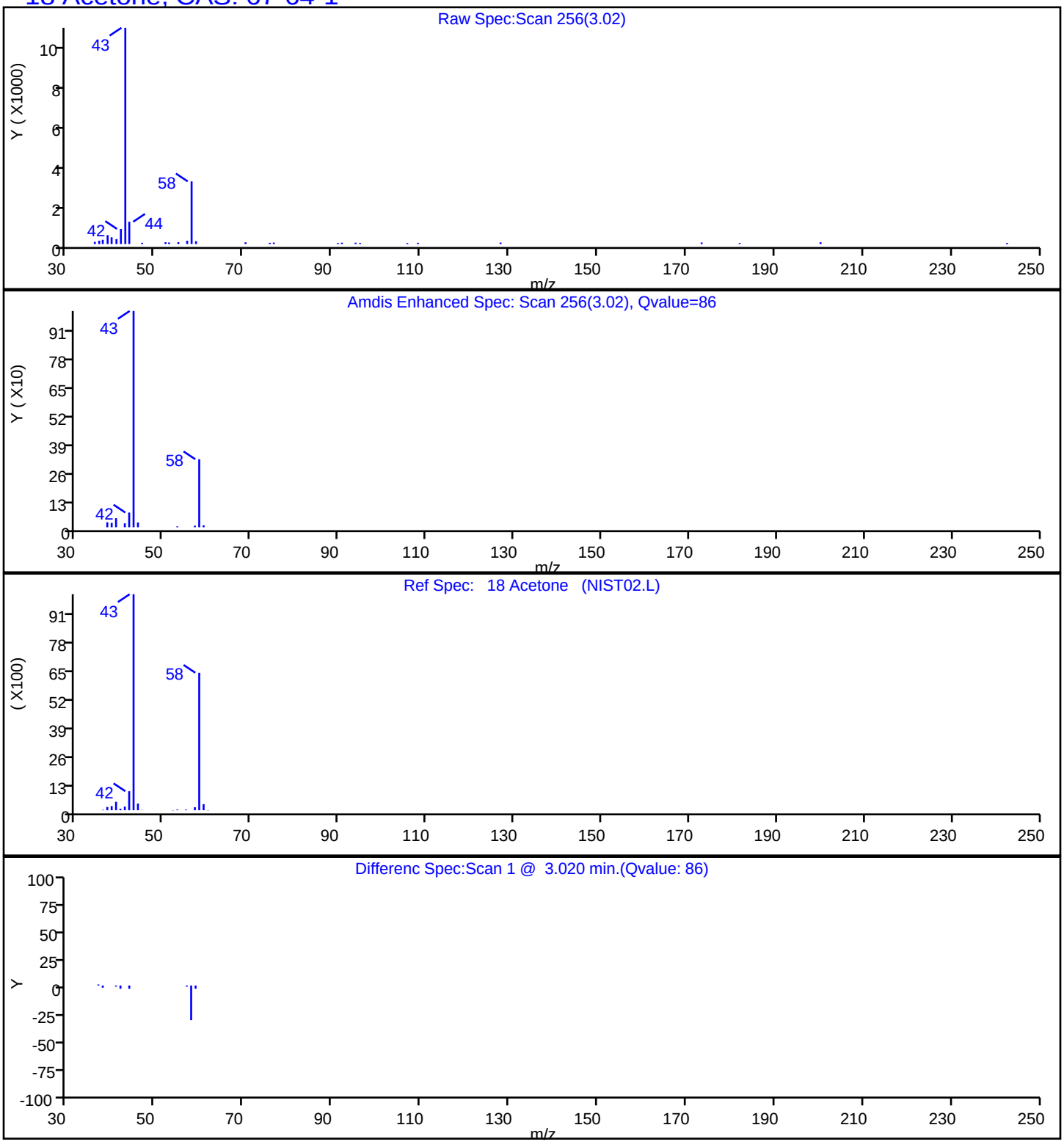


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1		
Client ID:	GC-MW-109M(SO)-33-35				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

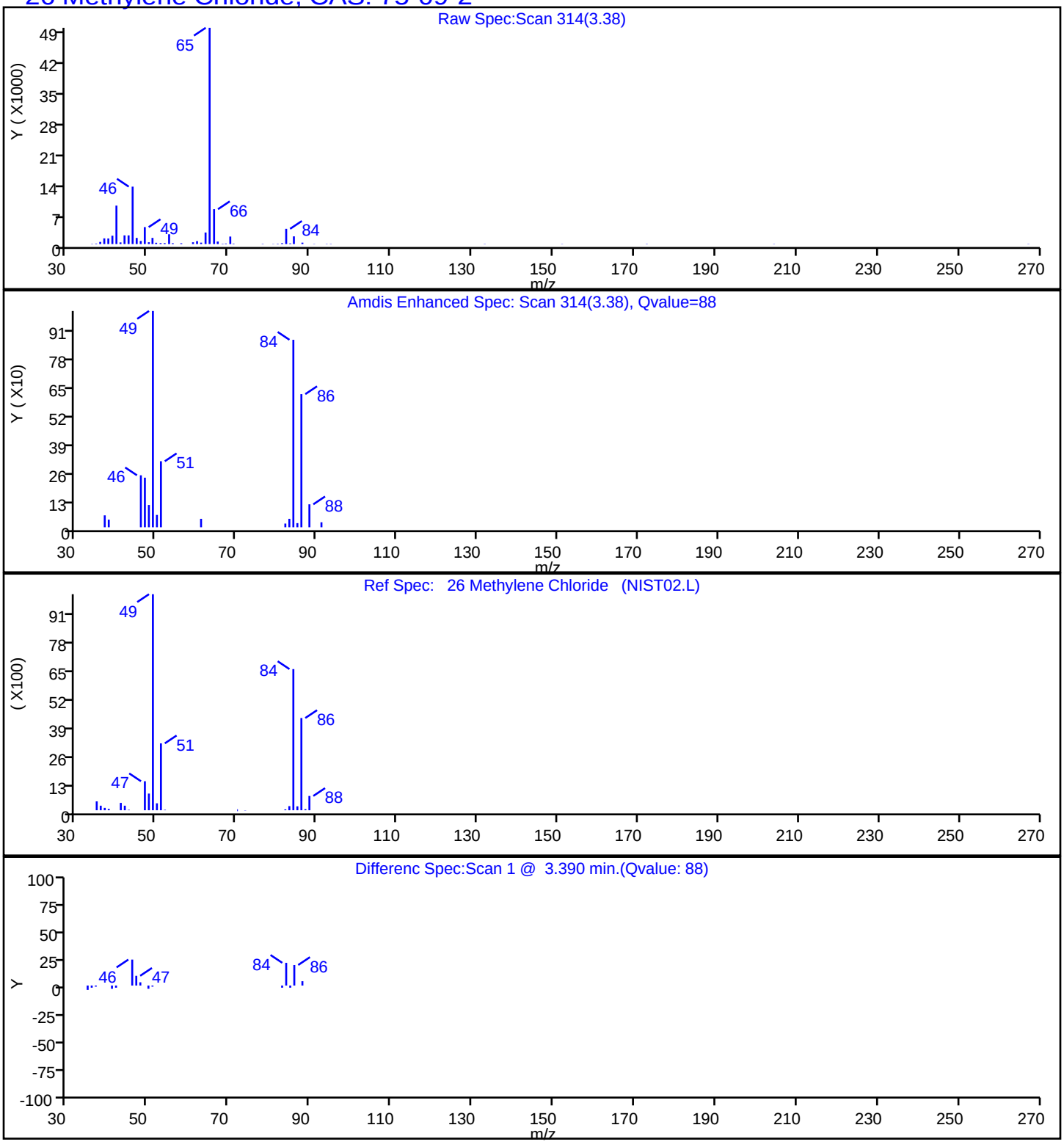
18 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D
Injection Date: 13-Apr-2018 03:26:30 Instrument ID: CVOAMS9
Lims ID: 460-153082-B-1-A Lab Sample ID: 460-153082-1
Client ID: GC-MW-109M(SO)-33-35
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

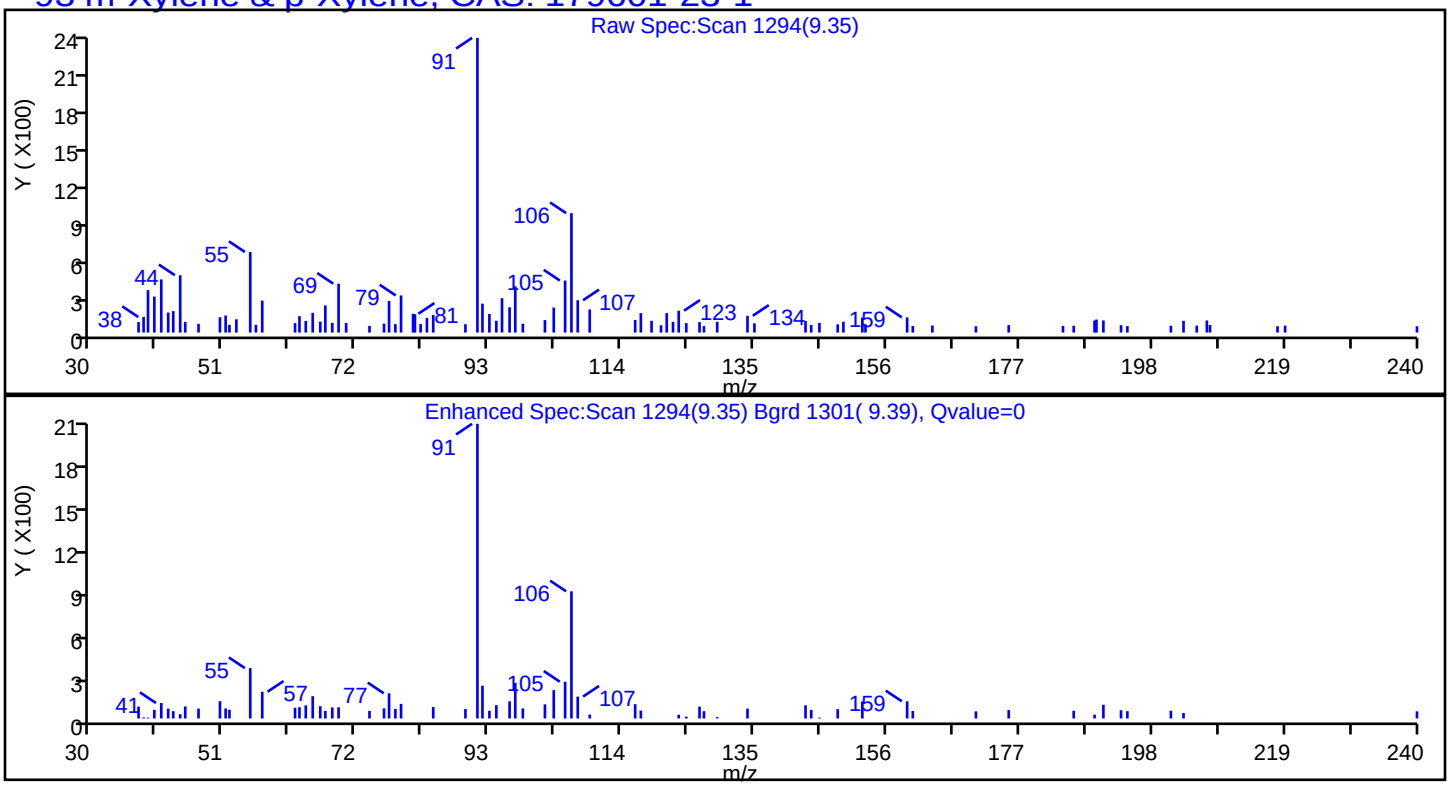
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D		
Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1
Client ID:	GC-MW-109M(SO)-33-35		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

93 m-Xylene & p-Xylene, CAS: 179601-23-1

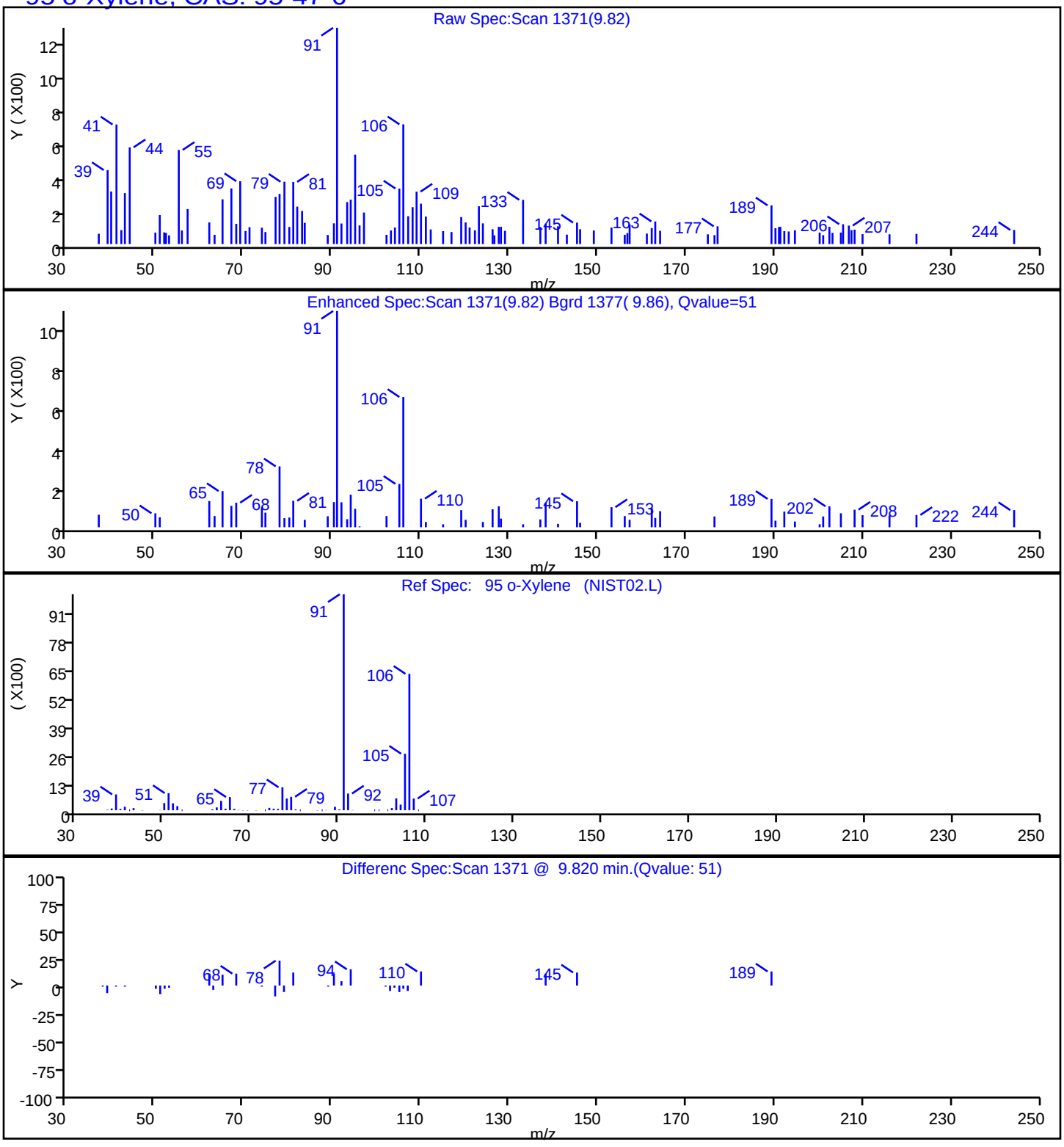


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1
Client ID:	GC-MW-109M(SO)-33-35		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

95 o-Xylene, CAS: 95-47-6

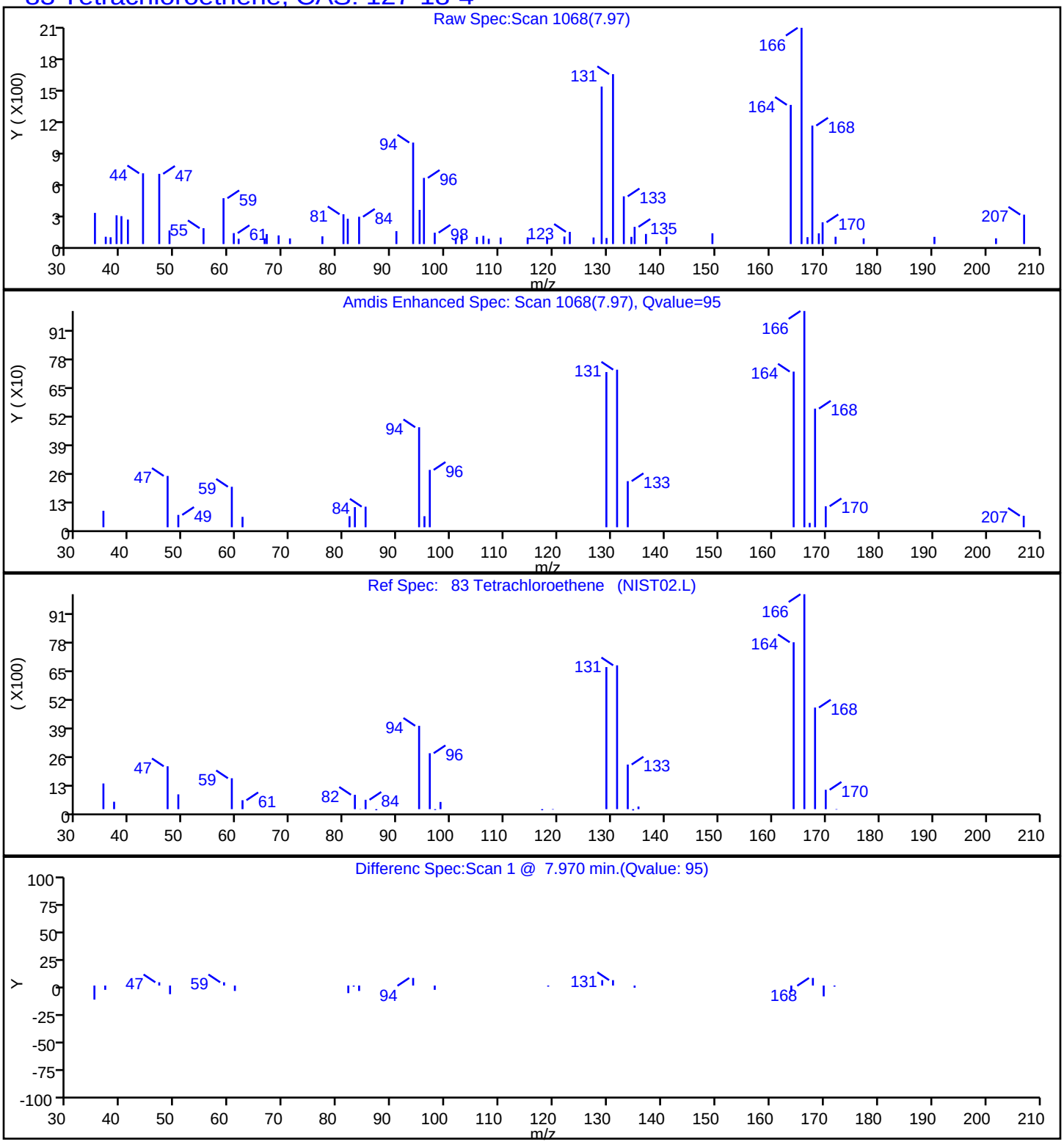


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1
Client ID:	GC-MW-109M(SO)-33-35		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

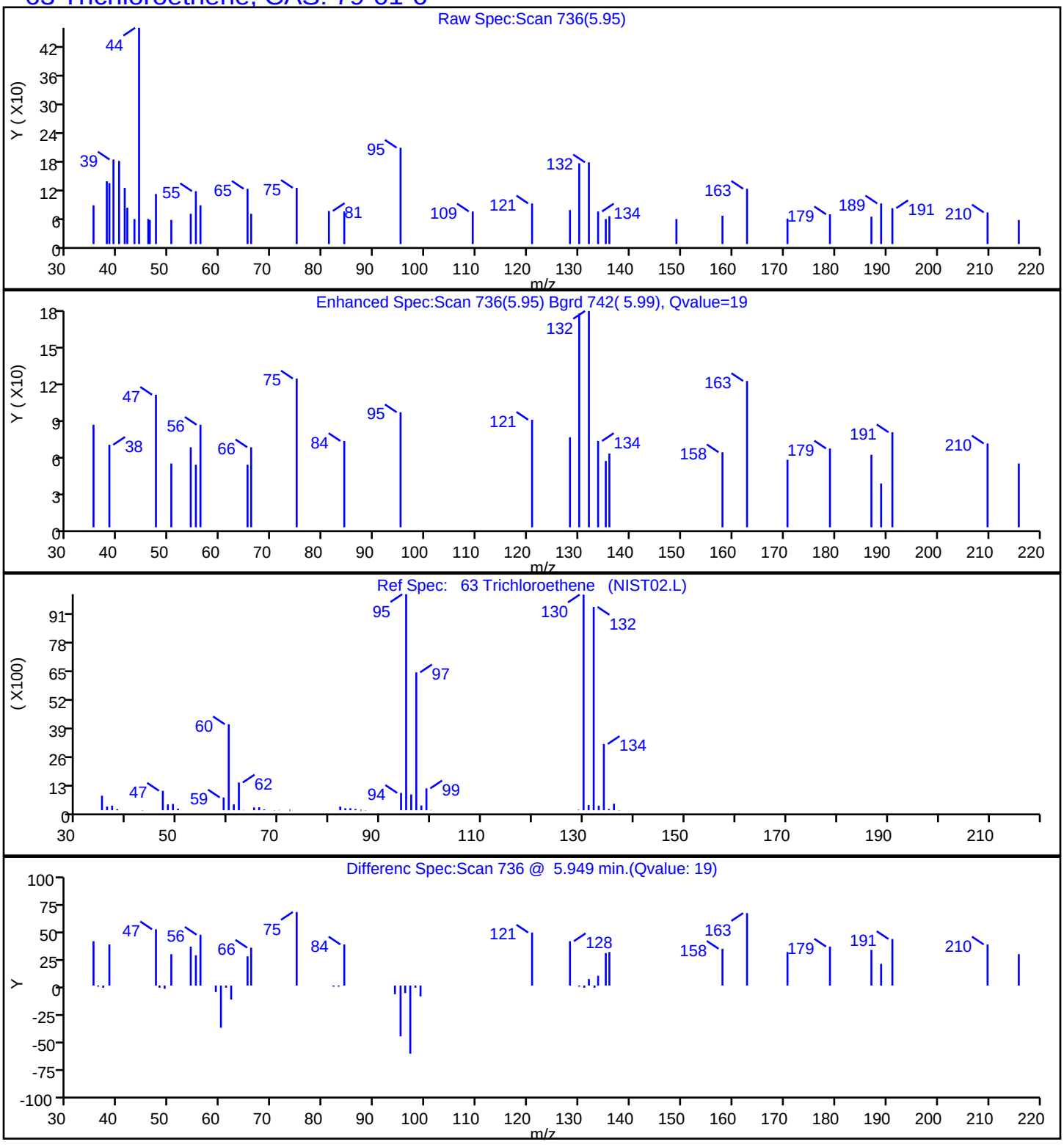
83 Tetrachloroethene, CAS: 127-18-4



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D		
Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1
Client ID:	GC-MW-109M(SO)-33-35		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

63 Trichloroethene, CAS: 79-01-6



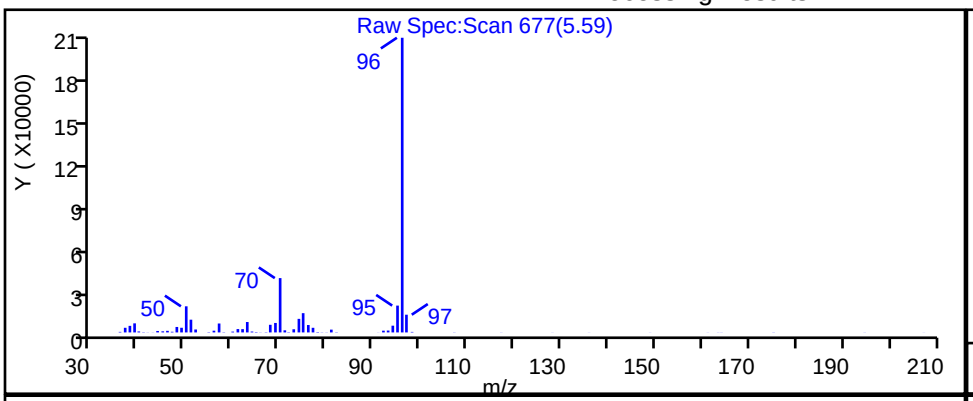
User Disabled Compound Report

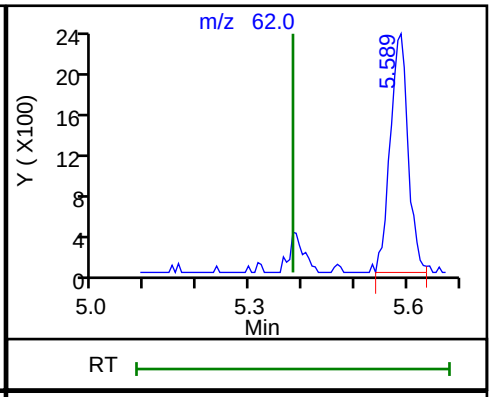
TestAmerica Edison

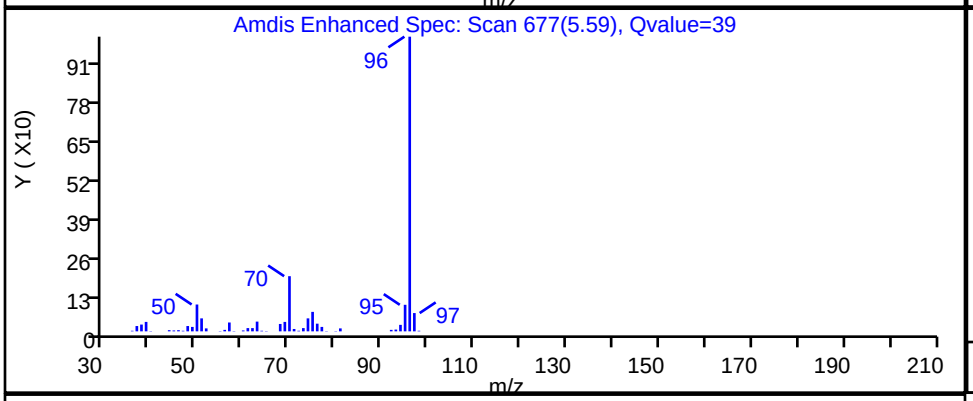
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D		
Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1
Client ID:	GC-MW-109M(SO)-33-35		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

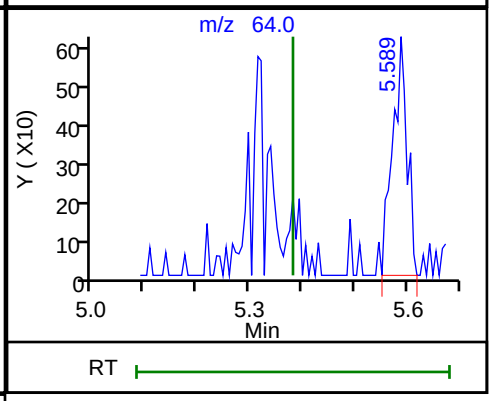
59 1,2-Dichloroethane, CAS: 107-06-2

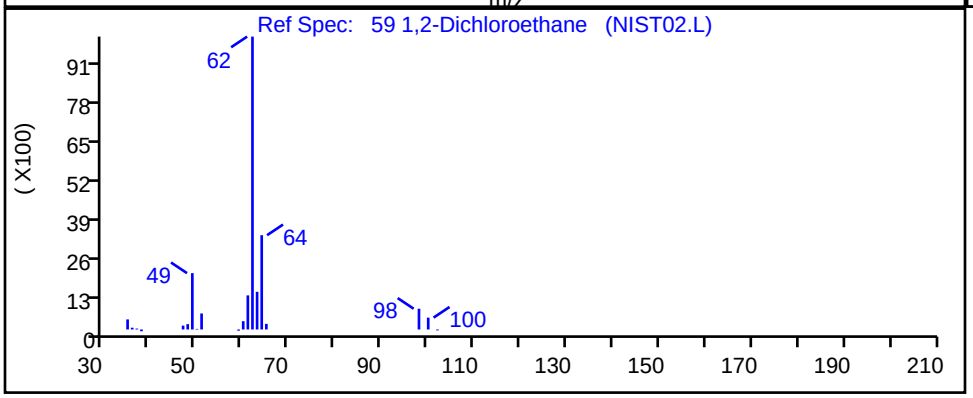
Processing Results











RT	Mass	Response	Amount
5.59	62.00	5534	1.488516
5.59	64.00	1199	

Reviewer: tupayachia, 13-Apr-2018 06:56:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

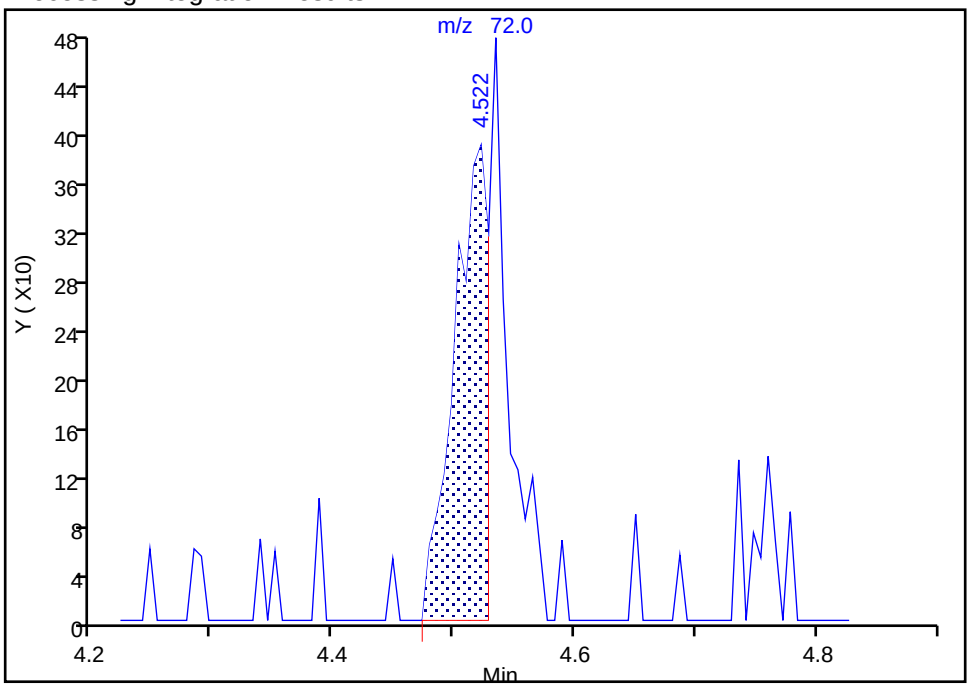
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D		
Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1
Client ID:	GC-MW-109M(SO)-33-35		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

42 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

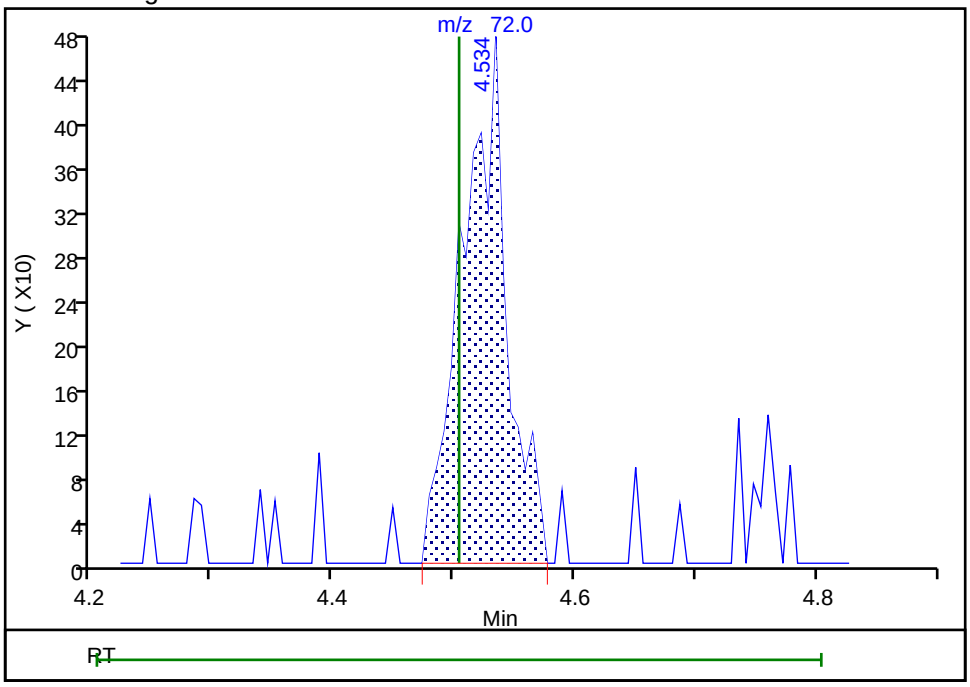
Processing Integration Results

RT: 4.52
Area: 761
Amount: 1.607647
Amount Units: ug/l



Manual Integration Results

RT: 4.53
Area: 1216
Amount: 2.568855
Amount Units: ug/l



Reviewer: delpolitov, 13-Apr-2018 10:51:15

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

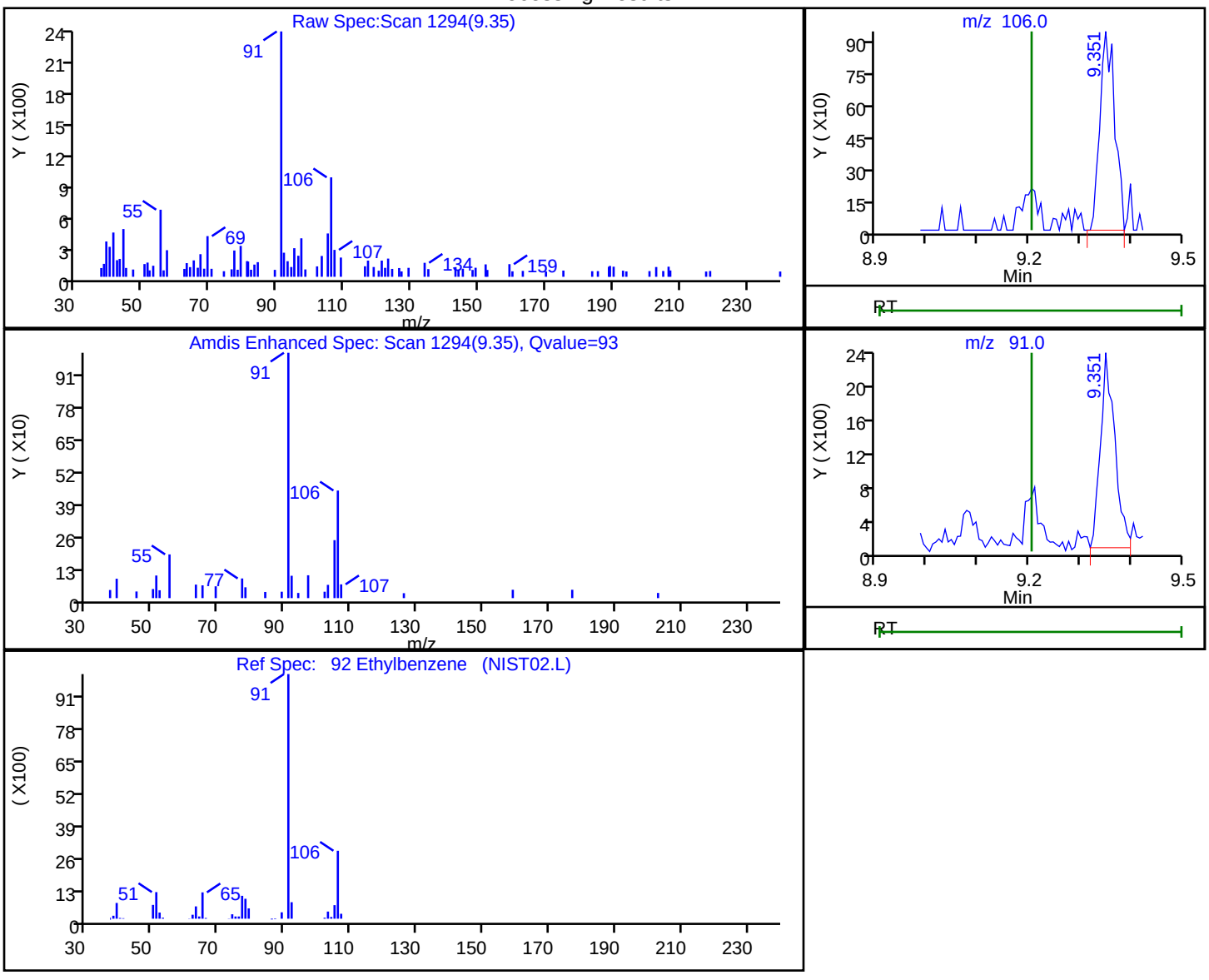
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D		
Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1
Client ID:	GC-MW-109M(SO)-33-35		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.35	106.00	1922	0.380896
9.35	91.00	4399	

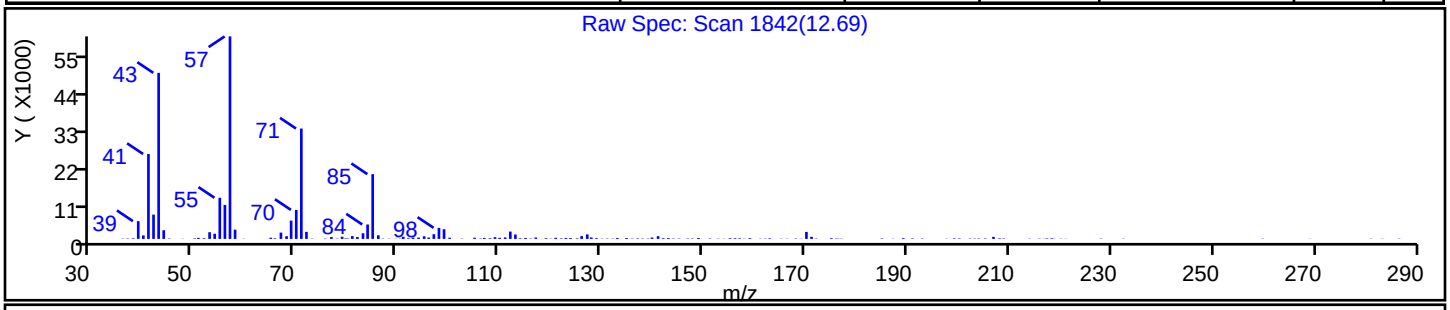
Reviewer: tupayachia, 13-Apr-2018 06:56:00

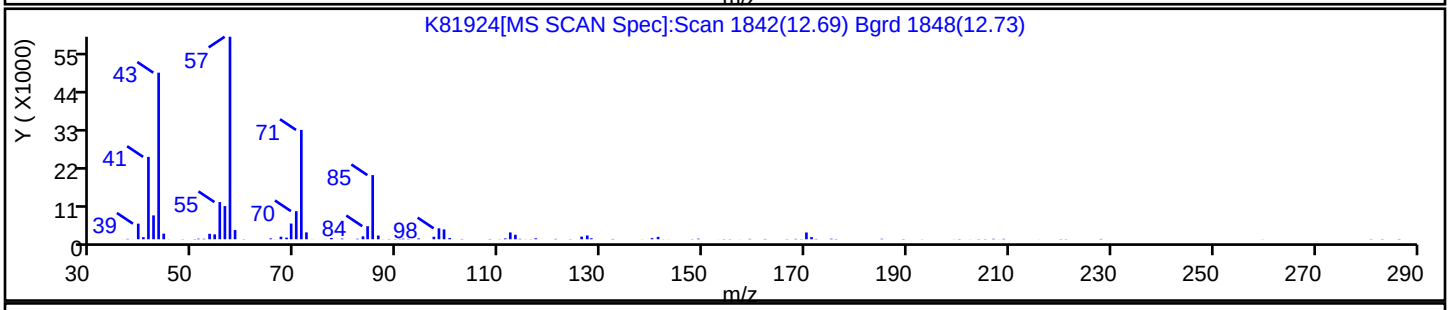
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

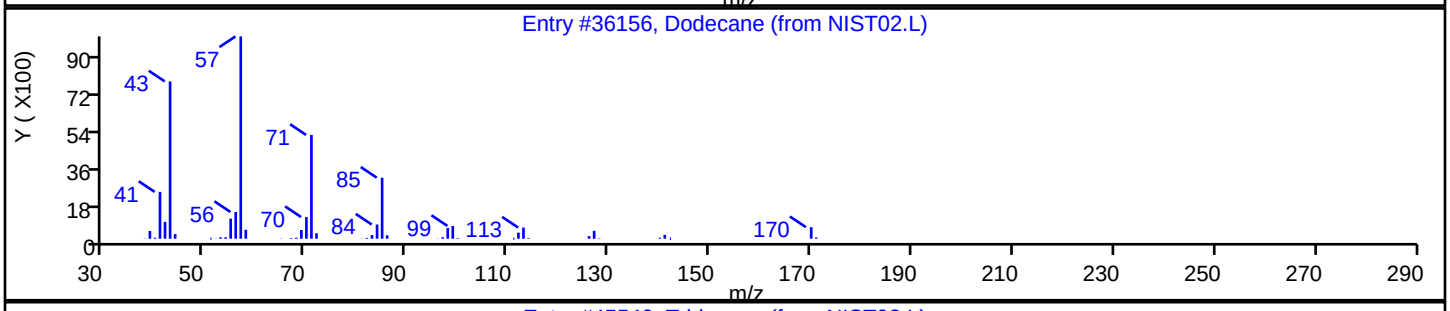
TestAmerica Edison

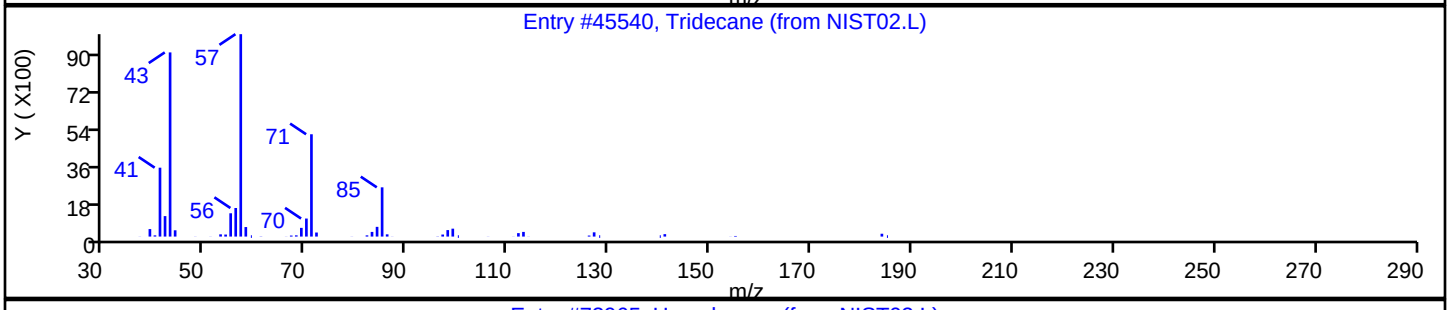
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D
Injection Date: 13-Apr-2018 03:26:30 Instrument ID: CVOAMS9
Lims ID: 460-153082-B-1-A Lab Sample ID: 460-153082-1
Client ID: GC-MW-109M(SO)-33-35
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

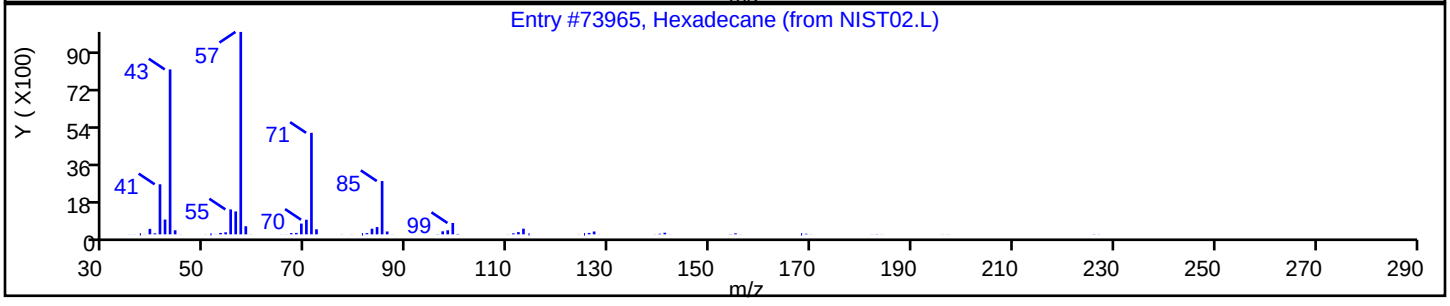
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Dodecane	112-40-3	NIST02.L	36156	C12H26	170	91
Tridecane	629-50-5	NIST02.L	45540	C13H28	184	86
Hexadecane	544-76-3	NIST02.L	73965	C16H34	226	86











Report Date: 04-May-2018 11:20:48 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date: 13-Apr-2018 03:26:30 Instrument ID: CVOAMS9

Lims ID: 460-153082-B-1-A Lab Sample ID: 460-153082-1

Client ID: GC-MW-109M(SO)-33-35

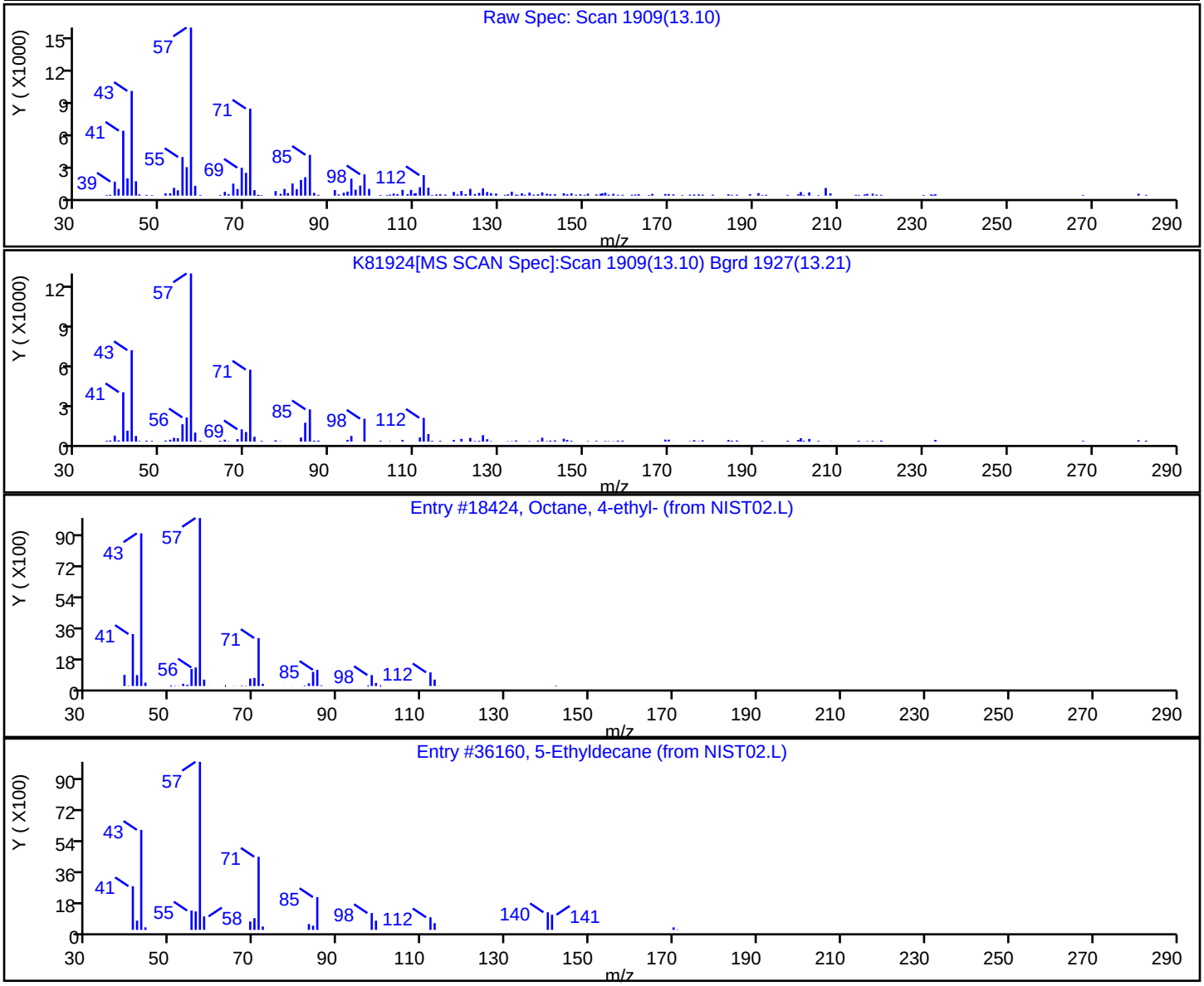
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Octane, 4-ethyl-	15869-86-0	NIST02.L	18424	C10H22	142	87
5-Ethyldecane	17302-36-2	NIST02.L	36160	C12H26	170	87



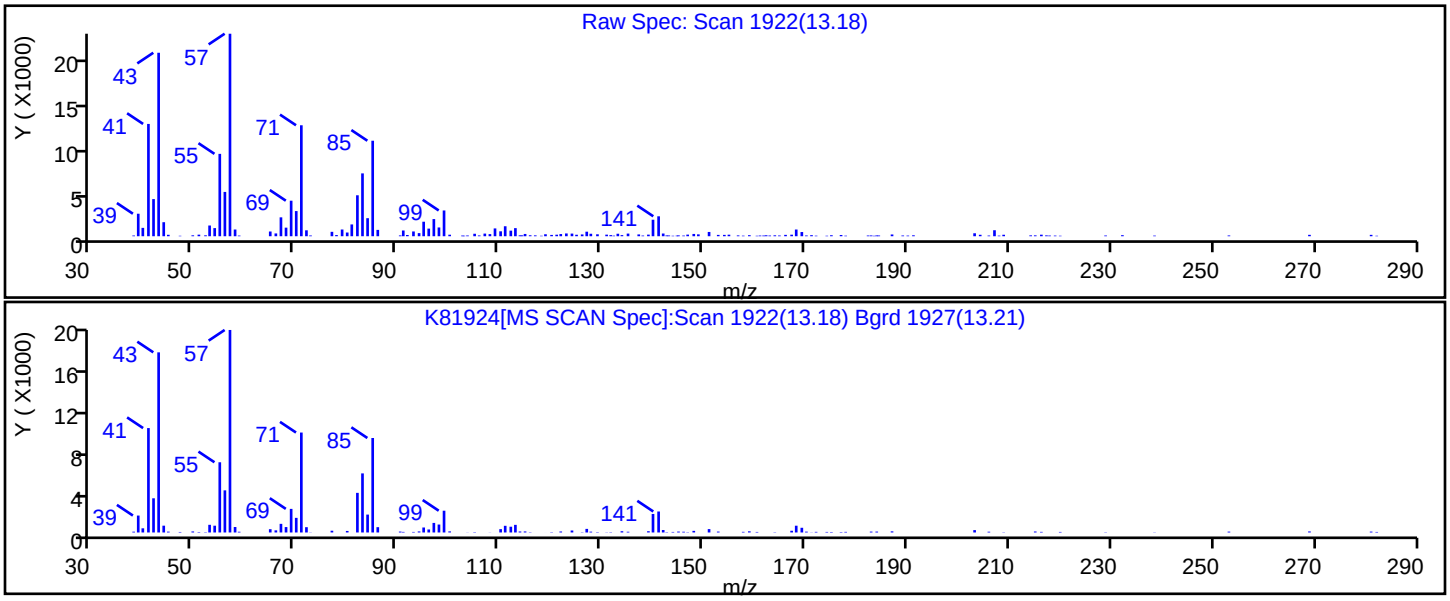
Report Date: 04-May-2018 11:20:48 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1		
Client ID:	GC-MW-109M(SO)-33-35				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 70



Report Date: 04-May-2018 11:20:48 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date: 13-Apr-2018 03:26:30 Instrument ID: CVOAMS9

Lims ID: 460-153082-B-1-A Lab Sample ID: 460-153082-1

Client ID: GC-MW-109M(SO)-33-35

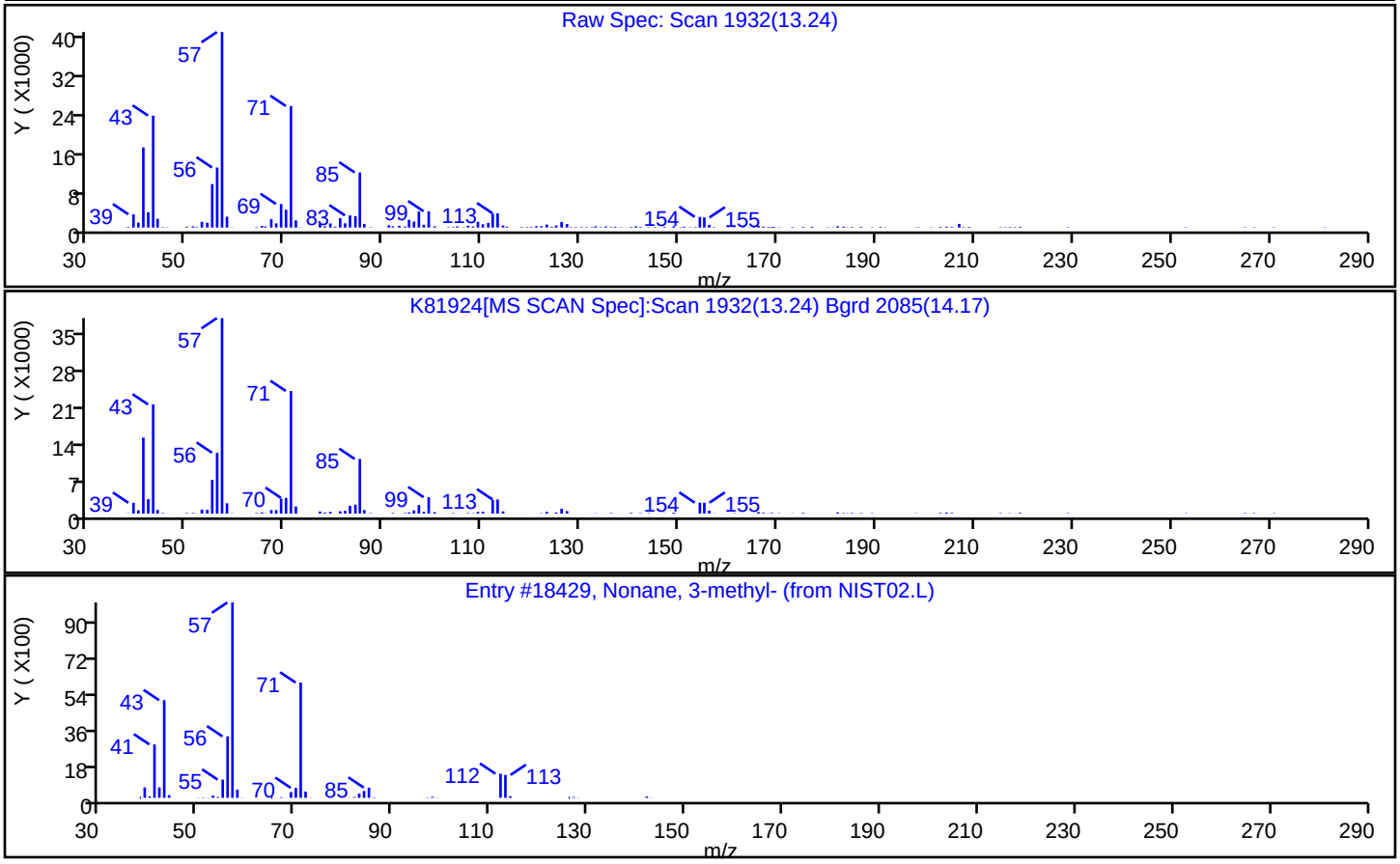
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Detector MS SCAN

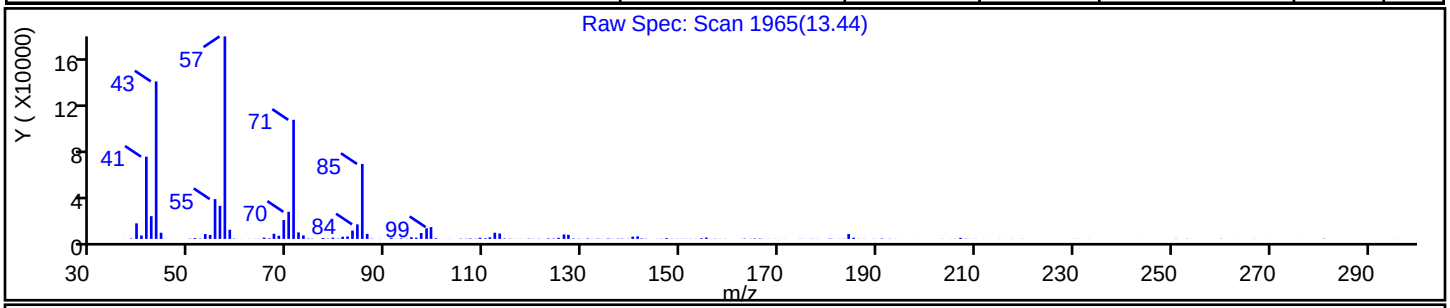
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Unknown alkane						
Nonane, 3-methyl-	5911-04-6	NIST02.L	18429	C10H22	142	76

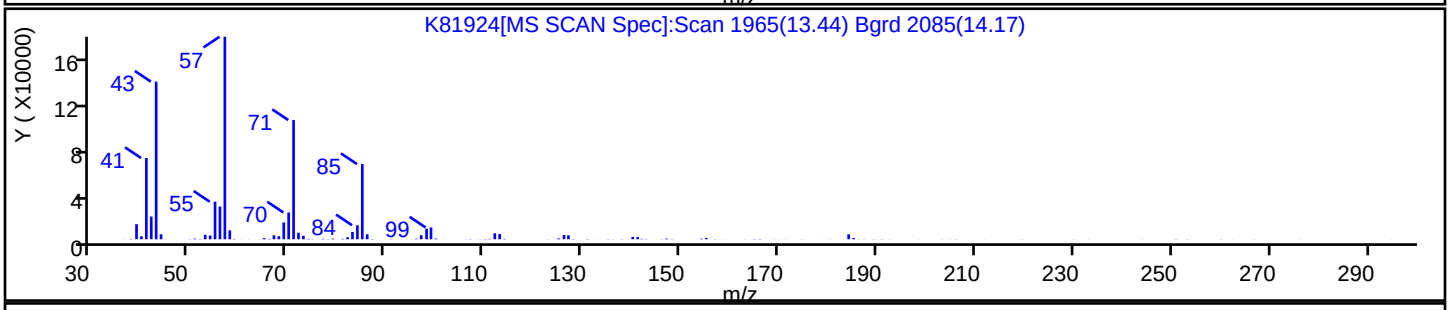


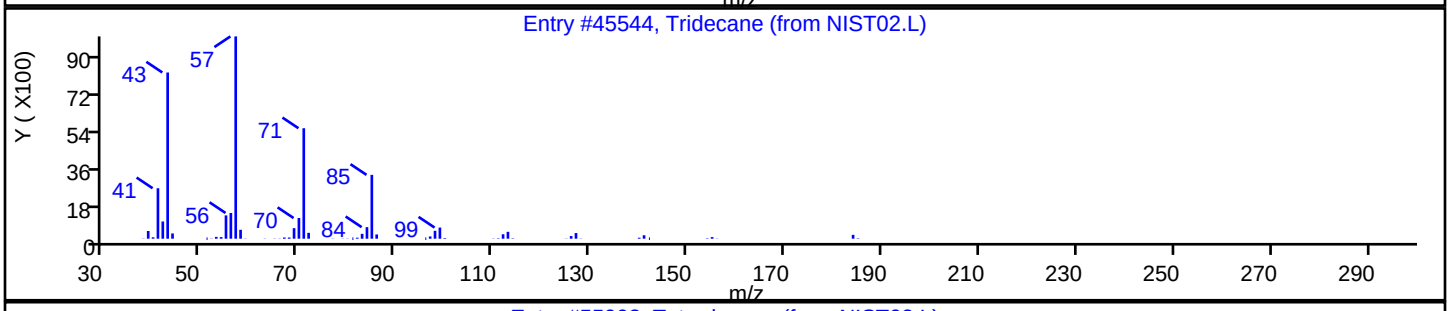
TestAmerica Edison

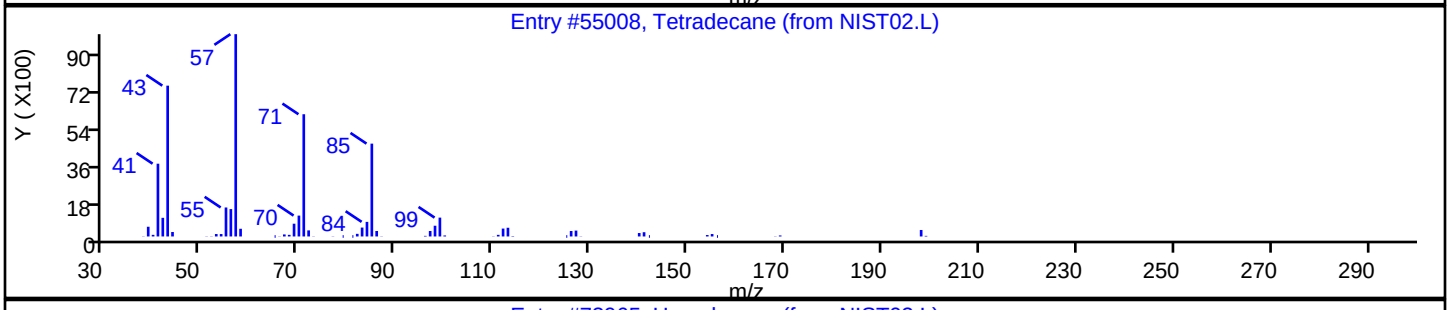
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D
Injection Date: 13-Apr-2018 03:26:30 Instrument ID: CVOAMS9
Lims ID: 460-153082-B-1-A Lab Sample ID: 460-153082-1
Client ID: GC-MW-109M(SO)-33-35
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

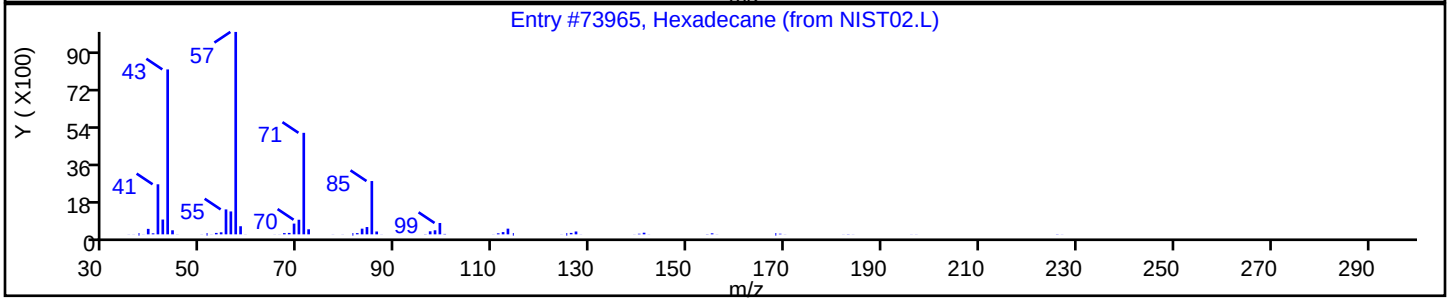
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Tridecane	629-50-5	NIST02.L	45544	C13H28	184	94
Tetradecane	629-59-4	NIST02.L	55008	C14H30	198	90
Hexadecane	544-76-3	NIST02.L	73965	C16H34	226	90











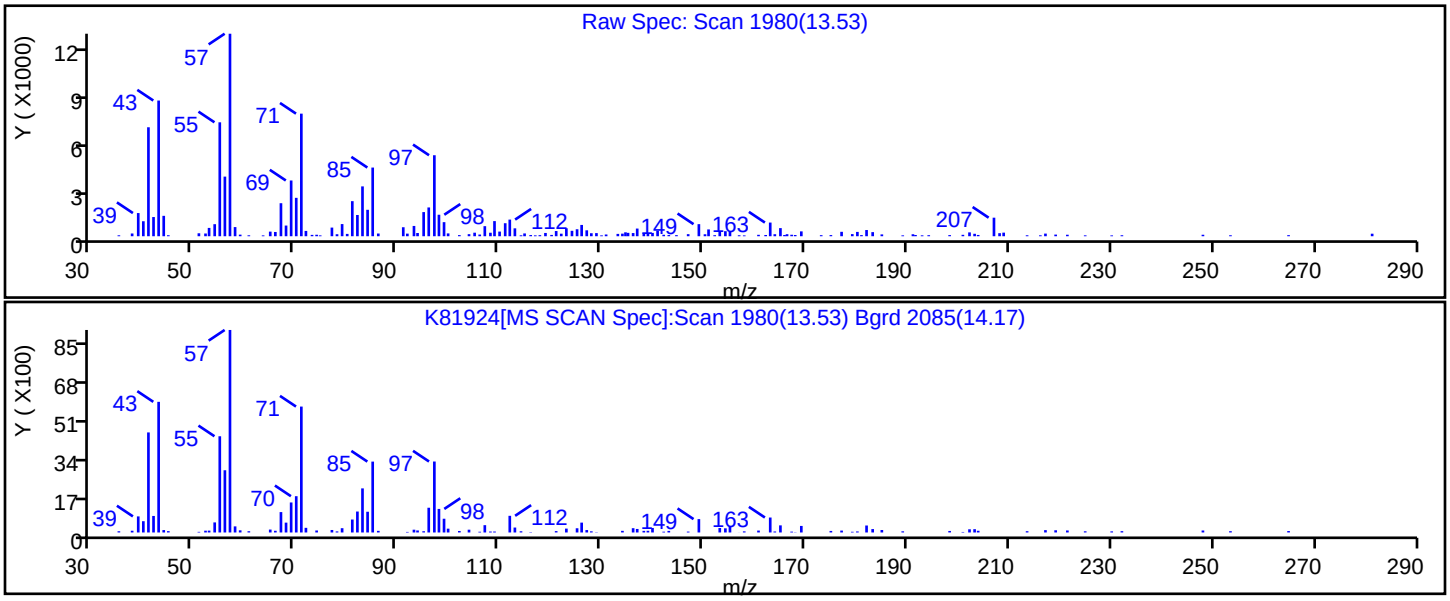
Report Date: 04-May-2018 11:20:48 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1		
Client ID:	GC-MW-109M(SO)-33-35				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

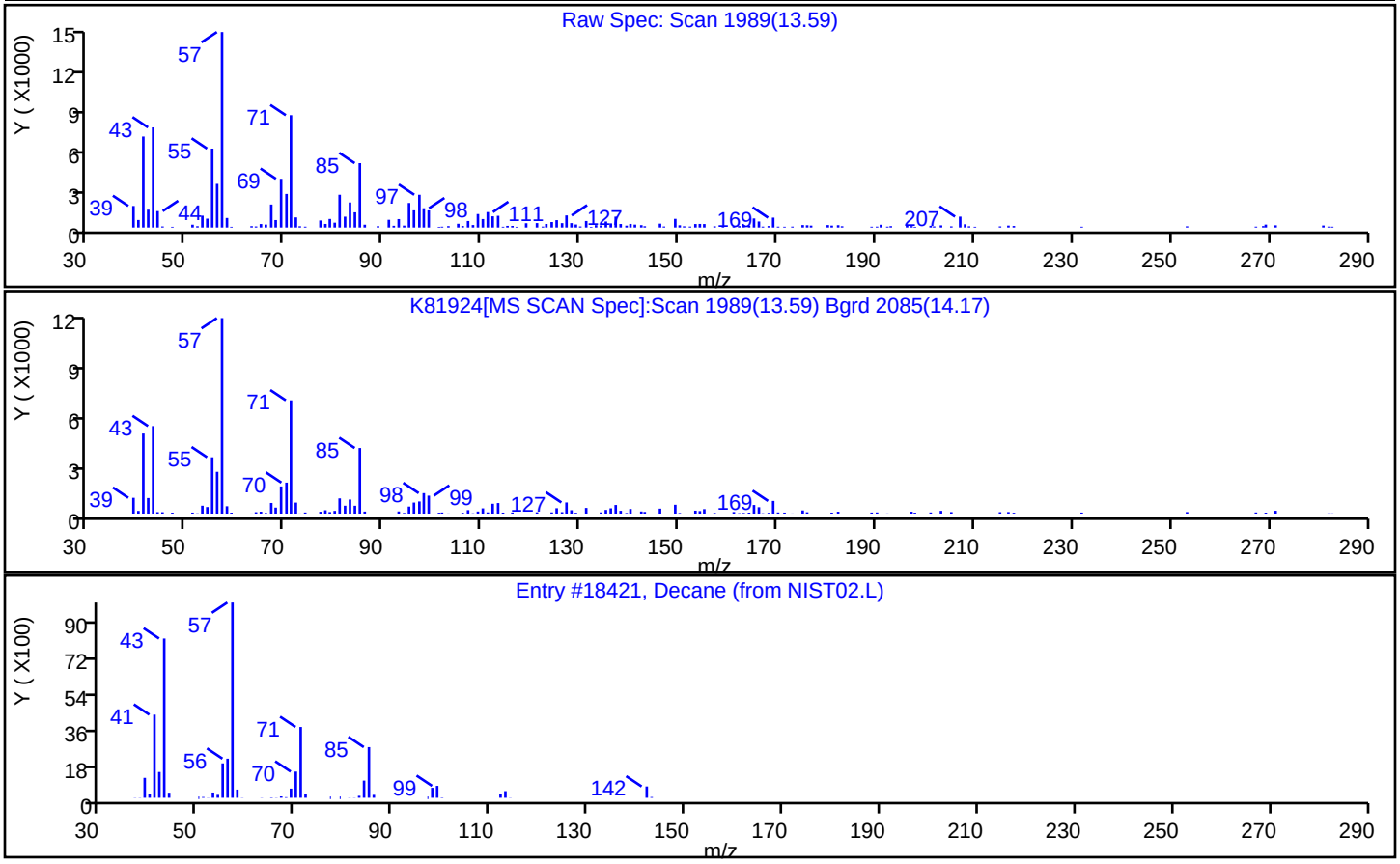
No Library Matches Found above the Threshold: 70



TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D
Injection Date: 13-Apr-2018 03:26:30 Instrument ID: CVOAMS9
Lims ID: 460-153082-B-1-A Lab Sample ID: 460-153082-1
Client ID: GC-MW-109M(SO)-33-35
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Unknown alkane						
Decane	124-18-5	NIST02.L	18421	C10H22	142	83



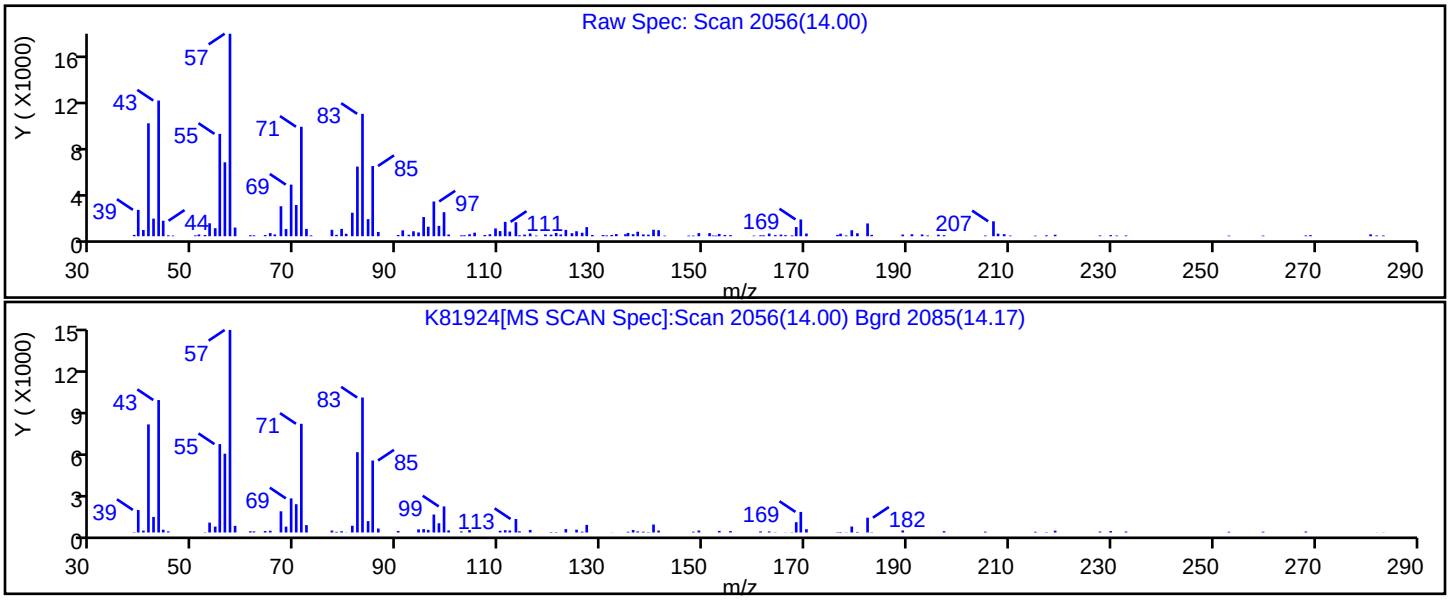
Report Date: 04-May-2018 11:20:48 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D

Injection Date:	13-Apr-2018 03:26:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153082-B-1-A	Lab Sample ID:	460-153082-1		
Client ID:	GC-MW-109M(SO)-33-35				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:		Detector	MS SCAN		

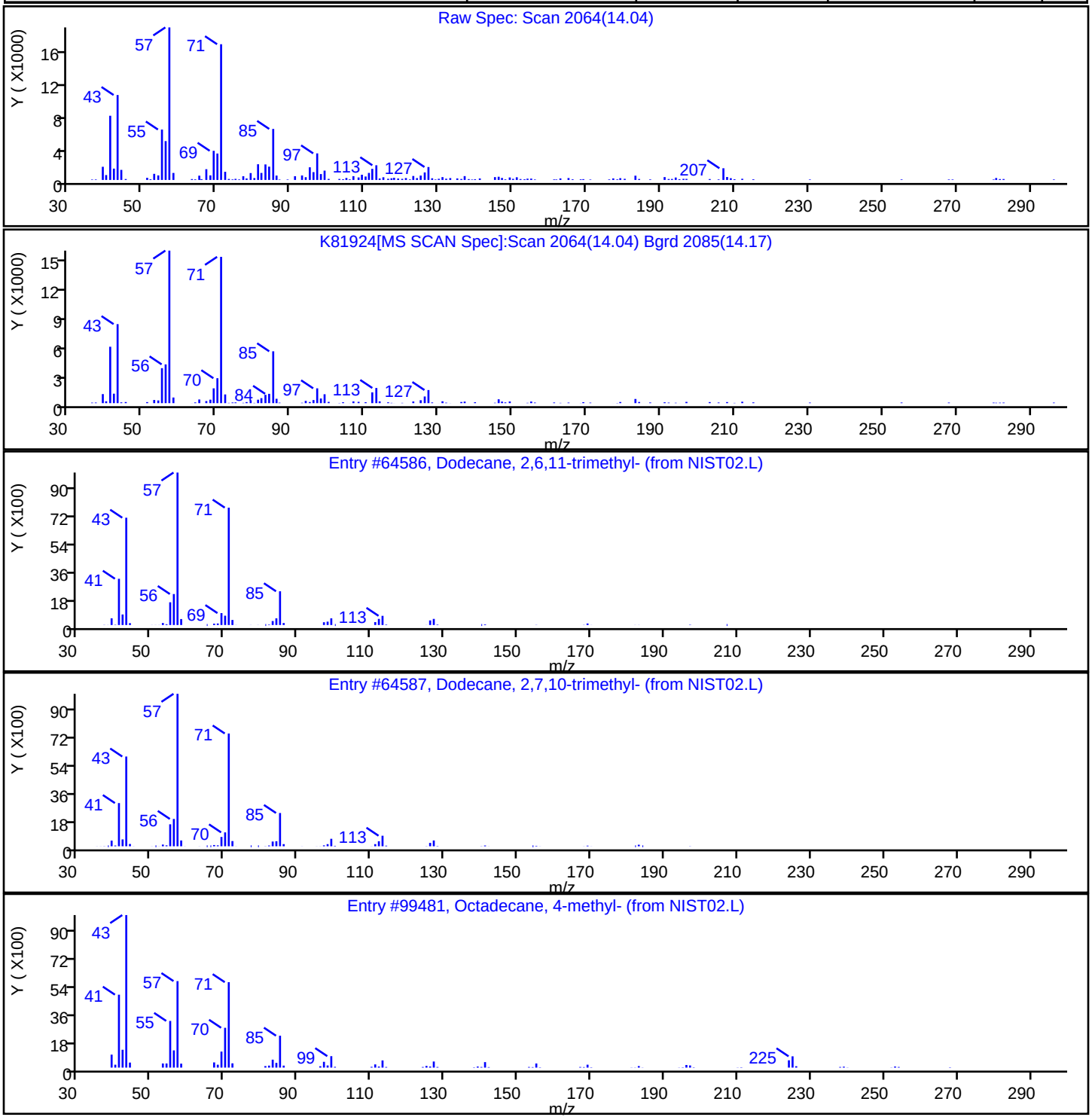
No Library Matches Found above the Threshold: 70



TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D
Injection Date: 13-Apr-2018 03:26:30 Instrument ID: CVOAMS9
Lims ID: 460-153082-B-1-A Lab Sample ID: 460-153082-1
Client ID: GC-MW-109M(SO)-33-35
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

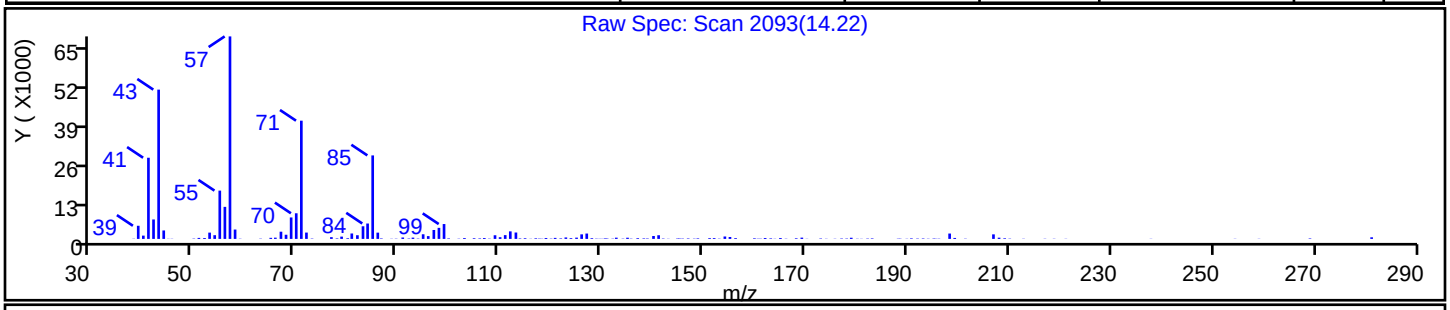
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Dodecane, 2,6,11-trimethyl-	31295-56-4	NIST02.L	64586	C15H32	212	90
Dodecane, 2,7,10-trimethyl-	74645-98-0	NIST02.L	64587	C15H32	212	86
Octadecane, 4-methyl-	10544-95-3	NIST02.L	99481	C19H40	268	86

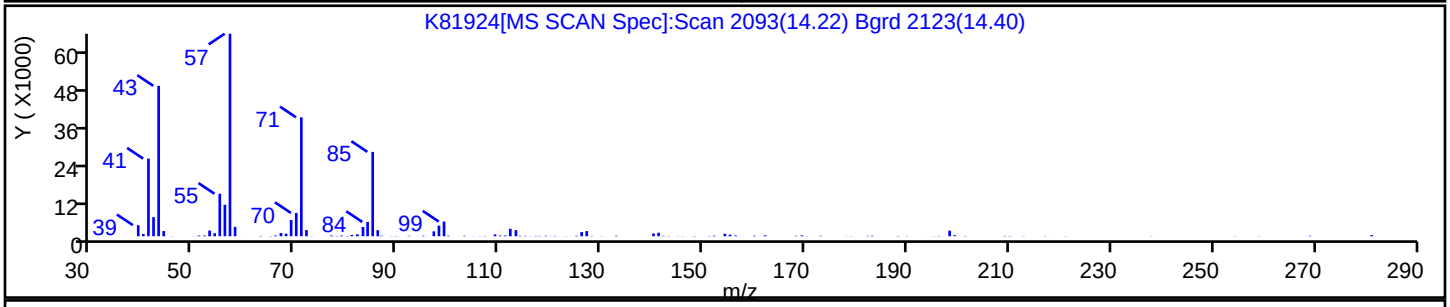


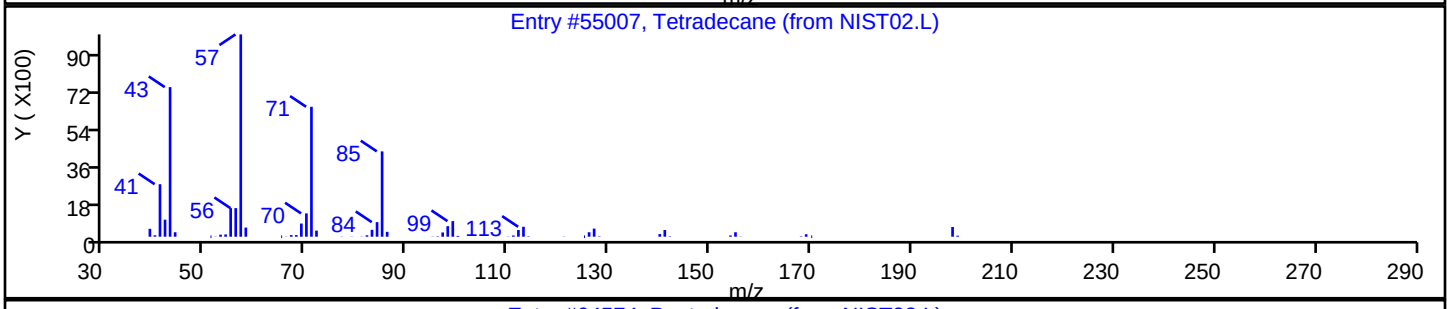
TestAmerica Edison

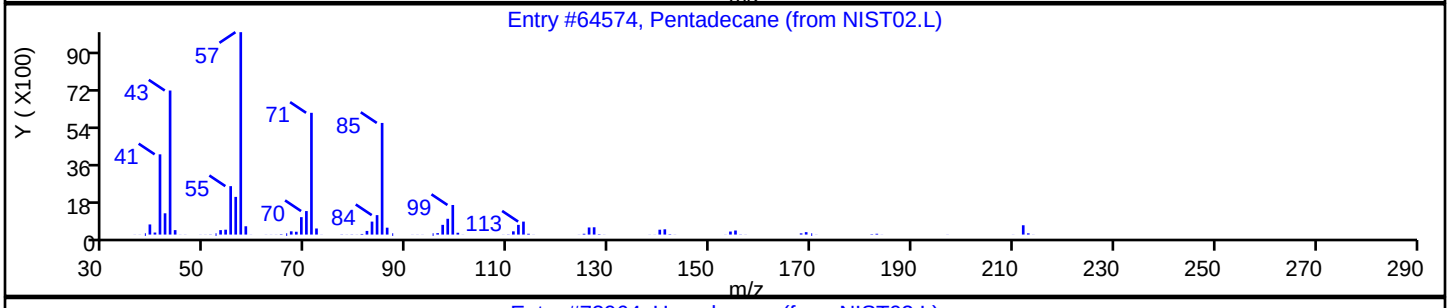
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81924.D
Injection Date: 13-Apr-2018 03:26:30 Instrument ID: CVOAMS9
Lims ID: 460-153082-B-1-A Lab Sample ID: 460-153082-1
Client ID: GC-MW-109M(SO)-33-35
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Detector MS SCAN

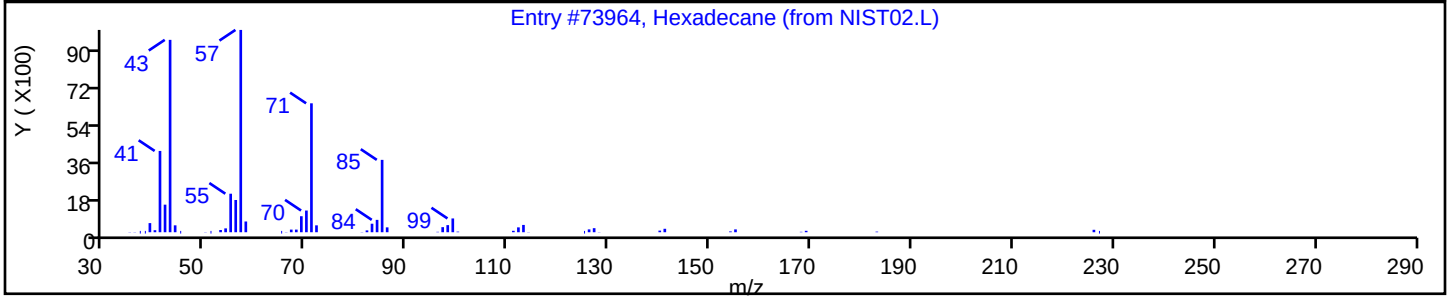
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Tetradecane	629-59-4	NIST02.L	55007	C14H30	198	94
Pentadecane	629-62-9	NIST02.L	64574	C15H32	212	90
Hexadecane	544-76-3	NIST02.L	73964	C16H34	226	90











FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-106(SO)-15-17 | Lab Sample ID: 460-153163-1

Matrix: Solid | Lab File ID: K81925.D

Analysis Method: 8260C | Date Collected: 04/03/2018 08:40

Sample wt/vol: 5.579(g) | Date Analyzed: 04/13/2018 03:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.8 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029
79-00-5	1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017
75-34-3	1,1-Dichloroethane	0.00096	U	0.00096	0.00020
75-35-4	1,1-Dichloroethene	0.00096	U	0.00096	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000088
96-12-8	1,2-Dibromo-3-Chloropropane	0.00096	U	0.00096	0.00044
95-50-1	1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014
107-06-2	1,2-Dichloroethane	0.00096	U	0.00096	0.00028
78-87-5	1,2-Dichloropropane	0.00096	U	0.00096	0.00041
541-73-1	1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015
106-46-7	1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0088
78-93-3	2-Butanone (MEK)	0.0022	J	0.0048	0.0011
591-78-6	2-Hexanone	0.0048	U	0.0048	0.00075
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064
67-64-1	Acetone	0.031		0.0048	0.0036
71-43-2	Benzene	0.00096	U	0.00096	0.00025
75-25-2	Bromoform	0.00096	U	0.00096	0.00041
74-83-9	Bromomethane	0.00096	U	0.00096	0.00046
75-15-0	Carbon disulfide	0.00096	U	0.00096	0.00026
56-23-5	Carbon tetrachloride	0.00096	U	0.00096	0.00017
108-90-7	Chlorobenzene	0.00096	U	0.00096	0.00017
74-97-5	Chlorobromomethane	0.00096	U	0.00096	0.00027
124-48-1	Chlorodibromomethane	0.00096	U	0.00096	0.00019
75-00-3	Chloroethane	0.00096	U	0.00096	0.00050
67-66-3	Chloroform	0.00096	U	0.00096	0.00031
74-87-3	Chloromethane	0.00096	U	0.00096	0.00042
156-59-2	cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
110-82-7	Cyclohexane	0.00096	U	0.00096	0.00021
75-27-4	Dichlorobromomethane	0.00096	U	0.00096	0.00025
75-71-8	Dichlorodifluoromethane	0.00096	U	0.00096	0.00033

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-106(SO)-15-17 | Lab Sample ID: 460-153163-1

Matrix: Solid | Lab File ID: K81925.D

Analysis Method: 8260C | Date Collected: 04/03/2018 08:40

Sample wt/vol: 5.579(g) | Date Analyzed: 04/13/2018 03:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.8 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00096	U	0.00096	0.00019
106-93-4	Ethylene Dibromide	0.00096	U	0.00096	0.00017
98-82-8	Isopropylbenzene	0.00096	U	0.00096	0.00012
79-20-9	Methyl acetate	0.0048	U	0.0048	0.0041
1634-04-4	Methyl tert-butyl ether	0.00096	U	0.00096	0.00012
108-87-2	Methylcyclohexane	0.00096	U	0.00096	0.00015
75-09-2	Methylene Chloride	0.00029	J	0.00096	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00038	J	0.00096	0.00017
95-47-6	o-Xylene	0.00020	J	0.00096	0.000091
100-42-5	Styrene	0.00096	U	0.00096	0.00012
127-18-4	Tetrachloroethene	0.00096	U	0.00096	0.00014
108-88-3	Toluene	0.00096	U	0.00096	0.00060
156-60-5	trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
79-01-6	Trichloroethene	0.00096	U	0.00096	0.00014
75-69-4	Trichlorofluoromethane	0.00096	U	0.00096	0.00039
75-01-4	Vinyl chloride	0.00096	U	0.00096	0.00053

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		78-135
460-00-4	4-Bromofluorobenzene	111		67-126
1868-53-7	Dibromofluoromethane (Surr)	121		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-106(SO)-15-17 | Lab Sample ID: 460-153163-1

Matrix: Solid | Lab File ID: K81925.D

Analysis Method: 8260C | Date Collected: 04/03/2018 08:40

Sample wt/vol: 5.579(g) | Date Analyzed: 04/13/2018 03:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.8 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D
Lims ID: 460-153163-B-1-A
Client ID: GC-MW-106(SO)-15-17
Sample Type: Client
Inject. Date: 13-Apr-2018 03:51:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153163-B-1-A
Misc. Info.: 460-0070288-018
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 10:52:29 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tupayachia Date: 13-Apr-2018 06:56:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.010	3.004	0.006	85	39704	32.1	
* 25 TBA-d9 (IS)	65	3.370	3.376	-0.006	0	426997	1000.0	
26 Methylene Chloride	84	3.388	3.376	0.012	30	1237	0.3029	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	289270	250.0	
42 2-Butanone (MEK)	72	4.535	4.504	0.030	74	1284	2.26	a
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	180987	60.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.309	0.006	0	172356	60.5	
* 61 Fluorobenzene	96	5.589	5.577	0.012	99	476958	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	37862	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	98	585345	49.0	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	383861	50.0	
93 m-Xylene & p-Xylene	106	9.357	9.351	0.006	0	2591	0.3992	
95 o-Xylene	106	9.820	9.820	0.000	92	1371	0.2065	
$ 100 4-Bromofluorobenzene	174	10.424	10.417	0.007	92	179501	55.3	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	227920	50.0	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

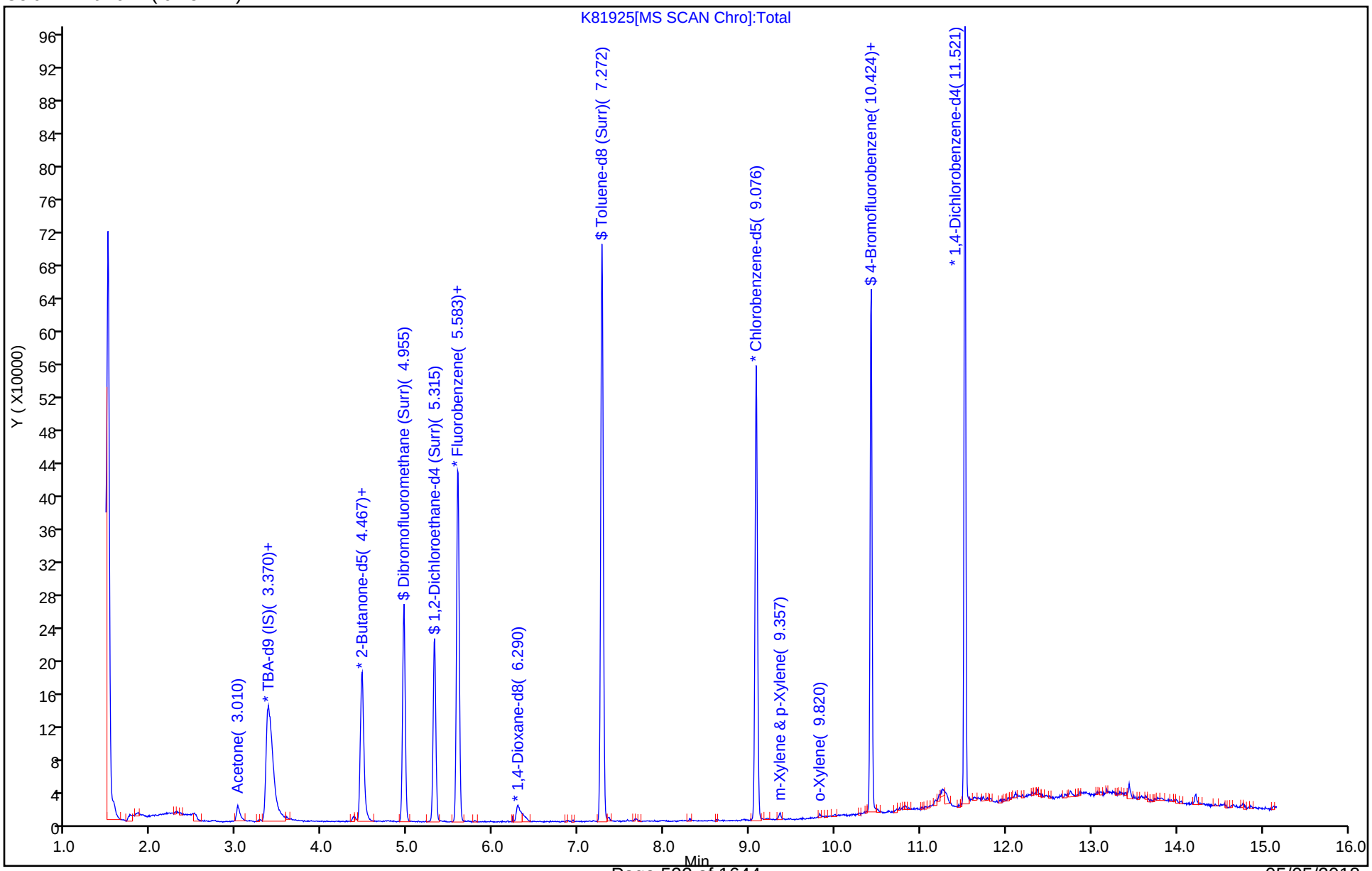
Report Date: 13-Apr-2018 10:52:30 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D

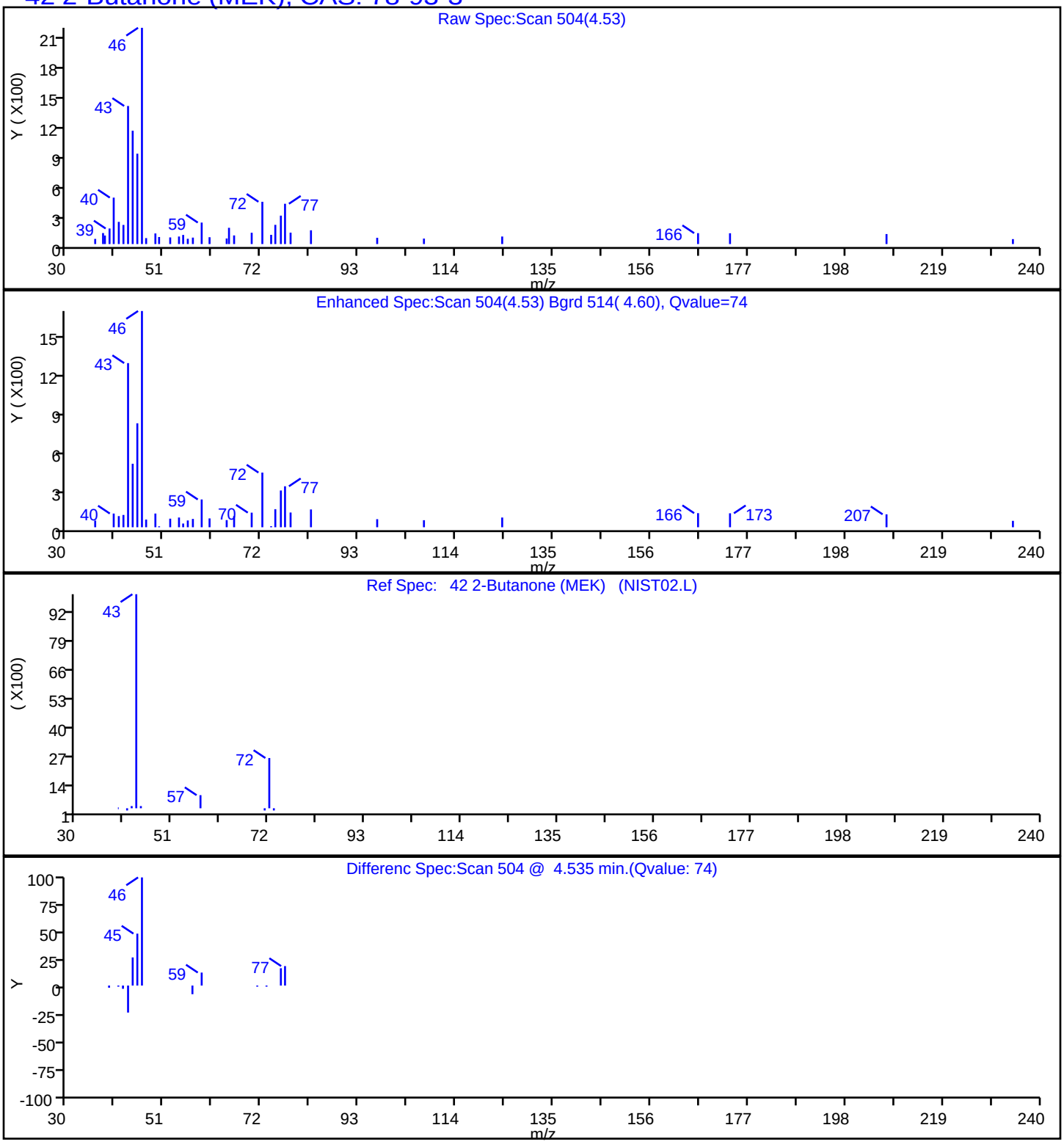
Injection Date:	13-Apr-2018 03:51:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153163-B-1-A	Lab Sample ID:	460-153163-1	Worklist Smp#:	18
Client ID:	GC-MW-106(SO)-15-17				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D
Injection Date: 13-Apr-2018 03:51:30 Instrument ID: CVOAMS9
Lims ID: 460-153163-B-1-A Lab Sample ID: 460-153163-1
Client ID: GC-MW-106(SO)-15-17
Operator ID: ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

42 2-Butanone (MEK), CAS: 78-93-3

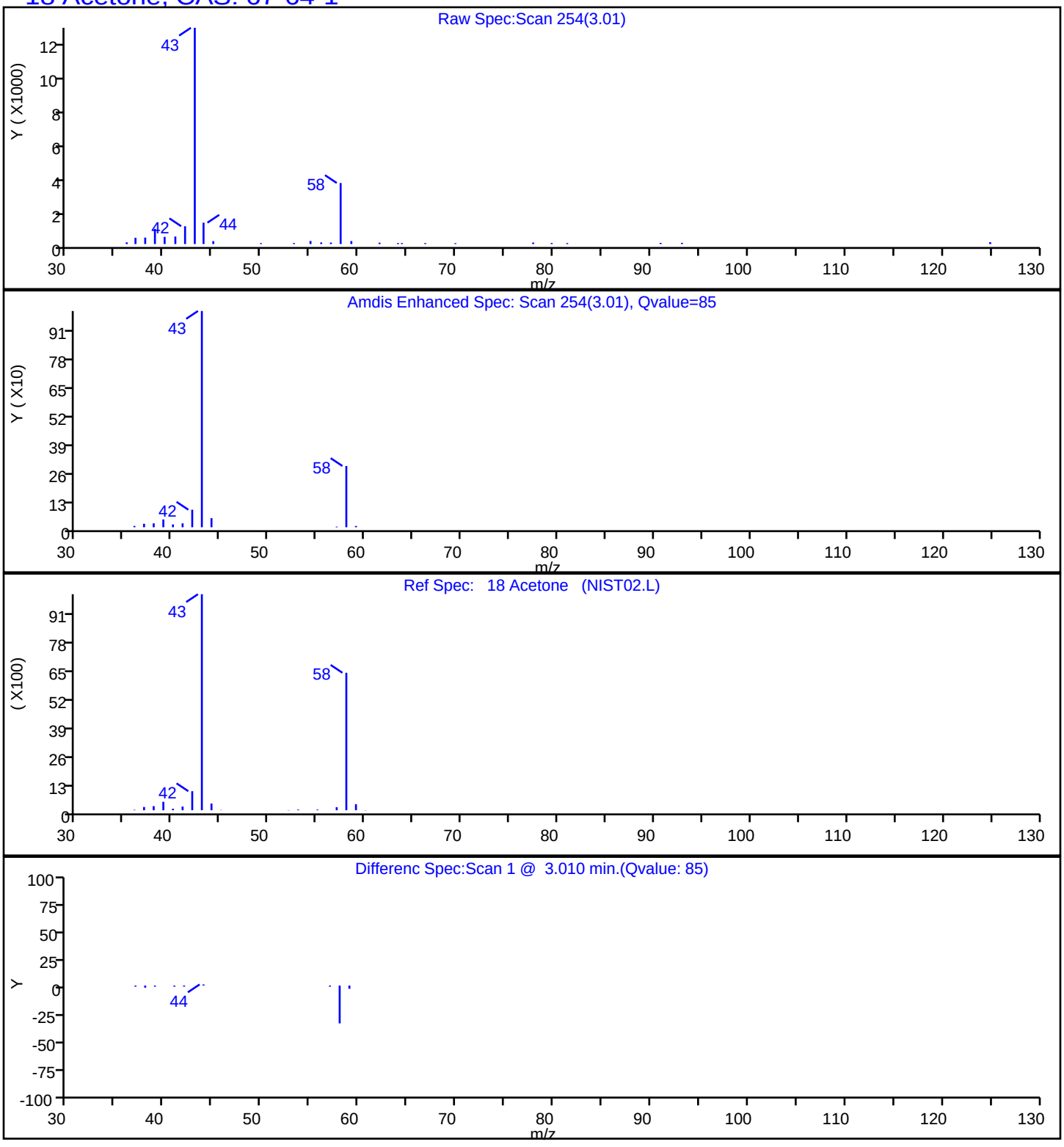


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D

Injection Date:	13-Apr-2018 03:51:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153163-B-1-A	Lab Sample ID:	460-153163-1		
Client ID:	GC-MW-106(SO)-15-17				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



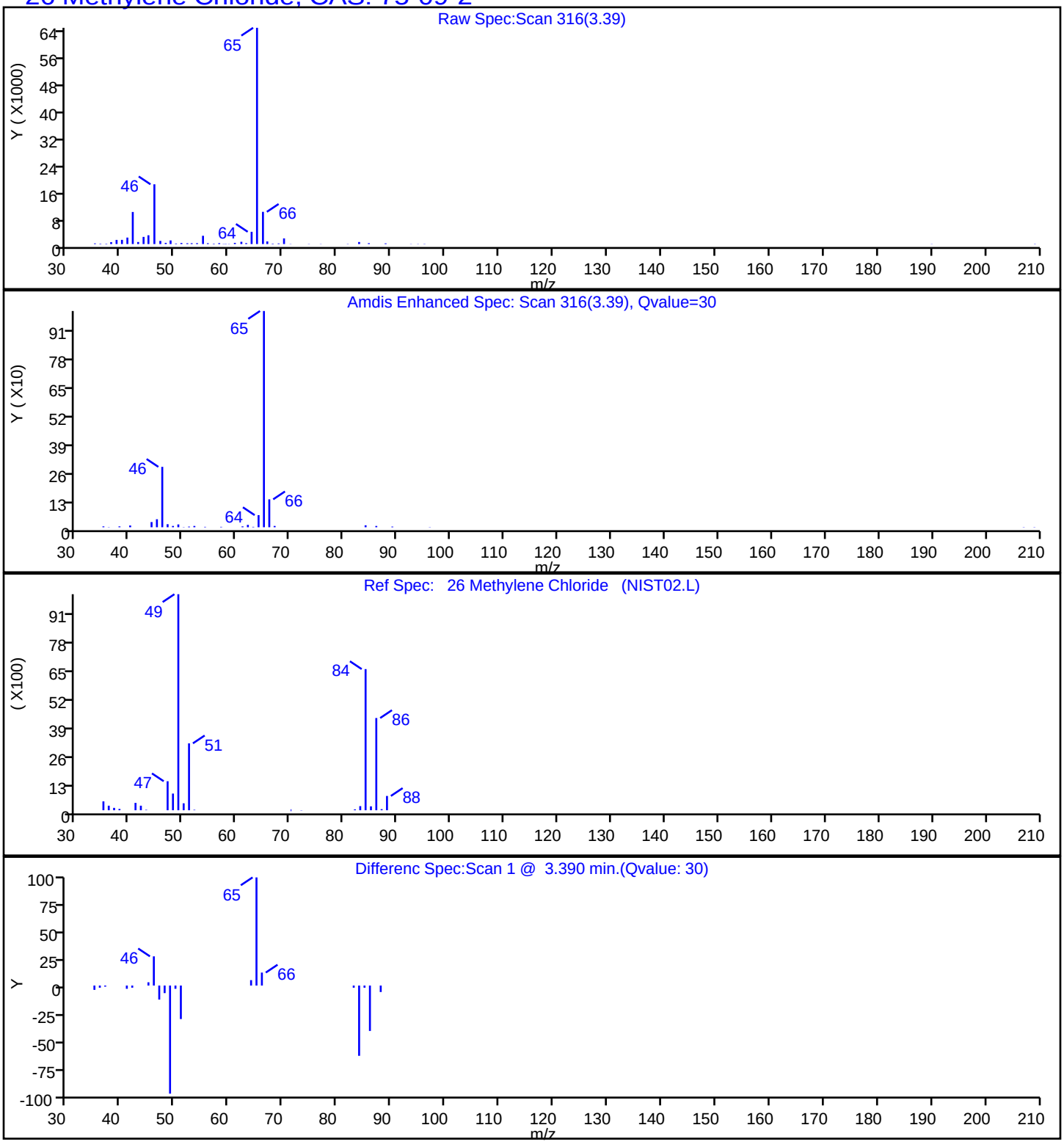
Report Date: 13-Apr-2018 10:52:30 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D

Injection Date:	13-Apr-2018 03:51:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153163-B-1-A	Lab Sample ID:	460-153163-1		
Client ID:	GC-MW-106(SO)-15-17				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

26 Methylene Chloride, CAS: 75-09-2



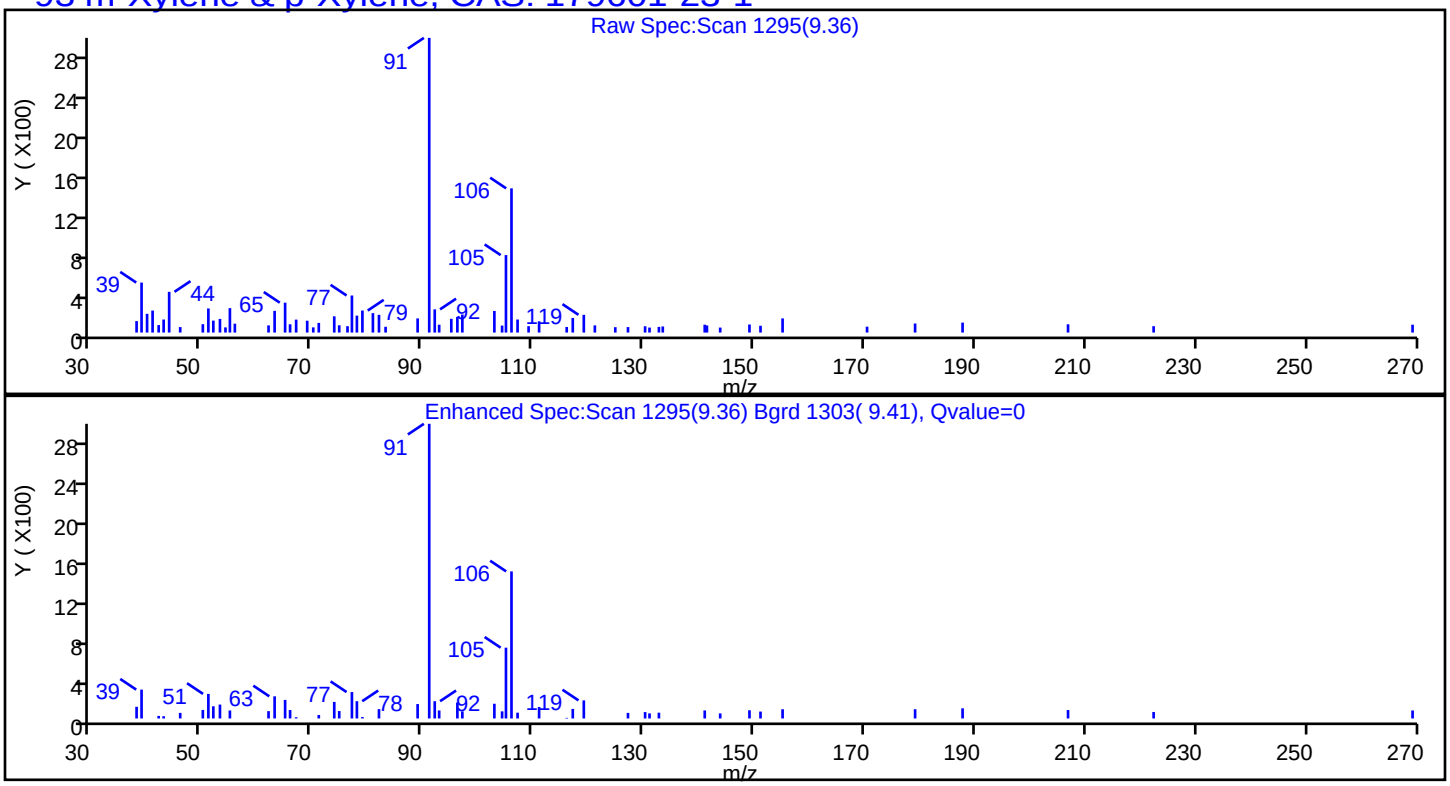
Report Date: 13-Apr-2018 10:52:30 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D

Injection Date:	13-Apr-2018 03:51:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153163-B-1-A	Lab Sample ID:	460-153163-1		
Client ID:	GC-MW-106(SO)-15-17				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

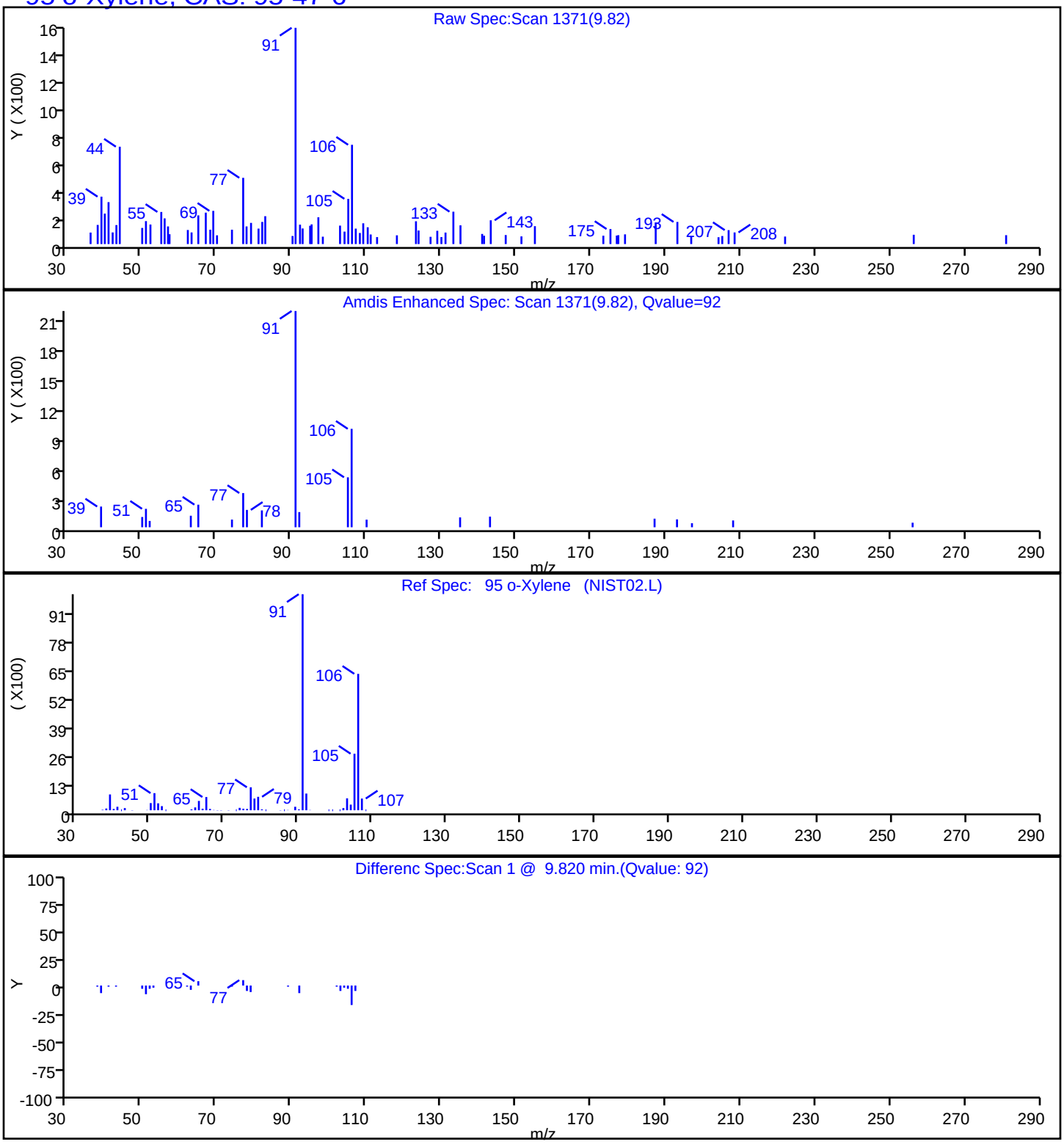
93 m-Xylene & p-Xylene, CAS: 179601-23-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D

Injection Date:	13-Apr-2018 03:51:30	Instrument ID:	CVOAMS9
Lims ID:	460-153163-B-1-A	Lab Sample ID:	460-153163-1
Client ID:	GC-MW-106(SO)-15-17		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

95 o-Xylene, CAS: 95-47-6



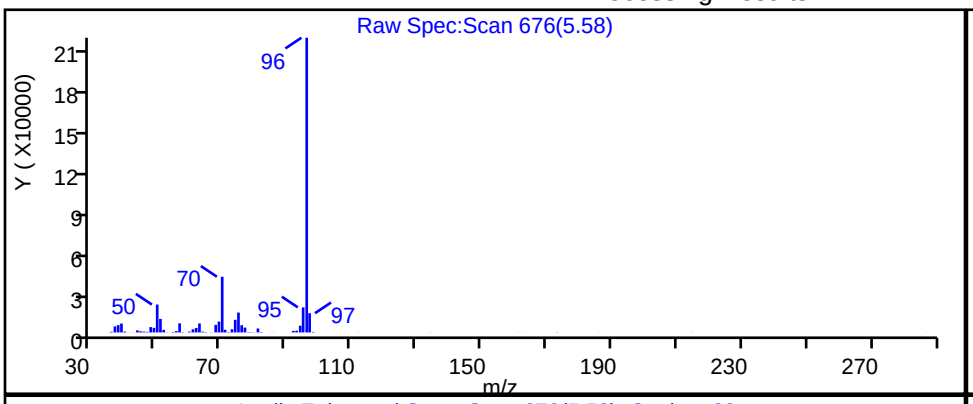
User Disabled Compound Report

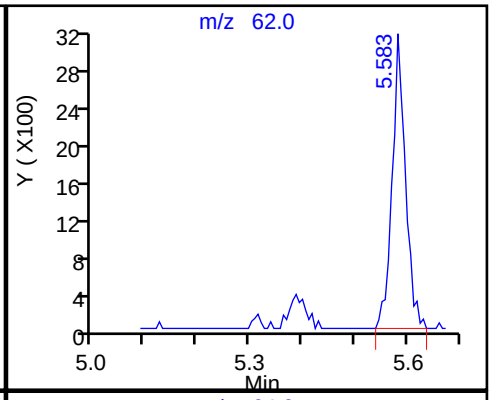
TestAmerica Edison

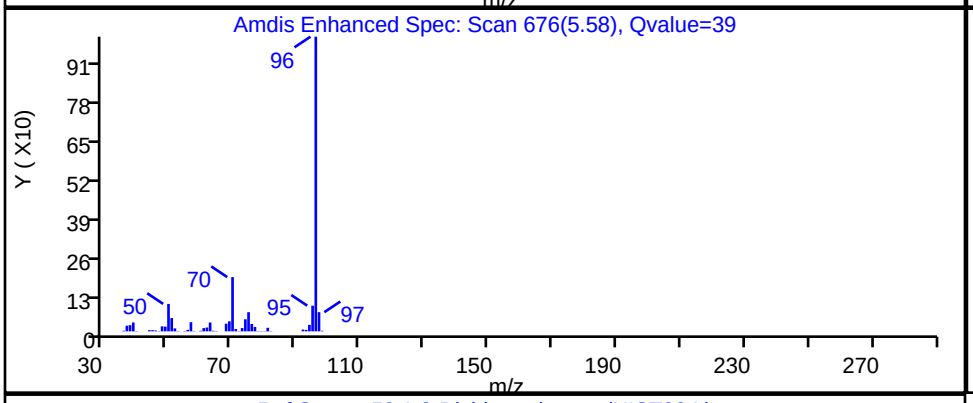
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D				
Injection Date:	13-Apr-2018 03:51:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153163-B-1-A	Lab Sample ID:	460-153163-1		
Client ID:	GC-MW-106(SO)-15-17				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

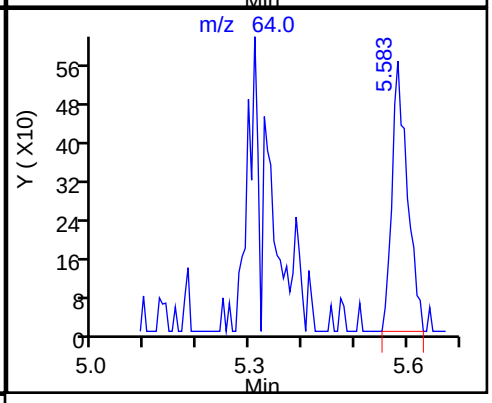
59 1,2-Dichloroethane, CAS: 107-06-2

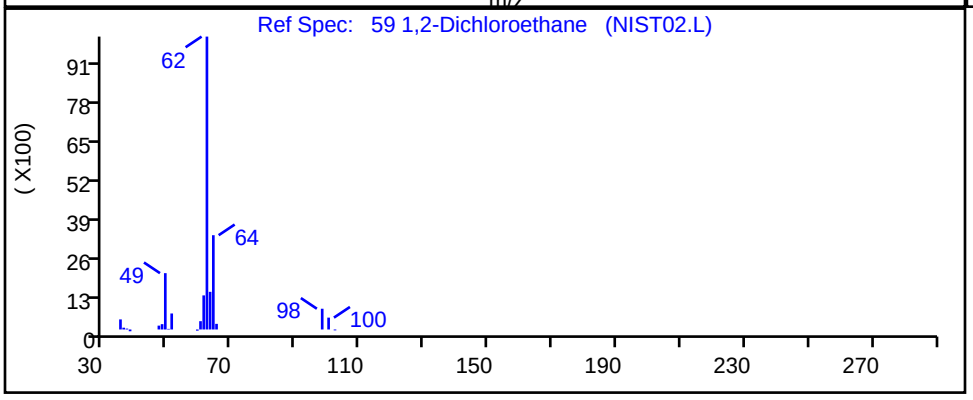
Processing Results











RT	Mass	Response	Amount
5.58	62.00	5646	1.472384
5.58	64.00	1153	

Reviewer: delpolitov, 13-Apr-2018 10:52:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

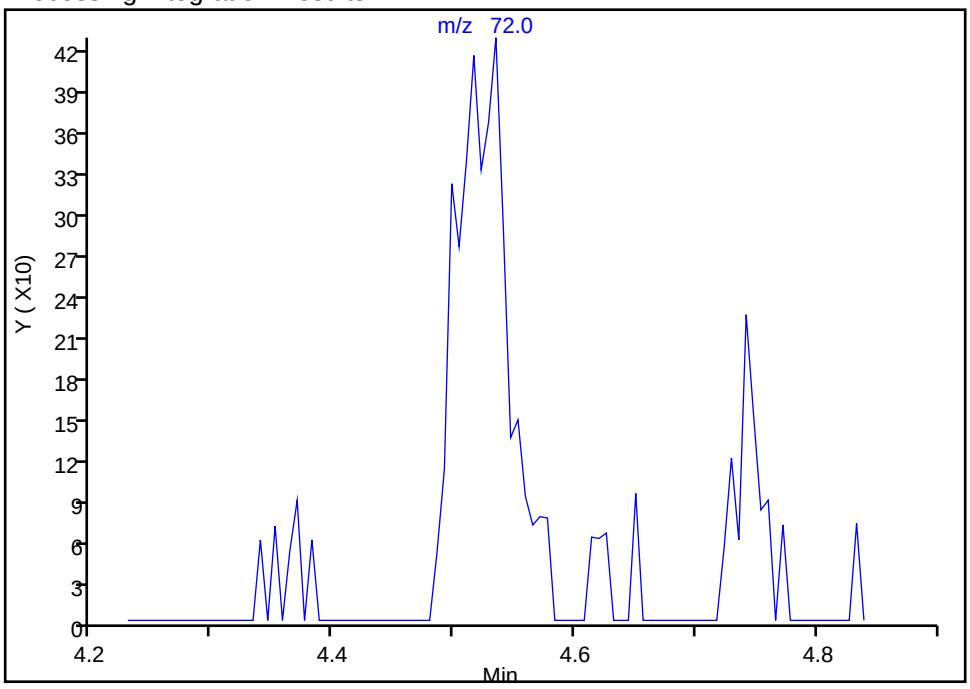
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D		
Injection Date:	13-Apr-2018 03:51:30	Instrument ID:	CVOAMS9
Lims ID:	460-153163-B-1-A	Lab Sample ID:	460-153163-1
Client ID:	GC-MW-106(SO)-15-17		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

42 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

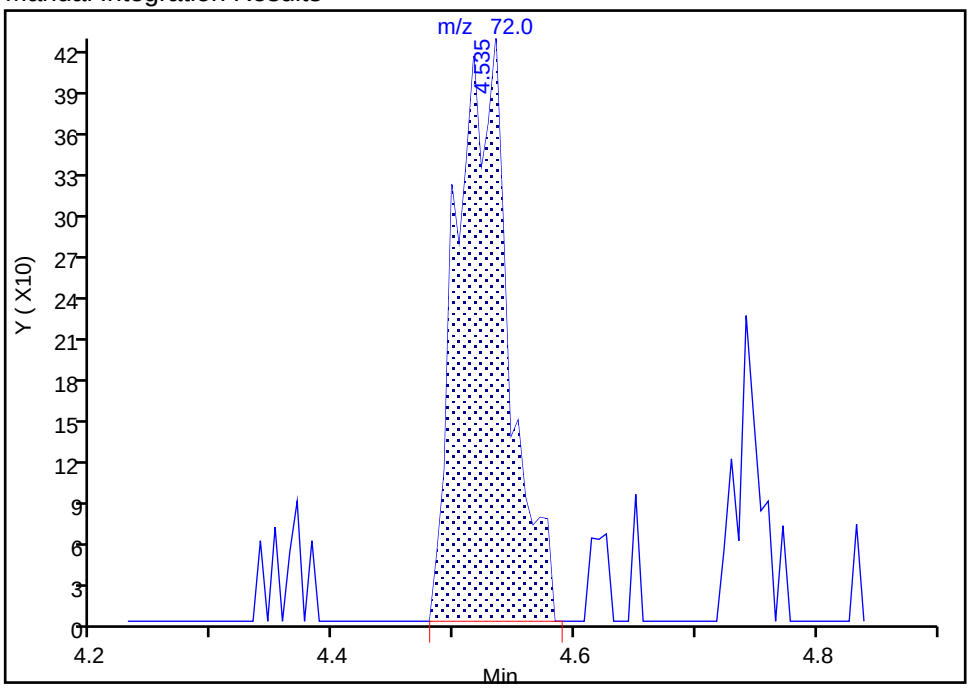
Not Detected
Expected RT: 4.50

Processing Integration Results



Manual Integration Results

RT: 4.53
Area: 1284
Amount: 2.256388
Amount Units: ug/l



Reviewer: delpolitov, 13-Apr-2018 10:52:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

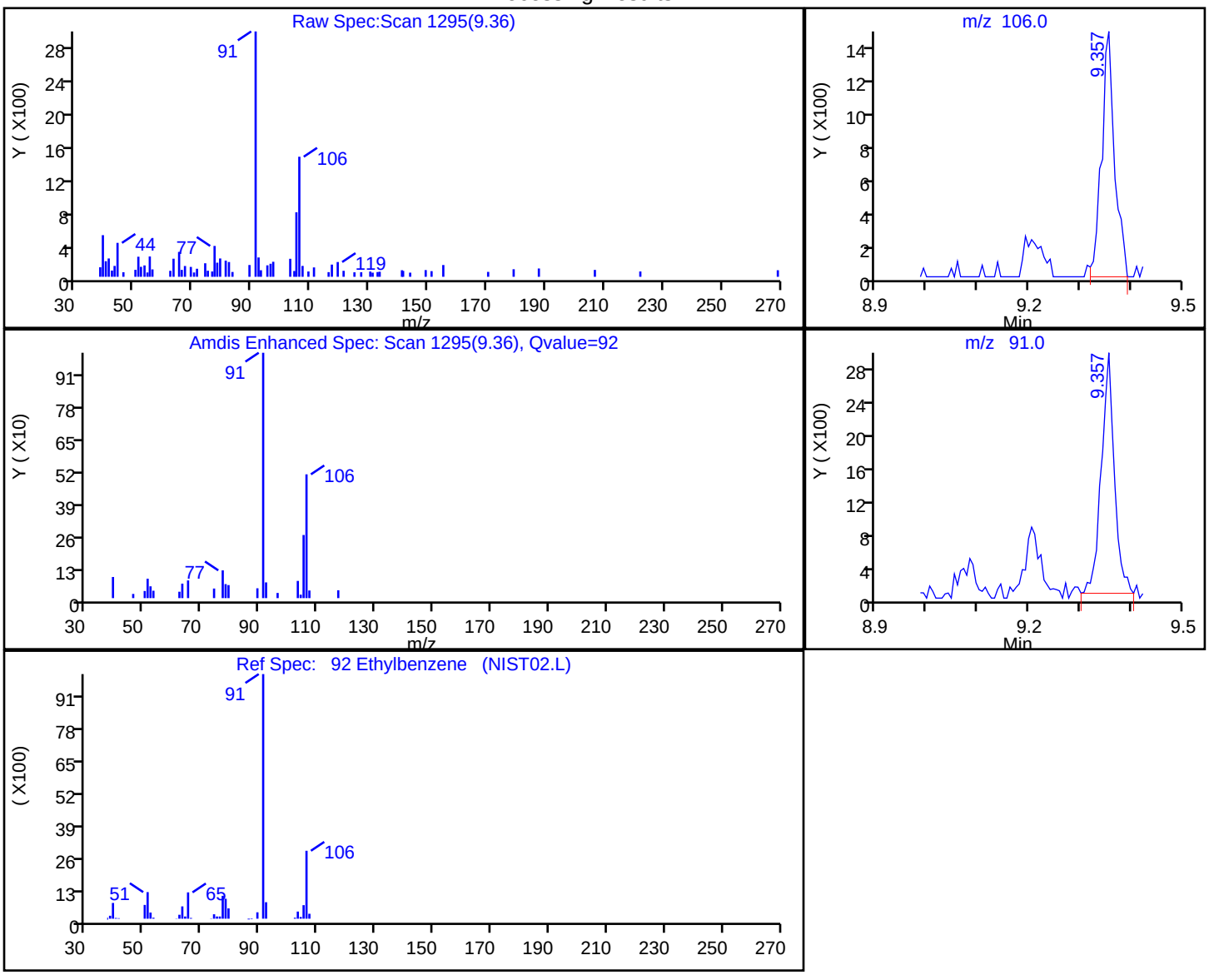
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81925.D		
Injection Date:	13-Apr-2018 03:51:30	Instrument ID:	CVOAMS9
Lims ID:	460-153163-B-1-A	Lab Sample ID:	460-153163-1
Client ID:	GC-MW-106(SO)-15-17		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.36	106.00	2566	0.497610
9.36	91.00	5188	

Reviewer: delpolitov, 13-Apr-2018 10:52:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-15-17 | Lab Sample ID: 460-153163-2

Matrix: Solid | Lab File ID: K81926.D

Analysis Method: 8260C | Date Collected: 04/03/2018 11:10

Sample wt/vol: 5.538(g) | Date Analyzed: 04/13/2018 04:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000093
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00043
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0093
78-93-3	2-Butanone (MEK)	0.0024	J	0.0051	0.0011
591-78-6	2-Hexanone	0.0051	U	0.0051	0.00079
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00067
67-64-1	Acetone	0.041		0.0051	0.0039
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00048
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00020
75-00-3	Chloroethane	0.0010	U	0.0010	0.00053
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-15-17 | Lab Sample ID: 460-153163-2

Matrix: Solid | Lab File ID: K81926.D

Analysis Method: 8260C | Date Collected: 04/03/2018 11:10

Sample wt/vol: 5.538(g) | Date Analyzed: 04/13/2018 04:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0051	U	0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.00024	J	0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.00040	J	0.0010	0.00018
95-47-6	o-Xylene	0.00015	J	0.0010	0.000097
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00015
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		78-135
460-00-4	4-Bromofluorobenzene	114		67-126
1868-53-7	Dibromofluoromethane (Surr)	121		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-15-17 Lab Sample ID: 460-153163-2

Matrix: Solid Lab File ID: K81926.D

Analysis Method: 8260C Date Collected: 04/03/2018 11:10

Sample wt/vol: 5.538(g) Date Analyzed: 04/13/2018 04:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 Level: (low/med) Low

Analysis Batch No.: 510660 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D
Lims ID: 460-153163-B-2-A
Client ID: GC-MW-108D(SO)-15-17
Sample Type: Client
Inject. Date: 13-Apr-2018 04:15:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153163-B-2-A
Misc. Info.: 460-0070288-019
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 10:52:52 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tupayachia Date: 13-Apr-2018 07:11:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.010	3.004	0.006	87	47924	40.1	
* 25 TBA-d9 (IS)	65	3.376	3.376	0.000	0	409746	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	30	935	0.2355	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	279707	250.0	
42 2-Butanone (MEK)	72	4.516	4.504	0.012	81	1326	2.41	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	176422	60.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.308	5.309	-0.001	0	169359	61.1	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	463690	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.278	0.012	0	37933	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	99	570503	49.4	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	371290	50.0	
93 m-Xylene & p-Xylene	106	9.356	9.351	0.005	0	2459	0.3917	
95 o-Xylene	106	9.814	9.820	-0.006	92	973	0.1515	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	92	178670	56.9	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	220802	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

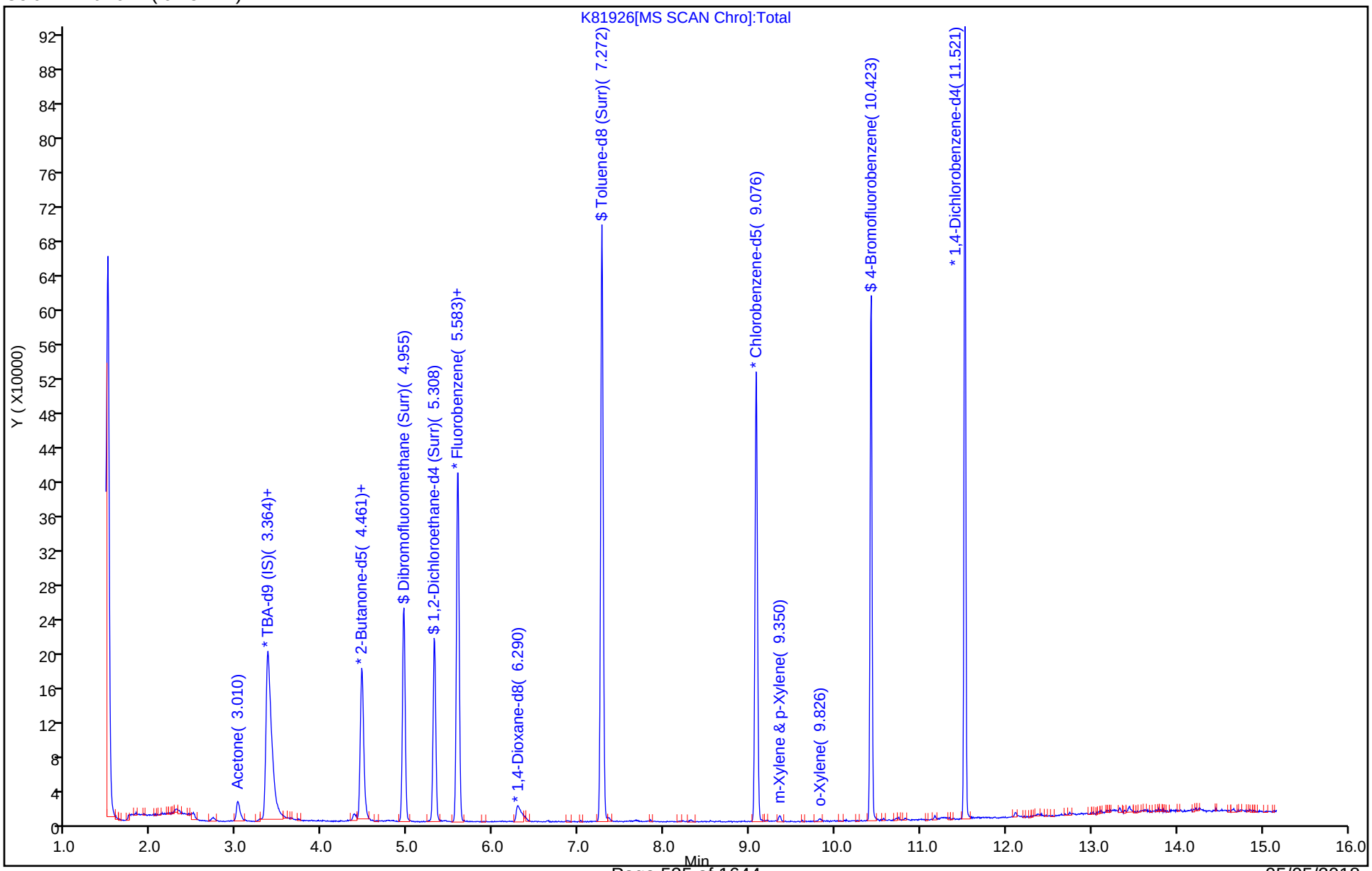
Report Date: 13-Apr-2018 10:52:53 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D

Injection Date:	13-Apr-2018 04:15:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153163-B-2-A	Lab Sample ID:	460-153163-2	Worklist Smp#:	19
Client ID:	GC-MW-108D(SO)-15-17				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)

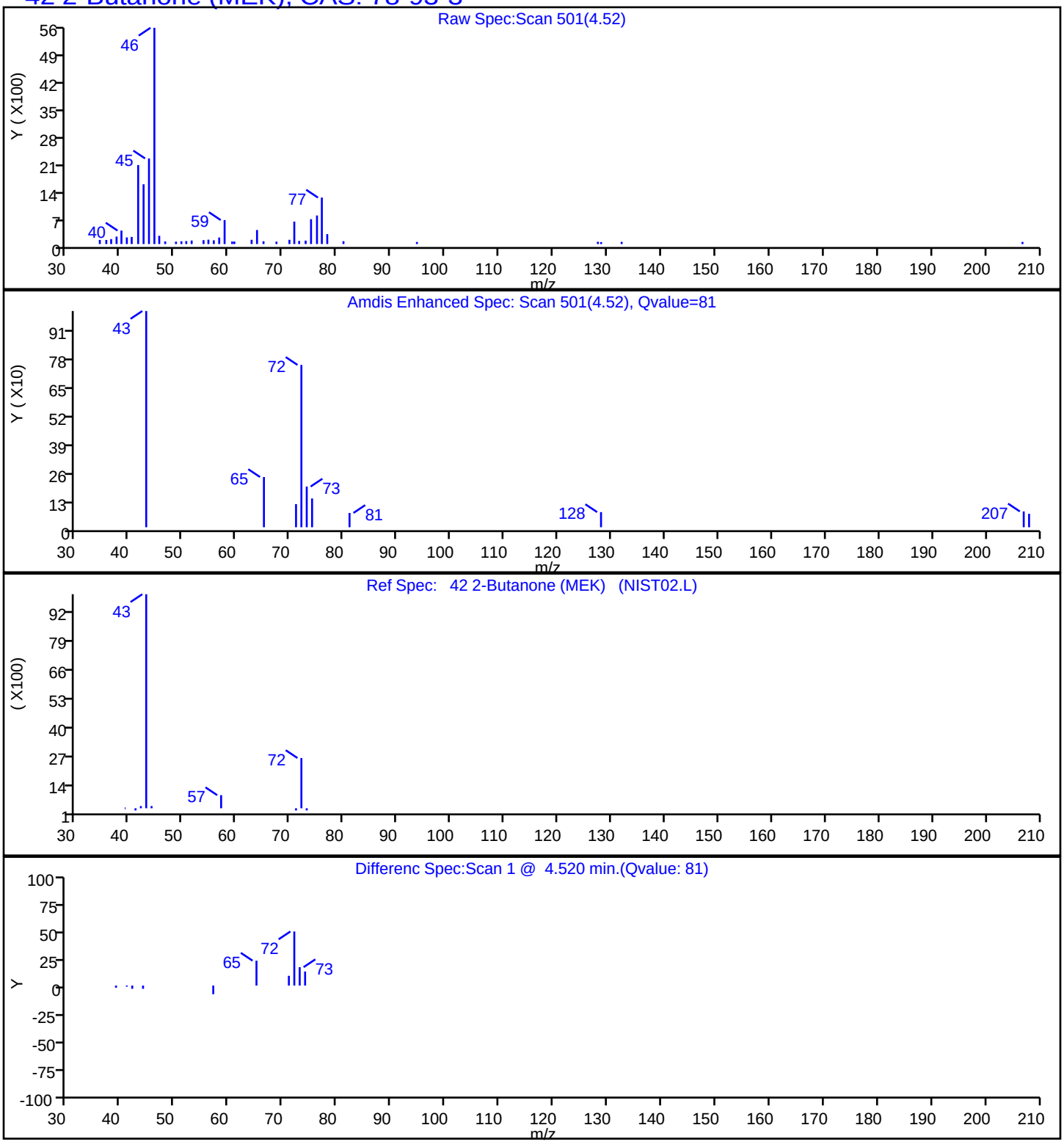


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D

Injection Date:	13-Apr-2018 04:15:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153163-B-2-A	Lab Sample ID:	460-153163-2		
Client ID:	GC-MW-108D(SO)-15-17				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3



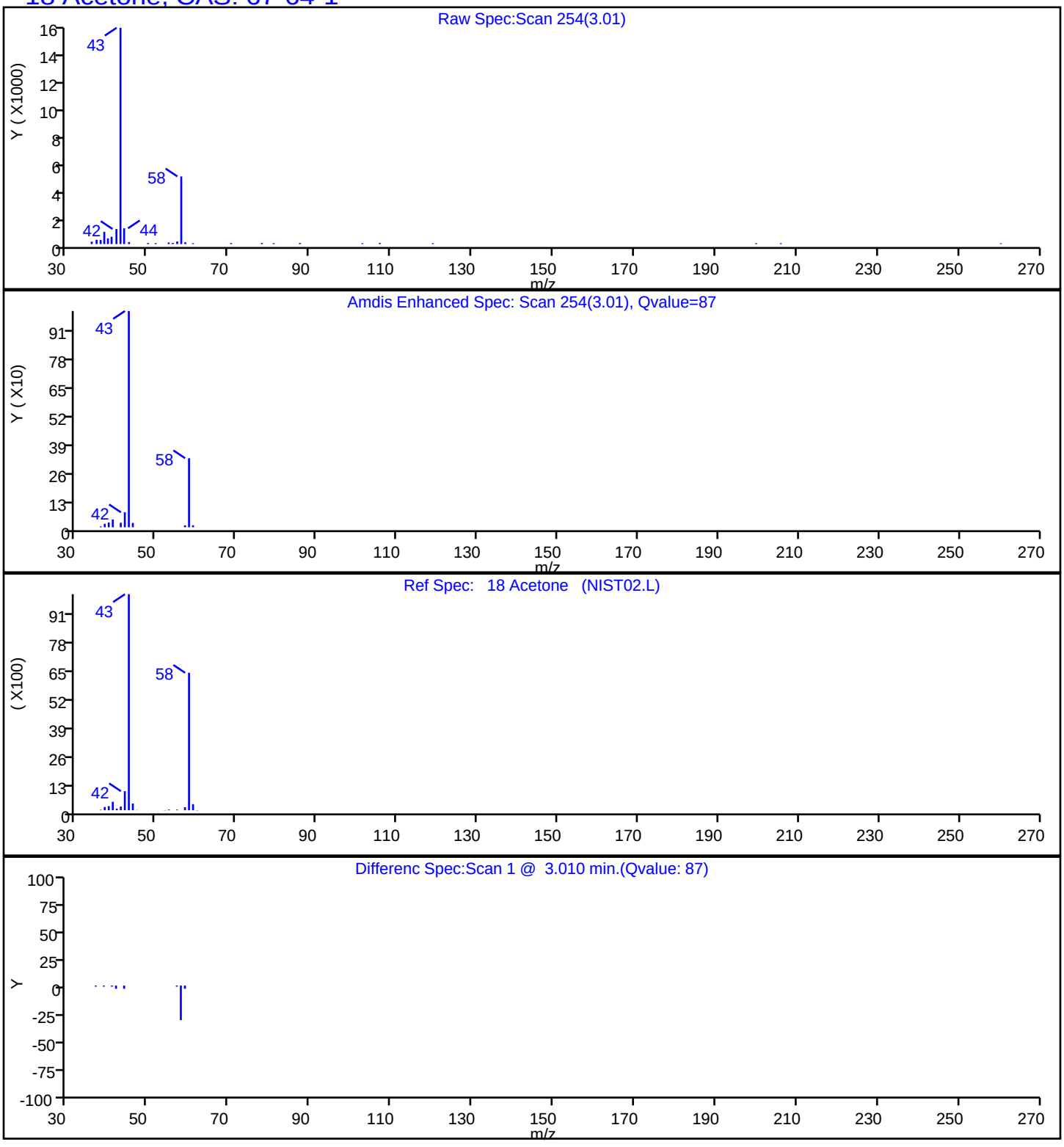
Report Date: 13-Apr-2018 10:52:53 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D

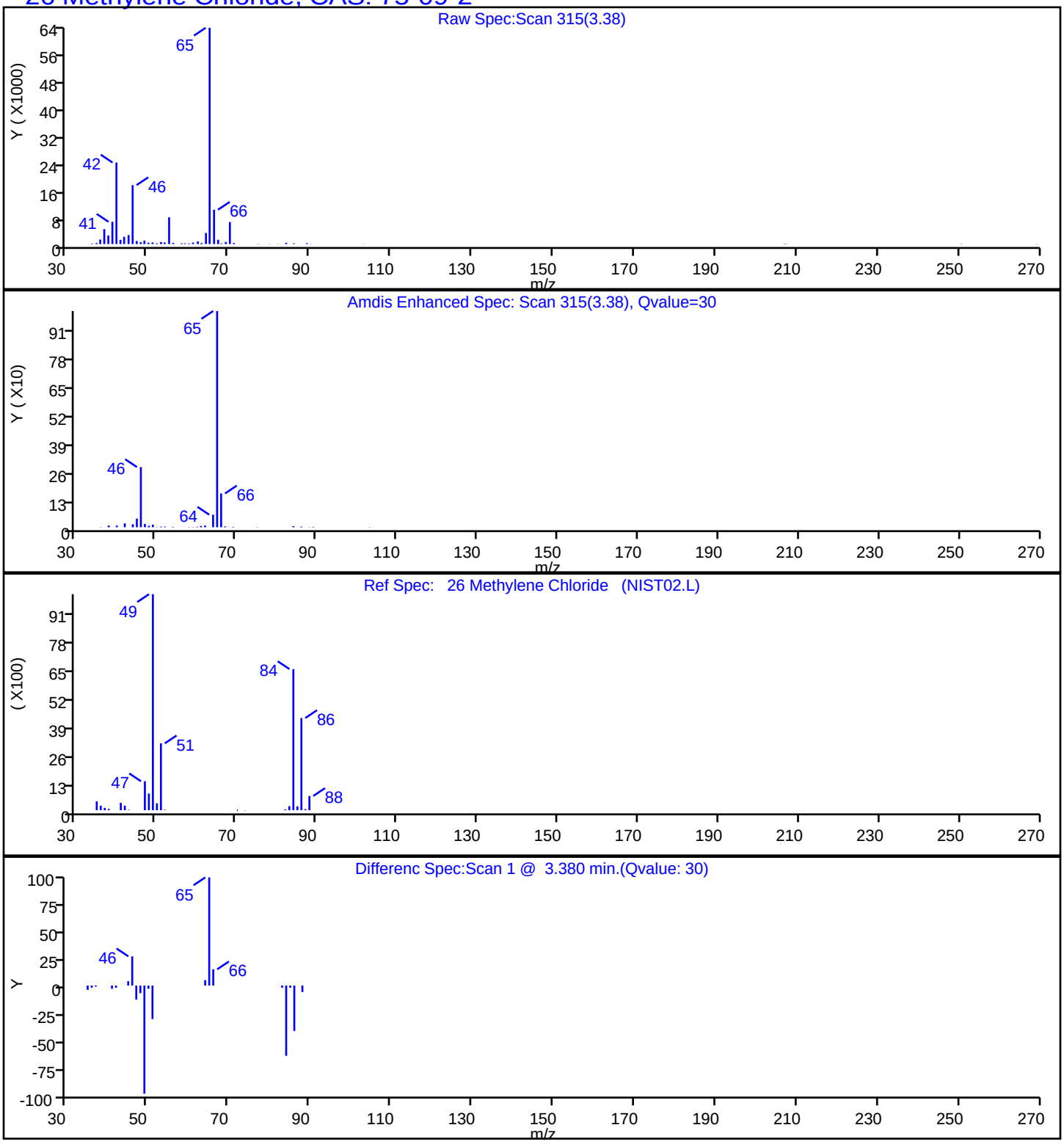
Injection Date:	13-Apr-2018 04:15:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153163-B-2-A	Lab Sample ID:	460-153163-2		
Client ID:	GC-MW-108D(SO)-15-17				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D
Injection Date: 13-Apr-2018 04:15:30 Instrument ID: CVOAMS9
Lims ID: 460-153163-B-2-A Lab Sample ID: 460-153163-2
Client ID: GC-MW-108D(SO)-15-17
Operator ID: ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methylene Chloride, CAS: 75-09-2



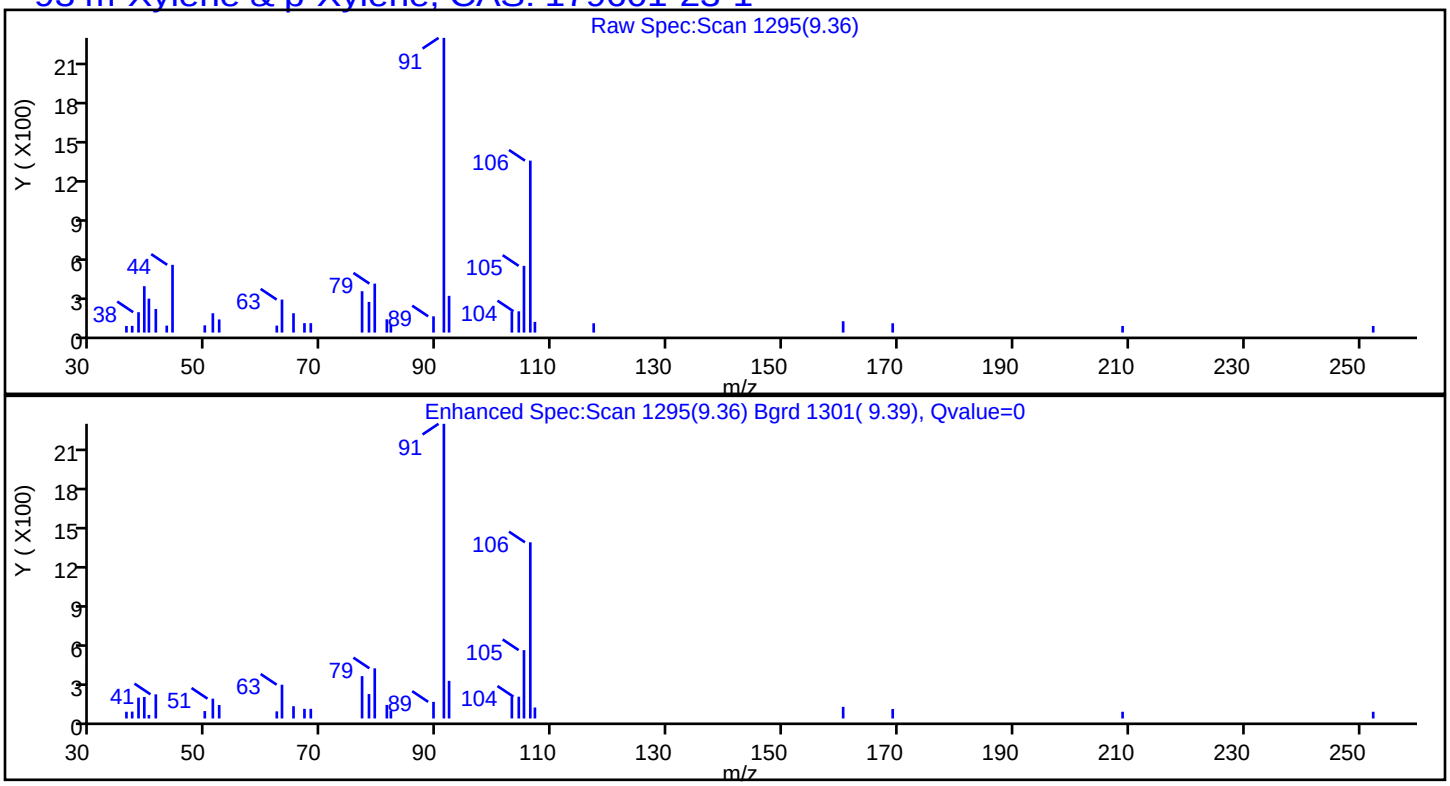
Report Date: 13-Apr-2018 10:52:53 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D

Injection Date:	13-Apr-2018 04:15:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153163-B-2-A	Lab Sample ID:	460-153163-2		
Client ID:	GC-MW-108D(SO)-15-17				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

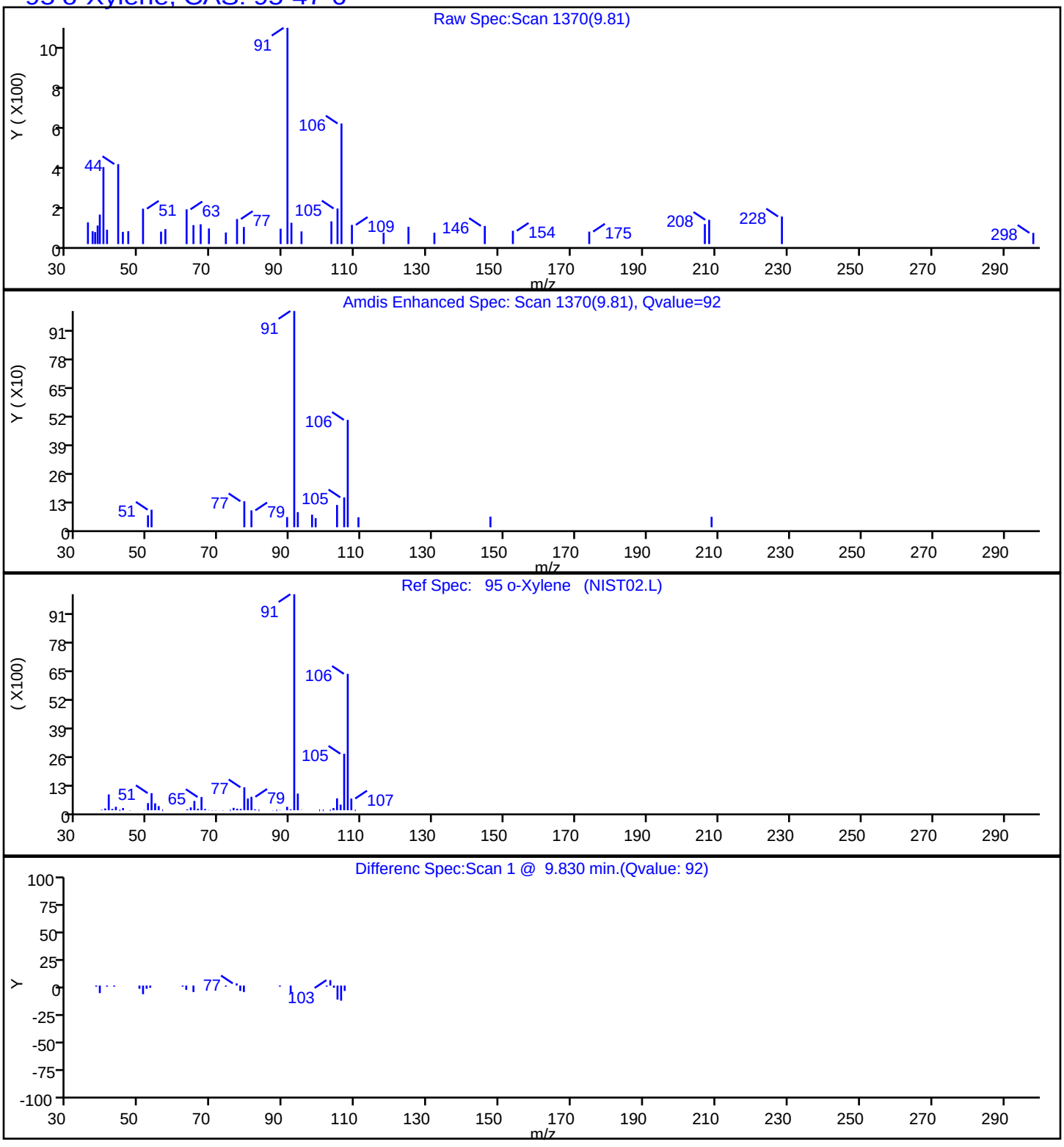
93 m-Xylene & p-Xylene, CAS: 179601-23-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D

Injection Date:	13-Apr-2018 04:15:30	Instrument ID:	CVOAMS9
Lims ID:	460-153163-B-2-A	Lab Sample ID:	460-153163-2
Client ID:	GC-MW-108D(SO)-15-17		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

95 o-Xylene, CAS: 95-47-6



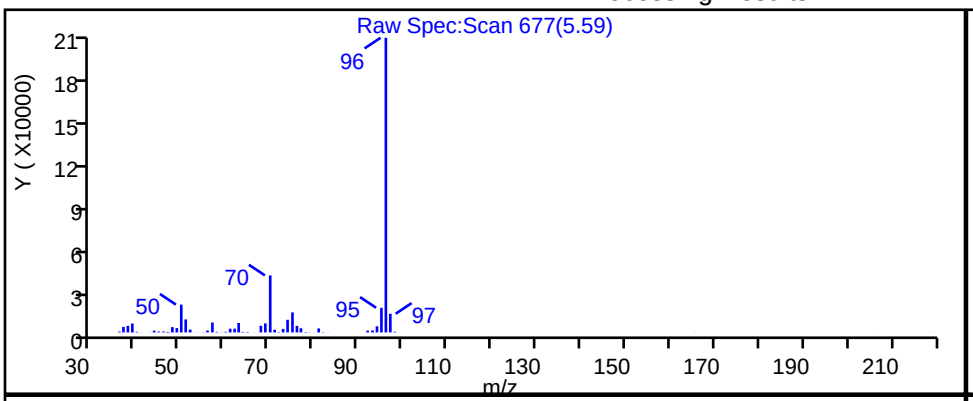
User Disabled Compound Report

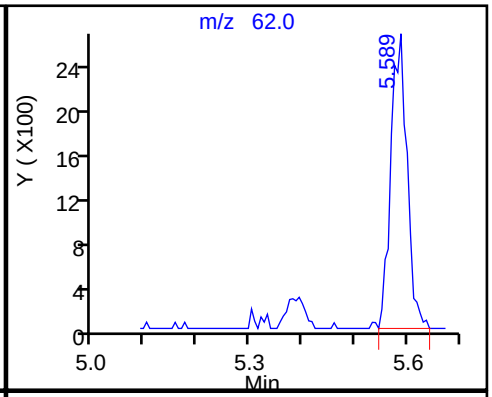
TestAmerica Edison

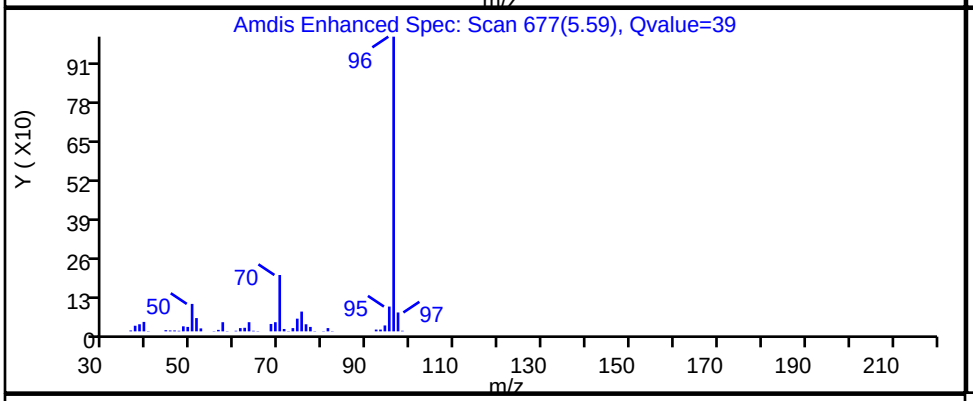
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D				
Injection Date:	13-Apr-2018 04:15:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153163-B-2-A	Lab Sample ID:	460-153163-2		
Client ID:	GC-MW-108D(SO)-15-17				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

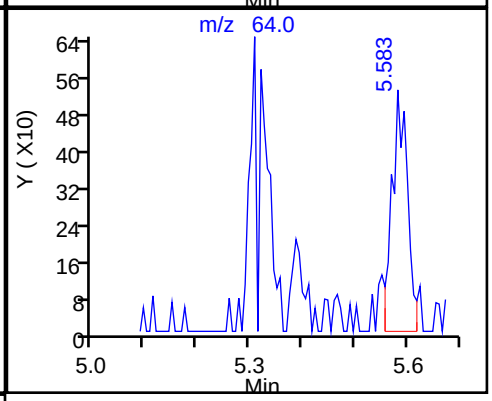
59 1,2-Dichloroethane, CAS: 107-06-2

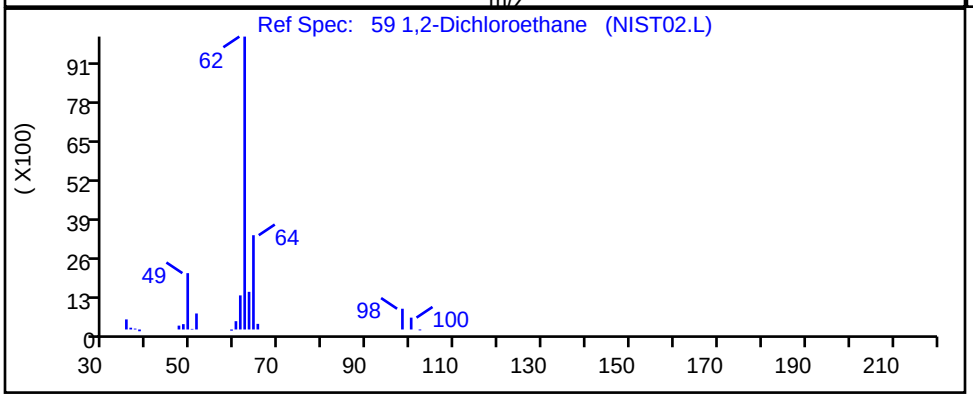
Processing Results











RT	Mass	Response	Amount
5.59	62.00	5651	1.515855
5.58	64.00	1091	

Reviewer: tupayachia, 13-Apr-2018 07:11:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

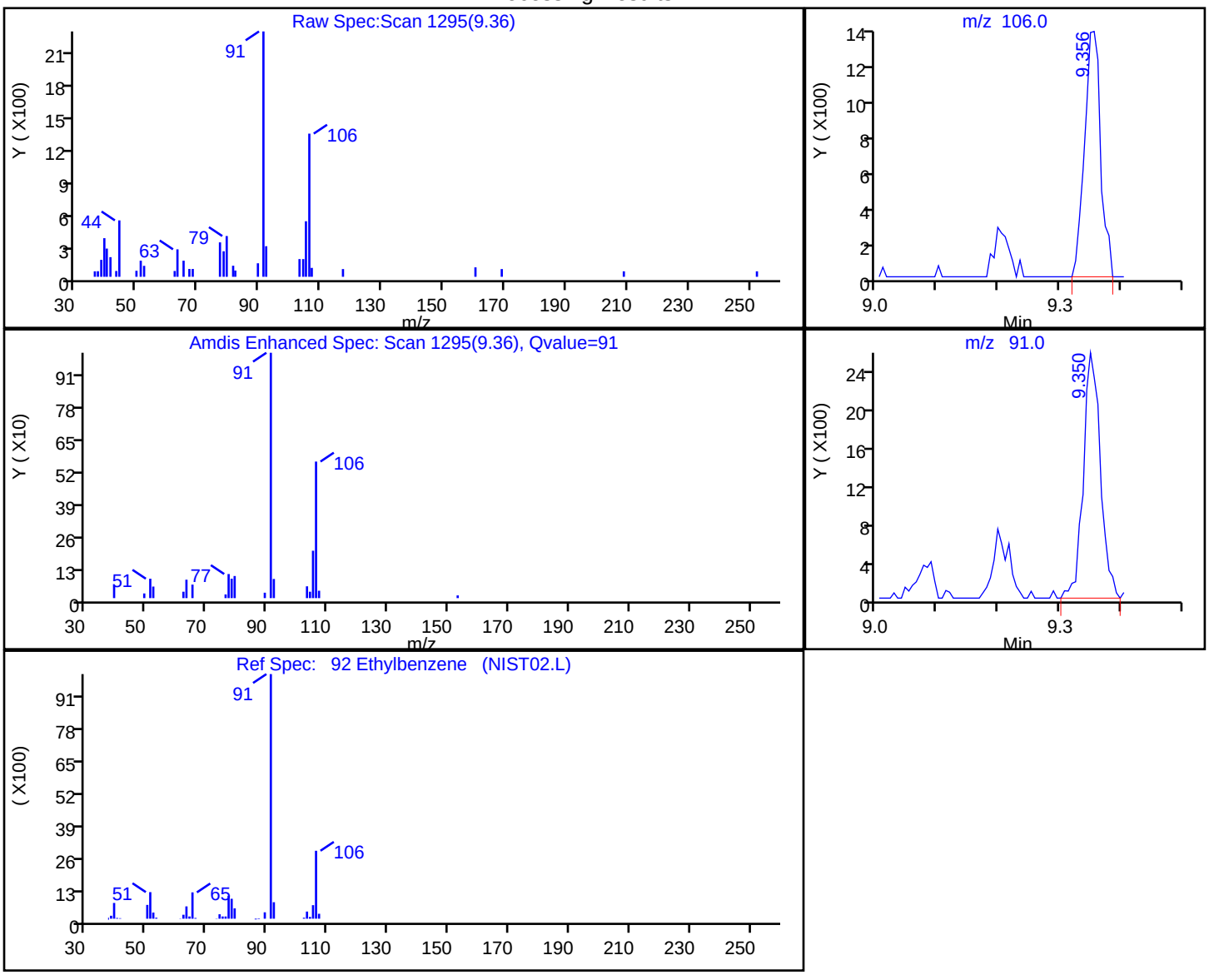
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81926.D		
Injection Date:	13-Apr-2018 04:15:30	Instrument ID:	CVOAMS9
Lims ID:	460-153163-B-2-A	Lab Sample ID:	460-153163-2
Client ID:	GC-MW-108D(SO)-15-17		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.36	106.00	2459	0.493005
9.35	91.00	4960	

Reviewer: delpolitov, 13-Apr-2018 10:52:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-33-35 | Lab Sample ID: 460-153254-1

Matrix: Solid | Lab File ID: K82046.D

Analysis Method: 8260C | Date Collected: 04/04/2018 08:00

Sample wt/vol: 6.461(g) | Date Analyzed: 04/16/2018 10:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.4 | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U *	0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000094
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00043
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0094
78-93-3	2-Butanone (MEK)	0.0021	J	0.0051	0.0011
591-78-6	2-Hexanone	0.0051	U	0.0051	0.00080
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068
67-64-1	Acetone	0.040		0.0051	0.0039
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00049
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U *	0.0010	0.00019
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00020
75-00-3	Chloroethane	0.0010	U	0.0010	0.00053
67-66-3	Chloroform	0.0010	U	0.0010	0.00033
74-87-3	Chloromethane	0.0010	U	0.0010	0.00045
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00023
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-33-35 | Lab Sample ID: 460-153254-1

Matrix: Solid | Lab File ID: K82046.D

Analysis Method: 8260C | Date Collected: 04/04/2018 08:00

Sample wt/vol: 6.461(g) | Date Analyzed: 04/16/2018 10:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.4 | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0051	U	0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.00086	J	0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.00044	J	0.0010	0.00018
95-47-6	o-Xylene	0.00017	J	0.0010	0.000097
100-42-5	Styrene	0.0010	U	0.0010	0.00013
127-18-4	Tetrachloroethene	0.014		0.0010	0.00015
108-88-3	Toluene	0.0010	U	0.0010	0.00064
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00042
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00056

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		78-135
460-00-4	4-Bromofluorobenzene	113		67-126
1868-53-7	Dibromofluoromethane (Surr)	127		61-149
2037-26-5	Toluene-d8 (Surr)	101		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-33-35 | Lab Sample ID: 460-153254-1

Matrix: Solid | Lab File ID: K82046.D

Analysis Method: 8260C | Date Collected: 04/04/2018 08:00

Sample wt/vol: 6.461(g) | Date Analyzed: 04/16/2018 10:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.4 | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D
Lims ID: 460-153254-C-1-A
Client ID: GC-MW-108D(SO)-33-35
Sample Type: Client
Inject. Date: 16-Apr-2018 10:34:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153254-C-1-A
Misc. Info.: 460-0070418-016
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 16-Apr-2018 10:56:10 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: delpolitov Date: 16-Apr-2018 10:56:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.004	3.016	-0.012	86	38215	38.9	
* 25 TBA-d9 (IS)	65	3.364	3.370	-0.006	0	326972	1000.0	
26 Methylene Chloride	84	3.388	3.382	0.006	30	3196	0.8357	
* 38 2-Butanone-d5	46	4.455	4.461	-0.006	0	229724	250.0	
42 2-Butanone (MEK)	72	4.504	4.516	-0.012	26	932	2.06	M
$ 51 Dibromofluoromethane (Surr	113	4.949	4.955	-0.006	96	177538	63.4	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.315	-0.006	0	164242	61.6	
* 61 Fluorobenzene	96	5.583	5.589	-0.006	99	446585	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.284	0.006	0	28301	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	600640	50.5	
83 Tetrachloroethene	166	7.973	7.973	0.000	97	44373	13.4	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	382900	50.0	
93 m-Xylene & p-Xylene	106	9.344	9.351	-0.007	0	2804	0.4331	
95 o-Xylene	106	9.826	9.820	0.006	93	1080	0.1631	
$ 100 4-Bromofluorobenzene	174	10.424	10.424	0.000	93	183365	56.6	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	226855	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

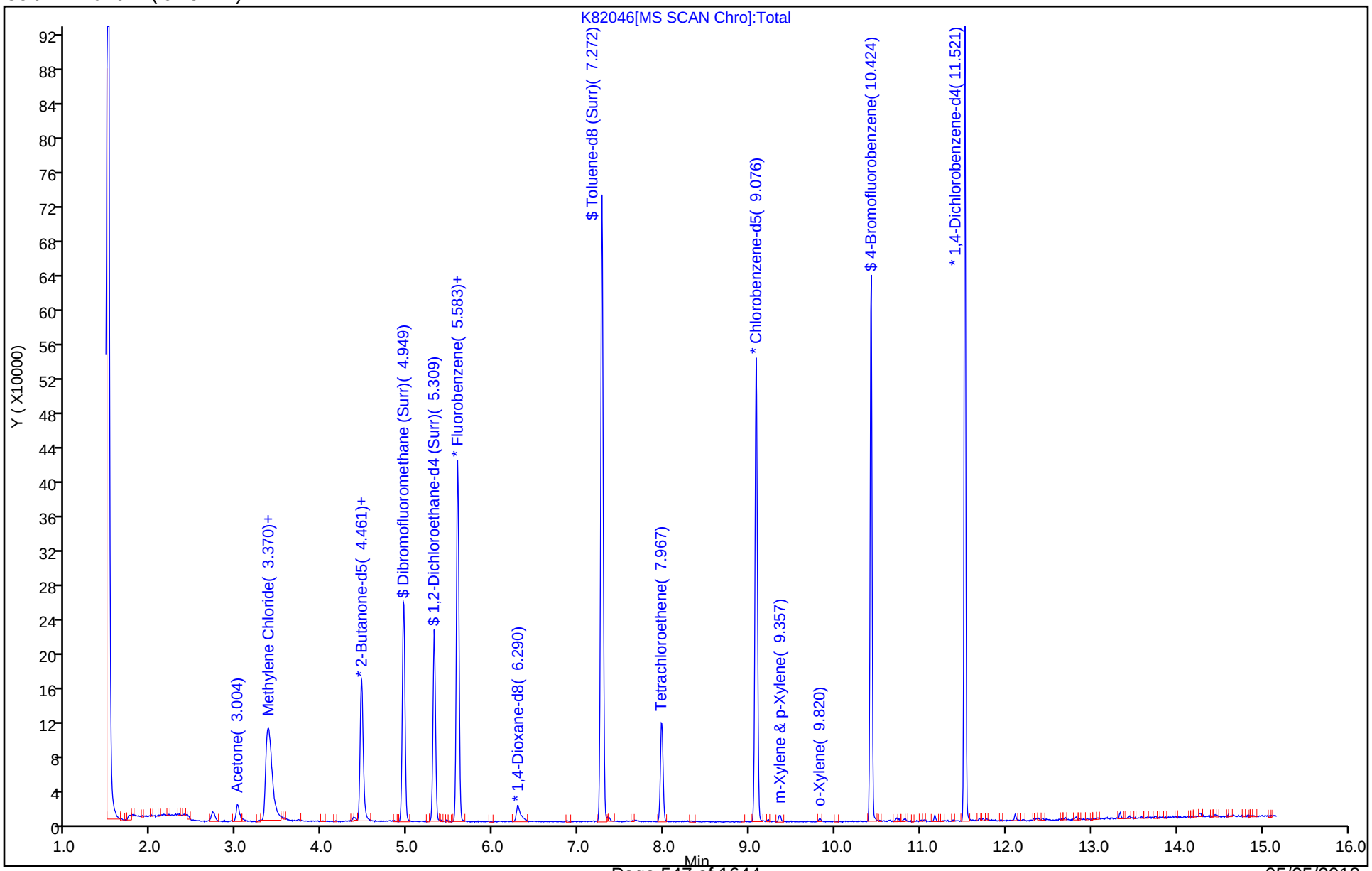
Report Date: 16-Apr-2018 10:56:11 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D

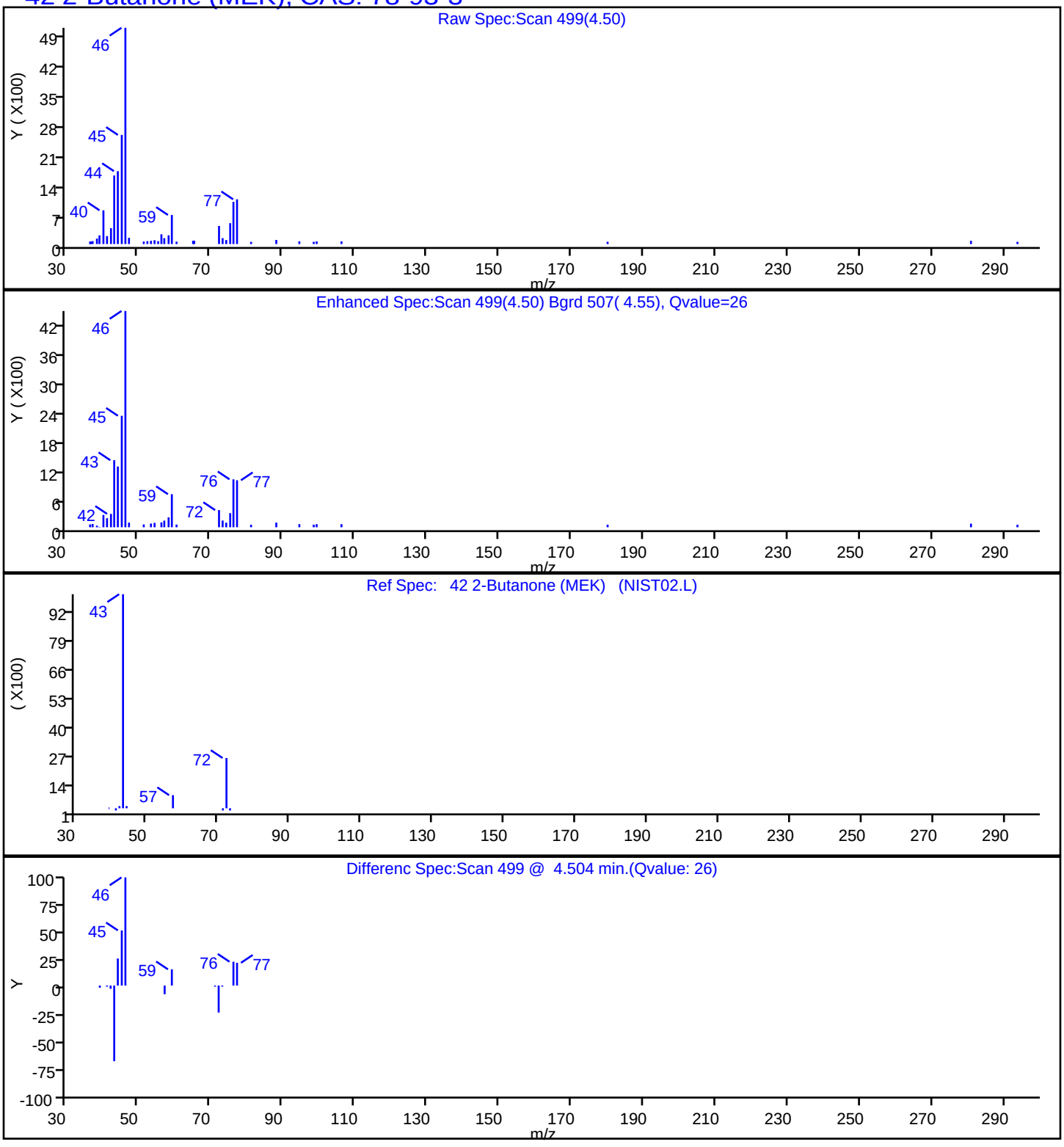
Injection Date:	16-Apr-2018 10:34:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153254-C-1-A	Lab Sample ID:	460-153254-1	Worklist Smp#:	16
Client ID:	GC-MW-108D(SO)-33-35				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



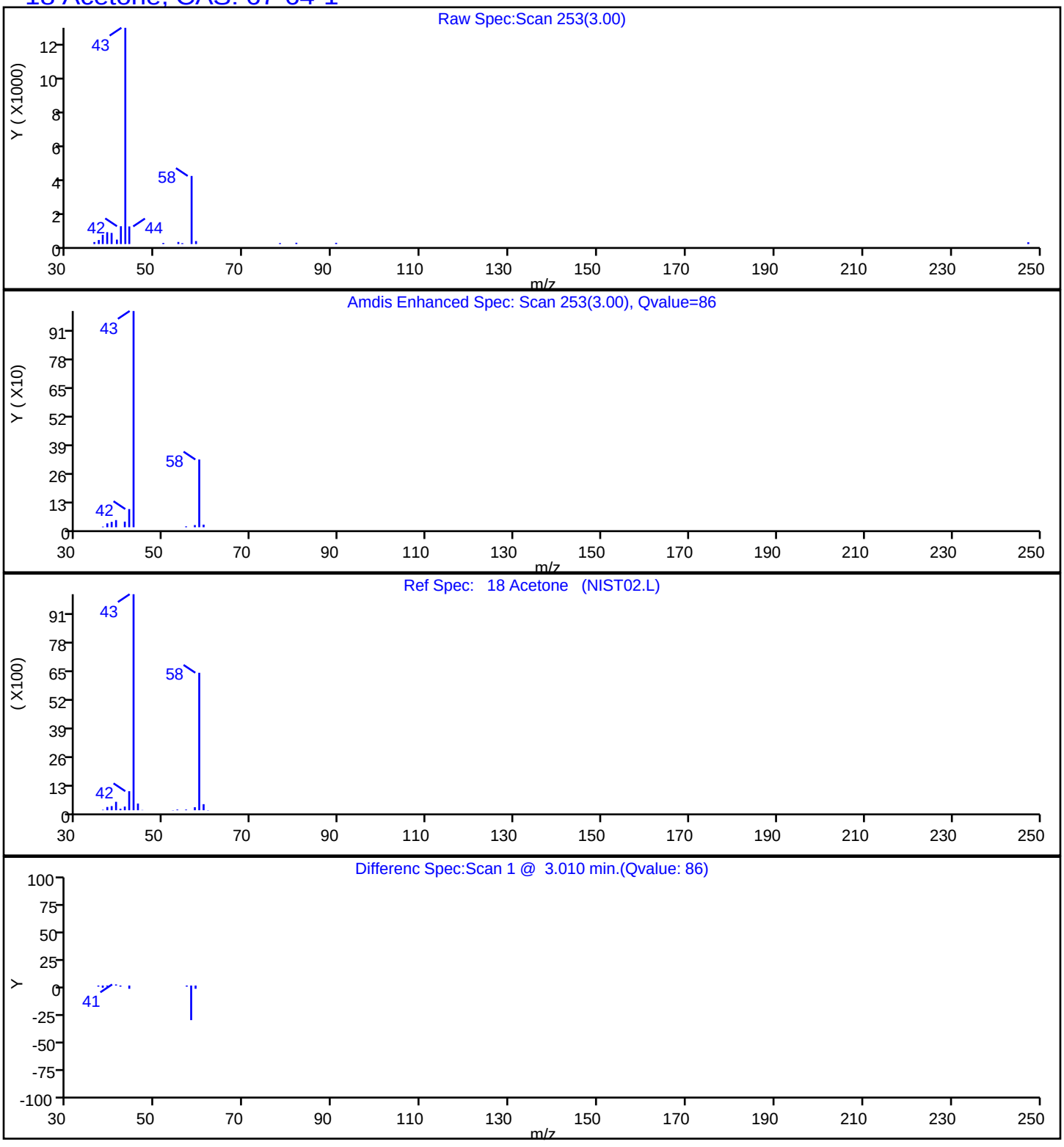
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D
Injection Date: 16-Apr-2018 10:34:30 Instrument ID: CVOAMS9
Lims ID: 460-153254-C-1-A Lab Sample ID: 460-153254-1
Client ID: GC-MW-108D(SO)-33-35
Operator ID: ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

42 2-Butanone (MEK), CAS: 78-93-3



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D
Injection Date: 16-Apr-2018 10:34:30 Instrument ID: CVOAMS9
Lims ID: 460-153254-C-1-A Lab Sample ID: 460-153254-1
Client ID: GC-MW-108D(SO)-33-35
Operator ID: ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

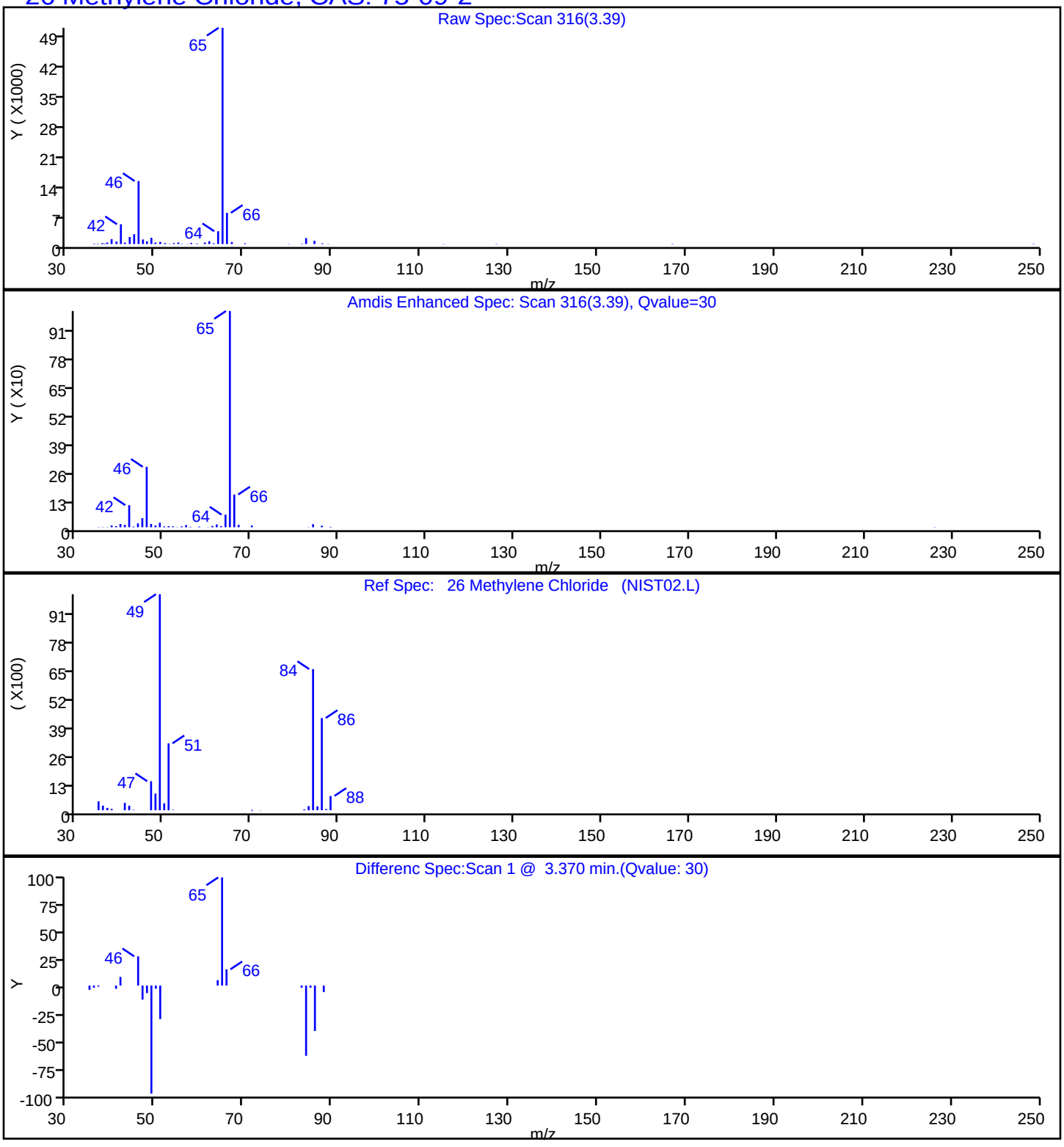
18 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D

Injection Date:	16-Apr-2018 10:34:30	Instrument ID:	CVOAMS9
Lims ID:	460-153254-C-1-A	Lab Sample ID:	460-153254-1
Client ID:	GC-MW-108D(SO)-33-35		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

26 Methylene Chloride, CAS: 75-09-2



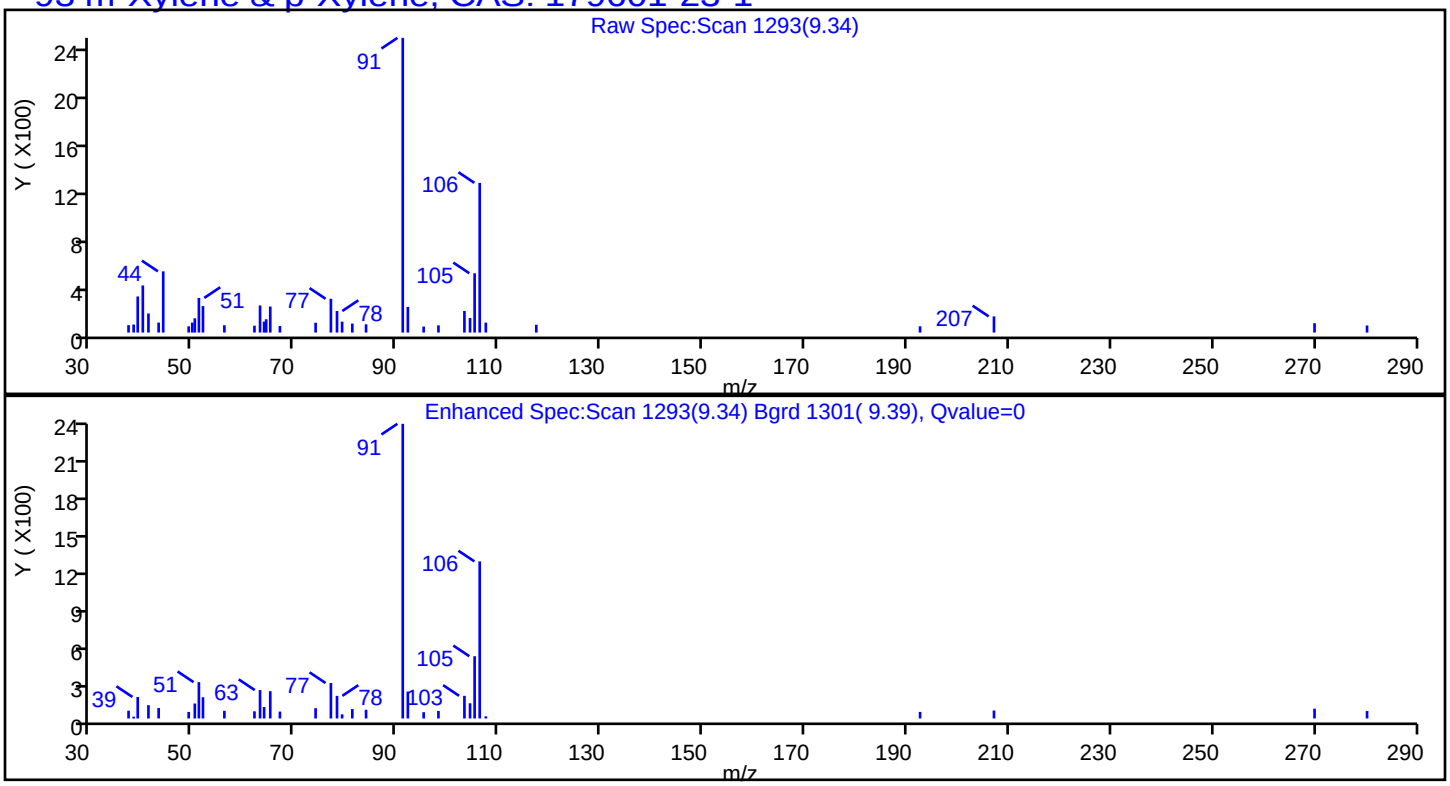
Report Date: 16-Apr-2018 10:56:11 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D

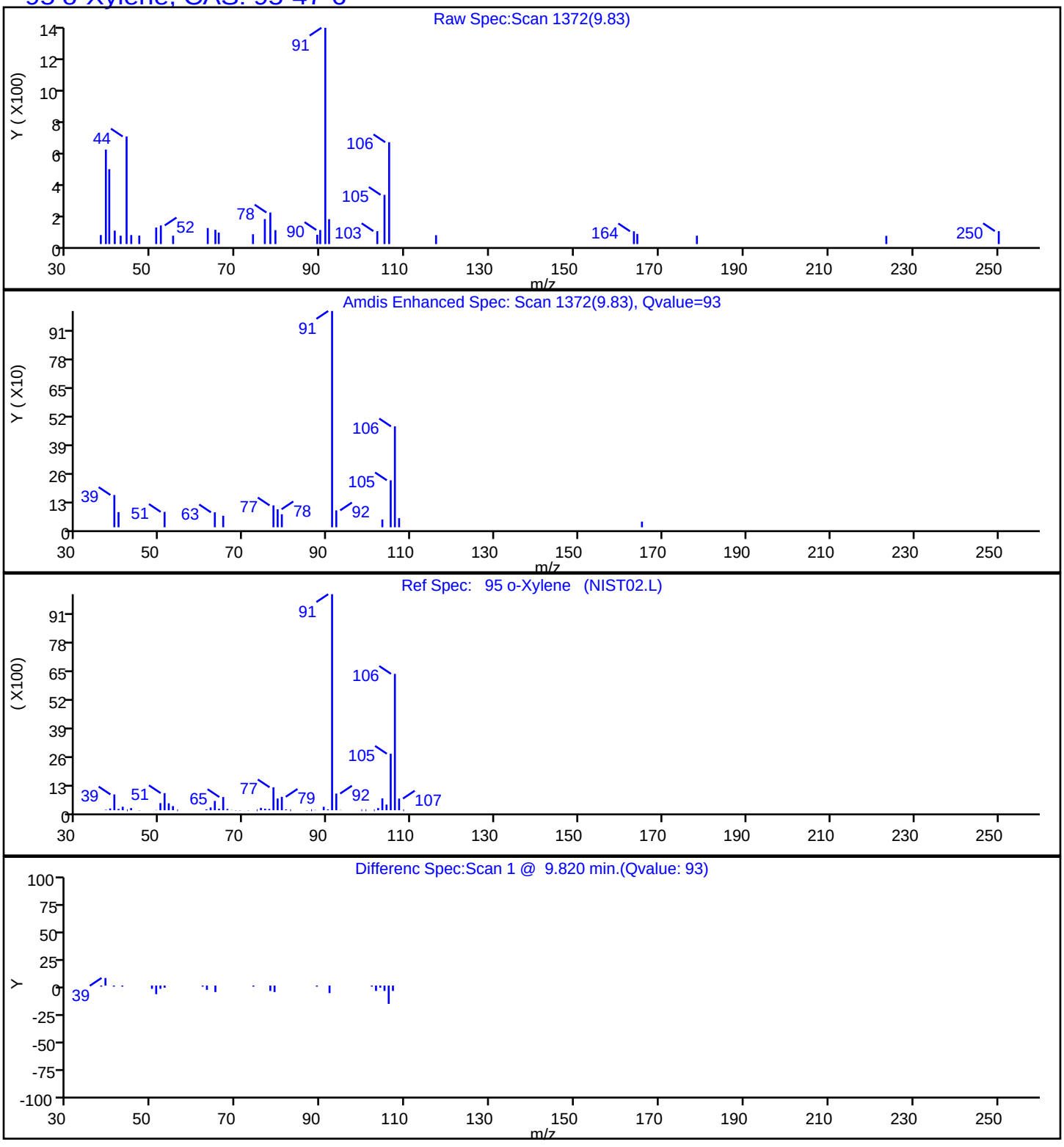
Injection Date:	16-Apr-2018 10:34:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153254-C-1-A	Lab Sample ID:	460-153254-1		
Client ID:	GC-MW-108D(SO)-33-35				
Operator ID:		ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1



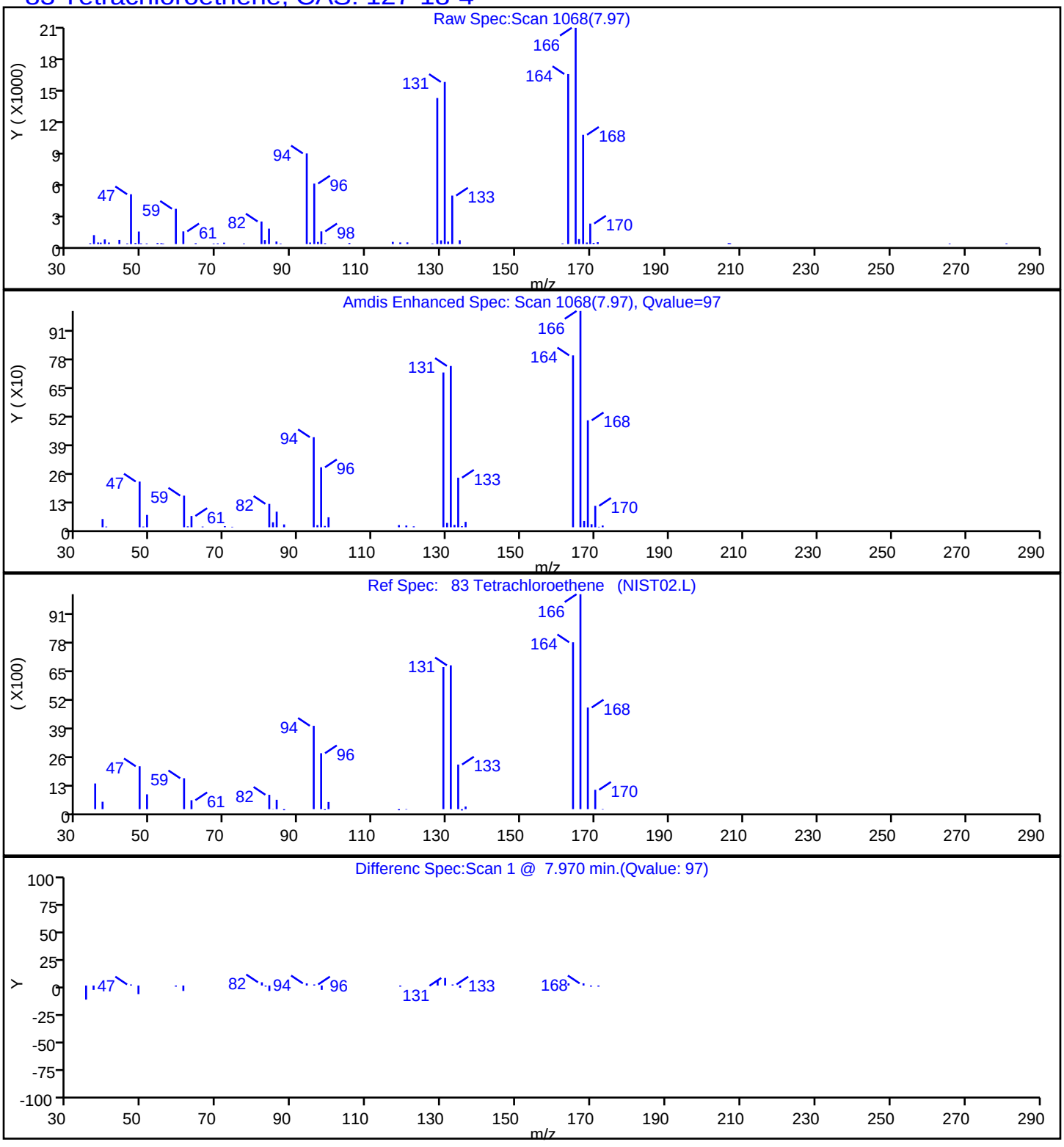
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D
Injection Date: 16-Apr-2018 10:34:30 Instrument ID: CVOAMS9
Lims ID: 460-153254-C-1-A Lab Sample ID: 460-153254-1
Client ID: GC-MW-108D(SO)-33-35
Operator ID: ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 o-Xylene, CAS: 95-47-6



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D
Injection Date: 16-Apr-2018 10:34:30 Instrument ID: CVOAMS9
Lims ID: 460-153254-C-1-A Lab Sample ID: 460-153254-1
Client ID: GC-MW-108D(SO)-33-35
Operator ID: ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



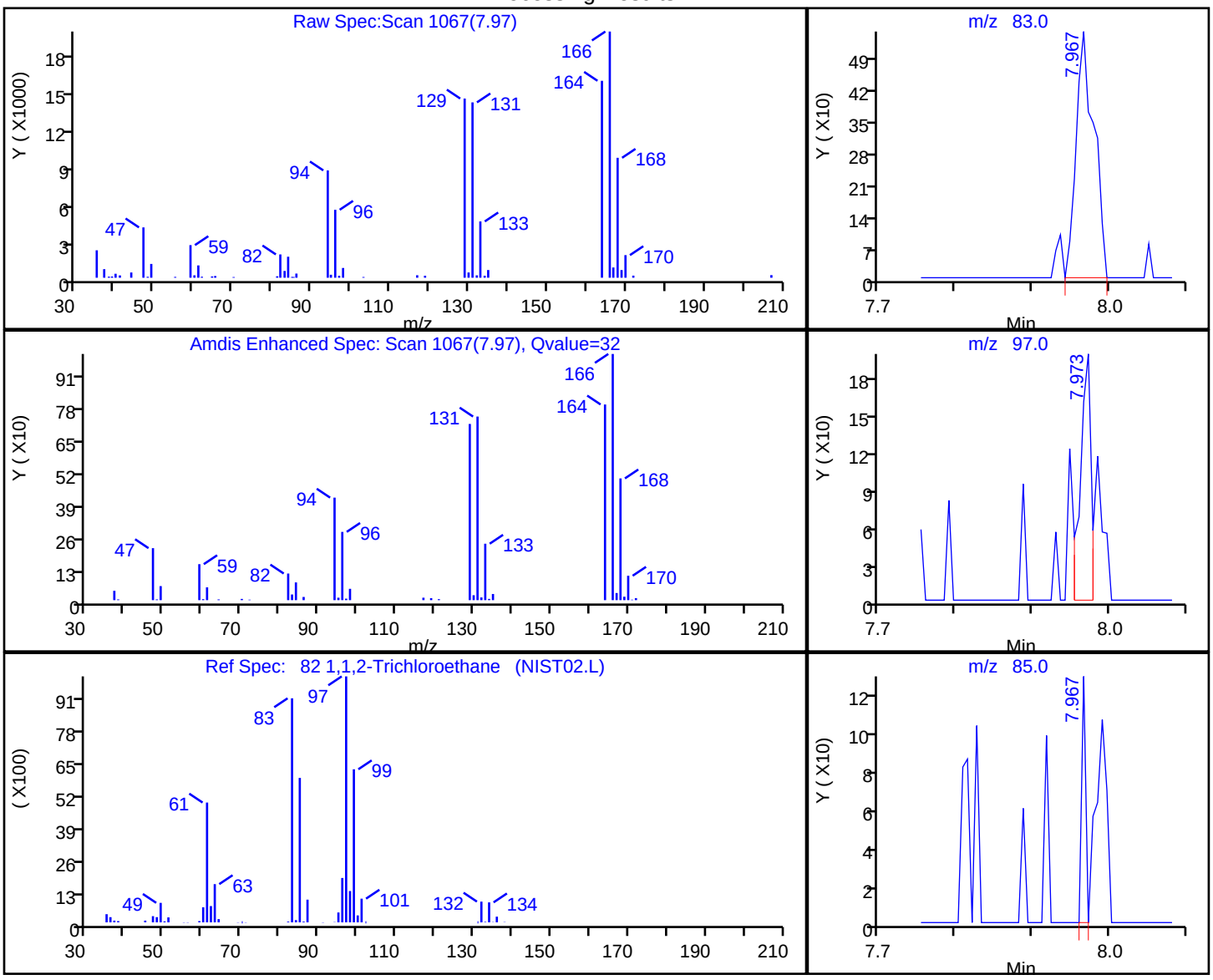
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D				
Injection Date:	16-Apr-2018 10:34:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153254-C-1-A	Lab Sample ID:	460-153254-1		
Client ID:	GC-MW-108D(SO)-33-35				
Operator ID:		ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

82 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
7.97	83.00	884	0.356357
7.97	97.00	191	
7.97	85.00	46	

Reviewer: delpolitov, 16-Apr-2018 10:56:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

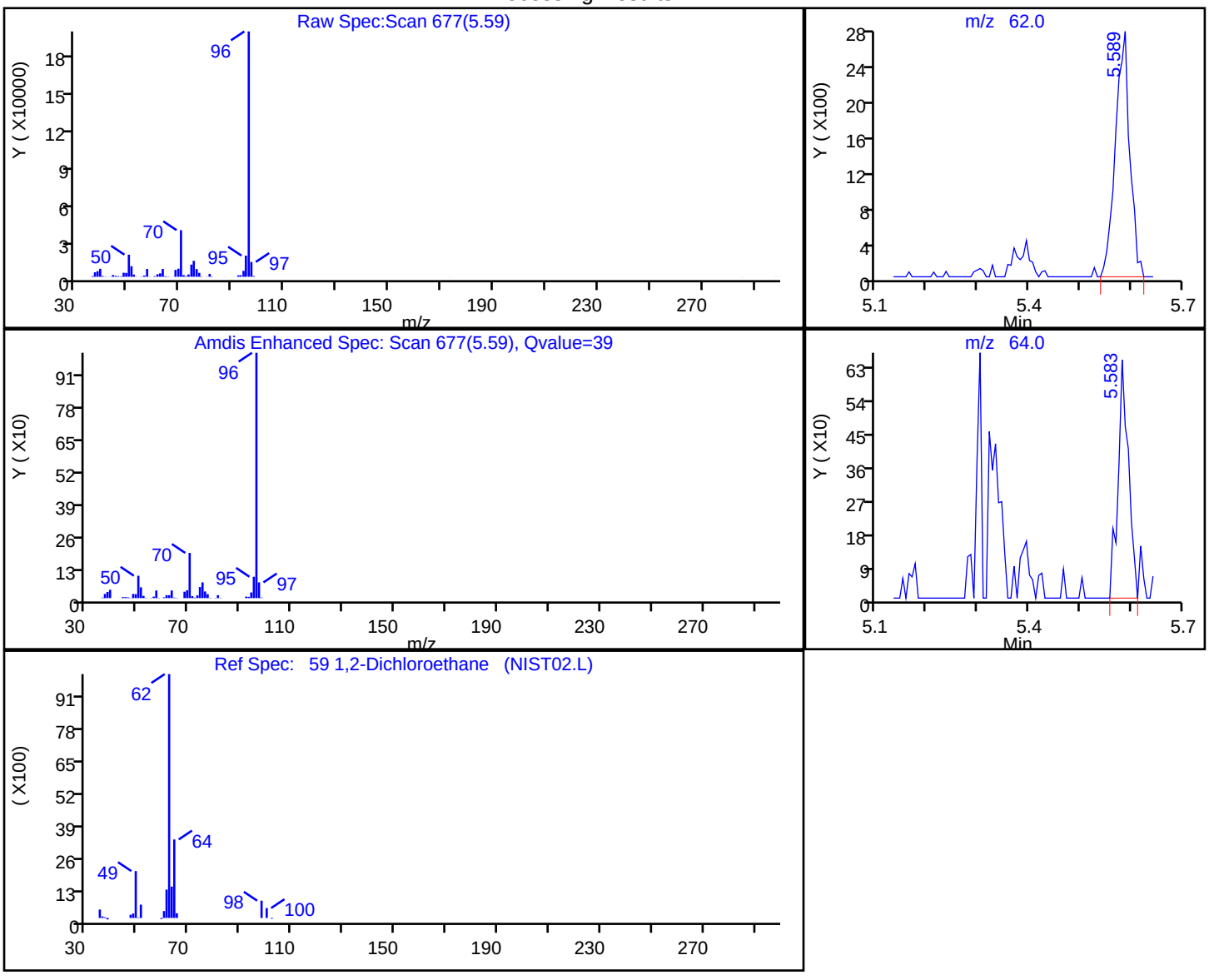
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D		
Injection Date:	16-Apr-2018 10:34:30	Instrument ID:	CVOAMS9
Lims ID:	460-153254-C-1-A	Lab Sample ID:	460-153254-1
Client ID:	GC-MW-108D(SO)-33-35		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.59	62.00	5379	1.498158
5.58	64.00	933	

Reviewer: delpolitov, 16-Apr-2018 10:56:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

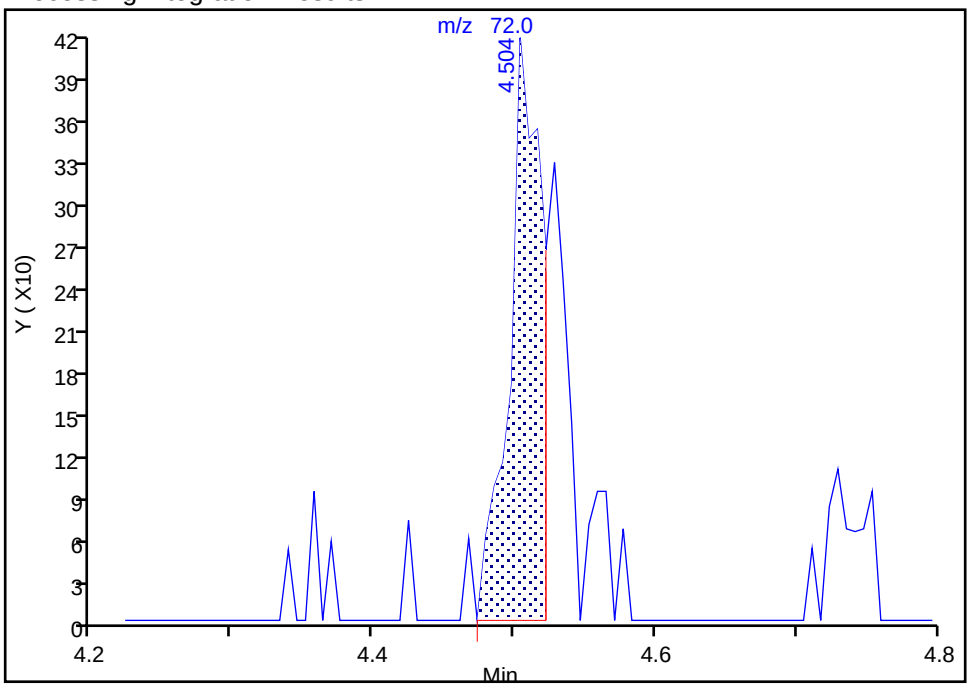
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D				
Injection Date:	16-Apr-2018 10:34:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153254-C-1-A	Lab Sample ID:	460-153254-1		
Client ID:	GC-MW-108D(SO)-33-35				
Operator ID:		ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

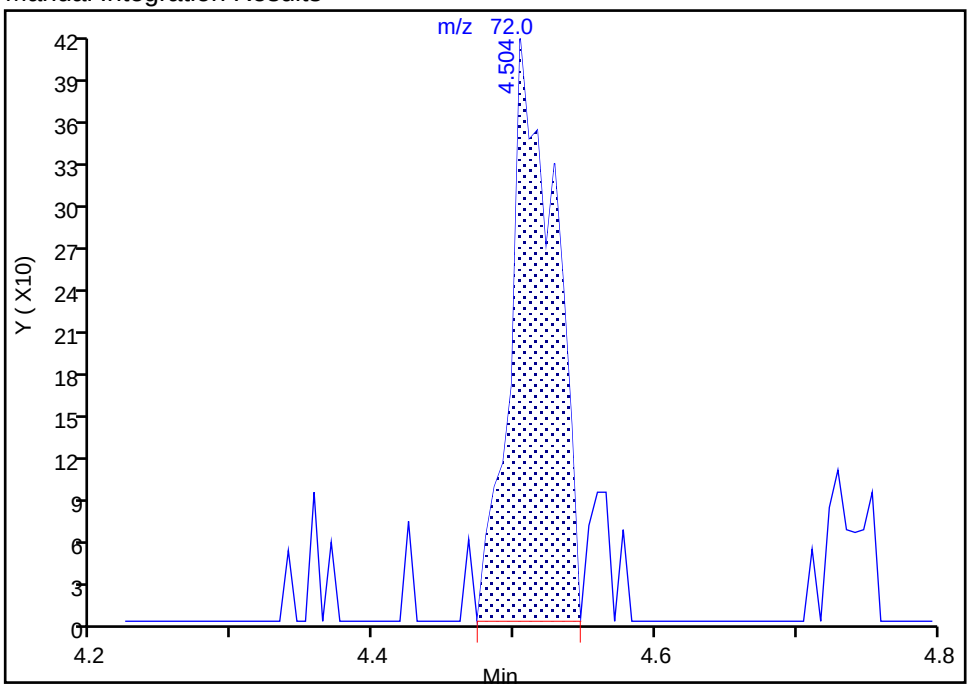
Processing Integration Results

RT: 4.50
Area: 669
Amount: 1.480376
Amount Units: ug/l



Manual Integration Results

RT: 4.50
Area: 932
Amount: 2.062347
Amount Units: ug/l



Reviewer: delpolitov, 16-Apr-2018 10:55:44

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

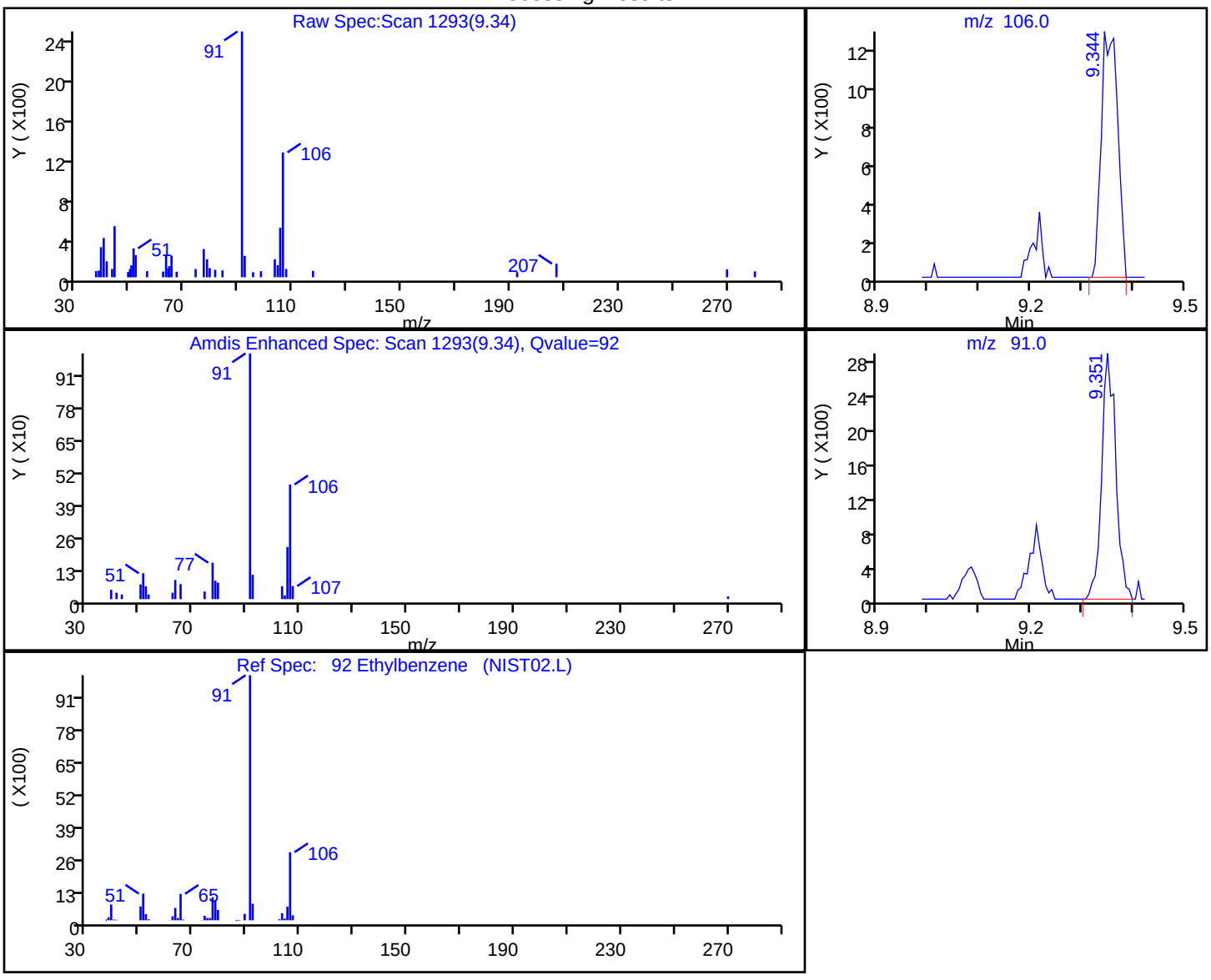
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82046.D		
Injection Date:	16-Apr-2018 10:34:30	Instrument ID:	CVOAMS9
Lims ID:	460-153254-C-1-A	Lab Sample ID:	460-153254-1
Client ID:	GC-MW-108D(SO)-33-35		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.34	106.00	2804	0.545128
9.35	91.00	5567	

Reviewer: delpolitov, 16-Apr-2018 10:56:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-59-60.5 | Lab Sample ID: 460-153254-2

Matrix: Solid | Lab File ID: K81975.D

Analysis Method: 8260C | Date Collected: 04/04/2018 10:00

Sample wt/vol: 10.131(g) | Date Analyzed: 04/14/2018 01:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 12.0 | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00056	U	0.00056	0.00013
79-34-5	1,1,2,2-Tetrachloroethane	0.00056	U	0.00056	0.00012
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00056	U	0.00056	0.00017
79-00-5	1,1,2-Trichloroethane	0.00056	U	0.00056	0.00010
75-34-3	1,1-Dichloroethane	0.00056	U	0.00056	0.00012
75-35-4	1,1-Dichloroethene	0.00056	U	0.00056	0.00013
87-61-6	1,2,3-Trichlorobenzene	0.00056	U	0.00056	0.00010
120-82-1	1,2,4-Trichlorobenzene	0.00056	U	0.00056	0.000052
96-12-8	1,2-Dibromo-3-Chloropropane	0.00056	U	0.00056	0.00026
95-50-1	1,2-Dichlorobenzene	0.00056	U	0.00056	0.000081
107-06-2	1,2-Dichloroethane	0.00056	U	0.00056	0.00017
78-87-5	1,2-Dichloropropane	0.00056	U	0.00056	0.00024
541-73-1	1,3-Dichlorobenzene	0.00056	U	0.00056	0.000089
106-46-7	1,4-Dichlorobenzene	0.00056	U	0.00056	0.000056
123-91-1	1,4-Dioxane	0.011	U	0.011	0.0052
78-93-3	2-Butanone (MEK)	0.0016	J	0.0028	0.00062
591-78-6	2-Hexanone	0.0028	U	0.0028	0.00044
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0028	U	0.0028	0.00037
67-64-1	Acetone	0.020		0.0028	0.0021
71-43-2	Benzene	0.00056	U	0.00056	0.00014
75-25-2	Bromoform	0.00056	U	0.00056	0.00024
74-83-9	Bromomethane	0.00056	U	0.00056	0.00027
75-15-0	Carbon disulfide	0.00056	U	0.00056	0.00015
56-23-5	Carbon tetrachloride	0.00056	U *	0.00056	0.00010
108-90-7	Chlorobenzene	0.00056	U	0.00056	0.000099
74-97-5	Chlorobromomethane	0.00056	U	0.00056	0.00016
124-48-1	Chlorodibromomethane	0.00056	U	0.00056	0.00011
75-00-3	Chloroethane	0.00056	U	0.00056	0.00029
67-66-3	Chloroform	0.00056	U	0.00056	0.00018
74-87-3	Chloromethane	0.00056	U	0.00056	0.00024
156-59-2	cis-1,2-Dichloroethene	0.00056	U	0.00056	0.000085
10061-01-5	cis-1,3-Dichloropropene	0.00056	U	0.00056	0.00015
110-82-7	Cyclohexane	0.00056	U	0.00056	0.00012
75-27-4	Dichlorobromomethane	0.00056	U	0.00056	0.00014
75-71-8	Dichlorodifluoromethane	0.00056	U	0.00056	0.00019

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-59-60.5 | Lab Sample ID: 460-153254-2

Matrix: Solid | Lab File ID: K81975.D

Analysis Method: 8260C | Date Collected: 04/04/2018 10:00

Sample wt/vol: 10.131(g) | Date Analyzed: 04/14/2018 01:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 12.0 | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00056	U	0.00056	0.00011
106-93-4	Ethylene Dibromide	0.00056	U	0.00056	0.00010
98-82-8	Isopropylbenzene	0.00056	U	0.00056	0.000071
79-20-9	Methyl acetate	0.0028	U *	0.0028	0.0024
1634-04-4	Methyl tert-butyl ether	0.00056	U	0.00056	0.000070
108-87-2	Methylcyclohexane	0.00056	U	0.00056	0.000090
75-09-2	Methylene Chloride	0.00027	J	0.00056	0.000091
179601-23-1	m-Xylene & p-Xylene	0.00020	J	0.00056	0.000098
95-47-6	o-Xylene	0.000080	J	0.00056	0.000053
100-42-5	Styrene	0.00056	U	0.00056	0.000069
127-18-4	Tetrachloroethene	0.00056	U	0.00056	0.000080
108-88-3	Toluene	0.00056	U	0.00056	0.00035
156-60-5	trans-1,2-Dichloroethene	0.00056	U	0.00056	0.00014
10061-02-6	trans-1,3-Dichloropropene	0.00056	U	0.00056	0.00015
79-01-6	Trichloroethene	0.00056	U	0.00056	0.000081
75-69-4	Trichlorofluoromethane	0.00056	U	0.00056	0.00023
75-01-4	Vinyl chloride	0.00056	U	0.00056	0.00031

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		78-135
460-00-4	4-Bromofluorobenzene	115		67-126
1868-53-7	Dibromofluoromethane (Surr)	122		61-149
2037-26-5	Toluene-d8 (Surr)	102		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-59-60.5 | Lab Sample ID: 460-153254-2

Matrix: Solid | Lab File ID: K81975.D

Analysis Method: 8260C | Date Collected: 04/04/2018 10:00

Sample wt/vol: 10.131(g) | Date Analyzed: 04/14/2018 01:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 12.0 | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D
Lims ID: 460-153254-B-2-A
Client ID: GC-MW-108D(SO)-59-60.5
Sample Type: Client
Inject. Date: 14-Apr-2018 01:15:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153254-B-2-A
Misc. Info.: 460-0070351-014
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 12:06:29 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: delpolitov Date: 17-Apr-2018 12:06:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.004	3.010	-0.006	86	40145	35.6	
26 Methylene Chloride	84	3.376	3.376	0.000	31	2058	0.4734	
* 25 TBA-d9 (IS)	65	3.376	3.394	-0.018	0	379809	1000.0	
* 38 2-Butanone-d5	46	4.455	4.461	-0.006	0	263991	250.0	
42 2-Butanone (MEK)	72	4.504	4.510	-0.006	99	1442	2.78	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	194238	61.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	180865	59.6	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	507664	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.302	-0.012	0	33321	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	668707	50.9	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	422759	50.0	
93 m-Xylene & p-Xylene	106	9.357	9.351	0.006	0	2598	0.3635	
95 o-Xylene	106	9.814	9.820	-0.006	92	1040	0.1422	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	92	206373	57.7	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	248683	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

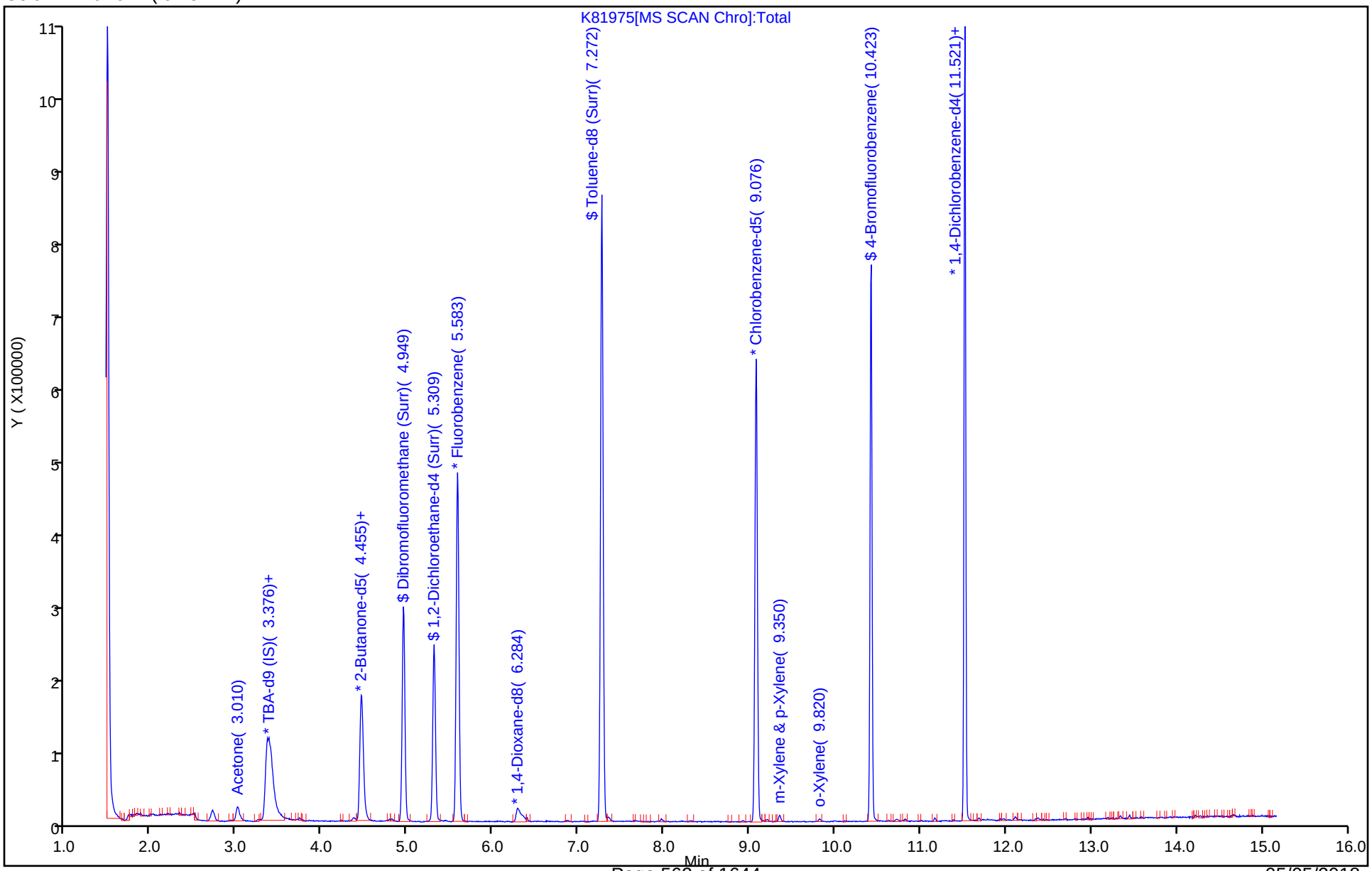
Report Date: 17-Apr-2018 12:06:30 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D

Injection Date:	14-Apr-2018 01:15:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153254-B-2-A	Lab Sample ID:	460-153254-2	Worklist Smp#:	14
Client ID:	GC-MW-108D(SO)-59-60.5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

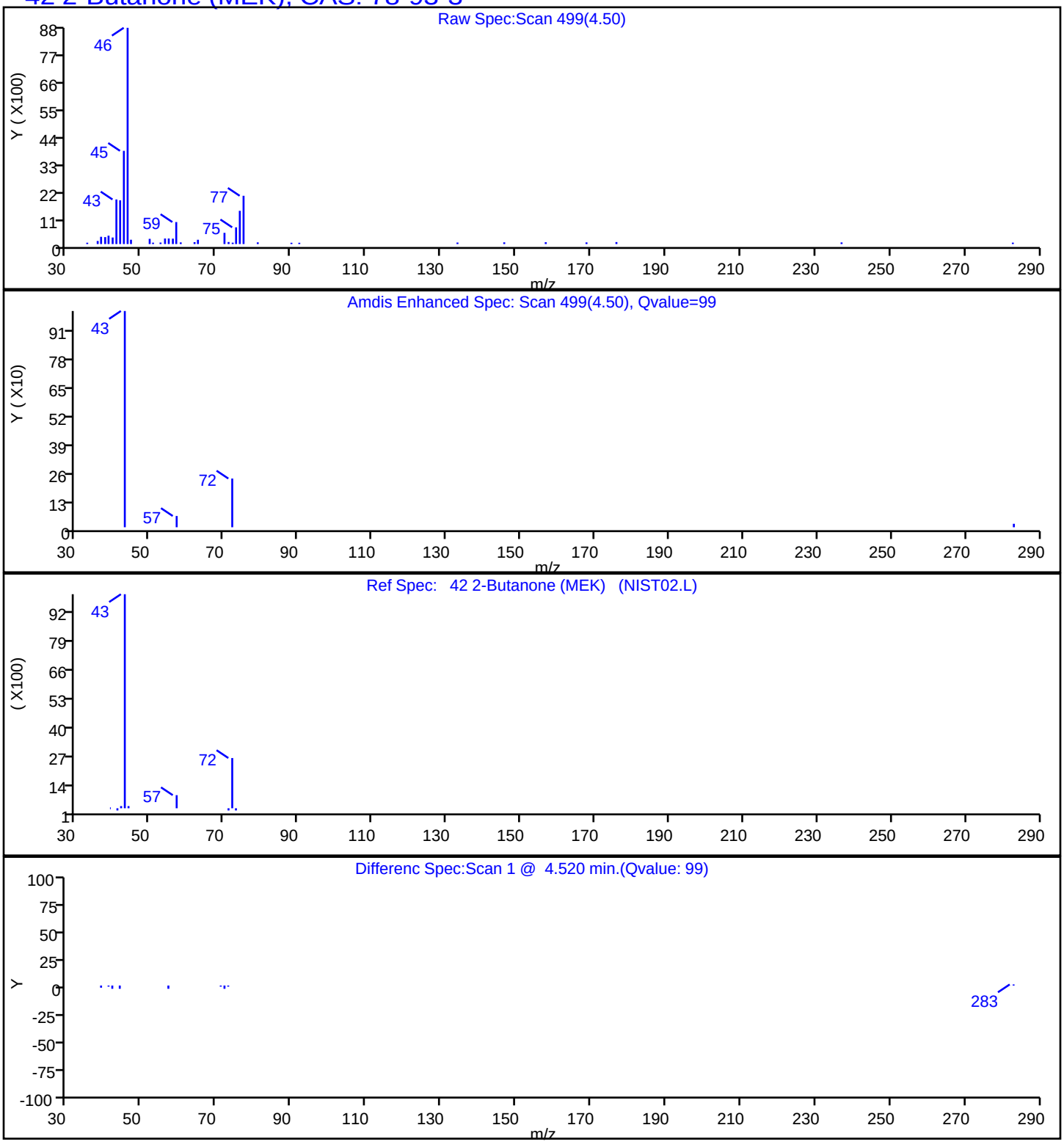
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

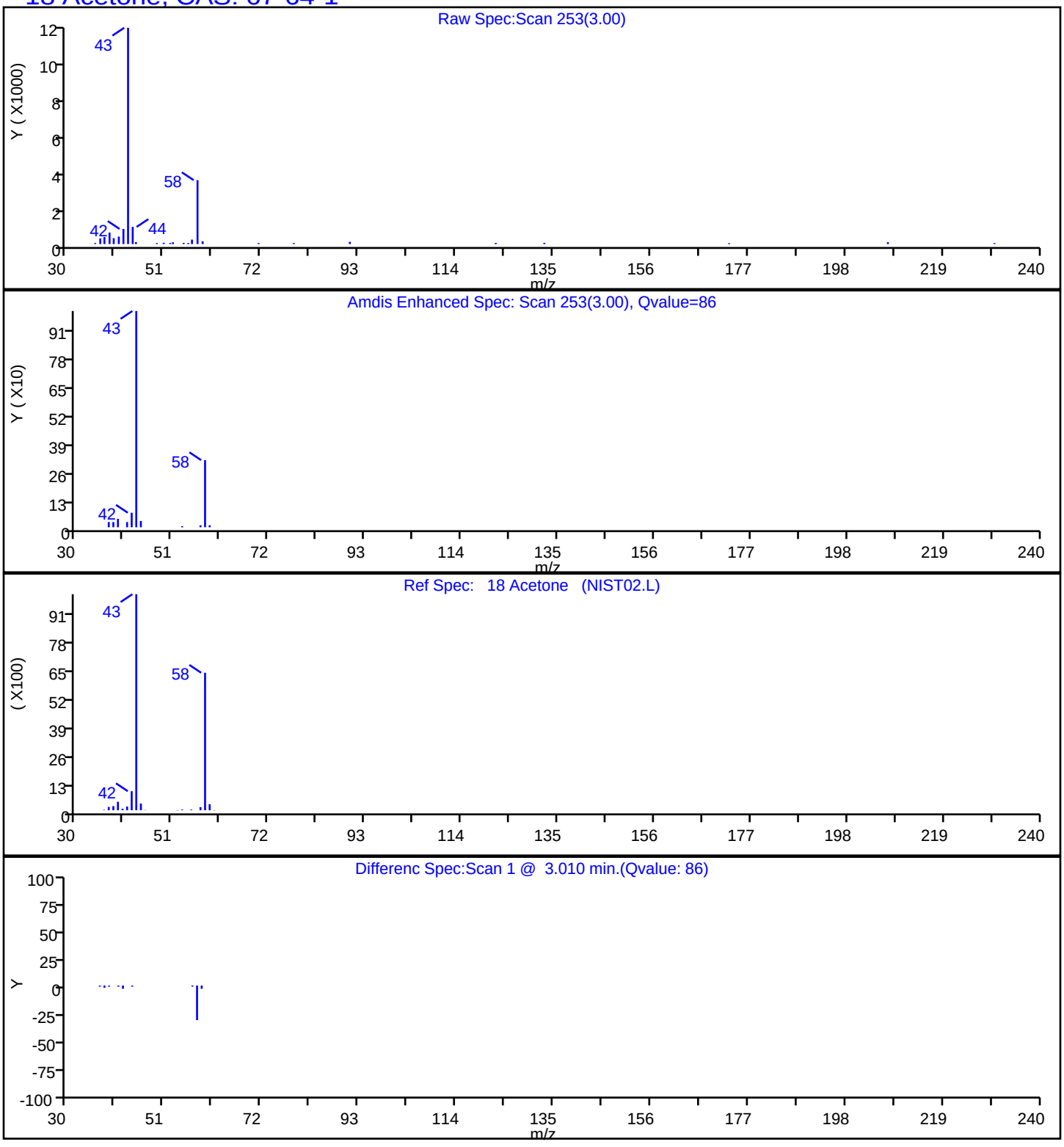
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D				
Injection Date:	14-Apr-2018 01:15:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153254-B-2-A	Lab Sample ID:	460-153254-2		
Client ID:	GC-MW-108D(SO)-59-60.5				
Operator ID:		ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D
Injection Date: 14-Apr-2018 01:15:30 Instrument ID: CVOAMS9
Lims ID: 460-153254-B-2-A Lab Sample ID: 460-153254-2
Client ID: GC-MW-108D(SO)-59-60.5
Operator ID: ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

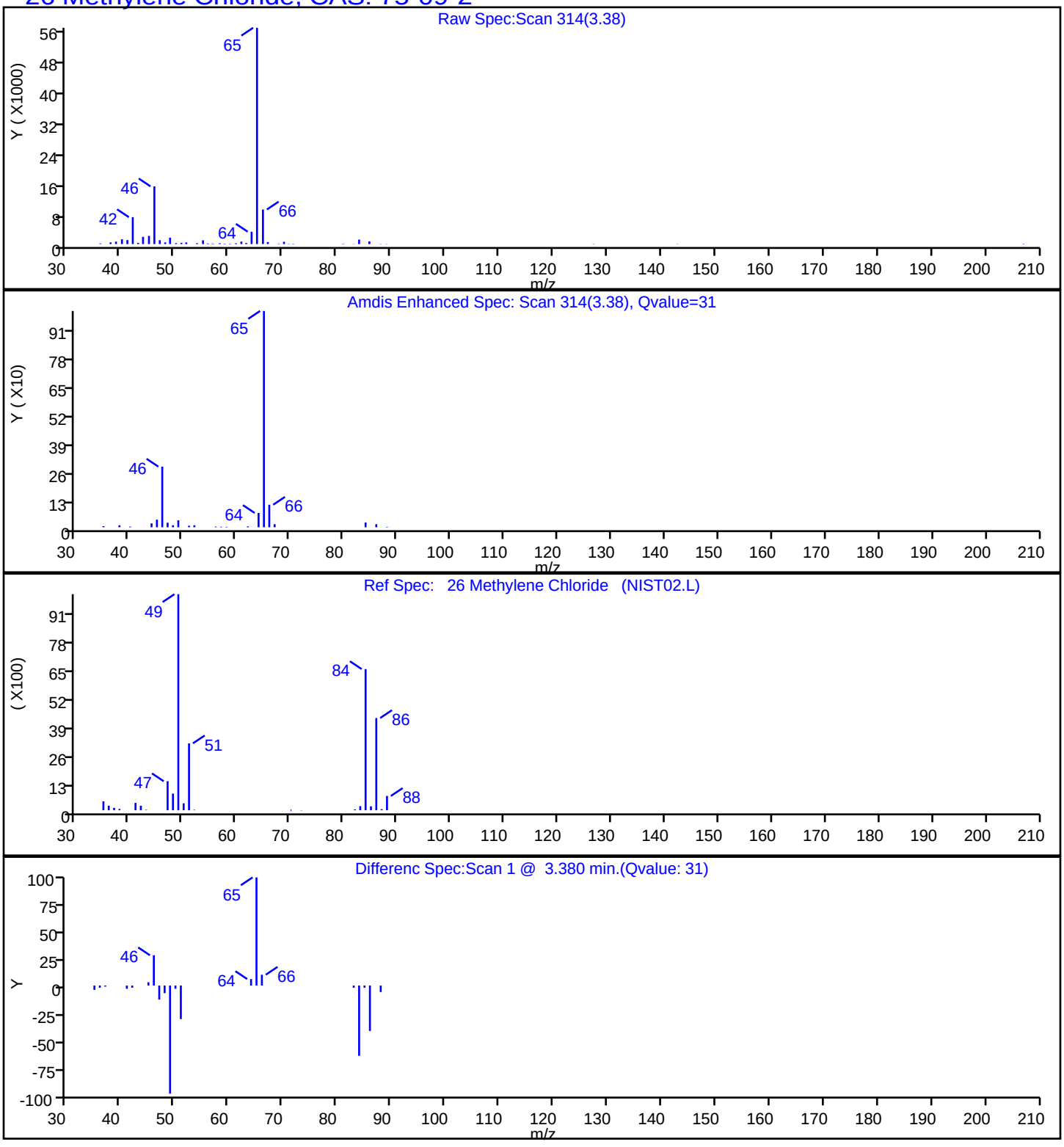
18 Acetone, CAS: 67-64-1



TestAmerica Edison

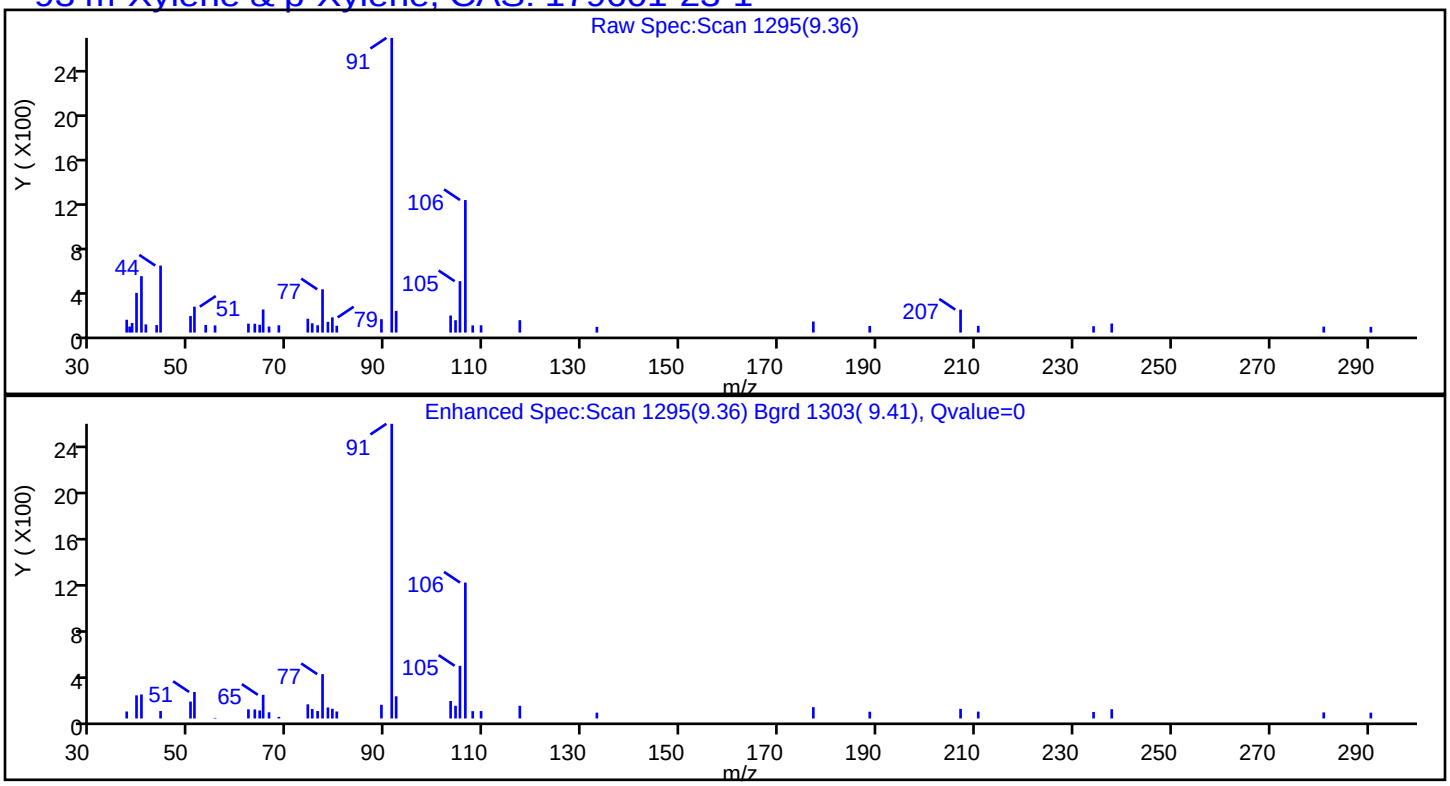
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D
Injection Date: 14-Apr-2018 01:15:30 Instrument ID: CVOAMS9
Lims ID: 460-153254-B-2-A Lab Sample ID: 460-153254-2
Client ID: GC-MW-108D(SO)-59-60.5
Operator ID: ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methylene Chloride, CAS: 75-09-2



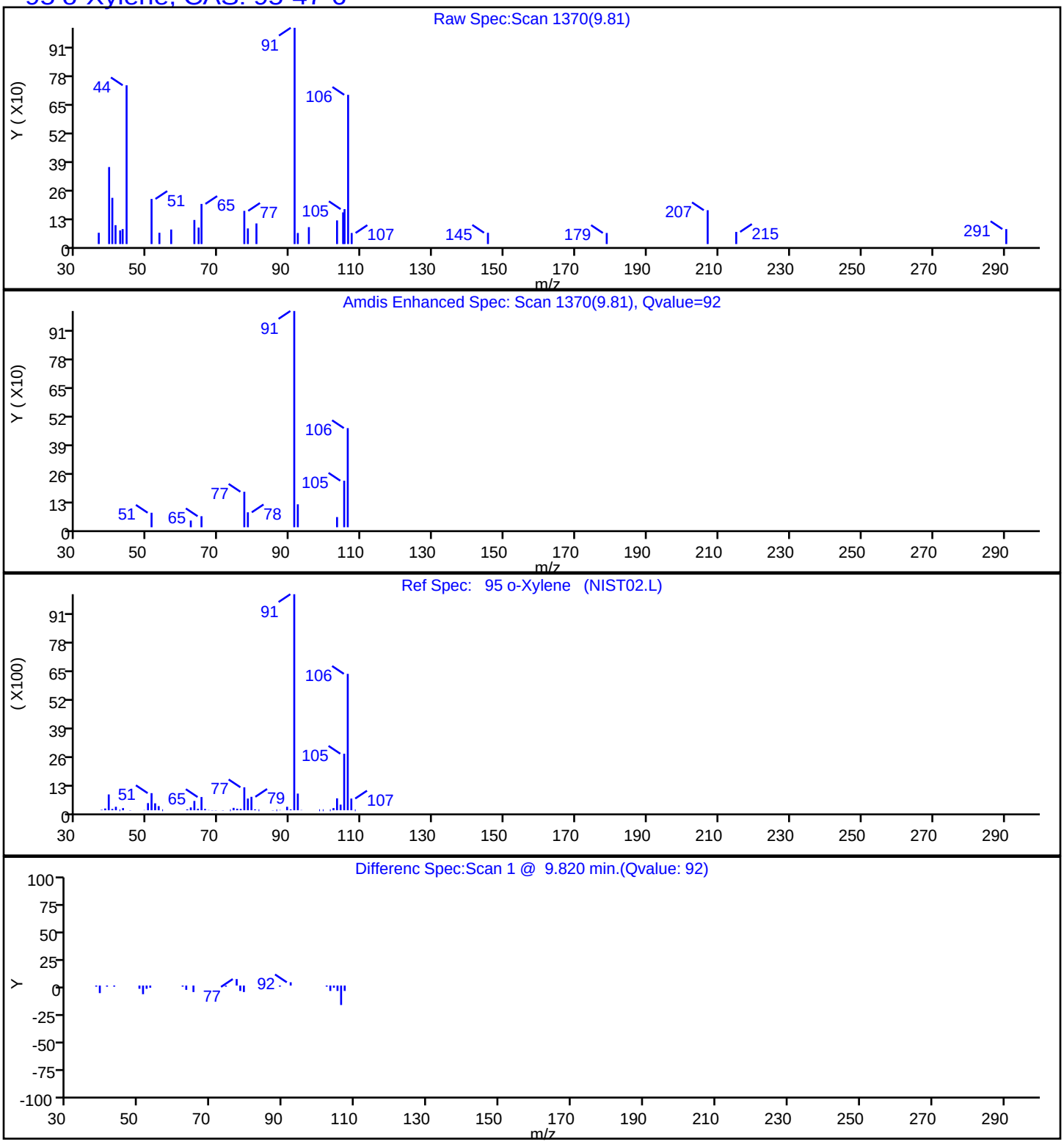
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D
Injection Date: 14-Apr-2018 01:15:30 Instrument ID: CVOAMS9
Lims ID: 460-153254-B-2-A Lab Sample ID: 460-153254-2
Client ID: GC-MW-108D(SO)-59-60.5
Operator ID: ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

93 m-Xylene & p-Xylene, CAS: 179601-23-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D
Injection Date: 14-Apr-2018 01:15:30 Instrument ID: CVOAMS9
Lims ID: 460-153254-B-2-A Lab Sample ID: 460-153254-2
Client ID: GC-MW-108D(SO)-59-60.5
Operator ID: ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 o-Xylene, CAS: 95-47-6



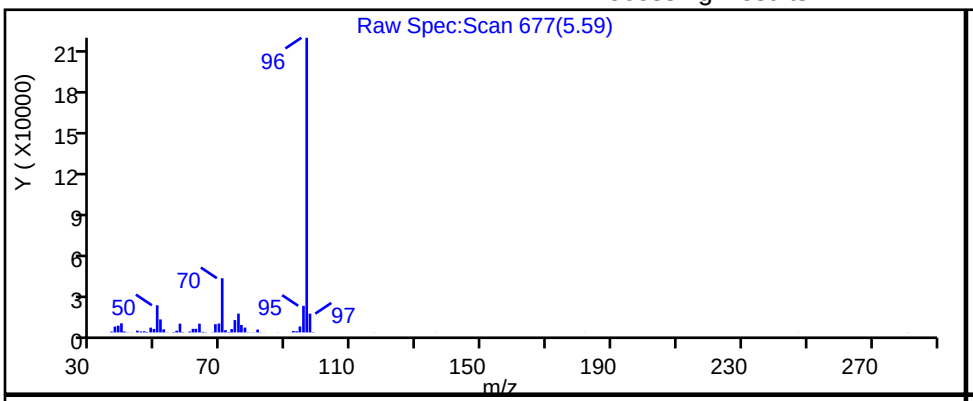
User Disabled Compound Report

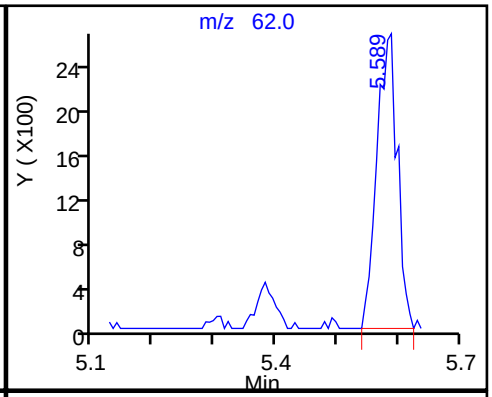
TestAmerica Edison

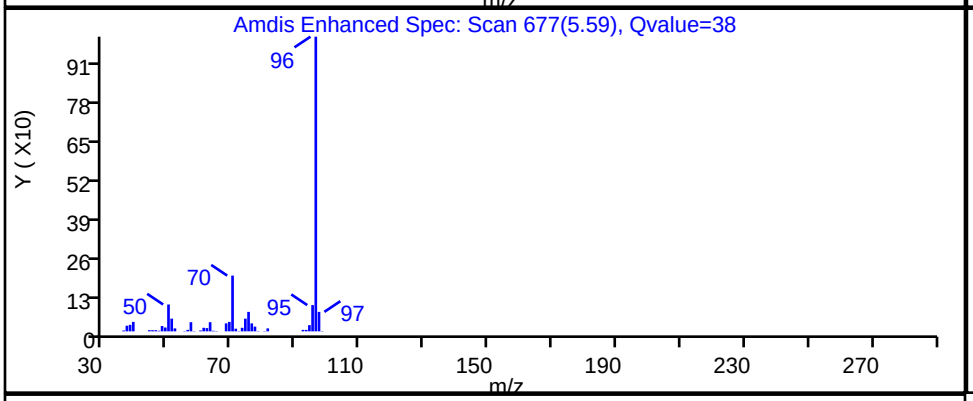
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D				
Injection Date:	14-Apr-2018 01:15:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153254-B-2-A	Lab Sample ID:	460-153254-2		
Client ID:	GC-MW-108D(SO)-59-60.5				
Operator ID:		ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

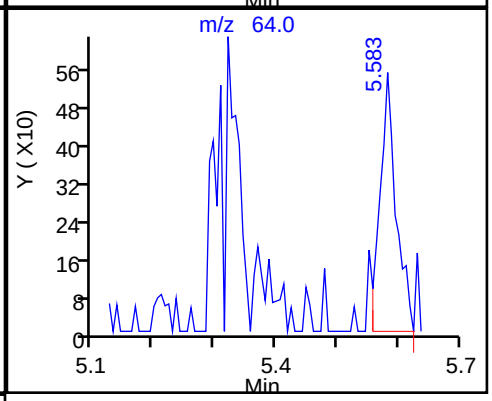
59 1,2-Dichloroethane, CAS: 107-06-2

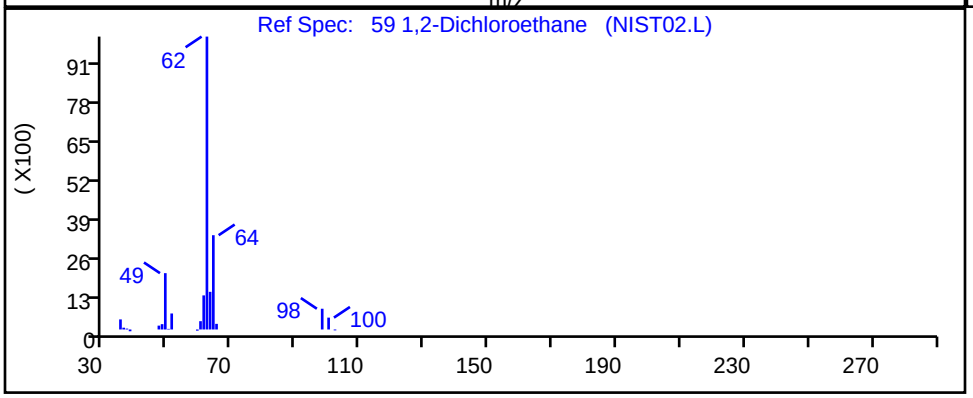
Processing Results











RT	Mass	Response	Amount
5.59	62.00	6078	1.489171
5.58	64.00	992	

Reviewer: delpolitov, 17-Apr-2018 12:06:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

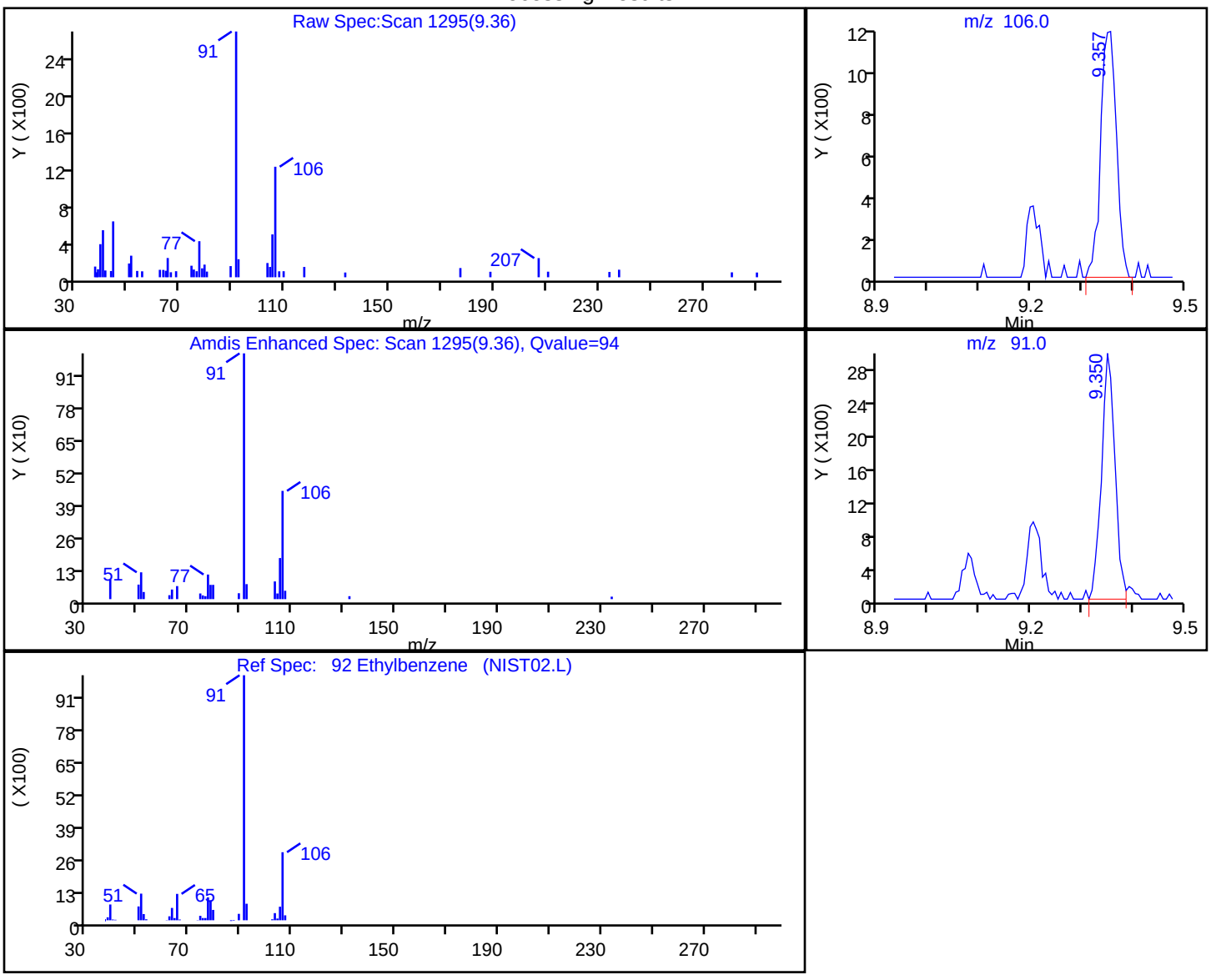
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81975.D				
Injection Date:	14-Apr-2018 01:15:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153254-B-2-A	Lab Sample ID:	460-153254-2		
Client ID:	GC-MW-108D(SO)-59-60.5				
Operator ID:		ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.36	106.00	2569	0.452353
9.35	91.00	5394	

Reviewer: delpolitov, 17-Apr-2018 12:06:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-110D(SO)-15-17 | Lab Sample ID: 460-153389-1

Matrix: Solid | Lab File ID: D48925.D

Analysis Method: 8260C | Date Collected: 04/05/2018 08:00

Sample wt/vol: 6.65(g) | Date Analyzed: 04/19/2018 21:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00085	U	0.00085	0.00020
79-34-5	1,1,2,2-Tetrachloroethane	0.00085	U	0.00085	0.00018
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00085	U	0.00085	0.00025
79-00-5	1,1,2-Trichloroethane	0.00085	U	0.00085	0.00015
75-34-3	1,1-Dichloroethane	0.00085	U	0.00085	0.00017
75-35-4	1,1-Dichloroethene	0.00085	U	0.00085	0.00019
87-61-6	1,2,3-Trichlorobenzene	0.00085	U	0.00085	0.00015
120-82-1	1,2,4-Trichlorobenzene	0.00085	U	0.00085	0.000078
96-12-8	1,2-Dibromo-3-Chloropropane	0.00085	U	0.00085	0.00039
95-50-1	1,2-Dichlorobenzene	0.00085	U	0.00085	0.00012
107-06-2	1,2-Dichloroethane	0.00085	U	0.00085	0.00025
78-87-5	1,2-Dichloropropane	0.00085	U	0.00085	0.00036
541-73-1	1,3-Dichlorobenzene	0.00085	U	0.00085	0.00013
106-46-7	1,4-Dichlorobenzene	0.00085	U	0.00085	0.000085
123-91-1	1,4-Dioxane	0.017	U	0.017	0.0078
78-93-3	2-Butanone (MEK)	0.0020	J	0.0042	0.00094
591-78-6	2-Hexanone	0.0042	U	0.0042	0.00066
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0042	U	0.0042	0.00056
67-64-1	Acetone	0.018	*	0.0042	0.0032
71-43-2	Benzene	0.00085	U	0.00085	0.00022
75-25-2	Bromoform	0.00085	U	0.00085	0.00036
74-83-9	Bromomethane	0.00085	U	0.00085	0.00040
75-15-0	Carbon disulfide	0.00085	U	0.00085	0.00023
56-23-5	Carbon tetrachloride	0.00085	U	0.00085	0.00015
108-90-7	Chlorobenzene	0.00085	U	0.00085	0.00015
74-97-5	Chlorobromomethane	0.00085	U	0.00085	0.00024
124-48-1	Chlorodibromomethane	0.00085	U	0.00085	0.00016
75-00-3	Chloroethane	0.00085	U	0.00085	0.00044
67-66-3	Chloroform	0.00085	U	0.00085	0.00027
74-87-3	Chloromethane	0.00085	U	0.00085	0.00037
156-59-2	cis-1,2-Dichloroethene	0.00085	U	0.00085	0.00013
10061-01-5	cis-1,3-Dichloropropene	0.00085	U	0.00085	0.00023
110-82-7	Cyclohexane	0.00085	U	0.00085	0.00019
75-27-4	Dichlorobromomethane	0.00085	U	0.00085	0.00022
75-71-8	Dichlorodifluoromethane	0.00085	U	0.00085	0.00029

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-110D(SO)-15-17 | Lab Sample ID: 460-153389-1

Matrix: Solid | Lab File ID: D48925.D

Analysis Method: 8260C | Date Collected: 04/05/2018 08:00

Sample wt/vol: 6.65(g) | Date Analyzed: 04/19/2018 21:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00085	U	0.00085	0.00017
106-93-4	Ethylene Dibromide	0.00085	U	0.00085	0.00015
98-82-8	Isopropylbenzene	0.00085	U	0.00085	0.00011
79-20-9	Methyl acetate	0.0042	U	0.0042	0.0036
1634-04-4	Methyl tert-butyl ether	0.00085	U	0.00085	0.00011
108-87-2	Methylcyclohexane	0.00085	U	0.00085	0.00014
75-09-2	Methylene Chloride	0.00024	J B	0.00085	0.00014
179601-23-1	m-Xylene & p-Xylene	0.00019	J	0.00085	0.00015
95-47-6	o-Xylene	0.00085	U	0.00085	0.000080
100-42-5	Styrene	0.00085	U	0.00085	0.00010
127-18-4	Tetrachloroethene	0.00085	U	0.00085	0.00012
108-88-3	Toluene	0.00085	U	0.00085	0.00053
156-60-5	trans-1,2-Dichloroethene	0.00085	U	0.00085	0.00021
10061-02-6	trans-1,3-Dichloropropene	0.00085	U	0.00085	0.00023
79-01-6	Trichloroethene	0.00085	U	0.00085	0.00012
75-69-4	Trichlorofluoromethane	0.00085	U	0.00085	0.00034
75-01-4	Vinyl chloride	0.00085	U	0.00085	0.00046

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		78-135
460-00-4	4-Bromofluorobenzene	97		67-126
1868-53-7	Dibromofluoromethane (Surr)	80		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-110D(SO)-15-17 Lab Sample ID: 460-153389-1

Matrix: Solid Lab File ID: D48925.D

Analysis Method: 8260C Date Collected: 04/05/2018 08:00

Sample wt/vol: 6.65(g) Date Analyzed: 04/19/2018 21:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 Level: (low/med) Low

Analysis Batch No.: 512479 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48925.D
Lims ID: 460-153389-A-1-A
Client ID: GC-MW-110D(SO)-15-17
Sample Type: Client
Inject. Date: 19-Apr-2018 21:03:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153389-A-1-A
Misc. Info.: 460-0070668-009
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 17:13:49 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: starzecm Date: 19-Apr-2018 21:38:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.131	3.130	0.000	86	26237	21.8	
26 Methylene Chloride	84	3.563	3.563	0.000	35	1159	0.2832	
* 27 TBA-d9 (IS)	65	3.569	3.576	-0.007	38	338676	1000.0	
* 38 2-Butanone-d5	46	4.880	4.886	-0.006	0	291209	250.0	
41 2-Butanone (MEK)	72	4.947	4.953	-0.006	99	864	2.36	
$ 51 Dibromofluoromethane (Surr	113	5.465	5.472	-0.007	95	139950	39.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.898	5.904	-0.006	96	147872	40.1	
* 61 Fluorobenzene	96	6.234	6.240	-0.006	98	511265	50.0	
* 67 1,4-Dioxane-d8	96	7.081	7.087	-0.006	0	19800	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.020	8.020	0.000	98	452912	48.5	
* 89 Chlorobenzene-d5	117	9.355	9.361	-0.006	89	302983	50.0	
93 m-Xylene & p-Xylene	106	9.544	9.550	-0.006	95	798	0.2218	
$ 100 4-Bromofluorobenzene	174	10.312	10.318	-0.006	0	118736	48.6	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.184	-0.006	97	157216	50.0	

Reagents:

8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent

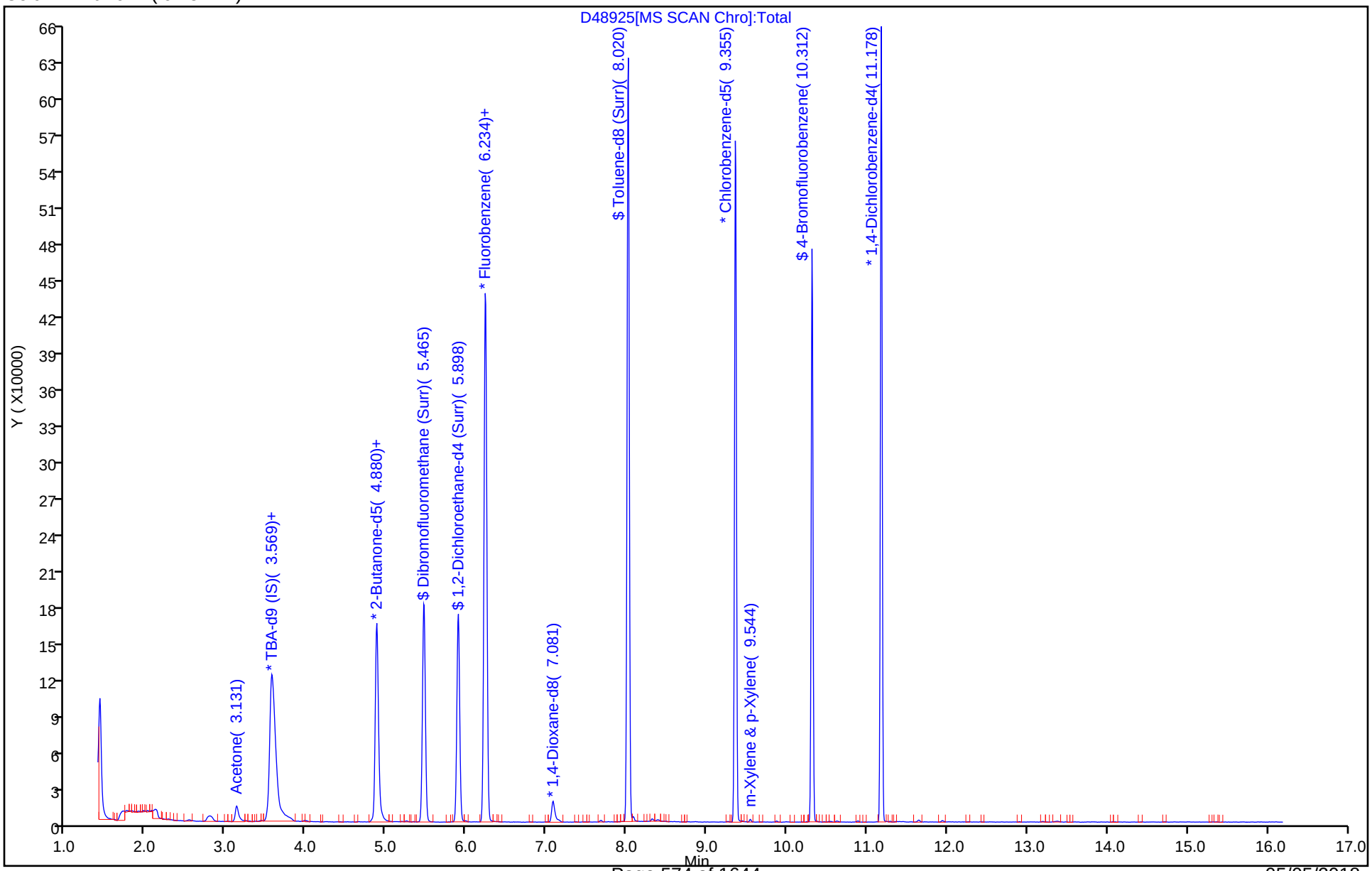
Report Date: 23-Apr-2018 17:14:04 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48925.D

Injection Date:	19-Apr-2018 21:03:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	460-153389-A-1-A	Lab Sample ID:	460-153389-1	Worklist Smp#:	9
Client ID:	GC-MW-110D(SO)-15-17				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

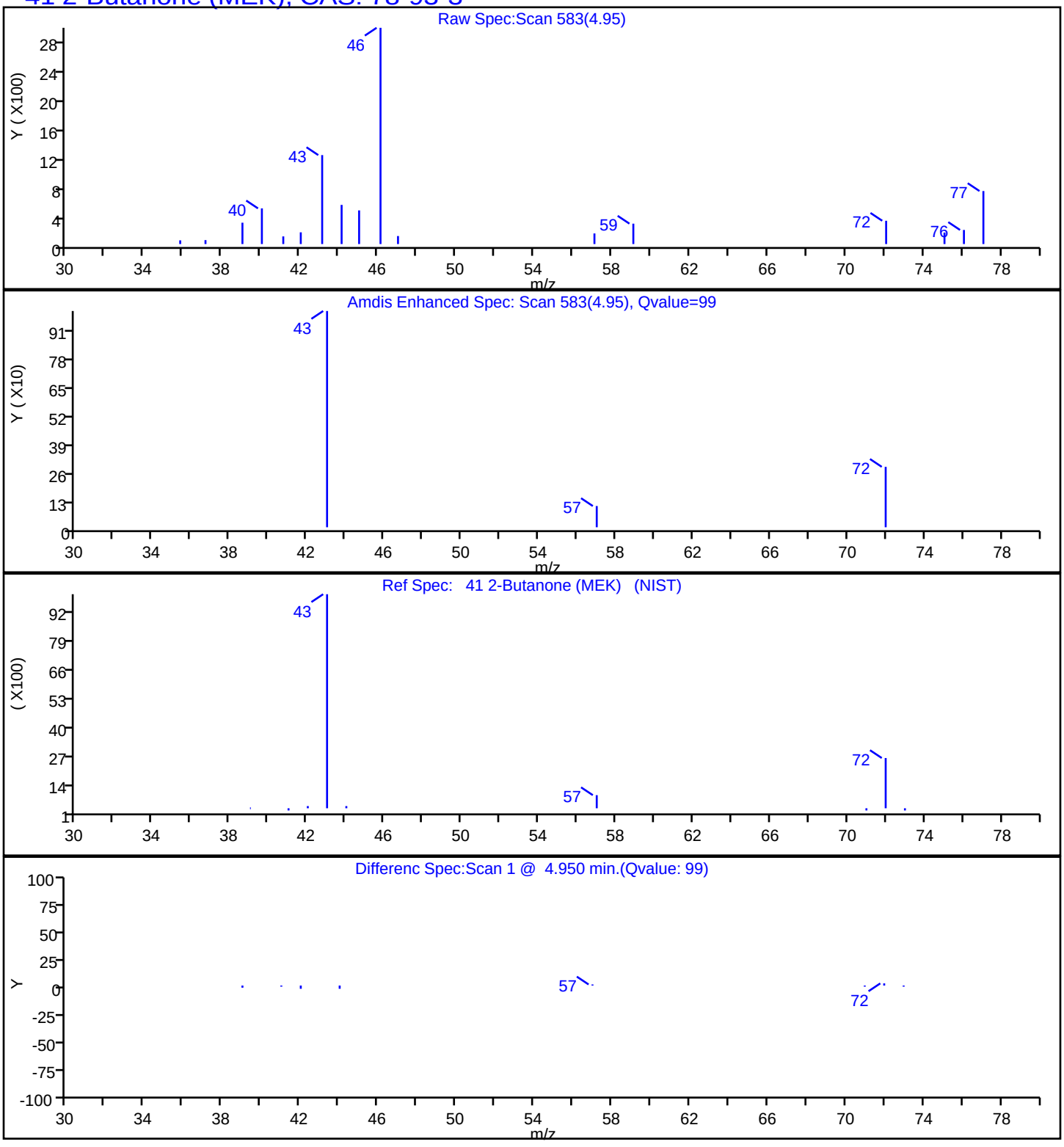
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48925.D		
Injection Date:	19-Apr-2018 21:03:30	Instrument ID:	CVOAMS4
Lims ID:	460-153389-A-1-A	Lab Sample ID:	460-153389-1
Client ID:	GC-MW-110D(SO)-15-17		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

41 2-Butanone (MEK), CAS: 78-93-3

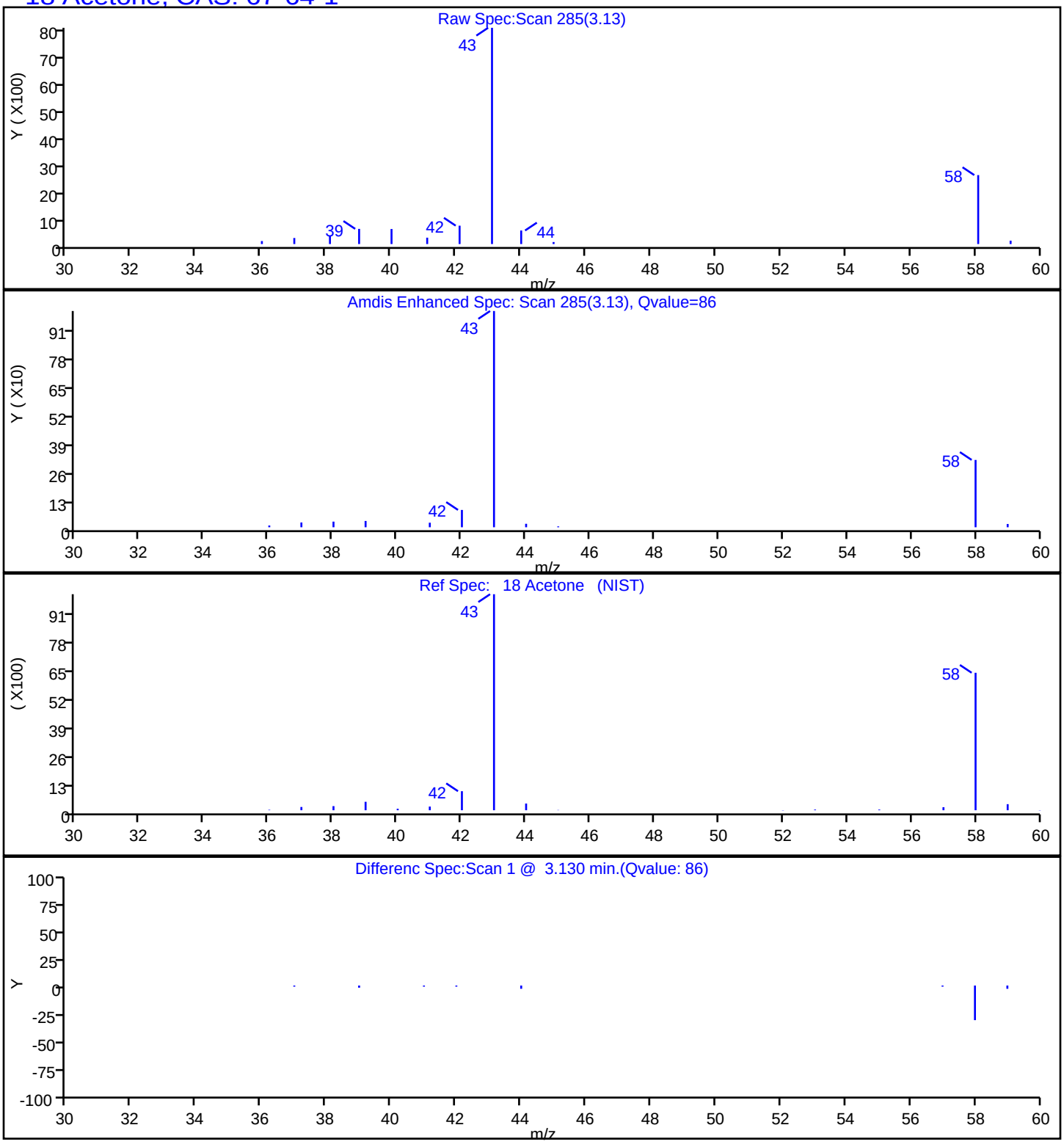


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48925.D

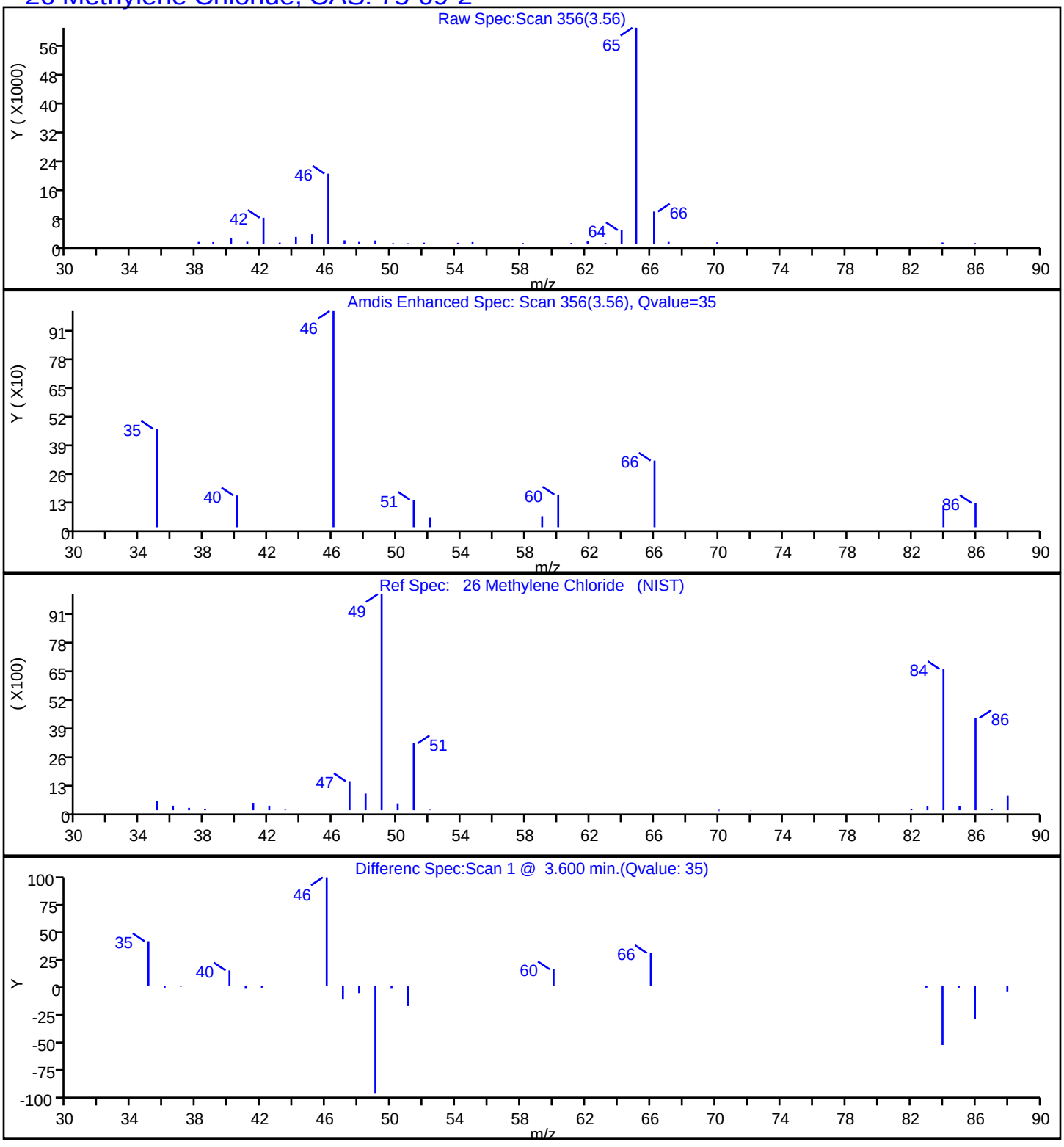
Injection Date:	19-Apr-2018 21:03:30	Instrument ID:	CVOAMS4
Lims ID:	460-153389-A-1-A	Lab Sample ID:	460-153389-1
Client ID:	GC-MW-110D(SO)-15-17		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48925.D
Injection Date: 19-Apr-2018 21:03:30 Instrument ID: CVOAMS4
Lims ID: 460-153389-A-1-A Lab Sample ID: 460-153389-1
Client ID: GC-MW-110D(SO)-15-17
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

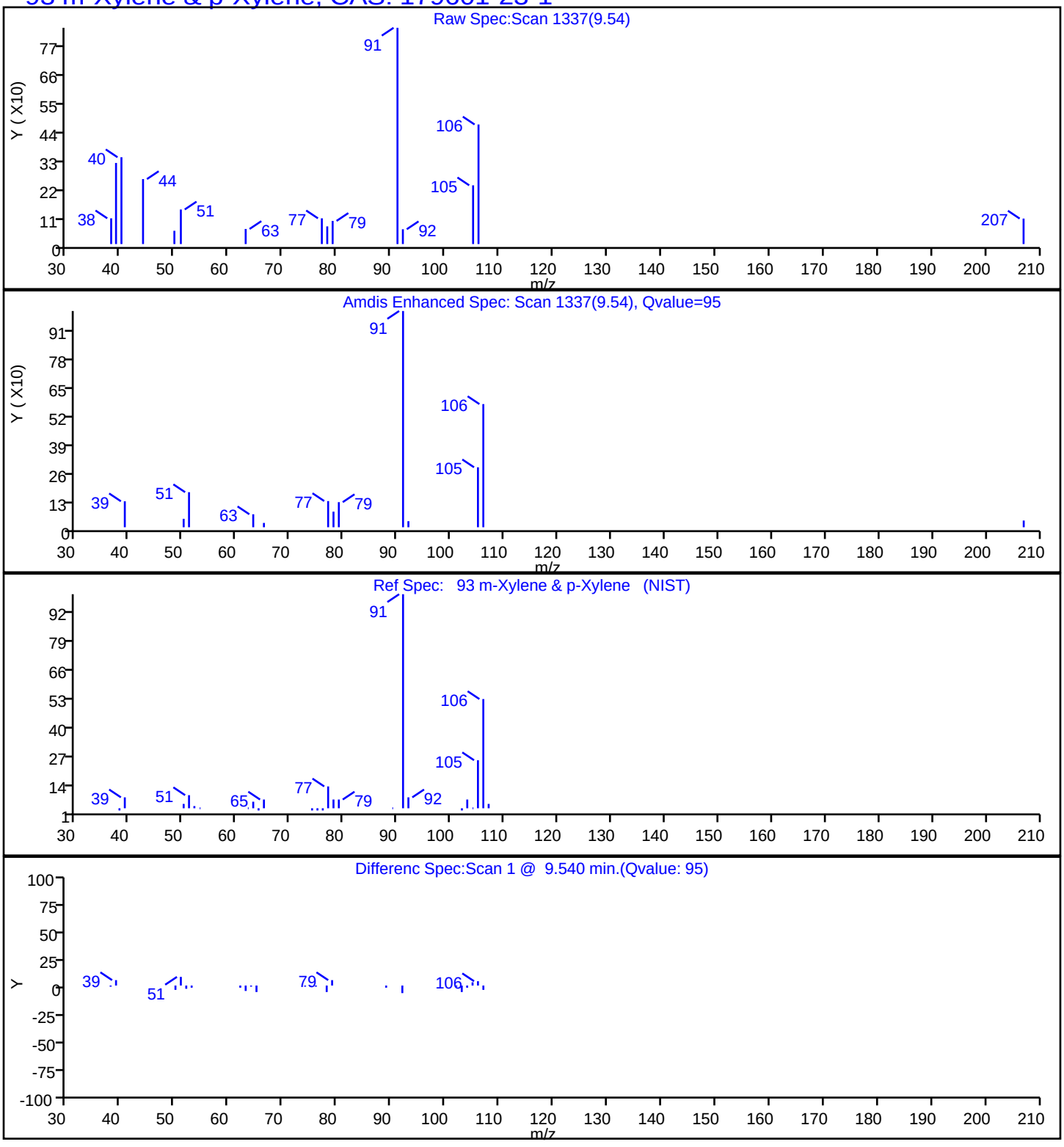
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48925.D				
Injection Date:	19-Apr-2018 21:03:30	Instrument ID:	CVOAMS4		
Lims ID:	460-153389-A-1-A	Lab Sample ID:	460-153389-1		
Client ID:	GC-MW-110D(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1



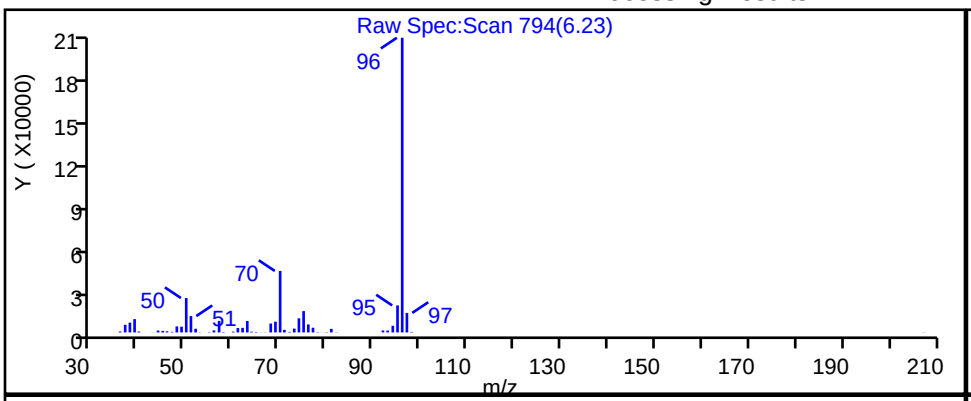
User Disabled Compound Report

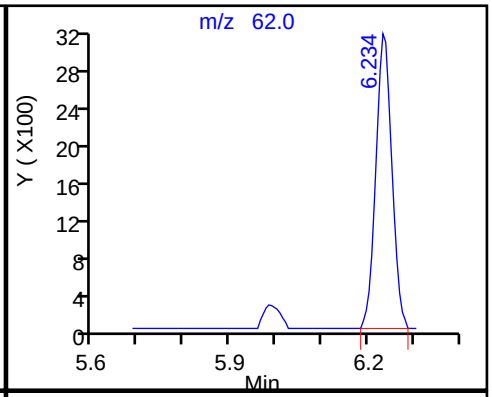
TestAmerica Edison

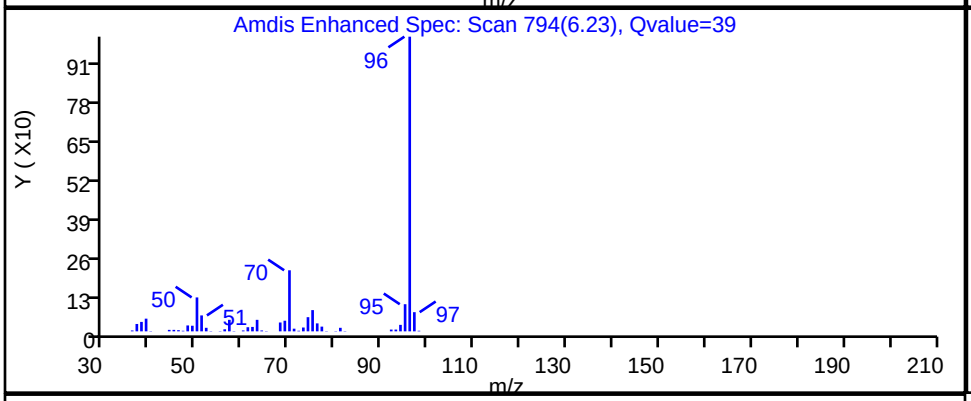
Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48925.D				
Injection Date:	19-Apr-2018 21:03:30	Instrument ID:	CVOAMS4		
Lims ID:	460-153389-A-1-A	Lab Sample ID:	460-153389-1		
Client ID:	GC-MW-110D(SO)-15-17				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

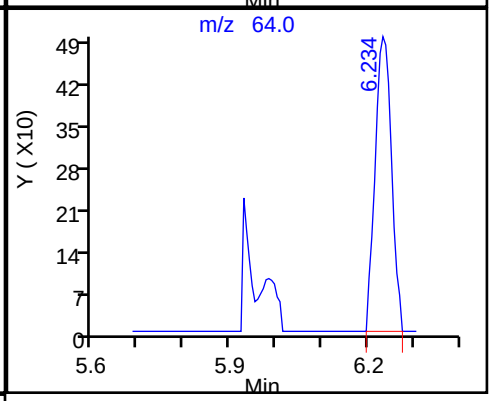
59 1,2-Dichloroethane, CAS: 107-06-2

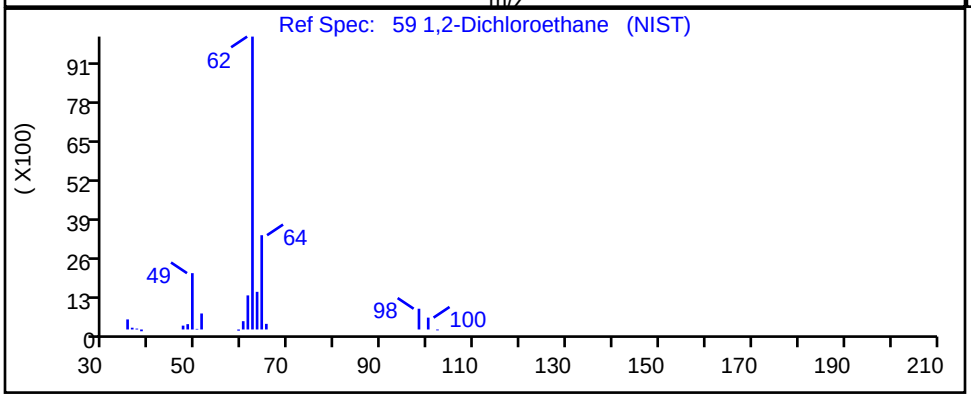
Processing Results











RT	Mass	Response	Amount
6.23	62.00	7623	1.924941
6.23	64.00	1237	

Reviewer: starzecm, 19-Apr-2018 21:38:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

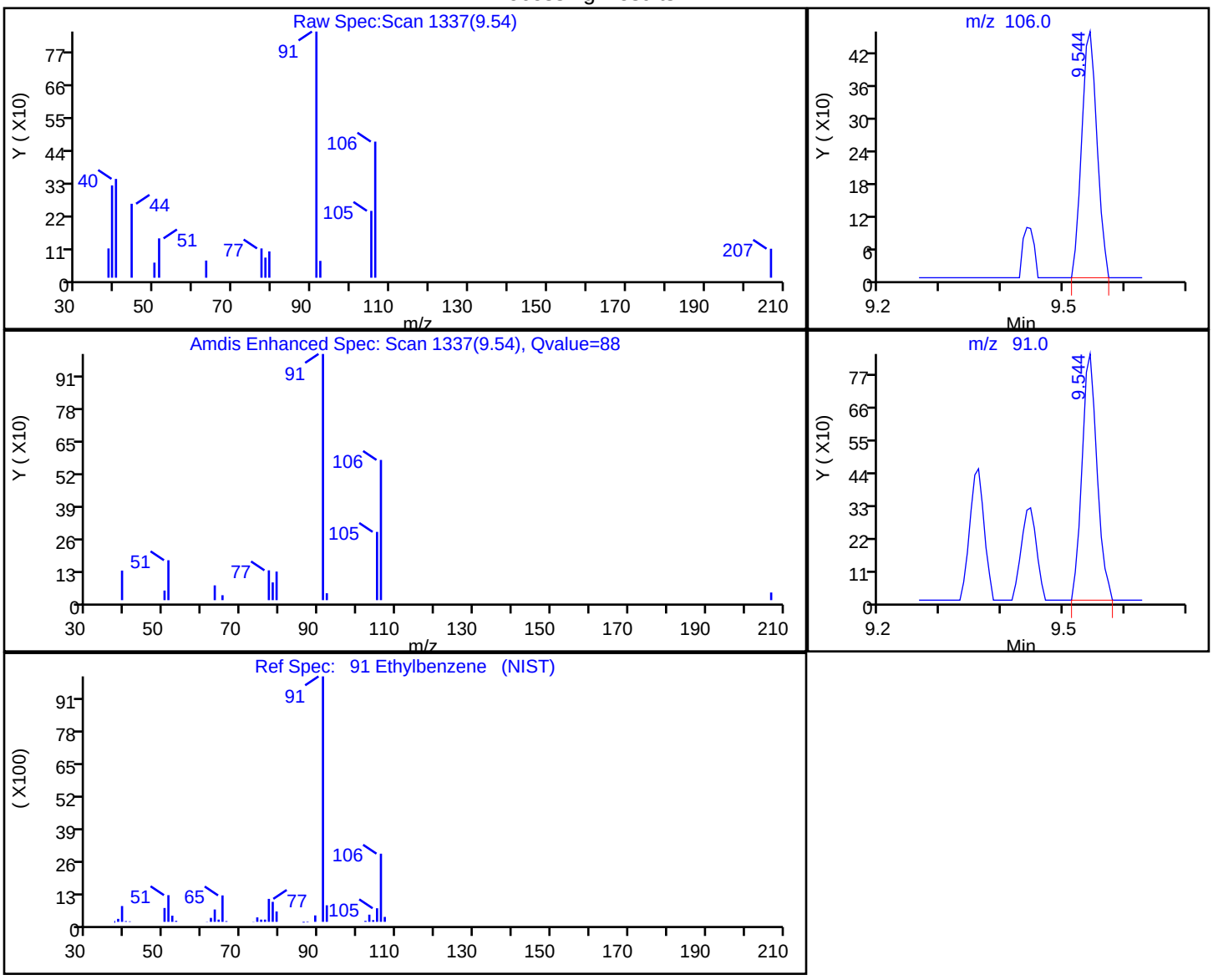
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48925.D		
Injection Date:	19-Apr-2018 21:03:30	Instrument ID:	CVOAMS4
Lims ID:	460-153389-A-1-A	Lab Sample ID:	460-153389-1
Client ID:	GC-MW-110D(SO)-15-17		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

91 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.54	106.00	798	0.267505
9.54	91.00	1422	

Reviewer: starzecm, 19-Apr-2018 21:38:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GE-MW-110D(SO)-(69-70) | Lab Sample ID: 460-153515-1

Matrix: Solid | Lab File ID: K82069.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 8.658(g) | Date Analyzed: 04/16/2018 21:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00068	U	0.00068	0.00016
79-34-5	1,1,2,2-Tetrachloroethane	0.00068	U	0.00068	0.00015
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00068	U	0.00068	0.00020
79-00-5	1,1,2-Trichloroethane	0.00068	U	0.00068	0.00012
75-34-3	1,1-Dichloroethane	0.00068	U	0.00068	0.00014
75-35-4	1,1-Dichloroethene	0.00068	U	0.00068	0.00015
87-61-6	1,2,3-Trichlorobenzene	0.00068	U	0.00068	0.00012
120-82-1	1,2,4-Trichlorobenzene	0.00068	U	0.00068	0.000062
96-12-8	1,2-Dibromo-3-Chloropropane	0.00068	U	0.00068	0.00031
95-50-1	1,2-Dichlorobenzene	0.00068	U	0.00068	0.000098
107-06-2	1,2-Dichloroethane	0.00068	U	0.00068	0.00020
78-87-5	1,2-Dichloropropane	0.00068	U	0.00068	0.00029
541-73-1	1,3-Dichlorobenzene	0.00068	U	0.00068	0.00011
106-46-7	1,4-Dichlorobenzene	0.00068	U	0.00068	0.000068
123-91-1	1,4-Dioxane	0.014	U	0.014	0.0062
78-93-3	2-Butanone (MEK)	0.0034	U	0.0034	0.00075
591-78-6	2-Hexanone	0.0034	U	0.0034	0.00053
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0034	U	0.0034	0.00045
67-64-1	Acetone	0.0045	B	0.0034	0.0026
71-43-2	Benzene	0.00068	U	0.00068	0.00017
75-25-2	Bromoform	0.00068	U	0.00068	0.00029
74-83-9	Bromomethane	0.00068	U	0.00068	0.00032
75-15-0	Carbon disulfide	0.00068	U	0.00068	0.00018
56-23-5	Carbon tetrachloride	0.00068	U *	0.00068	0.00012
108-90-7	Chlorobenzene	0.00068	U	0.00068	0.00012
74-97-5	Chlorobromomethane	0.00068	U	0.00068	0.00019
124-48-1	Chlorodibromomethane	0.00068	U	0.00068	0.00013
75-00-3	Chloroethane	0.00068	U	0.00068	0.00035
67-66-3	Chloroform	0.00068	U	0.00068	0.00022
74-87-3	Chloromethane	0.00068	U	0.00068	0.00029
156-59-2	cis-1,2-Dichloroethene	0.00068	U	0.00068	0.00010
10061-01-5	cis-1,3-Dichloropropene	0.00068	U	0.00068	0.00019
110-82-7	Cyclohexane	0.00068	U	0.00068	0.00015
75-27-4	Dichlorobromomethane	0.00068	U	0.00068	0.00017
75-71-8	Dichlorodifluoromethane	0.00068	U	0.00068	0.00023

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GE-MW-110D(SO)-(69-70) | Lab Sample ID: 460-153515-1

Matrix: Solid | Lab File ID: K82069.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 8.658(g) | Date Analyzed: 04/16/2018 21:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00068	U	0.00068	0.00013
106-93-4	Ethylene Dibromide	0.00068	U	0.00068	0.00012
98-82-8	Isopropylbenzene	0.00068	U	0.00068	0.000085
79-20-9	Methyl acetate	0.0034	U *	0.0034	0.0029
1634-04-4	Methyl tert-butyl ether	0.00068	U	0.00068	0.000085
108-87-2	Methylcyclohexane	0.00068	U	0.00068	0.00011
75-09-2	Methylene Chloride	0.00065	J	0.00068	0.00011
179601-23-1	m-Xylene & p-Xylene	0.00021	J	0.00068	0.00012
95-47-6	o-Xylene	0.000094	J	0.00068	0.000064
100-42-5	Styrene	0.00068	U	0.00068	0.000083
127-18-4	Tetrachloroethene	0.00068	U	0.00068	0.000097
108-88-3	Toluene	0.00068	U	0.00068	0.00042
156-60-5	trans-1,2-Dichloroethene	0.00068	U	0.00068	0.00017
10061-02-6	trans-1,3-Dichloropropene	0.00068	U	0.00068	0.00018
79-01-6	Trichloroethene	0.00068	U	0.00068	0.000098
75-69-4	Trichlorofluoromethane	0.00068	U	0.00068	0.00028
75-01-4	Vinyl chloride	0.00068	U	0.00068	0.00037

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		78-135
460-00-4	4-Bromofluorobenzene	114		67-126
1868-53-7	Dibromofluoromethane (Surr)	126		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GE-MW-110D(SO)-(69-70) | Lab Sample ID: 460-153515-1

Matrix: Solid | Lab File ID: K82069.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 8.658(g) | Date Analyzed: 04/16/2018 21:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D
Lims ID: 460-153515-B-1-A
Client ID: GE-MW-110D(SO)-(69-70)
Sample Type: Client
Inject. Date: 16-Apr-2018 21:52:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153515-B-1-A
Misc. Info.: 460-0070455-010
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 14:32:52 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: tupayachia Date: 17-Apr-2018 09:19:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.016	3.004	0.012	88	7244	6.59	
* 25 TBA-d9 (IS)	65	3.388	3.376	0.012	0	409884	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	32	4210	0.9562	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	257216	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	202557	62.9	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.309	0.006	0	185357	60.4	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	514131	50.0	
* 67 1,4-Dioxane-d8	96	6.296	6.284	0.012	0	33066	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	678484	49.9	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	437114	50.0	
93 m-Xylene & p-Xylene	106	9.357	9.350	0.007	0	2255	0.3051	a
95 o-Xylene	106	9.826	9.820	0.006	46	1043	0.1379	a
$ 100 4-Bromofluorobenzene	174	10.424	10.423	0.001	94	211067	57.1	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	260247	50.0	
S 131 Xylenes, Total	100				0		0.4431	
S 132 Total BTEX	1				0		0.4431	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

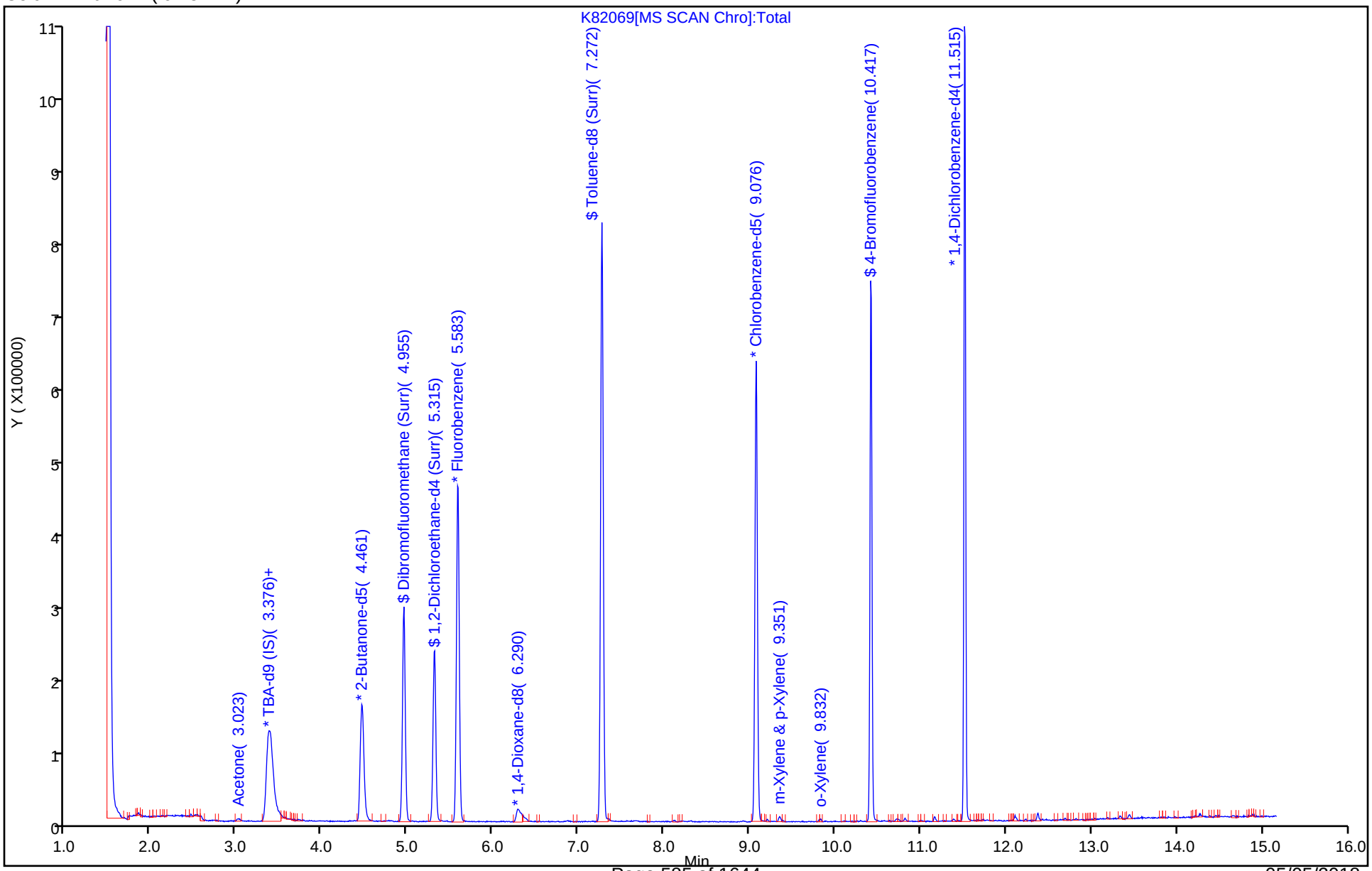
Report Date: 17-Apr-2018 14:32:53 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D

Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1	Worklist Smp#:	10
Client ID:	GE-MW-110D(SO)-(69-70)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

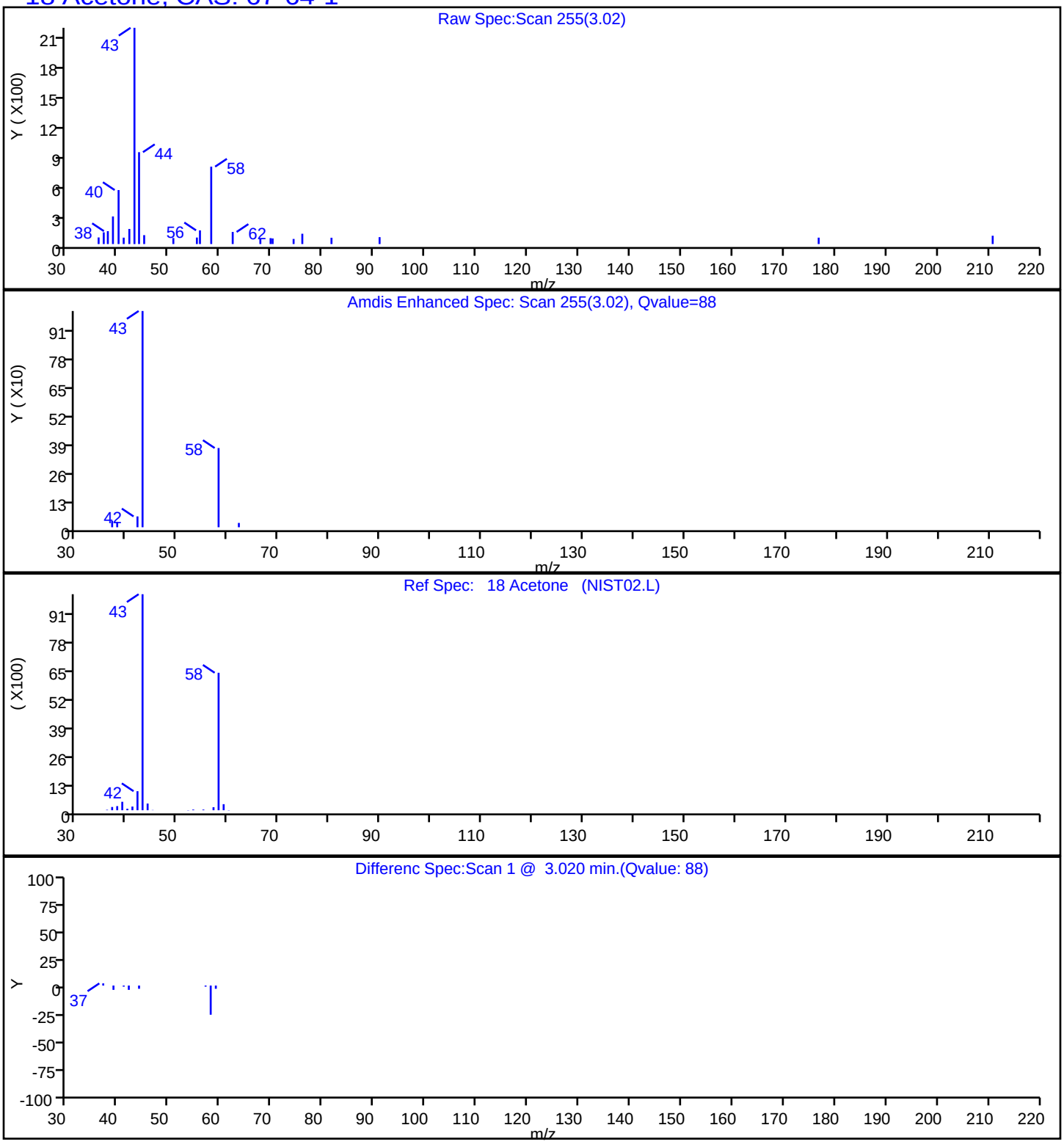
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D				
Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1		
Client ID:	GE-MW-110D(SO)-(69-70)				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



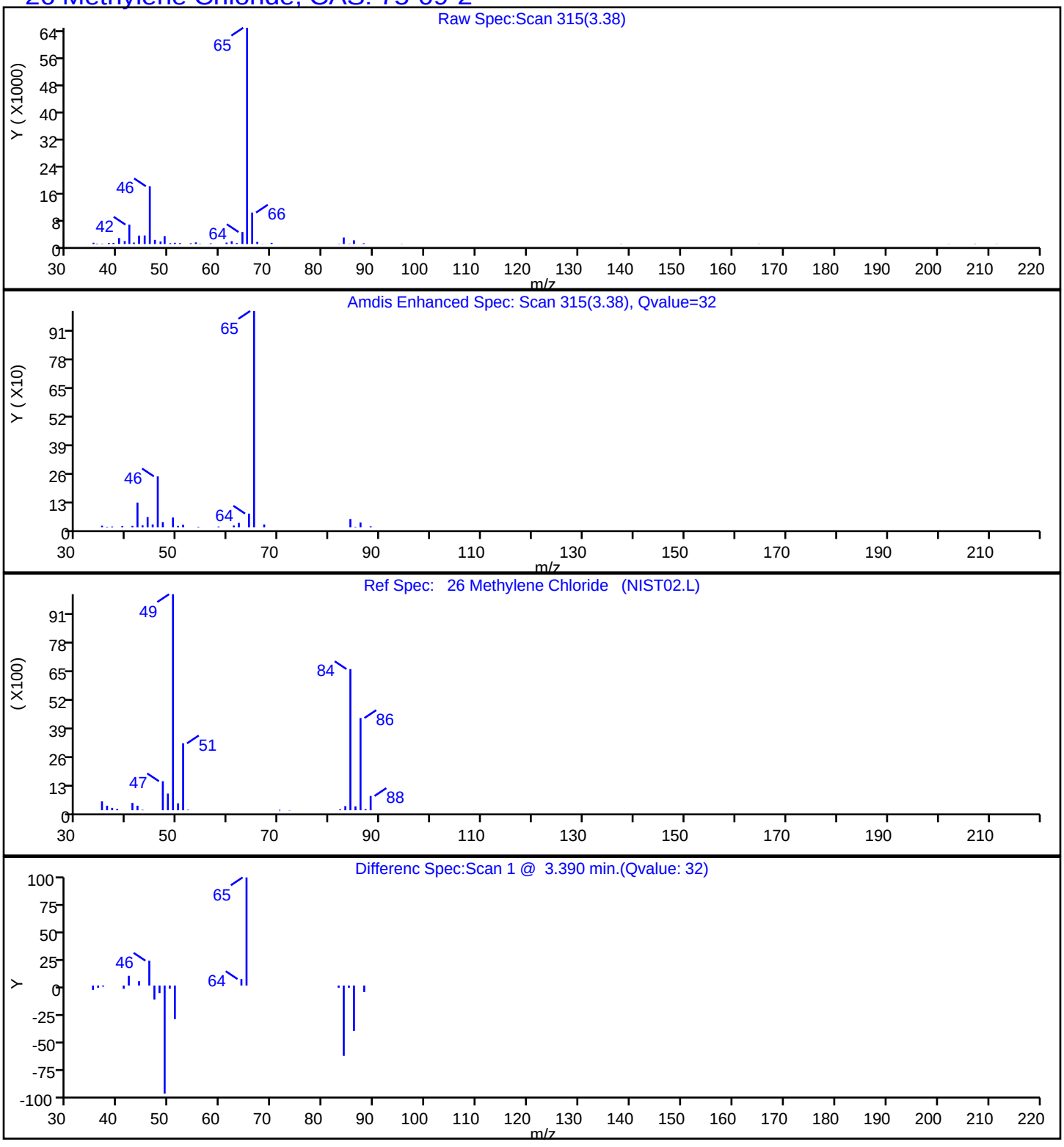
Report Date: 17-Apr-2018 14:32:53 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D

Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1
Client ID:	GE-MW-110D(SO)-(69-70)		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

26 Methylene Chloride, CAS: 75-09-2

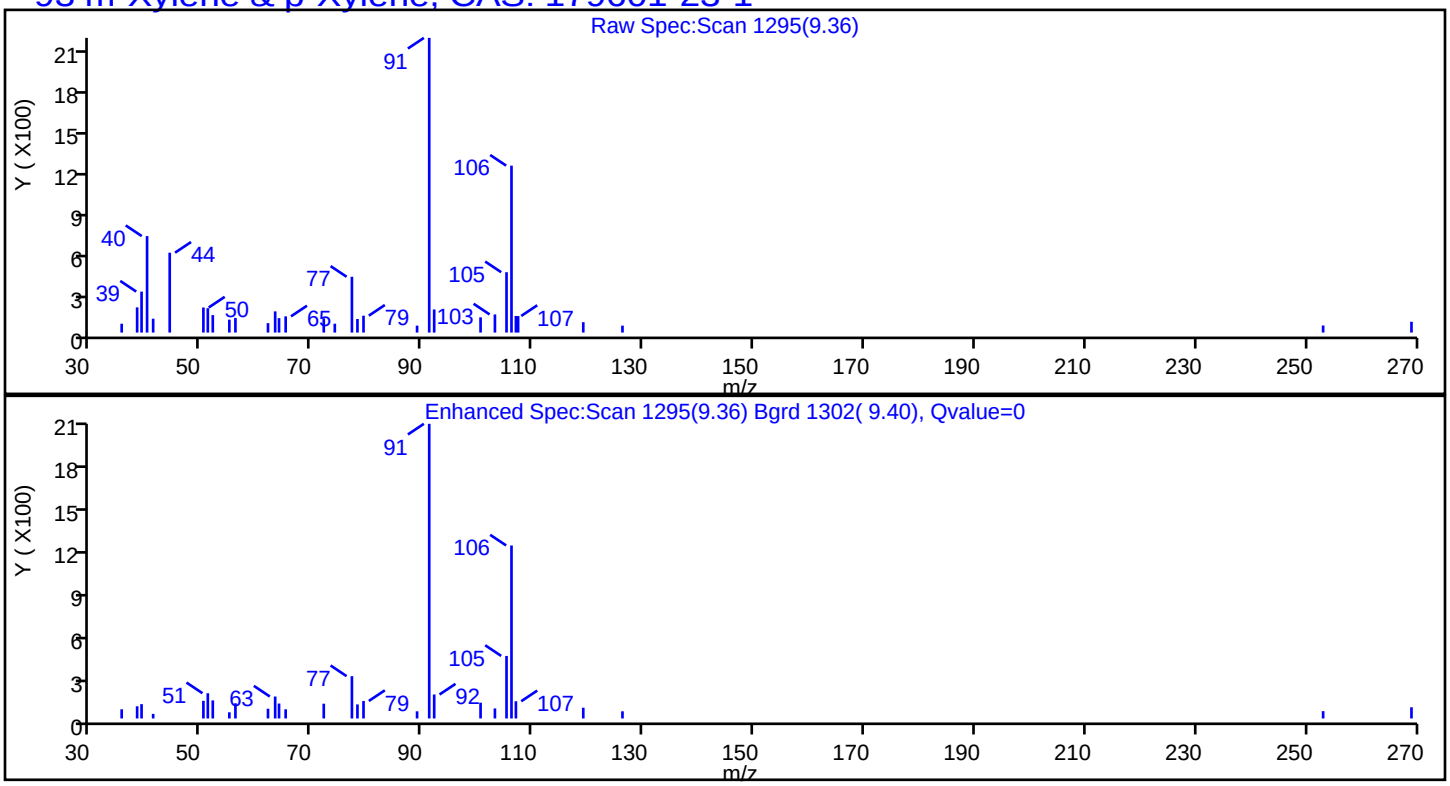


Report Date: 17-Apr-2018 14:32:53 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D				
Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1		
Client ID:	GE-MW-110D(SO)-(69-70)				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

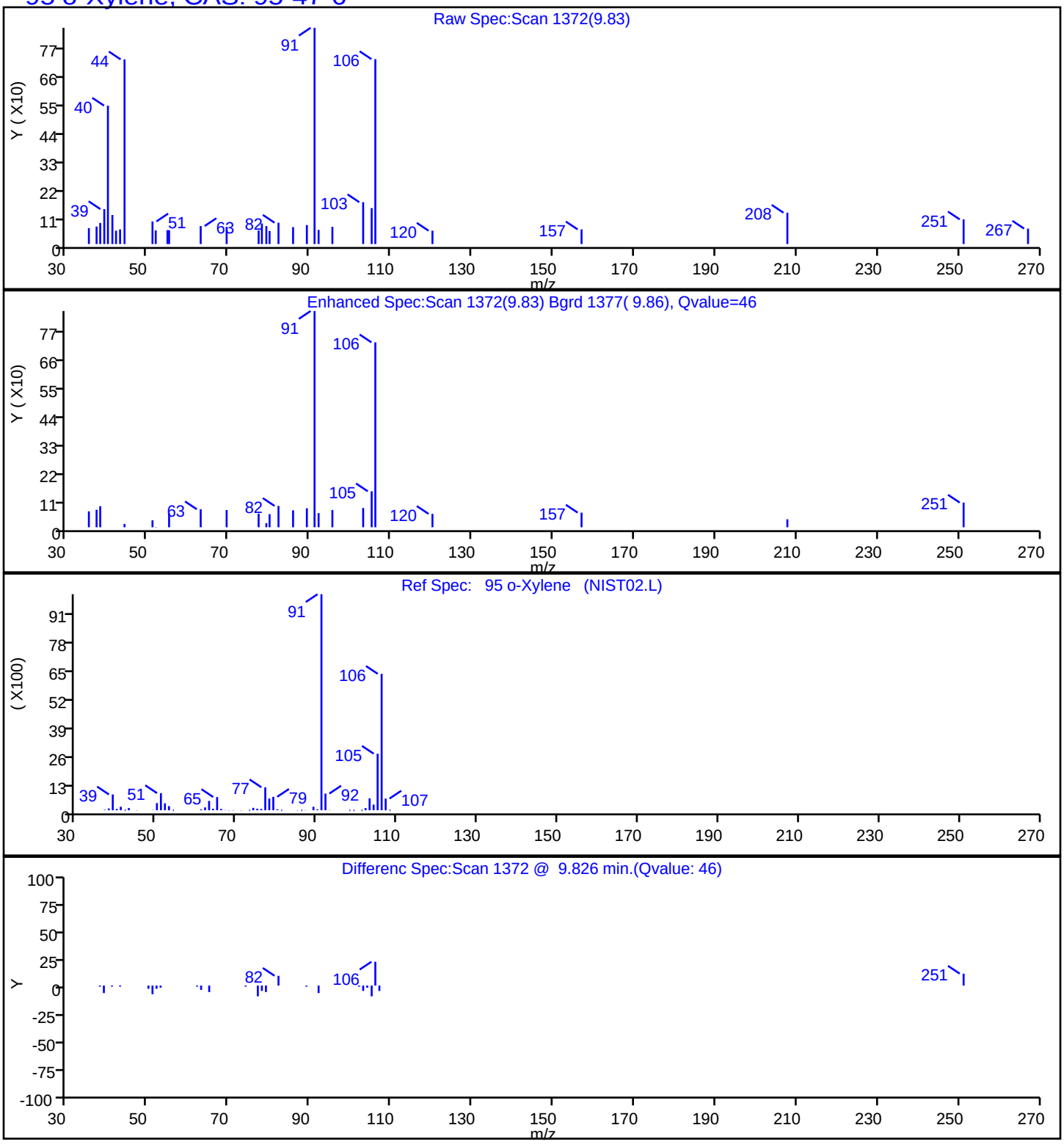
93 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D		
Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1
Client ID:	GE-MW-110D(SO)-(69-70)		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

95 o-Xylene, CAS: 95-47-6



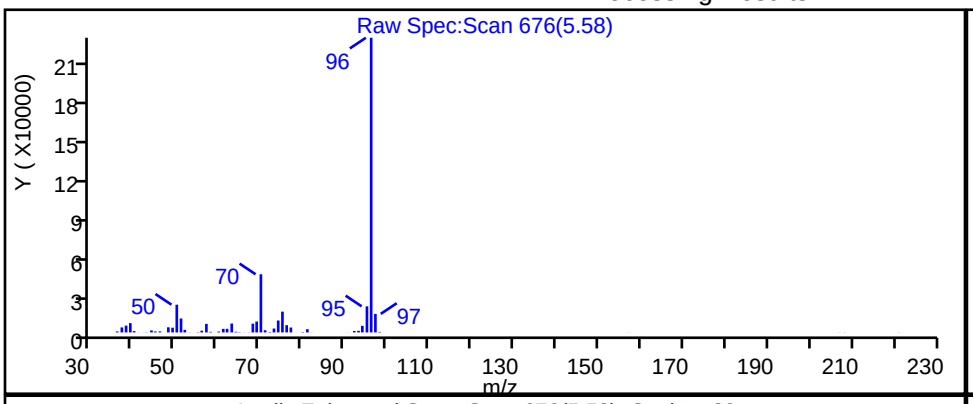
User Disabled Compound Report

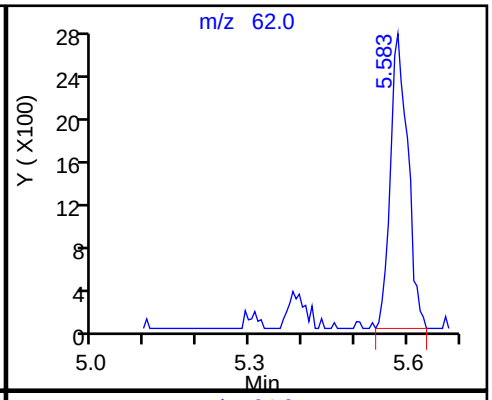
TestAmerica Edison

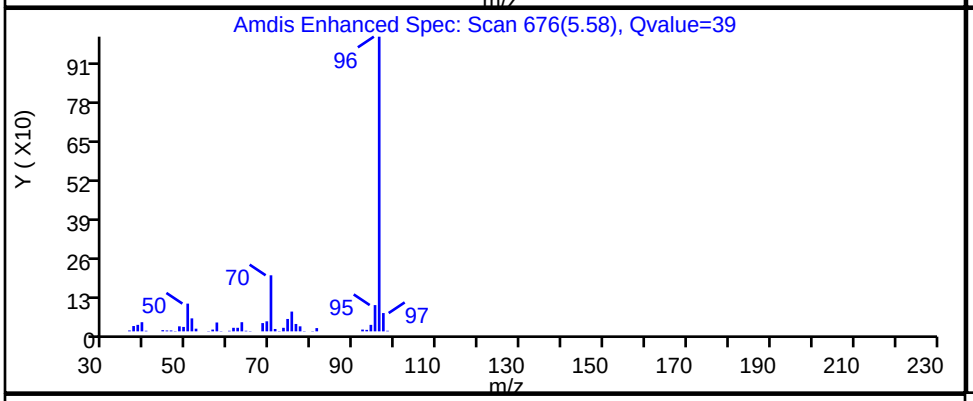
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D		
Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1
Client ID:	GE-MW-110D(SO)-(69-70)		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

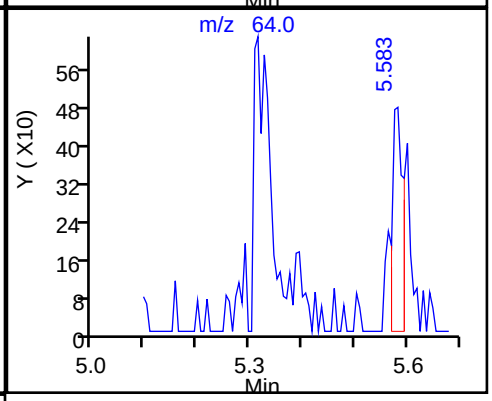
59 1,2-Dichloroethane, CAS: 107-06-2

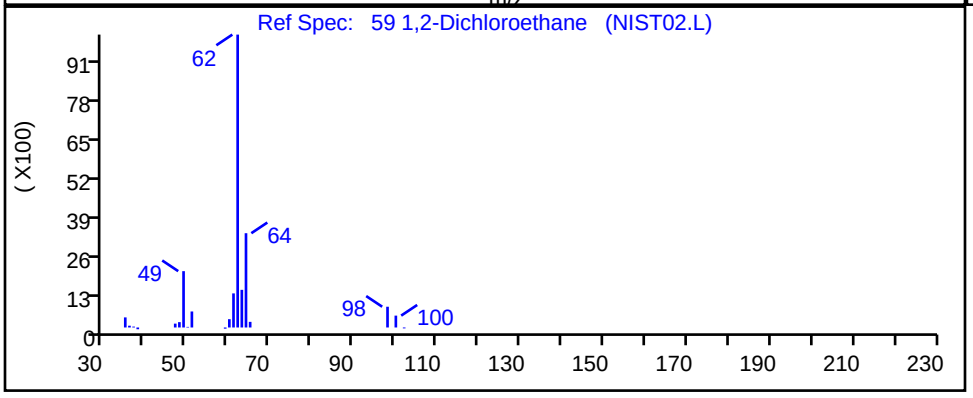
Processing Results











RT	Mass	Response	Amount
5.58	62.00	6337	1.533099
5.58	64.00	657	

Reviewer: tupayachia, 17-Apr-2018 09:19:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

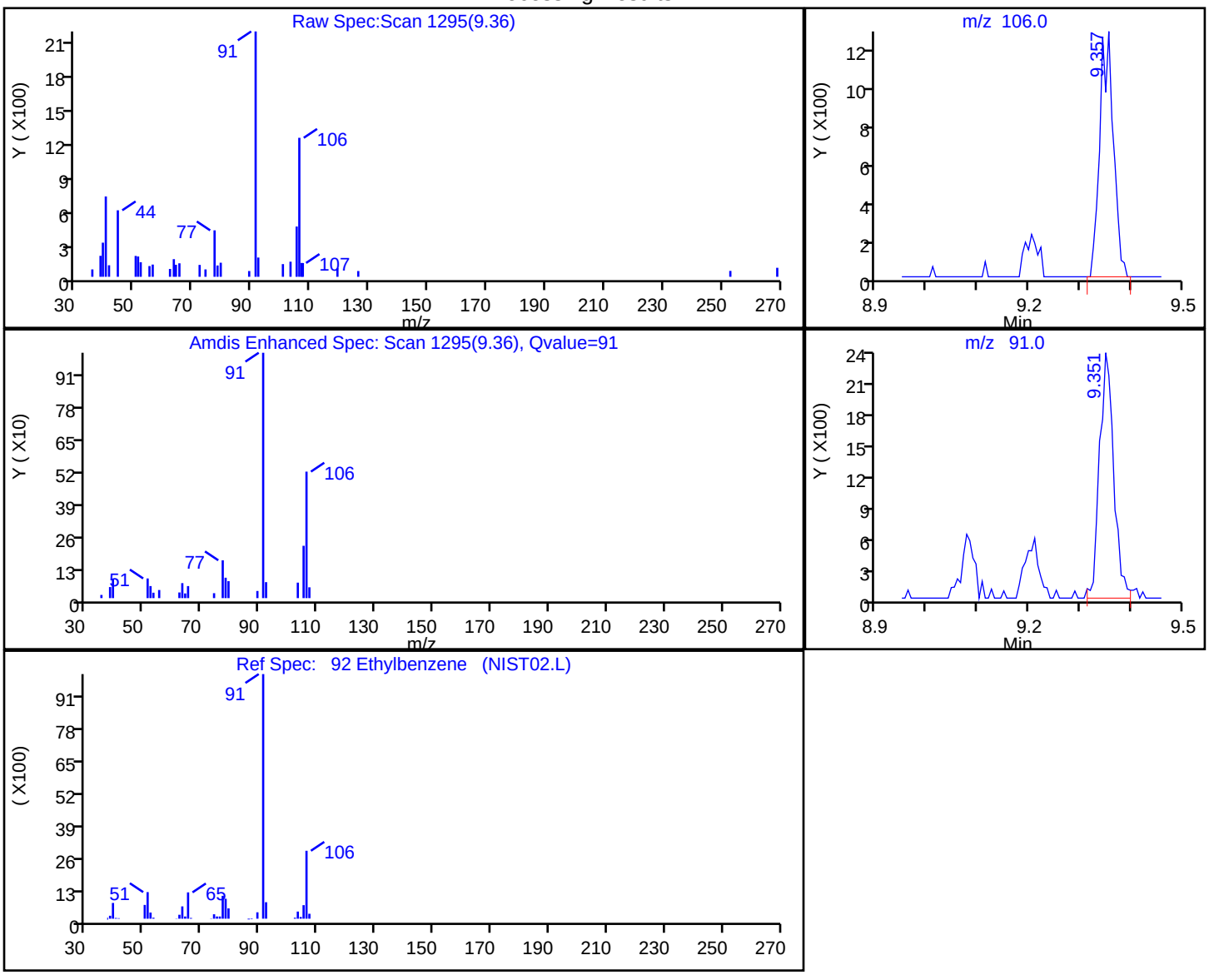
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D				
Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1		
Client ID:	GE-MW-110D(SO)-(69-70)				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.36	106.00	2255	0.384024
9.35	91.00	4565	

Reviewer: tupayachia, 17-Apr-2018 09:19:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

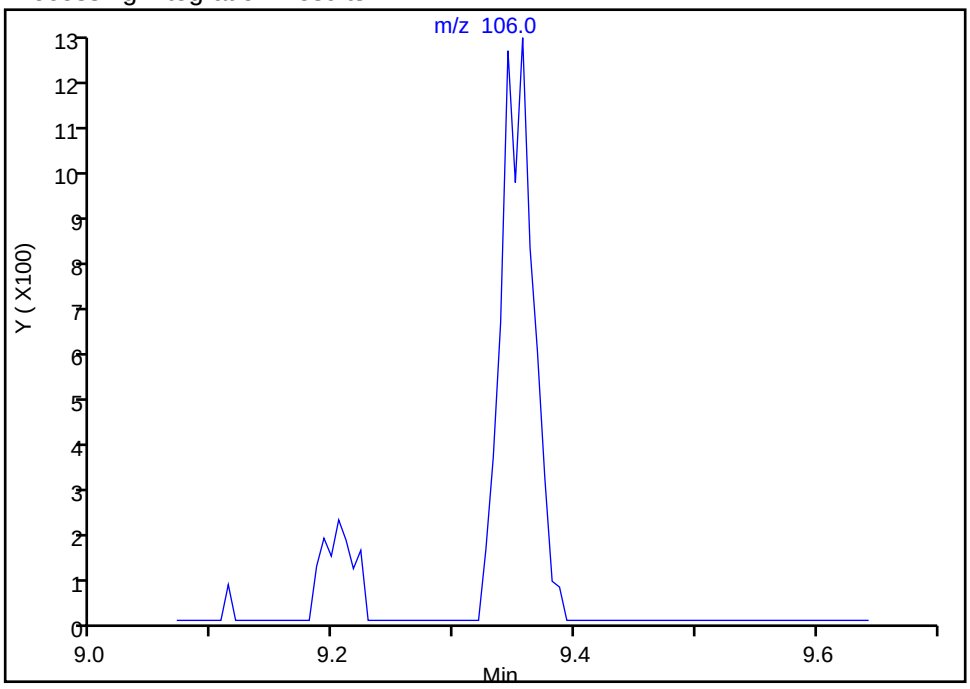
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D				
Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1		
Client ID:	GE-MW-110D(SO)-(69-70)				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

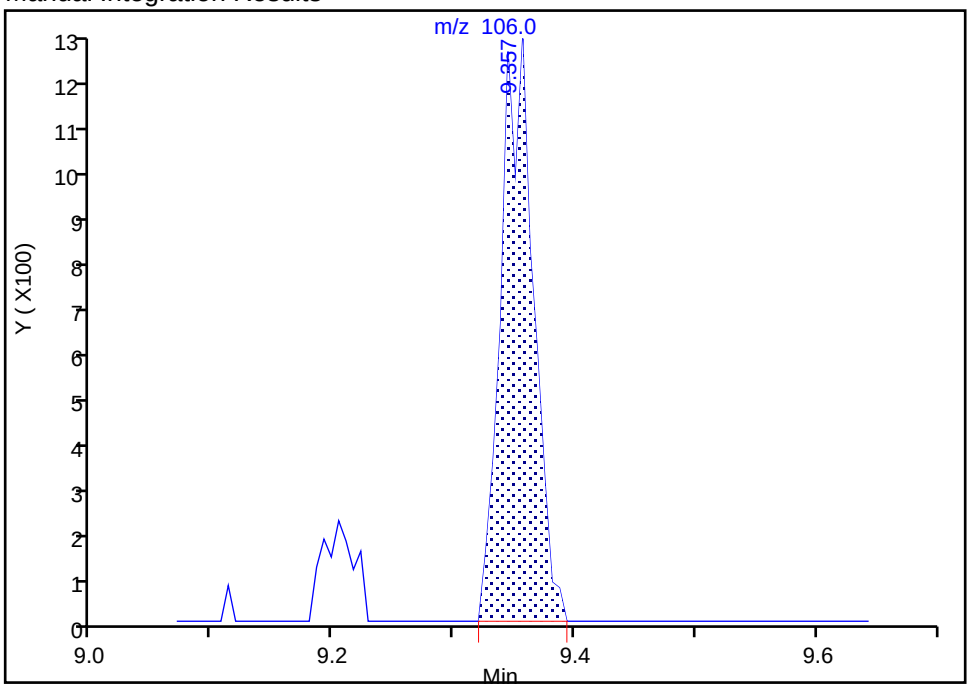
Not Detected
Expected RT: 9.35

Processing Integration Results



Manual Integration Results

RT: 9.36
Area: 2255
Amount: 0.305108
Amount Units: ug/l



Reviewer: delpolitov, 17-Apr-2018 14:32:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

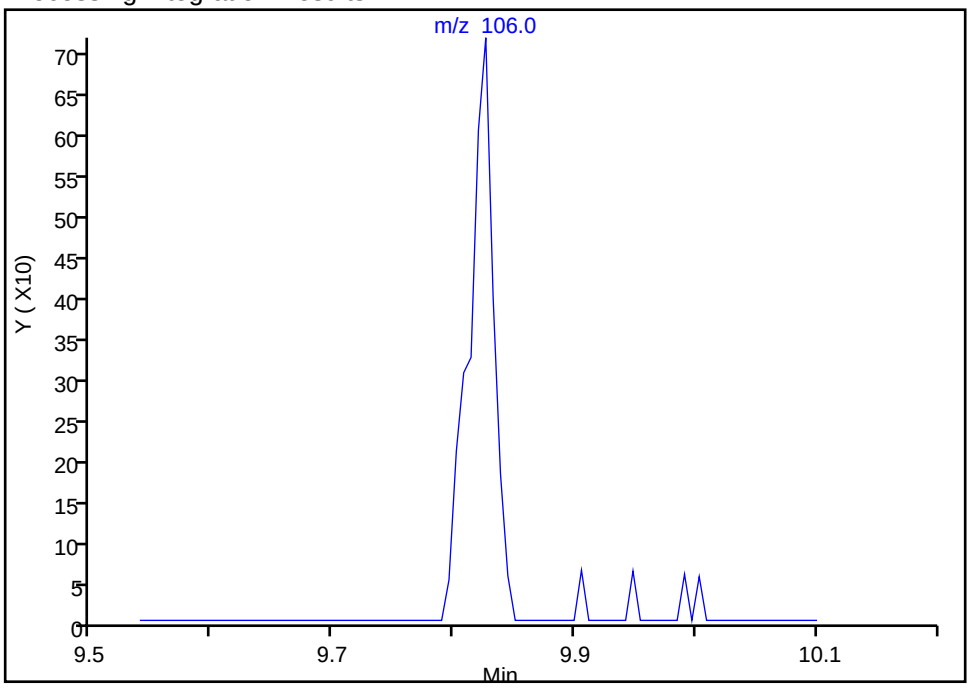
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82069.D				
Injection Date:	16-Apr-2018 21:52:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153515-B-1-A	Lab Sample ID:	460-153515-1		
Client ID:	GE-MW-110D(SO)-(69-70)				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6

Signal: 1

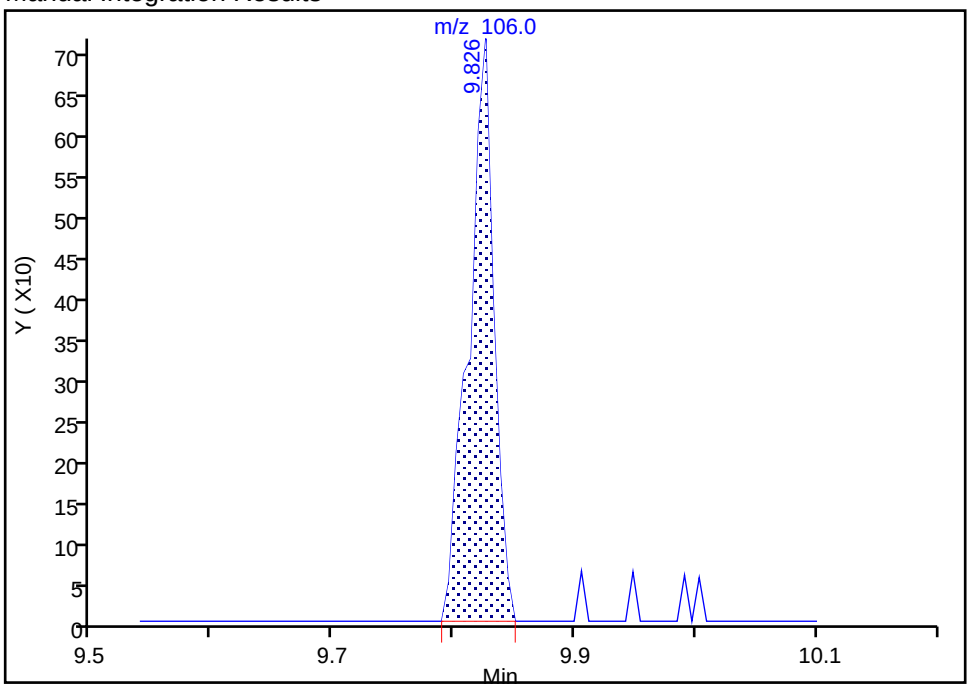
Not Detected
Expected RT: 9.82

Processing Integration Results



Manual Integration Results

RT: 9.83
Area: 1043
Amount: 0.137948
Amount Units: ug/l



Reviewer: delpolitov, 17-Apr-2018 14:32:46
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-101D(SO)-14-15 | Lab Sample ID: 460-153682-1

Matrix: Solid | Lab File ID: D48780.D

Analysis Method: 8260C | Date Collected: 04/09/2018 13:10

Sample wt/vol: 5.576(g) | Date Analyzed: 04/17/2018 04:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.8 | Level: (low/med) Low

Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00093	U	0.00093	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00093	U	0.00093	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00093	U	0.00093	0.00028
79-00-5	1,1,2-Trichloroethane	0.00093	U	0.00093	0.00017
75-34-3	1,1-Dichloroethane	0.00093	U	0.00093	0.00019
75-35-4	1,1-Dichloroethene	0.00093	U	0.00093	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00093	U	0.00093	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00093	U	0.00093	0.000086
96-12-8	1,2-Dibromo-3-Chloropropane	0.00093	U	0.00093	0.00043
95-50-1	1,2-Dichlorobenzene	0.00093	U	0.00093	0.00013
107-06-2	1,2-Dichloroethane	0.00093	U	0.00093	0.00028
78-87-5	1,2-Dichloropropane	0.00093	U	0.00093	0.00039
541-73-1	1,3-Dichlorobenzene	0.00093	U	0.00093	0.00015
106-46-7	1,4-Dichlorobenzene	0.00093	U	0.00093	0.000093
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0086
78-93-3	2-Butanone (MEK)	0.0047	U	0.0047	0.0010
591-78-6	2-Hexanone	0.0047	U	0.0047	0.00073
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00062
67-64-1	Acetone	0.0047	U *	0.0047	0.0035
71-43-2	Benzene	0.00093	U	0.00093	0.00024
75-25-2	Bromoform	0.00093	U	0.00093	0.00040
74-83-9	Bromomethane	0.00093	U	0.00093	0.00044
75-15-0	Carbon disulfide	0.00093	U	0.00093	0.00025
56-23-5	Carbon tetrachloride	0.00093	U	0.00093	0.00017
108-90-7	Chlorobenzene	0.00093	U	0.00093	0.00016
74-97-5	Chlorobromomethane	0.00093	U	0.00093	0.00026
124-48-1	Chlorodibromomethane	0.00093	U	0.00093	0.00018
75-00-3	Chloroethane	0.00093	U	0.00093	0.00049
67-66-3	Chloroform	0.00093	U	0.00093	0.00030
74-87-3	Chloromethane	0.00093	U	0.00093	0.00041
156-59-2	cis-1,2-Dichloroethene	0.00093	U	0.00093	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00093	U	0.00093	0.00025
110-82-7	Cyclohexane	0.00093	U	0.00093	0.00021
75-27-4	Dichlorobromomethane	0.00093	U	0.00093	0.00024
75-71-8	Dichlorodifluoromethane	0.00093	U	0.00093	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-101D(SO)-14-15 | Lab Sample ID: 460-153682-1

Matrix: Solid | Lab File ID: D48780.D

Analysis Method: 8260C | Date Collected: 04/09/2018 13:10

Sample wt/vol: 5.576(g) | Date Analyzed: 04/17/2018 04:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.8 | Level: (low/med) Low

Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00093	U	0.00093	0.00019
106-93-4	Ethylene Dibromide	0.00093	U	0.00093	0.00017
98-82-8	Isopropylbenzene	0.00093	U	0.00093	0.00012
79-20-9	Methyl acetate	0.0047	U	0.0047	0.0040
1634-04-4	Methyl tert-butyl ether	0.00093	U	0.00093	0.00012
108-87-2	Methylcyclohexane	0.00093	U	0.00093	0.00015
75-09-2	Methylene Chloride	0.00093	U	0.00093	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00031	J	0.00093	0.00016
95-47-6	o-Xylene	0.00093	U	0.00093	0.000089
100-42-5	Styrene	0.00093	U	0.00093	0.00011
127-18-4	Tetrachloroethene	0.00093	U	0.00093	0.00013
108-88-3	Toluene	0.00093	U	0.00093	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00093	U	0.00093	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00093	U	0.00093	0.00025
79-01-6	Trichloroethene	0.00093	U	0.00093	0.00013
75-69-4	Trichlorofluoromethane	0.00093	U	0.00093	0.00038
75-01-4	Vinyl chloride	0.00093	U	0.00093	0.00051

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		78-135
460-00-4	4-Bromofluorobenzene	95		67-126
1868-53-7	Dibromofluoromethane (Surr)	85		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-101D(SO)-14-15 Lab Sample ID: 460-153682-1

Matrix: Solid Lab File ID: D48780.D

Analysis Method: 8260C Date Collected: 04/09/2018 13:10

Sample wt/vol: 5.576(g) Date Analyzed: 04/17/2018 04:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.8 Level: (low/med) Low

Analysis Batch No.: 511498 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48780.D
Lims ID: 460-153682-A-1-A
Client ID: GC-MW-101D(SO)-14-15
Sample Type: Client
Inject. Date: 17-Apr-2018 04:24:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153682-A-1-A
Misc. Info.: 460-0070463-024
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 17:07:12 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 17-Apr-2018 09:55:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.588	3.600	-0.012	39	466538	1000.0	
* 38 2-Butanone-d5	46	4.898	4.904	-0.006	0	424180	250.0	
$ 51 Dibromofluoromethane (Surr	113	5.490	5.496	-0.006	95	194081	42.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.917	5.929	-0.012	96	216646	45.0	
* 61 Fluorobenzene	96	6.258	6.264	-0.006	98	667772	50.0	
* 67 1,4-Dioxane-d8	96	7.099	7.105	-0.006	0	25579	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.032	8.038	-0.006	98	639182	48.4	
* 89 Chlorobenzene-d5	117	9.373	9.373	0.000	89	428402	50.0	
93 m-Xylene & p-Xylene	106	9.556	9.562	-0.006	97	1691	0.3323	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	164700	47.7	
* 116 1,4-Dichlorobenzene-d4	152	11.190	11.196	-0.006	97	222054	50.0	

Reagents:

8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

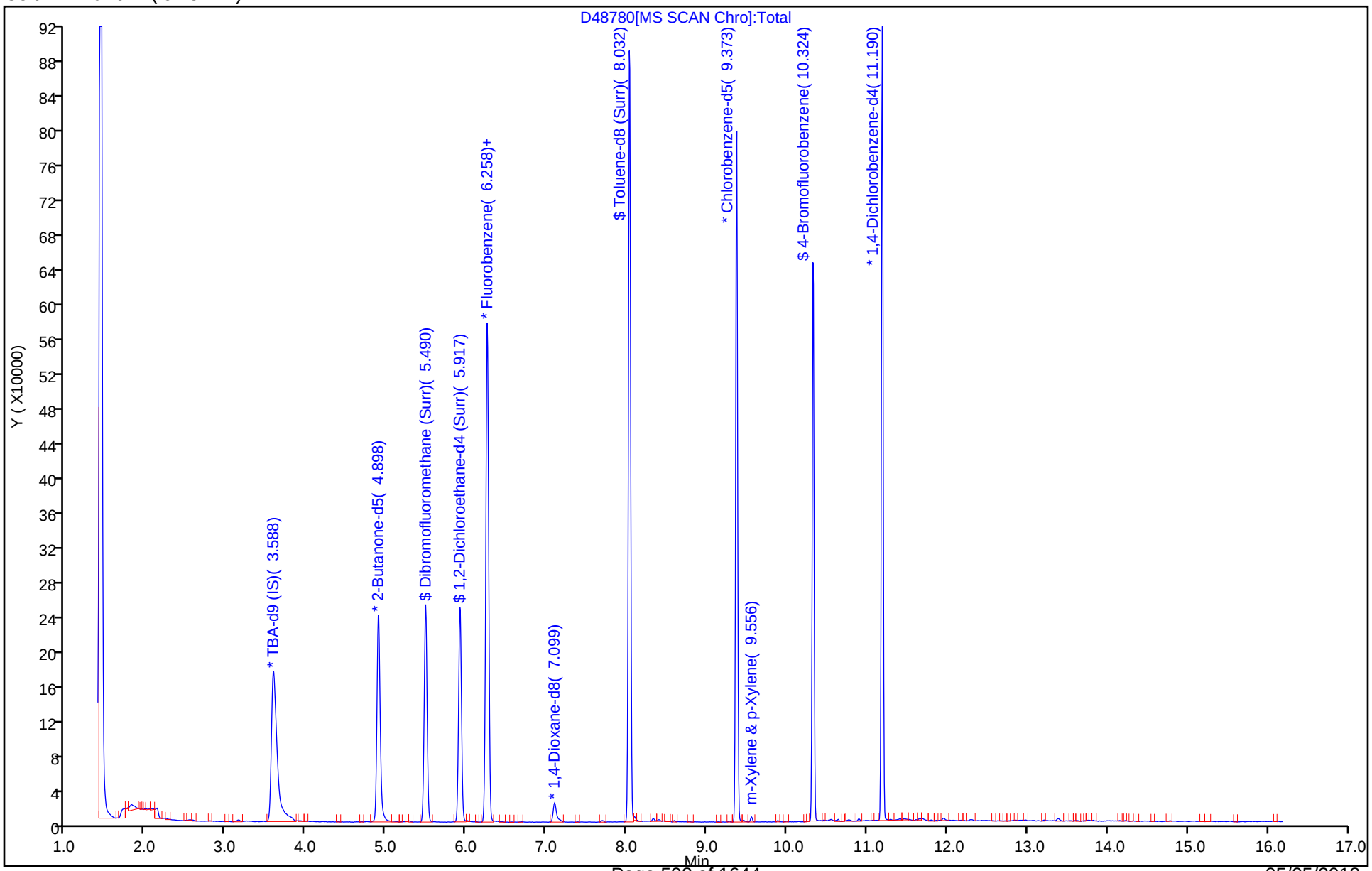
Report Date: 17-Apr-2018 17:07:26 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48780.D

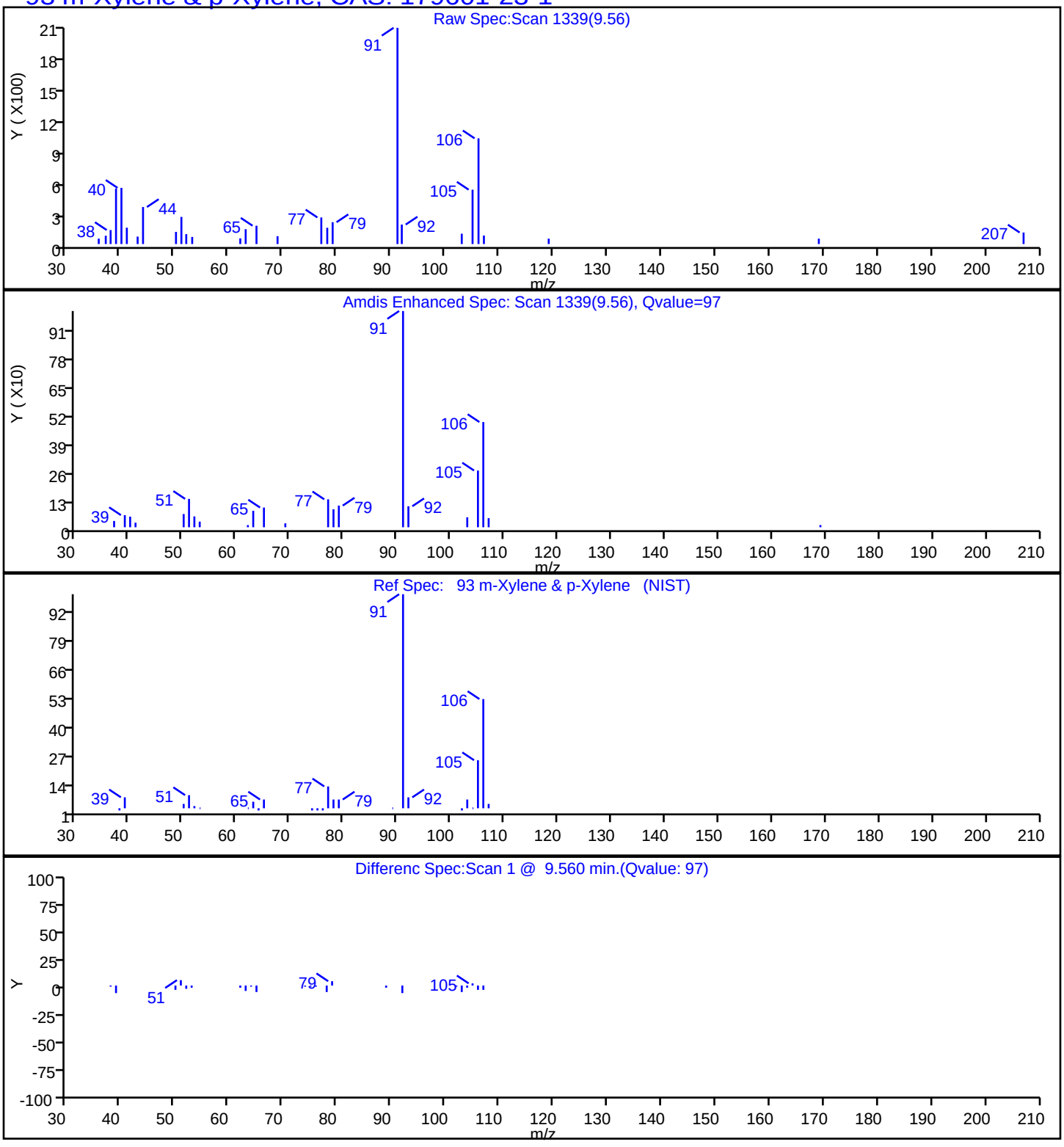
Injection Date:	17-Apr-2018 04:24:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	460-153682-A-1-A	Lab Sample ID:	460-153682-1	Worklist Smp#:	24
Client ID:	GC-MW-101D(SO)-14-15				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48780.D
Injection Date: 17-Apr-2018 04:24:30 Instrument ID: CVOAMS4
Lims ID: 460-153682-A-1-A Lab Sample ID: 460-153682-1
Client ID: GC-MW-101D(SO)-14-15
Operator ID: ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

93 m-Xylene & p-Xylene, CAS: 179601-23-1



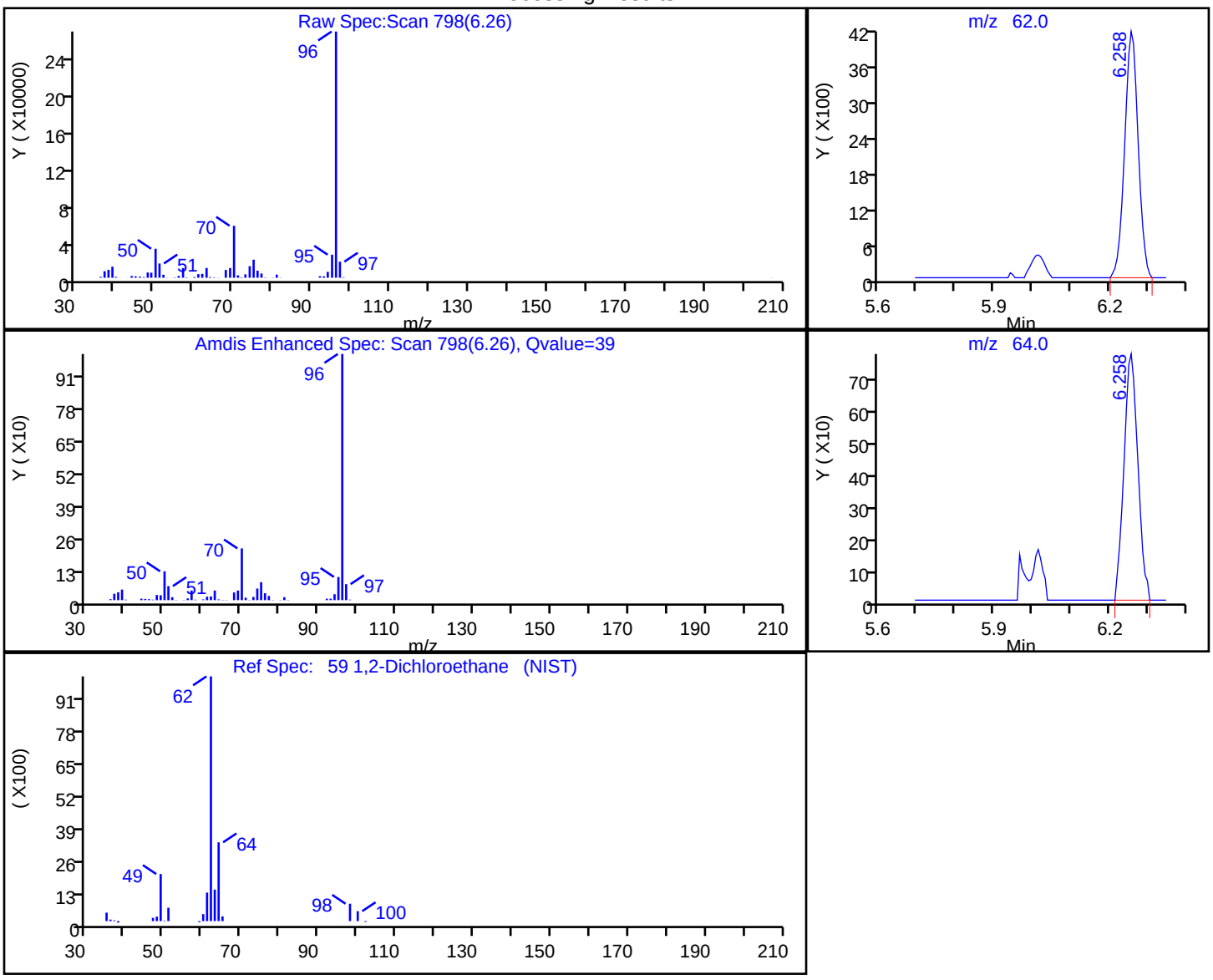
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48780.D		
Injection Date:	17-Apr-2018 04:24:30	Instrument ID:	CVOAMS4
Lims ID:	460-153682-A-1-A	Lab Sample ID:	460-153682-1
Client ID:	GC-MW-101D(SO)-14-15		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
6.26	62.00	10140	1.960412
6.26	64.00	1971	

Reviewer: tupayachia, 17-Apr-2018 09:55:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

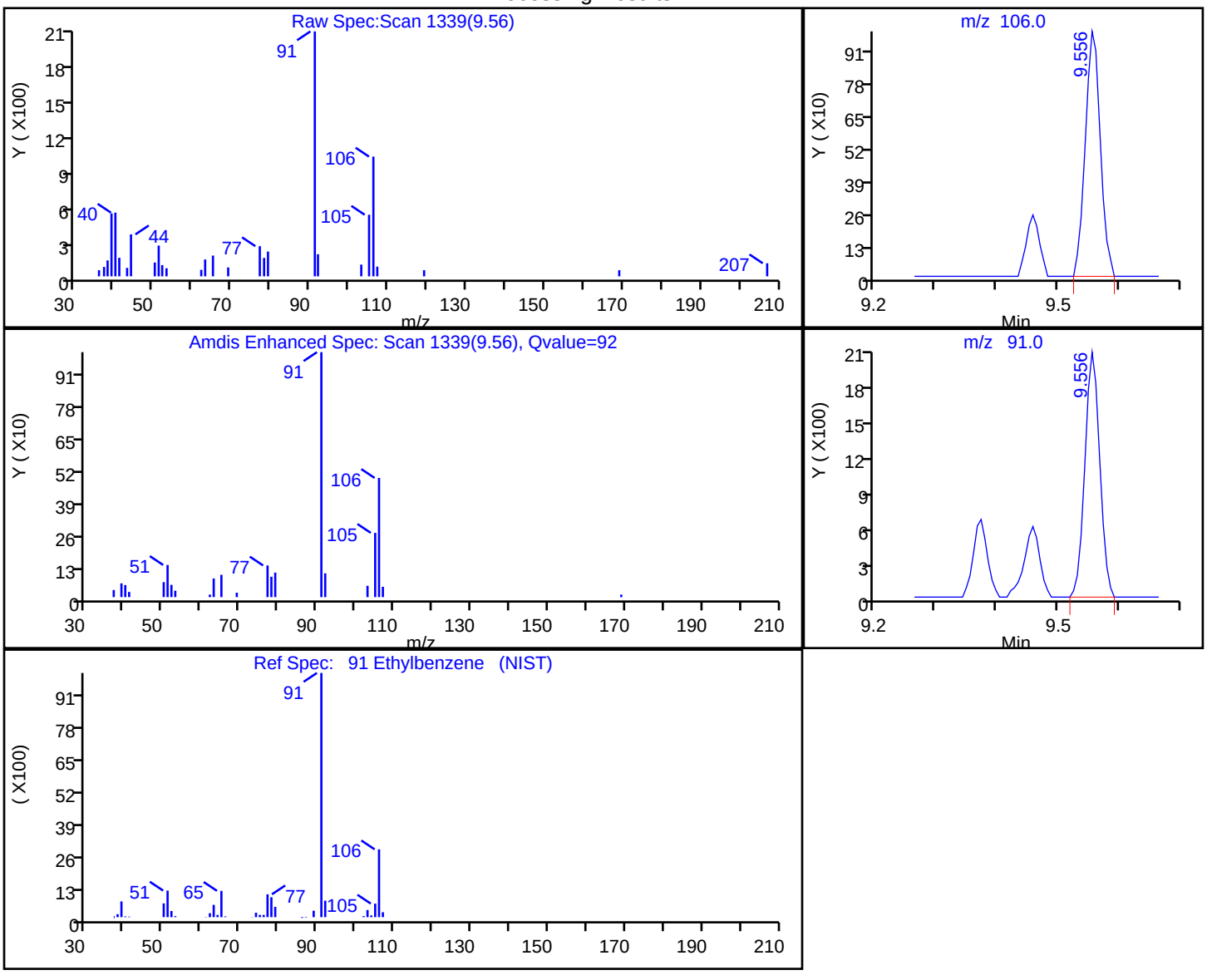
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48780.D		
Injection Date:	17-Apr-2018 04:24:30	Instrument ID:	CVOAMS4
Lims ID:	460-153682-A-1-A	Lab Sample ID:	460-153682-1
Client ID:	GC-MW-101D(SO)-14-15		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

91 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.56	106.00	1691	0.400902
9.56	91.00	3419	

Reviewer: xuyvo, 17-Apr-2018 15:46:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-101D(SO)(99.2-100) | Lab Sample ID: 460-153878-1

Matrix: Solid | Lab File ID: D48968.D

Analysis Method: 8260C | Date Collected: 04/11/2018 13:15

Sample wt/vol: 6.212(g) | Date Analyzed: 04/20/2018 16:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00095	U	0.00095	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00095	U	0.00095	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00095	U	0.00095	0.00029
79-00-5	1,1,2-Trichloroethane	0.00095	U	0.00095	0.00017
75-34-3	1,1-Dichloroethane	0.00095	U	0.00095	0.00020
75-35-4	1,1-Dichloroethene	0.00095	U	0.00095	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00095	U	0.00095	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00095	U	0.00095	0.000087
96-12-8	1,2-Dibromo-3-Chloropropane	0.00095	U	0.00095	0.00044
95-50-1	1,2-Dichlorobenzene	0.00095	U	0.00095	0.00014
107-06-2	1,2-Dichloroethane	0.00095	U	0.00095	0.00028
78-87-5	1,2-Dichloropropane	0.00095	U	0.00095	0.00040
541-73-1	1,3-Dichlorobenzene	0.00095	U	0.00095	0.00015
106-46-7	1,4-Dichlorobenzene	0.00095	U	0.00095	0.000095
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0087
78-93-3	2-Butanone (MEK)	0.0028	J	0.0047	0.0011
591-78-6	2-Hexanone	0.0047	U	0.0047	0.00074
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00063
67-64-1	Acetone	0.017		0.0047	0.0036
71-43-2	Benzene	0.00095	U	0.00095	0.00024
75-25-2	Bromoform	0.00095	U	0.00095	0.00040
74-83-9	Bromomethane	0.00095	U	0.00095	0.00045
75-15-0	Carbon disulfide	0.00095	U	0.00095	0.00025
56-23-5	Carbon tetrachloride	0.00095	U	0.00095	0.00017
108-90-7	Chlorobenzene	0.00095	U	0.00095	0.00017
74-97-5	Chlorobromomethane	0.00095	U	0.00095	0.00027
124-48-1	Chlorodibromomethane	0.00095	U	0.00095	0.00018
75-00-3	Chloroethane	0.00095	U	0.00095	0.00050
67-66-3	Chloroform	0.00095	U	0.00095	0.00030
74-87-3	Chloromethane	0.00095	U	0.00095	0.00041
156-59-2	cis-1,2-Dichloroethene	0.00095	U	0.00095	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00095	U	0.00095	0.00026
110-82-7	Cyclohexane	0.00095	U	0.00095	0.00021
75-27-4	Dichlorobromomethane	0.00095	U	0.00095	0.00024
75-71-8	Dichlorodifluoromethane	0.00095	U	0.00095	0.00032

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-101D(SO)(99.2-100) | Lab Sample ID: 460-153878-1

Matrix: Solid | Lab File ID: D48968.D

Analysis Method: 8260C | Date Collected: 04/11/2018 13:15

Sample wt/vol: 6.212(g) | Date Analyzed: 04/20/2018 16:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00095	U	0.00095	0.00019
106-93-4	Ethylene Dibromide	0.00095	U	0.00095	0.00017
98-82-8	Isopropylbenzene	0.00095	U	0.00095	0.00012
79-20-9	Methyl acetate	0.0047	U	0.0047	0.0041
1634-04-4	Methyl tert-butyl ether	0.00095	U	0.00095	0.00012
108-87-2	Methylcyclohexane	0.00095	U	0.00095	0.00015
75-09-2	Methylene Chloride	0.00023	J	0.00095	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00088	J	0.00095	0.00017
95-47-6	o-Xylene	0.00030	J	0.00095	0.000090
100-42-5	Styrene	0.00095	U	0.00095	0.00012
127-18-4	Tetrachloroethene	0.00095	U	0.00095	0.00014
108-88-3	Toluene	0.00095	U	0.00095	0.00059
156-60-5	trans-1,2-Dichloroethene	0.00095	U	0.00095	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00095	U	0.00095	0.00025
79-01-6	Trichloroethene	0.00095	U	0.00095	0.00014
75-69-4	Trichlorofluoromethane	0.00095	U	0.00095	0.00039
75-01-4	Vinyl chloride	0.00095	U	0.00095	0.00052

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		78-135
460-00-4	4-Bromofluorobenzene	98		67-126
1868-53-7	Dibromofluoromethane (Surr)	77		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-101D(SO)(99.2-100) Lab Sample ID: 460-153878-1

Matrix: Solid Lab File ID: D48968.D

Analysis Method: 8260C Date Collected: 04/11/2018 13:15

Sample wt/vol: 6.212(g) Date Analyzed: 04/20/2018 16:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.2 Level: (low/med) Low

Analysis Batch No.: 512623 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D
Lims ID: 460-153878-B-1-A
Client ID: GC-MW-101D(SO)(99.2-100)
Sample Type: Client
Inject. Date: 20-Apr-2018 16:23:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153878-B-1-A
Misc. Info.: 460-0070697-025
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 13:26:08 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: delpolitov Date: 20-Apr-2018 17:15:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 Acetone	43	3.124	3.130	-0.006	86	23267	17.4	
26 Methylene Chloride	84	3.557	3.563	-0.006	35	1087	0.2446	
* 27 TBA-d9 (IS)	65	3.563	3.575	-0.012	38	336718	1000.0	
* 38 2-Butanone-d5	46	4.868	4.874	-0.006	0	323217	250.0	
41 2-Butanone (MEK)	72	4.935	4.947	-0.012	99	1201	2.95	
$ 51 Dibromofluoromethane (Surr	113	5.453	5.465	-0.012	95	146378	38.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.886	5.892	-0.006	96	163800	40.9	
* 61 Fluorobenzene	96	6.221	6.233	-0.012	98	555019	50.0	
* 67 1,4-Dioxane-d8	96	7.069	7.075	-0.006	0	15171	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.007	8.014	-0.007	98	494797	48.7	
* 89 Chlorobenzene-d5	117	9.349	9.355	-0.006	89	329680	50.0	
93 m-Xylene & p-Xylene	106	9.538	9.538	0.000	97	3637	0.9288	
95 o-Xylene	106	9.867	9.867	0.000	93	1301	0.3195	
$ 100 4-Bromofluorobenzene	174	10.306	10.312	-0.006	0	126253	49.0	
* 116 1,4-Dichlorobenzene-d4	152	11.171	11.172	-0.001	97	165640	50.0	

Reagents:

8260ISNEW_00119	Amount Added: 1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added: 1.00	Units: uL	Run Reagent

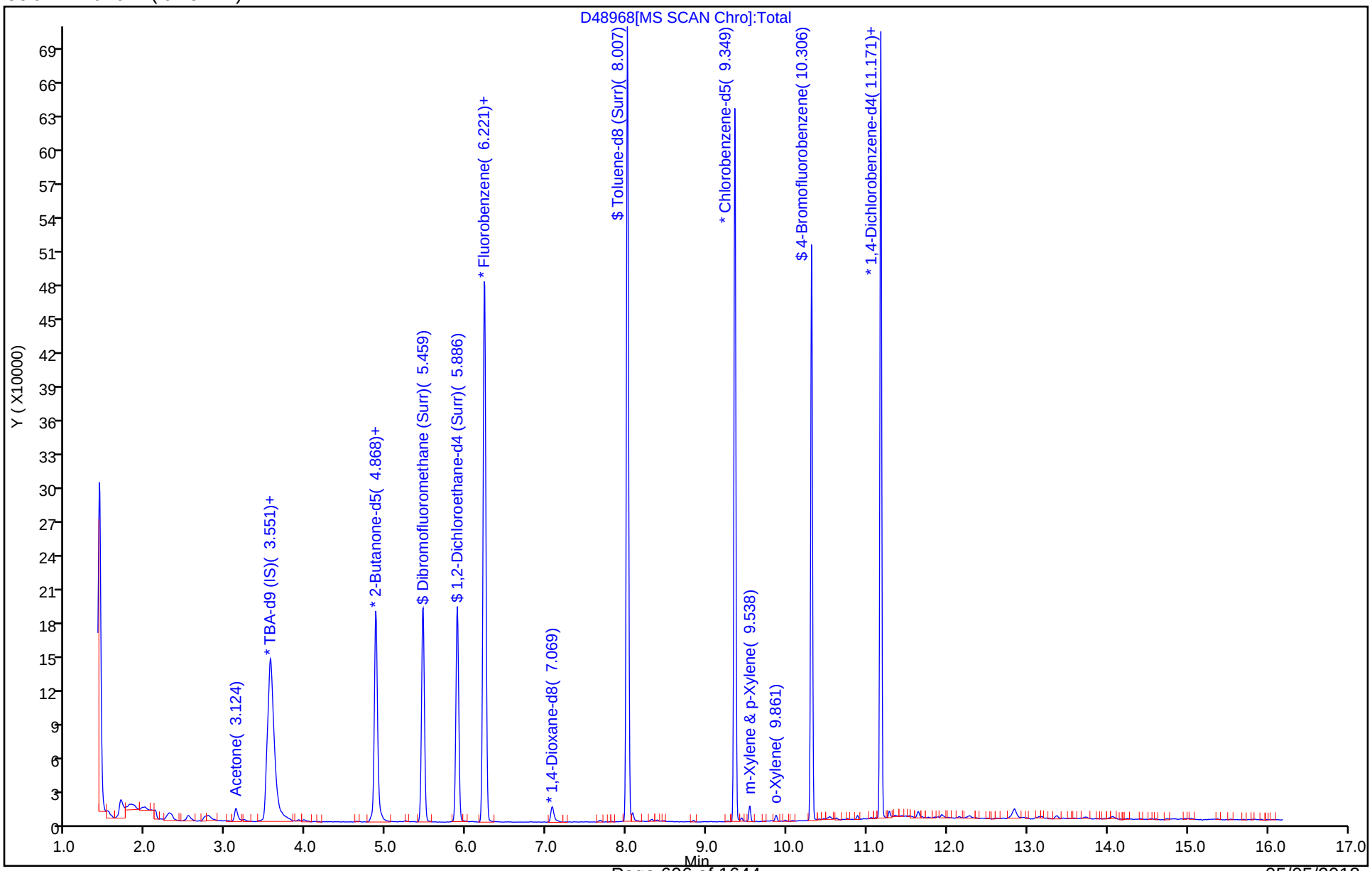
Report Date: 23-Apr-2018 14:29:05 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D

Injection Date:	20-Apr-2018 16:23:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	460-153878-B-1-A	Lab Sample ID:	460-153878-1	Worklist Smp#:	25
Client ID:	GC-MW-101D(SO)(99.2-100)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

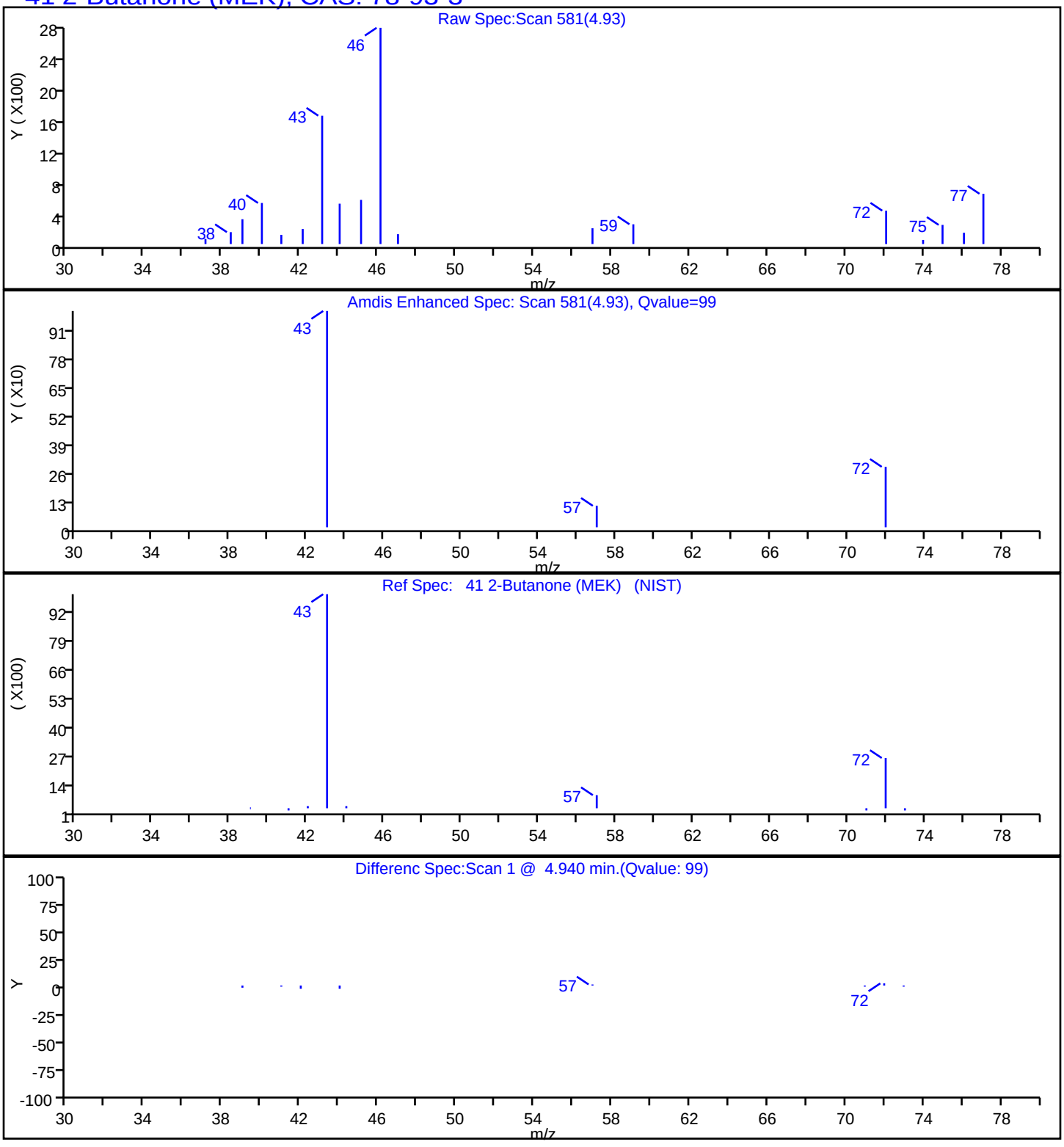
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D		
Injection Date:	20-Apr-2018 16:23:30	Instrument ID:	CVOAMS4
Lims ID:	460-153878-B-1-A	Lab Sample ID:	460-153878-1
Client ID:	GC-MW-101D(SO)(99.2-100)		
Operator ID:		ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

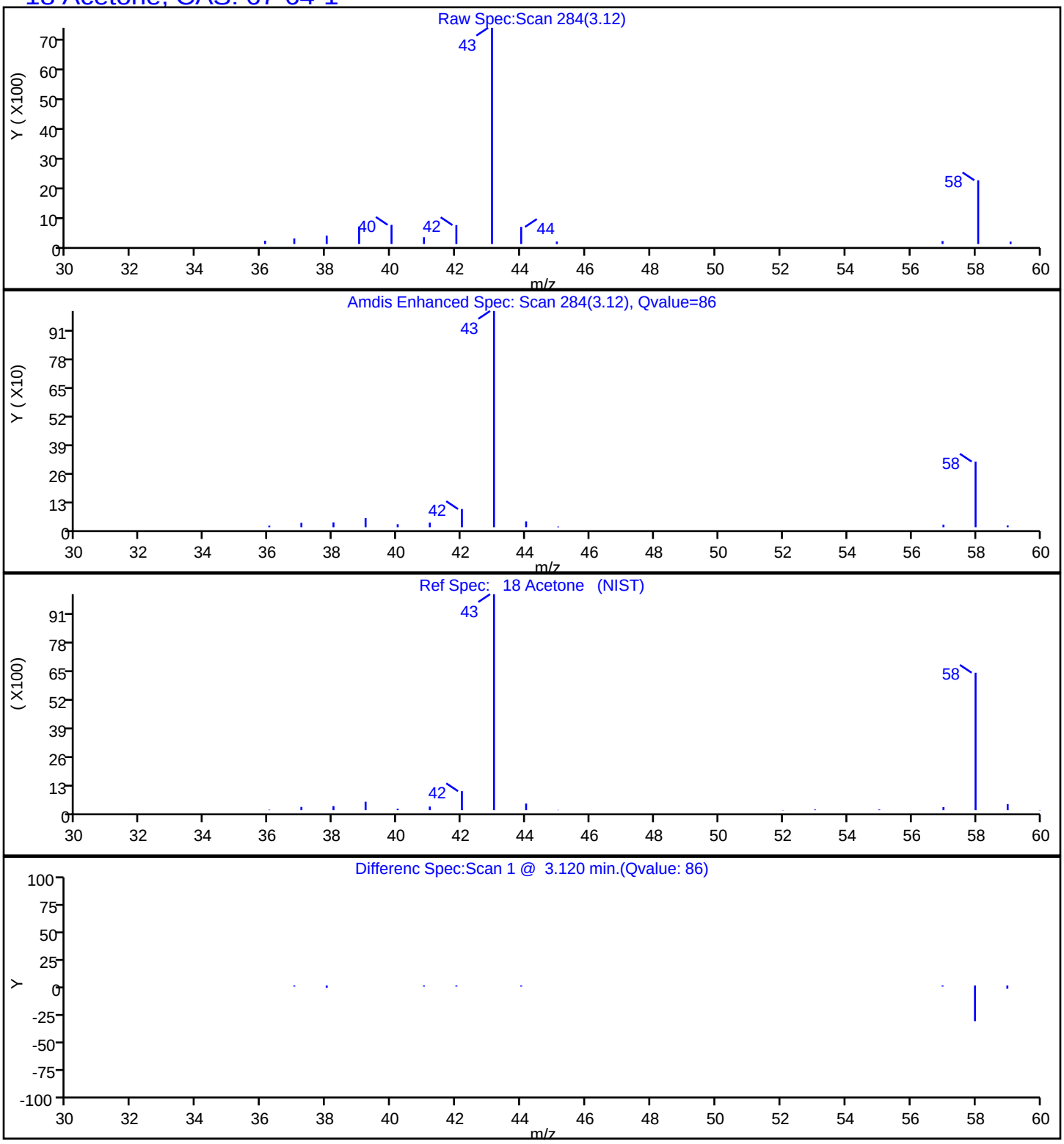
41 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D		
Injection Date:	20-Apr-2018 16:23:30	Instrument ID:	CVOAMS4
Lims ID:	460-153878-B-1-A	Lab Sample ID:	460-153878-1
Client ID:	GC-MW-101D(SO)(99.2-100)		
Operator ID:		ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1



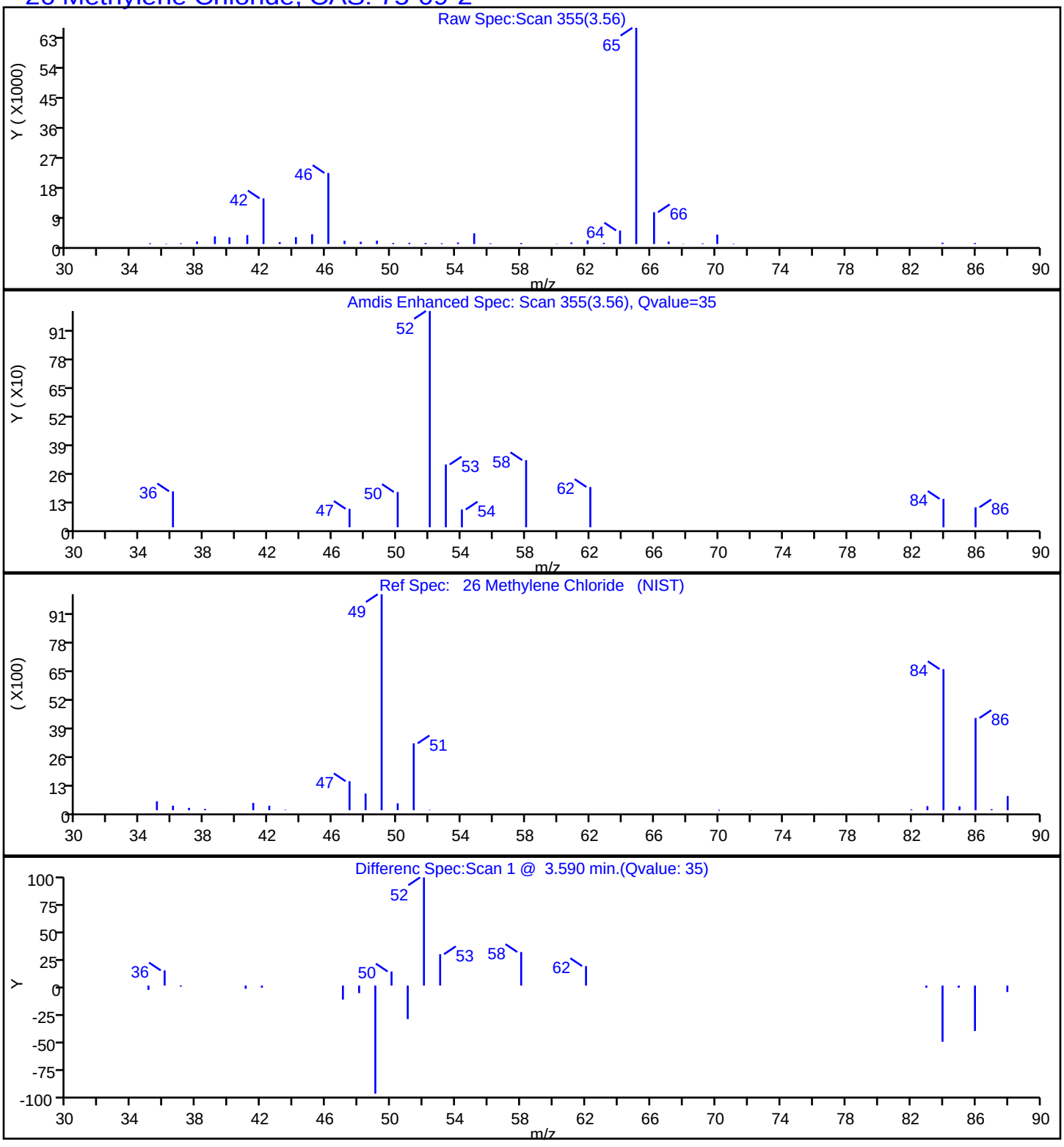
Report Date: 23-Apr-2018 14:29:05 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D

Injection Date:	20-Apr-2018 16:23:30	Instrument ID:	CVOAMS4		
Lims ID:	460-153878-B-1-A	Lab Sample ID:	460-153878-1		
Client ID:	GC-MW-101D(SO)(99.2-100)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

26 Methylene Chloride, CAS: 75-09-2



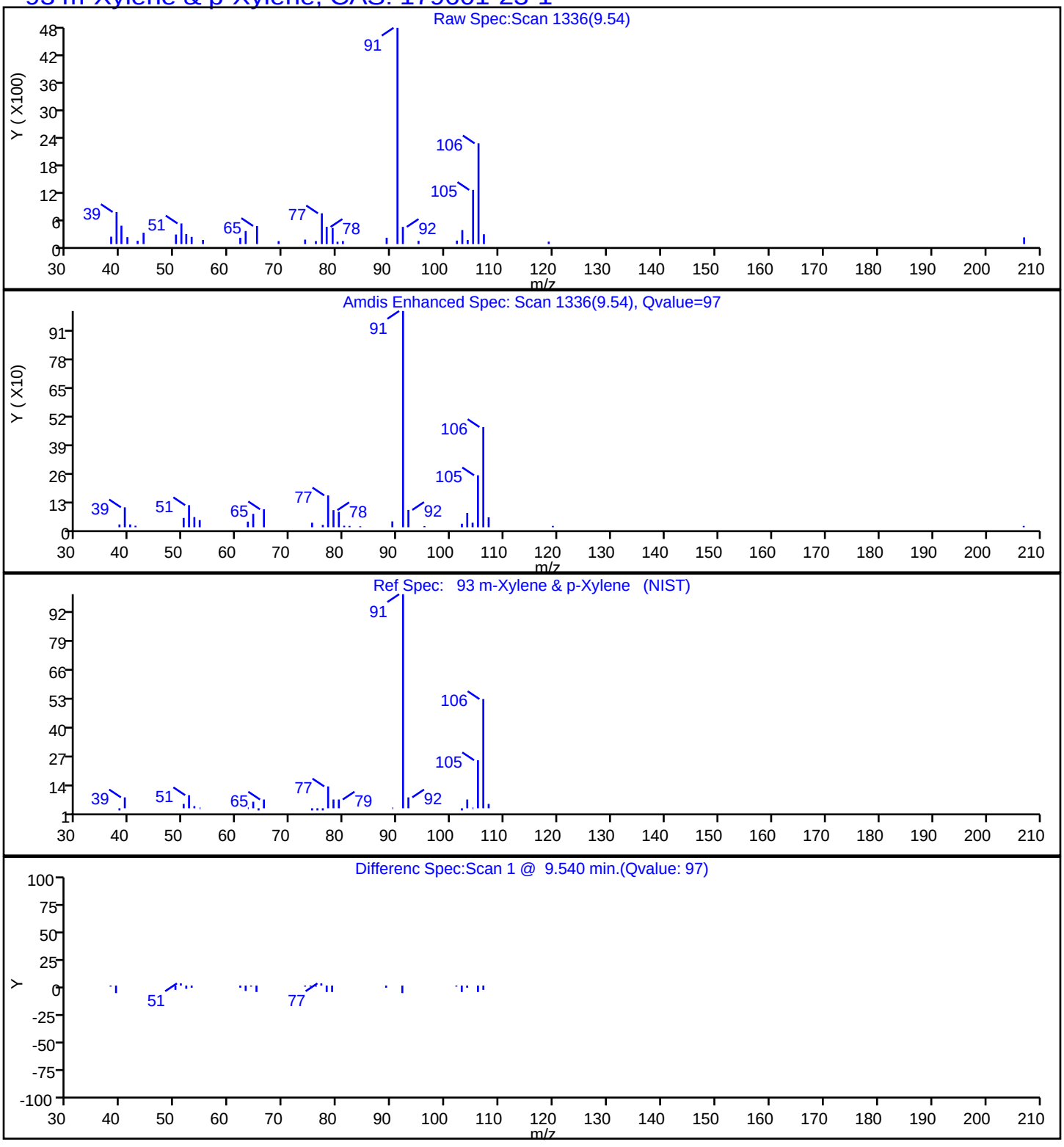
Report Date: 23-Apr-2018 14:29:05 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D

Injection Date:	20-Apr-2018 16:23:30	Instrument ID:	CVOAMS4		
Lims ID:	460-153878-B-1-A	Lab Sample ID:	460-153878-1		
Client ID:	GC-MW-101D(SO)(99.2-100)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

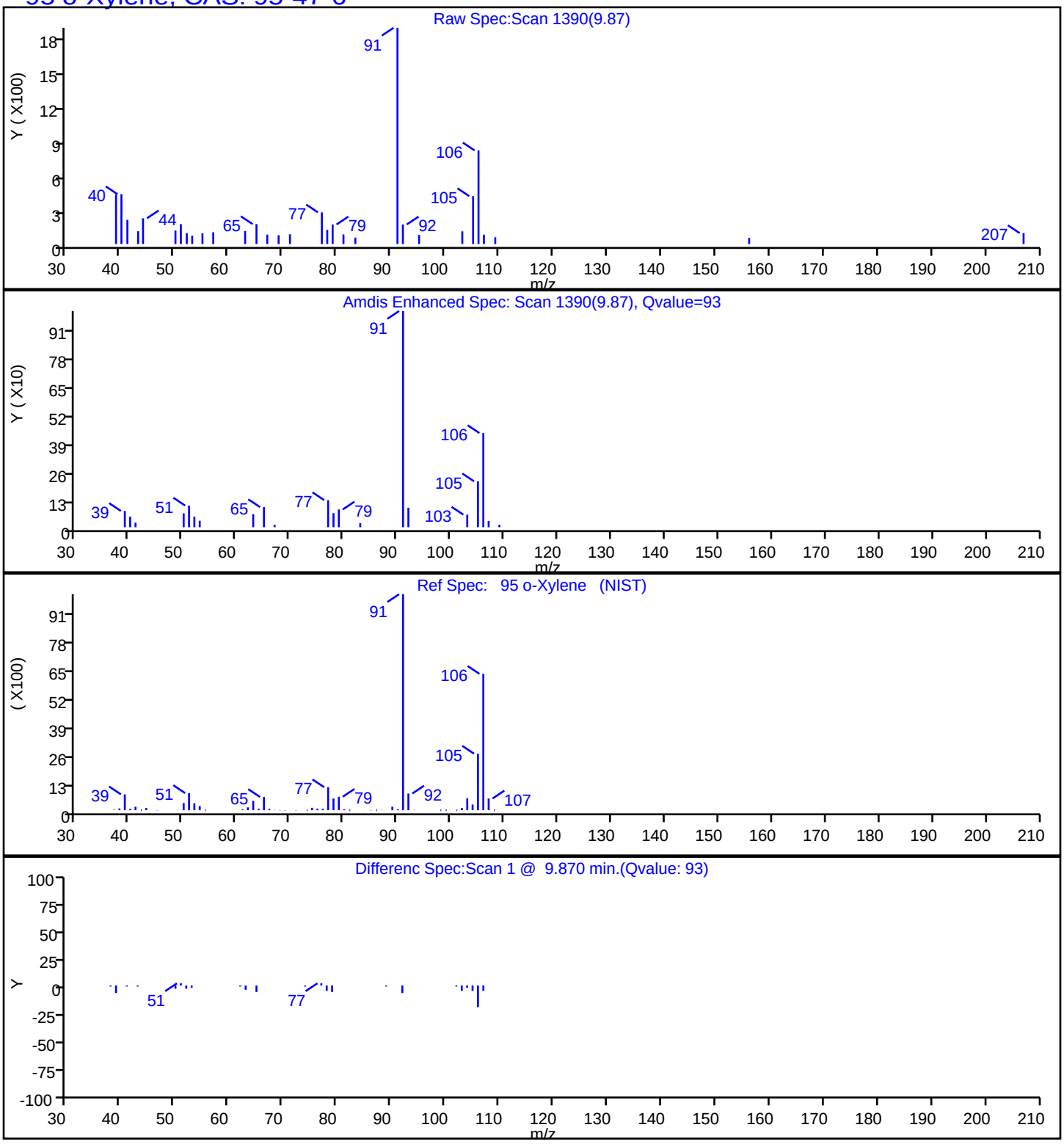
93 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D				
Injection Date:	20-Apr-2018 16:23:30	Instrument ID:	CVOAMS4		
Lims ID:	460-153878-B-1-A	Lab Sample ID:	460-153878-1		
Client ID:	GC-MW-101D(SO)(99.2-100)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6



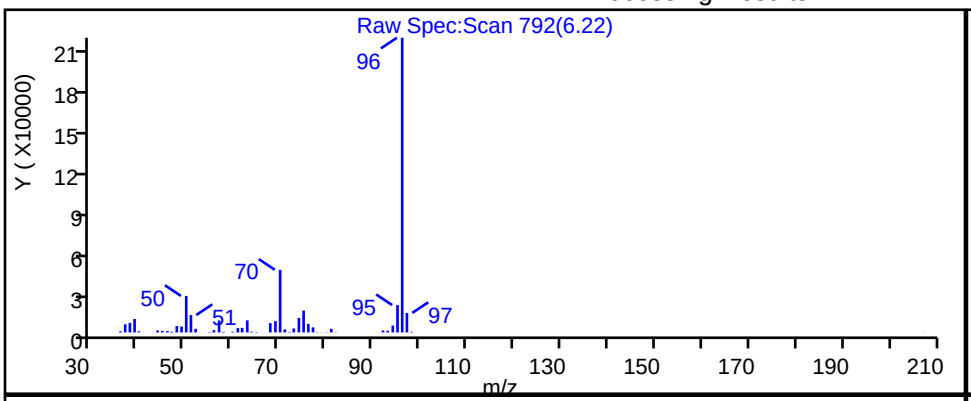
User Disabled Compound Report

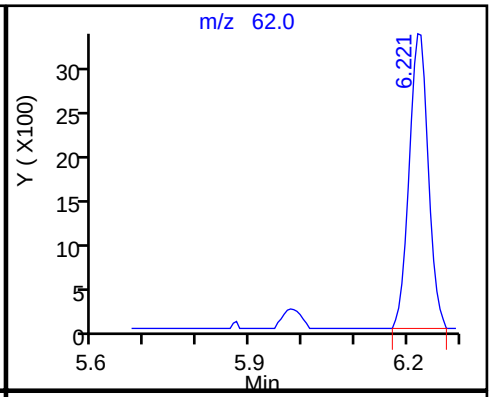
TestAmerica Edison

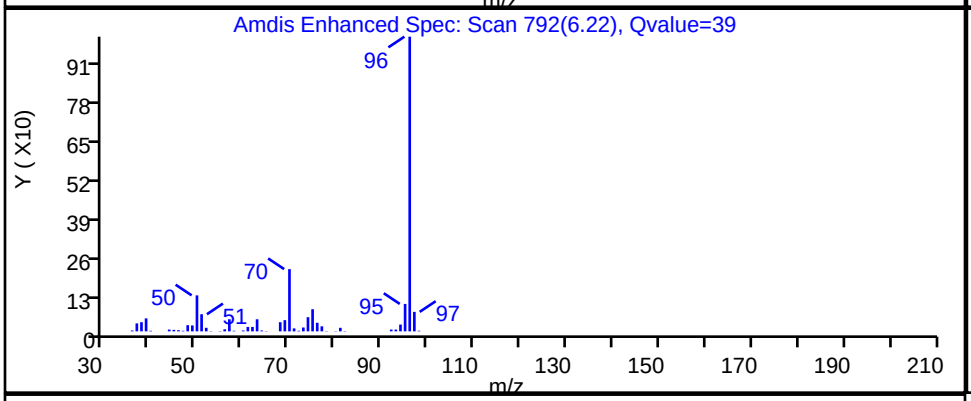
Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D				
Injection Date:	20-Apr-2018 16:23:30	Instrument ID:	CVOAMS4		
Lims ID:	460-153878-B-1-A	Lab Sample ID:	460-153878-1		
Client ID:	GC-MW-101D(SO)(99.2-100)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

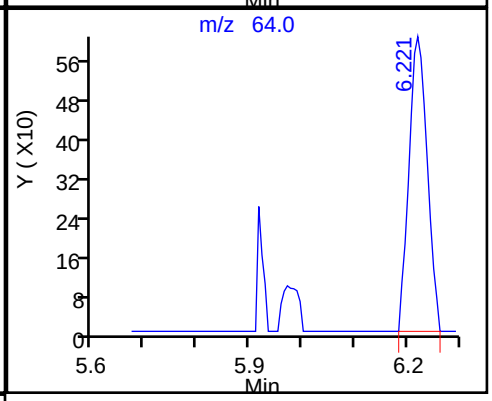
59 1,2-Dichloroethane, CAS: 107-06-2

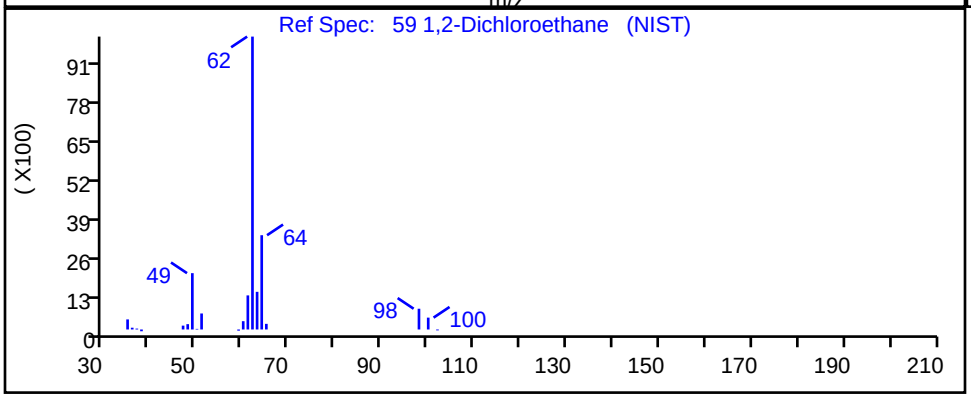
Processing Results











RT	Mass	Response	Amount
6.22	62.00	8561	1.991381
6.22	64.00	1457	

Reviewer: delpolitov, 20-Apr-2018 17:09:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

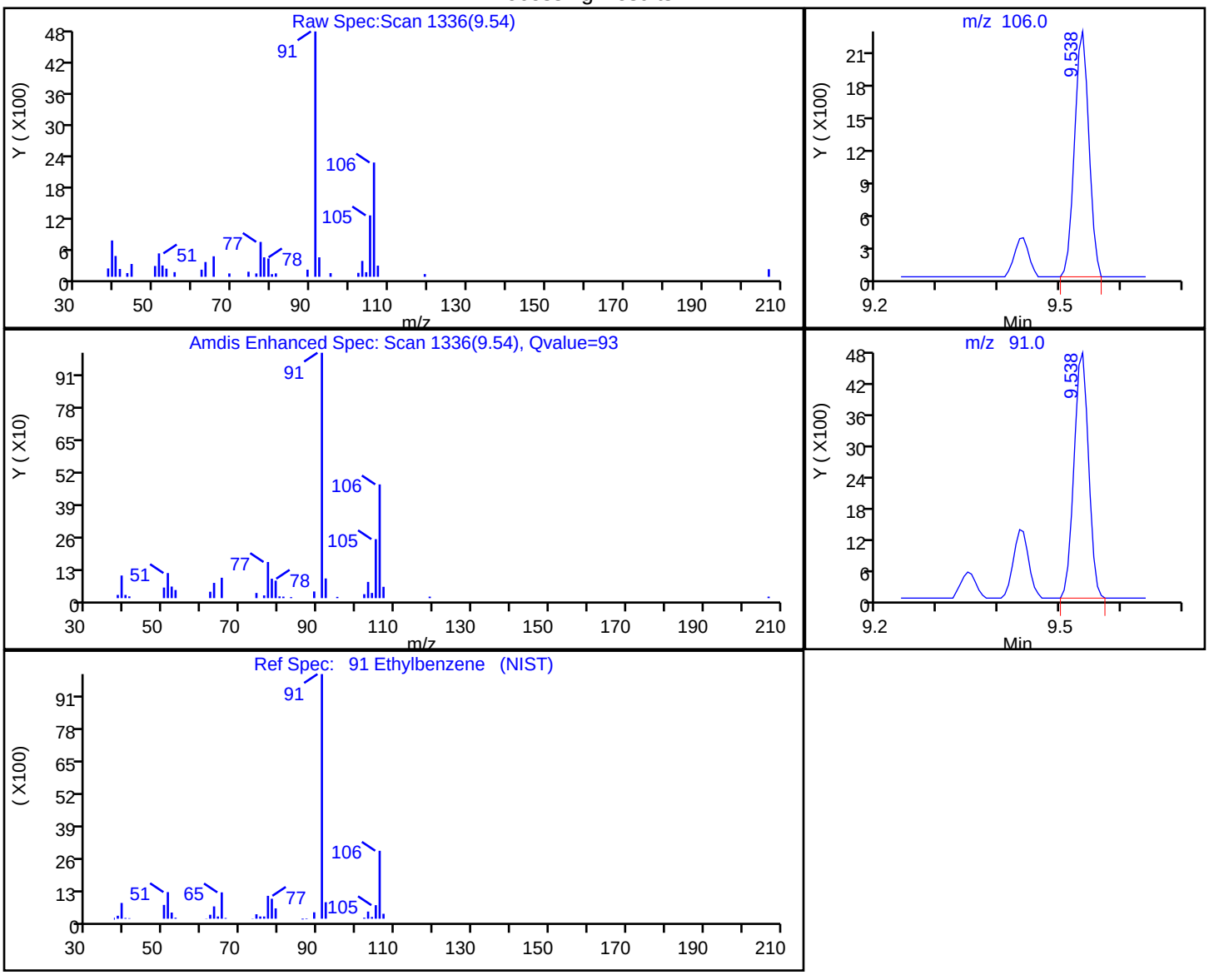
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48968.D				
Injection Date:	20-Apr-2018 16:23:30	Instrument ID:	CVOAMS4		
Lims ID:	460-153878-B-1-A	Lab Sample ID:	460-153878-1		
Client ID:	GC-MW-101D(SO)(99.2-100)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

91 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.54	106.00	3637	1.120462
9.54	91.00	7908	

Reviewer: delpolitov, 20-Apr-2018 17:09:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-505957/3	B27891.D
Level 2	STD5 460-505957/4	B27892.D
Level 3	STD20 460-505957/5	B27893.D
Level 4	STD50 460-505957/6	B27894.D
Level 5	STD200 460-505957/7	B27895.D
Level 6	STD500 460-505957/8	B27896.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.6792 0.6920	0.6017	0.6271	0.6055	0.7136	Ave		0.6532			0.1000	7.3		20.0			
Chloromethane	0.7240 0.5881	0.5635	0.5676	0.5393	0.5999	Ave		0.5971			0.1000	11.0		20.0			
Butadiene	0.4729 0.4869	0.5395	0.4778	0.5038	0.5459	Ave		0.5045				6.2		20.0			
Vinyl chloride	0.6767 0.5548	0.5969	0.5741	0.5614	0.6144	Ave		0.5964			0.1000	7.6		20.0			
Bromomethane	0.4425 0.3127	0.4087	0.3475	0.3292	0.3348	Ave		0.3626			0.1000	14.1		20.0			
Chloroethane	0.3630 0.2914	0.3570	0.3151	0.2909	0.3117	Ave		0.3215			0.1000	9.8		20.0			
Trichlorofluoromethane	0.6591 0.6894	0.6743	0.7299	0.6911	0.6958	Ave		0.6899			0.1000	3.4		20.0			
Dichlorofluoromethane	1.1872 0.8477	0.9179	0.9419	0.9040	0.8755	Ave		0.9457				13.0		20.0			
Pentane	0.0792 0.0816	0.0787	0.0845	0.0786	0.0813	Ave		0.0807				2.8		20.0			
Ethyl ether	0.3457 0.3062	0.3144	0.3275	0.3260	0.3308	Ave		0.3251				4.2		20.0			
2-Methyl-1,3-butadiene	0.4705 0.4395	0.4318	0.4776	0.4462	0.4576	Ave		0.4539				3.9		20.0			
Ethanol	0.0688 0.0702	0.0582	0.0689	0.0702	0.0728	Ave		0.0682				7.5		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	0.3750 0.3361	0.3398	0.3731	0.3560	0.3586	Ave		0.3564				4.6		20.0			
Acrolein	1.8077 1.9653	2.4251	2.3001	1.9964	1.9763	Ave		2.0785				11.2		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4465 0.4229	0.4156	0.4762	0.4443	0.4477	Ave		0.4422			0.1000	4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloroethene	0.4550 0.3813	0.3961	0.4167	0.4068	0.4062	Ave		0.4103			0.1000	6.1		20.0			
Acetone	1.7157 0.9114	0.8988	0.9365	0.8767	0.9080	QuaF		0.9025	0.0000036		0.0500				1.0000		0.9900
Iodomethane	0.7981 0.6493	0.6371	0.7186	0.6760	0.6872	Ave		0.6944				8.4		20.0			
Carbon disulfide	1.8376 1.3691	1.5276	1.6589	1.5939	1.5135	Ave		1.5834			0.1000	10.0		20.0			
Isopropyl alcohol	0.6811 0.9842	0.6405	0.8178	0.8203	0.9136	Ave		0.8096				16.3		20.0			
Allyl chloride	0.3104 0.2580	0.2662	0.2949	0.2756	0.2833	Ave		0.2814				6.8		20.0			
Methyl acetate	0.2739 0.2315	0.2006	0.2233	0.2363	0.2491	Ave		0.2358			0.1000	10.5		20.0			
Methylene Chloride	0.5209 0.4038	0.4338	0.4498	0.4130	0.4327	Ave		0.4424			0.1000	9.4		20.0			
2-Methyl-2-propanol	2.1752 1.5559	1.6625	1.6430	1.5331	1.6857	Ave		1.7092				13.8		20.0			
Methyl tert-butyl ether	1.1078 0.9292	0.9212	0.9604	0.9470	0.9972	Ave		0.9771			0.1000	7.1		20.0			
trans-1,2-Dichloroethene	0.4556 0.3987	0.4040	0.4482	0.4289	0.4277	Ave		0.4272			0.1000	5.3		20.0			
Acrylonitrile	3.7014 4.0725	3.4774	4.5132	4.1543	4.5578	Ave		4.0794				10.6		20.0			
Hexane	0.7550 0.6862	0.7003	0.7987	0.7734	0.7460	Ave		0.7433				5.8		20.0			
Isopropyl ether	1.7553 1.4571	1.4024	1.5664	1.5318	1.5522	Ave		1.5442				7.8		20.0			
1,1-Dichloroethane	1.0267 0.7945	0.8208	0.8731	0.8533	0.8669	Ave		0.8726			0.2000	9.3		20.0			
2-Chloro-1,3-butadiene	0.3529 0.4059	0.3432	0.4019	0.3987	0.4101	Ave		0.3854				7.6		20.0			
Vinyl acetate	0.4211 0.5137	0.4173	0.5883	0.5192	0.5332	Ave		0.4988				13.5		20.0			
Tert-butyl ethyl ether	1.3222 1.2084	1.1097	1.2240	1.2092	1.2467	Ave		1.2200				5.6		20.0			
2,2-Dichloropropane	0.2720 0.2025	0.1816	0.2082	0.2108	0.2147	Ave		0.2150				14.1		20.0			
cis-1,2-Dichloroethene	0.5336 0.4310	0.4445	0.4633	0.4486	0.4656	Ave		0.4644			0.1000	7.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Butanone (MEK)	0.4823 0.3253	0.2735	0.3514	0.3262	0.3319	QuaF		0.3354	-0.000004		0.0500				1.0000		0.9900
Ethyl acetate	0.3195 0.3300	0.2924	0.3339	0.3063	0.3178	Ave		0.3166				4.9		20.0			
Propionitrile	0.2984 0.4171	0.3392	0.4331	0.4382	0.4223	Ave		0.3914				14.9		20.0			
Chlorobromomethane	0.2894 0.1796	0.1677	0.1841	0.1787	0.1834	QuaF		0.1850	-0.000011						1.0000		0.9900
Methacrylonitrile	0.1193 0.1147	0.0981	0.1104	0.1163	0.1174	Ave		0.1127				6.9		20.0			
Chloroform	0.8383 0.6858	0.6900	0.7399	0.7182	0.7436	Ave		0.7360			0.2000	7.6		20.0			
Cyclohexane	0.5980 0.6201	0.6335	0.6732	0.6689	0.6565	Ave		0.6417			0.1000	4.6		20.0			
1,1,1-Trichloroethane	0.6571 0.5965	0.5924	0.6551	0.6196	0.6447	Ave		0.6275			0.1000	4.6		20.0			
Carbon tetrachloride	0.6598 0.5169	0.4926	0.5434	0.5225	0.5361	Ave		0.5452			0.1000	10.8		20.0			
1,1-Dichloropropene	0.6090 0.5768	0.5305	0.6150	0.5961	0.6144	Ave		0.5903				5.5		20.0			
Benzene	2.5634 1.8924	2.0614	2.3076	2.1968	2.1938	Ave		2.2026			0.5000	10.3		20.0			
Isobutyl alcohol	0.4213 0.4425	0.2257	0.3266	0.3552	0.4529	QuaF		0.4424	0.0000001						0.9990		0.9900
Tert-amyl methyl ether	1.3303 1.2096	1.0382	1.1894	1.1921	1.2208	Ave		1.1967				7.8		20.0			
1,2-Dichloroethane	0.6320 0.4577	0.4519	0.4707	0.4575	0.4848	Ave		0.4924			0.1000	14.1		20.0			
n-Heptane	0.3108 0.4048	0.4008	0.4502	0.4398	0.4370	Ave		0.4072				12.6		20.0			
Trichloroethene	0.4360 0.4111	0.3677	0.4200	0.4094	0.4287	Ave		0.4121			0.2000	5.8		20.0			
n-Butanol	0.0579 0.2997	0.1276	0.1880	0.2089	0.2791	QuaF		0.2551	0.0000036						0.9990		0.9900
Methylcyclohexane	0.7243 0.7455	0.6445	0.8059	0.7864	0.7902	Ave		0.7495			0.1000	8.0		20.0			
Ethyl acrylate	0.5800 0.4671	0.1404	0.2774	0.3307	0.4001	Ave		0.3660				41.8	*	20.0			
1,2-Dichloropropane	0.4686 0.4398	0.4184	0.4430	0.4355	0.4603	Ave		0.4443			0.1000	4.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromomethane	0.2267 0.2027	0.1761	0.2051	0.1992	0.2105	Ave		0.2034				8.1		20.0			
1,4-Dioxane	0.2584 +++++	1.3317	1.6863	1.6263	1.5590	Lin2	-27.82	1.6470							0.9980		0.9900
Dichlorobromomethane	0.5331 0.4859	0.4185	0.4619	0.4633	0.5102	Ave		0.4788			0.2000	8.4		20.0			
2-Nitropropane	0.1126 0.0733	0.0711	0.0622	0.0617	0.0677	Lin2	0.0939	0.0648							0.9930		0.9900
2-Chloroethyl vinyl ether	0.1085 0.2213	0.1317	0.1655	0.1866	0.2110	Qua2	-0.065	0.1690	0.0001212						0.9930		0.9900
Epichlorohydrin	0.2511 0.2624	0.2385	0.2947	0.2782	0.2756	Ave		0.2667				7.6		20.0			
cis-1,3-Dichloropropene	0.7279 0.7914	0.6538	0.7788	0.8016	0.8509	Ave		0.7674			0.2000	8.9		20.0			
4-Methyl-2-pentanone (MIBK)	3.9231 2.9760	2.7986	3.4616	3.3660	3.3950	Ave		3.3201			0.0500	11.9		20.0			
Toluene	2.5969 1.8201	1.9980	2.2316	2.1567	2.1219	Ave		2.1542			0.4000	12.1		20.0			
trans-1,3-Dichloropropene	0.5986 0.6406	0.4947	0.5963	0.6259	0.6849	Ave		0.6068			0.1000	10.5		20.0			
1,1,2-Trichloroethane	0.3574 0.3320	0.3102	0.3241	0.3361	0.3518	Ave		0.3353			0.1000	5.2		20.0			
Tetrachloroethene	0.5941 0.5225	0.4885	0.6040	0.5826	0.5617	Ave		0.5589			0.2000	8.1		20.0			
1,3-Dichloropropane	0.6719 0.6290	0.5668	0.6387	0.6391	0.6565	Ave		0.6337				5.7		20.0			
2-Hexanone	1.2615 2.0080	1.1607	1.8747	2.0305	2.2243	QuaF		2.3143	-0.000122		0.0500				1.0000		0.9900
Chlorodibromomethane	0.4523 0.4240	0.3238	0.3796	0.4021	0.4447	Ave		0.4044			0.1000	11.8		20.0			
Ethylene Dibromide	0.3267 0.3382	0.2719	0.3342	0.3535	0.3571	Ave		0.3303			0.1000	9.3		20.0			
Chlorobenzene	1.4451 1.1800	1.1927	1.3509	1.3104	1.3404	Ave		1.3032			0.5000	7.8		20.0			
Ethylbenzene	0.7424 0.7002	0.6350	0.7165	0.7102	0.7471	Ave		0.7086			0.1000	5.7		20.0			
1,1,1,2-Tetrachloroethane	0.5379 0.4552	0.4083	0.4624	0.4677	0.4925	Ave		0.4707				9.1		20.0			
m-Xylene & p-Xylene	0.8014 0.8279	0.7301	0.8915	0.8888	0.9195	Ave		0.8432			0.1000	8.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
o-Xylene	0.8394 0.7988	0.7152	0.8245	0.8466	0.8850	Ave		0.8183			0.3000	7.1		20.0			
Styrene	1.2408 1.2104	0.9863	1.2909	1.3345	1.4195	Ave		1.2470			0.3000	11.8		20.0			
Bromoform	0.3465 0.2771	0.2082	0.2400	0.2584	0.2856	Ave		0.2693			0.1000	17.4		20.0			
Amyl acetate (mixed isomers)	0.4551 1.4786	0.5594	1.0021	1.1961	1.3735	QuaF		1.2780	0.0004029						1.0000		0.9900
Isopropylbenzene	2.1863 1.7783	1.9715	2.3987	2.3559	2.3019	Ave		2.1654			0.1000	11.3		20.0			
Bromobenzene	1.3641 1.0299	0.8947	1.0018	0.9801	1.0523	Ave		1.0539				15.3		20.0			
1,1,2,2-Tetrachloroethane	1.0338 0.8914	0.7337	0.8821	0.8567	0.8953	Ave		0.8822			0.3000	10.9		20.0			
N-Propylbenzene	5.1402 3.8318	4.6455	5.4146	5.2764	5.0385	Ave		4.8912				11.9		20.0			
1,2,3-Trichloropropane	0.2854 0.2153	0.1938	0.2208	0.2172	0.2126	Ave		0.2242				14.0		20.0			
trans-1,4-Dichloro-2-butene	0.3058 0.3844	0.2616	0.3169	0.3374	0.3692	Ave		0.3292				13.6		20.0			
2-Chlorotoluene	4.1515 3.0906	3.3611	3.6865	3.5454	3.5780	Ave		3.5689				9.9		20.0			
4-Ethyltoluene	4.0817 3.7453	3.7804	4.5379	4.5186	4.4592	Ave		4.1872				8.8		20.0			
1,3,5-Trimethylbenzene	3.9551 3.0279	3.3974	3.8201	3.5940	3.5576	Ave		3.5587				9.2		20.0			
4-Chlorotoluene	3.8914 3.0226	3.2057	3.5654	3.4263	3.4395	Ave		3.4252				8.7		20.0			
tert-Butylbenzene	3.3839 2.8518	2.5472	3.1134	3.1118	3.3029	Ave		3.0518				10.1		20.0			
1,2,4-Trimethylbenzene	3.8022 2.9381	3.0867	3.5612	3.5711	3.6092	Ave		3.4281				9.8		20.0			
sec-Butylbenzene	4.7697 3.6094	4.2533	4.9250	4.8178	4.6673	Ave		4.5071				11.0		20.0			
1,3-Dichlorobenzene	2.3054 1.7891	1.8267	1.9730	1.9326	1.9973	Ave		1.9707			0.6000	9.3		20.0			
4-Isopropyltoluene	3.4603 3.1732	3.2562	3.9551	3.9069	3.9314	Ave		3.6138				10.0		20.0			
1,4-Dichlorobenzene	2.7960 1.8775	2.0974	2.1315	1.9767	2.0819	Ave		2.1602			0.5000	15.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Benzyl chloride	0.2618 0.3432	0.2606	0.2687	0.3057	0.3294	Ave		0.2949				12.3		20.0			
Indan	1.5892 1.1596	1.2126	1.4808	1.4482	1.4782	Ave		1.3948				12.1		20.0			
p-Diethylbenzene	2.3435 2.0791	1.8765	2.3345	2.2757	2.3805	Ave		2.2150				8.9		20.0			
n-Butylbenzene	1.6838 2.0093	2.0430	2.3984	2.2926	2.4192	Ave		2.1410				13.3		20.0			
1,2-Dichlorobenzene	2.3194 1.6406	1.8073	1.9221	1.8364	1.9011	Ave		1.9045			0.4000	11.9		20.0			
1,2,4,5-Tetramethylbenzene	2.8607 2.6647	2.7062	3.4396	3.4877	3.3940	Ave		3.0922				12.6		20.0			
1,2-Dibromo-3-Chloropropane	0.0805 0.1003	0.0846	0.0984	0.1211	0.1145	Ave		0.0999			0.0500	16.0		20.0			
1,3,5-Trichlorobenzene	1.9604 1.2779	1.5712	1.7103	1.6687	1.5442	Ave		1.6221				13.8		20.0			
1,2,4-Trichlorobenzene	1.3040 0.9445	1.0541	1.3680	1.3133	1.2201	Ave		1.2007			0.2000	13.9		20.0			
Hexachlorobutadiene	1.1465 0.7208	0.9798	1.0425	0.9931	0.9134	Ave		0.9660				14.8		20.0			
Naphthalene	2.5945 +++++	1.6832	2.1143	2.2693	1.8901	Ave		2.1103				16.6		20.0			
1,2,3-Trichlorobenzene	1.4884 0.6386	0.9144	1.1622	1.1176	0.8984	QuaF		1.0861	-0.000896						1.0000		0.9900
Dibromofluoromethane (Surr)	0.2884 0.2822	0.2821	0.2883	0.2774	0.2695	Ave		0.2813				2.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2940 0.3212	0.2973	0.2854	0.2782	0.2915	Ave		0.2946				5.0		20.0			
Toluene-d8 (Surr)	1.4727 1.4963	1.4567	1.5397	1.5023	1.4864	Ave		1.4923				1.9		20.0			
4-Bromofluorobenzene	0.9607 0.9369	0.8990	0.8873	0.8563	0.8877	Ave		0.9046				4.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-505957/3	B27891.D
Level 2	STD5 460-505957/4	B27892.D
Level 3	STD20 460-505957/5	B27893.D
Level 4	STD50 460-505957/6	B27894.D
Level 5	STD200 460-505957/7	B27895.D
Level 6	STD500 460-505957/8	B27896.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	7112 4400177	33268	134397	345422	1768158	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	7581 3739724	31156	121656	307689	1486419	1.00 500	5.00	20.0	50.0	200
Butadiene	FB	Ave	4952 3096219	29828	102401	287430	1352721	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	7086 3527951	33000	123041	320269	1522339	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	4633 1988153	22597	74483	187821	829565	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	3801 1852964	19740	67528	165938	772381	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	6901 4383411	37282	156441	394305	1724036	1.00 500	5.00	20.0	50.0	200
Dichlorofluoromethane	FB	Ave	12431 5390438	50748	201886	515741	2169407	1.00 500	5.00	20.0	50.0	200
Pentane	FB	Ave	1658 1038287	8707	36218	89703	402857	2.00 1000	10.0	40.0	100	400
Ethyl ether	FB	Ave	3620 1947206	17382	70189	185979	819698	1.00 500	5.00	20.0	50.0	200
2-Methyl-1,3-butadiene	FB	Ave	4927 2794781	23875	102354	254558	1133880	1.00 500	5.00	20.0	50.0	200
Ethanol	TBAd 9	Ave	833 476150	3380	14479	43742	181661	40.0 20000	200	800	2000	8000
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	3927 2137390	18788	79965	203095	888586	1.00 500	5.00	20.0	50.0	200
Acrolein	TBAd 9	Ave	54698 399957	140952	181220	248855	308234	100 600	200	300	400	500
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	4675 2688982	22977	102055	253491	1109412	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethene	FB	Ave	4764 2424326	21899	89313	232095	1006385	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acetone	BUT	QuaF	8068 2946813	22225	86196	235926	1086118	5.00 2500	25.0	100	250	1000
Iodomethane	FB	Ave	8357 4128636	35225	154013	385678	1702869	1.00 500	5.00	20.0	50.0	200
Carbon disulfide	FB	Ave	19241 8705528	84460	355557	909343	3750248	1.00 500	5.00	20.0	50.0	200
Isopropyl alcohol	TBAd9	Ave	2061 1669162	9306	42955	127810	569965	10.0 5000	50.0	200	500	2000
Allyl chloride	FB	Ave	3250 1640859	14717	63212	157209	701858	1.00 500	5.00	20.0	50.0	200
Methyl acetate	FB	Ave	14339 7359133	55440	239260	673985	3086305	5.00 2500	25.0	100	250	1000
Methylene Chloride	FB	Ave	5454 2567949	23986	96413	235626	1072220	1.00 500	5.00	20.0	50.0	200
2-Methyl-2-propanol	TBAd9	Ave	6582 2638690	24156	86299	238869	1051685	10.0 5000	50.0	200	500	2000
Methyl tert-butyl ether	FB	Ave	11600 5908337	50931	205837	540282	2471000	1.00 500	5.00	20.0	50.0	200
trans-1,2-Dichloroethene	FB	Ave	4770 2535153	22337	96072	244691	1059746	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	TBAd9	Ave	11200 6906453	50527	237054	647287	2843435	10.0 5000	50.0	200	500	2000
Hexane	FB	Ave	7905 4363538	38719	171187	441256	1848593	1.00 500	5.00	20.0	50.0	200
Isopropyl ether	FB	Ave	18379 9265110	77535	335728	873926	3846077	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	10750 5052078	45378	187138	486826	2148170	1.00 500	5.00	20.0	50.0	200
2-Chloro-1,3-butadiene	FB	Ave	3695 2580926	18977	86139	227440	1016056	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	BUT	Ave	792 664399	4128	21659	55894	255109	2.00 1000	10.0	40.0	100	400
Tert-butyl ethyl ether	FB	Ave	13844 7684147	61353	262338	689847	3089165	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	2848 1287533	10039	44620	120268	532099	1.00 500	5.00	20.0	50.0	200
cis-1,2-Dichloroethene	FB	Ave	5587 2740478	24573	99296	255917	1153697	1.00 500	5.00	20.0	50.0	200
2-Butanone (MEK)	BUT	QuaF	2268 1051685	6762	32344	87773	396976	5.00 2500	25.0	100	250	1000
Ethyl acetate	BUT	Ave	601 426777	2892	12293	32972	152029	2.00 1000	10.0	40.0	100	400

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Propionitrile	BUT	Ave	2806 2697227	16778	79714	235830	1010336	10.0 5000	50.0	200	500	2000
Chlorobromomethane	FB	QuaF	3030 1141953	9269	39458	101944	454521	1.00 500	5.00	20.0	50.0	200
Methacrylonitrile	FB	Ave	12487 7293053	54254	236643	663319	2908636	10.0 5000	50.0	200	500	2000
Chloroform	FB	Ave	8778 4361108	38148	158588	409711	1842628	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Ave	6262 3942749	35027	144289	381589	1626771	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	6880 3792708	32751	140409	353469	1597477	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	6909 3287051	27234	116461	298079	1328270	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	6377 3667895	29328	131822	340076	1522288	1.00 500	5.00	20.0	50.0	200
Benzene	CBNZ d5	Ave	19615 9351754	85430	368873	925676	4155899	1.00 500	5.00	20.0	50.0	200
Isobutyl alcohol	TBAd 9	QuaF	3187 1876164	8200	42883	138359	706401	25.0 12500	125	500	1250	5000
Tert-amyl methyl ether	FB	Ave	13929 7691313	57398	254917	680080	3024927	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	6618 2910517	24984	100878	261014	1201359	1.00 500	5.00	20.0	50.0	200
n-Heptane	FB	Ave	3254 2573786	22159	96491	250915	1082750	1.00 500	5.00	20.0	50.0	200
Trichloroethene	FB	Ave	4565 2613811	20327	90024	233539	1062333	1.00 500	5.00	20.0	50.0	200
n-Butanol	TBAd 9	QuaF	438 1270715	4635	24686	81354	435290	25.0 12500	125	500	1250	5000
Methylcyclohexane	FB	Ave	7584 4740380	35635	172718	448645	1957996	1.00 500	5.00	20.0	50.0	200
Ethyl acrylate	FB	Ave	6073 2970303	7761	59464	188651	991373	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	4907 2796584	23134	94951	248479	1140451	1.00 500	5.00	20.0	50.0	200
Dibromomethane	FB	Ave	2374 1288660	9735	43958	113629	521520	1.00 500	5.00	20.0	50.0	200
1,4-Dioxane	DXE	Lin2	94 +++++	2507	11557	36363	160460	20.0 +++++	100	400	1000	4000
Dichlorobromomethane	FB	Ave	5582 3089826	23136	99000	264299	1264090	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
2-Nitropropane	FB	Lin2	2359 932192	7864	26666	70421	335535	2.00 1000	10.0	40.0	100	400
2-Chloroethyl vinyl ether	FB	Qua2	1136 1407454	7284	35468	106439	522815	1.00 500	5.00	20.0	50.0	200
Epichlorohydrin	BUT	Ave	4723 3393848	23591	108482	299445	1318471	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	CBNZ d5	Ave	5570 3910749	27097	124499	337757	1611966	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone (MIBK)	BUT	Ave	18448 9622782	69205	318596	905828	4060870	5.00 2500	25.0	100	250	1000
Toluene	CBNZ d5	Ave	19871 8994276	82801	356723	908804	4019867	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBNZ d5	Ave	4580 3165701	20503	95325	263735	1297462	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBNZ d5	Ave	2735 1640390	12855	51814	141642	666519	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBNZ d5	Ave	4546 2582010	20244	96556	245504	1064031	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBNZ d5	Ave	5141 3108280	23489	102104	269299	1243606	1.00 500	5.00	20.0	50.0	200
2-Hexanone	BUT	QuaF	5932 6492827	28702	172545	546417	2660537	5.00 2500	25.0	100	250	1000
Chlorodibromomethane	CBNZ d5	Ave	3461 2095390	13421	60675	169437	842436	1.00 500	5.00	20.0	50.0	200
Ethylene Dibromide	CBNZ d5	Ave	2500 1671135	11267	53421	148974	676548	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBNZ d5	Ave	11058 5830906	49427	215947	552178	2539214	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBNZ d5	Ave	5681 3459955	26317	114536	299265	1415361	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	4116 2249652	16919	73914	197094	932966	1.00 500	5.00	20.0	50.0	200
m-Xylene & p-Xylene	CBNZ d5	Ave	6132 4091345	30257	142507	374524	1741944	1.00 500	5.00	20.0	50.0	200
o-Xylene	CBNZ d5	Ave	6423 3947442	29640	131803	356758	1676652	1.00 500	5.00	20.0	50.0	200
Styrene	CBNZ d5	Ave	9494 5981533	40874	206348	562318	2689070	1.00 500	5.00	20.0	50.0	200
Bromoform	CBNZ d5	Ave	2651 1369423	8629	38368	108872	541129	1.00 500	5.00	20.0	50.0	200
Amyl acetate (mixed isomers)	DCBd 4	QuaF	1780 3785012	12268	88681	281457	1462340	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Isopropylbenzene	CBNZ d5	Ave	16729 8787644	81704	383442	992719	4360831	1.00 500	5.00	20.0	50.0	200
Bromobenzene	DCBd 4	Ave	5335 2636434	19621	88657	230646	1120389	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	4043 2281929	16089	78064	201590	953237	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCBd 4	Ave	20103 9808605	101872	479168	1241642	5364387	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichloropropane	DCBd 4	Ave	1116 551043	4250	19544	51114	226385	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1196 984096	5737	28044	79401	393052	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCBd 4	Ave	16236 7911311	73706	326240	834300	3809431	1.00 500	5.00	20.0	50.0	200
4-Ethyltoluene	DCBd 4	Ave	15963 9587314	82900	401579	1063310	4747601	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCBd 4	Ave	15468 7750918	74503	338064	845743	3787659	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCBd 4	Ave	15219 7737294	70298	315522	806287	3661942	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCBd 4	Ave	13234 7300134	55857	275519	732269	3516531	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCBd 4	Ave	14870 7520948	67688	315150	840359	3842600	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCBd 4	Ave	18654 9239456	93271	435836	1133723	4969156	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCBd 4	Ave	9016 4579648	40058	174603	454774	2126431	1.00 500	5.00	20.0	50.0	200
4-Isopropyltoluene	DCBd 4	Ave	13533 8122882	71405	350008	919362	4185640	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCBd 4	Ave	10935 4806093	45993	188627	465167	2216529	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCBd 4	Ave	1024 878640	5714	23779	71932	350654	1.00 500	5.00	20.0	50.0	200
Indan	FB	Ave	16640 7373746	67042	317367	826194	3662888	1.00 500	5.00	20.0	50.0	200
p-Diethylbenzene	DCBd 4	Ave	9165 5322158	41151	206591	535525	2534491	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCBd 4	Ave	6585 5143438	44801	212248	539502	2575638	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCBd 4	Ave	9071 4199532	39632	170099	432140	2024086	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505957

SDG No.:

Instrument ID: CVOAMS2 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/26/2018 04:03 Calibration End Date: 03/26/2018 09:16 Calibration ID: 67235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	11188 6821004	59345	304390	820726	3613515	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	315 256786	1856	8708	28487	121905	1.00 500	5.00	20.0	50.0	200
1,3,5-Trichlorobenzene	DCBd 4	Ave	7667 3271131	34455	151351	392679	1644116	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	5100 2417807	23116	121064	309041	1299063	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCBd 4	Ave	4484 1845029	21487	92256	233695	972456	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCBd 4	Ave	10147 +++++	36910	187103	534022	2012319	1.00 +++++	5.00	20.0	50.0	200
1,2,3-Trichlorobenzene	DCBd 4	QuaF	5821 1634586	20053	102852	262989	956472	1.00 500	5.00	20.0	50.0	200
Dibromofluoromethane (Surr)	FB	Ave	150970 179411	155967	154463	158235	166960	50.0 50.0	50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	153934 204230	164351	152924	158740	180590	50.0 50.0	50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	563433 739439	603673	615332	633035	703950	50.0 50.0	50.0	50.0	50.0	50.0
4-Bromofluorobenzene	DCBd 4	Ave	187856 239815	197139	196315	201494	236278	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua2 = Quadratic 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27891.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Mar-2018 04:03:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0069287-003
Operator ID: Instrument ID: CVOAMS2
Sublist: chrom-8260S_2*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 27-Mar-2018 13:13:02 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: tupayachia Date: 26-Mar-2018 05:24:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.113	1.113	0.000	96	7112	1.00	1.04	
2 Chloromethane	50	1.250	1.261	-0.011	95	7581	1.00	1.21	
4 Butadiene	54	1.330	1.341	-0.011	85	4952	1.00	0.9375	
3 Vinyl chloride	62	1.330	1.341	-0.011	95	7086	1.00	1.13	
5 Bromomethane	94	1.581	1.593	-0.012	90	4633	1.00	1.22	
6 Chloroethane	64	1.650	1.661	-0.011	88	3801	1.00	1.13	
7 Trichlorofluoromethane	101	1.810	1.821	-0.011	84	6901	1.00	0.9553	
8 Dichlorofluoromethane	67	1.821	1.833	-0.012	94	12431	1.00	1.26	
9 Pentane	72	1.844	1.844	0.000	95	1658	2.00	1.96	
12 Ethyl ether	59	2.038	2.050	-0.012	81	3620	1.00	1.06	
11 2-Methyl-1,3-butadiene	53	2.050	2.050	0.000	93	4927	1.00	1.04	
10 Ethanol	46	2.050	2.061	-0.011	70	833	40.0	40.4	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	95	3927	1.00	1.05	
16 Acrolein	56	2.210	2.221	-0.011	95	54698	100.0	87.0	
14 1,1,2-Trichloro-1,2,2-trif	101	2.210	2.221	-0.011	32	4675	1.00	1.01	
15 1,1-Dichloroethene	96	2.221	2.233	-0.012	91	4764	1.00	1.11	
17 Acetone	43	2.347	2.347	0.000	47	8068	5.00	9.50	
18 Iodomethane	142	2.359	2.370	-0.011	100	8357	1.00	1.15	
19 Carbon disulfide	76	2.381	2.393	-0.012	100	19241	1.00	1.16	
20 Isopropyl alcohol	45	2.473	2.484	-0.011	25	2061	10.0	8.41	
21 3-Chloro-1-propene	76	2.541	2.553	-0.012	77	3250	1.00	1.10	
22 Methyl acetate	43	2.587	2.587	0.000	98	14339	5.00	5.81	
23 Methylene Chloride	84	2.679	2.679	0.000	96	5454	1.00	1.18	
* 24 TBA-d9 (IS)	65	2.724	2.736	-0.012	0	302587	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.804	2.804	0.000	91	6582	10.0	12.7	
26 Methyl tert-butyl ether	73	2.850	2.850	0.000	96	11600	1.00	1.13	
27 trans-1,2-Dichloroethene	96	2.861	2.873	-0.012	94	4770	1.00	1.07	
28 Acrylonitrile	53	2.976	2.964	0.012	90	11200	10.0	9.07	
29 Hexane	57	3.021	3.033	-0.012	93	7905	1.00	1.02	
30 Isopropyl ether	45	3.273	3.273	0.000	99	18379	1.00	1.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 1,1-Dichloroethane	63	3.273	3.284	-0.011	80	10750	1.00	1.18	
33 2-Chloro-1,3-butadiene	88	3.319	3.330	-0.011	92	3695	1.00	0.9155	
32 Vinyl acetate	86	3.341	3.330	0.011	100	792	2.00	1.69	
34 Tert-butyl ethyl ether	59	3.604	3.616	-0.012	89	13844	1.00	1.08	
35 2,2-Dichloropropane	79	3.799	3.799	0.000	68	2848	1.00	1.27	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	235118	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.833	3.844	-0.011	63	5587	1.00	1.15	
38 2-Butanone (MEK)	72	3.890	3.890	0.000	43	2268	5.00	7.19	
39 Ethyl acetate	70	3.913	3.902	0.011	72	601	2.00	2.02	
40 Propionitrile	54	4.050	4.039	0.011	32	2806	10.0	7.62	a
41 Chlorobromomethane	128	4.084	4.084	0.000	95	3030	1.00	1.56	
42 Methacrylonitrile	67	4.142	4.130	0.012	96	12487	10.0	10.6	
43 Chloroform	83	4.153	4.153	0.000	94	8778	1.00	1.14	
44 Cyclohexane	84	4.256	4.256	0.000	89	6262	1.00	0.9320	
45 1,1,1-Trichloroethane	97	4.279	4.290	-0.011	97	6880	1.00	1.05	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	97	150970	50.0	51.3	
47 Carbon tetrachloride	117	4.404	4.404	0.000	88	6909	1.00	1.21	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	92	6377	1.00	1.03	
49 Benzene	78	4.667	4.667	0.000	95	19615	1.00	1.16	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.702	4.702	0.000	0	153934	50.0	49.9	
50 Isobutyl alcohol	42	4.759	4.713	0.046	1	3187	25.0	23.8	a
53 1,2-Dichloroethane	62	4.782	4.782	0.000	74	6618	1.00	1.28	
52 Tert-amyl methyl ether	73	4.782	4.782	0.000	97	13929	1.00	1.11	
54 n-Heptane	57	4.873	4.873	0.000	92	3254	1.00	0.7631	
* 55 Fluorobenzene	96	4.999	4.999	0.000	99	523541	50.0	50.0	
56 Trichloroethene	95	5.399	5.399	0.000	93	4565	1.00	1.06	
58 Methylcyclohexane	83	5.513	5.513	0.000	96	7584	1.00	0.9664	
57 n-Butanol	43	5.513	5.513	0.000	45	438	25.0	5.67	
59 Ethyl acrylate	55	5.673	5.616	0.057	60	6073	1.00	1.58	
60 1,2-Dichloropropane	63	5.730	5.730	0.000	89	4907	1.00	1.05	
* 61 1,4-Dioxane-d8	96	5.845	5.845	0.000	0	18187	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	83	2374	1.00	1.11	
63 1,4-Dioxane	88	5.890	5.902	-0.012	33	94	20.0	20.0	
64 Dichlorobromomethane	83	6.073	6.073	0.000	94	5582	1.00	1.11	
65 2-Nitropropane	41	6.496	6.485	0.011	76	2359	2.00	2.03	
66 2-Chloroethyl vinyl ether	63	6.519	6.508	0.011	61	1136	1.00	1.03	
67 Epichlorohydrin	57	6.633	6.622	0.011	67	4723	20.0	18.8	a
68 cis-1,3-Dichloropropene	75	6.668	6.656	0.012	92	5570	1.00	0.9486	
69 4-Methyl-2-pentanone (MIBK	43	6.885	6.873	0.012	38	18448	5.00	5.91	
$ 70 Toluene-d8 (Surr)	98	6.908	6.908	0.000	98	563433	50.0	49.3	
71 Toluene	91	6.988	6.988	0.000	92	19871	1.00	1.21	
72 trans-1,3-Dichloropropene	75	7.376	7.365	0.011	95	4580	1.00	0.9863	
73 1,1,2-Trichloroethane	83	7.548	7.548	0.000	76	2735	1.00	1.07	
74 Tetrachloroethene	166	7.548	7.548	0.000	91	4546	1.00	1.06	
75 1,3-Dichloropropane	76	7.719	7.719	0.000	91	5141	1.00	1.06	
76 2-Hexanone	43	7.822	7.810	0.012	69	5932	5.00	2.73	a
77 Chlorodibromomethane	129	7.902	7.890	0.012	90	3461	1.00	1.12	
78 Ethylene Dibromide	107	8.005	8.005	0.000	92	2500	1.00	0.9893	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	88	382591	50.0	50.0	
80 Chlorobenzene	112	8.428	8.428	0.000	93	11058	1.00	1.11	
81 Ethylbenzene	106	8.519	8.508	0.011	97	5681	1.00	1.05	
82 1,1,1,2-Tetrachloroethane	131	8.519	8.519	0.000	92	4116	1.00	1.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	6132	1.00	0.9504	
84 o-Xylene	106	8.965	8.953	0.012	92	6423	1.00	1.03	
85 Styrene	104	8.988	8.988	0.000	97	9494	1.00	0.99	
86 Bromoform	173	9.159	9.159	0.000	95	2651	1.00	1.29	
87 Amyl acetate (mixed isomer	43	9.193	9.171	0.022	35	1780	1.00	0.3561	
88 Isopropylbenzene	105	9.251	9.251	0.000	96	16729	1.00	1.01	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	91	187856	50.0	53.1	
90 Bromobenzene	156	9.514	9.514	0.000	96	5335	1.00	1.29	
91 1,1,2,2-Tetrachloroethane	83	9.571	9.571	0.000	52	4043	1.00	1.17	
92 N-Propylbenzene	91	9.582	9.571	0.011	97	20103	1.00	1.05	
93 1,2,3-Trichloropropane	110	9.605	9.605	0.000	90	1116	1.00	1.27	
95 trans-1,4-Dichloro-2-buten	53	9.651	9.628	0.023	27	1196	1.00	0.9289	a
94 2-Chlorotoluene	91	9.662	9.662	0.000	97	16236	1.00	1.16	
96 4-Ethyltoluene	105	9.674	9.662	0.012	94	15963	1.00	0.9748	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	94	15468	1.00	1.11	
98 4-Chlorotoluene	91	9.754	9.754	0.000	97	15219	1.00	1.14	
99 tert-Butylbenzene	119	9.948	9.948	0.000	91	13234	1.00	1.11	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	95	14870	1.00	1.11	
101 sec-Butylbenzene	105	10.119	10.119	0.000	98	18654	1.00	1.06	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	75	9016	1.00	1.17	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	96	13533	1.00	0.9575	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	97	195545	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.291	10.291	0.000	79	10935	1.00	1.29	
106 Benzyl chloride	126	10.416	10.405	0.011	96	1024	1.00	0.8879	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	94	16640	1.00	1.14	
108 p-Diethylbenzene	119	10.508	10.496	0.012	88	9165	1.00	1.06	
109 n-Butylbenzene	92	10.519	10.519	0.000	94	6585	1.00	0.7864	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	93	9071	1.00	1.22	
111 1,2,4,5-Tetramethylbenzene	119	11.057	11.057	0.000	98	11188	1.00	0.9252	
112 1,2-Dibromo-3-Chloropropan	155	11.137	11.137	0.000	1	315	1.00	0.8062	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	95	7667	1.00	1.21	
114 1,2,4-Trichlorobenzene	180	11.674	11.662	0.012	91	5100	1.00	1.09	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	96	4484	1.00	1.19	
116 Naphthalene	128	11.845	11.834	0.011	97	10147	1.00	1.23	
117 1,2,3-Trichlorobenzene	180	12.005	11.994	0.011	91	5821	1.00	1.37	
S 118 1,2-Dichloroethene, Total	100				0		2.00	2.22	
S 119 1,3-Dichloropropene, Total	100				0		2.00	1.93	
S 120 Xylenes, Total	100				0		2.00	1.98	
S 121 Total BTEX	1				0		5.00	5.39	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	1.00	Units: uL	
ACROLEIN W_00075	Amount Added:	10.00	Units: uL	
GASES Li_00252	Amount Added:	1.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Mar-2018 13:13:08 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27891.D

Injection Date: 26-Mar-2018 04:03:30 Instrument ID: CVOAMS2 Operator ID:

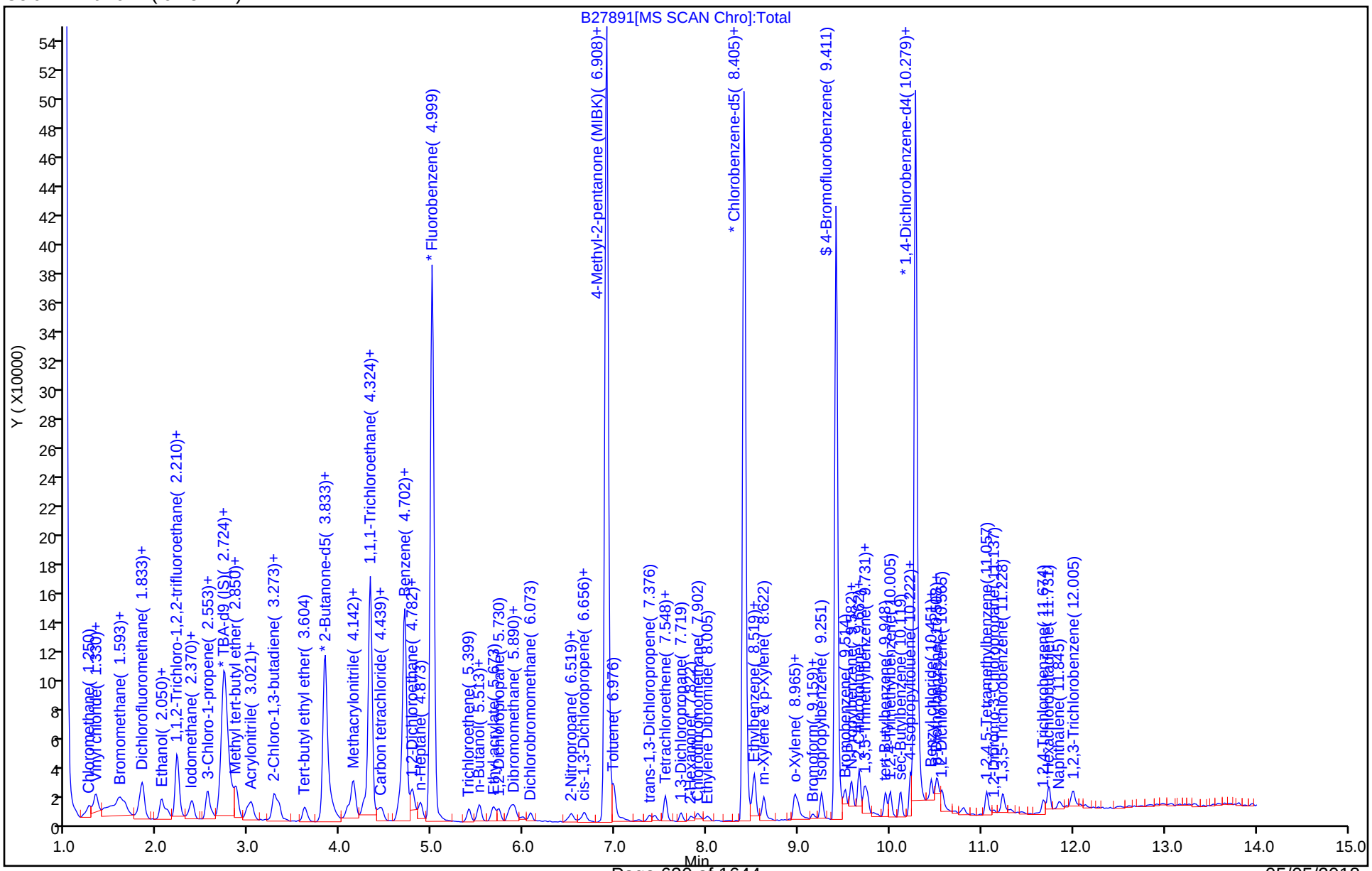
Lims ID: STD1 Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

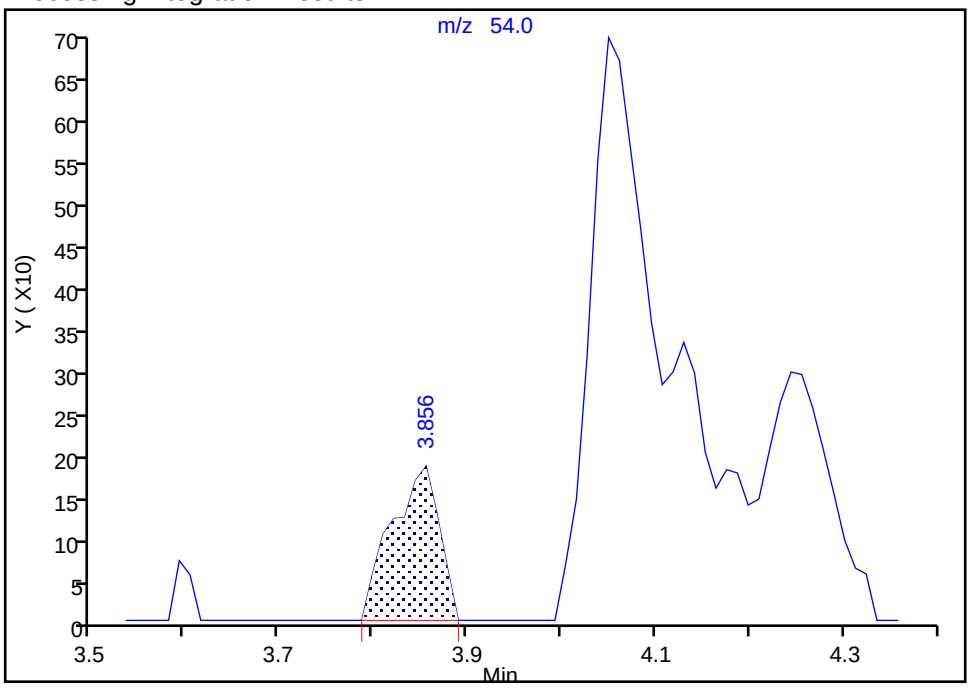
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27891.D
Injection Date: 26-Mar-2018 04:03:30 Instrument ID: CVOAMS2
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

40 Propionitrile, CAS: 107-12-0

Signal: 1

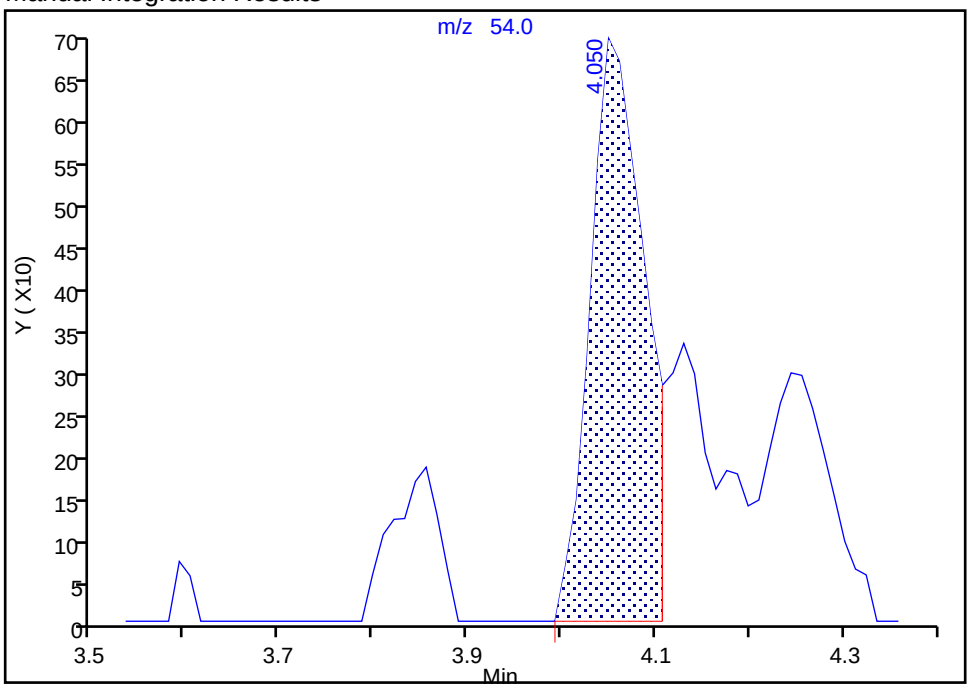
Processing Integration Results

RT: 3.86
Area: 643
Amount: 1.598690
Amount Units: ug/l



Manual Integration Results

RT: 4.05
Area: 2806
Amount: 7.623405
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 11:58:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

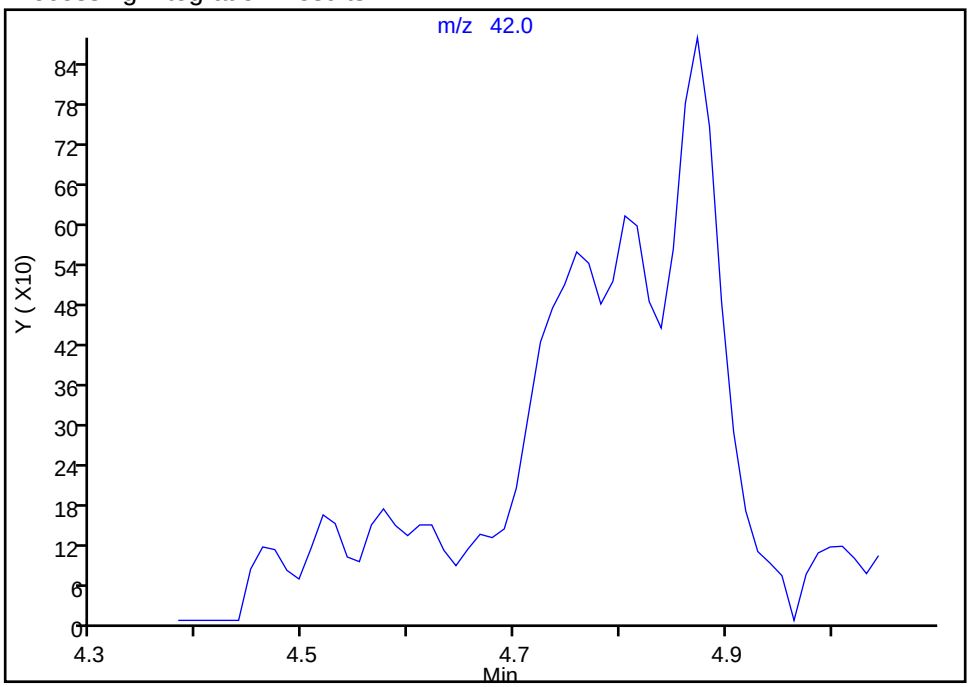
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27891.D
Injection Date: 26-Mar-2018 04:03:30 Instrument ID: CVOAMS2
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

50 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

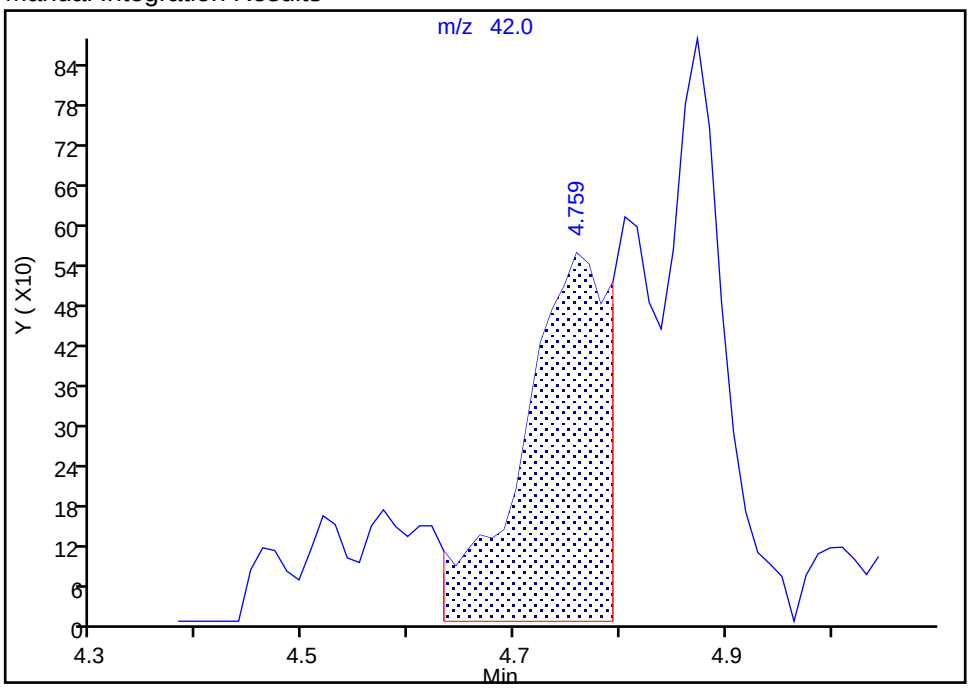
Not Detected
Expected RT: 4.71

Processing Integration Results



Manual Integration Results

RT: 4.76
Area: 3187
Amount: 23.808718
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:02:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

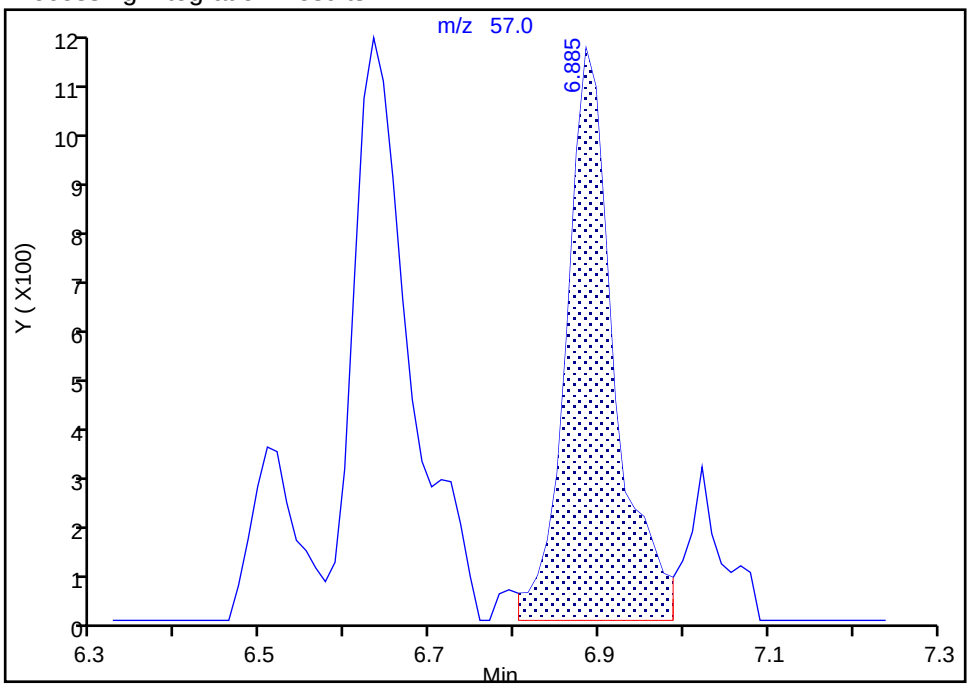
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27891.D
Injection Date: 26-Mar-2018 04:03:30 Instrument ID: CVOAMS2
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

67 Epichlorohydrin, CAS: 106-89-8

Signal: 1

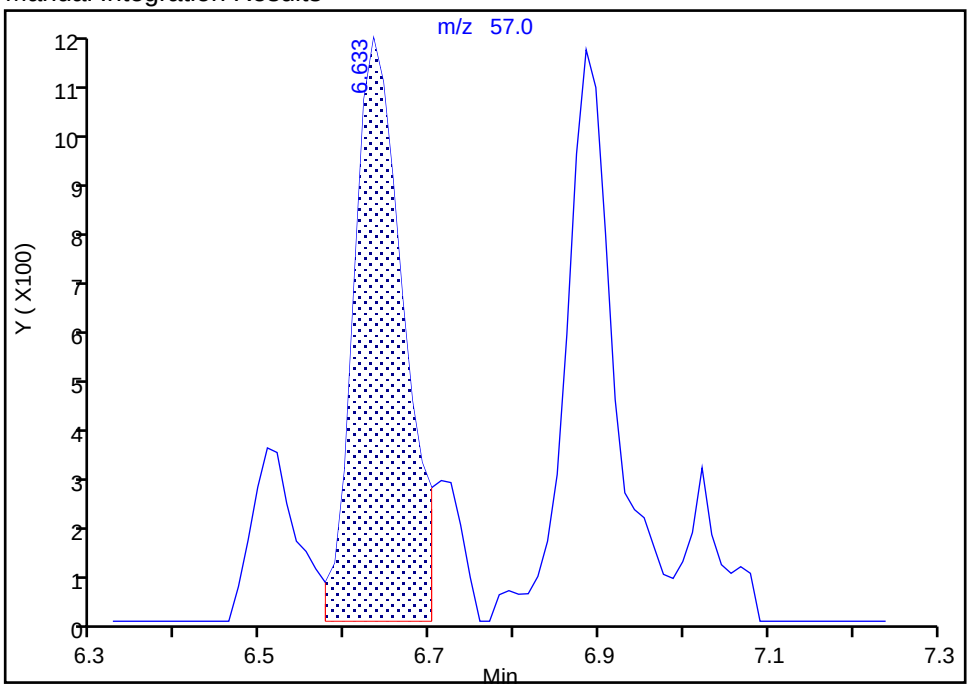
Processing Integration Results

RT: 6.88
Area: 4444
Amount: 17.880894
Amount Units: ug/l



Manual Integration Results

RT: 6.63
Area: 4723
Amount: 18.827353
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:04:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

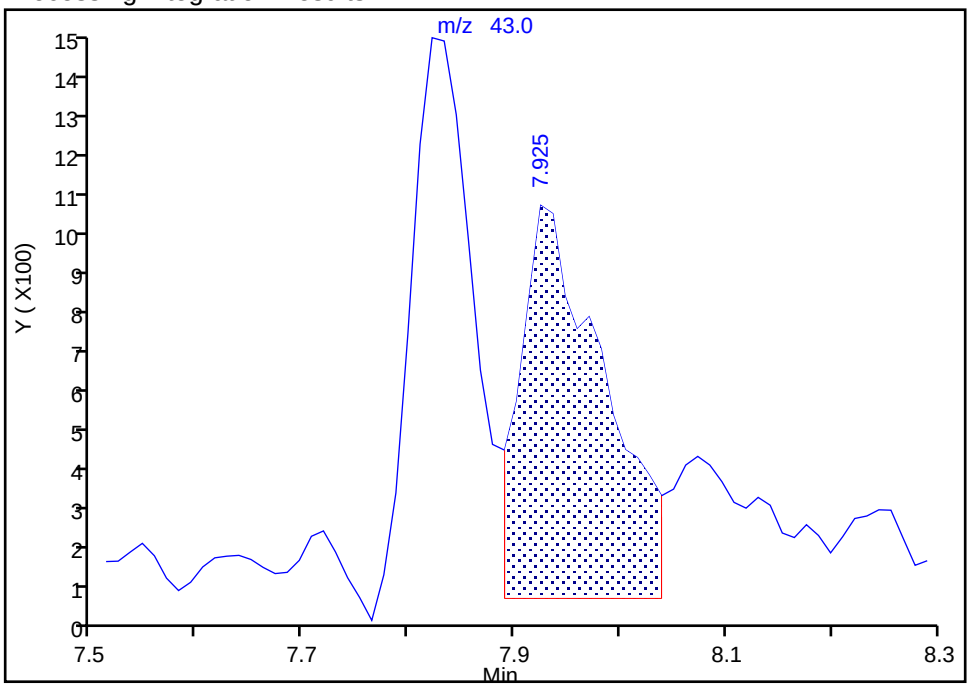
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27891.D
Injection Date: 26-Mar-2018 04:03:30 Instrument ID: CVOAMS2
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

76 2-Hexanone, CAS: 591-78-6

Signal: 1

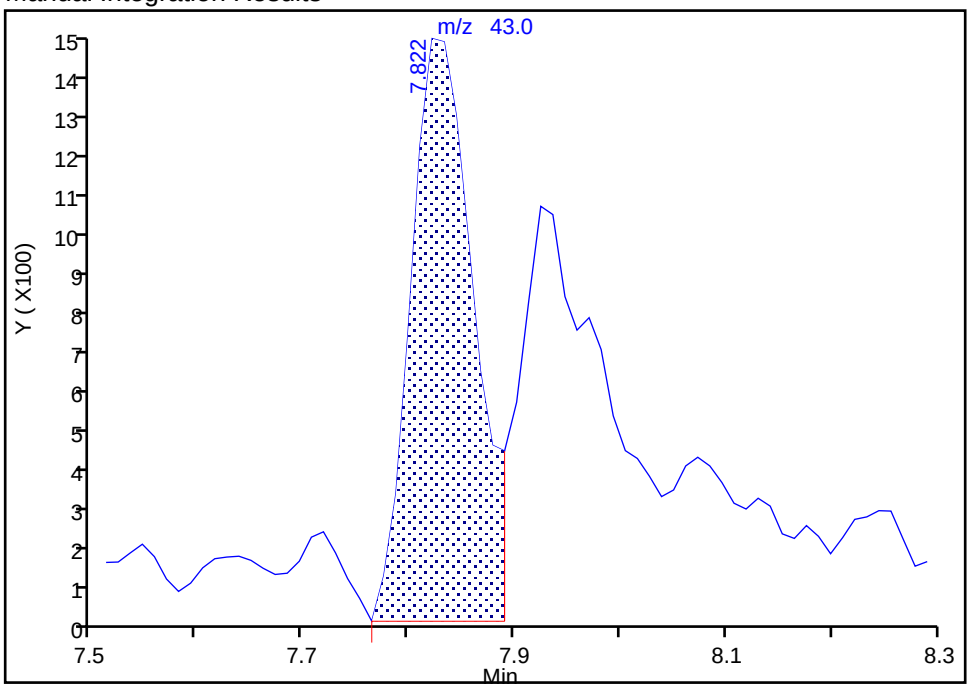
Processing Integration Results

RT: 7.92
Area: 5337
Amount: 2.452403
Amount Units: ug/l



Manual Integration Results

RT: 7.82
Area: 5932
Amount: 2.725841
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:04:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

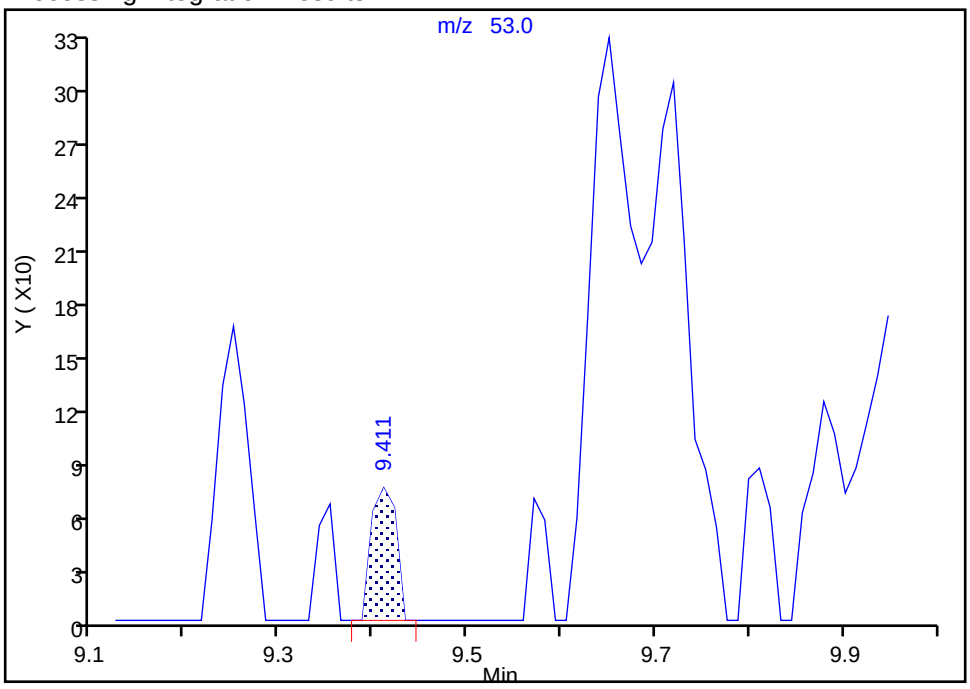
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27891.D
Injection Date: 26-Mar-2018 04:03:30 Instrument ID: CVOAMS2
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

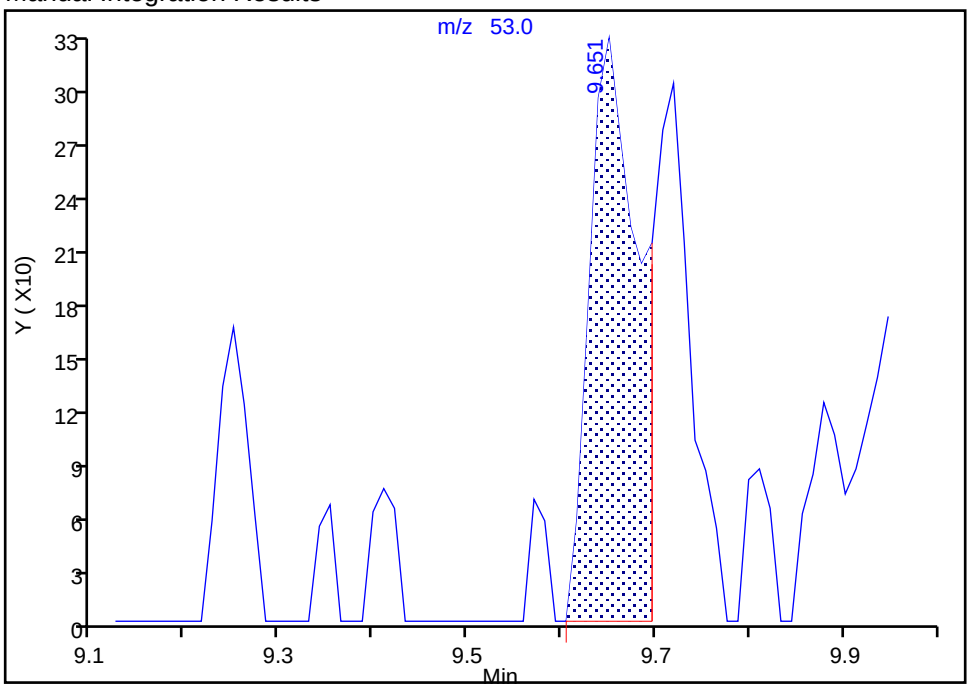
Processing Integration Results

RT: 9.41
Area: 136
Amount: 0.098187
Amount Units: ug/l



Manual Integration Results

RT: 9.65
Area: 1196
Amount: 0.928879
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:05:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27892.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Mar-2018 04:33:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0069287-004
Operator ID: Instrument ID: CVOAMS2
Sublist: chrom-8260S_2*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 27-Mar-2018 13:13:21 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: tupayachia Date: 26-Mar-2018 07:22:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.124	1.113	0.011	99	33268	5.00	4.61	
2 Chloromethane	50	1.261	1.261	0.000	99	31156	5.00	4.72	
3 Vinyl chloride	62	1.341	1.341	0.000	96	33000	5.00	5.00	
4 Butadiene	54	1.341	1.341	0.000	95	29828	5.00	5.35	
5 Bromomethane	94	1.593	1.593	0.000	98	22597	5.00	5.64	
6 Chloroethane	64	1.661	1.661	0.000	98	19740	5.00	5.55	
7 Trichlorofluoromethane	101	1.821	1.821	0.000	96	37282	5.00	4.89	
8 Dichlorofluoromethane	67	1.833	1.833	0.000	98	50748	5.00	4.85	
9 Pentane	72	1.855	1.844	0.011	96	8707	10.0	9.76	
11 2-Methyl-1,3-butadiene	53	2.061	2.050	0.011	94	23875	5.00	4.76	
12 Ethyl ether	59	2.050	2.050	0.000	98	17382	5.00	4.84	
10 Ethanol	46	2.073	2.061	0.012	62	3380	200.0	170.6	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	96	18788	5.00	4.77	
14 1,1,2-Trichloro-1,2,2-trif	101	2.221	2.221	0.000	96	22977	5.00	4.70	
16 Acrolein	56	2.221	2.221	0.000	96	140952	200.0	233.4	
15 1,1-Dichloroethene	96	2.233	2.233	0.000	97	21899	5.00	4.83	
17 Acetone	43	2.358	2.347	0.011	85	22225	25.0	24.9	
18 Iodomethane	142	2.370	2.370	0.000	98	35225	5.00	4.59	
19 Carbon disulfide	76	2.393	2.393	0.000	100	84460	5.00	4.82	
20 Isopropyl alcohol	45	2.495	2.484	0.011	96	9306	50.0	39.6	
21 3-Chloro-1-propene	76	2.553	2.553	0.000	88	14717	5.00	4.73	
22 Methyl acetate	43	2.598	2.587	0.011	100	55440	25.0	21.3	
23 Methylene Chloride	84	2.690	2.679	0.011	98	23986	5.00	4.90	
* 24 TBA-d9 (IS)	65	2.735	2.736	-0.001	0	290605	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.804	2.804	0.000	34	24156	50.0	48.6	
26 Methyl tert-butyl ether	73	2.861	2.850	0.011	96	50931	5.00	4.71	
27 trans-1,2-Dichloroethene	96	2.873	2.873	0.000	97	22337	5.00	4.73	
28 Acrylonitrile	53	2.976	2.964	0.012	95	50527	50.0	42.6	
29 Hexane	57	3.033	3.033	0.000	94	38719	5.00	4.71	
30 Isopropyl ether	45	3.284	3.273	0.011	98	77535	5.00	4.54	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 1,1-Dichloroethane	63	3.284	3.284	0.000	79	45378	5.00	4.70	
32 Vinyl acetate	86	3.330	3.330	0.000	100	4128	10.0	8.37	
33 2-Chloro-1,3-butadiene	88	3.330	3.330	0.000	93	18977	5.00	4.45	
34 Tert-butyl ethyl ether	59	3.616	3.616	0.000	87	61353	5.00	4.55	
35 2,2-Dichloropropane	79	3.810	3.799	0.011	95	10039	5.00	4.22	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	247284	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.844	3.844	0.000	93	24573	5.00	4.79	
38 2-Butanone (MEK)	72	3.890	3.890	0.000	95	6762	25.0	20.4	
39 Ethyl acetate	70	3.913	3.902	0.011	94	2892	10.0	9.23	
40 Propionitrile	54	4.050	4.039	0.011	95	16778	50.0	43.3	
41 Chlorobromomethane	128	4.084	4.084	0.000	96	9269	5.00	4.53	
42 Methacrylonitrile	67	4.141	4.130	0.011	93	54254	50.0	43.5	
43 Chloroform	83	4.164	4.153	0.011	97	38148	5.00	4.69	
44 Cyclohexane	84	4.256	4.256	0.000	94	35027	5.00	4.94	
45 1,1,1-Trichloroethane	97	4.290	4.290	0.000	98	32751	5.00	4.72	
$ 46 Dibromofluoromethane (Surr	113	4.336	4.324	0.012	97	155967	50.0	50.1	
47 Carbon tetrachloride	117	4.416	4.404	0.012	96	27234	5.00	4.52	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	94	29328	5.00	4.49	
49 Benzene	78	4.667	4.667	0.000	96	85430	5.00	4.68	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.701	4.702	-0.001	0	164351	50.0	50.5	
50 Isobutyl alcohol	42	4.724	4.713	0.011	1	8200	125.0	63.8	a
52 Tert-amyl methyl ether	73	4.781	4.782	-0.001	96	57398	5.00	4.34	
53 1,2-Dichloroethane	62	4.793	4.782	0.011	87	24984	5.00	4.59	
54 n-Heptane	57	4.873	4.873	0.000	94	22159	5.00	4.92	
* 55 Fluorobenzene	96	5.010	4.999	0.011	98	552877	50.0	50.0	
56 Trichloroethene	95	5.410	5.399	0.011	96	20327	5.00	4.46	
57 n-Butanol	43	5.524	5.513	0.011	48	4635	125.0	62.5	
58 Methylcyclohexane	83	5.524	5.513	0.011	93	35635	5.00	4.30	
59 Ethyl acrylate	55	5.639	5.616	0.023	67	7761	5.00	1.92	M
60 1,2-Dichloropropane	63	5.730	5.730	0.000	93	23134	5.00	4.71	
* 61 1,4-Dioxane-d8	96	5.844	5.845	-0.001	0	18826	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	95	9735	5.00	4.33	
63 1,4-Dioxane	88	5.924	5.902	0.022	12	2507	100.0	97.7	a
64 Dichlorobromomethane	83	6.073	6.073	0.000	97	23136	5.00	4.37	
65 2-Nitropropane	41	6.484	6.485	-0.001	74	7864	10.0	9.53	
66 2-Chloroethyl vinyl ether	63	6.519	6.508	0.011	92	7284	5.00	4.27	
67 Epichlorohydrin	57	6.633	6.622	0.011	99	23591	100.0	89.4	
68 cis-1,3-Dichloropropene	75	6.667	6.656	0.011	96	27097	5.00	4.26	
69 4-Methyl-2-pentanone (MIBK	43	6.884	6.873	0.011	96	69205	25.0	21.1	
$ 70 Toluene-d8 (Surr)	98	6.907	6.908	-0.001	99	603673	50.0	48.8	
71 Toluene	91	6.987	6.988	-0.001	92	82801	5.00	4.64	
72 trans-1,3-Dichloropropene	75	7.376	7.365	0.011	97	20503	5.00	4.08	
74 Tetrachloroethene	166	7.547	7.548	-0.001	90	20244	5.00	4.37	
73 1,1,2-Trichloroethane	83	7.547	7.548	-0.001	75	12855	5.00	4.63	
75 1,3-Dichloropropane	76	7.719	7.719	0.000	94	23489	5.00	4.47	
76 2-Hexanone	43	7.810	7.810	0.000	98	28702	25.0	12.5	
77 Chlorodibromomethane	129	7.902	7.890	0.012	95	13421	5.00	4.00	
78 Ethylene Dibromide	107	8.005	8.005	0.000	96	11267	5.00	4.12	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	88	414425	50.0	50.0	
80 Chlorobenzene	112	8.427	8.428	-0.001	94	49427	5.00	4.58	
81 Ethylbenzene	106	8.507	8.508	-0.001	99	26317	5.00	4.48	
82 1,1,1,2-Tetrachloroethane	131	8.530	8.519	0.011	95	16919	5.00	4.34	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	30257	5.00	4.33	
84 o-Xylene	106	8.965	8.953	0.012	94	29640	5.00	4.37	
85 Styrene	104	8.988	8.988	0.000	90	40874	5.00	3.95	
86 Bromoform	173	9.159	9.159	0.000	94	8629	5.00	3.87	
87 Amyl acetate (mixed isomer	43	9.182	9.171	0.011	93	12268	5.00	2.19	
88 Isopropylbenzene	105	9.250	9.251	-0.001	97	81704	5.00	4.55	
$ 89 4-Bromofluorobenzene	174	9.410	9.411	-0.001	91	197139	50.0	49.7	
90 Bromobenzene	156	9.513	9.514	-0.001	97	19621	5.00	4.25	
92 N-Propylbenzene	91	9.582	9.571	0.011	99	101872	5.00	4.75	
91 1,1,2,2-Tetrachloroethane	83	9.570	9.571	-0.001	93	16089	5.00	4.16	
93 1,2,3-Trichloropropane	110	9.605	9.605	0.000	96	4250	5.00	4.32	
95 trans-1,4-Dichloro-2-buten	53	9.639	9.628	0.011	23	5737	5.00	3.97	a
96 4-Ethyltoluene	105	9.673	9.662	0.011	97	82900	5.00	4.51	
94 2-Chlorotoluene	91	9.662	9.662	0.000	97	73706	5.00	4.71	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	97	74503	5.00	4.77	
98 4-Chlorotoluene	91	9.753	9.754	-0.001	99	70298	5.00	4.68	
99 tert-Butylbenzene	119	9.948	9.948	0.000	91	55857	5.00	4.17	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	97	67688	5.00	4.50	
101 sec-Butylbenzene	105	10.119	10.119	0.000	98	93271	5.00	4.72	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	97	71405	5.00	4.51	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	75	40058	5.00	4.63	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	96	219291	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.302	10.291	0.011	89	45993	5.00	4.85	
106 Benzyl chloride	126	10.416	10.405	0.011	53	5714	5.00	4.42	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	91	67042	5.00	4.35	
108 p-Diethylbenzene	119	10.496	10.496	0.000	91	41151	5.00	4.24	
109 n-Butylbenzene	92	10.519	10.519	0.000	98	44801	5.00	4.77	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	94	39632	5.00	4.74	
111 1,2,4,5-Tetramethylbenzene	119	11.056	11.057	-0.001	97	59345	5.00	4.38	
112 1,2-Dibromo-3-Chloropropan	155	11.136	11.137	-0.001	85	1856	5.00	4.24	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	97	34455	5.00	4.84	
114 1,2,4-Trichlorobenzene	180	11.674	11.662	0.012	93	23116	5.00	4.39	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	96	21487	5.00	5.07	
116 Naphthalene	128	11.845	11.834	0.011	99	36910	5.00	3.99	
117 1,2,3-Trichlorobenzene	180	12.005	11.994	0.011	92	20053	5.00	4.22	
S 118 1,2-Dichloroethene, Total	100				0		10.0	9.51	
S 119 1,3-Dichloropropene, Total	100				0		10.0	8.34	
S 120 Xylenes, Total	100				0		10.0	8.70	
S 121 Total BTEX	1				0		25.0	22.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	0.50	Units: uL	
ACROLEIN W_00075	Amount Added:	2.00	Units: uL	
GASES Li_00252	Amount Added:	0.50	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

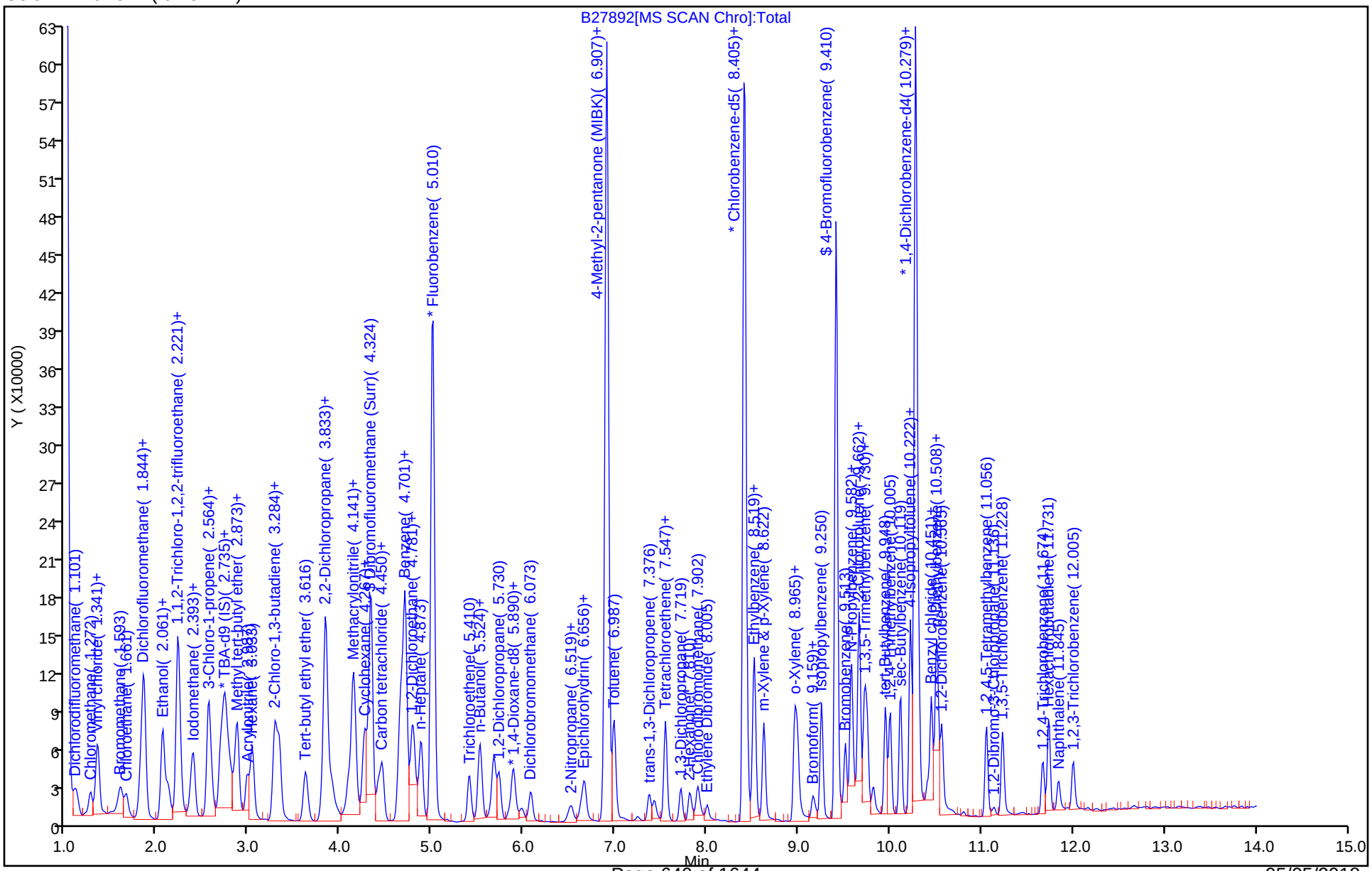
Report Date: 27-Mar-2018 13:13:26 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27892.D

Injection Date:	26-Mar-2018 04:33:30	Instrument ID:	CVOAMS2	Operator ID:	
Lims ID:	STD5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

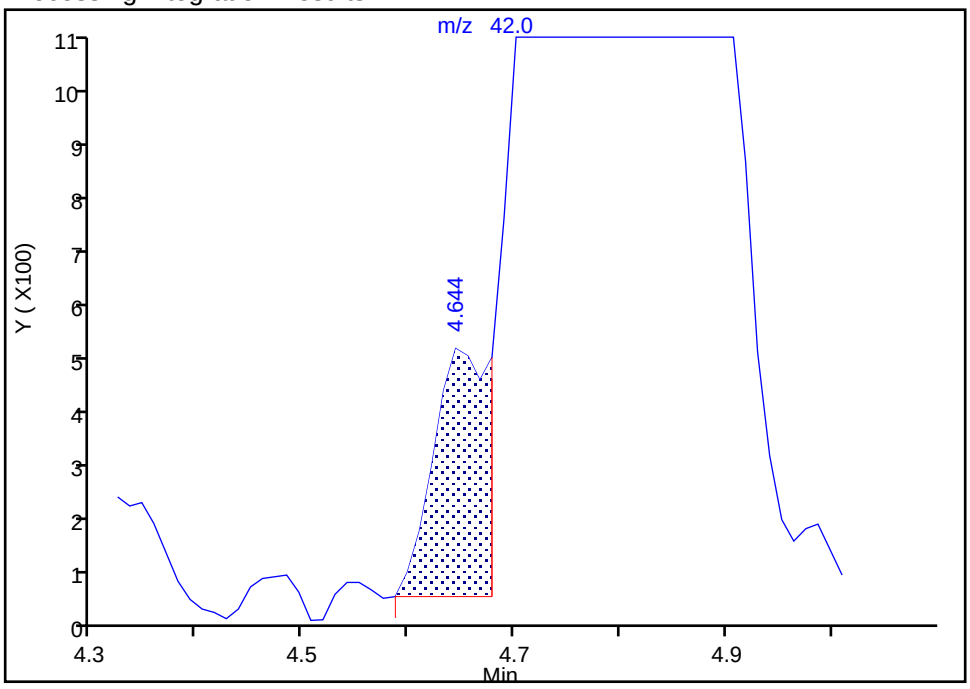
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27892.D
Injection Date: 26-Mar-2018 04:33:30 Instrument ID: CVOAMS2
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

50 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

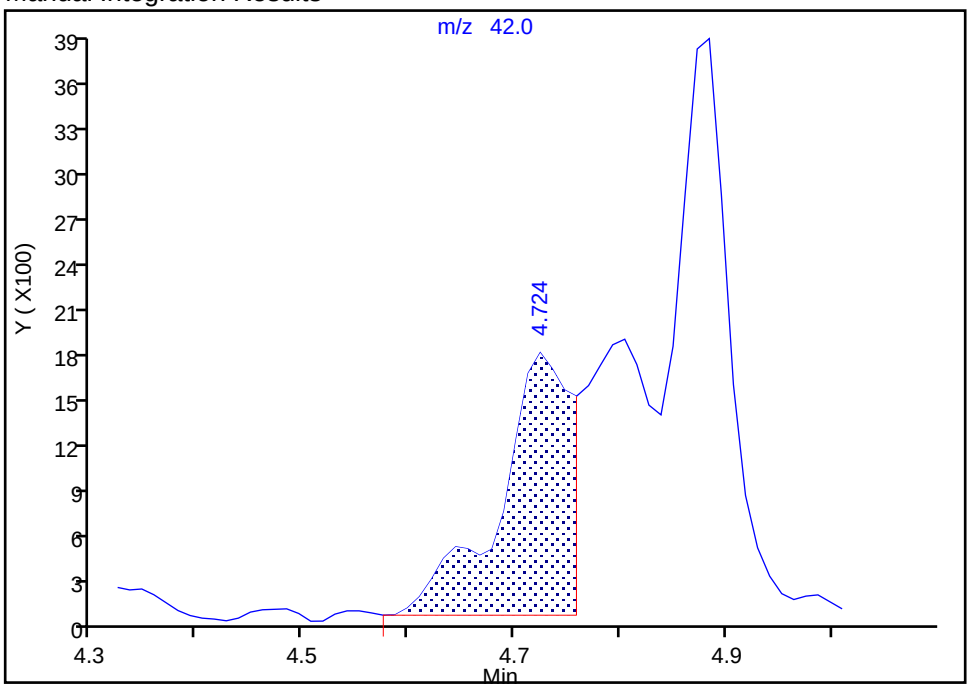
Processing Integration Results

RT: 4.64
Area: 1659
Amount: 12.912606
Amount Units: ug/l



Manual Integration Results

RT: 4.72
Area: 8200
Amount: 63.784150
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:06:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

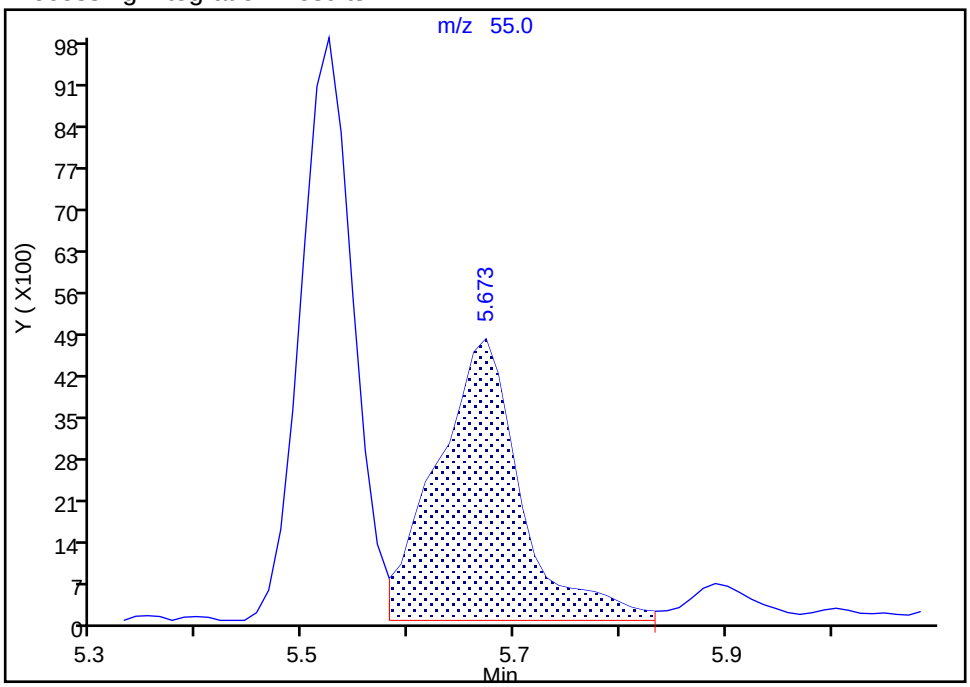
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27892.D
Injection Date: 26-Mar-2018 04:33:30 Instrument ID: CVOAMS2
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

59 Ethyl acrylate, CAS: 140-88-5

Signal: 1

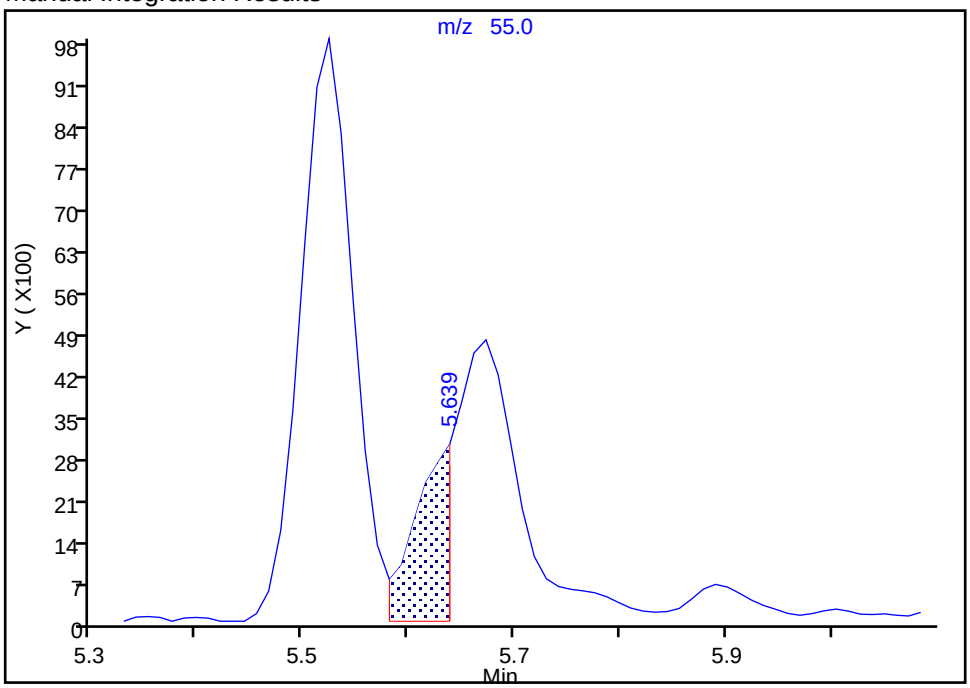
Processing Integration Results

RT: 5.67
Area: 26496
Amount: 5.672438
Amount Units: ug/l



Manual Integration Results

RT: 5.64
Area: 7761
Amount: 1.917950
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:07:40
Audit Action: Split an Integrated Peak Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

TestAmerica Edison

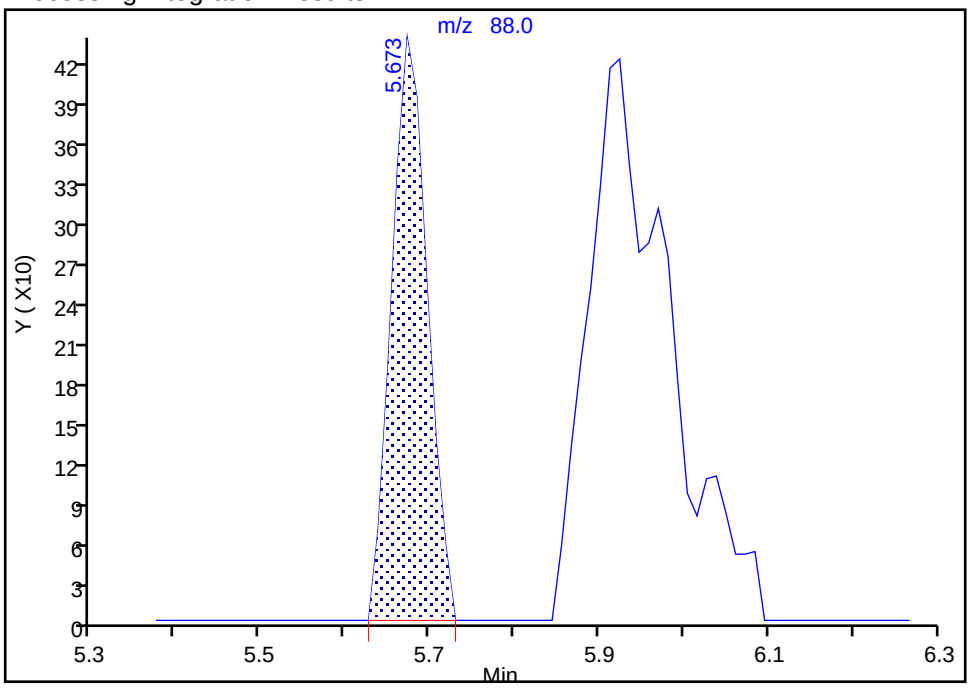
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27892.D
Injection Date: 26-Mar-2018 04:33:30 Instrument ID: CVOAMS2
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

63 1,4-Dioxane, CAS: 123-91-1

Signal: 1

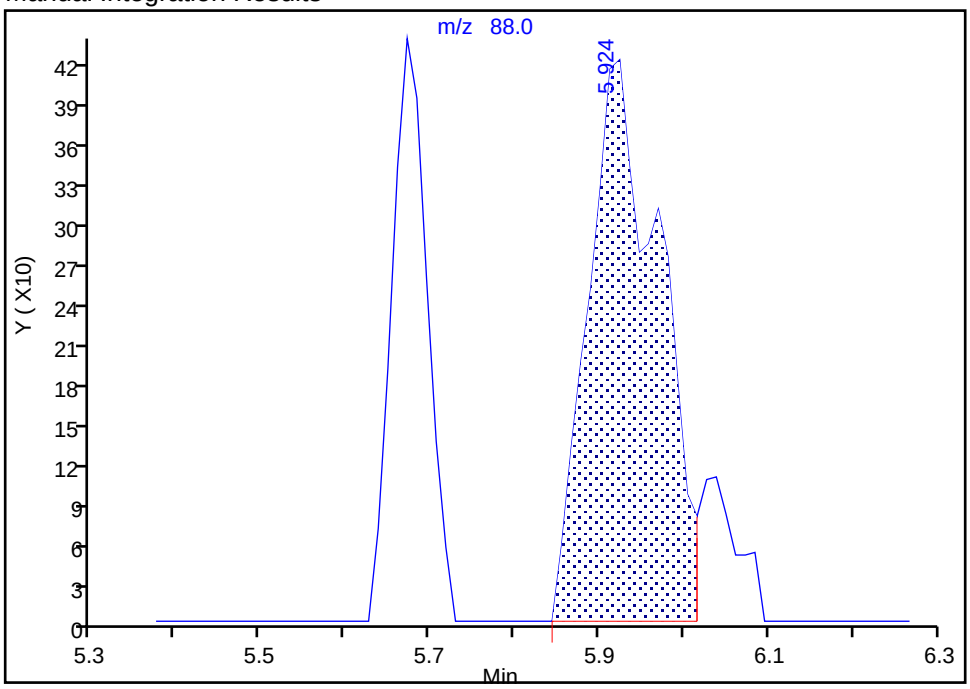
Processing Integration Results

RT: 5.67
Area: 1296
Amount: 38.198411
Amount Units: ug/l



Manual Integration Results

RT: 5.92
Area: 2507
Amount: 97.743347
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:07:49
Audit Action: Assigned Compound ID Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

TestAmerica Edison

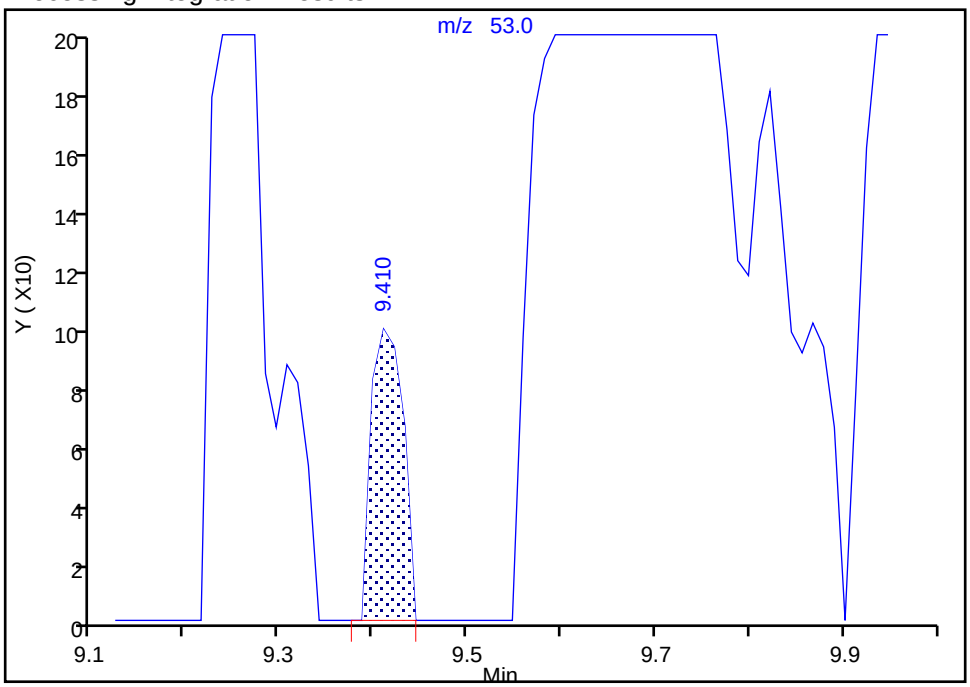
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27892.D
Injection Date: 26-Mar-2018 04:33:30 Instrument ID: CVOAMS2
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

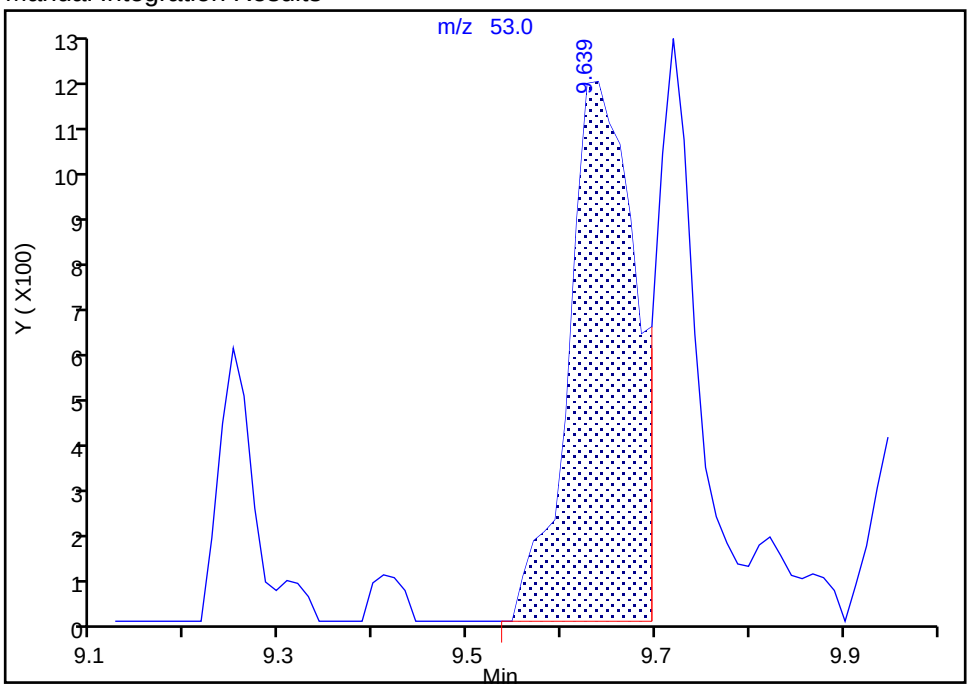
Processing Integration Results

RT: 9.41
Area: 230
Amount: 0.148063
Amount Units: ug/l



Manual Integration Results

RT: 9.64
Area: 5737
Amount: 3.973185
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:08:05
Audit Action: Assigned Compound ID Audit Reason: Wrong peak

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27893.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 26-Mar-2018 04:57:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0069287-005
Operator ID: Instrument ID: CVOAMS2
Sublist: chrom-8260S_2*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 27-Mar-2018 13:13:39 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: delpolitov Date: 27-Mar-2018 13:05:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.113	1.113	0.000	99	134397	20.0	19.2	
2 Chloromethane	50	1.261	1.261	0.000	99	121656	20.0	19.0	
4 Butadiene	54	1.341	1.341	0.000	93	102401	20.0	18.9	
3 Vinyl chloride	62	1.341	1.341	0.000	98	123041	20.0	19.3	
5 Bromomethane	94	1.593	1.593	0.000	99	74483	20.0	19.2	
6 Chloroethane	64	1.661	1.661	0.000	99	67528	20.0	19.6	
7 Trichlorofluoromethane	101	1.821	1.821	0.000	99	156441	20.0	21.2	
8 Dichlorofluoromethane	67	1.833	1.833	0.000	99	201886	20.0	19.9	
9 Pentane	72	1.844	1.844	0.000	96	36218	40.0	41.9	
12 Ethyl ether	59	2.050	2.050	0.000	89	70189	20.0	20.1	
11 2-Methyl-1,3-butadiene	53	2.050	2.050	0.000	97	102354	20.0	21.0	
10 Ethanol	46	2.061	2.061	0.000	78	14479	800.0	808.7	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	98	79965	20.0	20.9	
16 Acrolein	56	2.221	2.221	0.000	97	181220	300.0	332.0	
14 1,1,2-Trichloro-1,2,2-trif	101	2.221	2.221	0.000	95	102055	20.0	21.5	
15 1,1-Dichloroethene	96	2.233	2.233	0.000	94	89313	20.0	20.3	
17 Acetone	43	2.347	2.347	0.000	84	86196	100.0	103.7	
18 Iodomethane	142	2.370	2.370	0.000	99	154013	20.0	20.7	
19 Carbon disulfide	76	2.393	2.393	0.000	99	355557	20.0	21.0	
20 Isopropyl alcohol	45	2.484	2.484	0.000	96	42955	200.0	202.0	
21 3-Chloro-1-propene	76	2.553	2.553	0.000	87	63212	20.0	21.0	
22 Methyl acetate	43	2.587	2.587	0.000	99	239260	100.0	94.7	
23 Methylene Chloride	84	2.679	2.679	0.000	99	96413	20.0	20.3	
* 24 TBA-d9 (IS)	65	2.736	2.736	0.000	0	262622	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.804	2.804	0.000	97	86299	200.0	192.3	
26 Methyl tert-butyl ether	73	2.850	2.850	0.000	98	205837	20.0	19.7	
27 trans-1,2-Dichloroethene	96	2.873	2.873	0.000	99	96072	20.0	21.0	
28 Acrylonitrile	53	2.964	2.964	0.000	95	237054	200.0	221.3	
29 Hexane	57	3.033	3.033	0.000	94	171187	20.0	21.5	
30 Isopropyl ether	45	3.273	3.273	0.000	96	335728	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 1,1-Dichloroethane	63	3.284	3.284	0.000	99	187138	20.0	20.0	
33 2-Chloro-1,3-butadiene	88	3.330	3.330	0.000	85	86139	20.0	20.9	
32 Vinyl acetate	86	3.330	3.330	0.000	100	21659	40.0	47.2	
34 Tert-butyl ethyl ether	59	3.616	3.616	0.000	88	262338	20.0	20.1	
35 2,2-Dichloropropane	79	3.799	3.799	0.000	96	44620	20.0	19.4	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	230092	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.844	3.844	0.000	93	99296	20.0	20.0	
38 2-Butanone (MEK)	72	3.890	3.890	0.000	97	32344	100.0	104.9	
39 Ethyl acetate	70	3.902	3.902	0.000	96	12293	40.0	42.2	
40 Propionitrile	54	4.039	4.039	0.000	93	79714	200.0	221.3	
41 Chlorobromomethane	128	4.084	4.084	0.000	98	39458	20.0	19.9	
42 Methacrylonitrile	67	4.130	4.130	0.000	95	236643	200.0	196.0	
43 Chloroform	83	4.153	4.153	0.000	98	158588	20.0	20.1	
44 Cyclohexane	84	4.256	4.256	0.000	95	144289	20.0	21.0	
45 1,1,1-Trichloroethane	97	4.290	4.290	0.000	98	140409	20.0	20.9	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	96	154463	50.0	51.2	
47 Carbon tetrachloride	117	4.404	4.404	0.000	98	116461	20.0	19.9	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	96	131822	20.0	20.8	
49 Benzene	78	4.667	4.667	0.000	97	368873	20.0	21.0	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.702	4.702	0.000	0	152924	50.0	48.4	
50 Isobutyl alcohol	42	4.713	4.713	0.000	1	42883	500.0	369.1	a
53 1,2-Dichloroethane	62	4.782	4.782	0.000	94	100878	20.0	19.1	
52 Tert-amyl methyl ether	73	4.782	4.782	0.000	94	254917	20.0	19.9	
54 n-Heptane	57	4.873	4.873	0.000	96	96491	20.0	22.1	
* 55 Fluorobenzene	96	4.999	4.999	0.000	98	535821	50.0	50.0	
56 Trichloroethene	95	5.399	5.399	0.000	97	90024	20.0	20.4	
58 Methylcyclohexane	83	5.513	5.513	0.000	93	172718	20.0	21.5	
57 n-Butanol	43	5.513	5.513	0.000	49	24686	500.0	366.6	
59 Ethyl acrylate	55	5.616	5.616	0.000	96	59464	20.0	15.2	
60 1,2-Dichloropropane	63	5.730	5.730	0.000	94	94951	20.0	19.9	
* 61 1,4-Dioxane-d8	96	5.845	5.845	0.000	0	17134	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	96	43958	20.0	20.2	
63 1,4-Dioxane	88	5.902	5.902	0.000	30	11557	400.0	426.4	
64 Dichlorobromomethane	83	6.073	6.073	0.000	97	99000	20.0	19.3	
65 2-Nitropropane	41	6.485	6.485	0.000	99	26666	40.0	37.0	
66 2-Chloroethyl vinyl ether	63	6.508	6.508	0.000	96	35468	20.0	19.7	
67 Epichlorohydrin	57	6.622	6.622	0.000	96	108482	400.0	441.9	a
68 cis-1,3-Dichloropropene	75	6.656	6.656	0.000	96	124499	20.0	20.3	
69 4-Methyl-2-pentanone (MIBK	43	6.873	6.873	0.000	97	318596	100.0	104.3	
$ 70 Toluene-d8 (Surr)	98	6.908	6.908	0.000	99	615332	50.0	51.6	
71 Toluene	91	6.988	6.988	0.000	92	356723	20.0	20.7	
72 trans-1,3-Dichloropropene	75	7.365	7.365	0.000	95	95325	20.0	19.7	
73 1,1,2-Trichloroethane	83	7.548	7.548	0.000	71	51814	20.0	19.3	
74 Tetrachloroethene	166	7.548	7.548	0.000	94	96556	20.0	21.6	
75 1,3-Dichloropropane	76	7.719	7.719	0.000	96	102104	20.0	20.2	
76 2-Hexanone	43	7.810	7.810	0.000	99	172545	100.0	81.4	
77 Chlorodibromomethane	129	7.890	7.890	0.000	95	60675	20.0	18.8	
78 Ethylene Dibromide	107	8.005	8.005	0.000	98	53421	20.0	20.2	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	89	399632	50.0	50.0	
80 Chlorobenzene	112	8.428	8.428	0.000	92	215947	20.0	20.7	
81 Ethylbenzene	106	8.508	8.508	0.000	99	114536	20.0	20.2	
82 1,1,1,2-Tetrachloroethane	131	8.519	8.519	0.000	95	73914	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	142507	20.0	21.1	
84 o-Xylene	106	8.953	8.953	0.000	93	131803	20.0	20.2	
85 Styrene	104	8.988	8.988	0.000	93	206348	20.0	20.7	
86 Bromoform	173	9.159	9.159	0.000	95	38368	20.0	17.8	
87 Amyl acetate (mixed isomer	43	9.171	9.171	0.000	89	88681	20.0	15.6	
88 Isopropylbenzene	105	9.251	9.251	0.000	97	383442	20.0	22.2	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	91	196315	50.0	49.0	
90 Bromobenzene	156	9.514	9.514	0.000	97	88657	20.0	19.0	
91 1,1,2,2-Tetrachloroethane	83	9.571	9.571	0.000	97	78064	20.0	20.0	
92 N-Propylbenzene	91	9.571	9.571	0.000	99	479168	20.0	22.1	
93 1,2,3-Trichloropropane	110	9.605	9.605	0.000	95	19544	20.0	19.7	
95 trans-1,4-Dichloro-2-buten	53	9.628	9.628	0.000	80	28044	20.0	19.3	
94 2-Chlorotoluene	91	9.662	9.662	0.000	97	326240	20.0	20.7	
96 4-Ethyltoluene	105	9.662	9.662	0.000	98	401579	20.0	21.7	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	93	338064	20.0	21.5	
98 4-Chlorotoluene	91	9.754	9.754	0.000	99	315522	20.0	20.8	
99 tert-Butylbenzene	119	9.948	9.948	0.000	91	275519	20.0	20.4	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	98	315150	20.0	20.8	
101 sec-Butylbenzene	105	10.119	10.119	0.000	99	435836	20.0	21.9	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	72	174603	20.0	20.0	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	97	350008	20.0	21.9	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	93	221238	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.291	10.291	0.000	92	188627	20.0	19.7	
106 Benzyl chloride	126	10.405	10.405	0.000	98	23779	20.0	18.2	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	93	317367	20.0	21.2	
108 p-Diethylbenzene	119	10.496	10.496	0.000	92	206591	20.0	21.1	
109 n-Butylbenzene	92	10.519	10.519	0.000	97	212248	20.0	22.4	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	96	170099	20.0	20.2	
111 1,2,4,5-Tetramethylbenzene	119	11.057	11.057	0.000	98	304390	20.0	22.2	
112 1,2-Dibromo-3-Chloropropan	155	11.137	11.137	0.000	91	8708	20.0	19.7	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	96	151351	20.0	21.1	
114 1,2,4-Trichlorobenzene	180	11.662	11.662	0.000	93	121064	20.0	22.8	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	97	92256	20.0	21.6	
116 Naphthalene	128	11.834	11.834	0.000	99	187103	20.0	20.0	
117 1,2,3-Trichlorobenzene	180	11.994	11.994	0.000	96	102852	20.0	21.8	
S 118 1,2-Dichloroethene, Total	100				0		40.0	40.9	
S 119 1,3-Dichloropropene, Total	100				0		40.0	40.0	
S 120 Xylenes, Total	100				0		40.0	41.3	
S 121 Total BTEX	1				0		100.0	103.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00252	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

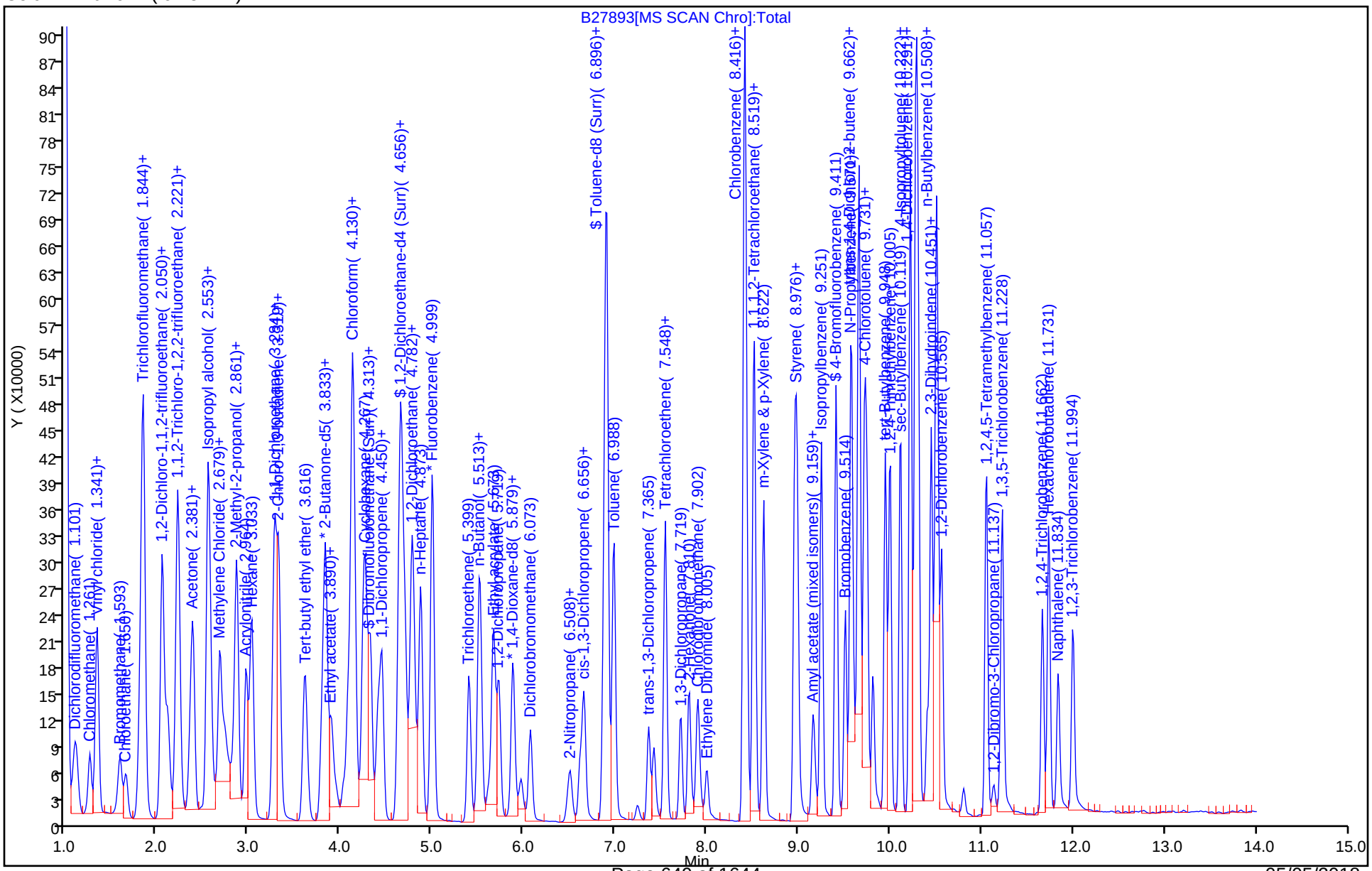
Report Date: 27-Mar-2018 13:13:41 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27893.D

Injection Date:	26-Mar-2018 04:57:30	Instrument ID:	CVOAMS2	Operator ID:	
Lims ID:	STD20			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

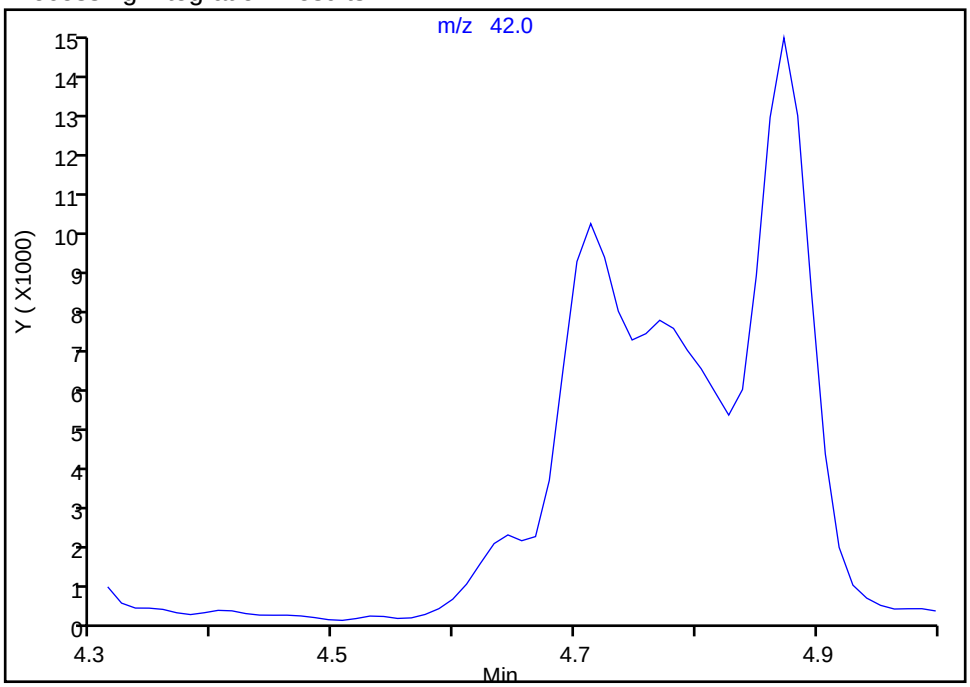
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27893.D
Injection Date: 26-Mar-2018 04:57:30 Instrument ID: CVOAMS2
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

50 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

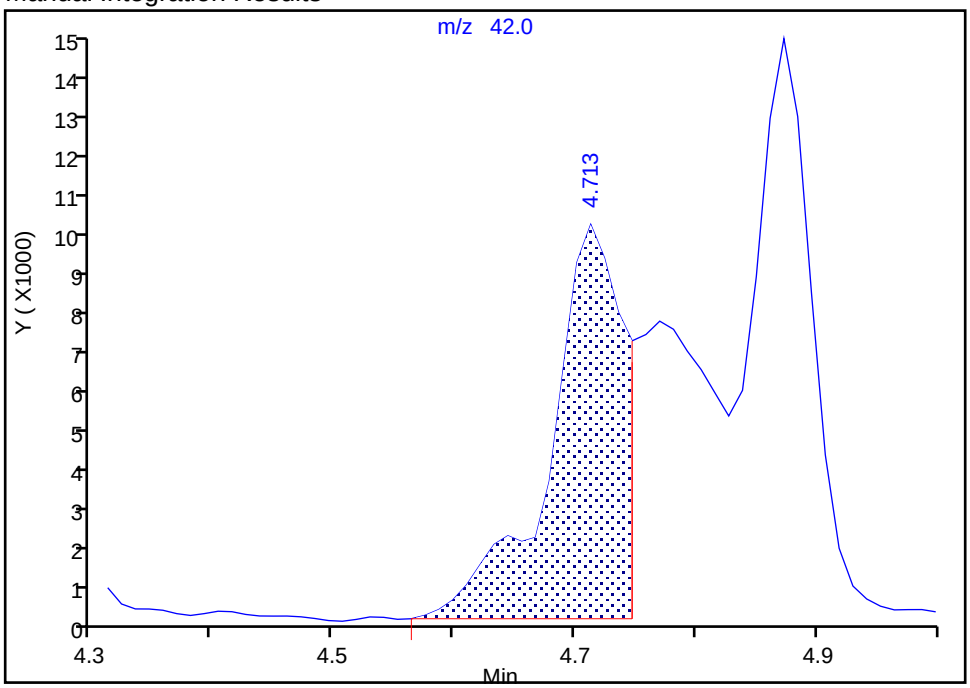
Not Detected
Expected RT: 4.71

Processing Integration Results



Manual Integration Results

RT: 4.71
Area: 42883
Amount: 369.0959
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 11:47:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

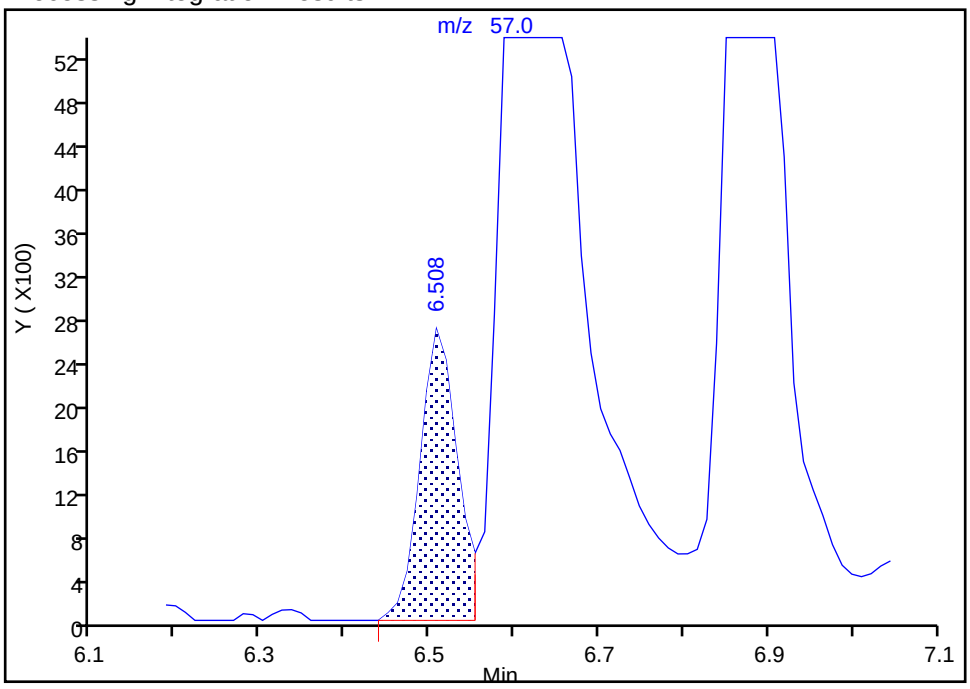
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27893.D
Injection Date: 26-Mar-2018 04:57:30 Instrument ID: CVOAMS2
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

67 Epichlorohydrin, CAS: 106-89-8

Signal: 1

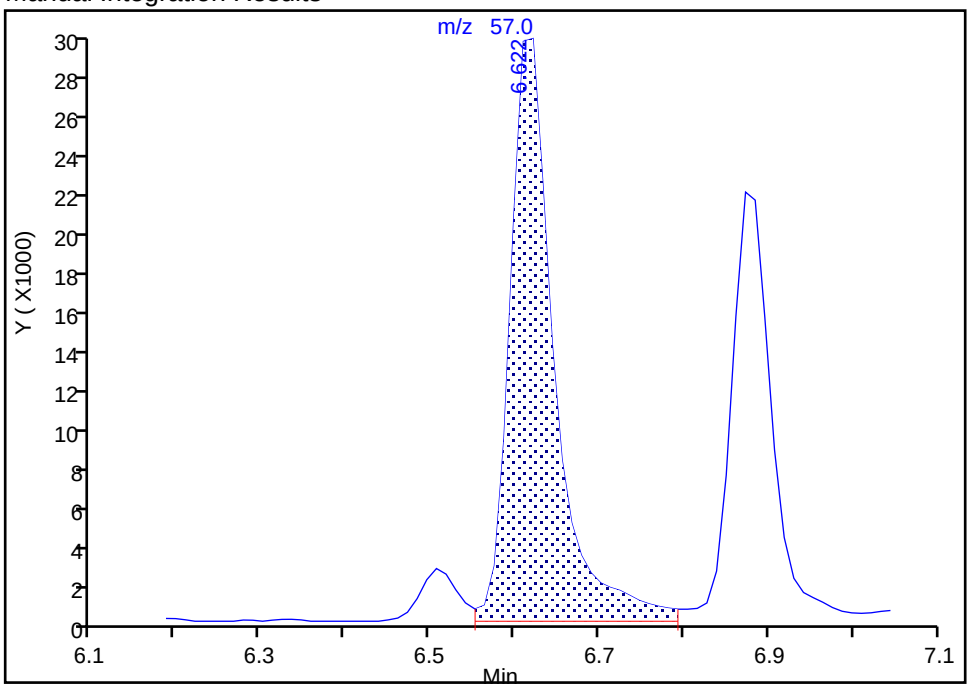
Processing Integration Results

RT: 6.51
Area: 8304
Amount: 31.904386
Amount Units: ug/l



Manual Integration Results

RT: 6.62
Area: 108482
Amount: 441.8892
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 11:48:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27894.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-Mar-2018 05:20:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0069287-006
Operator ID: Instrument ID: CVOAMS2
Sublist: chrom-8260S_2*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 27-Mar-2018 13:13:55 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: tupayachia Date: 26-Mar-2018 09:47:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.113	1.113	0.000	99	345422	50.0	46.3	
2 Chloromethane	50	1.261	1.261	0.000	99	307689	50.0	45.2	
3 Vinyl chloride	62	1.341	1.341	0.000	98	320269	50.0	47.1	
4 Butadiene	54	1.341	1.341	0.000	96	287430	50.0	49.9	
5 Bromomethane	94	1.593	1.593	0.000	98	187821	50.0	45.4	
6 Chloroethane	64	1.661	1.661	0.000	99	165938	50.0	45.2	
7 Trichlorofluoromethane	101	1.821	1.821	0.000	99	394305	50.0	50.1	
8 Dichlorofluoromethane	67	1.833	1.833	0.000	99	515741	50.0	47.8	
9 Pentane	72	1.844	1.844	0.000	97	89703	100.0	97.5	
11 2-Methyl-1,3-butadiene	53	2.050	2.050	0.000	97	254558	50.0	49.2	
12 Ethyl ether	59	2.050	2.050	0.000	96	185979	50.0	50.1	
10 Ethanol	46	2.050	2.061	-0.011	94	43742	2000.0	2058.9	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	97	203095	50.0	49.9	
14 1,1,2-Trichloro-1,2,2-trif	101	2.221	2.221	0.000	92	253491	50.0	50.2	
16 Acrolein	56	2.210	2.221	-0.011	97	248855	400.0	384.2	
15 1,1-Dichloroethene	96	2.233	2.233	0.000	95	232095	50.0	49.6	
17 Acetone	43	2.347	2.347	0.000	86	235926	250.0	242.6	
18 Iodomethane	142	2.370	2.370	0.000	98	385678	50.0	48.7	
19 Carbon disulfide	76	2.393	2.393	0.000	100	909343	50.0	50.3	
20 Isopropyl alcohol	45	2.473	2.484	-0.011	96	127810	500.0	506.6	
21 3-Chloro-1-propene	76	2.553	2.553	0.000	88	157209	50.0	49.0	
22 Methyl acetate	43	2.587	2.587	0.000	100	673985	250.0	250.5	
23 Methylene Chloride	84	2.679	2.679	0.000	99	235626	50.0	46.7	
* 24 TBA-d9 (IS)	65	2.736	2.736	0.000	0	311621	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.804	2.804	0.000	97	238869	500.0	448.5	
26 Methyl tert-butyl ether	73	2.850	2.850	0.000	98	540282	50.0	48.5	
27 trans-1,2-Dichloroethene	96	2.861	2.873	-0.012	98	244691	50.0	50.2	
28 Acrylonitrile	53	2.964	2.964	0.000	96	647287	500.0	509.2	
29 Hexane	57	3.033	3.033	0.000	93	441256	50.0	52.0	
30 Isopropyl ether	45	3.273	3.273	0.000	98	873926	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 1,1-Dichloroethane	63	3.284	3.284	0.000	99	486826	50.0	48.9	
32 Vinyl acetate	86	3.330	3.330	0.000	100	55894	100.0	104.1	
33 2-Chloro-1,3-butadiene	88	3.319	3.330	-0.011	74	227440	50.0	51.7	
34 Tert-butyl ethyl ether	59	3.616	3.616	0.000	87	689847	50.0	49.6	
35 2,2-Dichloropropane	79	3.799	3.799	0.000	95	120268	50.0	49.0	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	269111	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.844	3.844	0.000	96	255917	50.0	48.3	
38 2-Butanone (MEK)	72	3.890	3.890	0.000	98	87773	250.0	243.9	
39 Ethyl acetate	70	3.902	3.902	0.000	95	32972	100.0	96.7	
40 Propionitrile	54	4.027	4.039	-0.012	93	235830	500.0	559.8	
41 Chlorobromomethane	128	4.084	4.084	0.000	98	101944	50.0	48.4	
42 Methacrylonitrile	67	4.130	4.130	0.000	94	663319	500.0	515.9	
43 Chloroform	83	4.153	4.153	0.000	97	409711	50.0	48.8	
44 Cyclohexane	84	4.256	4.256	0.000	94	381589	50.0	52.1	
45 1,1,1-Trichloroethane	97	4.279	4.290	-0.011	98	353469	50.0	49.4	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	97	158235	50.0	49.3	
47 Carbon tetrachloride	117	4.404	4.404	0.000	97	298079	50.0	47.9	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	96	340076	50.0	50.5	
49 Benzene	78	4.667	4.667	0.000	96	925676	50.0	49.9	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.702	4.702	0.000	0	158740	50.0	47.2	M
50 Isobutyl alcohol	42	4.702	4.713	-0.011	76	138359	1250.0	1003.5	
52 Tert-amyl methyl ether	73	4.782	4.782	0.000	94	680080	50.0	49.8	
53 1,2-Dichloroethane	62	4.782	4.782	0.000	94	261014	50.0	46.5	
54 n-Heptane	57	4.873	4.873	0.000	96	250915	50.0	54.0	
* 55 Fluorobenzene	96	4.999	4.999	0.000	98	570507	50.0	50.0	
56 Trichloroethene	95	5.399	5.399	0.000	97	233539	50.0	49.7	
57 n-Butanol	43	5.502	5.513	-0.011	85	81354	1250.0	1009.0	
58 Methylcyclohexane	83	5.525	5.513	0.012	94	448645	50.0	52.5	
59 Ethyl acrylate	55	5.605	5.616	-0.011	97	188651	50.0	45.2	
60 1,2-Dichloropropane	63	5.730	5.730	0.000	94	248479	50.0	49.0	
* 61 1,4-Dioxane-d8	96	5.845	5.845	0.000	0	22359	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	96	113629	50.0	49.0	
63 1,4-Dioxane	88	5.902	5.902	0.000	89	36363	1000.0	1004.3	
64 Dichlorobromomethane	83	6.073	6.073	0.000	99	264299	50.0	48.4	
65 2-Nitropropane	41	6.485	6.485	0.000	98	70421	100.0	93.8	
66 2-Chloroethyl vinyl ether	63	6.508	6.508	0.000	97	106439	50.0	53.5	
67 Epichlorohydrin	57	6.610	6.622	-0.012	100	299445	1000.0	1042.9	
68 cis-1,3-Dichloropropene	75	6.656	6.656	0.000	96	337757	50.0	52.2	
69 4-Methyl-2-pentanone (MIBK	43	6.873	6.873	0.000	98	905828	250.0	253.5	
$ 70 Toluene-d8 (Surr)	98	6.908	6.908	0.000	99	633035	50.0	50.3	
71 Toluene	91	6.988	6.988	0.000	93	908804	50.0	50.1	
72 trans-1,3-Dichloropropene	75	7.365	7.365	0.000	98	263735	50.0	51.6	
74 Tetrachloroethene	166	7.548	7.548	0.000	95	245504	50.0	52.1	
73 1,1,2-Trichloroethane	83	7.548	7.548	0.000	73	141642	50.0	50.1	
75 1,3-Dichloropropane	76	7.708	7.719	-0.011	96	269299	50.0	50.4	
76 2-Hexanone	43	7.799	7.810	-0.011	98	546417	250.0	221.9	
77 Chlorodibromomethane	129	7.891	7.890	0.000	99	169437	50.0	49.7	
78 Ethylene Dibromide	107	7.993	8.005	-0.012	98	148974	50.0	53.5	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	90	421379	50.0	50.0	
80 Chlorobenzene	112	8.428	8.428	0.000	92	552178	50.0	50.3	
81 Ethylbenzene	106	8.508	8.508	0.000	99	299265	50.0	50.1	
82 1,1,1,2-Tetrachloroethane	131	8.519	8.519	0.000	96	197094	50.0	49.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	374524	50.0	52.7	
84 o-Xylene	106	8.953	8.953	0.000	92	356758	50.0	51.7	
85 Styrene	104	8.988	8.988	0.000	93	562318	50.0	53.5	
86 Bromoform	173	9.148	9.159	-0.011	96	108872	50.0	48.0	
87 Amyl acetate (mixed isomer	43	9.171	9.171	0.000	89	281457	50.0	46.1	
88 Isopropylbenzene	105	9.251	9.251	0.000	97	992719	50.0	54.4	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	90	201494	50.0	47.3	
90 Bromobenzene	156	9.514	9.514	0.000	98	230646	50.0	46.5	
92 N-Propylbenzene	91	9.571	9.571	0.000	99	1241642	50.0	53.9	
91 1,1,2,2-Tetrachloroethane	83	9.571	9.571	0.000	98	201590	50.0	48.6	
93 1,2,3-Trichloropropane	110	9.594	9.605	-0.011	95	51114	50.0	48.4	
95 trans-1,4-Dichloro-2-buten	53	9.616	9.628	-0.012	82	79401	50.0	51.2	
96 4-Ethyltoluene	105	9.662	9.662	0.000	98	1063310	50.0	54.0	
94 2-Chlorotoluene	91	9.662	9.662	0.000	96	834300	50.0	49.7	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	93	845743	50.0	50.5	
98 4-Chlorotoluene	91	9.742	9.754	-0.012	99	806287	50.0	50.0	
99 tert-Butylbenzene	119	9.948	9.948	0.000	92	732269	50.0	51.0	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	98	840359	50.0	52.1	
101 sec-Butylbenzene	105	10.108	10.119	-0.011	99	1133723	50.0	53.4	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	97	919362	50.0	54.1	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	71	454774	50.0	49.0	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	94	235320	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.291	10.291	0.000	94	465167	50.0	45.8	
106 Benzyl chloride	126	10.405	10.405	0.000	97	71932	50.0	51.8	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	93	826194	50.0	51.9	
108 p-Diethylbenzene	119	10.496	10.496	0.000	93	535525	50.0	51.4	
109 n-Butylbenzene	92	10.519	10.519	0.000	97	539502	50.0	53.5	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	96	432140	50.0	48.2	
111 1,2,4,5-Tetramethylbenzene	119	11.057	11.057	0.000	97	820726	50.0	56.4	
112 1,2-Dibromo-3-Chloropropan	155	11.137	11.137	0.000	95	28487	50.0	60.6	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	97	392679	50.0	51.4	
114 1,2,4-Trichlorobenzene	180	11.662	11.662	0.000	94	309041	50.0	54.7	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	97	233695	50.0	51.4	
116 Naphthalene	128	11.834	11.834	0.000	99	534022	50.0	53.8	
117 1,2,3-Trichlorobenzene	180	11.994	11.994	0.000	95	262989	50.0	53.8	
S 118 1,2-Dichloroethene, Total	100				0		100.0	98.5	
S 119 1,3-Dichloropropene, Total	100				0		100.0	103.8	
S 120 Xylenes, Total	100				0		100.0	104.4	
S 121 Total BTEX	1				0		250.0	254.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260MIX1COMB_00074	Amount Added:	5.00	Units: uL	
ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
GASES Li_00252	Amount Added:	5.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

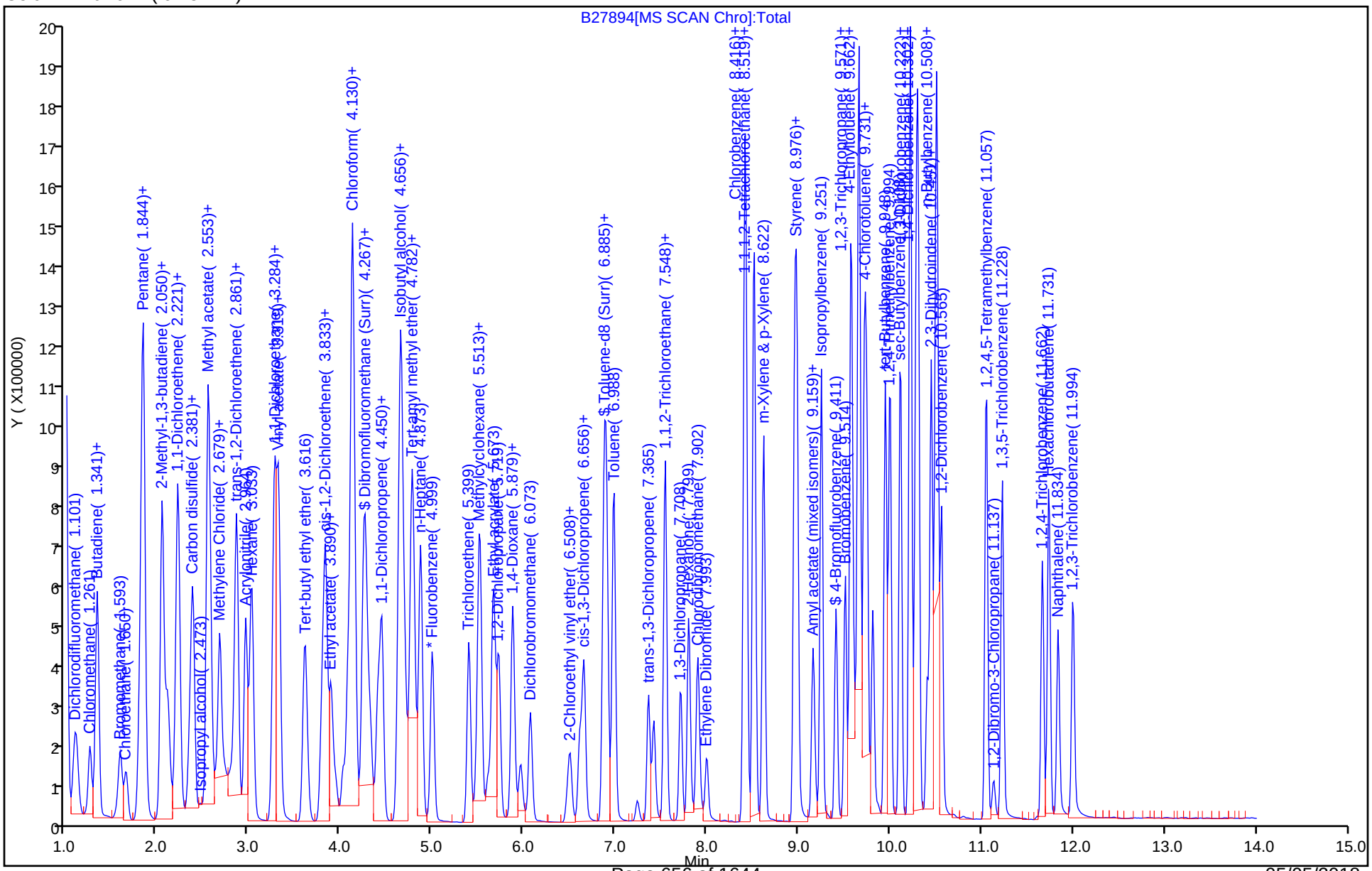
Report Date: 27-Mar-2018 13:13:59 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27894.D

Injection Date:	26-Mar-2018 05:20:30	Instrument ID:	CVOAMS2	Operator ID:	
Lims ID:	STD50			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

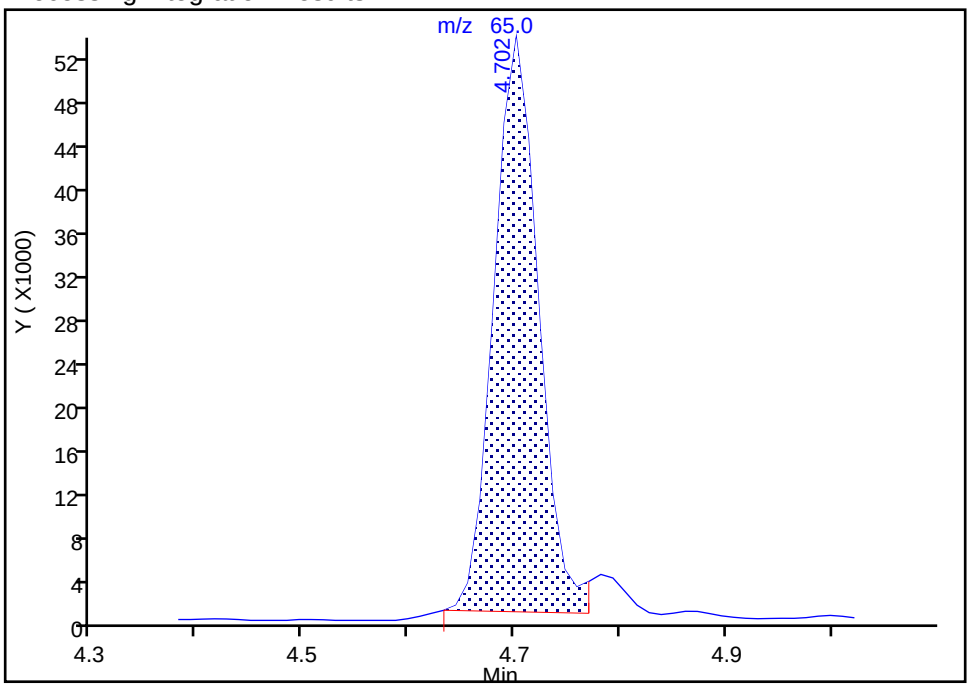
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27894.D
Injection Date: 26-Mar-2018 05:20:30 Instrument ID: CVOAMS2
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

$ 51 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

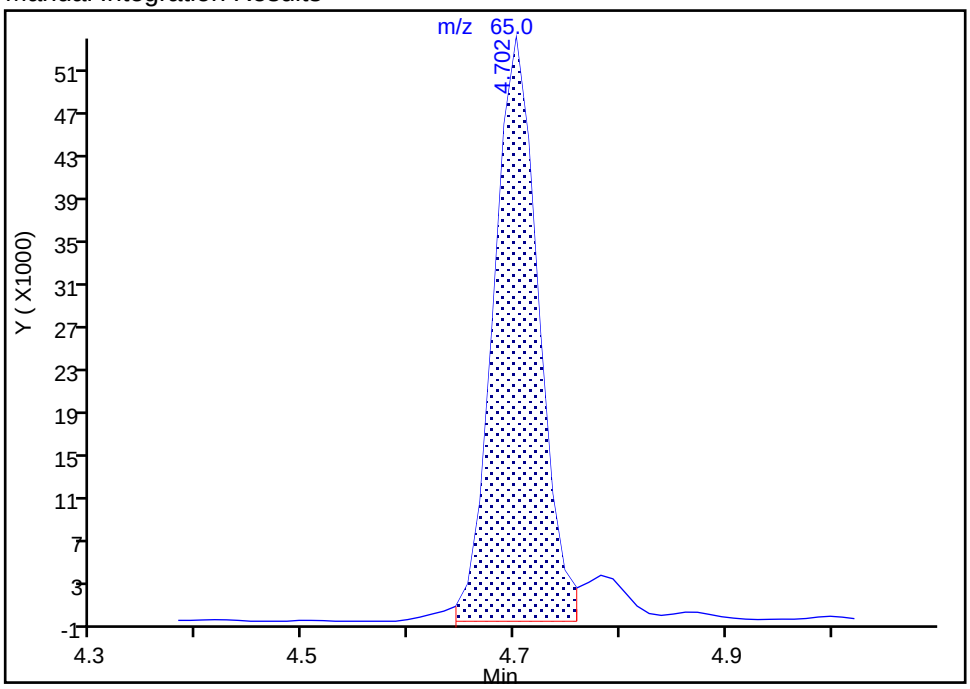
Processing Integration Results

RT: 4.70
Area: 154807
Amount: 46.233152
Amount Units: ug/l



Manual Integration Results

RT: 4.70
Area: 158740
Amount: 47.222852
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:14:46
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27895.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Mar-2018 05:44:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0069287-007
Operator ID: Instrument ID: CVOAMS2
Sublist: chrom-8260S_2*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 27-Mar-2018 13:14:10 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: tupayachia Date: 26-Mar-2018 07:22:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.113	1.113	0.000	99	1768158	200.0	218.5	
2 Chloromethane	50	1.261	1.261	0.000	99	1486419	200.0	200.9	
4 Butadiene	54	1.341	1.341	0.000	98	1352721	200.0	216.4	
3 Vinyl chloride	62	1.341	1.341	0.000	98	1522339	200.0	206.0	
5 Bromomethane	94	1.593	1.593	0.000	99	829565	200.0	184.7	
6 Chloroethane	64	1.661	1.661	0.000	100	772381	200.0	193.9	
7 Trichlorofluoromethane	101	1.821	1.821	0.000	99	1724036	200.0	201.7	
8 Dichlorofluoromethane	67	1.833	1.833	0.000	99	2169407	200.0	185.2	
9 Pentane	72	1.844	1.844	0.000	95	402857	400.0	403.1	
12 Ethyl ether	59	2.050	2.050	0.000	92	819698	200.0	203.5	
11 2-Methyl-1,3-butadiene	53	2.050	2.050	0.000	98	1133880	200.0	201.6	
10 Ethanol	46	2.050	2.061	-0.011	78	181661	8000.0	8542.0	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	96	888586	200.0	201.2	
16 Acrolein	56	2.210	2.221	-0.011	96	308234	500.0	475.4	
14 1,1,2-Trichloro-1,2,2-trif	101	2.221	2.221	0.000	98	1109412	200.0	202.5	
15 1,1-Dichloroethene	96	2.233	2.233	0.000	95	1006385	200.0	198.0	
17 Acetone	43	2.336	2.347	-0.011	86	1086118	1000.0	1002.1	
18 Iodomethane	142	2.370	2.370	0.000	98	1702869	200.0	197.9	
19 Carbon disulfide	76	2.393	2.393	0.000	100	3750248	200.0	191.2	
20 Isopropyl alcohol	45	2.461	2.484	-0.023	98	569965	2000.0	2257.0	
21 3-Chloro-1-propene	76	2.553	2.553	0.000	90	701858	200.0	201.3	
22 Methyl acetate	43	2.576	2.587	-0.011	99	3086305	1000.0	1056.6	
23 Methylene Chloride	84	2.678	2.679	-0.001	99	1072220	200.0	195.6	
* 24 TBA-d9 (IS)	65	2.724	2.736	-0.012	0	311934	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.793	2.804	-0.011	96	1051685	2000.0	1972.5	
26 Methyl tert-butyl ether	73	2.850	2.850	0.000	98	2471000	200.0	204.1	
27 trans-1,2-Dichloroethene	96	2.861	2.873	-0.012	98	1059746	200.0	200.2	
28 Acrylonitrile	53	2.964	2.964	0.000	94	2843435	2000.0	2234.5	
29 Hexane	57	3.033	3.033	0.000	94	1848593	200.0	200.7	
30 Isopropyl ether	45	3.273	3.273	0.000	99	3846077	200.0	201.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 1,1-Dichloroethane	63	3.284	3.284	0.000	100	2148170	200.0	198.7	
33 2-Chloro-1,3-butadiene	88	3.319	3.330	-0.011	78	1016056	200.0	212.8	
32 Vinyl acetate	86	3.319	3.330	-0.011	100	255109	400.0	427.6	
34 Tert-butyl ethyl ether	59	3.616	3.616	0.000	88	3089165	200.0	204.4	
35 2,2-Dichloropropane	79	3.810	3.799	0.011	98	532099	200.0	199.8	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	299030	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.844	3.844	0.000	94	1153697	200.0	200.5	
38 2-Butanone (MEK)	72	3.879	3.890	-0.011	99	396976	1000.0	1001.7	
39 Ethyl acetate	70	3.901	3.902	-0.001	96	152029	400.0	401.4	
40 Propionitrile	54	4.027	4.039	-0.012	97	1010336	2000.0	2158.2	
41 Chlorobromomethane	128	4.084	4.084	0.000	98	454521	200.0	200.6	
42 Methacrylonitrile	67	4.130	4.130	0.000	94	2908636	2000.0	2083.3	
43 Chloroform	83	4.153	4.153	0.000	98	1842628	200.0	202.1	
44 Cyclohexane	84	4.256	4.256	0.000	93	1626771	200.0	204.6	
45 1,1,1-Trichloroethane	97	4.290	4.290	0.000	98	1597477	200.0	205.5	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	95	166960	50.0	47.9	
47 Carbon tetrachloride	117	4.404	4.404	0.000	98	1328270	200.0	196.6	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	95	1522288	200.0	208.1	
49 Benzene	78	4.667	4.667	0.000	98	4155899	200.0	199.2	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.702	4.702	0.000	0	180590	50.0	49.5	M
50 Isobutyl alcohol	42	4.702	4.713	-0.011	79	706401	5000.0	5115.8	
53 1,2-Dichloroethane	62	4.782	4.782	0.000	95	1201359	200.0	196.9	
52 Tert-amyl methyl ether	73	4.782	4.782	0.000	93	3024927	200.0	204.0	
54 n-Heptane	57	4.873	4.873	0.000	97	1082750	200.0	214.6	
* 55 Fluorobenzene	96	4.999	4.999	0.000	98	619465	50.0	50.0	
56 Trichloroethene	95	5.399	5.399	0.000	98	1062333	200.0	208.1	
58 Methylcyclohexane	83	5.524	5.513	0.011	95	1957996	200.0	210.9	
57 n-Butanol	43	5.467	5.513	-0.046	92	435290	5000.0	5103.0	
59 Ethyl acrylate	55	5.604	5.616	-0.012	96	991373	200.0	218.7	
60 1,2-Dichloropropane	63	5.730	5.730	0.000	94	1140451	200.0	207.2	
* 61 1,4-Dioxane-d8	96	5.844	5.845	-0.001	0	25731	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	96	521520	200.0	207.0	
63 1,4-Dioxane	88	5.890	5.902	-0.012	90	160460	4000.0	3803.2	
64 Dichlorobromomethane	83	6.073	6.073	0.000	99	1264090	200.0	213.1	
65 2-Nitropropane	41	6.473	6.485	-0.012	98	335535	400.0	416.5	
66 2-Chloroethyl vinyl ether	63	6.507	6.508	-0.001	97	522815	200.0	216.5	
67 Epichlorohydrin	57	6.610	6.622	-0.012	99	1318471	4000.0	4132.5	
68 cis-1,3-Dichloropropene	75	6.656	6.656	0.000	97	1611966	200.0	221.8	
69 4-Methyl-2-pentanone (MIBK	43	6.873	6.873	0.000	98	4060870	1000.0	1022.6	
$ 70 Toluene-d8 (Surr)	98	6.907	6.908	-0.001	98	703950	50.0	49.8	
71 Toluene	91	6.987	6.988	-0.001	93	4019867	200.0	197.0	
72 trans-1,3-Dichloropropene	75	7.365	7.365	0.000	98	1297462	200.0	225.7	
73 1,1,2-Trichloroethane	83	7.548	7.548	0.000	77	666519	200.0	209.9	
74 Tetrachloroethene	166	7.548	7.548	0.000	94	1064031	200.0	201.0	
75 1,3-Dichloropropane	76	7.708	7.719	-0.011	96	1243606	200.0	207.2	
76 2-Hexanone	43	7.799	7.810	-0.011	98	2660537	1000.0	1015.4	
77 Chlorodibromomethane	129	7.890	7.890	0.000	98	842436	200.0	219.9	
78 Ethylene Dibromide	107	7.993	8.005	-0.012	98	676548	200.0	216.3	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	90	473606	50.0	50.0	
80 Chlorobenzene	112	8.428	8.428	0.000	93	2539214	200.0	205.7	
81 Ethylbenzene	106	8.508	8.508	0.000	99	1415361	200.0	210.9	
82 1,1,1,2-Tetrachloroethane	131	8.519	8.519	0.000	96	932966	200.0	209.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	1741944	200.0	218.1	
84 o-Xylene	106	8.953	8.953	0.000	93	1676652	200.0	216.3	
85 Styrene	104	8.988	8.988	0.000	93	2689070	200.0	227.7	
86 Bromoform	173	9.148	9.159	-0.011	97	541129	200.0	212.1	
87 Amyl acetate (mixed isomer	43	9.159	9.171	-0.012	88	1462340	200.0	202.1	
88 Isopropylbenzene	105	9.251	9.251	0.000	97	4360831	200.0	212.6	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	91	236278	50.0	49.1	
90 Bromobenzene	156	9.513	9.514	-0.001	98	1120389	200.0	199.7	
91 1,1,2,2-Tetrachloroethane	83	9.571	9.571	0.000	99	953237	200.0	203.0	
92 N-Propylbenzene	91	9.571	9.571	0.000	99	5364387	200.0	206.0	
93 1,2,3-Trichloropropane	110	9.593	9.605	-0.012	98	226385	200.0	189.7	
95 trans-1,4-Dichloro-2-buten	53	9.616	9.628	-0.012	82	393052	200.0	224.3	
94 2-Chlorotoluene	91	9.651	9.662	-0.011	97	3809431	200.0	200.5	
96 4-Ethyltoluene	105	9.662	9.662	0.000	98	4747601	200.0	213.0	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	94	3787659	200.0	199.9	
98 4-Chlorotoluene	91	9.742	9.754	-0.012	99	3661942	200.0	200.8	
99 tert-Butylbenzene	119	9.948	9.948	0.000	92	3516531	200.0	216.5	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	98	3842600	200.0	210.6	
101 sec-Butylbenzene	105	10.119	10.119	0.000	98	4969156	200.0	207.1	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	82	2126431	200.0	202.7	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	96	4185640	200.0	217.6	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	82	266169	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.291	10.291	0.000	92	2216529	200.0	192.8	
106 Benzyl chloride	126	10.405	10.405	0.000	98	350654	200.0	223.4	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	94	3662888	200.0	212.0	
108 p-Diethylbenzene	119	10.496	10.496	0.000	92	2534491	200.0	214.9	
109 n-Butylbenzene	92	10.519	10.519	0.000	98	2575638	200.0	226.0	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	96	2024086	200.0	199.6	
111 1,2,4,5-Tetramethylbenzene	119	11.056	11.057	-0.001	98	3613515	200.0	219.5	
112 1,2-Dibromo-3-Chloropropan	155	11.136	11.137	-0.001	96	121905	200.0	229.2	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	97	1644116	200.0	190.4	
114 1,2,4-Trichlorobenzene	180	11.662	11.662	0.000	93	1299063	200.0	203.2	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	98	972456	200.0	189.1	
116 Naphthalene	128	11.834	11.834	0.000	99	2012319	200.0	179.1	
117 1,2,3-Trichlorobenzene	180	11.994	11.994	0.000	95	956472	200.0	197.7	
S 118 1,2-Dichloroethene, Total	100				0		400.0	400.7	
S 119 1,3-Dichloropropene, Total	100				0		400.0	447.5	
S 120 Xylenes, Total	100				0		400.0	434.4	
S 121 Total BTEX	1				0		1000.0	1041.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260MIX1COMB_00074	Amount Added:	20.00	Units: uL	
ACROLEIN W_00075	Amount Added:	5.00	Units: uL	
GASES Li_00252	Amount Added:	20.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Mar-2018 13:14:15 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27895.D

Injection Date: 26-Mar-2018 05:44:30 Instrument ID: CVOAMS2 Operator ID:

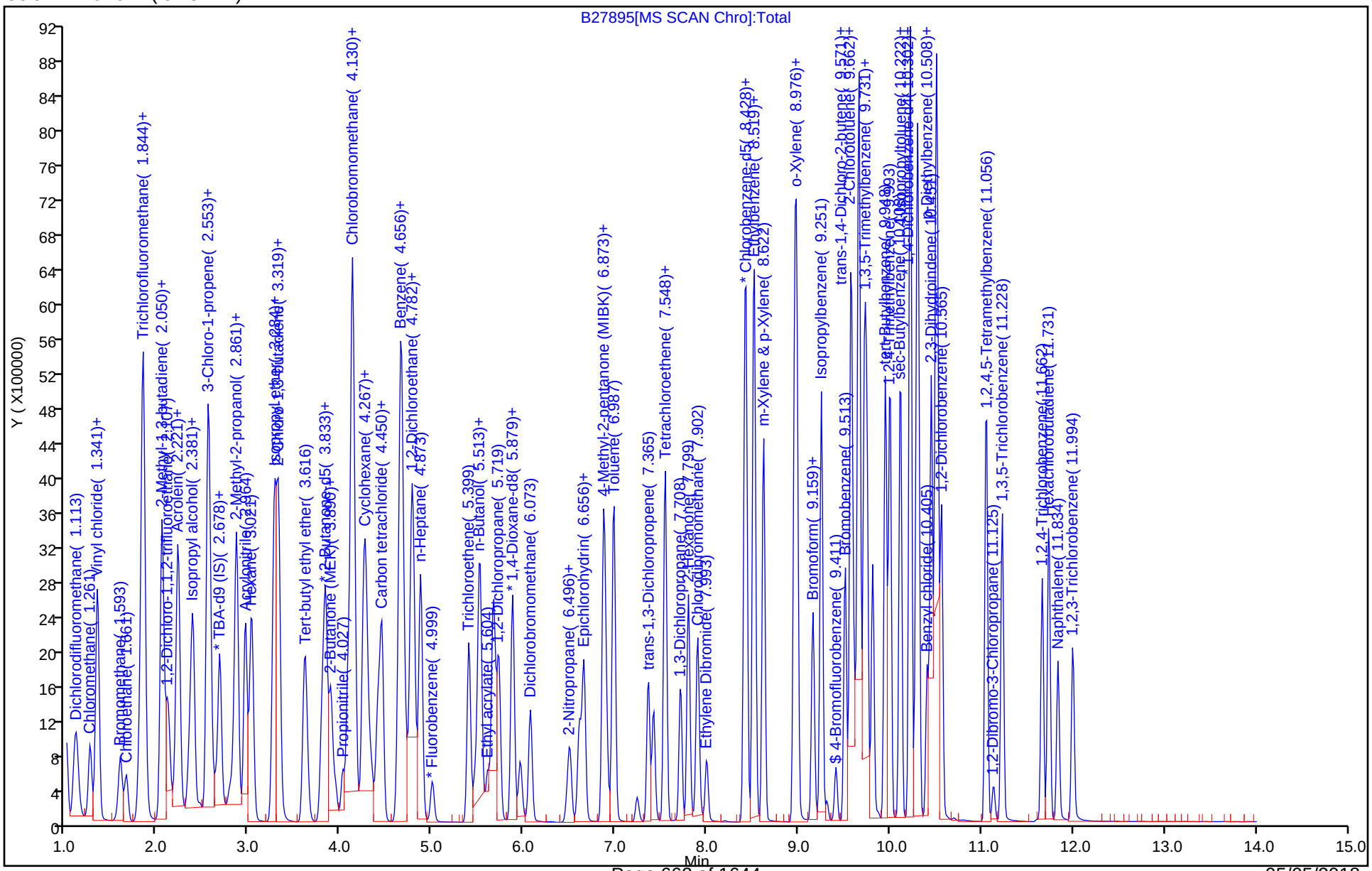
Lims ID: STD200 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

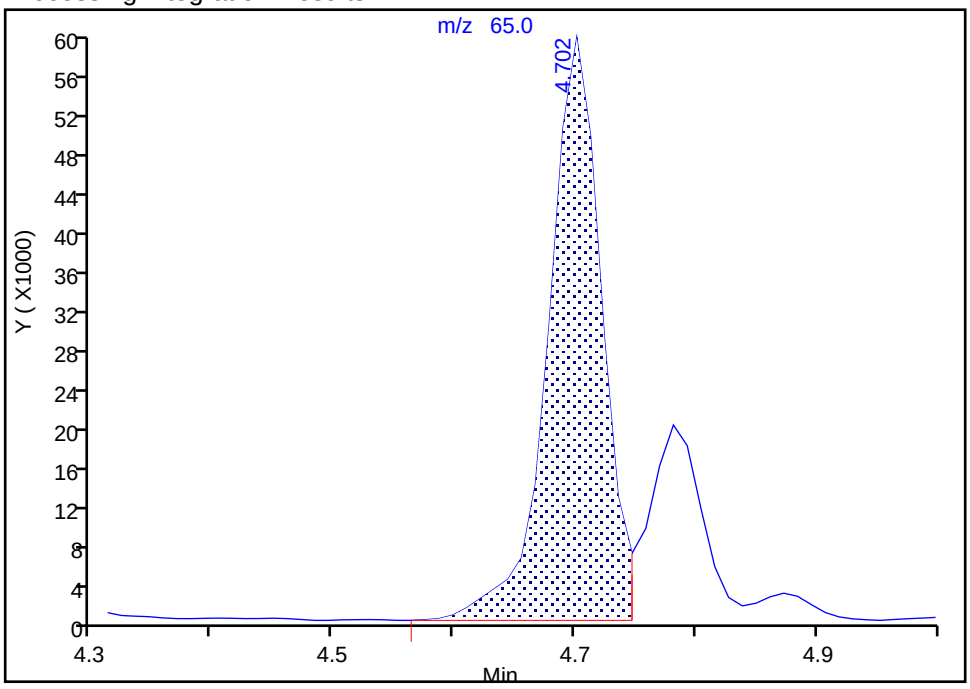
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27895.D
Injection Date: 26-Mar-2018 05:44:30 Instrument ID: CVOAMS2
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

$ 51 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

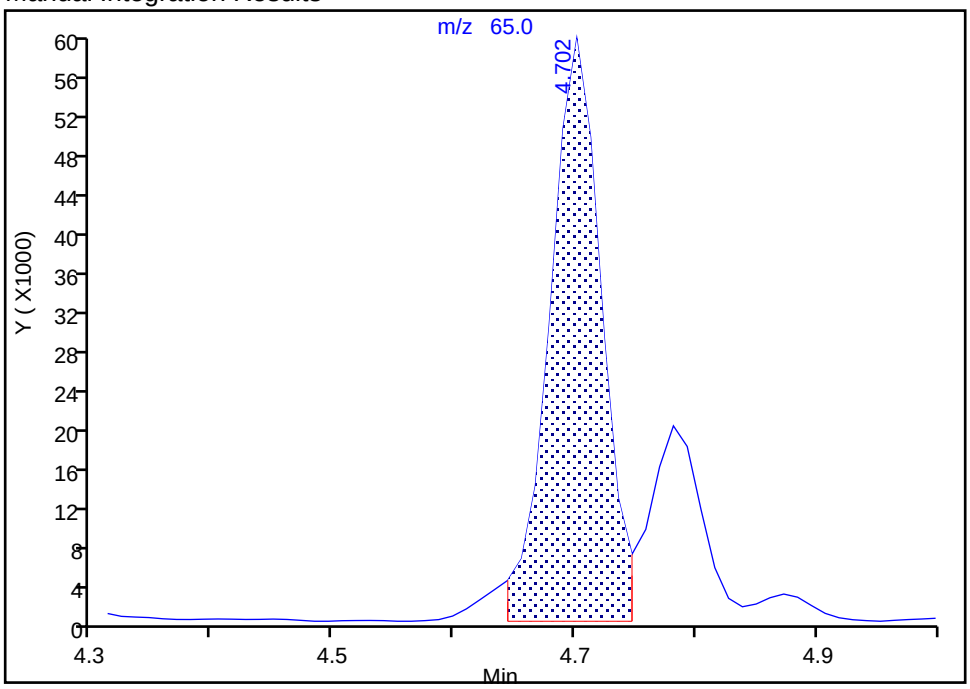
Processing Integration Results

RT: 4.70
Area: 185703
Amount: 50.838759
Amount Units: ug/l



Manual Integration Results

RT: 4.70
Area: 180590
Amount: 49.477043
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:13:47
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Mar-2018 06:08:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0069287-008
Operator ID: Instrument ID: CVOAMS2
Sublist: chrom-8260S_2*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 27-Mar-2018 13:14:28 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: tupayachia Date: 26-Mar-2018 09:42:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.113	1.113	0.000	100	4400177	500.0	529.7	
2 Chloromethane	50	1.261	1.261	0.000	99	3739724	500.0	492.5	
3 Vinyl chloride	62	1.341	1.341	0.000	98	3527951	500.0	465.2	
4 Butadiene	54	1.341	1.341	0.000	97	3096219	500.0	482.6	
5 Bromomethane	94	1.593	1.593	0.000	98	1988153	500.0	431.2	
6 Chloroethane	64	1.661	1.661	0.000	99	1852964	500.0	453.2	
7 Trichlorofluoromethane	101	1.821	1.821	0.000	100	4383411	500.0	499.6	
8 Dichlorofluoromethane	67	1.833	1.833	0.000	99	5390438	500.0	448.2	
9 Pentane	72	1.844	1.844	0.000	95	1038287	1000.0	1012.2	
11 2-Methyl-1,3-butadiene	53	2.050	2.050	0.000	97	2794781	500.0	484.2	
12 Ethyl ether	59	2.038	2.050	-0.012	93	1947206	500.0	471.0	
10 Ethanol	46	2.050	2.061	-0.011	90	476150	20000	20591	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	97	2137390	500.0	471.5	
14 1,1,2-Trichloro-1,2,2-trif	101	2.221	2.221	0.000	97	2688982	500.0	478.2	
16 Acrolein	56	2.210	2.221	-0.011	93	399957	600.0	567.3	
15 1,1-Dichloroethene	96	2.221	2.233	-0.012	96	2424326	500.0	464.6	
17 Acetone	43	2.336	2.347	-0.011	86	2946813	2500.0	2499.7	
18 Iodomethane	142	2.370	2.370	0.000	98	4128636	500.0	467.5	
19 Carbon disulfide	76	2.393	2.393	0.000	100	8705528	500.0	432.3	
20 Isopropyl alcohol	45	2.461	2.484	-0.023	98	1669162	5000.0	6078.6	
21 3-Chloro-1-propene	76	2.541	2.553	-0.012	88	1640859	500.0	458.5	
22 Methyl acetate	43	2.576	2.587	-0.011	100	7359133	2500.0	2454.5	
23 Methylene Chloride	84	2.679	2.679	0.000	99	2567949	500.0	456.5	
* 24 TBA-d9 (IS)	65	2.736	2.736	0.000	0	339179	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.793	2.804	-0.011	96	2638690	5000.0	4551.5	
26 Methyl tert-butyl ether	73	2.850	2.850	0.000	98	5908337	500.0	475.5	
27 trans-1,2-Dichloroethene	96	2.861	2.873	-0.012	99	2535153	500.0	466.7	
28 Acrylonitrile	53	2.964	2.964	0.000	93	6906453	5000.0	4991.5	
29 Hexane	57	3.021	3.033	-0.012	94	4363538	500.0	461.6	
30 Isopropyl ether	45	3.273	3.273	0.000	97	9265110	500.0	471.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 1,1-Dichloroethane	63	3.284	3.284	0.000	100	5052078	500.0	455.3	
32 Vinyl acetate	86	3.319	3.330	-0.011	100	664399	1000.0	1029.8	
33 2-Chloro-1,3-butadiene	88	3.319	3.330	-0.011	94	2580926	500.0	526.5	
34 Tert-butyl ethyl ether	59	3.604	3.616	-0.012	88	7684147	500.0	495.3	
35 2,2-Dichloropropane	79	3.810	3.799	0.011	98	1287533	500.0	471.0	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	323344	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.833	3.844	-0.011	94	2740478	500.0	464.0	
38 2-Butanone (MEK)	72	3.879	3.890	-0.011	100	1051685	2500.0	2499.8	
39 Ethyl acetate	70	3.902	3.902	0.000	96	426777	1000.0	1042.1	
40 Propionitrile	54	4.027	4.039	-0.012	97	2697227	5000.0	5328.4	
41 Chlorobromomethane	128	4.084	4.084	0.000	98	1141953	500.0	499.9	
42 Methacrylonitrile	67	4.130	4.130	0.000	93	7293053	5000.0	5088.9	
43 Chloroform	83	4.153	4.153	0.000	98	4361108	500.0	465.9	
44 Cyclohexane	84	4.256	4.256	0.000	93	3942749	500.0	483.1	
45 1,1,1-Trichloroethane	97	4.290	4.290	0.000	98	3792708	500.0	475.2	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	97	179411	50.0	50.2	
47 Carbon tetrachloride	117	4.404	4.404	0.000	99	3287051	500.0	474.1	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	95	3667895	500.0	488.6	
49 Benzene	78	4.667	4.667	0.000	98	9351754	500.0	429.6	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.702	4.702	0.000	0	204230	50.0	54.5	M
50 Isobutyl alcohol	42	4.702	4.713	-0.011	88	1876164	12500	12484	
52 Tert-amyl methyl ether	73	4.782	4.782	0.000	93	7691313	500.0	505.4	
53 1,2-Dichloroethane	62	4.782	4.782	0.000	95	2910517	500.0	464.7	
54 n-Heptane	57	4.873	4.873	0.000	96	2573786	500.0	497.0	
* 55 Fluorobenzene	96	4.999	4.999	0.000	98	635870	50.0	50.0	
56 Trichloroethene	95	5.399	5.399	0.000	98	2613811	500.0	498.7	
57 n-Butanol	43	5.467	5.513	-0.046	86	1270715	12500	12488	
58 Methylcyclohexane	83	5.525	5.513	0.012	96	4740380	500.0	497.4	
59 Ethyl acrylate	55	5.605	5.616	-0.011	97	2970303	500.0	638.2	
60 1,2-Dichloropropane	63	5.730	5.730	0.000	94	2796584	500.0	495.0	
* 61 1,4-Dioxane-d8	96	5.867	5.845	0.022	0	35743	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	96	1288660	500.0	498.3	
63 1,4-Dioxane	88	5.890	5.902	-0.012	93	413352	10000	7038.5	
64 Dichlorobromomethane	83	6.073	6.073	0.000	99	3089826	500.0	507.4	
65 2-Nitropropane	41	6.473	6.485	-0.012	98	932192	1000.0	1129.9	
66 2-Chloroethyl vinyl ether	63	6.508	6.508	0.000	97	1407454	500.0	485.9	
67 Epichlorohydrin	57	6.610	6.622	-0.012	99	3393848	10000	9837.5	
68 cis-1,3-Dichloropropene	75	6.656	6.656	0.000	97	3910749	500.0	515.6	
69 4-Methyl-2-pentanone (MIBK	43	6.873	6.873	0.000	97	9622782	2500.0	2240.9	
$ 70 Toluene-d8 (Surr)	98	6.908	6.908	0.000	98	739439	50.0	50.1	
71 Toluene	91	6.988	6.988	0.000	94	8994276	500.0	422.5	
72 trans-1,3-Dichloropropene	75	7.365	7.365	0.000	99	3165701	500.0	527.8	
74 Tetrachloroethene	166	7.548	7.548	0.000	93	2582010	500.0	467.4	
73 1,1,2-Trichloroethane	83	7.548	7.548	0.000	93	1640390	500.0	495.0	
75 1,3-Dichloropropane	76	7.708	7.719	-0.011	96	3108280	500.0	496.3	
76 2-Hexanone	43	7.799	7.810	-0.011	96	6492827	2500.0	2497.4	
77 Chlorodibromomethane	129	7.891	7.890	0.000	98	2095390	500.0	524.2	
78 Ethylene Dibromide	107	7.993	8.005	-0.012	99	1671135	500.0	512.0	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	91	494162	50.0	50.0	
80 Chlorobenzene	112	8.428	8.428	0.000	91	5830906	500.0	452.7	
81 Ethylbenzene	106	8.508	8.508	0.000	97	3459955	500.0	494.1	
82 1,1,1,2-Tetrachloroethane	131	8.531	8.519	0.012	96	2249652	500.0	483.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	4091345	500.0	490.9	
84 o-Xylene	106	8.953	8.953	0.000	95	3947442	500.0	488.1	
85 Styrene	104	8.988	8.988	0.000	91	5981533	500.0	485.3	
86 Bromoform	173	9.148	9.159	-0.011	97	1369423	500.0	514.5	
87 Amyl acetate (mixed isomer	43	9.159	9.171	-0.012	90	3785012	500.0	499.8	
88 Isopropylbenzene	105	9.251	9.251	0.000	98	8787644	500.0	410.6	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	90	239815	50.0	51.8	
90 Bromobenzene	156	9.514	9.514	0.000	96	2636434	500.0	488.7	
92 N-Propylbenzene	91	9.571	9.571	0.000	97	9808605	500.0	391.7	
91 1,1,2,2-Tetrachloroethane	83	9.571	9.571	0.000	99	2281929	500.0	505.3	
93 1,2,3-Trichloropropane	110	9.605	9.605	0.000	97	551043	500.0	480.1	
95 trans-1,4-Dichloro-2-buten	53	9.616	9.628	-0.012	81	984096	500.0	583.9	
96 4-Ethyltoluene	105	9.662	9.662	0.000	97	9587314	500.0	447.2	
94 2-Chlorotoluene	91	9.662	9.662	0.000	97	7911311	500.0	433.0	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	95	7750918	500.0	425.4	
98 4-Chlorotoluene	91	9.742	9.754	-0.012	98	7737294	500.0	441.2	
99 tert-Butylbenzene	119	9.948	9.948	0.000	91	7300134	500.0	467.2	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	96	7520948	500.0	428.5	
101 sec-Butylbenzene	105	10.119	10.119	0.000	94	9239456	500.0	400.4	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	93	8122882	500.0	439.0	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	76	4579648	500.0	453.9	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	80	255980	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.291	10.291	0.000	93	4806093	500.0	434.6	
106 Benzyl chloride	126	10.405	10.405	0.000	99	878640	500.0	582.0	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	95	7373746	500.0	415.7	
108 p-Diethylbenzene	119	10.496	10.496	0.000	92	5322158	500.0	469.3	
109 n-Butylbenzene	92	10.519	10.519	0.000	97	5143438	500.0	469.2	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	94	4199532	500.0	430.7	
111 1,2,4,5-Tetramethylbenzene	119	11.057	11.057	0.000	98	6821004	500.0	430.9	
112 1,2-Dibromo-3-Chloropropan	155	11.137	11.137	0.000	96	256786	500.0	502.0	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	97	3271131	500.0	393.9	
114 1,2,4-Trichlorobenzene	180	11.662	11.662	0.000	93	2417807	500.0	393.3	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	98	1845029	500.0	373.1	
116 Naphthalene	128	11.834	11.834	0.000	98	3708692	500.0	343.3	
117 1,2,3-Trichlorobenzene	180	11.994	11.994	0.000	95	1634586	500.0	501.2	
S 118 1,2-Dichloroethene, Total	100				0		1000.0	930.7	
S 119 1,3-Dichloropropene, Total	100				0		1000.0	1043.5	
S 120 Xylenes, Total	100				0		1000.0	979.1	
S 121 Total BTEX	1				0		2500.0	2325.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260MIX1COMB_00074	Amount Added:	50.00	Units: uL	
ACROLEIN W_00075	Amount Added:	6.00	Units: uL	
GASES Li_00252	Amount Added:	50.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 27-Mar-2018 13:14:34 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Injection Date: 26-Mar-2018 06:08:30 Instrument ID: CVOAMS2 Operator ID:

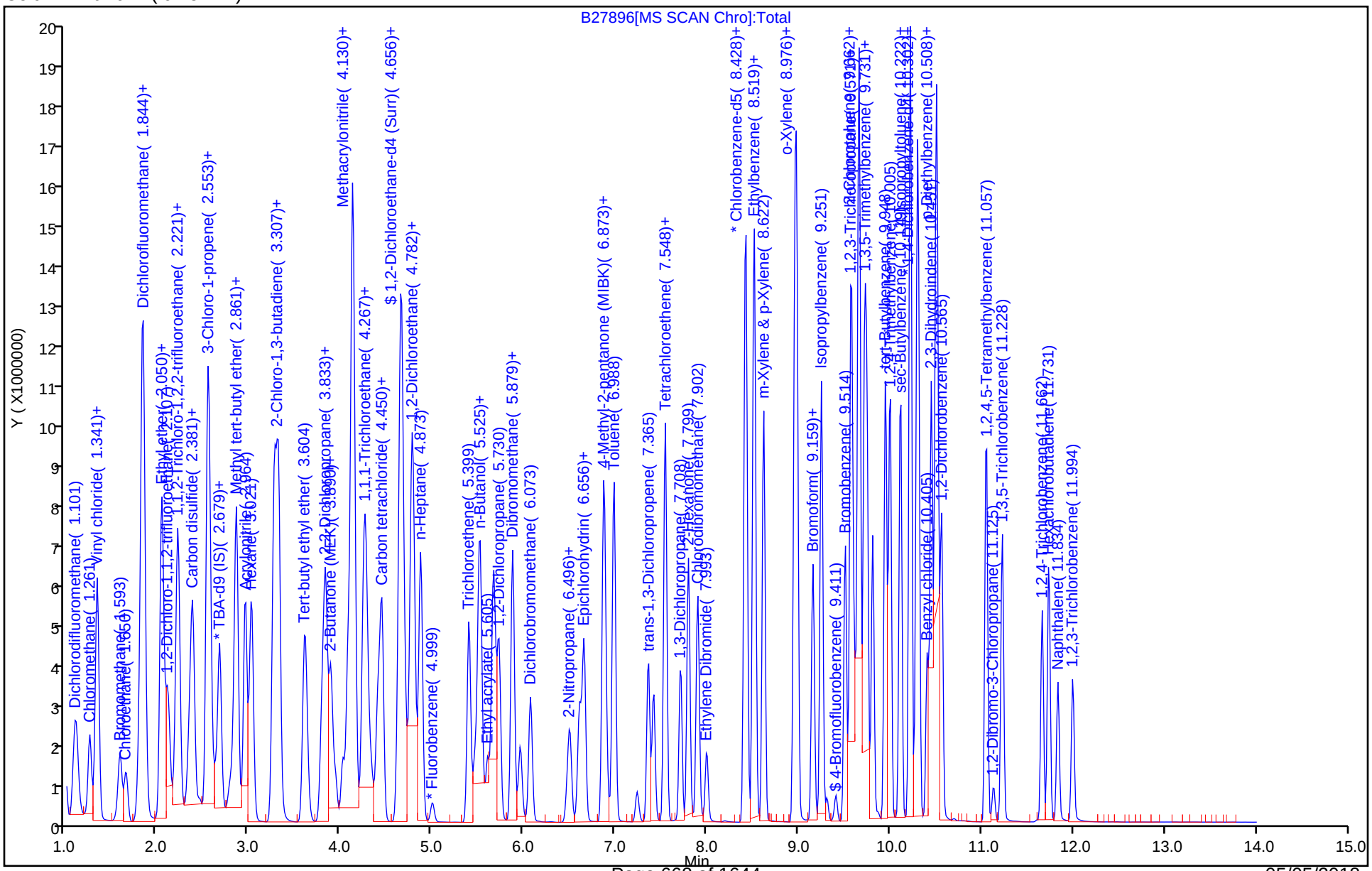
Lims ID: STD500 Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

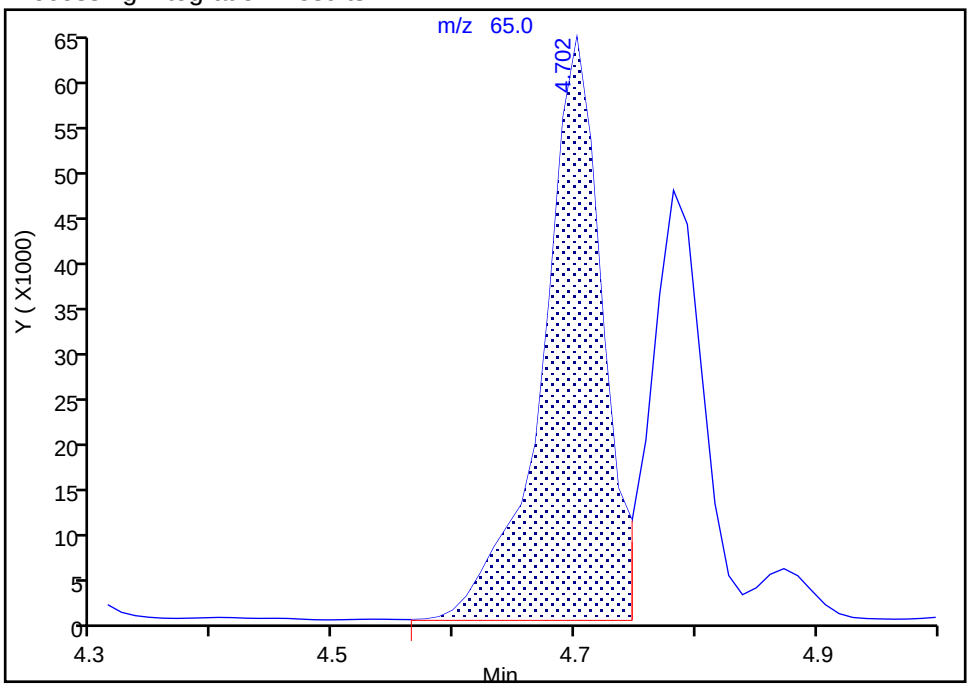
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D
Injection Date: 26-Mar-2018 06:08:30 Instrument ID: CVOAMS2
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

$ 51 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

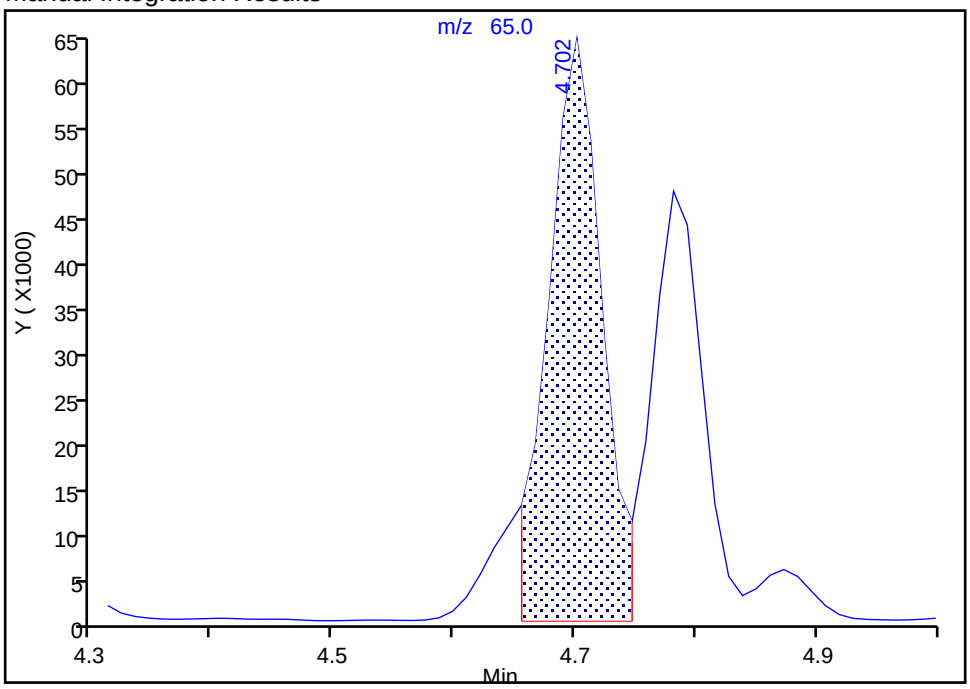
Processing Integration Results

RT: 4.70
Area: 223543
Amount: 58.612775
Amount Units: ug/l



Manual Integration Results

RT: 4.70
Area: 204230
Amount: 54.510230
Amount Units: ug/l



Reviewer: delpolitov, 27-Mar-2018 12:13:10
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-506606/18	D47920a.D
Level 2	STD5 460-506606/9	D47911.D
Level 3	STD20 460-506606/10	D47912.D
Level 4	STD50 460-506606/11	D47913.D
Level 5	STD200 460-506606/12	D47914.D
Level 6	STD500 460-506606/13	D47915.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	0.0913 0.2358	0.1864	0.2045	0.2191	0.2444	Lin2	-0.138	0.2263							0.9960		0.9900
Dichlorodifluoromethane	0.4557 0.7744	0.7241	0.7174	0.7434	0.8198	Lin2	-0.317	0.7733			0.1000				0.9980		0.9900
Chloromethane	0.8446 0.7949	0.9245	0.8665	0.8652	0.8618	Ave		0.8596			0.1000	4.9		20.0			
Vinyl chloride	0.7727 0.6764	0.8460	0.7442	0.7463	0.7201	Ave		0.7509			0.1000	7.6		20.0			
Butadiene	0.3268 0.6112	0.5746	0.5943	0.6412	0.6458	Lin2	-0.303	0.6301							0.9990		0.9900
Bromomethane	0.3348 0.3039	0.3338	0.3331	0.3387	0.3040	Ave		0.3247			0.1000	5.0		20.0			
Chloroethane	0.3387 0.3035	0.3723	0.3322	0.3346	0.3072	Ave		0.3314			0.1000	7.5		20.0			
Trichlorofluoromethane	0.4176 0.6131	0.6361	0.6063	0.6411	0.6080	Ave		0.5870			0.1000	14.4		20.0			
Dichlorofluoromethane	0.7665 0.8212	0.8962	0.8595	0.8750	0.8123	Ave		0.8385				5.7		20.0			
Pentane	0.0622 0.0719	0.0839	0.0743	0.0754	0.0723	Ave		0.0733				9.5		20.0			
Ethanol	0.0700 0.0434	0.0492	0.0478	0.0451	0.0432	QuaF		0.0434	0						1.0000		0.9900
Ethyl ether	0.3265 0.2620	0.2711	0.2867	0.2921	0.2617	Ave		0.2834				8.7		20.0			
2-Methyl-1,3-butadiene	0.2366 0.3337	0.3224	0.3192	0.3367	0.3341	Ave		0.3138				12.3		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	0.2641 0.3025	0.3253	0.3126	0.3187	0.2974	Ave		0.3034				7.2		20.0			
Acrolein	1.3463 1.2997	1.3465	1.2976	1.2920	1.2124	Ave		1.2991				3.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2767 0.4064	0.3984	0.3854	0.3992	0.3966	Ave		0.3771			0.1000	13.2		20.0			
1,1-Dichloroethene	0.2986 0.3735	0.3497	0.3462	0.3586	0.3528	Ave		0.3466			0.1000	7.3		20.0			
Acetone	1.3914 1.1111	0.9419	0.8759	0.8558	1.0336	Ave		1.0350			0.0500	19.3		20.0			
Iodomethane	0.5978 0.6630	0.6323	0.6252	0.6426	0.6228	Ave		0.6306				3.4		20.0			
Carbon disulfide	1.2476 1.4299	1.3506	1.3351	1.3760	1.3764	Ave		1.3526			0.1000	4.5		20.0			
Isopropyl alcohol	0.7768 +++++	0.5580	0.5697	0.5678	0.5372	Ave		0.6019				16.4		20.0			
Allyl chloride	0.2084 0.1902	0.2099	0.2211	0.2205	0.2119	Ave		0.2103				5.3		20.0			
Cyclopentene	0.6199 0.8622	0.8635	0.8353	0.8808	0.8755	Ave		0.8229				12.2		20.0			
Methyl acetate	0.2226 0.2004	0.1978	0.2061	0.2120	0.2017	Ave		0.2068			0.1000	4.5		20.0			
Acetonitrile	0.8446 0.8537	0.7564	0.7832	0.7922	0.7848	Ave		0.8025				4.8		20.0			
Methylene Chloride	0.4382 0.3868	0.4122	0.3959	0.3990	0.3696	Ave		0.4003			0.1000	5.8		20.0			
2-Methyl-2-propanol	1.3213 0.9454	1.0026	0.9688	0.9802	0.8946	Ave		1.0188				15.0		20.0			
Methyl tert-butyl ether	0.9276 0.8839	0.8894	0.8951	0.9111	0.8483	Ave		0.8926			0.1000	3.0		20.0			
trans-1,2-Dichloroethene	0.3165 0.3364	0.3497	0.3447	0.3591	0.3334	Ave		0.3400			0.1000	4.3		20.0			
Acrylonitrile	2.9300 2.8249	2.6746	2.7552	2.7779	2.5628	Ave		2.7542				4.6		20.0			
Hexane	0.2993 0.4674	0.4952	0.4672	0.4948	0.4793	Ave		0.4505				16.7		20.0			
Isopropyl ether	1.0203 1.0073	0.9725	1.0025	1.0561	0.9917	Ave		1.0084				2.8		20.0			
1,1-Dichloroethane	0.6316 0.5976	0.6117	0.6039	0.6291	0.5903	Ave		0.6107			0.2000	2.7		20.0			
Vinyl acetate	0.0454 0.0583	0.0516	0.0555	0.0595	0.0554	Ave		0.0543				9.5		20.0			
2-Chloro-1,3-butadiene	0.2292 0.2930	0.2748	0.2744	0.3017	0.3036	Ave		0.2794				9.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	0.9079 0.9381	0.9190	0.9299	0.9725	0.9139	Ave		0.9302				2.5		20.0			
2,2-Dichloropropane	0.1610 0.1620	0.1659	0.1578	0.1596	0.1548	Ave		0.1602				2.4		20.0			
cis-1,2-Dichloroethene	0.5760 0.3677	0.4262	0.3725	0.3826	0.3542	Lin2	0.2105	0.3684			0.1000				0.9990		0.9900
2-Butanone (MEK)	0.3578 0.3379	0.2908	0.2880	0.3005	0.3145	Ave		0.3149			0.0500	8.8		20.0			
Ethyl acetate	0.2772 0.2755	0.2838	0.2733	0.2737	0.2635	Ave		0.2745				2.4		20.0			
Methyl acrylate	0.2277 0.2142	0.1958	0.2084	0.2093	0.2120	Ave		0.2112				4.9		20.0			
Propionitrile	0.0390 0.0366	0.0352	0.0373	0.0384	0.0366	Ave		0.0372				3.7		20.0			
Tetrahydrofuran	0.3900 0.3225	0.3173	0.3180	0.3358	0.3097	Ave		0.3322				8.9		20.0			
Chlorobromomethane	0.1442 0.1584	0.1502	0.1546	0.1614	0.1510	Ave		0.1533				4.0		20.0			
Methacrylonitrile	0.1014 0.1182	0.0985	0.1055	0.1128	0.1167	Ave		0.1088				7.6		20.0			
Chloroform	0.5206 0.5660	0.5475	0.5533	0.5993	0.5809	Ave		0.5613			0.2000	4.9		20.0			
Cyclohexane	0.3315 0.5165	0.4794	0.4746	0.5042	0.4997	Ave		0.4677			0.1000	14.6		20.0			
1,1,1-Trichloroethane	0.3929 0.5016	0.4632	0.4581	0.4947	0.4822	Ave		0.4655			0.1000	8.5		20.0			
Carbon tetrachloride	0.2830 0.3933	0.3700	0.3667	0.3929	0.3747	Ave		0.3635			0.1000	11.3		20.0			
1,1-Dichloropropene	0.3152 0.4014	0.3798	0.3797	0.4174	0.3912	Ave		0.3808				9.2		20.0			
Isobutyl alcohol	0.4373 0.6760	0.5348	0.5565	0.6281	0.6176	Ave		0.5750				14.7		20.0			
Benzene	1.5965 1.5496	1.6038	1.5765	1.7330	1.6246	Ave		1.6140			0.5000	3.9		20.0			
Tert-amyl methyl ether	0.2484 0.2724	0.2357	0.2498	0.2661	0.2596	Ave		0.2553				5.2		20.0			
Isopropyl acetate	0.8559 0.8892	0.8236	0.8551	0.9355	0.8537	Ave		0.8688				4.5		20.0			
1,2-Dichloroethane	0.4319 0.4004	0.3632	0.3600	0.3904	0.3778	Ave		0.3873			0.1000	6.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Heptane	0.1605 0.2634	0.2491	0.2391	0.2571	0.2561	Ave		0.2376				16.3		20.0			
n-Butanol	0.1743 0.2239	0.1630	0.1766	0.1933	0.1980	Ave		0.1882				11.6		20.0			
Trichloroethene	0.2615 0.2987	0.2742	0.2673	0.2884	0.2793	Ave		0.2782			0.2000	4.9		20.0			
Methylcyclohexane	0.3461 0.5856	0.5316	0.5354	0.5578	0.5492	Ave		0.5176			0.1000	16.7		20.0			
Ethyl acrylate	0.0102 0.0245	0.0182	0.0187	0.0217	0.0220	Lin2	-0.012	0.0217							0.9930		0.9900
1,2-Dichloropropane	0.2871 0.3015	0.2741	0.2782	0.2921	0.2779	Ave		0.2852			0.1000	3.7		20.0			
Methyl methacrylate	0.0545 0.0653	0.0559	0.0555	0.0586	0.0598	Ave		0.0583				6.8		20.0			
1,4-Dioxane	0.9742 0.9049	1.1054	1.0933	1.1413	1.0248	Ave		1.0406				8.6		20.0			
Dibromomethane	0.1822 0.1979	0.1644	0.1683	0.1782	0.1784	Ave		0.1782				6.6		20.0			
n-Propyl acetate	0.3109 0.3232	0.2750	0.2949	0.3057	0.3107	Ave		0.3034				5.5		20.0			
Dichlorobromomethane	0.3187 0.3881	0.3206	0.3286	0.3596	0.3522	Ave		0.3446			0.2000	7.9		20.0			
2-Nitropropane	0.0815 0.0656	0.0586	0.0589	0.0617	0.0621	Ave		0.0647				13.3		20.0			
2-Chloroethyl vinyl ether	0.1064 0.1298	0.1025	0.1063	0.1110	0.1133	Ave		0.1115				8.7		20.0			
Epichlorohydrin	0.2162 0.2197	0.2092	0.2169	0.2156	0.1981	Ave		0.2126				3.7		20.0			
cis-1,3-Dichloropropene	0.5167 0.5667	0.5211	0.5419	0.5775	0.5481	Ave		0.5453			0.2000	4.4		20.0			
4-Methyl-2-pentanone (MIBK)	2.1016 2.2354	1.9764	2.1250	2.2394	2.1201	Ave		2.1330			0.0500	4.6		20.0			
Toluene	1.5855 1.4759	1.5459	1.4702	1.5981	1.5143	Ave		1.5316			0.4000	3.5		20.0			
trans-1,3-Dichloropropene	0.4180 0.4744	0.4255	0.4404	0.4602	0.4411	Ave		0.4433			0.1000	4.8		20.0			
Ethyl methacrylate	0.2473 0.3195	0.2486	0.2762	0.2913	0.2886	Ave		0.2786				9.9		20.0			
1,1,2-Trichloroethane	0.2347 0.2508	0.2466	0.2520	0.2628	0.2397	Ave		0.2478			0.1000	4.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.2708 0.3319	0.3311	0.3264	0.3539	0.3351	Ave		0.3249			0.2000	8.7		20.0			
1,3-Dichloropropane	0.4544 0.4549	0.4414	0.4445	0.4701	0.4332	Ave		0.4497				2.9		20.0			
2-Hexanone	1.2891 1.4871	1.2181	1.2772	1.3078	1.2938	Ave		1.3122			0.0500	6.9		20.0			
n-Butyl acetate	0.0909 0.0778	0.0813	0.0810	0.0843	0.0770	Ave		0.0821				6.2		20.0			
Chlorodibromomethane	0.2632 0.3327	0.2744	0.2996	0.3271	0.3124	Ave		0.3016			0.1000	9.3		20.0			
Ethylene Dibromide	0.2734 0.2719	0.2567	0.2631	0.2781	0.2558	Ave		0.2665			0.1000	3.5		20.0			
Chlorobenzene	0.8795 0.8866	0.8661	0.8527	0.8978	0.8407	Ave		0.8706			0.5000	2.5		20.0			
Ethylbenzene	0.4472 0.5130	0.4806	0.4780	0.5248	0.5102	Ave		0.4923			0.1000	5.9		20.0			
1,1,1,2-Tetrachloroethane	0.2927 0.3795	0.3154	0.3356	0.3824	0.3775	Ave		0.3472				11.0		20.0			
m-Xylene & p-Xylene	0.5504 0.6105	0.5927	0.5713	0.6384	0.5998	Ave		0.5939			0.1000	5.2		20.0			
n-Butyl acrylate	0.2081 0.2271	0.2147	0.2208	0.2381	0.2138	Ave		0.2204				4.9		20.0			
o-Xylene	0.5349 0.6607	0.5969	0.6060	0.6643	0.6424	Ave		0.6175			0.3000	7.9		20.0			
Styrene	0.8169 1.0567	0.8752	0.9395	1.0256	1.0417	Ave		0.9593			0.3000	10.3		20.0			
Amyl acetate (mixed isomers)	0.9904 0.9644	0.9642	0.9957	1.0785	1.0036	Ave		0.9995				4.2		20.0			
Bromoform	0.1621 0.2127	0.1684	0.1797	0.1991	0.1935	Ave		0.1859			0.1000	10.4		20.0			
Isopropylbenzene	1.2930 1.7253	1.5858	1.6195	1.8145	1.7741	Ave		1.6354			0.1000	11.6		20.0			
Bromobenzene	0.6733 0.6807	0.6753	0.6824	0.7043	0.6499	Ave		0.6777				2.6		20.0			
1,1,2,2-Tetrachloroethane	0.7348 0.7785	0.7175	0.7571	0.8151	0.7671	Ave		0.7617			0.3000	4.5		20.0			
N-Propylbenzene	3.2200 3.7701	3.7100	3.7033	4.1006	3.9562	Ave		3.7434				8.0		20.0			
1,2,3-Trichloropropane	0.1844 0.1927	0.1801	0.1993	0.2084	0.1960	Ave		0.1935				5.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.1813 0.1749	0.1745	0.1856	0.1982	0.1888	Ave		0.1839				4.9		20.0			
4-Ethyltoluene	2.5640 3.0605	3.1393	3.0708	3.3189	3.3320	Ave		3.0809				9.1		20.0			
2-Chlorotoluene	2.2758 2.6550	2.5301	2.5023	2.7507	2.8743	Ave		2.5981				8.1		20.0			
1,3,5-Trimethylbenzene	2.0752 2.7822	2.4561	2.5601	2.9160	2.9404	Ave		2.6217				12.6		20.0			
4-Chlorotoluene	2.0542 2.2408	2.0362	2.0920	2.2885	2.2599	Ave		2.1619				5.2		20.0			
Butyl Methacrylate	0.7213 0.9676	0.7771	0.8638	0.9923	1.0241	Ave		0.8911				13.9		20.0			
tert-Butylbenzene	1.4876 2.4131	1.8894	1.9952	2.3002	2.3750	Ave		2.0768				17.2		20.0			
1,2,4-Trimethylbenzene	2.3035 2.8768	2.6772	2.6231	2.9547	2.9796	Ave		2.7358				9.4		20.0			
sec-Butylbenzene	2.5380 3.8248	3.2048	3.3866	3.8451	3.9779	Ave		3.4629				15.7		20.0			
4-Isopropyltoluene	2.1142 3.1413	2.6595	2.7562	3.1095	3.2107	Ave		2.8319				14.7		20.0			
1,3-Dichlorobenzene	1.3438 1.3365	1.3179	1.3265	1.4268	1.3777	Ave		1.3549			0.6000	3.0		20.0			
1,4-Dichlorobenzene	1.4199 1.3523	1.3435	1.3432	1.4264	1.3730	Ave		1.3764			0.5000	2.8		20.0			
Benzyl chloride	0.1999 0.2711	0.2215	0.2492	0.2708	0.2634	Ave		0.2460				11.9		20.0			
Indan	0.9440 1.2953	1.0143	1.0340	1.1236	1.1814	Ave		1.0988				11.6		20.0			
p-Diethylbenzene	1.3564 1.7955	1.6589	1.6513	1.8697	1.9273	Ave		1.7098				12.0		20.0			
n-Butylbenzene	1.2645 1.6151	1.5434	1.5742	1.8021	1.8042	Ave		1.6006				12.5		20.0			
1,2-Dichlorobenzene	1.3595 1.4019	1.2896	1.3164	1.4268	1.3632	Ave		1.3596			0.4000	3.8		20.0			
1,2,4,5-Tetramethylbenzene	2.3040 2.9332	2.3987	2.5090	2.7566	2.8612	Ave		2.6271				9.9		20.0			
1,2-Dibromo-3-Chloropropane	0.1400 0.1476	0.1290	0.1442	0.1526	0.1406	Ave		0.1423			0.0500	5.7		20.0			
1,3,5-Trichlorobenzene	1.0697 1.0493	1.0891	1.0419	1.0903	1.0139	Ave		1.0590				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	1.0576 0.9046	1.0000	0.9677	0.9949	0.8530	Ave		0.9630			0.2000	7.6		20.0			
Hexachlorobutadiene	0.3432 0.5323	0.4562	0.4442	0.4763	0.4620	Ave		0.4524				13.6		20.0			
Naphthalene	2.5121 2.2613	2.2708	2.3903	2.4685	2.1558	Ave		2.3431				5.8		20.0			
1,2,3-Trichlorobenzene	0.9770 0.8856	0.9606	0.9389	0.9611	0.8369	Ave		0.9267				5.9		20.0			
Dibromofluoromethane (Surr)	0.3319 0.3620	0.3277	0.3333	0.3563	0.3511	Ave		0.3437				4.2		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3274 0.4262	0.3291	0.3299	0.3654	0.3845	Ave		0.3604				11.1		20.0			
Toluene-d8 (Surr)	1.5067 1.4812	1.5346	1.5338	1.6327	1.5616	Ave		1.5418				3.4		20.0			
4-Bromofluorobenzene	0.7988 0.7084	0.8083	0.7967	0.8151	0.7385	Ave		0.7776				5.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-506606/18	D47920a.D
Level 2	STD5 460-506606/9	D47911.D
Level 3	STD20 460-506606/10	D47912.D
Level 4	STD50 460-506606/11	D47913.D
Level 5	STD200 460-506606/12	D47914.D
Level 6	STD500 460-506606/13	D47915.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Lin2	946 1523352	9713	42214	115739	579316	1.00 500	5.00	20.0	50.0	200
Dichlorodifluoromethane	FB	Lin2	4721 5002854	37722	148068	392732	1943357	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	8751 5135228	48165	178851	457048	2042881	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	8006 4369374	44074	153611	394228	1706954	1.00 500	5.00	20.0	50.0	200
Butadiene	FB	Lin2	3386 3948478	29934	122678	338718	1530909	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	3469 1962960	17392	68747	178948	720673	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	3509 1960332	19395	68570	176757	728186	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	4327 3960354	33137	125141	338667	1441388	1.00 500	5.00	20.0	50.0	200
Dichlorofluoromethane	FB	Ave	7942 5305050	46690	177402	462246	1925580	1.00 500	5.00	20.0	50.0	200
Pentane	FB	Ave	1289 928438	8739	30675	79680	342856	2.00 1000	10.0	40.0	100	400
Ethanol	TBAd9	QuaF	1102 405095	3889	15392	36797	159085	40.0 20000	200	800	2000	8000
Ethyl ether	FB	Ave	3383 1692703	14126	59185	154327	620301	1.00 500	5.00	20.0	50.0	200
2-Methyl-1,3-butadiene	FB	Ave	2451 2155941	16798	65888	177869	792103	1.00 500	5.00	20.0	50.0	200
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	2736 1953990	16945	64519	168342	704977	1.00 500	5.00	20.0	50.0	200
Acrolein	TBAd9	Ave	52985 363927	106354	156663	211039	279148	100 600	200	300	400	500
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	2867 2625343	20753	79547	210910	940101	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1-Dichloroethene	FB	Ave	3094 2412814	18219	71454	189436	836299	1.00 500	5.00	20.0	50.0	200
Acetone	BUT	Ave	7252 3905071	25129	93319	237293	1330681	5.00 2500	25.0	100	250	1000
Iodomethane	FB	Ave	6194 4282970	32941	129053	339486	1476371	1.00 500	5.00	20.0	50.0	200
Carbon disulfide	FB	Ave	12926 9237158	70363	275572	726878	3262827	1.00 500	5.00	20.0	50.0	200
Isopropyl alcohol	TBAd9	Ave	3057 +++++	11019	45858	115938	494784	10.0 +++++	50.0	200	500	2000
Allyl chloride	FB	Ave	2159 1228987	10936	45637	116492	502334	1.00 500	5.00	20.0	50.0	200
Cyclopentene	FB	Ave	6423 5570147	44984	172405	465323	2075488	1.00 500	5.00	20.0	50.0	200
Methyl acetate	FB	Ave	11533 6473886	51519	212737	559847	2391159	5.00 2500	25.0	100	250	1000
Acetonitrile	TBAd9	Ave	3324 1992049	14936	63038	161752	722826	10.0 5000	50.0	200	500	2000
Methylene Chloride	FB	Ave	4540 2498833	21476	81707	210790	876095	1.00 500	5.00	20.0	50.0	200
2-Methyl-2-propanol	TBAd9	Ave	5200 2206005	19798	77978	200140	823901	10.0 5000	50.0	200	500	2000
Methyl tert-butyl ether	FB	Ave	9611 5709882	46335	184748	481308	2010850	1.00 500	5.00	20.0	50.0	200
trans-1,2-Dichloroethene	FB	Ave	3279 2173186	18216	71142	189727	790358	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	TBAd9	Ave	11531 6591461	52815	221765	567198	2360263	10.0 5000	50.0	200	500	2000
Hexane	FB	Ave	3101 3019362	25801	96438	261383	1136101	1.00 500	5.00	20.0	50.0	200
Isopropyl ether	FB	Ave	10571 6506933	50667	206918	557898	2350849	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	6544 3860443	31868	124643	332341	1399425	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	FB	Ave	940 753614	5376	22924	62837	262504	2.00 1000	10.0	40.0	100	400
2-Chloro-1,3-butadiene	FB	Ave	2375 1892762	14316	56638	159363	719723	1.00 500	5.00	20.0	50.0	200
Tert-butyl ethyl ether	FB	Ave	9407 6060160	47876	191949	513739	2166441	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	1668 1046643	8644	32562	84311	366859	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Lin2	5968 2375467	22203	76894	202134	839650	1.00 500	5.00	20.0	50.0	200
2-Butanone (MEK)	BUT	Ave	1865 1187669	7759	30687	83327	404894	5.00 2500	25.0	100	250	1000
Ethyl acetate	BUT	Ave	578 387230	3029	11648	30351	135685	2.00 1000	10.0	40.0	100	400
Methyl acrylate	FB	Ave	2359 1383499	10201	43013	110549	502479	1.00 500	5.00	20.0	50.0	200
Propionitrile	FB	Ave	4041 2363095	18356	77073	203073	868636	10.0 5000	50.0	200	500	2000
Tetrahydrofuran	BUT	Ave	813 453371	3386	13553	37245	159458	2.00 1000	10.0	40.0	100	400
Chlorobromomethane	FB	Ave	1494 1022970	7824	31920	85250	357977	1.00 500	5.00	20.0	50.0	200
Methacrylonitrile	FB	Ave	10505 7638006	51313	217835	595666	2765427	10.0 5000	50.0	200	500	2000
Chloroform	FB	Ave	5394 3656310	28523	114214	316587	1376973	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Ave	3435 3336754	24973	97964	266369	1184449	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	4071 3240435	24133	94561	261324	1142965	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	2932 2540795	19278	75699	207573	888225	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	3266 2592889	19784	78373	220513	927451	1.00 500	5.00	20.0	50.0	200
Isobutyl alcohol	TBAd9	Ave	4302 3943486	26400	111975	320620	1422098	25.0 12500	125	500	1250	5000
Benzene	CBNZd5	Ave	11732 7956981	59328	231610	639068	2802431	1.00 500	5.00	20.0	50.0	200
Tert-amyl methyl ether	FB	Ave	2574 1759553	12278	51553	140566	615453	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	8868 5744232	42908	176495	494197	2023776	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	4475 2586329	18922	74304	206253	895647	1.00 500	5.00	20.0	50.0	200
n-Heptane	FB	Ave	1663 1701584	12977	49362	135818	607079	1.00 500	5.00	20.0	50.0	200
n-Butanol	TBAd9	Ave	1715 1306375	8046	35539	98662	455972	25.0 12500	125	500	1250	5000
Trichloroethene	FB	Ave	2709 1929905	14284	55183	152372	661996	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methylcyclohexane	FB	Ave	3586 3782759	27697	110505	294653	1301948	1.00 500	5.00	20.0	50.0	200
Ethyl acrylate	FB	Lin2	106 158485	946	3855	11476	52082	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	2975 1947867	14281	57432	154324	658805	1.00 500	5.00	20.0	50.0	200
Methyl methacrylate	FB	Ave	1130 843727	5822	22908	61921	283563	2.00 1000	10.0	40.0	100	400
1,4-Dioxane	DXE	Ave	451 355417	2518	11095	28349	129558	20.0 10000	100	400	1000	4000
Dibromomethane	FB	Ave	1888 1278401	8564	34730	94141	422919	1.00 500	5.00	20.0	50.0	200
n-Propyl acetate	FB	Ave	3221 2087573	14327	60879	161489	736528	1.00 500	5.00	20.0	50.0	200
Dichlorobromomethane	FB	Ave	3302 2507400	16701	67817	189974	834944	1.00 500	5.00	20.0	50.0	200
2-Nitropropane	FB	Ave	1689 848024	6110	24306	65209	294318	2.00 1000	10.0	40.0	100	400
2-Chloroethyl vinyl ether	FB	Ave	1102 838377	5338	21938	58642	268514	1.00 500	5.00	20.0	50.0	200
Epichlorohydrin	BUT	Ave	4507 3088228	22329	92426	239169	1019884	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	CBNZ d5	Ave	3797 2909884	19277	79621	212953	945395	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone (MIBK)	BUT	Ave	10954 7856096	52726	226403	620911	2729347	5.00 2500	25.0	100	250	1000
Toluene	CBNZ d5	Ave	11651 7578873	57186	215993	589321	2612187	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBNZ d5	Ave	3072 2436241	15739	64698	169708	760837	1.00 500	5.00	20.0	50.0	200
Ethyl methacrylate	FB	Ave	2562 2063830	12949	57019	153900	684082	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBNZ d5	Ave	1725 1287907	9123	37022	96903	413545	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBNZ d5	Ave	1990 1704079	12250	47947	130523	578076	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBNZ d5	Ave	3339 2335843	16328	65299	173346	747244	1.00 500	5.00	20.0	50.0	200
2-Hexanone	BUT	Ave	6719 5226478	32496	136080	362602	1665592	5.00 2500	25.0	100	250	1000
n-Butyl acetate	CBNZ d5	Ave	668 399605	3007	11906	31088	132895	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorodibromomethane	CBNZ d5	Ave	1934 1708675	10150	44010	120637	538861	1.00 500	5.00	20.0	50.0	200
Ethylene Dibromide	CBNZ d5	Ave	2009 1396394	9495	38650	102542	441256	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBNZ d5	Ave	6463 4552774	32039	125273	331098	1450238	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBNZ d5	Ave	3286 2634116	17779	70223	193536	880135	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2151 1948755	11668	49309	141013	651192	1.00 500	5.00	20.0	50.0	200
m-Xylene & p-Xylene	CBNZ d5	Ave	4045 3134811	21927	83931	235425	1034708	1.00 500	5.00	20.0	50.0	200
n-Butyl acrylate	CBNZ d5	Ave	1529 1166054	7941	32443	87822	368856	1.00 500	5.00	20.0	50.0	200
o-Xylene	CBNZ d5	Ave	3931 3392786	22081	89038	244965	1108103	1.00 500	5.00	20.0	50.0	200
Styrene	CBNZ d5	Ave	6003 5426157	32375	138022	378197	1796983	1.00 500	5.00	20.0	50.0	200
Amyl acetate (mixed isomers)	DCBd 4	Ave	3835 2657905	18677	75848	207300	897940	1.00 500	5.00	20.0	50.0	200
Bromoform	CBNZ d5	Ave	1191 1092306	6231	26397	73425	333761	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBNZ d5	Ave	9502 8859338	58664	237930	669139	3060329	1.00 500	5.00	20.0	50.0	200
Bromobenzene	DCBd 4	Ave	2607 1876039	13082	51981	135370	581503	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	2845 2145456	13899	57672	156675	686367	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCBd 4	Ave	12468 10390191	71867	282093	788158	3539807	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichloropropane	DCBd 4	Ave	714 531209	3488	15183	40047	175333	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	702 482117	3381	14135	38103	168965	1.00 500	5.00	20.0	50.0	200
4-Ethyltoluene	DCBd 4	Ave	9928 8434659	60812	233916	637904	2981347	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCBd 4	Ave	8812 7317066	49012	190615	528705	2571791	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCBd 4	Ave	8035 7667652	47578	195017	560471	2630893	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCBd 4	Ave	7954 6175566	39445	159359	439866	2022014	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Butyl Methacrylate	DCBd 4	Ave	2793 2666812	15054	65798	190726	916348	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCBd 4	Ave	5760 6650373	36600	151986	442111	2125037	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCBd 4	Ave	8919 7928471	51861	199815	567914	2665975	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCBd 4	Ave	9827 10541017	62081	257973	739047	3559207	1.00 500	5.00	20.0	50.0	200
4-Isopropyltoluene	DCBd 4	Ave	8186 8657423	51519	209949	597667	2872803	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCBd 4	Ave	5203 3683487	25529	101043	274245	1232692	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCBd 4	Ave	5498 3726798	26026	102314	274168	1228493	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCBd 4	Ave	774 747103	4291	18984	52044	235669	1.00 500	5.00	20.0	50.0	200
Indan	FB	Ave	9781 8367676	52843	213420	593560	2800584	1.00 500	5.00	20.0	50.0	200
p-Diethylbenzene	DCBd 4	Ave	5252 4948283	32135	125784	359360	1724422	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCBd 4	Ave	4896 4451265	29897	119910	346374	1614345	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCBd 4	Ave	5264 3863575	24981	100273	274230	1219747	1.00 500	5.00	20.0	50.0	200
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	8921 8083721	46466	191121	529830	2560095	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	542 406733	2498	10984	29335	125793	1.00 500	5.00	20.0	50.0	200
1,3,5-Trichlorobenzene	DCBd 4	Ave	4142 2891929	21097	79369	209564	907166	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	4095 2492993	19372	73715	191224	763231	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCBd 4	Ave	1329 1466935	8837	33838	91543	413355	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCBd 4	Ave	9727 6232094	43988	182081	474454	1928944	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichlorobenzene	DCBd 4	Ave	3783 2440787	18609	71520	184731	748796	1.00 500	5.00	20.0	50.0	200
Dibromofluoromethane (Surr)	FB	Ave	171954 233856	170711	171978	188203	208081	50.0 50.0	50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	169601 275353	171462	170224	193037	227891	50.0 50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 506606

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/28/2018 13:30 Calibration End Date: 03/28/2018 19:22 Calibration ID: 67312

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene-d8 (Surr)	CBNZ d5	Ave	553603 760610	567678	563360	602094	673443	50.0 50.0	50.0	50.0	50.0	50.0
4-Bromofluorobenzene	DCBd 4	Ave	154649 195224	156580	151728	156659	165187	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47911.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Mar-2018 13:30:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0069427-009
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 09:53:54 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: martineze Date: 28-Mar-2018 17:11:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.527	1.527	0.000	75	9713	5.00	4.73	a
2 Dichlorodifluoromethane	85	1.570	1.564	0.006	99	37722	5.00	5.09	
3 Chloromethane	50	1.771	1.771	0.000	100	48165	5.00	5.38	
4 Vinyl chloride	62	1.874	1.868	0.006	98	44074	5.00	5.63	
5 Butadiene	54	1.887	1.887	0.000	97	29934	5.00	5.04	
6 Bromomethane	94	2.222	2.216	0.006	97	17392	5.00	5.14	
7 Chloroethane	64	2.301	2.301	0.000	99	19395	5.00	5.62	
9 Trichlorofluoromethane	101	2.527	2.521	0.006	62	33137	5.00	5.42	
8 Dichlorofluoromethane	67	2.527	2.527	0.000	97	46690	5.00	5.34	
10 Pentane	72	2.533	2.533	0.000	98	8739	10.0	11.4	
12 Ethanol	46	2.764	2.765	-0.001	81	3889	200.0	226.7	
11 Ethyl ether	59	2.777	2.777	0.000	94	14126	5.00	4.78	
13 2-Methyl-1,3-butadiene	53	2.789	2.789	0.000	95	16798	5.00	5.14	
14 1,2-Dichloro-1,1,2-trifluo	117	2.862	2.862	0.000	94	16945	5.00	5.36	
16 Acrolein	56	2.978	2.978	0.000	97	106354	200.0	207.3	
15 1,1,2-Trichloro-1,2,2-trif	101	3.008	3.008	0.000	89	20753	5.00	5.28	
17 1,1-Dichloroethene	96	3.021	3.015	0.006	96	18219	5.00	5.05	
18 Acetone	43	3.130	3.130	0.000	87	25129	25.0	22.8	
19 Iodomethane	142	3.197	3.197	0.000	99	32941	5.00	5.01	
20 Carbon disulfide	76	3.234	3.228	0.006	100	70363	5.00	4.99	
21 Isopropyl alcohol	45	3.252	3.258	-0.006	99	11019	50.0	46.4	
22 3-Chloro-1-propene	76	3.405	3.405	0.000	84	10936	5.00	4.99	
23 Cyclopentene	67	3.423	3.423	0.000	89	44984	5.00	5.25	
24 Methyl acetate	43	3.429	3.429	0.000	100	51519	25.0	23.9	
25 Acetonitrile	41	3.490	3.496	-0.006	94	14936	50.0	47.1	
26 Methylene Chloride	84	3.563	3.563	0.000	93	21476	5.00	5.15	
* 27 TBA-d9 (IS)	65	3.575	3.575	0.000	38	394934	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.655	3.661	-0.006	97	19798	50.0	49.2	
29 Methyl tert-butyl ether	73	3.764	3.764	0.000	96	46335	5.00	4.98	
30 trans-1,2-Dichloroethene	96	3.789	3.789	0.000	97	18216	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.880	3.880	0.000	93	52815	50.0	48.6	
32 Hexane	57	3.984	3.984	0.000	92	25801	5.00	5.50	
33 Isopropyl ether	45	4.252	4.252	0.000	95	50667	5.00	4.82	
34 1,1-Dichloroethane	63	4.276	4.276	0.000	99	31868	5.00	5.01	
35 Vinyl acetate	86	4.307	4.307	0.000	99	5376	10.0	9.51	
36 2-Chloro-1,3-butadiene	88	4.331	4.331	0.000	93	14316	5.00	4.92	
37 Tert-butyl ethyl ether	59	4.642	4.642	0.000	88	47876	5.00	4.94	
* 38 2-Butanone-d5	46	4.880	4.880	0.000	0	266782	250.0	250.0	
39 2,2-Dichloropropane	79	4.898	4.892	0.006	51	8644	5.00	5.18	a
40 cis-1,2-Dichloroethene	96	4.923	4.923	0.000	97	22203	5.00	5.21	
41 2-Butanone (MEK)	72	4.947	4.947	0.000	98	7759	25.0	23.1	
42 Ethyl acetate	70	4.965	4.959	0.006	96	3029	10.0	10.3	
43 Methyl acrylate	55	5.020	5.020	0.000	99	10201	5.00	4.64	
44 Propionitrile	54	5.112	5.106	0.006	98	18356	50.0	47.3	
45 Tetrahydrofuran	72	5.191	5.191	0.000	79	3386	10.0	9.55	
46 Chlorobromomethane	128	5.197	5.197	0.000	89	7824	5.00	4.90	
47 Methacrylonitrile	67	5.234	5.234	0.000	90	51313	50.0	45.2	
48 Chloroform	83	5.276	5.270	0.006	98	28523	5.00	4.88	
49 Cyclohexane	84	5.423	5.423	-0.001	91	24973	5.00	5.13	
50 1,1,1-Trichloroethane	97	5.441	5.441	0.000	98	24133	5.00	4.98	
$ 51 Dibromofluoromethane (Surr	113	5.465	5.465	0.000	96	170711	50.0	47.7	
52 Carbon tetrachloride	117	5.587	5.587	0.000	96	19278	5.00	5.09	
53 1,1-Dichloropropene	75	5.624	5.624	0.000	95	19784	5.00	4.99	
54 Isobutyl alcohol	43	5.825	5.825	0.000	89	26400	125.0	116.2	
55 Benzene	78	5.868	5.868	0.000	96	59328	5.00	4.97	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.892	5.892	0.000	97	171462	50.0	45.7	
57 Tert-amyl methyl ether	87	5.965	5.965	0.000	91	12278	5.00	4.62	
58 Isopropyl acetate	43	5.971	5.971	0.000	96	42908	5.00	4.74	
59 1,2-Dichloroethane	62	5.989	5.990	-0.001	97	18922	5.00	4.69	
60 n-Heptane	57	6.081	6.081	0.000	89	12977	5.00	5.24	
* 61 Fluorobenzene	96	6.233	6.233	0.000	98	520973	50.0	50.0	
62 n-Butanol	56	6.648	6.648	0.000	85	8046	125.0	108.3	
63 Trichloroethene	95	6.678	6.672	0.006	96	14284	5.00	4.93	
64 Methylcyclohexane	83	6.819	6.819	0.000	95	27697	5.00	5.14	
65 Ethyl acrylate	73	6.843	6.843	0.000	96	946	5.00	4.72	
66 1,2-Dichloropropane	63	7.014	7.014	0.000	90	14281	5.00	4.81	
* 67 1,4-Dioxane-d8	96	7.075	7.081	-0.006	0	22780	1000.0	1000.0	
68 Methyl methacrylate	100	7.117	7.117	0.000	87	5822	10.0	9.59	
69 1,4-Dioxane	88	7.142	7.142	0.000	42	2518	100.0	106.2	
70 Dibromomethane	93	7.154	7.154	0.000	95	8564	5.00	4.61	
71 n-Propyl acetate	43	7.184	7.178	0.006	98	14327	5.00	4.53	
72 Dichlorobromomethane	83	7.318	7.319	-0.001	99	16701	5.00	4.65	
73 2-Nitropropane	41	7.654	7.648	0.006	90	6110	10.0	9.06	
74 2-Chloroethyl vinyl ether	63	7.660	7.660	0.000	81	5338	5.00	4.59	
75 Epichlorohydrin	57	7.751	7.751	0.000	99	22329	100.0	98.4	
76 cis-1,3-Dichloropropene	75	7.800	7.800	0.000	93	19277	5.00	4.78	
77 4-Methyl-2-pentanone (MIBK	43	7.952	7.953	-0.001	97	52726	25.0	23.2	
$ 78 Toluene-d8 (Surr)	98	8.020	8.014	0.006	98	567678	50.0	49.8	
79 Toluene	91	8.081	8.081	0.000	94	57186	5.00	5.05	
80 trans-1,3-Dichloropropene	75	8.373	8.373	0.000	97	15739	5.00	4.80	
81 Ethyl methacrylate	69	8.398	8.398	0.000	88	12949	5.00	4.46	
82 1,1,2-Trichloroethane	83	8.544	8.544	0.000	96	9123	5.00	4.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.574	8.574	0.000	95	12250	5.00	5.10	
84 1,3-Dichloropropane	76	8.702	8.702	0.000	92	16328	5.00	4.91	
85 2-Hexanone	43	8.745	8.745	0.000	96	32496	25.0	23.2	
86 n-Butyl acetate	73	8.830	8.824	0.006	98	3007	5.00	4.95	
87 Chlorodibromomethane	129	8.873	8.873	0.000	97	10150	5.00	4.55	
88 Ethylene Dibromide	107	8.983	8.983	0.000	96	9495	5.00	4.82	
* 89 Chlorobenzene-d5	117	9.355	9.355	0.000	88	369930	50.0	50.0	
90 Chlorobenzene	112	9.379	9.379	0.000	97	32039	5.00	4.97	
91 Ethylbenzene	106	9.440	9.440	0.000	99	17779	5.00	4.88	
92 1,1,1,2-Tetrachloroethane	131	9.458	9.458	0.000	95	11668	5.00	4.54	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	99	21927	5.00	4.99	
94 n-Butyl acrylate	73	9.836	9.836	0.000	96	7941	5.00	4.87	
95 o-Xylene	106	9.873	9.867	0.006	94	22081	5.00	4.83	
96 Styrene	104	9.891	9.891	0.000	93	32375	5.00	4.56	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	91	18677	5.00	4.82	
98 Bromoform	173	10.068	10.068	0.000	94	6231	5.00	4.53	
99 Isopropylbenzene	105	10.147	10.147	0.000	96	58664	5.00	4.85	
$ 100 4-Bromofluorobenzene	174	10.312	10.312	0.000	0	156580	50.0	52.0	
101 Bromobenzene	156	10.428	10.428	0.000	98	13082	5.00	4.98	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.440	0.000	98	13899	5.00	4.71	
103 N-Propylbenzene	91	10.464	10.464	0.000	99	71867	5.00	4.96	
104 1,2,3-Trichloropropane	110	10.489	10.483	0.006	94	3488	5.00	4.65	
105 trans-1,4-Dichloro-2-buten	53	10.489	10.489	0.000	76	3381	5.00	4.75	
106 4-Ethyltoluene	105	10.556	10.550	0.006	99	60812	5.00	5.09	
107 2-Chlorotoluene	91	10.562	10.562	0.000	96	49012	5.00	4.87	
108 1,3,5-Trimethylbenzene	105	10.604	10.605	-0.001	92	47578	5.00	4.68	
109 4-Chlorotoluene	91	10.647	10.647	0.000	97	39445	5.00	4.71	
110 Butyl Methacrylate	87	10.659	10.659	0.000	92	15054	5.00	4.36	
111 tert-Butylbenzene	119	10.842	10.836	0.006	93	36600	5.00	4.55	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	98	51861	5.00	4.89	
113 sec-Butylbenzene	105	11.001	11.001	0.000	98	62081	5.00	4.63	
114 4-Isopropyltoluene	119	11.104	11.104	0.000	97	51519	5.00	4.70	
115 1,3-Dichlorobenzene	146	11.123	11.123	0.000	95	25529	5.00	4.86	
* 116 1,4-Dichlorobenzene-d4	152	11.177	11.178	-0.001	97	193714	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	92	26026	5.00	4.88	
118 Benzyl chloride	126	11.299	11.300	-0.001	98	4291	5.00	4.50	
119 2,3-Dihydroindene	117	11.354	11.354	0.000	93	52843	5.00	4.62	
120 p-Diethylbenzene	119	11.379	11.379	0.000	88	32135	5.00	4.85	a
121 n-Butylbenzene	92	11.403	11.403	0.000	96	29897	5.00	4.82	
122 1,2-Dichlorobenzene	146	11.476	11.476	0.000	95	24981	5.00	4.74	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.013	0.000	97	46466	5.00	4.57	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	94	2498	5.00	4.53	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	96	21097	5.00	5.14	
126 1,2,4-Trichlorobenzene	180	12.897	12.897	0.000	93	19372	5.00	5.19	
127 Hexachlorobutadiene	225	13.006	13.006	0.000	92	8837	5.00	5.04	
128 Naphthalene	128	13.189	13.189	0.000	99	43988	5.00	4.85	
129 1,2,3-Trichlorobenzene	180	13.482	13.476	0.006	95	18609	5.00	5.18	
S 130 1,2-Dichloroethene, Total	100				0		10.0	10.4	
S 131 1,3-Dichloropropene, Total	100				0		10.0	9.58	
S 132 Xylenes, Total	100				0		10.0	9.82	
S 133 Total BTEX	1				0		25.0	24.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	0.50	Units: uL	
8260MIX1COMB_00075	Amount Added:	0.50	Units: uL	
ACROLEIN W_00075	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 02-Apr-2018 09:53:55 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47911.D

Injection Date: 28-Mar-2018 13:30:30 Instrument ID: CVOAMS4 Operator ID:

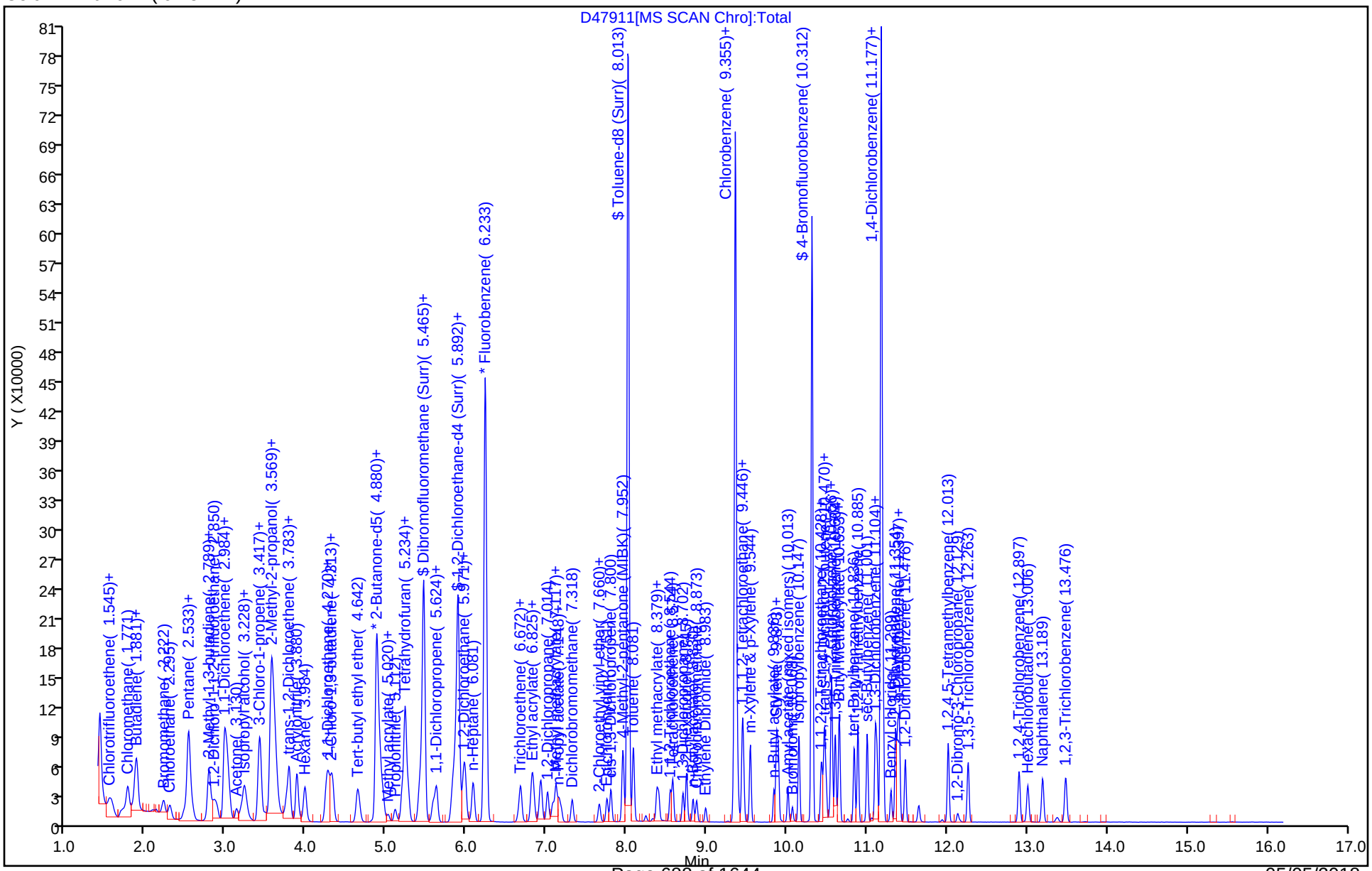
Lims ID: STD5 Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

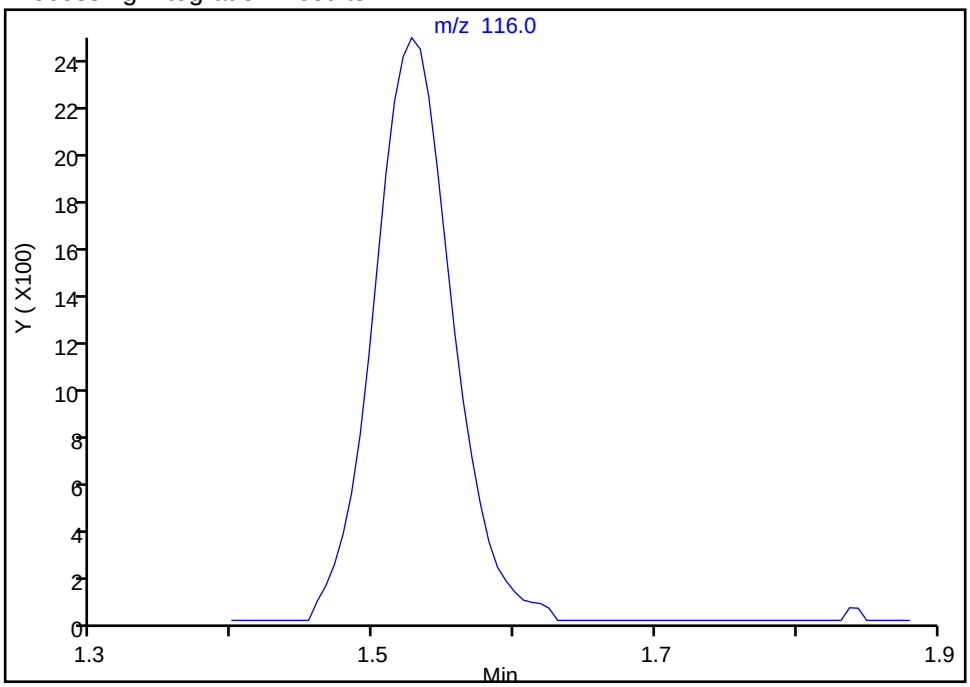
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47911.D
Injection Date: 28-Mar-2018 13:30:30 Instrument ID: CVOAMS4
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

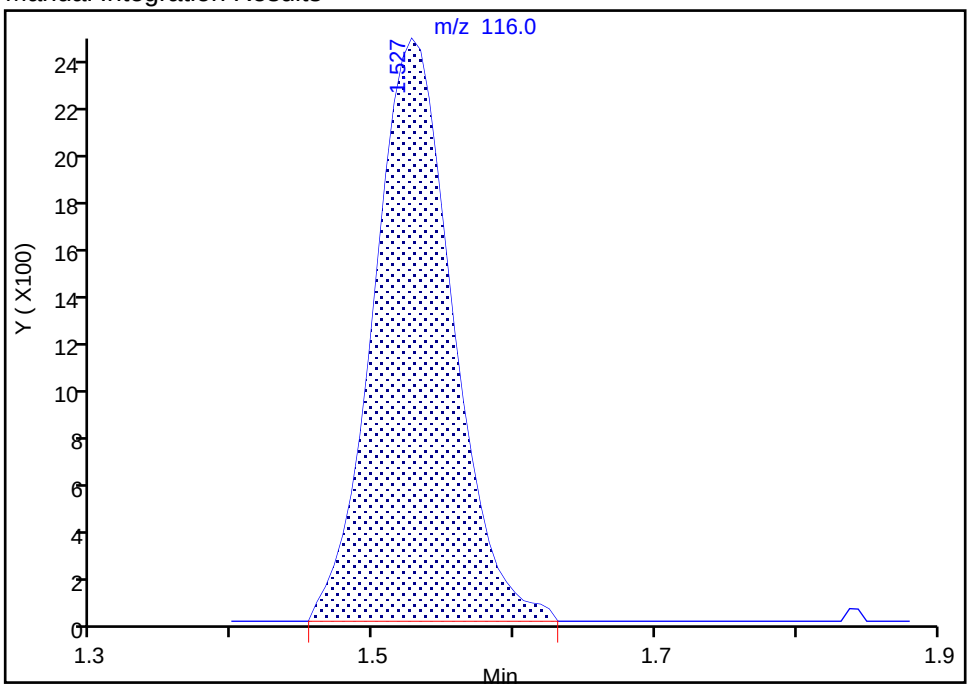
Not Detected
Expected RT: 1.53

Processing Integration Results



Manual Integration Results

RT: 1.53
Area: 9713
Amount: 4.729204
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:49:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

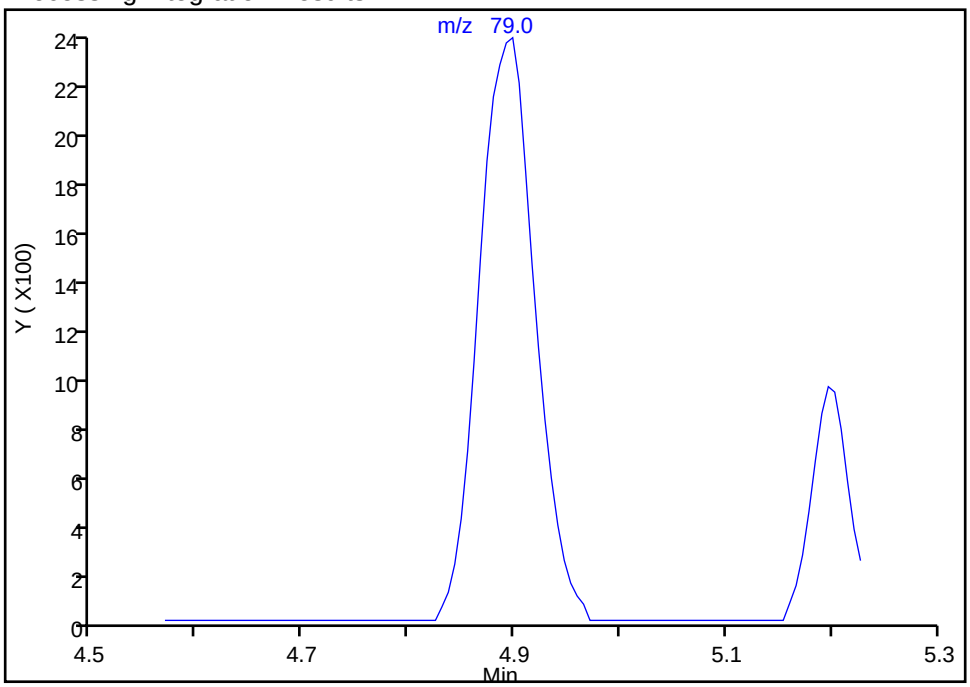
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47911.D
Injection Date: 28-Mar-2018 13:30:30 Instrument ID: CVOAMS4
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

39 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

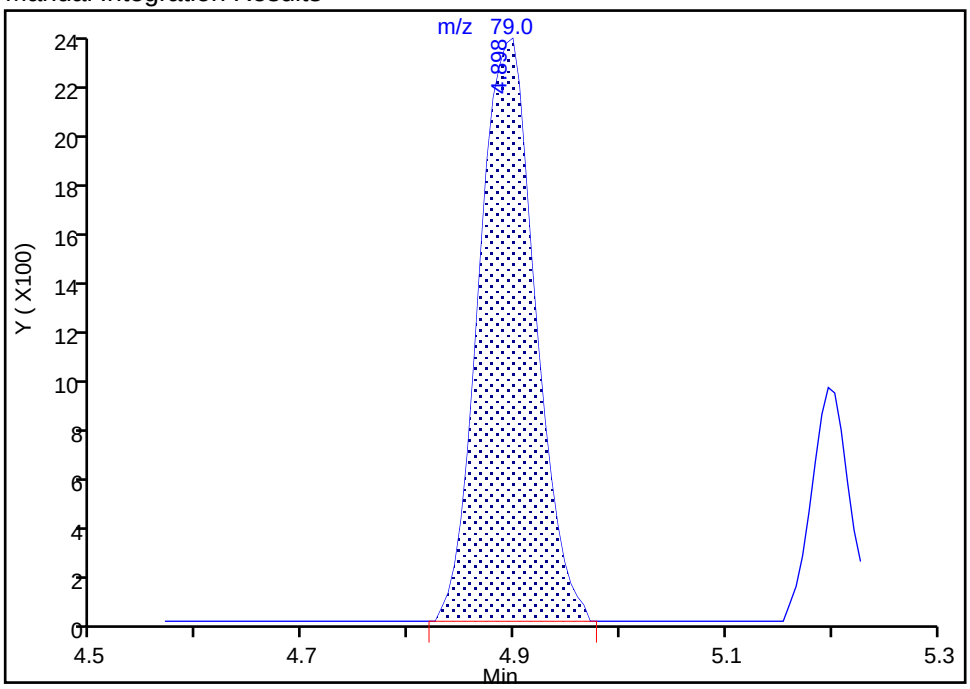
Not Detected
Expected RT: 4.89

Processing Integration Results



Manual Integration Results

RT: 4.90
Area: 8644
Amount: 5.179396
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:50:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

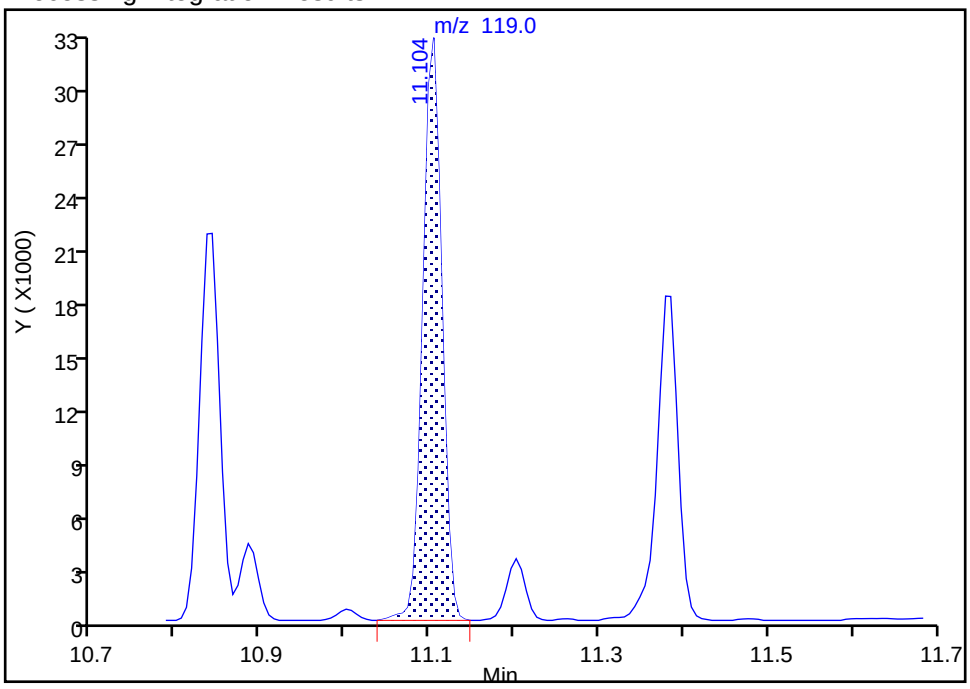
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47911.D
Injection Date: 28-Mar-2018 13:30:30 Instrument ID: CVOAMS4
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

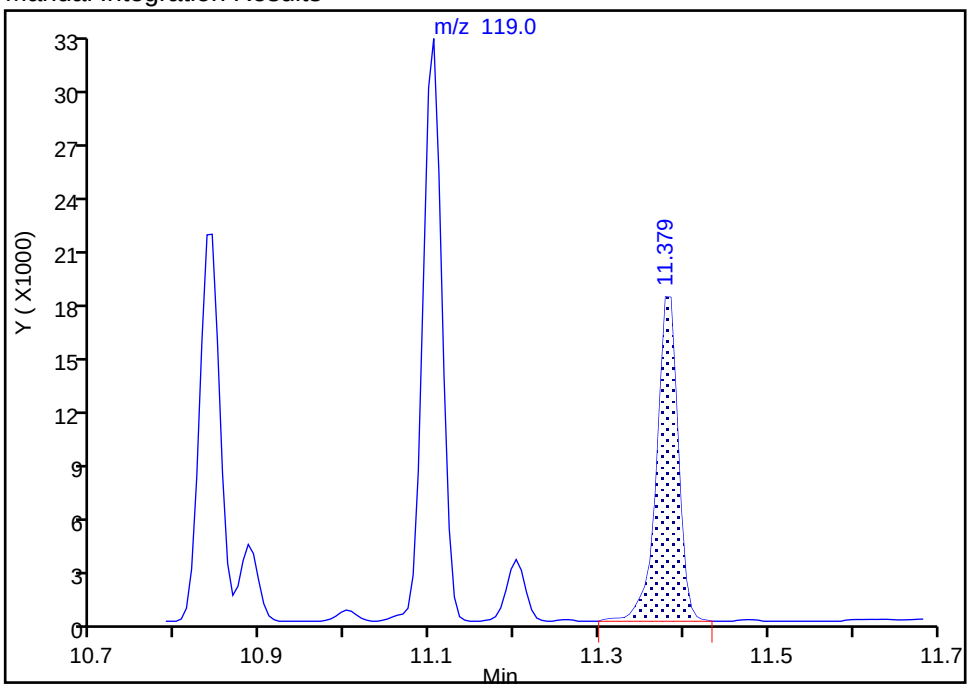
Processing Integration Results

RT: 11.10
Area: 51519
Amount: 6.171647
Amount Units: ug/l



Manual Integration Results

RT: 11.38
Area: 32135
Amount: 4.851039
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:50:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47912.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 28-Mar-2018 13:54:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0069427-010
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 09:54:05 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: martineze Date: 28-Mar-2018 17:01:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.527	1.527	0.000	78	42214	20.0	18.7	a
2 Dichlorodifluoromethane	85	1.564	1.564	0.000	85	148068	20.0	19.0	
3 Chloromethane	50	1.771	1.771	0.000	89	178851	20.0	20.2	
4 Vinyl chloride	62	1.868	1.868	0.000	83	153611	20.0	19.8	
5 Butadiene	54	1.887	1.887	0.000	97	122678	20.0	19.3	
6 Bromomethane	94	2.216	2.216	0.000	98	68747	20.0	20.5	
7 Chloroethane	64	2.301	2.301	0.000	81	68570	20.0	20.0	
9 Trichlorofluoromethane	101	2.521	2.521	0.000	46	125141	20.0	20.7	
8 Dichlorofluoromethane	67	2.527	2.527	0.000	74	177402	20.0	20.5	
10 Pentane	72	2.533	2.533	0.000	95	30675	40.0	40.5	
12 Ethanol	46	2.765	2.765	0.000	75	15392	800.0	880.7	
11 Ethyl ether	59	2.777	2.777	0.000	88	59185	20.0	20.2	
13 2-Methyl-1,3-butadiene	53	2.789	2.789	0.000	97	65888	20.0	20.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.862	2.862	0.000	79	64519	20.0	20.6	
16 Acrolein	56	2.978	2.978	0.000	96	156663	300.0	299.7	
15 1,1,2-Trichloro-1,2,2-trif	101	3.008	3.008	0.000	58	79547	20.0	20.4	
17 1,1-Dichloroethene	96	3.015	3.015	0.000	87	71454	20.0	20.0	
18 Acetone	43	3.130	3.130	0.000	76	93319	100.0	84.6	
19 Iodomethane	142	3.197	3.197	0.000	98	129053	20.0	19.8	
20 Carbon disulfide	76	3.228	3.228	0.000	99	275572	20.0	19.7	
21 Isopropyl alcohol	45	3.258	3.258	0.000	1	45858	200.0	189.3	
22 3-Chloro-1-propene	76	3.405	3.405	0.000	70	45637	20.0	21.0	
23 Cyclopentene	67	3.423	3.423	0.000	73	172405	20.0	20.3	
24 Methyl acetate	43	3.429	3.429	0.000	98	212737	100.0	99.7	
25 Acetonitrile	41	3.496	3.496	0.000	94	63038	200.0	195.2	
26 Methylene Chloride	84	3.563	3.563	0.000	63	81707	20.0	19.8	
* 27 TBA-d9 (IS)	65	3.575	3.575	0.000	39	402445	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.661	3.661	0.000	8	77978	200.0	190.2	
29 Methyl tert-butyl ether	73	3.764	3.764	0.000	95	184748	20.0	20.1	
30 trans-1,2-Dichloroethene	96	3.789	3.789	0.000	83	71142	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.880	3.880	0.000	93	221765	200.0	200.1	
32 Hexane	57	3.984	3.984	0.000	93	96438	20.0	20.7	
33 Isopropyl ether	45	4.252	4.252	0.000	96	206918	20.0	19.9	
34 1,1-Dichloroethane	63	4.276	4.276	0.000	94	124643	20.0	19.8	
35 Vinyl acetate	86	4.307	4.307	0.000	99	22924	40.0	40.9	
36 2-Chloro-1,3-butadiene	88	4.331	4.331	0.000	91	56638	20.0	19.6	
37 Tert-butyl ethyl ether	59	4.642	4.642	0.000	85	191949	20.0	20.0	
* 38 2-Butanone-d5	46	4.880	4.880	0.000	0	266359	250.0	250.0	
39 2,2-Dichloropropane	79	4.892	4.892	0.000	68	32562	20.0	19.7	
40 cis-1,2-Dichloroethene	96	4.923	4.923	0.000	87	76894	20.0	19.7	
41 2-Butanone (MEK)	72	4.947	4.947	0.000	97	30687	100.0	91.5	
42 Ethyl acetate	70	4.959	4.959	0.000	96	11648	40.0	39.8	
43 Methyl acrylate	55	5.020	5.020	0.000	97	43013	20.0	19.7	
44 Propionitrile	54	5.106	5.106	0.000	89	77073	200.0	200.7	
45 Tetrahydrofuran	72	5.191	5.191	0.000	26	13553	40.0	38.3	
46 Chlorobromomethane	128	5.197	5.197	0.000	72	31920	20.0	20.2	
47 Methacrylonitrile	67	5.234	5.234	0.000	91	217835	200.0	193.9	
48 Chloroform	83	5.270	5.270	0.000	91	114214	20.0	19.7	
49 Cyclohexane	84	5.423	5.423	0.000	92	97964	20.0	20.3	
50 1,1,1-Trichloroethane	97	5.441	5.441	0.000	62	94561	20.0	19.7	
$ 51 Dibromofluoromethane (Surr	113	5.465	5.465	0.000	90	171978	50.0	48.5	
52 Carbon tetrachloride	117	5.587	5.587	0.000	87	75699	20.0	20.2	
53 1,1-Dichloropropene	75	5.624	5.624	0.000	94	78373	20.0	19.9	
54 Isobutyl alcohol	43	5.825	5.825	0.000	34	111975	500.0	483.9	
55 Benzene	78	5.868	5.868	0.000	87	231610	20.0	19.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.892	5.892	0.000	95	170224	50.0	45.8	
57 Tert-amyl methyl ether	87	5.965	5.965	0.000	57	51553	20.0	19.6	
58 Isopropyl acetate	43	5.971	5.971	0.000	91	176495	20.0	19.7	
59 1,2-Dichloroethane	62	5.990	5.990	0.000	82	74304	20.0	18.6	
60 n-Heptane	57	6.081	6.081	0.000	90	49362	20.0	20.1	
* 61 Fluorobenzene	96	6.233	6.233	0.000	98	516022	50.0	50.0	
62 n-Butanol	56	6.648	6.648	0.000	86	35539	500.0	469.2	
63 Trichloroethene	95	6.672	6.672	0.000	91	55183	20.0	19.2	
64 Methylcyclohexane	83	6.819	6.819	0.000	90	110505	20.0	20.7	
65 Ethyl acrylate	73	6.843	6.843	0.000	95	3855	20.0	17.7	
66 1,2-Dichloropropane	63	7.014	7.014	0.000	90	57432	20.0	19.5	
* 67 1,4-Dioxane-d8	96	7.081	7.081	0.000	0	25370	1000.0	1000.0	
68 Methyl methacrylate	100	7.117	7.117	0.000	76	22908	40.0	38.1	
69 1,4-Dioxane	88	7.142	7.142	0.000	44	11095	400.0	420.3	
70 Dibromomethane	93	7.154	7.154	0.000	92	34730	20.0	18.9	
71 n-Propyl acetate	43	7.178	7.178	0.000	97	60879	20.0	19.4	
72 Dichlorobromomethane	83	7.319	7.319	0.000	91	67817	20.0	19.1	
73 2-Nitropropane	41	7.648	7.648	0.000	88	24306	40.0	36.4	
74 2-Chloroethyl vinyl ether	63	7.660	7.660	0.000	71	21938	20.0	19.1	
75 Epichlorohydrin	57	7.751	7.751	0.000	98	92426	400.0	408.0	
76 cis-1,3-Dichloropropene	75	7.800	7.800	0.000	89	79621	20.0	19.9	
77 4-Methyl-2-pentanone (MIBK	43	7.953	7.953	0.000	65	226403	100.0	99.6	
$ 78 Toluene-d8 (Surr)	98	8.014	8.014	0.000	98	563360	50.0	49.7	
79 Toluene	91	8.081	8.081	0.000	91	215993	20.0	19.2	
80 trans-1,3-Dichloropropene	75	8.373	8.373	0.000	95	64698	20.0	19.9	
81 Ethyl methacrylate	69	8.398	8.398	0.000	86	57019	20.0	19.8	
82 1,1,2-Trichloroethane	83	8.544	8.544	0.000	93	37022	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.574	8.574	0.000	90	47947	20.0	20.1	
84 1,3-Dichloropropane	76	8.702	8.702	0.000	90	65299	20.0	19.8	
85 2-Hexanone	43	8.745	8.745	0.000	95	136080	100.0	97.3	
86 n-Butyl acetate	73	8.824	8.824	0.000	98	11906	20.0	19.8	
87 Chlorodibromomethane	129	8.873	8.873	0.000	95	44010	20.0	19.9	
88 Ethylene Dibromide	107	8.983	8.983	0.000	98	38650	20.0	19.7	
* 89 Chlorobenzene-d5	117	9.355	9.355	0.000	86	367290	50.0	50.0	
90 Chlorobenzene	112	9.379	9.379	0.000	91	125273	20.0	19.6	
91 Ethylbenzene	106	9.440	9.440	0.000	99	70223	20.0	19.4	
92 1,1,1,2-Tetrachloroethane	131	9.458	9.458	0.000	68	49309	20.0	19.3	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	98	83931	20.0	19.2	
94 n-Butyl acrylate	73	9.836	9.836	0.000	87	32443	20.0	20.0	
95 o-Xylene	106	9.867	9.867	0.000	92	89038	20.0	19.6	
96 Styrene	104	9.891	9.891	0.000	93	138022	20.0	19.6	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	91	75848	20.0	19.9	
98 Bromoform	173	10.068	10.068	0.000	93	26397	20.0	19.3	
99 Isopropylbenzene	105	10.147	10.147	0.000	96	237930	20.0	19.8	
$ 100 4-Bromofluorobenzene	174	10.312	10.312	0.000	0	151728	50.0	51.2	
101 Bromobenzene	156	10.428	10.428	0.000	72	51981	20.0	20.1	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.440	0.000	69	57672	20.0	19.9	
103 N-Propylbenzene	91	10.464	10.464	0.000	97	282093	20.0	19.8	
104 1,2,3-Trichloropropane	110	10.483	10.483	0.000	81	15183	20.0	20.6	
105 trans-1,4-Dichloro-2-buten	53	10.489	10.489	0.000	72	14135	20.0	20.2	
106 4-Ethyltoluene	105	10.550	10.550	0.000	79	233916	20.0	19.9	
107 2-Chlorotoluene	91	10.562	10.562	0.000	93	190615	20.0	19.3	
108 1,3,5-Trimethylbenzene	105	10.605	10.605	0.000	89	195017	20.0	19.5	
109 4-Chlorotoluene	91	10.647	10.647	0.000	97	159359	20.0	19.4	
110 Butyl Methacrylate	87	10.659	10.659	0.000	91	65798	20.0	19.4	
111 tert-Butylbenzene	119	10.836	10.836	0.000	80	151986	20.0	19.2	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	92	199815	20.0	19.2	
113 sec-Butylbenzene	105	11.001	11.001	0.000	96	257973	20.0	19.6	
114 4-Isopropyltoluene	119	11.104	11.104	0.000	73	209949	20.0	19.5	
115 1,3-Dichlorobenzene	146	11.123	11.123	0.000	77	101043	20.0	19.6	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	96	190436	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	73	102314	20.0	19.5	
118 Benzyl chloride	126	11.300	11.300	0.000	77	18984	20.0	20.3	
119 2,3-Dihydroindene	117	11.354	11.354	0.000	89	213420	20.0	18.8	
120 p-Diethylbenzene	119	11.379	11.379	0.000	87	125784	20.0	19.3	
121 n-Butylbenzene	92	11.403	11.403	0.000	92	119910	20.0	19.7	
122 1,2-Dichlorobenzene	146	11.476	11.476	0.000	95	100273	20.0	19.4	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.013	0.000	95	191121	20.0	19.1	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	92	10984	20.0	20.3	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	96	79369	20.0	19.7	
126 1,2,4-Trichlorobenzene	180	12.897	12.897	0.000	92	73715	20.0	20.1	
127 Hexachlorobutadiene	225	13.006	13.006	0.000	89	33838	20.0	19.6	
128 Naphthalene	128	13.189	13.189	0.000	99	182081	20.0	20.4	
129 1,2,3-Trichlorobenzene	180	13.476	13.476	0.000	92	71520	20.0	20.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.9	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.7	
S 132 Xylenes, Total	100				0		40.0	38.9	
S 133 Total BTEX	1				0		100.0	97.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00075	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 02-Apr-2018 09:54:07 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47912.D

Injection Date: 28-Mar-2018 13:54:30 Instrument ID: CVOAMS4 Operator ID:

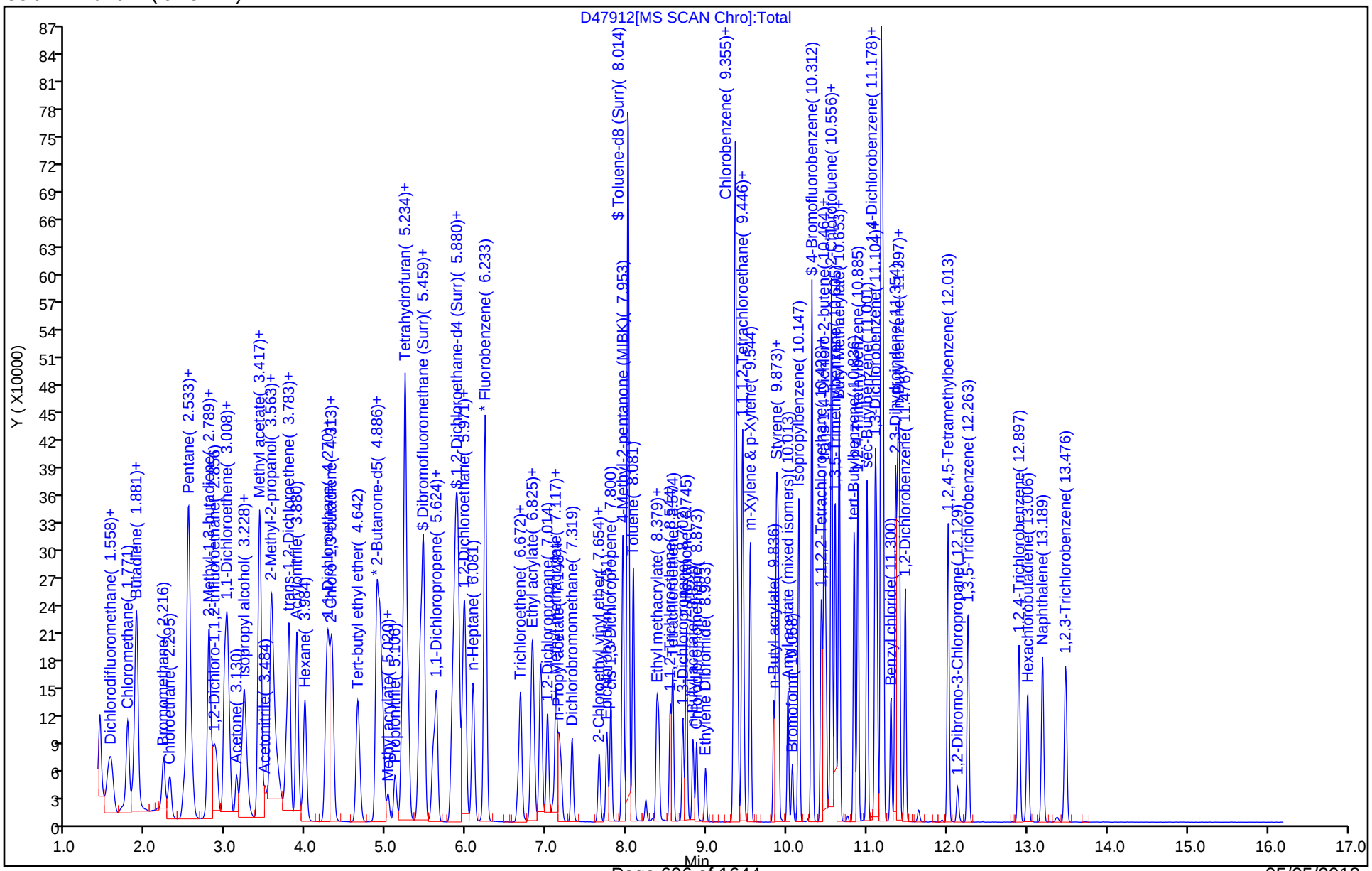
Lims ID: STD20 Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

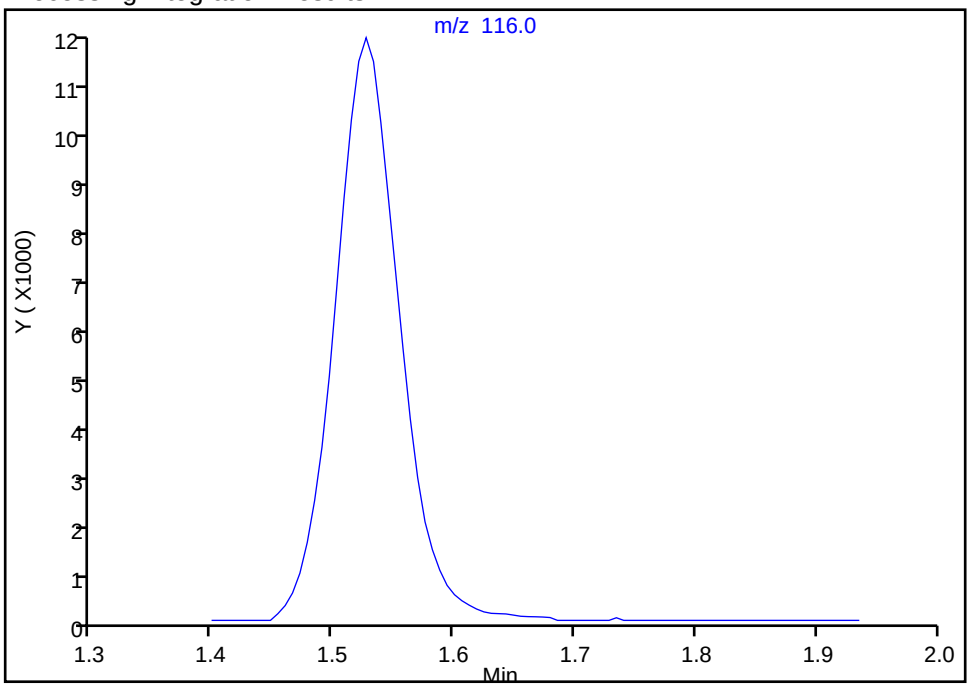
Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47912.D				
Injection Date:	28-Mar-2018 13:54:30	Instrument ID:	CVOAMS4		
Lims ID:	STD20				
Client ID:					
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

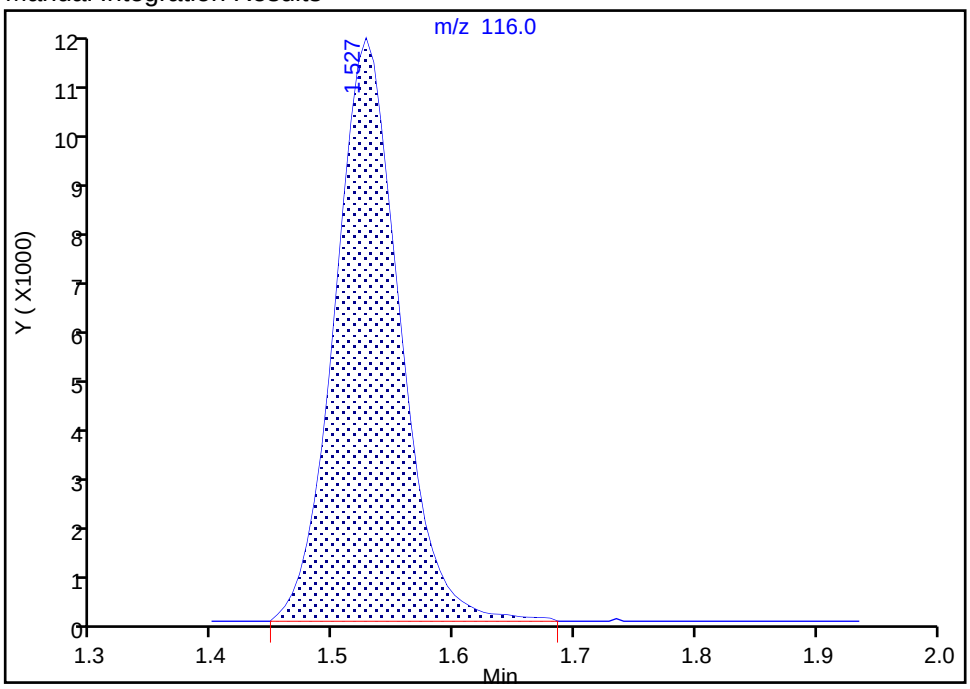
Not Detected
Expected RT: 1.53

Processing Integration Results



Manual Integration Results

RT: 1.53
Area: 42214
Amount: 18.682269
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:47:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47913.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Mar-2018 14:19:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0069427-011
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 09:54:16 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: martineze Date: 28-Mar-2018 17:02:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.527	1.527	0.000	79	115739	50.0	49.0	a
2 Dichlorodifluoromethane	85	1.564	1.564	0.000	99	392732	50.0	48.5	
3 Chloromethane	50	1.771	1.771	0.000	99	457048	50.0	50.3	
4 Vinyl chloride	62	1.869	1.868	0.000	98	394228	50.0	49.7	
5 Butadiene	54	1.887	1.887	0.000	97	338718	50.0	51.4	
6 Bromomethane	94	2.216	2.216	0.000	98	178948	50.0	52.2	
7 Chloroethane	64	2.295	2.301	-0.006	99	176757	50.0	50.5	
9 Trichlorofluoromethane	101	2.521	2.521	0.000	98	338667	50.0	54.6	
8 Dichlorofluoromethane	67	2.527	2.527	0.000	98	462246	50.0	52.2	
10 Pentane	72	2.533	2.533	0.000	95	79680	100.0	102.8	
12 Ethanol	46	2.771	2.765	0.006	98	36797	2000.0	2075.0	
11 Ethyl ether	59	2.777	2.777	0.000	93	154327	50.0	51.5	
13 2-Methyl-1,3-butadiene	53	2.795	2.789	0.006	98	177869	50.0	53.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.868	2.862	0.006	95	168342	50.0	52.5	
16 Acrolein	56	2.984	2.978	0.006	97	211039	400.0	397.8	
15 1,1,2-Trichloro-1,2,2-trif	101	3.009	3.008	0.001	94	210910	50.0	52.9	
17 1,1-Dichloroethene	96	3.015	3.015	0.000	96	189436	50.0	51.7	
18 Acetone	43	3.130	3.130	0.000	87	237293	250.0	206.7	
19 Iodomethane	142	3.191	3.197	-0.006	99	339486	50.0	51.0	
20 Carbon disulfide	76	3.228	3.228	0.000	100	726878	50.0	50.9	
21 Isopropyl alcohol	45	3.258	3.258	0.000	100	115938	500.0	471.7	
22 3-Chloro-1-propene	76	3.405	3.405	0.000	87	116492	50.0	52.4	
23 Cyclopentene	67	3.423	3.423	0.000	92	465323	50.0	53.5	
24 Methyl acetate	43	3.429	3.429	0.000	99	559847	250.0	256.3	
25 Acetonitrile	41	3.496	3.496	0.000	98	161752	500.0	493.6	
26 Methylene Chloride	84	3.563	3.563	0.000	94	210790	50.0	49.8	
* 27 TBA-d9 (IS)	65	3.582	3.575	0.007	37	408367	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.667	3.661	0.006	98	200140	500.0	481.0	
29 Methyl tert-butyl ether	73	3.764	3.764	0.000	97	481308	50.0	51.0	
30 trans-1,2-Dichloroethene	96	3.789	3.789	0.000	97	189727	50.0	52.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.886	3.880	0.006	94	567198	500.0	504.3	
32 Hexane	57	3.984	3.984	0.000	92	261383	50.0	54.9	
33 Isopropyl ether	45	4.258	4.252	0.006	93	557898	50.0	52.4	
34 1,1-Dichloroethane	63	4.277	4.276	0.001	99	332341	50.0	51.5	
35 Vinyl acetate	86	4.313	4.307	0.006	99	62837	100.0	109.6	
36 2-Chloro-1,3-butadiene	88	4.331	4.331	0.000	92	159363	50.0	54.0	
37 Tert-butyl ethyl ether	59	4.642	4.642	0.000	88	513739	50.0	52.3	
* 38 2-Butanone-d5	46	4.880	4.880	0.000	0	277266	250.0	250.0	
39 2,2-Dichloropropane	79	4.892	4.892	0.000	94	84311	50.0	49.8	
40 cis-1,2-Dichloroethene	96	4.923	4.923	0.000	97	202134	50.0	51.4	
41 2-Butanone (MEK)	72	4.947	4.947	0.000	97	83327	250.0	238.6	
42 Ethyl acetate	70	4.965	4.959	0.006	96	30351	100.0	99.7	
43 Methyl acrylate	55	5.026	5.020	0.006	100	110549	50.0	49.5	
44 Propionitrile	54	5.112	5.106	0.006	98	203073	500.0	516.6	
45 Tetrahydrofuran	72	5.197	5.191	0.006	93	37245	100.0	101.1	
46 Chlorobromomethane	128	5.197	5.197	0.000	92	85250	50.0	52.6	
47 Methacrylonitrile	67	5.240	5.234	0.006	92	595666	500.0	518.0	
48 Chloroform	83	5.276	5.270	0.006	98	316587	50.0	53.4	
49 Cyclohexane	84	5.423	5.423	0.000	92	266369	50.0	53.9	
50 1,1,1-Trichloroethane	97	5.441	5.441	0.000	98	261324	50.0	53.1	
$ 51 Dibromofluoromethane (Surr	113	5.465	5.465	0.000	95	188203	50.0	51.8	
52 Carbon tetrachloride	117	5.587	5.587	0.000	97	207573	50.0	54.1	
53 1,1-Dichloropropene	75	5.630	5.624	0.006	96	220513	50.0	54.8	
54 Isobutyl alcohol	43	5.831	5.825	0.006	93	320620	1250.0	1365.3	
55 Benzene	78	5.868	5.868	0.000	97	639068	50.0	53.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.898	5.892	0.006	98	193037	50.0	50.7	
57 Tert-amyl methyl ether	87	5.971	5.965	0.006	90	140566	50.0	52.1	
58 Isopropyl acetate	43	5.971	5.971	0.000	98	494197	50.0	53.8	
59 1,2-Dichloroethane	62	5.990	5.990	0.000	97	206253	50.0	50.4	
60 n-Heptane	57	6.087	6.081	0.006	91	135818	50.0	54.1	
* 61 Fluorobenzene	96	6.234	6.233	0.001	98	528270	50.0	50.0	
62 n-Butanol	56	6.648	6.648	0.000	88	98662	1250.0	1283.8	
63 Trichloroethene	95	6.679	6.672	0.007	96	152372	50.0	51.8	
64 Methylcyclohexane	83	6.825	6.819	0.006	93	294653	50.0	53.9	
65 Ethyl acrylate	73	6.843	6.843	0.000	98	11476	50.0	50.5	
66 1,2-Dichloropropane	63	7.014	7.014	0.000	91	154324	50.0	51.2	
* 67 1,4-Dioxane-d8	96	7.081	7.081	0.000	0	24840	1000.0	1000.0	
68 Methyl methacrylate	100	7.117	7.117	0.000	86	61921	100.0	100.6	
69 1,4-Dioxane	88	7.142	7.142	0.000	93	28349	1000.0	1096.7	
70 Dibromomethane	93	7.154	7.154	0.000	95	94141	50.0	50.0	
71 n-Propyl acetate	43	7.178	7.178	0.000	98	161489	50.0	50.4	
72 Dichlorobromomethane	83	7.319	7.319	0.000	99	189974	50.0	52.2	
73 2-Nitropropane	41	7.654	7.648	0.006	99	65209	100.0	95.3	
74 2-Chloroethyl vinyl ether	63	7.660	7.660	0.000	94	58642	50.0	49.8	
75 Epichlorohydrin	57	7.752	7.751	0.001	99	239169	1000.0	1014.3	
76 cis-1,3-Dichloropropene	75	7.800	7.800	0.000	93	212953	50.0	52.9	
77 4-Methyl-2-pentanone (MIBK	43	7.953	7.953	0.000	97	620911	250.0	262.5	
$ 78 Toluene-d8 (Surr)	98	8.020	8.014	0.006	99	602094	50.0	52.9	
79 Toluene	91	8.081	8.081	0.000	93	589321	50.0	52.2	
80 trans-1,3-Dichloropropene	75	8.373	8.373	0.000	98	169708	50.0	51.9	
81 Ethyl methacrylate	69	8.398	8.398	0.000	88	153900	50.0	52.3	
82 1,1,2-Trichloroethane	83	8.544	8.544	0.000	96	96903	50.0	53.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.575	8.574	0.000	94	130523	50.0	54.5	
84 1,3-Dichloropropane	76	8.703	8.702	0.001	92	173346	50.0	52.3	
85 2-Hexanone	43	8.745	8.745	0.000	96	362602	250.0	249.2	
86 n-Butyl acetate	73	8.824	8.824	0.000	98	31088	50.0	51.4	
87 Chlorodibromomethane	129	8.873	8.873	0.000	98	120637	50.0	54.2	
88 Ethylene Dibromide	107	8.983	8.983	0.000	98	102542	50.0	52.2	
* 89 Chlorobenzene-d5	117	9.355	9.355	0.000	88	368772	50.0	50.0	
90 Chlorobenzene	112	9.379	9.379	0.000	96	331098	50.0	51.6	
91 Ethylbenzene	106	9.440	9.440	0.000	99	193536	50.0	53.3	
92 1,1,1,2-Tetrachloroethane	131	9.458	9.458	0.000	95	141013	50.0	55.1	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	98	235425	50.0	53.7	
94 n-Butyl acrylate	73	9.836	9.836	0.000	97	87822	50.0	54.0	
95 o-Xylene	106	9.873	9.867	0.006	93	244965	50.0	53.8	
96 Styrene	104	9.891	9.891	0.000	93	378197	50.0	53.5	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	90	207300	50.0	54.0	
98 Bromoform	173	10.068	10.068	0.000	94	73425	50.0	53.5	
99 Isopropylbenzene	105	10.147	10.147	0.000	96	669139	50.0	55.5	
$ 100 4-Bromofluorobenzene	174	10.312	10.312	0.000	0	156659	50.0	52.4	
101 Bromobenzene	156	10.428	10.428	0.000	98	135370	50.0	52.0	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.440	0.000	99	156675	50.0	53.5	
103 N-Propylbenzene	91	10.464	10.464	0.000	98	788158	50.0	54.8	
104 1,2,3-Trichloropropane	110	10.489	10.483	0.006	95	40047	50.0	53.8	
105 trans-1,4-Dichloro-2-buten	53	10.489	10.489	0.000	81	38103	50.0	53.9	
106 4-Ethyltoluene	105	10.556	10.550	0.006	98	637904	50.0	53.9	
107 2-Chlorotoluene	91	10.562	10.562	0.000	96	528705	50.0	52.9	
108 1,3,5-Trimethylbenzene	105	10.605	10.605	0.000	93	560471	50.0	55.6	
109 4-Chlorotoluene	91	10.647	10.647	0.000	98	439866	50.0	52.9	
110 Butyl Methacrylate	87	10.659	10.659	0.000	92	190726	50.0	55.7	
111 tert-Butylbenzene	119	10.836	10.836	0.000	93	442111	50.0	55.4	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	97	567914	50.0	54.0	
113 sec-Butylbenzene	105	11.001	11.001	0.000	99	739047	50.0	55.5	
114 4-Isopropyltoluene	119	11.105	11.104	0.000	97	597667	50.0	54.9	
115 1,3-Dichlorobenzene	146	11.123	11.123	0.000	97	274245	50.0	52.7	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	95	192204	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	93	274168	50.0	51.8	
118 Benzyl chloride	126	11.300	11.300	0.000	98	52044	50.0	55.0	
119 2,3-Dihydroindene	117	11.354	11.354	0.000	94	593560	50.0	51.1	
120 p-Diethylbenzene	119	11.379	11.379	0.000	86	359360	50.0	54.7	a
121 n-Butylbenzene	92	11.403	11.403	0.000	97	346374	50.0	56.3	
122 1,2-Dichlorobenzene	146	11.476	11.476	0.000	96	274230	50.0	52.5	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.013	0.000	97	529830	50.0	52.5	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	95	29335	50.0	53.6	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	96	209564	50.0	51.5	
126 1,2,4-Trichlorobenzene	180	12.897	12.897	0.000	94	191224	50.0	51.7	
127 Hexachlorobutadiene	225	13.007	13.006	0.001	92	91543	50.0	52.6	
128 Naphthalene	128	13.189	13.189	0.000	99	474454	50.0	52.7	
129 1,2,3-Trichlorobenzene	180	13.482	13.476	0.006	95	184731	50.0	51.9	
S 130 1,2-Dichloroethene, Total	100				0		100.0	104.2	
S 131 1,3-Dichloropropene, Total	100				0		100.0	104.9	
S 132 Xylenes, Total	100				0		100.0	107.5	
S 133 Total BTEX	1				0		250.0	266.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	5.00	Units: uL	
8260MIX1COMB_00075	Amount Added:	5.00	Units: uL	
ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

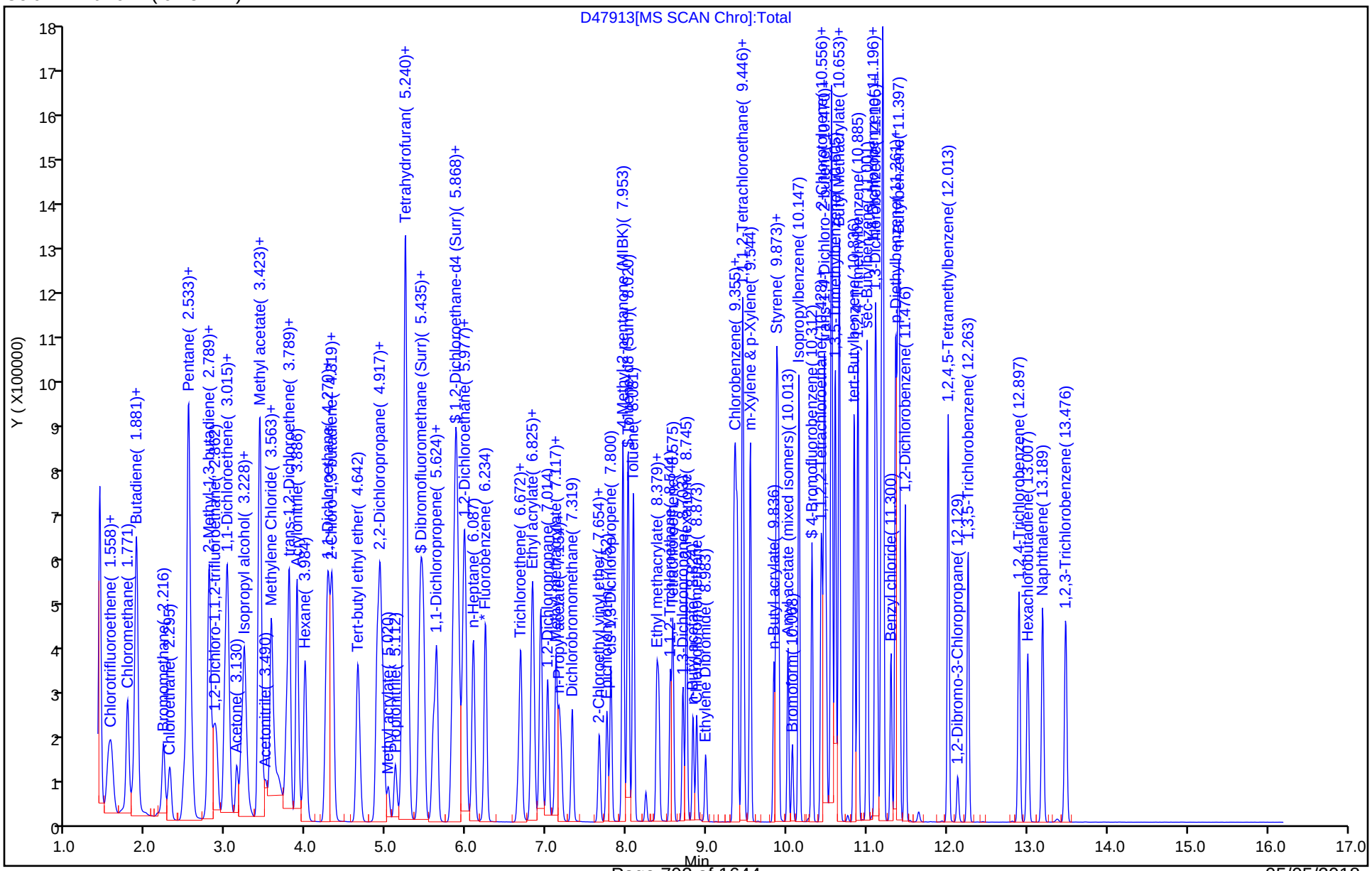
Report Date: 02-Apr-2018 09:54:17 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47913.D

Injection Date:	28-Mar-2018 14:19:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	STD50			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

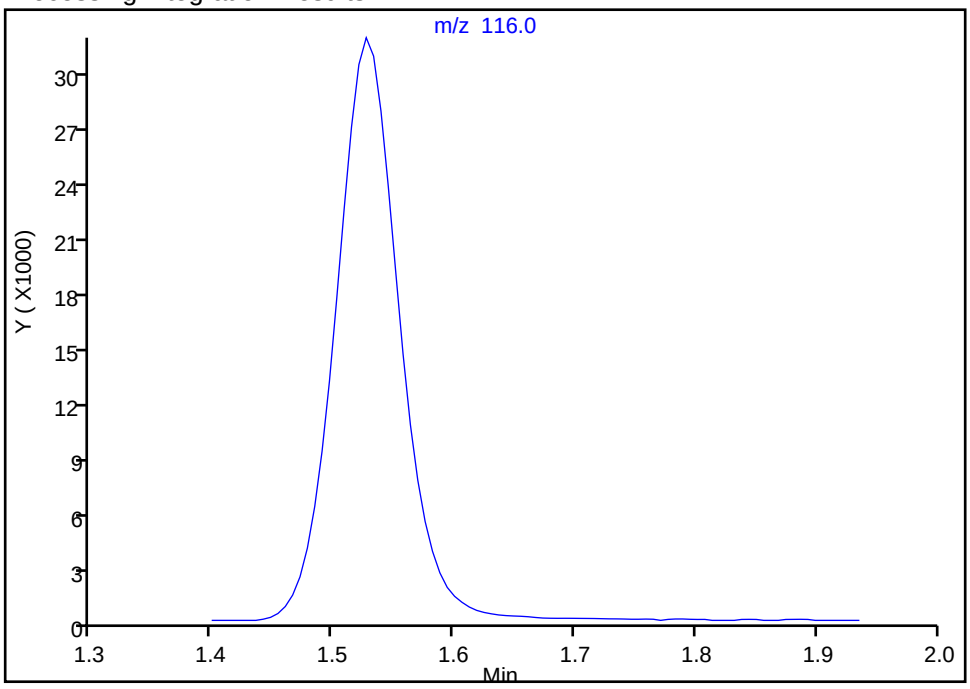
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47913.D
Injection Date: 28-Mar-2018 14:19:30 Instrument ID: CVOAMS4
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

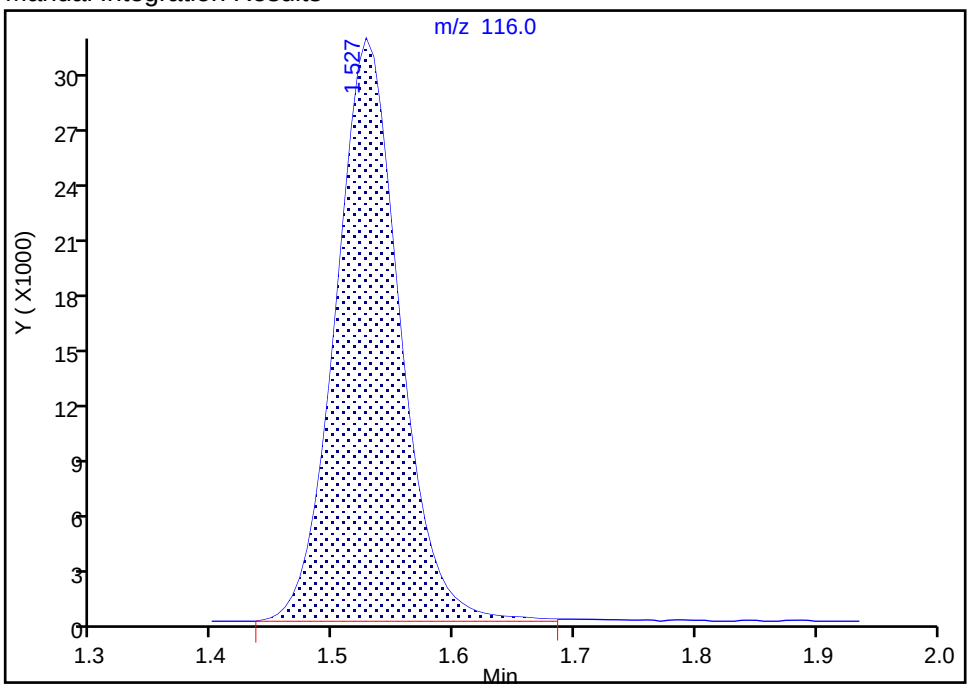
Not Detected
Expected RT: 1.53

Processing Integration Results



Manual Integration Results

RT: 1.53
Area: 115739
Amount: 49.009267
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:50:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

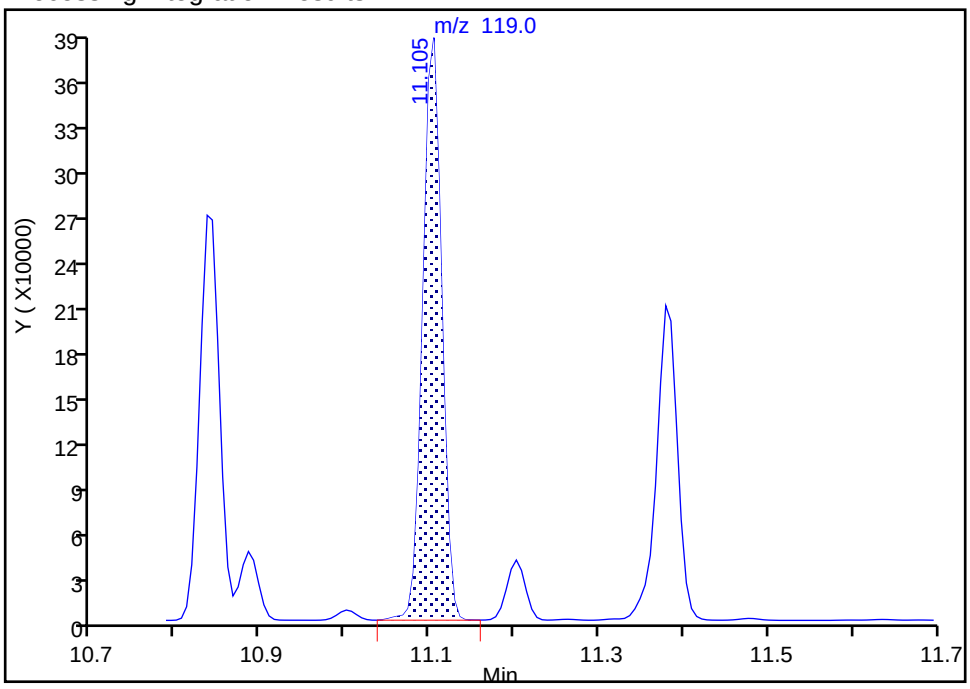
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47913.D
Injection Date: 28-Mar-2018 14:19:30 Instrument ID: CVOAMS4
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

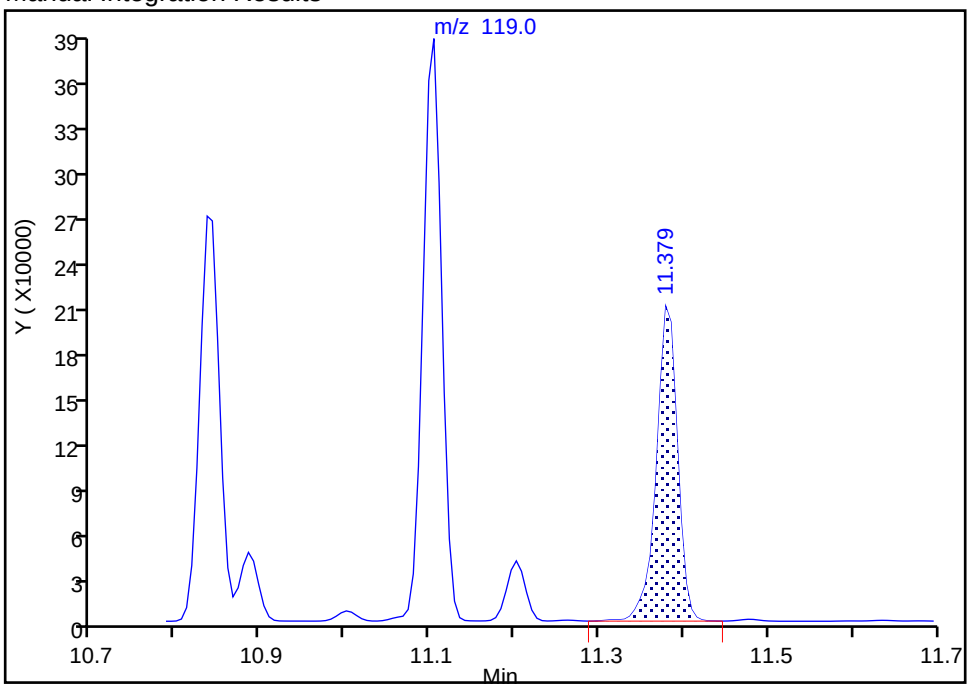
Processing Integration Results

RT: 11.10
Area: 596660
Amount: 73.786300
Amount Units: ug/l



Manual Integration Results

RT: 11.38
Area: 359360
Amount: 54.674492
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:51:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47914.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Mar-2018 14:43:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0069427-012
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 09:54:25 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: martineze Date: 28-Mar-2018 17:07:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.527	1.527	0.000	69	579316	200.0	216.6	a
2 Dichlorodifluoromethane	85	1.564	1.564	0.000	99	1943357	200.0	212.4	
3 Chloromethane	50	1.771	1.771	0.000	99	2042881	200.0	200.5	
4 Vinyl chloride	62	1.868	1.868	0.000	98	1706954	200.0	191.8	
5 Butadiene	54	1.887	1.887	0.000	97	1530909	200.0	205.5	
6 Bromomethane	94	2.216	2.216	0.000	98	720673	200.0	187.2	
7 Chloroethane	64	2.295	2.301	-0.006	99	728186	200.0	185.4	
9 Trichlorofluoromethane	101	2.527	2.521	0.006	77	1441388	200.0	207.2	
8 Dichlorofluoromethane	67	2.527	2.527	0.000	98	1925580	200.0	193.8	
10 Pentane	72	2.533	2.533	0.000	96	342856	400.0	394.5	
12 Ethanol	46	2.777	2.765	0.012	81	159085	8000.0	7957.6	
11 Ethyl ether	59	2.777	2.777	0.000	92	620301	200.0	184.7	
13 2-Methyl-1,3-butadiene	53	2.789	2.789	0.000	97	792103	200.0	213.0	
14 1,2-Dichloro-1,1,2-trifluo	117	2.874	2.862	0.012	93	704977	200.0	196.0	
16 Acrolein	56	2.984	2.978	0.006	95	279148	500.0	466.6	
15 1,1,2-Trichloro-1,2,2-trif	101	3.015	3.008	0.007	93	940101	200.0	210.3	
17 1,1-Dichloroethene	96	3.015	3.015	0.000	97	836299	200.0	203.6	
18 Acetone	43	3.130	3.130	0.000	86	1330681	1000.0	998.7	
19 Iodomethane	142	3.197	3.197	0.000	100	1476371	200.0	197.5	
20 Carbon disulfide	76	3.228	3.228	0.000	100	3262827	200.0	203.5	
21 Isopropyl alcohol	45	3.258	3.258	0.000	100	494784	2000.0	1785.1	
22 3-Chloro-1-propene	76	3.405	3.405	0.000	86	502334	200.0	201.5	
23 Cyclopentene	67	3.423	3.423	0.000	90	2075488	200.0	212.8	
24 Methyl acetate	43	3.429	3.429	0.000	99	2391159	1000.0	975.6	
25 Acetonitrile	41	3.496	3.496	0.000	98	722826	2000.0	1956.0	
26 Methylene Chloride	84	3.563	3.563	0.000	94	876095	200.0	184.7	
* 27 TBA-d9 (IS)	65	3.581	3.575	0.006	41	460487	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.667	3.661	0.006	98	823901	2000.0	1756.1	
29 Methyl tert-butyl ether	73	3.764	3.764	0.000	96	2010850	200.0	190.1	
30 trans-1,2-Dichloroethene	96	3.789	3.789	0.000	97	790358	200.0	196.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.886	3.880	0.006	94	2360263	2000.0	1861.0	
32 Hexane	57	3.984	3.984	0.000	92	1136101	200.0	212.8	
33 Isopropyl ether	45	4.258	4.252	0.006	96	2350849	200.0	196.7	
34 1,1-Dichloroethane	63	4.276	4.276	0.000	100	1399425	200.0	193.3	
35 Vinyl acetate	86	4.313	4.307	0.006	99	262504	400.0	408.0	
36 2-Chloro-1,3-butadiene	88	4.331	4.331	0.000	92	719723	200.0	217.3	
37 Tert-butyl ethyl ether	59	4.648	4.642	0.006	88	2166441	200.0	196.5	
* 38 2-Butanone-d5	46	4.886	4.880	0.006	0	321843	250.0	250.0	a
39 2,2-Dichloropropane	79	4.898	4.892	0.006	95	366859	200.0	193.2	
40 cis-1,2-Dichloroethene	96	4.923	4.923	0.000	96	839650	200.0	191.7	
41 2-Butanone (MEK)	72	4.947	4.947	0.000	100	404894	1000.0	998.6	
42 Ethyl acetate	70	4.965	4.959	0.006	96	135685	400.0	384.0	
43 Methyl acrylate	55	5.026	5.020	0.006	100	502479	200.0	200.7	
44 Propionitrile	54	5.112	5.106	0.006	98	868636	2000.0	1969.7	
45 Tetrahydrofuran	72	5.197	5.191	0.006	92	159458	400.0	372.8	
46 Chlorobromomethane	128	5.203	5.197	0.006	94	357977	200.0	197.0	
47 Methacrylonitrile	67	5.240	5.234	0.006	91	2765427	2000.0	2143.6	
48 Chloroform	83	5.276	5.270	0.006	98	1376973	200.0	207.0	
49 Cyclohexane	84	5.423	5.423	0.000	92	1184449	200.0	213.7	
50 1,1,1-Trichloroethane	97	5.447	5.441	0.006	98	1142965	200.0	207.2	
$ 51 Dibromofluoromethane (Surr	113	5.465	5.465	0.000	95	208081	50.0	51.1	
52 Carbon tetrachloride	117	5.593	5.587	0.006	97	888225	200.0	206.2	
53 1,1-Dichloropropene	75	5.630	5.624	0.006	96	927451	200.0	205.5	
54 Isobutyl alcohol	43	5.831	5.825	0.006	92	1422098	5000.0	5370.4	
55 Benzene	78	5.874	5.868	0.006	97	2802431	200.0	201.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.898	5.892	0.006	99	227891	50.0	53.3	
57 Tert-amyl methyl ether	87	5.971	5.965	0.006	91	615453	200.0	203.4	
58 Isopropyl acetate	43	5.971	5.971	0.000	98	2023776	200.0	196.5	
59 1,2-Dichloroethane	62	5.990	5.990	0.000	96	895647	200.0	195.1	
60 n-Heptane	57	6.087	6.081	0.006	91	607079	200.0	215.6	
* 61 Fluorobenzene	96	6.240	6.233	0.007	98	592631	50.0	50.0	
62 n-Butanol	56	6.648	6.648	0.000	87	455972	5000.0	5261.5	
63 Trichloroethene	95	6.678	6.672	0.006	96	661996	200.0	200.7	
64 Methylcyclohexane	83	6.825	6.819	0.006	94	1301948	200.0	212.2	
65 Ethyl acrylate	73	6.843	6.843	0.000	98	52082	200.0	202.7	
66 1,2-Dichloropropane	63	7.014	7.014	0.000	90	658805	200.0	194.9	
* 67 1,4-Dioxane-d8	96	7.081	7.081	0.000	0	31605	1000.0	1000.0	M
68 Methyl methacrylate	100	7.117	7.117	0.000	87	283563	400.0	410.6	
69 1,4-Dioxane	88	7.142	7.142	0.000	90	129558	4000.0	3939.2	
70 Dibromomethane	93	7.154	7.154	0.000	95	422919	200.0	200.2	
71 n-Propyl acetate	43	7.184	7.178	0.006	98	736528	200.0	204.8	
72 Dichlorobromomethane	83	7.319	7.319	0.000	99	834944	200.0	204.4	
73 2-Nitropropane	41	7.654	7.648	0.006	99	294318	400.0	383.5	
74 2-Chloroethyl vinyl ether	63	7.660	7.660	0.000	96	268514	200.0	203.1	
75 Epichlorohydrin	57	7.758	7.751	0.007	99	1019884	4000.0	3726.1	
76 cis-1,3-Dichloropropene	75	7.806	7.800	0.006	94	945395	200.0	201.0	
77 4-Methyl-2-pentanone (MIBK	43	7.953	7.953	0.000	97	2729347	1000.0	994.0	
$ 78 Toluene-d8 (Surr)	98	8.020	8.014	0.006	98	673443	50.0	50.6	
79 Toluene	91	8.087	8.081	0.006	93	2612187	200.0	197.7	
80 trans-1,3-Dichloropropene	75	8.373	8.373	0.000	98	760837	200.0	199.0	
81 Ethyl methacrylate	69	8.398	8.398	0.000	88	684082	200.0	207.2	
82 1,1,2-Trichloroethane	83	8.544	8.544	0.000	96	413545	200.0	193.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.574	8.574	0.000	95	578076	200.0	206.3	
84 1,3-Dichloropropane	76	8.702	8.702	0.000	92	747244	200.0	192.6	
85 2-Hexanone	43	8.745	8.745	0.000	96	1665592	1000.0	986.0	
86 n-Butyl acetate	73	8.830	8.824	0.006	98	132895	200.0	187.8	
87 Chlorodibromomethane	129	8.873	8.873	0.000	98	538861	200.0	207.2	
88 Ethylene Dibromide	107	8.983	8.983	0.000	98	441256	200.0	192.0	
* 89 Chlorobenzene-d5	117	9.355	9.355	0.000	91	431249	50.0	50.0	
90 Chlorobenzene	112	9.379	9.379	0.000	95	1450238	200.0	193.1	
91 Ethylbenzene	106	9.446	9.440	0.006	99	880135	200.0	207.3	
92 1,1,1,2-Tetrachloroethane	131	9.458	9.458	0.000	95	651192	200.0	217.5	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	98	1034708	200.0	202.0	
94 n-Butyl acrylate	73	9.836	9.836	0.000	97	368856	200.0	194.0	
95 o-Xylene	106	9.873	9.867	0.006	93	1108103	200.0	208.0	
96 Styrene	104	9.891	9.891	0.000	94	1796983	200.0	217.2	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	90	897940	200.0	200.8	
98 Bromoform	173	10.068	10.068	0.000	94	333761	200.0	208.1	
99 Isopropylbenzene	105	10.147	10.147	0.000	97	3060329	200.0	217.0	
$ 100 4-Bromofluorobenzene	174	10.312	10.312	0.000	0	165187	50.0	47.5	
101 Bromobenzene	156	10.428	10.428	0.000	97	581503	200.0	191.8	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.440	0.000	99	686367	200.0	201.4	
103 N-Propylbenzene	91	10.470	10.464	0.006	98	3539807	200.0	211.4	
104 1,2,3-Trichloropropane	110	10.489	10.483	0.006	98	175333	200.0	202.6	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.489	0.006	80	168965	200.0	205.4	
106 4-Ethyltoluene	105	10.556	10.550	0.006	98	2981347	200.0	216.3	
107 2-Chlorotoluene	91	10.562	10.562	0.000	96	2571791	200.0	221.3	
108 1,3,5-Trimethylbenzene	105	10.605	10.605	-0.001	92	2630893	200.0	224.3	
109 4-Chlorotoluene	91	10.647	10.647	0.000	98	2022014	200.0	209.1	
110 Butyl Methacrylate	87	10.659	10.659	0.000	91	916348	200.0	229.9	
111 tert-Butylbenzene	119	10.842	10.836	0.006	92	2125037	200.0	228.7	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	98	2665975	200.0	217.8	
113 sec-Butylbenzene	105	11.001	11.001	0.000	99	3559207	200.0	229.7	
114 4-Isopropyltoluene	119	11.104	11.104	0.000	97	2872803	200.0	226.8	
115 1,3-Dichlorobenzene	146	11.123	11.123	0.000	96	1232692	200.0	203.4	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	95	223688	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	94	1228493	200.0	199.5	
118 Benzyl chloride	126	11.299	11.300	-0.001	98	235669	200.0	214.2	
119 2,3-Dihydroindene	117	11.360	11.354	0.006	94	2800584	200.0	215.0	
120 p-Diethylbenzene	119	11.385	11.379	0.006	93	1724422	200.0	225.4	
121 n-Butylbenzene	92	11.403	11.403	0.000	96	1614345	200.0	225.4	
122 1,2-Dichlorobenzene	146	11.476	11.476	0.000	94	1219747	200.0	200.5	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.013	0.000	97	2560095	200.0	217.8	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	96	125793	200.0	197.6	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	96	907166	200.0	191.5	
126 1,2,4-Trichlorobenzene	180	12.897	12.897	0.000	94	763231	200.0	177.2	
127 Hexachlorobutadiene	225	13.006	13.006	0.000	92	413355	200.0	204.3	
128 Naphthalene	128	13.189	13.189	0.000	99	1928944	200.0	184.0	
129 1,2,3-Trichlorobenzene	180	13.482	13.476	0.006	95	748796	200.0	180.6	
S 130 1,2-Dichloroethene, Total	100				0		400.0	387.9	
S 131 1,3-Dichloropropene, Total	100				0		400.0	400.0	
S 132 Xylenes, Total	100				0		400.0	410.1	
S 133 Total BTEX	1				0		1000.0	1016.4	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00075	Amount Added:	20.00	Units: uL	
ACROLEIN W_00075	Amount Added:	5.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

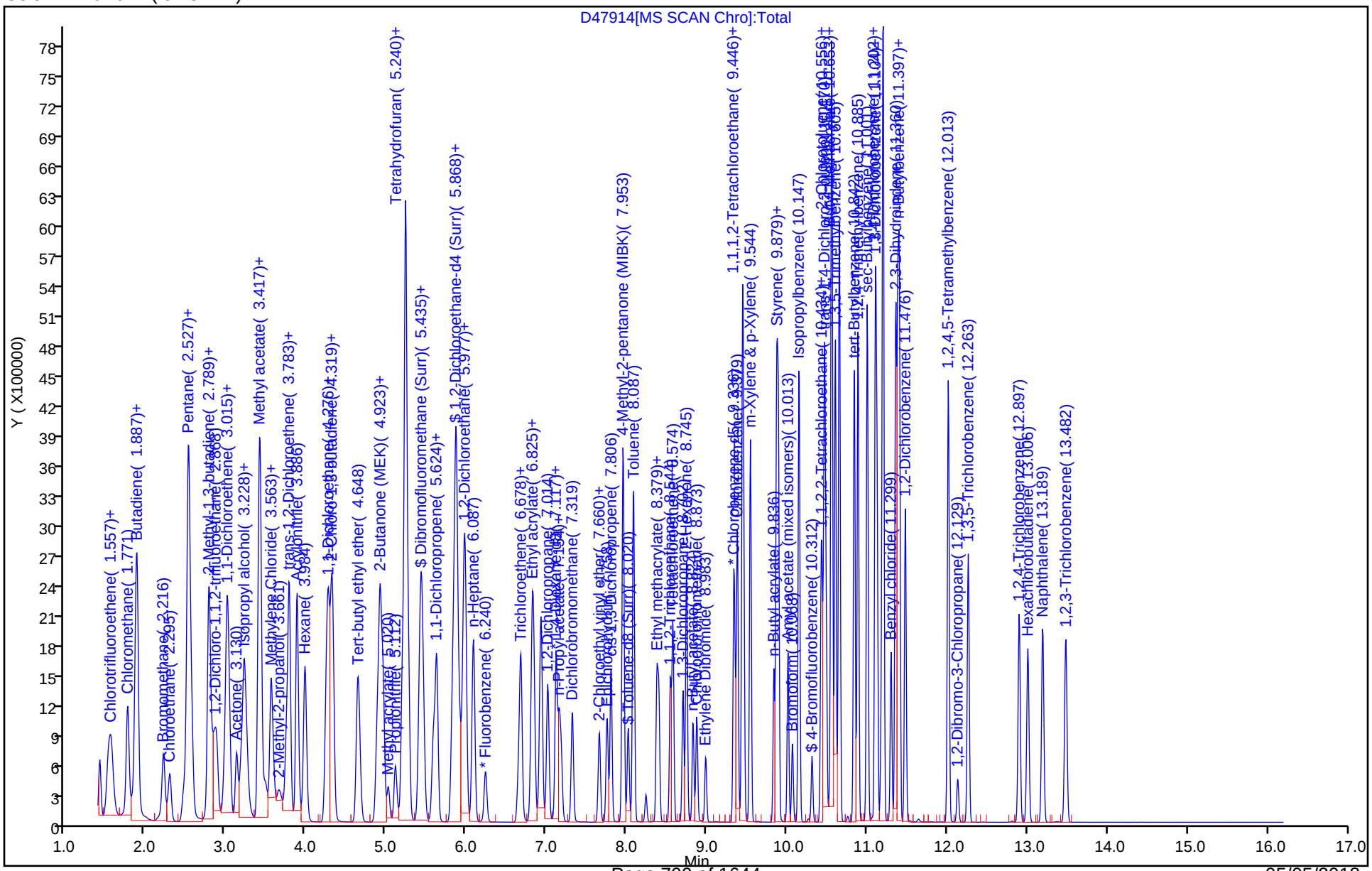
Report Date: 02-Apr-2018 09:54:27 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47914.D

Injection Date:	28-Mar-2018 14:43:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	STD200			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

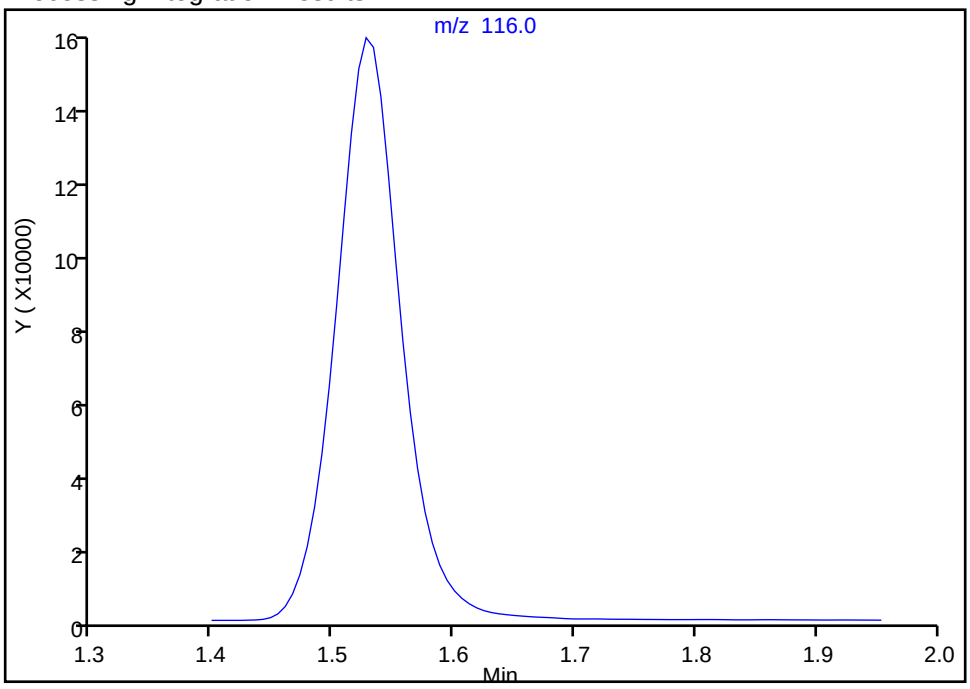
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47914.D
Injection Date: 28-Mar-2018 14:43:30 Instrument ID: CVOAMS4
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

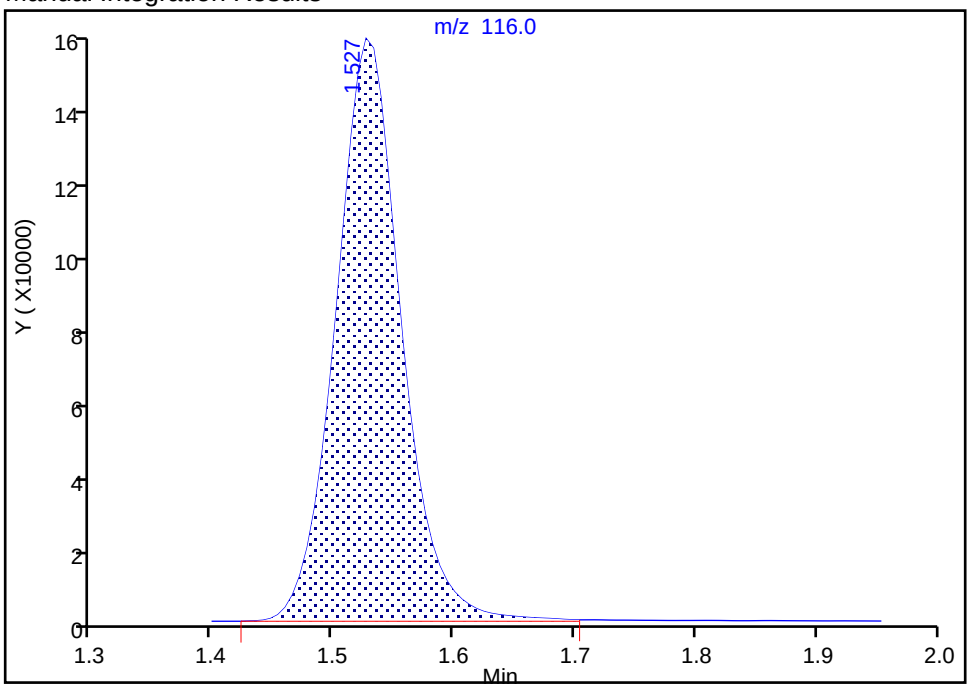
Not Detected
Expected RT: 1.53

Processing Integration Results



Manual Integration Results

RT: 1.53
Area: 579316
Amount: 216.5543
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:51:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

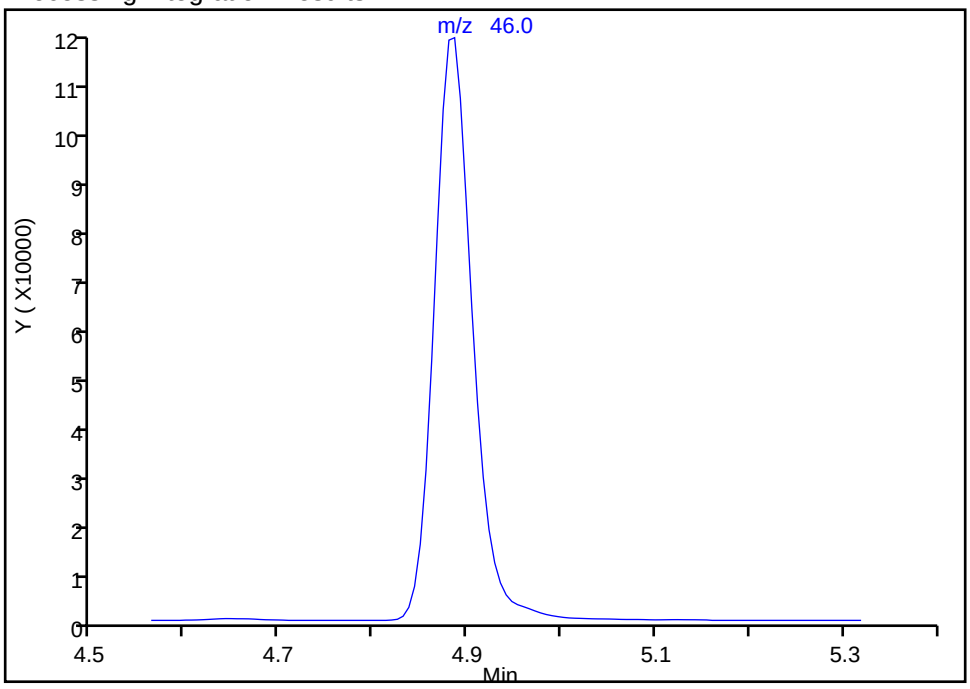
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47914.D
Injection Date: 28-Mar-2018 14:43:30 Instrument ID: CVOAMS4
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 38 2-Butanone-d5, CAS: 24313-50-6

Signal: 1

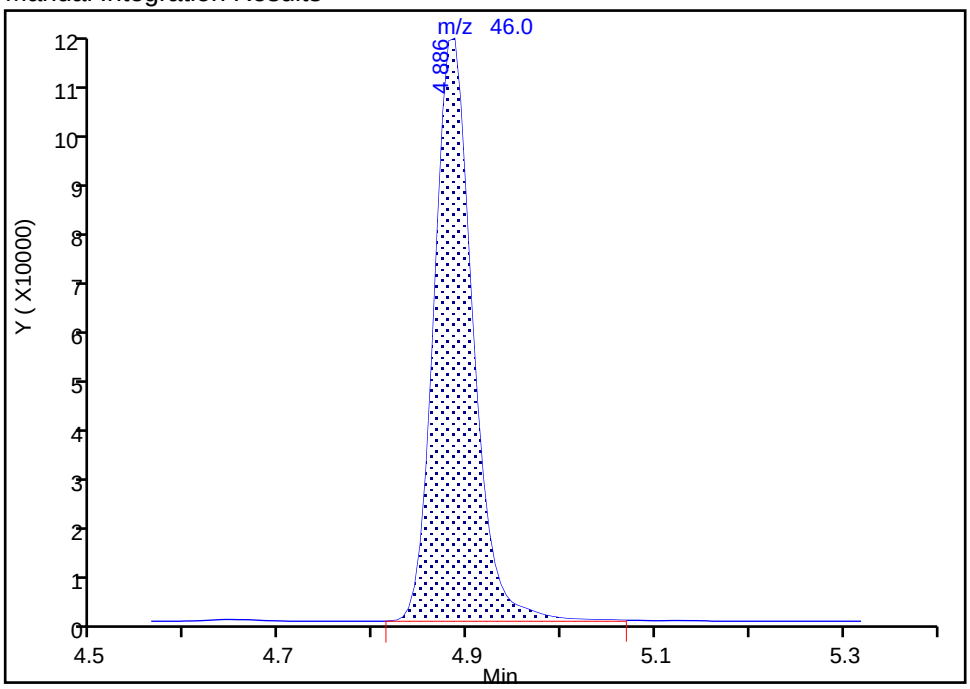
Not Detected
Expected RT: 4.88

Processing Integration Results



Manual Integration Results

RT: 4.89
Area: 321843
Amount: 250.0000
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:52:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

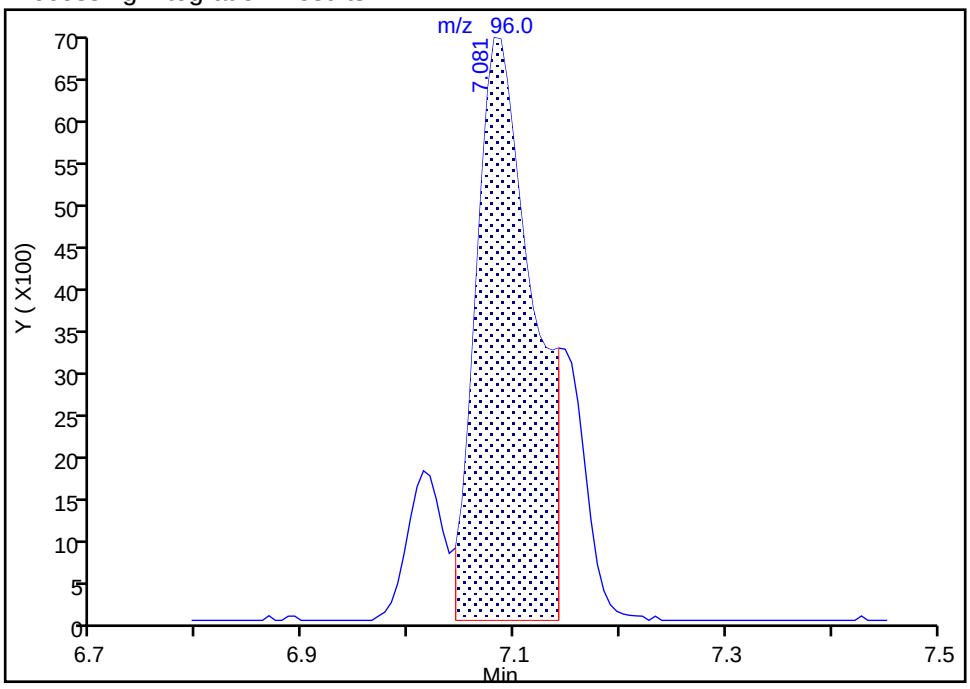
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47914.D
Injection Date: 28-Mar-2018 14:43:30 Instrument ID: CVOAMS4
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

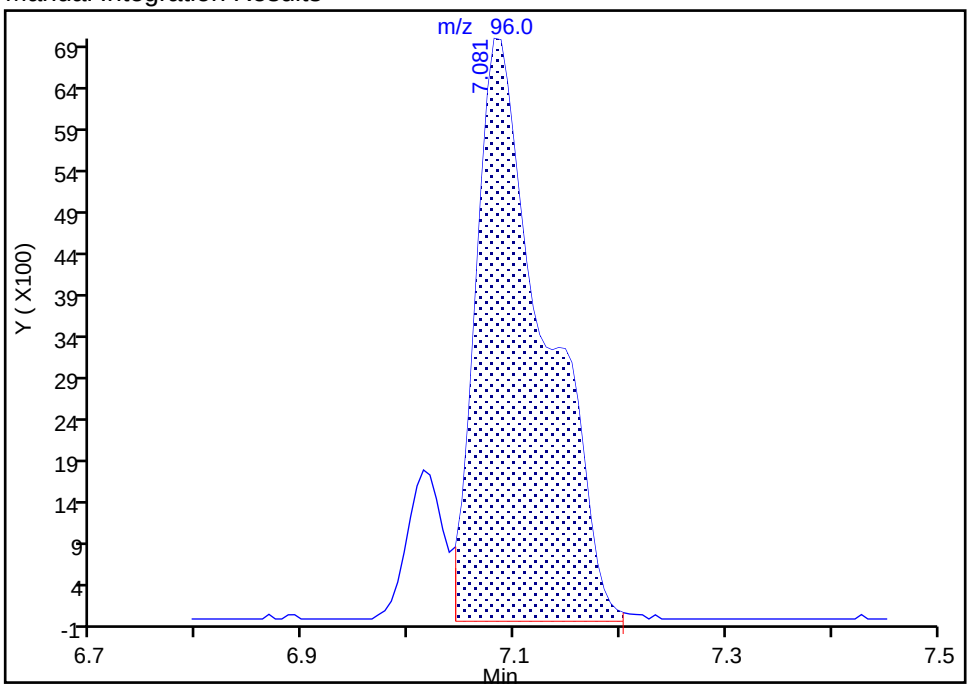
Processing Integration Results

RT: 7.08
Area: 26432
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 7.08
Area: 31605
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:52:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47915.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Mar-2018 15:08:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0069427-013
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 09:54:35 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: martineze Date: 28-Mar-2018 17:10:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.521	1.527	-0.006	91	1523352	500.0	521.5	a
2 Dichlorodifluoromethane	85	1.558	1.564	-0.006	99	5002854	500.0	501.2	
3 Chloromethane	50	1.765	1.771	-0.006	99	5135228	500.0	462.4	
4 Vinyl chloride	62	1.869	1.868	0.001	98	4369374	500.0	450.3	
5 Butadiene	54	1.887	1.887	0.000	98	3948478	500.0	485.5	
6 Bromomethane	94	2.216	2.216	0.000	98	1962960	500.0	467.9	
7 Chloroethane	64	2.295	2.301	-0.006	99	1960332	500.0	457.8	
9 Trichlorofluoromethane	101	2.533	2.521	0.012	97	3960354	500.0	522.2	
8 Dichlorofluoromethane	67	2.527	2.527	0.000	98	5305050	500.0	489.7	
10 Pentane	72	2.551	2.533	0.018	96	928438	1000.0	980.0	
12 Ethanol	46	2.765	2.765	0.000	82	405095	20000	20006	
11 Ethyl ether	59	2.765	2.777	-0.012	93	1692703	500.0	462.3	
13 2-Methyl-1,3-butadiene	53	2.783	2.789	-0.006	97	2155941	500.0	531.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.874	2.862	0.012	96	1953990	500.0	498.5	
16 Acrolein	56	2.978	2.978	0.000	94	363927	600.0	600.3	
15 1,1,2-Trichloro-1,2,2-trif	101	3.009	3.008	0.001	93	2625343	500.0	538.8	
17 1,1-Dichloroethene	96	3.033	3.015	0.018	96	2412814	500.0	538.9	
18 Acetone	43	3.124	3.130	-0.006	87	3905071	2500.0	2684.0	
19 Iodomethane	142	3.210	3.197	0.013	100	4282970	500.0	525.7	
20 Carbon disulfide	76	3.252	3.228	0.024	99	9237158	500.0	528.6	
21 Isopropyl alcohol	45	3.246	3.258	-0.012	100	1286443	5000.0	4579.8	
22 3-Chloro-1-propene	76	3.399	3.405	-0.006	87	1228987	500.0	452.2	
23 Cyclopentene	67	3.417	3.423	-0.006	90	5570147	500.0	523.9	
24 Methyl acetate	43	3.417	3.429	-0.012	99	6473886	2500.0	2423.2	
25 Acetonitrile	41	3.490	3.496	-0.006	97	1992049	5000.0	5319.2	a
26 Methylene Chloride	84	3.563	3.563	0.000	96	2498833	500.0	483.2	
* 27 TBA-d9 (IS)	65	3.569	3.575	-0.006	36	466671	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.655	3.661	-0.006	98	2206005	5000.0	4639.8	
29 Methyl tert-butyl ether	73	3.758	3.764	-0.006	97	5709882	500.0	495.1	
30 trans-1,2-Dichloroethene	96	3.783	3.789	-0.006	98	2173186	500.0	494.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.880	3.880	0.000	94	6591461	5000.0	5128.3	
32 Hexane	57	3.978	3.984	-0.006	93	3019362	500.0	518.7	
33 Isopropyl ether	45	4.252	4.252	0.000	94	6506933	500.0	499.4	
34 1,1-Dichloroethane	63	4.277	4.276	0.001	100	3860443	500.0	489.3	
35 Vinyl acetate	86	4.307	4.307	0.000	100	753614	1000.0	1074.7	
36 2-Chloro-1,3-butadiene	88	4.331	4.331	0.000	93	1892762	500.0	524.2	
37 Tert-butyl ethyl ether	59	4.642	4.642	0.000	88	6060160	500.0	504.2	
* 38 2-Butanone-d5	46	4.880	4.880	0.000	0	351448	250.0	250.0	a
39 2,2-Dichloropropane	79	4.898	4.892	0.006	96	1046643	500.0	505.8	
40 cis-1,2-Dichloroethene	96	4.917	4.923	-0.006	96	2375467	500.0	498.5	
41 2-Butanone (MEK)	72	4.947	4.947	0.000	99	1187669	2500.0	2682.5	
42 Ethyl acetate	70	4.959	4.959	0.000	96	387230	1000.0	1003.5	
43 Methyl acrylate	55	5.020	5.020	0.000	100	1383499	500.0	507.0	
44 Propionitrile	54	5.112	5.106	0.006	98	2363095	5000.0	4915.8	
45 Tetrahydrofuran	72	5.191	5.191	0.000	86	453371	1000.0	970.8	
46 Chlorobromomethane	128	5.203	5.197	0.006	88	1022970	500.0	516.5	
47 Methacrylonitrile	67	5.240	5.234	0.006	93	7638006	5000.0	5431.3	
48 Chloroform	83	5.276	5.270	0.006	98	3656310	500.0	504.2	
49 Cyclohexane	84	5.429	5.423	0.006	91	3336754	500.0	552.2	
50 1,1,1-Trichloroethane	97	5.447	5.441	0.006	99	3240435	500.0	538.8	
$ 51 Dibromofluoromethane (Surr	113	5.465	5.465	0.000	96	233856	50.0	52.7	
52 Carbon tetrachloride	117	5.587	5.587	0.000	97	2540795	500.0	541.1	
53 1,1-Dichloropropene	75	5.630	5.624	0.006	97	2592889	500.0	527.0	
54 Isobutyl alcohol	43	5.831	5.825	0.006	38	3943486	12500	14695	a
55 Benzene	78	5.868	5.868	0.000	97	7956981	500.0	480.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.898	5.892	0.006	90	275353	50.0	59.1	
57 Tert-amyl methyl ether	87	5.971	5.965	0.006	91	1759553	500.0	533.4	
58 Isopropyl acetate	43	5.971	5.971	0.000	98	5744232	500.0	511.7	
59 1,2-Dichloroethane	62	5.990	5.990	0.000	97	2586329	500.0	516.9	
60 n-Heptane	57	6.087	6.081	0.006	90	1701584	500.0	554.4	
* 61 Fluorobenzene	96	6.234	6.233	0.001	98	646006	50.0	50.0	
62 n-Butanol	56	6.648	6.648	0.000	88	1306375	12500	14875	
63 Trichloroethene	95	6.679	6.672	0.007	95	1929905	500.0	536.8	
64 Methylcyclohexane	83	6.825	6.819	0.006	91	3782759	500.0	565.6	
65 Ethyl acrylate	73	6.843	6.843	0.000	98	158485	500.0	564.8	
66 1,2-Dichloropropane	63	7.014	7.014	0.000	91	1947867	500.0	528.7	
* 67 1,4-Dioxane-d8	96	7.081	7.081	0.000	0	39279	1000.0	1000.0	M
68 Methyl methacrylate	100	7.118	7.117	0.001	87	843727	1000.0	1120.7	
69 1,4-Dioxane	88	7.142	7.142	0.000	93	355417	10000	8695.2	
70 Dibromomethane	93	7.154	7.154	0.000	94	1278401	500.0	555.2	
71 n-Propyl acetate	43	7.185	7.178	0.007	98	2087573	500.0	532.6	
72 Dichlorobromomethane	83	7.319	7.319	0.000	99	2507400	500.0	563.1	
73 2-Nitropropane	41	7.654	7.648	0.006	99	848024	1000.0	1013.8	
74 2-Chloroethyl vinyl ether	63	7.660	7.660	0.000	95	838377	500.0	581.8	
75 Epichlorohydrin	57	7.758	7.751	0.007	99	3088228	10000	10332	
76 cis-1,3-Dichloropropene	75	7.806	7.800	0.006	93	2909884	500.0	519.6	
77 4-Methyl-2-pentanone (MIBK	43	7.953	7.953	0.000	96	7856096	2500.0	2620.0	
$ 78 Toluene-d8 (Surr)	98	8.020	8.014	0.006	98	760610	50.0	48.0	
79 Toluene	91	8.087	8.081	0.006	93	7578873	500.0	481.8	
80 trans-1,3-Dichloropropene	75	8.379	8.373	0.006	98	2436241	500.0	535.2	
81 Ethyl methacrylate	69	8.404	8.398	0.006	91	2063830	500.0	573.4	
82 1,1,2-Trichloroethane	83	8.544	8.544	0.000	96	1287907	500.0	506.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.581	8.574	0.007	96	1704079	500.0	510.8	
84 1,3-Dichloropropane	76	8.703	8.702	0.001	92	2335843	500.0	505.7	
85 2-Hexanone	43	8.745	8.745	0.000	96	5226478	2500.0	2833.3	
86 n-Butyl acetate	73	8.831	8.824	0.007	98	399605	500.0	474.1	
87 Chlorodibromomethane	129	8.873	8.873	0.000	98	1708675	500.0	551.7	
88 Ethylene Dibromide	107	8.989	8.983	0.006	98	1396394	500.0	510.2	
* 89 Chlorobenzene-d5	117	9.355	9.355	0.000	89	513502	50.0	50.0	
90 Chlorobenzene	112	9.385	9.379	0.006	96	4552774	500.0	509.2	
91 Ethylbenzene	106	9.446	9.440	0.006	99	2634116	500.0	521.0	
92 1,1,1,2-Tetrachloroethane	131	9.459	9.458	0.001	96	1948755	500.0	546.5	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	98	3134811	500.0	514.0	
94 n-Butyl acrylate	73	9.837	9.836	0.000	97	1166054	500.0	515.1	
95 o-Xylene	106	9.873	9.867	0.006	93	3392786	500.0	535.0	
96 Styrene	104	9.891	9.891	0.000	94	5426157	500.0	550.8	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	91	2657905	500.0	482.5	
98 Bromoform	173	10.068	10.068	0.000	94	1092306	500.0	572.1	
99 Isopropylbenzene	105	10.154	10.147	0.007	97	8859338	500.0	527.5	
$ 100 4-Bromofluorobenzene	174	10.312	10.312	0.000	0	195224	50.0	45.5	
101 Bromobenzene	156	10.428	10.428	0.000	97	1876039	500.0	502.3	
102 1,1,2,2-Tetrachloroethane	83	10.446	10.440	0.006	99	2145456	500.0	511.0	
103 N-Propylbenzene	91	10.471	10.464	0.007	99	10390191	500.0	503.6	
104 1,2,3-Trichloropropane	110	10.489	10.483	0.006	96	531209	500.0	498.1	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.489	0.006	89	482117	500.0	475.6	
106 4-Ethyltoluene	105	10.556	10.550	0.006	98	8434659	500.0	496.7	
107 2-Chlorotoluene	91	10.562	10.562	0.000	97	7317066	500.0	511.0	
108 1,3,5-Trimethylbenzene	105	10.605	10.605	0.000	92	7667652	500.0	530.6	
109 4-Chlorotoluene	91	10.653	10.647	0.006	98	6175566	500.0	518.2	
110 Butyl Methacrylate	87	10.660	10.659	0.001	88	2666812	500.0	543.0	
111 tert-Butylbenzene	119	10.842	10.836	0.006	91	6650373	500.0	581.0	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	97	7928471	500.0	525.8	
113 sec-Butylbenzene	105	11.001	11.001	0.000	98	10541017	500.0	552.3	
114 4-Isopropyltoluene	119	11.105	11.104	0.001	97	8657423	500.0	554.6	
115 1,3-Dichlorobenzene	146	11.123	11.123	0.000	96	3683487	500.0	493.2	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	91	275598	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	93	3726798	500.0	491.2	
118 Benzyl chloride	126	11.300	11.300	0.000	98	747103	500.0	551.0	
119 2,3-Dihydroindene	117	11.361	11.354	0.007	94	8367676	500.0	589.4	
120 p-Diethylbenzene	119	11.385	11.379	0.006	93	4948283	500.0	525.0	
121 n-Butylbenzene	92	11.403	11.403	0.000	97	4451265	500.0	504.5	
122 1,2-Dichlorobenzene	146	11.476	11.476	0.000	95	3863575	500.0	515.6	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.013	0.000	97	8083721	500.0	558.2	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	97	406733	500.0	518.5	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	96	2891929	500.0	495.4	
126 1,2,4-Trichlorobenzene	180	12.897	12.897	0.000	94	2492993	500.0	469.7	
127 Hexachlorobutadiene	225	13.007	13.006	0.001	92	1466935	500.0	588.3	
128 Naphthalene	128	13.196	13.189	0.007	99	6232094	500.0	482.5	
129 1,2,3-Trichlorobenzene	180	13.482	13.476	0.006	95	2440787	500.0	477.8	
S 130 1,2-Dichloroethene, Total	100				0		1000.0	993.3	
S 131 1,3-Dichloropropene, Total	100				0		1000.0	1054.7	
S 132 Xylenes, Total	100				0		1000.0	1048.9	
S 133 Total BTEX	1				0		2500.0	2531.8	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	50.00	Units: uL	
8260MIX1COMB_00075	Amount Added:	50.00	Units: uL	
ACROLEIN W_00075	Amount Added:	6.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 02-Apr-2018 09:54:37 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47915.D

Injection Date: 28-Mar-2018 15:08:30 Instrument ID: CVOAMS4 Operator ID:

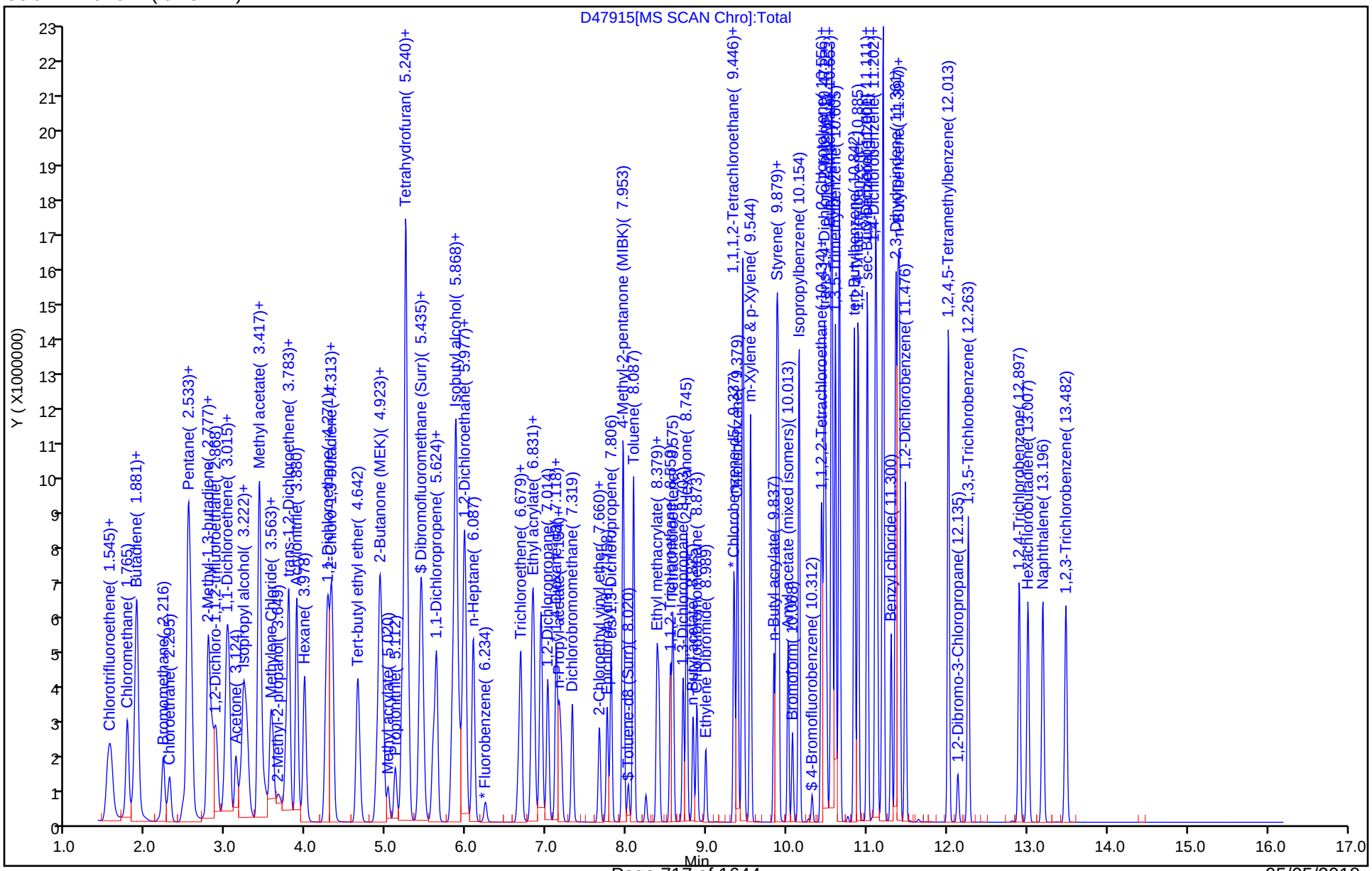
Lims ID: STD500 Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 12

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

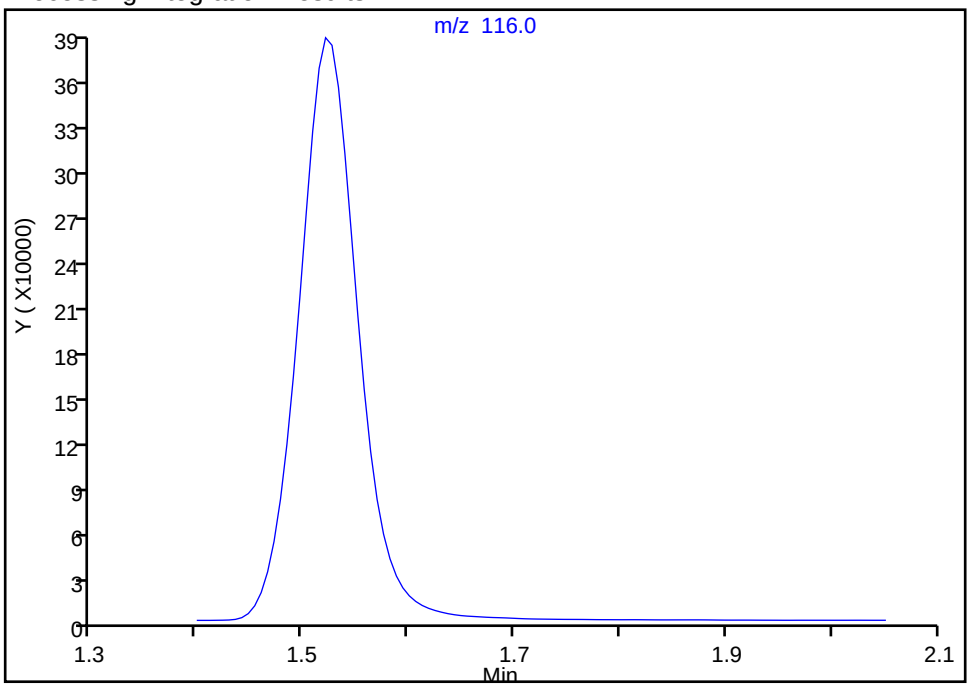
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47915.D
Injection Date: 28-Mar-2018 15:08:30 Instrument ID: CVOAMS4
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

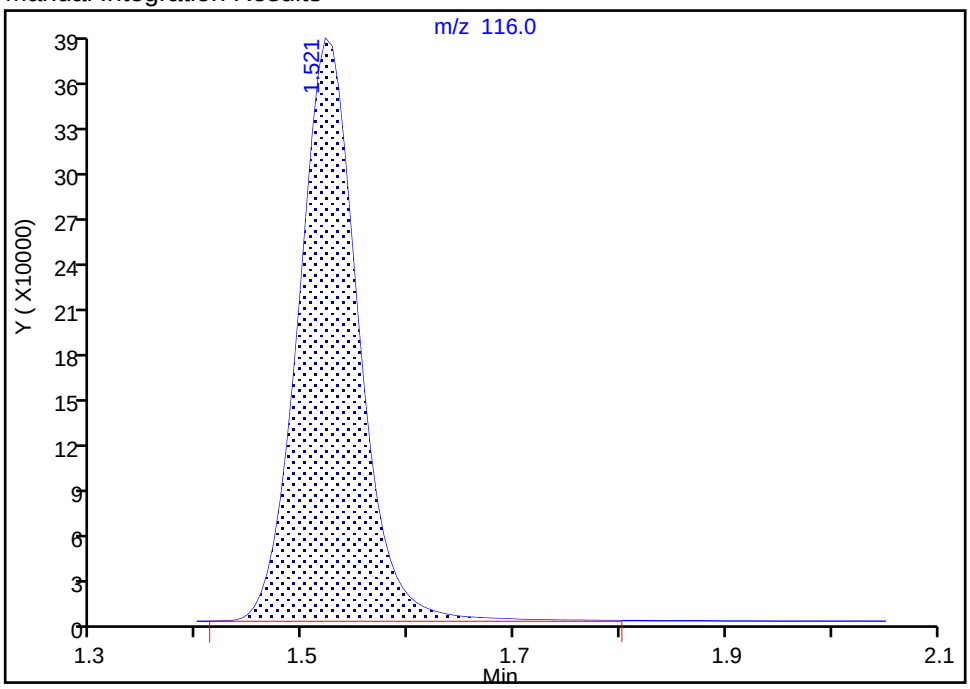
Not Detected
Expected RT: 1.53

Processing Integration Results



Manual Integration Results

RT: 1.52
Area: 1523352
Amount: 521.5331
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:52:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

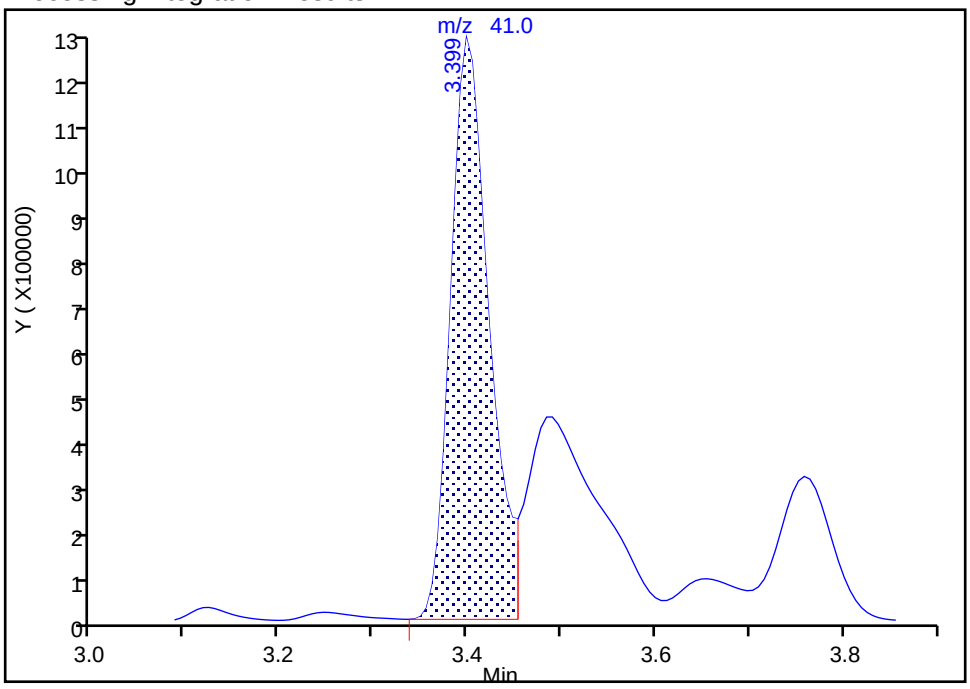
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47915.D
Injection Date: 28-Mar-2018 15:08:30 Instrument ID: CVOAMS4
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

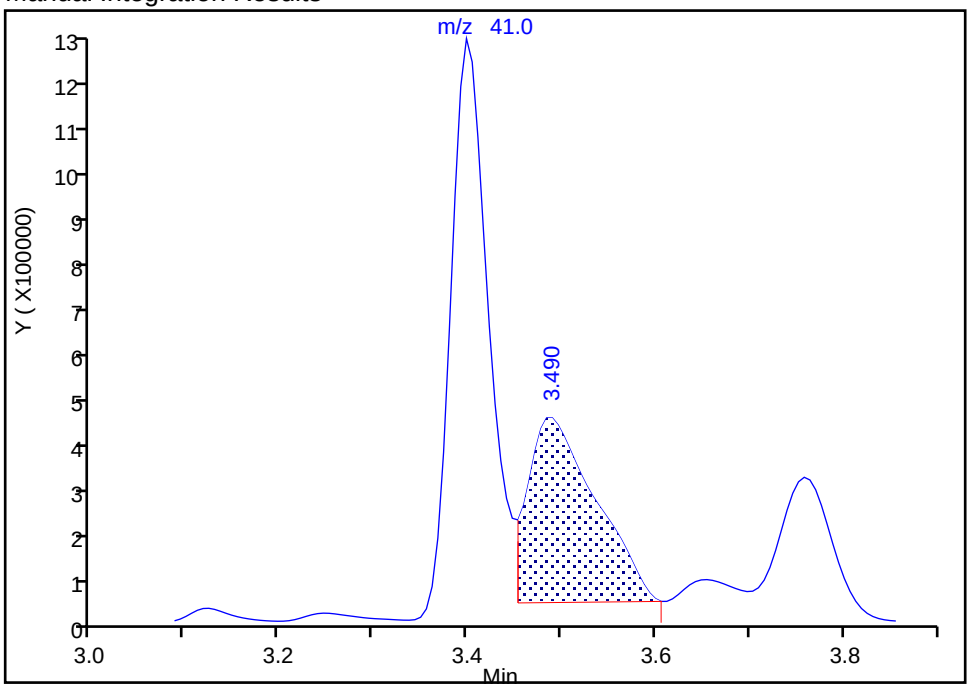
Processing Integration Results

RT: 3.40
Area: 3560648
Amount: 5003.7165
Amount Units: ug/l



Manual Integration Results

RT: 3.49
Area: 1992049
Amount: 5319.2183
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:52:48
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

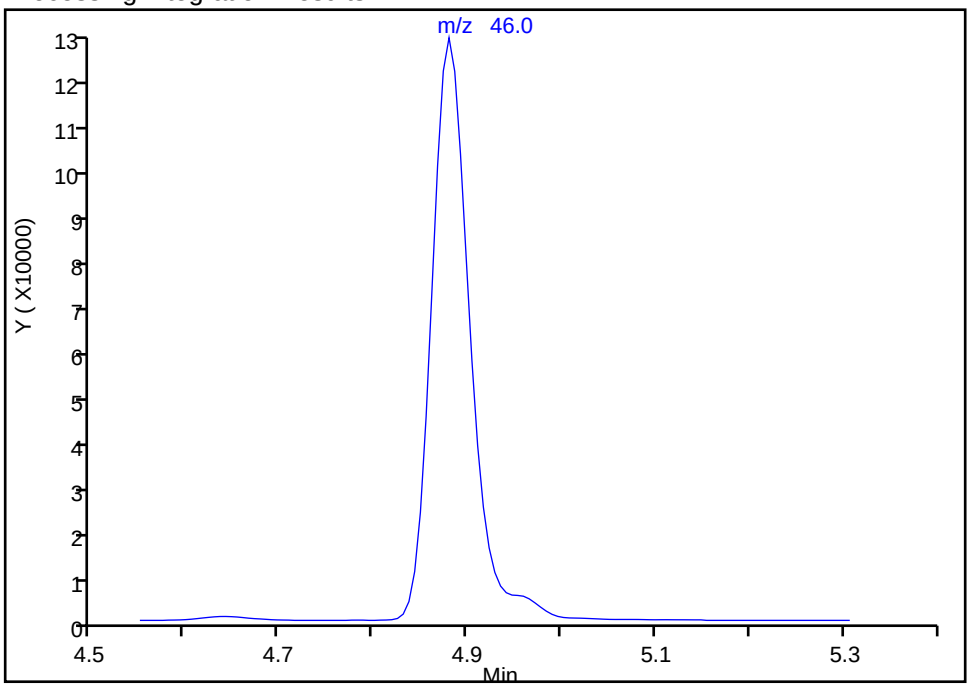
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47915.D
Injection Date: 28-Mar-2018 15:08:30 Instrument ID: CVOAMS4
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 38 2-Butanone-d5, CAS: 24313-50-6

Signal: 1

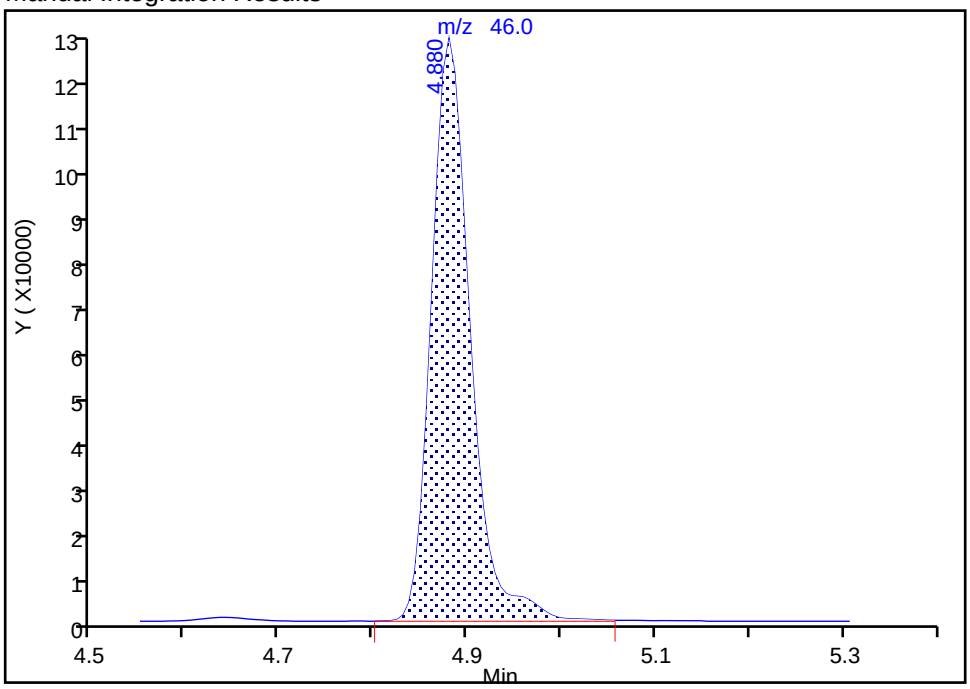
Not Detected
Expected RT: 4.88

Processing Integration Results



Manual Integration Results

RT: 4.88
Area: 351448
Amount: 250.0000
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:53:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

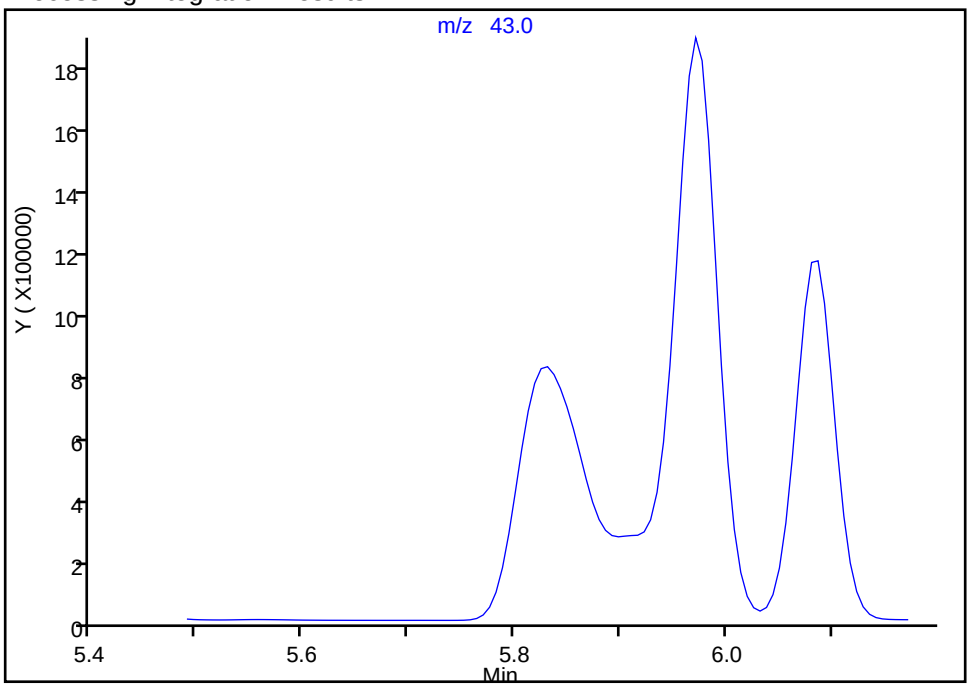
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47915.D
Injection Date: 28-Mar-2018 15:08:30 Instrument ID: CVOAMS4
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

54 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

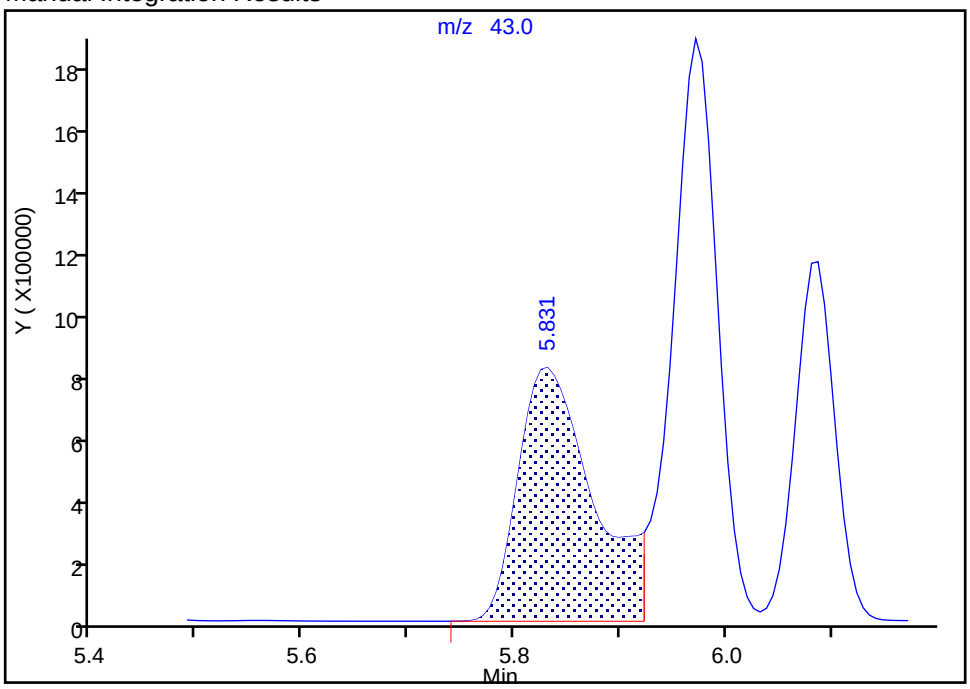
Not Detected
Expected RT: 5.82

Processing Integration Results



Manual Integration Results

RT: 5.83
Area: 3943486
Amount: 14695
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:52:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

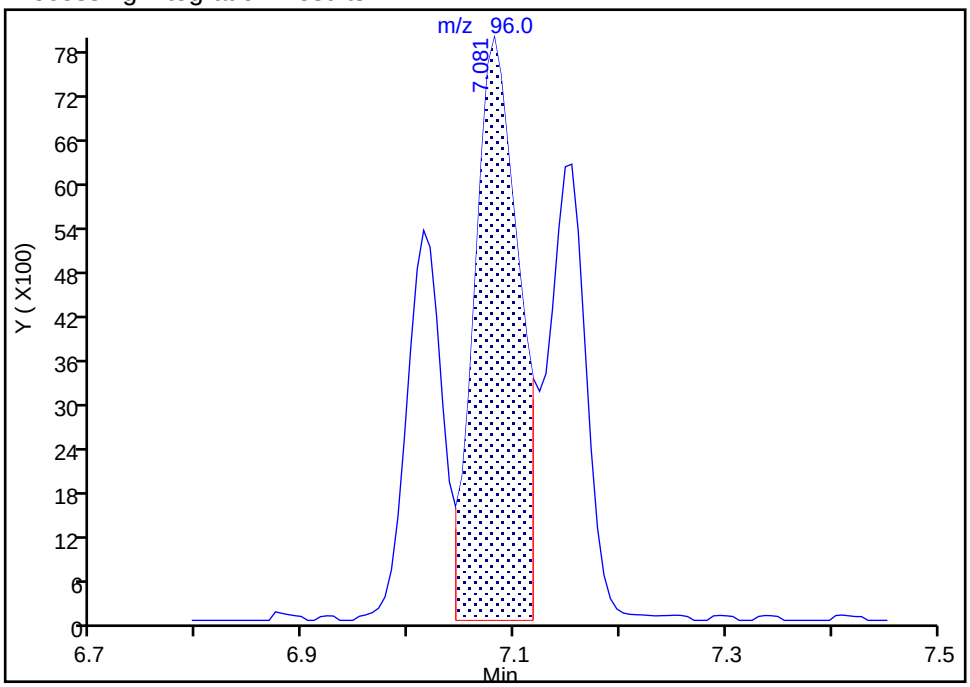
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47915.D
Injection Date: 28-Mar-2018 15:08:30 Instrument ID: CVOAMS4
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

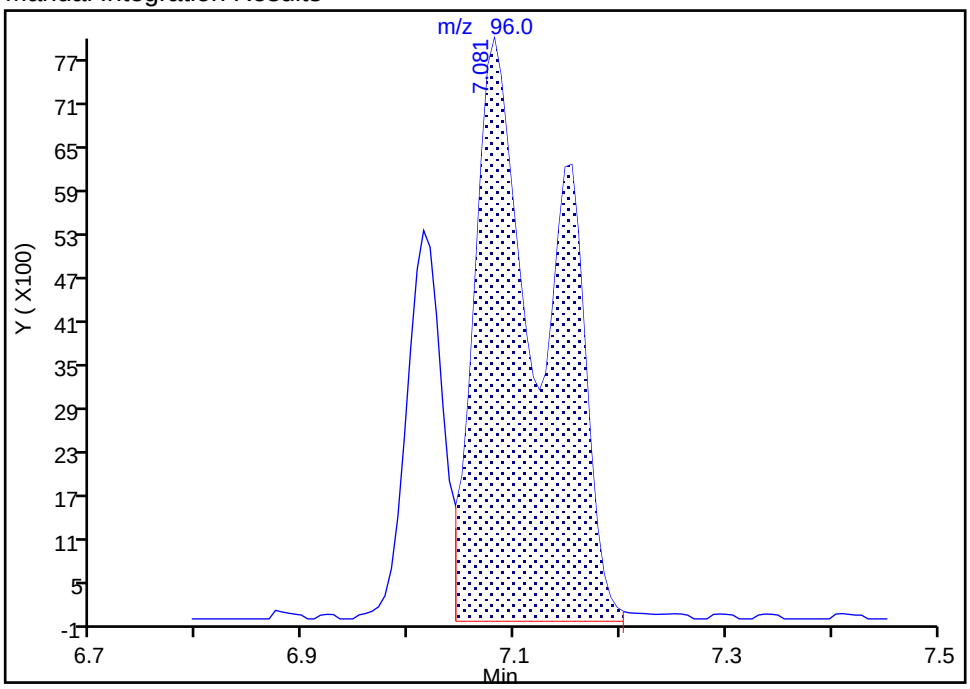
Processing Integration Results

RT: 7.08
Area: 23517
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 7.08
Area: 39279
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:54:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Mar-2018 19:22:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0069427-018
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 09:54:46 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: boykink Date: 28-Mar-2018 20:12:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.521	1.527	-0.006	1	946	1.00	1.01	a
2 Dichlorodifluoromethane	85	1.557	1.564	-0.007	97	4721	1.00	1.00	
3 Chloromethane	50	1.771	1.771	0.000	99	8751	1.00	0.9826	
4 Vinyl chloride	62	1.874	1.868	0.006	98	8006	1.00	1.03	
5 Butadiene	54	1.868	1.887	-0.019	51	3386	1.00	1.00	
6 Bromomethane	94	2.216	2.216	0.000	95	3469	1.00	1.03	
7 Chloroethane	64	2.295	2.301	-0.006	98	3509	1.00	1.02	
9 Trichlorofluoromethane	101	2.521	2.521	0.000	88	4327	1.00	0.7114	
8 Dichlorofluoromethane	67	2.527	2.527	0.000	96	7942	1.00	0.9142	
10 Pentane	72	2.533	2.533	0.000	96	1289	2.00	1.70	
12 Ethanol	46	2.777	2.765	0.012	69	1102	40.0	64.5	
11 Ethyl ether	59	2.777	2.777	0.000	92	3383	1.00	1.15	
13 2-Methyl-1,3-butadiene	53	2.789	2.789	0.000	90	2451	1.00	0.7539	
14 1,2-Dichloro-1,1,2-trifluo	117	2.862	2.862	0.000	85	2736	1.00	0.8704	
16 Acrolein	56	2.978	2.978	0.000	95	52985	100.0	103.6	
15 1,1,2-Trichloro-1,2,2-trif	101	3.021	3.008	0.013	47	2867	1.00	0.7338	M
17 1,1-Dichloroethene	96	3.021	3.015	0.006	95	3094	1.00	0.8617	
18 Acetone	43	3.130	3.130	0.000	87	7252	5.00	6.72	M
19 Iodomethane	142	3.191	3.197	-0.006	99	6194	1.00	0.9480	
20 Carbon disulfide	76	3.228	3.228	0.000	99	12926	1.00	0.9224	
21 Isopropyl alcohol	45	3.264	3.258	0.006	98	3057	10.0	12.9	M
22 3-Chloro-1-propene	76	3.405	3.405	0.000	85	2159	1.00	0.99	
23 Cyclopentene	67	3.417	3.423	-0.006	89	6423	1.00	0.7534	
24 Methyl acetate	43	3.429	3.429	0.000	99	11533	5.00	5.38	
25 Acetonitrile	41	3.496	3.496	0.000	90	3324	10.0	10.5	
26 Methylene Chloride	84	3.557	3.563	-0.006	97	4540	1.00	1.09	
* 27 TBA-d9 (IS)	65	3.575	3.575	0.000	38	393547	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.661	3.661	0.000	91	5200	10.0	13.0	
29 Methyl tert-butyl ether	73	3.764	3.764	0.000	96	9611	1.00	1.04	
30 trans-1,2-Dichloroethene	96	3.789	3.789	0.000	95	3279	1.00	0.9309	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.886	3.880	0.006	96	11531	10.0	10.6	
32 Hexane	57	3.984	3.984	0.000	93	3101	1.00	0.6643	
33 Isopropyl ether	45	4.252	4.252	0.000	90	10571	1.00	1.01	
34 1,1-Dichloroethane	63	4.276	4.276	0.000	99	6544	1.00	1.03	
35 Vinyl acetate	86	4.307	4.307	0.000	100	940	2.00	1.67	
36 2-Chloro-1,3-butadiene	88	4.331	4.331	0.000	91	2375	1.00	0.8203	
37 Tert-butyl ethyl ether	59	4.642	4.642	0.000	88	9407	1.00	0.9760	
* 38 2-Butanone-d5	46	4.880	4.880	0.000	0	260609	250.0	250.0	
39 2,2-Dichloropropane	79	4.880	4.892	-0.012	46	1668	1.00	1.01	
40 cis-1,2-Dichloroethene	96	4.923	4.923	0.000	98	5968	1.00	0.99	
41 2-Butanone (MEK)	72	4.947	4.947	0.000	99	1865	5.00	5.68	
42 Ethyl acetate	70	4.965	4.959	0.006	95	578	2.00	2.02	
43 Methyl acrylate	55	5.026	5.020	0.006	97	2359	1.00	1.08	
44 Propionitrile	54	5.112	5.106	0.006	98	4041	10.0	10.5	
45 Tetrahydrofuran	72	5.191	5.191	0.000	55	813	2.00	2.35	
46 Chlorobromomethane	128	5.197	5.197	0.000	89	1494	1.00	0.9407	
47 Methacrylonitrile	67	5.234	5.234	0.000	92	10505	10.0	9.32	
48 Chloroform	83	5.276	5.270	0.006	97	5394	1.00	0.9276	
49 Cyclohexane	84	5.423	5.423	0.000	91	3435	1.00	0.7089	
50 1,1,1-Trichloroethane	97	5.441	5.441	0.000	97	4071	1.00	0.8442	
$ 51 Dibromofluoromethane (Surr	113	5.465	5.465	0.000	96	171954	50.0	48.3	
52 Carbon tetrachloride	117	5.587	5.587	0.000	95	2932	1.00	0.7786	
53 1,1-Dichloropropene	75	5.624	5.624	0.000	95	3266	1.00	0.8278	
54 Isobutyl alcohol	43	5.831	5.825	0.006	86	4302	25.0	19.0	
55 Benzene	78	5.868	5.868	0.000	95	11732	1.00	0.9892	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.892	5.892	0.000	97	169601	50.0	45.4	
57 Tert-amyl methyl ether	87	5.971	5.965	0.006	84	2574	1.00	0.9730	
58 Isopropyl acetate	43	5.971	5.971	0.000	95	8868	1.00	0.9851	
59 1,2-Dichloroethane	62	5.990	5.990	0.000	97	4475	1.00	1.12	
60 n-Heptane	57	6.081	6.081	0.000	88	1663	1.00	0.6757	
* 61 Fluorobenzene	96	6.233	6.233	0.000	98	518042	50.0	50.0	
62 n-Butanol	56	6.654	6.648	0.006	93	1715	25.0	23.2	
63 Trichloroethene	95	6.672	6.672	0.000	94	2709	1.00	0.9397	
64 Methylcyclohexane	83	6.819	6.819	0.000	96	3586	1.00	0.6687	
65 Ethyl acrylate	73	6.849	6.843	0.006	97	106	1.00	1.02	
66 1,2-Dichloropropane	63	7.008	7.014	-0.006	90	2975	1.00	1.01	
* 67 1,4-Dioxane-d8	96	7.081	7.081	0.000	0	23148	1000.0	1000.0	
68 Methyl methacrylate	100	7.117	7.117	0.000	84	1130	2.00	1.87	
69 1,4-Dioxane	88	7.142	7.142	0.000	33	451	20.0	18.7	
70 Dibromomethane	93	7.154	7.154	0.000	90	1888	1.00	1.02	
71 n-Propyl acetate	43	7.178	7.178	0.000	96	3221	1.00	1.02	
72 Dichlorobromomethane	83	7.319	7.319	0.000	97	3302	1.00	0.9247	
73 2-Nitropropane	41	7.648	7.648	0.000	84	1689	2.00	2.52	
74 2-Chloroethyl vinyl ether	63	7.660	7.660	0.000	79	1102	1.00	0.9537	
75 Epichlorohydrin	57	7.757	7.751	0.006	98	4507	20.0	20.3	
76 cis-1,3-Dichloropropene	75	7.800	7.800	0.000	89	3797	1.00	0.9475	
77 4-Methyl-2-pentanone (MIBK	43	7.953	7.953	0.000	97	10954	5.00	4.93	
$ 78 Toluene-d8 (Surr)	98	8.014	8.014	0.000	99	553603	50.0	48.9	
79 Toluene	91	8.081	8.081	0.000	93	11651	1.00	1.04	
80 trans-1,3-Dichloropropene	75	8.373	8.373	0.000	96	3072	1.00	0.9431	
81 Ethyl methacrylate	69	8.398	8.398	0.000	89	2562	1.00	0.8876	
82 1,1,2-Trichloroethane	83	8.544	8.544	0.000	93	1725	1.00	0.9474	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.574	8.574	0.000	93	1990	1.00	0.8336	
84 1,3-Dichloropropane	76	8.702	8.702	0.000	89	3339	1.00	1.01	
85 2-Hexanone	43	8.745	8.745	0.000	97	6719	5.00	4.91	
86 n-Butyl acetate	73	8.830	8.824	0.006	97	668	1.00	1.11	
87 Chlorodibromomethane	129	8.873	8.873	0.000	96	1934	1.00	0.8727	
88 Ethylene Dibromide	107	8.983	8.983	0.000	97	2009	1.00	1.03	
* 89 Chlorobenzene-d5	117	9.355	9.355	0.000	88	367427	50.0	50.0	
90 Chlorobenzene	112	9.379	9.379	0.000	97	6463	1.00	1.01	
91 Ethylbenzene	106	9.440	9.440	0.000	99	3286	1.00	0.9083	
92 1,1,1,2-Tetrachloroethane	131	9.458	9.458	0.000	92	2151	1.00	0.8431	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	99	4045	1.00	0.9269	
94 n-Butyl acrylate	73	9.836	9.836	0.000	97	1529	1.00	0.9439	
95 o-Xylene	106	9.873	9.867	0.006	93	3931	1.00	0.8662	
96 Styrene	104	9.891	9.891	0.000	94	6003	1.00	0.8516	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	92	3835	1.00	0.99	
98 Bromoform	173	10.068	10.068	0.000	92	1191	1.00	0.8718	
99 Isopropylbenzene	105	10.147	10.147	0.000	96	9502	1.00	0.7907	
$ 100 4-Bromofluorobenzene	174	10.312	10.312	0.000	0	154649	50.0	51.4	
101 Bromobenzene	156	10.428	10.428	0.000	96	2607	1.00	0.99	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.440	0.000	97	2845	1.00	0.9647	
103 N-Propylbenzene	91	10.464	10.464	0.000	98	12468	1.00	0.8602	
104 1,2,3-Trichloropropane	110	10.489	10.483	0.006	96	714	1.00	0.9531	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.489	0.006	72	702	1.00	0.9859	
106 4-Ethyltoluene	105	10.556	10.550	0.006	98	9928	1.00	0.8322	
107 2-Chlorotoluene	91	10.562	10.562	0.000	97	8812	1.00	0.8760	
108 1,3,5-Trimethylbenzene	105	10.598	10.605	-0.007	94	8035	1.00	0.7915	
109 4-Chlorotoluene	91	10.647	10.647	0.000	97	7954	1.00	0.9502	
110 Butyl Methacrylate	87	10.659	10.659	0.000	92	2793	1.00	0.8095	
111 tert-Butylbenzene	119	10.836	10.836	0.000	92	5760	1.00	0.7163	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	97	8919	1.00	0.8420	
113 sec-Butylbenzene	105	11.001	11.001	0.000	99	9827	1.00	0.7329	
114 4-Isopropyltoluene	119	11.104	11.104	0.000	97	8186	1.00	0.7465	
115 1,3-Dichlorobenzene	146	11.123	11.123	0.000	93	5203	1.00	0.99	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	97	193600	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	91	5498	1.00	1.03	
118 Benzyl chloride	126	11.299	11.300	-0.001	98	774	1.00	0.8127	
119 2,3-Dihydroindene	117	11.354	11.354	0.000	93	9781	1.00	0.8592	
120 p-Diethylbenzene	119	11.379	11.379	0.000	93	5252	1.00	0.7933	
121 n-Butylbenzene	92	11.403	11.403	0.000	96	4896	1.00	0.7900	
122 1,2-Dichlorobenzene	146	11.476	11.476	0.000	94	5264	1.00	1.00	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.013	0.000	96	8921	1.00	0.8770	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	90	542	1.00	0.9835	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	95	4142	1.00	1.01	
126 1,2,4-Trichlorobenzene	180	12.897	12.897	0.000	92	4095	1.00	1.10	
127 Hexachlorobutadiene	225	13.006	13.006	0.000	83	1329	1.00	0.7588	
128 Naphthalene	128	13.189	13.189	0.000	99	9727	1.00	1.07	
129 1,2,3-Trichlorobenzene	180	13.476	13.476	0.000	94	3783	1.00	1.05	
S 130 1,2-Dichloroethene, Total	100				0		2.00	1.92	
S 131 1,3-Dichloropropene, Total	100				0		2.00	1.89	
S 132 Xylenes, Total	100				0		2.00	1.79	
S 133 Total BTEX	1				0		5.00	4.73	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	1.00	Units: uL	
8260MIX1COMB_00075	Amount Added:	1.00	Units: uL	
ACROLEIN W_00075	Amount Added:	10.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 02-Apr-2018 09:54:47 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Injection Date: 28-Mar-2018 19:22:30 Instrument ID: CVOAMS4 Operator ID:

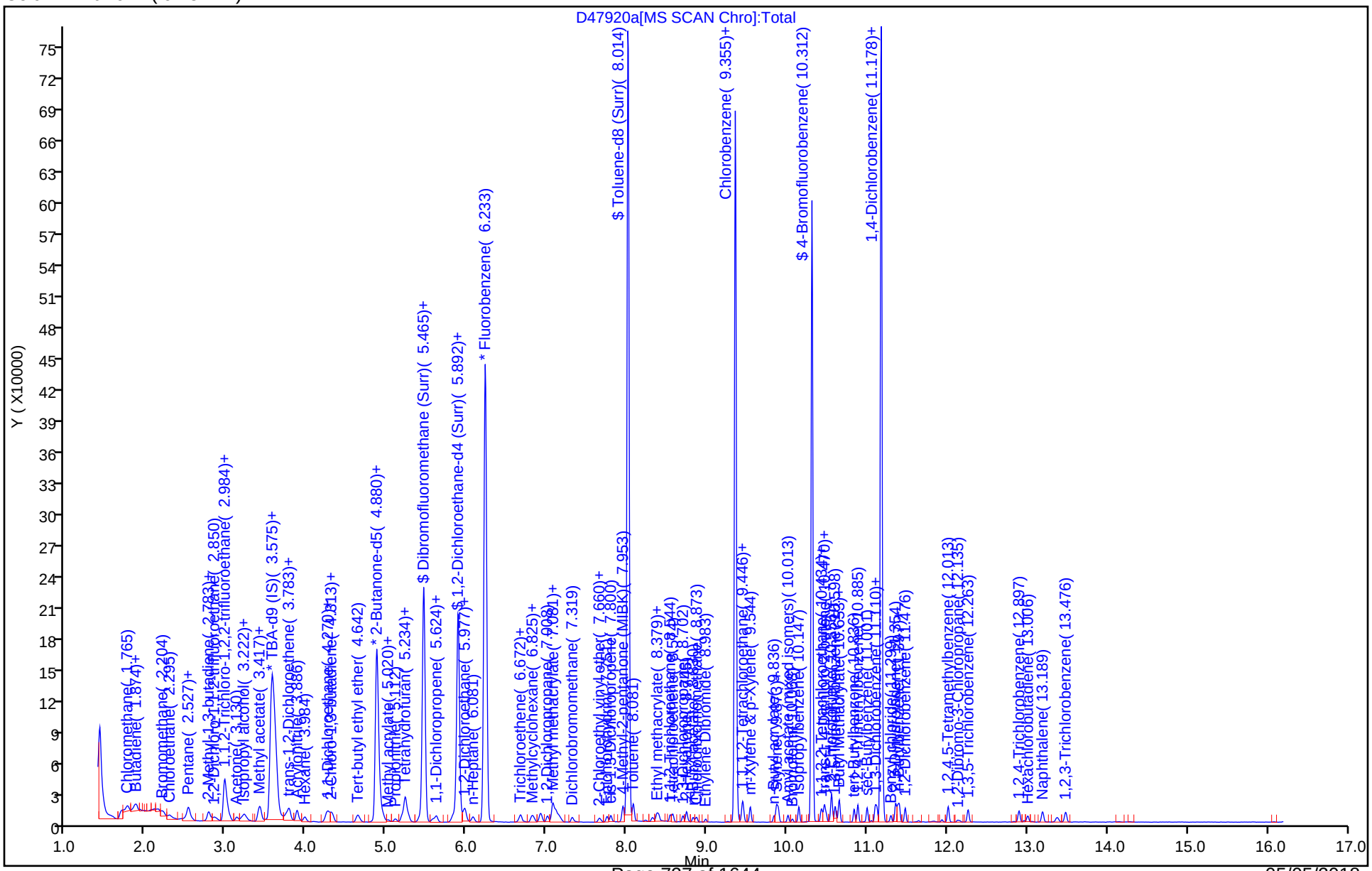
Lims ID: STD1 Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 17

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



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Manual Integration/User Assign Peak Report

TestAmerica Edison

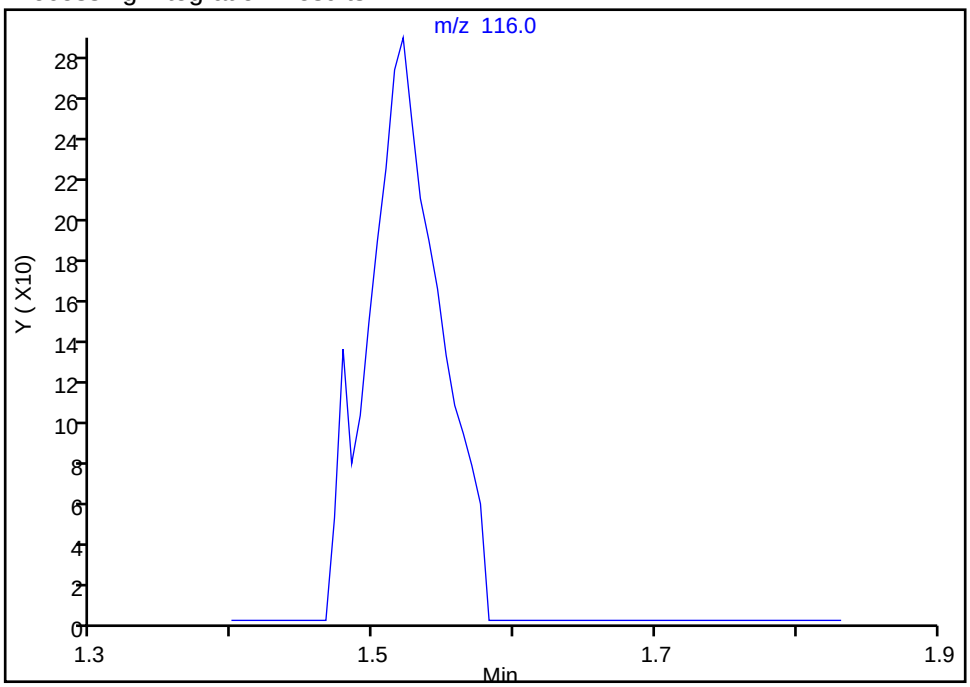
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D
Injection Date: 28-Mar-2018 19:22:30 Instrument ID: CVOAMS4
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

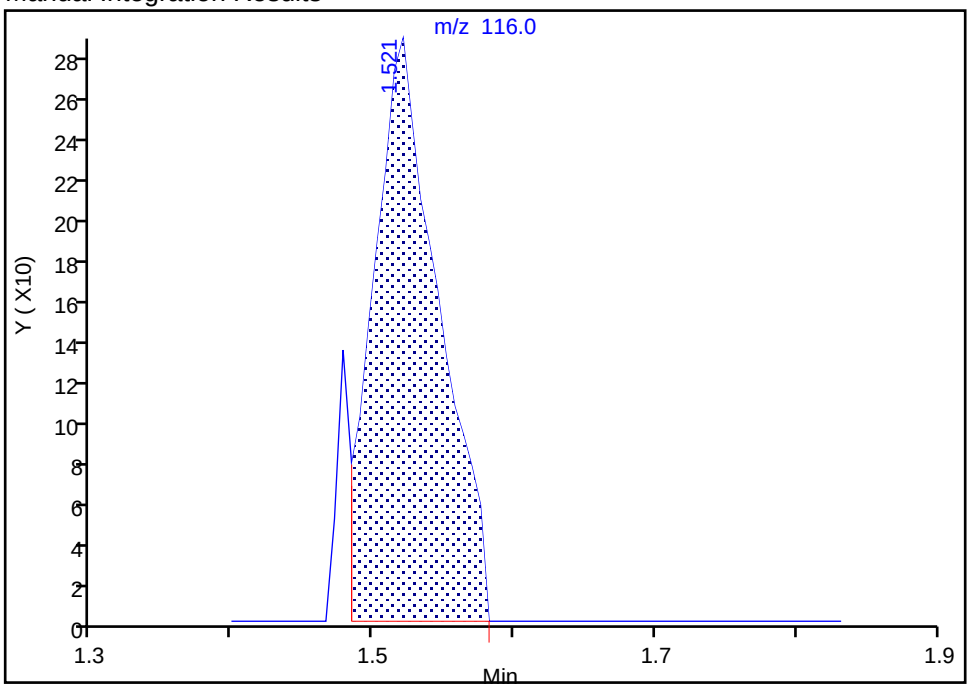
Not Detected
Expected RT: 1.53

Processing Integration Results



Manual Integration Results

RT: 1.52
Area: 946
Amount: 1.014022
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:55:12
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

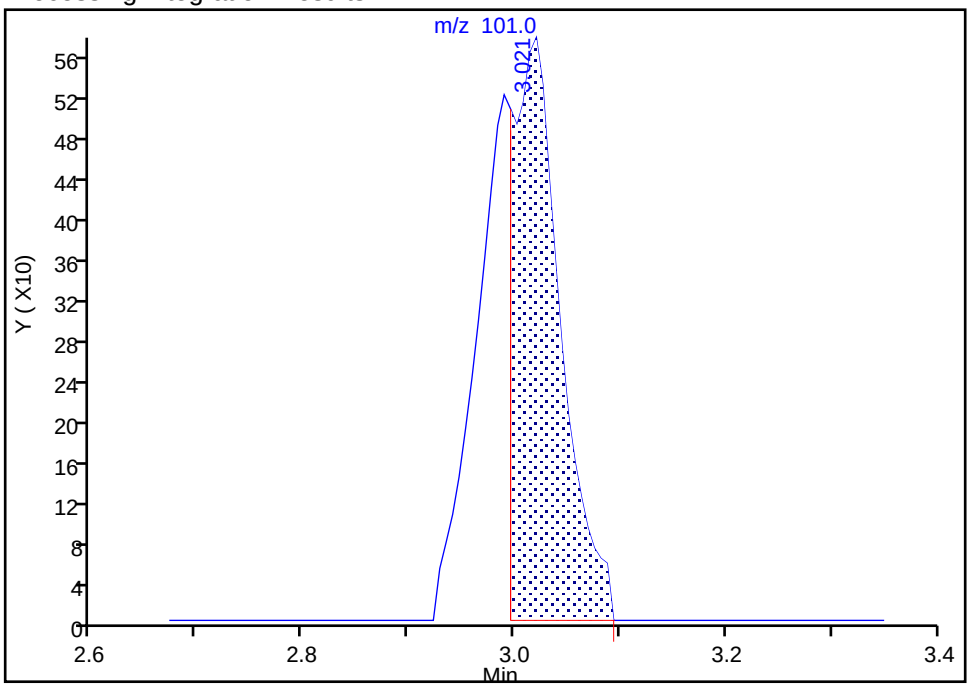
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D
Injection Date: 28-Mar-2018 19:22:30 Instrument ID: CVOAMS4
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

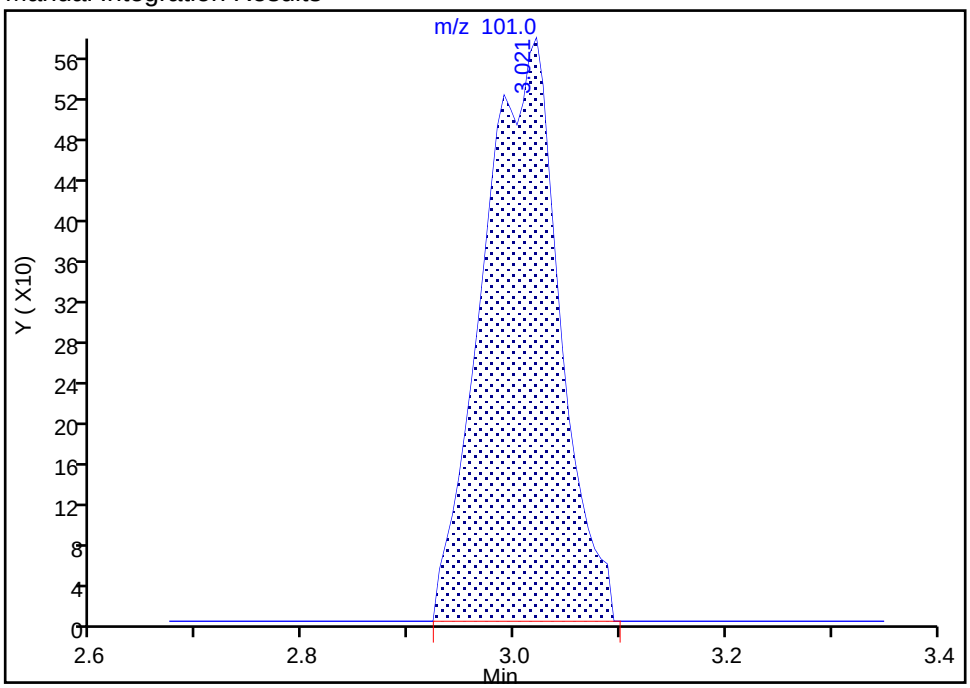
Processing Integration Results

RT: 3.02
Area: 1815
Amount: 0.448077
Amount Units: ug/l



Manual Integration Results

RT: 3.02
Area: 2867
Amount: 0.733774
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 15:55:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

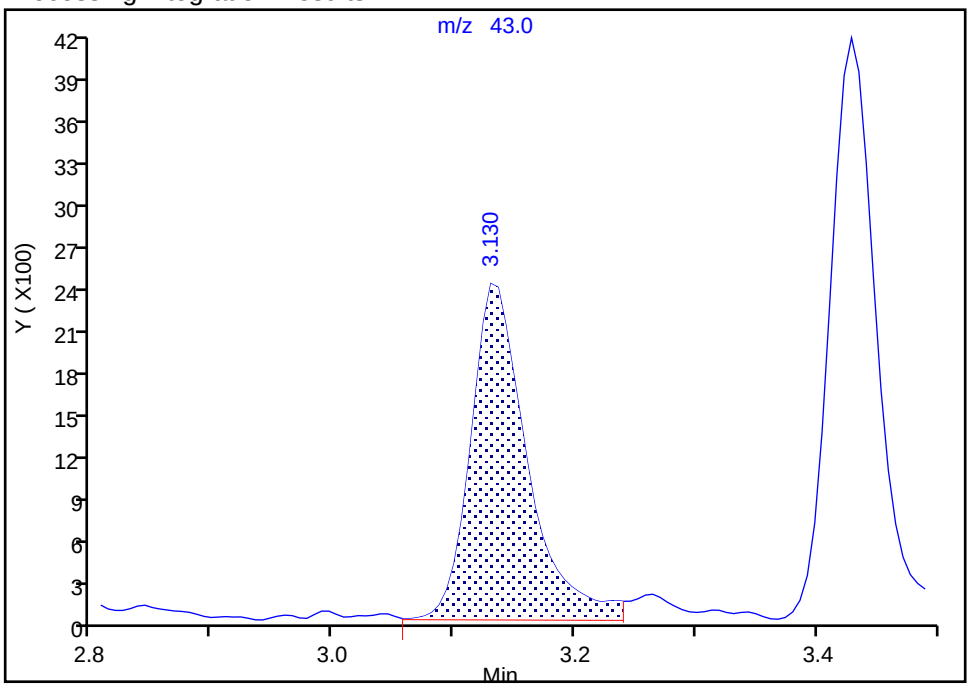
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D
Injection Date: 28-Mar-2018 19:22:30 Instrument ID: CVOAMS4
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

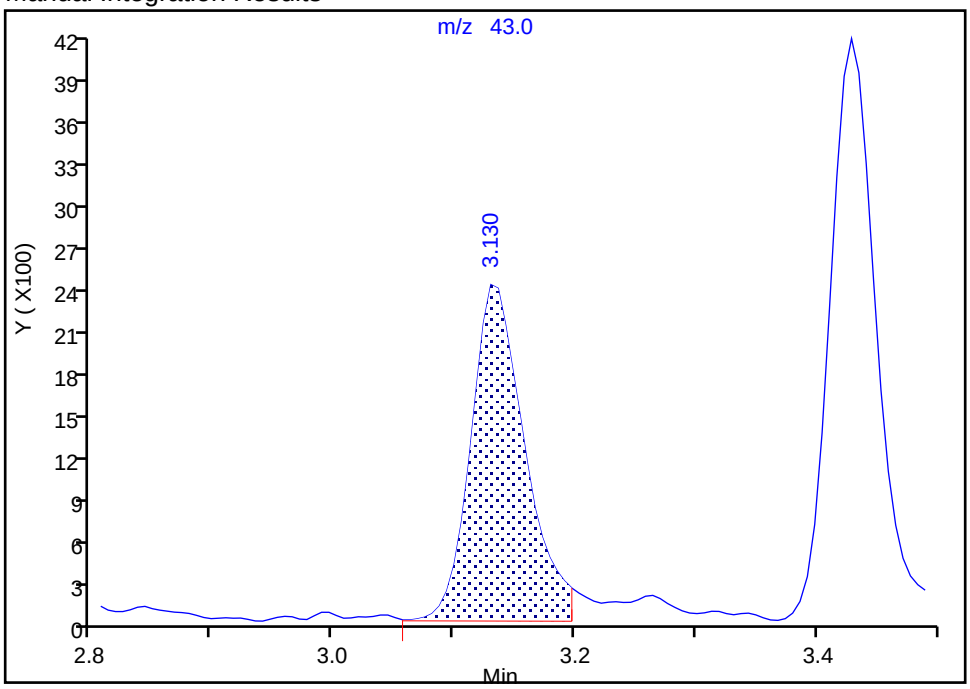
Processing Integration Results

RT: 3.13
Area: 7633
Amount: 7.620524
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 7252
Amount: 6.721774
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 16:24:54
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

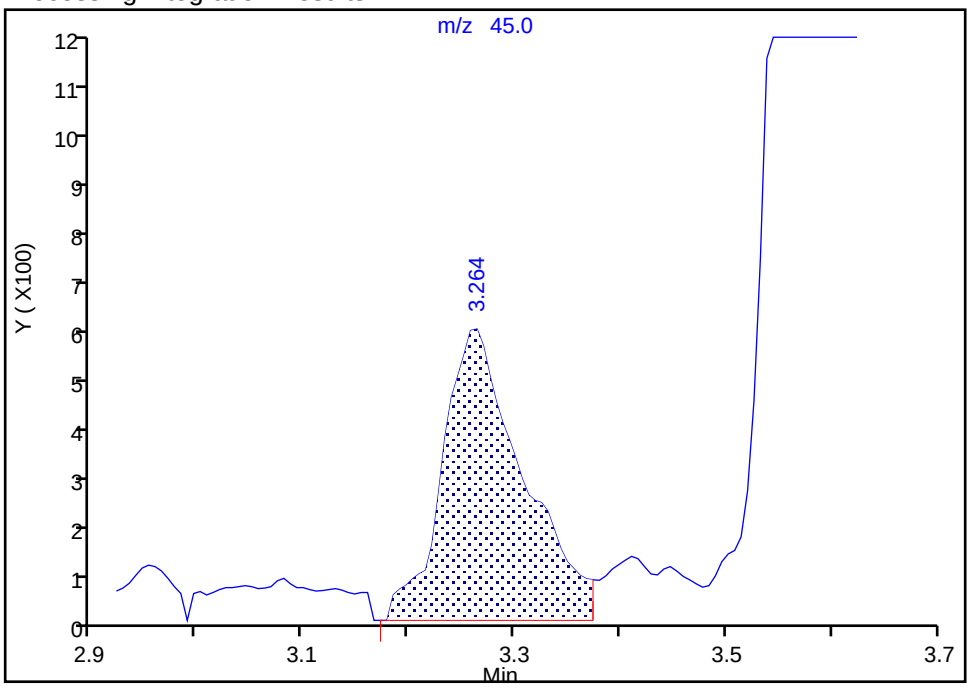
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D
Injection Date: 28-Mar-2018 19:22:30 Instrument ID: CVOAMS4
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

21 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

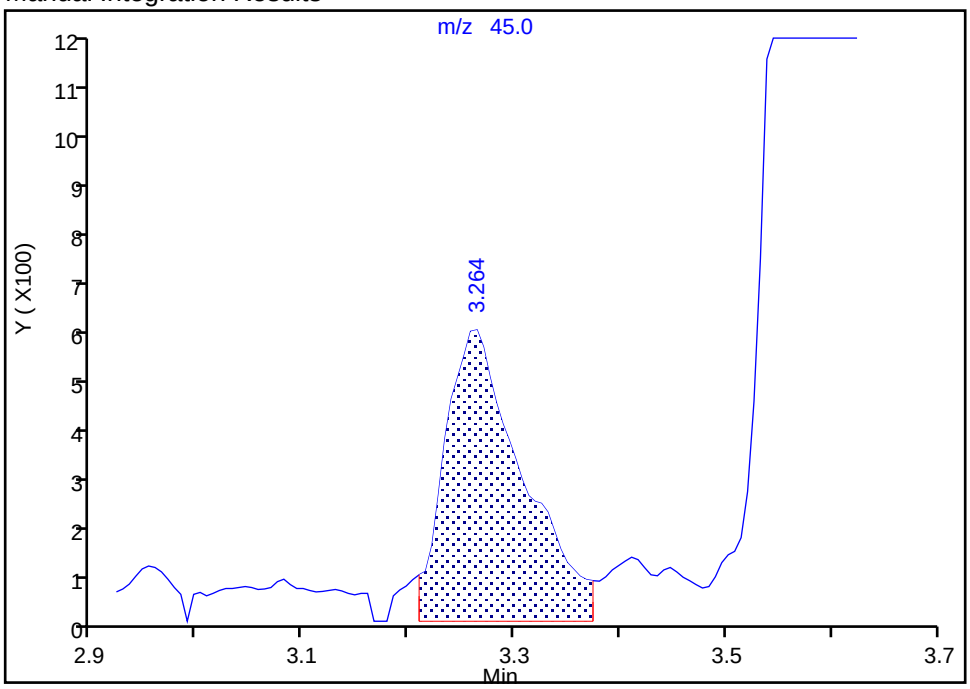
Processing Integration Results

RT: 3.26
Area: 3157
Amount: 13.420813
Amount Units: ug/l



Manual Integration Results

RT: 3.26
Area: 3057
Amount: 12.905087
Amount Units: ug/l



Reviewer: delpolitov, 31-Mar-2018 16:25:03
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-502604/2	K80594.D
Level 2	STD5 460-502604/3	K80595.D
Level 3	STD20 460-502604/4	K80596.D
Level 4	STD50 460-502604/5	K80597.D
Level 5	STD200 460-502604/6	K80598.D
Level 6	STD500 460-502604/7	K80599.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	0.0649 0.0693	0.0885	0.0904	0.0846	0.0739	Ave		0.0786				13.6		20.0			
Dichlorodifluoromethane	0.3202 0.5062	0.5672	0.6035	0.5666	0.5532	Lin2	-0.239	0.5704			0.1000				0.9940		0.9900
Chloromethane	0.3312 0.3849	0.4319	0.4493	0.4069	0.4058	Ave		0.4017			0.1000	10.3		20.0			
Vinyl chloride	0.3339 0.4005	0.4643	0.4799	0.4385	0.4317	Ave		0.4248			0.1000	12.3		20.0			
Butadiene	0.2216 0.3035	0.3057	0.3401	0.3228	0.3197	Ave		0.3022				13.8		20.0			
Bromomethane	0.3289 0.3338	0.3878	0.4029	0.3754	0.3524	Ave		0.3635			0.1000	8.2		20.0			
Chloroethane	0.1719 0.2052	0.2226	0.2414	0.2137	0.2151	Ave		0.2116			0.1000	10.9		20.0			
Dichlorofluoromethane	0.5564 0.6351	0.7336	0.7563	0.7139	0.6986	Ave		0.6823				10.9		20.0			
Trichlorofluoromethane	0.5015 0.6202	0.7584	0.7644	0.7352	0.6976	Ave		0.6795			0.1000	15.0		20.0			
Pentane	1.3292 1.4939	1.8299	2.0487	1.8743	1.6861	Ave		1.7103				15.4		20.0			
Ethanol	0.0398 0.0332	0.0355	0.0379	0.0329	0.0325	Ave		0.0353				8.5		20.0			
Ethyl ether	0.2290 0.1898	0.2320	0.2192	0.2134	0.2063	Ave		0.2150				7.2		20.0			
2-Methyl-1,3-butadiene	0.1549 0.2241	0.2330	0.2648	0.2559	0.2442	Lin2	-0.093	0.2492							0.9960		0.9900
1,2-Dichloro-1,1,2-trifluoroethane	0.2396 0.2989	0.3553	0.3728	0.3518	0.3235	Ave		0.3237				15.1		20.0			
Acrolein	1.2383 1.2138	1.2375	1.3269	1.2253	1.3054	Ave		1.2578				3.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2517 0.3825	0.4407	0.4633	0.4504	0.4112	Lin2	-0.176	0.4375			0.1000				0.9920		0.9900
1,1-Dichloroethene	0.2064 0.3045	0.3367	0.3664	0.3493	0.3260	Lin2	-0.131	0.3427			0.1000				0.9940		0.9900
Acetone	1.9018 1.2757	1.3347	1.1760	1.1062	1.2207	QuaF		1.1722	0.0000415		0.0500				1.0000		0.9900
Iodomethane	0.5839 0.6697	0.7517	0.8177	0.7583	0.7282	Ave		0.7182				11.3		20.0			
Isopropyl alcohol	0.7334 0.6325	0.4639	0.6642	0.6258	0.6540	Ave		0.6290				14.2		20.0			
Carbon disulfide	0.8143 1.0436	1.1385	1.2269	1.1731	1.1403	Ave		1.0895			0.1000	13.5		20.0			
Allyl chloride	0.1540 0.1690	0.1897	0.2039	0.1852	0.1829	Ave		0.1808				9.6		20.0			
Methyl acetate	0.1871 0.1644	0.1724	0.1782	0.1715	0.1741	Ave		0.1746			0.1000	4.3		20.0			
Cyclopentene	0.4111 0.6182	0.6718	0.7395	0.7240	0.6864	Lin2	-0.283	0.7020							0.9950		0.9900
Acetonitrile	1.2935 1.1242	0.9899	1.3742	1.2108	1.2539	Ave		1.2078				11.2		20.0			
Methylene Chloride	0.4392 0.3272	0.3979	0.3968	0.3697	0.3539	Ave		0.3808			0.1000	10.3		20.0			
2-Methyl-2-propanol	1.7868 1.2966	1.4729	1.3686	1.3063	1.3620	Ave		1.4322				12.9		20.0			
Methyl tert-butyl ether	0.9375 0.8650	0.9624	0.9697	0.9334	0.9198	Ave		0.9313			0.1000	4.0		20.0			
trans-1,2-Dichloroethene	0.2499 0.3065	0.3677	0.3830	0.3621	0.3459	Ave		0.3358			0.1000	14.8		20.0			
Acrylonitrile	0.0968 0.0863	0.0901	0.0957	0.0910	0.0907	Ave		0.0918				4.2		20.0			
Hexane	0.1795 0.2032	0.2226	0.2365	0.2323	0.2207	Ave		0.2158				9.8		20.0			
Isopropyl ether	0.7741 0.7604	0.8982	0.8871	0.8498	0.8206	Ave		0.8317				6.9		20.0			
1,1-Dichloroethane	0.4604 0.4830	0.5473	0.5965	0.5580	0.5325	Ave		0.5296			0.2000	9.5		20.0			
Vinyl acetate	1.8632 1.6722	1.8990	1.9168	1.8262	1.9293	Ave		1.8511				5.2		20.0			
2-Chloro-1,3-butadiene	0.1929 0.2553	0.2869	0.2991	0.2958	0.2805	Ave		0.2684				15.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	0.8424 0.8513	0.9321	0.9636	0.9256	0.9081	Ave		0.9038				5.3		20.0			
2,2-Dichloropropane	0.1815 0.1657	0.1781	0.1910	0.1818	0.1757	Ave		0.1790				4.6		20.0			
cis-1,2-Dichloroethene	0.3673 0.3576	0.4235	0.4261	0.4130	0.3939	Ave		0.3969			0.1000	7.3		20.0			
Ethyl acetate	0.3864 0.3483	0.4250	0.3955	0.3852	0.3816	Ave		0.3870				6.4		20.0			
2-Butanone (MEK)	0.5188 0.4207	0.4616	0.4416	0.4329	0.4332	Ave		0.4515			0.0500	7.9		20.0			
Methyl acrylate	0.2195 0.2295	0.2211	0.2141	0.2154	0.2312	Ave		0.2218				3.2		20.0			
Propionitrile	1.5547 1.3319	1.4513	1.4905	1.4782	1.4249	Ave		1.4552				5.1		20.0			
Tetrahydrofuran	0.6727 0.4602	0.5664	0.5471	0.5156	0.5132	Ave		0.5459				13.2		20.0			
Chlorobromomethane	0.1908 0.1897	0.2394	0.2222	0.2140	0.2114	Ave		0.2112				9.0		20.0			
Methacrylonitrile	0.1137 0.1042	0.1114	0.1090	0.1078	0.1094	Ave		0.1092				3.0		20.0			
Chloroform	0.5601 0.5705	0.6732	0.6899	0.6621	0.6312	Ave		0.6311			0.2000	8.6		20.0			
Cyclohexane	0.3281 0.4646	0.5190	0.5496	0.5314	0.4927	Lin2	-0.182	0.5197			0.1000				0.9940		0.9900
1,1,1-Trichloroethane	0.4951 0.5722	0.6122	0.6682	0.6389	0.6112	Ave		0.5996			0.1000	10.1		20.0			
Carbon tetrachloride	0.3716 0.5316	0.5687	0.5970	0.5854	0.5595	Ave		0.5356			0.1000	15.6		20.0			
1,1-Dichloropropene	0.3033 0.3957	0.4269	0.4517	0.4464	0.4306	Ave		0.4091				13.5		20.0			
Isobutyl alcohol	0.0250 0.0547	0.0488	0.0486	0.0489	0.0561	Lin2	-0.695	0.0530							0.9970		0.9900
Benzene	1.1669 1.3109	1.5048	1.5411	1.5293	1.5045	Ave		1.4263			0.5000	10.7		20.0			
Isopropyl acetate	0.9767 0.7945	0.8279	0.7929	0.8181	0.8338	Ave		0.8406				8.2		20.0			
Tert-amyl methyl ether	0.8765 0.9364	1.0192	1.0048	1.0148	1.0042	Ave		0.9760				5.9		20.0			
1,2-Dichloroethane	0.4833 0.4170	0.4716	0.4543	0.4474	0.4437	Ave		0.4529			0.1000	5.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Heptane	0.1118 0.2112	0.2263	0.2380	0.2395	0.2266	Lin2	-0.119	0.2341							0.9960		0.9900
n-Butanol	0.2740 0.3252	0.2474	0.2749	0.2877	0.3146	Ave		0.2873				10.0		20.0			
Trichloroethene	0.2765 0.3399	0.3732	0.3650	0.3699	0.3601	Ave		0.3474			0.2000	10.6		20.0			
Ethyl acrylate	0.1214 0.1718	0.1822	0.1953	0.1882	0.1801	Ave		0.1732				15.4		20.0			
Methylcyclohexane	0.3032 0.5636	0.6001	0.6437	0.6307	0.6047	Lin2	-0.311	0.6239			0.1000				0.9960		0.9900
1,2-Dichloropropane	0.2945 0.2682	0.2965	0.2869	0.2842	0.2815	Ave		0.2853			0.1000	3.6		20.0			
Methyl methacrylate	0.1971 0.2313	0.2172	0.2105	0.2141	0.2288	Ave		0.2165				5.8		20.0			
1,4-Dioxane	2.0475 1.8116	1.8867	1.5518	1.5562	1.8571	Ave		1.7852				11.0		20.0			
n-Propyl acetate	0.2839 0.3453	0.3168	0.3126	0.3193	0.3323	Ave		0.3184				6.5		20.0			
Dibromomethane	0.1998 0.2135	0.2274	0.2227	0.2180	0.2201	Ave		0.2169				4.4		20.0			
Dichlorobromomethane	0.3838 0.4513	0.4713	0.4528	0.4582	0.4672	Ave		0.4474			0.2000	7.2		20.0			
2-Chloroethyl vinyl ether	0.0959 0.1366	0.1354	0.1264	0.1266	0.1289	Ave		0.1250				11.9		20.0			
2-Nitropropane	0.0880 0.0842	0.0636	0.0653	0.0665	0.0800	Ave		0.0746				14.4		20.0			
Epichlorohydrin	0.3386 0.3282	0.3399	0.3559	0.3448	0.3456	Ave		0.3422				2.7		20.0			
cis-1,3-Dichloropropene	0.4699 0.5824	0.5982	0.5929	0.5906	0.6157	Ave		0.5750			0.2000	9.2		20.0			
4-Methyl-2-pentanone (MIBK)	2.9657 2.8790	3.0303	3.2592	3.1613	3.2274	Ave		3.0871			0.0500	4.9		20.0			
Toluene	1.4894 1.5974	1.7125	1.7700	1.7491	1.7561	Ave		1.6791			0.4000	6.7		20.0			
trans-1,3-Dichloropropene	0.4191 0.5247	0.5101	0.5107	0.5115	0.5397	Ave		0.5026			0.1000	8.5		20.0			
Ethyl methacrylate	0.3325 0.4085	0.3692	0.3707	0.3991	0.4282	Ave		0.3847				8.9		20.0			
1,1,2-Trichloroethane	0.2696 0.2691	0.2918	0.2808	0.2773	0.2884	Ave		0.2795			0.1000	3.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.3774 0.4720	0.5154	0.5291	0.5251	0.5192	Ave		0.4897			0.2000	12.0		20.0			
1,3-Dichloropropane	0.4071 0.4891	0.5436	0.5100	0.5126	0.5151	Ave		0.4962				9.5		20.0			
2-Hexanone	1.8405 2.0065	1.9566	2.1124	2.0539	2.0184	Ave		1.9981			0.0500	4.7		20.0			
n-Butyl acetate	0.4036 0.4112	0.3936	0.3828	0.3989	0.4198	Ave		0.4017				3.3		20.0			
Chlorodibromomethane	0.4149 0.4738	0.4629	0.4655	0.4861	0.4947	Ave		0.4663			0.1000	6.0		20.0			
Ethylene Dibromide	0.3190 0.3610	0.3878	0.3766	0.3710	0.3736	Ave		0.3649			0.1000	6.6		20.0			
Chlorobenzene	1.0232 1.0832	1.2234	1.1960	1.1703	1.1667	Ave		1.1438			0.5000	6.6		20.0			
Ethylbenzene	0.4602 0.5533	0.5930	0.6163	0.6059	0.6131	Ave		0.5736			0.1000	10.5		20.0			
1,1,1,2-Tetrachloroethane	0.4075 0.4914	0.4784	0.4782	0.5188	0.5404	Ave		0.4858				9.4		20.0			
m-Xylene & p-Xylene	0.5903 0.6831	0.7040	0.7505	0.7416	0.7438	Ave		0.7022			0.1000	8.7		20.0			
n-Butyl acrylate	0.2016 0.2451	0.2141	0.2248	0.2377	0.2501	Ave		0.2289				8.2		20.0			
o-Xylene	0.5794 0.7108	0.7201	0.7892	0.7724	0.7895	Ave		0.7269			0.3000	11.0		20.0			
Styrene	0.9105 1.1473	1.1567	1.2749	1.2532	1.2371	Ave		1.1633			0.3000	11.5		20.0			
Amyl acetate (mixed isomers)	0.7351 0.8434	0.7110	0.7666	0.7893	0.8756	Ave		0.7868				8.0		20.0			
Bromoform	0.3015 0.3374	0.3166	0.3119	0.3252	0.3424	Ave		0.3225			0.1000	4.8		20.0			
Isopropylbenzene	1.3303 2.0182	2.0425	2.2864	2.2793	2.2803	Lin2	-0.895	2.2300			0.1000				0.9970		0.9900
Bromobenzene	0.7920 0.9206	0.9666	0.9754	0.9499	0.9834	Ave		0.9313				7.7		20.0			
1,1,2,2-Tetrachloroethane	0.6944 0.7956	0.8004	0.7949	0.7997	0.8516	Ave		0.7894			0.3000	6.5		20.0			
N-Propylbenzene	2.7529 3.7825	3.8298	4.1607	4.0526	4.2243	Ave		3.8005				14.3		20.0			
1,2,3-Trichloropropane	0.2723 0.2438	0.2674	0.2521	0.2443	0.2604	Ave		0.2567				4.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.1799 0.1935	0.1936	0.1894	0.1809	0.1950	Ave		0.1887				3.6		20.0			
2-Chlorotoluene	2.2298 2.6408	2.7230	2.9105	2.7902	2.9141	Ave		2.7014				9.4		20.0			
4-Ethyltoluene	2.6359 3.2783	3.3548	3.7198	3.6128	3.6689	Ave		3.3784				12.0		20.0			
1,3,5-Trimethylbenzene	2.0772 3.1004	2.9472	3.2938	3.1924	3.4152	Ave		3.0044				16.0		20.0			
4-Chlorotoluene	1.7887 2.2756	2.3377	2.5098	2.3903	2.4275	Ave		2.2883				11.2		20.0			
Butyl Methacrylate	0.5578 0.8967	0.6907	0.8089	0.8665	0.9500	Ave		0.7951				18.4		20.0			
tert-Butylbenzene	1.3879 2.6555	2.3309	2.6968	2.6836	2.9063	Lin2	-1.372	2.7355							0.9980		0.9900
1,2,4-Trimethylbenzene	2.2020 3.1351	3.0982	3.3629	3.2830	3.4733	Ave		3.0924				14.8		20.0			
sec-Butylbenzene	2.5224 3.9951	3.6218	4.1726	4.2043	4.4030	Lin2	-1.697	4.1810							0.9980		0.9900
4-Isopropyltoluene	2.2384 3.5031	3.4624	3.7321	3.7146	3.8776	Lin2	-1.493	3.7390							0.9990		0.9900
1,3-Dichlorobenzene	1.5579 1.6734	1.9089	1.9430	1.8590	1.8385	Ave		1.7968			0.6000	8.3		20.0			
1,4-Dichlorobenzene	1.6076 1.6744	1.9416	1.9328	1.8377	1.8382	Ave		1.8054			0.5000	7.6		20.0			
Benzyl chloride	1.2834 1.5524	1.2995	1.3738	1.3852	1.5754	Ave		1.4116				8.8		20.0			
Indan	2.7461 3.1312	3.2473	3.5044	3.3906	3.5067	Ave		3.2544				8.9		20.0			
p-Diethylbenzene	1.4606 1.8498	1.8678	2.1719	2.0796	2.0390	Ave		1.9115				13.3		20.0			
n-Butylbenzene	1.0800 1.6211	1.6775	1.8522	1.7494	1.7707	Lin2	-0.674	1.7687							0.9970		0.9900
1,2-Dichlorobenzene	1.6035 1.7394	1.9418	1.9450	1.8740	1.9091	Ave		1.8355			0.4000	7.4		20.0			
1,2,4,5-Tetramethylbenzene	2.4023 3.5022	3.3316	3.7071	3.7148	3.8818	Ave		3.4233				15.6		20.0			
1,2-Dibromo-3-Chloropropane	0.1867 0.1789	0.1943	0.1709	0.1703	0.1832	Ave		0.1807			0.0500	5.2		20.0			
1,3,5-Trichlorobenzene	1.3252 1.4758	1.6247	1.7175	1.6797	1.6354	Ave		1.5764				9.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	1.3830 1.4395	1.5412	1.6645	1.6080	1.6004	Ave		1.5394			0.2000	7.0		20.0			
Hexachlorobutadiene	0.5025 0.7849	0.7220	0.8168	0.7905	0.7957	Lin2	-0.298	0.7989							0.9990		0.9900
Naphthalene	3.6135 3.5011	3.6356	3.8541	3.7702	3.8844	Ave		3.7098				4.1		20.0			
1,2,3-Trichlorobenzene	1.4004 1.4446	1.6558	1.6926	1.6398	1.6129	Ave		1.5743				7.7		20.0			
Dibromofluoromethane (Surr)	0.3434 0.3000	0.3628	0.3589	0.3535	0.3467	Ave		0.3442				6.6		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3194 0.3289	0.3483	0.3447	0.3476	0.3533	Ave		0.3404				3.9		20.0			
Toluene-d8 (Surr)	1.3445 1.3138	1.4808	1.5086	1.4848	1.5393	Ave		1.4453				6.4		20.0			
4-Bromofluorobenzene	0.4632 0.4460	0.5181	0.5133	0.5132	0.5001	Ave		0.4923				6.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-502604/2	K80594.D
Level 2	STD5 460-502604/3	K80595.D
Level 3	STD20 460-502604/4	K80596.D
Level 4	STD50 460-502604/5	K80597.D
Level 5	STD200 460-502604/6	K80598.D
Level 6	STD500 460-502604/7	K80599.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Ave	578 392978	3993	16259	40737	155201	1.00 500	5.00	20.0	50.0	200
Dichlorodifluoromethane	FB	Lin2	2852 2871470	25603	108599	272833	1161580	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	2950 2183458	19496	80854	195954	852187	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	2974 2271907	20956	86346	211156	906554	1.00 500	5.00	20.0	50.0	200
Butadiene	FB	Ave	1974 1721392	13798	61205	155459	671301	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	2930 1893379	17506	72490	180758	739968	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	1531 1163867	10048	43439	102879	451598	1.00 500	5.00	20.0	50.0	200
Dichlorofluoromethane	FB	Ave	4956 3602632	33112	136096	343747	1466947	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	4467 3517632	34232	137546	354022	1464737	1.00 500	5.00	20.0	50.0	200
Pentane	TBAd9	Ave	692 488293	4451	19074	47450	197297	2.00 1000	10.0	40.0	100	400
Ethanol	TBAd9	Ave	414 217233	1729	7054	16636	76094	40.0 20000	200	800	2000	8000
Ethyl ether	FB	Ave	2040 1076692	10471	39448	102770	433259	1.00 500	5.00	20.0	50.0	200
2-Methyl-1,3-butadiene	FB	Lin2	1380 1271265	10519	47653	123232	512675	1.00 500	5.00	20.0	50.0	200
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	2134 1695441	16039	67081	169385	679385	1.00 500	5.00	20.0	50.0	200
Acrolein	TBAd9	Ave	32233 238046	60201	92653	124078	190928	100 600	200	300	400	500
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Lin2	2242 2169690	19894	83373	216864	863417	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1-Dichloroethene	FB	Lin2	1839 1727151	15197	65939	168217	684486	1.00 500	5.00	20.0	50.0	200
Acetone	BUT	QuaF	6891 3115704	23466	79181	204318	1021466	5.00 2500	25.0	100	250	1000
Iodomethane	FB	Ave	5201 3798552	33931	147142	365145	1529031	1.00 500	5.00	20.0	50.0	200
Isopropyl alcohol	TBAd9	Ave	1909 1033713	5642	30920	79220	382624	10.0 5000	50.0	200	500	2000
Carbon disulfide	FB	Ave	7254 5919604	51390	220778	564853	2394372	1.00 500	5.00	20.0	50.0	200
Allyl chloride	FB	Ave	1372 958623	8562	36684	89164	384094	1.00 500	5.00	20.0	50.0	200
Methyl acetate	FB	Ave	8335 4662269	38910	160296	412989	1828266	5.00 2500	25.0	100	250	1000
Cyclopentene	FB	Lin2	3662 3506775	30324	133075	348613	1441341	1.00 500	5.00	20.0	50.0	200
Acetonitrile	TBAd9	Ave	3367 1837237	12039	63974	153270	733605	10.0 5000	50.0	200	500	2000
Methylene Chloride	FB	Ave	3912 1855692	17959	71405	177995	743200	1.00 500	5.00	20.0	50.0	200
2-Methyl-2-propanol	TBAd9	Ave	4651 2119104	17913	63710	165358	796833	10.0 5000	50.0	200	500	2000
Methyl tert-butyl ether	FB	Ave	8351 4906358	43443	174490	449438	1931423	1.00 500	5.00	20.0	50.0	200
trans-1,2-Dichloroethene	FB	Ave	2226 1738556	16596	68922	174350	726236	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	FB	Ave	8619 4895512	40691	172248	438194	1904598	10.0 5000	50.0	200	500	2000
Hexane	FB	Ave	1599 1152416	10048	42557	111874	463434	1.00 500	5.00	20.0	50.0	200
Isopropyl ether	FB	Ave	6896 4312862	40542	159630	409206	1723182	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	4101 2739512	24702	107334	268689	1118165	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	TBAd9	Ave	970 546596	4619	17846	46234	225747	2.00 1000	10.0	40.0	100	400
2-Chloro-1,3-butadiene	FB	Ave	1718 1448167	12951	53814	142422	589072	1.00 500	5.00	20.0	50.0	200
Tert-butyl ethyl ether	FB	Ave	7504 4828434	42073	173401	445697	1906789	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	1617 940141	8038	34363	87520	368909	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	3272 2028523	19117	76673	198888	827114	1.00 500	5.00	20.0	50.0	200
Ethyl acetate	BUT	Ave	560 340294	2989	10651	28460	127712	2.00 1000	10.0	40.0	100	400
2-Butanone (MEK)	BUT	Ave	1880 1027550	8115	29733	79956	362481	5.00 2500	25.0	100	250	1000
Methyl acrylate	FB	Ave	1955 1301761	9981	38519	103731	485384	1.00 500	5.00	20.0	50.0	200
Propionitrile	TBAd9	Ave	4047 2176747	17650	69386	187110	833626	10.0 5000	50.0	200	500	2000
Tetrahydrofuran	BUT	Ave	975 449595	3983	14733	38092	171775	2.00 1000	10.0	40.0	100	400
Chlorobromomethane	FB	Ave	1700 1075722	10805	39991	103055	443809	1.00 500	5.00	20.0	50.0	200
Methacrylonitrile	FB	Ave	10128 5909398	50269	196077	518955	2298075	10.0 5000	50.0	200	500	2000
Chloroform	FB	Ave	4989 3236109	30386	124140	318793	1325310	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Lin2	2923 2635117	23426	98900	255876	1034559	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	4410 3245807	27635	120237	307642	1283350	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	3310 3015059	25672	107425	281861	1174933	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	2702 2244467	19271	81275	214948	904226	1.00 500	5.00	20.0	50.0	200
Isobutyl alcohol	TBAd9	Lin2	163 223541	1485	5661	15472	82018	25.0 12500	125	500	1250	5000
Benzene	CBNZd5	Ave	8398 6351108	56330	229582	605358	2558276	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	8700 4506502	37372	142670	393923	1750767	1.00 500	5.00	20.0	50.0	200
Tert-amyl methyl ether	FB	Ave	7808 5311417	46005	180808	488671	2108677	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	4305 2365300	21289	81751	215433	931767	1.00 500	5.00	20.0	50.0	200
n-Heptane	FB	Lin2	996 1197948	10216	42824	115331	475823	1.00 500	5.00	20.0	50.0	200
n-Butanol	TBAd9	Ave	1783 1328834	7523	31991	91046	460164	25.0 12500	125	500	1250	5000
Trichloroethene	FB	Ave	2463 1928079	16844	65670	178136	756101	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethyl acrylate	FB	Ave	1081 974357	8224	35150	90607	378097	1.00 500	5.00	20.0	50.0	200
Methylcyclohexane	FB	Lin2	2701 3196547	27087	115827	303675	1269702	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	2623 1521037	13382	51628	136852	591075	1.00 500	5.00	20.0	50.0	200
Methyl methacrylate	FB	Ave	3511 2624401	19610	75766	206153	960713	2.00 1000	10.0	40.0	100	400
1,4-Dioxane	DXE	Ave	900 365317	4115	14385	35403	142559	20.0 10000	100	400	1000	4000
n-Propyl acetate	FB	Ave	2529 1958688	14300	56241	153758	697711	1.00 500	5.00	20.0	50.0	200
Dibromomethane	FB	Ave	1780 1210960	10263	40080	104980	462061	1.00 500	5.00	20.0	50.0	200
Dichlorobromomethane	FB	Ave	3419 2560049	21274	81469	220647	981074	1.00 500	5.00	20.0	50.0	200
2-Chloroethyl vinyl ether	FB	Ave	854 774683	6112	22752	60944	270671	1.00 500	5.00	20.0	50.0	200
2-Nitropropane	FB	Ave	1568 955530	5745	23506	64073	336123	2.00 1000	10.0	40.0	100	400
Epichlorohydrin	BUT	Ave	4908 3206132	23901	95836	254742	1156777	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	CBNZ d5	Ave	3382 2821717	22392	88324	233789	1046976	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone (MIBK)	BUT	Ave	10746 7031663	53277	219435	583887	2700608	5.00 2500	25.0	100	250	1000
Toluene	CBNZ d5	Ave	10719 7739026	64104	263681	692346	2986011	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBNZ d5	Ave	3016 2542225	19094	76085	202488	917671	1.00 500	5.00	20.0	50.0	200
Ethyl methacrylate	CBNZ d5	Ave	2393 1979175	13821	55231	157982	728161	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBNZ d5	Ave	1940 1303679	10924	41825	109778	490404	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBNZ d5	Ave	2716 2286591	19294	78818	207858	882846	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBNZ d5	Ave	2930 2369577	20348	75969	202902	875842	1.00 500	5.00	20.0	50.0	200
2-Hexanone	BUT	Ave	6669 4900692	34400	142225	379360	1688994	5.00 2500	25.0	100	250	1000
n-Butyl acetate	CBNZ d5	Ave	2905 1991929	14733	57026	157903	713914	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorodibromomethane	CBNZ d5	Ave	2986 2295430	17327	69349	192425	841222	1.00 500	5.00	20.0	50.0	200
Ethylene Dibromide	CBNZ d5	Ave	2296 1749017	14518	56106	146873	635317	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBNZ d5	Ave	7364 5247613	45795	178175	463234	1983820	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBNZ d5	Ave	3312 2680683	22197	91806	239854	1042565	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2933 2380747	17909	71244	205352	918823	1.00 500	5.00	20.0	50.0	200
m-Xylene & p-Xylene	CBNZ d5	Ave	4248 3309337	26355	111809	293540	1264692	1.00 500	5.00	20.0	50.0	200
n-Butyl acrylate	CBNZ d5	Ave	1451 1187367	8014	33492	94103	425296	1.00 500	5.00	20.0	50.0	200
o-Xylene	CBNZ d5	Ave	4170 3443745	26955	117566	305753	1342558	1.00 500	5.00	20.0	50.0	200
Styrene	CBNZ d5	Ave	6553 5558586	43298	189929	496052	2103544	1.00 500	5.00	20.0	50.0	200
Amyl acetate (mixed isomers)	DCBd 4	Ave	3256 2318556	16076	68328	187312	842762	1.00 500	5.00	20.0	50.0	200
Bromoform	CBNZ d5	Ave	2170 1634815	11850	46470	128718	582147	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBNZ d5	Lin2	9574 9777467	76457	340602	902218	3877510	1.00 500	5.00	20.0	50.0	200
Bromobenzene	DCBd 4	Ave	3508 2530724	21853	86939	225443	946574	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	3076 2187081	18096	70850	189802	819672	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCBd 4	Ave	12194 10398463	86588	370853	961788	4065987	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichloropropane	DCBd 4	Ave	1206 670256	6045	22471	57985	250623	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	797 531920	4377	16883	42929	187717	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCBd 4	Ave	9877 7259794	61565	259421	662183	2804849	1.00 500	5.00	20.0	50.0	200
4-Ethyltoluene	DCBd 4	Ave	11676 9012342	75849	331555	857417	3531350	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCBd 4	Ave	9201 8523199	66633	293587	757640	3287193	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCBd 4	Ave	7923 6255694	52852	223708	567290	2336497	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Butyl Methacrylate	DCBd 4	Ave	2471 2465039	15617	72100	205646	914381	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCBd 4	Lin2	6148 7300161	52698	240377	636901	2797349	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCBd 4	Ave	9754 8618699	70048	299744	779144	3343124	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCBd 4	Lin2	11173 10982894	81885	371920	997797	4237978	1.00 500	5.00	20.0	50.0	200
4-Isopropyltoluene	DCBd 4	Lin2	9915 9630278	78280	332656	881569	3732274	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCBd 4	Ave	6901 4600197	43157	173187	441193	1769581	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCBd 4	Ave	7121 4603018	43898	172276	436149	1769242	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCBd 4	Ave	5685 4267722	29380	122455	328748	1516345	1.00 500	5.00	20.0	50.0	200
Indan	DCBd 4	Ave	12164 8607916	73418	312354	804695	3375231	1.00 500	5.00	20.0	50.0	200
p-Diethylbenzene	DCBd 4	Ave	6470 5085226	42229	193587	493550	1962558	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCBd 4	Lin2	4784 4456415	37926	165094	415172	1704285	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCBd 4	Ave	7103 4781666	43901	173366	444763	1837491	1.00 500	5.00	20.0	50.0	200
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	10641 9627690	75323	330422	881620	3736258	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	827 491787	4394	15235	40408	176306	1.00 500	5.00	20.0	50.0	200
1,3,5-Trichlorobenzene	DCBd 4	Ave	5870 4057039	36733	153087	398644	1574098	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	6126 3957268	34845	148361	381619	1540363	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCBd 4	Lin2	2226 2157746	16324	72800	187618	765840	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCBd 4	Ave	16006 9624845	82197	343525	894766	3738759	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichlorobenzene	DCBd 4	Ave	6203 3971300	37436	150867	389162	1552398	1.00 500	5.00	20.0	50.0	200
Dibromofluoromethane (Surr)	FB	Ave	152927 170155	163778	161458	170236	181995	50.0 50.0	50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	142281 186531	157223	155045	167397	185476	50.0 50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 502604

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/09/2018 22:30 Calibration End Date: 03/10/2018 00:31 Calibration ID: 66902

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene-d8 (Surr)	CBNZ d5	Ave	483814 636508	554324	561834	587757	654361	50.0 50.0	50.0	50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	166663 216082	193943	191153	203133	212588	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 09-Mar-2018 22:30:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0068588-002
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Mar-2018 17:11:23 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: tupayachia Date: 10-Mar-2018 03:58:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.632	1.596	0.036	1	578	1.00	0.8257	a
2 Dichlorodifluoromethane	85	1.632	1.638	-0.006	68	2852	1.00	0.9807	a
3 Chloromethane	50	1.803	1.803	0.000	69	2950	1.00	0.8244	a
5 Butadiene	54	1.907	1.913	-0.006	91	1974	1.00	0.7332	
4 Vinyl chloride	62	1.907	1.913	-0.006	58	2974	1.00	0.7859	a
6 Bromomethane	94	2.205	2.212	-0.007	75	2930	1.00	0.9048	
7 Chloroethane	64	2.279	2.279	0.000	62	1531	1.00	0.8121	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	94	4956	1.00	0.8154	
8 Trichlorofluoromethane	101	2.468	2.486	-0.018	76	4467	1.00	0.7380	
10 Pentane	72	2.498	2.498	0.000	97	692	2.00	1.55	
12 Ethanol	46	2.693	2.687	0.006	86	414	40.0	45.1	M
11 Ethyl ether	59	2.699	2.699	0.000	78	2040	1.00	1.07	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	90	1380	1.00	0.99	M
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.760	-0.006	71	2134	1.00	0.7402	
15 Acrolein	56	2.882	2.882	0.000	97	32233	100.0	98.4	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.894	-0.006	31	2242	1.00	0.9782	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	96	1839	1.00	0.9838	
18 Acetone	43	3.004	3.004	0.000	85	6891	5.00	8.11	M
19 Iodomethane	142	3.077	3.083	-0.006	92	5201	1.00	0.8129	
22 Isopropyl alcohol	45	3.120	3.083	0.037	24	1909	10.0	11.7	M
20 Carbon disulfide	76	3.114	3.120	-0.006	98	7254	1.00	0.7475	
21 3-Chloro-1-propene	76	3.236	3.242	-0.006	74	1372	1.00	0.8520	
23 Methyl acetate	43	3.254	3.248	0.006	98	8335	5.00	5.36	
24 Cyclopentene	67	3.260	3.266	-0.006	51	3662	1.00	0.9884	
29 Acetonitrile	41	3.327	3.315	0.012	40	3367	10.0	10.7	a
* 25 TBA-d9 (IS)	65	3.358	3.358	0.000	0	260305	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	82	3912	1.00	1.15	
27 2-Methyl-2-propanol	59	3.443	3.431	0.012	34	4651	10.0	12.5	M
28 Methyl tert-butyl ether	73	3.534	3.534	0.000	95	8351	1.00	1.01	
30 trans-1,2-Dichloroethene	96	3.565	3.571	-0.006	93	2226	1.00	0.7441	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	97	8619	10.0	10.5	
32 Hexane	43	3.723	3.717	0.006	73	1599	1.00	0.8318	
33 Isopropyl ether	45	3.925	3.931	-0.006	87	6896	1.00	0.9308	
35 Vinyl acetate	86	3.992	3.973	0.019	98	970	2.00	2.01	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	82	4101	1.00	0.8693	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	89	1718	1.00	0.7185	
37 Tert-butyl ethyl ether	59	4.260	4.254	0.006	92	7504	1.00	0.9320	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	181170	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.485	0.001	48	1617	1.00	1.01	Ma
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	87	3272	1.00	0.9254	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	92	1880	5.00	5.75	
41 Ethyl acetate	70	4.510	4.510	0.000	85	560	2.00	2.00	
44 Methyl acrylate	55	4.559	4.571	-0.012	71	1955	1.00	0.9895	a
43 Propionitrile	54	4.656	4.650	0.006	98	4047	10.0	10.7	
46 Chlorobromomethane	128	4.748	4.735	0.013	75	1700	1.00	0.9034	
45 Tetrahydrofuran	72	4.748	4.735	0.013	26	975	2.00	2.46	a
47 Methacrylonitrile	67	4.748	4.754	-0.006	90	10128	10.0	10.4	
48 Chloroform	83	4.790	4.784	0.006	98	4989	1.00	0.8874	
49 Cyclohexane	84	4.924	4.937	-0.013	31	2923	1.00	0.9824	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	152927	50.0	49.9	
50 1,1,1-Trichloroethane	97	4.937	4.943	-0.006	36	4410	1.00	0.8256	
52 Carbon tetrachloride	117	5.059	5.065	-0.006	93	3310	1.00	0.6937	
53 1,1-Dichloropropene	75	5.083	5.089	-0.006	92	2702	1.00	0.7414	
56 Isobutyl alcohol	74	5.174	5.193	-0.019	20	163	25.0	25.0	M
54 Benzene	78	5.290	5.290	0.000	44	8398	1.00	0.8181	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.302	0.007	0	142281	50.0	46.9	
57 Isopropyl acetate	43	5.333	5.327	0.006	50	8700	1.00	1.16	a
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	97	7808	1.00	0.8981	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	4305	1.00	1.07	
60 n-Heptane	57	5.430	5.430	0.000	59	996	1.00	0.9840	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	445394	50.0	50.0	
62 n-Butanol	56	5.882	5.863	0.019	33	1783	25.0	23.8	a
63 Trichloroethene	95	5.936	5.943	-0.006	92	2463	1.00	0.7958	
64 Ethyl acrylate	56	6.077	6.064	0.013	34	1081	1.00	0.7009	Ma
65 Methylcyclohexane	83	6.089	6.071	0.018	36	2701	1.00	0.9848	
66 1,2-Dichloropropane	63	6.229	6.235	-0.006	72	2623	1.00	1.03	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	21978	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.290	0.006	83	3511	2.00	1.82	
70 n-Propyl acetate	43	6.345	6.345	0.000	85	2529	1.00	0.8918	
69 1,4-Dioxane	88	6.345	6.345	0.000	8	900	20.0	22.9	a
71 Dibromomethane	93	6.375	6.369	0.006	87	1780	1.00	0.9212	
72 Dichlorobromomethane	83	6.510	6.516	-0.006	92	3419	1.00	0.8578	
74 2-Nitropropane	41	6.839	6.845	-0.006	87	1568	2.00	2.36	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	60	854	1.00	0.7672	
75 Epichlorohydrin	57	6.961	6.955	0.007	98	4908	20.0	19.8	
76 cis-1,3-Dichloropropene	75	7.016	7.015	0.001	89	3382	1.00	0.8173	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	95	10746	5.00	4.80	
$ 78 Toluene-d8 (Surr)	98	7.265	7.265	0.000	97	483814	50.0	46.5	
79 Toluene	91	7.351	7.345	0.006	91	10719	1.00	0.8870	
80 trans-1,3-Dichloropropene	75	7.698	7.692	0.006	92	3016	1.00	0.8337	
81 Ethyl methacrylate	69	7.711	7.704	0.006	55	2393	1.00	0.8643	
82 1,1,2-Trichloroethane	83	7.906	7.912	-0.006	92	1940	1.00	0.9645	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.960	7.966	-0.006	92	2716	1.00	0.7707	
84 1,3-Dichloropropane	76	8.119	8.125	-0.006	90	2930	1.00	0.8204	
85 2-Hexanone	43	8.174	8.174	0.000	96	6669	5.00	4.61	
86 n-Butyl acetate	43	8.290	8.284	0.006	96	2905	1.00	1.00	
87 Chlorodibromomethane	129	8.363	8.369	-0.006	96	2986	1.00	0.8897	
88 Ethylene Dibromide	107	8.527	8.527	0.000	98	2296	1.00	0.8744	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	84	359846	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	95	7364	1.00	0.8946	
92 Ethylbenzene	106	9.204	9.198	0.006	97	3312	1.00	0.8022	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	86	2933	1.00	0.8389	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	4248	1.00	0.8406	
94 n-Butyl acrylate	73	9.783	9.777	0.006	97	1451	1.00	0.8808	
95 o-Xylene	106	9.814	9.814	0.000	93	4170	1.00	0.7971	
96 Styrene	104	9.850	9.844	0.006	93	6553	1.00	0.7827	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	95	3256	1.00	0.9342	
98 Bromoform	173	10.088	10.082	0.006	95	2170	1.00	0.9349	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	9574	1.00	1.00	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	97	166663	50.0	47.0	
101 Bromobenzene	156	10.564	10.564	0.000	88	3508	1.00	0.8504	
102 1,1,2,2-Tetrachloroethane	83	10.588	10.600	-0.012	96	3076	1.00	0.8796	
103 N-Propylbenzene	91	10.625	10.625	0.001	99	12194	1.00	0.7244	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	93	1206	1.00	1.06	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	65	797	1.00	0.9534	
106 2-Chlorotoluene	91	10.740	10.740	0.000	91	9877	1.00	0.8254	
107 4-Ethyltoluene	105	10.740	10.740	0.000	88	11676	1.00	0.7802	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	90	9201	1.00	0.6914	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	7923	1.00	0.7817	
110 Butyl Methacrylate	87	10.893	10.899	-0.006	92	2471	1.00	0.7016	
111 tert-Butylbenzene	119	11.100	11.100	0.000	94	6148	1.00	1.01	
112 1,2,4-Trimethylbenzene	105	11.161	11.167	-0.006	96	9754	1.00	0.7121	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	11173	1.00	1.01	
114 4-Isopropyltoluene	119	11.435	11.435	0.000	97	9915	1.00	1.00	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	96	6901	1.00	0.8671	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	221478	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.533	11.539	-0.006	91	7121	1.00	0.8905	
118 Benzyl chloride	91	11.667	11.667	0.000	97	5685	1.00	0.9092	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	91	12164	1.00	0.8438	
120 p-Diethylbenzene	119	11.771	11.777	-0.006	94	6470	1.00	0.7642	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	4784	1.00	0.99	
122 1,2-Dichlorobenzene	146	11.868	11.862	0.006	98	7103	1.00	0.8736	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	95	10641	1.00	0.7017	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	89	827	1.00	1.03	
125 1,3,5-Trichlorobenzene	180	12.649	12.642	0.007	96	5870	1.00	0.8406	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	92	6126	1.00	0.8984	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	91	2226	1.00	1.00	
128 Naphthalene	128	13.331	13.331	0.000	100	16006	1.00	0.9740	
129 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	93	6203	1.00	0.8895	
S 130 1,2-Dichloroethene, Total	100				0		2.00	1.67	
S 131 Xylenes, Total	100				0		2.00	1.64	
S 132 Total BTEX	1				0		5.00	4.15	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00250	Amount Added:	1.00	Units: uL	
8260MIX1COMB_00074	Amount Added:	1.00	Units: uL	
ACROLEIN W_00074	Amount Added:	10.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Mar-2018 17:11:25 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D

Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9 Operator ID:

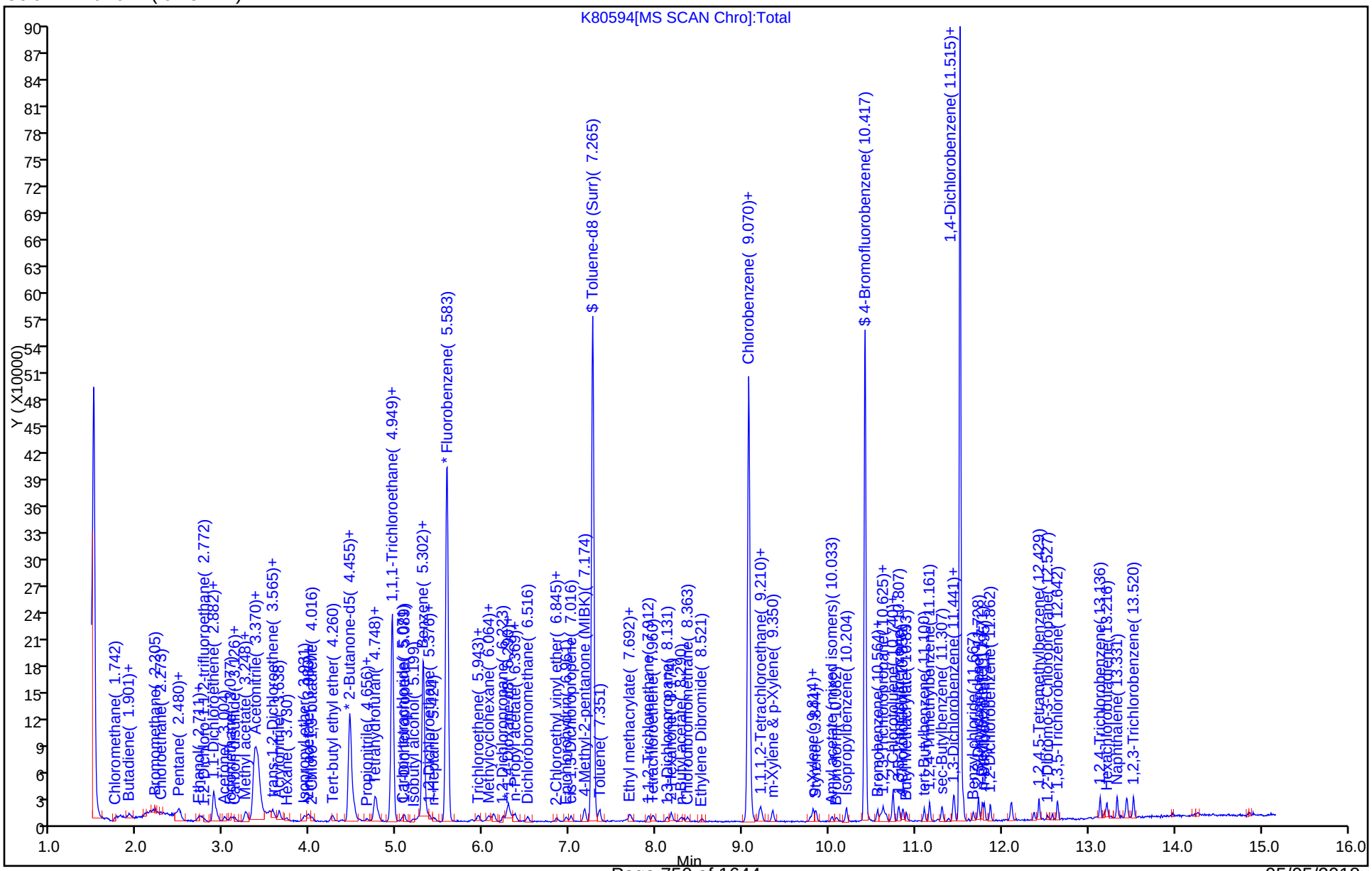
Lims ID: STD1 Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

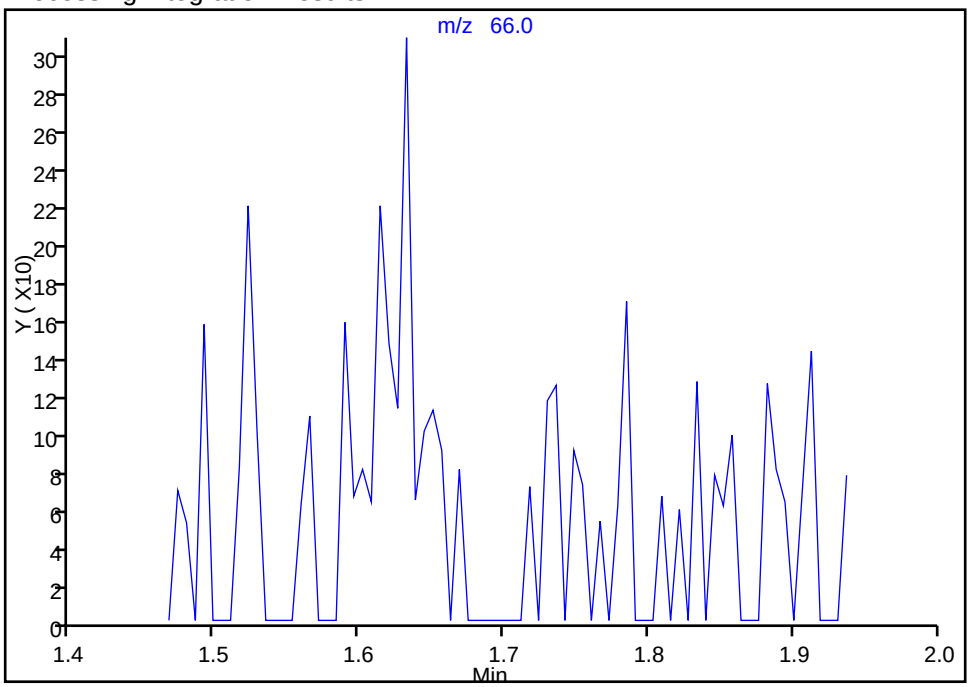
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D				
Injection Date:	09-Mar-2018 22:30:30	Instrument ID:	CVOAMS9		
Lims ID:	STD1				
Client ID:					
Operator ID:		ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

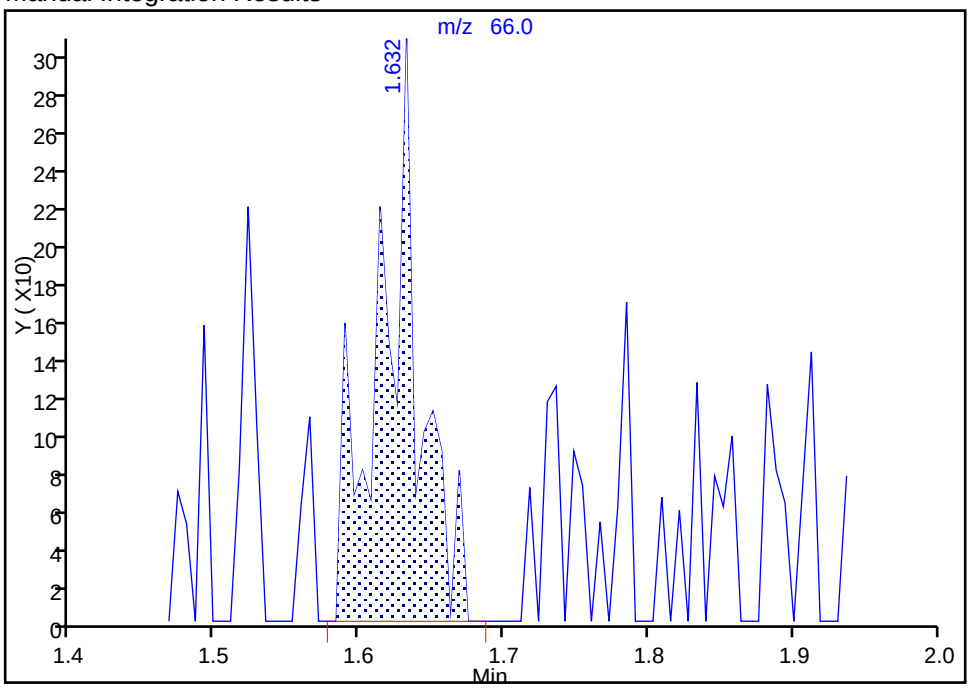
Processing Integration Results

Not Detected
Expected RT: 1.60



Manual Integration Results

RT: 1.63
Area: 578
Amount: 0.825701
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:24:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

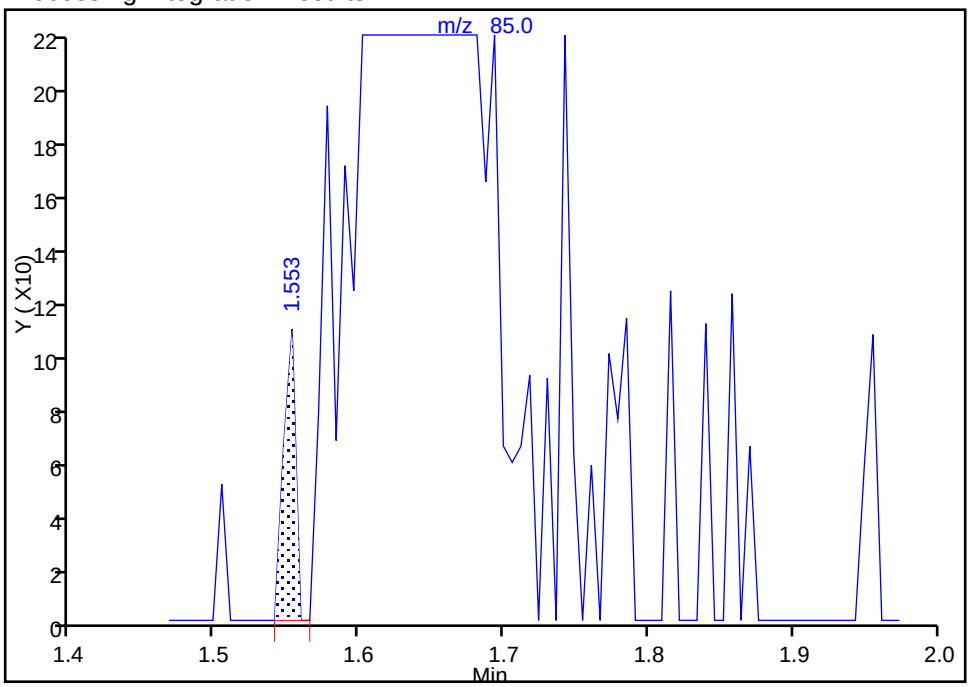
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

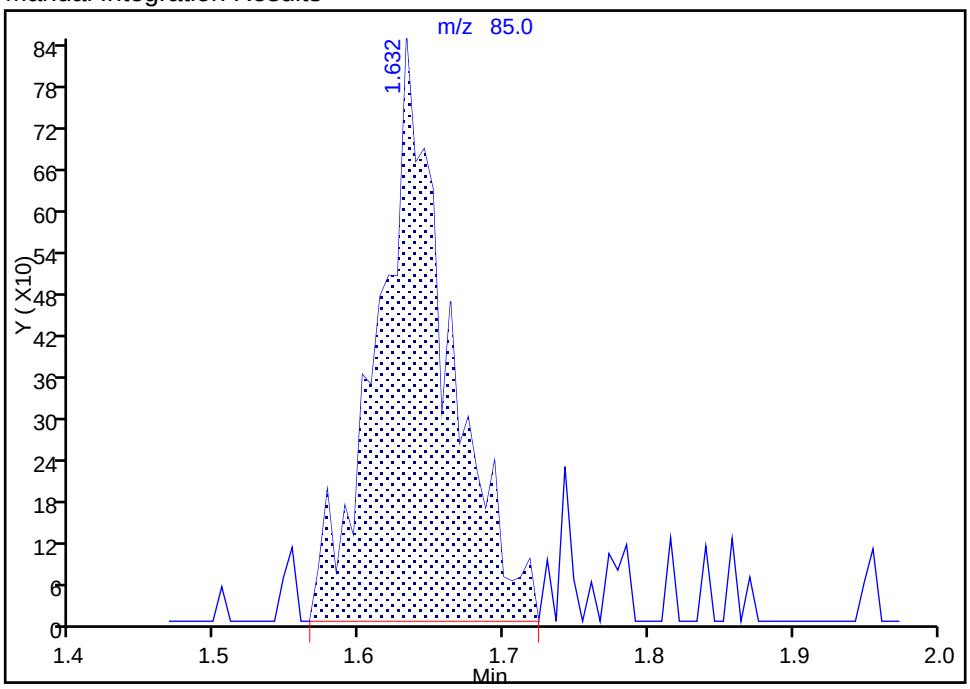
Processing Integration Results

RT: 1.55
Area: 62
Amount: 0.011927
Amount Units: ug/l



Manual Integration Results

RT: 1.63
Area: 2852
Amount: 0.980722
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:24:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

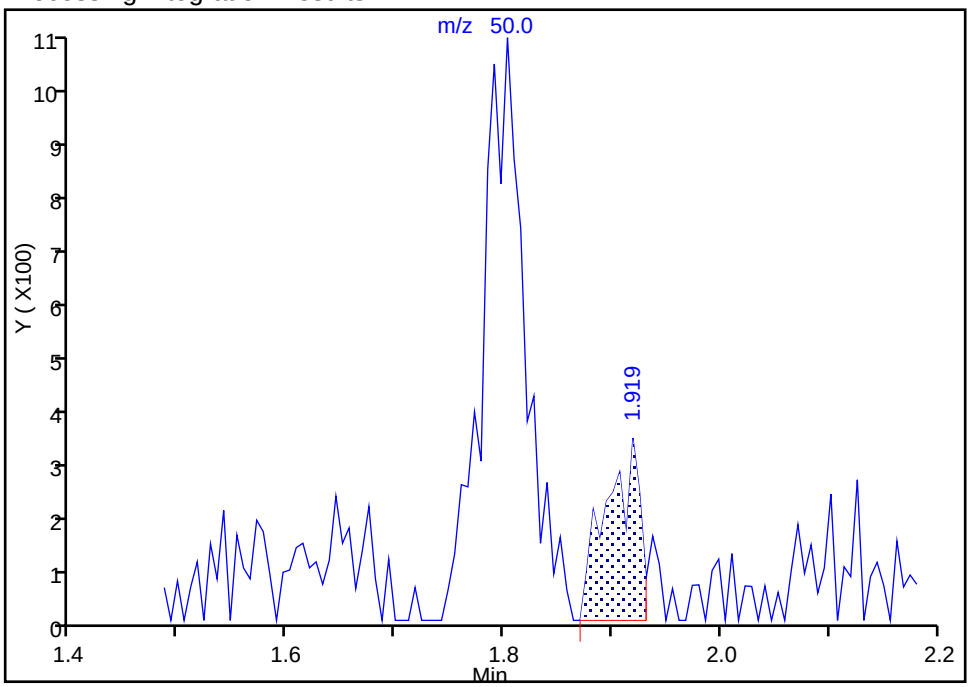
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Chloromethane, CAS: 74-87-3

Signal: 1

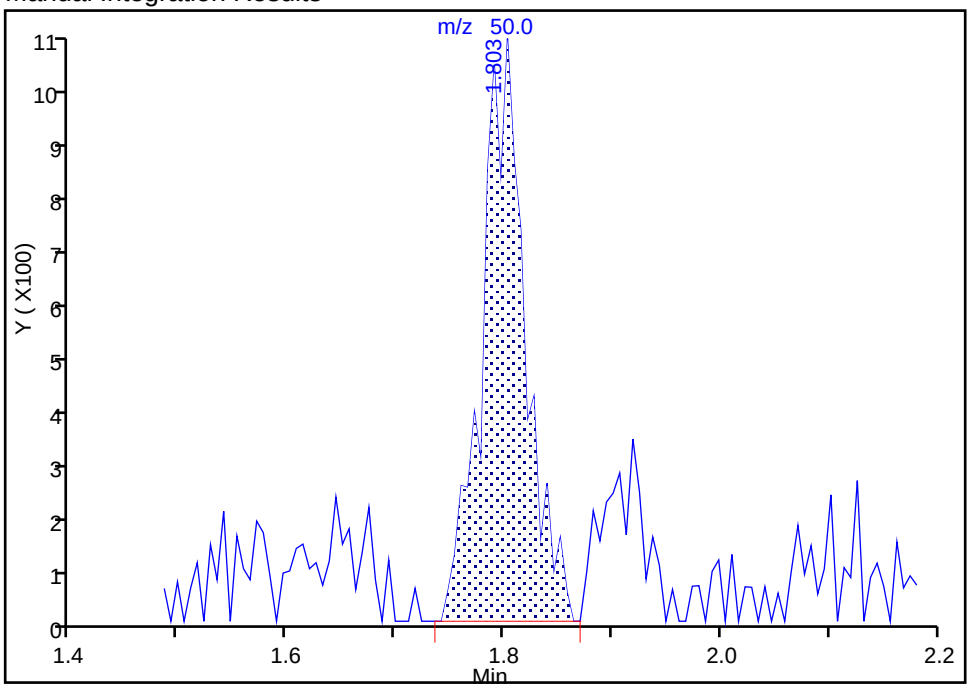
Processing Integration Results

RT: 1.92
Area: 719
Amount: 0.192542
Amount Units: ug/l



Manual Integration Results

RT: 1.80
Area: 2950
Amount: 0.824431
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:25:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

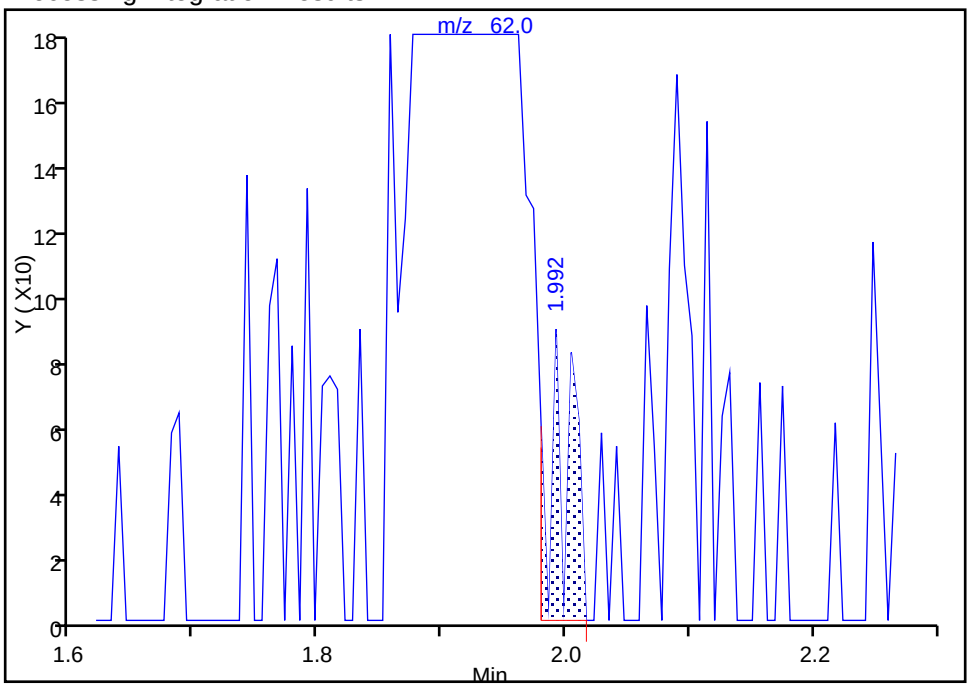
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

4 Vinyl chloride, CAS: 75-01-4

Signal: 1

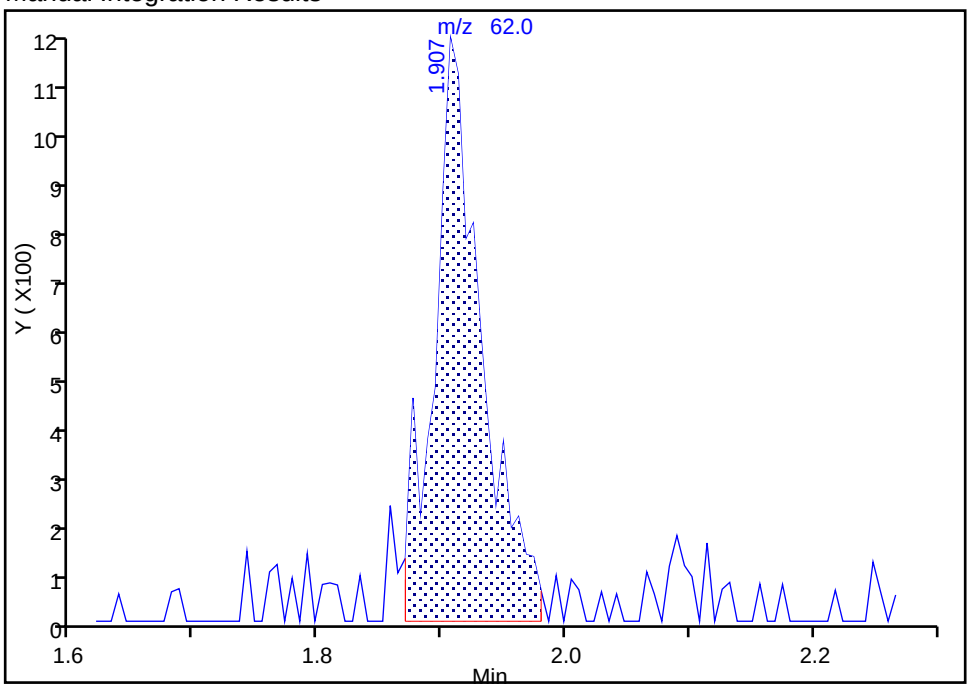
Processing Integration Results

RT: 1.99
Area: 104
Amount: 0.025930
Amount Units: ug/l



Manual Integration Results

RT: 1.91
Area: 2974
Amount: 0.785936
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:25:05
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

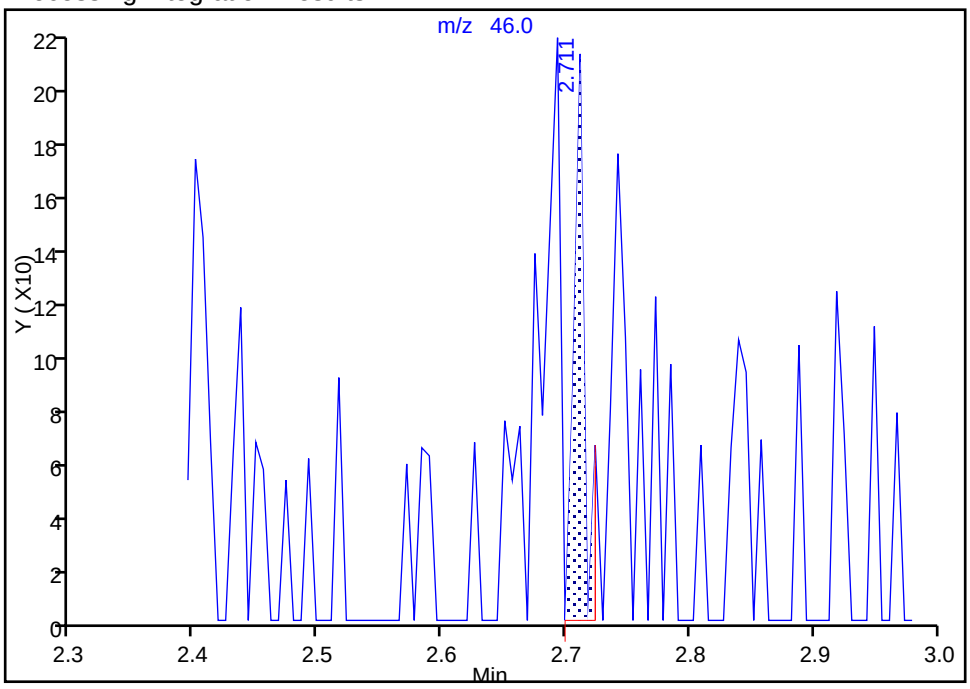
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethanol, CAS: 64-17-5

Signal: 1

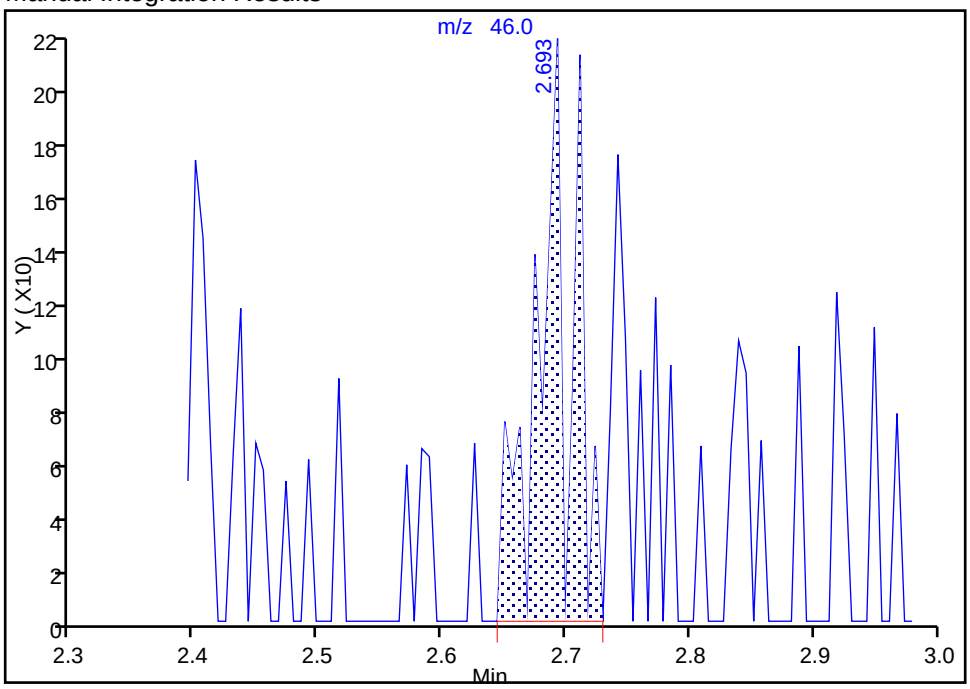
Processing Integration Results

RT: 2.71
Area: 132
Amount: 33.604059
Amount Units: ug/l



Manual Integration Results

RT: 2.69
Area: 414
Amount: 45.057786
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:25:19
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

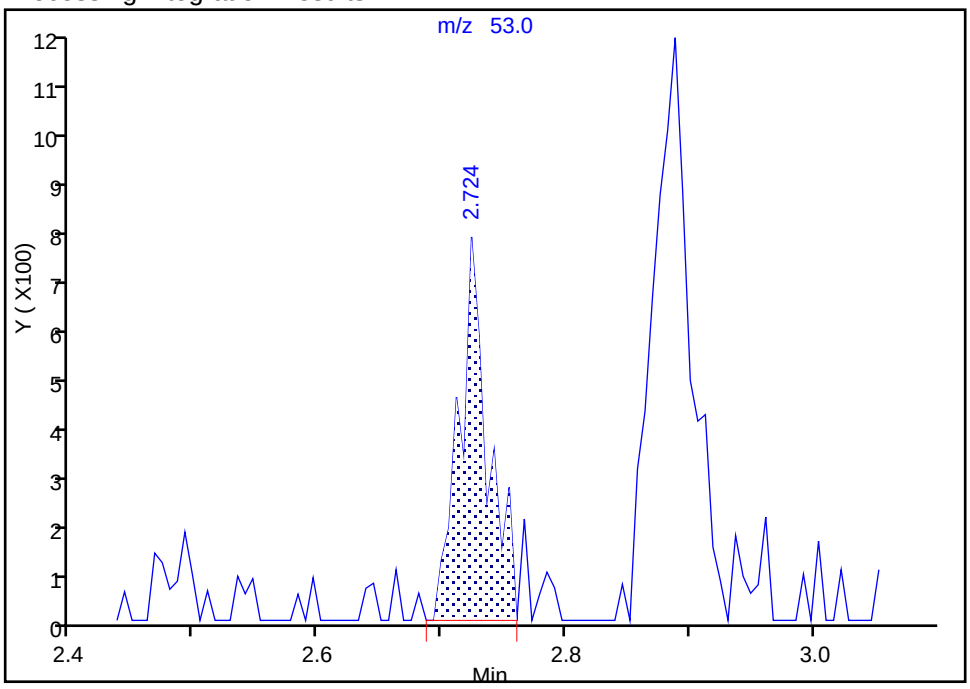
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

13 2-Methyl-1,3-butadiene, CAS: 78-79-5

Signal: 1

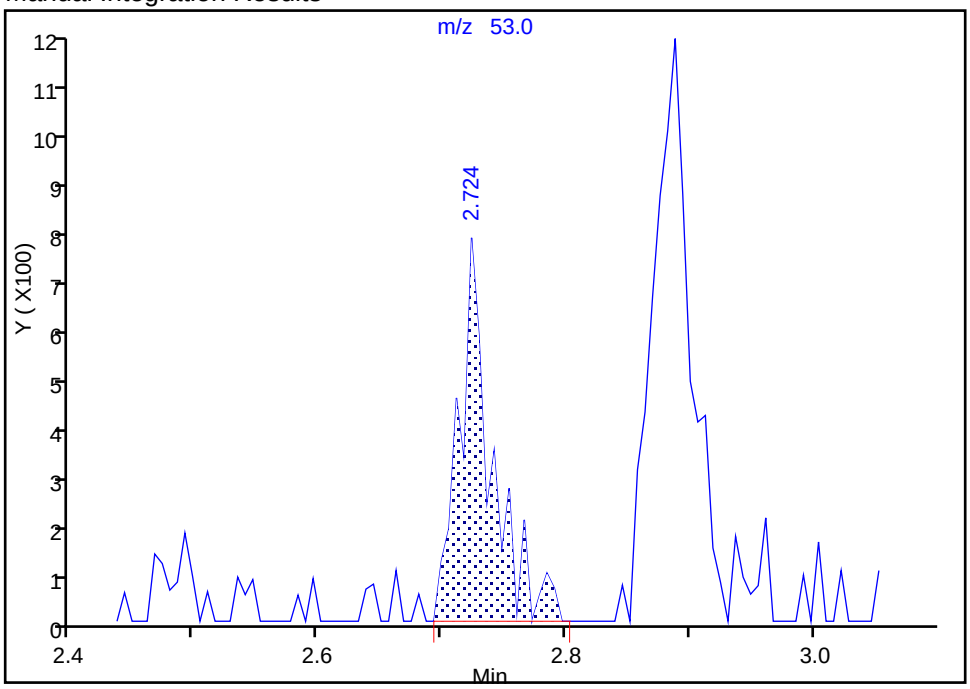
Processing Integration Results

RT: 2.72
Area: 1229
Amount: 0.535032
Amount Units: ug/l



Manual Integration Results

RT: 2.72
Area: 1380
Amount: 0.993663
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:40:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

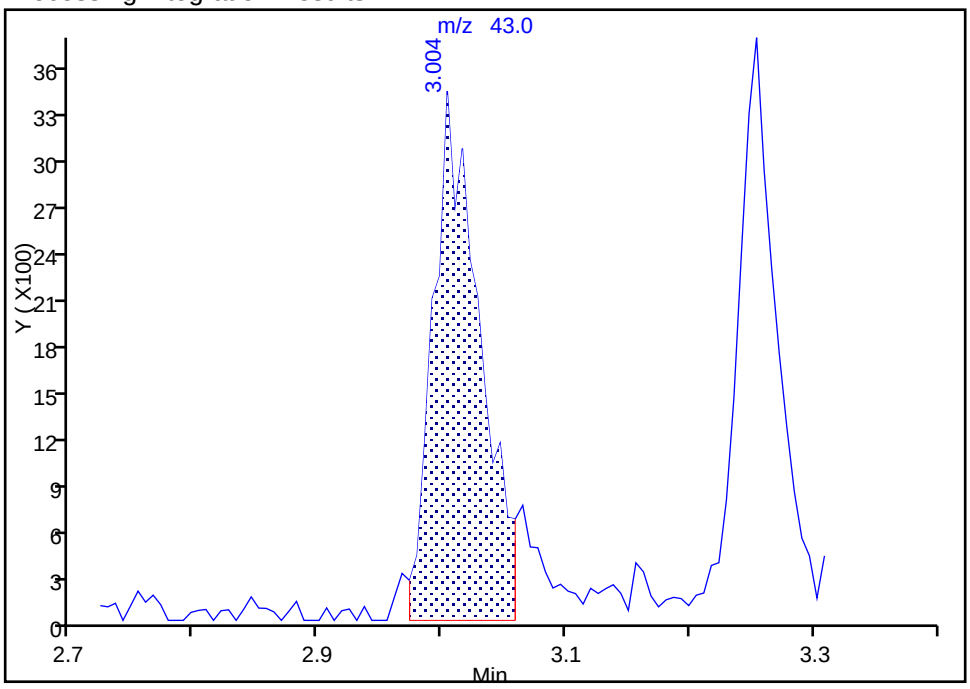
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

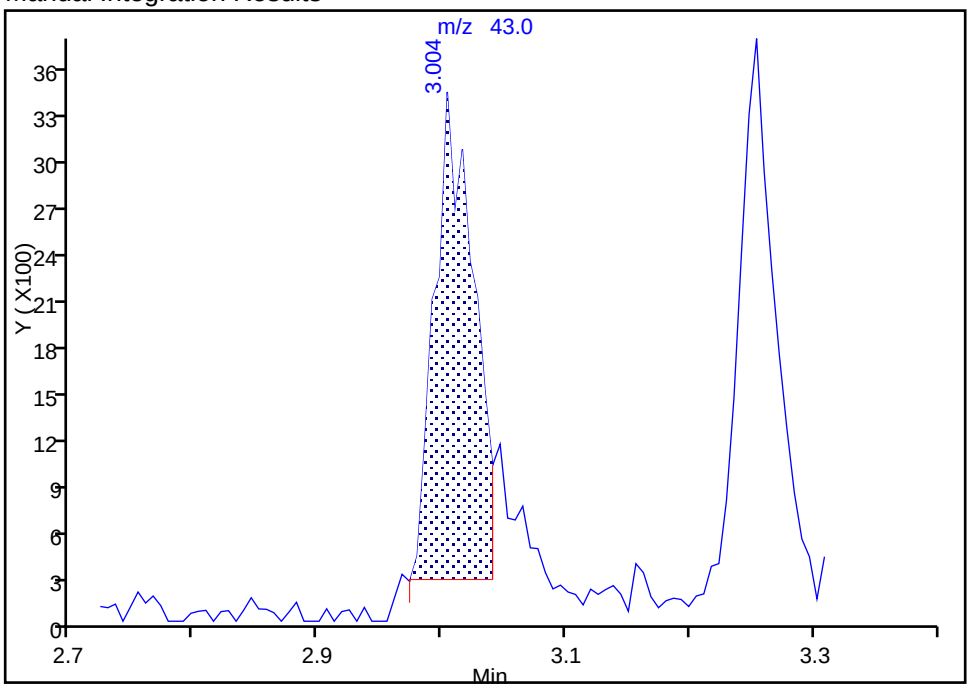
Processing Integration Results

RT: 3.00
Area: 8964
Amount: 10.548165
Amount Units: ug/l



Manual Integration Results

RT: 3.00
Area: 6891
Amount: 8.109753
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:40:32
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

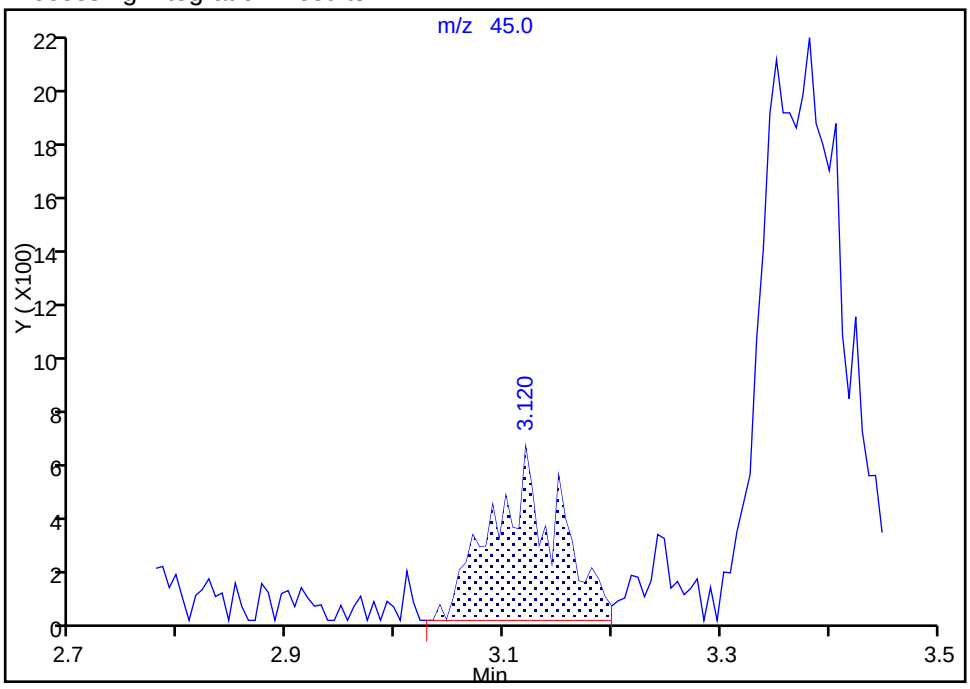
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

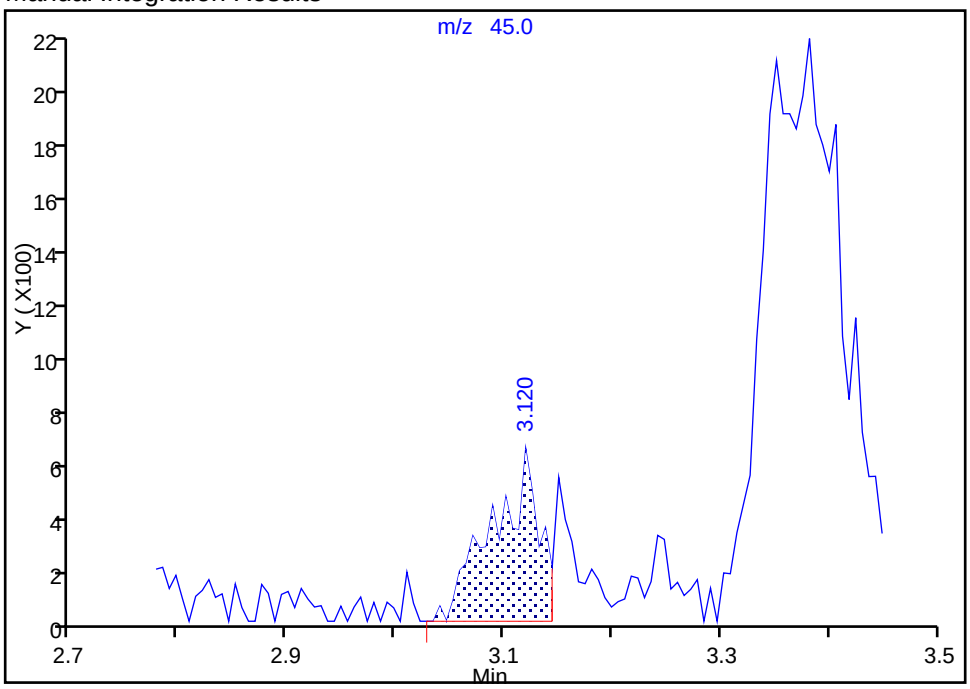
Processing Integration Results

RT: 3.12
Area: 2637
Amount: 15.289764
Amount Units: ug/l



Manual Integration Results

RT: 3.12
Area: 1909
Amount: 11.659848
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:40:49
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

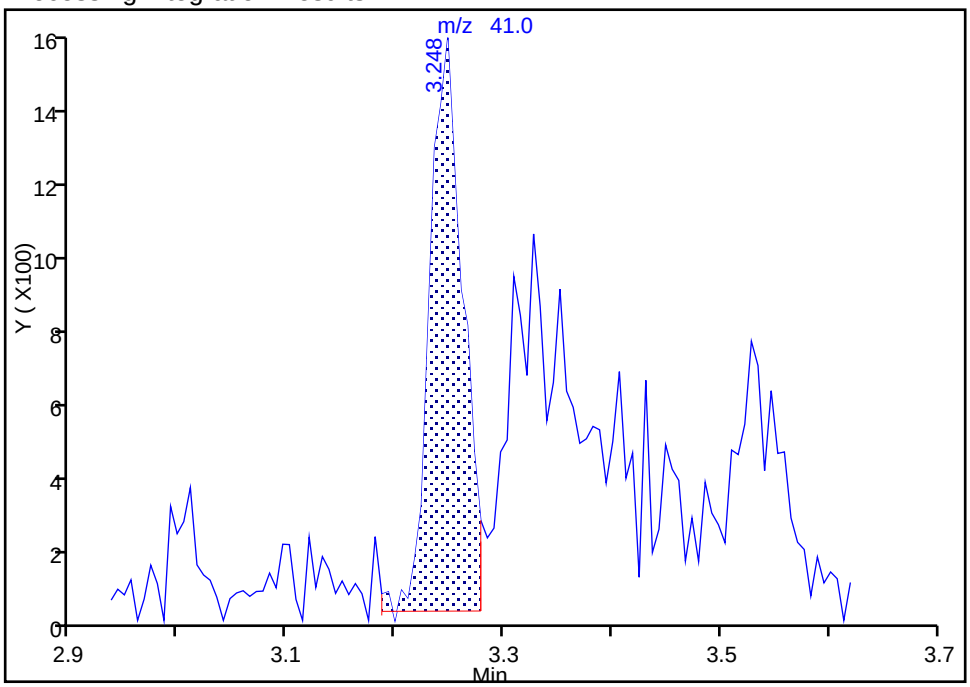
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

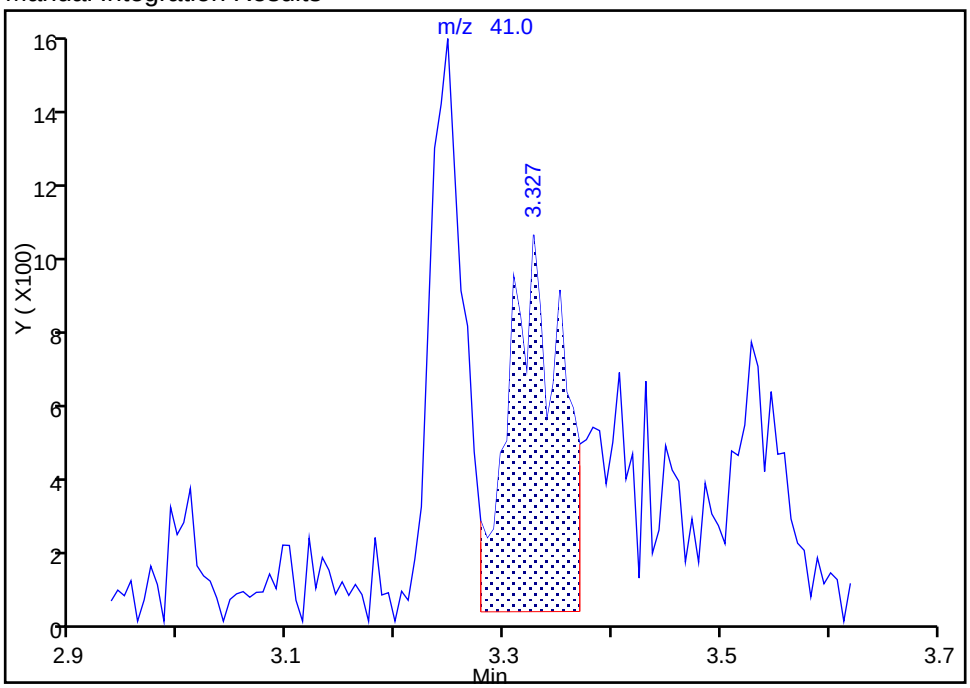
Processing Integration Results

RT: 3.25
Area: 3267
Amount: 8.068338
Amount Units: ug/l



Manual Integration Results

RT: 3.33
Area: 3367
Amount: 10.709796
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:25:30
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

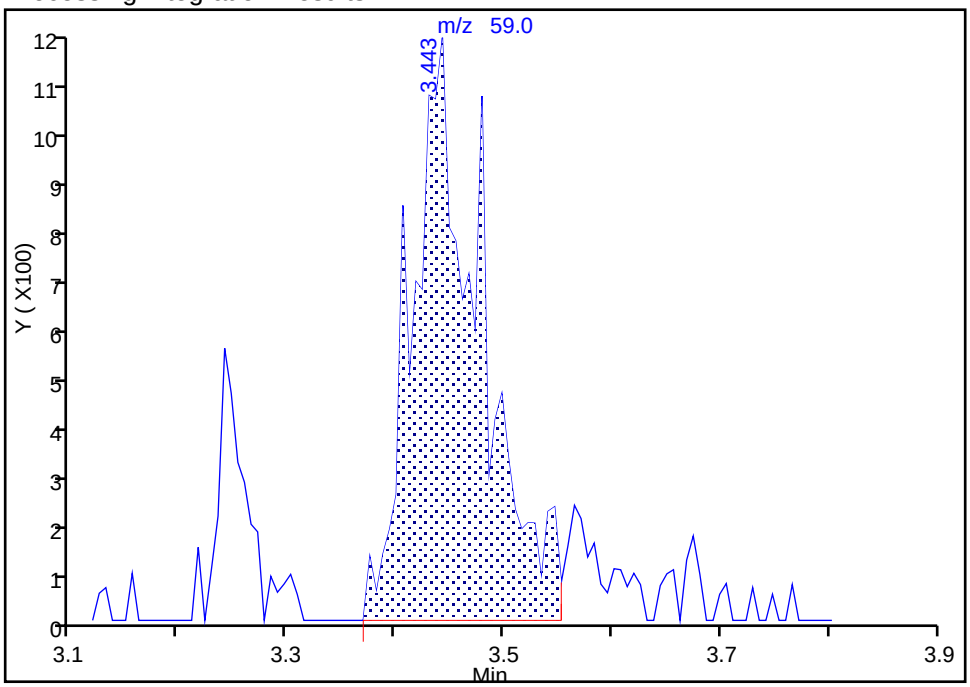
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

27 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

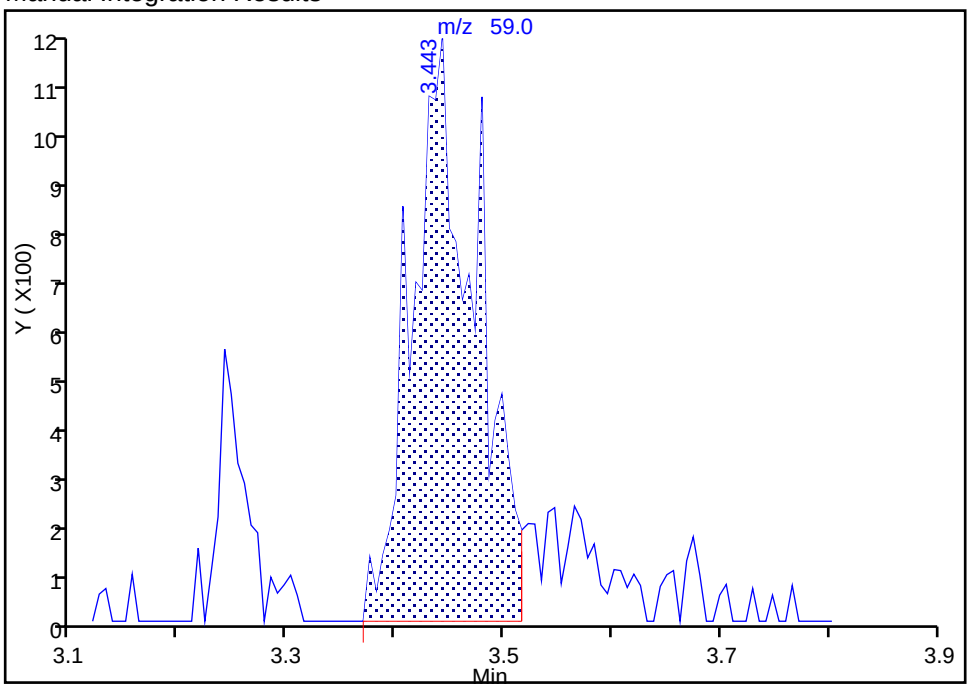
Processing Integration Results

RT: 3.44
Area: 5006
Amount: 13.809285
Amount Units: ug/l



Manual Integration Results

RT: 3.44
Area: 4651
Amount: 12.475617
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:41:58
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

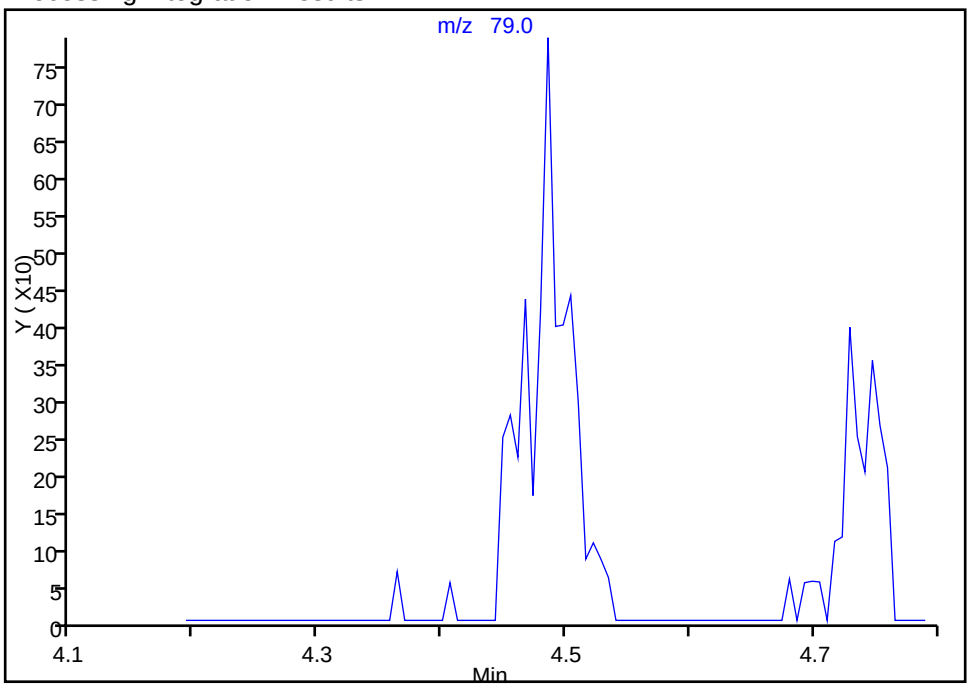
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D				
Injection Date:	09-Mar-2018 22:30:30	Instrument ID:	CVOAMS9		
Lims ID:	STD1				
Client ID:					
Operator ID:		ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

39 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

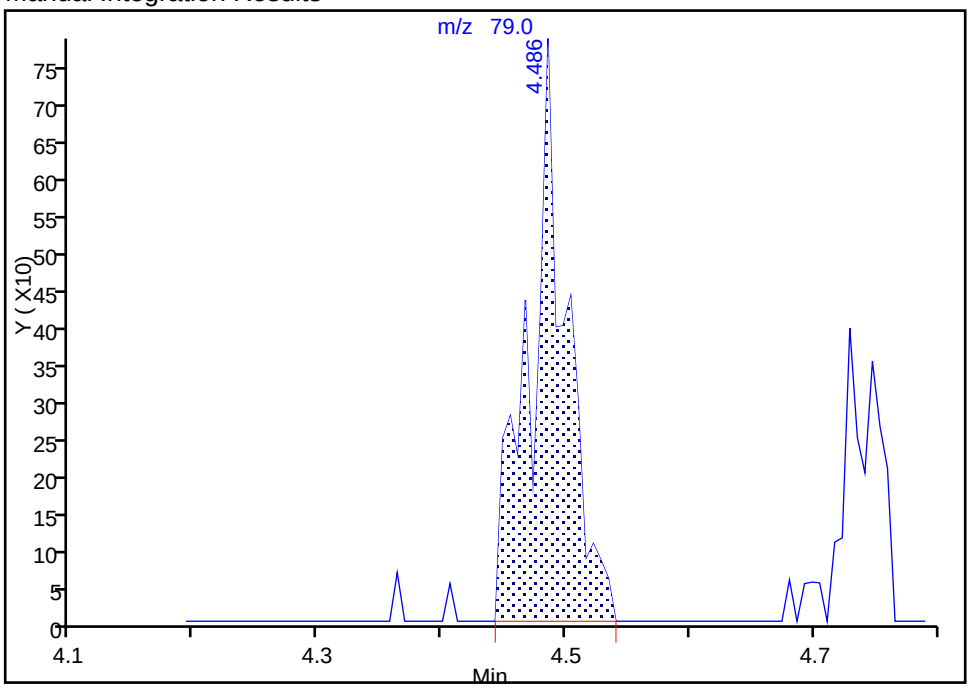
Not Detected
Expected RT: 4.49

Processing Integration Results



Manual Integration Results

RT: 4.49
Area: 1617
Amount: 1.014331
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:25:45
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

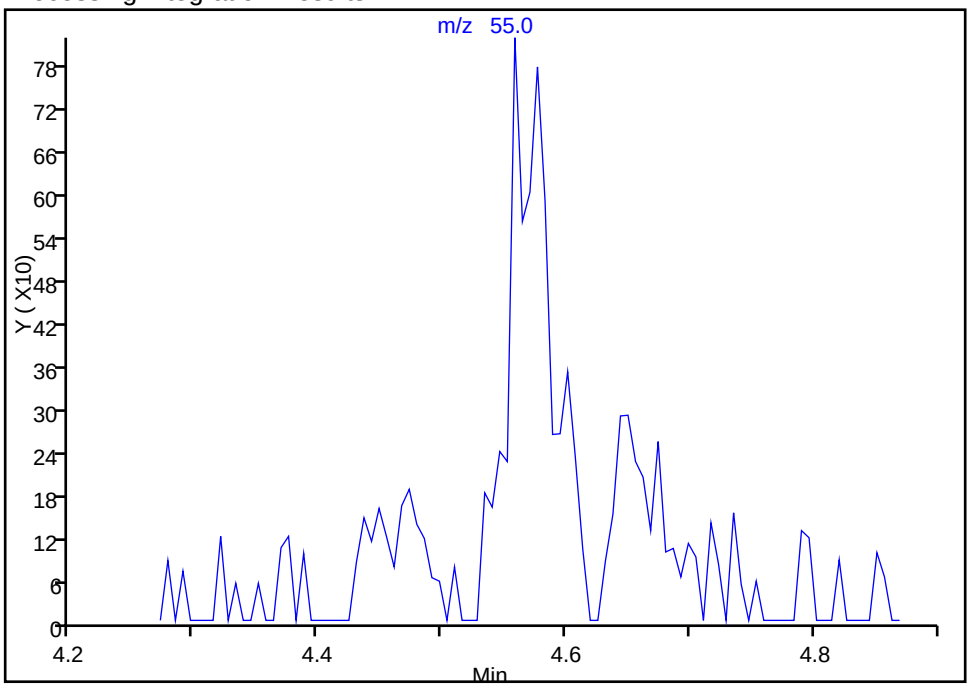
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Methyl acrylate, CAS: 96-33-3

Signal: 1

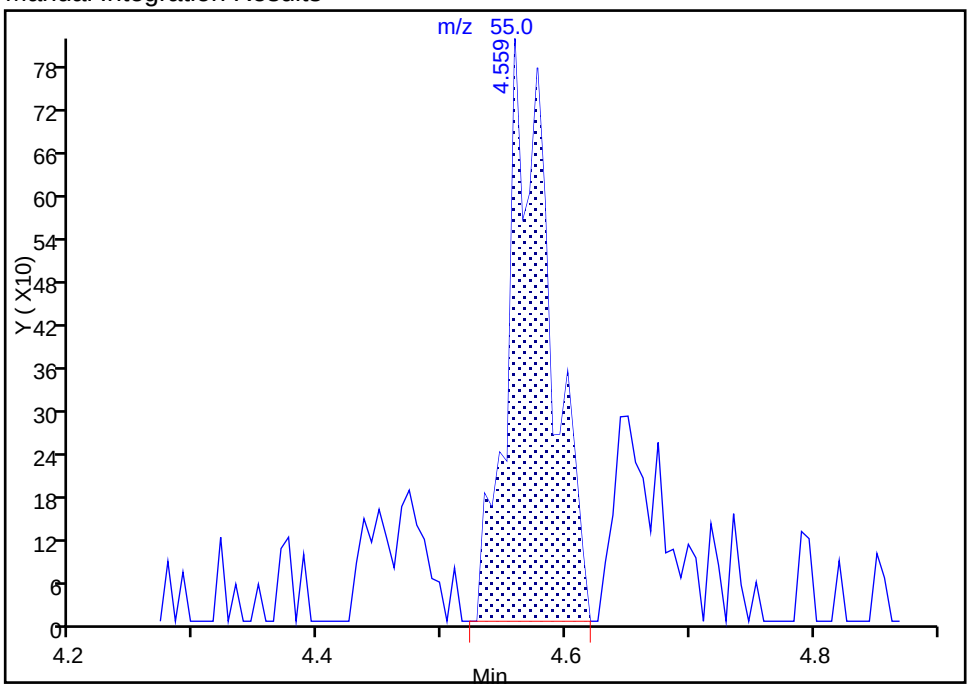
Not Detected
Expected RT: 4.57

Processing Integration Results



Manual Integration Results

RT: 4.56
Area: 1955
Amount: 0.989537
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:25:51
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

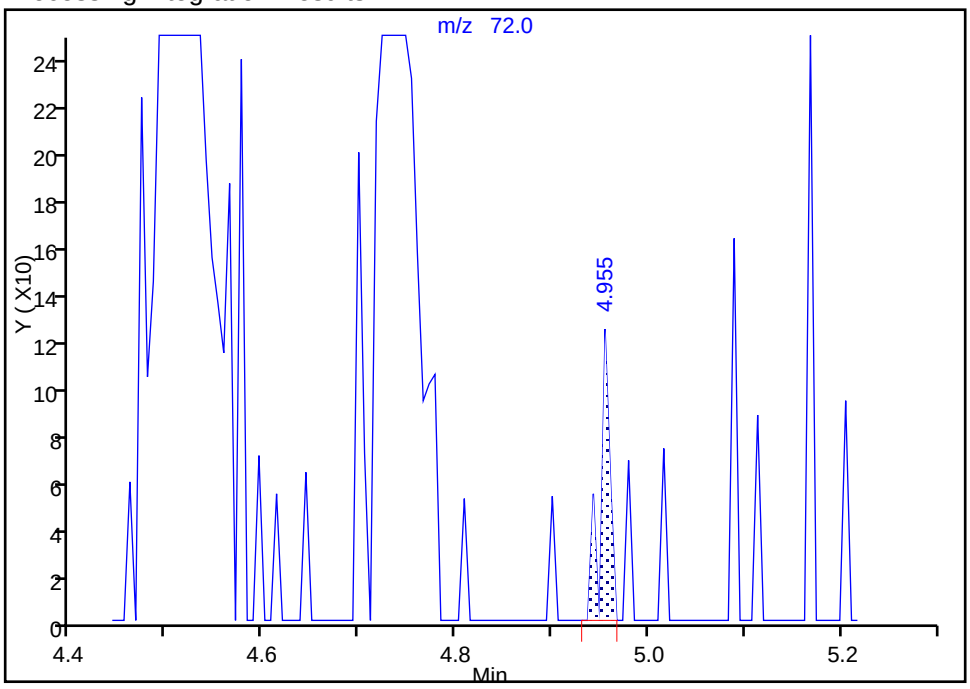
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

45 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

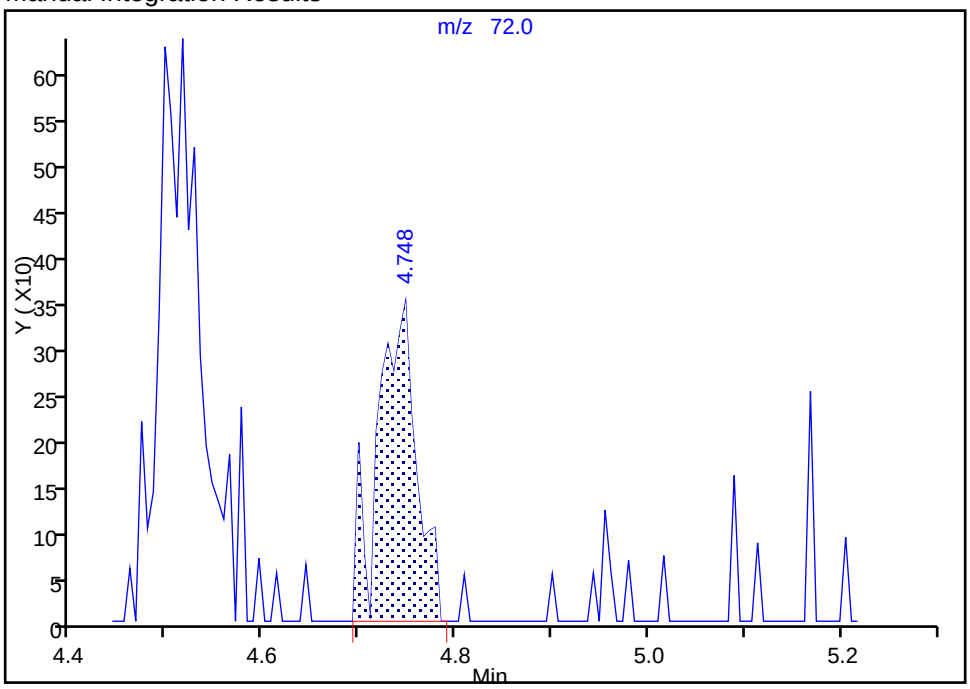
Processing Integration Results

RT: 4.95
Area: 84
Amount: 0.212576
Amount Units: ug/l



Manual Integration Results

RT: 4.75
Area: 975
Amount: 2.464804
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:25:55
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

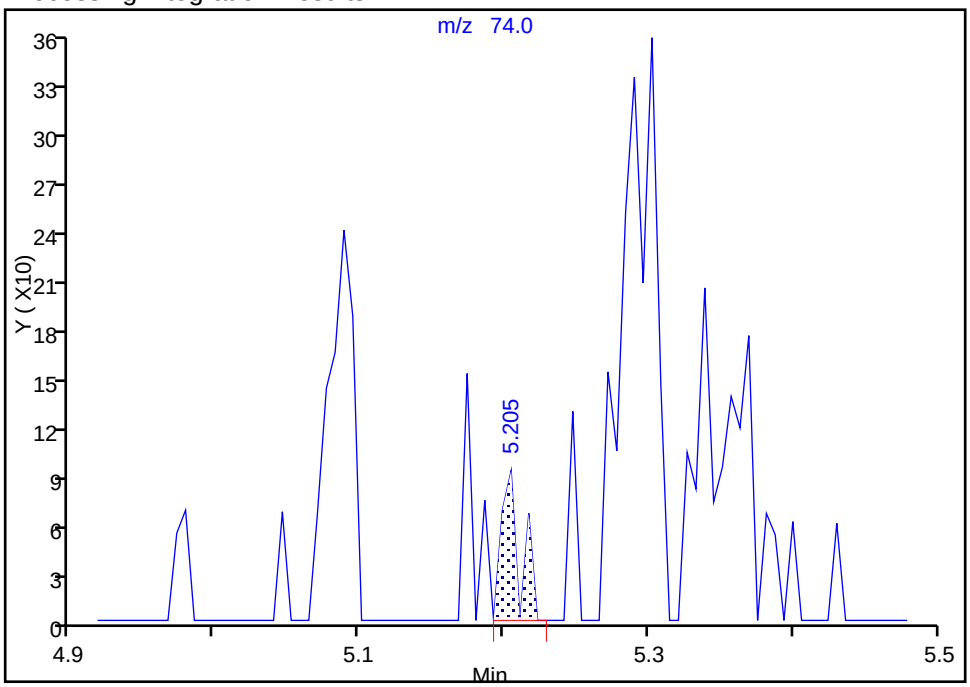
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

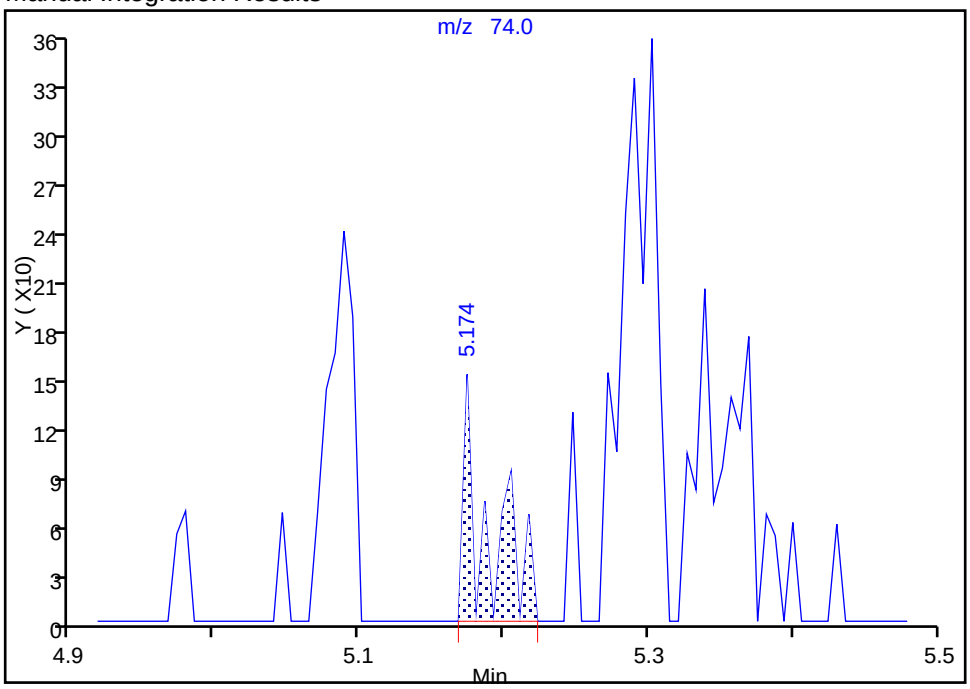
Processing Integration Results

RT: 5.20
Area: 82
Amount: 7.006477
Amount Units: ug/l



Manual Integration Results

RT: 5.17
Area: 163
Amount: 24.955757
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:26:06
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

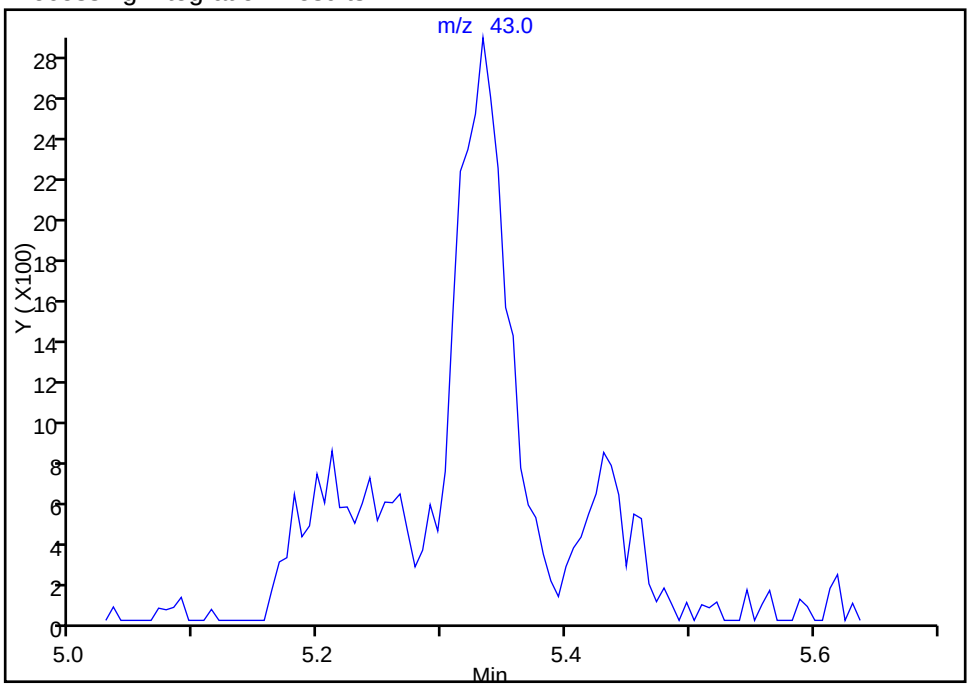
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

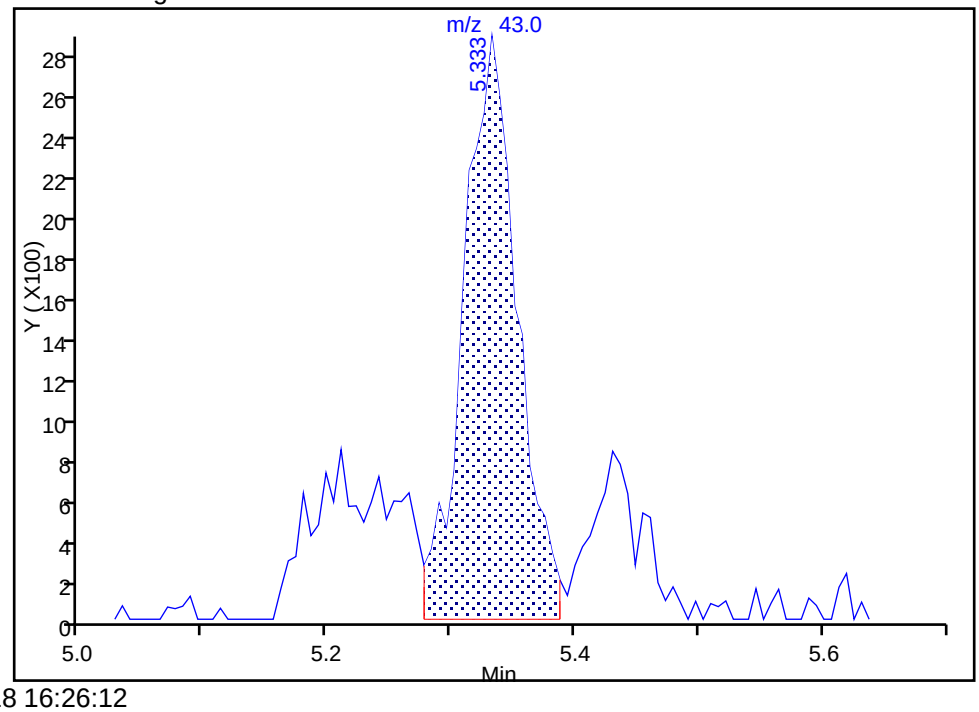
Not Detected
Expected RT: 5.33

Processing Integration Results



Manual Integration Results

RT: 5.33
Area: 8700
Amount: 1.161811
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:26:12
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

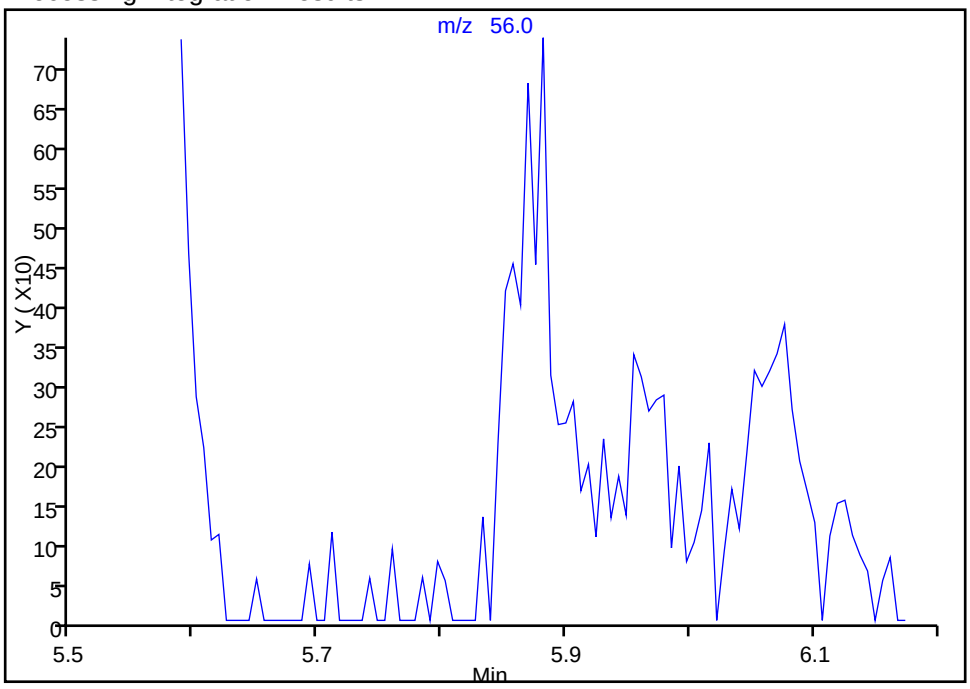
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

62 n-Butanol, CAS: 71-36-3

Signal: 1

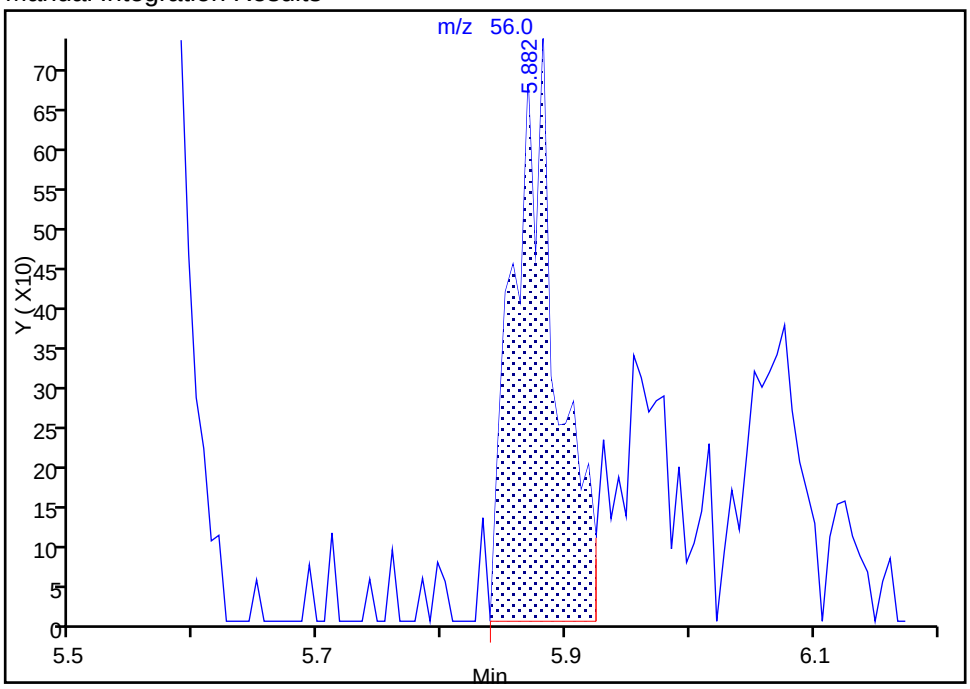
Not Detected
Expected RT: 5.86

Processing Integration Results



Manual Integration Results

RT: 5.88
Area: 1783
Amount: 23.840762
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:26:17
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

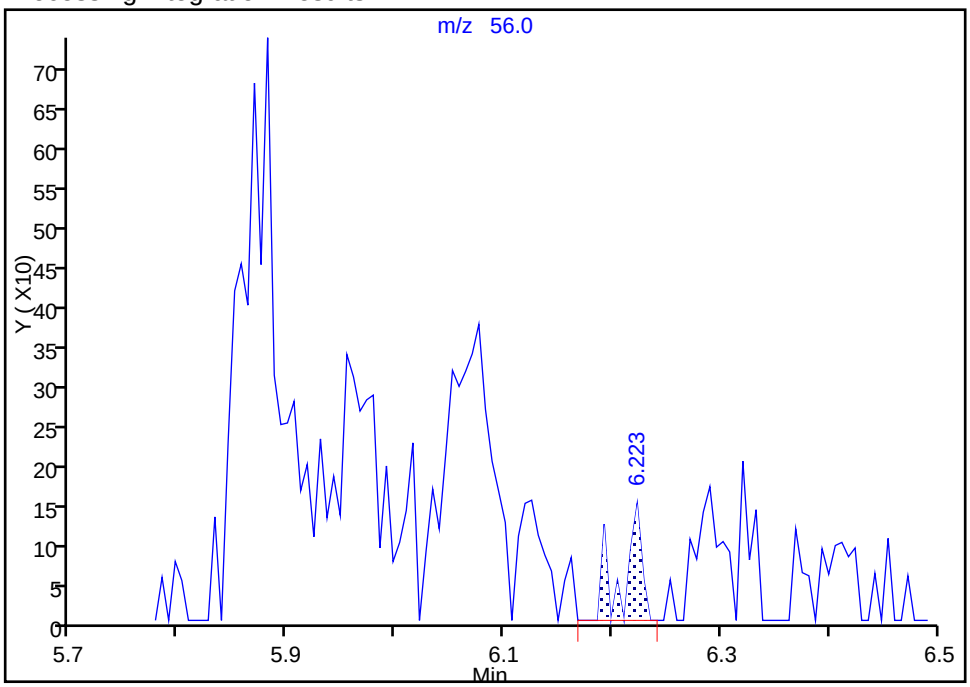
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

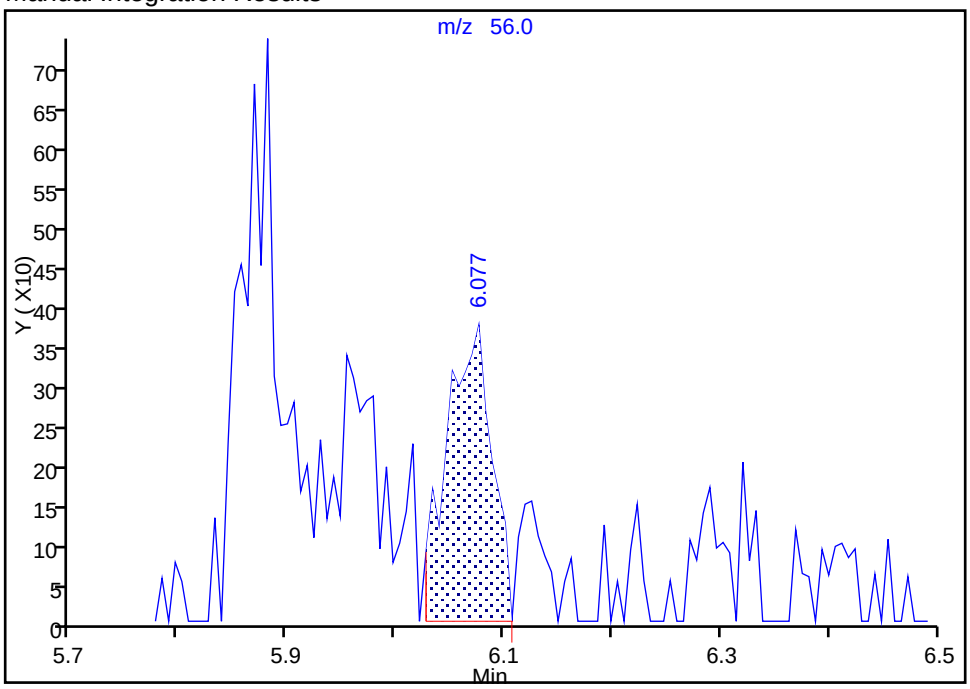
Processing Integration Results

RT: 6.22
Area: 168
Amount: 0.125577
Amount Units: ug/l



Manual Integration Results

RT: 6.08
Area: 1081
Amount: 0.700855
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:26:39
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

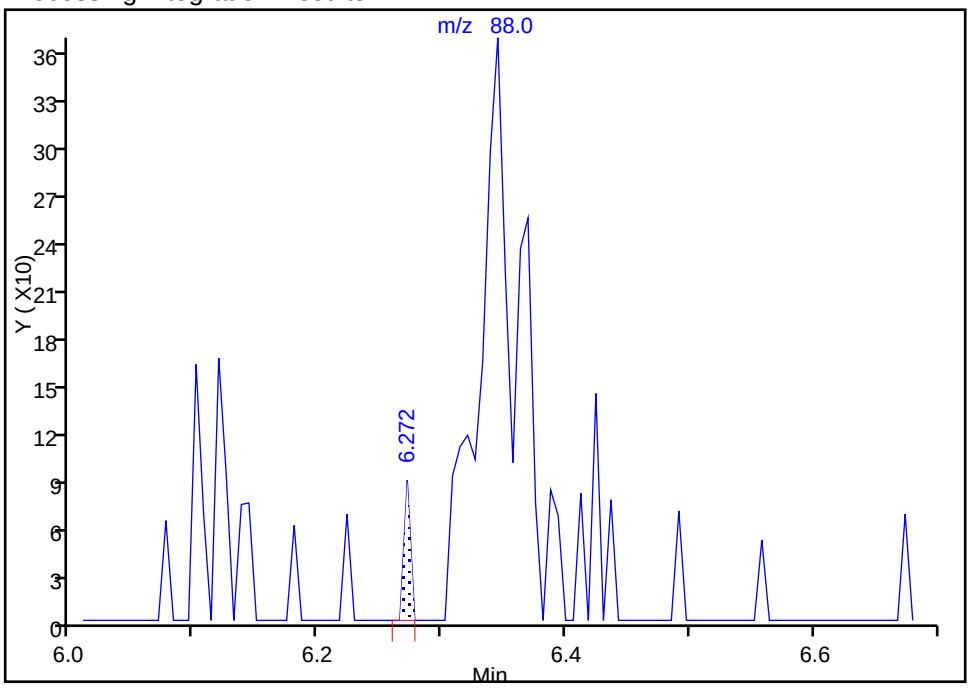
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80594.D
Injection Date: 09-Mar-2018 22:30:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

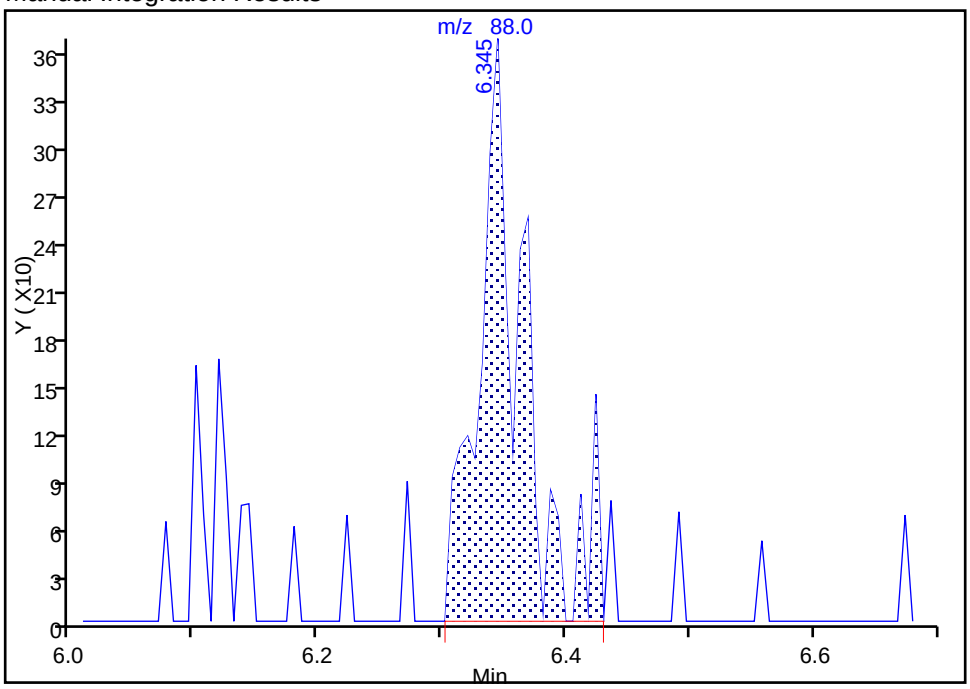
Processing Integration Results

RT: 6.27
Area: 32
Amount: 0.810880
Amount Units: ug/l



Manual Integration Results

RT: 6.34
Area: 900
Amount: 22.939199
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:26:46
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80595.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 09-Mar-2018 22:54:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0068588-003
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Mar-2018 17:11:35 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: tupayachia Date: 10-Mar-2018 03:52:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.590	1.596	-0.006	86	3993	5.00	5.63	
2 Dichlorodifluoromethane	85	1.620	1.638	-0.018	99	25603	5.00	5.39	
3 Chloromethane	50	1.791	1.803	-0.012	99	19496	5.00	5.38	
4 Vinyl chloride	62	1.901	1.913	-0.012	97	20956	5.00	5.46	
5 Butadiene	54	1.895	1.913	-0.018	91	13798	5.00	5.06	
6 Bromomethane	94	2.199	2.212	-0.013	98	17506	5.00	5.33	
7 Chloroethane	64	2.254	2.279	-0.025	99	10048	5.00	5.26	
9 Dichlorofluoromethane	67	2.462	2.474	-0.012	97	33112	5.00	5.38	
8 Trichlorofluoromethane	101	2.468	2.486	-0.018	73	34232	5.00	5.58	
10 Pentane	72	2.492	2.498	-0.006	92	4451	10.0	10.7	
12 Ethanol	46	2.638	2.687	-0.049	1	1729	200.0	201.4	Ma
11 Ethyl ether	59	2.687	2.699	-0.012	94	10471	5.00	5.40	
13 2-Methyl-1,3-butadiene	53	2.718	2.724	-0.006	97	10519	5.00	5.05	
14 1,2-Dichloro-1,1,2-trifluo	117	2.736	2.760	-0.024	90	16039	5.00	5.49	
15 Acrolein	56	2.870	2.882	-0.012	97	60201	200.0	196.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.882	2.894	-0.012	97	19894	5.00	5.44	
17 1,1-Dichloroethene	96	2.913	2.919	-0.006	97	15197	5.00	5.29	
18 Acetone	43	2.998	3.004	-0.006	85	23466	25.0	28.4	
22 Isopropyl alcohol	45	3.083	3.083	0.000	18	5642	50.0	36.9	Ma
19 Iodomethane	142	3.077	3.083	-0.006	100	33931	5.00	5.23	
20 Carbon disulfide	76	3.114	3.120	-0.006	98	51390	5.00	5.23	
21 3-Chloro-1-propene	76	3.236	3.242	-0.006	78	8562	5.00	5.25	
23 Methyl acetate	43	3.236	3.248	-0.012	97	38910	25.0	24.7	
24 Cyclopentene	67	3.260	3.266	-0.006	92	30324	5.00	5.19	
29 Acetonitrile	41	3.303	3.315	-0.012	87	12039	50.0	41.0	a
* 25 TBA-d9 (IS)	65	3.352	3.358	-0.006	0	243233	1000.0	1000.0	
26 Methylene Chloride	84	3.364	3.376	-0.012	83	17959	5.00	5.22	
27 2-Methyl-2-propanol	59	3.425	3.431	-0.006	94	17913	50.0	51.4	
28 Methyl tert-butyl ether	73	3.522	3.534	-0.012	95	43443	5.00	5.17	
30 trans-1,2-Dichloroethene	96	3.559	3.571	-0.012	90	16596	5.00	5.47	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.638	-0.006	90	40691	50.0	49.1	
32 Hexane	43	3.711	3.717	-0.006	90	10048	5.00	5.16	
33 Isopropyl ether	45	3.919	3.931	-0.012	94	40542	5.00	5.40	
34 1,1-Dichloroethane	63	3.967	3.973	-0.006	92	24702	5.00	5.17	
35 Vinyl acetate	86	3.980	3.973	0.007	99	4619	10.0	10.3	
36 2-Chloro-1,3-butadiene	88	4.010	4.022	-0.012	90	12951	5.00	5.34	
37 Tert-butyl ethyl ether	59	4.248	4.254	-0.006	91	42073	5.00	5.16	
* 38 2-Butanone-d5	46	4.449	4.455	-0.006	0	175814	250.0	250.0	
39 2,2-Dichloropropane	79	4.479	4.485	-0.006	76	8038	5.00	4.98	
40 cis-1,2-Dichloroethene	96	4.498	4.504	-0.006	93	19117	5.00	5.34	
41 Ethyl acetate	70	4.504	4.510	-0.006	96	2989	10.0	11.0	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	98	8115	25.0	25.6	
44 Methyl acrylate	55	4.565	4.571	-0.006	99	9981	5.00	4.98	
43 Propionitrile	54	4.644	4.650	-0.006	96	17650	50.0	49.9	
45 Tetrahydrofuran	72	4.735	4.735	0.000	63	3983	10.0	10.4	
46 Chlorobromomethane	128	4.735	4.735	0.000	66	10805	5.00	5.67	
47 Methacrylonitrile	67	4.748	4.754	-0.006	92	50269	50.0	51.0	
48 Chloroform	83	4.778	4.784	-0.006	99	30386	5.00	5.33	
49 Cyclohexane	84	4.924	4.937	-0.013	47	23426	5.00	5.34	
50 1,1,1-Trichloroethane	97	4.937	4.943	-0.006	41	27635	5.00	5.11	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	97	163778	50.0	52.7	
52 Carbon tetrachloride	117	5.059	5.065	-0.006	96	25672	5.00	5.31	
53 1,1-Dichloropropene	75	5.083	5.089	-0.006	95	19271	5.00	5.22	
56 Isobutyl alcohol	74	5.193	5.193	0.000	88	1485	125.0	128.4	
54 Benzene	78	5.284	5.290	-0.006	73	56330	5.00	5.28	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.302	0.000	0	157223	50.0	51.2	
57 Isopropyl acetate	43	5.327	5.327	0.000	98	37372	5.00	4.92	
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	96	46005	5.00	5.22	
59 1,2-Dichloroethane	62	5.376	5.382	-0.006	98	21289	5.00	5.21	
60 n-Heptane	57	5.430	5.430	0.000	88	10216	5.00	5.34	
* 61 Fluorobenzene	96	5.577	5.577	0.000	99	451384	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	89	7523	125.0	107.7	
63 Trichloroethene	95	5.936	5.943	-0.006	96	16844	5.00	5.37	
64 Ethyl acrylate	56	6.064	6.064	0.000	84	8224	5.00	5.26	
65 Methylcyclohexane	83	6.064	6.071	-0.007	92	27087	5.00	5.31	
66 1,2-Dichloropropane	63	6.229	6.235	-0.006	85	13382	5.00	5.20	
* 67 1,4-Dioxane-d8	96	6.272	6.284	-0.012	0	21811	1000.0	1000.0	
68 Methyl methacrylate	41	6.284	6.290	-0.006	83	19610	10.0	10.0	
69 1,4-Dioxane	88	6.345	6.345	0.000	28	4115	100.0	105.7	M
70 n-Propyl acetate	43	6.345	6.345	0.000	98	14300	5.00	4.98	
71 Dibromomethane	93	6.363	6.369	-0.006	91	10263	5.00	5.24	
72 Dichlorobromomethane	83	6.510	6.516	-0.006	97	21274	5.00	5.27	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	71	6112	5.00	5.42	
74 2-Nitropropane	41	6.851	6.845	0.006	89	5745	10.0	8.53	
75 Epichlorohydrin	57	6.955	6.955	0.001	98	23901	100.0	99.3	
76 cis-1,3-Dichloropropene	75	7.016	7.015	0.001	92	22392	5.00	5.20	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	95	53277	25.0	24.5	
$ 78 Toluene-d8 (Surr)	98	7.265	7.265	0.000	98	554324	50.0	51.2	
79 Toluene	91	7.339	7.345	-0.006	93	64104	5.00	5.10	
80 trans-1,3-Dichloropropene	75	7.686	7.692	-0.006	98	19094	5.00	5.07	
81 Ethyl methacrylate	69	7.704	7.704	0.000	86	13821	5.00	4.80	
82 1,1,2-Trichloroethane	83	7.918	7.912	0.006	93	10924	5.00	5.22	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.966	0.001	96	19294	5.00	5.26	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	89	20348	5.00	5.48	
85 2-Hexanone	43	8.168	8.174	-0.006	94	34400	25.0	24.5	
86 n-Butyl acetate	43	8.284	8.284	0.000	98	14733	5.00	4.90	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	17327	5.00	4.96	
88 Ethylene Dibromide	107	8.527	8.527	0.000	97	14518	5.00	5.31	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	83	374339	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	98	45795	5.00	5.35	
92 Ethylbenzene	106	9.204	9.198	0.006	98	22197	5.00	5.17	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	96	17909	5.00	4.92	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	26355	5.00	5.01	
94 n-Butyl acrylate	73	9.783	9.777	0.006	97	8014	5.00	4.68	
95 o-Xylene	106	9.814	9.814	0.000	93	26955	5.00	4.95	
96 Styrene	104	9.844	9.844	0.000	93	43298	5.00	4.97	
97 Amyl acetate (mixed isomer	43	10.027	10.033	-0.006	92	16076	5.00	4.52	
98 Bromoform	173	10.082	10.082	0.000	97	11850	5.00	4.91	
99 Isopropylbenzene	105	10.198	10.198	0.000	95	76457	5.00	4.98	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	96	193943	50.0	52.6	
101 Bromobenzene	156	10.558	10.564	-0.006	89	21853	5.00	5.19	
102 1,1,2,2-Tetrachloroethane	83	10.594	10.600	-0.006	98	18096	5.00	5.07	
103 N-Propylbenzene	91	10.625	10.625	0.001	99	86588	5.00	5.04	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	91	6045	5.00	5.21	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.661	0.000	92	4377	5.00	5.13	
107 4-Ethyltoluene	105	10.740	10.740	0.000	94	75849	5.00	4.97	
106 2-Chlorotoluene	91	10.734	10.740	-0.006	96	61565	5.00	5.04	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	93	66633	5.00	4.90	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	52852	5.00	5.11	
110 Butyl Methacrylate	87	10.899	10.899	0.000	90	15617	5.00	4.34	
111 tert-Butylbenzene	119	11.100	11.100	0.000	94	52698	5.00	4.76	
112 1,2,4-Trimethylbenzene	105	11.161	11.167	-0.006	97	70048	5.00	5.01	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	81885	5.00	4.74	
114 4-Isopropyltoluene	119	11.435	11.435	0.000	98	78280	5.00	5.03	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	98	43157	5.00	5.31	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	226089	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	43898	5.00	5.38	
118 Benzyl chloride	91	11.667	11.667	0.000	98	29380	5.00	4.60	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	93	73418	5.00	4.99	
120 p-Diethylbenzene	119	11.771	11.777	-0.006	96	42229	5.00	4.89	
121 n-Butylbenzene	92	11.795	11.795	0.000	98	37926	5.00	5.12	
122 1,2-Dichlorobenzene	146	11.862	11.862	0.000	98	43901	5.00	5.29	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	75323	5.00	4.87	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	92	4394	5.00	5.38	
125 1,3,5-Trichlorobenzene	180	12.642	12.642	0.000	97	36733	5.00	5.15	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	96	34845	5.00	5.01	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	94	16324	5.00	4.89	
128 Naphthalene	128	13.331	13.331	0.000	99	82197	5.00	4.90	
129 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	97	37436	5.00	5.26	
S 130 1,2-Dichloroethene, Total	100				0		10.0	10.8	
S 131 Xylenes, Total	100				0		10.0	9.97	
S 132 Total BTEX	1				0		25.0	25.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00250	Amount Added:	0.50	Units: uL	
8260MIX1COMB_00074	Amount Added:	0.50	Units: uL	
ACROLEIN W_00074	Amount Added:	2.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Mar-2018 17:11:37 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80595.D

Injection Date: 09-Mar-2018 22:54:30 Instrument ID: CVOAMS9 Operator ID:

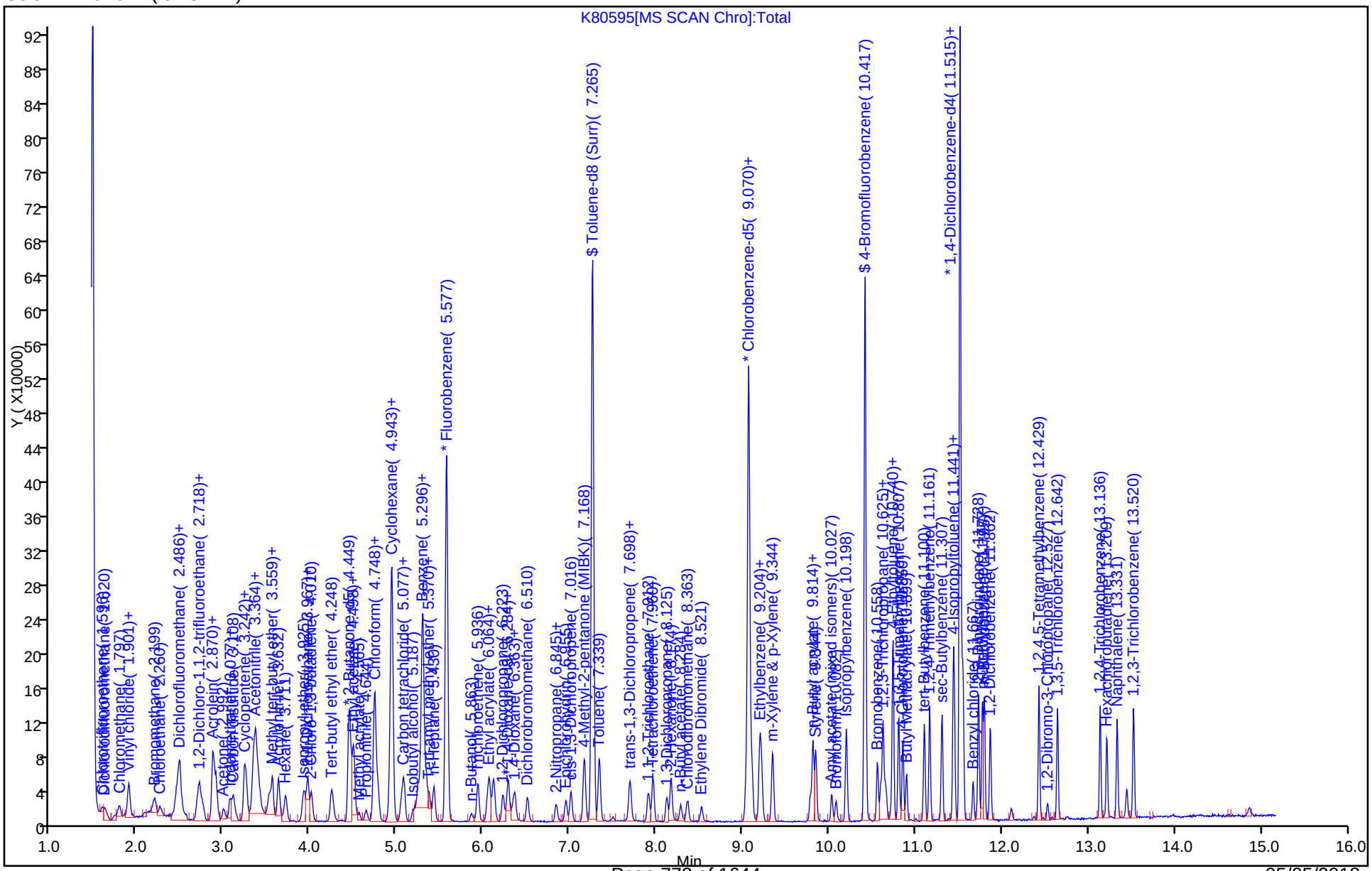
Lims ID: STD5 Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

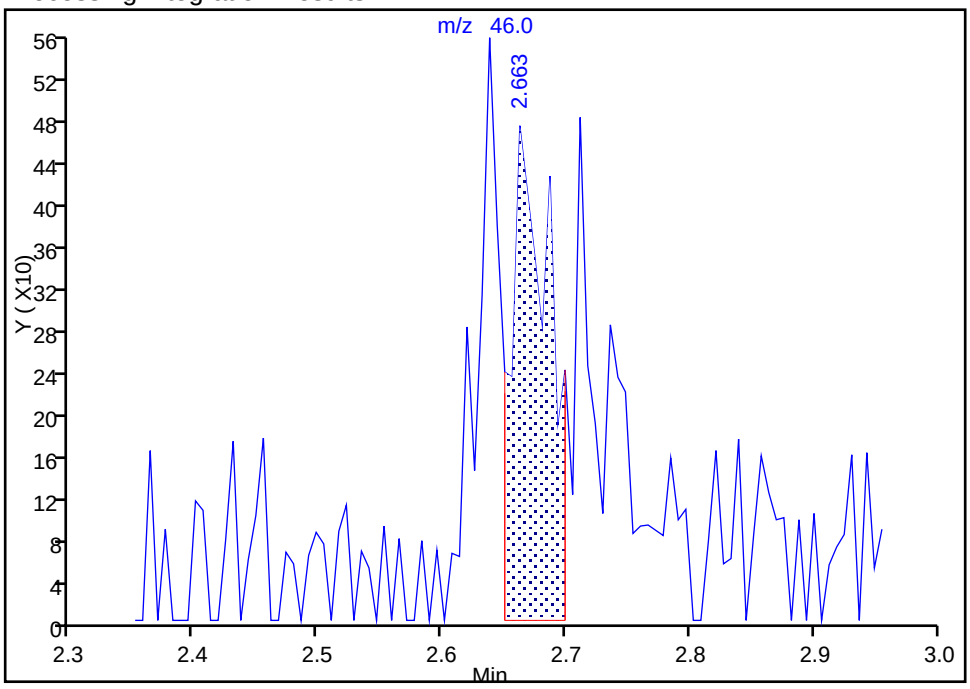
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80595.D
Injection Date: 09-Mar-2018 22:54:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethanol, CAS: 64-17-5

Signal: 1

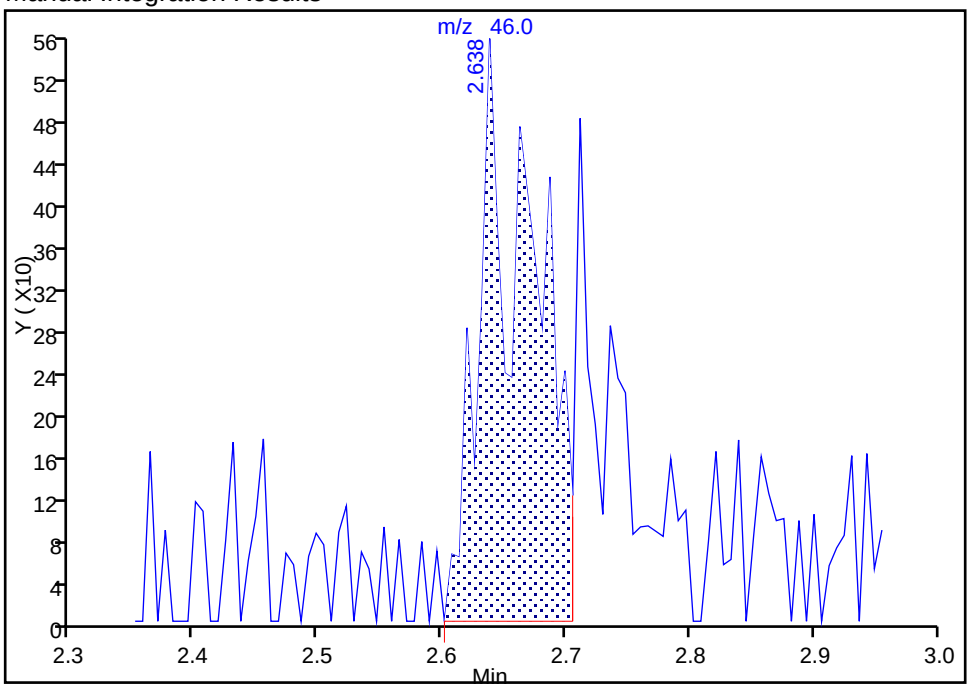
Processing Integration Results

RT: 2.66
Area: 1029
Amount: 276.2836
Amount Units: ug/l



Manual Integration Results

RT: 2.64
Area: 1729
Amount: 201.3838
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:39:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

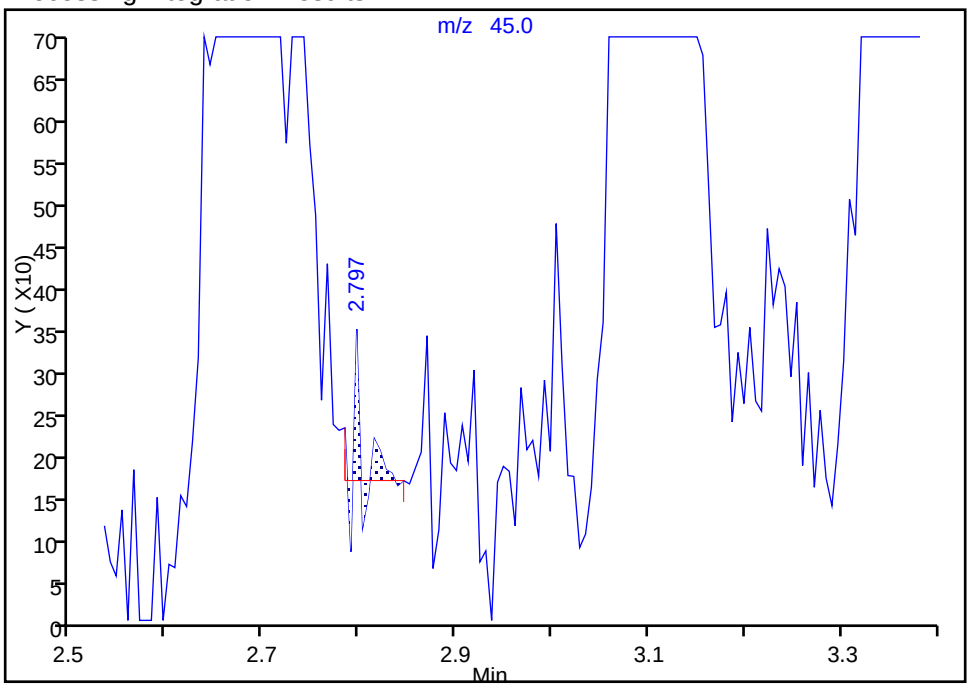
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80595.D
Injection Date: 09-Mar-2018 22:54:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

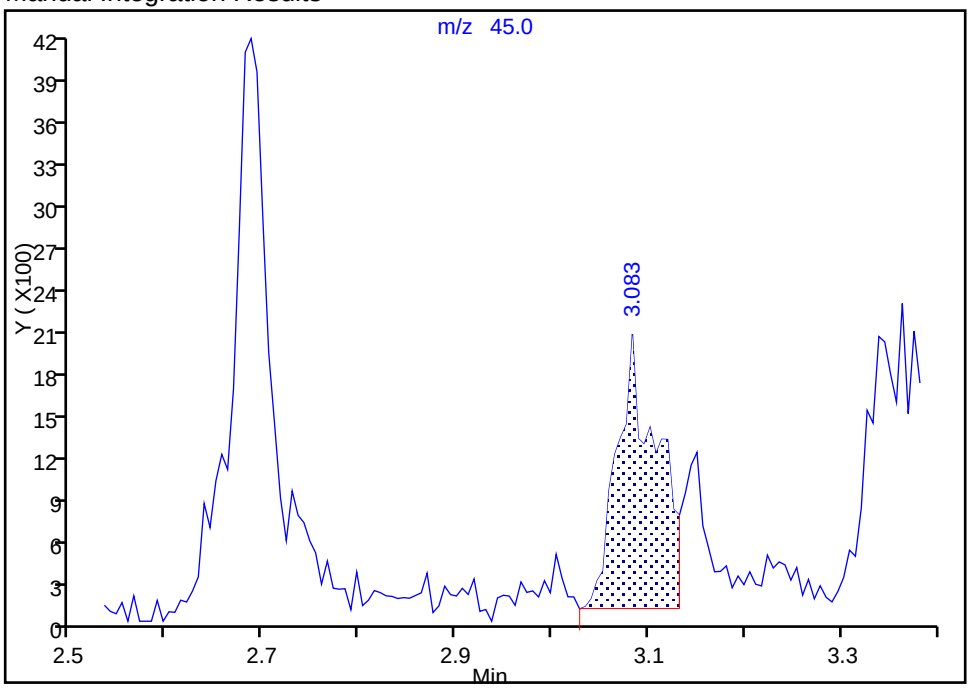
Processing Integration Results

RT: 2.80
Area: 68
Amount: 0.955428
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 5642
Amount: 36.879078
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:41:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

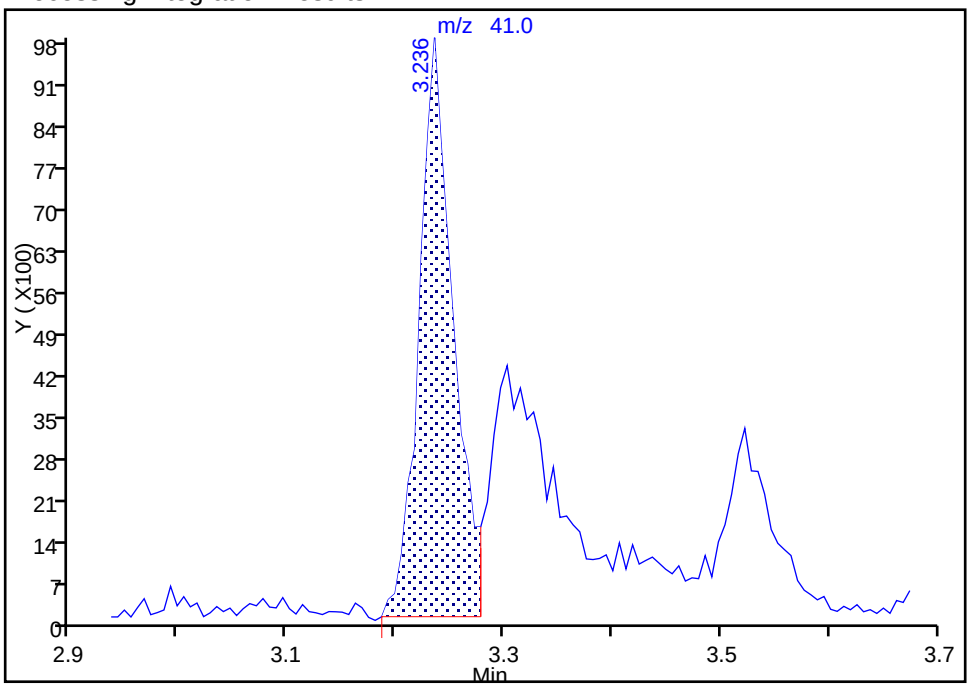
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80595.D
Injection Date: 09-Mar-2018 22:54:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

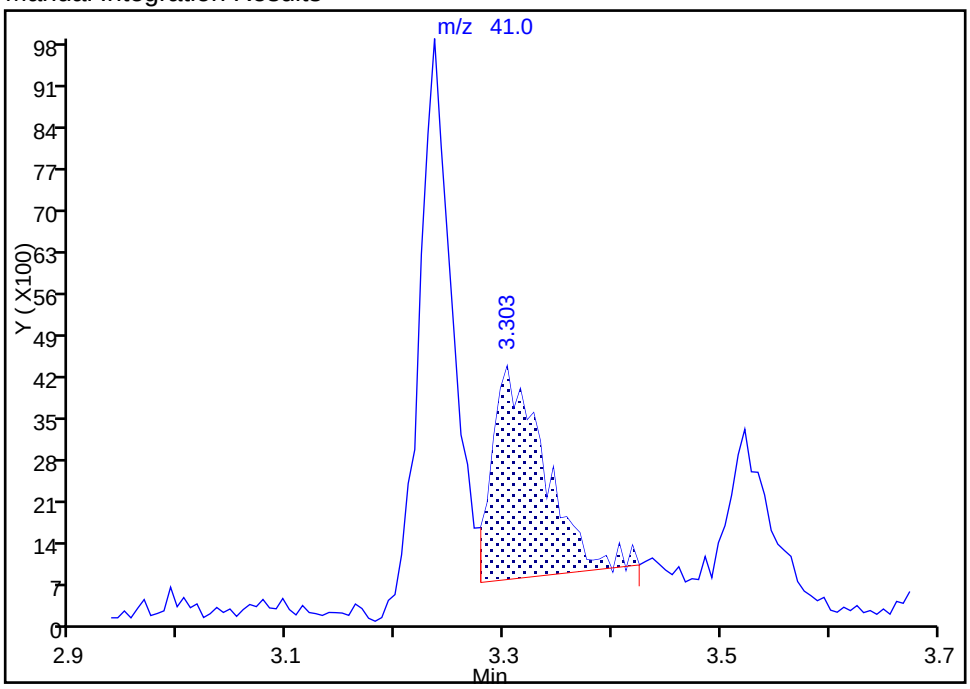
Processing Integration Results

RT: 3.24
Area: 21392
Amount: 56.307003
Amount Units: ug/l



Manual Integration Results

RT: 3.30
Area: 12039
Amount: 40.981564
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:28:28
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

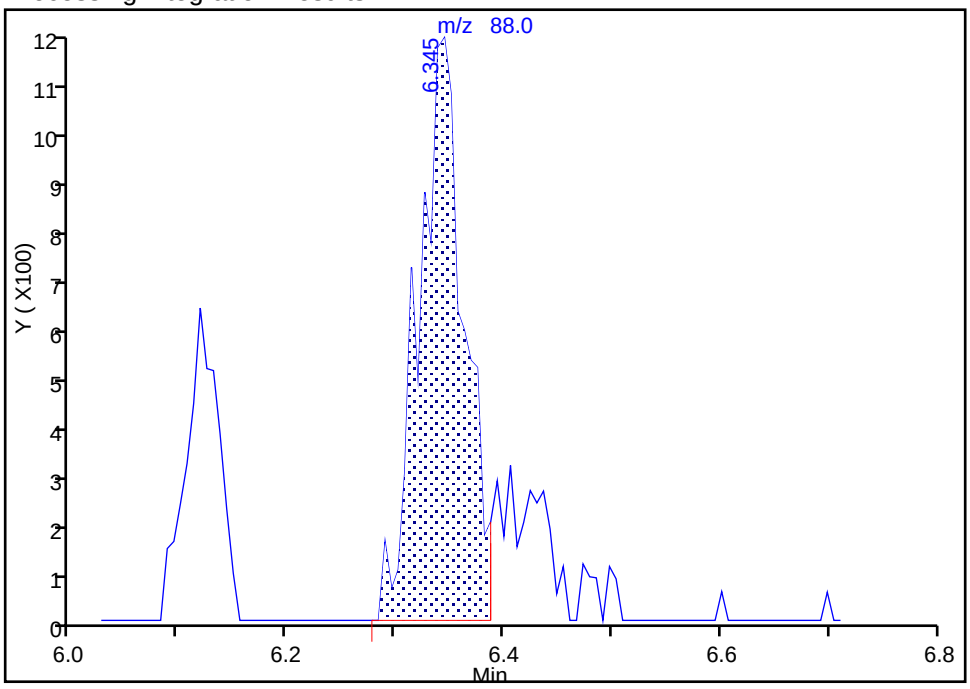
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80595.D
Injection Date: 09-Mar-2018 22:54:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

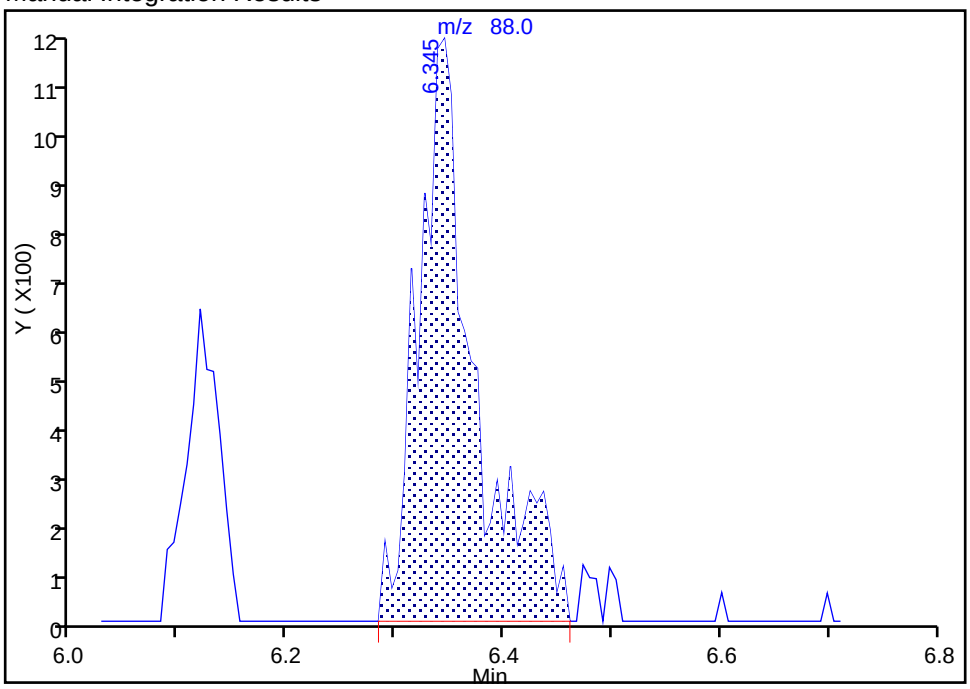
Processing Integration Results

RT: 6.34
Area: 3332
Amount: 85.946229
Amount Units: ug/l



Manual Integration Results

RT: 6.34
Area: 4115
Amount: 105.6862
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:29:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80596.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 09-Mar-2018 23:18:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0068588-004
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Mar-2018 17:11:03 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: delpolitov Date: 11-Mar-2018 17:11:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.596	1.596	0.000	87	16259	20.0	23.0	a
2 Dichlorodifluoromethane	85	1.638	1.638	0.000	98	108599	20.0	21.6	
3 Chloromethane	50	1.803	1.803	0.000	99	80854	20.0	22.4	
5 Butadiene	54	1.913	1.913	0.000	98	61205	20.0	22.5	
4 Vinyl chloride	62	1.913	1.913	0.000	98	86346	20.0	22.6	
6 Bromomethane	94	2.212	2.212	0.000	98	72490	20.0	22.2	
7 Chloroethane	64	2.279	2.279	0.000	100	43439	20.0	22.8	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	96	136096	20.0	22.2	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	80	137546	20.0	22.5	
10 Pentane	72	2.498	2.498	0.000	93	19074	40.0	47.9	
12 Ethanol	46	2.687	2.687	0.000	73	7054	800.0	858.6	
11 Ethyl ether	59	2.699	2.699	0.000	93	39448	20.0	20.4	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	97	47653	20.0	21.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.760	0.000	86	67081	20.0	23.0	
15 Acrolein	56	2.882	2.882	0.000	96	92653	300.0	316.5	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.894	0.000	98	83373	20.0	21.6	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	98	65939	20.0	21.8	
18 Acetone	43	3.004	3.004	0.000	85	79181	100.0	100.0	
19 Iodomethane	142	3.083	3.083	0.000	99	147142	20.0	22.8	
22 Isopropyl alcohol	45	3.083	3.083	0.000	6	30920	200.0	211.2	a
20 Carbon disulfide	76	3.120	3.120	0.000	98	220778	20.0	22.5	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	94	36684	20.0	22.6	
23 Methyl acetate	43	3.248	3.248	0.000	98	160296	100.0	102.0	
24 Cyclopentene	67	3.266	3.266	0.000	94	133075	20.0	21.5	
29 Acetonitrile	41	3.315	3.315	0.000	95	63974	200.0	227.6	a
* 25 TBA-d9 (IS)	65	3.358	3.358	0.000	0	232760	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	85	71405	20.0	20.8	
27 2-Methyl-2-propanol	59	3.431	3.431	0.000	98	63710	200.0	191.1	
28 Methyl tert-butyl ether	73	3.534	3.534	0.000	95	174490	20.0	20.8	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	92	68922	20.0	22.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	93	172248	200.0	208.6	
32 Hexane	43	3.717	3.717	0.000	90	42557	20.0	21.9	
33 Isopropyl ether	45	3.931	3.931	0.000	95	159630	20.0	21.3	
35 Vinyl acetate	86	3.973	3.973	0.000	99	17846	40.0	41.4	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	79	107334	20.0	22.5	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	91	53814	20.0	22.3	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	173401	20.0	21.3	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	168321	250.0	250.0	
39 2,2-Dichloropropane	79	4.485	4.485	0.000	95	34363	20.0	21.3	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	97	76673	20.0	21.5	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	98	29733	100.0	97.8	
41 Ethyl acetate	70	4.510	4.510	0.000	95	10651	40.0	40.9	
44 Methyl acrylate	55	4.571	4.571	0.000	99	38519	20.0	19.3	
43 Propionitrile	54	4.650	4.650	0.000	97	69386	200.0	204.8	
46 Chlorobromomethane	128	4.735	4.735	0.000	69	39991	20.0	21.0	
45 Tetrahydrofuran	72	4.735	4.735	0.000	58	14733	40.0	40.1	
47 Methacrylonitrile	67	4.754	4.754	0.000	90	196077	200.0	199.5	
48 Chloroform	83	4.784	4.784	0.000	98	124140	20.0	21.9	
49 Cyclohexane	84	4.937	4.937	0.000	87	98900	20.0	21.5	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	96	161458	50.0	52.1	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	96	120237	20.0	22.3	
52 Carbon tetrachloride	117	5.065	5.065	0.000	95	107425	20.0	22.3	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	96	81275	20.0	22.1	
56 Isobutyl alcohol	74	5.193	5.193	0.000	97	5661	500.0	472.4	
54 Benzene	78	5.290	5.290	0.000	96	229582	20.0	21.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.302	0.000	0	155045	50.0	50.6	
57 Isopropyl acetate	43	5.327	5.327	0.000	95	142670	20.0	18.9	a
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	97	180808	20.0	20.6	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	98	81751	20.0	20.1	
60 n-Heptane	57	5.430	5.430	0.000	89	42824	20.0	20.8	
* 61 Fluorobenzene	96	5.577	5.577	0.000	99	449855	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	88	31991	500.0	478.4	
63 Trichloroethene	95	5.943	5.943	0.000	96	65670	20.0	21.0	
64 Ethyl acrylate	56	6.064	6.064	0.000	98	35150	20.0	22.6	
65 Methylcyclohexane	83	6.071	6.071	0.000	93	115827	20.0	21.1	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	89	51628	20.0	20.1	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	23174	1000.0	1000.0	M
68 Methyl methacrylate	41	6.290	6.290	0.000	83	75766	40.0	38.9	
70 n-Propyl acetate	43	6.345	6.345	0.000	97	56241	20.0	19.6	
69 1,4-Dioxane	88	6.345	6.345	0.000	29	14385	400.0	347.7	
71 Dibromomethane	93	6.369	6.369	0.000	93	40080	20.0	20.5	
72 Dichlorobromomethane	83	6.516	6.516	0.000	98	81469	20.0	20.2	
74 2-Nitropropane	41	6.845	6.845	0.000	83	23506	40.0	35.0	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	67	22752	20.0	20.2	
75 Epichlorohydrin	57	6.955	6.955	0.000	99	95836	400.0	416.0	
76 cis-1,3-Dichloropropene	75	7.015	7.015	0.000	92	88324	20.0	20.6	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	95	219435	100.0	105.6	
$ 78 Toluene-d8 (Surr)	98	7.265	7.265	0.000	97	561834	50.0	52.2	
79 Toluene	91	7.345	7.345	0.000	92	263681	20.0	21.1	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	98	76085	20.0	20.3	
81 Ethyl methacrylate	69	7.704	7.704	0.000	86	55231	20.0	19.3	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	95	41825	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.966	7.966	0.000	97	78818	20.0	21.6	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	92	75969	20.0	20.6	
85 2-Hexanone	43	8.174	8.174	0.000	95	142225	100.0	105.7	
86 n-Butyl acetate	43	8.284	8.284	0.000	98	57026	20.0	19.1	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	69349	20.0	20.0	
88 Ethylene Dibromide	107	8.527	8.527	0.000	98	56106	20.0	20.6	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	83	372429	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	97	178175	20.0	20.9	
92 Ethylbenzene	106	9.198	9.198	0.000	98	91806	20.0	21.5	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	95	71244	20.0	19.7	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	111809	20.0	21.4	
94 n-Butyl acrylate	73	9.777	9.777	0.000	97	33492	20.0	19.6	
95 o-Xylene	106	9.814	9.814	0.000	93	117566	20.0	21.7	
96 Styrene	104	9.844	9.844	0.000	96	189929	20.0	21.9	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	92	68328	20.0	19.5	
98 Bromoform	173	10.082	10.082	0.000	97	46470	20.0	19.3	
99 Isopropylbenzene	105	10.198	10.198	0.000	94	340602	20.0	20.9	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	191153	50.0	52.1	
101 Bromobenzene	156	10.564	10.564	0.000	91	86939	20.0	20.9	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	97	70850	20.0	20.1	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	370853	20.0	21.9	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	96	22471	20.0	19.6	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.661	0.000	87	16883	20.0	20.1	
106 2-Chlorotoluene	91	10.740	10.740	0.000	88	259421	20.0	21.5	
107 4-Ethyltoluene	105	10.740	10.740	0.000	91	331555	20.0	22.0	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	93	293587	20.0	21.9	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	223708	20.0	21.9	
110 Butyl Methacrylate	87	10.899	10.899	0.000	87	72100	20.0	20.3	
111 tert-Butylbenzene	119	11.100	11.100	0.000	94	240377	20.0	20.2	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	96	299744	20.0	21.7	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	371920	20.0	20.4	
114 4-Isopropyltoluene	119	11.435	11.435	0.000	98	332656	20.0	20.4	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	98	173187	20.0	21.6	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	92	222833	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	172276	20.0	21.4	
118 Benzyl chloride	91	11.667	11.667	0.000	99	122455	20.0	19.5	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	93	312354	20.0	21.5	
120 p-Diethylbenzene	119	11.777	11.777	0.000	95	193587	20.0	22.7	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	165094	20.0	21.3	
122 1,2-Dichlorobenzene	146	11.862	11.862	0.000	98	173366	20.0	21.2	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	330422	20.0	21.7	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	92	15235	20.0	18.9	
125 1,3,5-Trichlorobenzene	180	12.642	12.642	0.000	98	153087	20.0	21.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	148361	20.0	21.6	
127 Hexachlorobutadiene	225	13.215	13.215	0.000	95	72800	20.0	20.8	
128 Naphthalene	128	13.331	13.331	0.000	99	343525	20.0	20.8	
129 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	97	150867	20.0	21.5	
S 130 1,2-Dichloroethene, Total	100				0		40.0	44.3	
S 131 Xylenes, Total	100				0		40.0	43.1	
S 132 Total BTEX	1				0		100.0	107.3	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00074	Amount Added:	3.00	Units: uL	
GASES Li_00250	Amount Added:	2.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

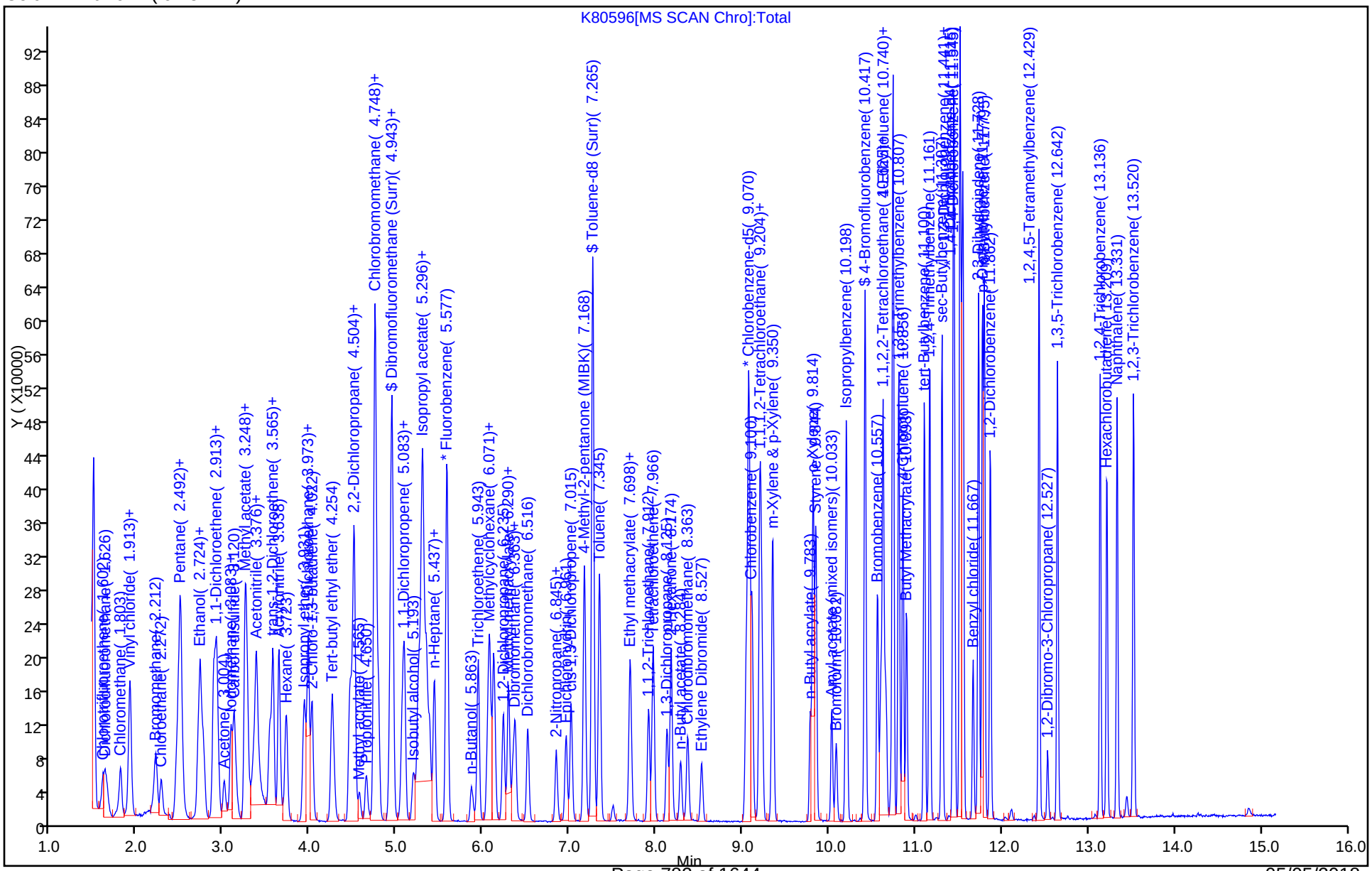
Report Date: 11-Mar-2018 17:11:05 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80596.D

Injection Date:	09-Mar-2018 23:18:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD20			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

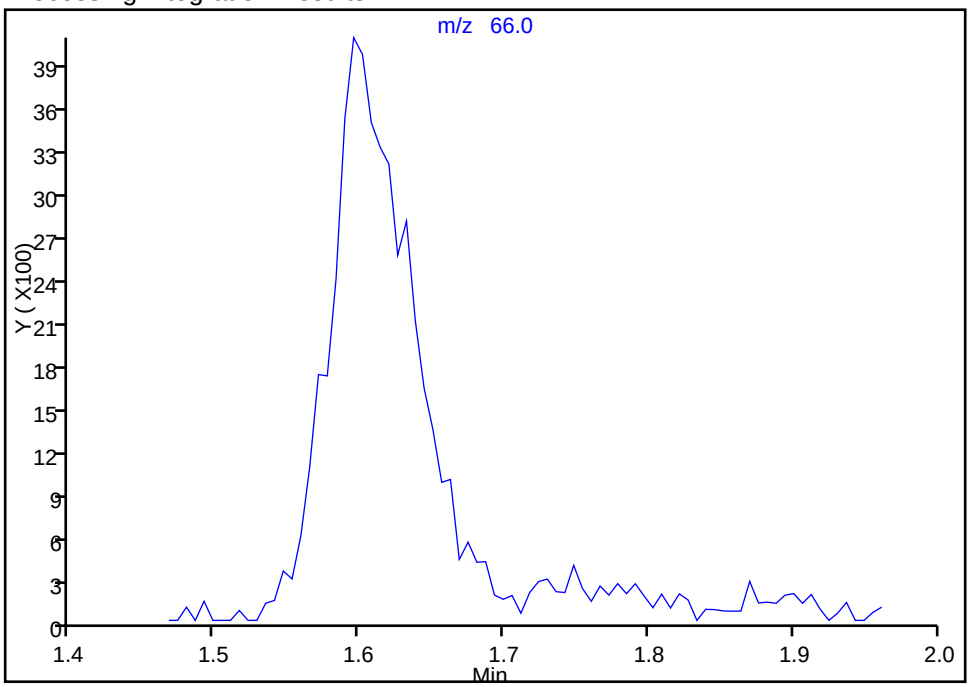
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80596.D
Injection Date: 09-Mar-2018 23:18:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

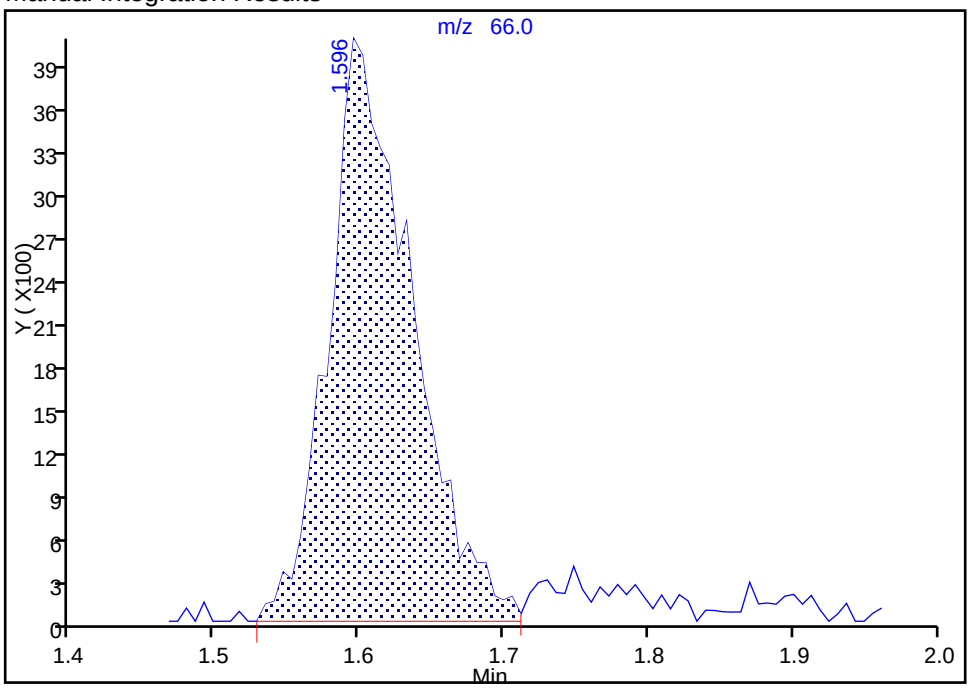
Not Detected
Expected RT: 1.60

Processing Integration Results



Manual Integration Results

RT: 1.60
Area: 16259
Amount: 22.996449
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:18:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

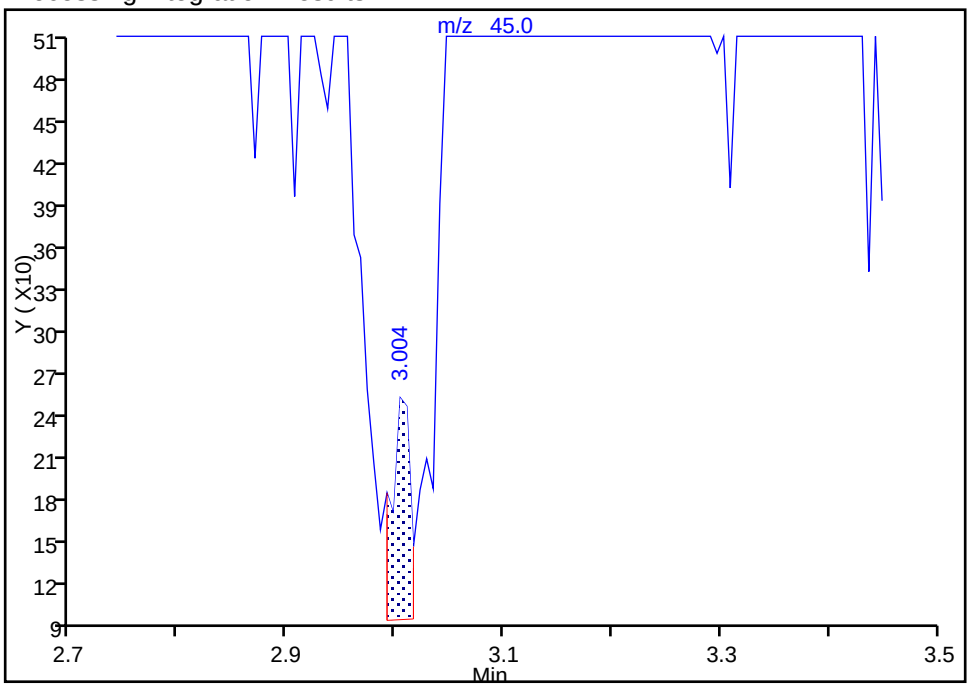
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80596.D
Injection Date: 09-Mar-2018 23:18:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

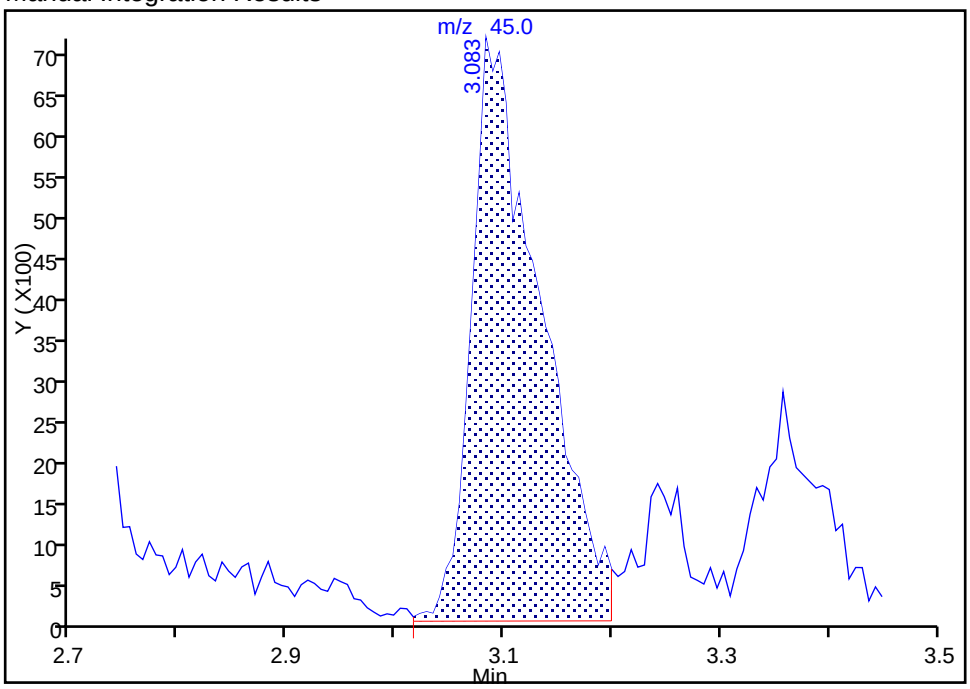
Processing Integration Results

RT: 3.00
Area: 191
Amount: 1.176903
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 30920
Amount: 211.2033
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:18:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

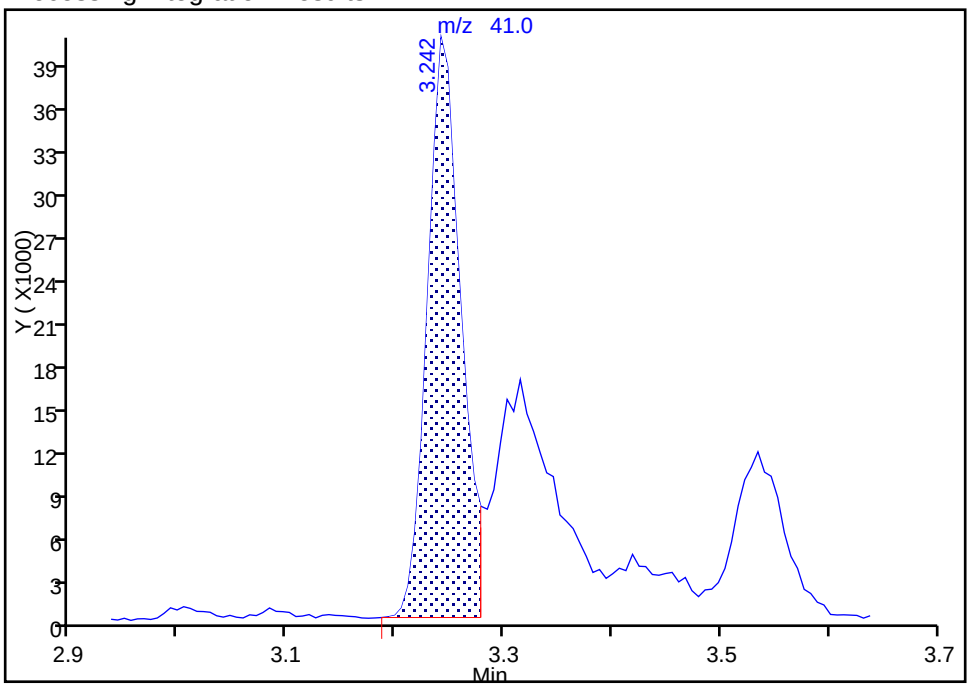
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80596.D
Injection Date: 09-Mar-2018 23:18:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

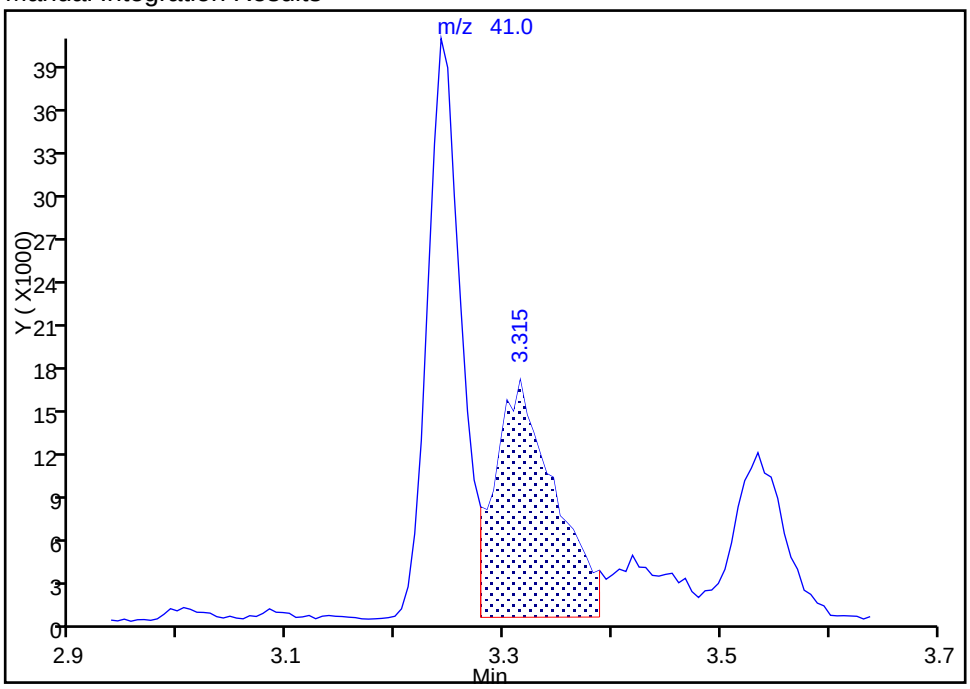
Processing Integration Results

RT: 3.24
Area: 87131
Amount: 232.9147
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 63974
Amount: 227.5704
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:19:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

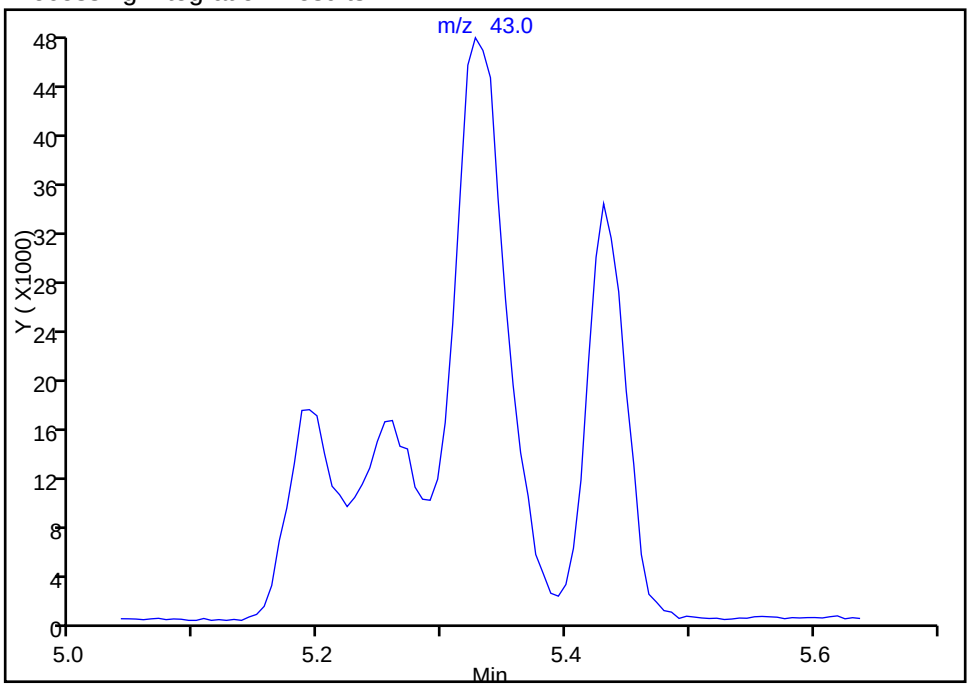
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80596.D				
Injection Date:	09-Mar-2018 23:18:30	Instrument ID:	CVOAMS9		
Lims ID:	STD20				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

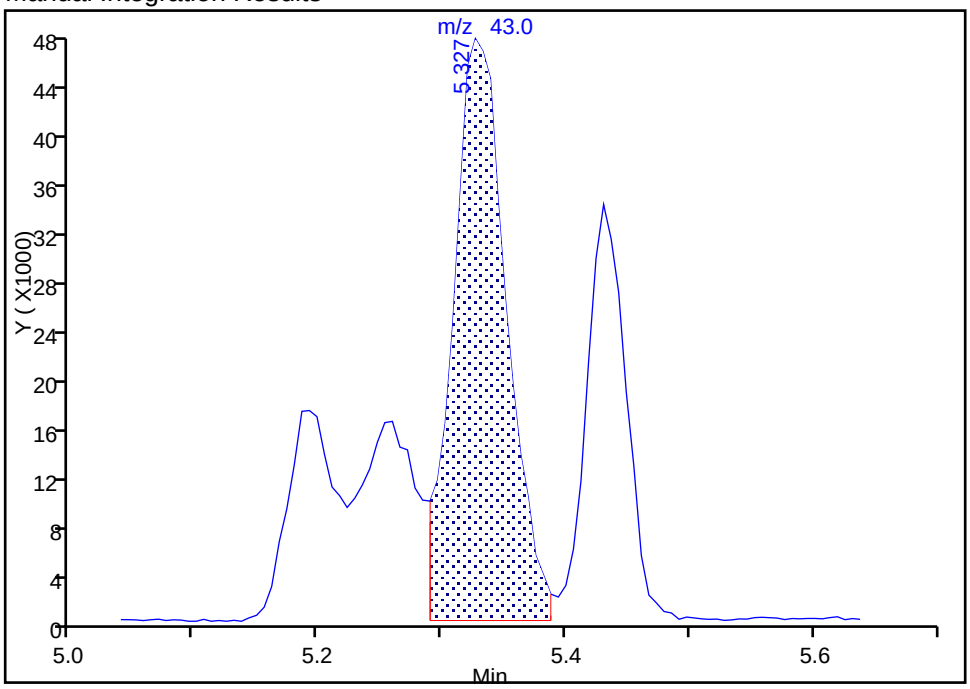
Not Detected
Expected RT: 5.33

Processing Integration Results



Manual Integration Results

RT: 5.33
Area: 142670
Amount: 18.863425
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:19:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

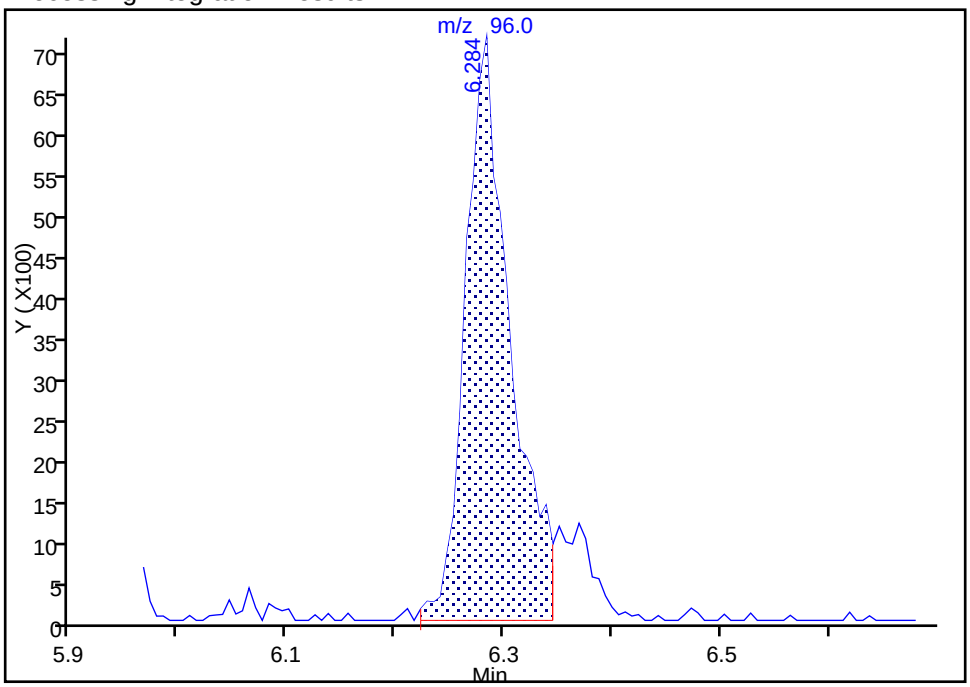
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80596.D
Injection Date: 09-Mar-2018 23:18:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

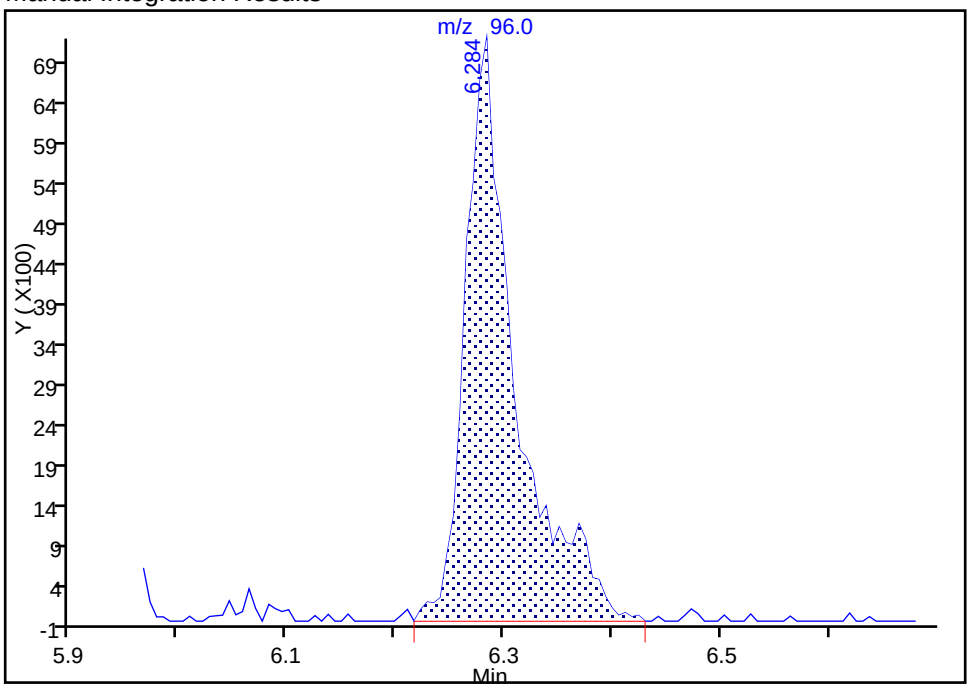
Processing Integration Results

RT: 6.28
Area: 20588
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.28
Area: 23174
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:19:42
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80597.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 09-Mar-2018 23:43:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0068588-005
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Mar-2018 17:11:46 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: tupayachia Date: 10-Mar-2018 03:46:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.602	1.596	0.006	93	40737	50.0	53.8	
2 Dichlorodifluoromethane	85	1.627	1.638	-0.011	99	272833	50.0	50.1	
3 Chloromethane	50	1.803	1.803	0.000	99	195954	50.0	50.7	
5 Butadiene	54	1.913	1.913	0.000	97	155459	50.0	53.4	
4 Vinyl chloride	62	1.907	1.913	-0.006	98	211156	50.0	51.6	
6 Bromomethane	94	2.212	2.212	0.000	98	180758	50.0	51.6	
7 Chloroethane	64	2.279	2.279	0.000	100	102879	50.0	50.5	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	98	343747	50.0	52.3	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	97	354022	50.0	54.1	
10 Pentane	72	2.498	2.498	0.000	95	47450	100.0	109.6	
12 Ethanol	46	2.663	2.687	-0.024	71	16636	2000.0	1861.6	M
11 Ethyl ether	59	2.693	2.699	-0.006	93	102770	50.0	49.6	
13 2-Methyl-1,3-butadiene	53	2.718	2.724	-0.006	96	123232	50.0	51.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.760	-0.006	87	169385	50.0	54.3	
15 Acrolein	56	2.876	2.882	-0.006	95	124078	400.0	389.6	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.894	-0.006	97	216864	50.0	51.9	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	96	168217	50.0	51.3	
18 Acetone	43	3.004	3.004	0.000	85	204318	250.0	234.0	
19 Iodomethane	142	3.077	3.083	-0.006	100	365145	50.0	52.8	
22 Isopropyl alcohol	45	3.090	3.083	0.007	1	79220	500.0	497.5	a
20 Carbon disulfide	76	3.120	3.120	0.000	98	564853	50.0	53.8	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	92	89164	50.0	51.2	
23 Methyl acetate	43	3.248	3.248	0.000	97	412989	250.0	245.6	
24 Cyclopentene	67	3.266	3.266	0.000	91	348613	50.0	52.0	
29 Acetonitrile	41	3.309	3.315	-0.006	93	153270	500.0	501.3	a
* 25 TBA-d9 (IS)	65	3.358	3.358	0.000	0	253166	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.376	-0.006	87	177995	50.0	48.5	
27 2-Methyl-2-propanol	59	3.437	3.431	0.006	97	165358	500.0	456.1	
28 Methyl tert-butyl ether	73	3.529	3.534	-0.005	95	449438	50.0	50.1	
30 trans-1,2-Dichloroethene	96	3.565	3.571	-0.006	92	174350	50.0	53.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.638	-0.006	91	438194	500.0	495.8	
32 Hexane	43	3.718	3.717	0.001	90	111874	50.0	53.8	
33 Isopropyl ether	45	3.925	3.931	-0.006	95	409206	50.0	51.1	
35 Vinyl acetate	86	3.974	3.973	0.001	99	46234	100.0	98.7	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	82	268689	50.0	52.7	
36 2-Chloro-1,3-butadiene	88	4.016	4.022	-0.006	92	142422	50.0	55.1	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	445697	50.0	51.2	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	184698	250.0	250.0	
39 2,2-Dichloropropane	79	4.480	4.485	-0.005	97	87520	50.0	50.8	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	98	198888	50.0	52.0	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	79956	250.0	239.7	
41 Ethyl acetate	70	4.510	4.510	0.000	92	28460	100.0	99.5	
44 Methyl acrylate	55	4.565	4.571	-0.006	99	103731	50.0	48.6	
43 Propionitrile	54	4.644	4.650	-0.006	97	187110	500.0	507.9	
46 Chlorobromomethane	128	4.736	4.735	0.001	74	103055	50.0	50.7	
45 Tetrahydrofuran	72	4.730	4.735	-0.005	59	38092	100.0	94.5	
47 Methacrylonitrile	67	4.748	4.754	-0.006	90	518955	500.0	493.3	
48 Chloroform	83	4.784	4.784	0.000	99	318793	50.0	52.4	
49 Cyclohexane	84	4.931	4.937	-0.006	90	255876	50.0	51.5	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	96	170236	50.0	51.4	
50 1,1,1-Trichloroethane	97	4.937	4.943	-0.006	97	307642	50.0	53.3	
52 Carbon tetrachloride	117	5.059	5.065	-0.006	98	281861	50.0	54.6	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	97	214948	50.0	54.6	
56 Isobutyl alcohol	74	5.205	5.193	0.012	94	15472	1250.0	1167.2	
54 Benzene	78	5.290	5.290	0.000	95	605358	50.0	53.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.302	0.001	0	167397	50.0	51.1	
57 Isopropyl acetate	43	5.333	5.327	0.006	95	393923	50.0	48.7	
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	95	488671	50.0	52.0	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	98	215433	50.0	49.4	
60 n-Heptane	57	5.431	5.430	0.001	88	115331	50.0	51.7	
* 61 Fluorobenzene	96	5.577	5.577	0.000	99	481522	50.0	50.0	
62 n-Butanol	56	5.864	5.863	0.001	88	91046	1250.0	1251.7	
63 Trichloroethene	95	5.937	5.943	-0.005	97	178136	50.0	53.2	
64 Ethyl acrylate	56	6.071	6.064	0.007	98	90607	50.0	54.3	
65 Methylcyclohexane	83	6.071	6.071	0.000	93	303675	50.0	51.0	
66 1,2-Dichloropropane	63	6.229	6.235	-0.006	87	136852	50.0	49.8	
* 67 1,4-Dioxane-d8	96	6.278	6.284	-0.006	0	22750	1000.0	1000.0	M
68 Methyl methacrylate	41	6.290	6.290	0.000	82	206153	100.0	98.9	
70 n-Propyl acetate	43	6.345	6.345	0.000	97	153758	50.0	50.1	
69 1,4-Dioxane	88	6.333	6.345	-0.012	30	35403	1000.0	871.7	
71 Dibromomethane	93	6.370	6.369	0.001	93	104980	50.0	50.3	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	220647	50.0	51.2	
74 2-Nitropropane	41	6.845	6.845	0.000	83	64073	100.0	89.2	
73 2-Chloroethyl vinyl ether	63	6.839	6.845	-0.006	70	60944	50.0	50.6	
75 Epichlorohydrin	57	6.955	6.955	0.001	99	254742	1000.0	1007.8	
76 cis-1,3-Dichloropropene	75	7.016	7.015	0.001	92	233789	50.0	51.4	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	94	583887	250.0	256.0	
$ 78 Toluene-d8 (Surr)	98	7.266	7.265	0.001	97	587757	50.0	51.4	
79 Toluene	91	7.345	7.345	0.000	92	692346	50.0	52.1	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	97	202488	50.0	50.9	
81 Ethyl methacrylate	69	7.705	7.704	0.001	83	157982	50.0	51.9	
82 1,1,2-Trichloroethane	83	7.906	7.912	-0.006	95	109778	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.966	0.001	96	207858	50.0	53.6	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	89	202902	50.0	51.6	
85 2-Hexanone	43	8.168	8.174	-0.006	95	379360	250.0	257.0	
86 n-Butyl acetate	43	8.278	8.284	-0.006	99	157903	50.0	49.7	
87 Chlorodibromomethane	129	8.363	8.369	-0.006	97	192425	50.0	52.1	
88 Ethylene Dibromide	107	8.528	8.527	0.001	98	146873	50.0	50.8	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	82	395837	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	97	463234	50.0	51.2	
92 Ethylbenzene	106	9.198	9.198	0.000	98	239854	50.0	52.8	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	95	205352	50.0	53.4	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	293540	50.0	52.8	
94 n-Butyl acrylate	73	9.783	9.777	0.006	97	94103	50.0	51.9	
95 o-Xylene	106	9.814	9.814	0.000	92	305753	50.0	53.1	
96 Styrene	104	9.844	9.844	0.000	95	496052	50.0	53.9	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	92	187312	50.0	50.2	
98 Bromoform	173	10.082	10.082	0.000	97	128718	50.0	50.4	
99 Isopropylbenzene	105	10.198	10.198	0.000	95	902218	50.0	51.5	
$ 100 4-Bromofluorobenzene	174	10.418	10.417	0.001	97	203133	50.0	52.1	
101 Bromobenzene	156	10.558	10.564	-0.006	90	225443	50.0	51.0	
102 1,1,2,2-Tetrachloroethane	83	10.594	10.600	-0.006	98	189802	50.0	50.7	
103 N-Propylbenzene	91	10.625	10.625	0.001	99	961788	50.0	53.3	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	57985	50.0	47.6	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.661	0.000	93	42929	50.0	47.9	
106 2-Chlorotoluene	91	10.741	10.740	0.001	90	662183	50.0	51.6	
107 4-Ethyltoluene	105	10.741	10.740	0.001	90	857417	50.0	53.5	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	93	757640	50.0	53.1	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	567290	50.0	52.2	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	205646	50.0	54.5	
111 tert-Butylbenzene	119	11.100	11.100	0.000	94	636901	50.0	49.6	
112 1,2,4-Trimethylbenzene	105	11.161	11.167	-0.006	97	779144	50.0	53.1	
113 sec-Butylbenzene	105	11.308	11.307	0.001	100	997797	50.0	50.7	
114 4-Isopropyltoluene	119	11.436	11.435	0.001	98	881569	50.0	50.1	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	98	441193	50.0	51.7	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	92	237328	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	436149	50.0	50.9	
118 Benzyl chloride	91	11.667	11.667	0.000	99	328748	50.0	49.1	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	804695	50.0	52.1	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	493550	50.0	54.4	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	415172	50.0	49.8	
122 1,2-Dichlorobenzene	146	11.862	11.862	0.000	98	444763	50.0	51.1	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	881620	50.0	54.3	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	92	40408	50.0	47.1	
125 1,3,5-Trichlorobenzene	180	12.643	12.642	0.001	98	398644	50.0	53.3	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	95	381619	50.0	52.2	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	95	187618	50.0	49.9	
128 Naphthalene	128	13.332	13.331	0.001	99	894766	50.0	50.8	
129 1,2,3-Trichlorobenzene	180	13.521	13.520	0.001	97	389162	50.0	52.1	
S 130 1,2-Dichloroethene, Total	100				0		100.0	105.9	
S 131 Xylenes, Total	100				0		100.0	105.9	
S 132 Total BTEX	1				0		250.0	264.4	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	5.00	Units: uL	
ACROLEIN W_00074	Amount Added:	4.00	Units: uL	
GASES Li_00250	Amount Added:	5.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

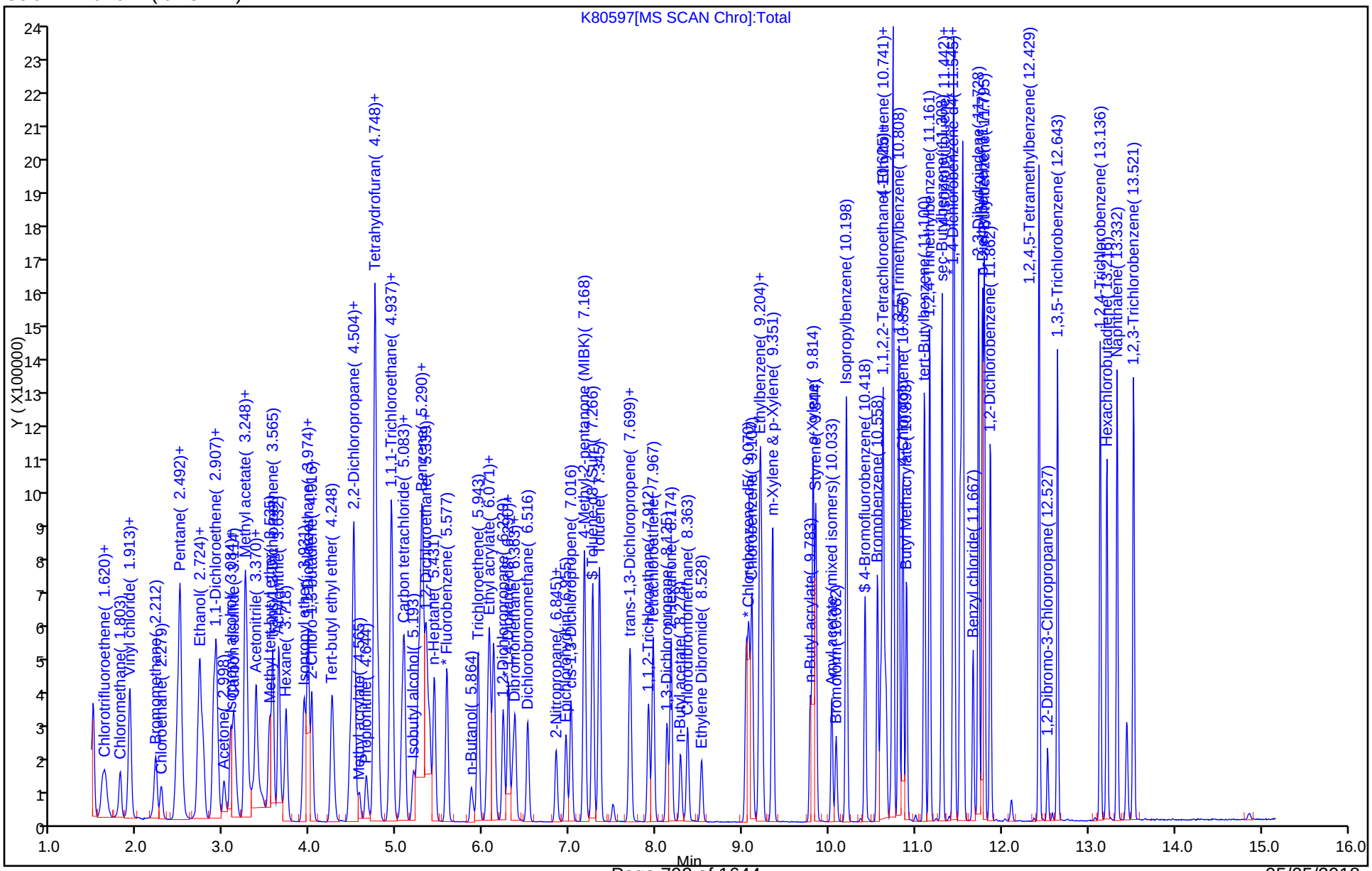
Report Date: 11-Mar-2018 17:11:48 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80597.D

Injection Date:	09-Mar-2018 23:43:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD50			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

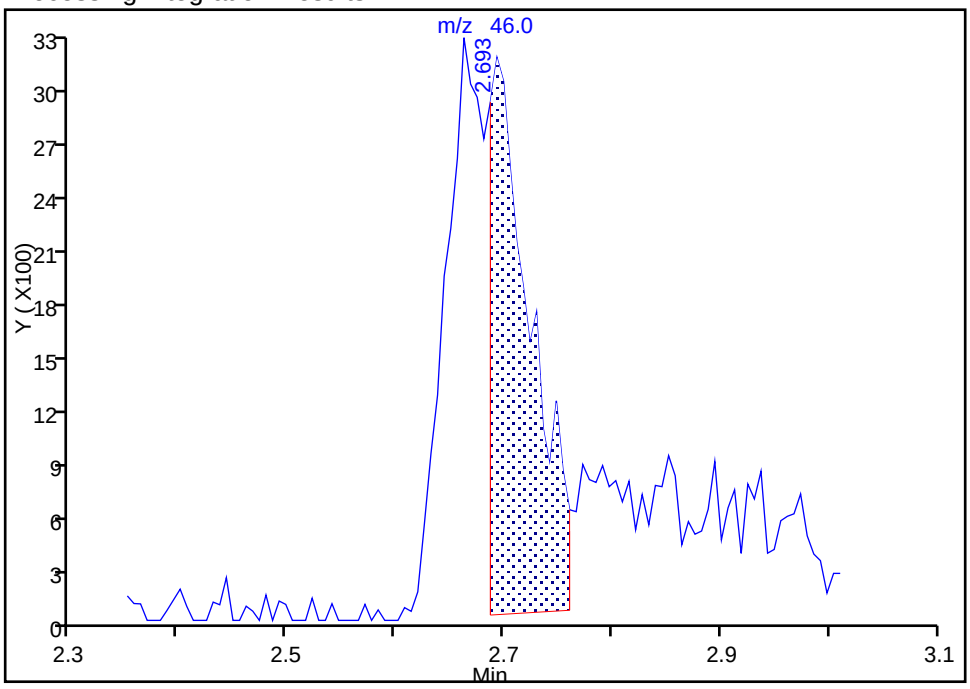
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80597.D
Injection Date: 09-Mar-2018 23:43:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethanol, CAS: 64-17-5

Signal: 1

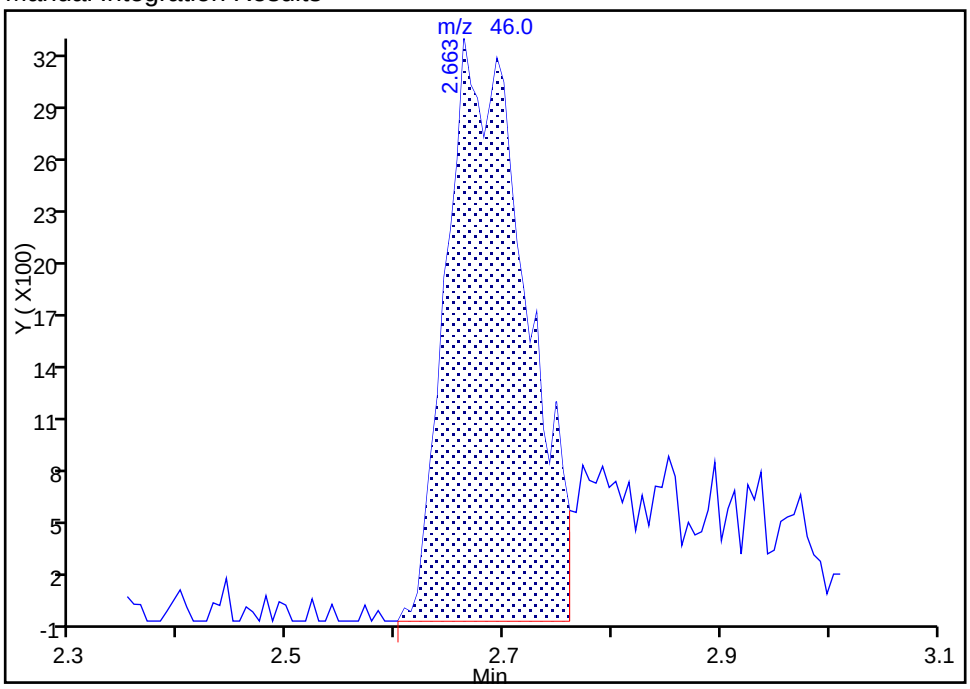
Processing Integration Results

RT: 2.69
Area: 8454
Amount: 1976.7292
Amount Units: ug/l



Manual Integration Results

RT: 2.66
Area: 16636
Amount: 1861.6393
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:30:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

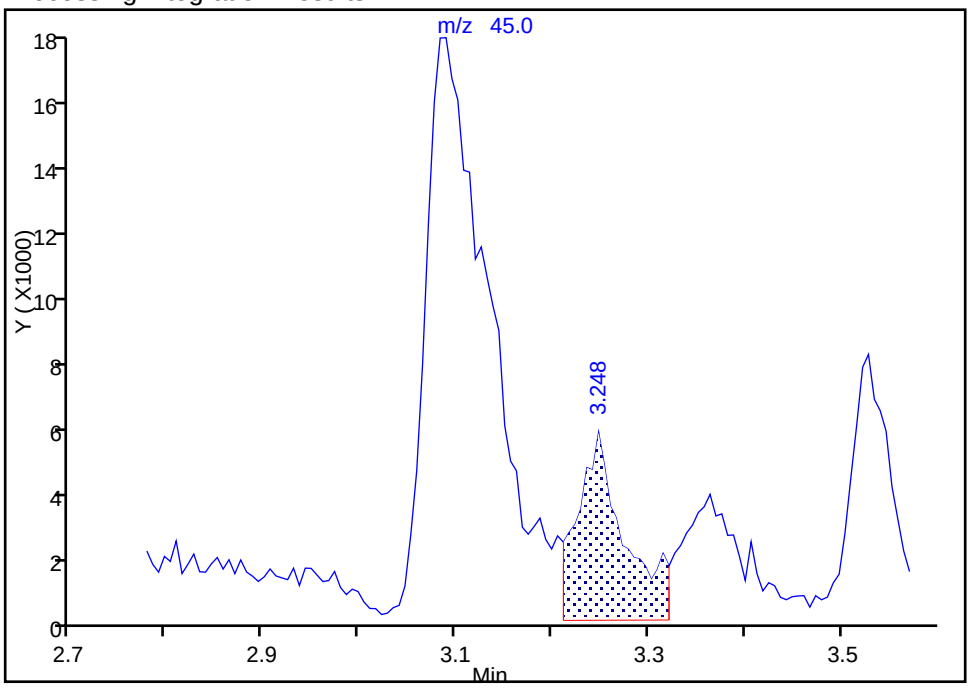
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80597.D
Injection Date: 09-Mar-2018 23:43:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

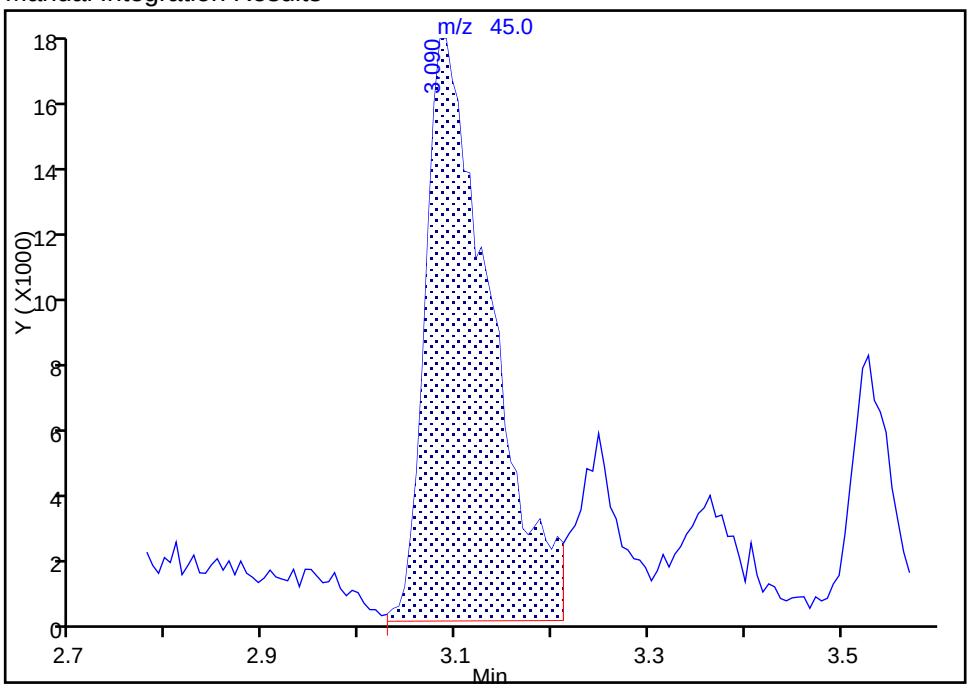
Processing Integration Results

RT: 3.25
Area: 18800
Amount: 193.9146
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 79220
Amount: 497.5067
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:30:22
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

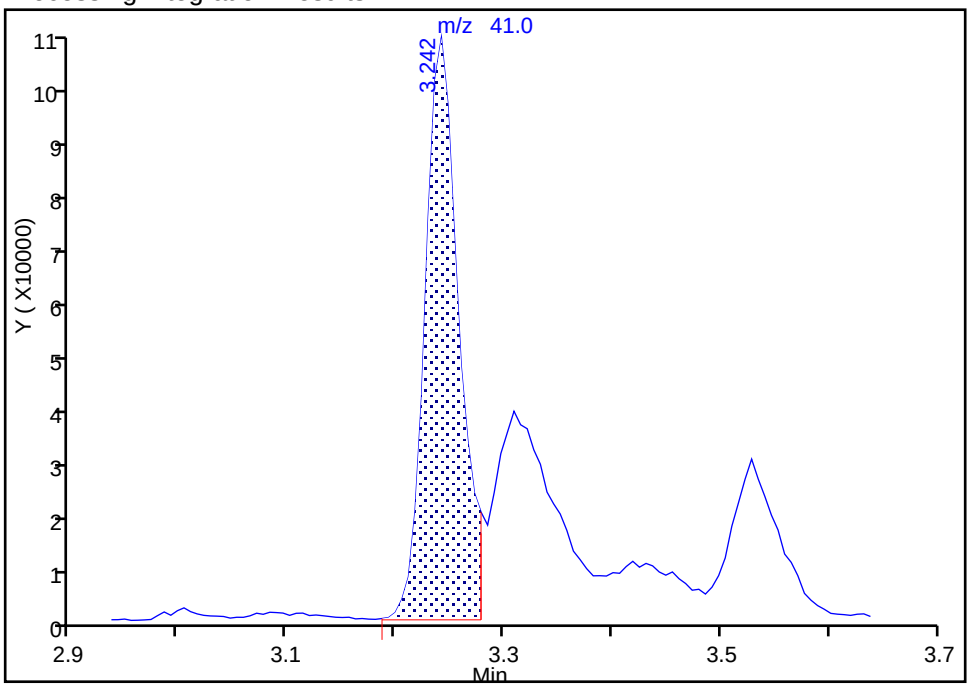
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80597.D
Injection Date: 09-Mar-2018 23:43:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

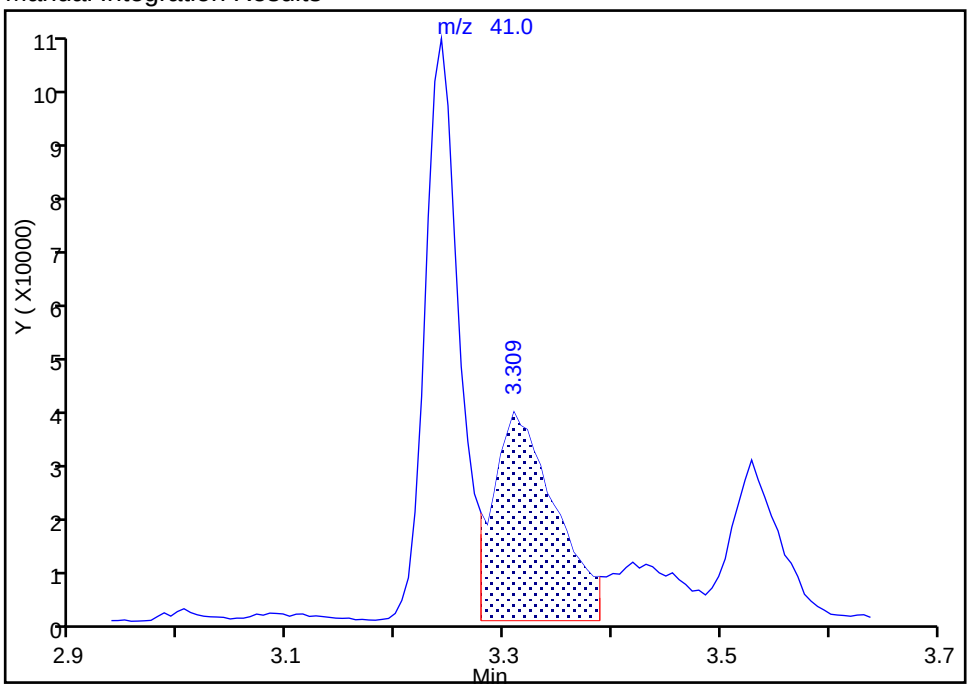
Processing Integration Results

RT: 3.24
Area: 231788
Amount: 528.3208
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 153270
Amount: 501.2708
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:30:27
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

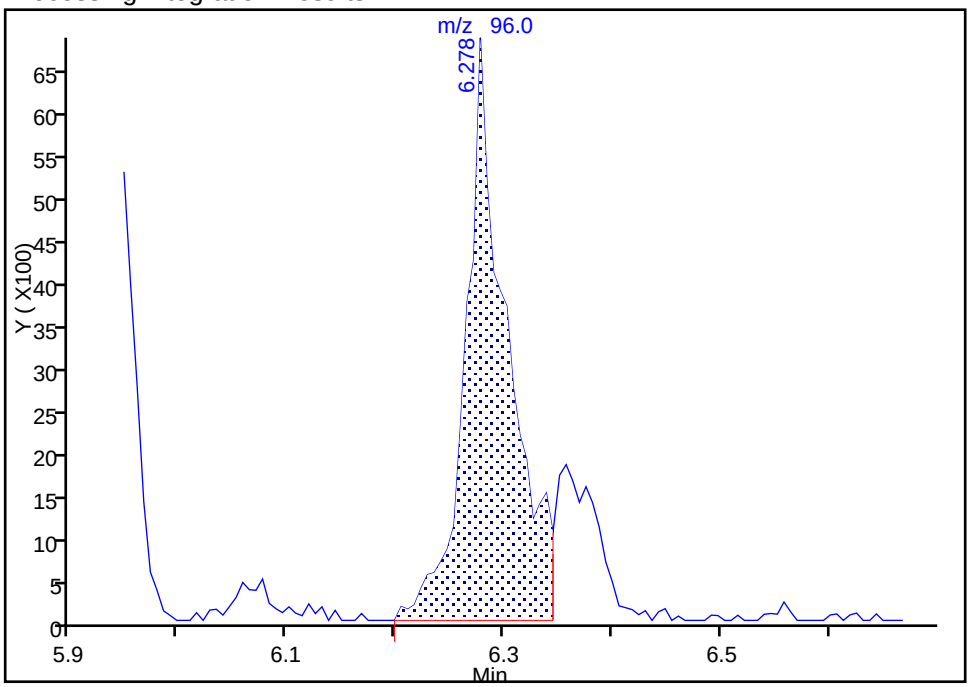
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80597.D
Injection Date: 09-Mar-2018 23:43:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

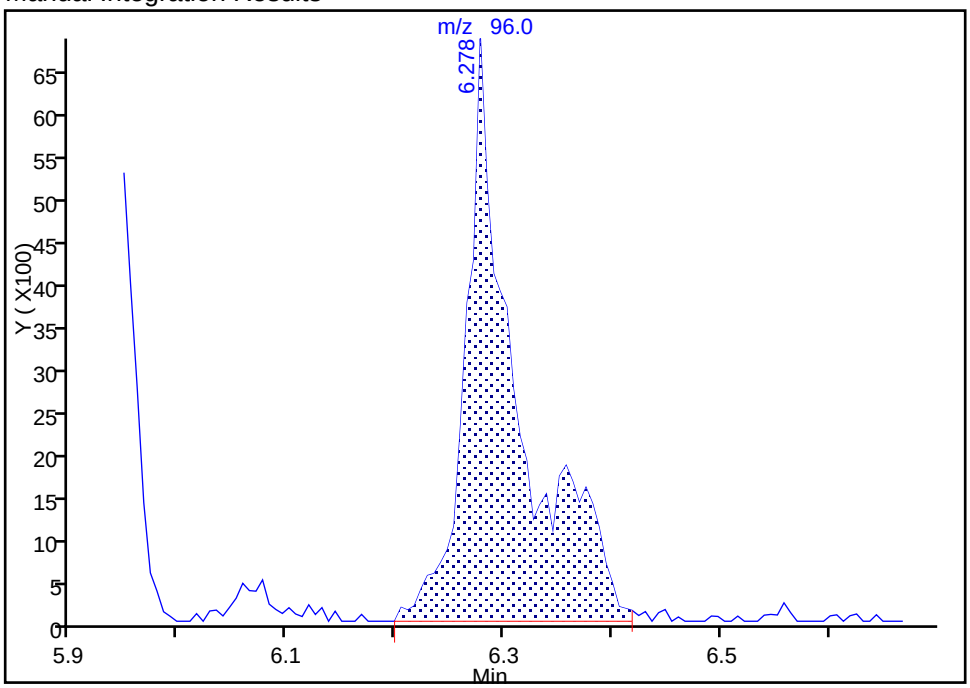
Processing Integration Results

RT: 6.28
Area: 18317
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.28
Area: 22750
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:31:03
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80598.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Mar-2018 00:07:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0068588-006
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Mar-2018 17:11:58 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: tupayachia Date: 10-Mar-2018 03:44:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.602	1.596	0.006	87	155201	200.0	188.1	
2 Dichlorodifluoromethane	85	1.633	1.638	-0.005	99	1161580	200.0	194.4	
3 Chloromethane	50	1.809	1.803	0.006	99	852187	200.0	202.1	
4 Vinyl chloride	62	1.913	1.913	0.000	98	906554	200.0	203.3	
5 Butadiene	54	1.925	1.913	0.012	97	671301	200.0	211.6	
6 Bromomethane	94	2.218	2.212	0.006	98	739968	200.0	193.9	
7 Chloroethane	64	2.279	2.279	0.000	100	451598	200.0	203.2	
9 Dichlorofluoromethane	67	2.480	2.474	0.006	98	1466947	200.0	204.8	
8 Trichlorofluoromethane	101	2.492	2.486	0.006	98	1464737	200.0	205.3	
10 Pentane	72	2.498	2.498	0.000	96	197297	400.0	394.3	
12 Ethanol	46	2.700	2.687	0.013	66	76094	8000.0	7369.5	M
11 Ethyl ether	59	2.700	2.699	0.001	94	433259	200.0	192.0	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	96	512675	200.0	196.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.760	-0.006	86	679385	200.0	199.9	
15 Acrolein	56	2.882	2.882	0.000	96	190928	500.0	518.9	
16 1,1,2-Trichloro-1,2,2-trif	101	2.895	2.894	0.001	97	863417	200.0	188.4	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	97	684486	200.0	190.6	
18 Acetone	43	3.004	3.004	0.000	85	1021466	1000.0	1005.5	
22 Isopropyl alcohol	45	3.090	3.083	0.007	1	382624	2000.0	2079.6	a
19 Iodomethane	142	3.084	3.083	0.001	100	1529031	200.0	202.8	
20 Carbon disulfide	76	3.120	3.120	0.000	99	2394372	200.0	209.3	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	93	384094	200.0	202.4	
23 Methyl acetate	43	3.248	3.248	0.000	98	1828266	1000.0	997.2	
24 Cyclopentene	67	3.266	3.266	0.000	92	1441341	200.0	196.0	
29 Acetonitrile	41	3.315	3.315	0.000	90	733605	2000.0	2076.4	a
* 25 TBA-d9 (IS)	65	3.358	3.358	0.000	0	292526	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	85	743200	200.0	185.9	
27 2-Methyl-2-propanol	59	3.437	3.431	0.006	97	796833	2000.0	1902.0	
28 Methyl tert-butyl ether	73	3.535	3.534	0.001	95	1931423	200.0	197.5	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	92	726236	200.0	206.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	91	1904598	2000.0	1976.7	
32 Hexane	43	3.724	3.717	0.007	91	463434	200.0	204.5	
33 Isopropyl ether	45	3.931	3.931	0.000	94	1723182	200.0	197.3	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	99	1118165	200.0	201.1	
35 Vinyl acetate	86	3.980	3.973	0.007	100	225747	400.0	416.9	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	92	589072	200.0	209.0	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	1906789	200.0	200.9	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	209197	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.485	0.001	95	368909	200.0	196.3	
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	98	827114	200.0	198.5	
41 Ethyl acetate	70	4.516	4.510	0.006	96	127712	400.0	394.4	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	97	362481	1000.0	959.5	
44 Methyl acrylate	55	4.571	4.571	0.000	99	485384	200.0	208.4	
43 Propionitrile	54	4.650	4.650	0.000	97	833626	2000.0	1958.3	
45 Tetrahydrofuran	72	4.736	4.735	0.001	88	171775	400.0	376.1	
46 Chlorobromomethane	128	4.742	4.735	0.007	74	443809	200.0	200.1	
47 Methacrylonitrile	67	4.754	4.754	0.000	92	2298075	2000.0	2003.7	
48 Chloroform	83	4.791	4.784	0.007	99	1325310	200.0	200.0	
49 Cyclohexane	84	4.931	4.937	-0.006	89	1034559	200.0	189.9	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	97	1283350	200.0	203.9	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	97	181995	50.0	50.4	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	1174933	200.0	208.9	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	96	904226	200.0	210.5	
56 Isobutyl alcohol	74	5.199	5.193	0.006	97	82018	5000.0	5307.8	
54 Benzene	78	5.297	5.290	0.007	96	2558276	200.0	211.0	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.302	0.007	0	185476	50.0	51.9	M
57 Isopropyl acetate	43	5.333	5.327	0.006	95	1750767	200.0	198.4	
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	97	2108677	200.0	205.8	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	98	931767	200.0	196.0	
60 n-Heptane	57	5.437	5.430	0.007	86	475823	200.0	194.1	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	524949	50.0	50.0	
62 n-Butanol	56	5.864	5.863	0.001	88	460164	5000.0	5475.2	
63 Trichloroethene	95	5.943	5.943	0.001	96	756101	200.0	207.3	
64 Ethyl acrylate	56	6.071	6.064	0.007	98	378097	200.0	208.0	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	1269702	200.0	194.3	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	88	591075	200.0	197.3	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	19191	1000.0	1000.0	M
68 Methyl methacrylate	41	6.290	6.290	0.000	83	960713	400.0	422.7	
69 1,4-Dioxane	88	6.339	6.345	-0.006	34	142559	4000.0	4161.2	
70 n-Propyl acetate	43	6.345	6.345	0.000	97	697711	200.0	208.7	
71 Dibromomethane	93	6.370	6.369	0.001	93	462061	200.0	202.9	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	981074	200.0	208.8	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	88	270671	200.0	206.3	
74 2-Nitropropane	41	6.845	6.845	0.000	91	336123	400.0	429.0	
75 Epichlorohydrin	57	6.961	6.955	0.007	99	1156777	4000.0	4040.3	
76 cis-1,3-Dichloropropene	75	7.022	7.015	0.007	92	1046976	200.0	214.2	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	94	2700608	1000.0	1045.4	
$ 78 Toluene-d8 (Surr)	98	7.272	7.265	0.007	97	654361	50.0	53.3	
79 Toluene	91	7.345	7.345	0.000	92	2986011	200.0	209.2	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	97	917671	200.0	214.7	
81 Ethyl methacrylate	69	7.711	7.704	0.007	87	728161	200.0	222.6	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	95	490404	200.0	206.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.966	0.001	98	882846	200.0	212.0	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	90	875842	200.0	207.6	
85 2-Hexanone	43	8.174	8.174	0.000	95	1688994	1000.0	1010.2	
86 n-Butyl acetate	43	8.284	8.284	0.000	98	713914	200.0	209.1	
87 Chlorodibromomethane	129	8.363	8.369	-0.006	98	841222	200.0	212.2	
88 Ethylene Dibromide	107	8.528	8.527	0.001	98	635317	200.0	204.8	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	84	425103	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	97	1983820	200.0	204.0	
92 Ethylbenzene	106	9.204	9.198	0.006	98	1042565	200.0	213.8	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	95	918823	200.0	222.5	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	1264692	200.0	211.8	
94 n-Butyl acrylate	73	9.783	9.777	0.006	97	425296	200.0	218.5	
95 o-Xylene	106	9.820	9.814	0.006	93	1342558	200.0	217.2	
96 Styrene	104	9.851	9.844	0.007	96	2103544	200.0	212.7	
97 Amyl acetate (mixed isomer	43	10.027	10.033	-0.006	92	842762	200.0	222.6	
98 Bromoform	173	10.082	10.082	0.000	98	582147	200.0	212.3	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	3877510	200.0	204.9	
$ 100 4-Bromofluorobenzene	174	10.418	10.417	0.001	95	212588	50.0	50.8	
101 Bromobenzene	156	10.564	10.564	0.000	90	946574	200.0	211.2	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	97	819672	200.0	215.7	
103 N-Propylbenzene	91	10.625	10.625	0.001	99	4065987	200.0	222.3	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	96	250623	200.0	202.9	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.661	0.000	93	187717	200.0	206.7	
107 4-Ethyltoluene	105	10.741	10.740	0.001	90	3531350	200.0	217.2	
106 2-Chlorotoluene	91	10.741	10.740	0.001	90	2804849	200.0	215.7	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	93	3287193	200.0	227.4	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	2336497	200.0	212.2	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	914381	200.0	239.0	
111 tert-Butylbenzene	119	11.100	11.100	0.000	94	2797349	200.0	213.0	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	3343124	200.0	224.6	
113 sec-Butylbenzene	105	11.308	11.307	0.001	99	4237978	200.0	211.0	
114 4-Isopropyltoluene	119	11.442	11.435	0.007	98	3732274	200.0	207.8	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	98	1769581	200.0	204.6	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	92	240628	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	1769242	200.0	203.6	
118 Benzyl chloride	91	11.667	11.667	0.000	99	1516345	200.0	223.2	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	3375231	200.0	215.5	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	1962558	200.0	213.3	
121 n-Butylbenzene	92	11.795	11.795	0.000	98	1704285	200.0	200.6	
122 1,2-Dichlorobenzene	146	11.868	11.862	0.006	99	1837491	200.0	208.0	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	3736258	200.0	226.8	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	92	176306	200.0	202.7	
125 1,3,5-Trichlorobenzene	180	12.643	12.642	0.001	98	1574098	200.0	207.5	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	95	1540363	200.0	207.9	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	95	765840	200.0	199.6	
128 Naphthalene	128	13.332	13.331	0.001	99	3738759	200.0	209.4	
129 1,2,3-Trichlorobenzene	180	13.521	13.520	0.001	96	1552398	200.0	204.9	
S 130 1,2-Dichloroethene, Total	100				0		400.0	404.4	
S 131 Xylenes, Total	100				0		400.0	429.1	
S 132 Total BTEX	1				0		1000.0	1063.0	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	20.00	Units: uL	
ACROLEIN W_00074	Amount Added:	5.00	Units: uL	
GASES Li_00250	Amount Added:	20.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

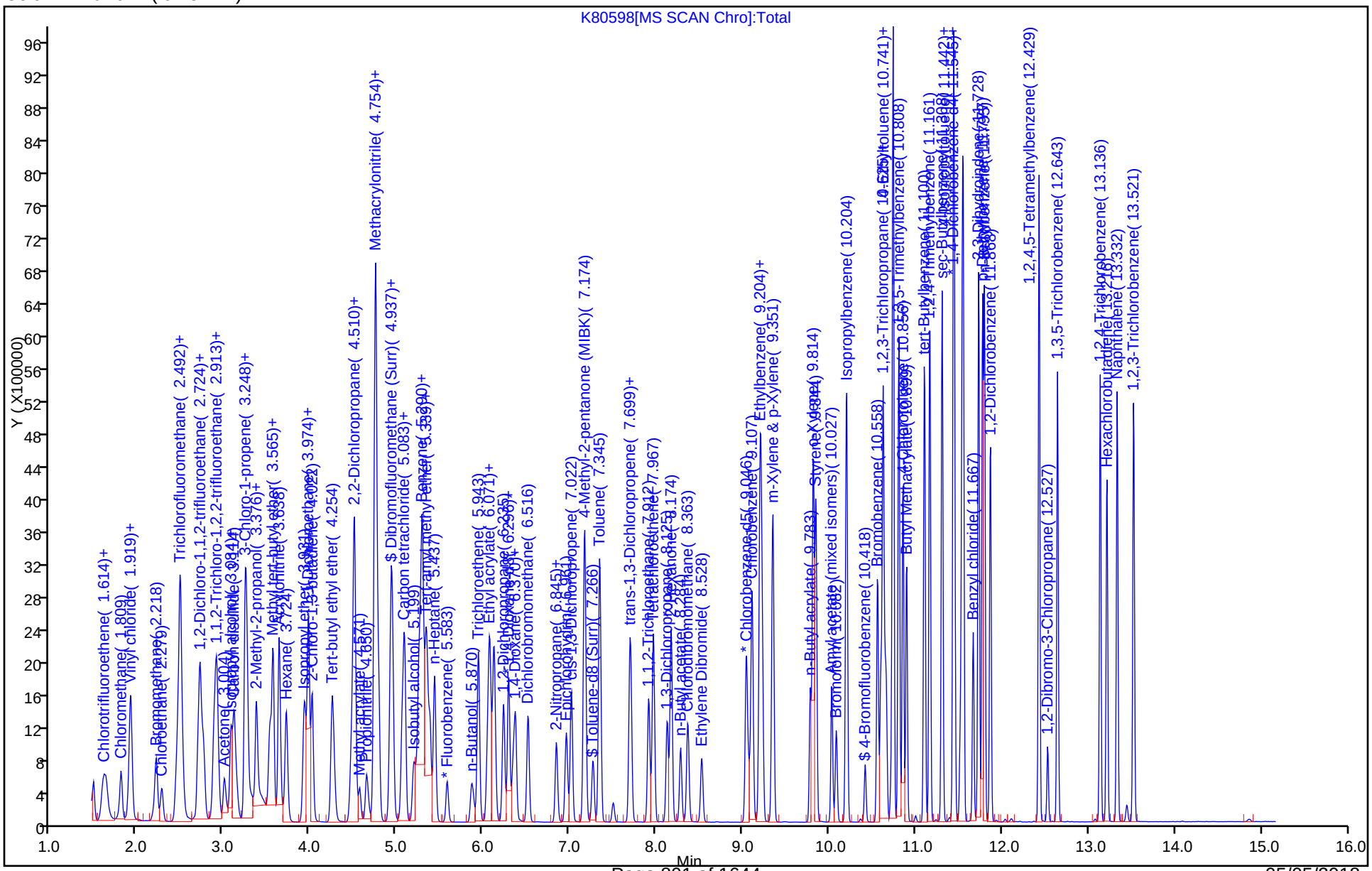
Report Date: 11-Mar-2018 17:12:01 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80598.D

Injection Date:	10-Mar-2018 00:07:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD200			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

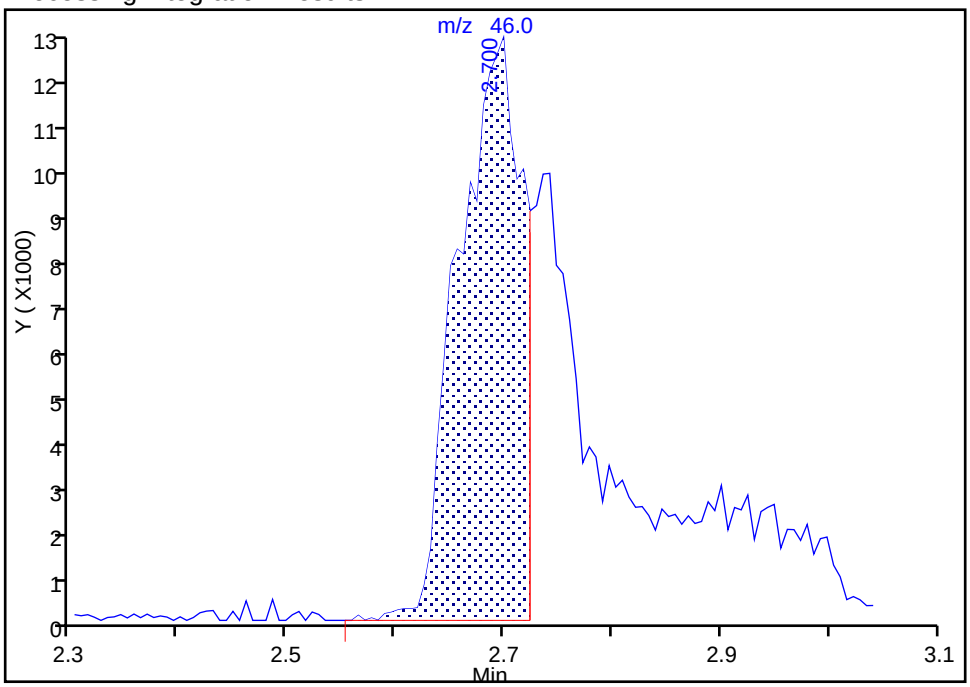
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80598.D				
Injection Date:	10-Mar-2018 00:07:30	Instrument ID:	CVOAMS9		
Lims ID:	STD200				
Client ID:					
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

12 Ethanol, CAS: 64-17-5

Signal: 1

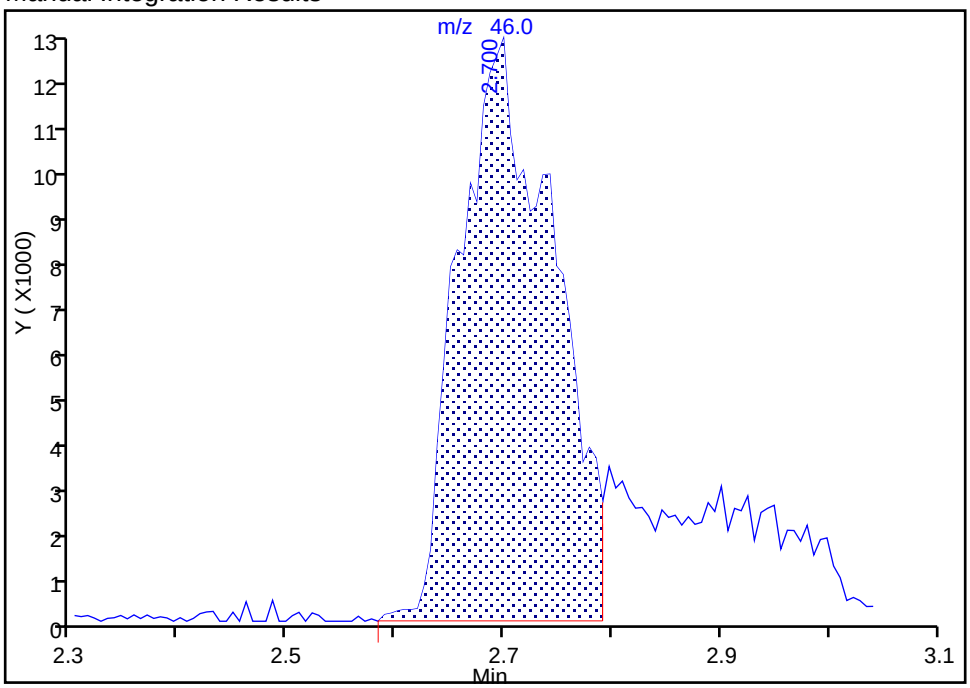
Processing Integration Results

RT: 2.70
Area: 51430
Amount: 7551.0026
Amount Units: ug/l



Manual Integration Results

RT: 2.70
Area: 76094
Amount: 7369.4989
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:31:45

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

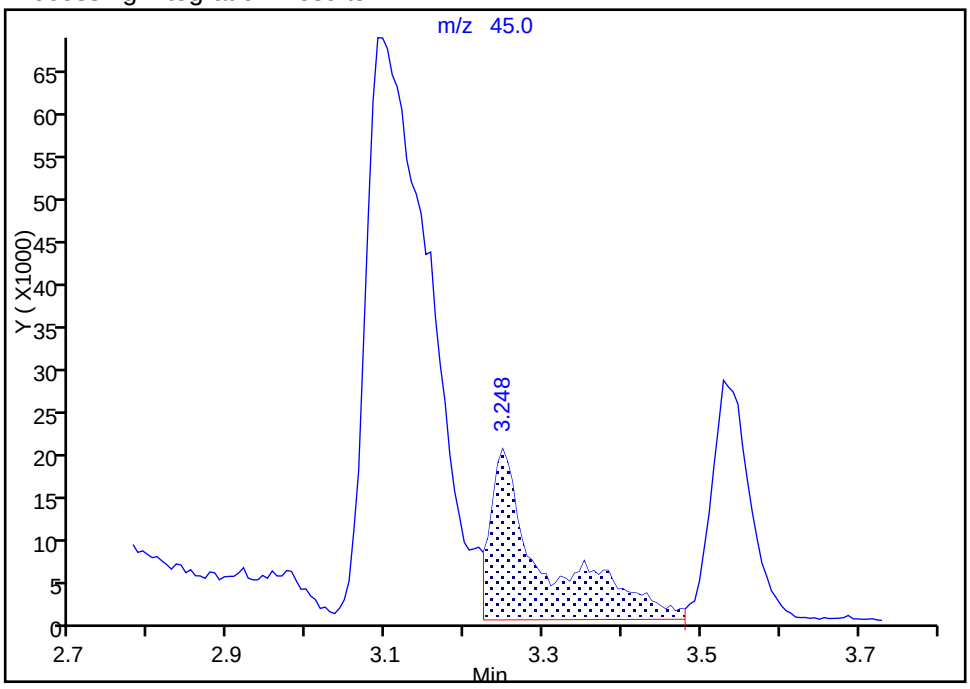
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80598.D
Injection Date: 10-Mar-2018 00:07:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

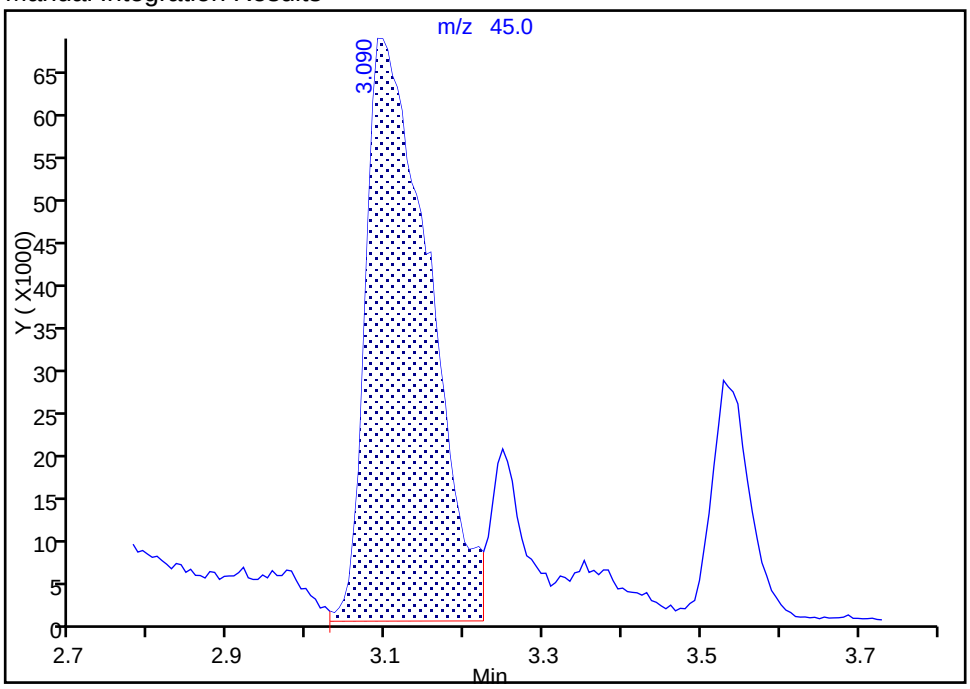
Processing Integration Results

RT: 3.25
Area: 97231
Amount: 682.6826
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 382624
Amount: 2079.5875
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:31:53
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

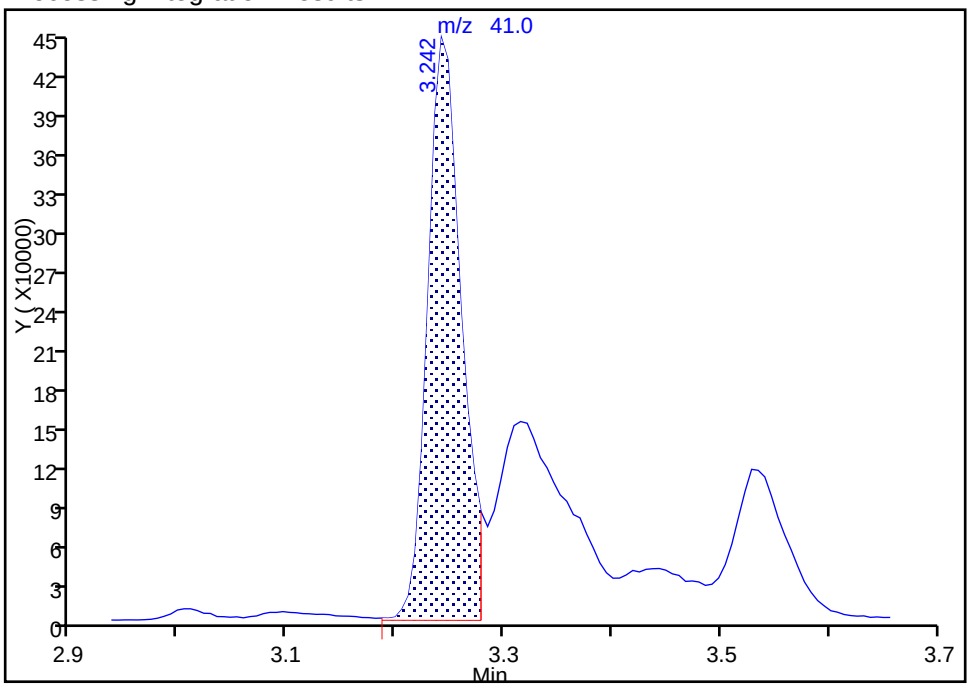
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80598.D
Injection Date: 10-Mar-2018 00:07:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

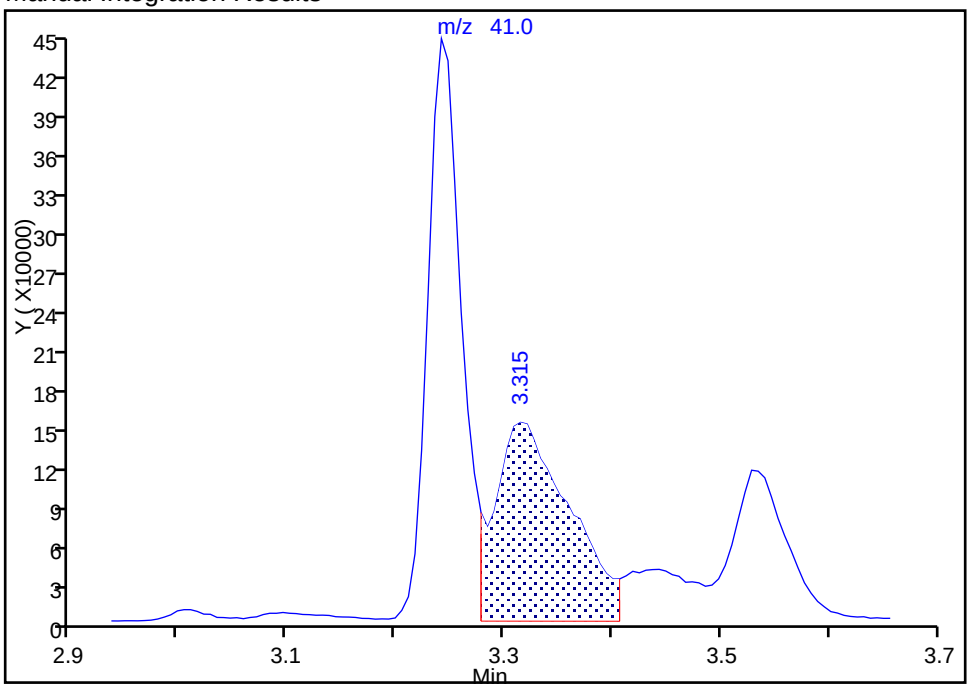
Processing Integration Results

RT: 3.24
Area: 961899
Amount: 2471.6445
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 733605
Amount: 2076.4354
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:31:58
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

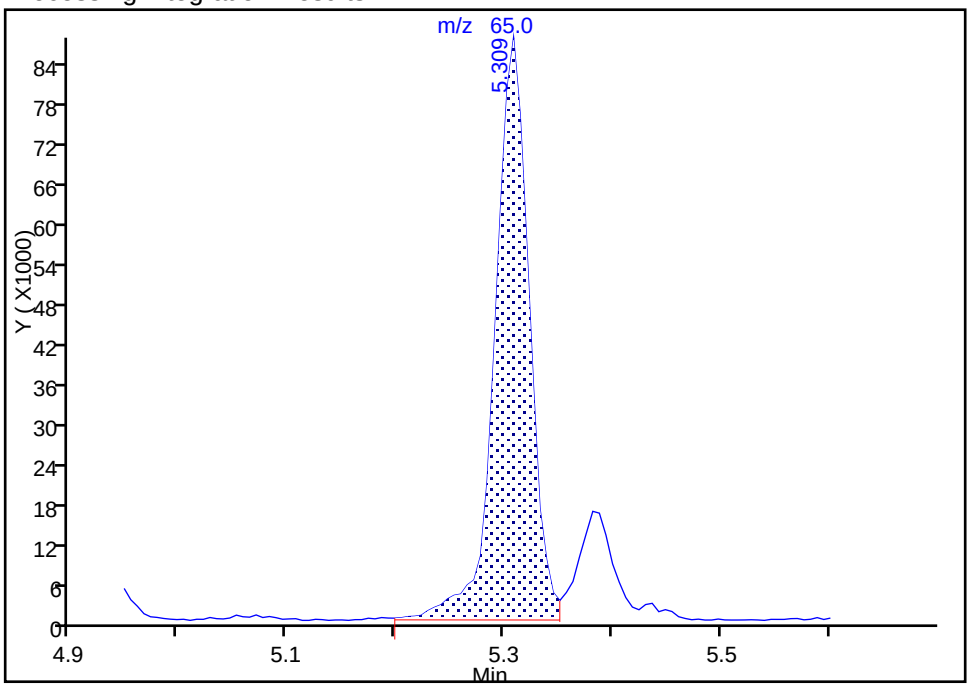
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80598.D
Injection Date: 10-Mar-2018 00:07:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

$ 55 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

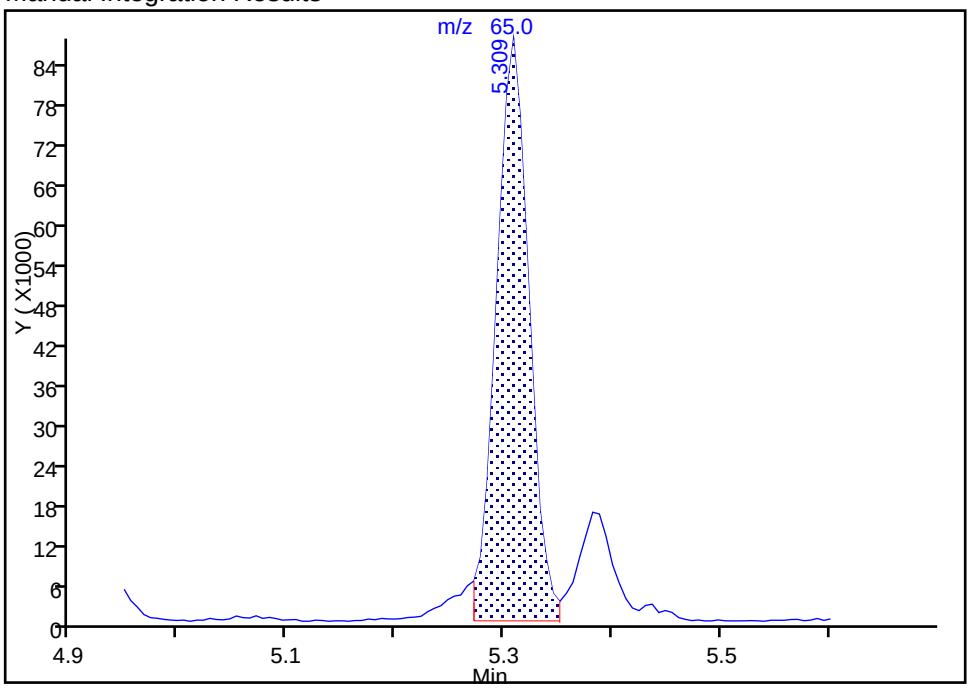
Processing Integration Results

RT: 5.31
Area: 194235
Amount: 53.912722
Amount Units: ug/l



Manual Integration Results

RT: 5.31
Area: 185476
Amount: 51.902148
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:35:32
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

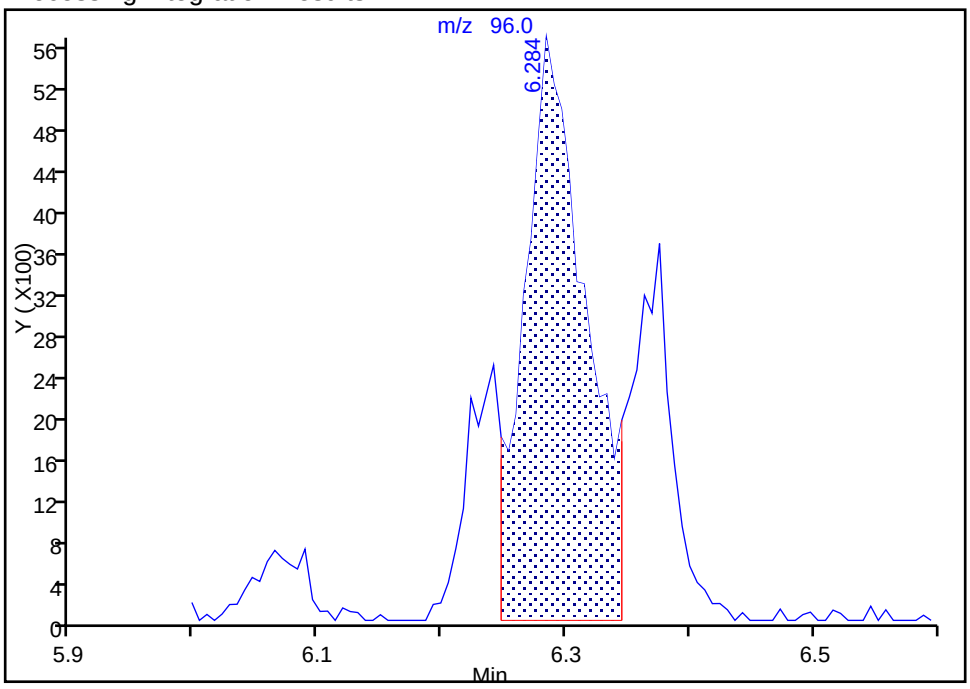
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80598.D
Injection Date: 10-Mar-2018 00:07:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

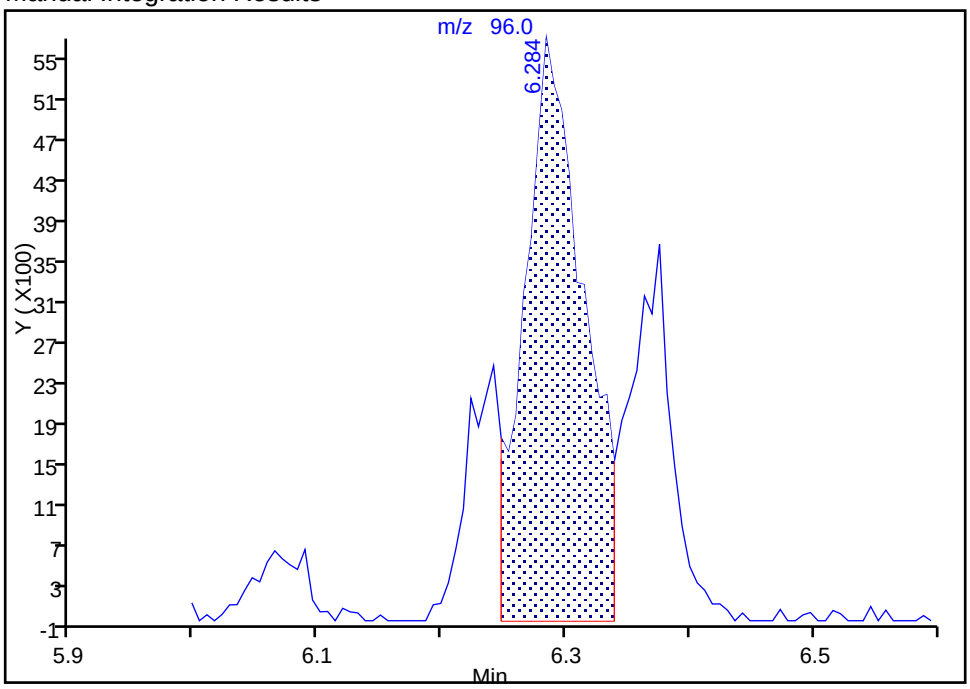
Processing Integration Results

RT: 6.28
Area: 19873
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.28
Area: 19191
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:33:54
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Mar-2018 00:31:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0068588-007
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Mar-2018 17:12:11 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: tupayachia Date: 10-Mar-2018 03:42:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.596	1.596	0.000	88	392978	500.0	440.8	
2 Dichlorodifluoromethane	85	1.626	1.638	-0.012	99	2871470	500.0	444.2	
3 Chloromethane	50	1.809	1.803	0.006	99	2183458	500.0	479.2	
5 Butadiene	54	1.919	1.913	0.006	98	1721392	500.0	502.1	
4 Vinyl chloride	62	1.907	1.913	-0.006	98	2271907	500.0	471.5	
6 Bromomethane	94	2.212	2.212	0.000	98	1893379	500.0	459.1	
7 Chloroethane	64	2.279	2.279	0.000	100	1163867	500.0	484.8	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	99	3602632	500.0	465.4	
8 Trichlorofluoromethane	101	2.492	2.486	0.006	98	3517632	500.0	456.3	
10 Pentane	72	2.492	2.498	-0.006	94	488293	1000.0	873.4	
12 Ethanol	46	2.699	2.687	0.012	75	217233	20000	18828	
11 Ethyl ether	59	2.687	2.699	-0.012	95	1076692	500.0	441.5	
13 2-Methyl-1,3-butadiene	53	2.718	2.724	-0.006	95	1271265	500.0	450.0	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.760	-0.006	87	1695441	500.0	461.8	
15 Acrolein	56	2.876	2.882	-0.006	95	238046	600.0	579.0	
16 1,1,2-Trichloro-1,2,2-trif	101	2.895	2.894	0.000	97	2169690	500.0	437.6	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	97	1727151	500.0	444.6	
18 Acetone	43	2.998	3.004	-0.006	85	3115704	2500.0	2499.3	
19 Iodomethane	142	3.083	3.083	0.000	100	3798552	500.0	466.2	
22 Isopropyl alcohol	45	3.083	3.083	0.000	1	1033713	5000.0	5028.1	a
20 Carbon disulfide	76	3.114	3.120	-0.006	98	5919604	500.0	479.0	
21 3-Chloro-1-propene	76	3.236	3.242	-0.006	93	958623	500.0	467.4	
23 Methyl acetate	43	3.242	3.248	-0.006	98	4662269	2500.0	2353.5	
24 Cyclopentene	67	3.260	3.266	-0.006	91	3506775	500.0	440.7	
29 Acetonitrile	41	3.309	3.315	-0.006	88	1837237	5000.0	4653.9	a
* 25 TBA-d9 (IS)	65	3.352	3.358	-0.006	0	326866	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.376	-0.006	86	1855692	500.0	429.6	
27 2-Methyl-2-propanol	59	3.425	3.431	-0.006	95	2119104	5000.0	4526.7	
28 Methyl tert-butyl ether	73	3.529	3.534	-0.005	95	4906358	500.0	464.4	
30 trans-1,2-Dichloroethene	96	3.565	3.571	-0.006	92	1738556	500.0	456.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.638	-0.006	91	4895512	5000.0	4702.2	
32 Hexane	43	3.718	3.717	0.001	90	1152416	500.0	470.7	
33 Isopropyl ether	45	3.925	3.931	-0.006	96	4312862	500.0	457.1	
35 Vinyl acetate	86	3.974	3.973	0.001	99	546596	1000.0	903.4	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	99	2739512	500.0	456.0	
36 2-Chloro-1,3-butadiene	88	4.016	4.022	-0.006	91	1448167	500.0	475.6	
37 Tert-butyl ethyl ether	59	4.248	4.254	-0.006	89	4828434	500.0	470.9	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	244244	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.485	0.001	95	940141	500.0	463.1	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	98	2028523	500.0	450.5	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	1027550	2500.0	2329.6	
41 Ethyl acetate	70	4.510	4.510	0.000	93	340294	1000.0	900.0	
44 Methyl acrylate	55	4.565	4.571	-0.006	99	1301761	500.0	517.4	
43 Propionitrile	54	4.650	4.650	0.000	97	2176747	5000.0	4576.2	
46 Chlorobromomethane	128	4.736	4.735	0.001	76	1075722	500.0	448.9	
45 Tetrahydrofuran	72	4.730	4.735	-0.005	88	449595	1000.0	843.1	
47 Methacrylonitrile	67	4.754	4.754	0.000	92	5909398	5000.0	4768.6	
48 Chloroform	83	4.784	4.784	0.000	99	3236109	500.0	452.0	
49 Cyclohexane	84	4.931	4.937	-0.006	88	2635117	500.0	447.3	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	37	170155	50.0	43.6	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	97	3245807	500.0	477.2	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	3015059	500.0	496.2	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	96	2244467	500.0	483.6	
56 Isobutyl alcohol	74	5.193	5.193	0.000	96	223541	12500	12928	
54 Benzene	78	5.290	5.290	0.000	96	6351108	500.0	459.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.302	0.007	0	186531	50.0	48.3	M
57 Isopropyl acetate	43	5.327	5.327	0.000	96	4506502	500.0	472.6	a
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	91	5311417	500.0	479.7	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	98	2365300	500.0	460.4	
60 n-Heptane	57	5.437	5.430	0.007	87	1197948	500.0	451.5	
* 61 Fluorobenzene	96	5.583	5.577	0.006	100	567210	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	88	1328834	12500	14150	
63 Trichloroethene	95	5.943	5.943	0.001	97	1928079	500.0	489.2	
64 Ethyl acrylate	56	6.071	6.064	0.007	80	974357	500.0	496.0	a
65 Methylcyclohexane	83	6.071	6.071	0.000	94	3196547	500.0	452.2	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	89	1521037	500.0	470.0	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	20165	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	83	2624401	1000.0	1068.6	
70 n-Propyl acetate	43	6.345	6.345	0.000	97	1958688	500.0	542.3	
69 1,4-Dioxane	88	6.345	6.345	0.000	27	365317	10000	10148	
71 Dibromomethane	93	6.369	6.369	0.000	93	1210960	500.0	492.1	
72 Dichlorobromomethane	83	6.516	6.516	0.000	98	2560049	500.0	504.4	
74 2-Nitropropane	41	6.845	6.845	0.000	91	955530	1000.0	1128.7	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	87	774683	500.0	546.5	
75 Epichlorohydrin	57	6.961	6.955	0.007	99	3206132	10000	9591.3	
76 cis-1,3-Dichloropropene	75	7.022	7.015	0.007	93	2821717	500.0	506.5	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	94	7031663	2500.0	2331.4	
$ 78 Toluene-d8 (Surr)	98	7.266	7.265	0.001	97	636508	50.0	45.5	
79 Toluene	91	7.345	7.345	0.000	92	7739026	500.0	475.7	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	98	2542225	500.0	522.0	
81 Ethyl methacrylate	69	7.705	7.704	0.001	87	1979175	500.0	530.9	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	95	1303679	500.0	481.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.966	0.001	97	2286591	500.0	481.9	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	90	2369577	500.0	492.8	
85 2-Hexanone	43	8.174	8.174	0.000	94	4900692	2500.0	2510.5	
86 n-Butyl acetate	43	8.284	8.284	0.000	98	1991929	500.0	511.8	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	2295430	500.0	508.0	
88 Ethylene Dibromide	107	8.528	8.527	0.001	99	1749017	500.0	494.7	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	83	484474	50.0	50.0	
90 Chlorobenzene	112	9.113	9.107	0.006	96	5247613	500.0	473.5	
92 Ethylbenzene	106	9.204	9.198	0.006	98	2680683	500.0	482.3	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	94	2380747	500.0	505.8	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	3309337	500.0	486.4	
94 n-Butyl acrylate	73	9.783	9.777	0.006	97	1187367	500.0	535.3	
95 o-Xylene	106	9.820	9.814	0.006	93	3443745	500.0	488.9	
96 Styrene	104	9.850	9.844	0.006	95	5558586	500.0	493.1	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	92	2318556	500.0	536.0	
98 Bromoform	173	10.082	10.082	0.000	98	1634815	500.0	523.2	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	9777467	500.0	452.9	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	96	216082	50.0	45.3	
101 Bromobenzene	156	10.564	10.564	0.000	91	2530724	500.0	494.2	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	97	2187081	500.0	503.9	
103 N-Propylbenzene	91	10.625	10.625	0.001	100	10398463	500.0	497.6	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	670256	500.0	474.9	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	93	531920	500.0	512.6	
106 2-Chlorotoluene	91	10.741	10.740	0.001	91	7259794	500.0	488.8	
107 4-Ethyltoluene	105	10.741	10.740	0.001	90	9012342	500.0	485.2	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	93	8523199	500.0	516.0	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	6255694	500.0	497.2	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	2465039	500.0	563.9	
111 tert-Butylbenzene	119	11.106	11.100	0.006	94	7300161	500.0	485.9	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	8618699	500.0	506.9	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	10982894	500.0	478.2	
114 4-Isopropyltoluene	119	11.442	11.435	0.007	98	9630278	500.0	468.9	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	98	4600197	500.0	465.7	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	92	274907	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	4603018	500.0	463.7	
118 Benzyl chloride	91	11.667	11.667	0.000	99	4267722	500.0	549.9	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	94	8607916	500.0	481.1	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	5085226	500.0	483.9	
121 n-Butylbenzene	92	11.795	11.795	0.000	96	4456415	500.0	458.7	
122 1,2-Dichlorobenzene	146	11.868	11.862	0.006	98	4781666	500.0	473.8	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	9627690	500.0	511.5	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	93	491787	500.0	495.0	
125 1,3,5-Trichlorobenzene	180	12.643	12.642	0.001	98	4057039	500.0	468.1	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	95	3957268	500.0	467.5	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	95	2157746	500.0	491.6	
128 Naphthalene	128	13.331	13.331	0.000	99	9624845	500.0	471.9	
129 1,2,3-Trichlorobenzene	180	13.527	13.520	0.007	97	3971300	500.0	458.8	
S 130 1,2-Dichloroethene, Total	100				0		1000.0	906.8	
S 131 Xylenes, Total	100				0		1000.0	975.3	
S 132 Total BTEX	1				0		2500.0	2392.9	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	50.00	Units: uL	
ACROLEIN W_00074	Amount Added:	6.00	Units: uL	
GASES Li_00250	Amount Added:	50.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Mar-2018 17:12:13 Chrom Revision: 2.2 08-Feb-2018 13:38:42

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Injection Date: 10-Mar-2018 00:31:30 Instrument ID: CVOAMS9 Operator ID:

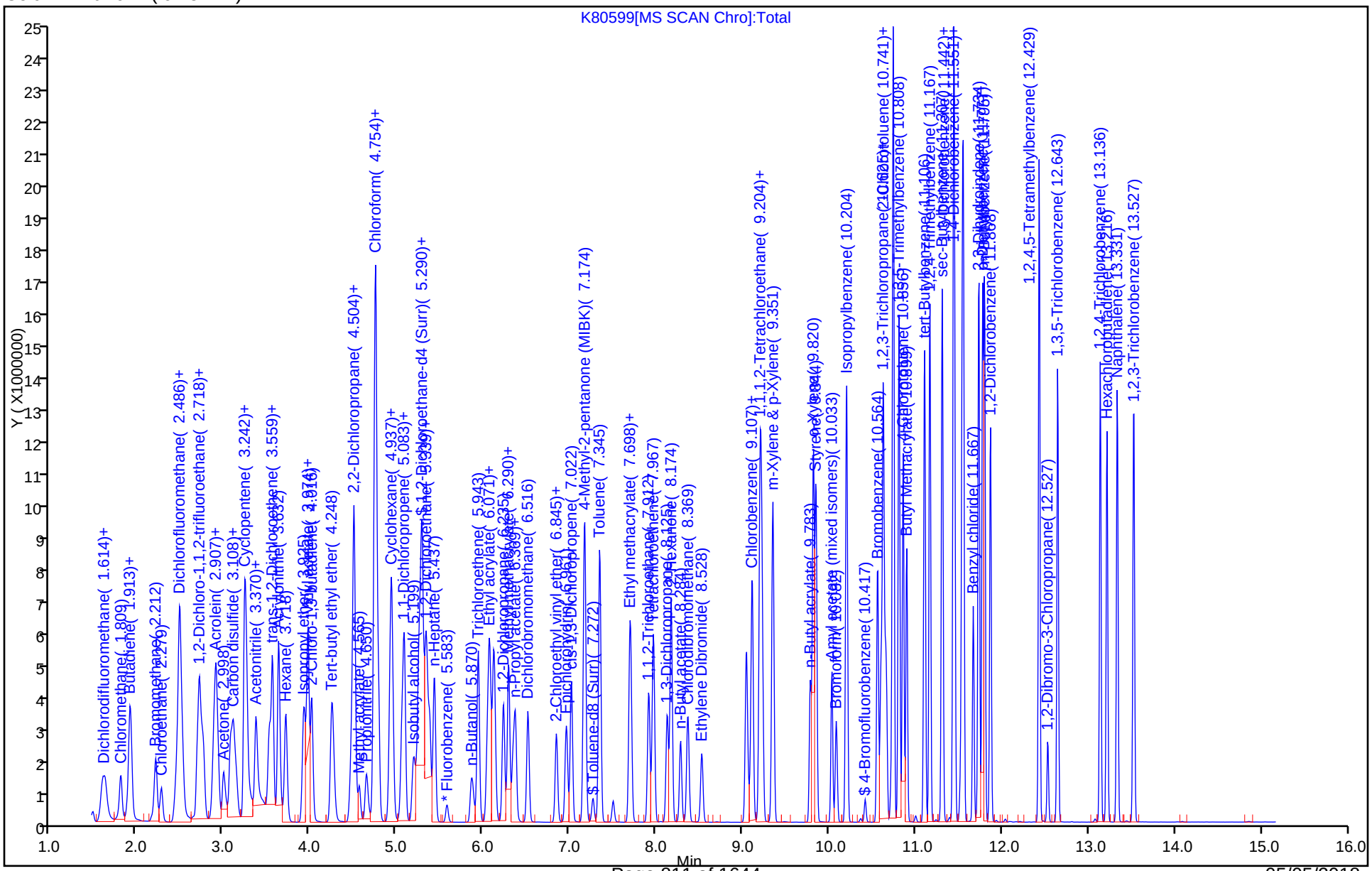
Lims ID: STD500 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

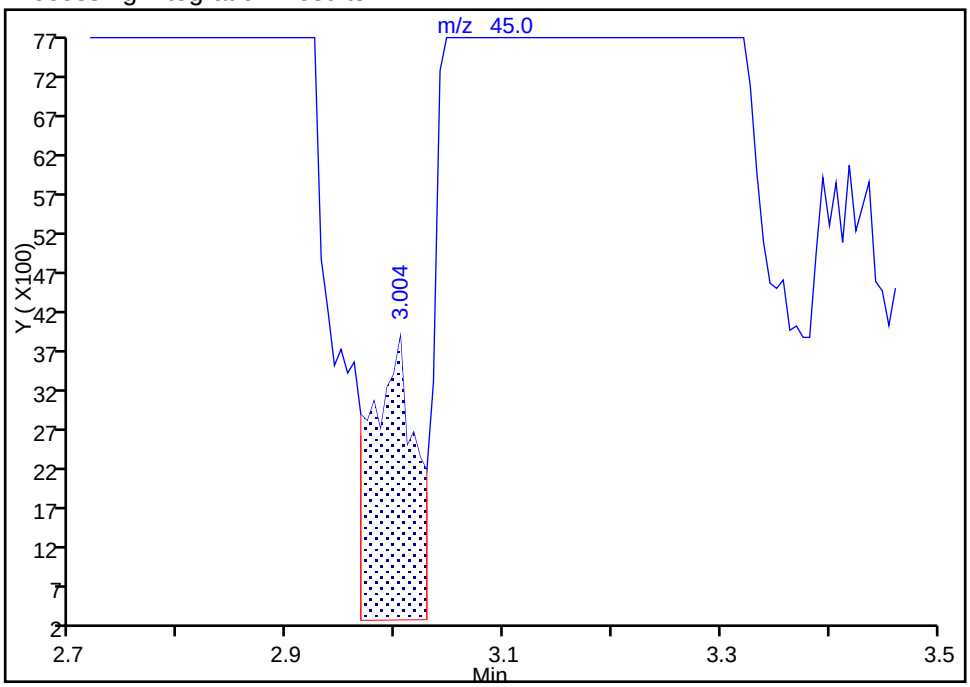
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D
Injection Date: 10-Mar-2018 00:31:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

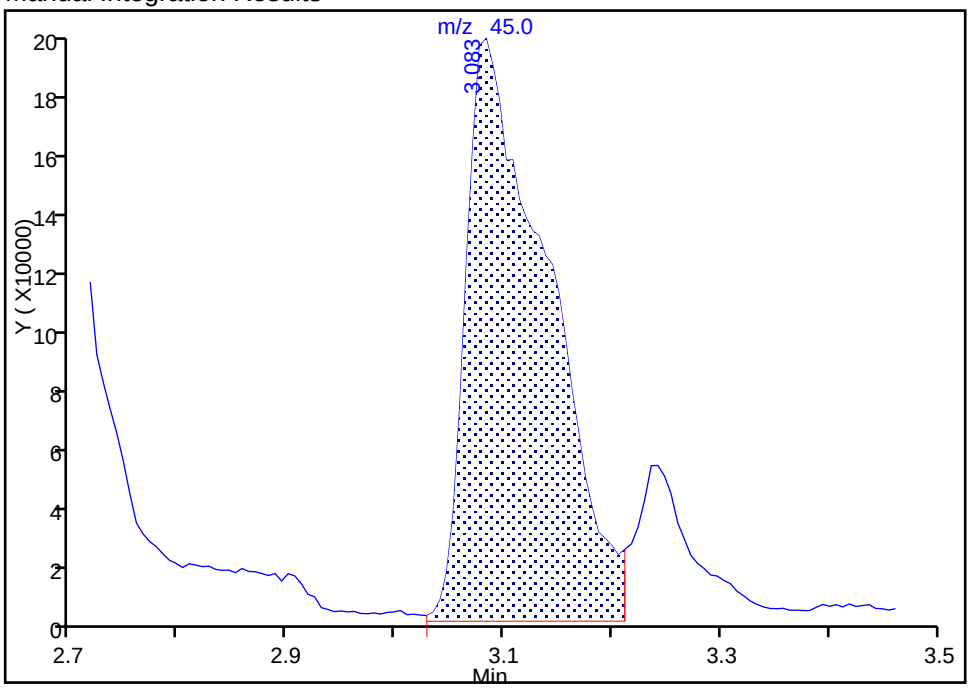
Processing Integration Results

RT: 3.00
Area: 10498
Amount: 56.526264
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 1033713
Amount: 5028.0513
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:34:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

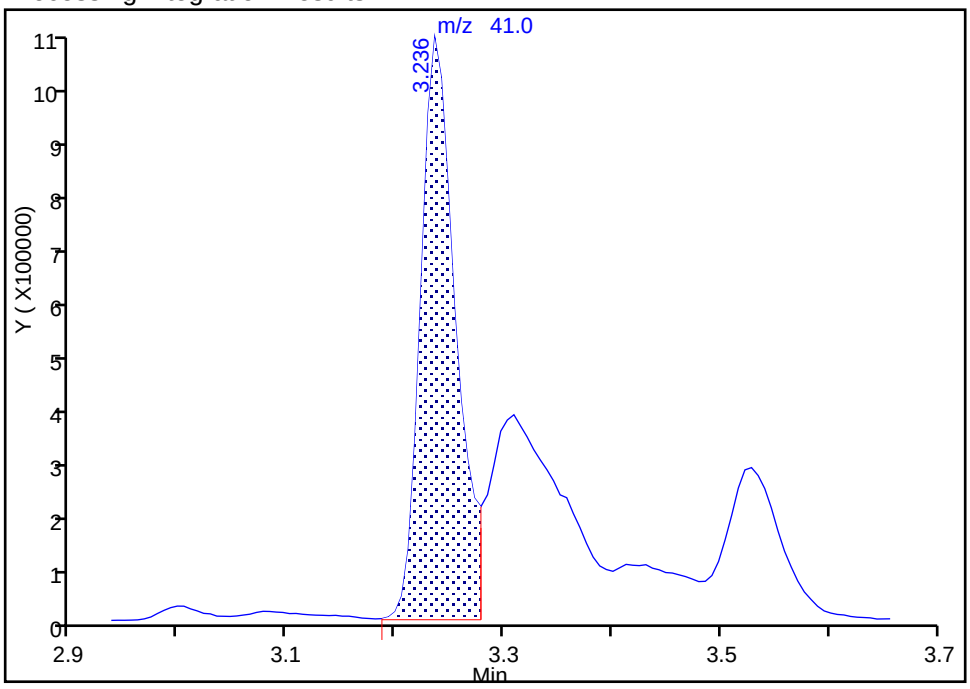
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D
Injection Date: 10-Mar-2018 00:31:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

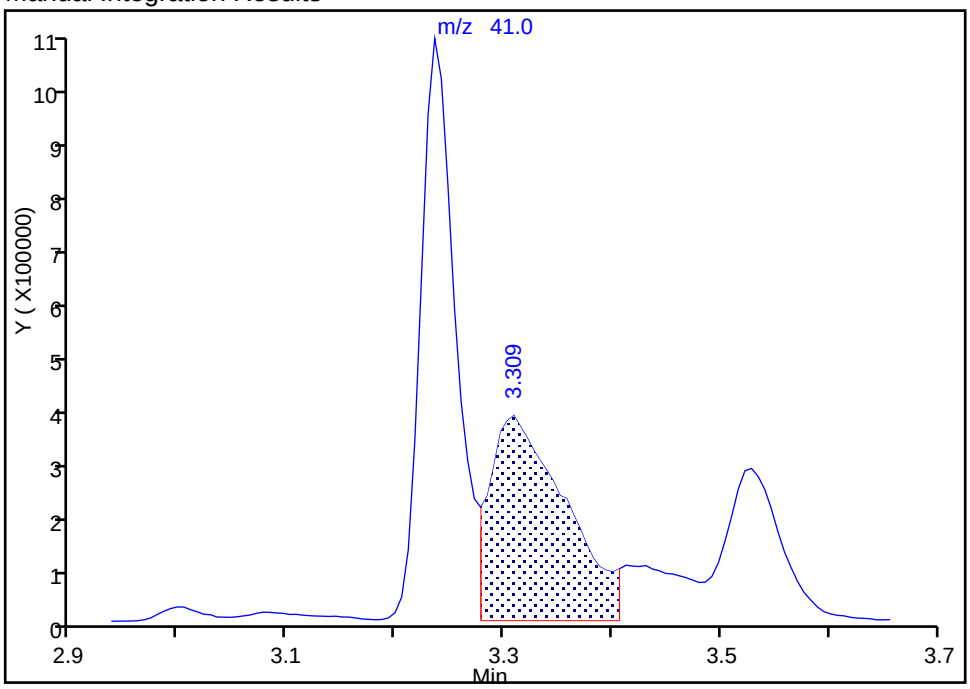
Processing Integration Results

RT: 3.24
Area: 2402045
Amount: 5807.6316
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 1837237
Amount: 4653.8893
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:34:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

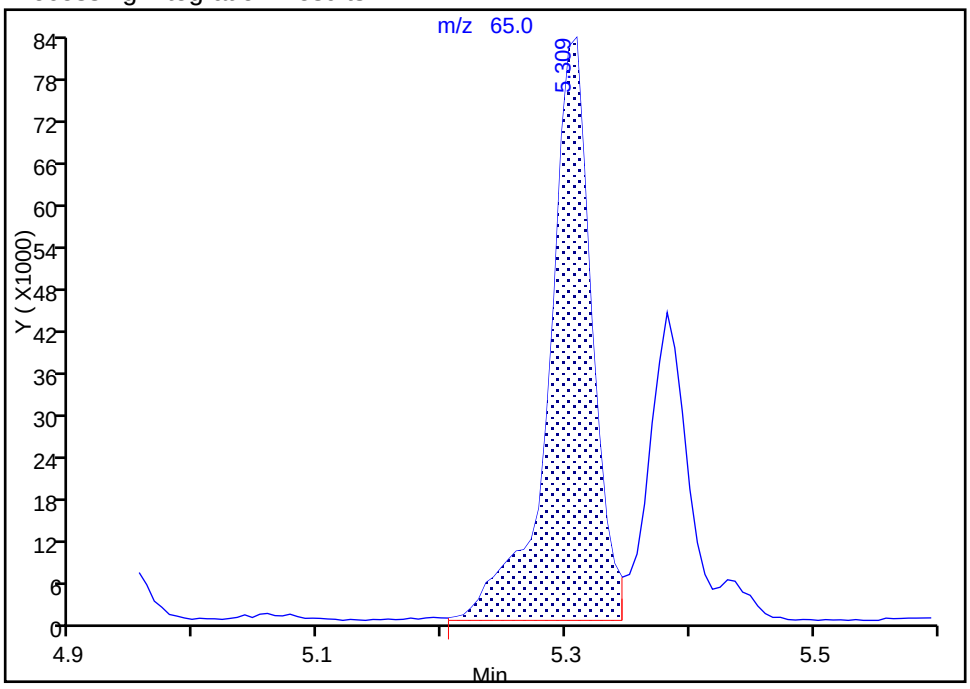
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D
Injection Date: 10-Mar-2018 00:31:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

$ 55 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

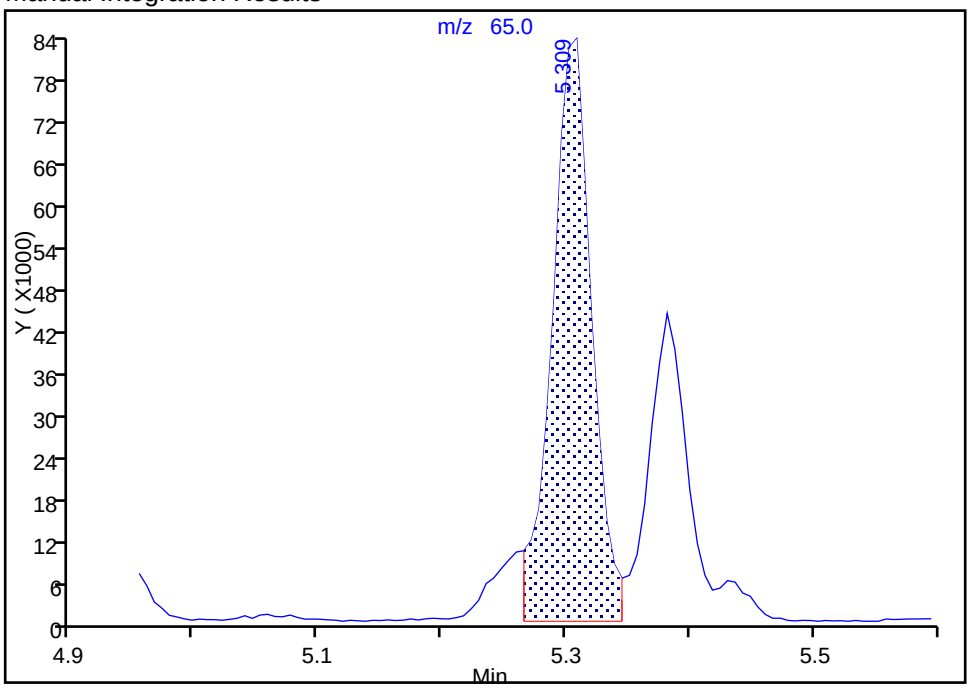
Processing Integration Results

RT: 5.31
Area: 202657
Amount: 51.350271
Amount Units: ug/l



Manual Integration Results

RT: 5.31
Area: 186531
Amount: 48.308312
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:35:11
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

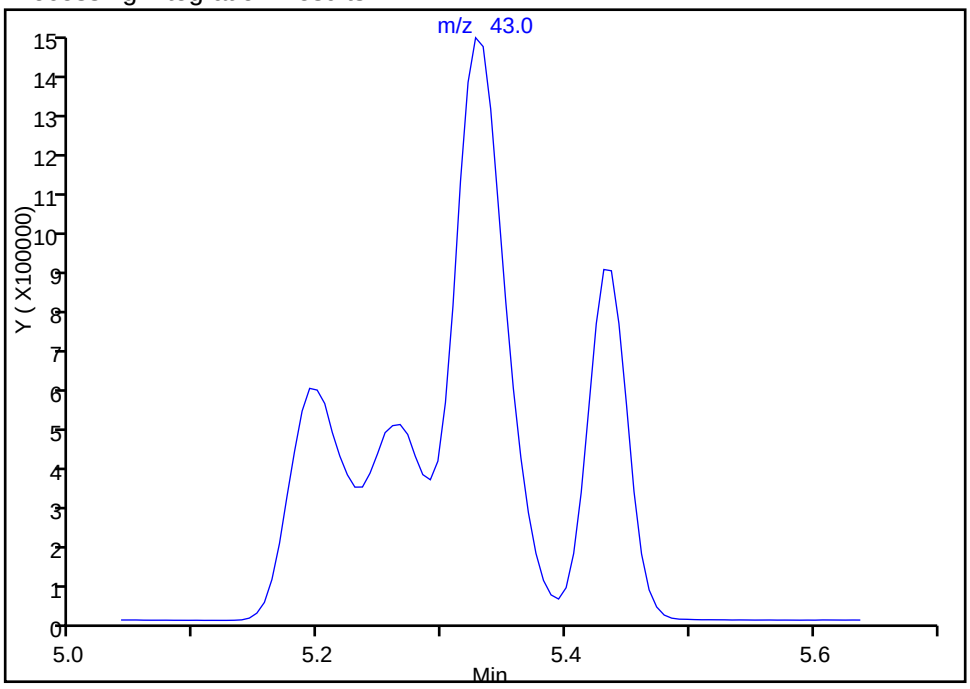
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D
Injection Date: 10-Mar-2018 00:31:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

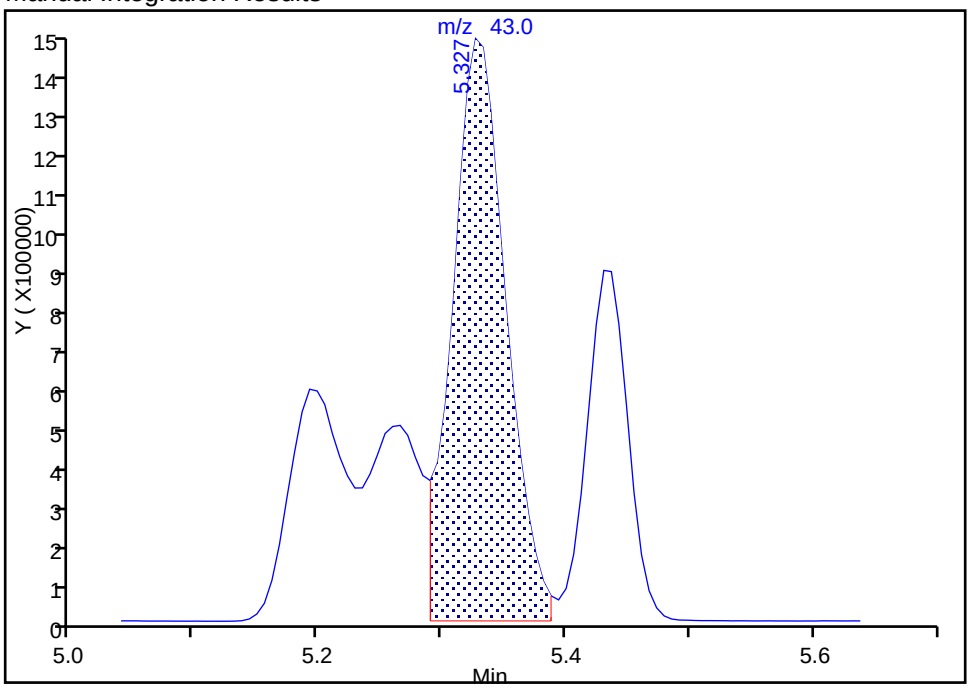
Not Detected
Expected RT: 5.33

Processing Integration Results



Manual Integration Results

RT: 5.33
Area: 4506502
Amount: 472.5591
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:34:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

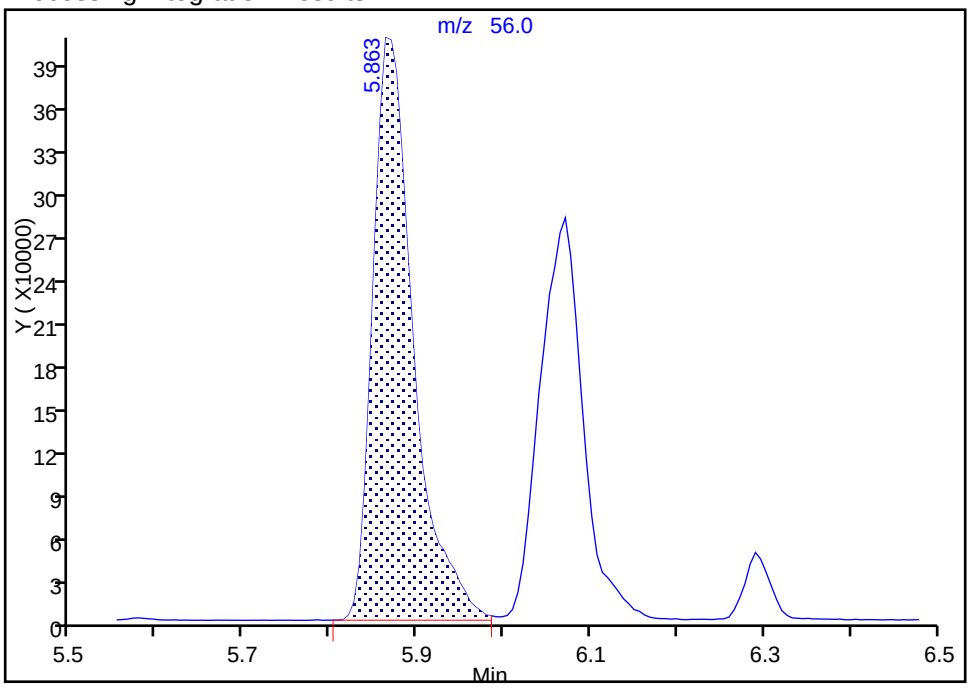
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D
Injection Date: 10-Mar-2018 00:31:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

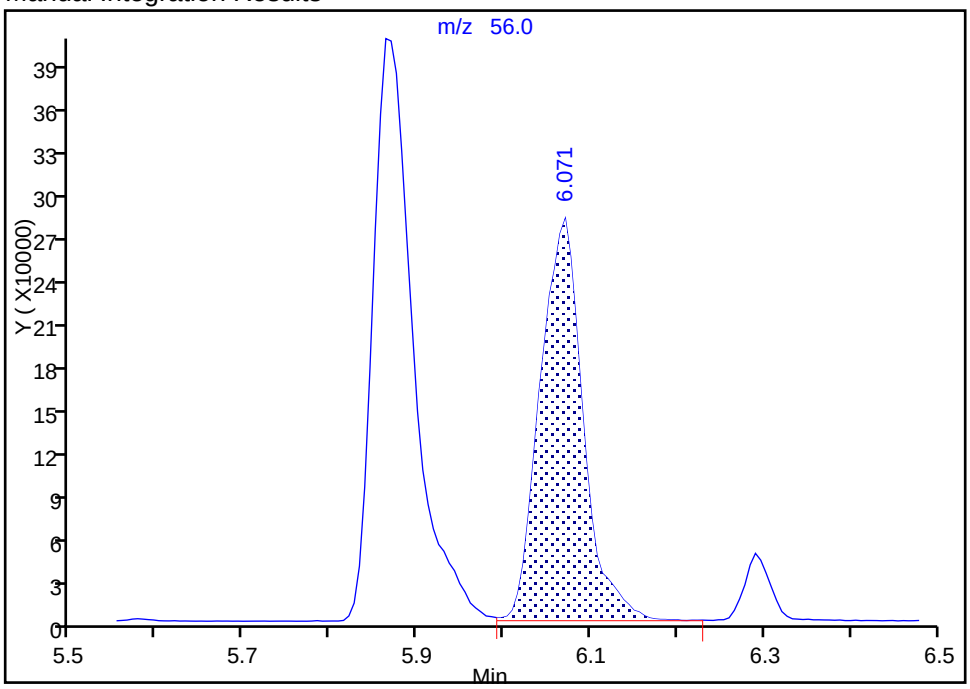
Processing Integration Results

RT: 5.86
Area: 1326117
Amount: 637.0955
Amount Units: ug/l



Manual Integration Results

RT: 6.07
Area: 974357
Amount: 496.0451
Amount Units: ug/l



Reviewer: delpolitov, 11-Mar-2018 16:34:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-505429/3	K81082.D
Level 2	STD5 460-505429/4	K81083.D
Level 3	STD20 460-505429/5	K81084.D
Level 4	STD50 460-505429/6	K81085.D
Level 5	STD200 460-505429/7	K81086.D
Level 6	STD500 460-505429/8	K81087.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	0.0862 0.0962	0.0971	0.1154	0.1082	0.1097	Ave		0.1021				10.6		20.0			
Dichlorodifluoromethane	0.5658 0.7212	0.6517	0.6435	0.6053	0.8166	Ave		0.6673			0.1000	13.4		20.0			
Chloromethane	0.5776 0.6078	0.5978	0.5641	0.5431	0.6893	Ave		0.5966			0.1000	8.5		20.0			
Butadiene	0.3556 0.4498	0.4139	0.3948	0.3965	0.5007	Ave		0.4185				12.1		20.0			
Vinyl chloride	0.5177 0.5236	0.5442	0.4906	0.4917	0.5993	Ave		0.5278			0.1000	7.7		20.0			
Bromomethane	0.3473 0.2866	0.3039	0.2892	0.2980	0.3225	Ave		0.3079			0.1000	7.5		20.0			
Chloroethane	0.2119 0.2177	0.2268	0.2252	0.2286	0.2446	Ave		0.2258			0.1000	4.9		20.0			
Dichlorofluoromethane	0.7146 0.7626	0.9316	0.8666	0.7553	0.9685	Ave		0.8332				12.5		20.0			
Trichlorofluoromethane	0.5176 0.6621	0.7341	0.6619	0.6423	0.7772	Ave		0.6659			0.1000	13.4		20.0			
Pentane	1.0806 1.4933	1.4836	1.4291	1.3990	1.7340	Ave		1.4366				14.7		20.0			
Ethyl ether	0.3455 0.2978	0.3515	0.3542	0.3364	0.3287	Ave		0.3357				6.2		20.0			
Ethanol	0.0511 0.0777	0.0678	0.0742	0.0623	0.0752	Ave		0.0680				14.7		20.0			
2-Methyl-1,3-butadiene	0.3809 0.3751	0.4551	0.4141	0.4047	0.4238	Ave		0.4089				7.2		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	0.2766 0.3077	0.3414	0.3391	0.3307	0.3462	Ave		0.3236				8.3		20.0			
Acrolein	1.6271 1.6339	1.4922	1.7084	1.9507	1.6681	Ave		1.6801				9.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4056 0.4115	0.4872	0.4653	0.4521	0.4597	Ave		0.4469			0.1000	7.2		20.0			
1,1-Dichloroethene	0.3327 0.3311	0.3972	0.3754	0.3645	0.3668	Ave		0.3613			0.1000	7.1		20.0			
Acetone	1.9149 1.0296	1.2986	1.2627	1.1167	1.1270	QuaF		1.1859	-0.000062		0.0500				1.0000		0.9900
Iodomethane	0.6484 0.6050	0.7212	0.7083	0.6739	0.6672	Ave		0.6707				6.3		20.0			
Isopropyl alcohol	1.3257 0.9830	0.9969	0.9726	0.8884	0.9857	Ave		1.0254				14.9		20.0			
Carbon disulfide	1.4648 1.2853	1.5585	1.5536	1.4990	1.4392	Ave		1.4667			0.1000	6.9		20.0			
Allyl chloride	0.2033 0.2149	0.2651	0.2515	0.2507	0.2490	Ave		0.2391				10.1		20.0			
Methyl acetate	0.3372 0.3274	0.3738	0.3878	0.3714	0.3579	Ave		0.3592			0.1000	6.4		20.0			
Cyclopentene	0.9033 0.9217	1.1007	1.0654	1.0207	1.0485	Ave		1.0101				7.9		20.0			
Acetonitrile	1.9037 2.3230	2.0222	2.0352	1.9316	2.0830	Ave		2.0498				7.3		20.0			
Methylene Chloride	0.7143 0.4067	0.5280	0.4855	0.4463	0.4446	Qua	0.1195	0.4669	-0.000121		0.1000				1.0000		0.9900
2-Methyl-2-propanol	1.5561 1.4640	1.5421	1.4802	1.4010	1.4762	Ave		1.4866				3.8		20.0			
Methyl tert-butyl ether	1.3354 1.1256	1.2416	1.3063	1.2118	1.2143	Ave		1.2392			0.1000	6.0		20.0			
trans-1,2-Dichloroethene	0.3769 0.3349	0.4118	0.3972	0.3823	0.3748	Ave		0.3796			0.1000	6.9		20.0			
Acrylonitrile	0.1649 0.1432	0.1618	0.1744	0.1650	0.1555	Ave		0.1608				6.6		20.0			
Hexane	0.4382 0.4205	0.5815	0.5182	0.4992	0.4717	Ave		0.4882				12.0		20.0			
Isopropyl ether	1.8463 1.6446	1.8602	1.8815	1.7966	1.8127	Ave		1.8070				4.7		20.0			
1,1-Dichloroethane	0.8367 0.7126	0.8447	0.8454	0.8121	0.7978	Ave		0.8082			0.2000	6.3		20.0			
Vinyl acetate	1.8521 1.2721	1.6840	1.4513	1.5366	1.3438	Ave		1.5233				14.2		20.0			
2-Chloro-1,3-butadiene	0.3293 0.3126	0.3599	0.3471	0.3402	0.3442	Ave		0.3389				4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	1.5613 1.3826	1.5422	1.5628	1.4626	1.5002	Ave		1.5020				4.7		20.0			
2,2-Dichloropropane	0.2606 0.1947	0.2500	0.2228	0.2121	0.2190	Ave		0.2265				10.8		20.0			
cis-1,2-Dichloroethene	0.4601 0.3945	0.4587	0.4580	0.4431	0.4378	Ave		0.4420			0.1000	5.7		20.0			
2-Butanone (MEK)	0.4098 0.3073	0.3609	0.3295	0.3173	0.3330	Ave		0.3430			0.0500	10.9		20.0			
Ethyl acetate	0.2541 0.2788	0.3625	0.3143	0.3022	0.3062	Ave		0.3030				12.0		20.0			
Methyl acrylate	0.4497 0.3659	0.3603	0.3857	0.3776	0.3737	Ave		0.3855				8.5		20.0			
Propionitrile	1.6107 1.5835	1.5575	1.5446	1.6424	1.6171	Ave		1.5926				2.4		20.0			
Tetrahydrofuran	0.4102 0.3538	0.4616	0.4116	0.3942	0.3878	Ave		0.4032				8.8		20.0			
Chlorobromomethane	0.2226 0.1845	0.2232	0.2126	0.2077	0.2011	Ave		0.2086				7.0		20.0			
Methacrylonitrile	0.1508 0.1334	0.1541	0.1627	0.1556	0.1481	Ave		0.1508				6.5		20.0			
Chloroform	0.7572 0.6834	0.7942	0.7674	0.7464	0.7507	Ave		0.7499			0.2000	4.9		20.0			
Cyclohexane	0.5529 0.5499	0.6828	0.6627	0.6426	0.6189	Ave		0.6183			0.1000	9.1		20.0			
1,1,1-Trichloroethane	0.6660 0.6167	0.6879	0.6769	0.6625	0.6809	Ave		0.6652			0.1000	3.8		20.0			
Carbon tetrachloride	0.4381 0.5231	0.5180	0.5191	0.5215	0.5568	Ave		0.5128			0.1000	7.7		20.0			
1,1-Dichloropropene	0.5298 0.4959	0.5540	0.5487	0.5604	0.5477	Ave		0.5394				4.4		20.0			
Isobutyl alcohol	0.0685 0.0529	0.0588	0.0506	0.0493	0.0531	Ave		0.0556				12.8		20.0			
Benzene	1.8923 1.7592	1.9901	1.9629	2.0096	1.9067	Ave		1.9201			0.5000	4.8		20.0			
Isopropyl acetate	1.4370 1.3728	1.4361	1.5466	1.5543	1.4670	Ave		1.4689				4.8		20.0			
Tert-amyl methyl ether	1.3875 1.2666	1.3480	1.4096	1.3681	1.3860	Ave		1.3610				3.7		20.0			
1,2-Dichloroethane	0.6289 0.5208	0.5717	0.5643	0.5434	0.5464	Ave		0.5626			0.1000	6.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Heptane	0.3652 0.3311	0.4157	0.3955	0.4118	0.3677	Ave		0.3812				8.5		20.0			
n-Butanol	0.4470 0.4064	0.3341	0.3383	0.3577	0.3916	Ave		0.3792				11.6		20.0			
Trichloroethene	0.4134 0.3594	0.4105	0.3882	0.3901	0.3889	Ave		0.3918			0.2000	5.0		20.0			
Ethyl acrylate	0.2583 0.2720	0.2821	0.2901	0.3064	0.3017	Ave		0.2851				6.4		20.0			
Methylcyclohexane	0.6468 0.6714	0.7710	0.7894	0.7722	0.7530	Ave		0.7340			0.1000	8.1		20.0			
1,2-Dichloropropane	0.4625 0.4216	0.4855	0.4446	0.4453	0.4534	Ave		0.4521			0.1000	4.7		20.0			
Methyl methacrylate	0.4424 0.3627	0.3742	0.3961	0.3739	0.3843	Ave		0.3889				7.3		20.0			
1,4-Dioxane	1.7748 1.1743	1.6204	1.6180	1.4998	1.3928	Ave		1.5133				13.9		20.0			
n-Propyl acetate	0.6937 0.6581	0.6923	0.7322	0.6913	0.6956	Ave		0.6939				3.4		20.0			
Dibromomethane	0.2968 0.2290	0.2585	0.2520	0.2358	0.2398	Ave		0.2520				9.7		20.0			
Dichlorobromomethane	0.5290 0.5105	0.4681	0.4821	0.4843	0.5220	Ave		0.4993			0.2000	4.9		20.0			
2-Chloroethyl vinyl ether	0.1998 0.2007	0.1963	0.2129	0.2022	0.2132	Ave		0.2042				3.5		20.0			
2-Nitropropane	0.0547 0.0618	0.0605	0.0527	0.0498	0.0556	Ave		0.0559				8.2		20.0			
Epichlorohydrin	0.3654 0.2685	0.3231	0.3266	0.3117	0.2883	Ave		0.3139				10.7		20.0			
cis-1,3-Dichloropropene	0.7990 0.7756	0.8084	0.7925	0.8013	0.8018	Ave		0.7964			0.2000	1.4		20.0			
4-Methyl-2-pentanone (MIBK)	3.9037 3.4028	3.8365	3.8381	3.6779	3.7708	Ave		3.7383			0.0500	4.8		20.0			
Toluene	2.0808 1.8535	2.0502	2.0355	2.0400	1.9737	Ave		2.0056			0.4000	4.1		20.0			
trans-1,3-Dichloropropene	0.7050 0.6757	0.6606	0.6960	0.6976	0.7091	Ave		0.6907			0.1000	2.7		20.0			
Ethyl methacrylate	0.6690 0.5729	0.6003	0.6270	0.6201	0.5979	Ave		0.6145				5.3		20.0			
1,1,2-Trichloroethane	0.3780 0.3427	0.3701	0.3532	0.3527	0.3627	Ave		0.3599			0.1000	3.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.4604 0.4181	0.4688	0.4522	0.4595	0.4469	Ave		0.4510			0.2000	3.9		20.0			
1,3-Dichloropropane	0.7367 0.6614	0.6892	0.7174	0.6989	0.6980	Ave		0.7003				3.7		20.0			
2-Hexanone	2.7026 2.2053	2.4437	2.5071	2.3594	2.4605	Ave		2.4464			0.0500	6.7		20.0			
n-Butyl acetate	1.1806 0.8776	0.9082	0.9941	0.9581	0.9232	Ave		0.9736				11.2		20.0			
Chlorodibromomethane	0.4130 0.4501	0.3554	0.3799	0.3943	0.4389	Ave		0.4052			0.1000	8.9		20.0			
Ethylene Dibromide	0.4234 0.3775	0.3972	0.3992	0.3941	0.3947	Ave		0.3977			0.1000	3.7		20.0			
Chlorobenzene	1.2131 1.1388	1.2162	1.2345	1.2230	1.2233	Ave		1.2081			0.5000	2.9		20.0			
Ethylbenzene	0.6476 0.5816	0.6373	0.6348	0.6421	0.6245	Ave		0.6280			0.1000	3.8		20.0			
1,1,1,2-Tetrachloroethane	0.4502 0.5125	0.4606	0.4662	0.4843	0.5126	Ave		0.4811				5.6		20.0			
m-Xylene & p-Xylene	0.8493 0.7203	0.7834	0.7859	0.7858	0.7745	Ave		0.7832			0.1000	5.2		20.0			
n-Butyl acrylate	0.4022 0.3507	0.3473	0.3799	0.3742	0.3662	Ave		0.3701				5.5		20.0			
o-Xylene	0.8140 0.7610	0.8371	0.8207	0.8208	0.8106	Ave		0.8107			0.3000	3.2		20.0			
Styrene	1.2693 1.2334	1.2948	1.3427	1.3446	1.3248	Ave		1.3016			0.3000	3.4		20.0			
Amyl acetate (mixed isomers)	1.8497 1.9047	1.9720	2.0747	2.0258	2.0288	Ave		1.9760				4.3		20.0			
Bromoform	0.2072 0.2812	0.2122	0.2255	0.2292	0.2614	Ave		0.2361			0.1000	12.3		20.0			
Isopropylbenzene	2.2581 2.1902	2.3231	2.3692	2.4049	2.3323	Ave		2.3130			0.1000	3.4		20.0			
Bromobenzene	0.9004 0.8992	0.9004	0.9377	0.9134	0.9536	Ave		0.9174				2.5		20.0			
1,1,2,2-Tetrachloroethane	1.1440 1.0734	1.0264	1.1145	1.0841	1.1151	Ave		1.0929			0.3000	3.8		20.0			
N-Propylbenzene	4.4950 4.5317	4.7771	5.0351	5.0652	5.0560	Ave		4.8267				5.5		20.0			
1,2,3-Trichloropropane	0.3111 0.2696	0.2724	0.2789	0.2733	0.2766	Ave		0.2803				5.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.2594 0.2970	0.3106	0.3046	0.2956	0.3108	Ave		0.2963				6.5		20.0			
2-Chlorotoluene	3.2936 3.1736	3.2739	3.4359	3.4166	3.4814	Ave		3.3458				3.5		20.0			
4-Ethyltoluene	3.8399 3.8053	3.9420	4.0586	4.0522	4.1893	Ave		3.9812				3.7		20.0			
1,3,5-Trimethylbenzene	3.1740 3.4607	3.3496	3.5618	3.6044	3.6815	Ave		3.4720				5.4		20.0			
4-Chlorotoluene	2.8044 2.7214	2.8843	2.9659	2.9175	2.9630	Ave		2.8761				3.4		20.0			
Butyl Methacrylate	1.0302 1.2232	1.1510	1.2653	1.2372	1.2788	Ave		1.1976				7.8		20.0			
tert-Butylbenzene	2.2881 2.9566	2.6413	2.8287	2.9078	3.0715	Ave		2.7823				10.1		20.0			
1,2,4-Trimethylbenzene	3.4125 3.4958	3.4997	3.6315	3.6551	3.7509	Ave		3.5742				3.5		20.0			
sec-Butylbenzene	4.0579 4.5862	4.4517	4.6640	4.7746	4.9400	Ave		4.5791				6.7		20.0			
4-Isopropyltoluene	3.3349 3.7955	3.6486	3.9252	3.9584	4.0793	Ave		3.7903				7.1		20.0			
1,3-Dichlorobenzene	1.7980 1.7090	1.7765	1.8197	1.7803	1.8311	Ave		1.7858			0.6000	2.4		20.0			
1,4-Dichlorobenzene	1.9694 1.7002	1.7955	1.8190	1.7877	1.8153	Ave		1.8145			0.5000	4.8		20.0			
Benzyl chloride	1.5073 1.7054	1.5798	1.6725	1.6477	1.7306	Ave		1.6405				5.1		20.0			
Indan	3.4581 3.5975	3.5592	3.7345	3.6921	3.8012	Ave		3.6404				3.5		20.0			
p-Diethylbenzene	1.9717 2.0823	2.0060	2.1429	2.1419	2.2061	Ave		2.0918				4.3		20.0			
n-Butylbenzene	1.9190 1.9733	2.0265	2.1350	2.1369	2.1529	Ave		2.0573				4.8		20.0			
1,2-Dichlorobenzene	1.8059 1.8003	1.7905	1.8918	1.8205	1.8660	Ave		1.8292			0.4000	2.2		20.0			
1,2,4,5-Tetramethylbenzene	3.6582 4.0201	3.7144	3.9573	3.9760	4.1830	Ave		3.9182				5.0		20.0			
1,2-Dibromo-3-Chloropropane	0.2421 0.2276	0.2047	0.2214	0.2086	0.2195	Ave		0.2207			0.0500	6.1		20.0			
1,3,5-Trichlorobenzene	1.5307 1.5454	1.4769	1.5255	1.5227	1.5769	Ave		1.5297				2.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	1.6074 1.4783	1.4740	1.4993	1.5038	1.5150	Ave		1.5130			0.2000	3.2		20.0			
Hexachlorobutadiene	0.7454 0.8665	0.7318	0.7787	0.7894	0.8587	Ave		0.7951				7.1		20.0			
Naphthalene	4.3516 3.7345	3.9428	4.0599	3.8902	3.7970	Ave		3.9627				5.6		20.0			
1,2,3-Trichlorobenzene	1.5928 1.5206	1.5028	1.5636	1.5274	1.5499	Ave		1.5428				2.1		20.0			
Dibromofluoromethane (Surr)	0.3403 0.3324	0.3463	0.3458	0.3196	0.3388	Ave		0.3372				3.0		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3812 0.4186	0.3887	0.3978	0.3650	0.4054	Ave		0.3928				4.8		20.0			
Toluene-d8 (Surr)	1.6142 1.6294	1.6024	1.6085	1.5252	1.6110	Ave		1.5985				2.3		20.0			
4-Bromofluorobenzene	0.4689 0.4569	0.4678	0.4685	0.4359	0.4587	Ave		0.4594				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-505429/3	K81082.D
Level 2	STD5 460-505429/4	K81083.D
Level 3	STD20 460-505429/5	K81084.D
Level 4	STD50 460-505429/6	K81085.D
Level 5	STD200 460-505429/7	K81086.D
Level 6	STD500 460-505429/8	K81087.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Ave	748 480260	4249	20567	50318	204201	1.00 500	5.00	20.0	50.0	200
Dichlorodifluoromethane	FB	Ave	4909 3598767	28520	114711	281591	1519919	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	5012 3032563	26162	100568	252634	1283139	1.00 500	5.00	20.0	50.0	200
Butadiene	FB	Ave	3085 2244576	18114	70385	184450	931927	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	4492 2612704	23815	87456	228742	1115468	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	3013 1430158	13299	51563	138645	600328	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	1839 1086307	9925	40148	106318	455369	1.00 500	5.00	20.0	50.0	200
Dichlorofluoromethane	FB	Ave	6200 3805199	40770	154493	351361	1802763	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	4491 3303763	32128	117994	298791	1446639	1.00 500	5.00	20.0	50.0	200
Pentane	TBAd9	Ave	776 580473	5351	22782	53953	256254	2.00 1000	10.0	40.0	100	400
Ethyl ether	FB	Ave	2998 1486188	15384	63143	156497	611778	1.00 500	5.00	20.0	50.0	200
Ethanol	TBAd9	Ave	734 603934	4890	23651	48057	222255	40.0 20000	200	800	2000	8000
2-Methyl-1,3-butadiene	FB	Ave	3305 1871775	19916	73815	188242	788853	1.00 500	5.00	20.0	50.0	200
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	2400 1535380	14941	60450	153855	644349	1.00 500	5.00	20.0	50.0	200
Acrolein	TBAd9	Ave	58421 381088	107641	204258	300924	308158	100 600	200	300	400	500
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	3519 2053095	21320	82948	210293	855644	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1-Dichloroethene	FB	Ave	2887 1652166	17381	66917	169555	682821	1.00 500	5.00	20.0	50.0	200
Acetone	BUT	QuaF	10701 3432716	36734	155866	359228	1369245	5.00 2500	25.0	100	250	1000
Iodomethane	FB	Ave	5626 3018917	31561	126276	313483	1241875	1.00 500	5.00	20.0	50.0	200
Isopropyl alcohol	TBAd9	Ave	4760 1910559	17978	77526	171314	728395	10.0 5000	50.0	200	500	2000
Carbon disulfide	FB	Ave	12710 6413360	68205	276963	697330	2678835	1.00 500	5.00	20.0	50.0	200
Allyl chloride	FB	Ave	1764 1072271	11601	44831	116631	463470	1.00 500	5.00	20.0	50.0	200
Methyl acetate	FB	Ave	14627 8169291	81788	345695	863918	3330527	5.00 2500	25.0	100	250	1000
Cyclopentene	FB	Ave	7838 4599196	48172	189926	474800	1951600	1.00 500	5.00	20.0	50.0	200
Acetonitrile	TBAd9	Ave	6835 4514952	36468	162219	372479	1539215	10.0 5000	50.0	200	500	2000
Methylene Chloride	FB	Qua	6198 2029445	23107	86556	207618	827642	1.00 500	5.00	20.0	50.0	200
2-Methyl-2-propanol	TBAd9	Ave	5587 2845486	27810	117988	270151	1090780	10.0 5000	50.0	200	500	2000
Methyl tert-butyl ether	FB	Ave	11587 5616363	54337	232875	563711	2260195	1.00 500	5.00	20.0	50.0	200
trans-1,2-Dichloroethene	FB	Ave	3270 1670837	18023	70811	177840	697666	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	FB	Ave	14311 7147190	70791	310841	767618	2894710	10.0 5000	50.0	200	500	2000
Hexane	FB	Ave	3802 2098221	25448	92372	232207	878079	1.00 500	5.00	20.0	50.0	200
Isopropyl ether	FB	Ave	16020 8205983	81409	335406	835747	3374077	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	7260 3555879	36967	150714	377760	1484924	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	TBAd9	Ave	1330 494481	6074	23136	59261	198602	2.00 1000	10.0	40.0	100	400
2-Chloro-1,3-butadiene	FB	Ave	2857 1559626	15751	61873	158247	640597	1.00 500	5.00	20.0	50.0	200
Tert-butyl ethyl ether	FB	Ave	13547 6898933	67493	278600	680365	2792399	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	2261 971607	10941	39716	98674	407569	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	3992 1968297	20073	81641	206142	814853	1.00 500	5.00	20.0	50.0	200
2-Butanone (MEK)	BUT	Ave	2290 1024670	10209	40670	102061	404532	5.00 2500	25.0	100	250	1000
Ethyl acetate	BUT	Ave	568 371768	4102	15521	38885	148786	2.00 1000	10.0	40.0	100	400
Methyl acrylate	FB	Ave	3902 1825571	15769	68753	175653	695665	1.00 500	5.00	20.0	50.0	200
Propionitrile	TBAd9	Ave	5783 3077786	28088	123118	316710	1194894	10.0 5000	50.0	200	500	2000
Tetrahydrofuran	BUT	Ave	917 471794	5223	20322	50722	188476	2.00 1000	10.0	40.0	100	400
Chlorobromomethane	FB	Ave	1931 920393	9768	37891	96613	374237	1.00 500	5.00	20.0	50.0	200
Methacrylonitrile	FB	Ave	13084 6658423	67439	289974	723603	2755959	10.0 5000	50.0	200	500	2000
Chloroform	FB	Ave	6570 3410130	34755	136804	347206	1397263	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Ave	4797 2743692	29882	118146	298906	1151960	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	5779 3077034	30106	120673	308194	1267362	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	3801 2610139	22668	92544	242605	1036419	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	4597 2474408	24244	97822	260710	1019504	1.00 500	5.00	20.0	50.0	200
Isobutyl alcohol	TBAd9	Ave	615 257254	2652	10084	23780	98115	25.0 12500	125	500	1250	5000
Benzene	CBNZd5	Ave	13050 6931810	70742	282353	731328	2864295	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	12468 6849688	62847	275712	723010	2730644	1.00 500	5.00	20.0	50.0	200
Tert-amyl methyl ether	FB	Ave	12039 6319961	58995	251287	636431	2579919	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	5457 2598845	25020	100598	252763	1017052	1.00 500	5.00	20.0	50.0	200
n-Heptane	FB	Ave	3169 1652219	18194	70508	191582	684355	1.00 500	5.00	20.0	50.0	200
n-Butanol	TBAd9	Ave	4012 1974814	15061	67416	172434	723484	25.0 12500	125	500	1250	5000
Trichloroethene	FB	Ave	3587 1793076	17967	69212	181487	723900	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethyl acrylate	FB	Ave	2241 1357170	12344	51716	142547	561580	1.00 500	5.00	20.0	50.0	200
Methylcyclohexane	FB	Ave	5612 3350067	33741	140732	359231	1401640	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	4013 2103791	21246	79261	207128	843870	1.00 500	5.00	20.0	50.0	200
Methyl methacrylate	FB	Ave	7677 3619185	32750	141217	347848	1430666	2.00 1000	10.0	40.0	100	400
1,4-Dioxane	DXE	Ave	933 442681	3938	17621	38778	164571	20.0 10000	100	400	1000	4000
n-Propyl acetate	FB	Ave	6019 3283690	30299	130535	321584	1294774	1.00 500	5.00	20.0	50.0	200
Dibromomethane	FB	Ave	2575 1142681	11312	44918	109668	446435	1.00 500	5.00	20.0	50.0	200
Dichlorobromomethane	FB	Ave	4590 2547264	20484	85945	225280	971669	1.00 500	5.00	20.0	50.0	200
2-Chloroethyl vinyl ether	FB	Ave	1734 1001279	8589	37945	94037	396796	1.00 500	5.00	20.0	50.0	200
2-Nitropropane	FB	Ave	950 617102	5296	18796	46362	207160	2.00 1000	10.0	40.0	100	400
Epichlorohydrin	BUT	Ave	8169 3580734	36555	161261	401050	1401141	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	CBNZ d5	Ave	5510 3056208	28737	113993	291599	1204543	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone (MIBK)	BUT	Ave	21815 11344603	108527	473766	1183127	4581300	5.00 2500	25.0	100	250	1000
Toluene	CBNZ d5	Ave	14350 7303691	72877	292793	742414	2964994	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBNZ d5	Ave	4862 2662659	23483	100113	253858	1065267	1.00 500	5.00	20.0	50.0	200
Ethyl methacrylate	CBNZ d5	Ave	4614 2257266	21338	90188	225688	898197	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBNZ d5	Ave	2607 1350266	13157	50809	128339	544840	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBNZ d5	Ave	3175 1647461	16663	65054	167206	671424	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBNZ d5	Ave	5081 2606046	24497	103200	254345	1048633	1.00 500	5.00	20.0	50.0	200
2-Hexanone	BUT	Ave	15103 7352390	69127	309475	758974	2989421	5.00 2500	25.0	100	250	1000
n-Butyl acetate	CBNZ d5	Ave	8142 3458087	32285	142993	348692	1386873	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorodibromomethane	CBNZ d5	Ave	2848 1773498	12632	54651	143487	659302	1.00 500	5.00	20.0	50.0	200
Ethylene Dibromide	CBNZ d5	Ave	2920 1487530	14119	57427	143407	593004	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBNZ d5	Ave	8366 4487426	43231	177584	445084	1837659	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBNZ d5	Ave	4466 2291556	22652	91311	233678	938198	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3105 2019649	16373	67061	176265	770009	1.00 500	5.00	20.0	50.0	200
m-Xylene & p-Xylene	CBNZ d5	Ave	5857 2838451	27848	113044	285955	1163569	1.00 500	5.00	20.0	50.0	200
n-Butyl acrylate	CBNZ d5	Ave	2774 1381914	12346	54649	136179	550118	1.00 500	5.00	20.0	50.0	200
o-Xylene	CBNZ d5	Ave	5614 2998839	29756	118053	298698	1217707	1.00 500	5.00	20.0	50.0	200
Styrene	CBNZ d5	Ave	8754 4860138	46025	193144	489351	1990210	1.00 500	5.00	20.0	50.0	200
Amyl acetate (mixed isomers)	DCBd 4	Ave	7266 4043809	39391	165813	410585	1621329	1.00 500	5.00	20.0	50.0	200
Bromoform	CBNZ d5	Ave	1429 1108025	7542	32438	83408	392669	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBNZ d5	Ave	15573 8630200	82579	340803	875203	3503747	1.00 500	5.00	20.0	50.0	200
Bromobenzene	DCBd 4	Ave	3537 1908963	17986	74944	185116	762041	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	4494 2278878	20502	89068	219710	891155	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCBd 4	Ave	17657 9621062	95423	402408	1026576	4040443	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichloropropane	DCBd 4	Ave	1222 572437	5441	22289	55387	221016	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1019 630473	6205	24344	59902	248386	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCBd 4	Ave	12938 6737701	65397	274598	692444	2782152	1.00 500	5.00	20.0	50.0	200
4-Ethyltoluene	DCBd 4	Ave	15084 8078814	78741	324364	821278	3347885	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCBd 4	Ave	12468 7347173	66909	284664	730519	2942088	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCBd 4	Ave	11016 5777594	57614	237039	591290	2367829	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Butyl Methacrylate	DCBd 4	Ave	4047 2596881	22991	101123	250740	1021929	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCBd 4	Ave	8988 6277005	52759	226071	589339	2454604	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCBd 4	Ave	13405 7421730	69906	290232	740797	2997508	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCBd 4	Ave	15940 9736779	88922	372749	967691	3947811	1.00 500	5.00	20.0	50.0	200
4-Isopropyltoluene	DCBd 4	Ave	13100 8058175	72880	313706	802256	3259912	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCBd 4	Ave	7063 3628386	35486	145428	360810	1463299	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCBd 4	Ave	7736 3609533	35865	145375	362315	1450691	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCBd 4	Ave	5921 3620592	31556	133667	333946	1383020	1.00 500	5.00	20.0	50.0	200
Indan	DCBd 4	Ave	13584 7637740	71096	298464	748297	3037685	1.00 500	5.00	20.0	50.0	200
p-Diethylbenzene	DCBd 4	Ave	7745 4420822	40069	171260	434113	1762977	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCBd 4	Ave	7538 4189527	40479	170627	433097	1720440	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCBd 4	Ave	7094 3822181	35765	151193	368970	1491216	1.00 500	5.00	20.0	50.0	200
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	14370 8534828	74196	316271	805825	3342854	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	951 483212	4089	17694	42280	175444	1.00 500	5.00	20.0	50.0	200
1,3,5-Trichlorobenzene	DCBd 4	Ave	6013 3281014	29502	121921	308617	1260133	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	6314 3138528	29443	119824	304789	1210680	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCBd 4	Ave	2928 1839696	14618	62237	159985	686205	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCBd 4	Ave	17094 7928477	78758	324468	788437	3034329	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichlorobenzene	DCBd 4	Ave	6257 3228314	30019	124964	309555	1238558	1.00 500	5.00	20.0	50.0	200
Dibromofluoromethane (Surr)	FB	Ave	147623 165880	151556	154118	148670	157636	50.0 50.0	50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	165366 208889	170120	177308	169812	188650	50.0 50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 505429

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/23/2018 12:53 Calibration End Date: 03/23/2018 14:55 Calibration ID: 67199

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene-d8 (Surr)	CBNZ d5	Ave	556616 642032	569603	578460	555065	605029	50.0 50.0	50.0	50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	161689 180026	166284	168496	158627	172264	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 23-Mar-2018 12:53:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0069166-003
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Mar-2018 19:36:52 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: baronm Date: 23-Mar-2018 17:17:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.620	1.602	0.018	28	748	1.00	0.8441	Ma
2 Dichlorodifluoromethane	85	1.639	1.638	0.001	45	4909	1.00	0.8478	
3 Chloromethane	50	1.803	1.803	0.000	98	5012	1.00	0.9682	
4 Vinyl chloride	62	1.913	1.913	0.000	75	4492	1.00	0.9808	
5 Butadiene	54	1.907	1.913	-0.006	94	3085	1.00	0.8495	
6 Bromomethane	94	2.199	2.211	-0.012	87	3013	1.00	1.13	
7 Chloroethane	64	2.266	2.272	-0.006	74	1839	1.00	0.9386	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	97	6200	1.00	0.8576	
8 Trichlorofluoromethane	101	2.474	2.486	-0.012	60	4491	1.00	0.7773	
10 Pentane	72	2.510	2.498	0.012	95	776	2.00	1.50	M
12 Ethanol	46	2.718	2.687	0.031	85	734	40.0	30.0	
11 Ethyl ether	59	2.693	2.699	-0.006	86	2998	1.00	1.03	
13 2-Methyl-1,3-butadiene	53	2.730	2.724	0.006	92	3305	1.00	0.9314	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.754	0.006	76	2400	1.00	0.8547	
15 Acrolein	56	2.882	2.882	0.000	97	58421	100.0	96.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.900	2.894	0.006	89	3519	1.00	0.9076	
17 1,1-Dichloroethene	96	2.919	2.925	-0.006	95	2887	1.00	0.9210	
18 Acetone	43	3.004	3.004	0.000	84	10701	5.00	8.08	
19 Iodomethane	142	3.077	3.083	-0.006	98	5626	1.00	0.9668	
22 Isopropyl alcohol	45	3.089	3.089	0.000	1	4760	10.0	12.9	a
20 Carbon disulfide	76	3.120	3.120	0.000	100	12710	1.00	1.00	
21 3-Chloro-1-propene	76	3.242	3.248	-0.006	78	1764	1.00	0.8504	
23 Methyl acetate	43	3.248	3.248	0.000	98	14627	5.00	4.69	
24 Cyclopentene	67	3.266	3.272	-0.006	89	7838	1.00	0.8943	
29 Acetonitrile	41	3.309	3.309	0.000	38	6835	10.0	9.29	a
* 25 TBA-d9 (IS)	65	3.358	3.351	0.007	0	359046	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	96	6198	1.00	1.27	M
27 2-Methyl-2-propanol	59	3.425	3.431	-0.006	1	5587	10.0	10.5	
28 Methyl tert-butyl ether	73	3.534	3.534	0.000	96	11587	1.00	1.08	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	96	3270	1.00	0.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.644	3.638	0.006	91	14311	10.0	10.3	
32 Hexane	43	3.723	3.723	0.000	94	3802	1.00	0.8975	
33 Isopropyl ether	45	3.931	3.931	0.000	91	16020	1.00	1.02	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	65	7260	1.00	1.04	
35 Vinyl acetate	86	3.980	3.979	0.001	100	1330	2.00	2.43	
36 2-Chloro-1,3-butadiene	88	4.028	4.022	0.006	92	2857	1.00	0.9717	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	13547	1.00	1.04	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	279416	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.485	0.001	47	2261	1.00	1.15	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	94	2290	5.00	5.97	
41 Ethyl acetate	70	4.516	4.510	0.006	89	568	2.00	1.68	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	55	3992	1.00	1.04	
44 Methyl acrylate	55	4.577	4.571	0.006	77	3902	1.00	1.17	
43 Propionitrile	54	4.644	4.650	-0.006	97	5783	10.0	10.1	
45 Tetrahydrofuran	72	4.729	4.735	-0.006	1	917	2.00	2.03	
46 Chlorobromomethane	128	4.742	4.741	0.001	96	1931	1.00	1.07	
47 Methacrylonitrile	67	4.754	4.754	0.000	97	13084	10.0	10.0	
48 Chloroform	83	4.790	4.790	0.000	99	6570	1.00	1.01	
49 Cyclohexane	84	4.931	4.937	-0.006	95	4797	1.00	0.8942	
50 1,1,1-Trichloroethane	97	4.937	4.943	-0.006	84	5779	1.00	1.00	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	147623	50.0	50.5	
52 Carbon tetrachloride	117	5.071	5.065	0.006	96	3801	1.00	0.8543	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	92	4597	1.00	0.9822	
56 Isobutyl alcohol	74	5.205	5.187	0.019	74	615	25.0	30.8	
54 Benzene	78	5.296	5.296	0.000	40	13050	1.00	0.9855	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.308	0.001	0	165366	50.0	48.5	
57 Isopropyl acetate	43	5.327	5.333	-0.006	41	12468	1.00	0.9782	a
58 Tert-amyl methyl ether	73	5.345	5.351	-0.006	92	12039	1.00	1.02	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	97	5457	1.00	1.12	
60 n-Heptane	57	5.437	5.436	0.001	98	3169	1.00	0.9581	
* 61 Fluorobenzene	96	5.583	5.583	0.000	98	433834	50.0	50.0	
62 n-Butanol	56	5.876	5.863	0.013	91	4012	25.0	29.5	
63 Trichloroethene	95	5.943	5.942	0.001	96	3587	1.00	1.06	
64 Ethyl acrylate	56	6.077	6.070	0.007	88	2241	1.00	0.9059	
65 Methylcyclohexane	83	6.077	6.077	0.000	82	5612	1.00	0.8812	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	86	4013	1.00	1.02	
* 67 1,4-Dioxane-d8	96	6.284	6.290	-0.006	0	26285	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.296	-0.006	91	7677	2.00	2.28	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	6019	1.00	1.00	
69 1,4-Dioxane	88	6.339	6.345	-0.006	27	933	20.0	23.5	M
71 Dibromomethane	93	6.369	6.369	0.000	92	2575	1.00	1.18	
72 Dichlorobromomethane	83	6.522	6.522	0.000	98	4590	1.00	1.06	
73 2-Chloroethyl vinyl ether	63	6.839	6.845	-0.006	68	1734	1.00	0.9789	
74 2-Nitropropane	41	6.857	6.851	0.006	60	950	2.00	1.96	a
75 Epichlorohydrin	57	6.961	6.961	0.000	98	8169	20.0	23.3	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	96	5510	1.00	1.00	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	98	21815	5.00	5.22	
$ 78 Toluene-d8 (Surr)	98	7.272	7.271	0.001	97	556616	50.0	50.5	
79 Toluene	91	7.345	7.351	-0.006	92	14350	1.00	1.04	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	95	4862	1.00	1.02	
81 Ethyl methacrylate	69	7.711	7.710	0.000	93	4614	1.00	1.09	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	90	2607	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.973	-0.006	97	3175	1.00	1.02	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	93	5081	1.00	1.05	
85 2-Hexanone	43	8.174	8.174	0.000	98	15103	5.00	5.52	
86 n-Butyl acetate	43	8.284	8.290	-0.006	97	8142	1.00	1.21	
87 Chlorodibromomethane	129	8.369	8.369	0.000	95	2848	1.00	1.02	
88 Ethylene Dibromide	107	8.527	8.527	0.000	91	2920	1.00	1.06	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	89	344826	50.0	50.0	
90 Chlorobenzene	112	9.107	9.113	-0.006	96	8366	1.00	1.00	
92 Ethylbenzene	106	9.204	9.204	0.000	99	4466	1.00	1.03	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.222	0.006	91	3105	1.00	0.9359	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	5857	1.00	1.08	
94 n-Butyl acrylate	73	9.783	9.783	0.000	93	2774	1.00	1.09	
95 o-Xylene	106	9.820	9.820	0.000	94	5614	1.00	1.00	
96 Styrene	104	9.850	9.850	0.000	93	8754	1.00	0.9752	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	89	7266	1.00	0.9361	
98 Bromoform	173	10.082	10.082	0.000	88	1429	1.00	0.8776	
99 Isopropylbenzene	105	10.198	10.204	-0.006	96	15573	1.00	0.9763	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	88	161689	50.0	51.0	
101 Bromobenzene	156	10.558	10.564	-0.006	92	3537	1.00	0.9814	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	96	4494	1.00	1.05	
103 N-Propylbenzene	91	10.625	10.624	0.001	98	17657	1.00	0.9313	
104 1,2,3-Trichloropropane	110	10.649	10.655	-0.006	92	1222	1.00	1.11	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.667	-0.006	78	1019	1.00	0.8754	
106 2-Chlorotoluene	91	10.740	10.740	0.000	94	12938	1.00	0.9844	
107 4-Ethyltoluene	105	10.740	10.740	0.000	87	15084	1.00	0.9645	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	92	12468	1.00	0.9142	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	11016	1.00	0.9751	
110 Butyl Methacrylate	87	10.899	10.899	0.000	95	4047	1.00	0.8603	
111 tert-Butylbenzene	119	11.106	11.106	0.000	90	8988	1.00	0.8224	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	13405	1.00	0.9548	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	15940	1.00	0.8862	
114 4-Isopropyltoluene	119	11.441	11.441	0.000	97	13100	1.00	0.8798	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	92	7063	1.00	1.01	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	97	196409	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	94	7736	1.00	1.09	
118 Benzyl chloride	91	11.667	11.667	0.000	97	5921	1.00	0.9188	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	13584	1.00	0.9499	
120 p-Diethylbenzene	119	11.777	11.777	0.000	91	7745	1.00	0.9426	
121 n-Butylbenzene	92	11.801	11.801	0.000	97	7538	1.00	0.9328	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	89	7094	1.00	0.9873	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	14370	1.00	0.9336	
124 1,2-Dibromo-3-Chloropropan	75	12.521	12.533	-0.012	86	951	1.00	1.10	
125 1,3,5-Trichlorobenzene	180	12.642	12.648	-0.006	97	6013	1.00	1.00	
126 1,2,4-Trichlorobenzene	180	13.142	13.136	0.006	95	6314	1.00	1.06	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	93	2928	1.00	0.9375	
128 Naphthalene	128	13.337	13.331	0.006	99	17094	1.00	1.10	
129 1,2,3-Trichlorobenzene	180	13.526	13.526	0.000	95	6257	1.00	1.03	
S 130 1,2-Dichloroethene, Total	100				0		2.00	2.03	
S 131 Xylenes, Total	100				0		2.00	2.09	
S 132 Total BTEX	1				0		5.00	5.14	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00252	Amount Added:	1.00	Units: uL	
8260MIX1COMB_00074	Amount Added:	1.00	Units: uL	
ACROLEIN W_00075	Amount Added:	10.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

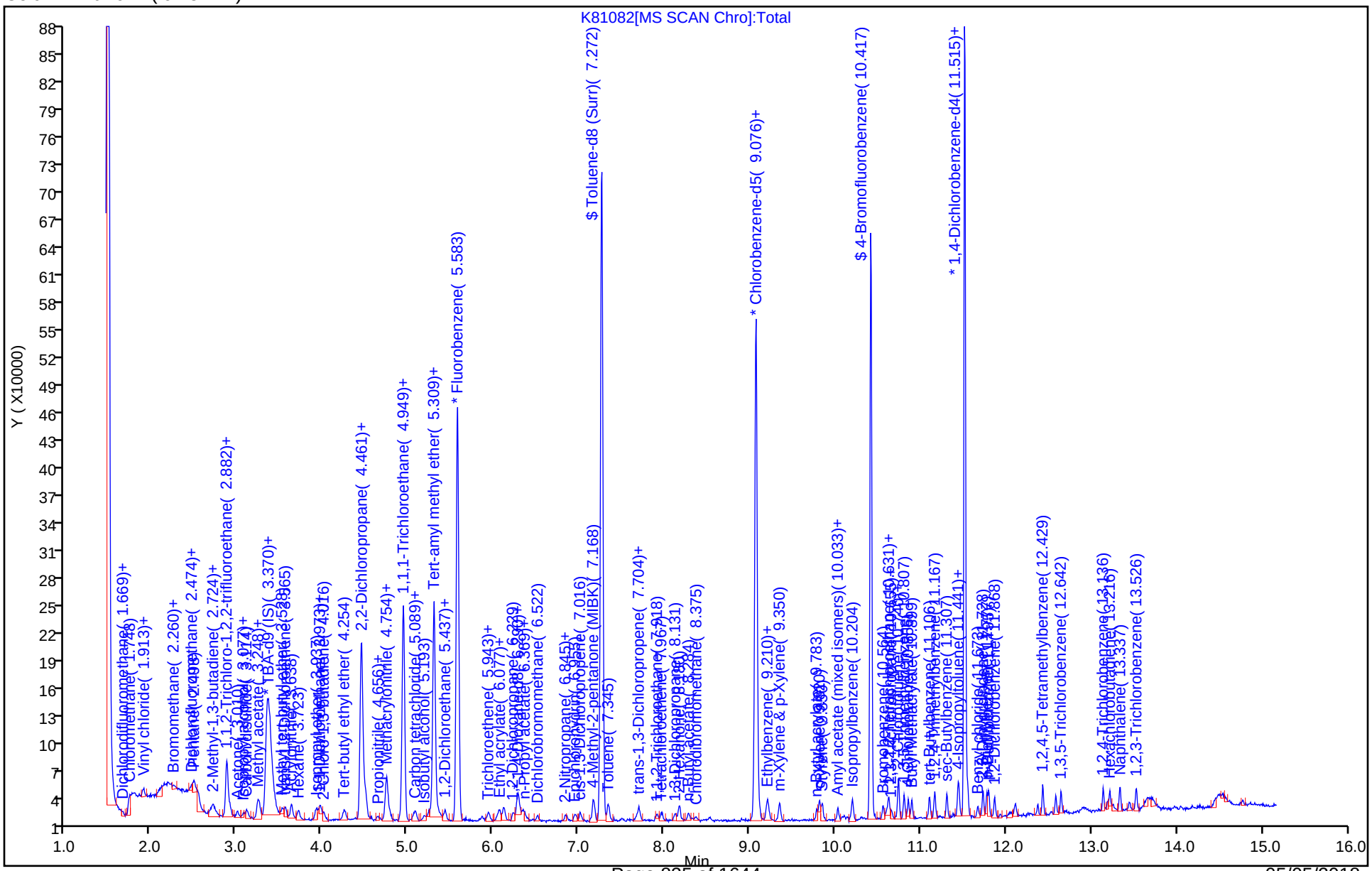
Report Date: 25-Mar-2018 19:36:54 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D

Injection Date:	23-Mar-2018 12:53:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD1			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

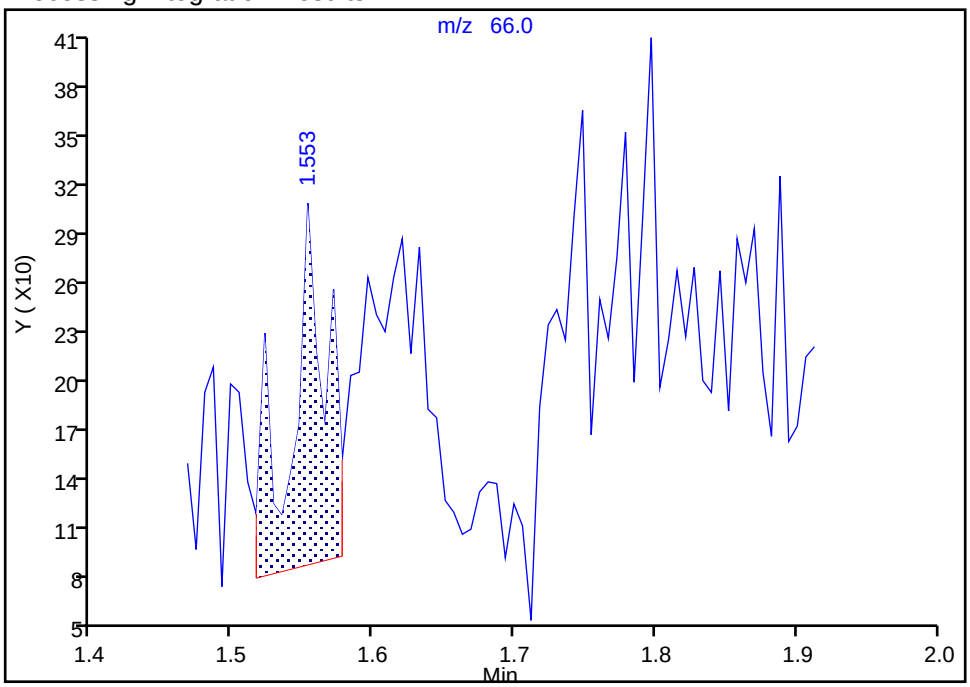
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Injection Date: 23-Mar-2018 12:53:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

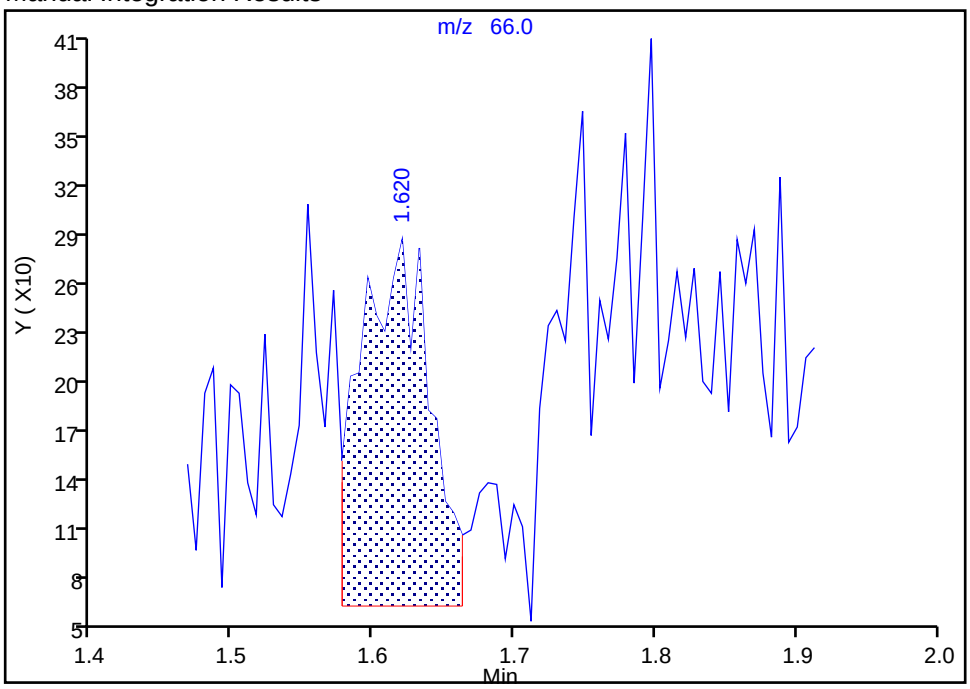
Processing Integration Results

RT: 1.55
Area: 378
Amount: 0.370964
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 748
Amount: 0.844086
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:58:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

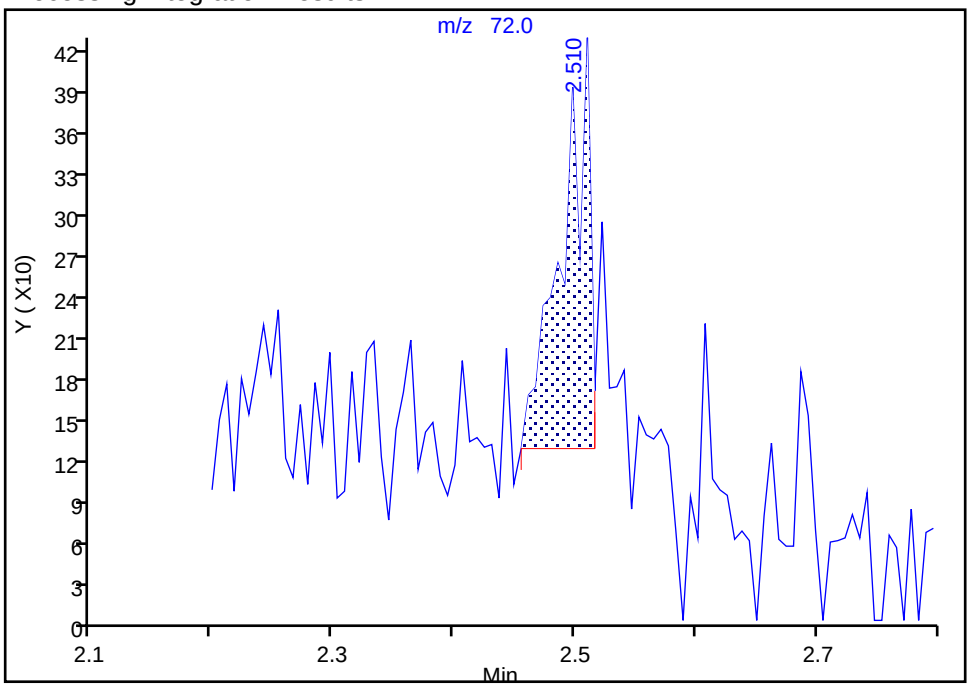
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Injection Date: 23-Mar-2018 12:53:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

10 Pentane, CAS: 109-66-0

Signal: 1

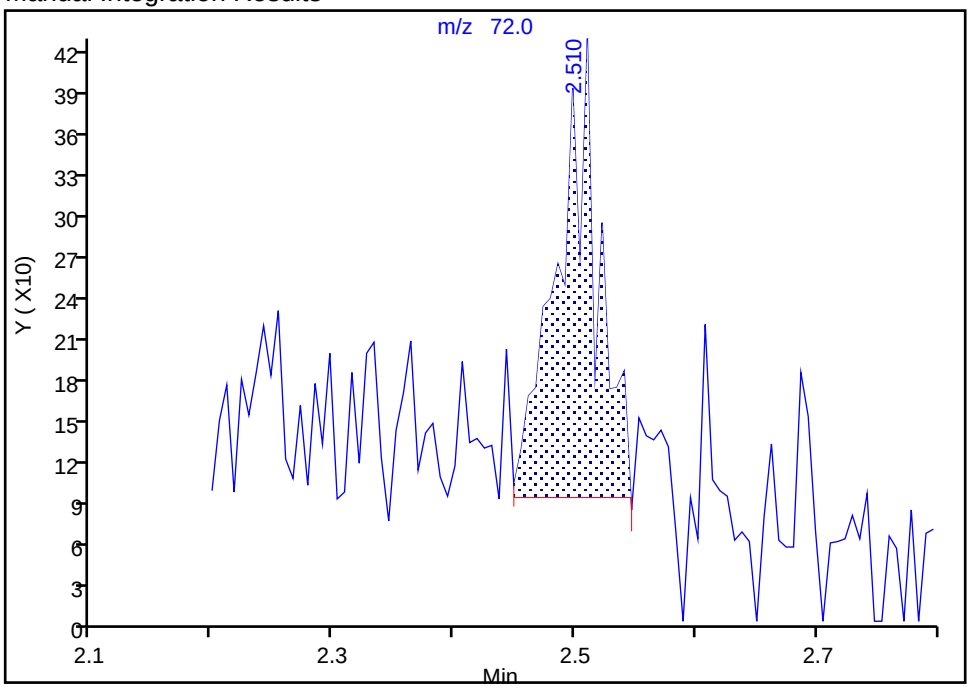
Processing Integration Results

RT: 2.51
Area: 470
Amount: 0.718864
Amount Units: ug/l



Manual Integration Results

RT: 2.51
Area: 776
Amount: 1.504461
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:57:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

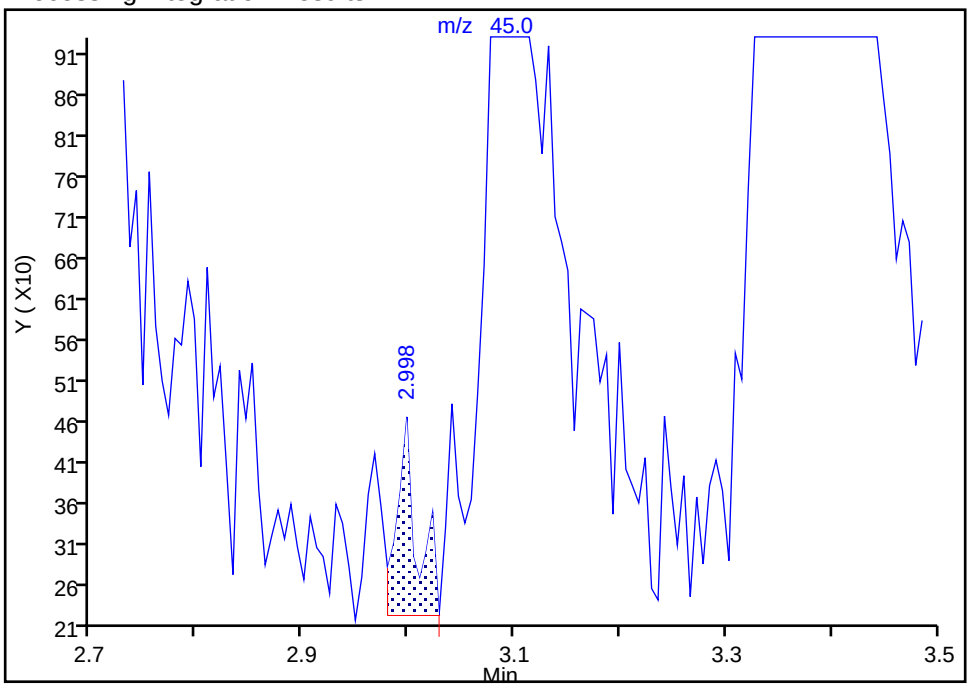
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Injection Date: 23-Mar-2018 12:53:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

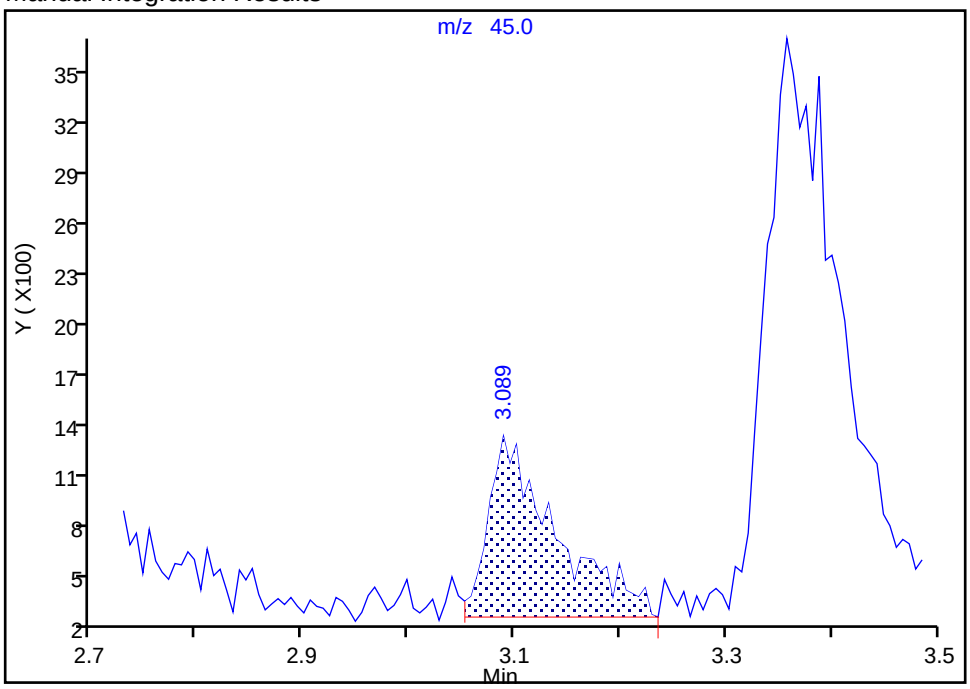
Processing Integration Results

RT: 3.00
Area: 316
Amount: 3.737358
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 4760
Amount: 12.928982
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:36:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

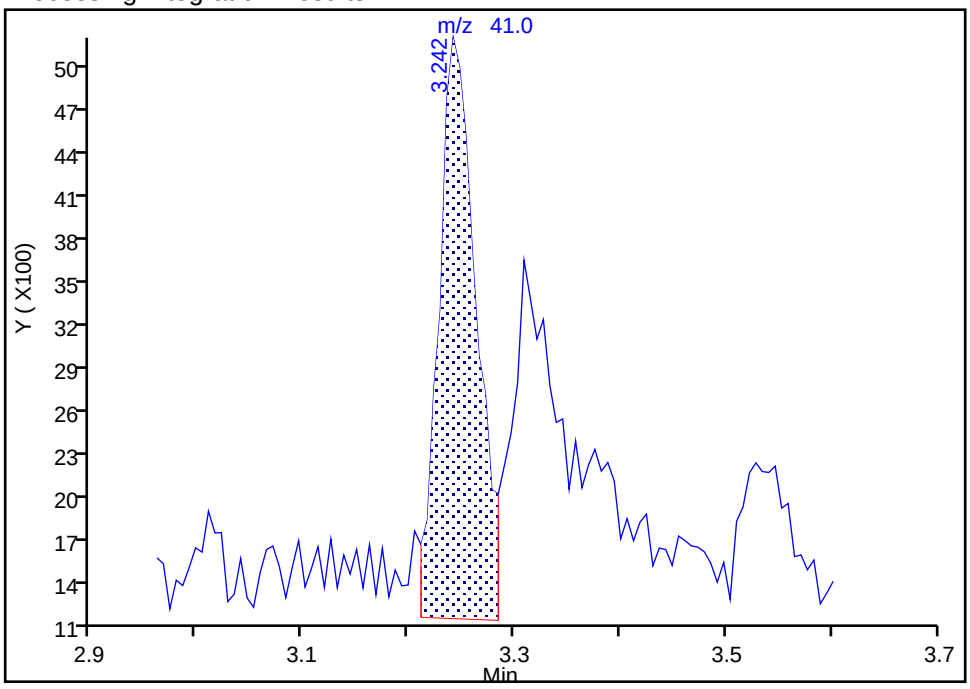
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Injection Date: 23-Mar-2018 12:53:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

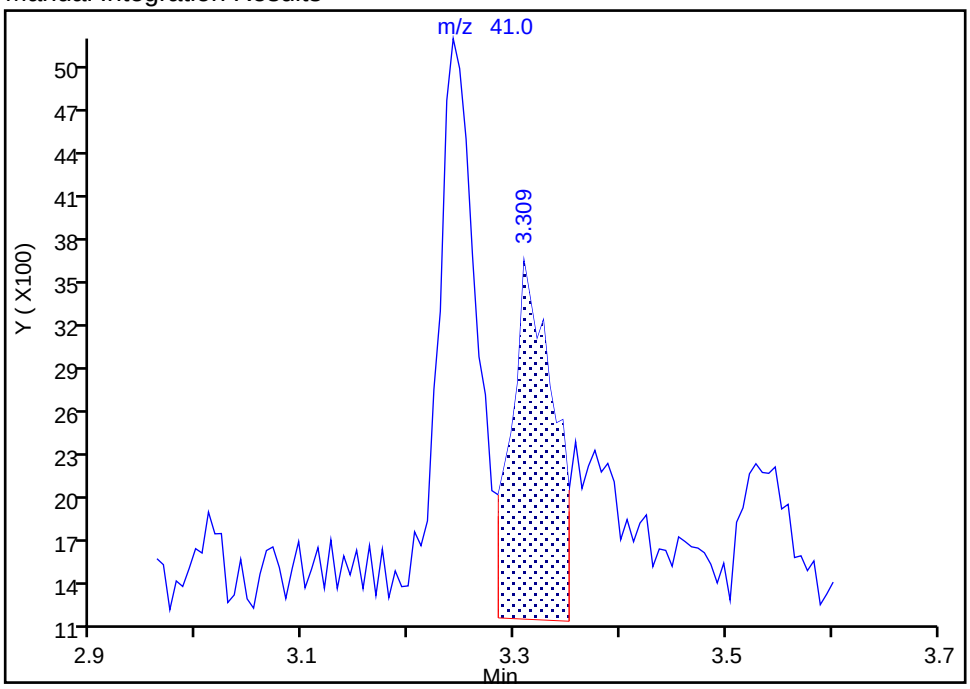
Processing Integration Results

RT: 3.24
Area: 9932
Amount: 12.129162
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 6835
Amount: 9.287185
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:36:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

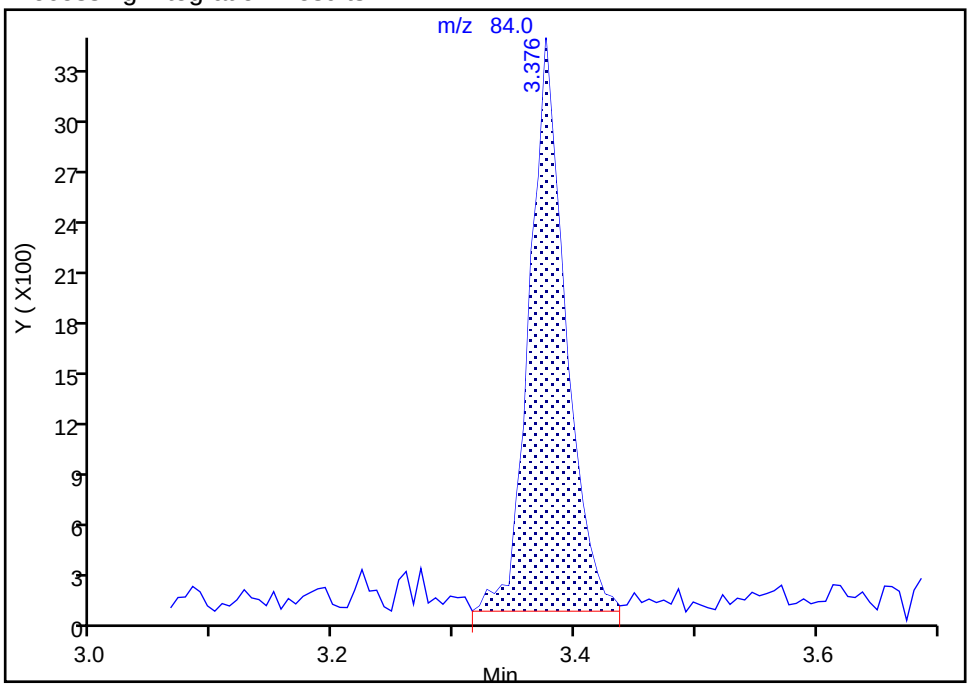
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Injection Date: 23-Mar-2018 12:53:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methylene Chloride, CAS: 75-09-2

Signal: 1

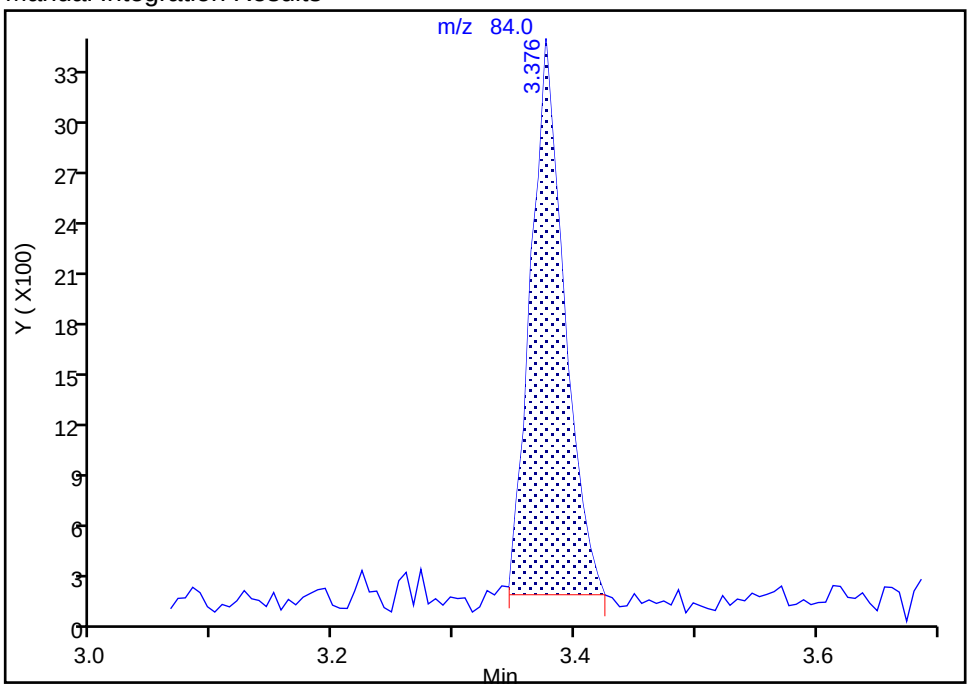
Processing Integration Results

RT: 3.38
Area: 6900
Amount: 1.699644
Amount Units: ug/l



Manual Integration Results

RT: 3.38
Area: 6198
Amount: 1.274457
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:58:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

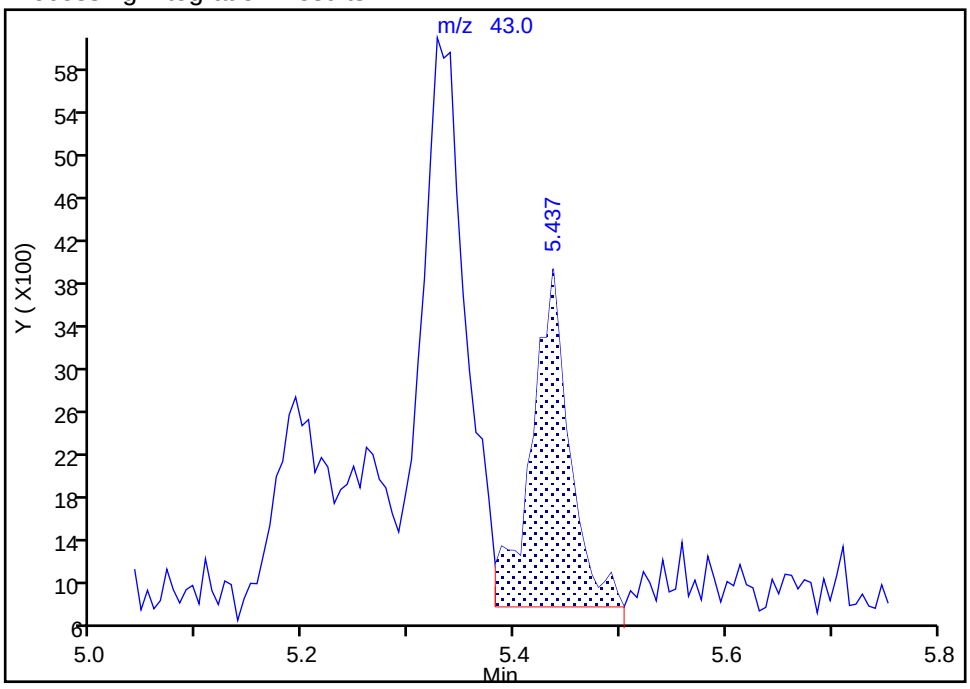
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Injection Date: 23-Mar-2018 12:53:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

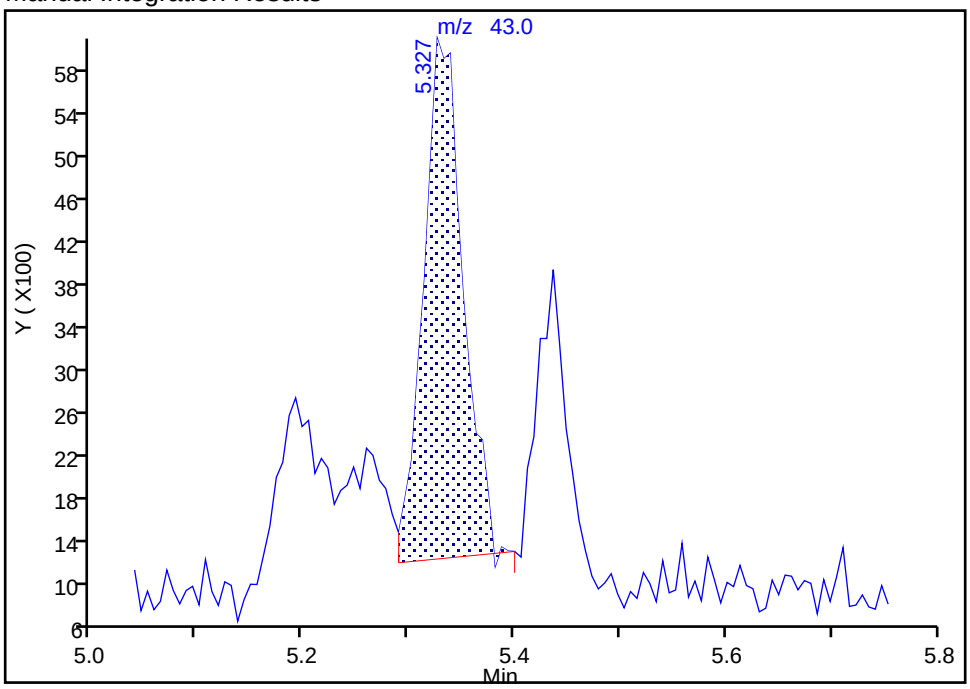
Processing Integration Results

RT: 5.44
Area: 7747
Amount: 1.000510
Amount Units: ug/l



Manual Integration Results

RT: 5.33
Area: 12468
Amount: 0.978227
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:36:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

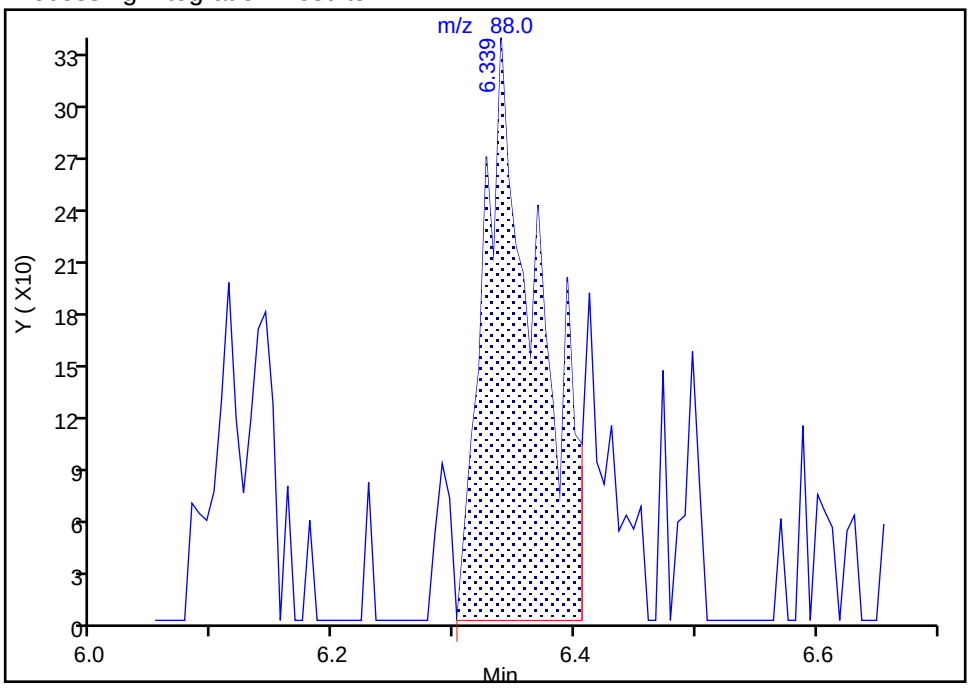
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Injection Date: 23-Mar-2018 12:53:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

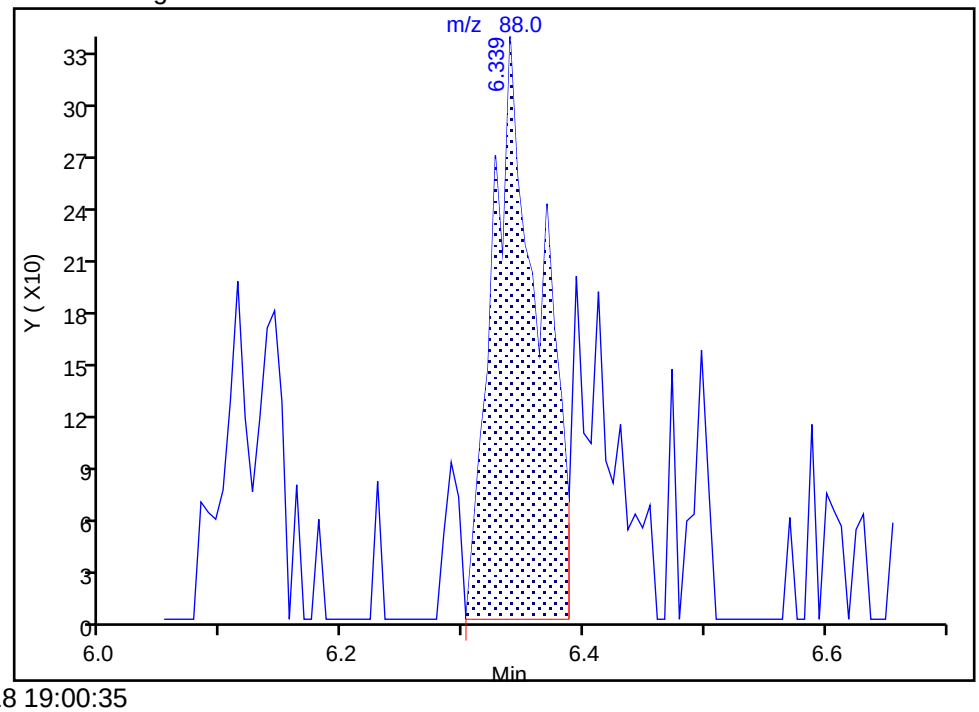
Processing Integration Results

RT: 6.34
Area: 1082
Amount: 26.737576
Amount Units: ug/l



Manual Integration Results

RT: 6.34
Area: 933
Amount: 23.455110
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 19:00:35
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

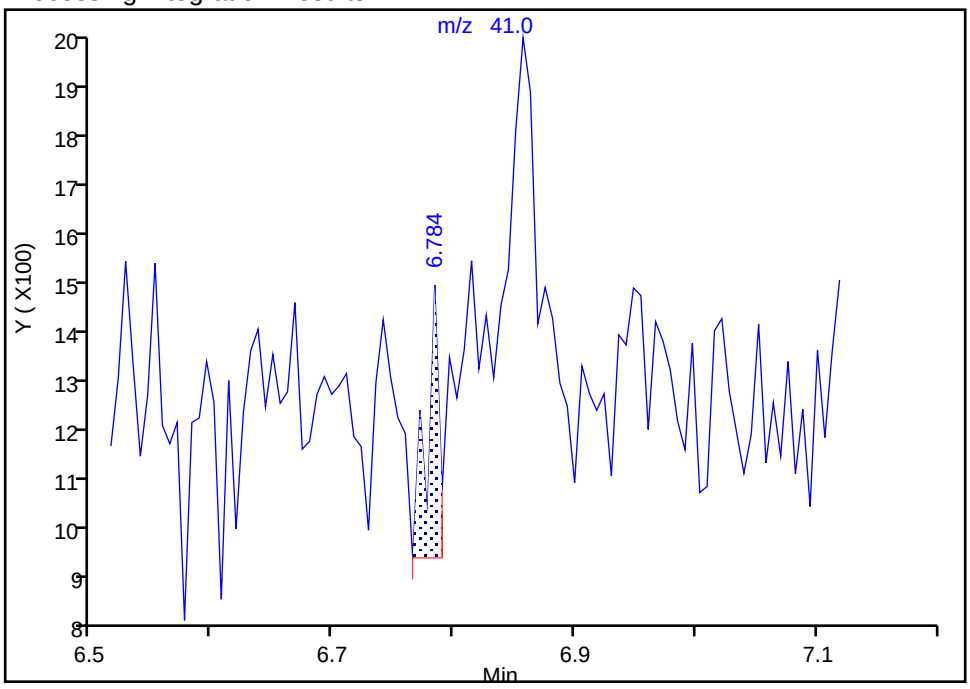
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81082.D
Injection Date: 23-Mar-2018 12:53:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Signal: 1

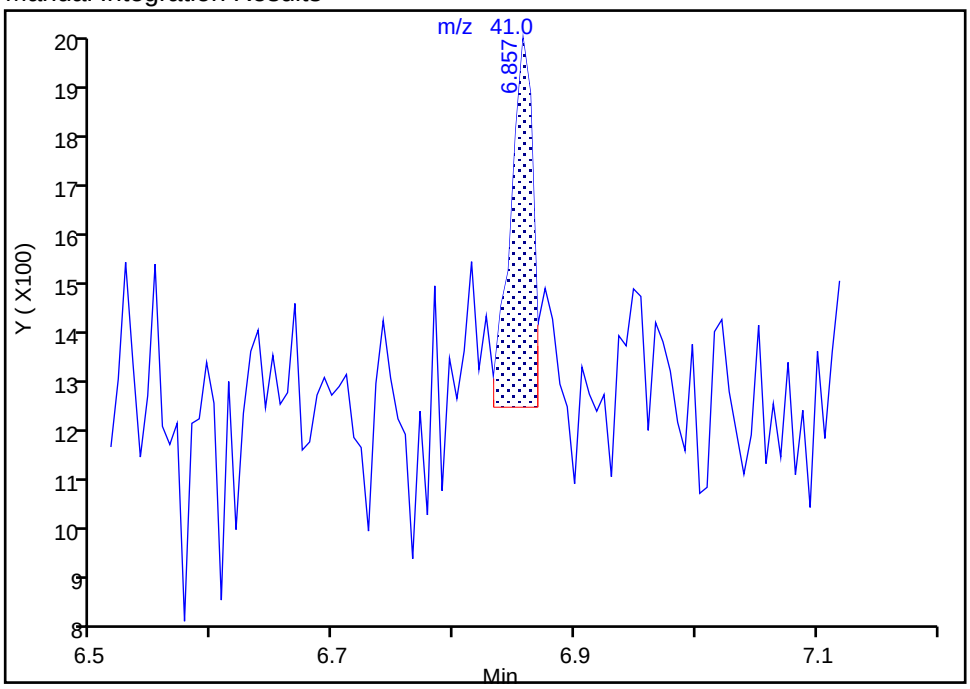
Processing Integration Results

RT: 6.78
Area: 387
Amount: 0.871333
Amount Units: ug/l



Manual Integration Results

RT: 6.86
Area: 950
Amount: 1.959323
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:37:10
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81083.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 23-Mar-2018 13:18:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0069166-004
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Mar-2018 19:37:05 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: baronm Date: 23-Mar-2018 17:19:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.602	1.602	0.000	88	4249	5.00	4.75	
2 Dichlorodifluoromethane	85	1.632	1.638	-0.006	99	28520	5.00	4.88	
3 Chloromethane	50	1.803	1.803	0.000	99	26162	5.00	5.01	
5 Butadiene	54	1.907	1.913	-0.006	92	18114	5.00	4.94	
4 Vinyl chloride	62	1.919	1.913	0.006	81	23815	5.00	5.15	
6 Bromomethane	94	2.212	2.211	0.001	97	13299	5.00	4.93	
7 Chloroethane	64	2.273	2.272	0.000	96	9925	5.00	5.02	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	97	40770	5.00	5.59	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	47	32128	5.00	5.51	
10 Pentane	72	2.510	2.498	0.012	96	5351	10.0	10.3	
12 Ethanol	46	2.705	2.687	0.018	81	4890	200.0	199.3	M
11 Ethyl ether	59	2.705	2.699	0.006	90	15384	5.00	5.24	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	96	19916	5.00	5.56	
14 1,2-Dichloro-1,1,2-trifluo	117	2.766	2.754	0.012	87	14941	5.00	5.27	
15 Acrolein	56	2.882	2.882	0.000	96	107641	200.0	177.6	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.894	-0.006	37	21320	5.00	5.45	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	94	17381	5.00	5.50	
18 Acetone	43	3.004	3.004	0.000	84	36734	25.0	27.4	
19 Iodomethane	142	3.083	3.083	0.000	100	31561	5.00	5.38	
22 Isopropyl alcohol	45	3.089	3.089	0.000	1	17978	50.0	48.6	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	68205	5.00	5.31	
23 Methyl acetate	43	3.248	3.248	0.000	98	81788	25.0	26.0	
21 3-Chloro-1-propene	76	3.248	3.248	0.000	94	11601	5.00	5.54	
24 Cyclopentene	67	3.266	3.272	-0.006	94	48172	5.00	5.45	
29 Acetonitrile	41	3.315	3.309	0.006	95	36468	50.0	49.3	
* 25 TBA-d9 (IS)	65	3.358	3.351	0.007	0	360680	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	98	23107	5.00	5.41	
27 2-Methyl-2-propanol	59	3.419	3.431	-0.012	97	27810	50.0	51.9	
28 Methyl tert-butyl ether	73	3.541	3.534	0.007	98	54337	5.00	5.01	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	96	18023	5.00	5.42	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	92	70791	50.0	50.3	
32 Hexane	43	3.723	3.723	0.000	94	25448	5.00	5.96	
33 Isopropyl ether	45	3.931	3.931	0.000	98	81409	5.00	5.15	
34 1,1-Dichloroethane	63	3.979	3.973	0.006	64	36967	5.00	5.23	
35 Vinyl acetate	86	3.986	3.979	0.007	100	6074	10.0	11.1	
36 2-Chloro-1,3-butadiene	88	4.016	4.022	-0.006	93	15751	5.00	5.31	
37 Tert-butyl ethyl ether	59	4.260	4.254	0.006	87	67493	5.00	5.13	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	282877	250.0	250.0	
39 2,2-Dichloropropane	79	4.485	4.485	0.000	88	10941	5.00	5.52	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	66	20073	5.00	5.19	
41 Ethyl acetate	70	4.510	4.510	0.000	90	4102	10.0	12.0	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	94	10209	25.0	26.3	
44 Methyl acrylate	55	4.571	4.571	0.000	98	15769	5.00	4.67	
43 Propionitrile	54	4.650	4.650	0.000	99	28088	50.0	48.9	
45 Tetrahydrofuran	72	4.729	4.735	-0.006	73	5223	10.0	11.4	
46 Chlorobromomethane	128	4.742	4.741	0.001	98	9768	5.00	5.35	
47 Methacrylonitrile	67	4.754	4.754	0.000	96	67439	50.0	51.1	
48 Chloroform	83	4.790	4.790	0.000	99	34755	5.00	5.30	
49 Cyclohexane	84	4.937	4.937	0.000	97	29882	5.00	5.52	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	77	30106	5.00	5.17	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	151556	50.0	51.4	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	22668	5.00	5.05	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	93	24244	5.00	5.13	
56 Isobutyl alcohol	74	5.199	5.187	0.013	95	2652	125.0	132.4	
54 Benzene	78	5.296	5.296	0.000	97	70742	5.00	5.18	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.308	5.308	0.000	0	170120	50.0	49.5	
57 Isopropyl acetate	43	5.333	5.333	0.000	95	62847	5.00	4.89	
58 Tert-amyl methyl ether	73	5.345	5.351	-0.006	96	58995	5.00	4.95	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	96	25020	5.00	5.08	
60 n-Heptane	57	5.437	5.436	0.001	97	18194	5.00	5.45	
* 61 Fluorobenzene	96	5.583	5.583	0.000	98	437636	50.0	50.0	
62 n-Butanol	56	5.875	5.863	0.012	95	15061	125.0	110.1	
63 Trichloroethene	95	5.949	5.942	0.007	96	17967	5.00	5.24	
64 Ethyl acrylate	56	6.071	6.070	0.001	97	12344	5.00	4.95	
65 Methylcyclohexane	83	6.077	6.077	0.000	94	33741	5.00	5.25	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	91	21246	5.00	5.37	
* 67 1,4-Dioxane-d8	96	6.284	6.290	-0.006	0	24303	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	96	32750	10.0	9.62	
69 1,4-Dioxane	88	6.345	6.345	0.000	27	3938	100.0	107.1	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	30299	5.00	4.99	
71 Dibromomethane	93	6.369	6.369	0.000	93	11312	5.00	5.13	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	99	20484	5.00	4.69	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	79	8589	5.00	4.81	
74 2-Nitropropane	41	6.851	6.851	0.000	77	5296	10.0	10.8	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	36555	100.0	102.9	
76 cis-1,3-Dichloropropene	75	7.015	7.022	-0.007	96	28737	5.00	5.08	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	98	108527	25.0	25.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.271	0.001	97	569603	50.0	50.1	
79 Toluene	91	7.345	7.351	-0.006	91	72877	5.00	5.11	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	96	23483	5.00	4.78	
81 Ethyl methacrylate	69	7.710	7.710	0.000	93	21338	5.00	4.88	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	95	13157	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	94	16663	5.00	5.20	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	96	24497	5.00	4.92	
85 2-Hexanone	43	8.174	8.174	0.000	99	69127	25.0	25.0	
86 n-Butyl acetate	43	8.284	8.290	-0.006	96	32285	5.00	4.66	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	12632	5.00	4.38	
88 Ethylene Dibromide	107	8.527	8.527	0.000	99	14119	5.00	4.99	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	88	355464	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	93	43231	5.00	5.03	
92 Ethylbenzene	106	9.204	9.204	0.000	100	22652	5.00	5.07	
91 1,1,1,2-Tetrachloroethane	131	9.228	9.222	0.006	92	16373	5.00	4.79	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	27848	5.00	5.00	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	12346	5.00	4.69	
95 o-Xylene	106	9.820	9.820	0.000	93	29756	5.00	5.16	
96 Styrene	104	9.850	9.850	0.000	94	46025	5.00	4.97	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	86	39391	5.00	4.99	
98 Bromoform	173	10.082	10.082	0.000	97	7542	5.00	4.49	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	82579	5.00	5.02	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	88	166284	50.0	50.9	
101 Bromobenzene	156	10.564	10.564	0.000	96	17986	5.00	4.91	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	20502	5.00	4.70	
103 N-Propylbenzene	91	10.625	10.624	0.001	98	95423	5.00	4.95	
104 1,2,3-Trichloropropane	110	10.649	10.655	-0.006	96	5441	5.00	4.86	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	73	6205	5.00	5.24	
107 4-Ethyltoluene	105	10.740	10.740	0.000	88	78741	5.00	4.95	
106 2-Chlorotoluene	91	10.740	10.740	0.000	93	65397	5.00	4.89	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	92	66909	5.00	4.82	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	57614	5.00	5.01	
110 Butyl Methacrylate	87	10.899	10.899	0.000	96	22991	5.00	4.81	
111 tert-Butylbenzene	119	11.106	11.106	0.000	93	52759	5.00	4.75	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	69906	5.00	4.90	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	88922	5.00	4.86	
114 4-Isopropyltoluene	119	11.441	11.441	0.000	97	72880	5.00	4.81	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	95	35486	5.00	4.97	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	97	199750	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	94	35865	5.00	4.95	
118 Benzyl chloride	91	11.667	11.667	0.000	97	31556	5.00	4.81	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	71096	5.00	4.89	
120 p-Diethylbenzene	119	11.777	11.777	0.000	92	40069	5.00	4.79	
121 n-Butylbenzene	92	11.801	11.801	0.000	98	40479	5.00	4.93	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	95	35765	5.00	4.89	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	74196	5.00	4.74	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	90	4089	5.00	4.64	
125 1,3,5-Trichlorobenzene	180	12.642	12.648	-0.006	95	29502	5.00	4.83	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	29443	5.00	4.87	
127 Hexachlorobutadiene	225	13.215	13.215	0.000	93	14618	5.00	4.60	
128 Naphthalene	128	13.331	13.331	0.000	99	78758	5.00	4.97	
129 1,2,3-Trichlorobenzene	180	13.526	13.526	0.000	96	30019	5.00	4.87	
S 130 1,2-Dichloroethene, Total	100				0		10.0	10.6	
S 131 Xylenes, Total	100				0		10.0	10.2	
S 132 Total BTEX	1				0		25.0	25.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00252	Amount Added:	0.50	Units: uL	
8260MIX1COMB_00074	Amount Added:	0.50	Units: uL	
ACROLEIN W_00075	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

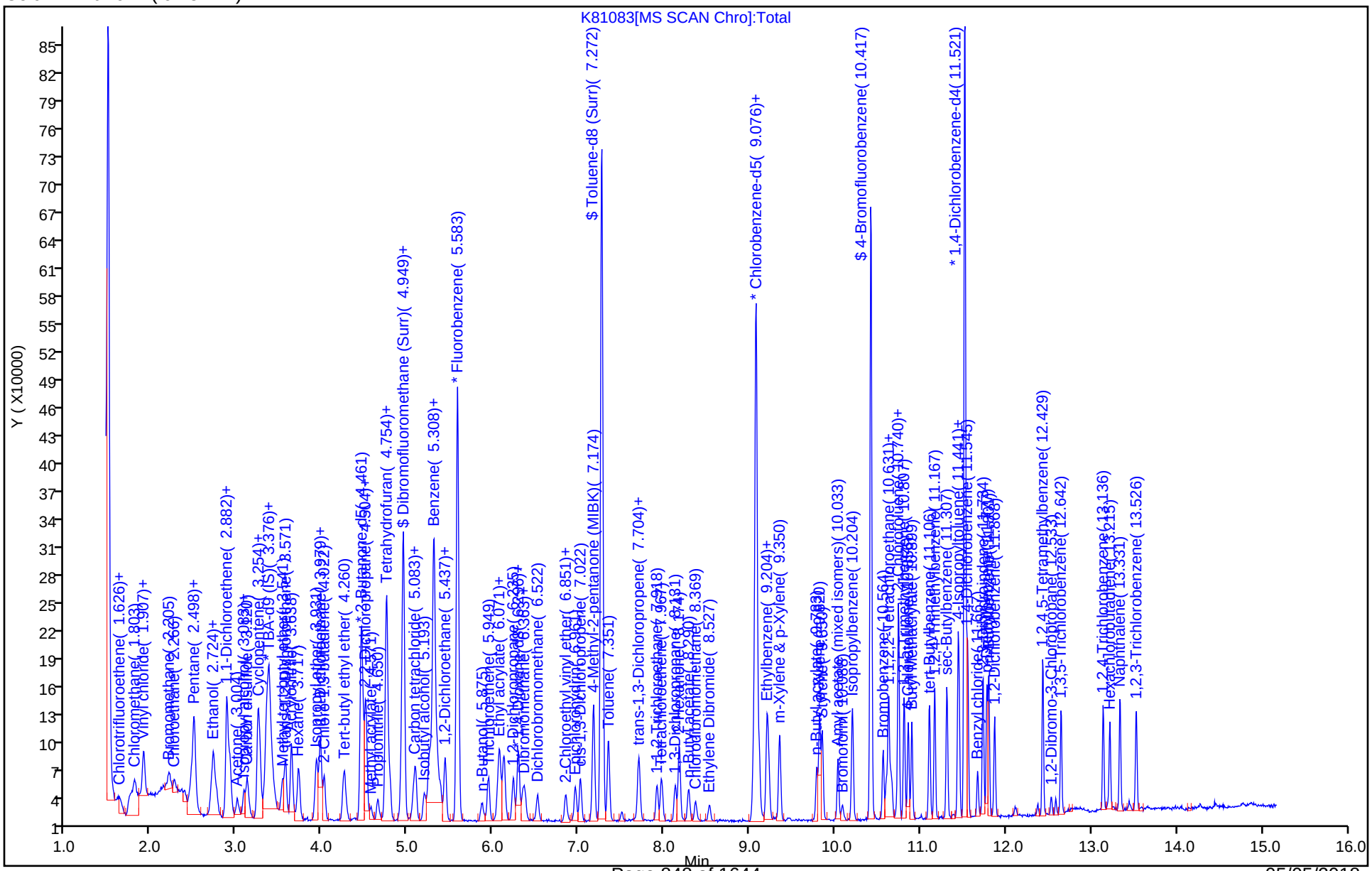
Report Date: 25-Mar-2018 19:37:08 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81083.D

Injection Date:	23-Mar-2018 13:18:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

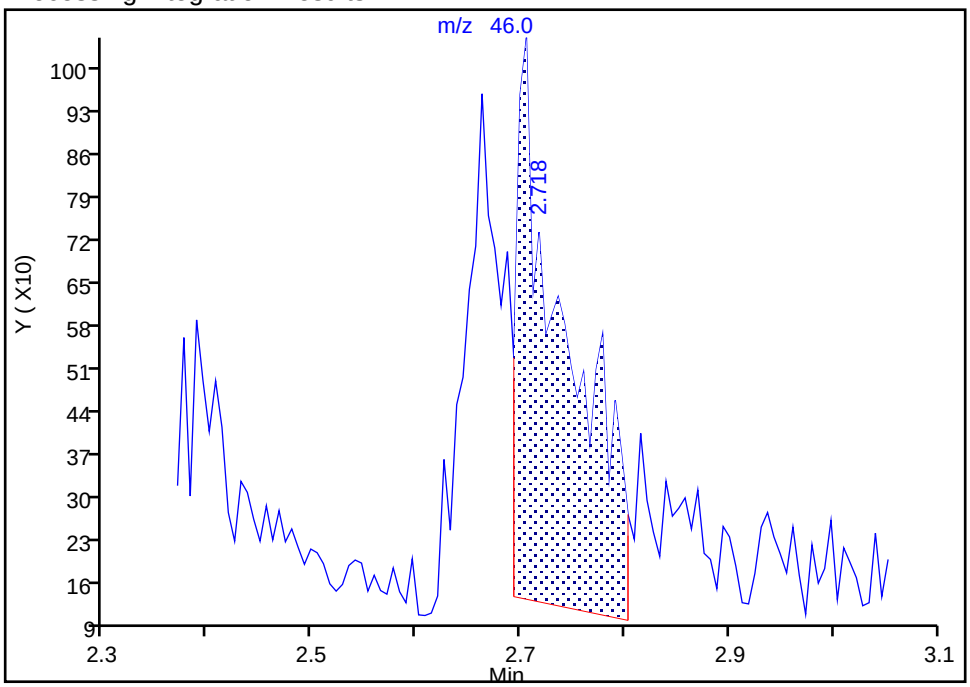
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81083.D
Injection Date: 23-Mar-2018 13:18:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethanol, CAS: 64-17-5

Signal: 1

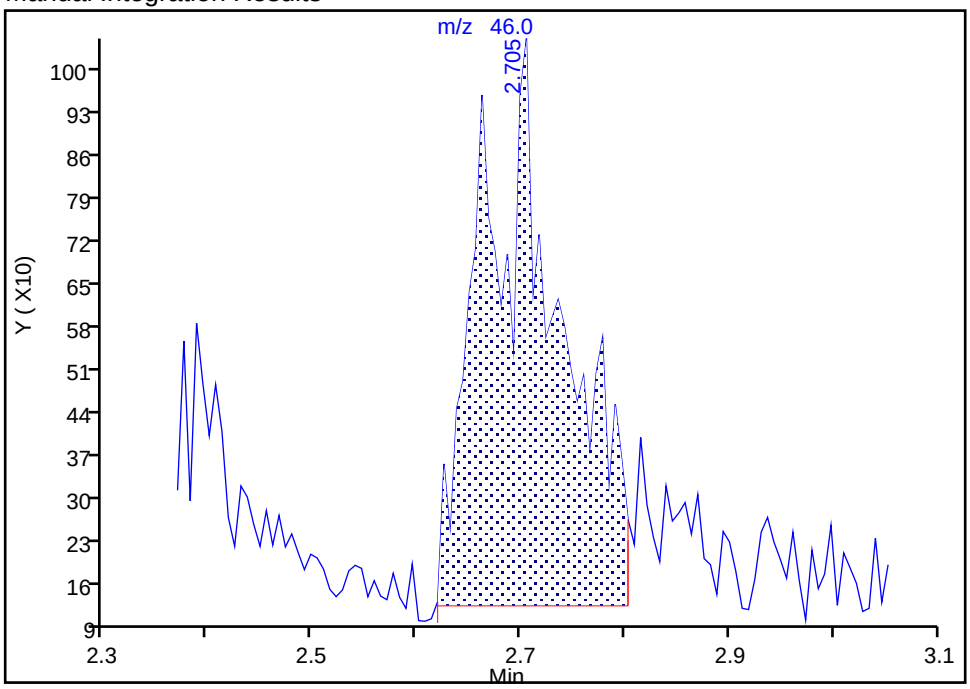
Processing Integration Results

RT: 2.72
Area: 3072
Amount: 118.3812
Amount Units: ug/l



Manual Integration Results

RT: 2.71
Area: 4890
Amount: 199.2531
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:39:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

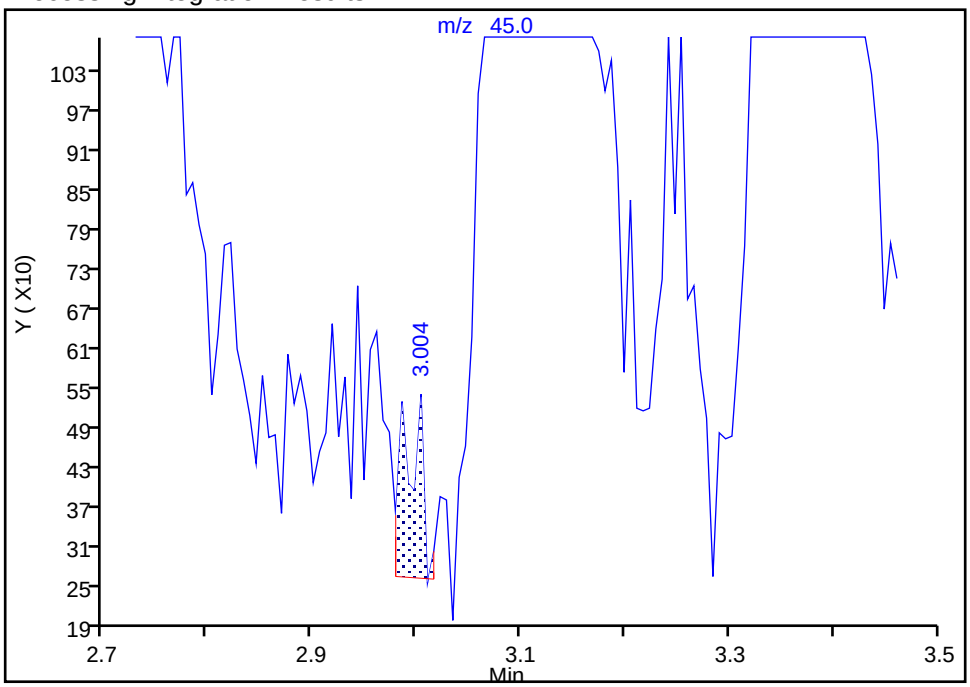
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81083.D
Injection Date: 23-Mar-2018 13:18:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

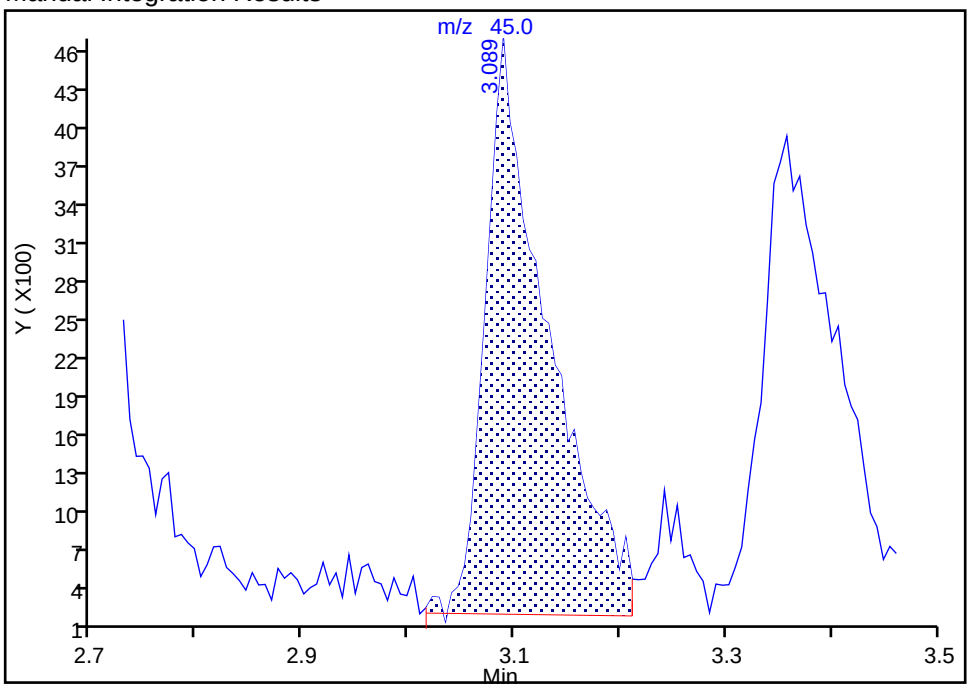
Processing Integration Results

RT: 3.00
Area: 343
Amount: 2.152626
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 17978
Amount: 48.610130
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:39:11
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81084.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 23-Mar-2018 13:42:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0069166-005
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Mar-2018 19:36:39 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: delpolitov Date: 25-Mar-2018 19:36:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.602	1.602	0.000	90	20567	20.0	22.6	
2 Dichlorodifluoromethane	85	1.638	1.638	0.000	99	114711	20.0	19.3	
3 Chloromethane	50	1.803	1.803	0.000	100	100568	20.0	18.9	
4 Vinyl chloride	62	1.913	1.913	0.000	73	87456	20.0	18.6	
5 Butadiene	54	1.913	1.913	0.000	91	70385	20.0	18.9	
6 Bromomethane	94	2.211	2.211	0.000	98	51563	20.0	18.8	
7 Chloroethane	64	2.272	2.272	0.000	98	40148	20.0	19.9	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	98	154493	20.0	20.8	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	54	117994	20.0	19.9	
10 Pentane	72	2.498	2.498	0.000	97	22782	40.0	39.8	
12 Ethanol	46	2.687	2.687	0.000	94	23651	800.0	872.2	
11 Ethyl ether	59	2.699	2.699	0.000	90	63143	20.0	21.1	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	96	73815	20.0	20.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.754	0.000	97	60450	20.0	21.0	
15 Acrolein	56	2.882	2.882	0.000	97	204258	300.0	305.1	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.894	0.000	77	82948	20.0	20.8	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	92	66917	20.0	20.8	
18 Acetone	43	3.004	3.004	0.000	84	155866	100.0	107.1	
19 Iodomethane	142	3.083	3.083	0.000	99	126276	20.0	21.1	
22 Isopropyl alcohol	45	3.089	3.089	0.000	1	77526	200.0	189.7	a
20 Carbon disulfide	76	3.120	3.120	0.000	100	276963	20.0	21.2	
21 3-Chloro-1-propene	76	3.248	3.248	0.000	95	44831	20.0	21.0	
23 Methyl acetate	43	3.248	3.248	0.000	99	345695	100.0	108.0	
24 Cyclopentene	67	3.272	3.272	0.000	93	189926	20.0	21.1	
29 Acetonitrile	41	3.309	3.309	0.000	92	162219	200.0	198.6	a
* 25 TBA-d9 (IS)	65	3.351	3.351	0.000	0	398543	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	99	86556	20.0	20.7	
27 2-Methyl-2-propanol	59	3.431	3.431	0.000	95	117988	200.0	199.1	
28 Methyl tert-butyl ether	73	3.534	3.534	0.000	97	232875	20.0	21.1	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	97	70811	20.0	20.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	92	310841	200.0	216.9	
32 Hexane	43	3.723	3.723	0.000	95	92372	20.0	21.2	
33 Isopropyl ether	45	3.931	3.931	0.000	97	335406	20.0	20.8	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	62	150714	20.0	20.9	
35 Vinyl acetate	86	3.979	3.979	0.000	100	23136	40.0	38.1	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	93	61873	20.0	20.5	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	87	278600	20.0	20.8	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	308595	250.0	250.0	
39 2,2-Dichloropropane	79	4.485	4.485	0.000	93	39716	20.0	19.7	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	94	40670	100.0	96.1	
41 Ethyl acetate	70	4.510	4.510	0.000	93	15521	40.0	41.5	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	86	81641	20.0	20.7	
44 Methyl acrylate	55	4.571	4.571	0.000	99	68753	20.0	20.0	
43 Propionitrile	54	4.650	4.650	0.000	98	123118	200.0	194.0	
45 Tetrahydrofuran	72	4.735	4.735	0.000	70	20322	40.0	40.8	
46 Chlorobromomethane	128	4.741	4.741	0.000	96	37891	20.0	20.4	
47 Methacrylonitrile	67	4.754	4.754	0.000	97	289974	200.0	215.8	
48 Chloroform	83	4.790	4.790	0.000	99	136804	20.0	20.5	
49 Cyclohexane	84	4.937	4.937	0.000	97	118146	20.0	21.4	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	87	120673	20.0	20.4	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	154118	50.0	51.3	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	92544	20.0	20.2	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	93	97822	20.0	20.3	
56 Isobutyl alcohol	74	5.187	5.187	0.000	97	10084	500.0	455.5	
54 Benzene	78	5.296	5.296	0.000	97	282353	20.0	20.4	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.308	5.308	0.000	0	177308	50.0	50.6	
57 Isopropyl acetate	43	5.333	5.333	0.000	95	275712	20.0	21.1	
58 Tert-amyl methyl ether	73	5.351	5.351	0.000	93	251287	20.0	20.7	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	100598	20.0	20.1	
60 n-Heptane	57	5.436	5.436	0.000	98	70508	20.0	20.8	
* 61 Fluorobenzene	96	5.583	5.583	0.000	97	445671	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	95	67416	500.0	446.1	
63 Trichloroethene	95	5.942	5.942	0.000	98	69212	20.0	19.8	
64 Ethyl acrylate	56	6.070	6.070	0.000	98	51716	20.0	20.4	
65 Methylcyclohexane	83	6.077	6.077	0.000	93	140732	20.0	21.5	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	92	79261	20.0	19.7	
* 67 1,4-Dioxane-d8	96	6.290	6.290	0.000	0	27227	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	96	141217	40.0	40.7	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	130535	20.0	21.1	
69 1,4-Dioxane	88	6.345	6.345	0.000	39	17621	400.0	427.7	
71 Dibromomethane	93	6.369	6.369	0.000	95	44918	20.0	20.0	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	85945	20.0	19.3	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	80	37945	20.0	20.9	
74 2-Nitropropane	41	6.851	6.851	0.000	75	18796	40.0	37.7	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	161261	400.0	416.1	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	96	113993	20.0	19.9	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	98	473766	100.0	102.7	
$ 78 Toluene-d8 (Surr)	98	7.271	7.271	0.000	97	578460	50.0	50.3	
79 Toluene	91	7.351	7.351	0.000	92	292793	20.0	20.3	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	96	100113	20.0	20.2	
81 Ethyl methacrylate	69	7.710	7.710	0.000	91	90188	20.0	20.4	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	95	50809	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	95	65054	20.0	20.1	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	98	103200	20.0	20.5	
85 2-Hexanone	43	8.174	8.174	0.000	99	309475	100.0	102.5	
86 n-Butyl acetate	43	8.290	8.290	0.000	97	142993	20.0	20.4	
87 Chlorodibromomethane	129	8.369	8.369	0.000	99	54651	20.0	18.8	
88 Ethylene Dibromide	107	8.527	8.527	0.000	98	57427	20.0	20.1	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	89	359617	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	93	177584	20.0	20.4	
92 Ethylbenzene	106	9.204	9.204	0.000	99	91311	20.0	20.2	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	93	67061	20.0	19.4	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	113044	20.0	20.1	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	54649	20.0	20.5	
95 o-Xylene	106	9.820	9.820	0.000	92	118053	20.0	20.2	
96 Styrene	104	9.850	9.850	0.000	94	193144	20.0	20.6	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	87	165813	20.0	21.0	
98 Bromoform	173	10.082	10.082	0.000	96	32438	20.0	19.1	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	340803	20.0	20.5	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	86	168496	50.0	51.0	
101 Bromobenzene	156	10.564	10.564	0.000	97	74944	20.0	20.4	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	89068	20.0	20.4	
103 N-Propylbenzene	91	10.624	10.624	0.000	98	402408	20.0	20.9	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	95	22289	20.0	19.9	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	88	24344	20.0	20.6	
106 2-Chlorotoluene	91	10.740	10.740	0.000	92	274598	20.0	20.5	
107 4-Ethyltoluene	105	10.740	10.740	0.000	88	324364	20.0	20.4	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	92	284664	20.0	20.5	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	237039	20.0	20.6	
110 Butyl Methacrylate	87	10.899	10.899	0.000	97	101123	20.0	21.1	
111 tert-Butylbenzene	119	11.106	11.106	0.000	92	226071	20.0	20.3	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	290232	20.0	20.3	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	372749	20.0	20.4	
114 4-Isopropyltoluene	119	11.441	11.441	0.000	98	313706	20.0	20.7	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	95	145428	20.0	20.4	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	199802	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	95	145375	20.0	20.0	
118 Benzyl chloride	91	11.667	11.667	0.000	98	133667	20.0	20.4	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	298464	20.0	20.5	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	171260	20.0	20.5	
121 n-Butylbenzene	92	11.801	11.801	0.000	97	170627	20.0	20.8	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	95	151193	20.0	20.7	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	316271	20.0	20.2	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	95	17694	20.0	20.1	
125 1,3,5-Trichlorobenzene	180	12.648	12.648	0.000	98	121921	20.0	19.9	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	119824	20.0	19.8	
127 Hexachlorobutadiene	225	13.215	13.215	0.000	94	62237	20.0	19.6	
128 Naphthalene	128	13.331	13.331	0.000	99	324468	20.0	20.5	
129 1,2,3-Trichlorobenzene	180	13.526	13.526	0.000	95	124964	20.0	20.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.6	
S 131 Xylenes, Total	100				0		40.0	40.3	
S 132 Total BTEX	1				0		100.0	101.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00252	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 25-Mar-2018 19:36:41 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81084.D

Injection Date: 23-Mar-2018 13:42:30 Instrument ID: CVOAMS9 Operator ID:

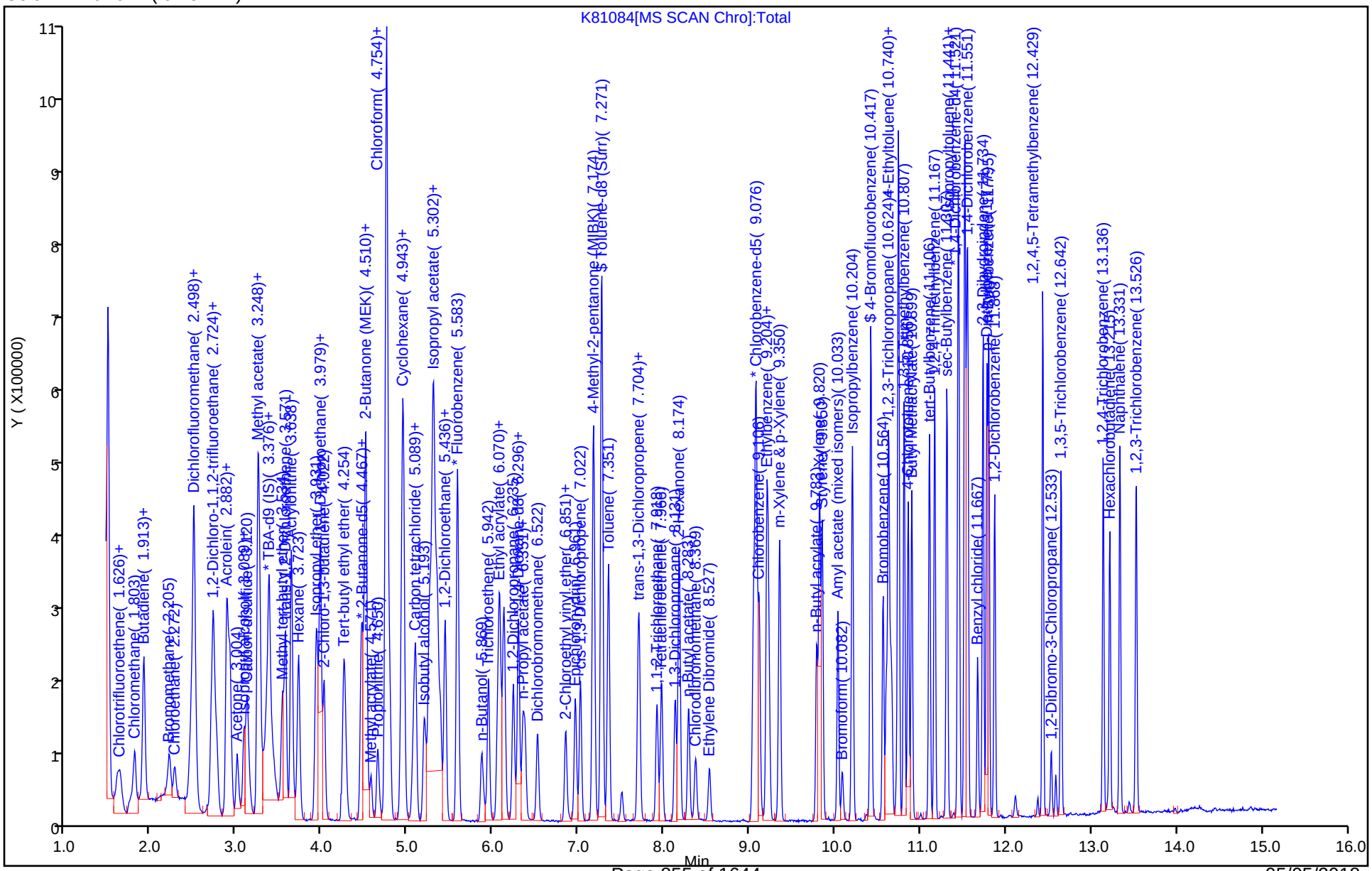
Lims ID: STD20 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

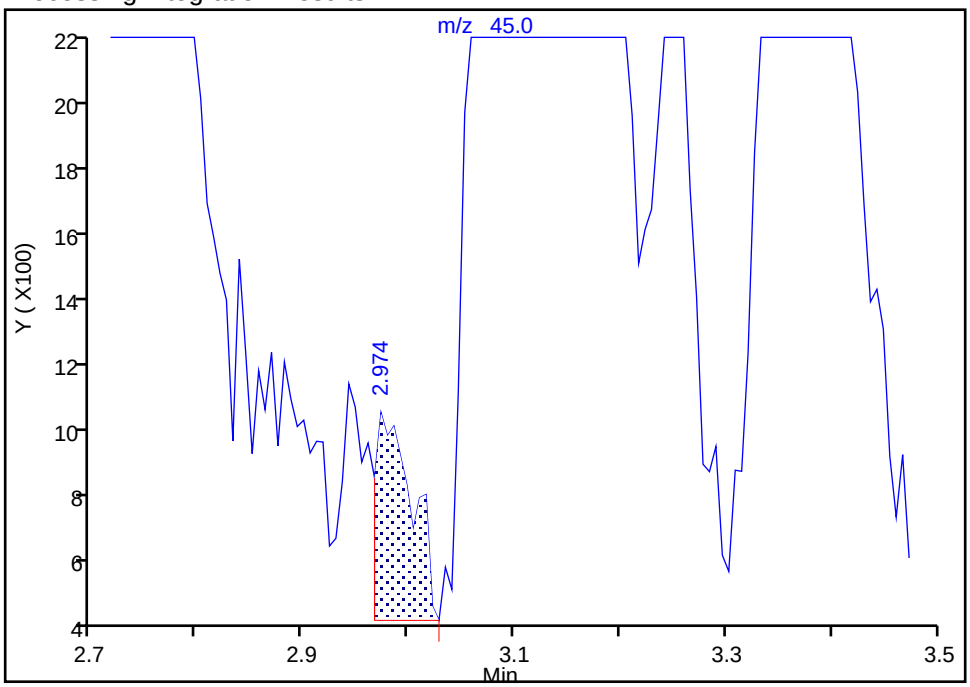
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81084.D
Injection Date: 23-Mar-2018 13:42:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

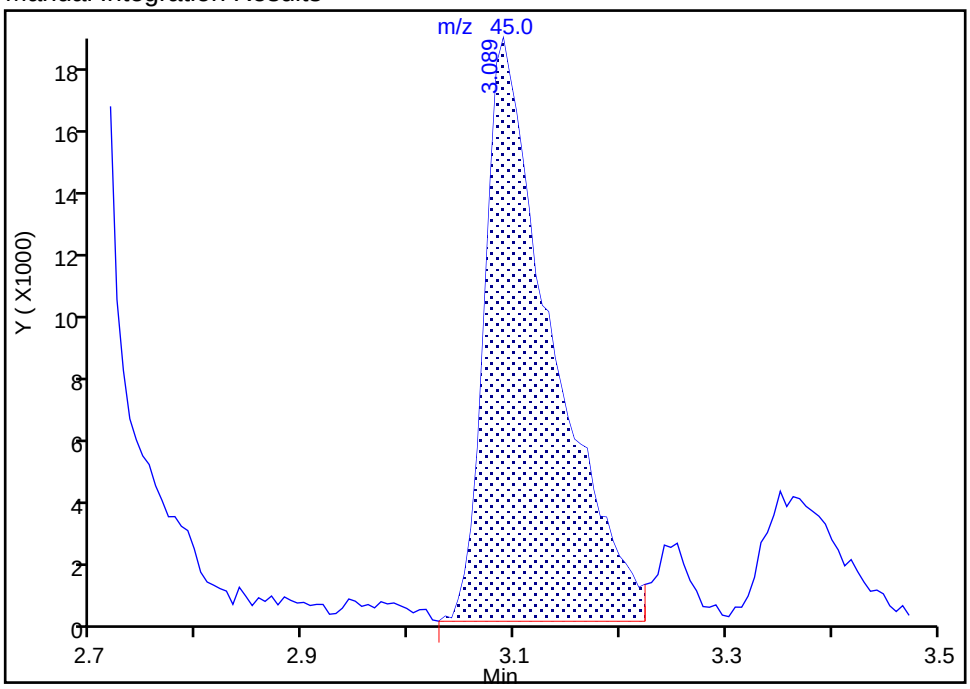
Processing Integration Results

RT: 2.97
Area: 1434
Amount: 3.778851
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 77526
Amount: 189.7054
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:03:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

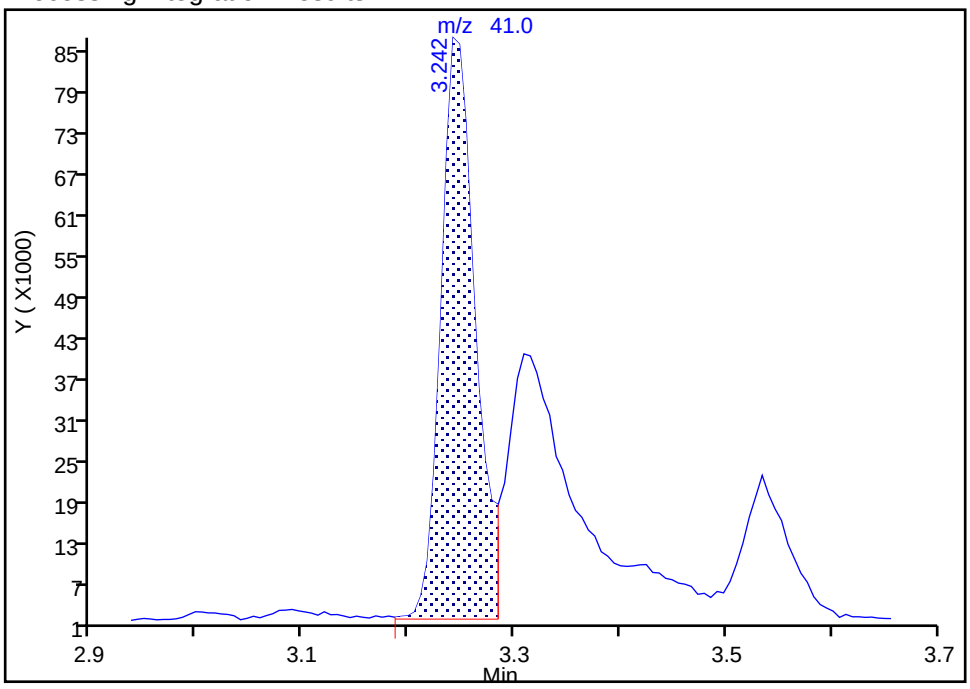
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81084.D
Injection Date: 23-Mar-2018 13:42:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

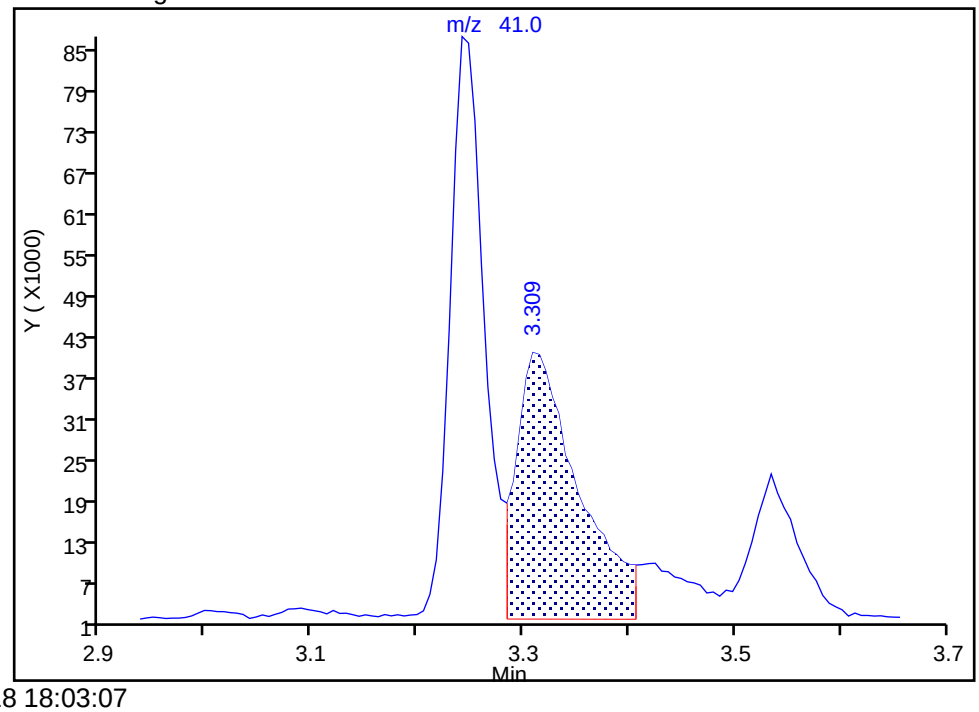
Processing Integration Results

RT: 3.24
Area: 194946
Amount: 403.4349
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 162219
Amount: 198.5739
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:03:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81085.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Mar-2018 14:07:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0069166-006
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Mar-2018 19:37:16 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: baronm Date: 23-Mar-2018 17:25:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.596	1.602	-0.006	96	50318	50.0	53.0	
2 Dichlorodifluoromethane	85	1.626	1.638	-0.012	99	281591	50.0	45.4	
3 Chloromethane	50	1.803	1.803	0.000	99	252634	50.0	45.5	
4 Vinyl chloride	62	1.907	1.913	-0.006	78	228742	50.0	46.6	
5 Butadiene	54	1.907	1.913	-0.006	91	184450	50.0	47.4	
6 Bromomethane	94	2.212	2.211	0.001	99	138645	50.0	48.4	
7 Chloroethane	64	2.273	2.272	0.001	98	106318	50.0	50.6	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	98	351361	50.0	45.3	
8 Trichlorofluoromethane	101	2.480	2.486	-0.006	98	298791	50.0	48.2	
10 Pentane	72	2.492	2.498	-0.006	96	53953	100.0	97.4	
12 Ethanol	46	2.693	2.687	0.006	84	48057	2000.0	1831.3	
11 Ethyl ether	59	2.693	2.699	-0.006	90	156497	50.0	50.1	
13 2-Methyl-1,3-butadiene	53	2.718	2.724	-0.006	97	188242	50.0	49.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.754	0.000	97	153855	50.0	51.1	
15 Acrolein	56	2.876	2.882	-0.006	97	300924	400.0	464.4	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.894	0.000	95	210293	50.0	50.6	
17 1,1-Dichloroethene	96	2.919	2.925	-0.006	93	169555	50.0	50.4	
18 Acetone	43	2.998	3.004	-0.006	84	359228	250.0	238.4	
19 Iodomethane	142	3.077	3.083	-0.006	99	313483	50.0	50.2	
22 Isopropyl alcohol	45	3.083	3.089	-0.006	1	171314	500.0	433.2	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	697330	50.0	51.1	
21 3-Chloro-1-propene	76	3.242	3.248	-0.006	96	116631	50.0	52.4	
23 Methyl acetate	43	3.248	3.248	0.000	99	863918	250.0	258.5	
24 Cyclopentene	67	3.266	3.272	-0.006	89	474800	50.0	50.5	
29 Acetonitrile	41	3.309	3.309	0.000	98	372479	500.0	471.2	
* 25 TBA-d9 (IS)	65	3.352	3.351	0.001	0	385664	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	99	207618	50.0	48.1	
27 2-Methyl-2-propanol	59	3.425	3.431	-0.006	99	270151	500.0	471.2	
28 Methyl tert-butyl ether	73	3.535	3.534	0.001	98	563711	50.0	48.9	
30 trans-1,2-Dichloroethene	96	3.565	3.571	-0.006	97	177840	50.0	50.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	92	767618	500.0	513.1	
32 Hexane	43	3.717	3.723	-0.006	94	232207	50.0	51.1	
33 Isopropyl ether	45	3.931	3.931	0.000	97	835747	50.0	49.7	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	63	377760	50.0	50.2	
35 Vinyl acetate	86	3.974	3.979	-0.005	100	59261	100.0	100.9	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	93	158247	50.0	50.2	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	87	680365	50.0	48.7	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	321686	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.485	0.001	96	98674	50.0	46.8	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	95	102061	250.0	231.3	
41 Ethyl acetate	70	4.510	4.510	0.000	93	38885	100.0	99.7	
40 cis-1,2-Dichloroethene	96	4.504	4.510	-0.006	90	206142	50.0	50.1	
44 Methyl acrylate	55	4.565	4.571	-0.006	99	175653	50.0	49.0	
43 Propionitrile	54	4.650	4.650	0.000	98	316710	500.0	515.6	
45 Tetrahydrofuran	72	4.729	4.735	-0.006	66	50722	100.0	97.8	
46 Chlorobromomethane	128	4.736	4.741	-0.005	92	96613	50.0	49.8	
47 Methacrylonitrile	67	4.754	4.754	0.000	97	723603	500.0	515.9	
48 Chloroform	83	4.784	4.790	-0.006	98	347206	50.0	49.8	
49 Cyclohexane	84	4.931	4.937	-0.006	98	298906	50.0	52.0	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	99	308194	50.0	49.8	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	95	148670	50.0	47.4	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	242605	50.0	50.9	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	94	260710	50.0	51.9	
56 Isobutyl alcohol	74	5.199	5.187	0.013	92	23780	1250.0	1109.9	
54 Benzene	78	5.290	5.296	-0.006	98	731328	50.0	52.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.308	0.001	0	169812	50.0	46.5	
57 Isopropyl acetate	43	5.327	5.333	-0.006	96	723010	50.0	52.9	
58 Tert-amyl methyl ether	73	5.345	5.351	-0.006	93	636431	50.0	50.3	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	252763	50.0	48.3	
60 n-Heptane	57	5.437	5.436	0.001	98	191582	50.0	54.0	
* 61 Fluorobenzene	96	5.583	5.583	0.000	98	465182	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	94	172434	1250.0	1179.1	
63 Trichloroethene	95	5.943	5.942	0.001	97	181487	50.0	49.8	
64 Ethyl acrylate	56	6.071	6.070	0.001	98	142547	50.0	53.7	
65 Methylcyclohexane	83	6.077	6.077	0.000	93	359231	50.0	52.6	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	91	207128	50.0	49.2	
* 67 1,4-Dioxane-d8	96	6.278	6.290	-0.012	0	25856	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	96	347848	100.0	96.1	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	321584	50.0	49.8	
69 1,4-Dioxane	88	6.339	6.345	-0.006	32	38778	1000.0	991.0	
71 Dibromomethane	93	6.369	6.369	0.000	97	109668	50.0	46.8	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	99	225280	50.0	48.5	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	79	94037	50.0	49.5	
74 2-Nitropropane	41	6.845	6.851	-0.006	73	46362	100.0	89.2	
75 Epichlorohydrin	57	6.961	6.961	0.000	100	401050	1000.0	992.8	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	96	291599	50.0	50.3	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	98	1183127	250.0	246.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.271	0.001	97	555065	50.0	47.7	
79 Toluene	91	7.345	7.351	-0.006	92	742414	50.0	50.9	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	97	253858	50.0	50.5	
81 Ethyl methacrylate	69	7.711	7.710	0.001	95	225688	50.0	50.5	
82 1,1,2-Trichloroethane	83	7.912	7.918	-0.006	95	128339	50.0	49.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	95	167206	50.0	50.9	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	97	254345	50.0	49.9	
85 2-Hexanone	43	8.174	8.174	0.000	99	758974	250.0	241.1	
86 n-Butyl acetate	43	8.284	8.290	-0.006	97	348692	50.0	49.2	
87 Chlorodibromomethane	129	8.369	8.369	0.000	99	143487	50.0	48.6	
88 Ethylene Dibromide	107	8.528	8.527	0.001	98	143407	50.0	49.5	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	88	363925	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	92	445084	50.0	50.6	
92 Ethylbenzene	106	9.204	9.204	0.000	99	233678	50.0	51.1	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.000	94	176265	50.0	50.3	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	285955	50.0	50.2	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	136179	50.0	50.6	
95 o-Xylene	106	9.820	9.820	0.000	92	298698	50.0	50.6	
96 Styrene	104	9.850	9.850	0.000	93	489351	50.0	51.7	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	87	410585	50.0	51.3	
98 Bromoform	173	10.088	10.082	0.006	97	83408	50.0	48.5	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	875203	50.0	52.0	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	86	158627	50.0	47.4	
101 Bromobenzene	156	10.564	10.564	0.000	96	185116	50.0	49.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	219710	50.0	49.6	
103 N-Propylbenzene	91	10.625	10.624	0.001	98	1026576	50.0	52.5	
104 1,2,3-Trichloropropane	110	10.649	10.655	-0.006	96	55387	50.0	48.7	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	88	59902	50.0	49.9	
106 2-Chlorotoluene	91	10.741	10.740	0.000	92	692444	50.0	51.1	
107 4-Ethyltoluene	105	10.741	10.740	0.000	88	821278	50.0	50.9	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	92	730519	50.0	51.9	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	591290	50.0	50.7	
110 Butyl Methacrylate	87	10.899	10.899	0.000	96	250740	50.0	51.7	
111 tert-Butylbenzene	119	11.106	11.106	0.000	92	589339	50.0	52.3	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	740797	50.0	51.1	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	967691	50.0	52.1	
114 4-Isopropyltoluene	119	11.442	11.441	0.001	97	802256	50.0	52.2	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	96	360810	50.0	49.8	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	202673	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	93	362315	50.0	49.3	
118 Benzyl chloride	91	11.667	11.667	0.000	98	333946	50.0	50.2	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	748297	50.0	50.7	
120 p-Diethylbenzene	119	11.777	11.777	0.000	92	434113	50.0	51.2	
121 n-Butylbenzene	92	11.801	11.801	0.000	97	433097	50.0	51.9	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	95	368970	50.0	49.8	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	805825	50.0	50.7	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	95	42280	50.0	47.3	
125 1,3,5-Trichlorobenzene	180	12.643	12.648	-0.005	98	308617	50.0	49.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	304789	50.0	49.7	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	95	159985	50.0	49.6	
128 Naphthalene	128	13.338	13.331	0.007	99	788437	50.0	49.1	
129 1,2,3-Trichlorobenzene	180	13.527	13.526	0.001	96	309555	50.0	49.5	
S 130 1,2-Dichloroethene, Total	100				0		100.0	100.5	
S 131 Xylenes, Total	100				0		100.0	100.8	
S 132 Total BTEX	1				0		250.0	255.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	5.00	Units: uL	
ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
GASES Li_00252	Amount Added:	5.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

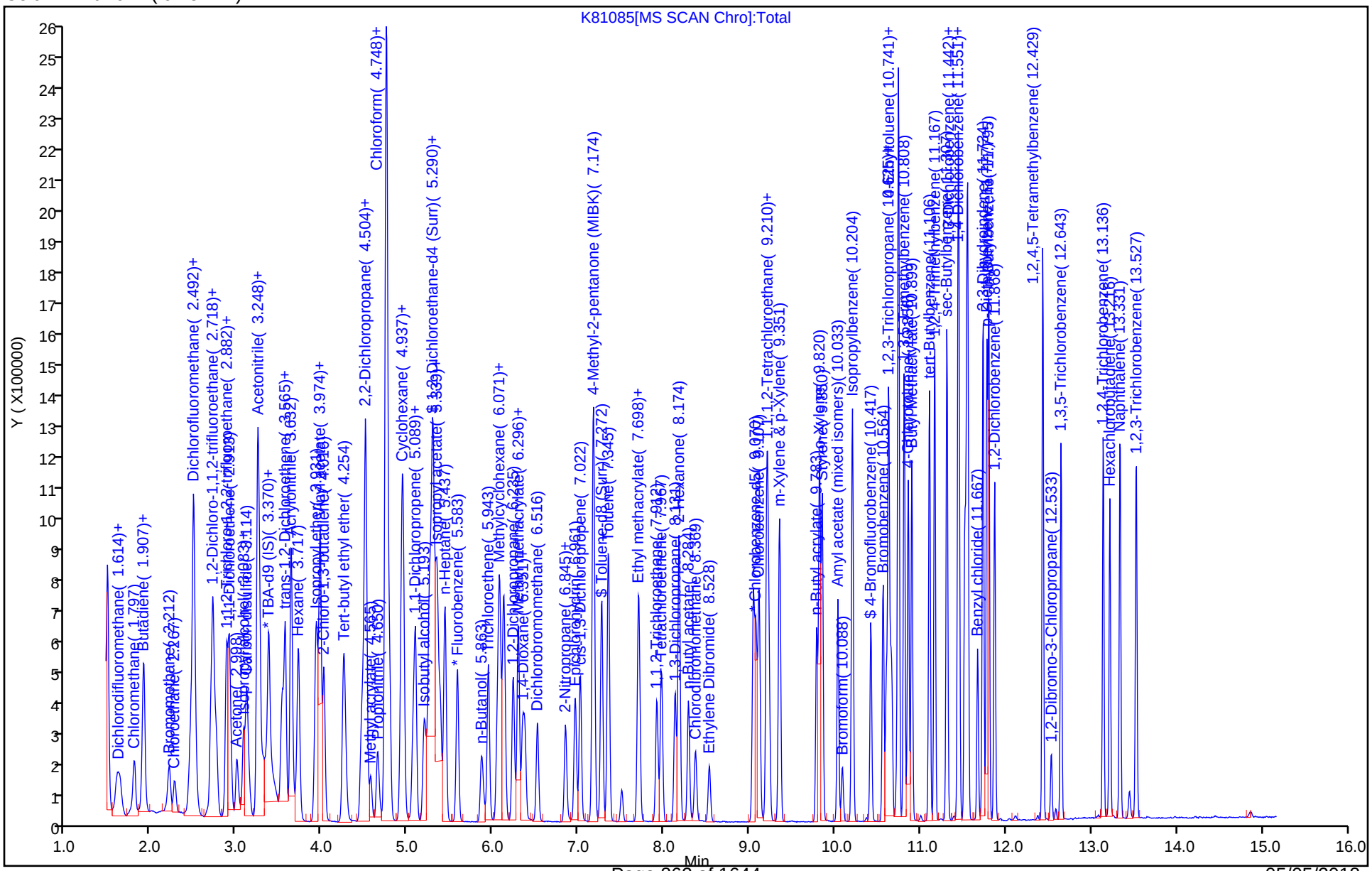
Report Date: 25-Mar-2018 19:37:18 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81085.D

Injection Date:	23-Mar-2018 14:07:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD50			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

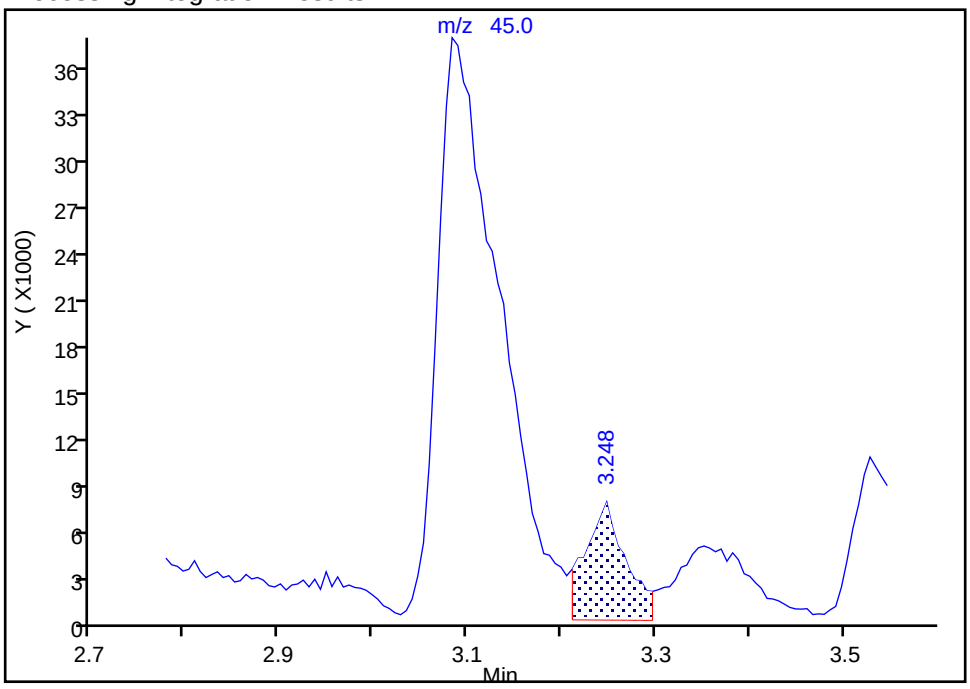
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81085.D
Injection Date: 23-Mar-2018 14:07:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

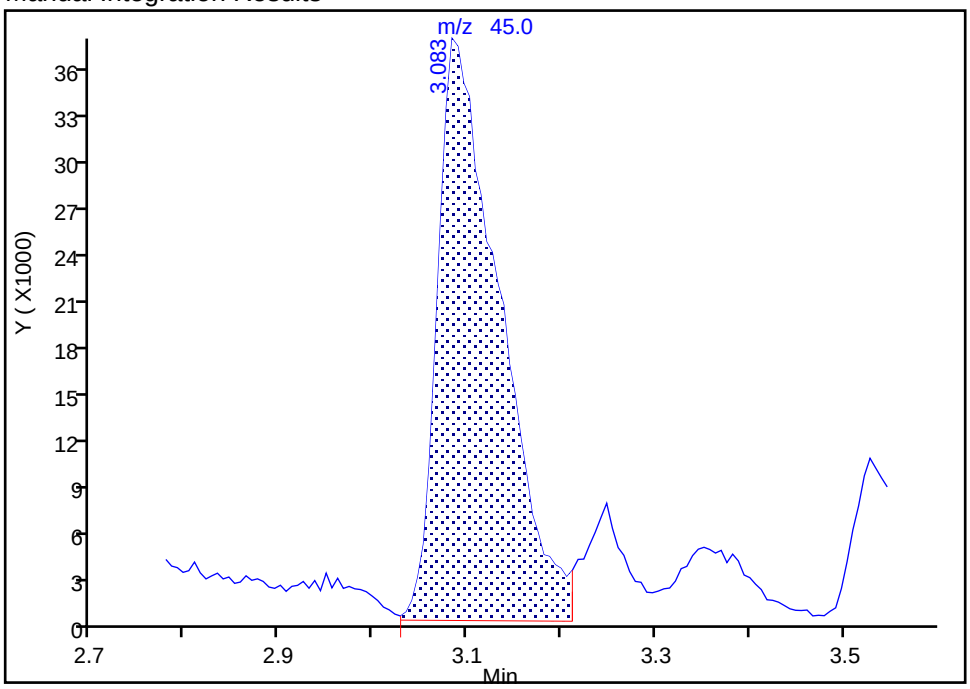
Processing Integration Results

RT: 3.25
Area: 23012
Amount: 98.665361
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 171314
Amount: 433.2028
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:40:09
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81086.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Mar-2018 14:31:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0069166-007
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Mar-2018 19:37:27 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: baronm Date: 23-Mar-2018 17:26:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.596	1.602	-0.006	91	204201	200.0	214.8	
2 Dichlorodifluoromethane	85	1.632	1.638	-0.006	99	1519919	200.0	244.7	
3 Chloromethane	50	1.803	1.803	0.000	100	1283139	200.0	231.1	
5 Butadiene	54	1.919	1.913	0.006	96	931927	200.0	239.2	
4 Vinyl chloride	62	1.913	1.913	0.000	98	1115468	200.0	227.1	
6 Bromomethane	94	2.212	2.211	0.001	99	600328	200.0	209.5	
7 Chloroethane	64	2.279	2.272	0.007	98	455369	200.0	216.7	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	99	1802763	200.0	232.5	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	99	1446639	200.0	233.4	
10 Pentane	72	2.498	2.498	0.000	97	256254	400.0	482.8	
12 Ethanol	46	2.693	2.687	0.006	94	222255	8000.0	8840.9	
11 Ethyl ether	59	2.693	2.699	-0.006	91	611778	200.0	195.8	
13 2-Methyl-1,3-butadiene	53	2.718	2.724	-0.006	96	788853	200.0	207.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.754	0.000	96	644349	200.0	213.9	
15 Acrolein	56	2.876	2.882	-0.006	96	308158	500.0	496.4	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.894	0.000	95	855644	200.0	205.7	
17 1,1-Dichloroethene	96	2.919	2.925	-0.006	93	682821	200.0	203.1	
18 Acetone	43	2.998	3.004	-0.006	84	1369245	1000.0	1003.3	
19 Iodomethane	142	3.083	3.083	0.000	99	1241875	200.0	199.0	
22 Isopropyl alcohol	45	3.083	3.089	-0.006	1	728395	2000.0	1922.7	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	2678835	200.0	196.2	
23 Methyl acetate	43	3.242	3.248	-0.006	99	3330527	1000.0	996.1	
21 3-Chloro-1-propene	76	3.242	3.248	-0.006	93	463470	200.0	208.3	
24 Cyclopentene	67	3.266	3.272	-0.006	91	1951600	200.0	207.6	
29 Acetonitrile	41	3.309	3.309	0.000	95	1539215	2000.0	2032.5	a
* 25 TBA-d9 (IS)	65	3.358	3.351	0.007	0	369465	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	99	827642	200.0	200.6	
27 2-Methyl-2-propanol	59	3.419	3.431	-0.012	97	1090780	2000.0	1986.0	
28 Methyl tert-butyl ether	73	3.534	3.534	0.000	98	2260195	200.0	196.0	
30 trans-1,2-Dichloroethene	96	3.565	3.571	-0.006	98	697666	200.0	197.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.638	-0.006	92	2894710	2000.0	1934.2	
32 Hexane	43	3.717	3.723	-0.006	94	878079	200.0	193.3	
33 Isopropyl ether	45	3.931	3.931	0.000	96	3374077	200.0	200.6	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	67	1484924	200.0	197.4	
35 Vinyl acetate	86	3.980	3.979	0.001	100	198602	400.0	352.9	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	93	640597	200.0	203.1	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	87	2792399	200.0	199.8	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	303739	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.485	0.001	97	407569	200.0	193.3	
40 cis-1,2-Dichloroethene	96	4.504	4.510	-0.006	90	814853	200.0	198.1	
41 Ethyl acetate	70	4.510	4.510	0.000	96	148786	400.0	404.1	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	95	404532	1000.0	970.9	
44 Methyl acrylate	55	4.565	4.571	-0.006	99	695665	200.0	193.9	
43 Propionitrile	54	4.644	4.650	-0.006	98	1194894	2000.0	2030.7	
45 Tetrahydrofuran	72	4.729	4.735	-0.006	92	188476	400.0	384.7	
46 Chlorobromomethane	128	4.742	4.741	0.001	98	374237	200.0	192.8	
47 Methacrylonitrile	67	4.754	4.754	0.000	97	2755959	2000.0	1964.1	
48 Chloroform	83	4.790	4.790	0.000	98	1397263	200.0	200.2	
49 Cyclohexane	84	4.931	4.937	-0.006	97	1151960	200.0	200.2	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	99	1267362	200.0	204.7	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	157636	50.0	50.2	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	1036419	200.0	217.2	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	93	1019504	200.0	203.1	
56 Isobutyl alcohol	74	5.199	5.187	0.013	94	98115	5000.0	4780.2	
54 Benzene	78	5.296	5.296	0.000	98	2864295	200.0	198.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.308	0.000	0	188650	50.0	51.6	
57 Isopropyl acetate	43	5.327	5.333	-0.006	95	2730644	200.0	199.7	a
58 Tert-amyl methyl ether	73	5.345	5.351	-0.006	97	2579919	200.0	203.7	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	1017052	200.0	194.2	
60 n-Heptane	57	5.437	5.436	0.001	98	684355	200.0	192.9	
* 61 Fluorobenzene	96	5.583	5.583	0.000	97	465345	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	95	723484	5000.0	5164.3	
63 Trichloroethene	95	5.943	5.942	0.001	98	723900	200.0	198.5	
64 Ethyl acrylate	56	6.071	6.070	0.001	90	561580	200.0	211.6	a
65 Methylcyclohexane	83	6.077	6.077	0.000	92	1401640	200.0	205.2	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	90	843870	200.0	200.5	
* 67 1,4-Dioxane-d8	96	6.278	6.290	-0.012	0	29539	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	96	1430666	400.0	395.3	
69 1,4-Dioxane	88	6.345	6.345	0.000	65	164571	4000.0	3681.5	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	1294774	200.0	200.5	
71 Dibromomethane	93	6.369	6.369	0.000	97	446435	200.0	190.4	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	99	971669	200.0	209.1	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	90	396796	200.0	208.8	
74 2-Nitropropane	41	6.851	6.851	0.000	75	207160	400.0	398.3	
75 Epichlorohydrin	57	6.961	6.961	0.000	100	1401141	4000.0	3673.5	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	97	1204543	200.0	201.4	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	98	4581300	1000.0	1008.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.271	0.001	97	605029	50.0	50.4	
79 Toluene	91	7.351	7.351	0.000	92	2964994	200.0	196.8	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	97	1065267	200.0	205.3	
81 Ethyl methacrylate	69	7.710	7.710	0.000	93	898197	200.0	194.6	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	95	544840	200.0	201.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	96	671424	200.0	198.2	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	97	1048633	200.0	199.4	
85 2-Hexanone	43	8.174	8.174	0.000	100	2989421	1000.0	1005.8	
86 n-Butyl acetate	43	8.284	8.290	-0.006	97	1386873	200.0	189.6	
87 Chlorodibromomethane	129	8.369	8.369	0.000	99	659302	200.0	216.6	
88 Ethylene Dibromide	107	8.527	8.527	0.000	98	593004	200.0	198.5	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	87	375563	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	92	1837659	200.0	202.5	
92 Ethylbenzene	106	9.204	9.204	0.000	99	938198	200.0	198.9	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	94	770009	200.0	213.1	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	1163569	200.0	197.8	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	550118	200.0	197.9	
95 o-Xylene	106	9.820	9.820	0.000	92	1217707	200.0	200.0	
96 Styrene	104	9.850	9.850	0.000	93	1990210	200.0	203.6	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	87	1621329	200.0	205.4	
98 Bromoform	173	10.088	10.082	0.006	97	392669	200.0	221.4	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	3503747	200.0	201.7	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	88	172264	50.0	49.9	
101 Bromobenzene	156	10.564	10.564	0.000	96	762041	200.0	207.9	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	891155	200.0	204.1	
103 N-Propylbenzene	91	10.625	10.624	0.001	98	4040443	200.0	209.5	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	95	221016	200.0	197.3	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	90	248386	200.0	209.8	
107 4-Ethyltoluene	105	10.740	10.740	0.000	88	3347885	200.0	210.5	
106 2-Chlorotoluene	91	10.740	10.740	0.000	94	2782152	200.0	208.1	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	92	2942088	200.0	212.1	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	2367829	200.0	206.0	
110 Butyl Methacrylate	87	10.899	10.899	0.000	97	1021929	200.0	213.6	
111 tert-Butylbenzene	119	11.106	11.106	0.000	92	2454604	200.0	220.8	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	2997508	200.0	209.9	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	3947811	200.0	215.8	
114 4-Isopropyltoluene	119	11.441	11.441	0.000	97	3259912	200.0	215.2	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	95	1463299	200.0	205.1	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	94	199786	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	93	1450691	200.0	200.1	
118 Benzyl chloride	91	11.667	11.667	0.000	98	1383020	200.0	211.0	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	3037685	200.0	208.8	
120 p-Diethylbenzene	119	11.777	11.777	0.000	92	1762977	200.0	210.9	
121 n-Butylbenzene	92	11.801	11.801	0.000	98	1720440	200.0	209.3	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	95	1491216	200.0	204.0	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	3342854	200.0	213.5	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	95	175444	200.0	199.0	
125 1,3,5-Trichlorobenzene	180	12.642	12.648	-0.006	98	1260133	200.0	206.2	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	1210680	200.0	200.3	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	94	686205	200.0	216.0	
128 Naphthalene	128	13.331	13.331	0.000	99	3034329	200.0	191.6	
129 1,2,3-Trichlorobenzene	180	13.526	13.526	0.000	96	1238558	200.0	200.9	
S 130 1,2-Dichloroethene, Total	100				0		400.0	395.5	
S 131 Xylenes, Total	100				0		400.0	397.8	
S 132 Total BTEX	1				0		1000.0	992.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	20.00	Units: uL	
ACROLEIN W_00075	Amount Added:	5.00	Units: uL	
GASES Li_00252	Amount Added:	20.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

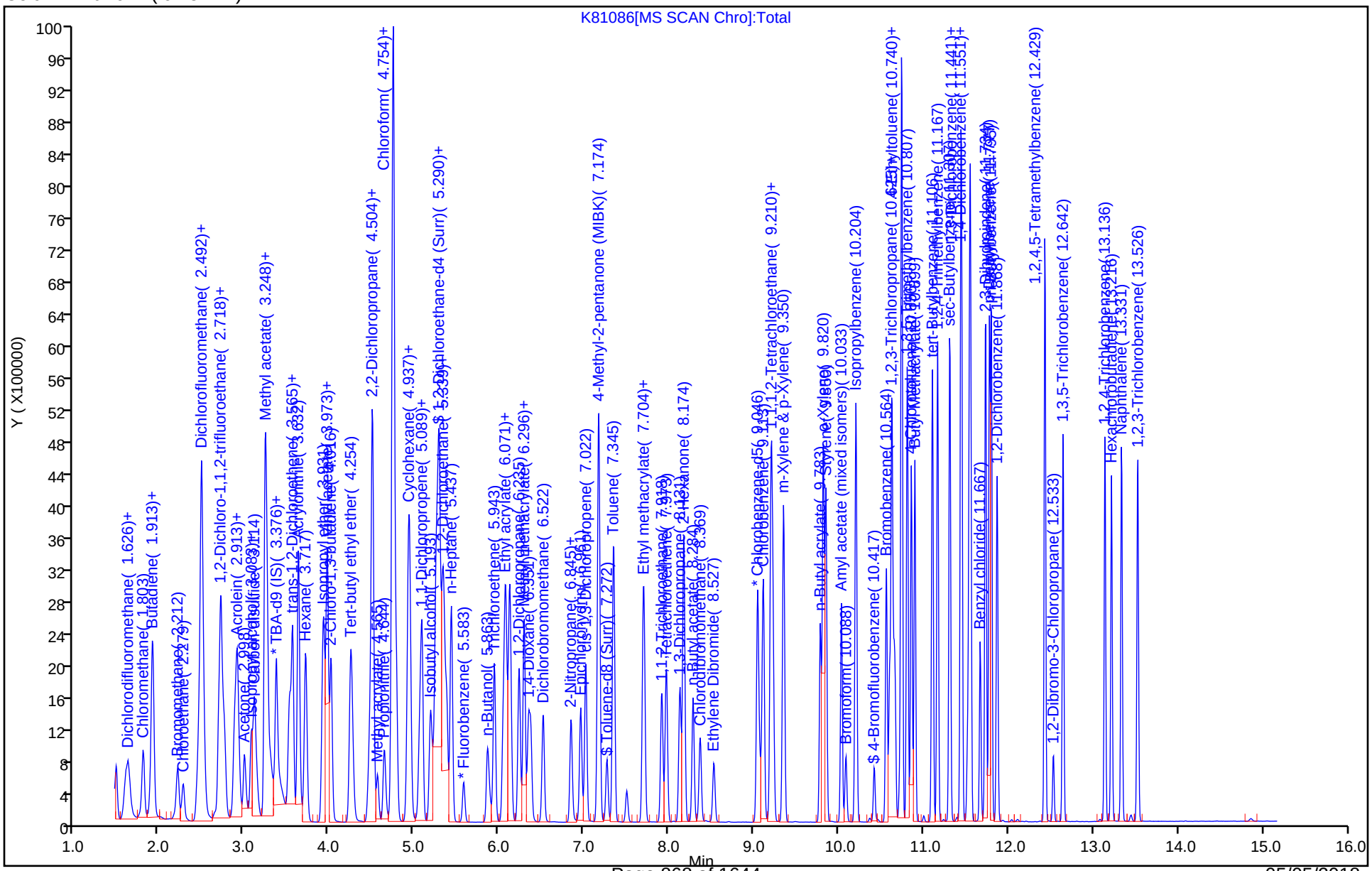
Report Date: 25-Mar-2018 19:37:31 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81086.D

Injection Date:	23-Mar-2018 14:31:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD200			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

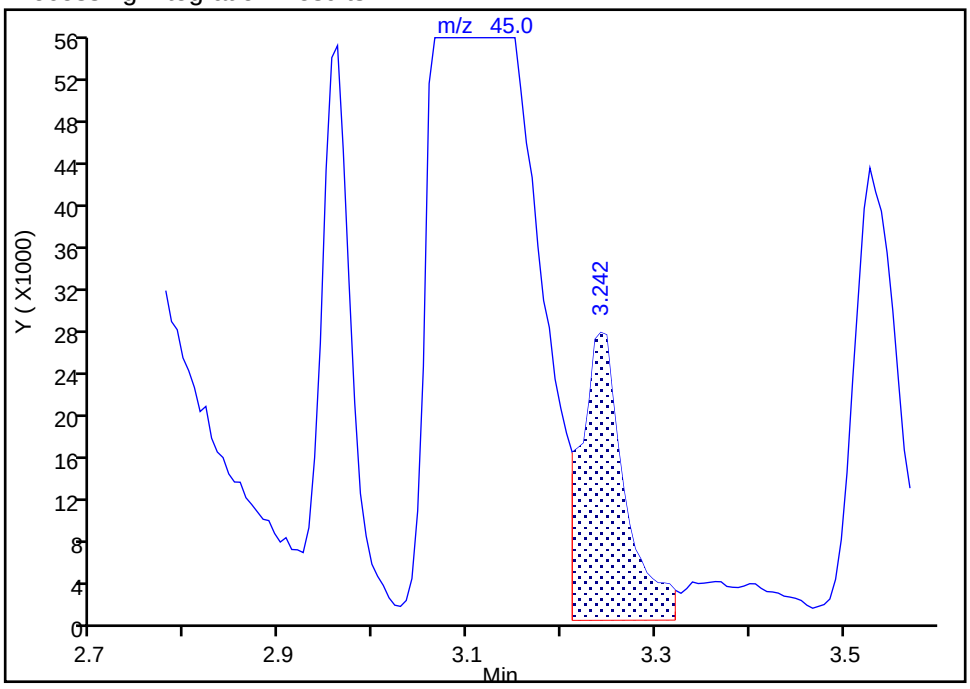
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81086.D
Injection Date: 23-Mar-2018 14:31:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

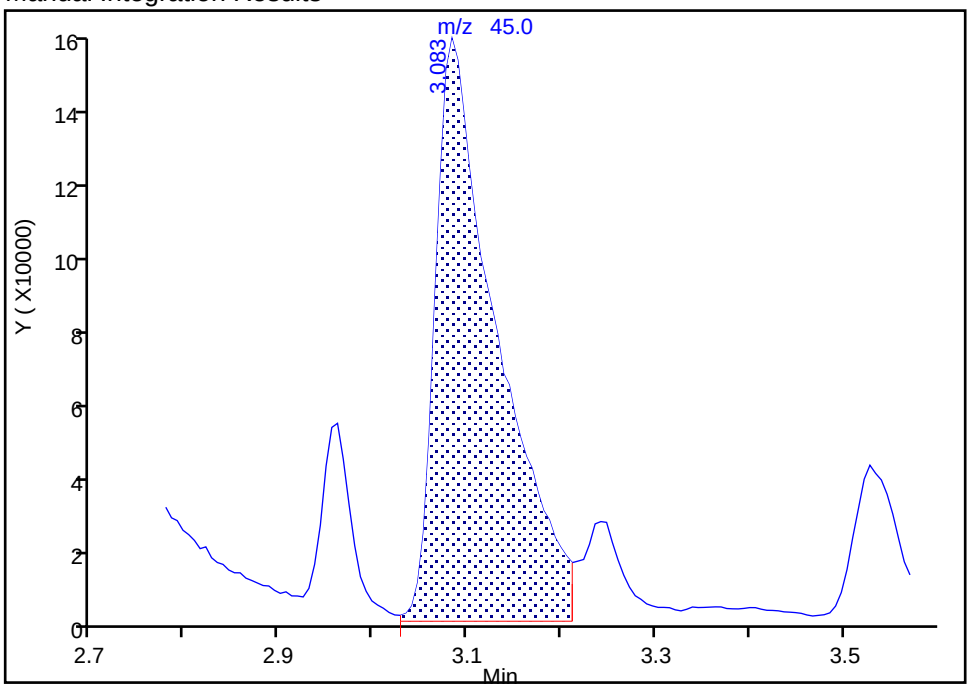
Processing Integration Results

RT: 3.24
Area: 88365
Amount: 326.3182
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 728395
Amount: 1922.6539
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:40:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

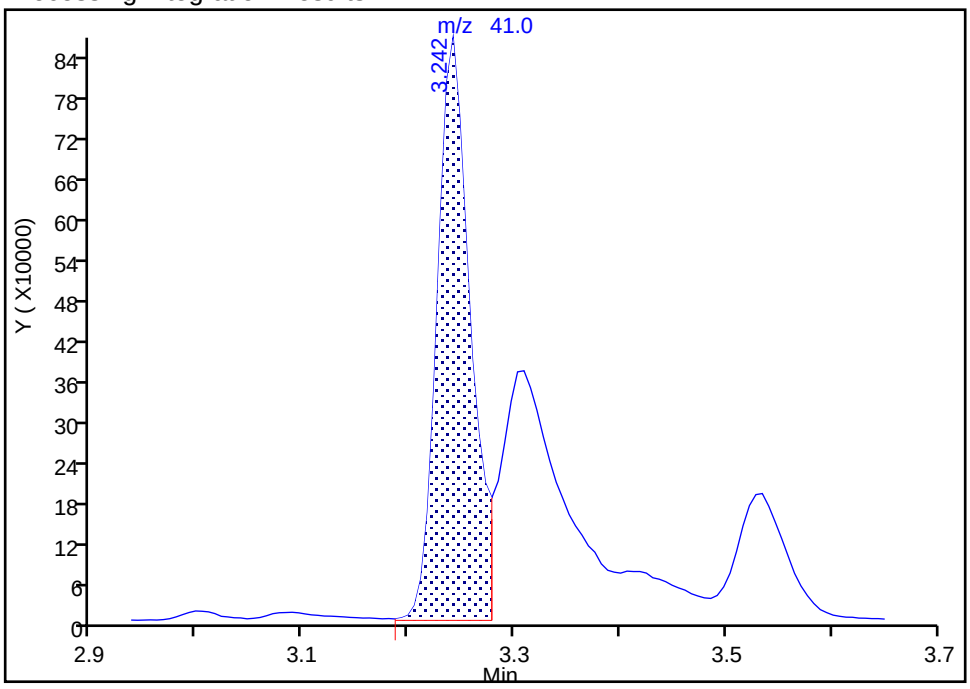
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81086.D
Injection Date: 23-Mar-2018 14:31:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

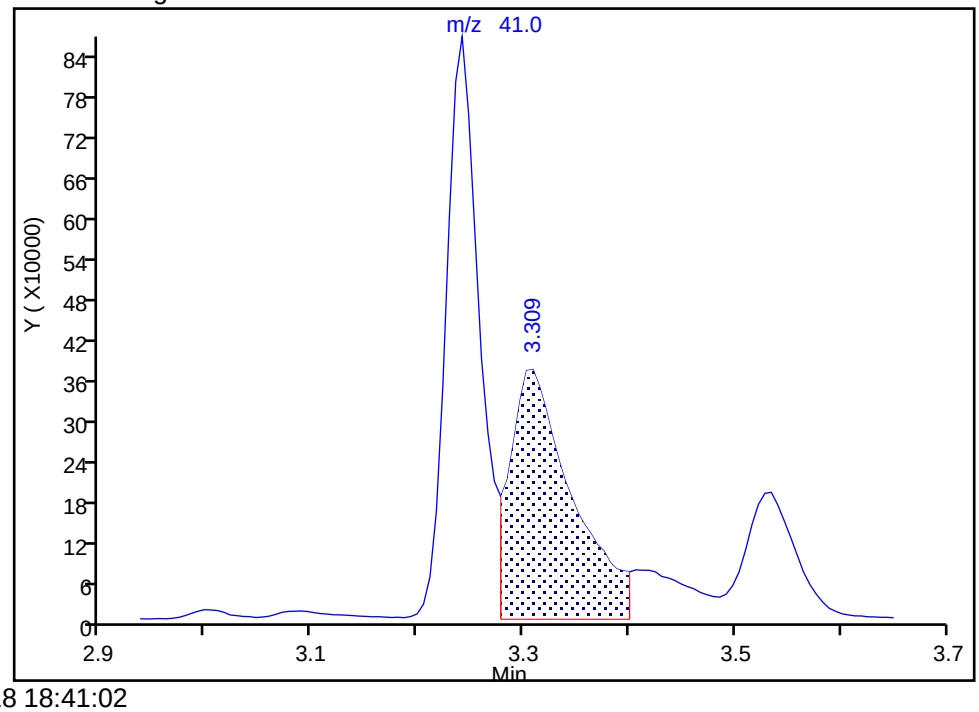
Processing Integration Results

RT: 3.24
Area: 1912335
Amount: 2422.2091
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 1539215
Amount: 2032.4583
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:41:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

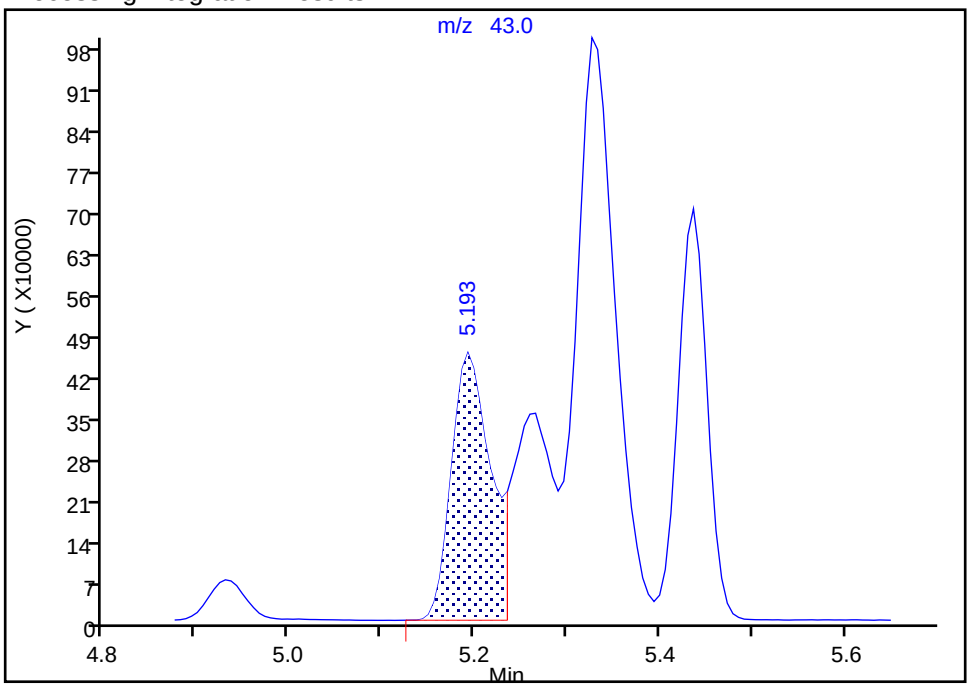
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81086.D
Injection Date: 23-Mar-2018 14:31:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

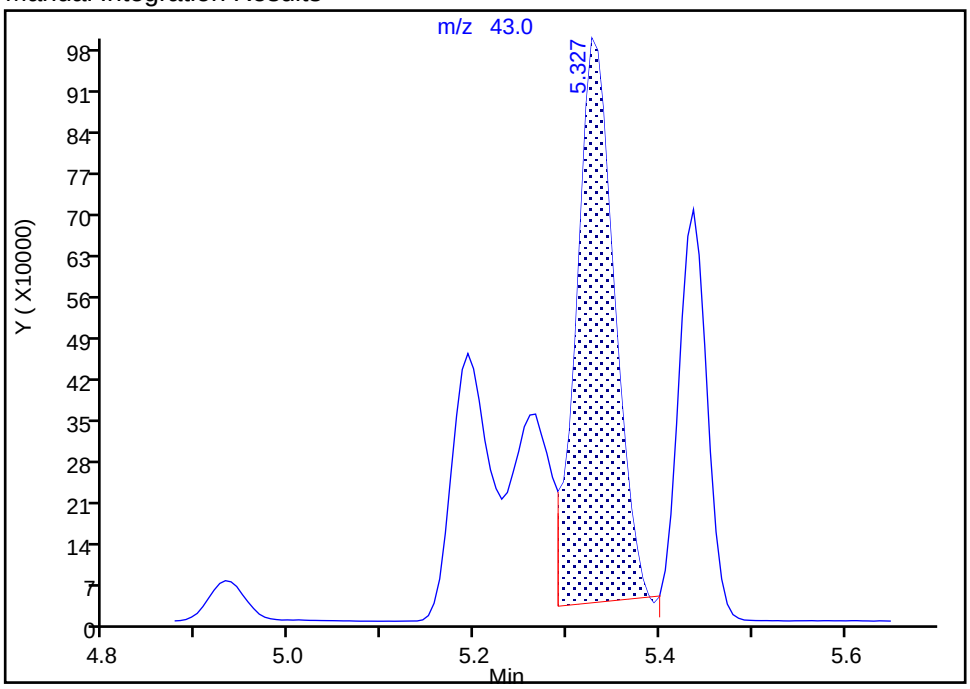
Processing Integration Results

RT: 5.19
Area: 1377072
Amount: 132.2314
Amount Units: ug/l



Manual Integration Results

RT: 5.33
Area: 2730644
Amount: 199.7360
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:41:12
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

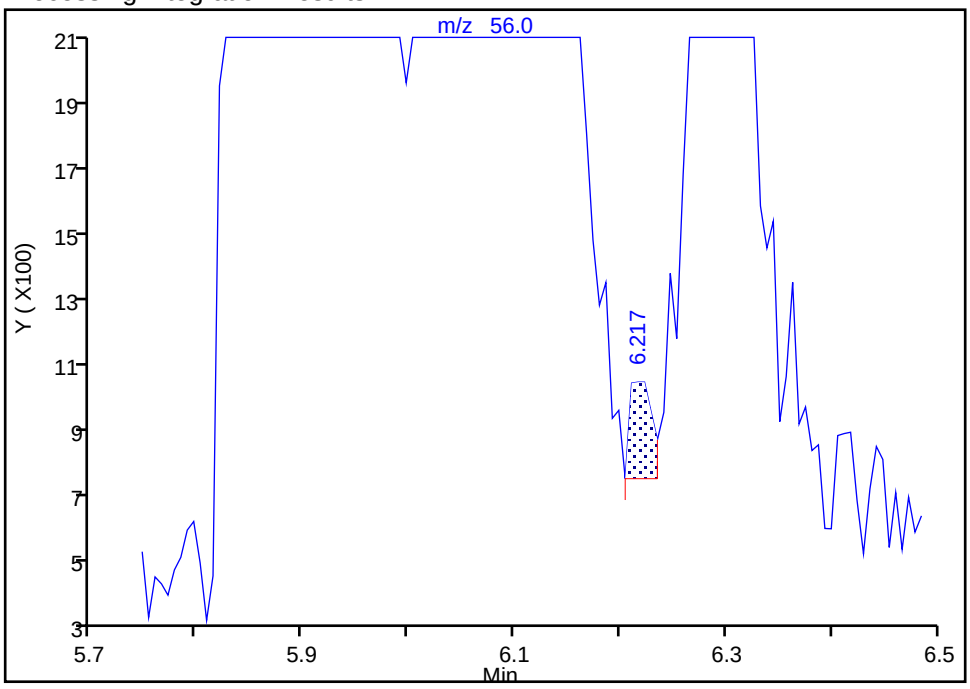
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81086.D
Injection Date: 23-Mar-2018 14:31:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

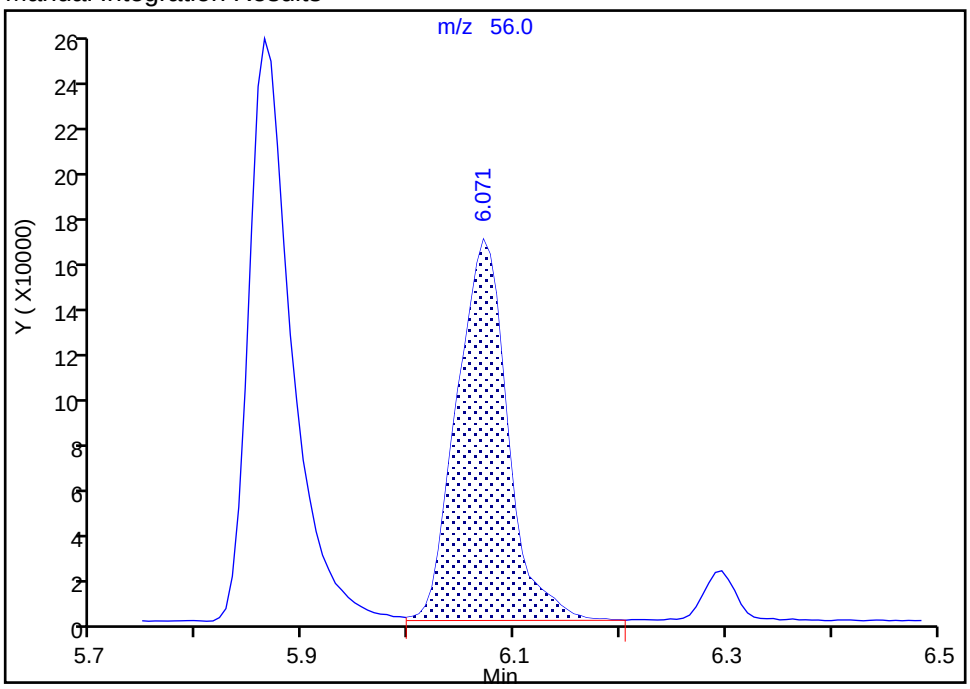
Processing Integration Results

RT: 6.22
Area: 435
Amount: 0.246604
Amount Units: ug/l



Manual Integration Results

RT: 6.07
Area: 561580
Amount: 211.6497
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:41:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 23-Mar-2018 14:55:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0069166-008
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Mar-2018 19:37:40 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: baronm Date: 23-Mar-2018 15:38:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.602	1.602	0.000	92	480260	500.0	471.2	
2 Dichlorodifluoromethane	85	1.632	1.638	-0.006	99	3598767	500.0	540.4	
3 Chloromethane	50	1.815	1.803	0.012	99	3032563	500.0	509.3	
4 Vinyl chloride	62	1.919	1.913	0.006	98	2612704	500.0	496.0	
5 Butadiene	54	1.925	1.913	0.012	92	2244576	500.0	537.4	
6 Bromomethane	94	2.218	2.211	0.007	99	1430158	500.0	465.4	
7 Chloroethane	64	2.285	2.272	0.013	98	1086307	500.0	482.1	
9 Dichlorofluoromethane	67	2.480	2.474	0.006	98	3805199	500.0	457.6	
8 Trichlorofluoromethane	101	2.492	2.486	0.006	99	3303763	500.0	497.2	
10 Pentane	72	2.498	2.498	0.000	96	580473	1000.0	1039.5	
12 Ethanol	46	2.693	2.687	0.006	82	603934	20000	22833	
11 Ethyl ether	59	2.699	2.699	0.000	91	1486188	500.0	443.6	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	96	1871775	500.0	458.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.754	0.006	96	1535380	500.0	475.4	
15 Acrolein	56	2.882	2.882	0.000	95	381088	600.0	583.5	
16 1,1,2-Trichloro-1,2,2-trif	101	2.901	2.894	0.007	95	2053095	500.0	460.4	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	94	1652166	500.0	458.2	
18 Acetone	43	3.004	3.004	0.000	84	3432716	2500.0	2499.5	
19 Iodomethane	142	3.083	3.083	0.000	99	3018917	500.0	451.1	
22 Isopropyl alcohol	45	3.090	3.089	0.001	1	1910559	5000.0	4793.2	a
20 Carbon disulfide	76	3.120	3.120	0.000	100	6413360	500.0	438.2	
21 3-Chloro-1-propene	76	3.242	3.248	-0.006	96	1072271	500.0	449.4	
23 Methyl acetate	43	3.248	3.248	0.000	99	8169291	2500.0	2278.7	
24 Cyclopentene	67	3.266	3.272	-0.006	92	4599196	500.0	456.3	
29 Acetonitrile	41	3.309	3.309	0.000	96	4514952	5000.0	5666.4	a
* 25 TBA-d9 (IS)	65	3.364	3.351	0.013	0	388725	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	99	2029445	500.0	499.9	
27 2-Methyl-2-propanol	59	3.431	3.431	0.000	98	2845486	5000.0	4924.1	
28 Methyl tert-butyl ether	73	3.541	3.534	0.007	98	5616363	500.0	454.2	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	98	1670837	500.0	441.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	92	7147190	5000.0	4453.8	
32 Hexane	43	3.724	3.723	0.001	94	2098221	500.0	430.7	
33 Isopropyl ether	45	3.931	3.931	0.000	98	8205983	500.0	455.1	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	99	3555879	500.0	440.9	
35 Vinyl acetate	86	3.980	3.979	0.001	100	494481	1000.0	835.1	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	93	1559626	500.0	461.2	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	87	6898933	500.0	460.3	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	333390	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.485	0.007	95	971607	500.0	429.8	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	95	1024670	2500.0	2240.4	
41 Ethyl acetate	70	4.516	4.510	0.006	96	371768	1000.0	920.0	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	90	1968297	500.0	446.2	
44 Methyl acrylate	55	4.571	4.571	0.000	99	1825571	500.0	474.6	
43 Propionitrile	54	4.650	4.650	0.000	98	3077786	5000.0	4971.4	
45 Tetrahydrofuran	72	4.736	4.735	0.001	91	471794	1000.0	877.4	
46 Chlorobromomethane	128	4.742	4.741	0.001	98	920393	500.0	442.2	
47 Methacrylonitrile	67	4.760	4.754	0.006	97	6658423	5000.0	4425.4	
48 Chloroform	83	4.790	4.790	0.000	98	3410130	500.0	455.7	
49 Cyclohexane	84	4.937	4.937	0.000	98	2743692	500.0	444.7	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	99	3077034	500.0	463.6	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	97	165880	50.0	49.3	
52 Carbon tetrachloride	117	5.071	5.065	0.006	98	2610139	500.0	510.1	
53 1,1-Dichloropropene	75	5.095	5.089	0.006	93	2474408	500.0	459.7	
56 Isobutyl alcohol	74	5.199	5.187	0.013	94	257254	12500	11913	
54 Benzene	78	5.296	5.296	0.000	98	6931810	500.0	458.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.308	0.001	0	208889	50.0	53.3	
57 Isopropyl acetate	43	5.333	5.333	0.000	94	6849688	500.0	467.3	a
58 Tert-amyl methyl ether	73	5.351	5.351	0.000	93	6319961	500.0	465.3	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	97	2598845	500.0	462.9	
60 n-Heptane	57	5.437	5.436	0.001	98	1652219	500.0	434.3	
* 61 Fluorobenzene	96	5.583	5.583	0.000	97	498973	50.0	50.0	
62 n-Butanol	56	5.869	5.863	0.006	95	1974814	12500	13398	
63 Trichloroethene	95	5.943	5.942	0.001	98	1793076	500.0	458.6	
64 Ethyl acrylate	56	6.077	6.070	0.007	88	1357170	500.0	477.0	a
65 Methylcyclohexane	83	6.077	6.077	0.000	90	3350067	500.0	457.4	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	91	2103791	500.0	466.3	
* 67 1,4-Dioxane-d8	96	6.290	6.290	0.000	0	37697	1000.0	1000.0	M
68 Methyl methacrylate	41	6.296	6.296	0.000	95	3619185	1000.0	932.5	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	3283690	500.0	474.2	
69 1,4-Dioxane	88	6.345	6.345	0.000	36	442681	10000	7759.8	
71 Dibromomethane	93	6.375	6.369	0.006	97	1142681	500.0	454.4	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	2547264	500.0	511.2	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	91	1001279	500.0	491.5	
74 2-Nitropropane	41	6.851	6.851	0.000	77	617102	1000.0	1106.6	
75 Epichlorohydrin	57	6.961	6.961	0.000	100	3580734	10000	8553.0	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	97	3056208	500.0	486.9	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	99	11344603	2500.0	2275.6	
$ 78 Toluene-d8 (Surr)	98	7.272	7.271	0.001	97	642032	50.0	51.0	
79 Toluene	91	7.351	7.351	0.000	92	7303691	500.0	462.1	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	97	2662659	500.0	489.2	
81 Ethyl methacrylate	69	7.711	7.710	0.001	94	2257266	500.0	466.1	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	95	1350266	500.0	476.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	1647461	500.0	463.5	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	97	2606046	500.0	472.2	
85 2-Hexanone	43	8.180	8.174	0.006	99	7352390	2500.0	2253.6	
86 n-Butyl acetate	43	8.284	8.290	-0.006	97	3458087	500.0	450.7	
87 Chlorodibromomethane	129	8.369	8.369	0.000	99	1773498	500.0	555.3	
88 Ethylene Dibromide	107	8.534	8.527	0.007	98	1487530	500.0	474.6	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	87	394041	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	92	4487426	500.0	471.3	
92 Ethylbenzene	106	9.204	9.204	0.000	99	2291556	500.0	463.0	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.222	0.007	95	2019649	500.0	532.7	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	2838451	500.0	459.9	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	1381914	500.0	473.8	
95 o-Xylene	106	9.820	9.820	0.000	92	2998839	500.0	469.4	
96 Styrene	104	9.850	9.850	0.000	93	4860138	500.0	473.8	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	87	4043809	500.0	482.0	
98 Bromoform	173	10.088	10.082	0.006	97	1108025	500.0	595.5	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	8630200	500.0	473.5	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	87	180026	50.0	49.7	
101 Bromobenzene	156	10.564	10.564	0.000	96	1908963	500.0	490.0	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	2278878	500.0	491.1	
103 N-Propylbenzene	91	10.631	10.624	0.007	98	9621062	500.0	469.4	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	97	572437	500.0	481.0	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	91	630473	500.0	501.1	
106 2-Chlorotoluene	91	10.747	10.740	0.007	94	6737701	500.0	474.3	
107 4-Ethyltoluene	105	10.747	10.740	0.007	88	8078814	500.0	477.9	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	92	7347173	500.0	498.4	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	5777594	500.0	473.1	
110 Butyl Methacrylate	87	10.899	10.899	0.000	97	2596881	500.0	510.7	
111 tert-Butylbenzene	119	11.106	11.106	0.000	92	6277005	500.0	531.3	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	98	7421730	500.0	489.0	
113 sec-Butylbenzene	105	11.314	11.307	0.007	99	9736779	500.0	500.8	
114 4-Isopropyltoluene	119	11.442	11.441	0.001	97	8058175	500.0	500.7	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	3628386	500.0	478.5	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	97	212306	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	94	3609533	500.0	468.5	
118 Benzyl chloride	91	11.667	11.667	0.000	98	3620592	500.0	519.8	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	7637740	500.0	494.1	
120 p-Diethylbenzene	119	11.777	11.777	0.000	92	4420822	500.0	497.7	
121 n-Butylbenzene	92	11.801	11.801	0.000	99	4189527	500.0	479.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	95	3822181	500.0	492.1	
123 1,2,4,5-Tetramethylbenzene	119	12.435	12.429	0.006	97	8534828	500.0	513.0	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	96	483212	500.0	515.7	
125 1,3,5-Trichlorobenzene	180	12.649	12.648	0.001	98	3281014	500.0	505.1	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	3138528	500.0	488.5	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	95	1839696	500.0	544.9	
128 Naphthalene	128	13.338	13.331	0.007	99	7928477	500.0	471.2	
129 1,2,3-Trichlorobenzene	180	13.527	13.526	0.000	96	3228314	500.0	492.8	
S 130 1,2-Dichloroethene, Total	100				0		1000.0	887.2	
S 131 Xylenes, Total	100				0		1000.0	929.2	
S 132 Total BTEX	1				0		2500.0	2312.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	50.00	Units: uL	
ACROLEIN W_00075	Amount Added:	6.00	Units: uL	
GASES Li_00252	Amount Added:	50.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 25-Mar-2018 19:37:42 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Injection Date: 23-Mar-2018 14:55:30 Instrument ID: CVOAMS9 Operator ID:

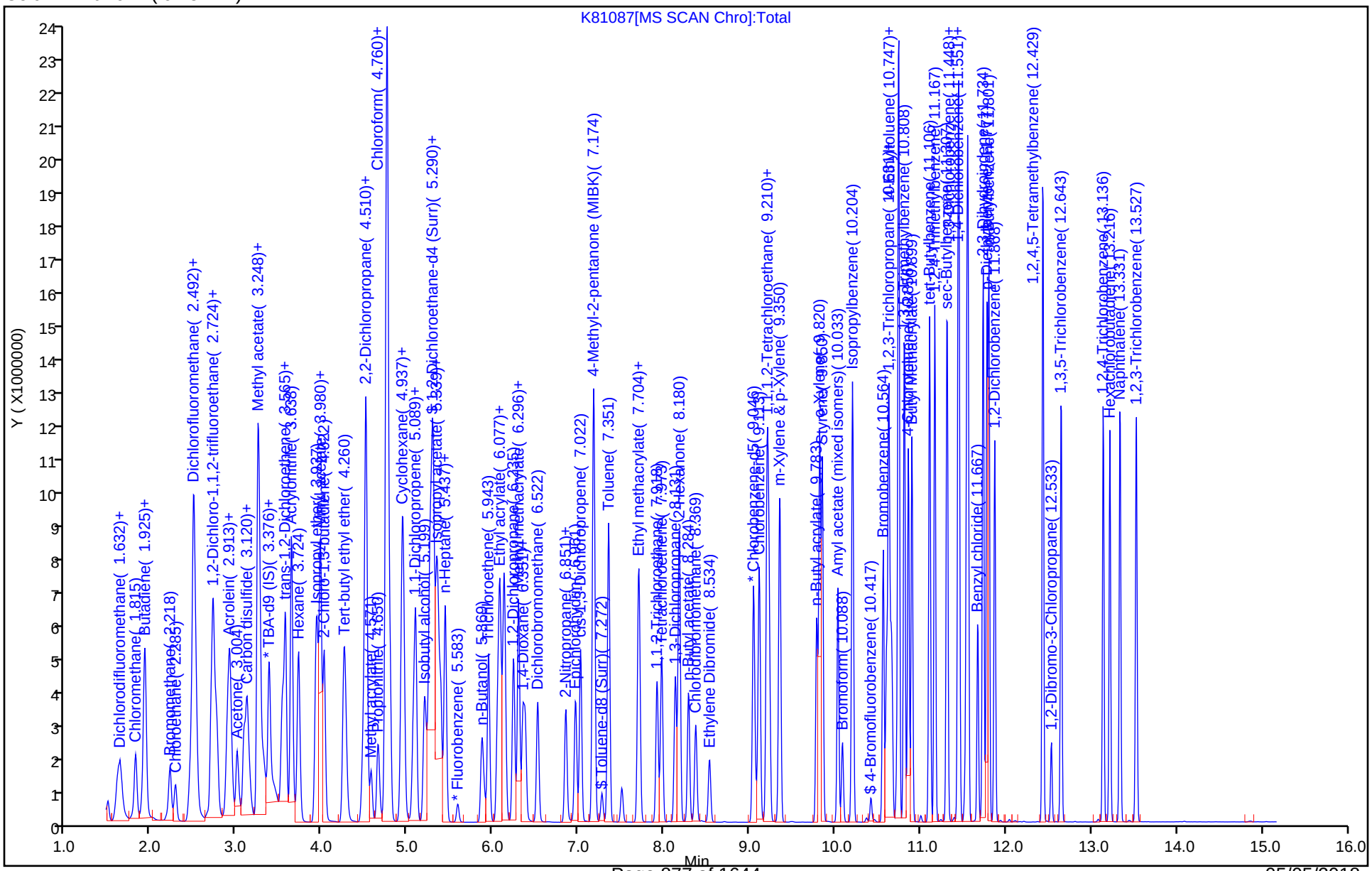
Lims ID: STD500 Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

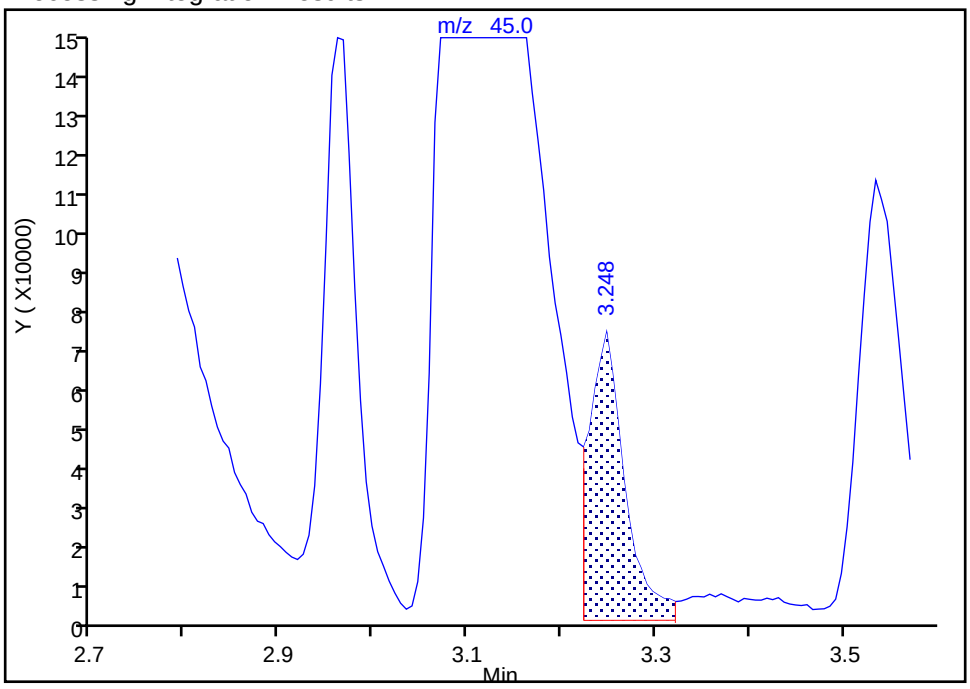
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D
Injection Date: 23-Mar-2018 14:55:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

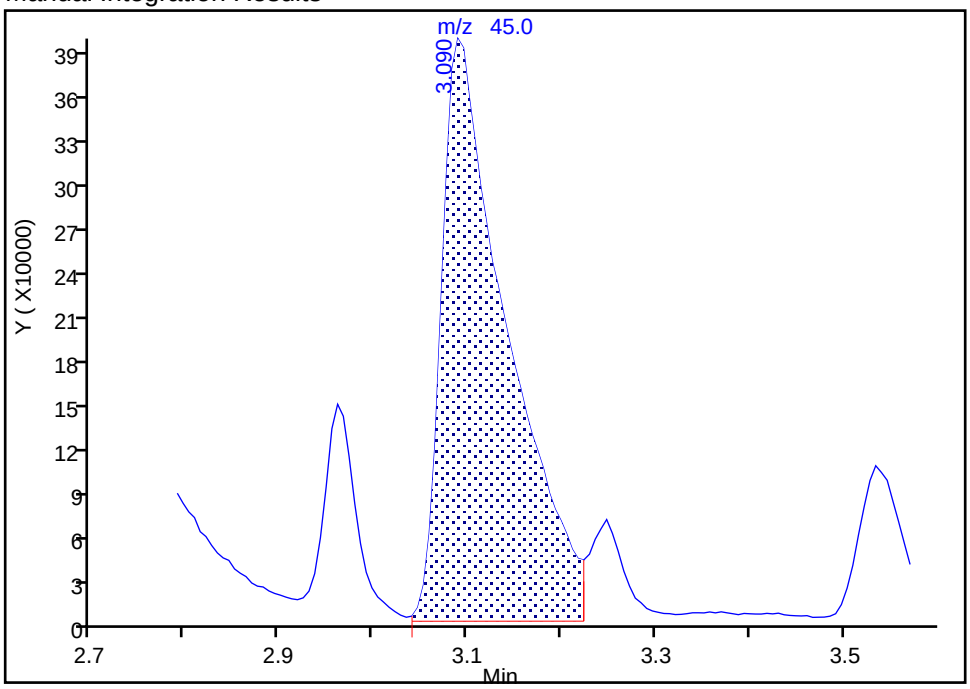
Processing Integration Results

RT: 3.25
Area: 183418
Amount: 537.8409
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 1910559
Amount: 4793.1989
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:54:05
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

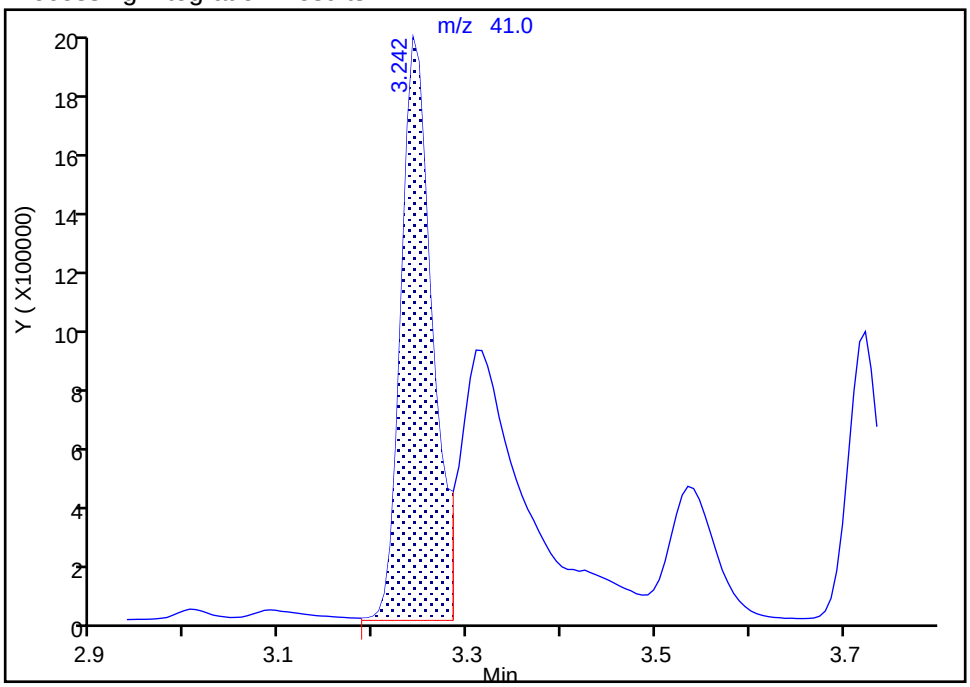
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D
Injection Date: 23-Mar-2018 14:55:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

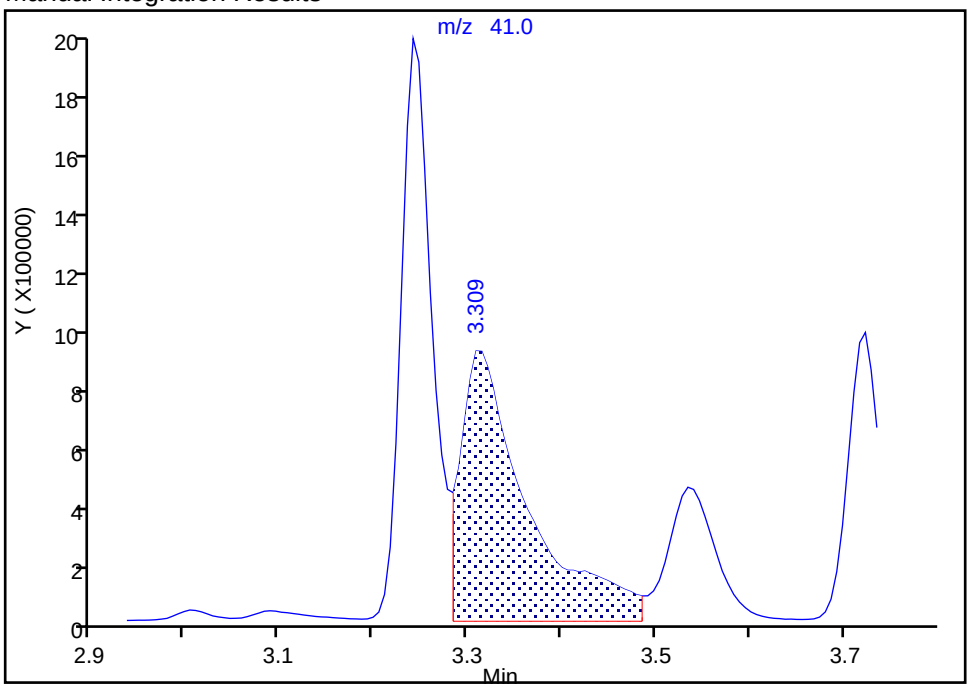
Processing Integration Results

RT: 3.24
Area: 4549361
Amount: 5701.3655
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 4514952
Amount: 5666.3882
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:54:10
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

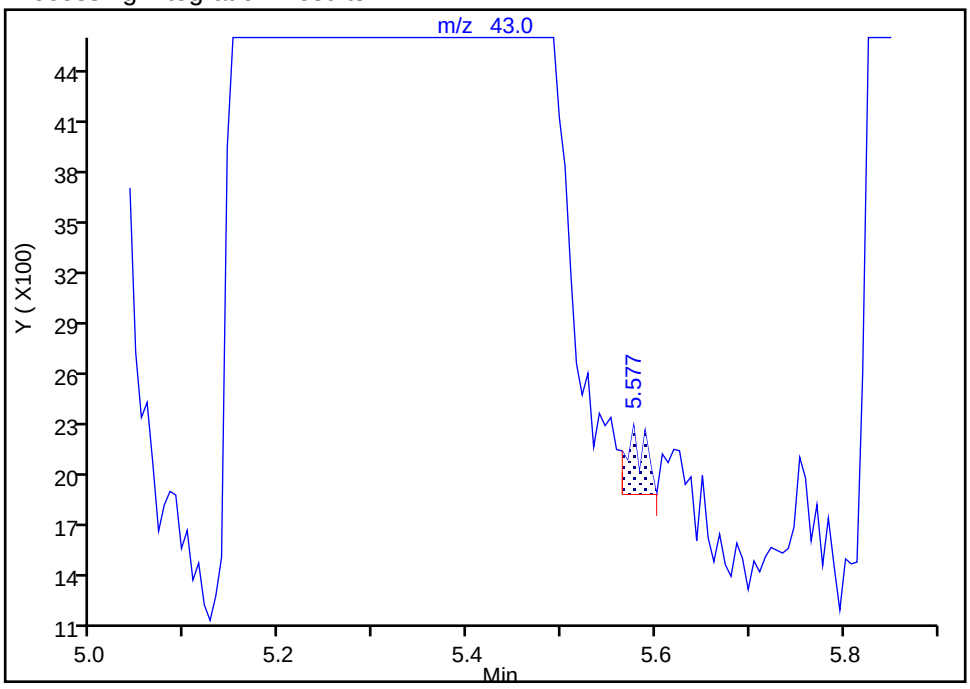
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D
Injection Date: 23-Mar-2018 14:55:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

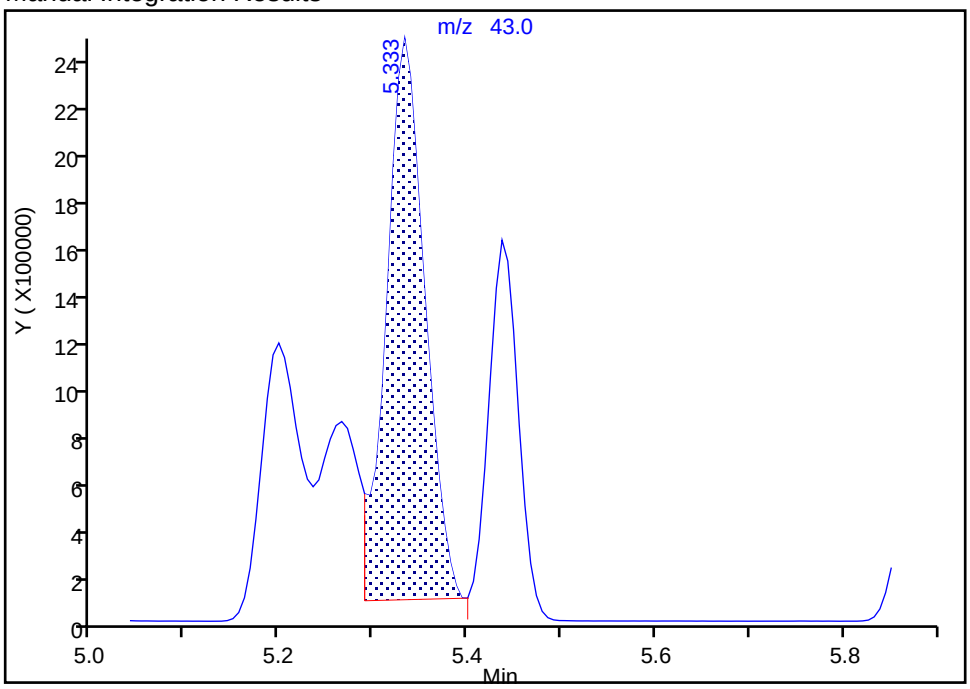
Processing Integration Results

RT: 5.58
Area: 553
Amount: 0.044683
Amount Units: ug/l



Manual Integration Results

RT: 5.33
Area: 6849688
Amount: 467.2616
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:54:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

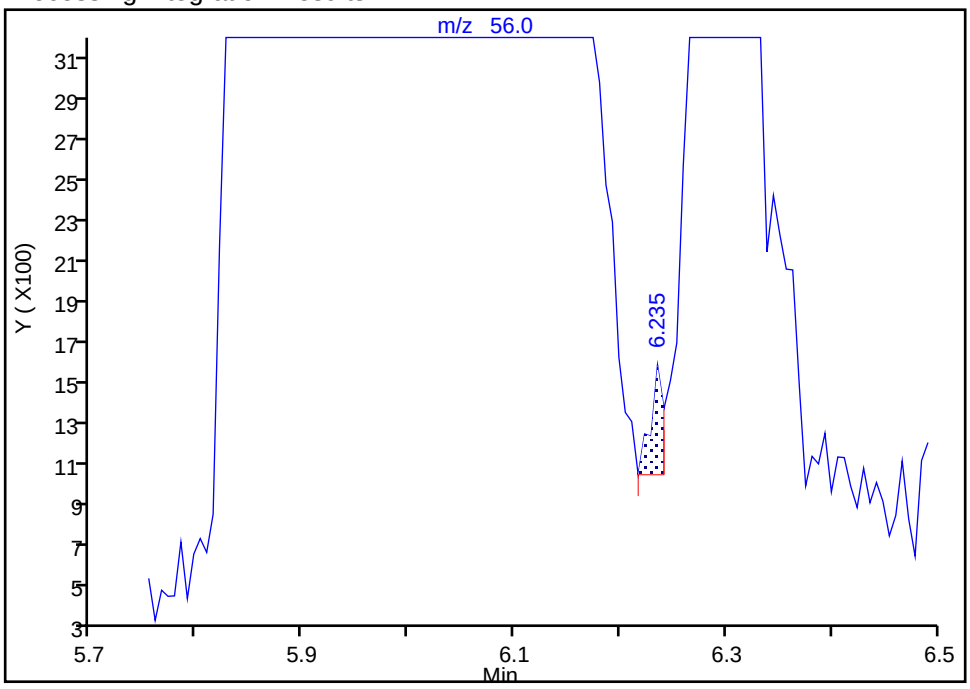
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D
Injection Date: 23-Mar-2018 14:55:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

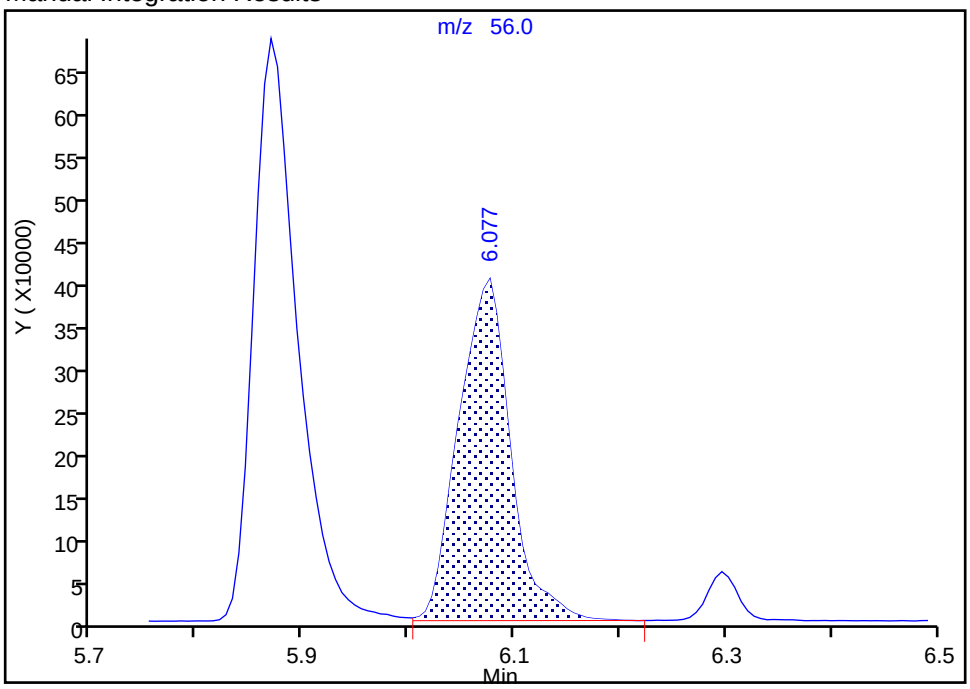
Processing Integration Results

RT: 6.24
Area: 446
Amount: 0.186389
Amount Units: ug/l



Manual Integration Results

RT: 6.08
Area: 1357170
Amount: 477.0218
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:54:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

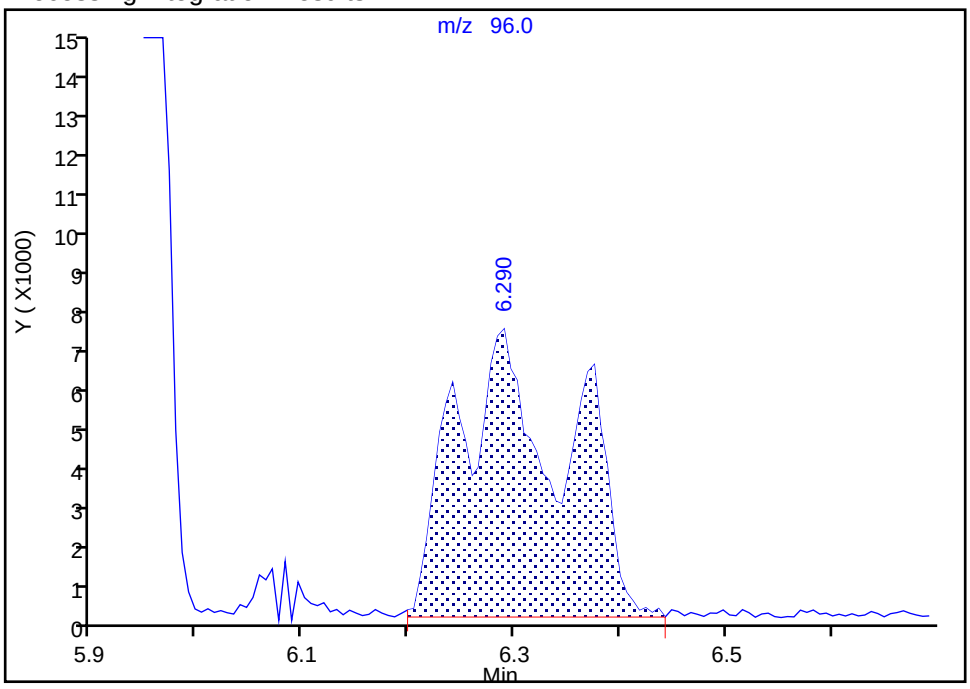
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D
Injection Date: 23-Mar-2018 14:55:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

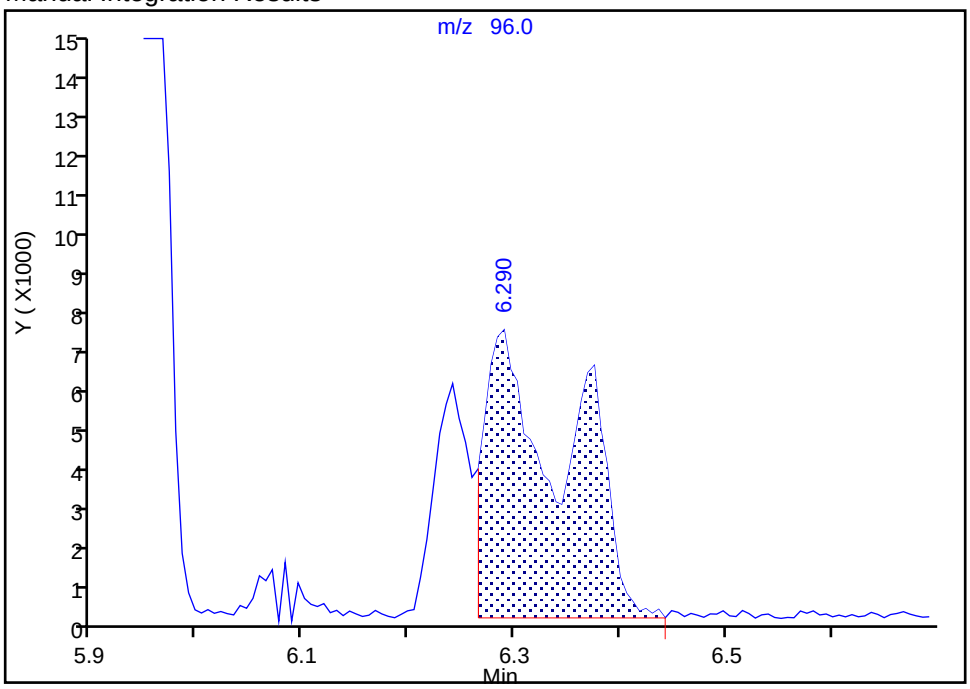
Processing Integration Results

RT: 6.29
Area: 50178
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.29
Area: 37697
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 25-Mar-2018 18:54:52
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-507960/3	K81445.D
Level 2	STD5 460-507960/13	K81455.D
Level 3	STD20 460-507960/5	K81447.D
Level 4	STD50 460-507960/6	K81448.D
Level 5	STD200 460-507960/7	K81449.D
Level 6	STD500 460-507960/8	K81450.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	0.1346 0.2419	0.1731	0.2070	0.2243	0.2602	Lin	-0.037	0.2443							0.9990		0.9900
Dichlorodifluoromethane	0.4520 0.6839	0.5583	0.6212	0.5680	0.7292	Ave		0.6021			0.1000	16.4		20.0			
Chloromethane	0.6387 0.5917	0.5610	0.5767	0.5117	0.6312	Ave		0.5852			0.1000	8.0		20.0			
Butadiene	0.3010 0.4892	0.4338	0.4645	0.4207	0.5132	Ave		0.4371				17.1		20.0			
Vinyl chloride	0.4842 0.6125	0.6184	0.6402	0.5637	0.6492	Ave		0.5947			0.1000	10.4		20.0			
Bromomethane	0.4350 0.4277	0.4366	0.4321	0.4097	0.4496	Ave		0.4318			0.1000	3.0		20.0			
Chloroethane	0.2098 0.2805	0.2889	0.2721	0.2585	0.2907	Ave		0.2668			0.1000	11.4		20.0			
Dichlorofluoromethane	0.7251 0.7233	0.7675	0.7656	0.7135	0.8094	Ave		0.7507				4.9		20.0			
Trichlorofluoromethane	0.5594 0.6058	0.6286	0.6450	0.5835	0.6738	Ave		0.6160			0.1000	6.8		20.0			
Pentane	2.4630 2.1108	1.9086	2.7013	2.6051	2.2779	Ave		2.3445				12.9		20.0			
Ethanol	0.0941 0.0597	0.0689	0.0719	0.0644	0.0664	Ave		0.0709				17.1		20.0			
Ethyl ether	0.2976 0.2461	0.2407	0.2490	0.2501	0.2589	Ave		0.2571				8.1		20.0			
2-Methyl-1,3-butadiene	0.2168 0.2617	0.2596	0.2936	0.2762	0.2673	Ave		0.2625				9.7		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	0.2793 0.3042	0.2858	0.3337	0.3198	0.3186	Ave		0.3069				6.9		20.0			
Acrolein	2.4846 1.5927	1.2313	2.1721	2.2646	1.8197	Ave		1.9275				24.2	*	20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2905 0.4145	0.3793	0.4370	0.4116	0.4335	Ave		0.3944			0.1000	13.9		20.0			
1,1-Dichloroethene	0.3123 0.3606	0.3507	0.3742	0.3563	0.3743	Ave		0.3547			0.1000	6.5		20.0			
Acetone	1.3444 1.0605	1.0232	1.0557	0.8953	1.0354	Ave		1.0691			0.0500	13.8		20.0			
Iodomethane	0.6909 0.6770	0.6311	0.6773	0.6550	0.7088	Ave		0.6734				4.0		20.0			
Isopropyl alcohol	0.7611 0.7400	0.6717	0.6609	0.6852	0.7252	Ave		0.7074				5.7		20.0			
Carbon disulfide	1.2122 1.3724	1.2556	1.4286	1.3257	1.4357	Ave		1.3384			0.1000	6.8		20.0			
Allyl chloride	0.1889 0.2162	0.1955	0.2037	0.2051	0.2199	Ave		0.2049				5.8		20.0			
Methyl acetate	0.1801 0.1841	0.1780	0.1729	0.1800	0.1943	Ave		0.1816			0.1000	4.0		20.0			
Cyclopentene	0.7088 0.8081	0.7989	0.9070	0.8489	0.8304	Ave		0.8170				8.0		20.0			
Acetonitrile	2.2141 1.7432	1.7673	2.2608	2.1674	1.8717	Ave		2.0041				11.8		20.0			
Methylene Chloride	0.5193 0.4050	0.4084	0.4085	0.4011	0.4267	Ave		0.4282			0.1000	10.6		20.0			
2-Methyl-2-propanol	1.6510 1.5062	1.2620	1.6076	1.4896	1.5825	Ave		1.5165				9.2		20.0			
Methyl tert-butyl ether	1.0503 0.9807	0.9374	0.9513	0.9318	1.0200	Ave		0.9786			0.1000	4.9		20.0			
trans-1,2-Dichloroethene	0.4115 0.3626	0.3585	0.4119	0.3722	0.3879	Ave		0.3841			0.1000	6.2		20.0			
Acrylonitrile	0.1204 0.1076	0.1081	0.1144	0.1097	0.1136	Ave		0.1123				4.3		20.0			
Hexane	0.2781 0.2690	0.2561	0.3034	0.2669	0.2890	Ave		0.2771				6.1		20.0			
Isopropyl ether	1.1504 0.9903	0.9795	1.0285	0.9883	1.0143	Ave		1.0252				6.2		20.0			
1,1-Dichloroethane	0.5782 0.5792	0.5656	0.6304	0.5930	0.6191	Ave		0.5942			0.2000	4.3		20.0			
Vinyl acetate	2.2147 2.1401	1.6434	1.9928	2.0874	2.1851	Ave		2.0439				10.3		20.0			
2-Chloro-1,3-butadiene	0.2948 0.3172	0.3166	0.3557	0.3247	0.3257	Ave		0.3225				6.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	0.9826 1.0149	0.9494	0.9240	0.9530	1.0037	Ave		0.9713				3.6		20.0			
2,2-Dichloropropane	0.1267 0.1595	0.1406	0.1310	0.1305	0.1524	Ave		0.1401				9.5		20.0			
cis-1,2-Dichloroethene	0.4765 0.4233	0.4050	0.4406	0.4203	0.4443	Ave		0.4350			0.1000	5.7		20.0			
Ethyl acetate	0.5173 0.4029	0.4027	0.3445	0.3764	0.3984	Ave		0.4070				14.4		20.0			
2-Butanone (MEK)	0.6428 0.4699	0.4212	0.4830	0.4527	0.4811	Ave		0.4918			0.0500	15.7		20.0			
Methyl acrylate	0.2081 0.2541	0.2197	0.2014	0.2276	0.2476	Ave		0.2264				9.3		20.0			
Propionitrile	2.6125 1.5984	1.5370	2.1534	1.8409	1.6820	QuaF		1.7633	-0.000033						1.0000		0.9900
Tetrahydrofuran	0.8122 0.5278	0.4988	0.5690	0.5247	0.5537	Ave		0.5811				19.9		20.0			
Chlorobromomethane	0.2135 0.1981	0.2025	0.1988	0.1904	0.2066	Ave		0.2017				3.9		20.0			
Methacrylonitrile	0.1430 0.1293	0.1293	0.1301	0.1306	0.1309	Ave		0.1322				4.0		20.0			
Chloroform	0.6562 0.6079	0.5834	0.6398	0.6024	0.6400	Ave		0.6216			0.2000	4.5		20.0			
Cyclohexane	0.4351 0.6026	0.5571	0.6456	0.6020	0.6308	Ave		0.5789			0.1000	13.2		20.0			
1,1,1-Trichloroethane	0.4168 0.5318	0.4567	0.5117	0.4937	0.5395	Ave		0.4917			0.1000	9.6		20.0			
Carbon tetrachloride	0.2935 0.4345	0.3114	0.3348	0.3462	0.4124	Ave		0.3554			0.1000	15.8		20.0			
1,1-Dichloropropene	0.3821 0.4509	0.4408	0.4913	0.4482	0.4651	Ave		0.4464				8.1		20.0			
Isobutyl alcohol	0.0374 0.0635	0.0407	0.0443	0.0506	0.0633	QuaF		0.0610	0.0000002						0.9990		0.9900
Benzene	1.9589 1.7718	1.7138	1.9138	1.7640	1.9222	Ave		1.8408			0.5000	5.6		20.0			
Isopropyl acetate	0.7839 0.8433	0.7765	0.7498	0.7664	0.8488	Ave		0.7948				5.2		20.0			
Tert-amyl methyl ether	0.2878 0.3243	0.2897	0.2849	0.2893	0.3244	Ave		0.3001				6.3		20.0			
1,2-Dichloroethane	0.4876 0.3866	0.3838	0.3838	0.3719	0.3982	Ave		0.4020			0.1000	10.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Heptane	0.2108 0.2783	0.2630	0.3205	0.2876	0.2990	Ave		0.2765				13.6		20.0			
n-Butanol	0.3368 +++++	0.2118	0.2710	0.2791	0.3494	Ave		0.2896				19.1		20.0			
Trichloroethene	0.3722 0.3582	0.3307	0.3662	0.3495	0.3665	Ave		0.3572			0.2000	4.3		20.0			
Methylcyclohexane	0.5044 0.7167	0.6410	0.7819	0.7136	0.7444	Ave		0.6837			0.1000	14.5		20.0			
Ethyl acrylate	0.1509 0.2161	0.1857	0.2110	0.2155	0.2216	Ave		0.2001				13.6		20.0			
1,2-Dichloropropane	0.3909 0.3394	0.3319	0.3451	0.3301	0.3450	Ave		0.3471			0.1000	6.4		20.0			
Methyl methacrylate	0.1380 0.1947	0.1493	0.1923	0.1781	0.1882	Ave		0.1734				13.9		20.0			
1,4-Dioxane	1.8013 1.1545	1.5423	1.7096	1.5251	1.4720	Ave		1.5341				14.6		20.0			
n-Propyl acetate	0.2695 0.3733	0.3232	0.3031	0.3435	0.3645	Ave		0.3295				11.9		20.0			
Dibromomethane	0.2319 0.2217	0.2144	0.2078	0.2098	0.2230	Ave		0.2181				4.2		20.0			
Dichlorobromomethane	0.3805 0.4473	0.3568	0.3785	0.3835	0.4353	Ave		0.3970			0.2000	9.0		20.0			
2-Chloroethyl vinyl ether	0.1886 0.1668	0.1523	0.1529	0.1593	0.1593	Ave		0.1632				8.3		20.0			
2-Nitropropane	0.0551 0.0516	0.0363	0.0300	0.0335	0.0412	Qua2	0.0495	0.0303	0.0000219						0.9980		0.9900
Epichlorohydrin	0.4031 0.3384	0.2982	0.3503	0.3465	0.3447	Ave		0.3469				9.7		20.0			
cis-1,3-Dichloropropene	0.6368 0.6863	0.5835	0.5980	0.6236	0.6913	Ave		0.6366			0.2000	7.0		20.0			
4-Methyl-2-pentanone (MIBK)	3.6271 3.1227	2.9298	3.4830	3.2263	3.2813	Ave		3.2784			0.0500	7.6		20.0			
Toluene	2.0690 1.8572	1.7914	2.0053	1.8900	1.9419	Ave		1.9258			0.4000	5.3		20.0			
trans-1,3-Dichloropropene	0.4308 0.5766	0.4495	0.4339	0.4887	0.5726	Ave		0.4920			0.1000	13.7		20.0			
Ethyl methacrylate	0.3528 0.4922	0.3652	0.3635	0.4209	0.4969	Ave		0.4153				15.9		20.0			
1,1,2-Trichloroethane	0.3560 0.3223	0.3083	0.3122	0.3133	0.3314	Ave		0.3239			0.1000	5.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.4221 0.4251	0.3945	0.4705	0.4348	0.4423	Ave		0.4315			0.2000	5.8		20.0			
1,3-Dichloropropane	0.6694 0.5922	0.5926	0.5842	0.5871	0.6130	Ave		0.6064				5.4		20.0			
2-Hexanone	2.3923 2.0511	1.9326	2.1872	2.1593	2.0849	Ave		2.1346			0.0500	7.3		20.0			
n-Butyl acetate	0.3454 0.4949	0.3781	0.3595	0.4244	0.4836	Ave		0.4143				15.4		20.0			
Chlorodibromomethane	0.2700 0.4203	0.2785	0.3028	0.3289	0.4045	Ave		0.3342			0.1000	19.2		20.0			
Ethylene Dibromide	0.3600 0.3826	0.3401	0.3438	0.3669	0.3911	Ave		0.3641			0.1000	5.6		20.0			
Chlorobenzene	1.3678 1.1899	1.1579	1.2707	1.2059	1.2419	Ave		1.2390			0.5000	6.0		20.0			
Ethylbenzene	0.6835 0.6568	0.6122	0.7337	0.6616	0.6822	Ave		0.6717			0.1000	5.9		20.0			
1,1,1,2-Tetrachloroethane	0.3467 0.4570	0.3001	0.3354	0.3449	0.4487	Ave		0.3721				17.4		20.0			
m-Xylene & p-Xylene	0.9463 0.8043	0.7638	0.9118	0.8064	0.8398	Ave		0.8454			0.1000	8.3		20.0			
n-Butyl acrylate	0.1695 0.3032	0.1957	0.1893	0.2267	0.2879	Qua2	-0.043	0.2103	0.0002133						0.9930		0.9900
o-Xylene	0.9169 0.8454	0.7874	0.9215	0.8356	0.8823	Ave		0.8649			0.3000	6.0		20.0			
Styrene	1.4242 1.3374	1.2708	1.4331	1.3480	1.3905	Ave		1.3673			0.3000	4.5		20.0			
Amyl acetate (mixed isomers)	0.6297 1.1056	0.7521	0.7202	0.8787	1.0643	Qua2	-0.189	0.8099	0.0006864						0.9930		0.9900
Bromoform	0.1524 0.2531	0.1470	0.1590	0.1793	0.2358	Qua2	-0.017	0.1656	0.0001991		0.1000				0.9920		0.9900
Isopropylbenzene	2.2296 2.2208	2.0764	2.5309	2.1951	2.3091	Ave		2.2603			0.1000	6.7		20.0			
Bromobenzene	0.9796 0.9491	0.8917	0.9808	0.9498	0.9679	Ave		0.9532				3.5		20.0			
1,1,2,2-Tetrachloroethane	1.1517 1.0290	0.9751	1.0015	1.0029	1.0644	Ave		1.0374			0.3000	6.1		20.0			
N-Propylbenzene	4.7117 4.7213	4.6000	5.5508	4.9459	4.9965	Ave		4.9210				7.0		20.0			
1,2,3-Trichloropropane	0.3052 0.2542	0.2330	0.2505	0.2523	0.2622	Ave		0.2596				9.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.2295 0.2096	0.1767	0.1859	0.1885	0.2070	Ave		0.1995				9.7		20.0			
2-Chlorotoluene	3.4027 3.2119	3.0507	3.5810	3.2437	3.3244	Ave		3.3024				5.5		20.0			
4-Ethyltoluene	4.3306 3.8924	3.7200	4.5498	4.0662	3.9613	Ave		4.0867				7.4		20.0			
1,3,5-Trimethylbenzene	3.5668 3.5919	3.1920	3.8279	3.5073	3.6974	Ave		3.5639				6.0		20.0			
4-Chlorotoluene	3.1395 2.7050	2.5357	3.0421	2.7578	2.8127	Ave		2.8321				7.9		20.0			
Butyl Methacrylate	0.5200 1.1938	0.7082	0.7290	0.9046	1.1484	Qua2	-0.318	0.8231	0.0008658						0.9900		0.9900
tert-Butylbenzene	2.6448 3.0433	2.5369	2.9778	2.8947	3.0971	Ave		2.8658				7.9		20.0			
1,2,4-Trimethylbenzene	3.5233 3.6251	3.3225	3.9524	3.5944	3.7365	Ave		3.6257				5.8		20.0			
sec-Butylbenzene	4.2711 4.8133	4.3612	5.2423	4.7865	5.0131	Ave		4.7479				7.9		20.0			
4-Isopropyltoluene	3.6783 3.9813	3.5734	4.3924	3.9330	4.0963	Ave		3.9424				7.5		20.0			
1,3-Dichlorobenzene	2.0698 1.8010	1.7420	1.9953	1.8288	1.8512	Ave		1.8813			0.6000	6.6		20.0			
1,4-Dichlorobenzene	2.1249 1.8005	1.7967	1.9995	1.8157	1.8536	Ave		1.8985			0.5000	7.1		20.0			
Benzyl chloride	0.8684 +++++	0.9369	1.0388	1.0864	1.4205	Ave		1.0702				20.0		20.0			
Indan	3.9907 3.6617	3.3998	3.9460	3.6399	3.6864	Ave		3.7207				5.9		20.0			
p-Diethylbenzene	2.1730 2.0942	2.0133	2.4653	2.1436	2.1260	Ave		2.1693				7.1		20.0			
n-Butylbenzene	2.1205 2.0375	1.9571	2.4581	2.1484	2.1425	Ave		2.1440				8.0		20.0			
1,2-Dichlorobenzene	1.9971 1.8280	1.7550	1.9521	1.8175	1.8799	Ave		1.8716			0.4000	4.8		20.0			
1,2,4,5-Tetramethylbenzene	4.0561 3.9809	3.4953	4.1258	3.8561	3.9594	Ave		3.9123				5.7		20.0			
1,2-Dibromo-3-Chloropropane	0.1228 0.1921	0.1346	0.1311	0.1561	0.1873	Ave		0.1540			0.0500	19.3		20.0			
1,3,5-Trichlorobenzene	1.6956 1.4762	1.4286	1.7166	1.4703	1.4762	Ave		1.5439				8.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	1.5532 1.4546	1.3988	1.5988	1.4210	1.4962	Ave		1.4871			0.2000	5.2		20.0			
Hexachlorobutadiene	0.6266 0.6843	0.5901	0.6671	0.6575	0.6967	Ave		0.6537				6.0		20.0			
Naphthalene	4.7486 3.9459	3.9502	4.0173	3.9768	4.1018	Ave		4.1234				7.6		20.0			
1,2,3-Trichlorobenzene	1.8148 1.4484	1.4100	1.5191	1.4200	1.5214	Ave		1.5223				9.9		20.0			
Dibromofluoromethane (Surr)	0.3153 0.3155	0.3218	0.2884	0.3166	0.3222	Ave		0.3133				4.0		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2830 0.3263	0.2986	0.2671	0.3016	0.3152	Ave		0.2986				7.2		20.0			
Toluene-d8 (Surr)	1.5807 1.5607	1.5909	1.4147	1.6079	1.5730	Ave		1.5547				4.5		20.0			
4-Bromofluorobenzene	0.4327 0.4259	0.4314	0.3901	0.4301	0.4266	Ave		0.4228				3.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-507960/3	K81445.D
Level 2	STD5 460-507960/13	K81455.D
Level 3	STD20 460-507960/5	K81447.D
Level 4	STD50 460-507960/6	K81448.D
Level 5	STD200 460-507960/7	K81449.D
Level 6	STD500 460-507960/8	K81450.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Lin	1224 1189041	8150	40487	101585	496177	1.00 500	5.00	20.0	50.0	200
Dichlorodifluoromethane	FB	Ave	4111 3362317	26282	121470	257324	1390743	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	5809 2908945	26409	112766	231777	1203853	1.00 500	5.00	20.0	50.0	200
Butadiene	FB	Ave	2738 2405228	20421	90828	190562	978799	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	4404 3011179	29113	125184	255369	1238043	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	3956 2102609	20554	84497	185572	857416	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	1908 1379206	13599	53213	117104	554443	1.00 500	5.00	20.0	50.0	200
Dichlorofluoromethane	FB	Ave	6595 3556144	36131	149715	323214	1543618	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	5088 2978345	29594	126118	264336	1284989	1.00 500	5.00	20.0	50.0	200
Pentane	TBAd 9	Ave	853 574441	5274	22765	55859	233736	2.00 1000	10.0	40.0	100	400
Ethanol	TBAd 9	Ave	652 324925	3806	12127	27615	136354	40.0 20000	200	800	2000	8000
Ethyl ether	FB	Ave	2707 1209783	11334	48682	113301	493844	1.00 500	5.00	20.0	50.0	200
2-Methyl-1,3-butadiene	FB	Ave	1972 1286592	12222	57409	125108	509759	1.00 500	5.00	20.0	50.0	200
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	2540 1495544	13454	65261	144856	607703	1.00 500	5.00	20.0	50.0	200
Acrolein	TBAd 9	Ave	43024 260067	68048	137289	194228	233402	100 600	200	300	400	500
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	2642 2037775	17859	85447	186437	826705	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1-Dichloroethene	FB	Ave	2840 1772935	16512	73181	161412	713755	1.00 500	5.00	20.0	50.0	200
Acetone	BUT	Ave	4626 2247816	21569	84176	170123	835208	5.00 2500	25.0	100	250	1000
Iodomethane	FB	Ave	6284 3328599	29710	132441	296723	1351730	1.00 500	5.00	20.0	50.0	200
Isopropyl alcohol	TBAd9	Ave	1318 1006858	9280	27850	73465	372080	10.0 5000	50.0	200	500	2000
Carbon disulfide	FB	Ave	11025 6747163	59110	279359	600536	2738110	1.00 500	5.00	20.0	50.0	200
Allyl chloride	FB	Ave	1718 1063054	9204	39834	92903	419458	1.00 500	5.00	20.0	50.0	200
Methyl acetate	FB	Ave	8192 4525660	41899	169016	407699	1852948	5.00 2500	25.0	100	250	1000
Cyclopentene	FB	Ave	6447 3972770	37612	177362	384552	1583641	1.00 500	5.00	20.0	50.0	200
Acetonitrile	TBAd9	Ave	3834 2372014	24417	95264	232364	960303	10.0 5000	50.0	200	500	2000
Methylene Chloride	FB	Ave	4723 1991081	19227	79889	181680	813770	1.00 500	5.00	20.0	50.0	200
2-Methyl-2-propanol	TBAd9	Ave	2859 2049527	17436	67738	159702	811897	10.0 5000	50.0	200	500	2000
Methyl tert-butyl ether	FB	Ave	9553 4821366	44130	186023	422118	1945229	1.00 500	5.00	20.0	50.0	200
trans-1,2-Dichloroethene	FB	Ave	3743 1782685	16880	80537	168594	739878	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	FB	Ave	10947 5287559	50869	223777	496850	2167093	10.0 5000	50.0	200	500	2000
Hexane	FB	Ave	2529 1322645	12059	59322	120924	551122	1.00 500	5.00	20.0	50.0	200
Isopropyl ether	FB	Ave	10463 4868520	46113	201123	447712	1934379	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	5259 2847432	26626	123274	268611	1180749	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	TBAd9	Ave	767 582394	4541	16794	44757	224211	2.00 1000	10.0	40.0	100	400
2-Chloro-1,3-butadiene	FB	Ave	2681 1559435	14903	69558	147105	621205	1.00 500	5.00	20.0	50.0	200
Tert-butyl ethyl ether	FB	Ave	8937 4989835	44696	180680	431719	1914126	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	1152 783914	6617	25607	59102	290680	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	4334 2080986	19067	86161	190389	847403	1.00 500	5.00	20.0	50.0	200
Ethyl acetate	BUT	Ave	712 341616	3396	10988	28606	128550	2.00 1000	10.0	40.0	100	400
2-Butanone (MEK)	BUT	Ave	2212 996070	8880	38508	86024	388100	5.00 2500	25.0	100	250	1000
Methyl acrylate	FB	Ave	1893 1249269	10343	39373	103110	472198	1.00 500	5.00	20.0	50.0	200
Propionitrile	TBAd9	QuaF	4524 2174908	21236	90737	197364	862951	10.0 5000	50.0	200	500	2000
Tetrahydrofuran	BUT	Ave	1118 447526	4206	18148	39882	178650	2.00 1000	10.0	40.0	100	400
Chlorobromomethane	FB	Ave	1942 974063	9534	38880	86250	393968	1.00 500	5.00	20.0	50.0	200
Methacrylonitrile	FB	Ave	13008 6356915	60870	254479	591682	2496409	10.0 5000	50.0	200	500	2000
Chloroform	FB	Ave	5968 2988455	27467	125107	272878	1220501	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Ave	3957 2962448	26226	126241	272698	1203124	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	3791 2614740	21499	100065	223663	1028869	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	2669 2136251	14658	65476	156812	786413	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	3475 2216961	20754	96069	203012	887020	1.00 500	5.00	20.0	50.0	200
Isobutyl alcohol	TBAd9	QuaF	162 216109	1406	4663	13553	81225	25.0 12500	125	500	1250	5000
Benzene	CBNZd5	Ave	13613 6931298	62569	292712	627666	2815445	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	7130 4146079	36559	146614	347198	1618720	1.00 500	5.00	20.0	50.0	200
Tert-amyl methyl ether	FB	Ave	2618 1594326	13641	55706	131042	618591	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	4435 1900585	18068	75049	168480	759419	1.00 500	5.00	20.0	50.0	200
n-Heptane	FB	Ave	1917 1368235	12380	62666	130288	570299	1.00 500	5.00	20.0	50.0	200
n-Butanol	TBAd9	Ave	1458 +++++	7317	28552	74804	448127	25.0 +++++	125	500	1250	5000
Trichloroethene	FB	Ave	3385 1761007	15569	71616	158329	699064	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methylcyclohexane	FB	Ave	4588 3523493	30178	152898	323274	1419721	1.00 500	5.00	20.0	50.0	200
Ethyl acrylate	FB	Ave	1372 1062267	8742	41254	97612	422669	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	3555 1668789	15627	67480	149527	657952	1.00 500	5.00	20.0	50.0	200
Methyl methacrylate	FB	Ave	2511 1914788	14054	75197	161399	717839	2.00 1000	10.0	40.0	100	400
1,4-Dioxane	DXE	Ave	951 423474	4525	17054	40853	180543	20.0 10000	100	400	1000	4000
n-Propyl acetate	FB	Ave	2451 1835380	15217	59275	155626	695157	1.00 500	5.00	20.0	50.0	200
Dibromomethane	FB	Ave	2109 1090136	10094	40628	95036	425379	1.00 500	5.00	20.0	50.0	200
Dichlorobromomethane	FB	Ave	3461 2199212	16797	74020	173712	830137	1.00 500	5.00	20.0	50.0	200
2-Chloroethyl vinyl ether	FB	Ave	1715 819862	7168	29894	72153	303879	1.00 500	5.00	20.0	50.0	200
2-Nitropropane	FB	Qua2	1002 507049	3417	11748	30330	157216	2.00 1000	10.0	40.0	100	400
Epichlorohydrin	BUT	Ave	5548 2869389	25147	111733	263399	1112090	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	CBNZ d5	Ave	4425 2684997	21303	91461	221866	1012530	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone (MIBK)	BUT	Ave	12481 6618828	61763	277708	613056	2646906	5.00 2500	25.0	100	250	1000
Toluene	CBNZ d5	Ave	14378 7265358	65401	306699	672465	2844225	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBNZ d5	Ave	2994 2255839	16410	66364	173886	838678	1.00 500	5.00	20.0	50.0	200
Ethyl methacrylate	CBNZ d5	Ave	2452 1925397	13334	55590	149767	727790	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBNZ d5	Ave	2474 1261032	11257	47747	111473	485427	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBNZ d5	Ave	2933 1662882	14404	71957	154721	647808	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBNZ d5	Ave	4652 2316842	21633	89354	208906	897844	1.00 500	5.00	20.0	50.0	200
2-Hexanone	BUT	Ave	8232 4347559	40740	174390	410313	1681806	5.00 2500	25.0	100	250	1000
n-Butyl acetate	CBNZ d5	Ave	2400 1936008	13802	54979	151015	708377	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorodibromomethane	CBNZ d5	Ave	1876 1644268	10168	46319	117010	592492	1.00 500	5.00	20.0	50.0	200
Ethylene Dibromide	CBNZ d5	Ave	2502 1496674	12417	52587	130540	572904	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBNZ d5	Ave	9505 4655086	42274	194351	429065	1819055	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBNZ d5	Ave	4750 2569399	22352	112222	235408	999208	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2409 1787877	10956	51299	122707	657173	1.00 500	5.00	20.0	50.0	200
m-Xylene & p-Xylene	CBNZ d5	Ave	6576 3146696	27885	139462	286909	1230120	1.00 500	5.00	20.0	50.0	200
n-Butyl acrylate	CBNZ d5	Qua2	1178 1186081	7144	28946	80651	421664	1.00 500	5.00	20.0	50.0	200
o-Xylene	CBNZ d5	Ave	6372 3307479	28747	140935	297313	1292283	1.00 500	5.00	20.0	50.0	200
Styrene	CBNZ d5	Ave	9897 5231861	46395	219181	479636	2036683	1.00 500	5.00	20.0	50.0	200
Amyl acetate (mixed isomers)	DCBd 4	Qua2	2445 2283763	14882	59190	163124	820885	1.00 500	5.00	20.0	50.0	200
Bromoform	CBNZ d5	Qua2	1059 990013	5365	24317	63790	345310	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBNZ d5	Ave	15494 8688045	75804	387100	781028	3382089	1.00 500	5.00	20.0	50.0	200
Bromobenzene	DCBd 4	Ave	3804 1960480	17643	80602	176334	746511	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	4472 2125548	19294	82310	186188	820959	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCBd 4	Ave	18296 9752240	91016	456182	918223	3853562	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichloropropane	DCBd 4	Ave	1185 525004	4610	20587	46836	202246	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	891 432898	3496	15281	34998	159629	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCBd 4	Ave	13213 6634312	60361	294302	602207	2563935	1.00 500	5.00	20.0	50.0	200
4-Ethyltoluene	DCBd 4	Ave	16816 8039927	73604	373919	754904	3055173	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCBd 4	Ave	13850 7419293	63158	314593	651133	2851630	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCBd 4	Ave	12191 5587278	50171	250013	512000	2169310	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Butyl Methacrylate	DCBd 4	Qua2	2019 2465805	14013	59915	167938	885743	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCBd 4	Ave	10270 6286078	50196	244730	537415	2388643	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCBd 4	Ave	13681 7487873	65740	324823	667302	2881792	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCBd 4	Ave	16585 9942242	86292	430828	888620	3866359	1.00 500	5.00	20.0	50.0	200
4-Isopropyltoluene	DCBd 4	Ave	14283 8223617	70704	360983	730172	3159292	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCBd 4	Ave	8037 3720054	34468	163978	339525	1427724	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCBd 4	Ave	8251 3719052	35549	164326	337094	1429610	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCBd 4	Ave	3372 +++++	18538	85371	201688	1095555	1.00 +++++	5.00	20.0	50.0	200
Indan	DCBd 4	Ave	15496 7563474	67270	324294	675756	2843168	1.00 500	5.00	20.0	50.0	200
p-Diethylbenzene	DCBd 4	Ave	8438 4325779	39836	202611	397971	1639675	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCBd 4	Ave	8234 4208673	38724	202019	398848	1652429	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCBd 4	Ave	7755 3775865	34724	160427	337416	1449883	1.00 500	5.00	20.0	50.0	200
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	15750 8222922	69158	339075	715891	3053716	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	477 396837	2663	10773	28974	144441	1.00 500	5.00	20.0	50.0	200
1,3,5-Trichlorobenzene	DCBd 4	Ave	6584 3049118	28266	141077	272966	1138523	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	6031 3004508	27676	131399	263817	1153986	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCBd 4	Ave	2433 1413436	11675	54827	122059	537319	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCBd 4	Ave	18439 8150505	78160	330157	738292	3163500	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichlorobenzene	DCBd 4	Ave	7047 2991837	27898	124844	263635	1173351	1.00 500	5.00	20.0	50.0	200
Dibromofluoromethane (Surr)	FB	Ave	143368 155124	151515	141000	143405	153637	50.0 50.0	50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	128714 160406	140562	130597	136628	150305	50.0 50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 507960

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/03/2018 07:38 Calibration End Date: 04/03/2018 15:21 Calibration ID: 67510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene-d8 (Surr)	CBNZ d5	Ave	549218 610573	580804	540949	572120	575989	50.0 50.0	50.0	50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	150360 166600	157487	149155	153022	156212	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Qua2 = Quadratic 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Apr-2018 07:38:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0069732-003
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-Apr-2018 16:22:52 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: martineze Date: 03-Apr-2018 16:47:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.590	0.012	35	1224	1.00	0.7036	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	97	4111	1.00	0.7507	
3 Chloromethane	50	1.797	1.797	0.000	98	5809	1.00	1.09	
5 Butadiene	54	1.901	1.901	0.000	90	2738	1.00	0.6888	M
4 Vinyl chloride	62	1.907	1.907	0.000	96	4404	1.00	0.8142	
6 Bromomethane	94	2.199	2.200	-0.001	89	3956	1.00	1.01	
7 Chloroethane	64	2.260	2.267	-0.007	97	1908	1.00	0.7864	
9 Dichlorofluoromethane	67	2.455	2.462	-0.007	96	6595	1.00	0.9659	
8 Trichlorofluoromethane	101	2.455	2.474	-0.019	59	5088	1.00	0.9081	
10 Pentane	72	2.492	2.492	0.000	97	853	2.00	2.10	
12 Ethanol	46	2.669	2.687	-0.018	3	652	40.0	53.1	a
11 Ethyl ether	59	2.687	2.687	0.000	91	2707	1.00	1.16	
13 2-Methyl-1,3-butadiene	53	2.718	2.712	0.006	94	1972	1.00	0.8259	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.742	0.006	85	2540	1.00	0.9100	
15 Acrolein	56	2.876	2.876	0.000	95	43024	100.0	128.9	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.882	0.012	30	2642	1.00	0.7365	
17 1,1-Dichloroethene	96	2.913	2.913	0.000	85	2840	1.00	0.8802	
18 Acetone	43	2.998	2.998	0.000	89	4626	5.00	6.29	M
19 Iodomethane	142	3.077	3.071	0.006	97	6284	1.00	1.03	
22 Isopropyl alcohol	45	3.071	3.090	-0.019	29	1318	10.0	10.8	
20 Carbon disulfide	76	3.120	3.108	0.012	98	11025	1.00	0.9057	
21 3-Chloro-1-propene	76	3.242	3.236	0.006	84	1718	1.00	0.9219	
23 Methyl acetate	43	3.248	3.242	0.006	96	8192	5.00	4.96	
24 Cyclopentene	67	3.260	3.260	0.000	56	6447	1.00	0.8676	
29 Acetonitrile	41	3.303	3.309	-0.006	39	3834	10.0	11.0	Ma
26 Methylene Chloride	84	3.370	3.370	0.000	41	4723	1.00	1.21	
* 25 TBA-d9 (IS)	65	3.358	3.382	-0.024	0	173165	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.419	3.461	-0.042	1	2859	10.0	10.9	
28 Methyl tert-butyl ether	73	3.535	3.529	0.005	95	9553	1.00	1.07	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	92	3743	1.00	1.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.632	0.006	95	10947	10.0	10.7	
32 Hexane	43	3.717	3.718	-0.001	89	2529	1.00	1.00	
33 Isopropyl ether	45	3.925	3.925	0.000	96	10463	1.00	1.12	
35 Vinyl acetate	86	3.967	3.967	0.000	99	767	2.00	2.17	
34 1,1-Dichloroethane	63	3.973	3.967	0.006	91	5259	1.00	0.9730	
36 2-Chloro-1,3-butadiene	88	4.010	4.016	-0.006	90	2681	1.00	0.9142	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	92	8937	1.00	1.01	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	172053	250.0	250.0	
39 2,2-Dichloropropane	79	4.449	4.480	-0.031	47	1152	1.00	0.9042	
41 Ethyl acetate	70	4.510	4.498	0.012	84	712	2.00	2.54	M
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	70	4334	1.00	1.10	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	96	2212	5.00	6.54	
44 Methyl acrylate	55	4.577	4.559	0.018	56	1893	1.00	0.9193	
43 Propionitrile	54	4.650	4.644	0.006	96	4524	10.0	14.8	
45 Tetrahydrofuran	72	4.729	4.723	0.006	51	1118	2.00	2.80	
46 Chlorobromomethane	128	4.742	4.736	0.006	38	1942	1.00	1.06	
47 Methacrylonitrile	67	4.754	4.748	0.006	89	13008	10.0	10.8	
48 Chloroform	83	4.784	4.784	0.000	99	5968	1.00	1.06	
49 Cyclohexane	84	4.937	4.925	0.012	31	3957	1.00	0.7516	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	36	3791	1.00	0.8477	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	143368	50.0	50.3	
52 Carbon tetrachloride	117	5.065	5.065	0.000	95	2669	1.00	0.8256	
53 1,1-Dichloropropene	75	5.095	5.083	0.012	96	3475	1.00	0.8559	
56 Isobutyl alcohol	74	5.193	5.211	-0.018	1	162	25.0	15.3	Ma
54 Benzene	78	5.284	5.284	0.000	94	13613	1.00	1.06	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.303	-0.001	0	128714	50.0	47.4	
58 Tert-amyl methyl ether	87	5.339	5.333	0.006	94	2618	1.00	0.9593	
57 Isopropyl acetate	43	5.327	5.333	-0.006	95	7130	1.00	0.9863	a
59 1,2-Dichloroethane	62	5.376	5.376	0.000	84	4435	1.00	1.21	a
60 n-Heptane	57	5.424	5.431	-0.007	88	1917	1.00	0.7622	
* 61 Fluorobenzene	96	5.577	5.577	0.000	99	454754	50.0	50.0	
62 n-Butanol	56	5.888	5.863	0.025	14	1458	25.0	29.1	Ma
63 Trichloroethene	95	5.936	5.937	-0.001	97	3385	1.00	1.04	
64 Ethyl acrylate	56	6.077	6.065	0.012	81	1372	1.00	0.7538	M
65 Methylcyclohexane	83	6.071	6.065	0.006	94	4588	1.00	0.7378	
66 1,2-Dichloropropane	63	6.235	6.229	0.006	89	3555	1.00	1.13	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	26397	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.290	0.006	61	2511	2.00	1.59	
69 1,4-Dioxane	88	6.351	6.333	0.018	28	951	20.0	23.5	M
70 n-Propyl acetate	43	6.345	6.339	0.006	85	2451	1.00	0.8178	
71 Dibromomethane	93	6.363	6.363	0.000	93	2109	1.00	1.06	
72 Dichlorobromomethane	83	6.516	6.510	0.006	99	3461	1.00	0.9586	
74 2-Nitropropane	41	6.863	6.839	0.024	78	1002	2.00	2.00	
73 2-Chloroethyl vinyl ether	63	6.851	6.839	0.012	77	1715	1.00	1.16	
75 Epichlorohydrin	57	6.955	6.955	0.000	98	5548	20.0	23.2	
76 cis-1,3-Dichloropropene	75	7.022	7.010	0.012	90	4425	1.00	1.00	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	93	12481	5.00	5.53	
$ 78 Toluene-d8 (Surr)	98	7.265	7.266	-0.001	99	549218	50.0	50.8	
79 Toluene	91	7.345	7.339	0.006	93	14378	1.00	1.07	
80 trans-1,3-Dichloropropene	75	7.692	7.686	0.006	92	2994	1.00	0.8756	
81 Ethyl methacrylate	69	7.711	7.705	0.006	81	2452	1.00	0.8497	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	92	2474	1.00	1.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.961	0.012	90	2933	1.00	0.9780	
84 1,3-Dichloropropane	76	8.131	8.119	0.012	92	4652	1.00	1.10	
85 2-Hexanone	43	8.174	8.168	0.006	93	8232	5.00	5.60	
86 n-Butyl acetate	43	8.284	8.278	0.006	91	2400	1.00	0.8336	
87 Chlorodibromomethane	129	8.369	8.363	0.006	92	1876	1.00	0.8079	
88 Ethylene Dibromide	107	8.527	8.521	0.006	98	2502	1.00	0.9889	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	85	347463	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	95	9505	1.00	1.10	
92 Ethylbenzene	106	9.204	9.198	0.006	97	4750	1.00	1.02	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.216	0.013	84	2409	1.00	0.9316	
93 m-Xylene & p-Xylene	106	9.357	9.344	0.013	0	6576	1.00	1.12	
94 n-Butyl acrylate	73	9.789	9.783	0.006	99	1178	1.00	1.01	
95 o-Xylene	106	9.814	9.814	0.000	93	6372	1.00	1.06	
96 Styrene	104	9.850	9.844	0.006	97	9897	1.00	1.04	
97 Amyl acetate (mixed isomer	43	10.027	10.027	0.000	95	2445	1.00	1.01	
98 Bromoform	173	10.094	10.082	0.012	79	1059	1.00	1.02	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	15494	1.00	0.9864	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	89	150360	50.0	51.2	
101 Bromobenzene	156	10.558	10.558	0.000	97	3804	1.00	1.03	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.594	0.006	98	4472	1.00	1.11	
103 N-Propylbenzene	91	10.625	10.625	0.000	100	18296	1.00	0.9575	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	93	1185	1.00	1.18	
105 trans-1,4-Dichloro-2-buten	53	10.673	10.661	0.012	62	891	1.00	1.15	
106 2-Chlorotoluene	91	10.740	10.734	0.006	91	13213	1.00	1.03	
107 4-Ethyltoluene	105	10.740	10.741	-0.001	89	16816	1.00	1.06	
108 1,3,5-Trimethylbenzene	105	10.807	10.802	0.005	93	13850	1.00	1.00	
109 4-Chlorotoluene	91	10.856	10.850	0.006	96	12191	1.00	1.11	
110 Butyl Methacrylate	87	10.893	10.893	0.000	88	2019	1.00	1.02	
111 tert-Butylbenzene	119	11.100	11.100	0.000	93	10270	1.00	0.9229	
112 1,2,4-Trimethylbenzene	105	11.167	11.161	0.006	97	13681	1.00	0.9717	
113 sec-Butylbenzene	105	11.307	11.308	-0.001	99	16585	1.00	0.8996	
114 4-Isopropyltoluene	119	11.442	11.436	0.006	98	14283	1.00	0.9330	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	95	8037	1.00	1.10	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	95	194153	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.533	0.006	93	8251	1.00	1.12	
118 Benzyl chloride	91	11.667	11.661	0.006	99	3372	1.00	0.8114	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	93	15496	1.00	1.07	
120 p-Diethylbenzene	119	11.777	11.771	0.006	92	8438	1.00	1.00	
121 n-Butylbenzene	92	11.801	11.795	0.006	97	8234	1.00	0.9890	
122 1,2-Dichlorobenzene	146	11.868	11.862	0.006	95	7755	1.00	1.07	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	15750	1.00	1.04	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	58	477	1.00	0.7977	
125 1,3,5-Trichlorobenzene	180	12.642	12.643	-0.001	96	6584	1.00	1.10	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	93	6031	1.00	1.04	
127 Hexachlorobutadiene	225	13.216	13.210	0.006	89	2433	1.00	0.9585	
128 Naphthalene	128	13.331	13.332	-0.001	99	18439	1.00	1.15	
129 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	95	7047	1.00	1.19	
S 130 1,2-Dichloroethene, Total	100				0		2.00	2.17	
S 131 Xylenes, Total	100				0		2.00	2.18	
S 132 Total BTEX	1				0		5.00	5.34	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	1.00	Units: uL	
8260MIX1COMB_00076	Amount Added:	1.00	Units: uL	
ACROLEIN W_00075	Amount Added:	10.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-Apr-2018 16:22:54 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D

Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9 Operator ID:

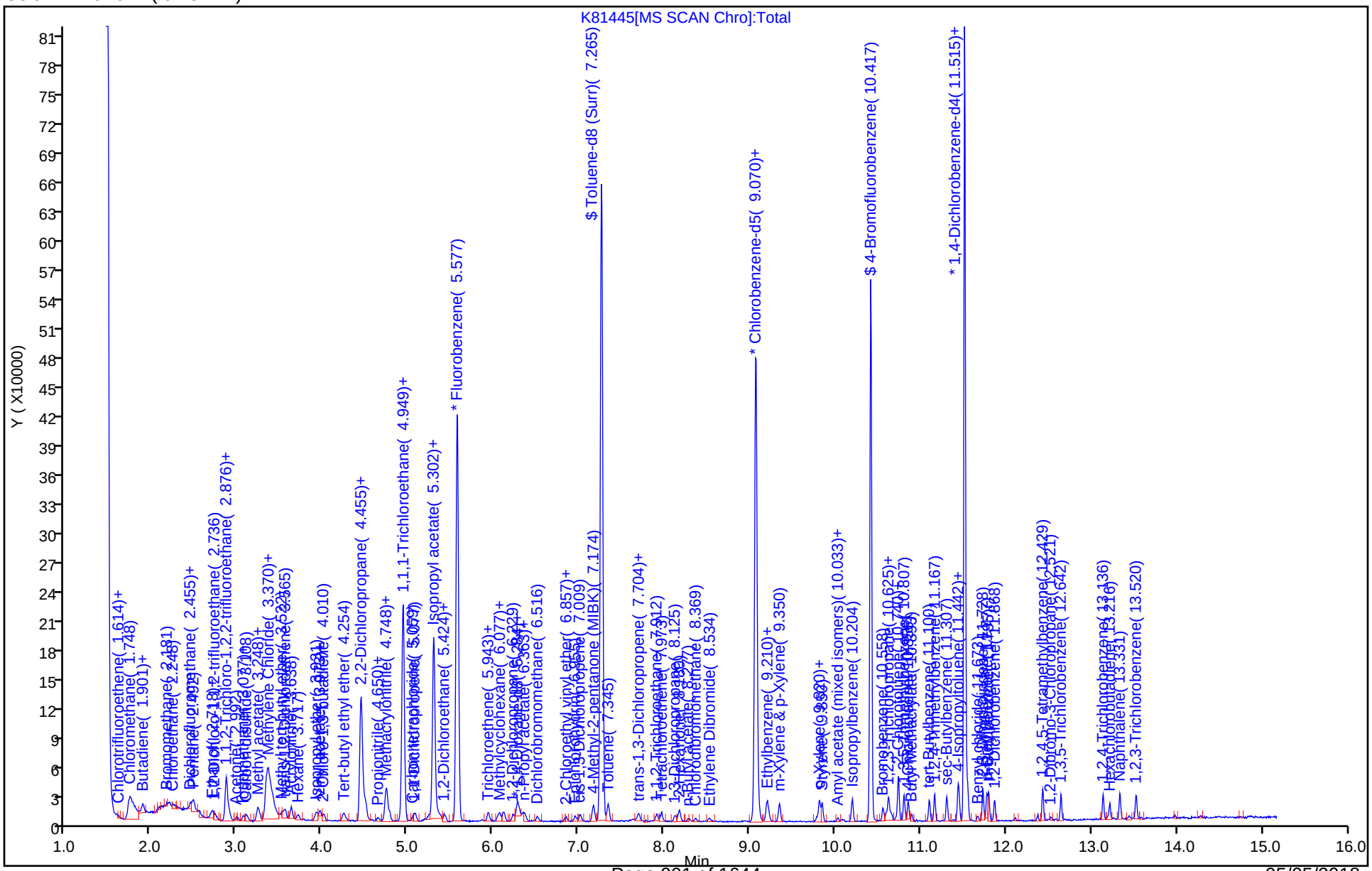
Lims ID: STD1 Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

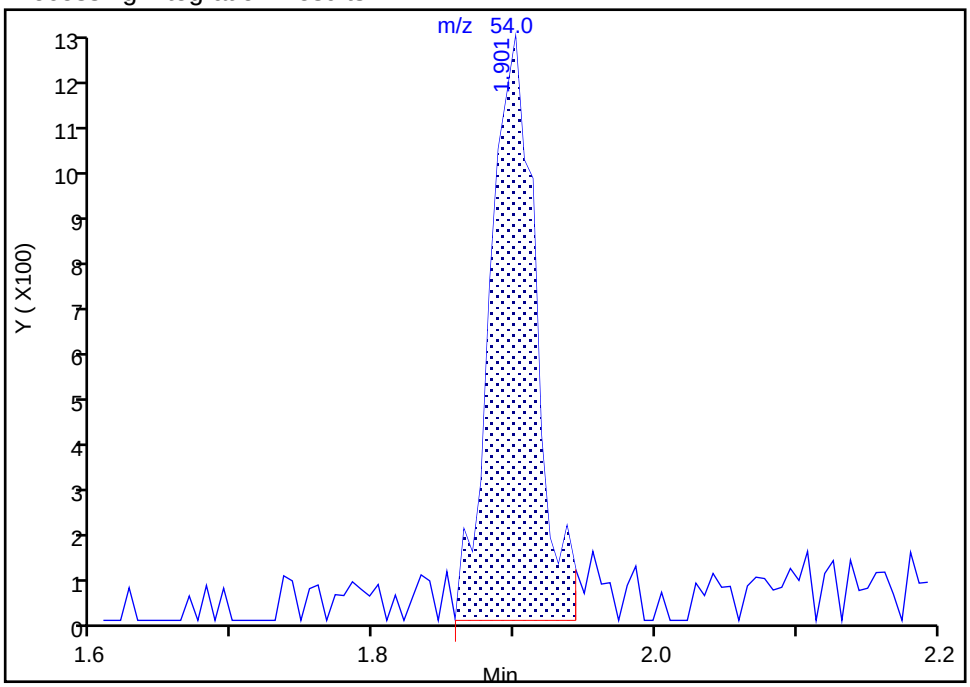
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

5 Butadiene, CAS: 106-99-0

Signal: 1

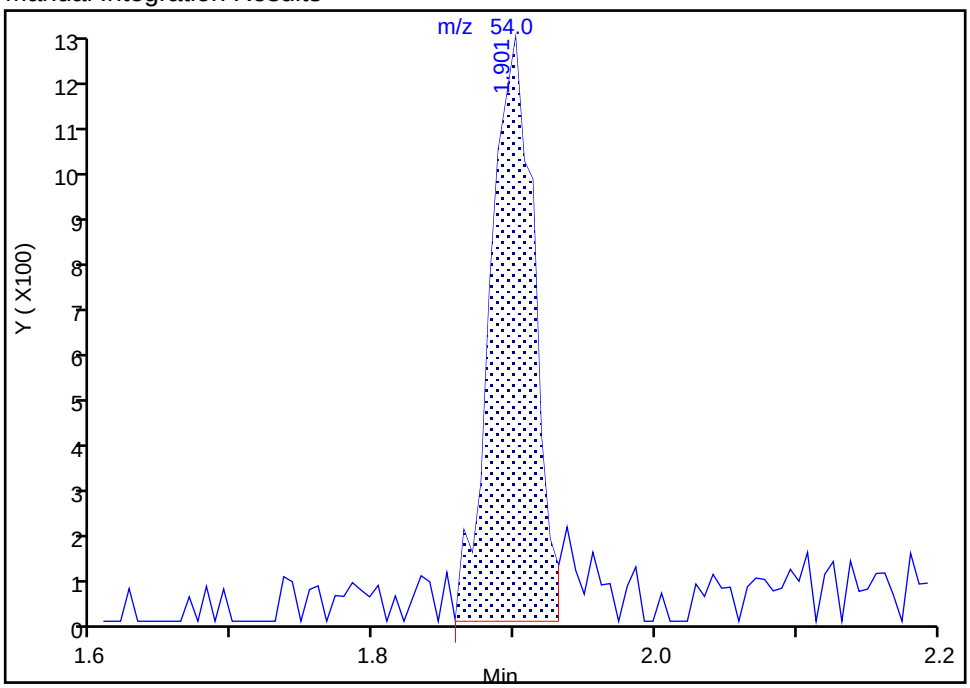
Processing Integration Results

RT: 1.90
Area: 2854
Amount: 1.477321
Amount Units: ug/l



Manual Integration Results

RT: 1.90
Area: 2738
Amount: 0.688772
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:03:55
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

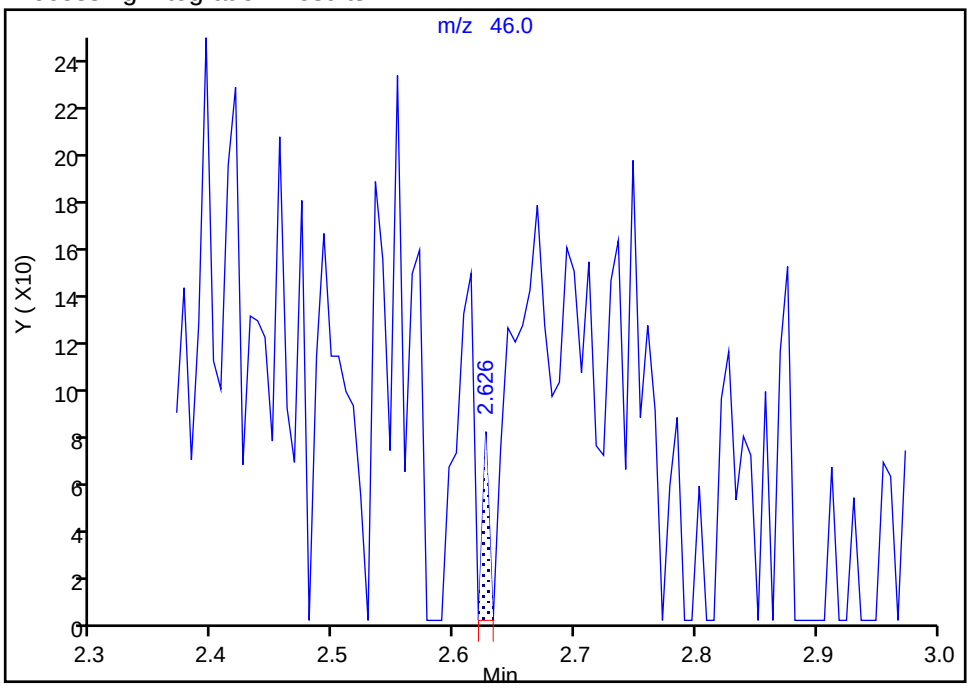
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethanol, CAS: 64-17-5

Signal: 1

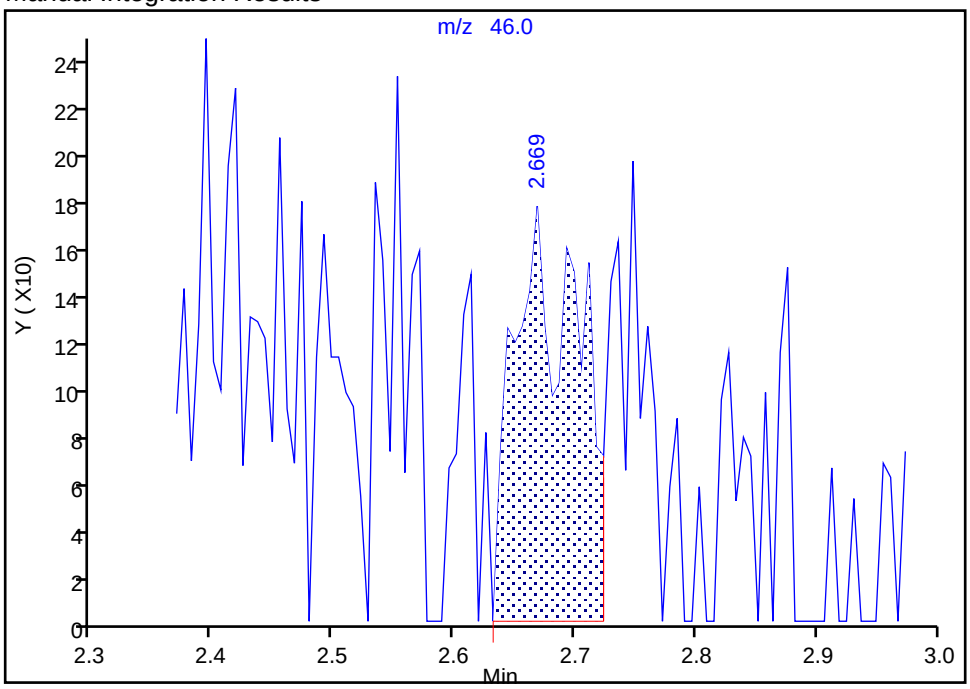
Processing Integration Results

RT: 2.63
Area: 29
Amount: 2.386350
Amount Units: ug/l



Manual Integration Results

RT: 2.67
Area: 652
Amount: 53.095239
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:44:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

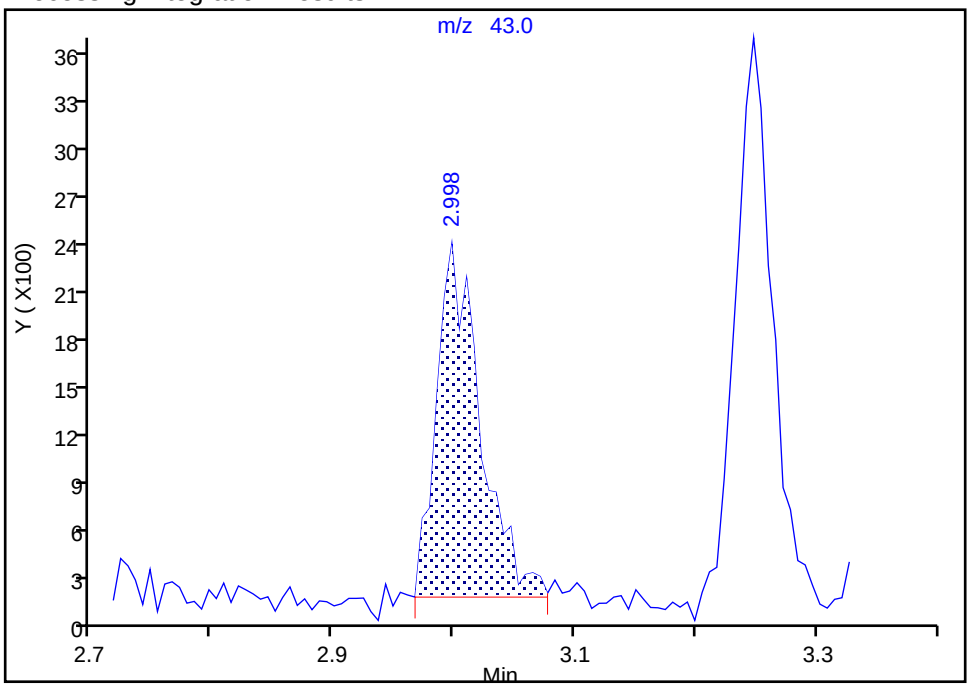
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

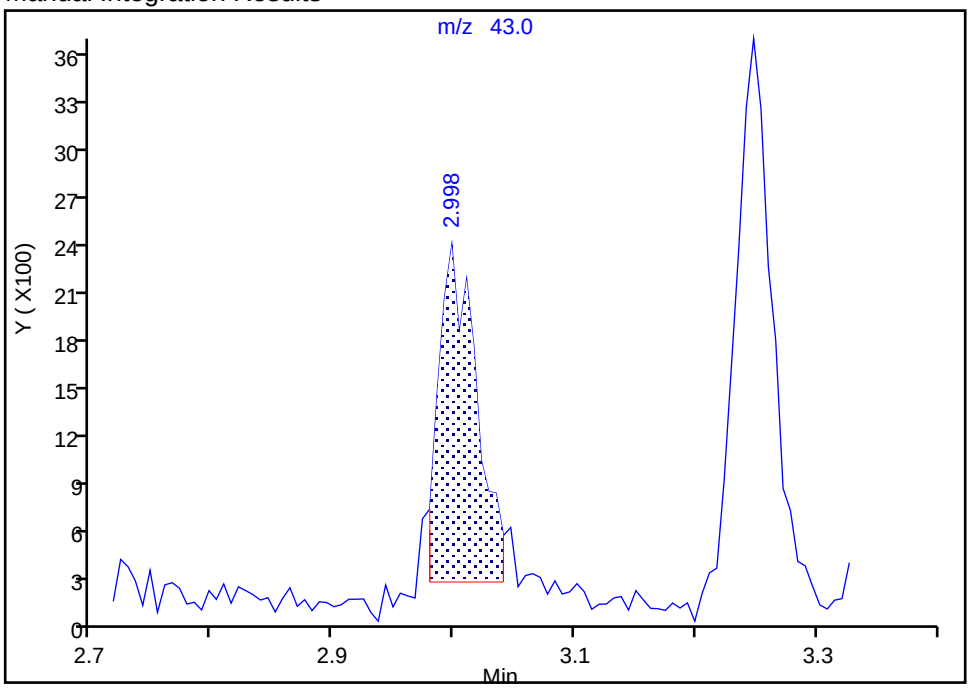
Processing Integration Results

RT: 3.00
Area: 5561
Amount: 18.648069
Amount Units: ug/l



Manual Integration Results

RT: 3.00
Area: 4626
Amount: 6.287486
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:07:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

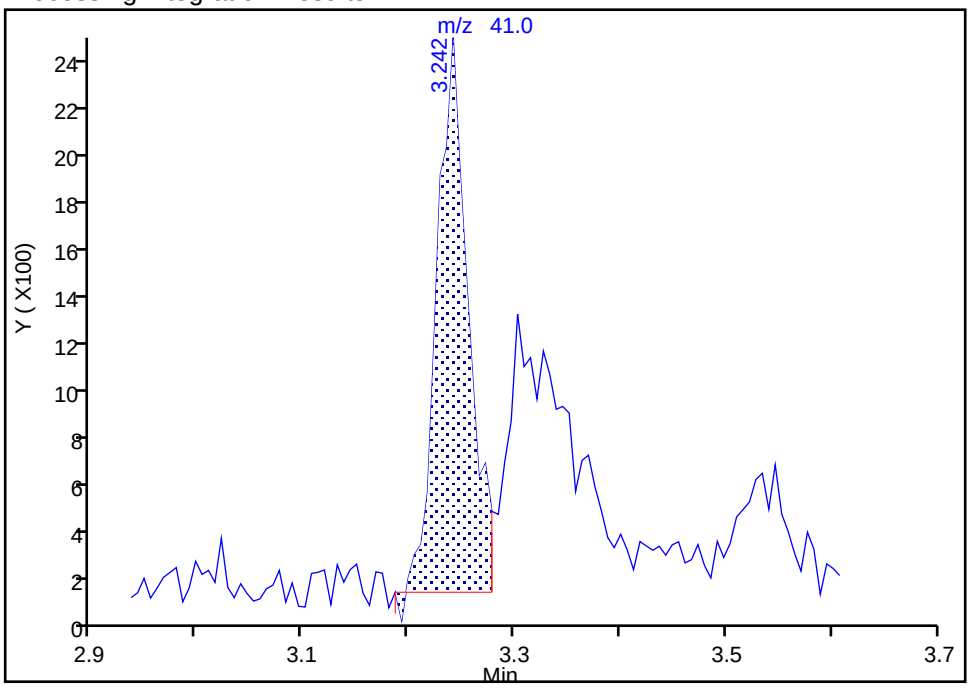
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

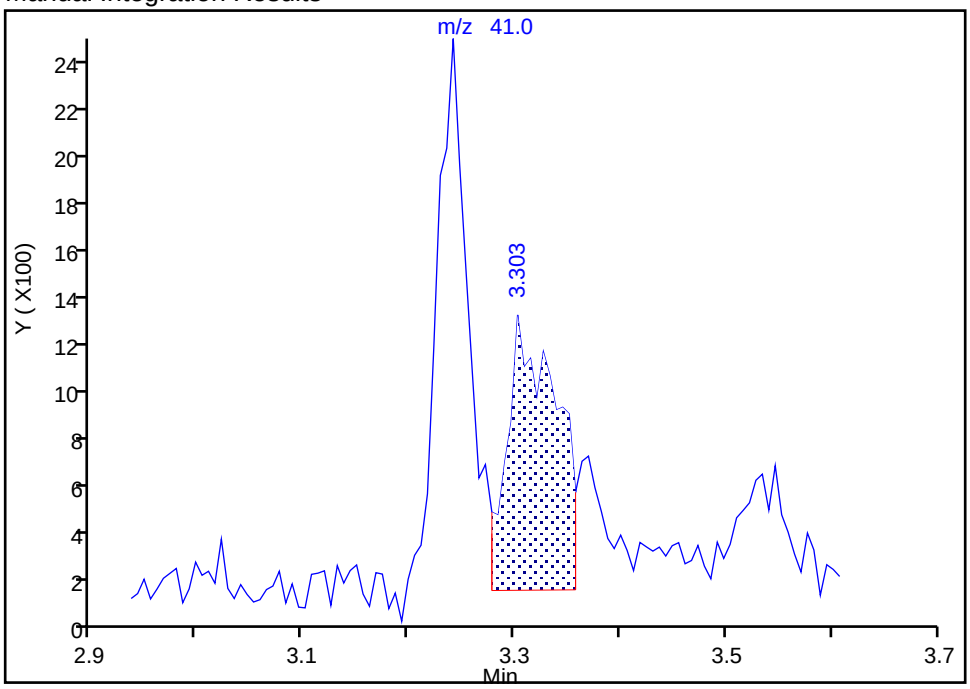
Processing Integration Results

RT: 3.24
Area: 4876
Amount: 13.317464
Amount Units: ug/l



Manual Integration Results

RT: 3.30
Area: 3834
Amount: 11.047790
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:07:46
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

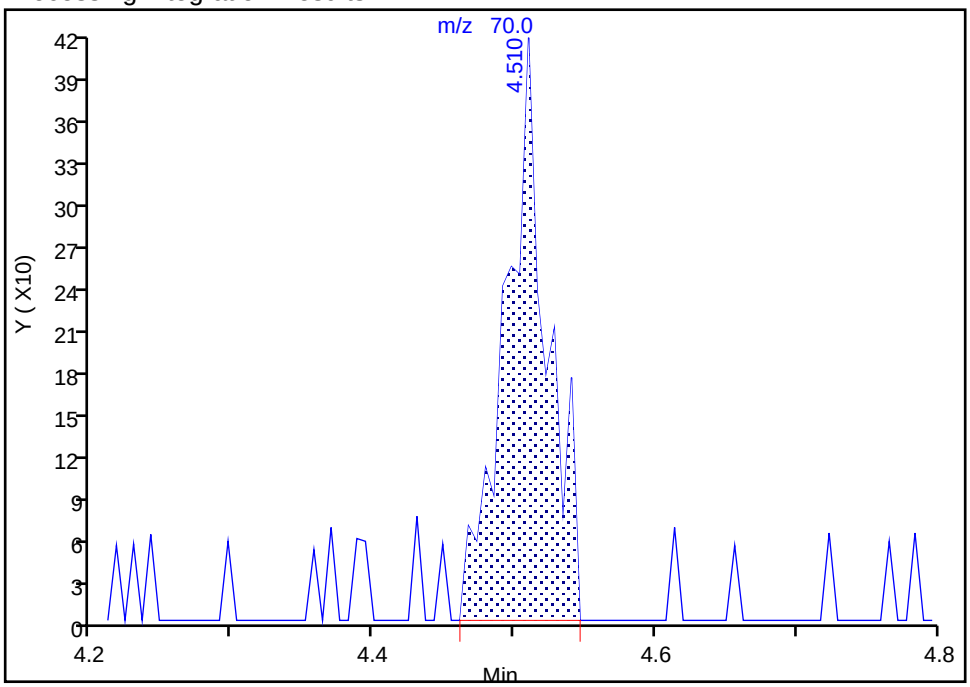
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

41 Ethyl acetate, CAS: 141-78-6

Signal: 1

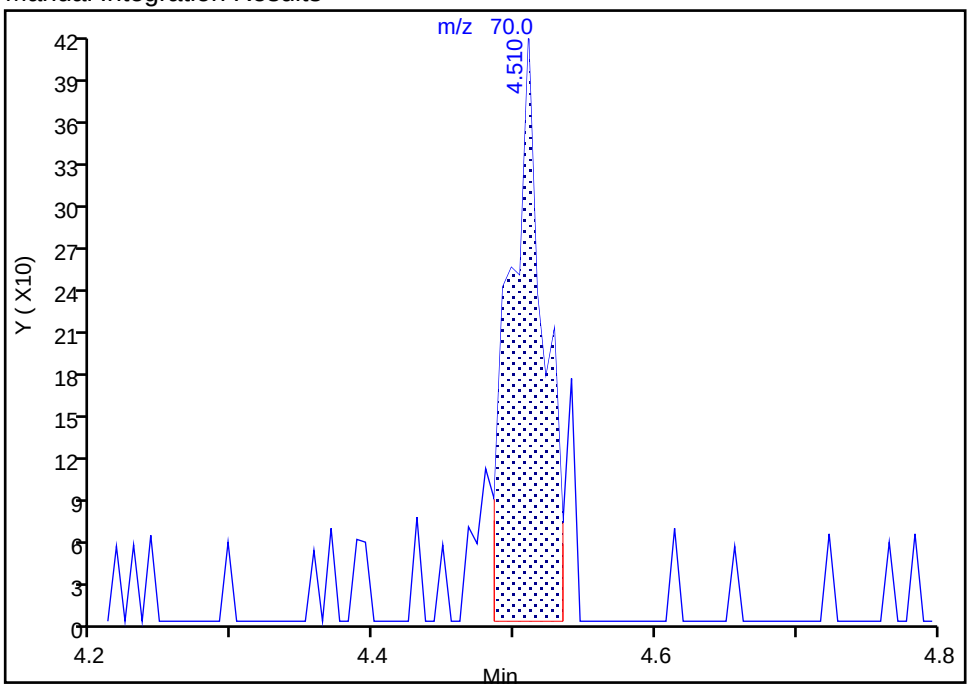
Processing Integration Results

RT: 4.51
Area: 861
Amount: 6.193003
Amount Units: ug/l



Manual Integration Results

RT: 4.51
Area: 712
Amount: 2.541686
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:08:11
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

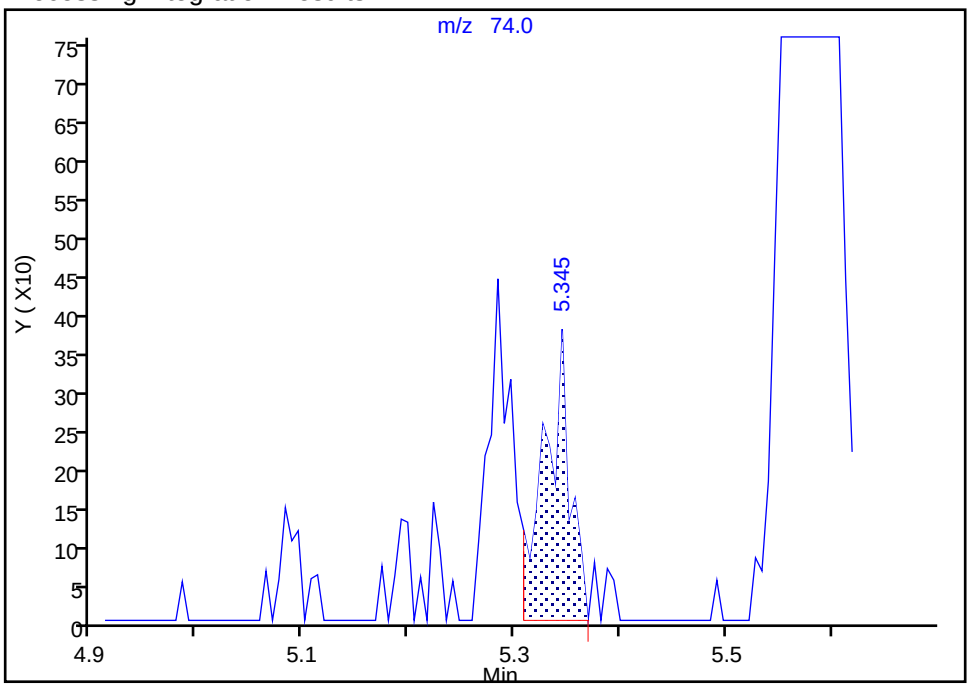
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

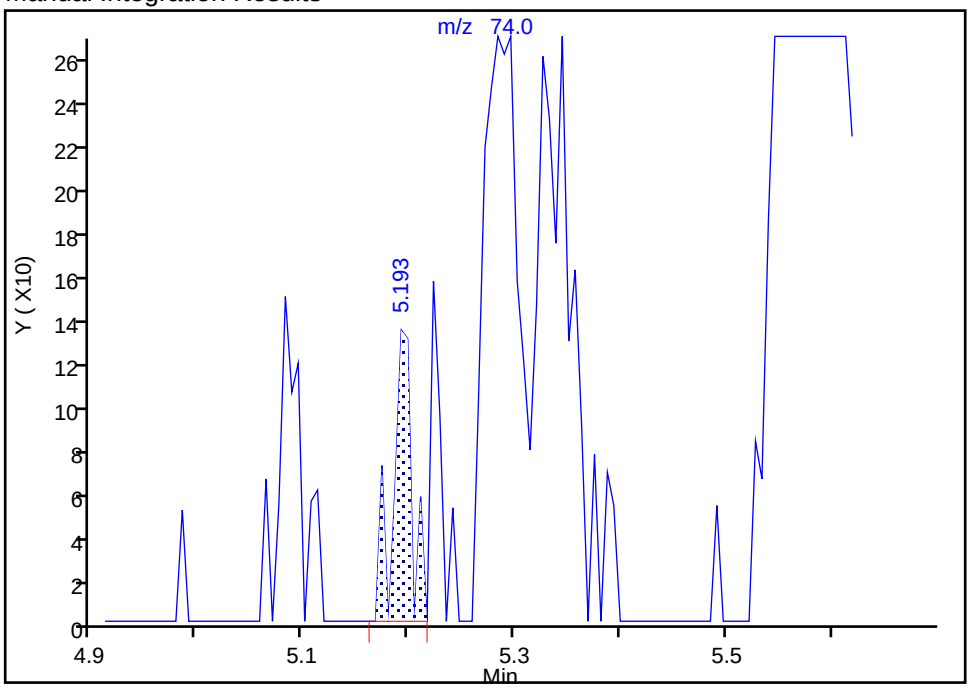
Processing Integration Results

RT: 5.35
Area: 635
Amount: 60.076128
Amount Units: ug/l



Manual Integration Results

RT: 5.19
Area: 162
Amount: 15.338237
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:10:35
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

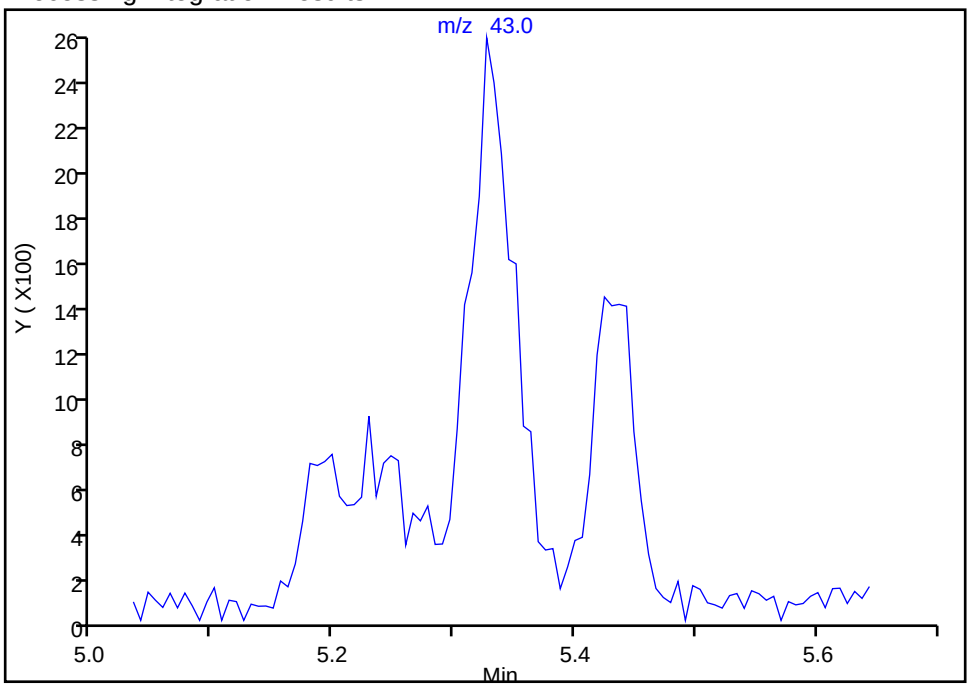
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

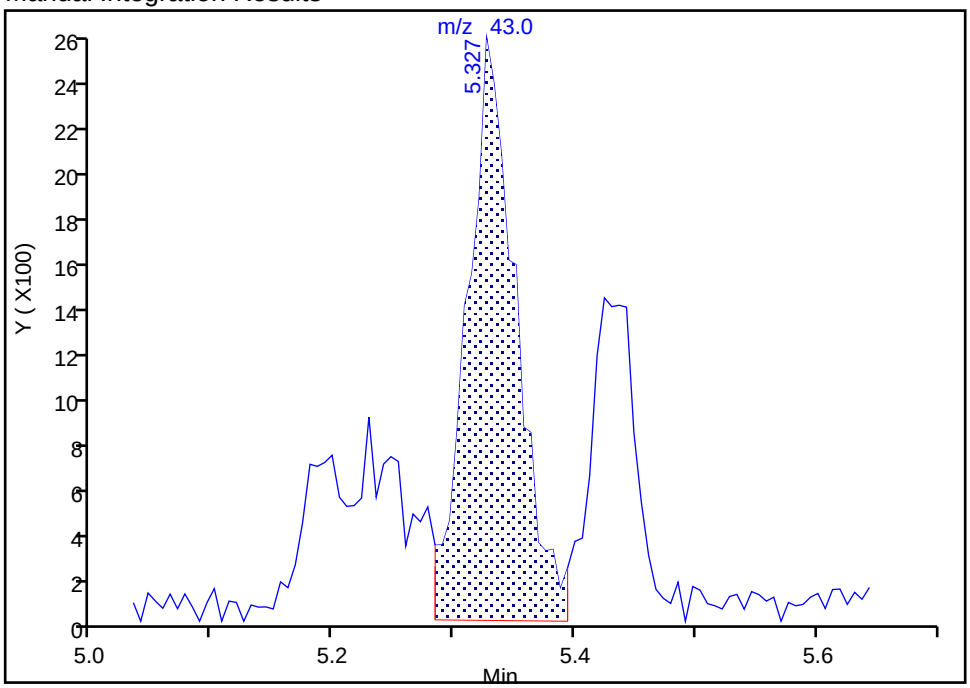
Not Detected
Expected RT: 5.33

Processing Integration Results



Manual Integration Results

RT: 5.33
Area: 7130
Amount: 0.986336
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:45:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

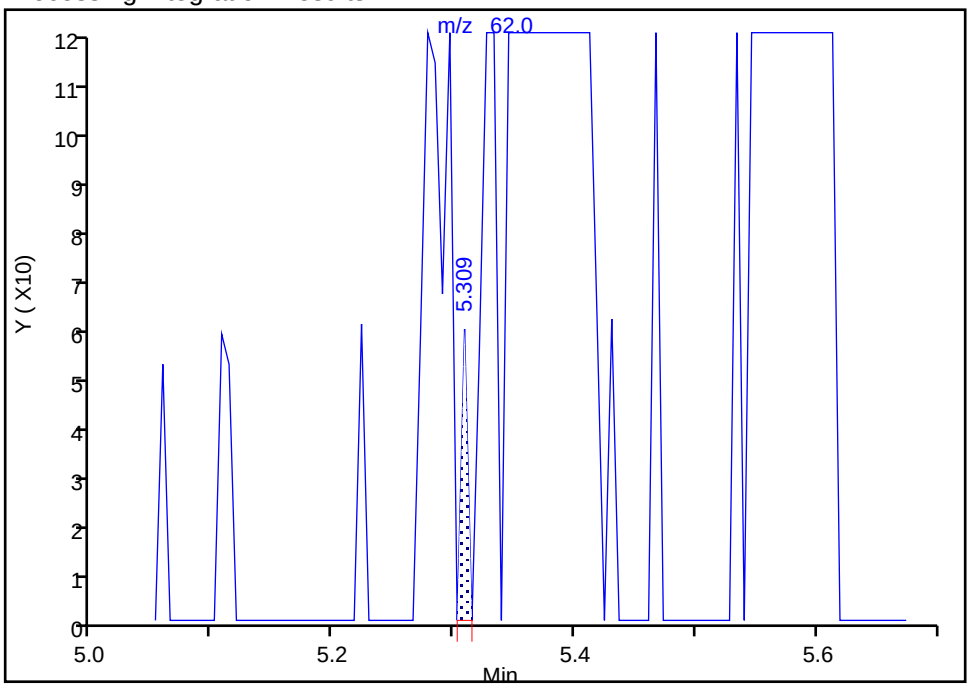
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

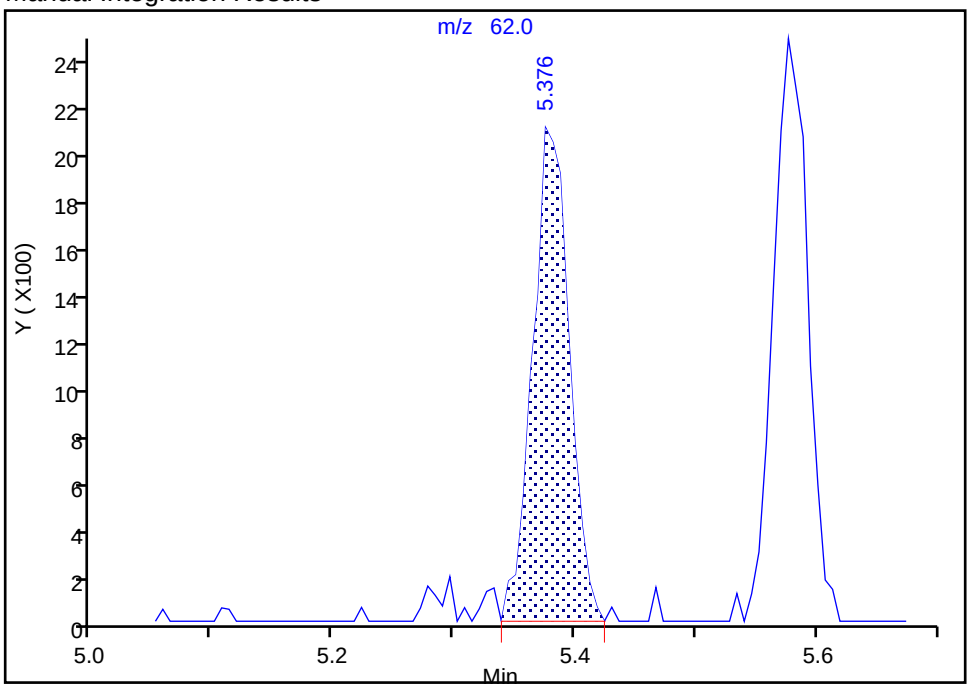
Processing Integration Results

RT: 5.31
Area: 21
Amount: 0.005758
Amount Units: ug/l



Manual Integration Results

RT: 5.38
Area: 4435
Amount: 1.213046
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:46:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

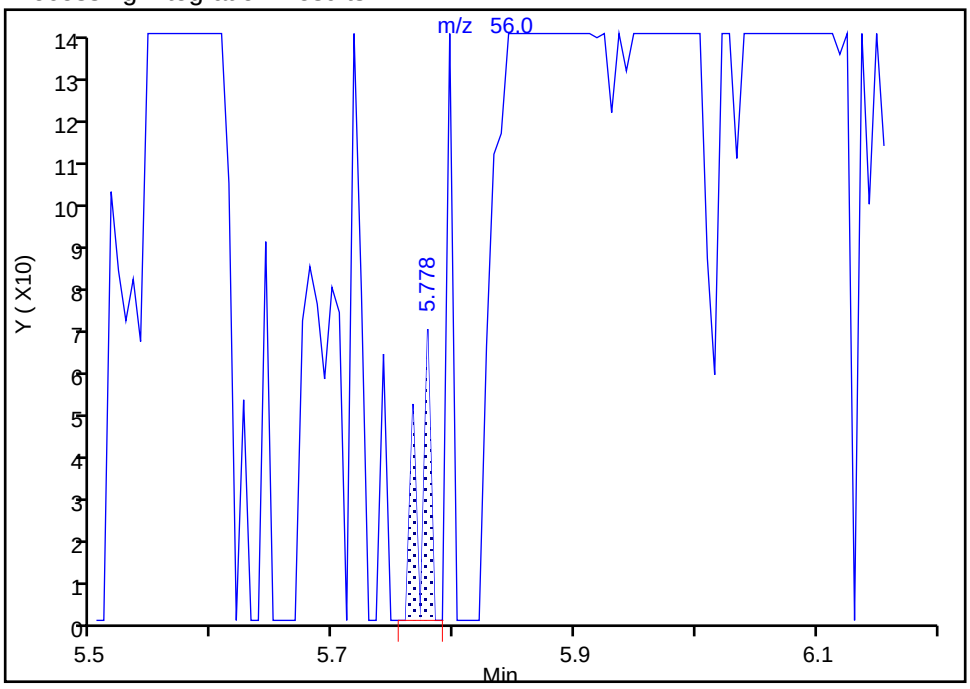
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

62 n-Butanol, CAS: 71-36-3

Signal: 1

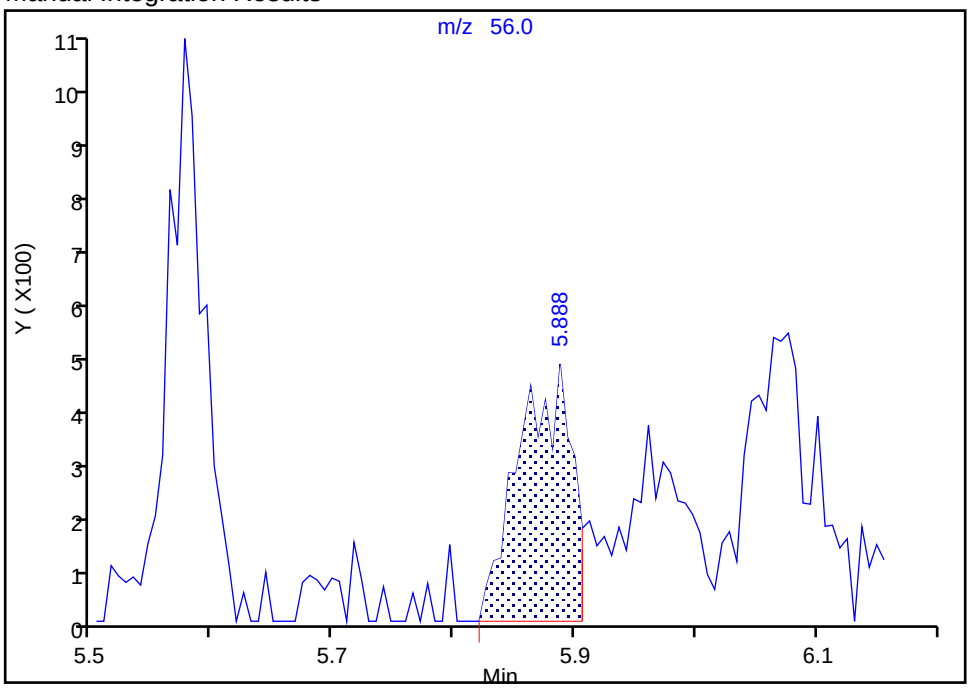
Processing Integration Results

RT: 5.78
Area: 45
Amount: 0.825310
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 1458
Amount: 29.070762
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:11:48
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

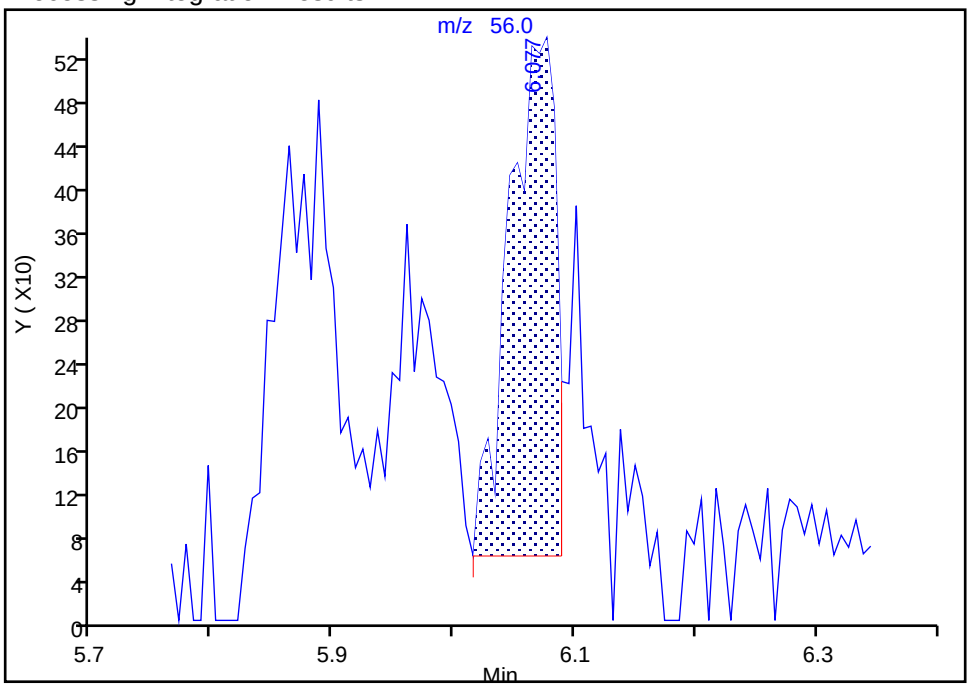
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

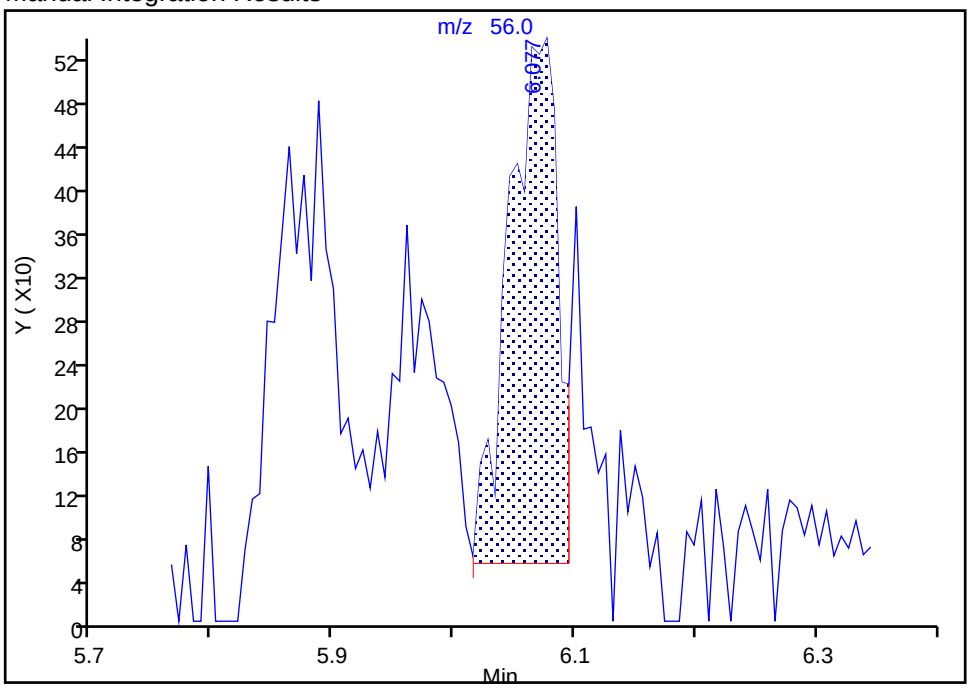
Processing Integration Results

RT: 6.08
Area: 1283
Amount: 0.445527
Amount Units: ug/l



Manual Integration Results

RT: 6.08
Area: 1372
Amount: 0.753825
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:13:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

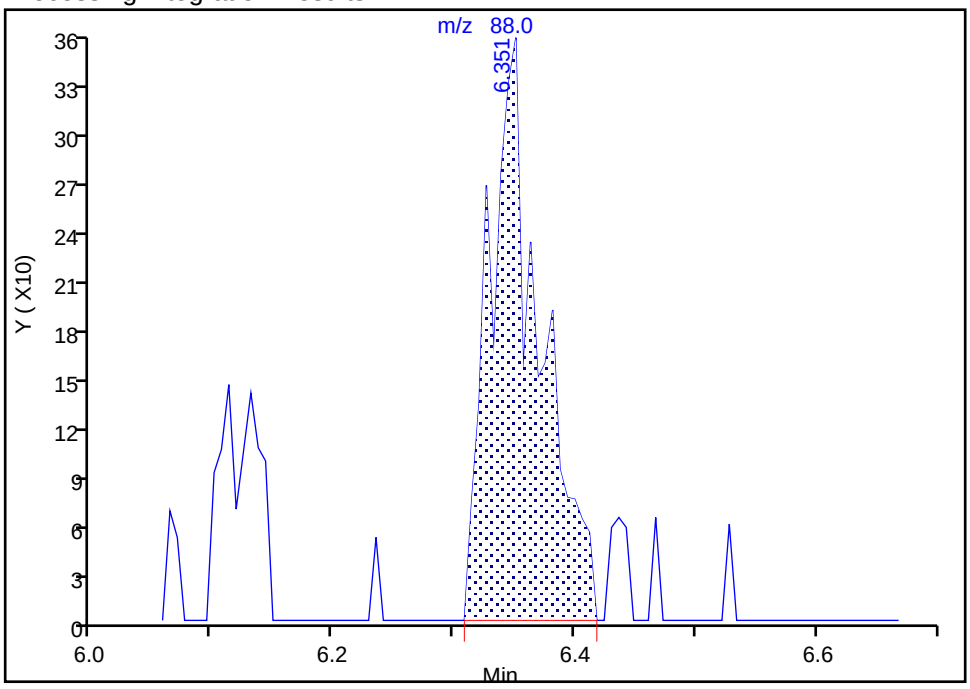
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81445.D
Injection Date: 03-Apr-2018 07:38:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

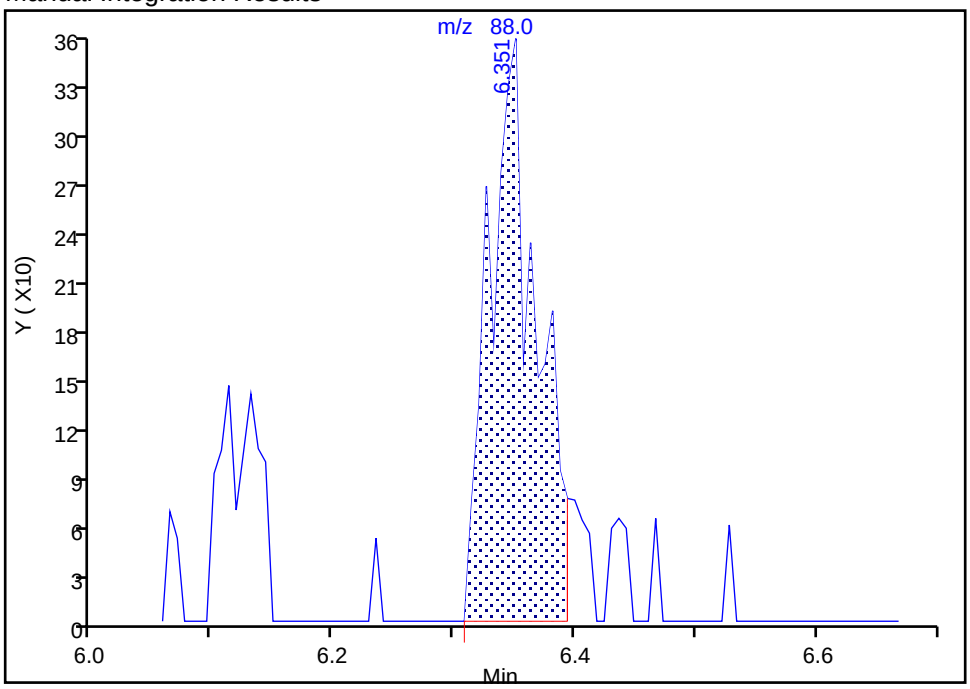
Processing Integration Results

RT: 6.35
Area: 1020
Amount: 32.942302
Amount Units: ug/l



Manual Integration Results

RT: 6.35
Area: 951
Amount: 23.483366
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:13:27
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81447.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 03-Apr-2018 10:54:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0069732-005
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-Apr-2018 16:22:01 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: delpolitov Date: 04-Apr-2018 16:16:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.590	1.590	0.000	87	40487	20.0	17.1	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	99	121470	20.0	20.6	
3 Chloromethane	50	1.797	1.797	0.000	100	112766	20.0	19.7	
5 Butadiene	54	1.901	1.901	0.000	94	90828	20.0	21.3	
4 Vinyl chloride	62	1.907	1.907	0.000	95	125184	20.0	21.5	
6 Bromomethane	94	2.200	2.200	0.000	99	84497	20.0	20.0	
7 Chloroethane	64	2.267	2.267	0.000	99	53213	20.0	20.4	
9 Dichlorofluoromethane	67	2.462	2.462	0.000	98	149715	20.0	20.4	
8 Trichlorofluoromethane	101	2.474	2.474	0.000	76	126118	20.0	20.9	
10 Pentane	72	2.492	2.492	0.000	97	22765	40.0	46.1	
12 Ethanol	46	2.687	2.687	0.000	64	12127	800.0	811.7	
11 Ethyl ether	59	2.687	2.687	0.000	96	48682	20.0	19.4	
13 2-Methyl-1,3-butadiene	53	2.712	2.712	0.000	94	57409	20.0	22.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.742	2.742	0.000	93	65261	20.0	21.7	
15 Acrolein	56	2.876	2.876	0.000	95	137289	300.0	338.1	
16 1,1,2-Trichloro-1,2,2-trif	101	2.882	2.882	0.000	97	85447	20.0	22.2	
17 1,1-Dichloroethene	96	2.913	2.913	0.000	96	73181	20.0	21.1	
18 Acetone	43	2.998	2.998	0.000	89	84176	100.0	98.8	
19 Iodomethane	142	3.071	3.071	0.000	97	132441	20.0	20.1	
22 Isopropyl alcohol	45	3.090	3.090	0.000	1	27850	200.0	186.9	a
20 Carbon disulfide	76	3.108	3.108	0.000	98	279359	20.0	21.3	
21 3-Chloro-1-propene	76	3.236	3.236	0.000	95	39834	20.0	19.9	
23 Methyl acetate	43	3.242	3.242	0.000	98	169016	100.0	95.2	
24 Cyclopentene	67	3.260	3.260	0.000	93	177362	20.0	22.2	
29 Acetonitrile	41	3.309	3.309	0.000	93	95264	200.0	225.6	a
26 Methylene Chloride	84	3.370	3.370	0.000	87	79889	20.0	19.1	
* 25 TBA-d9 (IS)	65	3.382	3.382	0.000	0	210686	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.461	3.461	0.000	95	67738	200.0	212.0	
28 Methyl tert-butyl ether	73	3.529	3.529	0.000	96	186023	20.0	19.4	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	91	80537	20.0	21.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.632	0.000	96	223777	200.0	203.8	
32 Hexane	43	3.718	3.718	0.000	90	59322	20.0	21.9	
33 Isopropyl ether	45	3.925	3.925	0.000	96	201123	20.0	20.1	
35 Vinyl acetate	86	3.967	3.967	0.000	99	16794	40.0	39.0	
34 1,1-Dichloroethane	63	3.967	3.967	0.000	99	123274	20.0	21.2	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	87	69558	20.0	22.1	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	90	180680	20.0	19.0	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	199333	250.0	250.0	
39 2,2-Dichloropropane	79	4.480	4.480	0.000	95	25607	20.0	18.7	
41 Ethyl acetate	70	4.498	4.498	0.000	83	10988	40.0	33.9	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	89	86161	20.0	20.3	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	98	38508	100.0	98.2	
44 Methyl acrylate	55	4.559	4.559	0.000	98	39373	20.0	17.8	
43 Propionitrile	54	4.644	4.644	0.000	98	90737	200.0	245.4	
45 Tetrahydrofuran	72	4.723	4.723	0.000	62	18148	40.0	39.2	
46 Chlorobromomethane	128	4.736	4.736	0.000	76	38880	20.0	19.7	
47 Methacrylonitrile	67	4.748	4.748	0.000	89	254479	200.0	196.9	
48 Chloroform	83	4.784	4.784	0.000	98	125107	20.0	20.6	
49 Cyclohexane	84	4.925	4.925	0.000	87	126241	20.0	22.3	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	93	100065	20.0	20.8	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	96	141000	50.0	46.0	
52 Carbon tetrachloride	117	5.065	5.065	0.000	88	65476	20.0	18.8	
53 1,1-Dichloropropene	75	5.083	5.083	0.000	98	96069	20.0	22.0	
56 Isobutyl alcohol	74	5.211	5.211	0.000	1	4663	500.0	362.4	a
54 Benzene	78	5.284	5.284	0.000	95	292712	20.0	20.8	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	130597	50.0	44.7	
58 Tert-amyl methyl ether	87	5.333	5.333	0.000	94	55706	20.0	19.0	
57 Isopropyl acetate	43	5.333	5.333	0.000	97	146614	20.0	18.9	
59 1,2-Dichloroethane	62	5.376	5.376	0.000	97	75049	20.0	19.1	
60 n-Heptane	57	5.431	5.431	0.000	90	62666	20.0	23.2	
* 61 Fluorobenzene	96	5.577	5.577	0.000	99	488860	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	86	28552	500.0	467.9	
63 Trichloroethene	95	5.937	5.937	0.000	99	71616	20.0	20.5	
64 Ethyl acrylate	56	6.065	6.065	0.000	98	41254	20.0	21.1	
65 Methylcyclohexane	83	6.065	6.065	0.000	95	152898	20.0	22.9	
66 1,2-Dichloropropane	63	6.229	6.229	0.000	94	67480	20.0	19.9	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	24938	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	85	75197	40.0	44.3	
69 1,4-Dioxane	88	6.333	6.333	0.000	29	17054	400.0	445.8	
70 n-Propyl acetate	43	6.339	6.339	0.000	97	59275	20.0	18.4	
71 Dibromomethane	93	6.363	6.363	0.000	97	40628	20.0	19.1	
72 Dichlorobromomethane	83	6.510	6.510	0.000	99	74020	20.0	19.1	
74 2-Nitropropane	41	6.839	6.839	0.000	66	11748	40.0	37.0	
73 2-Chloroethyl vinyl ether	63	6.839	6.839	0.000	90	29894	20.0	18.7	
75 Epichlorohydrin	57	6.955	6.955	0.000	99	111733	400.0	404.0	
76 cis-1,3-Dichloropropene	75	7.010	7.010	0.000	90	91461	20.0	18.8	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	94	277708	100.0	106.2	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	99	540949	50.0	45.5	
79 Toluene	91	7.339	7.339	0.000	93	306699	20.0	20.8	
80 trans-1,3-Dichloropropene	75	7.686	7.686	0.000	97	66364	20.0	17.6	
81 Ethyl methacrylate	69	7.705	7.705	0.000	86	55590	20.0	17.5	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	98	47747	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.961	7.961	0.000	96	71957	20.0	21.8	
84 1,3-Dichloropropane	76	8.119	8.119	0.000	87	89354	20.0	19.3	
85 2-Hexanone	43	8.168	8.168	0.000	94	174390	100.0	102.5	
86 n-Butyl acetate	43	8.278	8.278	0.000	98	54979	20.0	17.4	
87 Chlorodibromomethane	129	8.363	8.363	0.000	98	46319	20.0	18.1	
88 Ethylene Dibromide	107	8.521	8.521	0.000	98	52587	20.0	18.9	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	85	382367	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	96	194351	20.0	20.5	
92 Ethylbenzene	106	9.198	9.198	0.000	98	112222	20.0	21.8	
91 1,1,1,2-Tetrachloroethane	131	9.216	9.216	0.000	92	51299	20.0	18.0	
93 m-Xylene & p-Xylene	106	9.344	9.344	0.000	0	139462	20.0	21.6	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	28946	20.0	17.9	
95 o-Xylene	106	9.814	9.814	0.000	94	140935	20.0	21.3	
96 Styrene	104	9.844	9.844	0.000	96	219181	20.0	21.0	
97 Amyl acetate (mixed isomer	43	10.027	10.027	0.000	92	59190	20.0	17.8	
98 Bromoform	173	10.082	10.082	0.000	95	24317	20.0	18.9	
99 Isopropylbenzene	105	10.198	10.198	0.000	95	387100	20.0	22.4	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	92	149155	50.0	46.1	
101 Bromobenzene	156	10.558	10.558	0.000	99	80602	20.0	20.6	
102 1,1,2,2-Tetrachloroethane	83	10.594	10.594	0.000	99	82310	20.0	19.3	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	456182	20.0	22.6	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	96	20587	20.0	19.3	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.661	0.000	74	15281	20.0	18.6	
106 2-Chlorotoluene	91	10.734	10.734	0.000	91	294302	20.0	21.7	
107 4-Ethyltoluene	105	10.741	10.741	0.000	90	373919	20.0	22.3	
108 1,3,5-Trimethylbenzene	105	10.802	10.802	0.000	93	314593	20.0	21.5	
109 4-Chlorotoluene	91	10.850	10.850	0.000	97	250013	20.0	21.5	
110 Butyl Methacrylate	87	10.893	10.893	0.000	85	59915	20.0	17.8	
111 tert-Butylbenzene	119	11.100	11.100	0.000	94	244730	20.0	20.8	
112 1,2,4-Trimethylbenzene	105	11.161	11.161	0.000	97	324823	20.0	21.8	
113 sec-Butylbenzene	105	11.308	11.308	0.000	100	430828	20.0	22.1	
114 4-Isopropyltoluene	119	11.436	11.436	0.000	98	360983	20.0	22.3	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	97	163978	20.0	21.2	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	205459	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.533	11.533	0.000	96	164326	20.0	21.1	
118 Benzyl chloride	91	11.661	11.661	0.000	99	85371	20.0	19.4	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	324294	20.0	21.2	
120 p-Diethylbenzene	119	11.771	11.771	0.000	93	202611	20.0	22.7	a
121 n-Butylbenzene	92	11.795	11.795	0.000	97	202019	20.0	22.9	
122 1,2-Dichlorobenzene	146	11.862	11.862	0.000	97	160427	20.0	20.9	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	339075	20.0	21.1	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	93	10773	20.0	17.0	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	141077	20.0	22.2	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	131399	20.0	21.5	
127 Hexachlorobutadiene	225	13.210	13.210	0.000	93	54827	20.0	20.4	
128 Naphthalene	128	13.332	13.332	0.000	99	330157	20.0	19.5	
129 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	96	124844	20.0	20.0	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.7	
S 131 Xylenes, Total	100				0		40.0	42.9	
S 132 Total BTEX	1				0		100.0	106.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00253	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

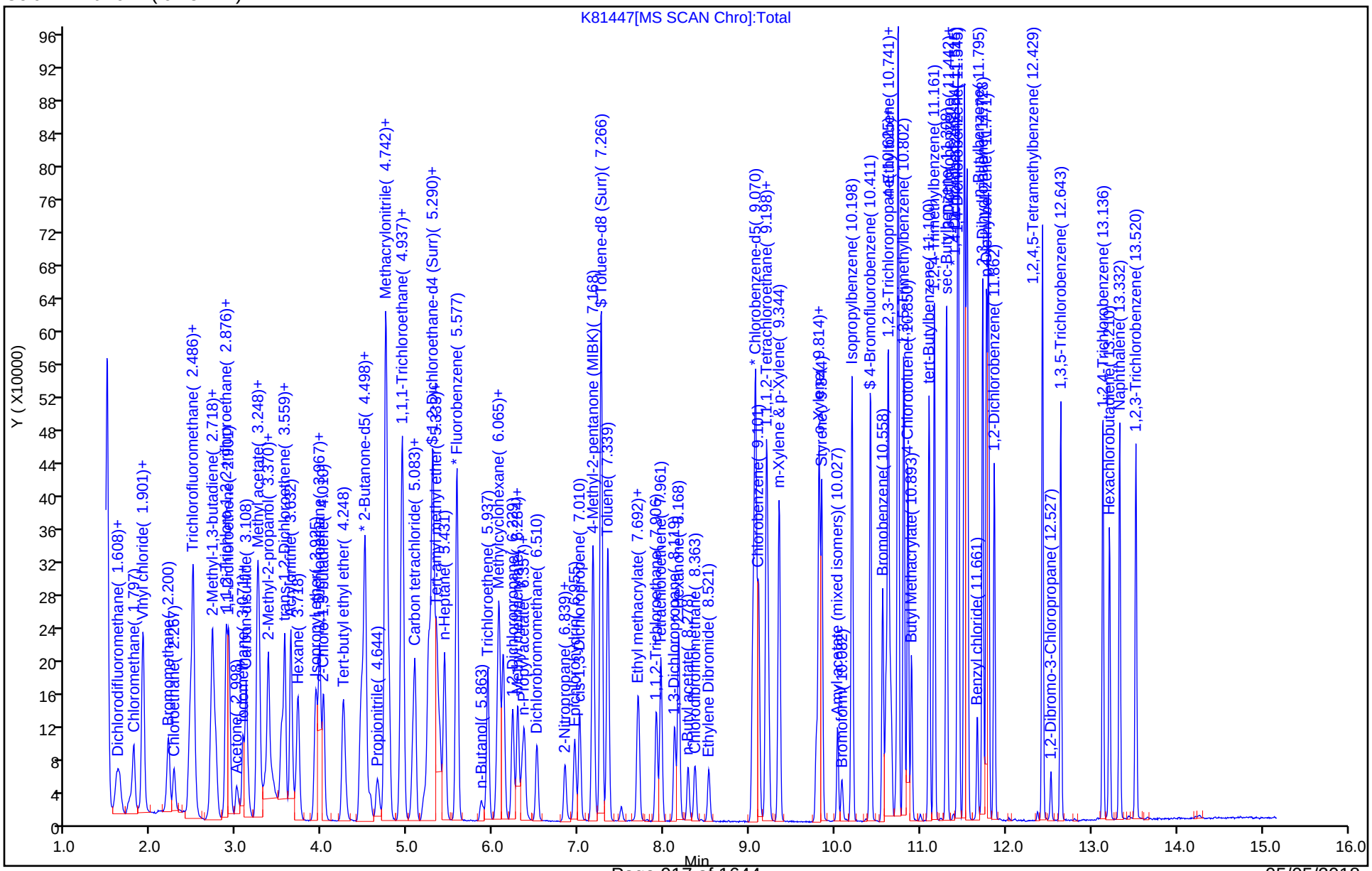
Report Date: 04-Apr-2018 16:22:04 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81447.D

Injection Date:	03-Apr-2018 10:54:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD20			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

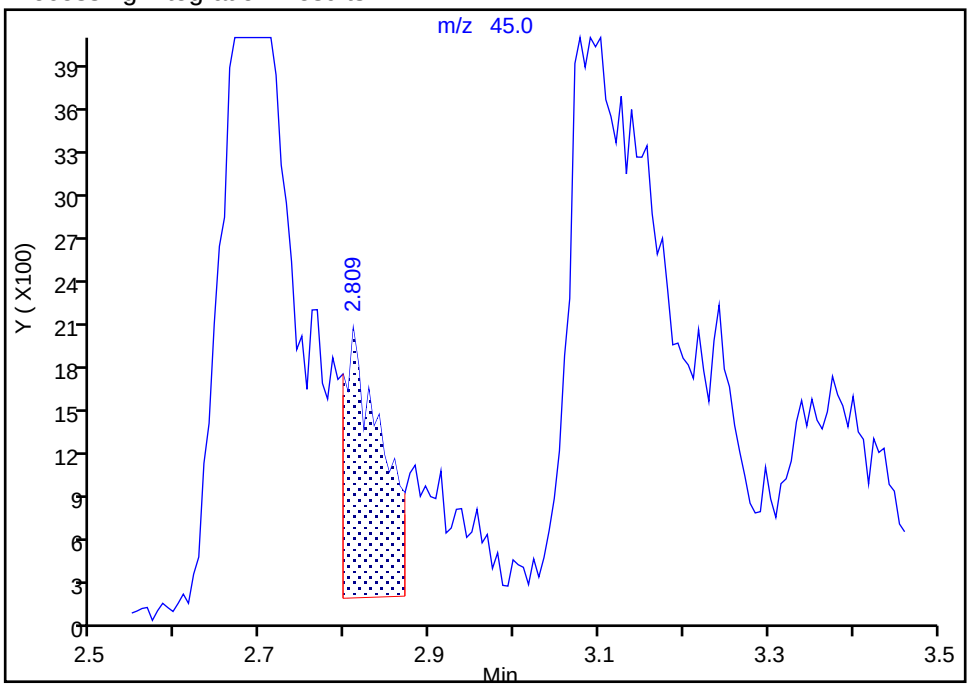
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81447.D
Injection Date: 03-Apr-2018 10:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

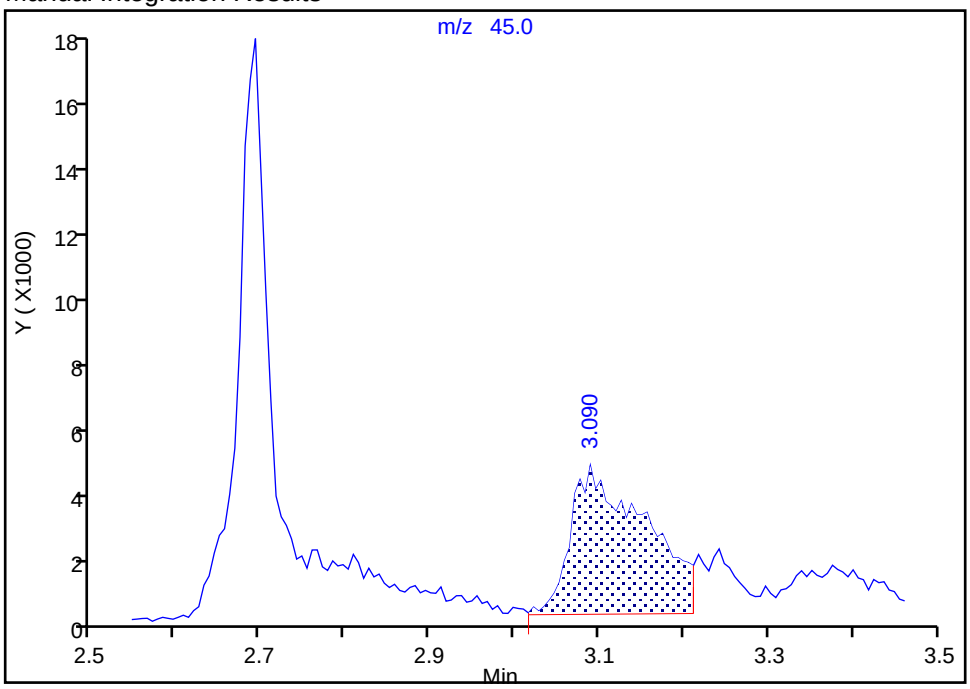
Processing Integration Results

RT: 2.81
Area: 5793
Amount: 41.789450
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 27850
Amount: 186.8735
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:36:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

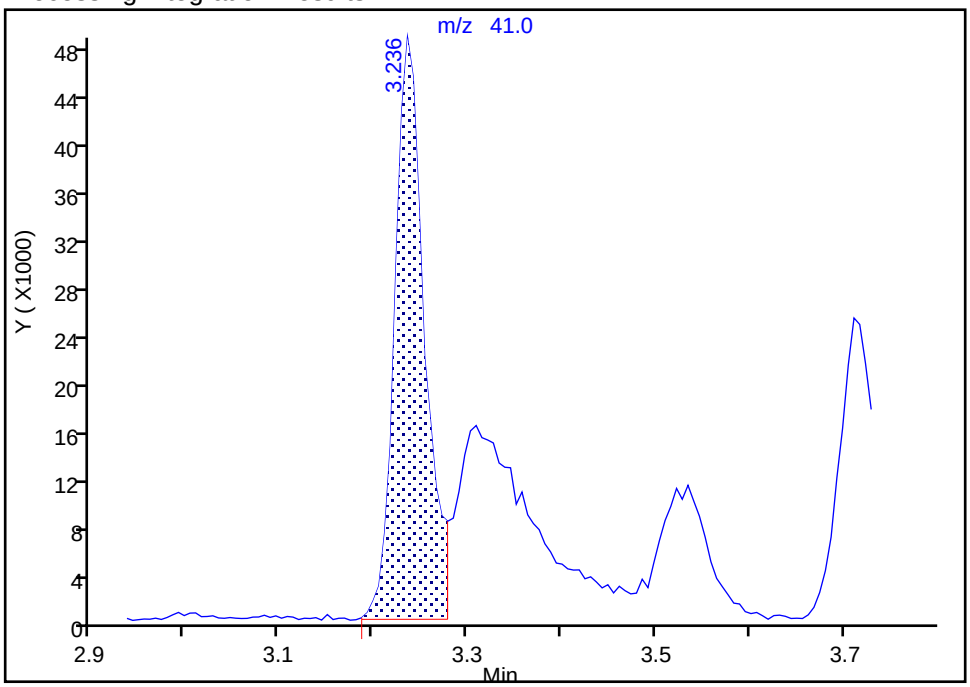
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81447.D
Injection Date: 03-Apr-2018 10:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

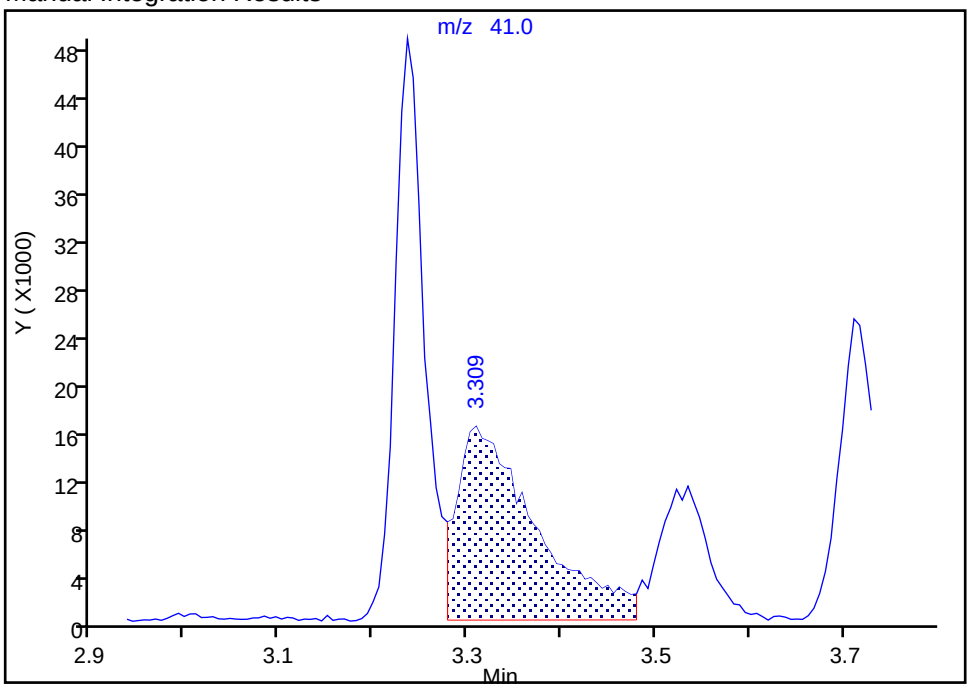
Processing Integration Results

RT: 3.24
Area: 107269
Amount: 264.5676
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 95264
Amount: 225.6195
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:36:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

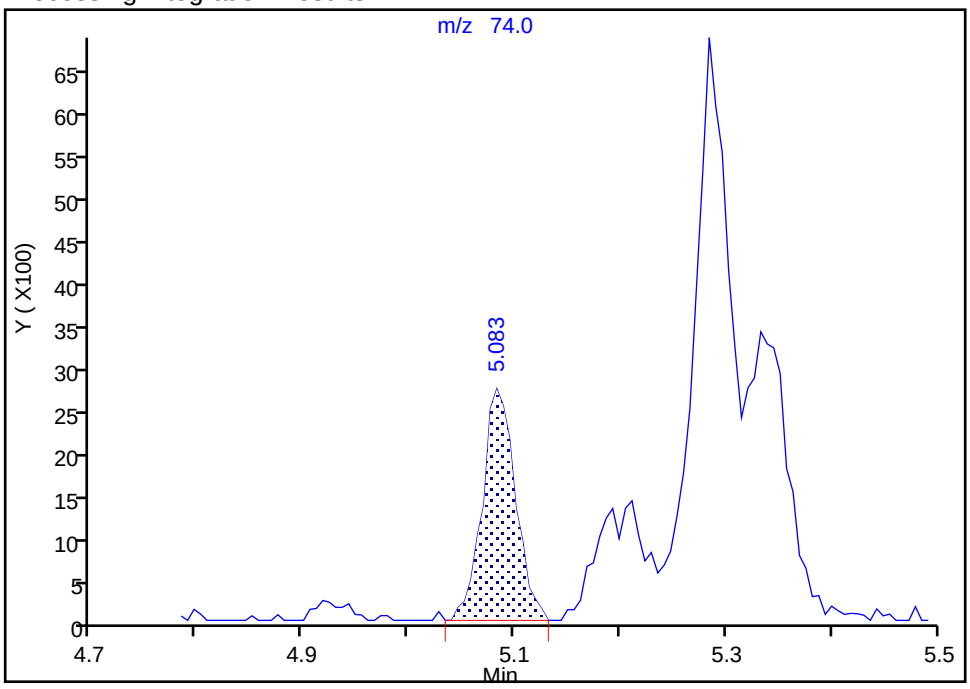
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81447.D
Injection Date: 03-Apr-2018 10:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

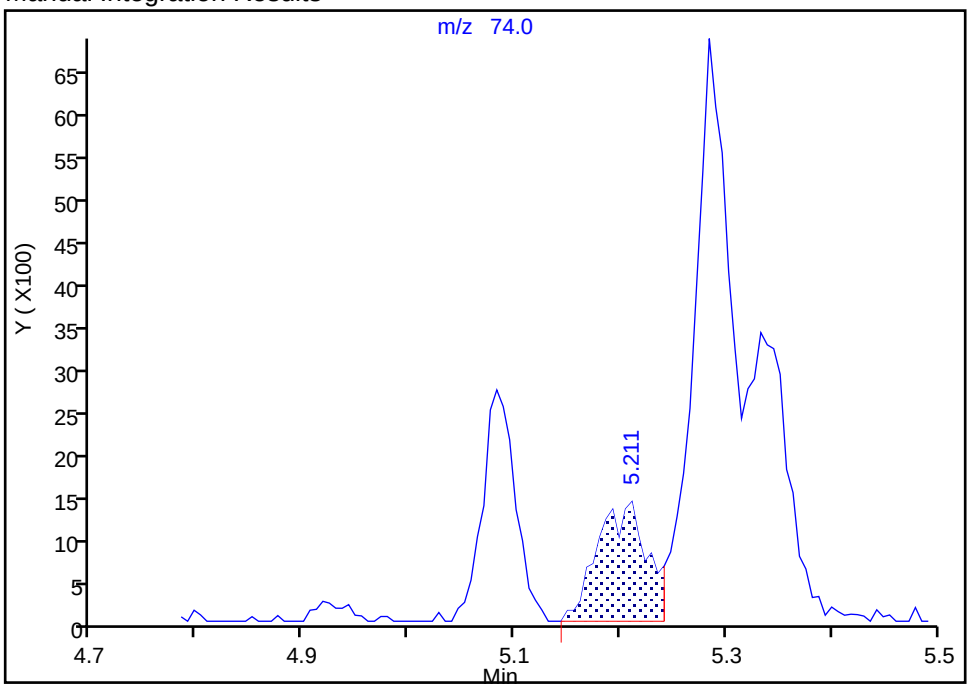
Processing Integration Results

RT: 5.08
Area: 5909
Amount: 242.2779
Amount Units: ug/l



Manual Integration Results

RT: 5.21
Area: 4663
Amount: 362.4386
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:37:13
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

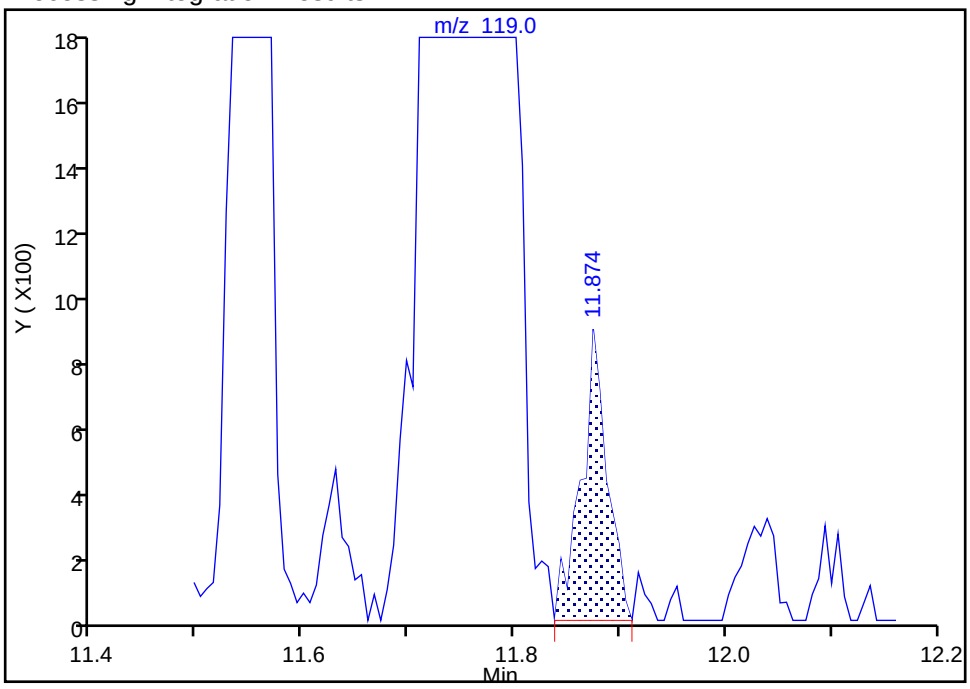
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81447.D
Injection Date: 03-Apr-2018 10:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

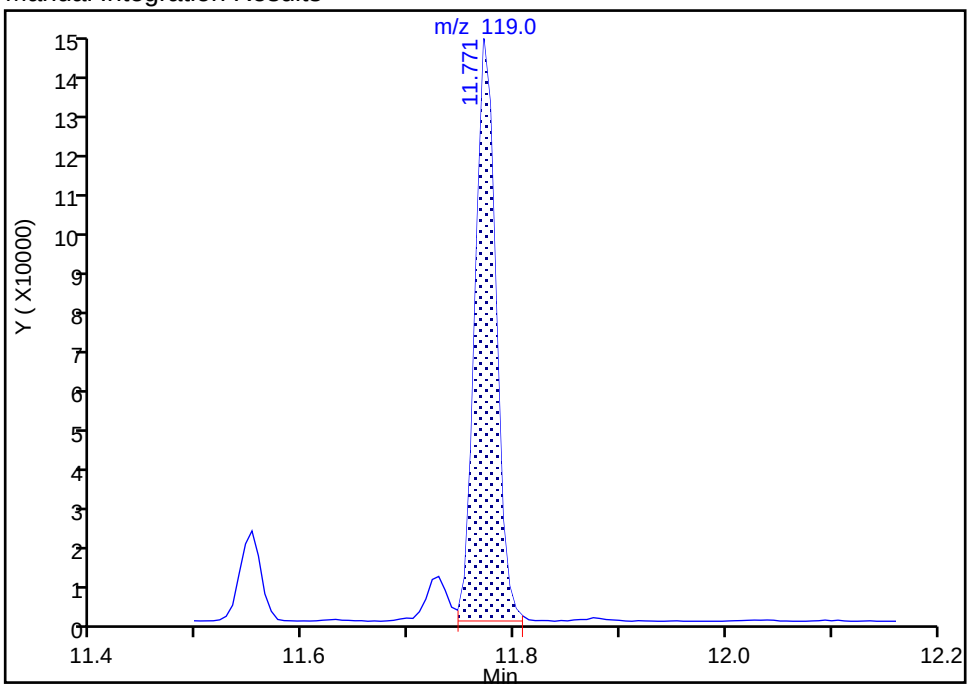
Processing Integration Results

RT: 11.87
Area: 1519
Amount: 0.178186
Amount Units: ug/l



Manual Integration Results

RT: 11.77
Area: 202611
Amount: 22.729856
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:37:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81448.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Apr-2018 11:18:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0069732-006
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-Apr-2018 16:22:13 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: martineze Date: 03-Apr-2018 16:28:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.584	1.590	-0.006	86	101585	50.0	46.1	
2 Dichlorodifluoromethane	85	1.614	1.626	-0.012	99	257324	50.0	47.2	
3 Chloromethane	50	1.791	1.797	-0.006	99	231777	50.0	43.7	
5 Butadiene	54	1.901	1.901	0.000	95	190562	50.0	48.1	
4 Vinyl chloride	62	1.901	1.907	-0.006	97	255369	50.0	47.4	
6 Bromomethane	94	2.199	2.200	-0.001	99	185572	50.0	47.4	
7 Chloroethane	64	2.266	2.267	-0.001	99	117104	50.0	48.5	
9 Dichlorofluoromethane	67	2.462	2.462	0.000	99	323214	50.0	47.5	
8 Trichlorofluoromethane	101	2.474	2.474	0.000	57	264336	50.0	47.4	
10 Pentane	72	2.486	2.492	-0.006	99	55859	100.0	111.1	
11 Ethyl ether	59	2.687	2.687	0.000	95	113301	50.0	48.6	
12 Ethanol	46	2.675	2.687	-0.012	72	27615	2000.0	1816.1	
13 2-Methyl-1,3-butadiene	53	2.712	2.712	0.000	95	125108	50.0	52.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.742	2.742	0.000	93	144856	50.0	52.1	
15 Acrolein	56	2.870	2.876	-0.006	95	194228	400.0	470.0	
16 1,1,2-Trichloro-1,2,2-trif	101	2.882	2.882	0.000	95	186437	50.0	52.2	
17 1,1-Dichloroethene	96	2.907	2.913	-0.006	95	161412	50.0	50.2	
18 Acetone	43	2.992	2.998	-0.006	89	170123	250.0	209.4	
19 Iodomethane	142	3.071	3.071	0.000	97	296723	50.0	48.6	
22 Isopropyl alcohol	45	3.071	3.090	-0.019	1	73465	500.0	484.4	a
20 Carbon disulfide	76	3.108	3.108	0.000	98	600536	50.0	49.5	
21 3-Chloro-1-propene	76	3.230	3.236	-0.006	97	92903	50.0	50.0	
23 Methyl acetate	43	3.236	3.242	-0.006	97	407699	250.0	247.8	
24 Cyclopentene	67	3.254	3.260	-0.006	91	384552	50.0	52.0	
29 Acetonitrile	41	3.297	3.309	-0.012	99	232364	500.0	540.7	a
26 Methylene Chloride	84	3.364	3.370	-0.006	87	181680	50.0	46.8	
* 25 TBA-d9 (IS)	65	3.346	3.382	-0.036	0	214419	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.419	3.461	-0.042	97	159702	500.0	491.1	
28 Methyl tert-butyl ether	73	3.522	3.529	-0.007	96	422118	50.0	47.6	
30 trans-1,2-Dichloroethene	96	3.559	3.565	-0.006	92	168594	50.0	48.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.626	3.632	-0.006	95	496850	500.0	488.4	
32 Hexane	43	3.711	3.718	-0.007	90	120924	50.0	48.2	
33 Isopropyl ether	45	3.925	3.925	0.000	95	447712	50.0	48.2	
34 1,1-Dichloroethane	63	3.967	3.967	0.000	78	268611	50.0	49.9	
35 Vinyl acetate	86	3.967	3.967	0.000	99	44757	100.0	102.1	
36 2-Chloro-1,3-butadiene	88	4.010	4.016	-0.006	88	147105	50.0	50.4	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	89	431719	50.0	49.1	
* 38 2-Butanone-d5	46	4.443	4.455	-0.012	0	190017	250.0	250.0	
39 2,2-Dichloropropane	79	4.473	4.480	-0.007	96	59102	50.0	46.6	
41 Ethyl acetate	70	4.498	4.498	0.000	95	28606	100.0	92.5	
40 cis-1,2-Dichloroethene	96	4.498	4.504	-0.006	98	190389	50.0	48.3	
42 2-Butanone (MEK)	72	4.504	4.510	-0.006	100	86024	250.0	230.1	
44 Methyl acrylate	55	4.559	4.559	0.000	100	103110	50.0	50.3	
43 Propionitrile	54	4.638	4.644	-0.006	99	197364	500.0	527.2	
45 Tetrahydrofuran	72	4.723	4.723	0.000	79	39882	100.0	90.3	
46 Chlorobromomethane	128	4.729	4.736	-0.007	85	86250	50.0	47.2	
47 Methacrylonitrile	67	4.742	4.748	-0.006	88	591682	500.0	494.0	
48 Chloroform	83	4.778	4.784	-0.006	100	272878	50.0	48.5	
49 Cyclohexane	84	4.924	4.925	-0.001	88	272698	50.0	52.0	
50 1,1,1-Trichloroethane	97	4.931	4.937	-0.006	97	223663	50.0	50.2	
$ 51 Dibromofluoromethane (Surr	113	4.937	4.943	-0.006	96	143405	50.0	50.5	
52 Carbon tetrachloride	117	5.059	5.065	-0.006	97	156812	50.0	48.7	
53 1,1-Dichloropropene	75	5.083	5.083	0.000	99	203012	50.0	50.2	
56 Isobutyl alcohol	74	5.193	5.211	-0.018	92	13553	1250.0	1032.7	
54 Benzene	78	5.284	5.284	0.000	94	627666	50.0	47.9	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.296	5.303	-0.007	0	136628	50.0	50.5	
57 Isopropyl acetate	43	5.321	5.333	-0.012	96	347198	50.0	48.2	a
58 Tert-amyl methyl ether	87	5.339	5.333	0.006	96	131042	50.0	48.2	
59 1,2-Dichloroethane	62	5.376	5.376	0.000	97	168480	50.0	46.3	
60 n-Heptane	57	5.430	5.431	-0.001	90	130288	50.0	52.0	
* 61 Fluorobenzene	96	5.577	5.577	0.000	100	452996	50.0	50.0	
62 n-Butanol	56	5.857	5.863	-0.006	87	74804	1250.0	1204.5	
63 Trichloroethene	95	5.936	5.937	-0.001	99	158329	50.0	48.9	
65 Methylcyclohexane	83	6.065	6.065	0.000	95	323274	50.0	52.2	
64 Ethyl acrylate	56	6.065	6.065	0.000	98	97612	50.0	53.8	
66 1,2-Dichloropropane	63	6.229	6.229	0.000	95	149527	50.0	47.6	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	26787	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	84	161399	100.0	102.7	
69 1,4-Dioxane	88	6.333	6.333	0.000	30	40853	1000.0	994.1	
70 n-Propyl acetate	43	6.339	6.339	0.000	97	155626	50.0	52.1	
71 Dibromomethane	93	6.363	6.363	0.000	97	95036	50.0	48.1	
72 Dichlorobromomethane	83	6.510	6.510	0.000	99	173712	50.0	48.3	
73 2-Chloroethyl vinyl ether	63	6.839	6.839	0.000	89	72153	50.0	48.8	
74 2-Nitropropane	41	6.845	6.839	0.006	73	30330	100.0	101.3	
75 Epichlorohydrin	57	6.955	6.955	0.000	99	263399	1000.0	999.0	
76 cis-1,3-Dichloropropene	75	7.016	7.010	0.006	89	221866	50.0	49.0	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	94	613056	250.0	246.0	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	99	572120	50.0	51.7	
79 Toluene	91	7.345	7.339	0.006	93	672465	50.0	49.1	
80 trans-1,3-Dichloropropene	75	7.692	7.686	0.006	98	173886	50.0	49.7	
81 Ethyl methacrylate	69	7.704	7.705	-0.001	85	149767	50.0	50.7	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	97	111473	50.0	48.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.961	0.006	96	154721	50.0	50.4	
84 1,3-Dichloropropane	76	8.125	8.119	0.006	87	208906	50.0	48.4	
85 2-Hexanone	43	8.168	8.168	0.000	94	410313	250.0	252.9	
86 n-Butyl acetate	43	8.284	8.278	0.006	99	151015	50.0	51.2	
87 Chlorodibromomethane	129	8.363	8.363	0.000	97	117010	50.0	49.2	
88 Ethylene Dibromide	107	8.527	8.521	0.006	98	130540	50.0	50.4	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	85	355811	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	97	429065	50.0	48.7	
92 Ethylbenzene	106	9.198	9.198	0.000	98	235408	50.0	49.3	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.216	0.006	95	122707	50.0	46.3	
93 m-Xylene & p-Xylene	106	9.350	9.344	0.006	0	286909	50.0	47.7	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	80651	50.0	51.4	
95 o-Xylene	106	9.814	9.814	0.000	95	297313	50.0	48.3	
96 Styrene	104	9.844	9.844	0.000	97	479636	50.0	49.3	
97 Amyl acetate (mixed isomer	43	10.027	10.027	0.000	91	163124	50.0	52.2	
98 Bromoform	173	10.082	10.082	0.000	96	63790	50.0	51.1	
99 Isopropylbenzene	105	10.198	10.198	0.000	95	781028	50.0	48.6	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	89	153022	50.0	50.9	
101 Bromobenzene	156	10.564	10.558	0.006	98	176334	50.0	49.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.594	0.006	99	186188	50.0	48.3	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	918223	50.0	50.3	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	98	46836	50.0	48.6	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	88	34998	50.0	47.2	
106 2-Chlorotoluene	91	10.740	10.734	0.006	91	602207	50.0	49.1	
107 4-Ethyltoluene	105	10.740	10.741	-0.001	90	754904	50.0	49.7	
108 1,3,5-Trimethylbenzene	105	10.807	10.802	0.005	93	651133	50.0	49.2	
109 4-Chlorotoluene	91	10.856	10.850	0.006	97	512000	50.0	48.7	
110 Butyl Methacrylate	87	10.899	10.893	0.006	85	167938	50.0	52.4	
111 tert-Butylbenzene	119	11.100	11.100	0.000	94	537415	50.0	50.5	
112 1,2,4-Trimethylbenzene	105	11.161	11.161	0.000	97	667302	50.0	49.6	
113 sec-Butylbenzene	105	11.307	11.308	-0.001	99	888620	50.0	50.4	
114 4-Isopropyltoluene	119	11.435	11.436	-0.001	98	730172	50.0	49.9	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	96	339525	50.0	48.6	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	94	185652	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.533	0.006	95	337094	50.0	47.8	
118 Benzyl chloride	91	11.667	11.661	0.006	99	201688	50.0	50.8	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	675756	50.0	48.9	
120 p-Diethylbenzene	119	11.777	11.771	0.006	93	397971	50.0	49.4	
121 n-Butylbenzene	92	11.795	11.795	0.000	98	398848	50.0	50.1	
122 1,2-Dichlorobenzene	146	11.868	11.862	0.006	97	337416	50.0	48.6	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	715891	50.0	49.3	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	96	28974	50.0	50.7	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	-0.001	98	272966	50.0	47.6	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	263817	50.0	47.8	
127 Hexachlorobutadiene	225	13.216	13.210	0.006	94	122059	50.0	50.3	
128 Naphthalene	128	13.331	13.332	-0.001	99	738292	50.0	48.2	
129 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	96	263635	50.0	46.6	
S 130 1,2-Dichloroethene, Total	100				0		100.0	96.8	
S 131 Xylenes, Total	100				0		100.0	96.0	
S 132 Total BTEX	1				0		250.0	242.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00076	Amount Added:	5.00	Units: uL	
ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
GASES Li_00253	Amount Added:	5.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-Apr-2018 16:22:15 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81448.D

Injection Date: 03-Apr-2018 11:18:30 Instrument ID: CVOAMS9 Operator ID:

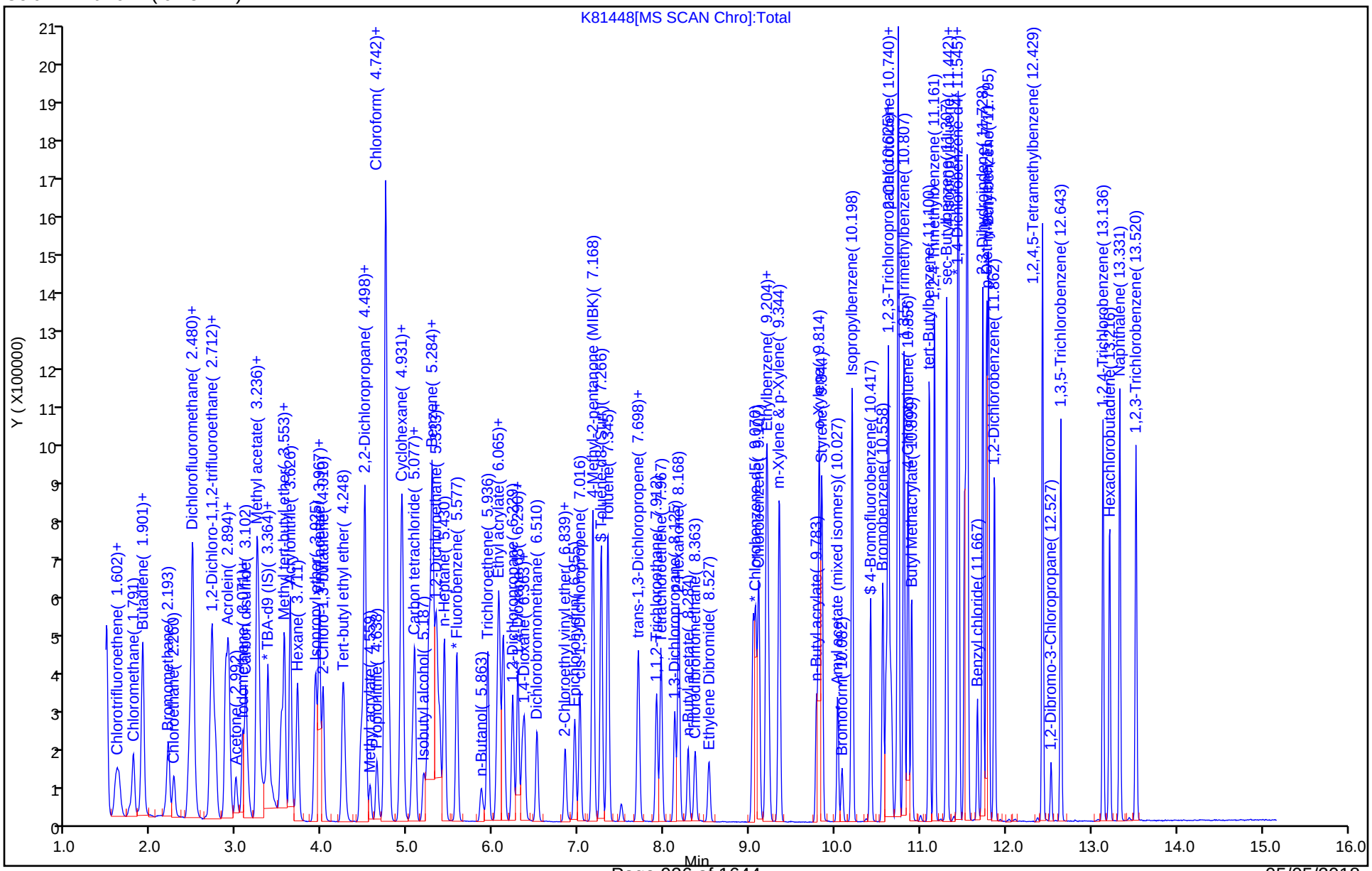
Lims ID: STD50 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

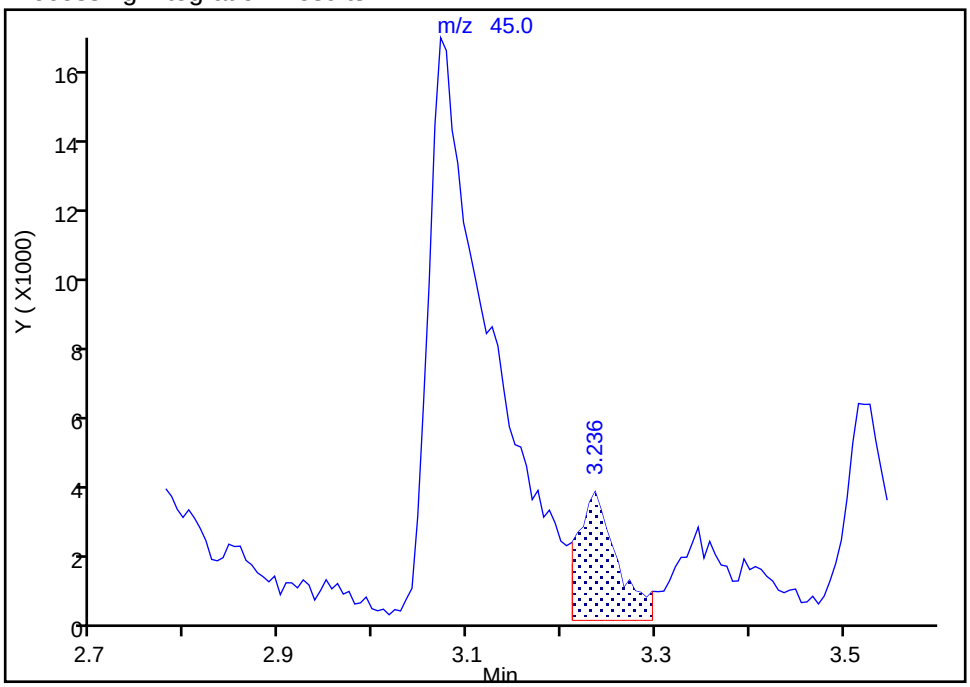
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81448.D
Injection Date: 03-Apr-2018 11:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

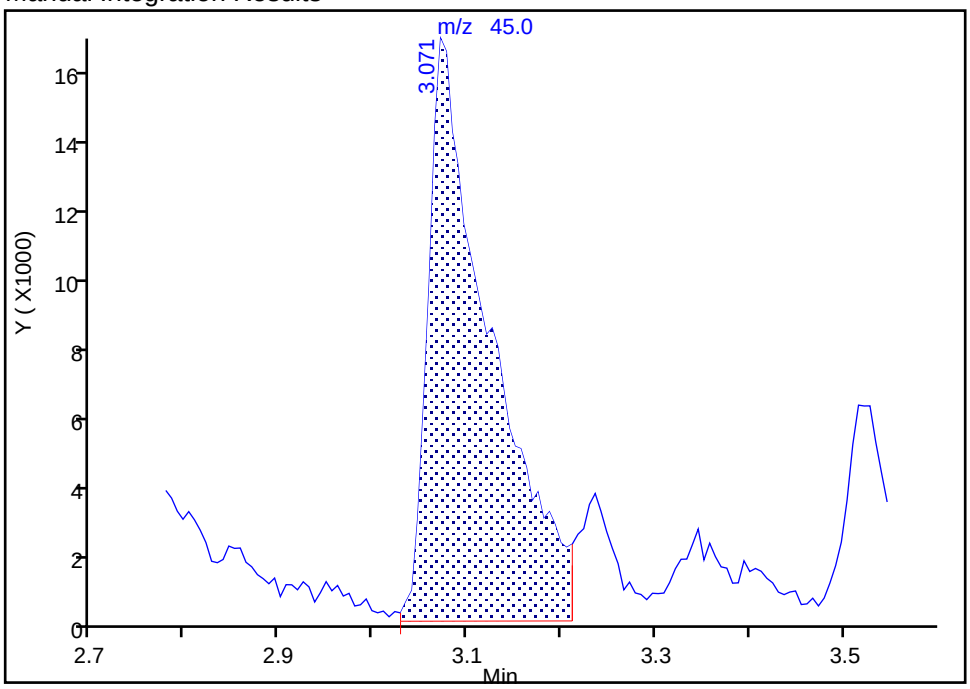
Processing Integration Results

RT: 3.24
Area: 10308
Amount: 121.9293
Amount Units: ug/l



Manual Integration Results

RT: 3.07
Area: 73465
Amount: 484.3681
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:52:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

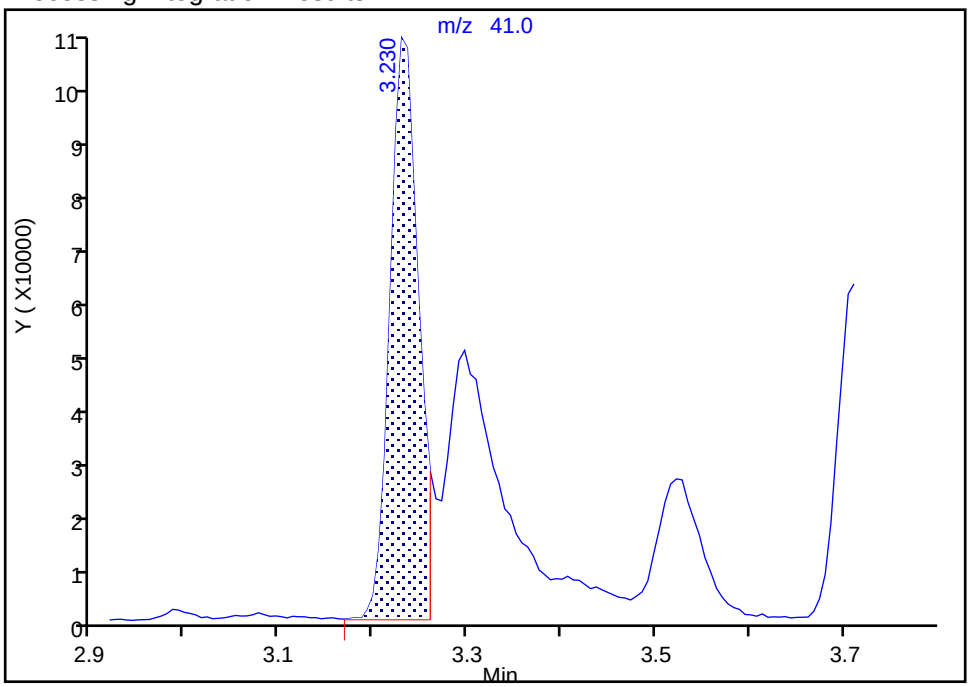
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81448.D
Injection Date: 03-Apr-2018 11:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

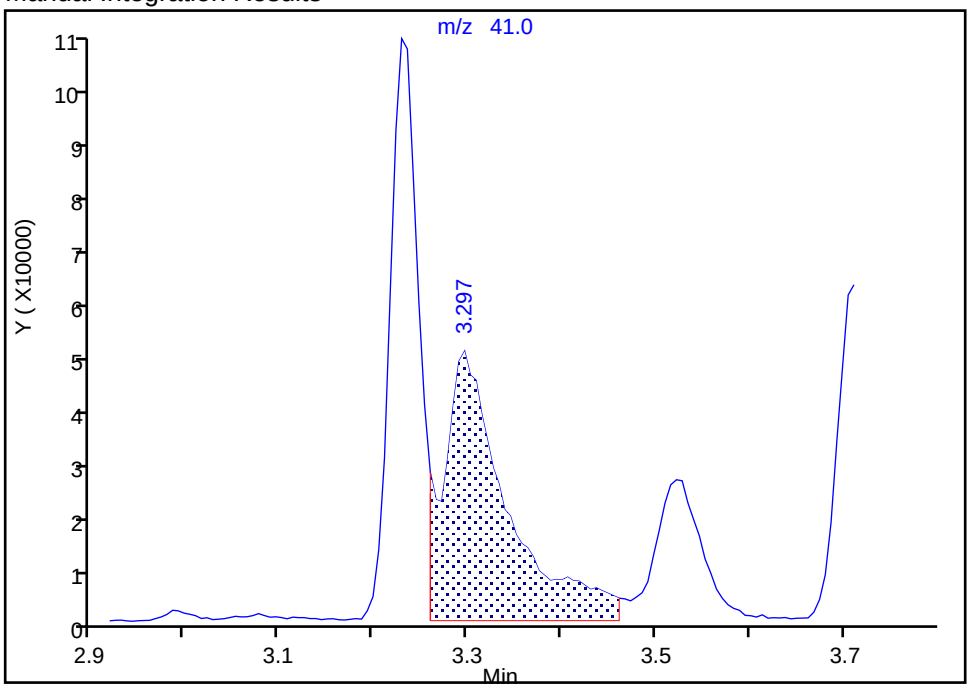
Processing Integration Results

RT: 3.23
Area: 223480
Amount: 483.4257
Amount Units: ug/l



Manual Integration Results

RT: 3.30
Area: 232364
Amount: 540.7406
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:52:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

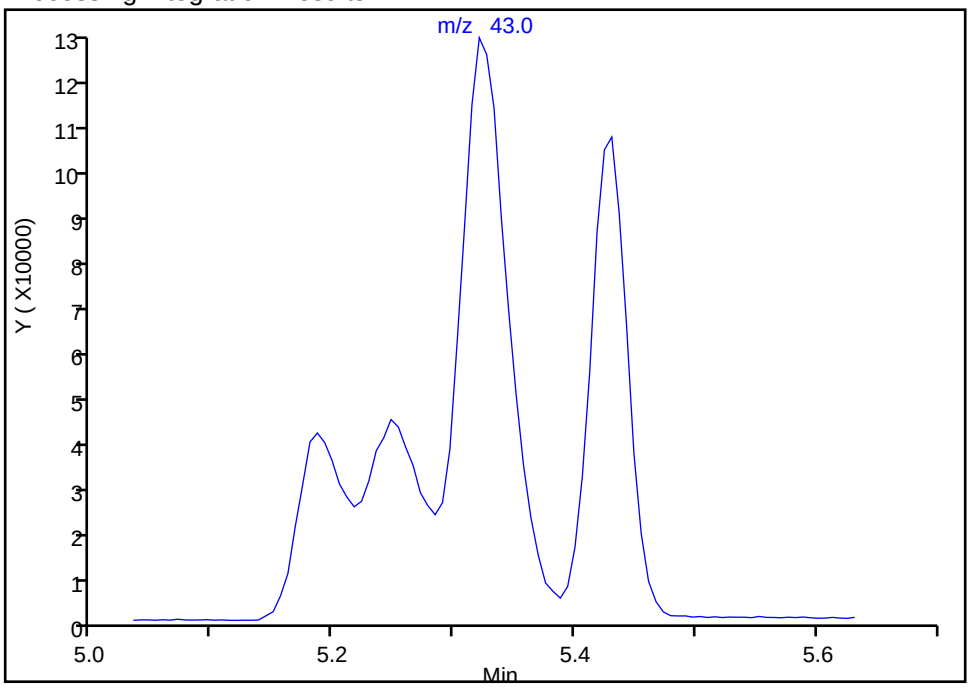
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81448.D
Injection Date: 03-Apr-2018 11:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

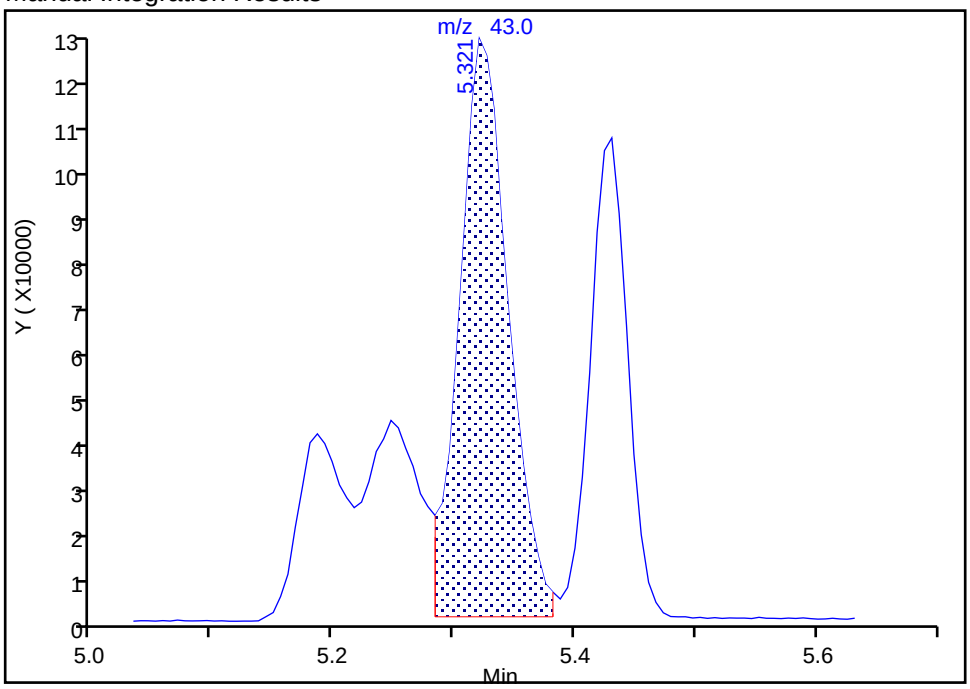
Not Detected
Expected RT: 5.33

Processing Integration Results



Manual Integration Results

RT: 5.32
Area: 347198
Amount: 48.216385
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:52:23
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81449.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Apr-2018 11:42:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0069732-007
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-Apr-2018 16:22:27 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: martineze Date: 03-Apr-2018 16:29:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.590	0.006	87	496177	200.0	213.2	
2 Dichlorodifluoromethane	85	1.633	1.626	0.007	99	1390743	200.0	242.2	
3 Chloromethane	50	1.809	1.797	0.012	99	1203853	200.0	215.8	
5 Butadiene	54	1.919	1.901	0.018	94	978799	200.0	234.8	
4 Vinyl chloride	62	1.913	1.907	0.006	98	1238043	200.0	218.3	
6 Bromomethane	94	2.212	2.200	0.012	99	857416	200.0	208.3	
7 Chloroethane	64	2.279	2.267	0.012	99	554443	200.0	218.0	
9 Dichlorofluoromethane	67	2.474	2.462	0.012	99	1543618	200.0	215.6	
8 Trichlorofluoromethane	101	2.486	2.474	0.012	98	1284989	200.0	218.8	
10 Pentane	72	2.498	2.492	0.006	97	233736	400.0	388.6	
12 Ethanol	46	2.693	2.687	0.006	84	136354	8000.0	7495.5	
11 Ethyl ether	59	2.699	2.687	0.012	95	493844	200.0	201.5	
13 2-Methyl-1,3-butadiene	53	2.718	2.712	0.006	94	509759	200.0	203.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.742	0.018	86	607703	200.0	207.7	
15 Acrolein	56	2.882	2.876	0.006	94	233402	500.0	472.0	
16 1,1,2-Trichloro-1,2,2-trif	101	2.895	2.882	0.013	96	826705	200.0	219.8	
17 1,1-Dichloroethene	96	2.919	2.913	0.006	96	713755	200.0	211.0	
18 Acetone	43	3.004	2.998	0.006	89	835208	1000.0	968.5	
19 Iodomethane	142	3.077	3.071	0.006	97	1351730	200.0	210.5	
22 Isopropyl alcohol	45	3.096	3.090	0.006	1	372080	2000.0	2050.5	a
20 Carbon disulfide	76	3.120	3.108	0.012	98	2738110	200.0	214.5	
21 3-Chloro-1-propene	76	3.242	3.236	0.006	97	419458	200.0	214.7	
23 Methyl acetate	43	3.248	3.242	0.006	98	1852948	1000.0	1070.2	
24 Cyclopentene	67	3.266	3.260	0.006	92	1583641	200.0	203.3	
29 Acetonitrile	41	3.309	3.309	0.000	97	960303	2000.0	1867.9	a
26 Methylene Chloride	84	3.376	3.370	0.006	85	813770	200.0	199.3	
* 25 TBA-d9 (IS)	65	3.364	3.382	-0.018	0	256527	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.431	3.461	-0.030	98	811897	2000.0	2087.0	
28 Methyl tert-butyl ether	73	3.535	3.529	0.006	97	1945229	200.0	208.5	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	92	739878	200.0	202.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.632	0.006	94	2167093	2000.0	2024.0	
32 Hexane	43	3.718	3.718	0.000	90	551122	200.0	208.6	
33 Isopropyl ether	45	3.931	3.925	0.006	96	1934379	200.0	197.9	
35 Vinyl acetate	86	3.980	3.967	0.013	99	224211	400.0	427.6	
34 1,1-Dichloroethane	63	3.974	3.967	0.007	95	1180749	200.0	208.4	
36 2-Chloro-1,3-butadiene	88	4.022	4.016	0.006	88	621205	200.0	202.0	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	90	1914126	200.0	206.7	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	201664	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.480	0.006	95	290680	200.0	217.6	
41 Ethyl acetate	70	4.510	4.498	0.012	96	128550	400.0	391.5	
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	99	847403	200.0	204.3	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	98	388100	1000.0	978.3	
44 Methyl acrylate	55	4.571	4.559	0.012	100	472198	200.0	218.7	
43 Propionitrile	54	4.650	4.644	0.006	98	862951	2000.0	1981.6	
45 Tetrahydrofuran	72	4.736	4.723	0.013	93	178650	400.0	381.2	
46 Chlorobromomethane	128	4.742	4.736	0.006	83	393968	200.0	204.9	
47 Methacrylonitrile	67	4.754	4.748	0.006	88	2496409	2000.0	1980.1	
48 Chloroform	83	4.791	4.784	0.007	100	1220501	200.0	205.9	
49 Cyclohexane	84	4.931	4.925	0.006	88	1203124	200.0	218.0	
50 1,1,1-Trichloroethane	97	4.943	4.937	0.006	98	1028869	200.0	219.4	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	97	153637	50.0	51.4	
52 Carbon tetrachloride	117	5.065	5.065	0.000	99	786413	200.0	232.0	
53 1,1-Dichloropropene	75	5.089	5.083	0.006	98	887020	200.0	208.4	
56 Isobutyl alcohol	74	5.199	5.211	-0.012	94	81225	5000.0	5102.4	
54 Benzene	78	5.290	5.284	0.006	95	2815445	200.0	208.8	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	150305	50.0	52.8	
58 Tert-amyl methyl ether	87	5.345	5.333	0.012	92	618591	200.0	216.2	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	1618720	200.0	213.6	
59 1,2-Dichloroethane	62	5.382	5.376	0.006	97	759419	200.0	198.1	
60 n-Heptane	57	5.437	5.431	0.006	89	570299	200.0	216.3	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	476787	50.0	50.0	
62 n-Butanol	56	5.870	5.863	0.007	85	448127	5000.0	6031.5	
63 Trichloroethene	95	5.943	5.937	0.006	99	699064	200.0	205.2	
64 Ethyl acrylate	56	6.077	6.065	0.012	98	422669	200.0	221.5	
65 Methylcyclohexane	83	6.071	6.065	0.006	94	1419721	200.0	217.8	
66 1,2-Dichloropropane	63	6.235	6.229	0.006	94	657952	200.0	198.8	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	30663	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.290	0.006	83	717839	400.0	434.0	
69 1,4-Dioxane	88	6.339	6.333	0.006	27	180543	4000.0	3838.0	
70 n-Propyl acetate	43	6.345	6.339	0.006	97	695157	200.0	221.2	
71 Dibromomethane	93	6.369	6.363	0.006	98	425379	200.0	204.5	
72 Dichlorobromomethane	83	6.516	6.510	0.006	99	830137	200.0	219.3	
74 2-Nitropropane	41	6.845	6.839	0.006	80	157216	400.0	416.4	
73 2-Chloroethyl vinyl ether	63	6.845	6.839	0.006	85	303879	200.0	195.3	
75 Epichlorohydrin	57	6.961	6.955	0.006	99	1112090	4000.0	3974.4	
76 cis-1,3-Dichloropropene	75	7.022	7.010	0.012	89	1012530	200.0	217.2	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	94	2646906	1000.0	1000.9	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	99	575989	50.0	50.6	
79 Toluene	91	7.345	7.339	0.006	93	2844225	200.0	201.7	
80 trans-1,3-Dichloropropene	75	7.692	7.686	0.006	98	838678	200.0	232.7	
81 Ethyl methacrylate	69	7.711	7.705	0.006	86	727790	200.0	239.3	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	98	485427	200.0	204.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.961	0.006	96	647808	200.0	205.0	
84 1,3-Dichloropropane	76	8.131	8.119	0.012	88	897844	200.0	202.2	
85 2-Hexanone	43	8.174	8.168	0.006	93	1681806	1000.0	976.7	
86 n-Butyl acetate	43	8.284	8.278	0.006	98	708377	200.0	233.5	
87 Chlorodibromomethane	129	8.369	8.363	0.006	97	592492	200.0	242.1	
88 Ethylene Dibromide	107	8.528	8.521	0.007	98	572904	200.0	214.9	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	84	366174	50.0	50.0	
90 Chlorobenzene	112	9.113	9.107	0.006	96	1819055	200.0	200.5	
92 Ethylbenzene	106	9.204	9.198	0.006	98	999208	200.0	203.1	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.216	0.007	96	657173	200.0	241.1	
93 m-Xylene & p-Xylene	106	9.351	9.344	0.007	0	1230120	200.0	198.7	
94 n-Butyl acrylate	73	9.783	9.783	0.000	99	421664	200.0	223.4	
95 o-Xylene	106	9.820	9.814	0.006	94	1292283	200.0	204.0	
96 Styrene	104	9.851	9.844	0.007	96	2036683	200.0	203.4	
97 Amyl acetate (mixed isomer	43	10.033	10.027	0.006	92	820885	200.0	221.5	
98 Bromoform	173	10.082	10.082	0.000	96	345310	200.0	224.3	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	3382089	200.0	204.3	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	89	156212	50.0	50.5	
101 Bromobenzene	156	10.564	10.558	0.006	98	746511	200.0	203.1	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.594	0.006	99	820959	200.0	205.2	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	3853562	200.0	203.1	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	98	202246	200.0	202.1	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	92	159629	200.0	207.5	
106 2-Chlorotoluene	91	10.741	10.734	0.007	92	2563935	200.0	201.3	
107 4-Ethyltoluene	105	10.741	10.741	0.000	89	3055173	200.0	193.9	
108 1,3,5-Trimethylbenzene	105	10.808	10.802	0.006	93	2851630	200.0	207.5	
109 4-Chlorotoluene	91	10.856	10.850	0.006	96	2169310	200.0	198.6	
110 Butyl Methacrylate	87	10.899	10.893	0.006	85	885743	200.0	225.8	
111 tert-Butylbenzene	119	11.106	11.100	0.006	94	2388643	200.0	216.1	
112 1,2,4-Trimethylbenzene	105	11.167	11.161	0.006	97	2881792	200.0	206.1	
113 sec-Butylbenzene	105	11.308	11.308	0.000	99	3866359	200.0	211.2	
114 4-Isopropyltoluene	119	11.442	11.436	0.006	98	3159292	200.0	207.8	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	96	1427724	200.0	196.8	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	192814	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.533	0.006	95	1429610	200.0	195.3	
118 Benzyl chloride	91	11.667	11.661	0.006	99	1095555	200.0	265.5	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	2843168	200.0	198.2	
120 p-Diethylbenzene	119	11.777	11.771	0.006	93	1639675	200.0	196.0	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	1652429	200.0	199.9	
122 1,2-Dichlorobenzene	146	11.868	11.862	0.006	97	1449883	200.0	200.9	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	3053716	200.0	202.4	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	97	144441	200.0	243.2	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	1138523	200.0	191.2	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	1153986	200.0	201.2	
127 Hexachlorobutadiene	225	13.216	13.210	0.006	93	537319	200.0	213.2	
128 Naphthalene	128	13.332	13.332	0.000	99	3163500	200.0	198.9	
129 1,2,3-Trichlorobenzene	180	13.527	13.520	0.007	96	1173351	200.0	199.9	
S 130 1,2-Dichloroethene, Total	100				0		400.0	406.3	
S 131 Xylenes, Total	100				0		400.0	402.7	
S 132 Total BTEX	1				0		1000.0	1016.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00076	Amount Added:	20.00	Units: uL	
ACROLEIN W_00075	Amount Added:	5.00	Units: uL	
GASES Li_00253	Amount Added:	20.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-Apr-2018 16:22:29 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81449.D

Injection Date: 03-Apr-2018 11:42:30 Instrument ID: CVOAMS9 Operator ID:

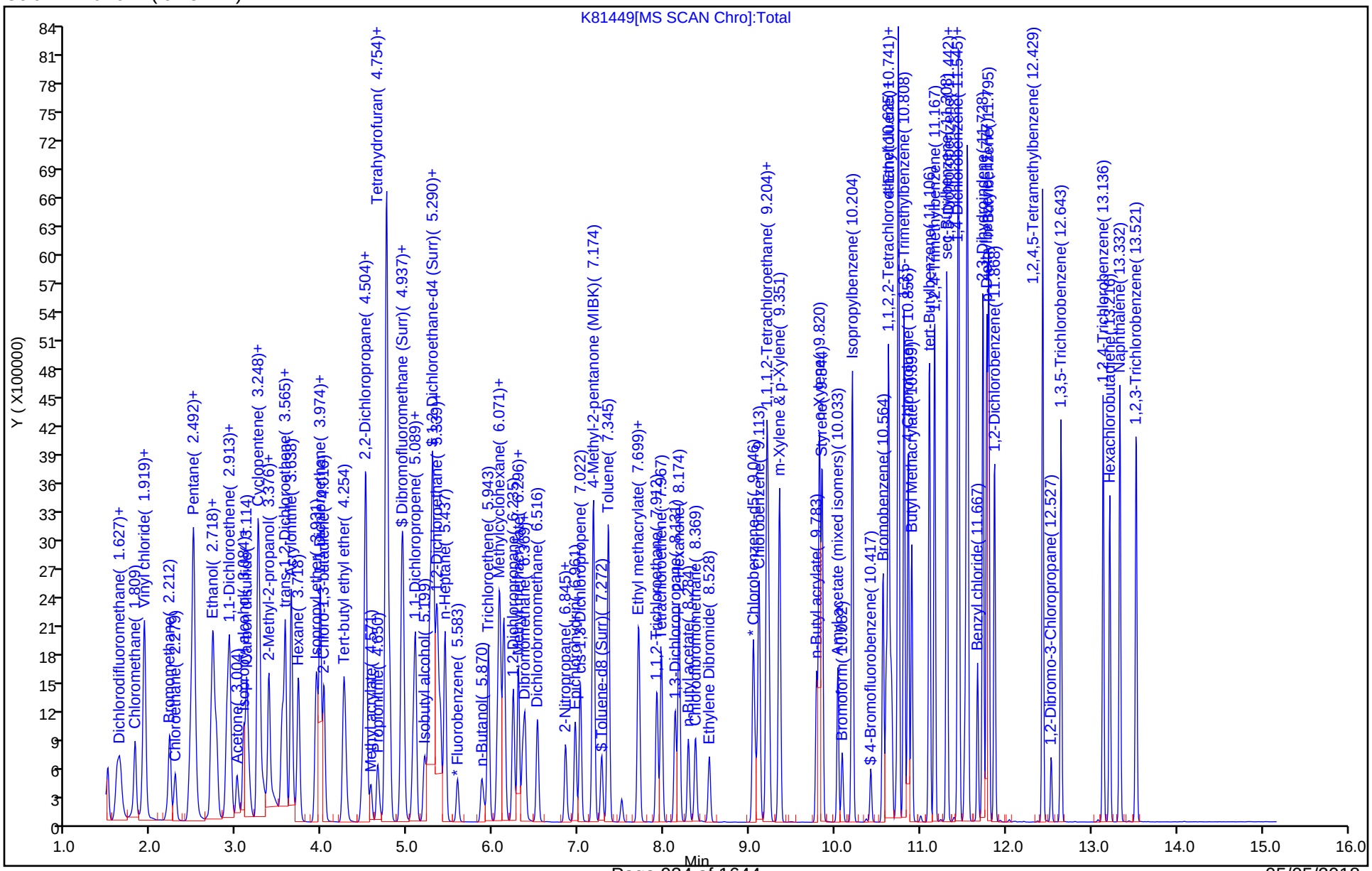
Lims ID: STD200 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

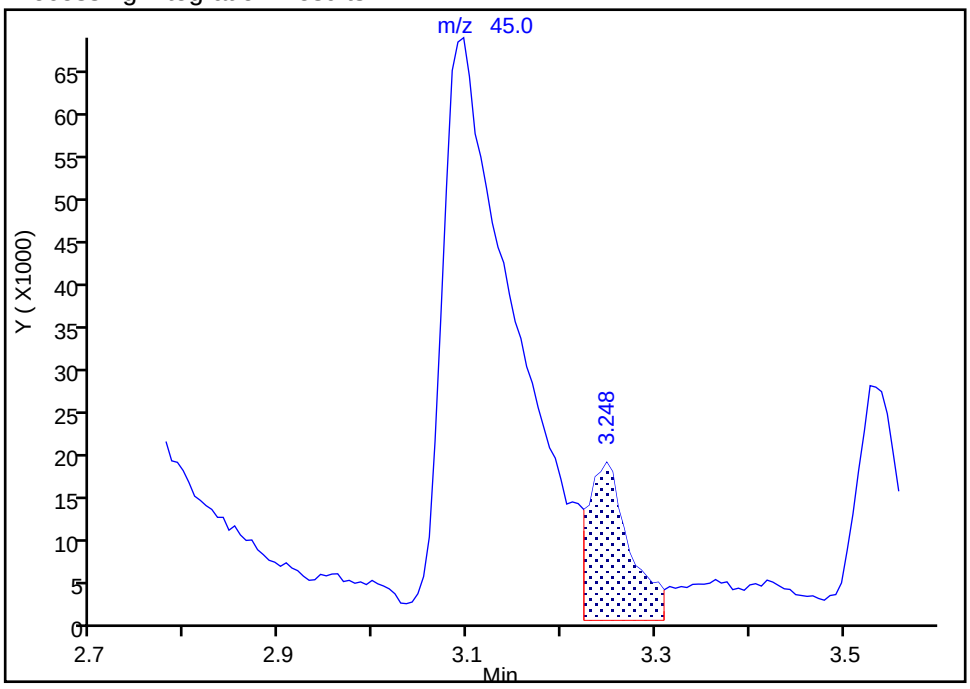
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81449.D
Injection Date: 03-Apr-2018 11:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

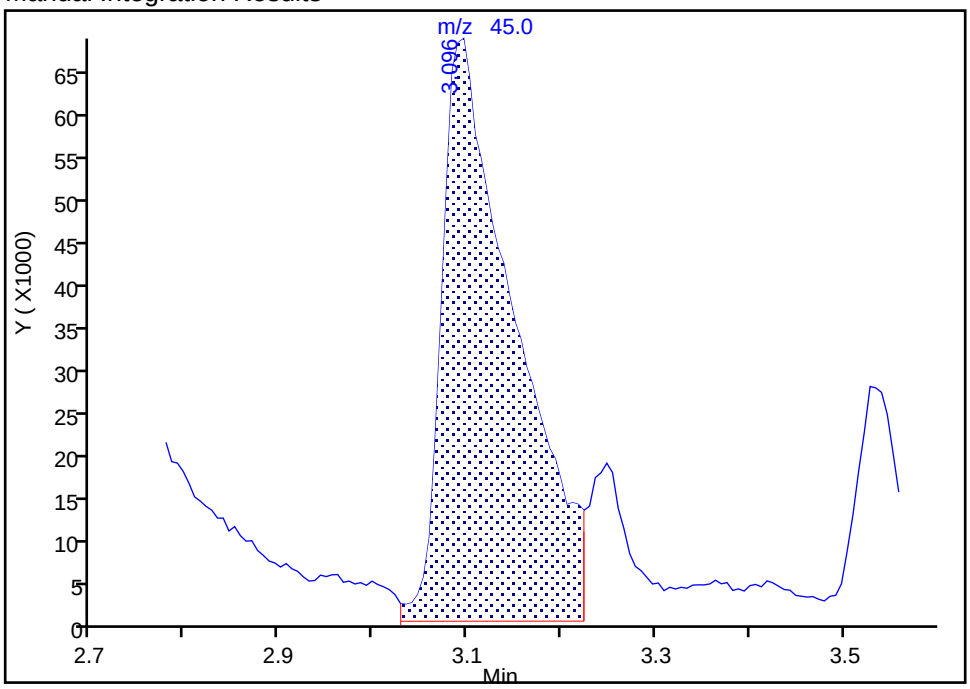
Processing Integration Results

RT: 3.25
Area: 58264
Amount: 461.2057
Amount Units: ug/l



Manual Integration Results

RT: 3.10
Area: 372080
Amount: 2050.5084
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:53:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

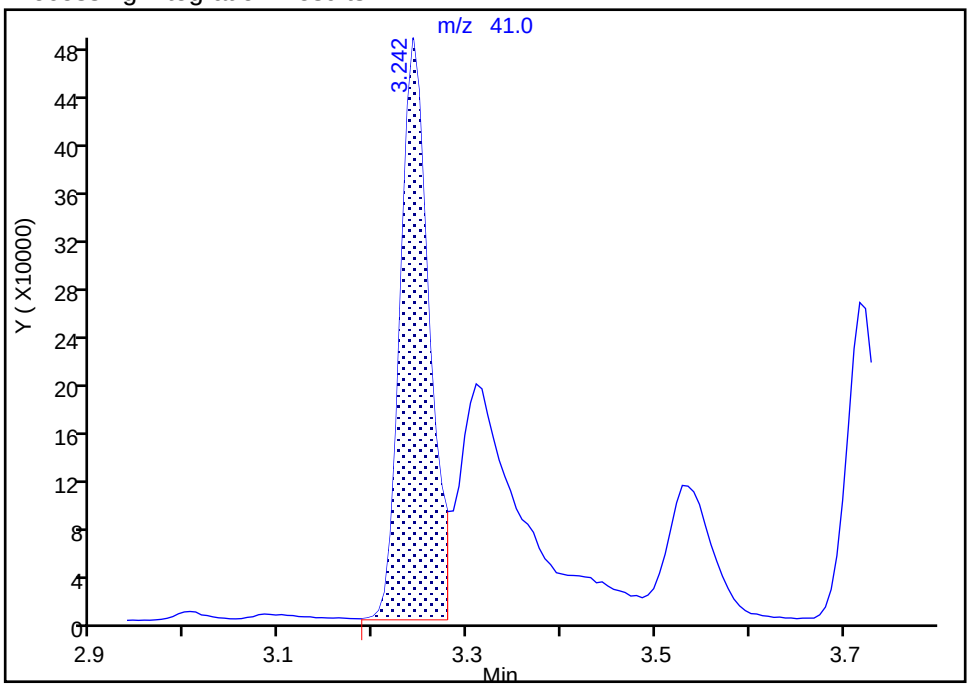
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81449.D
Injection Date: 03-Apr-2018 11:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

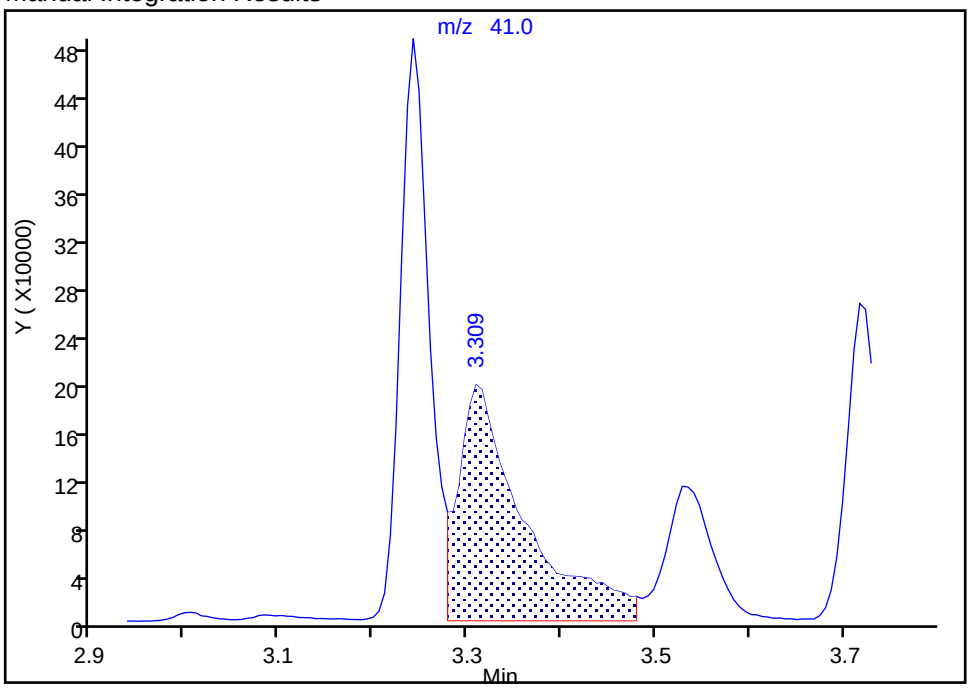
Processing Integration Results

RT: 3.24
Area: 1032473
Amount: 1854.9270
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 960303
Amount: 1867.9214
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:53:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81450.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Apr-2018 12:07:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0069732-008
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-Apr-2018 16:22:40 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: martineze Date: 03-Apr-2018 16:33:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.590	0.006	87	1189041	500.0	495.2	
2 Dichlorodifluoromethane	85	1.632	1.626	0.006	99	3362317	500.0	567.9	
3 Chloromethane	50	1.809	1.797	0.012	99	2908945	500.0	505.6	
5 Butadiene	54	1.925	1.901	0.024	94	2405228	500.0	559.7	
4 Vinyl chloride	62	1.913	1.907	0.006	98	3011179	500.0	515.0	
6 Bromomethane	94	2.218	2.200	0.018	99	2102609	500.0	495.3	
7 Chloroethane	64	2.279	2.267	0.012	99	1379206	500.0	525.8	
9 Dichlorofluoromethane	67	2.474	2.462	0.012	99	3556144	500.0	481.7	
8 Trichlorofluoromethane	101	2.492	2.474	0.018	98	2978345	500.0	491.7	
10 Pentane	72	2.498	2.492	0.006	95	574441	1000.0	900.4	
11 Ethyl ether	59	2.693	2.687	0.006	95	1209783	500.0	478.6	
12 Ethanol	46	2.693	2.687	0.006	94	324925	20000	16837	
13 2-Methyl-1,3-butadiene	53	2.718	2.712	0.006	94	1286592	500.0	498.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.742	0.018	92	1495544	500.0	495.6	
15 Acrolein	56	2.876	2.876	0.000	93	260067	600.0	495.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.882	0.012	96	2037775	500.0	525.5	
17 1,1-Dichloroethene	96	2.919	2.913	0.006	96	1772935	500.0	508.3	
18 Acetone	43	2.998	2.998	0.000	89	2247816	2500.0	2479.9	
19 Iodomethane	142	3.083	3.071	0.012	98	3328599	500.0	502.7	
22 Isopropyl alcohol	45	3.083	3.090	-0.007	1	1006858	5000.0	5230.4	a
20 Carbon disulfide	76	3.120	3.108	0.012	99	6747163	500.0	512.7	
21 3-Chloro-1-propene	76	3.242	3.236	0.006	95	1063054	500.0	527.7	
23 Methyl acetate	43	3.248	3.242	0.006	98	4525660	2500.0	2534.9	
24 Cyclopentene	67	3.266	3.260	0.006	93	3972770	500.0	494.5	
29 Acetonitrile	41	3.309	3.309	0.000	97	2372014	5000.0	4349.2	a
26 Methylene Chloride	84	3.376	3.370	0.006	86	1991081	500.0	472.9	
* 25 TBA-d9 (IS)	65	3.358	3.382	-0.024	0	272139	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.425	3.461	-0.036	98	2049527	5000.0	4966.2	
28 Methyl tert-butyl ether	73	3.534	3.529	0.005	97	4821366	500.0	501.1	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	92	1782685	500.0	472.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.632	0.006	94	5287559	5000.0	4789.2	
32 Hexane	43	3.717	3.718	-0.001	90	1322645	500.0	485.5	
33 Isopropyl ether	45	3.931	3.925	0.006	96	4868520	500.0	483.0	
34 1,1-Dichloroethane	63	3.973	3.967	0.006	100	2847432	500.0	487.3	
35 Vinyl acetate	86	3.979	3.967	0.012	99	582394	1000.0	1047.1	
36 2-Chloro-1,3-butadiene	88	4.022	4.016	0.006	88	1559435	500.0	491.9	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	90	4989835	500.0	522.5	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	211959	250.0	250.0	
39 2,2-Dichloropropane	79	4.485	4.480	0.005	94	783914	500.0	569.1	
41 Ethyl acetate	70	4.510	4.498	0.012	94	341616	1000.0	989.9	
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	99	2080986	500.0	486.5	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	996070	2500.0	2388.9	
44 Methyl acrylate	55	4.571	4.559	0.012	100	1249269	500.0	561.1	
43 Propionitrile	54	4.650	4.644	0.006	98	2174908	5000.0	5002.9	
45 Tetrahydrofuran	72	4.735	4.723	0.012	91	447526	1000.0	908.4	
46 Chlorobromomethane	128	4.742	4.736	0.006	84	974063	500.0	491.2	
47 Methacrylonitrile	67	4.760	4.748	0.012	88	6356915	5000.0	4890.0	
48 Chloroform	83	4.790	4.784	0.006	100	2988455	500.0	488.9	
49 Cyclohexane	84	4.937	4.925	0.012	88	2962448	500.0	520.5	
50 1,1,1-Trichloroethane	97	4.943	4.937	0.006	98	2614740	500.0	540.8	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	155124	50.0	50.4	
52 Carbon tetrachloride	117	5.065	5.065	0.000	99	2136251	500.0	611.2	
53 1,1-Dichloropropene	75	5.095	5.083	0.012	99	2216961	500.0	505.1	
56 Isobutyl alcohol	74	5.193	5.211	-0.018	94	216109	12500	12487	
54 Benzene	78	5.296	5.284	0.012	95	6931298	500.0	481.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.308	5.303	0.005	0	160406	50.0	54.6	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	4146079	500.0	530.5	
58 Tert-amyl methyl ether	87	5.345	5.333	0.012	92	1594326	500.0	540.4	
59 1,2-Dichloroethane	62	5.388	5.376	0.012	97	1900585	500.0	480.8	
60 n-Heptane	57	5.437	5.431	0.006	89	1368235	500.0	503.2	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	491634	50.0	50.0	
62 n-Butanol	56	5.869	5.863	0.006	85	1321897	12500	16771	
63 Trichloroethene	95	5.943	5.937	0.006	99	1761007	500.0	501.4	
65 Methylcyclohexane	83	6.077	6.065	0.012	94	3523493	500.0	524.1	
64 Ethyl acrylate	56	6.071	6.065	0.006	82	1062267	500.0	539.9	a
66 1,2-Dichloropropane	63	6.235	6.229	0.006	93	1668789	500.0	489.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	36680	1000.0	1000.0	M
68 Methyl methacrylate	41	6.296	6.290	0.006	82	1914788	1000.0	1122.8	
69 1,4-Dioxane	88	6.345	6.333	0.012	80	423474	10000	7525.4	
70 n-Propyl acetate	43	6.345	6.339	0.006	97	1835380	500.0	566.4	
71 Dibromomethane	93	6.375	6.363	0.012	97	1090136	500.0	508.3	
72 Dichlorobromomethane	83	6.522	6.510	0.012	99	2199212	500.0	563.4	
73 2-Chloroethyl vinyl ether	63	6.845	6.839	0.006	90	819862	500.0	511.0	
74 2-Nitropropane	41	6.851	6.839	0.012	92	507049	1000.0	989.9	
75 Epichlorohydrin	57	6.961	6.955	0.006	99	2869389	10000	9756.7	
76 cis-1,3-Dichloropropene	75	7.022	7.010	0.012	89	2684997	500.0	539.1	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	94	6618828	2500.0	2381.3	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	99	610573	50.0	50.2	
79 Toluene	91	7.351	7.339	0.012	93	7265358	500.0	482.2	
80 trans-1,3-Dichloropropene	75	7.698	7.686	0.012	98	2255839	500.0	586.0	
81 Ethyl methacrylate	69	7.710	7.705	0.005	86	1925397	500.0	592.6	
82 1,1,2-Trichloroethane	83	7.918	7.912	0.006	98	1261032	500.0	497.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.961	0.012	97	1662882	500.0	492.5	
84 1,3-Dichloropropane	76	8.131	8.119	0.012	88	2316842	500.0	488.3	
85 2-Hexanone	43	8.174	8.168	0.006	93	4347559	2500.0	2402.3	
86 n-Butyl acetate	43	8.284	8.278	0.006	98	1936008	500.0	597.2	
87 Chlorodibromomethane	129	8.369	8.363	0.006	98	1644268	500.0	628.9	
88 Ethylene Dibromide	107	8.527	8.521	0.006	98	1496674	500.0	525.4	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	83	391210	50.0	50.0	
90 Chlorobenzene	112	9.113	9.107	0.006	96	4655086	500.0	480.2	
92 Ethylbenzene	106	9.204	9.198	0.006	98	2569399	500.0	488.9	
91 1,1,1,2-Tetrachloroethane	131	9.228	9.216	0.012	97	1787877	500.0	614.1	
93 m-Xylene & p-Xylene	106	9.350	9.344	0.006	0	3146696	500.0	475.7	
94 n-Butyl acrylate	73	9.783	9.783	0.000	99	1186081	500.0	483.7	
95 o-Xylene	106	9.820	9.814	0.006	94	3307479	500.0	488.8	
96 Styrene	104	9.850	9.844	0.006	96	5231861	500.0	489.0	
97 Amyl acetate (mixed isomer	43	10.033	10.027	0.006	92	2283763	500.0	484.1	
98 Bromoform	173	10.088	10.082	0.006	96	990013	500.0	483.3	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	8688045	500.0	491.3	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	90	166600	50.0	50.4	
101 Bromobenzene	156	10.564	10.558	0.006	97	1960480	500.0	497.9	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.594	0.006	99	2125548	500.0	495.9	
103 N-Propylbenzene	91	10.631	10.625	0.006	99	9752240	500.0	479.7	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	97	525004	500.0	489.6	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	90	432898	500.0	525.2	
106 2-Chlorotoluene	91	10.746	10.734	0.012	93	6634312	500.0	486.3	
107 4-Ethyltoluene	105	10.746	10.741	0.005	89	8039927	500.0	476.2	
108 1,3,5-Trimethylbenzene	105	10.807	10.802	0.005	93	7419293	500.0	503.9	
109 4-Chlorotoluene	91	10.856	10.850	0.006	97	5587278	500.0	477.5	
110 Butyl Methacrylate	87	10.899	10.893	0.006	85	2465805	500.0	481.6	
111 tert-Butylbenzene	119	11.106	11.100	0.006	94	6286078	500.0	531.0	
112 1,2,4-Trimethylbenzene	105	11.167	11.161	0.006	97	7487873	500.0	499.9	
113 sec-Butylbenzene	105	11.313	11.308	0.005	99	9942242	500.0	506.9	
114 4-Isopropyltoluene	119	11.441	11.436	0.005	97	8223617	500.0	504.9	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	96	3720054	500.0	478.6	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	206557	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.533	0.006	95	3719052	500.0	474.2	
118 Benzyl chloride	91	11.667	11.661	0.006	99	3267653	500.0	739.1	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	94	7563474	500.0	492.1	
120 p-Diethylbenzene	119	11.777	11.771	0.006	92	4325779	500.0	482.7	a
121 n-Butylbenzene	92	11.801	11.795	0.006	98	4208673	500.0	475.2	
122 1,2-Dichlorobenzene	146	11.868	11.862	0.006	98	3775865	500.0	488.4	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	8222922	500.0	508.8	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.527	0.006	95	396837	500.0	623.8	
125 1,3,5-Trichlorobenzene	180	12.649	12.643	0.006	98	3049118	500.0	478.1	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	3004508	500.0	489.1	
127 Hexachlorobutadiene	225	13.215	13.210	0.005	93	1413436	500.0	523.4	
128 Naphthalene	128	13.337	13.332	0.005	99	8150505	500.0	478.5	
129 1,2,3-Trichlorobenzene	180	13.526	13.520	0.006	96	2991837	500.0	475.7	
S 130 1,2-Dichloroethene, Total	100				0		1000.0	958.5	
S 131 Xylenes, Total	100				0		1000.0	964.5	
S 132 Total BTEX	1				0		2500.0	2416.8	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00076	Amount Added:	50.00	Units: uL	
ACROLEIN W_00075	Amount Added:	6.00	Units: uL	
GASES Li_00253	Amount Added:	50.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-Apr-2018 16:22:43 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81450.D

Injection Date: 03-Apr-2018 12:07:30 Instrument ID: CVOAMS9 Operator ID:

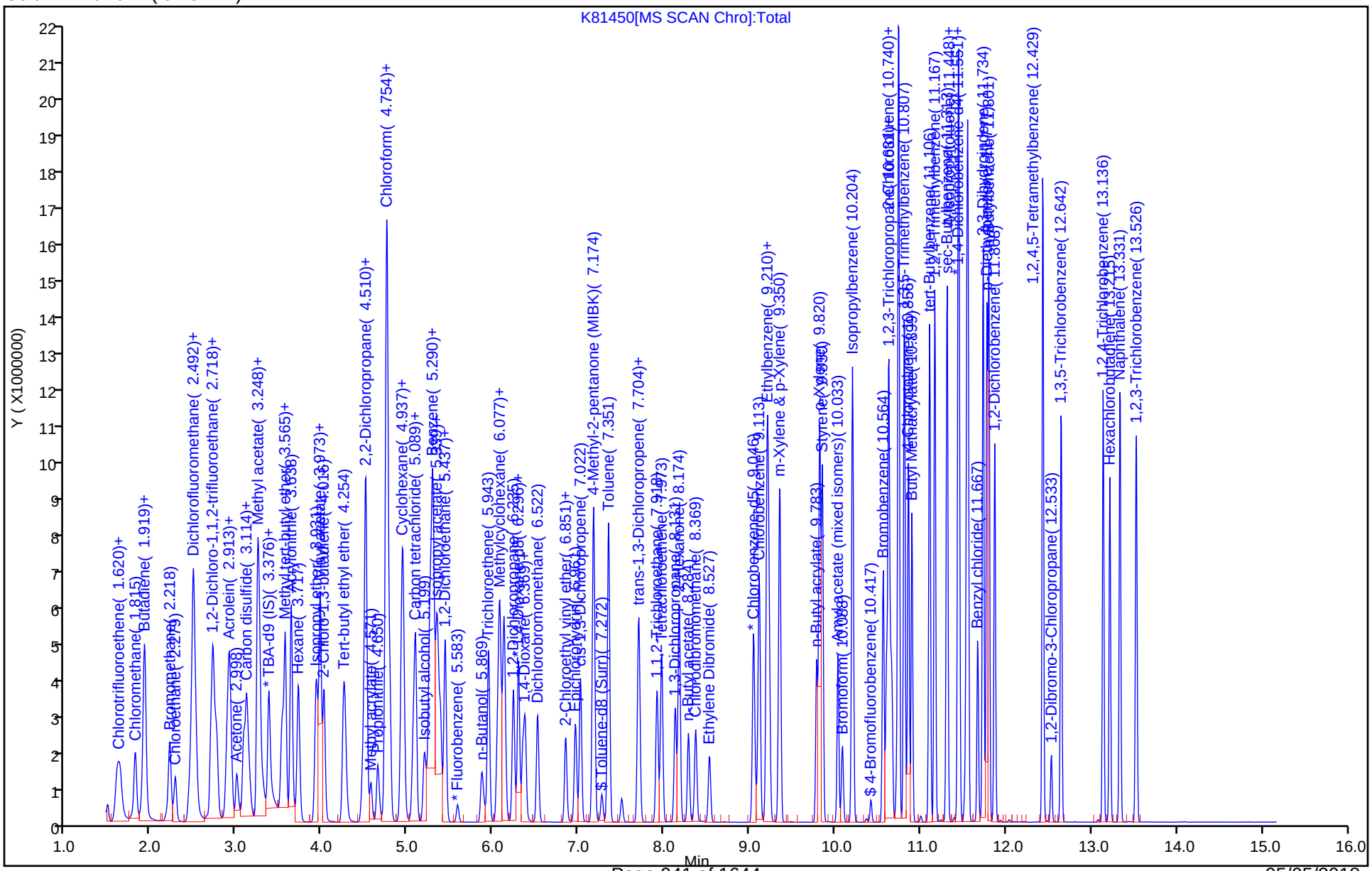
Lims ID: STD500 Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

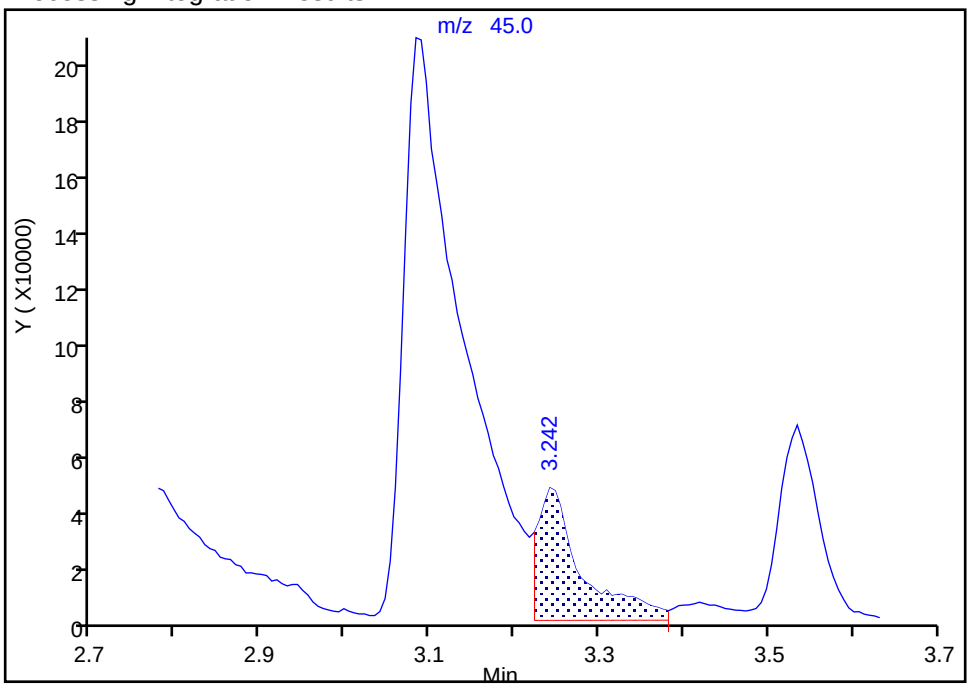
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81450.D
Injection Date: 03-Apr-2018 12:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

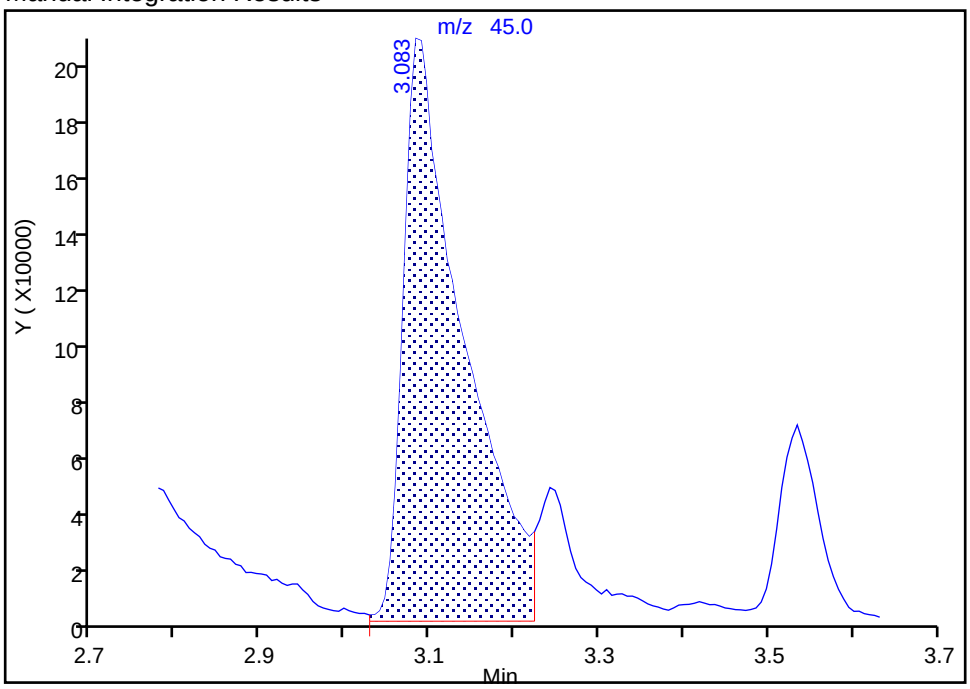
Processing Integration Results

RT: 3.24
Area: 168279
Amount: 1040.2945
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 1006858
Amount: 5230.4102
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:53:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

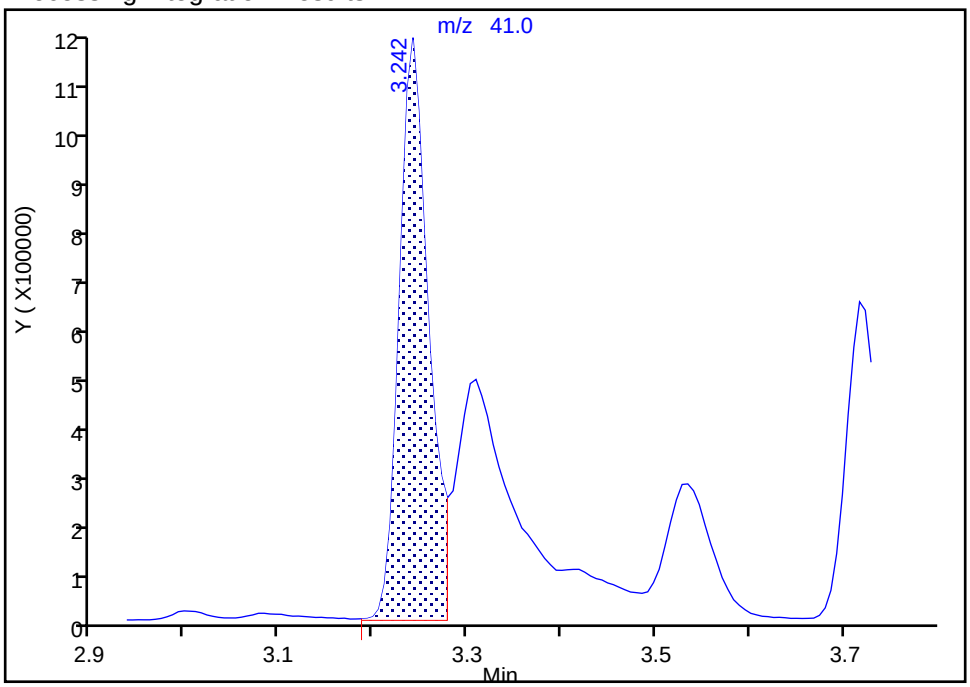
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81450.D
Injection Date: 03-Apr-2018 12:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

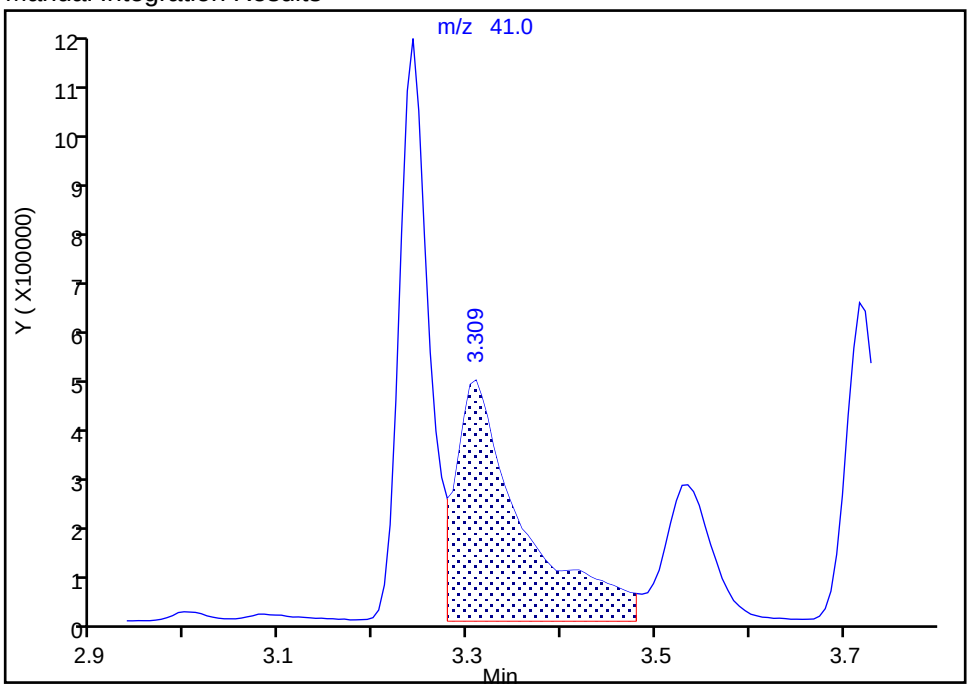
Processing Integration Results

RT: 3.24
Area: 2520686
Amount: 4315.4614
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 2372014
Amount: 4349.2049
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:54:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

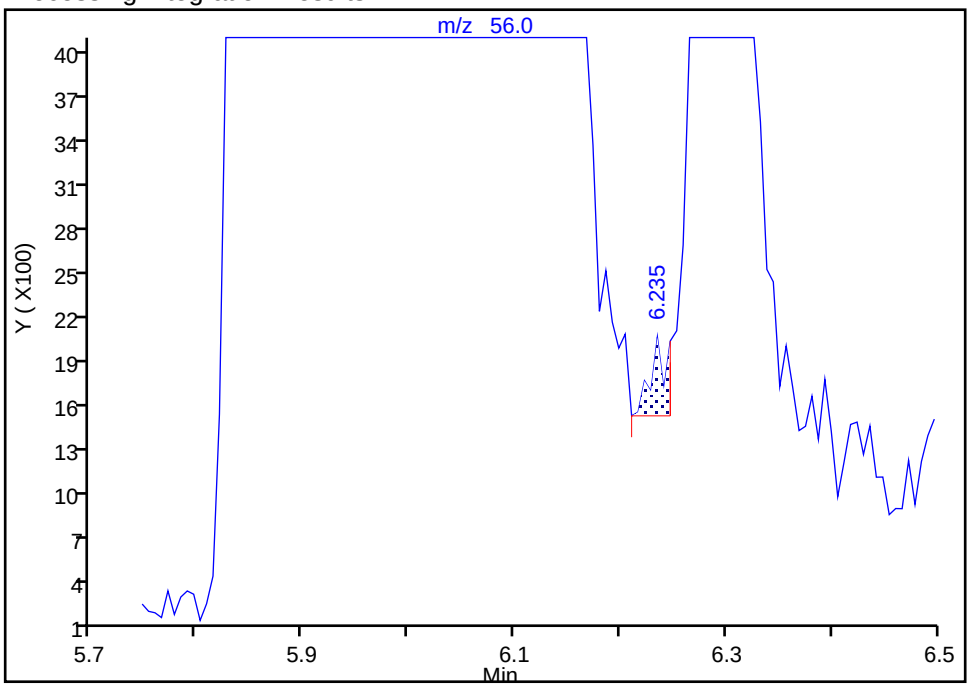
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81450.D
Injection Date: 03-Apr-2018 12:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

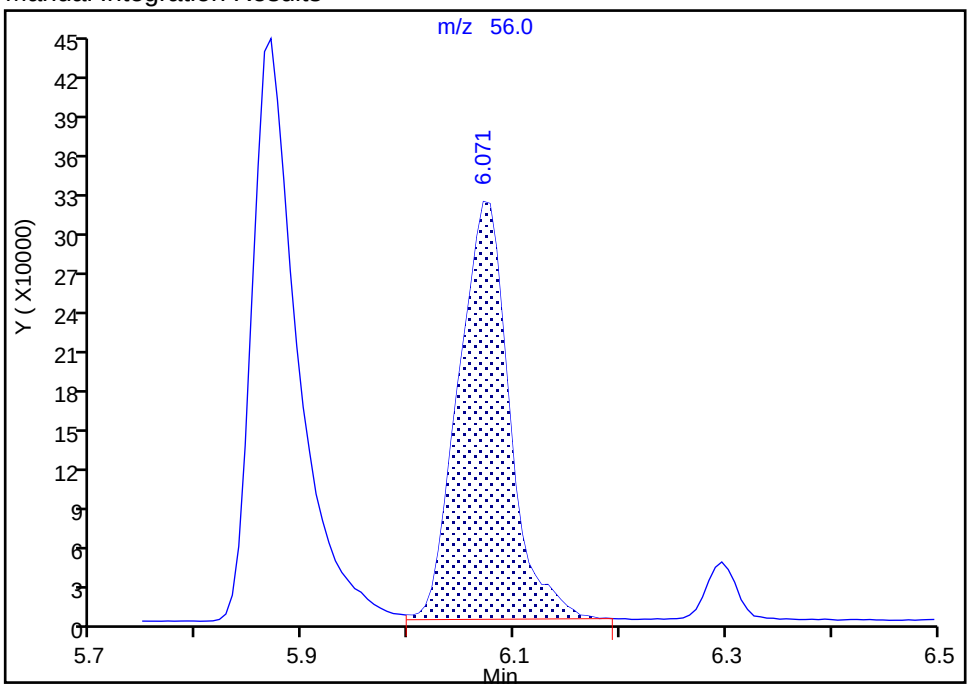
Processing Integration Results

RT: 6.24
Area: 599
Amount: 0.371945
Amount Units: ug/l



Manual Integration Results

RT: 6.07
Area: 1062267
Amount: 539.8643
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:54:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

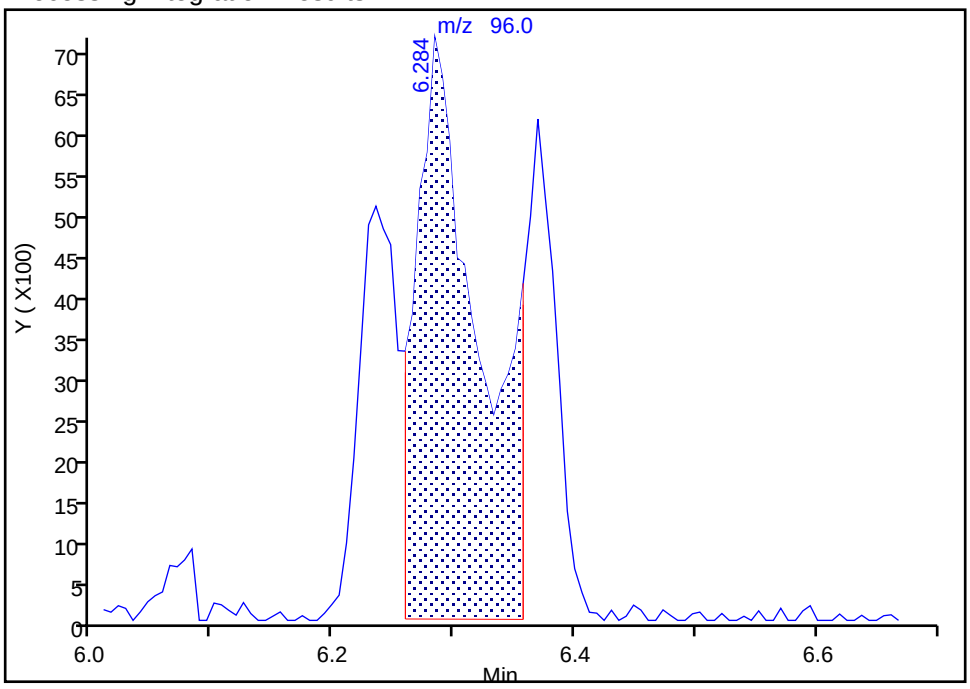
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81450.D
Injection Date: 03-Apr-2018 12:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

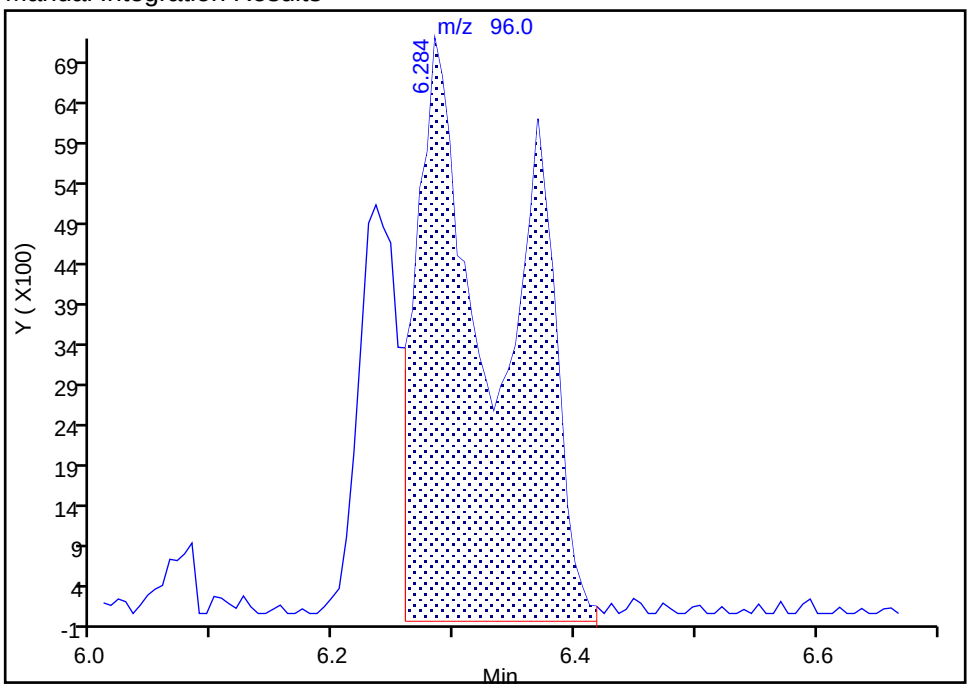
Processing Integration Results

RT: 6.28
Area: 26196
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.28
Area: 36680
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:55:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

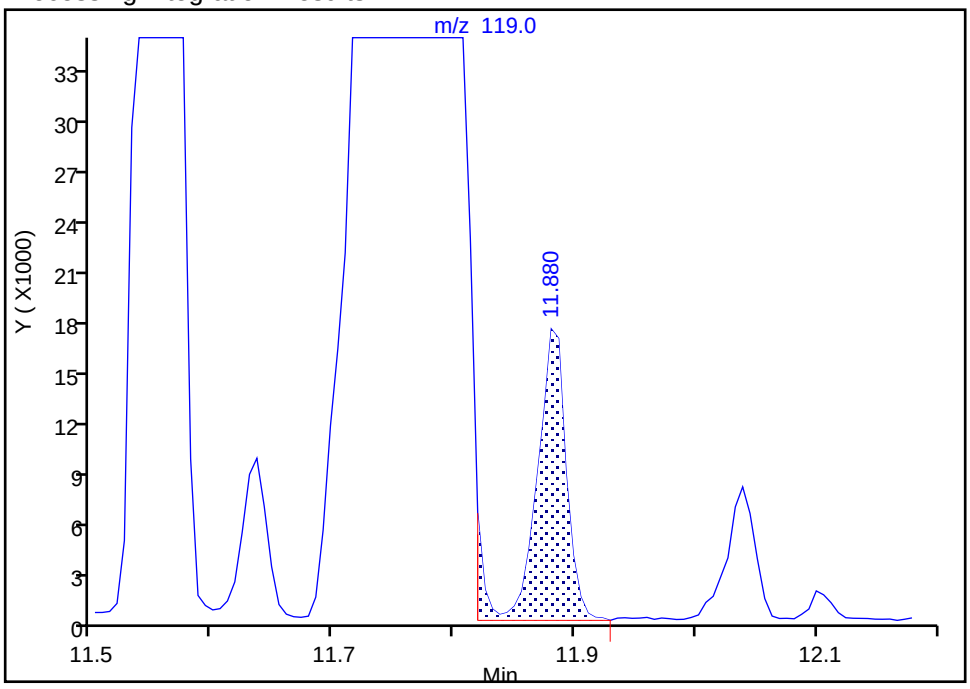
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81450.D
Injection Date: 03-Apr-2018 12:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

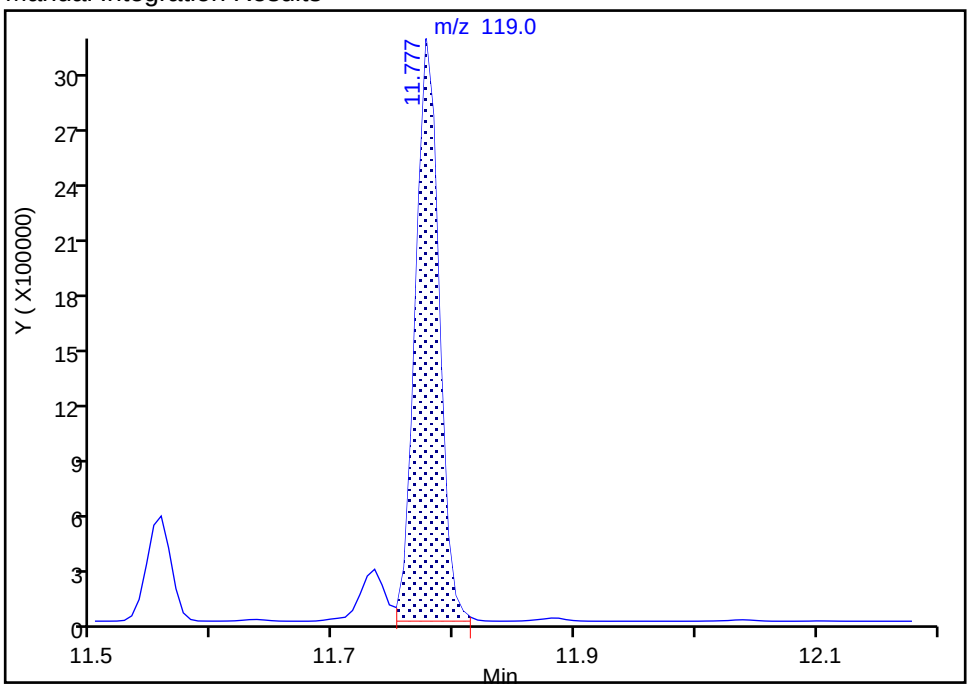
Processing Integration Results

RT: 11.88
Area: 31606
Amount: 4.256096
Amount Units: ug/l



Manual Integration Results

RT: 11.78
Area: 4325779
Amount: 482.7066
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:54:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Apr-2018 15:21:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0069732-013
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-Apr-2018 16:23:06 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: martineze Date: 03-Apr-2018 16:35:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.590	1.590	0.000	79	8150	5.00	3.70	a
2 Dichlorodifluoromethane	85	1.639	1.626	0.013	98	26282	5.00	4.64	
3 Chloromethane	50	1.797	1.797	0.000	98	26409	5.00	4.79	
5 Butadiene	54	1.901	1.901	0.000	94	20421	5.00	4.96	
4 Vinyl chloride	62	1.907	1.907	0.000	98	29113	5.00	5.20	
6 Bromomethane	94	2.200	2.200	0.000	99	20554	5.00	5.06	
7 Chloroethane	64	2.273	2.267	0.006	99	13599	5.00	5.41	
9 Dichlorofluoromethane	67	2.474	2.462	0.012	98	36131	5.00	5.11	
8 Trichlorofluoromethane	101	2.462	2.474	-0.012	56	29594	5.00	5.10	
10 Pentane	72	2.492	2.492	0.000	95	5274	10.0	8.14	
11 Ethyl ether	59	2.693	2.687	0.006	94	11334	5.00	4.68	
12 Ethanol	46	2.687	2.687	0.000	65	3806	200.0	194.2	M
13 2-Methyl-1,3-butadiene	53	2.724	2.712	0.012	94	12222	5.00	4.94	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.742	0.012	91	13454	5.00	4.66	
15 Acrolein	56	2.876	2.876	0.000	95	68048	200.0	127.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.882	0.006	43	17859	5.00	4.81	
17 1,1-Dichloroethene	96	2.919	2.913	0.006	95	16512	5.00	4.94	
18 Acetone	43	2.998	2.998	0.000	88	21569	25.0	23.9	
19 Iodomethane	142	3.084	3.071	0.013	96	29710	5.00	4.69	
22 Isopropyl alcohol	45	3.090	3.090	0.000	1	9280	50.0	47.5	a
20 Carbon disulfide	76	3.114	3.108	0.006	98	59110	5.00	4.69	
21 3-Chloro-1-propene	76	3.242	3.236	0.006	75	9204	5.00	4.77	
23 Methyl acetate	43	3.248	3.242	0.006	97	41899	25.0	24.5	
24 Cyclopentene	67	3.266	3.260	0.006	89	37612	5.00	4.89	
29 Acetonitrile	41	3.315	3.309	0.006	99	24417	50.0	44.1	a
26 Methylene Chloride	84	3.370	3.370	0.000	87	19227	5.00	4.77	
* 25 TBA-d9 (IS)	65	3.352	3.382	-0.030	0	276322	1000.0	1000.0	M
27 2-Methyl-2-propanol	59	3.431	3.461	-0.030	91	17436	50.0	41.6	
28 Methyl tert-butyl ether	73	3.535	3.529	0.006	97	44130	5.00	4.79	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	92	16880	5.00	4.67	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.632	0.006	94	50869	50.0	48.1	
32 Hexane	43	3.718	3.718	0.000	90	12059	5.00	4.62	
33 Isopropyl ether	45	3.925	3.925	0.000	94	46113	5.00	4.78	
34 1,1-Dichloroethane	63	3.974	3.967	0.007	86	26626	5.00	4.76	
35 Vinyl acetate	86	3.980	3.967	0.013	99	4541	10.0	8.04	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	88	14903	5.00	4.91	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	90	44696	5.00	4.89	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	210809	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.480	0.012	69	6617	5.00	5.02	a
41 Ethyl acetate	70	4.510	4.498	0.012	87	3396	10.0	9.89	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	71	19067	5.00	4.66	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	8880	25.0	21.4	
44 Methyl acrylate	55	4.571	4.559	0.012	98	10343	5.00	4.85	
43 Propionitrile	54	4.650	4.644	0.006	99	21236	50.0	43.6	
45 Tetrahydrofuran	72	4.742	4.723	0.019	67	4206	10.0	8.58	
46 Chlorobromomethane	128	4.736	4.736	0.000	76	9534	5.00	5.02	
47 Methacrylonitrile	67	4.754	4.748	0.006	88	60870	50.0	48.9	
48 Chloroform	83	4.784	4.784	0.000	99	27467	5.00	4.69	
49 Cyclohexane	84	4.931	4.925	0.006	88	26226	5.00	4.81	
50 1,1,1-Trichloroethane	97	4.943	4.937	0.006	86	21499	5.00	4.64	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	151515	50.0	51.4	
52 Carbon tetrachloride	117	5.071	5.065	0.006	96	14658	5.00	4.38	
53 1,1-Dichloropropene	75	5.089	5.083	0.006	98	20754	5.00	4.94	
56 Isobutyl alcohol	74	5.193	5.211	-0.018	1	1406	125.0	83.4	a
54 Benzene	78	5.290	5.284	0.006	93	62569	5.00	4.66	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	140562	50.0	50.0	
57 Isopropyl acetate	43	5.327	5.333	-0.006	96	36559	5.00	4.89	
58 Tert-amyl methyl ether	87	5.339	5.333	0.006	98	13641	5.00	4.83	
59 1,2-Dichloroethane	62	5.382	5.376	0.006	97	18068	5.00	4.77	
60 n-Heptane	57	5.437	5.431	0.006	90	12380	5.00	4.75	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	470788	50.0	50.0	
62 n-Butanol	56	5.870	5.863	0.007	87	7317	125.0	91.4	
63 Trichloroethene	95	5.943	5.937	0.006	98	15569	5.00	4.63	
65 Methylcyclohexane	83	6.071	6.065	0.006	92	30178	5.00	4.69	
64 Ethyl acrylate	56	6.071	6.065	0.006	97	8742	5.00	4.64	
66 1,2-Dichloropropane	63	6.235	6.229	0.006	94	15627	5.00	4.78	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	29340	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	82	14054	10.0	8.61	
69 1,4-Dioxane	88	6.333	6.333	0.000	34	4525	100.0	100.5	
70 n-Propyl acetate	43	6.345	6.339	0.006	96	15217	5.00	4.90	
71 Dibromomethane	93	6.369	6.363	0.006	95	10094	5.00	4.92	
72 Dichlorobromomethane	83	6.516	6.510	0.006	98	16797	5.00	4.49	
73 2-Chloroethyl vinyl ether	63	6.851	6.839	0.012	90	7168	5.00	4.67	
74 2-Nitropropane	41	6.845	6.839	0.006	74	3417	10.0	10.3	
75 Epichlorohydrin	57	6.961	6.955	0.006	98	25147	100.0	86.0	
76 cis-1,3-Dichloropropene	75	7.022	7.010	0.012	90	21303	5.00	4.58	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	94	61763	25.0	22.3	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	99	580804	50.0	51.2	
79 Toluene	91	7.345	7.339	0.006	93	65401	5.00	4.65	
80 trans-1,3-Dichloropropene	75	7.698	7.686	0.012	97	16410	5.00	4.57	
81 Ethyl methacrylate	69	7.711	7.705	0.006	86	13334	5.00	4.40	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	97	11257	5.00	4.76	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.961	0.012	95	14404	5.00	4.57	
84 1,3-Dichloropropane	76	8.131	8.119	0.012	91	21633	5.00	4.89	
85 2-Hexanone	43	8.180	8.168	0.012	94	40740	25.0	22.6	
86 n-Butyl acetate	43	8.284	8.278	0.006	97	13802	5.00	4.56	
87 Chlorodibromomethane	129	8.369	8.363	0.006	96	10168	5.00	4.17	
88 Ethylene Dibromide	107	8.534	8.521	0.013	98	12417	5.00	4.67	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	85	365081	50.0	50.0	
90 Chlorobenzene	112	9.113	9.107	0.006	97	42274	5.00	4.67	
92 Ethylbenzene	106	9.204	9.198	0.006	98	22352	5.00	4.56	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.216	0.007	93	10956	5.00	4.03	
93 m-Xylene & p-Xylene	106	9.351	9.344	0.007	0	27885	5.00	4.52	
94 n-Butyl acrylate	73	9.790	9.783	0.007	99	7144	5.00	4.83	
95 o-Xylene	106	9.820	9.814	0.006	93	28747	5.00	4.55	
96 Styrene	104	9.850	9.844	0.006	97	46395	5.00	4.65	
97 Amyl acetate (mixed isomer	43	10.033	10.027	0.006	91	14882	5.00	4.86	
98 Bromoform	173	10.082	10.082	0.000	93	5365	5.00	4.51	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	75804	5.00	4.59	
$ 100 4-Bromofluorobenzene	174	10.424	10.417	0.007	91	157487	50.0	51.0	
101 Bromobenzene	156	10.564	10.558	0.006	97	17643	5.00	4.68	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.594	0.006	99	19294	5.00	4.70	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	91016	5.00	4.67	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	96	4610	5.00	4.49	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	77	3496	5.00	4.43	
106 2-Chlorotoluene	91	10.741	10.734	0.007	93	60361	5.00	4.62	
107 4-Ethyltoluene	105	10.741	10.741	0.000	89	73604	5.00	4.55	
108 1,3,5-Trimethylbenzene	105	10.808	10.802	0.006	93	63158	5.00	4.48	
109 4-Chlorotoluene	91	10.856	10.850	0.006	97	50171	5.00	4.48	
110 Butyl Methacrylate	87	10.899	10.893	0.006	85	14013	5.00	4.67	
111 tert-Butylbenzene	119	11.106	11.100	0.006	94	50196	5.00	4.43	
112 1,2,4-Trimethylbenzene	105	11.167	11.161	0.006	97	65740	5.00	4.58	
113 sec-Butylbenzene	105	11.314	11.308	0.006	99	86292	5.00	4.59	
114 4-Isopropyltoluene	119	11.442	11.436	0.006	98	70704	5.00	4.53	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	95	34468	5.00	4.63	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	197862	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.533	0.006	94	35549	5.00	4.73	
118 Benzyl chloride	91	11.667	11.661	0.006	99	18538	5.00	4.38	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	94	67270	5.00	4.57	
120 p-Diethylbenzene	119	11.777	11.771	0.006	93	39836	5.00	4.64	a
121 n-Butylbenzene	92	11.801	11.795	0.006	97	38724	5.00	4.56	
122 1,2-Dichlorobenzene	146	11.868	11.862	0.006	95	34724	5.00	4.69	
123 1,2,4,5-Tetramethylbenzene	119	12.435	12.429	0.006	96	69158	5.00	4.47	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	89	2663	5.00	4.37	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	28266	5.00	4.63	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	27676	5.00	4.70	
127 Hexachlorobutadiene	225	13.216	13.210	0.006	93	11675	5.00	4.51	
128 Naphthalene	128	13.338	13.332	0.006	100	78160	5.00	4.79	
129 1,2,3-Trichlorobenzene	180	13.527	13.520	0.007	95	27898	5.00	4.63	
S 130 1,2-Dichloroethene, Total	100				0		10.0	9.32	
S 131 Xylenes, Total	100				0		10.0	9.07	
S 132 Total BTEX	1				0		25.0	22.9	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	0.50	Units: uL	
8260MIX1COMB_00076	Amount Added:	0.50	Units: uL	
ACROLEIN W_00075	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

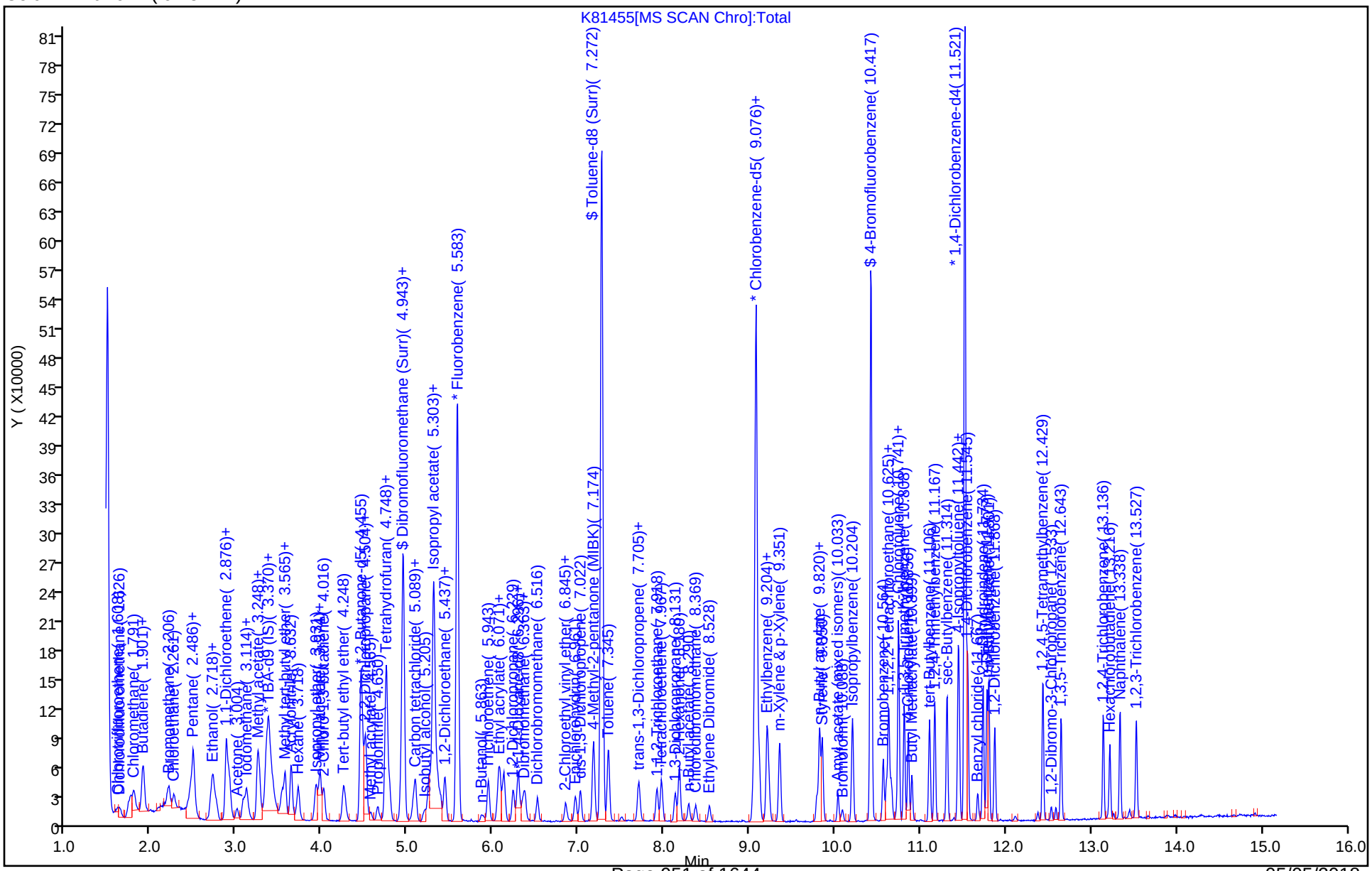
Report Date: 04-Apr-2018 16:23:08 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Injection Date:	03-Apr-2018 15:21:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD5			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

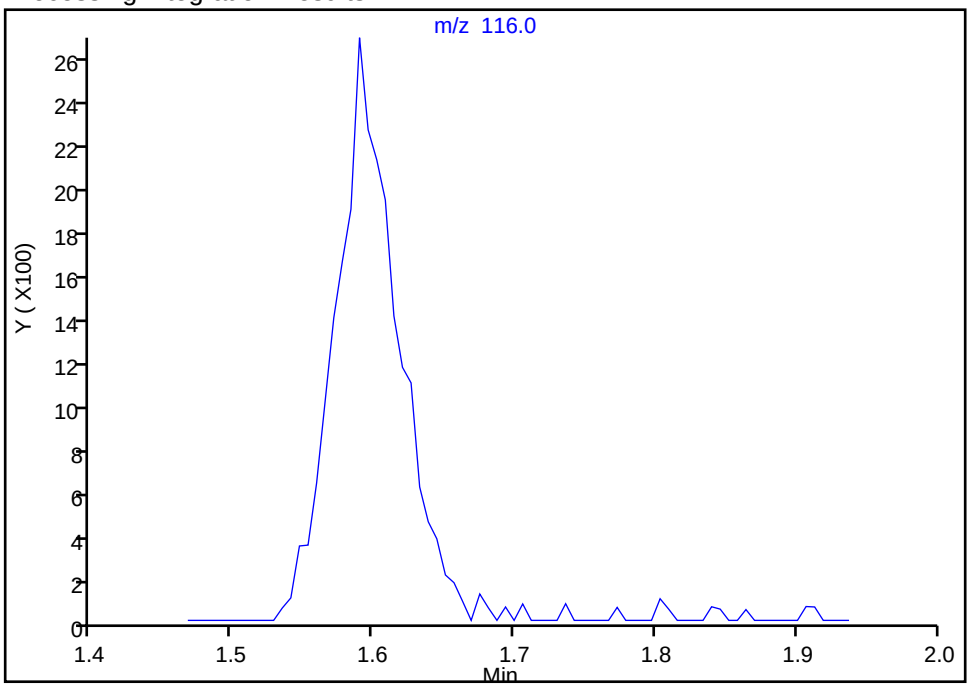
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Injection Date: 03-Apr-2018 15:21:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

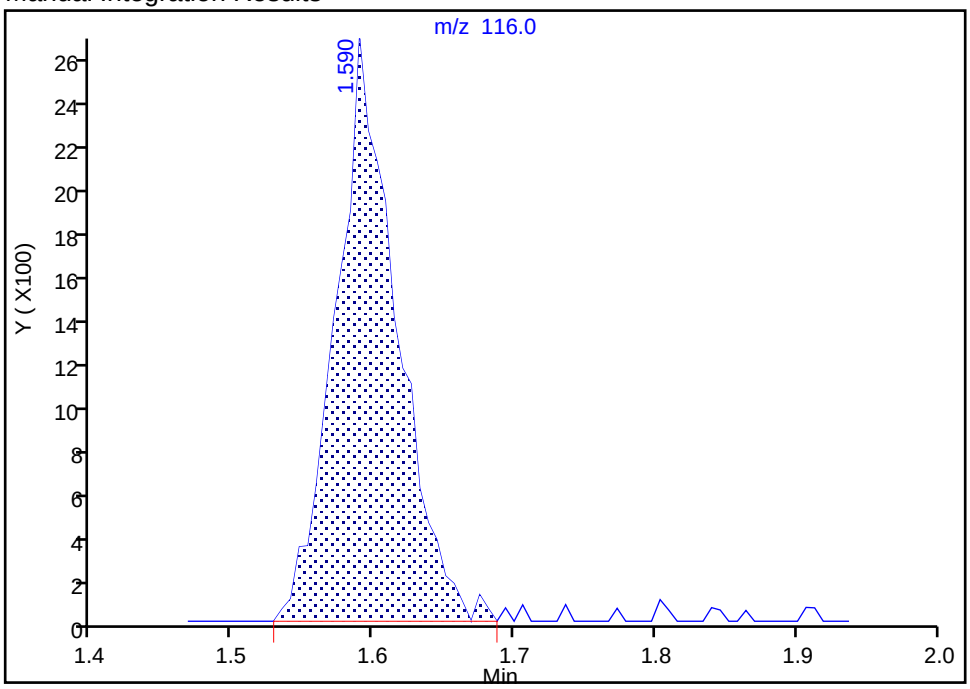
Not Detected
Expected RT: 1.59

Processing Integration Results



Manual Integration Results

RT: 1.59
Area: 8150
Amount: 3.696387
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:48:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

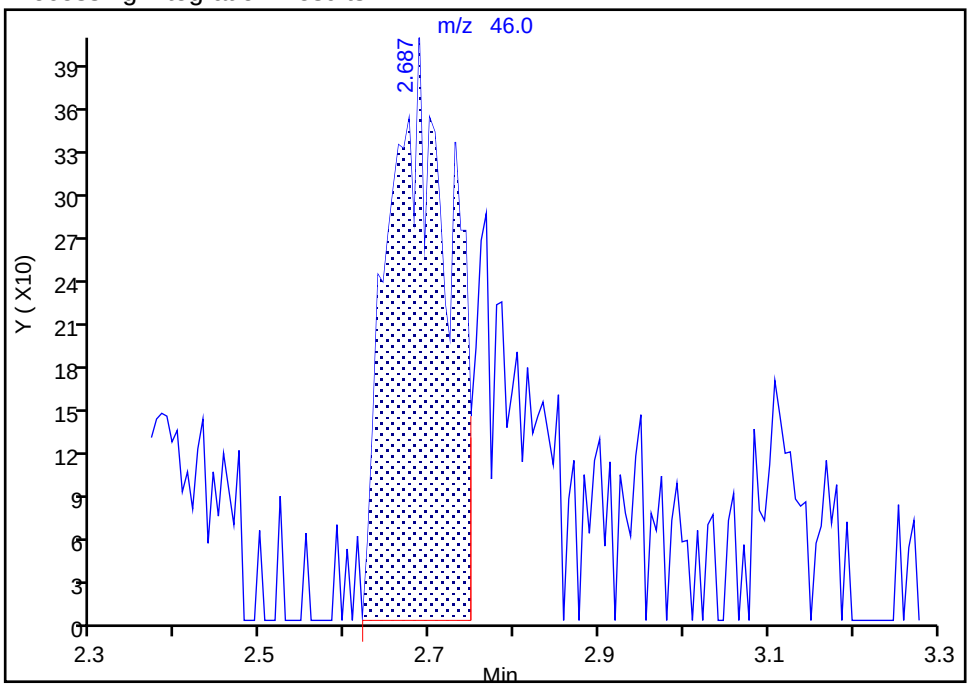
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Injection Date: 03-Apr-2018 15:21:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethanol, CAS: 64-17-5

Signal: 1

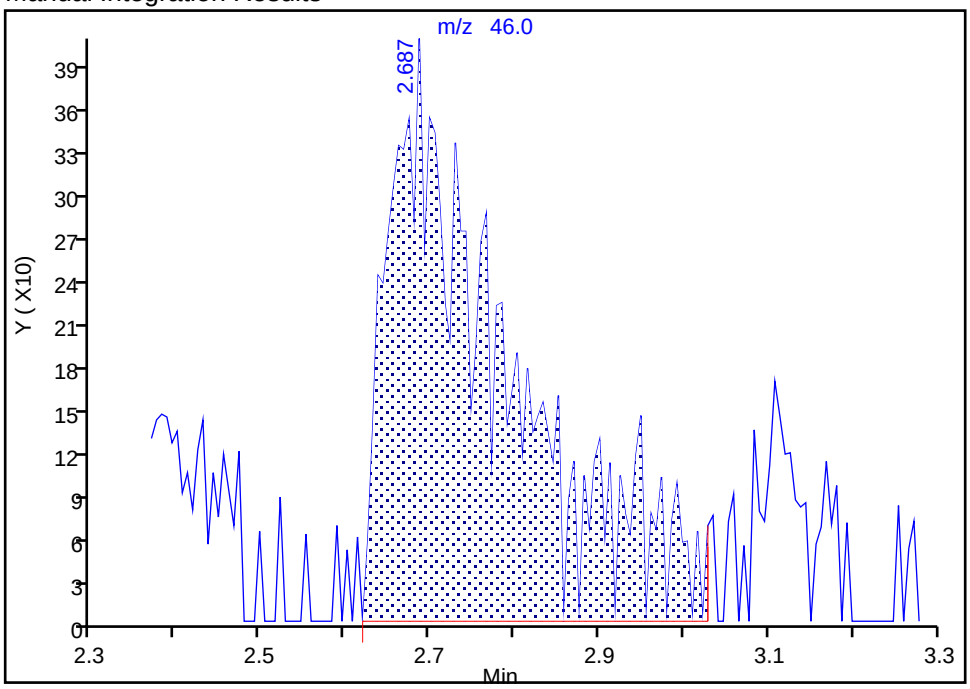
Processing Integration Results

RT: 2.69
Area: 2056
Amount: 106.9078
Amount Units: ug/l



Manual Integration Results

RT: 2.69
Area: 3806
Amount: 194.2323
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:05:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

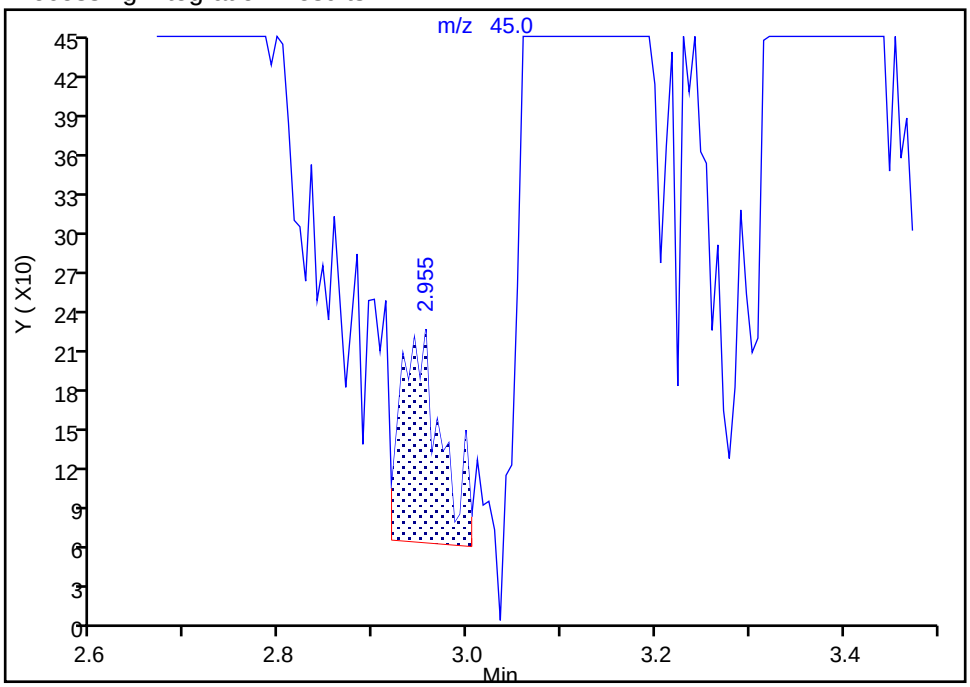
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Injection Date: 03-Apr-2018 15:21:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

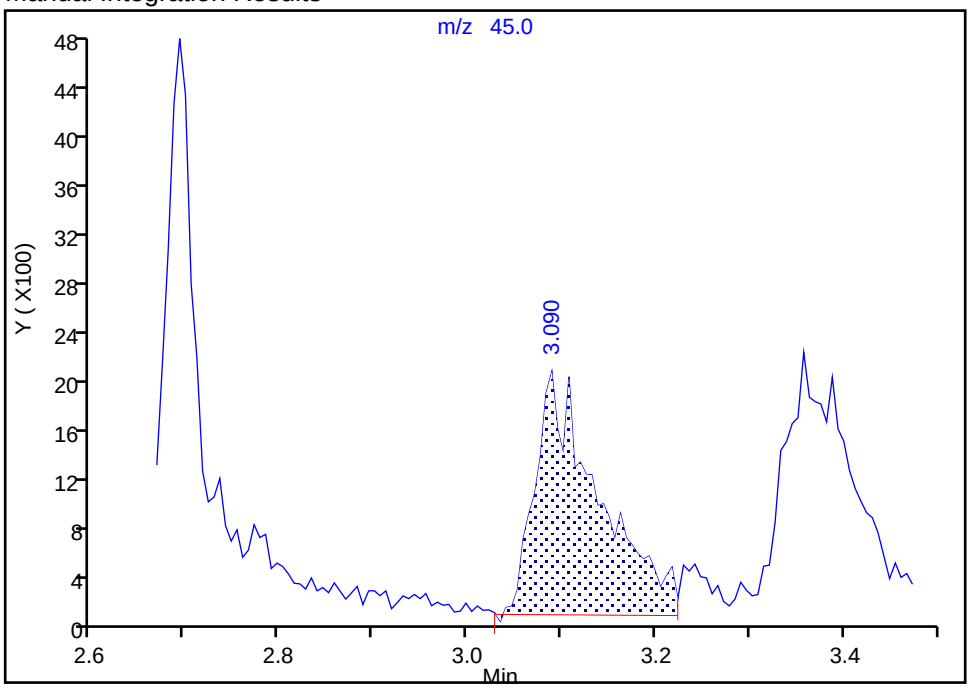
Processing Integration Results

RT: 2.96
Area: 479
Amount: 5.853658
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 9280
Amount: 47.477826
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:49:01
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

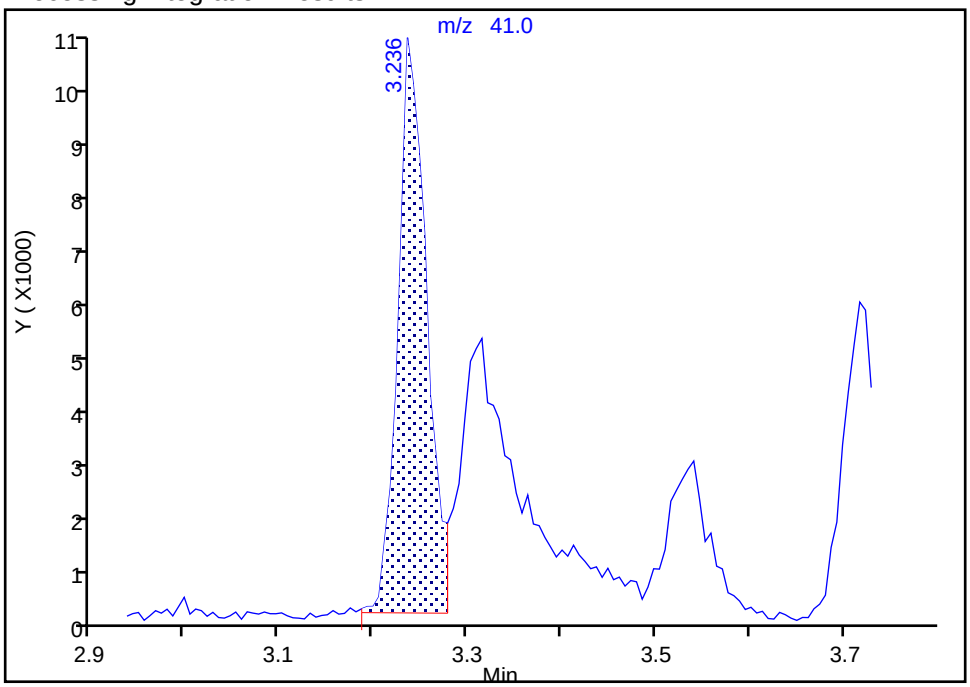
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Injection Date: 03-Apr-2018 15:21:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

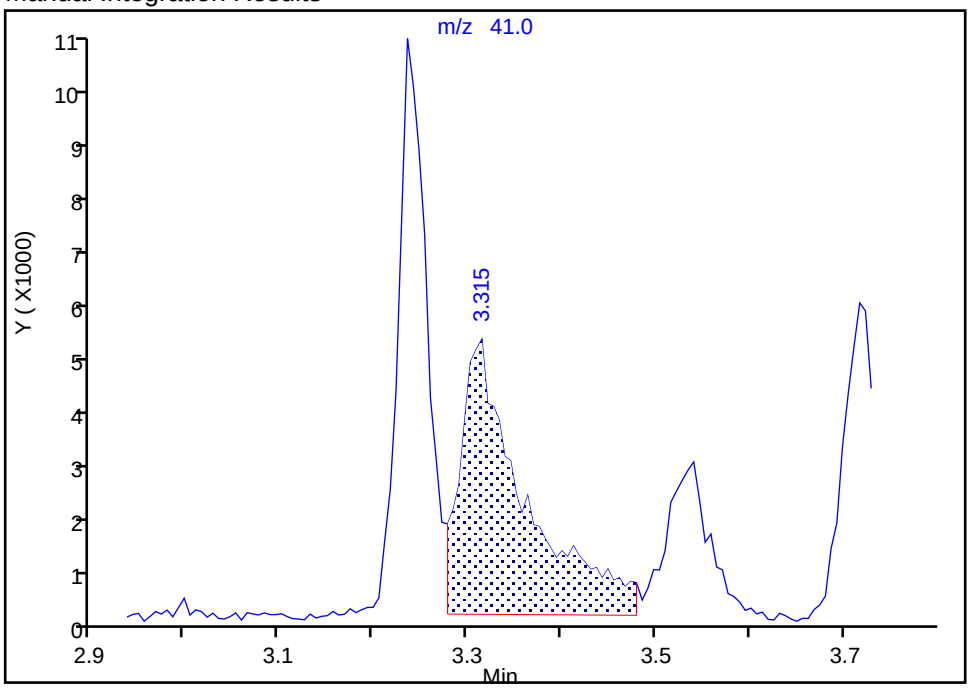
Processing Integration Results

RT: 3.24
Area: 22764
Amount: 39.380220
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 24417
Amount: 44.092045
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:49:05
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

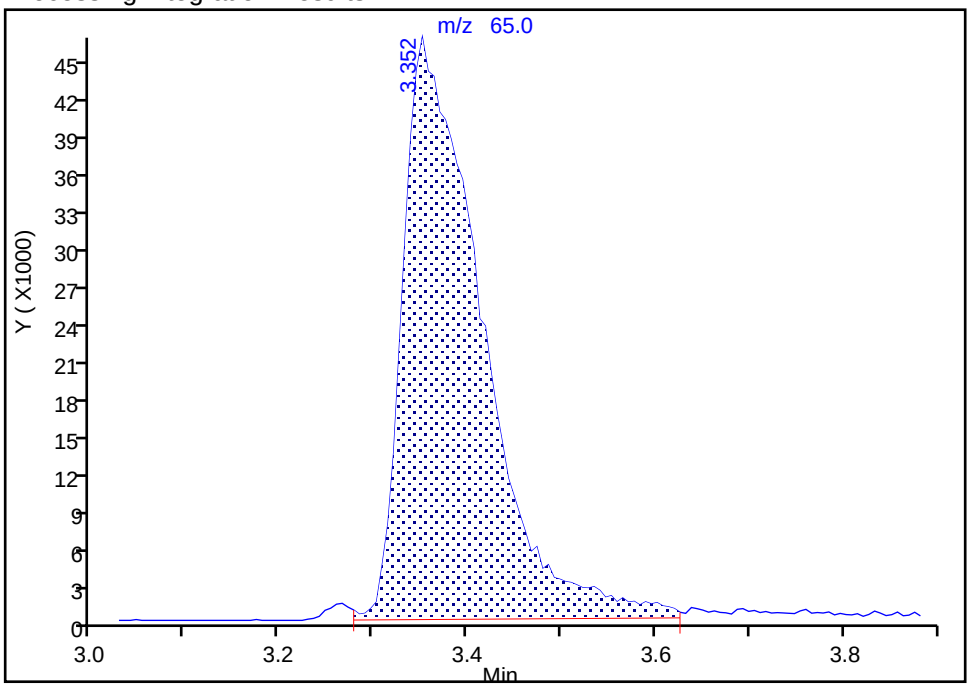
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Injection Date: 03-Apr-2018 15:21:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 25 TBA-d9 (IS), CAS: 25725-11-5

Signal: 1

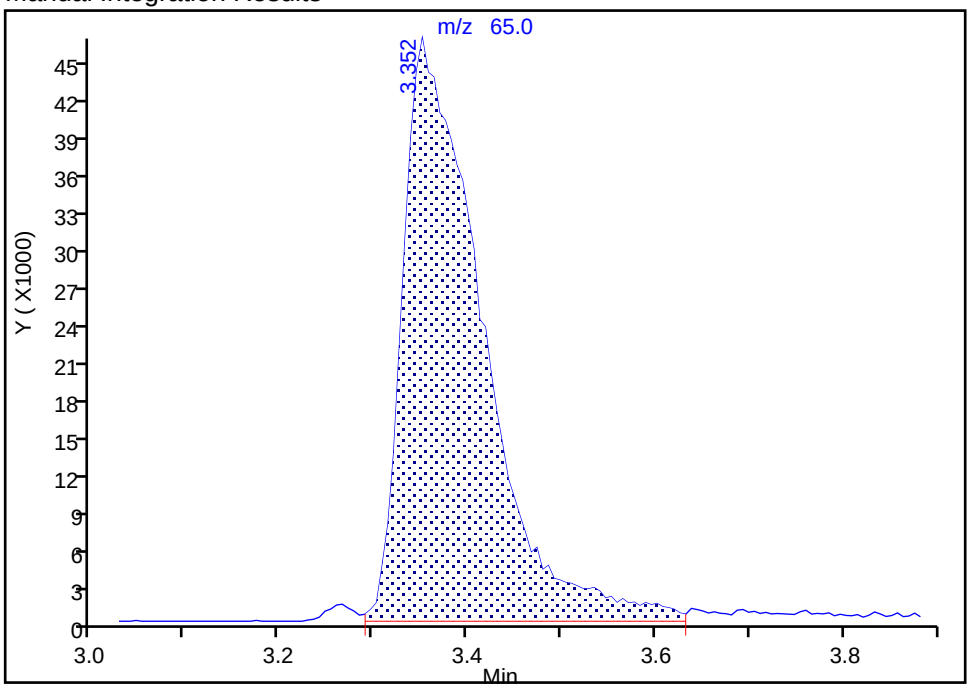
Processing Integration Results

RT: 3.35
Area: 274230
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 3.35
Area: 276322
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 15:06:19
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

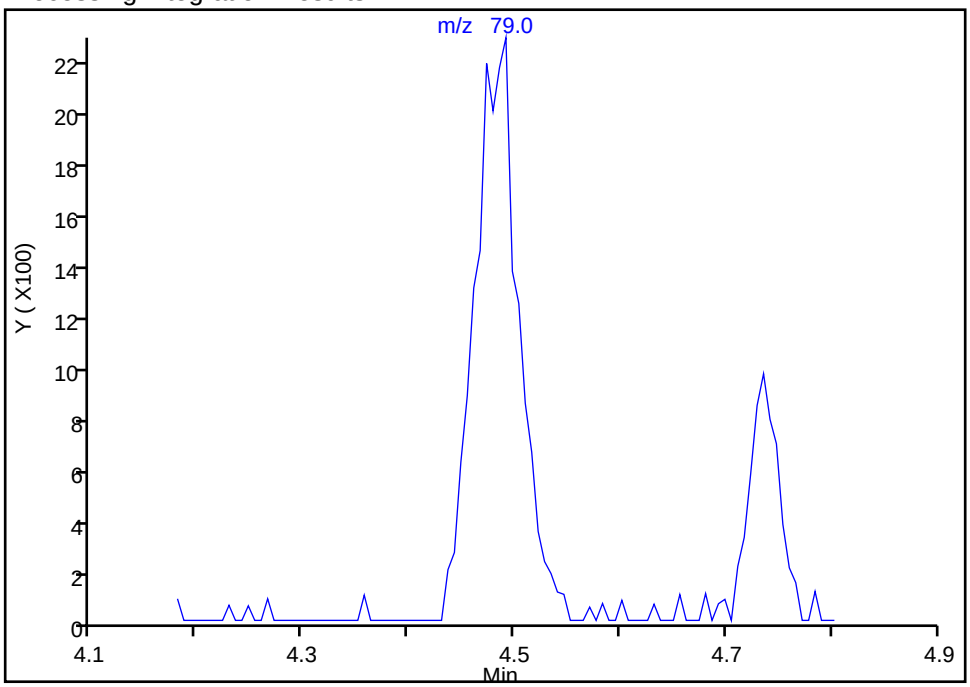
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Injection Date: 03-Apr-2018 15:21:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

39 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

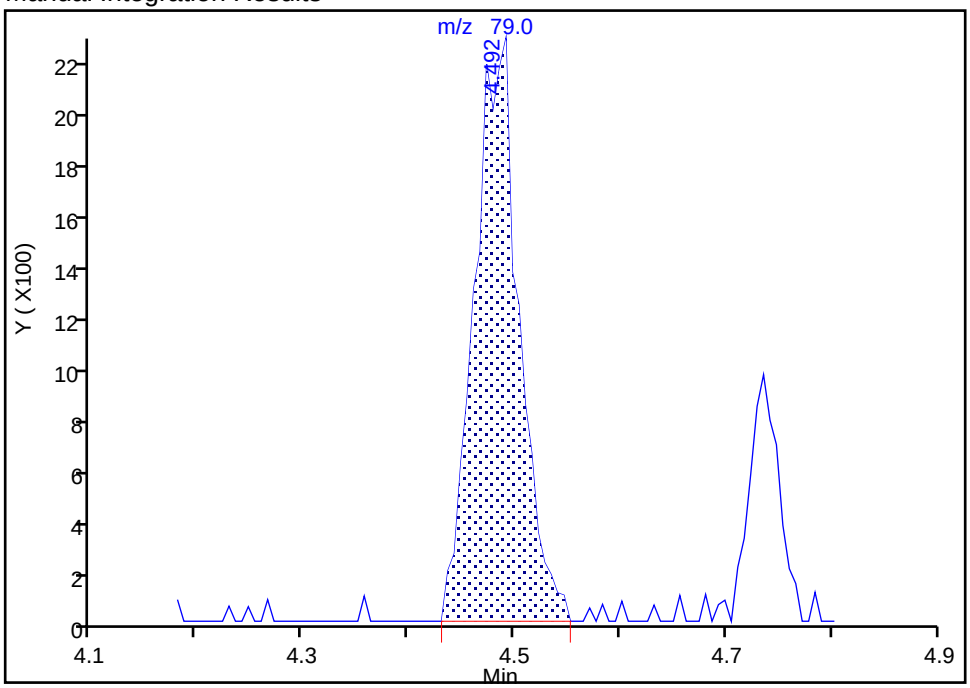
Not Detected
Expected RT: 4.48

Processing Integration Results



Manual Integration Results

RT: 4.49
Area: 6617
Amount: 5.016701
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:49:11
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

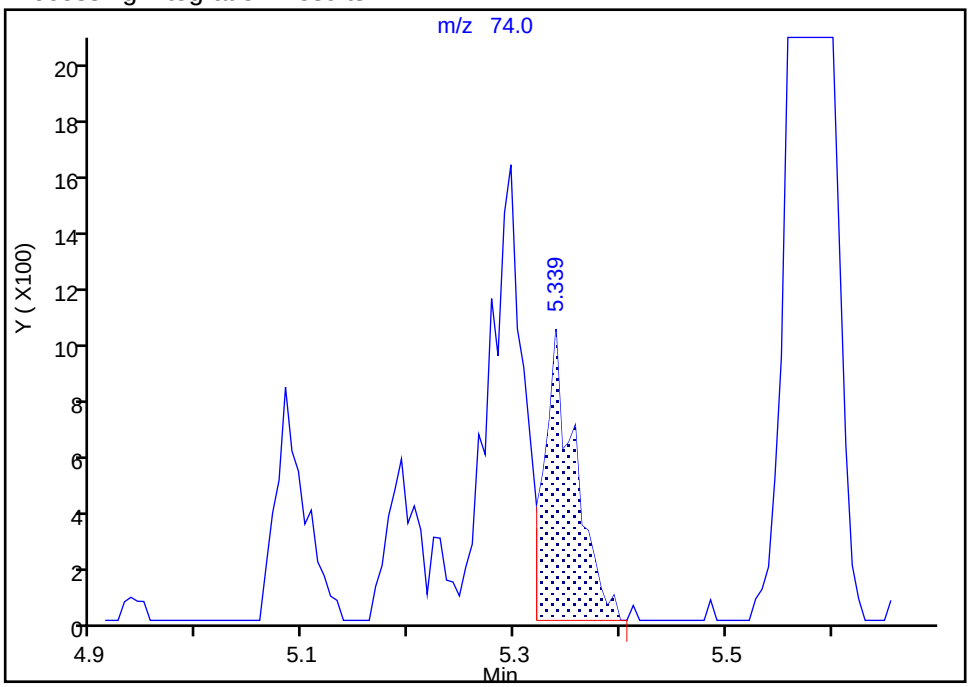
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Injection Date: 03-Apr-2018 15:21:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

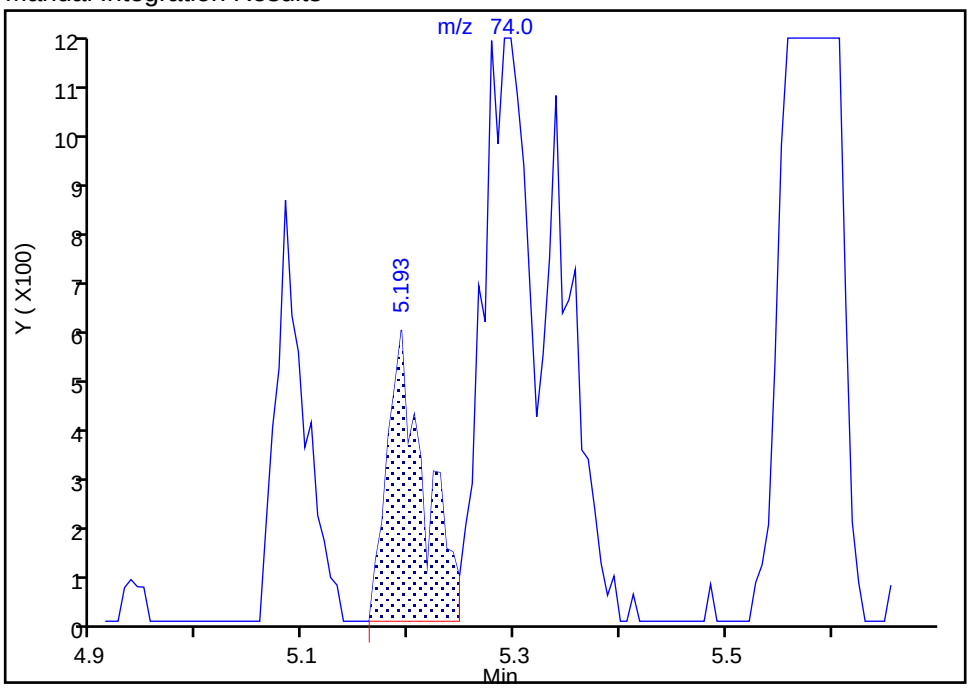
Processing Integration Results

RT: 5.34
Area: 2099
Amount: 133.0046
Amount Units: ug/l



Manual Integration Results

RT: 5.19
Area: 1406
Amount: 83.404446
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:49:18
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

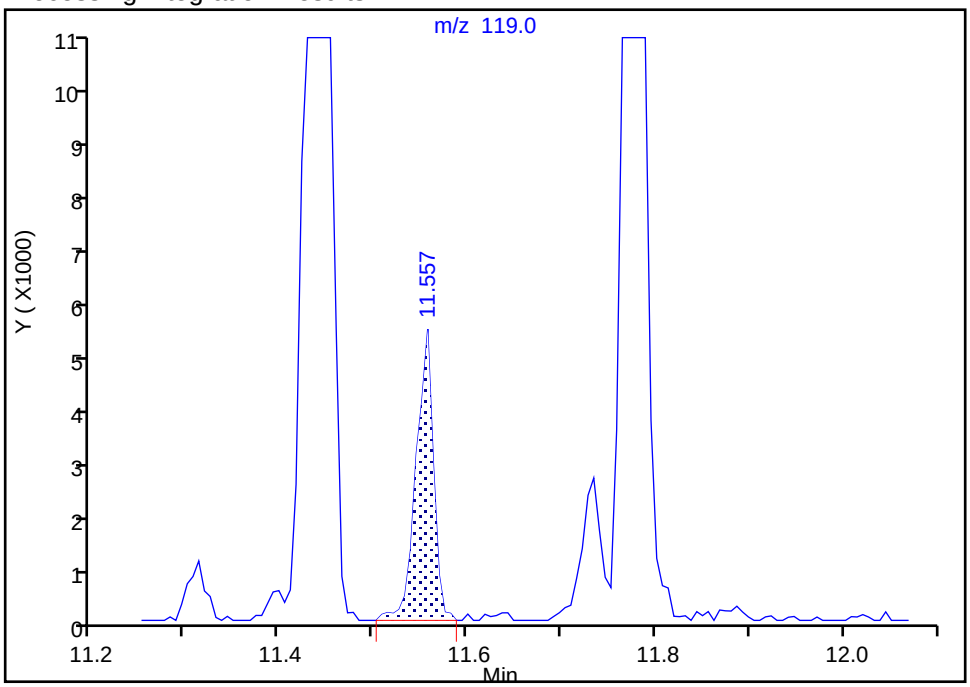
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D
Injection Date: 03-Apr-2018 15:21:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

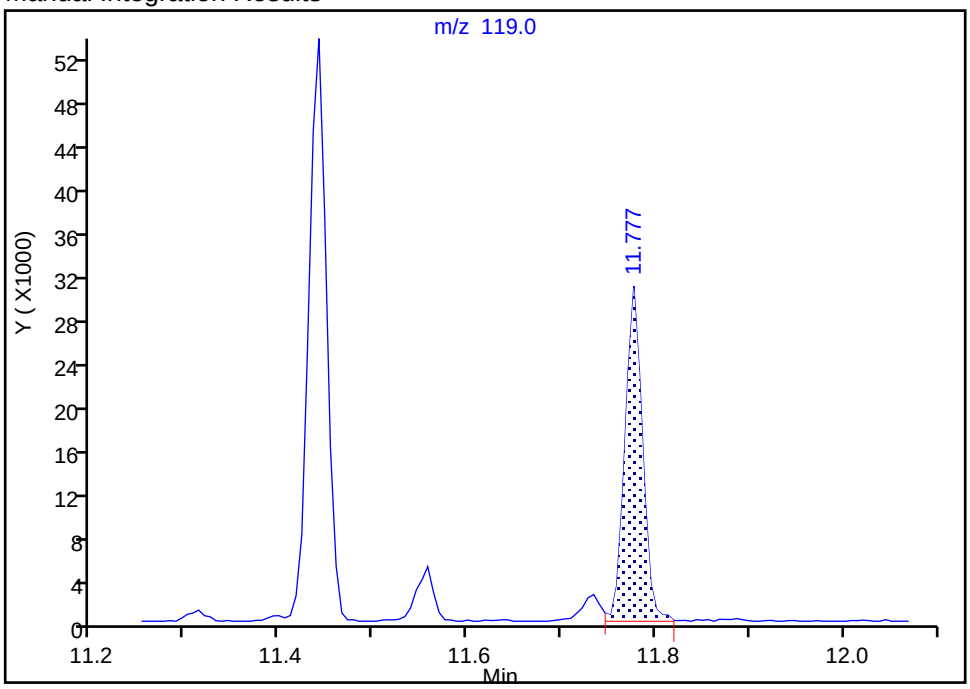
Processing Integration Results

RT: 11.56
Area: 6416
Amount: 1.051952
Amount Units: ug/l



Manual Integration Results

RT: 11.78
Area: 39836
Amount: 4.640579
Amount Units: ug/l



Reviewer: delpolitov, 04-Apr-2018 14:49:38
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-512949/3	K82296.D
Level 2	STD5 460-512949/4	K82297.D
Level 3	STD20 460-512949/5	K82298.D
Level 4	STD50 460-512949/6	K82299.D
Level 5	STD200 460-512949/7	K82300.D
Level 6	STD500 460-512949/8	K82301.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	0.1840 0.3331	0.2999	0.3140	0.2977	0.4213	QuaF		0.4532	-0.000239						0.9970		0.9900
Dichlorodifluoromethane	0.4191 0.7119	0.6312	0.6240	0.6176	0.8831	QuaF		0.9403	-0.000453		0.1000				0.9970		0.9900
Chloromethane	0.6476 0.6198	0.5949	0.5714	0.5502	0.7487	Ave		0.6221			0.1000	11.4		20.0			
Vinyl chloride	0.5149 0.6229	0.6310	0.6058	0.5857	0.7704	Ave		0.6218			0.1000	13.5		20.0			
Butadiene	0.3711 0.5072	0.4494	0.4675	0.4557	0.6062	Ave		0.4762				16.3		20.0			
Bromomethane	0.5312 0.5026	0.4925	0.4947	0.4814	0.6018	Ave		0.5174			0.1000	8.6		20.0			
Chloroethane	0.2900 0.3121	0.2963	0.3098	0.3011	0.3722	Ave		0.3136			0.1000	9.5		20.0			
Dichlorofluoromethane	0.8773 0.8504	0.9055	0.9369	0.8953	1.0256	Ave		0.9152				6.7		20.0			
Trichlorofluoromethane	0.6703 0.8060	0.7993	0.8136	0.8100	0.9767	Ave		0.8127			0.1000	12.0		20.0			
Pentane	1.4291 1.7520	1.8792	1.9411	1.8065	2.1179	Ave		1.8210				12.6		20.0			
Ethanol	0.0519 0.0586	0.0649	0.0702	0.0583	0.0722	Ave		0.0627				12.4		20.0			
Ethyl ether	0.2694 0.2603	0.2494	0.2849	0.2642	0.3056	Ave		0.2723				7.4		20.0			
2-Methyl-1,3-butadiene	0.2484 0.3056	0.3041	0.3367	0.3175	0.3634	Ave		0.3126				12.3		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	0.2991 0.3871	0.4034	0.4308	0.4128	0.4793	Ave		0.4021				14.8		20.0			
Acrolein	1.4946 1.3517	1.1921	1.5565	1.6487	1.6512	Ave		1.4825				12.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3000 0.5040	0.4881	0.5279	0.5142	0.6145	Lin2	-0.245	0.5437			0.1000				0.9940		0.9900
1,1-Dichloroethene	0.3310 0.4061	0.4041	0.4326	0.4031	0.4840	Ave		0.4101			0.1000	12.1		20.0			
Acetone	1.5182 1.0786	1.2273	1.1518	1.1015	1.2994	Ave		1.2294			0.0500	13.3		20.0			
Iodomethane	0.8254 0.8441	0.8063	0.9136	0.8565	1.0010	Ave		0.8745				8.2		20.0			
Isopropyl alcohol	0.6883 0.7208	0.8313	0.7512	0.7713	0.8549	Ave		0.7696				8.3		20.0			
Carbon disulfide	1.3530 1.4995	1.4216	1.5995	1.4925	1.8109	Ave		1.5295			0.1000	10.5		20.0			
Allyl chloride	0.1961 0.2487	0.2333	0.2512	0.2421	0.2843	Ave		0.2426				11.8		20.0			
Methyl acetate	6.5144 6.3909	6.8910	6.7340	6.3749	7.5977	Ave		6.7505			0.1000	6.8		20.0			
Cyclopentene	0.7207 0.8814	0.8724	0.9680	0.9330	1.0506	Ave		0.9044				12.3		20.0			
Acetonitrile	1.6369 1.6355	1.7263	1.5545	1.4038	2.0201	Ave		1.6628				12.4		20.0			
Methylene Chloride	0.4961 0.4343	0.4408	0.4760	0.4488	0.5112	Ave		0.4679			0.1000	6.7		20.0			
2-Methyl-2-propanol	1.6416 1.4180	1.3508	1.5242	1.4216	1.6544	Ave		1.5018				8.4		20.0			
Methyl tert-butyl ether	1.1281 1.0674	1.0609	1.1842	1.1225	1.3066	Ave		1.1450			0.1000	8.0		20.0			
trans-1,2-Dichloroethene	0.4572 0.4135	0.4151	0.4555	0.4337	0.5050	Ave		0.4467			0.1000	7.7		20.0			
Acrylonitrile	0.1218 0.1179	0.1163	0.1245	0.1199	0.1406	Ave		0.1235				7.2		20.0			
Hexane	0.2560 0.3358	0.3306	0.3622	0.3469	0.4356	Ave		0.3445				16.8		20.0			
Isopropyl ether	1.2037 1.1280	1.1498	1.2748	1.1890	1.3223	Ave		1.2113				6.1		20.0			
1,1-Dichloroethane	0.6886 0.6728	0.6499	0.7345	0.6988	0.8132	Ave		0.7096			0.2000	8.2		20.0			
Vinyl acetate	1.6046 1.6620	1.7145	1.9508	1.8161	1.9825	Ave		1.7884				8.7		20.0			
2-Chloro-1,3-butadiene	0.3016 0.3536	0.3451	0.3848	0.3582	0.4203	Ave		0.3606				11.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	1.1625 1.0985	1.1040	1.2283	1.1510	1.2664	Ave		1.1685				5.8		20.0			
2,2-Dichloropropane	0.2276 0.2165	0.2095	0.2360	0.2145	0.2640	Ave		0.2280				8.8		20.0			
cis-1,2-Dichloroethene	0.4856 0.4761	0.4713	0.5140	0.4766	0.5644	Ave		0.4980			0.1000	7.2		20.0			
Ethyl acetate	0.4846 0.3877	0.3787	0.4162	0.3964	0.4379	Ave		0.4169				9.4		20.0			
2-Butanone (MEK)	0.5460 0.4484	0.4795	0.4749	0.4535	0.5266	Ave		0.4882			0.0500	8.1		20.0			
Methyl acrylate	0.2731 0.2712	0.2739	0.2715	0.2631	0.3077	Ave		0.2768				5.6		20.0			
Propionitrile	1.2213 1.3186	1.3761	1.4984	1.4052	1.5623	Ave		1.3970				8.8		20.0			
Tetrahydrofuran	0.6577 0.5382	0.6079	0.5747	0.5413	0.6234	Ave		0.5906				8.1		20.0			
Chlorobromomethane	0.2451 0.2440	0.2342	0.2580	0.2395	0.2790	Ave		0.2500				6.5		20.0			
Methacrylonitrile	0.1274 0.1355	0.1314	0.1413	0.1340	0.1525	Ave		0.1370				6.5		20.0			
Chloroform	0.7355 0.7109	0.7068	0.7658	0.7109	0.8379	Ave		0.7447			0.2000	6.8		20.0			
Cyclohexane	0.4211 0.6894	0.6646	0.7174	0.6979	0.8471	Lin2	-0.324	0.7419			0.1000				0.9940		0.9900
1,1,1-Trichloroethane	0.6210 0.7065	0.6795	0.7382	0.7048	0.8614	Ave		0.7185			0.1000	11.2		20.0			
Carbon tetrachloride	0.5129 0.6434	0.5759	0.6397	0.6295	0.7678	Ave		0.6282			0.1000	13.5		20.0			
1,1-Dichloropropene	0.4963 0.5383	0.5063	0.5566	0.5309	0.6511	Ave		0.5466				10.2		20.0			
Isobutyl alcohol	0.0365 0.0561	0.0487	0.0494	0.0494	0.0650	Ave		0.0509				18.5		20.0			
Benzene	1.6519 1.6965	1.6625	1.8023	1.7141	2.0635	Ave		1.7651			0.5000	8.8		20.0			
Isopropyl acetate	0.9745 1.0207	0.9755	1.0617	0.9688	1.1604	Ave		1.0269				7.3		20.0			
Tert-amyl methyl ether	0.3194 0.3581	0.3326	0.3698	0.3514	0.4022	Ave		0.3556				8.2		20.0			
1,2-Dichloroethane	0.5115 0.4630	0.4610	0.4833	0.4471	0.5321	Ave		0.4830			0.1000	6.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Heptane	0.2101 0.3272	0.3225	0.3478	0.3350	0.4173	Lin2	-0.150	0.3586							0.9910		0.9900
n-Butanol	0.2886 0.3435	0.2926	0.2949	0.2918	0.3692	Ave		0.3134				10.9		20.0			
Trichloroethene	0.4001 0.4218	0.4067	0.4284	0.4102	0.5008	Ave		0.4280			0.2000	8.7		20.0			
Ethyl acrylate	0.1793 0.2556	0.2331	0.2759	0.2519	0.3044	Ave		0.2500				16.9		20.0			
Methylcyclohexane	0.4962 0.8348	0.7743	0.8785	0.8396	1.0377	Lin2	-0.410	0.8974			0.1000				0.9920		0.9900
1,2-Dichloropropane	0.3807 0.3674	0.3571	0.3857	0.3584	0.4305	Ave		0.3800			0.1000	7.2		20.0			
Methyl methacrylate	0.2264 0.2643	0.2432	0.2663	0.2560	0.2985	Ave		0.2591				9.4		20.0			
1,4-Dioxane	1.2805 1.1126	1.5030	1.5440	1.3334	1.4801	Ave		1.3756				12.0		20.0			
n-Propyl acetate	0.3763 0.4344	0.3914	0.4294	0.4160	0.4892	Ave		0.4228				9.3		20.0			
Dibromomethane	0.2444 0.2528	0.2390	0.2598	0.2428	0.2859	Ave		0.2541				6.8		20.0			
Dichlorobromomethane	0.4685 0.5423	0.4697	0.5349	0.5015	0.6132	Ave		0.5217			0.2000	10.5		20.0			
2-Chloroethyl vinyl ether	0.1707 0.1884	0.1805	0.1930	0.1805	0.2114	Ave		0.1874				7.5		20.0			
2-Nitropropane	0.0747 0.0736	0.0562	0.0590	0.0575	0.0756	Ave		0.0661				14.2		20.0			
Epichlorohydrin	0.3218 0.3672	0.3542	0.3825	0.3744	0.4339	Ave		0.3723				9.9		20.0			
cis-1,3-Dichloropropene	0.5800 0.6465	0.5946	0.6485	0.6177	0.7578	Ave		0.6408			0.2000	9.9		20.0			
4-Methyl-2-pentanone (MIBK)	3.3296 3.5431	3.6074	3.8553	3.7044	4.2367	Ave		3.7128			0.0500	8.4		20.0			
Toluene	1.7803 1.7934	1.7443	1.8807	1.8314	2.1900	Ave		1.8700			0.4000	8.7		20.0			
trans-1,3-Dichloropropene	0.4977 0.5722	0.5144	0.5575	0.5372	0.6592	Ave		0.5564			0.1000	10.3		20.0			
Ethyl methacrylate	0.4102 0.4639	0.3985	0.4412	0.4437	0.5446	Ave		0.4504				11.5		20.0			
1,1,2-Trichloroethane	0.2955 0.2960	0.2997	0.3155	0.2911	0.3465	Ave		0.3074			0.1000	6.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.4734 0.5068	0.4923	0.5389	0.5097	0.6245	Ave		0.5243			0.2000	10.2		20.0			
1,3-Dichloropropane	0.5374 0.5525	0.5439	0.5798	0.5519	0.6468	Ave		0.5687				7.2		20.0			
2-Hexanone	2.0662 2.2715	2.3236	2.4628	2.3668	2.6973	Ave		2.3647			0.0500	8.9		20.0			
n-Butyl acetate	0.5535 0.4942	0.4383	0.4941	0.4899	0.5684	Ave		0.5064				9.4		20.0			
Chlorodibromomethane	0.4014 0.4764	0.4039	0.4359	0.4334	0.5387	Ave		0.4483			0.1000	11.6		20.0			
Ethylene Dibromide	0.3326 0.3807	0.3612	0.3946	0.3759	0.4430	Ave		0.3814			0.1000	9.7		20.0			
Chlorobenzene	1.1611 1.2164	1.1716	1.2651	1.2223	1.4489	Ave		1.2475			0.5000	8.5		20.0			
Ethylbenzene	0.6016 0.6719	0.6391	0.6914	0.6690	0.8081	Ave		0.6802			0.1000	10.3		20.0			
1,1,1,2-Tetrachloroethane	0.4489 0.5252	0.4503	0.4806	0.4792	0.6045	Ave		0.4981				11.9		20.0			
m-Xylene & p-Xylene	0.7501 0.8140	0.7725	0.8495	0.8135	0.9821	Ave		0.8303			0.1000	9.9		20.0			
n-Butyl acrylate	0.2364 0.2782	0.2394	0.2662	0.2575	0.3104	Ave		0.2647				10.4		20.0			
o-Xylene	0.7992 0.8542	0.8026	0.8836	0.8500	1.0119	Ave		0.8669			0.3000	9.0		20.0			
Styrene	1.1923 1.3443	1.2645	1.3914	1.3331	1.5918	Ave		1.3529			0.3000	10.1		20.0			
Amyl acetate (mixed isomers)	0.8716 0.9858	0.7970	0.9545	0.9843	1.1588	Ave		0.9587				12.8		20.0			
Bromoform	0.2651 0.3176	0.2603	0.2790	0.2804	0.3485	Ave		0.2918			0.1000	11.7		20.0			
Isopropylbenzene	1.9157 2.3264	2.1284	2.3988	2.3342	2.8428	Ave		2.3244			0.1000	13.3		20.0			
Bromobenzene	0.9424 0.9456	0.9365	0.9715	0.9486	1.1423	Ave		0.9812				8.1		20.0			
1,1,2,2-Tetrachloroethane	0.7827 0.8321	0.8168	0.8610	0.8456	0.9994	Ave		0.8563			0.3000	8.8		20.0			
N-Propylbenzene	3.6678 4.2408	4.1069	4.4991	4.4245	5.4059	Ave		4.3908				13.2		20.0			
1,2,3-Trichloropropane	0.2536 0.2352	0.2241	0.2413	0.2397	0.2874	Ave		0.2469				8.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.1921 0.1931	0.1823	0.1797	0.1922	0.2300	Ave		0.1949				9.3		20.0			
2-Chlorotoluene	2.5445 2.9451	2.7648	2.9472	2.9274	3.5598	Ave		2.9481				11.5		20.0			
4-Ethyltoluene	3.0649 3.6528	3.5635	3.8074	3.7518	4.3297	Ave		3.6950				11.1		20.0			
1,3,5-Trimethylbenzene	2.5821 3.3503	2.9437	3.2423	3.2668	4.1118	Ave		3.2495				15.6		20.0			
4-Chlorotoluene	2.2643 2.4089	2.3408	2.5408	2.4536	2.9919	Ave		2.5000				10.4		20.0			
Butyl Methacrylate	0.7190 0.9997	0.7516	0.9136	0.9334	1.1222	Ave		0.9066				16.7		20.0			
tert-Butylbenzene	1.9761 2.9477	2.4503	2.7155	2.7555	3.6004	Ave		2.7409				19.7		20.0			
1,2,4-Trimethylbenzene	2.8149 3.3645	3.0384	3.3793	3.3448	4.1453	Ave		3.3479				13.5		20.0			
sec-Butylbenzene	3.2041 4.4146	3.9835	4.4801	4.4541	5.7154	Ave		4.3753				18.7		20.0			
4-Isopropyltoluene	2.8329 4.0222	3.5269	3.9205	3.8798	4.9751	Ave		3.8596				18.1		20.0			
1,3-Dichlorobenzene	1.7523 1.8914	1.8166	1.9201	1.8440	2.2629	Ave		1.9146			0.6000	9.4		20.0			
1,4-Dichlorobenzene	1.8449 1.8699	1.8431	1.9367	1.8275	2.2230	Ave		1.9242			0.5000	7.9		20.0			
Benzyl chloride	1.2603 1.6157	1.2681	1.4836	1.4924	1.7842	Ave		1.4840				13.6		20.0			
Indan	3.0726 3.3699	3.2687	3.5457	3.4281	3.8888	Ave		3.4290				8.1		20.0			
p-Diethylbenzene	1.8873 2.0968	1.9678	2.1774	2.1322	2.4559	Ave		2.1195				9.3		20.0			
n-Butylbenzene	1.5407 1.9607	1.9048	2.0284	1.9789	2.4641	Ave		1.9796				14.9		20.0			
1,2-Dichlorobenzene	1.7696 1.8535	1.7893	1.9275	1.8527	2.2115	Ave		1.9007			0.4000	8.5		20.0			
1,2,4,5-Tetramethylbenzene	3.1008 3.8931	3.5249	3.8612	3.7835	4.4650	Ave		3.7714				11.9		20.0			
1,2-Dibromo-3-Chloropropane	0.2082 0.1730	0.1492	0.1689	0.1571	0.1997	Ave		0.1760			0.0500	13.3		20.0			
1,3,5-Trichlorobenzene	1.4962 1.6202	1.6707	1.7271	1.6463	1.8655	Ave		1.6710				7.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	1.5849 1.5596	1.5202	1.6507	1.5595	1.8898	Ave		1.6274			0.2000	8.3		20.0			
Hexachlorobutadiene	0.5589 0.8562	0.7300	0.7936	0.7841	1.0379	Ave		0.7934				19.8		20.0			
Naphthalene	3.6347 3.5647	3.4467	3.7190	3.6731	4.2909	Ave		3.7215				7.9		20.0			
1,2,3-Trichlorobenzene	1.5066 1.5066	1.4820	1.6327	1.5361	1.8450	Ave		1.5848				8.7		20.0			
Dibromofluoromethane (Surr)	0.3749 0.3925	0.3813	0.4046	0.3881	0.4610	Ave		0.4004				7.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3328 0.3956	0.3464	0.3624	0.3482	0.4491	Ave		0.3724				11.6		20.0			
Toluene-d8 (Surr)	1.3981 1.4779	1.4895	1.5027	1.5043	1.8148	Ave		1.5312				9.4		20.0			
4-Bromofluorobenzene	0.4626 0.4817	0.4888	0.4872	0.4827	0.5701	Ave		0.4955				7.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-512949/3	K82296.D
Level 2	STD5 460-512949/4	K82297.D
Level 3	STD20 460-512949/5	K82298.D
Level 4	STD50 460-512949/6	K82299.D
Level 5	STD200 460-512949/7	K82300.D
Level 6	STD500 460-512949/8	K82301.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	QuaF	1783 1738921	13714	57246	135885	663290	1.00 500	5.00	20.0	50.0	200
Dichlorodifluoromethane	FB	QuaF	4061 3716485	28865	113768	281893	1390269	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	6275 3235979	27205	104166	251138	1178713	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	4989 3252084	28857	110439	267346	1212827	1.00 500	5.00	20.0	50.0	200
Butadiene	FB	Ave	3596 2647680	20552	85231	207992	954435	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	5147 2623628	22521	90189	219717	947501	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	2810 1629405	13548	56487	137432	585994	1.00 500	5.00	20.0	50.0	200
Dichlorofluoromethane	FB	Ave	8501 4439412	41411	170807	408660	1614718	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	6495 4207662	36555	148322	369744	1537625	1.00 500	5.00	20.0	50.0	200
Pentane	TBAd9	Ave	1026 644307	5605	23533	56087	229927	2.00 1000	10.0	40.0	100	400
Ethanol	TBAd9	Ave	745 431300	3873	17016	36200	156699	40.0 20000	200	800	2000	8000
Ethyl ether	FB	Ave	2610 1359159	11404	51942	120615	481159	1.00 500	5.00	20.0	50.0	200
2-Methyl-1,3-butadiene	FB	Ave	2407 1595256	13908	61390	144944	572079	1.00 500	5.00	20.0	50.0	200
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	2898 2021149	18447	78531	188412	754521	1.00 500	5.00	20.0	50.0	200
Acrolein	TBAd9	Ave	53654 298249	71116	141525	204750	224076	100 600	200	300	400	500
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Lin2	2907 2631394	22321	96232	234718	967357	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1-Dichloroethene	FB	Ave	3207 2120050	18481	78869	183987	761927	1.00 500	5.00	20.0	50.0	200
Acetone	BUT	Ave	6532 2546708	23460	89929	214228	914399	5.00 2500	25.0	100	250	1000
Iodomethane	FB	Ave	7998 4406580	36873	166549	390955	1575995	1.00 500	5.00	20.0	50.0	200
Isopropyl alcohol	TBAd9	Ave	2471 1325334	12397	45536	119731	464092	10.0 5000	50.0	200	500	2000
Carbon disulfide	FB	Ave	13110 7828280	65013	291598	681245	2850970	1.00 500	5.00	20.0	50.0	200
Allyl chloride	FB	Ave	1900 1298603	10671	45800	110507	447657	1.00 500	5.00	20.0	50.0	200
Methyl acetate	TBAd9	Ave	4677 2350296	20554	81640	197921	824852	2.00 1000	10.0	40.0	100	400
Cyclopentene	FB	Ave	6983 4601331	39897	176477	425858	1654056	1.00 500	5.00	20.0	50.0	200
Acetonitrile	TBAd9	Ave	5876 3007230	25746	94229	217917	1096556	10.0 5000	50.0	200	500	2000
Methylene Chloride	FB	Ave	4807 2267418	20157	86781	204831	804876	1.00 500	5.00	20.0	50.0	200
2-Methyl-2-propanol	TBAd9	Ave	5893 2607412	20146	92394	220678	898055	10.0 5000	50.0	200	500	2000
Methyl tert-butyl ether	FB	Ave	10931 5572595	48516	215890	512367	2056964	1.00 500	5.00	20.0	50.0	200
trans-1,2-Dichloroethene	FB	Ave	4430 2158507	18984	83045	197978	795117	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	FB	Ave	11804 6155659	53187	226954	547259	2214143	10.0 5000	50.0	200	500	2000
Hexane	FB	Ave	2481 1753188	15117	66028	158325	685827	1.00 500	5.00	20.0	50.0	200
Isopropyl ether	FB	Ave	11663 5888682	52581	232407	542730	2081755	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	6672 3512423	29722	133908	318966	1280328	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	TBAd9	Ave	1152 611218	5114	23651	56384	215236	2.00 1000	10.0	40.0	100	400
2-Chloro-1,3-butadiene	FB	Ave	2922 1845762	15783	70159	163493	661720	1.00 500	5.00	20.0	50.0	200
Tert-butyl ethyl ether	FB	Ave	11264 5734878	50487	223930	525361	1993822	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	2205 1130284	9583	43028	97890	415649	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	4705 2485563	21552	93711	217535	888592	1.00 500	5.00	20.0	50.0	200
Ethyl acetate	BUT	Ave	834 366131	2896	12998	30841	123268	2.00 1000	10.0	40.0	100	400
2-Butanone (MEK)	BUT	Ave	2349 1058728	9167	37082	88204	370564	5.00 2500	25.0	100	250	1000
Methyl acrylate	FB	Ave	2646 1415871	12528	49505	120091	484396	1.00 500	5.00	20.0	50.0	200
Propionitrile	TBAd9	Ave	4384 2424610	20523	90833	218137	848054	10.0 5000	50.0	200	500	2000
Tetrahydrofuran	BUT	Ave	1132 508330	4648	17950	42114	175491	2.00 1000	10.0	40.0	100	400
Chlorobromomethane	FB	Ave	2375 1273941	10710	47033	109298	439271	1.00 500	5.00	20.0	50.0	200
Methacrylonitrile	FB	Ave	12347 7072143	60094	257668	611832	2401367	10.0 5000	50.0	200	500	2000
Chloroform	FB	Ave	7127 3711522	32324	139619	324500	1319220	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Lin2	4080 3599086	30391	130787	318574	1333622	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	6017 3688095	31073	134575	321683	1356087	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	4970 3358724	26337	116620	287335	1208842	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	4809 2810143	23153	101478	242321	1025023	1.00 500	5.00	20.0	50.0	200
Isobutyl alcohol	TBAd9	Ave	328 257835	1816	7482	19169	88200	25.0 12500	125	500	1250	5000
Benzene	CBNZd5	Ave	14163 8104906	68120	298894	699391	2907428	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	9442 5328646	44612	193555	442217	1826824	1.00 500	5.00	20.0	50.0	200
Tert-amyl methyl ether	FB	Ave	3095 1869432	15211	67413	160387	633125	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	4956 2417080	21080	88116	204081	837733	1.00 500	5.00	20.0	50.0	200
n-Heptane	FB	Lin2	2036 1708319	14748	63410	152930	657035	1.00 500	5.00	20.0	50.0	200
n-Butanol	TBAd9	Ave	2590 1578822	10911	44696	113225	501069	25.0 12500	125	500	1250	5000
Trichloroethene	FB	Ave	3877 2202078	18597	78099	187239	788359	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethyl acrylate	FB	Ave	1737 1334268	10661	50302	114987	479271	1.00 500	5.00	20.0	50.0	200
Methylcyclohexane	FB	Lin2	4808 4358031	35409	160154	383246	1633663	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	3689 1918282	16330	70324	163587	677752	1.00 500	5.00	20.0	50.0	200
Methyl methacrylate	FB	Ave	4388 2759376	22248	97082	233677	939861	2.00 1000	10.0	40.0	100	400
1,4-Dioxane	DXE	Ave	877 508319	4501	19683	44101	182927	20.0 10000	100	400	1000	4000
n-Propyl acetate	FB	Ave	3646 2267744	17898	78274	189871	770221	1.00 500	5.00	20.0	50.0	200
Dibromomethane	FB	Ave	2368 1319972	10929	47355	110836	450037	1.00 500	5.00	20.0	50.0	200
Dichlorobromomethane	FB	Ave	4540 2831025	21481	97507	228929	965440	1.00 500	5.00	20.0	50.0	200
2-Chloroethyl vinyl ether	FB	Ave	1654 983629	8256	35187	82379	332749	1.00 500	5.00	20.0	50.0	200
2-Nitropropane	FB	Ave	1447 768007	5140	21520	52529	237934	2.00 1000	10.0	40.0	100	400
Epichlorohydrin	BUT	Ave	5539 3467474	27081	119462	291301	1221469	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	CBNZ d5	Ave	4973 3088646	24362	107543	252036	1067716	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone (MIBK)	BUT	Ave	14326 8365424	68958	301016	720496	2981483	5.00 2500	25.0	100	250	1000
Toluene	CBNZ d5	Ave	15264 8567637	71471	311894	747261	3085741	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBNZ d5	Ave	4267 2733408	21076	92463	219201	928837	1.00 500	5.00	20.0	50.0	200
Ethyl methacrylate	CBNZ d5	Ave	3517 2216316	16330	73173	181055	767325	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBNZ d5	Ave	2534 1414170	12279	52328	118758	488174	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBNZ d5	Ave	4059 2420988	20170	89373	207952	879952	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBNZ d5	Ave	4608 2639253	22287	96148	225167	911348	1.00 500	5.00	20.0	50.0	200
2-Hexanone	BUT	Ave	8890 5363216	44418	192293	460327	1898172	5.00 2500	25.0	100	250	1000
n-Butyl acetate	CBNZ d5	Ave	4746 2360911	17958	81948	199906	800945	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorodibromomethane	CBNZ d5	Ave	3442 2276080	16548	72292	176836	758979	1.00 500	5.00	20.0	50.0	200
Ethylene Dibromide	CBNZ d5	Ave	2852 1818661	14800	65450	153385	624224	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBNZ d5	Ave	9955 5811100	48004	209801	498741	2041430	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBNZ d5	Ave	5158 3209924	26188	114672	272978	1138618	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3849 2508950	18451	79697	195525	851798	1.00 500	5.00	20.0	50.0	200
m-Xylene & p-Xylene	CBNZ d5	Ave	6431 3888694	31651	140882	331907	1383770	1.00 500	5.00	20.0	50.0	200
n-Butyl acrylate	CBNZ d5	Ave	2027 1329207	9810	44145	105075	437313	1.00 500	5.00	20.0	50.0	200
o-Xylene	CBNZ d5	Ave	6852 4080656	32885	146537	346813	1425714	1.00 500	5.00	20.0	50.0	200
Styrene	CBNZ d5	Ave	10223 6422101	51813	230759	543913	2242792	1.00 500	5.00	20.0	50.0	200
Amyl acetate (mixed isomers)	DCBd 4	Ave	4643 2839458	20015	96240	237847	943288	1.00 500	5.00	20.0	50.0	200
Bromoform	CBNZ d5	Ave	2273 1517237	10667	46276	114406	491016	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBNZ d5	Ave	16425 11114089	87209	397823	952388	4005467	1.00 500	5.00	20.0	50.0	200
Bromobenzene	DCBd 4	Ave	5020 2723772	23518	97954	229236	929815	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	4169 2396886	20514	86812	204328	813471	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCBd 4	Ave	19537 12214934	103139	453652	1069161	4400321	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichloropropane	DCBd 4	Ave	1351 677451	5627	24326	57916	233908	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1023 556327	4577	18120	46438	187256	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCBd 4	Ave	13554 8482907	69433	297170	707395	2897624	1.00 500	5.00	20.0	50.0	200
4-Ethyltoluene	DCBd 4	Ave	16326 10521378	89493	383910	906609	3524347	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCBd 4	Ave	13754 9650015	73926	326928	789412	3346980	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCBd 4	Ave	12061 6938442	58787	256190	592906	2435355	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Butyl Methacrylate	DCBd 4	Ave	3830 2879398	18876	92118	225545	913437	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCBd 4	Ave	10526 8490425	61537	273810	665846	2930675	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCBd 4	Ave	14994 9691103	76306	340746	808260	3374215	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCBd 4	Ave	17067 12715712	100039	451741	1076321	4652275	1.00 500	5.00	20.0	50.0	200
4-Isopropyltoluene	DCBd 4	Ave	15090 11585541	88574	395307	937541	4049655	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCBd 4	Ave	9334 5448058	45622	193604	445593	1841981	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCBd 4	Ave	9827 5385868	46286	195277	441606	1809471	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCBd 4	Ave	6713 4653939	31846	149594	360625	1452335	1.00 500	5.00	20.0	50.0	200
Indan	DCBd 4	Ave	16367 9706621	82088	357520	828385	3165421	1.00 500	5.00	20.0	50.0	200
p-Diethylbenzene	DCBd 4	Ave	10053 6039454	49418	219550	515228	1999034	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCBd 4	Ave	8207 5647585	47837	204531	478184	2005724	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCBd 4	Ave	9426 5338635	44936	194350	447709	1800117	1.00 500	5.00	20.0	50.0	200
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	16517 11213434	88523	389332	914277	3634463	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1109 498291	3746	17031	37957	162531	1.00 500	5.00	20.0	50.0	200
1,3,5-Trichlorobenzene	DCBd 4	Ave	7970 4666735	41958	174149	397827	1518526	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	8442 4492334	38177	166441	376853	1538270	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCBd 4	Ave	2977 2466219	18332	80021	189486	844813	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCBd 4	Ave	19361 10267513	86559	374994	887580	3492764	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichlorobenzene	DCBd 4	Ave	8025 4339553	37218	164633	371182	1501784	1.00 500	5.00	20.0	50.0	200
Dibromofluoromethane (Surr)	FB	Ave	181619 204895	174366	184398	177150	181438	50.0 50.0	50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	161239 206544	158398	165159	158945	176762	50.0 50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-152211-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene-d8 (Surr)	CBNZ d5	Ave	599379 706025	610308	623036	613789	639250	50.0 50.0	50.0	50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	198309 230101	200277	202010	196938	200809	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 21-Apr-2018 06:04:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0070764-003
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:30:47 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:17:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.590	0.012	1	1783	1.00	0.4061	M
2 Dichlorodifluoromethane	85	1.639	1.626	0.013	76	4061	1.00	0.4458	
3 Chloromethane	50	1.809	1.803	0.006	97	6275	1.00	1.04	
4 Vinyl chloride	62	1.919	1.907	0.012	90	4989	1.00	0.8281	
5 Butadiene	54	1.919	1.907	0.012	97	3596	1.00	0.7794	
6 Bromomethane	94	2.212	2.212	0.000	98	5147	1.00	1.03	
7 Chloroethane	64	2.267	2.273	-0.006	97	2810	1.00	0.9248	
9 Dichlorofluoromethane	67	2.480	2.468	0.012	87	8501	1.00	0.9586	a
8 Trichlorofluoromethane	101	2.480	2.486	-0.006	65	6495	1.00	0.8248	
10 Pentane	72	2.504	2.498	0.006	99	1026	2.00	1.57	
12 Ethanol	46	2.669	2.687	-0.018	66	745	40.0	33.1	M
11 Ethyl ether	59	2.699	2.693	0.006	94	2610	1.00	0.9892	
13 2-Methyl-1,3-butadiene	53	2.724	2.718	0.006	88	2407	1.00	0.7946	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.748	0.012	80	2898	1.00	0.7439	
15 Acrolein	56	2.882	2.876	0.006	96	53654	100.0	100.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	31	2907	1.00	1.00	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	95	3207	1.00	0.8070	
18 Acetone	43	3.010	2.998	0.012	50	6532	5.00	6.17	M
19 Iodomethane	142	3.090	3.077	0.013	99	7998	1.00	0.9439	
22 Isopropyl alcohol	45	3.145	3.083	0.062	31	2471	10.0	8.94	a
20 Carbon disulfide	76	3.120	3.120	0.000	100	13110	1.00	0.8846	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	92	1900	1.00	0.8081	
23 Methyl acetate	43	3.260	3.248	0.012	98	4677	2.00	1.93	
24 Cyclopentene	67	3.266	3.266	0.000	90	6983	1.00	0.7969	
29 Acetonitrile	41	3.340	3.309	0.031	62	5876	10.0	9.84	Ma
* 25 TBA-d9 (IS)	65	3.376	3.352	0.024	0	358975	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	53	4807	1.00	1.06	
27 2-Methyl-2-propanol	59	3.431	3.419	0.012	34	5893	10.0	10.9	
28 Methyl tert-butyl ether	73	3.541	3.535	0.006	96	10931	1.00	0.9853	
30 trans-1,2-Dichloroethene	96	3.571	3.565	0.006	93	4430	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.644	3.638	0.006	91	11804	10.0	9.86	M
32 Hexane	43	3.724	3.717	0.007	93	2481	1.00	0.7432	
33 Isopropyl ether	45	3.937	3.931	0.006	93	11663	1.00	0.99	
35 Vinyl acetate	86	3.980	3.973	0.007	99	1152	2.00	1.79	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	94	6672	1.00	0.9703	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	71	2922	1.00	0.8363	
37 Tert-butyl ethyl ether	59	4.260	4.248	0.012	87	11264	1.00	0.99	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	215128	250.0	250.0	
39 2,2-Dichloropropane	79	4.498	4.492	0.006	51	2205	1.00	1.00	a
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	66	4705	1.00	0.9751	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	96	2349	5.00	5.59	
41 Ethyl acetate	70	4.516	4.510	0.006	87	834	2.00	2.32	
44 Methyl acrylate	55	4.571	4.565	0.006	65	2646	1.00	0.9867	
43 Propionitrile	54	4.656	4.644	0.012	98	4384	10.0	8.74	
45 Tetrahydrofuran	72	4.754	4.729	0.025	61	1132	2.00	2.23	a
46 Chlorobromomethane	128	4.742	4.742	0.000	83	2375	1.00	0.9806	
47 Methacrylonitrile	67	4.754	4.754	0.000	93	12347	10.0	9.30	
48 Chloroform	83	4.791	4.784	0.007	96	7127	1.00	0.9877	
49 Cyclohexane	84	4.931	4.937	-0.006	31	4080	1.00	1.00	
50 1,1,1-Trichloroethane	97	4.949	4.937	0.012	36	6017	1.00	0.8642	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	181619	50.0	46.8	
52 Carbon tetrachloride	117	5.065	5.065	0.000	93	4970	1.00	0.8165	
53 1,1-Dichloropropene	75	5.095	5.089	0.006	98	4809	1.00	0.9080	
56 Isobutyl alcohol	74	5.211	5.199	0.012	1	328	25.0	18.0	
54 Benzene	78	5.290	5.290	0.000	43	14163	1.00	0.9358	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	161239	50.0	44.7	
57 Isopropyl acetate	43	5.339	5.327	0.012	95	9442	1.00	0.9489	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	95	3095	1.00	0.8983	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	94	4956	1.00	1.06	
60 n-Heptane	57	5.431	5.437	-0.006	92	2036	1.00	1.00	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	484477	50.0	50.0	
62 n-Butanol	56	5.870	5.869	0.001	25	2590	25.0	23.0	Ma
63 Trichloroethene	95	5.949	5.943	0.006	98	3877	1.00	0.9349	
65 Methylcyclohexane	83	6.071	6.071	0.000	90	4808	1.00	1.01	M
64 Ethyl acrylate	56	6.065	6.071	-0.006	89	1737	1.00	0.7170	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	85	3689	1.00	1.00	
* 67 1,4-Dioxane-d8	96	6.290	6.284	0.006	0	34244	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	59	4388	2.00	1.75	
69 1,4-Dioxane	88	6.333	6.333	0.000	28	877	20.0	18.6	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	3646	1.00	0.8900	
71 Dibromomethane	93	6.363	6.369	-0.006	67	2368	1.00	0.9617	
72 Dichlorobromomethane	83	6.522	6.522	0.000	97	4540	1.00	0.8981	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	83	1654	1.00	0.9108	
74 2-Nitropropane	41	6.857	6.851	0.006	78	1447	2.00	2.26	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	5539	20.0	17.3	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	4973	1.00	0.9051	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	95	14326	5.00	4.48	
$ 78 Toluene-d8 (Surr)	98	7.266	7.272	-0.006	99	599379	50.0	45.7	
79 Toluene	91	7.351	7.351	0.000	93	15264	1.00	0.9520	
80 trans-1,3-Dichloropropene	75	7.699	7.698	0.001	98	4267	1.00	0.8945	
81 Ethyl methacrylate	69	7.717	7.711	0.006	83	3517	1.00	0.9108	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	93	2534	1.00	0.9615	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	95	4059	1.00	0.9030	
84 1,3-Dichloropropane	76	8.125	8.131	-0.006	90	4608	1.00	0.9450	
85 2-Hexanone	43	8.174	8.174	0.000	96	8890	5.00	4.37	
86 n-Butyl acetate	43	8.284	8.284	0.000	98	4746	1.00	1.09	
87 Chlorodibromomethane	129	8.363	8.369	-0.006	94	3442	1.00	0.8955	
88 Ethylene Dibromide	107	8.534	8.527	0.007	95	2852	1.00	0.8723	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	428696	50.0	50.0	
90 Chlorobenzene	112	9.107	9.113	-0.006	94	9955	1.00	0.9307	
92 Ethylbenzene	106	9.198	9.204	-0.006	97	5158	1.00	0.8844	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	60	3849	1.00	0.9012	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	6431	1.00	0.9034	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	2027	1.00	0.8932	
95 o-Xylene	106	9.820	9.820	0.000	93	6852	1.00	0.9219	
96 Styrene	104	9.851	9.850	0.001	97	10223	1.00	0.8813	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	4643	1.00	0.9092	
98 Bromoform	173	10.082	10.088	-0.006	94	2273	1.00	0.9084	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	16425	1.00	0.8242	
$ 100 4-Bromofluorobenzene	174	10.418	10.417	0.001	95	198309	50.0	46.7	
101 Bromobenzene	156	10.564	10.564	0.000	88	5020	1.00	0.9605	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	95	4169	1.00	0.9141	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	19537	1.00	0.8353	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	93	1351	1.00	1.03	
105 trans-1,4-Dichloro-2-buten	53	10.674	10.667	0.007	72	1023	1.00	0.9854	
106 2-Chlorotoluene	91	10.741	10.740	0.001	89	13554	1.00	0.8631	
107 4-Ethyltoluene	105	10.741	10.740	0.001	89	16326	1.00	0.8295	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	93	13754	1.00	0.7946	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	12061	1.00	0.9057	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	3830	1.00	0.7931	
111 tert-Butylbenzene	119	11.100	11.106	-0.006	92	10526	1.00	0.7210	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	14994	1.00	0.8408	
113 sec-Butylbenzene	105	11.308	11.307	0.001	98	17067	1.00	0.7323	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	97	15090	1.00	0.7340	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	9334	1.00	0.9153	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	94	266334	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	88	9827	1.00	0.9588	
118 Benzyl chloride	91	11.667	11.667	0.000	99	6713	1.00	0.8492	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	93	16367	1.00	0.8961	
120 p-Diethylbenzene	119	11.771	11.777	-0.006	92	10053	1.00	0.8904	a
121 n-Butylbenzene	92	11.795	11.795	0.000	95	8207	1.00	0.7783	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	9426	1.00	0.9310	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	16517	1.00	0.8222	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	92	1109	1.00	1.18	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	94	7970	1.00	0.8954	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	92	8442	1.00	0.9738	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	85	2977	1.00	0.7044	
128 Naphthalene	128	13.332	13.331	0.001	99	19361	1.00	0.9767	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.001	96	8025	1.00	0.9506	
S 130 1,2-Dichloroethene, Total	100				0		2.00	2.00	
S 131 Xylenes, Total	100				0		2.00	1.83	
S 132 Total BTEX	1				0		5.00	4.60	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	1.00	Units: uL	
ACROLEIN W_00075	Amount Added:	10.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	1.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

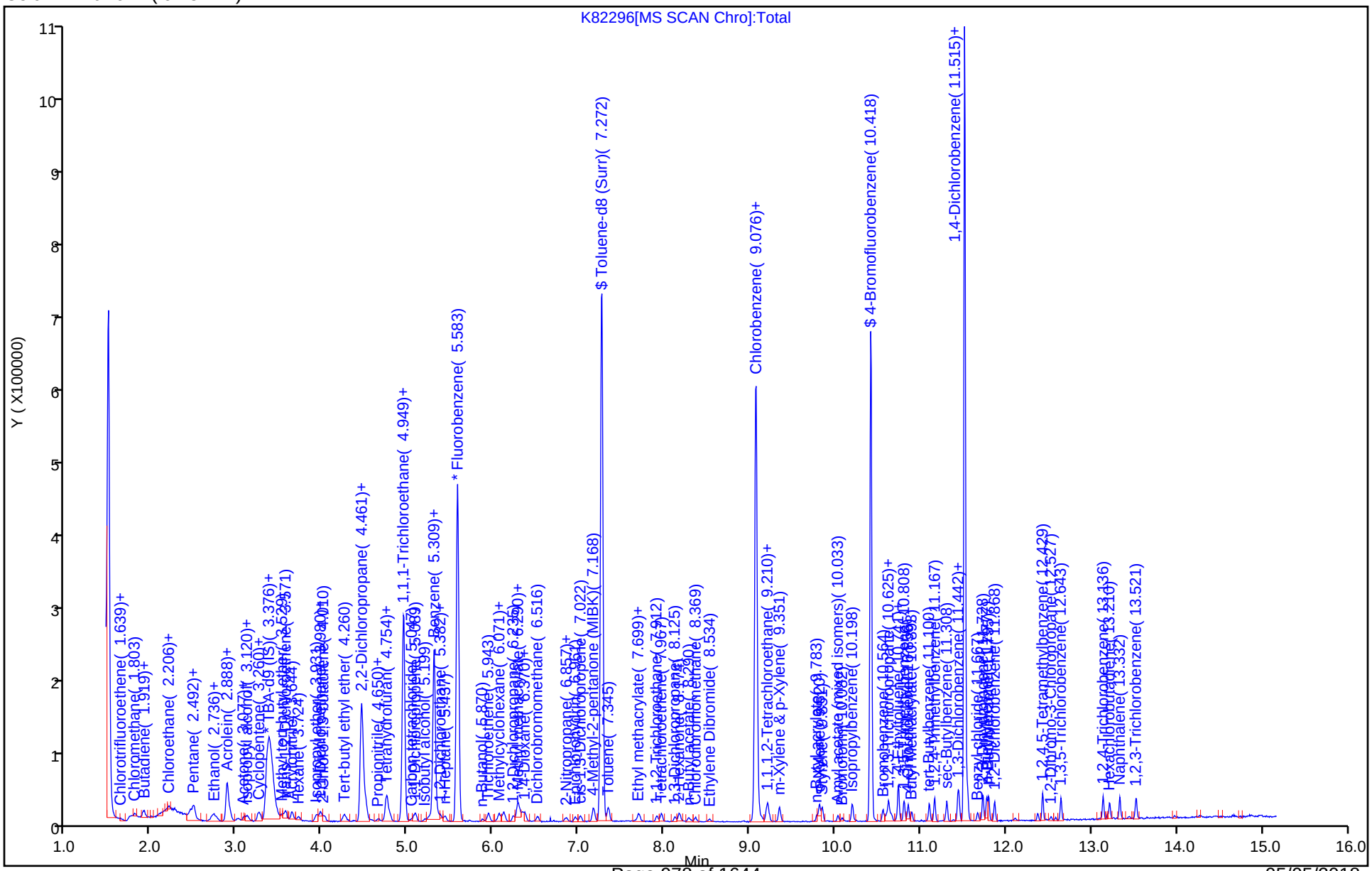
Report Date: 22-Apr-2018 22:30:49 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D

Injection Date:	21-Apr-2018 06:04:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD1			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

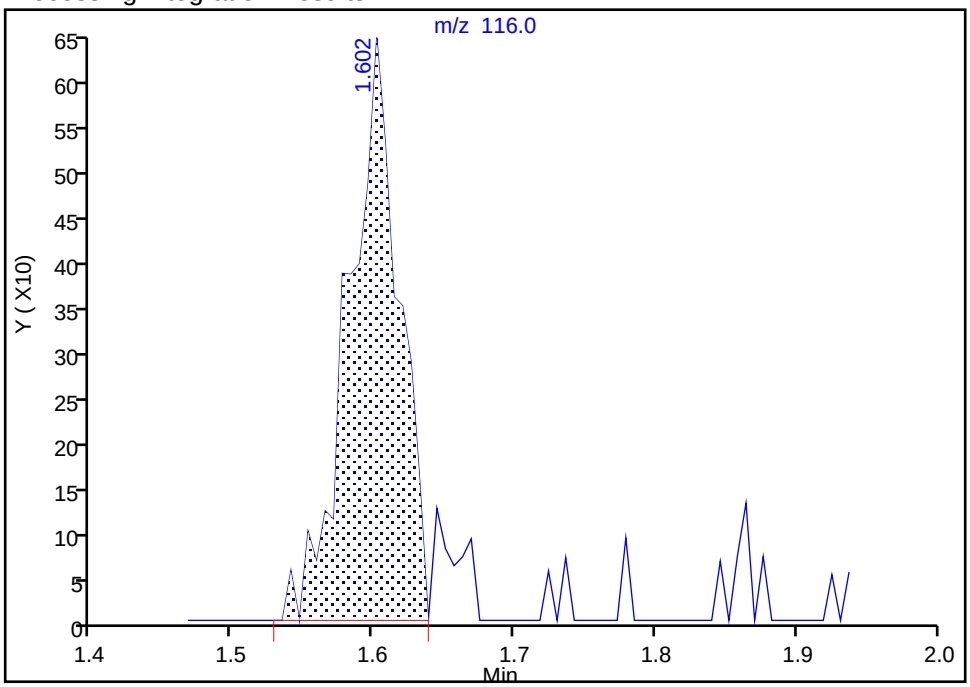
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

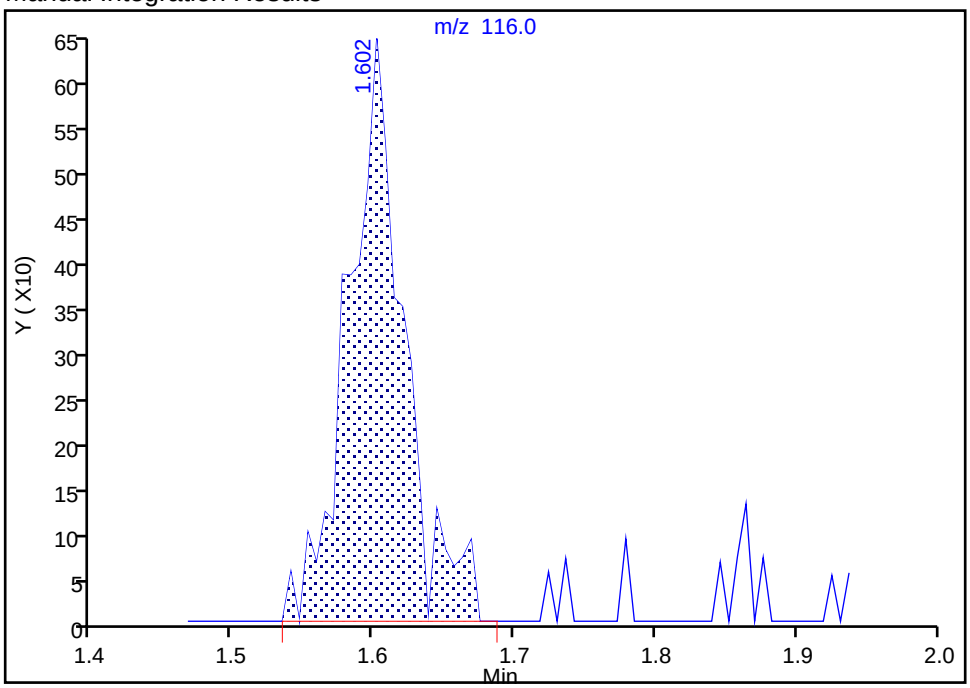
Processing Integration Results

RT: 1.60
Area: 1627
Amount: 0.370538
Amount Units: ug/l



Manual Integration Results

RT: 1.60
Area: 1783
Amount: 0.406073
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:03:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

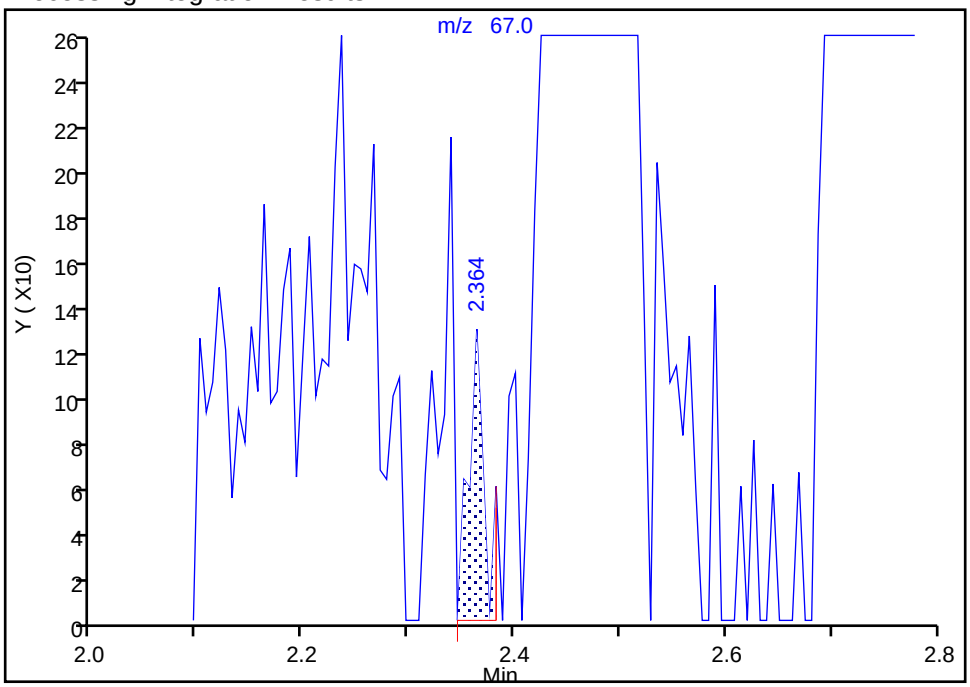
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

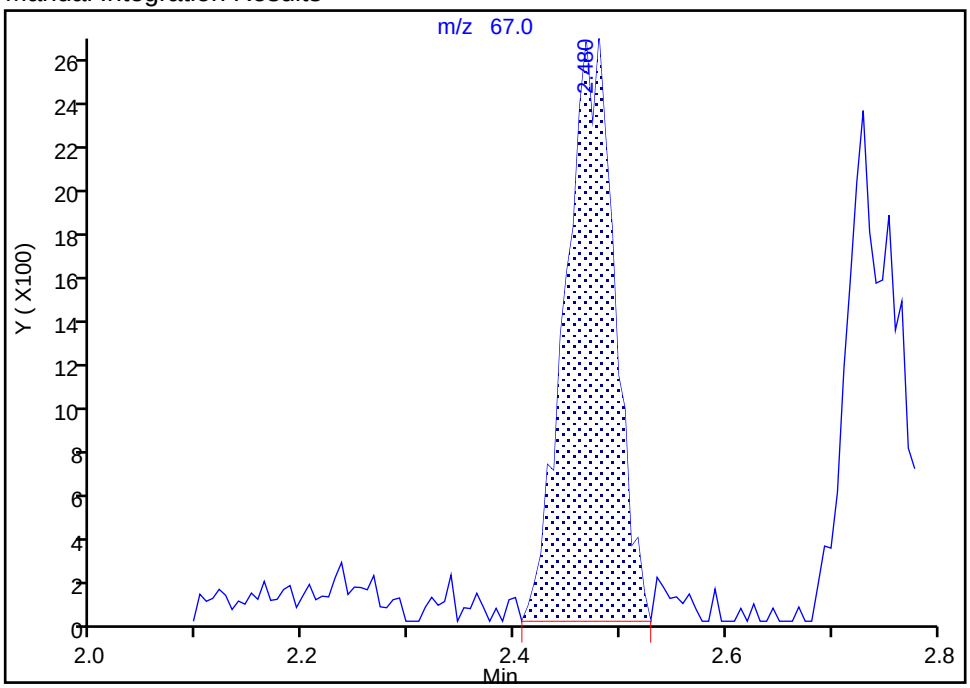
Processing Integration Results

RT: 2.36
Area: 134
Amount: 0.012483
Amount Units: ug/l



Manual Integration Results

RT: 2.48
Area: 8501
Amount: 0.958647
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:43:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

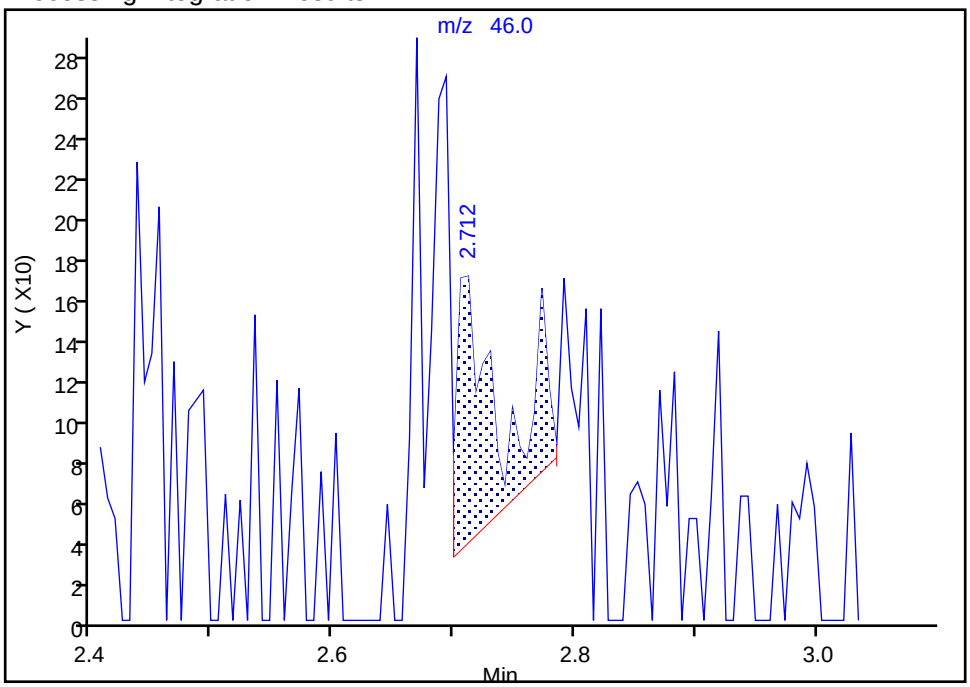
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethanol, CAS: 64-17-5

Signal: 1

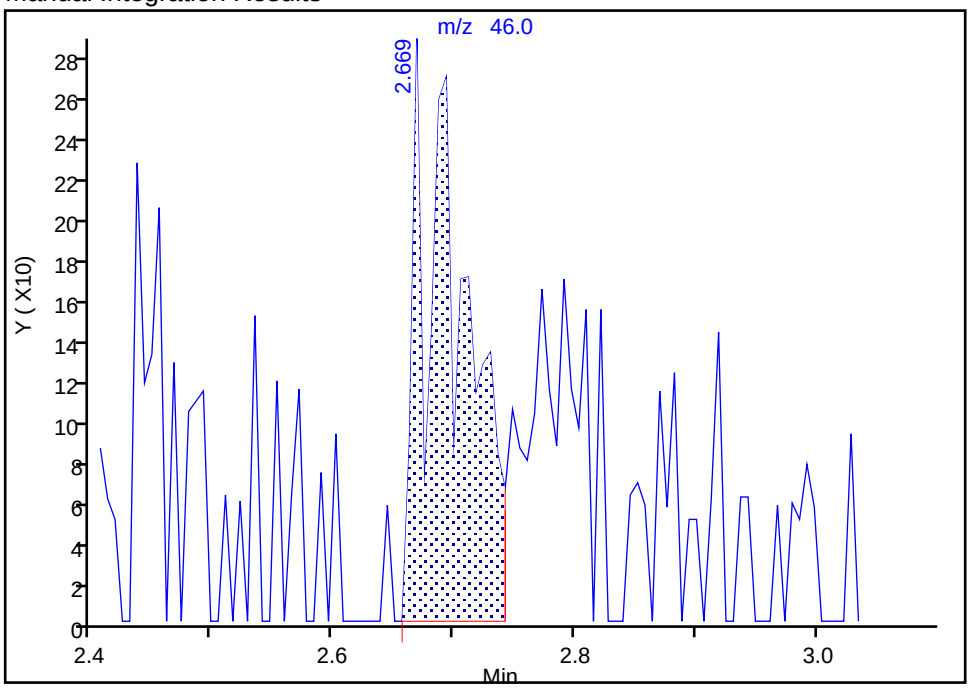
Processing Integration Results

RT: 2.71
Area: 305
Amount: 10.878772
Amount Units: ug/l



Manual Integration Results

RT: 2.67
Area: 745
Amount: 33.109289
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:43:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

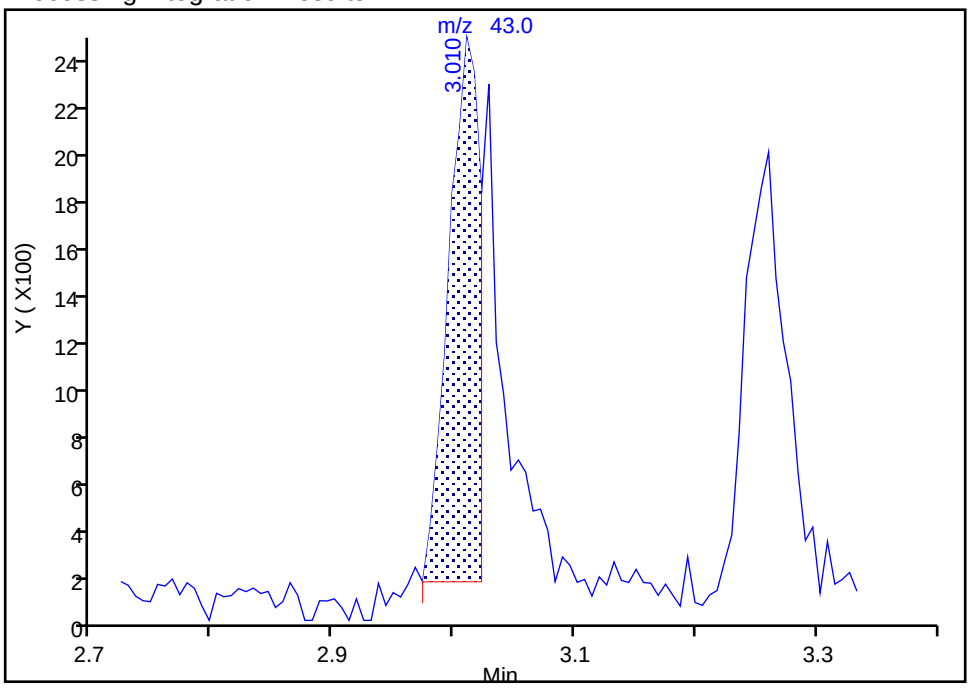
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

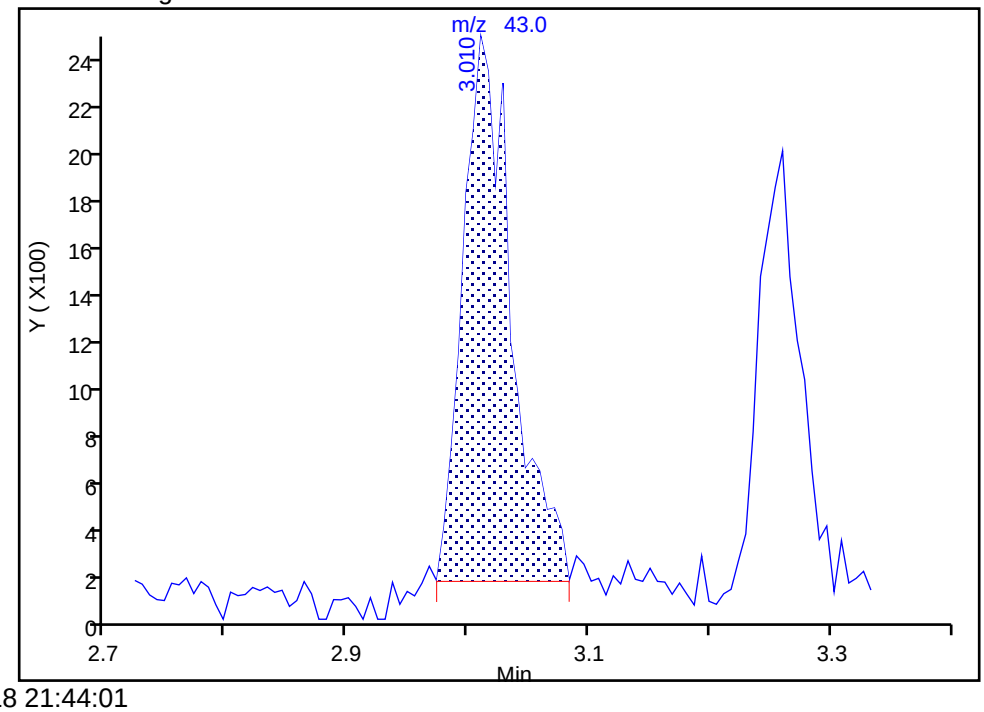
Processing Integration Results

RT: 3.01
Area: 4221
Amount: 4.303123
Amount Units: ug/l



Manual Integration Results

RT: 3.01
Area: 6532
Amount: 6.174212
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:44:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

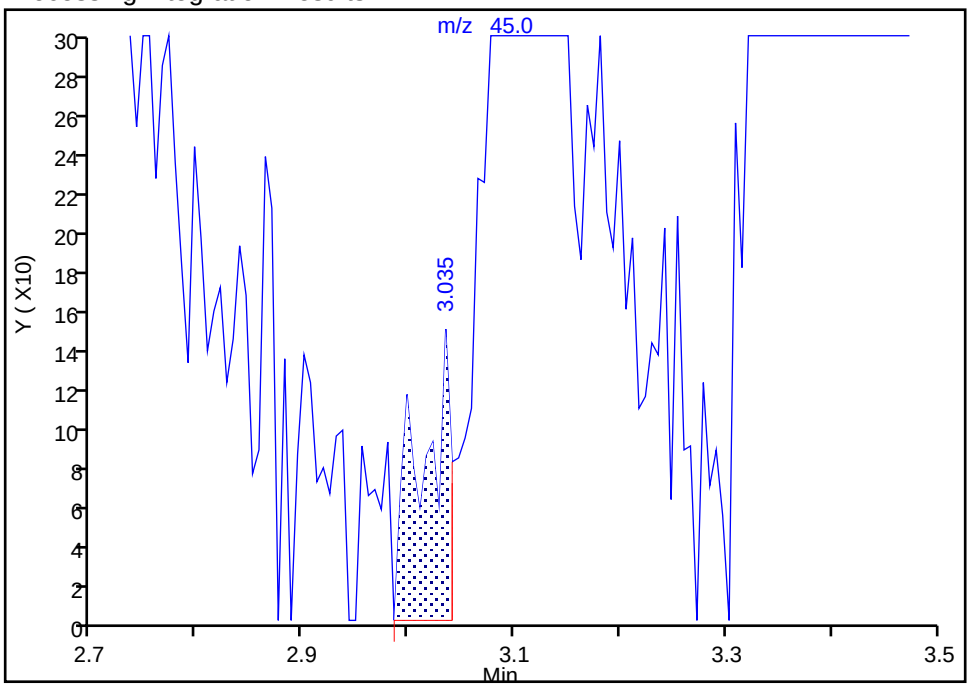
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

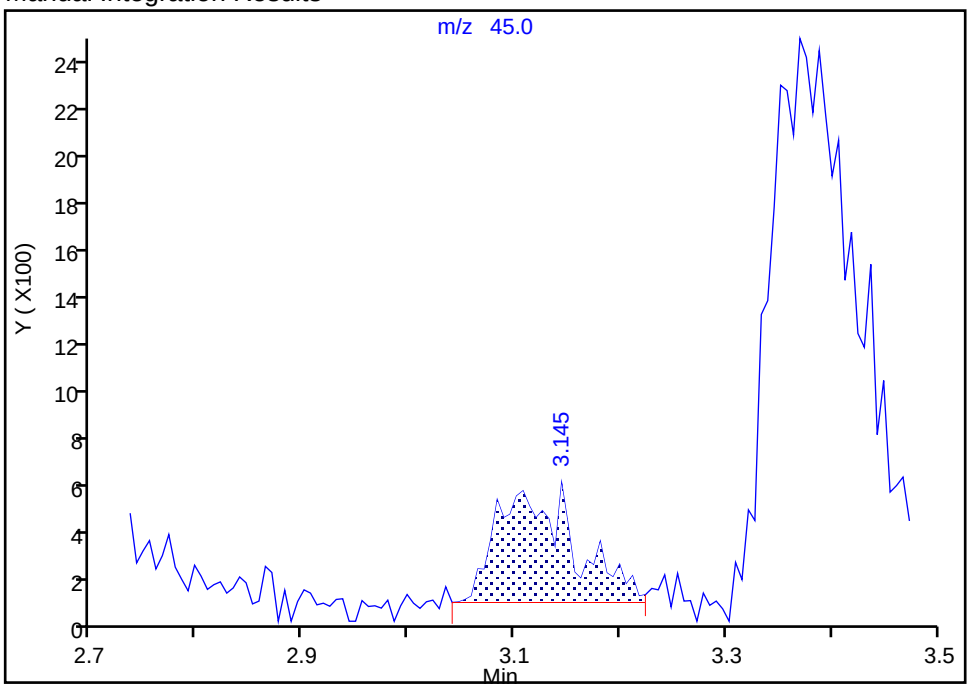
Processing Integration Results

RT: 3.03
Area: 280
Amount: 48.259715
Amount Units: ug/l



Manual Integration Results

RT: 3.14
Area: 2471
Amount: 8.943825
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:44:49
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

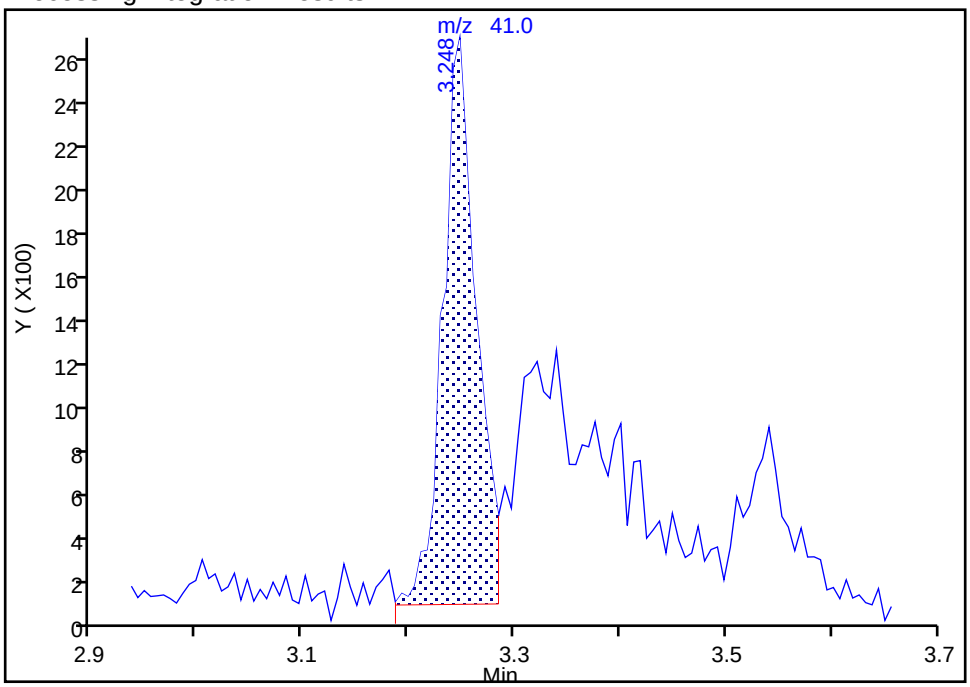
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

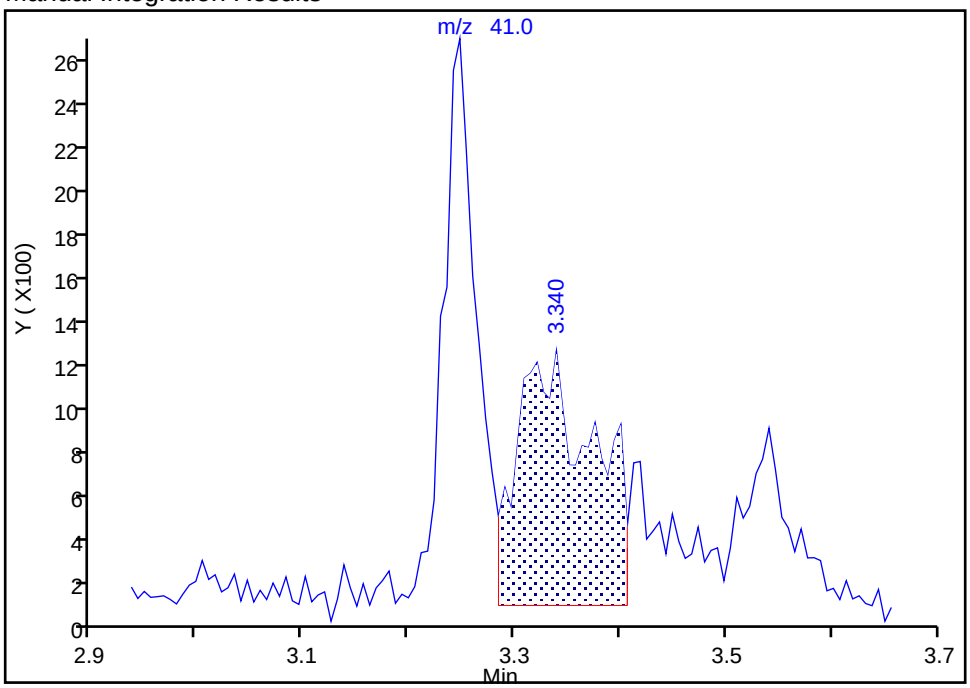
Processing Integration Results

RT: 3.25
Area: 5703
Amount: 8.656687
Amount Units: ug/l



Manual Integration Results

RT: 3.34
Area: 5876
Amount: 9.843912
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:03:16
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

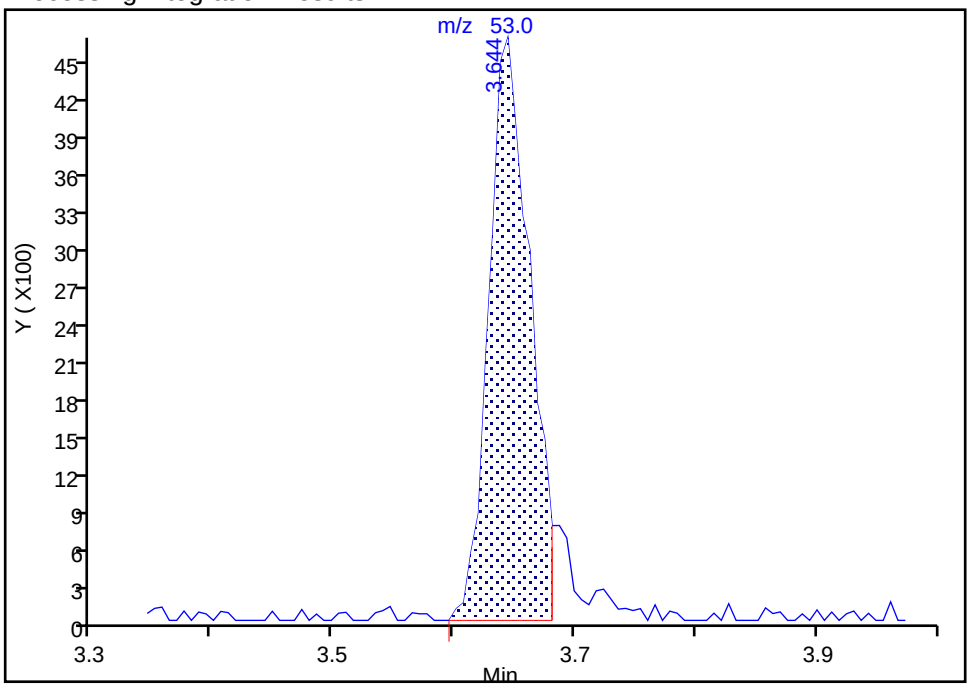
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

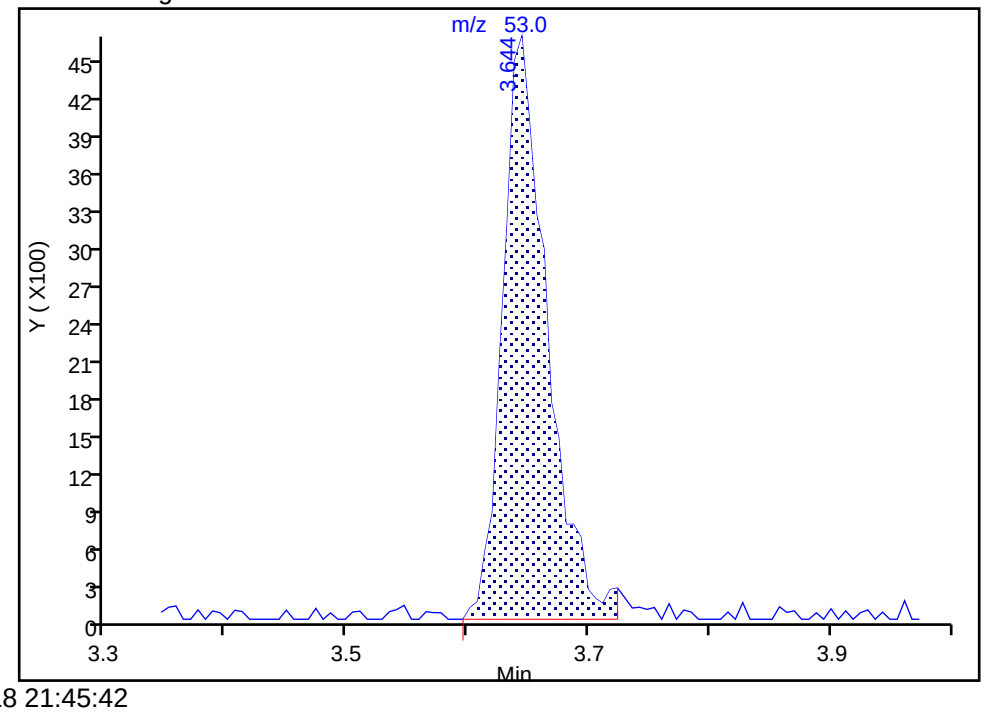
Processing Integration Results

RT: 3.64
Area: 10923
Amount: 9.240544
Amount Units: ug/l



Manual Integration Results

RT: 3.64
Area: 11804
Amount: 9.863326
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:45:42
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

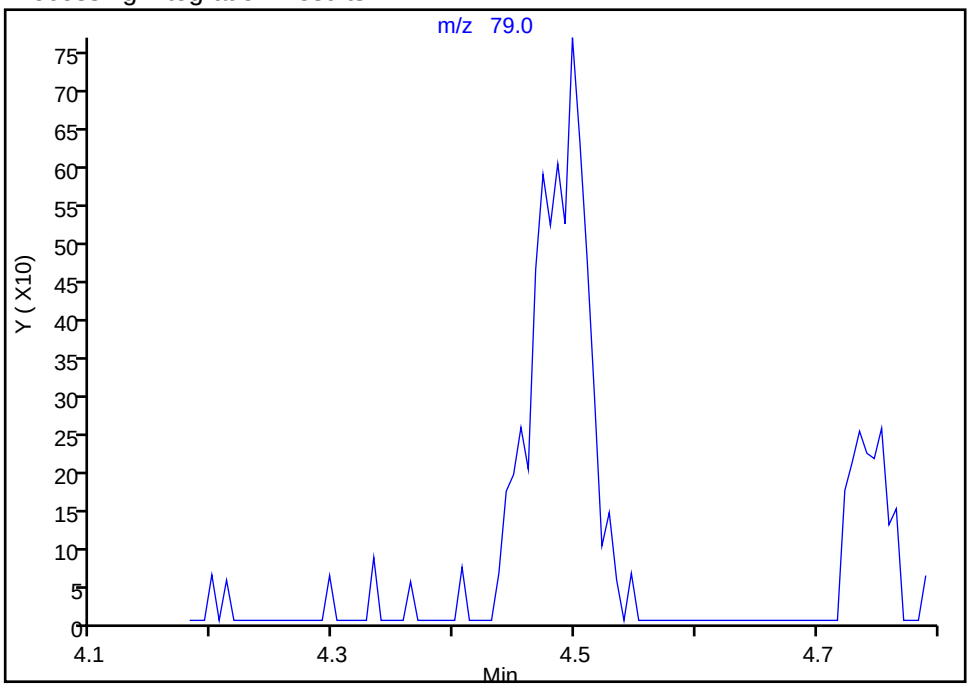
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

39 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

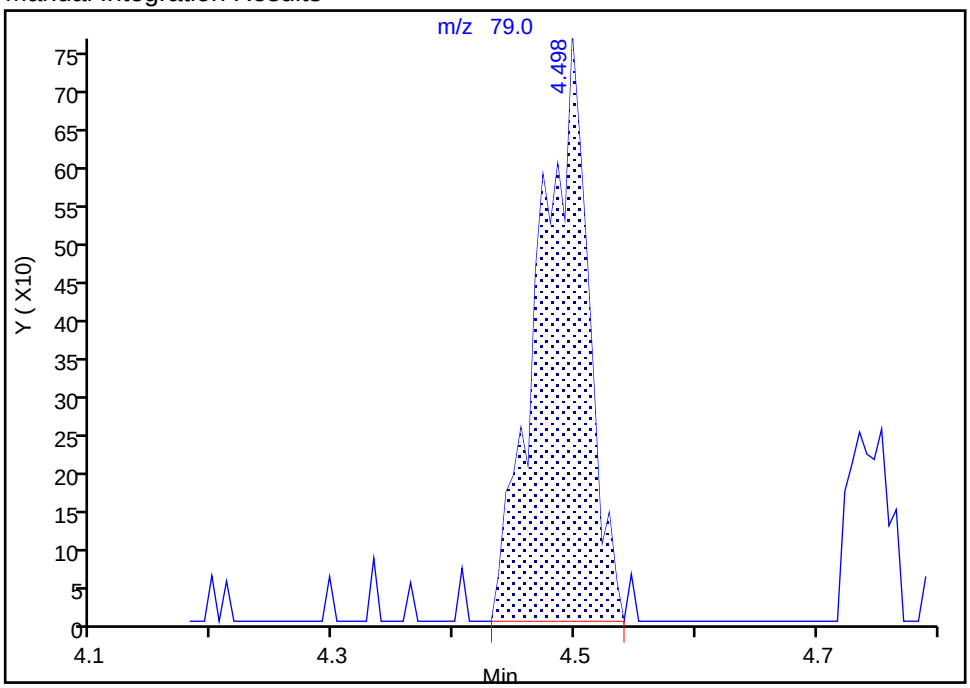
Not Detected
Expected RT: 4.49

Processing Integration Results



Manual Integration Results

RT: 4.50
Area: 2205
Amount: 0.998009
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:46:27
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

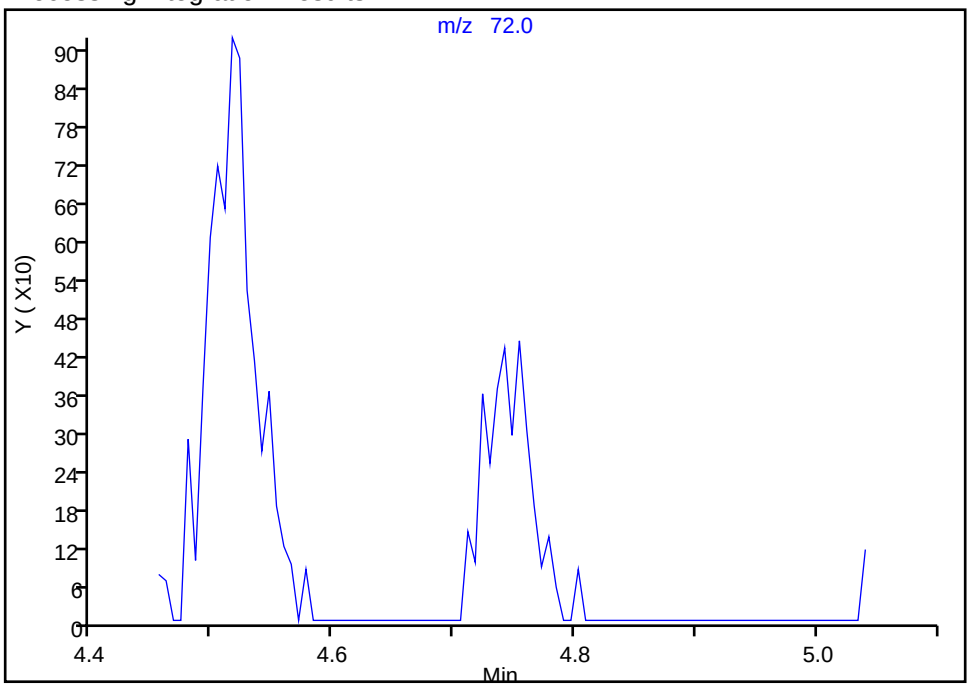
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

45 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

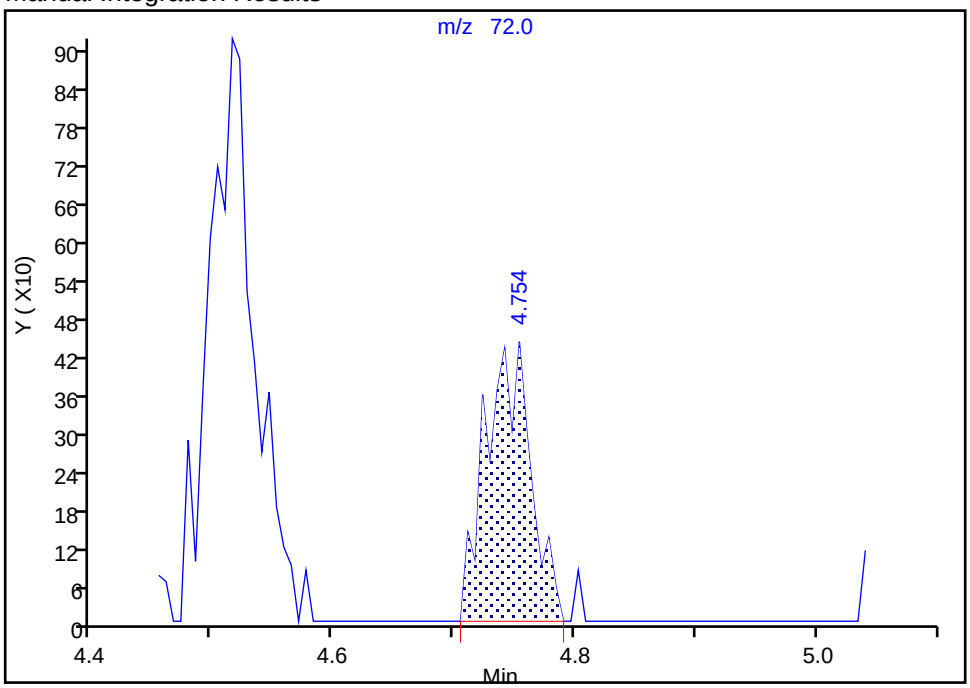
Not Detected
Expected RT: 4.73

Processing Integration Results



Manual Integration Results

RT: 4.75
Area: 1132
Amount: 2.227538
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:46:53
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

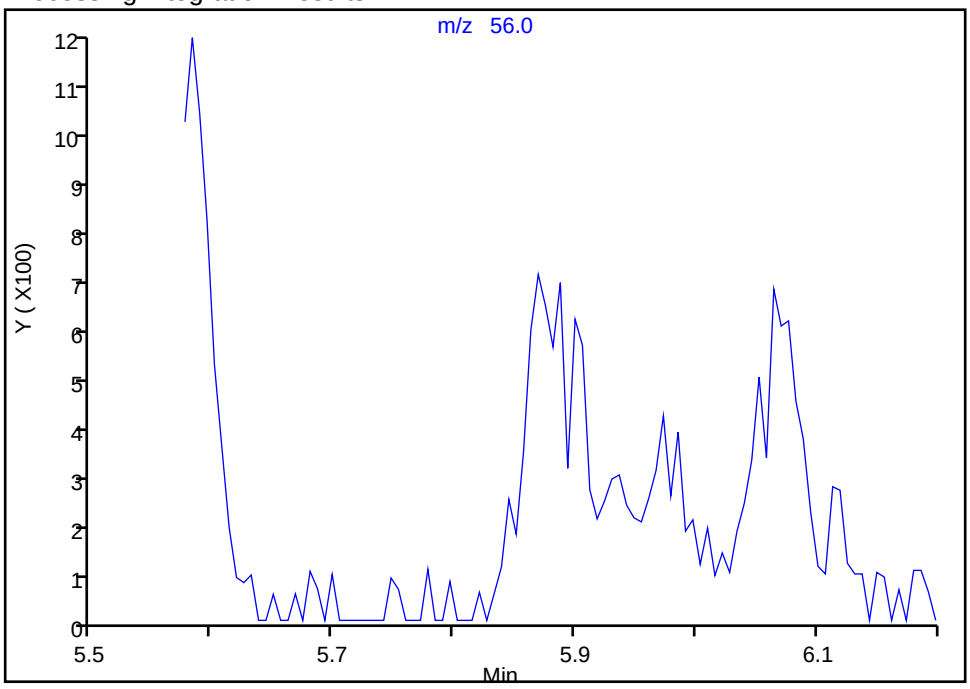
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

62 n-Butanol, CAS: 71-36-3

Signal: 1

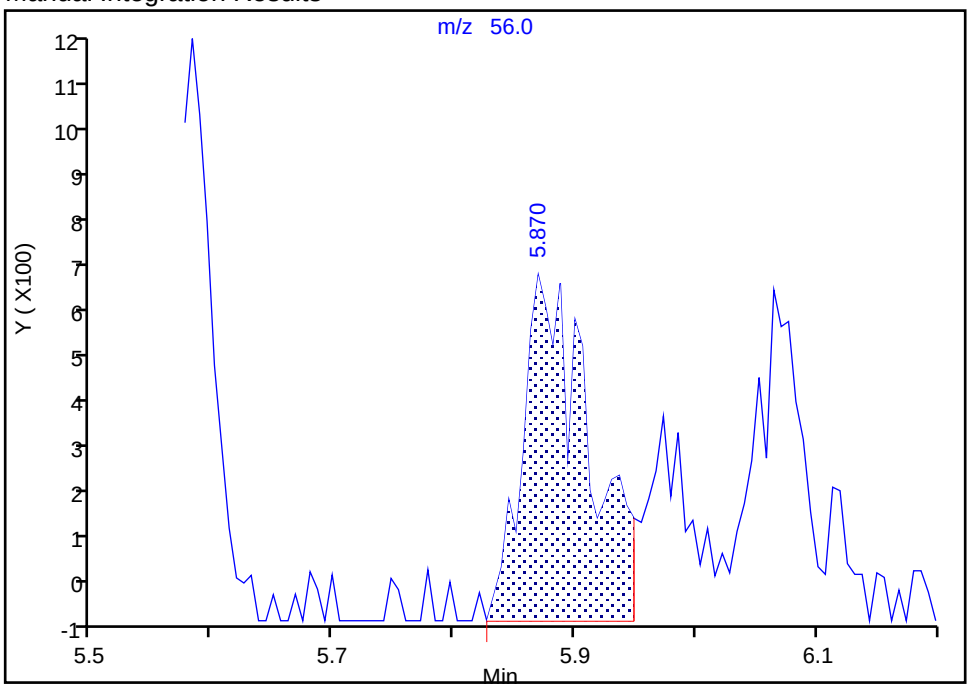
Not Detected
Expected RT: 5.87

Processing Integration Results



Manual Integration Results

RT: 5.87
Area: 2590
Amount: 23.019053
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:47:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

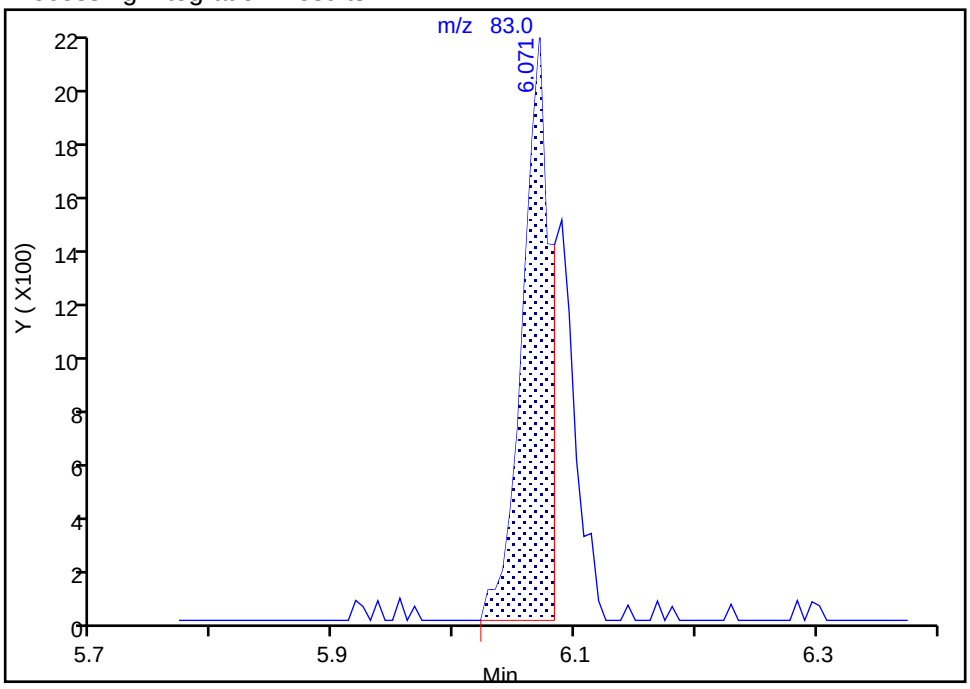
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

65 Methylcyclohexane, CAS: 108-87-2

Signal: 1

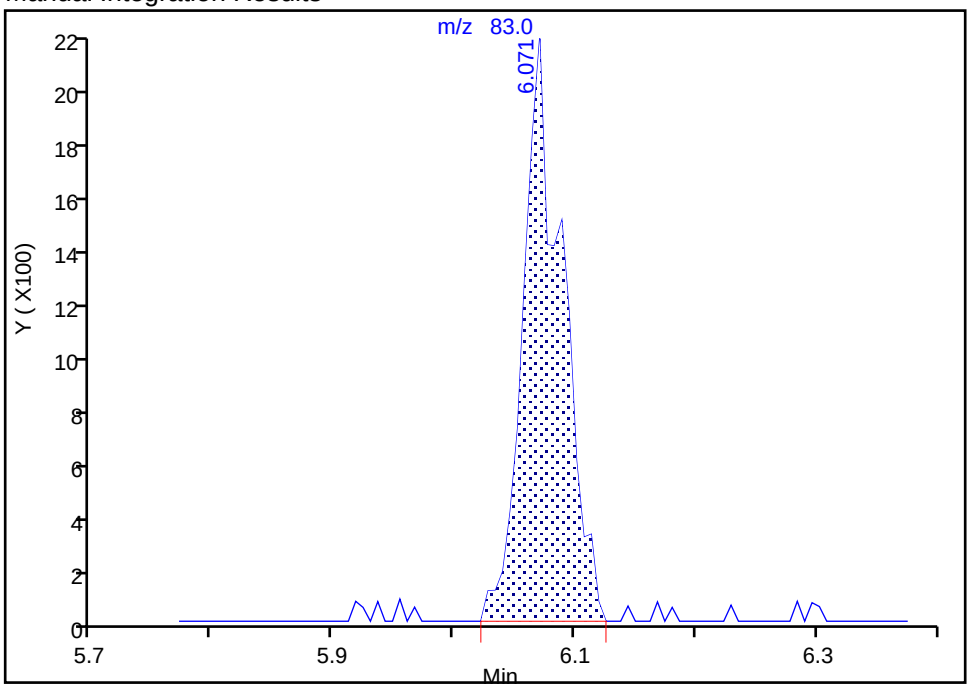
Processing Integration Results

RT: 6.07
Area: 3408
Amount: 0.312707
Amount Units: ug/l



Manual Integration Results

RT: 6.07
Area: 4808
Amount: 1.009532
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:47:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

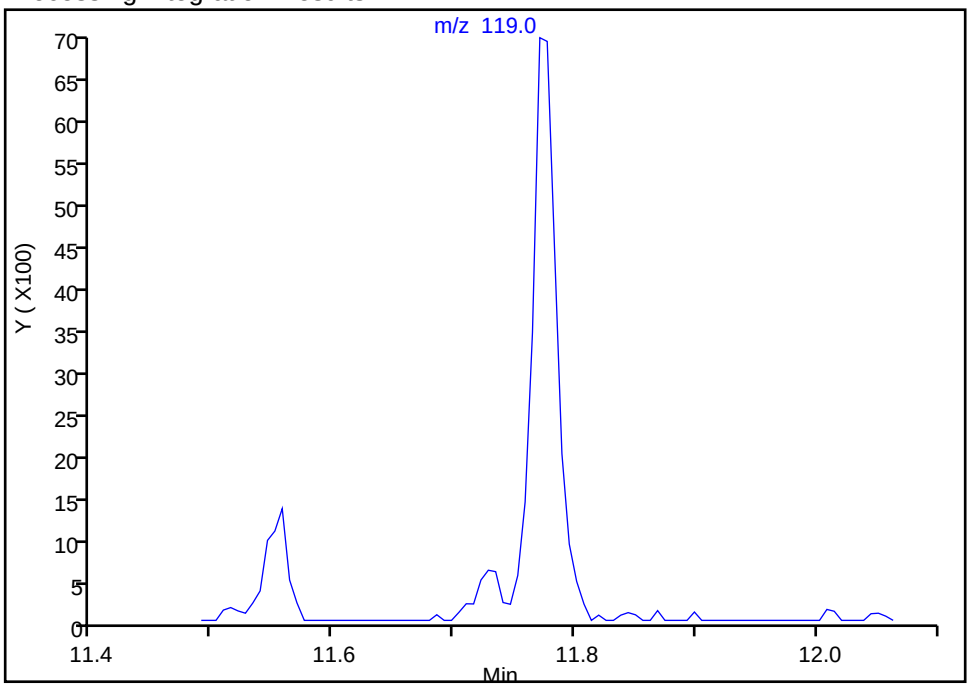
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

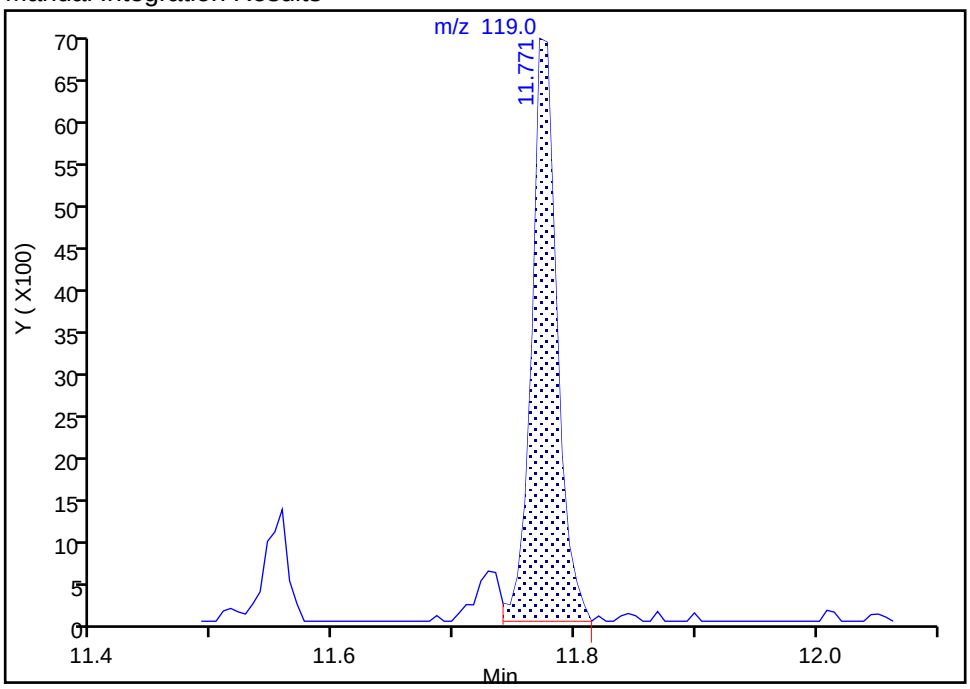
Not Detected
Expected RT: 11.78

Processing Integration Results



Manual Integration Results

RT: 11.77
Area: 10053
Amount: 0.890426
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:48:53
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 21-Apr-2018 06:29:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0070764-004
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:31:07 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:19:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.584	1.590	-0.006	79	13714	5.00	3.31	a
2 Dichlorodifluoromethane	85	1.627	1.626	0.001	99	28865	5.00	3.36	
3 Chloromethane	50	1.797	1.803	-0.006	99	27205	5.00	4.78	
5 Butadiene	54	1.901	1.907	-0.006	96	20552	5.00	4.72	
4 Vinyl chloride	62	1.901	1.907	-0.006	95	28857	5.00	5.07	
6 Bromomethane	94	2.206	2.212	-0.006	98	22521	5.00	4.76	
7 Chloroethane	64	2.261	2.273	-0.012	99	13548	5.00	4.72	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	41411	5.00	4.95	
8 Trichlorofluoromethane	101	2.474	2.486	-0.012	63	36555	5.00	4.92	a
10 Pentane	72	2.492	2.498	-0.006	96	5605	10.0	10.3	
12 Ethanol	46	2.687	2.687	0.000	84	3873	200.0	207.2	
11 Ethyl ether	59	2.699	2.693	0.006	95	11404	5.00	4.58	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	95	13908	5.00	4.86	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	88	18447	5.00	5.02	
15 Acrolein	56	2.870	2.876	-0.006	95	71116	200.0	160.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	75	22321	5.00	4.94	
17 1,1-Dichloroethene	96	2.907	2.919	-0.012	97	18481	5.00	4.93	
18 Acetone	43	2.998	2.998	0.000	87	23460	25.0	25.0	
19 Iodomethane	142	3.077	3.077	0.000	99	36873	5.00	4.61	
22 Isopropyl alcohol	45	3.084	3.083	0.001	1	12397	50.0	54.0	a
20 Carbon disulfide	76	3.108	3.120	-0.012	99	65013	5.00	4.65	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	92	10671	5.00	4.81	
23 Methyl acetate	43	3.242	3.248	-0.006	91	20554	10.0	10.2	
24 Cyclopentene	67	3.260	3.266	-0.006	93	39897	5.00	4.82	
29 Acetonitrile	41	3.315	3.309	0.006	93	25746	50.0	51.9	a
* 25 TBA-d9 (IS)	65	3.346	3.352	-0.006	0	298272	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.376	-0.006	92	20157	5.00	4.71	
27 2-Methyl-2-propanol	59	3.425	3.419	0.006	92	20146	50.0	45.0	
28 Methyl tert-butyl ether	73	3.529	3.535	-0.006	96	48516	5.00	4.63	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	92	18984	5.00	4.65	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.638	-0.006	95	53187	50.0	47.1	
32 Hexane	43	3.711	3.717	-0.006	93	15117	5.00	4.80	
33 Isopropyl ether	45	3.925	3.931	-0.006	96	52581	5.00	4.75	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	77	29722	5.00	4.58	
35 Vinyl acetate	86	3.968	3.973	-0.005	99	5114	10.0	9.59	
36 2-Chloro-1,3-butadiene	88	4.010	4.016	-0.006	91	15783	5.00	4.79	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	89	50487	5.00	4.72	
* 38 2-Butanone-d5	46	4.449	4.455	-0.006	0	191159	250.0	250.0	
39 2,2-Dichloropropane	79	4.474	4.492	-0.018	69	9583	5.00	4.59	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	89	21552	5.00	4.73	
41 Ethyl acetate	70	4.516	4.510	0.006	93	2896	10.0	9.08	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	96	9167	25.0	24.6	
44 Methyl acrylate	55	4.565	4.565	0.000	99	12528	5.00	4.95	
43 Propionitrile	54	4.650	4.644	0.006	97	20523	50.0	49.3	
45 Tetrahydrofuran	72	4.730	4.729	0.001	66	4648	10.0	10.3	
46 Chlorobromomethane	128	4.742	4.742	0.000	76	10710	5.00	4.68	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	60094	50.0	47.9	
48 Chloroform	83	4.784	4.784	0.000	99	32324	5.00	4.75	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	92	31073	5.00	4.73	
49 Cyclohexane	84	4.919	4.937	-0.018	93	30391	5.00	4.92	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.949	-0.006	97	174366	50.0	47.6	
52 Carbon tetrachloride	117	5.065	5.065	0.000	99	26337	5.00	4.58	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	98	23153	5.00	4.63	
56 Isobutyl alcohol	74	5.181	5.199	-0.018	95	1816	125.0	119.7	
54 Benzene	78	5.290	5.290	0.000	94	68120	5.00	4.71	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.309	-0.006	0	158398	50.0	46.5	
57 Isopropyl acetate	43	5.327	5.327	0.000	97	44612	5.00	4.75	
58 Tert-amyl methyl ether	87	5.333	5.345	-0.012	97	15211	5.00	4.68	
59 1,2-Dichloroethane	62	5.376	5.382	-0.006	96	21080	5.00	4.77	
60 n-Heptane	57	5.431	5.437	-0.006	91	14748	5.00	4.91	
* 61 Fluorobenzene	96	5.577	5.583	-0.006	99	457315	50.0	50.0	
62 n-Butanol	56	5.863	5.869	-0.006	85	10911	125.0	116.7	
63 Trichloroethene	95	5.943	5.943	0.000	96	18597	5.00	4.75	
64 Ethyl acrylate	56	6.077	6.071	0.006	94	10661	5.00	4.66	
65 Methylcyclohexane	83	6.071	6.071	0.000	92	35409	5.00	4.77	
66 1,2-Dichloropropane	63	6.229	6.235	-0.006	88	16330	5.00	4.70	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	29947	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.296	-0.006	86	22248	10.0	9.39	
69 1,4-Dioxane	88	6.339	6.333	0.006	30	4501	100.0	109.3	
70 n-Propyl acetate	43	6.345	6.345	0.000	97	17898	5.00	4.63	
71 Dibromomethane	93	6.369	6.369	0.000	95	10929	5.00	4.70	
72 Dichlorobromomethane	83	6.510	6.522	-0.012	99	21481	5.00	4.50	
73 2-Chloroethyl vinyl ether	63	6.839	6.845	-0.006	81	8256	5.00	4.82	
74 2-Nitropropane	41	6.851	6.851	0.000	82	5140	10.0	8.50	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	27081	100.0	95.1	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	24362	5.00	4.64	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.174	-0.006	96	68958	25.0	24.3	
$ 78 Toluene-d8 (Surr)	98	7.266	7.272	-0.006	99	610308	50.0	48.6	
79 Toluene	91	7.345	7.351	-0.006	93	71471	5.00	4.66	
80 trans-1,3-Dichloropropene	75	7.692	7.698	-0.006	97	21076	5.00	4.62	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	16330	5.00	4.42	
82 1,1,2-Trichloroethane	83	7.912	7.918	-0.006	97	12279	5.00	4.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	20170	5.00	4.69	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	88	22287	5.00	4.78	
85 2-Hexanone	43	8.174	8.174	0.000	97	44418	25.0	24.6	
86 n-Butyl acetate	43	8.290	8.284	0.006	98	17958	5.00	4.33	
87 Chlorodibromomethane	129	8.363	8.369	-0.006	97	16548	5.00	4.50	
88 Ethylene Dibromide	107	8.528	8.527	0.001	100	14800	5.00	4.74	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	409743	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	48004	5.00	4.70	
92 Ethylbenzene	106	9.204	9.204	0.000	98	26188	5.00	4.70	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	94	18451	5.00	4.52	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	31651	5.00	4.65	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	9810	5.00	4.52	
95 o-Xylene	106	9.820	9.820	0.000	95	32885	5.00	4.63	
96 Styrene	104	9.851	9.850	0.001	96	51813	5.00	4.67	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	20015	5.00	4.16	
98 Bromoform	173	10.082	10.088	-0.006	96	10667	5.00	4.46	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	87209	5.00	4.58	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	200277	50.0	49.3	
101 Bromobenzene	156	10.564	10.564	0.000	89	23518	5.00	4.77	
102 1,1,2,2-Tetrachloroethane	83	10.594	10.600	-0.006	98	20514	5.00	4.77	
103 N-Propylbenzene	91	10.625	10.625	0.000	100	103139	5.00	4.68	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	95	5627	5.00	4.54	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.667	-0.006	74	4577	5.00	4.68	
107 4-Ethyltoluene	105	10.741	10.740	0.001	90	89493	5.00	4.82	
106 2-Chlorotoluene	91	10.741	10.740	0.001	94	69433	5.00	4.69	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	73926	5.00	4.53	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	58787	5.00	4.68	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	18876	5.00	4.15	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	61537	5.00	4.47	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	76306	5.00	4.54	
113 sec-Butylbenzene	105	11.308	11.307	0.001	99	100039	5.00	4.55	
114 4-Isopropyltoluene	119	11.436	11.442	-0.006	98	88574	5.00	4.57	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	45622	5.00	4.74	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	251136	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	95	46286	5.00	4.79	
118 Benzyl chloride	91	11.667	11.667	0.000	99	31846	5.00	4.27	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	93	82088	5.00	4.77	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	49418	5.00	4.64	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	47837	5.00	4.81	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	44936	5.00	4.71	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	88523	5.00	4.67	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	93	3746	5.00	4.24	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	41958	5.00	5.00	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	38177	5.00	4.67	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	18332	5.00	4.60	
128 Naphthalene	128	13.332	13.331	0.001	99	86559	5.00	4.63	
129 1,2,3-Trichlorobenzene	180	13.521	13.527	-0.005	97	37218	5.00	4.68	
S 130 1,2-Dichloroethene, Total	100				0		10.0	9.38	
S 131 Xylenes, Total	100				0		10.0	9.28	
S 132 Total BTEX	1				0		25.0	23.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	0.50	Units: uL	
ACROLEIN W_00075	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	0.50	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 22:31:09 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D

Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9 Operator ID:

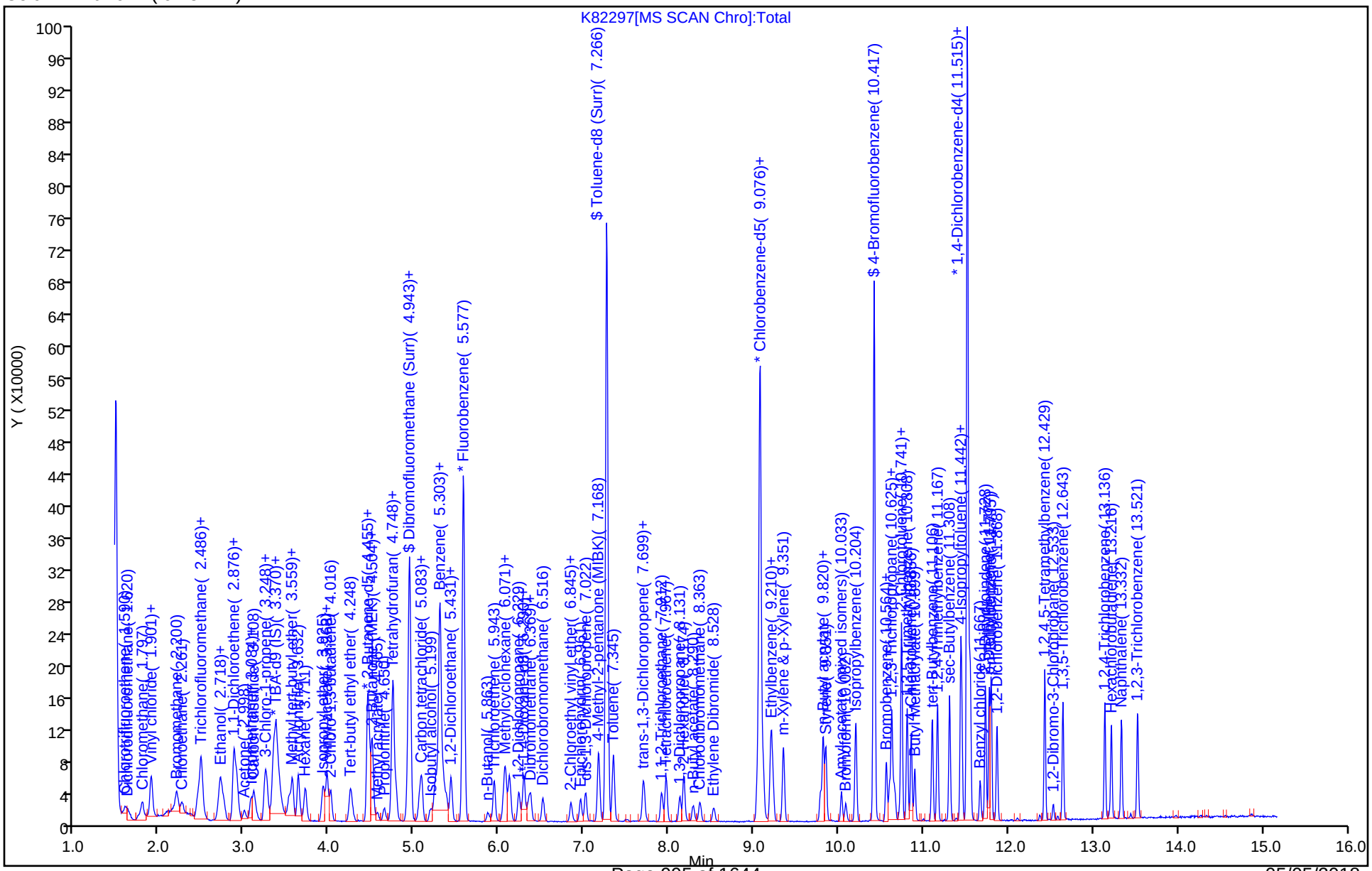
Lims ID: STD5 Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

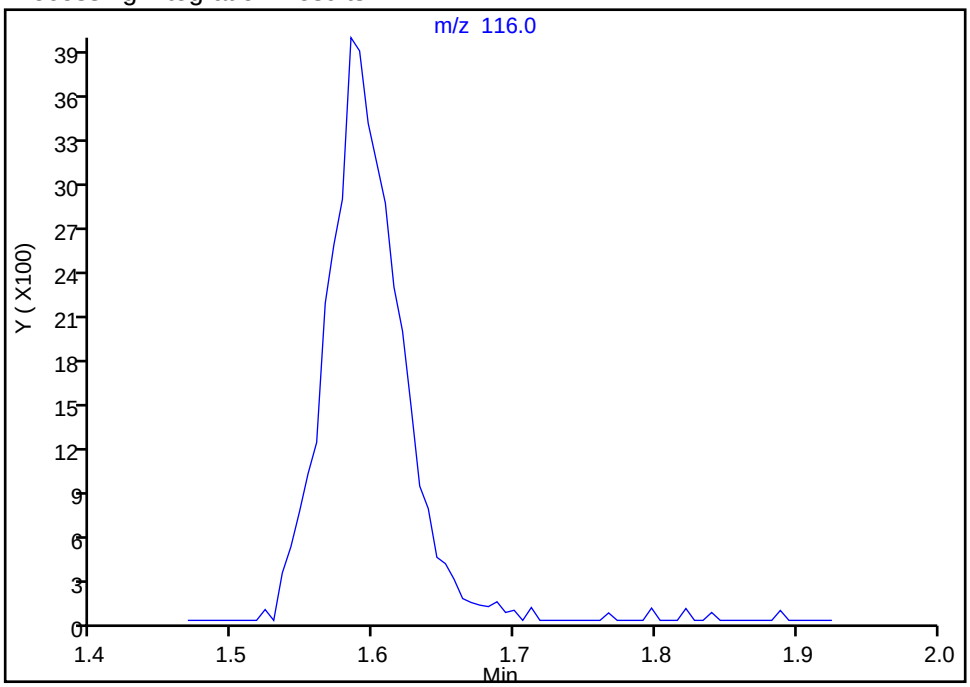
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

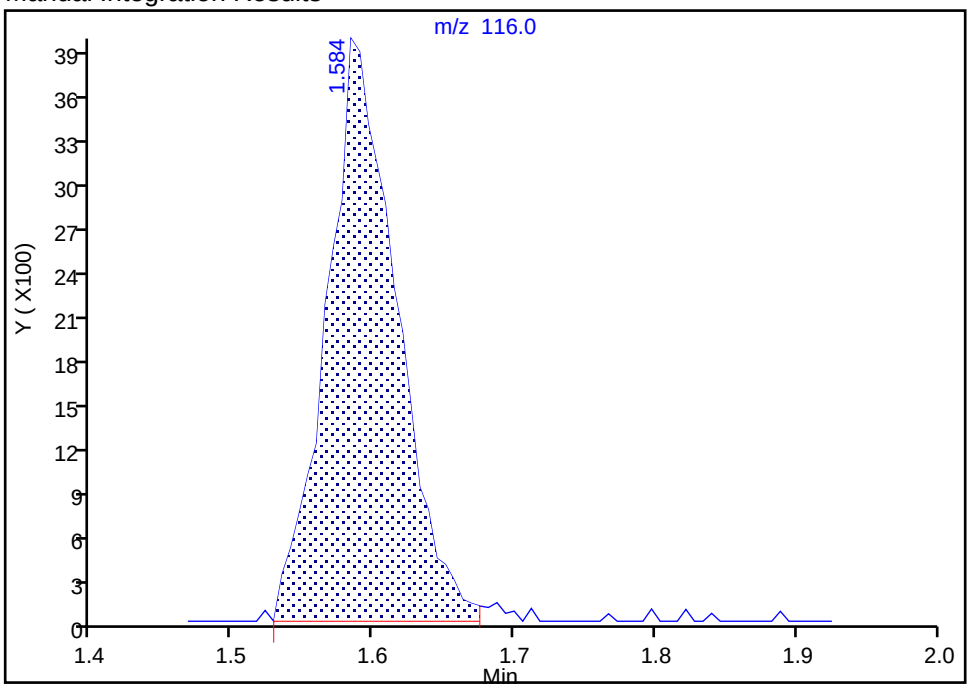
Not Detected
Expected RT: 1.59

Processing Integration Results



Manual Integration Results

RT: 1.58
Area: 13714
Amount: 3.313904
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:50:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

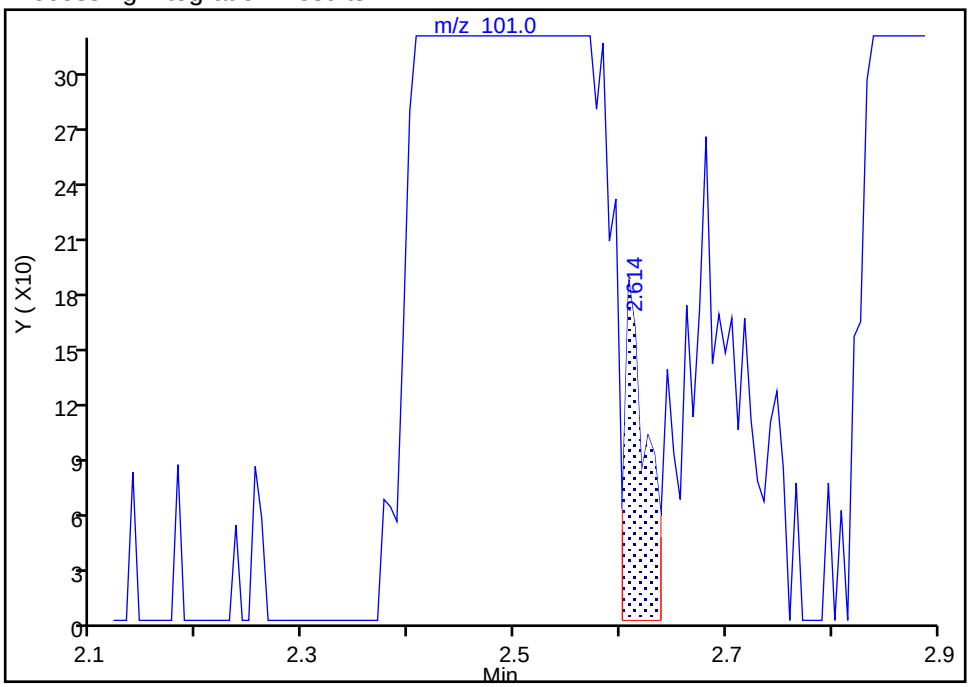
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

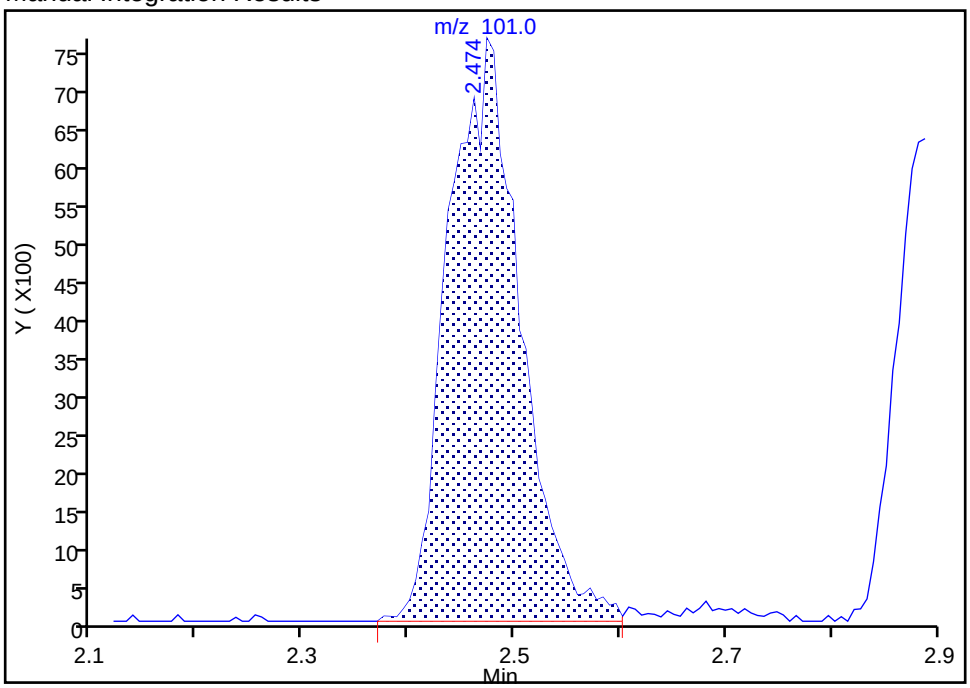
Processing Integration Results

RT: 2.61
Area: 269
Amount: 0.028056
Amount Units: ug/l



Manual Integration Results

RT: 2.47
Area: 36555
Amount: 4.918069
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:50:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

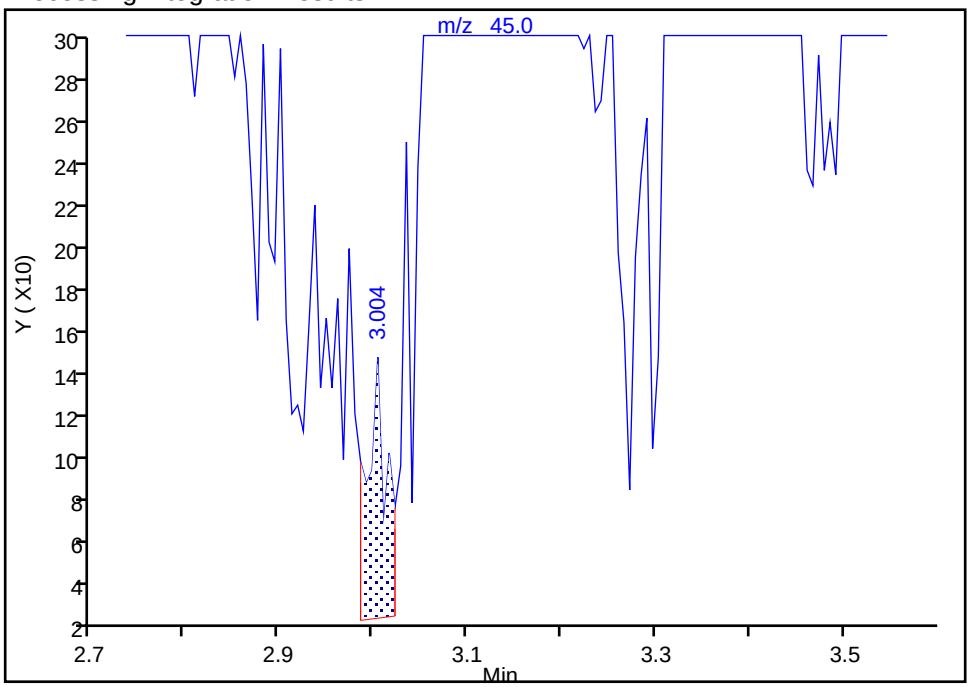
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

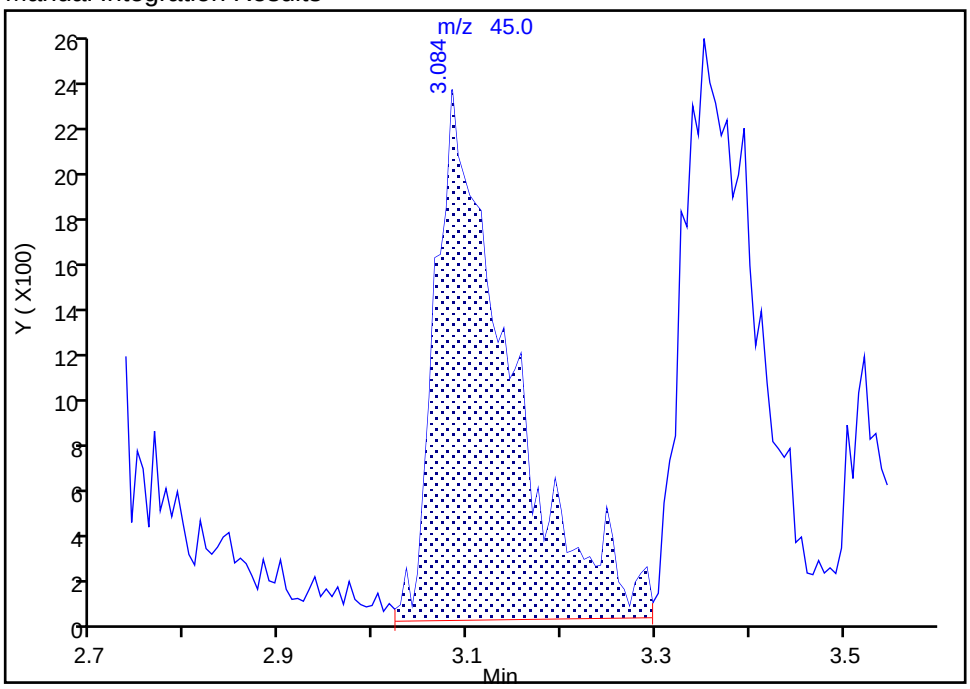
Processing Integration Results

RT: 3.00
Area: 180
Amount: 41.578724
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 12397
Amount: 54.003121
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:50:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

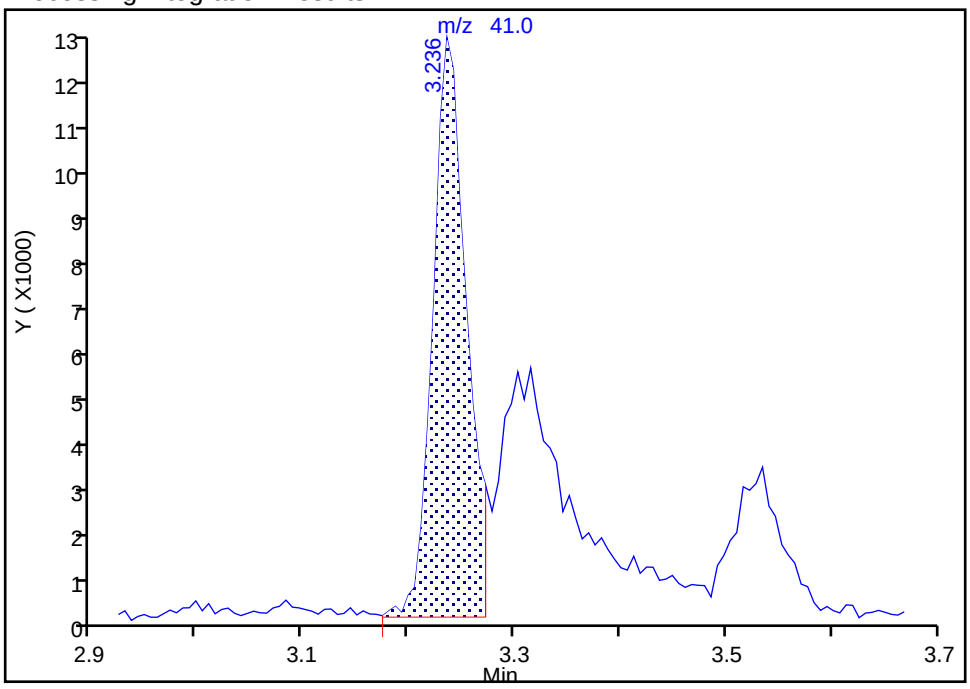
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

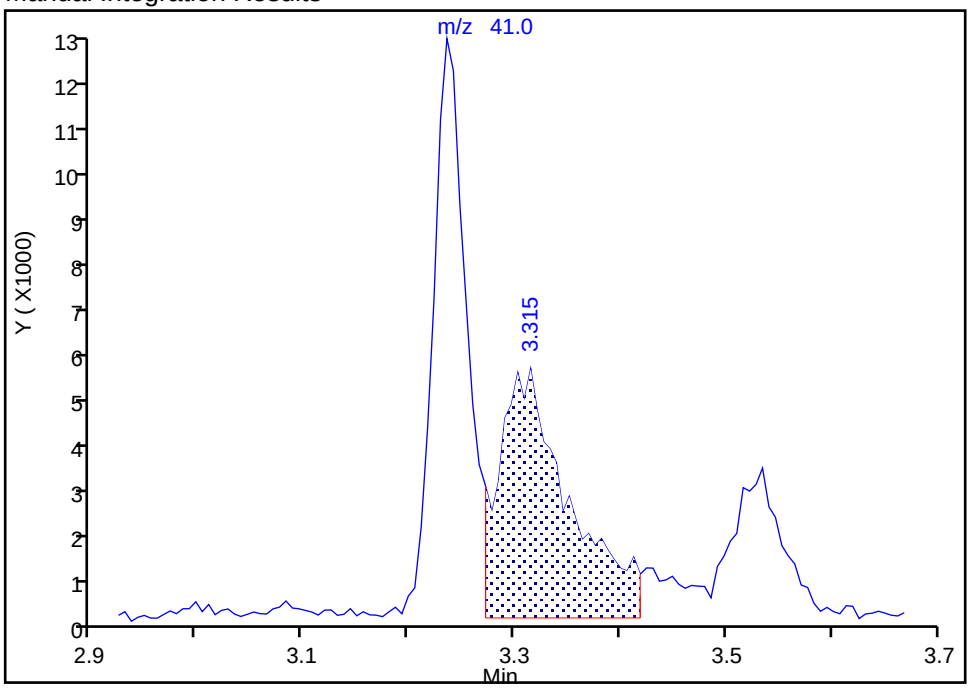
Processing Integration Results

RT: 3.24
Area: 28629
Amount: 41.676615
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 25746
Amount: 51.909571
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:50:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 21-Apr-2018 06:54:30 ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0070764-005
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:31:20 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:21:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.590	1.590	0.000	88	57246	20.0	14.0	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	98	113768	20.0	13.4	
3 Chloromethane	50	1.803	1.803	0.000	100	104166	20.0	18.4	
4 Vinyl chloride	62	1.907	1.907	0.000	94	110439	20.0	19.5	
5 Butadiene	54	1.907	1.907	0.000	97	85231	20.0	19.6	
6 Bromomethane	94	2.212	2.212	0.000	98	90189	20.0	19.1	
7 Chloroethane	64	2.273	2.273	0.000	100	56487	20.0	19.8	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	170807	20.0	20.5	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	61	148322	20.0	20.0	
10 Pentane	72	2.498	2.498	0.000	96	23533	40.0	42.6	
12 Ethanol	46	2.687	2.687	0.000	67	17016	800.0	895.7	
11 Ethyl ether	59	2.693	2.693	0.000	94	51942	20.0	20.9	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	96	61390	20.0	21.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	90	78531	20.0	21.4	
15 Acrolein	56	2.876	2.876	0.000	96	141525	300.0	315.0	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	82	96232	20.0	19.9	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	97	78869	20.0	21.1	
18 Acetone	43	2.998	2.998	0.000	87	89929	100.0	93.7	
19 Iodomethane	142	3.077	3.077	0.000	98	166549	20.0	20.9	
22 Isopropyl alcohol	45	3.083	3.083	0.000	1	45536	200.0	195.2	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	291598	20.0	20.9	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	92	45800	20.0	20.7	
23 Methyl acetate	43	3.248	3.248	0.000	91	81640	40.0	39.9	
24 Cyclopentene	67	3.266	3.266	0.000	91	176477	20.0	21.4	
29 Acetonitrile	41	3.309	3.309	0.000	93	94229	200.0	187.0	a
* 25 TBA-d9 (IS)	65	3.352	3.352	0.000	0	303090	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	89	86781	20.0	20.3	
27 2-Methyl-2-propanol	59	3.419	3.419	0.000	96	92394	200.0	203.0	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	96	215890	20.0	20.7	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	93	83045	20.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	92	226954	200.0	201.6	
32 Hexane	43	3.717	3.717	0.000	93	66028	20.0	21.0	
33 Isopropyl ether	45	3.931	3.931	0.000	96	232407	20.0	21.0	
35 Vinyl acetate	86	3.973	3.973	0.000	99	23651	40.0	43.6	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	75	133908	20.0	20.7	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	89	70159	20.0	21.3	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	89	223930	20.0	21.0	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	195195	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.492	0.000	95	43028	20.0	20.7	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	97	93711	20.0	20.6	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	96	37082	100.0	97.3	
41 Ethyl acetate	70	4.510	4.510	0.000	93	12998	40.0	39.9	
44 Methyl acrylate	55	4.565	4.565	0.000	99	49505	20.0	19.6	
43 Propionitrile	54	4.644	4.644	0.000	98	90833	200.0	214.5	
45 Tetrahydrofuran	72	4.729	4.729	0.000	64	17950	40.0	38.9	
46 Chlorobromomethane	128	4.742	4.742	0.000	71	47033	20.0	20.6	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	257668	200.0	206.3	
48 Chloroform	83	4.784	4.784	0.000	99	139619	20.0	20.6	
49 Cyclohexane	84	4.937	4.937	0.000	92	130787	20.0	19.8	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	94	134575	20.0	20.5	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	184398	50.0	50.5	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	116620	20.0	20.4	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	98	101478	20.0	20.4	
56 Isobutyl alcohol	74	5.199	5.199	0.000	94	7482	500.0	485.5	
54 Benzene	78	5.290	5.290	0.000	95	298894	20.0	20.4	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	165159	50.0	48.7	
57 Isopropyl acetate	43	5.327	5.327	0.000	96	193555	20.0	20.7	a
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	91	67413	20.0	20.8	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	88116	20.0	20.0	
60 n-Heptane	57	5.437	5.437	0.000	93	63410	20.0	19.8	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	455766	50.0	50.0	
62 n-Butanol	56	5.869	5.869	0.000	91	44696	500.0	470.5	
63 Trichloroethene	95	5.943	5.943	0.000	97	78099	20.0	20.0	
65 Methylcyclohexane	83	6.071	6.071	0.000	95	160154	20.0	20.0	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	50302	20.0	22.1	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	93	70324	20.0	20.3	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	31871	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	87	97082	40.0	41.1	
69 1,4-Dioxane	88	6.333	6.333	0.000	27	19683	400.0	449.0	
70 n-Propyl acetate	43	6.345	6.345	0.000	97	78274	20.0	20.3	
71 Dibromomethane	93	6.369	6.369	0.000	95	47355	20.0	20.4	
72 Dichlorobromomethane	83	6.522	6.522	0.000	98	97507	20.0	20.5	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	83	35187	20.0	20.6	
74 2-Nitropropane	41	6.851	6.851	0.000	78	21520	40.0	35.7	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	119462	400.0	410.9	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	89	107543	20.0	20.2	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	301016	100.0	103.8	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	623036	50.0	49.1	
79 Toluene	91	7.351	7.351	0.000	93	311894	20.0	20.1	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	92463	20.0	20.0	
81 Ethyl methacrylate	69	7.711	7.711	0.000	85	73173	20.0	19.6	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	97	52328	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	89373	20.0	20.6	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	89	96148	20.0	20.4	
85 2-Hexanone	43	8.174	8.174	0.000	95	192293	100.0	104.1	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	81948	20.0	19.5	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	72292	20.0	19.4	
88 Ethylene Dibromide	107	8.527	8.527	0.000	98	65450	20.0	20.7	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	83	414609	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	209801	20.0	20.3	
92 Ethylbenzene	106	9.204	9.204	0.000	98	114672	20.0	20.3	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	95	79697	20.0	19.3	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	140882	20.0	20.5	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	44145	20.0	20.1	
95 o-Xylene	106	9.820	9.820	0.000	95	146537	20.0	20.4	
96 Styrene	104	9.850	9.850	0.000	97	230759	20.0	20.6	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	96240	20.0	19.9	
98 Bromoform	173	10.088	10.088	0.000	97	46276	20.0	19.1	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	397823	20.0	20.6	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	202010	50.0	49.2	
101 Bromobenzene	156	10.564	10.564	0.000	92	97954	20.0	19.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	86812	20.0	20.1	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	453652	20.0	20.5	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	24326	20.0	19.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	90	18120	20.0	18.4	
106 2-Chlorotoluene	91	10.740	10.740	0.000	88	297170	20.0	20.0	
107 4-Ethyltoluene	105	10.740	10.740	0.000	90	383910	20.0	20.6	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	326928	20.0	20.0	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	256190	20.0	20.3	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	92118	20.0	20.2	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	273810	20.0	19.8	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	340746	20.0	20.2	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	451741	20.0	20.5	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	395307	20.0	20.3	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	193604	20.0	20.1	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	252080	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	195277	20.0	20.1	
118 Benzyl chloride	91	11.667	11.667	0.000	99	149594	20.0	20.0	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	357520	20.0	20.7	
120 p-Diethylbenzene	119	11.777	11.777	0.000	96	219550	20.0	20.5	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	204531	20.0	20.5	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	194350	20.0	20.3	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	389332	20.0	20.5	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	93	17031	20.0	19.2	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	174149	20.0	20.7	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	166441	20.0	20.3	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	80021	20.0	20.0	
128 Naphthalene	128	13.331	13.331	0.000	99	374994	20.0	20.0	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	164633	20.0	20.6	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.0	
S 131 Xylenes, Total	100				0		40.0	40.8	
S 132 Total BTEX	1				0		100.0	101.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00256	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 22:31:22 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D

Injection Date: 21-Apr-2018 06:54:30 Instrument ID: CVOAMS9 Operator ID:

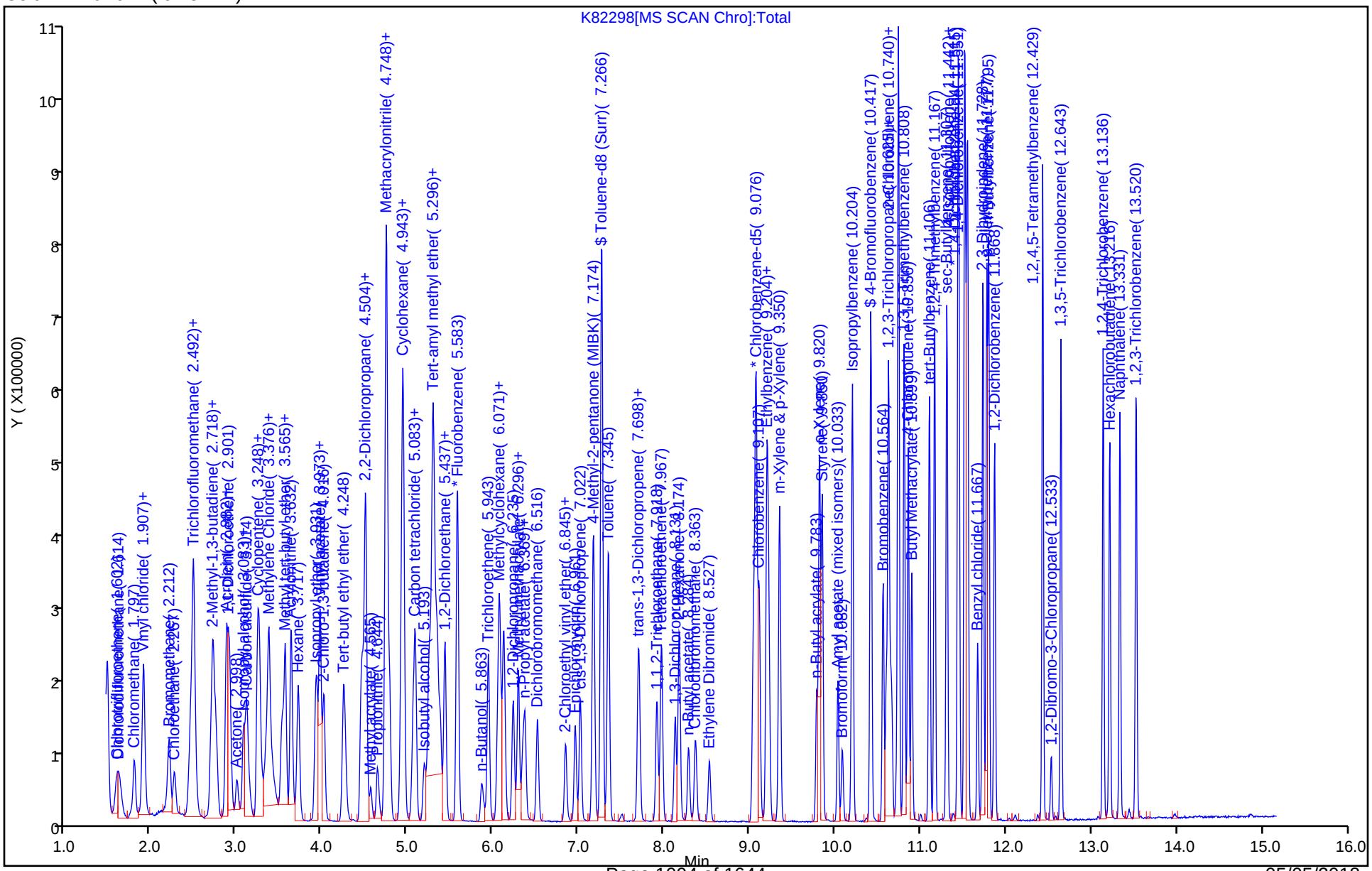
Lims ID: STD20 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

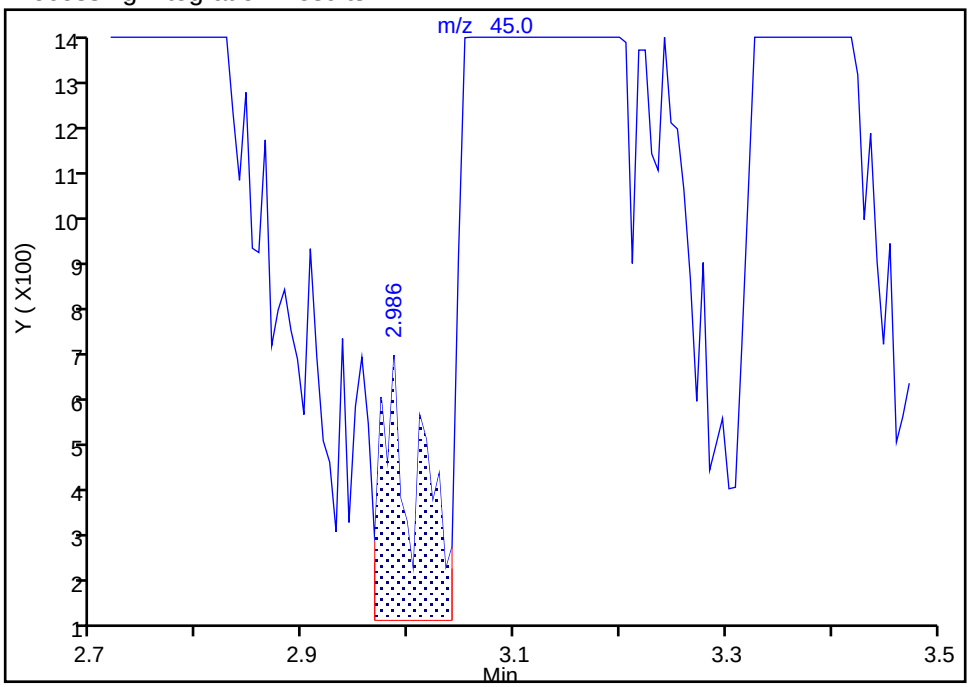
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D
Injection Date: 21-Apr-2018 06:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

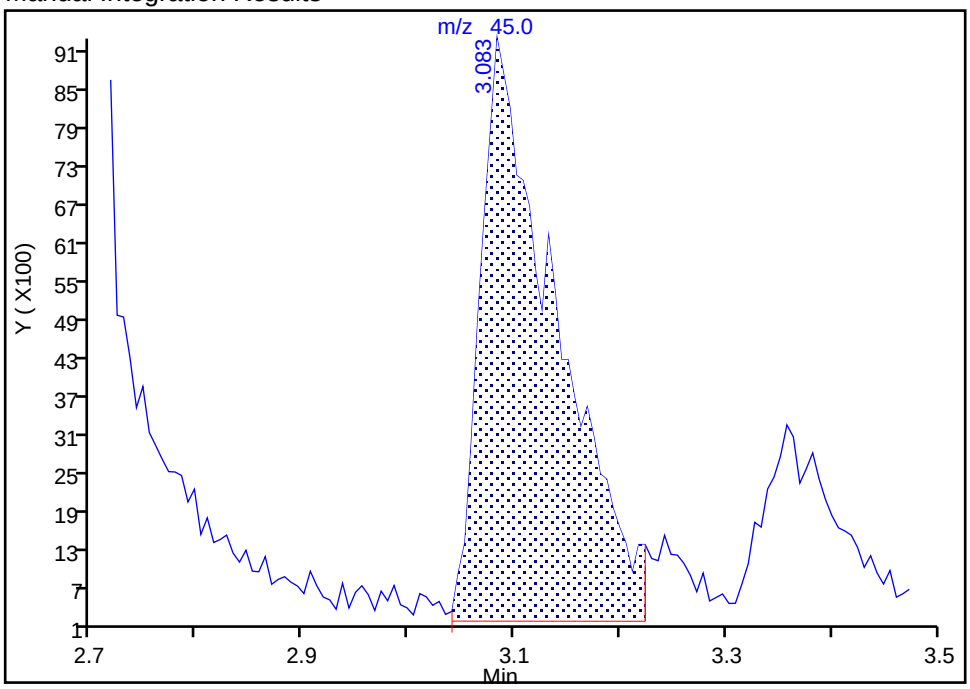
Processing Integration Results

RT: 2.99
Area: 1356
Amount: 5.239280
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 45536
Amount: 195.2082
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:39:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

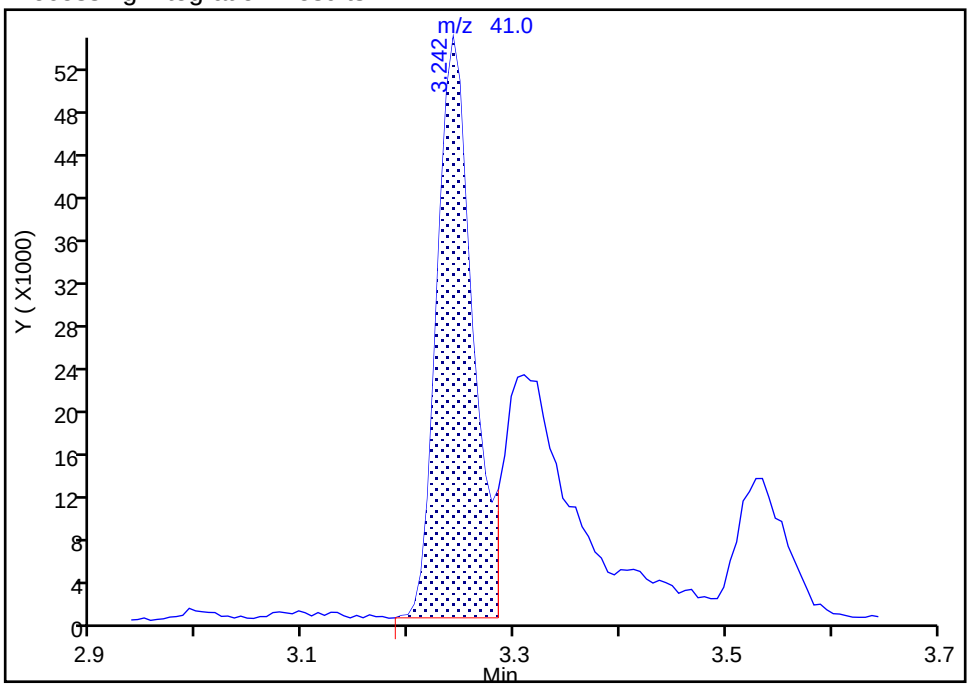
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D
Injection Date: 21-Apr-2018 06:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

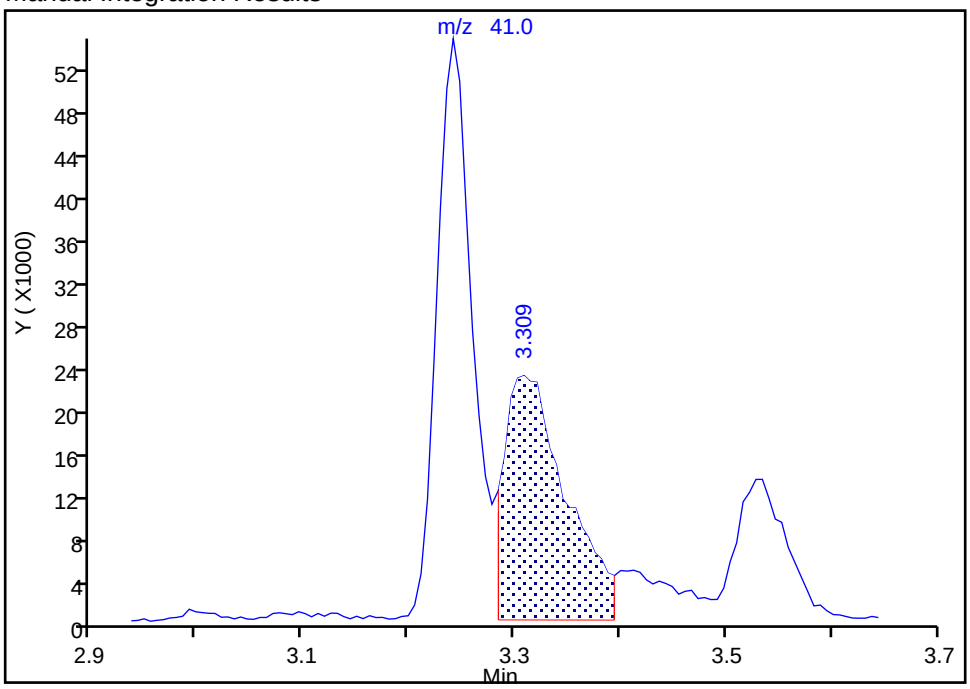
Processing Integration Results

RT: 3.24
Area: 129760
Amount: 244.4628
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 94229
Amount: 186.9662
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:39:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

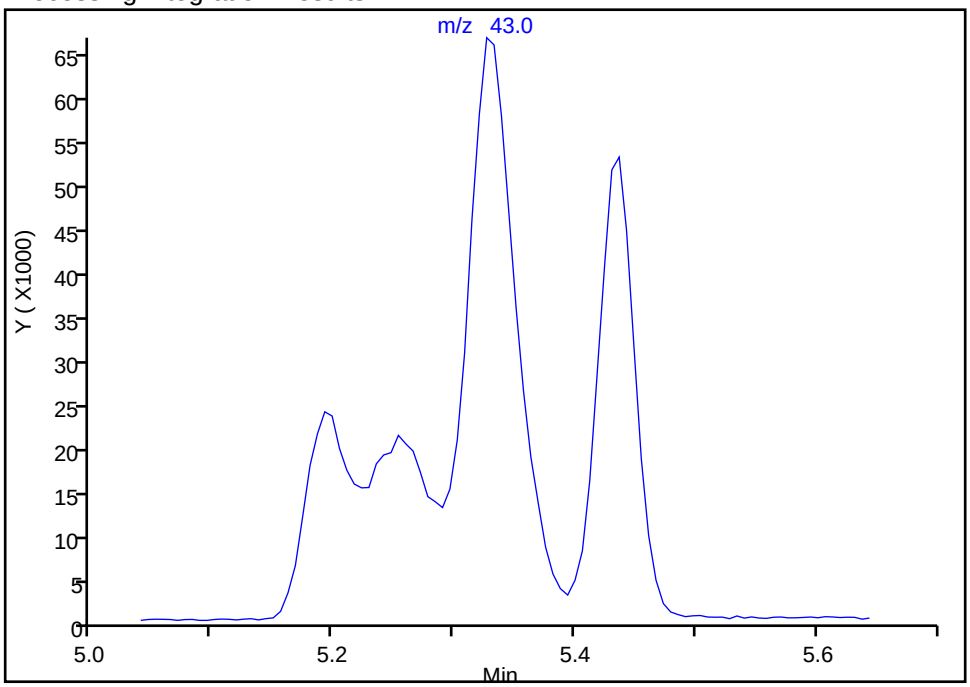
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D
Injection Date: 21-Apr-2018 06:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

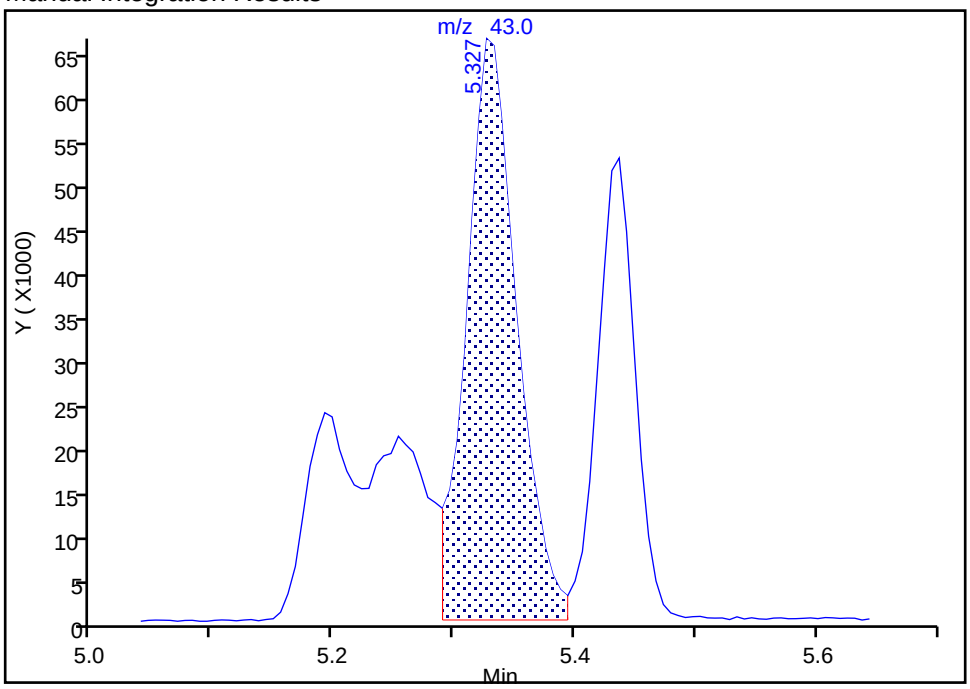
Not Detected
Expected RT: 5.33

Processing Integration Results



Manual Integration Results

RT: 5.33
Area: 193555
Amount: 20.677234
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:39:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 21-Apr-2018 07:18:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0070764-006
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:31:34 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:27:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.590	0.006	88	135885	50.0	33.4	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	99	281893	50.0	33.4	M
3 Chloromethane	50	1.803	1.803	0.000	99	251138	50.0	44.2	
5 Butadiene	54	1.913	1.907	0.006	97	207992	50.0	47.8	
4 Vinyl chloride	62	1.907	1.907	0.000	98	267346	50.0	47.1	
6 Bromomethane	94	2.212	2.212	0.000	99	219717	50.0	46.5	
7 Chloroethane	64	2.273	2.273	0.000	100	137432	50.0	48.0	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	408660	50.0	48.9	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	57	369744	50.0	49.8	
10 Pentane	72	2.492	2.498	-0.006	96	56087	100.0	99.2	
12 Ethanol	46	2.705	2.687	0.018	94	36200	2000.0	1860.2	
11 Ethyl ether	59	2.693	2.693	0.000	94	120615	50.0	48.5	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	97	144944	50.0	50.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.748	0.006	93	188412	50.0	51.3	
15 Acrolein	56	2.876	2.876	0.000	95	204750	400.0	444.9	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	99	234718	50.0	47.7	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	97	183987	50.0	49.1	
18 Acetone	43	2.998	2.998	0.000	87	214228	250.0	224.0	
19 Iodomethane	142	3.077	3.077	0.000	98	390955	50.0	49.0	
22 Isopropyl alcohol	45	3.090	3.083	0.007	1	119731	500.0	501.1	a
20 Carbon disulfide	76	3.114	3.120	-0.006	99	681245	50.0	48.8	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	95	110507	50.0	49.9	
23 Methyl acetate	43	3.242	3.248	-0.006	99	197921	100.0	94.4	
24 Cyclopentene	67	3.266	3.266	0.000	92	425858	50.0	51.6	
29 Acetonitrile	41	3.309	3.309	0.000	94	217917	500.0	422.1	a
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	310467	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	88	204831	50.0	48.0	
27 2-Methyl-2-propanol	59	3.431	3.419	0.012	97	220678	500.0	473.3	
28 Methyl tert-butyl ether	73	3.528	3.535	-0.007	96	512367	50.0	49.0	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	92	197978	50.0	48.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	94	547259	500.0	485.4	
32 Hexane	43	3.724	3.717	0.007	93	158325	50.0	50.3	
33 Isopropyl ether	45	3.925	3.931	-0.006	97	542730	50.0	49.1	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	87	318966	50.0	49.2	
35 Vinyl acetate	86	3.980	3.973	0.007	100	56384	100.0	101.5	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	90	163493	50.0	49.7	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	89	525361	50.0	49.3	
* 38 2-Butanone-d5	46	4.449	4.455	-0.006	0	194496	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.492	-0.006	96	97890	50.0	47.0	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	98	217535	50.0	47.8	
41 Ethyl acetate	70	4.510	4.510	0.000	93	30841	100.0	95.1	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	88204	250.0	232.3	
44 Methyl acrylate	55	4.565	4.565	0.000	99	120091	50.0	47.5	
43 Propionitrile	54	4.644	4.644	0.000	98	218137	500.0	502.9	
45 Tetrahydrofuran	72	4.736	4.729	0.007	84	42114	100.0	91.7	
46 Chlorobromomethane	128	4.742	4.742	0.000	75	109298	50.0	47.9	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	611832	500.0	489.1	
48 Chloroform	83	4.784	4.784	0.000	99	324500	50.0	47.7	
50 1,1,1-Trichloroethane	97	4.943	4.937	0.006	97	321683	50.0	49.0	
49 Cyclohexane	84	4.937	4.937	0.000	89	318574	50.0	47.5	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	97	177150	50.0	48.5	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	287335	50.0	50.1	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	98	242321	50.0	48.6	
56 Isobutyl alcohol	74	5.193	5.199	-0.006	94	19169	1250.0	1214.2	
54 Benzene	78	5.290	5.290	0.000	96	699391	50.0	48.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	158945	50.0	46.8	
57 Isopropyl acetate	43	5.333	5.327	0.006	95	442217	50.0	47.2	
58 Tert-amyl methyl ether	87	5.339	5.345	-0.006	97	160387	50.0	49.4	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	204081	50.0	46.3	
60 n-Heptane	57	5.437	5.437	0.000	91	152930	50.0	47.1	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	456447	50.0	50.0	
62 n-Butanol	56	5.863	5.869	-0.006	88	113225	1250.0	1163.5	
63 Trichloroethene	95	5.943	5.943	0.000	97	187239	50.0	47.9	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	114987	50.0	50.4	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	383246	50.0	47.2	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	93	163587	50.0	47.2	
* 67 1,4-Dioxane-d8	96	6.278	6.284	-0.006	0	33073	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.296	-0.006	91	233677	100.0	98.8	
69 1,4-Dioxane	88	6.339	6.333	0.006	28	44101	1000.0	969.4	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	189871	50.0	49.2	
71 Dibromomethane	93	6.369	6.369	0.000	96	110836	50.0	47.8	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	98	228929	50.0	48.1	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	81	82379	50.0	48.1	
74 2-Nitropropane	41	6.851	6.851	0.000	80	52529	100.0	87.1	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	291301	1000.0	1005.6	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	252036	50.0	48.2	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	720496	250.0	249.4	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	613789	50.0	49.1	
79 Toluene	91	7.345	7.351	-0.006	93	747261	50.0	49.0	
80 trans-1,3-Dichloropropene	75	7.692	7.698	-0.006	98	219201	50.0	48.3	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	181055	50.0	49.3	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	118758	50.0	47.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.973	-0.006	97	207952	50.0	48.6	
84 1,3-Dichloropropane	76	8.125	8.131	-0.006	90	225167	50.0	48.5	
85 2-Hexanone	43	8.174	8.174	0.000	95	460327	250.0	250.2	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	199906	50.0	48.4	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	176836	50.0	48.3	
88 Ethylene Dibromide	107	8.527	8.527	0.000	99	153385	50.0	49.3	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	408020	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	98	498741	50.0	49.0	
92 Ethylbenzene	106	9.204	9.204	0.000	98	272978	50.0	49.2	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	95	195525	50.0	48.1	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.000	0	331907	50.0	49.0	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	105075	50.0	48.6	
95 o-Xylene	106	9.820	9.820	0.000	95	346813	50.0	49.0	
96 Styrene	104	9.850	9.850	0.000	96	543913	50.0	49.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	237847	50.0	51.3	
98 Bromoform	173	10.082	10.088	-0.006	97	114406	50.0	48.0	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	952388	50.0	50.2	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	196938	50.0	48.7	
101 Bromobenzene	156	10.564	10.564	0.000	91	229236	50.0	48.3	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	204328	50.0	49.4	
103 N-Propylbenzene	91	10.625	10.625	0.000	100	1069161	50.0	50.4	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	96	57916	50.0	48.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	92	46438	50.0	49.3	
107 4-Ethyltoluene	105	10.740	10.740	0.000	90	906609	50.0	50.8	
106 2-Chlorotoluene	91	10.740	10.740	0.000	90	707395	50.0	49.6	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	789412	50.0	50.3	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	592906	50.0	49.1	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	225545	50.0	51.5	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	665846	50.0	50.3	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	808260	50.0	50.0	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	1076321	50.0	50.9	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	937541	50.0	50.3	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	445593	50.0	48.2	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	91	241646	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	441606	50.0	47.5	
118 Benzyl chloride	91	11.667	11.667	0.000	99	360625	50.0	50.3	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	828385	50.0	50.0	
120 p-Diethylbenzene	119	11.777	11.777	0.000	95	515228	50.0	50.3	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	478184	50.0	50.0	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	447709	50.0	48.7	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	914277	50.0	50.2	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	93	37957	50.0	44.6	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	397827	50.0	49.3	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	376853	50.0	47.9	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	189486	50.0	49.4	
128 Naphthalene	128	13.331	13.331	0.000	99	887580	50.0	49.3	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.001	96	371182	50.0	48.5	
S 130 1,2-Dichloroethene, Total	100				0		100.0	96.4	
S 131 Xylenes, Total	100				0		100.0	98.0	
S 132 Total BTEX	1				0		250.0	244.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
GASES Li_00256	Amount Added:	5.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	5.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

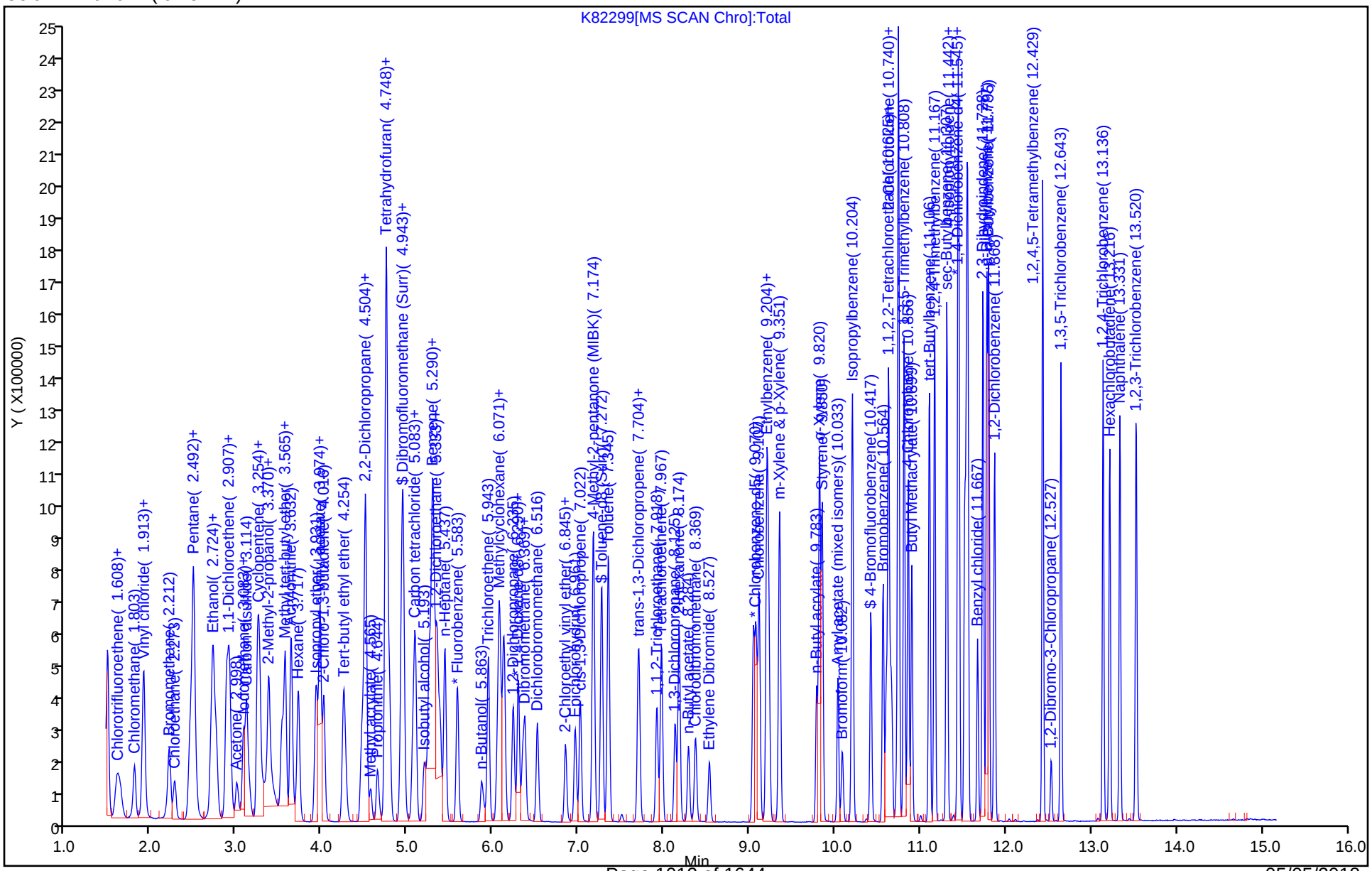
Report Date: 22-Apr-2018 22:31:36 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D

Injection Date:	21-Apr-2018 07:18:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD50			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

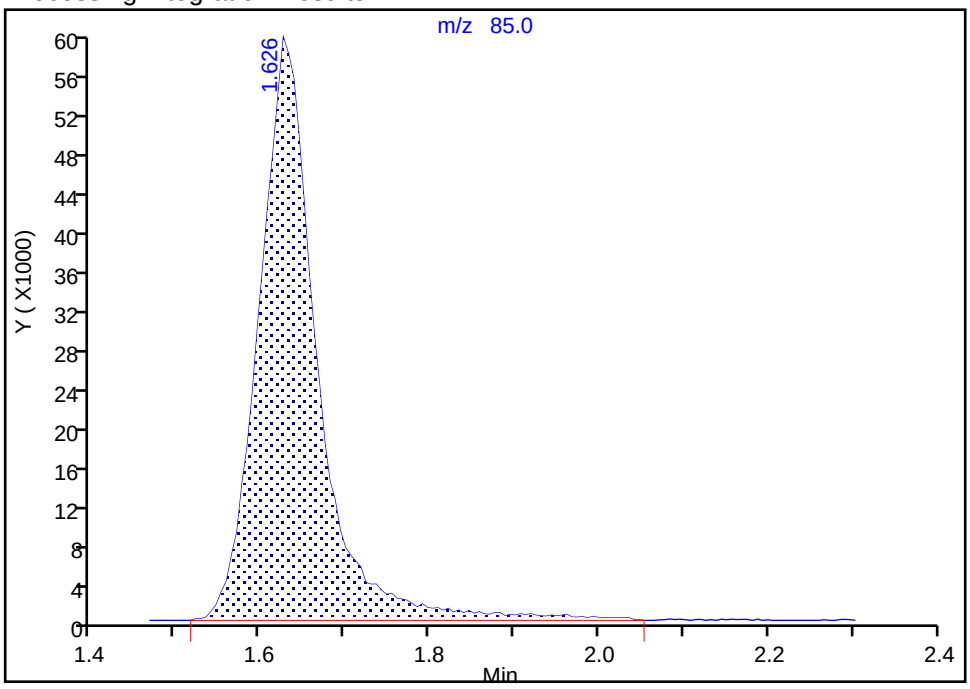
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D
Injection Date: 21-Apr-2018 07:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

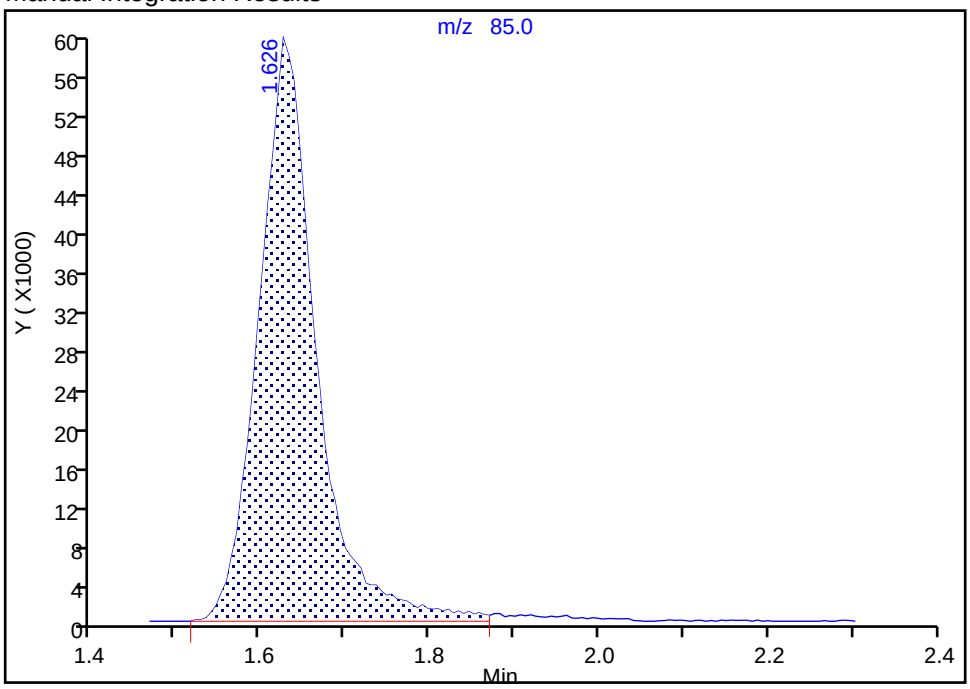
Processing Integration Results

RT: 1.63
Area: 286324
Amount: 33.415846
Amount Units: ug/l



Manual Integration Results

RT: 1.63
Area: 281893
Amount: 33.374911
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:08:10
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

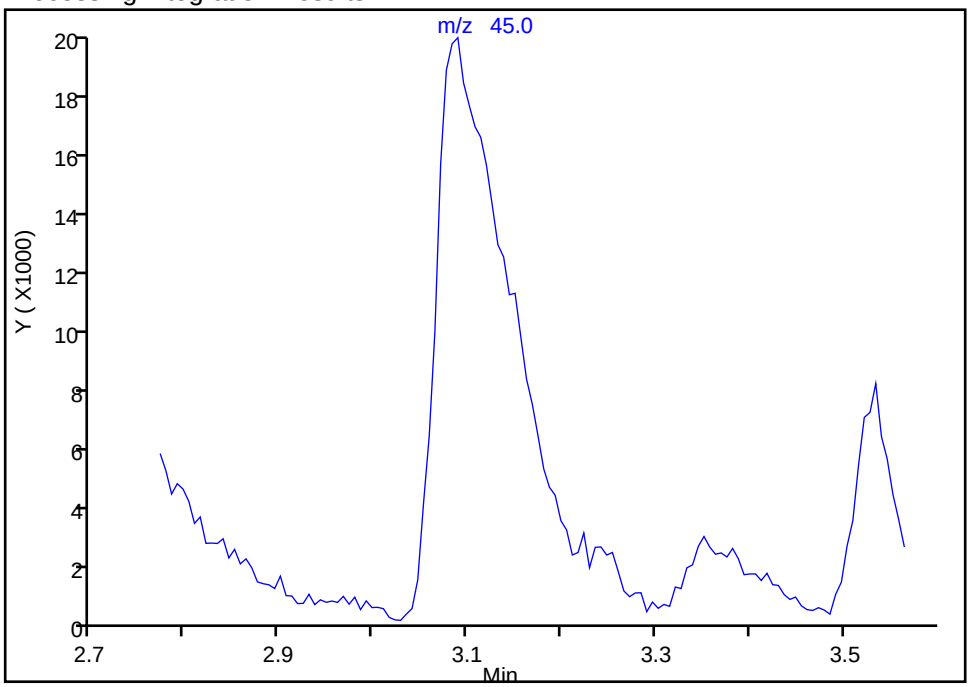
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D
Injection Date: 21-Apr-2018 07:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

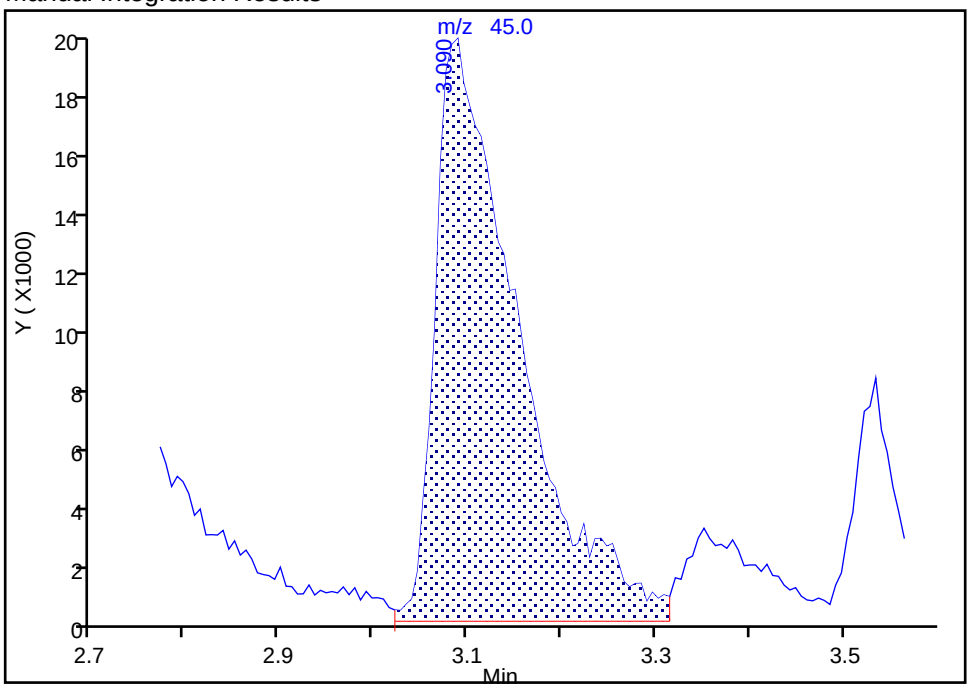
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.09
Area: 119731
Amount: 501.0787
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:51:44
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

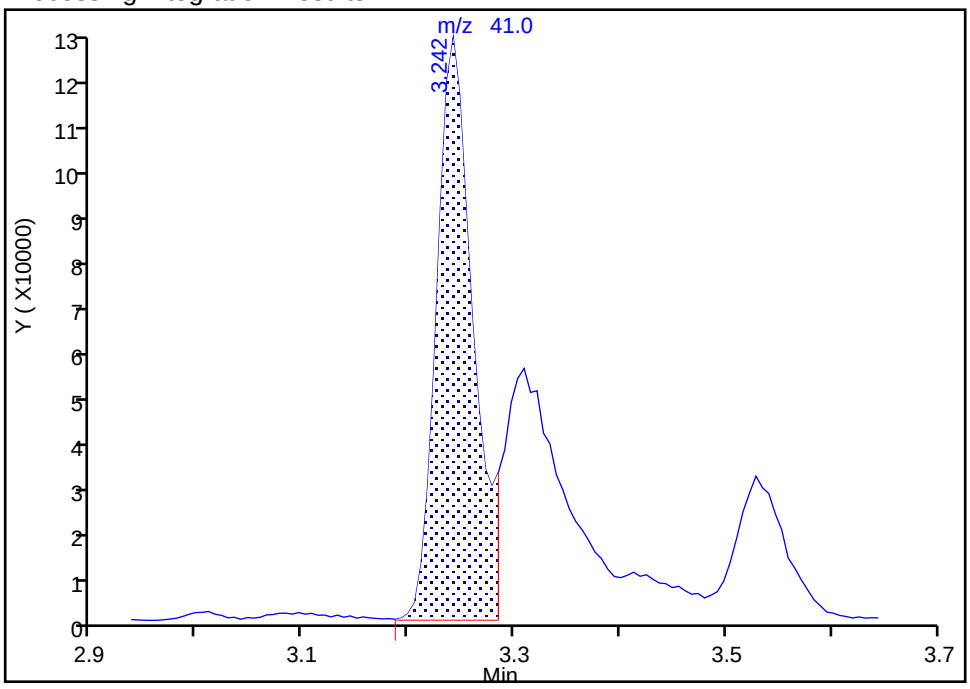
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D
Injection Date: 21-Apr-2018 07:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

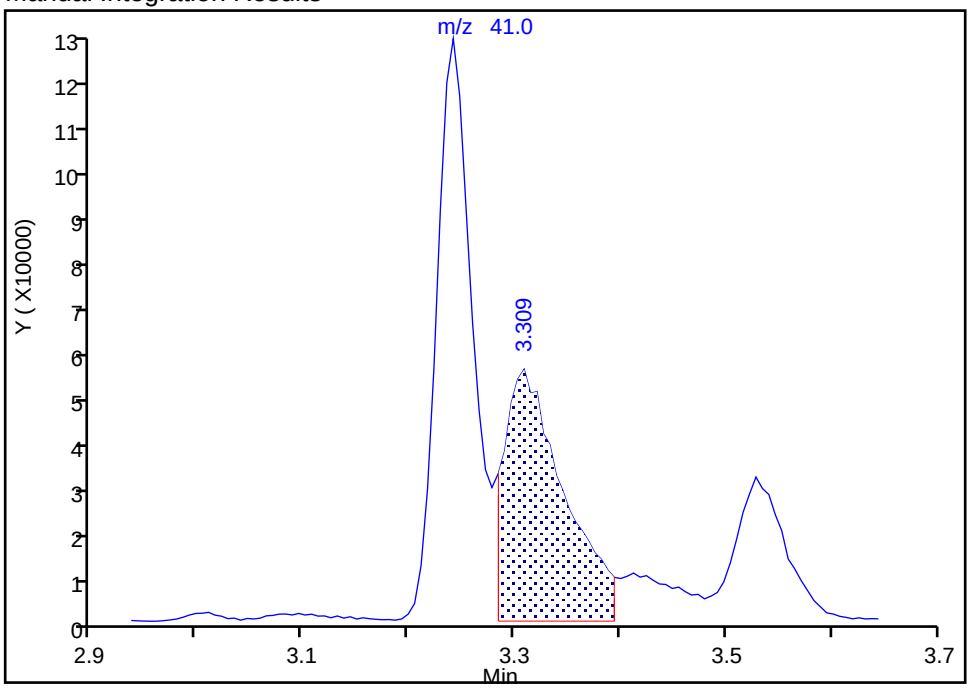
Processing Integration Results

RT: 3.24
Area: 309430
Amount: 440.3681
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 217917
Amount: 422.1102
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:51:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 21-Apr-2018 07:42:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0070764-007
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:31:48 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:29:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.590	1.590	0.000	87	663290	200.0	208.9	
2 Dichlorodifluoromethane	85	1.627	1.626	0.001	99	1390269	200.0	208.8	M
3 Chloromethane	50	1.803	1.803	0.000	99	1178713	200.0	240.7	
4 Vinyl chloride	62	1.907	1.907	0.000	98	1212827	200.0	247.8	
5 Butadiene	54	1.913	1.907	0.006	97	954435	200.0	254.6	
6 Bromomethane	94	2.212	2.212	0.000	99	947501	200.0	232.7	
7 Chloroethane	64	2.273	2.273	0.000	100	585994	200.0	237.4	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	99	1614718	200.0	224.1	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	98	1537625	200.0	240.4	
10 Pentane	72	2.492	2.498	-0.006	97	229927	400.0	465.2	
12 Ethanol	46	2.699	2.687	0.012	68	156699	8000.0	9210.6	
11 Ethyl ether	59	2.693	2.693	0.000	93	481159	200.0	224.5	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	96	572079	200.0	232.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	90	754521	200.0	238.4	
15 Acrolein	56	2.876	2.876	0.000	94	224076	500.0	556.9	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	98	967357	200.0	226.5	
17 1,1-Dichloroethene	96	2.913	2.919	-0.006	97	761927	200.0	236.0	
18 Acetone	43	2.998	2.998	0.000	87	914399	1000.0	1056.9	
19 Iodomethane	142	3.077	3.077	0.000	98	1575995	200.0	228.9	
22 Isopropyl alcohol	45	3.077	3.083	-0.006	1	464092	2000.0	2221.7	a
20 Carbon disulfide	76	3.114	3.120	-0.006	99	2850970	200.0	236.8	
21 3-Chloro-1-propene	76	3.236	3.242	-0.006	96	447657	200.0	234.4	
23 Methyl acetate	43	3.242	3.248	-0.006	99	824852	400.0	450.2	
24 Cyclopentene	67	3.260	3.266	-0.006	93	1654056	200.0	232.4	
29 Acetonitrile	41	3.309	3.309	0.000	96	1096556	2000.0	2429.7	a
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	271415	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.376	-0.006	89	804876	200.0	218.5	
27 2-Methyl-2-propanol	59	3.425	3.419	0.006	96	898055	2000.0	2203.2	
28 Methyl tert-butyl ether	73	3.529	3.535	-0.006	96	2056964	200.0	228.2	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	93	795117	200.0	226.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.638	-0.006	94	2214143	2000.0	2277.4	
32 Hexane	43	3.718	3.717	0.001	93	685827	200.0	252.9	
33 Isopropyl ether	45	3.925	3.931	-0.006	97	2081755	200.0	218.3	
35 Vinyl acetate	86	3.974	3.973	0.001	100	215236	400.0	443.4	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	74	1280328	200.0	229.2	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	90	661720	200.0	233.1	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	89	1993822	200.0	216.8	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	175932	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.492	-0.006	94	415649	200.0	231.6	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	97	888592	200.0	226.7	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	370564	1000.0	1078.7	
41 Ethyl acetate	70	4.504	4.510	-0.006	95	123268	400.0	420.1	
44 Methyl acrylate	55	4.565	4.565	0.000	100	484396	200.0	222.3	
43 Propionitrile	54	4.644	4.644	0.000	98	848054	2000.0	2236.6	
45 Tetrahydrofuran	72	4.730	4.729	0.001	91	175491	400.0	422.3	
46 Chlorobromomethane	128	4.736	4.742	-0.006	83	439271	200.0	223.2	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	2401367	2000.0	2226.2	
48 Chloroform	83	4.784	4.784	0.000	99	1319220	200.0	225.1	
49 Cyclohexane	84	4.931	4.937	-0.006	90	1333622	200.0	228.8	
50 1,1,1-Trichloroethane	97	4.943	4.937	0.006	98	1356087	200.0	239.8	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	181438	50.0	57.6	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	1208842	200.0	244.5	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	97	1025023	200.0	238.2	
56 Isobutyl alcohol	74	5.199	5.199	0.000	94	88200	5000.0	6390.6	
54 Benzene	78	5.290	5.290	0.000	96	2907428	200.0	233.8	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	176762	50.0	60.3	
57 Isopropyl acetate	43	5.327	5.327	0.000	96	1826824	200.0	226.0	
58 Tert-amyl methyl ether	87	5.339	5.345	-0.006	91	633125	200.0	226.2	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	837733	200.0	220.3	
60 n-Heptane	57	5.437	5.437	0.000	91	657035	200.0	233.2	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	393586	50.0	50.0	
62 n-Butanol	56	5.864	5.869	-0.005	88	501069	5000.0	5890.0	
63 Trichloroethene	95	5.943	5.943	0.000	96	788359	200.0	234.0	
65 Methylcyclohexane	83	6.077	6.071	0.006	95	1633663	200.0	231.7	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	479271	200.0	243.5	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	92	677752	200.0	226.6	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	30898	1000.0	1000.0	M
68 Methyl methacrylate	41	6.290	6.296	-0.006	85	939861	400.0	460.8	
69 1,4-Dioxane	88	6.339	6.333	0.006	86	182927	4000.0	4303.8	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	770221	200.0	231.4	
71 Dibromomethane	93	6.370	6.369	0.001	95	450037	200.0	225.0	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	99	965440	200.0	235.1	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	89	332749	200.0	225.5	
74 2-Nitropropane	41	6.851	6.851	0.000	92	237934	400.0	457.3	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	1221469	4000.0	4661.7	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	1067716	200.0	236.5	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	2981483	1000.0	1141.1	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	639250	50.0	59.3	
79 Toluene	91	7.345	7.351	-0.006	93	3085741	200.0	234.2	
80 trans-1,3-Dichloropropene	75	7.692	7.698	-0.006	98	928837	200.0	237.0	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	767325	200.0	241.8	
82 1,1,2-Trichloroethane	83	7.912	7.918	-0.006	96	488174	200.0	225.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	879952	200.0	238.3	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	90	911348	200.0	227.5	
85 2-Hexanone	43	8.174	8.174	0.000	95	1898172	1000.0	1140.7	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	800945	200.0	224.5	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	758979	200.0	240.3	
88 Ethylene Dibromide	107	8.528	8.527	0.001	99	624224	200.0	232.3	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	352250	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	2041430	200.0	232.3	
92 Ethylbenzene	106	9.204	9.204	0.000	98	1138618	200.0	237.6	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	96	851798	200.0	242.7	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	1383770	200.0	236.6	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	437313	200.0	234.5	
95 o-Xylene	106	9.820	9.820	0.000	95	1425714	200.0	233.4	
96 Styrene	104	9.851	9.850	0.001	96	2242792	200.0	235.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	943288	200.0	241.8	
98 Bromoform	173	10.088	10.088	0.000	98	491016	200.0	238.8	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	4005467	200.0	244.6	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	96	200809	50.0	57.5	
101 Bromobenzene	156	10.564	10.564	0.000	92	929815	200.0	232.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	813471	200.0	233.4	
103 N-Propylbenzene	91	10.625	10.625	0.000	100	4400321	200.0	246.2	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	233908	200.0	232.8	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	93	187256	200.0	236.1	
106 2-Chlorotoluene	91	10.741	10.740	0.001	92	2897624	200.0	241.5	
107 4-Ethyltoluene	105	10.741	10.740	0.001	89	3524347	200.0	234.4	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	3346980	200.0	253.1	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	2435355	200.0	239.3	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	913437	200.0	247.6	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	2930675	200.0	262.7	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	3374215	200.0	247.6	
113 sec-Butylbenzene	105	11.308	11.307	0.001	99	4652275	200.0	261.3	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	4049655	200.0	257.8	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	1841981	200.0	236.4	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	203497	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	1809471	200.0	231.1	
118 Benzyl chloride	91	11.667	11.667	0.000	99	1452335	200.0	240.5	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	94	3165421	200.0	226.8	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	1999034	200.0	231.7	a
121 n-Butylbenzene	92	11.801	11.795	0.006	97	2005724	200.0	248.9	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	1800117	200.0	232.7	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	3634463	200.0	236.8	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	94	162531	200.0	226.9	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	1518526	200.0	223.3	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	1538270	200.0	232.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	844813	200.0	261.6	
128 Naphthalene	128	13.332	13.331	0.001	99	3492764	200.0	230.6	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.001	96	1501784	200.0	232.8	
S 130 1,2-Dichloroethene, Total	100				0		400.0	452.8	
S 131 Xylenes, Total	100				0		400.0	470.0	
S 132 Total BTEX	1				0		1000.0	1175.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	5.00	Units: uL	
GASES Li_00256	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

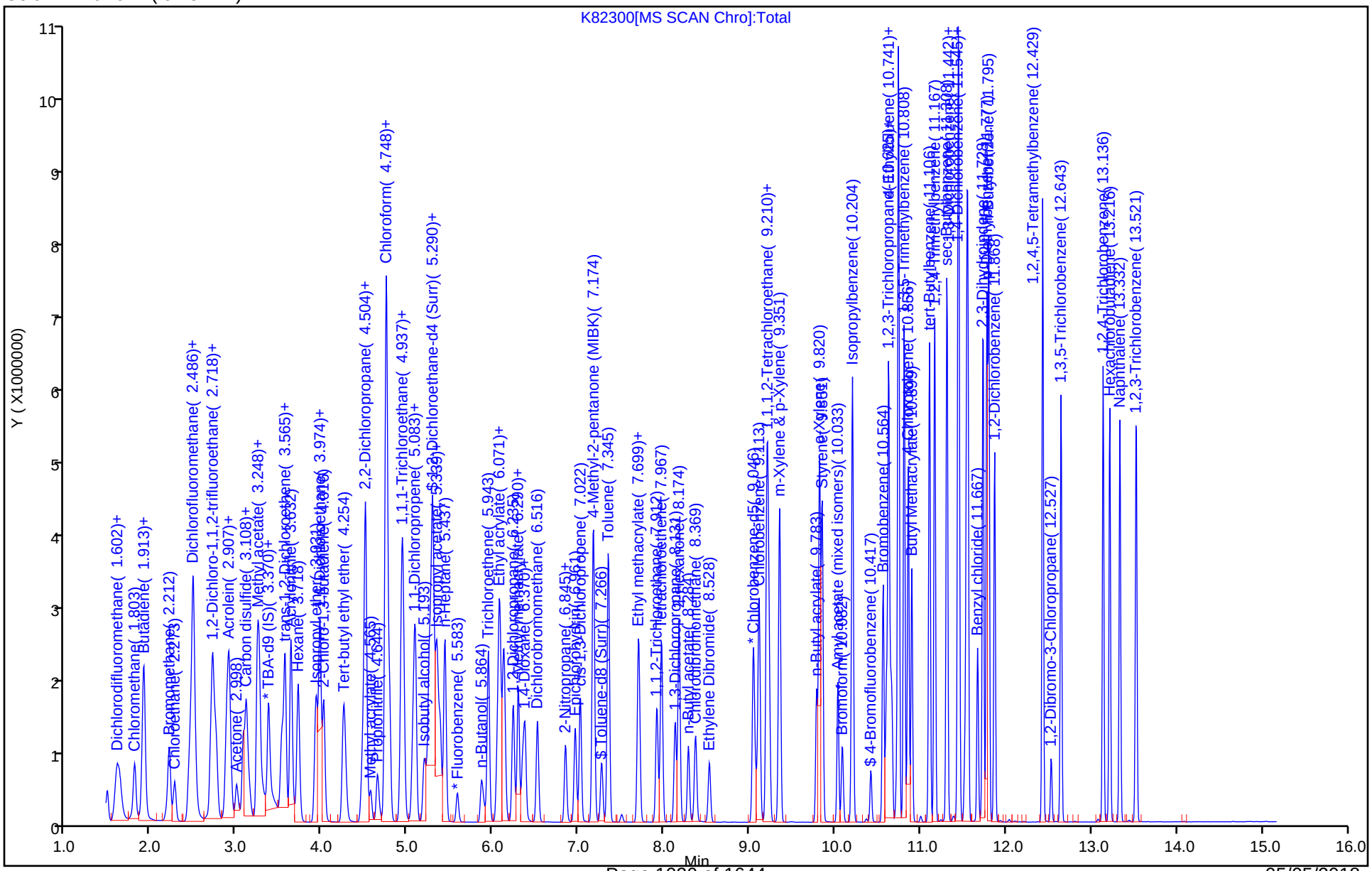
Report Date: 22-Apr-2018 22:31:50 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D

Injection Date:	21-Apr-2018 07:42:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD200			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

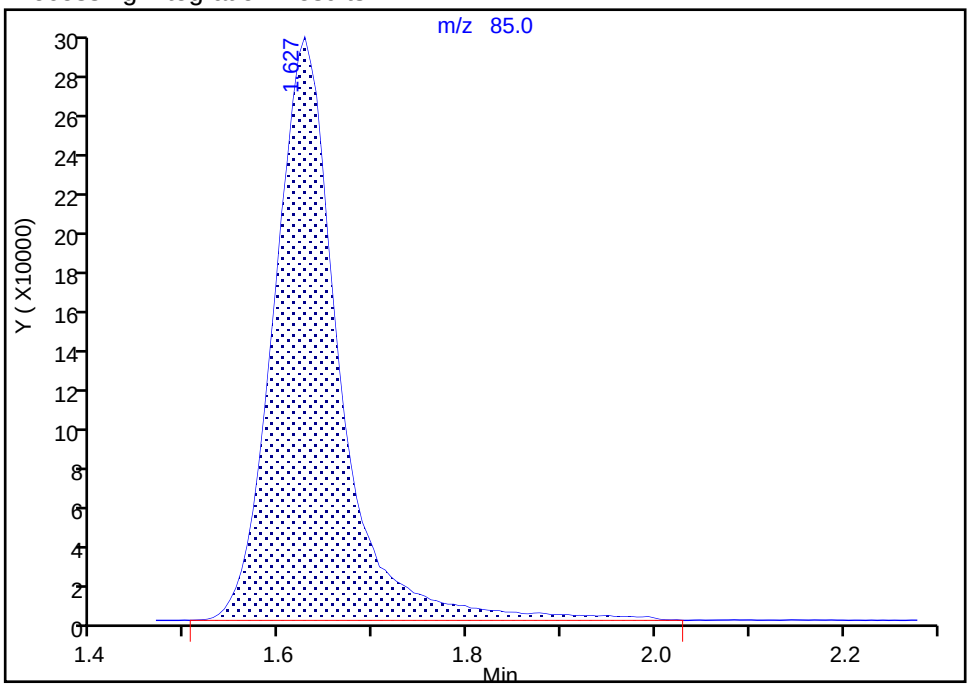
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

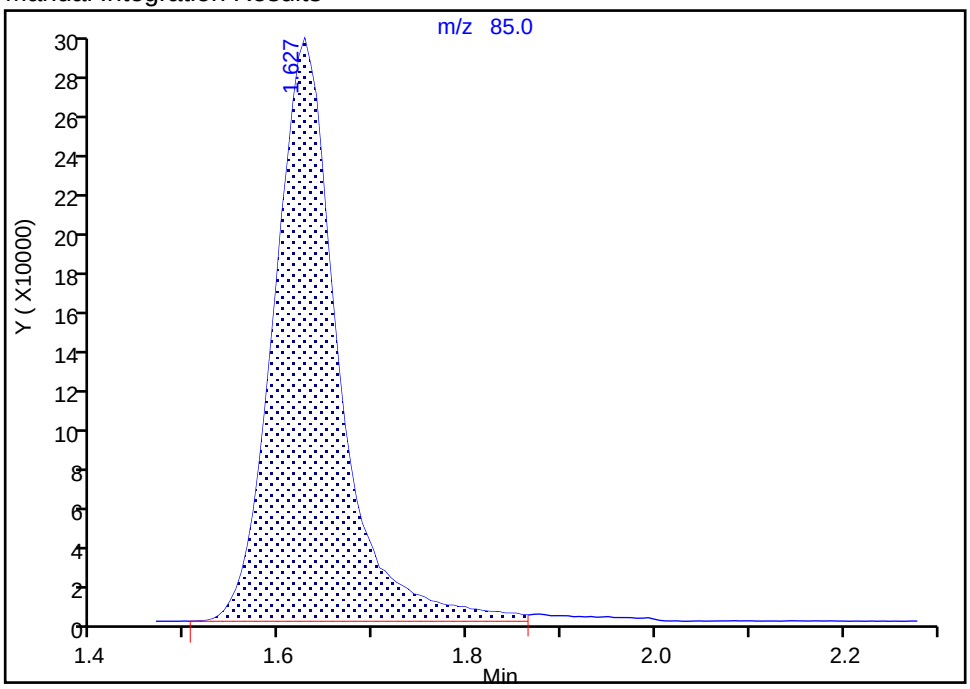
Processing Integration Results

RT: 1.63
Area: 1409043
Amount: 209.0964
Amount Units: ug/l



Manual Integration Results

RT: 1.63
Area: 1390269
Amount: 208.8443
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:09:06
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

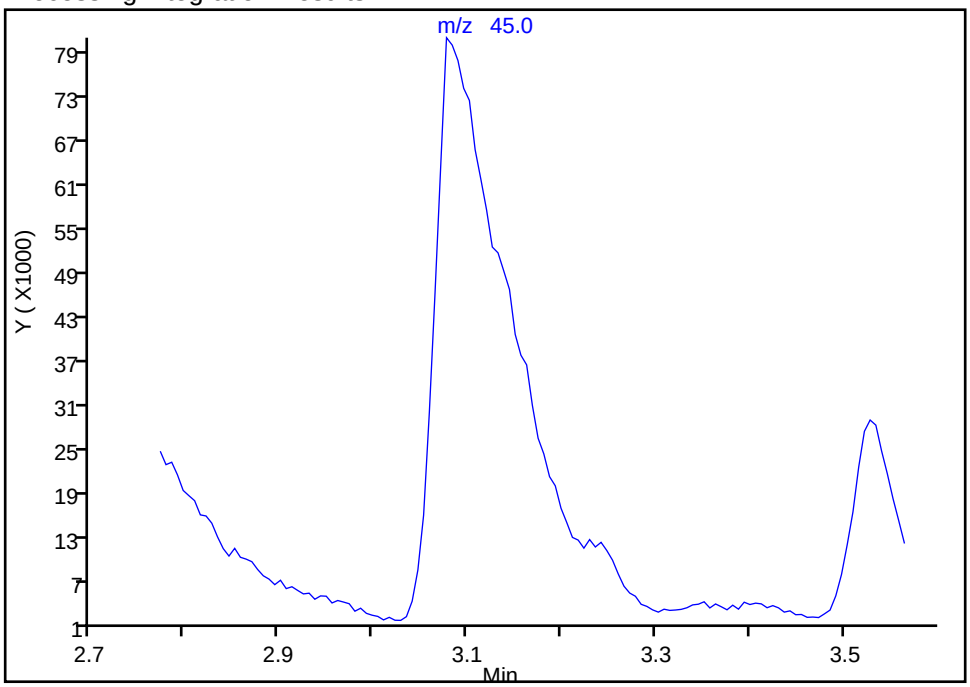
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

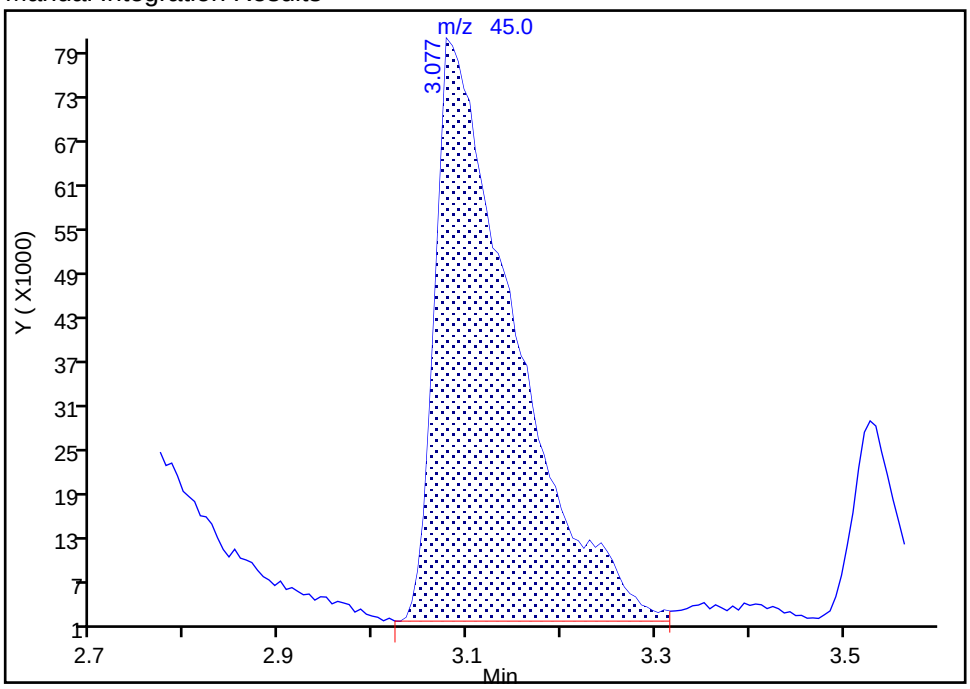
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.08
Area: 464092
Amount: 2221.6978
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:52:42
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

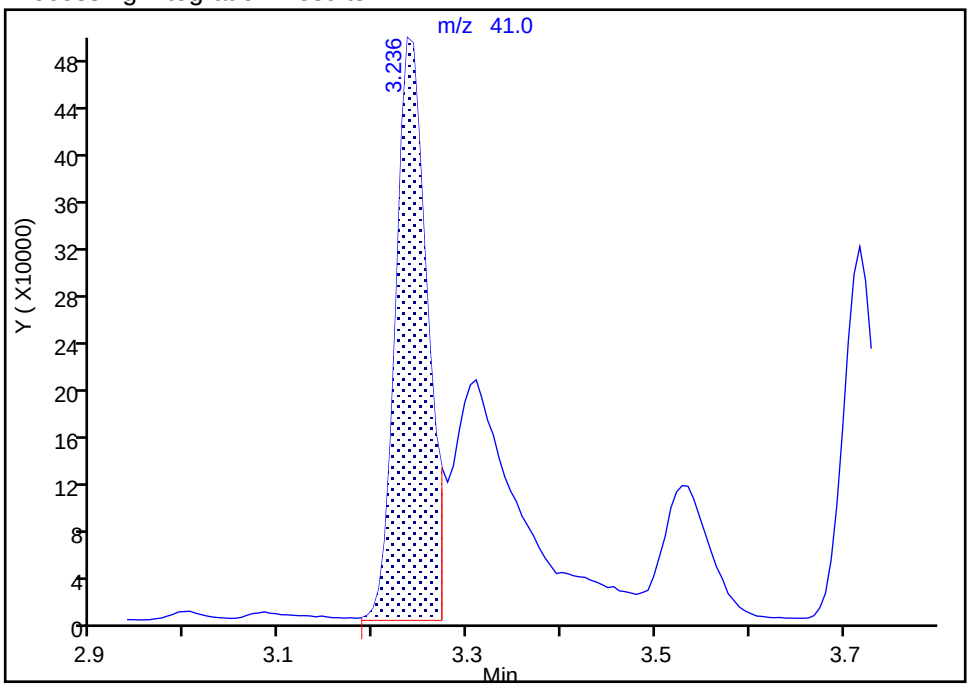
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

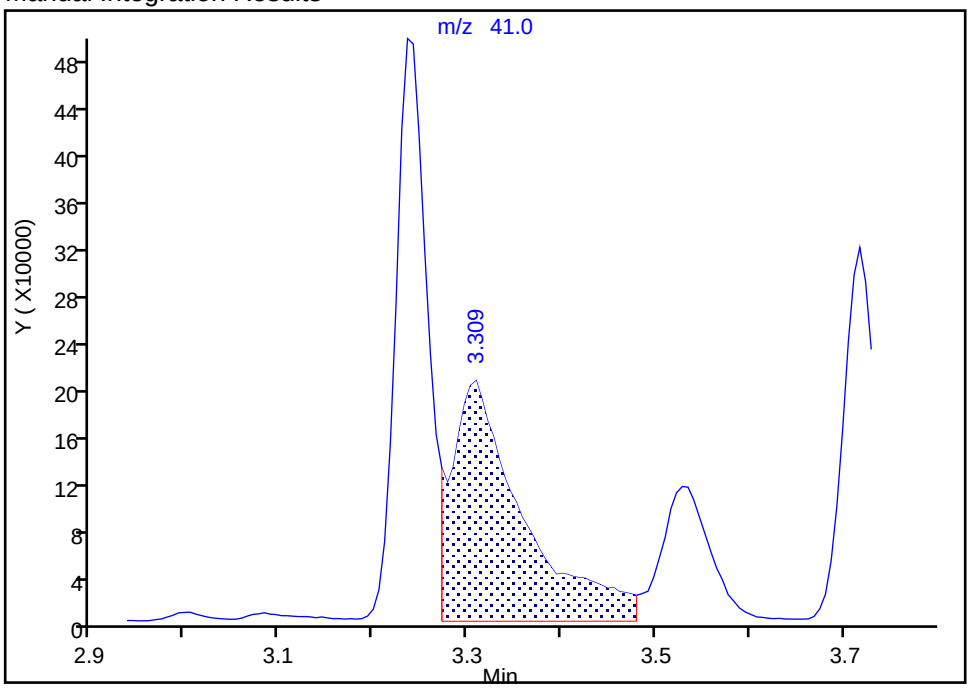
Processing Integration Results

RT: 3.24
Area: 1164811
Amount: 2089.2632
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 1096556
Amount: 2429.6691
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:52:48
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

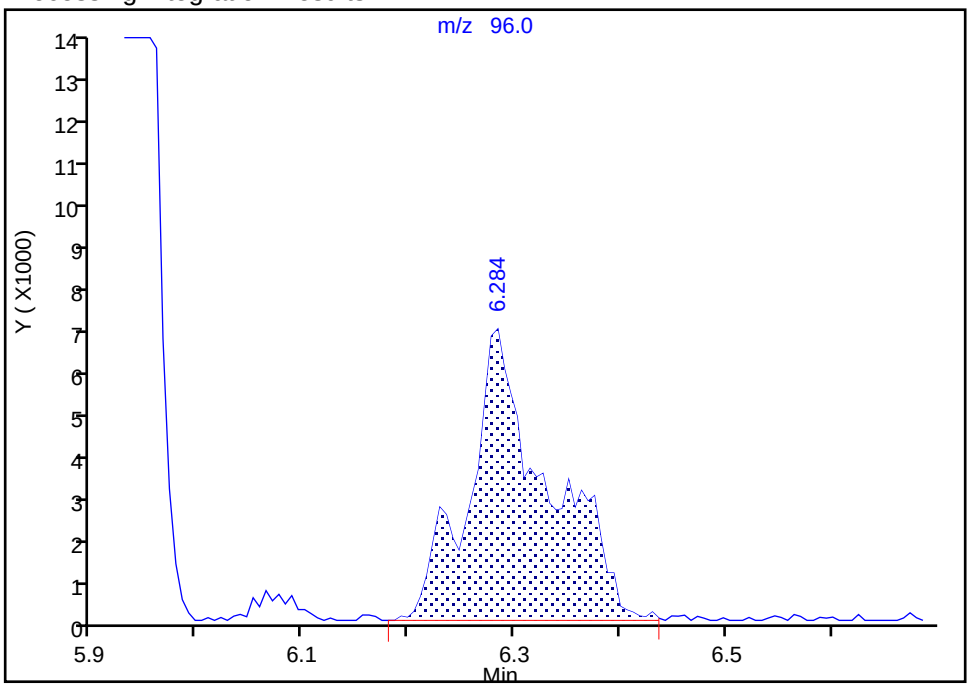
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

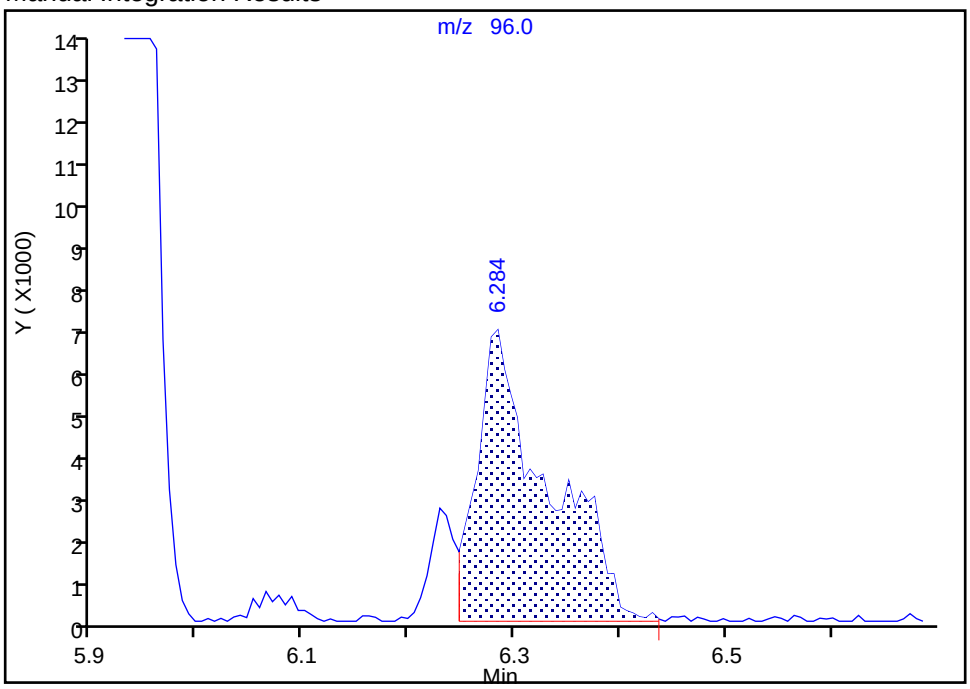
Processing Integration Results

RT: 6.28
Area: 34795
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.28
Area: 30898
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:58:19
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

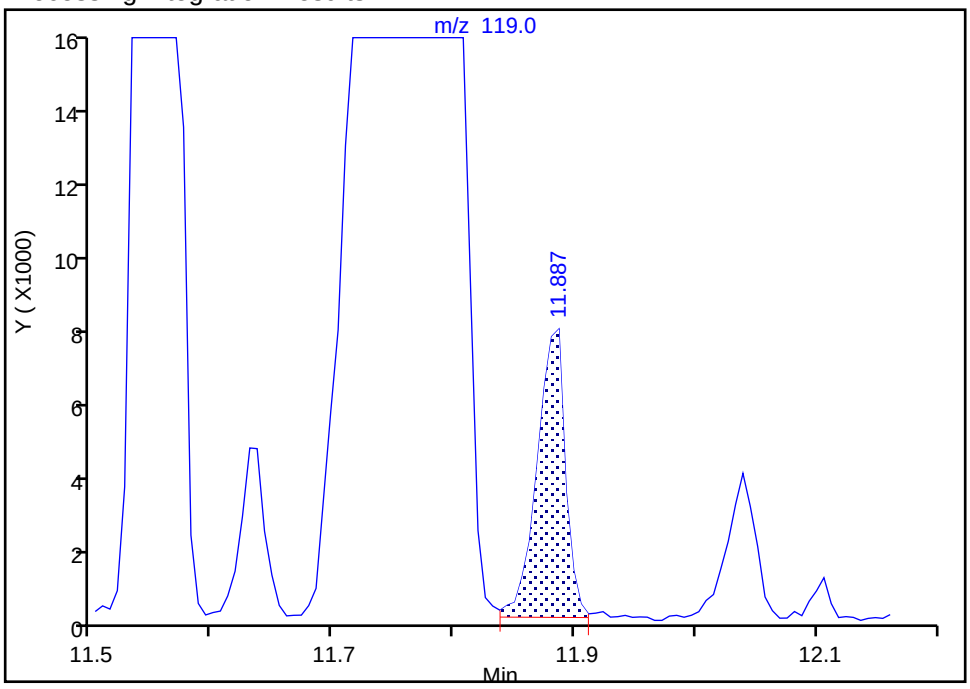
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

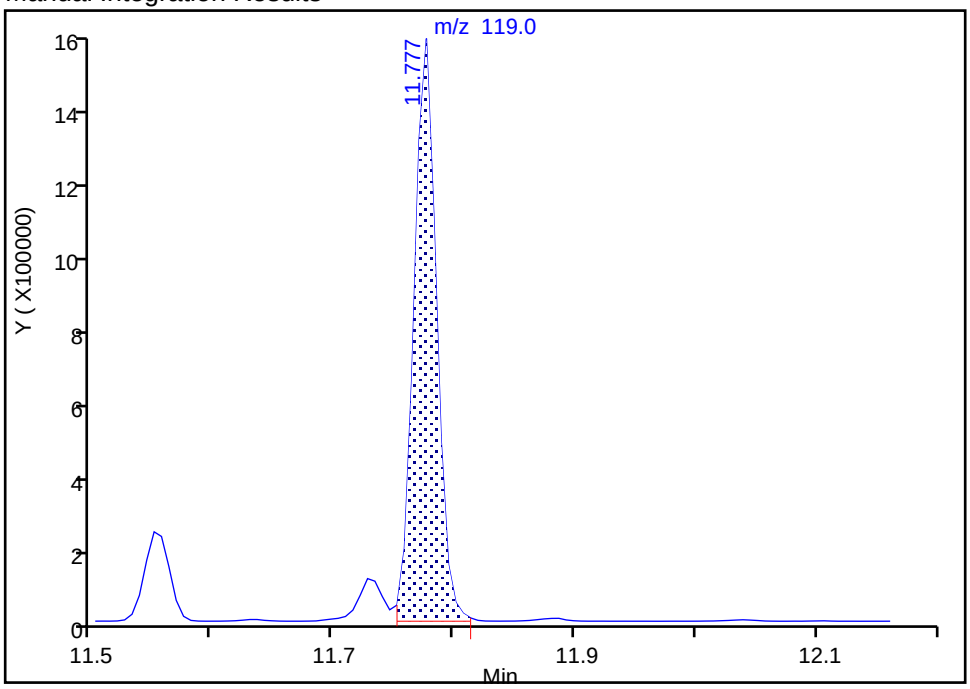
Processing Integration Results

RT: 11.89
Area: 12451
Amount: 2.240510
Amount Units: ug/l



Manual Integration Results

RT: 11.78
Area: 1999034
Amount: 231.7346
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:53:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 21-Apr-2018 08:07:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0070764-008
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:32:00 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:32:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.590	0.012	87	1738921	500.0	498.0	
2 Dichlorodifluoromethane	85	1.639	1.626	0.013	99	3716485	500.0	498.1	M
3 Chloromethane	50	1.821	1.803	0.018	99	3235979	500.0	498.2	
5 Butadiene	54	1.925	1.907	0.018	97	2647680	500.0	532.5	
4 Vinyl chloride	62	1.919	1.907	0.012	98	3252084	500.0	500.9	
6 Bromomethane	94	2.218	2.212	0.006	99	2623628	500.0	485.7	
7 Chloroethane	64	2.285	2.273	0.012	100	1629405	500.0	497.6	
9 Dichlorofluoromethane	67	2.480	2.468	0.012	99	4439412	500.0	464.6	
8 Trichlorofluoromethane	101	2.498	2.486	0.012	98	4207662	500.0	495.9	
10 Pentane	72	2.498	2.498	0.000	96	644307	1000.0	962.1	
12 Ethanol	46	2.699	2.687	0.012	87	431300	20000	18710	
11 Ethyl ether	59	2.699	2.693	0.006	94	1359159	500.0	478.0	
13 2-Methyl-1,3-butadiene	53	2.724	2.718	0.006	96	1595256	500.0	488.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.748	0.012	89	2021149	500.0	481.4	
15 Acrolein	56	2.882	2.876	0.006	95	298249	600.0	547.1	
16 1,1,2-Trichloro-1,2,2-trif	101	2.900	2.888	0.012	98	2631394	500.0	464.0	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	97	2120050	500.0	495.1	
18 Acetone	43	3.004	2.998	0.006	87	2546708	2500.0	2193.3	
19 Iodomethane	142	3.083	3.077	0.006	99	4406580	500.0	482.6	
22 Isopropyl alcohol	45	3.089	3.083	0.006	2	1325334	5000.0	4682.5	Ma
20 Carbon disulfide	76	3.120	3.120	0.000	100	7828280	500.0	490.2	
21 3-Chloro-1-propene	76	3.248	3.242	0.006	95	1298603	500.0	512.6	
23 Methyl acetate	43	3.248	3.248	0.000	99	2350296	1000.0	946.7	
24 Cyclopentene	67	3.272	3.266	0.006	94	4601331	500.0	487.3	
29 Acetonitrile	41	3.309	3.309	0.000	95	3007230	5000.0	4917.7	a
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	367755	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	90	2267418	500.0	464.2	
27 2-Methyl-2-propanol	59	3.431	3.419	0.012	98	2607412	5000.0	4721.1	
28 Methyl tert-butyl ether	73	3.534	3.535	-0.001	96	5572595	500.0	466.1	
30 trans-1,2-Dichloroethene	96	3.571	3.565	0.006	93	2158507	500.0	462.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	94	6155659	5000.0	4773.3	
32 Hexane	43	3.723	3.717	0.006	93	1753188	500.0	487.4	
33 Isopropyl ether	45	3.937	3.931	0.006	97	5888682	500.0	465.6	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	74	3512423	500.0	474.0	
35 Vinyl acetate	86	3.980	3.973	0.007	100	611218	1000.0	929.3	
36 2-Chloro-1,3-butadiene	88	4.022	4.016	0.006	90	1845762	500.0	490.2	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	90	5734878	500.0	470.1	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	236106	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.492	0.000	94	1130284	500.0	474.8	
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	98	2485563	500.0	478.0	
41 Ethyl acetate	70	4.510	4.510	0.000	97	366131	1000.0	929.9	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	96	1058728	2500.0	2296.5	
44 Methyl acrylate	55	4.571	4.565	0.006	100	1415871	500.0	490.0	
43 Propionitrile	54	4.650	4.644	0.006	98	2424610	5000.0	4719.4	
45 Tetrahydrofuran	72	4.735	4.729	0.006	96	508330	1000.0	911.4	
46 Chlorobromomethane	128	4.742	4.742	0.000	82	1273941	500.0	488.1	
47 Methacrylonitrile	67	4.760	4.754	0.006	92	7072143	5000.0	4942.8	
48 Chloroform	83	4.790	4.784	0.006	99	3711522	500.0	477.4	
50 1,1,1-Trichloroethane	97	4.949	4.937	0.012	97	3688095	500.0	491.6	
49 Cyclohexane	84	4.937	4.937	0.000	90	3599086	500.0	465.1	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	97	204895	50.0	49.0	
52 Carbon tetrachloride	117	5.071	5.065	0.006	98	3358724	500.0	512.1	
53 1,1-Dichloropropene	75	5.095	5.089	0.006	97	2810143	500.0	492.4	
56 Isobutyl alcohol	74	5.199	5.199	0.000	93	257835	12500	13788	
54 Benzene	78	5.296	5.290	0.006	96	8104906	500.0	480.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	206544	50.0	53.1	M
57 Isopropyl acetate	43	5.333	5.327	0.006	96	5328646	500.0	497.0	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	92	1869432	500.0	503.5	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	97	2417080	500.0	479.3	
60 n-Heptane	57	5.437	5.437	0.000	91	1708319	500.0	456.7	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	522059	50.0	50.0	
62 n-Butanol	56	5.869	5.869	0.000	88	1578822	12500	13697	
63 Trichloroethene	95	5.949	5.943	0.006	97	2202078	500.0	492.8	
64 Ethyl acrylate	56	6.077	6.071	0.006	78	1334268	500.0	511.1	a
65 Methylcyclohexane	83	6.077	6.071	0.006	94	4358031	500.0	465.6	
66 1,2-Dichloropropane	63	6.241	6.235	0.006	92	1918282	500.0	483.5	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	45687	1000.0	1000.0	M
68 Methyl methacrylate	41	6.296	6.296	0.000	86	2759376	1000.0	1019.9	
69 1,4-Dioxane	88	6.345	6.333	0.012	27	508319	10000	8088.2	
70 n-Propyl acetate	43	6.351	6.345	0.006	99	2267744	500.0	513.7	
71 Dibromomethane	93	6.375	6.369	0.006	96	1319972	500.0	497.5	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	2831025	500.0	519.7	
73 2-Chloroethyl vinyl ether	63	6.851	6.845	0.006	95	983629	500.0	502.7	
74 2-Nitropropane	41	6.851	6.851	0.000	90	768007	1000.0	1112.9	
75 Epichlorohydrin	57	6.967	6.961	0.006	99	3467474	10000	9860.7	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	91	3088646	500.0	504.4	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	8365424	2500.0	2385.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	706025	50.0	48.3	
79 Toluene	91	7.351	7.351	0.000	93	8567637	500.0	479.5	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	2733408	500.0	514.2	
81 Ethyl methacrylate	69	7.711	7.711	-0.001	88	2216316	500.0	515.1	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	1414170	500.0	481.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	2420988	500.0	483.3	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	89	2639253	500.0	485.7	
85 2-Hexanone	43	8.174	8.174	0.000	95	5363216	2500.0	2401.5	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	2360911	500.0	487.9	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	2276080	500.0	531.4	
88 Ethylene Dibromide	107	8.534	8.527	0.007	99	1818661	500.0	499.1	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	82	477732	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	5811100	500.0	487.5	
92 Ethylbenzene	106	9.204	9.204	0.000	98	3209924	500.0	493.9	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.222	0.006	97	2508950	500.0	527.2	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	3888694	500.0	490.2	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	1329207	500.0	525.6	
95 o-Xylene	106	9.820	9.820	0.000	95	4080656	500.0	492.7	
96 Styrene	104	9.850	9.850	0.000	96	6422101	500.0	496.8	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	2839458	500.0	514.1	
98 Bromoform	173	10.088	10.088	0.000	97	1517237	500.0	544.1	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	11114089	500.0	500.4	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	97	230101	50.0	48.6	
101 Bromobenzene	156	10.564	10.564	0.000	91	2723772	500.0	481.9	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	2396886	500.0	485.9	
103 N-Propylbenzene	91	10.631	10.625	0.006	100	12214934	500.0	482.9	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	98	677451	500.0	476.4	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	94	556327	500.0	495.5	
107 4-Ethyltoluene	105	10.747	10.740	0.006	89	10521378	500.0	494.3	
106 2-Chlorotoluene	91	10.747	10.740	0.006	95	8482907	500.0	499.5	
108 1,3,5-Trimethylbenzene	105	10.807	10.808	-0.001	94	9650015	500.0	515.5	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	6938442	500.0	481.8	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	2879398	500.0	551.3	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	8490425	500.0	537.7	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	9691103	500.0	502.5	a
113 sec-Butylbenzene	105	11.307	11.307	0.000	98	12715712	500.0	504.5	e
114 4-Isopropyltoluene	119	11.441	11.442	-0.001	97	11585541	500.0	521.1	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	5448058	500.0	494.0	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	288037	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	5385868	500.0	485.9	
118 Benzyl chloride	91	11.667	11.667	0.000	99	4653939	500.0	544.4	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	94	9706621	500.0	491.4	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	6039454	500.0	494.6	a
121 n-Butylbenzene	92	11.801	11.795	0.006	98	5647585	500.0	495.2	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	5338635	500.0	487.6	
123 1,2,4,5-Tetramethylbenzene	119	12.435	12.429	0.006	97	11213434	500.0	516.1	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	95	498291	500.0	491.5	
125 1,3,5-Trichlorobenzene	180	12.649	12.643	0.006	98	4666735	500.0	484.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	4492334	500.0	479.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	2466219	500.0	539.6	
128 Naphthalene	128	13.331	13.331	0.000	99	10267513	500.0	478.9	
129 1,2,3-Trichlorobenzene	180	13.526	13.527	0.000	96	4339553	500.0	475.3	
S 130 1,2-Dichloroethene, Total	100				0		1000.0	940.8	
S 131 Xylenes, Total	100				0		1000.0	982.9	
S 132 Total BTEX	1				0		2500.0	2436.9	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	6.00	Units: uL	
GASES Li_00256	Amount Added:	50.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	50.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

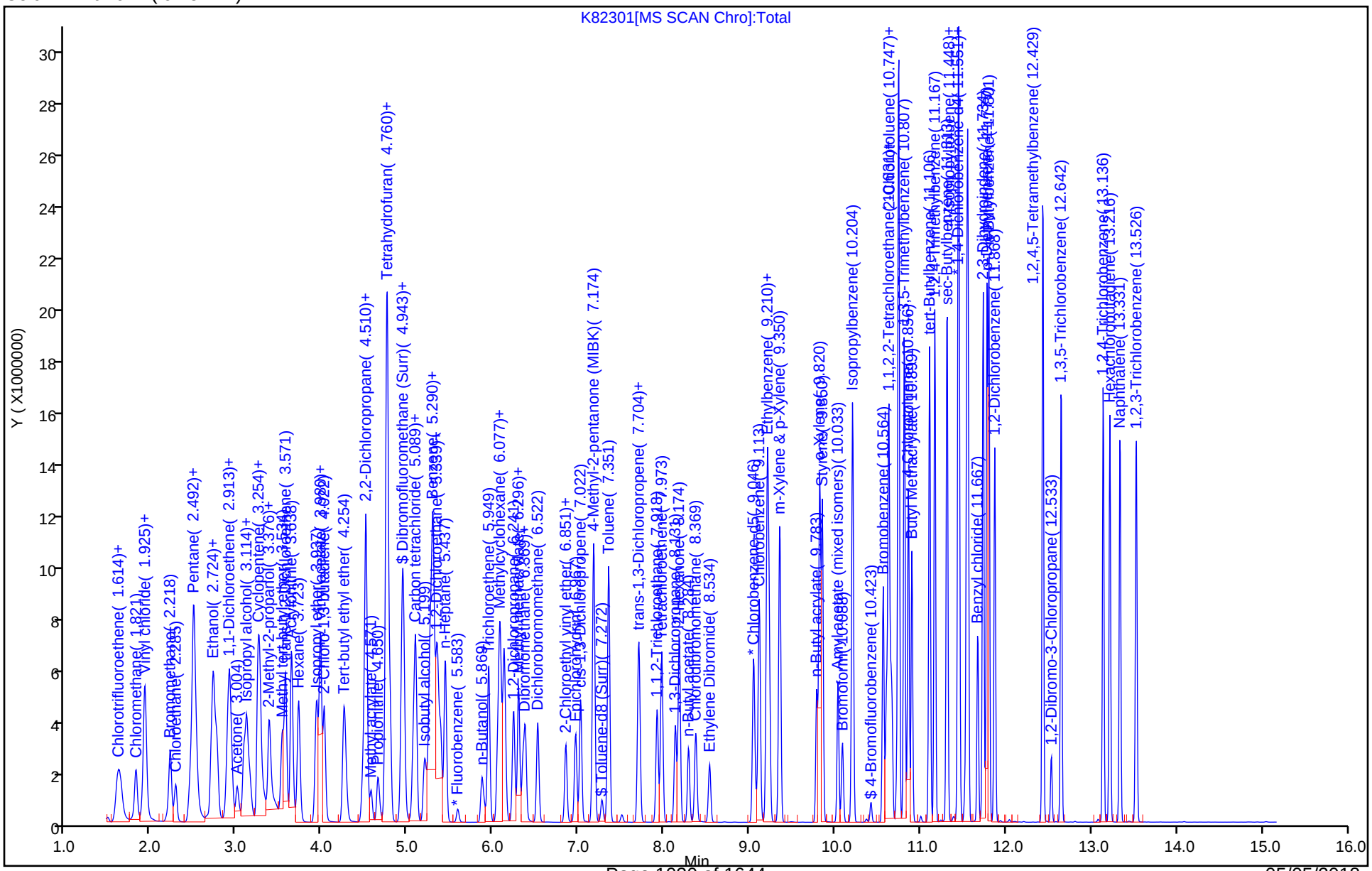
Report Date: 22-Apr-2018 22:32:01 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Injection Date:	21-Apr-2018 08:07:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD500			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

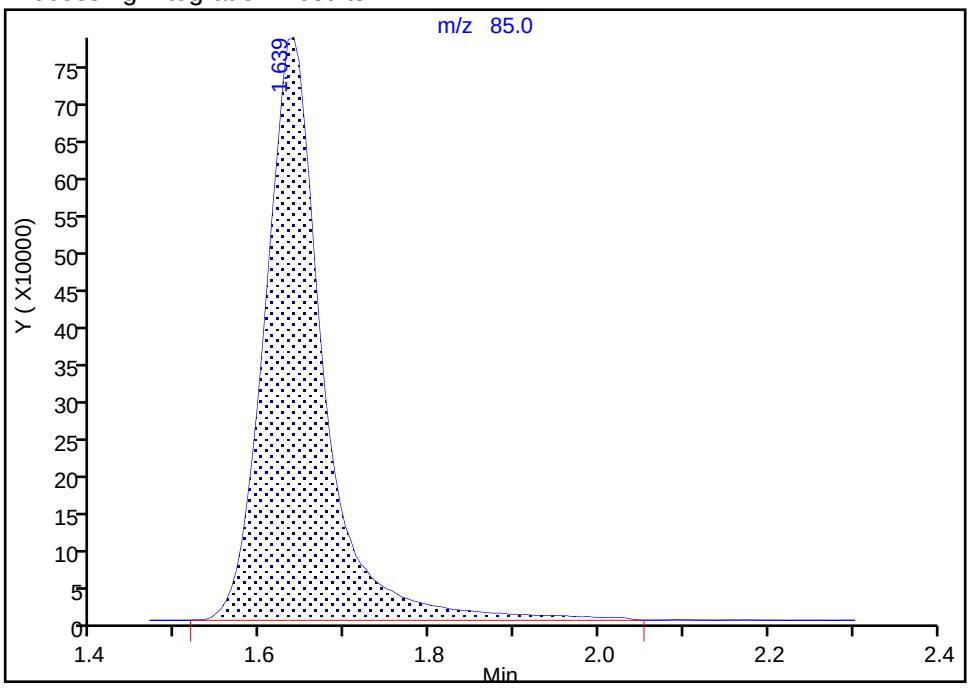
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

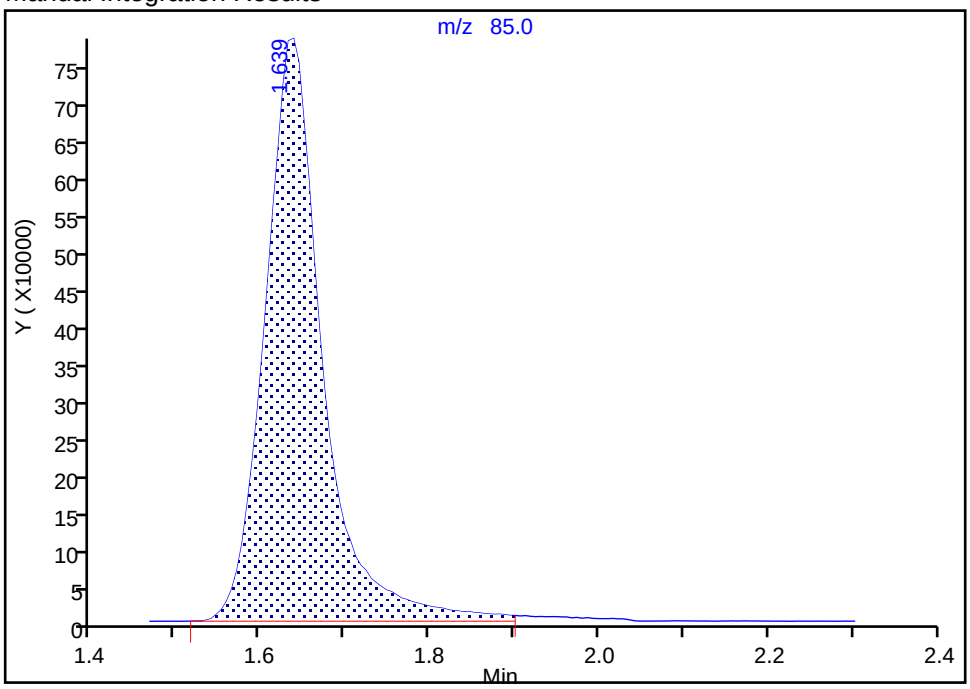
Processing Integration Results

RT: 1.64
Area: 3756420
Amount: 498.2303
Amount Units: ug/l



Manual Integration Results

RT: 1.64
Area: 3716485
Amount: 498.1382
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:09:52
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

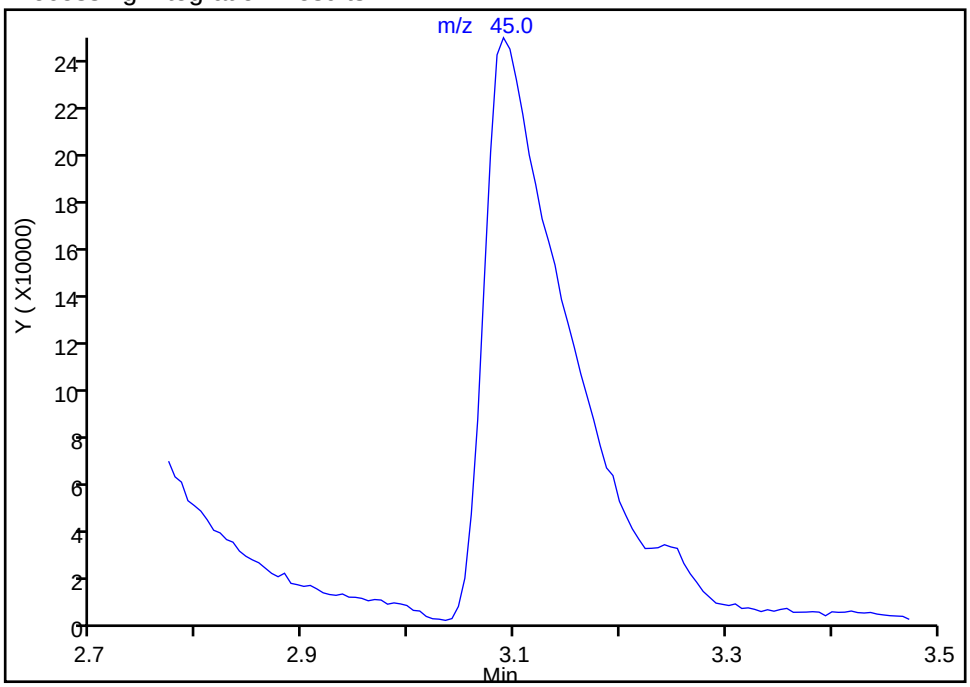
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

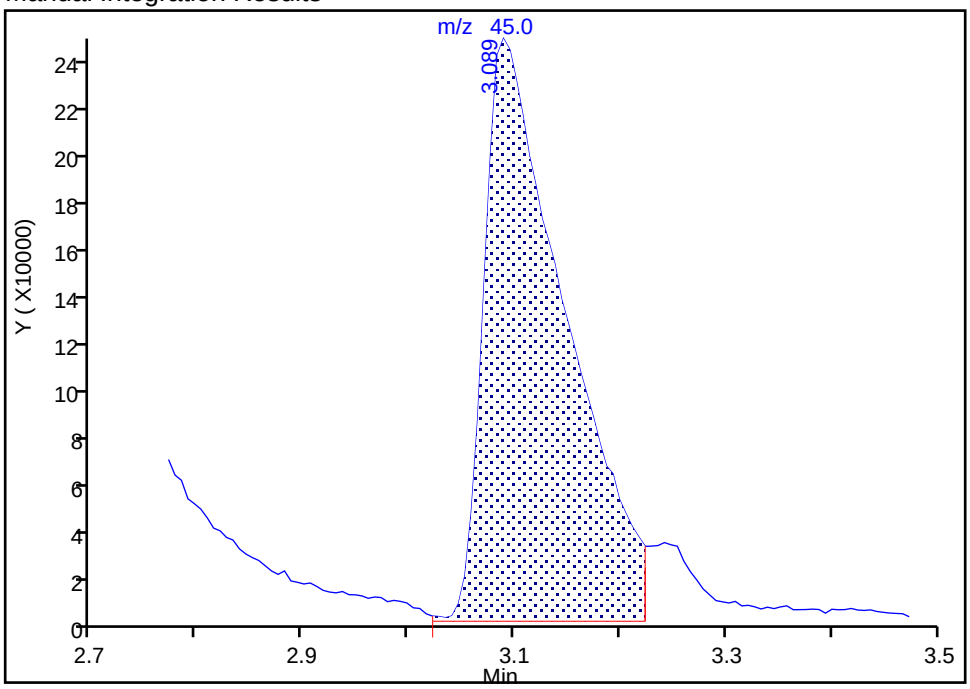
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.09
Area: 1325334
Amount: 4682.5400
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:55:54
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

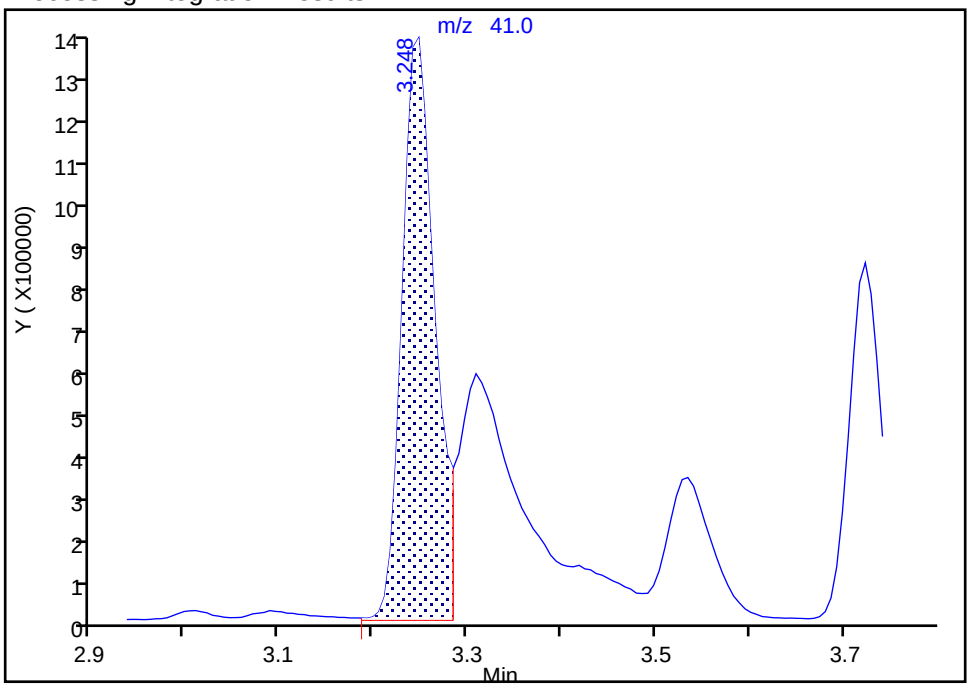
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

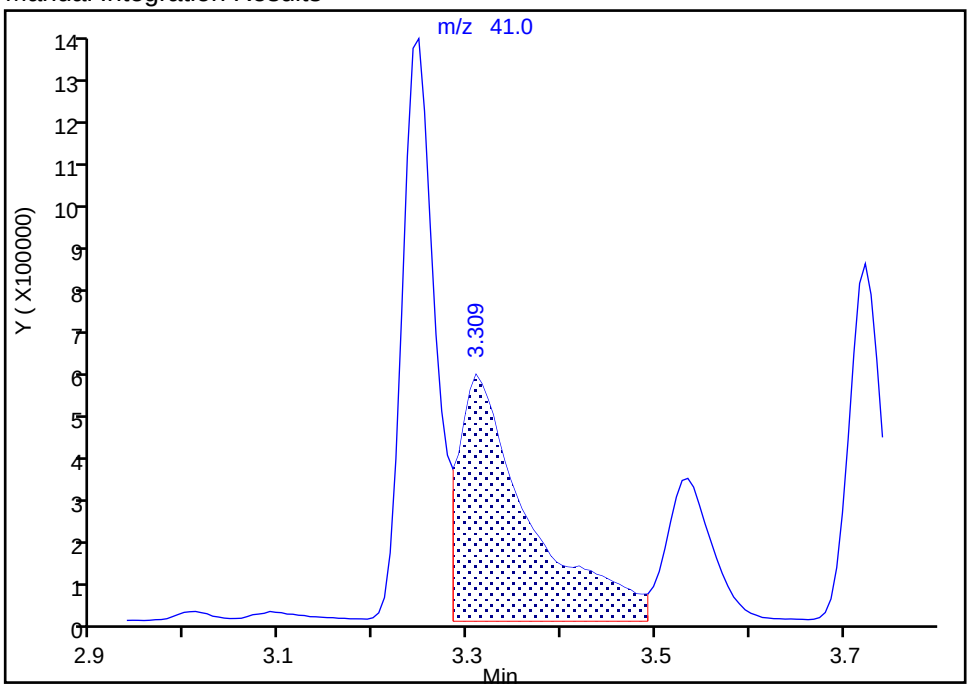
Processing Integration Results

RT: 3.25
Area: 3326990
Amount: 4988.6303
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 3007230
Amount: 4917.6568
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:56:02
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

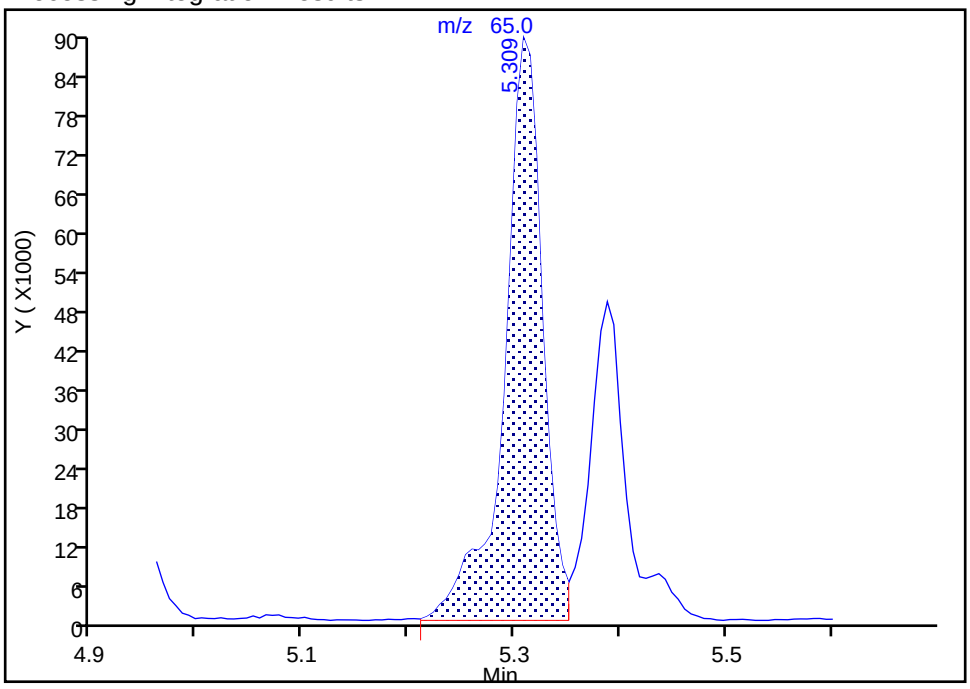
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

$ 55 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

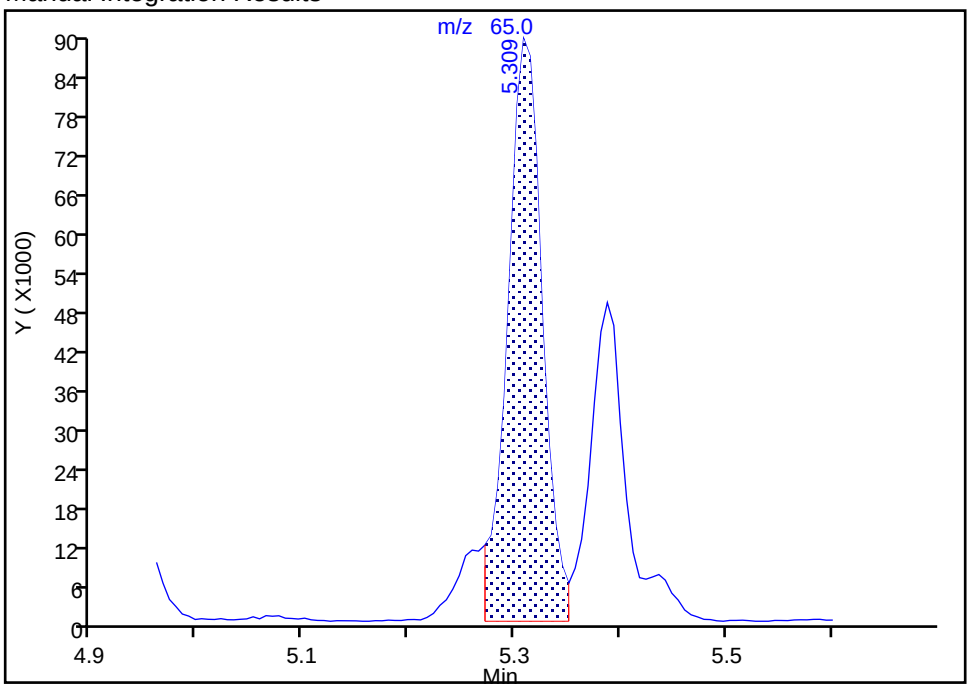
Processing Integration Results

RT: 5.31
Area: 225353
Amount: 57.034191
Amount Units: ug/l



Manual Integration Results

RT: 5.31
Area: 206544
Amount: 53.116699
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:57:10
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

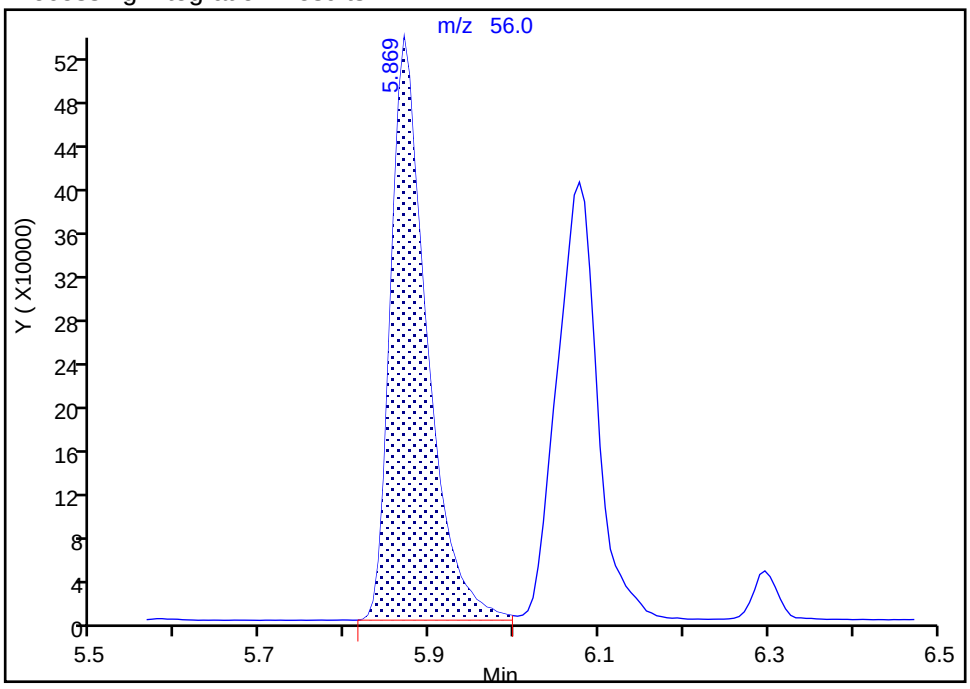
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

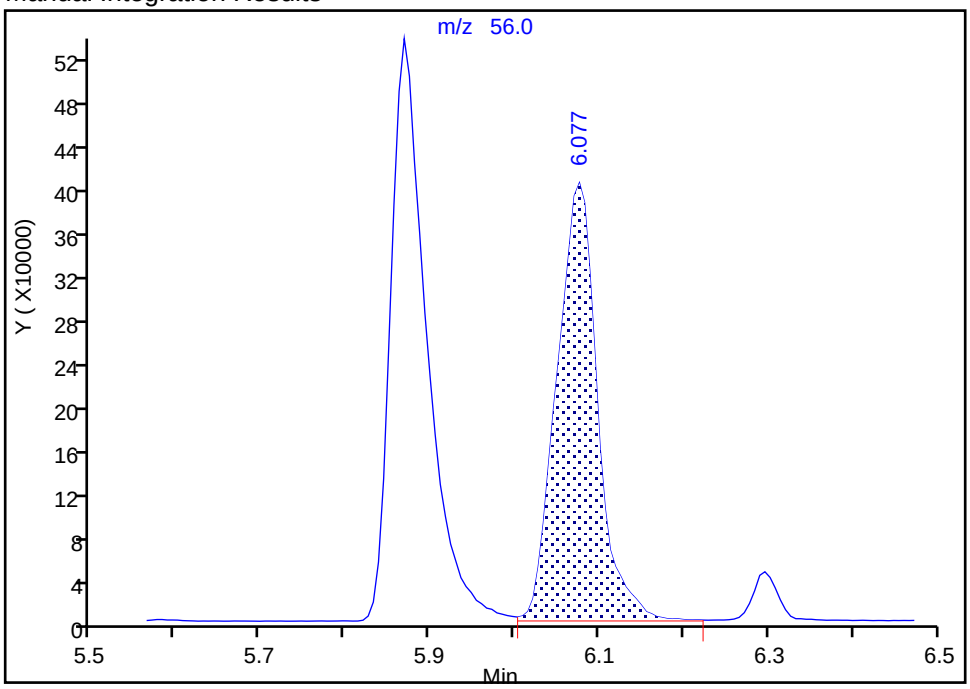
Processing Integration Results

RT: 5.87
Area: 1576918
Amount: 585.8716
Amount Units: ug/l



Manual Integration Results

RT: 6.08
Area: 1334268
Amount: 511.0781
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:56:21
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

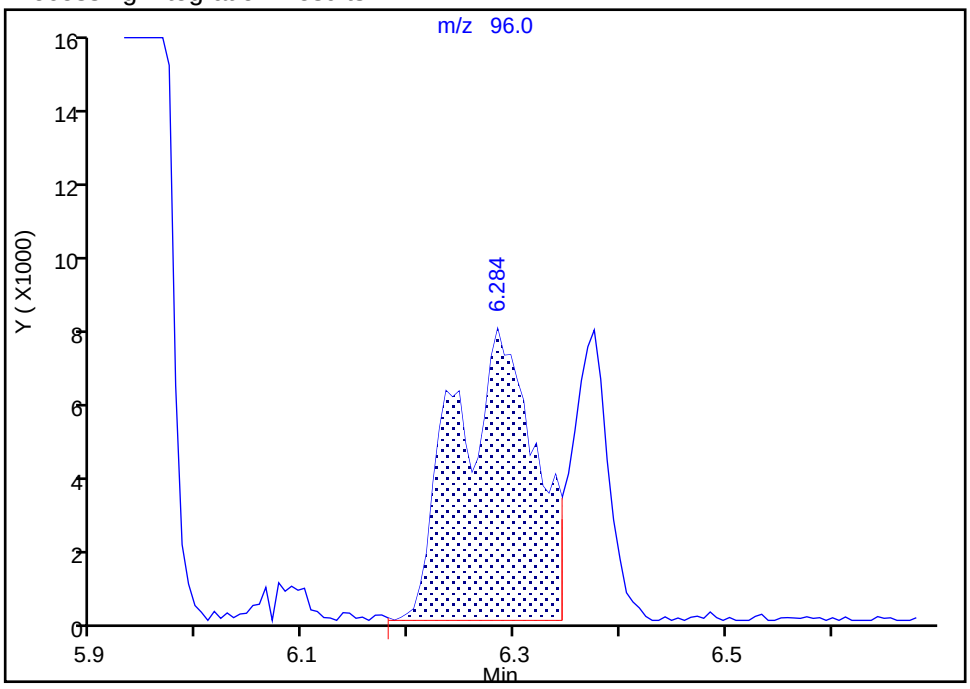
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

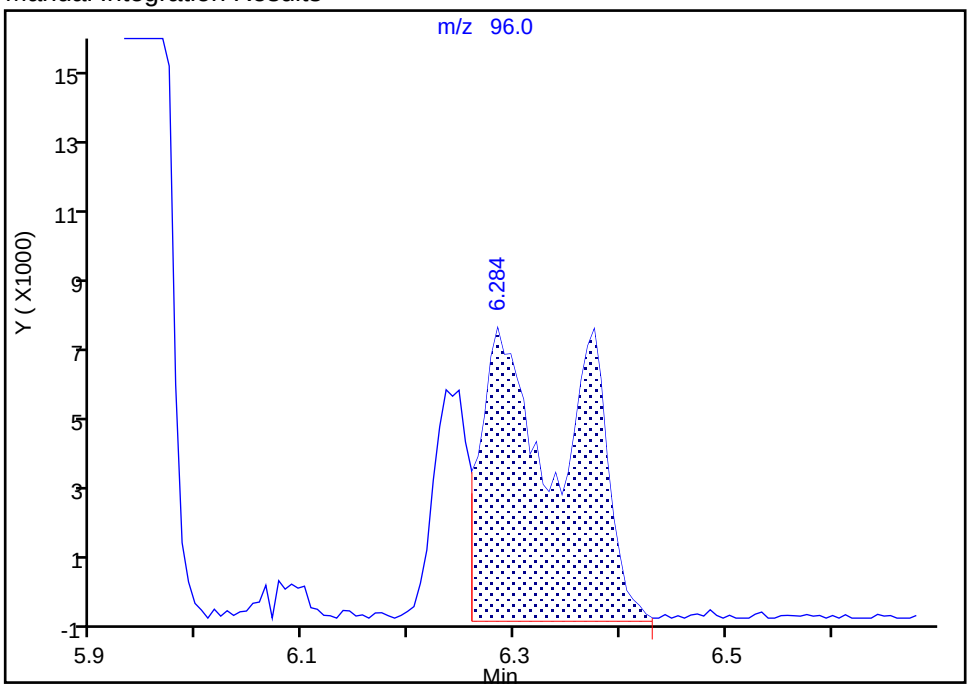
Processing Integration Results

RT: 6.28
Area: 40523
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.28
Area: 45687
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:57:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

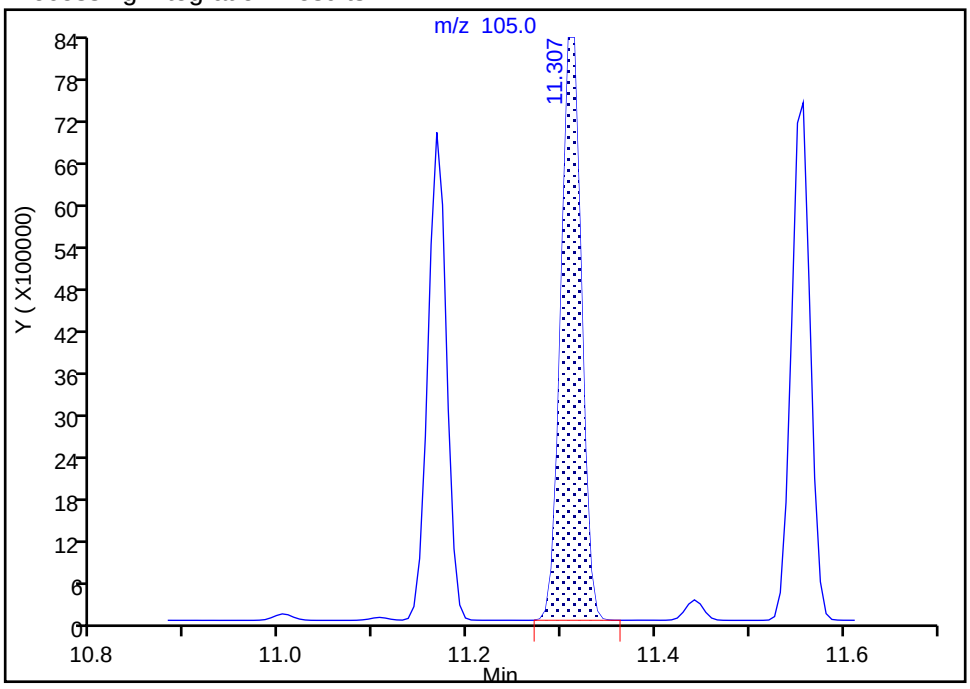
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

112 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

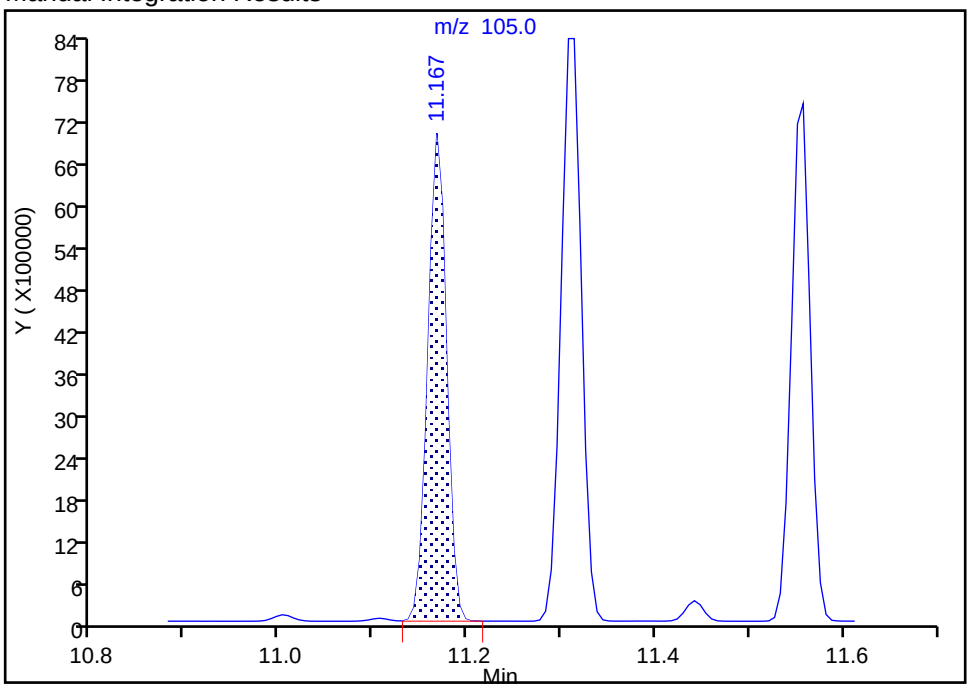
Processing Integration Results

RT: 11.31
Area: 12764329
Amount: 628.4537
Amount Units: ug/l



Manual Integration Results

RT: 11.17
Area: 9691103
Amount: 502.4868
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:56:43
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

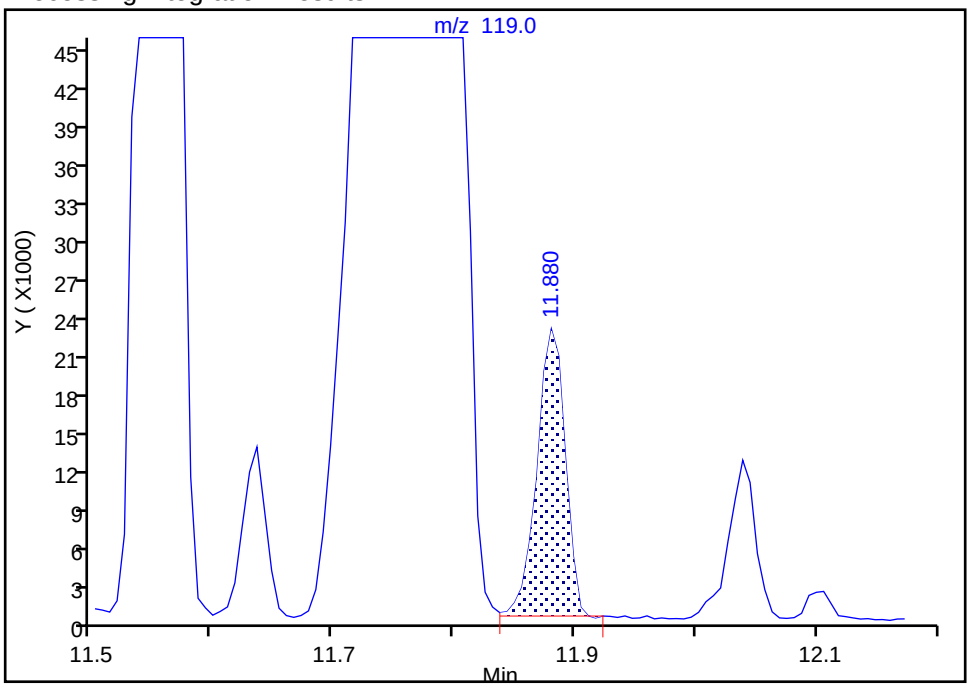
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

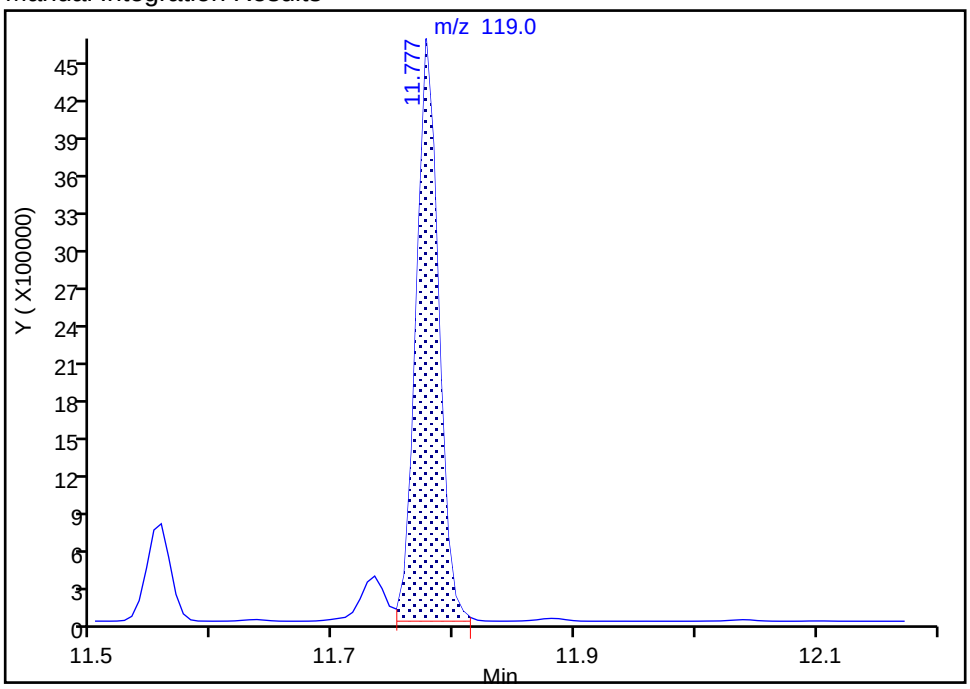
Processing Integration Results

RT: 11.88
Area: 36486
Amount: 3.573863
Amount Units: ug/l



Manual Integration Results

RT: 11.78
Area: 6039454
Amount: 494.6274
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:56:55
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-504873/3 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 03/20/2018 23:13

ANALYTE	RT	RESOLUTION (%)
Total BTEX		100.0
Dichlorodifluoromethane	1.63	100.0
Chloromethane	1.79	100.0
Vinyl chloride	1.90	100.0
Bromomethane	2.20	100.0
Chloroethane	2.27	100.0
Trichlorofluoromethane	2.47	100.0
Ethanol	2.69	100.0
Acrolein	2.88	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.88	100.0
1,1-Dichloroethene	2.91	100.0
Acetone	3.00	100.0
Carbon disulfide	3.11	100.0
Methyl acetate	3.25	100.0
Acetonitrile	3.31	100.0
Methylene Chloride	3.37	100.0
2-Methyl-2-propanol	3.44	100.0
Methyl tert-butyl ether	3.53	100.0
trans-1,2-Dichloroethene	3.57	100.0
Acrylonitrile	3.63	100.0
1,1-Dichloroethane	3.97	100.0
cis-1,2-Dichloroethene	4.50	100.0
2-Butanone (MEK)	4.50	100.0
Chlorobromomethane	4.74	100.0
Methacrylonitrile	4.75	100.0
Chloroform	4.78	100.0
Cyclohexane	4.93	100.0
Dibromofluoromethane (Surr)	4.94	100.0
1,1,1-Trichloroethane	4.94	100.0
Carbon tetrachloride	5.07	100.0
Isobutyl alcohol	5.19	100.0
Benzene	5.29	100.0
1,2-Dichloroethane-d4 (Surr)	5.30	100.0
1,2-Dichloroethane	5.38	100.0
n-Butanol	5.86	100.0
Trichloroethene	5.94	100.0
Methylcyclohexane	6.07	100.0
1,2-Dichloropropane	6.24	100.0
Methyl methacrylate	6.29	100.0
1,4-Dioxane	6.34	100.0
Dichlorobromomethane	6.52	100.0
Epichlorohydrin	6.96	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0
Toluene-d8 (Surr)	7.27	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-504873/3 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 03/20/2018 23:13

ANALYTE	RT	RESOLUTION (%)
Toluene	7.35	100.0
trans-1,3-Dichloropropene	7.69	100.0
1,1,2-Trichloroethane	7.91	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.17	100.0
Chlorodibromomethane	8.36	100.0
Ethylene Dibromide	8.52	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.34	100.0
o-Xylene	9.81	100.0
Styrene	9.84	100.0
Bromoform	10.08	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-505749/2 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 03/24/2018 05:54

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.63	100.0
Chloromethane	1.79	100.0
Vinyl chloride	1.90	100.0
Bromomethane	2.19	100.0
Chloroethane	2.27	100.0
Trichlorofluoromethane	2.47	100.0
Ethanol	2.68	100.0
Acrolein	2.87	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.88	100.0
1,1-Dichloroethene	2.91	100.0
Acetone	3.00	100.0
Carbon disulfide	3.11	100.0
Methyl acetate	3.24	100.0
Acetonitrile	3.30	100.0
Methylene Chloride	3.37	100.0
2-Methyl-2-propanol	3.43	100.0
Methyl tert-butyl ether	3.52	100.0
trans-1,2-Dichloroethene	3.57	100.0
Acrylonitrile	3.63	100.0
1,1-Dichloroethane	3.97	100.0
cis-1,2-Dichloroethene	4.50	100.0
2-Butanone (MEK)	4.50	100.0
Propionitrile	4.64	100.0
Chlorobromomethane	4.74	100.0
Methacrylonitrile	4.75	100.0
Chloroform	4.78	100.0
Cyclohexane	4.93	100.0
1,1,1-Trichloroethane	4.94	100.0
Dibromofluoromethane (Surr)	4.94	100.0
Carbon tetrachloride	5.06	100.0
Isobutyl alcohol	5.19	100.0
Benzene	5.29	100.0
1,2-Dichloroethane-d4 (Surr)	5.30	100.0
1,2-Dichloroethane	5.38	100.0
n-Butanol	5.86	100.0
Trichloroethene	5.94	100.0
Methylcyclohexane	6.07	100.0
1,2-Dichloropropane	6.23	100.0
1,4-Dioxane	6.34	100.0
Dichlorobromomethane	6.52	100.0
Epichlorohydrin	6.96	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0
Toluene-d8 (Surr)	7.27	100.0
Toluene	7.35	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-505749/2 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 03/24/2018 05:54

ANALYTE	RT	RESOLUTION (%)
trans-1,3-Dichloropropene	7.69	100.0
1,1,2-Trichloroethane	7.91	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.17	100.0
Chlorodibromomethane	8.36	100.0
Ethylene Dibromide	8.53	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.35	100.0
o-Xylene	9.81	100.0
Styrene	9.85	100.0
Bromoform	10.08	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-505873/2 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 03/25/2018 04:30

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.63	100.0
Chloromethane	1.80	100.0
Vinyl chloride	1.91	100.0
Bromomethane	2.20	100.0
Chloroethane	2.27	100.0
Trichlorofluoromethane	2.47	100.0
Ethanol	2.69	100.0
Acrolein	2.88	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.89	100.0
1,1-Dichloroethene	2.92	100.0
Acetone	3.00	100.0
Carbon disulfide	3.11	100.0
Methyl acetate	3.25	100.0
Acetonitrile	3.32	100.0
Methylene Chloride	3.38	100.0
2-Methyl-2-propanol	3.43	100.0
Methyl tert-butyl ether	3.54	100.0
trans-1,2-Dichloroethene	3.57	100.0
Acrylonitrile	3.64	100.0
1,1-Dichloroethane	3.97	100.0
cis-1,2-Dichloroethene	4.50	100.0
2-Butanone (MEK)	4.51	100.0
Propionitrile	4.64	100.0
Chlorobromomethane	4.74	100.0
Methacrylonitrile	4.75	100.0
Chloroform	4.78	100.0
Cyclohexane	4.93	100.0
1,1,1-Trichloroethane	4.94	100.0
Dibromofluoromethane (Surr)	4.95	100.0
Carbon tetrachloride	5.07	100.0
Isobutyl alcohol	5.19	100.0
Benzene	5.29	100.0
1,2-Dichloroethane-d4 (Surr)	5.30	100.0
1,2-Dichloroethane	5.38	100.0
n-Butanol	5.86	100.0
Trichloroethene	5.94	100.0
Methylcyclohexane	6.07	100.0
1,2-Dichloropropane	6.24	100.0
1,4-Dioxane	6.34	100.0
Dichlorobromomethane	6.52	100.0
Epichlorohydrin	6.96	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0
Toluene-d8 (Surr)	7.27	100.0
Toluene	7.35	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-505873/2 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 03/25/2018 04:30

ANALYTE	RT	RESOLUTION (%)
trans-1,3-Dichloropropene	7.69	100.0
1,1,2-Trichloroethane	7.91	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.17	100.0
Chlorodibromomethane	8.37	100.0
Ethylene Dibromide	8.53	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.35	100.0
o-Xylene	9.82	100.0
Styrene	9.85	100.0
Bromoform	10.08	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-507466/4 Instrument ID (1): CVOAMS2

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 03/31/2018 12:11

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.11	100.0
Chloromethane	1.26	100.0
Vinyl chloride	1.34	100.0
Bromomethane	1.59	100.0
Chloroethane	1.65	100.0
Trichlorofluoromethane	1.82	100.0
Ethanol	2.06	100.0
Acrolein	2.21	100.0
1,1-Dichloroethene	2.22	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.22	100.0
Acetone	2.35	100.0
Carbon disulfide	2.39	100.0
Isopropyl alcohol	2.47	100.0
Methyl acetate	2.59	100.0
Methylene Chloride	2.68	100.0
2-Methyl-2-propanol	2.79	100.0
Methyl tert-butyl ether	2.85	100.0
trans-1,2-Dichloroethene	2.86	100.0
Acrylonitrile	2.96	100.0
1,1-Dichloroethane	3.28	100.0
cis-1,2-Dichloroethene	3.83	100.0
2-Butanone (MEK)	3.89	100.0
Propionitrile	4.03	100.0
Chlorobromomethane	4.08	100.0
Methacrylonitrile	4.13	100.0
Chloroform	4.15	100.0
Cyclohexane	4.26	100.0
1,1,1-Trichloroethane	4.28	100.0
Dibromofluoromethane (Surr)	4.32	100.0
Carbon tetrachloride	4.40	100.0
Benzene	4.67	100.0
1,2-Dichloroethane-d4 (Surr)	4.70	100.0
Isobutyl alcohol	4.71	100.0
1,2-Dichloroethane	4.78	100.0
Trichloroethene	5.40	100.0
Methylcyclohexane	5.51	100.0
n-Butanol	5.51	100.0
1,2-Dichloropropane	5.73	100.0
1,4-Dioxane	5.90	100.0
Dichlorobromomethane	6.07	100.0
Epichlorohydrin	6.61	100.0
cis-1,3-Dichloropropene	6.66	100.0
4-Methyl-2-pentanone (MIBK)	6.87	100.0
Toluene-d8 (Surr)	6.91	100.0
Toluene	6.99	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-507466/4 Instrument ID (1): CVOAMS2

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 03/31/2018 12:11

ANALYTE	RT	RESOLUTION (%)
trans-1,3-Dichloropropene	7.37	100.0
1,1,2-Trichloroethane	7.55	100.0
Tetrachloroethene	7.55	100.0
2-Hexanone	7.80	100.0
Chlorodibromomethane	7.89	100.0
Ethylene Dibromide	7.99	100.0
Chlorobenzene	8.43	100.0
Ethylbenzene	8.51	100.0
m-Xylene & p-Xylene	8.62	100.0
o-Xylene	8.95	100.0
Styrene	8.99	100.0
Bromoform	9.15	100.0
Isopropylbenzene	9.25	100.0
4-Bromofluorobenzene	9.41	100.0
1,1,2,2-Tetrachloroethane	9.57	100.0
1,3-Dichlorobenzene	10.22	100.0
1,4-Dichlorobenzene	10.29	100.0
1,2-Dichlorobenzene	10.57	100.0
1,2-Dibromo-3-Chloropropane	11.14	100.0
1,2,4-Trichlorobenzene	11.66	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-510106/2 Instrument ID (1): CVOAMS4

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/11/2018 08:49

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.56	100.0
Chloromethane	1.77	100.0
Vinyl chloride	1.86	100.0
Bromomethane	2.21	100.0
Chloroethane	2.29	100.0
Trichlorofluoromethane	2.51	100.0
Ethanol	2.77	100.0
Acrolein	2.97	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	3.00	100.0
1,1-Dichloroethene	3.01	100.0
Acetone	3.12	100.0
Carbon disulfide	3.22	100.0
Isopropyl alcohol	3.25	100.0
Methyl acetate	3.42	100.0
Acetonitrile	3.48	100.0
Methylene Chloride	3.55	100.0
2-Methyl-2-propanol	3.66	100.0
Methyl tert-butyl ether	3.76	100.0
trans-1,2-Dichloroethene	3.78	100.0
Acrylonitrile	3.87	100.0
1,1-Dichloroethane	4.27	100.0
cis-1,2-Dichloroethene	4.91	100.0
2-Butanone (MEK)	4.94	100.0
Propionitrile	5.10	100.0
Chlorobromomethane	5.19	100.0
Chloroform	5.26	100.0
Cyclohexane	5.41	100.0
1,1,1-Trichloroethane	5.43	100.0
Dibromofluoromethane (Surr)	5.45	100.0
Carbon tetrachloride	5.58	100.0
Isobutyl alcohol	5.81	100.0
Benzene	5.86	100.0
1,2-Dichloroethane-d4 (Surr)	5.88	100.0
1,2-Dichloroethane	5.98	100.0
n-Butanol	6.64	100.0
Trichloroethene	6.66	100.0
Methylcyclohexane	6.81	100.0
1,2-Dichloropropane	7.00	100.0
1,4-Dioxane	7.13	100.0
Dichlorobromomethane	7.31	100.0
Epichlorohydrin	7.75	100.0
cis-1,3-Dichloropropene	7.79	100.0
4-Methyl-2-pentanone (MIBK)	7.94	100.0
Toluene-d8 (Surr)	8.01	100.0
Toluene	8.08	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-510106/2 Instrument ID (1): CVOAMS4

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/11/2018 08:49

ANALYTE	RT	RESOLUTION (%)
trans-1,3-Dichloropropene	8.37	100.0
1,1,2-Trichloroethane	8.53	100.0
Tetrachloroethene	8.57	100.0
2-Hexanone	8.74	100.0
Chlorodibromomethane	8.87	100.0
Ethylene Dibromide	8.98	100.0
Chlorobenzene	9.37	100.0
Ethylbenzene	9.43	100.0
m-Xylene & p-Xylene	9.54	100.0
o-Xylene	9.86	100.0
Styrene	9.89	100.0
Bromoform	10.06	100.0
Isopropylbenzene	10.14	100.0
4-Bromofluorobenzene	10.31	100.0
1,1,2,2-Tetrachloroethane	10.43	100.0
1,3-Dichlorobenzene	11.12	100.0
1,4-Dichlorobenzene	11.19	100.0
1,2-Dichlorobenzene	11.47	100.0
1,2-Dibromo-3-Chloropropane	12.12	100.0
1,2,4-Trichlorobenzene	12.89	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): LCS 460-510106/3 Instrument ID (1): CVOAMS4

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/11/2018 09:14

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.56	100.0
Chloromethane	1.77	100.0
Vinyl chloride	1.86	100.0
Bromomethane	2.21	100.0
Chloroethane	2.30	100.0
Trichlorofluoromethane	2.51	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	3.00	100.0
1,1-Dichloroethene	3.01	100.0
Acetone	3.12	100.0
Carbon disulfide	3.22	100.0
Methyl acetate	3.42	100.0
Methylene Chloride	3.55	100.0
Methyl tert-butyl ether	3.75	100.0
trans-1,2-Dichloroethene	3.78	100.0
1,1-Dichloroethane	4.27	100.0
cis-1,2-Dichloroethene	4.91	100.0
2-Butanone (MEK)	4.94	100.0
Chlorobromomethane	5.19	100.0
Chloroform	5.26	100.0
Cyclohexane	5.41	100.0
1,1,1-Trichloroethane	5.43	100.0
Dibromofluoromethane (Surr)	5.45	100.0
Carbon tetrachloride	5.58	100.0
Benzene	5.86	100.0
1,2-Dichloroethane-d4 (Surr)	5.88	100.0
1,2-Dichloroethane	5.98	100.0
Trichloroethene	6.66	100.0
Methylcyclohexane	6.81	100.0
1,2-Dichloropropane	7.00	100.0
1,4-Dioxane	7.13	100.0
Dichlorobromomethane	7.31	100.0
cis-1,3-Dichloropropene	7.79	100.0
4-Methyl-2-pentanone (MIBK)	7.94	100.0
Toluene-d8 (Surr)	8.01	100.0
Toluene	8.07	100.0
trans-1,3-Dichloropropene	8.37	100.0
1,1,2-Trichloroethane	8.53	100.0
Tetrachloroethene	8.57	100.0
2-Hexanone	8.74	100.0
Chlorodibromomethane	8.87	100.0
Ethylene Dibromide	8.98	100.0
Chlorobenzene	9.37	100.0
Ethylbenzene	9.43	100.0
m-Xylene & p-Xylene	9.54	100.0
o-Xylene	9.86	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): LCS 460-510106/3 Instrument ID (1): CVOAMS4

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/11/2018 09:14

ANALYTE	RT	RESOLUTION (%)
Styrene	9.89	100.0
Bromoform	10.06	100.0
Isopropylbenzene	10.14	100.0
4-Bromofluorobenzene	10.31	100.0
1,1,2,2-Tetrachloroethane	10.43	100.0
1,3-Dichlorobenzene	11.12	100.0
1,4-Dichlorobenzene	11.19	100.0
1,2-Dichlorobenzene	11.47	100.0
1,2-Dibromo-3-Chloropropane	12.12	100.0
1,2,4-Trichlorobenzene	12.89	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-510660/3 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/12/2018 21:47

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.63	100.0
Chloromethane	1.80	100.0
Vinyl chloride	1.91	100.0
Bromomethane	2.21	100.0
Chloroethane	2.27	100.0
Trichlorofluoromethane	2.49	100.0
Ethanol	2.69	100.0
Acrolein	2.88	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.89	100.0
1,1-Dichloroethene	2.92	100.0
Acetone	3.00	100.0
Isopropyl alcohol	3.08	100.0
Carbon disulfide	3.12	100.0
Methyl acetate	3.25	100.0
Acetonitrile	3.31	100.0
Methylene Chloride	3.38	100.0
2-Methyl-2-propanol	3.45	100.0
Methyl tert-butyl ether	3.53	100.0
trans-1,2-Dichloroethene	3.57	100.0
Acrylonitrile	3.64	100.0
1,1-Dichloroethane	3.97	100.0
cis-1,2-Dichloroethene	4.50	100.0
2-Butanone (MEK)	4.50	100.0
Chlorobromomethane	4.74	100.0
Methacrylonitrile	4.75	100.0
Chloroform	4.79	100.0
Cyclohexane	4.93	100.0
1,1,1-Trichloroethane	4.94	100.0
Dibromofluoromethane (Surr)	4.95	100.0
Carbon tetrachloride	5.07	100.0
Isobutyl alcohol	5.21	100.0
Benzene	5.29	100.0
1,2-Dichloroethane-d4 (Surr)	5.31	100.0
1,2-Dichloroethane	5.38	100.0
n-Butanol	5.87	100.0
Trichloroethene	5.94	100.0
Methylcyclohexane	6.07	100.0
1,2-Dichloropropane	6.23	100.0
1,4-Dioxane	6.34	100.0
Dichlorobromomethane	6.52	100.0
Epichlorohydrin	6.96	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0
Toluene-d8 (Surr)	7.27	100.0
Toluene	7.35	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-510660/3 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/12/2018 21:47

ANALYTE	RT	RESOLUTION (%)
trans-1,3-Dichloropropene	7.69	100.0
1,1,2-Trichloroethane	7.91	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.17	100.0
Chlorodibromomethane	8.37	100.0
Ethylene Dibromide	8.53	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.35	100.0
o-Xylene	9.82	100.0
Styrene	9.85	100.0
Bromoform	10.08	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): LCS 460-510660/4 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/12/2018 22:11

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.63	100.0
Chloromethane	1.80	100.0
Vinyl chloride	1.91	100.0
Bromomethane	2.21	100.0
Chloroethane	2.27	100.0
Trichlorofluoromethane	2.46	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.89	100.0
1,1-Dichloroethene	2.91	100.0
Acetone	3.00	100.0
Carbon disulfide	3.11	100.0
Methyl acetate	3.25	100.0
Methylene Chloride	3.38	100.0
Methyl tert-butyl ether	3.54	100.0
trans-1,2-Dichloroethene	3.57	100.0
1,1-Dichloroethane	3.97	100.0
cis-1,2-Dichloroethene	4.51	100.0
2-Butanone (MEK)	4.52	100.0
Chlorobromomethane	4.74	100.0
Chloroform	4.79	100.0
Cyclohexane	4.93	100.0
Dibromofluoromethane (Surr)	4.95	100.0
1,1,1-Trichloroethane	4.95	100.0
Carbon tetrachloride	5.07	100.0
Benzene	5.30	100.0
1,2-Dichloroethane-d4 (Surr)	5.31	100.0
1,2-Dichloroethane	5.39	100.0
Trichloroethene	5.94	100.0
Methylcyclohexane	6.08	100.0
1,2-Dichloropropane	6.24	100.0
1,4-Dioxane	6.36	100.0
Dichlorobromomethane	6.52	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0
Toluene-d8 (Surr)	7.27	100.0
Toluene	7.35	100.0
trans-1,3-Dichloropropene	7.70	100.0
1,1,2-Trichloroethane	7.92	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.17	100.0
Chlorodibromomethane	8.37	100.0
Ethylene Dibromide	8.53	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.35	100.0
o-Xylene	9.82	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): LCS 460-510660/4 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/12/2018 22:11

ANALYTE	RT	RESOLUTION (%)
Styrene	9.85	100.0
Bromoform	10.09	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-510972/2 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/13/2018 20:21

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.63	100.0
Chloromethane	1.80	100.0
Vinyl chloride	1.91	100.0
Bromomethane	2.21	100.0
Chloroethane	2.27	100.0
Trichlorofluoromethane	2.47	100.0
Ethanol	2.70	100.0
Acrolein	2.88	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.89	100.0
1,1-Dichloroethene	2.92	100.0
Acetone	3.01	100.0
Isopropyl alcohol	3.10	100.0
Carbon disulfide	3.12	100.0
Methyl acetate	3.25	100.0
Methylene Chloride	3.38	100.0
2-Methyl-2-propanol	3.46	100.0
Methyl tert-butyl ether	3.54	100.0
trans-1,2-Dichloroethene	3.57	100.0
Acrylonitrile	3.64	100.0
1,1-Dichloroethane	3.98	100.0
cis-1,2-Dichloroethene	4.51	100.0
2-Butanone (MEK)	4.51	100.0
Propionitrile	4.65	100.0
Chlorobromomethane	4.74	100.0
Methacrylonitrile	4.75	100.0
Chloroform	4.79	100.0
Cyclohexane	4.94	100.0
1,1,1-Trichloroethane	4.94	100.0
Dibromofluoromethane (Surr)	4.95	100.0
Carbon tetrachloride	5.07	100.0
Isobutyl alcohol	5.22	100.0
Benzene	5.30	100.0
1,2-Dichloroethane-d4 (Surr)	5.31	100.0
1,2-Dichloroethane	5.38	100.0
n-Butanol	5.87	100.0
Trichloroethene	5.94	100.0
Methylcyclohexane	6.08	100.0
1,2-Dichloropropane	6.24	100.0
1,4-Dioxane	6.36	100.0
Dichlorobromomethane	6.52	100.0
Epichlorohydrin	6.96	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0
Toluene-d8 (Surr)	7.27	100.0
Toluene	7.35	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-510972/2 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/13/2018 20:21

ANALYTE	RT	RESOLUTION (%)
trans-1,3-Dichloropropene	7.70	100.0
1,1,2-Trichloroethane	7.92	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.17	100.0
Chlorodibromomethane	8.37	100.0
Ethylene Dibromide	8.53	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.35	100.0
o-Xylene	9.82	100.0
Styrene	9.85	100.0
Bromoform	10.08	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-511293/3 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 04:50

ANALYTE	RT	RESOLUTION (%)
Total BTEX		100.0
1,2-Dichloroethene, Total		100.0
Dichlorodifluoromethane	1.65	100.0
Chloromethane	1.81	100.0
Vinyl chloride	1.92	100.0
Bromomethane	2.22	100.0
Chloroethane	2.28	100.0
Trichlorofluoromethane	2.49	100.0
Ethanol	2.69	100.0
Acrolein	2.89	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.90	100.0
1,1-Dichloroethene	2.93	100.0
Acetone	3.02	100.0
Isopropyl alcohol	3.11	100.0
Carbon disulfide	3.13	100.0
Methyl acetate	3.25	100.0
Acetonitrile	3.33	100.0
Methylene Chloride	3.38	100.0
2-Methyl-2-propanol	3.44	100.0
Methyl tert-butyl ether	3.54	100.0
trans-1,2-Dichloroethene	3.58	100.0
Acrylonitrile	3.64	100.0
1,1-Dichloroethane	3.98	100.0
cis-1,2-Dichloroethene	4.52	100.0
2-Butanone (MEK)	4.52	100.0
Chlorobromomethane	4.75	100.0
Methacrylonitrile	4.76	100.0
Chloroform	4.79	100.0
Cyclohexane	4.94	100.0
1,1,1-Trichloroethane	4.95	100.0
Dibromofluoromethane (Surr)	4.96	100.0
Carbon tetrachloride	5.07	100.0
Isobutyl alcohol	5.21	100.0
Benzene	5.30	100.0
1,2-Dichloroethane-d4 (Surr)	5.32	100.0
1,2-Dichloroethane	5.39	100.0
n-Butanol	5.87	100.0
Trichloroethene	5.95	100.0
Methylcyclohexane	6.08	100.0
1,2-Dichloropropane	6.24	100.0
1,4-Dioxane	6.35	100.0
Dichlorobromomethane	6.52	100.0
Epichlorohydrin	6.96	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-511293/3 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 04:50

ANALYTE	RT	RESOLUTION (%)
Toluene-d8 (Surr)	7.27	100.0
Toluene	7.35	100.0
trans-1,3-Dichloropropene	7.70	100.0
1,1,2-Trichloroethane	7.92	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.18	100.0
Chlorodibromomethane	8.37	100.0
Ethylene Dibromide	8.53	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.35	100.0
o-Xylene	9.82	100.0
Styrene	9.85	100.0
Bromoform	10.09	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): LCS 460-511293/4 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 05:14

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.64	100.0
Chloromethane	1.81	100.0
Vinyl chloride	1.92	100.0
Bromomethane	2.22	100.0
Chloroethane	2.28	100.0
Trichlorofluoromethane	2.49	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.89	100.0
1,1-Dichloroethene	2.93	100.0
Acetone	3.01	100.0
Carbon disulfide	3.12	100.0
Methyl acetate	3.25	100.0
Methylene Chloride	3.38	100.0
Methyl tert-butyl ether	3.54	100.0
trans-1,2-Dichloroethene	3.58	100.0
1,1-Dichloroethane	3.98	100.0
cis-1,2-Dichloroethene	4.52	100.0
2-Butanone (MEK)	4.52	100.0
Chlorobromomethane	4.74	100.0
Chloroform	4.80	100.0
Cyclohexane	4.94	100.0
1,1,1-Trichloroethane	4.95	100.0
Dibromofluoromethane (Surr)	4.96	100.0
Carbon tetrachloride	5.07	100.0
Benzene	5.30	100.0
1,2-Dichloroethane-d4 (Surr)	5.31	100.0
1,2-Dichloroethane	5.39	100.0
Trichloroethene	5.95	100.0
Methylcyclohexane	6.08	100.0
1,2-Dichloropropane	6.24	100.0
1,4-Dioxane	6.35	100.0
Dichlorobromomethane	6.52	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0
Toluene-d8 (Surr)	7.27	100.0
Toluene	7.35	100.0
trans-1,3-Dichloropropene	7.70	100.0
1,1,2-Trichloroethane	7.92	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.17	100.0
Chlorodibromomethane	8.37	100.0
Ethylene Dibromide	8.53	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.35	100.0
o-Xylene	9.82	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): LCS 460-511293/4 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 05:14

ANALYTE	RT	RESOLUTION (%)
Styrene	9.85	100.0
Bromoform	10.09	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-511471/4 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 18:36

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.63	100.0
Chloromethane	1.80	100.0
Vinyl chloride	1.91	100.0
Bromomethane	2.22	100.0
Chloroethane	2.27	100.0
Trichlorofluoromethane	2.48	100.0
Ethanol	2.71	100.0
Acrolein	2.88	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.89	100.0
1,1-Dichloroethene	2.92	100.0
Acetone	3.00	100.0
Isopropyl alcohol	3.09	100.0
Carbon disulfide	3.12	100.0
Methyl acetate	3.25	100.0
Acetonitrile	3.32	100.0
Methylene Chloride	3.38	100.0
2-Methyl-2-propanol	3.43	100.0
Methyl tert-butyl ether	3.53	100.0
trans-1,2-Dichloroethene	3.57	100.0
Acrylonitrile	3.64	100.0
1,1-Dichloroethane	3.97	100.0
cis-1,2-Dichloroethene	4.51	100.0
2-Butanone (MEK)	4.51	100.0
Chlorobromomethane	4.74	100.0
Methacrylonitrile	4.75	100.0
Chloroform	4.79	100.0
Cyclohexane	4.94	100.0
Dibromofluoromethane (Surr)	4.95	100.0
1,1,1-Trichloroethane	4.95	100.0
Carbon tetrachloride	5.07	100.0
Isobutyl alcohol	5.21	100.0
Benzene	5.30	100.0
1,2-Dichloroethane-d4 (Surr)	5.31	100.0
1,2-Dichloroethane	5.39	100.0
n-Butanol	5.88	100.0
Trichloroethene	5.94	100.0
Methylcyclohexane	6.08	100.0
1,2-Dichloropropane	6.24	100.0
1,4-Dioxane	6.34	100.0
Dichlorobromomethane	6.52	100.0
Epichlorohydrin	6.96	100.0
cis-1,3-Dichloropropene	7.02	100.0
4-Methyl-2-pentanone (MIBK)	7.17	100.0
Toluene-d8 (Surr)	7.27	100.0
Toluene	7.35	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-511471/4 Instrument ID (1): CVOAMS9

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 18:36

ANALYTE	RT	RESOLUTION (%)
trans-1,3-Dichloropropene	7.70	100.0
1,1,2-Trichloroethane	7.92	100.0
Tetrachloroethene	7.97	100.0
2-Hexanone	8.18	100.0
Chlorodibromomethane	8.37	100.0
Ethylene Dibromide	8.53	100.0
Chlorobenzene	9.11	100.0
Ethylbenzene	9.20	100.0
m-Xylene & p-Xylene	9.35	100.0
o-Xylene	9.82	100.0
Styrene	9.85	100.0
Bromoform	10.09	100.0
Isopropylbenzene	10.20	100.0
4-Bromofluorobenzene	10.42	100.0
1,1,2,2-Tetrachloroethane	10.60	100.0
1,3-Dichlorobenzene	11.45	100.0
1,4-Dichlorobenzene	11.54	100.0
1,2-Dichlorobenzene	11.87	100.0
1,2-Dibromo-3-Chloropropane	12.53	100.0
1,2,4-Trichlorobenzene	13.14	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-511498/3 Instrument ID (1): CVOAMS4

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 19:15

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.58	100.0
Chloromethane	1.79	100.0
Vinyl chloride	1.89	100.0
Bromomethane	2.24	100.0
Chloroethane	2.33	100.0
Trichlorofluoromethane	2.53	100.0
Pentane	2.56	100.0
Ethanol	2.80	100.0
Acrolein	3.01	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	3.03	100.0
1,1-Dichloroethene	3.05	100.0
Acetone	3.16	100.0
Carbon disulfide	3.26	100.0
Isopropyl alcohol	3.28	100.0
Methyl acetate	3.45	100.0
Acetonitrile	3.51	100.0
Methylene Chloride	3.59	100.0
Methyl tert-butyl ether	3.79	100.0
trans-1,2-Dichloroethene	3.82	100.0
Acrylonitrile	3.91	100.0
1,1-Dichloroethane	4.31	100.0
cis-1,2-Dichloroethene	4.95	100.0
2-Butanone (MEK)	4.98	100.0
Chlorobromomethane	5.23	100.0
Methacrylonitrile	5.26	100.0
Chloroform	5.31	100.0
Cyclohexane	5.45	100.0
1,1,1-Trichloroethane	5.47	100.0
Dibromofluoromethane (Surr)	5.50	100.0
Carbon tetrachloride	5.62	100.0
Isobutyl alcohol	5.86	100.0
Benzene	5.90	100.0
1,2-Dichloroethane-d4 (Surr)	5.93	100.0
1,2-Dichloroethane	6.02	100.0
n-Butanol	6.68	100.0
Trichloroethene	6.71	100.0
Methylcyclohexane	6.85	100.0
1,2-Dichloropropane	7.04	100.0
1,4-Dioxane	7.17	100.0
Dichlorobromomethane	7.34	100.0
Epichlorohydrin	7.78	100.0
cis-1,3-Dichloropropene	7.83	100.0
4-Methyl-2-pentanone (MIBK)	7.98	100.0
Toluene-d8 (Surr)	8.04	100.0
Toluene	8.11	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): CCVIS 460-511498/3 Instrument ID (1): CVOAMS4

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 19:15

ANALYTE	RT	RESOLUTION (%)
trans-1,3-Dichloropropene	8.40	100.0
1,1,2-Trichloroethane	8.56	100.0
Tetrachloroethene	8.60	100.0
2-Hexanone	8.76	100.0
Chlorodibromomethane	8.89	100.0
Ethylene Dibromide	9.01	100.0
Chlorobenzene	9.40	100.0
Ethylbenzene	9.46	100.0
m-Xylene & p-Xylene	9.56	100.0
o-Xylene	9.89	100.0
Styrene	9.91	100.0
Bromoform	10.09	100.0
Isopropylbenzene	10.17	100.0
4-Bromofluorobenzene	10.33	100.0
Bromobenzene	10.45	100.0
1,1,2,2-Tetrachloroethane	10.46	100.0
4-Ethyltoluene	10.57	100.0
sec-Butylbenzene	11.02	100.0
1,3-Dichlorobenzene	11.14	100.0
1,4-Dichlorobenzene	11.21	100.0
1,2-Dichlorobenzene	11.50	100.0
1,2-Dibromo-3-Chloropropane	12.15	100.0
1,3,5-Trichlorobenzene	12.28	100.0
1,2,4-Trichlorobenzene	12.92	100.0
Naphthalene	13.21	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): LCS 460-511498/4 Instrument ID (1): CVOAMS4

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 19:40

ANALYTE	RT	RESOLUTION (%)
Dichlorodifluoromethane	1.58	100.0
Chloromethane	1.79	100.0
Vinyl chloride	1.89	100.0
Bromomethane	2.24	100.0
Chloroethane	2.33	100.0
Trichlorofluoromethane	2.53	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	3.03	100.0
1,1-Dichloroethene	3.05	100.0
Acetone	3.16	100.0
Carbon disulfide	3.26	100.0
Methyl acetate	3.45	100.0
Methylene Chloride	3.59	100.0
Methyl tert-butyl ether	3.79	100.0
trans-1,2-Dichloroethene	3.82	100.0
1,1-Dichloroethane	4.31	100.0
cis-1,2-Dichloroethene	4.95	100.0
2-Butanone (MEK)	4.98	100.0
Chlorobromomethane	5.23	100.0
Chloroform	5.31	100.0
Cyclohexane	5.45	100.0
1,1,1-Trichloroethane	5.47	100.0
Dibromofluoromethane (Surr)	5.50	100.0
Carbon tetrachloride	5.62	100.0
Benzene	5.90	100.0
1,2-Dichloroethane-d4 (Surr)	5.93	100.0
1,2-Dichloroethane	6.02	100.0
Trichloroethene	6.71	100.0
Methylcyclohexane	6.85	100.0
1,2-Dichloropropane	7.04	100.0
1,4-Dioxane	7.17	100.0
Dichlorobromomethane	7.34	100.0
cis-1,3-Dichloropropene	7.83	100.0
4-Methyl-2-pentanone (MIBK)	7.98	100.0
Toluene-d8 (Surr)	8.04	100.0
Toluene	8.11	100.0
trans-1,3-Dichloropropene	8.40	100.0
1,1,2-Trichloroethane	8.56	100.0
Tetrachloroethene	8.60	100.0
2-Hexanone	8.76	100.0
Chlorodibromomethane	8.89	100.0
Ethylene Dibromide	9.01	100.0
Chlorobenzene	9.40	100.0
Ethylbenzene	9.47	100.0
m-Xylene & p-Xylene	9.56	100.0
o-Xylene	9.89	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID (1): LCS 460-511498/4 Instrument ID (1): CVOAMS4

GC Column (1): Rtx-624 ID: 0.25(mm) Date Analyzed (1): 04/16/2018 19:40

ANALYTE	RT	RESOLUTION (%)
Styrene	9.91	100.0
Bromoform	10.09	100.0
Isopropylbenzene	10.17	100.0
4-Bromofluorobenzene	10.33	100.0
1,1,2,2-Tetrachloroethane	10.46	100.0
1,3-Dichlorobenzene	11.14	100.0
1,4-Dichlorobenzene	11.21	100.0
1,2-Dichlorobenzene	11.50	100.0
1,2-Dibromo-3-Chloropropane	12.15	100.0
1,2,4-Trichlorobenzene	12.92	100.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-507466/4 Calibration Date: 03/31/2018 12:11

Instrument ID: CVOAMS2 Calib Start Date: 03/26/2018 04:03

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/26/2018 09:16

Lab File ID: B28115.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.6532	0.6034	0.1000	18.5	20.0	-7.6	20.0
Chloromethane	Ave	0.5971	0.7103	0.1000	23.8	20.0	19.0	20.0
Butadiene	Ave	0.5045	0.5233		20.7	20.0	3.7	20.0
Vinyl chloride	Ave	0.5964	0.6101	0.1000	20.5	20.0	2.3	20.0
Bromomethane	Ave	0.3626	0.3346	0.1000	18.5	20.0	-7.7	50.0
Chloroethane	Ave	0.3215	0.2767	0.1000	17.2	20.0	-13.9	50.0
Trichlorofluoromethane	Ave	0.6899	0.6764	0.1000	19.6	20.0	-2.0	20.0
Dichlorofluoromethane	Ave	0.9457	0.8575		18.1	20.0	-9.3	20.0
Pentane	Ave	0.0807	0.0741		36.7	40.0	-8.2	20.0
2-Methyl-1,3-butadiene	Ave	0.4539	0.4477		19.7	20.0	-1.4	20.0
Ethyl ether	Ave	0.3251	0.3455		21.3	20.0	6.3	20.0
Ethanol	Ave	0.0682	0.0544		639	800	-20.2	50.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3564	0.3752		21.1	20.0	5.3	20.0
Acrolein	Ave	2.078	1.509		218	300	-27.4	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.4422	0.4475	0.1000	20.2	20.0	1.2	20.0
1,1-Dichloroethene	Ave	0.4103	0.4210	0.1000	20.5	20.0	2.6	20.0
Acetone	QuaF		0.9211	0.0500	102	100	2.0	50.0
Iodomethane	Ave	0.6944	0.7008		20.2	20.0	0.9	20.0
Carbon disulfide	Ave	1.583	1.625	0.1000	20.5	20.0	2.6	50.0
Isopropyl alcohol	Ave	0.8096	0.7207		178	200	-11.0	50.0
Allyl chloride	Ave	0.2814	0.2826		20.1	20.0	0.4	20.0
Methyl acetate	Ave	0.2358	0.2570	0.1000	109	100	9.0	20.0
Methylene Chloride	Ave	0.4424	0.4719	0.1000	21.3	20.0	6.7	20.0
2-Methyl-2-propanol	Ave	1.709	1.669		195	200	-2.3	50.0
Methyl tert-butyl ether	Ave	0.9771	1.001	0.1000	20.5	20.0	2.4	20.0
trans-1,2-Dichloroethene	Ave	0.4272	0.4289	0.1000	20.1	20.0	0.4	20.0
Acrylonitrile	Ave	4.079	4.228		207	200	3.6	20.0
Hexane	Ave	0.7433	0.7083		19.1	20.0	-4.7	20.0
Isopropyl ether	Ave	1.544	1.598		20.7	20.0	3.5	20.0
1,1-Dichloroethane	Ave	0.8726	0.9009	0.2000	20.6	20.0	3.2	20.0
2-Chloro-1,3-butadiene	Ave	0.3854	0.3898		20.2	20.0	1.1	20.0
Vinyl acetate	Ave	0.4988	0.4983		40.0	40.0	-0.1	20.0
Tert-butyl ethyl ether	Ave	1.220	1.228		20.1	20.0	0.6	20.0
2,2-Dichloropropane	Ave	0.2150	0.2218		20.6	20.0	3.2	20.0
cis-1,2-Dichloroethene	Ave	0.4644	0.4563	0.1000	19.7	20.0	-1.7	20.0
2-Butanone (MEK)	QuaF		0.3120	0.0500	93.1	100	-6.9	50.0
Ethyl acetate	Ave	0.3166	0.2906		36.7	40.0	-8.2	20.0
Propionitrile	Ave	0.3914	0.4139		211	200	5.7	20.0
Chlorobromomethane	QuaF		0.1990		21.5	20.0	7.7	20.0
Methacrylonitrile	Ave	0.1127	0.1239		220	200	9.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-507466/4 Calibration Date: 03/31/2018 12:11

Instrument ID: CVOAMS2 Calib Start Date: 03/26/2018 04:03

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/26/2018 09:16

Lab File ID: B28115.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	0.7360	0.8113	0.2000	22.0	20.0	10.2	20.0
Cyclohexane	Ave	0.6417	0.6190	0.1000	19.3	20.0	-3.5	50.0
1,1,1-Trichloroethane	Ave	0.6275	0.6730	0.1000	21.4	20.0	7.2	20.0
Carbon tetrachloride	Ave	0.5452	0.5656	0.1000	20.7	20.0	3.7	20.0
1,1-Dichloropropene	Ave	0.5903	0.5792		19.6	20.0	-1.9	20.0
Benzene	Ave	2.203	2.547	0.5000	23.1	20.0	15.7	20.0
Isobutyl alcohol	QuaF		0.6200		701	500	40.1*	20.0
Tert-amyl methyl ether	Ave	1.197	1.219		20.4	20.0	1.8	20.0
1,2-Dichloroethane	Ave	0.4924	0.5257	0.1000	21.3	20.0	6.7	20.0
n-Heptane	Ave	0.4072	0.4147		20.4	20.0	1.8	20.0
Trichloroethene	Ave	0.4121	0.4092	0.2000	19.9	20.0	-0.7	20.0
Methylcyclohexane	Ave	0.7495	0.6876	0.1000	18.3	20.0	-8.3	50.0
n-Butanol	QuaF		0.1631		318	500	-36.4	50.0
Ethyl acrylate	Ave	0.3660	0.3038		16.6	20.0	-17.0	20.0
1,2-Dichloropropane	Ave	0.4443	0.4750	0.1000	21.4	20.0	6.9	20.0
Dibromomethane	Ave	0.2034	0.2137		21.0	20.0	5.1	20.0
1,4-Dioxane	Lin2		1.477		376	400	-6.1	50.0
Dichlorobromomethane	Ave	0.4788	0.4724	0.2000	19.7	20.0	-1.3	20.0
2-Nitropropane	Lin2		0.0700		41.7	40.0	4.4	20.0
2-Chloroethyl vinyl ether	Qua2		0.1409		16.9	20.0	-15.7	20.0
Epichlorohydrin	Ave	0.2667	0.2205		331	400	-17.3	20.0
cis-1,3-Dichloropropene	Ave	0.7674	0.7412	0.2000	19.3	20.0	-3.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.320	2.721	0.0500	82.0	100	-18.0	50.0
Toluene	Ave	2.154	2.057	0.4000	19.1	20.0	-4.5	20.0
trans-1,3-Dichloropropene	Ave	0.6068	0.5860	0.1000	19.3	20.0	-3.4	50.0
1,1,2-Trichloroethane	Ave	0.3353	0.3254	0.1000	19.4	20.0	-3.0	20.0
Tetrachloroethene	Ave	0.5589	0.5453	0.2000	19.5	20.0	-2.4	20.0
1,3-Dichloropropane	Ave	0.6337	0.6036		19.1	20.0	-4.7	20.0
2-Hexanone	QuaF		1.362	0.0500	59.0	100	-41.0	50.0
Chlorodibromomethane	Ave	0.4044	0.4422	0.1000	21.9	20.0	9.3	50.0
Ethylene Dibromide	Ave	0.3303	0.3153	0.1000	19.1	20.0	-4.5	20.0
Chlorobenzene	Ave	1.303	1.306	0.5000	20.0	20.0	0.2	20.0
Ethylbenzene	Ave	0.7086	0.6872	0.1000	19.4	20.0	-3.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4707	0.4993		21.2	20.0	6.1	20.0
m-Xylene & p-Xylene	Ave	0.8432	0.8052	0.1000	19.1	20.0	-4.5	20.0
o-Xylene	Ave	0.8183	0.7833	0.3000	19.1	20.0	-4.3	20.0
Styrene	Ave	1.247	1.268	0.3000	20.3	20.0	1.7	20.0
Bromoform	Ave	0.2693	0.2929	0.1000	21.7	20.0	8.7	20.0
Amyl acetate (mixed isomers)	QuaF		0.7910		12.3	20.0	-38.3*	20.0
Isopropylbenzene	Ave	2.165	2.237	0.1000	20.7	20.0	3.3	20.0
Bromobenzene	Ave	1.054	0.9163		17.4	20.0	-13.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-507466/4 Calibration Date: 03/31/2018 12:11

Instrument ID: CVOAMS2 Calib Start Date: 03/26/2018 04:03

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/26/2018 09:16

Lab File ID: B28115.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,2,2-Tetrachloroethane	Ave	0.8822	0.7758	0.3000	17.6	20.0	-12.1	20.0
N-Propylbenzene	Ave	4.891	4.349		17.8	20.0	-11.1	20.0
1,2,3-Trichloropropane	Ave	0.2242	0.2024		18.1	20.0	-9.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3292	0.2846		17.3	20.0	-13.6	20.0
2-Chlorotoluene	Ave	3.569	3.237		18.1	20.0	-9.3	20.0
4-Ethyltoluene	Ave	4.187	3.911		18.7	20.0	-6.6	20.0
1,3,5-Trimethylbenzene	Ave	3.559	3.247		18.2	20.0	-8.8	20.0
4-Chlorotoluene	Ave	3.425	3.159		18.4	20.0	-7.8	20.0
tert-Butylbenzene	Ave	3.052	2.678		17.5	20.0	-12.3	20.0
1,2,4-Trimethylbenzene	Ave	3.428	3.332		19.4	20.0	-2.8	20.0
sec-Butylbenzene	Ave	4.507	4.396		19.5	20.0	-2.5	20.0
1,3-Dichlorobenzene	Ave	1.971	1.956	0.6000	19.9	20.0	-0.7	20.0
4-Isopropyltoluene	Ave	3.614	3.483		19.3	20.0	-3.6	20.0
1,4-Dichlorobenzene	Ave	2.160	2.074	0.5000	19.2	20.0	-4.0	20.0
Benzyl chloride	Ave	0.2949	0.2897		19.6	20.0	-1.8	50.0
Indan	Ave	1.395	1.438		20.6	20.0	3.1	20.0
p-Diethylbenzene	Ave	2.215	2.230		20.1	20.0	0.7	20.0
n-Butylbenzene	Ave	2.141	2.179		20.4	20.0	1.8	20.0
1,2-Dichlorobenzene	Ave	1.904	1.906	0.4000	20.0	20.0	0.0	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.092	2.978		19.3	20.0	-3.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0999	0.1261	0.0500	25.2	20.0	26.2	50.0
1,3,5-Trichlorobenzene	Ave	1.622	1.669		20.6	20.0	2.9	20.0
1,2,4-Trichlorobenzene	Ave	1.201	1.277	0.2000	21.3	20.0	6.3	20.0
Hexachlorobutadiene	Ave	0.9660	1.003		20.8	20.0	3.8	20.0
Naphthalene	Ave	2.110	2.067		19.6	20.0	-2.1	50.0
1,2,3-Trichlorobenzene	QuaF		1.042		19.5	20.0	-2.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2813	0.2936		52.2	50.0	4.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2946	0.3343		56.7	50.0	13.5	20.0
Toluene-d8 (Surr)	Ave	1.492	1.552		52.0	50.0	4.0	20.0
4-Bromofluorobenzene	Ave	0.9046	0.7277		40.2	50.0	-19.6	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28115.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 31-Mar-2018 12:11:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0069609-002
Operator ID: Instrument ID: CVOAMS2
Sublist: chrom-8260S_2*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 16:31:53 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: xuyvo Date: 02-Apr-2018 16:31:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.113	1.113	0.000	99	111319	20.0	18.5	
2 Chloromethane	50	1.261	1.261	0.000	99	131040	20.0	23.8	
3 Vinyl chloride	62	1.341	1.341	0.000	97	112551	20.0	20.5	
4 Butadiene	54	1.341	1.341	0.000	93	96544	20.0	20.7	
5 Bromomethane	94	1.593	1.593	0.000	98	61731	20.0	18.5	
6 Chloroethane	64	1.650	1.650	0.000	99	51044	20.0	17.2	
7 Trichlorofluoromethane	101	1.821	1.821	0.000	96	124774	20.0	19.6	
8 Dichlorofluoromethane	67	1.833	1.833	0.000	97	158194	20.0	18.1	
9 Pentane	72	1.844	1.844	0.000	96	27333	40.0	36.7	
12 Ethyl ether	59	2.050	2.050	0.000	90	63743	20.0	21.3	
11 2-Methyl-1,3-butadiene	53	2.050	2.050	0.000	96	82592	20.0	19.7	
10 Ethanol	46	2.061	2.061	0.000	75	11498	800.0	638.6	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	97	69222	20.0	21.1	
16 Acrolein	56	2.210	2.210	0.000	96	119568	300.0	217.8	
14 1,1,2-Trichloro-1,2,2-trif	101	2.221	2.221	0.000	60	82549	20.0	20.2	
15 1,1-Dichloroethene	96	2.221	2.221	0.000	95	77659	20.0	20.5	
17 Acetone	43	2.347	2.347	0.000	85	87335	100.0	102.0	
18 Iodomethane	142	2.370	2.370	0.000	99	129277	20.0	20.2	
19 Carbon disulfide	76	2.393	2.393	0.000	100	299784	20.0	20.5	
20 Isopropyl alcohol	45	2.473	2.473	0.000	96	38065	200.0	178.0	
21 3-Chloro-1-propene	76	2.553	2.553	0.000	87	52130	20.0	20.1	
22 Methyl acetate	43	2.587	2.587	0.000	99	237030	100.0	109.0	
23 Methylene Chloride	84	2.678	2.678	0.000	98	87051	20.0	21.3	
* 24 TBA-d9 (IS)	65	2.724	2.724	0.000	0	264091	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.793	2.793	0.000	98	88173	200.0	195.3	
26 Methyl tert-butyl ether	73	2.850	2.850	0.000	97	184668	20.0	20.5	
27 trans-1,2-Dichloroethene	96	2.861	2.861	0.000	98	79119	20.0	20.1	
28 Acrylonitrile	53	2.964	2.964	0.000	95	223321	200.0	207.3	
29 Hexane	57	3.033	3.033	0.000	93	130670	20.0	19.1	
30 Isopropyl ether	45	3.273	3.273	0.000	97	294762	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 1,1-Dichloroethane	63	3.284	3.284	0.000	99	166192	20.0	20.6	
33 2-Chloro-1,3-butadiene	88	3.318	3.318	0.000	73	71915	20.0	20.2	
32 Vinyl acetate	86	3.330	3.330	0.000	100	18900	40.0	40.0	
34 Tert-butyl ethyl ether	59	3.604	3.604	0.000	87	226448	20.0	20.1	
35 2,2-Dichloropropane	79	3.799	3.799	0.000	95	40912	20.0	20.6	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	237049	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.833	3.833	0.000	95	84185	20.0	19.7	
38 2-Butanone (MEK)	72	3.890	3.890	0.000	96	29582	100.0	93.1	
39 Ethyl acetate	70	3.901	3.901	0.000	95	11020	40.0	36.7	
40 Propionitrile	54	4.027	4.027	0.000	97	78485	200.0	211.5	
41 Chlorobromomethane	128	4.084	4.084	0.000	98	36701	20.0	21.5	
42 Methacrylonitrile	67	4.130	4.130	0.000	95	228526	200.0	219.9	
43 Chloroform	83	4.153	4.153	0.000	98	149671	20.0	22.0	
44 Cyclohexane	84	4.256	4.256	0.000	95	114185	20.0	19.3	
45 1,1,1-Trichloroethane	97	4.279	4.279	0.000	97	124145	20.0	21.4	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	96	135409	50.0	52.2	
47 Carbon tetrachloride	117	4.404	4.404	0.000	97	104344	20.0	20.7	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	94	106844	20.0	19.6	
49 Benzene	78	4.667	4.667	0.000	97	316438	20.0	23.1	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.701	4.701	0.000	0	154163	50.0	56.7	
50 Isobutyl alcohol	42	4.713	4.713	0.000	1	81867	500.0	700.7	a
52 Tert-amyl methyl ether	73	4.770	4.770	0.000	93	224841	20.0	20.4	
53 1,2-Dichloroethane	62	4.781	4.781	0.000	93	96975	20.0	21.3	
54 n-Heptane	57	4.873	4.873	0.000	95	76510	20.0	20.4	
* 55 Fluorobenzene	96	4.999	4.999	0.000	98	461194	50.0	50.0	
56 Trichloroethene	95	5.399	5.399	0.000	96	75492	20.0	19.9	
57 n-Butanol	43	5.513	5.513	0.000	51	21533	500.0	318.2	
58 Methylcyclohexane	83	5.513	5.513	0.000	87	126841	20.0	18.3	
59 Ethyl acrylate	55	5.616	5.616	0.000	97	56048	20.0	16.6	
60 1,2-Dichloropropane	63	5.730	5.730	0.000	94	87628	20.0	21.4	
* 61 1,4-Dioxane-d8	96	5.844	5.844	0.000	0	16990	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	95	39413	20.0	21.0	
63 1,4-Dioxane	88	5.902	5.902	0.000	30	10037	400.0	375.6	
64 Dichlorobromomethane	83	6.073	6.073	0.000	99	87152	20.0	19.7	
65 2-Nitropropane	41	6.485	6.485	0.000	98	25817	40.0	41.7	
66 2-Chloroethyl vinyl ether	63	6.507	6.507	0.000	96	25983	20.0	16.9	
67 Epichlorohydrin	57	6.610	6.610	0.000	91	83630	400.0	330.7	a
68 cis-1,3-Dichloropropene	75	6.656	6.656	0.000	97	92076	20.0	19.3	
69 4-Methyl-2-pentanone (MIBK	43	6.873	6.873	0.000	97	258050	100.0	82.0	
$ 70 Toluene-d8 (Surr)	98	6.907	6.907	0.000	99	482095	50.0	52.0	
71 Toluene	91	6.987	6.987	0.000	93	255504	20.0	19.1	
72 trans-1,3-Dichloropropene	75	7.365	7.365	0.000	98	72797	20.0	19.3	
73 1,1,2-Trichloroethane	83	7.547	7.547	0.000	75	40421	20.0	19.4	
74 Tetrachloroethene	166	7.547	7.547	0.000	92	67741	20.0	19.5	
75 1,3-Dichloropropane	76	7.708	7.708	0.000	95	74983	20.0	19.1	
76 2-Hexanone	43	7.799	7.799	0.000	99	129118	100.0	59.0	
77 Chlorodibromomethane	129	7.890	7.890	0.000	97	54931	20.0	21.9	
78 Ethylene Dibromide	107	7.993	7.993	0.000	99	39173	20.0	19.1	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	88	310562	50.0	50.0	
80 Chlorobenzene	112	8.428	8.428	0.000	93	162293	20.0	20.0	
81 Ethylbenzene	106	8.508	8.508	0.000	99	85368	20.0	19.4	
82 1,1,1,2-Tetrachloroethane	131	8.519	8.519	0.000	95	62030	20.0	21.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	100027	20.0	19.1	
84 o-Xylene	106	8.953	8.953	0.000	93	97305	20.0	19.1	
85 Styrene	104	8.988	8.988	0.000	93	157540	20.0	20.3	
86 Bromoform	173	9.148	9.148	0.000	97	36380	20.0	21.7	
87 Amyl acetate (mixed isomer	43	9.171	9.171	0.000	92	62413	20.0	12.3	
88 Isopropylbenzene	105	9.251	9.251	0.000	97	277879	20.0	20.7	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	93	143547	50.0	40.2	
90 Bromobenzene	156	9.513	9.513	0.000	96	72300	20.0	17.4	
91 1,1,2,2-Tetrachloroethane	83	9.571	9.571	0.000	96	61216	20.0	17.6	
92 N-Propylbenzene	91	9.571	9.571	0.000	99	343119	20.0	17.8	
93 1,2,3-Trichloropropane	110	9.605	9.605	0.000	97	15972	20.0	18.1	
95 trans-1,4-Dichloro-2-buten	53	9.628	9.628	0.000	80	22456	20.0	17.3	
94 2-Chlorotoluene	91	9.662	9.662	0.000	96	255394	20.0	18.1	
96 4-Ethyltoluene	105	9.662	9.662	0.000	98	308591	20.0	18.7	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	93	256185	20.0	18.2	
98 4-Chlorotoluene	91	9.753	9.753	0.000	99	249257	20.0	18.4	
99 tert-Butylbenzene	119	9.948	9.948	0.000	92	211270	20.0	17.5	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	98	262923	20.0	19.4	
101 sec-Butylbenzene	105	10.119	10.119	0.000	98	346871	20.0	19.5	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	74	154336	20.0	19.9	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	96	274817	20.0	19.3	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	95	197262	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.291	10.291	0.000	92	163615	20.0	19.2	
106 Benzyl chloride	126	10.405	10.405	0.000	98	22855	20.0	19.6	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	93	265205	20.0	20.6	
108 p-Diethylbenzene	119	10.496	10.496	0.000	92	175927	20.0	20.1	
109 n-Butylbenzene	92	10.519	10.519	0.000	97	171910	20.0	20.4	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	94	150376	20.0	20.0	
111 1,2,4,5-Tetramethylbenzene	119	11.056	11.056	0.000	97	235004	20.0	19.3	
112 1,2-Dibromo-3-Chloropropan	155	11.136	11.136	0.000	93	9948	20.0	25.2	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	97	131710	20.0	20.6	
114 1,2,4-Trichlorobenzene	180	11.662	11.662	0.000	94	100732	20.0	21.3	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	97	79109	20.0	20.8	
116 Naphthalene	128	11.834	11.834	0.000	99	163064	20.0	19.6	
117 1,2,3-Trichlorobenzene	180	12.005	12.005	0.000	94	82186	20.0	19.5	
S 118 1,2-Dichloroethene, Total	100				0		40.0	39.7	
S 119 1,3-Dichloropropene, Total	100				0		40.0	38.6	
S 120 Xylenes, Total	100				0		40.0	38.2	
S 121 Total BTEX	1				0		100.0	99.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00075	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00253	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 02-Apr-2018 16:31:56 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28115.D

Injection Date: 31-Mar-2018 12:11:30 Instrument ID: CVOAMS2 Operator ID:

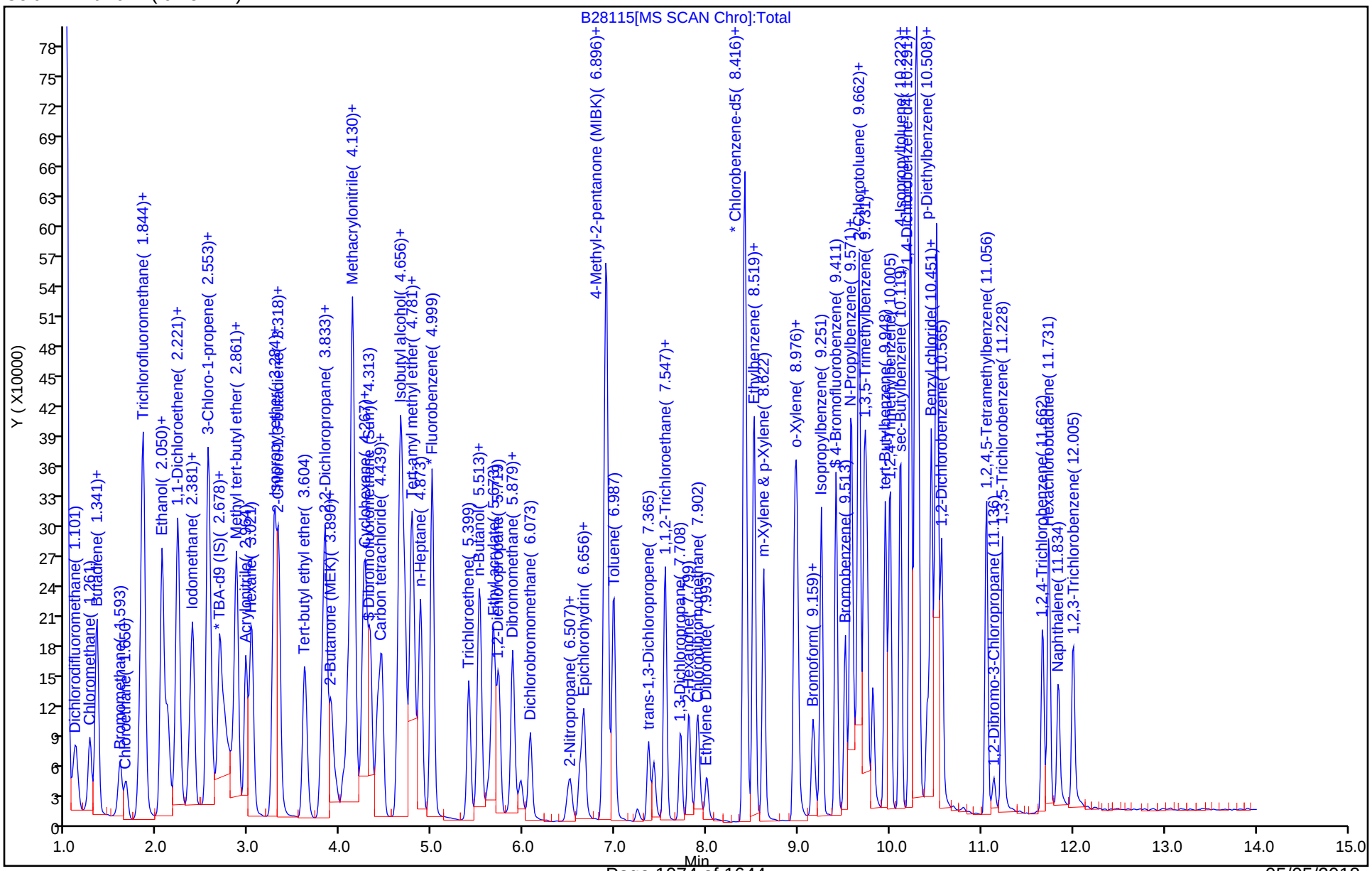
Lims ID: CCVIS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

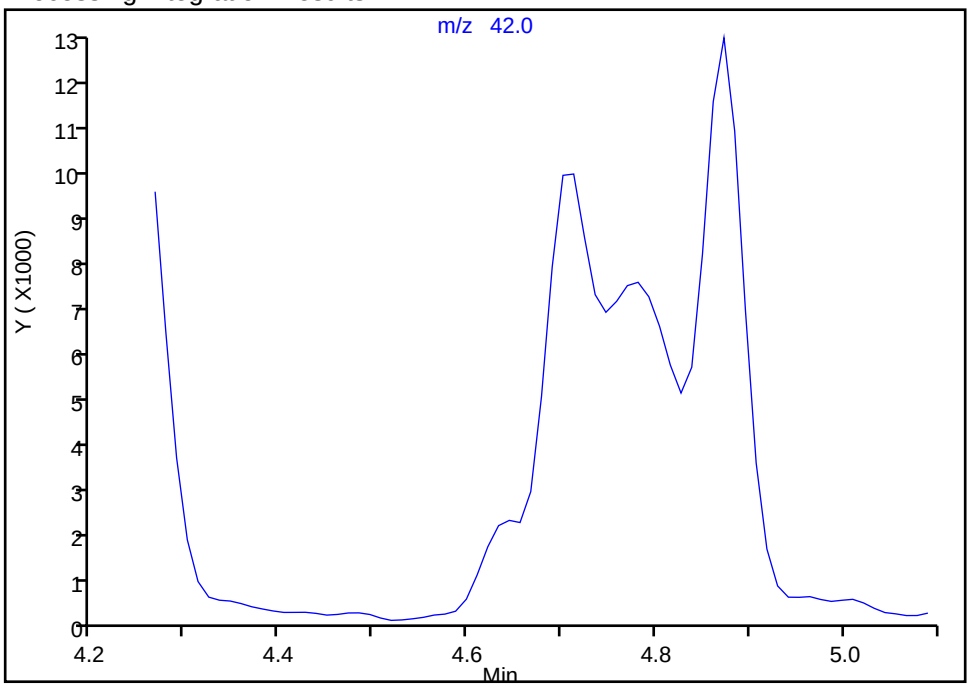
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28115.D
Injection Date: 31-Mar-2018 12:11:30 Instrument ID: CVOAMS2
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

50 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

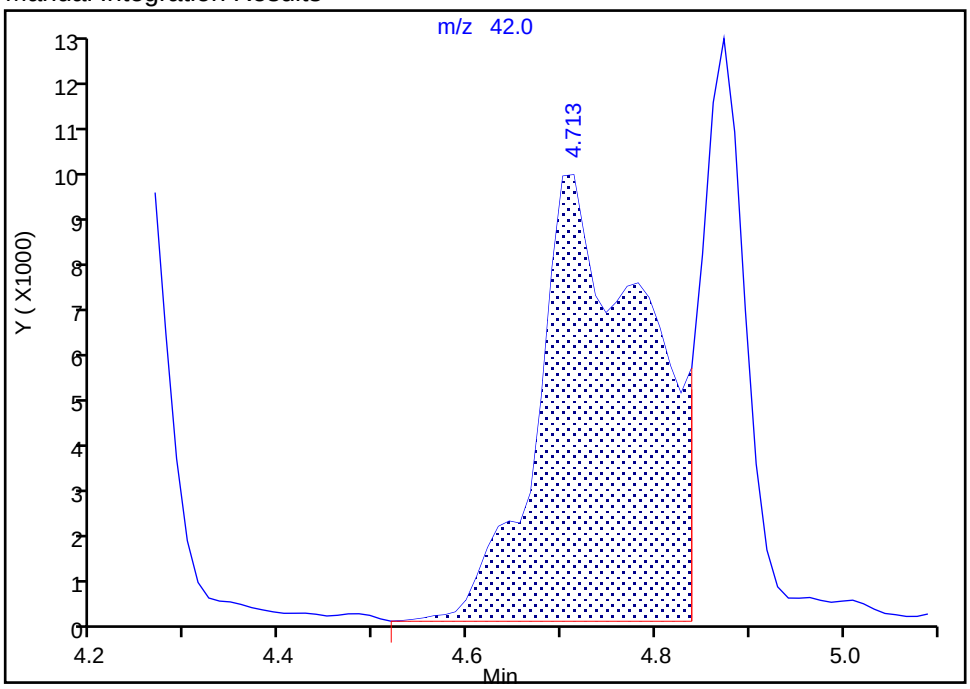
Not Detected
Expected RT: 4.71

Processing Integration Results



Manual Integration Results

RT: 4.71
Area: 81867
Amount: 700.6840
Amount Units: ug/l



Reviewer: kaewink, 02-Apr-2018 10:18:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

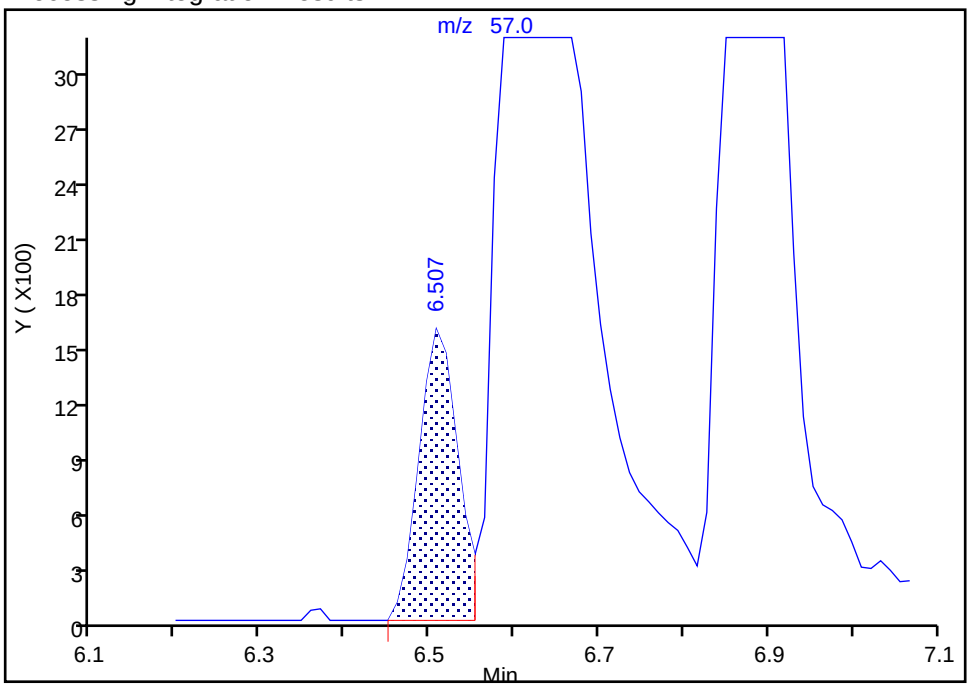
Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28115.D
Injection Date: 31-Mar-2018 12:11:30 Instrument ID: CVOAMS2
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

67 Epichlorohydrin, CAS: 106-89-8

Signal: 1

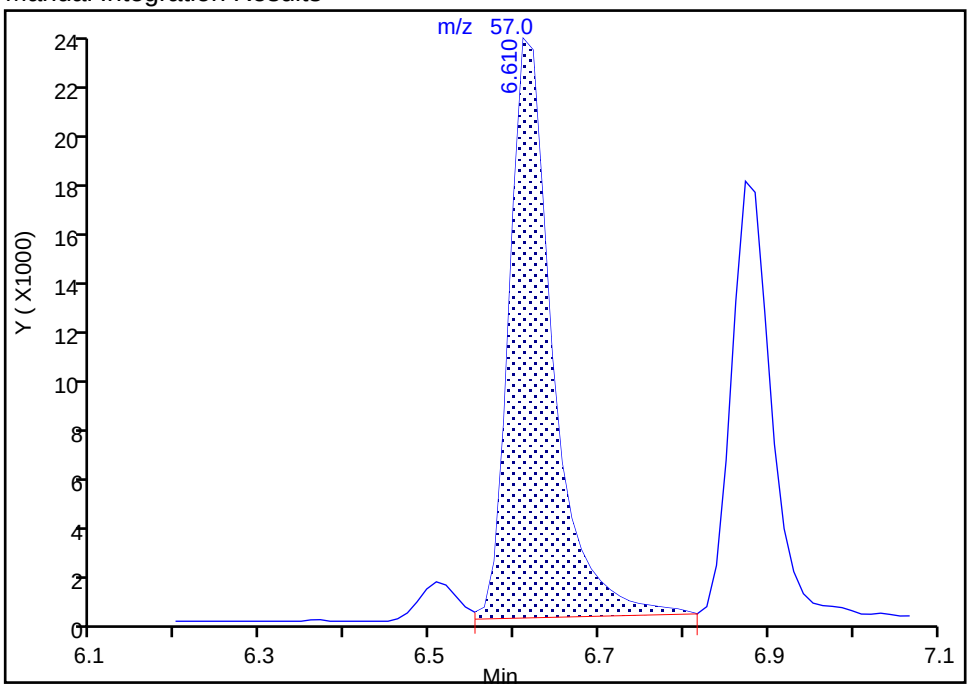
Processing Integration Results

RT: 6.51
Area: 5150
Amount: 20.362275
Amount Units: ug/l



Manual Integration Results

RT: 6.61
Area: 83630
Amount: 330.6596
Amount Units: ug/l



Reviewer: xuyvo, 02-Apr-2018 16:30:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510106/2 Calibration Date: 04/11/2018 08:49

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48510.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.2070		18.9	20.0	-5.5	20.0
Dichlorodifluoromethane	Lin2		0.5801	0.1000	15.4	20.0	-22.9*	20.0
Chloromethane	Ave	0.8596	0.7991	0.1000	18.6	20.0	-7.0	20.0
Vinyl chloride	Ave	0.7509	0.6311	0.1000	16.8	20.0	-16.0	20.0
Butadiene	Lin2		0.5140		16.8	20.0	-16.0	20.0
Bromomethane	Ave	0.3247	0.3054	0.1000	18.8	20.0	-6.0	50.0
Chloroethane	Ave	0.3314	0.3128	0.1000	18.9	20.0	-5.6	50.0
Trichlorofluoromethane	Ave	0.5870	0.4998	0.1000	17.0	20.0	-14.9	20.0
Dichlorofluoromethane	Ave	0.8385	0.8411		20.1	20.0	0.3	20.0
Pentane	Ave	0.0733	0.0725		39.5	40.0	-1.2	20.0
Ethanol	QuaF		0.0525		967	800	20.9	50.0
Ethyl ether	Ave	0.2834	0.2880		20.3	20.0	1.6	20.0
2-Methyl-1,3-butadiene	Ave	0.3138	0.3399		21.7	20.0	8.3	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3034	0.2901		19.1	20.0	-4.4	20.0
Acrolein	Ave	1.299	1.173		271	300	-9.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3771	0.3526	0.1000	18.7	20.0	-6.5	20.0
1,1-Dichloroethene	Ave	0.3466	0.3345	0.1000	19.3	20.0	-3.5	20.0
Acetone	Ave	1.035	0.8564	0.0500	82.7	100	-17.3	50.0
Iodomethane	Ave	0.6306	0.5767		18.3	20.0	-8.6	20.0
Carbon disulfide	Ave	1.353	1.274	0.1000	18.8	20.0	-5.8	50.0
Isopropyl alcohol	Ave	0.6019	0.5917		197	200	-1.7	50.0
Allyl chloride	Ave	0.2103	0.2114		20.1	20.0	0.5	20.0
Cyclopentene	Ave	0.8229	0.8584		20.9	20.0	4.3	20.0
Methyl acetate	Ave	0.2068	0.2147	0.1000	104	100	3.8	20.0
Acetonitrile	Ave	0.8025	0.9481		236	200	18.1	20.0
Methylene Chloride	Ave	0.4003	0.3829	0.1000	19.1	20.0	-4.3	20.0
2-Methyl-2-propanol	Ave	1.019	0.9867		194	200	-3.2	50.0
Methyl tert-butyl ether	Ave	0.8926	0.8502	0.1000	19.0	20.0	-4.8	20.0
trans-1,2-Dichloroethene	Ave	0.3400	0.3290	0.1000	19.4	20.0	-3.2	20.0
Acrylonitrile	Ave	2.754	3.073		223	200	11.6	20.0
Hexane	Ave	0.4505	0.4824		21.4	20.0	7.1	20.0
Isopropyl ether	Ave	1.008	1.067		21.2	20.0	5.8	20.0
1,1-Dichloroethane	Ave	0.6107	0.6091	0.2000	19.9	20.0	-0.3	20.0
Vinyl acetate	Ave	0.0543	0.0492		36.3	40.0	-9.3	20.0
2-Chloro-1,3-butadiene	Ave	0.2794	0.2688		19.2	20.0	-3.8	20.0
Tert-butyl ethyl ether	Ave	0.9302	0.9163		19.7	20.0	-1.5	20.0
2,2-Dichloropropane	Ave	0.1602	0.1497		18.7	20.0	-6.5	20.0
cis-1,2-Dichloroethene	Lin2		0.3339	0.1000	17.6	20.0	-12.2	20.0
2-Butanone (MEK)	Ave	0.3149	0.2480	0.0500	78.7	100	-21.3	50.0
Ethyl acetate	Ave	0.2745	0.2237		32.6	40.0	-18.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510106/2 Calibration Date: 04/11/2018 08:49

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48510.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2112	0.2031		19.2	20.0	-3.8	20.0
Propionitrile	Ave	0.0372	0.0363		195	200	-2.3	20.0
Chlorobromomethane	Ave	0.1533	0.1348		17.6	20.0	-12.1	20.0
Tetrahydrofuran	Ave	0.3322	0.2877		34.6	40.0	-13.4	20.0
Methacrylonitrile	Ave	0.1088	0.0988		182	200	-9.2	20.0
Chloroform	Ave	0.5613	0.5166	0.2000	18.4	20.0	-8.0	20.0
Cyclohexane	Ave	0.4677	0.4529	0.1000	19.4	20.0	-3.2	50.0
1,1,1-Trichloroethane	Ave	0.4655	0.4233	0.1000	18.2	20.0	-9.0	20.0
Carbon tetrachloride	Ave	0.3635	0.3304	0.1000	18.2	20.0	-9.1	20.0
1,1-Dichloropropene	Ave	0.3808	0.3715		19.5	20.0	-2.4	20.0
Isobutyl alcohol	Ave	0.5750	0.5778		502	500	0.5	50.0
Benzene	Ave	1.614	1.719	0.5000	21.3	20.0	6.5	20.0
Isopropyl acetate	Ave	0.8688	0.8529		19.6	20.0	-1.8	20.0
Tert-amyl methyl ether	Ave	0.2553	0.2262		17.7	20.0	-11.4	20.0
1,2-Dichloroethane	Ave	0.3873	0.3478	0.1000	18.0	20.0	-10.2	20.0
n-Heptane	Ave	0.2376	0.2460		20.7	20.0	3.5	20.0
n-Butanol	Ave	0.1882	0.1749		465	500	-7.1	50.0
Trichloroethene	Ave	0.2782	0.2511	0.2000	18.0	20.0	-9.8	20.0
Methylcyclohexane	Ave	0.5176	0.5003	0.1000	19.3	20.0	-3.4	50.0
Ethyl acrylate	Lin2		0.0170		16.2	20.0	-19.2	20.0
1,2-Dichloropropane	Ave	0.2852	0.2744	0.1000	19.2	20.0	-3.8	20.0
Methyl methacrylate	Ave	0.0583	0.0500		34.3	40.0	-14.2	20.0
1,4-Dioxane	Ave	1.041	1.164		447	400	11.8	50.0
Dibromomethane	Ave	0.1782	0.1528		17.1	20.0	-14.3	20.0
n-Propyl acetate	Ave	0.3034	0.2989		19.7	20.0	-1.5	20.0
Dichlorobromomethane	Ave	0.3446	0.2994	0.2000	17.4	20.0	-13.1	20.0
2-Nitropropane	Ave	0.0647	0.0501		30.9	40.0	-22.7*	20.0
2-Chloroethyl vinyl ether	Ave	0.1115	0.1125		20.2	20.0	0.9	20.0
Epichlorohydrin	Ave	0.2126	0.1909		359	400	-10.2	20.0
cis-1,3-Dichloropropene	Ave	0.5453	0.5739	0.2000	21.0	20.0	5.2	50.0
4-Methyl-2-pentanone (MIBK)	Ave	2.133	1.916	0.0500	89.8	100	-10.2	50.0
Toluene	Ave	1.532	1.596	0.4000	20.8	20.0	4.2	20.0
trans-1,3-Dichloropropene	Ave	0.4433	0.4588	0.1000	20.7	20.0	3.5	50.0
Ethyl methacrylate	Ave	0.2786	0.2529		18.2	20.0	-9.2	20.0
1,1,2-Trichloroethane	Ave	0.2478	0.2564	0.1000	20.7	20.0	3.5	20.0
Tetrachloroethene	Ave	0.3249	0.3249	0.2000	20.0	20.0	0.0	20.0
1,3-Dichloropropane	Ave	0.4497	0.4807		21.4	20.0	6.9	20.0
2-Hexanone	Ave	1.312	1.147	0.0500	87.4	100	-12.6	50.0
n-Butyl acetate	Ave	0.0821	0.0808		19.7	20.0	-1.5	20.0
Chlorodibromomethane	Ave	0.3016	0.2765	0.1000	18.3	20.0	-8.3	50.0
Ethylene Dibromide	Ave	0.2665	0.2587	0.1000	19.4	20.0	-2.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510106/2 Calibration Date: 04/11/2018 08:49

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48510.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	0.8706	0.8934	0.5000	20.5	20.0	2.6	20.0
Ethylbenzene	Ave	0.4923	0.5099	0.1000	20.7	20.0	3.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3472	0.3189		18.4	20.0	-8.2	20.0
m-Xylene & p-Xylene	Ave	0.5939	0.6213	0.1000	20.9	20.0	4.6	20.0
n-Butyl acrylate	Ave	0.2204	0.2318		21.0	20.0	5.2	20.0
o-Xylene	Ave	0.6175	0.6361	0.3000	20.6	20.0	3.0	20.0
Styrene	Ave	0.9593	0.9759	0.3000	20.3	20.0	1.7	20.0
Amyl acetate (mixed isomers)	Ave	0.999	1.141		22.8	20.0	14.1	20.0
Bromoform	Ave	0.1859	0.1529	0.1000	16.5	20.0	-17.7	20.0
Isopropylbenzene	Ave	1.635	1.687	0.1000	20.6	20.0	3.2	20.0
Bromobenzene	Ave	0.6777	0.6931		20.5	20.0	2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7617	0.8086	0.3000	21.2	20.0	6.2	20.0
N-Propylbenzene	Ave	3.743	4.203		22.5	20.0	12.3	20.0
1,2,3-Trichloropropane	Ave	0.1935	0.1994		20.6	20.0	3.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1839	0.2147		23.3	20.0	16.7	20.0
4-Ethyltoluene	Ave	3.081	3.421		22.2	20.0	11.0	20.0
2-Chlorotoluene	Ave	2.598	2.827		21.8	20.0	8.8	20.0
1,3,5-Trimethylbenzene	Ave	2.622	2.845		21.7	20.0	8.5	20.0
4-Chlorotoluene	Ave	2.162	2.359		21.8	20.0	9.1	20.0
Butyl Methacrylate	Ave	0.8911	0.9133		20.5	20.0	2.5	20.0
tert-Butylbenzene	Ave	2.077	2.192		21.1	20.0	5.5	20.0
1,2,4-Trimethylbenzene	Ave	2.736	2.890		21.1	20.0	5.6	20.0
sec-Butylbenzene	Ave	3.463	3.774		21.8	20.0	9.0	20.0
4-Isopropyltoluene	Ave	2.832	3.035		21.4	20.0	7.2	20.0
1,3-Dichlorobenzene	Ave	1.355	1.395	0.6000	20.6	20.0	3.0	20.0
1,4-Dichlorobenzene	Ave	1.376	1.441	0.5000	20.9	20.0	4.7	20.0
Benzyl chloride	Ave	0.2460	0.2382		19.4	20.0	-3.2	50.0
Indan	Ave	1.099	0.9362		17.0	20.0	-14.8	20.0
p-Diethylbenzene	Ave	1.710	1.888		22.1	20.0	10.4	20.0
n-Butylbenzene	Ave	1.601	1.825		22.8	20.0	14.0	20.0
1,2-Dichlorobenzene	Ave	1.360	1.384	0.4000	20.4	20.0	1.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.627	2.770		21.1	20.0	5.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1423	0.1296	0.0500	18.2	20.0	-9.0	50.0
1,3,5-Trichlorobenzene	Ave	1.059	1.089		20.6	20.0	2.8	20.0
1,2,4-Trichlorobenzene	Ave	0.9630	0.999	0.2000	20.7	20.0	3.7	20.0
Hexachlorobutadiene	Ave	0.4524	0.4510		19.9	20.0	-0.3	20.0
Naphthalene	Ave	2.343	2.376		20.3	20.0	1.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9267	0.9229		19.9	20.0	-0.4	20.0
Dibromofluoromethane (Surr)	Ave	0.3437	0.2822		41.0	50.0	-17.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3604	0.3110		43.1	50.0	-13.7	20.0
Toluene-d8 (Surr)	Ave	1.542	1.545		50.1	50.0	0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510106/2 Calibration Date: 04/11/2018 08:49

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48510.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.7776	0.8086		52.0	50.0	4.0	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48510.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 11-Apr-2018 08:49:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0070170-002
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Apr-2018 13:55:13 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: martineze Date: 11-Apr-2018 09:30:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.521	1.521	0.000	64	67209	20.0	18.9	a
2 Dichlorodifluoromethane	85	1.558	1.558	0.000	99	188390	20.0	15.4	
3 Chloromethane	50	1.765	1.765	0.000	99	259498	20.0	18.6	
4 Vinyl chloride	62	1.862	1.862	0.000	97	204945	20.0	16.8	
5 Butadiene	54	1.875	1.875	0.000	96	166910	20.0	16.8	
6 Bromomethane	94	2.210	2.210	0.000	98	99165	20.0	18.8	
7 Chloroethane	64	2.289	2.289	0.000	99	101582	20.0	18.9	
9 Trichlorofluoromethane	101	2.509	2.509	0.000	97	162312	20.0	17.0	
8 Dichlorofluoromethane	67	2.521	2.521	0.000	98	273158	20.0	20.1	
10 Pentane	72	2.527	2.527	0.000	97	47068	40.0	39.5	
12 Ethanol	46	2.765	2.765	0.000	83	23783	800.0	967.1	
11 Ethyl ether	59	2.765	2.765	0.000	93	93513	20.0	20.3	
13 2-Methyl-1,3-butadiene	53	2.783	2.783	0.000	98	110392	20.0	21.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.862	2.862	0.000	97	94203	20.0	19.1	
16 Acrolein	56	2.972	2.972	0.000	98	199217	300.0	270.8	
15 1,1,2-Trichloro-1,2,2-trif	101	3.002	3.002	0.000	93	114510	20.0	18.7	
17 1,1-Dichloroethene	96	3.009	3.009	0.000	95	108624	20.0	19.3	
18 Acetone	43	3.124	3.124	0.000	86	156042	100.0	82.7	
19 Iodomethane	142	3.185	3.185	0.000	100	187283	20.0	18.3	
20 Carbon disulfide	76	3.222	3.222	0.000	100	413753	20.0	18.8	
21 Isopropyl alcohol	45	3.246	3.246	0.000	99	67015	200.0	196.6	
22 3-Chloro-1-propene	76	3.393	3.393	0.000	87	68640	20.0	20.1	
23 Cyclopentene	67	3.411	3.411	0.000	95	278750	20.0	20.9	
24 Methyl acetate	43	3.417	3.417	0.000	100	348582	100.0	103.8	
25 Acetonitrile	41	3.484	3.484	0.000	98	107370	200.0	236.3	
26 Methylene Chloride	84	3.551	3.551	0.000	97	124358	20.0	19.1	
* 27 TBA-d9 (IS)	65	3.569	3.569	0.000	44	566249	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.655	3.655	0.000	98	111744	200.0	193.7	
29 Methyl tert-butyl ether	73	3.758	3.758	0.000	97	276086	20.0	19.0	
30 trans-1,2-Dichloroethene	96	3.777	3.777	0.000	99	106857	20.0	19.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.874	3.874	0.000	94	348054	200.0	223.2	
32 Hexane	57	3.972	3.972	0.000	93	156661	20.0	21.4	
33 Isopropyl ether	45	4.246	4.246	0.000	99	346503	20.0	21.2	
34 1,1-Dichloroethane	63	4.271	4.271	0.000	99	197789	20.0	19.9	
35 Vinyl acetate	86	4.301	4.301	0.000	100	31966	40.0	36.3	
36 2-Chloro-1,3-butadiene	88	4.319	4.319	0.000	92	87282	20.0	19.2	
37 Tert-butyl ethyl ether	59	4.636	4.636	0.000	88	297577	20.0	19.7	
* 38 2-Butanone-d5	46	4.868	4.868	0.000	0	455543	250.0	250.0	
39 2,2-Dichloropropane	79	4.880	4.880	0.000	91	48622	20.0	18.7	
40 cis-1,2-Dichloroethene	96	4.911	4.911	0.000	94	108432	20.0	17.6	
41 2-Butanone (MEK)	72	4.935	4.935	0.000	98	45182	100.0	78.7	
42 Ethyl acetate	70	4.953	4.953	0.000	96	16302	40.0	32.6	
43 Methyl acrylate	55	5.008	5.008	0.000	99	65963	20.0	19.2	
44 Propionitrile	54	5.100	5.100	0.000	98	118023	200.0	195.4	
45 Tetrahydrofuran	72	5.185	5.185	0.000	91	20966	40.0	34.6	
46 Chlorobromomethane	128	5.185	5.185	0.000	97	43778	20.0	17.6	
47 Methacrylonitrile	67	5.222	5.222	0.000	93	320886	200.0	181.6	
48 Chloroform	83	5.264	5.264	0.000	98	167776	20.0	18.4	
49 Cyclohexane	84	5.411	5.411	0.000	94	147067	20.0	19.4	
50 1,1,1-Trichloroethane	97	5.429	5.429	0.000	97	137479	20.0	18.2	
$ 51 Dibromofluoromethane (Surr	113	5.453	5.453	0.000	95	229078	50.0	41.0	
52 Carbon tetrachloride	117	5.575	5.575	0.000	96	107307	20.0	18.2	
53 1,1-Dichloropropene	75	5.612	5.612	0.000	95	120647	20.0	19.5	
54 Isobutyl alcohol	43	5.813	5.813	0.000	91	163594	500.0	502.4	
55 Benzene	78	5.856	5.856	0.000	98	353352	20.0	21.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.880	5.880	0.000	97	252521	50.0	43.1	
57 Tert-amyl methyl ether	87	5.959	5.959	0.000	92	73457	20.0	17.7	
58 Isopropyl acetate	43	5.959	5.959	0.000	97	276979	20.0	19.6	
59 1,2-Dichloroethane	62	5.978	5.978	0.000	95	112933	20.0	18.0	
60 n-Heptane	57	6.069	6.069	0.000	96	79880	20.0	20.7	
* 61 Fluorobenzene	96	6.221	6.221	0.000	98	811877	50.0	50.0	
62 n-Butanol	56	6.636	6.636	0.000	88	49524	500.0	464.7	
63 Trichloroethene	95	6.660	6.660	0.000	95	81548	20.0	18.0	
64 Methylcyclohexane	83	6.807	6.807	0.000	94	162455	20.0	19.3	
65 Ethyl acrylate	73	6.831	6.831	0.000	98	5509	20.0	16.2	
66 1,2-Dichloropropane	63	7.002	7.002	0.000	91	89121	20.0	19.2	
* 67 1,4-Dioxane-d8	96	7.069	7.069	0.000	0	33224	1000.0	1000.0	
68 Methyl methacrylate	100	7.105	7.105	0.000	92	32475	40.0	34.3	
69 1,4-Dioxane	88	7.130	7.130	0.000	90	15463	400.0	447.2	
70 Dibromomethane	93	7.142	7.142	0.000	91	49632	20.0	17.1	
71 n-Propyl acetate	43	7.172	7.172	0.000	98	97071	20.0	19.7	
72 Dichlorobromomethane	83	7.307	7.307	0.000	99	97238	20.0	17.4	
73 2-Nitropropane	41	7.642	7.642	0.000	99	32508	40.0	30.9	
74 2-Chloroethyl vinyl ether	63	7.648	7.648	0.000	95	36531	20.0	20.2	
75 Epichlorohydrin	57	7.745	7.745	0.000	99	139170	400.0	359.2	
76 cis-1,3-Dichloropropene	75	7.794	7.794	0.000	95	117952	20.0	21.0	
77 4-Methyl-2-pentanone (MIBK	43	7.941	7.941	0.000	97	349039	100.0	89.8	
$ 78 Toluene-d8 (Surr)	98	8.008	8.008	0.000	98	793598	50.0	50.1	
79 Toluene	91	8.075	8.075	0.000	93	328050	20.0	20.8	
80 trans-1,3-Dichloropropene	75	8.367	8.367	0.000	98	94285	20.0	20.7	
81 Ethyl methacrylate	69	8.392	8.392	0.000	90	82123	20.0	18.2	
82 1,1,2-Trichloroethane	83	8.532	8.532	0.000	95	52686	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.568	8.568	0.000	94	66767	20.0	20.0	
84 1,3-Dichloropropane	76	8.690	8.690	0.000	93	98802	20.0	21.4	
85 2-Hexanone	43	8.739	8.739	0.000	97	208918	100.0	87.4	
86 n-Butyl acetate	73	8.818	8.818	0.000	99	16614	20.0	19.7	
87 Chlorodibromomethane	129	8.867	8.867	0.000	98	56827	20.0	18.3	
88 Ethylene Dibromide	107	8.977	8.977	0.000	98	53163	20.0	19.4	
* 89 Chlorobenzene-d5	117	9.349	9.349	0.000	90	513816	50.0	50.0	
90 Chlorobenzene	112	9.373	9.373	0.000	94	183607	20.0	20.5	
91 Ethylbenzene	106	9.434	9.434	0.000	99	104791	20.0	20.7	
92 1,1,1,2-Tetrachloroethane	131	9.452	9.452	0.000	94	65537	20.0	18.4	
93 m-Xylene & p-Xylene	106	9.538	9.538	0.000	98	127689	20.0	20.9	
94 n-Butyl acrylate	73	9.830	9.830	0.000	97	47647	20.0	21.0	
95 o-Xylene	106	9.861	9.861	0.000	93	130730	20.0	20.6	
96 Styrene	104	9.885	9.885	0.000	94	200565	20.0	20.3	
97 Amyl acetate (mixed isomer	43	10.007	10.007	0.000	90	115039	20.0	22.8	
98 Bromoform	173	10.062	10.062	0.000	94	31432	20.0	16.5	
99 Isopropylbenzene	105	10.141	10.141	0.000	96	346713	20.0	20.6	
$ 100 4-Bromofluorobenzene	174	10.306	10.306	0.000	0	203837	50.0	52.0	
101 Bromobenzene	156	10.422	10.422	0.000	96	69896	20.0	20.5	
102 1,1,2,2-Tetrachloroethane	83	10.434	10.434	0.000	99	81540	20.0	21.2	
103 N-Propylbenzene	91	10.458	10.458	0.000	98	423849	20.0	22.5	
104 1,2,3-Trichloropropane	110	10.477	10.477	0.000	95	20109	20.0	20.6	
105 trans-1,4-Dichloro-2-buten	53	10.483	10.483	0.000	77	21649	20.0	23.3	
106 4-Ethyltoluene	105	10.544	10.544	0.000	98	344988	20.0	22.2	
107 2-Chlorotoluene	91	10.556	10.556	0.000	96	285120	20.0	21.8	
108 1,3,5-Trimethylbenzene	105	10.599	10.599	0.000	92	286880	20.0	21.7	
109 4-Chlorotoluene	91	10.641	10.641	0.000	98	237902	20.0	21.8	
110 Butyl Methacrylate	87	10.653	10.653	0.000	93	92100	20.0	20.5	
111 tert-Butylbenzene	119	10.830	10.830	0.000	92	221003	20.0	21.1	
112 1,2,4-Trimethylbenzene	105	10.879	10.879	0.000	98	291392	20.0	21.1	
113 sec-Butylbenzene	105	10.995	10.995	0.000	99	380562	20.0	21.8	
114 4-Isopropyltoluene	119	11.098	11.098	0.000	97	306062	20.0	21.4	
115 1,3-Dichlorobenzene	146	11.117	11.117	0.000	94	140665	20.0	20.6	
* 116 1,4-Dichlorobenzene-d4	152	11.172	11.172	0.000	96	252099	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.190	11.190	0.000	93	145301	20.0	20.9	
118 Benzyl chloride	126	11.294	11.294	0.000	97	24020	20.0	19.4	
119 2,3-Dihydroindene	117	11.348	11.348	0.000	94	304016	20.0	17.0	
120 p-Diethylbenzene	119	11.373	11.373	0.000	91	190340	20.0	22.1	
121 n-Butylbenzene	92	11.397	11.397	0.000	97	183985	20.0	22.8	
122 1,2-Dichlorobenzene	146	11.470	11.470	0.000	94	139591	20.0	20.4	
123 1,2,4,5-Tetramethylbenzene	119	12.007	12.007	0.000	97	279298	20.0	21.1	
124 1,2-Dibromo-3-Chloropropan	157	12.123	12.123	0.000	92	13066	20.0	18.2	
125 1,3,5-Trichlorobenzene	180	12.257	12.257	0.000	96	109809	20.0	20.6	
126 1,2,4-Trichlorobenzene	180	12.891	12.891	0.000	94	100693	20.0	20.7	
127 Hexachlorobutadiene	225	13.001	13.001	0.000	91	45475	20.0	19.9	
128 Naphthalene	128	13.183	13.183	0.000	99	239606	20.0	20.3	
129 1,2,3-Trichlorobenzene	180	13.470	13.470	0.000	93	93066	20.0	19.9	
S 130 1,2-Dichloroethene, Total	100				0		40.0	36.9	
S 131 1,3-Dichloropropene, Total	100				0		40.0	41.7	
S 132 Xylenes, Total	100				0		40.0	41.5	
S 133 Total BTEX	1				0		100.0	104.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 11-Apr-2018 13:55:14 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48510.D

Injection Date: 11-Apr-2018 08:49:30 Instrument ID: CVOAMS4 Operator ID:

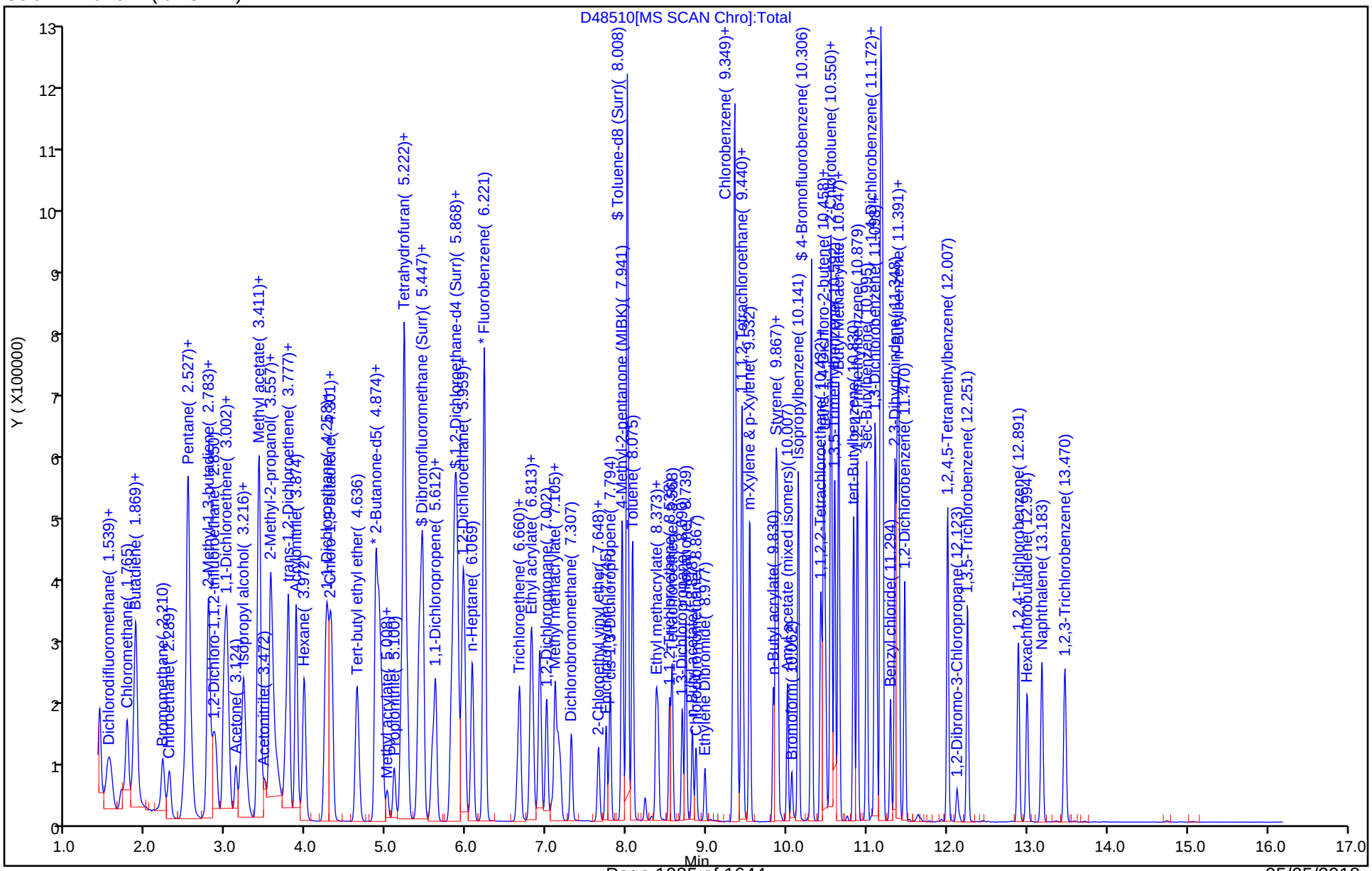
Lims ID: CCVIS Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

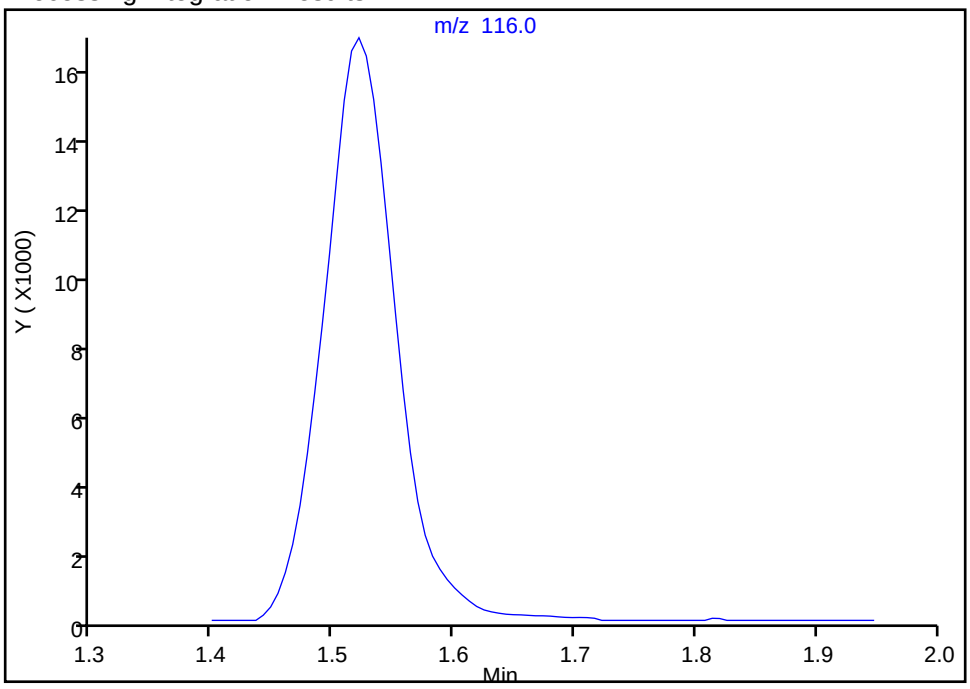
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48510.D
Injection Date: 11-Apr-2018 08:49:30 Instrument ID: CVOAMS4
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

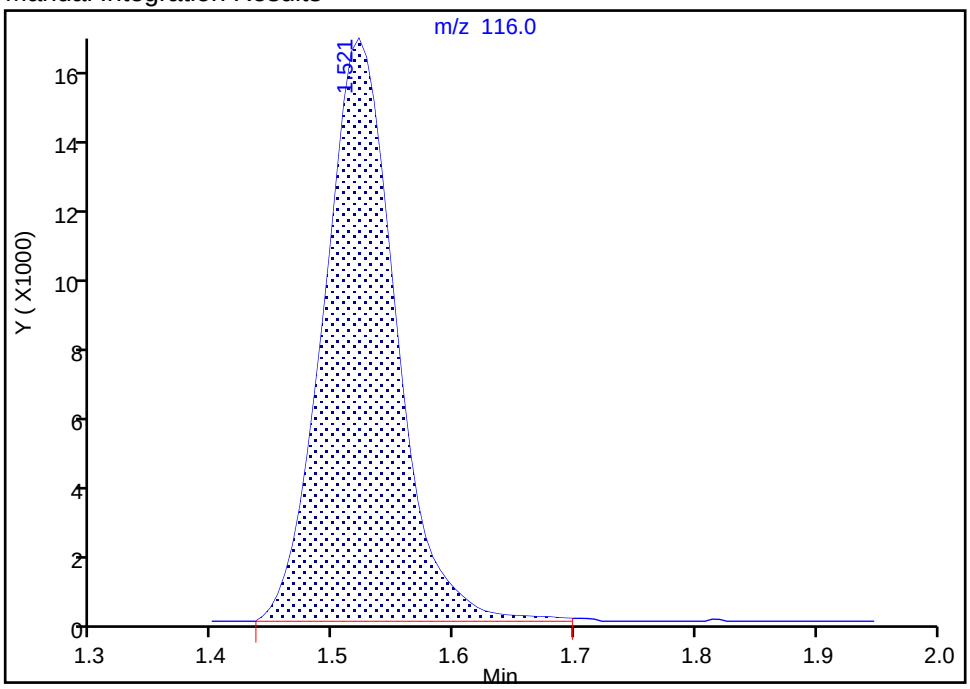
Not Detected
Expected RT: 1.52

Processing Integration Results



Manual Integration Results

RT: 1.52
Area: 67209
Amount: 18.897798
Amount Units: ug/l



Reviewer: martineze, 11-Apr-2018 09:50:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511498/3 Calibration Date: 04/16/2018 19:15

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48759.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.1941		17.8	20.0	-11.2	20.0
Dichlorodifluoromethane	Lin2		0.5903	0.1000	15.7	20.0	-21.6*	20.0
Chloromethane	Ave	0.8596	0.9708	0.1000	22.6	20.0	12.9	20.0
Vinyl chloride	Ave	0.7509	0.7699	0.1000	20.5	20.0	2.5	20.0
Butadiene	Lin2		0.6851		22.2	20.0	11.1	20.0
Bromomethane	Ave	0.3247	0.3587	0.1000	22.1	20.0	10.5	50.0
Chloroethane	Ave	0.3314	0.3539	0.1000	21.4	20.0	6.8	50.0
Trichlorofluoromethane	Ave	0.5870	0.5577	0.1000	19.0	20.0	-5.0	20.0
Dichlorofluoromethane	Ave	0.8385	0.8374		20.0	20.0	-0.1	20.0
Pentane	Ave	0.0733	0.0725		39.6	40.0	-1.1	20.0
Ethanol	QuaF		0.0489		900	800	12.5	50.0
Ethyl ether	Ave	0.2834	0.2787		19.7	20.0	-1.7	20.0
2-Methyl-1,3-butadiene	Ave	0.3138	0.3284		20.9	20.0	4.6	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3034	0.2800		18.5	20.0	-7.7	20.0
Acrolein	Ave	1.299	1.523		352	300	17.2	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3771	0.3479	0.1000	18.4	20.0	-7.8	20.0
1,1-Dichloroethene	Ave	0.3466	0.3248	0.1000	18.7	20.0	-6.3	20.0
Acetone	Ave	1.035	0.8316	0.0500	80.4	100	-19.6	50.0
Iodomethane	Ave	0.6306	0.5564		17.6	20.0	-11.8	20.0
Carbon disulfide	Ave	1.353	1.204	0.1000	17.8	20.0	-11.0	50.0
Isopropyl alcohol	Ave	0.6019	0.5776		192	200	-4.0	50.0
Allyl chloride	Ave	0.2103	0.1960		18.6	20.0	-6.8	20.0
Cyclopentene	Ave	0.8229	0.8386		20.4	20.0	1.9	20.0
Methyl acetate	Ave	0.2068	0.2021	0.1000	97.7	100	-2.3	20.0
Acetonitrile	Ave	0.8025	0.9176		229	200	14.3	20.0
Methylene Chloride	Ave	0.4003	0.3688	0.1000	18.4	20.0	-7.9	20.0
2-Methyl-2-propanol	Ave	1.019	0.9605		189	200	-5.7	50.0
Methyl tert-butyl ether	Ave	0.8926	0.7882	0.1000	17.7	20.0	-11.7	20.0
trans-1,2-Dichloroethene	Ave	0.3400	0.3129	0.1000	18.4	20.0	-8.0	20.0
Acrylonitrile	Ave	2.754	3.419		248	200	24.1*	20.0
Hexane	Ave	0.4505	0.4706		20.9	20.0	4.5	20.0
Isopropyl ether	Ave	1.008	0.999		19.8	20.0	-0.9	20.0
1,1-Dichloroethane	Ave	0.6107	0.5707	0.2000	18.7	20.0	-6.5	20.0
Vinyl acetate	Ave	0.0543	0.0473		34.9	40.0	-12.8	20.0
2-Chloro-1,3-butadiene	Ave	0.2794	0.2662		19.1	20.0	-4.7	20.0
Tert-butyl ethyl ether	Ave	0.9302	0.8324		17.9	20.0	-10.5	20.0
2,2-Dichloropropane	Ave	0.1602	0.1376		17.2	20.0	-14.1	20.0
cis-1,2-Dichloroethene	Lin2		0.3278	0.1000	17.2	20.0	-13.9	20.0
2-Butanone (MEK)	Ave	0.3149	0.2458	0.0500	78.0	100	-22.0	50.0
Ethyl acetate	Ave	0.2745	0.2150		31.3	40.0	-21.7*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511498/3 Calibration Date: 04/16/2018 19:15

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48759.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2112	0.1983		18.8	20.0	-6.1	20.0
Propionitrile	Ave	0.0372	0.0352		189	200	-5.5	20.0
Tetrahydrofuran	Ave	0.3322	0.2837		34.2	40.0	-14.6	20.0
Chlorobromomethane	Ave	0.1533	0.1366		17.8	20.0	-10.9	20.0
Methacrylonitrile	Ave	0.1088	0.0974		179	200	-10.5	20.0
Chloroform	Ave	0.5613	0.5007	0.2000	17.8	20.0	-10.8	20.0
Cyclohexane	Ave	0.4677	0.4473	0.1000	19.1	20.0	-4.4	50.0
1,1,1-Trichloroethane	Ave	0.4655	0.4000	0.1000	17.2	20.0	-14.1	20.0
Carbon tetrachloride	Ave	0.3635	0.3113	0.1000	17.1	20.0	-14.3	20.0
1,1-Dichloropropene	Ave	0.3808	0.3673		19.3	20.0	-3.5	20.0
Isobutyl alcohol	Ave	0.5750	0.6297		548	500	9.5	50.0
Benzene	Ave	1.614	1.695	0.5000	21.0	20.0	5.0	20.0
Isopropyl acetate	Ave	0.8688	0.7910		18.2	20.0	-9.0	20.0
Tert-amyl methyl ether	Ave	0.2553	0.2179		17.1	20.0	-14.7	20.0
1,2-Dichloroethane	Ave	0.3873	0.3268	0.1000	16.9	20.0	-15.6	20.0
n-Heptane	Ave	0.2376	0.2369		19.9	20.0	-0.3	20.0
n-Butanol	Ave	0.1882	0.1813		482	500	-3.7	50.0
Trichloroethene	Ave	0.2782	0.2469	0.2000	17.7	20.0	-11.3	20.0
Methylcyclohexane	Ave	0.5176	0.5009	0.1000	19.4	20.0	-3.2	50.0
Ethyl acrylate	Lin2		0.0178		16.9	20.0	-15.3	20.0
1,2-Dichloropropane	Ave	0.2852	0.2684	0.1000	18.8	20.0	-5.9	20.0
Methyl methacrylate	Ave	0.0583	0.0476		32.7	40.0	-18.3	20.0
1,4-Dioxane	Ave	1.041	1.200		461	400	15.3	50.0
Dibromomethane	Ave	0.1782	0.1504		16.9	20.0	-15.6	20.0
n-Propyl acetate	Ave	0.3034	0.2873		18.9	20.0	-5.3	20.0
Dichlorobromomethane	Ave	0.3446	0.2842	0.2000	16.5	20.0	-17.5	20.0
2-Nitropropane	Ave	0.0647	0.0408		25.2	40.0	-36.9*	20.0
2-Chloroethyl vinyl ether	Ave	0.1115	0.1002		18.0	20.0	-10.2	20.0
Epichlorohydrin	Ave	0.2126	0.1794		337	400	-15.6	20.0
cis-1,3-Dichloropropene	Ave	0.5453	0.5516	0.2000	20.2	20.0	1.2	50.0
4-Methyl-2-pentanone (MIBK)	Ave	2.133	1.903	0.0500	89.2	100	-10.8	50.0
Toluene	Ave	1.532	1.556	0.4000	20.3	20.0	1.6	20.0
trans-1,3-Dichloropropene	Ave	0.4433	0.4239	0.1000	19.1	20.0	-4.4	50.0
Ethyl methacrylate	Ave	0.2786	0.2372		17.0	20.0	-14.9	20.0
1,1,2-Trichloroethane	Ave	0.2478	0.2524	0.1000	20.4	20.0	1.8	20.0
Tetrachloroethene	Ave	0.3249	0.3311	0.2000	20.4	20.0	1.9	20.0
1,3-Dichloropropane	Ave	0.4497	0.4819		21.4	20.0	7.2	20.0
2-Hexanone	Ave	1.312	1.127	0.0500	85.9	100	-14.1	50.0
n-Butyl acetate	Ave	0.0821	0.0785		19.1	20.0	-4.3	20.0
Chlorodibromomethane	Ave	0.3016	0.2710	0.1000	18.0	20.0	-10.1	50.0
Ethylene Dibromide	Ave	0.2665	0.2661	0.1000	20.0	20.0	-0.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511498/3 Calibration Date: 04/16/2018 19:15

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48759.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	0.8706	0.9011	0.5000	20.7	20.0	3.5	20.0
Ethylbenzene	Ave	0.4923	0.5047	0.1000	20.5	20.0	2.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3472	0.3204		18.5	20.0	-7.7	20.0
m-Xylene & p-Xylene	Ave	0.5939	0.5972	0.1000	20.1	20.0	0.6	20.0
n-Butyl acrylate	Ave	0.2204	0.2085		18.9	20.0	-5.4	20.0
o-Xylene	Ave	0.6175	0.6343	0.3000	20.5	20.0	2.7	20.0
Styrene	Ave	0.9593	0.9659	0.3000	20.1	20.0	0.7	20.0
Amyl acetate (mixed isomers)	Ave	0.999	1.068		21.4	20.0	6.8	20.0
Bromoform	Ave	0.1859	0.1443	0.1000	15.5	20.0	-22.4*	20.0
Isopropylbenzene	Ave	1.635	1.686	0.1000	20.6	20.0	3.1	20.0
Bromobenzene	Ave	0.6777	0.6692		19.7	20.0	-1.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7617	0.7969	0.3000	20.9	20.0	4.6	20.0
N-Propylbenzene	Ave	3.743	3.997		21.4	20.0	6.8	20.0
1,2,3-Trichloropropane	Ave	0.1935	0.2008		20.8	20.0	3.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1839	0.1926		20.9	20.0	4.7	20.0
4-Ethyltoluene	Ave	3.081	3.126		20.3	20.0	1.5	20.0
2-Chlorotoluene	Ave	2.598	2.673		20.6	20.0	2.9	20.0
1,3,5-Trimethylbenzene	Ave	2.622	2.785		21.2	20.0	6.2	20.0
4-Chlorotoluene	Ave	2.162	2.249		20.8	20.0	4.0	20.0
Butyl Methacrylate	Ave	0.8911	0.8471		19.0	20.0	-4.9	20.0
tert-Butylbenzene	Ave	2.077	2.148		20.7	20.0	3.4	20.0
1,2,4-Trimethylbenzene	Ave	2.736	2.752		20.1	20.0	0.6	20.0
sec-Butylbenzene	Ave	3.463	3.609		20.8	20.0	4.2	20.0
4-Isopropyltoluene	Ave	2.832	2.955		20.9	20.0	4.3	20.0
1,3-Dichlorobenzene	Ave	1.355	1.374	0.6000	20.3	20.0	1.4	20.0
1,4-Dichlorobenzene	Ave	1.376	1.387	0.5000	20.2	20.0	0.8	20.0
Benzyl chloride	Ave	0.2460	0.2053		16.7	20.0	-16.5	50.0
Indan	Ave	1.099	0.9379		17.1	20.0	-14.6	20.0
p-Diethylbenzene	Ave	1.710	1.811		21.2	20.0	5.9	20.0
n-Butylbenzene	Ave	1.601	1.653		20.7	20.0	3.3	20.0
1,2-Dichlorobenzene	Ave	1.360	1.335	0.4000	19.6	20.0	-1.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.627	2.586		19.7	20.0	-1.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1423	0.1263	0.0500	17.7	20.0	-11.3	50.0
1,3,5-Trichlorobenzene	Ave	1.059	1.081		20.4	20.0	2.1	20.0
1,2,4-Trichlorobenzene	Ave	0.9630	0.9739	0.2000	20.2	20.0	1.1	20.0
Hexachlorobutadiene	Ave	0.4524	0.4338		19.2	20.0	-4.1	20.0
Naphthalene	Ave	2.343	2.335		19.9	20.0	-0.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9267	0.9202		19.9	20.0	-0.7	20.0
Dibromofluoromethane (Surr)	Ave	0.3437	0.2927		42.6	50.0	-14.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3604	0.3141		43.6	50.0	-12.9	20.0
Toluene-d8 (Surr)	Ave	1.542	1.574		51.0	50.0	2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511498/3 Calibration Date: 04/16/2018 19:15

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48759.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.7776	0.7314		47.0	50.0	-5.9	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48759.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Apr-2018 19:15:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0070463-002
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 17:05:12 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: xuyvo Date: 17-Apr-2018 17:01:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.545	1.545	0.000	68	53974	20.0	17.8	a
2 Dichlorodifluoromethane	85	1.576	1.576	0.000	99	164173	20.0	15.7	
3 Chloromethane	50	1.789	1.789	0.000	99	269988	20.0	22.6	
4 Vinyl chloride	62	1.887	1.887	0.000	98	214121	20.0	20.5	
5 Butadiene	54	1.905	1.905	0.000	94	190539	20.0	22.2	
6 Bromomethane	94	2.240	2.240	0.000	99	99756	20.0	22.1	
7 Chloroethane	64	2.326	2.326	0.000	100	98437	20.0	21.4	
9 Trichlorofluoromethane	101	2.533	2.533	0.000	97	155106	20.0	19.0	
8 Dichlorofluoromethane	67	2.557	2.557	0.000	98	232899	20.0	20.0	
10 Pentane	72	2.557	2.557	0.000	96	40339	40.0	39.6	
12 Ethanol	46	2.795	2.795	0.000	78	16332	800.0	900.1	
11 Ethyl ether	59	2.801	2.801	0.000	97	77505	20.0	19.7	
13 2-Methyl-1,3-butadiene	53	2.819	2.819	0.000	98	91328	20.0	20.9	
14 1,2-Dichloro-1,1,2-trifluo	117	2.893	2.893	0.000	96	77884	20.0	18.5	
16 Acrolein	56	3.008	3.008	0.000	98	190876	300.0	351.7	
15 1,1,2-Trichloro-1,2,2-trif	101	3.033	3.033	0.000	92	96752	20.0	18.4	
17 1,1-Dichloroethene	96	3.045	3.045	0.000	94	90319	20.0	18.7	
18 Acetone	43	3.155	3.155	0.000	87	128290	100.0	80.4	
19 Iodomethane	142	3.228	3.228	0.000	100	154744	20.0	17.6	
20 Carbon disulfide	76	3.258	3.258	0.000	100	334721	20.0	17.8	
21 Isopropyl alcohol	45	3.283	3.283	0.000	99	48265	200.0	191.9	
22 3-Chloro-1-propene	76	3.429	3.429	0.000	87	54511	20.0	18.6	
23 Cyclopentene	67	3.447	3.447	0.000	87	233239	20.0	20.4	
24 Methyl acetate	43	3.453	3.453	0.000	99	281062	100.0	97.7	
25 Acetonitrile	41	3.514	3.514	0.000	98	76674	200.0	228.7	
26 Methylene Chloride	84	3.588	3.588	0.000	96	102583	20.0	18.4	
* 27 TBA-d9 (IS)	65	3.600	3.600	0.000	41	417821	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.685	3.685	0.000	98	80259	200.0	188.5	
29 Methyl tert-butyl ether	73	3.789	3.789	0.000	97	219209	20.0	17.7	
30 trans-1,2-Dichloroethene	96	3.819	3.819	0.000	98	87012	20.0	18.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.911	3.911	0.000	94	285681	200.0	248.3	
32 Hexane	57	4.014	4.014	0.000	93	130885	20.0	20.9	
33 Isopropyl ether	45	4.283	4.283	0.000	95	277813	20.0	19.8	
34 1,1-Dichloroethane	63	4.307	4.307	0.000	99	158725	20.0	18.7	
35 Vinyl acetate	86	4.337	4.337	0.000	100	26318	40.0	34.9	
36 2-Chloro-1,3-butadiene	88	4.362	4.362	0.000	92	74048	20.0	19.1	
37 Tert-butyl ethyl ether	59	4.673	4.673	0.000	89	231508	20.0	17.9	
* 38 2-Butanone-d5	46	4.904	4.904	0.000	0	385669	250.0	250.0	
39 2,2-Dichloropropane	79	4.923	4.923	0.000	90	38265	20.0	17.2	
40 cis-1,2-Dichloroethene	96	4.953	4.953	0.000	95	91157	20.0	17.2	
41 2-Butanone (MEK)	72	4.978	4.978	0.000	97	37913	100.0	78.0	
42 Ethyl acetate	70	4.990	4.990	0.000	96	13267	40.0	31.3	
43 Methyl acrylate	55	5.051	5.051	0.000	99	55151	20.0	18.8	
44 Propionitrile	54	5.136	5.136	0.000	98	97748	200.0	188.9	
45 Tetrahydrofuran	72	5.221	5.221	0.000	94	17504	40.0	34.2	
46 Chlorobromomethane	128	5.228	5.228	0.000	97	38000	20.0	17.8	
47 Methacrylonitrile	67	5.264	5.264	0.000	93	270849	200.0	178.9	
48 Chloroform	83	5.307	5.307	0.000	98	139263	20.0	17.8	
49 Cyclohexane	84	5.453	5.453	0.000	93	124402	20.0	19.1	
50 1,1,1-Trichloroethane	97	5.471	5.471	0.000	97	111251	20.0	17.2	
$ 51 Dibromofluoromethane (Surr	113	5.496	5.496	0.000	96	203509	50.0	42.6	
52 Carbon tetrachloride	117	5.618	5.618	0.000	97	86584	20.0	17.1	
53 1,1-Dichloropropene	75	5.660	5.660	0.000	96	102152	20.0	19.3	
54 Isobutyl alcohol	43	5.855	5.855	0.000	92	131549	500.0	547.5	
55 Benzene	78	5.898	5.898	0.000	97	293861	20.0	21.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.929	5.929	0.000	97	218389	50.0	43.6	
57 Tert-amyl methyl ether	87	6.002	6.002	0.000	91	60593	20.0	17.1	
58 Isopropyl acetate	43	6.002	6.002	0.000	98	219985	20.0	18.2	
59 1,2-Dichloroethane	62	6.020	6.020	0.000	95	90892	20.0	16.9	
60 n-Heptane	57	6.111	6.111	0.000	94	65897	20.0	19.9	
* 61 Fluorobenzene	96	6.264	6.264	0.000	98	695303	50.0	50.0	
62 n-Butanol	56	6.678	6.678	0.000	93	37875	500.0	481.7	
63 Trichloroethene	95	6.709	6.709	0.000	96	68658	20.0	17.7	
64 Methylcyclohexane	83	6.849	6.849	0.000	93	139310	20.0	19.4	
65 Ethyl acrylate	73	6.874	6.874	0.000	98	4957	20.0	16.9	
66 1,2-Dichloropropane	63	7.038	7.038	0.000	92	74658	20.0	18.8	
* 67 1,4-Dioxane-d8	96	7.105	7.105	0.000	0	25719	1000.0	1000.0	
68 Methyl methacrylate	100	7.142	7.142	0.000	89	26484	40.0	32.7	
69 1,4-Dioxane	88	7.166	7.166	0.000	86	12347	400.0	461.3	
70 Dibromomethane	93	7.178	7.178	0.000	92	41832	20.0	16.9	
71 n-Propyl acetate	43	7.209	7.209	0.000	99	79902	20.0	18.9	
72 Dichlorobromomethane	83	7.343	7.343	0.000	99	79030	20.0	16.5	
73 2-Nitropropane	41	7.672	7.672	0.000	96	22713	40.0	25.2	
74 2-Chloroethyl vinyl ether	63	7.684	7.684	0.000	95	27866	20.0	18.0	
75 Epichlorohydrin	57	7.776	7.776	0.000	100	110690	400.0	337.5	
76 cis-1,3-Dichloropropene	75	7.825	7.825	0.000	94	95610	20.0	20.2	
77 4-Methyl-2-pentanone (MIBK	43	7.977	7.977	0.000	97	293576	100.0	89.2	
$ 78 Toluene-d8 (Surr)	98	8.038	8.038	0.000	98	681914	50.0	51.0	
79 Toluene	91	8.105	8.105	0.000	93	269685	20.0	20.3	
80 trans-1,3-Dichloropropene	75	8.398	8.398	0.000	99	73476	20.0	19.1	
81 Ethyl methacrylate	69	8.422	8.422	0.000	89	65964	20.0	17.0	
82 1,1,2-Trichloroethane	83	8.562	8.562	0.000	95	43738	20.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.599	8.599	0.000	95	57387	20.0	20.4	
84 1,3-Dichloropropane	76	8.721	8.721	0.000	92	83527	20.0	21.4	
85 2-Hexanone	43	8.763	8.763	0.000	97	173815	100.0	85.9	
86 n-Butyl acetate	73	8.849	8.849	0.000	99	13606	20.0	19.1	
87 Chlorodibromomethane	129	8.891	8.891	0.000	98	46964	20.0	18.0	
88 Ethylene Dibromide	107	9.007	9.007	0.000	97	46123	20.0	20.0	
* 89 Chlorobenzene-d5	117	9.373	9.373	0.000	90	433312	50.0	50.0	
90 Chlorobenzene	112	9.397	9.397	0.000	95	156186	20.0	20.7	
91 Ethylbenzene	106	9.464	9.464	0.000	99	87479	20.0	20.5	
92 1,1,1,2-Tetrachloroethane	131	9.477	9.477	0.000	94	55539	20.0	18.5	
93 m-Xylene & p-Xylene	106	9.562	9.562	0.000	98	103514	20.0	20.1	
94 n-Butyl acrylate	73	9.855	9.855	0.000	97	36134	20.0	18.9	
95 o-Xylene	106	9.891	9.891	0.000	94	109941	20.0	20.5	
96 Styrene	104	9.910	9.910	0.000	93	167421	20.0	20.1	
97 Amyl acetate (mixed isomer	43	10.031	10.031	0.000	90	94816	20.0	21.4	
98 Bromoform	173	10.086	10.086	0.000	93	25003	20.0	15.5	
99 Isopropylbenzene	105	10.166	10.166	0.000	96	292228	20.0	20.6	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	162347	50.0	47.0	
101 Bromobenzene	156	10.446	10.446	0.000	96	59412	20.0	19.7	
102 1,1,2,2-Tetrachloroethane	83	10.458	10.458	0.000	99	70753	20.0	20.9	
103 N-Propylbenzene	91	10.483	10.483	0.000	98	354920	20.0	21.4	
104 1,2,3-Trichloropropane	110	10.501	10.501	0.000	97	17828	20.0	20.8	
105 trans-1,4-Dichloro-2-buten	53	10.507	10.507	0.000	76	17096	20.0	20.9	
106 4-Ethyltoluene	105	10.568	10.568	0.000	98	277562	20.0	20.3	
107 2-Chlorotoluene	91	10.574	10.574	0.000	97	237347	20.0	20.6	
108 1,3,5-Trimethylbenzene	105	10.617	10.617	0.000	92	247287	20.0	21.2	
109 4-Chlorotoluene	91	10.665	10.665	0.000	98	199642	20.0	20.8	
110 Butyl Methacrylate	87	10.672	10.672	0.000	93	75207	20.0	19.0	
111 tert-Butylbenzene	119	10.854	10.854	0.000	93	190732	20.0	20.7	
112 1,2,4-Trimethylbenzene	105	10.903	10.903	0.000	97	244316	20.0	20.1	
113 sec-Butylbenzene	105	11.019	11.019	0.000	99	320388	20.0	20.8	
114 4-Isopropyltoluene	119	11.117	11.117	0.000	97	262346	20.0	20.9	
115 1,3-Dichlorobenzene	146	11.141	11.141	0.000	96	122014	20.0	20.3	
* 116 1,4-Dichlorobenzene-d4	152	11.196	11.196	0.000	96	221965	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.208	11.208	0.000	92	123150	20.0	20.2	
118 Benzyl chloride	126	11.318	11.318	0.000	99	18230	20.0	16.7	
119 2,3-Dihydroindene	117	11.373	11.373	0.000	93	260854	20.0	17.1	
120 p-Diethylbenzene	119	11.397	11.397	0.000	93	160796	20.0	21.2	a
121 n-Butylbenzene	92	11.421	11.421	0.000	95	146799	20.0	20.7	
122 1,2-Dichlorobenzene	146	11.495	11.495	0.000	95	118495	20.0	19.6	
123 1,2,4,5-Tetramethylbenzene	119	12.031	12.031	0.000	97	229592	20.0	19.7	
124 1,2-Dibromo-3-Chloropropan	157	12.153	12.153	0.000	94	11209	20.0	17.7	
125 1,3,5-Trichlorobenzene	180	12.281	12.281	0.000	96	95997	20.0	20.4	
126 1,2,4-Trichlorobenzene	180	12.921	12.921	0.000	93	86470	20.0	20.2	
127 Hexachlorobutadiene	225	13.031	13.031	0.000	91	38511	20.0	19.2	
128 Naphthalene	128	13.214	13.214	0.000	99	207283	20.0	19.9	
129 1,2,3-Trichlorobenzene	180	13.506	13.506	0.000	94	81699	20.0	19.9	
S 130 1,2-Dichloroethene, Total	100				0		40.0	35.6	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.4	
S 132 Xylenes, Total	100				0		40.0	40.7	
S 133 Total BTEX	1				0		100.0	102.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 17-Apr-2018 17:05:15 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48759.D

Injection Date: 16-Apr-2018 19:15:30 Instrument ID: CVOAMS4 Operator ID:

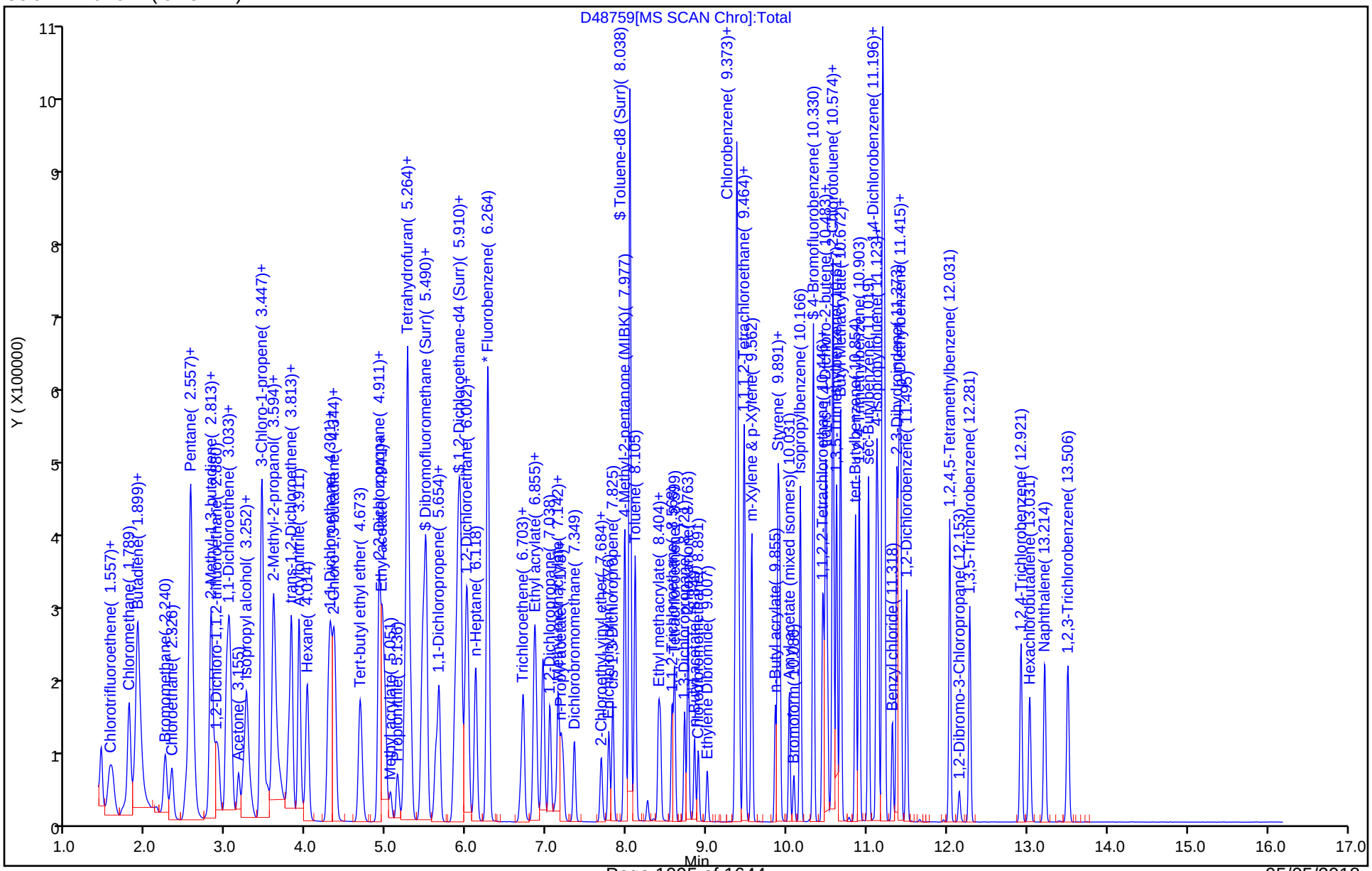
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

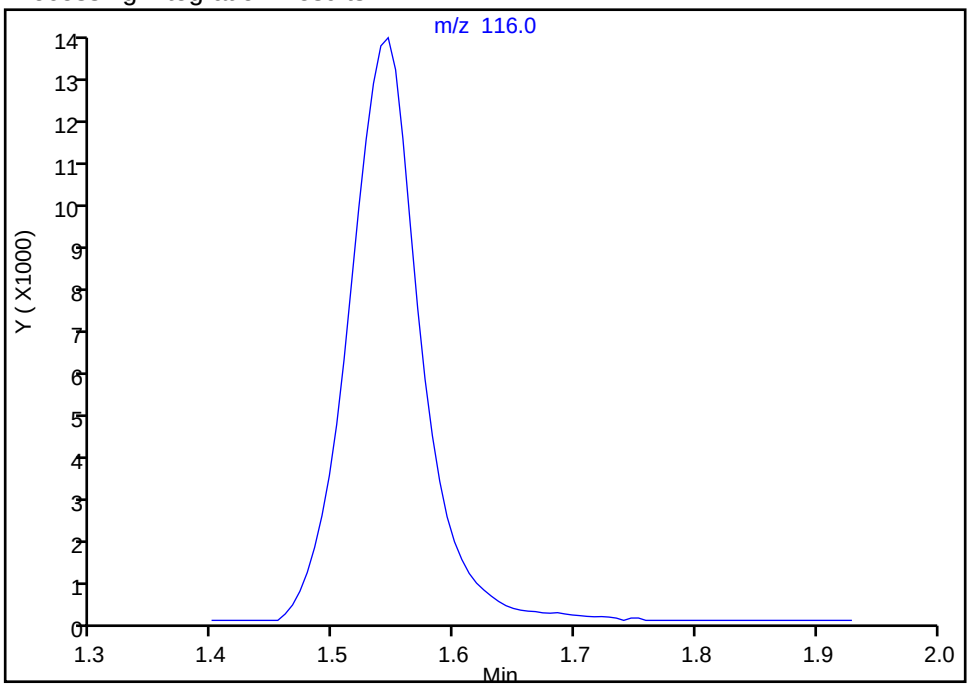
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48759.D
Injection Date: 16-Apr-2018 19:15:30 Instrument ID: CVOAMS4
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

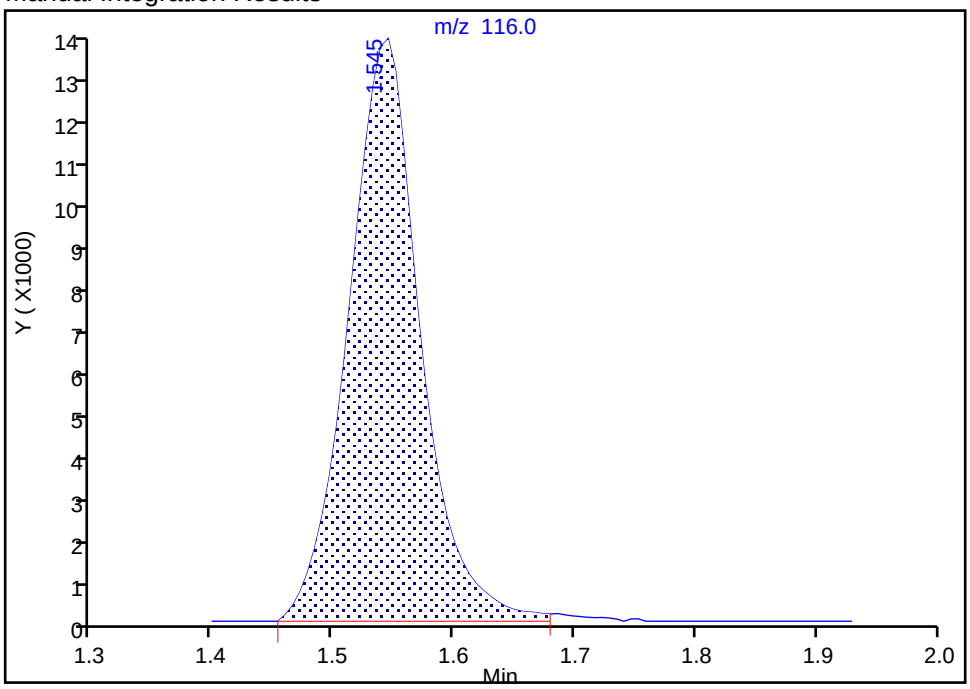
Not Detected
Expected RT: 1.55

Processing Integration Results



Manual Integration Results

RT: 1.55
Area: 53974
Amount: 17.758877
Amount Units: ug/l



Reviewer: tupayachia, 17-Apr-2018 05:41:19
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

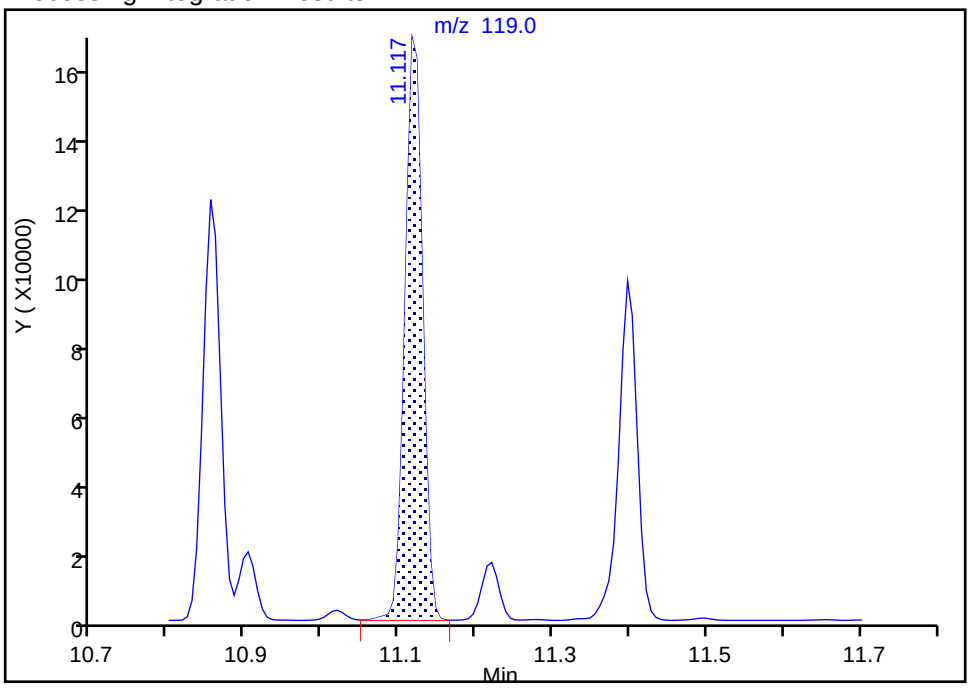
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48759.D
Injection Date: 16-Apr-2018 19:15:30 Instrument ID: CVOAMS4
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

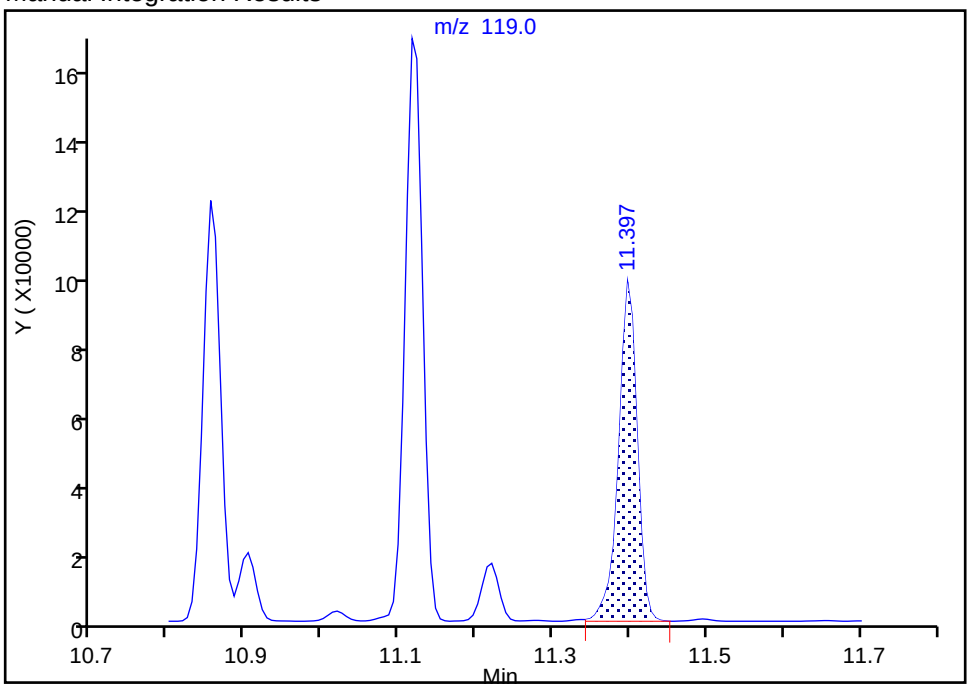
Processing Integration Results

RT: 11.12
Area: 262346
Amount: 34.562678
Amount Units: ug/l



Manual Integration Results

RT: 11.40
Area: 160796
Amount: 21.184011
Amount Units: ug/l



Reviewer: xuyvo, 17-Apr-2018 15:38:09
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512479/3 Calibration Date: 04/19/2018 18:35

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48919.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.2916		26.4	20.0	31.9*	20.0
Dichlorodifluoromethane	Lin2		0.6615	0.1000	17.5	20.0	-12.4	20.0
Chloromethane	Ave	0.8596	0.9898	0.1000	23.0	20.0	15.1	20.0
Vinyl chloride	Ave	0.7509	0.8451	0.1000	22.5	20.0	12.5	20.0
Butadiene	Lin2		0.7363		23.9	20.0	19.3	20.0
Bromomethane	Ave	0.3247	0.3678	0.1000	22.7	20.0	13.3	50.0
Chloroethane	Ave	0.3314	0.3473	0.1000	21.0	20.0	4.8	50.0
Trichlorofluoromethane	Ave	0.5870	0.5612	0.1000	19.1	20.0	-4.4	20.0
Dichlorofluoromethane	Ave	0.8385	0.8590		20.5	20.0	2.4	20.0
Pentane	Ave	0.0733	0.0704		38.4	40.0	-4.0	20.0
Ethyl ether	Ave	0.2834	0.2784		19.7	20.0	-1.7	20.0
Ethanol	QuaF		0.0487		896	800	12.0	50.0
2-Methyl-1,3-butadiene	Ave	0.3138	0.3394		21.6	20.0	8.2	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3034	0.3071		20.2	20.0	1.2	20.0
Acrolein	Ave	1.299	1.277		295	300	-1.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3771	0.3687	0.1000	19.6	20.0	-2.2	20.0
1,1-Dichloroethene	Ave	0.3466	0.3304	0.1000	19.1	20.0	-4.7	20.0
Acetone	Ave	1.035	0.7515	0.0500	72.6	100	-27.4	50.0
Iodomethane	Ave	0.6306	0.5590		17.7	20.0	-11.4	20.0
Carbon disulfide	Ave	1.353	1.245	0.1000	18.4	20.0	-8.0	50.0
Isopropyl alcohol	Ave	0.6019	0.5680		189	200	-5.6	50.0
Allyl chloride	Ave	0.2103	0.1972		18.8	20.0	-6.2	20.0
Cyclopentene	Ave	0.8229	0.8479		20.6	20.0	3.0	20.0
Methyl acetate	Ave	0.2068	0.2169	0.1000	42.0	40.0	4.9	20.0
Acetonitrile	Ave	0.8025	0.8791		219	200	9.5	20.0
Methylene Chloride	Ave	0.4003	0.3821	0.1000	19.1	20.0	-4.5	20.0
2-Methyl-2-propanol	Ave	1.019	0.9846		193	200	-3.4	50.0
Methyl tert-butyl ether	Ave	0.8926	0.8304	0.1000	18.6	20.0	-7.0	20.0
trans-1,2-Dichloroethene	Ave	0.3400	0.3275	0.1000	19.3	20.0	-3.7	20.0
Acrylonitrile	Ave	2.754	3.311		240	200	20.2*	20.0
Hexane	Ave	0.4505	0.5190		23.0	20.0	15.2	20.0
Isopropyl ether	Ave	1.008	1.042		20.7	20.0	3.3	20.0
1,1-Dichloroethane	Ave	0.6107	0.5901	0.2000	19.3	20.0	-3.4	20.0
Vinyl acetate	Ave	0.0543	0.0502		37.0	40.0	-7.5	20.0
2-Chloro-1,3-butadiene	Ave	0.2794	0.2784		19.9	20.0	-0.4	20.0
Tert-butyl ethyl ether	Ave	0.9302	0.8750		18.8	20.0	-5.9	20.0
2,2-Dichloropropane	Ave	0.1602	0.1467		18.3	20.0	-8.4	20.0
cis-1,2-Dichloroethene	Lin2		0.3430	0.1000	18.0	20.0	-9.8	20.0
2-Butanone (MEK)	Ave	0.3149	0.2435	0.0500	77.3	100	-22.7	50.0
Ethyl acetate	Ave	0.2745	0.2126		31.0	40.0	-22.6*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512479/3 Calibration Date: 04/19/2018 18:35

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48919.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2112	0.2032		19.2	20.0	-3.8	20.0
Propionitrile	Ave	0.0372	0.0372		200	200	-0.0	20.0
Tetrahydrofuran	Ave	0.3322	0.2978		35.9	40.0	-10.4	20.0
Chlorobromomethane	Ave	0.1533	0.1390		18.1	20.0	-9.3	20.0
Methacrylonitrile	Ave	0.1088	0.1007		185	200	-7.5	20.0
Chloroform	Ave	0.5613	0.5140	0.2000	18.3	20.0	-8.4	20.0
Cyclohexane	Ave	0.4677	0.4998	0.1000	21.4	20.0	6.9	50.0
1,1,1-Trichloroethane	Ave	0.4655	0.4347	0.1000	18.7	20.0	-6.6	20.0
Carbon tetrachloride	Ave	0.3635	0.3346	0.1000	18.4	20.0	-7.9	20.0
1,1-Dichloropropene	Ave	0.3808	0.3958		20.8	20.0	3.9	20.0
Isobutyl alcohol	Ave	0.5750	0.6059		527	500	5.4	50.0
Benzene	Ave	1.614	1.883	0.5000	23.3	20.0	16.7	20.0
Isopropyl acetate	Ave	0.8688	0.8281		19.1	20.0	-4.7	20.0
Tert-amyl methyl ether	Ave	0.2553	0.2219		17.4	20.0	-13.1	20.0
1,2-Dichloroethane	Ave	0.3873	0.3296	0.1000	17.0	20.0	-14.9	20.0
n-Heptane	Ave	0.2376	0.2719		22.9	20.0	14.5	20.0
n-Butanol	Ave	0.1882	0.1767		469	500	-6.1	50.0
Trichloroethene	Ave	0.2782	0.2637	0.2000	19.0	20.0	-5.2	20.0
Methylcyclohexane	Ave	0.5176	0.5733	0.1000	22.2	20.0	10.8	50.0
Ethyl acrylate	Lin2		0.0171		16.3	20.0	-18.7	20.0
1,2-Dichloropropane	Ave	0.2852	0.2725	0.1000	19.1	20.0	-4.5	20.0
Methyl methacrylate	Ave	0.0583	0.0492		33.8	40.0	-15.5	20.0
1,4-Dioxane	Ave	1.041	1.208		464	400	16.1	50.0
Dibromomethane	Ave	0.1782	0.1584		17.8	20.0	-11.1	20.0
n-Propyl acetate	Ave	0.3034	0.2910		19.2	20.0	-4.1	20.0
Dichlorobromomethane	Ave	0.3446	0.3028	0.2000	17.6	20.0	-12.1	20.0
2-Nitropropane	Ave	0.0647	0.0420		25.9	40.0	-35.2*	20.0
2-Chloroethyl vinyl ether	Ave	0.1115	0.0989		17.7	20.0	-11.3	20.0
Epichlorohydrin	Ave	0.2126	0.1787		336	400	-16.0	20.0
cis-1,3-Dichloropropene	Ave	0.5453	0.5554	0.2000	20.4	20.0	1.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	2.133	1.952	0.0500	91.5	100	-8.5	50.0
Toluene	Ave	1.532	1.668	0.4000	21.8	20.0	8.9	20.0
trans-1,3-Dichloropropene	Ave	0.4433	0.4315	0.1000	19.5	20.0	-2.6	50.0
Ethyl methacrylate	Ave	0.2786	0.2504		18.0	20.0	-10.1	20.0
1,1,2-Trichloroethane	Ave	0.2478	0.2738	0.1000	22.1	20.0	10.5	20.0
Tetrachloroethene	Ave	0.3249	0.3721	0.2000	22.9	20.0	14.5	20.0
1,3-Dichloropropane	Ave	0.4497	0.4808		21.4	20.0	6.9	20.0
2-Hexanone	Ave	1.312	1.096	0.0500	83.6	100	-16.4	50.0
n-Butyl acetate	Ave	0.0821	0.0839		20.4	20.0	2.2	20.0
Chlorodibromomethane	Ave	0.3016	0.2723	0.1000	18.1	20.0	-9.7	50.0
Ethylene Dibromide	Ave	0.2665	0.2713	0.1000	20.4	20.0	1.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512479/3 Calibration Date: 04/19/2018 18:35

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48919.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	0.8706	0.9304	0.5000	21.4	20.0	6.9	20.0
Ethylbenzene	Ave	0.4923	0.5479	0.1000	22.3	20.0	11.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3472	0.3420		19.7	20.0	-1.5	20.0
m-Xylene & p-Xylene	Ave	0.5939	0.6536	0.1000	22.0	20.0	10.1	20.0
n-Butyl acrylate	Ave	0.2204	0.2258		20.5	20.0	2.4	20.0
o-Xylene	Ave	0.6175	0.7019	0.3000	22.7	20.0	13.7	20.0
Styrene	Ave	0.9593	1.021	0.3000	21.3	20.0	6.4	20.0
Amyl acetate (mixed isomers)	Ave	0.999	1.173		23.5	20.0	17.3	20.0
Bromoform	Ave	0.1859	0.1493	0.1000	16.1	20.0	-19.7	20.0
Isopropylbenzene	Ave	1.635	1.924	0.1000	23.5	20.0	17.6	20.0
Bromobenzene	Ave	0.6777	0.7271		21.5	20.0	7.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7617	0.8742	0.3000	23.0	20.0	14.8	20.0
N-Propylbenzene	Ave	3.743	4.538		24.2	20.0	21.2*	20.0
1,2,3-Trichloropropane	Ave	0.1935	0.2161		22.3	20.0	11.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1839	0.2056		22.4	20.0	11.8	20.0
4-Ethyltoluene	Ave	3.081	3.537		23.0	20.0	14.8	20.0
2-Chlorotoluene	Ave	2.598	2.996		23.1	20.0	15.3	20.0
1,3,5-Trimethylbenzene	Ave	2.622	3.195		24.4	20.0	21.9*	20.0
4-Chlorotoluene	Ave	2.162	2.448		22.6	20.0	13.2	20.0
Butyl Methacrylate	Ave	0.8911	0.9593		21.5	20.0	7.7	20.0
tert-Butylbenzene	Ave	2.077	2.483		23.9	20.0	19.6	20.0
1,2,4-Trimethylbenzene	Ave	2.736	3.130		22.9	20.0	14.4	20.0
sec-Butylbenzene	Ave	3.463	4.186		24.2	20.0	20.9*	20.0
4-Isopropyltoluene	Ave	2.832	3.418		24.1	20.0	20.7*	20.0
1,3-Dichlorobenzene	Ave	1.355	1.533	0.6000	22.6	20.0	13.2	20.0
1,4-Dichlorobenzene	Ave	1.376	1.518	0.5000	22.1	20.0	10.3	20.0
Benzyl chloride	Ave	0.2460	0.2203		17.9	20.0	-10.4	50.0
Indan	Ave	1.099	0.9826		17.9	20.0	-10.6	20.0
p-Diethylbenzene	Ave	1.710	2.072		24.2	20.0	21.2*	20.0
n-Butylbenzene	Ave	1.601	1.923		24.0	20.0	20.1*	20.0
1,2-Dichlorobenzene	Ave	1.360	1.486	0.4000	21.9	20.0	9.3	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.627	3.040		23.1	20.0	15.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1423	0.1403	0.0500	19.7	20.0	-1.4	50.0
1,3,5-Trichlorobenzene	Ave	1.059	1.237		23.4	20.0	16.8	20.0
1,2,4-Trichlorobenzene	Ave	0.9630	1.107	0.2000	23.0	20.0	14.9	20.0
Hexachlorobutadiene	Ave	0.4524	0.5334		23.6	20.0	17.9	20.0
Naphthalene	Ave	2.343	2.720		23.2	20.0	16.1	50.0
1,2,3-Trichlorobenzene	Ave	0.9267	1.096		23.7	20.0	18.3	20.0
Dibromofluoromethane (Surr)	Ave	0.3437	0.2794		40.6	50.0	-18.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3604	0.3000		41.6	50.0	-16.8	20.0
Toluene-d8 (Surr)	Ave	1.542	1.537		49.8	50.0	-0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512479/3 Calibration Date: 04/19/2018 18:35

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48919.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.7776	0.7786		50.1	50.0	0.1	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48919.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 19-Apr-2018 18:35:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0070668-003
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 17:09:28 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: delpolitov Date: 23-Apr-2018 17:03:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.521	1.521	0.000	76	57890	20.0	26.4	a
2 Dichlorodifluoromethane	85	1.558	1.558	0.000	98	131306	20.0	17.5	
3 Chloromethane	50	1.765	1.765	0.000	99	196486	20.0	23.0	
4 Vinyl chloride	62	1.869	1.869	0.000	98	167757	20.0	22.5	
5 Butadiene	54	1.875	1.875	0.000	96	146169	20.0	23.9	
6 Bromomethane	94	2.216	2.216	0.000	98	73012	20.0	22.7	
7 Chloroethane	64	2.295	2.295	0.000	100	68936	20.0	21.0	
9 Trichlorofluoromethane	101	2.503	2.503	0.000	97	111401	20.0	19.1	
8 Dichlorofluoromethane	67	2.533	2.533	0.000	98	170519	20.0	20.5	
10 Pentane	72	2.533	2.533	0.000	96	27957	40.0	38.4	
11 Ethyl ether	59	2.771	2.771	0.000	97	55271	20.0	19.7	
12 Ethanol	46	2.777	2.777	0.000	70	12624	800.0	896.1	
13 2-Methyl-1,3-butadiene	53	2.789	2.789	0.000	97	67375	20.0	21.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.862	2.862	0.000	97	60958	20.0	20.2	
16 Acrolein	56	2.978	2.978	0.000	98	124290	300.0	294.9	
15 1,1,2-Trichloro-1,2,2-trif	101	3.009	3.009	0.000	89	73197	20.0	19.6	
17 1,1-Dichloroethene	96	3.015	3.015	0.000	96	65585	20.0	19.1	
18 Acetone	43	3.130	3.130	0.000	86	85567	100.0	72.6	
19 Iodomethane	142	3.198	3.198	0.000	99	110962	20.0	17.7	
20 Carbon disulfide	76	3.228	3.228	0.000	100	247061	20.0	18.4	
21 Isopropyl alcohol	45	3.259	3.259	0.000	100	36849	200.0	188.7	
22 3-Chloro-1-propene	76	3.405	3.405	0.000	88	39154	20.0	18.8	
23 Cyclopentene	67	3.423	3.423	0.000	95	168318	20.0	20.6	
24 Methyl acetate	43	3.429	3.429	0.000	99	86108	40.0	42.0	
25 Acetonitrile	41	3.496	3.496	0.000	99	57032	200.0	219.1	
26 Methylene Chloride	84	3.563	3.563	0.000	97	75859	20.0	19.1	
* 27 TBA-d9 (IS)	65	3.576	3.576	0.000	38	324389	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.661	3.661	0.000	92	63876	200.0	193.3	
29 Methyl tert-butyl ether	73	3.765	3.765	0.000	97	164839	20.0	18.6	
30 trans-1,2-Dichloroethene	96	3.789	3.789	0.000	98	65008	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.886	3.886	0.000	95	214801	200.0	240.4	
32 Hexane	57	3.990	3.990	0.000	94	103030	20.0	23.0	
33 Isopropyl ether	45	4.258	4.258	0.000	96	206797	20.0	20.7	
34 1,1-Dichloroethane	63	4.283	4.283	0.000	99	117139	20.0	19.3	
35 Vinyl acetate	86	4.313	4.313	0.000	100	19925	40.0	37.0	
36 2-Chloro-1,3-butadiene	88	4.338	4.338	0.000	93	55262	20.0	19.9	
37 Tert-butyl ethyl ether	59	4.648	4.648	0.000	88	173704	20.0	18.8	
* 38 2-Butanone-d5	46	4.886	4.886	0.000	0	284665	250.0	250.0	
39 2,2-Dichloropropane	79	4.898	4.898	0.000	89	29118	20.0	18.3	
40 cis-1,2-Dichloroethene	96	4.929	4.929	0.000	95	68087	20.0	18.0	
41 2-Butanone (MEK)	72	4.953	4.953	0.000	97	27729	100.0	77.3	
42 Ethyl acetate	70	4.966	4.966	0.000	96	9682	40.0	31.0	
43 Methyl acrylate	55	5.026	5.026	0.000	99	40328	20.0	19.2	
44 Propionitrile	54	5.118	5.118	0.000	98	73830	200.0	199.9	
45 Tetrahydrofuran	72	5.197	5.197	0.000	93	13564	40.0	35.9	
46 Chlorobromomethane	128	5.203	5.203	0.000	96	27595	20.0	18.1	
47 Methacrylonitrile	67	5.240	5.240	0.000	93	199955	200.0	185.1	
48 Chloroform	83	5.276	5.276	0.000	98	102037	20.0	18.3	
49 Cyclohexane	84	5.429	5.429	0.000	92	99212	20.0	21.4	
50 1,1,1-Trichloroethane	97	5.447	5.447	0.000	98	86288	20.0	18.7	
$ 51 Dibromofluoromethane (Surr	113	5.472	5.472	0.000	95	138663	50.0	40.6	
52 Carbon tetrachloride	117	5.593	5.593	0.000	97	66418	20.0	18.4	
53 1,1-Dichloropropene	75	5.636	5.636	0.000	96	78567	20.0	20.8	
54 Isobutyl alcohol	43	5.831	5.831	0.000	91	98265	500.0	526.8	
55 Benzene	78	5.874	5.874	0.000	96	224867	20.0	23.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.904	5.904	0.000	96	148878	50.0	41.6	
57 Tert-amyl methyl ether	87	5.978	5.978	0.000	92	44056	20.0	17.4	
58 Isopropyl acetate	43	5.978	5.978	0.000	99	164389	20.0	19.1	
59 1,2-Dichloroethane	62	5.996	5.996	0.000	95	65434	20.0	17.0	
60 n-Heptane	57	6.093	6.093	0.000	92	53975	20.0	22.9	
* 61 Fluorobenzene	96	6.240	6.240	0.000	98	496282	50.0	50.0	
62 n-Butanol	56	6.654	6.654	0.000	90	28654	500.0	469.4	
63 Trichloroethene	95	6.685	6.685	0.000	94	52344	20.0	19.0	
64 Methylcyclohexane	83	6.825	6.825	0.000	94	113799	20.0	22.2	
65 Ethyl acrylate	73	6.849	6.849	0.000	98	3391	20.0	16.3	
66 1,2-Dichloropropane	63	7.020	7.020	0.000	92	54092	20.0	19.1	
* 67 1,4-Dioxane-d8	96	7.087	7.087	0.000	0	19568	1000.0	1000.0	
68 Methyl methacrylate	100	7.124	7.124	0.000	88	19544	40.0	33.8	
69 1,4-Dioxane	88	7.148	7.148	0.000	86	9453	400.0	464.2	
70 Dibromomethane	93	7.160	7.160	0.000	91	31446	20.0	17.8	
71 n-Propyl acetate	43	7.185	7.185	0.000	99	57774	20.0	19.2	
72 Dichlorobromomethane	83	7.325	7.325	0.000	99	60105	20.0	17.6	
73 2-Nitropropane	41	7.660	7.660	0.000	98	16663	40.0	25.9	
74 2-Chloroethyl vinyl ether	63	7.666	7.666	0.000	97	19632	20.0	17.7	
75 Epichlorohydrin	57	7.758	7.758	0.000	99	81369	400.0	336.1	
76 cis-1,3-Dichloropropene	75	7.806	7.806	0.000	92	66323	20.0	20.4	
77 4-Methyl-2-pentanone (MIBK	43	7.959	7.959	0.000	97	222305	100.0	91.5	
$ 78 Toluene-d8 (Surr)	98	8.020	8.020	0.000	99	458759	50.0	49.8	
79 Toluene	91	8.087	8.087	0.000	93	199200	20.0	21.8	
80 trans-1,3-Dichloropropene	75	8.379	8.379	0.000	98	51536	20.0	19.5	
81 Ethyl methacrylate	69	8.404	8.404	0.000	89	49705	20.0	18.0	
82 1,1,2-Trichloroethane	83	8.550	8.550	0.000	96	32697	20.0	22.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.581	8.581	0.000	94	44438	20.0	22.9	
84 1,3-Dichloropropane	76	8.709	8.709	0.000	91	57417	20.0	21.4	
85 2-Hexanone	43	8.751	8.751	0.000	96	124853	100.0	83.6	
86 n-Butyl acetate	73	8.831	8.831	0.000	99	10019	20.0	20.4	
87 Chlorodibromomethane	129	8.879	8.879	0.000	97	32513	20.0	18.1	
88 Ethylene Dibromide	107	8.989	8.989	0.000	97	32404	20.0	20.4	
* 89 Chlorobenzene-d5	117	9.361	9.361	0.000	89	298563	50.0	50.0	
90 Chlorobenzene	112	9.385	9.385	0.000	95	111108	20.0	21.4	
91 Ethylbenzene	106	9.446	9.446	0.000	99	65433	20.0	22.3	
92 1,1,1,2-Tetrachloroethane	131	9.465	9.465	0.000	94	40839	20.0	19.7	
93 m-Xylene & p-Xylene	106	9.550	9.550	0.000	99	78052	20.0	22.0	
94 n-Butyl acrylate	73	9.843	9.843	0.000	97	26968	20.0	20.5	
95 o-Xylene	106	9.873	9.873	0.000	94	83823	20.0	22.7	
96 Styrene	104	9.897	9.897	0.000	93	121942	20.0	21.3	
97 Amyl acetate (mixed isomer	43	10.019	10.019	0.000	90	70010	20.0	23.5	
98 Bromoform	173	10.074	10.074	0.000	93	17830	20.0	16.1	
99 Isopropylbenzene	105	10.154	10.154	0.000	96	229766	20.0	23.5	
$ 100 4-Bromofluorobenzene	174	10.318	10.318	0.000	0	116222	50.0	50.1	
101 Bromobenzene	156	10.434	10.434	0.000	97	43412	20.0	21.5	
102 1,1,2,2-Tetrachloroethane	83	10.446	10.446	0.000	99	52194	20.0	23.0	
103 N-Propylbenzene	91	10.471	10.471	0.000	98	270960	20.0	24.2	
104 1,2,3-Trichloropropane	110	10.489	10.489	0.000	97	12900	20.0	22.3	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.495	0.000	71	12274	20.0	22.4	
106 4-Ethyltoluene	105	10.556	10.556	0.000	98	211156	20.0	23.0	
107 2-Chlorotoluene	91	10.562	10.562	0.000	96	178875	20.0	23.1	
108 1,3,5-Trimethylbenzene	105	10.605	10.605	0.000	93	190773	20.0	24.4	
109 4-Chlorotoluene	91	10.653	10.653	0.000	98	146183	20.0	22.6	
110 Butyl Methacrylate	87	10.666	10.666	0.000	92	57277	20.0	21.5	
111 tert-Butylbenzene	119	10.842	10.842	0.000	93	148258	20.0	23.9	
112 1,2,4-Trimethylbenzene	105	10.891	10.891	0.000	98	186859	20.0	22.9	
113 sec-Butylbenzene	105	11.007	11.007	0.000	99	249954	20.0	24.2	
114 4-Isopropyltoluene	119	11.105	11.105	0.000	98	204079	20.0	24.1	
115 1,3-Dichlorobenzene	146	11.129	11.129	0.000	96	91558	20.0	22.6	
* 116 1,4-Dichlorobenzene-d4	152	11.184	11.184	0.000	95	149265	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.202	11.202	0.000	92	90606	20.0	22.1	
118 Benzyl chloride	126	11.306	11.306	0.000	98	13155	20.0	17.9	
119 2,3-Dihydroindene	117	11.361	11.361	0.000	95	195061	20.0	17.9	
120 p-Diethylbenzene	119	11.385	11.385	0.000	87	123732	20.0	24.2	a
121 n-Butylbenzene	92	11.409	11.409	0.000	97	114794	20.0	24.0	
122 1,2-Dichlorobenzene	146	11.483	11.483	0.000	94	88693	20.0	21.9	
123 1,2,4,5-Tetramethylbenzene	119	12.019	12.019	0.000	97	181488	20.0	23.1	
124 1,2-Dibromo-3-Chloropropan	157	12.141	12.141	0.000	94	8378	20.0	19.7	
125 1,3,5-Trichlorobenzene	180	12.269	12.269	0.000	96	73878	20.0	23.4	
126 1,2,4-Trichlorobenzene	180	12.903	12.903	0.000	94	66070	20.0	23.0	
127 Hexachlorobutadiene	225	13.013	13.013	0.000	91	31846	20.0	23.6	
128 Naphthalene	128	13.196	13.196	0.000	99	162428	20.0	23.2	
129 1,2,3-Trichlorobenzene	180	13.488	13.488	0.000	95	65458	20.0	23.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	37.3	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.8	
S 132 Xylenes, Total	100				0		40.0	44.7	
S 133 Total BTEX	1				0		100.0	112.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 23-Apr-2018 17:09:31 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48919.D

Injection Date: 19-Apr-2018 18:35:30 Instrument ID: CVOAMS4 Operator ID:

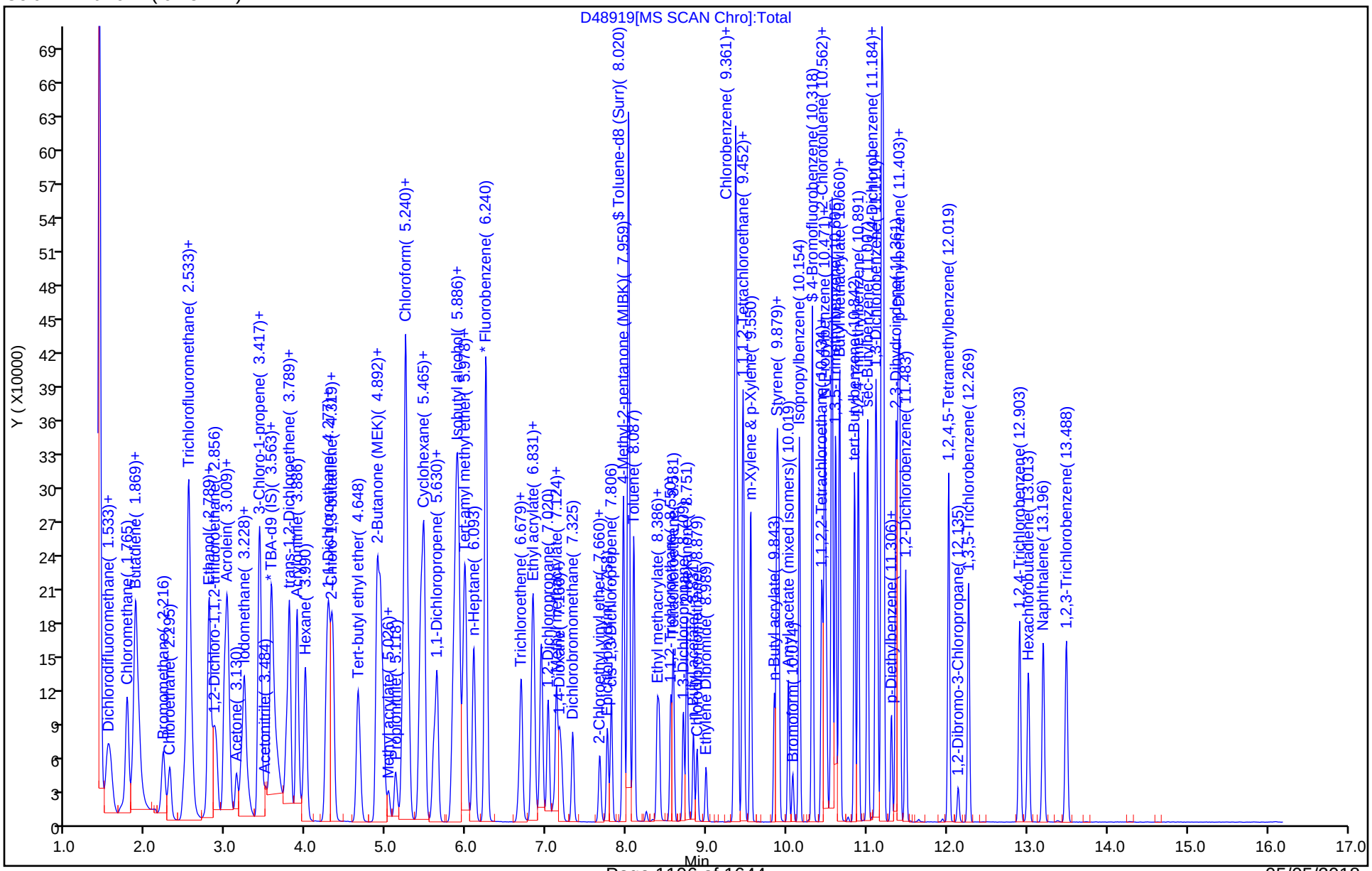
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

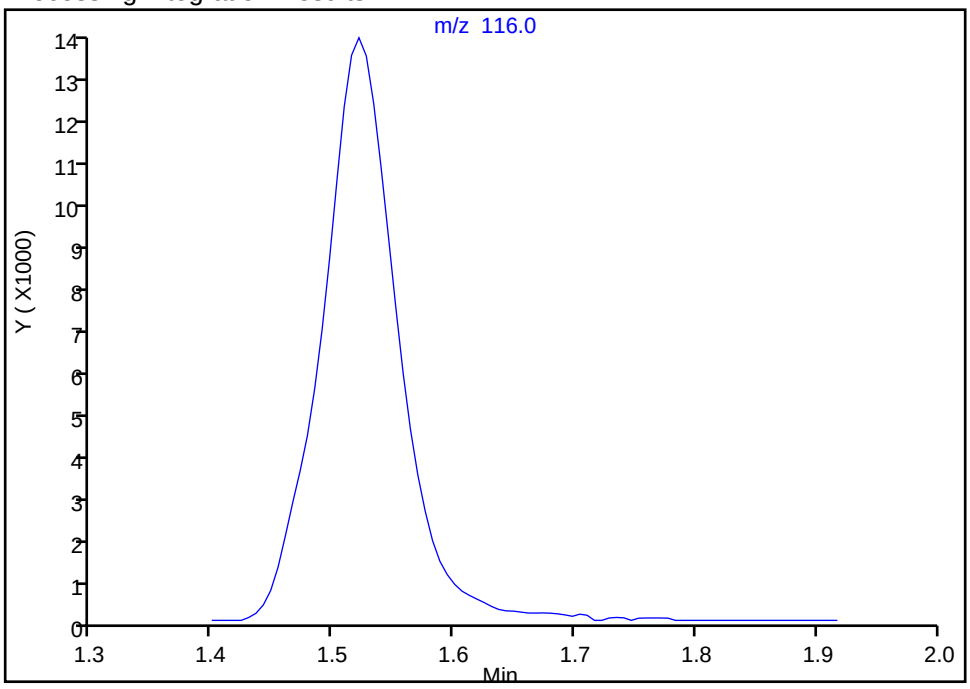
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48919.D
Injection Date: 19-Apr-2018 18:35:30 Instrument ID: CVOAMS4
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

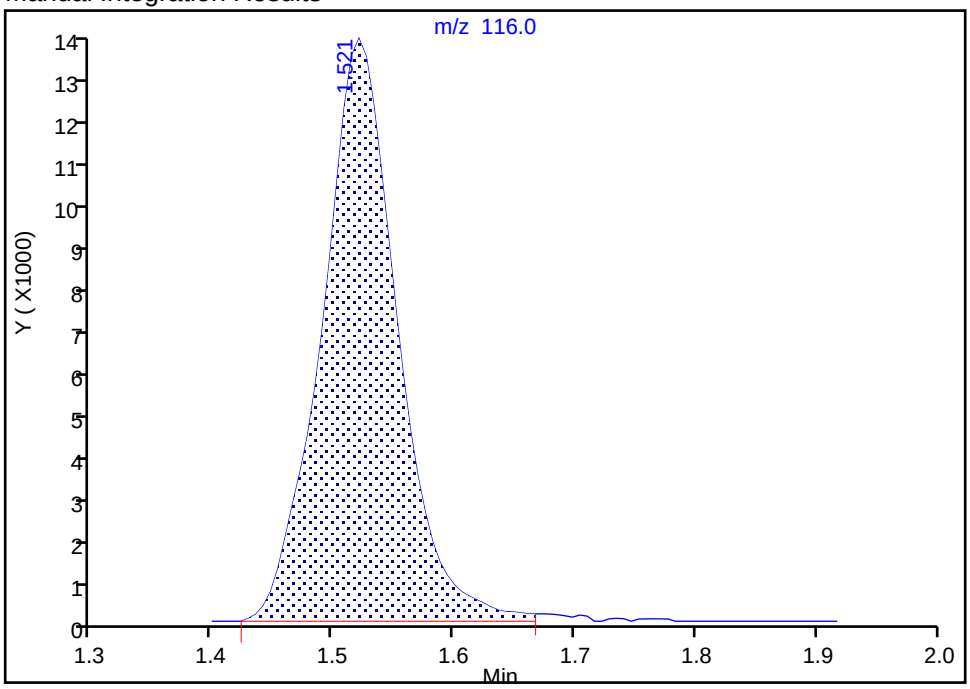
Not Detected
Expected RT: 1.52

Processing Integration Results



Manual Integration Results

RT: 1.52
Area: 57890
Amount: 26.378844
Amount Units: ug/l



Reviewer: starzecm, 19-Apr-2018 19:12:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

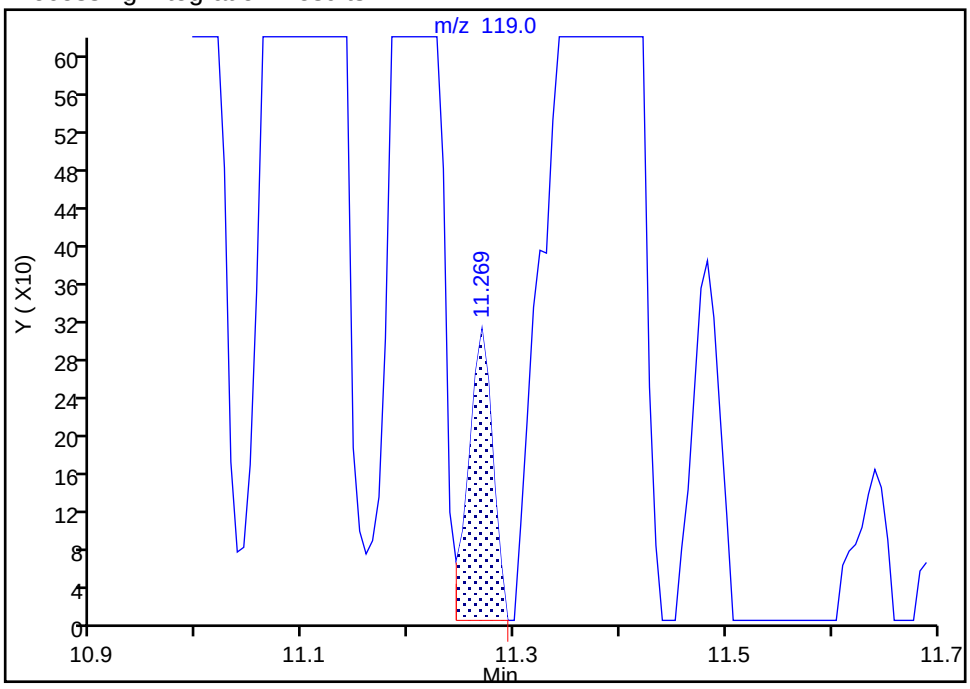
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48919.D
Injection Date: 19-Apr-2018 18:35:30 Instrument ID: CVOAMS4
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

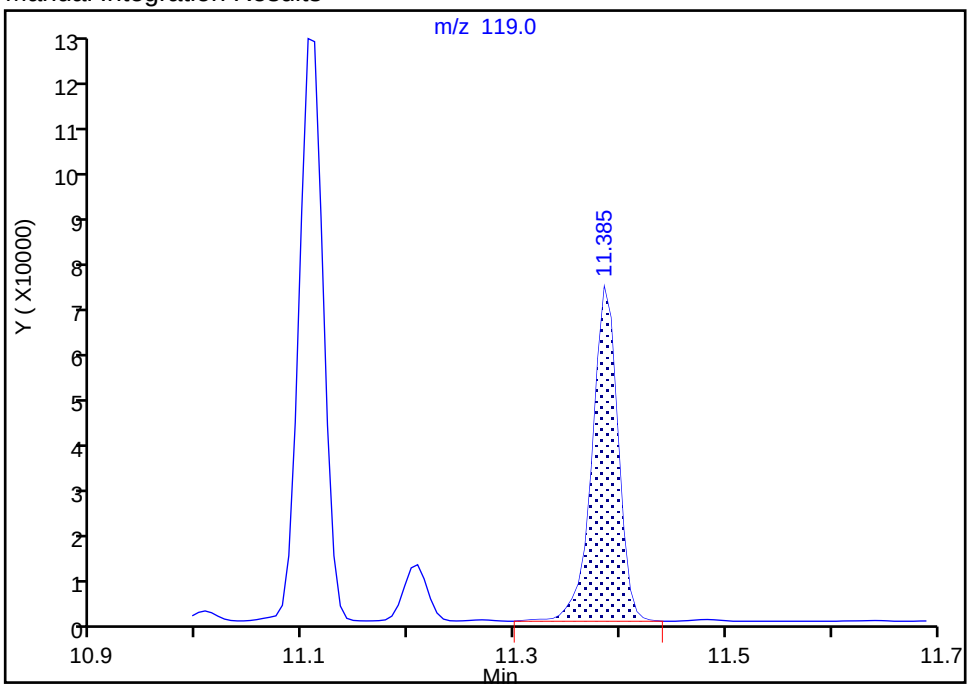
Processing Integration Results

RT: 11.27
Area: 492
Amount: 0.096388
Amount Units: ug/l



Manual Integration Results

RT: 11.38
Area: 123732
Amount: 24.240495
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 17:09:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512623/2 Calibration Date: 04/20/2018 06:44

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48945.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.2737		24.8	20.0	24.0*	20.0
Dichlorodifluoromethane	Lin2		0.5780	0.1000	15.4	20.0	-23.2*	20.0
Chloromethane	Ave	0.8596	0.8986	0.1000	20.9	20.0	4.5	20.0
Vinyl chloride	Ave	0.7509	0.7531	0.1000	20.1	20.0	0.3	20.0
Butadiene	Lin2		0.6873		22.3	20.0	11.5	20.0
Bromomethane	Ave	0.3247	0.3146	0.1000	19.4	20.0	-3.1	50.0
Chloroethane	Ave	0.3314	0.3355	0.1000	20.2	20.0	1.2	50.0
Trichlorofluoromethane	Ave	0.5870	0.4796	0.1000	16.3	20.0	-18.3	20.0
Dichlorofluoromethane	Ave	0.8385	0.7567		18.0	20.0	-9.8	20.0
Pentane	Ave	0.0733	0.0687		37.5	40.0	-6.3	20.0
Ethanol	QuaF		0.0546		1010	800	25.7	50.0
Ethyl ether	Ave	0.2834	0.2741		19.3	20.0	-3.3	20.0
2-Methyl-1,3-butadiene	Ave	0.3138	0.3403		21.7	20.0	8.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3034	0.2965		19.5	20.0	-2.3	20.0
Acrolein	Ave	1.299	1.169		270	300	-10.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3771	0.3551	0.1000	18.8	20.0	-5.8	20.0
1,1-Dichloroethene	Ave	0.3466	0.3269	0.1000	18.9	20.0	-5.7	20.0
Acetone	Ave	1.035	0.8863	0.0500	85.6	100	-14.4	50.0
Iodomethane	Ave	0.6306	0.5380		17.1	20.0	-14.7	20.0
Carbon disulfide	Ave	1.353	1.191	0.1000	17.6	20.0	-12.0	50.0
Isopropyl alcohol	Ave	0.6019	0.5798		193	200	-3.7	50.0
Allyl chloride	Ave	0.2103	0.1970		18.7	20.0	-6.3	20.0
Cyclopentene	Ave	0.8229	0.8682		21.1	20.0	5.5	20.0
Methyl acetate	Ave	0.2068	0.2226	0.1000	43.1	40.0	7.7	20.0
Acetonitrile	Ave	0.8025	0.9245		230	200	15.2	20.0
Methylene Chloride	Ave	0.4003	0.3711	0.1000	18.5	20.0	-7.3	20.0
2-Methyl-2-propanol	Ave	1.019	0.9741		191	200	-4.4	50.0
Methyl tert-butyl ether	Ave	0.8926	0.8253	0.1000	18.5	20.0	-7.5	20.0
trans-1,2-Dichloroethene	Ave	0.3400	0.3268	0.1000	19.2	20.0	-3.9	20.0
Acrylonitrile	Ave	2.754	3.089		224	200	12.1	20.0
Hexane	Ave	0.4505	0.5227		23.2	20.0	16.0	20.0
Isopropyl ether	Ave	1.008	1.054		20.9	20.0	4.6	20.0
1,1-Dichloroethane	Ave	0.6107	0.5954	0.2000	19.5	20.0	-2.5	20.0
Vinyl acetate	Ave	0.0543	0.0490		36.1	40.0	-9.7	20.0
2-Chloro-1,3-butadiene	Ave	0.2794	0.2764		19.8	20.0	-1.1	20.0
Tert-butyl ethyl ether	Ave	0.9302	0.8860		19.0	20.0	-4.8	20.0
2,2-Dichloropropane	Ave	0.1602	0.1472		18.4	20.0	-8.1	20.0
cis-1,2-Dichloroethene	Lin2		0.3391	0.1000	17.8	20.0	-10.8	20.0
2-Butanone (MEK)	Ave	0.3149	0.2486	0.0500	78.9	100	-21.1	50.0
Ethyl acetate	Ave	0.2745	0.2126		31.0	40.0	-22.5*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512623/2 Calibration Date: 04/20/2018 06:44

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48945.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2112	0.2014		19.1	20.0	-4.7	20.0
Propionitrile	Ave	0.0372	0.0364		195	200	-2.3	20.0
Tetrahydrofuran	Ave	0.3322	0.2701		32.5	40.0	-18.7	20.0
Chlorobromomethane	Ave	0.1533	0.1331		17.4	20.0	-13.1	20.0
Methacrylonitrile	Ave	0.1088	0.0984		181	200	-9.6	20.0
Chloroform	Ave	0.5613	0.5113	0.2000	18.2	20.0	-8.9	20.0
Cyclohexane	Ave	0.4677	0.4866	0.1000	20.8	20.0	4.0	50.0
1,1,1-Trichloroethane	Ave	0.4655	0.4214	0.1000	18.1	20.0	-9.5	20.0
Carbon tetrachloride	Ave	0.3635	0.3196	0.1000	17.6	20.0	-12.1	20.0
1,1-Dichloropropene	Ave	0.3808	0.3929		20.6	20.0	3.2	20.0
Isobutyl alcohol	Ave	0.5750	0.6051		526	500	5.2	50.0
Benzene	Ave	1.614	1.876	0.5000	23.3	20.0	16.3	20.0
Isopropyl acetate	Ave	0.8688	0.8179		18.8	20.0	-5.9	20.0
Tert-amyl methyl ether	Ave	0.2553	0.2214		17.3	20.0	-13.3	20.0
1,2-Dichloroethane	Ave	0.3873	0.3290	0.1000	17.0	20.0	-15.0	20.0
n-Heptane	Ave	0.2376	0.2657		22.4	20.0	11.8	20.0
n-Butanol	Ave	0.1882	0.1773		471	500	-5.8	50.0
Trichloroethene	Ave	0.2782	0.2645	0.2000	19.0	20.0	-5.0	20.0
Methylcyclohexane	Ave	0.5176	0.5590	0.1000	21.6	20.0	8.0	50.0
Ethyl acrylate	Lin2		0.0169		16.1	20.0	-19.4	20.0
1,2-Dichloropropane	Ave	0.2852	0.2738	0.1000	19.2	20.0	-4.0	20.0
Methyl methacrylate	Ave	0.0583	0.0481		33.0	40.0	-17.5	20.0
1,4-Dioxane	Ave	1.041	1.123		432	400	8.0	50.0
Dibromomethane	Ave	0.1782	0.1483		16.6	20.0	-16.8	20.0
n-Propyl acetate	Ave	0.3034	0.2763		18.2	20.0	-8.9	20.0
Dichlorobromomethane	Ave	0.3446	0.2965	0.2000	17.2	20.0	-14.0	20.0
2-Nitropropane	Ave	0.0647	0.0377		23.3	40.0	-41.8*	20.0
2-Chloroethyl vinyl ether	Ave	0.1115	0.0982		17.6	20.0	-11.9	20.0
Epichlorohydrin	Ave	0.2126	0.1753		330	400	-17.6	20.0
cis-1,3-Dichloropropene	Ave	0.5453	0.5535	0.2000	20.3	20.0	1.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	2.133	1.888	0.0500	88.5	100	-11.5	50.0
Toluene	Ave	1.532	1.645	0.4000	21.5	20.0	7.4	20.0
trans-1,3-Dichloropropene	Ave	0.4433	0.4232	0.1000	19.1	20.0	-4.5	50.0
Ethyl methacrylate	Ave	0.2786	0.2462		17.7	20.0	-11.6	20.0
1,1,2-Trichloroethane	Ave	0.2478	0.2580	0.1000	20.8	20.0	4.1	20.0
Tetrachloroethene	Ave	0.3249	0.3619	0.2000	22.3	20.0	11.4	20.0
1,3-Dichloropropane	Ave	0.4497	0.4825		21.5	20.0	7.3	20.0
2-Hexanone	Ave	1.312	1.097	0.0500	83.6	100	-16.4	50.0
n-Butyl acetate	Ave	0.0821	0.0804		19.6	20.0	-2.0	20.0
Chlorodibromomethane	Ave	0.3016	0.2634	0.1000	17.5	20.0	-12.6	50.0
Ethylene Dibromide	Ave	0.2665	0.2594	0.1000	19.5	20.0	-2.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512623/2 Calibration Date: 04/20/2018 06:44

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48945.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	0.8706	0.9240	0.5000	21.2	20.0	6.1	20.0
Ethylbenzene	Ave	0.4923	0.5399	0.1000	21.9	20.0	9.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3472	0.3295		19.0	20.0	-5.1	20.0
m-Xylene & p-Xylene	Ave	0.5939	0.6450	0.1000	21.7	20.0	8.6	20.0
n-Butyl acrylate	Ave	0.2204	0.2158		19.6	20.0	-2.1	20.0
o-Xylene	Ave	0.6175	0.6689	0.3000	21.7	20.0	8.3	20.0
Styrene	Ave	0.9593	1.010	0.3000	21.1	20.0	5.3	20.0
Amyl acetate (mixed isomers)	Ave	0.999	1.156		23.1	20.0	15.6	20.0
Bromoform	Ave	0.1859	0.1380	0.1000	14.8	20.0	-25.8*	20.0
Isopropylbenzene	Ave	1.635	1.816	0.1000	22.2	20.0	11.1	20.0
Bromobenzene	Ave	0.6777	0.7214		21.3	20.0	6.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7617	0.8357	0.3000	21.9	20.0	9.7	20.0
N-Propylbenzene	Ave	3.743	4.496		24.0	20.0	20.1*	20.0
1,2,3-Trichloropropane	Ave	0.1935	0.2034		21.0	20.0	5.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1839	0.1910		20.8	20.0	3.8	20.0
4-Ethyltoluene	Ave	3.081	3.537		23.0	20.0	14.8	20.0
2-Chlorotoluene	Ave	2.598	2.967		22.8	20.0	14.2	20.0
1,3,5-Trimethylbenzene	Ave	2.622	3.034		23.1	20.0	15.7	20.0
4-Chlorotoluene	Ave	2.162	2.442		22.6	20.0	12.9	20.0
Butyl Methacrylate	Ave	0.8911	0.9435		21.2	20.0	5.9	20.0
tert-Butylbenzene	Ave	2.077	2.403		23.1	20.0	15.7	20.0
1,2,4-Trimethylbenzene	Ave	2.736	3.030		22.2	20.0	10.8	20.0
sec-Butylbenzene	Ave	3.463	4.082		23.6	20.0	17.9	20.0
4-Isopropyltoluene	Ave	2.832	3.282		23.2	20.0	15.9	20.0
1,3-Dichlorobenzene	Ave	1.355	1.489	0.6000	22.0	20.0	9.9	20.0
1,4-Dichlorobenzene	Ave	1.376	1.524	0.5000	22.1	20.0	10.7	20.0
Benzyl chloride	Ave	0.2460	0.2121		17.2	20.0	-13.8	50.0
Indan	Ave	1.099	0.9507		17.3	20.0	-13.5	20.0
p-Diethylbenzene	Ave	1.710	1.992		23.3	20.0	16.5	20.0
n-Butylbenzene	Ave	1.601	1.988		24.8	20.0	24.2*	20.0
1,2-Dichlorobenzene	Ave	1.360	1.448	0.4000	21.3	20.0	6.5	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.627	2.867		21.8	20.0	9.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1423	0.1216	0.0500	17.1	20.0	-14.6	50.0
1,3,5-Trichlorobenzene	Ave	1.059	1.167		22.0	20.0	10.1	20.0
1,2,4-Trichlorobenzene	Ave	0.9630	1.051	0.2000	21.8	20.0	9.1	20.0
Hexachlorobutadiene	Ave	0.4524	0.4782		21.1	20.0	5.7	20.0
Naphthalene	Ave	2.343	2.481		21.2	20.0	5.9	50.0
1,2,3-Trichlorobenzene	Ave	0.9267	1.003		21.7	20.0	8.3	20.0
Dibromofluoromethane (Surr)	Ave	0.3437	0.2795		40.7	50.0	-18.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3604	0.2989		41.5	50.0	-17.1	20.0
Toluene-d8 (Surr)	Ave	1.542	1.539		49.9	50.0	-0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512623/2 Calibration Date: 04/20/2018 06:44

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48945.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.7776	0.7803		50.2	50.0	0.3	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48945.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Apr-2018 06:44:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0070697-002
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 20-Apr-2018 13:59:17 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: tupayachia Date: 20-Apr-2018 07:03:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.527	1.527	0.000	68	60117	20.0	24.8	a
2 Dichlorodifluoromethane	85	1.564	1.564	0.000	98	126967	20.0	15.4	
3 Chloromethane	50	1.765	1.765	0.000	99	197405	20.0	20.9	
4 Vinyl chloride	62	1.868	1.868	0.000	98	165449	20.0	20.1	
5 Butadiene	54	1.881	1.881	0.000	97	150986	20.0	22.3	
6 Bromomethane	94	2.216	2.216	0.000	98	69111	20.0	19.4	
7 Chloroethane	64	2.295	2.295	0.000	99	73698	20.0	20.2	
9 Trichlorofluoromethane	101	2.509	2.509	0.000	97	105364	20.0	16.3	
8 Dichlorofluoromethane	67	2.527	2.527	0.000	99	166224	20.0	18.0	
10 Pentane	72	2.533	2.533	0.000	97	30173	40.0	37.5	
12 Ethanol	46	2.765	2.765	0.000	77	15898	800.0	1005.2	
11 Ethyl ether	59	2.777	2.777	0.000	90	60222	20.0	19.3	
13 2-Methyl-1,3-butadiene	53	2.789	2.789	0.000	98	74753	20.0	21.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.868	2.868	0.000	98	65126	20.0	19.5	
16 Acrolein	56	2.978	2.978	0.000	98	127740	300.0	270.0	
15 1,1,2-Trichloro-1,2,2-trif	101	3.002	3.002	0.000	83	78009	20.0	18.8	
17 1,1-Dichloroethene	96	3.015	3.015	0.000	96	71823	20.0	18.9	
18 Acetone	43	3.130	3.130	0.000	87	110116	100.0	85.6	
19 Iodomethane	142	3.191	3.191	0.000	99	118184	20.0	17.1	
20 Carbon disulfide	76	3.228	3.228	0.000	100	261607	20.0	17.6	
21 Isopropyl alcohol	45	3.258	3.258	0.000	100	42232	200.0	192.7	
22 3-Chloro-1-propene	76	3.405	3.405	0.000	87	43278	20.0	18.7	
23 Cyclopentene	67	3.417	3.417	0.000	94	190727	20.0	21.1	
24 Methyl acetate	43	3.429	3.429	0.000	99	97809	40.0	43.1	
25 Acetonitrile	41	3.496	3.496	0.000	97	67334	200.0	230.4	
26 Methylene Chloride	84	3.563	3.563	0.000	97	81519	20.0	18.5	
* 27 TBA-d9 (IS)	65	3.575	3.575	0.000	40	364176	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.661	3.661	0.000	98	70948	200.0	191.2	
29 Methyl tert-butyl ether	73	3.758	3.758	0.000	97	181314	20.0	18.5	
30 trans-1,2-Dichloroethene	96	3.789	3.789	0.000	98	71801	20.0	19.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.880	3.880	0.000	94	224955	200.0	224.3	
32 Hexane	57	3.984	3.984	0.000	93	114819	20.0	23.2	
33 Isopropyl ether	45	4.252	4.252	0.000	96	231611	20.0	20.9	
34 1,1-Dichloroethane	63	4.277	4.277	0.000	99	130794	20.0	19.5	
35 Vinyl acetate	86	4.307	4.307	0.000	100	21545	40.0	36.1	
36 2-Chloro-1,3-butadiene	88	4.331	4.331	0.000	93	60718	20.0	19.8	
37 Tert-butyl ethyl ether	59	4.642	4.642	0.000	88	194630	20.0	19.0	
* 38 2-Butanone-d5	46	4.874	4.874	0.000	0	310605	250.0	250.0	
39 2,2-Dichloropropane	79	4.886	4.886	0.000	96	32331	20.0	18.4	
40 cis-1,2-Dichloroethene	96	4.917	4.917	0.000	95	74485	20.0	17.8	
41 2-Butanone (MEK)	72	4.947	4.947	0.000	97	30881	100.0	78.9	
42 Ethyl acetate	70	4.959	4.959	0.000	96	10567	40.0	31.0	
43 Methyl acrylate	55	5.020	5.020	0.000	99	44233	20.0	19.1	
44 Propionitrile	54	5.106	5.106	0.000	98	79878	200.0	195.5	
45 Tetrahydrofuran	72	5.191	5.191	0.000	89	13423	40.0	32.5	
46 Chlorobromomethane	128	5.197	5.197	0.000	96	29248	20.0	17.4	
47 Methacrylonitrile	67	5.234	5.234	0.000	95	216242	200.0	180.9	
48 Chloroform	83	5.270	5.270	0.000	98	112315	20.0	18.2	
49 Cyclohexane	84	5.417	5.417	0.000	94	106892	20.0	20.8	
50 1,1,1-Trichloroethane	97	5.441	5.441	0.000	98	92575	20.0	18.1	
$ 51 Dibromofluoromethane (Surr	113	5.465	5.465	0.000	95	153525	50.0	40.7	
52 Carbon tetrachloride	117	5.587	5.587	0.000	97	70218	20.0	17.6	
53 1,1-Dichloropropene	75	5.624	5.624	0.000	96	86319	20.0	20.6	
54 Isobutyl alcohol	43	5.825	5.825	0.000	92	110178	500.0	526.1	
55 Benzene	78	5.868	5.868	0.000	97	248745	20.0	23.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.892	5.892	0.000	98	164180	50.0	41.5	
57 Tert-amyl methyl ether	87	5.965	5.965	0.000	92	48641	20.0	17.3	
58 Isopropyl acetate	43	5.965	5.965	0.000	98	179689	20.0	18.8	
59 1,2-Dichloroethane	62	5.983	5.983	0.000	96	72282	20.0	17.0	
60 n-Heptane	57	6.081	6.081	0.000	93	58367	20.0	22.4	
* 61 Fluorobenzene	96	6.233	6.233	0.000	98	549209	50.0	50.0	
62 n-Butanol	56	6.642	6.642	0.000	89	32286	500.0	471.1	
63 Trichloroethene	95	6.672	6.672	0.000	95	58097	20.0	19.0	
64 Methylcyclohexane	83	6.813	6.813	0.000	96	122796	20.0	21.6	
65 Ethyl acrylate	73	6.843	6.843	0.000	96	3717	20.0	16.1	
66 1,2-Dichloropropane	63	7.008	7.008	0.000	92	60156	20.0	19.2	
* 67 1,4-Dioxane-d8	96	7.075	7.075	0.000	0	22740	1000.0	1000.0	
68 Methyl methacrylate	100	7.111	7.111	0.000	89	21132	40.0	33.0	
69 1,4-Dioxane	88	7.136	7.136	0.000	45	10219	400.0	431.8	
70 Dibromomethane	93	7.148	7.148	0.000	92	32584	20.0	16.6	
71 n-Propyl acetate	43	7.178	7.178	0.000	98	60688	20.0	18.2	
72 Dichlorobromomethane	83	7.313	7.313	0.000	98	65127	20.0	17.2	
73 2-Nitropropane	41	7.648	7.648	0.000	99	16566	40.0	23.3	
74 2-Chloroethyl vinyl ether	63	7.654	7.654	0.000	94	21579	20.0	17.6	
75 Epichlorohydrin	57	7.745	7.745	0.000	99	87111	400.0	329.8	
76 cis-1,3-Dichloropropene	75	7.800	7.800	0.000	92	73367	20.0	20.3	
77 4-Methyl-2-pentanone (MIBK	43	7.947	7.947	0.000	98	234619	100.0	88.5	
$ 78 Toluene-d8 (Surr)	98	8.014	8.014	0.000	98	510039	50.0	49.9	
79 Toluene	91	8.081	8.081	0.000	93	218099	20.0	21.5	
80 trans-1,3-Dichloropropene	75	8.373	8.373	0.000	98	56100	20.0	19.1	
81 Ethyl methacrylate	69	8.398	8.398	0.000	90	54075	20.0	17.7	
82 1,1,2-Trichloroethane	83	8.538	8.538	0.000	97	34193	20.0	20.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.568	8.568	0.000	94	47977	20.0	22.3	
84 1,3-Dichloropropane	76	8.696	8.696	0.000	92	63961	20.0	21.5	
85 2-Hexanone	43	8.739	8.739	0.000	97	136324	100.0	83.6	
86 n-Butyl acetate	73	8.824	8.824	0.000	98	10661	20.0	19.6	
87 Chlorodibromomethane	129	8.867	8.867	0.000	98	34919	20.0	17.5	
88 Ethylene Dibromide	107	8.983	8.983	0.000	99	34388	20.0	19.5	
* 89 Chlorobenzene-d5	117	9.355	9.355	0.000	89	331396	50.0	50.0	
90 Chlorobenzene	112	9.373	9.373	0.000	96	122489	20.0	21.2	
91 Ethylbenzene	106	9.440	9.440	0.000	99	71562	20.0	21.9	
92 1,1,1,2-Tetrachloroethane	131	9.452	9.452	0.000	94	43679	20.0	19.0	
93 m-Xylene & p-Xylene	106	9.538	9.538	0.000	99	85495	20.0	21.7	
94 n-Butyl acrylate	73	9.836	9.836	0.000	97	28609	20.0	19.6	
95 o-Xylene	106	9.867	9.867	0.000	93	88670	20.0	21.7	
96 Styrene	104	9.885	9.885	0.000	93	133866	20.0	21.1	
97 Amyl acetate (mixed isomer	43	10.007	10.007	0.000	90	75712	20.0	23.1	
98 Bromoform	173	10.062	10.062	0.000	93	18296	20.0	14.8	
99 Isopropylbenzene	105	10.147	10.147	0.000	96	240751	20.0	22.2	
$ 100 4-Bromofluorobenzene	174	10.312	10.312	0.000	0	127817	50.0	50.2	
101 Bromobenzene	156	10.422	10.422	0.000	96	47265	20.0	21.3	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.440	0.000	99	54754	20.0	21.9	
103 N-Propylbenzene	91	10.464	10.464	0.000	98	294558	20.0	24.0	
104 1,2,3-Trichloropropane	110	10.483	10.483	0.000	95	13325	20.0	21.0	
105 trans-1,4-Dichloro-2-buten	53	10.489	10.489	0.000	78	12513	20.0	20.8	
106 4-Ethyltoluene	105	10.550	10.550	0.000	98	231750	20.0	23.0	
107 2-Chlorotoluene	91	10.556	10.556	0.000	96	194381	20.0	22.8	
108 1,3,5-Trimethylbenzene	105	10.598	10.598	0.000	92	198806	20.0	23.1	
109 4-Chlorotoluene	91	10.647	10.647	0.000	98	159993	20.0	22.6	
110 Butyl Methacrylate	87	10.653	10.653	0.000	92	61821	20.0	21.2	
111 tert-Butylbenzene	119	10.836	10.836	0.000	93	157466	20.0	23.1	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	98	198555	20.0	22.2	
113 sec-Butylbenzene	105	10.995	10.995	0.000	99	267459	20.0	23.6	
114 4-Isopropyltoluene	119	11.098	11.098	0.000	98	215069	20.0	23.2	
115 1,3-Dichlorobenzene	146	11.123	11.123	0.000	95	97543	20.0	22.0	
* 116 1,4-Dichlorobenzene-d4	152	11.172	11.172	0.000	97	163802	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.190	11.190	0.000	93	99854	20.0	22.1	
118 Benzyl chloride	126	11.293	11.293	0.000	98	13898	20.0	17.2	
119 2,3-Dihydroindene	117	11.354	11.354	0.000	94	208860	20.0	17.3	
120 p-Diethylbenzene	119	11.379	11.379	0.000	92	130525	20.0	23.3	
121 n-Butylbenzene	92	11.397	11.397	0.000	97	130223	20.0	24.8	
122 1,2-Dichlorobenzene	146	11.470	11.470	0.000	94	94853	20.0	21.3	
123 1,2,4,5-Tetramethylbenzene	119	12.007	12.007	0.000	97	187833	20.0	21.8	
124 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	92	7967	20.0	17.1	
125 1,3,5-Trichlorobenzene	180	12.257	12.257	0.000	97	76430	20.0	22.0	
126 1,2,4-Trichlorobenzene	180	12.891	12.891	0.000	93	68852	20.0	21.8	
127 Hexachlorobutadiene	225	13.000	13.000	0.000	90	31332	20.0	21.1	
128 Naphthalene	128	13.189	13.189	0.000	99	162555	20.0	21.2	
129 1,2,3-Trichlorobenzene	180	13.476	13.476	0.000	95	65736	20.0	21.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	37.1	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.4	
S 132 Xylenes, Total	100				0		40.0	43.4	
S 133 Total BTEX	1				0		100.0	110.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Apr-2018 13:59:19 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48945.D

Injection Date: 20-Apr-2018 06:44:30 Instrument ID: CVOAMS4 Operator ID:

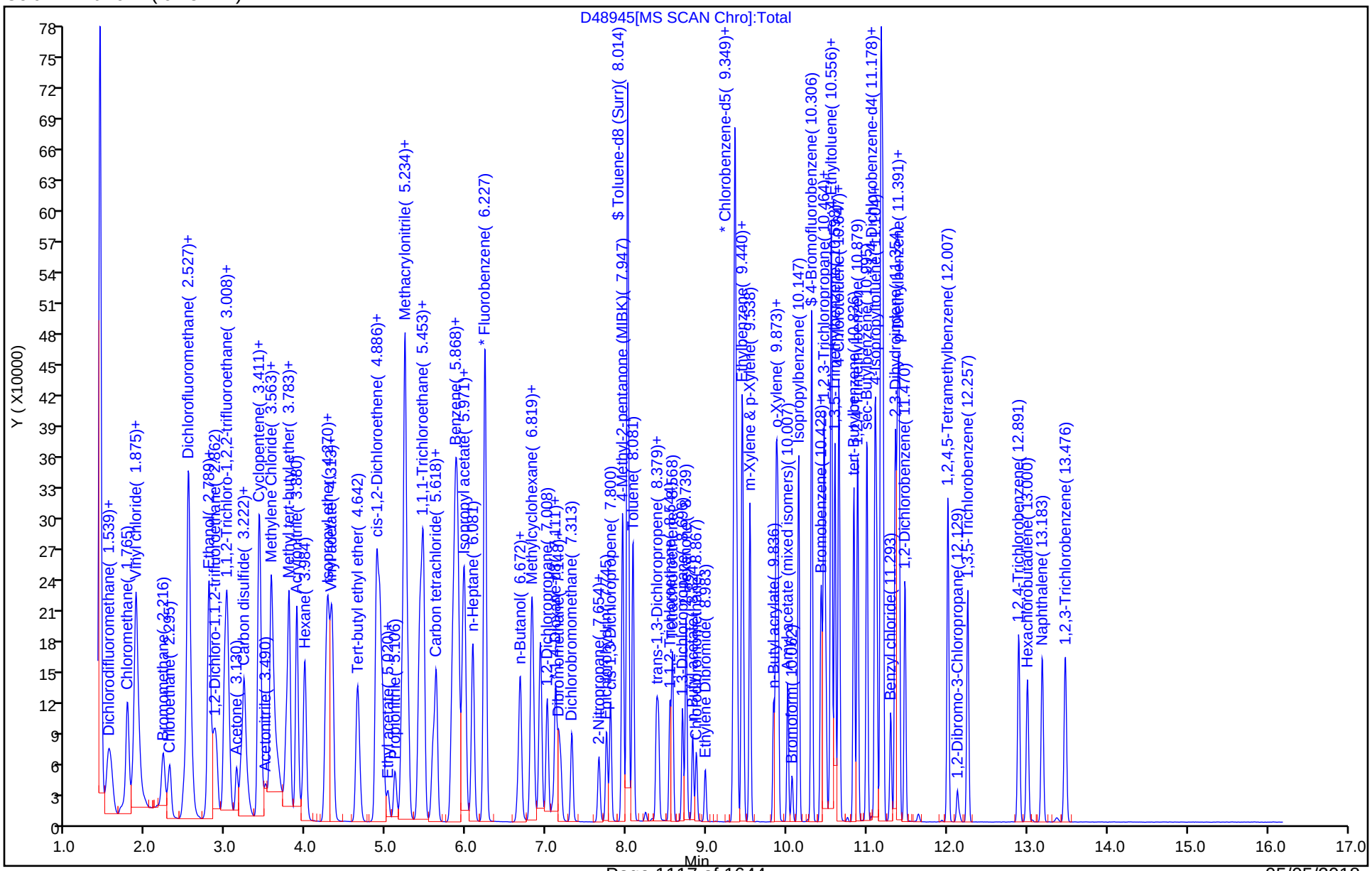
Lims ID: CCVIS Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

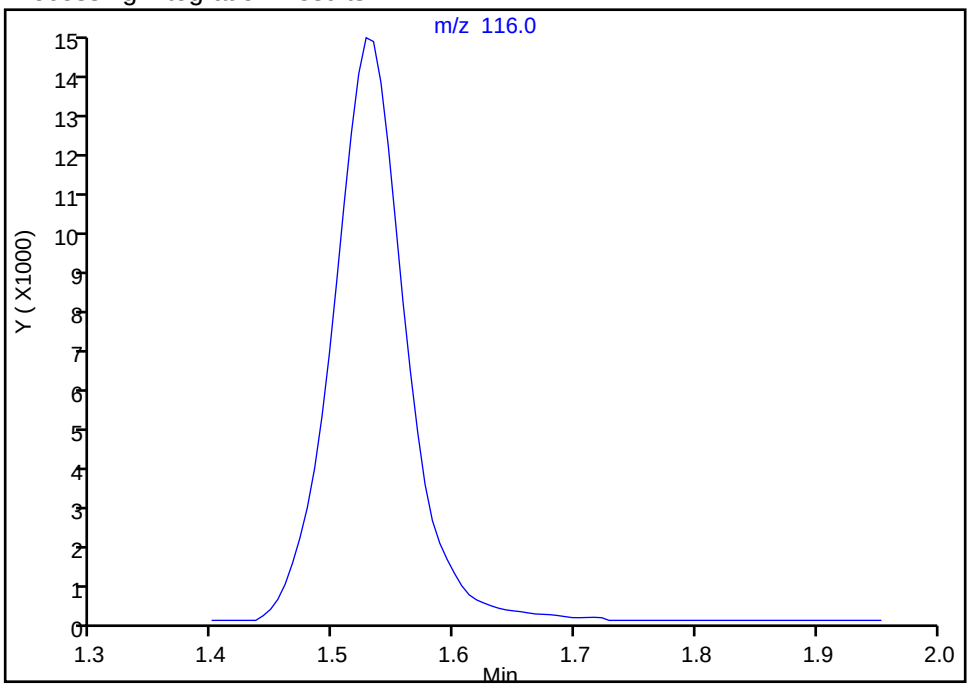
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48945.D
Injection Date: 20-Apr-2018 06:44:30 Instrument ID: CVOAMS4
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

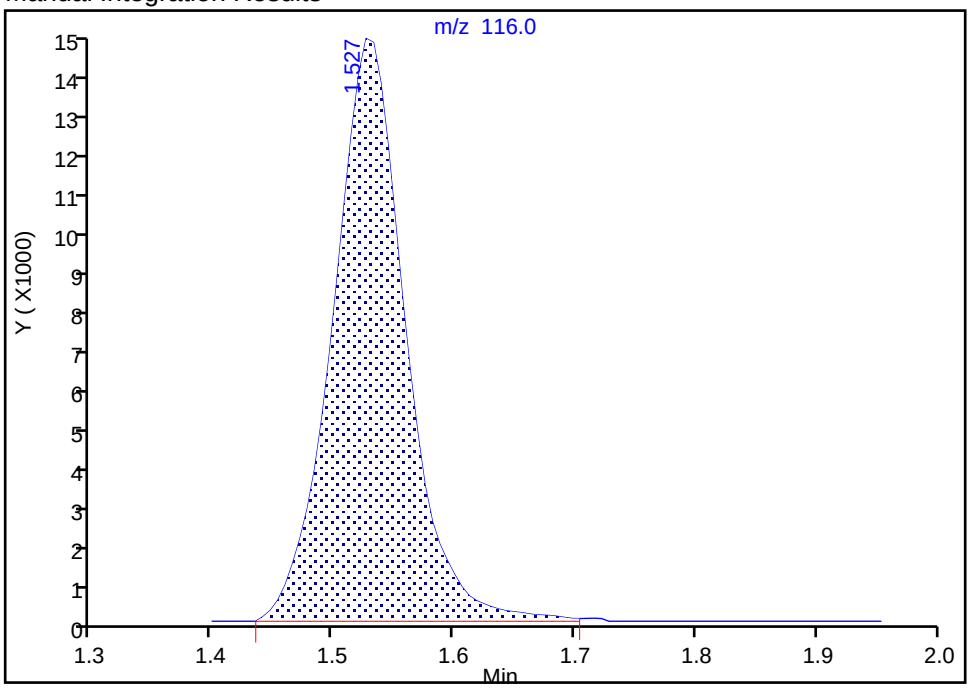
Not Detected
Expected RT: 1.53

Processing Integration Results



Manual Integration Results

RT: 1.53
Area: 60117
Amount: 24.791334
Amount Units: ug/l



Reviewer: tupayachia, 20-Apr-2018 07:01:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-504873/3 Calibration Date: 03/20/2018 23:13

Instrument ID: CVOAMS9 Calib Start Date: 03/09/2018 22:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/10/2018 00:31

Lab File ID: K81011.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.0786	0.0933		23.7	20.0	18.7	20.0
Dichlorodifluoromethane	Lin2		0.5619	0.1000	20.1	20.0	0.6	20.0
Chloromethane	Ave	0.4017	0.5037	0.1000	25.1	20.0	25.4*	20.0
Vinyl chloride	Ave	0.4248	0.5125	0.1000	24.1	20.0	20.6*	20.0
Butadiene	Ave	0.3022	0.3729		24.7	20.0	23.4*	20.0
Bromomethane	Ave	0.3635	0.3745	0.1000	20.6	20.0	3.0	50.0
Chloroethane	Ave	0.2116	0.2412	0.1000	22.8	20.0	14.0	50.0
Dichlorofluoromethane	Ave	0.6823	0.7376		21.6	20.0	8.1	20.0
Trichlorofluoromethane	Ave	0.6795	0.6801	0.1000	20.0	20.0	0.0	20.0
Pentane	Ave	1.710	1.577		36.9	40.0	-7.8	20.0
Ethanol	Ave	0.0353	0.0344		779	800	-2.7	50.0
Ethyl ether	Ave	0.2150	0.2377		22.1	20.0	10.6	20.0
2-Methyl-1,3-butadiene	Lin2		0.2928		23.9	20.0	19.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3237	0.3387		20.9	20.0	4.7	20.0
Acrolein	Ave	1.258	1.338		319	300	6.4	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin2		0.4496	0.1000	21.0	20.0	4.8	20.0
1,1-Dichloroethene	Lin2		0.3432	0.1000	20.4	20.0	2.0	20.0
Acetone	QuaF		1.086	0.0500	92.3	100	-7.7	50.0
Iodomethane	Ave	0.7182	0.6703		18.7	20.0	-6.7	20.0
Isopropyl alcohol	Ave	0.6290	0.5726		182	200	-9.0	50.0
Carbon disulfide	Ave	1.089	1.248	0.1000	22.9	20.0	14.5	50.0
Allyl chloride	Ave	0.1808	0.1994		22.1	20.0	10.3	20.0
Methyl acetate	Ave	0.1746	0.2359	0.1000	135	100	35.1*	20.0
Cyclopentene	Lin2		0.7898		22.9	20.0	14.5	20.0
Acetonitrile	Ave	1.208	1.202		199	200	-0.5	20.0
Methylene Chloride	Ave	0.3808	0.3745	0.1000	19.7	20.0	-1.7	20.0
2-Methyl-2-propanol	Ave	1.432	1.201		168	200	-16.1	50.0
Methyl tert-butyl ether	Ave	0.9313	0.9671	0.1000	20.8	20.0	3.8	20.0
trans-1,2-Dichloroethene	Ave	0.3358	0.3604	0.1000	21.5	20.0	7.3	20.0
Acrylonitrile	Ave	0.0918	0.1128		246	200	22.9*	20.0
Hexane	Ave	0.2158	0.3242		30.0	20.0	50.2*	20.0
Isopropyl ether	Ave	0.8317	1.129		27.2	20.0	35.8*	20.0
1,1-Dichloroethane	Ave	0.5296	0.6395	0.2000	24.1	20.0	20.7*	20.0
Vinyl acetate	Ave	1.851	1.611		34.8	40.0	-13.0	20.0
2-Chloro-1,3-butadiene	Ave	0.2684	0.2923		21.8	20.0	8.9	20.0
Tert-butyl ethyl ether	Ave	0.9038	1.065		23.6	20.0	17.9	20.0
2,2-Dichloropropane	Ave	0.1790	0.1891		21.1	20.0	5.7	20.0
Ethyl acetate	Ave	0.3870	0.3060		31.6	40.0	-20.9*	20.0
2-Butanone (MEK)	Ave	0.4515	0.3434	0.0500	76.1	100	-23.9	50.0
cis-1,2-Dichloroethene	Ave	0.3969	0.4062	0.1000	20.5	20.0	2.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-504873/3 Calibration Date: 03/20/2018 23:13

Instrument ID: CVOAMS9 Calib Start Date: 03/09/2018 22:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/10/2018 00:31

Lab File ID: K81011.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2218	0.2613		23.6	20.0	17.8	20.0
Propionitrile	Ave	1.455	1.385		190	200	-4.8	20.0
Tetrahydrofuran	Ave	0.5459	0.4208		30.8	40.0	-22.9*	20.0
Chlorobromomethane	Ave	0.2112	0.1947		18.4	20.0	-7.8	20.0
Methacrylonitrile	Ave	0.1092	0.1215		222	200	11.2	20.0
Chloroform	Ave	0.6311	0.6914	0.2000	21.9	20.0	9.6	20.0
Cyclohexane	Lin2		0.5562	0.1000	21.8	20.0	8.8	50.0
1,1,1-Trichloroethane	Ave	0.5996	0.6436	0.1000	21.5	20.0	7.3	20.0
Carbon tetrachloride	Ave	0.5356	0.5552	0.1000	20.7	20.0	3.7	20.0
1,1-Dichloropropene	Ave	0.4091	0.4910		24.0	20.0	20.0	20.0
Isobutyl alcohol	Lin2		0.0408		398	500	-20.3*	20.0
Benzene	Ave	1.426	1.541	0.5000	21.6	20.0	8.1	20.0
Isopropyl acetate	Ave	0.8406	0.9901		23.6	20.0	17.8	20.0
Tert-amyl methyl ether	Ave	0.9760	1.050		21.5	20.0	7.5	20.0
1,2-Dichloroethane	Ave	0.4529	0.4568	0.1000	20.2	20.0	0.9	20.0
n-Heptane	Lin2		0.3049		26.6	20.0	32.8*	20.0
n-Butanol	Ave	0.2873	0.2472		430	500	-14.0	50.0
Trichloroethene	Ave	0.3474	0.3627	0.2000	20.9	20.0	4.4	20.0
Ethyl acrylate	Ave	0.1732	0.2079		24.0	20.0	20.1*	20.0
Methylcyclohexane	Lin2		0.6698	0.1000	22.0	20.0	9.9	50.0
1,2-Dichloropropane	Ave	0.2853	0.3360	0.1000	23.6	20.0	17.8	20.0
Methyl methacrylate	Ave	0.2165	0.2295		42.4	40.0	6.0	20.0
1,4-Dioxane	Ave	1.785	1.333		299	400	-25.3	50.0
n-Propyl acetate	Ave	0.3184	0.4424		27.8	20.0	39.0*	20.0
Dibromomethane	Ave	0.2169	0.2204		20.3	20.0	1.6	20.0
Dichlorobromomethane	Ave	0.4474	0.4747	0.2000	21.2	20.0	6.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1250	0.1530		24.5	20.0	22.4*	20.0
2-Nitropropane	Ave	0.0746	0.0706		37.9	40.0	-5.4	20.0
Epichlorohydrin	Ave	0.3422	0.3004		351	400	-12.2	20.0
cis-1,3-Dichloropropene	Ave	0.5750	0.5907	0.2000	20.5	20.0	2.7	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.087	3.134	0.0500	102	100	1.5	50.0
Toluene	Ave	1.679	1.722	0.4000	20.5	20.0	2.6	20.0
trans-1,3-Dichloropropene	Ave	0.5026	0.5323	0.1000	21.2	20.0	5.9	50.0
Ethyl methacrylate	Ave	0.3847	0.4213		21.9	20.0	9.5	20.0
1,1,2-Trichloroethane	Ave	0.2795	0.2739	0.1000	19.6	20.0	-2.0	20.0
Tetrachloroethene	Ave	0.4897	0.4668	0.2000	19.1	20.0	-4.7	20.0
1,3-Dichloropropane	Ave	0.4962	0.5257		21.2	20.0	5.9	20.0
2-Hexanone	Ave	1.998	2.041	0.0500	102	100	2.1	50.0
n-Butyl acetate	Ave	0.4017	0.5739		28.6	20.0	42.9*	20.0
Chlorodibromomethane	Ave	0.4663	0.4064	0.1000	17.4	20.0	-12.8	50.0
Ethylene Dibromide	Ave	0.3649	0.3397	0.1000	18.6	20.0	-6.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-504873/3 Calibration Date: 03/20/2018 23:13

Instrument ID: CVOAMS9 Calib Start Date: 03/09/2018 22:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/10/2018 00:31

Lab File ID: K81011.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.144	1.104	0.5000	19.3	20.0	-3.5	20.0
Ethylbenzene	Ave	0.5736	0.5879	0.1000	20.5	20.0	2.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4858	0.4542		18.7	20.0	-6.5	20.0
m-Xylene & p-Xylene	Ave	0.7022	0.7211	0.1000	20.5	20.0	2.7	20.0
n-Butyl acrylate	Ave	0.2289	0.2470		21.6	20.0	7.9	20.0
o-Xylene	Ave	0.7269	0.7081	0.3000	19.5	20.0	-2.6	20.0
Styrene	Ave	1.163	1.136	0.3000	19.5	20.0	-2.4	20.0
Amyl acetate (mixed isomers)	Ave	0.7868	1.077		27.4	20.0	36.9*	20.0
Bromoform	Ave	0.3225	0.2753	0.1000	17.1	20.0	-14.6	20.0
Isopropylbenzene	Lin2		2.133	0.1000	19.5	20.0	-2.3	20.0
Bromobenzene	Ave	0.9313	0.8588		18.4	20.0	-7.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7894	0.8468	0.3000	21.5	20.0	7.3	20.0
N-Propylbenzene	Ave	3.800	4.310		22.7	20.0	13.4	20.0
1,2,3-Trichloropropane	Ave	0.2567	0.2402		18.7	20.0	-6.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1887	0.2131		22.6	20.0	12.9	20.0
2-Chlorotoluene	Ave	2.701	2.881		21.3	20.0	6.6	20.0
4-Ethyltoluene	Ave	3.378	3.588		21.2	20.0	6.2	20.0
1,3,5-Trimethylbenzene	Ave	3.004	3.075		20.5	20.0	2.4	20.0
4-Chlorotoluene	Ave	2.288	2.464		21.5	20.0	7.7	20.0
Butyl Methacrylate	Ave	0.7951	0.8566		21.5	20.0	7.7	20.0
tert-Butylbenzene	Lin2		2.466		18.5	20.0	-7.4	20.0
1,2,4-Trimethylbenzene	Ave	3.092	3.169		20.5	20.0	2.5	20.0
sec-Butylbenzene	Lin2		4.161		20.3	20.0	1.5	20.0
4-Isopropyltoluene	Lin2		3.582		19.6	20.0	-2.2	20.0
1,3-Dichlorobenzene	Ave	1.797	1.785	0.6000	19.9	20.0	-0.6	20.0
1,4-Dichlorobenzene	Ave	1.805	1.778	0.5000	19.7	20.0	-1.5	20.0
Benzyl chloride	Ave	1.412	1.476		20.9	20.0	4.6	50.0
Indan	Ave	3.254	3.196		19.6	20.0	-1.8	20.0
p-Diethylbenzene	Ave	1.911	2.026		21.2	20.0	6.0	20.0
n-Butylbenzene	Lin2		1.943		22.3	20.0	11.7	20.0
1,2-Dichlorobenzene	Ave	1.835	1.784	0.4000	19.4	20.0	-2.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.423	3.414		19.9	20.0	-0.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1807	0.1714	0.0500	19.0	20.0	-5.2	50.0
1,3,5-Trichlorobenzene	Ave	1.576	1.639		20.8	20.0	4.0	20.0
1,2,4-Trichlorobenzene	Ave	1.539	1.584	0.2000	20.6	20.0	2.9	20.0
Hexachlorobutadiene	Lin2		0.7980		20.4	20.0	1.8	20.0
Naphthalene	Ave	3.710	3.448		18.6	20.0	-7.1	50.0
1,2,3-Trichlorobenzene	Ave	1.574	1.555		19.7	20.0	-1.3	20.0
Dibromofluoromethane (Surr)	Ave	0.3442	0.3733		54.2	50.0	8.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3404	0.4036		59.3	50.0	18.6	20.0
Toluene-d8 (Surr)	Ave	1.445	1.470		50.8	50.0	1.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-504873/3 Calibration Date: 03/20/2018 23:13

Instrument ID: CVOAMS9 Calib Start Date: 03/09/2018 22:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/10/2018 00:31

Lab File ID: K81011.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4923	0.5102		51.8	50.0	3.6	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81011.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Mar-2018 23:13:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0069055-003
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 21-Mar-2018 13:26:58 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: delpolitov Date: 21-Mar-2018 13:26:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.590	1.590	0.000	89	15088	20.0	23.7	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	99	90877	20.0	20.1	
3 Chloromethane	50	1.791	1.791	0.000	99	81465	20.0	25.1	
4 Vinyl chloride	62	1.901	1.901	0.000	86	82882	20.0	24.1	
5 Butadiene	54	1.907	1.907	0.000	96	60297	20.0	24.7	
6 Bromomethane	94	2.199	2.199	0.000	98	60564	20.0	20.6	
7 Chloroethane	64	2.266	2.266	0.000	100	39000	20.0	22.8	
9 Dichlorofluoromethane	67	2.462	2.462	0.000	98	119280	20.0	21.6	
8 Trichlorofluoromethane	101	2.468	2.468	0.000	66	109987	20.0	20.0	
10 Pentane	72	2.498	2.498	0.000	98	17247	40.0	36.9	
12 Ethanol	46	2.687	2.687	0.000	77	7515	800.0	778.6	
11 Ethyl ether	59	2.693	2.693	0.000	92	38447	20.0	22.1	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	98	47358	20.0	23.9	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	94	54776	20.0	20.9	
15 Acrolein	56	2.876	2.876	0.000	96	109740	300.0	319.1	
16 1,1,2-Trichloro-1,2,2-trif	101	2.882	2.882	0.000	65	72716	20.0	21.0	
17 1,1-Dichloroethene	96	2.913	2.913	0.000	99	55503	20.0	20.4	
18 Acetone	43	3.004	3.004	0.000	84	93556	100.0	92.3	
19 Iodomethane	142	3.077	3.077	0.000	100	108403	20.0	18.7	
22 Isopropyl alcohol	45	3.089	3.089	0.000	39	31312	200.0	182.1	a
20 Carbon disulfide	76	3.114	3.114	0.000	99	201783	20.0	22.9	
21 3-Chloro-1-propene	76	3.236	3.236	0.000	96	32254	20.0	22.1	
23 Methyl acetate	43	3.248	3.248	0.000	99	190732	100.0	135.1	
24 Cyclopentene	67	3.266	3.266	0.000	93	127720	20.0	22.9	
29 Acetonitrile	41	3.309	3.309	0.000	85	65752	200.0	199.1	a
* 25 TBA-d9 (IS)	65	3.352	3.352	0.000	0	273445	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.370	0.000	92	60561	20.0	19.7	
27 2-Methyl-2-propanol	59	3.443	3.443	0.000	96	65701	200.0	167.8	M
28 Methyl tert-butyl ether	73	3.528	3.528	0.000	96	156406	20.0	20.8	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	96	58288	20.0	21.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.632	0.000	92	182440	200.0	245.8	
32 Hexane	43	3.717	3.717	0.000	92	52429	20.0	30.0	
33 Isopropyl ether	45	3.925	3.925	0.000	94	182658	20.0	27.2	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	80	103414	20.0	24.1	
35 Vinyl acetate	86	3.973	3.973	0.000	100	17623	40.0	34.8	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	93	47266	20.0	21.8	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	88	172268	20.0	23.6	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	215412	250.0	250.0	
39 2,2-Dichloropropane	79	4.479	4.479	0.000	95	30587	20.0	21.1	
41 Ethyl acetate	70	4.498	4.498	0.000	91	10545	40.0	31.6	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	93	65690	20.0	20.5	
42 2-Butanone (MEK)	72	4.504	4.504	0.000	96	29589	100.0	76.1	
44 Methyl acrylate	55	4.565	4.565	0.000	99	42251	20.0	23.6	
43 Propionitrile	54	4.644	4.644	0.000	97	75758	200.0	190.4	
45 Tetrahydrofuran	72	4.729	4.729	0.000	62	14503	40.0	30.8	
46 Chlorobromomethane	128	4.735	4.735	0.000	79	31490	20.0	18.4	
47 Methacrylonitrile	67	4.748	4.748	0.000	94	196458	200.0	222.4	
48 Chloroform	83	4.784	4.784	0.000	99	111818	20.0	21.9	
49 Cyclohexane	84	4.931	4.931	0.000	87	89948	20.0	21.8	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	72	104080	20.0	21.5	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	97	150905	50.0	54.2	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	89787	20.0	20.7	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	96	79411	20.0	24.0	
56 Isobutyl alcohol	74	5.193	5.193	0.000	1	5578	500.0	398.3	a
54 Benzene	78	5.290	5.290	0.000	96	214690	20.0	21.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.302	0.000	0	163176	50.0	59.3	
57 Isopropyl acetate	43	5.327	5.327	0.000	96	160115	20.0	23.6	
58 Tert-amyl methyl ether	73	5.339	5.339	0.000	95	169728	20.0	21.5	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	73874	20.0	20.2	
60 n-Heptane	57	5.437	5.437	0.000	93	49311	20.0	26.6	
* 61 Fluorobenzene	96	5.577	5.577	0.000	99	404301	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	93	33801	500.0	430.2	
63 Trichloroethene	95	5.943	5.943	0.000	98	58656	20.0	20.9	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	33617	20.0	24.0	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	108316	20.0	22.0	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	91	54332	20.0	23.6	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	21225	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	93	74228	40.0	42.4	
69 1,4-Dioxane	88	6.339	6.339	0.000	31	11317	400.0	298.7	
70 n-Propyl acetate	43	6.345	6.345	0.000	99	71551	20.0	27.8	
71 Dibromomethane	93	6.369	6.369	0.000	96	35644	20.0	20.3	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	76761	20.0	21.2	
73 2-Chloroethyl vinyl ether	63	6.839	6.839	0.000	71	24736	20.0	24.5	
74 2-Nitropropane	41	6.845	6.845	0.000	82	22846	40.0	37.9	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	103541	400.0	351.2	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	93	82282	20.0	20.5	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	98	270080	100.0	101.5	
$ 78 Toluene-d8 (Surr)	98	7.265	7.265	0.000	98	511788	50.0	50.8	
79 Toluene	91	7.345	7.345	0.000	91	239953	20.0	20.5	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	96	74157	20.0	21.2	
81 Ethyl methacrylate	69	7.704	7.704	0.000	91	58685	20.0	21.9	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	94	38157	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.967	0.000	97	65022	20.0	19.1	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	95	73229	20.0	21.2	
85 2-Hexanone	43	8.174	8.174	0.000	98	175861	100.0	102.1	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	79948	20.0	28.6	
87 Chlorodibromomethane	129	8.363	8.363	0.000	97	56615	20.0	17.4	
88 Ethylene Dibromide	107	8.521	8.521	0.000	99	47326	20.0	18.6	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	86	348271	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	95	153800	20.0	19.3	
92 Ethylbenzene	106	9.198	9.198	0.000	99	81898	20.0	20.5	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	94	63269	20.0	18.7	
93 m-Xylene & p-Xylene	106	9.344	9.344	0.000	0	100453	20.0	20.5	
94 n-Butyl acrylate	73	9.783	9.783	0.000	96	34406	20.0	21.6	
95 o-Xylene	106	9.814	9.814	0.000	91	98645	20.0	19.5	
96 Styrene	104	9.844	9.844	0.000	95	158227	20.0	19.5	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	87355	20.0	27.4	
98 Bromoform	173	10.082	10.082	0.000	95	38352	20.0	17.1	
99 Isopropylbenzene	105	10.198	10.198	0.000	95	297128	20.0	19.5	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	94	177702	50.0	51.8	
101 Bromobenzene	156	10.557	10.557	0.000	96	69644	20.0	18.4	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	68668	20.0	21.5	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	349509	20.0	22.7	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	19483	20.0	18.7	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.661	0.000	86	17284	20.0	22.6	
107 4-Ethyltoluene	105	10.740	10.740	0.000	89	290997	20.0	21.2	
106 2-Chlorotoluene	91	10.740	10.740	0.000	91	233641	20.0	21.3	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	92	249398	20.0	20.5	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	199848	20.0	21.5	
110 Butyl Methacrylate	87	10.899	10.899	0.000	92	69464	20.0	21.5	
111 tert-Butylbenzene	119	11.100	11.100	0.000	94	199943	20.0	18.5	
112 1,2,4-Trimethylbenzene	105	11.161	11.161	0.000	97	256959	20.0	20.5	
113 sec-Butylbenzene	105	11.307	11.307	0.000	100	337419	20.0	20.3	
114 4-Isopropyltoluene	119	11.435	11.435	0.000	98	290457	20.0	19.6	
120 p-Diethylbenzene	119	11.777	11.777	0.000	92	164338	20.0	21.2	a
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	97	144780	20.0	19.9	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	94	202741	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	97	144208	20.0	19.7	
118 Benzyl chloride	91	11.667	11.667	0.000	98	119736	20.0	20.9	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	259184	20.0	19.6	
121 n-Butylbenzene	92	11.795	11.795	0.000	96	157546	20.0	22.3	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	144711	20.0	19.4	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	276842	20.0	19.9	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	96	13899	20.0	19.0	
125 1,3,5-Trichlorobenzene	180	12.642	12.642	0.000	98	132930	20.0	20.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	128477	20.0	20.6	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	96	64713	20.0	20.4	
128 Naphthalene	128	13.331	13.331	0.000	99	279618	20.0	18.6	
129 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	96	126069	20.0	19.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.9	
S 131 Xylenes, Total	100				0		40.0	40.0	
S 132 Total BTEX	1				0		100.0	102.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00074	Amount Added:	3.00	Units: uL	
GASES Li_00252	Amount Added:	2.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Mar-2018 13:27:00 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81011.D

Injection Date: 20-Mar-2018 23:13:30 Instrument ID: CVOAMS9 Operator ID:

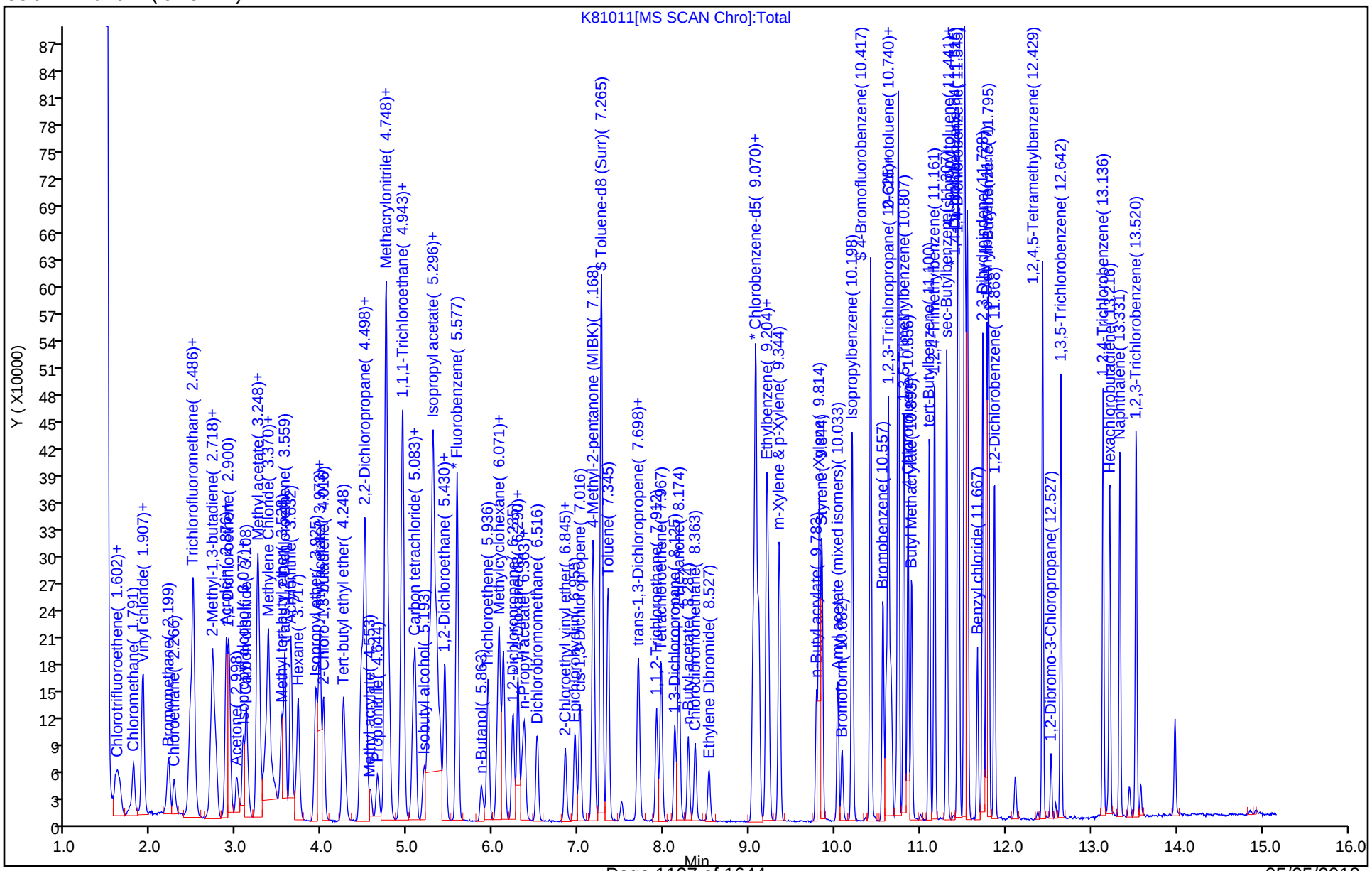
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

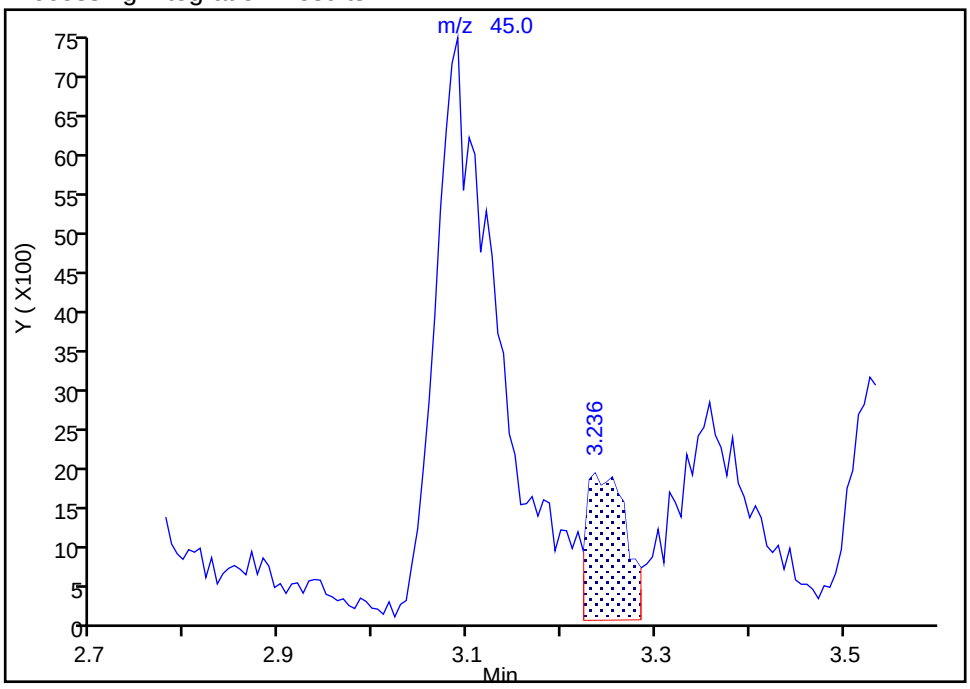
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81011.D
Injection Date: 20-Mar-2018 23:13:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

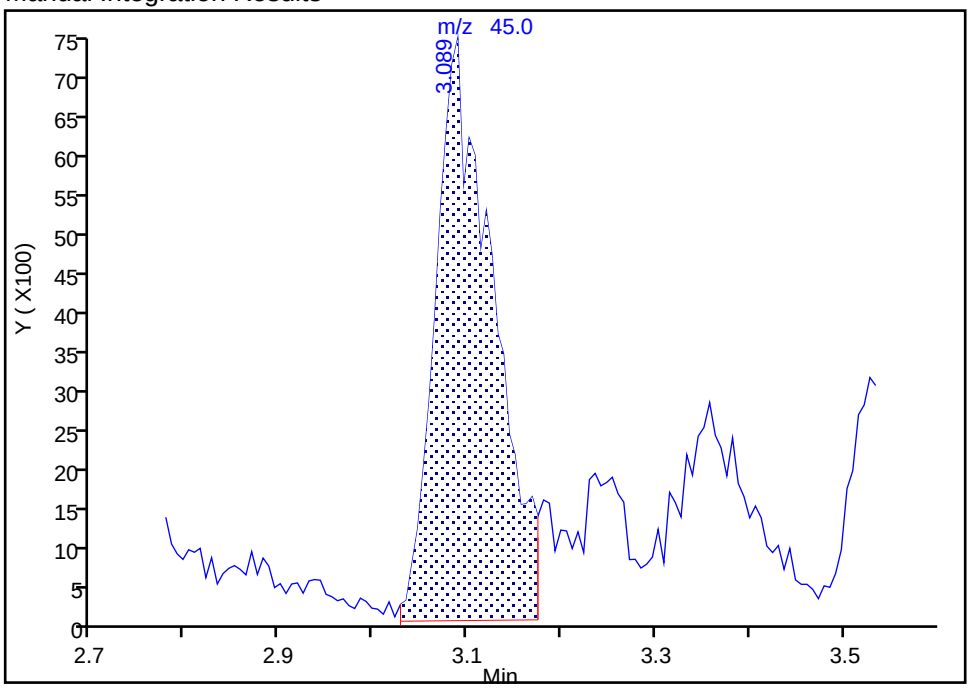
Processing Integration Results

RT: 3.24
Area: 5478
Amount: 31.850885
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 31312
Amount: 182.0582
Amount Units: ug/l



Reviewer: delpolitov, 21-Mar-2018 13:25:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

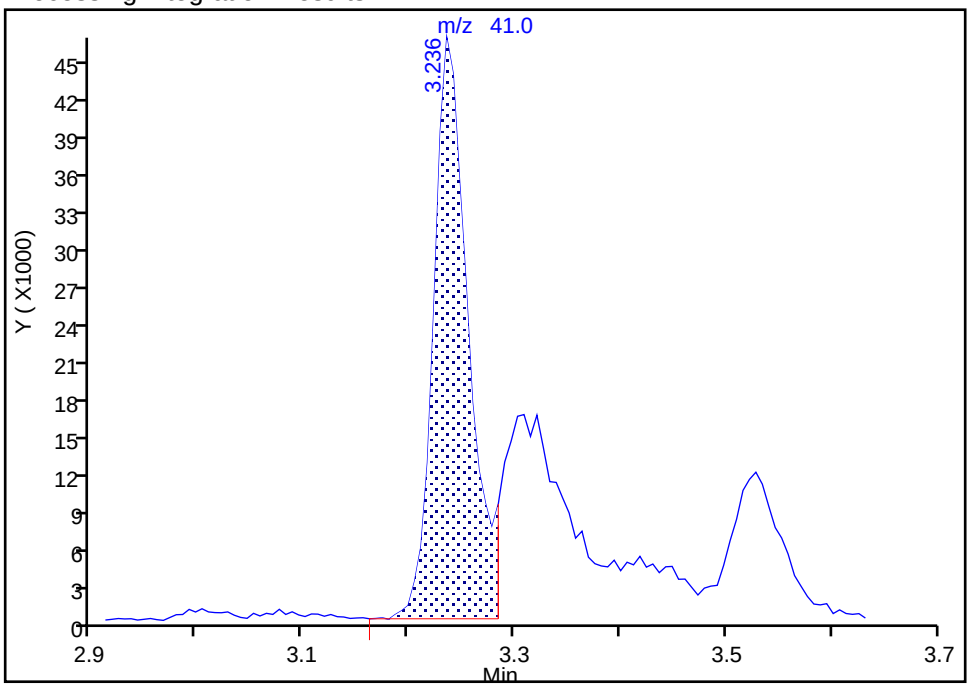
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81011.D
Injection Date: 20-Mar-2018 23:13:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

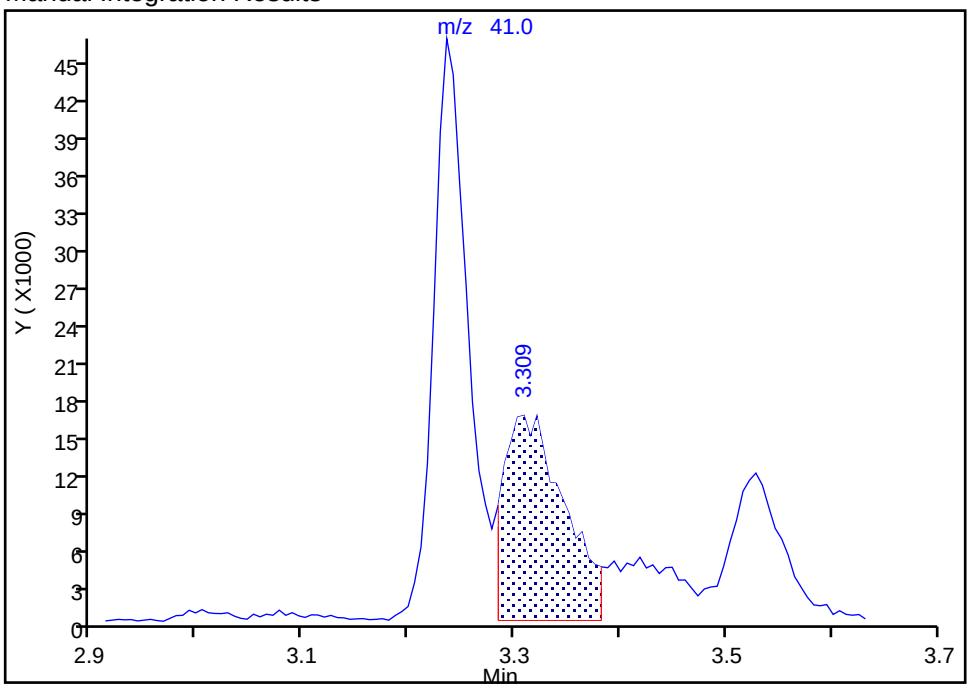
Processing Integration Results

RT: 3.24
Area: 106686
Amount: 323.0413
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 65752
Amount: 199.0947
Amount Units: ug/l



Reviewer: delpolitov, 21-Mar-2018 13:25:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

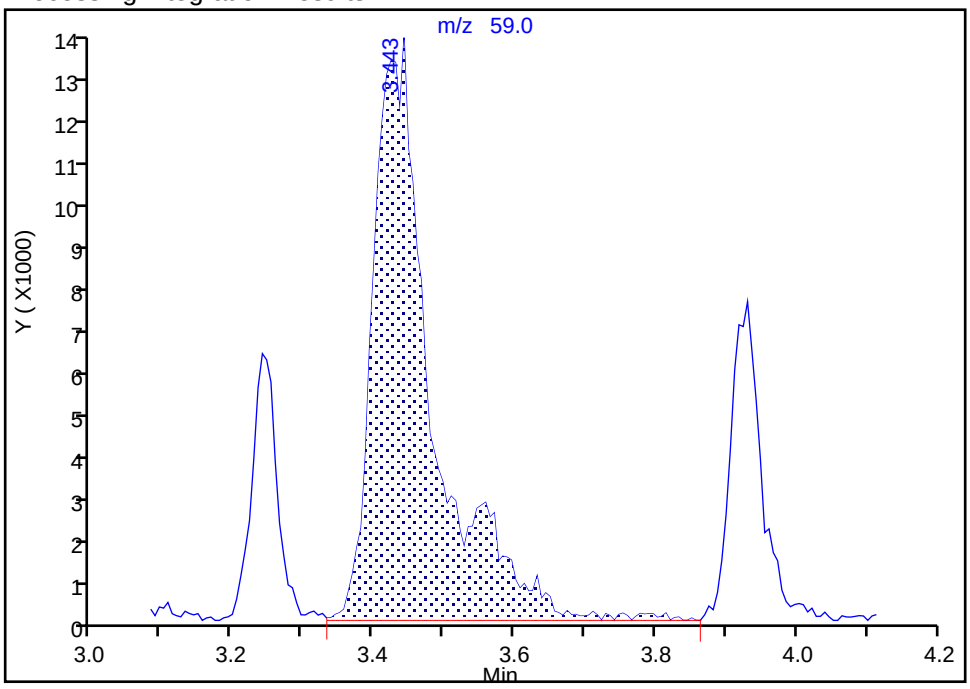
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81011.D
Injection Date: 20-Mar-2018 23:13:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

27 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

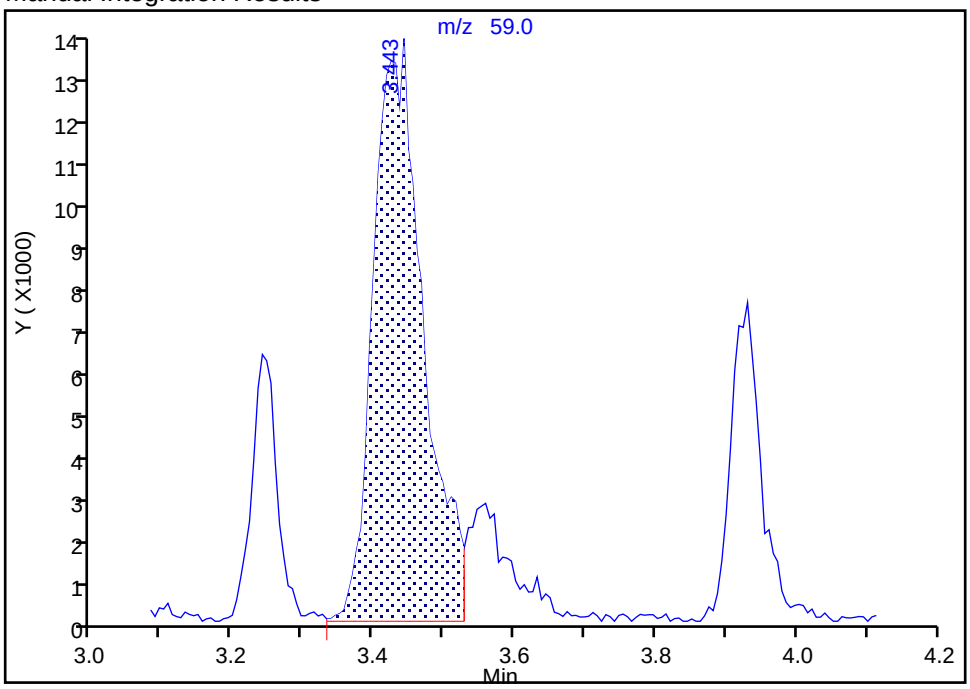
Processing Integration Results

RT: 3.44
Area: 77679
Amount: 198.3498
Amount Units: ug/l



Manual Integration Results

RT: 3.44
Area: 65701
Amount: 167.7646
Amount Units: ug/l



Reviewer: delpolitov, 21-Mar-2018 13:26:11
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

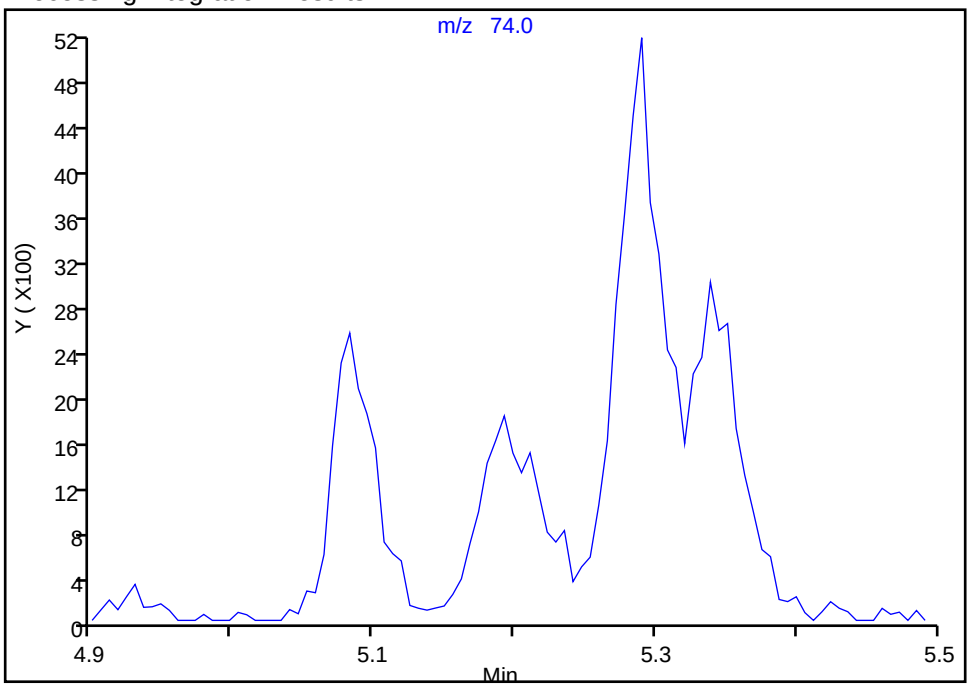
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81011.D
Injection Date: 20-Mar-2018 23:13:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

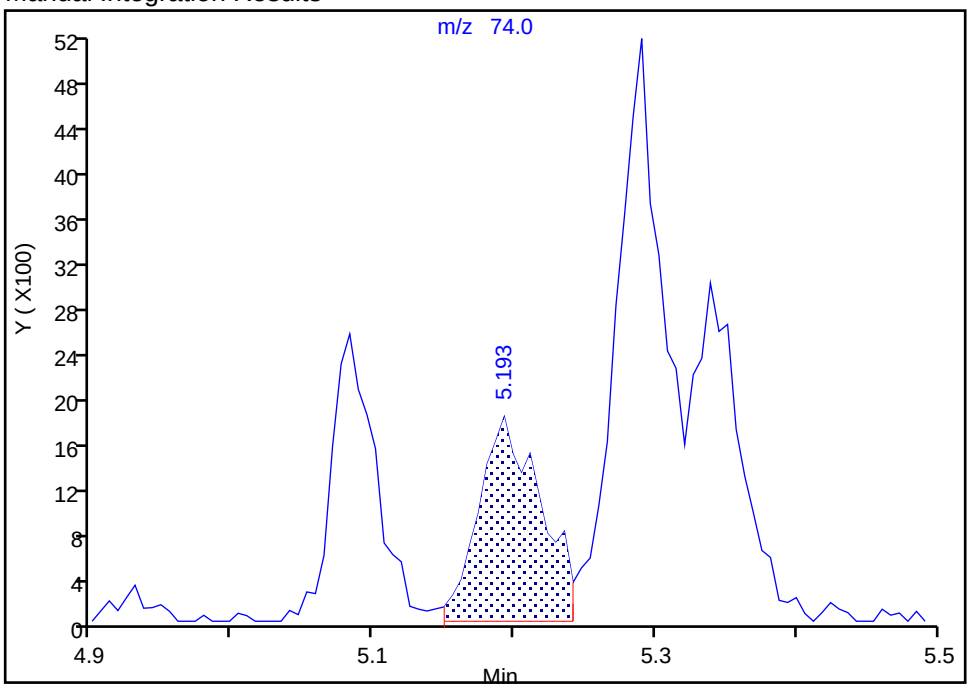
Not Detected
Expected RT: 5.19

Processing Integration Results



Manual Integration Results

RT: 5.19
Area: 5578
Amount: 398.3467
Amount Units: ug/l



Reviewer: delpolitov, 21-Mar-2018 13:26:23
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

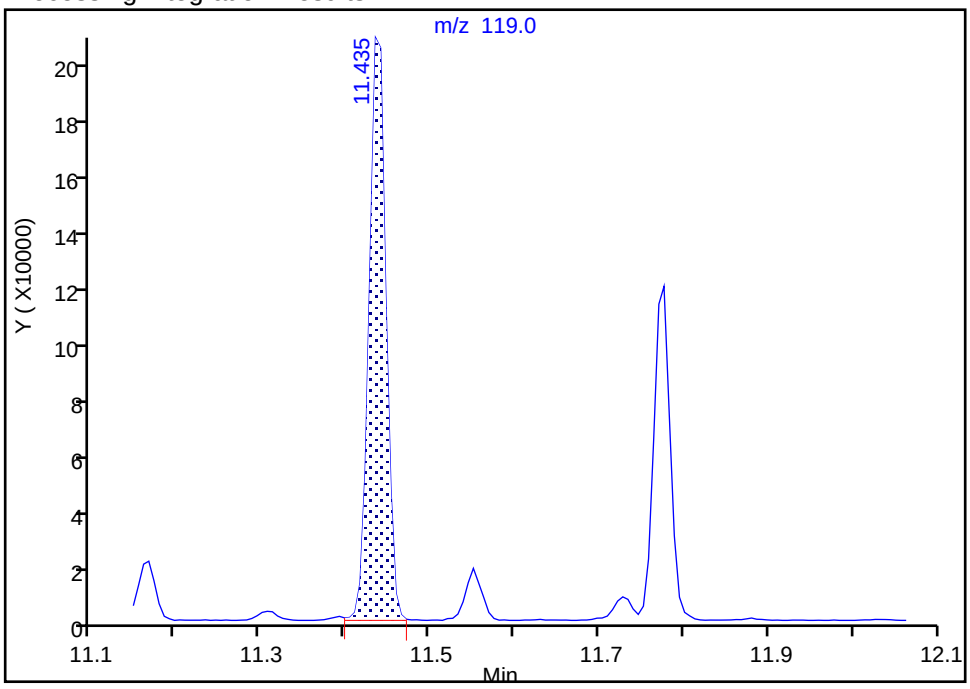
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81011.D		
Injection Date:	20-Mar-2018 23:13:30	Instrument ID:	CVOAMS9
Lims ID:	CCVIS		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

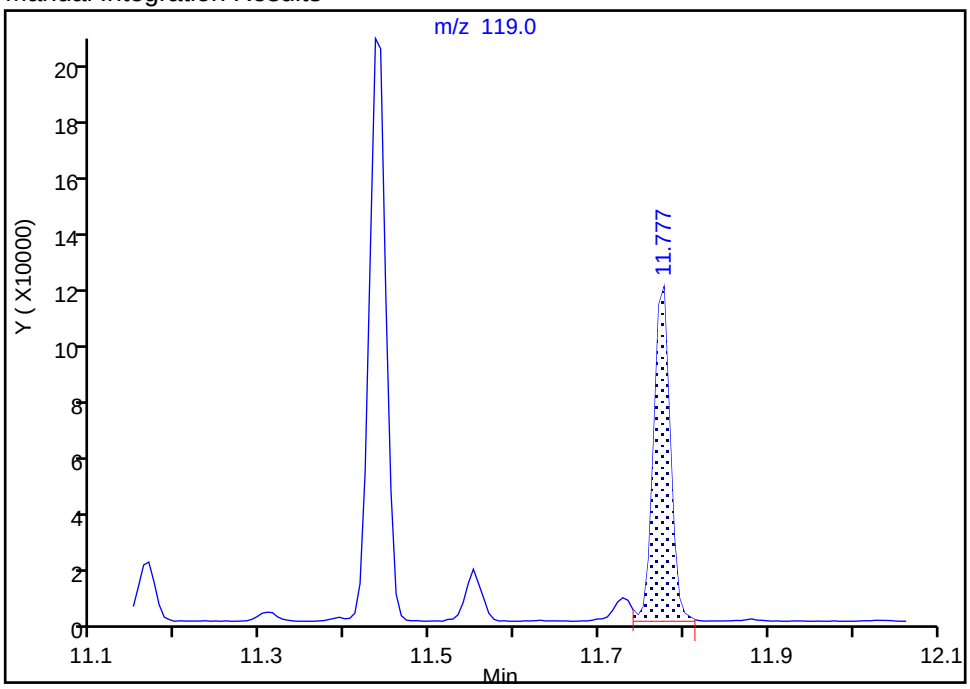
Processing Integration Results

RT: 11.44
Area: 290447
Amount: 37.474082
Amount Units: ug/l



Manual Integration Results

RT: 11.78
Area: 164338
Amount: 21.203234
Amount Units: ug/l



Reviewer: delpolitov, 21-Mar-2018 13:26:46
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505749/2 Calibration Date: 03/24/2018 05:54

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81118.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1021	0.1124		22.0	20.0	10.1	20.0
Dichlorodifluoromethane	Ave	0.6673	0.7530	0.1000	22.6	20.0	12.8	20.0
Chloromethane	Ave	0.5966	0.6567	0.1000	22.0	20.0	10.1	20.0
Butadiene	Ave	0.4185	0.4724		22.6	20.0	12.9	20.0
Vinyl chloride	Ave	0.5278	0.6210	0.1000	23.5	20.0	17.6	20.0
Bromomethane	Ave	0.3079	0.3092	0.1000	20.1	20.0	0.4	50.0
Chloroethane	Ave	0.2258	0.2448	0.1000	21.7	20.0	8.4	50.0
Dichlorofluoromethane	Ave	0.8332	0.8232		19.8	20.0	-1.2	20.0
Trichlorofluoromethane	Ave	0.6659	0.7487	0.1000	22.5	20.0	12.4	20.0
Pentane	Ave	1.437	1.301		36.2	40.0	-9.4	20.0
Ethanol	Ave	0.0680	0.0766		901	800	12.6	50.0
Ethyl ether	Ave	0.3357	0.3467		20.7	20.0	3.3	20.0
2-Methyl-1,3-butadiene	Ave	0.4089	0.4446		21.7	20.0	8.7	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3236	0.3423		21.2	20.0	5.8	20.0
Acrolein	Ave	1.680	1.701		304	300	1.2	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.4469	0.4881	0.1000	21.8	20.0	9.2	20.0
1,1-Dichloroethene	Ave	0.3613	0.3763	0.1000	20.8	20.0	4.2	20.0
Acetone	QuaF		1.077	0.0500	91.2	100	-8.8	50.0
Iodomethane	Ave	0.6707	0.6319		18.8	20.0	-5.8	20.0
Isopropyl alcohol	Ave	1.025	0.9157		179	200	-10.7	50.0
Carbon disulfide	Ave	1.467	1.526	0.1000	20.8	20.0	4.0	50.0
Allyl chloride	Ave	0.2391	0.2479		20.7	20.0	3.7	20.0
Methyl acetate	Ave	0.3592	0.3810	0.1000	106	100	6.1	20.0
Cyclopentene	Ave	1.010	1.088		21.5	20.0	7.7	20.0
Acetonitrile	Ave	2.050	2.036		199	200	-0.7	20.0
Methylene Chloride	Qua		0.4621	0.1000	19.6	20.0	-1.8	20.0
2-Methyl-2-propanol	Ave	1.487	1.394		188	200	-6.2	50.0
Methyl tert-butyl ether	Ave	1.239	1.222	0.1000	19.7	20.0	-1.4	20.0
trans-1,2-Dichloroethene	Ave	0.3796	0.4003	0.1000	21.1	20.0	5.4	20.0
Acrylonitrile	Ave	0.1608	0.1698		211	200	5.6	20.0
Hexane	Ave	0.4882	0.5616		23.0	20.0	15.0	20.0
Isopropyl ether	Ave	1.807	1.878		20.8	20.0	3.9	20.0
1,1-Dichloroethane	Ave	0.8082	0.8527	0.2000	21.1	20.0	5.5	20.0
Vinyl acetate	Ave	1.523	1.423		37.4	40.0	-6.6	20.0
2-Chloro-1,3-butadiene	Ave	0.3389	0.3471		20.5	20.0	2.4	20.0
Tert-butyl ethyl ether	Ave	1.502	1.497		19.9	20.0	-0.3	20.0
2,2-Dichloropropane	Ave	0.2265	0.2518		22.2	20.0	11.1	20.0
2-Butanone (MEK)	Ave	0.3430	0.3128	0.0500	91.2	100	-8.8	50.0
cis-1,2-Dichloroethene	Ave	0.4420	0.4399	0.1000	19.9	20.0	-0.5	20.0
Ethyl acetate	Ave	0.3030	0.2895		38.2	40.0	-4.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505749/2 Calibration Date: 03/24/2018 05:54

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81118.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.3855	0.3820		19.8	20.0	-0.9	20.0
Propionitrile	Ave	1.593	1.492		187	200	-6.3	20.0
Tetrahydrofuran	Ave	0.4032	0.3611		35.8	40.0	-10.4	20.0
Chlorobromomethane	Ave	0.2086	0.1983		19.0	20.0	-4.9	20.0
Methacrylonitrile	Ave	0.1508	0.1573		209	200	4.3	20.0
Chloroform	Ave	0.7499	0.7687	0.2000	20.5	20.0	2.5	20.0
Cyclohexane	Ave	0.6183	0.6907	0.1000	22.3	20.0	11.7	50.0
1,1,1-Trichloroethane	Ave	0.6652	0.7099	0.1000	21.3	20.0	6.7	20.0
Carbon tetrachloride	Ave	0.5128	0.5759	0.1000	22.5	20.0	12.3	20.0
1,1-Dichloropropene	Ave	0.5394	0.5927		22.0	20.0	9.9	20.0
Isobutyl alcohol	Ave	0.0556	0.0463		417	500	-16.6	50.0
Benzene	Ave	1.920	2.033	0.5000	21.2	20.0	5.9	20.0
Isopropyl acetate	Ave	1.469	1.518		20.7	20.0	3.3	20.0
Tert-amyl methyl ether	Ave	1.361	1.359		20.0	20.0	-0.2	20.0
1,2-Dichloroethane	Ave	0.5626	0.5623	0.1000	20.0	20.0	-0.0	20.0
n-Heptane	Ave	0.3812	0.4425		23.2	20.0	16.1	20.0
n-Butanol	Ave	0.3792	0.3303		435	500	-12.9	50.0
Trichloroethene	Ave	0.3918	0.4022	0.2000	20.5	20.0	2.7	20.0
Ethyl acrylate	Ave	0.2851	0.3310		23.2	20.0	16.1	20.0
Methylcyclohexane	Ave	0.7340	0.8272	0.1000	22.5	20.0	12.7	50.0
1,2-Dichloropropane	Ave	0.4521	0.4518	0.1000	20.0	20.0	-0.0	20.0
Methyl methacrylate	Ave	0.3889	0.3914		40.3	40.0	0.6	20.0
1,4-Dioxane	Ave	1.513	1.535		406	400	1.4	50.0
n-Propyl acetate	Ave	0.6939	0.6878		19.8	20.0	-0.9	20.0
Dibromomethane	Ave	0.2520	0.2303		18.3	20.0	-8.6	20.0
Dichlorobromomethane	Ave	0.4993	0.4846	0.2000	19.4	20.0	-3.0	20.0
2-Chloroethyl vinyl ether	Ave	0.2042	0.2099		20.6	20.0	2.8	20.0
2-Nitropropane	Ave	0.0559	0.0629		45.0	40.0	12.6	20.0
Epichlorohydrin	Ave	0.3139	0.3172		404	400	1.0	20.0
cis-1,3-Dichloropropene	Ave	0.7964	0.8204	0.2000	20.6	20.0	3.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.738	3.589	0.0500	96.0	100	-4.0	50.0
Toluene	Ave	2.006	2.119	0.4000	21.1	20.0	5.7	20.0
trans-1,3-Dichloropropene	Ave	0.6907	0.7137	0.1000	20.7	20.0	3.3	50.0
Ethyl methacrylate	Ave	0.6145	0.6145		20.0	20.0	-0.0	20.0
1,1,2-Trichloroethane	Ave	0.3599	0.3541	0.1000	19.7	20.0	-1.6	20.0
Tetrachloroethene	Ave	0.4510	0.4658	0.2000	20.7	20.0	3.3	20.0
1,3-Dichloropropane	Ave	0.7003	0.7038		20.1	20.0	0.5	20.0
2-Hexanone	Ave	2.446	2.349	0.0500	96.0	100	-4.0	50.0
n-Butyl acetate	Ave	0.9736	0.9567		19.7	20.0	-1.7	20.0
Chlorodibromomethane	Ave	0.4052	0.3796	0.1000	18.7	20.0	-6.3	50.0
Ethylene Dibromide	Ave	0.3977	0.3870	0.1000	19.5	20.0	-2.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505749/2 Calibration Date: 03/24/2018 05:54

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81118.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.208	1.234	0.5000	20.4	20.0	2.1	20.0
Ethylbenzene	Ave	0.6280	0.6407	0.1000	20.4	20.0	2.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4811	0.4534		18.8	20.0	-5.8	20.0
m-Xylene & p-Xylene	Ave	0.7832	0.8062	0.1000	20.6	20.0	2.9	20.0
n-Butyl acrylate	Ave	0.3701	0.3625		19.6	20.0	-2.1	20.0
o-Xylene	Ave	0.8107	0.8270	0.3000	20.4	20.0	2.0	20.0
Styrene	Ave	1.302	1.346	0.3000	20.7	20.0	3.4	20.0
Amyl acetate (mixed isomers)	Ave	1.976	2.057		20.8	20.0	4.1	20.0
Bromoform	Ave	0.2361	0.2130	0.1000	18.0	20.0	-9.8	20.0
Isopropylbenzene	Ave	2.313	2.450	0.1000	21.2	20.0	5.9	20.0
Bromobenzene	Ave	0.9174	0.9214		20.1	20.0	0.4	20.0
1,1,2,2-Tetrachloroethane	Ave	1.093	1.080	0.3000	19.8	20.0	-1.2	20.0
N-Propylbenzene	Ave	4.827	5.402		22.4	20.0	11.9	20.0
1,2,3-Trichloropropane	Ave	0.2803	0.2694		19.2	20.0	-3.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2963	0.3395		22.9	20.0	14.6	20.0
2-Chlorotoluene	Ave	3.346	3.649		21.8	20.0	9.1	20.0
4-Ethyltoluene	Ave	3.981	4.385		22.0	20.0	10.1	20.0
1,3,5-Trimethylbenzene	Ave	3.472	3.763		21.7	20.0	8.4	20.0
4-Chlorotoluene	Ave	2.876	3.175		22.1	20.0	10.4	20.0
Butyl Methacrylate	Ave	1.198	1.189		19.8	20.0	-0.8	20.0
tert-Butylbenzene	Ave	2.782	2.982		21.4	20.0	7.2	20.0
1,2,4-Trimethylbenzene	Ave	3.574	3.879		21.7	20.0	8.5	20.0
sec-Butylbenzene	Ave	4.579	5.073		22.2	20.0	10.8	20.0
4-Isopropyltoluene	Ave	3.790	4.158		21.9	20.0	9.7	20.0
1,3-Dichlorobenzene	Ave	1.786	1.865	0.6000	20.9	20.0	4.5	20.0
1,4-Dichlorobenzene	Ave	1.814	1.886	0.5000	20.8	20.0	3.9	20.0
Benzyl chloride	Ave	1.641	1.992		24.3	20.0	21.4	50.0
Indan	Ave	3.640	3.735		20.5	20.0	2.6	20.0
p-Diethylbenzene	Ave	2.092	2.293		21.9	20.0	9.6	20.0
n-Butylbenzene	Ave	2.057	2.428		23.6	20.0	18.0	20.0
1,2-Dichlorobenzene	Ave	1.829	1.855	0.4000	20.3	20.0	1.4	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.918	4.112		21.0	20.0	5.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.2207	0.2075	0.0500	18.8	20.0	-6.0	50.0
1,3,5-Trichlorobenzene	Ave	1.530	1.622		21.2	20.0	6.0	20.0
1,2,4-Trichlorobenzene	Ave	1.513	1.593	0.2000	21.1	20.0	5.3	20.0
Hexachlorobutadiene	Ave	0.7951	0.8167		20.5	20.0	2.7	20.0
Naphthalene	Ave	3.963	3.876		19.6	20.0	-2.2	50.0
1,2,3-Trichlorobenzene	Ave	1.543	1.543		20.0	20.0	0.0	20.0
Dibromofluoromethane (Surr)	Ave	0.3372	0.3187		47.3	50.0	-5.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3928	0.3844		48.9	50.0	-2.1	20.0
Toluene-d8 (Surr)	Ave	1.598	1.528		47.8	50.0	-4.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505749/2 Calibration Date: 03/24/2018 05:54

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81118.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4594	0.4133		45.0	50.0	-10.0	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81118.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 24-Mar-2018 05:54:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0069230-002
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:03:30 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:03:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.590	1.590	0.000	95	17327	20.0	22.0	
2 Dichlorodifluoromethane	85	1.627	1.627	0.000	98	116036	20.0	22.6	
3 Chloromethane	50	1.791	1.791	0.000	99	101197	20.0	22.0	
4 Vinyl chloride	62	1.901	1.901	0.000	79	95701	20.0	23.5	
5 Butadiene	54	1.901	1.901	0.000	90	72800	20.0	22.6	
6 Bromomethane	94	2.193	2.193	0.000	99	47650	20.0	20.1	
7 Chloroethane	64	2.267	2.267	0.000	97	37719	20.0	21.7	
9 Dichlorofluoromethane	67	2.456	2.456	0.000	97	126852	20.0	19.8	
8 Trichlorofluoromethane	101	2.468	2.468	0.000	71	115386	20.0	22.5	
10 Pentane	72	2.492	2.492	0.000	97	18255	40.0	36.2	
12 Ethanol	46	2.681	2.681	0.000	84	21507	800.0	901.0	
11 Ethyl ether	59	2.687	2.687	0.000	92	53427	20.0	20.7	
13 2-Methyl-1,3-butadiene	53	2.712	2.712	0.000	95	68509	20.0	21.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.742	2.742	0.000	98	52757	20.0	21.2	
15 Acrolein	56	2.870	2.870	0.000	97	178970	300.0	303.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.882	2.882	0.000	92	75217	20.0	21.8	
17 1,1-Dichloroethene	96	2.913	2.913	0.000	93	57991	20.0	20.8	
18 Acetone	43	2.998	2.998	0.000	84	120231	100.0	91.2	
19 Iodomethane	142	3.071	3.071	0.000	98	97383	20.0	18.8	
22 Isopropyl alcohol	45	3.084	3.084	0.000	1	64245	200.0	178.6	a
20 Carbon disulfide	76	3.108	3.108	0.000	99	235132	20.0	20.8	
21 3-Chloro-1-propene	76	3.236	3.236	0.000	95	38205	20.0	20.7	
23 Methyl acetate	43	3.242	3.242	0.000	98	293569	100.0	106.1	
24 Cyclopentene	67	3.260	3.260	0.000	92	167606	20.0	21.5	
29 Acetonitrile	41	3.303	3.303	0.000	95	142857	200.0	198.7	
* 25 TBA-d9 (IS)	65	3.352	3.352	0.000	0	350803	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.370	0.000	98	71207	20.0	19.6	
27 2-Methyl-2-propanol	59	3.431	3.431	0.000	98	97796	200.0	187.5	
28 Methyl tert-butyl ether	73	3.522	3.522	0.000	98	188339	20.0	19.7	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	96	61681	20.0	21.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.632	0.000	92	261595	200.0	211.1	
32 Hexane	43	3.711	3.711	0.000	95	86540	20.0	23.0	
33 Isopropyl ether	45	3.925	3.925	0.000	96	289339	20.0	20.8	
34 1,1-Dichloroethane	63	3.968	3.968	0.000	64	131400	20.0	21.1	
35 Vinyl acetate	86	3.968	3.968	0.000	100	19969	40.0	37.4	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	93	53488	20.0	20.5	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	87	230729	20.0	19.9	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	279183	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.486	0.000	95	38802	20.0	22.2	
42 2-Butanone (MEK)	72	4.504	4.504	0.000	94	34928	100.0	91.2	
41 Ethyl acetate	70	4.504	4.504	0.000	93	12933	40.0	38.2	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	85	67790	20.0	19.9	
44 Methyl acrylate	55	4.565	4.565	0.000	99	58875	20.0	19.8	
43 Propionitrile	54	4.644	4.644	0.000	98	104684	200.0	187.4	
45 Tetrahydrofuran	72	4.730	4.730	0.000	67	16131	40.0	35.8	
46 Chlorobromomethane	128	4.736	4.736	0.000	88	30563	20.0	19.0	
47 Methacrylonitrile	67	4.748	4.748	0.000	97	242371	200.0	208.6	
48 Chloroform	83	4.784	4.784	0.000	97	118467	20.0	20.5	
49 Cyclohexane	84	4.931	4.931	0.000	98	106435	20.0	22.3	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	93	109401	20.0	21.3	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	95	122767	50.0	47.3	
52 Carbon tetrachloride	117	5.059	5.059	0.000	98	88742	20.0	22.5	
53 1,1-Dichloropropene	75	5.083	5.083	0.000	92	91334	20.0	22.0	
56 Isobutyl alcohol	74	5.193	5.193	0.000	96	8126	500.0	417.0	
54 Benzene	78	5.290	5.290	0.000	97	250631	20.0	21.2	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	148100	50.0	48.9	
57 Isopropyl acetate	43	5.327	5.327	0.000	95	233921	20.0	20.7	
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	93	209407	20.0	20.0	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	86652	20.0	20.0	
60 n-Heptane	57	5.431	5.431	0.000	98	68198	20.0	23.2	
* 61 Fluorobenzene	96	5.577	5.577	0.000	97	385266	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	97	57926	500.0	435.5	
63 Trichloroethene	95	5.943	5.943	0.000	96	61981	20.0	20.5	
64 Ethyl acrylate	56	6.071	6.071	0.000	89	51002	20.0	23.2	a
65 Methylcyclohexane	83	6.071	6.071	0.000	93	127480	20.0	22.5	
66 1,2-Dichloropropane	63	6.229	6.229	0.000	89	69623	20.0	20.0	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	24910	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	95	120619	40.0	40.3	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	105986	20.0	19.8	
69 1,4-Dioxane	88	6.339	6.339	0.000	27	15292	400.0	405.7	
71 Dibromomethane	93	6.363	6.363	0.000	94	35496	20.0	18.3	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	74678	20.0	19.4	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	77	32353	20.0	20.6	
74 2-Nitropropane	41	6.845	6.845	0.000	76	19393	40.0	45.0	
75 Epichlorohydrin	57	6.955	6.955	0.000	100	141698	400.0	404.2	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	97	101148	20.0	20.6	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	98	400820	100.0	96.0	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	97	470945	50.0	47.8	
79 Toluene	91	7.345	7.345	0.000	92	261266	20.0	21.1	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	97	87987	20.0	20.7	
81 Ethyl methacrylate	69	7.705	7.705	0.000	94	75759	20.0	20.0	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	95	43656	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.967	0.000	94	57428	20.0	20.7	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	97	86769	20.0	20.1	
85 2-Hexanone	43	8.174	8.174	0.000	99	262298	100.0	96.0	
86 n-Butyl acetate	43	8.284	8.284	0.000	97	117949	20.0	19.7	
87 Chlorodibromomethane	129	8.363	8.363	0.000	98	46803	20.0	18.7	
88 Ethylene Dibromide	107	8.528	8.528	0.000	98	47716	20.0	19.5	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	90	308230	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	92	152086	20.0	20.4	
92 Ethylbenzene	106	9.198	9.198	0.000	99	78988	20.0	20.4	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.223	0.000	93	55899	20.0	18.8	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	99402	20.0	20.6	
94 n-Butyl acrylate	73	9.783	9.783	0.000	94	44693	20.0	19.6	
95 o-Xylene	106	9.814	9.814	0.000	92	101964	20.0	20.4	
96 Styrene	104	9.851	9.851	0.000	93	166010	20.0	20.7	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	86	136954	20.0	20.8	
98 Bromoform	173	10.082	10.082	0.000	94	26257	20.0	18.0	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	302011	20.0	21.2	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	83	127405	50.0	45.0	
101 Bromobenzene	156	10.564	10.564	0.000	94	61354	20.0	20.1	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	71918	20.0	19.8	
103 N-Propylbenzene	91	10.625	10.625	0.000	98	359665	20.0	22.4	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	98	17937	20.0	19.2	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	85	22603	20.0	22.9	
106 2-Chlorotoluene	91	10.741	10.741	0.000	90	242986	20.0	21.8	
107 4-Ethyltoluene	105	10.741	10.741	0.000	88	291955	20.0	22.0	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	91	250566	20.0	21.7	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	211424	20.0	22.1	
110 Butyl Methacrylate	87	10.899	10.899	0.000	96	79142	20.0	19.8	
111 tert-Butylbenzene	119	11.106	11.106	0.000	91	198531	20.0	21.4	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	258256	20.0	21.7	
113 sec-Butylbenzene	105	11.308	11.308	0.000	99	337798	20.0	22.2	
114 4-Isopropyltoluene	119	11.436	11.436	0.000	97	276841	20.0	21.9	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	96	124206	20.0	20.9	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	97	166464	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	94	125580	20.0	20.8	
118 Benzyl chloride	91	11.667	11.667	0.000	98	132667	20.0	24.3	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	248693	20.0	20.5	
120 p-Diethylbenzene	119	11.777	11.777	0.000	91	152711	20.0	21.9	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	161693	20.0	23.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	94	123497	20.0	20.3	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	273822	20.0	21.0	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	90	13817	20.0	18.8	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	107990	20.0	21.2	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	106097	20.0	21.1	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	54383	20.0	20.5	
128 Naphthalene	128	13.332	13.332	0.000	99	258074	20.0	19.6	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	102744	20.0	20.0	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.0	
S 131 Xylenes, Total	100				0		40.0	41.0	
S 132 Total BTEX	1				0		100.0	103.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00252	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

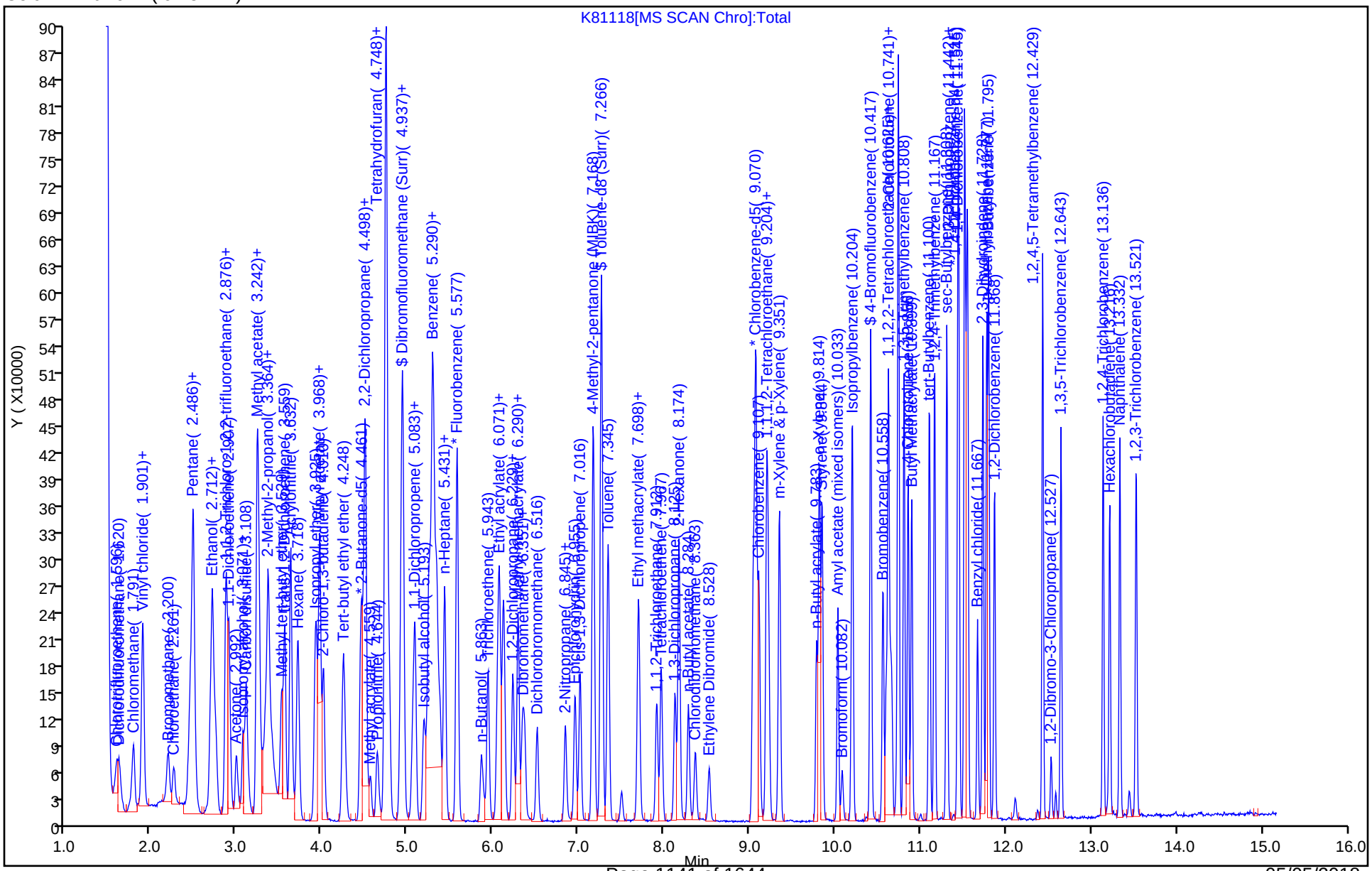
Report Date: 26-Mar-2018 13:03:32 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81118.D

Injection Date:	24-Mar-2018 05:54:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

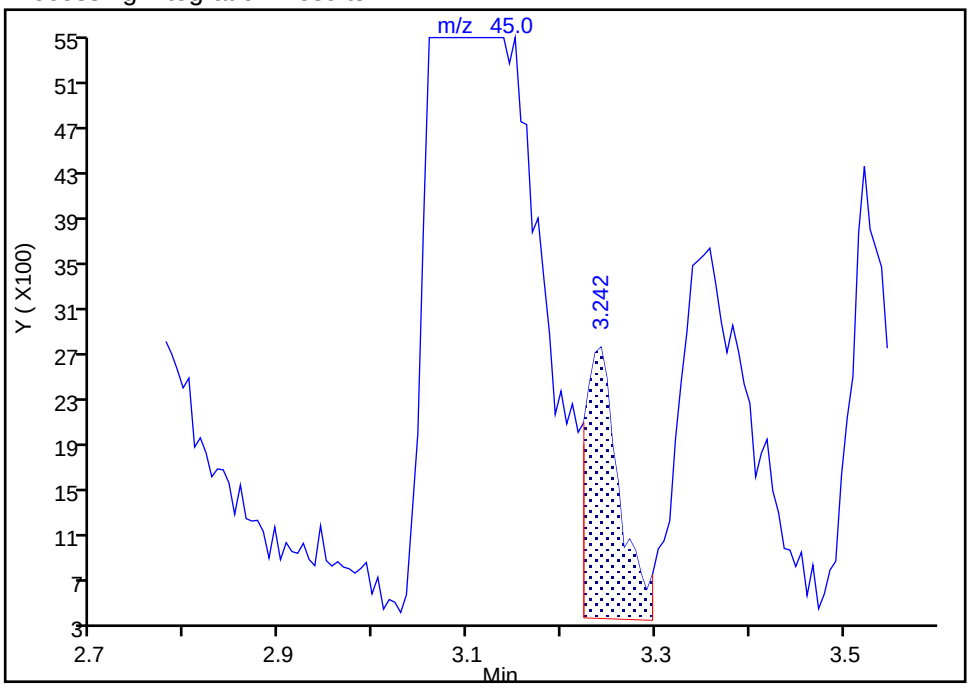
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81118.D
Injection Date: 24-Mar-2018 05:54:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

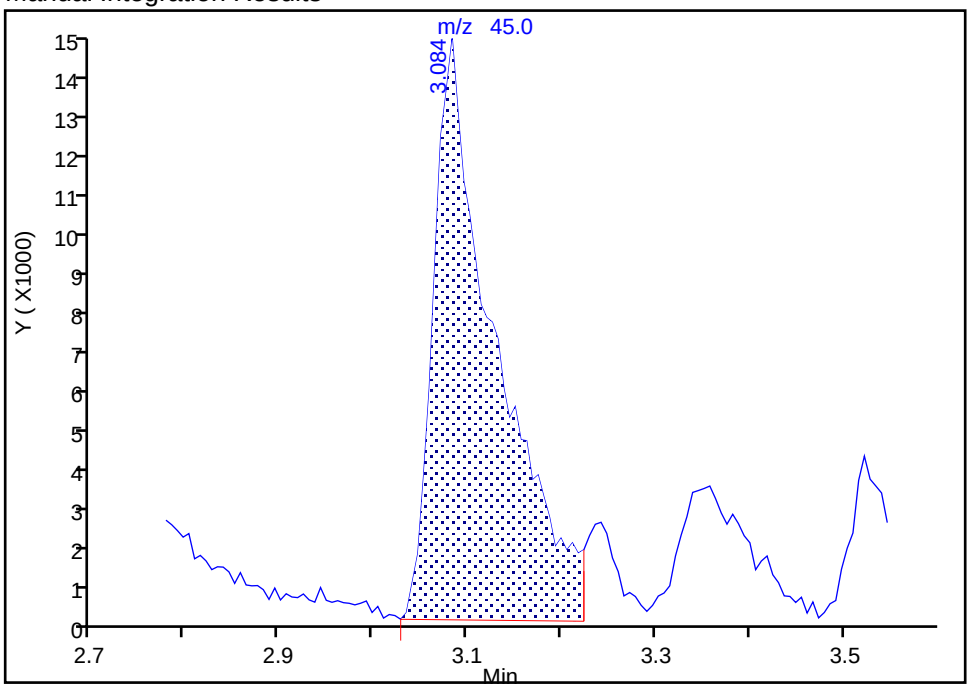
Processing Integration Results

RT: 3.24
Area: 5972
Amount: 16.602136
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 64245
Amount: 178.6008
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 13:02:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

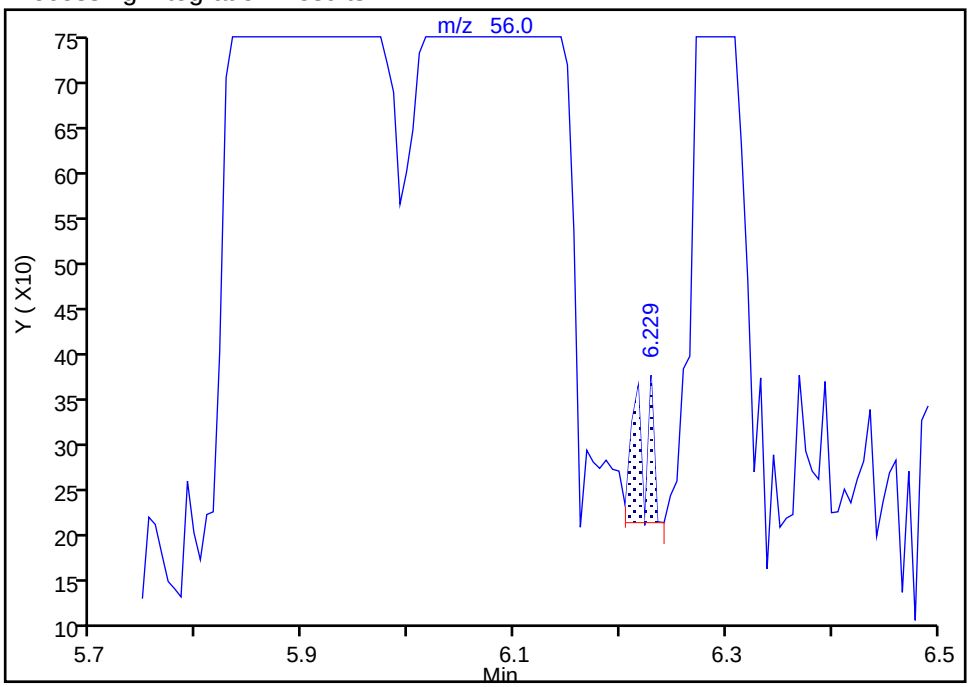
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81118.D
Injection Date: 24-Mar-2018 05:54:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

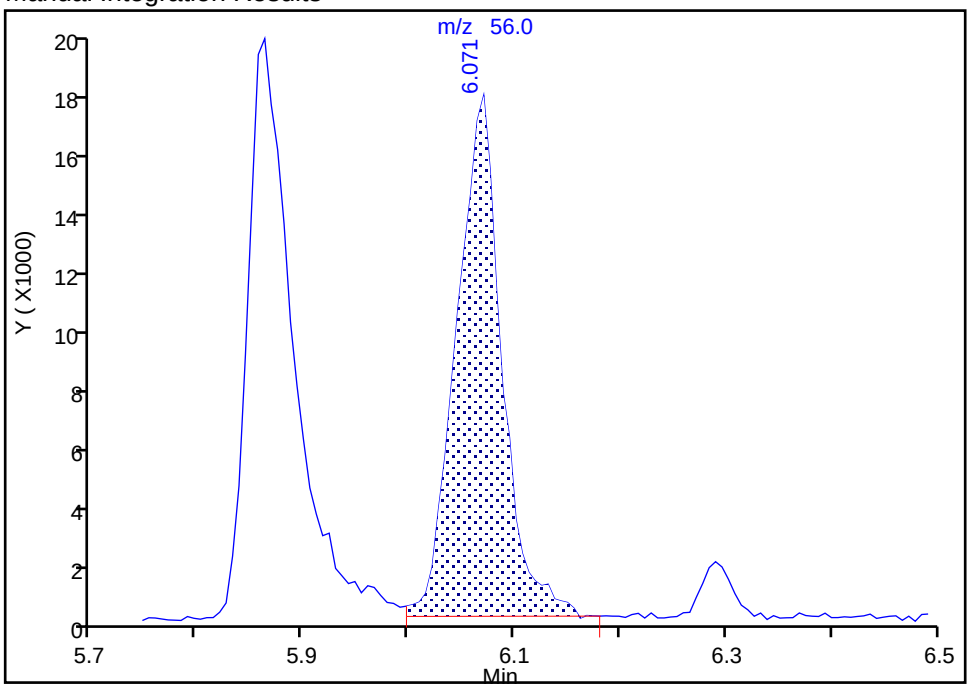
Processing Integration Results

RT: 6.23
Area: 161
Amount: 0.073290
Amount Units: ug/l



Manual Integration Results

RT: 6.07
Area: 51002
Amount: 23.217077
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 13:03:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505873/2 Calibration Date: 03/25/2018 04:30

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81147.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1021	0.1215		23.8	20.0	18.9	20.0
Dichlorodifluoromethane	Ave	0.6673	0.7613	0.1000	22.8	20.0	14.1	20.0
Chloromethane	Ave	0.5966	0.6684	0.1000	22.4	20.0	12.0	20.0
Butadiene	Ave	0.4185	0.4759		22.7	20.0	13.7	20.0
Vinyl chloride	Ave	0.5278	0.6115	0.1000	23.2	20.0	15.8	20.0
Bromomethane	Ave	0.3079	0.3245	0.1000	21.1	20.0	5.4	50.0
Chloroethane	Ave	0.2258	0.2627	0.1000	23.3	20.0	16.3	50.0
Dichlorofluoromethane	Ave	0.8332	1.015		24.4	20.0	21.8*	20.0
Trichlorofluoromethane	Ave	0.6659	0.7991	0.1000	24.0	20.0	20.0	20.0
Pentane	Ave	1.437	1.566		43.6	40.0	9.0	20.0
Ethanol	Ave	0.0680	0.0538		633	800	-20.9	50.0
Ethyl ether	Ave	0.3357	0.3442		20.5	20.0	2.5	20.0
2-Methyl-1,3-butadiene	Ave	0.4089	0.4627		22.6	20.0	13.2	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3236	0.3585		22.2	20.0	10.8	20.0
Acrolein	Ave	1.680	1.627		290	300	-3.2	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.4469	0.4935	0.1000	22.1	20.0	10.4	20.0
1,1-Dichloroethene	Ave	0.3613	0.3944	0.1000	21.8	20.0	9.2	20.0
Acetone	QuaF		1.185	0.0500	100	100	0.5	50.0
Iodomethane	Ave	0.6707	0.6571		19.6	20.0	-2.0	20.0
Isopropyl alcohol	Ave	1.025	0.8976		175	200	-12.5	50.0
Carbon disulfide	Ave	1.467	1.562	0.1000	21.3	20.0	6.5	50.0
Allyl chloride	Ave	0.2391	0.2481		20.8	20.0	3.8	20.0
Methyl acetate	Ave	0.3592	0.3759	0.1000	105	100	4.6	20.0
Cyclopentene	Ave	1.010	1.128		22.3	20.0	11.7	20.0
Acetonitrile	Ave	2.050	2.066		202	200	0.8	20.0
Methylene Chloride	Qua		0.4581	0.1000	19.5	20.0	-2.7	20.0
2-Methyl-2-propanol	Ave	1.487	1.360		183	200	-8.5	50.0
Methyl tert-butyl ether	Ave	1.239	1.256	0.1000	20.3	20.0	1.4	20.0
trans-1,2-Dichloroethene	Ave	0.3796	0.4142	0.1000	21.8	20.0	9.1	20.0
Acrylonitrile	Ave	0.1608	0.1700		211	200	5.7	20.0
Hexane	Ave	0.4882	0.5659		23.2	20.0	15.9	20.0
Isopropyl ether	Ave	1.807	1.905		21.1	20.0	5.4	20.0
1,1-Dichloroethane	Ave	0.8082	0.8817	0.2000	21.8	20.0	9.1	20.0
Vinyl acetate	Ave	1.523	1.353		35.5	40.0	-11.2	20.0
2-Chloro-1,3-butadiene	Ave	0.3389	0.3662		21.6	20.0	8.1	20.0
Tert-butyl ethyl ether	Ave	1.502	1.530		20.4	20.0	1.8	20.0
2,2-Dichloropropane	Ave	0.2265	0.2571		22.7	20.0	13.5	20.0
cis-1,2-Dichloroethene	Ave	0.4420	0.4644	0.1000	21.0	20.0	5.1	20.0
2-Butanone (MEK)	Ave	0.3430	0.3046	0.0500	88.8	100	-11.2	50.0
Ethyl acetate	Ave	0.3030	0.2838		37.5	40.0	-6.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505873/2 Calibration Date: 03/25/2018 04:30

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81147.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.3855	0.3653		19.0	20.0	-5.2	20.0
Propionitrile	Ave	1.593	1.493		188	200	-6.2	20.0
Chlorobromomethane	Ave	0.2086	0.1966		18.9	20.0	-5.7	20.0
Tetrahydrofuran	Ave	0.4032	0.3781		37.5	40.0	-6.2	20.0
Methacrylonitrile	Ave	0.1508	0.1539		204	200	2.0	20.0
Chloroform	Ave	0.7499	0.7895	0.2000	21.1	20.0	5.3	20.0
Cyclohexane	Ave	0.6183	0.7073	0.1000	22.9	20.0	14.4	50.0
1,1,1-Trichloroethane	Ave	0.6652	0.7462	0.1000	22.4	20.0	12.2	20.0
Carbon tetrachloride	Ave	0.5128	0.6208	0.1000	24.2	20.0	21.1*	20.0
1,1-Dichloropropene	Ave	0.5394	0.6093		22.6	20.0	12.9	20.0
Isobutyl alcohol	Ave	0.0556	0.0479		431	500	-13.7	50.0
Benzene	Ave	1.920	2.086	0.5000	21.7	20.0	8.6	20.0
Isopropyl acetate	Ave	1.469	1.537		20.9	20.0	4.6	20.0
Tert-amyl methyl ether	Ave	1.361	1.404		20.6	20.0	3.2	20.0
1,2-Dichloroethane	Ave	0.5626	0.5612	0.1000	20.0	20.0	-0.2	20.0
n-Heptane	Ave	0.3812	0.4395		23.1	20.0	15.3	20.0
n-Butanol	Ave	0.3792	0.3300		435	500	-13.0	50.0
Trichloroethene	Ave	0.3918	0.4094	0.2000	20.9	20.0	4.5	20.0
Ethyl acrylate	Ave	0.2851	0.3274		23.0	20.0	14.8	20.0
Methylcyclohexane	Ave	0.7340	0.8474	0.1000	23.1	20.0	15.4	50.0
1,2-Dichloropropane	Ave	0.4521	0.4637	0.1000	20.5	20.0	2.5	20.0
Methyl methacrylate	Ave	0.3889	0.3701		38.1	40.0	-4.8	20.0
1,4-Dioxane	Ave	1.513	1.560		412	400	3.1	50.0
n-Propyl acetate	Ave	0.6939	0.6924		20.0	20.0	-0.2	20.0
Dibromomethane	Ave	0.2520	0.2340		18.6	20.0	-7.1	20.0
Dichlorobromomethane	Ave	0.4993	0.5062	0.2000	20.3	20.0	1.4	20.0
2-Chloroethyl vinyl ether	Ave	0.2042	0.1990		19.5	20.0	-2.5	20.0
2-Nitropropane	Ave	0.0559	0.0774		55.4	40.0	38.5*	20.0
Epichlorohydrin	Ave	0.3139	0.3031		386	400	-3.5	20.0
cis-1,3-Dichloropropene	Ave	0.7964	0.8152	0.2000	20.5	20.0	2.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.738	3.558	0.0500	95.2	100	-4.8	50.0
Toluene	Ave	2.006	2.121	0.4000	21.1	20.0	5.7	20.0
trans-1,3-Dichloropropene	Ave	0.6907	0.7223	0.1000	20.9	20.0	4.6	50.0
Ethyl methacrylate	Ave	0.6145	0.5964		19.4	20.0	-2.9	20.0
1,1,2-Trichloroethane	Ave	0.3599	0.3523	0.1000	19.6	20.0	-2.1	20.0
Tetrachloroethene	Ave	0.4510	0.4803	0.2000	21.3	20.0	6.5	20.0
1,3-Dichloropropane	Ave	0.7003	0.7003		20.0	20.0	0.0	20.0
2-Hexanone	Ave	2.446	2.297	0.0500	93.9	100	-6.1	50.0
n-Butyl acetate	Ave	0.9736	0.9578		19.7	20.0	-1.6	20.0
Chlorodibromomethane	Ave	0.4052	0.4093	0.1000	20.2	20.0	1.0	50.0
Ethylene Dibromide	Ave	0.3977	0.3749	0.1000	18.9	20.0	-5.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505873/2 Calibration Date: 03/25/2018 04:30

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81147.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.208	1.254	0.5000	20.8	20.0	3.8	20.0
Ethylbenzene	Ave	0.6280	0.6698	0.1000	21.3	20.0	6.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4811	0.4940		20.5	20.0	2.7	20.0
m-Xylene & p-Xylene	Ave	0.7832	0.8269	0.1000	21.1	20.0	5.6	20.0
n-Butyl acrylate	Ave	0.3701	0.3593		19.4	20.0	-2.9	20.0
o-Xylene	Ave	0.8107	0.8507	0.3000	21.0	20.0	4.9	20.0
Styrene	Ave	1.302	1.354	0.3000	20.8	20.0	4.0	20.0
Amyl acetate (mixed isomers)	Ave	1.976	2.051		20.8	20.0	3.8	20.0
Bromoform	Ave	0.2361	0.2415	0.1000	20.5	20.0	2.3	20.0
Isopropylbenzene	Ave	2.313	2.547	0.1000	22.0	20.0	10.1	20.0
Bromobenzene	Ave	0.9174	0.9337		20.4	20.0	1.8	20.0
1,1,2,2-Tetrachloroethane	Ave	1.093	1.079	0.3000	19.7	20.0	-1.3	20.0
N-Propylbenzene	Ave	4.827	5.589		23.2	20.0	15.8	20.0
1,2,3-Trichloropropane	Ave	0.2803	0.2741		19.6	20.0	-2.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2963	0.3287		22.2	20.0	10.9	20.0
2-Chlorotoluene	Ave	3.346	3.659		21.9	20.0	9.3	20.0
4-Ethyltoluene	Ave	3.981	4.430		22.3	20.0	11.3	20.0
1,3,5-Trimethylbenzene	Ave	3.472	3.857		22.2	20.0	11.1	20.0
4-Chlorotoluene	Ave	2.876	3.179		22.1	20.0	10.5	20.0
Butyl Methacrylate	Ave	1.198	1.218		20.3	20.0	1.7	20.0
tert-Butylbenzene	Ave	2.782	3.007		21.6	20.0	8.1	20.0
1,2,4-Trimethylbenzene	Ave	3.574	3.950		22.1	20.0	10.5	20.0
sec-Butylbenzene	Ave	4.579	5.155		22.5	20.0	12.6	20.0
4-Isopropyltoluene	Ave	3.790	4.272		22.5	20.0	12.7	20.0
1,3-Dichlorobenzene	Ave	1.786	1.873	0.6000	21.0	20.0	4.9	20.0
1,4-Dichlorobenzene	Ave	1.814	1.901	0.5000	21.0	20.0	4.8	20.0
Benzyl chloride	Ave	1.641	2.113		25.8	20.0	28.8	50.0
Indan	Ave	3.640	3.781		20.8	20.0	3.9	20.0
p-Diethylbenzene	Ave	2.092	2.401		23.0	20.0	14.8	20.0
n-Butylbenzene	Ave	2.057	2.473		24.0	20.0	20.2*	20.0
1,2-Dichlorobenzene	Ave	1.829	1.882	0.4000	20.6	20.0	2.9	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.918	4.258		21.7	20.0	8.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.2207	0.2182	0.0500	19.8	20.0	-1.1	50.0
1,3,5-Trichlorobenzene	Ave	1.530	1.690		22.1	20.0	10.5	20.0
1,2,4-Trichlorobenzene	Ave	1.513	1.604	0.2000	21.2	20.0	6.0	20.0
Hexachlorobutadiene	Ave	0.7951	0.8068		20.3	20.0	1.5	20.0
Naphthalene	Ave	3.963	3.928		19.8	20.0	-0.9	50.0
1,2,3-Trichlorobenzene	Ave	1.543	1.569		20.3	20.0	1.7	20.0
Dibromofluoromethane (Surr)	Ave	0.3372	0.3288		48.7	50.0	-2.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3928	0.3920		49.9	50.0	-0.2	20.0
Toluene-d8 (Surr)	Ave	1.598	1.542		48.2	50.0	-3.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505873/2 Calibration Date: 03/25/2018 04:30

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81147.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4594	0.4213		45.9	50.0	-8.3	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81147.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 25-Mar-2018 04:30:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0069264-002
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 12:03:24 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 12:00:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.596	1.596	0.000	94	20396	20.0	23.8	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	98	127847	20.0	22.8	
3 Chloromethane	50	1.797	1.797	0.000	99	112241	20.0	22.4	
4 Vinyl chloride	62	1.907	1.907	0.000	79	102684	20.0	23.2	
5 Butadiene	54	1.907	1.907	0.000	90	79914	20.0	22.7	
6 Bromomethane	94	2.199	2.199	0.000	99	54500	20.0	21.1	
7 Chloroethane	64	2.267	2.267	0.000	98	44112	20.0	23.3	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	170392	20.0	24.4	
8 Trichlorofluoromethane	101	2.474	2.474	0.000	67	134201	20.0	24.0	
10 Pentane	72	2.498	2.498	0.000	96	24037	40.0	43.6	
12 Ethanol	46	2.693	2.693	0.000	86	16520	800.0	632.9	
11 Ethyl ether	59	2.693	2.693	0.000	92	57804	20.0	20.5	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	96	77705	20.0	22.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	98	60211	20.0	22.2	
15 Acrolein	56	2.876	2.876	0.000	97	187219	300.0	290.5	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.894	0.000	93	82872	20.0	22.1	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	93	66231	20.0	21.8	
18 Acetone	43	3.004	3.004	0.000	84	143771	100.0	100.5	
19 Iodomethane	142	3.077	3.077	0.000	98	110341	20.0	19.6	
22 Isopropyl alcohol	45	3.090	3.090	0.000	1	68873	200.0	175.1	a
20 Carbon disulfide	76	3.114	3.114	0.000	99	262291	20.0	21.3	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	93	41666	20.0	20.8	
29 Acetonitrile	41	3.315	3.315	0.000	92	158535	200.0	201.6	a
23 Methyl acetate	43	3.248	3.248	0.000	98	315624	100.0	104.6	
24 Cyclopentene	67	3.266	3.266	0.000	92	189479	20.0	22.3	
* 25 TBA-d9 (IS)	65	3.358	3.358	0.000	0	383632	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	99	76931	20.0	19.5	
27 2-Methyl-2-propanol	59	3.431	3.431	0.000	98	104375	200.0	183.0	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	97	210997	20.0	20.3	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	96	69555	20.0	21.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	92	285511	200.0	211.5	
32 Hexane	43	3.717	3.717	0.000	94	95032	20.0	23.2	
33 Isopropyl ether	45	3.925	3.925	0.000	96	319927	20.0	21.1	
34 1,1-Dichloroethane	63	3.974	3.974	0.000	66	148061	20.0	21.8	
35 Vinyl acetate	86	3.974	3.974	0.000	100	20768	40.0	35.5	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	93	61498	20.0	21.6	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	86	256884	20.0	20.4	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	303300	250.0	250.0	
39 2,2-Dichloropropane	79	4.480	4.480	0.000	94	43169	20.0	22.7	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	85	77993	20.0	21.0	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	94	36955	100.0	88.8	
41 Ethyl acetate	70	4.510	4.510	0.000	91	13770	40.0	37.5	
44 Methyl acrylate	55	4.565	4.565	0.000	99	61346	20.0	19.0	
43 Propionitrile	54	4.644	4.644	0.000	98	114582	200.0	187.5	
45 Tetrahydrofuran	72	4.736	4.736	0.000	63	18350	40.0	37.5	
46 Chlorobromomethane	128	4.736	4.736	0.000	89	33015	20.0	18.9	
47 Methacrylonitrile	67	4.754	4.754	0.000	97	258365	200.0	204.1	
48 Chloroform	83	4.784	4.784	0.000	98	132584	20.0	21.1	
49 Cyclohexane	84	4.931	4.931	0.000	98	118785	20.0	22.9	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	89	125316	20.0	22.4	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	138020	50.0	48.7	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	104255	20.0	24.2	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	93	102314	20.0	22.6	
56 Isobutyl alcohol	74	5.193	5.193	0.000	96	9194	500.0	431.4	
54 Benzene	78	5.290	5.290	0.000	97	275154	20.0	21.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	164559	50.0	49.9	
57 Isopropyl acetate	43	5.327	5.327	0.000	94	258059	20.0	20.9	a
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	93	235764	20.0	20.6	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	94246	20.0	20.0	
60 n-Heptane	57	5.431	5.431	0.000	98	73808	20.0	23.1	
* 61 Fluorobenzene	96	5.583	5.583	0.000	97	419830	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	96	63303	500.0	435.2	
63 Trichloroethene	95	5.937	5.937	0.000	96	68749	20.0	20.9	
64 Ethyl acrylate	56	6.071	6.071	0.000	97	54980	20.0	23.0	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	142297	20.0	23.1	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	91	77861	20.0	20.5	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	23281	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	95	124312	40.0	38.1	
69 1,4-Dioxane	88	6.339	6.339	0.000	27	14530	400.0	412.4	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	116275	20.0	20.0	
71 Dibromomethane	93	6.369	6.369	0.000	93	39291	20.0	18.6	
72 Dichlorobromomethane	83	6.516	6.516	0.000	98	85010	20.0	20.3	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	75	33419	20.0	19.5	
74 2-Nitropropane	41	6.845	6.845	0.000	79	25992	40.0	55.4	
75 Epichlorohydrin	57	6.961	6.961	0.000	100	147081	400.0	386.2	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	99	107546	20.0	20.5	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	98	431622	100.0	95.2	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	97	508579	50.0	48.2	
79 Toluene	91	7.345	7.345	0.000	93	279765	20.0	21.1	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	97	95285	20.0	20.9	
81 Ethyl methacrylate	69	7.711	7.711	0.000	95	78684	20.0	19.4	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	95	46472	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.967	0.000	94	63370	20.0	21.3	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	97	92390	20.0	20.0	
85 2-Hexanone	43	8.174	8.174	0.000	99	278616	100.0	93.9	
86 n-Butyl acetate	43	8.284	8.284	0.000	96	126355	20.0	19.7	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	53995	20.0	20.2	
88 Ethylene Dibromide	107	8.528	8.528	0.000	98	49455	20.0	18.9	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	90	329816	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	92	165390	20.0	20.8	
92 Ethylbenzene	106	9.198	9.198	0.000	99	88370	20.0	21.3	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	93	65166	20.0	20.5	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	109095	20.0	21.1	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	47404	20.0	19.4	
95 o-Xylene	106	9.820	9.820	0.000	92	112233	20.0	21.0	
96 Styrene	104	9.850	9.850	0.000	92	178609	20.0	20.8	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	86	149726	20.0	20.8	
98 Bromoform	173	10.082	10.082	0.000	95	31862	20.0	20.5	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	335957	20.0	22.0	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	84	138959	50.0	45.9	
101 Bromobenzene	156	10.564	10.564	0.000	94	68154	20.0	20.4	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	78747	20.0	19.7	
103 N-Propylbenzene	91	10.625	10.625	0.000	98	408004	20.0	23.2	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	95	20006	20.0	19.6	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	76	23991	20.0	22.2	
106 2-Chlorotoluene	91	10.740	10.740	0.000	90	267058	20.0	21.9	
107 4-Ethyltoluene	105	10.740	10.740	0.000	88	323401	20.0	22.3	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	91	281527	20.0	22.2	
109 4-Chlorotoluene	91	10.856	10.856	0.000	99	232045	20.0	22.1	
110 Butyl Methacrylate	87	10.899	10.899	0.000	97	88899	20.0	20.3	
111 tert-Butylbenzene	119	11.106	11.106	0.000	92	219503	20.0	21.6	
112 1,2,4-Trimethylbenzene	105	11.161	11.161	0.000	97	288330	20.0	22.1	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	376280	20.0	22.5	
114 4-Isopropyltoluene	119	11.435	11.435	0.000	97	311807	20.0	22.5	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	93	136709	20.0	21.0	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	97	182490	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	94	138747	20.0	21.0	
118 Benzyl chloride	91	11.667	11.667	0.000	98	154209	20.0	25.8	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	276007	20.0	20.8	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	175237	20.0	23.0	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	180506	20.0	24.0	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	94	137377	20.0	20.6	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	310799	20.0	21.7	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	91	15931	20.0	19.8	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	123360	20.0	22.1	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	95	117101	20.0	21.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	58894	20.0	20.3	
128 Naphthalene	128	13.331	13.331	0.000	99	286702	20.0	19.8	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	114559	20.0	20.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	42.8	
S 131 Xylenes, Total	100				0		40.0	42.1	
S 132 Total BTEX	1				0		100.0	106.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00252	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

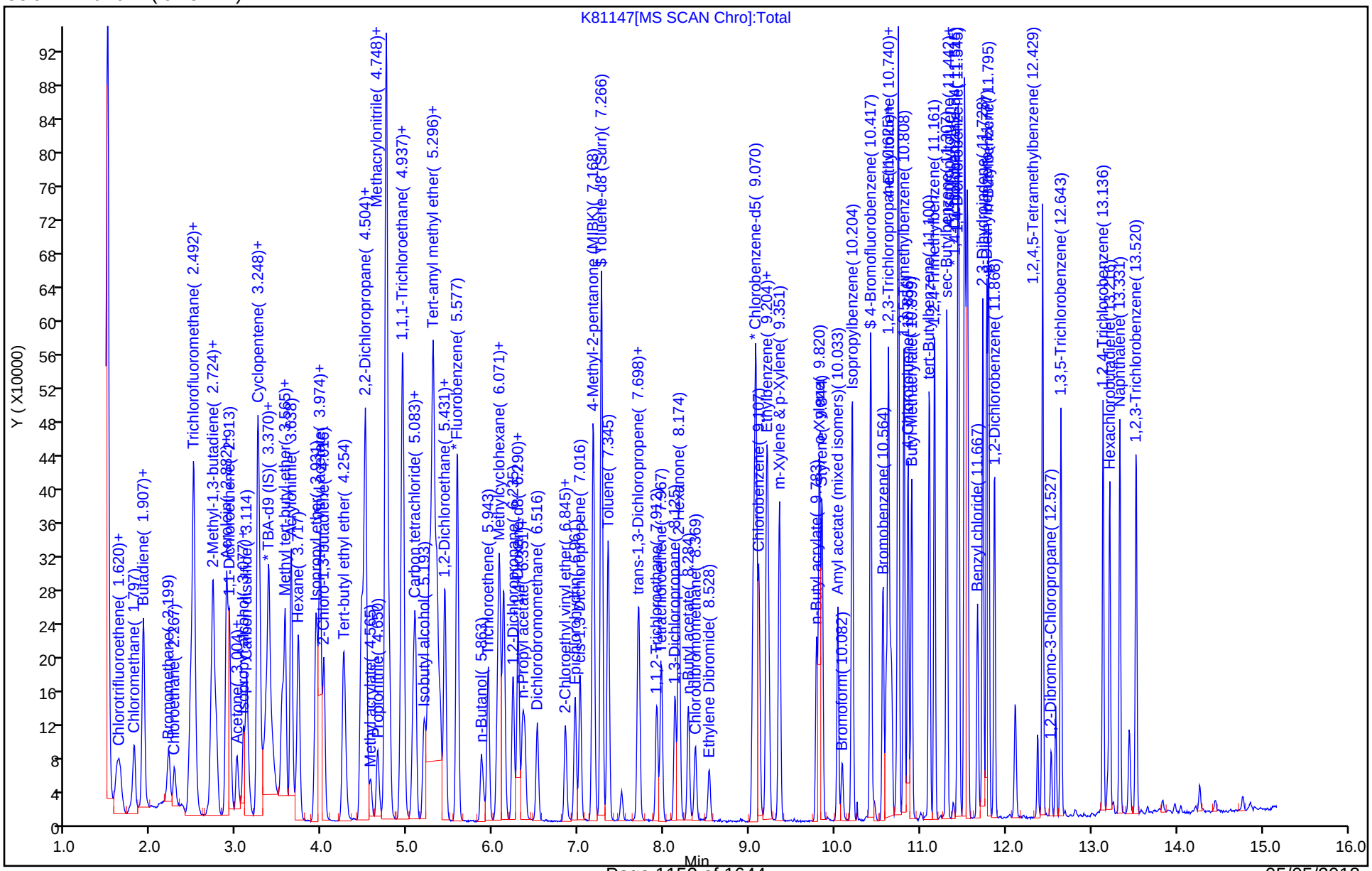
Report Date: 26-Mar-2018 12:03:26 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81147.D

Injection Date:	25-Mar-2018 04:30:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

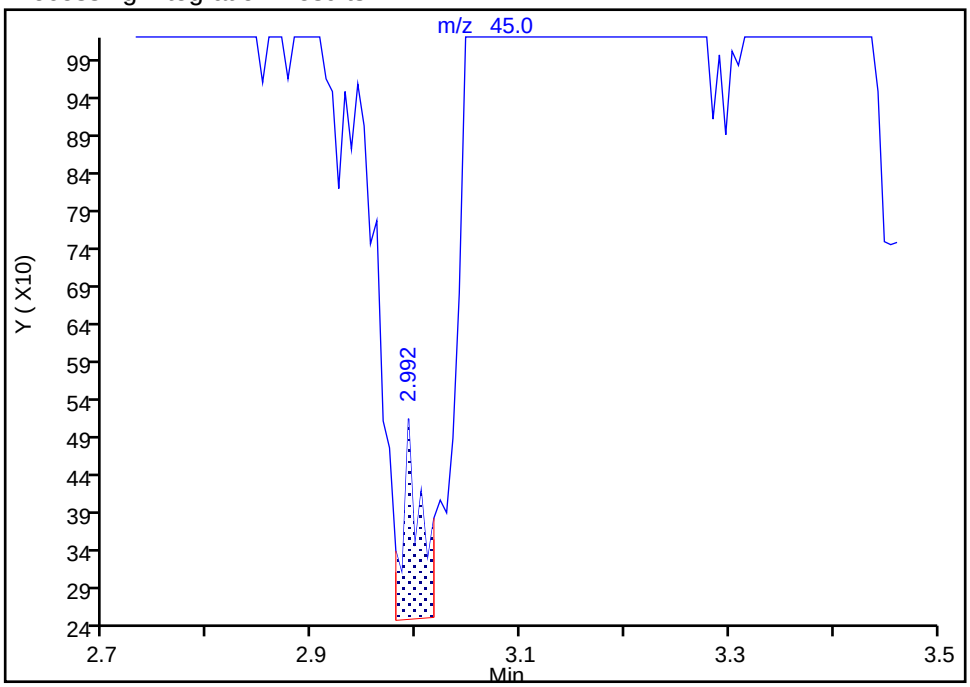
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81147.D
Injection Date: 25-Mar-2018 04:30:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

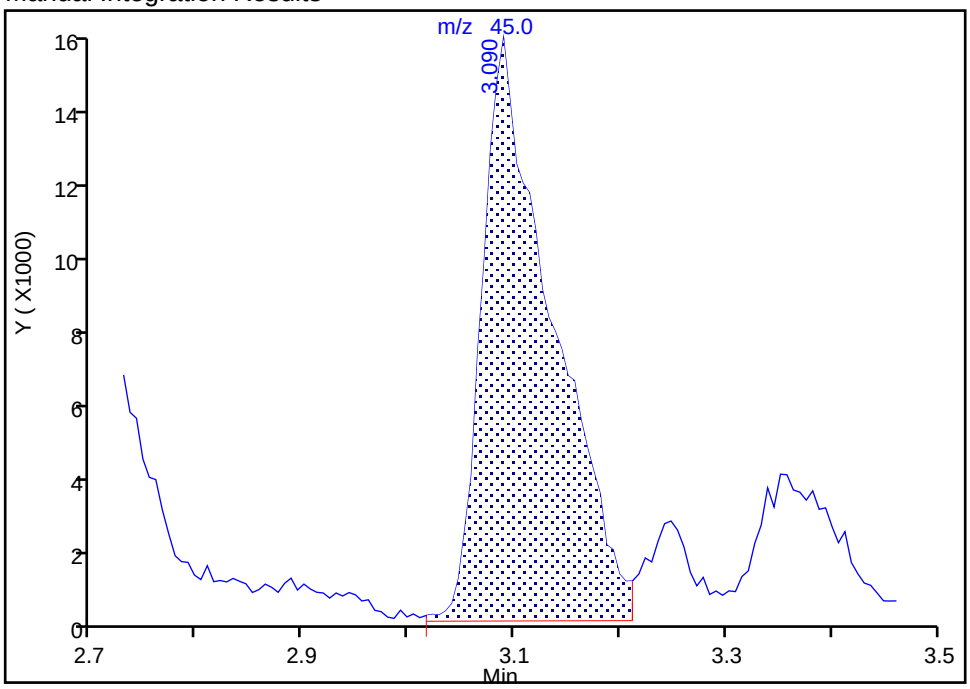
Processing Integration Results

RT: 2.99
Area: 328
Amount: 0.833809
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 68873
Amount: 175.0821
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 12:02:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

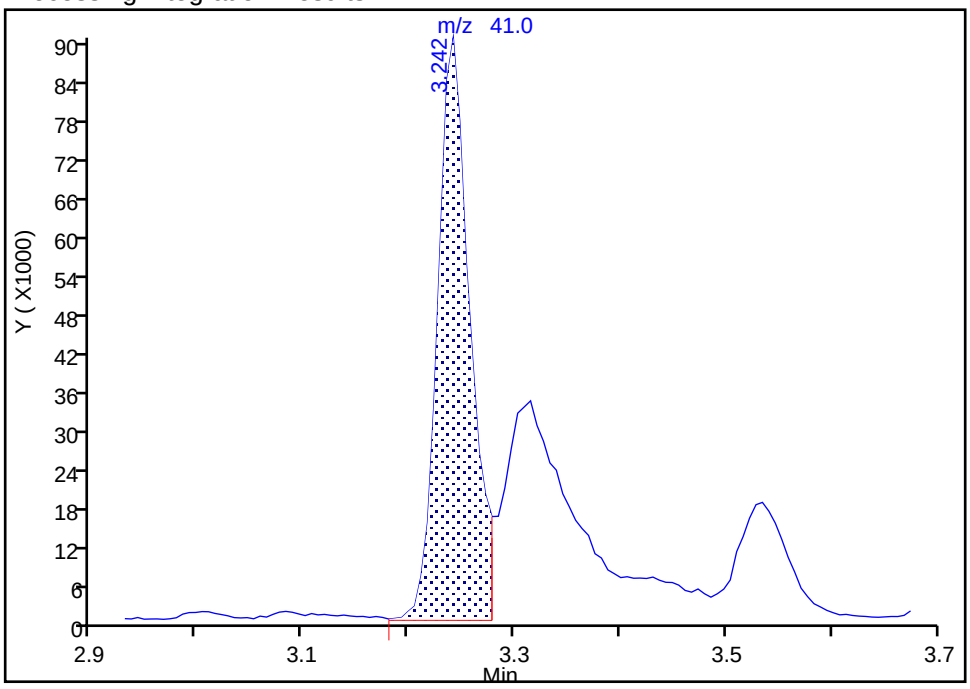
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81147.D
Injection Date: 25-Mar-2018 04:30:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

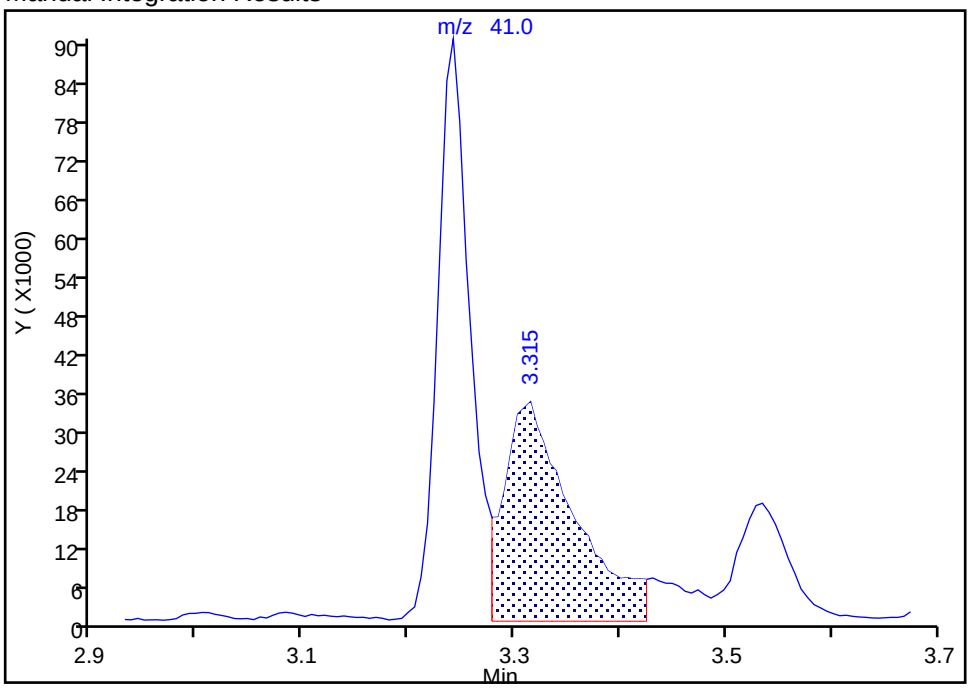
Processing Integration Results

RT: 3.24
Area: 194254
Amount: 247.0306
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 158535
Amount: 201.6072
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 12:02:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

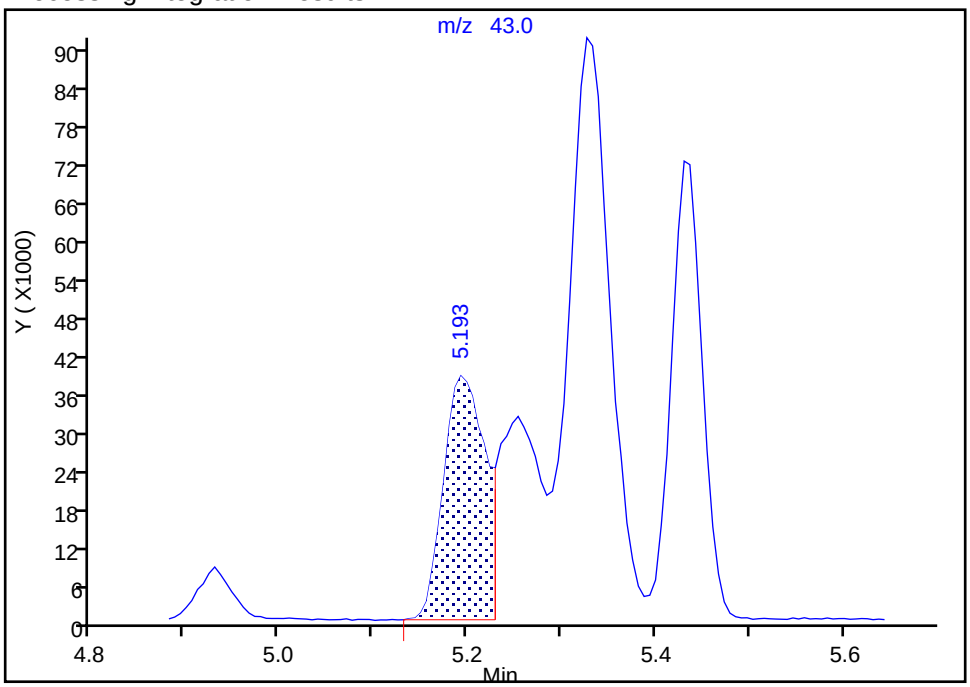
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81147.D
Injection Date: 25-Mar-2018 04:30:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

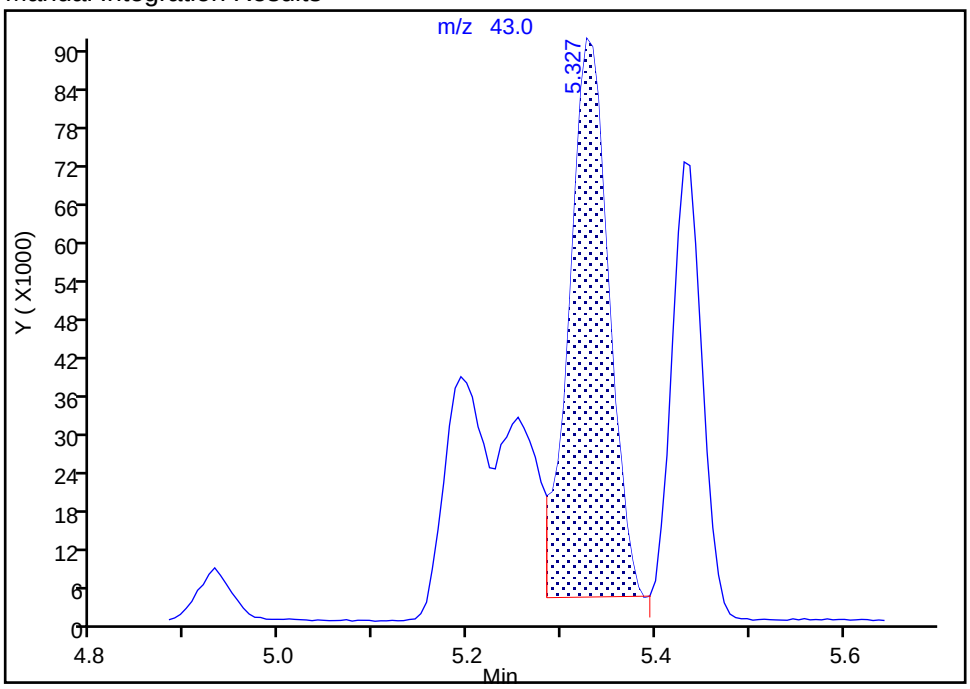
Processing Integration Results

RT: 5.19
Area: 121637
Amount: 9.861854
Amount Units: ug/l



Manual Integration Results

RT: 5.33
Area: 258059
Amount: 20.922418
Amount Units: ug/l



Reviewer: delpolitov, 26-Mar-2018 12:02:52
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510660/3 Calibration Date: 04/12/2018 21:47

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81910.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin		0.2286		18.9	20.0	-5.7	20.0
Dichlorodifluoromethane	Ave	0.6021	0.5386	0.1000	17.9	20.0	-10.5	20.0
Chloromethane	Ave	0.5852	0.5325	0.1000	18.2	20.0	-9.0	20.0
Butadiene	Ave	0.4371	0.4041		18.5	20.0	-7.5	20.0
Vinyl chloride	Ave	0.5947	0.5400	0.1000	18.2	20.0	-9.2	20.0
Bromomethane	Ave	0.4318	0.4331	0.1000	20.1	20.0	0.3	50.0
Chloroethane	Ave	0.2668	0.2667	0.1000	20.0	20.0	-0.0	50.0
Dichlorofluoromethane	Ave	0.7507	0.7589		20.2	20.0	1.1	20.0
Trichlorofluoromethane	Ave	0.6160	0.6379	0.1000	20.7	20.0	3.5	20.0
Pentane	Ave	2.344	1.840		31.4	40.0	-21.5*	20.0
Ethanol	Ave	0.0709	0.0597		673	800	-15.9	50.0
Ethyl ether	Ave	0.2571	0.2676		20.8	20.0	4.1	20.0
2-Methyl-1,3-butadiene	Ave	0.2625	0.2972		22.6	20.0	13.2	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3069	0.3458		22.5	20.0	12.7	20.0
Acrolein	Ave	1.927	1.558		243	300	-19.1	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3944	0.4298	0.1000	21.8	20.0	9.0	20.0
1,1-Dichloroethene	Ave	0.3547	0.3676	0.1000	20.7	20.0	3.6	20.0
Acetone	Ave	1.069	1.103	0.0500	103	100	3.2	50.0
Iodomethane	Ave	0.6734	0.6995		20.8	20.0	3.9	20.0
Isopropyl alcohol	Ave	0.7074	0.6966		197	200	-1.5	50.0
Carbon disulfide	Ave	1.338	1.359	0.1000	20.3	20.0	1.6	50.0
Allyl chloride	Ave	0.2049	0.2235		21.8	20.0	9.1	20.0
Methyl acetate	Ave	0.1816	0.2268	0.1000	125	100	24.9*	20.0
Cyclopentene	Ave	0.8170	0.8877		21.7	20.0	8.7	20.0
Acetonitrile	Ave	2.004	1.828		182	200	-8.8	20.0
Methylene Chloride	Ave	0.4282	0.4194	0.1000	19.6	20.0	-2.0	20.0
2-Methyl-2-propanol	Ave	1.516	1.372		181	200	-9.5	50.0
Methyl tert-butyl ether	Ave	0.9786	1.055	0.1000	21.6	20.0	7.8	20.0
trans-1,2-Dichloroethene	Ave	0.3841	0.3854	0.1000	20.1	20.0	0.3	20.0
Acrylonitrile	Ave	0.1123	0.1266		226	200	12.8	20.0
Hexane	Ave	0.2771	0.3118		22.5	20.0	12.5	20.0
Isopropyl ether	Ave	1.025	1.174		22.9	20.0	14.5	20.0
1,1-Dichloroethane	Ave	0.5942	0.6531	0.2000	22.0	20.0	9.9	20.0
Vinyl acetate	Ave	2.044	1.718		33.6	40.0	-15.9	20.0
2-Chloro-1,3-butadiene	Ave	0.3225	0.3292		20.4	20.0	2.1	20.0
Tert-butyl ethyl ether	Ave	0.9713	1.095		22.5	20.0	12.7	20.0
2,2-Dichloropropane	Ave	0.1401	0.1838		26.2	20.0	31.2*	20.0
2-Butanone (MEK)	Ave	0.4918	0.4224	0.0500	85.9	100	-14.1	50.0
cis-1,2-Dichloroethene	Ave	0.4350	0.4467	0.1000	20.5	20.0	2.7	20.0
Ethyl acetate	Ave	0.4070	0.3392		33.3	40.0	-16.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510660/3 Calibration Date: 04/12/2018 21:47

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81910.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2264	0.2751		24.3	20.0	21.5*	20.0
Propionitrile	QuaF		1.510		172	200	-14.1	20.0
Tetrahydrofuran	Ave	0.5811	0.4892		33.7	40.0	-15.8	20.0
Chlorobromomethane	Ave	0.2017	0.2170		21.5	20.0	7.6	20.0
Methacrylonitrile	Ave	0.1322	0.1397		211	200	5.7	20.0
Chloroform	Ave	0.6216	0.6694	0.2000	21.5	20.0	7.7	20.0
Cyclohexane	Ave	0.5789	0.5922	0.1000	20.5	20.0	2.3	50.0
1,1,1-Trichloroethane	Ave	0.4917	0.5863	0.1000	23.8	20.0	19.2	20.0
Carbon tetrachloride	Ave	0.3554	0.4839	0.1000	27.2	20.0	36.1*	20.0
1,1-Dichloropropene	Ave	0.4464	0.4746		21.3	20.0	6.3	20.0
Isobutyl alcohol	QuaF		0.0452		370	500	-26.0*	20.0
Benzene	Ave	1.841	1.797	0.5000	19.5	20.0	-2.4	20.0
Isopropyl acetate	Ave	0.7948	1.023		25.7	20.0	28.7*	20.0
Tert-amyl methyl ether	Ave	0.3001	0.3310		22.1	20.0	10.3	20.0
1,2-Dichloroethane	Ave	0.4020	0.4378	0.1000	21.8	20.0	8.9	20.0
n-Heptane	Ave	0.2765	0.3078		22.3	20.0	11.3	20.0
n-Butanol	Ave	0.2896	0.2633		455	500	-9.1	50.0
Trichloroethene	Ave	0.3572	0.3657	0.2000	20.5	20.0	2.4	20.0
Ethyl acrylate	Ave	0.2001	0.2252		22.5	20.0	12.6	20.0
Methylcyclohexane	Ave	0.6837	0.7135	0.1000	20.9	20.0	4.4	50.0
1,2-Dichloropropane	Ave	0.3471	0.3500	0.1000	20.2	20.0	0.8	20.0
Methyl methacrylate	Ave	0.1734	0.2632		60.7	40.0	51.8*	20.0
1,4-Dioxane	Ave	1.534	1.445		377	400	-5.8	50.0
n-Propyl acetate	Ave	0.3295	0.4105		24.9	20.0	24.6*	20.0
Dibromomethane	Ave	0.2181	0.2333		21.4	20.0	7.0	20.0
Dichlorobromomethane	Ave	0.3970	0.4557	0.2000	23.0	20.0	14.8	20.0
2-Chloroethyl vinyl ether	Ave	0.1632	0.1798		22.0	20.0	10.2	20.0
2-Nitropropane	Qua2		0.0455		56.1	40.0	40.2*	20.0
Epichlorohydrin	Ave	0.3469	0.3198		369	400	-7.8	20.0
cis-1,3-Dichloropropene	Ave	0.6366	0.6556	0.2000	20.6	20.0	3.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.278	3.336	0.0500	102	100	1.8	50.0
Toluene	Ave	1.926	1.807	0.4000	18.8	20.0	-6.2	20.0
trans-1,3-Dichloropropene	Ave	0.4920	0.5517	0.1000	22.4	20.0	12.1	50.0
Ethyl methacrylate	Ave	0.4153	0.4671		22.5	20.0	12.5	20.0
1,1,2-Trichloroethane	Ave	0.3239	0.3132	0.1000	19.3	20.0	-3.3	20.0
Tetrachloroethene	Ave	0.4315	0.4460	0.2000	20.7	20.0	3.4	20.0
1,3-Dichloropropane	Ave	0.6064	0.5799		19.1	20.0	-4.4	20.0
2-Hexanone	Ave	2.135	2.089	0.0500	97.8	100	-2.2	50.0
n-Butyl acetate	Ave	0.4143	0.5207		25.1	20.0	25.7*	20.0
Chlorodibromomethane	Ave	0.3342	0.4057	0.1000	24.3	20.0	21.4	50.0
Ethylene Dibromide	Ave	0.3641	0.3772	0.1000	20.7	20.0	3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510660/3 Calibration Date: 04/12/2018 21:47

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81910.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.239	1.174	0.5000	19.0	20.0	-5.2	20.0
Ethylbenzene	Ave	0.6717	0.6341	0.1000	18.9	20.0	-5.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3721	0.4420		23.8	20.0	18.8	20.0
m-Xylene & p-Xylene	Ave	0.8454	0.7878	0.1000	18.6	20.0	-6.8	20.0
n-Butyl acrylate	Qua2		0.2653		24.8	20.0	24.0*	20.0
o-Xylene	Ave	0.8649	0.8259	0.3000	19.1	20.0	-4.5	20.0
Styrene	Ave	1.367	1.296	0.3000	19.0	20.0	-5.2	20.0
Amyl acetate (mixed isomers)	Qua2		1.077		26.2	20.0	31.2*	20.0
Bromoform	Qua2		0.2390	0.1000	28.0	20.0	40.1*	20.0
Isopropylbenzene	Ave	2.260	2.261	0.1000	20.0	20.0	0.0	20.0
Bromobenzene	Ave	0.9532	0.9130		19.2	20.0	-4.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.037	0.9785	0.3000	18.9	20.0	-5.7	20.0
N-Propylbenzene	Ave	4.921	4.577		18.6	20.0	-7.0	20.0
1,2,3-Trichloropropane	Ave	0.2596	0.2673		20.6	20.0	3.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1995	0.2120		21.2	20.0	6.2	20.0
2-Chlorotoluene	Ave	3.302	3.045		18.4	20.0	-7.8	20.0
4-Ethyltoluene	Ave	4.087	3.717		18.2	20.0	-9.0	20.0
1,3,5-Trimethylbenzene	Ave	3.564	3.272		18.4	20.0	-8.2	20.0
4-Chlorotoluene	Ave	2.832	2.572		18.2	20.0	-9.2	20.0
Butyl Methacrylate	Qua2		0.9442		22.8	20.0	13.9	20.0
tert-Butylbenzene	Ave	2.866	2.664		18.6	20.0	-7.0	20.0
1,2,4-Trimethylbenzene	Ave	3.626	3.350		18.5	20.0	-7.6	20.0
sec-Butylbenzene	Ave	4.748	4.426		18.6	20.0	-6.8	20.0
4-Isopropyltoluene	Ave	3.942	3.715		18.8	20.0	-5.8	20.0
1,3-Dichlorobenzene	Ave	1.881	1.775	0.6000	18.9	20.0	-5.7	20.0
1,4-Dichlorobenzene	Ave	1.898	1.807	0.5000	19.0	20.0	-4.8	20.0
Benzyl chloride	Ave	1.070	1.401		26.2	20.0	30.9	50.0
Indan	Ave	3.721	3.482		18.7	20.0	-6.4	20.0
p-Diethylbenzene	Ave	2.169	2.075		19.1	20.0	-4.4	20.0
n-Butylbenzene	Ave	2.144	2.004		18.7	20.0	-6.5	20.0
1,2-Dichlorobenzene	Ave	1.872	1.802	0.4000	19.3	20.0	-3.7	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.912	3.667		18.7	20.0	-6.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1692	0.0500	22.0	20.0	9.9	50.0
1,3,5-Trichlorobenzene	Ave	1.544	1.551		20.1	20.0	0.5	20.0
1,2,4-Trichlorobenzene	Ave	1.487	1.500	0.2000	20.2	20.0	0.9	20.0
Hexachlorobutadiene	Ave	0.6537	0.6961		21.3	20.0	6.5	20.0
Naphthalene	Ave	4.123	3.798		18.4	20.0	-7.9	50.0
1,2,3-Trichlorobenzene	Ave	1.522	1.493		19.6	20.0	-1.9	20.0
Dibromofluoromethane (Surr)	Ave	0.3133	0.3629		57.9	50.0	15.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2986	0.3413		57.1	50.0	14.3	20.0
Toluene-d8 (Surr)	Ave	1.555	1.525		49.0	50.0	-1.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510660/3 Calibration Date: 04/12/2018 21:47

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81910.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4228	0.4622		54.7	50.0	9.3	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81910.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 12-Apr-2018 21:47:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0070288-003
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 10:38:46 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: delpolitov Date: 13-Apr-2018 10:38:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.596	0.000	95	44093	20.0	18.9	
2 Dichlorodifluoromethane	85	1.627	1.627	0.000	99	103919	20.0	17.9	
3 Chloromethane	50	1.803	1.803	0.000	100	102739	20.0	18.2	
5 Butadiene	54	1.907	1.907	0.000	96	77964	20.0	18.5	
4 Vinyl chloride	62	1.907	1.907	0.000	98	104186	20.0	18.2	
6 Bromomethane	94	2.212	2.212	0.000	99	83547	20.0	20.1	
7 Chloroethane	64	2.273	2.273	0.000	100	51457	20.0	20.0	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	98	146404	20.0	20.2	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	56	123066	20.0	20.7	
10 Pentane	72	2.498	2.498	0.000	97	24066	40.0	31.4	
12 Ethanol	46	2.693	2.693	0.000	78	15608	800.0	673.2	
11 Ethyl ether	59	2.693	2.693	0.000	93	51635	20.0	20.8	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	97	57335	20.0	22.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	90	66723	20.0	22.5	
15 Acrolein	56	2.876	2.876	0.000	95	152861	300.0	242.6	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	98	82914	20.0	21.8	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	98	70913	20.0	20.7	
18 Acetone	43	3.004	3.004	0.000	87	104970	100.0	103.2	
19 Iodomethane	142	3.077	3.077	0.000	99	134960	20.0	20.8	
22 Isopropyl alcohol	45	3.084	3.084	0.000	1	45549	200.0	196.9	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	262262	20.0	20.3	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	97	43117	20.0	21.8	
23 Methyl acetate	43	3.248	3.248	0.000	99	218802	100.0	124.9	
24 Cyclopentene	67	3.266	3.266	0.000	93	171269	20.0	21.7	
29 Acetonitrile	41	3.309	3.309	0.000	97	119506	200.0	182.4	a
* 25 TBA-d9 (IS)	65	3.376	3.376	0.000	0	326959	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	91	80916	20.0	19.6	
27 2-Methyl-2-propanol	59	3.449	3.449	0.000	92	89714	200.0	180.9	
28 Methyl tert-butyl ether	73	3.529	3.529	0.000	96	203583	20.0	21.6	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	95	74346	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	95	244266	200.0	225.5	
32 Hexane	43	3.718	3.718	0.000	92	60163	20.0	22.5	
33 Isopropyl ether	45	3.925	3.925	0.000	97	226501	20.0	22.9	
34 1,1-Dichloroethane	63	3.974	3.974	0.000	77	125992	20.0	22.0	
35 Vinyl acetate	86	3.980	3.980	0.000	100	22468	40.0	33.6	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	89	63504	20.0	20.4	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	211278	20.0	22.5	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	237833	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.486	0.000	94	35468	20.0	26.2	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	96	86184	20.0	20.5	
42 2-Butanone (MEK)	72	4.504	4.504	0.000	96	40182	100.0	85.9	
41 Ethyl acetate	70	4.516	4.516	0.000	92	12909	40.0	33.3	
44 Methyl acrylate	55	4.571	4.571	0.000	98	53069	20.0	24.3	
43 Propionitrile	54	4.650	4.650	0.000	98	98764	200.0	171.9	
45 Tetrahydrofuran	72	4.730	4.730	0.000	66	18615	40.0	33.7	
46 Chlorobromomethane	128	4.742	4.742	0.000	75	41871	20.0	21.5	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	269571	200.0	211.4	
48 Chloroform	83	4.791	4.791	0.000	99	129136	20.0	21.5	
49 Cyclohexane	84	4.931	4.931	0.000	91	114244	20.0	20.5	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	92	113116	20.0	23.8	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	175026	50.0	57.9	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	93361	20.0	27.2	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	98	91567	20.0	21.3	
56 Isobutyl alcohol	74	5.205	5.205	0.000	1	7387	500.0	370.0	a
54 Benzene	78	5.290	5.290	0.000	95	278117	20.0	19.5	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	164617	50.0	57.1	
57 Isopropyl acetate	43	5.327	5.327	0.000	96	197364	20.0	25.7	
58 Tert-amyl methyl ether	87	5.339	5.339	0.000	96	63868	20.0	22.1	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	84459	20.0	21.8	
60 n-Heptane	57	5.437	5.437	0.000	92	59374	20.0	22.3	
* 61 Fluorobenzene	96	5.577	5.577	0.000	99	482322	50.0	50.0	
62 n-Butanol	56	5.870	5.870	0.000	89	43051	500.0	454.6	
63 Trichloroethene	95	5.943	5.943	0.000	98	70560	20.0	20.5	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	43455	20.0	22.5	
65 Methylcyclohexane	83	6.071	6.071	0.000	96	137659	20.0	20.9	
66 1,2-Dichloropropane	63	6.229	6.229	0.000	91	67525	20.0	20.2	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	31785	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	88	101559	40.0	60.7	
69 1,4-Dioxane	88	6.339	6.339	0.000	28	18376	400.0	376.8	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	79196	20.0	24.9	
71 Dibromomethane	93	6.370	6.370	0.000	97	45005	20.0	21.4	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	87910	20.0	23.0	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	83	34691	20.0	22.0	
74 2-Nitropropane	41	6.845	6.845	0.000	74	17550	40.0	56.1	
75 Epichlorohydrin	57	6.961	6.961	0.000	98	121696	400.0	368.8	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	91	101476	20.0	20.6	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	96	317359	100.0	101.8	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	99	590016	50.0	49.0	
79 Toluene	91	7.345	7.345	0.000	92	279614	20.0	18.8	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	98	85390	20.0	22.4	
81 Ethyl methacrylate	69	7.705	7.705	0.000	85	72294	20.0	22.5	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	96	48480	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.967	0.000	97	69036	20.0	20.7	
84 1,3-Dichloropropane	76	8.125	8.125	0.000	93	89759	20.0	19.1	
85 2-Hexanone	43	8.174	8.174	0.000	96	198701	100.0	97.8	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	80588	20.0	25.1	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	62791	20.0	24.3	
88 Ethylene Dibromide	107	8.528	8.528	0.000	98	58376	20.0	20.7	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	386940	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	181714	20.0	19.0	
92 Ethylbenzene	106	9.204	9.204	0.000	98	98136	20.0	18.9	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.223	0.000	94	68404	20.0	23.8	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	121925	20.0	18.6	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	41059	20.0	24.8	
95 o-Xylene	106	9.820	9.820	0.000	94	127827	20.0	19.1	
96 Styrene	104	9.851	9.851	0.000	96	200609	20.0	19.0	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	94756	20.0	26.2	
98 Bromoform	173	10.082	10.082	0.000	96	36989	20.0	28.0	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	349975	20.0	20.0	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	91	178829	50.0	54.7	
101 Bromobenzene	156	10.564	10.564	0.000	96	80335	20.0	19.2	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	86097	20.0	18.9	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	402739	20.0	18.6	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	23524	20.0	20.6	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	87	18652	20.0	21.2	
107 4-Ethyltoluene	105	10.741	10.741	0.000	89	327065	20.0	18.2	
106 2-Chlorotoluene	91	10.741	10.741	0.000	91	267901	20.0	18.4	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	93	287927	20.0	18.4	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	226303	20.0	18.2	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	83085	20.0	22.8	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	234423	20.0	18.6	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	294783	20.0	18.5	
113 sec-Butylbenzene	105	11.308	11.308	0.000	99	389434	20.0	18.6	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	326859	20.0	18.8	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	156168	20.0	18.9	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	94	219983	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	158997	20.0	19.0	
118 Benzyl chloride	91	11.667	11.667	0.000	99	123267	20.0	26.2	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	306392	20.0	18.7	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	182576	20.0	19.1	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	176344	20.0	18.7	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	96	158561	20.0	19.3	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	322694	20.0	18.7	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	95	14886	20.0	22.0	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	136475	20.0	20.1	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	131970	20.0	20.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	61251	20.0	21.3	
128 Naphthalene	128	13.332	13.332	0.000	99	334220	20.0	18.4	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	131349	20.0	19.6	
S 130 1,2-Dichloroethene, Total	100				0		40.0	40.6	
S 131 Xylenes, Total	100				0		40.0	37.7	
S 132 Total BTEX	1				0		100.0	94.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

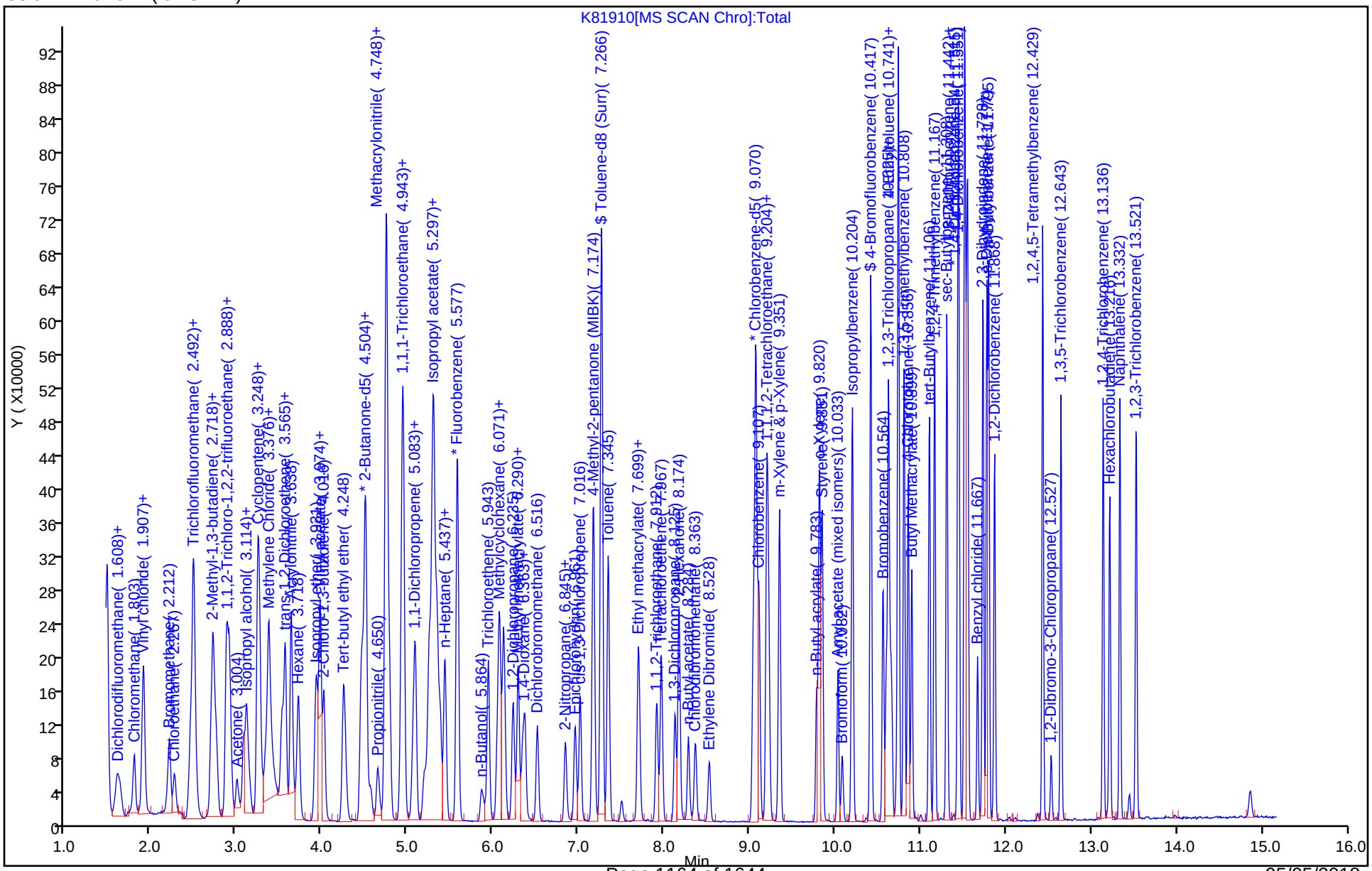
Report Date: 13-Apr-2018 10:38:48 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81910.D

Injection Date:	12-Apr-2018 21:47:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

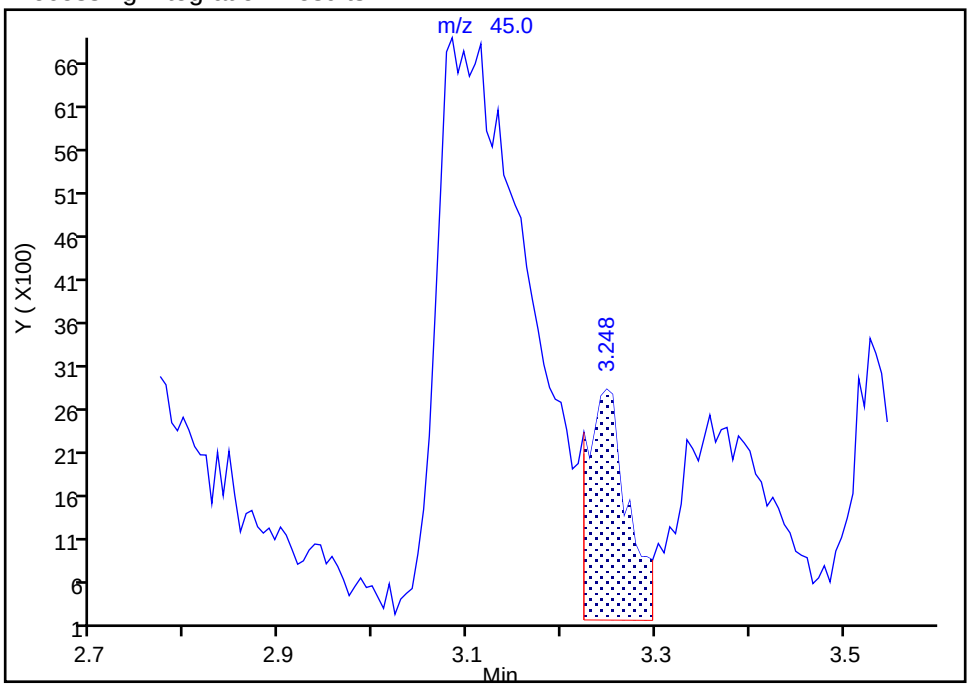
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81910.D
Injection Date: 12-Apr-2018 21:47:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

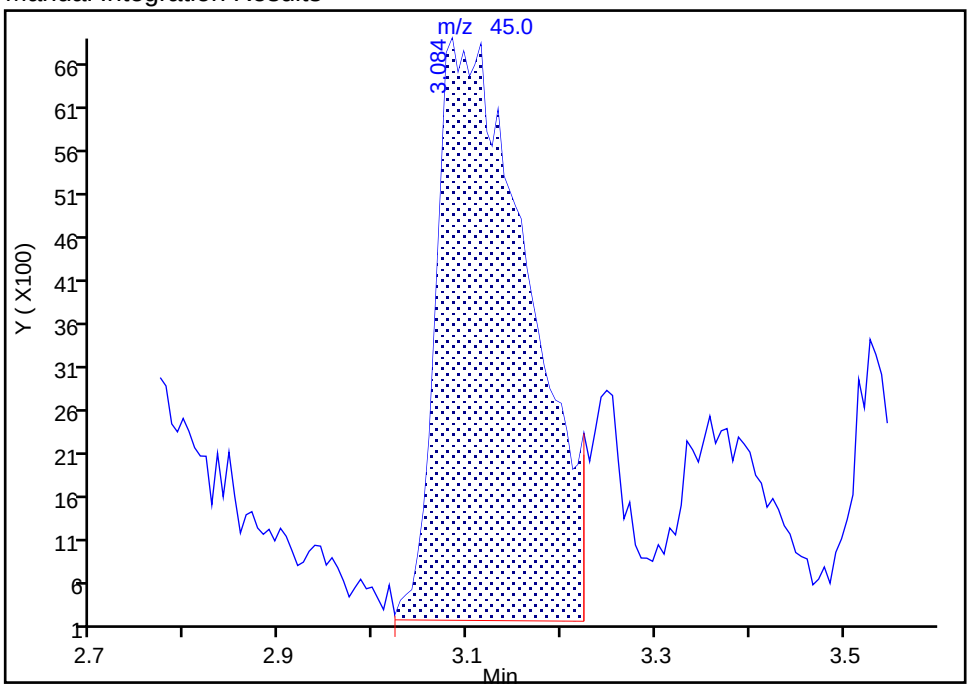
Processing Integration Results

RT: 3.25
Area: 7844
Amount: 33.915842
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 45549
Amount: 196.9445
Amount Units: ug/l



Reviewer: delpolitov, 13-Apr-2018 10:38:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

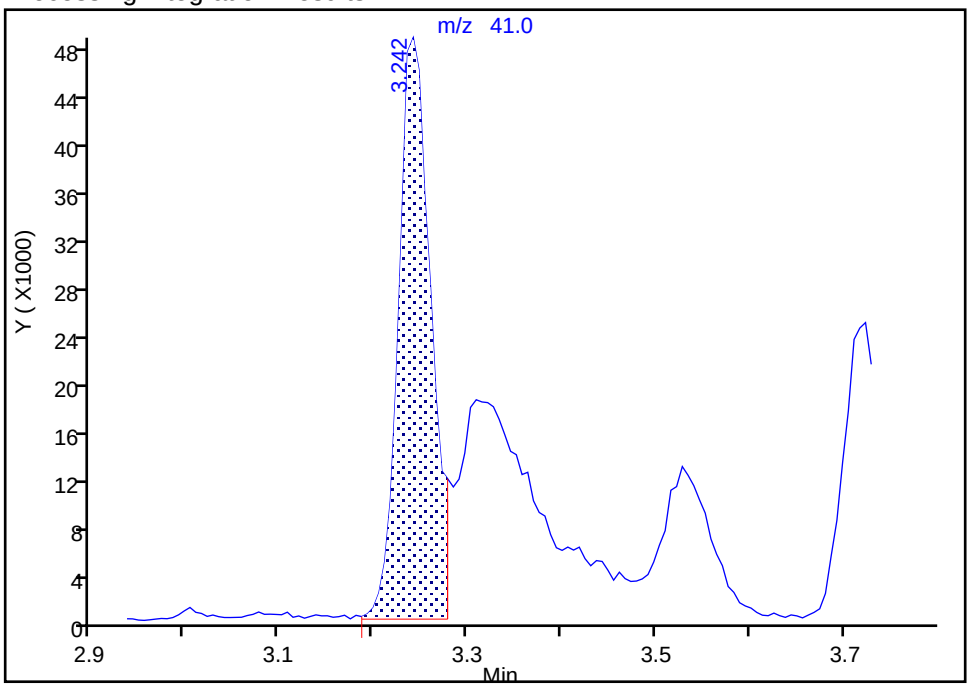
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81910.D
Injection Date: 12-Apr-2018 21:47:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

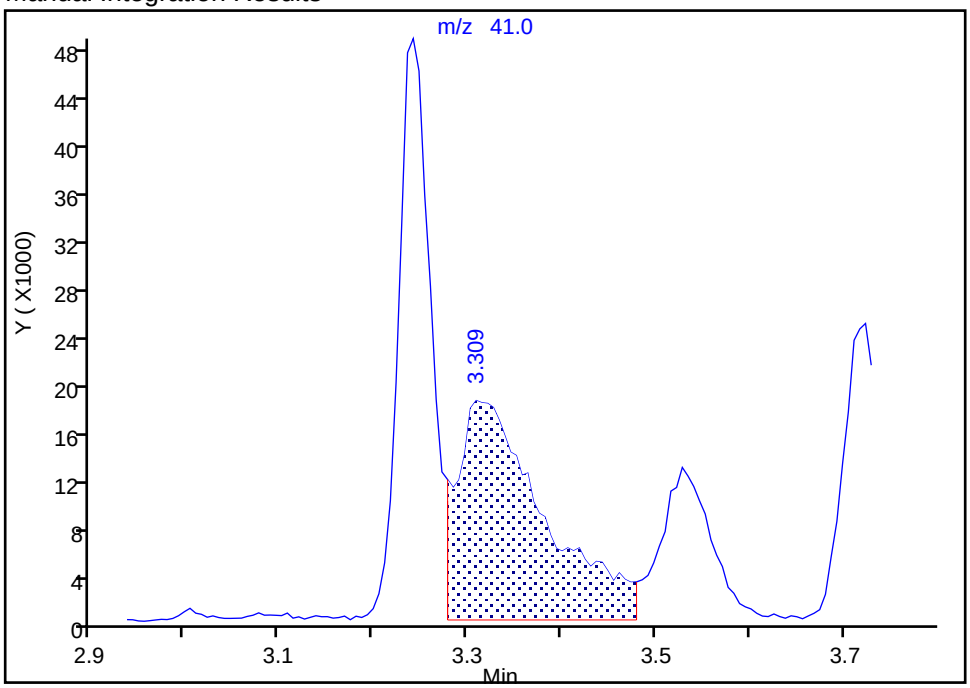
Processing Integration Results

RT: 3.24
Area: 116882
Amount: 178.3765
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 119506
Amount: 182.3811
Amount Units: ug/l



Reviewer: boykink, 12-Apr-2018 22:11:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

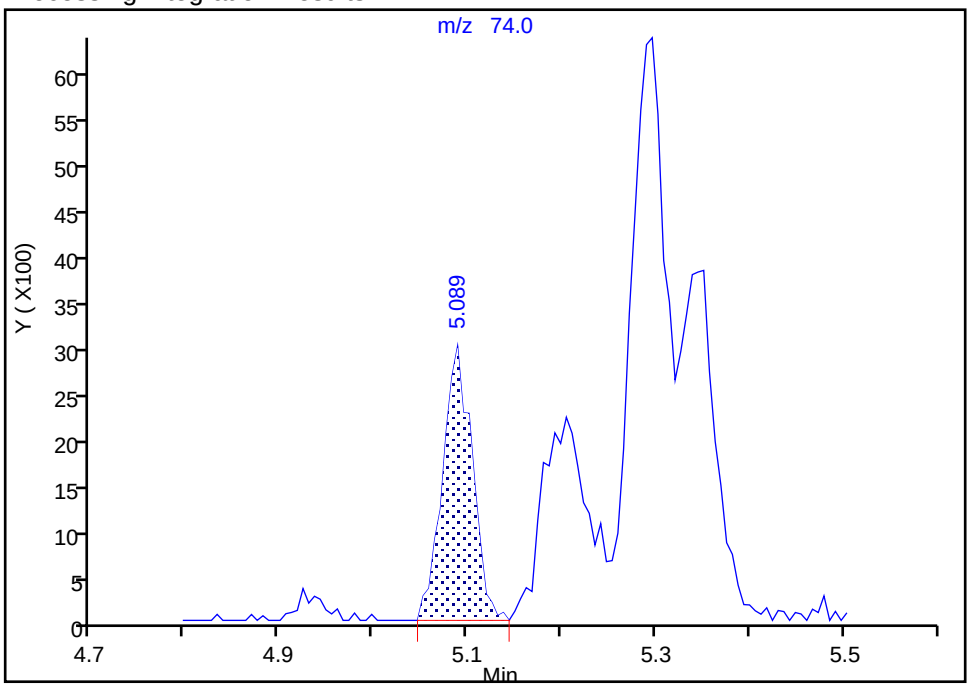
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81910.D
Injection Date: 12-Apr-2018 21:47:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

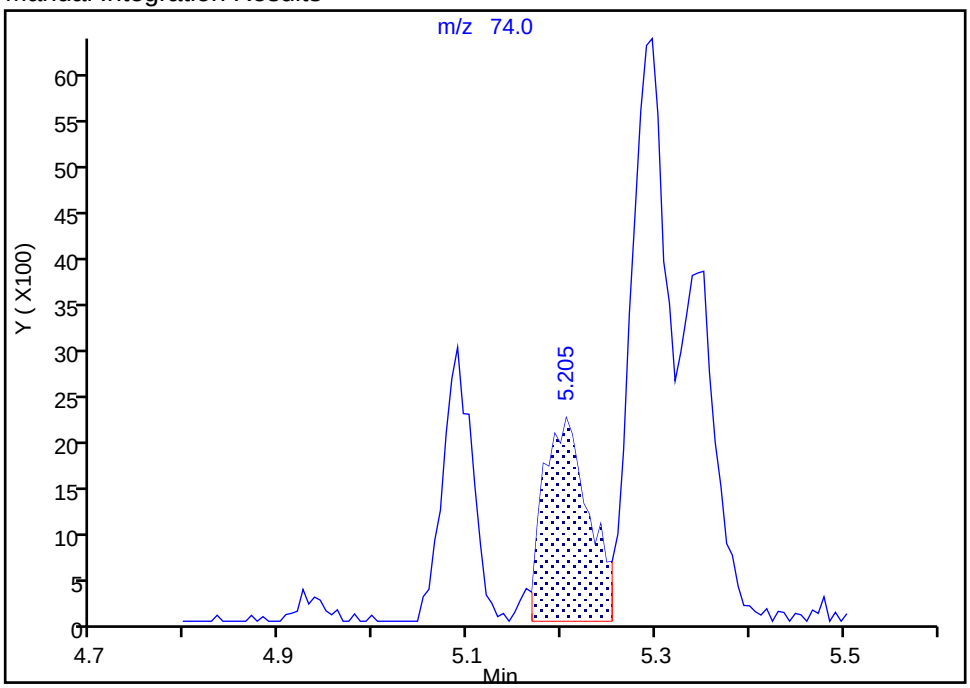
Processing Integration Results

RT: 5.09
Area: 6481
Amount: 324.6457
Amount Units: ug/l



Manual Integration Results

RT: 5.21
Area: 7387
Amount: 369.9716
Amount Units: ug/l



Reviewer: boykink, 12-Apr-2018 22:13:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510972/2 Calibration Date: 04/13/2018 20:21

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81963.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin		0.2525		20.8	20.0	4.1	20.0
Dichlorodifluoromethane	Ave	0.6021	0.5415	0.1000	18.0	20.0	-10.1	20.0
Chloromethane	Ave	0.5852	0.5059	0.1000	17.3	20.0	-13.5	20.0
Butadiene	Ave	0.4371	0.3929		18.0	20.0	-10.1	20.0
Vinyl chloride	Ave	0.5947	0.5404	0.1000	18.2	20.0	-9.1	20.0
Bromomethane	Ave	0.4318	0.4104	0.1000	19.0	20.0	-4.9	50.0
Chloroethane	Ave	0.2668	0.2576	0.1000	19.3	20.0	-3.4	50.0
Dichlorofluoromethane	Ave	0.7507	0.7875		21.0	20.0	4.9	20.0
Trichlorofluoromethane	Ave	0.6160	0.6532	0.1000	21.2	20.0	6.0	20.0
Pentane	Ave	2.344	1.930		32.9	40.0	-17.7	20.0
Ethanol	Ave	0.0709	0.0639		721	800	-9.9	50.0
Ethyl ether	Ave	0.2571	0.2745		21.4	20.0	6.8	20.0
2-Methyl-1,3-butadiene	Ave	0.2625	0.3238		24.7	20.0	23.3*	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3069	0.3615		23.6	20.0	17.8	20.0
Acrolein	Ave	1.927	1.477		230	300	-23.4	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3944	0.4649	0.1000	23.6	20.0	17.9	20.0
1,1-Dichloroethene	Ave	0.3547	0.3930	0.1000	22.2	20.0	10.8	20.0
Acetone	Ave	1.069	1.066	0.0500	99.8	100	-0.2	50.0
Iodomethane	Ave	0.6734	0.7452		22.1	20.0	10.7	20.0
Isopropyl alcohol	Ave	0.7074	0.6726		190	200	-4.9	50.0
Carbon disulfide	Ave	1.338	1.487	0.1000	22.2	20.0	11.1	50.0
Allyl chloride	Ave	0.2049	0.2195		21.4	20.0	7.2	20.0
Methyl acetate	Ave	0.1816	0.2354	0.1000	130	100	29.7*	20.0
Cyclopentene	Ave	0.8170	0.9635		23.6	20.0	17.9	20.0
Acetonitrile	Ave	2.004	1.662		166	200	-17.1	20.0
Methylene Chloride	Ave	0.4282	0.4401	0.1000	20.6	20.0	2.8	20.0
2-Methyl-2-propanol	Ave	1.516	1.383		182	200	-8.8	50.0
Methyl tert-butyl ether	Ave	0.9786	1.084	0.1000	22.1	20.0	10.7	20.0
trans-1,2-Dichloroethene	Ave	0.3841	0.4131	0.1000	21.5	20.0	7.5	20.0
Acrylonitrile	Ave	0.1123	0.1316		234	200	17.2	20.0
Hexane	Ave	0.2771	0.3523		25.4	20.0	27.1*	20.0
Isopropyl ether	Ave	1.025	1.230		24.0	20.0	19.9	20.0
1,1-Dichloroethane	Ave	0.5942	0.6998	0.2000	23.6	20.0	17.8	20.0
Vinyl acetate	Ave	2.044	1.602		31.4	40.0	-21.6*	20.0
2-Chloro-1,3-butadiene	Ave	0.3225	0.3629		22.5	20.0	12.5	20.0
Tert-butyl ethyl ether	Ave	0.9713	1.137		23.4	20.0	17.0	20.0
2,2-Dichloropropane	Ave	0.1401	0.2103		30.0	20.0	50.1*	20.0
2-Butanone (MEK)	Ave	0.4918	0.4005	0.0500	81.4	100	-18.6	50.0
cis-1,2-Dichloroethene	Ave	0.4350	0.4677	0.1000	21.5	20.0	7.5	20.0
Ethyl acetate	Ave	0.4070	0.3384		33.3	40.0	-16.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510972/2 Calibration Date: 04/13/2018 20:21

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81963.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2264	0.2640		23.3	20.0	16.6	20.0
Propionitrile	QuaF		1.486		169	200	-15.5	20.0
Chlorobromomethane	Ave	0.2017	0.2203		21.8	20.0	9.2	20.0
Tetrahydrofuran	Ave	0.5811	0.4963		34.2	40.0	-14.6	20.0
Methacrylonitrile	Ave	0.1322	0.1419		215	200	7.3	20.0
Chloroform	Ave	0.6216	0.7164	0.2000	23.0	20.0	15.2	20.0
Cyclohexane	Ave	0.5789	0.6605	0.1000	22.8	20.0	14.1	50.0
1,1,1-Trichloroethane	Ave	0.4917	0.6399	0.1000	26.0	20.0	30.1*	20.0
Carbon tetrachloride	Ave	0.3554	0.5105	0.1000	28.7	20.0	43.6*	20.0
1,1-Dichloropropene	Ave	0.4464	0.5234		23.5	20.0	17.3	20.0
Isobutyl alcohol	QuaF		0.0471		385	500	-22.9*	20.0
Benzene	Ave	1.841	1.847	0.5000	20.1	20.0	0.3	20.0
Isopropyl acetate	Ave	0.7948	1.079		27.2	20.0	35.8*	20.0
Tert-amyl methyl ether	Ave	0.3001	0.3347		22.3	20.0	11.5	20.0
1,2-Dichloroethane	Ave	0.4020	0.4515	0.1000	22.5	20.0	12.3	20.0
n-Heptane	Ave	0.2765	0.3399		24.6	20.0	22.9*	20.0
n-Butanol	Ave	0.2896	0.2593		448	500	-10.5	50.0
Trichloroethene	Ave	0.3572	0.3960	0.2000	22.2	20.0	10.8	20.0
Ethyl acrylate	Ave	0.2001	0.2264		22.6	20.0	13.1	20.0
Methylcyclohexane	Ave	0.6837	0.7800	0.1000	22.8	20.0	14.1	50.0
1,2-Dichloropropane	Ave	0.3471	0.3724	0.1000	21.5	20.0	7.3	20.0
Methyl methacrylate	Ave	0.1734	0.2149		49.6	40.0	23.9*	20.0
n-Propyl acetate	Ave	0.3295	0.4291		26.0	20.0	30.2*	20.0
1,4-Dioxane	Ave	1.534	1.471		384	400	-4.1	50.0
Dibromomethane	Ave	0.2181	0.2403		22.0	20.0	10.2	20.0
Dichlorobromomethane	Ave	0.3970	0.4480	0.2000	22.6	20.0	12.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1632	0.1849		22.7	20.0	13.3	20.0
2-Nitropropane	Qua2		0.0470		57.9	40.0	44.6*	20.0
Epichlorohydrin	Ave	0.3469	0.3237		373	400	-6.7	20.0
cis-1,3-Dichloropropene	Ave	0.6366	0.6401	0.2000	20.1	20.0	0.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.278	3.399	0.0500	104	100	3.7	50.0
Toluene	Ave	1.926	1.928	0.4000	20.0	20.0	0.0	20.0
trans-1,3-Dichloropropene	Ave	0.4920	0.5411	0.1000	22.0	20.0	10.0	50.0
Ethyl methacrylate	Ave	0.4153	0.4655		22.4	20.0	12.1	20.0
1,1,2-Trichloroethane	Ave	0.3239	0.3201	0.1000	19.8	20.0	-1.2	20.0
Tetrachloroethene	Ave	0.4315	0.4835	0.2000	22.4	20.0	12.0	20.0
1,3-Dichloropropane	Ave	0.6064	0.5873		19.4	20.0	-3.2	20.0
2-Hexanone	Ave	2.135	2.111	0.0500	98.9	100	-1.1	50.0
n-Butyl acetate	Ave	0.4143	0.5325		25.7	20.0	28.5*	20.0
Chlorodibromomethane	Ave	0.3342	0.3903	0.1000	23.4	20.0	16.8	50.0
Ethylene Dibromide	Ave	0.3641	0.3774	0.1000	20.7	20.0	3.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510972/2 Calibration Date: 04/13/2018 20:21

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81963.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.239	1.224	0.5000	19.8	20.0	-1.2	20.0
Ethylbenzene	Ave	0.6717	0.6893	0.1000	20.5	20.0	2.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3721	0.4414		23.7	20.0	18.6	20.0
m-Xylene & p-Xylene	Ave	0.8454	0.8411	0.1000	19.9	20.0	-0.5	20.0
n-Butyl acrylate	Qua2		0.2700		25.2	20.0	26.2*	20.0
o-Xylene	Ave	0.8649	0.8901	0.3000	20.6	20.0	2.9	20.0
Styrene	Ave	1.367	1.357	0.3000	19.9	20.0	-0.7	20.0
Amyl acetate (mixed isomers)	Qua2		1.075		26.2	20.0	31.0*	20.0
Bromoform	Qua2		0.2300	0.1000	27.0	20.0	35.0*	20.0
Isopropylbenzene	Ave	2.260	2.418	0.1000	21.4	20.0	7.0	20.0
Bromobenzene	Ave	0.9532	0.9418		19.8	20.0	-1.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.037	0.9777	0.3000	18.8	20.0	-5.8	20.0
N-Propylbenzene	Ave	4.921	4.887		19.9	20.0	-0.7	20.0
1,2,3-Trichloropropane	Ave	0.2596	0.2569		19.8	20.0	-1.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1995	0.2009		20.1	20.0	0.7	20.0
2-Chlorotoluene	Ave	3.302	3.232		19.6	20.0	-2.1	20.0
4-Ethyltoluene	Ave	4.087	4.001		19.6	20.0	-2.1	20.0
1,3,5-Trimethylbenzene	Ave	3.564	3.442		19.3	20.0	-3.4	20.0
4-Chlorotoluene	Ave	2.832	2.718		19.2	20.0	-4.0	20.0
Butyl Methacrylate	Qua2		0.9440		22.8	20.0	13.9	20.0
tert-Butylbenzene	Ave	2.866	2.665		18.6	20.0	-7.0	20.0
1,2,4-Trimethylbenzene	Ave	3.626	3.629		20.0	20.0	0.0	20.0
sec-Butylbenzene	Ave	4.748	4.698		19.8	20.0	-1.0	20.0
4-Isopropyltoluene	Ave	3.942	3.952		20.0	20.0	0.2	20.0
1,3-Dichlorobenzene	Ave	1.881	1.879	0.6000	20.0	20.0	-0.1	20.0
1,4-Dichlorobenzene	Ave	1.898	1.852	0.5000	19.5	20.0	-2.4	20.0
Benzyl chloride	Ave	1.070	1.471		27.5	20.0	37.5	50.0
Indan	Ave	3.721	3.618		19.4	20.0	-2.8	20.0
p-Diethylbenzene	Ave	2.169	2.237		20.6	20.0	3.1	20.0
n-Butylbenzene	Ave	2.144	2.191		20.4	20.0	2.2	20.0
1,2-Dichlorobenzene	Ave	1.872	1.892	0.4000	20.2	20.0	1.1	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.912	3.834		19.6	20.0	-2.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1658	0.0500	21.5	20.0	7.7	50.0
1,3,5-Trichlorobenzene	Ave	1.544	1.681		21.8	20.0	8.9	20.0
1,2,4-Trichlorobenzene	Ave	1.487	1.554	0.2000	20.9	20.0	4.5	20.0
Hexachlorobutadiene	Ave	0.6537	0.7443		22.8	20.0	13.9	20.0
Naphthalene	Ave	4.123	3.794		18.4	20.0	-8.0	50.0
1,2,3-Trichlorobenzene	Ave	1.522	1.536		20.2	20.0	0.9	20.0
Dibromofluoromethane (Surr)	Ave	0.3133	0.3618		57.7	50.0	15.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2986	0.3407		57.0	50.0	14.1	20.0
Toluene-d8 (Surr)	Ave	1.555	1.527		49.1	50.0	-1.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510972/2 Calibration Date: 04/13/2018 20:21

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81963.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4228	0.4562		53.9	50.0	7.9	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81963.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 13-Apr-2018 20:21:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0070351-002
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 12:07:57 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: delpolitov Date: 17-Apr-2018 11:37:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.596	0.000	89	51565	20.0	20.8	
2 Dichlorodifluoromethane	85	1.633	1.633	0.000	99	110592	20.0	18.0	
3 Chloromethane	50	1.803	1.803	0.000	99	103313	20.0	17.3	
5 Butadiene	54	1.907	1.907	0.000	96	80240	20.0	18.0	
4 Vinyl chloride	62	1.913	1.913	0.000	98	110357	20.0	18.2	
6 Bromomethane	94	2.212	2.212	0.000	97	83818	20.0	19.0	
7 Chloroethane	64	2.267	2.267	0.000	100	52604	20.0	19.3	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	160816	20.0	21.0	
8 Trichlorofluoromethane	101	2.474	2.474	0.000	68	133399	20.0	21.2	
10 Pentane	72	2.504	2.504	0.000	96	27889	40.0	32.9	
11 Ethyl ether	59	2.699	2.699	0.000	95	56055	20.0	21.4	
12 Ethanol	46	2.699	2.699	0.000	69	18476	800.0	721.1	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	96	66121	20.0	24.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.754	0.000	96	73836	20.0	23.6	
15 Acrolein	56	2.882	2.882	0.000	96	160054	300.0	229.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	97	94940	20.0	23.6	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	97	80253	20.0	22.2	
18 Acetone	43	3.010	3.010	0.000	87	110348	100.0	99.8	
19 Iodomethane	142	3.083	3.083	0.000	98	152177	20.0	22.1	
22 Isopropyl alcohol	45	3.096	3.096	0.000	1	48608	200.0	190.2	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	303604	20.0	22.2	
21 3-Chloro-1-propene	76	3.248	3.248	0.000	97	44836	20.0	21.4	
23 Methyl acetate	43	3.254	3.254	0.000	100	240397	100.0	129.7	
24 Cyclopentene	67	3.266	3.266	0.000	94	196767	20.0	23.6	
29 Acetonitrile	41	3.327	3.327	0.000	99	120088	200.0	165.8	a
26 Methylene Chloride	84	3.376	3.376	0.000	92	89875	20.0	20.6	
* 25 TBA-d9 (IS)	65	3.394	3.394	0.000	0	361320	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.455	3.455	0.000	94	99915	200.0	182.3	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	96	221326	20.0	22.1	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	94	84361	20.0	21.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	94	268769	200.0	234.4	
32 Hexane	43	3.724	3.724	0.000	92	71939	20.0	25.4	
33 Isopropyl ether	45	3.931	3.931	0.000	96	251108	20.0	24.0	
34 1,1-Dichloroethane	63	3.980	3.980	0.000	75	142906	20.0	23.6	
35 Vinyl acetate	86	3.986	3.986	0.000	100	23153	40.0	31.4	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	90	74112	20.0	22.5	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	232145	20.0	23.4	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	258670	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.492	0.000	93	42953	20.0	30.0	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	93	95506	20.0	21.5	
41 Ethyl acetate	70	4.510	4.510	0.000	91	14007	40.0	33.3	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	41443	100.0	81.4	
44 Methyl acrylate	55	4.571	4.571	0.000	99	53914	20.0	23.3	
43 Propionitrile	54	4.650	4.650	0.000	98	107365	200.0	169.1	
45 Tetrahydrofuran	72	4.742	4.742	0.000	67	20540	40.0	34.2	
46 Chlorobromomethane	128	4.742	4.742	0.000	86	44982	20.0	21.8	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	289843	200.0	214.7	
48 Chloroform	83	4.790	4.790	0.000	99	146304	20.0	23.0	
49 Cyclohexane	84	4.937	4.937	0.000	91	134882	20.0	22.8	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	80	130672	20.0	26.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	184739	50.0	57.7	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	104260	20.0	28.7	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	106899	20.0	23.5	
56 Isobutyl alcohol	74	5.223	5.223	0.000	95	8504	500.0	385.4	
54 Benzene	78	5.296	5.296	0.000	95	310444	20.0	20.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	173968	50.0	57.0	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	220431	20.0	27.2	
58 Tert-amyl methyl ether	87	5.339	5.339	0.000	93	68347	20.0	22.3	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	92204	20.0	22.5	
60 n-Heptane	57	5.437	5.437	0.000	93	69417	20.0	24.6	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	510559	50.0	50.0	
62 n-Butanol	56	5.870	5.870	0.000	89	46837	500.0	447.6	
63 Trichloroethene	95	5.943	5.943	0.000	99	80870	20.0	22.2	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	46240	20.0	22.6	
65 Methylcyclohexane	83	6.077	6.077	0.000	95	159300	20.0	22.8	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	93	76047	20.0	21.5	
68 Methyl methacrylate	41	6.290	6.290	0.000	87	87786	40.0	49.6	
* 67 1,4-Dioxane-d8	96	6.302	6.302	0.000	0	35083	1000.0	1000.0	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	87624	20.0	26.0	
69 1,4-Dioxane	88	6.357	6.357	0.000	30	20641	400.0	383.5	
71 Dibromomethane	93	6.369	6.369	0.000	98	49074	20.0	22.0	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	91501	20.0	22.6	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	86	37764	20.0	22.7	
74 2-Nitropropane	41	6.851	6.851	0.000	77	19177	40.0	57.9	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	133954	400.0	373.2	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	91	107607	20.0	20.1	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	351717	100.0	103.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	641528	50.0	49.1	
79 Toluene	91	7.351	7.351	0.000	93	324028	20.0	20.0	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	90962	20.0	22.0	
81 Ethyl methacrylate	69	7.711	7.711	0.000	89	78245	20.0	22.4	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	53800	20.0	19.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.967	0.000	98	81282	20.0	22.4	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	92	98721	20.0	19.4	
85 2-Hexanone	43	8.174	8.174	0.000	96	218378	100.0	98.9	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	89506	20.0	25.7	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	65603	20.0	23.4	
88 Ethylene Dibromide	107	8.528	8.528	0.000	97	63443	20.0	20.7	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	420250	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	205807	20.0	19.8	
92 Ethylbenzene	106	9.204	9.204	0.000	98	115873	20.0	20.5	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.223	0.000	95	74202	20.0	23.7	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	141385	20.0	19.9	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	45382	20.0	25.2	
95 o-Xylene	106	9.820	9.820	0.000	95	149628	20.0	20.6	
96 Styrene	104	9.850	9.850	0.000	96	228155	20.0	19.9	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	103798	20.0	26.2	
98 Bromoform	173	10.082	10.082	0.000	96	38660	20.0	27.0	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	406545	20.0	21.4	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	92	191710	50.0	53.9	
101 Bromobenzene	156	10.564	10.564	0.000	96	90936	20.0	19.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	94398	20.0	18.8	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	471885	20.0	19.9	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	97	24800	20.0	19.8	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	78	19398	20.0	20.1	
107 4-Ethyltoluene	105	10.741	10.741	0.000	90	386321	20.0	19.6	
106 2-Chlorotoluene	91	10.741	10.741	0.000	93	312065	20.0	19.6	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	332351	20.0	19.3	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	262443	20.0	19.2	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	91145	20.0	22.8	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	257332	20.0	18.6	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	350354	20.0	20.0	
113 sec-Butylbenzene	105	11.307	11.307	0.000	100	453647	20.0	19.8	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	381570	20.0	20.0	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	181417	20.0	20.0	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	94	241383	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	178839	20.0	19.5	
118 Benzyl chloride	91	11.667	11.667	0.000	99	142028	20.0	27.5	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	349338	20.0	19.4	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	215944	20.0	20.6	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	211581	20.0	20.4	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	182665	20.0	20.2	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	370193	20.0	19.6	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	95	16009	20.0	21.5	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	162308	20.0	21.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	150044	20.0	20.9	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	71862	20.0	22.8	
128 Naphthalene	128	13.331	13.331	0.000	99	366300	20.0	18.4	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	148347	20.0	20.2	
S 130 1,2-Dichloroethene, Total	100				0		40.0	43.0	
S 131 Xylenes, Total	100				0		40.0	40.5	
S 132 Total BTEX	1				0		100.0	101.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00255	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 17-Apr-2018 12:07:59 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81963.D

Injection Date: 13-Apr-2018 20:21:30 Instrument ID: CVOAMS9 Operator ID:

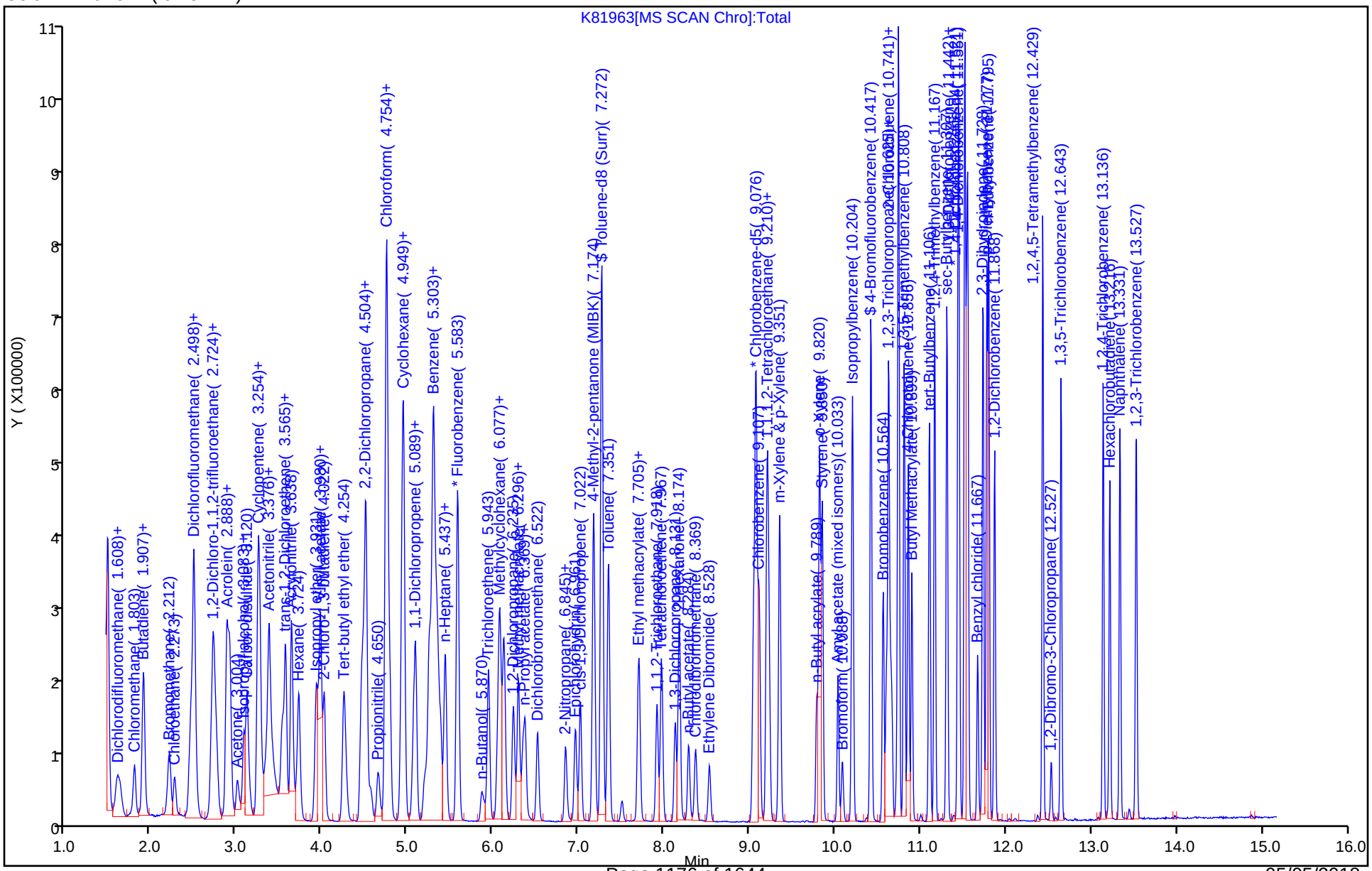
Lims ID: CCVIS Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

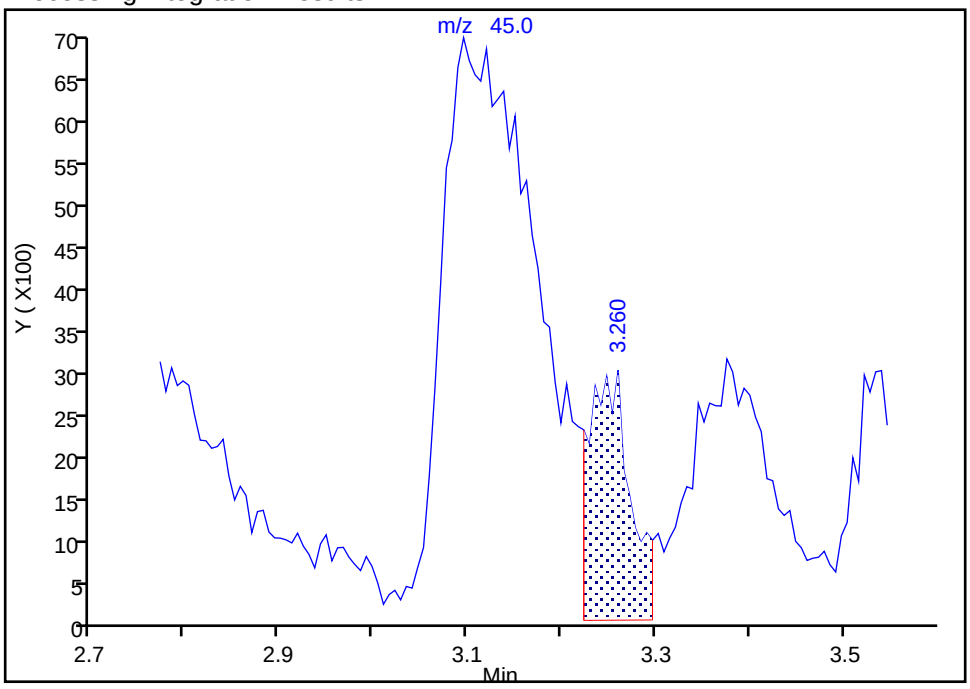
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81963.D
Injection Date: 13-Apr-2018 20:21:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

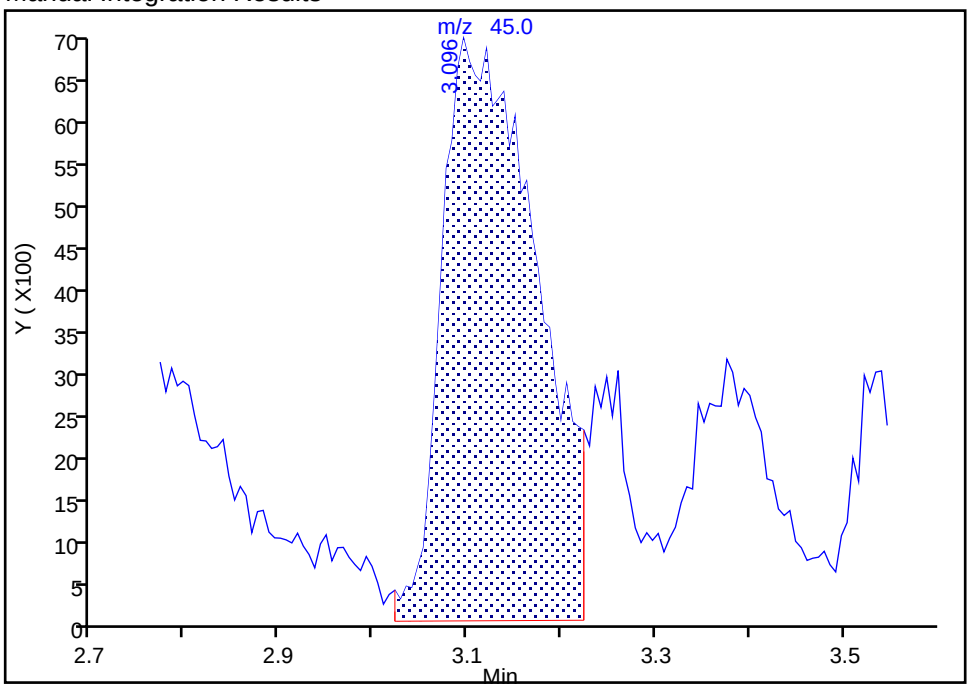
Processing Integration Results

RT: 3.26
Area: 9165
Amount: 35.859050
Amount Units: ug/l



Manual Integration Results

RT: 3.10
Area: 48608
Amount: 190.1840
Amount Units: ug/l



Reviewer: boykink, 13-Apr-2018 21:08:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

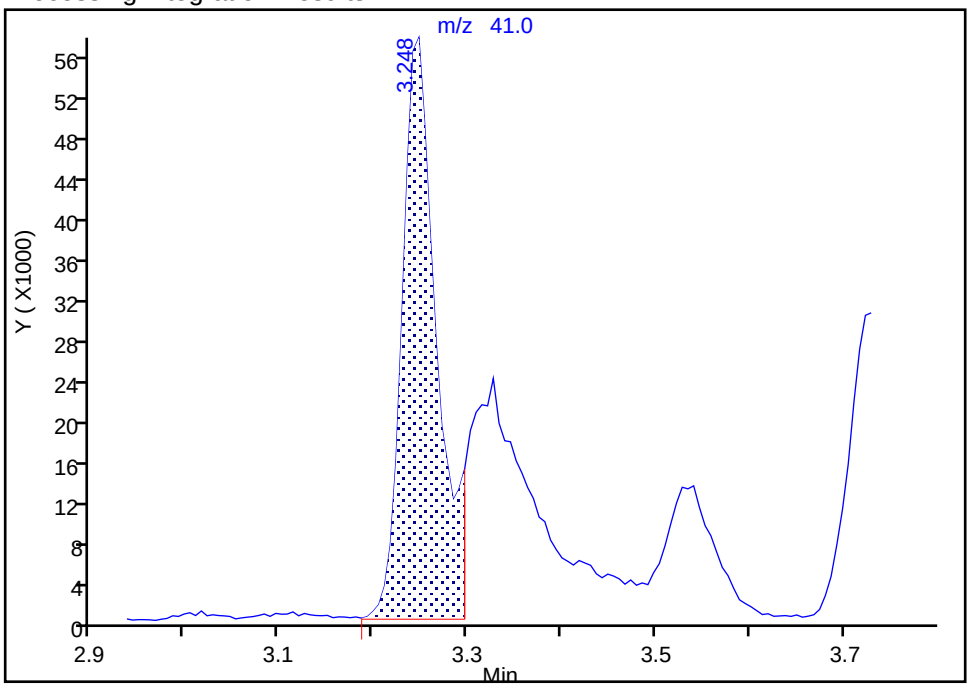
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81963.D
Injection Date: 13-Apr-2018 20:21:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

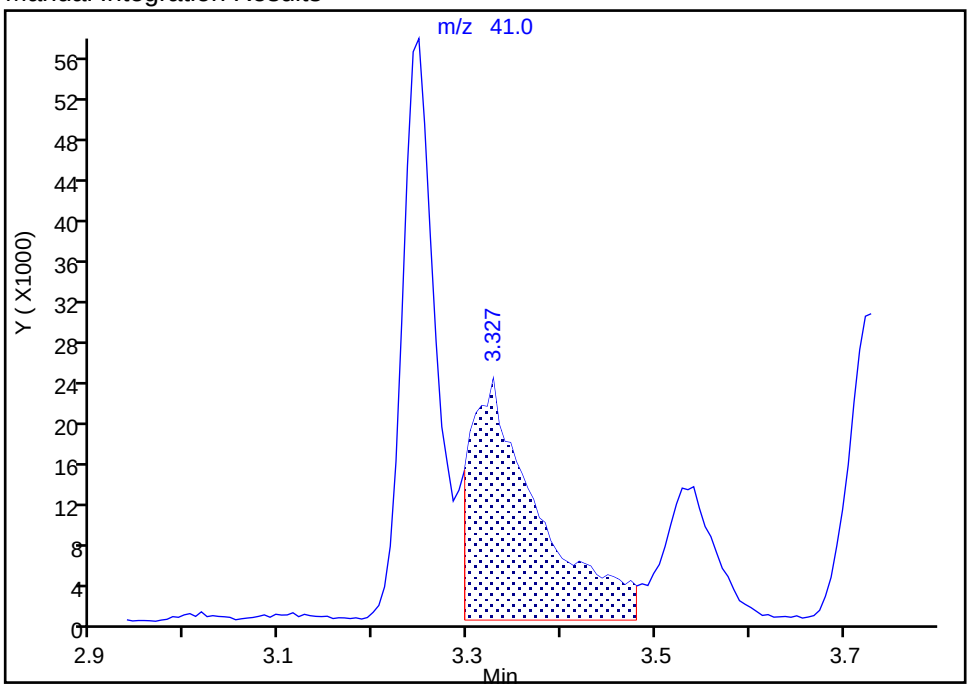
Processing Integration Results

RT: 3.25
Area: 147499
Amount: 203.6951
Amount Units: ug/l



Manual Integration Results

RT: 3.33
Area: 120088
Amount: 165.8407
Amount Units: ug/l



Reviewer: boykink, 13-Apr-2018 21:08:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511293/3 Calibration Date: 04/16/2018 04:50

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82033.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin		0.2205		18.2	20.0	-9.0	20.0
Dichlorodifluoromethane	Ave	0.6021	0.5612	0.1000	18.6	20.0	-6.8	20.0
Chloromethane	Ave	0.5852	0.5528	0.1000	18.9	20.0	-5.5	20.0
Butadiene	Ave	0.4371	0.4436		20.3	20.0	1.5	20.0
Vinyl chloride	Ave	0.5947	0.5859	0.1000	19.7	20.0	-1.5	20.0
Bromomethane	Ave	0.4318	0.4753	0.1000	22.0	20.0	10.1	50.0
Chloroethane	Ave	0.2668	0.2965	0.1000	22.2	20.0	11.2	50.0
Dichlorofluoromethane	Ave	0.7507	0.8491		22.6	20.0	13.1	20.0
Trichlorofluoromethane	Ave	0.6160	0.7193	0.1000	23.4	20.0	16.8	20.0
Pentane	Ave	2.344	1.761		30.0	40.0	-24.9*	20.0
Ethanol	Ave	0.0709	0.0630		711	800	-11.1	50.0
Ethyl ether	Ave	0.2571	0.2673		20.8	20.0	4.0	20.0
2-Methyl-1,3-butadiene	Ave	0.2625	0.3082		23.5	20.0	17.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3069	0.3514		22.9	20.0	14.5	20.0
Acrolein	Ave	1.927	1.414		220	300	-26.6	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3944	0.4502	0.1000	22.8	20.0	14.1	20.0
1,1-Dichloroethene	Ave	0.3547	0.3762	0.1000	21.2	20.0	6.1	20.0
Acetone	Ave	1.069	1.075	0.0500	101	100	0.6	50.0
Iodomethane	Ave	0.6734	0.7374		21.9	20.0	9.5	20.0
Isopropyl alcohol	Ave	0.7074	0.6608		187	200	-6.6	50.0
Carbon disulfide	Ave	1.338	1.391	0.1000	20.8	20.0	3.9	50.0
Allyl chloride	Ave	0.2049	0.2242		21.9	20.0	9.4	20.0
Methyl acetate	Ave	0.1816	0.2231	0.1000	123	100	22.9*	20.0
Cyclopentene	Ave	0.8170	0.9148		22.4	20.0	12.0	20.0
Acetonitrile	Ave	2.004	1.604		160	200	-20.0	20.0
Methylene Chloride	Ave	0.4282	0.4266	0.1000	19.9	20.0	-0.4	20.0
2-Methyl-2-propanol	Ave	1.516	1.332		176	200	-12.2	50.0
Methyl tert-butyl ether	Ave	0.9786	1.022	0.1000	20.9	20.0	4.5	20.0
trans-1,2-Dichloroethene	Ave	0.3841	0.4003	0.1000	20.8	20.0	4.2	20.0
Acrylonitrile	Ave	0.1123	0.1238		221	200	10.3	20.0
Hexane	Ave	0.2771	0.3203		23.1	20.0	15.6	20.0
Isopropyl ether	Ave	1.025	1.171		22.8	20.0	14.2	20.0
1,1-Dichloroethane	Ave	0.5942	0.6540	0.2000	22.0	20.0	10.1	20.0
Vinyl acetate	Ave	2.044	1.563		30.6	40.0	-23.5*	20.0
2-Chloro-1,3-butadiene	Ave	0.3225	0.3372		20.9	20.0	4.6	20.0
Tert-butyl ethyl ether	Ave	0.9713	1.083		22.3	20.0	11.5	20.0
2,2-Dichloropropane	Ave	0.1401	0.1951		27.9	20.0	39.3*	20.0
Ethyl acetate	Ave	0.4070	0.3321		32.6	40.0	-18.4	20.0
2-Butanone (MEK)	Ave	0.4918	0.3943	0.0500	80.2	100	-19.8	50.0
cis-1,2-Dichloroethene	Ave	0.4350	0.4479	0.1000	20.6	20.0	3.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511293/3 Calibration Date: 04/16/2018 04:50

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82033.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2264	0.2567		22.7	20.0	13.4	20.0
Propionitrile	QuaF		1.340		152	200	-23.8*	20.0
Tetrahydrofuran	Ave	0.5811	0.4794		33.0	40.0	-17.5	20.0
Chlorobromomethane	Ave	0.2017	0.2175		21.6	20.0	7.8	20.0
Methacrylonitrile	Ave	0.1322	0.1301		197	200	-1.6	20.0
Chloroform	Ave	0.6216	0.6891	0.2000	22.2	20.0	10.9	20.0
Cyclohexane	Ave	0.5789	0.6226	0.1000	21.5	20.0	7.6	50.0
1,1,1-Trichloroethane	Ave	0.4917	0.6068	0.1000	24.7	20.0	23.4*	20.0
Carbon tetrachloride	Ave	0.3554	0.4900	0.1000	27.6	20.0	37.9*	20.0
1,1-Dichloropropene	Ave	0.4464	0.4842		21.7	20.0	8.5	20.0
Isobutyl alcohol	QuaF		0.0447		366	500	-26.8*	20.0
Benzene	Ave	1.841	1.716	0.5000	18.6	20.0	-6.8	20.0
Isopropyl acetate	Ave	0.7948	0.8870		22.3	20.0	11.6	20.0
Tert-amyl methyl ether	Ave	0.3001	0.3171		21.1	20.0	5.7	20.0
1,2-Dichloroethane	Ave	0.4020	0.4209	0.1000	20.9	20.0	4.7	20.0
n-Heptane	Ave	0.2765	0.3134		22.7	20.0	13.3	20.0
n-Butanol	Ave	0.2896	0.2337		403	500	-19.3	50.0
Trichloroethene	Ave	0.3572	0.3599	0.2000	20.2	20.0	0.8	20.0
Ethyl acrylate	Ave	0.2001	0.2338		23.4	20.0	16.8	20.0
Methylcyclohexane	Ave	0.6837	0.7483	0.1000	21.9	20.0	9.4	50.0
1,2-Dichloropropane	Ave	0.3471	0.3374	0.1000	19.4	20.0	-2.8	20.0
Methyl methacrylate	Ave	0.1734	0.1997		46.0	40.0	15.1	20.0
1,4-Dioxane	Ave	1.534	1.452		378	400	-5.4	50.0
n-Propyl acetate	Ave	0.3295	0.3648		22.1	20.0	10.7	20.0
Dibromomethane	Ave	0.2181	0.2261		20.7	20.0	3.7	20.0
Dichlorobromomethane	Ave	0.3970	0.4116	0.2000	20.7	20.0	3.7	20.0
2-Chloroethyl vinyl ether	Ave	0.1632	0.1634		20.0	20.0	0.1	20.0
2-Nitropropane	Qua2		0.0394		48.6	40.0	21.4*	20.0
Epichlorohydrin	Ave	0.3469	0.2966		342	400	-14.5	20.0
cis-1,3-Dichloropropene	Ave	0.6366	0.5904	0.2000	18.5	20.0	-7.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.278	3.122	0.0500	95.2	100	-4.8	50.0
Toluene	Ave	1.926	1.737	0.4000	18.0	20.0	-9.8	20.0
trans-1,3-Dichloropropene	Ave	0.4920	0.5074	0.1000	20.6	20.0	3.1	50.0
Ethyl methacrylate	Ave	0.4153	0.4247		20.5	20.0	2.3	20.0
1,1,2-Trichloroethane	Ave	0.3239	0.2894	0.1000	17.9	20.0	-10.6	20.0
Tetrachloroethene	Ave	0.4315	0.4499	0.2000	20.9	20.0	4.3	20.0
1,3-Dichloropropane	Ave	0.6064	0.5363		17.7	20.0	-11.6	20.0
2-Hexanone	Ave	2.135	1.967	0.0500	92.1	100	-7.9	50.0
n-Butyl acetate	Ave	0.4143	0.5128		24.8	20.0	23.8*	20.0
Chlorodibromomethane	Ave	0.3342	0.3545	0.1000	21.2	20.0	6.1	50.0
Ethylene Dibromide	Ave	0.3641	0.3474	0.1000	19.1	20.0	-4.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511293/3 Calibration Date: 04/16/2018 04:50

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82033.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.239	1.135	0.5000	18.3	20.0	-8.4	20.0
Ethylbenzene	Ave	0.6717	0.6253	0.1000	18.6	20.0	-6.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3721	0.4100		22.0	20.0	10.2	20.0
m-Xylene & p-Xylene	Ave	0.8454	0.7844	0.1000	18.6	20.0	-7.2	20.0
n-Butyl acrylate	Qua2		0.2561		24.0	20.0	19.9	20.0
o-Xylene	Ave	0.8649	0.7943	0.3000	18.4	20.0	-8.2	20.0
Styrene	Ave	1.367	1.249	0.3000	18.3	20.0	-8.7	20.0
Amyl acetate (mixed isomers)	Qua2		0.9717		23.8	20.0	18.8	20.0
Bromoform	Qua2		0.2140	0.1000	25.2	20.0	25.9*	20.0
Isopropylbenzene	Ave	2.260	2.204	0.1000	19.5	20.0	-2.5	20.0
Bromobenzene	Ave	0.9532	0.8671		18.2	20.0	-9.0	20.0
1,1,2,2-Tetrachloroethane	Ave	1.037	0.8693	0.3000	16.8	20.0	-16.2	20.0
N-Propylbenzene	Ave	4.921	4.357		17.7	20.0	-11.5	20.0
1,2,3-Trichloropropane	Ave	0.2596	0.2404		18.5	20.0	-7.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1995	0.1796		18.0	20.0	-10.0	20.0
2-Chlorotoluene	Ave	3.302	2.853		17.3	20.0	-13.6	20.0
4-Ethyltoluene	Ave	4.087	3.636		17.8	20.0	-11.0	20.0
1,3,5-Trimethylbenzene	Ave	3.564	3.113		17.5	20.0	-12.7	20.0
4-Chlorotoluene	Ave	2.832	2.446		17.3	20.0	-13.7	20.0
Butyl Methacrylate	Qua2		0.8773		21.2	20.0	6.1	20.0
tert-Butylbenzene	Ave	2.866	2.429		17.0	20.0	-15.2	20.0
1,2,4-Trimethylbenzene	Ave	3.626	3.261		18.0	20.0	-10.0	20.0
sec-Butylbenzene	Ave	4.748	4.214		17.8	20.0	-11.2	20.0
4-Isopropyltoluene	Ave	3.942	3.547		18.0	20.0	-10.0	20.0
1,3-Dichlorobenzene	Ave	1.881	1.734	0.6000	18.4	20.0	-7.9	20.0
1,4-Dichlorobenzene	Ave	1.898	1.710	0.5000	18.0	20.0	-9.9	20.0
Benzyl chloride	Ave	1.070	1.346		25.2	20.0	25.8	50.0
Indan	Ave	3.721	3.260		17.5	20.0	-12.4	20.0
p-Diethylbenzene	Ave	2.169	2.027		18.7	20.0	-6.6	20.0
n-Butylbenzene	Ave	2.144	1.954		18.2	20.0	-8.8	20.0
1,2-Dichlorobenzene	Ave	1.872	1.754	0.4000	18.7	20.0	-6.3	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.912	3.539		18.1	20.0	-9.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1514	0.0500	19.7	20.0	-1.7	50.0
1,3,5-Trichlorobenzene	Ave	1.544	1.559		20.2	20.0	1.0	20.0
1,2,4-Trichlorobenzene	Ave	1.487	1.498	0.2000	20.1	20.0	0.7	20.0
Hexachlorobutadiene	Ave	0.6537	0.7023		21.5	20.0	7.4	20.0
Naphthalene	Ave	4.123	3.589		17.4	20.0	-13.0	50.0
1,2,3-Trichlorobenzene	Ave	1.522	1.478		19.4	20.0	-2.9	20.0
Dibromofluoromethane (Surr)	Ave	0.3133	0.3756		59.9	50.0	19.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2986	0.3511		58.8	50.0	17.6	20.0
Toluene-d8 (Surr)	Ave	1.555	1.527		49.1	50.0	-1.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511293/3 Calibration Date: 04/16/2018 04:50

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82033.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4228	0.4620		54.6	50.0	9.3	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82033.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Apr-2018 04:50:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0070418-003
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 16-Apr-2018 10:43:23 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: delpolitov Date: 16-Apr-2018 10:43:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.602	0.000	89	41357	20.0	18.2	a
2 Dichlorodifluoromethane	85	1.645	1.645	0.000	99	105256	20.0	18.6	
3 Chloromethane	50	1.809	1.809	0.000	100	103678	20.0	18.9	
5 Butadiene	54	1.919	1.919	0.000	96	83186	20.0	20.3	
4 Vinyl chloride	62	1.919	1.919	0.000	97	109887	20.0	19.7	
6 Bromomethane	94	2.218	2.218	0.000	99	89142	20.0	22.0	
7 Chloroethane	64	2.279	2.279	0.000	100	55611	20.0	22.2	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	98	159246	20.0	22.6	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	71	134904	20.0	23.4	
10 Pentane	72	2.504	2.504	0.000	97	24133	40.0	30.0	
11 Ethyl ether	59	2.706	2.706	0.000	96	50136	20.0	20.8	
13 2-Methyl-1,3-butadiene	53	2.730	2.730	0.000	97	57797	20.0	23.5	
12 Ethanol	46	2.693	2.693	0.000	67	17277	800.0	711.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.767	2.767	0.000	92	65896	20.0	22.9	
15 Acrolein	56	2.888	2.888	0.000	96	145356	300.0	220.1	
16 1,1,2-Trichloro-1,2,2-trif	101	2.901	2.901	0.000	96	84421	20.0	22.8	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	98	70559	20.0	21.2	
18 Acetone	43	3.016	3.016	0.000	87	99821	100.0	100.6	
19 Iodomethane	142	3.090	3.090	0.000	98	138284	20.0	21.9	
22 Isopropyl alcohol	45	3.108	3.108	0.000	1	45274	200.0	186.8	a
20 Carbon disulfide	76	3.126	3.126	0.000	99	260797	20.0	20.8	
21 3-Chloro-1-propene	76	3.254	3.254	0.000	96	42044	20.0	21.9	
23 Methyl acetate	43	3.254	3.254	0.000	99	209215	100.0	122.9	
24 Cyclopentene	67	3.273	3.273	0.000	93	171567	20.0	22.4	
29 Acetonitrile	41	3.327	3.327	0.000	96	109897	200.0	160.1	a
* 25 TBA-d9 (IS)	65	3.370	3.370	0.000	0	342573	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.382	0.000	89	80010	20.0	19.9	
27 2-Methyl-2-propanol	59	3.437	3.437	0.000	94	91272	200.0	175.7	
28 Methyl tert-butyl ether	73	3.541	3.541	0.000	96	191717	20.0	20.9	
30 trans-1,2-Dichloroethene	96	3.577	3.577	0.000	94	75077	20.0	20.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.644	3.644	0.000	94	232206	200.0	220.5	
32 Hexane	43	3.724	3.724	0.000	93	60075	20.0	23.1	
33 Isopropyl ether	45	3.937	3.937	0.000	96	219597	20.0	22.8	
34 1,1-Dichloroethane	63	3.980	3.980	0.000	73	122652	20.0	22.0	
35 Vinyl acetate	86	3.986	3.986	0.000	100	21419	40.0	30.6	
36 2-Chloro-1,3-butadiene	88	4.028	4.028	0.000	90	63238	20.0	20.9	
37 Tert-butyl ethyl ether	59	4.260	4.260	0.000	90	203064	20.0	22.3	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	232043	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.486	0.000	92	36596	20.0	27.9	
41 Ethyl acetate	70	4.510	4.510	0.000	91	12328	40.0	32.6	
40 cis-1,2-Dichloroethene	96	4.516	4.516	0.000	94	83992	20.0	20.6	
42 2-Butanone (MEK)	72	4.516	4.516	0.000	97	36599	100.0	80.2	
44 Methyl acrylate	55	4.577	4.577	0.000	99	48132	20.0	22.7	
43 Propionitrile	54	4.656	4.656	0.000	98	91825	200.0	152.5	
45 Tetrahydrofuran	72	4.742	4.742	0.000	65	17800	40.0	33.0	
46 Chlorobromomethane	128	4.748	4.748	0.000	77	40781	20.0	21.6	
47 Methacrylonitrile	67	4.760	4.760	0.000	92	244046	200.0	196.8	
48 Chloroform	83	4.791	4.791	0.000	99	129232	20.0	22.2	
49 Cyclohexane	84	4.937	4.937	0.000	90	116770	20.0	21.5	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	96	113806	20.0	24.7	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	97	176102	50.0	59.9	
52 Carbon tetrachloride	117	5.071	5.071	0.000	97	91900	20.0	27.6	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	90804	20.0	21.7	
56 Isobutyl alcohol	74	5.211	5.211	0.000	1	7652	500.0	365.8	a
54 Benzene	78	5.297	5.297	0.000	95	267159	20.0	18.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.315	0.000	0	164633	50.0	58.8	
57 Isopropyl acetate	43	5.339	5.339	0.000	96	166347	20.0	22.3	
58 Tert-amyl methyl ether	87	5.351	5.351	0.000	96	59470	20.0	21.1	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	96	78932	20.0	20.9	
60 n-Heptane	57	5.437	5.437	0.000	93	58778	20.0	22.7	
* 61 Fluorobenzene	96	5.589	5.589	0.000	99	468854	50.0	50.0	
62 n-Butanol	56	5.870	5.870	0.000	89	40021	500.0	403.4	
63 Trichloroethene	95	5.949	5.949	0.000	98	67500	20.0	20.2	
64 Ethyl acrylate	56	6.077	6.077	0.000	91	43837	20.0	23.4	
65 Methylcyclohexane	83	6.077	6.077	0.000	95	140335	20.0	21.9	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	93	63270	20.0	19.4	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	31363	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	88	74888	40.0	46.0	
69 1,4-Dioxane	88	6.351	6.351	0.000	29	18211	400.0	378.5	
70 n-Propyl acetate	43	6.351	6.351	0.000	99	68417	20.0	22.1	
71 Dibromomethane	93	6.376	6.376	0.000	98	42408	20.0	20.7	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	77195	20.0	20.7	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	88	30642	20.0	20.0	
74 2-Nitropropane	41	6.851	6.851	0.000	76	14761	40.0	48.6	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	110131	400.0	342.1	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	92	91891	20.0	18.5	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	97	289734	100.0	95.2	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	594159	50.0	49.1	
79 Toluene	91	7.351	7.351	0.000	93	270327	20.0	18.0	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	78972	20.0	20.6	
81 Ethyl methacrylate	69	7.711	7.711	0.000	86	66098	20.0	20.5	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	97	45052	20.0	17.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	96	70026	20.0	20.9	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	92	83473	20.0	17.7	
85 2-Hexanone	43	8.180	8.180	0.000	96	182571	100.0	92.1	
86 n-Butyl acetate	43	8.290	8.290	0.000	99	79819	20.0	24.8	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	55180	20.0	21.2	
88 Ethylene Dibromide	107	8.534	8.534	0.000	98	54072	20.0	19.1	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	389129	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	176602	20.0	18.3	
92 Ethylbenzene	106	9.204	9.204	0.000	98	97322	20.0	18.6	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.223	0.000	94	63822	20.0	22.0	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	122100	20.0	18.6	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	39857	20.0	24.0	
95 o-Xylene	106	9.820	9.820	0.000	95	123630	20.0	18.4	
96 Styrene	104	9.851	9.851	0.000	96	194394	20.0	18.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	88616	20.0	23.8	
98 Bromoform	173	10.088	10.088	0.000	97	33311	20.0	25.2	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	343066	20.0	19.5	
$ 100 4-Bromofluorobenzene	174	10.424	10.424	0.000	95	179777	50.0	54.6	
101 Bromobenzene	156	10.564	10.564	0.000	94	79078	20.0	18.2	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	79275	20.0	16.8	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	397335	20.0	17.7	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	98	21922	20.0	18.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	87	16382	20.0	18.0	
106 2-Chlorotoluene	91	10.741	10.741	0.000	91	260179	20.0	17.3	
107 4-Ethyltoluene	105	10.747	10.747	0.000	90	331574	20.0	17.8	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	93	283855	20.0	17.5	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	223021	20.0	17.3	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	80002	20.0	21.2	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	221507	20.0	17.0	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	297427	20.0	18.0	
113 sec-Butylbenzene	105	11.308	11.308	0.000	99	384286	20.0	17.8	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	323469	20.0	18.0	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	158088	20.0	18.4	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	227987	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	155977	20.0	18.0	
118 Benzyl chloride	91	11.667	11.667	0.000	99	122749	20.0	25.2	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	297306	20.0	17.5	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	184809	20.0	18.7	
121 n-Butylbenzene	92	11.801	11.801	0.000	98	178235	20.0	18.2	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	159952	20.0	18.7	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	322759	20.0	18.1	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	96	13810	20.0	19.7	
125 1,3,5-Trichlorobenzene	180	12.649	12.649	0.000	98	142182	20.0	20.2	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	136624	20.0	20.1	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	64050	20.0	21.5	
128 Naphthalene	128	13.338	13.338	0.000	99	327280	20.0	17.4	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	134740	20.0	19.4	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.4	
S 131 Xylenes, Total	100				0		40.0	36.9	
S 132 Total BTEX	1				0		100.0	92.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

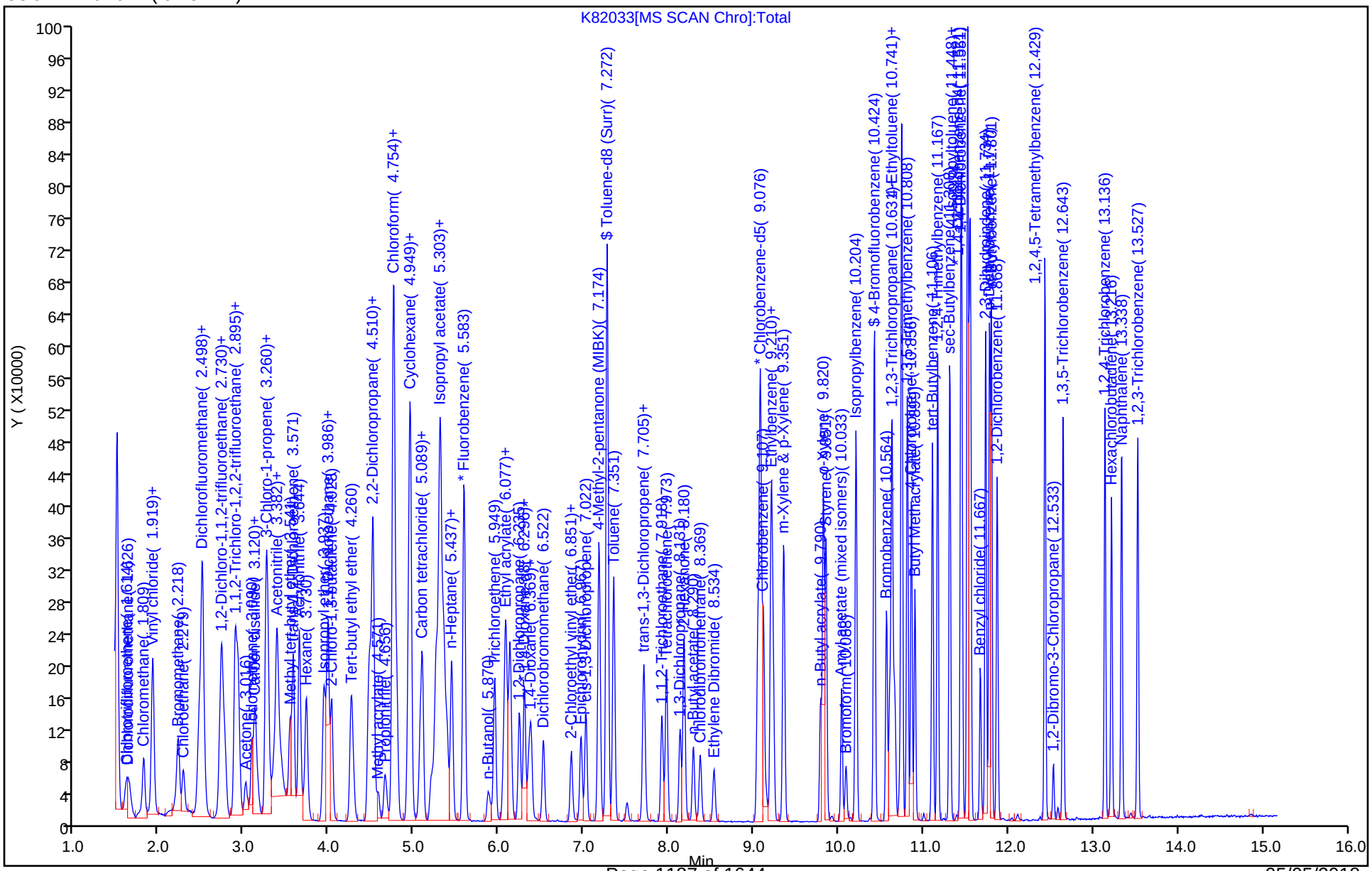
Report Date: 16-Apr-2018 10:43:24 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82033.D

Injection Date:	16-Apr-2018 04:50:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

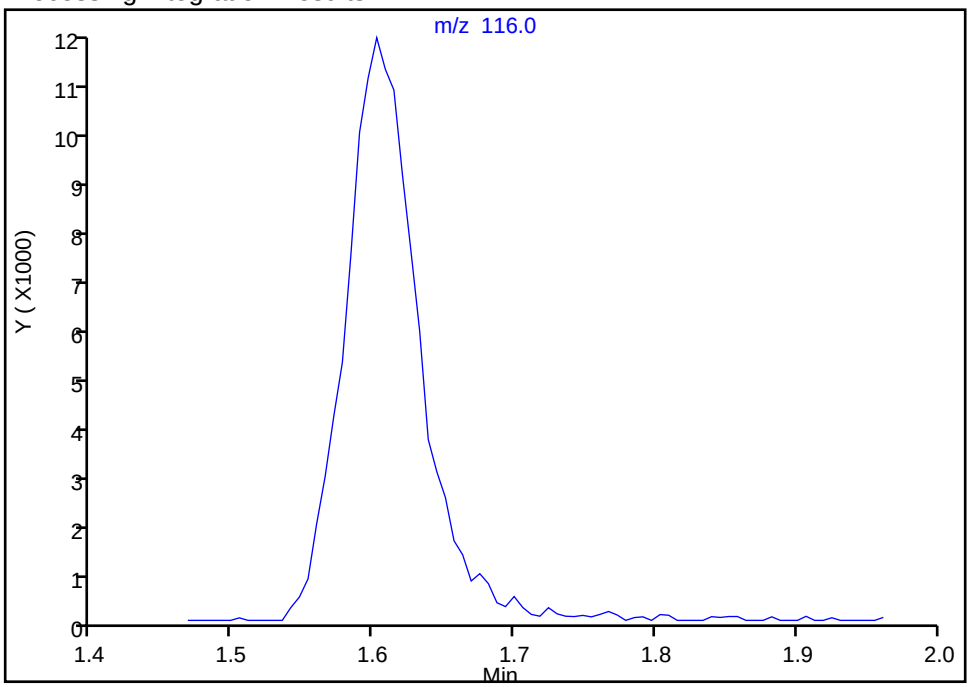
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82033.D
Injection Date: 16-Apr-2018 04:50:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

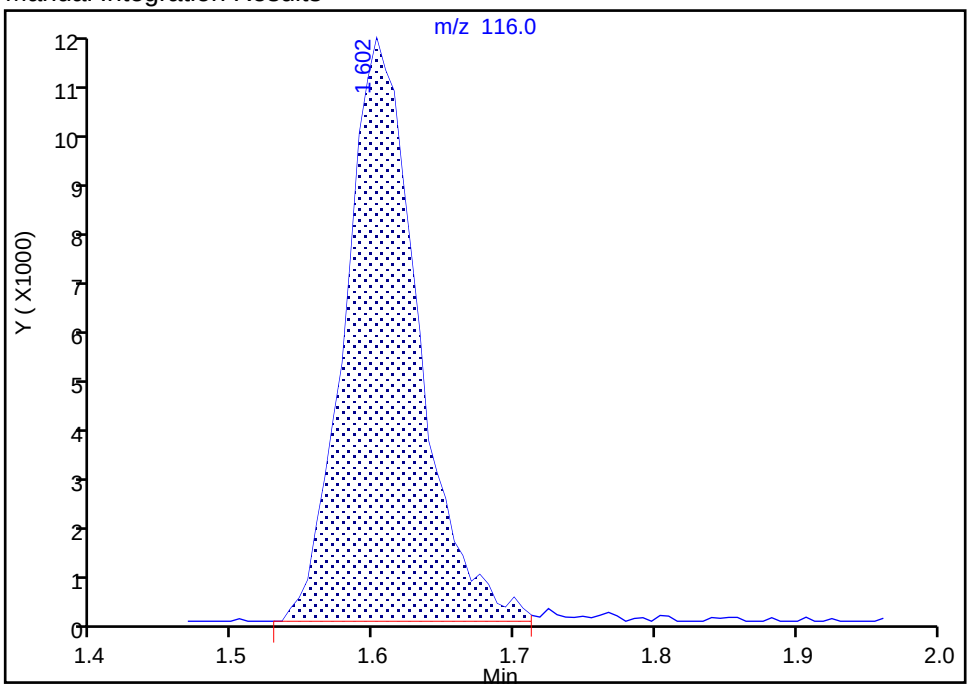
Not Detected
Expected RT: 1.60

Processing Integration Results



Manual Integration Results

RT: 1.60
Area: 41357
Amount: 18.209637
Amount Units: ug/l



Reviewer: tupayachia, 16-Apr-2018 05:42:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

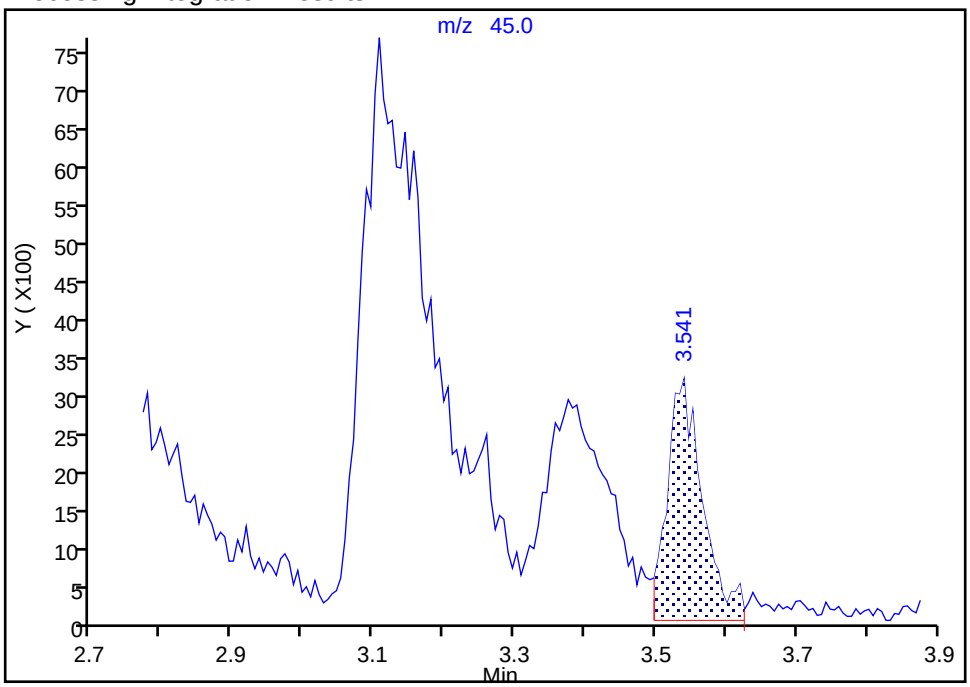
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82033.D
Injection Date: 16-Apr-2018 04:50:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

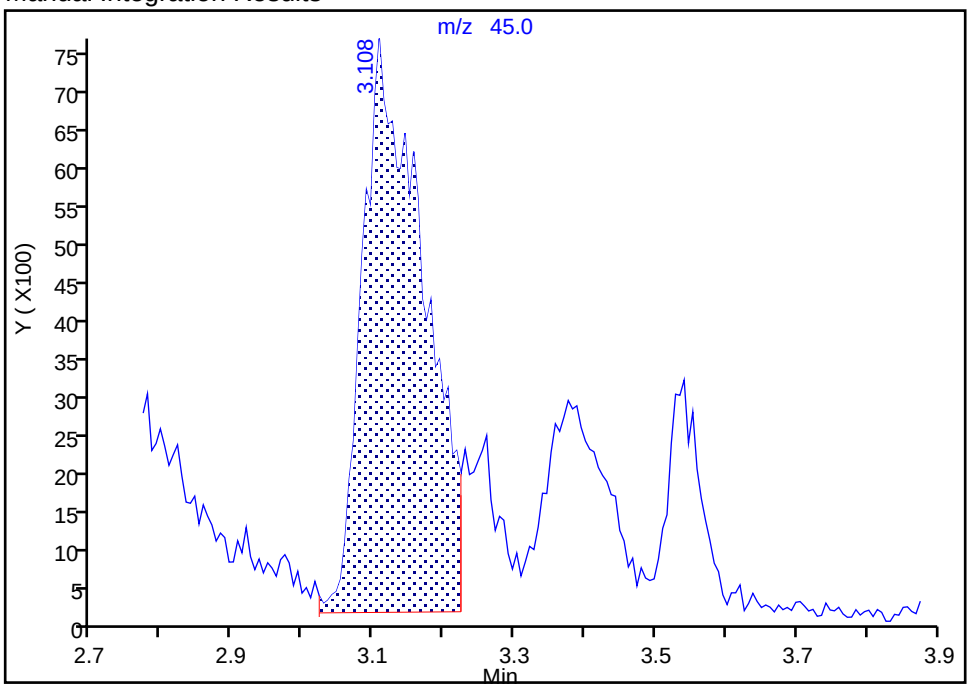
Processing Integration Results

RT: 3.54
Area: 10858
Amount: 44.807944
Amount Units: ug/l



Manual Integration Results

RT: 3.11
Area: 45274
Amount: 186.8332
Amount Units: ug/l



Reviewer: tupayachia, 16-Apr-2018 05:42:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

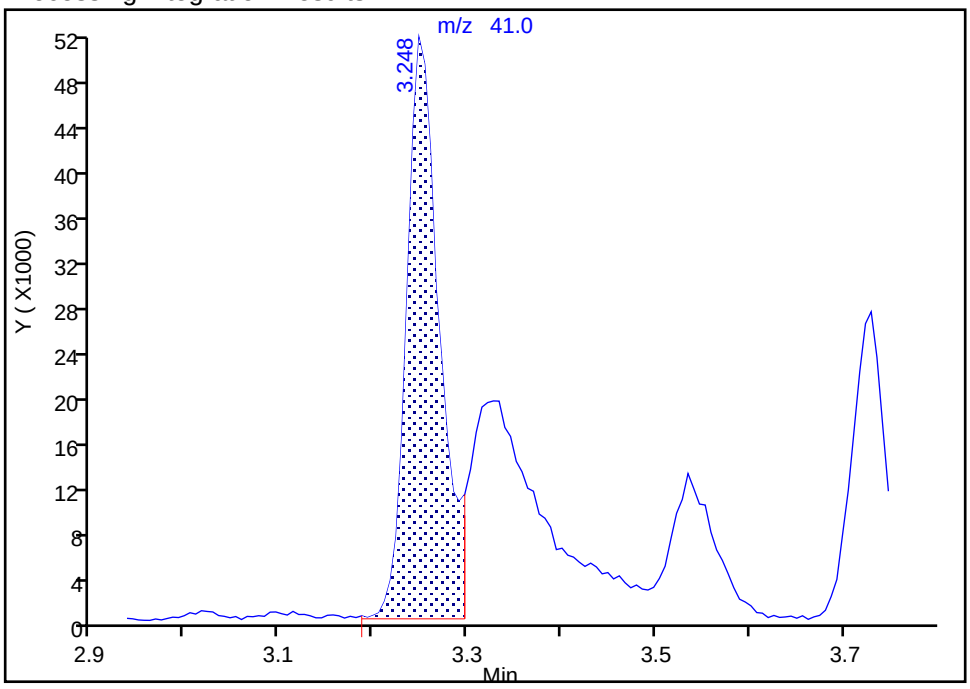
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82033.D
Injection Date: 16-Apr-2018 04:50:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

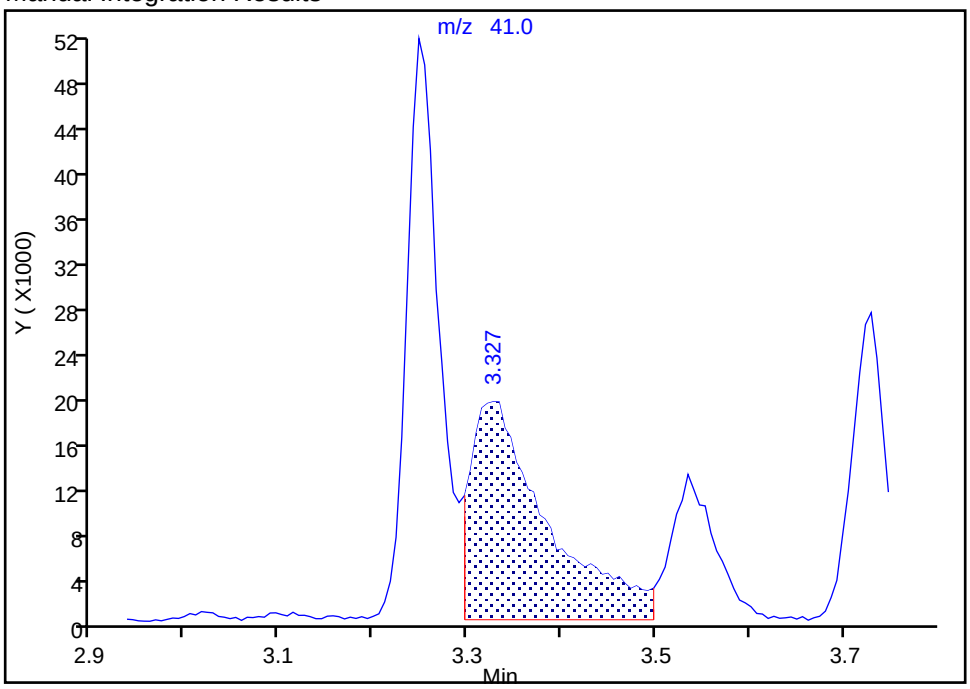
Processing Integration Results

RT: 3.25
Area: 125948
Amount: 183.4516
Amount Units: ug/l



Manual Integration Results

RT: 3.33
Area: 109897
Amount: 160.0723
Amount Units: ug/l



Reviewer: tupayachia, 16-Apr-2018 05:42:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

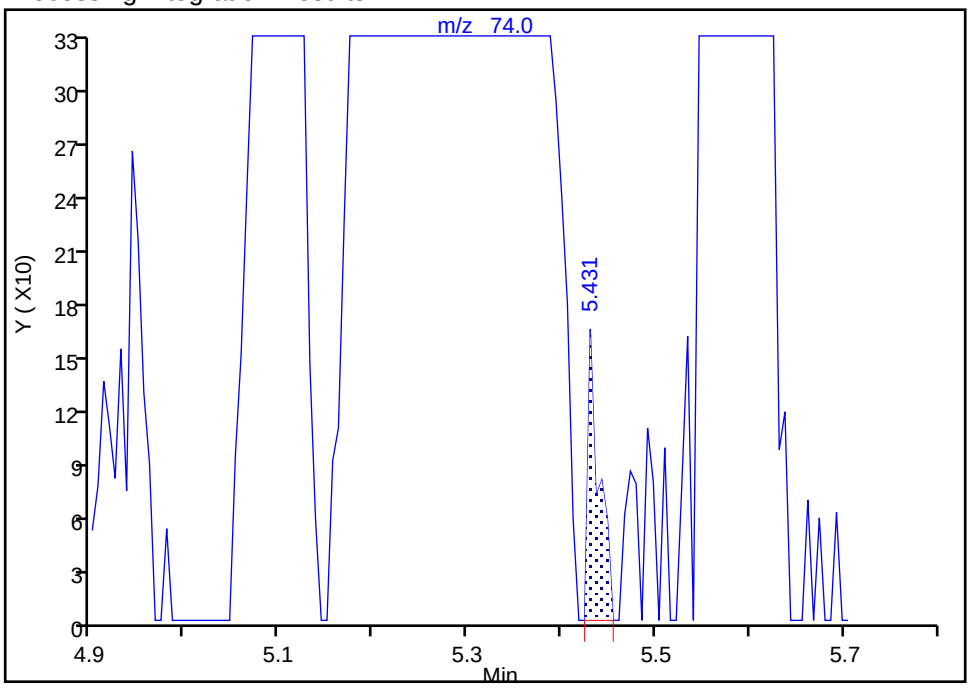
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82033.D
Injection Date: 16-Apr-2018 04:50:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

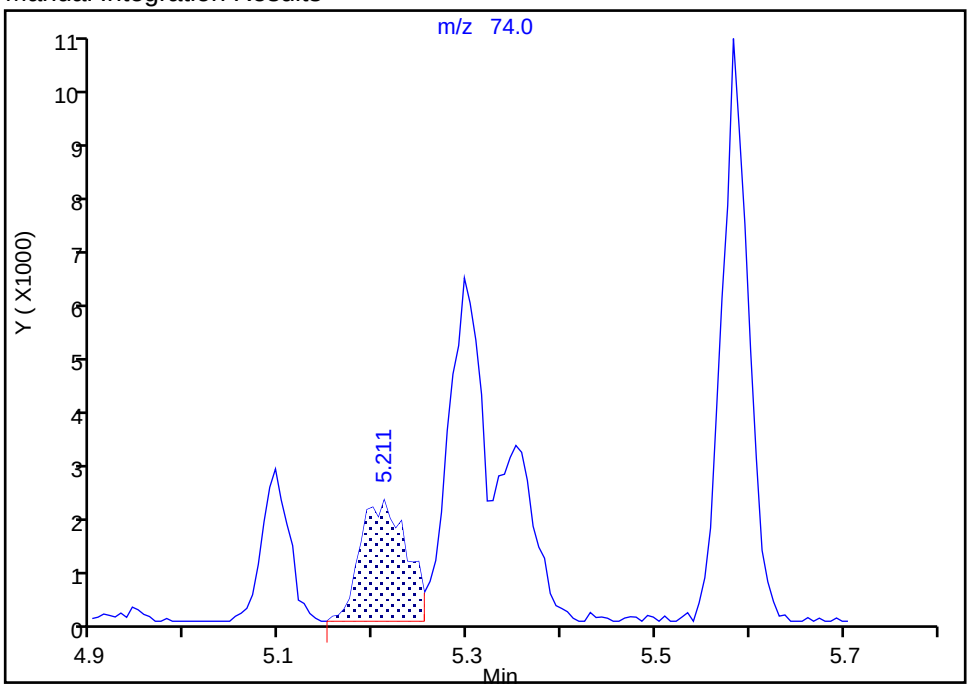
Processing Integration Results

RT: 5.43
Area: 134
Amount: 6.413358
Amount Units: ug/l



Manual Integration Results

RT: 5.21
Area: 7652
Amount: 365.7814
Amount Units: ug/l



Reviewer: tupayachia, 16-Apr-2018 05:42:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511471/4 Calibration Date: 04/16/2018 18:36

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82063.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin		0.2027		16.7	20.0	-16.3	20.0
Dichlorodifluoromethane	Ave	0.6021	0.5508	0.1000	18.3	20.0	-8.5	20.0
Chloromethane	Ave	0.5852	0.5309	0.1000	18.1	20.0	-9.3	20.0
Vinyl chloride	Ave	0.5947	0.5616	0.1000	18.9	20.0	-5.6	20.0
Butadiene	Ave	0.4371	0.4390		20.1	20.0	0.4	20.0
Bromomethane	Ave	0.4318	0.4296	0.1000	19.9	20.0	-0.5	50.0
Chloroethane	Ave	0.2668	0.2744	0.1000	20.6	20.0	2.9	50.0
Dichlorofluoromethane	Ave	0.7507	0.7925		21.1	20.0	5.6	20.0
Trichlorofluoromethane	Ave	0.6160	0.6723	0.1000	21.8	20.0	9.1	20.0
Pentane	Ave	2.344	1.633		27.9	40.0	-30.4*	20.0
Ethyl ether	Ave	0.2571	0.2303		17.9	20.0	-10.4	20.0
Ethanol	Ave	0.0709	0.0546		615	800	-23.1	50.0
2-Methyl-1,3-butadiene	Ave	0.2625	0.2858		21.8	20.0	8.9	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3069	0.3208		20.9	20.0	4.5	20.0
Acrolein	Ave	1.927	1.483		231	300	-23.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3944	0.4152	0.1000	21.1	20.0	5.3	20.0
1,1-Dichloroethene	Ave	0.3547	0.3494	0.1000	19.7	20.0	-1.5	20.0
Acetone	Ave	1.069	1.000	0.0500	93.5	100	-6.5	50.0
Iodomethane	Ave	0.6734	0.6573		19.5	20.0	-2.4	20.0
Isopropyl alcohol	Ave	0.7074	0.7055		199	200	-0.3	50.0
Carbon disulfide	Ave	1.338	1.272	0.1000	19.0	20.0	-5.0	50.0
Allyl chloride	Ave	0.2049	0.2136		20.9	20.0	4.3	20.0
Methyl acetate	Ave	0.1816	0.2036	0.1000	112	100	12.2	20.0
Cyclopentene	Ave	0.8170	0.8462		20.7	20.0	3.6	20.0
Acetonitrile	Ave	2.004	1.529		153	200	-23.7*	20.0
Methylene Chloride	Ave	0.4282	0.3751	0.1000	17.5	20.0	-12.4	20.0
2-Methyl-2-propanol	Ave	1.516	1.256		166	200	-17.2	50.0
Methyl tert-butyl ether	Ave	0.9786	0.8986	0.1000	18.4	20.0	-8.2	20.0
trans-1,2-Dichloroethene	Ave	0.3841	0.3611	0.1000	18.8	20.0	-6.0	20.0
Acrylonitrile	Ave	0.1123	0.1130		201	200	0.6	20.0
Hexane	Ave	0.2771	0.2994		21.6	20.0	8.1	20.0
Isopropyl ether	Ave	1.025	1.018		19.9	20.0	-0.7	20.0
1,1-Dichloroethane	Ave	0.5942	0.6034	0.2000	20.3	20.0	1.5	20.0
Vinyl acetate	Ave	2.044	1.444		28.3	40.0	-29.4*	20.0
2-Chloro-1,3-butadiene	Ave	0.3225	0.3143		19.5	20.0	-2.5	20.0
Tert-butyl ethyl ether	Ave	0.9713	0.9552		19.7	20.0	-1.7	20.0
2,2-Dichloropropane	Ave	0.1401	0.1869		26.7	20.0	33.4*	20.0
Ethyl acetate	Ave	0.4070	0.3226		31.7	40.0	-20.7*	20.0
2-Butanone (MEK)	Ave	0.4918	0.3810	0.0500	77.5	100	-22.5	50.0
cis-1,2-Dichloroethene	Ave	0.4350	0.3967	0.1000	18.2	20.0	-8.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511471/4 Calibration Date: 04/16/2018 18:36

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82063.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2264	0.2430		21.5	20.0	7.3	20.0
Propionitrile	QuaF		1.231		140	200	-30.0*	20.0
Chlorobromomethane	Ave	0.2017	0.1903		18.9	20.0	-5.6	20.0
Tetrahydrofuran	Ave	0.5811	0.4414		30.4	40.0	-24.0*	20.0
Methacrylonitrile	Ave	0.1322	0.1239		187	200	-6.3	20.0
Chloroform	Ave	0.6216	0.6095	0.2000	19.6	20.0	-2.0	20.0
Cyclohexane	Ave	0.5789	0.5687	0.1000	19.6	20.0	-1.8	50.0
1,1,1-Trichloroethane	Ave	0.4917	0.5648	0.1000	23.0	20.0	14.9	20.0
Carbon tetrachloride	Ave	0.3554	0.4693	0.1000	26.4	20.0	32.0*	20.0
1,1-Dichloropropene	Ave	0.4464	0.4576		20.5	20.0	2.5	20.0
Isobutyl alcohol	QuaF		0.0392		321	500	-35.9*	20.0
Benzene	Ave	1.841	1.585	0.5000	17.2	20.0	-13.9	20.0
Isopropyl acetate	Ave	0.7948	0.8308		20.9	20.0	4.5	20.0
Tert-amyl methyl ether	Ave	0.3001	0.2888		19.3	20.0	-3.7	20.0
1,2-Dichloroethane	Ave	0.4020	0.3808	0.1000	18.9	20.0	-5.3	20.0
n-Heptane	Ave	0.2765	0.2871		20.8	20.0	3.8	20.0
n-Butanol	Ave	0.2896	0.2261		390	500	-21.9	50.0
Trichloroethene	Ave	0.3572	0.3402	0.2000	19.0	20.0	-4.8	20.0
Ethyl acrylate	Ave	0.2001	0.2046		20.4	20.0	2.2	20.0
Methylcyclohexane	Ave	0.6837	0.6679	0.1000	19.5	20.0	-2.3	50.0
1,2-Dichloropropane	Ave	0.3471	0.3134	0.1000	18.1	20.0	-9.7	20.0
Methyl methacrylate	Ave	0.1734	0.1877		43.3	40.0	8.2	20.0
1,4-Dioxane	Ave	1.534	1.299		339	400	-15.3	50.0
n-Propyl acetate	Ave	0.3295	0.3605		21.9	20.0	9.4	20.0
Dibromomethane	Ave	0.2181	0.2054		18.8	20.0	-5.8	20.0
Dichlorobromomethane	Ave	0.3970	0.3926	0.2000	19.8	20.0	-1.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1632	0.1622		19.9	20.0	-0.6	20.0
2-Nitropropane	Qua2		0.0433		53.4	40.0	33.6*	20.0
Epichlorohydrin	Ave	0.3469	0.2938		339	400	-15.3	20.0
cis-1,3-Dichloropropene	Ave	0.6366	0.5689	0.2000	17.9	20.0	-10.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.278	2.990	0.0500	91.2	100	-8.8	50.0
Toluene	Ave	1.926	1.660	0.4000	17.2	20.0	-13.8	20.0
trans-1,3-Dichloropropene	Ave	0.4920	0.4759	0.1000	19.3	20.0	-3.3	50.0
Ethyl methacrylate	Ave	0.4153	0.3931		18.9	20.0	-5.3	20.0
1,1,2-Trichloroethane	Ave	0.3239	0.2675	0.1000	16.5	20.0	-17.4	20.0
Tetrachloroethene	Ave	0.4315	0.4232	0.2000	19.6	20.0	-1.9	20.0
1,3-Dichloropropane	Ave	0.6064	0.4989		16.5	20.0	-17.7	20.0
2-Hexanone	Ave	2.135	1.909	0.0500	89.4	100	-10.6	50.0
n-Butyl acetate	Ave	0.4143	0.4598		22.2	20.0	11.0	20.0
Chlorodibromomethane	Ave	0.3342	0.3470	0.1000	20.8	20.0	3.8	50.0
Ethylene Dibromide	Ave	0.3641	0.3238	0.1000	17.8	20.0	-11.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511471/4 Calibration Date: 04/16/2018 18:36

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82063.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.239	1.064	0.5000	17.2	20.0	-14.1	20.0
Ethylbenzene	Ave	0.6717	0.5970	0.1000	17.8	20.0	-11.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3721	0.3859		20.7	20.0	3.7	20.0
m-Xylene & p-Xylene	Ave	0.8454	0.7261	0.1000	17.2	20.0	-14.1	20.0
n-Butyl acrylate	Qua2		0.2293		21.5	20.0	7.7	20.0
o-Xylene	Ave	0.8649	0.7458	0.3000	17.2	20.0	-13.8	20.0
Styrene	Ave	1.367	1.137	0.3000	16.6	20.0	-16.9	20.0
Amyl acetate (mixed isomers)	Qua2		0.9635		23.6	20.0	17.8	20.0
Bromoform	Qua2		0.2049	0.1000	24.2	20.0	20.8*	20.0
Isopropylbenzene	Ave	2.260	2.057	0.1000	18.2	20.0	-9.0	20.0
Bromobenzene	Ave	0.9532	0.8261		17.3	20.0	-13.3	20.0
1,1,2,2-Tetrachloroethane	Ave	1.037	0.8179	0.3000	15.8	20.0	-21.2*	20.0
N-Propylbenzene	Ave	4.921	4.249		17.3	20.0	-13.7	20.0
1,2,3-Trichloropropane	Ave	0.2596	0.2254		17.4	20.0	-13.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1995	0.1849		18.5	20.0	-7.3	20.0
2-Chlorotoluene	Ave	3.302	2.744		16.6	20.0	-16.9	20.0
4-Ethyltoluene	Ave	4.087	3.512		17.2	20.0	-14.1	20.0
1,3,5-Trimethylbenzene	Ave	3.564	3.041		17.1	20.0	-14.7	20.0
4-Chlorotoluene	Ave	2.832	2.334		16.5	20.0	-17.6	20.0
Butyl Methacrylate	Qua2		0.8285		20.1	20.0	0.5	20.0
tert-Butylbenzene	Ave	2.866	2.436		17.0	20.0	-15.0	20.0
1,2,4-Trimethylbenzene	Ave	3.626	3.104		17.1	20.0	-14.4	20.0
sec-Butylbenzene	Ave	4.748	4.100		17.3	20.0	-13.6	20.0
4-Isopropyltoluene	Ave	3.942	3.470		17.6	20.0	-12.0	20.0
1,3-Dichlorobenzene	Ave	1.881	1.667	0.6000	17.7	20.0	-11.4	20.0
1,4-Dichlorobenzene	Ave	1.898	1.636	0.5000	17.2	20.0	-13.8	20.0
Benzyl chloride	Ave	1.070	1.322		24.7	20.0	23.5	50.0
Indan	Ave	3.721	3.114		16.7	20.0	-16.3	20.0
p-Diethylbenzene	Ave	2.169	1.937		17.9	20.0	-10.7	20.0
n-Butylbenzene	Ave	2.144	1.892		17.7	20.0	-11.7	20.0
1,2-Dichlorobenzene	Ave	1.872	1.649	0.4000	17.6	20.0	-11.9	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.912	3.326		17.0	20.0	-15.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1453	0.0500	18.9	20.0	-5.6	50.0
1,3,5-Trichlorobenzene	Ave	1.544	1.434		18.6	20.0	-7.1	20.0
1,2,4-Trichlorobenzene	Ave	1.487	1.376	0.2000	18.5	20.0	-7.5	20.0
Hexachlorobutadiene	Ave	0.6537	0.6585		20.1	20.0	0.7	20.0
Naphthalene	Ave	4.123	3.403		16.5	20.0	-17.5	50.0
1,2,3-Trichlorobenzene	Ave	1.522	1.317		17.3	20.0	-13.5	20.0
Dibromofluoromethane (Surr)	Ave	0.3133	0.3625		57.9	50.0	15.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2986	0.3297		55.2	50.0	10.4	20.0
Toluene-d8 (Surr)	Ave	1.555	1.558		50.1	50.0	0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511471/4 Calibration Date: 04/16/2018 18:36

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82063.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4228	0.4538		53.7	50.0	7.3	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82063.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Apr-2018 18:36:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070455-004
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 14:51:47 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: colladox Date: 16-Apr-2018 19:03:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.596	0.000	90	40456	20.0	16.7	
2 Dichlorodifluoromethane	85	1.632	1.632	0.000	98	109963	20.0	18.3	
3 Chloromethane	50	1.803	1.803	0.000	99	105984	20.0	18.1	
4 Vinyl chloride	62	1.907	1.907	0.000	96	112118	20.0	18.9	
5 Butadiene	54	1.913	1.913	0.000	95	87631	20.0	20.1	
6 Bromomethane	94	2.218	2.218	0.000	98	85755	20.0	19.9	
7 Chloroethane	64	2.273	2.273	0.000	100	54777	20.0	20.6	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	99	158194	20.0	21.1	
8 Trichlorofluoromethane	101	2.480	2.480	0.000	94	134212	20.0	21.8	
10 Pentane	72	2.504	2.504	0.000	96	24194	40.0	27.9	
11 Ethyl ether	59	2.693	2.693	0.000	92	45968	20.0	17.9	
12 Ethanol	46	2.711	2.711	0.000	69	16169	800.0	615.5	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	97	57053	20.0	21.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.754	0.000	92	64042	20.0	20.9	
15 Acrolein	56	2.882	2.882	0.000	96	164826	300.0	230.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	60	82880	20.0	21.1	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	98	69757	20.0	19.7	
18 Acetone	43	3.004	3.004	0.000	87	98729	100.0	93.5	
19 Iodomethane	142	3.083	3.083	0.000	98	131213	20.0	19.5	
22 Isopropyl alcohol	45	3.089	3.089	0.000	1	52274	200.0	199.5	a
20 Carbon disulfide	76	3.120	3.120	0.000	98	253892	20.0	19.0	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	97	42648	20.0	20.9	
23 Methyl acetate	43	3.248	3.248	0.000	100	203255	100.0	112.2	
24 Cyclopentene	67	3.266	3.266	0.000	93	168926	20.0	20.7	
29 Acetonitrile	41	3.321	3.321	0.000	95	113319	200.0	152.6	a
* 25 TBA-d9 (IS)	65	3.376	3.376	0.000	0	370468	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	89	74873	20.0	17.5	
27 2-Methyl-2-propanol	59	3.431	3.431	0.000	46	93065	200.0	165.7	
28 Methyl tert-butyl ether	73	3.528	3.528	0.000	96	179380	20.0	18.4	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	94	72082	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	94	225502	200.0	201.2	
32 Hexane	43	3.723	3.723	0.000	92	59770	20.0	21.6	
33 Isopropyl ether	45	3.931	3.931	0.000	94	203299	20.0	19.9	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	80	120448	20.0	20.3	
35 Vinyl acetate	86	3.973	3.973	0.000	100	21398	40.0	28.3	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	89	62734	20.0	19.5	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	190685	20.0	19.7	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	246808	250.0	250.0	
39 2,2-Dichloropropane	79	4.479	4.479	0.000	88	37314	20.0	26.7	
41 Ethyl acetate	70	4.504	4.504	0.000	87	12739	40.0	31.7	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	68	79184	20.0	18.2	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	96	37612	100.0	77.5	
44 Methyl acrylate	55	4.571	4.571	0.000	91	48505	20.0	21.5	a
43 Propionitrile	54	4.656	4.656	0.000	98	91243	200.0	140.0	
45 Tetrahydrofuran	72	4.742	4.742	0.000	64	17430	40.0	30.4	
46 Chlorobromomethane	128	4.742	4.742	0.000	74	37988	20.0	18.9	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	247353	200.0	187.4	
48 Chloroform	83	4.790	4.790	0.000	98	121663	20.0	19.6	
49 Cyclohexane	84	4.937	4.937	0.000	91	113525	20.0	19.6	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	94	112755	20.0	23.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	180922	50.0	57.9	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	93694	20.0	26.4	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	99	91351	20.0	20.5	
56 Isobutyl alcohol	74	5.205	5.205	0.000	1	7252	500.0	320.6	a
54 Benzene	78	5.296	5.296	0.000	95	260950	20.0	17.2	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	164558	50.0	55.2	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	165851	20.0	20.9	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	97	57660	20.0	19.3	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	96	76011	20.0	18.9	
60 n-Heptane	57	5.437	5.437	0.000	91	57313	20.0	20.8	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	499068	50.0	50.0	
62 n-Butanol	56	5.876	5.876	0.000	87	41875	500.0	390.3	
63 Trichloroethene	95	5.943	5.943	0.000	98	67911	20.0	19.0	
64 Ethyl acrylate	56	6.077	6.077	0.000	97	40839	20.0	20.4	
65 Methylcyclohexane	83	6.077	6.077	0.000	95	133334	20.0	19.5	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	91	62553	20.0	18.1	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	34607	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	86	74949	40.0	43.3	
69 1,4-Dioxane	88	6.339	6.339	0.000	32	17980	400.0	338.7	
70 n-Propyl acetate	43	6.351	6.351	0.000	99	71972	20.0	21.9	
71 Dibromomethane	93	6.375	6.375	0.000	97	41001	20.0	18.8	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	78376	20.0	19.8	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	83	32370	20.0	19.9	
74 2-Nitropropane	41	6.851	6.851	0.000	77	17303	40.0	53.4	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	116013	400.0	338.8	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	91	93686	20.0	17.9	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	295196	100.0	91.2	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	641380	50.0	50.1	
79 Toluene	91	7.351	7.351	0.000	93	273306	20.0	17.2	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	78376	20.0	19.3	
81 Ethyl methacrylate	69	7.711	7.711	0.000	87	64740	20.0	18.9	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	97	44048	20.0	16.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	69698	20.0	19.6	
84 1,3-Dichloropropane	76	8.137	8.137	0.000	87	82158	20.0	16.5	
85 2-Hexanone	43	8.180	8.180	0.000	96	188474	100.0	89.4	
86 n-Butyl acetate	43	8.290	8.290	0.000	99	75718	20.0	22.2	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	57142	20.0	20.8	
88 Ethylene Dibromide	107	8.527	8.527	0.000	98	53322	20.0	17.8	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	411715	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	175220	20.0	17.2	
92 Ethylbenzene	106	9.204	9.204	0.000	98	98311	20.0	17.8	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.229	0.000	95	63545	20.0	20.7	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	119578	20.0	17.2	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	37766	20.0	21.5	
95 o-Xylene	106	9.820	9.820	0.000	94	122828	20.0	17.2	
96 Styrene	104	9.850	9.850	0.000	96	187188	20.0	16.6	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	88861	20.0	23.6	
98 Bromoform	173	10.088	10.088	0.000	96	33751	20.0	24.2	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	338825	20.0	18.2	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	93	186827	50.0	53.7	
101 Bromobenzene	156	10.564	10.564	0.000	95	76193	20.0	17.3	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	75440	20.0	15.8	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	391887	20.0	17.3	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	96	20787	20.0	17.4	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	91	17050	20.0	18.5	
106 2-Chlorotoluene	91	10.747	10.747	0.000	90	253082	20.0	16.6	
107 4-Ethyltoluene	105	10.747	10.747	0.000	90	323961	20.0	17.2	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	93	280432	20.0	17.1	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	215307	20.0	16.5	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	76413	20.0	20.1	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	224670	20.0	17.0	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	286298	20.0	17.1	
113 sec-Butylbenzene	105	11.307	11.307	0.000	100	378185	20.0	17.3	
114 4-Isopropyltoluene	119	11.441	11.441	0.000	98	320005	20.0	17.6	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	153742	20.0	17.7	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	94	230580	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	150866	20.0	17.2	
118 Benzyl chloride	91	11.667	11.667	0.000	99	121923	20.0	24.7	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	93	287172	20.0	16.7	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	178623	20.0	17.9	
121 n-Butylbenzene	92	11.801	11.801	0.000	97	174537	20.0	17.7	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	152088	20.0	17.6	
123 1,2,4,5-Tetramethylbenzene	119	12.435	12.435	0.000	97	306760	20.0	17.0	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	95	13404	20.0	18.9	
125 1,3,5-Trichlorobenzene	180	12.649	12.649	0.000	97	132217	20.0	18.6	
126 1,2,4-Trichlorobenzene	180	13.142	13.142	0.000	93	126907	20.0	18.5	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	60738	20.0	20.1	
128 Naphthalene	128	13.337	13.337	0.000	99	313838	20.0	16.5	
129 1,2,3-Trichlorobenzene	180	13.526	13.526	0.000	96	121430	20.0	17.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	37.0	
S 131 Xylenes, Total	100				0		40.0	34.4	
S 132 Total BTEX	1				0		100.0	86.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

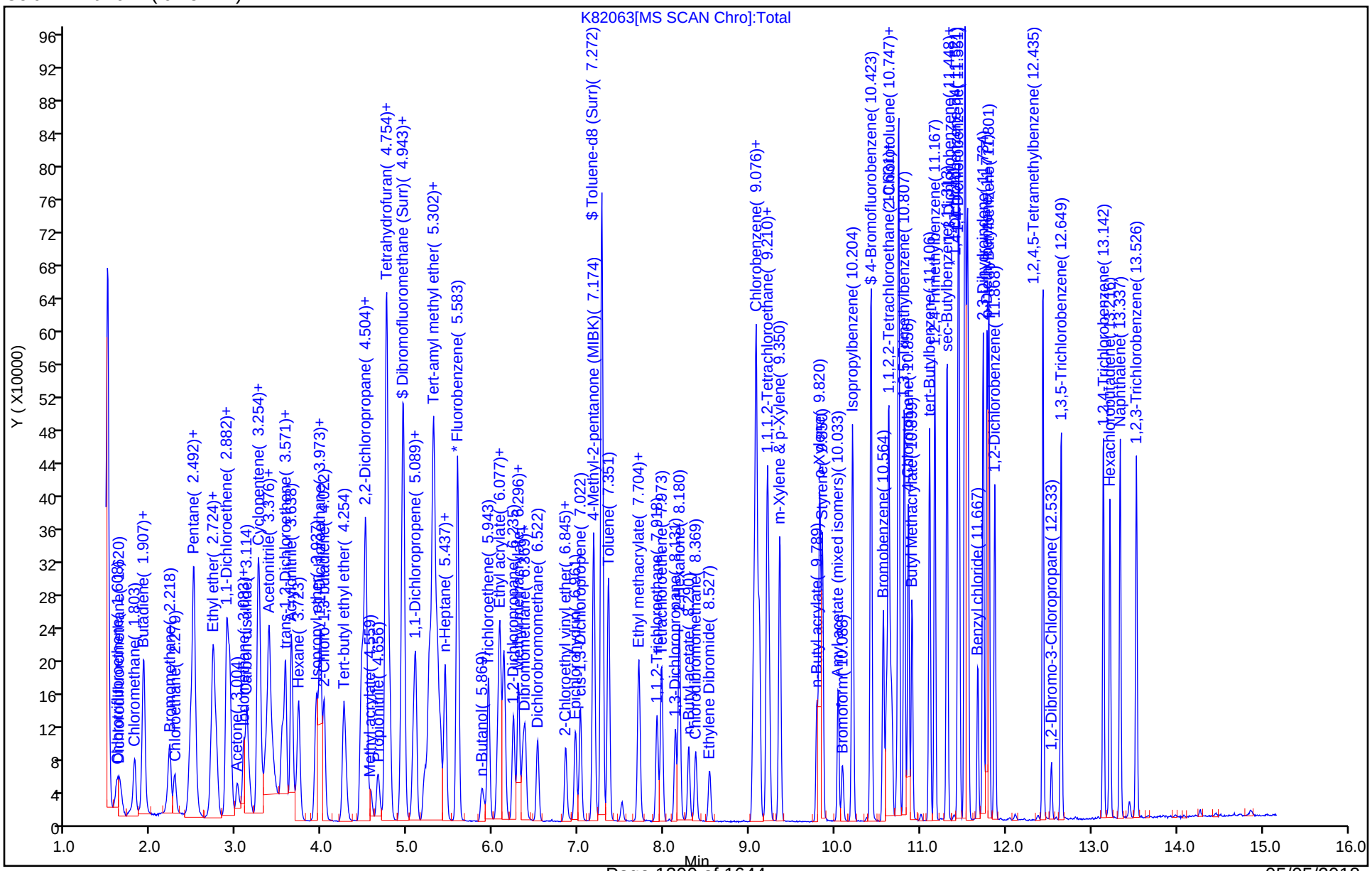
Report Date: 17-Apr-2018 14:51:48 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82063.D

Injection Date:	16-Apr-2018 18:36:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

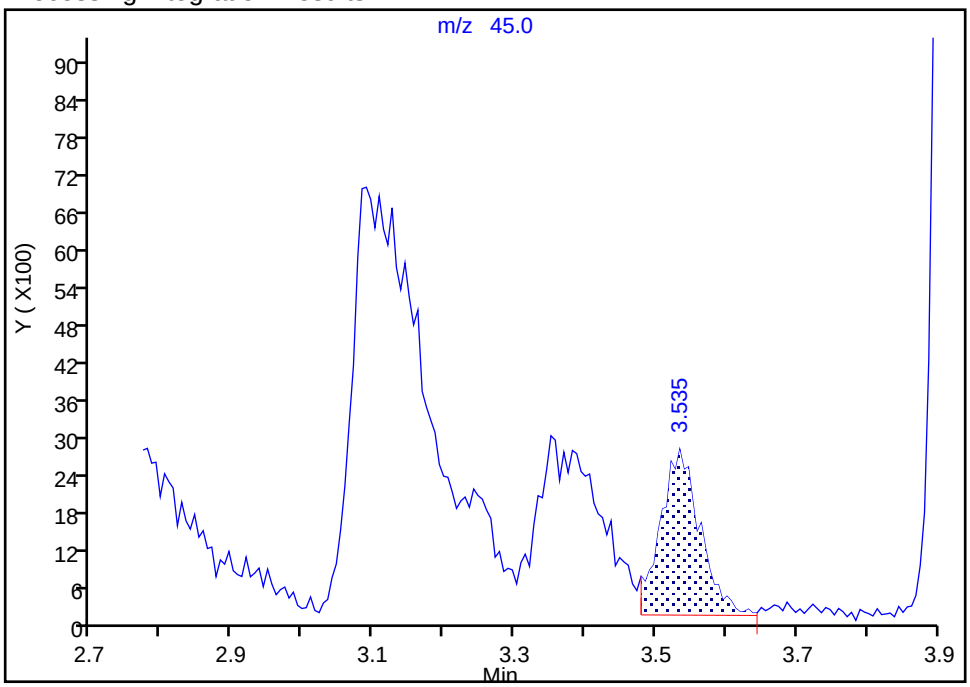
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82063.D
Injection Date: 16-Apr-2018 18:36:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

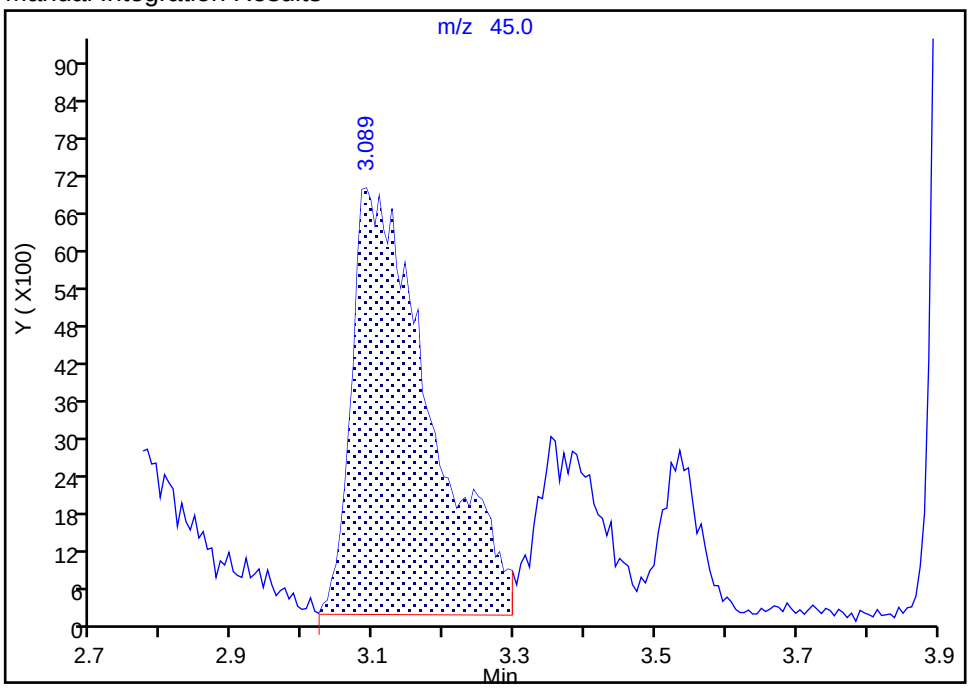
Processing Integration Results

RT: 3.53
Area: 10354
Amount: 39.510795
Amount Units: ug/l



Manual Integration Results

RT: 3.09
Area: 52274
Amount: 199.4772
Amount Units: ug/l



Reviewer: delpolitov, 17-Apr-2018 14:25:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

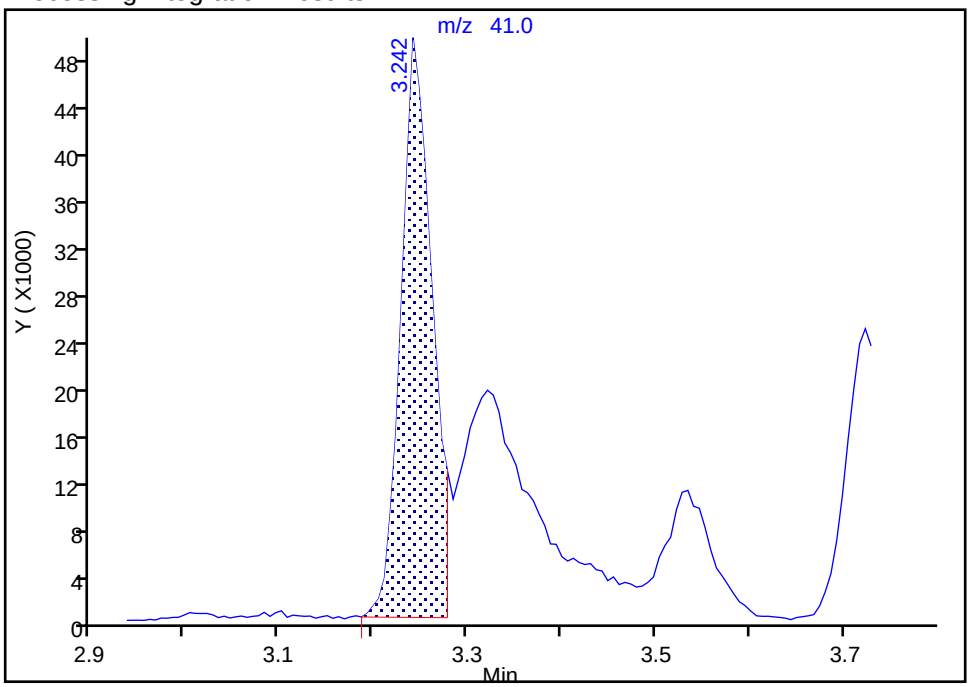
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82063.D
Injection Date: 16-Apr-2018 18:36:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

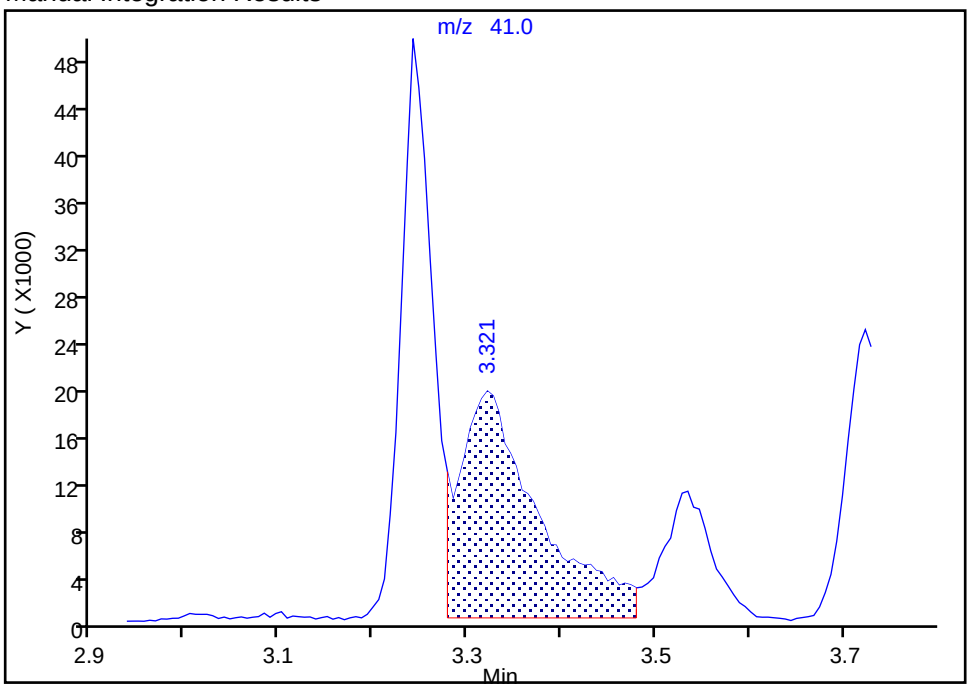
Processing Integration Results

RT: 3.24
Area: 112996
Amount: 152.1934
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 113319
Amount: 152.6284
Amount Units: ug/l



Reviewer: delpolitov, 17-Apr-2018 14:25:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

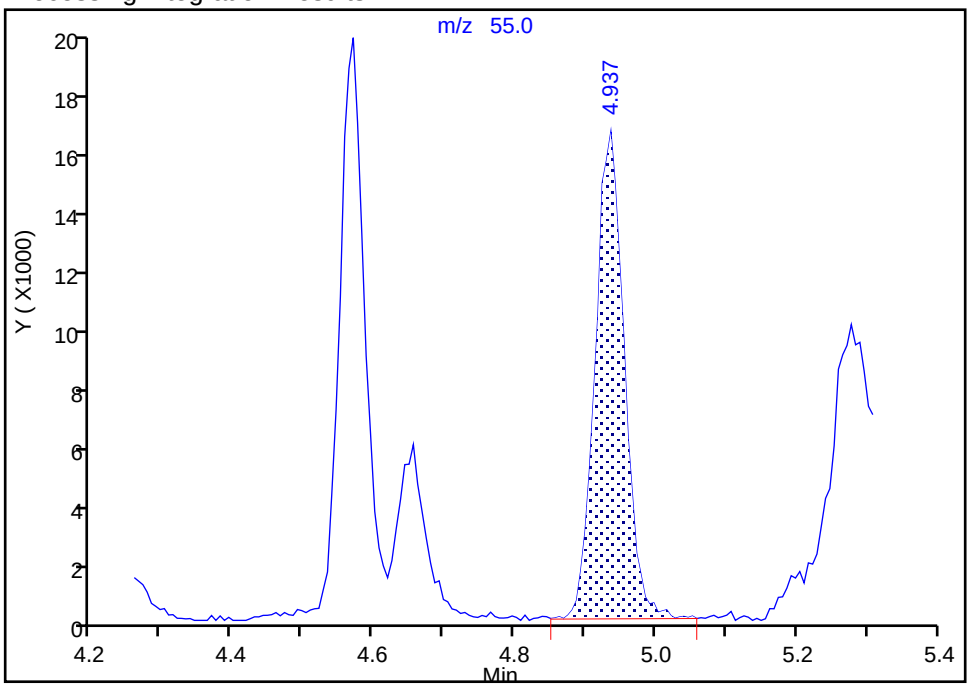
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82063.D				
Injection Date:	16-Apr-2018 18:36:30	Instrument ID:	CVOAMS9		
Lims ID:	CCVIS				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

44 Methyl acrylate, CAS: 96-33-3

Signal: 1

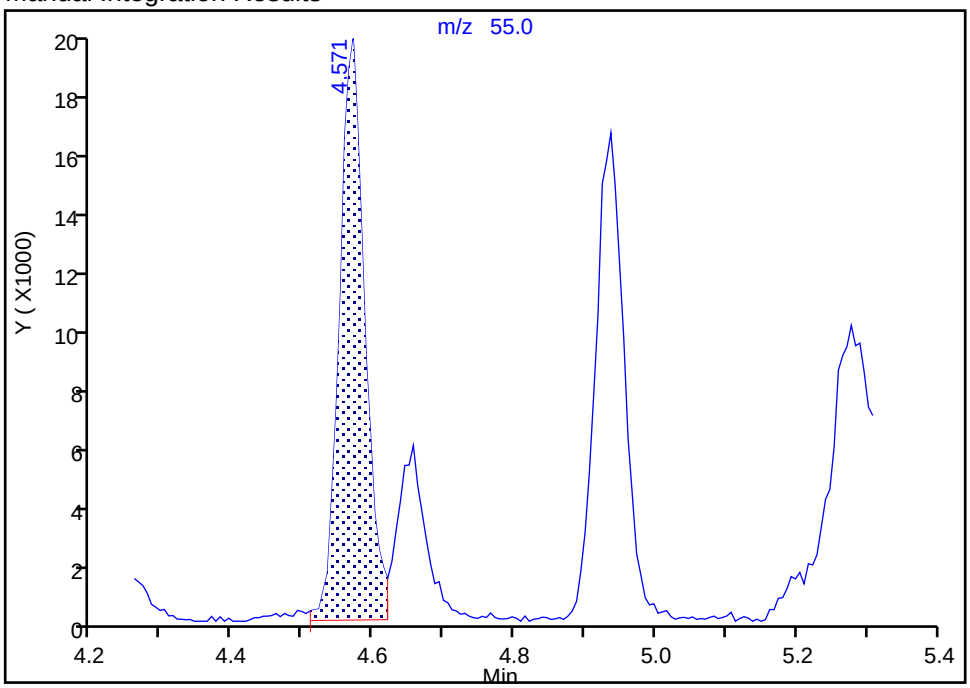
Processing Integration Results

RT: 4.94
Area: 46326
Amount: 20.498743
Amount Units: ug/l



Manual Integration Results

RT: 4.57
Area: 48505
Amount: 21.462927
Amount Units: ug/l



Reviewer: delpolitov, 17-Apr-2018 14:26:09

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

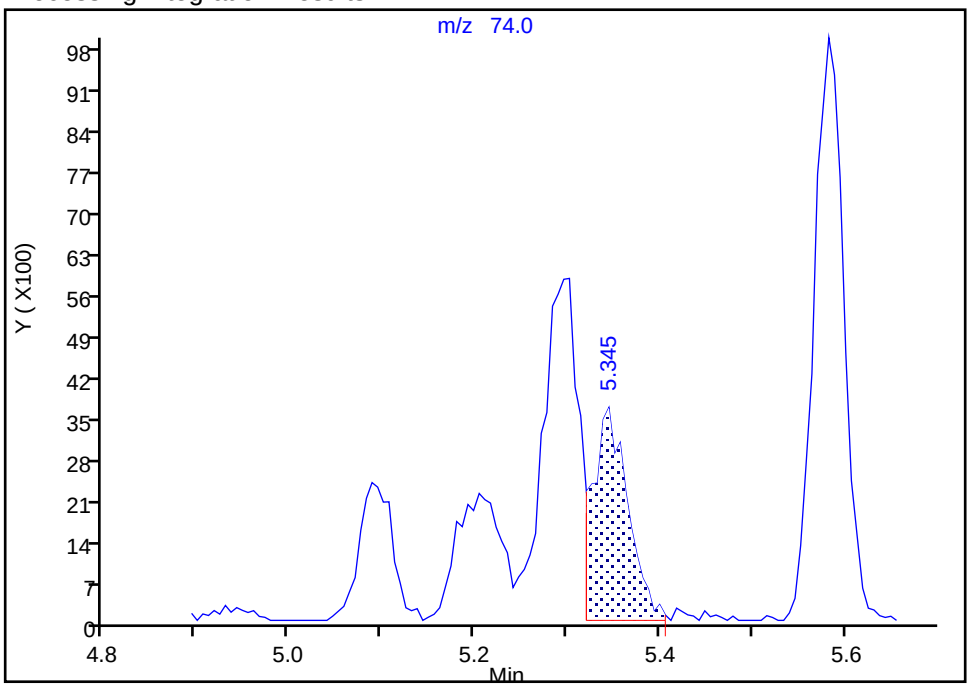
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82063.D
Injection Date: 16-Apr-2018 18:36:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

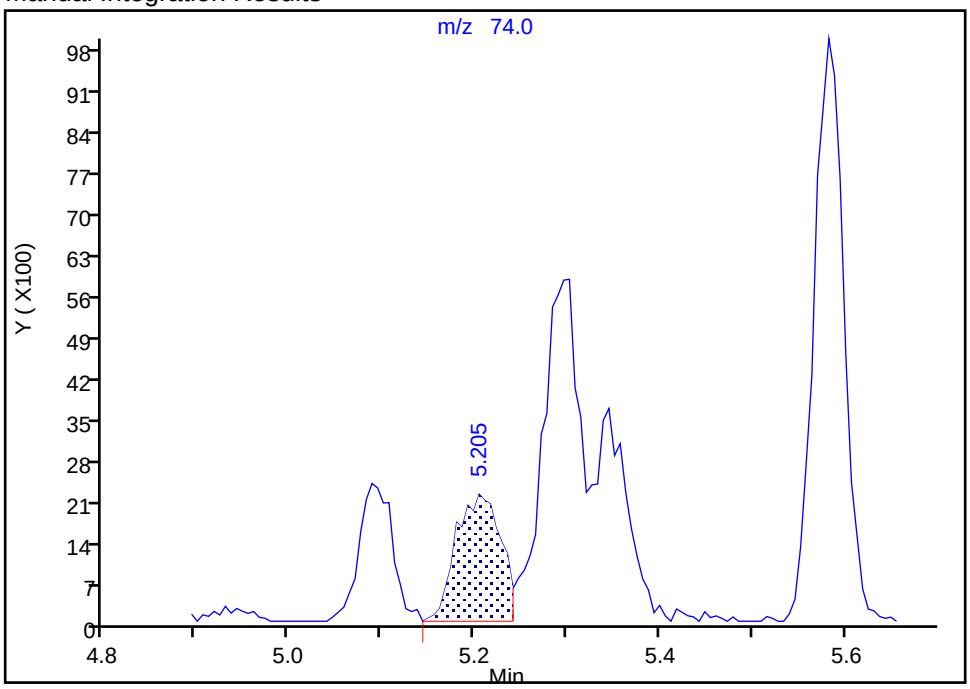
Processing Integration Results

RT: 5.35
Area: 9634
Amount: 425.7618
Amount Units: ug/l



Manual Integration Results

RT: 5.20
Area: 7252
Amount: 320.6077
Amount Units: ug/l



Reviewer: delpolitov, 17-Apr-2018 14:26:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-513435/2 Calibration Date: 04/23/2018 17:27

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82435.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.2999		13.3	20.0	-33.4*	20.0
Dichlorodifluoromethane	QuaF		0.5530	0.1000	11.8	20.0	-40.9*	20.0
Chloromethane	Ave	0.6221	0.4991	0.1000	16.0	20.0	-19.8	20.0
Butadiene	Ave	0.4762	0.4054		17.0	20.0	-14.9	20.0
Vinyl chloride	Ave	0.6218	0.5387	0.1000	17.3	20.0	-13.4	20.0
Bromomethane	Ave	0.5174	0.4274	0.1000	16.5	20.0	-17.4	50.0
Chloroethane	Ave	0.3136	0.2601	0.1000	16.6	20.0	-17.1	50.0
Dichlorofluoromethane	Ave	0.9152	0.8099		17.7	20.0	-11.5	20.0
Trichlorofluoromethane	Ave	0.8127	0.7453	0.1000	18.3	20.0	-8.3	20.0
Pentane	Ave	1.821	1.539		33.8	40.0	-15.5	20.0
Ethyl ether	Ave	0.2723	0.2686		19.7	20.0	-1.4	20.0
Ethanol	Ave	0.0627	0.0614		784	800	-2.0	50.0
2-Methyl-1,3-butadiene	Ave	0.3126	0.3231		20.7	20.0	3.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.4021	0.4354		21.7	20.0	8.3	20.0
Acrolein	Ave	1.482	1.089		220	300	-26.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin2		0.5056	0.1000	19.1	20.0	-4.7	20.0
1,1-Dichloroethene	Ave	0.4101	0.4185	0.1000	20.4	20.0	2.0	20.0
Acetone	Ave	1.229	1.205	0.0500	98.0	100	-2.0	50.0
Iodomethane	Ave	0.8745	0.8949		20.5	20.0	2.3	20.0
Isopropyl alcohol	Ave	0.7696	0.7394		192	200	-3.9	50.0
Carbon disulfide	Ave	1.530	1.547	0.1000	20.2	20.0	1.1	50.0
Allyl chloride	Ave	0.2426	0.2415		19.9	20.0	-0.5	20.0
Methyl acetate	Ave	6.750	6.365	0.1000	37.7	40.0	-5.7	20.0
Cyclopentene	Ave	0.9044	0.9492		21.0	20.0	5.0	20.0
Acetonitrile	Ave	1.663	1.426		171	200	-14.3	20.0
Methylene Chloride	Ave	0.4679	0.4620	0.1000	19.8	20.0	-1.2	20.0
2-Methyl-2-propanol	Ave	1.502	1.499		200	200	-0.2	50.0
Methyl tert-butyl ether	Ave	1.145	1.124	0.1000	19.6	20.0	-1.8	20.0
trans-1,2-Dichloroethene	Ave	0.4467	0.4587	0.1000	20.5	20.0	2.7	20.0
Acrylonitrile	Ave	0.1235	0.1394		226	200	12.9	20.0
Hexane	Ave	0.3445	0.3347		19.4	20.0	-2.8	20.0
Isopropyl ether	Ave	1.211	1.210		20.0	20.0	-0.1	20.0
1,1-Dichloroethane	Ave	0.7096	0.7304	0.2000	20.6	20.0	2.9	20.0
Vinyl acetate	Ave	1.788	1.614		36.1	40.0	-9.7	20.0
2-Chloro-1,3-butadiene	Ave	0.3606	0.3843		21.3	20.0	6.6	20.0
Tert-butyl ethyl ether	Ave	1.168	1.128		19.3	20.0	-3.5	20.0
2,2-Dichloropropane	Ave	0.2280	0.2253		19.8	20.0	-1.2	20.0
cis-1,2-Dichloroethene	Ave	0.4980	0.5144	0.1000	20.7	20.0	3.3	20.0
Ethyl acetate	Ave	0.4169	0.3901		37.4	40.0	-6.4	20.0
2-Butanone (MEK)	Ave	0.4882	0.4833	0.0500	99.0	100	-1.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-513435/2 Calibration Date: 04/23/2018 17:27

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82435.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2768	0.2900		21.0	20.0	4.8	20.0
Propionitrile	Ave	1.397	1.433		205	200	2.6	20.0
Tetrahydrofuran	Ave	0.5906	0.5834		39.5	40.0	-1.2	20.0
Chlorobromomethane	Ave	0.2500	0.2603		20.8	20.0	4.1	20.0
Methacrylonitrile	Ave	0.1370	0.1515		221	200	10.5	20.0
Chloroform	Ave	0.7447	0.7778	0.2000	20.9	20.0	4.4	20.0
Cyclohexane	Lin2		0.7064	0.1000	19.5	20.0	-2.6	50.0
1,1,1-Trichloroethane	Ave	0.7185	0.7469	0.1000	20.8	20.0	3.9	20.0
Carbon tetrachloride	Ave	0.6282	0.6487	0.1000	20.7	20.0	3.3	20.0
1,1-Dichloropropene	Ave	0.5466	0.5814		21.3	20.0	6.4	20.0
Isobutyl alcohol	Ave	0.0509	0.0468		460	500	-7.9	50.0
Benzene	Ave	1.765	1.801	0.5000	20.4	20.0	2.0	20.0
Isopropyl acetate	Ave	1.027	1.074		20.9	20.0	4.5	20.0
Tert-amyl methyl ether	Ave	0.3556	0.3716		20.9	20.0	4.5	20.0
1,2-Dichloroethane	Ave	0.4830	0.4861	0.1000	20.1	20.0	0.6	20.0
n-Heptane	Lin2		0.3465		19.7	20.0	-1.3	20.0
n-Butanol	Ave	0.3134	0.2773		442	500	-11.5	50.0
Trichloroethene	Ave	0.4280	0.4371	0.2000	20.4	20.0	2.1	20.0
Ethyl acrylate	Ave	0.2500	0.2634		21.1	20.0	5.4	20.0
Methylcyclohexane	Lin2		0.8360	0.1000	19.1	20.0	-4.6	50.0
1,2-Dichloropropane	Ave	0.3800	0.3809	0.1000	20.1	20.0	0.3	20.0
Methyl methacrylate	Ave	0.2591	0.2827		43.6	40.0	9.1	20.0
1,4-Dioxane	Ave	1.376	1.613		469	400	17.3	50.0
n-Propyl acetate	Ave	0.4228	0.4644		22.0	20.0	9.8	20.0
Dibromomethane	Ave	0.2541	0.2661		20.9	20.0	4.7	20.0
Dichlorobromomethane	Ave	0.5217	0.5324	0.2000	20.4	20.0	2.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1874	0.1972		21.0	20.0	5.2	20.0
2-Nitropropane	Ave	0.0661	0.0648		39.2	40.0	-1.9	20.0
Epichlorohydrin	Ave	0.3723	0.3808		409	400	2.3	20.0
cis-1,3-Dichloropropene	Ave	0.6408	0.6156	0.2000	19.2	20.0	-3.9	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.713	3.864	0.0500	104	100	4.1	50.0
Toluene	Ave	1.870	1.952	0.4000	20.9	20.0	4.4	20.0
trans-1,3-Dichloropropene	Ave	0.5564	0.5290	0.1000	19.0	20.0	-4.9	50.0
Ethyl methacrylate	Ave	0.4504	0.4733		21.0	20.0	5.1	20.0
1,1,2-Trichloroethane	Ave	0.3074	0.3085	0.1000	20.1	20.0	0.4	20.0
Tetrachloroethene	Ave	0.5243	0.5626	0.2000	21.5	20.0	7.3	20.0
1,3-Dichloropropane	Ave	0.5687	0.5613		19.7	20.0	-1.3	20.0
2-Hexanone	Ave	2.365	2.446	0.0500	103	100	3.4	50.0
n-Butyl acetate	Ave	0.5064	0.5219		20.6	20.0	3.0	20.0
Chlorodibromomethane	Ave	0.4483	0.4521	0.1000	20.2	20.0	0.9	50.0
Ethylene Dibromide	Ave	0.3814	0.3904	0.1000	20.5	20.0	2.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-513435/2 Calibration Date: 04/23/2018 17:27

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82435.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.248	1.296	0.5000	20.8	20.0	3.8	20.0
Ethylbenzene	Ave	0.6802	0.7371	0.1000	21.7	20.0	8.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4981	0.5021		20.2	20.0	0.8	20.0
m-Xylene & p-Xylene	Ave	0.8303	0.8756	0.1000	21.1	20.0	5.5	20.0
n-Butyl acrylate	Ave	0.2647	0.2732		20.6	20.0	3.2	20.0
o-Xylene	Ave	0.8669	0.9090	0.3000	21.0	20.0	4.9	20.0
Styrene	Ave	1.353	1.416	0.3000	20.9	20.0	4.7	20.0
Amyl acetate (mixed isomers)	Ave	0.9587	0.9856		20.6	20.0	2.8	20.0
Bromoform	Ave	0.2918	0.2999	0.1000	20.6	20.0	2.8	20.0
Isopropylbenzene	Ave	2.324	2.454	0.1000	21.1	20.0	5.6	20.0
Bromobenzene	Ave	0.9812	0.9813		20.0	20.0	0.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8563	0.9320	0.3000	21.8	20.0	8.8	20.0
N-Propylbenzene	Ave	4.391	4.618		21.0	20.0	5.2	20.0
1,2,3-Trichloropropane	Ave	0.2469	0.2749		22.3	20.0	11.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1949	0.1960		20.1	20.0	0.5	20.0
2-Chlorotoluene	Ave	2.948	3.059		20.8	20.0	3.8	20.0
4-Ethyltoluene	Ave	3.695	3.943		21.3	20.0	6.7	20.0
1,3,5-Trimethylbenzene	Ave	3.249	3.323		20.5	20.0	2.3	20.0
4-Chlorotoluene	Ave	2.500	2.549		20.4	20.0	1.9	20.0
Butyl Methacrylate	Ave	0.9066	0.8979		19.8	20.0	-1.0	20.0
tert-Butylbenzene	Ave	2.741	2.628		19.2	20.0	-4.1	20.0
1,2,4-Trimethylbenzene	Ave	3.348	3.411		20.4	20.0	1.9	20.0
sec-Butylbenzene	Ave	4.375	4.434		20.3	20.0	1.4	20.0
4-Isopropyltoluene	Ave	3.860	3.918		20.3	20.0	1.5	20.0
1,3-Dichlorobenzene	Ave	1.915	1.926	0.6000	20.1	20.0	0.6	20.0
1,4-Dichlorobenzene	Ave	1.924	1.937	0.5000	20.1	20.0	0.7	20.0
Benzyl chloride	Ave	1.484	1.583		21.3	20.0	6.7	50.0
Indan	Ave	3.429	3.553		20.7	20.0	3.6	20.0
p-Diethylbenzene	Ave	2.120	2.205		20.8	20.0	4.0	20.0
n-Butylbenzene	Ave	1.980	2.039		20.6	20.0	3.0	20.0
1,2-Dichlorobenzene	Ave	1.901	1.951	0.4000	20.5	20.0	2.7	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.771	3.682		19.5	20.0	-2.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1760	0.1836	0.0500	20.9	20.0	4.3	50.0
1,3,5-Trichlorobenzene	Ave	1.671	1.710		20.5	20.0	2.3	20.0
1,2,4-Trichlorobenzene	Ave	1.627	1.563	0.2000	19.2	20.0	-4.0	20.0
Hexachlorobutadiene	Ave	0.7934	0.7683		19.4	20.0	-3.2	20.0
Naphthalene	Ave	3.722	3.659		19.7	20.0	-1.7	50.0
1,2,3-Trichlorobenzene	Ave	1.585	1.520		19.2	20.0	-4.1	20.0
Dibromofluoromethane (Surr)	Ave	0.4004	0.3974		49.6	50.0	-0.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3724	0.3570		47.9	50.0	-4.1	20.0
Toluene-d8 (Surr)	Ave	1.531	1.524		49.8	50.0	-0.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-513435/2 Calibration Date: 04/23/2018 17:27

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82435.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4955	0.5026		50.7	50.0	1.4	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82435.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 23-Apr-2018 17:27:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0070876-002
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 24-Apr-2018 12:10:37 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: colladox Date: 23-Apr-2018 17:54:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.602	0.000	87	53223	20.0	13.3	
2 Dichlorodifluoromethane	85	1.632	1.632	0.000	99	98137	20.0	11.8	
3 Chloromethane	50	1.803	1.803	0.000	100	88583	20.0	16.0	
5 Butadiene	54	1.913	1.913	0.000	96	71946	20.0	17.0	
4 Vinyl chloride	62	1.913	1.913	0.000	95	95600	20.0	17.3	
6 Bromomethane	94	2.212	2.212	0.000	99	75857	20.0	16.5	
7 Chloroethane	64	2.279	2.279	0.000	100	46155	20.0	16.6	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	99	143727	20.0	17.7	
8 Trichlorofluoromethane	101	2.474	2.474	0.000	93	132277	20.0	18.3	
10 Pentane	72	2.504	2.504	0.000	97	21753	40.0	33.8	
11 Ethyl ether	59	2.699	2.699	0.000	91	47672	20.0	19.7	
12 Ethanol	46	2.705	2.705	0.000	71	17356	800.0	783.7	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	97	57343	20.0	20.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.754	0.000	91	77267	20.0	21.7	
15 Acrolein	56	2.882	2.882	0.000	96	115438	300.0	220.4	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.894	0.000	97	89737	20.0	19.1	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	97	74266	20.0	20.4	
18 Acetone	43	3.010	3.010	0.000	87	102645	100.0	98.0	
19 Iodomethane	142	3.083	3.083	0.000	97	158816	20.0	20.5	
22 Isopropyl alcohol	45	3.114	3.114	0.000	1	52246	200.0	192.1	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	274502	20.0	20.2	
21 3-Chloro-1-propene	76	3.248	3.248	0.000	96	42856	20.0	19.9	
23 Methyl acetate	43	3.254	3.254	0.000	98	89952	40.0	37.7	
24 Cyclopentene	67	3.266	3.266	0.000	94	168454	20.0	21.0	
29 Acetonitrile	41	3.321	3.321	0.000	97	100729	200.0	171.5	
26 Methylene Chloride	84	3.376	3.376	0.000	88	81999	20.0	19.8	
* 25 TBA-d9 (IS)	65	3.382	3.382	0.000	0	353303	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.437	3.437	0.000	91	105897	200.0	199.6	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	96	199495	20.0	19.6	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	93	81409	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.644	3.644	0.000	94	247452	200.0	225.8	
32 Hexane	43	3.724	3.724	0.000	92	59407	20.0	19.4	
33 Isopropyl ether	45	3.931	3.931	0.000	95	214698	20.0	20.0	
34 1,1-Dichloroethane	63	3.980	3.980	0.000	83	129617	20.0	20.6	
35 Vinyl acetate	86	3.986	3.986	0.000	100	22815	40.0	36.1	
36 2-Chloro-1,3-butadiene	88	4.028	4.028	0.000	90	68200	20.0	21.3	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	200152	20.0	19.3	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	213013	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.492	0.000	93	39979	20.0	19.8	
41 Ethyl acetate	70	4.510	4.510	0.000	86	13295	40.0	37.4	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	97	91298	20.0	20.7	
42 2-Butanone (MEK)	72	4.522	4.522	0.000	97	41178	100.0	99.0	
44 Methyl acrylate	55	4.571	4.571	0.000	98	51473	20.0	21.0	
43 Propionitrile	54	4.656	4.656	0.000	98	101264	200.0	205.2	
45 Tetrahydrofuran	72	4.742	4.742	0.000	66	19883	40.0	39.5	
46 Chlorobromomethane	128	4.748	4.748	0.000	70	46202	20.0	20.8	
47 Methacrylonitrile	67	4.760	4.760	0.000	91	268802	200.0	221.1	
48 Chloroform	83	4.790	4.790	0.000	98	138033	20.0	20.9	
49 Cyclohexane	84	4.937	4.937	0.000	90	125366	20.0	19.5	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	96	132550	20.0	20.8	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	96	176325	50.0	49.6	
52 Carbon tetrachloride	117	5.071	5.071	0.000	97	115124	20.0	20.7	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	103190	20.0	21.3	
56 Isobutyl alcohol	74	5.211	5.211	0.000	1	8269	500.0	460.3	a
54 Benzene	78	5.296	5.296	0.000	95	292549	20.0	20.4	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	158395	50.0	47.9	
57 Isopropyl acetate	43	5.339	5.339	0.000	95	190541	20.0	20.9	
58 Tert-amyl methyl ether	87	5.351	5.351	0.000	91	65953	20.0	20.9	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	97	86275	20.0	20.1	
60 n-Heptane	57	5.437	5.437	0.000	92	61502	20.0	19.7	
* 61 Fluorobenzene	96	5.583	5.583	0.000	100	443682	50.0	50.0	
62 n-Butanol	56	5.869	5.869	0.000	86	48985	500.0	442.4	
63 Trichloroethene	95	5.949	5.949	0.000	97	77571	20.0	20.4	
65 Methylcyclohexane	83	6.077	6.077	0.000	91	148364	20.0	19.1	
64 Ethyl acrylate	56	6.077	6.077	0.000	98	46754	20.0	21.1	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	92	67607	20.0	20.1	
* 67 1,4-Dioxane-d8	96	6.296	6.296	0.000	0	29956	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	87	100355	40.0	43.6	
70 n-Propyl acetate	43	6.351	6.351	0.000	98	82416	20.0	22.0	
69 1,4-Dioxane	88	6.351	6.351	0.000	30	19332	400.0	469.1	
71 Dibromomethane	93	6.375	6.375	0.000	95	47219	20.0	20.9	
72 Dichlorobromomethane	83	6.522	6.522	0.000	98	94493	20.0	20.4	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	79	35005	20.0	21.0	
74 2-Nitropropane	41	6.851	6.851	0.000	79	23010	40.0	39.2	
75 Epichlorohydrin	57	6.967	6.967	0.000	99	129782	400.0	409.1	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	100002	20.0	19.2	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	329246	100.0	104.1	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	619021	50.0	49.8	
79 Toluene	91	7.351	7.351	0.000	93	317020	20.0	20.9	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	85927	20.0	19.0	
81 Ethyl methacrylate	69	7.717	7.717	0.000	87	76887	20.0	21.0	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	95	50108	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	91395	20.0	21.5	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	89	91174	20.0	19.7	
85 2-Hexanone	43	8.180	8.180	0.000	96	208409	100.0	103.4	
86 n-Butyl acetate	43	8.290	8.290	0.000	98	84770	20.0	20.6	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	73443	20.0	20.2	
88 Ethylene Dibromide	107	8.534	8.534	0.000	99	63417	20.0	20.5	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	83	406104	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	98	210451	20.0	20.8	
92 Ethylbenzene	106	9.204	9.204	0.000	98	119739	20.0	21.7	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.229	0.000	94	81562	20.0	20.2	
93 m-Xylene & p-Xylene	106	9.357	9.357	0.000	0	142237	20.0	21.1	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	44385	20.0	20.6	
95 o-Xylene	106	9.820	9.820	0.000	95	147663	20.0	21.0	
96 Styrene	104	9.850	9.850	0.000	96	230055	20.0	20.9	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	97862	20.0	20.6	
98 Bromoform	173	10.088	10.088	0.000	97	48716	20.0	20.6	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	398558	20.0	21.1	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	97	204118	50.0	50.7	
101 Bromobenzene	156	10.564	10.564	0.000	90	97434	20.0	20.0	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	92538	20.0	21.8	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	458535	20.0	21.0	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	94	27292	20.0	22.3	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	91	19457	20.0	20.1	
107 4-Ethyltoluene	105	10.740	10.740	0.000	90	391471	20.0	21.3	
106 2-Chlorotoluene	91	10.740	10.740	0.000	92	303717	20.0	20.8	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	329961	20.0	20.5	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	253059	20.0	20.4	
110 Butyl Methacrylate	87	10.899	10.899	0.000	87	89158	20.0	19.8	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	260924	20.0	19.2	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	338707	20.0	20.4	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	440303	20.0	20.3	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	389056	20.0	20.3	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	191244	20.0	20.1	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	92	248231	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	192377	20.0	20.1	
118 Benzyl chloride	91	11.667	11.667	0.000	99	157154	20.0	21.3	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	352818	20.0	20.7	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	218936	20.0	20.8	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	202496	20.0	20.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	193761	20.0	20.5	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	365591	20.0	19.5	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	93	18233	20.0	20.9	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	169745	20.0	20.5	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	155149	20.0	19.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	76283	20.0	19.4	
128 Naphthalene	128	13.331	13.331	0.000	99	363284	20.0	19.7	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	150899	20.0	19.2	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.2	
S 131 Xylenes, Total	100				0		40.0	42.1	
S 132 Total BTEX	1				0		100.0	105.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00078	Amount Added:	2.00	Units: uL	
ACROLEIN W_00076	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

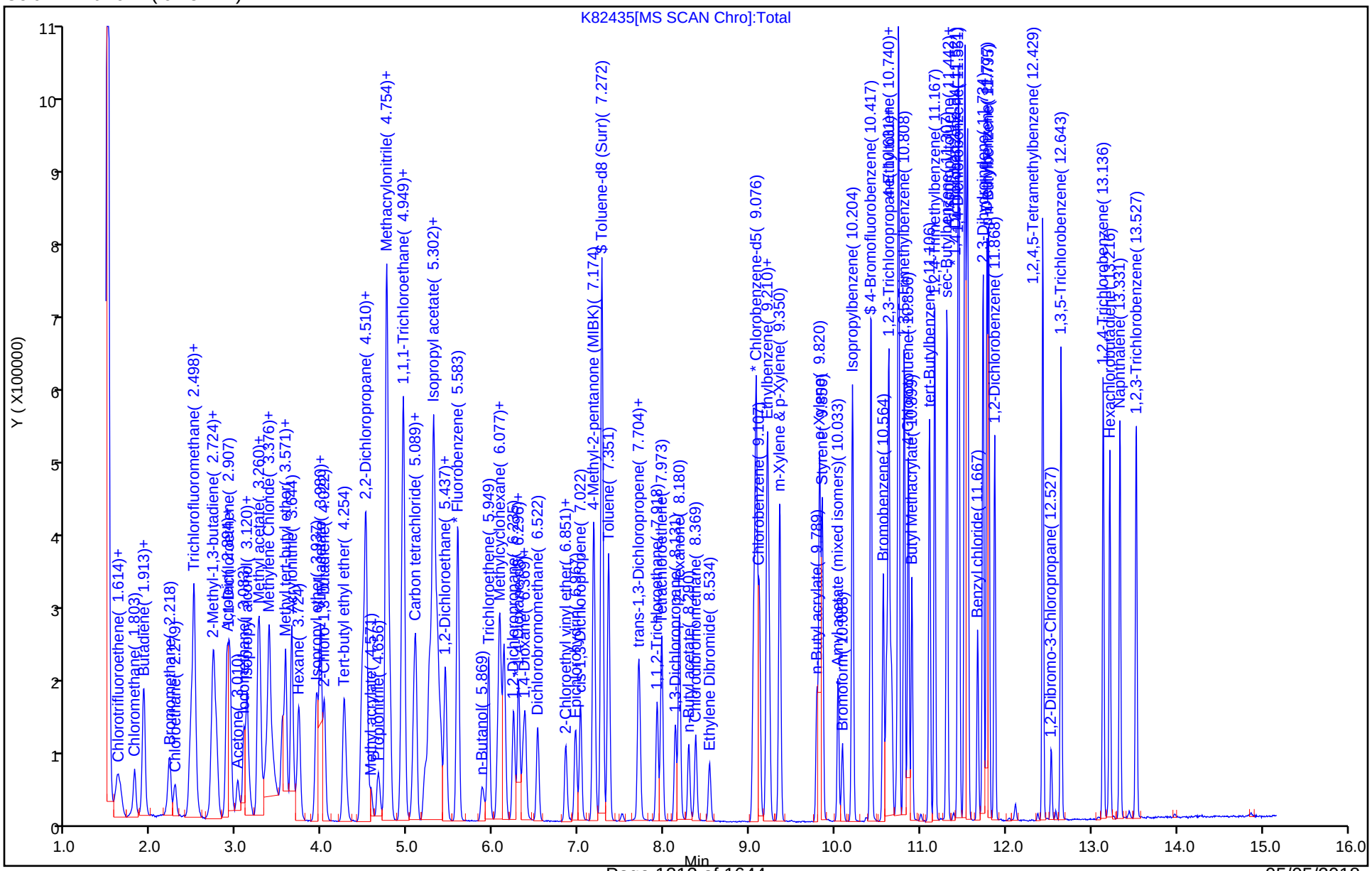
Report Date: 24-Apr-2018 12:10:40 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82435.D

Injection Date:	23-Apr-2018 17:27:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

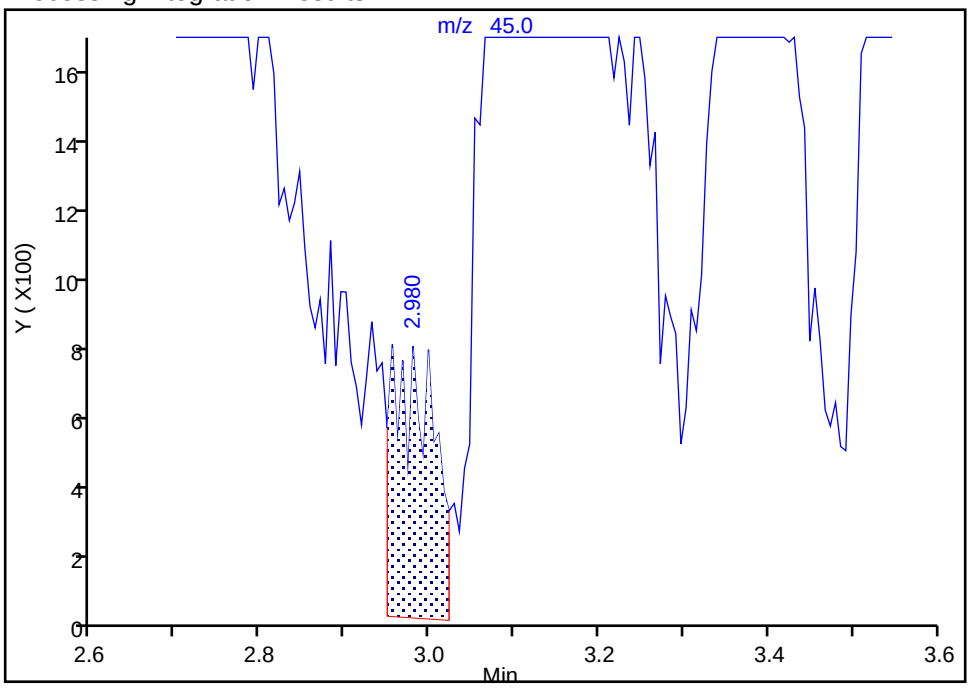
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82435.D
Injection Date: 23-Apr-2018 17:27:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

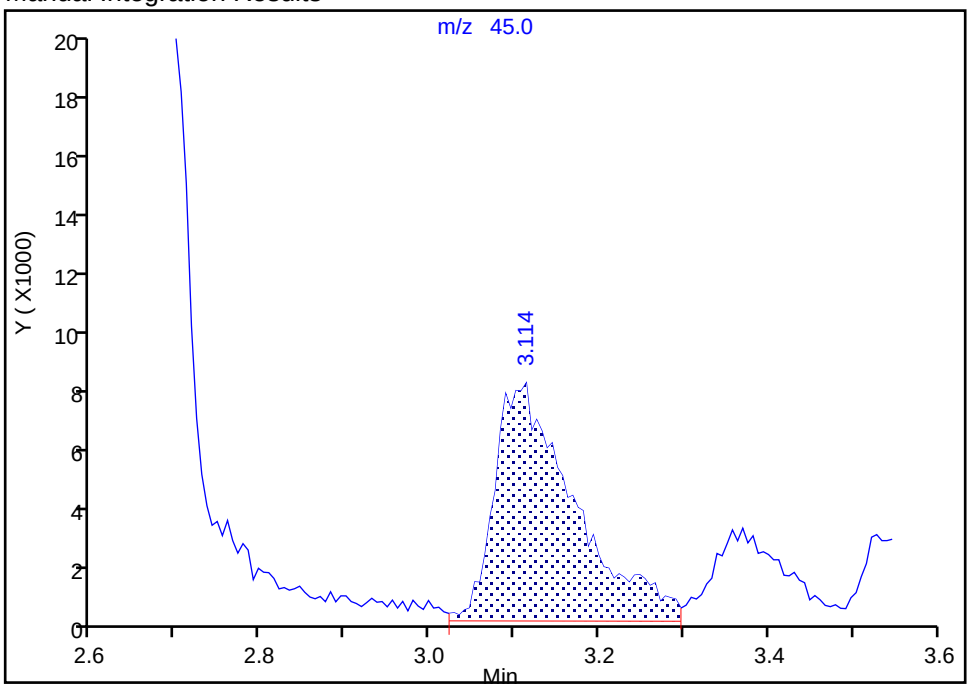
Processing Integration Results

RT: 2.98
Area: 2485
Amount: 9.138898
Amount Units: ug/l



Manual Integration Results

RT: 3.11
Area: 52246
Amount: 192.1412
Amount Units: ug/l



Reviewer: baronm, 24-Apr-2018 11:30:35
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

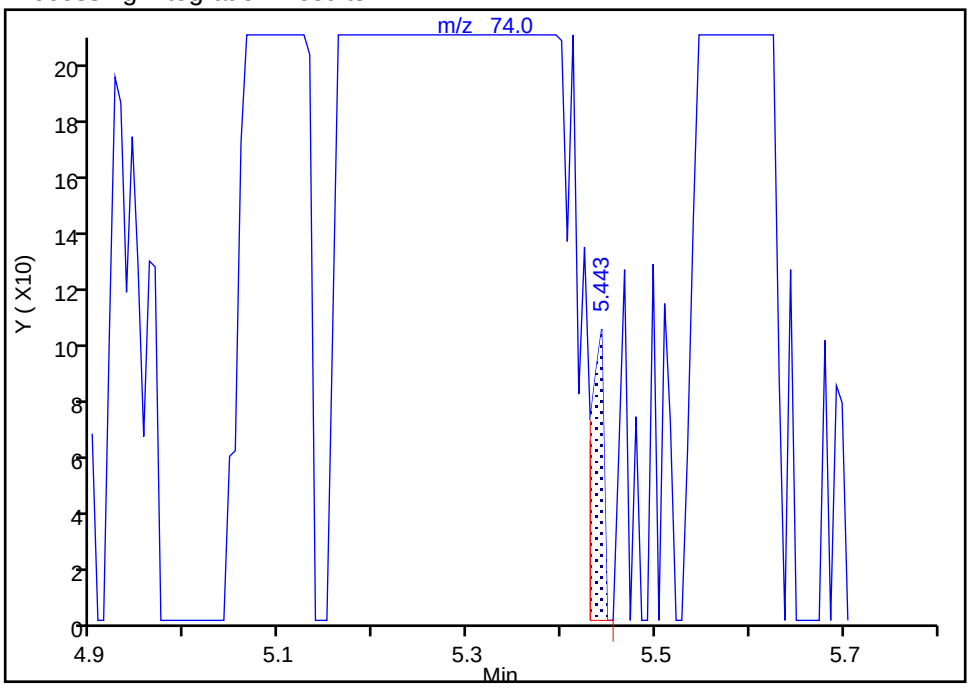
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82435.D
Injection Date: 23-Apr-2018 17:27:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

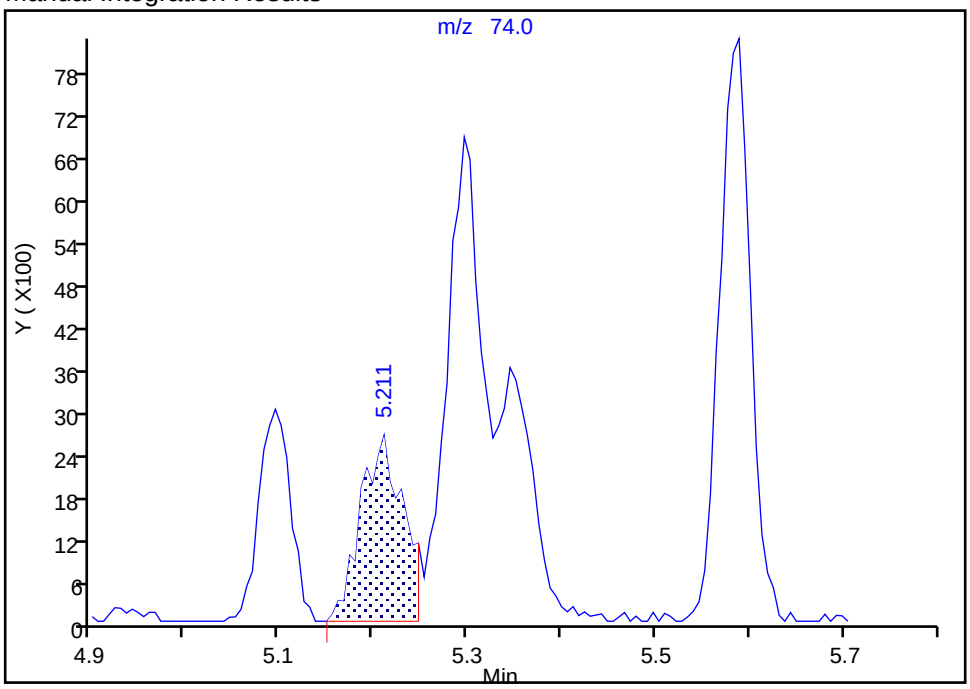
Processing Integration Results

RT: 5.44
Area: 96
Amount: 5.343547
Amount Units: ug/l



Manual Integration Results

RT: 5.21
Area: 8269
Amount: 460.2686
Amount Units: ug/l



Reviewer: baronm, 24-Apr-2018 11:30:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27889.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 26-Mar-2018 03:14:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0069287-001
Operator ID: Instrument ID: CVOAMS2

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 20:24:46 Calib Date: 26-Mar-2018 09:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27903.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: sarmientod Date: 26-Mar-2018 20:24:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 122 BFB	95	2.151	2.151	0.000	93	128377	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

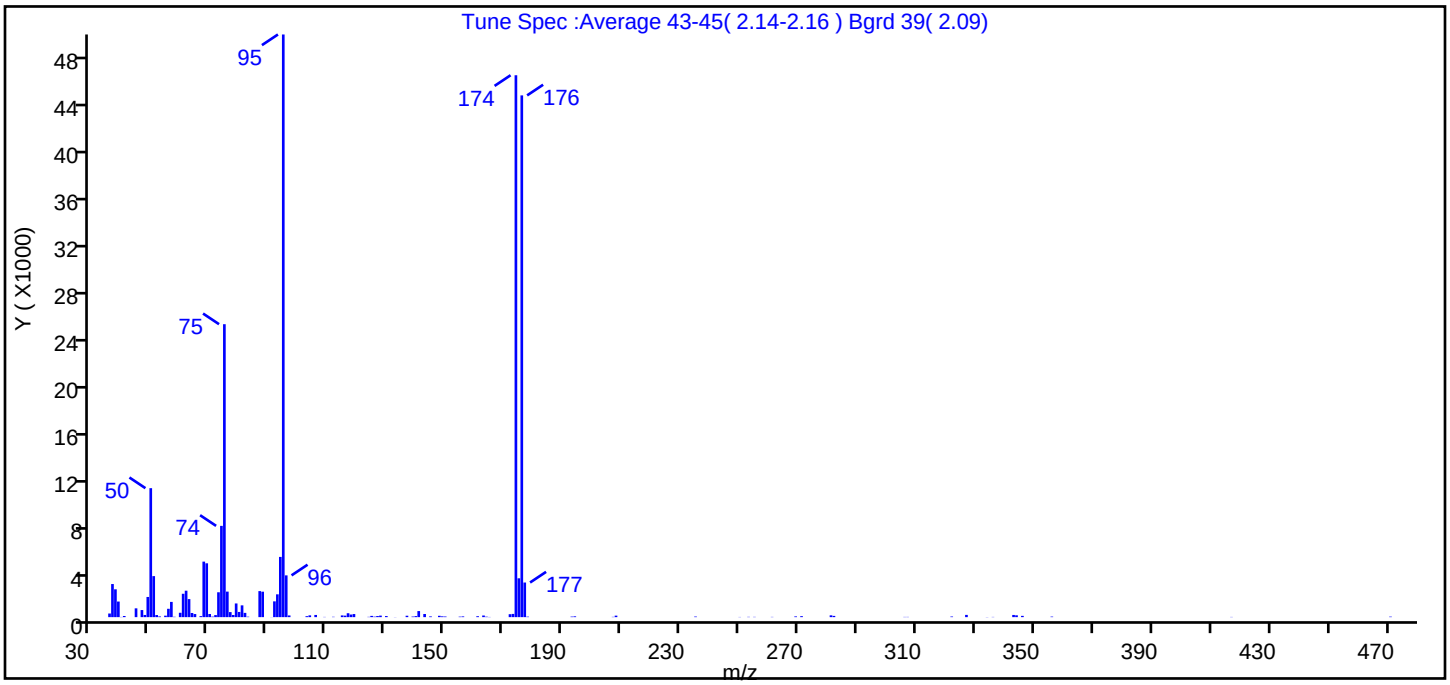
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27889.D
Injection Date: 26-Mar-2018 03:14:30 Instrument ID: CVOAMS2
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 122 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.1
75	30 to 60% of m/z 95	50.3
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.6 (0.6)
174	50 to 120% of m/z 95	93.0
175	5 to 9% of m/z 174	6.7 (7.2)
176	Greater than 95% but less than 101% of m/z 174	89.5 (96.3)
177	5 to 9% of m/z 176	5.9 (6.6)

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27889.D\8260S_2.rslt\spectra.d
Injection Date: 26-Mar-2018 03:14:30
Spectrum: Tune Spec :Average 43-45(2.14-2.16) Bgrd 39(2.09)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	307	72.00	173	118.00	220	177.00	2928
37.00	2800	73.00	2104	119.00	262	178.00	42
38.00	2355	74.00	7719	124.00	25	193.00	46
39.00	1319	75.00	24776	125.00	106	194.00	68
40.00	16	76.00	2159	126.00	43	207.00	24
41.00	97	77.00	427	127.00	93	208.00	127
45.00	745	78.00	183	128.00	129	235.00	50
47.00	599	79.00	1158	130.00	92	250.00	16
48.00	184	80.00	439	133.00	10	253.00	25
49.00	1707	81.00	997	137.00	119	255.00	23
50.00	10908	82.00	361	139.00	50	261.00	21
51.00	3470	83.00	39	140.00	88	269.00	63
52.00	177	87.00	2202	141.00	514	271.00	82
53.00	62	88.00	2152	143.00	266	281.00	153
55.00	125	91.00	8	145.00	62	282.00	105
56.00	707	92.00	1335	148.00	113	306.00	20
57.00	1289	93.00	1930	149.00	66	307.00	21
58.00	31	94.00	5094	150.00	52	322.00	53
60.00	370	95.00	49280	155.00	42	327.00	190
61.00	1977	96.00	3533	156.00	62	334.00	12
62.00	2236	97.00	144	161.00	78	336.00	19
63.00	1526	103.00	82	163.00	138	343.00	185
64.00	351	104.00	151	164.00	40	344.00	155
65.00	262	106.00	185	165.00	16	346.00	108
67.00	85	109.00	19	172.00	249	356.00	46
68.00	4696	112.00	30	173.00	273	417.00	18
69.00	4553	115.00	145	174.00	45832	471.00	43
70.00	265	116.00	128	175.00	3286		
71.00	44	117.00	331	176.00	44128		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28112.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 31-Mar-2018 10:48:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0069609-001
Operator ID: Instrument ID: CVOAMS2

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 01-Apr-2018 20:42:48 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 122 BFB	95	2.140	2.140	0.000	89	63299	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

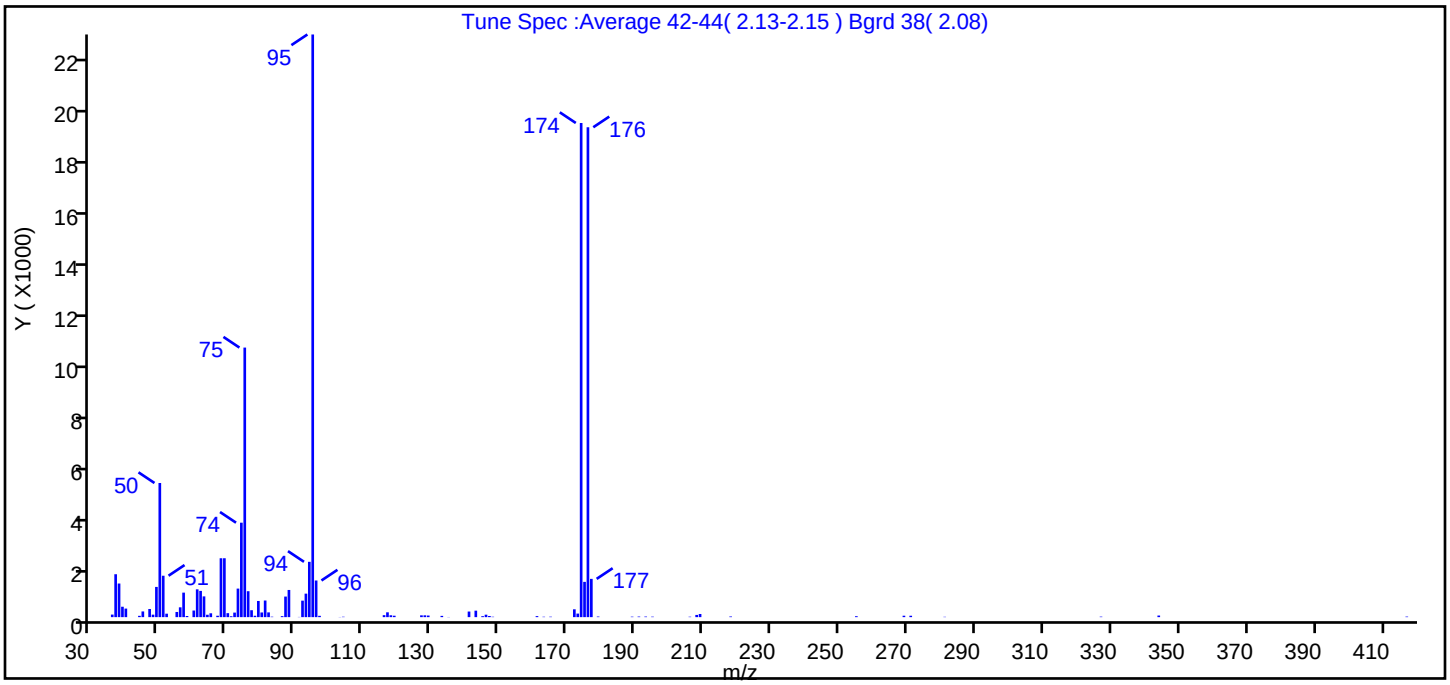
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28112.D
Injection Date: 31-Mar-2018 10:48:30 Instrument ID: CVOAMS2
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 122 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.0
75	30 to 60% of m/z 95	46.3
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	84.8
175	5 to 9% of m/z 174	6.1 (7.1)
176	Greater than 95% but less than 101% of m/z 174	84.1 (99.1)
177	5 to 9% of m/z 176	6.6 (7.8)

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28112.D\8260S_2.rslt\spectra.d
Injection Date: 31-Mar-2018 10:48:30
Spectrum: Tune Spec :Average 42-44(2.13-2.15) Bgrd 38(2.08)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	101	67.00	55	94.00	2180	165.00	18
37.00	1691	68.00	2321	95.00	22960	172.00	309
38.00	1325	69.00	2321	96.00	1444	173.00	140
39.00	410	70.00	157	97.00	52	174.00	19472
40.00	337	71.00	35	103.00	6	175.00	1390
44.00	52	72.00	179	104.00	16	176.00	19304
45.00	225	73.00	1125	116.00	78	177.00	1508
47.00	321	74.00	3722	117.00	190	179.00	24
48.00	98	75.00	10622	118.00	74	189.00	19
49.00	1191	76.00	1022	119.00	56	191.00	23
50.00	5286	77.00	273	127.00	71	193.00	23
51.00	1632	78.00	55	128.00	72	195.00	19
52.00	136	79.00	637	129.00	63	206.00	17
55.00	204	80.00	184	133.00	50	208.00	87
56.00	387	81.00	655	135.00	6	209.00	124
57.00	966	82.00	187	141.00	221	218.00	26
58.00	45	83.00	18	143.00	255	255.00	37
60.00	261	86.00	39	145.00	38	269.00	56
61.00	1096	87.00	811	146.00	97	271.00	55
62.00	1034	88.00	1071	147.00	45	281.00	13
63.00	818	91.00	8	148.00	16	327.00	20
64.00	94	92.00	650	161.00	41	344.00	63
65.00	152	93.00	926	163.00	16	417.00	22

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47903.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 28-Mar-2018 09:56:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0069427-001
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Mar-2018 15:40:24 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: delpolitov Date: 31-Mar-2018 15:40:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	2.506	2.506	0.000	80	129192	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

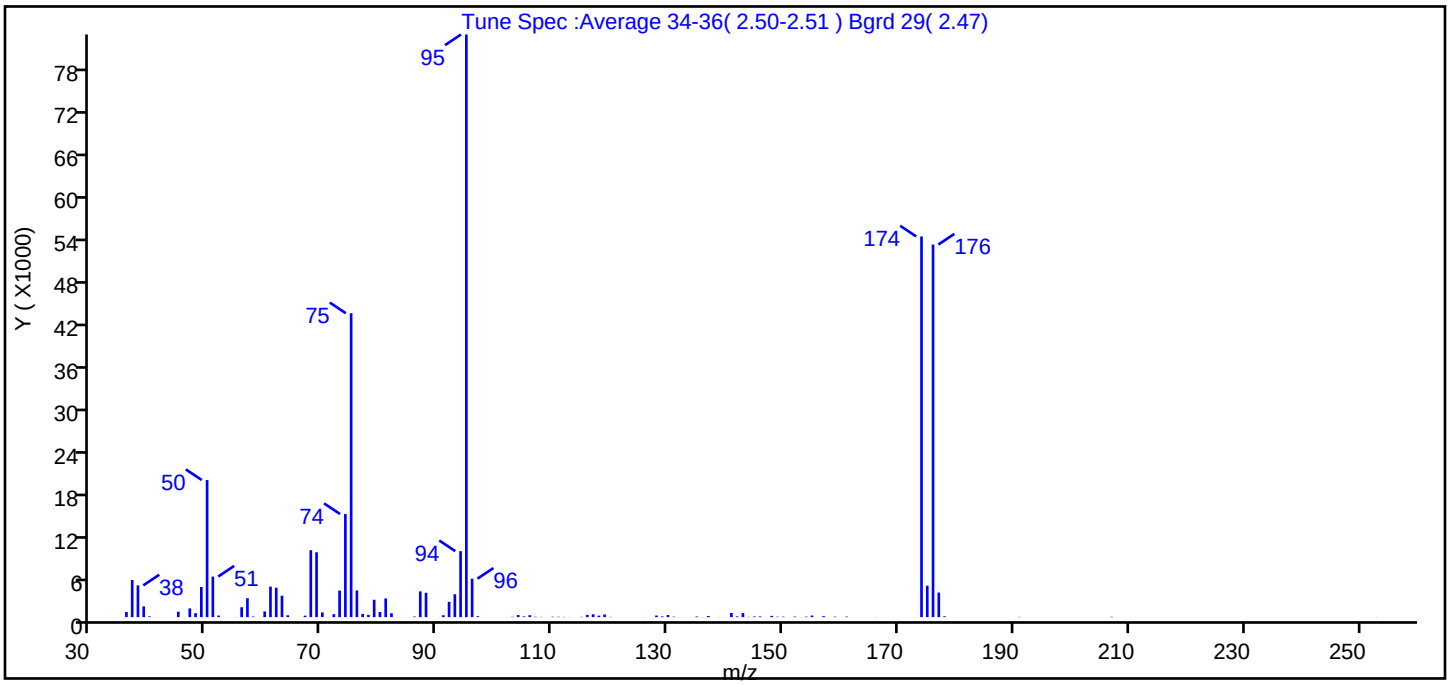
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47903.D
Injection Date: 28-Mar-2018 09:56:30 Instrument ID: CVOAMS4
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.5
75	30 to 60% of m/z 95	52.2
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	65.3
175	5 to 9% of m/z 174	5.4 (8.3)
176	Greater than 95% but less than 101% of m/z 174	63.9 (97.9)
177	5 to 9% of m/z 176	4.2 (6.6)

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47903.D\8260S_4.rslt\spectra.d
Injection Date: 28-Mar-2018 09:56:30
Spectrum: Tune Spec :Average 34-36(2.50-2.51) Bgrd 29(2.47)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	738	71.00	20	104.00	305	139.00	16
37.00	5245	72.00	420	105.00	107	141.00	585
38.00	4480	73.00	3750	106.00	276	142.00	108
39.00	1518	74.00	14545	107.00	57	143.00	572
40.00	103	75.00	42872	108.00	34	144.00	37
45.00	766	76.00	3775	109.00	9	145.00	92
46.00	16	77.00	457	110.00	59	146.00	100
47.00	1237	78.00	319	111.00	51	148.00	180
48.00	561	79.00	2451	112.00	36	149.00	61
49.00	4247	80.00	732	113.00	16	150.00	71
50.00	19344	81.00	2640	115.00	44	152.00	79
51.00	5723	82.00	549	116.00	316	153.00	15
52.00	221	83.00	13	117.00	406	154.00	73
55.00	19	85.00	11	118.00	214	155.00	228
56.00	1401	86.00	82	119.00	374	157.00	137
57.00	2671	87.00	3634	120.00	39	159.00	70
58.00	84	88.00	3440	126.00	11	161.00	81
60.00	800	91.00	266	128.00	230	166.00	17
61.00	4308	92.00	2161	129.00	105	174.00	53704
62.00	4157	93.00	3226	130.00	312	175.00	4436
63.00	3027	94.00	9311	131.00	65	176.00	52560
64.00	266	95.00	82192	132.00	19	177.00	3471
67.00	208	96.00	5425	134.00	3	178.00	118
68.00	9444	97.00	132	135.00	94	191.00	37
69.00	9156	102.00	12	136.00	16	207.00	53
70.00	666	103.00	54	137.00	160	253.00	17

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48509.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 11-Apr-2018 08:11:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070132-001
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Apr-2018 13:55:10 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK023

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	2.482	2.482	0.000	81	110670	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

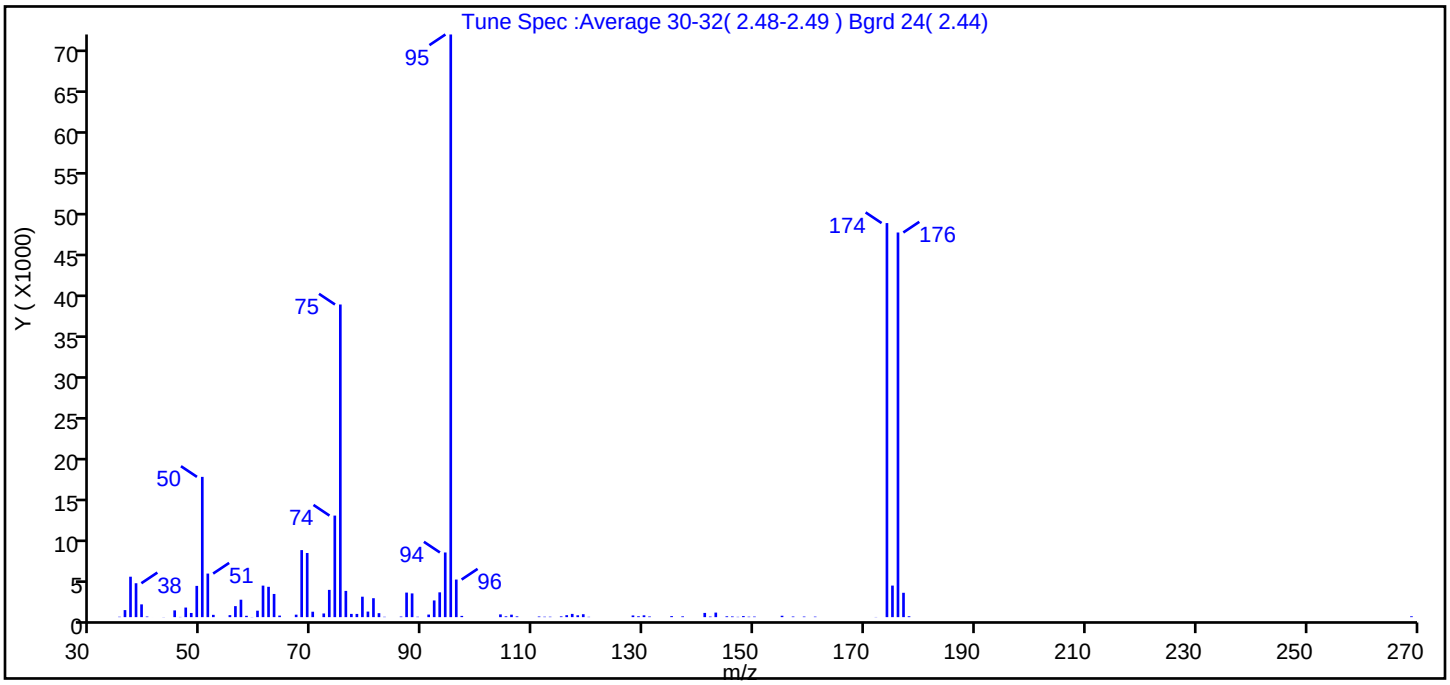
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48509.D
Injection Date: 11-Apr-2018 08:11:30 Instrument ID: CVOAMS4
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.1
75	30 to 60% of m/z 95	53.7
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	67.6
175	5 to 9% of m/z 174	5.4 (8.0)
176	Greater than 95% but less than 101% of m/z 174	66.0 (97.6)
177	5 to 9% of m/z 176	4.2 (6.3)

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48509.D\8260S_4.rslt\spectra.d
Injection Date: 11-Apr-2018 08:11:30
Spectrum: Tune Spec :Average 30-32(2.48-2.49) Bgrd 24(2.44)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	48	62.00	3711	91.00	315	131.00	81
36.00	862	63.00	2837	92.00	2044	135.00	126
37.00	4946	64.00	193	93.00	3034	137.00	96
38.00	4148	67.00	303	94.00	7911	141.00	517
39.00	1563	68.00	8202	95.00	71280	142.00	72
40.00	73	69.00	7848	96.00	4599	143.00	556
41.00	1	70.00	664	97.00	154	145.00	105
43.00	15	72.00	449	104.00	335	146.00	86
45.00	826	73.00	3335	105.00	101	147.00	38
46.00	26	74.00	12423	106.00	302	148.00	130
47.00	1174	75.00	38248	107.00	93	149.00	55
48.00	511	76.00	3212	111.00	79	150.00	70
49.00	3823	77.00	397	112.00	53	155.00	170
50.00	17160	78.00	394	113.00	53	157.00	76
51.00	5330	79.00	2501	115.00	95	159.00	71
52.00	282	80.00	682	116.00	241	161.00	63
55.00	245	81.00	2316	117.00	397	172.00	20
56.00	1348	82.00	486	118.00	226	174.00	48208
57.00	2134	83.00	42	119.00	358	175.00	3861
58.00	165	86.00	71	120.00	40	176.00	47056
59.00	18	87.00	3003	128.00	207	177.00	2980
60.00	790	88.00	2903	129.00	106	178.00	104
61.00	3856	89.00	48	130.00	223	269.00	103

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48757.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Apr-2018 18:25:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070463-001
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 09:38:07 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: sarmientod Date: 16-Apr-2018 21:58:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	2.488	2.488	0.000	78	114020	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

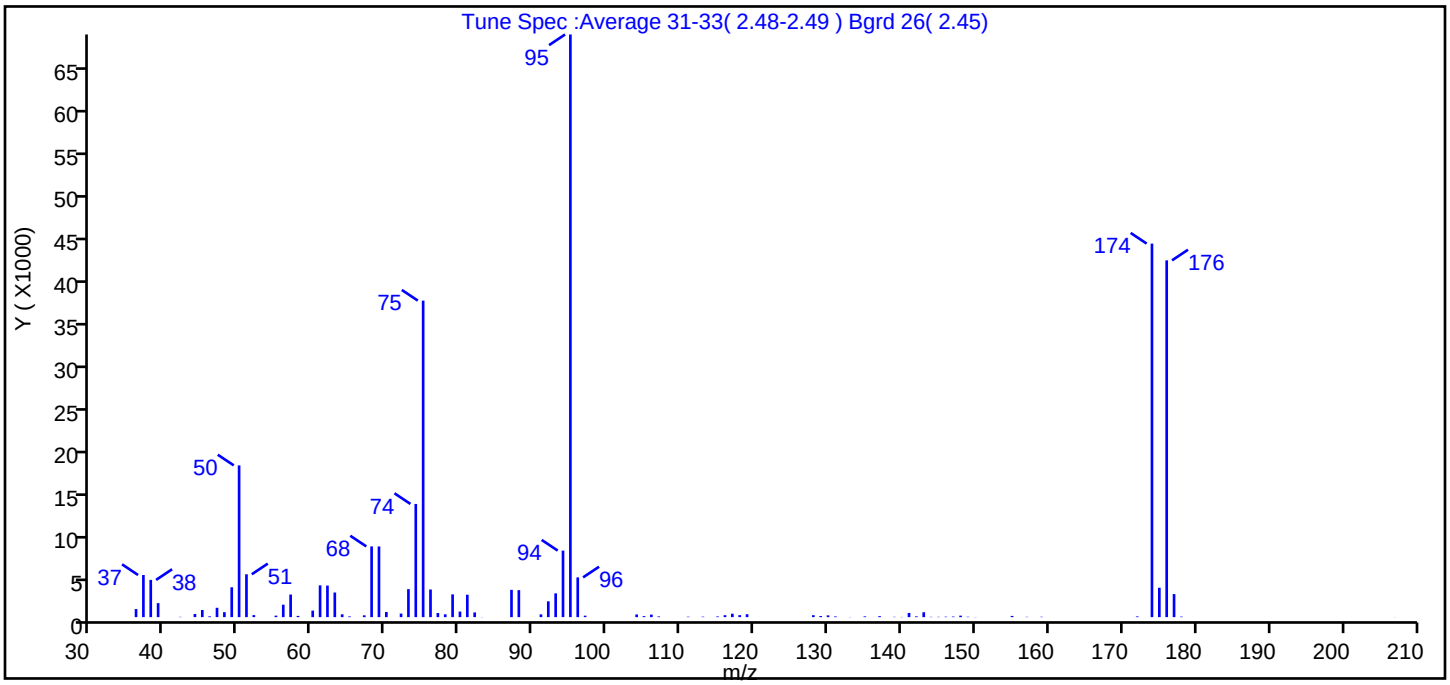
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48757.D
Injection Date: 16-Apr-2018 18:25:30 Instrument ID: CVOAMS4
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.0
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	64.1
175	5 to 9% of m/z 174	5.0 (7.9)
176	Greater than 95% but less than 101% of m/z 174	61.2 (95.5)
177	5 to 9% of m/z 176	4.0 (6.5)

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48757.D\8260S_4.rslt\spectra.d
Injection Date: 16-Apr-2018 18:25:30
Spectrum: Tune Spec :Average 31-33(2.48-2.49) Bgrd 26(2.45)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	950	65.00	84	95.00	68344	141.00	494
37.00	4943	67.00	215	96.00	4664	142.00	95
38.00	4368	68.00	8296	97.00	173	143.00	577
39.00	1646	69.00	8292	104.00	316	144.00	35
42.00	35	70.00	604	105.00	119	145.00	38
44.00	371	72.00	420	106.00	298	146.00	54
45.00	840	73.00	3286	107.00	83	147.00	69
46.00	93	74.00	13277	111.00	52	148.00	177
47.00	1098	75.00	37128	113.00	56	149.00	47
48.00	584	76.00	3243	115.00	81	150.00	19
49.00	3503	77.00	484	116.00	230	155.00	144
50.00	17800	78.00	332	117.00	403	157.00	38
51.00	5028	79.00	2671	118.00	236	159.00	45
52.00	240	80.00	653	119.00	340	172.00	85
55.00	178	81.00	2629	128.00	228	174.00	43816
56.00	1463	82.00	554	129.00	130	175.00	3448
57.00	2653	83.00	17	130.00	208	176.00	41848
58.00	147	87.00	3202	131.00	83	177.00	2706
60.00	766	88.00	3169	133.00	20	178.00	63
61.00	3730	91.00	326	135.00	89	207.00	11
62.00	3704	92.00	1857	137.00	115		
63.00	2889	93.00	2790	139.00	37		
64.00	334	94.00	7806	140.00	21		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48917.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	19-Apr-2018 17:40:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0070668-001				
Operator ID:		Instrument ID:	CVOAMS4		
Method:	\\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\8260S_4.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	20-Apr-2018 01:05:46	Calib Date:	28-Mar-2018 19:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK024				
First Level Reviewer: starzecm		Date:	20-Apr-2018 01:05:46		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	2.476	2.476	0.000	80	66697	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

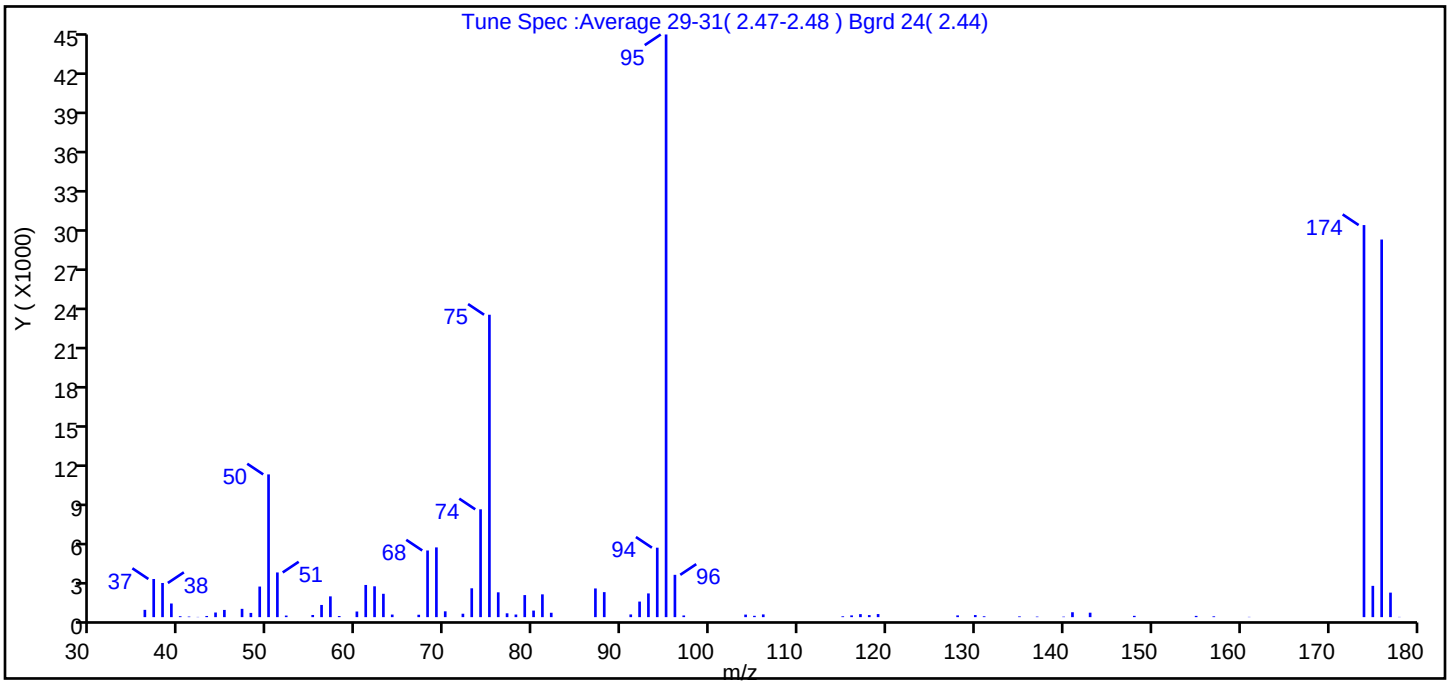
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48917.D
Injection Date: 19-Apr-2018 17:40:30 Instrument ID: CVOAMS4
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.5
75	30 to 60% of m/z 95	51.9
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	67.3
175	5 to 9% of m/z 174	5.4 (8.0)
176	Greater than 95% but less than 101% of m/z 174	64.8 (96.3)
177	5 to 9% of m/z 176	4.2 (6.5)

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48917.D\8260S_4.rslt\spectra.d
Injection Date: 19-Apr-2018 17:40:30
Spectrum: Tune Spec :Average 29-31(2.47-2.48) Bgrd 24(2.44)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	554	58.00	82	81.00	1729	128.00	133
37.00	2894	60.00	428	82.00	332	130.00	158
38.00	2591	61.00	2441	87.00	2176	131.00	66
39.00	1035	62.00	2339	88.00	1897	135.00	57
40.00	69	63.00	1772	91.00	204	137.00	42
41.00	44	64.00	196	92.00	1181	140.00	37
42.00	17	67.00	182	93.00	1800	141.00	372
43.00	88	68.00	5056	94.00	5268	143.00	338
44.00	351	69.00	5290	95.00	44192	148.00	99
45.00	548	70.00	441	96.00	3210	155.00	96
47.00	629	72.00	260	97.00	127	157.00	62
48.00	321	73.00	2188	104.00	193	161.00	20
49.00	2320	74.00	8178	105.00	101	174.00	29736
50.00	10826	75.00	22936	106.00	207	175.00	2373
51.00	3390	76.00	1883	115.00	65	176.00	28640
52.00	120	77.00	291	116.00	133	177.00	1860
55.00	164	78.00	198	117.00	228	178.00	18
56.00	925	79.00	1673	118.00	156		
57.00	1576	80.00	497	119.00	234		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48944.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Apr-2018 05:30:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070697-001
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 20-Apr-2018 13:09:20 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: tupayachia Date: 20-Apr-2018 05:33:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	2.488	2.488	0.000	79	61443	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

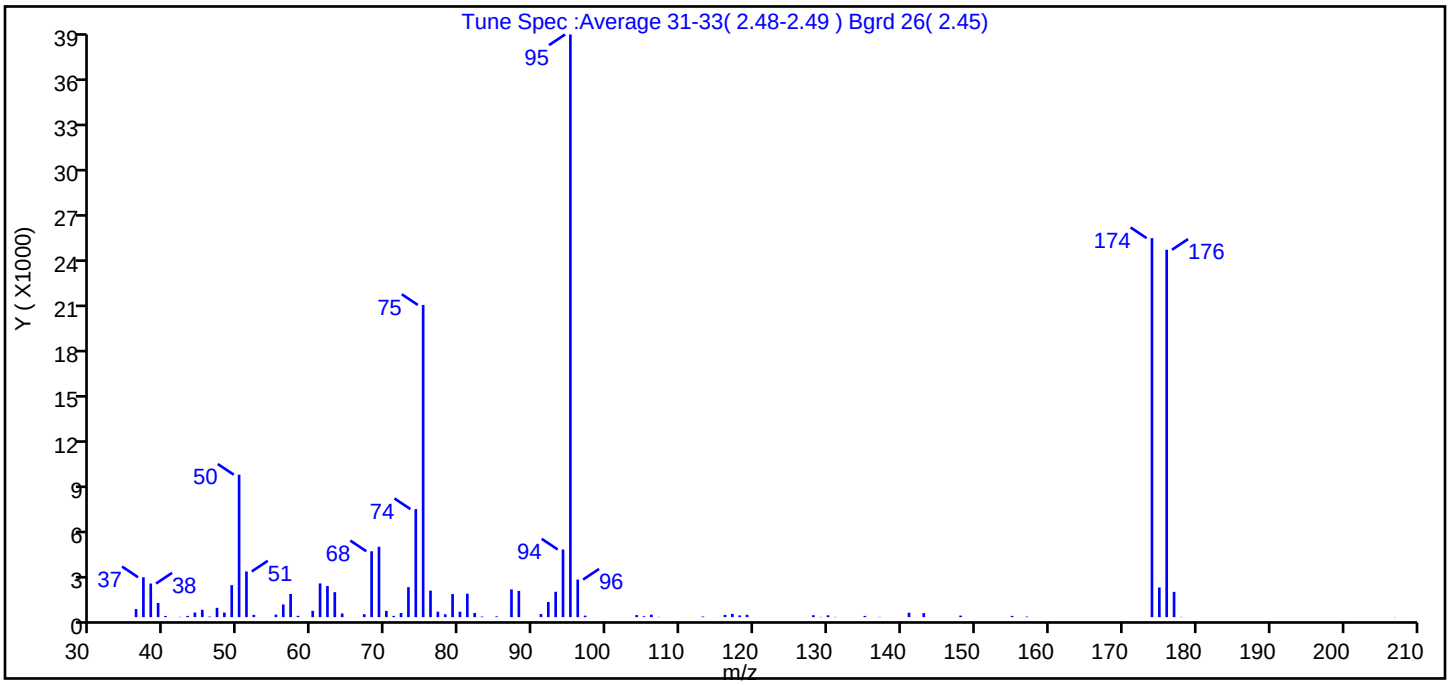
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48944.D
Injection Date: 20-Apr-2018 05:30:30 Instrument ID: CVOAMS4
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.4
75	30 to 60% of m/z 95	53.6
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	65.0
175	5 to 9% of m/z 174	5.1 (7.8)
176	Greater than 95% but less than 101% of m/z 174	63.1 (96.9)
177	5 to 9% of m/z 176	4.3 (6.9)

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48944.D\8260S_4.rslt\spectra.d
Injection Date: 20-Apr-2018 05:30:30
Spectrum: Tune Spec :Average 31-33(2.48-2.49) Bgrd 26(2.45)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 79

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	532	58.00	87	81.00	1536	118.00	116
37.00	2615	60.00	413	82.00	273	119.00	155
38.00	2203	61.00	2211	83.00	39	128.00	126
39.00	931	62.00	2040	85.00	50	129.00	16
40.00	79	63.00	1638	87.00	1815	130.00	120
41.00	3	64.00	238	88.00	1721	131.00	18
42.00	20	67.00	193	91.00	203	135.00	81
43.00	80	68.00	4318	92.00	995	137.00	17
44.00	303	69.00	4612	93.00	1662	141.00	287
45.00	480	70.00	411	94.00	4433	143.00	263
46.00	37	71.00	85	95.00	38176	148.00	100
47.00	610	72.00	268	96.00	2461	155.00	81
48.00	300	73.00	1966	97.00	100	157.00	40
49.00	2096	74.00	7078	104.00	135	174.00	24832
50.00	9333	75.00	20456	105.00	57	175.00	1942
51.00	2993	76.00	1738	106.00	161	176.00	24072
52.00	151	77.00	358	107.00	17	177.00	1656
55.00	163	78.00	186	113.00	43	178.00	17
56.00	830	79.00	1513	116.00	149	207.00	12
57.00	1515	80.00	355	117.00	217		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80593.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 09-Mar-2018 21:58:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0068588-001
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Mar-2018 16:12:24 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: delpolitov Date: 11-Mar-2018 16:12:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.306	4.306	0.000	96	29967	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

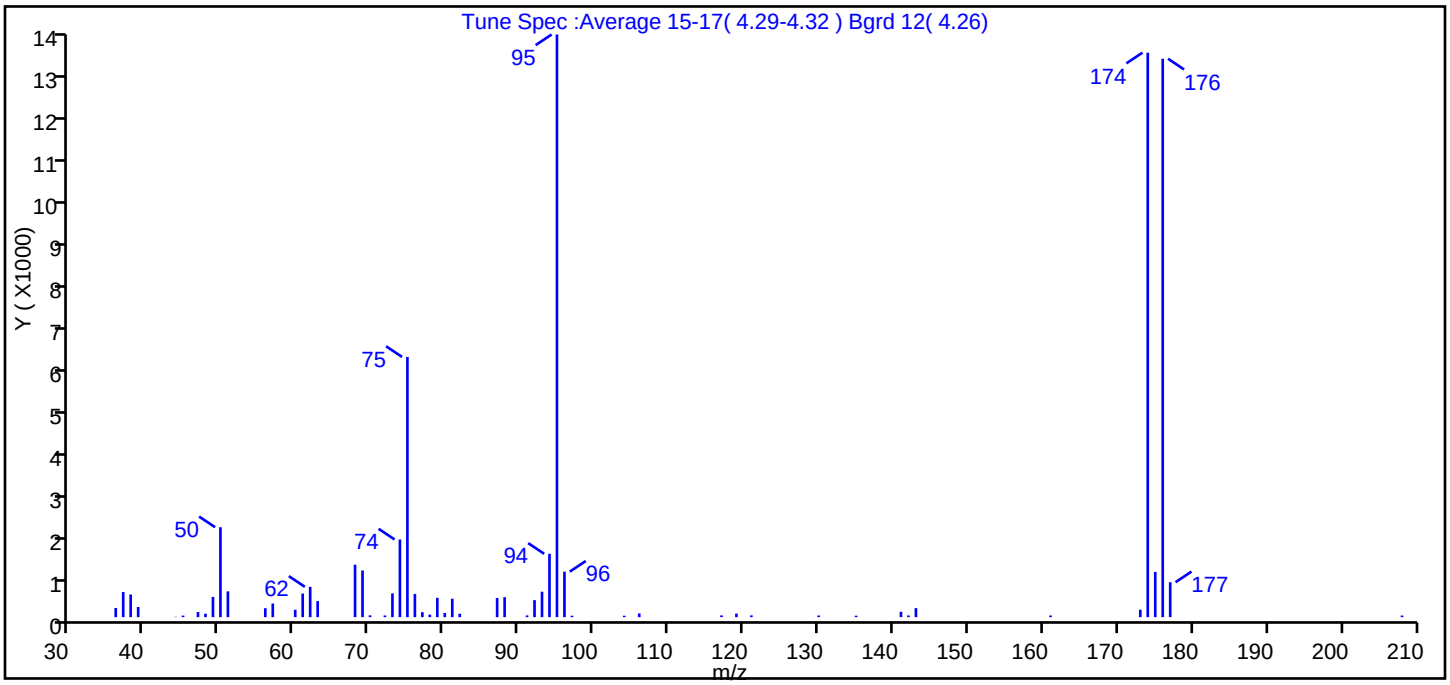
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80593.D
Injection Date: 09-Mar-2018 21:58:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.4
75	30 to 60% of m/z 95	44.7
96	5 to 9% of m/z 95	7.8
173	Less than 2% of m/z 174	1.3 (1.3)
174	50 to 120% of m/z 95	96.9
175	5 to 9% of m/z 174	7.8 (8.0)
176	Greater than 95% but less than 101% of m/z 174	95.8 (98.9)
177	5 to 9% of m/z 176	6.0 (6.3)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80593.D\8260S9.rslt\spectra.d
Injection Date: 09-Mar-2018 21:58:30
Spectrum: Tune Spec :Average 15-17(4.29-4.32) Bgrd 12(4.26)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 57

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	211	62.00	699	82.00	78	130.00	38
37.00	578	63.00	370	87.00	441	135.00	34
38.00	522	68.00	1209	88.00	461	141.00	124
39.00	234	69.00	1075	91.00	40	142.00	39
44.00	7	70.00	42	92.00	392	143.00	208
45.00	36	72.00	39	93.00	586	161.00	38
47.00	117	73.00	548	94.00	1460	173.00	171
48.00	80	74.00	1790	95.00	13426	174.00	13007
49.00	467	75.00	5996	96.00	1048	175.00	1042
50.00	2072	76.00	535	97.00	33	176.00	12866
51.00	594	77.00	114	104.00	33	177.00	805
56.00	206	78.00	59	106.00	84	208.00	37
57.00	314	79.00	445	117.00	40		
60.00	171	80.00	96	119.00	82		
61.00	543	81.00	425	121.00	41		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81009.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	20-Mar-2018 21:17:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0069055-001				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	21-Mar-2018 01:58:04	Calib Date:	10-Mar-2018 00:31:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK010				
First Level Reviewer: starzecm		Date:	21-Mar-2018 01:58:04		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.306	4.306	0.000	94	24497	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

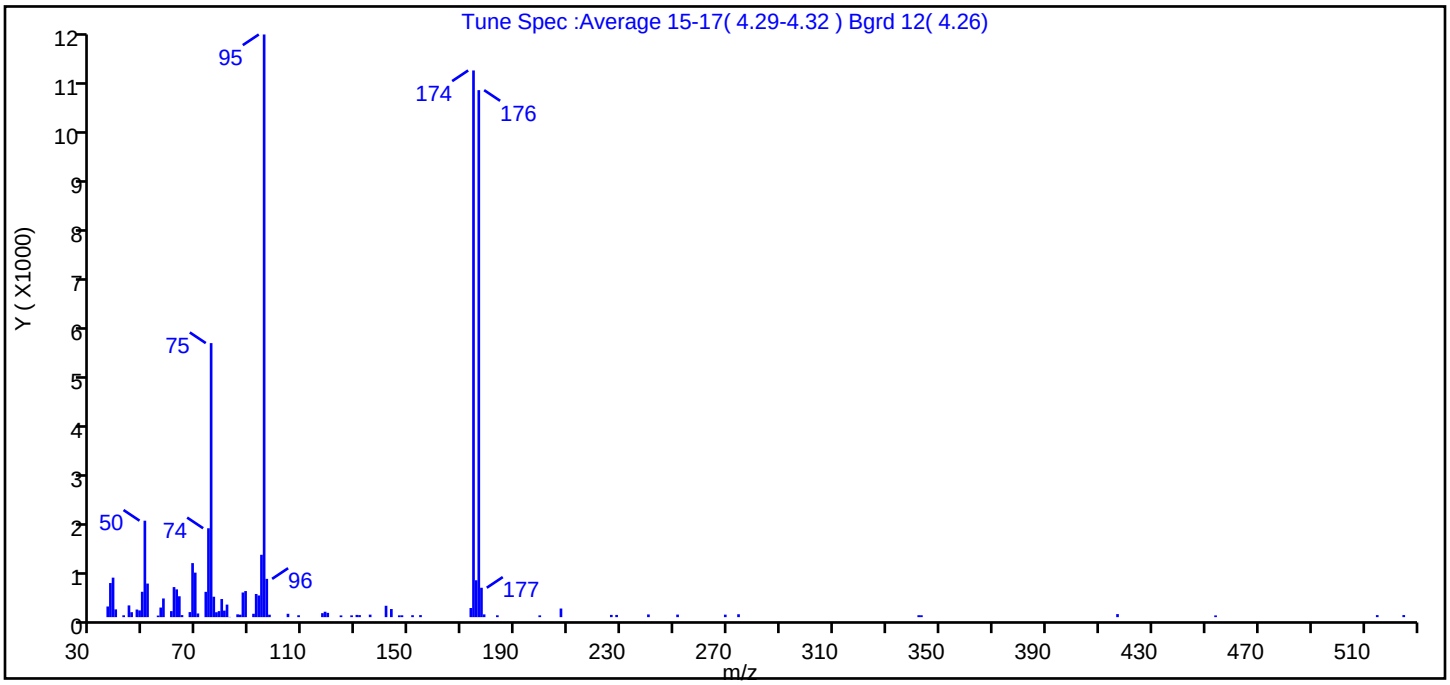
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81009.D
Injection Date: 20-Mar-2018 21:17:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.6
75	30 to 60% of m/z 95	47.0
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	1.6 (1.7)
174	50 to 120% of m/z 95	93.8
175	5 to 9% of m/z 174	6.3 (6.7)
176	Greater than 95% but less than 101% of m/z 174	90.4 (96.4)
177	5 to 9% of m/z 176	5.0 (5.6)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81009.D\8260S9.rslt\spectra.d
Injection Date: 20-Mar-2018 21:17:30
Spectrum: Tune Spec :Average 15-17(4.29-4.32) Bgrd 12(4.26)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	209	68.00	1059	95.00	11418	175.00	723
37.00	668	69.00	872	96.00	750	176.00	10327
38.00	774	70.00	72	97.00	48	177.00	576
39.00	152	73.00	496	104.00	66	178.00	54
42.00	36	74.00	1742	108.00	37	183.00	36
44.00	230	75.00	5370	117.00	78	199.00	35
45.00	97	76.00	400	118.00	106	207.00	169
47.00	149	77.00	96	119.00	84	226.00	44
48.00	132	78.00	118	124.00	34	228.00	43
49.00	497	79.00	355	128.00	35	240.00	53
50.00	1890	80.00	128	130.00	44	251.00	50
51.00	658	81.00	246	131.00	40	269.00	49
55.00	31	82.00	4	135.00	49	274.00	57
56.00	188	85.00	55	141.00	223	342.00	38
57.00	366	86.00	48	143.00	159	343.00	37
60.00	118	87.00	483	146.00	35	417.00	60
61.00	589	88.00	511	147.00	36	454.00	34
62.00	544	91.00	66	151.00	38	515.00	40
63.00	409	92.00	454	154.00	40	525.00	41
64.00	40	93.00	425	173.00	179		
67.00	99	94.00	1222	174.00	10713		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81080.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	23-Mar-2018 12:02:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0069166-001				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	23-Mar-2018 20:26:52	Calib Date:	23-Mar-2018 14:55:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK030				
First Level Reviewer: boykink		Date:	23-Mar-2018 20:13:48		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.306	4.306	0.000	89	45672	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

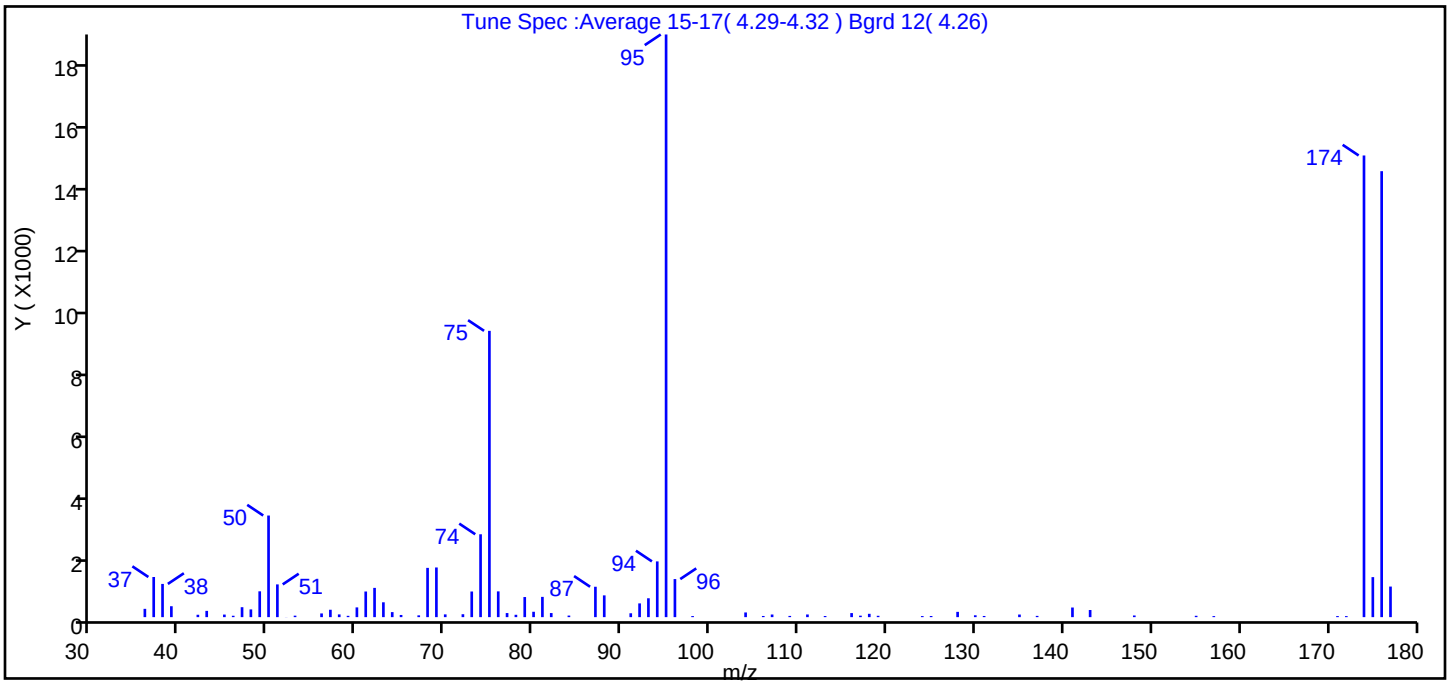
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81080.D
Injection Date: 23-Mar-2018 12:02:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.4
75	30 to 60% of m/z 95	49.1
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	79.2
175	5 to 9% of m/z 174	6.9 (8.7)
176	Greater than 95% but less than 101% of m/z 174	76.5 (96.6)
177	5 to 9% of m/z 176	5.2 (6.9)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81080.D\8260S9.rslt\spectra.d
Injection Date: 23-Mar-2018 12:02:30
Spectrum: Tune Spec :Average 15-17(4.29-4.32) Bgrd 12(4.26)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	264	61.00	815	84.00	50	124.00	34
37.00	1276	62.00	930	87.00	966	125.00	36
38.00	1056	63.00	472	88.00	692	128.00	168
39.00	347	64.00	160	91.00	123	130.00	59
42.00	76	65.00	69	92.00	437	131.00	37
43.00	199	67.00	57	93.00	600	135.00	83
45.00	82	68.00	1566	94.00	1772	137.00	40
46.00	44	69.00	1579	95.00	18520	141.00	306
47.00	316	70.00	88	96.00	1210	143.00	227
48.00	246	72.00	93	98.00	34	148.00	53
49.00	821	73.00	815	104.00	149	155.00	43
50.00	3230	74.00	2634	106.00	37	157.00	33
51.00	1041	75.00	9100	107.00	84	171.00	34
52.00	3	76.00	819	109.00	39	172.00	33
53.00	47	77.00	130	111.00	85	174.00	14674
56.00	118	78.00	75	113.00	36	175.00	1272
57.00	235	79.00	639	116.00	129	176.00	14175
58.00	87	80.00	171	117.00	47	177.00	972
59.00	42	81.00	644	118.00	106		
60.00	310	82.00	130	119.00	43		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81117.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 24-Mar-2018 05:27:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0069230-001
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 24-Mar-2018 12:26:49 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: tupayachia Date: 24-Mar-2018 05:37:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.317	4.317	0.000	79	50383	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

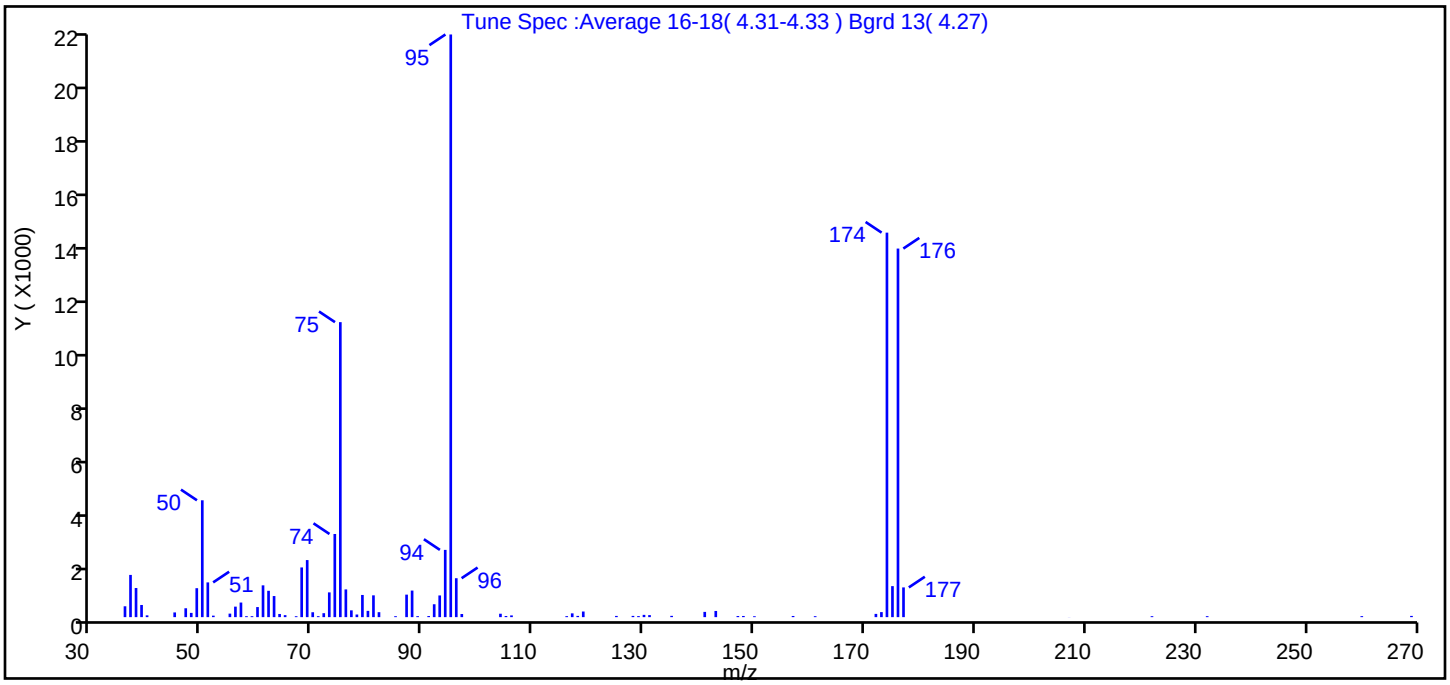
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81117.D
Injection Date: 24-Mar-2018 05:27:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.1
75	30 to 60% of m/z 95	50.6
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.9 (1.3)
174	50 to 120% of m/z 95	66.0
175	5 to 9% of m/z 174	5.3 (8.1)
176	Greater than 95% but less than 101% of m/z 174	63.3 (95.9)
177	5 to 9% of m/z 176	5.1 (8.1)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81117.D\8260S9.rslt\spectra.d
Injection Date: 24-Mar-2018 05:27:30
Spectrum: Tune Spec :Average 16-18(4.31-4.33) Bgrd 13(4.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	401	64.00	117	89.00	36	141.00	194
37.00	1559	65.00	74	91.00	40	143.00	228
38.00	1075	67.00	34	92.00	476	147.00	41
39.00	449	68.00	1835	93.00	801	148.00	43
40.00	66	69.00	2107	94.00	2483	150.00	33
45.00	174	70.00	181	95.00	21512	157.00	43
47.00	328	71.00	35	96.00	1437	161.00	35
48.00	157	72.00	146	97.00	116	172.00	120
49.00	1069	73.00	914	104.00	126	173.00	186
50.00	4314	74.00	3070	105.00	42	174.00	14196
51.00	1283	75.00	10891	106.00	64	175.00	1145
52.00	55	76.00	1024	116.00	37	176.00	13608
55.00	130	77.00	251	117.00	140	177.00	1098
56.00	388	78.00	97	118.00	46	207.00	3
57.00	539	79.00	819	119.00	208	222.00	35
58.00	35	80.00	232	125.00	45	232.00	36
59.00	35	81.00	805	128.00	46	260.00	37
60.00	372	82.00	183	129.00	38	269.00	46
61.00	1174	85.00	35	130.00	84		
62.00	973	87.00	831	131.00	75		
63.00	779	88.00	981	135.00	48		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81146.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 25-Mar-2018 04:01:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0069264-001
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Mar-2018 12:15:13 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: tupayachia Date: 25-Mar-2018 04:13:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.317	4.317	0.000	81	48533	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

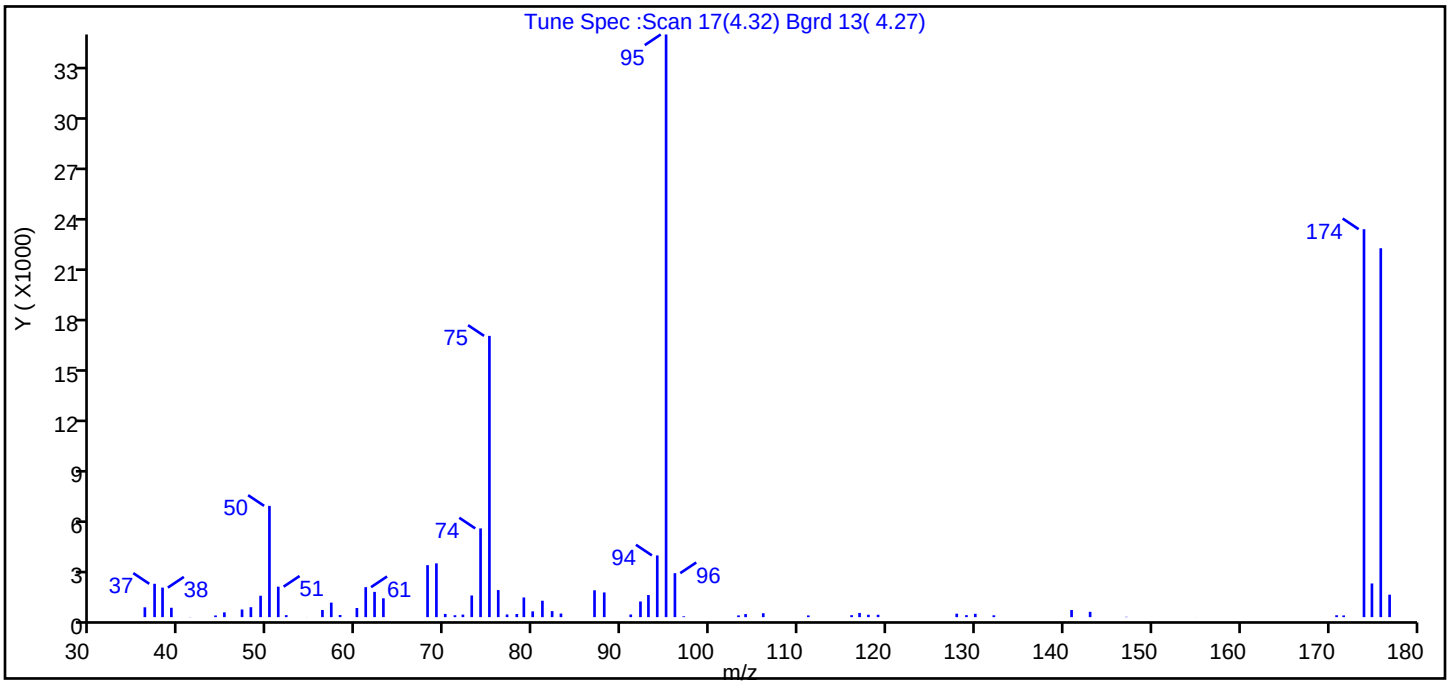
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81146.D
Injection Date: 25-Mar-2018 04:01:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.1
75	30 to 60% of m/z 95	48.3
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	66.6
175	5 to 9% of m/z 174	5.8 (8.7)
176	Greater than 95% but less than 101% of m/z 174	63.3 (95.1)
177	5 to 9% of m/z 176	3.9 (6.1)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81146.D\8260S9.rslt\spectra.d
Injection Date: 25-Mar-2018 04:01:30
Spectrum: Tune Spec :Scan 17(4.32) Bgrd 13(4.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	583	60.00	541	81.00	972	116.90	250
37.10	1976	61.00	1777	82.10	357	117.90	143
38.00	1750	62.00	1496	83.10	214	119.00	141
39.00	556	63.00	1117	86.90	1590	127.90	205
41.10	9	68.00	3081	88.00	1464	129.00	118
44.00	100	69.00	3187	91.00	157	130.00	198
45.00	284	70.00	191	92.10	929	132.10	109
47.00	453	71.10	113	93.00	1309	140.90	424
48.00	589	72.00	152	94.00	3657	143.00	316
49.10	1267	73.00	1283	95.00	34520	147.10	19
50.10	6593	74.00	5257	96.00	2606	155.10	2
51.10	1805	75.00	16664	97.00	48	170.90	113
52.00	118	76.00	1604	103.20	104	171.70	102
54.30	3	77.00	159	104.00	182	174.00	22984
56.10	424	78.10	187	106.00	231	174.90	1995
57.10	861	78.90	1166	111.10	101	175.90	21856
58.10	127	79.90	342	116.00	117	176.90	1331

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81443.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Apr-2018 06:47:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0069732-001
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-Apr-2018 14:24:21 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: delpolitov Date: 04-Apr-2018 14:24:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.317	4.317	0.000	84	26238	NR	NR	a

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
a - User Assigned ID

Reagents:

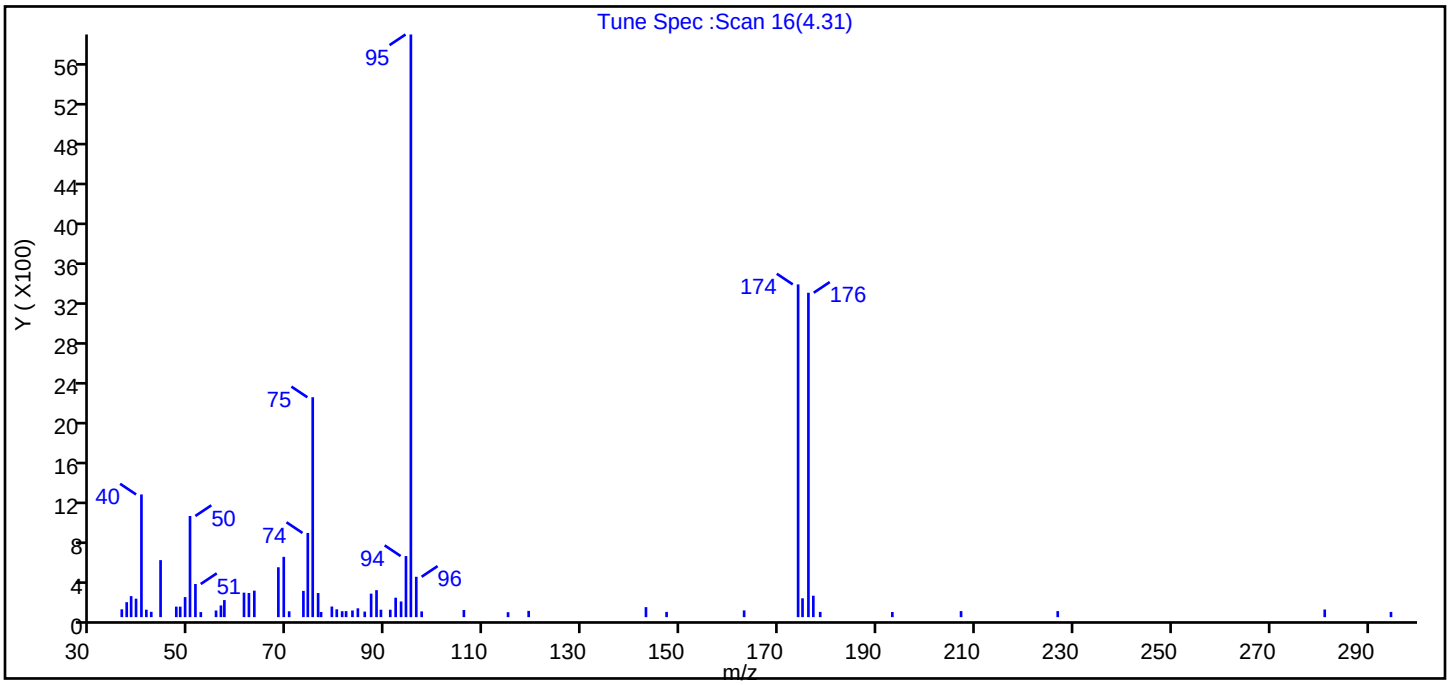
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81443.D
Injection Date: 03-Apr-2018 06:47:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.4
75	30 to 60% of m/z 95	37.7
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	57.1
175	5 to 9% of m/z 174	3.2 (5.7)
176	Greater than 95% but less than 101% of m/z 174	55.7 (97.5)
177	5 to 9% of m/z 176	3.7 (6.6)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81443.D\8260S9.rslt\spectra.d
Injection Date: 03-Apr-2018 06:47:30
Spectrum: Tune Spec :Scan 16(4.31)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 61

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	79	57.00	172	83.10	67	142.90	101
37.10	151	61.00	247	84.20	89	147.10	53
38.00	212	62.00	243	85.60	56	162.90	68
39.00	186	63.10	267	86.90	237	173.90	3355
40.10	1237	68.00	503	88.00	272	174.80	190
41.10	75	69.10	608	88.90	75	176.00	3271
42.10	54	70.20	59	90.80	75	177.00	216
44.00	575	73.10	265	91.90	196	178.40	53
47.20	106	74.00	849	93.00	158	193.10	52
48.00	106	75.00	2217	94.00	616	207.10	61
49.00	202	76.10	243	95.00	5875	226.80	61
50.00	1020	76.70	52	96.10	407	281.20	77
51.10	334	78.90	107	97.20	58	294.70	53
52.20	51	79.90	79	105.80	72		
55.30	67	81.00	60	114.80	50		
56.30	118	81.80	61	119.00	63		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81908.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 12-Apr-2018 20:13:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070288-001
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 00:39:19 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.318	4.318	0.000	88	35309	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

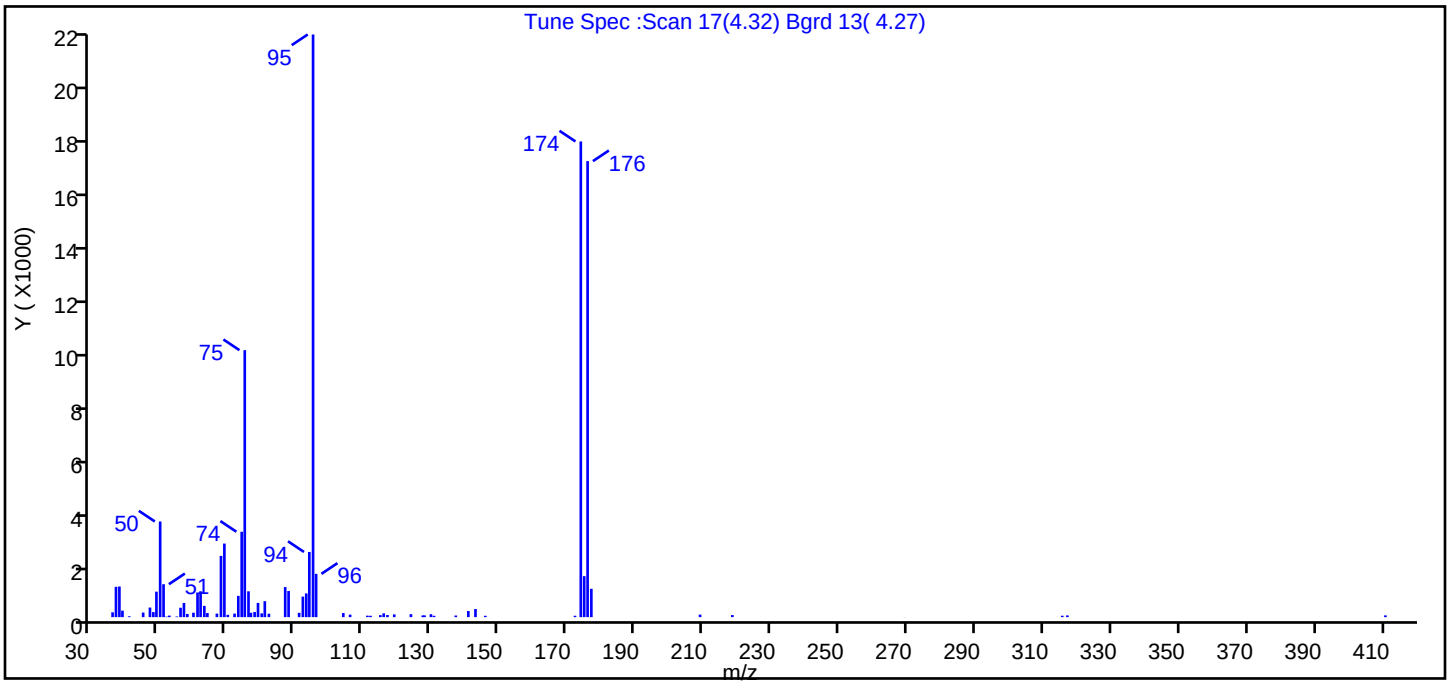
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81908.D
Injection Date: 12-Apr-2018 20:13:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.4
75	30 to 60% of m/z 95	45.8
96	5 to 9% of m/z 95	7.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	81.6
175	5 to 9% of m/z 174	7.0 (8.6)
176	Greater than 95% but less than 101% of m/z 174	78.3 (95.9)
177	5 to 9% of m/z 176	4.9 (6.2)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81908.D\8260S9.rslt\spectra.d
Injection Date: 12-Apr-2018 20:13:30
Spectrum: Tune Spec :Scan 17(4.32) Bgrd 13(4.27)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	175	62.00	936	87.90	945	130.70	50
37.10	1098	63.10	408	91.00	157	137.10	59
38.10	1109	64.00	148	92.10	743	140.80	222
39.00	235	66.80	128	93.10	859	142.90	294
41.00	31	68.00	2217	94.00	2359	145.80	50
45.10	167	69.00	2663	95.10	21088	172.20	51
47.10	347	70.00	85	96.00	1568	173.90	17216
48.10	183	72.00	128	104.00	148	174.90	1484
49.00	922	73.10	771	106.00	91	175.90	16504
50.10	3462	74.10	3091	111.10	54	177.00	1026
51.10	1192	75.00	9663	112.00	50	209.00	92
52.00	18	76.10	935	114.90	73	218.50	76
52.80	56	76.80	158	115.90	138	269.20	3
55.00	23	77.90	185	117.00	77	315.60	52
56.10	340	78.90	515	119.00	99	317.10	63
57.10	513	80.00	137	123.90	108	410.70	64
58.10	116	80.90	578	127.40	62		
59.90	160	82.10	123	127.90	64		
61.10	892	86.90	1089	129.80	106		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81962.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	13-Apr-2018 19:50:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0070351-001				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	14-Apr-2018 05:54:08	Calib Date:	03-Apr-2018 15:21:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK009				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.317	4.317	0.000	89	30818	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

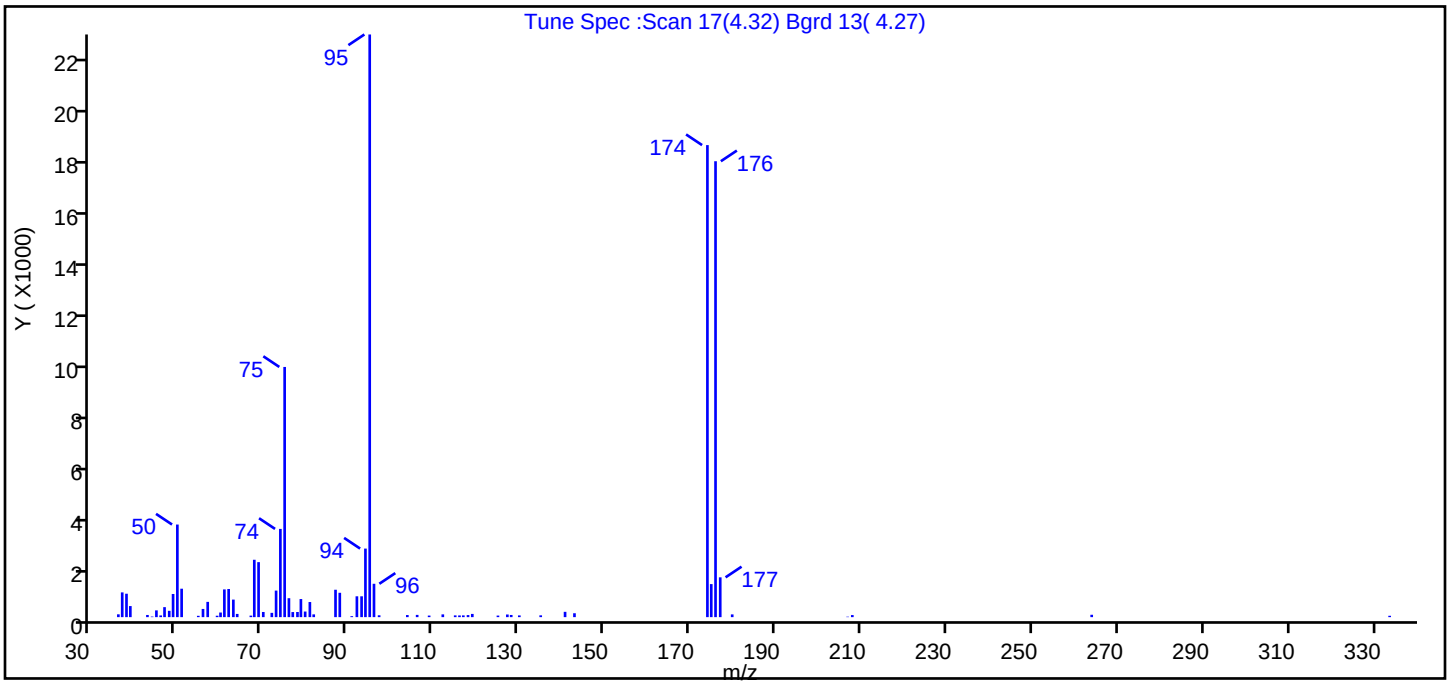
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81962.D
Injection Date: 13-Apr-2018 19:50:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.9
75	30 to 60% of m/z 95	42.9
96	5 to 9% of m/z 95	5.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	81.0
175	5 to 9% of m/z 174	5.7 (7.0)
176	Greater than 95% but less than 101% of m/z 174	78.2 (96.6)
177	5 to 9% of m/z 176	6.8 (8.7)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81962.D\8260S9.rslt\spectra.d
Injection Date: 13-Apr-2018 19:50:30
Spectrum: Tune Spec :Scan 17(4.32) Bgrd 13(4.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.20	108	61.00	1059	81.90	106	119.00	123
37.10	945	62.00	1074	87.00	1046	125.00	60
38.10	894	63.10	670	88.00	930	127.20	101
39.00	423	64.00	123	90.80	37	128.10	83
43.00	83	67.20	58	92.00	796	130.00	66
44.10	22	68.00	2191	93.10	796	135.00	69
45.10	258	69.00	2100	94.00	2618	140.70	203
46.10	65	70.10	197	95.00	22248	142.90	149
47.00	382	72.10	164	96.00	1274	174.00	18024
48.10	241	73.10	1014	97.20	71	174.90	1262
49.00	884	74.10	3369	103.80	80	175.90	17408
50.00	3536	75.10	9553	106.10	86	177.00	1520
51.00	1086	76.10	723	108.90	60	179.80	105
54.90	51	77.00	194	112.10	106	206.80	17
56.00	313	78.10	196	115.00	67	207.90	79
57.10	583	78.90	691	116.00	65	263.90	91
59.30	54	79.90	214	116.90	67	333.60	52
60.10	176	81.00	577	118.00	79		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82031.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Apr-2018 03:56:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070418-001
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 16-Apr-2018 10:42:01 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: delpolitov Date: 16-Apr-2018 10:42:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.318	4.318	0.000	90	62223	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

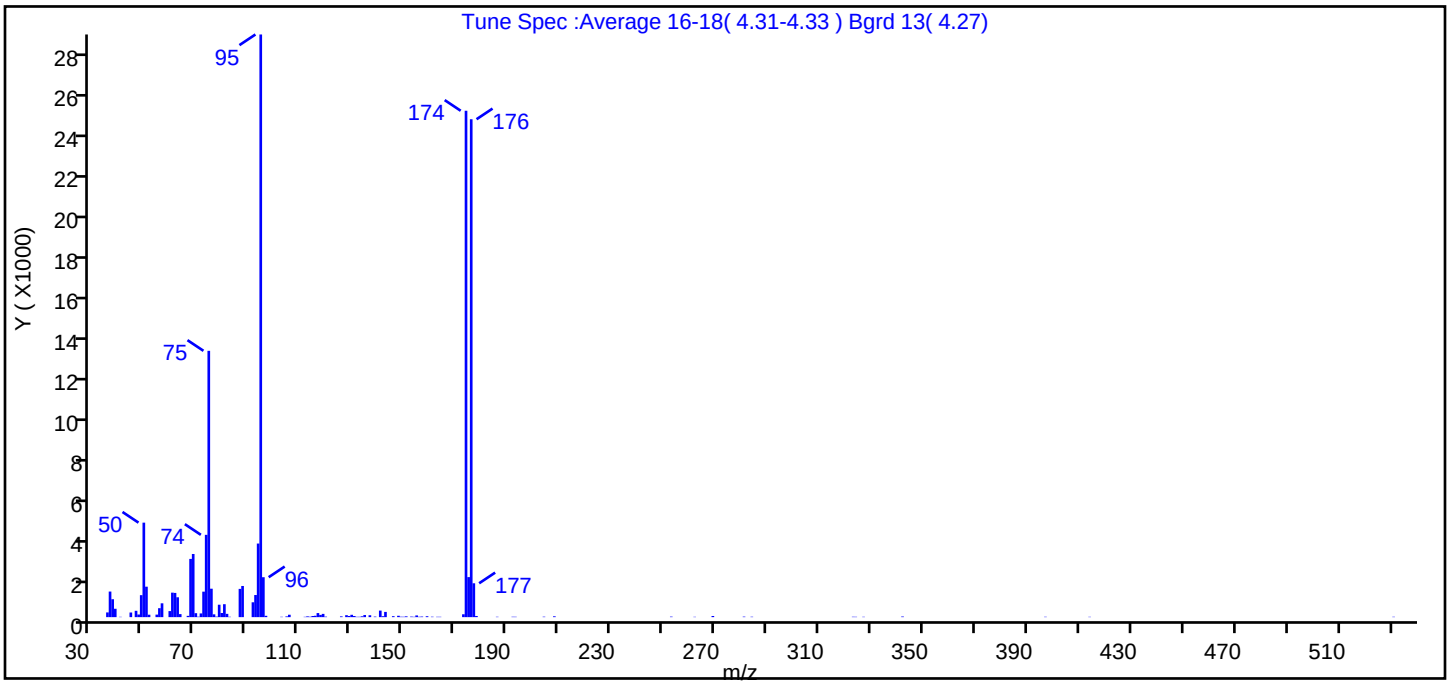
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82031.D
Injection Date: 16-Apr-2018 03:56:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.2
75	30 to 60% of m/z 95	45.7
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	86.9
175	5 to 9% of m/z 174	6.9 (7.9)
176	Greater than 95% but less than 101% of m/z 174	85.5 (98.3)
177	5 to 9% of m/z 176	5.8 (6.8)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82031.D\8260S9.rslt\spectra.d
Injection Date: 16-Apr-2018 03:56:30
Spectrum: Tune Spec :Average 16-18(4.31-4.33) Bgrd 13(4.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	227	74.00	3962	118.00	108	159.00	44
37.00	1232	75.00	12820	119.00	157	161.00	21
38.00	863	76.00	1369	120.00	24	163.00	17
39.00	403	77.00	135	126.00	37	164.00	17
41.00	15	78.00	26	128.00	94	173.00	138
45.00	223	79.00	598	129.00	56	174.00	24376
47.00	305	80.00	200	130.00	113	175.00	1927
48.00	126	81.00	623	131.00	54	176.00	23968
49.00	1058	82.00	158	132.00	17	177.00	1630
50.00	4549	83.00	18	133.00	18	178.00	56
51.00	1466	87.00	1360	134.00	40	186.00	18
52.00	117	88.00	1500	135.00	102	192.00	19
55.00	122	92.00	715	137.00	91	193.00	18
56.00	431	93.00	1065	139.00	26	204.00	22
57.00	666	94.00	3543	141.00	315	208.00	40
60.00	291	95.00	28048	142.00	45	253.00	25
61.00	1179	96.00	1922	143.00	252	262.00	16
62.00	1166	97.00	64	146.00	46	269.00	55
63.00	956	103.00	17	148.00	66	281.00	25
64.00	146	105.00	36	149.00	21	284.00	20
67.00	62	106.00	116	150.00	19	323.00	19
68.00	2803	112.00	16	151.00	38	324.00	17
69.00	3040	113.00	37	153.00	27	327.00	17
70.00	191	114.00	20	154.00	17	342.00	30
71.00	22	115.00	55	155.00	82	397.00	18
72.00	179	116.00	66	156.00	19	414.00	16
73.00	1227	117.00	196	157.00	29	531.00	18

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82060.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Apr-2018 17:18:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070455-001
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 14:25:10 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.318	4.318	0.000	85	43706	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

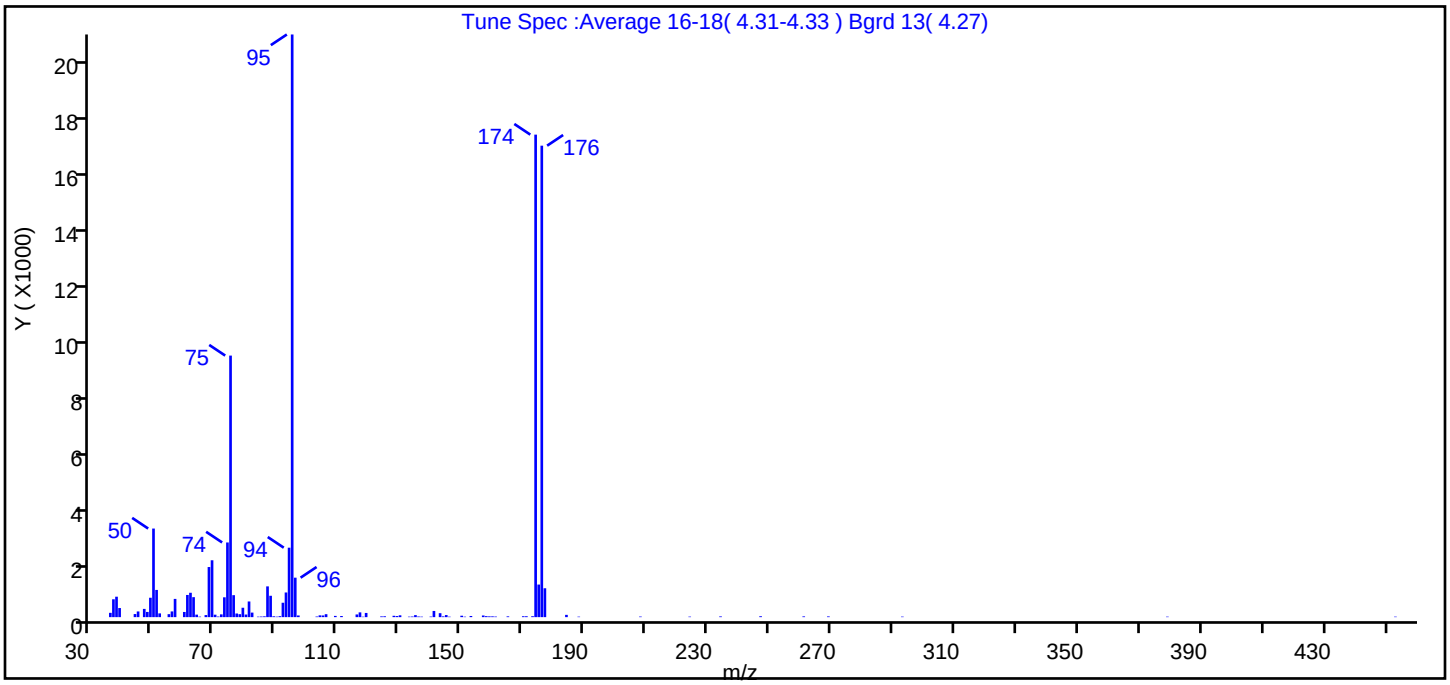
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82060.D
Injection Date: 16-Apr-2018 17:18:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.2
75	30 to 60% of m/z 95	44.9
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.2 (0.2)
174	50 to 120% of m/z 95	82.8
175	5 to 9% of m/z 174	5.6 (6.8)
176	Greater than 95% but less than 101% of m/z 174	80.9 (97.7)
177	5 to 9% of m/z 176	5.0 (6.1)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82060.D\8260S9.rslt\spectra.d
Injection Date: 16-Apr-2018 17:18:30
Spectrum: Tune Spec :Average 16-18(4.31-4.33) Bgrd 13(4.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	149	72.00	96	104.00	62	151.00	16
37.00	618	73.00	686	105.00	58	153.00	40
38.00	707	74.00	2583	106.00	102	157.00	57
39.00	315	75.00	9046	109.00	43	158.00	34
44.00	107	76.00	760	111.00	38	159.00	27
45.00	197	77.00	126	116.00	93	160.00	27
47.00	285	78.00	103	117.00	165	161.00	20
48.00	180	79.00	325	118.00	15	165.00	27
49.00	671	80.00	90	119.00	145	170.00	31
50.00	3064	81.00	542	124.00	26	171.00	31
51.00	941	82.00	157	125.00	30	173.00	32
52.00	130	84.00	17	128.00	47	174.00	16688
55.00	103	85.00	21	129.00	38	175.00	1127
56.00	198	86.00	28	130.00	63	176.00	16306
57.00	631	87.00	1064	133.00	17	177.00	999
60.00	179	88.00	739	134.00	21	184.00	79
61.00	767	89.00	29	135.00	70	188.00	17
62.00	843	90.00	17	136.00	22	208.00	20
63.00	691	91.00	33	137.00	17	224.00	18
64.00	87	92.00	498	140.00	19	234.00	25
65.00	18	93.00	853	141.00	214	247.00	31
67.00	71	94.00	2402	143.00	137	261.00	26
68.00	1733	95.00	20152	144.00	26	269.00	25
69.00	1967	96.00	1365	145.00	72	293.00	18
70.00	85	97.00	58	146.00	16	379.00	17
71.00	21	103.00	21	150.00	49	453.00	17

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82294.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	21-Apr-2018 05:15:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0070764-001				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	22-Apr-2018 22:36:14	Calib Date:	21-Apr-2018 08:07:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK014				
First Level Reviewer: tupayachia		Date:	21-Apr-2018 05:23:36		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.329	4.329	0.000	95	21835	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

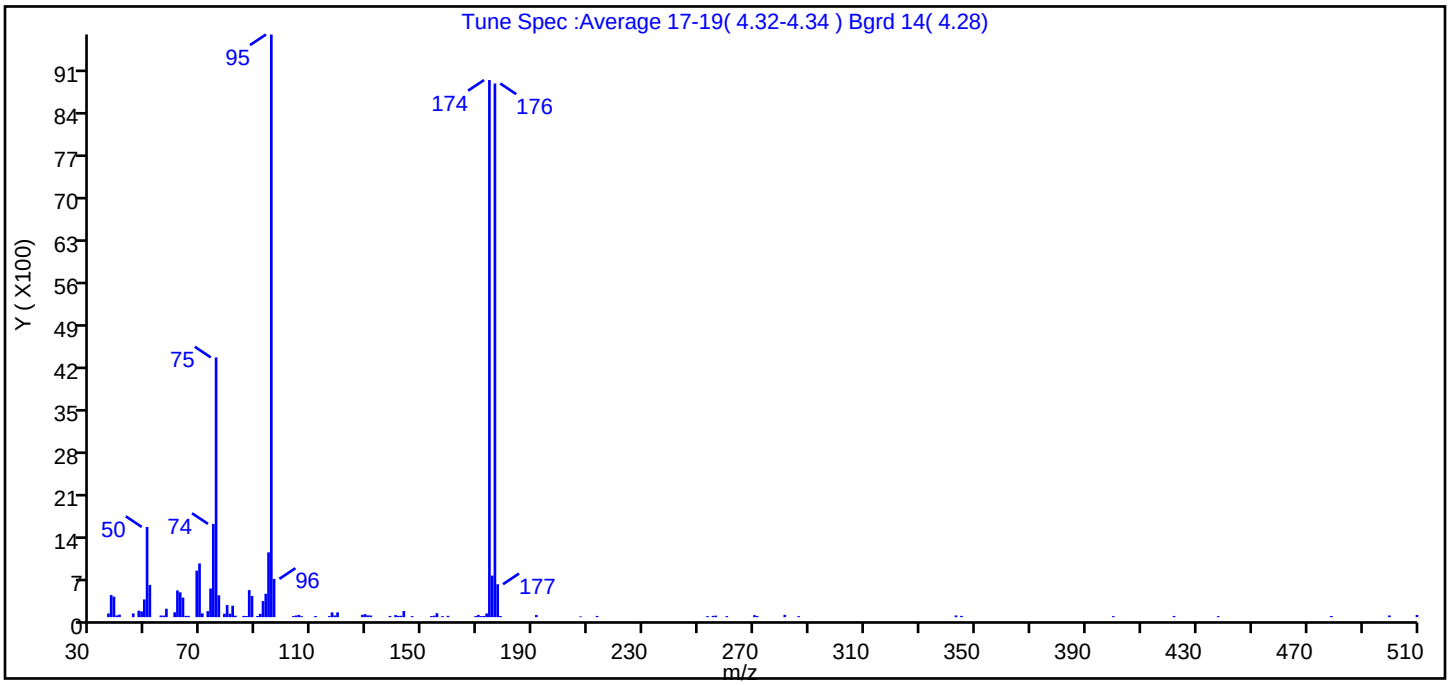
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82294.D
Injection Date: 21-Apr-2018 05:15:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.5
75	30 to 60% of m/z 95	44.6
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	92.2
175	5 to 9% of m/z 174	7.1 (7.7)
176	Greater than 95% but less than 101% of m/z 174	91.6 (99.4)
177	5 to 9% of m/z 176	5.7 (6.2)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82294.D\8260S9.rslt\spectra.d
Injection Date: 21-Apr-2018 05:15:30
Spectrum: Tune Spec :Average 17-19(4.32-4.34) Bgrd 14(4.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	61	74.00	1537	117.00	79	176.00	8798
37.00	364	75.00	4282	118.00	28	177.00	543
38.00	338	76.00	360	119.00	79	178.00	19
39.00	28	78.00	57	128.00	39	191.00	35
40.00	42	79.00	200	129.00	49	207.00	12
45.00	61	80.00	57	130.00	30	213.00	20
47.00	107	81.00	189	131.00	27	253.00	17
48.00	95	82.00	24	138.00	20	255.00	21
49.00	292	85.00	21	140.00	34	256.00	25
50.00	1487	86.00	19	141.00	21	260.00	18
51.00	531	87.00	446	142.00	22	270.00	33
55.00	27	88.00	350	143.00	101	271.00	20
56.00	26	90.00	20	146.00	17	281.00	38
57.00	139	91.00	54	153.00	18	286.00	17
60.00	80	92.00	265	154.00	24	343.00	28
61.00	440	93.00	386	155.00	65	345.00	21
62.00	409	94.00	1068	157.00	17	400.00	17
63.00	322	95.00	9606	159.00	22	422.00	20
64.00	21	96.00	631	169.00	18	438.00	17
65.00	22	103.00	18	170.00	37	479.00	19
68.00	766	104.00	28	171.00	18	500.00	28
69.00	886	105.00	37	172.00	20	510.00	36
70.00	62	106.00	16	173.00	61		
72.00	99	111.00	19	174.00	8855		
73.00	472	116.00	17	175.00	685		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82434.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 23-Apr-2018 17:01:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070876-001
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 24-Apr-2018 05:46:17 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: colladox Date: 23-Apr-2018 17:44:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.318	4.318	0.000	91	36609	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

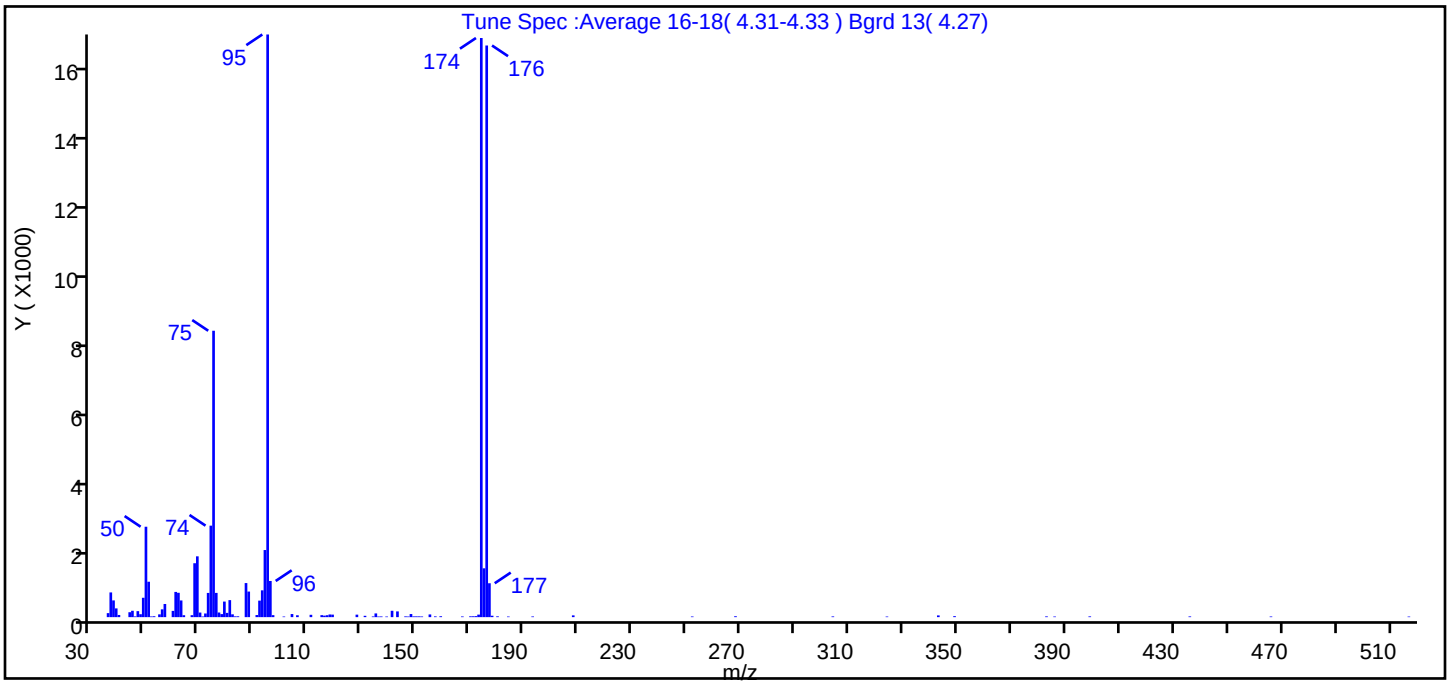
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82434.D
Injection Date: 23-Apr-2018 17:01:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.5
75	30 to 60% of m/z 95	49.2
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	99.4
175	5 to 9% of m/z 174	8.4 (8.4)
176	Greater than 95% but less than 101% of m/z 174	98.1 (98.7)
177	5 to 9% of m/z 176	5.8 (5.9)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82434.D\8260S9.rslt\spectra.d
Injection Date: 23-Apr-2018 17:01:30
Spectrum: Tune Spec :Average 16-18(4.31-4.33) Bgrd 13(4.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	111	70.00	127	106.00	52	167.00	19
37.00	684	71.00	17	111.00	65	170.00	23
38.00	463	72.00	101	115.00	55	171.00	24
39.00	242	73.00	670	116.00	42	172.00	28
40.00	60	74.00	2532	117.00	53	173.00	70
44.00	136	75.00	7926	118.00	74	174.00	16027
45.00	176	76.00	671	119.00	70	175.00	1351
46.00	20	77.00	128	128.00	69	176.00	15820
47.00	166	78.00	84	131.00	37	177.00	938
48.00	81	79.00	431	134.00	19	178.00	39
49.00	536	80.00	118	135.00	103	180.00	22
50.00	2502	81.00	471	136.00	17	184.00	17
51.00	980	82.00	78	137.00	19	193.00	19
52.00	19	83.00	21	139.00	17	208.00	49
53.00	25	84.00	23	141.00	176	252.00	18
55.00	77	87.00	943	143.00	159	268.00	25
56.00	216	88.00	708	146.00	21	304.00	20
57.00	364	91.00	58	147.00	17	324.00	17
60.00	173	92.00	457	148.00	86	343.00	48
61.00	698	93.00	742	149.00	20	349.00	27
62.00	674	94.00	1857	150.00	21	383.00	21
63.00	462	95.00	16125	151.00	21	386.00	17
64.00	53	96.00	1001	152.00	18	399.00	21
67.00	54	97.00	55	155.00	75	436.00	20
68.00	1492	101.00	17	157.00	21	466.00	18
69.00	1683	104.00	86	159.00	25	517.00	16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-504873/8

Matrix: Solid | Lab File ID: K81016.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/21/2018 01:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-504873/8

Matrix: Solid | Lab File ID: K81016.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/21/2018 01:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		78-135
460-00-4	4-Bromofluorobenzene	103		67-126
1868-53-7	Dibromofluoromethane (Surr)	111		61-149
2037-26-5	Toluene-d8 (Surr)	103		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-504873/8

Matrix: Solid Lab File ID: K81016.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2018 01:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 504873 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81016.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-Mar-2018 01:16:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0069055-008
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 21-Mar-2018 10:41:33 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: starzecm Date: 21-Mar-2018 01:37:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	298716	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	232585	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	142227	50.0	55.5	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.302	0.000	0	155374	50.0	61.3	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	372123	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	20993	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.265	7.265	0.000	98	473826	50.0	51.7	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	86	316845	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	93	160287	50.0	51.4	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	95	188411	50.0	50.0	

Reagents:

8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

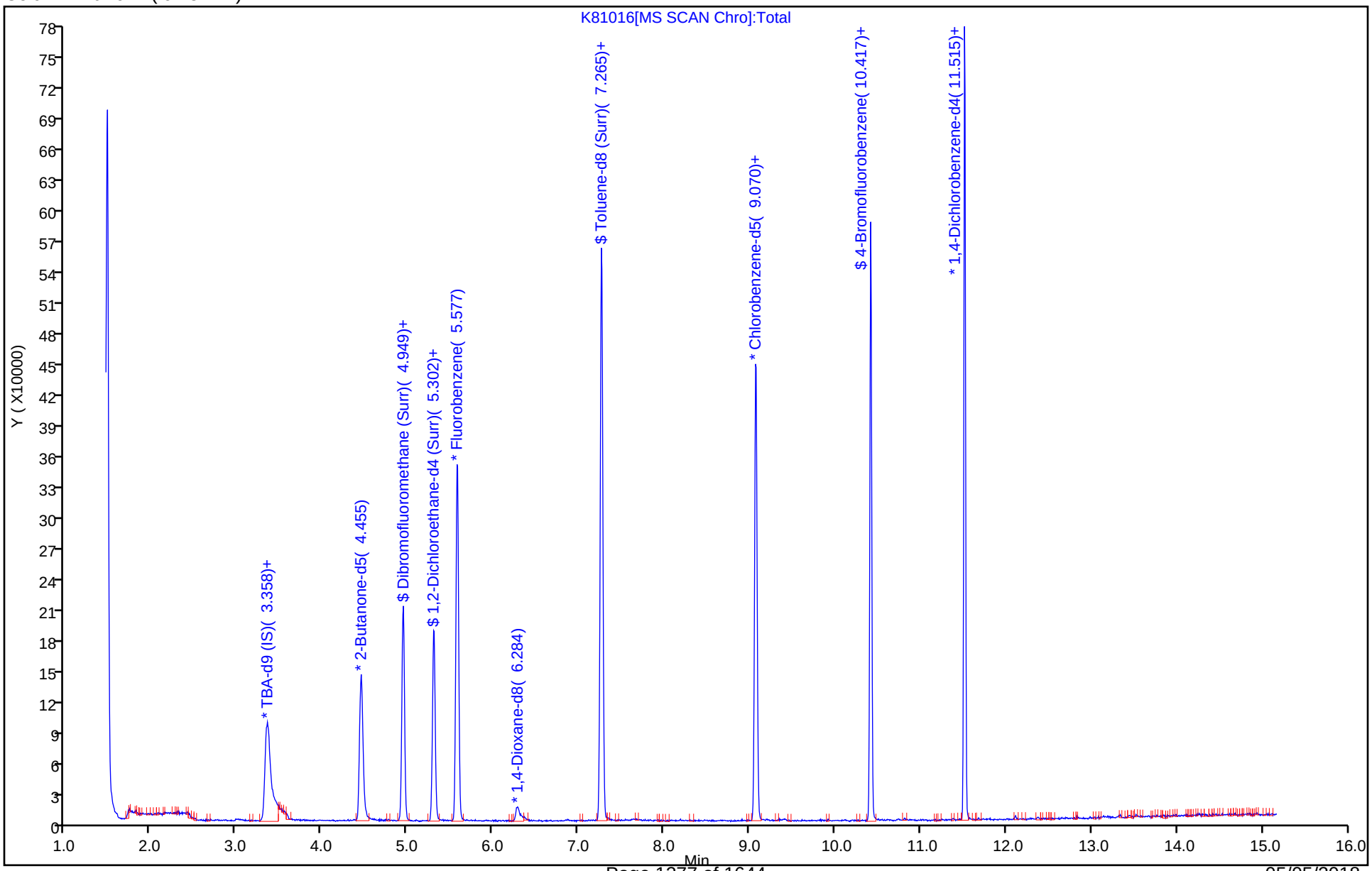
Report Date: 21-Mar-2018 10:41:50 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81016.D

Injection Date:	21-Mar-2018 01:16:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



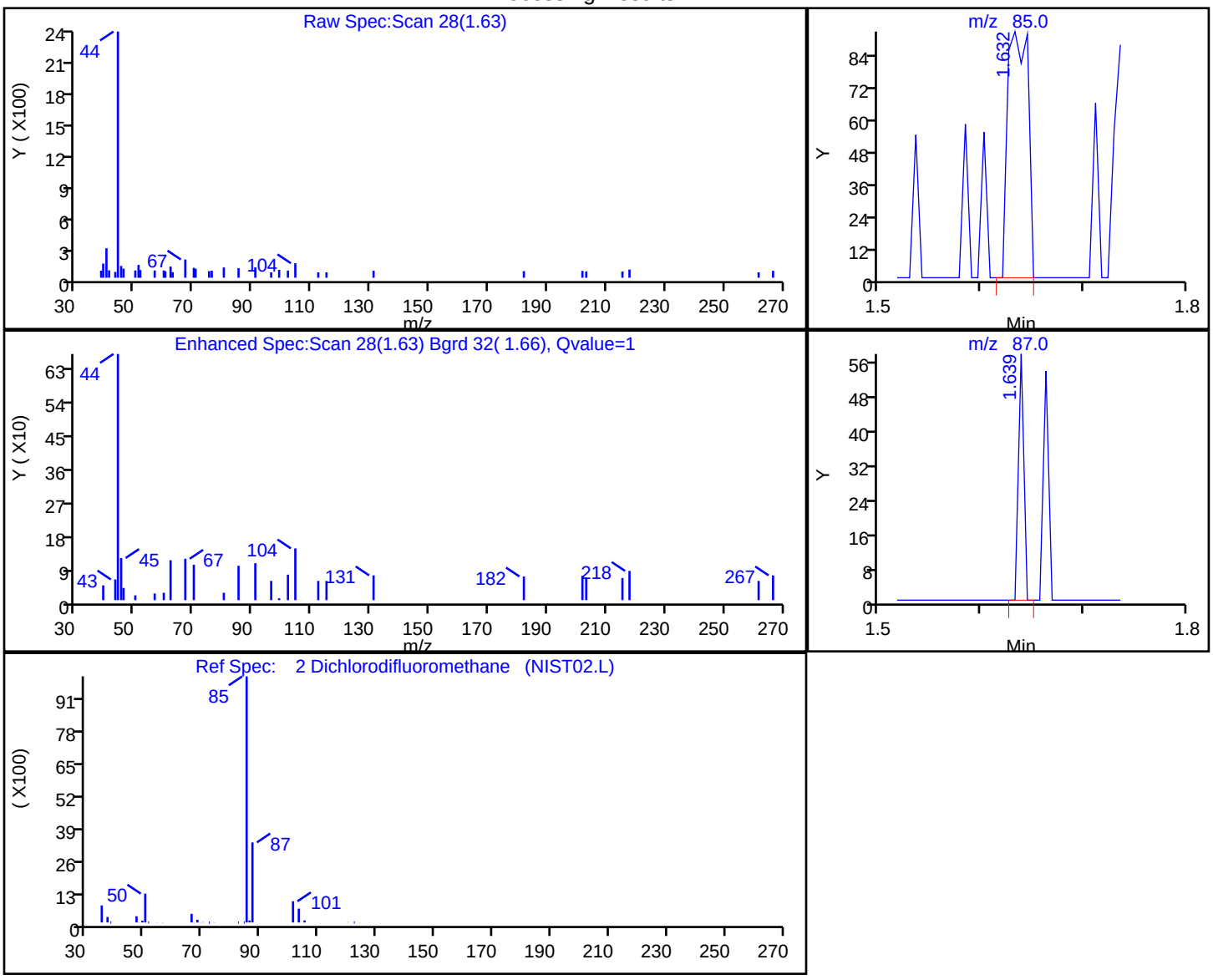
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81016.D		
Injection Date:	21-Mar-2018 01:16:30	Instrument ID:	CVOAMS9
Lims ID:	MB		
Client ID:			
Operator ID:		ALS Bottle#:	7 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.63	85.00	129	0.449817
1.64	87.00	21	

Reviewer: starzecm, 21-Mar-2018 01:37:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-505749/7

Matrix: Solid | Lab File ID: K81123.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/24/2018 08:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-505749/7

Matrix: Solid | Lab File ID: K81123.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/24/2018 08:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.000370	J	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		78-135
460-00-4	4-Bromofluorobenzene	93		67-126
1868-53-7	Dibromofluoromethane (Surr)	96		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-505749/7

Matrix: Solid Lab File ID: K81123.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/24/2018 08:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 505749 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81123.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 24-Mar-2018 08:10:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0069230-007
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:06:35 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:06:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.346	3.352	-0.006	0	297855	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	94	2304		0.3701	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	249083	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	95	127054	50.0	47.8	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.303	-0.001	0	149090	50.0	48.2	
* 61 Fluorobenzene	96	5.577	5.577	0.000	97	394098	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.278	0.012	0	18993	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.265	7.266	-0.001	97	485353	50.0	48.8	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	90	310933	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	84	132233	50.0	46.3	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	98	170017	50.0	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

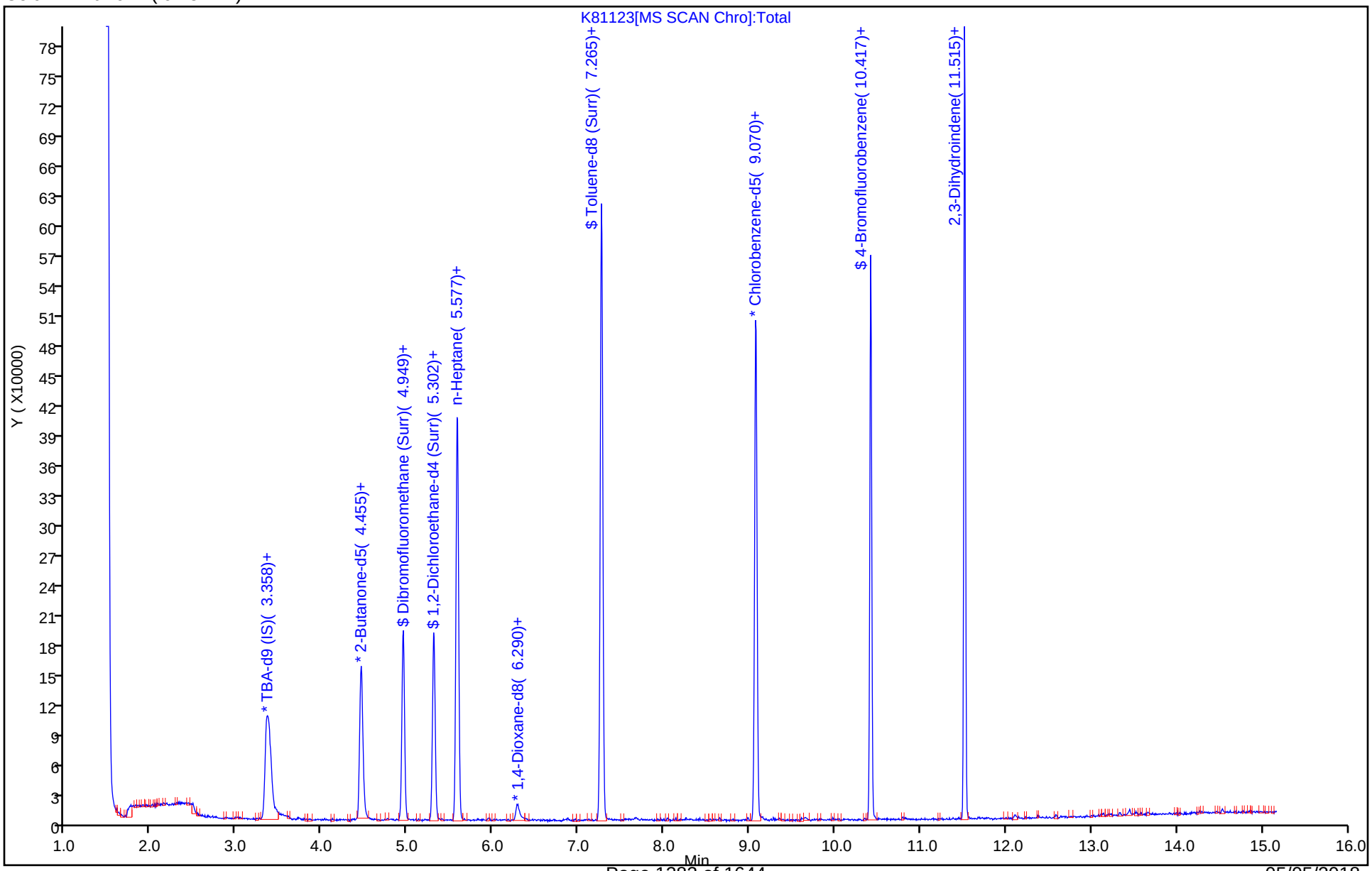
Report Date: 26-Mar-2018 13:06:36 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81123.D

Injection Date:	24-Mar-2018 08:10:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB	Lab Sample ID:	MB 460-505750/7-A	Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)

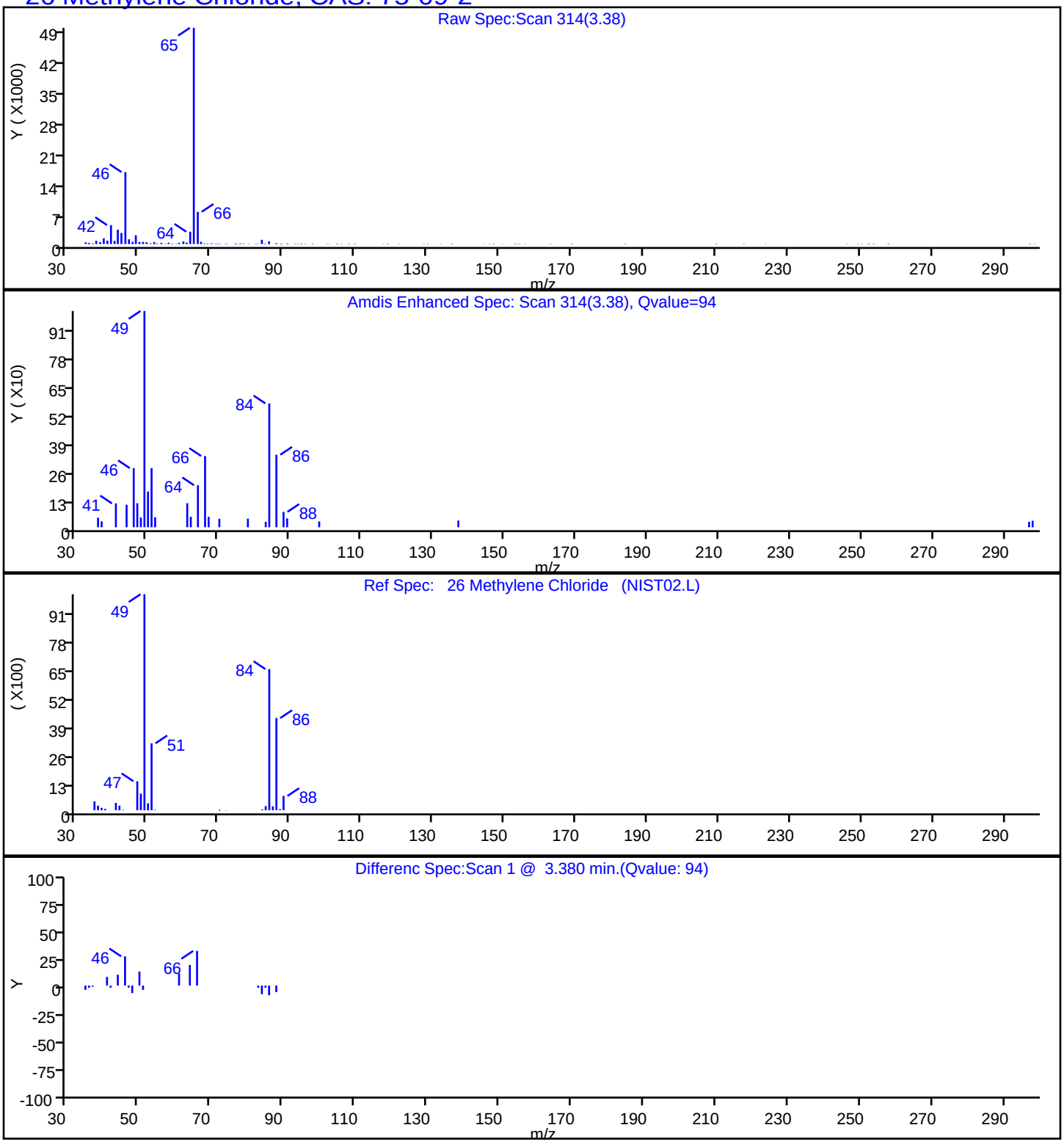


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81123.D

Injection Date:	24-Mar-2018 08:10:30	Instrument ID:	CVOAMS9
Lims ID:	MB	Lab Sample ID:	MB 460-505750/7-A
Client ID:			
Operator ID:		ALS Bottle#:	6 Worklist Smp#: 7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

26 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-505873/7

Matrix: Solid | Lab File ID: K81152.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/25/2018 06:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-505873/7

Matrix: Solid | Lab File ID: K81152.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/25/2018 06:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		78-135
460-00-4	4-Bromofluorobenzene	92		67-126
1868-53-7	Dibromofluoromethane (Surr)	97		61-149
2037-26-5	Toluene-d8 (Surr)	95		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-505873/7

Matrix: Solid Lab File ID: K81152.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/25/2018 06:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 505873 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81152.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 25-Mar-2018 06:54:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0069264-007
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 12:09:03 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 12:09:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.364	3.358	0.006	0	327472	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	264587	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	132285	50.0	48.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.303	0.006	0	156357	50.0	49.4	
* 61 Fluorobenzene	96	5.583	5.583	0.000	98	402985	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	19740	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.265	7.266	-0.001	97	478064	50.0	47.6	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	90	314287	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	84	132778	50.0	46.0	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	97	177430	50.0	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

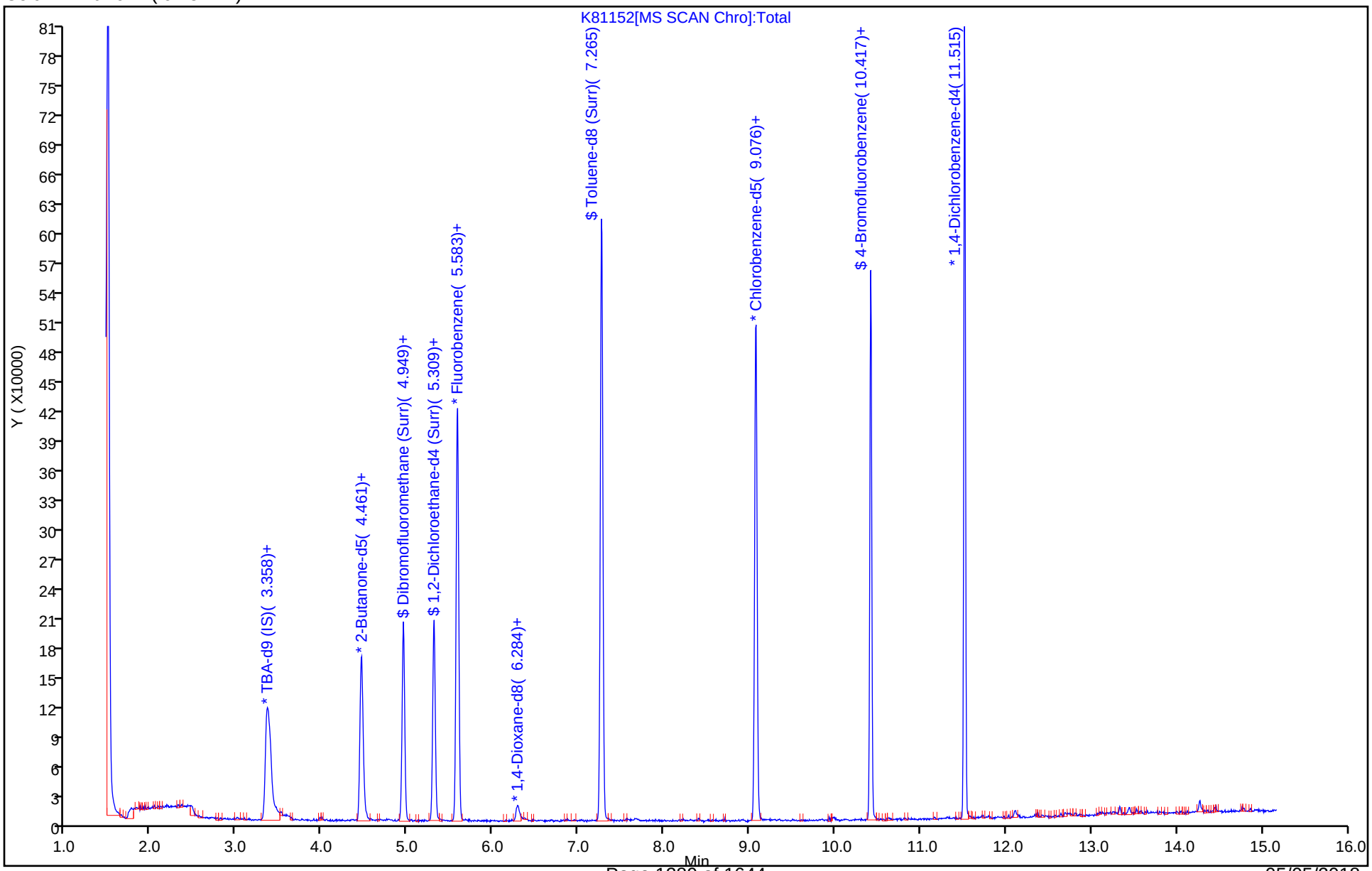
Report Date: 26-Mar-2018 12:09:04 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81152.D

Injection Date:	25-Mar-2018 06:54:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB	Lab Sample ID:	MB 460-505874/7-A	Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-507466/9

Matrix: Solid | Lab File ID: B28120.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2018 14:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-507466/9

Matrix: Solid | Lab File ID: B28120.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2018 14:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		78-135
460-00-4	4-Bromofluorobenzene	83		67-126
1868-53-7	Dibromofluoromethane (Surr)	114		61-149
2037-26-5	Toluene-d8 (Surr)	94		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-507466/9

Matrix: Solid Lab File ID: B28120.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2018 14:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507466 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28120.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 31-Mar-2018 14:28:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0069609-009
Operator ID: Instrument ID: CVOAMS2

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 16:26:21 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: xuyvo Date: 02-Apr-2018 16:26:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 24 TBA-d9 (IS)	65	2.736	2.736	0.000	0	219446	1000.0	1000.0	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	183312	250.0	250.0	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	96	125068	50.0	56.9	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.702	4.702	0.000	0	132128	50.0	57.4	
* 55 Fluorobenzene	96	4.999	4.999	0.000	97	390759	50.0	50.0	
* 61 1,4-Dioxane-d8	96	5.856	5.845	0.011	0	11274	1000.0	1000.0	
$ 70 Toluene-d8 (Surr)	98	6.908	6.908	0.000	98	402605	50.0	46.8	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	89	288320	50.0	50.0	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	95	100318	50.0	41.7	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	96	132875	50.0	50.0	

Reagents:

8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent

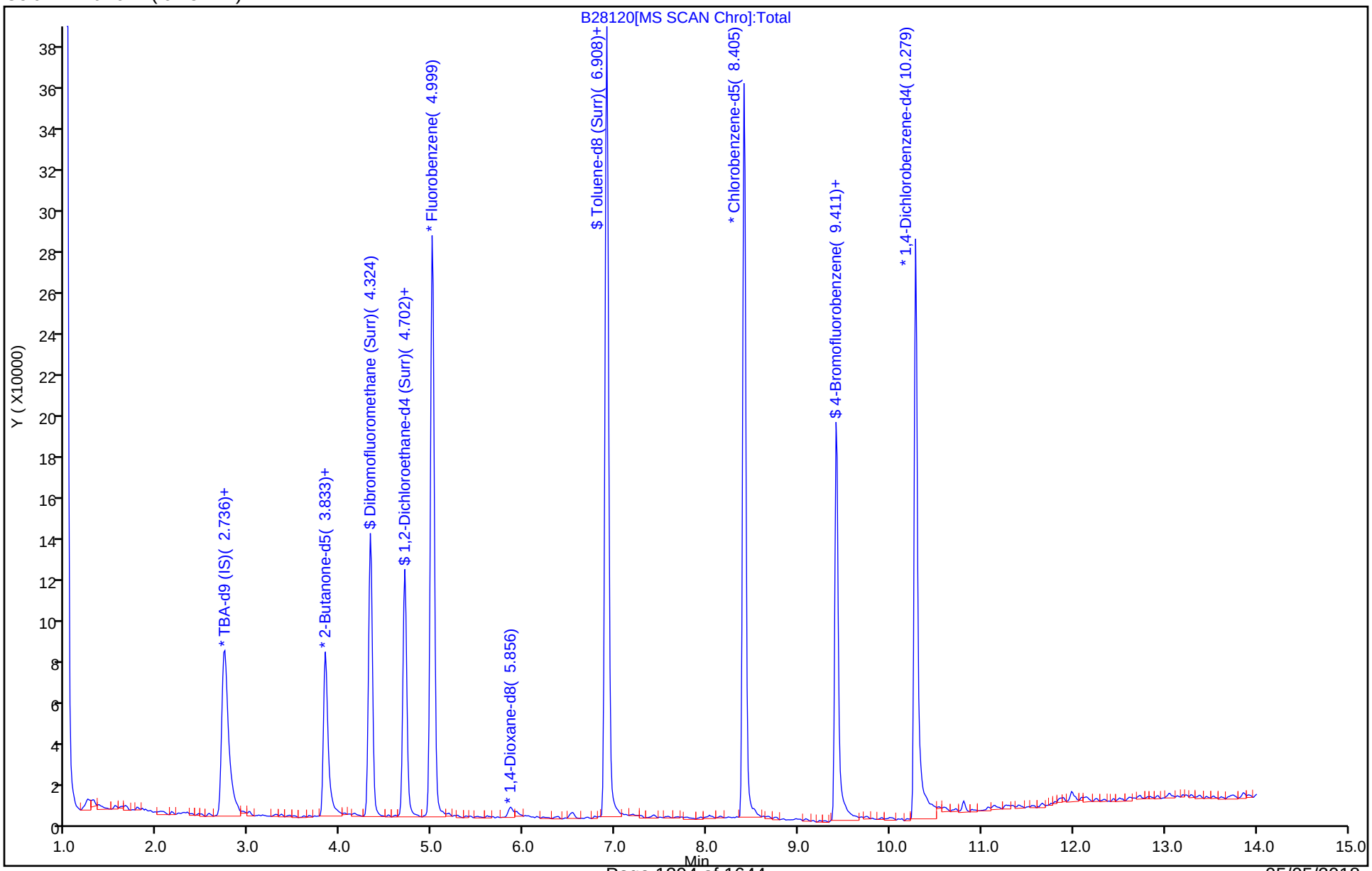
Report Date: 02-Apr-2018 16:26:22 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28120.D

Injection Date:	31-Mar-2018 14:28:30	Instrument ID:	CVOAMS2	Operator ID:	
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260S_2	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



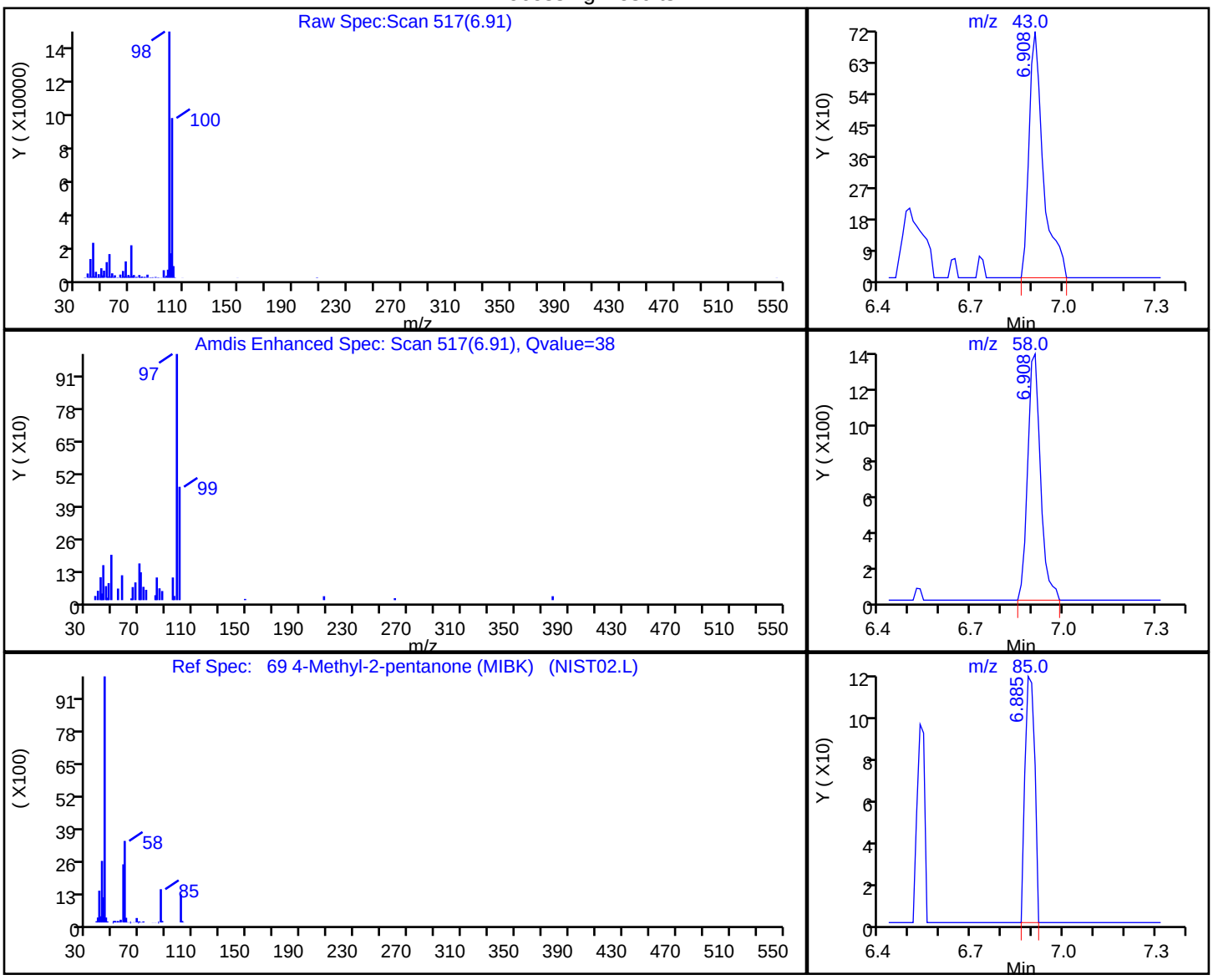
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28120.D
Injection Date: 31-Mar-2018 14:28:30 Instrument ID: CVOAMS2
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

69 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
6.91	43.00	2322	0.953815
6.91	58.00	4058	
6.88	85.00	249	
6.91	100.00	258799	

Reviewer: xuyvo, 02-Apr-2018 16:26:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

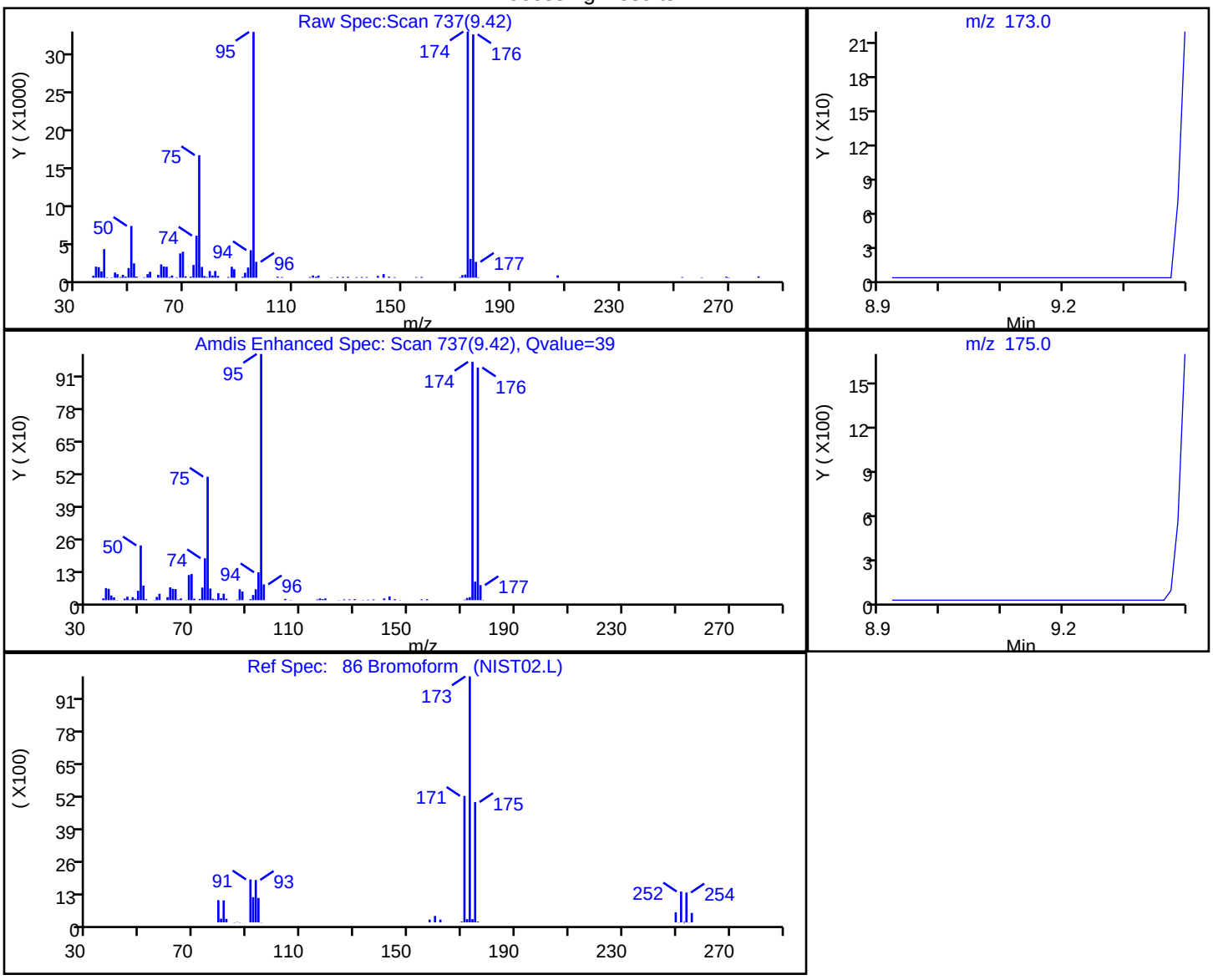
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28120.D
Injection Date: 31-Mar-2018 14:28:30 Instrument ID: CVOAMS2
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

86 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
9.42	173.00	1031	0.663913
9.41	175.00	7087	

Reviewer: kaewink, 02-Apr-2018 10:29:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-510106/7

Matrix: Solid | Lab File ID: D48515.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/11/2018 10:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-510106/7

Matrix: Solid | Lab File ID: D48515.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/11/2018 10:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.000211	J	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	78		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-510106/7

Matrix: Solid Lab File ID: D48515.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/11/2018 10:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 510106 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48515.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 11-Apr-2018 10:54:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0070170-007
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Apr-2018 13:55:18 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: baronm Date: 11-Apr-2018 13:46:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
26 Methylene Chloride	84	3.551	3.551	0.000	29	1221		0.2111	
* 27 TBA-d9 (IS)	65	3.557	3.569	-0.012	39	483043	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.862	4.868	-0.006	0	388889	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	5.453	5.453	0.000	95	194899	50.0	39.2	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.880	5.880	0.000	97	211637	50.0	40.6	
* 61 Fluorobenzene	96	6.221	6.221	0.000	98	722662	50.0	50.0	
* 67 1,4-Dioxane-d8	96	7.069	7.069	0.000	0	30254	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.007	8.008	-0.001	98	699949	50.0	48.7	
* 89 Chlorobenzene-d5	117	9.349	9.349	0.000	89	466354	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.306	10.306	0.000	0	185827	50.0	50.9	
* 116 1,4-Dichlorobenzene-d4	152	11.171	11.172	-0.001	97	234864	50.0	50.0	

Reagents:

8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent

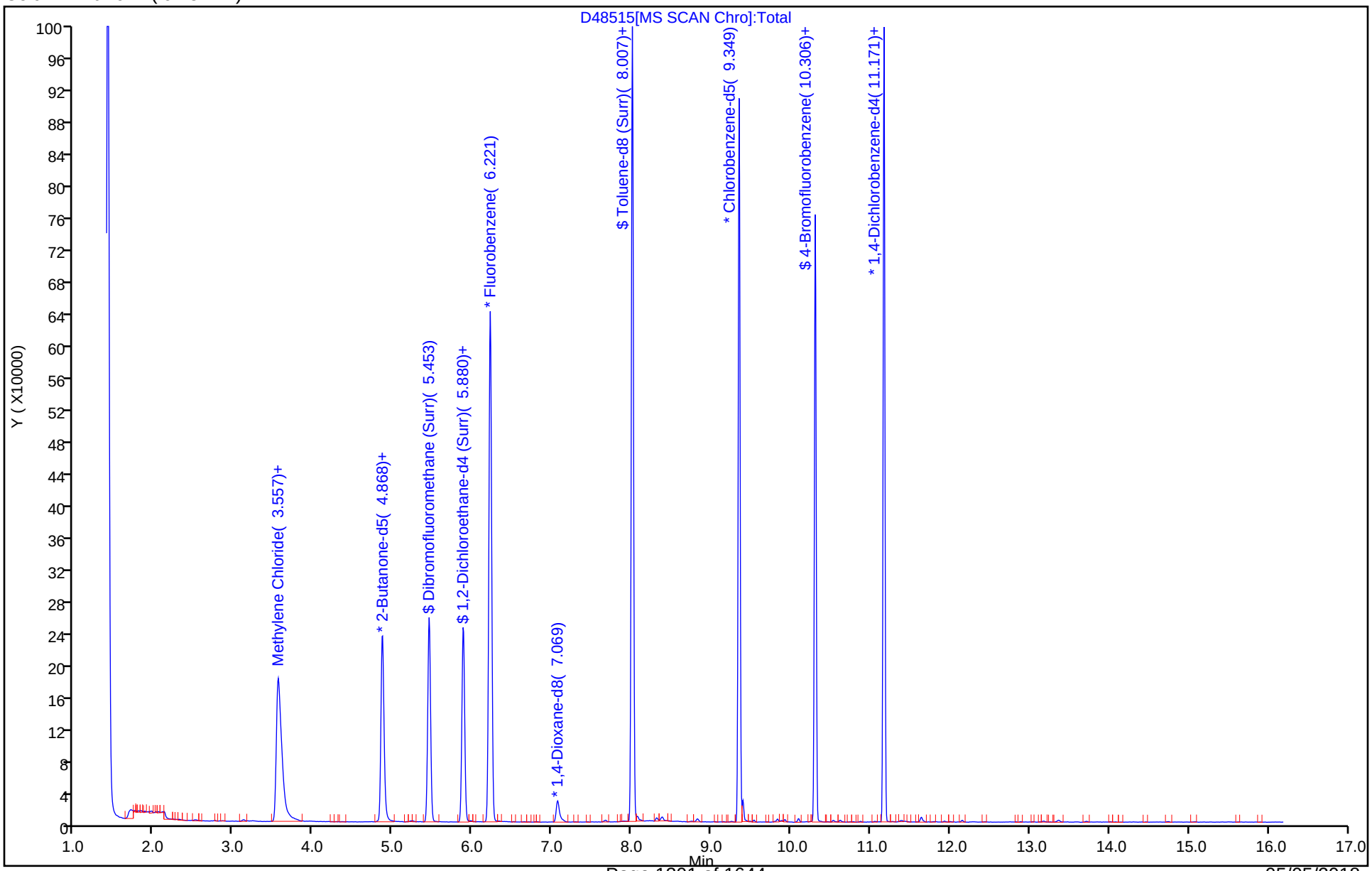
Report Date: 11-Apr-2018 13:55:29 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48515.D

Injection Date:	11-Apr-2018 10:54:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Report Date: 11-Apr-2018 13:55:29 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48515.D

Injection Date: 11-Apr-2018 10:54:30 Instrument ID: CVOAMS4

Lims ID: MB

Client ID:

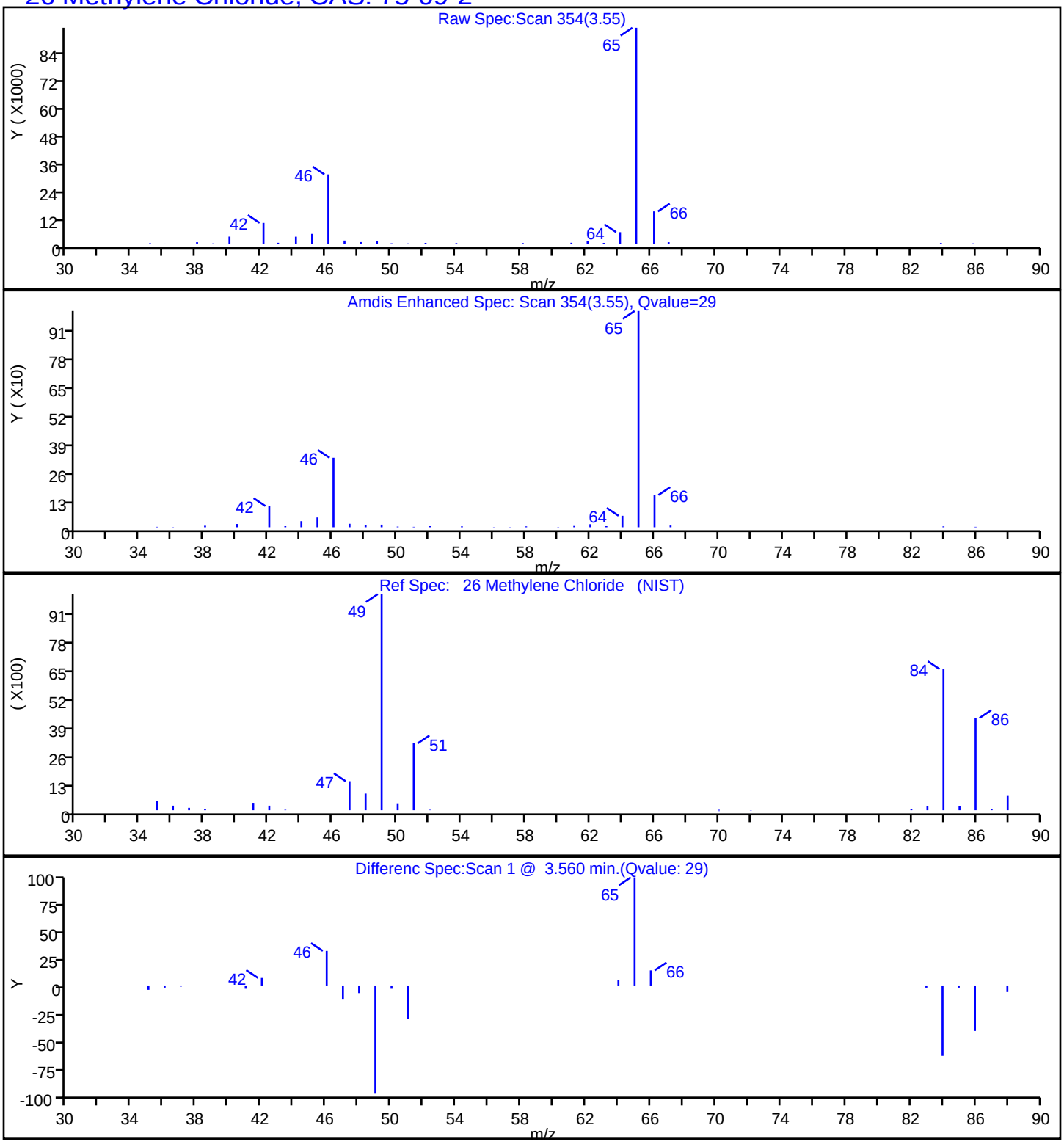
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-510660/8

Matrix: Solid | Lab File ID: K81915.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/12/2018 23:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-510660/8

Matrix: Solid | Lab File ID: K81915.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/12/2018 23:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		78-135
460-00-4	4-Bromofluorobenzene	112		67-126
1868-53-7	Dibromofluoromethane (Surr)	120		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-510660/8

Matrix: Solid Lab File ID: K81915.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/12/2018 23:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 510660 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81915.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 12-Apr-2018 23:48:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0070288-008
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 06:48:56 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: tupayachia Date: 13-Apr-2018 06:49:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.364	3.376	-0.012	0	306522	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	216470	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	170556	50.0	60.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	159416	50.0	58.9	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	453158	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	28202	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	99	567784	50.0	49.7	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	367485	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	93	173617	50.0	55.9	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	211471	50.0	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

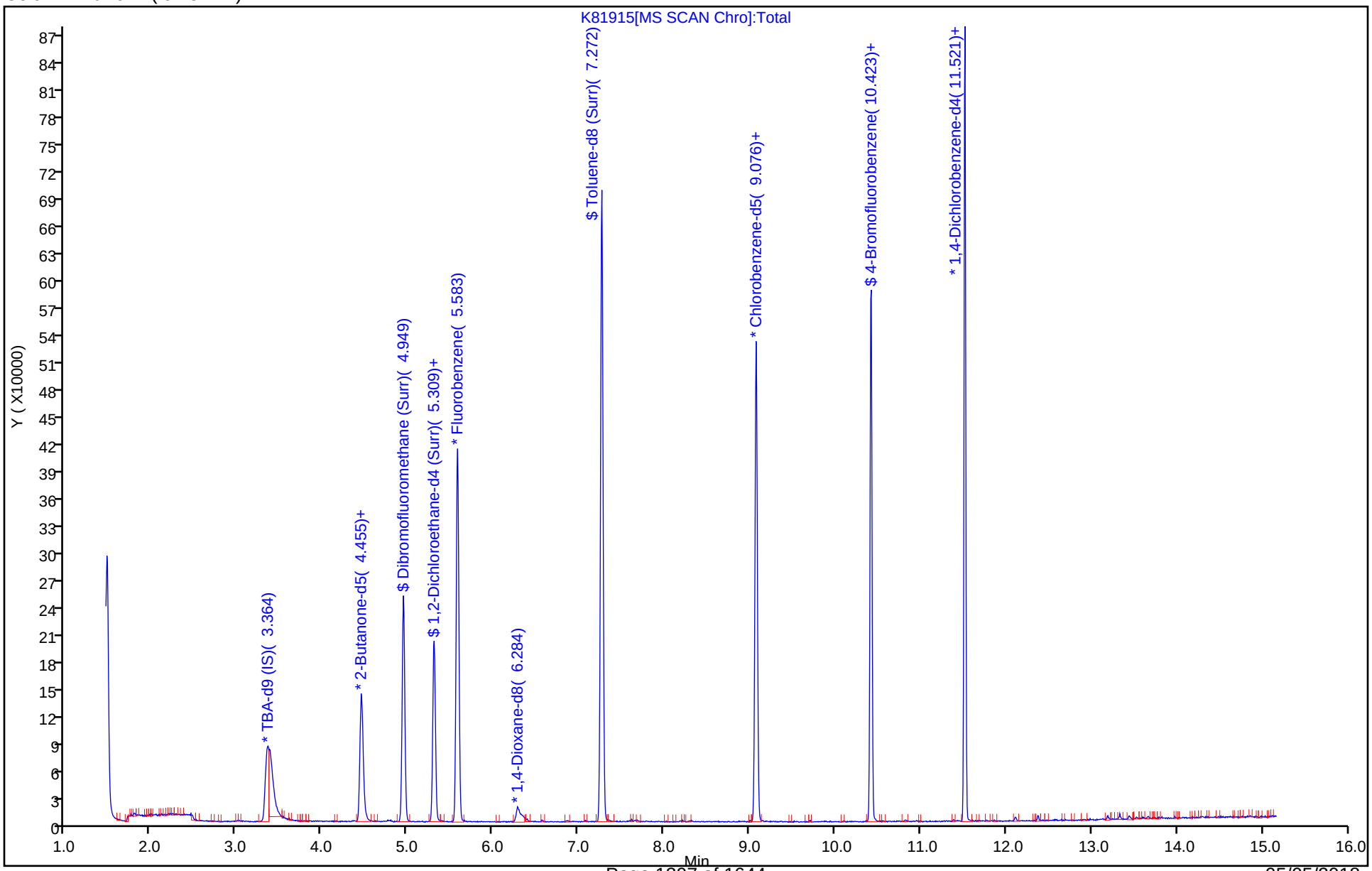
Report Date: 13-Apr-2018 06:49:07 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81915.D

Injection Date:	12-Apr-2018 23:48:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-510972/7

Matrix: Solid | Lab File ID: K81968.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/13/2018 22:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-510972/7

Matrix: Solid | Lab File ID: K81968.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/13/2018 22:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		78-135
460-00-4	4-Bromofluorobenzene	113		67-126
1868-53-7	Dibromofluoromethane (Surr)	120		61-149
2037-26-5	Toluene-d8 (Surr)	101		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-510972/7

Matrix: Solid Lab File ID: K81968.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/13/2018 22:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 510972 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81968.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 13-Apr-2018 22:23:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0070351-007
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 11:42:34 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: delpolitov Date: 17-Apr-2018 11:43:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.382	3.394	-0.012	0	320238	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	215141	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	179071	50.0	59.9	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.309	0.006	0	161368	50.0	56.6	
* 61 Fluorobenzene	96	5.589	5.583	0.006	99	477305	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.302	-0.012	0	28409	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	601143	50.0	50.4	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	86	383448	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	92	183604	50.0	56.6	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	227702	50.0	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

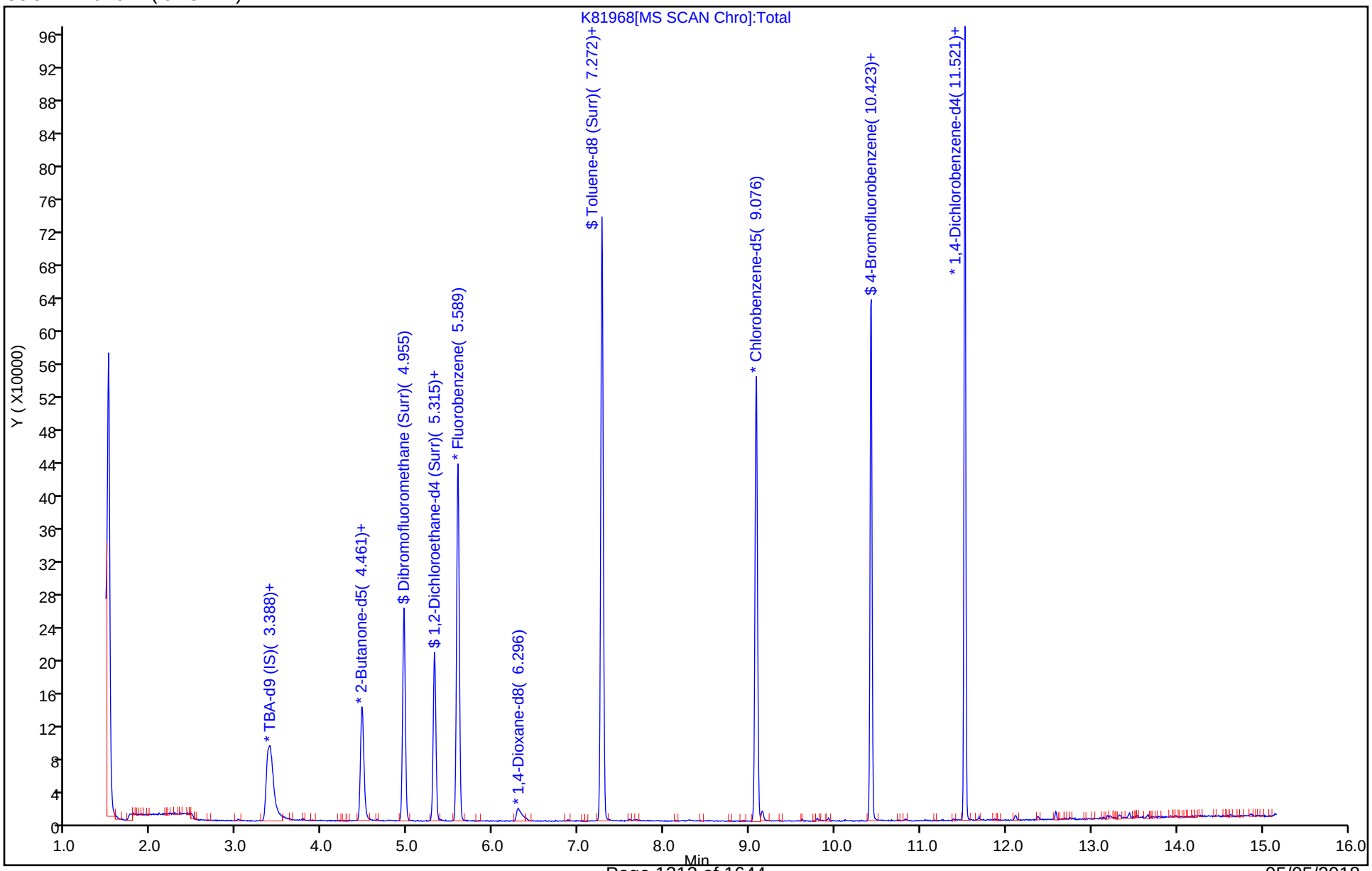
Report Date: 17-Apr-2018 11:43:22 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81968.D

Injection Date:	13-Apr-2018 22:23:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-511293/8

Matrix: Solid | Lab File ID: K82038.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 07:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-511293/8

Matrix: Solid | Lab File ID: K82038.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 07:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		78-135
460-00-4	4-Bromofluorobenzene	109		67-126
1868-53-7	Dibromofluoromethane (Surr)	120		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-511293/8

Matrix: Solid Lab File ID: K82038.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/16/2018 07:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511293 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82038.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Apr-2018 07:18:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0070418-008
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 16-Apr-2018 10:48:15 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: delpolitov Date: 16-Apr-2018 10:48:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.370	3.370	0.000	0	272392	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.455	4.461	-0.006	0	184494	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.955	-0.006	96	165830	50.0	60.0	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.315	-0.006	0	149590	50.0	56.8	
* 61 Fluorobenzene	96	5.583	5.589	-0.006	99	441313	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.284	0.006	0	26167	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	98	572855	50.0	49.3	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	373386	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.423	10.424	-0.001	97	172023	50.0	54.5	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	94	217563	50.0	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

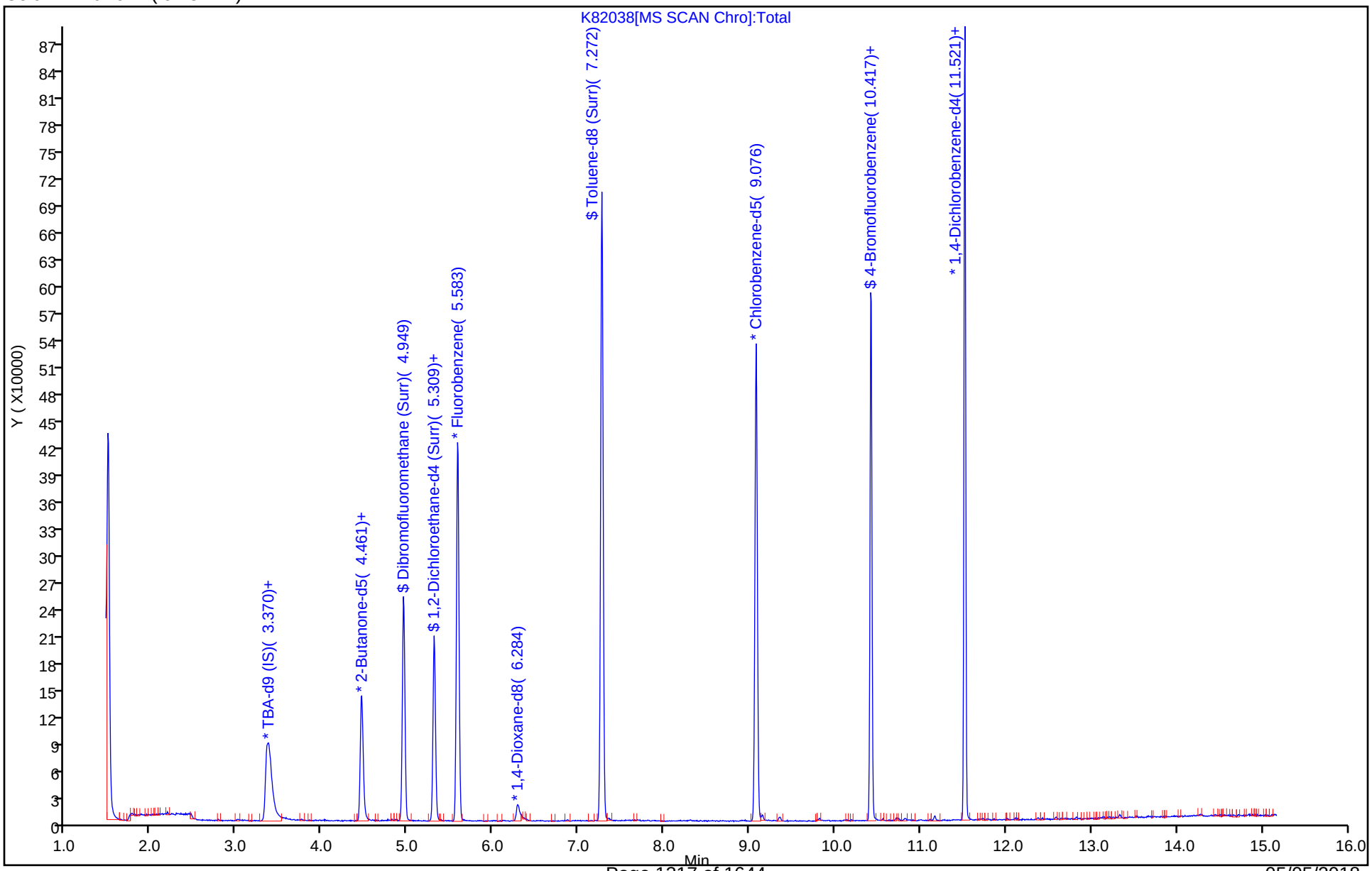
Report Date: 16-Apr-2018 10:48:16 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82038.D

Injection Date:	16-Apr-2018 07:18:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-511471/8

Matrix: Solid | Lab File ID: K82067.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 20:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.00455	J	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-511471/8

Matrix: Solid | Lab File ID: K82067.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 20:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		78-135
460-00-4	4-Bromofluorobenzene	112		67-126
1868-53-7	Dibromofluoromethane (Surr)	122		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-511471/8

Matrix: Solid Lab File ID: K82067.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/16/2018 20:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511471 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82067.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Apr-2018 20:33:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0070455-008
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 14:30:15 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: delpolitov Date: 17-Apr-2018 14:30:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
18 Acetone	43	3.029	3.004	0.024	84	4518		4.55	
* 25 TBA-d9 (IS)	65	3.382	3.376	0.006	0	355957	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.467	4.455	0.012	0	232211	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	97	196701	50.0	61.2	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.309	0.006	0	176870	50.0	57.7	
* 61 Fluorobenzene	96	5.589	5.583	0.006	99	512821	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.296	6.284	0.012	0	28576	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	657631	50.0	48.9	
* 89 Chlorobenzene-d5	117	9.082	9.076	0.006	85	432832	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	92	205009	50.0	56.0	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	258668	50.0	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

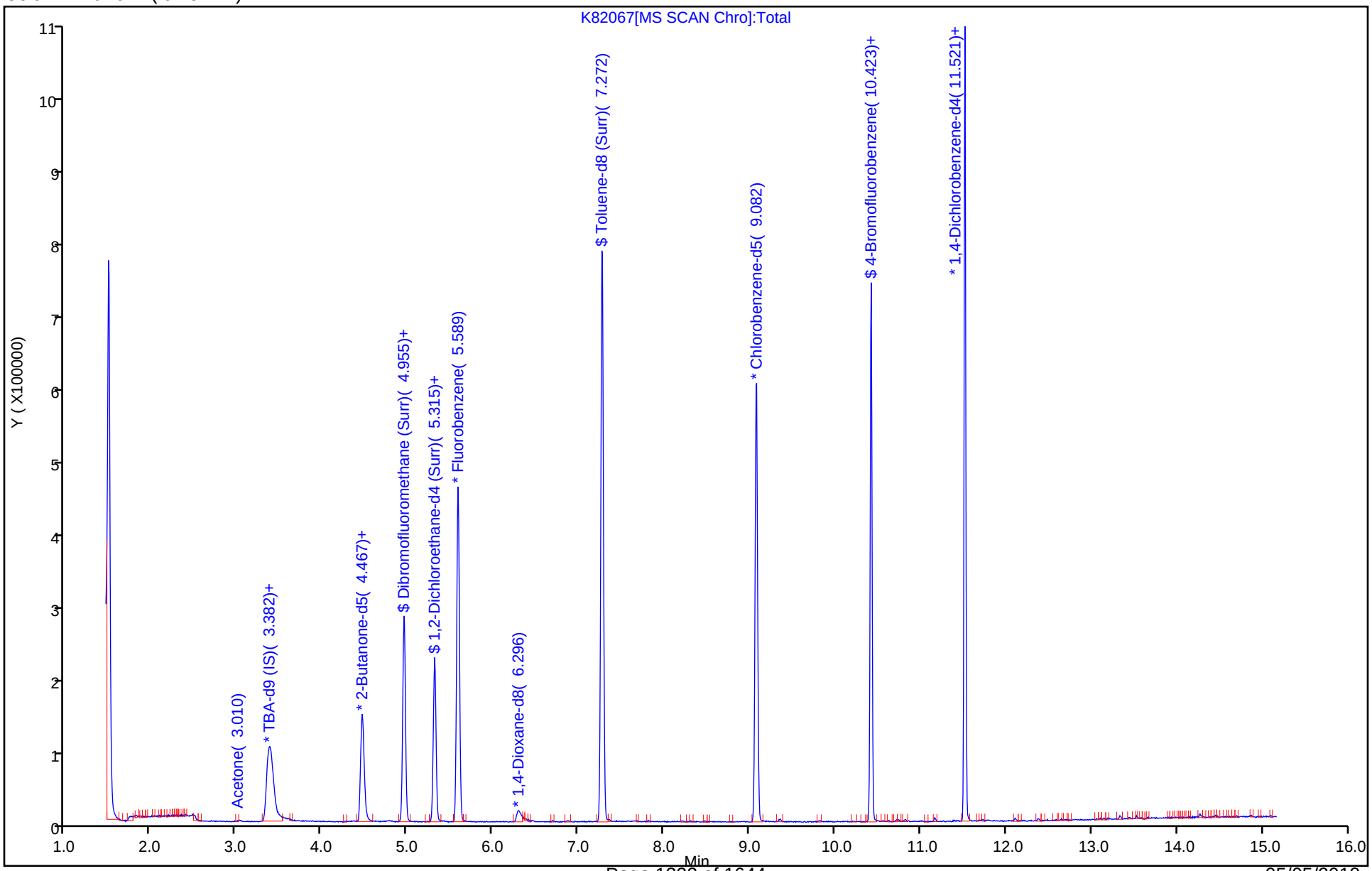
Report Date: 17-Apr-2018 14:30:16 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82067.D

Injection Date:	16-Apr-2018 20:33:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Report Date: 17-Apr-2018 14:30:16 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82067.D

Injection Date: 16-Apr-2018 20:33:30 Instrument ID: CVOAMS9

Lims ID: MB

Client ID:

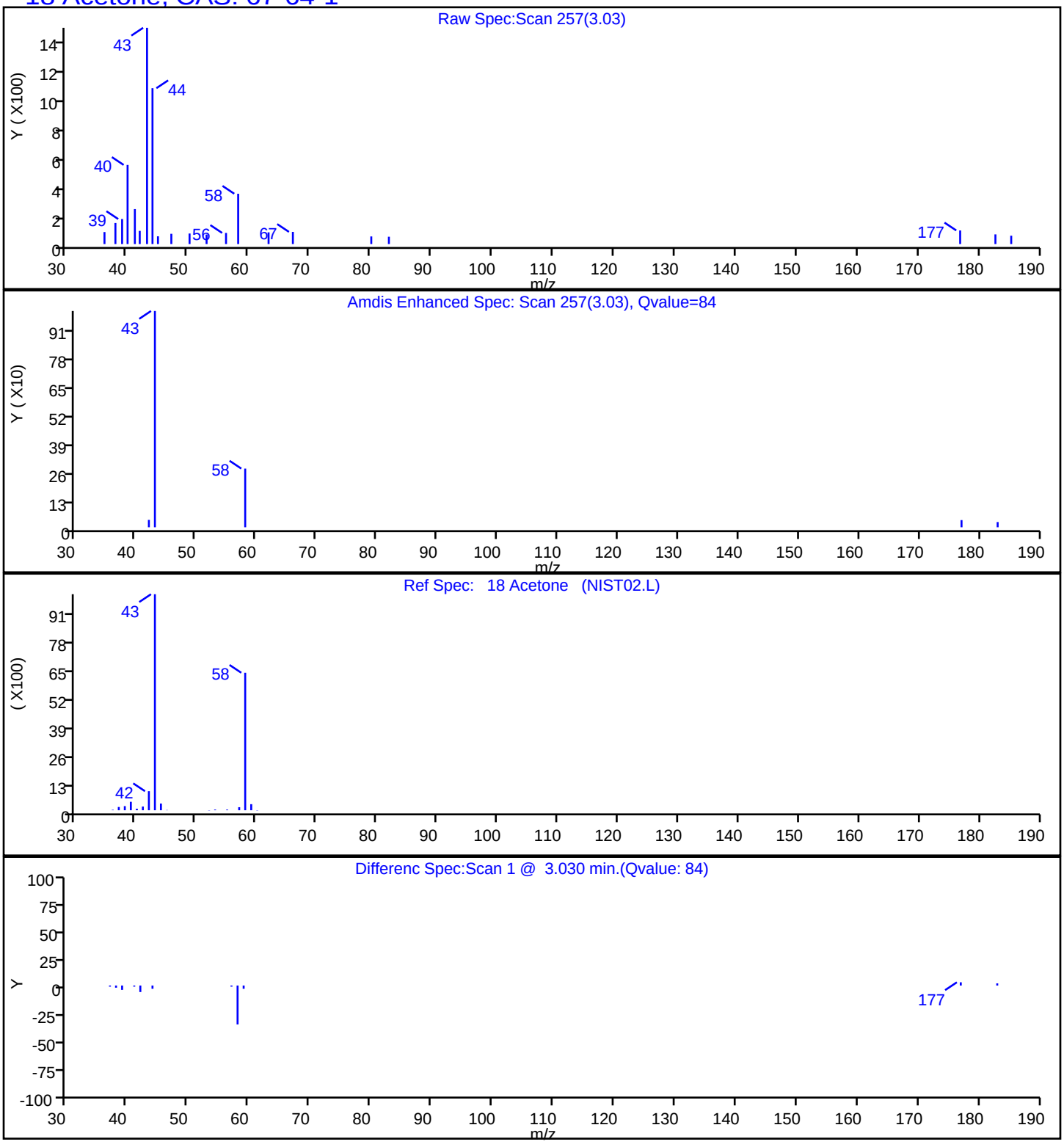
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-511498/8

Matrix: Solid | Lab File ID: D48764.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 21:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-511498/8

Matrix: Solid | Lab File ID: D48764.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 21:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		78-135
460-00-4	4-Bromofluorobenzene	95		67-126
1868-53-7	Dibromofluoromethane (Surr)	83		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-511498/8

Matrix: Solid Lab File ID: D48764.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/16/2018 21:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511498 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48764.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Apr-2018 21:36:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 460-0070463-008
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 17:05:12 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 17-Apr-2018 09:44:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.594	3.600	-0.006	51	398416	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.904	4.904	0.000	0	357262	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	5.490	5.496	-0.006	95	188114	50.0	41.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.923	5.929	-0.007	96	202282	50.0	42.5	
* 61 Fluorobenzene	96	6.264	6.264	0.000	98	659898	50.0	50.0	
* 67 1,4-Dioxane-d8	96	7.099	7.105	-0.006	0	24197	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.038	8.038	0.000	98	636245	50.0	49.9	
* 89 Chlorobenzene-d5	117	9.373	9.373	0.000	89	413114	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	157938	50.0	47.7	
* 116 1,4-Dichlorobenzene-d4	152	11.190	11.196	-0.006	97	213070	50.0	50.0	

Reagents:

8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent

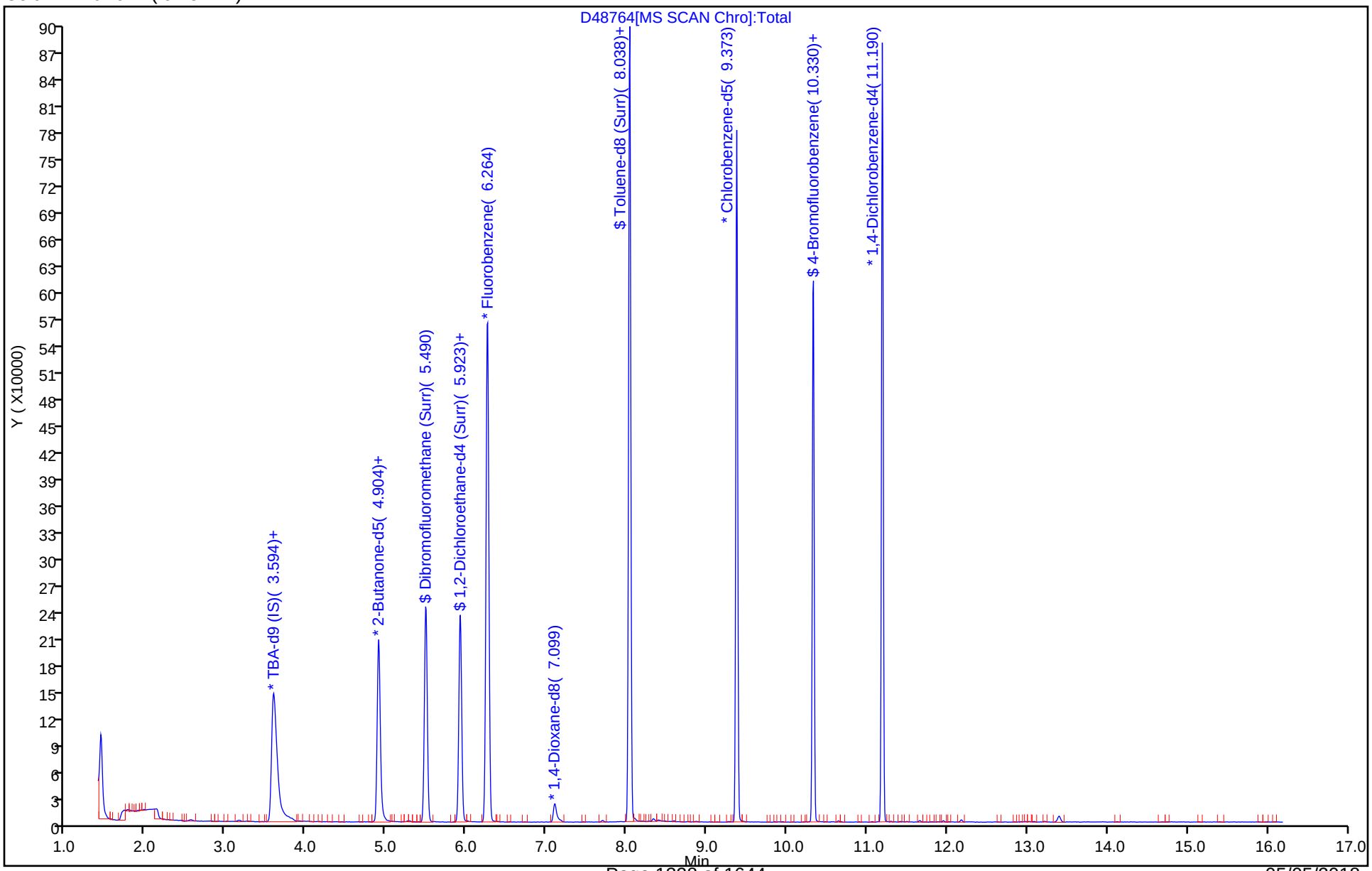
Report Date: 17-Apr-2018 17:06:48 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48764.D

Injection Date:	16-Apr-2018 21:36:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-512479/8

Matrix: Solid | Lab File ID: D48924.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/19/2018 20:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-512479/8

Matrix: Solid | Lab File ID: D48924.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/19/2018 20:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.000267	J	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		78-135
460-00-4	4-Bromofluorobenzene	97		67-126
1868-53-7	Dibromofluoromethane (Surr)	80		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-512479/8

Matrix: Solid Lab File ID: D48924.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/19/2018 20:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512479 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48924.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Apr-2018 20:38:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0070668-008
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 17:13:49 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: delpolitov Date: 23-Apr-2018 17:13:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
26 Methylene Chloride	84	3.563	3.563	0.000	36	1041		0.2672	
* 27 TBA-d9 (IS)	65	3.576	3.576	0.000	38	349488	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.880	4.886	-0.006	0	304112	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	5.471	5.472	-0.001	95	134609	50.0	40.2	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.898	5.904	-0.006	96	143596	50.0	40.9	
* 61 Fluorobenzene	96	6.240	6.240	0.000	98	486578	50.0	50.0	
* 67 1,4-Dioxane-d8	96	7.081	7.087	-0.006	0	19688	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.020	8.020	0.000	98	433878	50.0	48.6	
* 89 Chlorobenzene-d5	117	9.361	9.361	0.000	88	289338	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.318	10.318	0.000	0	112804	50.0	48.7	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.184	-0.006	97	148897	50.0	50.0	

Reagents:

8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent

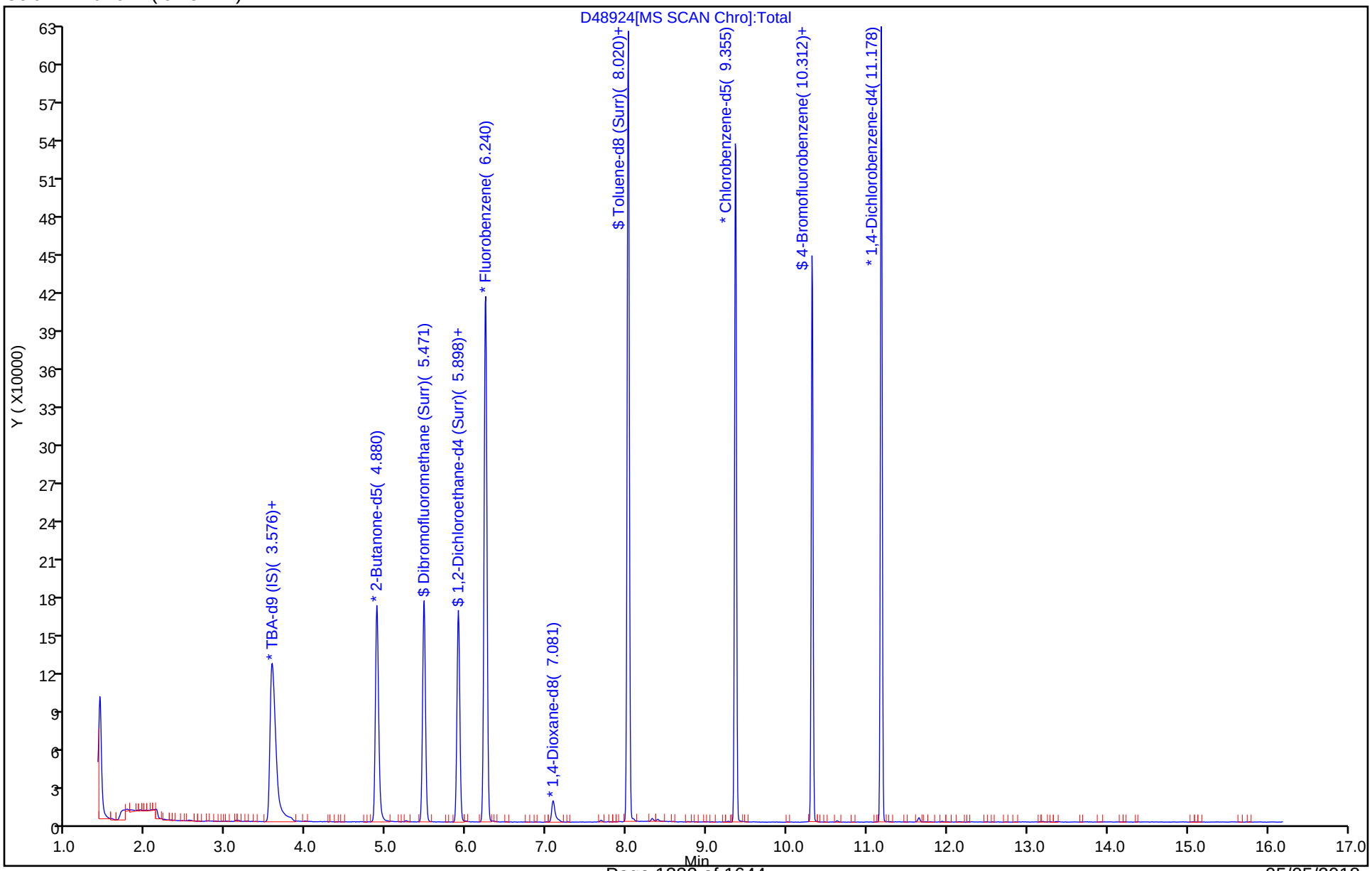
Report Date: 23-Apr-2018 17:13:50 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48924.D

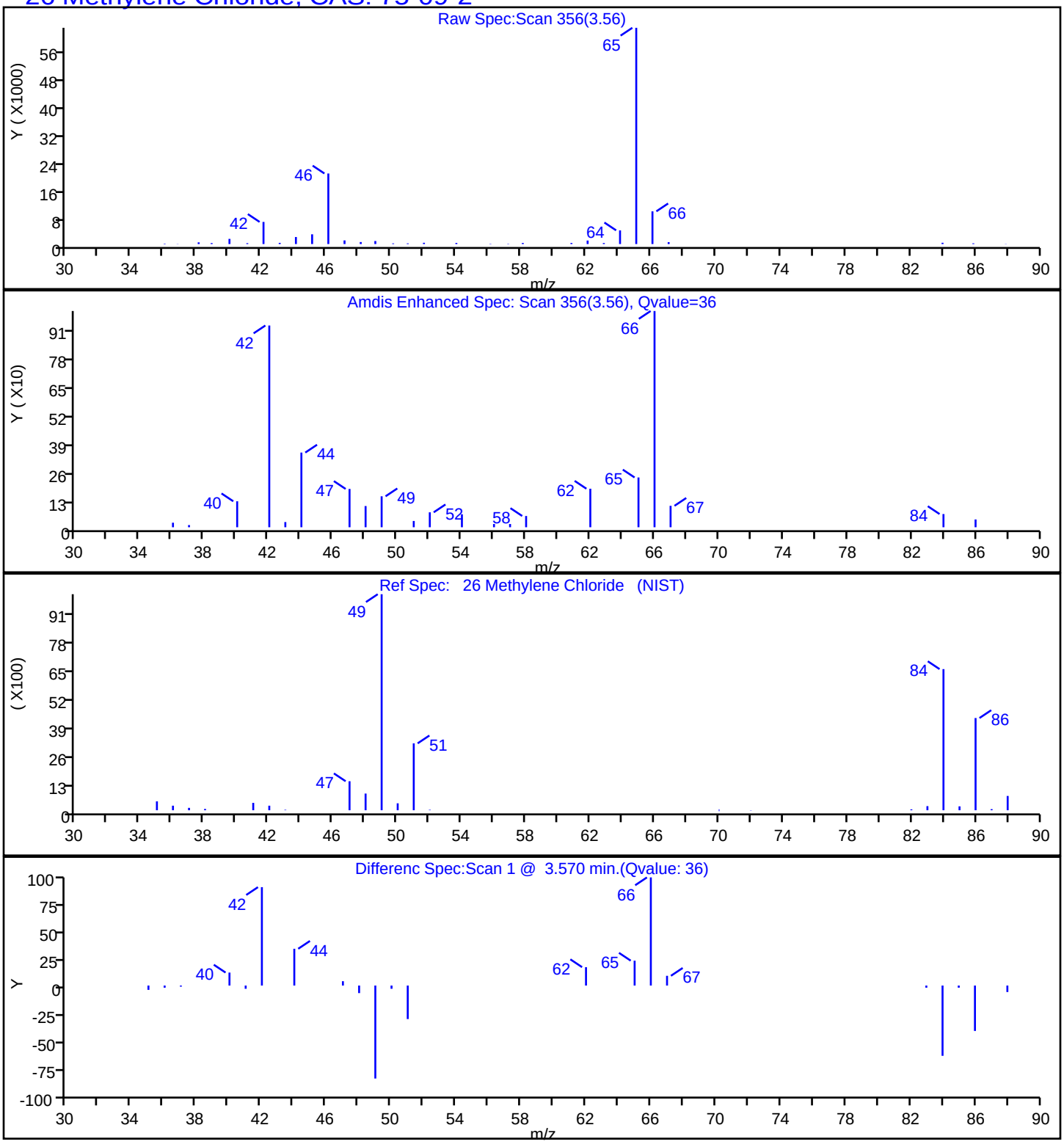
Injection Date:	19-Apr-2018 20:38:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48924.D
Injection Date: 19-Apr-2018 20:38:30 Instrument ID: CVOAMS4
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-512623/7

Matrix: Solid | Lab File ID: D48950.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/20/2018 08:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-512623/7

Matrix: Solid | Lab File ID: D48950.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/20/2018 08:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		78-135
460-00-4	4-Bromofluorobenzene	98		67-126
1868-53-7	Dibromofluoromethane (Surr)	77		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-512623/7

Matrix: Solid Lab File ID: D48950.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2018 08:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512623 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48950.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Apr-2018 08:59:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0070697-007
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 20-Apr-2018 13:59:17 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: delpolitov Date: 20-Apr-2018 13:06:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.563	3.575	-0.012	46	285783	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.868	4.874	-0.006	0	264915	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	5.459	5.465	-0.006	95	140232	50.0	38.6	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.886	5.892	-0.006	95	147595	50.0	38.8	
* 61 Fluorobenzene	96	6.227	6.233	-0.006	99	528236	50.0	50.0	
* 67 1,4-Dioxane-d8	96	7.069	7.075	-0.006	0	17701	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.008	8.014	-0.006	98	480752	50.0	48.6	
* 89 Chlorobenzene-d5	117	9.349	9.355	-0.006	89	320679	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.306	10.312	-0.006	0	123427	50.0	49.0	
* 116 1,4-Dichlorobenzene-d4	152	11.172	11.172	0.000	97	161864	50.0	50.0	

Reagents:

8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00169 Amount Added: 1.00 Units: uL Run Reagent

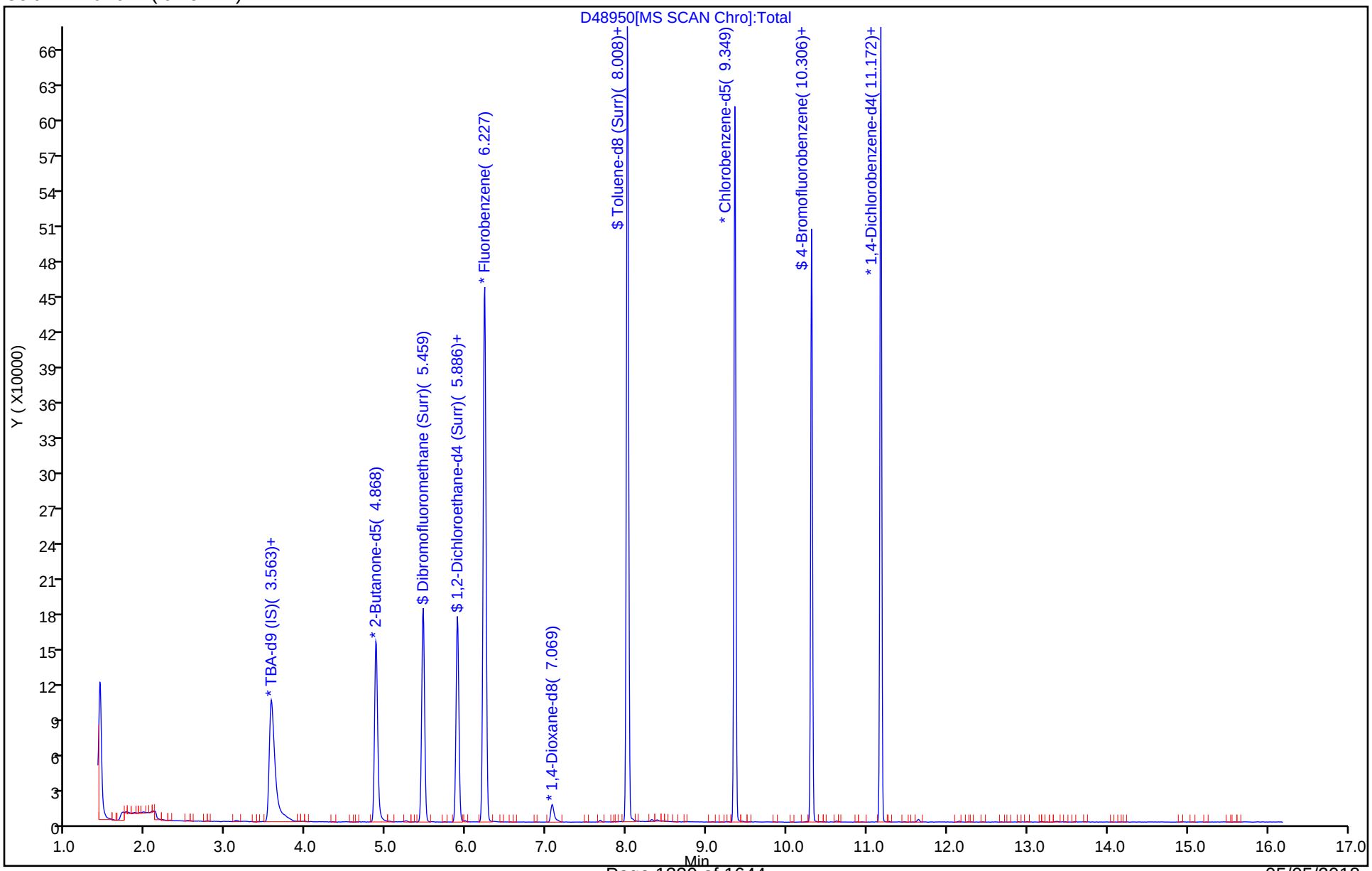
Report Date: 20-Apr-2018 13:59:44 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48950.D

Injection Date:	20-Apr-2018 08:59:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-513435/7

Matrix: Solid | Lab File ID: K82440.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/23/2018 19:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-513435/7

Matrix: Solid | Lab File ID: K82440.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/23/2018 19:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		78-135
460-00-4	4-Bromofluorobenzene	100		67-126
1868-53-7	Dibromofluoromethane (Surr)	97		61-149
2037-26-5	Toluene-d8 (Surr)	92		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-513435/7

Matrix: Solid Lab File ID: K82440.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/23/2018 19:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 513435 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82440.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 23-Apr-2018 19:41:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0070876-007
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 24-Apr-2018 12:10:37 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: colladox Date: 23-Apr-2018 20:35:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.370	3.382	-0.012	0	319720	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.455	4.461	-0.006	0	206415	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.955	-0.006	97	183696	50.0	48.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	162297	50.0	46.2	
* 61 Fluorobenzene	96	5.583	5.583	0.000	100	471420	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.284	6.296	-0.012	0	27604	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	614279	50.0	46.1	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	434847	50.0	50.0	
94 n-Butyl acrylate	73	9.789	9.783	0.006	50	245		0.1064	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	97	215687	50.0	50.1	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	274523	50.0	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

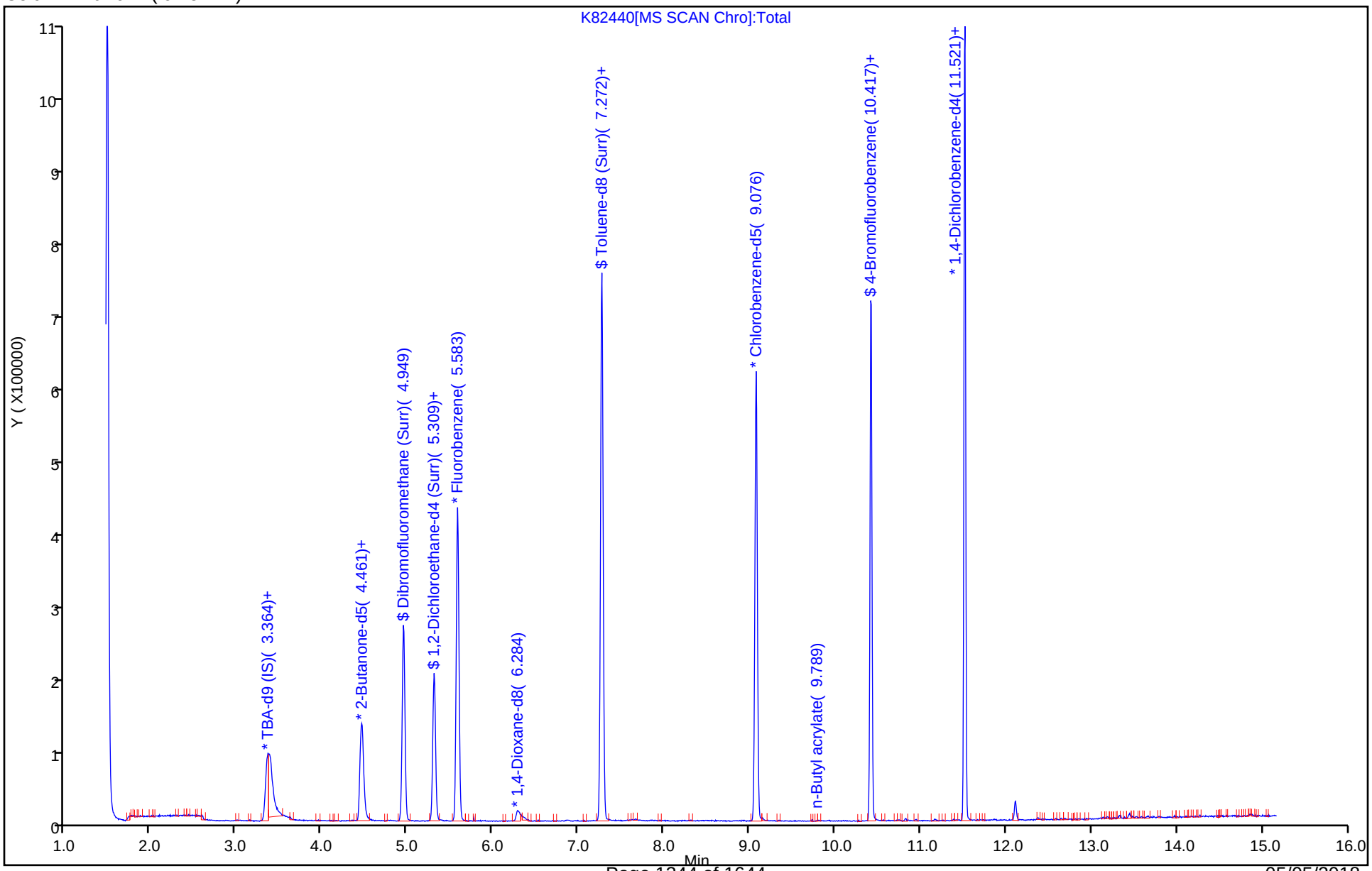
Report Date: 24-Apr-2018 12:17:58 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82440.D

Injection Date:	23-Apr-2018 19:41:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



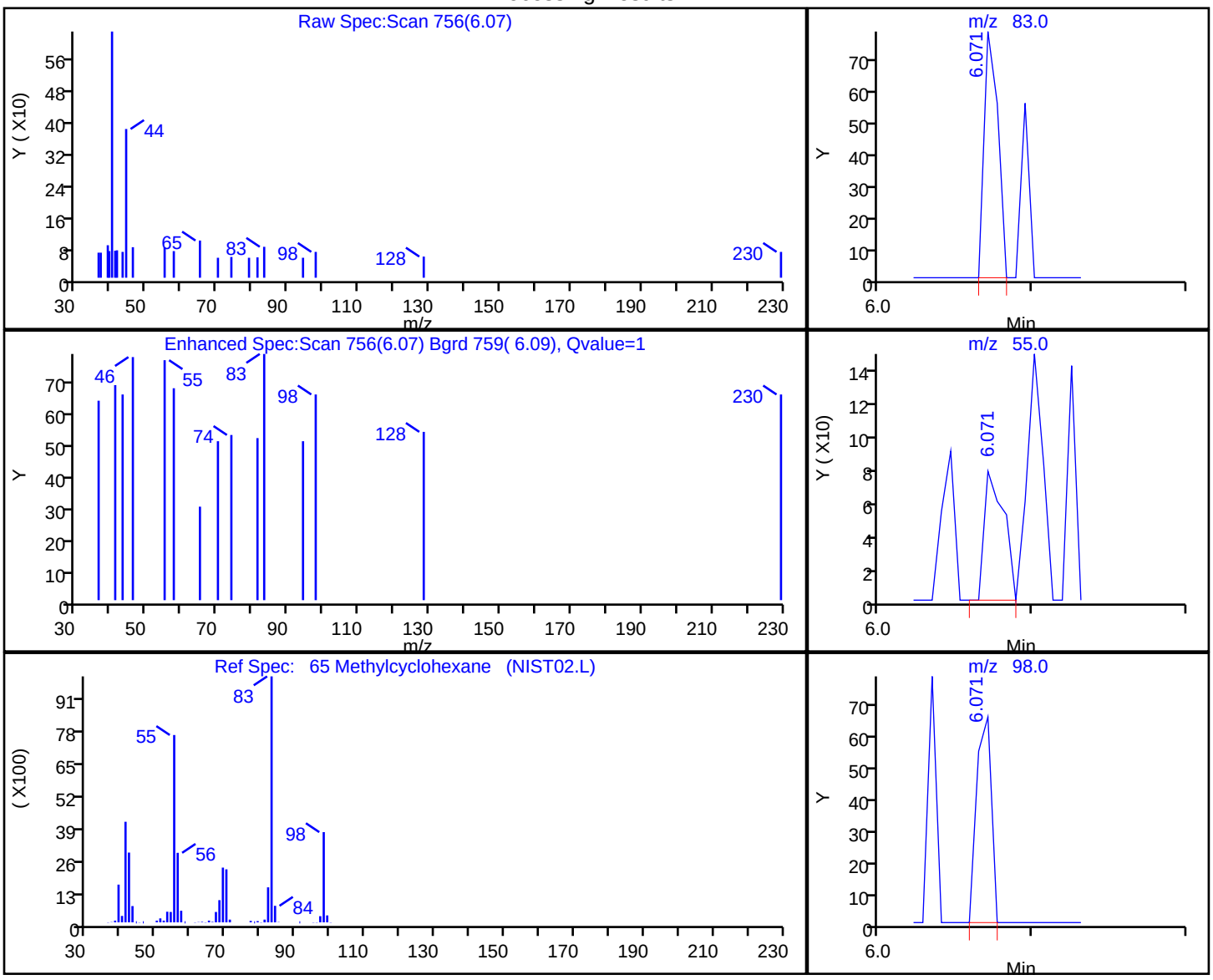
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82440.D
Injection Date: 23-Apr-2018 19:41:30 Instrument ID: CVOAMS9
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

65 Methylcyclohexane, CAS: 108-87-2

Processing Results



RT	Mass	Response	Amount
6.07	83.00	49	0.462375
6.07	55.00	68	
6.07	98.00	44	

Reviewer: colladox, 23-Apr-2018 20:35:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-504873/4

Matrix: Solid | Lab File ID: K81012.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/20/2018 23:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0203		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0207		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0193		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0184		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0228		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0194		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0192		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0199		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0181		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0184		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0197		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0217		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0187		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0185		0.0010	0.00010
123-91-1	1,4-Dioxane	0.307		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0711		0.0050	0.0011
591-78-6	2-Hexanone	0.0899		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0933		0.0050	0.00066
67-64-1	Acetone	0.0802		0.0050	0.0038
71-43-2	Benzene	0.0213		0.0010	0.00026
75-25-2	Bromoform	0.0161		0.0010	0.00043
74-83-9	Bromomethane	0.0179		0.0010	0.00047
75-15-0	Carbon disulfide	0.0218		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0194		0.0010	0.00018
108-90-7	Chlorobenzene	0.0181		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0181		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0165		0.0010	0.00019
75-00-3	Chloroethane	0.0198		0.0010	0.00052
67-66-3	Chloroform	0.0206		0.0010	0.00032
74-87-3	Chloromethane	0.0219		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0196		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0198		0.0010	0.00027
110-82-7	Cyclohexane	0.0204		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0190		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0177		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-504873/4

Matrix: Solid | Lab File ID: K81012.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/20/2018 23:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0185		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0180		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0184		0.0010	0.00013
79-20-9	Methyl acetate	0.124		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0198		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0204		0.0010	0.00016
75-09-2	Methylene Chloride	0.0195		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0187		0.0010	0.00017
95-47-6	o-Xylene	0.0187		0.0010	0.000095
100-42-5	Styrene	0.0185		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0182		0.0010	0.00014
108-88-3	Toluene	0.0195		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0201		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0198		0.0010	0.00027
79-01-6	Trichloroethene	0.0198		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0169		0.0010	0.00041
75-01-4	Vinyl chloride	0.0210		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		78-135
460-00-4	4-Bromofluorobenzene	103		67-126
1868-53-7	Dibromofluoromethane (Surr)	108		61-149
2037-26-5	Toluene-d8 (Surr)	104		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81012.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Mar-2018 23:38:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0069055-004
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 21-Mar-2018 13:30:53 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: starzecm Date: 21-Mar-2018 02:00:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.596	1.590	0.006	89	14029	20.0	21.8	
2 Dichlorodifluoromethane	85	1.633	1.626	0.007	99	80466	20.0	17.7	
3 Chloromethane	50	1.803	1.791	0.012	99	71863	20.0	21.9	
4 Vinyl chloride	62	1.913	1.901	0.012	97	72885	20.0	21.0	
5 Butadiene	54	1.907	1.907	0.000	96	53446	20.0	21.6	
6 Bromomethane	94	2.206	2.199	0.007	97	53215	20.0	17.9	
7 Chloroethane	64	2.273	2.266	0.007	99	34204	20.0	19.8	
9 Dichlorofluoromethane	67	2.474	2.462	0.012	98	103241	20.0	18.5	
8 Trichlorofluoromethane	101	2.474	2.468	0.006	62	93696	20.0	16.9	
10 Pentane	72	2.498	2.498	0.000	97	16402	40.0	36.7	
12 Ethanol	46	2.706	2.687	0.019	72	7035	800.0	763.4	M
11 Ethyl ether	59	2.699	2.693	0.006	95	39084	20.0	22.2	
13 2-Methyl-1,3-butadiene	53	2.724	2.718	0.006	98	44659	20.0	22.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.748	0.006	87	52070	20.0	19.7	
15 Acrolein	56	2.882	2.876	0.006	96	109224	300.0	332.6	
16 1,1,2-Trichloro-1,2,2-trif	101	2.901	2.882	0.019	95	67783	20.0	19.3	
17 1,1-Dichloroethene	96	2.919	2.913	0.006	96	53220	20.0	19.4	
18 Acetone	43	3.004	3.004	0.000	85	79587	100.0	80.2	
19 Iodomethane	142	3.084	3.077	0.007	100	106708	20.0	18.2	
22 Isopropyl alcohol	45	3.108	3.089	0.019	31	26894	200.0	163.8	a
20 Carbon disulfide	76	3.120	3.114	0.006	99	194691	20.0	21.8	
21 3-Chloro-1-propene	76	3.242	3.236	0.006	96	30794	20.0	20.8	
23 Methyl acetate	43	3.248	3.248	0.000	99	176872	100.0	123.8	
24 Cyclopentene	67	3.273	3.266	0.007	92	127051	20.0	22.5	
29 Acetonitrile	41	3.315	3.309	0.006	96	65239	200.0	206.9	Ma
* 25 TBA-d9 (IS)	65	3.364	3.352	0.012	0	261087	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	92	60881	20.0	19.5	
27 2-Methyl-2-propanol	59	3.437	3.443	-0.006	98	59579	200.0	159.3	M
28 Methyl tert-butyl ether	73	3.541	3.528	0.013	96	150513	20.0	19.8	
30 trans-1,2-Dichloroethene	96	3.571	3.565	0.006	95	55296	20.0	20.1	
31 Acrylonitrile	53	3.638	3.632	0.006	91	174289	200.0	232.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.717	0.007	93	49951	20.0	28.3	
33 Isopropyl ether	45	3.931	3.925	0.006	96	173475	20.0	25.5	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	76	98883	20.0	22.8	
35 Vinyl acetate	86	3.980	3.973	0.007	100	15943	40.0	33.0	
36 2-Chloro-1,3-butadiene	88	4.022	4.016	0.006	93	45465	20.0	20.7	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	87	162248	20.0	21.9	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	211174	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.479	0.007	98	29985	20.0	20.5	
41 Ethyl acetate	70	4.516	4.498	0.018	92	9672	40.0	29.6	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	94	63625	20.0	19.6	
42 2-Butanone (MEK)	72	4.510	4.504	0.006	95	27112	100.0	71.1	
44 Methyl acrylate	55	4.565	4.565	0.000	99	39488	20.0	21.8	
43 Propionitrile	54	4.650	4.644	0.006	97	69782	200.0	183.7	
45 Tetrahydrofuran	72	4.736	4.729	0.007	63	13225	40.0	28.7	
46 Chlorobromomethane	128	4.742	4.735	0.007	85	31321	20.0	18.1	
47 Methacrylonitrile	67	4.754	4.748	0.006	94	184866	200.0	206.8	
48 Chloroform	83	4.784	4.784	0.000	99	106192	20.0	20.6	
49 Cyclohexane	84	4.931	4.931	0.000	93	85422	20.0	20.4	
50 1,1,1-Trichloroethane	97	4.937	4.943	-0.006	87	99379	20.0	20.3	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	152492	50.0	54.1	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	85044	20.0	19.4	
53 1,1-Dichloropropene	75	5.095	5.089	0.006	97	73865	20.0	22.1	
56 Isobutyl alcohol	74	5.193	5.193	0.000	14	4209	500.0	317.6	a
54 Benzene	78	5.297	5.290	0.007	96	202303	20.0	21.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.302	0.007	0	158993	50.0	57.1	
57 Isopropyl acetate	43	5.333	5.327	0.006	95	152325	20.0	22.1	
58 Tert-amyl methyl ether	73	5.339	5.339	0.000	96	159529	20.0	20.0	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	98	73033	20.0	19.7	
60 n-Heptane	57	5.437	5.437	0.000	93	44116	20.0	23.5	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	409087	50.0	50.0	
62 n-Butanol	56	5.870	5.863	0.007	88	30080	500.0	401.0	
63 Trichloroethene	95	5.943	5.943	0.000	98	56316	20.0	19.8	
64 Ethyl acrylate	56	6.065	6.071	-0.006	89	32844	20.0	23.2	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	101344	20.0	20.4	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	89	50706	20.0	21.7	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	19254	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.290	0.006	93	65818	40.0	37.2	
69 1,4-Dioxane	88	6.333	6.339	-0.006	27	10546	400.0	306.8	
70 n-Propyl acetate	43	6.345	6.345	0.000	99	64792	20.0	24.9	
71 Dibromomethane	93	6.370	6.369	0.001	97	33851	20.0	19.1	
72 Dichlorobromomethane	83	6.516	6.516	0.000	98	69663	20.0	19.0	
73 2-Chloroethyl vinyl ether	63	6.845	6.839	0.006	71	21446	20.0	21.0	
74 2-Nitropropane	41	6.845	6.845	0.000	84	19831	40.0	32.5	
75 Epichlorohydrin	57	6.955	6.961	-0.006	100	92599	400.0	320.4	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	93	75527	20.0	19.8	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	98	243222	100.0	93.3	
$ 78 Toluene-d8 (Surr)	98	7.266	7.265	0.001	97	500339	50.0	52.1	
79 Toluene	91	7.345	7.345	0.000	91	217736	20.0	19.5	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	98	66158	20.0	19.8	
81 Ethyl methacrylate	69	7.711	7.704	0.007	89	53107	20.0	20.8	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	94	34210	20.0	18.4	
83 Tetrachloroethene	166	7.967	7.967	0.000	97	59222	20.0	18.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.125	8.125	0.000	96	65677	20.0	19.9	
85 2-Hexanone	43	8.174	8.174	0.000	98	151812	100.0	89.9	
86 n-Butyl acetate	43	8.284	8.284	0.000	98	65347	20.0	24.5	
87 Chlorodibromomethane	129	8.369	8.363	0.006	98	51286	20.0	16.5	
88 Ethylene Dibromide	107	8.528	8.521	0.007	96	43790	20.0	18.0	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	85	332511	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	96	137530	20.0	18.1	
92 Ethylbenzene	106	9.198	9.198	0.000	99	70596	20.0	18.5	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	94	57704	20.0	17.9	
93 m-Xylene & p-Xylene	106	9.351	9.344	0.007	0	87165	20.0	18.7	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	31091	20.0	20.4	
95 o-Xylene	106	9.814	9.814	0.000	92	90540	20.0	18.7	
96 Styrene	104	9.851	9.844	0.007	95	143082	20.0	18.5	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	77063	20.0	25.5	
98 Bromoform	173	10.082	10.082	0.000	97	34536	20.0	16.1	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	267499	20.0	18.4	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	168231	50.0	51.4	
101 Bromobenzene	156	10.564	10.557	0.007	96	60598	20.0	17.0	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	62621	20.0	20.7	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	308980	20.0	21.2	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	95	17683	20.0	18.0	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.661	0.000	89	15219	20.0	21.0	
107 4-Ethyltoluene	105	10.741	10.740	0.001	90	258888	20.0	20.0	
106 2-Chlorotoluene	91	10.741	10.740	0.001	90	208461	20.0	20.1	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	94	222115	20.0	19.3	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	175948	20.0	20.0	
110 Butyl Methacrylate	87	10.899	10.899	0.000	92	62164	20.0	20.4	
111 tert-Butylbenzene	119	11.106	11.100	0.006	94	181974	20.0	17.8	
112 1,2,4-Trimethylbenzene	105	11.161	11.161	0.000	97	228438	20.0	19.3	
113 sec-Butylbenzene	105	11.308	11.307	0.001	100	303457	20.0	19.3	
114 4-Isopropyltoluene	119	11.436	11.435	0.001	98	257065	20.0	18.3	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	97	128831	20.0	18.7	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	95	191757	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	128079	20.0	18.5	
118 Benzyl chloride	91	11.667	11.667	0.000	98	104945	20.0	19.4	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	232374	20.0	18.6	
120 p-Diethylbenzene	119	11.777	11.777	0.000	91	146322	20.0	20.0	a
121 n-Butylbenzene	92	11.795	11.795	0.000	98	141902	20.0	21.3	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	129477	20.0	18.4	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	250347	20.0	19.1	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	96	12550	20.0	18.1	
125 1,3,5-Trichlorobenzene	180	12.643	12.642	0.001	98	120960	20.0	20.0	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	117221	20.0	19.9	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	95	59536	20.0	19.8	
128 Naphthalene	128	13.332	13.331	0.001	99	255714	20.0	18.0	
129 1,2,3-Trichlorobenzene	180	13.521	13.520	0.001	96	116112	20.0	19.2	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.7	
S 131 Xylenes, Total	100				0		40.0	37.4	
S 132 Total BTEX	1				0		100.0	96.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00074	Amount Added:	3.00	Units: uL	
GASES Li_00252	Amount Added:	2.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Mar-2018 13:30:55 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81012.D

Injection Date: 20-Mar-2018 23:38:30 Instrument ID: CVOAMS9 Operator ID:

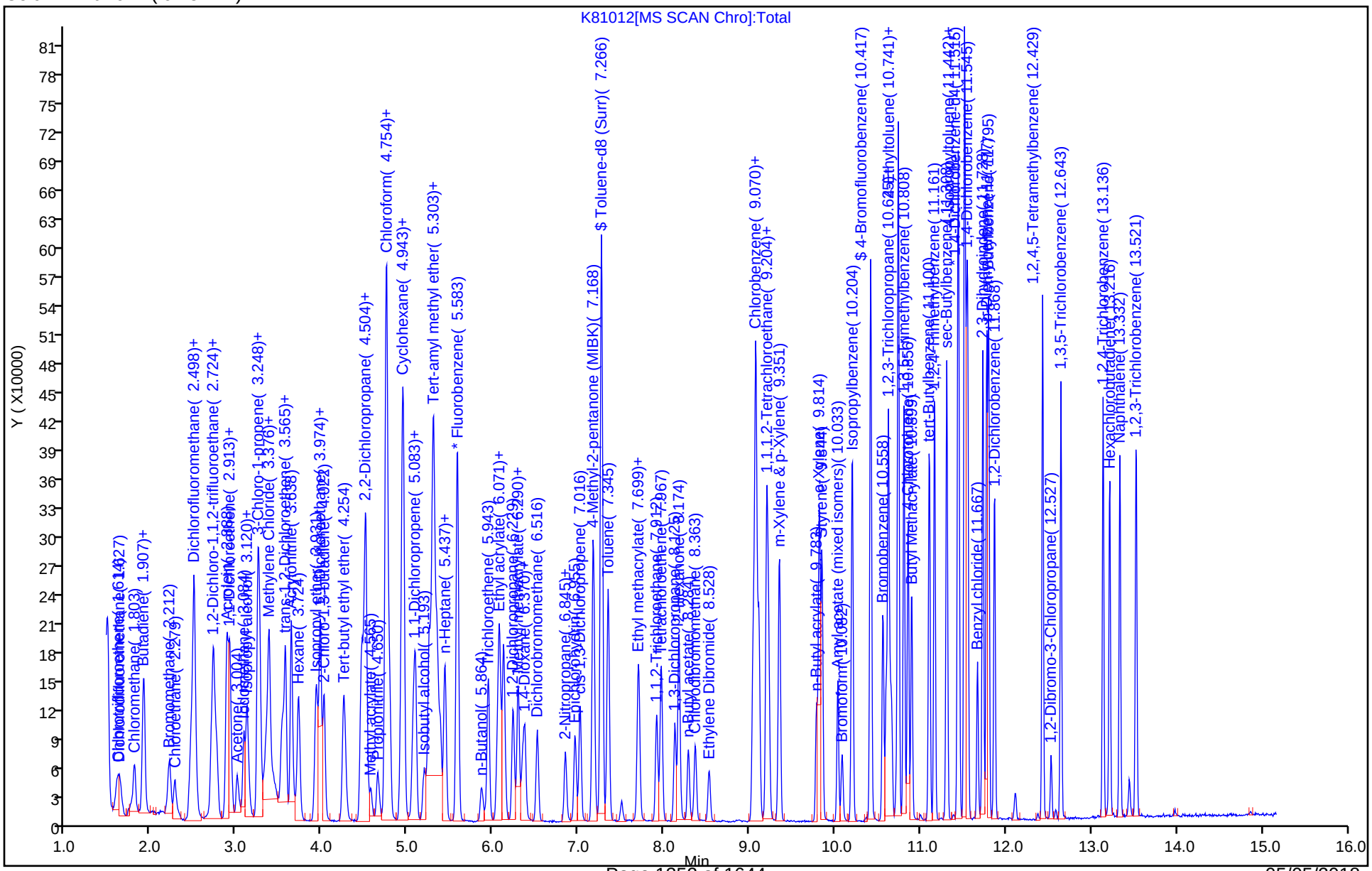
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-505749/3

Matrix: Solid | Lab File ID: K81119.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/24/2018 06:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0202		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0191		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0206		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0198		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0204		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0205		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0200		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0208		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0196		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0200		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0195		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0196		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0205		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0201		0.0010	0.00010
123-91-1	1,4-Dioxane	0.416		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0901		0.0050	0.0011
591-78-6	2-Hexanone	0.0968		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0962		0.0050	0.00066
67-64-1	Acetone	0.0917		0.0050	0.0038
71-43-2	Benzene	0.0202		0.0010	0.00026
75-25-2	Bromoform	0.0174		0.0010	0.00043
74-83-9	Bromomethane	0.0202		0.0010	0.00047
75-15-0	Carbon disulfide	0.0202		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0212		0.0010	0.00018
108-90-7	Chlorobenzene	0.0200		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0187		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0186		0.0010	0.00019
75-00-3	Chloroethane	0.0212		0.0010	0.00052
67-66-3	Chloroform	0.0199		0.0010	0.00032
74-87-3	Chloromethane	0.0228		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0193		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0203		0.0010	0.00027
110-82-7	Cyclohexane	0.0210		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0191		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0220		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-505749/3

Matrix: Solid | Lab File ID: K81119.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/24/2018 06:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0195		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0185		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0200		0.0010	0.00013
79-20-9	Methyl acetate	0.100		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0197		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0212		0.0010	0.00016
75-09-2	Methylene Chloride	0.0192		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0196		0.0010	0.00017
95-47-6	o-Xylene	0.0195		0.0010	0.000095
100-42-5	Styrene	0.0201		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0194		0.0010	0.00014
108-88-3	Toluene	0.0202		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0202		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0200		0.0010	0.00027
79-01-6	Trichloroethene	0.0197		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0237		0.0010	0.00041
75-01-4	Vinyl chloride	0.0230		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		78-135
460-00-4	4-Bromofluorobenzene	97		67-126
1868-53-7	Dibromofluoromethane (Surr)	101		61-149
2037-26-5	Toluene-d8 (Surr)	103		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81119.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 24-Mar-2018 06:19:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0069230-003
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:05:03 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:05:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.590	1.590	0.000	76	19527	20.0	24.1	a
2 Dichlorodifluoromethane	85	1.633	1.627	0.007	98	116357	20.0	22.0	
3 Chloromethane	50	1.791	1.791	0.000	100	107784	20.0	22.8	
4 Vinyl chloride	62	1.907	1.901	0.006	72	96302	20.0	23.0	
5 Butadiene	54	1.901	1.901	0.000	89	74196	20.0	22.4	
6 Bromomethane	94	2.200	2.193	0.007	97	49411	20.0	20.2	
7 Chloroethane	64	2.267	2.267	0.000	96	37868	20.0	21.2	
9 Dichlorofluoromethane	67	2.462	2.456	0.006	98	159560	20.0	24.2	
8 Trichlorofluoromethane	101	2.474	2.468	0.006	98	125021	20.0	23.7	
10 Pentane	72	2.498	2.492	0.006	97	19141	40.0	39.5	
12 Ethanol	46	2.663	2.681	-0.018	92	20155	800.0	877.7	
11 Ethyl ether	59	2.687	2.687	0.000	90	52559	20.0	19.8	
13 2-Methyl-1,3-butadiene	53	2.718	2.712	0.006	95	65428	20.0	20.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.742	0.006	98	53043	20.0	20.7	
15 Acrolein	56	2.870	2.870	0.000	96	179763	300.0	317.0	
16 1,1,2-Trichloro-1,2,2-trif	101	2.889	2.882	0.006	83	73079	20.0	20.6	
17 1,1-Dichloroethene	96	2.913	2.913	0.000	92	58620	20.0	20.5	
18 Acetone	43	2.992	2.998	-0.006	84	118107	100.0	91.7	
19 Iodomethane	142	3.077	3.071	0.006	98	99437	20.0	18.7	
22 Isopropyl alcohol	45	3.077	3.084	-0.007	1	64790	200.0	187.2	a
20 Carbon disulfide	76	3.114	3.108	0.006	99	234925	20.0	20.2	
21 3-Chloro-1-propene	76	3.236	3.236	0.000	92	37783	20.0	19.9	
23 Methyl acetate	43	3.242	3.242	0.000	98	285174	100.0	100.1	
24 Cyclopentene	67	3.260	3.260	0.000	93	162932	20.0	20.4	
29 Acetonitrile	41	3.303	3.303	0.000	46	133862	200.0	193.5	Ma
* 25 TBA-d9 (IS)	65	3.346	3.352	-0.006	0	337486	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.370	0.000	97	71761	20.0	19.2	
27 2-Methyl-2-propanol	59	3.425	3.431	-0.006	97	95597	200.0	190.5	
28 Methyl tert-butyl ether	73	3.535	3.522	0.013	97	193267	20.0	19.7	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	97	60782	20.0	20.2	
31 Acrylonitrile	53	3.632	3.632	0.000	92	256956	200.0	201.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.712	3.711	0.001	95	81102	20.0	21.0	
33 Isopropyl ether	45	3.925	3.925	0.000	98	293498	20.0	20.5	
34 1,1-Dichloroethane	63	3.968	3.968	0.000	98	130576	20.0	20.4	
35 Vinyl acetate	86	3.968	3.968	0.000	100	18668	40.0	36.3	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	93	53485	20.0	19.9	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	88	232704	20.0	19.5	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	272907	250.0	250.0	
39 2,2-Dichloropropane	79	4.480	4.486	-0.006	95	37336	20.0	20.8	
42 2-Butanone (MEK)	72	4.504	4.504	0.000	94	33722	100.0	90.1	
41 Ethyl acetate	70	4.504	4.504	0.000	93	12225	40.0	37.0	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	86	67684	20.0	19.3	
44 Methyl acrylate	55	4.565	4.565	0.000	99	54393	20.0	17.8	
43 Propionitrile	54	4.644	4.644	0.000	98	101196	200.0	188.3	
45 Tetrahydrofuran	72	4.736	4.730	0.006	70	16654	40.0	37.8	
46 Chlorobromomethane	128	4.736	4.736	0.000	95	30900	20.0	18.7	
47 Methacrylonitrile	67	4.748	4.748	0.000	97	239482	200.0	200.4	
48 Chloroform	83	4.784	4.784	0.000	97	118581	20.0	19.9	
49 Cyclohexane	84	4.931	4.931	0.000	98	103011	20.0	21.0	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	94	106457	20.0	20.2	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	96	134587	50.0	50.4	
52 Carbon tetrachloride	117	5.065	5.059	0.006	97	86096	20.0	21.2	
53 1,1-Dichloropropene	75	5.089	5.083	0.006	92	88152	20.0	20.6	
56 Isobutyl alcohol	74	5.181	5.193	-0.012	96	7730	500.0	412.3	
54 Benzene	78	5.290	5.290	0.000	97	248113	20.0	20.2	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	162052	50.0	52.0	
57 Isopropyl acetate	43	5.327	5.327	0.000	94	228597	20.0	19.6	a
58 Tert-amyl methyl ether	73	5.339	5.345	-0.006	95	212675	20.0	19.7	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	87007	20.0	19.5	
60 n-Heptane	57	5.431	5.431	0.000	98	62008	20.0	20.5	
* 61 Fluorobenzene	96	5.577	5.577	0.000	97	396334	50.0	50.0	
62 n-Butanol	56	5.857	5.863	-0.006	95	57556	500.0	449.8	
63 Trichloroethene	95	5.937	5.943	-0.006	95	61246	20.0	19.7	
64 Ethyl acrylate	56	6.065	6.071	-0.006	97	49154	20.0	21.8	
65 Methylcyclohexane	83	6.071	6.071	0.000	95	123583	20.0	21.2	
66 1,2-Dichloropropane	63	6.229	6.229	0.000	89	70394	20.0	19.6	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	24779	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	95	122242	40.0	39.7	
69 1,4-Dioxane	88	6.345	6.339	0.006	27	15607	400.0	416.2	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	107329	20.0	19.5	
71 Dibromomethane	93	6.363	6.363	0.000	94	36829	20.0	18.4	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	75676	20.0	19.1	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	78	32178	20.0	19.9	
74 2-Nitropropane	41	6.839	6.845	-0.006	76	18727	40.0	42.3	
75 Epichlorohydrin	57	6.955	6.955	0.000	100	137510	400.0	401.3	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	97	103132	20.0	20.3	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	98	392389	100.0	96.2	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	97	525980	50.0	51.6	
79 Toluene	91	7.345	7.345	0.000	92	258468	20.0	20.2	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	96	88229	20.0	20.0	
81 Ethyl methacrylate	69	7.705	7.705	0.000	90	73335	20.0	18.7	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	94	45451	20.0	19.8	
83 Tetrachloroethene	166	7.967	7.967	0.000	94	55952	20.0	19.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.125	8.125	0.000	97	87403	20.0	19.6	
85 2-Hexanone	43	8.174	8.174	0.000	99	258411	100.0	96.8	
86 n-Butyl acetate	43	8.284	8.284	0.000	96	118977	20.0	19.1	
87 Chlorodibromomethane	129	8.363	8.363	0.000	98	48064	20.0	18.6	
88 Ethylene Dibromide	107	8.528	8.528	0.000	98	47074	20.0	18.5	
* 89 Chlorobenzene-d5	117	9.070	9.076	-0.006	90	319139	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	92	153994	20.0	20.0	
92 Ethylbenzene	106	9.198	9.198	0.000	99	78182	20.0	19.5	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.223	0.000	93	56166	20.0	18.3	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	98043	20.0	19.6	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	43951	20.0	18.6	
95 o-Xylene	106	9.814	9.814	0.000	91	100656	20.0	19.5	
96 Styrene	104	9.851	9.851	0.001	93	166854	20.0	20.1	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	86	139744	20.0	20.4	
98 Bromoform	173	10.082	10.082	0.000	96	26236	20.0	17.4	
99 Isopropylbenzene	105	10.198	10.204	-0.006	95	295842	20.0	20.0	
$ 100 4-Bromofluorobenzene	174	10.418	10.417	0.001	84	142054	50.0	48.4	
101 Bromobenzene	156	10.564	10.564	0.000	94	60901	20.0	19.1	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	72242	20.0	19.1	
103 N-Propylbenzene	91	10.625	10.625	0.000	98	359240	20.0	21.5	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	95	18785	20.0	19.3	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.667	-0.006	86	21724	20.0	21.1	
106 2-Chlorotoluene	91	10.741	10.741	0.000	91	244224	20.0	21.1	
107 4-Ethyltoluene	105	10.741	10.741	0.000	88	290065	20.0	21.0	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	91	247698	20.0	20.6	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	213388	20.0	21.4	
110 Butyl Methacrylate	87	10.899	10.899	0.000	97	84535	20.0	20.4	
111 tert-Butylbenzene	119	11.100	11.106	-0.006	91	197160	20.0	20.4	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	258404	20.0	20.9	
113 sec-Butylbenzene	105	11.308	11.308	0.000	99	331533	20.0	20.9	
114 4-Isopropyltoluene	119	11.436	11.436	0.000	97	273738	20.0	20.8	
115 1,3-Dichlorobenzene	146	11.448	11.454	-0.006	93	127086	20.0	20.5	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	96	173369	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	94	126524	20.0	20.1	
118 Benzyl chloride	91	11.667	11.667	0.000	97	134682	20.0	23.7	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	253911	20.0	20.1	
120 p-Diethylbenzene	119	11.777	11.777	0.000	92	155009	20.0	21.4	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	161451	20.0	22.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	94	126768	20.0	20.0	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	279154	20.0	20.5	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	90	15004	20.0	19.6	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	109919	20.0	20.7	
126 1,2,4-Trichlorobenzene	180	13.137	13.136	0.000	94	109268	20.0	20.8	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	53100	20.0	19.3	
128 Naphthalene	128	13.332	13.332	0.000	99	268240	20.0	19.5	
129 1,2,3-Trichlorobenzene	180	13.521	13.527	-0.006	96	107225	20.0	20.0	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.5	
S 131 Xylenes, Total	100				0		40.0	39.1	
S 132 Total BTEX	1				0		100.0	99.0	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00252	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

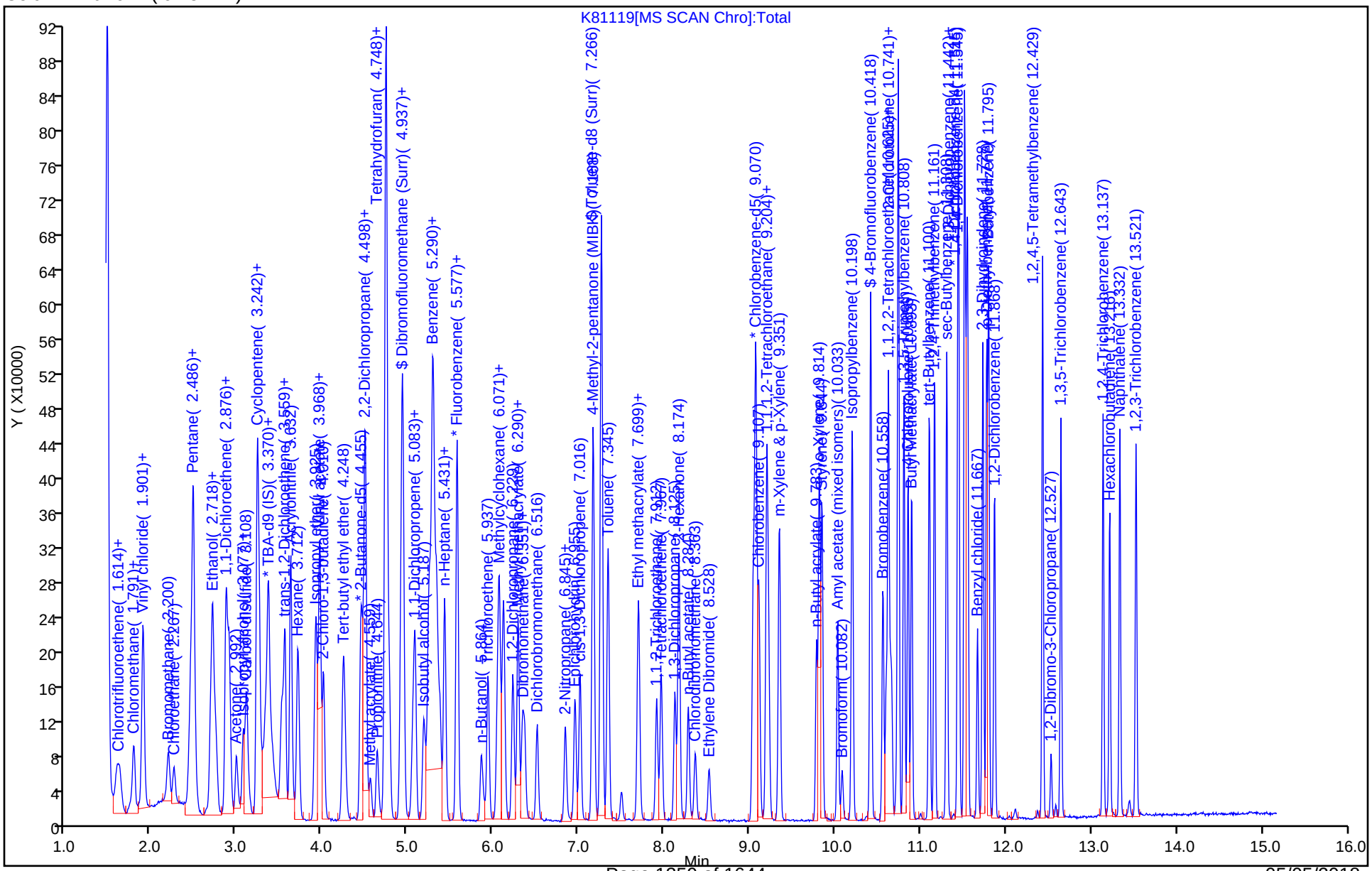
Report Date: 26-Mar-2018 13:05:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81119.D

Injection Date:	24-Mar-2018 06:19:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-505873/3

Matrix: Solid | Lab File ID: K81148.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/25/2018 04:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0222		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0196		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0222		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0199		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0214		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0215		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0205		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0216		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0195		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0206		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0205		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0203		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0210		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0205		0.0010	0.00010
123-91-1	1,4-Dioxane	0.411		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0949		0.0050	0.0011
591-78-6	2-Hexanone	0.101		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0981		0.0050	0.00066
67-64-1	Acetone	0.0955		0.0050	0.0038
71-43-2	Benzene	0.0213		0.0010	0.00026
75-25-2	Bromoform	0.0203		0.0010	0.00043
74-83-9	Bromomethane	0.0208		0.0010	0.00047
75-15-0	Carbon disulfide	0.0209		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0238		0.0010	0.00018
108-90-7	Chlorobenzene	0.0209		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0186		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0202		0.0010	0.00019
75-00-3	Chloroethane	0.0220		0.0010	0.00052
67-66-3	Chloroform	0.0208		0.0010	0.00032
74-87-3	Chloromethane	0.0230		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0207		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0206		0.0010	0.00027
110-82-7	Cyclohexane	0.0228		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0203		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0230		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-505873/3

Matrix: Solid | Lab File ID: K81148.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/25/2018 04:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0211		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0191		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0216		0.0010	0.00013
79-20-9	Methyl acetate	0.104		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0204		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0230		0.0010	0.00016
75-09-2	Methylene Chloride	0.0196		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0210		0.0010	0.00017
95-47-6	o-Xylene	0.0208		0.0010	0.000095
100-42-5	Styrene	0.0211		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0206		0.0010	0.00014
108-88-3	Toluene	0.0210		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0209		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0210		0.0010	0.00027
79-01-6	Trichloroethene	0.0208		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0237		0.0010	0.00041
75-01-4	Vinyl chloride	0.0233		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		78-135
460-00-4	4-Bromofluorobenzene	101		67-126
1868-53-7	Dibromofluoromethane (Surr)	104		61-149
2037-26-5	Toluene-d8 (Surr)	105		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81148.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 25-Mar-2018 04:55:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0069264-003
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 12:05:20 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: chujia Date: 26-Mar-2018 00:42:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.596	1.596	0.000	94	19878	20.0	23.3	
2 Dichlorodifluoromethane	85	1.627	1.626	0.000	99	128107	20.0	23.0	
3 Chloromethane	50	1.797	1.797	0.000	100	114677	20.0	23.0	
4 Vinyl chloride	62	1.907	1.907	0.000	72	102752	20.0	23.3	
5 Butadiene	54	1.907	1.907	0.000	89	80980	20.0	23.2	
6 Bromomethane	94	2.200	2.199	0.001	98	53602	20.0	20.8	
7 Chloroethane	64	2.267	2.267	0.000	98	41479	20.0	22.0	
9 Dichlorofluoromethane	67	2.462	2.468	-0.006	97	153249	20.0	22.0	
8 Trichlorofluoromethane	101	2.474	2.474	0.000	57	131916	20.0	23.7	
10 Pentane	72	2.492	2.498	-0.006	96	21927	40.0	40.0	
12 Ethanol	46	2.669	2.693	-0.024	89	23241	800.0	895.1	
11 Ethyl ether	59	2.693	2.693	0.000	91	58815	20.0	21.0	
13 2-Methyl-1,3-butadiene	53	2.712	2.718	-0.006	96	75811	20.0	22.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	96	61616	20.0	22.8	
15 Acrolein	56	2.876	2.876	0.000	97	188707	300.0	294.3	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.894	-0.006	93	83003	20.0	22.2	
17 1,1-Dichloroethene	96	2.913	2.919	-0.006	92	65018	20.0	21.5	
18 Acetone	43	2.992	3.004	-0.012	83	130866	100.0	95.5	
19 Iodomethane	142	3.071	3.077	-0.006	98	110709	20.0	19.8	
22 Isopropyl alcohol	45	3.084	3.090	-0.006	1	69168	200.0	176.8	a
20 Carbon disulfide	76	3.114	3.114	0.000	99	256374	20.0	20.9	
21 3-Chloro-1-propene	76	3.236	3.242	-0.006	95	42617	20.0	21.3	
23 Methyl acetate	43	3.242	3.248	-0.006	98	310998	100.0	103.6	
24 Cyclopentene	67	3.260	3.266	-0.006	89	187120	20.0	22.2	
29 Acetonitrile	41	3.303	3.315	-0.012	95	139769	200.0	178.7	
* 25 TBA-d9 (IS)	65	3.346	3.358	-0.012	0	381591	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.376	-0.006	98	77223	20.0	19.6	
27 2-Methyl-2-propanol	59	3.425	3.431	-0.006	98	105576	200.0	186.1	
28 Methyl tert-butyl ether	73	3.529	3.535	-0.006	97	210660	20.0	20.4	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	96	66428	20.0	20.9	
31 Acrylonitrile	53	3.632	3.638	-0.006	92	276312	200.0	205.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.718	3.717	0.001	95	90729	20.0	22.2	
33 Isopropyl ether	45	3.925	3.925	0.000	98	318565	20.0	21.1	
34 1,1-Dichloroethane	63	3.968	3.974	-0.006	64	144244	20.0	21.4	
35 Vinyl acetate	86	3.974	3.974	0.000	100	20384	40.0	35.1	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	93	58953	20.0	20.8	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	87	256879	20.0	20.5	
* 38 2-Butanone-d5	46	4.449	4.455	-0.006	0	290236	250.0	250.0	
39 2,2-Dichloropropane	79	4.480	4.480	0.000	95	43814	20.0	23.2	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	87	76541	20.0	20.7	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	95	37771	100.0	94.9	
41 Ethyl acetate	70	4.504	4.510	-0.006	93	14005	40.0	39.8	
44 Methyl acrylate	55	4.565	4.565	0.000	99	61146	20.0	19.0	
43 Propionitrile	54	4.644	4.644	0.000	98	111165	200.0	182.9	
45 Tetrahydrofuran	72	4.730	4.736	-0.006	66	17441	40.0	37.3	
46 Chlorobromomethane	128	4.736	4.736	0.000	91	32404	20.0	18.6	
47 Methacrylonitrile	67	4.748	4.754	-0.006	97	260537	200.0	206.9	
48 Chloroform	83	4.784	4.784	0.000	98	130360	20.0	20.8	
49 Cyclohexane	84	4.925	4.931	-0.006	98	117742	20.0	22.8	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	93	123536	20.0	22.2	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.949	-0.006	95	146402	50.0	52.0	
52 Carbon tetrachloride	117	5.059	5.065	-0.006	98	101907	20.0	23.8	
53 1,1-Dichloropropene	75	5.083	5.089	-0.006	93	102109	20.0	22.7	
56 Isobutyl alcohol	74	5.199	5.193	0.006	96	9360	500.0	441.5	
54 Benzene	78	5.290	5.290	0.000	98	272391	20.0	21.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	176628	50.0	53.8	
57 Isopropyl acetate	43	5.327	5.327	0.000	95	255179	20.0	20.8	
58 Tert-amyl methyl ether	73	5.339	5.345	-0.006	92	229997	20.0	20.2	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	96396	20.0	20.5	
60 n-Heptane	57	5.431	5.431	0.000	98	73061	20.0	22.9	
* 61 Fluorobenzene	96	5.577	5.583	-0.006	97	417693	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	97	63738	500.0	440.5	
63 Trichloroethene	95	5.943	5.937	0.006	97	68184	20.0	20.8	
64 Ethyl acrylate	56	6.065	6.071	-0.006	98	54872	20.0	23.0	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	140773	20.0	23.0	
66 1,2-Dichloropropane	63	6.229	6.235	-0.006	89	76509	20.0	20.3	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	26462	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	95	130985	40.0	40.3	
69 1,4-Dioxane	88	6.339	6.339	0.000	36	16454	400.0	410.9	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	118371	20.0	20.4	
71 Dibromomethane	93	6.363	6.369	-0.006	95	39724	20.0	18.9	
72 Dichlorobromomethane	83	6.510	6.516	-0.006	98	84559	20.0	20.3	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	74	34089	20.0	20.0	
74 2-Nitropropane	41	6.845	6.845	0.000	78	25024	40.0	53.6	
75 Epichlorohydrin	57	6.955	6.961	-0.006	100	149224	400.0	409.4	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	97	109636	20.0	20.6	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	98	425650	100.0	98.1	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	97	561530	50.0	52.6	
79 Toluene	91	7.345	7.345	0.000	92	281572	20.0	21.0	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	97	96861	20.0	21.0	
81 Ethyl methacrylate	69	7.705	7.711	-0.006	96	77761	20.0	19.0	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	95	47757	20.0	19.9	
83 Tetrachloroethene	166	7.967	7.967	0.000	94	62124	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.125	8.125	0.000	97	94165	20.0	20.1	
85 2-Hexanone	43	8.174	8.174	0.000	99	285602	100.0	100.6	
86 n-Butyl acetate	43	8.284	8.284	0.000	96	127592	20.0	19.6	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	54516	20.0	20.2	
88 Ethylene Dibromide	107	8.528	8.528	0.000	98	50600	20.0	19.1	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	90	333689	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	92	168123	20.0	20.9	
92 Ethylbenzene	106	9.204	9.198	0.006	99	88261	20.0	21.1	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	93	63378	20.0	19.7	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	109856	20.0	21.0	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	47732	20.0	19.3	
95 o-Xylene	106	9.814	9.820	-0.006	92	112483	20.0	20.8	
96 Styrene	104	9.844	9.850	-0.006	93	183307	20.0	21.1	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	87	153300	20.0	20.9	
98 Bromoform	173	10.082	10.082	0.000	96	32040	20.0	20.3	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	332967	20.0	21.6	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	85	155489	50.0	50.7	
101 Bromobenzene	156	10.564	10.564	0.000	94	67963	20.0	20.0	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	79410	20.0	19.6	
103 N-Propylbenzene	91	10.625	10.625	0.000	98	406933	20.0	22.8	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	96	19694	20.0	19.0	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	88	24520	20.0	22.3	
106 2-Chlorotoluene	91	10.741	10.740	0.001	91	271232	20.0	21.9	
107 4-Ethyltoluene	105	10.741	10.740	0.001	88	323386	20.0	21.9	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	91	280988	20.0	21.8	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	237775	20.0	22.3	
110 Butyl Methacrylate	87	10.899	10.899	0.000	97	90294	20.0	20.4	
111 tert-Butylbenzene	119	11.100	11.106	-0.006	92	221624	20.0	21.5	
112 1,2,4-Trimethylbenzene	105	11.161	11.161	0.000	97	287077	20.0	21.7	
113 sec-Butylbenzene	105	11.308	11.307	0.001	99	374430	20.0	22.1	
114 4-Isopropyltoluene	119	11.436	11.435	0.001	97	306176	20.0	21.8	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	94	138880	20.0	21.0	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	97	185227	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	95	138029	20.0	20.5	
118 Benzyl chloride	91	11.667	11.667	0.000	98	153244	20.0	25.2	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	278240	20.0	20.6	
120 p-Diethylbenzene	119	11.777	11.777	0.000	90	173995	20.0	22.5	a
121 n-Butylbenzene	92	11.795	11.795	0.000	98	179798	20.0	23.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	139607	20.0	20.6	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	315423	20.0	21.7	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	91	15933	20.0	19.5	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	123456	20.0	21.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	121229	20.0	21.6	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	61618	20.0	20.9	
128 Naphthalene	128	13.332	13.331	0.001	99	299302	20.0	20.4	
129 1,2,3-Trichlorobenzene	180	13.521	13.527	-0.006	95	117350	20.0	20.5	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.7	
S 131 Xylenes, Total	100				0		40.0	41.8	
S 132 Total BTEX	1				0		100.0	105.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00252	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 26-Mar-2018 12:05:22 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81148.D

Injection Date: 25-Mar-2018 04:55:30 Instrument ID: CVOAMS9 Operator ID:

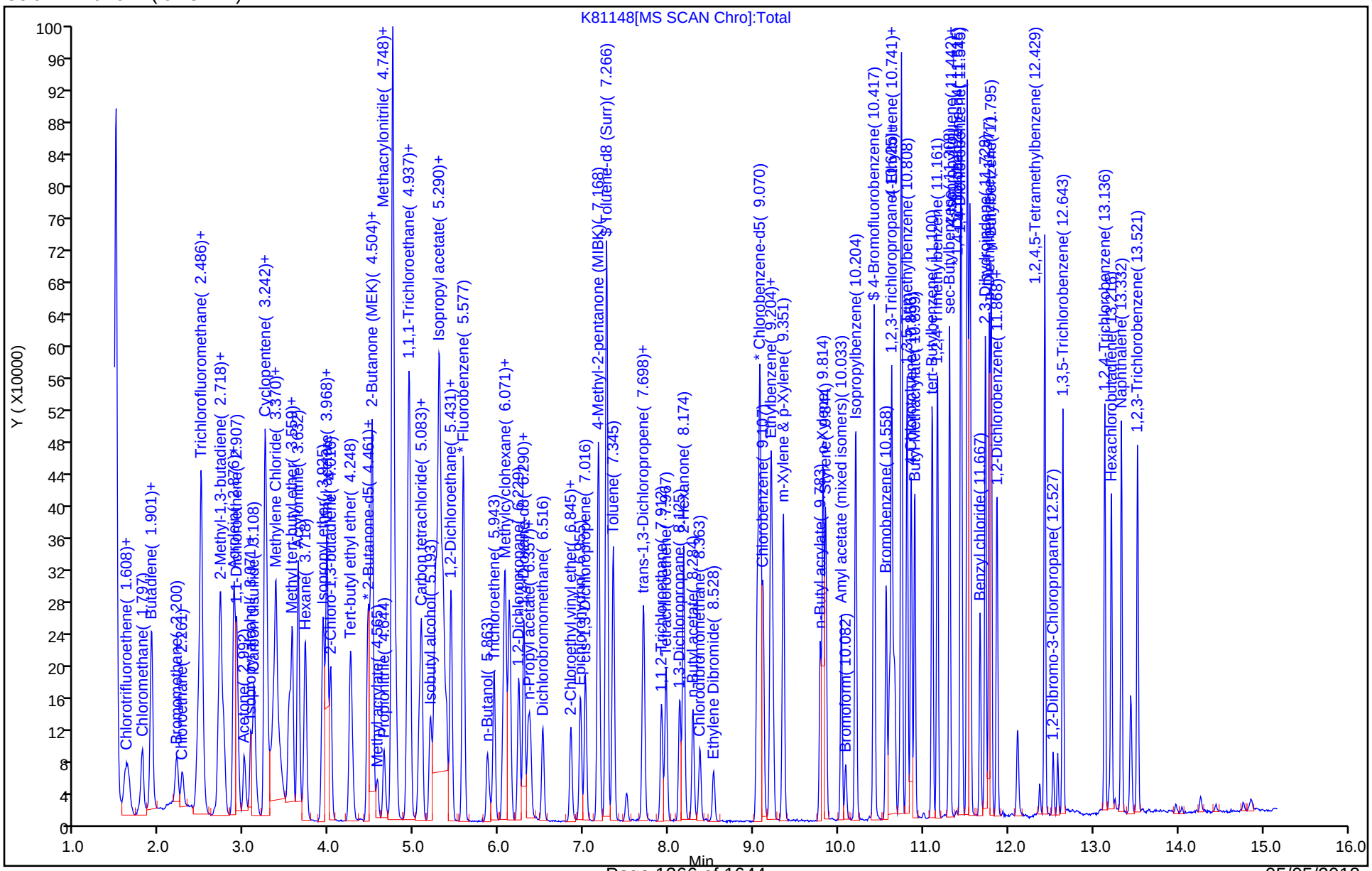
Lims ID: LCS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-507466/5

Matrix: Solid | Lab File ID: B28116.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2018 12:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0219		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0219		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0181		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0210		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0176		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0173		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0209		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0230		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0262		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0204		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0209		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0210		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0202		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0202		0.0010	0.00010
123-91-1	1,4-Dioxane	0.504		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0991		0.0050	0.0011
591-78-6	2-Hexanone	0.0737		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0960		0.0050	0.00066
67-64-1	Acetone	0.0772		0.0050	0.0038
71-43-2	Benzene	0.0215		0.0010	0.00026
75-25-2	Bromoform	0.0225		0.0010	0.00043
74-83-9	Bromomethane	0.0188		0.0010	0.00047
75-15-0	Carbon disulfide	0.0175		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0213		0.0010	0.00018
108-90-7	Chlorobenzene	0.0212		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0202		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0224		0.0010	0.00019
75-00-3	Chloroethane	0.0169		0.0010	0.00052
67-66-3	Chloroform	0.0216		0.0010	0.00032
74-87-3	Chloromethane	0.0228		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0195		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0208		0.0010	0.00027
110-82-7	Cyclohexane	0.0202		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0217		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0196		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-507466/5

Matrix: Solid | Lab File ID: B28116.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2018 12:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0199		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0220		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0211		0.0010	0.00013
79-20-9	Methyl acetate	0.0814		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0173		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0196		0.0010	0.00016
75-09-2	Methylene Chloride	0.0169		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0197		0.0010	0.00017
95-47-6	o-Xylene	0.0201		0.0010	0.000095
100-42-5	Styrene	0.0213		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0215		0.0010	0.00014
108-88-3	Toluene	0.0204		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0189		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0198		0.0010	0.00027
79-01-6	Trichloroethene	0.0198		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0172		0.0010	0.00041
75-01-4	Vinyl chloride	0.0197		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		78-135
460-00-4	4-Bromofluorobenzene	82		67-126
1868-53-7	Dibromofluoromethane (Surr)	104		61-149
2037-26-5	Toluene-d8 (Surr)	101		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28116.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Mar-2018 12:53:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0069609-003
Operator ID: Instrument ID: CVOAMS2

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 16:32:17 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: kaewink Date: 02-Apr-2018 10:24:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.113	1.113	0.000	99	122237	20.0	19.6	
2 Chloromethane	50	1.261	1.261	0.000	99	129858	20.0	22.8	
3 Vinyl chloride	62	1.341	1.341	0.000	98	111715	20.0	19.7	
4 Butadiene	54	1.341	1.341	0.000	92	95575	20.0	19.9	
5 Bromomethane	94	1.593	1.593	0.000	97	64952	20.0	18.8	
6 Chloroethane	64	1.650	1.650	0.000	99	51880	20.0	16.9	
7 Trichlorofluoromethane	101	1.821	1.821	0.000	97	113072	20.0	17.2	
8 Dichlorofluoromethane	67	1.821	1.833	-0.012	98	149439	20.0	16.6	
9 Pentane	72	1.844	1.844	0.000	96	25090	40.0	32.6	
12 Ethyl ether	59	2.038	2.050	-0.012	96	52403	20.0	16.9	
11 2-Methyl-1,3-butadiene	53	2.050	2.050	0.000	98	71347	20.0	16.5	
10 Ethanol	46	2.050	2.061	-0.011	67	12132	800.0	788.5	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	96	62464	20.0	18.4	
16 Acrolein	56	2.210	2.210	0.000	96	92267	300.0	196.7	
14 1,1,2-Trichloro-1,2,2-trif	101	2.210	2.221	-0.011	96	76122	20.0	18.1	
15 1,1-Dichloroethene	96	2.221	2.221	0.000	94	67617	20.0	17.3	
17 Acetone	43	2.347	2.347	0.000	85	68946	100.0	77.2	
18 Iodomethane	142	2.370	2.370	0.000	97	123543	20.0	18.7	
19 Carbon disulfide	76	2.393	2.393	0.000	100	263412	20.0	17.5	
20 Isopropyl alcohol	45	2.473	2.473	0.000	39	33019	200.0	180.7	
21 3-Chloro-1-propene	76	2.541	2.553	-0.012	90	44048	20.0	16.4	
22 Methyl acetate	43	2.587	2.587	0.000	100	182770	100.0	81.4	
23 Methylene Chloride	84	2.678	2.678	0.000	98	71230	20.0	16.9	
* 24 TBA-d9 (IS)	65	2.724	2.724	0.000	0	225688	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.793	2.793	0.000	53	74378	200.0	192.8	
26 Methyl tert-butyl ether	73	2.850	2.850	0.000	97	160816	20.0	17.3	
27 trans-1,2-Dichloroethene	96	2.861	2.861	0.000	97	77017	20.0	18.9	
28 Acrylonitrile	53	2.964	2.964	0.000	95	181388	200.0	197.0	
29 Hexane	57	3.021	3.033	-0.012	93	113926	20.0	16.1	
30 Isopropyl ether	45	3.273	3.273	0.000	98	241185	20.0	16.4	
31 1,1-Dichloroethane	63	3.273	3.284	-0.011	99	146371	20.0	17.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 2-Chloro-1,3-butadiene	88	3.319	3.318	0.001	76	67728	20.0	18.4	
32 Vinyl acetate	86	3.319	3.330	-0.011	100	17141	40.0	34.7	
34 Tert-butyl ethyl ether	59	3.604	3.604	0.000	88	221290	20.0	19.0	
35 2,2-Dichloropropane	79	3.799	3.799	0.000	96	42165	20.0	20.6	
* 36 2-Butanone-d5	46	3.833	3.833	0.000	0	247366	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.833	3.833	0.000	93	86220	20.0	19.5	
38 2-Butanone (MEK)	72	3.890	3.890	0.000	96	32831	100.0	99.1	
39 Ethyl acetate	70	3.901	3.901	0.000	95	12892	40.0	41.1	
40 Propionitrile	54	4.027	4.027	0.000	99	79042	200.0	204.1	
41 Chlorobromomethane	128	4.073	4.084	-0.011	97	35632	20.0	20.2	
42 Methacrylonitrile	67	4.130	4.130	0.000	96	230504	200.0	214.7	
43 Chloroform	83	4.153	4.153	0.000	98	151753	20.0	21.6	
44 Cyclohexane	84	4.256	4.256	0.000	96	123463	20.0	20.2	
45 1,1,1-Trichloroethane	97	4.279	4.279	0.000	97	131018	20.0	21.9	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	97	138750	50.0	51.8	
47 Carbon tetrachloride	117	4.404	4.404	0.000	98	110811	20.0	21.3	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	95	114027	20.0	20.3	
49 Benzene	78	4.656	4.667	-0.011	97	328399	20.0	21.5	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.702	4.701	0.001	0	157702	50.0	56.2	
50 Isobutyl alcohol	42	4.713	4.713	0.000	65	85761	500.0	858.9	
52 Tert-amyl methyl ether	73	4.770	4.770	0.000	93	233283	20.0	20.5	
53 1,2-Dichloroethane	62	4.782	4.781	0.001	94	98288	20.0	20.9	
54 n-Heptane	57	4.873	4.873	0.000	96	82389	20.0	21.2	
* 55 Fluorobenzene	96	4.999	4.999	0.000	98	476380	50.0	50.0	
56 Trichloroethene	95	5.399	5.399	0.000	97	77685	20.0	19.8	
57 n-Butanol	43	5.502	5.513	-0.011	53	23063	500.0	398.3	
58 Methylcyclohexane	83	5.513	5.513	0.000	89	139644	20.0	19.6	
59 Ethyl acrylate	55	5.616	5.616	0.000	97	58031	20.0	16.6	
60 1,2-Dichloropropane	63	5.730	5.730	0.000	94	89035	20.0	21.0	
* 61 1,4-Dioxane-d8	96	5.845	5.844	0.000	0	16070	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	94	41659	20.0	21.5	
63 1,4-Dioxane	88	5.902	5.902	0.000	88	12905	400.0	504.5	
64 Dichlorobromomethane	83	6.073	6.073	0.000	98	98870	20.0	21.7	
65 2-Nitropropane	41	6.473	6.485	-0.012	96	29763	40.0	46.8	
66 2-Chloroethyl vinyl ether	63	6.507	6.507	0.000	96	29589	20.0	18.5	
67 Epichlorohydrin	57	6.610	6.610	0.000	98	104588	400.0	396.3	a
68 cis-1,3-Dichloropropene	75	6.656	6.656	0.000	98	111186	20.0	20.8	
69 4-Methyl-2-pentanone (MIBK	43	6.873	6.873	0.000	97	315490	100.0	96.0	
$ 70 Toluene-d8 (Surr)	98	6.907	6.907	0.000	99	524299	50.0	50.5	
71 Toluene	91	6.987	6.987	0.000	94	306005	20.0	20.4	
72 trans-1,3-Dichloropropene	75	7.365	7.365	0.000	96	83533	20.0	19.8	
73 1,1,2-Trichloroethane	83	7.548	7.547	0.001	74	48924	20.0	21.0	
74 Tetrachloroethene	166	7.548	7.547	0.001	93	83469	20.0	21.5	
75 1,3-Dichloropropane	76	7.708	7.708	0.000	96	88651	20.0	20.1	
76 2-Hexanone	43	7.799	7.799	0.000	99	168068	100.0	73.7	
77 Chlorodibromomethane	129	7.890	7.890	0.000	98	63028	20.0	22.4	
78 Ethylene Dibromide	107	7.993	7.993	0.000	98	50574	20.0	22.0	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	90	347541	50.0	50.0	
80 Chlorobenzene	112	8.428	8.428	0.000	92	192431	20.0	21.2	
81 Ethylbenzene	106	8.508	8.508	0.000	99	98004	20.0	19.9	
82 1,1,1,2-Tetrachloroethane	131	8.519	8.519	0.000	95	70553	20.0	21.6	
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	115230	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 o-Xylene	106	8.953	8.953	0.000	93	114223	20.0	20.1	
85 Styrene	104	8.988	8.988	0.000	93	184800	20.0	21.3	
86 Bromoform	173	9.148	9.148	0.000	96	42170	20.0	22.5	
87 Amyl acetate (mixed isomer	43	9.171	9.171	0.001	87	83889	20.0	16.4	
88 Isopropylbenzene	105	9.251	9.251	0.001	98	317813	20.0	21.1	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	0.000	90	148337	50.0	41.2	
90 Bromobenzene	156	9.513	9.513	0.000	97	79189	20.0	18.9	
91 1,1,2,2-Tetrachloroethane	83	9.571	9.571	0.000	96	76681	20.0	21.9	
92 N-Propylbenzene	91	9.571	9.571	0.000	98	395617	20.0	20.3	
93 1,2,3-Trichloropropane	110	9.605	9.605	0.000	96	17118	20.0	19.2	
95 trans-1,4-Dichloro-2-buten	53	9.628	9.628	0.000	80	27195	20.0	20.8	
94 2-Chlorotoluene	91	9.662	9.662	0.000	96	281662	20.0	19.8	
96 4-Ethyltoluene	105	9.662	9.662	0.000	97	344383	20.0	20.7	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	97	290053	20.0	20.5	
98 4-Chlorotoluene	91	9.753	9.753	0.000	99	283995	20.0	20.8	
99 tert-Butylbenzene	119	9.948	9.948	0.000	92	234555	20.0	19.3	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	98	276737	20.0	20.3	
101 sec-Butylbenzene	105	10.119	10.119	0.000	98	364272	20.0	20.3	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	77	158501	20.0	20.2	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	97	297332	20.0	20.7	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	95	198906	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.291	10.291	0.000	92	173426	20.0	20.2	
106 Benzyl chloride	126	10.405	10.405	0.000	98	25837	20.0	22.0	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	92	273492	20.0	20.6	
108 p-Diethylbenzene	119	10.496	10.496	0.000	92	176335	20.0	20.0	
109 n-Butylbenzene	92	10.519	10.519	0.000	95	176563	20.0	20.7	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	96	154374	20.0	20.4	
111 1,2,4,5-Tetramethylbenzene	119	11.056	11.056	0.000	97	240629	20.0	19.6	
112 1,2-Dibromo-3-Chloropropan	155	11.136	11.136	0.000	94	10412	20.0	26.2	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	97	137411	20.0	21.3	
114 1,2,4-Trichlorobenzene	180	11.662	11.662	0.000	93	109991	20.0	23.0	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	97	80984	20.0	21.1	
116 Naphthalene	128	11.834	11.834	0.000	99	174131	20.0	20.7	
117 1,2,3-Trichlorobenzene	180	12.005	12.005	0.000	95	88751	20.0	20.9	
S 118 1,2-Dichloroethene, Total	100				0		40.0	38.4	
S 119 1,3-Dichloropropene, Total	100				0		40.0	40.6	
S 120 Xylenes, Total	100				0		40.0	39.7	
S 121 Total BTEX	1				0		100.0	101.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00075	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 02-Apr-2018 16:32:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28116.D

Injection Date: 31-Mar-2018 12:53:30 Instrument ID: CVOAMS2 Operator ID:

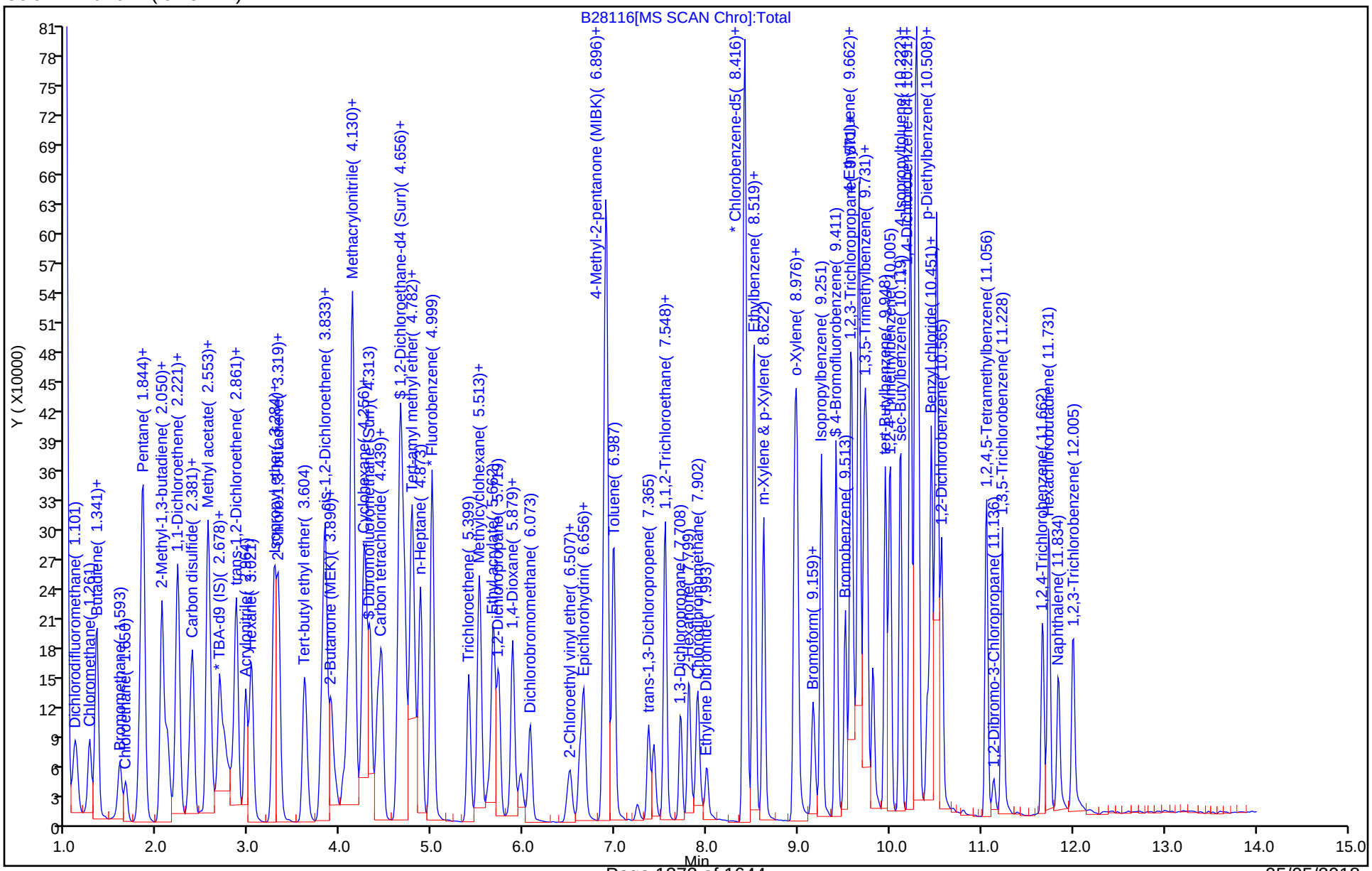
Lims ID: LCS Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-510106/3

Matrix: Solid | Lab File ID: D48511.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/11/2018 09:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0175		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0211		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0172		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0208		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0192		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0178		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0203		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0204		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0175		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0199		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0179		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0192		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0204		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0205		0.0010	0.00010
123-91-1	1,4-Dioxane	0.438		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0796		0.0050	0.0011
591-78-6	2-Hexanone	0.0909		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0929		0.0050	0.00066
67-64-1	Acetone	0.0829		0.0050	0.0038
71-43-2	Benzene	0.0208		0.0010	0.00026
75-25-2	Bromoform	0.0162		0.0010	0.00043
74-83-9	Bromomethane	0.0170		0.0010	0.00047
75-15-0	Carbon disulfide	0.0173		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0170		0.0010	0.00018
108-90-7	Chlorobenzene	0.0202		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0174		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0183		0.0010	0.00019
75-00-3	Chloroethane	0.0171		0.0010	0.00052
67-66-3	Chloroform	0.0182		0.0010	0.00032
74-87-3	Chloromethane	0.0162		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0173		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0209		0.0010	0.00027
110-82-7	Cyclohexane	0.0185		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0172		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0132		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-510106/3

Matrix: Solid | Lab File ID: D48511.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/11/2018 09:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0203		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0195		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0200		0.0010	0.00013
79-20-9	Methyl acetate	0.0983		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0188		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0185		0.0010	0.00016
75-09-2	Methylene Chloride	0.0187		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0204		0.0010	0.00017
95-47-6	o-Xylene	0.0203		0.0010	0.000095
100-42-5	Styrene	0.0201		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0192		0.0010	0.00014
108-88-3	Toluene	0.0207		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0182		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0206		0.0010	0.00027
79-01-6	Trichloroethene	0.0179		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0150		0.0010	0.00041
75-01-4	Vinyl chloride	0.0148		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	81		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48511.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 11-Apr-2018 09:14:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0070170-003
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Apr-2018 13:55:18 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: martineze Date: 11-Apr-2018 09:48:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.521	1.521	0.000	75	58203	20.0	16.3	a
2 Dichlorodifluoromethane	85	1.557	1.557	0.000	99	162274	20.0	13.2	
3 Chloromethane	50	1.765	1.765	0.000	99	227308	20.0	16.2	
4 Vinyl chloride	62	1.862	1.862	0.000	97	182210	20.0	14.8	
5 Butadiene	54	1.874	1.874	0.000	95	147638	20.0	14.8	
6 Bromomethane	94	2.210	2.210	0.000	98	90091	20.0	17.0	
7 Chloroethane	64	2.295	2.295	0.000	99	92641	20.0	17.1	
9 Trichlorofluoromethane	101	2.508	2.508	0.000	98	144239	20.0	15.0	
8 Dichlorofluoromethane	67	2.521	2.521	0.000	98	247181	20.0	18.0	
10 Pentane	72	2.527	2.527	0.000	98	42447	40.0	35.4	
12 Ethanol	46	2.764	2.764	0.000	90	20988	800.0	907.1	
11 Ethyl ether	59	2.764	2.764	0.000	94	89312	20.0	19.3	
13 2-Methyl-1,3-butadiene	53	2.783	2.783	0.000	97	98787	20.0	19.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.850	2.850	0.000	93	86821	20.0	17.5	
16 Acrolein	56	2.972	2.972	0.000	98	184865	300.0	267.1	
15 1,1,2-Trichloro-1,2,2-trif	101	3.002	3.002	0.000	79	105762	20.0	17.2	
17 1,1-Dichloroethene	96	3.008	3.008	0.000	94	100991	20.0	17.8	
18 Acetone	43	3.118	3.118	0.000	90	150681	100.0	82.9	
19 Iodomethane	142	3.185	3.185	0.000	99	176428	20.0	17.1	
20 Carbon disulfide	76	3.222	3.222	0.000	100	382796	20.0	17.3	
21 Isopropyl alcohol	45	3.246	3.246	0.000	99	62030	200.0	193.4	
22 3-Chloro-1-propene	76	3.392	3.392	0.000	89	62858	20.0	18.3	
23 Cyclopentene	67	3.411	3.411	0.000	92	257353	20.0	19.1	
24 Methyl acetate	43	3.417	3.417	0.000	99	332104	100.0	98.3	
25 Acetonitrile	41	3.484	3.484	0.000	96	96093	200.0	224.7	
26 Methylene Chloride	84	3.551	3.551	0.000	97	122322	20.0	18.7	
* 27 TBA-d9 (IS)	65	3.563	3.563	0.000	38	532807	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.648	3.648	0.000	98	103276	200.0	190.3	
29 Methyl tert-butyl ether	73	3.752	3.752	0.000	97	273911	20.0	18.8	
30 trans-1,2-Dichloroethene	96	3.776	3.776	0.000	99	101317	20.0	18.2	
31 Acrylonitrile	53	3.874	3.874	0.000	95	335563	200.0	228.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.972	3.972	0.000	93	146781	20.0	19.9	
33 Isopropyl ether	45	4.246	4.246	0.000	97	342519	20.0	20.8	
34 1,1-Dichloroethane	63	4.270	4.270	0.000	99	191233	20.0	19.2	
35 Vinyl acetate	86	4.295	4.295	0.000	100	31817	40.0	35.9	
36 2-Chloro-1,3-butadiene	88	4.319	4.319	0.000	94	81746	20.0	17.9	
37 Tert-butyl ethyl ether	59	4.630	4.630	0.000	88	299443	20.0	19.7	
* 38 2-Butanone-d5	46	4.868	4.868	0.000	0	438969	250.0	250.0	
39 2,2-Dichloropropane	79	4.880	4.880	0.000	90	47156	20.0	18.0	
40 cis-1,2-Dichloroethene	96	4.910	4.910	0.000	95	107494	20.0	17.3	
41 2-Butanone (MEK)	72	4.935	4.935	0.000	97	44015	100.0	79.6	
42 Ethyl acetate	70	4.947	4.947	0.000	96	16364	40.0	34.0	
43 Methyl acrylate	55	5.008	5.008	0.000	99	65499	20.0	19.0	
44 Propionitrile	54	5.099	5.099	0.000	98	113886	200.0	187.2	
45 Tetrahydrofuran	72	5.179	5.179	0.000	94	19001	40.0	32.6	
46 Chlorobromomethane	128	5.185	5.185	0.000	97	43504	20.0	17.4	
47 Methacrylonitrile	67	5.221	5.221	0.000	93	319473	200.0	179.6	
48 Chloroform	83	5.264	5.264	0.000	98	167239	20.0	18.2	
49 Cyclohexane	84	5.410	5.410	0.000	93	141637	20.0	18.5	
50 1,1,1-Trichloroethane	97	5.429	5.429	0.000	97	133473	20.0	17.5	
$ 51 Dibromofluoromethane (Surr	113	5.453	5.453	0.000	95	228441	50.0	40.7	
52 Carbon tetrachloride	117	5.575	5.575	0.000	97	101273	20.0	17.0	
53 1,1-Dichloropropene	75	5.612	5.612	0.000	95	117156	20.0	18.8	
54 Isobutyl alcohol	43	5.813	5.813	0.000	94	157132	500.0	512.9	
55 Benzene	78	5.855	5.855	0.000	98	347402	20.0	20.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.880	5.880	0.000	98	251625	50.0	42.7	
57 Tert-amyl methyl ether	87	5.953	5.953	0.000	92	73252	20.0	17.6	
58 Isopropyl acetate	43	5.959	5.959	0.000	97	276438	20.0	19.5	
59 1,2-Dichloroethane	62	5.977	5.977	0.000	96	113180	20.0	17.9	
60 n-Heptane	57	6.069	6.069	0.000	93	76442	20.0	19.7	
* 61 Fluorobenzene	96	6.221	6.221	0.000	98	817333	50.0	50.0	
62 n-Butanol	56	6.636	6.636	0.000	88	48993	500.0	488.6	
63 Trichloroethene	95	6.660	6.660	0.000	94	81295	20.0	17.9	
64 Methylcyclohexane	83	6.806	6.806	0.000	95	156809	20.0	18.5	
65 Ethyl acrylate	73	6.831	6.831	0.000	98	5870	20.0	17.1	
66 1,2-Dichloropropane	63	7.001	7.001	0.000	91	89340	20.0	19.2	
* 67 1,4-Dioxane-d8	96	7.069	7.069	0.000	0	33499	1000.0	1000.0	
68 Methyl methacrylate	100	7.105	7.105	0.000	90	31951	40.0	33.5	
69 1,4-Dioxane	88	7.130	7.130	0.000	90	15283	400.0	438.4	
70 Dibromomethane	93	7.142	7.142	0.000	92	49702	20.0	17.1	
71 n-Propyl acetate	43	7.172	7.172	0.000	99	101325	20.0	20.4	
72 Dichlorobromomethane	83	7.306	7.306	0.000	98	97015	20.0	17.2	
73 2-Nitropropane	41	7.642	7.642	0.000	96	32303	40.0	30.5	
74 2-Chloroethyl vinyl ether	63	7.648	7.648	0.000	96	36562	20.0	20.1	
75 Epichlorohydrin	57	7.739	7.739	0.000	99	135368	400.0	362.6	
76 cis-1,3-Dichloropropene	75	7.794	7.794	0.000	95	118136	20.0	20.9	
77 4-Methyl-2-pentanone (MIBK	43	7.940	7.940	0.000	97	347770	100.0	92.9	
$ 78 Toluene-d8 (Surr)	98	8.007	8.007	0.000	98	793590	50.0	49.6	
79 Toluene	91	8.074	8.074	0.000	93	328764	20.0	20.7	
80 trans-1,3-Dichloropropene	75	8.367	8.367	0.000	98	94568	20.0	20.6	
81 Ethyl methacrylate	69	8.391	8.391	0.000	89	82330	20.0	18.1	
82 1,1,2-Trichloroethane	83	8.532	8.532	0.000	96	53526	20.0	20.8	
83 Tetrachloroethene	166	8.568	8.568	0.000	94	64558	20.0	19.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.690	8.690	0.000	93	98787	20.0	21.2	
85 2-Hexanone	43	8.739	8.739	0.000	97	209406	100.0	90.9	
86 n-Butyl acetate	73	8.818	8.818	0.000	98	17250	20.0	20.3	
87 Chlorodibromomethane	129	8.867	8.867	0.000	98	57090	20.0	18.3	
88 Ethylene Dibromide	107	8.977	8.977	0.000	98	53957	20.0	19.5	
* 89 Chlorobenzene-d5	117	9.349	9.349	0.000	90	518373	50.0	50.0	
90 Chlorobenzene	112	9.373	9.373	0.000	94	182271	20.0	20.2	
91 Ethylbenzene	106	9.434	9.434	0.000	99	103462	20.0	20.3	
92 1,1,1,2-Tetrachloroethane	131	9.446	9.446	0.000	95	65291	20.0	18.1	
93 m-Xylene & p-Xylene	106	9.538	9.538	0.000	98	125310	20.0	20.4	
94 n-Butyl acrylate	73	9.830	9.830	0.000	96	45919	20.0	20.1	
95 o-Xylene	106	9.861	9.861	0.000	93	130052	20.0	20.3	
96 Styrene	104	9.885	9.885	0.000	93	200335	20.0	20.1	
97 Amyl acetate (mixed isomer	43	10.007	10.007	0.000	90	117427	20.0	22.8	
98 Bromoform	173	10.062	10.062	0.000	94	31265	20.0	16.2	
99 Isopropylbenzene	105	10.141	10.141	0.000	97	339389	20.0	20.0	
$ 100 4-Bromofluorobenzene	174	10.306	10.306	0.000	0	204038	50.0	51.0	
101 Bromobenzene	156	10.422	10.422	0.000	96	70572	20.0	20.3	
102 1,1,2,2-Tetrachloroethane	83	10.434	10.434	0.000	99	82477	20.0	21.1	
103 N-Propylbenzene	91	10.458	10.458	0.000	98	414176	20.0	21.5	
104 1,2,3-Trichloropropane	110	10.476	10.476	0.000	95	20718	20.0	20.8	
105 trans-1,4-Dichloro-2-buten	53	10.483	10.483	0.000	77	21253	20.0	22.5	
106 4-Ethyltoluene	105	10.543	10.543	0.000	98	336531	20.0	21.2	
107 2-Chlorotoluene	91	10.550	10.550	0.000	96	284445	20.0	21.3	
108 1,3,5-Trimethylbenzene	105	10.592	10.592	0.000	92	285848	20.0	21.2	
109 4-Chlorotoluene	91	10.641	10.641	0.000	98	237944	20.0	21.4	
110 Butyl Methacrylate	87	10.653	10.653	0.000	93	94842	20.0	20.7	
111 tert-Butylbenzene	119	10.830	10.830	0.000	92	218392	20.0	20.4	
112 1,2,4-Trimethylbenzene	105	10.879	10.879	0.000	98	291487	20.0	20.7	
113 sec-Butylbenzene	105	10.995	10.995	0.000	99	368715	20.0	20.7	
114 4-Isopropyltoluene	119	11.098	11.098	0.000	97	304468	20.0	20.9	
115 1,3-Dichlorobenzene	146	11.117	11.117	0.000	94	141936	20.0	20.4	
* 116 1,4-Dichlorobenzene-d4	152	11.171	11.171	0.000	96	257121	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.190	11.190	0.000	91	144865	20.0	20.5	
118 Benzyl chloride	126	11.293	11.293	0.000	97	24217	20.0	19.1	
119 2,3-Dihydroindene	117	11.348	11.348	0.000	95	308892	20.0	17.2	
120 p-Diethylbenzene	119	11.373	11.373	0.000	92	188568	20.0	21.4	
121 n-Butylbenzene	92	11.397	11.397	0.000	97	184066	20.0	22.4	
122 1,2-Dichlorobenzene	146	11.470	11.470	0.000	94	138986	20.0	19.9	
123 1,2,4,5-Tetramethylbenzene	119	12.007	12.007	0.000	96	281946	20.0	20.9	
124 1,2-Dibromo-3-Chloropropan	157	12.122	12.122	0.000	92	12775	20.0	17.5	
125 1,3,5-Trichlorobenzene	180	12.250	12.250	0.000	96	110516	20.0	20.3	
126 1,2,4-Trichlorobenzene	180	12.891	12.891	0.000	94	100993	20.0	20.4	
127 Hexachlorobutadiene	225	13.000	13.000	0.000	91	44744	20.0	19.2	
128 Naphthalene	128	13.183	13.183	0.000	99	244442	20.0	20.3	
129 1,2,3-Trichlorobenzene	180	13.470	13.470	0.000	95	96924	20.0	20.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	35.5	
S 131 1,3-Dichloropropene, Total	100				0		40.0	41.5	
S 132 Xylenes, Total	100				0		40.0	40.7	
S 133 Total BTEX	1				0		100.0	102.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

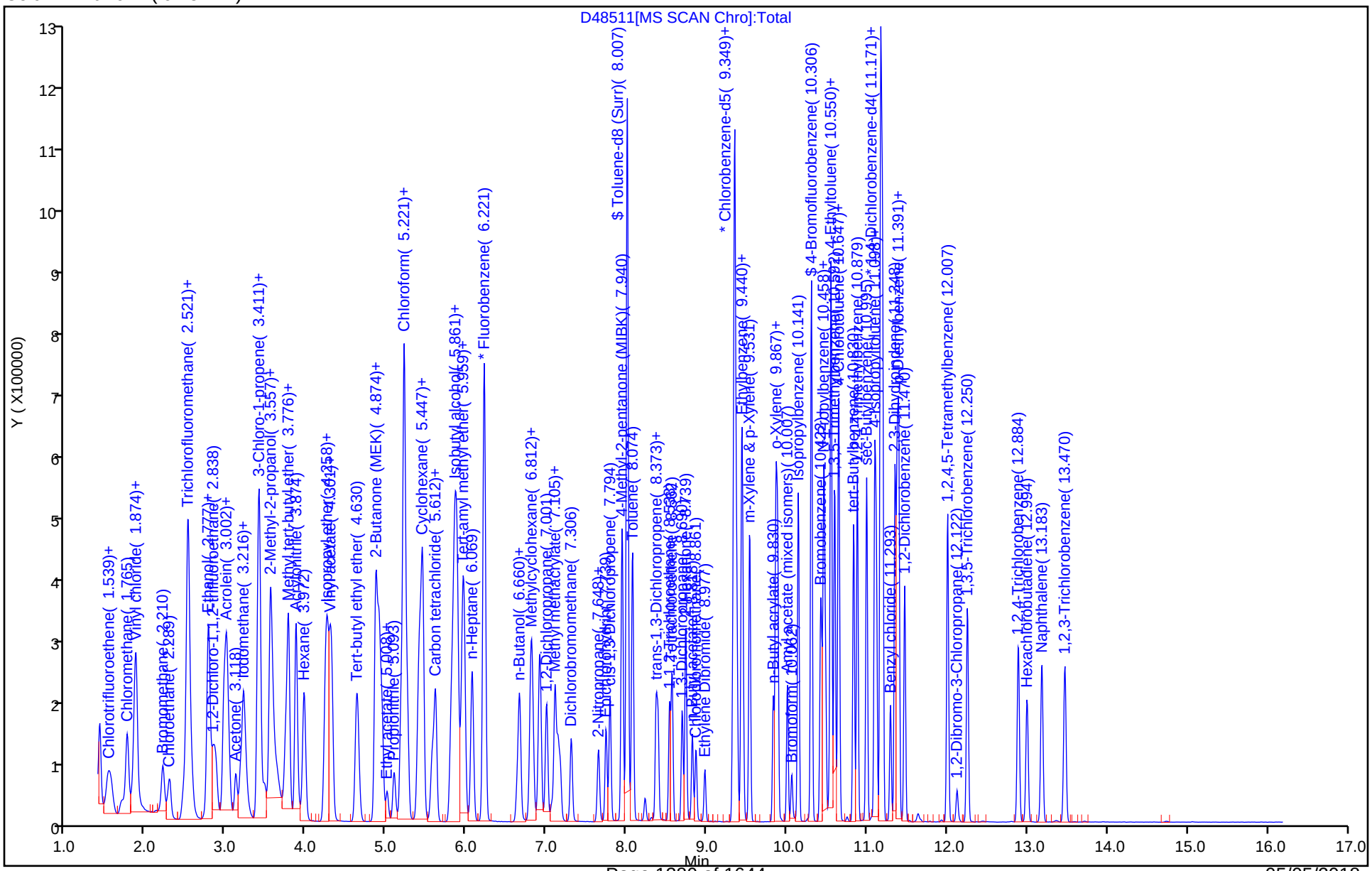
Report Date: 11-Apr-2018 13:55:20 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48511.D

Injection Date:	11-Apr-2018 09:14:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-510660/4

Matrix: Solid | Lab File ID: K81911.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/12/2018 22:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0236		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0173		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0211		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0180		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0210		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0193		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0181		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0192		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0207		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0187		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0206		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0194		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0182		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0178		0.0010	0.00010
123-91-1	1,4-Dioxane	0.363		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0801		0.0050	0.0011
591-78-6	2-Hexanone	0.0990		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.101		0.0050	0.00066
67-64-1	Acetone	0.0965		0.0050	0.0038
71-43-2	Benzene	0.0177		0.0010	0.00026
75-25-2	Bromoform	0.0266		0.0010	0.00043
74-83-9	Bromomethane	0.0200		0.0010	0.00047
75-15-0	Carbon disulfide	0.0192		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0267		0.0010	0.00018
108-90-7	Chlorobenzene	0.0180		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0204		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0227		0.0010	0.00019
75-00-3	Chloroethane	0.0203		0.0010	0.00052
67-66-3	Chloroform	0.0212		0.0010	0.00032
74-87-3	Chloromethane	0.0182		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0193		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0184		0.0010	0.00027
110-82-7	Cyclohexane	0.0201		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0214		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0182		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-510660/4

Matrix: Solid | Lab File ID: K81911.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/12/2018 22:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0187		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0194		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0191		0.0010	0.00013
79-20-9	Methyl acetate	0.118		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0200		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0200		0.0010	0.00016
75-09-2	Methylene Chloride	0.0187		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0180		0.0010	0.00017
95-47-6	o-Xylene	0.0185		0.0010	0.000095
100-42-5	Styrene	0.0183		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0198		0.0010	0.00014
108-88-3	Toluene	0.0178		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0191		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0203		0.0010	0.00027
79-01-6	Trichloroethene	0.0192		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0232		0.0010	0.00041
75-01-4	Vinyl chloride	0.0180		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		78-135
460-00-4	4-Bromofluorobenzene	112		67-126
1868-53-7	Dibromofluoromethane (Surr)	116		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81911.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-Apr-2018 22:11:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070288-004
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 10:39:50 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: boykink Date: 13-Apr-2018 00:41:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.596	0.000	87	41995	20.0	18.5	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	99	102442	20.0	18.2	
3 Chloromethane	50	1.803	1.803	0.000	99	99638	20.0	18.2	
5 Butadiene	54	1.907	1.907	0.000	95	74437	20.0	18.2	
4 Vinyl chloride	62	1.913	1.913	0.000	92	100138	20.0	18.0	
6 Bromomethane	94	2.206	2.206	0.000	99	80988	20.0	20.0	
7 Chloroethane	64	2.273	2.273	0.000	100	50814	20.0	20.3	
8 Trichlorofluoromethane	101	2.462	2.462	0.000	82	134109	20.0	23.2	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	151666	20.0	21.6	
10 Pentane	72	2.498	2.498	0.000	96	22420	40.0	30.0	
12 Ethanol	46	2.657	2.657	0.000	43	16511	800.0	730.2	a
11 Ethyl ether	59	2.699	2.699	0.000	94	49867	20.0	20.7	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	97	53106	20.0	21.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	92	61166	20.0	21.3	
15 Acrolein	56	2.882	2.882	0.000	96	147947	300.0	240.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	96	77952	20.0	21.1	
17 1,1-Dichloroethene	96	2.913	2.913	0.000	98	64149	20.0	19.3	
18 Acetone	43	3.004	3.004	0.000	89	93061	100.0	96.5	
19 Iodomethane	142	3.077	3.077	0.000	99	122087	20.0	19.4	
22 Isopropyl alcohol	45	3.096	3.096	0.000	1	40912	200.0	181.4	a
20 Carbon disulfide	76	3.114	3.114	0.000	99	240983	20.0	19.2	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	94	39226	20.0	20.4	
23 Methyl acetate	43	3.248	3.248	0.000	99	201371	100.0	118.4	
24 Cyclopentene	67	3.266	3.266	0.000	93	158307	20.0	20.7	
29 Acetonitrile	41	3.315	3.315	0.000	97	109557	200.0	171.4	a
* 25 TBA-d9 (IS)	65	3.370	3.370	0.000	0	318881	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	93	75048	20.0	18.7	
27 2-Methyl-2-propanol	59	3.431	3.431	0.000	91	84667	200.0	175.1	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	96	183515	20.0	20.0	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	94	68744	20.0	19.1	
31 Acrylonitrile	53	3.638	3.638	0.000	93	224841	200.0	213.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.724	0.000	94	58723	20.0	22.6	
33 Isopropyl ether	45	3.931	3.931	0.000	96	212196	20.0	22.1	
34 1,1-Dichloroethane	63	3.974	3.974	0.000	75	116829	20.0	21.0	
35 Vinyl acetate	86	3.986	3.986	0.000	100	20776	40.0	31.9	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	91	59151	20.0	19.6	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	195990	20.0	21.5	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	225482	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.486	0.000	93	32918	20.0	25.1	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	72	78717	20.0	19.3	
41 Ethyl acetate	70	4.510	4.510	0.000	87	11912	40.0	32.4	
42 2-Butanone (MEK)	72	4.516	4.516	0.000	96	35521	100.0	80.1	
44 Methyl acrylate	55	4.565	4.565	0.000	98	45182	20.0	21.3	
43 Propionitrile	54	4.650	4.650	0.000	98	89264	200.0	159.2	
45 Tetrahydrofuran	72	4.742	4.742	0.000	64	17678	40.0	33.7	
46 Chlorobromomethane	128	4.742	4.742	0.000	78	38550	20.0	20.4	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	242521	200.0	195.8	
48 Chloroform	83	4.790	4.790	0.000	99	123421	20.0	21.2	
49 Cyclohexane	84	4.931	4.931	0.000	90	108996	20.0	20.1	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	83	108662	20.0	23.6	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	170580	50.0	58.1	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	89035	20.0	26.7	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	97	84489	20.0	20.2	
56 Isobutyl alcohol	74	5.205	5.205	0.000	1	7025	500.0	360.8	a
54 Benzene	78	5.296	5.296	0.000	95	258481	20.0	17.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	156835	50.0	56.0	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	193869	20.0	26.0	
58 Tert-amyl methyl ether	87	5.339	5.339	0.000	90	58643	20.0	20.9	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	96	77491	20.0	20.6	
60 n-Heptane	57	5.437	5.437	0.000	92	56219	20.0	21.7	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	468502	50.0	50.0	
62 n-Butanol	56	5.876	5.876	0.000	89	38447	500.0	416.3	
63 Trichloroethene	95	5.943	5.943	0.000	98	64358	20.0	19.2	
64 Ethyl acrylate	56	6.077	6.077	0.000	94	37571	20.0	20.0	
65 Methylcyclohexane	83	6.077	6.077	0.000	95	128431	20.0	20.0	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	92	63169	20.0	19.4	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	30941	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	88	93633	40.0	57.6	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	75833	20.0	24.6	
69 1,4-Dioxane	88	6.357	6.357	0.000	29	17217	400.0	362.7	
71 Dibromomethane	93	6.376	6.376	0.000	97	42183	20.0	20.6	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	79737	20.0	21.4	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	88	32217	20.0	21.1	
74 2-Nitropropane	41	6.851	6.851	0.000	77	15674	40.0	51.6	
75 Epichlorohydrin	57	6.961	6.961	0.000	98	110589	400.0	353.5	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	90	92773	20.0	18.4	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	299121	100.0	101.2	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	600641	50.0	48.8	
79 Toluene	91	7.351	7.351	0.000	93	271425	20.0	17.8	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	99	79043	20.0	20.3	
81 Ethyl methacrylate	69	7.711	7.711	0.000	87	69581	20.0	21.2	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	97	46147	20.0	18.0	
83 Tetrachloroethene	166	7.973	7.973	0.000	97	67710	20.0	19.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.131	0.000	88	84771	20.0	17.6	
85 2-Hexanone	43	8.174	8.174	0.000	95	190602	100.0	99.0	
86 n-Butyl acetate	43	8.290	8.290	0.000	99	81982	20.0	25.0	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	60111	20.0	22.7	
88 Ethylene Dibromide	107	8.528	8.528	0.000	99	55911	20.0	19.4	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	396109	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	176355	20.0	18.0	
92 Ethylbenzene	106	9.204	9.204	0.000	98	99380	20.0	18.7	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.223	0.000	95	64265	20.0	21.8	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	120561	20.0	18.0	
94 n-Butyl acrylate	73	9.790	9.790	0.000	96	40464	20.0	23.9	
95 o-Xylene	106	9.820	9.820	0.000	94	126931	20.0	18.5	
96 Styrene	104	9.850	9.850	0.000	96	198682	20.0	18.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	94752	20.0	24.6	
98 Bromoform	173	10.088	10.088	0.000	96	35919	20.0	26.6	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	342304	20.0	19.1	
$ 100 4-Bromofluorobenzene	174	10.424	10.424	0.000	94	187188	50.0	55.9	
101 Bromobenzene	156	10.564	10.564	0.000	96	80875	20.0	18.0	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	84290	20.0	17.3	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	407850	20.0	17.6	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	98	22821	20.0	18.7	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	90	17623	20.0	18.8	
107 4-Ethyltoluene	105	10.741	10.741	0.000	90	338434	20.0	17.6	
106 2-Chlorotoluene	91	10.741	10.741	0.000	91	269650	20.0	17.4	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	93	287141	20.0	17.1	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	228297	20.0	17.1	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	82028	20.0	21.1	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	221418	20.0	16.4	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	299297	20.0	17.5	
113 sec-Butylbenzene	105	11.308	11.308	0.000	99	383089	20.0	17.1	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	326948	20.0	17.6	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	160816	20.0	18.2	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	94	235241	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	159433	20.0	17.8	
118 Benzyl chloride	91	11.667	11.667	0.000	99	121978	20.0	24.2	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	309080	20.0	17.7	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	186299	20.0	18.3	
121 n-Butylbenzene	92	11.801	11.801	0.000	97	180627	20.0	17.9	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	164634	20.0	18.7	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	324461	20.0	17.6	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	96	15010	20.0	20.7	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	140799	20.0	19.4	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	93	134521	20.0	19.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	61821	20.0	20.1	
128 Naphthalene	128	13.332	13.332	0.000	99	330114	20.0	17.0	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	129678	20.0	18.1	
S 130 1,2-Dichloroethene, Total	100				0		40.0	38.4	
S 131 Xylenes, Total	100				0		40.0	36.5	
S 132 Total BTEX	1				0		100.0	90.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

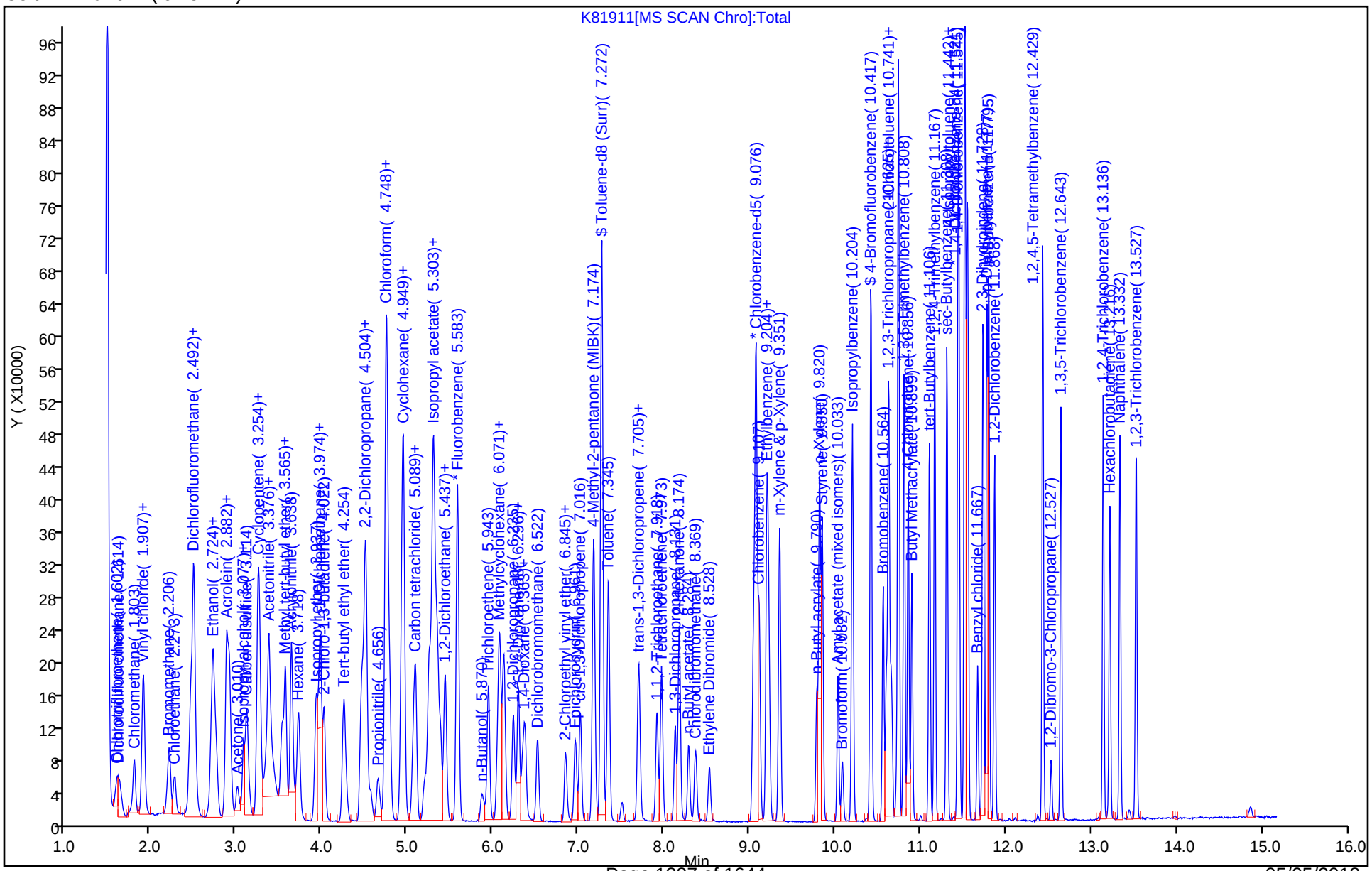
Report Date: 13-Apr-2018 10:39:52 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81911.D

Injection Date:	12-Apr-2018 22:11:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-510972/3

Matrix: Solid | Lab File ID: K81964.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/13/2018 20:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0249		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0179		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0226		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0192		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0229		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0213		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0194		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0205		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0214		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0195		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0218		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0210		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0191		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0189		0.0010	0.00010
123-91-1	1,4-Dioxane	0.391		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0855		0.0050	0.0011
591-78-6	2-Hexanone	0.0974		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.103		0.0050	0.00066
67-64-1	Acetone	0.0992		0.0050	0.0038
71-43-2	Benzene	0.0198		0.0010	0.00026
75-25-2	Bromoform	0.0260		0.0010	0.00043
74-83-9	Bromomethane	0.0190		0.0010	0.00047
75-15-0	Carbon disulfide	0.0212		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0279		0.0010	0.00018
108-90-7	Chlorobenzene	0.0192		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0210		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0232		0.0010	0.00019
75-00-3	Chloroethane	0.0197		0.0010	0.00052
67-66-3	Chloroform	0.0224		0.0010	0.00032
74-87-3	Chloromethane	0.0171		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0207		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0202		0.0010	0.00027
110-82-7	Cyclohexane	0.0218		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0227		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0173		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-510972/3

Matrix: Solid | Lab File ID: K81964.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/13/2018 20:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0199		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0203		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0204		0.0010	0.00013
79-20-9	Methyl acetate	0.122		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0212		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0217		0.0010	0.00016
75-09-2	Methylene Chloride	0.0199		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0190		0.0010	0.00017
95-47-6	o-Xylene	0.0196		0.0010	0.000095
100-42-5	Styrene	0.0193		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0212		0.0010	0.00014
108-88-3	Toluene	0.0193		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0210		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0214		0.0010	0.00027
79-01-6	Trichloroethene	0.0213		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0208		0.0010	0.00041
75-01-4	Vinyl chloride	0.0173		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		78-135
460-00-4	4-Bromofluorobenzene	109		67-126
1868-53-7	Dibromofluoromethane (Surr)	115		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81964.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 13-Apr-2018 20:46:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0070351-003
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 11:40:46 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: delpolitov Date: 17-Apr-2018 11:40:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.608	1.596	0.012	88	48958	20.0	19.9	
2 Dichlorodifluoromethane	85	1.632	1.633	-0.001	98	105993	20.0	17.3	
3 Chloromethane	50	1.803	1.803	0.000	99	101953	20.0	17.1	
5 Butadiene	54	1.907	1.907	0.000	97	76331	20.0	17.2	
4 Vinyl chloride	62	1.913	1.913	0.000	89	104795	20.0	17.3	
6 Bromomethane	94	2.212	2.212	0.000	99	83183	20.0	19.0	
7 Chloroethane	64	2.273	2.267	0.006	100	53444	20.0	19.7	
9 Dichlorofluoromethane	67	2.474	2.468	0.006	97	155928	20.0	20.4	
8 Trichlorofluoromethane	101	2.480	2.474	0.006	55	130347	20.0	20.8	
10 Pentane	72	2.504	2.504	0.000	96	25771	40.0	31.8	
11 Ethyl ether	59	2.699	2.699	0.000	95	55103	20.0	21.1	
12 Ethanol	46	2.705	2.699	0.006	68	17237	800.0	702.4	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	97	63570	20.0	23.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.754	0.000	92	71003	20.0	22.8	
15 Acrolein	56	2.882	2.882	0.000	96	140600	300.0	210.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.888	0.006	97	90506	20.0	22.6	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	97	76928	20.0	21.3	
18 Acetone	43	3.004	3.010	-0.006	89	104474	100.0	99.2	
19 Iodomethane	142	3.083	3.083	0.000	98	147764	20.0	21.6	
22 Isopropyl alcohol	45	3.102	3.096	0.006	1	48105	200.0	196.5	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	288602	20.0	21.2	
21 3-Chloro-1-propene	76	3.248	3.248	0.000	97	45592	20.0	21.9	
23 Methyl acetate	43	3.254	3.254	0.000	99	225905	100.0	122.4	
24 Cyclopentene	67	3.272	3.266	0.006	93	190026	20.0	22.9	
29 Acetonitrile	41	3.315	3.327	-0.012	93	125121	200.0	180.4	a
26 Methylene Chloride	84	3.376	3.376	0.000	90	86531	20.0	19.9	
* 25 TBA-d9 (IS)	65	3.376	3.394	-0.018	0	346072	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.449	3.455	-0.006	91	95616	200.0	182.2	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	96	211207	20.0	21.2	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	93	82108	20.0	21.0	
31 Acrylonitrile	53	3.638	3.638	0.000	94	256688	200.0	224.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.724	0.000	93	68130	20.0	24.2	
33 Isopropyl ether	45	3.931	3.931	0.000	97	244417	20.0	23.5	
34 1,1-Dichloroethane	63	3.980	3.980	0.000	75	138198	20.0	22.9	
35 Vinyl acetate	86	3.986	3.986	0.000	100	23492	40.0	33.2	
36 2-Chloro-1,3-butadiene	88	4.028	4.022	0.006	90	69682	20.0	21.3	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	226110	20.0	22.9	
* 38 2-Butanone-d5	46	4.455	4.461	-0.006	0	246240	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.492	-0.006	94	39121	20.0	27.5	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	97	91442	20.0	20.7	
41 Ethyl acetate	70	4.510	4.510	0.000	92	13922	40.0	34.7	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	96	41415	100.0	85.5	
44 Methyl acrylate	55	4.571	4.571	0.000	99	53338	20.0	23.2	
43 Propionitrile	54	4.656	4.650	0.006	98	101049	200.0	166.1	
45 Tetrahydrofuran	72	4.736	4.742	-0.006	68	19383	40.0	33.9	
46 Chlorobromomethane	128	4.742	4.742	0.000	91	43120	20.0	21.0	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	278005	200.0	206.9	
48 Chloroform	83	4.790	4.790	0.000	99	141263	20.0	22.4	
49 Cyclohexane	84	4.937	4.937	0.000	89	128043	20.0	21.8	
50 1,1,1-Trichloroethane	97	4.949	4.943	0.006	81	124263	20.0	24.9	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	97	183682	50.0	57.7	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	100914	20.0	27.9	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	102857	20.0	22.7	
56 Isobutyl alcohol	74	5.211	5.223	-0.012	1	7470	500.0	353.5	a
54 Benzene	78	5.296	5.296	0.000	95	300618	20.0	19.8	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	170174	50.0	56.1	
57 Isopropyl acetate	43	5.333	5.333	0.000	92	207130	20.0	25.6	a
58 Tert-amyl methyl ether	87	5.351	5.339	0.012	94	65846	20.0	21.6	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	97	89192	20.0	21.8	
60 n-Heptane	57	5.437	5.437	0.000	92	64675	20.0	23.0	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	508191	50.0	50.0	
62 n-Butanol	56	5.876	5.870	0.006	89	45194	500.0	450.9	
63 Trichloroethene	95	5.949	5.943	0.006	99	77190	20.0	21.3	
64 Ethyl acrylate	56	6.071	6.071	0.000	99	46165	20.0	22.7	
65 Methylcyclohexane	83	6.077	6.077	0.000	94	150526	20.0	21.7	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	93	73963	20.0	21.0	
68 Methyl methacrylate	41	6.296	6.290	0.006	87	106962	40.0	60.7	
* 67 1,4-Dioxane-d8	96	6.284	6.302	-0.018	0	32399	1000.0	1000.0	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	84096	20.0	25.1	
69 1,4-Dioxane	88	6.339	6.357	-0.018	30	19443	400.0	391.2	
71 Dibromomethane	93	6.369	6.369	0.000	97	46875	20.0	21.1	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	98	91543	20.0	22.7	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	84	36497	20.0	22.0	
74 2-Nitropropane	41	6.851	6.851	0.000	76	17353	40.0	52.6	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	126802	400.0	371.1	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	91	106010	20.0	20.2	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	331512	100.0	102.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	630826	50.0	49.2	
79 Toluene	91	7.345	7.351	-0.006	93	305940	20.0	19.3	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	86914	20.0	21.4	
81 Ethyl methacrylate	69	7.711	7.711	0.000	86	75372	20.0	22.0	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	98	51437	20.0	19.2	
83 Tetrachloroethene	166	7.973	7.967	0.006	96	75506	20.0	21.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.131	0.000	92	96685	20.0	19.3	
85 2-Hexanone	43	8.174	8.174	0.000	96	204818	100.0	97.4	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	84748	20.0	24.8	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	63966	20.0	23.2	
88 Ethylene Dibromide	107	8.527	8.528	-0.001	99	61054	20.0	20.3	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	412478	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	95	196485	20.0	19.2	
92 Ethylbenzene	106	9.204	9.204	0.000	98	110465	20.0	19.9	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.223	0.007	95	71547	20.0	23.3	
93 m-Xylene & p-Xylene	106	9.350	9.351	-0.001	0	132682	20.0	19.0	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	43484	20.0	24.7	
95 o-Xylene	106	9.820	9.820	0.000	94	139920	20.0	19.6	
96 Styrene	104	9.850	9.850	0.000	96	217291	20.0	19.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	100252	20.0	25.6	
98 Bromoform	173	10.088	10.082	0.006	96	36468	20.0	26.0	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	379610	20.0	20.4	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	93	190287	50.0	54.6	
101 Bromobenzene	156	10.564	10.564	0.000	95	87103	20.0	19.1	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	88561	20.0	17.9	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	447131	20.0	19.0	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	97	24073	20.0	19.4	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	81	18598	20.0	19.5	
107 4-Ethyltoluene	105	10.740	10.741	0.000	90	361443	20.0	18.5	
106 2-Chlorotoluene	91	10.740	10.741	0.000	90	291909	20.0	18.5	
108 1,3,5-Trimethylbenzene	105	10.807	10.808	-0.001	93	314778	20.0	18.5	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	246249	20.0	18.2	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	89230	20.0	22.6	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	252469	20.0	18.5	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	327816	20.0	18.9	
113 sec-Butylbenzene	105	11.307	11.307	0.000	100	431118	20.0	19.0	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	360497	20.0	19.2	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	171474	20.0	19.1	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	238694	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	170916	20.0	18.9	
118 Benzyl chloride	91	11.667	11.667	0.000	99	136037	20.0	26.6	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	93	334516	20.0	18.8	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	204704	20.0	19.8	
121 n-Butylbenzene	92	11.801	11.795	0.006	97	201123	20.0	19.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	174321	20.0	19.5	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	358555	20.0	19.2	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	97	15761	20.0	21.4	
125 1,3,5-Trichlorobenzene	180	12.642	12.643	-0.001	98	154782	20.0	21.0	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	145850	20.0	20.5	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	68548	20.0	22.0	
128 Naphthalene	128	13.331	13.331	0.000	99	356529	20.0	18.1	
129 1,2,3-Trichlorobenzene	180	13.526	13.527	-0.001	96	140992	20.0	19.4	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.7	
S 131 Xylenes, Total	100				0		40.0	38.6	
S 132 Total BTEX	1				0		100.0	97.6	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 17-Apr-2018 11:40:48 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81964.D

Injection Date: 13-Apr-2018 20:46:30 Instrument ID: CVOAMS9 Operator ID:

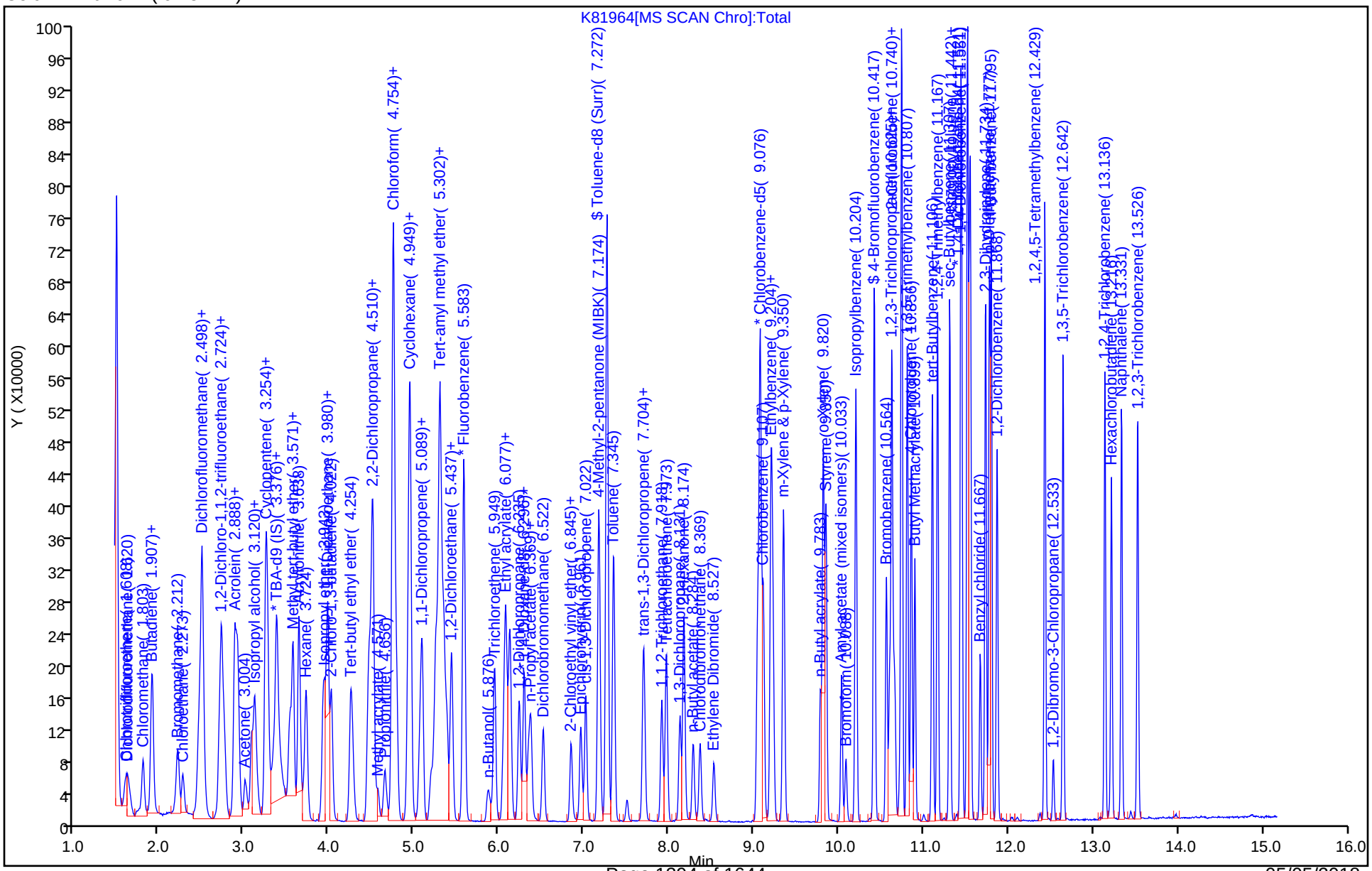
Lims ID: LCS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-511293/4

Matrix: Solid | Lab File ID: K82034.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 05:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0256		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0170		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0233		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0186		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0226		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0214		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0197		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0205		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0206		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0191		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0215		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0205		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0189		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0186		0.0010	0.00010
123-91-1	1,4-Dioxane	0.381		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0834		0.0050	0.0011
591-78-6	2-Hexanone	0.0964		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.101		0.0050	0.00066
67-64-1	Acetone	0.100		0.0050	0.0038
71-43-2	Benzene	0.0192		0.0010	0.00026
75-25-2	Bromoform	0.0259		0.0010	0.00043
74-83-9	Bromomethane	0.0223		0.0010	0.00047
75-15-0	Carbon disulfide	0.0210		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0283		0.0010	0.00018
108-90-7	Chlorobenzene	0.0189		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0218		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0226		0.0010	0.00019
75-00-3	Chloroethane	0.0229		0.0010	0.00052
67-66-3	Chloroform	0.0223		0.0010	0.00032
74-87-3	Chloromethane	0.0200		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0206		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0193		0.0010	0.00027
110-82-7	Cyclohexane	0.0219		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0216		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0197		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-511293/4

Matrix: Solid | Lab File ID: K82034.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 05:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0190		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0198		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0199		0.0010	0.00013
79-20-9	Methyl acetate	0.123		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0214		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0216		0.0010	0.00016
75-09-2	Methylene Chloride	0.0205		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0187		0.0010	0.00017
95-47-6	o-Xylene	0.0190		0.0010	0.000095
100-42-5	Styrene	0.0189		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0215		0.0010	0.00014
108-88-3	Toluene	0.0187		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0212		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0213		0.0010	0.00027
79-01-6	Trichloroethene	0.0207		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0253		0.0010	0.00041
75-01-4	Vinyl chloride	0.0204		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		78-135
460-00-4	4-Bromofluorobenzene	112		67-126
1868-53-7	Dibromofluoromethane (Surr)	119		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82034.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2018 05:14:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070418-004
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 16-Apr-2018 10:44:28 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: delpolitov Date: 16-Apr-2018 10:44:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.602	0.000	88	41059	20.0	18.4	
2 Dichlorodifluoromethane	85	1.639	1.639	0.000	99	109182	20.0	19.7	
3 Chloromethane	50	1.809	1.809	0.000	99	107981	20.0	20.0	
5 Butadiene	54	1.913	1.913	0.000	96	84083	20.0	20.9	
4 Vinyl chloride	62	1.919	1.919	0.000	98	111694	20.0	20.4	
6 Bromomethane	94	2.218	2.218	0.000	99	88685	20.0	22.3	
7 Chloroethane	64	2.279	2.279	0.000	100	56189	20.0	22.9	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	98	171292	20.0	24.8	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	94	143539	20.0	25.3	
10 Pentane	72	2.504	2.504	0.000	97	26411	40.0	34.7	
11 Ethyl ether	59	2.699	2.699	0.000	96	49364	20.0	20.8	
13 2-Methyl-1,3-butadiene	53	2.730	2.730	0.000	97	57506	20.0	23.8	
12 Ethanol	46	2.754	2.754	0.000	8	17024	800.0	739.8	a
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.760	0.000	92	67127	20.0	23.7	
15 Acrolein	56	2.882	2.882	0.000	96	137935	300.0	220.5	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	95	84645	20.0	23.3	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	97	70077	20.0	21.4	
18 Acetone	43	3.010	3.010	0.000	87	92631	100.0	100.1	
19 Iodomethane	142	3.083	3.083	0.000	98	136225	20.0	22.0	
22 Isopropyl alcohol	45	3.108	3.108	0.000	1	44640	200.0	194.5	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	258515	20.0	21.0	
21 3-Chloro-1-propene	76	3.248	3.248	0.000	99	42263	20.0	22.4	
23 Methyl acetate	43	3.254	3.254	0.000	98	206263	100.0	123.3	
24 Cyclopentene	67	3.272	3.272	0.000	91	170237	20.0	22.6	
29 Acetonitrile	41	3.315	3.315	0.000	97	104379	200.0	160.5	a
* 25 TBA-d9 (IS)	65	3.370	3.370	0.000	0	324495	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.382	0.000	90	80692	20.0	20.5	
27 2-Methyl-2-propanol	59	3.449	3.449	0.000	92	82637	200.0	167.9	
28 Methyl tert-butyl ether	73	3.541	3.541	0.000	96	192993	20.0	21.4	
30 trans-1,2-Dichloroethene	96	3.577	3.577	0.000	94	75025	20.0	21.2	
31 Acrylonitrile	53	3.644	3.644	0.000	94	226684	200.0	219.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.730	3.730	0.000	93	60567	20.0	23.7	
33 Isopropyl ether	45	3.937	3.937	0.000	96	219836	20.0	23.3	
34 1,1-Dichloroethane	63	3.980	3.980	0.000	75	123643	20.0	22.6	
35 Vinyl acetate	86	3.980	3.980	0.000	100	20711	40.0	31.2	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	90	63430	20.0	21.4	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	207045	20.0	23.1	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	216399	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.486	0.000	95	36605	20.0	28.4	
41 Ethyl acetate	70	4.516	4.516	0.000	91	12235	40.0	34.7	
40 cis-1,2-Dichloroethene	96	4.516	4.516	0.000	93	82387	20.0	20.6	
42 2-Butanone (MEK)	72	4.516	4.516	0.000	96	35522	100.0	83.4	
44 Methyl acrylate	55	4.577	4.577	0.000	98	44364	20.0	21.3	
43 Propionitrile	54	4.656	4.656	0.000	98	88864	200.0	155.8	
45 Tetrahydrofuran	72	4.742	4.742	0.000	64	16934	40.0	33.7	
46 Chlorobromomethane	128	4.742	4.742	0.000	75	40577	20.0	21.8	
47 Methacrylonitrile	67	4.754	4.754	0.000	92	244466	200.0	200.7	
48 Chloroform	83	4.797	4.797	0.000	99	127860	20.0	22.3	
49 Cyclohexane	84	4.937	4.937	0.000	90	116776	20.0	21.9	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	97	115851	20.0	25.6	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	97	171989	50.0	59.6	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	92780	20.0	28.3	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	91667	20.0	22.3	
56 Isobutyl alcohol	74	5.217	5.217	0.000	86	7247	500.0	365.7	a
54 Benzene	78	5.296	5.296	0.000	95	266435	20.0	19.2	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	163360	50.0	59.4	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	162729	20.0	22.2	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	95	60134	20.0	21.8	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	97	79794	20.0	21.5	
60 n-Heptane	57	5.443	5.443	0.000	93	57063	20.0	22.4	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	460607	50.0	50.0	
62 n-Butanol	56	5.870	5.870	0.000	88	41616	500.0	442.8	
63 Trichloroethene	95	5.949	5.949	0.000	99	68119	20.0	20.7	
64 Ethyl acrylate	56	6.077	6.077	0.000	98	39501	20.0	21.4	
65 Methylcyclohexane	83	6.077	6.077	0.000	94	136340	20.0	21.6	
66 1,2-Dichloropropane	63	6.241	6.241	0.000	95	65670	20.0	20.5	
* 67 1,4-Dioxane-d8	96	6.290	6.290	0.000	0	29646	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	87	76150	40.0	47.7	
69 1,4-Dioxane	88	6.345	6.345	0.000	28	17324	400.0	380.9	
70 n-Propyl acetate	43	6.351	6.351	0.000	98	69836	20.0	23.0	
71 Dibromomethane	93	6.376	6.376	0.000	97	41253	20.0	20.5	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	78898	20.0	21.6	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	87	31888	20.0	21.2	
74 2-Nitropropane	41	6.851	6.851	0.000	77	16187	40.0	54.2	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	110425	400.0	367.8	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	91	92489	20.0	19.3	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	286867	100.0	101.1	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	584234	50.0	49.8	
79 Toluene	91	7.351	7.351	0.000	92	271455	20.0	18.7	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	79214	20.0	21.3	
81 Ethyl methacrylate	69	7.717	7.717	0.000	89	63789	20.0	20.4	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	97	45548	20.0	18.6	
83 Tetrachloroethene	166	7.973	7.973	0.000	95	70044	20.0	21.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.131	0.000	88	83410	20.0	18.2	
85 2-Hexanone	43	8.174	8.174	0.000	96	178071	100.0	96.4	
86 n-Butyl acetate	43	8.290	8.290	0.000	98	78923	20.0	25.3	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	57060	20.0	22.6	
88 Ethylene Dibromide	107	8.528	8.528	0.000	99	54315	20.0	19.8	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	377102	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	176731	20.0	18.9	
92 Ethylbenzene	106	9.204	9.204	0.000	98	96443	20.0	19.0	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.229	0.000	94	65067	20.0	23.2	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	119164	20.0	18.7	
94 n-Butyl acrylate	73	9.789	9.789	0.000	97	39513	20.0	24.5	
95 o-Xylene	106	9.820	9.820	0.000	94	124195	20.0	19.0	
96 Styrene	104	9.850	9.850	0.000	96	195122	20.0	18.9	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	89357	20.0	24.6	
98 Bromoform	173	10.088	10.088	0.000	96	33261	20.0	25.9	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	339524	20.0	19.9	
$ 100 4-Bromofluorobenzene	174	10.424	10.424	0.000	95	178821	50.0	56.1	
101 Bromobenzene	156	10.564	10.564	0.000	95	79741	20.0	18.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	78226	20.0	17.0	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	400876	20.0	18.3	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	20460	20.0	17.7	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	87	16514	20.0	18.6	
106 2-Chlorotoluene	91	10.741	10.741	0.000	92	260819	20.0	17.8	
107 4-Ethyltoluene	105	10.741	10.741	0.000	90	329182	20.0	18.1	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	282715	20.0	17.9	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	221902	20.0	17.6	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	80141	20.0	21.8	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	221354	20.0	17.4	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	295295	20.0	18.3	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	383229	20.0	18.2	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	330275	20.0	18.9	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	157706	20.0	18.9	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	222065	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	156639	20.0	18.6	
118 Benzyl chloride	91	11.667	11.667	0.000	99	124302	20.0	26.2	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	299210	20.0	18.1	
120 p-Diethylbenzene	119	11.777	11.777	0.000	95	181688	20.0	18.9	
121 n-Butylbenzene	92	11.801	11.801	0.000	97	175138	20.0	18.4	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	158998	20.0	19.1	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	323923	20.0	18.6	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	96	14087	20.0	20.6	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	140525	20.0	20.5	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	135686	20.0	20.5	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	63766	20.0	22.0	
128 Naphthalene	128	13.338	13.338	0.000	99	324246	20.0	17.7	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	132950	20.0	19.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.8	
S 131 Xylenes, Total	100				0		40.0	37.7	
S 132 Total BTEX	1				0		100.0	94.6	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

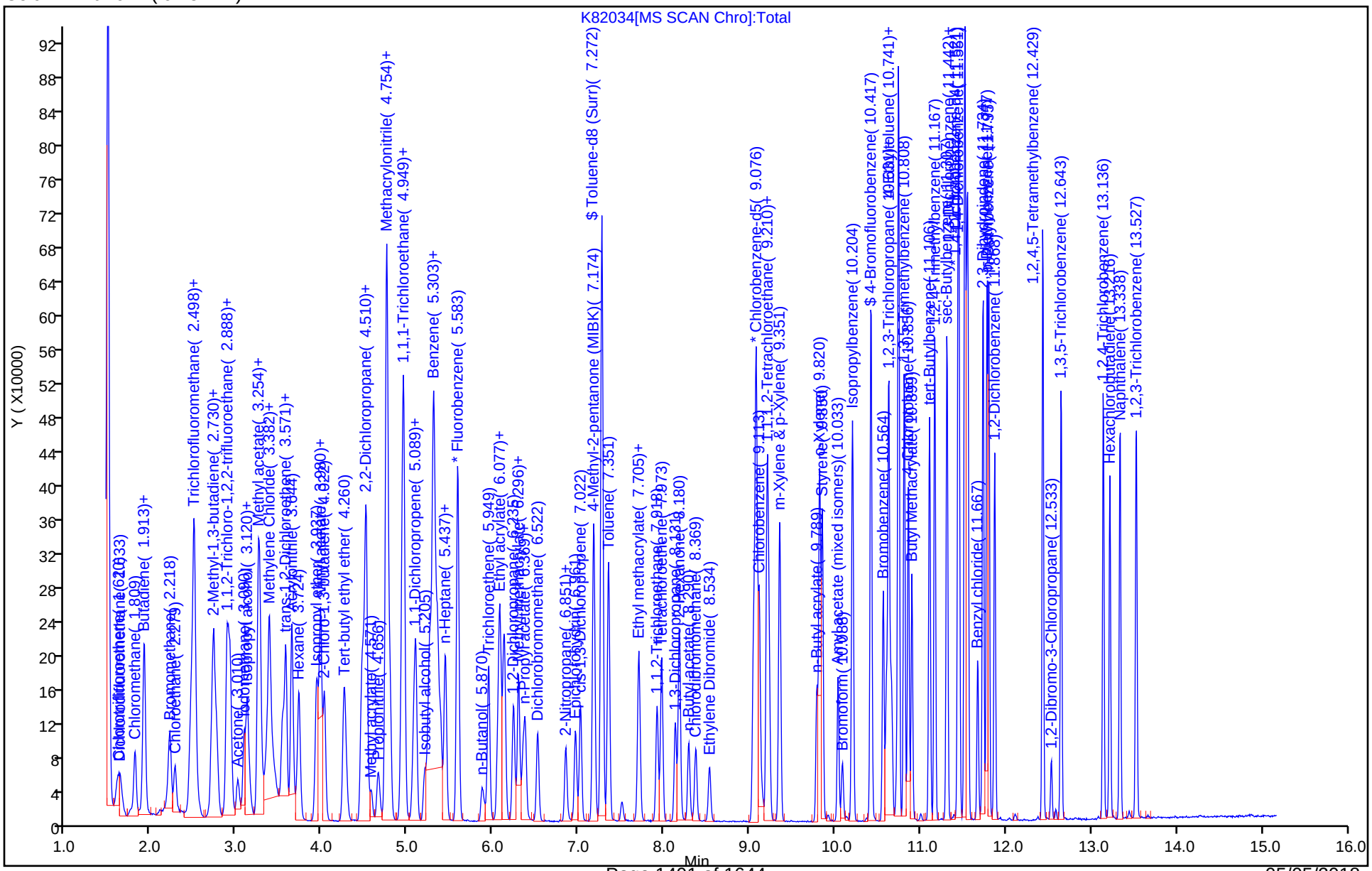
Report Date: 16-Apr-2018 10:44:29 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82034.D

Injection Date:	16-Apr-2018 05:14:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-511471/5

Matrix: Solid | Lab File ID: K82064.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 19:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0249		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0182		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0217		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0184		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0220		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0210		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0184		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0193		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0222		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0190		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0210		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0202		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0187		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0181		0.0010	0.00010
123-91-1	1,4-Dioxane	0.364		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0799		0.0050	0.0011
591-78-6	2-Hexanone	0.0965		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.101		0.0050	0.00066
67-64-1	Acetone	0.0952		0.0050	0.0038
71-43-2	Benzene	0.0187		0.0010	0.00026
75-25-2	Bromoform	0.0285		0.0010	0.00043
74-83-9	Bromomethane	0.0195		0.0010	0.00047
75-15-0	Carbon disulfide	0.0206		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0280		0.0010	0.00018
108-90-7	Chlorobenzene	0.0185		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0209		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0228		0.0010	0.00019
75-00-3	Chloroethane	0.0197		0.0010	0.00052
67-66-3	Chloroform	0.0214		0.0010	0.00032
74-87-3	Chloromethane	0.0177		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0207		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0193		0.0010	0.00027
110-82-7	Cyclohexane	0.0209		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0218		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0174		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-511471/5

Matrix: Solid | Lab File ID: K82064.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 19:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0194		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0198		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0196		0.0010	0.00013
79-20-9	Methyl acetate	0.132		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0213		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0210		0.0010	0.00016
75-09-2	Methylene Chloride	0.0199		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0189		0.0010	0.00017
95-47-6	o-Xylene	0.0194		0.0010	0.000095
100-42-5	Styrene	0.0188		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0208		0.0010	0.00014
108-88-3	Toluene	0.0184		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0209		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0207		0.0010	0.00027
79-01-6	Trichloroethene	0.0203		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0204		0.0010	0.00041
75-01-4	Vinyl chloride	0.0182		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		78-135
460-00-4	4-Bromofluorobenzene	112		67-126
1868-53-7	Dibromofluoromethane (Surr)	119		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82064.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2018 19:12:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070455-005
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 14:28:15 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: colladox Date: 16-Apr-2018 19:33:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.596	0.006	90	44807	20.0	18.1	
2 Dichlorodifluoromethane	85	1.639	1.632	0.007	99	107539	20.0	17.4	
3 Chloromethane	50	1.809	1.803	0.006	99	105890	20.0	17.7	
4 Vinyl chloride	62	1.919	1.907	0.012	96	110950	20.0	18.2	
5 Butadiene	54	1.919	1.913	0.006	96	85196	20.0	19.0	
6 Bromomethane	94	2.218	2.218	0.000	99	86315	20.0	19.5	
7 Chloroethane	64	2.279	2.273	0.006	100	53749	20.0	19.7	
9 Dichlorofluoromethane	67	2.480	2.474	0.006	98	156084	20.0	20.3	
8 Trichlorofluoromethane	101	2.486	2.480	0.006	71	128657	20.0	20.4	
10 Pentane	72	2.504	2.504	0.000	96	25827	40.0	25.8	
11 Ethyl ether	59	2.705	2.693	0.012	93	53954	20.0	20.5	
12 Ethanol	46	2.705	2.711	-0.006	68	19324	800.0	637.8	
13 2-Methyl-1,3-butadiene	53	2.730	2.724	0.006	97	63184	20.0	23.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.754	0.006	94	69126	20.0	22.0	
15 Acrolein	56	2.888	2.882	0.006	95	175746	300.0	213.4	
16 1,1,2-Trichloro-1,2,2-trif	101	2.907	2.888	0.019	94	87557	20.0	21.7	
17 1,1-Dichloroethene	96	2.931	2.919	0.012	98	76368	20.0	21.0	
18 Acetone	43	3.016	3.004	0.012	88	110275	100.0	95.2	
19 Iodomethane	142	3.090	3.083	0.007	98	147708	20.0	21.4	
22 Isopropyl alcohol	45	3.108	3.089	0.019	1	53433	200.0	176.8	a
20 Carbon disulfide	76	3.126	3.120	0.006	99	282031	20.0	20.6	
21 3-Chloro-1-propene	76	3.254	3.242	0.012	97	45578	20.0	21.7	
23 Methyl acetate	43	3.260	3.248	0.012	99	244845	100.0	131.7	
24 Cyclopentene	67	3.279	3.266	0.013	91	186006	20.0	22.2	
29 Acetonitrile	41	3.327	3.321	0.006	96	127582	200.0	149.0	a
* 25 TBA-d9 (IS)	65	3.388	3.376	0.012	0	427219	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	89	87436	20.0	19.9	
27 2-Methyl-2-propanol	59	3.443	3.431	0.012	94	113548	200.0	175.3	
28 Methyl tert-butyl ether	73	3.541	3.528	0.013	96	213788	20.0	21.3	
30 trans-1,2-Dichloroethene	96	3.577	3.571	0.006	94	82143	20.0	20.9	
31 Acrylonitrile	53	3.644	3.638	0.006	95	272961	200.0	237.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.736	3.723	0.013	92	63765	20.0	22.5	
33 Isopropyl ether	45	3.943	3.931	0.012	96	234599	20.0	22.3	
34 1,1-Dichloroethane	63	3.986	3.973	0.013	74	134159	20.0	22.0	
35 Vinyl acetate	86	3.992	3.973	0.019	100	23486	40.0	26.9	
36 2-Chloro-1,3-butadiene	88	4.028	4.022	0.006	89	69827	20.0	21.1	
37 Tert-butyl ethyl ether	59	4.260	4.254	0.006	89	222870	20.0	22.4	
* 38 2-Butanone-d5	46	4.467	4.455	0.012	0	270815	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.479	0.013	94	39397	20.0	27.5	
41 Ethyl acetate	70	4.516	4.504	0.012	91	14422	40.0	32.7	
40 cis-1,2-Dichloroethene	96	4.516	4.510	0.006	96	92046	20.0	20.7	
42 2-Butanone (MEK)	72	4.522	4.510	0.012	96	42543	100.0	79.9	
44 Methyl acrylate	55	4.577	4.571	0.006	91	56535	20.0	24.4	a
43 Propionitrile	54	4.656	4.656	0.000	98	110397	200.0	147.0	
45 Tetrahydrofuran	72	4.742	4.742	0.000	67	21281	40.0	33.8	
46 Chlorobromomethane	128	4.748	4.742	0.006	92	43098	20.0	20.9	
47 Methacrylonitrile	67	4.760	4.754	0.006	91	287774	200.0	212.6	
48 Chloroform	83	4.797	4.790	0.007	99	136495	20.0	21.4	
49 Cyclohexane	84	4.943	4.937	0.006	91	123986	20.0	20.9	
50 1,1,1-Trichloroethane	97	4.955	4.949	0.006	96	125386	20.0	24.9	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	191274	50.0	59.6	
52 Carbon tetrachloride	117	5.071	5.071	0.000	97	101742	20.0	28.0	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	99	99294	20.0	21.7	
56 Isobutyl alcohol	74	5.217	5.205	0.012	1	8658	500.0	331.9	a
54 Benzene	78	5.303	5.296	0.007	95	293594	20.0	18.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.309	0.006	0	177618	50.0	58.1	
57 Isopropyl acetate	43	5.339	5.333	0.006	96	196869	20.0	24.2	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	93	65044	20.0	21.2	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	97	86346	20.0	21.0	
60 n-Heptane	57	5.443	5.437	0.006	93	61770	20.0	21.8	a
* 61 Fluorobenzene	96	5.589	5.583	0.006	99	511955	50.0	50.0	
62 n-Butanol	56	5.882	5.876	0.006	88	50472	500.0	407.9	
63 Trichloroethene	95	5.949	5.943	0.006	98	74196	20.0	20.3	
64 Ethyl acrylate	56	6.077	6.077	0.000	98	47650	20.0	23.3	
65 Methylcyclohexane	83	6.083	6.077	0.006	96	146794	20.0	21.0	
66 1,2-Dichloropropane	63	6.241	6.235	0.006	94	71696	20.0	20.2	
* 67 1,4-Dioxane-d8	96	6.296	6.284	0.012	0	35661	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	87	88519	40.0	49.8	
69 1,4-Dioxane	88	6.351	6.339	0.012	32	19906	400.0	363.9	
70 n-Propyl acetate	43	6.351	6.351	0.000	98	82627	20.0	24.5	
71 Dibromomethane	93	6.382	6.375	0.007	97	47356	20.0	21.2	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	88437	20.0	21.8	
73 2-Chloroethyl vinyl ether	63	6.851	6.845	0.006	86	36241	20.0	21.7	
74 2-Nitropropane	41	6.851	6.851	0.000	77	20158	40.0	60.6	
75 Epichlorohydrin	57	6.967	6.961	0.006	99	134320	400.0	357.5	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	105214	20.0	19.3	
77 4-Methyl-2-pentanone (MIBK	43	7.180	7.174	0.006	96	359270	100.0	101.2	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	666199	50.0	50.1	
79 Toluene	91	7.351	7.351	0.000	93	302677	20.0	18.4	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	87143	20.0	20.7	
81 Ethyl methacrylate	69	7.711	7.711	0.000	86	77264	20.0	21.8	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	50990	20.0	18.4	
83 Tetrachloroethene	166	7.973	7.973	0.000	96	76851	20.0	20.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.137	8.137	0.000	88	93291	20.0	18.0	
85 2-Hexanone	43	8.180	8.180	0.000	96	223140	100.0	96.5	
86 n-Butyl acetate	43	8.290	8.290	0.000	99	91801	20.0	25.9	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	65066	20.0	22.8	
88 Ethylene Dibromide	107	8.534	8.527	0.007	99	61611	20.0	19.8	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	427287	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	196190	20.0	18.5	
92 Ethylbenzene	106	9.210	9.204	0.006	98	111168	20.0	19.4	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.229	0.000	94	74552	20.0	23.4	
93 m-Xylene & p-Xylene	106	9.357	9.350	0.007	0	136422	20.0	18.9	
94 n-Butyl acrylate	73	9.789	9.783	0.006	98	46471	20.0	25.4	
95 o-Xylene	106	9.820	9.820	0.000	94	143744	20.0	19.4	
96 Styrene	104	9.850	9.850	0.000	96	219335	20.0	18.8	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	107329	20.0	26.3	
98 Bromoform	173	10.088	10.088	0.000	96	41637	20.0	28.5	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	378220	20.0	19.6	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	93	201572	50.0	55.8	
101 Bromobenzene	156	10.564	10.564	0.000	95	89789	20.0	18.9	
102 1,1,2,2-Tetrachloroethane	83	10.606	10.600	0.006	98	93767	20.0	18.2	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	449452	20.0	18.3	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	96	25933	20.0	20.1	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	90	20012	20.0	20.1	
106 2-Chlorotoluene	91	10.747	10.747	0.001	92	298027	20.0	18.1	
107 4-Ethyltoluene	105	10.747	10.747	0.001	90	374437	20.0	18.4	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	93	314478	20.0	17.7	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	246698	20.0	17.5	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	92588	20.0	22.5	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	240325	20.0	16.8	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	333265	20.0	18.5	
113 sec-Butylbenzene	105	11.314	11.307	0.007	99	419114	20.0	17.7	
114 4-Isopropyltoluene	119	11.442	11.441	0.001	98	357333	20.0	18.2	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	175551	20.0	18.7	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	248929	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	170810	20.0	18.1	
118 Benzyl chloride	91	11.667	11.667	0.000	99	148694	20.0	27.9	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	330516	20.0	17.8	
120 p-Diethylbenzene	119	11.777	11.777	0.000	92	204007	20.0	18.9	a
121 n-Butylbenzene	92	11.801	11.801	0.000	97	196821	20.0	18.4	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	177213	20.0	19.0	
123 1,2,4,5-Tetramethylbenzene	119	12.435	12.435	0.000	97	344862	20.0	17.7	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	95	17006	20.0	22.2	
125 1,3,5-Trichlorobenzene	180	12.649	12.649	0.000	98	151881	20.0	19.8	
126 1,2,4-Trichlorobenzene	180	13.142	13.142	0.000	94	142769	20.0	19.3	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	67044	20.0	20.6	
128 Naphthalene	128	13.338	13.337	0.001	99	365590	20.0	17.8	
129 1,2,3-Trichlorobenzene	180	13.527	13.526	0.001	96	139208	20.0	18.4	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.6	
S 131 Xylenes, Total	100				0		40.0	38.3	
S 132 Total BTEX	1				0		100.0	94.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00255	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

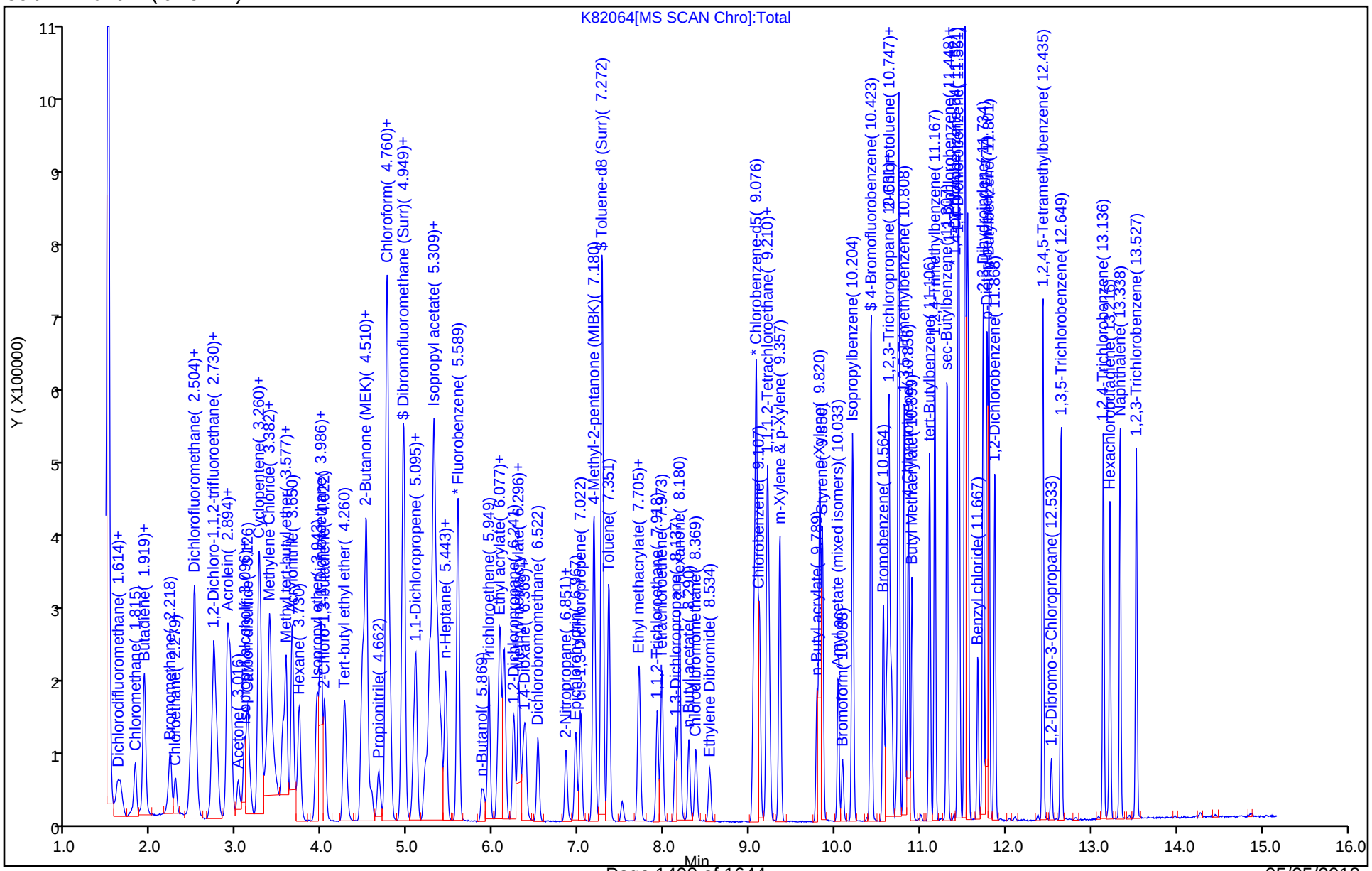
Report Date: 17-Apr-2018 14:28:57 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82064.D

Injection Date:	16-Apr-2018 19:12:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-511498/4

Matrix: Solid | Lab File ID: D48760.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 19:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0171		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0214		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0185		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0207		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0187		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0181		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0197		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0203		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0177		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0199		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0170		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0190		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0200		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0203		0.0010	0.00010
123-91-1	1,4-Dioxane	0.418		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0770		0.0050	0.0011
591-78-6	2-Hexanone	0.0836		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0870		0.0050	0.00066
67-64-1	Acetone	0.0695		0.0050	0.0038
71-43-2	Benzene	0.0210		0.0010	0.00026
75-25-2	Bromoform	0.0152		0.0010	0.00043
74-83-9	Bromomethane	0.0211		0.0010	0.00047
75-15-0	Carbon disulfide	0.0171		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0169		0.0010	0.00018
108-90-7	Chlorobenzene	0.0203		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0173		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0176		0.0010	0.00019
75-00-3	Chloroethane	0.0203		0.0010	0.00052
67-66-3	Chloroform	0.0177		0.0010	0.00032
74-87-3	Chloromethane	0.0217		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0169		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0200		0.0010	0.00027
110-82-7	Cyclohexane	0.0189		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0165		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0152		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-511498/4

Matrix: Solid | Lab File ID: D48760.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 19:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0207		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0193		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0206		0.0010	0.00013
79-20-9	Methyl acetate	0.0994		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0176		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0192		0.0010	0.00016
75-09-2	Methylene Chloride	0.0180		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0201		0.0010	0.00017
95-47-6	o-Xylene	0.0201		0.0010	0.000095
100-42-5	Styrene	0.0198		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0200		0.0010	0.00014
108-88-3	Toluene	0.0200		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0181		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0187		0.0010	0.00027
79-01-6	Trichloroethene	0.0175		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0183		0.0010	0.00041
75-01-4	Vinyl chloride	0.0200		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		78-135
460-00-4	4-Bromofluorobenzene	95		67-126
1868-53-7	Dibromofluoromethane (Surr)	85		61-149
2037-26-5	Toluene-d8 (Surr)	101		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48760.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2018 19:40:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0070463-003
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 17:07:12 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 17-Apr-2018 05:42:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.539	1.539	0.000	74	54224	20.0	17.5	a
2 Dichlorodifluoromethane	85	1.576	1.576	0.000	98	162886	20.0	15.2	
3 Chloromethane	50	1.789	1.789	0.000	99	264311	20.0	21.7	
4 Vinyl chloride	62	1.887	1.887	0.000	98	213056	20.0	20.0	
5 Butadiene	54	1.905	1.905	0.000	94	189288	20.0	21.6	
6 Bromomethane	94	2.240	2.240	0.000	98	97418	20.0	21.1	
7 Chloroethane	64	2.326	2.326	0.000	99	95677	20.0	20.3	
9 Trichlorofluoromethane	101	2.533	2.533	0.000	97	152303	20.0	18.3	
8 Dichlorofluoromethane	67	2.557	2.557	0.000	97	230417	20.0	19.4	
10 Pentane	72	2.557	2.557	0.000	99	40294	40.0	38.7	
12 Ethanol	46	2.795	2.795	0.000	75	16661	800.0	861.4	
11 Ethyl ether	59	2.801	2.801	0.000	93	78433	20.0	19.5	
13 2-Methyl-1,3-butadiene	53	2.813	2.813	0.000	94	92161	20.0	20.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.893	2.893	0.000	98	76472	20.0	17.8	
16 Acrolein	56	3.009	3.009	0.000	99	197107	300.0	340.7	
15 1,1,2-Trichloro-1,2,2-trif	101	3.033	3.033	0.000	92	99214	20.0	18.5	
17 1,1-Dichloroethene	96	3.045	3.045	0.000	97	89116	20.0	18.1	
18 Acetone	43	3.155	3.155	0.000	87	117265	100.0	69.5	
19 Iodomethane	142	3.228	3.228	0.000	99	152871	20.0	17.1	
20 Carbon disulfide	76	3.259	3.259	0.000	100	329138	20.0	17.1	
21 Isopropyl alcohol	45	3.283	3.283	0.000	99	49019	200.0	182.9	
22 3-Chloro-1-propene	76	3.429	3.429	0.000	87	55124	20.0	18.5	
23 Cyclopentene	67	3.448	3.448	0.000	88	232915	20.0	19.9	
24 Methyl acetate	43	3.454	3.454	0.000	99	291641	100.0	99.4	
25 Acetonitrile	41	3.521	3.521	0.000	98	77035	200.0	215.5	
26 Methylene Chloride	84	3.588	3.588	0.000	97	102325	20.0	18.0	
* 27 TBA-d9 (IS)	65	3.600	3.600	0.000	41	445354	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.685	3.685	0.000	98	81162	200.0	178.9	
29 Methyl tert-butyl ether	73	3.789	3.789	0.000	97	222814	20.0	17.6	
30 trans-1,2-Dichloroethene	96	3.819	3.819	0.000	99	87309	20.0	18.1	
31 Acrylonitrile	53	3.911	3.911	0.000	94	289277	200.0	235.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	4.014	4.014	0.000	93	135795	20.0	21.2	
33 Isopropyl ether	45	4.283	4.283	0.000	96	281089	20.0	19.6	
34 1,1-Dichloroethane	63	4.307	4.307	0.000	99	161756	20.0	18.7	
35 Vinyl acetate	86	4.338	4.338	0.000	100	27076	40.0	35.1	
36 2-Chloro-1,3-butadiene	88	4.362	4.362	0.000	93	74347	20.0	18.7	
37 Tert-butyl ethyl ether	59	4.673	4.673	0.000	88	238248	20.0	18.0	
* 38 2-Butanone-d5	46	4.911	4.911	0.000	0	407762	250.0	250.0	
39 2,2-Dichloropropane	79	4.923	4.923	0.000	91	37986	20.0	16.7	
40 cis-1,2-Dichloroethene	96	4.953	4.953	0.000	94	91373	20.0	16.9	
41 2-Butanone (MEK)	72	4.978	4.978	0.000	97	39568	100.0	77.0	
42 Ethyl acetate	70	4.990	4.990	0.000	96	13709	40.0	30.6	
43 Methyl acrylate	55	5.051	5.051	0.000	99	56880	20.0	19.0	
44 Propionitrile	54	5.142	5.142	0.000	98	101496	200.0	192.2	
45 Tetrahydrofuran	72	5.228	5.228	0.000	95	19375	40.0	35.8	
46 Chlorobromomethane	128	5.228	5.228	0.000	97	37552	20.0	17.3	
47 Methacrylonitrile	67	5.264	5.264	0.000	93	283629	200.0	183.6	
48 Chloroform	83	5.307	5.307	0.000	98	141303	20.0	17.7	
49 Cyclohexane	84	5.453	5.453	0.000	94	125596	20.0	18.9	
50 1,1,1-Trichloroethane	97	5.472	5.472	0.000	97	112736	20.0	17.1	
$ 51 Dibromofluoromethane (Surr	113	5.496	5.496	0.000	95	207122	50.0	42.4	
52 Carbon tetrachloride	117	5.618	5.618	0.000	97	87405	20.0	16.9	
53 1,1-Dichloropropene	75	5.660	5.660	0.000	96	103618	20.0	19.2	
54 Isobutyl alcohol	43	5.856	5.856	0.000	93	135684	500.0	529.8	
55 Benzene	78	5.898	5.898	0.000	97	298672	20.0	21.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.929	5.929	0.000	97	227339	50.0	44.4	
57 Tert-amyl methyl ether	87	6.002	6.002	0.000	96	59689	20.0	16.5	
58 Isopropyl acetate	43	6.002	6.002	0.000	98	226666	20.0	18.4	
59 1,2-Dichloroethane	62	6.020	6.020	0.000	95	93598	20.0	17.0	
60 n-Heptane	57	6.118	6.118	0.000	92	69060	20.0	20.5	
* 61 Fluorobenzene	96	6.270	6.270	0.000	98	709811	50.0	50.0	
62 n-Butanol	56	6.679	6.679	0.000	87	39359	500.0	469.6	
63 Trichloroethene	95	6.709	6.709	0.000	96	69142	20.0	17.5	
64 Methylcyclohexane	83	6.849	6.849	0.000	93	141361	20.0	19.2	
65 Ethyl acrylate	73	6.874	6.874	0.000	96	4805	20.0	16.1	
66 1,2-Dichloropropane	63	7.038	7.038	0.000	92	76747	20.0	19.0	
* 67 1,4-Dioxane-d8	96	7.105	7.105	0.000	0	26970	1000.0	1000.0	
68 Methyl methacrylate	100	7.142	7.142	0.000	94	26817	40.0	32.4	
69 1,4-Dioxane	88	7.166	7.166	0.000	88	11724	400.0	417.7	
70 Dibromomethane	93	7.178	7.178	0.000	93	42411	20.0	16.8	
71 n-Propyl acetate	43	7.209	7.209	0.000	98	81536	20.0	18.9	
72 Dichlorobromomethane	83	7.343	7.343	0.000	99	80850	20.0	16.5	
73 2-Nitropropane	41	7.678	7.678	0.000	98	22863	40.0	24.9	
74 2-Chloroethyl vinyl ether	63	7.684	7.684	0.000	96	28711	20.0	18.1	
75 Epichlorohydrin	57	7.776	7.776	0.000	100	113878	400.0	328.4	
76 cis-1,3-Dichloropropene	75	7.825	7.825	0.000	93	96153	20.0	20.0	
77 4-Methyl-2-pentanone (MIBK	43	7.977	7.977	0.000	97	302767	100.0	87.0	
$ 78 Toluene-d8 (Surr)	98	8.038	8.038	0.000	98	682292	50.0	50.3	
79 Toluene	91	8.105	8.105	0.000	93	269395	20.0	20.0	
80 trans-1,3-Dichloropropene	75	8.398	8.398	0.000	98	73064	20.0	18.7	
81 Ethyl methacrylate	69	8.422	8.422	0.000	89	66822	20.0	16.9	
82 1,1,2-Trichloroethane	83	8.562	8.562	0.000	94	45141	20.0	20.7	
83 Tetrachloroethene	166	8.599	8.599	0.000	95	57248	20.0	20.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.721	8.721	0.000	93	84528	20.0	21.4	
85 2-Hexanone	43	8.764	8.764	0.000	97	178822	100.0	83.6	
86 n-Butyl acetate	73	8.849	8.849	0.000	98	13937	20.0	19.3	
87 Chlorodibromomethane	129	8.892	8.892	0.000	97	46652	20.0	17.6	
88 Ethylene Dibromide	107	9.007	9.007	0.000	97	45236	20.0	19.3	
* 89 Chlorobenzene-d5	117	9.379	9.379	0.000	90	439723	50.0	50.0	
90 Chlorobenzene	112	9.398	9.398	0.000	97	155448	20.0	20.3	
91 Ethylbenzene	106	9.465	9.465	0.000	99	89412	20.0	20.7	
92 1,1,1,2-Tetrachloroethane	131	9.477	9.477	0.000	93	56434	20.0	18.5	
93 m-Xylene & p-Xylene	106	9.562	9.562	0.000	98	105222	20.0	20.1	
94 n-Butyl acrylate	73	9.855	9.855	0.000	96	36447	20.0	18.8	
95 o-Xylene	106	9.891	9.891	0.000	94	109370	20.0	20.1	
96 Styrene	104	9.910	9.910	0.000	94	166992	20.0	19.8	
97 Amyl acetate (mixed isomer	43	10.032	10.032	0.000	90	99371	20.0	22.4	
98 Bromoform	173	10.086	10.086	0.000	93	24834	20.0	15.2	
99 Isopropylbenzene	105	10.166	10.166	0.000	96	296877	20.0	20.6	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	163746	50.0	47.5	
101 Bromobenzene	156	10.446	10.446	0.000	97	61291	20.0	20.4	
102 1,1,2,2-Tetrachloroethane	83	10.458	10.458	0.000	99	72324	20.0	21.4	
103 N-Propylbenzene	91	10.483	10.483	0.000	98	357642	20.0	21.5	
104 1,2,3-Trichloropropane	110	10.501	10.501	0.000	94	17680	20.0	20.6	
105 trans-1,4-Dichloro-2-buten	53	10.507	10.507	0.000	76	16547	20.0	20.3	
106 4-Ethyltoluene	105	10.568	10.568	0.000	98	279950	20.0	20.5	
107 2-Chlorotoluene	91	10.580	10.580	0.000	97	234213	20.0	20.3	
108 1,3,5-Trimethylbenzene	105	10.617	10.617	0.000	93	247700	20.0	21.3	
109 4-Chlorotoluene	91	10.666	10.666	0.000	98	199790	20.0	20.8	
110 Butyl Methacrylate	87	10.672	10.672	0.000	94	78335	20.0	19.8	
111 tert-Butylbenzene	119	10.855	10.855	0.000	94	190961	20.0	20.7	
112 1,2,4-Trimethylbenzene	105	10.903	10.903	0.000	97	245915	20.0	20.3	
113 sec-Butylbenzene	105	11.019	11.019	0.000	99	325563	20.0	21.2	
114 4-Isopropyltoluene	119	11.117	11.117	0.000	98	262185	20.0	20.9	
115 1,3-Dichlorobenzene	146	11.141	11.141	0.000	94	120413	20.0	20.0	
* 116 1,4-Dichlorobenzene-d4	152	11.196	11.196	0.000	96	221875	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.208	11.208	0.000	93	124057	20.0	20.3	
118 Benzyl chloride	126	11.318	11.318	0.000	97	17728	20.0	16.2	
119 2,3-Dihydroindene	117	11.373	11.373	0.000	95	263340	20.0	16.9	
120 p-Diethylbenzene	119	11.397	11.397	0.000	93	161387	20.0	21.3	
121 n-Butylbenzene	92	11.422	11.422	0.000	97	146354	20.0	20.6	
122 1,2-Dichlorobenzene	146	11.495	11.495	0.000	94	119778	20.0	19.9	
123 1,2,4,5-Tetramethylbenzene	119	12.031	12.031	0.000	97	230294	20.0	19.8	
124 1,2-Dibromo-3-Chloropropan	157	12.153	12.153	0.000	91	11195	20.0	17.7	
125 1,3,5-Trichlorobenzene	180	12.281	12.281	0.000	96	95444	20.0	20.3	
126 1,2,4-Trichlorobenzene	180	12.921	12.921	0.000	93	86925	20.0	20.3	
127 Hexachlorobutadiene	225	13.031	13.031	0.000	90	38043	20.0	19.0	
128 Naphthalene	128	13.220	13.220	0.000	99	210488	20.0	20.2	
129 1,2,3-Trichlorobenzene	180	13.507	13.507	0.000	93	81118	20.0	19.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	35.0	
S 131 1,3-Dichloropropene, Total	100				0		40.0	38.8	
S 132 Xylenes, Total	100				0		40.0	40.3	
S 133 Total BTEX	1				0		100.0	102.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 17-Apr-2018 17:07:14 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48760.D

Injection Date: 16-Apr-2018 19:40:30 Instrument ID: CVOAMS4 Operator ID:

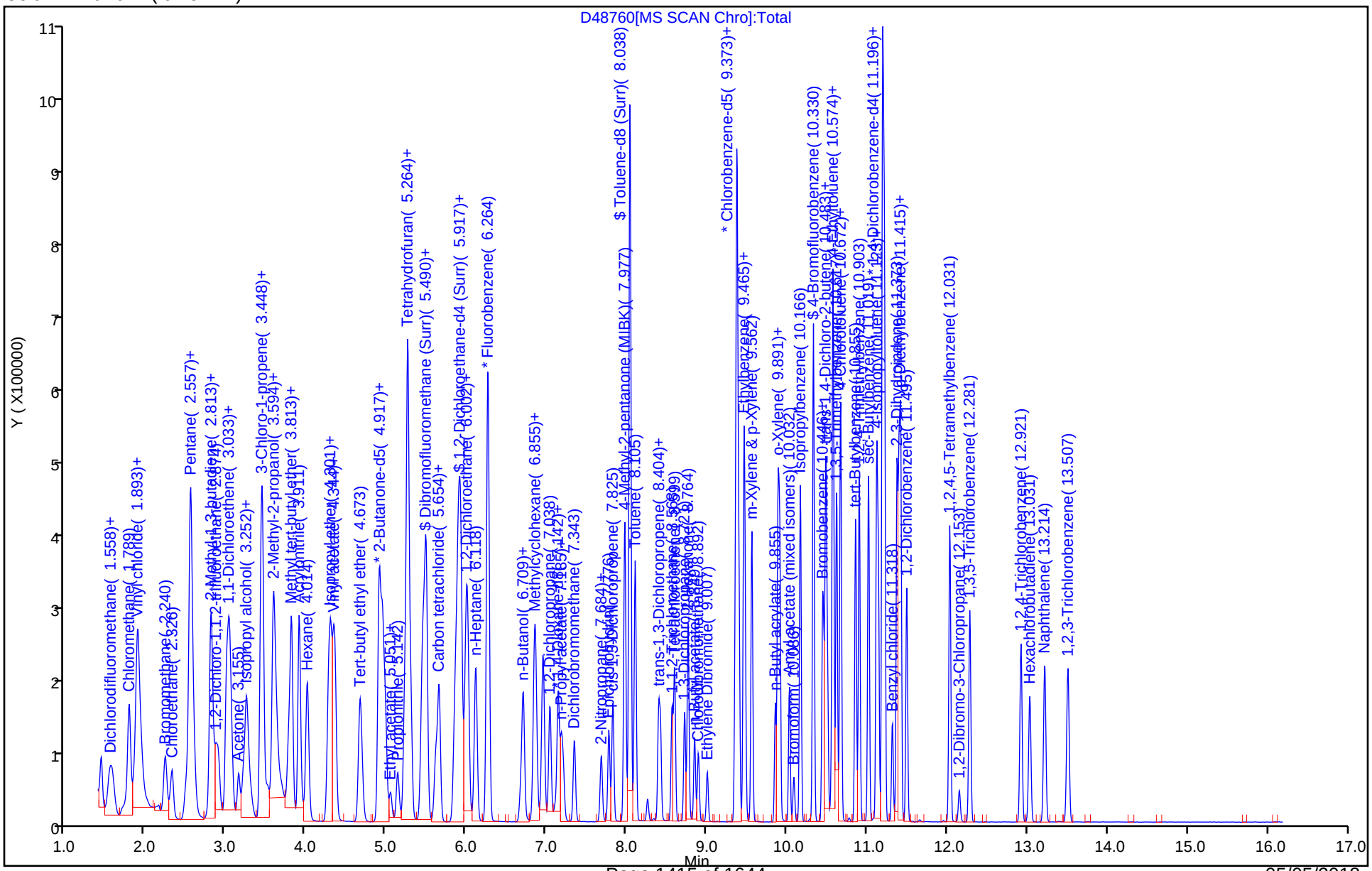
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-512479/4

Matrix: Solid | Lab File ID: D48920.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/19/2018 19:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0176		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0226		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0183		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0215		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0188		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0186		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0211		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0197		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0188		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0201		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0171		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0187		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0203		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0201		0.0010	0.00010
123-91-1	1,4-Dioxane	0.483		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0788		0.0050	0.0011
591-78-6	2-Hexanone	0.0827		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0884		0.0050	0.00066
67-64-1	Acetone	0.0739		0.0050	0.0038
71-43-2	Benzene	0.0224		0.0010	0.00026
75-25-2	Bromoform	0.0157		0.0010	0.00043
74-83-9	Bromomethane	0.0229		0.0010	0.00047
75-15-0	Carbon disulfide	0.0179		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0172		0.0010	0.00018
108-90-7	Chlorobenzene	0.0202		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0181		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0180		0.0010	0.00019
75-00-3	Chloroethane	0.0220		0.0010	0.00052
67-66-3	Chloroform	0.0178		0.0010	0.00032
74-87-3	Chloromethane	0.0246		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0173		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0202		0.0010	0.00027
110-82-7	Cyclohexane	0.0191		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0173		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0174		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-512479/4

Matrix: Solid | Lab File ID: D48920.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/19/2018 19:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0205		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0201		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0201		0.0010	0.00013
79-20-9	Methyl acetate	0.0430		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0188		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0188		0.0010	0.00016
75-09-2	Methylene Chloride	0.0190		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0202		0.0010	0.00017
95-47-6	o-Xylene	0.0205		0.0010	0.000095
100-42-5	Styrene	0.0206		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0201		0.0010	0.00014
108-88-3	Toluene	0.0207		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0187		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0195		0.0010	0.00027
79-01-6	Trichloroethene	0.0181		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0195		0.0010	0.00041
75-01-4	Vinyl chloride	0.0232		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		78-135
460-00-4	4-Bromofluorobenzene	98		67-126
1868-53-7	Dibromofluoromethane (Surr)	81		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48920.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Apr-2018 19:00:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0070668-004
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 17:11:43 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: starzecm Date: 20-Apr-2018 01:05:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.527	1.521	0.006	80	55533	20.0	25.0	a
2 Dichlorodifluoromethane	85	1.564	1.558	0.006	98	131900	20.0	17.4	
3 Chloromethane	50	1.771	1.765	0.006	99	212099	20.0	24.6	
4 Vinyl chloride	62	1.875	1.869	0.006	98	174948	20.0	23.2	
5 Butadiene	54	1.887	1.875	0.012	95	157316	20.0	25.3	
6 Bromomethane	94	2.222	2.216	0.006	98	74780	20.0	22.9	
7 Chloroethane	64	2.307	2.295	0.012	100	73299	20.0	22.0	
9 Trichlorofluoromethane	101	2.515	2.503	0.012	98	114826	20.0	19.5	
8 Dichlorofluoromethane	67	2.539	2.533	0.006	98	177021	20.0	21.0	
10 Pentane	72	2.539	2.533	0.006	96	26041	40.0	35.3	
11 Ethyl ether	59	2.777	2.771	0.006	94	56445	20.0	19.8	
12 Ethanol	46	2.777	2.777	0.000	73	13494	800.0	947.1	
13 2-Methyl-1,3-butadiene	53	2.795	2.789	0.006	96	64535	20.0	20.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.868	2.862	0.006	96	58447	20.0	19.2	
16 Acrolein	56	2.984	2.978	0.006	98	127429	300.0	299.0	
15 1,1,2-Trichloro-1,2,2-trif	101	3.015	3.009	0.006	69	69453	20.0	18.3	
17 1,1-Dichloroethene	96	3.027	3.015	0.012	95	64624	20.0	18.6	
18 Acetone	43	3.137	3.130	0.007	86	89998	100.0	73.9	M
19 Iodomethane	142	3.204	3.198	0.006	100	111235	20.0	17.6	
20 Carbon disulfide	76	3.234	3.228	0.006	100	242779	20.0	17.9	
21 Isopropyl alcohol	45	3.258	3.259	-0.001	100	39679	200.0	200.9	
22 3-Chloro-1-propene	76	3.411	3.405	0.006	88	39707	20.0	18.8	
23 Cyclopentene	67	3.429	3.423	0.006	94	164924	20.0	19.9	
24 Methyl acetate	43	3.435	3.429	0.006	99	89326	40.0	43.0	
25 Acetonitrile	41	3.496	3.496	0.000	98	62525	200.0	237.5	
26 Methylene Chloride	84	3.569	3.563	0.006	93	76334	20.0	19.0	
* 27 TBA-d9 (IS)	65	3.575	3.576	-0.001	39	328090	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.661	3.661	0.000	99	67986	200.0	203.4	
29 Methyl tert-butyl ether	73	3.771	3.765	0.006	97	169009	20.0	18.8	
30 trans-1,2-Dichloroethene	96	3.795	3.789	0.006	98	64042	20.0	18.7	
31 Acrylonitrile	53	3.893	3.886	0.006	94	216235	200.0	239.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.990	3.990	0.000	94	89394	20.0	19.7	
33 Isopropyl ether	45	4.264	4.258	0.006	98	206895	20.0	20.4	
34 1,1-Dichloroethane	63	4.289	4.283	0.006	99	115100	20.0	18.8	
35 Vinyl acetate	86	4.319	4.313	0.006	100	19908	40.0	36.5	
36 2-Chloro-1,3-butadiene	88	4.338	4.338	0.000	92	54054	20.0	19.3	
37 Tert-butyl ethyl ether	59	4.655	4.648	0.007	88	176722	20.0	18.9	
* 38 2-Butanone-d5	46	4.886	4.886	0.000	0	294359	250.0	250.0	
39 2,2-Dichloropropane	79	4.898	4.898	0.000	91	28850	20.0	17.9	
40 cis-1,2-Dichloroethene	96	4.929	4.929	0.000	96	66199	20.0	17.3	
41 2-Butanone (MEK)	72	4.959	4.953	0.006	96	29238	100.0	78.8	
42 Ethyl acetate	70	4.972	4.966	0.006	96	10001	40.0	30.9	
43 Methyl acrylate	55	5.033	5.026	0.007	99	41871	20.0	19.7	
44 Propionitrile	54	5.118	5.118	0.000	98	75400	200.0	201.7	
45 Tetrahydrofuran	72	5.203	5.197	0.006	94	13940	40.0	35.6	
46 Chlorobromomethane	128	5.209	5.203	0.006	97	27894	20.0	18.1	
47 Methacrylonitrile	67	5.246	5.240	0.006	92	205850	200.0	188.2	
48 Chloroform	83	5.282	5.276	0.006	98	100657	20.0	17.8	
49 Cyclohexane	84	5.429	5.429	0.000	93	89671	20.0	19.1	
50 1,1,1-Trichloroethane	97	5.453	5.447	0.006	97	82323	20.0	17.6	
$ 51 Dibromofluoromethane (Surr	113	5.478	5.472	0.006	95	139006	50.0	40.3	
52 Carbon tetrachloride	117	5.593	5.593	0.000	97	62663	20.0	17.2	
53 1,1-Dichloropropene	75	5.636	5.636	0.000	96	76235	20.0	19.9	
54 Isobutyl alcohol	43	5.831	5.831	0.000	92	95582	500.0	506.6	
55 Benzene	78	5.880	5.874	0.006	97	221487	20.0	22.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.904	5.904	0.000	96	151458	50.0	41.8	
57 Tert-amyl methyl ether	87	5.977	5.978	-0.001	91	44290	20.0	17.3	
58 Isopropyl acetate	43	5.977	5.978	-0.001	98	165134	20.0	18.9	
59 1,2-Dichloroethane	62	5.996	5.996	0.000	96	66383	20.0	17.1	
60 n-Heptane	57	6.093	6.093	0.000	92	44733	20.0	18.7	
* 61 Fluorobenzene	96	6.246	6.240	0.006	98	502352	50.0	50.0	
62 n-Butanol	56	6.654	6.654	0.000	90	29903	500.0	484.3	
63 Trichloroethene	95	6.685	6.685	0.000	94	50726	20.0	18.1	
64 Methylcyclohexane	83	6.831	6.825	0.006	95	97901	20.0	18.8	
65 Ethyl acrylate	73	6.855	6.849	0.006	96	3441	20.0	16.3	
66 1,2-Dichloropropane	63	7.020	7.020	0.000	91	53651	20.0	18.7	
* 67 1,4-Dioxane-d8	96	7.087	7.087	0.000	0	19581	1000.0	1000.0	
68 Methyl methacrylate	100	7.124	7.124	0.000	88	20048	40.0	34.2	
69 1,4-Dioxane	88	7.148	7.148	0.000	88	9842	400.0	483.0	
70 Dibromomethane	93	7.160	7.160	0.000	91	31583	20.0	17.6	
71 n-Propyl acetate	43	7.191	7.185	0.006	99	60812	20.0	19.9	
72 Dichlorobromomethane	83	7.325	7.325	0.000	98	59995	20.0	17.3	
73 2-Nitropropane	41	7.660	7.660	0.000	95	17433	40.0	26.8	
74 2-Chloroethyl vinyl ether	63	7.666	7.666	0.000	96	20078	20.0	17.9	
75 Epichlorohydrin	57	7.758	7.758	0.000	99	84508	400.0	337.6	
76 cis-1,3-Dichloropropene	75	7.806	7.806	0.000	92	67414	20.0	20.2	
77 4-Methyl-2-pentanone (MIBK	43	7.959	7.959	0.000	97	221972	100.0	88.4	
$ 78 Toluene-d8 (Surr)	98	8.026	8.020	0.006	98	465180	50.0	49.2	
79 Toluene	91	8.087	8.087	0.000	93	193956	20.0	20.7	
80 trans-1,3-Dichloropropene	75	8.379	8.379	0.000	98	53059	20.0	19.5	
81 Ethyl methacrylate	69	8.404	8.404	0.000	89	50149	20.0	17.9	
82 1,1,2-Trichloroethane	83	8.550	8.550	0.000	96	32592	20.0	21.5	
83 Tetrachloroethene	166	8.581	8.581	0.000	94	40098	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.709	8.709	0.000	91	59576	20.0	21.6	
85 2-Hexanone	43	8.751	8.751	0.000	97	127702	100.0	82.7	
86 n-Butyl acetate	73	8.837	8.831	0.006	98	10102	20.0	20.1	
87 Chlorodibromomethane	129	8.879	8.879	0.000	98	33224	20.0	18.0	
88 Ethylene Dibromide	107	8.989	8.989	0.000	98	32814	20.0	20.1	
* 89 Chlorobenzene-d5	117	9.361	9.361	0.000	89	306437	50.0	50.0	
90 Chlorobenzene	112	9.385	9.385	0.000	93	108000	20.0	20.2	
91 Ethylbenzene	106	9.446	9.446	0.000	99	61736	20.0	20.5	
92 1,1,1,2-Tetrachloroethane	131	9.465	9.465	0.000	93	39649	20.0	18.6	
93 m-Xylene & p-Xylene	106	9.550	9.550	0.000	99	73356	20.0	20.2	
94 n-Butyl acrylate	73	9.843	9.843	0.000	96	25717	20.0	19.0	
95 o-Xylene	106	9.873	9.873	0.000	93	77772	20.0	20.5	
96 Styrene	104	9.897	9.897	0.000	95	121025	20.0	20.6	
97 Amyl acetate (mixed isomer	43	10.019	10.019	0.000	91	69886	20.0	23.0	
98 Bromoform	173	10.074	10.074	0.000	94	17898	20.0	15.7	
99 Isopropylbenzene	105	10.153	10.154	-0.001	96	201095	20.0	20.1	
$ 100 4-Bromofluorobenzene	174	10.318	10.318	0.000	0	116099	50.0	49.2	
101 Bromobenzene	156	10.434	10.434	0.000	97	42320	20.0	20.6	
102 1,1,2,2-Tetrachloroethane	83	10.446	10.446	0.000	99	52239	20.0	22.6	
103 N-Propylbenzene	91	10.470	10.471	-0.001	98	236021	20.0	20.8	
104 1,2,3-Trichloropropane	110	10.489	10.489	0.000	96	13025	20.0	22.2	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.495	0.000	75	11820	20.0	21.2	
106 4-Ethyltoluene	105	10.556	10.556	0.000	98	187942	20.0	20.1	
107 2-Chlorotoluene	91	10.562	10.562	0.000	97	163272	20.0	20.7	
108 1,3,5-Trimethylbenzene	105	10.605	10.605	0.000	93	167102	20.0	21.0	
109 4-Chlorotoluene	91	10.653	10.653	0.000	99	137373	20.0	20.9	
110 Butyl Methacrylate	87	10.666	10.666	0.000	94	54807	20.0	20.3	
111 tert-Butylbenzene	119	10.842	10.842	0.000	93	129643	20.0	20.6	
112 1,2,4-Trimethylbenzene	105	10.891	10.891	0.000	98	164213	20.0	19.8	
113 sec-Butylbenzene	105	11.007	11.007	0.000	99	214458	20.0	20.4	
114 4-Isopropyltoluene	119	11.105	11.105	0.000	98	175091	20.0	20.4	
115 1,3-Dichlorobenzene	146	11.129	11.129	0.000	97	83443	20.0	20.3	
* 116 1,4-Dichlorobenzene-d4	152	11.184	11.184	0.000	96	151678	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.202	11.202	0.000	92	84090	20.0	20.1	
118 Benzyl chloride	126	11.306	11.306	0.000	98	12586	20.0	16.9	
119 2,3-Dihydroindene	117	11.361	11.361	0.000	94	177398	20.0	16.1	
120 p-Diethylbenzene	119	11.385	11.385	0.000	87	104751	20.0	20.2	a
121 n-Butylbenzene	92	11.409	11.409	0.000	96	96282	20.0	19.8	
122 1,2-Dichlorobenzene	146	11.482	11.483	-0.001	97	82795	20.0	20.1	
123 1,2,4,5-Tetramethylbenzene	119	12.019	12.019	0.000	97	155801	20.0	19.5	
124 1,2-Dibromo-3-Chloropropan	157	12.141	12.141	0.000	92	8137	20.0	18.8	
125 1,3,5-Trichlorobenzene	180	12.269	12.269	0.000	96	62491	20.0	19.5	
126 1,2,4-Trichlorobenzene	180	12.903	12.903	0.000	94	57465	20.0	19.7	
127 Hexachlorobutadiene	225	13.013	13.013	0.000	91	26142	20.0	19.1	
128 Naphthalene	128	13.202	13.196	0.006	99	151784	20.0	21.4	
129 1,2,3-Trichlorobenzene	180	13.488	13.488	0.000	95	59253	20.0	21.1	
S 130 1,2-Dichloroethene, Total	100				0		40.0	36.1	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.7	
S 132 Xylenes, Total	100				0		40.0	40.7	
S 133 Total BTEX	1				0		100.0	104.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 23-Apr-2018 17:11:45 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48920.D

Injection Date: 19-Apr-2018 19:00:30 Instrument ID: CVOAMS4 Operator ID:

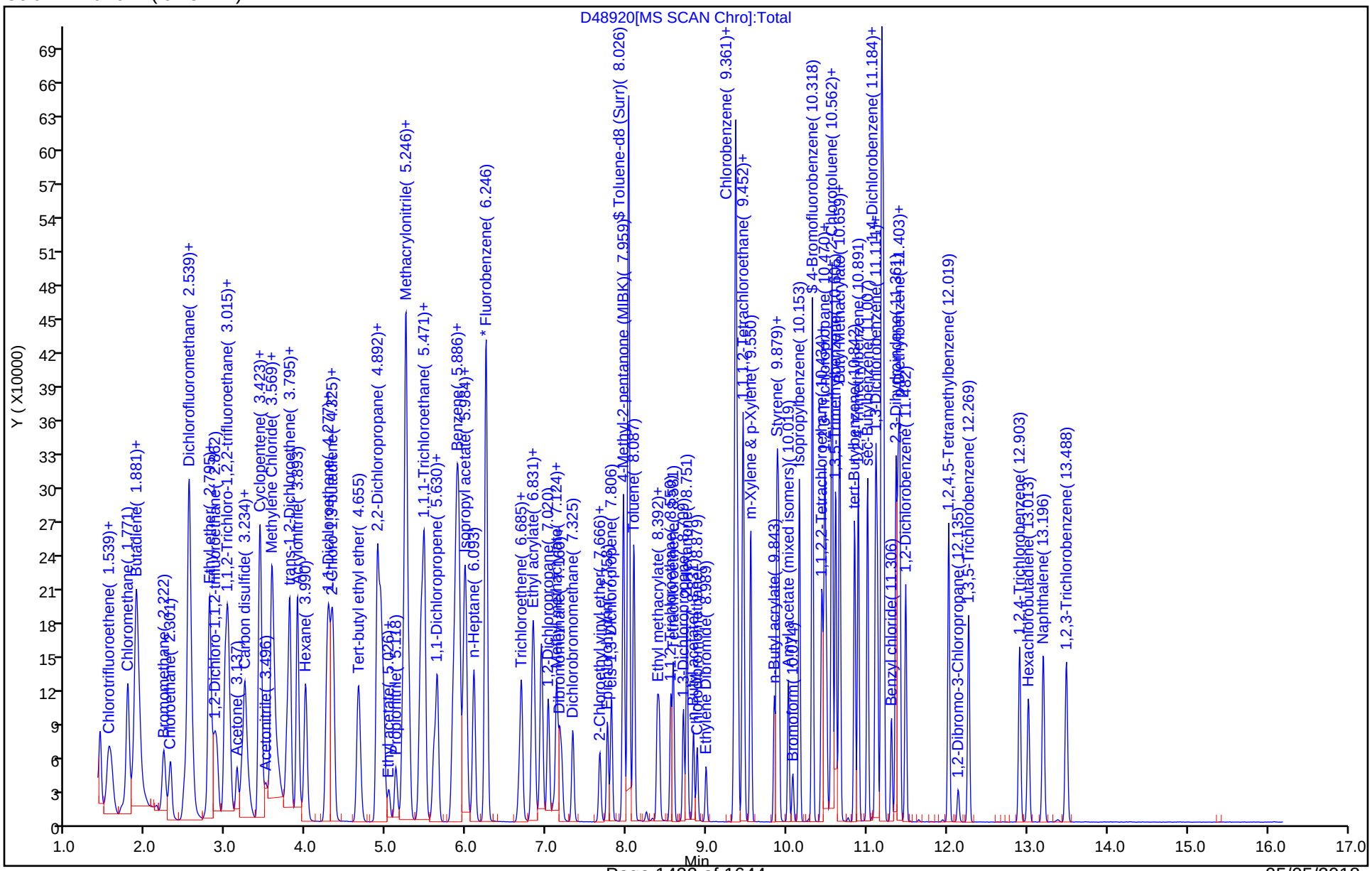
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

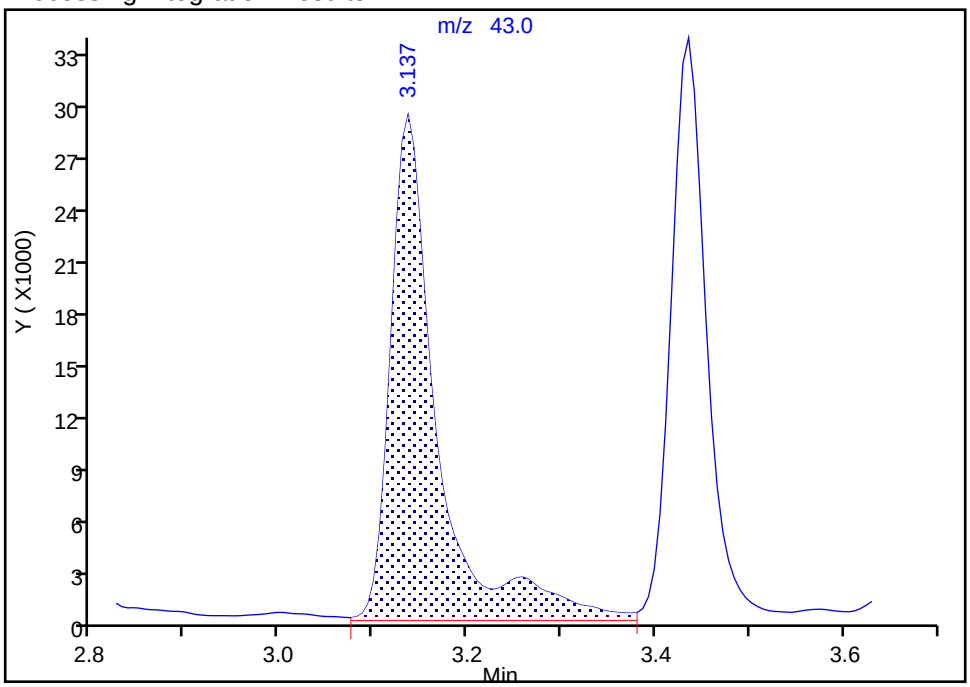
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48920.D
Injection Date: 19-Apr-2018 19:00:30 Instrument ID: CVOAMS4
Lims ID: LCS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

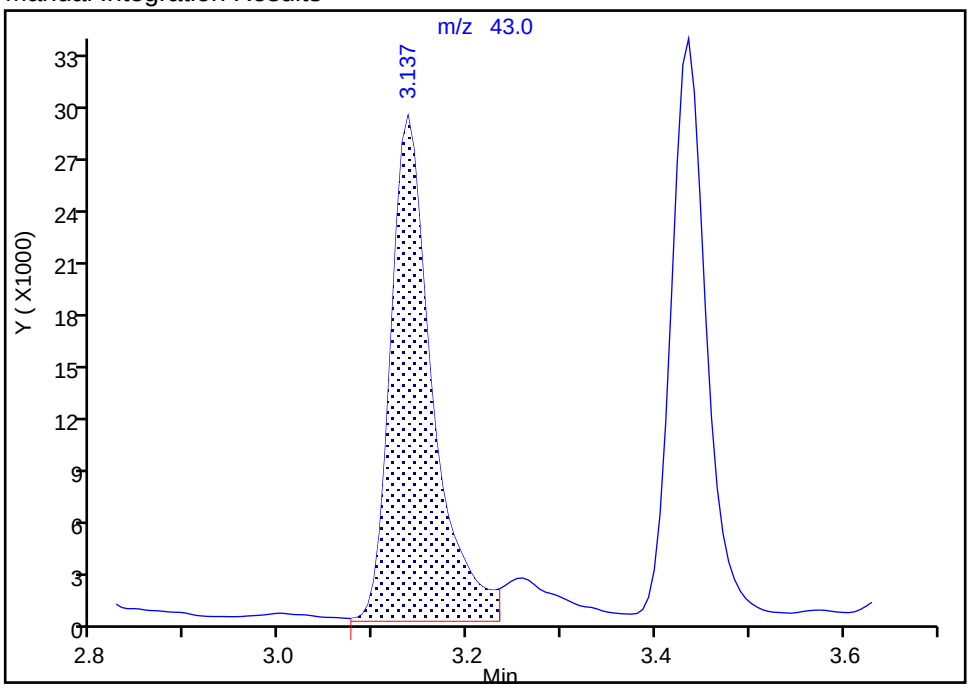
Processing Integration Results

RT: 3.14
Area: 101124
Amount: 93.070051
Amount Units: ug/l



Manual Integration Results

RT: 3.14
Area: 89998
Amount: 73.853495
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 17:11:40
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-512623/3

Matrix: Solid | Lab File ID: D48946.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/20/2018 07:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0192		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0205		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0208		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0200		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0197		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0205		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0216		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0222		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0153		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0214		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0162		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0188		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0221		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0221		0.0010	0.00010
123-91-1	1,4-Dioxane	0.448		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0771		0.0050	0.0011
591-78-6	2-Hexanone	0.0808		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0874		0.0050	0.00066
67-64-1	Acetone	0.0863		0.0050	0.0038
71-43-2	Benzene	0.0237		0.0010	0.00026
75-25-2	Bromoform	0.0136		0.0010	0.00043
74-83-9	Bromomethane	0.0236		0.0010	0.00047
75-15-0	Carbon disulfide	0.0192		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0188		0.0010	0.00018
108-90-7	Chlorobenzene	0.0212		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0172		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0169		0.0010	0.00019
75-00-3	Chloroethane	0.0243		0.0010	0.00052
67-66-3	Chloroform	0.0184		0.0010	0.00032
74-87-3	Chloromethane	0.0256		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0178		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0200		0.0010	0.00027
110-82-7	Cyclohexane	0.0221		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0169		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0190		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-512623/3

Matrix: Solid | Lab File ID: D48946.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/20/2018 07:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0223		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0184		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0233		0.0010	0.00013
79-20-9	Methyl acetate	0.0383		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0179		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0226		0.0010	0.00016
75-09-2	Methylene Chloride	0.0189		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0227		0.0010	0.00017
95-47-6	o-Xylene	0.0222		0.0010	0.000095
100-42-5	Styrene	0.0211		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0231		0.0010	0.00014
108-88-3	Toluene	0.0225		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0199		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0188		0.0010	0.00027
79-01-6	Trichloroethene	0.0192		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0196		0.0010	0.00041
75-01-4	Vinyl chloride	0.0245		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	79		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48946.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Apr-2018 07:20:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0070697-003
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 20-Apr-2018 13:59:17 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: tupayachia Date: 20-Apr-2018 07:53:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.521	1.527	-0.006	78	64452	20.0	27.9	a
2 Dichlorodifluoromethane	85	1.558	1.564	-0.006	98	150078	20.0	19.0	
3 Chloromethane	50	1.759	1.765	-0.006	99	228901	20.0	25.6	
4 Vinyl chloride	62	1.862	1.868	-0.006	98	191844	20.0	24.5	
5 Butadiene	54	1.875	1.881	-0.006	98	174504	20.0	27.1	
6 Bromomethane	94	2.210	2.216	-0.006	98	79758	20.0	23.6	
7 Chloroethane	64	2.289	2.295	-0.006	99	83845	20.0	24.3	
9 Trichlorofluoromethane	101	2.503	2.509	-0.006	97	119984	20.0	19.6	
8 Dichlorofluoromethane	67	2.521	2.527	-0.006	97	189594	20.0	21.7	
10 Pentane	72	2.527	2.533	-0.006	96	31284	40.0	40.9	
12 Ethanol	46	2.753	2.765	-0.012	83	14706	800.0	1097.8	
11 Ethyl ether	59	2.765	2.777	-0.012	93	55638	20.0	18.8	
13 2-Methyl-1,3-butadiene	53	2.783	2.789	-0.006	98	76964	20.0	23.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.856	2.868	-0.012	95	66052	20.0	20.9	
16 Acrolein	56	2.972	2.978	-0.006	98	115783	300.0	288.9	
15 1,1,2-Trichloro-1,2,2-trif	101	3.002	3.002	0.000	87	81732	20.0	20.8	
17 1,1-Dichloroethene	96	3.009	3.015	-0.006	94	74079	20.0	20.5	
18 Acetone	43	3.124	3.130	-0.006	86	95009	100.0	86.3	
19 Iodomethane	142	3.185	3.191	-0.006	100	119867	20.0	18.2	
20 Carbon disulfide	76	3.222	3.228	-0.006	100	270163	20.0	19.2	
21 Isopropyl alcohol	45	3.252	3.258	-0.006	99	36846	200.0	198.5	
22 3-Chloro-1-propene	76	3.393	3.405	-0.012	87	42755	20.0	19.5	
23 Cyclopentene	67	3.411	3.417	-0.006	94	191803	20.0	22.4	
24 Methyl acetate	43	3.417	3.429	-0.012	99	82476	40.0	38.3	
25 Acetonitrile	41	3.484	3.496	-0.012	97	62145	200.0	251.1	
26 Methylene Chloride	84	3.551	3.563	-0.012	96	78921	20.0	18.9	
* 27 TBA-d9 (IS)	65	3.569	3.575	-0.006	56	308461	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.655	3.661	-0.006	95	59843	200.0	190.4	
29 Methyl tert-butyl ether	73	3.752	3.758	-0.006	97	166934	20.0	17.9	
30 trans-1,2-Dichloroethene	96	3.783	3.789	-0.006	99	70357	20.0	19.9	
31 Acrylonitrile	53	3.874	3.880	-0.006	94	190329	200.0	224.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.978	3.984	-0.006	94	113323	20.0	24.1	
33 Isopropyl ether	45	4.246	4.252	-0.006	97	220522	20.0	21.0	
34 1,1-Dichloroethane	63	4.271	4.277	-0.005	99	125646	20.0	19.7	
35 Vinyl acetate	86	4.301	4.307	-0.006	100	18018	40.0	31.9	
36 2-Chloro-1,3-butadiene	88	4.325	4.331	-0.006	92	58707	20.0	20.2	
37 Tert-butyl ethyl ether	59	4.636	4.642	-0.006	88	180062	20.0	18.6	
* 38 2-Butanone-d5	46	4.868	4.874	-0.006	0	265991	250.0	250.0	
39 2,2-Dichloropropane	79	4.886	4.886	0.000	96	32309	20.0	19.4	
40 cis-1,2-Dichloroethene	96	4.911	4.917	-0.006	94	70607	20.0	17.8	
41 2-Butanone (MEK)	72	4.941	4.947	-0.006	98	25827	100.0	77.1	
42 Ethyl acetate	70	4.953	4.959	-0.006	96	9219	40.0	31.6	
43 Methyl acrylate	55	5.014	5.020	-0.006	99	37532	20.0	17.1	
44 Propionitrile	54	5.100	5.106	-0.006	98	66517	200.0	171.5	
45 Tetrahydrofuran	72	5.185	5.191	-0.006	92	11170	40.0	31.6	
46 Chlorobromomethane	128	5.191	5.197	-0.006	96	27522	20.0	17.2	
47 Methacrylonitrile	67	5.228	5.234	-0.006	92	182519	200.0	160.9	
48 Chloroform	83	5.264	5.270	-0.006	98	107615	20.0	18.4	
49 Cyclohexane	84	5.411	5.417	-0.006	93	107527	20.0	22.1	
50 1,1,1-Trichloroethane	97	5.435	5.441	-0.006	98	92983	20.0	19.2	
$ 51 Dibromofluoromethane (Surr	113	5.459	5.465	-0.006	94	141929	50.0	39.6	
52 Carbon tetrachloride	117	5.581	5.587	-0.006	96	71220	20.0	18.8	
53 1,1-Dichloropropene	75	5.618	5.624	-0.006	96	84456	20.0	21.3	
54 Isobutyl alcohol	43	5.819	5.825	-0.006	90	102150	500.0	575.9	
55 Benzene	78	5.862	5.868	-0.006	97	238980	20.0	23.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.886	5.892	-0.006	97	150470	50.0	40.1	
57 Tert-amyl methyl ether	87	5.959	5.965	-0.006	91	42854	20.0	16.1	
58 Isopropyl acetate	43	5.965	5.965	0.000	98	151248	20.0	16.7	
59 1,2-Dichloroethane	62	5.984	5.983	0.001	96	65397	20.0	16.2	
60 n-Heptane	57	6.075	6.081	-0.006	92	57820	20.0	23.4	
* 61 Fluorobenzene	96	6.227	6.233	-0.006	98	521080	50.0	50.0	
62 n-Butanol	56	6.642	6.642	0.000	90	26579	500.0	457.9	
63 Trichloroethene	95	6.666	6.672	-0.006	95	55727	20.0	19.2	
64 Methylcyclohexane	83	6.813	6.813	0.000	96	122128	20.0	22.6	
65 Ethyl acrylate	73	6.837	6.843	-0.006	97	3222	20.0	14.8	
66 1,2-Dichloropropane	63	7.002	7.008	-0.006	92	55903	20.0	18.8	
* 67 1,4-Dioxane-d8	96	7.075	7.075	0.000	0	19865	1000.0	1000.0	
68 Methyl methacrylate	100	7.111	7.111	0.000	88	17662	40.0	29.1	
69 1,4-Dioxane	88	7.136	7.136	0.000	90	9260	400.0	447.9	
70 Dibromomethane	93	7.148	7.148	0.000	93	28839	20.0	15.5	
71 n-Propyl acetate	43	7.172	7.178	-0.006	99	51178	20.0	16.2	
72 Dichlorobromomethane	83	7.313	7.313	0.001	99	60546	20.0	16.9	
73 2-Nitropropane	41	7.642	7.648	-0.006	99	13914	40.0	20.6	
74 2-Chloroethyl vinyl ether	63	7.654	7.654	0.000	94	18663	20.0	16.1	
75 Epichlorohydrin	57	7.745	7.745	0.000	99	73078	400.0	323.1	
76 cis-1,3-Dichloropropene	75	7.794	7.800	-0.006	93	68245	20.0	20.0	
77 4-Methyl-2-pentanone (MIBK	43	7.947	7.947	0.000	98	198457	100.0	87.4	
$ 78 Toluene-d8 (Surr)	98	8.008	8.014	-0.006	98	483101	50.0	50.2	
79 Toluene	91	8.075	8.081	-0.006	93	215288	20.0	22.5	
80 trans-1,3-Dichloropropene	75	8.367	8.373	-0.006	98	52146	20.0	18.8	
81 Ethyl methacrylate	69	8.392	8.398	-0.006	89	46186	20.0	15.9	
82 1,1,2-Trichloroethane	83	8.538	8.538	0.000	96	31006	20.0	20.0	
83 Tetrachloroethene	166	8.568	8.568	0.000	94	46908	20.0	23.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.697	8.696	0.000	92	58335	20.0	20.8	
85 2-Hexanone	43	8.739	8.739	0.000	97	112809	100.0	80.8	
86 n-Butyl acetate	73	8.825	8.824	0.001	98	9005	20.0	17.6	
87 Chlorodibromomethane	129	8.867	8.867	0.000	98	31853	20.0	16.9	
88 Ethylene Dibromide	107	8.977	8.983	-0.006	99	30631	20.0	18.4	
* 89 Chlorobenzene-d5	117	9.349	9.355	-0.006	90	312276	50.0	50.0	
90 Chlorobenzene	112	9.373	9.373	0.000	94	115270	20.0	21.2	
91 Ethylbenzene	106	9.440	9.440	0.000	99	68691	20.0	22.3	
92 1,1,1,2-Tetrachloroethane	131	9.452	9.452	0.000	94	40948	20.0	18.9	
93 m-Xylene & p-Xylene	106	9.538	9.538	0.000	98	84259	20.0	22.7	
94 n-Butyl acrylate	73	9.830	9.836	-0.006	97	25127	20.0	18.3	
95 o-Xylene	106	9.867	9.867	0.000	93	85723	20.0	22.2	
96 Styrene	104	9.885	9.885	0.000	94	126334	20.0	21.1	
97 Amyl acetate (mixed isomer	43	10.007	10.007	0.000	91	63684	20.0	20.9	
98 Bromoform	173	10.062	10.062	0.000	93	15792	20.0	13.6	
99 Isopropylbenzene	105	10.147	10.147	0.000	96	237781	20.0	23.3	
$ 100 4-Bromofluorobenzene	174	10.312	10.312	0.000	0	121030	50.0	51.1	
101 Bromobenzene	156	10.422	10.422	0.000	97	44442	20.0	21.5	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.440	0.000	98	47438	20.0	20.5	
103 N-Propylbenzene	91	10.464	10.464	0.000	98	284638	20.0	25.0	
104 1,2,3-Trichloropropane	110	10.483	10.483	0.000	97	11497	20.0	19.5	
105 trans-1,4-Dichloro-2-buten	53	10.489	10.489	0.000	75	11000	20.0	19.7	
106 4-Ethyltoluene	105	10.550	10.550	0.000	98	224908	20.0	24.0	
107 2-Chlorotoluene	91	10.556	10.556	0.000	97	187292	20.0	23.7	
108 1,3,5-Trimethylbenzene	105	10.599	10.598	0.001	93	193891	20.0	24.3	
109 4-Chlorotoluene	91	10.647	10.647	0.000	98	151979	20.0	23.1	
110 Butyl Methacrylate	87	10.653	10.653	0.000	93	55762	20.0	20.6	
111 tert-Butylbenzene	119	10.836	10.836	0.000	93	156235	20.0	24.7	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	98	193030	20.0	23.2	
113 sec-Butylbenzene	105	10.995	10.995	0.000	99	262776	20.0	24.9	
114 4-Isopropyltoluene	119	11.098	11.098	0.000	97	208350	20.0	24.2	
115 1,3-Dichlorobenzene	146	11.117	11.123	-0.006	95	91189	20.0	22.1	
* 116 1,4-Dichlorobenzene-d4	152	11.172	11.172	0.000	96	152179	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.190	11.190	0.000	94	92508	20.0	22.1	
118 Benzyl chloride	126	11.294	11.293	0.001	98	11811	20.0	15.8	
119 2,3-Dihydroindene	117	11.355	11.354	0.001	94	193738	20.0	16.9	
120 p-Diethylbenzene	119	11.379	11.379	0.000	92	128546	20.0	24.7	
121 n-Butylbenzene	92	11.397	11.397	0.000	97	121709	20.0	25.0	
122 1,2-Dichlorobenzene	146	11.470	11.470	0.000	96	88420	20.0	21.4	
123 1,2,4,5-Tetramethylbenzene	119	12.007	12.007	0.000	97	182037	20.0	22.8	
124 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	91	6634	20.0	15.3	
125 1,3,5-Trichlorobenzene	180	12.257	12.257	0.000	96	72731	20.0	22.6	
126 1,2,4-Trichlorobenzene	180	12.891	12.891	0.000	93	65099	20.0	22.2	
127 Hexachlorobutadiene	225	13.001	13.000	0.001	90	31790	20.0	23.1	
128 Naphthalene	128	13.190	13.189	0.001	99	144592	20.0	20.3	
129 1,2,3-Trichlorobenzene	180	13.476	13.476	0.000	94	60963	20.0	21.6	
S 130 1,2-Dichloroethene, Total	100				0		40.0	37.7	
S 131 1,3-Dichloropropene, Total	100				0		40.0	38.9	
S 132 Xylenes, Total	100				0		40.0	44.9	
S 133 Total BTEX	1				0		100.0	113.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Apr-2018 13:59:29 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48946.D

Injection Date: 20-Apr-2018 07:20:30 Instrument ID: CVOAMS4 Operator ID:

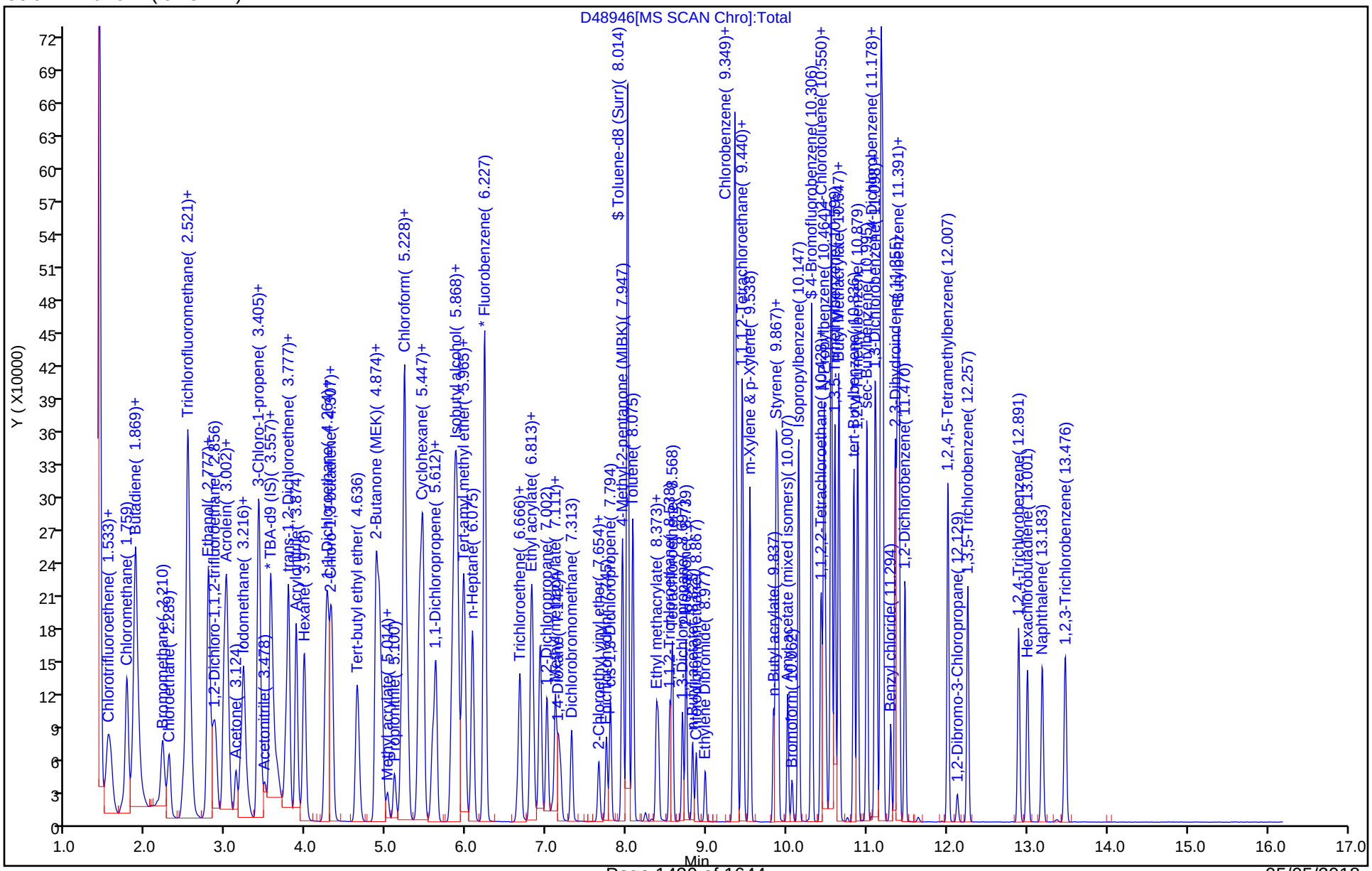
Lims ID: LCS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-513435/3

Matrix: Solid | Lab File ID: K82436.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/23/2018 17:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0186		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0189		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0167		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0179		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0184		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0179		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0173		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0169		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0179		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0183		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0180		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0180		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0181		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0176		0.0010	0.00010
123-91-1	1,4-Dioxane	0.471		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0902		0.0050	0.0011
591-78-6	2-Hexanone	0.0952		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0930		0.0050	0.00066
67-64-1	Acetone	0.0839		0.0050	0.0038
71-43-2	Benzene	0.0181		0.0010	0.00026
75-25-2	Bromoform	0.0184		0.0010	0.00043
74-83-9	Bromomethane	0.0185		0.0010	0.00047
75-15-0	Carbon disulfide	0.0179		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0186		0.0010	0.00018
108-90-7	Chlorobenzene	0.0184		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0187		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0183		0.0010	0.00019
75-00-3	Chloroethane	0.0192		0.0010	0.00052
67-66-3	Chloroform	0.0188		0.0010	0.00032
74-87-3	Chloromethane	0.0178		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0184		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0175		0.0010	0.00027
110-82-7	Cyclohexane	0.0170		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0185		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0126		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-513435/3

Matrix: Solid | Lab File ID: K82436.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/23/2018 17:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0185		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0184		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0184		0.0010	0.00013
79-20-9	Methyl acetate	0.0344		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0178		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0168		0.0010	0.00016
75-09-2	Methylene Chloride	0.0176		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0185		0.0010	0.00017
95-47-6	o-Xylene	0.0184		0.0010	0.000095
100-42-5	Styrene	0.0186		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0186		0.0010	0.00014
108-88-3	Toluene	0.0184		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0186		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0174		0.0010	0.00027
79-01-6	Trichloroethene	0.0184		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0196		0.0010	0.00041
75-01-4	Vinyl chloride	0.0197		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	102		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82436.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Apr-2018 17:51:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0070876-003
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 24-Apr-2018 12:10:37 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: baronm Date: 24-Apr-2018 11:35:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.602	0.000	85	48743	20.0	12.0	
2 Dichlorodifluoromethane	85	1.632	1.632	0.000	98	107034	20.0	12.6	
3 Chloromethane	50	1.803	1.803	0.000	99	100046	20.0	17.8	
5 Butadiene	54	1.907	1.913	-0.006	97	80248	20.0	18.6	
4 Vinyl chloride	62	1.913	1.913	0.000	97	111197	20.0	19.7	
6 Bromomethane	94	2.212	2.212	0.000	98	86727	20.0	18.5	
7 Chloroethane	64	2.273	2.279	-0.006	100	54595	20.0	19.2	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	96	162517	20.0	19.6	
8 Trichlorofluoromethane	101	2.480	2.474	0.006	60	144283	20.0	19.6	
10 Pentane	72	2.498	2.504	-0.006	97	18856	40.0	29.9	
11 Ethyl ether	59	2.699	2.699	0.000	93	43806	20.0	17.8	
12 Ethanol	46	2.693	2.705	-0.012	72	12639	800.0	581.6	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	98	51807	20.0	18.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.754	-0.006	94	69529	20.0	19.1	
15 Acrolein	56	2.882	2.882	0.000	96	112503	300.0	218.9	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.894	-0.006	94	79778	20.0	16.7	
17 1,1-Dichloroethene	96	2.919	2.925	-0.006	98	66562	20.0	17.9	
18 Acetone	43	3.010	3.010	0.000	87	88170	100.0	83.9	
19 Iodomethane	142	3.083	3.083	0.000	98	141896	20.0	17.9	
22 Isopropyl alcohol	45	3.114	3.114	0.000	28	40236	200.0	150.8	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	247502	20.0	17.9	
21 3-Chloro-1-propene	76	3.248	3.248	0.000	97	37990	20.0	17.3	
23 Methyl acetate	43	3.254	3.254	0.000	99	80577	40.0	34.4	
24 Cyclopentene	67	3.266	3.266	0.000	93	151837	20.0	18.5	
29 Acetonitrile	41	3.327	3.321	0.006	93	104196	200.0	180.8	a
26 Methylene Chloride	84	3.376	3.376	0.000	89	74474	20.0	17.6	
* 25 TBA-d9 (IS)	65	3.382	3.382	0.000	0	346668	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.431	3.437	-0.006	93	85492	200.0	164.2	
28 Methyl tert-butyl ether	73	3.534	3.535	-0.001	96	184873	20.0	17.8	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	92	75125	20.0	18.6	
31 Acrylonitrile	53	3.644	3.644	0.000	94	220199	200.0	196.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.723	3.724	-0.001	92	55535	20.0	17.8	
33 Isopropyl ether	45	3.931	3.931	0.000	95	194862	20.0	17.8	
34 1,1-Dichloroethane	63	3.973	3.980	-0.007	79	117941	20.0	18.4	
35 Vinyl acetate	86	3.980	3.986	-0.006	99	21451	40.0	34.6	
36 2-Chloro-1,3-butadiene	88	4.022	4.028	-0.006	90	62654	20.0	19.2	
37 Tert-butyl ethyl ether	59	4.248	4.254	-0.006	89	187147	20.0	17.7	
* 38 2-Butanone-d5	46	4.455	4.461	-0.006	0	213768	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.492	-0.006	95	37046	20.0	17.9	
41 Ethyl acetate	70	4.510	4.510	0.000	87	12533	40.0	35.2	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	76	83158	20.0	18.4	
42 2-Butanone (MEK)	72	4.516	4.522	-0.006	96	37650	100.0	90.2	
44 Methyl acrylate	55	4.571	4.571	0.000	98	45880	20.0	18.3	
43 Propionitrile	54	4.650	4.656	-0.006	97	90998	200.0	187.9	
45 Tetrahydrofuran	72	4.735	4.742	-0.007	63	18578	40.0	36.8	
46 Chlorobromomethane	128	4.742	4.748	-0.006	70	42421	20.0	18.7	
47 Methacrylonitrile	67	4.754	4.760	-0.006	91	249045	200.0	200.7	
48 Chloroform	83	4.790	4.790	0.000	99	126556	20.0	18.8	
49 Cyclohexane	84	4.937	4.937	0.000	90	111461	20.0	17.0	
50 1,1,1-Trichloroethane	97	4.943	4.949	-0.006	97	121231	20.0	18.6	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.955	-0.006	97	185569	50.0	51.2	
52 Carbon tetrachloride	117	5.071	5.071	0.000	97	105927	20.0	18.6	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	97	91776	20.0	18.5	
56 Isobutyl alcohol	74	5.211	5.211	0.000	96	7309	500.0	414.6	
54 Benzene	78	5.296	5.296	0.000	95	266628	20.0	18.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	162015	50.0	48.0	
57 Isopropyl acetate	43	5.333	5.339	-0.006	96	181089	20.0	19.5	
58 Tert-amyl methyl ether	87	5.345	5.351	-0.006	96	60205	20.0	18.7	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	97	78909	20.0	18.0	
60 n-Heptane	57	5.437	5.437	0.000	91	54720	20.0	17.3	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	452776	50.0	50.0	
62 n-Butanol	56	5.869	5.869	0.000	88	46058	500.0	423.9	
63 Trichloroethene	95	5.943	5.949	-0.006	96	71179	20.0	18.4	
65 Methylcyclohexane	83	6.077	6.077	0.000	94	133087	20.0	16.8	
64 Ethyl acrylate	56	6.077	6.077	0.000	68	42852	20.0	18.9	a
66 1,2-Dichloropropane	63	6.235	6.235	0.000	91	62108	20.0	18.0	
* 67 1,4-Dioxane-d8	96	6.290	6.296	-0.006	0	28038	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	86	96768	40.0	41.2	
70 n-Propyl acetate	43	6.345	6.351	-0.006	98	74813	20.0	19.5	
69 1,4-Dioxane	88	6.345	6.351	-0.006	28	18169	400.0	471.1	
71 Dibromomethane	93	6.369	6.375	-0.006	96	44554	20.0	19.4	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	99	87622	20.0	18.5	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	82	31716	20.0	18.7	
74 2-Nitropropane	41	6.851	6.851	0.000	80	21904	40.0	36.6	
75 Epichlorohydrin	57	6.961	6.967	-0.006	99	119085	400.0	374.0	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	93637	20.0	17.5	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	295381	100.0	93.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	637857	50.0	50.0	
79 Toluene	91	7.351	7.351	0.000	92	286631	20.0	18.4	
80 trans-1,3-Dichloropropene	75	7.692	7.698	-0.006	99	80786	20.0	17.4	
81 Ethyl methacrylate	69	7.710	7.717	-0.007	86	68246	20.0	18.2	
82 1,1,2-Trichloroethane	83	7.912	7.918	-0.006	97	45883	20.0	17.9	
83 Tetrachloroethene	166	7.973	7.973	0.000	97	81343	20.0	18.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.131	0.000	91	85713	20.0	18.1	
85 2-Hexanone	43	8.174	8.180	-0.006	96	192508	100.0	95.2	
86 n-Butyl acetate	43	8.290	8.290	0.000	98	76911	20.0	18.2	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	68190	20.0	18.3	
88 Ethylene Dibromide	107	8.534	8.534	0.000	98	58332	20.0	18.4	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	83	416474	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	98	190905	20.0	18.4	
92 Ethylbenzene	106	9.204	9.204	0.000	98	104824	20.0	18.5	
91 1,1,1,2-Tetrachloroethane	131	9.228	9.229	-0.001	94	75645	20.0	18.2	
93 m-Xylene & p-Xylene	106	9.350	9.357	-0.007	0	128120	20.0	18.5	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	40904	20.0	18.6	
95 o-Xylene	106	9.820	9.820	0.000	94	133024	20.0	18.4	
96 Styrene	104	9.850	9.850	0.000	97	209698	20.0	18.6	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	88489	20.0	18.1	
98 Bromoform	173	10.088	10.088	0.000	97	44757	20.0	18.4	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	357127	20.0	18.4	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	97	211256	50.0	51.2	
101 Bromobenzene	156	10.564	10.564	0.000	89	90126	20.0	18.0	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	97	82452	20.0	18.9	
103 N-Propylbenzene	91	10.625	10.631	-0.006	100	407426	20.0	18.2	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	96	24460	20.0	19.4	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	91	17948	20.0	18.1	
107 4-Ethyltoluene	105	10.740	10.740	0.000	90	348976	20.0	18.5	
106 2-Chlorotoluene	91	10.740	10.740	0.000	92	269570	20.0	17.9	
108 1,3,5-Trimethylbenzene	105	10.807	10.808	-0.001	94	295437	20.0	17.8	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	226776	20.0	17.8	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	82363	20.0	17.8	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	241001	20.0	17.3	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	306706	20.0	18.0	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	394590	20.0	17.7	
114 4-Isopropyltoluene	119	11.441	11.442	-0.001	98	349982	20.0	17.8	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	176785	20.0	18.1	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	254777	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	172979	20.0	17.6	
118 Benzyl chloride	91	11.667	11.667	0.000	99	142877	20.0	18.9	
119 2,3-Dihydroindene	117	11.728	11.734	-0.006	94	318073	20.0	18.2	
120 p-Diethylbenzene	119	11.777	11.777	0.000	96	198042	20.0	18.3	
121 n-Butylbenzene	92	11.801	11.795	0.006	97	179193	20.0	17.8	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	176797	20.0	18.3	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	328072	20.0	17.1	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	94	16088	20.0	17.9	
125 1,3,5-Trichlorobenzene	180	12.642	12.643	-0.001	98	155137	20.0	18.2	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	140415	20.0	16.9	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	95	68258	20.0	16.9	
128 Naphthalene	128	13.331	13.331	0.000	99	345206	20.0	18.2	
129 1,2,3-Trichlorobenzene	180	13.526	13.527	0.000	95	139599	20.0	17.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	37.0	
S 131 Xylenes, Total	100				0		40.0	36.9	
S 132 Total BTEX	1				0		100.0	92.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00078	Amount Added:	2.00	Units: uL	
ACROLEIN W_00076	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

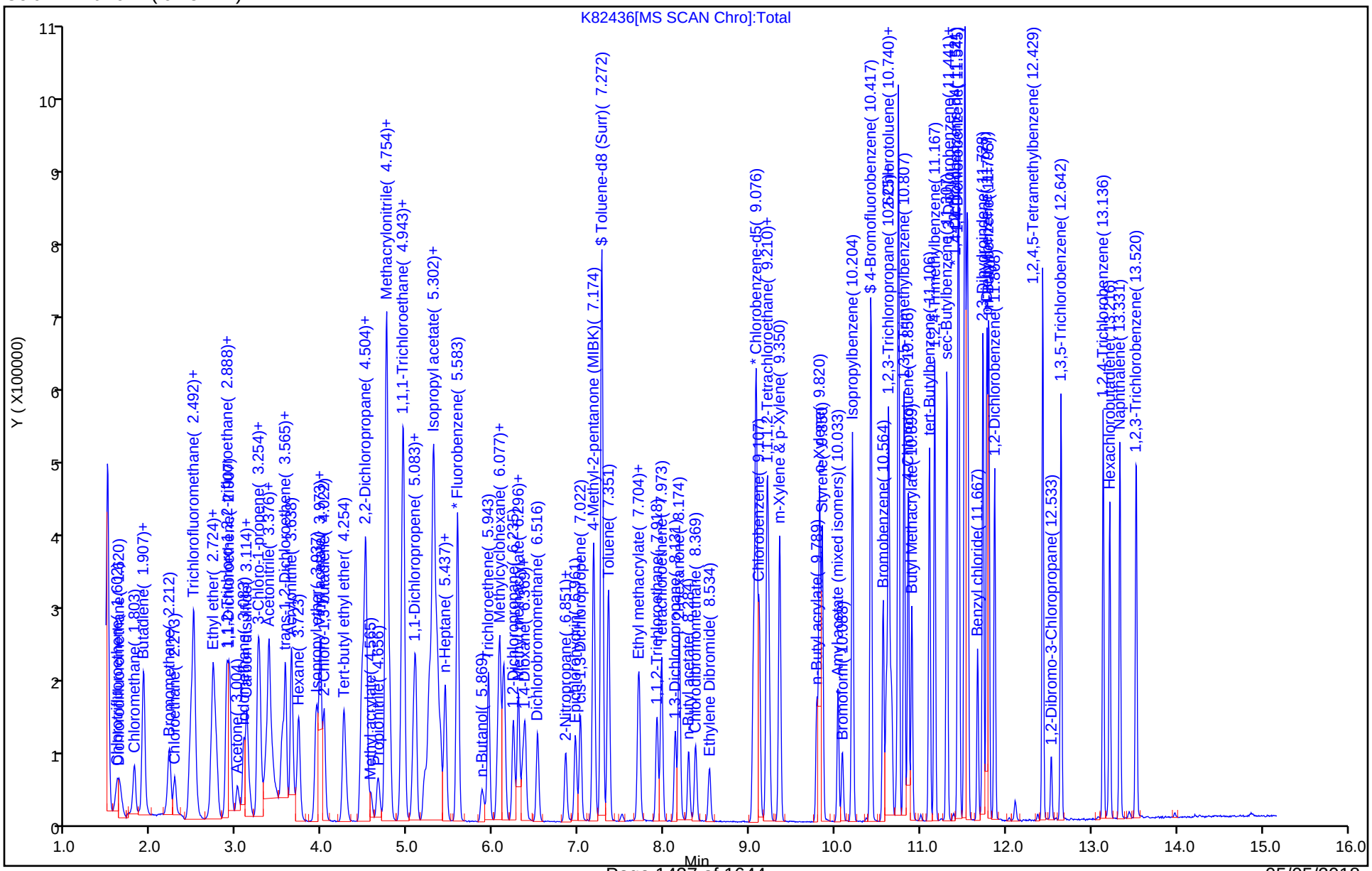
Report Date: 24-Apr-2018 12:10:48 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82436.D

Injection Date:	23-Apr-2018 17:51:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-504873/5

Matrix: Solid | Lab File ID: K81013.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/21/2018 00:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0193		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0200		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0193		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0197		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0224		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0191		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0178		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0186		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0181		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0179		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0196		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0213		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0178		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0181		0.0010	0.00010
123-91-1	1,4-Dioxane	0.294		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0717		0.0050	0.0011
591-78-6	2-Hexanone	0.0935		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0957		0.0050	0.00066
67-64-1	Acetone	0.0807		0.0050	0.0038
71-43-2	Benzene	0.0212		0.0010	0.00026
75-25-2	Bromoform	0.0162		0.0010	0.00043
74-83-9	Bromomethane	0.0186		0.0010	0.00047
75-15-0	Carbon disulfide	0.0209		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0193		0.0010	0.00018
108-90-7	Chlorobenzene	0.0179		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0173		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0168		0.0010	0.00019
75-00-3	Chloroethane	0.0205		0.0010	0.00052
67-66-3	Chloroform	0.0205		0.0010	0.00032
74-87-3	Chloromethane	0.0223		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0193		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0196		0.0010	0.00027
110-82-7	Cyclohexane	0.0195		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0191		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0183		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-504873/5

Matrix: Solid | Lab File ID: K81013.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/21/2018 00:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0187		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0178		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0182		0.0010	0.00013
79-20-9	Methyl acetate	0.127		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0193		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0193		0.0010	0.00016
75-09-2	Methylene Chloride	0.0190		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0184		0.0010	0.00017
95-47-6	o-Xylene	0.0181		0.0010	0.000095
100-42-5	Styrene	0.0186		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0180		0.0010	0.00014
108-88-3	Toluene	0.0193		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0198		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0195		0.0010	0.00027
79-01-6	Trichloroethene	0.0195		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0175		0.0010	0.00041
75-01-4	Vinyl chloride	0.0204		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		78-135
460-00-4	4-Bromofluorobenzene	103		67-126
1868-53-7	Dibromofluoromethane (Surr)	108		61-149
2037-26-5	Toluene-d8 (Surr)	105		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81013.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 21-Mar-2018 00:03:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0069055-005
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 21-Mar-2018 13:32:02 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: starzecm Date: 21-Mar-2018 02:01:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.614	1.590	0.024	97	11539	20.0	17.7	
2 Dichlorodifluoromethane	85	1.620	1.626	-0.006	99	84368	20.0	18.3	
3 Chloromethane	50	1.797	1.791	0.006	99	74190	20.0	22.3	
4 Vinyl chloride	62	1.907	1.901	0.006	90	71654	20.0	20.4	
5 Butadiene	54	1.901	1.907	-0.006	97	54603	20.0	21.8	
6 Bromomethane	94	2.205	2.199	0.006	98	56159	20.0	18.6	
7 Chloroethane	64	2.273	2.266	0.006	100	35977	20.0	20.5	
9 Dichlorofluoromethane	67	2.468	2.462	0.006	98	105962	20.0	18.7	
8 Trichlorofluoromethane	101	2.486	2.468	0.018	63	98268	20.0	17.5	
10 Pentane	72	2.492	2.498	-0.006	97	16100	40.0	35.0	
12 Ethanol	46	2.693	2.687	0.006	77	8318	800.0	876.3	
11 Ethyl ether	59	2.693	2.693	0.000	92	36679	20.0	20.6	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	98	46194	20.0	22.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	92	53508	20.0	20.0	
15 Acrolein	56	2.876	2.876	0.000	97	104051	300.0	307.6	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.882	0.006	95	68582	20.0	19.3	
17 1,1-Dichloroethene	96	2.913	2.913	0.000	95	53169	20.0	19.1	
18 Acetone	43	2.998	3.004	-0.006	85	80699	100.0	80.7	
19 Iodomethane	142	3.077	3.077	0.000	99	107159	20.0	18.0	
22 Isopropyl alcohol	45	3.089	3.089	0.000	30	29979	200.0	177.2	a
20 Carbon disulfide	76	3.120	3.114	0.006	99	188591	20.0	20.9	
21 3-Chloro-1-propene	76	3.236	3.236	0.000	97	29328	20.0	19.6	
23 Methyl acetate	43	3.248	3.248	0.000	99	183219	100.0	126.6	
24 Cyclopentene	67	3.266	3.266	0.000	94	122382	20.0	21.4	
29 Acetonitrile	41	3.309	3.309	0.000	93	64931	200.0	199.9	a
* 25 TBA-d9 (IS)	65	3.345	3.352	-0.007	0	268924	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.370	0.000	93	60048	20.0	19.0	
27 2-Methyl-2-propanol	59	3.431	3.443	-0.012	99	57923	200.0	150.4	M
28 Methyl tert-butyl ether	73	3.528	3.528	0.000	97	149211	20.0	19.3	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	95	55115	20.0	19.8	
31 Acrylonitrile	53	3.632	3.632	0.000	92	176676	200.0	232.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.717	3.717	0.000	93	49669	20.0	27.8	
33 Isopropyl ether	45	3.925	3.925	0.000	96	177496	20.0	25.8	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	95	98231	20.0	22.4	
35 Vinyl acetate	86	3.979	3.973	0.006	100	15446	40.0	31.0	
36 2-Chloro-1,3-butadiene	88	4.022	4.016	0.006	92	46242	20.0	20.8	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	88	166097	20.0	22.2	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	212666	250.0	250.0	
39 2,2-Dichloropropane	79	4.479	4.479	0.000	94	30692	20.0	20.7	
41 Ethyl acetate	70	4.510	4.498	0.012	87	9087	40.0	27.6	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	72	63327	20.0	19.3	
42 2-Butanone (MEK)	72	4.510	4.504	0.006	96	27543	100.0	71.7	
44 Methyl acrylate	55	4.571	4.565	0.006	98	38817	20.0	21.1	
43 Propionitrile	54	4.656	4.644	0.012	97	69599	200.0	177.8	
45 Tetrahydrofuran	72	4.735	4.729	0.006	63	13154	40.0	28.3	
46 Chlorobromomethane	128	4.735	4.735	0.000	78	30203	20.0	17.3	
47 Methacrylonitrile	67	4.754	4.748	0.006	94	186616	200.0	206.2	
48 Chloroform	83	4.784	4.784	0.000	99	107105	20.0	20.5	
49 Cyclohexane	84	4.931	4.931	0.000	92	82262	20.0	19.5	
50 1,1,1-Trichloroethane	97	4.937	4.943	-0.006	87	95924	20.0	19.3	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	97	153549	50.0	53.8	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	85497	20.0	19.3	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	97	75290	20.0	22.2	
56 Isobutyl alcohol	74	5.193	5.193	0.000	1	5285	500.0	384.2	a
54 Benzene	78	5.290	5.290	0.000	96	207047	20.0	21.2	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.302	5.302	0.000	0	161558	50.0	57.3	
57 Isopropyl acetate	43	5.333	5.327	0.006	96	161906	20.0	23.2	
58 Tert-amyl methyl ether	73	5.345	5.339	0.006	95	163254	20.0	20.2	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	73555	20.0	19.6	
60 n-Heptane	57	5.437	5.437	0.000	95	46480	20.0	24.5	
* 61 Fluorobenzene	96	5.583	5.577	0.006	98	414234	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	96	31933	500.0	413.3	
63 Trichloroethene	95	5.943	5.943	-0.001	98	56206	20.0	19.5	
64 Ethyl acrylate	56	6.064	6.071	-0.007	99	34021	20.0	23.7	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	97070	20.0	19.3	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	86	50289	20.0	21.3	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	20013	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	91	73481	40.0	41.0	
69 1,4-Dioxane	88	6.339	6.339	0.000	27	10518	400.0	294.4	
70 n-Propyl acetate	43	6.339	6.345	-0.006	98	60933	20.0	23.1	
71 Dibromomethane	93	6.369	6.369	0.000	96	34484	20.0	19.2	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	70733	20.0	19.1	
73 2-Chloroethyl vinyl ether	63	6.845	6.839	0.006	71	22159	20.0	21.4	
74 2-Nitropropane	41	6.845	6.845	0.000	84	20572	40.0	33.3	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	98260	400.0	337.6	
76 cis-1,3-Dichloropropene	75	7.015	7.016	-0.001	95	77215	20.0	19.6	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	97	251409	100.0	95.7	
$ 78 Toluene-d8 (Surr)	98	7.265	7.265	0.000	98	517583	50.0	52.3	
79 Toluene	91	7.345	7.345	0.000	91	221937	20.0	19.3	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	98	67291	20.0	19.5	
81 Ethyl methacrylate	69	7.710	7.704	0.006	89	53776	20.0	20.4	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	95	37745	20.0	19.7	
83 Tetrachloroethene	166	7.967	7.967	-0.001	98	60551	20.0	18.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.125	8.125	0.000	90	69027	20.0	20.3	
85 2-Hexanone	43	8.174	8.174	0.000	97	158922	100.0	93.5	
86 n-Butyl acetate	43	8.284	8.284	0.000	98	68204	20.0	24.8	
87 Chlorodibromomethane	129	8.363	8.363	0.000	98	53781	20.0	16.8	
88 Ethylene Dibromide	107	8.527	8.521	0.006	99	44598	20.0	17.8	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	86	342674	50.0	50.0	
90 Chlorobenzene	112	9.113	9.107	0.006	96	140533	20.0	17.9	
92 Ethylbenzene	106	9.204	9.198	0.006	99	73690	20.0	18.7	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	95	58100	20.0	17.5	
93 m-Xylene & p-Xylene	106	9.350	9.344	0.006	0	88402	20.0	18.4	
94 n-Butyl acrylate	73	9.783	9.783	0.000	96	32955	20.0	21.0	
95 o-Xylene	106	9.820	9.814	0.006	92	90279	20.0	18.1	
96 Styrene	104	9.850	9.844	0.006	94	148330	20.0	18.6	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	81737	20.0	25.6	
98 Bromoform	173	10.082	10.082	0.000	97	35792	20.0	16.2	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	272735	20.0	18.2	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	94	174231	50.0	51.6	
101 Bromobenzene	156	10.564	10.557	0.007	95	66705	20.0	17.6	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	64094	20.0	20.0	
103 N-Propylbenzene	91	10.625	10.625	0.000	98	313552	20.0	20.3	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	98	17685	20.0	17.0	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	87	16727	20.0	21.8	
107 4-Ethyltoluene	105	10.740	10.740	0.000	89	265622	20.0	19.4	
106 2-Chlorotoluene	91	10.740	10.740	0.000	91	216747	20.0	19.7	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	92	226240	20.0	18.5	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	184795	20.0	19.9	
110 Butyl Methacrylate	87	10.899	10.899	0.000	93	61139	20.0	18.9	
111 tert-Butylbenzene	119	11.106	11.100	0.006	93	183204	20.0	17.0	
112 1,2,4-Trimethylbenzene	105	11.167	11.161	0.006	97	238269	20.0	19.0	
113 sec-Butylbenzene	105	11.307	11.307	0.000	100	302327	20.0	18.2	
114 4-Isopropyltoluene	119	11.441	11.435	0.006	98	260715	20.0	17.6	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	97	130150	20.0	17.8	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	94	203136	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	132732	20.0	18.1	
118 Benzyl chloride	91	11.667	11.667	0.000	99	106247	20.0	18.5	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	240550	20.0	18.2	
120 p-Diethylbenzene	119	11.777	11.777	0.000	92	143642	20.0	18.5	a
121 n-Butylbenzene	92	11.795	11.795	0.000	99	141870	20.0	20.1	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	133215	20.0	17.9	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	248844	20.0	17.9	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	94	13293	20.0	18.1	
125 1,3,5-Trichlorobenzene	180	12.642	12.642	0.000	98	120700	20.0	18.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	116423	20.0	18.6	
127 Hexachlorobutadiene	225	13.215	13.216	-0.001	96	58414	20.0	18.4	
128 Naphthalene	128	13.331	13.331	0.000	99	260368	20.0	17.3	
129 1,2,3-Trichlorobenzene	180	13.526	13.520	0.006	95	113999	20.0	17.8	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.1	
S 131 Xylenes, Total	100				0		40.0	36.5	
S 132 Total BTEX	1				0		100.0	95.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00074	Amount Added:	3.00	Units: uL	
GASES Li_00252	Amount Added:	2.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Mar-2018 13:32:05 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81013.D

Injection Date: 21-Mar-2018 00:03:30 Instrument ID: CVOAMS9 Operator ID:

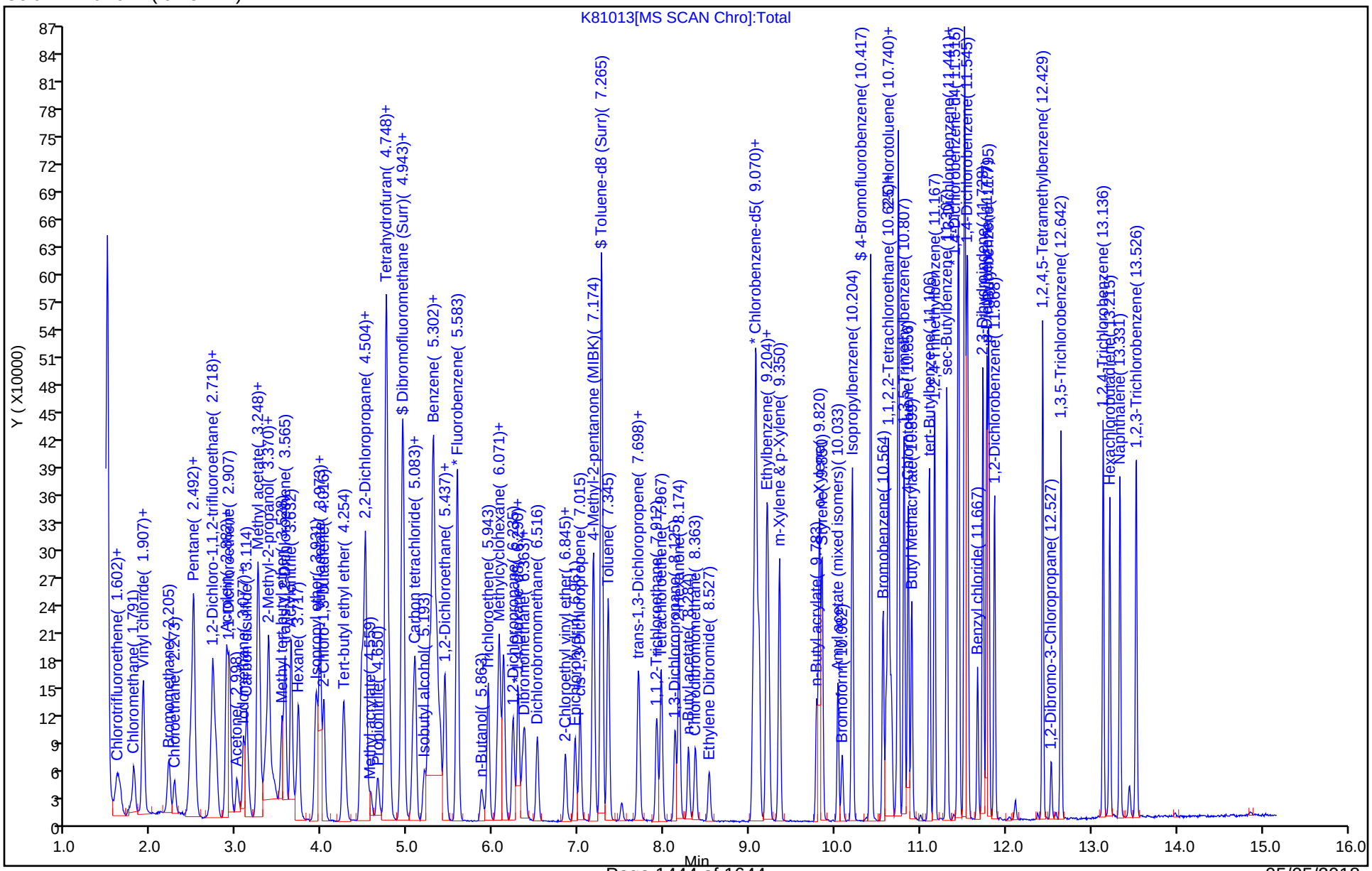
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-505749/4

Matrix: Solid | Lab File ID: K81120.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/24/2018 06:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0219		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0197		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0221		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0195		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0217		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0213		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0205		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0211		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0191		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0206		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0206		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0207		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0212		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0209		0.0010	0.00010
123-91-1	1,4-Dioxane	0.438		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0914		0.0050	0.0011
591-78-6	2-Hexanone	0.100		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.100		0.0050	0.00066
67-64-1	Acetone	0.0935		0.0050	0.0038
71-43-2	Benzene	0.0213		0.0010	0.00026
75-25-2	Bromoform	0.0186		0.0010	0.00043
74-83-9	Bromomethane	0.0204		0.0010	0.00047
75-15-0	Carbon disulfide	0.0215		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0226		0.0010	0.00018
108-90-7	Chlorobenzene	0.0209		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0189		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0190		0.0010	0.00019
75-00-3	Chloroethane	0.0217		0.0010	0.00052
67-66-3	Chloroform	0.0210		0.0010	0.00032
74-87-3	Chloromethane	0.0226		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0209		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0207		0.0010	0.00027
110-82-7	Cyclohexane	0.0227		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0200		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0229		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-505749/4

Matrix: Solid | Lab File ID: K81120.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/24/2018 06:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0217		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0192		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0215		0.0010	0.00013
79-20-9	Methyl acetate	0.104		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0200		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0226		0.0010	0.00016
75-09-2	Methylene Chloride	0.0198		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0210		0.0010	0.00017
95-47-6	o-Xylene	0.0209		0.0010	0.000095
100-42-5	Styrene	0.0209		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0206		0.0010	0.00014
108-88-3	Toluene	0.0216		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0216		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0207		0.0010	0.00027
79-01-6	Trichloroethene	0.0212		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0227		0.0010	0.00041
75-01-4	Vinyl chloride	0.0233		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		78-135
460-00-4	4-Bromofluorobenzene	97		67-126
1868-53-7	Dibromofluoromethane (Surr)	99		61-149
2037-26-5	Toluene-d8 (Surr)	102		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81120.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 24-Mar-2018 06:43:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0069230-004
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 13:05:55 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 26-Mar-2018 13:05:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.590	1.590	0.000	98	18381	20.0	22.6	
2 Dichlorodifluoromethane	85	1.620	1.627	-0.006	98	121750	20.0	22.9	
3 Chloromethane	50	1.791	1.791	0.000	99	107158	20.0	22.6	
4 Vinyl chloride	62	1.901	1.901	0.000	74	97815	20.0	23.3	
5 Butadiene	54	1.901	1.901	0.000	89	79246	20.0	23.8	
6 Bromomethane	94	2.193	2.193	0.000	98	49987	20.0	20.4	
7 Chloroethane	64	2.260	2.267	-0.007	98	38900	20.0	21.7	
9 Dichlorofluoromethane	67	2.462	2.456	0.006	97	135906	20.0	20.5	
8 Trichlorofluoromethane	101	2.462	2.468	-0.006	65	120284	20.0	22.7	
10 Pentane	72	2.486	2.492	-0.006	96	18440	40.0	38.3	
12 Ethanol	46	2.651	2.681	-0.030	92	20527	800.0	899.2	a
11 Ethyl ether	59	2.687	2.687	0.000	92	55135	20.0	20.6	
13 2-Methyl-1,3-butadiene	53	2.712	2.712	0.000	94	71529	20.0	22.0	
14 1,2-Dichloro-1,1,2-trifluo	117	2.742	2.742	0.000	98	57069	20.0	22.2	
15 Acrolein	56	2.870	2.870	0.000	96	173423	300.0	307.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.882	2.882	0.000	92	78750	20.0	22.1	
17 1,1-Dichloroethene	96	2.907	2.913	-0.006	92	61374	20.0	21.3	
18 Acetone	43	2.992	2.998	-0.006	84	120096	100.0	93.5	
19 Iodomethane	142	3.071	3.071	0.000	98	105268	20.0	19.7	
22 Isopropyl alcohol	45	3.083	3.084	-0.001	41	67095	200.0	195.0	
20 Carbon disulfide	76	3.108	3.108	0.000	100	251105	20.0	21.5	
21 3-Chloro-1-propene	76	3.236	3.236	0.000	94	39353	20.0	20.7	
23 Methyl acetate	43	3.242	3.242	0.000	98	296009	100.0	103.6	
24 Cyclopentene	67	3.260	3.260	0.000	95	178181	20.0	22.2	
29 Acetonitrile	41	3.303	3.303	0.000	90	143612	200.0	208.8	a
* 25 TBA-d9 (IS)	65	3.346	3.352	-0.006	0	335498	1000.0	1000.0	
26 Methylene Chloride	84	3.364	3.370	-0.006	97	73964	20.0	19.8	
27 2-Methyl-2-propanol	59	3.419	3.431	-0.012	97	98948	200.0	198.4	
28 Methyl tert-butyl ether	73	3.529	3.522	0.006	97	197463	20.0	20.0	
30 trans-1,2-Dichloroethene	96	3.559	3.565	-0.006	97	65380	20.0	21.6	
31 Acrylonitrile	53	3.626	3.632	-0.006	92	260010	200.0	203.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.711	3.711	0.000	94	90818	20.0	23.4	
33 Isopropyl ether	45	3.925	3.925	0.000	96	305795	20.0	21.3	
34 1,1-Dichloroethane	63	3.967	3.968	-0.001	64	139687	20.0	21.7	
35 Vinyl acetate	86	3.967	3.968	-0.001	100	20290	40.0	39.7	
36 2-Chloro-1,3-butadiene	88	4.010	4.016	-0.006	93	57002	20.0	21.1	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	87	244206	20.0	20.4	
* 38 2-Butanone-d5	46	4.449	4.449	0.000	0	272097	250.0	250.0	
39 2,2-Dichloropropane	79	4.473	4.486	-0.013	95	39993	20.0	22.2	
42 2-Butanone (MEK)	72	4.504	4.504	0.000	94	34119	100.0	91.4	
41 Ethyl acetate	70	4.504	4.504	0.000	93	12521	40.0	38.0	
40 cis-1,2-Dichloroethene	96	4.498	4.504	-0.006	90	73351	20.0	20.9	
44 Methyl acrylate	55	4.565	4.565	0.000	99	57522	20.0	18.8	
43 Propionitrile	54	4.638	4.644	-0.006	98	105354	200.0	197.2	
45 Tetrahydrofuran	72	4.729	4.730	-0.001	67	16959	40.0	38.6	
46 Chlorobromomethane	128	4.729	4.736	-0.007	88	31404	20.0	18.9	
47 Methacrylonitrile	67	4.748	4.748	0.000	97	251287	200.0	209.5	
48 Chloroform	83	4.784	4.784	0.000	97	125202	20.0	21.0	
49 Cyclohexane	84	4.925	4.931	-0.006	98	111877	20.0	22.7	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	85	115973	20.0	21.9	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.943	0.000	96	132620	50.0	49.4	
52 Carbon tetrachloride	117	5.059	5.059	0.000	98	92304	20.0	22.6	
53 1,1-Dichloropropene	75	5.083	5.083	0.000	93	96894	20.0	22.6	
56 Isobutyl alcohol	74	5.187	5.193	-0.006	96	8632	500.0	463.1	
54 Benzene	78	5.284	5.290	-0.006	97	262929	20.0	21.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	162819	50.0	52.1	
57 Isopropyl acetate	43	5.327	5.327	0.000	95	240324	20.0	20.6	
58 Tert-amyl methyl ether	73	5.339	5.345	-0.006	93	221038	20.0	20.4	
59 1,2-Dichloroethane	62	5.376	5.382	-0.006	96	92000	20.0	20.6	
60 n-Heptane	57	5.431	5.431	0.000	98	69606	20.0	22.9	
* 61 Fluorobenzene	96	5.577	5.577	0.000	97	397852	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	96	59575	500.0	468.3	
63 Trichloroethene	95	5.937	5.943	-0.006	96	66020	20.0	21.2	
64 Ethyl acrylate	56	6.065	6.071	-0.006	98	52458	20.0	23.1	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	132182	20.0	22.6	
66 1,2-Dichloropropane	63	6.229	6.229	0.000	89	74592	20.0	20.7	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	23899	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	95	126757	40.0	41.0	
69 1,4-Dioxane	88	6.333	6.339	-0.006	39	15847	400.0	438.2	
70 n-Propyl acetate	43	6.345	6.345	0.000	99	110479	20.0	20.0	
71 Dibromomethane	93	6.369	6.363	0.006	93	38949	20.0	19.4	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	79651	20.0	20.0	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	77	33963	20.0	20.9	
74 2-Nitropropane	41	6.845	6.845	0.000	75	19311	40.0	43.4	
75 Epichlorohydrin	57	6.955	6.955	0.000	100	144181	400.0	422.0	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	97	105994	20.0	20.7	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	98	407557	100.0	100.2	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	97	526341	50.0	51.2	
79 Toluene	91	7.345	7.345	0.000	92	278627	20.0	21.6	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	96	92118	20.0	20.7	
81 Ethyl methacrylate	69	7.705	7.705	0.000	95	76850	20.0	19.4	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	95	45206	20.0	19.5	
83 Tetrachloroethene	166	7.967	7.967	0.000	93	59846	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.125	8.125	0.000	98	93555	20.0	20.8	
85 2-Hexanone	43	8.174	8.174	0.000	99	266536	100.0	100.1	
86 n-Butyl acetate	43	8.284	8.284	0.000	97	124021	20.0	19.8	
87 Chlorodibromomethane	129	8.369	8.363	0.006	98	49526	20.0	19.0	
88 Ethylene Dibromide	107	8.521	8.528	-0.007	99	49021	20.0	19.2	
* 89 Chlorobenzene-d5	117	9.070	9.076	-0.006	90	321481	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	91	162698	20.0	20.9	
92 Ethylbenzene	106	9.198	9.198	0.000	99	87438	20.0	21.7	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.223	0.000	92	59934	20.0	19.4	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	105512	20.0	21.0	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	45920	20.0	19.3	
95 o-Xylene	106	9.814	9.814	0.000	92	108875	20.0	20.9	
96 Styrene	104	9.850	9.851	0.000	92	175305	20.0	20.9	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	86	145337	20.0	21.0	
98 Bromoform	173	10.082	10.082	0.000	95	28228	20.0	18.6	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	319866	20.0	21.5	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	84	142775	50.0	48.3	
101 Bromobenzene	156	10.564	10.564	0.000	93	63758	20.0	19.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	75499	20.0	19.7	
103 N-Propylbenzene	91	10.625	10.625	0.000	98	388295	20.0	22.9	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	98	19183	20.0	19.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	86	23224	20.0	22.3	
106 2-Chlorotoluene	91	10.741	10.741	0.000	92	261968	20.0	22.3	
107 4-Ethyltoluene	105	10.741	10.741	0.000	88	308591	20.0	22.1	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	92	264631	20.0	21.7	
109 4-Chlorotoluene	91	10.856	10.856	0.000	98	226654	20.0	22.5	
110 Butyl Methacrylate	87	10.899	10.899	0.000	97	86513	20.0	20.6	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	211816	20.0	21.7	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	275184	20.0	22.0	
113 sec-Butylbenzene	105	11.307	11.308	-0.001	99	356054	20.0	22.2	
114 4-Isopropyltoluene	119	11.436	11.436	0.000	97	293534	20.0	22.1	
115 1,3-Dichlorobenzene	146	11.448	11.454	-0.006	95	132455	20.0	21.2	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	96	175332	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	93	132681	20.0	20.9	
118 Benzyl chloride	91	11.667	11.667	0.000	98	139405	20.0	24.2	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	265703	20.0	20.8	
120 p-Diethylbenzene	119	11.777	11.777	0.000	91	166457	20.0	22.7	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	173032	20.0	24.0	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	94	132132	20.0	20.6	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	294923	20.0	21.5	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	89	14780	20.0	19.1	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	117658	20.0	21.9	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	95	112031	20.0	21.1	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	57806	20.0	20.7	
128 Naphthalene	128	13.331	13.332	-0.001	99	279677	20.0	20.1	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	95	110934	20.0	20.5	
S 130 1,2-Dichloroethene, Total	100				0		40.0	42.5	
S 131 Xylenes, Total	100				0		40.0	41.8	
S 132 Total BTEX	1				0		100.0	106.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00252	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 26-Mar-2018 13:05:57 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180324-69230.b\K81120.D

Injection Date: 24-Mar-2018 06:43:30 Instrument ID: CVOAMS9 Operator ID:

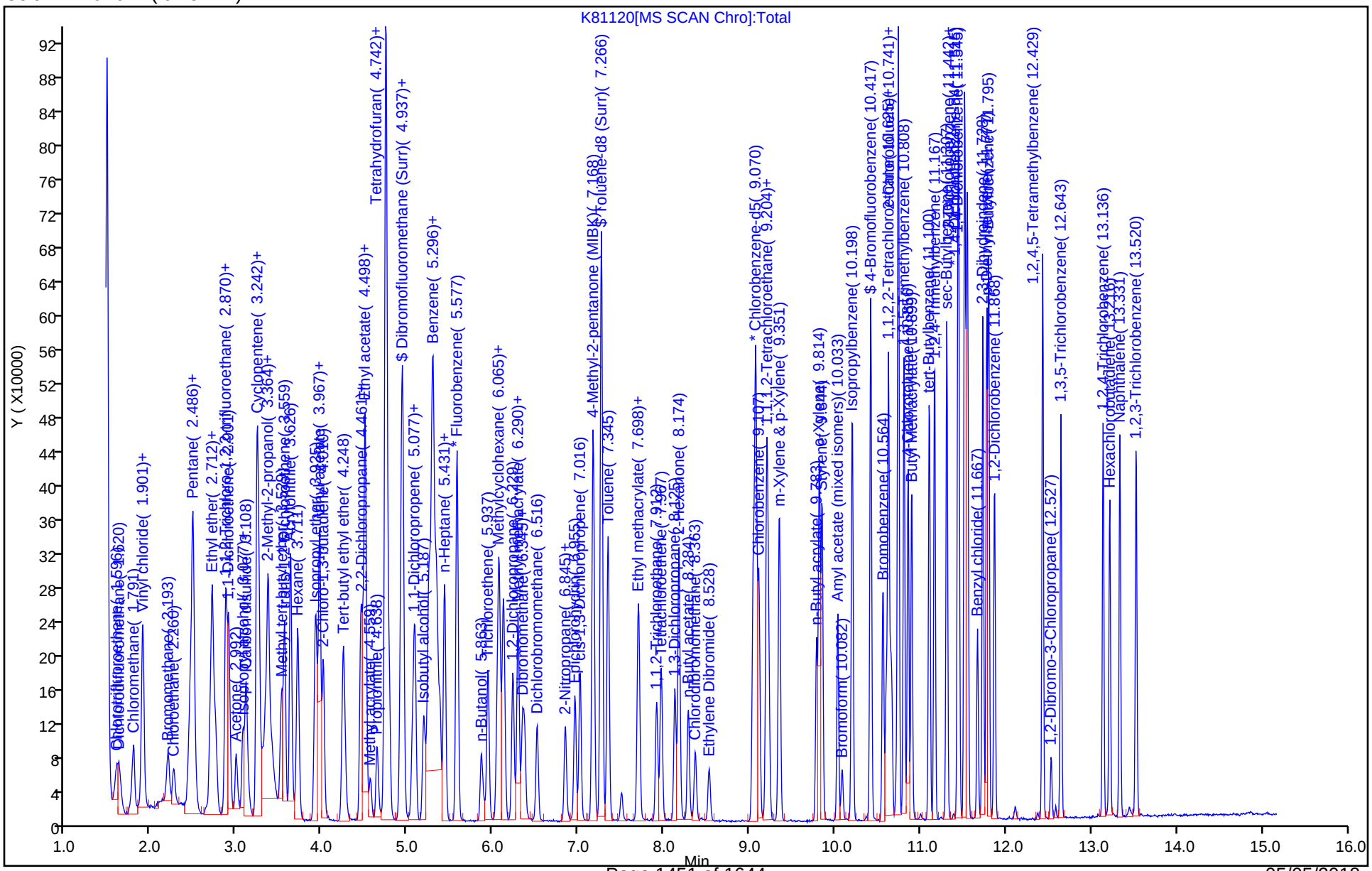
Lims ID: LCSD Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-505873/4

Matrix: Solid | Lab File ID: K81149.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/25/2018 05:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0220		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0187		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0218		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0185		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0213		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0209		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0203		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0206		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0192		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0198		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0197		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0200		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0210		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0204		0.0010	0.00010
123-91-1	1,4-Dioxane	0.427		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0887		0.0050	0.0011
591-78-6	2-Hexanone	0.0971		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0975		0.0050	0.00066
67-64-1	Acetone	0.102		0.0050	0.0038
71-43-2	Benzene	0.0209		0.0010	0.00026
75-25-2	Bromoform	0.0196		0.0010	0.00043
74-83-9	Bromomethane	0.0200		0.0010	0.00047
75-15-0	Carbon disulfide	0.0209		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0231		0.0010	0.00018
108-90-7	Chlorobenzene	0.0202		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0186		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0188		0.0010	0.00019
75-00-3	Chloroethane	0.0204		0.0010	0.00052
67-66-3	Chloroform	0.0205		0.0010	0.00032
74-87-3	Chloromethane	0.0223		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0207		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0197		0.0010	0.00027
110-82-7	Cyclohexane	0.0225		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0198		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0228		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-505873/4

Matrix: Solid | Lab File ID: K81149.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/25/2018 05:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0207		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0184		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0211		0.0010	0.00013
79-20-9	Methyl acetate	0.0981		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0199		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0225		0.0010	0.00016
75-09-2	Methylene Chloride	0.0195		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0201		0.0010	0.00017
95-47-6	o-Xylene	0.0200		0.0010	0.000095
100-42-5	Styrene	0.0204		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0197		0.0010	0.00014
108-88-3	Toluene	0.0206		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0211		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0198		0.0010	0.00027
79-01-6	Trichloroethene	0.0201		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0237		0.0010	0.00041
75-01-4	Vinyl chloride	0.0231		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		78-135
460-00-4	4-Bromofluorobenzene	100		67-126
1868-53-7	Dibromofluoromethane (Surr)	105		61-149
2037-26-5	Toluene-d8 (Surr)	105		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81149.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 25-Mar-2018 05:19:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0069264-004
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 26-Mar-2018 12:06:35 Calib Date: 23-Mar-2018 14:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180323-69166.b\K81087.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: chujia Date: 26-Mar-2018 00:43:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.602	1.596	0.006	94	18351	20.0	22.7	
2 Dichlorodifluoromethane	85	1.633	1.626	0.007	98	120682	20.0	22.8	
3 Chloromethane	50	1.797	1.797	0.000	99	105487	20.0	22.3	
4 Vinyl chloride	62	1.907	1.907	0.000	72	96334	20.0	23.1	
5 Butadiene	54	1.907	1.907	0.000	89	76679	20.0	23.1	
6 Bromomethane	94	2.206	2.199	0.007	98	48864	20.0	20.0	
7 Chloroethane	64	2.267	2.267	0.000	99	36535	20.0	20.4	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	155380	20.0	23.6	
8 Trichlorofluoromethane	101	2.468	2.474	-0.006	58	124876	20.0	23.7	
10 Pentane	72	2.492	2.498	-0.006	96	20460	40.0	42.6	
12 Ethanol	46	2.700	2.693	0.007	84	21987	800.0	966.4	
11 Ethyl ether	59	2.700	2.693	0.007	90	52702	20.0	19.8	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	96	70399	20.0	21.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	97	57144	20.0	22.3	
15 Acrolein	56	2.876	2.876	0.000	97	165519	300.0	294.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.895	2.894	0.001	94	77231	20.0	21.8	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	93	59834	20.0	20.9	
18 Acetone	43	3.004	3.004	0.000	84	125750	100.0	101.6	
19 Iodomethane	142	3.077	3.077	0.000	99	103609	20.0	19.5	
22 Isopropyl alcohol	45	3.090	3.090	0.000	1	63939	200.0	186.5	a
20 Carbon disulfide	76	3.120	3.114	0.006	99	243240	20.0	20.9	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	94	39644	20.0	20.9	
23 Methyl acetate	43	3.248	3.248	0.000	98	278891	100.0	98.1	
24 Cyclopentene	67	3.266	3.266	0.000	94	175897	20.0	22.0	
29 Acetonitrile	41	3.309	3.315	-0.006	92	133593	200.0	194.9	a
* 25 TBA-d9 (IS)	65	3.358	3.358	0.000	0	334359	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	98	72539	20.0	19.5	
27 2-Methyl-2-propanol	59	3.431	3.431	0.000	96	95461	200.0	192.1	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	97	195568	20.0	19.9	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	96	63393	20.0	21.1	
31 Acrylonitrile	53	3.638	3.638	0.000	92	250801	200.0	197.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.718	3.717	0.001	95	86432	20.0	22.4	
33 Isopropyl ether	45	3.931	3.925	0.006	96	296532	20.0	20.7	
34 1,1-Dichloroethane	63	3.974	3.974	0.000	65	136500	20.0	21.3	
35 Vinyl acetate	86	3.980	3.974	0.006	100	18807	40.0	36.9	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	93	55428	20.0	20.7	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	87	237757	20.0	20.0	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	262320	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.480	0.012	95	40336	20.0	22.5	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	89	72394	20.0	20.7	
42 2-Butanone (MEK)	72	4.504	4.510	-0.006	94	31927	100.0	88.7	
41 Ethyl acetate	70	4.504	4.510	-0.006	92	12385	40.0	39.0	
44 Methyl acrylate	55	4.571	4.565	0.006	99	53291	20.0	17.5	
43 Propionitrile	54	4.650	4.644	0.006	98	102362	200.0	192.2	
45 Tetrahydrofuran	72	4.736	4.736	0.000	65	15797	40.0	37.3	
46 Chlorobromomethane	128	4.742	4.736	0.006	89	30777	20.0	18.6	
47 Methacrylonitrile	67	4.754	4.754	0.000	97	233289	200.0	195.4	
48 Chloroform	83	4.791	4.784	0.007	98	121588	20.0	20.5	
49 Cyclohexane	84	4.931	4.931	0.000	98	109944	20.0	22.5	
50 1,1,1-Trichloroethane	97	4.943	4.937	0.006	98	116060	20.0	22.0	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	95	140531	50.0	52.6	
52 Carbon tetrachloride	117	5.065	5.065	0.000	98	93631	20.0	23.1	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	93	93104	20.0	21.8	
56 Isobutyl alcohol	74	5.193	5.193	0.000	96	8374	500.0	450.8	
54 Benzene	78	5.290	5.290	0.000	97	255223	20.0	20.9	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.303	0.000	0	166476	50.0	53.5	
57 Isopropyl acetate	43	5.327	5.327	0.000	94	235130	20.0	20.2	a
58 Tert-amyl methyl ether	73	5.345	5.345	0.000	93	214061	20.0	19.9	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	96	87768	20.0	19.7	
60 n-Heptane	57	5.437	5.431	0.006	98	66525	20.0	22.0	
* 61 Fluorobenzene	96	5.583	5.583	0.000	97	395853	50.0	50.0	
62 n-Butanol	56	5.864	5.863	0.001	98	56488	500.0	445.6	
63 Trichloroethene	95	5.937	5.937	0.000	96	62207	20.0	20.1	
64 Ethyl acrylate	56	6.065	6.071	-0.006	98	51537	20.0	22.8	
65 Methylcyclohexane	83	6.071	6.071	0.000	96	130961	20.0	22.5	
66 1,2-Dichloropropane	63	6.229	6.235	-0.006	90	71570	20.0	20.0	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	23149	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	95	114405	40.0	37.2	
69 1,4-Dioxane	88	6.345	6.339	0.006	27	14959	400.0	427.0	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	108271	20.0	19.7	
71 Dibromomethane	93	6.370	6.369	0.001	93	37103	20.0	18.6	
72 Dichlorobromomethane	83	6.516	6.516	0.000	98	78470	20.0	19.8	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	75	30976	20.0	19.2	
74 2-Nitropropane	41	6.845	6.845	0.000	78	21173	40.0	47.9	
75 Epichlorohydrin	57	6.961	6.961	0.000	100	131849	400.0	400.3	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	98	100064	20.0	19.7	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.168	0.000	98	382430	100.0	97.5	
$ 78 Toluene-d8 (Surr)	98	7.266	7.266	0.000	97	533547	50.0	52.4	
79 Toluene	91	7.345	7.345	0.000	92	263079	20.0	20.6	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	97	87147	20.0	19.8	
81 Ethyl methacrylate	69	7.711	7.711	0.000	95	73544	20.0	18.8	
82 1,1,2-Trichloroethane	83	7.918	7.912	0.006	95	42396	20.0	18.5	
83 Tetrachloroethene	166	7.967	7.967	0.000	93	56672	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.125	8.125	0.000	99	84048	20.0	18.8	
85 2-Hexanone	43	8.174	8.174	0.000	98	249286	100.0	97.1	
86 n-Butyl acetate	43	8.284	8.284	0.000	96	114289	20.0	18.4	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	48675	20.0	18.8	
88 Ethylene Dibromide	107	8.528	8.528	0.000	96	46565	20.0	18.4	
* 89 Chlorobenzene-d5	117	9.070	9.070	0.000	90	318618	50.0	50.0	
90 Chlorobenzene	112	9.107	9.107	0.000	94	155622	20.0	20.2	
92 Ethylbenzene	106	9.204	9.198	0.006	99	82861	20.0	20.7	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	93	59818	20.0	19.5	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	100319	20.0	20.1	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	43591	20.0	18.5	
95 o-Xylene	106	9.820	9.820	0.000	91	103369	20.0	20.0	
96 Styrene	104	9.851	9.850	0.001	92	169301	20.0	20.4	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	86	139680	20.0	20.3	
98 Bromoform	173	10.082	10.082	0.000	95	29417	20.0	19.6	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	310290	20.0	21.1	
$ 100 4-Bromofluorobenzene	174	10.418	10.417	0.001	84	146536	50.0	50.1	
101 Bromobenzene	156	10.564	10.564	0.000	94	62753	20.0	19.6	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	71468	20.0	18.7	
103 N-Propylbenzene	91	10.625	10.625	0.000	98	383505	20.0	22.8	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	96	19332	20.0	19.8	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	86	22270	20.0	21.5	
106 2-Chlorotoluene	91	10.741	10.740	0.001	91	249861	20.0	21.4	
107 4-Ethyltoluene	105	10.741	10.740	0.001	88	302114	20.0	21.7	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	91	258336	20.0	21.3	
109 4-Chlorotoluene	91	10.856	10.856	0.000	99	217110	20.0	21.6	
110 Butyl Methacrylate	87	10.899	10.899	0.000	97	82580	20.0	19.8	
111 tert-Butylbenzene	119	11.106	11.106	0.000	91	204972	20.0	21.1	
112 1,2,4-Trimethylbenzene	105	11.167	11.161	0.006	97	271587	20.0	21.8	
113 sec-Butylbenzene	105	11.308	11.307	0.001	99	348585	20.0	21.8	
114 4-Isopropyltoluene	119	11.436	11.435	0.001	97	288301	20.0	21.8	
115 1,3-Dichlorobenzene	146	11.448	11.448	0.000	94	130749	20.0	21.0	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	96	174465	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	94	129341	20.0	20.4	
118 Benzyl chloride	91	11.667	11.667	0.000	98	136893	20.0	23.9	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	258428	20.0	20.3	
120 p-Diethylbenzene	119	11.777	11.777	0.000	91	162612	20.0	22.3	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	169725	20.0	23.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	94	126621	20.0	19.8	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	290835	20.0	21.3	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	91	14816	20.0	19.2	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	114140	20.0	21.4	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	108810	20.0	20.6	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	92	55816	20.0	20.1	
128 Naphthalene	128	13.332	13.331	0.001	99	273592	20.0	19.8	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	109128	20.0	20.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.8	
S 131 Xylenes, Total	100				0		40.0	40.1	
S 132 Total BTEX	1				0		100.0	102.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00252	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

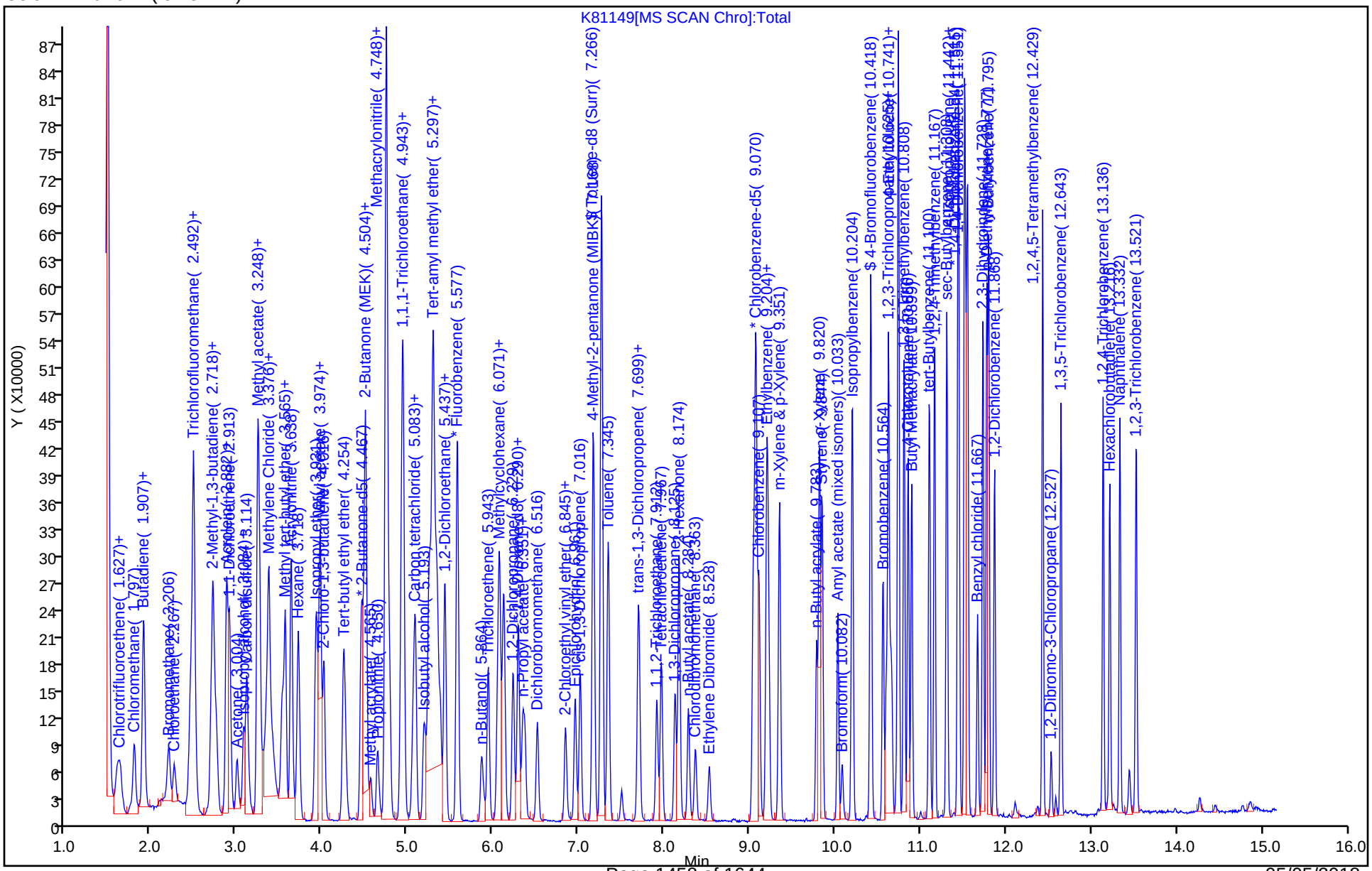
Report Date: 26-Mar-2018 12:06:37 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180325-69264.b\K81149.D

Injection Date:	25-Mar-2018 05:19:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-507466/6

Matrix: Solid | Lab File ID: B28117.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2018 13:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0220		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0170		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0221		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0193		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0206		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0200		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0218		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0229		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0239		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0194		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0201		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0171		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0190		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0191		0.0010	0.00010
123-91-1	1,4-Dioxane	0.420		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0948		0.0050	0.0011
591-78-6	2-Hexanone	0.0552		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0745		0.0050	0.00066
67-64-1	Acetone	0.101		0.0050	0.0038
71-43-2	Benzene	0.0234		0.0010	0.00026
75-25-2	Bromoform	0.0214		0.0010	0.00043
74-83-9	Bromomethane	0.0182		0.0010	0.00047
75-15-0	Carbon disulfide	0.0209		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0214		0.0010	0.00018
108-90-7	Chlorobenzene	0.0205		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0194		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0209		0.0010	0.00019
75-00-3	Chloroethane	0.0167		0.0010	0.00052
67-66-3	Chloroform	0.0212		0.0010	0.00032
74-87-3	Chloromethane	0.0229		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0194		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0185		0.0010	0.00027
110-82-7	Cyclohexane	0.0203		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0177		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0185		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-507466/6

Matrix: Solid | Lab File ID: B28117.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/31/2018 13:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0195		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0202		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0215		0.0010	0.00013
79-20-9	Methyl acetate	0.0970		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0193		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0179		0.0010	0.00016
75-09-2	Methylene Chloride	0.0200		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0194		0.0010	0.00017
95-47-6	o-Xylene	0.0196		0.0010	0.000095
100-42-5	Styrene	0.0209		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0221		0.0010	0.00014
108-88-3	Toluene	0.0191		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0210		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0186		0.0010	0.00027
79-01-6	Trichloroethene	0.0189		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0201		0.0010	0.00041
75-01-4	Vinyl chloride	0.0184		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		78-135
460-00-4	4-Bromofluorobenzene	76		67-126
1868-53-7	Dibromofluoromethane (Surr)	98		61-149
2037-26-5	Toluene-d8 (Surr)	94		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28117.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 31-Mar-2018 13:17:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0069609-004
Operator ID: Instrument ID: CVOAMS2

Method: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\8260S_2.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-Apr-2018 16:33:21 Calib Date: 26-Mar-2018 06:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS2\20180326-69287.b\B27896.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: kaewink Date: 02-Apr-2018 10:28:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.113	1.113	0.000	99	114530	20.0	18.5	
2 Chloromethane	50	1.261	1.261	0.000	99	129576	20.0	22.9	
3 Vinyl chloride	62	1.341	1.341	0.000	98	103906	20.0	18.4	
4 Butadiene	54	1.341	1.341	0.000	94	90025	20.0	18.8	
5 Bromomethane	94	1.593	1.593	0.000	98	62664	20.0	18.2	
6 Chloroethane	64	1.650	1.650	0.000	99	50865	20.0	16.7	
7 Trichlorofluoromethane	101	1.821	1.821	0.000	97	131755	20.0	20.1	
8 Dichlorofluoromethane	67	1.821	1.833	-0.012	98	164152	20.0	18.3	
9 Pentane	72	1.844	1.844	0.000	94	29271	40.0	38.3	
12 Ethyl ether	59	2.038	2.050	-0.012	92	58325	20.0	18.9	
11 2-Methyl-1,3-butadiene	53	2.050	2.050	0.000	97	90234	20.0	21.0	
10 Ethanol	46	2.061	2.061	0.000	79	12314	800.0	779.2	
13 1,2-Dichloro-1,1,2-trifluo	117	2.107	2.107	0.000	98	68472	20.0	20.3	
16 Acrolein	56	2.210	2.210	0.000	96	111063	300.0	230.5	
14 1,1,2-Trichloro-1,2,2-trif	101	2.210	2.221	-0.011	63	92708	20.0	22.1	
15 1,1-Dichloroethene	96	2.221	2.221	0.000	93	77737	20.0	20.0	
17 Acetone	43	2.347	2.347	0.000	84	80011	100.0	101.3	
18 Iodomethane	142	2.358	2.370	-0.012	98	135915	20.0	20.6	
19 Carbon disulfide	76	2.381	2.393	-0.012	100	314563	20.0	20.9	
20 Isopropyl alcohol	45	2.473	2.473	0.000	98	36794	200.0	196.1	
21 3-Chloro-1-propene	76	2.541	2.553	-0.012	86	53265	20.0	20.0	
22 Methyl acetate	43	2.576	2.587	-0.011	99	216754	100.0	97.0	
23 Methylene Chloride	84	2.678	2.678	0.000	97	83813	20.0	20.0	
* 24 TBA-d9 (IS)	65	2.724	2.724	0.000	0	231792	1000.0	1000.0	
25 2-Methyl-2-propanol	59	2.793	2.793	0.000	98	77562	200.0	195.8	
26 Methyl tert-butyl ether	73	2.850	2.850	0.000	97	178626	20.0	19.3	
27 trans-1,2-Dichloroethene	96	2.861	2.861	0.000	99	84900	20.0	21.0	
28 Acrylonitrile	53	2.964	2.964	0.000	95	209799	200.0	221.9	
29 Hexane	57	3.021	3.033	-0.012	93	142413	20.0	20.2	
30 Isopropyl ether	45	3.273	3.273	0.000	96	299806	20.0	20.5	
31 1,1-Dichloroethane	63	3.273	3.284	-0.011	97	170628	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 2-Chloro-1,3-butadiene	88	3.318	3.318	0.000	84	75073	20.0	20.5	
32 Vinyl acetate	86	3.318	3.330	-0.012	100	19336	40.0	44.3	
34 Tert-butyl ethyl ether	59	3.604	3.604	0.000	88	227682	20.0	19.7	
35 2,2-Dichloropropane	79	3.799	3.799	0.000	96	44245	20.0	21.7	
* 36 2-Butanone-d5	46	3.821	3.833	-0.012	0	218649	250.0	250.0	
37 cis-1,2-Dichloroethene	96	3.833	3.833	0.000	95	85422	20.0	19.4	
38 2-Butanone (MEK)	72	3.890	3.890	0.000	96	27770	100.0	94.8	
39 Ethyl acetate	70	3.901	3.901	0.000	95	9222	40.0	33.3	
40 Propionitrile	54	4.027	4.027	0.000	96	71389	200.0	208.6	
41 Chlorobromomethane	128	4.073	4.084	-0.011	97	34083	20.0	19.4	
42 Methacrylonitrile	67	4.130	4.130	0.000	96	211016	200.0	197.5	
43 Chloroform	83	4.153	4.153	0.000	97	148148	20.0	21.2	
44 Cyclohexane	84	4.256	4.256	0.000	96	123728	20.0	20.3	
45 1,1,1-Trichloroethane	97	4.279	4.279	0.000	97	130678	20.0	22.0	
$ 46 Dibromofluoromethane (Surr	113	4.324	4.324	0.000	97	130388	50.0	48.9	
47 Carbon tetrachloride	117	4.404	4.404	0.000	98	110765	20.0	21.4	
48 1,1-Dichloropropene	75	4.450	4.450	0.000	95	113018	20.0	20.2	
49 Benzene	78	4.656	4.667	-0.011	97	322175	20.0	23.4	
$ 51 1,2-Dichloroethane-d4 (Sur	65	4.701	4.701	0.000	0	148367	50.0	53.1	
50 Isobutyl alcohol	42	4.701	4.713	-0.012	14	67764	500.0	660.8	a
52 Tert-amyl methyl ether	73	4.770	4.770	0.000	94	219571	20.0	19.3	
53 1,2-Dichloroethane	62	4.781	4.781	0.000	94	93967	20.0	20.1	
54 n-Heptane	57	4.873	4.873	0.000	96	82928	20.0	21.5	
* 55 Fluorobenzene	96	4.999	4.999	0.000	98	474153	50.0	50.0	
56 Trichloroethene	95	5.399	5.399	0.000	98	73833	20.0	18.9	
57 n-Butanol	43	5.513	5.513	0.000	50	19017	500.0	320.1	
58 Methylcyclohexane	83	5.513	5.513	0.000	92	127494	20.0	17.9	
59 Ethyl acrylate	55	5.616	5.616	0.000	96	45346	20.0	13.1	
60 1,2-Dichloropropane	63	5.730	5.730	0.000	92	71966	20.0	17.1	
* 61 1,4-Dioxane-d8	96	5.844	5.844	0.000	0	13572	1000.0	1000.0	
62 Dibromomethane	93	5.879	5.879	0.000	96	34664	20.0	18.0	
63 1,4-Dioxane	88	5.902	5.902	0.000	31	9001	400.0	419.6	
64 Dichlorobromomethane	83	6.073	6.073	0.000	98	80483	20.0	17.7	
65 2-Nitropropane	41	6.485	6.485	-0.001	98	24969	40.0	39.2	
66 2-Chloroethyl vinyl ether	63	6.507	6.507	0.000	96	26478	20.0	16.7	
67 Epichlorohydrin	57	6.610	6.610	0.000	98	75590	400.0	324.0	a
68 cis-1,3-Dichloropropene	75	6.656	6.656	0.000	98	88589	20.0	18.5	
69 4-Methyl-2-pentanone (MIBK	43	6.873	6.873	0.000	98	216210	100.0	74.5	
$ 70 Toluene-d8 (Surr)	98	6.907	6.907	0.000	99	439966	50.0	47.2	
71 Toluene	91	6.987	6.987	0.000	93	256866	20.0	19.1	
72 trans-1,3-Dichloropropene	75	7.365	7.365	0.000	98	70471	20.0	18.6	
73 1,1,2-Trichloroethane	83	7.547	7.547	0.000	69	40338	20.0	19.3	
74 Tetrachloroethene	166	7.547	7.547	0.000	96	77019	20.0	22.1	
75 1,3-Dichloropropane	76	7.707	7.708	-0.001	95	73343	20.0	18.5	
76 2-Hexanone	43	7.799	7.799	0.000	98	111372	100.0	55.2	
77 Chlorodibromomethane	129	7.890	7.890	0.000	96	52745	20.0	20.9	
78 Ethylene Dibromide	107	7.993	7.993	0.000	100	41616	20.0	20.2	
* 79 Chlorobenzene-d5	117	8.405	8.405	0.000	87	312168	50.0	50.0	
80 Chlorobenzene	112	8.428	8.428	0.000	92	167110	20.0	20.5	
81 Ethylbenzene	106	8.508	8.508	0.000	99	86289	20.0	19.5	
82 1,1,1,2-Tetrachloroethane	131	8.519	8.519	0.000	95	63564	20.0	21.6	
83 m-Xylene & p-Xylene	106	8.622	8.622	0.000	0	102074	20.0	19.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 o-Xylene	106	8.953	8.953	0.000	93	100386	20.0	19.6	
85 Styrene	104	8.988	8.988	0.000	93	162571	20.0	20.9	
86 Bromoform	173	9.159	9.148	0.011	97	35945	20.0	21.4	
87 Amyl acetate (mixed isomer	43	9.170	9.171	0.000	92	58212	20.0	12.1	
88 Isopropylbenzene	105	9.250	9.251	0.000	97	290105	20.0	21.5	
$ 89 4-Bromofluorobenzene	174	9.411	9.411	-0.001	92	129268	50.0	38.0	
90 Bromobenzene	156	9.513	9.513	0.000	96	71396	20.0	18.0	
91 1,1,2,2-Tetrachloroethane	83	9.571	9.571	0.000	97	56348	20.0	17.0	
92 N-Propylbenzene	91	9.571	9.571	0.000	99	349965	20.0	19.0	
93 1,2,3-Trichloropropane	110	9.605	9.605	0.000	96	15174	20.0	18.0	
95 trans-1,4-Dichloro-2-buten	53	9.628	9.628	0.000	64	21687	20.0	17.5	
94 2-Chlorotoluene	91	9.662	9.662	0.000	97	241503	20.0	18.0	
96 4-Ethyltoluene	105	9.662	9.662	0.000	98	303552	20.0	19.3	
97 1,3,5-Trimethylbenzene	105	9.719	9.719	0.000	93	263289	20.0	19.7	
98 4-Chlorotoluene	91	9.753	9.753	0.000	98	241774	20.0	18.8	
99 tert-Butylbenzene	119	9.948	9.948	0.000	92	211090	20.0	18.4	
100 1,2,4-Trimethylbenzene	105	10.005	10.005	0.000	98	251357	20.0	19.5	
101 sec-Butylbenzene	105	10.119	10.119	0.000	99	339766	20.0	20.1	
102 1,3-Dichlorobenzene	146	10.222	10.222	0.000	72	140584	20.0	19.0	
103 4-Isopropyltoluene	119	10.222	10.222	0.000	97	268189	20.0	19.7	
* 104 1,4-Dichlorobenzene-d4	152	10.279	10.279	0.000	95	187976	50.0	50.0	
105 1,4-Dichlorobenzene	146	10.291	10.291	0.000	93	155049	20.0	19.1	
106 Benzyl chloride	126	10.405	10.405	0.000	98	20943	20.0	18.9	
107 2,3-Dihydroindene	117	10.451	10.451	0.000	93	248426	20.0	18.8	
108 p-Diethylbenzene	119	10.496	10.496	0.000	92	157815	20.0	19.0	
109 n-Butylbenzene	92	10.519	10.519	0.000	97	164055	20.0	20.4	
110 1,2-Dichlorobenzene	146	10.565	10.565	0.000	95	138703	20.0	19.4	
111 1,2,4,5-Tetramethylbenzene	119	11.056	11.056	0.000	97	235530	20.0	20.3	
112 1,2-Dibromo-3-Chloropropan	155	11.136	11.136	0.000	94	8960	20.0	23.9	
113 1,3,5-Trichlorobenzene	180	11.228	11.228	0.000	96	126648	20.0	20.8	
114 1,2,4-Trichlorobenzene	180	11.662	11.662	0.000	93	103463	20.0	22.9	
115 Hexachlorobutadiene	225	11.731	11.731	0.000	97	82037	20.0	22.6	
116 Naphthalene	128	11.834	11.834	0.000	99	163143	20.0	20.6	
117 1,2,3-Trichlorobenzene	180	12.005	12.005	0.000	96	87597	20.0	21.8	
S 118 1,2-Dichloroethene, Total	100				0		40.0	40.4	
S 119 1,3-Dichloropropene, Total	100				0		40.0	37.1	
S 120 Xylenes, Total	100				0		40.0	39.0	
S 121 Total BTEX	1				0		100.0	101.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00253	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00075	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 02-Apr-2018 16:33:24 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS2\20180331-69609.b\B28117.D

Injection Date: 31-Mar-2018 13:17:30 Instrument ID: CVOAMS2 Operator ID:

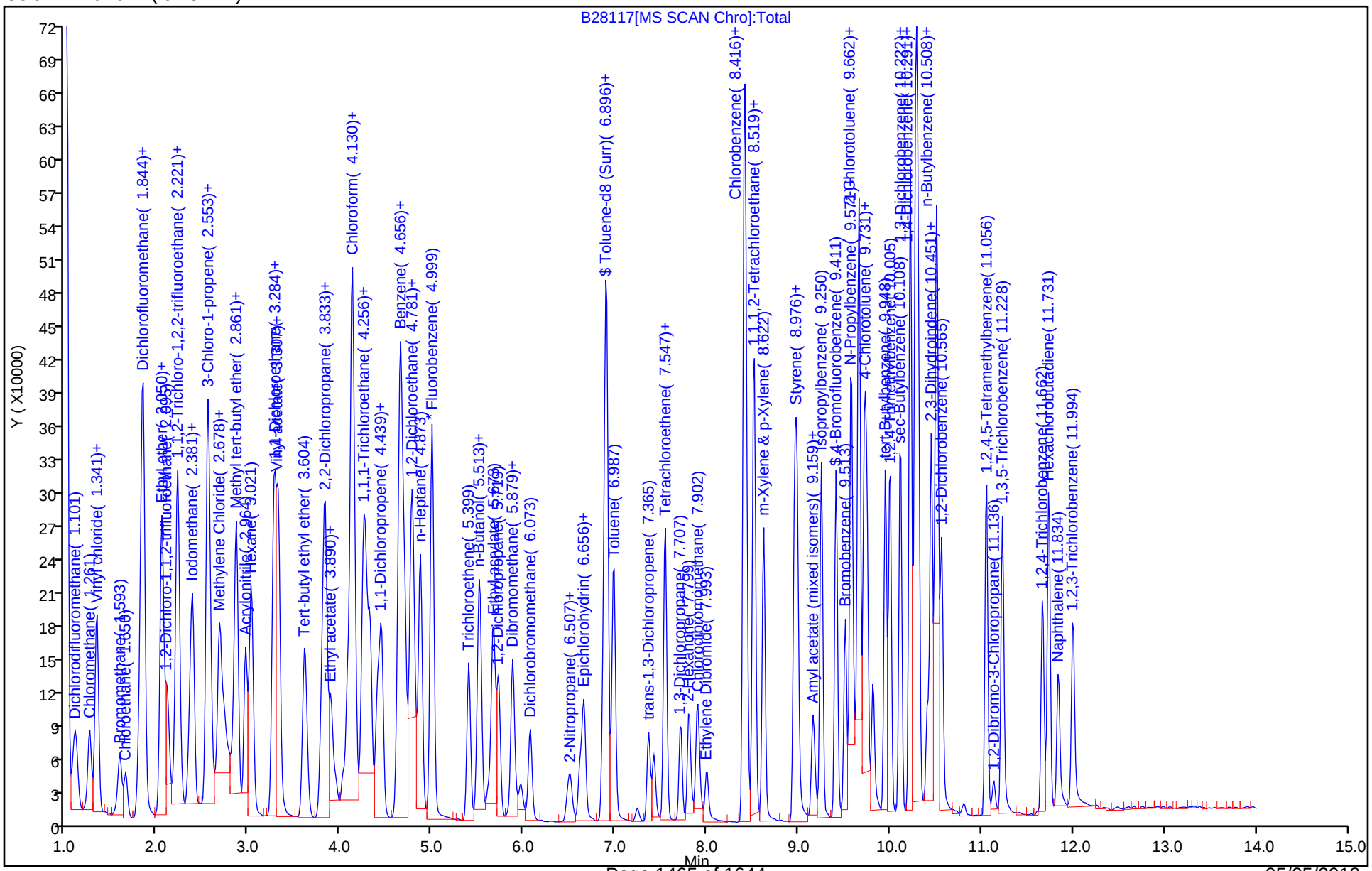
Lims ID: LCSD Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260S_2 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-510106/4

Matrix: Solid | Lab File ID: D48512.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/11/2018 09:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0187		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0217		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0187		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0211		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0195		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0186		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0208		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0210		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0177		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0205		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0184		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0196		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0208		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0208		0.0010	0.00010
123-91-1	1,4-Dioxane	0.439		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0819		0.0050	0.0011
591-78-6	2-Hexanone	0.0936		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0971		0.0050	0.00066
67-64-1	Acetone	0.0836		0.0050	0.0038
71-43-2	Benzene	0.0215		0.0010	0.00026
75-25-2	Bromoform	0.0162		0.0010	0.00043
74-83-9	Bromomethane	0.0164		0.0010	0.00047
75-15-0	Carbon disulfide	0.0184		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0182		0.0010	0.00018
108-90-7	Chlorobenzene	0.0206		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0178		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0184		0.0010	0.00019
75-00-3	Chloroethane	0.0169		0.0010	0.00052
67-66-3	Chloroform	0.0186		0.0010	0.00032
74-87-3	Chloromethane	0.0162		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0175		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0213		0.0010	0.00027
110-82-7	Cyclohexane	0.0201		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0174		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0141		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-510106/4

Matrix: Solid | Lab File ID: D48512.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/11/2018 09:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0211		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0202		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0212		0.0010	0.00013
79-20-9	Methyl acetate	0.0984		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0193		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0205		0.0010	0.00016
75-09-2	Methylene Chloride	0.0189		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0209		0.0010	0.00017
95-47-6	o-Xylene	0.0206		0.0010	0.000095
100-42-5	Styrene	0.0204		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0206		0.0010	0.00014
108-88-3	Toluene	0.0210		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0189		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0207		0.0010	0.00027
79-01-6	Trichloroethene	0.0181		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0154		0.0010	0.00041
75-01-4	Vinyl chloride	0.0148		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		78-135
460-00-4	4-Bromofluorobenzene	101		67-126
1868-53-7	Dibromofluoromethane (Surr)	81		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48512.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 11-Apr-2018 09:39:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070170-004
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 11-Apr-2018 13:55:18 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: martineze Date: 11-Apr-2018 10:11:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.515	1.521	-0.006	72	60700	20.0	17.9	a
2 Dichlorodifluoromethane	85	1.552	1.558	-0.006	99	164403	20.0	14.1	
3 Chloromethane	50	1.753	1.765	-0.012	99	216079	20.0	16.2	
4 Vinyl chloride	62	1.850	1.862	-0.012	97	172659	20.0	14.8	
5 Butadiene	54	1.862	1.875	-0.013	96	147963	20.0	15.6	
6 Bromomethane	94	2.198	2.210	-0.012	98	82694	20.0	16.4	
7 Chloroethane	64	2.283	2.289	-0.006	99	86918	20.0	16.9	
9 Trichlorofluoromethane	101	2.496	2.509	-0.013	97	140882	20.0	15.4	
8 Dichlorofluoromethane	67	2.515	2.521	-0.006	98	237840	20.0	18.2	
10 Pentane	72	2.515	2.527	-0.012	97	43300	40.0	38.0	
12 Ethanol	46	2.752	2.765	-0.013	81	21047	800.0	941.0	
11 Ethyl ether	59	2.759	2.765	-0.006	89	84498	20.0	19.2	a
13 2-Methyl-1,3-butadiene	53	2.777	2.783	-0.006	98	101334	20.0	20.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.844	2.862	-0.018	96	87400	20.0	18.5	
16 Acrolein	56	2.966	2.972	-0.006	98	179328	300.0	268.0	
15 1,1,2-Trichloro-1,2,2-trif	101	2.996	3.002	-0.006	85	109715	20.0	18.7	
17 1,1-Dichloroethene	96	2.996	3.009	-0.013	96	100329	20.0	18.6	
18 Acetone	43	3.112	3.124	-0.012	87	143598	100.0	83.6	
19 Iodomethane	142	3.179	3.185	-0.006	100	171336	20.0	17.5	
20 Carbon disulfide	76	3.210	3.222	-0.012	100	386174	20.0	18.4	
21 Isopropyl alcohol	45	3.240	3.246	-0.006	99	60614	200.0	195.5	
22 3-Chloro-1-propene	76	3.387	3.393	-0.006	86	62223	20.0	19.0	
23 Cyclopentene	67	3.405	3.411	-0.006	91	264179	20.0	20.7	
24 Methyl acetate	43	3.411	3.417	-0.006	100	316470	100.0	98.4	
25 Acetonitrile	41	3.472	3.484	-0.012	96	95837	200.0	231.9	
26 Methylene Chloride	84	3.545	3.551	-0.006	96	117398	20.0	18.9	
* 27 TBA-d9 (IS)	65	3.557	3.569	-0.012	48	515037	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.643	3.655	-0.012	98	99702	200.0	190.0	
29 Methyl tert-butyl ether	73	3.746	3.758	-0.012	97	267799	20.0	19.3	
30 trans-1,2-Dichloroethene	96	3.771	3.777	-0.006	99	99784	20.0	18.9	
31 Acrylonitrile	53	3.868	3.874	-0.006	94	320998	200.0	226.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.966	3.972	-0.006	93	152029	20.0	21.7	
33 Isopropyl ether	45	4.240	4.246	-0.006	97	335334	20.0	21.4	
34 1,1-Dichloroethane	63	4.258	4.271	-0.013	99	185291	20.0	19.5	
35 Vinyl acetate	86	4.289	4.301	-0.012	100	30444	40.0	36.1	
36 2-Chloro-1,3-butadiene	88	4.313	4.319	-0.006	93	81325	20.0	18.7	
37 Tert-butyl ethyl ether	59	4.630	4.636	-0.006	88	295056	20.0	20.4	
* 38 2-Butanone-d5	46	4.862	4.868	-0.006	0	415125	250.0	250.0	
39 2,2-Dichloropropane	79	4.874	4.880	-0.006	91	46645	20.0	18.7	
40 cis-1,2-Dichloroethene	96	4.905	4.911	-0.007	94	103486	20.0	17.5	
41 2-Butanone (MEK)	72	4.929	4.935	-0.006	100	42818	100.0	81.9	
42 Ethyl acetate	70	4.947	4.953	-0.006	98	15589	40.0	34.2	
43 Methyl acrylate	55	5.002	5.008	-0.006	99	63478	20.0	19.3	
44 Propionitrile	54	5.094	5.100	-0.006	98	110706	200.0	191.4	
45 Tetrahydrofuran	72	5.179	5.185	-0.006	91	20502	40.0	37.2	
46 Chlorobromomethane	128	5.185	5.185	0.000	97	42364	20.0	17.8	
47 Methacrylonitrile	67	5.215	5.222	-0.007	93	309301	200.0	182.8	
48 Chloroform	83	5.258	5.264	-0.006	98	161936	20.0	18.6	
49 Cyclohexane	84	5.404	5.411	-0.007	94	146192	20.0	20.1	
50 1,1,1-Trichloroethane	97	5.429	5.429	0.000	97	135378	20.0	18.7	
$ 51 Dibromofluoromethane (Surr	113	5.447	5.453	-0.006	95	215918	50.0	40.4	
52 Carbon tetrachloride	117	5.569	5.575	-0.006	97	102832	20.0	18.2	
53 1,1-Dichloropropene	75	5.612	5.612	0.000	95	116634	20.0	19.7	
54 Isobutyl alcohol	43	5.813	5.813	0.000	91	162595	500.0	549.0	
55 Benzene	78	5.849	5.856	-0.007	96	343843	20.0	21.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.880	5.880	0.000	97	240397	50.0	42.9	
57 Tert-amyl methyl ether	87	5.953	5.959	-0.006	91	72641	20.0	18.3	
58 Isopropyl acetate	43	5.953	5.959	-0.006	98	267740	20.0	19.8	
59 1,2-Dichloroethane	62	5.971	5.978	-0.007	95	110995	20.0	18.4	
60 n-Heptane	57	6.069	6.069	0.000	93	79627	20.0	21.6	
* 61 Fluorobenzene	96	6.221	6.221	0.000	98	777306	50.0	50.0	
62 n-Butanol	56	6.630	6.636	-0.006	90	48724	500.0	502.7	
63 Trichloroethene	95	6.660	6.660	0.000	94	78375	20.0	18.1	
64 Methylcyclohexane	83	6.807	6.807	0.000	95	165083	20.0	20.5	
65 Ethyl acrylate	73	6.831	6.831	0.000	96	6204	20.0	18.9	
66 1,2-Dichloropropane	63	6.996	7.002	-0.006	90	86680	20.0	19.6	
* 67 1,4-Dioxane-d8	96	7.063	7.069	-0.006	0	32575	1000.0	1000.0	
68 Methyl methacrylate	100	7.105	7.105	0.000	91	31499	40.0	34.8	
69 1,4-Dioxane	88	7.124	7.130	-0.006	90	14891	400.0	439.3	
70 Dibromomethane	93	7.142	7.142	0.000	92	47134	20.0	17.0	
71 n-Propyl acetate	43	7.166	7.172	-0.006	99	96361	20.0	20.4	
72 Dichlorobromomethane	83	7.306	7.307	0.000	98	93316	20.0	17.4	
73 2-Nitropropane	41	7.642	7.642	0.000	99	30507	40.0	30.3	
74 2-Chloroethyl vinyl ether	63	7.648	7.648	0.000	95	35290	20.0	20.4	
75 Epichlorohydrin	57	7.739	7.745	-0.006	100	132571	400.0	375.5	
76 cis-1,3-Dichloropropene	75	7.788	7.794	-0.006	94	115284	20.0	21.3	
77 4-Methyl-2-pentanone (MIBK	43	7.941	7.941	-0.001	98	343871	100.0	97.1	
$ 78 Toluene-d8 (Surr)	98	8.008	8.008	0.000	98	763705	50.0	49.9	
79 Toluene	91	8.075	8.075	0.000	93	319699	20.0	21.0	
80 trans-1,3-Dichloropropene	75	8.367	8.367	0.000	98	91061	20.0	20.7	
81 Ethyl methacrylate	69	8.392	8.392	0.000	90	80233	20.0	18.5	
82 1,1,2-Trichloroethane	83	8.532	8.532	0.000	95	51850	20.0	21.1	
83 Tetrachloroethene	166	8.568	8.568	0.000	95	66303	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.690	8.690	0.000	94	97205	20.0	21.8	
85 2-Hexanone	43	8.739	8.739	0.000	97	203857	100.0	93.6	
86 n-Butyl acetate	73	8.818	8.818	0.000	98	16756	20.0	20.6	
87 Chlorodibromomethane	129	8.861	8.867	-0.006	97	54951	20.0	18.4	
88 Ethylene Dibromide	107	8.977	8.977	0.000	98	53536	20.0	20.2	
* 89 Chlorobenzene-d5	117	9.349	9.349	0.000	90	496335	50.0	50.0	
90 Chlorobenzene	112	9.373	9.373	0.000	92	178102	20.0	20.6	
91 Ethylbenzene	106	9.434	9.434	0.000	99	103136	20.0	21.1	
92 1,1,1,2-Tetrachloroethane	131	9.446	9.452	-0.006	94	64075	20.0	18.6	
93 m-Xylene & p-Xylene	106	9.538	9.538	0.000	98	123252	20.0	20.9	
94 n-Butyl acrylate	73	9.830	9.830	0.000	96	44388	20.0	20.3	
95 o-Xylene	106	9.861	9.861	0.000	93	126538	20.0	20.6	
96 Styrene	104	9.885	9.885	0.000	92	193808	20.0	20.4	
97 Amyl acetate (mixed isomer	43	10.007	10.007	0.000	90	117340	20.0	23.8	
98 Bromoform	173	10.062	10.062	0.000	94	29844	20.0	16.2	
99 Isopropylbenzene	105	10.141	10.141	0.000	97	343810	20.0	21.2	
$ 100 4-Bromofluorobenzene	174	10.306	10.306	0.000	0	194266	50.0	50.7	
101 Bromobenzene	156	10.422	10.422	0.000	95	68016	20.0	20.4	
102 1,1,2,2-Tetrachloroethane	83	10.434	10.434	0.000	99	81550	20.0	21.7	
103 N-Propylbenzene	91	10.458	10.458	0.000	98	417546	20.0	22.6	
104 1,2,3-Trichloropropane	110	10.477	10.477	0.000	97	19887	20.0	20.9	
105 trans-1,4-Dichloro-2-buten	53	10.483	10.483	0.000	84	22045	20.0	24.3	
106 4-Ethyltoluene	105	10.544	10.544	0.000	98	335455	20.0	22.1	
107 2-Chlorotoluene	91	10.550	10.556	-0.006	96	277984	20.0	21.7	
108 1,3,5-Trimethylbenzene	105	10.599	10.599	0.000	92	284904	20.0	22.1	
109 4-Chlorotoluene	91	10.641	10.641	0.000	99	232077	20.0	21.8	
110 Butyl Methacrylate	87	10.653	10.653	0.000	94	94644	20.0	21.6	
111 tert-Butylbenzene	119	10.830	10.830	0.000	93	220278	20.0	21.5	
112 1,2,4-Trimethylbenzene	105	10.879	10.879	0.000	98	289178	20.0	21.4	
113 sec-Butylbenzene	105	10.995	10.995	0.000	99	381123	20.0	22.3	
114 4-Isopropyltoluene	119	11.098	11.098	0.000	97	307675	20.0	22.0	
115 1,3-Dichlorobenzene	146	11.117	11.117	0.000	96	138886	20.0	20.8	
* 116 1,4-Dichlorobenzene-d4	152	11.172	11.172	0.000	96	246416	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.190	11.190	0.000	94	140910	20.0	20.8	
118 Benzyl chloride	126	11.294	11.294	0.000	97	23201	20.0	19.1	
119 2,3-Dihydroindene	117	11.348	11.348	0.000	93	305930	20.0	17.9	
120 p-Diethylbenzene	119	11.373	11.373	0.000	85	189078	20.0	22.4	a
121 n-Butylbenzene	92	11.397	11.397	0.000	96	186595	20.0	23.7	
122 1,2-Dichlorobenzene	146	11.470	11.470	0.000	94	137672	20.0	20.5	
123 1,2,4,5-Tetramethylbenzene	119	12.007	12.007	0.000	97	277820	20.0	21.5	
124 1,2-Dibromo-3-Chloropropan	157	12.123	12.123	0.000	91	12392	20.0	17.7	
125 1,3,5-Trichlorobenzene	180	12.251	12.257	-0.006	96	108935	20.0	20.9	
126 1,2,4-Trichlorobenzene	180	12.891	12.891	0.000	93	99744	20.0	21.0	
127 Hexachlorobutadiene	225	12.994	13.001	-0.007	91	45634	20.0	20.5	
128 Naphthalene	128	13.183	13.183	0.000	99	242801	20.0	21.0	
129 1,2,3-Trichlorobenzene	180	13.470	13.470	0.000	94	94774	20.0	20.8	
S 130 1,2-Dichloroethene, Total	100				0		40.0	36.4	
S 131 1,3-Dichloropropene, Total	100				0		40.0	42.0	
S 132 Xylenes, Total	100				0		40.0	41.5	
S 133 Total BTEX	1				0		100.0	105.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

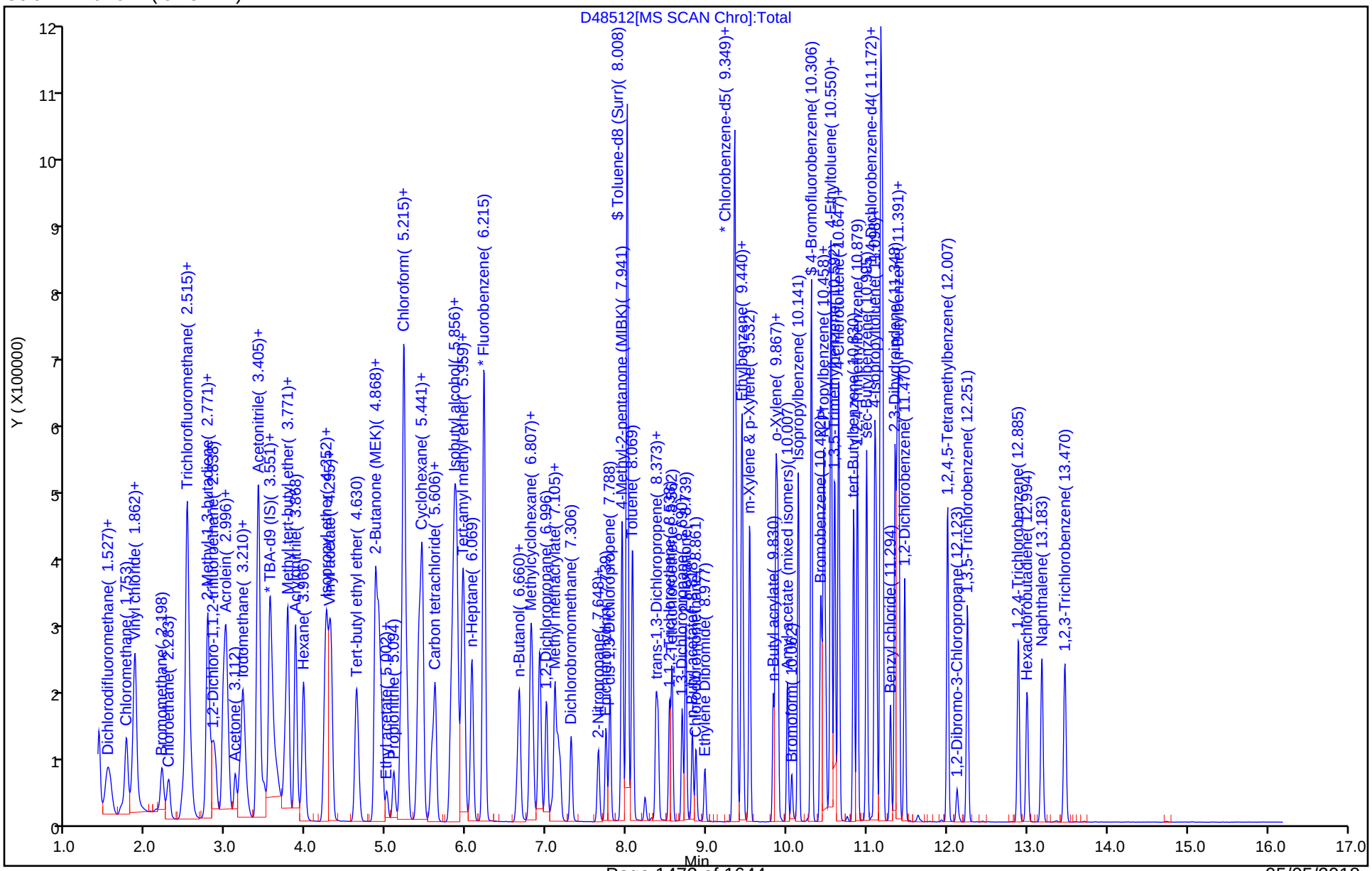
Report Date: 11-Apr-2018 13:55:25 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180411-70170.b\D48512.D

Injection Date:	11-Apr-2018 09:39:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S_4	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-510660/5

Matrix: Solid | Lab File ID: K81912.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/12/2018 22:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0239		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0169		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0214		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0174		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0212		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0197		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0176		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0191		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0196		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0184		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0202		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0196		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0181		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0179		0.0010	0.00010
123-91-1	1,4-Dioxane	0.371		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0768		0.0050	0.0011
591-78-6	2-Hexanone	0.0967		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0986		0.0050	0.00066
67-64-1	Acetone	0.0900		0.0050	0.0038
71-43-2	Benzene	0.0181		0.0010	0.00026
75-25-2	Bromoform	0.0263		0.0010	0.00043
74-83-9	Bromomethane	0.0208		0.0010	0.00047
75-15-0	Carbon disulfide	0.0199		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0270		0.0010	0.00018
108-90-7	Chlorobenzene	0.0182		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0204		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0218		0.0010	0.00019
75-00-3	Chloroethane	0.0209		0.0010	0.00052
67-66-3	Chloroform	0.0210		0.0010	0.00032
74-87-3	Chloromethane	0.0190		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0197		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0180		0.0010	0.00027
110-82-7	Cyclohexane	0.0198		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0210		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0188		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-510660/5

Matrix: Solid | Lab File ID: K81912.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/12/2018 22:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0188		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0189		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0189		0.0010	0.00013
79-20-9	Methyl acetate	0.116		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0202		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0195		0.0010	0.00016
75-09-2	Methylene Chloride	0.0188		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0181		0.0010	0.00017
95-47-6	o-Xylene	0.0185		0.0010	0.000095
100-42-5	Styrene	0.0183		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0193		0.0010	0.00014
108-88-3	Toluene	0.0179		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0194		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0195		0.0010	0.00027
79-01-6	Trichloroethene	0.0196		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0223		0.0010	0.00041
75-01-4	Vinyl chloride	0.0191		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		78-135
460-00-4	4-Bromofluorobenzene	114		67-126
1868-53-7	Dibromofluoromethane (Surr)	116		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81912.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 12-Apr-2018 22:35:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LL CCV
Misc. Info.: 460-0070288-005
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 13-Apr-2018 10:39:50 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: boykink Date: 13-Apr-2018 00:45:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.596	0.006	91	42810	20.0	18.9	
2 Dichlorodifluoromethane	85	1.639	1.627	0.012	99	106244	20.0	18.8	
3 Chloromethane	50	1.809	1.803	0.006	99	104305	20.0	19.0	
5 Butadiene	54	1.907	1.907	0.000	96	78634	20.0	19.2	
4 Vinyl chloride	62	1.913	1.907	0.006	92	106211	20.0	19.1	
6 Bromomethane	94	2.212	2.212	0.000	99	84297	20.0	20.8	
7 Chloroethane	64	2.273	2.273	0.000	100	52108	20.0	20.9	
9 Dichlorofluoromethane	67	2.468	2.474	-0.006	98	148970	20.0	21.2	
8 Trichlorofluoromethane	101	2.480	2.486	-0.006	67	128852	20.0	22.3	
10 Pentane	72	2.504	2.498	0.006	97	22267	40.0	29.6	
12 Ethanol	46	2.706	2.693	0.013	68	15979	800.0	702.7	
11 Ethyl ether	59	2.706	2.693	0.013	94	47421	20.0	19.7	
13 2-Methyl-1,3-butadiene	53	2.730	2.718	0.012	97	55065	20.0	22.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.748	0.006	90	61352	20.0	21.3	
15 Acrolein	56	2.888	2.876	0.012	95	150235	300.0	243.1	
16 1,1,2-Trichloro-1,2,2-trif	101	2.901	2.888	0.013	97	79235	20.0	21.4	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	98	65356	20.0	19.7	
18 Acetone	43	3.016	3.004	0.012	87	86775	100.0	90.0	
19 Iodomethane	142	3.083	3.077	0.006	98	125809	20.0	19.9	
22 Isopropyl alcohol	45	3.108	3.096	0.012	1	50358	200.0	222.0	a
20 Carbon disulfide	76	3.126	3.120	0.006	99	249831	20.0	19.9	
21 3-Chloro-1-propene	76	3.248	3.242	0.006	97	38560	20.0	20.1	
23 Methyl acetate	43	3.254	3.248	0.006	99	198115	100.0	116.5	
24 Cyclopentene	67	3.272	3.266	0.006	93	161270	20.0	21.1	
29 Acetonitrile	41	3.327	3.309	0.018	95	101376	200.0	157.8	a
* 25 TBA-d9 (IS)	65	3.388	3.376	0.012	0	320650	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	91	75495	20.0	18.8	
27 2-Methyl-2-propanol	59	3.431	3.449	-0.018	93	86187	200.0	177.2	
28 Methyl tert-butyl ether	73	3.535	3.529	0.006	97	184746	20.0	20.2	
30 trans-1,2-Dichloroethene	96	3.577	3.565	0.012	94	69772	20.0	19.4	
31 Acrylonitrile	53	3.644	3.638	0.006	94	222036	200.0	211.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.730	3.718	0.012	94	55592	20.0	21.4	
33 Isopropyl ether	45	3.937	3.925	0.012	95	208129	20.0	21.7	
34 1,1-Dichloroethane	63	3.980	3.974	0.006	77	117756	20.0	21.2	
35 Vinyl acetate	86	3.986	3.980	0.006	100	20052	40.0	30.6	
36 2-Chloro-1,3-butadiene	88	4.028	4.022	0.006	90	59751	20.0	19.8	
37 Tert-butyl ethyl ether	59	4.260	4.254	0.006	89	195210	20.0	21.5	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	225552	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.486	0.006	95	33974	20.0	25.9	
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	97	80304	20.0	19.7	
42 2-Butanone (MEK)	72	4.516	4.504	0.012	96	34062	100.0	76.8	
41 Ethyl acetate	70	4.516	4.516	0.000	92	11211	40.0	30.5	
44 Methyl acrylate	55	4.571	4.571	0.000	98	43981	20.0	20.7	
43 Propionitrile	54	4.656	4.650	0.006	98	88902	200.0	157.7	
45 Tetrahydrofuran	72	4.742	4.730	0.012	62	17915	40.0	34.2	
46 Chlorobromomethane	128	4.742	4.742	0.000	78	38559	20.0	20.4	
47 Methacrylonitrile	67	4.760	4.754	0.006	91	238203	200.0	192.3	
48 Chloroform	83	4.790	4.791	-0.001	98	122043	20.0	21.0	
49 Cyclohexane	84	4.931	4.931	0.000	90	107301	20.0	19.8	
50 1,1,1-Trichloroethane	97	4.949	4.943	0.006	92	110009	20.0	23.9	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	170683	50.0	58.2	
52 Carbon tetrachloride	117	5.071	5.065	0.006	98	89860	20.0	27.0	
53 1,1-Dichloropropene	75	5.095	5.089	0.006	97	85317	20.0	20.4	
56 Isobutyl alcohol	74	5.199	5.205	-0.006	1	7232	500.0	369.3	a
54 Benzene	78	5.296	5.290	0.006	95	261307	20.0	18.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	159602	50.0	57.0	
57 Isopropyl acetate	43	5.339	5.327	0.012	95	173198	20.0	23.3	
58 Tert-amyl methyl ether	87	5.351	5.339	0.012	91	57219	20.0	20.4	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	97	76007	20.0	20.2	
60 n-Heptane	57	5.443	5.437	0.006	93	54138	20.0	20.9	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	468407	50.0	50.0	
62 n-Butanol	56	5.870	5.870	0.000	89	38969	500.0	419.6	
63 Trichloroethene	95	5.949	5.943	0.006	98	65693	20.0	19.6	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	39405	20.0	21.0	
65 Methylcyclohexane	83	6.077	6.071	0.006	93	124960	20.0	19.5	
66 1,2-Dichloropropane	63	6.235	6.229	0.006	95	63845	20.0	19.6	
* 67 1,4-Dioxane-d8	96	6.296	6.278	0.018	0	29471	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.290	0.006	87	70619	40.0	43.5	
69 1,4-Dioxane	88	6.351	6.339	0.012	30	16775	400.0	371.0	
70 n-Propyl acetate	43	6.345	6.345	0.000	99	73890	20.0	23.9	
71 Dibromomethane	93	6.376	6.370	0.006	96	41619	20.0	20.4	
72 Dichlorobromomethane	83	6.522	6.516	0.006	99	78145	20.0	21.0	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	87	30381	20.0	19.9	
74 2-Nitropropane	41	6.851	6.845	0.006	76	17046	40.0	56.1	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	108568	400.0	346.9	
76 cis-1,3-Dichloropropene	75	7.022	7.016	0.006	90	89785	20.0	18.0	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	96	291571	100.0	98.6	
$ 78 Toluene-d8 (Surr)	98	7.272	7.266	0.006	99	597253	50.0	48.9	
79 Toluene	91	7.351	7.345	0.006	93	271285	20.0	17.9	
80 trans-1,3-Dichloropropene	75	7.698	7.692	0.006	99	75452	20.0	19.5	
81 Ethyl methacrylate	69	7.711	7.705	0.006	87	66291	20.0	20.3	
82 1,1,2-Trichloroethane	83	7.918	7.912	0.006	96	44297	20.0	17.4	
83 Tetrachloroethene	166	7.973	7.967	0.006	96	65235	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.125	0.006	90	81730	20.0	17.2	
85 2-Hexanone	43	8.180	8.174	0.006	96	186301	100.0	96.7	
86 n-Butyl acetate	43	8.290	8.284	0.006	99	76815	20.0	23.6	
87 Chlorodibromomethane	129	8.369	8.369	0.000	96	57143	20.0	21.8	
88 Ethylene Dibromide	107	8.534	8.528	0.006	99	53896	20.0	18.9	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	392556	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	176592	20.0	18.2	
92 Ethylbenzene	106	9.204	9.204	0.000	98	99348	20.0	18.8	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.223	0.006	95	63415	20.0	21.7	
93 m-Xylene & p-Xylene	106	9.351	9.351	0.000	0	120151	20.0	18.1	
94 n-Butyl acrylate	73	9.790	9.783	0.007	97	39367	20.0	23.5	
95 o-Xylene	106	9.820	9.820	0.000	94	125330	20.0	18.5	
96 Styrene	104	9.850	9.851	-0.001	96	196095	20.0	18.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	92151	20.0	24.1	
98 Bromoform	173	10.088	10.082	0.006	95	35195	20.0	26.3	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	335335	20.0	18.9	
$ 100 4-Bromofluorobenzene	174	10.424	10.417	0.007	93	189491	50.0	57.1	
101 Bromobenzene	156	10.564	10.564	0.000	96	79457	20.0	17.9	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	81931	20.0	16.9	
103 N-Propylbenzene	91	10.631	10.625	0.006	99	401933	20.0	17.5	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	97	21904	20.0	18.1	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	89	17756	20.0	19.1	
107 4-Ethyltoluene	105	10.741	10.741	0.000	90	328976	20.0	17.3	
106 2-Chlorotoluene	91	10.741	10.741	0.000	92	264759	20.0	17.2	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	93	276106	20.0	16.6	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	224045	20.0	17.0	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	83151	20.0	21.5	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	210689	20.0	15.8	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	294258	20.0	17.4	
113 sec-Butylbenzene	105	11.308	11.308	0.000	99	372304	20.0	16.8	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	316618	20.0	17.2	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	159332	20.0	18.1	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	94	233322	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	158792	20.0	17.9	
118 Benzyl chloride	91	11.667	11.667	0.000	98	129517	20.0	25.9	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	94	301222	20.0	17.3	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	179828	20.0	17.8	
121 n-Butylbenzene	92	11.801	11.795	0.006	98	174338	20.0	17.4	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	160757	20.0	18.4	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	310413	20.0	17.0	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.527	0.006	96	14090	20.0	19.6	
125 1,3,5-Trichlorobenzene	180	12.649	12.643	0.006	98	138930	20.0	19.3	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	132306	20.0	19.1	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	57819	20.0	19.0	
128 Naphthalene	128	13.338	13.332	0.006	99	319274	20.0	16.6	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	124784	20.0	17.6	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.1	
S 131 Xylenes, Total	100				0		40.0	36.6	
S 132 Total BTEX	1				0		100.0	91.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00255	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

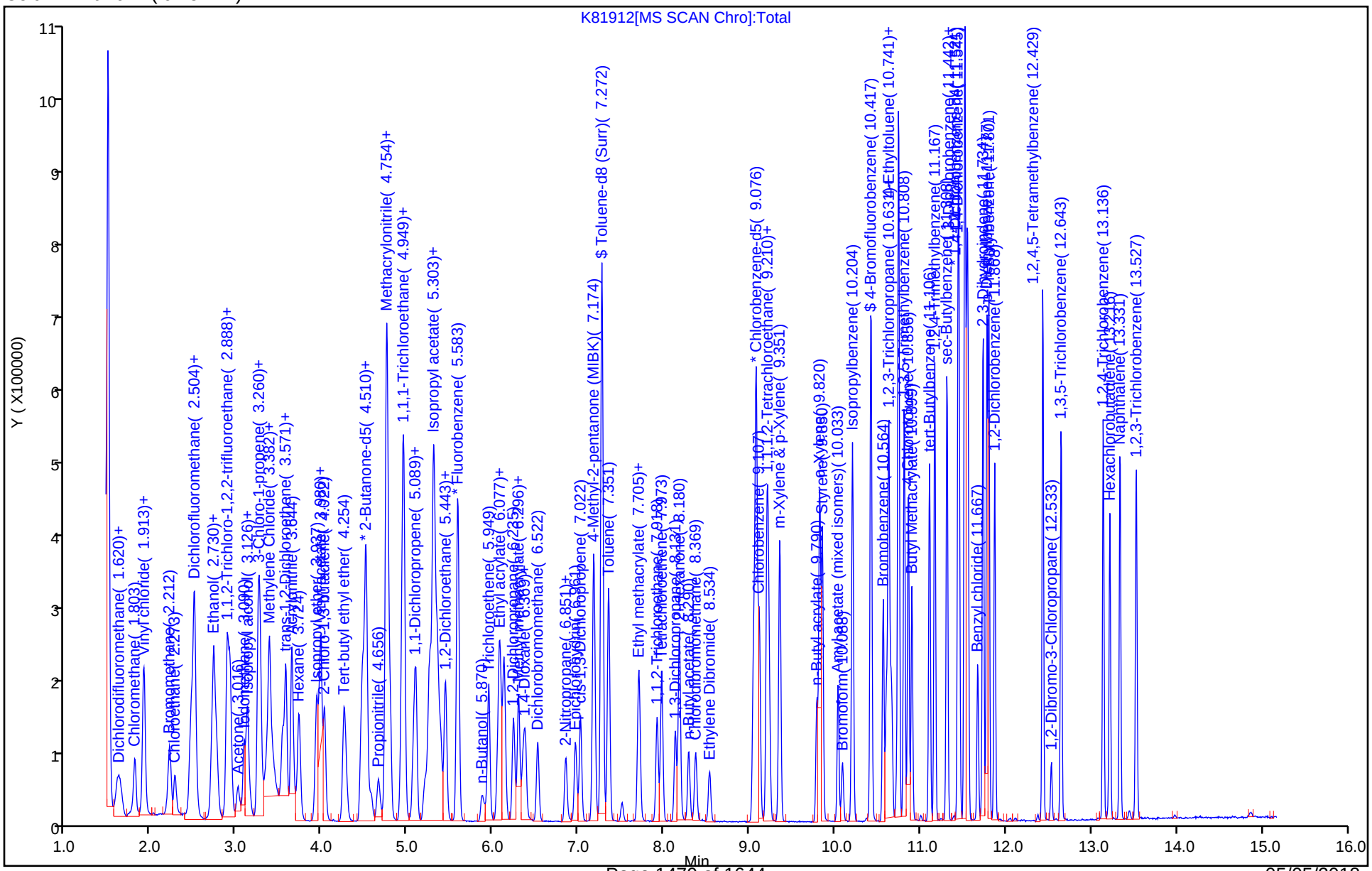
Report Date: 13-Apr-2018 10:40:35 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180412-70288.b\K81912.D

Injection Date:	12-Apr-2018 22:35:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-510972/4

Matrix: Solid | Lab File ID: K81965.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/13/2018 21:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0243		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0180		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0217		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0183		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0222		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0204		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0187		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0198		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0214		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0190		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0208		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0199		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0188		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0183		0.0010	0.00010
123-91-1	1,4-Dioxane	0.375		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0753		0.0050	0.0011
591-78-6	2-Hexanone	0.0917		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0959		0.0050	0.00066
67-64-1	Acetone	0.0937		0.0050	0.0038
71-43-2	Benzene	0.0188		0.0010	0.00026
75-25-2	Bromoform	0.0268		0.0010	0.00043
74-83-9	Bromomethane	0.0199		0.0010	0.00047
75-15-0	Carbon disulfide	0.0204		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0269		0.0010	0.00018
108-90-7	Chlorobenzene	0.0184		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0211		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0225		0.0010	0.00019
75-00-3	Chloroethane	0.0208		0.0010	0.00052
67-66-3	Chloroform	0.0218		0.0010	0.00032
74-87-3	Chloromethane	0.0178		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0205		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0188		0.0010	0.00027
110-82-7	Cyclohexane	0.0209		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0210		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0181		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-510972/4

Matrix: Solid | Lab File ID: K81965.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/13/2018 21:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0191		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0193		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0197		0.0010	0.00013
79-20-9	Methyl acetate	0.127		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0208		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0208		0.0010	0.00016
75-09-2	Methylene Chloride	0.0196		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0186		0.0010	0.00017
95-47-6	o-Xylene	0.0188		0.0010	0.000095
100-42-5	Styrene	0.0187		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0198		0.0010	0.00014
108-88-3	Toluene	0.0184		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0205		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0204		0.0010	0.00027
79-01-6	Trichloroethene	0.0202		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0233		0.0010	0.00041
75-01-4	Vinyl chloride	0.0182		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		78-135
460-00-4	4-Bromofluorobenzene	100		67-126
1868-53-7	Dibromofluoromethane (Surr)	106		61-149
2037-26-5	Toluene-d8 (Surr)	88		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81965.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 13-Apr-2018 21:10:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070351-004
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 11:41:43 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: delpolitov Date: 17-Apr-2018 11:41:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.608	1.596	0.012	88	48777	20.0	19.1	
2 Dichlorodifluoromethane	85	1.645	1.633	0.012	99	114418	20.0	18.1	
3 Chloromethane	50	1.809	1.803	0.006	99	109667	20.0	17.8	
5 Butadiene	54	1.913	1.907	0.006	96	84441	20.0	18.4	
4 Vinyl chloride	62	1.919	1.913	0.006	97	114097	20.0	18.2	
6 Bromomethane	94	2.218	2.212	0.006	98	90512	20.0	19.9	
7 Chloroethane	64	2.279	2.267	0.012	100	58302	20.0	20.8	
9 Dichlorofluoromethane	67	2.480	2.468	0.012	99	178835	20.0	22.6	
8 Trichlorofluoromethane	101	2.474	2.474	0.000	69	150766	20.0	23.3	a
10 Pentane	72	2.504	2.504	0.000	97	27552	40.0	29.6	
11 Ethyl ether	59	2.705	2.699	0.006	95	57665	20.0	21.3	
12 Ethanol	46	2.699	2.699	0.000	71	17129	800.0	607.8	
13 2-Methyl-1,3-butadiene	53	2.730	2.724	0.006	97	64102	20.0	23.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.754	0.006	92	70761	20.0	21.9	
15 Acrolein	56	2.894	2.882	0.012	96	180205	300.0	235.3	
16 1,1,2-Trichloro-1,2,2-trif	101	2.901	2.888	0.013	97	90086	20.0	21.7	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	98	76048	20.0	20.4	
18 Acetone	43	3.016	3.010	0.006	86	110682	100.0	93.7	
19 Iodomethane	142	3.090	3.083	0.007	98	144859	20.0	20.5	
22 Isopropyl alcohol	45	3.108	3.096	0.012	1	49609	200.0	176.5	a
20 Carbon disulfide	76	3.126	3.120	0.006	99	286844	20.0	20.4	
21 3-Chloro-1-propene	76	3.254	3.248	0.006	97	47531	20.0	22.1	
23 Methyl acetate	43	3.260	3.254	0.006	100	242182	100.0	126.8	
24 Cyclopentene	67	3.279	3.266	0.013	93	188984	20.0	22.0	
29 Acetonitrile	41	3.333	3.327	0.006	95	125042	200.0	157.0	a
26 Methylene Chloride	84	3.382	3.376	0.006	89	88473	20.0	19.6	
* 25 TBA-d9 (IS)	65	3.388	3.394	-0.006	0	397409	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.443	3.455	-0.012	94	102736	200.0	170.5	
28 Methyl tert-butyl ether	73	3.541	3.535	0.006	96	213864	20.0	20.8	
30 trans-1,2-Dichloroethene	96	3.577	3.571	0.006	94	82835	20.0	20.5	
31 Acrylonitrile	53	3.644	3.638	0.006	94	270749	200.0	229.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.730	3.724	0.006	93	66973	20.0	23.0	
33 Isopropyl ether	45	3.937	3.931	0.006	97	240457	20.0	22.3	
34 1,1-Dichloroethane	63	3.986	3.980	0.006	75	138759	20.0	22.2	
35 Vinyl acetate	86	3.980	3.986	-0.006	100	23845	40.0	29.4	
36 2-Chloro-1,3-butadiene	88	4.028	4.022	0.006	90	70747	20.0	20.9	
37 Tert-butyl ethyl ether	59	4.260	4.254	0.006	89	224517	20.0	22.0	
* 38 2-Butanone-d5	46	4.467	4.461	0.006	0	276114	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.492	-0.006	96	39941	20.0	27.1	
40 cis-1,2-Dichloroethene	96	4.516	4.510	0.006	95	93680	20.0	20.5	
41 Ethyl acetate	70	4.522	4.510	0.012	91	13842	40.0	30.8	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	96	40899	100.0	75.3	
44 Methyl acrylate	55	4.577	4.571	0.006	98	54580	20.0	22.9	
43 Propionitrile	54	4.656	4.650	0.006	98	107776	200.0	154.3	
45 Tetrahydrofuran	72	4.742	4.742	0.000	66	20956	40.0	32.7	
46 Chlorobromomethane	128	4.748	4.742	0.006	78	44771	20.0	21.1	
47 Methacrylonitrile	67	4.760	4.754	0.006	91	283523	200.0	203.9	
48 Chloroform	83	4.797	4.790	0.007	98	142477	20.0	21.8	
49 Cyclohexane	84	4.943	4.937	0.006	89	127171	20.0	20.9	
50 1,1,1-Trichloroethane	97	4.955	4.943	0.012	82	125771	20.0	24.3	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	174008	50.0	52.8	
52 Carbon tetrachloride	117	5.077	5.071	0.006	98	100450	20.0	26.9	
53 1,1-Dichloropropene	75	5.101	5.095	0.006	99	100897	20.0	21.5	
56 Isobutyl alcohol	74	5.217	5.223	-0.006	1	9244	500.0	380.9	a
54 Benzene	78	5.303	5.296	0.007	95	300120	20.0	18.8	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.309	0.006	0	165826	50.0	52.8	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	218038	20.0	26.1	
58 Tert-amyl methyl ether	87	5.345	5.339	0.006	95	67188	20.0	21.3	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	96	87801	20.0	20.8	
60 n-Heptane	57	5.443	5.437	0.006	92	64412	20.0	22.1	
* 61 Fluorobenzene	96	5.589	5.583	0.006	99	525958	50.0	50.0	
62 n-Butanol	56	5.876	5.870	0.006	89	43677	500.0	379.5	
63 Trichloroethene	95	5.949	5.943	0.006	99	75809	20.0	20.2	
64 Ethyl acrylate	56	6.083	6.071	0.012	98	47523	20.0	22.6	
65 Methylcyclohexane	83	6.077	6.077	0.000	96	149255	20.0	20.8	
66 1,2-Dichloropropane	63	6.241	6.235	0.006	94	72640	20.0	19.9	
68 Methyl methacrylate	41	6.296	6.290	0.006	86	85627	40.0	46.9	
* 67 1,4-Dioxane-d8	96	6.296	6.302	-0.006	0	31972	1000.0	1000.0	
70 n-Propyl acetate	43	6.351	6.345	0.006	99	86628	20.0	25.0	
69 1,4-Dioxane	88	6.351	6.357	-0.006	31	18374	400.0	374.6	
71 Dibromomethane	93	6.375	6.369	0.006	96	48463	20.0	21.1	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	87904	20.0	21.0	
73 2-Chloroethyl vinyl ether	63	6.851	6.845	0.006	83	35844	20.0	20.9	
74 2-Nitropropane	41	6.857	6.851	0.006	78	18731	40.0	54.9	
75 Epichlorohydrin	57	6.967	6.961	0.006	99	130898	400.0	341.7	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	103996	20.0	18.8	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	347355	100.0	95.9	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	592646	50.0	43.9	
79 Toluene	91	7.351	7.351	0.000	93	307629	20.0	18.4	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	99	86967	20.0	20.4	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	76438	20.0	21.2	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	51332	20.0	18.3	
83 Tetrachloroethene	166	7.973	7.967	0.006	96	74211	20.0	19.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.137	8.131	0.006	93	94118	20.0	17.9	
85 2-Hexanone	43	8.180	8.174	0.006	96	216203	100.0	91.7	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	90477	20.0	25.2	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	65313	20.0	22.5	
88 Ethylene Dibromide	107	8.534	8.528	0.006	99	60963	20.0	19.3	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	433761	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	197747	20.0	18.4	
92 Ethylbenzene	106	9.204	9.204	0.000	98	111503	20.0	19.1	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.223	0.007	95	70893	20.0	22.0	
93 m-Xylene & p-Xylene	106	9.357	9.351	0.006	0	136394	20.0	18.6	
94 n-Butyl acrylate	73	9.789	9.783	0.006	98	46500	20.0	25.1	
95 o-Xylene	106	9.820	9.820	0.000	93	140996	20.0	18.8	
96 Styrene	104	9.850	9.850	0.000	97	222004	20.0	18.7	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	106578	20.0	26.0	
98 Bromoform	173	10.088	10.082	0.006	96	39629	20.0	26.8	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	386542	20.0	19.7	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	92	183596	50.0	50.1	
101 Bromobenzene	156	10.564	10.564	0.000	95	87210	20.0	18.3	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	93393	20.0	18.0	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	452089	20.0	18.4	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	96	25305	20.0	19.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	89	19325	20.0	19.4	
107 4-Ethyltoluene	105	10.740	10.741	0.000	90	369803	20.0	18.1	
106 2-Chlorotoluene	91	10.740	10.741	0.000	92	296960	20.0	18.0	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	93	316236	20.0	17.8	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	248446	20.0	17.6	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	92665	20.0	22.4	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	244478	20.0	17.1	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	333434	20.0	18.4	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	424833	20.0	17.9	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	359146	20.0	18.2	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	176363	20.0	18.8	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	94	249659	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	95	173839	20.0	18.3	
118 Benzyl chloride	91	11.667	11.667	0.000	99	140691	20.0	26.3	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	334349	20.0	18.0	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	202492	20.0	18.7	
121 n-Butylbenzene	92	11.801	11.795	0.006	98	198733	20.0	18.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	96	177112	20.0	19.0	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	352389	20.0	18.0	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	96	16492	20.0	21.4	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	152240	20.0	19.7	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	146936	20.0	19.8	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	95	64888	20.0	19.9	
128 Naphthalene	128	13.331	13.331	0.000	99	366887	20.0	17.8	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	142382	20.0	18.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.0	
S 131 Xylenes, Total	100				0		40.0	37.4	
S 132 Total BTEX	1				0		100.0	93.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00076	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

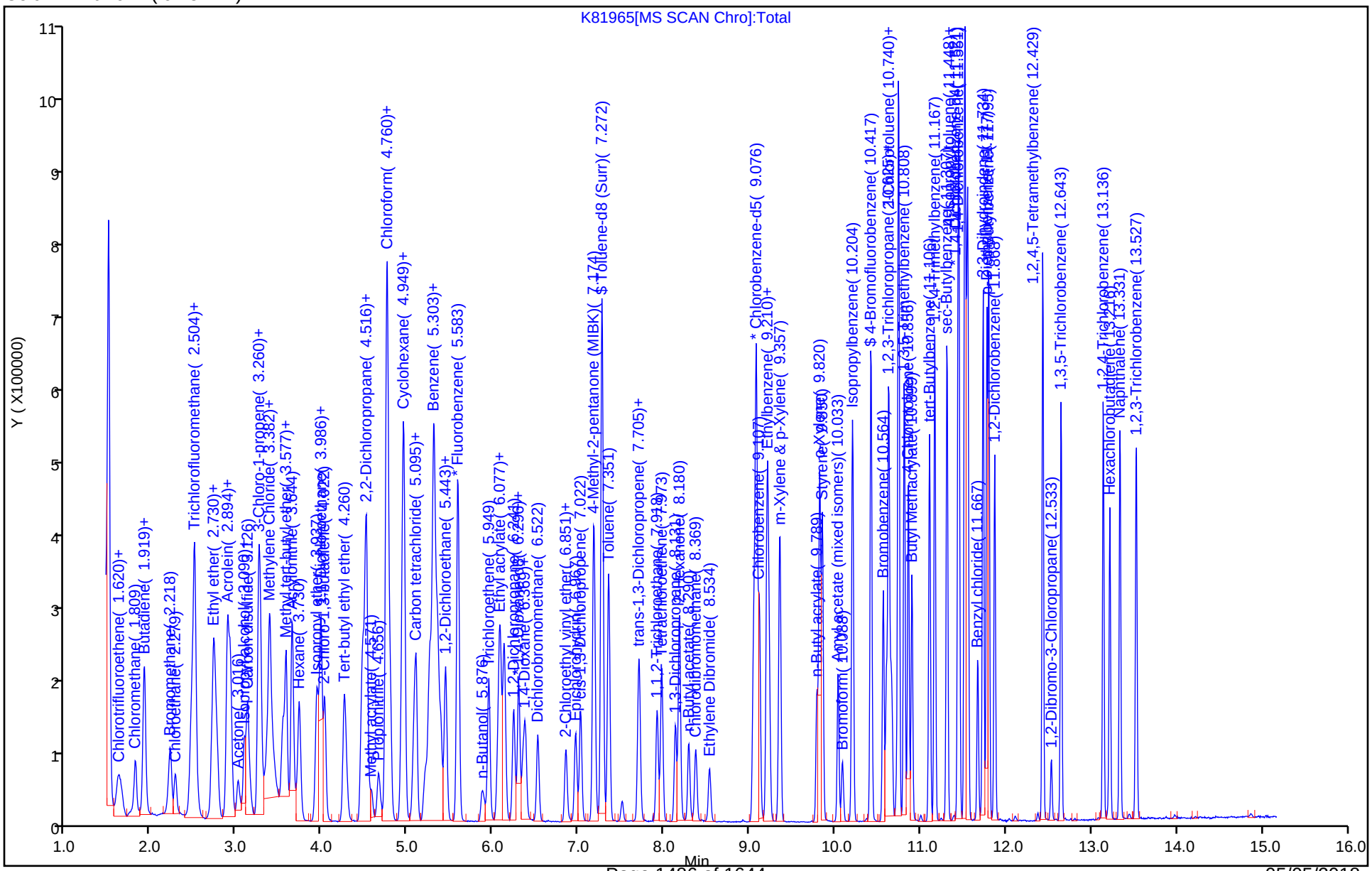
Report Date: 17-Apr-2018 11:41:45 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81965.D

Injection Date:	13-Apr-2018 21:10:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

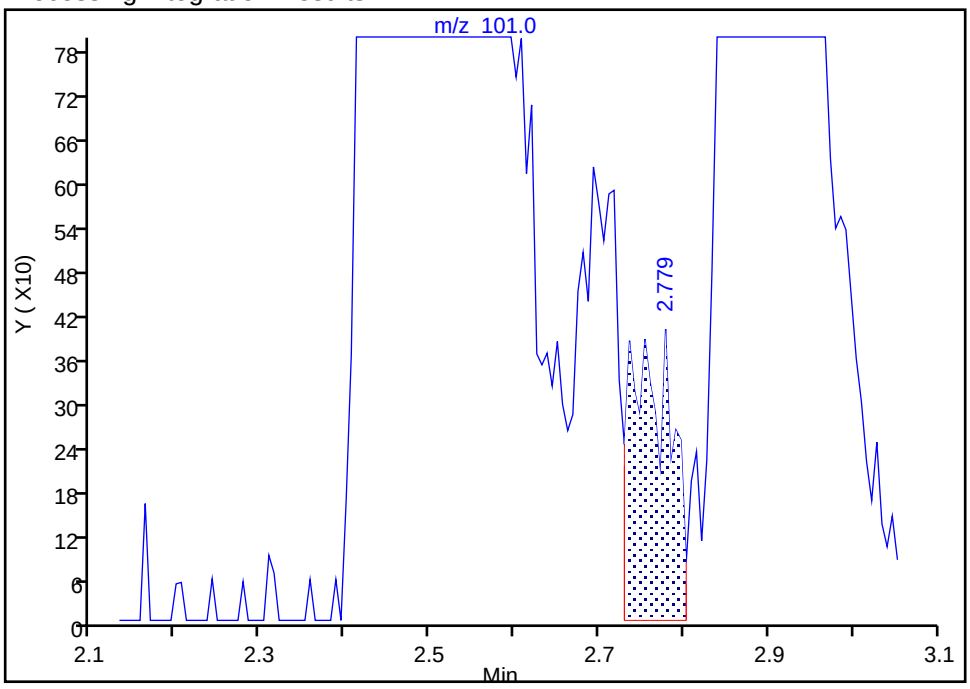
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180413-70351.b\K81965.D				
Injection Date:	13-Apr-2018 21:10:30	Instrument ID:	CVOAMS9		
Lims ID:	LCSD				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

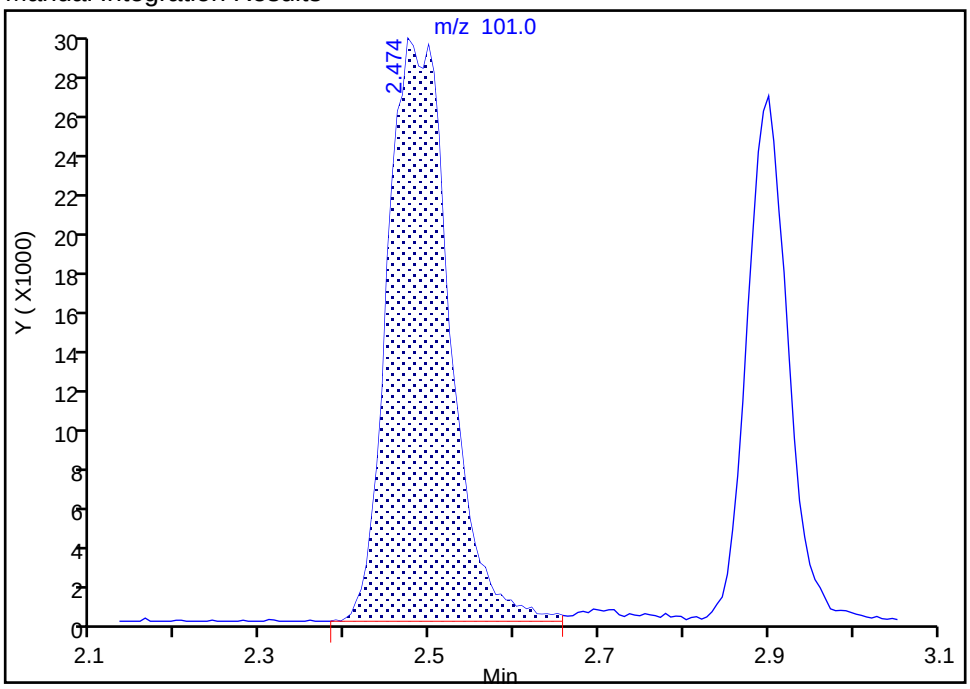
Processing Integration Results

RT: 2.78
Area: 1321
Amount: 0.203859
Amount Units: ug/l



Manual Integration Results

RT: 2.47
Area: 150766
Amount: 23.266453
Amount Units: ug/l



Reviewer: delpolitov, 17-Apr-2018 11:41:02

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-511293/5

Matrix: Solid | Lab File ID: K82035.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 05:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0258		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0169		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0246		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0179		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0229		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0222		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0193		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0206		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0199		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0191		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0210		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0202		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0193		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0186		0.0010	0.00010
123-91-1	1,4-Dioxane	0.386		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0824		0.0050	0.0011
591-78-6	2-Hexanone	0.0972		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.100		0.0050	0.00066
67-64-1	Acetone	0.102		0.0050	0.0038
71-43-2	Benzene	0.0193		0.0010	0.00026
75-25-2	Bromoform	0.0258		0.0010	0.00043
74-83-9	Bromomethane	0.0226		0.0010	0.00047
75-15-0	Carbon disulfide	0.0217		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0296		0.0010	0.00018
108-90-7	Chlorobenzene	0.0188		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0212		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0219		0.0010	0.00019
75-00-3	Chloroethane	0.0223		0.0010	0.00052
67-66-3	Chloroform	0.0222		0.0010	0.00032
74-87-3	Chloromethane	0.0198		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0208		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0188		0.0010	0.00027
110-82-7	Cyclohexane	0.0225		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0213		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0199		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-511293/5

Matrix: Solid | Lab File ID: K82035.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 05:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0199		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0195		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0204		0.0010	0.00013
79-20-9	Methyl acetate	0.122		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0207		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0224		0.0010	0.00016
75-09-2	Methylene Chloride	0.0197		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0191		0.0010	0.00017
95-47-6	o-Xylene	0.0196		0.0010	0.000095
100-42-5	Styrene	0.0187		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0222		0.0010	0.00014
108-88-3	Toluene	0.0189		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0216		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0203		0.0010	0.00027
79-01-6	Trichloroethene	0.0207		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0228		0.0010	0.00041
75-01-4	Vinyl chloride	0.0205		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		78-135
460-00-4	4-Bromofluorobenzene	101		67-126
1868-53-7	Dibromofluoromethane (Surr)	111		61-149
2037-26-5	Toluene-d8 (Surr)	91		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82035.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 16-Apr-2018 05:51:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070418-005
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 16-Apr-2018 10:44:28 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: delpolitov Date: 16-Apr-2018 10:45:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.602	0.000	79	44484	20.0	19.8	
2 Dichlorodifluoromethane	85	1.633	1.645	-0.012	99	111448	20.0	19.9	
3 Chloromethane	50	1.809	1.809	0.000	99	107470	20.0	19.8	
5 Butadiene	54	1.913	1.919	-0.006	96	86895	20.0	21.4	
4 Vinyl chloride	62	1.913	1.919	-0.006	98	113050	20.0	20.5	
6 Bromomethane	94	2.212	2.218	-0.006	99	90607	20.0	22.6	
7 Chloroethane	64	2.279	2.279	0.000	99	55347	20.0	22.3	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	98	153616	20.0	22.0	
8 Trichlorofluoromethane	101	2.474	2.486	-0.012	83	130400	20.0	22.8	
10 Pentane	72	2.504	2.504	0.000	96	23679	40.0	29.9	
12 Ethanol	46	2.712	2.693	0.019	70	16362	800.0	682.5	
11 Ethyl ether	59	2.706	2.706	0.000	93	47971	20.0	20.1	
13 2-Methyl-1,3-butadiene	53	2.730	2.730	0.000	97	60212	20.0	24.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.767	-0.013	92	69274	20.0	24.3	
15 Acrolein	56	2.888	2.888	0.000	96	142293	300.0	218.4	
16 1,1,2-Trichloro-1,2,2-trif	101	2.895	2.901	-0.006	69	90159	20.0	24.6	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	97	73050	20.0	22.2	
18 Acetone	43	3.010	3.016	-0.006	86	97741	100.0	101.6	
19 Iodomethane	142	3.090	3.090	0.000	97	140890	20.0	22.5	
22 Isopropyl alcohol	45	3.102	3.108	-0.006	1	43621	200.0	182.4	a
20 Carbon disulfide	76	3.126	3.126	0.000	99	269679	20.0	21.7	
21 3-Chloro-1-propene	76	3.248	3.254	-0.006	95	42845	20.0	22.5	
23 Methyl acetate	43	3.254	3.254	0.000	99	206049	100.0	122.1	
24 Cyclopentene	67	3.279	3.273	0.006	93	179796	20.0	23.7	
29 Acetonitrile	41	3.327	3.327	0.000	94	111759	200.0	165.0	a
* 25 TBA-d9 (IS)	65	3.388	3.370	0.018	0	338062	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.382	0.000	90	78211	20.0	19.7	
27 2-Methyl-2-propanol	59	3.449	3.437	0.012	91	89245	200.0	174.1	
28 Methyl tert-butyl ether	73	3.541	3.541	0.000	96	188301	20.0	20.7	
30 trans-1,2-Dichloroethene	96	3.577	3.577	0.000	94	76957	20.0	21.6	
31 Acrylonitrile	53	3.644	3.644	0.000	94	235874	200.0	226.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.724	0.000	93	64165	20.0	24.9	
33 Isopropyl ether	45	3.937	3.937	0.000	95	217192	20.0	22.8	
34 1,1-Dichloroethane	63	3.980	3.980	0.000	81	126459	20.0	22.9	
35 Vinyl acetate	86	3.980	3.986	-0.006	100	21434	40.0	31.0	
36 2-Chloro-1,3-butadiene	88	4.022	4.028	-0.006	90	65798	20.0	22.0	
37 Tert-butyl ethyl ether	59	4.260	4.260	0.000	89	200129	20.0	22.2	
* 38 2-Butanone-d5	46	4.467	4.461	0.006	0	225033	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.486	0.000	93	38571	20.0	29.6	
41 Ethyl acetate	70	4.510	4.510	0.000	91	12119	40.0	33.1	
40 cis-1,2-Dichloroethene	96	4.510	4.516	-0.006	93	84243	20.0	20.8	
42 2-Butanone (MEK)	72	4.516	4.516	0.000	96	36462	100.0	82.4	
44 Methyl acrylate	55	4.571	4.577	-0.006	99	47412	20.0	22.5	
43 Propionitrile	54	4.656	4.656	0.000	98	92511	200.0	155.7	
45 Tetrahydrofuran	72	4.748	4.742	0.006	66	17712	40.0	33.9	
46 Chlorobromomethane	128	4.748	4.748	0.000	74	39751	20.0	21.2	
47 Methacrylonitrile	67	4.760	4.760	0.000	91	247304	200.0	201.3	
48 Chloroform	83	4.790	4.791	0.000	99	128324	20.0	22.2	
49 Cyclohexane	84	4.937	4.937	0.000	93	121138	20.0	22.5	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	96	118085	20.0	25.8	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	96	162170	50.0	55.7	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	97691	20.0	29.6	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	99	95588	20.0	23.0	
56 Isobutyl alcohol	74	5.193	5.211	-0.018	1	7680	500.0	372.0	a
54 Benzene	78	5.296	5.297	0.000	95	271872	20.0	19.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.315	0.000	0	148405	50.0	53.5	
57 Isopropyl acetate	43	5.333	5.339	-0.006	95	165692	20.0	22.4	
58 Tert-amyl methyl ether	87	5.345	5.351	-0.006	95	59424	20.0	21.3	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	97	78464	20.0	21.0	
60 n-Heptane	57	5.443	5.437	0.006	91	61306	20.0	23.9	
* 61 Fluorobenzene	96	5.589	5.589	0.000	99	464589	50.0	50.0	
62 n-Butanol	56	5.876	5.870	0.006	87	42485	500.0	433.9	
63 Trichloroethene	95	5.949	5.949	0.000	98	68568	20.0	20.7	
64 Ethyl acrylate	56	6.071	6.077	-0.006	98	41833	20.0	22.5	
65 Methylcyclohexane	83	6.077	6.077	0.000	95	142609	20.0	22.4	
66 1,2-Dichloropropane	63	6.241	6.235	0.006	94	65005	20.0	20.2	
* 67 1,4-Dioxane-d8	96	6.296	6.284	0.012	0	29858	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	89	72871	40.0	45.2	
69 1,4-Dioxane	88	6.351	6.351	0.000	29	17676	400.0	385.9	
70 n-Propyl acetate	43	6.345	6.351	-0.006	98	69493	20.0	22.7	
71 Dibromomethane	93	6.376	6.376	0.000	98	41667	20.0	20.6	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	78504	20.0	21.3	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	86	31556	20.0	20.8	
74 2-Nitropropane	41	6.851	6.851	0.000	76	16602	40.0	55.1	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	111496	400.0	357.1	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	91727	20.0	18.8	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	295134	100.0	100.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	541323	50.0	45.5	
79 Toluene	91	7.351	7.351	0.000	94	278487	20.0	18.9	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	76246	20.0	20.3	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	64313	20.0	20.3	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	44459	20.0	17.9	
83 Tetrachloroethene	166	7.973	7.973	0.000	98	73105	20.0	22.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.131	0.000	88	82491	20.0	17.8	
85 2-Hexanone	43	8.174	8.180	-0.006	97	186803	100.0	97.2	
86 n-Butyl acetate	43	8.290	8.290	0.000	99	80312	20.0	25.3	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	55949	20.0	21.9	
88 Ethylene Dibromide	107	8.534	8.534	0.000	97	54178	20.0	19.5	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	382396	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	178170	20.0	18.8	
92 Ethylbenzene	106	9.204	9.204	0.000	98	102229	20.0	19.9	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.223	0.006	95	64822	20.0	22.8	
93 m-Xylene & p-Xylene	106	9.357	9.351	0.006	0	123796	20.0	19.1	
94 n-Butyl acrylate	73	9.790	9.783	0.007	97	40785	20.0	24.9	
95 o-Xylene	106	9.820	9.820	0.000	94	129779	20.0	19.6	
96 Styrene	104	9.850	9.851	0.000	97	195853	20.0	18.7	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	88366	20.0	24.4	
98 Bromoform	173	10.088	10.088	0.000	96	33516	20.0	25.8	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	352778	20.0	20.4	
$ 100 4-Bromofluorobenzene	174	10.424	10.424	0.000	94	162893	50.0	50.4	
101 Bromobenzene	156	10.564	10.564	0.000	95	78879	20.0	18.7	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	77393	20.0	16.9	
103 N-Propylbenzene	91	10.625	10.631	-0.006	99	413599	20.0	19.0	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	97	21254	20.0	18.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	89	17260	20.0	19.6	
106 2-Chlorotoluene	91	10.741	10.741	0.000	90	267518	20.0	18.3	
107 4-Ethyltoluene	105	10.741	10.747	-0.006	90	345427	20.0	19.1	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	93	287396	20.0	18.3	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	225155	20.0	18.0	
110 Butyl Methacrylate	87	10.899	10.899	0.000	90	78549	20.0	21.5	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	232807	20.0	18.4	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	304302	20.0	19.0	
113 sec-Butylbenzene	105	11.308	11.308	0.000	99	395554	20.0	18.9	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	340917	20.0	19.6	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	160154	20.0	19.3	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	94	220810	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	155707	20.0	18.6	
118 Benzyl chloride	91	11.667	11.667	0.000	99	127575	20.0	27.0	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	300515	20.0	18.3	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	190178	20.0	19.9	
121 n-Butylbenzene	92	11.801	11.801	0.000	97	188711	20.0	19.9	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	158043	20.0	19.1	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	322023	20.0	18.6	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	95	13549	20.0	19.9	
125 1,3,5-Trichlorobenzene	180	12.643	12.649	-0.006	97	143476	20.0	21.0	
126 1,2,4-Trichlorobenzene	180	13.143	13.136	0.006	94	135318	20.0	20.6	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	66392	20.0	23.0	
128 Naphthalene	128	13.338	13.338	0.000	99	319295	20.0	17.5	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	95	129416	20.0	19.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	42.4	
S 131 Xylenes, Total	100				0		40.0	38.8	
S 132 Total BTEX	1				0		100.0	96.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00255	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 16-Apr-2018 10:45:25 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70418.b\K82035.D

Injection Date: 16-Apr-2018 05:51:30 Instrument ID: CVOAMS9 Operator ID:

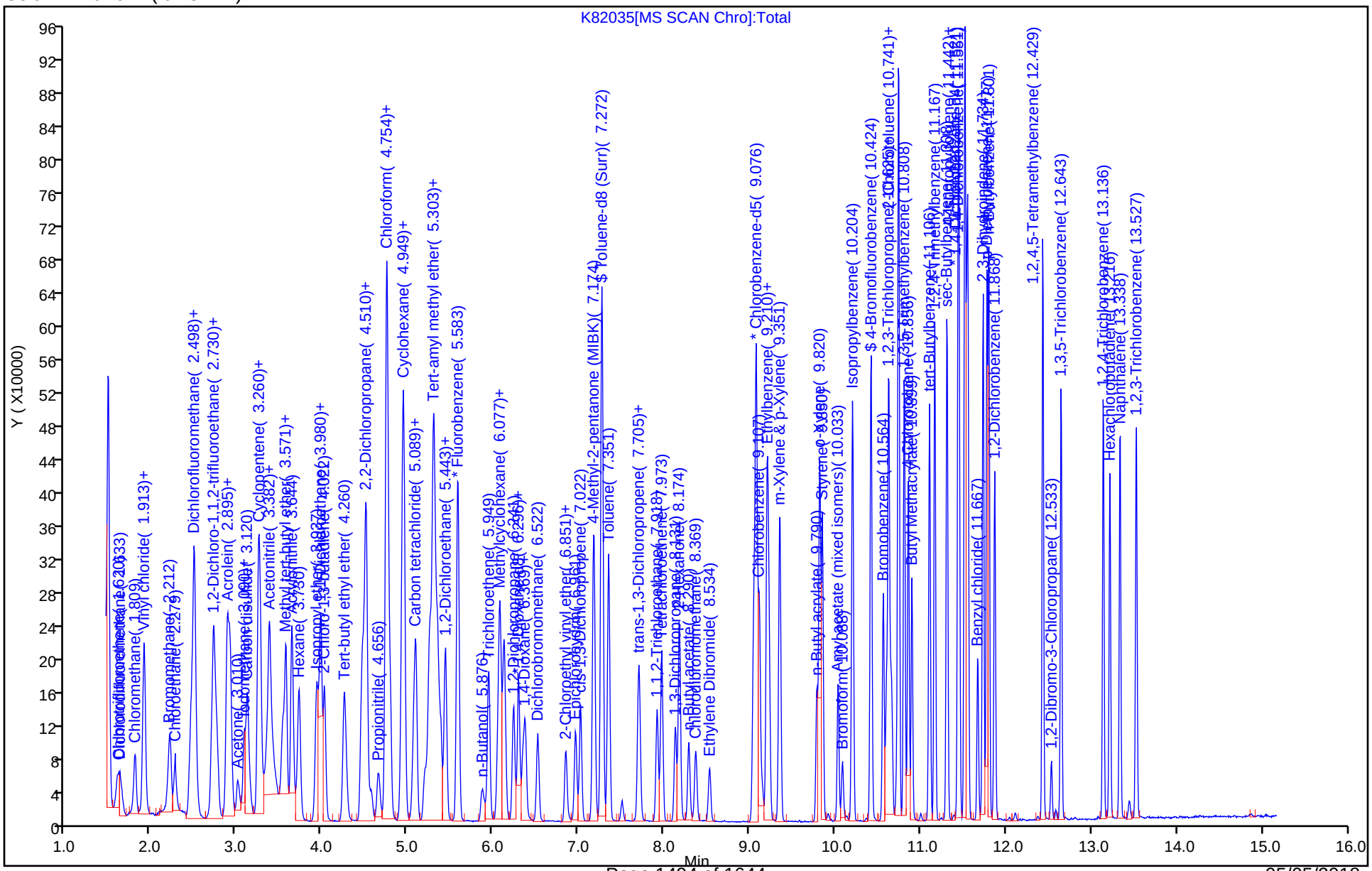
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-511498/5

Matrix: Solid | Lab File ID: D48761.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 20:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0171		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0217		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0178		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0207		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0187		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0181		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0207		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0205		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0192		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0201		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0169		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0186		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0201		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0201		0.0010	0.00010
123-91-1	1,4-Dioxane	0.501		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0784		0.0050	0.0011
591-78-6	2-Hexanone	0.0835		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0895		0.0050	0.00066
67-64-1	Acetone	0.0720		0.0050	0.0038
71-43-2	Benzene	0.0215		0.0010	0.00026
75-25-2	Bromoform	0.0160		0.0010	0.00043
74-83-9	Bromomethane	0.0213		0.0010	0.00047
75-15-0	Carbon disulfide	0.0172		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0169		0.0010	0.00018
108-90-7	Chlorobenzene	0.0204		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0176		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0180		0.0010	0.00019
75-00-3	Chloroethane	0.0205		0.0010	0.00052
67-66-3	Chloroform	0.0178		0.0010	0.00032
74-87-3	Chloromethane	0.0223		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0170		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0199		0.0010	0.00027
110-82-7	Cyclohexane	0.0193		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0162		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0155		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-511498/5

Matrix: Solid | Lab File ID: D48761.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 20:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0206		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0199		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0209		0.0010	0.00013
79-20-9	Methyl acetate	0.101		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0179		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0191		0.0010	0.00016
75-09-2	Methylene Chloride	0.0176		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0204		0.0010	0.00017
95-47-6	o-Xylene	0.0204		0.0010	0.000095
100-42-5	Styrene	0.0200		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0203		0.0010	0.00014
108-88-3	Toluene	0.0203		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0180		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0191		0.0010	0.00027
79-01-6	Trichloroethene	0.0179		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0184		0.0010	0.00041
75-01-4	Vinyl chloride	0.0208		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		78-135
460-00-4	4-Bromofluorobenzene	96		67-126
1868-53-7	Dibromofluoromethane (Surr)	85		61-149
2037-26-5	Toluene-d8 (Surr)	102		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48761.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 16-Apr-2018 20:04:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070463-004
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 17:07:12 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sarmientod Date: 16-Apr-2018 20:33:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.539	1.545	-0.006	71	54397	20.0	17.8	a
2 Dichlorodifluoromethane	85	1.570	1.576	-0.006	99	162688	20.0	15.5	
3 Chloromethane	50	1.783	1.789	-0.006	99	267512	20.0	22.3	
4 Vinyl chloride	62	1.881	1.887	-0.006	98	218275	20.0	20.8	
5 Butadiene	54	1.893	1.905	-0.012	95	196319	20.0	22.8	
6 Bromomethane	94	2.234	2.240	-0.006	99	96806	20.0	21.3	
7 Chloroethane	64	2.320	2.326	-0.006	99	94704	20.0	20.5	
9 Trichlorofluoromethane	101	2.527	2.533	-0.006	98	150873	20.0	18.4	
8 Dichlorofluoromethane	67	2.551	2.557	-0.006	95	230047	20.0	19.6	
10 Pentane	72	2.551	2.557	-0.006	98	39432	40.0	38.5	
12 Ethanol	46	2.789	2.795	-0.006	77	17776	800.0	902.0	
11 Ethyl ether	59	2.795	2.801	-0.006	93	75481	20.0	19.1	
13 2-Methyl-1,3-butadiene	53	2.813	2.819	-0.006	97	89109	20.0	20.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.880	2.893	-0.013	98	75061	20.0	17.7	
16 Acrolein	56	3.002	3.008	-0.006	97	196198	300.0	332.8	
15 1,1,2-Trichloro-1,2,2-trif	101	3.027	3.033	-0.006	75	93858	20.0	17.8	
17 1,1-Dichloroethene	96	3.039	3.045	-0.006	95	87414	20.0	18.1	
18 Acetone	43	3.155	3.155	0.000	87	121620	100.0	72.0	
19 Iodomethane	142	3.222	3.228	-0.006	99	150300	20.0	17.1	
20 Carbon disulfide	76	3.252	3.258	-0.006	100	324257	20.0	17.2	
21 Isopropyl alcohol	45	3.283	3.283	0.000	99	53079	200.0	194.3	
22 3-Chloro-1-propene	76	3.429	3.429	0.000	88	52897	20.0	18.0	
23 Cyclopentene	67	3.447	3.447	0.000	95	228869	20.0	19.9	
24 Methyl acetate	43	3.454	3.453	0.001	100	290816	100.0	100.7	
25 Acetonitrile	41	3.521	3.514	0.007	99	83134	200.0	228.3	
26 Methylene Chloride	84	3.588	3.588	0.000	97	98649	20.0	17.6	
* 27 TBA-d9 (IS)	65	3.600	3.600	0.000	39	453782	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.685	3.685	0.000	95	89953	200.0	194.6	
29 Methyl tert-butyl ether	73	3.789	3.789	0.000	97	223068	20.0	17.9	
30 trans-1,2-Dichloroethene	96	3.813	3.819	-0.006	98	85264	20.0	18.0	
31 Acrylonitrile	53	3.911	3.911	0.000	94	301065	200.0	240.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	4.008	4.014	-0.006	94	130868	20.0	20.8	
33 Isopropyl ether	45	4.283	4.283	0.000	98	277386	20.0	19.7	
34 1,1-Dichloroethane	63	4.307	4.307	0.000	99	159513	20.0	18.7	
35 Vinyl acetate	86	4.337	4.337	0.000	100	26307	40.0	34.7	
36 2-Chloro-1,3-butadiene	88	4.362	4.362	0.000	92	72625	20.0	18.6	
37 Tert-butyl ethyl ether	59	4.673	4.673	0.000	88	234203	20.0	18.0	
* 38 2-Butanone-d5	46	4.911	4.904	0.007	0	407806	250.0	250.0	
39 2,2-Dichloropropane	79	4.923	4.923	0.000	93	37166	20.0	16.6	
40 cis-1,2-Dichloroethene	96	4.947	4.953	-0.006	96	90272	20.0	17.0	
41 2-Butanone (MEK)	72	4.978	4.978	0.000	97	40271	100.0	78.4	
42 Ethyl acetate	70	4.990	4.990	0.000	96	13989	40.0	31.2	
43 Methyl acrylate	55	5.051	5.051	0.000	99	56005	20.0	19.0	
44 Propionitrile	54	5.142	5.136	0.006	98	104894	200.0	201.8	
45 Tetrahydrofuran	72	5.221	5.221	0.000	93	19204	40.0	35.4	
46 Chlorobromomethane	128	5.228	5.228	0.000	97	37679	20.0	17.6	
47 Methacrylonitrile	67	5.264	5.264	0.000	92	285294	200.0	187.6	
48 Chloroform	83	5.301	5.307	-0.006	97	139222	20.0	17.8	
49 Cyclohexane	84	5.447	5.453	-0.006	93	126137	20.0	19.3	
50 1,1,1-Trichloroethane	97	5.471	5.471	0.000	97	111516	20.0	17.1	
$ 51 Dibromofluoromethane (Surr	113	5.496	5.496	0.000	95	203106	50.0	42.3	
52 Carbon tetrachloride	117	5.618	5.618	0.000	97	85651	20.0	16.9	
53 1,1-Dichloropropene	75	5.654	5.660	-0.006	96	101906	20.0	19.2	
54 Isobutyl alcohol	43	5.855	5.855	0.000	93	138480	500.0	530.7	
55 Benzene	78	5.898	5.898	0.000	96	293611	20.0	21.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.923	5.929	-0.006	97	222525	50.0	44.2	
57 Tert-amyl methyl ether	87	5.996	6.002	-0.006	91	60959	20.0	17.1	
58 Isopropyl acetate	43	6.002	6.002	0.000	98	232119	20.0	19.1	
59 1,2-Dichloroethane	62	6.020	6.020	0.000	96	91649	20.0	16.9	
60 n-Heptane	57	6.112	6.111	0.001	96	67945	20.0	20.5	
* 61 Fluorobenzene	96	6.264	6.264	0.000	98	698588	50.0	50.0	
62 n-Butanol	56	6.678	6.678	0.000	90	40397	500.0	473.0	
63 Trichloroethene	95	6.709	6.709	0.000	95	69405	20.0	17.9	
64 Methylcyclohexane	83	6.849	6.849	0.000	93	137916	20.0	19.1	
65 Ethyl acrylate	73	6.874	6.874	0.000	96	4965	20.0	16.9	
66 1,2-Dichloropropane	63	7.038	7.038	0.000	91	74139	20.0	18.6	
* 67 1,4-Dioxane-d8	96	7.105	7.105	0.000	0	25315	1000.0	1000.0	
68 Methyl methacrylate	100	7.142	7.142	0.000	90	26767	40.0	32.9	
69 1,4-Dioxane	88	7.166	7.166	0.000	85	13196	400.0	500.9	
70 Dibromomethane	93	7.178	7.178	0.000	92	42009	20.0	16.9	
71 n-Propyl acetate	43	7.209	7.209	0.000	99	81459	20.0	19.2	
72 Dichlorobromomethane	83	7.343	7.343	0.000	99	78183	20.0	16.2	
73 2-Nitropropane	41	7.672	7.672	0.000	99	23600	40.0	26.1	
74 2-Chloroethyl vinyl ether	63	7.684	7.684	0.000	96	27001	20.0	17.3	
75 Epichlorohydrin	57	7.776	7.776	0.000	98	113872	400.0	328.3	
76 cis-1,3-Dichloropropene	75	7.825	7.825	0.000	93	91987	20.0	19.9	
77 4-Methyl-2-pentanone (MIBK	43	7.977	7.977	0.000	98	311277	100.0	89.5	
$ 78 Toluene-d8 (Surr)	98	8.038	8.038	0.000	98	666931	50.0	51.1	
79 Toluene	91	8.105	8.105	0.000	93	263543	20.0	20.3	
80 trans-1,3-Dichloropropene	75	8.398	8.398	0.000	98	71640	20.0	19.1	
81 Ethyl methacrylate	69	8.422	8.422	0.000	90	67252	20.0	17.3	
82 1,1,2-Trichloroethane	83	8.562	8.562	0.000	95	43334	20.0	20.7	
83 Tetrachloroethene	166	8.599	8.599	0.000	95	55922	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.721	8.721	0.000	93	80527	20.0	21.2	
85 2-Hexanone	43	8.763	8.763	0.000	97	178653	100.0	83.5	
86 n-Butyl acetate	73	8.849	8.849	0.000	98	14495	20.0	20.9	
87 Chlorodibromomethane	129	8.891	8.891	0.000	98	46002	20.0	18.0	
88 Ethylene Dibromide	107	9.001	9.007	-0.006	98	44841	20.0	19.9	
* 89 Chlorobenzene-d5	117	9.373	9.373	0.000	90	423079	50.0	50.0	
90 Chlorobenzene	112	9.397	9.397	0.000	96	149942	20.0	20.4	
91 Ethylbenzene	106	9.458	9.464	-0.006	99	85810	20.0	20.6	
92 1,1,1,2-Tetrachloroethane	131	9.477	9.477	0.000	94	56625	20.0	19.3	
93 m-Xylene & p-Xylene	106	9.562	9.562	0.000	98	102302	20.0	20.4	
94 n-Butyl acrylate	73	9.855	9.855	0.000	97	36707	20.0	19.7	
95 o-Xylene	106	9.885	9.891	-0.006	93	106842	20.0	20.4	
96 Styrene	104	9.910	9.910	0.000	93	161930	20.0	20.0	
97 Amyl acetate (mixed isomer	43	10.031	10.031	0.000	90	98929	20.0	23.1	
98 Bromoform	173	10.086	10.086	0.000	93	25172	20.0	16.0	
99 Isopropylbenzene	105	10.166	10.166	0.000	96	289777	20.0	20.9	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	159149	50.0	47.8	
101 Bromobenzene	156	10.446	10.446	0.000	97	58865	20.0	20.3	
102 1,1,2,2-Tetrachloroethane	83	10.458	10.458	0.000	99	70938	20.0	21.7	
103 N-Propylbenzene	91	10.483	10.483	0.000	98	350402	20.0	21.9	
104 1,2,3-Trichloropropane	110	10.501	10.501	0.000	97	17397	20.0	21.0	
105 trans-1,4-Dichloro-2-buten	53	10.507	10.507	0.000	77	16927	20.0	21.5	
106 4-Ethyltoluene	105	10.568	10.568	0.000	99	274065	20.0	20.8	
107 2-Chlorotoluene	91	10.574	10.574	0.000	97	233484	20.0	21.0	
108 1,3,5-Trimethylbenzene	105	10.617	10.617	0.000	92	242481	20.0	21.6	
109 4-Chlorotoluene	91	10.666	10.665	0.001	98	192563	20.0	20.8	
110 Butyl Methacrylate	87	10.672	10.672	0.000	94	75530	20.0	19.8	
111 tert-Butylbenzene	119	10.855	10.854	0.000	93	185975	20.0	20.9	
112 1,2,4-Trimethylbenzene	105	10.903	10.903	0.000	97	236898	20.0	20.2	
113 sec-Butylbenzene	105	11.019	11.019	0.000	99	319524	20.0	21.5	
114 4-Isopropyltoluene	119	11.117	11.117	0.000	97	257541	20.0	21.2	
115 1,3-Dichlorobenzene	146	11.141	11.141	0.000	95	116445	20.0	20.1	
* 116 1,4-Dichlorobenzene-d4	152	11.190	11.196	-0.006	97	214118	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.208	11.208	0.000	93	118742	20.0	20.1	
118 Benzyl chloride	126	11.318	11.318	0.000	98	17614	20.0	16.7	
119 2,3-Dihydroindene	117	11.373	11.373	0.000	94	256664	20.0	16.7	
120 p-Diethylbenzene	119	11.397	11.397	0.000	86	156389	20.0	21.4	a
121 n-Butylbenzene	92	11.415	11.421	-0.006	96	144942	20.0	21.1	
122 1,2-Dichlorobenzene	146	11.495	11.495	0.000	97	117127	20.0	20.1	
123 1,2,4,5-Tetramethylbenzene	119	12.031	12.031	0.000	97	226544	20.0	20.1	
124 1,2-Dibromo-3-Chloropropan	157	12.153	12.153	0.000	93	11719	20.0	19.2	
125 1,3,5-Trichlorobenzene	180	12.281	12.281	0.000	96	93672	20.0	20.7	
126 1,2,4-Trichlorobenzene	180	12.921	12.921	0.000	94	84558	20.0	20.5	
127 Hexachlorobutadiene	225	13.031	13.031	0.000	90	36694	20.0	18.9	
128 Naphthalene	128	13.214	13.214	0.000	99	210552	20.0	21.0	
129 1,2,3-Trichlorobenzene	180	13.506	13.506	0.000	94	81969	20.0	20.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	34.9	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.0	
S 132 Xylenes, Total	100				0		40.0	40.8	
S 133 Total BTEX	1				0		100.0	103.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00255	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 17-Apr-2018 17:07:21 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180416-70463.b\D48761.D

Injection Date: 16-Apr-2018 20:04:30 Instrument ID: CVOAMS4 Operator ID:

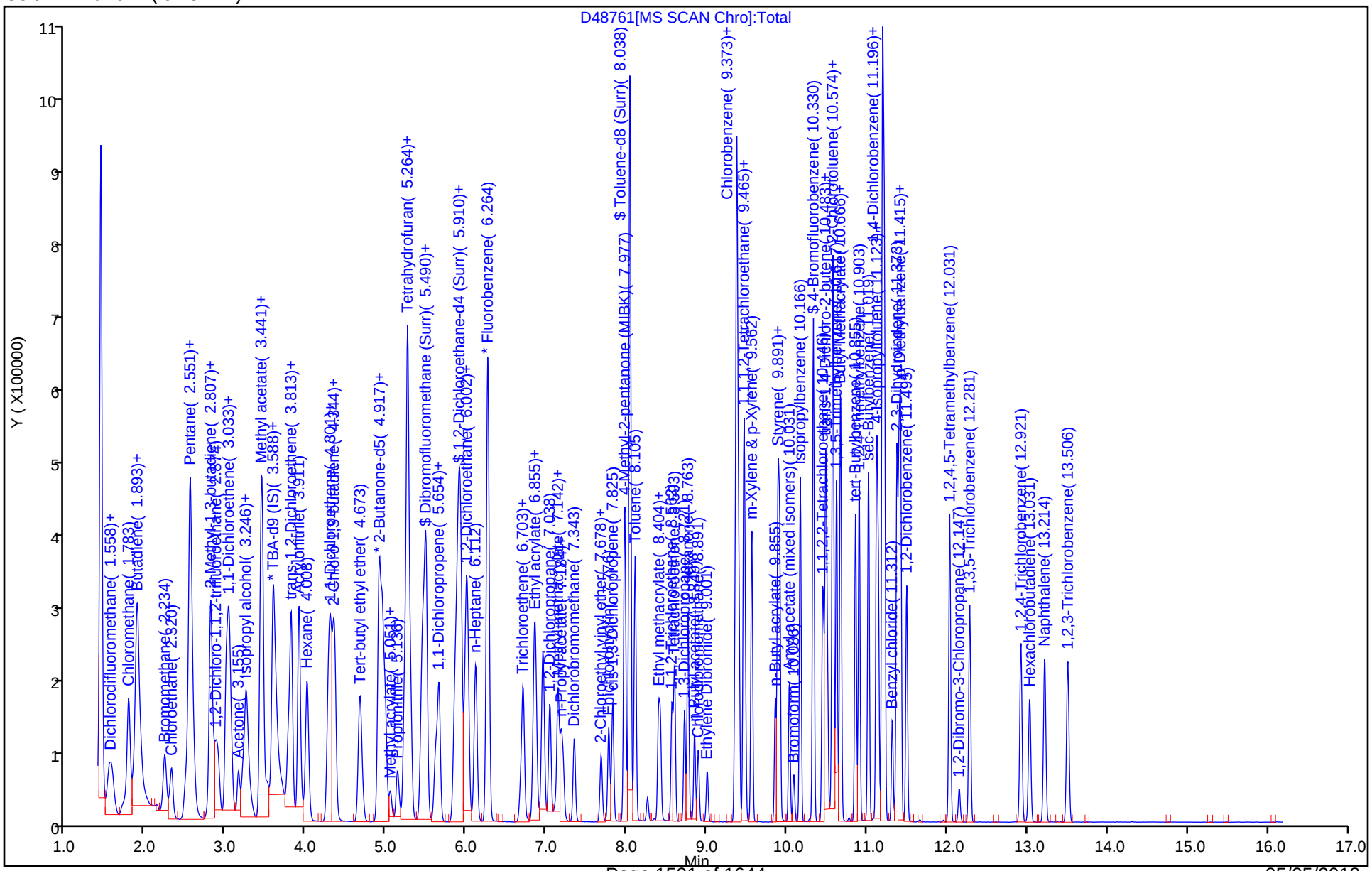
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-512479/5

Matrix: Solid | Lab File ID: D48921.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/19/2018 19:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0188		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0219		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0205		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0210		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0192		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0196		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0227		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0224		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0181		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0217		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0171		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0191		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0223		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0221		0.0010	0.00010
123-91-1	1,4-Dioxane	0.436		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0799		0.0050	0.0011
591-78-6	2-Hexanone	0.0845		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0908		0.0050	0.00066
67-64-1	Acetone	0.0751		0.0050	0.0038
71-43-2	Benzene	0.0229		0.0010	0.00026
75-25-2	Bromoform	0.0153		0.0010	0.00043
74-83-9	Bromomethane	0.0232		0.0010	0.00047
75-15-0	Carbon disulfide	0.0188		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0189		0.0010	0.00018
108-90-7	Chlorobenzene	0.0214		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0180		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0179		0.0010	0.00019
75-00-3	Chloroethane	0.0221		0.0010	0.00052
67-66-3	Chloroform	0.0184		0.0010	0.00032
74-87-3	Chloromethane	0.0248		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0177		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0204		0.0010	0.00027
110-82-7	Cyclohexane	0.0216		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0178		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0181		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-512479/5

Matrix: Solid | Lab File ID: D48921.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/19/2018 19:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0219		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0203		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0229		0.0010	0.00013
79-20-9	Methyl acetate	0.0398		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0184		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0221		0.0010	0.00016
75-09-2	Methylene Chloride	0.0192		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0222		0.0010	0.00017
95-47-6	o-Xylene	0.0219		0.0010	0.000095
100-42-5	Styrene	0.0211		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0229		0.0010	0.00014
108-88-3	Toluene	0.0220		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0189		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0194		0.0010	0.00027
79-01-6	Trichloroethene	0.0192		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0200		0.0010	0.00041
75-01-4	Vinyl chloride	0.0240		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		78-135
460-00-4	4-Bromofluorobenzene	100		67-126
1868-53-7	Dibromofluoromethane (Surr)	80		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48921.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 19-Apr-2018 19:25:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070668-005
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 17:12:28 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: starzecm Date: 20-Apr-2018 01:06:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.521	1.521	0.000	78	60684	20.0	27.1	a
2 Dichlorodifluoromethane	85	1.558	1.558	0.000	99	138502	20.0	18.1	
3 Chloromethane	50	1.765	1.765	0.000	99	215778	20.0	24.8	
4 Vinyl chloride	62	1.869	1.869	0.000	98	181996	20.0	24.0	
5 Butadiene	54	1.881	1.875	0.006	95	163437	20.0	26.1	
6 Bromomethane	94	2.216	2.216	0.000	99	76297	20.0	23.2	
7 Chloroethane	64	2.295	2.295	0.000	100	74131	20.0	22.1	
9 Trichlorofluoromethane	101	2.509	2.503	0.006	97	118362	20.0	20.0	
8 Dichlorofluoromethane	67	2.527	2.533	-0.006	99	180922	20.0	21.4	
10 Pentane	72	2.533	2.533	0.000	97	29439	40.0	39.7	
11 Ethyl ether	59	2.771	2.771	0.000	93	53763	20.0	18.8	
12 Ethanol	46	2.765	2.777	-0.012	78	12393	800.0	884.6	
13 2-Methyl-1,3-butadiene	53	2.789	2.789	0.000	97	69155	20.0	21.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.862	2.862	0.000	98	62366	20.0	20.3	
16 Acrolein	56	2.978	2.978	0.000	98	125054	300.0	298.4	
15 1,1,2-Trichloro-1,2,2-trif	101	3.009	3.009	0.000	86	78261	20.0	20.5	
17 1,1-Dichloroethene	96	3.015	3.015	0.000	95	68719	20.0	19.6	
18 Acetone	43	3.130	3.130	0.000	86	87690	100.0	75.1	M
19 Iodomethane	142	3.198	3.198	0.000	100	114643	20.0	18.0	
20 Carbon disulfide	76	3.228	3.228	0.000	100	257528	20.0	18.8	
21 Isopropyl alcohol	45	3.252	3.259	-0.007	99	38155	200.0	196.5	
22 3-Chloro-1-propene	76	3.405	3.405	0.000	87	40885	20.0	19.2	
23 Cyclopentene	67	3.423	3.423	0.000	94	173038	20.0	20.8	
24 Methyl acetate	43	3.429	3.429	0.000	99	83231	40.0	39.8	
25 Acetonitrile	41	3.490	3.496	-0.006	98	65055	200.0	251.3	
26 Methylene Chloride	84	3.563	3.563	0.000	96	77708	20.0	19.2	
* 27 TBA-d9 (IS)	65	3.569	3.576	-0.007	40	322590	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.655	3.661	-0.006	99	63147	200.0	192.1	
29 Methyl tert-butyl ether	73	3.765	3.765	-0.001	97	166394	20.0	18.4	
30 trans-1,2-Dichloroethene	96	3.789	3.789	0.000	99	64906	20.0	18.9	
31 Acrylonitrile	53	3.886	3.886	0.000	94	208532	200.0	234.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.984	3.990	-0.006	94	106158	20.0	23.3	
33 Isopropyl ether	45	4.258	4.258	0.000	97	207668	20.0	20.4	
34 1,1-Dichloroethane	63	4.283	4.283	0.000	99	118656	20.0	19.2	
35 Vinyl acetate	86	4.313	4.313	0.000	100	19127	40.0	34.9	
36 2-Chloro-1,3-butadiene	88	4.331	4.338	-0.007	93	55658	20.0	19.7	
37 Tert-butyl ethyl ether	59	4.648	4.648	0.000	88	176804	20.0	18.8	
* 38 2-Butanone-d5	46	4.880	4.886	-0.006	0	281908	250.0	250.0	
39 2,2-Dichloropropane	79	4.892	4.898	-0.006	93	30716	20.0	19.0	
40 cis-1,2-Dichloroethene	96	4.923	4.929	-0.006	96	68112	20.0	17.7	
41 2-Butanone (MEK)	72	4.947	4.953	-0.006	97	28369	100.0	79.9	
42 Ethyl acetate	70	4.965	4.966	-0.001	96	9742	40.0	31.5	
43 Methyl acrylate	55	5.026	5.026	0.000	100	40483	20.0	19.0	
44 Propionitrile	54	5.112	5.118	-0.006	98	71203	200.0	189.4	
45 Tetrahydrofuran	72	5.197	5.197	0.000	90	13141	40.0	35.1	
46 Chlorobromomethane	128	5.203	5.203	0.000	96	27822	20.0	18.0	
47 Methacrylonitrile	67	5.240	5.240	0.000	92	196672	200.0	178.8	
48 Chloroform	83	5.276	5.276	0.000	97	104408	20.0	18.4	
49 Cyclohexane	84	5.423	5.429	-0.006	93	102163	20.0	21.6	
50 1,1,1-Trichloroethane	97	5.447	5.447	0.000	98	88458	20.0	18.8	
$ 51 Dibromofluoromethane (Surr	113	5.471	5.472	-0.001	95	139095	50.0	40.0	
52 Carbon tetrachloride	117	5.593	5.593	0.000	97	69247	20.0	18.9	
53 1,1-Dichloropropene	75	5.630	5.636	-0.006	96	80193	20.0	20.8	
54 Isobutyl alcohol	43	5.831	5.831	0.000	92	102104	500.0	550.4	
55 Benzene	78	5.874	5.874	0.000	97	229312	20.0	22.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.898	5.904	-0.006	97	149429	50.0	41.0	
57 Tert-amyl methyl ether	87	5.971	5.978	-0.007	91	44161	20.0	17.1	
58 Isopropyl acetate	43	5.977	5.978	-0.001	98	162050	20.0	18.5	
59 1,2-Dichloroethane	62	5.996	5.996	0.000	96	66763	20.0	17.1	
60 n-Heptane	57	6.087	6.093	-0.006	92	54626	20.0	22.8	
* 61 Fluorobenzene	96	6.240	6.240	0.000	98	505310	50.0	50.0	
62 n-Butanol	56	6.654	6.654	0.000	89	29065	500.0	478.7	
63 Trichloroethene	95	6.679	6.685	-0.006	96	54007	20.0	19.2	
64 Methylcyclohexane	83	6.825	6.825	0.000	95	115823	20.0	22.1	
65 Ethyl acrylate	73	6.849	6.849	0.000	98	3592	20.0	16.9	
66 1,2-Dichloropropane	63	7.020	7.020	0.000	91	55117	20.0	19.1	
* 67 1,4-Dioxane-d8	96	7.087	7.087	0.000	0	20062	1000.0	1000.0	
68 Methyl methacrylate	100	7.124	7.124	0.000	89	19268	40.0	32.7	
69 1,4-Dioxane	88	7.142	7.148	-0.006	90	9094	400.0	435.6	
70 Dibromomethane	93	7.160	7.160	0.000	93	30587	20.0	17.0	
71 n-Propyl acetate	43	7.185	7.185	0.000	99	59137	20.0	19.3	
72 Dichlorobromomethane	83	7.325	7.325	0.000	99	61871	20.0	17.8	
73 2-Nitropropane	41	7.654	7.660	-0.006	96	16096	40.0	24.6	
74 2-Chloroethyl vinyl ether	63	7.666	7.666	0.000	96	19543	20.0	17.3	
75 Epichlorohydrin	57	7.758	7.758	0.000	98	81426	400.0	339.6	
76 cis-1,3-Dichloropropene	75	7.806	7.806	0.000	93	69295	20.0	20.4	
77 4-Methyl-2-pentanone (MIBK	43	7.959	7.959	0.000	97	218349	100.0	90.8	
$ 78 Toluene-d8 (Surr)	98	8.020	8.020	0.000	98	470787	50.0	49.1	
79 Toluene	91	8.087	8.087	0.000	93	209334	20.0	22.0	
80 trans-1,3-Dichloropropene	75	8.379	8.379	0.000	99	53536	20.0	19.4	
81 Ethyl methacrylate	69	8.404	8.404	0.000	90	49911	20.0	17.7	
82 1,1,2-Trichloroethane	83	8.550	8.550	0.000	96	32276	20.0	21.0	
83 Tetrachloroethene	166	8.581	8.581	0.000	94	46196	20.0	22.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.703	8.709	-0.006	91	60290	20.0	21.6	
85 2-Hexanone	43	8.751	8.751	0.000	96	124976	100.0	84.5	
86 n-Butyl acetate	73	8.831	8.831	0.000	99	10086	20.0	19.8	
87 Chlorodibromomethane	129	8.879	8.879	0.000	98	33492	20.0	17.9	
88 Ethylene Dibromide	107	8.989	8.989	0.000	97	33633	20.0	20.3	
* 89 Chlorobenzene-d5	117	9.361	9.361	0.000	88	310817	50.0	50.0	
90 Chlorobenzene	112	9.385	9.385	0.000	96	115991	20.0	21.4	
91 Ethylbenzene	106	9.446	9.446	0.000	99	67030	20.0	21.9	
92 1,1,1,2-Tetrachloroethane	131	9.465	9.465	0.000	93	42200	20.0	19.6	
93 m-Xylene & p-Xylene	106	9.544	9.550	-0.006	98	81812	20.0	22.2	
94 n-Butyl acrylate	73	9.843	9.843	0.000	96	26302	20.0	19.2	
95 o-Xylene	106	9.873	9.873	0.000	93	84032	20.0	21.9	
96 Styrene	104	9.897	9.897	0.000	94	125976	20.0	21.1	
97 Amyl acetate (mixed isomer	43	10.013	10.019	-0.006	91	70067	20.0	22.9	
98 Bromoform	173	10.074	10.074	0.000	93	17700	20.0	15.3	
99 Isopropylbenzene	105	10.154	10.154	0.000	96	232323	20.0	22.9	
$ 100 4-Bromofluorobenzene	174	10.318	10.318	0.000	0	119364	50.0	50.1	
101 Bromobenzene	156	10.434	10.434	0.000	97	44503	20.0	21.4	
102 1,1,2,2-Tetrachloroethane	83	10.446	10.446	0.000	99	51133	20.0	21.9	
103 N-Propylbenzene	91	10.471	10.471	-0.001	99	280718	20.0	24.5	
104 1,2,3-Trichloropropane	110	10.489	10.489	0.000	97	12529	20.0	21.1	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.495	0.000	79	12441	20.0	22.1	
106 4-Ethyltoluene	105	10.556	10.556	0.000	98	220574	20.0	23.4	
107 2-Chlorotoluene	91	10.562	10.562	0.000	96	184955	20.0	23.2	
108 1,3,5-Trimethylbenzene	105	10.605	10.605	0.000	93	193073	20.0	24.0	
109 4-Chlorotoluene	91	10.653	10.653	0.000	98	152304	20.0	23.0	
110 Butyl Methacrylate	87	10.660	10.666	-0.006	92	58815	20.0	21.5	
111 tert-Butylbenzene	119	10.842	10.842	0.000	93	154142	20.0	24.2	
112 1,2,4-Trimethylbenzene	105	10.891	10.891	0.000	98	190881	20.0	22.8	
113 sec-Butylbenzene	105	11.007	11.007	0.000	99	259730	20.0	24.5	
114 4-Isopropyltoluene	119	11.105	11.105	0.000	98	208457	20.0	24.0	
115 1,3-Dichlorobenzene	146	11.129	11.129	0.000	95	92682	20.0	22.3	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.184	-0.006	96	153162	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.202	-0.006	93	93143	20.0	22.1	
118 Benzyl chloride	126	11.306	11.306	0.000	98	13451	20.0	17.9	
119 2,3-Dihydroindene	117	11.361	11.361	0.000	94	197735	20.0	17.8	
120 p-Diethylbenzene	119	11.385	11.385	0.000	92	126166	20.0	24.1	
121 n-Butylbenzene	92	11.403	11.409	-0.006	96	118282	20.0	24.1	
122 1,2-Dichlorobenzene	146	11.483	11.483	-0.001	95	90380	20.0	21.7	
123 1,2,4,5-Tetramethylbenzene	119	12.019	12.019	0.000	97	182732	20.0	22.7	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.141	-0.006	91	7872	20.0	18.1	
125 1,3,5-Trichlorobenzene	180	12.269	12.269	0.000	96	74193	20.0	22.9	
126 1,2,4-Trichlorobenzene	180	12.903	12.903	0.000	94	66055	20.0	22.4	
127 Hexachlorobutadiene	225	13.013	13.013	0.000	91	32542	20.0	23.5	
128 Naphthalene	128	13.196	13.196	0.000	99	158811	20.0	22.1	
129 1,2,3-Trichlorobenzene	180	13.488	13.488	0.000	94	64390	20.0	22.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	36.6	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.9	
S 132 Xylenes, Total	100				0		40.0	44.1	
S 133 Total BTEX	1				0		100.0	110.8	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 23-Apr-2018 17:12:30 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48921.D

Injection Date: 19-Apr-2018 19:25:30 Instrument ID: CVOAMS4 Operator ID:

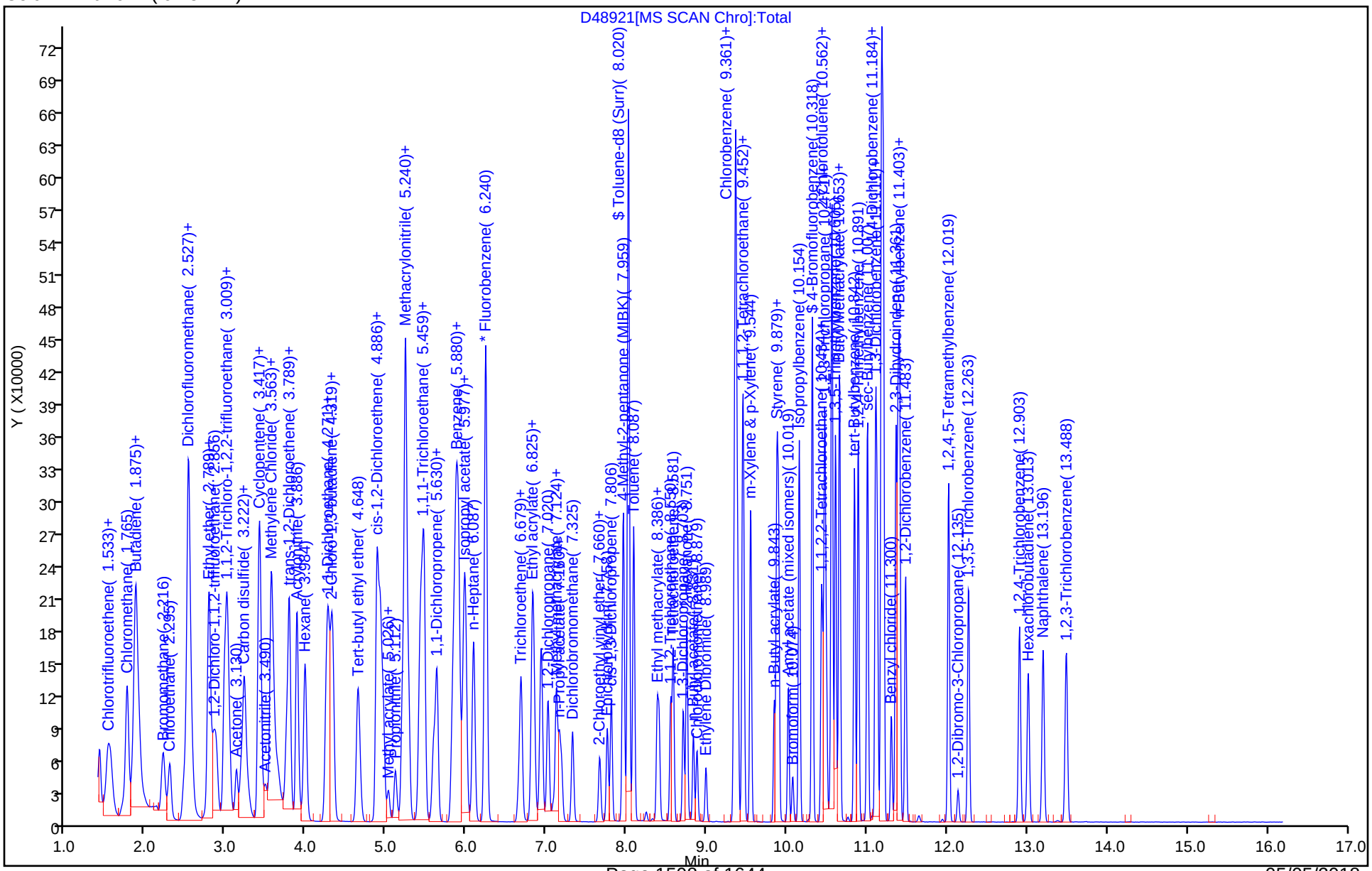
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

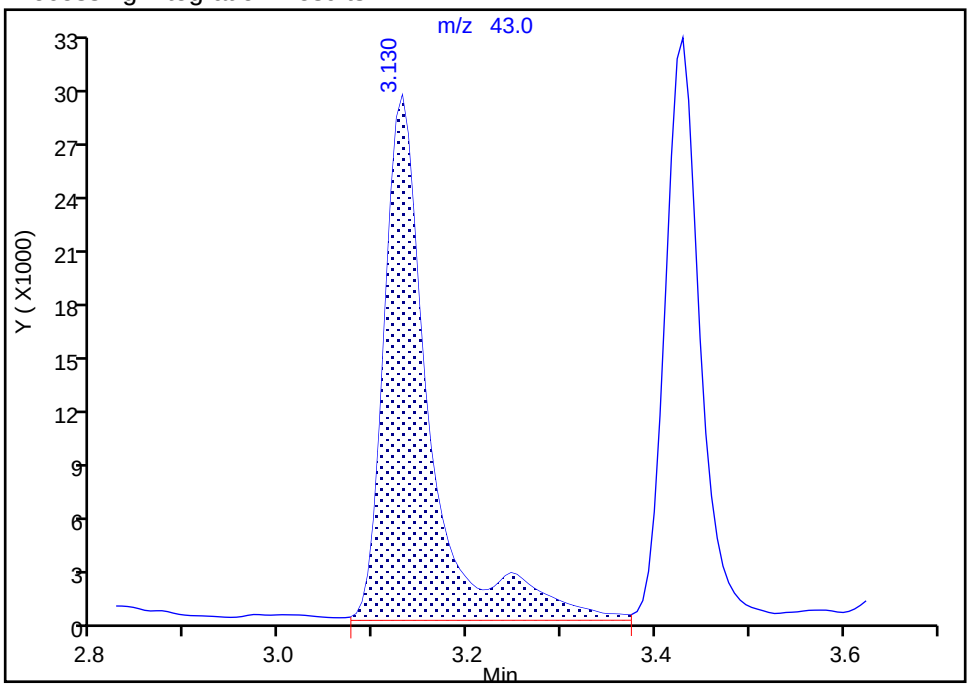
Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180419-70668.b\D48921.D
Injection Date: 19-Apr-2018 19:25:30 Instrument ID: CVOAMS4
Lims ID: LCSD
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

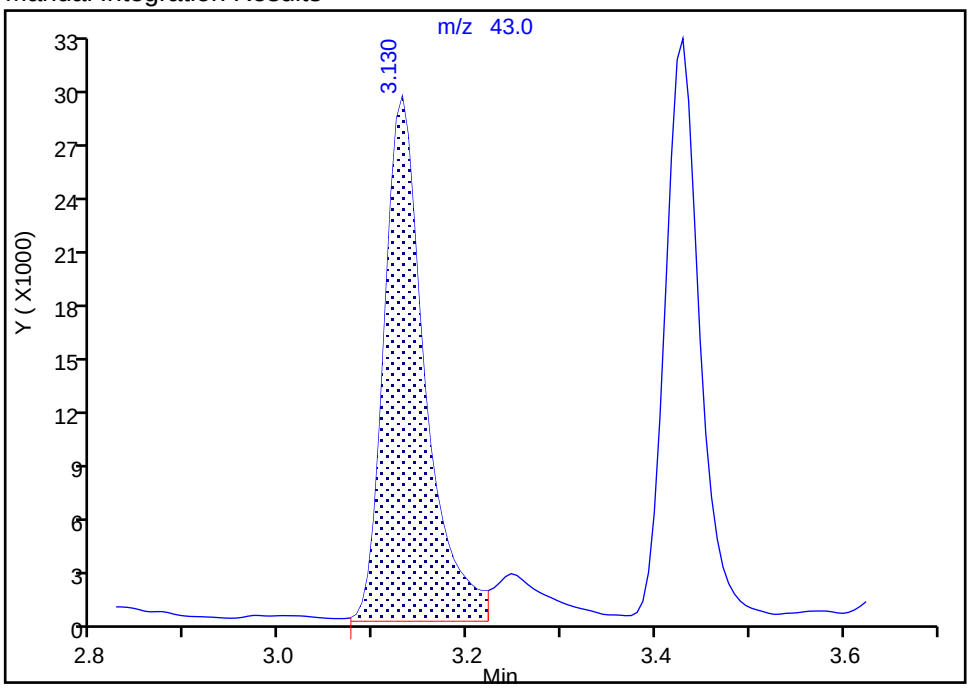
Processing Integration Results

RT: 3.13
Area: 98705
Amount: 94.907509
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 87690
Amount: 75.137749
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 17:11:55
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-512623/4

Matrix: Solid | Lab File ID: D48947.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/20/2018 07:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0178		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0213		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0191		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0207		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0187		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0187		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0205		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0207		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0165		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0205		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0165		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0185		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0215		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0215		0.0010	0.00010
123-91-1	1,4-Dioxane	0.400		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0774		0.0050	0.0011
591-78-6	2-Hexanone	0.0845		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0887		0.0050	0.00066
67-64-1	Acetone	0.0846		0.0050	0.0038
71-43-2	Benzene	0.0224		0.0010	0.00026
75-25-2	Bromoform	0.0145		0.0010	0.00043
74-83-9	Bromomethane	0.0196		0.0010	0.00047
75-15-0	Carbon disulfide	0.0173		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0172		0.0010	0.00018
108-90-7	Chlorobenzene	0.0205		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0172		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0166		0.0010	0.00019
75-00-3	Chloroethane	0.0195		0.0010	0.00052
67-66-3	Chloroform	0.0177		0.0010	0.00032
74-87-3	Chloromethane	0.0202		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0170		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0197		0.0010	0.00027
110-82-7	Cyclohexane	0.0203		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0167		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0153		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-512623/4

Matrix: Solid | Lab File ID: D48947.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/20/2018 07:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0215		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0194		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0218		0.0010	0.00013
79-20-9	Methyl acetate	0.0411		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0177		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0211		0.0010	0.00016
75-09-2	Methylene Chloride	0.0182		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0216		0.0010	0.00017
95-47-6	o-Xylene	0.0209		0.0010	0.000095
100-42-5	Styrene	0.0208		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0217		0.0010	0.00014
108-88-3	Toluene	0.0214		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0189		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0185		0.0010	0.00027
79-01-6	Trichloroethene	0.0182		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0164		0.0010	0.00041
75-01-4	Vinyl chloride	0.0196		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		78-135
460-00-4	4-Bromofluorobenzene	99		67-126
1868-53-7	Dibromofluoromethane (Surr)	80		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48947.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 20-Apr-2018 07:45:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070697-004
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\8260S_4.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 20-Apr-2018 13:59:17 Calib Date: 28-Mar-2018 19:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180328-69427.b\D47920a.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: tupayachia Date: 20-Apr-2018 08:03:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.527	1.527	0.000	75	57658	20.0	24.2	a
2 Dichlorodifluoromethane	85	1.564	1.564	0.000	98	123939	20.0	15.3	
3 Chloromethane	50	1.771	1.765	0.006	99	187659	20.0	20.2	
4 Vinyl chloride	62	1.868	1.868	0.000	98	158823	20.0	19.6	
5 Butadiene	54	1.881	1.881	0.000	95	141274	20.0	21.3	
6 Bromomethane	94	2.216	2.216	0.000	98	68659	20.0	19.6	
7 Chloroethane	64	2.295	2.295	0.000	99	69697	20.0	19.5	
9 Trichlorofluoromethane	101	2.509	2.509	0.000	97	104104	20.0	16.4	
8 Dichlorofluoromethane	67	2.527	2.527	0.000	97	161604	20.0	17.9	
10 Pentane	72	2.527	2.533	-0.006	98	28852	40.0	36.5	
12 Ethanol	46	2.759	2.765	-0.006	82	14700	800.0	1050.2	
11 Ethyl ether	59	2.771	2.777	-0.006	99	56835	20.0	18.6	
13 2-Methyl-1,3-butadiene	53	2.789	2.789	0.000	97	72922	20.0	21.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.856	2.868	-0.012	99	62289	20.0	19.0	
16 Acrolein	56	2.978	2.978	0.000	98	120871	300.0	288.7	
15 1,1,2-Trichloro-1,2,2-trif	101	3.008	3.002	0.006	92	77741	20.0	19.1	
17 1,1-Dichloroethene	96	3.015	3.015	0.000	95	70098	20.0	18.7	
18 Acetone	43	3.124	3.130	-0.006	86	102974	100.0	84.6	
19 Iodomethane	142	3.191	3.191	0.000	100	113495	20.0	16.7	
20 Carbon disulfide	76	3.222	3.228	-0.006	100	253266	20.0	17.3	
21 Isopropyl alcohol	45	3.252	3.258	-0.006	99	38484	200.0	198.4	
22 3-Chloro-1-propene	76	3.399	3.405	-0.006	86	42422	20.0	18.7	
23 Cyclopentene	67	3.417	3.417	0.000	90	182815	20.0	20.6	
24 Methyl acetate	43	3.423	3.429	-0.006	99	91684	40.0	41.1	
25 Acetonitrile	41	3.484	3.496	-0.012	97	63704	200.0	246.3	
26 Methylene Chloride	84	3.557	3.563	-0.006	96	78660	20.0	18.2	
* 27 TBA-d9 (IS)	65	3.569	3.575	-0.006	49	322316	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.655	3.661	-0.006	98	62360	200.0	189.9	
29 Methyl tert-butyl ether	73	3.758	3.758	0.000	97	170915	20.0	17.7	
30 trans-1,2-Dichloroethene	96	3.783	3.789	-0.006	98	69260	20.0	18.9	
31 Acrylonitrile	53	3.880	3.880	0.000	94	219520	200.0	247.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.978	3.984	-0.006	93	109570	20.0	22.5	
33 Isopropyl ether	45	4.246	4.252	-0.006	98	216914	20.0	19.9	
34 1,1-Dichloroethane	63	4.270	4.277	-0.006	99	123039	20.0	18.7	
35 Vinyl acetate	86	4.301	4.307	-0.006	100	19989	40.0	34.1	
36 2-Chloro-1,3-butadiene	88	4.325	4.331	-0.006	93	57743	20.0	19.1	
37 Tert-butyl ethyl ether	59	4.636	4.642	-0.006	88	181919	20.0	18.1	
* 38 2-Butanone-d5	46	4.868	4.874	-0.006	0	294162	250.0	250.0	
39 2,2-Dichloropropane	79	4.886	4.886	0.000	90	30560	20.0	17.7	
40 cis-1,2-Dichloroethene	96	4.917	4.917	0.000	95	69762	20.0	17.0	
41 2-Butanone (MEK)	72	4.941	4.947	-0.006	98	28695	100.0	77.4	
42 Ethyl acetate	70	4.953	4.959	-0.006	96	10509	40.0	32.5	
43 Methyl acrylate	55	5.014	5.020	-0.006	99	43501	20.0	19.1	
44 Propionitrile	54	5.100	5.106	-0.006	98	74896	200.0	186.5	
45 Tetrahydrofuran	72	5.185	5.191	-0.006	94	13512	40.0	34.6	
46 Chlorobromomethane	128	5.191	5.197	-0.006	97	28475	20.0	17.2	
47 Methacrylonitrile	67	5.228	5.234	-0.006	93	205506	200.0	174.9	
48 Chloroform	83	5.264	5.270	-0.006	98	107051	20.0	17.7	
49 Cyclohexane	84	5.410	5.417	-0.007	93	102540	20.0	20.3	
50 1,1,1-Trichloroethane	97	5.435	5.441	-0.006	98	89497	20.0	17.8	
$ 51 Dibromofluoromethane (Surr	113	5.459	5.465	-0.006	95	147558	50.0	39.8	
52 Carbon tetrachloride	117	5.581	5.587	-0.006	97	67399	20.0	17.2	
53 1,1-Dichloropropene	75	5.618	5.624	-0.006	96	82865	20.0	20.2	
54 Isobutyl alcohol	43	5.819	5.825	-0.006	26	104961	500.0	566.3	a
55 Benzene	78	5.862	5.868	-0.006	97	237649	20.0	22.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.886	5.892	-0.006	97	158360	50.0	40.7	
57 Tert-amyl methyl ether	87	5.959	5.965	-0.006	91	45084	20.0	16.4	
58 Isopropyl acetate	43	5.965	5.965	0.000	97	165869	20.0	17.7	
59 1,2-Dichloroethane	62	5.984	5.983	0.001	95	69066	20.0	16.5	
60 n-Heptane	57	6.075	6.081	-0.006	93	55244	20.0	21.5	
* 61 Fluorobenzene	96	6.227	6.233	-0.006	98	539658	50.0	50.0	
62 n-Butanol	56	6.642	6.642	0.000	88	29362	500.0	484.1	
63 Trichloroethene	95	6.666	6.672	-0.006	95	54616	20.0	18.2	
64 Methylcyclohexane	83	6.813	6.813	0.000	96	117787	20.0	21.1	
65 Ethyl acrylate	73	6.837	6.843	-0.006	96	3456	20.0	15.3	
66 1,2-Dichloropropane	63	7.002	7.008	-0.006	91	57045	20.0	18.5	
* 67 1,4-Dioxane-d8	96	7.069	7.075	-0.006	0	21391	1000.0	1000.0	
68 Methyl methacrylate	100	7.111	7.111	0.000	89	19523	40.0	31.0	
69 1,4-Dioxane	88	7.130	7.136	-0.006	89	8898	400.0	399.7	
70 Dibromomethane	93	7.142	7.148	-0.006	93	31366	20.0	16.3	
71 n-Propyl acetate	43	7.172	7.178	-0.006	99	59343	20.0	18.1	
72 Dichlorobromomethane	83	7.313	7.313	0.001	99	62093	20.0	16.7	
73 2-Nitropropane	41	7.642	7.648	-0.006	96	16359	40.0	23.4	
74 2-Chloroethyl vinyl ether	63	7.654	7.654	0.000	96	20150	20.0	16.7	
75 Epichlorohydrin	57	7.745	7.745	0.000	99	84104	400.0	336.2	
76 cis-1,3-Dichloropropene	75	7.794	7.800	-0.006	93	70593	20.0	19.7	
77 4-Methyl-2-pentanone (MIBK	43	7.947	7.947	0.000	98	222655	100.0	88.7	
$ 78 Toluene-d8 (Surr)	98	8.008	8.014	-0.006	98	503122	50.0	49.6	
79 Toluene	91	8.075	8.081	-0.006	93	215892	20.0	21.4	
80 trans-1,3-Dichloropropene	75	8.367	8.373	-0.006	99	53839	20.0	18.5	
81 Ethyl methacrylate	69	8.392	8.398	-0.006	93	51356	20.0	17.1	
82 1,1,2-Trichloroethane	83	8.538	8.538	0.000	96	33747	20.0	20.7	
83 Tetrachloroethene	166	8.568	8.568	0.000	95	46429	20.0	21.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.696	8.696	0.000	93	61544	20.0	20.8	
85 2-Hexanone	43	8.739	8.739	0.000	97	130394	100.0	84.5	
86 n-Butyl acetate	73	8.824	8.824	0.000	99	10460	20.0	19.4	
87 Chlorodibromomethane	129	8.867	8.867	0.000	97	32981	20.0	16.6	
88 Ethylene Dibromide	107	8.977	8.983	-0.006	98	34041	20.0	19.4	
* 89 Chlorobenzene-d5	117	9.349	9.355	-0.006	89	329159	50.0	50.0	
90 Chlorobenzene	112	9.373	9.373	0.000	92	117479	20.0	20.5	
91 Ethylbenzene	106	9.440	9.440	0.000	99	69606	20.0	21.5	
92 1,1,1,2-Tetrachloroethane	131	9.452	9.452	0.000	96	41110	20.0	18.0	
93 m-Xylene & p-Xylene	106	9.538	9.538	0.000	99	84397	20.0	21.6	
94 n-Butyl acrylate	73	9.830	9.836	-0.006	97	28155	20.0	19.4	
95 o-Xylene	106	9.867	9.867	0.000	93	85081	20.0	20.9	
96 Styrene	104	9.885	9.885	0.000	94	131517	20.0	20.8	
97 Amyl acetate (mixed isomer	43	10.007	10.007	0.000	90	72054	20.0	22.2	
98 Bromoform	173	10.062	10.062	0.000	94	17780	20.0	14.5	
99 Isopropylbenzene	105	10.141	10.147	-0.006	96	234331	20.0	21.8	
$ 100 4-Bromofluorobenzene	174	10.306	10.312	-0.006	0	124893	50.0	49.4	
101 Bromobenzene	156	10.422	10.422	0.000	97	46100	20.0	20.9	
102 1,1,2,2-Tetrachloroethane	83	10.434	10.440	-0.006	99	52752	20.0	21.3	
103 N-Propylbenzene	91	10.464	10.464	0.000	98	285327	20.0	23.4	
104 1,2,3-Trichloropropane	110	10.483	10.483	0.000	95	13237	20.0	21.0	
105 trans-1,4-Dichloro-2-buten	53	10.489	10.489	0.000	82	12894	20.0	21.6	
106 4-Ethyltoluene	105	10.550	10.550	0.000	98	227905	20.0	22.8	
107 2-Chlorotoluene	91	10.556	10.556	0.000	96	189455	20.0	22.4	
108 1,3,5-Trimethylbenzene	105	10.598	10.598	0.000	92	192022	20.0	22.5	
109 4-Chlorotoluene	91	10.641	10.647	-0.006	98	154399	20.0	22.0	
110 Butyl Methacrylate	87	10.653	10.653	0.000	94	58538	20.0	20.2	
111 tert-Butylbenzene	119	10.836	10.836	0.000	93	153046	20.0	22.7	
112 1,2,4-Trimethylbenzene	105	10.879	10.885	-0.006	98	192752	20.0	21.7	
113 sec-Butylbenzene	105	10.995	10.995	0.000	99	258213	20.0	22.9	
114 4-Isopropyltoluene	119	11.098	11.098	0.000	98	205483	20.0	22.3	
115 1,3-Dichlorobenzene	146	11.117	11.123	-0.006	95	94512	20.0	21.5	
* 116 1,4-Dichlorobenzene-d4	152	11.172	11.172	0.000	97	162538	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.190	11.190	0.000	92	96293	20.0	21.5	
118 Benzyl chloride	126	11.293	11.293	0.000	98	13113	20.0	16.4	
119 2,3-Dihydroindene	117	11.348	11.354	-0.006	94	198749	20.0	16.8	
120 p-Diethylbenzene	119	11.379	11.379	0.000	93	127220	20.0	22.9	
121 n-Butylbenzene	92	11.397	11.397	0.000	97	118413	20.0	22.8	
122 1,2-Dichlorobenzene	146	11.470	11.470	0.000	94	90783	20.0	20.5	
123 1,2,4,5-Tetramethylbenzene	119	12.007	12.007	0.000	97	176326	20.0	20.6	
124 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	91	7654	20.0	16.5	
125 1,3,5-Trichlorobenzene	180	12.257	12.257	0.000	96	73534	20.0	21.4	
126 1,2,4-Trichlorobenzene	180	12.891	12.891	0.000	94	64714	20.0	20.7	
127 Hexachlorobutadiene	225	13.000	13.000	0.000	90	30294	20.0	20.6	
128 Naphthalene	128	13.183	13.189	-0.006	99	153746	20.0	20.2	
129 1,2,3-Trichlorobenzene	180	13.470	13.476	-0.006	94	61753	20.0	20.5	
S 130 1,2-Dichloroethene, Total	100				0		40.0	35.8	
S 131 1,3-Dichloropropene, Total	100				0		40.0	38.1	
S 132 Xylenes, Total	100				0		40.0	42.5	
S 133 Total BTEX	1				0		100.0	107.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 20-Apr-2018 13:59:37 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180420-70697.b\D48947.D

Injection Date: 20-Apr-2018 07:45:30 Instrument ID: CVOAMS4 Operator ID:

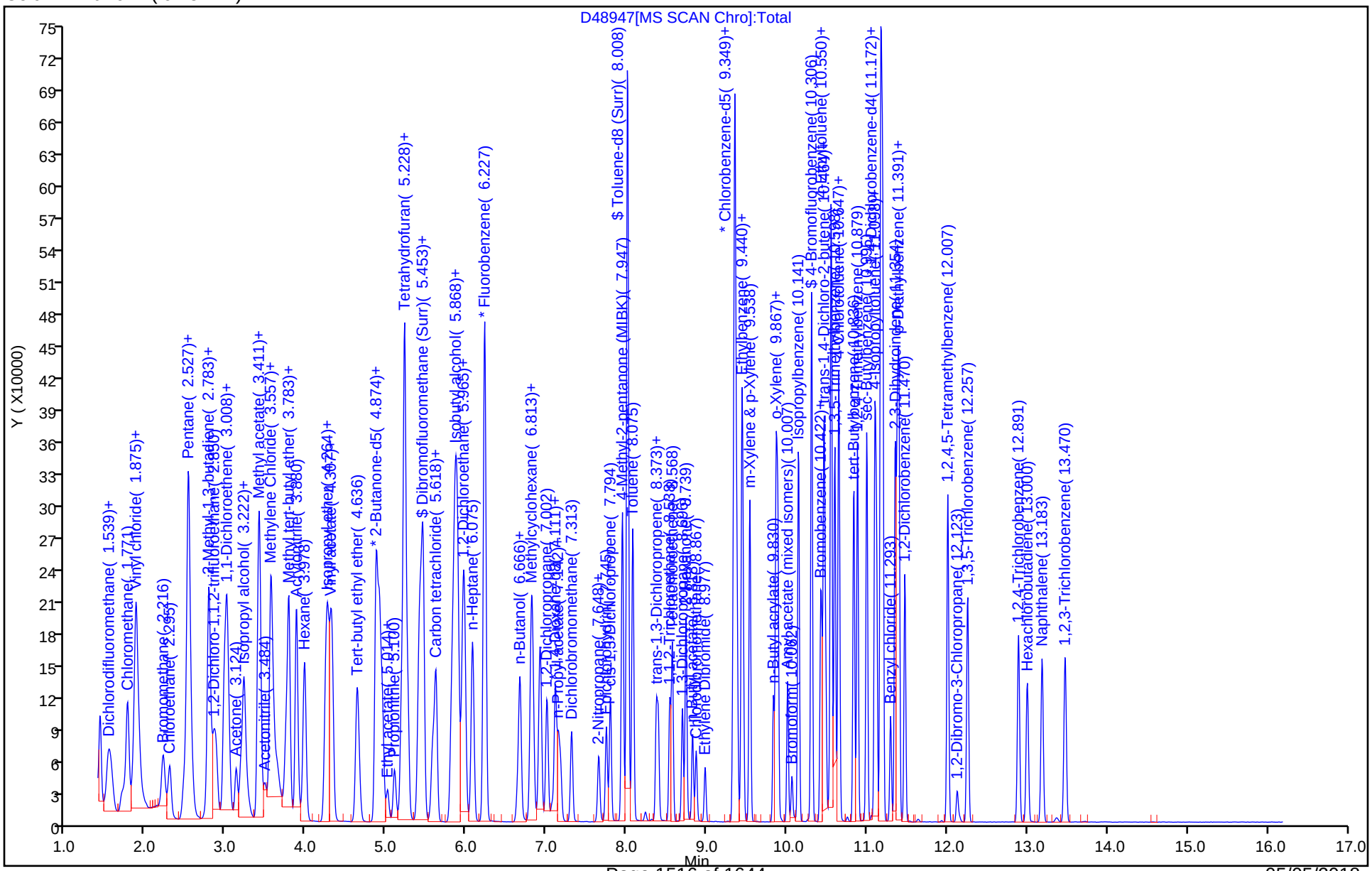
Lims ID: LCSD Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S_4 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-513435/4

Matrix: Solid | Lab File ID: K82437.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/23/2018 18:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0200		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0210		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0182		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0198		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0200		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0195		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0197		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0192		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0200		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0200		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0193		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0197		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0198		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0195		0.0010	0.00010
123-91-1	1,4-Dioxane	0.452		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0939		0.0050	0.0011
591-78-6	2-Hexanone	0.0933		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0957		0.0050	0.00066
67-64-1	Acetone	0.0926		0.0050	0.0038
71-43-2	Benzene	0.0203		0.0010	0.00026
75-25-2	Bromoform	0.0201		0.0010	0.00043
74-83-9	Bromomethane	0.0166		0.0010	0.00047
75-15-0	Carbon disulfide	0.0192		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0199		0.0010	0.00018
108-90-7	Chlorobenzene	0.0197		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0205		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0198		0.0010	0.00019
75-00-3	Chloroethane	0.0175		0.0010	0.00052
67-66-3	Chloroform	0.0202		0.0010	0.00032
74-87-3	Chloromethane	0.0159		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0198		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0191		0.0010	0.00027
110-82-7	Cyclohexane	0.0184		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0197		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0114		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-513435/4

Matrix: Solid | Lab File ID: K82437.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/23/2018 18:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0205		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0200		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0205		0.0010	0.00013
79-20-9	Methyl acetate	0.0373		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0190		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0186		0.0010	0.00016
75-09-2	Methylene Chloride	0.0193		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0202		0.0010	0.00017
95-47-6	o-Xylene	0.0202		0.0010	0.000095
100-42-5	Styrene	0.0199		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0207		0.0010	0.00014
108-88-3	Toluene	0.0200		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0199		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0186		0.0010	0.00027
79-01-6	Trichloroethene	0.0198		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0181		0.0010	0.00041
75-01-4	Vinyl chloride	0.0174		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		78-135
460-00-4	4-Bromofluorobenzene	101		67-126
1868-53-7	Dibromofluoromethane (Surr)	101		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82437.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 23-Apr-2018 18:16:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0070876-004
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 24-Apr-2018 12:10:37 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: colladox Date: 23-Apr-2018 18:41:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.614	1.602	0.012	87	51902	20.0	12.6	
2 Dichlorodifluoromethane	85	1.639	1.632	0.007	99	97085	20.0	11.4	
3 Chloromethane	50	1.809	1.803	0.006	99	90250	20.0	15.9	
5 Butadiene	54	1.919	1.913	0.006	96	74691	20.0	17.2	
4 Vinyl chloride	62	1.919	1.913	0.006	98	98938	20.0	17.4	
6 Bromomethane	94	2.218	2.212	0.006	98	78610	20.0	16.6	
7 Chloroethane	64	2.285	2.279	0.006	100	50014	20.0	17.5	
9 Dichlorofluoromethane	67	2.480	2.468	0.012	99	147680	20.0	17.7	
8 Trichlorofluoromethane	101	2.480	2.474	0.006	97	134138	20.0	18.1	
10 Pentane	72	2.504	2.504	0.000	98	21046	40.0	31.5	
11 Ethyl ether	59	2.705	2.699	0.006	92	47363	20.0	19.1	
12 Ethanol	46	2.712	2.705	0.007	74	14238	800.0	619.0	
13 2-Methyl-1,3-butadiene	53	2.730	2.724	0.006	96	56167	20.0	19.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.766	2.754	0.012	89	75892	20.0	20.7	
15 Acrolein	56	2.888	2.882	0.006	96	120602	300.0	221.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.901	2.894	0.007	99	88324	20.0	18.2	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	97	72964	20.0	19.5	
18 Acetone	43	3.010	3.010	0.000	87	101631	100.0	92.6	
19 Iodomethane	142	3.090	3.083	0.007	98	158197	20.0	19.8	
22 Isopropyl alcohol	45	3.102	3.114	-0.012	1	53471	200.0	189.3	a
20 Carbon disulfide	76	3.126	3.120	0.006	99	268205	20.0	19.2	
21 3-Chloro-1-propene	76	3.248	3.248	0.000	96	45220	20.0	20.4	
23 Methyl acetate	43	3.254	3.254	0.000	98	92354	40.0	37.3	
24 Cyclopentene	67	3.272	3.266	0.006	93	163212	20.0	19.8	
29 Acetonitrile	41	3.248	3.321	-0.073	73	120843	200.0	198.0	
26 Methylene Chloride	84	3.382	3.376	0.006	89	82559	20.0	19.3	
* 25 TBA-d9 (IS)	65	3.382	3.382	0.000	0	366942	1000.0	1000.0	
27 2-Methyl-2-propanol	59	3.449	3.437	0.012	91	101977	200.0	185.1	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	96	198910	20.0	19.0	
30 trans-1,2-Dichloroethene	96	3.577	3.571	0.006	92	81180	20.0	19.9	
31 Acrylonitrile	53	3.644	3.644	0.000	94	249754	200.0	221.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.724	0.000	93	61030	20.0	19.4	
33 Isopropyl ether	45	3.937	3.931	0.006	95	211693	20.0	19.1	
34 1,1-Dichloroethane	63	3.980	3.980	0.000	74	129671	20.0	20.0	
35 Vinyl acetate	86	3.986	3.986	0.000	100	23737	40.0	36.2	
36 2-Chloro-1,3-butadiene	88	4.028	4.028	0.000	90	68578	20.0	20.8	
37 Tert-butyl ethyl ether	59	4.260	4.254	0.006	90	198561	20.0	18.6	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	223206	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.492	-0.006	93	40289	20.0	19.4	
41 Ethyl acetate	70	4.522	4.510	0.012	89	13454	40.0	36.1	
40 cis-1,2-Dichloroethene	96	4.516	4.510	0.006	75	89823	20.0	19.8	
42 2-Butanone (MEK)	72	4.516	4.522	-0.006	96	40939	100.0	93.9	
44 Methyl acrylate	55	4.571	4.571	0.000	99	49856	20.0	19.7	
43 Propionitrile	54	4.656	4.656	0.000	98	97249	200.0	189.7	
45 Tetrahydrofuran	72	4.742	4.742	0.000	68	20338	40.0	38.6	
46 Chlorobromomethane	128	4.748	4.748	0.000	69	46737	20.0	20.5	
47 Methacrylonitrile	67	4.760	4.760	0.000	91	268351	200.0	214.5	
48 Chloroform	83	4.790	4.790	0.000	99	137163	20.0	20.2	
49 Cyclohexane	84	4.937	4.937	0.000	90	121738	20.0	18.4	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	96	131034	20.0	20.0	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	97	185370	50.0	50.7	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	114143	20.0	19.9	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	97	101274	20.0	20.3	
56 Isobutyl alcohol	74	5.205	5.211	-0.006	86	7857	500.0	421.1	
54 Benzene	78	5.296	5.296	0.000	95	289637	20.0	20.3	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.309	0.006	0	165096	50.0	48.6	
57 Isopropyl acetate	43	5.339	5.339	0.000	96	182854	20.0	19.5	
58 Tert-amyl methyl ether	87	5.351	5.351	0.000	94	63919	20.0	19.7	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	97	85003	20.0	19.3	
60 n-Heptane	57	5.443	5.437	0.006	92	60960	20.0	19.0	
* 61 Fluorobenzene	96	5.589	5.583	0.006	100	456467	50.0	50.0	
62 n-Butanol	56	5.869	5.869	0.000	89	48894	500.0	425.1	
63 Trichloroethene	95	5.949	5.949	0.000	96	77547	20.0	19.8	
65 Methylcyclohexane	83	6.077	6.077	0.000	93	148912	20.0	18.6	
64 Ethyl acrylate	56	6.077	6.077	0.000	98	45954	20.0	20.1	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	94	68312	20.0	19.7	
* 67 1,4-Dioxane-d8	96	6.296	6.296	0.000	0	30097	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	87	100318	40.0	42.4	
70 n-Propyl acetate	43	6.345	6.351	-0.006	98	76842	20.0	19.9	
69 1,4-Dioxane	88	6.339	6.351	-0.012	27	18731	400.0	452.4	
71 Dibromomethane	93	6.375	6.375	0.000	96	45969	20.0	19.8	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	93748	20.0	19.7	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	79	33422	20.0	19.5	
74 2-Nitropropane	41	6.851	6.851	0.000	81	23319	40.0	38.6	
75 Epichlorohydrin	57	6.961	6.967	-0.006	99	125166	400.0	376.5	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	91	99344	20.0	19.1	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	317238	100.0	95.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	621671	50.0	50.1	
79 Toluene	91	7.351	7.351	0.000	93	302387	20.0	20.0	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	83690	20.0	18.6	
81 Ethyl methacrylate	69	7.711	7.717	-0.006	88	72805	20.0	20.0	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	49339	20.0	19.8	
83 Tetrachloroethene	166	7.973	7.973	0.000	97	87915	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.131	0.000	89	87543	20.0	19.0	
85 2-Hexanone	43	8.180	8.180	0.000	95	197078	100.0	93.3	
86 n-Butyl acetate	43	8.290	8.290	0.000	99	82728	20.0	20.2	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	71923	20.0	19.8	
88 Ethylene Dibromide	107	8.534	8.534	0.000	98	61935	20.0	20.0	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	83	405076	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	98	198786	20.0	19.7	
92 Ethylbenzene	106	9.204	9.204	0.000	97	112950	20.0	20.5	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.229	0.000	95	79564	20.0	19.7	
93 m-Xylene & p-Xylene	106	9.351	9.357	-0.007	0	135547	20.0	20.2	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	43593	20.0	20.3	
95 o-Xylene	106	9.820	9.820	0.000	95	141852	20.0	20.2	
96 Styrene	104	9.850	9.850	0.000	97	218182	20.0	19.9	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	93101	20.0	19.7	
98 Bromoform	173	10.088	10.088	0.000	98	47529	20.0	20.1	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	385663	20.0	20.5	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	96	203446	50.0	50.7	
101 Bromobenzene	156	10.564	10.564	0.000	90	93393	20.0	19.3	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	88491	20.0	21.0	
103 N-Propylbenzene	91	10.631	10.631	0.000	100	437874	20.0	20.2	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	94	25139	20.0	20.7	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	89	18990	20.0	19.8	
107 4-Ethyltoluene	105	10.740	10.740	0.000	90	374452	20.0	20.6	
106 2-Chlorotoluene	91	10.740	10.740	0.000	90	287359	20.0	19.8	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	320057	20.0	20.0	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	240771	20.0	19.5	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	86437	20.0	19.3	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	257465	20.0	19.1	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	329316	20.0	19.9	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	424001	20.0	19.7	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	379446	20.0	19.9	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	186904	20.0	19.8	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	92	246535	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	184641	20.0	19.5	
118 Benzyl chloride	91	11.667	11.667	0.000	99	150889	20.0	20.6	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	338349	20.0	20.0	
120 p-Diethylbenzene	119	11.777	11.777	0.000	95	211284	20.0	20.2	
121 n-Butylbenzene	92	11.801	11.795	0.006	97	197164	20.0	20.2	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	187227	20.0	20.0	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	359173	20.0	19.3	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.527	0.000	93	17365	20.0	20.0	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	166286	20.0	20.2	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	95	154422	20.0	19.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	95	75914	20.0	19.4	
128 Naphthalene	128	13.331	13.331	0.000	99	369888	20.0	20.2	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	153882	20.0	19.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.7	
S 131 Xylenes, Total	100				0		40.0	40.3	
S 132 Total BTEX	1				0		100.0	101.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00078	Amount Added:	2.00	Units: uL	
ACROLEIN W_00076	Amount Added:	3.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 24-Apr-2018 12:10:56 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180423-70876.b\K82437.D

Injection Date: 23-Apr-2018 18:16:30 Instrument ID: CVOAMS9 Operator ID:

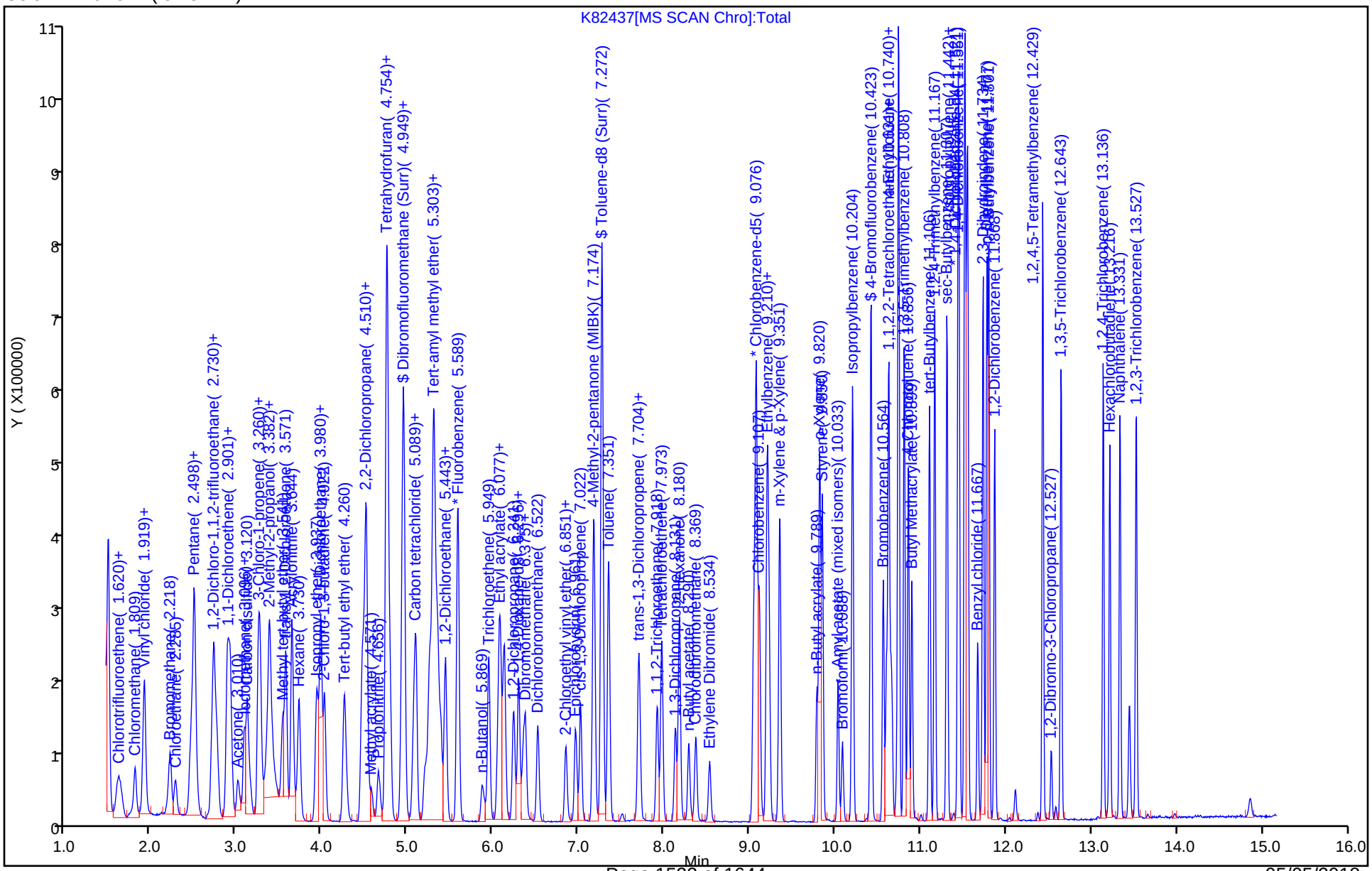
Lims ID: LCSD Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 MS | Lab Sample ID: 460-152211-2 MS

Matrix: Solid | Lab File ID: K81020.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.847(g) | Date Analyzed: 03/21/2018 03:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0157		0.00093	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.0142		0.00093	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0154		0.00093	0.00028
79-00-5	1,1,2-Trichloroethane	0.0140		0.00093	0.00017
75-34-3	1,1-Dichloroethane	0.0179		0.00093	0.00019
75-35-4	1,1-Dichloroethene	0.0147		0.00093	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.0125		0.00093	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.0133		0.00093	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.0124		0.00093	0.00043
95-50-1	1,2-Dichlorobenzene	0.0136		0.00093	0.00013
107-06-2	1,2-Dichloroethane	0.0150		0.00093	0.00027
78-87-5	1,2-Dichloropropane	0.0166		0.00093	0.00039
541-73-1	1,3-Dichlorobenzene	0.0136		0.00093	0.00015
106-46-7	1,4-Dichlorobenzene	0.0135		0.00093	0.000093
123-91-1	1,4-Dioxane	0.226		0.019	0.0085
78-93-3	2-Butanone (MEK)	0.0527		0.0046	0.0010
591-78-6	2-Hexanone	0.0680		0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0722		0.0046	0.00062
67-64-1	Acetone	0.0775		0.0046	0.0035
71-43-2	Benzene	0.0167		0.00093	0.00024
75-25-2	Bromoform	0.0121		0.00093	0.00039
74-83-9	Bromomethane	0.0162		0.00093	0.00044
75-15-0	Carbon disulfide	0.0169		0.00093	0.00025
56-23-5	Carbon tetrachloride	0.0151		0.00093	0.00017
108-90-7	Chlorobenzene	0.0134		0.00093	0.00016
74-97-5	Chlorobromomethane	0.0140		0.00093	0.00026
124-48-1	Chlorodibromomethane	0.0123		0.00093	0.00018
75-00-3	Chloroethane	0.0185		0.00093	0.00048
67-66-3	Chloroform	0.0161		0.00093	0.00030
74-87-3	Chloromethane	0.0201		0.00093	0.00040
156-59-2	cis-1,2-Dichloroethene	0.0150		0.00093	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.0146		0.00093	0.00025
110-82-7	Cyclohexane	0.0151		0.00093	0.00021
75-27-4	Dichlorobromomethane	0.0146		0.00093	0.00024

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 MS | Lab Sample ID: 460-152211-2 MS

Matrix: Solid | Lab File ID: K81020.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.847(g) | Date Analyzed: 03/21/2018 03:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	0.0163		0.00093	0.00031
100-41-4	Ethylbenzene	0.0140		0.00093	0.00018
106-93-4	Ethylene Dibromide	0.0124		0.00093	0.00017
98-82-8	Isopropylbenzene	0.0138		0.00093	0.00012
79-20-9	Methyl acetate	0.0904		0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.0142		0.00093	0.00012
108-87-2	Methylcyclohexane	0.0151		0.00093	0.00015
75-09-2	Methylene Chloride	0.0174		0.00093	0.00015
179601-23-1	m-Xylene & p-Xylene	0.0144		0.00093	0.00016
95-47-6	o-Xylene	0.0141		0.00093	0.000088
100-42-5	Styrene	0.0137		0.00093	0.00011
127-18-4	Tetrachloroethene	0.0139		0.00093	0.00013
108-88-3	Toluene	0.0148		0.00093	0.00058
156-60-5	trans-1,2-Dichloroethene	0.0159		0.00093	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.0145		0.00093	0.00025
79-01-6	Trichloroethene	0.0152		0.00093	0.00013
75-69-4	Trichlorofluoromethane	0.0172		0.00093	0.00038
75-01-4	Vinyl chloride	0.0194		0.00093	0.00051

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		78-135
460-00-4	4-Bromofluorobenzene	108		67-126
1868-53-7	Dibromofluoromethane (Surr)	114		61-149
2037-26-5	Toluene-d8 (Surr)	108		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81020.D
Lims ID: 460-152211-B-2-B MS
Client ID: GC-SB-101(SO)-15.5-17.5
Sample Type: MS
Inject. Date: 21-Mar-2018 03:08:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152211-B-2-B MS
Misc. Info.: 460-0069055-012
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Mar-2018 17:14:28 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: moroneyc Date: 21-Mar-2018 10:35:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.602	1.590	0.012	88	10782	20.0	17.6	
2 Dichlorodifluoromethane	85	1.639	1.626	0.013	99	76466	20.0	17.6	
3 Chloromethane	50	1.809	1.791	0.018	99	67996	20.0	21.7	
4 Vinyl chloride	62	1.913	1.901	0.012	94	69212	20.0	20.9	
5 Butadiene	54	1.913	1.907	0.006	96	50651	20.0	21.4	
6 Bromomethane	94	2.212	2.199	0.013	97	49506	20.0	17.4	
7 Chloroethane	64	2.279	2.266	0.013	99	32864	20.0	19.9	
9 Dichlorofluoromethane	67	2.474	2.462	0.012	98	102837	20.0	19.3	
8 Trichlorofluoromethane	101	2.474	2.468	0.006	61	98499	20.0	18.5	
10 Pentane	72	2.504	2.498	0.006	95	13630	40.0	33.5	
12 Ethanol	46	2.699	2.687	0.012	79	4277	800.0	509.9	
11 Ethyl ether	59	2.705	2.693	0.012	90	28659	20.0	17.1	
13 2-Methyl-1,3-butadiene	53	2.724	2.718	0.006	99	35089	20.0	18.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.748	0.012	92	42006	20.0	16.6	
15 Acrolein	56	2.882	2.876	0.006	97	74601	300.0	249.6	
16 1,1,2-Trichloro-1,2,2-trif	101	2.901	2.882	0.019	96	55415	20.0	16.6	
17 1,1-Dichloroethene	96	2.919	2.913	0.006	98	41505	20.0	15.9	
18 Acetone	43	3.016	3.004	0.012	84	71899	100.0	83.5	
19 Iodomethane	142	3.090	3.077	0.013	100	84821	20.0	15.1	
22 Isopropyl alcohol	45	3.096	3.089	0.007	35	21049	200.0	140.8	a
20 Carbon disulfide	76	3.120	3.114	0.006	99	154670	20.0	18.2	
21 3-Chloro-1-propene	76	3.242	3.236	0.006	94	25393	20.0	18.0	
23 Methyl acetate	43	3.254	3.248	0.006	100	132852	100.0	97.4	
24 Cyclopentene	67	3.272	3.266	0.006	91	97355	20.0	18.1	
29 Acetonitrile	41	3.315	3.309	0.006	92	40430	200.0	140.9	a
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	237621	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	91	55778	20.0	18.7	
27 2-Methyl-2-propanol	59	3.449	3.443	0.006	99	50710	200.0	149.0	
28 Methyl tert-butyl ether	73	3.535	3.528	0.007	97	111662	20.0	15.3	
30 trans-1,2-Dichloroethene	96	3.571	3.565	0.006	97	44832	20.0	17.1	
31 Acrylonitrile	53	3.638	3.632	0.006	92	124076	200.0	173.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.717	0.007	96	37786	20.0	22.4	
33 Isopropyl ether	45	3.937	3.925	0.012	96	137070	20.0	21.1	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	87	79944	20.0	19.3	
35 Vinyl acetate	86	3.986	3.973	0.013	100	9265	40.0	21.1	
36 2-Chloro-1,3-butadiene	88	4.028	4.016	0.012	92	37045	20.0	17.7	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	88	125454	20.0	17.8	
* 38 2-Butanone-d5	46	4.461	4.449	0.012	0	183114	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.479	0.007	97	22932	20.0	16.4	
41 Ethyl acetate	70	4.516	4.498	0.018	84	5183	40.0	18.3	
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	79	50238	20.0	16.2	
42 2-Butanone (MEK)	72	4.516	4.504	0.012	95	18778	100.0	56.8	
44 Methyl acrylate	55	4.571	4.565	0.006	99	28470	20.0	16.4	
43 Propionitrile	54	4.656	4.644	0.012	98	48146	200.0	139.2	
45 Tetrahydrofuran	72	4.742	4.729	0.013	63	10402	40.0	26.0	
46 Chlorobromomethane	128	4.742	4.735	0.007	74	24899	20.0	15.1	
47 Methacrylonitrile	67	4.754	4.748	0.006	95	127461	200.0	149.3	
48 Chloroform	83	4.790	4.784	0.006	99	85739	20.0	17.4	
49 Cyclohexane	84	4.937	4.931	0.006	93	64715	20.0	16.3	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	92	79177	20.0	16.9	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	97	153732	50.0	57.2	
52 Carbon tetrachloride	117	5.071	5.065	0.006	96	68116	20.0	16.3	
53 1,1-Dichloropropene	75	5.095	5.089	0.006	96	58101	20.0	18.2	
56 Isobutyl alcohol	74	5.199	5.193	0.006	1	3265	500.0	272.6	a
54 Benzene	78	5.296	5.290	0.006	95	164806	20.0	17.9	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.302	0.007	0	156254	50.0	58.7	
57 Isopropyl acetate	43	5.333	5.327	0.006	95	109518	20.0	16.7	
58 Tert-amyl methyl ether	73	5.351	5.339	0.012	96	126154	20.0	16.5	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	98	57241	20.0	16.2	
60 n-Heptane	57	5.437	5.437	0.000	94	32433	20.0	18.2	
* 61 Fluorobenzene	96	5.583	5.577	0.006	98	390713	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	88	20004	500.0	293.0	
63 Trichloroethene	95	5.943	5.943	0.000	99	44566	20.0	16.4	
64 Ethyl acrylate	56	6.065	6.071	-0.006	99	23249	20.0	17.2	M
65 Methylcyclohexane	83	6.077	6.071	0.006	95	77094	20.0	16.3	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	89	39740	20.0	17.8	
* 67 1,4-Dioxane-d8	96	6.278	6.278	0.000	0	16993	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	91	48648	40.0	28.8	
69 1,4-Dioxane	88	6.339	6.339	0.000	27	7384	400.0	243.4	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	42849	20.0	17.2	
71 Dibromomethane	93	6.375	6.369	0.006	96	25555	20.0	15.1	
72 Dichlorobromomethane	83	6.522	6.516	0.006	99	54984	20.0	15.7	
73 2-Chloroethyl vinyl ether	63	6.845	6.839	0.006	70	16121	20.0	16.5	
74 2-Nitropropane	41	6.845	6.845	0.000	82	14377	40.0	24.7	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	61509	400.0	245.4	
76 cis-1,3-Dichloropropene	75	7.022	7.016	0.006	94	58153	20.0	15.7	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	98	175798	100.0	77.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.265	0.007	98	501051	50.0	53.8	
79 Toluene	91	7.345	7.345	0.000	92	172119	20.0	15.9	
80 trans-1,3-Dichloropropene	75	7.698	7.692	0.006	97	50491	20.0	15.6	
81 Ethyl methacrylate	69	7.711	7.704	0.007	91	38262	20.0	15.4	
82 1,1,2-Trichloroethane	83	7.918	7.912	0.006	95	27083	20.0	15.1	
83 Tetrachloroethene	166	7.967	7.967	0.000	97	47135	20.0	15.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.125	0.006	95	50487	20.0	15.8	
85 2-Hexanone	43	8.174	8.174	0.000	99	107182	100.0	73.2	
86 n-Butyl acetate	43	8.290	8.284	0.006	98	47617	20.0	18.4	
87 Chlorodibromomethane	129	8.363	8.363	0.000	98	39732	20.0	13.2	
88 Ethylene Dibromide	107	8.528	8.521	0.007	99	31398	20.0	13.4	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	85	321892	50.0	50.0	
90 Chlorobenzene	112	9.113	9.107	0.006	95	106042	20.0	14.4	
92 Ethylbenzene	106	9.204	9.198	0.006	99	55639	20.0	15.1	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.222	0.007	94	45046	20.0	14.4	
93 m-Xylene & p-Xylene	106	9.351	9.344	0.006	0	69906	20.0	15.5	
94 n-Butyl acrylate	73	9.789	9.783	0.006	95	22009	20.0	14.9	
95 o-Xylene	106	9.820	9.814	0.006	91	71002	20.0	15.2	
96 Styrene	104	9.850	9.844	0.006	94	110635	20.0	14.8	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	89	55570	20.0	18.3	
98 Bromoform	173	10.082	10.082	0.000	96	27039	20.0	13.0	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	207837	20.0	14.9	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	170556	50.0	53.8	
101 Bromobenzene	156	10.564	10.557	0.007	95	50952	20.0	14.1	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	46767	20.0	15.3	
103 N-Propylbenzene	91	10.625	10.625	0.000	98	243460	20.0	16.6	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	12914	20.0	13.0	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	81	11486	20.0	15.7	
107 4-Ethyltoluene	105	10.740	10.740	0.000	89	202700	20.0	15.5	
106 2-Chlorotoluene	91	10.740	10.740	0.000	91	164535	20.0	15.7	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	93	172787	20.0	14.9	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	140379	20.0	15.9	
110 Butyl Methacrylate	87	10.899	10.899	0.000	94	45661	20.0	14.8	
111 tert-Butylbenzene	119	11.106	11.100	0.006	94	136313	20.0	13.4	
112 1,2,4-Trimethylbenzene	105	11.167	11.161	0.006	97	175128	20.0	14.6	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	224197	20.0	14.3	
114 4-Isopropyltoluene	119	11.442	11.435	0.007	98	190165	20.0	13.5	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	97	101518	20.0	14.6	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	193433	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	101583	20.0	14.5	
118 Benzyl chloride	91	11.667	11.667	0.000	98	72704	20.0	13.3	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	93	183211	20.0	14.6	
120 p-Diethylbenzene	119	11.442	11.777	-0.335	76	189230	20.0	25.6	
121 n-Butylbenzene	92	11.795	11.795	0.000	96	101757	20.0	15.3	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	103954	20.0	14.6	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	179413	20.0	13.5	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.527	0.006	96	9345	20.0	13.4	
125 1,3,5-Trichlorobenzene	180	12.643	12.642	0.001	97	91503	20.0	15.0	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	85536	20.0	14.4	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	95	38784	20.0	12.9	
128 Naphthalene	128	13.331	13.331	0.000	99	180064	20.0	12.5	
129 1,2,3-Trichlorobenzene	180	13.527	13.520	0.007	96	81747	20.0	13.4	
S 130 1,2-Dichloroethene, Total	100				0		40.0	33.3	
S 131 Xylenes, Total	100				0		40.0	30.6	
S 132 Total BTEX	1				0		100.0	79.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00252	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00074	Amount Added:	3.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

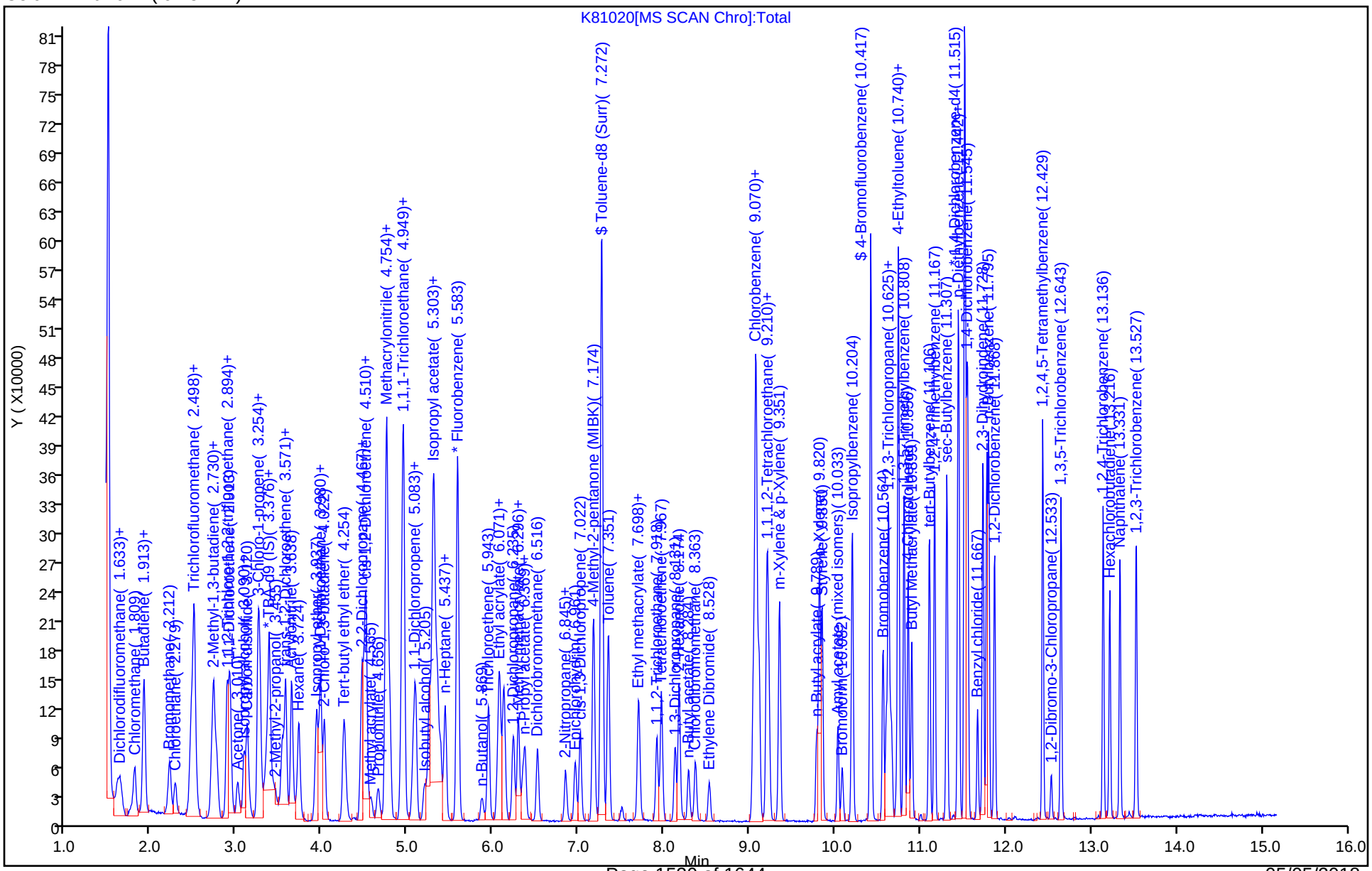
Report Date: 22-Mar-2018 17:14:30 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81020.D

Injection Date:	21-Mar-2018 03:08:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152211-B-2-B MS			Worklist Smp#:	12
Client ID:	GC-SB-101(SO)-15.5-17.5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GE-MW-110D(SO)-(69-70) MS | Lab Sample ID: 460-153515-1 MS

Matrix: Solid | Lab File ID: K82072.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 7.151(g) | Date Analyzed: 04/16/2018 23:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0218		0.00082	0.00019
79-34-5	1,1,2,2-Tetrachloroethane	0.0144		0.00082	0.00018
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0194		0.00082	0.00025
79-00-5	1,1,2-Trichloroethane	0.0152		0.00082	0.00015
75-34-3	1,1-Dichloroethane	0.0193		0.00082	0.00017
75-35-4	1,1-Dichloroethene	0.0184		0.00082	0.00018
87-61-6	1,2,3-Trichlorobenzene	0.0157		0.00082	0.00015
120-82-1	1,2,4-Trichlorobenzene	0.0166		0.00082	0.000076
96-12-8	1,2-Dibromo-3-Chloropropane	0.0163		0.00082	0.00038
95-50-1	1,2-Dichlorobenzene	0.0157		0.00082	0.00012
107-06-2	1,2-Dichloroethane	0.0176		0.00082	0.00024
78-87-5	1,2-Dichloropropane	0.0172		0.00082	0.00035
541-73-1	1,3-Dichlorobenzene	0.0157		0.00082	0.00013
106-46-7	1,4-Dichlorobenzene	0.0156		0.00082	0.000082
123-91-1	1,4-Dioxane	0.313		0.016	0.0075
78-93-3	2-Butanone (MEK)	0.0698		0.0041	0.00091
591-78-6	2-Hexanone	0.0837		0.0041	0.00064
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0868		0.0041	0.00055
67-64-1	Acetone	0.107		0.0041	0.0031
71-43-2	Benzene	0.0164		0.00082	0.00021
75-25-2	Bromoform	0.0226		0.00082	0.00035
74-83-9	Bromomethane	0.0134		0.00082	0.00039
75-15-0	Carbon disulfide	0.0182		0.00082	0.00022
56-23-5	Carbon tetrachloride	0.0248		0.00082	0.00015
108-90-7	Chlorobenzene	0.0158		0.00082	0.00015
74-97-5	Chlorobromomethane	0.0179		0.00082	0.00023
124-48-1	Chlorodibromomethane	0.0188		0.00082	0.00016
75-00-3	Chloroethane	0.0134		0.00082	0.00043
67-66-3	Chloroform	0.0185		0.00082	0.00026
74-87-3	Chloromethane	0.0121		0.00082	0.00036
156-59-2	cis-1,2-Dichloroethene	0.0177		0.00082	0.00012
10061-01-5	cis-1,3-Dichloropropene	0.0163		0.00082	0.00022
110-82-7	Cyclohexane	0.0183		0.00082	0.00018
75-27-4	Dichlorobromomethane	0.0186		0.00082	0.00021
75-71-8	Dichlorodifluoromethane	0.0125		0.00082	0.00028

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GE-MW-110D(SO)-(69-70) MS | Lab Sample ID: 460-153515-1 MS

Matrix: Solid | Lab File ID: K82072.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 7.151(g) | Date Analyzed: 04/16/2018 23:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0168		0.00082	0.00016
106-93-4	Ethylene Dibromide	0.0162		0.00082	0.00015
98-82-8	Isopropylbenzene	0.0174		0.00082	0.00010
79-20-9	Methyl acetate	0.0977		0.0041	0.0035
1634-04-4	Methyl tert-butyl ether	0.0177		0.00082	0.00010
108-87-2	Methylcyclohexane	0.0187		0.00082	0.00013
75-09-2	Methylene Chloride	0.0171		0.00082	0.00013
179601-23-1	m-Xylene & p-Xylene	0.0162		0.00082	0.00014
95-47-6	o-Xylene	0.0166		0.00082	0.000078
100-42-5	Styrene	0.0159		0.00082	0.00010
127-18-4	Tetrachloroethene	0.0186		0.00082	0.00012
108-88-3	Toluene	0.0161		0.00082	0.00051
156-60-5	trans-1,2-Dichloroethene	0.0179		0.00082	0.00020
10061-02-6	trans-1,3-Dichloropropene	0.0176		0.00082	0.00022
79-01-6	Trichloroethene	0.0183		0.00082	0.00012
75-69-4	Trichlorofluoromethane	0.0143		0.00082	0.00033
75-01-4	Vinyl chloride	0.0126		0.00082	0.00045

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		78-135
460-00-4	4-Bromofluorobenzene	113		67-126
1868-53-7	Dibromofluoromethane (Surr)	123		61-149
2037-26-5	Toluene-d8 (Surr)	104		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82072.D
Lims ID: 460-153515-B-1-B MS
Client ID: GE-MW-110D(SO)-(69-70)
Sample Type: MS
Inject. Date: 16-Apr-2018 23:39:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153515-B-1-B MS
Misc. Info.: 460-0070455-013
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 14:35:11 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: tupayachia Date: 17-Apr-2018 09:20:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.590	1.596	-0.006	87	47965	20.0	19.4	
2 Dichlorodifluoromethane	85	1.620	1.632	-0.012	99	93621	20.0	15.3	
3 Chloromethane	50	1.803	1.803	0.000	100	87614	20.0	14.7	
4 Vinyl chloride	62	1.907	1.907	0.000	97	93157	20.0	15.4	
5 Butadiene	54	1.907	1.913	-0.006	96	69873	20.0	15.7	
6 Bromomethane	94	2.212	2.218	-0.006	99	71586	20.0	16.3	
7 Chloroethane	64	2.273	2.273	0.000	100	44453	20.0	16.4	
9 Dichlorofluoromethane	67	2.468	2.474	-0.006	98	128116	20.0	16.8	
8 Trichlorofluoromethane	101	2.480	2.480	0.000	62	109130	20.0	17.4	a
10 Pentane	72	2.498	2.504	-0.006	97	26387	40.0	32.0	
11 Ethyl ether	59	2.699	2.693	0.006	92	55503	20.0	21.2	
12 Ethanol	46	2.687	2.711	-0.024	70	17456	800.0	700.4	
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	97	67374	20.0	25.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.754	0.000	92	74748	20.0	23.9	
15 Acrolein	56	2.882	2.882	0.000	96	128620	300.0	189.9	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	98	95028	20.0	23.7	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	98	81120	20.0	22.4	
18 Acetone	43	3.004	3.004	0.000	88	130079	100.0	130.0	
19 Iodomethane	142	3.084	3.083	0.001	98	153248	20.0	22.3	
22 Isopropyl alcohol	45	3.096	3.089	0.007	1	55822	200.0	224.5	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	302224	20.0	22.2	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	97	46727	20.0	22.4	
23 Methyl acetate	43	3.248	3.248	0.000	99	220145	100.0	119.0	
24 Cyclopentene	67	3.266	3.266	0.000	91	198922	20.0	23.9	
29 Acetonitrile	41	3.309	3.321	-0.012	95	108647	200.0	154.3	a
* 25 TBA-d9 (IS)	65	3.388	3.376	0.012	0	351450	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	89	90916	20.0	20.8	
27 2-Methyl-2-propanol	59	3.437	3.431	0.006	91	89091	200.0	167.2	
28 Methyl tert-butyl ether	73	3.541	3.528	0.013	96	215096	20.0	21.6	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	93	85198	20.0	21.8	
31 Acrylonitrile	53	3.638	3.638	0.000	94	243745	200.0	213.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.723	0.001	93	69643	20.0	24.7	
33 Isopropyl ether	45	3.931	3.931	0.000	95	243999	20.0	23.4	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	78	142178	20.0	23.5	
35 Vinyl acetate	86	3.980	3.973	0.007	100	24149	40.0	33.6	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	89	73154	20.0	22.3	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	90	223855	20.0	22.6	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	234079	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.479	0.007	94	42430	20.0	29.7	
41 Ethyl acetate	70	4.510	4.504	0.006	92	12770	40.0	33.5	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	98	95312	20.0	21.5	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	97	39161	100.0	85.0	
44 Methyl acrylate	55	4.571	4.571	0.000	92	49562	20.0	21.5	a
43 Propionitrile	54	4.650	4.656	-0.006	98	96746	200.0	156.6	
45 Tetrahydrofuran	72	4.736	4.742	-0.006	63	20125	40.0	37.0	
46 Chlorobromomethane	128	4.742	4.742	0.000	77	44738	20.0	21.8	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	265980	200.0	197.5	
48 Chloroform	83	4.791	4.790	0.001	99	142445	20.0	22.5	
49 Cyclohexane	84	4.937	4.937	0.000	90	131646	20.0	22.3	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	81	132784	20.0	26.5	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	97	195666	50.0	61.3	
52 Carbon tetrachloride	117	5.065	5.071	-0.006	97	109398	20.0	30.2	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	105958	20.0	23.3	
56 Isobutyl alcohol	74	5.211	5.205	0.006	1	6813	500.0	317.5	a
54 Benzene	78	5.297	5.296	0.001	95	310040	20.0	20.0	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	179496	50.0	59.0	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	186635	20.0	23.0	
58 Tert-amyl methyl ether	87	5.339	5.345	-0.006	91	66681	20.0	21.8	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	96	87977	20.0	21.5	
60 n-Heptane	57	5.437	5.437	0.000	92	68715	20.0	24.4	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	509371	50.0	50.0	
62 n-Butanol	56	5.876	5.876	0.000	90	44059	500.0	432.8	
63 Trichloroethene	95	5.943	5.943	0.000	98	81303	20.0	22.3	
64 Ethyl acrylate	56	6.077	6.077	0.000	96	43513	20.0	21.3	
65 Methylcyclohexane	83	6.077	6.077	0.000	95	158619	20.0	22.8	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	94	73911	20.0	20.9	
* 67 1,4-Dioxane-d8	96	6.290	6.284	0.006	0	30947	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	87	82036	40.0	46.4	
69 1,4-Dioxane	88	6.351	6.339	0.012	27	18113	400.0	381.5	
70 n-Propyl acetate	43	6.345	6.351	-0.006	98	75715	20.0	22.6	
71 Dibromomethane	93	6.370	6.375	-0.005	97	47423	20.0	21.3	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	91570	20.0	22.6	
73 2-Chloroethyl vinyl ether	63	6.851	6.845	0.006	85	36580	20.0	22.0	
74 2-Nitropropane	41	6.851	6.851	0.000	76	19523	40.0	59.0	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	119683	400.0	368.5	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	106391	20.0	19.8	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	324518	100.0	105.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	682479	50.0	52.1	
79 Toluene	91	7.345	7.351	-0.006	92	318283	20.0	19.6	
80 trans-1,3-Dichloropropene	75	7.692	7.698	-0.006	99	88911	20.0	21.4	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	74948	20.0	21.4	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	97	50722	20.0	18.6	
83 Tetrachloroethene	166	7.973	7.973	0.000	97	82476	20.0	22.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.137	-0.006	88	92864	20.0	18.2	
85 2-Hexanone	43	8.180	8.180	0.000	96	203733	100.0	101.9	
86 n-Butyl acetate	43	8.284	8.290	-0.006	99	87569	20.0	25.1	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	64635	20.0	22.9	
88 Ethylene Dibromide	107	8.534	8.527	0.007	97	60404	20.0	19.7	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	421548	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	201058	20.0	19.2	
92 Ethylbenzene	106	9.204	9.204	0.000	98	115900	20.0	20.5	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.229	-0.006	96	74346	20.0	23.7	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	140218	20.0	19.7	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	43574	20.0	24.2	
95 o-Xylene	106	9.820	9.820	0.000	94	147800	20.0	20.3	
96 Styrene	104	9.851	9.850	0.001	97	222939	20.0	19.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	99045	20.0	24.6	
98 Bromoform	173	10.088	10.088	0.000	96	39546	20.0	27.5	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	403033	20.0	21.1	
$ 100 4-Bromofluorobenzene	174	10.424	10.423	0.001	95	201461	50.0	56.5	
101 Bromobenzene	156	10.564	10.564	0.000	95	88381	20.0	18.9	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	99	89267	20.0	17.5	
103 N-Propylbenzene	91	10.625	10.631	-0.006	99	468900	20.0	19.4	
104 1,2,3-Trichloropropane	110	10.649	10.655	-0.006	97	23625	20.0	18.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	90	18919	20.0	19.3	
106 2-Chlorotoluene	91	10.741	10.747	-0.005	88	302049	20.0	18.6	
107 4-Ethyltoluene	105	10.741	10.747	-0.005	90	387361	20.0	19.3	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	93	331766	20.0	19.0	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	253081	20.0	18.2	
110 Butyl Methacrylate	87	10.899	10.899	0.000	87	92314	20.0	22.7	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	262742	20.0	18.7	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	340513	20.0	19.1	
113 sec-Butylbenzene	105	11.308	11.307	0.001	99	453251	20.0	19.4	
114 4-Isopropyltoluene	119	11.442	11.441	0.001	98	381632	20.0	19.7	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	176386	20.0	19.1	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	245516	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	177670	20.0	19.1	
118 Benzyl chloride	91	11.667	11.667	0.000	99	140099	20.0	26.7	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	337308	20.0	18.5	
120 p-Diethylbenzene	119	11.777	11.777	0.000	95	215241	20.0	20.2	
121 n-Butylbenzene	92	11.801	11.801	0.000	97	206978	20.0	19.7	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	175912	20.0	19.1	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.435	-0.006	97	360273	20.0	18.8	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	96	15056	20.0	19.9	
125 1,3,5-Trichlorobenzene	180	12.643	12.649	-0.006	97	157623	20.0	20.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.142	-0.006	94	147979	20.0	20.3	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	71934	20.0	22.4	
128 Naphthalene	128	13.332	13.337	-0.005	99	339703	20.0	16.8	
129 1,2,3-Trichlorobenzene	180	13.527	13.526	0.001	96	142718	20.0	19.1	
S 130 1,2-Dichloroethene, Total	100				0		40.0	43.3	
S 131 Xylenes, Total	100				0		40.0	39.9	
S 132 Total BTEX	1				0		100.0	100.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00255	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

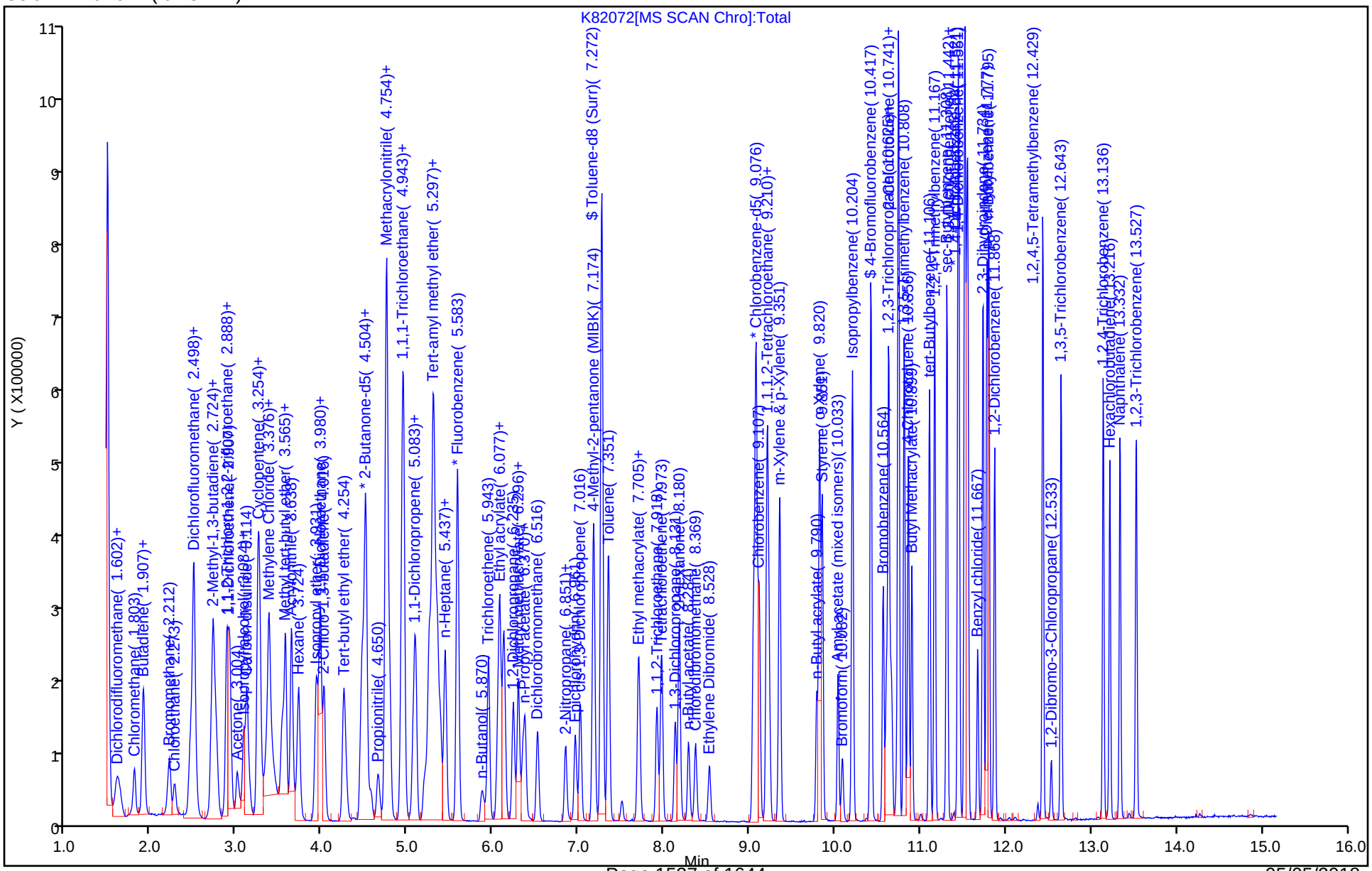
Report Date: 17-Apr-2018 14:35:13 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82072.D

Injection Date:	16-Apr-2018 23:39:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153515-B-1-B MS			Worklist Smp#:	13
Client ID:	GE-MW-110D(SO)-(69-70)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

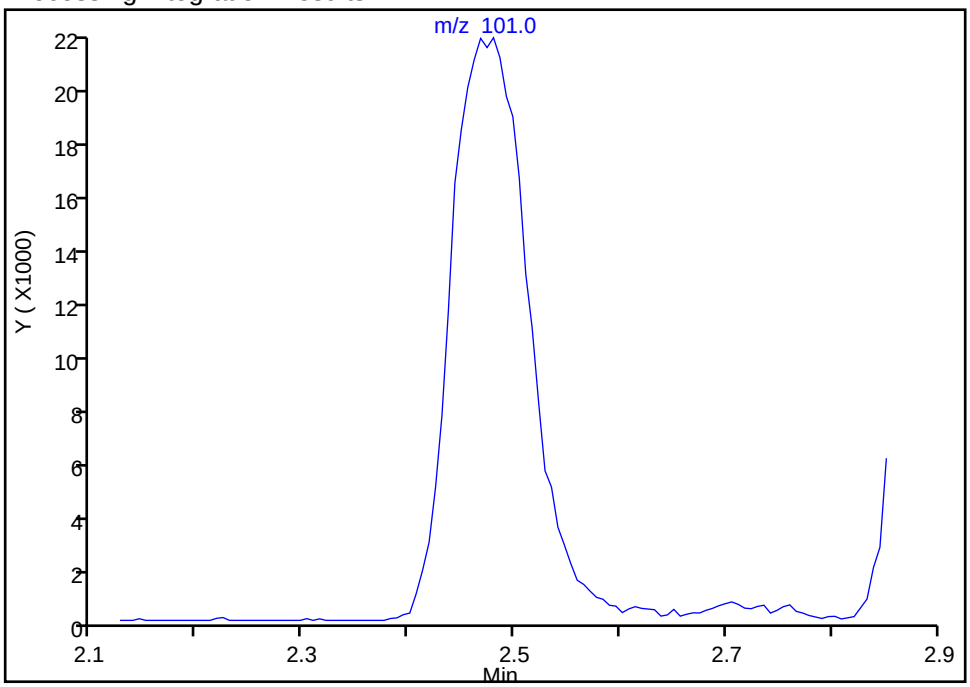
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82072.D				
Injection Date:	16-Apr-2018 23:39:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153515-B-1-B MS				
Client ID:	GE-MW-110D(SO)-(69-70)				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

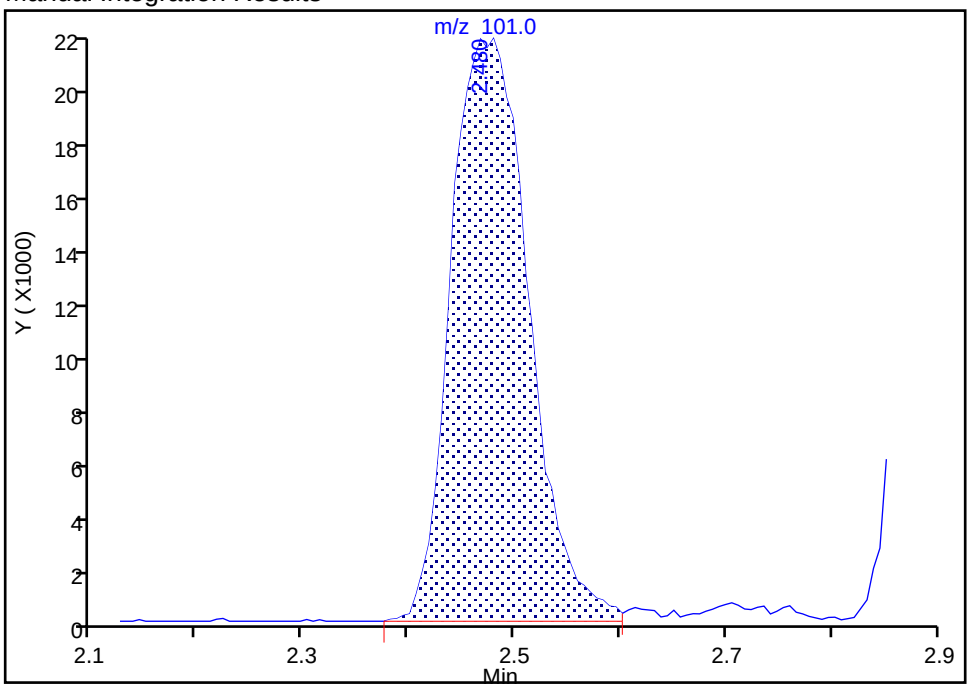
Not Detected
Expected RT: 2.48

Processing Integration Results



Manual Integration Results

RT: 2.48
Area: 109130
Amount: 17.389527
Amount Units: ug/l



Reviewer: tupayachia, 17-Apr-2018 09:20:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 MSD | Lab Sample ID: 460-152211-2 MSD

Matrix: Solid | Lab File ID: K81021.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.322(g) | Date Analyzed: 03/21/2018 03:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0156		0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0158		0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0147		0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0150		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0174		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0146		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0136		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0140		0.0010	0.000094
96-12-8	1,2-Dibromo-3-Chloropropane	0.0151		0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0136		0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0156		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0172		0.0010	0.00043
541-73-1	1,3-Dichlorobenzene	0.0135		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0138		0.0010	0.00010
123-91-1	1,4-Dioxane	0.250		0.020	0.0094
78-93-3	2-Butanone (MEK)	0.0614		0.0051	0.0011
591-78-6	2-Hexanone	0.0786		0.0051	0.00080
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0810		0.0051	0.00068
67-64-1	Acetone	0.0752		0.0051	0.0039
71-43-2	Benzene	0.0157		0.0010	0.00026
75-25-2	Bromoform	0.0128		0.0010	0.00043
74-83-9	Bromomethane	0.0137		0.0010	0.00048
75-15-0	Carbon disulfide	0.0163		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0144		0.0010	0.00018
108-90-7	Chlorobenzene	0.0132		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0147		0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0129		0.0010	0.00020
75-00-3	Chloroethane	0.0154		0.0010	0.00053
67-66-3	Chloroform	0.0160		0.0010	0.00033
74-87-3	Chloromethane	0.0170		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0149		0.0010	0.00016
10061-01-5	cis-1,3-Dichloropropene	0.0150		0.0010	0.00028
110-82-7	Cyclohexane	0.0147		0.0010	0.00023
75-27-4	Dichlorobromomethane	0.0150		0.0010	0.00026

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 MSD | Lab Sample ID: 460-152211-2 MSD

Matrix: Solid | Lab File ID: K81021.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.322(g) | Date Analyzed: 03/21/2018 03:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	0.0133		0.0010	0.00034
100-41-4	Ethylbenzene	0.0139		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0143		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0135		0.0010	0.00013
79-20-9	Methyl acetate	0.105		0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0155		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0146		0.0010	0.00016
75-09-2	Methylene Chloride	0.0201		0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.0142		0.0010	0.00018
95-47-6	o-Xylene	0.0146		0.0010	0.000097
100-42-5	Styrene	0.0141		0.0010	0.00013
127-18-4	Tetrachloroethene	0.0133		0.0010	0.00015
108-88-3	Toluene	0.0144		0.0010	0.00064
156-60-5	trans-1,2-Dichloroethene	0.0156		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0146		0.0010	0.00027
79-01-6	Trichloroethene	0.0151		0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0139		0.0010	0.00041
75-01-4	Vinyl chloride	0.0141		0.0010	0.00056

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	120		78-135
460-00-4	4-Bromofluorobenzene	109		67-126
1868-53-7	Dibromofluoromethane (Surr)	115		61-149
2037-26-5	Toluene-d8 (Surr)	109		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81021.D
Lims ID: 460-152211-B-2-C MSD
Client ID: GC-SB-101(SO)-15.5-17.5
Sample Type: MSD
Inject. Date: 21-Mar-2018 03:32:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-152211-B-2-C MSD
Misc. Info.: 460-0069055-013
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Mar-2018 17:14:28 Calib Date: 10-Mar-2018 00:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180309-68588.b\K80599.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: moroneyc Date: 21-Mar-2018 10:36:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	66	1.608	1.590	0.018	71	9176	20.0	14.8	
2 Dichlorodifluoromethane	85	1.639	1.626	0.013	99	56579	20.0	13.0	
3 Chloromethane	50	1.803	1.791	0.012	98	52667	20.0	16.7	
4 Vinyl chloride	62	1.913	1.901	0.012	91	46307	20.0	13.8	
5 Butadiene	54	1.907	1.907	0.000	95	35638	20.0	15.0	
6 Bromomethane	94	2.212	2.199	0.013	98	38352	20.0	13.4	
7 Chloroethane	64	2.273	2.266	0.007	99	25099	20.0	15.1	
9 Dichlorofluoromethane	67	2.474	2.462	0.012	98	79715	20.0	14.8	
8 Trichlorofluoromethane	101	2.474	2.468	0.006	69	72876	20.0	13.6	
10 Pentane	72	2.498	2.498	0.000	97	11730	40.0	27.0	
12 Ethanol	46	2.706	2.687	0.019	77	5419	800.0	605.0	
11 Ethyl ether	59	2.706	2.693	0.013	89	27690	20.0	16.4	
13 2-Methyl-1,3-butadiene	53	2.724	2.718	0.006	97	31309	20.0	16.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	94	36030	20.0	14.1	
15 Acrolein	56	2.882	2.876	0.006	95	68897	300.0	215.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.901	2.882	0.019	88	48375	20.0	14.5	
17 1,1-Dichloroethene	96	2.919	2.913	0.006	97	37590	20.0	14.3	
18 Acetone	43	3.010	3.004	0.006	85	65650	100.0	73.7	
19 Iodomethane	142	3.083	3.077	0.006	100	77714	20.0	13.7	
22 Isopropyl alcohol	45	3.114	3.089	0.025	28	23311	200.0	146.0	
20 Carbon disulfide	76	3.120	3.114	0.006	99	137312	20.0	16.0	
21 3-Chloro-1-propene	76	3.248	3.236	0.012	94	21534	20.0	15.1	
23 Methyl acetate	43	3.254	3.248	0.006	100	142008	100.0	103.3	
24 Cyclopentene	67	3.272	3.266	0.006	92	86982	20.0	16.1	
29 Acetonitrile	41	3.333	3.309	0.024	97	48564	200.0	158.5	a
* 25 TBA-d9 (IS)	65	3.370	3.352	0.018	0	253765	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	93	59100	20.0	19.7	
27 2-Methyl-2-propanol	59	3.437	3.443	-0.006	99	57252	200.0	157.5	
28 Methyl tert-butyl ether	73	3.535	3.528	0.007	96	111723	20.0	15.2	
30 trans-1,2-Dichloroethene	96	3.571	3.565	0.006	96	40417	20.0	15.3	
31 Acrylonitrile	53	3.638	3.632	0.006	92	130167	200.0	180.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.717	0.007	92	34478	20.0	20.3	
33 Isopropyl ether	45	3.931	3.925	0.006	96	131848	20.0	20.1	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	91	71204	20.0	17.1	
35 Vinyl acetate	86	3.980	3.973	0.007	100	8846	40.0	18.8	
36 2-Chloro-1,3-butadiene	88	4.022	4.016	0.006	92	32765	20.0	15.5	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	88	121473	20.0	17.1	
* 38 2-Butanone-d5	46	4.455	4.449	0.006	0	189426	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.479	0.007	96	20355	20.0	14.5	
41 Ethyl acetate	70	4.504	4.498	0.006	84	4966	40.0	16.9	
40 cis-1,2-Dichloroethene	96	4.516	4.504	0.012	79	45754	20.0	14.6	
42 2-Butanone (MEK)	72	4.516	4.504	0.012	96	20580	100.0	60.2	
44 Methyl acrylate	55	4.571	4.565	0.006	98	30059	20.0	17.2	
43 Propionitrile	54	4.656	4.644	0.012	97	52187	200.0	141.3	
45 Tetrahydrofuran	72	4.742	4.729	0.013	67	10276	40.0	24.8	
46 Chlorobromomethane	128	4.748	4.735	0.013	72	23961	20.0	14.4	
47 Methacrylonitrile	67	4.754	4.748	0.006	94	135452	200.0	157.5	
48 Chloroform	83	4.790	4.784	0.006	99	77754	20.0	15.7	
49 Cyclohexane	84	4.931	4.931	0.000	92	57573	20.0	14.4	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	89	71982	20.0	15.3	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.943	0.006	96	156055	50.0	57.6	
52 Carbon tetrachloride	117	5.071	5.065	0.006	98	59577	20.0	14.1	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	96	51421	20.0	16.0	
56 Isobutyl alcohol	74	5.211	5.193	0.018	1	3665	500.0	285.9	a
54 Benzene	78	5.296	5.290	0.006	97	145367	20.0	15.4	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.302	0.007	0	160633	50.0	60.0	
57 Isopropyl acetate	43	5.333	5.327	0.006	95	117383	20.0	17.7	
58 Tert-amyl methyl ether	73	5.339	5.339	0.000	99	128126	20.0	16.7	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	97	54536	20.0	15.3	
60 n-Heptane	57	5.437	5.437	0.000	93	30799	20.0	17.2	
* 61 Fluorobenzene	96	5.583	5.577	0.006	99	393561	50.0	50.0	
62 n-Butanol	56	5.863	5.863	0.000	94	25311	500.0	347.2	
63 Trichloroethene	95	5.943	5.943	0.000	99	40408	20.0	14.8	
64 Ethyl acrylate	56	6.071	6.071	0.000	92	24143	20.0	17.7	
65 Methylcyclohexane	83	6.077	6.071	0.006	91	67747	20.0	14.3	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	87	37780	20.0	16.8	
* 67 1,4-Dioxane-d8	96	6.284	6.278	0.006	0	18931	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.290	0.000	92	64768	40.0	38.0	
69 1,4-Dioxane	88	6.333	6.339	-0.006	28	8286	400.0	245.2	
70 n-Propyl acetate	43	6.345	6.345	0.000	99	45857	20.0	18.3	
71 Dibromomethane	93	6.369	6.369	0.000	96	24831	20.0	14.5	
72 Dichlorobromomethane	83	6.516	6.516	0.000	99	51708	20.0	14.7	
73 2-Chloroethyl vinyl ether	63	6.839	6.839	0.000	72	15774	20.0	16.0	
74 2-Nitropropane	41	6.851	6.845	0.006	84	14846	40.0	25.3	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	68770	400.0	265.3	
76 cis-1,3-Dichloropropene	75	7.016	7.016	0.000	93	55952	20.0	14.7	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.168	0.006	98	185817	100.0	79.4	
$ 78 Toluene-d8 (Surr)	98	7.272	7.265	0.007	98	519536	50.0	54.3	
79 Toluene	91	7.345	7.345	0.000	92	156829	20.0	14.1	
80 trans-1,3-Dichloropropene	75	7.692	7.692	0.000	98	47568	20.0	14.3	
81 Ethyl methacrylate	69	7.717	7.704	0.013	89	40748	20.0	16.0	
82 1,1,2-Trichloroethane	83	7.912	7.912	0.000	96	27106	20.0	14.7	
83 Tetrachloroethene	166	7.973	7.967	0.006	98	42180	20.0	13.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.125	8.125	0.000	95	52082	20.0	15.9	
85 2-Hexanone	43	8.174	8.174	0.000	99	116579	100.0	77.0	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	49602	20.0	18.7	
87 Chlorodibromomethane	129	8.369	8.363	0.006	98	38927	20.0	12.6	
88 Ethylene Dibromide	107	8.534	8.521	0.013	96	33843	20.0	14.0	
* 89 Chlorobenzene-d5	117	9.076	9.070	0.006	85	330742	50.0	50.0	
90 Chlorobenzene	112	9.113	9.107	0.006	95	97971	20.0	12.9	
92 Ethylbenzene	106	9.204	9.198	0.006	99	51804	20.0	13.7	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	94	41700	20.0	13.0	
93 m-Xylene & p-Xylene	106	9.351	9.344	0.007	0	64608	20.0	13.9	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	23219	20.0	15.3	
95 o-Xylene	106	9.820	9.814	0.006	92	68847	20.0	14.3	
96 Styrene	104	9.850	9.844	0.006	95	105983	20.0	13.8	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	57020	20.0	18.3	
98 Bromoform	173	10.088	10.082	0.006	97	26680	20.0	12.5	
99 Isopropylbenzene	105	10.204	10.198	0.006	95	189919	20.0	13.3	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	93	177199	50.0	54.4	
101 Bromobenzene	156	10.564	10.557	0.007	95	48745	20.0	13.2	
102 1,1,2,2-Tetrachloroethane	83	10.594	10.600	-0.006	98	48506	20.0	15.5	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	221591	20.0	14.7	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	94	14268	20.0	14.0	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.661	0.006	90	11768	20.0	15.7	
107 4-Ethyltoluene	105	10.741	10.740	0.001	89	182717	20.0	13.6	
106 2-Chlorotoluene	91	10.741	10.740	0.001	96	154384	20.0	14.4	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	92	159587	20.0	13.4	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	130978	20.0	14.4	
110 Butyl Methacrylate	87	10.899	10.899	0.000	94	45562	20.0	14.5	
111 tert-Butylbenzene	119	11.106	11.100	0.006	94	122062	20.0	11.8	
112 1,2,4-Trimethylbenzene	105	11.167	11.161	0.006	98	162022	20.0	13.2	
113 sec-Butylbenzene	105	11.307	11.307	0.000	100	210994	20.0	13.1	
114 4-Isopropyltoluene	119	11.442	11.435	0.007	98	175831	20.0	12.3	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	97	94468	20.0	13.3	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	94	198205	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	97	96648	20.0	13.5	
118 Benzyl chloride	91	11.667	11.667	0.000	98	74473	20.0	13.3	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	93	176238	20.0	13.7	
120 p-Diethylbenzene	119	11.442	11.777	-0.335	75	174413	20.0	23.0	
121 n-Butylbenzene	92	11.801	11.795	0.006	97	96096	20.0	14.1	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	97104	20.0	13.3	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	170857	20.0	12.6	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.527	0.006	95	10608	20.0	14.8	
125 1,3,5-Trichlorobenzene	180	12.643	12.642	0.001	97	85501	20.0	13.7	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	83579	20.0	13.7	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	95	39697	20.0	12.9	
128 Naphthalene	128	13.331	13.331	0.000	99	189030	20.0	12.9	
129 1,2,3-Trichlorobenzene	180	13.527	13.520	0.007	96	83127	20.0	13.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	29.9	
S 131 Xylenes, Total	100				0		40.0	28.2	
S 132 Total BTEX	1				0		100.0	71.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00252	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00074	Amount Added:	2.00	Units: uL	
ACROLEIN W_00074	Amount Added:	3.00	Units: uL	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

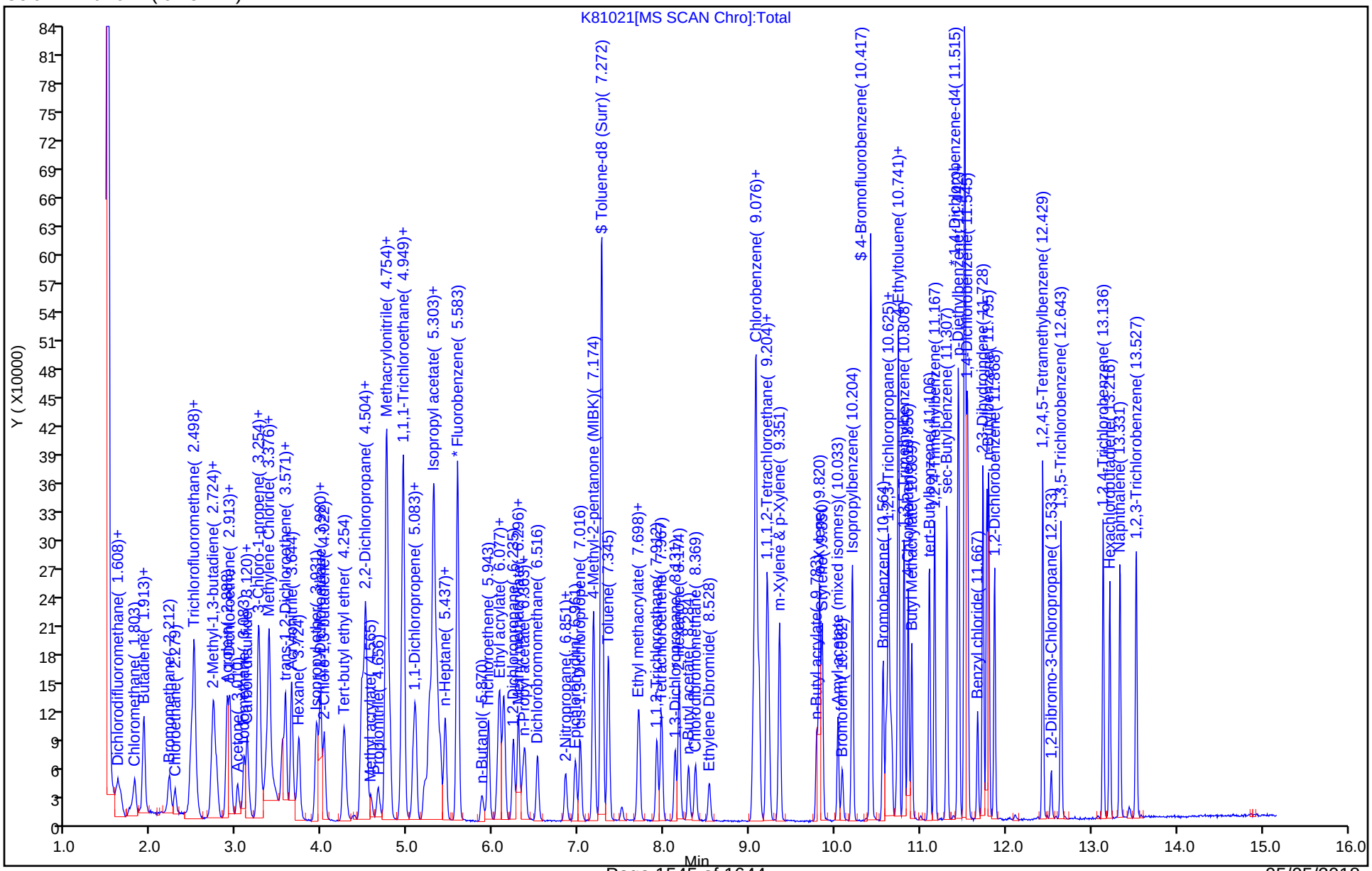
Report Date: 22-Mar-2018 17:15:07 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180320-69055.b\K81021.D

Injection Date:	21-Mar-2018 03:32:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-152211-B-2-C MSD			Worklist Smp#:	13
Client ID:	GC-SB-101(SO)-15.5-17.5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GE-MW-110D(SO)-(69-70) MSD | Lab Sample ID: 460-153515-1 MSD

Matrix: Solid | Lab File ID: K82073.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 6.829(g) | Date Analyzed: 04/17/2018 00:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0231		0.00086	0.00020
79-34-5	1,1,2,2-Tetrachloroethane	0.0147		0.00086	0.00018
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0203		0.00086	0.00026
79-00-5	1,1,2-Trichloroethane	0.0158		0.00086	0.00015
75-34-3	1,1-Dichloroethane	0.0204		0.00086	0.00018
75-35-4	1,1-Dichloroethene	0.0200		0.00086	0.00019
87-61-6	1,2,3-Trichlorobenzene	0.0160		0.00086	0.00016
120-82-1	1,2,4-Trichlorobenzene	0.0165		0.00086	0.000079
96-12-8	1,2-Dibromo-3-Chloropropane	0.0165		0.00086	0.00040
95-50-1	1,2-Dichlorobenzene	0.0165		0.00086	0.00012
107-06-2	1,2-Dichloroethane	0.0182		0.00086	0.00025
78-87-5	1,2-Dichloropropane	0.0182		0.00086	0.00036
541-73-1	1,3-Dichlorobenzene	0.0161		0.00086	0.00014
106-46-7	1,4-Dichlorobenzene	0.0161		0.00086	0.000086
123-91-1	1,4-Dioxane	0.419		0.017	0.0079
78-93-3	2-Butanone (MEK)	0.0753		0.0043	0.00095
591-78-6	2-Hexanone	0.0872		0.0043	0.00067
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0930		0.0043	0.00057
67-64-1	Acetone	0.124		0.0043	0.0033
71-43-2	Benzene	0.0172		0.00086	0.00022
75-25-2	Bromoform	0.0230		0.00086	0.00037
74-83-9	Bromomethane	0.0134		0.00086	0.00041
75-15-0	Carbon disulfide	0.0194		0.00086	0.00023
56-23-5	Carbon tetrachloride	0.0264		0.00086	0.00016
108-90-7	Chlorobenzene	0.0165		0.00086	0.00015
74-97-5	Chlorobromomethane	0.0190		0.00086	0.00024
124-48-1	Chlorodibromomethane	0.0201		0.00086	0.00017
75-00-3	Chloroethane	0.0139		0.00086	0.00045
67-66-3	Chloroform	0.0199		0.00086	0.00027
74-87-3	Chloromethane	0.0122		0.00086	0.00037
156-59-2	cis-1,2-Dichloroethene	0.0187		0.00086	0.00013
10061-01-5	cis-1,3-Dichloropropene	0.0170		0.00086	0.00023
110-82-7	Cyclohexane	0.0192		0.00086	0.00019
75-27-4	Dichlorobromomethane	0.0198		0.00086	0.00022

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GE-MW-110D(SO)-(69-70) MSD | Lab Sample ID: 460-153515-1 MSD

Matrix: Solid | Lab File ID: K82073.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 6.829(g) | Date Analyzed: 04/17/2018 00:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	0.0124		0.00086	0.00029
100-41-4	Ethylbenzene	0.0175		0.00086	0.00017
106-93-4	Ethylene Dibromide	0.0165		0.00086	0.00015
98-82-8	Isopropylbenzene	0.0180		0.00086	0.00011
79-20-9	Methyl acetate	0.0996		0.0043	0.0037
1634-04-4	Methyl tert-butyl ether	0.0183		0.00086	0.00011
108-87-2	Methylcyclohexane	0.0192		0.00086	0.00014
75-09-2	Methylene Chloride	0.0187		0.00086	0.00014
179601-23-1	m-Xylene & p-Xylene	0.0168		0.00086	0.00015
95-47-6	o-Xylene	0.0174		0.00086	0.000082
100-42-5	Styrene	0.0163		0.00086	0.00011
127-18-4	Tetrachloroethene	0.0191		0.00086	0.00012
108-88-3	Toluene	0.0169		0.00086	0.00054
156-60-5	trans-1,2-Dichloroethene	0.0194		0.00086	0.00021
10061-02-6	trans-1,3-Dichloropropene	0.0182		0.00086	0.00023
79-01-6	Trichloroethene	0.0188		0.00086	0.00012
75-69-4	Trichlorofluoromethane	0.0141		0.00086	0.00035
75-01-4	Vinyl chloride	0.0126		0.00086	0.00047

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		78-135
460-00-4	4-Bromofluorobenzene	109		67-126
1868-53-7	Dibromofluoromethane (Surr)	123		61-149
2037-26-5	Toluene-d8 (Surr)	102		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82073.D
Lims ID: 460-153515-B-1-C MSD
Client ID: GE-MW-110D(SO)-(69-70)
Sample Type: MSD
Inject. Date: 17-Apr-2018 00:03:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-153515-B-1-C MSD
Misc. Info.: 460-0070455-014
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 17-Apr-2018 14:36:24 Calib Date: 03-Apr-2018 15:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180403-69732.b\K81455.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: tupayachia Date: 17-Apr-2018 09:21:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.596	0.006	88	47631	20.0	19.3	
2 Dichlorodifluoromethane	85	1.639	1.632	0.006	99	88305	20.0	14.4	
3 Chloromethane	50	1.809	1.803	0.006	99	84567	20.0	14.2	
4 Vinyl chloride	62	1.913	1.907	0.006	97	88658	20.0	14.6	
5 Butadiene	54	1.913	1.913	0.000	97	66859	20.0	15.0	
6 Bromomethane	94	2.224	2.218	0.006	99	68296	20.0	15.5	
7 Chloroethane	64	2.279	2.273	0.006	100	44023	20.0	16.2	
9 Dichlorofluoromethane	67	2.480	2.474	0.006	98	122308	20.0	16.0	
8 Trichlorofluoromethane	101	2.486	2.480	0.006	71	102556	20.0	16.4	
10 Pentane	72	2.504	2.504	0.000	97	24662	40.0	33.2	
11 Ethyl ether	59	2.705	2.693	0.012	96	56083	20.0	21.4	
12 Ethanol	46	2.736	2.711	0.025	7	17315	800.0	770.5	a
13 2-Methyl-1,3-butadiene	53	2.724	2.724	0.000	97	67535	20.0	25.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.754	0.006	94	76674	20.0	24.5	
15 Acrolein	56	2.888	2.882	0.006	95	123250	300.0	201.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.900	2.888	0.012	97	94609	20.0	23.6	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	97	83987	20.0	23.3	
18 Acetone	43	3.010	3.004	0.006	86	134687	100.0	143.9	
19 Iodomethane	142	3.089	3.083	0.006	98	158359	20.0	23.1	
22 Isopropyl alcohol	45	3.102	3.089	0.013	1	46587	200.0	207.8	a
20 Carbon disulfide	76	3.126	3.120	0.006	99	307336	20.0	22.6	
21 3-Chloro-1-propene	76	3.254	3.242	0.012	96	48449	20.0	23.2	
23 Methyl acetate	43	3.254	3.248	0.006	99	214043	100.0	115.8	
24 Cyclopentene	67	3.272	3.266	0.006	93	201789	20.0	24.3	
29 Acetonitrile	41	3.333	3.321	0.012	96	111799	200.0	176.0	a
* 25 TBA-d9 (IS)	65	3.388	3.376	0.012	0	316915	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	90	94632	20.0	21.7	
27 2-Methyl-2-propanol	59	3.449	3.431	0.018	94	83477	200.0	173.7	
28 Methyl tert-butyl ether	73	3.534	3.528	0.006	97	211518	20.0	21.2	
30 trans-1,2-Dichloroethene	96	3.577	3.571	0.006	93	88165	20.0	22.6	
31 Acrylonitrile	53	3.644	3.638	0.006	94	234129	200.0	204.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.730	3.723	0.007	92	64238	20.0	22.8	
33 Isopropyl ether	45	3.937	3.931	0.006	95	247955	20.0	23.8	
34 1,1-Dichloroethane	63	3.986	3.973	0.013	80	143687	20.0	23.8	
35 Vinyl acetate	86	3.986	3.973	0.013	100	22615	40.0	34.9	
36 2-Chloro-1,3-butadiene	88	4.028	4.022	0.006	90	73900	20.0	22.5	
37 Tert-butyl ethyl ether	59	4.260	4.254	0.006	88	230227	20.0	23.3	
* 38 2-Butanone-d5	46	4.467	4.455	0.012	0	218911	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.479	0.013	95	42963	20.0	30.1	
41 Ethyl acetate	70	4.516	4.504	0.012	91	13184	40.0	37.0	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	93	96482	20.0	21.8	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	97	37714	100.0	87.6	
44 Methyl acrylate	55	4.577	4.571	0.006	89	51071	20.0	22.2	a
43 Propionitrile	54	4.656	4.656	0.000	97	91478	200.0	164.2	
45 Tetrahydrofuran	72	4.735	4.742	-0.007	60	18181	40.0	35.7	
46 Chlorobromomethane	128	4.748	4.742	0.006	77	45427	20.0	22.1	
47 Methacrylonitrile	67	4.760	4.754	0.006	93	257185	200.0	191.1	
48 Chloroform	83	4.796	4.790	0.006	99	146730	20.0	23.2	
49 Cyclohexane	84	4.943	4.937	0.006	92	131281	20.0	22.3	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	96	134328	20.0	26.8	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	195799	50.0	61.4	
52 Carbon tetrachloride	117	5.071	5.071	0.000	99	110963	20.0	30.7	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	108239	20.0	23.8	
56 Isobutyl alcohol	74	5.211	5.205	0.006	65	7818	500.0	403.9	a
54 Benzene	78	5.296	5.296	0.000	95	309984	20.0	20.0	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	174827	50.0	57.5	
57 Isopropyl acetate	43	5.339	5.333	0.006	96	178704	20.0	22.1	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	96	66293	20.0	21.7	
59 1,2-Dichloroethane	62	5.388	5.388	0.000	96	86827	20.0	21.2	
60 n-Heptane	57	5.443	5.437	0.006	92	59209	20.0	21.0	
* 61 Fluorobenzene	96	5.589	5.583	0.006	99	508906	50.0	50.0	
62 n-Butanol	56	5.875	5.876	-0.001	88	40646	500.0	442.8	
63 Trichloroethene	95	5.949	5.943	0.006	98	79529	20.0	21.9	
64 Ethyl acrylate	56	6.077	6.077	0.000	99	44451	20.0	21.8	
65 Methylcyclohexane	83	6.077	6.077	0.000	95	155540	20.0	22.4	
66 1,2-Dichloropropane	63	6.241	6.235	0.006	94	74770	20.0	21.2	
* 67 1,4-Dioxane-d8	96	6.296	6.284	0.012	0	24418	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	85	80315	40.0	45.5	
69 1,4-Dioxane	88	6.339	6.339	0.000	28	18279	400.0	488.0	a
70 n-Propyl acetate	43	6.351	6.351	0.000	98	78581	20.0	23.4	
71 Dibromomethane	93	6.375	6.375	0.000	97	46977	20.0	21.2	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	93149	20.0	23.1	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	84	35209	20.0	21.2	
74 2-Nitropropane	41	6.851	6.851	0.000	76	16990	40.0	51.5	
75 Epichlorohydrin	57	6.967	6.961	0.006	99	115959	400.0	381.8	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	106235	20.0	19.8	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	310701	100.0	108.2	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	665451	50.0	50.9	
79 Toluene	91	7.351	7.351	0.000	93	319486	20.0	19.7	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	87522	20.0	21.1	
81 Ethyl methacrylate	69	7.710	7.711	-0.001	88	73216	20.0	21.0	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	98	49974	20.0	18.3	
83 Tetrachloroethene	166	7.973	7.973	0.000	97	80806	20.0	22.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.137	-0.006	91	92238	20.0	18.1	
85 2-Hexanone	43	8.174	8.180	-0.006	95	189520	100.0	101.4	
86 n-Butyl acetate	43	8.290	8.290	0.000	98	84595	20.0	24.3	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	65821	20.0	23.4	
88 Ethylene Dibromide	107	8.534	8.527	0.007	98	58755	20.0	19.2	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	420802	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	200718	20.0	19.2	
92 Ethylbenzene	106	9.204	9.204	0.000	98	114849	20.0	20.3	
91 1,1,1,2-Tetrachloroethane	131	9.228	9.229	-0.001	95	74866	20.0	23.9	
93 m-Xylene & p-Xylene	106	9.357	9.350	0.006	0	138975	20.0	19.5	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	42914	20.0	23.9	
95 o-Xylene	106	9.820	9.820	0.000	94	147118	20.0	20.2	
96 Styrene	104	9.850	9.850	0.000	96	218085	20.0	19.0	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	98376	20.0	24.5	
98 Bromoform	173	10.088	10.088	0.000	95	38271	20.0	26.7	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	397744	20.0	20.9	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	93	193899	50.0	54.5	
101 Bromobenzene	156	10.564	10.564	0.000	95	87111	20.0	18.6	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	86746	20.0	17.1	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	445293	20.0	18.5	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	97	22630	20.0	17.8	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	90	18164	20.0	18.6	
106 2-Chlorotoluene	91	10.746	10.747	0.000	91	295809	20.0	18.3	
107 4-Ethyltoluene	105	10.746	10.747	0.000	90	376336	20.0	18.8	
108 1,3,5-Trimethylbenzene	105	10.807	10.807	0.000	93	322227	20.0	18.4	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	247709	20.0	17.8	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	91294	20.0	22.5	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	254052	20.0	18.1	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	334743	20.0	18.8	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	433537	20.0	18.6	
114 4-Isopropyltoluene	119	11.441	11.441	0.000	98	364697	20.0	18.9	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	172833	20.0	18.7	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	245160	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	173871	20.0	18.7	
118 Benzyl chloride	91	11.667	11.667	0.000	99	135292	20.0	25.8	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	332602	20.0	18.2	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	202886	20.0	19.1	
121 n-Butylbenzene	92	11.801	11.801	0.000	98	196316	20.0	18.7	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	176579	20.0	19.2	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.435	-0.006	97	347863	20.0	18.1	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	95	14507	20.0	19.2	
125 1,3,5-Trichlorobenzene	180	12.649	12.649	0.000	98	153459	20.0	20.3	
126 1,2,4-Trichlorobenzene	180	13.142	13.142	0.000	94	140287	20.0	19.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	67242	20.0	21.0	
128 Naphthalene	128	13.337	13.337	0.000	99	334439	20.0	16.5	
129 1,2,3-Trichlorobenzene	180	13.526	13.526	0.000	96	138943	20.0	18.6	
S 130 1,2-Dichloroethene, Total	100				0		40.0	44.3	
S 131 Xylenes, Total	100				0		40.0	39.7	
S 132 Total BTEX	1				0		100.0	99.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00077	Amount Added:	2.00	Units: uL	
ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00255	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

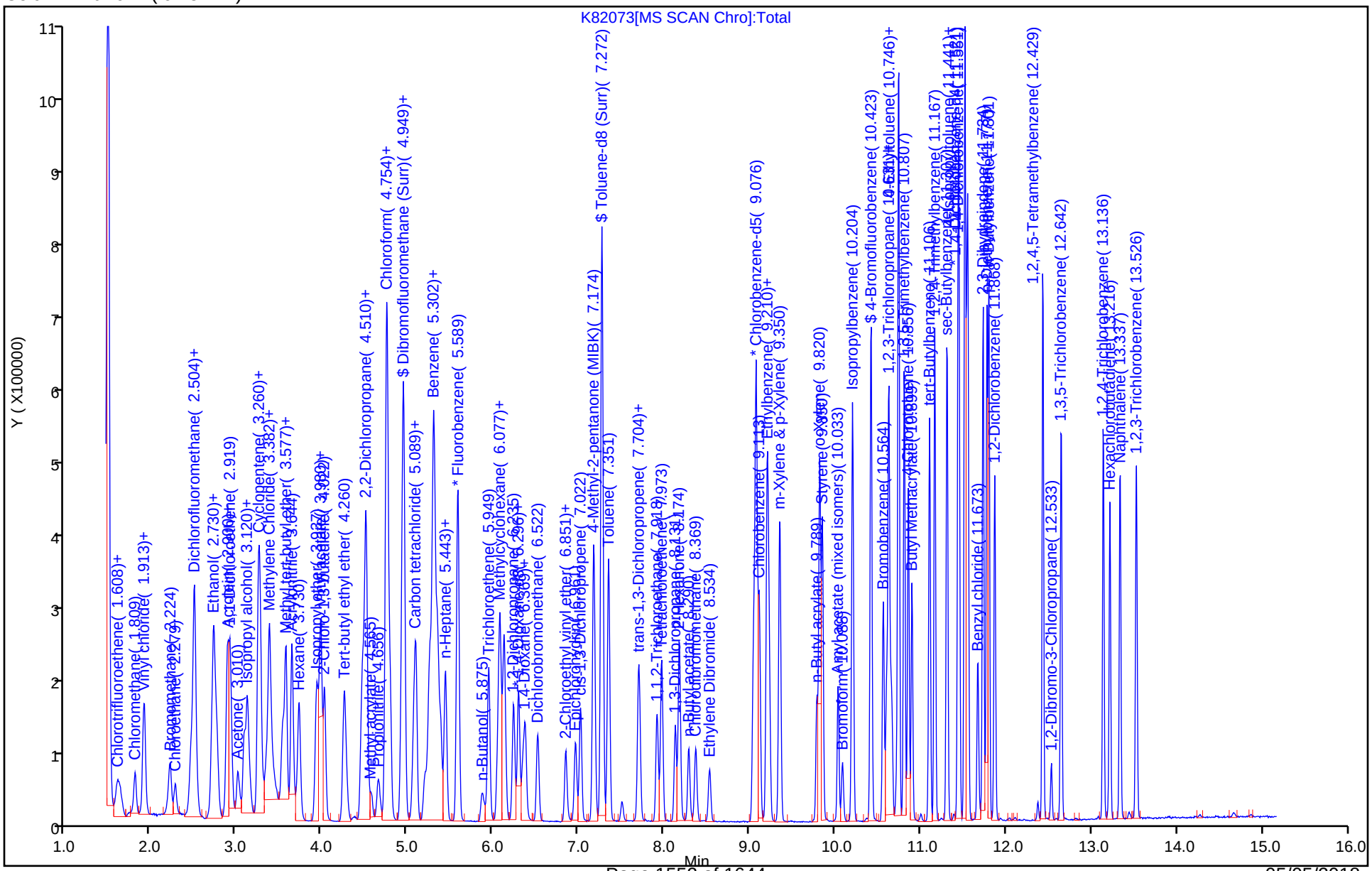
Report Date: 17-Apr-2018 14:36:26 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82073.D

Injection Date:	17-Apr-2018 00:03:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-153515-B-1-C MSD			Worklist Smp#:	14
Client ID:	GE-MW-110D(SO)-(69-70)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

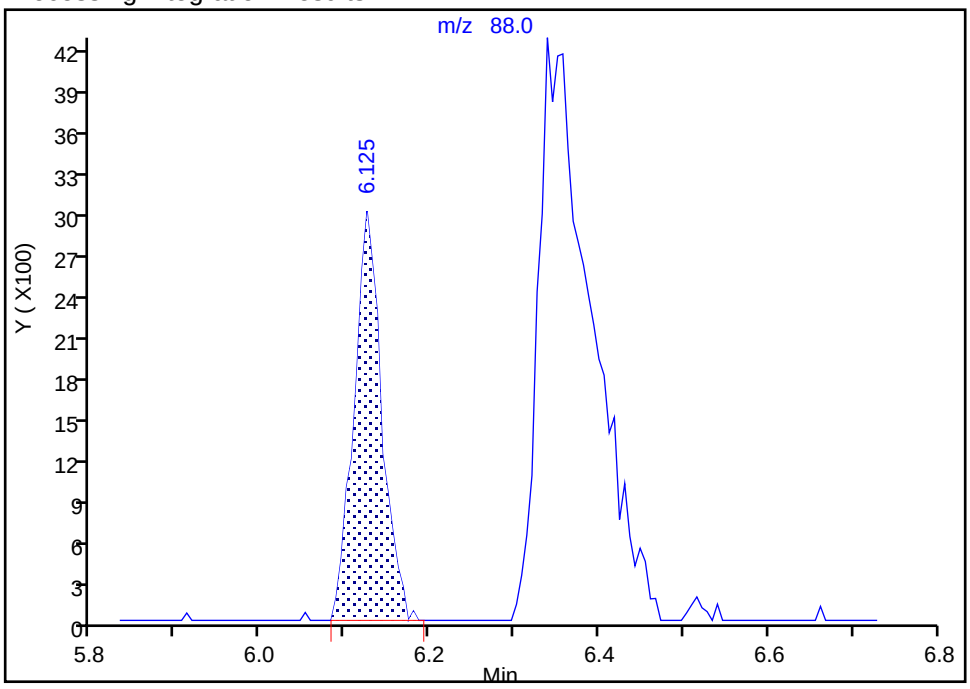
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180416-70455.b\K82073.D				
Injection Date:	17-Apr-2018 00:03:30	Instrument ID:	CVOAMS9		
Lims ID:	460-153515-B-1-C MSD				
Client ID:	GE-MW-110D(SO)-(69-70)				
Operator ID:		ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

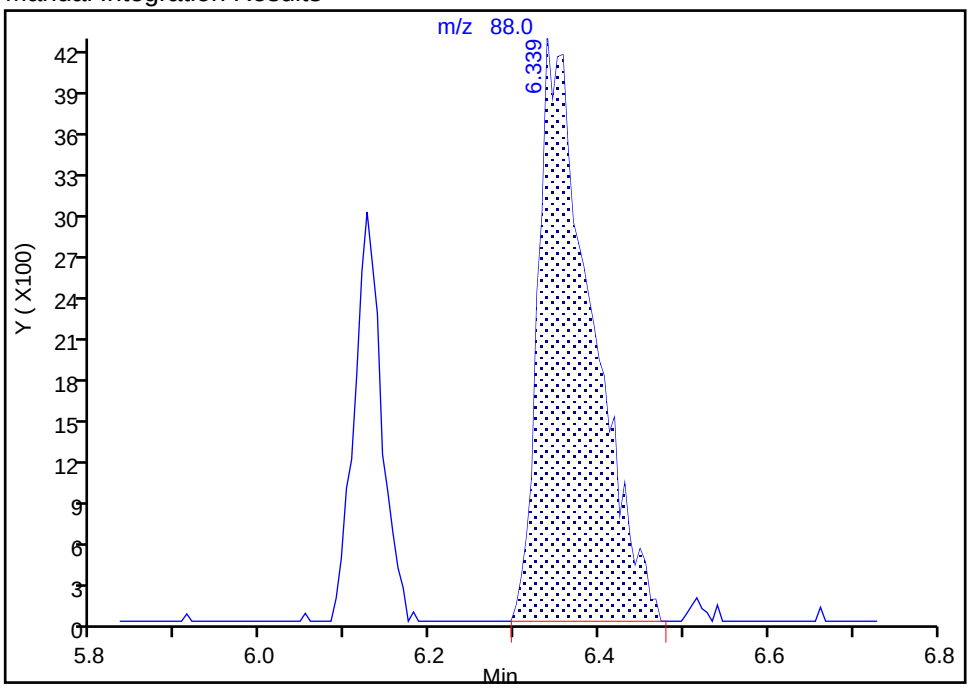
Processing Integration Results

RT: 6.13
Area: 6690
Amount: 178.5872
Amount Units: ug/l



Manual Integration Results

RT: 6.34
Area: 18279
Amount: 487.9516
Amount Units: ug/l



Reviewer: delpolitov, 17-Apr-2018 14:36:06

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS2 Start Date: 03/26/2018 03:14

Analysis Batch Number: 505957 End Date: 03/26/2018 13:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-505957/1		03/26/2018 03:14	1	B27889.D	Rtx-624 0.25(mm)
STD1 460-505957/3 IC		03/26/2018 04:03	1	B27891.D	Rtx-624 0.25(mm)
STD5 460-505957/4 IC		03/26/2018 04:33	1	B27892.D	Rtx-624 0.25(mm)
STD20 460-505957/5 ICIS		03/26/2018 04:57	1	B27893.D	Rtx-624 0.25(mm)
STD50 460-505957/6 IC		03/26/2018 05:20	1	B27894.D	Rtx-624 0.25(mm)
STD200 460-505957/7 IC		03/26/2018 05:44	1	B27895.D	Rtx-624 0.25(mm)
STD500 460-505957/8 IC		03/26/2018 06:08	1	B27896.D	Rtx-624 0.25(mm)
ICV 460-505957/16		03/26/2018 09:39	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 10:03	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 10:26	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 11:14	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 11:36	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 12:00	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 12:23	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 12:47	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 13:10	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 13:33	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2018 13:57	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS2 Start Date: 03/31/2018 10:48

Analysis Batch Number: 507466 End Date: 03/31/2018 19:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-507466/1		03/31/2018 10:48	1	B28112.D	Rtx-624 0.25(mm)
CCVIS 460-507466/4		03/31/2018 12:11	1	B28115.D	Rtx-624 0.25(mm)
LCS 460-507466/5		03/31/2018 12:53	1	B28116.D	Rtx-624 0.25(mm)
LCSD 460-507466/6		03/31/2018 13:17	1	B28117.D	Rtx-624 0.25(mm)
MB 460-507466/9		03/31/2018 14:28	1	B28120.D	Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 14:51	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 15:15	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 15:39	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 16:26	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 16:50	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 17:14	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 17:37	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 18:01	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 18:25	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 18:49	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 19:12	1		Rtx-624 0.25(mm)
ZZZZZ		03/31/2018 19:35	1		Rtx-624 0.25(mm)
460-152604-2		03/31/2018 19:59	1	B28134.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS4 Start Date: 03/28/2018 09:56

Analysis Batch Number: 506606 End Date: 03/28/2018 20:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-506606/1		03/28/2018 09:56	1	D47903.D	Rtx-624 0.25(mm)
STD5 460-506606/9 IC		03/28/2018 13:30	1	D47911.D	Rtx-624 0.25(mm)
STD20 460-506606/10 ICIS		03/28/2018 13:54	1	D47912.D	Rtx-624 0.25(mm)
STD50 460-506606/11 IC		03/28/2018 14:19	1	D47913.D	Rtx-624 0.25(mm)
STD200 460-506606/12 IC		03/28/2018 14:43	1	D47914.D	Rtx-624 0.25(mm)
STD500 460-506606/13 IC		03/28/2018 15:08	1	D47915.D	Rtx-624 0.25(mm)
STD1 460-506606/18 IC		03/28/2018 19:22	1	D47920a.D	Rtx-624 0.25(mm)
ICV 460-506606/19		03/28/2018 20:08	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS4 Start Date: 04/11/2018 08:11

Analysis Batch Number: 510106 End Date: 04/11/2018 18:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-510106/1		04/11/2018 08:11	1	D48509.D	Rtx-624 0.25(mm)
CCVIS 460-510106/2		04/11/2018 08:49	1	D48510.D	Rtx-624 0.25(mm)
LCS 460-510106/3		04/11/2018 09:14	1	D48511.D	Rtx-624 0.25(mm)
LCSD 460-510106/4		04/11/2018 09:39	1	D48512.D	Rtx-624 0.25(mm)
MB 460-510106/7		04/11/2018 10:54	1	D48515.D	Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 11:18	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 12:07	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 12:32	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 12:56	1		Rtx-624 0.25(mm)
460-153022-1		04/11/2018 13:45	1	D48522.D	Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 14:10	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 14:34	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 14:59	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 15:23	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 15:48	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 16:12	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 16:37	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 17:01	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 17:26	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 17:51	1		Rtx-624 0.25(mm)
ZZZZZ		04/11/2018 18:15	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS4 Start Date: 04/16/2018 18:25

Analysis Batch Number: 511498 End Date: 04/17/2018 04:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-511498/1		04/16/2018 18:25	1	D48757.D	Rtx-624 0.25(mm)
CCVIS 460-511498/3		04/16/2018 19:15	1	D48759.D	Rtx-624 0.25(mm)
LCS 460-511498/4		04/16/2018 19:40	1	D48760.D	Rtx-624 0.25(mm)
LCSD 460-511498/5		04/16/2018 20:04	1	D48761.D	Rtx-624 0.25(mm)
MB 460-511498/8		04/16/2018 21:36	1	D48764.D	Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 22:37	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 23:02	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 23:26	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 23:51	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 00:16	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 00:40	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 01:05	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 01:30	1		Rtx-624 0.25(mm)
460-153682-1		04/17/2018 04:24	1	D48780.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS4 Start Date: 04/19/2018 17:40

Analysis Batch Number: 512479 End Date: 04/20/2018 04:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-512479/1		04/19/2018 17:40	1	D48917.D	Rtx-624 0.25(mm)
CCVIS 460-512479/3		04/19/2018 18:35	1	D48919.D	Rtx-624 0.25(mm)
LCS 460-512479/4		04/19/2018 19:00	1	D48920.D	Rtx-624 0.25(mm)
LCSD 460-512479/5		04/19/2018 19:25	1	D48921.D	Rtx-624 0.25(mm)
MB 460-512479/8		04/19/2018 20:38	1	D48924.D	Rtx-624 0.25(mm)
460-153389-1		04/19/2018 21:03	1	D48925.D	Rtx-624 0.25(mm)
ZZZZZ		04/19/2018 22:35	1		Rtx-624 0.25(mm)
ZZZZZ		04/19/2018 23:00	1		Rtx-624 0.25(mm)
ZZZZZ		04/19/2018 23:25	1		Rtx-624 0.25(mm)
ZZZZZ		04/19/2018 23:49	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 00:14	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 00:39	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 01:28	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 01:53	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 02:18	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 02:43	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 03:07	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 03:32	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 03:56	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 04:21	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 04:46	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS4 Start Date: 04/20/2018 05:30

Analysis Batch Number: 512623 End Date: 04/20/2018 16:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-512623/1		04/20/2018 05:30	1	D48944.D	Rtx-624 0.25(mm)
CCVIS 460-512623/2		04/20/2018 06:44	1	D48945.D	Rtx-624 0.25(mm)
LCS 460-512623/3		04/20/2018 07:20	1	D48946.D	Rtx-624 0.25(mm)
LCSD 460-512623/4		04/20/2018 07:45	1	D48947.D	Rtx-624 0.25(mm)
MB 460-512623/7		04/20/2018 08:59	1	D48950.D	Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 09:23	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 09:48	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 10:13	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 13:54	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 14:19	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 14:44	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 15:33	1		Rtx-624 0.25(mm)
ZZZZZ		04/20/2018 15:58	1		Rtx-624 0.25(mm)
460-153878-1		04/20/2018 16:23	1	D48968.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 03/09/2018 21:58

Analysis Batch Number: 502604 End Date: 03/10/2018 02:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-502604/1		03/09/2018 21:58	1	K80593.D	Rtx-624 0.25(mm)
STD1 460-502604/2 IC		03/09/2018 22:30	1	K80594.D	Rtx-624 0.25(mm)
STD5 460-502604/3 IC		03/09/2018 22:54	1	K80595.D	Rtx-624 0.25(mm)
STD20 460-502604/4 ICIS		03/09/2018 23:18	1	K80596.D	Rtx-624 0.25(mm)
STD50 460-502604/5 IC		03/09/2018 23:43	1	K80597.D	Rtx-624 0.25(mm)
STD200 460-502604/6 IC		03/10/2018 00:07	1	K80598.D	Rtx-624 0.25(mm)
STD500 460-502604/7 IC		03/10/2018 00:31	1	K80599.D	Rtx-624 0.25(mm)
ICV 460-502604/13		03/10/2018 02:57	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 03/20/2018 21:17

Analysis Batch Number: 504873 End Date: 03/21/2018 07:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-504873/1		03/20/2018 21:17	1	K81009.D	Rtx-624 0.25(mm)
CCVIS 460-504873/3		03/20/2018 23:13	1	K81011.D	Rtx-624 0.25(mm)
LCS 460-504873/4		03/20/2018 23:38	1	K81012.D	Rtx-624 0.25(mm)
LCSD 460-504873/5		03/21/2018 00:03	1	K81013.D	Rtx-624 0.25(mm)
MB 460-504873/8		03/21/2018 01:16	1	K81016.D	Rtx-624 0.25(mm)
ZZZZZ		03/21/2018 02:19	1		Rtx-624 0.25(mm)
460-152211-2		03/21/2018 02:43	1	K81019.D	Rtx-624 0.25(mm)
460-152211-2 MS		03/21/2018 03:08	1	K81020.D	Rtx-624 0.25(mm)
460-152211-2 MSD		03/21/2018 03:32	1	K81021.D	Rtx-624 0.25(mm)
ZZZZZ		03/21/2018 04:21	1		Rtx-624 0.25(mm)
460-152211-1		03/21/2018 04:44	1	K81024.D	Rtx-624 0.25(mm)
460-152211-3		03/21/2018 05:09	1	K81025.D	Rtx-624 0.25(mm)
460-152211-4		03/21/2018 05:33	1	K81026.D	Rtx-624 0.25(mm)
460-152211-5		03/21/2018 05:57	1	K81027.D	Rtx-624 0.25(mm)
ZZZZZ		03/21/2018 06:21	1		Rtx-624 0.25(mm)
ZZZZZ		03/21/2018 06:46	1		Rtx-624 0.25(mm)
ZZZZZ		03/21/2018 07:10	1		Rtx-624 0.25(mm)
ZZZZZ		03/21/2018 07:34	1		Rtx-624 0.25(mm)
ZZZZZ		03/21/2018 07:58	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 03/23/2018 12:02

Analysis Batch Number: 505429 End Date: 03/23/2018 17:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-505429/1		03/23/2018 12:02	1	K81080.D	Rtx-624 0.25(mm)
STD1 460-505429/3 IC		03/23/2018 12:53	1	K81082.D	Rtx-624 0.25(mm)
STD5 460-505429/4 IC		03/23/2018 13:18	1	K81083.D	Rtx-624 0.25(mm)
STD20 460-505429/5 ICIS		03/23/2018 13:42	1	K81084.D	Rtx-624 0.25(mm)
STD50 460-505429/6 IC		03/23/2018 14:07	1	K81085.D	Rtx-624 0.25(mm)
STD200 460-505429/7 IC		03/23/2018 14:31	1	K81086.D	Rtx-624 0.25(mm)
STD500 460-505429/8 IC		03/23/2018 14:55	1	K81087.D	Rtx-624 0.25(mm)
ICV 460-505429/14		03/23/2018 17:59	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 03/24/2018 05:27

Analysis Batch Number: 505749 End Date: 03/24/2018 13:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-505749/1		03/24/2018 05:27	1	K81117.D	Rtx-624 0.25(mm)
CCVIS 460-505749/2		03/24/2018 05:54	1	K81118.D	Rtx-624 0.25(mm)
LCS 460-505749/3		03/24/2018 06:19	1	K81119.D	Rtx-624 0.25(mm)
LCSD 460-505749/4		03/24/2018 06:43	1	K81120.D	Rtx-624 0.25(mm)
MB 460-505749/7		03/24/2018 08:10	1	K81123.D	Rtx-624 0.25(mm)
460-152331-3		03/24/2018 08:36	1	K81124.D	Rtx-624 0.25(mm)
460-152331-4		03/24/2018 09:01	1	K81125.D	Rtx-624 0.25(mm)
460-152331-5		03/24/2018 09:24	1	K81126.D	Rtx-624 0.25(mm)
460-152331-6		03/24/2018 09:49	1	K81127.D	Rtx-624 0.25(mm)
460-152331-7		03/24/2018 10:13	1	K81128.D	Rtx-624 0.25(mm)
460-152331-1		03/24/2018 10:37	1	K81129.D	Rtx-624 0.25(mm)
ZZZZZ		03/24/2018 12:14	1		Rtx-624 0.25(mm)
ZZZZZ		03/24/2018 13:03	1		Rtx-624 0.25(mm)
ZZZZZ		03/24/2018 13:50	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 03/25/2018 04:01

Analysis Batch Number: 505873 End Date: 03/25/2018 15:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-505873/1		03/25/2018 04:01	1	K81146.D	Rtx-624 0.25(mm)
CCVIS 460-505873/2		03/25/2018 04:30	1	K81147.D	Rtx-624 0.25(mm)
LCS 460-505873/3		03/25/2018 04:55	1	K81148.D	Rtx-624 0.25(mm)
LCSD 460-505873/4		03/25/2018 05:19	1	K81149.D	Rtx-624 0.25(mm)
MB 460-505873/7		03/25/2018 06:54	1	K81152.D	Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 07:29	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 09:29	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 09:54	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 10:18	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 10:42	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 11:06	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 11:30	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 11:54	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 12:42	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 13:06	1		Rtx-624 0.25(mm)
460-152331-2		03/25/2018 13:30	1	K81168.D	Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 13:54	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 14:18	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 14:41	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 15:06	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2018 15:30	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 04/03/2018 06:47

Analysis Batch Number: 507960 End Date: 04/03/2018 15:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-507960/1		04/03/2018 06:47	1	K81443.D	Rtx-624 0.25(mm)
STD1 460-507960/3 IC		04/03/2018 07:38	1	K81445.D	Rtx-624 0.25(mm)
STD20 460-507960/5 ICIS		04/03/2018 10:54	1	K81447.D	Rtx-624 0.25(mm)
STD50 460-507960/6 IC		04/03/2018 11:18	1	K81448.D	Rtx-624 0.25(mm)
STD200 460-507960/7 IC		04/03/2018 11:42	1	K81449.D	Rtx-624 0.25(mm)
STD500 460-507960/8 IC		04/03/2018 12:07	1	K81450.D	Rtx-624 0.25(mm)
STD5 460-507960/13 IC		04/03/2018 15:21	1	K81455.D	Rtx-624 0.25(mm)
ICV 460-507960/14		04/03/2018 15:45	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 04/12/2018 20:13

Analysis Batch Number: 510660 End Date: 04/13/2018 05:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-510660/1		04/12/2018 20:13	1	K81908.D	Rtx-624 0.25(mm)
CCVIS 460-510660/3		04/12/2018 21:47	1	K81910.D	Rtx-624 0.25(mm)
LCS 460-510660/4		04/12/2018 22:11	1	K81911.D	Rtx-624 0.25(mm)
LCSD 460-510660/5		04/12/2018 22:35	1	K81912.D	Rtx-624 0.25(mm)
ZZZZZ		04/12/2018 23:23	1		Rtx-624 0.25(mm)
MB 460-510660/8		04/12/2018 23:48	1	K81915.D	Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 00:12	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 00:36	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 01:01	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 01:25	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 01:50	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 02:14	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 02:38	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 03:02	1		Rtx-624 0.25(mm)
460-153082-1		04/13/2018 03:26	1	K81924.D	Rtx-624 0.25(mm)
460-153163-1		04/13/2018 03:51	1	K81925.D	Rtx-624 0.25(mm)
460-153163-2		04/13/2018 04:15	1	K81926.D	Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 04:39	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 05:03	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 05:53	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 04/13/2018 19:50

Analysis Batch Number: 510972 End Date: 04/14/2018 04:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-510972/1		04/13/2018 19:50	1	K81962.D	Rtx-624 0.25(mm)
CCVIS 460-510972/2		04/13/2018 20:21	1	K81963.D	Rtx-624 0.25(mm)
LCS 460-510972/3		04/13/2018 20:46	1	K81964.D	Rtx-624 0.25(mm)
LCSD 460-510972/4		04/13/2018 21:10	1	K81965.D	Rtx-624 0.25(mm)
MB 460-510972/7		04/13/2018 22:23	1	K81968.D	Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 22:49	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 23:13	1		Rtx-624 0.25(mm)
ZZZZZ		04/13/2018 23:37	1		Rtx-624 0.25(mm)
ZZZZZ		04/14/2018 00:02	1		Rtx-624 0.25(mm)
ZZZZZ		04/14/2018 00:26	1		Rtx-624 0.25(mm)
460-153254-2		04/14/2018 01:15	1	K81975.D	Rtx-624 0.25(mm)
ZZZZZ		04/14/2018 01:40	1		Rtx-624 0.25(mm)
ZZZZZ		04/14/2018 02:28	1		Rtx-624 0.25(mm)
ZZZZZ		04/14/2018 02:53	1		Rtx-624 0.25(mm)
ZZZZZ		04/14/2018 03:17	1		Rtx-624 0.25(mm)
ZZZZZ		04/14/2018 03:41	1		Rtx-624 0.25(mm)
ZZZZZ		04/14/2018 04:06	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 04/16/2018 03:56

Analysis Batch Number: 511293 End Date: 04/16/2018 15:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-511293/1		04/16/2018 03:56	1	K82031.D	Rtx-624 0.25(mm)
CCVIS 460-511293/3		04/16/2018 04:50	1	K82033.D	Rtx-624 0.25(mm)
LCS 460-511293/4		04/16/2018 05:14	1	K82034.D	Rtx-624 0.25(mm)
LCSD 460-511293/5		04/16/2018 05:51	1	K82035.D	Rtx-624 0.25(mm)
MB 460-511293/8		04/16/2018 07:18	1	K82038.D	Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 08:08	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 08:32	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 08:57	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 10:10	1		Rtx-624 0.25(mm)
460-153254-1		04/16/2018 10:34	1	K82046.D	Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 10:59	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 11:48	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 12:13	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 12:37	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 13:26	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 13:50	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 14:15	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 15:03	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 15:28	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 04/16/2018 17:18

Analysis Batch Number: 511471 End Date: 04/17/2018 05:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-511471/1		04/16/2018 17:18	1	K82060.D	Rtx-624 0.25(mm)
CCVIS 460-511471/4		04/16/2018 18:36	1	K82063.D	Rtx-624 0.25(mm)
LCS 460-511471/5		04/16/2018 19:12	1	K82064.D	Rtx-624 0.25(mm)
MB 460-511471/8		04/16/2018 20:33	1	K82067.D	Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 21:27	1		Rtx-624 0.25(mm)
460-153515-1		04/16/2018 21:52	1	K82069.D	Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 22:16	1		Rtx-624 0.25(mm)
ZZZZZ		04/16/2018 22:40	1		Rtx-624 0.25(mm)
460-153515-1 MS		04/16/2018 23:39	1	K82072.D	Rtx-624 0.25(mm)
460-153515-1 MSD		04/17/2018 00:03	1	K82073.D	Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 00:51	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 01:16	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 01:40	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 02:04	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 02:29	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 02:53	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 03:42	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 04:06	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 04:30	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 04:55	1		Rtx-624 0.25(mm)
ZZZZZ		04/17/2018 05:19	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 04/21/2018 05:15

Analysis Batch Number: 512949 End Date: 04/21/2018 16:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-512949/1		04/21/2018 05:15	1	K82294.D	Rtx-624 0.25(mm)
STD1 460-512949/3 IC		04/21/2018 06:04	1	K82296.D	Rtx-624 0.25(mm)
STD5 460-512949/4 IC		04/21/2018 06:29	1	K82297.D	Rtx-624 0.25(mm)
STD20 460-512949/5 ICIS		04/21/2018 06:54	1	K82298.D	Rtx-624 0.25(mm)
STD50 460-512949/6 IC		04/21/2018 07:18	1	K82299.D	Rtx-624 0.25(mm)
STD200 460-512949/7 IC		04/21/2018 07:42	1	K82300.D	Rtx-624 0.25(mm)
STD500 460-512949/8 IC		04/21/2018 08:07	1	K82301.D	Rtx-624 0.25(mm)
ICV 460-512949/13		04/21/2018 10:08	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 10:33	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 10:57	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 11:45	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 12:10	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 12:34	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 12:58	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 13:22	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 13:47	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 14:11	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 14:35	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 14:59	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 15:23	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 15:48	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 16:12	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 04/23/2018 17:01

Analysis Batch Number: 513435 End Date: 04/24/2018 04:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-513435/1		04/23/2018 17:01	1	K82434.D	Rtx-624 0.25(mm)
CCVIS 460-513435/2		04/23/2018 17:27	1	K82435.D	Rtx-624 0.25(mm)
LCS 460-513435/3		04/23/2018 17:51	1	K82436.D	Rtx-624 0.25(mm)
LCSD 460-513435/4		04/23/2018 18:16	1	K82437.D	Rtx-624 0.25(mm)
MB 460-513435/7		04/23/2018 19:41	1	K82440.D	Rtx-624 0.25(mm)
ZZZZZ		04/23/2018 20:33	1		Rtx-624 0.25(mm)
460-153018-1		04/23/2018 21:10	1	K82442.D	Rtx-624 0.25(mm)
ZZZZZ		04/23/2018 22:22	1		Rtx-624 0.25(mm)
ZZZZZ		04/23/2018 22:47	1		Rtx-624 0.25(mm)
ZZZZZ		04/24/2018 00:00	1		Rtx-624 0.25(mm)
ZZZZZ		04/24/2018 02:01	1		Rtx-624 0.25(mm)
ZZZZZ		04/24/2018 02:49	1		Rtx-624 0.25(mm)
ZZZZZ		04/24/2018 03:13	1		Rtx-624 0.25(mm)
ZZZZZ		04/24/2018 03:37	1		Rtx-624 0.25(mm)
ZZZZZ		04/24/2018 04:00	1		Rtx-624 0.25(mm)
ZZZZZ		04/24/2018 04:24	1		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 504769 Batch Start Date: 03/20/18 10:02 Batch Analyst: Morrison, Derek

Batch Method: 5035 Batch End Date: 03/20/18 10:09

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-152211-B-1	GC-SB-101(SO) -3-5	5035, 8260C	T	+030.394 g	36.12 g	5.726 g	5 mL		
460-152211-B-2	GC-SB-101(SO) -15.5-17.5	5035, 8260C	T	+030.525 g	36.24 g	5.715 g	5 mL		
460-152211-B-2 MS	GC-SB-101(SO) -15.5-17.5	5035, 8260C	T	+030.113 g	35.96 g	5.847 g	5 mL		
460-152211-B-2 MSD	GC-SB-101(SO) -15.5-17.5	5035, 8260C	T	+030.098 g	35.42 g	5.322 g	5 mL		
460-152211-B-3	GC-MW-102(SO) -3-5	5035, 8260C	T	+030.037 g	35.72 g	5.683 g	5 mL		
460-152211-B-4	GC-MW-102(SO) -9-11	5035, 8260C	T	+029.895 g	36.03 g	6.135 g	5 mL		
460-152211-B-5	GC-MW-103(SO) -3-5	5035, 8260C	T	+030.628 g	36.32 g	5.692 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 505001 Batch Start Date: 03/21/18 07:50 Batch Analyst: Morrison, Derek

Batch Method: 5035 Batch End Date: 03/21/18 07:56

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-152331-B-1	GC-MW-103(SO) -12-14	5035, 8260C	T	+030.869 g	37.40 g	6.531 g	5 mL		
460-152331-C-2	GC-MW-103(SO) -15-17	5035, 8260C	T	+030.807 g	36.53 g	5.723 g	5 mL		
460-152331-B-3	GC-MW-104(SO) -0.5-2.5	5035, 8260C	T	+030.640 g	35.65 g	5.01 g	5 mL		
460-152331-B-4	GC-MW-104(SO) -7-9	5035, 8260C	T	+030.540 g	36.42 g	5.88 g	5 mL		
460-152331-B-5	GC-MW-105(SO) -0.5-2.5	5035, 8260C	T	+030.614 g	36.14 g	5.526 g	5 mL		
460-152331-B-6	GC-MW-105(SO) -7-9	5035, 8260C	T	+030.832 g	36.38 g	5.548 g	5 mL		
460-152331-B-7	GC-Drain-02(SO)	5035, 8260C	T	+030.887 g	35.03 g	4.143 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 506215 Batch Start Date: 03/27/18 02:26 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 03/27/18 02:32

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-152604-B-2	GC-MW-107D(SO) -15-17	5035, 8260C	T	+030.798 g	36.50 g	5.702 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 507385 Batch Start Date: 03/31/18 00:37 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 03/31/18 00:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-153018-B-1	GC-MW-109M(SO) -15-17	5035, 8260C	T	+030.740 g	38.86 g	8.12 g	5 mL		
460-153022-C-1	GC-MW-107D(SO) -97-99	5035, 8260C	T	+030.804 g	37.39 g	6.586 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 507938 Batch Start Date: 04/03/18 01:29 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 04/03/18 01:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-153082-B-1	GC-MW-109M(SO) -33-35	5035, 8260C	T	+030.497 g	37.14 g	6.643 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 508211 Batch Start Date: 04/03/18 23:03 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 04/03/18 23:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-153163-B-1	GC-MW-106(SO) -15-17	5035, 8260C	T	+030.521 g	36.10 g	5.579 g	5 mL		
460-153163-B-2	GC-MW-108D(SO) -15-17	5035, 8260C	T	+030.802 g	36.34 g	5.538 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 508550 Batch Start Date: 04/04/18 22:37 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 04/04/18 22:38

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-153254-C-1	GC-MW-108D(SO) -33-35	5035, 8260C	T	+030.539 g	37.00 g	6.461 g	5 mL		
460-153254-B-2	GC-MW-108D(SO) -59-60.5	5035, 8260C	T	+030.709 g	40.84 g	10.131 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 508892 Batch Start Date: 04/06/18 00:34 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 04/06/18 00:36

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-153389-A-1	GC-MW-110D(SO) -15-17	5035, 8260C	T	+030.620 g	37.27 g	6.65 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 509399 Batch Start Date: 04/08/18 08:35 Batch Analyst: Morrison, Derek

Batch Method: 5035 Batch End Date: 04/08/18 08:43

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-153515-B-1	GE-MW-110D(SO)-(69-70)	5035, 8260C	T	+030.652 g	39.31 g	8.658 g	5 mL		
460-153515-B-1 MS	GE-MW-110D(SO)-(69-70)	5035, 8260C	T	+030.889 g	38.04 g	7.151 g	5 mL		
460-153515-B-1 MSD	GE-MW-110D(SO)-(69-70)	5035, 8260C	T	+030.701 g	37.53 g	6.829 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 510009 Batch Start Date: 04/11/18 00:38 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 04/11/18 00:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-153682-A-1	GC-MW-101D(SO) -14-15	5035, 8260C	T	+030.504 g	36.08 g	5.576 g	5 mL		

Batch Notes	
Balance ID	153682 Terracores frozen 4/10/18 21:03

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 510729 Batch Start Date: 04/12/18 23:55 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 04/13/18 00:02

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-153878-B-1	GC-MW-101D(SO) (99.2-100)	5035, 8260C	T	+030.568 g	36.78 g	6.212 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-152211-1

SDG No.:

Project: GEM Cleaners

Client Sample ID	Lab Sample ID
GC-SB-101(SO)-3-5	460-152211-1
GC-SB-101(SO)-15.5-17.5	460-152211-2
GC-MW-102(SO)-3-5	460-152211-3
GC-MW-102(SO)-9-11	460-152211-4
GC-MW-103(SO)-3-5	460-152211-5
GC-MW-103(SO)-12-14	460-152331-1
GC-MW-103(SO)-15-17	460-152331-2
GC-MW-104(SO)-0.5-2.5	460-152331-3
GC-MW-104(SO)-7-9	460-152331-4
GC-MW-105(SO)-0.5-2.5	460-152331-5
GC-MW-105(SO)-7-9	460-152331-6
GC-Drain-02(SO)	460-152331-7
GC-MW-107D(SO)-15-17	460-152604-2
GC-MW-109M(SO)-15-17	460-153018-1
GC-MW-107D(SO)-97-99	460-153022-1
GC-MW-109M(SO)-33-35	460-153082-1
GC-MW-106(SO)-15-17	460-153163-1
GC-MW-108D(SO)-15-17	460-153163-2
GC-MW-108D(SO)-33-35	460-153254-1
GC-MW-108D(SO)-59-60.5	460-153254-2
GC-MW-110D(SO)-15-17	460-153389-1
GE-MW-110D(SO)-(69-70)	460-153515-1
GC-MW-101D(SO)-14-15	460-153682-1
GC-MW-101D(SO)(99.2-100)	460-153878-1

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-152211-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 02/15/2007 17:07

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		1	
Percent Solids		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-152211-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/01/2007 16:49

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		1	
Percent Solids		1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 03/20/2018 11:16 End Date: 03/20/2018 11:16

Lab Sample ID	D / F	Type	Time	Analytes																				
				% Sol	Moist																			
ZZZZZZ			11:16																					
460-152211-1	1	T	11:16	X	X																			
460-152211-2	1	T	11:16	X	X																			
460-152211-2 MS	1	T	11:16	X	X																			
460-152211-2 MSD	1	T	11:16	X	X																			
460-152211-3	1	T	11:16	X	X																			
460-152211-4	1	T	11:16	X	X																			
460-152211-5	1	T	11:16	X	X																			
ZZZZZZ			11:16																					
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ZZZZZZ			11:16																					
460-152227-A-4 DU	1	T	11:16	X	X																			

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 03/23/2018 09:13 End Date: 03/23/2018 09:13

Lab Sample ID	D / F	Type	Time	Analytes																				
				% Sol	Moist																			
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
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ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
460-152331-1	1	T	09:13	X	X																			
460-152331-2	1	T	09:13	X	X																			
460-152331-3	1	T	09:13	X	X																			
460-152331-4	1	T	09:13	X	X																			
460-152331-5	1	T	09:13	X	X																			
460-152331-6	1	T	09:13	X	X																			
460-152331-7	1	T	09:13	X	X																			
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
ZZZZZZ			09:13																					
460-152436-D-5 DU	1	T	09:13	X	X																			

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 03/29/2018 07:45 End Date: 03/29/2018 07:45

Lab Sample ID	D / F	Type	Time	Analytes																				
				% Sol	Moist																			
ZZZZZZ			07:45																					
ZZZZZZ			07:45																					
ZZZZZZ			07:45																					
ZZZZZZ			07:45																					
ZZZZZZ			07:45																					
ZZZZZZ			07:45																					
460-152604-2	1	T	07:45	X	X																			
ZZZZZZ			07:45																					
ZZZZZZ			07:45																					
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ZZZZZZ			07:45																					
460-152796-E-8 DU	1	T	07:45	X	X																			

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/05/2018 11:38 End Date: 04/05/2018 11:38

Lab Sample ID	D / F	Type	Time	Analytes																				
				% Sol	Moist																			
ZZZZZZ			11:38																					
ZZZZZZ			11:38																					
460-153254-1	1	T	11:38	X	X																			
460-153254-2	1	T	11:38	X	X																			
ZZZZZZ			11:38																					
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460-153244-A-5 DU	1	T	11:38	X	X																			

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/05/2018 12:07 End Date: 04/05/2018 12:07

Lab Sample ID	D / F	Type	Time	Analytes																				
				% Sol	Moist																			
ZZZZZZ			12:07																					
ZZZZZZ			12:07																					
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ZZZZZZ			12:07																					
ZZZZZZ			12:07																					
ZZZZZZ			12:07																					
460-153163-2	1	T	12:07	X	X																			
460-153163-1	1	T	12:07	X	X																			
ZZZZZZ			12:07																					
ZZZZZZ			12:07																					
460-153022-1	1	T	12:07	X	X																			
460-153082-1	1	T	12:07	X	X																			
ZZZZZZ			12:07																					
ZZZZZZ			12:07																					
ZZZZZZ			12:07																					
ZZZZZZ			12:07																					
460-153266-A-7 DU	1	T	12:07	X	X																			

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/10/2018 10:47 End Date: 04/10/2018 10:47

Lab Sample ID	D / F	Type	Time	Analytes																			
				% Sol	Moist																		
ZZZZZZ			10:47																				
460-153515-1	1	T	10:47	X	X																		
460-153515-1 MS	1	T	10:47	X	X																		
460-153515-1MSD	1	T	10:47	X	X																		
ZZZZZZ			10:47																				
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ZZZZZZ			10:47																				
460-153588-A-1 DU	1	T	10:47	X	X																		

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/11/2018 07:20 End Date: 04/11/2018 07:20

Lab Sample ID	D / F	Type	Time	Analytes																				
				% Sol	Moist																			
ZZZZZZ			07:20																					
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ZZZZZZ			07:20																					
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ZZZZZZ			07:20																					
ZZZZZZ			07:20																					
460-153682-1	1	T	07:20	X	X																			
ZZZZZZ			07:20																					
ZZZZZZ			07:20																					
460-153702-A-1 MS	1	T	07:20	X	X																			
ZZZZZZ			07:20																					
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Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/13/2018 08:43 End Date: 04/13/2018 08:43

Lab Sample ID	D / F	Type	Time	Analytes																			
				% Sol	Moist																		
ZZZZZZ			08:43																				
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ZZZZZZ			08:43																				
460-153876-C-2 MS	1	T	08:43	X	X																		
460-153876-C-2 MSD	1	T	08:43	X	X																		
460-153878-1	1	T	08:43	X	X																		
ZZZZZZ			08:43																				
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ZZZZZZ			08:43																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/20/2018 01:09 End Date: 04/20/2018 01:09

Lab Sample ID	D / F	Type	Time	Analytes																			
				% Sol	Moist																		
ZZZZZZ			01:09																				
460-153018-1	1	T	01:09	X	X																		
ZZZZZZ			01:09																				
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ZZZZZZ			01:09																				
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460-154343-E-1 DU	1	T	01:09	X	X																		

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/20/2018 07:26 End Date: 04/20/2018 07:26

Lab Sample ID	D / F	Type	Time	Analytes																				
				% Sol	Moist																			
ZZZZZZ			07:26																					
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ZZZZZZ			07:26																					
460-153389-1	1	T	07:26	X	X																			
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Prep Types

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 504785 Batch Start Date: 03/20/18 11:16 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-152211-D-1	GC-SB-101(SO) -3-5	Moisture	T	2	1.02 g	7.53 g	7.22 g		
460-152211-D-2	GC-SB-101(SO) -15.5-17.5	Moisture	T	3	1.03 g	8.24 g	7.67 g		
460-152211-D-2 MS	GC-SB-101(SO) -15.5-17.5	Moisture	T	4	1.03 g	8.24 g	7.67 g		
460-152211-D-2 MSD	GC-SB-101(SO) -15.5-17.5	Moisture	T	5	1.03 g	8.24 g	7.67 g		
460-152211-D-3	GC-MW-102(SO) -3-5	Moisture	T	6	1.03 g	9.31 g	8.91 g		
460-152211-D-4	GC-MW-102(SO) -9-11	Moisture	T	7	1.05 g	9.13 g	7.86 g		
460-152211-D-5	GC-MW-103(SO) -3-5	Moisture	T	8	1.05 g	9.04 g	8.64 g		
460-152227-A-4 DU		Moisture	T	22	1.02 g	7.25 g	6.33 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	03/20/2018
Oven Temp In	103 Degrees C
Time samples were place in the oven	11:32
Date samples were removed from oven	03/21/2018
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	07:52
Oven ID	3
Thermometer ID	146052
Temperature - Start - Uncorrected	103 Degrees C
Temperature - End - Uncorrected	103 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 505544 Batch Start Date: 03/23/18 09:13 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-152331-D-1	GC-MW-103(SO) -12-14	Moisture	T	165	1.03 g	7.71 g	6.02 g		
460-152331-D-2	GC-MW-103(SO) -15-17	Moisture	T	166	1.02 g	6.21 g	5.09 g		
460-152331-D-3	GC-MW-104(SO) -0.5-2.5	Moisture	T	167	1.03 g	6.22 g	6.06 g		
460-152331-D-4	GC-MW-104(SO) -7-9	Moisture	T	168	1.04 g	6.81 g	6.41 g		
460-152331-D-5	GC-MW-105(SO) -0.5-2.5	Moisture	T	169	1.02 g	6.30 g	6.19 g		
460-152331-D-6	GC-MW-105(SO) -7-9	Moisture	T	170	1.04 g	8.71 g	8.21 g		
460-152331-D-7	GC-Drain-02(SO)	Moisture	T	171	1.05 g	6.38 g	2.88 g		
460-152436-D-5 DU		Moisture	T	176	1.04 g	5.79 g	5.18 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	03/23/2018
Oven Temp In	103 Degrees C
Time samples were place in the oven	10:35
Date samples were removed from oven	03/24/2018
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	05:31
Oven ID	3
Thermometer ID	146052
Temperature - Start - Uncorrected	103 Degrees C
Temperature - End - Uncorrected	103 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 506862 Batch Start Date: 03/29/18 07:45 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-152604-D-2	GC-MW-107D(SO) -15-17	Moisture	T	7	1.03 g	6.11 g	5.68 g		
460-152796-E-8 DU		Moisture	T	22	1.04 g	7.11 g	6.50 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	03/29/2018
Oven Temp In	103 Degrees C
Time samples were place in the oven	08:04
Date samples were removed from oven	03/30/2018
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	05:31
Oven ID	3
Thermometer ID	146052
Temperature - Start - Uncorrected	103 Degrees C
Temperature - End - Uncorrected	103 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 508742 Batch Start Date: 04/05/18 11:38 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-153254-D-1	GC-MW-108D(SO) -33-35	Moisture	T	179	1.03 g	5.50 g	4.41 g		
460-153254-D-2	GC-MW-108D(SO) -59-60.5	Moisture	T	180	1.03 g	7.68 g	6.88 g		
460-153244-A-5 DU		Moisture	T	198	1.04 g	6.68 g	5.97 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	04/05/2018
Oven Temp In	101 Degrees C
Time samples were place in the oven	11:49
Date samples were removed from oven	04/06/2018
Oven Temp Out	104 Degrees C
Time Samples were removed from oven	05:50
Oven ID	2
Thermometer ID	146070
Temperature - Start - Uncorrected	101 Degrees C
Temperature - End - Uncorrected	104 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 508755 Batch Start Date: 04/05/18 12:07 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-153163-D-2	GC-MW-108D(SO) -15-17	Moisture	T	12	1.01 g	5.59 g	5.08 g		
460-153163-D-1	GC-MW-106(SO) -15-17	Moisture	T	13	1.04 g	6.17 g	5.82 g		
460-153022-D-1	GC-MW-107D(SO) -97-99	Moisture	T	16	1.04 g	7.30 g	6.18 g		
460-153082-D-1	GC-MW-109M(SO) -33-35	Moisture	T	17	1.06 g	9.50 g	7.43 g		
460-153266-A-7 DU		Moisture	T	22	1.09 g	8.12 g	7.56 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	04/05/2018
Oven Temp In	101 Degrees C
Time samples were place in the oven	12:24
Date samples were removed from oven	04/06/2018
Oven Temp Out	104 Degrees C
Time Samples were removed from oven	06:26
Oven ID	2
Thermometer ID	146070
Temperature - Start - Uncorrected	101 Degrees C
Temperature - End - Uncorrected	104 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 509861 Batch Start Date: 04/10/18 10:47 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-153515-D-1	GE-MW-110D(SO)-(69-70)	Moisture	T	156	1.03 g	7.57 g	6.60 g		
460-153515-D-1 MS	GE-MW-110D(SO)-(69-70)	Moisture	T	157	1.03 g	7.57 g	6.60 g		
460-153515-D-1 MSD	GE-MW-110D(SO)-(69-70)	Moisture	T	158	1.03 g	7.57 g	6.60 g		
460-153588-A-1 DU		Moisture	T	176	1.04 g	5.10 g	4.58 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	04/10/2018
Oven Temp In	107 Degrees C
Time samples were place in the oven	11:11
Date samples were removed from oven	04/11/2018
Oven Temp Out	104 Degrees C
Time Samples were removed from oven	05:30
Oven ID	2
Thermometer ID	146070
Temperature - Start - Uncorrected	107 Degrees C
Temperature - End - Uncorrected	104 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 510083 Batch Start Date: 04/11/18 07:20 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-153682-D-1	GC-MW-101D(SO) -14-15	Moisture	T	76	1.04 g	7.16 g	6.93 g		
460-153702-A-1 MS		Moisture	T	79	1.05 g	6.37 g	5.63 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	04/11/2018
Oven Temp In	104 Degrees C
Time samples were place in the oven	07:58
Date samples were removed from oven	04/12/2018
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	05:30
Oven ID	3
Thermometer ID	146052
Temperature - Start - Uncorrected	104 Degrees C
Temperature - End - Uncorrected	103 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 510842 Batch Start Date: 04/13/18 08:43 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-153876-C-2 MS		Moisture	T	126	1.04 g	6.41 g	5.71 g		
460-153876-C-2 MSD		Moisture	T	127	1.04 g	6.41 g	5.71 g		
460-153878-D-1	GC-MW-101D(SO) (99.2-100)	Moisture	T	128	1.01 g	6.28 g	5.48 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	04/13/2018
Oven Temp In	105 Degrees C
Time samples were place in the oven	08:57
Date samples were removed from oven	04/14/2018
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	06:00
Oven ID	3
Thermometer ID	146052
Temperature - Start - Uncorrected	105 Degrees C
Temperature - End - Uncorrected	103 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 512605 Batch Start Date: 04/20/18 01:09 Batch Analyst: Infante, Warleny M

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-153018-D-1	GC-MW-109M(SO) -15-17	Moisture	T	2	1.04 g	5.91 g	5.78 g		
460-154343-E-1 DU		Moisture	T	22	1.05 g	5.35 g	4.46 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	12/20/2018
Oven Temp In	100 Degrees C
Time samples were place in the oven	01:28
Date samples were removed from oven	04/20/2018
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	13:28
Oven ID	2
Thermometer ID	146070
Temperature - Start - Uncorrected	0128 Degrees C
Temperature - End - Uncorrected	103 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Batch Number: 512677 Batch Start Date: 04/20/18 07:26 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-153389-D-1	GC-MW-110D(SO) -15-17	Moisture	T	13	1.07 g	8.43 g	7.61 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	04/20/2018
Oven Temp In	103 Degrees C
Time samples were place in the oven	07:41
Date samples were removed from oven	04/21/2018
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	05:30
Oven ID	3
Thermometer ID	146052
Temperature - Start - Uncorrected	103 Degrees C
Temperature - End - Uncorrected	103 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Lindsay O'Hara	Samplers Name (Printed): James Robinson	Site/Project Identification: GEM Cleaners
Company: TRC Engineers, Inc.	P. O. #: 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 1430 Broadway	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: New York State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐	LAB USE ONLY Project No:
Phone: 203-278-5305 Fax: lonara@trcsolutions.com	Other ☒	Job No: 152211

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

460-152211 Chain of Custody

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOC + 10 via 8260			Sample Numbers
GC-SB-101(SO)-3-5	3/19	910	S	4	X	All 0-2ppm w/ PID		1
* GC-SB-101(SO)-15.5-17.5	3/19	920	S	4	X			2
GC-MW-102(SO)-3-5	3/19	1135	S	4	X			3
GC-MW-102(SO)-9-10	3/19	1130	S	4	X			4
GC-MW-103(SO)-3-5	3/19	1400	S	4	X			5
■ GC-MW-103(SO)-10-12	3/19	1355	S	4	X	← Note PID @ 13.8ppm		HOLD 6

SHORT HOLD

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Soil: X
Water:

Special Instructions: * Run MS/MSD on GC-SB-101(SO)-15.5-17.5; please use sample suffixes listed on the COC not on individual Water Metals Filtered (Yes/No)? Container labels

■ HOLD GC-MW-103(SO)-10-12

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	3/19/18 15:45	1)	T. A
2)	T. A	3/19/18 20:00	2) Wadeny Infante	TAEDT
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0814)

Massachusetts (M-NJ312), North Carolina (No. 578)

1.7 1.4 EKH 11 NOEJ

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 152211

Number of Coolers: Range: °C

Cooler Temperatures

Cooler #1:	°C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 2/19/18

TestAmerica Edison
777 New Durham Road
NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

05/05/2018

Client Information	Sampler: James Robinson	Lab PM: Franklin, Jannel O	Carrier Tracking No(s):	COC No: 460-95566-60636.1
Client Contact: Emily Ebert	Phone: 651-263-4479	E-Mail: jannel.franklin@testamericainc.com		Page: Page 1 of 1
Company: TRC Environmental Corporation				Job #: 152331

Address: 1430 Broadway, 10th FL	Due Date Requested:	Analysis Requested
City: New York	TAT Requested (days):	
State, Zip: NY, 10018-3308		
Phone: 860-298-9692(Tel)	PO #: ~~Purchase Order Requested~~ 120097	
Email: EEbert@trcsolutions.com	WO #:	
Project Name: GEM Cleaners	Project #: 46025365	
Site: 84 N Village Ave, Rockville Centre	SSOW#:	

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, ...S2O3, ...SO4, ... Dodecahydrate, ...itone, ...AA, ...4-5, ...r (specify)

460-152331 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOC + 10	1,4-Dioxane	Total Number of	Special Instructions/Note:
			Preservation Code:				F	J		
GC-MW-103(50)-12-14	3/20	0910	G	Solid			X	X		PID=300ppm 1
GC-MW-103(50)-15-17	3/20	0945	G	Solid			X	X		PID=0 ppm 2
GC-MW-104(50)-0.5-2.5	3/20	1040	G	Solid			X	X		PID=0ppm 3
GC-MW-104(50)-7-9	3/20	1045	G	Solid			X	X		PID=0ppm 4
GC-MW-105(50)-0.5-2.5	3/20	1220	G	Solid			X	X		5
GC-MW-105(50)-7-9	3/20	1225	G	Solid			X	X		6
GC-Drain-02(50)	3/20	1335	G	Solid			X	X		7
				Solid						
				Solid						
				Solid						
				Solid						

SHORT HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Category B Deliverable + NYSDEC Equis EDD

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/20/18 1445	Company	Received by:	Date/Time: 3/20/18 1445	Company TA
Relinquished by:	Date/Time: 3/20/18 19:40	Company TA	Received by:	Date/Time: 03/20/18 1940	Company TA edd
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

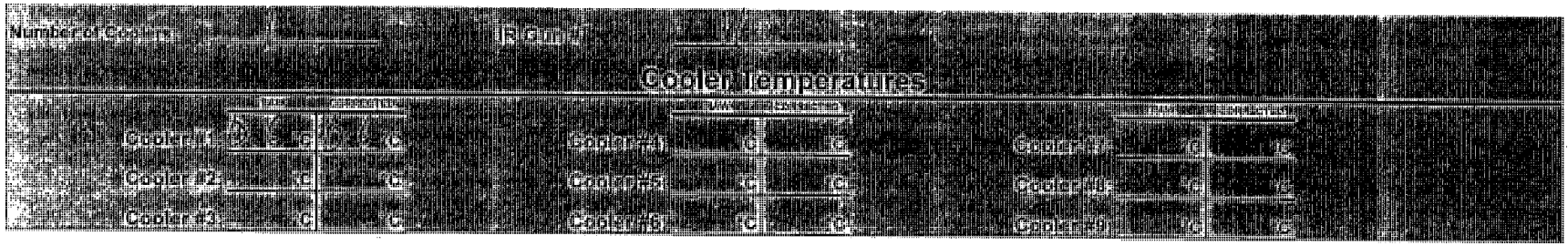
0.6 / 0.6 IR # 11 Does

Ver: 08/04/2016

TestAmerica Edison
Receipt Temperature and pH Log

Page ____ of ____

Job Number: 152331



TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 3/20/18

05/05/2018

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

05/05/2018

Client Information	Sampler: James Robinson	Lab PM: Franklin, Jannel O	Carrier Tracking No(s):	COC No: 460-95566-60636.3
Client Contact: Emily Ebert	Phone: 651-263-4429	E-Mail: jannel.franklin@testamericainc.com		Page: 1 of 1 (Page 2 of 3)
Company: TRC Environmental Corporation				Job #: 152604

Address: 1430 Broadway, 10th FL	Due Date Requested: 3/28/18 for "Wash" sample	Analysis Requested	Preservation Codes:
City: New York	TAT Requested (days): 48 hr for 1 sample; standard for MW sample		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: NY, 10018-3308			
Phone: 860-298-9692(Tel)	PO #: Purchase Order Requested		Other:
Email: EEbert@trcsolutions.com	WO #:		
Project Name: GEM Cleaners	Project #: 46025365		
Site: Gem Cleaners	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOC + 10	Reactivity, Ignitability, Corrosivity	TCLP metals	PCBs	Total Number of containers	Special Instructions/Note:	
			Preservation Code:				F						
GC-Waste(SO)-Drum-1	3/26/18	1045	C	Solid			X	X	X	X		48 hr TAT	1
GC-MW-107(SO)-15-17	3/26/18	1100	G	Solid			X					HOLD	2
				Solid									
				Solid									
				Solid									

460-152604 Chain of Custody

SHORT HOLD

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify): Category B & NYS EQUIS DEC Edd	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/26/18			3/26/18 1700	TA
2		3/26/18 2030	T. A	Wanleng Infante	3/26/18 2030	TAEDF
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

1.0 / 1.0 IR#11 NOC

Ver: 08/04/2016

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 152604

Number of Coolers: 1 **IR Gun #** 11

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.6 °C	1.0 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* *Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 3/26/18

05/05/2018

TestAmerica Edison
777 New Durham Road
[illegible] NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

05/05/2018

Client Information	Sampler: James Robinson	Lab PM: Franklin, Jannel O	Carrier Tracking No(s):	COC No: 460-95566-60636.2
Client Contact: Emily Ebert	Phone: 651-263-4939	E-Mail: jannel.franklin@testamericainc.com		Page: Page 1 of 2
Company: TRC Environmental Corporation				Job #: 153018

Address: 1430 Broadway, 10th FL	Due Date Requested:	Analysis Requested	Preservation Codes:
City: New York	TAT Requested (days): Standard		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)
State, Zip: NY, 10018-3308			
Phone: 860-298-9692(Tel)	PO #: Purchase Order Requested 120097		
Email: EEbert@trcsolutions.com	WO #:		Other:
Project Name: GEM Cleaners	Project #: 46025365		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOC + 10	1,4-Dioxane	SHORT HOLD	Total Number of containers	Special Instructions/Note:
			Preservation Code:				F				
GC-MW-109(50)-15-17	3/30/18	09:25	G	Solid	N	X	X	X			HOLD
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

460-153018 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Category B Deliverable & NYSEQUIS EDD

Special Instructions/QC Requirements: Please batch w/ other soil VOC samples

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Courier / TestAmerica

Relinquished by:	Date/Time: 3/30/18	Company	Received by:	Date/Time: 3/30/18 1026	Company TA
Relinquished by:	Date/Time: 3/30/18 1900	Company TA	Received by:	Date/Time: 03/30/18 1900	Company TA edi
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

0.5 0.5 IR #11 N-0

Ver: 08/04/2016

Job Number: 153018

TestAmerica Edison
Receipt Temperature and pH Log

Number of Coolers: ____ IR Gun # ____

Cooler Temperatures

Cooler #1	°C	°C	Cooler #4	°C	°C	Cooler #7	°C	°C
Cooler #2	°C	°C	Cooler #5	°C	°C	Cooler #8	°C	°C
Cooler #3	°C	°C	Cooler #6	°C	°C	Cooler #9	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* *Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 3/30/18

05/05/2018

Page 1616 of 1644

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TA Project Manager: Jannel Franklin

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice) Lindsay O'Hara	Samplers Name (Printed) James Robinson	Site/Project Identification Gem Cleaners	
Company TRC Engineers	P. O. # 120097	State (Location of site): NJ: ☒ NY: ☒	Other:
		Regulatory Program: NYSDEC	DKQP: ☐
Address 1430 Broadway 10th Fl	Analysis Turnaround Time: Standard ☒		
City New York State NY 11106	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐		
Phone 914 420 9649 Fax			

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 153022

Sample Identification	Date	Time	Matrix	No. of Cont.	8260C-TCL VOCs +10	1,4-Dioxane	SHORT HOLD	Sample Numbers
GC-MW-107(SO)-97-99	3/29/18	12:15	S	4	X	X		1

460-153022 Chain of Custody

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____
Soil:
Water:

Special Instructions Note 48 hold time for VOCs → must be extracted by 12:15 3/31/2018
Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	3/29/18 1800	1)	T.A
2)	T.A	3/30/18 0900	2)	TA Edi 03/30/18 1900
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

0.5 0.5 IA# 11 N° Cy

- Please Batch all VOC soil samples on 1 Report
- Provide Cat B deliverable & NYSDEC Equis EDD

05/05/2018

Page 1617 of 1644

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 153122

Number of Coolers: 1 IR Gun #

Cooler Temperatures:

Cooler #1	°C	°C	Cooler #4	°C	°C	Cooler #7	°C	°C
Cooler #2	°C	°C	Cooler #5	°C	°C	Cooler #8	°C	°C
Cooler #3	°C	°C	Cooler #6	°C	°C	Cooler #9	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 3/30/18

05/05/2018

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice) Lindsay O'Hara	Samplers Name (Printed) James Robinson	Site/Project Identification Gem Cleaners
Company TRC Engineers	P. O. # 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 1430 Broadway	Analysis Turnaround Time: Standard ☒	Regulatory Program: NYSDEC DKQP: ☐
City New York State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone 914-420-9649 Fax		Job No: 153082

Sample Identification	Date	Time	Matrix	No. of Cont.	8260C-TCL w/ 10	1,4-Dioxane	Sample Numbers
~~GC-MW-109R(50)-33-35~~ GC-MW-109D(50)-33-35	4/2/18	1000	S	4	X	X	1

460-153082 Chain of Custody

SHORT HOLD

Preservation Used: (1 = ICE) 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH 6 = Other Methanol, 7 = Other _____ Soil: Water:

Special Instructions: Please include all soil samples on 1 report, Please provide Cat B Deliverable & Equis NYSDEC EDD

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	4/2/18 1415	1)	FANYC
Relinquished by 2)	Company T.A	Date / Time 4/2/18 1940	Received by 2) Warleny Infante	Company TA EOL
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578) D.F / O.F FR# 11 NOC.J.

05/05/2018
Page 1619 of 1644

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 153082

Number of Coolers: ____ IR Gun #: ____

Cooler Temperatures

Cooler #1	°C	°C	Cooler #4	°C	°C	Cooler #7	°C	°C
Cooler #2	°C	°C	Cooler #5	°C	°C	Cooler #8	°C	°C
Cooler #3	°C	°C	Cooler #6	°C	°C	Cooler #9	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 4/2/18

05/05/2018

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

05/05/2018

Page 1621 of 1644

460501

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lab PM: Janael Franklin

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice): Lindsay O'Hara	Samplers Name (Printed): James Robinson	Site/Project Identification: Gem Cleaners	
Company: TRC	P. O. #: 120097	State (Location of site): NJ: ☐ NY: ☑ Other:	Regulatory Program: NYSDEC DKQP: ☐
Address: 1430 Broadway 10th Fl	Analysis Turnaround Time: Standard ☐		
City: New York State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐		
Phone: 914-420-9649 Fax:			

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 153163

Sample Identification	Date	Time	Matrix	No. of Cont.	8260C-TCL VOCs 10 ml	1,4-Dioxane	Sample Numbers
GC-MW-106(SO)-15-17	4/3/18	0840	S	4	X	X	1
GC-MW-108D(SO)-15-17	↓	1110	S	4	X	X	2

460-153163 Chain of Custody

SHORT HOLD

Preservation Used: (1 = ICE) 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH 6 = Other Methanol 7 = Other

Soil: 1,6 1,6
Water:

Special Instructions: Please batch all soil VOC samples on 1 report; please provide Cat B deliverable & EQuIS NYSDEC EDD

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	4/3/18 1445	1)	TAN YC
2)	TA	4/4/19 2:35	2) Wakeny Ingrale	TA EDF
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

1.2 @ IR #11

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 153163

Number of Coolers: 1 IR Gun # 17

Cooler Temperatures

Cooler #1: 12 °C 12 °C	Cooler #4: °C °C	Cooler #7: °C °C	
Cooler #2: °C °C	Cooler #5: °C °C	Cooler #8: °C °C	
Cooler #3: °C °C	Cooler #6: °C °C	Cooler #9: °C °C	

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: WT **Date:** _____

05/05/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TA PM: Jamel Franklin

NYSC 460501

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Lindsay O'Hara	James Robinson	Gem Cleaners
Company: TRC	P. O. #: 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program: NYSDEC DKQP: ☐
Address: 1430 Broadway	Analysis Turnaround Time: Standard ☒	
City: New York State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 914-420-8649 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	8260C - TCL VOCs +10	1,4-Dioxane										LAB USE ONLY Sample Numbers
GC-MW-108D(50)-33-35	4/4/18	0800	S	4	X	X										1
GC-MW-108D(50)-59-60.5	↓	1000	S	4	X	X										2

SHORT HOLD

LAB USE ONLY: Project No: 153254 Job No:

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other MeOH, 7 = Other _____

Soil: 1,6 1,6 Water:

Special Instructions: Batch all soil VOC samples into 1 lab report; provide cat B deliverable + EQuIS NYSDEC EZ

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	4/4/18 1135	1)	
2)		4/4/18 1800	2)	Test 04/04/18 1805
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

COC IR#11 NO C/S

460-153254 Chain of Custody

05/05/2018

Page 1623 of 1644

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 153254

Number of Coolers: 1 (C) IR Gun #: 11

Cooler Temperatures:

Cooler #1:	0.4 °C	0.6 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 04/04/14

05/05/2018

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Edison, New Jersey 08817
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05/05/2018

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice): Lindsay O'Hara	Samplers Name (Printed): James Robinson	Site/Project Identification: Gem Cleaners
Company: TRC	P. O. #: 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program: NYSDEC DKQP: ☐
Address: 1430 Broadway 10th Fl	Analysis Turnaround Time: Standard ☒	LAB USE ONLY Project No:
City: New York State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	Job No: 153389
Phone: 914-420-8647 Fax:		Sample Numbers

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	8260C - TCL VOCs +10	1,4-Dioxane									
GC-MW-110D(SOD)-15-17	4/5/18	0800	S	4											1
Soil:					1,6	1,6									
Water:															

SHORT HOLD

460-153389 Chain of Custody

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other Methanol, 7 = Other _____

Special Instructions Please batch all soil VOC samples onto 1 report; Please provide Equis NYSDEC EDD & Cat B deliverable

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	4/5/18	1)	TA
2)	TA	4/5/18 1200	2)	TA edd 04/05/18 2000
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578) 1.6/1.6 ILA 11 NJ C.J

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 153389

Number of Coolers: ____ IR Gun #: ____

Cooler Temperatures

Cooler #1 ____ °C ____ °C	Cooler #4 ____ °C ____ °C	Cooler #7 ____ °C ____ °C	
Cooler #2 ____ °C ____ °C	Cooler #5 ____ °C ____ °C	Cooler #8 ____ °C ____ °C	
Cooler #3 ____ °C ____ °C	Cooler #6 ____ °C ____ °C	Cooler #9 ____ °C ____ °C	

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 4/5/18

05/05/2018

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05/05/2018

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Lindsay O'Hara	Samplers Name (Printed) Sanjay Sharma	Site/Project Identification Gem Cleaners
Company TRC	P. O. # 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program: NYSDEC DKQP: ☐
Address 1430 Broadway, 10th fl	Analysis Turnaround Time: Standard ☒	LAB USE ONLY Project No:
City New York State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	Job No: 153515
Phone 9144208647 Fax		Sample Numbers

Sample Identification	Date	Time	Matrix	No. of Cont.	8260 ETBE + TIC VOC	1,4-Dioxane
GC-MW-110D(50)-(69-70) (MS & MSD)	4/6/18	1025	Soil	12	X	X

SHORT HOLD

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other Methanol = Other _____

Soil: 1,6 1,6
Water:

Special Instructions: Please Batch all soil samples into 1 Report / Equis NYSDEC EDD & Cat B deliverable

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	4/6/18 13:30	1)	
Relinquished by 2)	Company TRC	Date / Time 4/6/18 19:20	Received by 2)	Company TREDI 4/6/18 1920
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578) O.T / O.T IR # 11 WOC

460-153515 Chain of Custody

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 153515

Number of Coolers: ____ IR Gun #: ____

Cooler Temperatures

	Raw	Corrected		Raw	Corrected		Raw	Corrected
Cooler #1:	0.1 °C	0.5 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 4/6/18

05/05/2018

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Lindsay O'Hara	Samplers Name (Printed) S Sharma	Site/Project Identification Gem Cleaners
Company TRC	P. O. # 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program: NYSDEC DKQP: ☐
Address 1430 Broadway 10th Fl	Analysis Turnaround Time: Standard ☒	
City New York State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 9144208647 Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 153682

Sample Identification	Date	Time	Matrix	No. of Cont.	8260C + 10 VOCs	1,4 Dioxane	Sample Numbers
GC-MW-101D(50)-1415	4-9-18	1310	SOIL	04	X	X	1

SHORT HOLD

460-153682 Chain of Custody

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other Methanol, 7 = Other _____

Soil: 1.6 1.6
Water:

Special Instructions Please Batch all Soil samples into one Report. EQUIS NYSDEC-Cat-B. Deliv

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	4/10/18 1030	1)	
Relinquished by 2)	Company	Date / Time	Received by 2)	Company TA 601
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578) Lot 10 FLA NC

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 153682

Number of Coolers: 1 Temp Blank: Y

Cooler Temperatures

	Uncorrected	Corrected		Uncorrected	Corrected		Uncorrected	Corrected
Cooler #1	1.0 °C	2.0 °C	Cooler #4	°C	°C	Cooler #7	°C	°C
Cooler #2	°C	°C	Cooler #5	°C	°C	Cooler #8	°C	°C
Cooler #3	°C	°C	Cooler #6	°C	°C	Cooler #9	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 4/10/18

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05/05/2018

TestAmerica
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CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 01 of 01

Name (for report and invoice) Lindsay O'Hare	Samplers Name (Printed) S Sharma	Site/Project Identification Gem Cleaners	
Company TRC	P. O. # 120097	State (Location of site): NJ: ☐ NY: ☒ Other:	
Address 1430 Broadway	Analysis Turnaround Time: Standard ☒	Regulatory Program: NYSDEC	DKQP: ☐
City New York State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐		
Phone 914 420 Fax 8647			

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 153878

Sample Identification	Date	Time	Matrix	No. of Cont.	8260 Soil Prep/8260B	1,4-Dioxane	Sample Numbers
GC-MW-101D(50)(79.2-109.2)	4/11	1315	Soil	4	X	X	1

460-153878 Chain of Custody

SHORT HOLD

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other MeOH, 7 = Other _____

Soil:	1,6	1,6
Water:		

Special Instructions: LAST SOIL SAMPLE Please Batch all SOIL Samples into One Report EQUIS NYSDEC Cat B. Water Metals Filtered (Yes/No)? _____

Relinquished by	Company TRC	Date / Time 4/12/18 1027	Received by 1)	Company
Relinquished by 2)	Company T.12	Date / Time 4/12/18 1810	Received by 2) Wellenq Tingle	Company MH EQC
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

2.1 / 2.1 / IR # 4 NO CS

TestAmerica Edison
Receipt Temperature and pH Log

Page ____ of ____

Job Number: 153879

Number of Coolers: ____ IR Gun #: ____

Cooler Temperatures

	Temp in °C	Corrected Temp °C		Temp in °C	Corrected Temp °C		Temp in °C	Corrected Temp °C
Cooler #1	4.6	4.1	Cooler #4			Cooler #7		
Cooler #2			Cooler #5			Cooler #8		
Cooler #3			Cooler #6			Cooler #9		

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 4/12/18

05/05/2018

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 152211
List Number: 1
Creator: Fernandez, Diana X

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 152331
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 152604
List Number: 1
Creator: Infante, Warleny M

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153018
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153022
List Number: 1
Creator: Jara, Kelly D

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153082
List Number: 1
Creator: Infante, Warleny M

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153163
List Number: 1
Creator: Jara, Kelly D

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153254
List Number: 1
Creator: Villanueva, Angelica P

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153389
List Number: 1
Creator: Villanueva, Angelica P

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Analyses listed on COC; individual samples not designated for specific analyses
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153515
List Number: 1
Creator: Villanueva, Angelica P

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153682
List Number: 1
Creator: Jara, Kelly D

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-152211-1

Login Number: 153878
List Number: 1
Creator: Infante, Warleny M

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

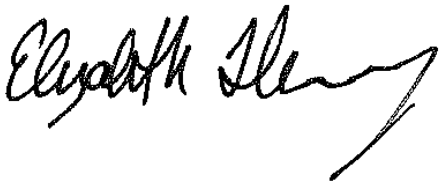
Job Number: 460-154849-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Emily Ebert



Approved for release.
Elizabeth J Flannery
Project Management Assistant I
5/14/2018 2:44 PM

Designee for
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05/14/2018

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 460-154849-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 4/26/2018 8:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.4º C and 1.7º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The client requested to change the ID for Sample #1 from GC-WasteDrain(SO) to GC-SO-101(SO).

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples GC-SO-101(SO) (460-154849-1) and GC-Sump (SO) (460-154849-2) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C. The samples were prepared on 04/26/2018 and analyzed on 05/01/2018.

The continuing calibration verification (CCV) analyzed in batch 460-515499 was outside the method criteria for the following analyte: Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The laboratory control sample (LCS) for analytical batch 460-515499 recovered outside control limits for the following analyte: Dichlorodifluoromethane. This analyte was not detected in the associated samples; therefore, the data have been reported. Dichlorodifluoromethane failed the recovery criteria low for LCS 460-515499/3. Refer to the QC report for details.

No difficulties were encountered during the volatiles analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE
Samples GC-SO-101(SO) (460-154849-1) and GC-Sump (SO) (460-154849-2) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 04/27/2018.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154849-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-154849-1	GC-SO-101(SO)	Solid	04/26/18 08:10	04/26/18 20:20
460-154849-2	GC-Sump (SO)	Solid	04/26/18 07:50	04/26/18 20:20

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154849-1

Client Sample ID: GC-SO-101(SO) — Lab Sample ID: 460-154849-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.00054	J	0.00092	0.00015	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00018	J	0.00092	0.00016	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: GC-Sump (SO) — Lab Sample ID: 460-154849-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.020	J	0.030	0.0049	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.022	J	0.030	0.0052	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.0099	J	0.030	0.0028	mg/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154849-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI
5035	Closed System Purge and Trap	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: GC-SO-101(SO)

Date Collected: 04/26/18 08:10
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154849-1

Matrix: Solid
Percent Solids: 98.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00092	U	0.00092	0.00021	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,1-Dichloroethane	0.00092	U	0.00092	0.00019	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,1-Dichloroethene	0.00092	U	0.00092	0.00021	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000084	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00042	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,2-Dichloroethane	0.00092	U	0.00092	0.00027	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,2-Dichloropropane	0.00092	U	0.00092	0.00039	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
1,4-Dioxane	0.018	U	0.018	0.0084	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
2-Butanone (MEK)	0.0046	U	0.0046	0.0010	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
2-Hexanone	0.0046	U	0.0046	0.00071	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Acetone	0.0046	U	0.0046	0.0035	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Benzene	0.00092	U	0.00092	0.00024	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Bromoform	0.00092	U	0.00092	0.00039	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Bromomethane	0.00092	U	0.00092	0.00043	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Carbon disulfide	0.00092	U	0.00092	0.00024	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Carbon tetrachloride	0.00092	U	0.00092	0.00017	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Chlorobenzene	0.00092	U	0.00092	0.00016	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Chlorobromomethane	0.00092	U	0.00092	0.00026	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Chlorodibromomethane	0.00092	U	0.00092	0.00018	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Chloroethane	0.00092	U	0.00092	0.00048	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Chloroform	0.00092	U	0.00092	0.00029	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Chloromethane	0.00092	U	0.00092	0.00040	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Cyclohexane	0.00092	U	0.00092	0.00020	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Dichlorobromomethane	0.00092	U	0.00092	0.00024	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Dichlorodifluoromethane	0.00092	U *	0.00092	0.00031	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Ethylbenzene	0.00092	U	0.00092	0.00018	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Ethylene Dibromide	0.00092	U	0.00092	0.00016	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Isopropylbenzene	0.00092	U	0.00092	0.00012	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Methyl acetate	0.0046	U	0.0046	0.0039	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Methyl tert-butyl ether	0.00092	U	0.00092	0.00011	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Methylcyclohexane	0.00092	U	0.00092	0.00015	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Methylene Chloride	**0.00054**	**J**	0.00092	0.00015	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
m-Xylene & p-Xylene	**0.00018**	**J**	0.00092	0.00016	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
o-Xylene	0.00092	U	0.00092	0.000087	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Styrene	0.00092	U	0.00092	0.00011	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Tetrachloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Toluene	0.00092	U	0.00092	0.00057	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00024	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1

Client Sample ID: GC-SO-101(SO)

Date Collected: 04/26/18 08:10
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154849-1

Matrix: Solid
Percent Solids: 98.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.00092	U	0.00092	0.00013	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Trichlorofluoromethane	0.00092	U	0.00092	0.00037	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1
Vinyl chloride	0.00092	U	0.00092	0.00050	mg/Kg	☼	04/26/18 23:36	05/01/18 14:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/26/18 23:36*	*05/01/18 14:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*78 - 135*	*04/26/18 23:36*	*05/01/18 14:49*	*1*
4-Bromofluorobenzene	*102*		*67 - 126*	*04/26/18 23:36*	*05/01/18 14:49*	*1*
Dibromofluoromethane (Surr)	*109*		*61 - 149*	*04/26/18 23:36*	*05/01/18 14:49*	*1*
Toluene-d8 (Surr)	*99*		*73 - 121*	*04/26/18 23:36*	*05/01/18 14:49*	*1*

Client Sample ID: GC-Sump (SO)

Date Collected: 04/26/18 07:50
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154849-2

Matrix: Solid
Percent Solids: 85.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.030	U	0.030	0.0070	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,1,2,2-Tetrachloroethane	0.030	U	0.030	0.0064	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.030	U	0.030	0.0090	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,1,2-Trichloroethane	0.030	U	0.030	0.0053	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,1-Dichloroethane	0.030	U	0.030	0.0062	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,1-Dichloroethene	0.030	U	0.030	0.0067	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,2,3-Trichlorobenzene	0.030	U	0.030	0.0054	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,2,4-Trichlorobenzene	0.030	U	0.030	0.0027	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,2-Dibromo-3-Chloropropane	0.030	U	0.030	0.014	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,2-Dichlorobenzene	0.030	U	0.030	0.0043	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,2-Dichloroethane	0.030	U	0.030	0.0088	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,2-Dichloropropane	0.030	U	0.030	0.013	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,3-Dichlorobenzene	0.030	U	0.030	0.0047	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,4-Dichlorobenzene	0.030	U	0.030	0.0030	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
1,4-Dioxane	0.60	U	0.60	0.27	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
2-Butanone (MEK)	0.15	U	0.15	0.033	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
2-Hexanone	0.15	U	0.15	0.023	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
4-Methyl-2-pentanone (MIBK)	0.15	U	0.15	0.020	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Acetone	0.15	U	0.15	0.11	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Benzene	0.030	U	0.030	0.0077	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Bromoform	0.030	U	0.030	0.013	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Bromomethane	0.030	U	0.030	0.014	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Carbon disulfide	0.030	U	0.030	0.0079	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Carbon tetrachloride	0.030	U	0.030	0.0054	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Chlorobenzene	0.030	U	0.030	0.0053	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Chlorobromomethane	0.030	U	0.030	0.0084	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Chlorodibromomethane	0.030	U	0.030	0.0058	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Chloroethane	0.030	U	0.030	0.016	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Chloroform	0.030	U	0.030	0.0095	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Chloromethane	0.030	U	0.030	0.013	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
cis-1,2-Dichloroethene	0.030	U	0.030	0.0045	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1

Client Sample ID: GC-Sump (SO)

Date Collected: 04/26/18 07:50
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154849-2

Matrix: Solid
Percent Solids: 85.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.030	U	0.030	0.0082	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Cyclohexane	0.030	U	0.030	0.0066	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Dichlorobromomethane	0.030	U	0.030	0.0077	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Dichlorodifluoromethane	0.030	U *	0.030	0.010	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Ethylbenzene	0.030	U	0.030	0.0059	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Ethylene Dibromide	0.030	U	0.030	0.0054	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Isopropylbenzene	0.030	U	0.030	0.0038	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Methyl acetate	0.15	U	0.15	0.13	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Methyl tert-butyl ether	0.030	U	0.030	0.0037	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Methylcyclohexane	0.030	U	0.030	0.0048	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Methylene Chloride	**0.020**	**J**	0.030	0.0049	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
m-Xylene & p-Xylene	**0.022**	**J**	0.030	0.0052	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
o-Xylene	**0.0099**	**J**	0.030	0.0028	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Styrene	0.030	U	0.030	0.0037	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Tetrachloroethene	0.030	U	0.030	0.0043	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Toluene	0.030	U	0.030	0.019	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
trans-1,2-Dichloroethene	0.030	U	0.030	0.0073	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
trans-1,3-Dichloropropene	0.030	U	0.030	0.0079	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Trichloroethene	0.030	U	0.030	0.0043	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Trichlorofluoromethane	0.030	U	0.030	0.012	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1
Vinyl chloride	0.030	U	0.030	0.016	mg/Kg	☼	04/26/18 23:36	05/01/18 15:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*04/26/18 23:36*	*05/01/18 15:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 135*	*04/26/18 23:36*	*05/01/18 15:14*	*1*
4-Bromofluorobenzene	*99*		*67 - 126*	*04/26/18 23:36*	*05/01/18 15:14*	*1*
Dibromofluoromethane (Surr)	*104*		*61 - 149*	*04/26/18 23:36*	*05/01/18 15:14*	*1*
Toluene-d8 (Surr)	*97*		*73 - 121*	*04/26/18 23:36*	*05/01/18 15:14*	*1*

Surrogate Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154849-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(78-135)	(67-126)	(61-149)	(73-121)
460-154849-1	GC-SO-101(SO)	113	102	109	99
460-154849-2	GC-Sump (SO)	105	99	104	97
LCS 460-515499/3	Lab Control Sample	97	91	97	92
LCSD 460-515499/4	Lab Control Sample Dup	104	98	103	99
MB 460-515499/7	Method Blank	98	90	98	90

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-515499/7
Matrix: Solid
Analysis Batch: 515499

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			05/01/18 08:44	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			05/01/18 08:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			05/01/18 08:44	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			05/01/18 08:44	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			05/01/18 08:44	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			05/01/18 08:44	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			05/01/18 08:44	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092	mg/Kg			05/01/18 08:44	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			05/01/18 08:44	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014	mg/Kg			05/01/18 08:44	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			05/01/18 08:44	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			05/01/18 08:44	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg			05/01/18 08:44	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg			05/01/18 08:44	1
1,4-Dioxane	0.020	U	0.020	0.0092	mg/Kg			05/01/18 08:44	1
2-Butanone (MEK)	0.0050	U	0.0050	0.0011	mg/Kg			05/01/18 08:44	1
2-Hexanone	0.0050	U	0.0050	0.00078	mg/Kg			05/01/18 08:44	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066	mg/Kg			05/01/18 08:44	1
Acetone	0.0050	U	0.0050	0.0038	mg/Kg			05/01/18 08:44	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			05/01/18 08:44	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			05/01/18 08:44	1
Bromomethane	0.0010	U	0.0010	0.00047	mg/Kg			05/01/18 08:44	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			05/01/18 08:44	1
Carbon tetrachloride	0.0010	U	0.0010	0.00018	mg/Kg			05/01/18 08:44	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			05/01/18 08:44	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			05/01/18 08:44	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			05/01/18 08:44	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			05/01/18 08:44	1
Chloroform	0.0010	U	0.0010	0.00032	mg/Kg			05/01/18 08:44	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			05/01/18 08:44	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015	mg/Kg			05/01/18 08:44	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			05/01/18 08:44	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			05/01/18 08:44	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			05/01/18 08:44	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			05/01/18 08:44	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			05/01/18 08:44	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			05/01/18 08:44	1
Isopropylbenzene	0.0010	U	0.0010	0.00013	mg/Kg			05/01/18 08:44	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			05/01/18 08:44	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg			05/01/18 08:44	1
Methylcyclohexane	0.0010	U	0.0010	0.00016	mg/Kg			05/01/18 08:44	1
Methylene Chloride	0.0010	U	0.0010	0.00016	mg/Kg			05/01/18 08:44	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			05/01/18 08:44	1
o-Xylene	0.0010	U	0.0010	0.000095	mg/Kg			05/01/18 08:44	1
Styrene	0.0010	U	0.0010	0.00012	mg/Kg			05/01/18 08:44	1
Tetrachloroethene	0.0010	U	0.0010	0.00014	mg/Kg			05/01/18 08:44	1
Toluene	0.0010	U	0.0010	0.00063	mg/Kg			05/01/18 08:44	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			05/01/18 08:44	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-515499/7
Matrix: Solid
Analysis Batch: 515499

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			05/01/18 08:44	1
Trichloroethene	0.0010	U	0.0010	0.00014	mg/Kg			05/01/18 08:44	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			05/01/18 08:44	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			05/01/18 08:44	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*					*05/01/18 08:44*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 135*		*05/01/18 08:44*	*1*
4-Bromofluorobenzene	*90*		*67 - 126*		*05/01/18 08:44*	*1*
Dibromofluoromethane (Surr)	*98*		*61 - 149*		*05/01/18 08:44*	*1*
Toluene-d8 (Surr)	*90*		*73 - 121*		*05/01/18 08:44*	*1*

Lab Sample ID: LCS 460-515499/3
Matrix: Solid
Analysis Batch: 515499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0200	0.0197		mg/Kg		99	80 - 125
1,1,2,2-Tetrachloroethane	0.0200	0.0196		mg/Kg		98	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0186		mg/Kg		93	78 - 132
1,1,2-Trichloroethane	0.0200	0.0186		mg/Kg		93	76 - 124
1,1-Dichloroethane	0.0200	0.0215		mg/Kg		108	80 - 124
1,1-Dichloroethene	0.0200	0.0198		mg/Kg		99	79 - 132
1,2,3-Trichlorobenzene	0.0200	0.0187		mg/Kg		93	75 - 123
1,2,4-Trichlorobenzene	0.0200	0.0182		mg/Kg		91	74 - 124
1,2-Dibromo-3-Chloropropane	0.0200	0.0172		mg/Kg		86	65 - 129
1,2-Dichlorobenzene	0.0200	0.0184		mg/Kg		92	80 - 121
1,2-Dichloroethane	0.0200	0.0201		mg/Kg		100	68 - 120
1,2-Dichloropropane	0.0200	0.0208		mg/Kg		104	77 - 124
1,3-Dichlorobenzene	0.0200	0.0180		mg/Kg		90	79 - 124
1,4-Dichlorobenzene	0.0200	0.0180		mg/Kg		90	79 - 121
1,4-Dioxane	0.400	0.381		mg/Kg		95	67 - 150
2-Butanone (MEK)	0.100	0.0849		mg/Kg		85	61 - 140
2-Hexanone	0.100	0.0944		mg/Kg		94	78 - 120
4-Methyl-2-pentanone (MIBK)	0.100	0.0986		mg/Kg		99	80 - 120
Acetone	0.100	0.0911		mg/Kg		91	75 - 120
Benzene	0.0200	0.0201		mg/Kg		100	75 - 127
Bromoform	0.0200	0.0170		mg/Kg		85	19 - 150
Bromomethane	0.0200	0.0196		mg/Kg		98	59 - 136
Carbon disulfide	0.0200	0.0206		mg/Kg		103	74 - 130
Carbon tetrachloride	0.0200	0.0189		mg/Kg		95	77 - 138
Chlorobenzene	0.0200	0.0183		mg/Kg		92	80 - 120
Chlorobromomethane	0.0200	0.0188		mg/Kg		94	80 - 125
Chlorodibromomethane	0.0200	0.0174		mg/Kg		87	67 - 143
Chloroethane	0.0200	0.0216		mg/Kg		108	50 - 139

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-515499/3
Matrix: Solid
Analysis Batch: 515499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.0200	0.0204		mg/Kg		102	80 - 122
Chloromethane	0.0200	0.0208		mg/Kg		104	66 - 128
cis-1,2-Dichloroethene	0.0200	0.0190		mg/Kg		95	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0191		mg/Kg		96	75 - 124
Cyclohexane	0.0200	0.0193		mg/Kg		97	67 - 135
Dichlorobromomethane	0.0200	0.0194		mg/Kg		97	76 - 129
Dichlorodifluoromethane	0.0200	0.0139	*	mg/Kg		70	72 - 127
Ethylbenzene	0.0200	0.0186		mg/Kg		93	79 - 124
Ethylene Dibromide	0.0200	0.0183		mg/Kg		91	80 - 122
Isopropylbenzene	0.0200	0.0188		mg/Kg		94	80 - 125
Methyl acetate	0.0400	0.0383		mg/Kg		96	73 - 123
Methyl tert-butyl ether	0.0200	0.0198		mg/Kg		99	80 - 120
Methylcyclohexane	0.0200	0.0190		mg/Kg		95	71 - 137
Methylene Chloride	0.0200	0.0200		mg/Kg		100	79 - 128
m-Xylene & p-Xylene	0.0200	0.0186		mg/Kg		93	79 - 121
o-Xylene	0.0200	0.0185		mg/Kg		93	79 - 123
Styrene	0.0200	0.0185		mg/Kg		92	78 - 123
Tetrachloroethene	0.0200	0.0178		mg/Kg		89	73 - 130
Toluene	0.0200	0.0192		mg/Kg		96	75 - 122
trans-1,2-Dichloroethene	0.0200	0.0197		mg/Kg		98	80 - 129
trans-1,3-Dichloropropene	0.0200	0.0187		mg/Kg		93	72 - 121
Trichloroethene	0.0200	0.0185		mg/Kg		93	79 - 122
Trichlorofluoromethane	0.0200	0.0202		mg/Kg		101	68 - 136
Vinyl chloride	0.0200	0.0208		mg/Kg		104	70 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 135*
4-Bromofluorobenzene	*91*		*67 - 126*
Dibromofluoromethane (Surr)	*97*		*61 - 149*
Toluene-d8 (Surr)	*92*		*73 - 121*

Lab Sample ID: LCSD 460-515499/4
Matrix: Solid
Analysis Batch: 515499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0191		mg/Kg		95	80 - 125	3	30
1,1,2,2-Tetrachloroethane	0.0200	0.0198		mg/Kg		99	72 - 131	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0183		mg/Kg		91	78 - 132	2	30
1,1,2-Trichloroethane	0.0200	0.0190		mg/Kg		95	76 - 124	2	30
1,1-Dichloroethane	0.0200	0.0211		mg/Kg		105	80 - 124	2	30
1,1-Dichloroethene	0.0200	0.0193		mg/Kg		96	79 - 132	3	30
1,2,3-Trichlorobenzene	0.0200	0.0183		mg/Kg		91	75 - 123	2	30
1,2,4-Trichlorobenzene	0.0200	0.0179		mg/Kg		90	74 - 124	1	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0176		mg/Kg		88	65 - 129	2	30
1,2-Dichlorobenzene	0.0200	0.0178		mg/Kg		89	80 - 121	3	30
1,2-Dichloroethane	0.0200	0.0201		mg/Kg		100	68 - 120	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-515499/4
Matrix: Solid
Analysis Batch: 515499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane			0.0200	0.0205		mg/Kg		102	77 - 124	2	30
1,3-Dichlorobenzene			0.0200	0.0179		mg/Kg		89	79 - 124	1	30
1,4-Dichlorobenzene			0.0200	0.0176		mg/Kg		88	79 - 121	2	30
1,4-Dioxane			0.400	0.395		mg/Kg		99	67 - 150	4	30
2-Butanone (MEK)			0.100	0.0851		mg/Kg		85	61 - 140	0	30
2-Hexanone			0.100	0.0940		mg/Kg		94	78 - 120	0	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0940		mg/Kg		94	80 - 120	5	30
Acetone			0.100	0.0862		mg/Kg		86	75 - 120	6	30
Benzene			0.0200	0.0197		mg/Kg		99	75 - 127	2	30
Bromoform			0.0200	0.0172		mg/Kg		86	19 - 150	1	30
Bromomethane			0.0200	0.0209		mg/Kg		105	59 - 136	6	30
Carbon disulfide			0.0200	0.0199		mg/Kg		100	74 - 130	3	30
Carbon tetrachloride			0.0200	0.0190		mg/Kg		95	77 - 138	0	30
Chlorobenzene			0.0200	0.0185		mg/Kg		93	80 - 120	1	30
Chlorobromomethane			0.0200	0.0187		mg/Kg		94	80 - 125	0	30
Chlorodibromomethane			0.0200	0.0174		mg/Kg		87	67 - 143	1	30
Chloroethane			0.0200	0.0221		mg/Kg		110	50 - 139	2	30
Chloroform			0.0200	0.0199		mg/Kg		100	80 - 122	3	30
Chloromethane			0.0200	0.0214		mg/Kg		107	66 - 128	3	30
cis-1,2-Dichloroethene			0.0200	0.0189		mg/Kg		95	80 - 123	0	30
cis-1,3-Dichloropropene			0.0200	0.0194		mg/Kg		97	75 - 124	1	30
Cyclohexane			0.0200	0.0189		mg/Kg		94	67 - 135	3	30
Dichlorobromomethane			0.0200	0.0195		mg/Kg		98	76 - 129	1	30
Dichlorodifluoromethane			0.0200	0.0144		mg/Kg		72	72 - 127	3	30
Ethylbenzene			0.0200	0.0182		mg/Kg		91	79 - 124	2	30
Ethylene Dibromide			0.0200	0.0186		mg/Kg		93	80 - 122	2	30
Isopropylbenzene			0.0200	0.0183		mg/Kg		92	80 - 125	3	30
Methyl acetate			0.0400	0.0359		mg/Kg		90	73 - 123	6	30
Methyl tert-butyl ether			0.0200	0.0206		mg/Kg		103	80 - 120	4	30
Methylcyclohexane			0.0200	0.0191		mg/Kg		95	71 - 137	0	30
Methylene Chloride			0.0200	0.0198		mg/Kg		99	79 - 128	1	30
m-Xylene & p-Xylene			0.0200	0.0180		mg/Kg		90	79 - 121	3	30
o-Xylene			0.0200	0.0180		mg/Kg		90	79 - 123	3	30
Styrene			0.0200	0.0183		mg/Kg		92	78 - 123	1	30
Tetrachloroethene			0.0200	0.0177		mg/Kg		88	73 - 130	0	30
Toluene			0.0200	0.0188		mg/Kg		94	75 - 122	2	30
trans-1,2-Dichloroethene			0.0200	0.0189		mg/Kg		94	80 - 129	4	30
trans-1,3-Dichloropropene			0.0200	0.0188		mg/Kg		94	72 - 121	1	30
Trichloroethene			0.0200	0.0186		mg/Kg		93	79 - 122	0	30
Trichlorofluoromethane			0.0200	0.0204		mg/Kg		102	68 - 136	1	30
Vinyl chloride			0.0200	0.0215		mg/Kg		107	70 - 134	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 135*
4-Bromofluorobenzene	*98*		*67 - 126*
Dibromofluoromethane (Surr)	*103*		*61 - 149*
Toluene-d8 (Surr)	*99*		*73 - 121*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Indicates an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154849-1

GC/MS VOA

Prep Batch: 514570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154849-1	GC-SO-101(SO)	Total/NA	Solid	5035	
460-154849-2	GC-Sump (SO)	Total/NA	Solid	5035	

Analysis Batch: 515499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154849-1	GC-SO-101(SO)	Total/NA	Solid	8260C	514570
460-154849-2	GC-Sump (SO)	Total/NA	Solid	8260C	514570
MB 460-515499/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-515499/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-515499/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

General Chemistry

Analysis Batch: 514693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154849-1	GC-SO-101(SO)	Total/NA	Solid	Moisture	
460-154849-2	GC-Sump (SO)	Total/NA	Solid	Moisture	
460-154814-D-3 DU	Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154849-1

Client Sample ID: GC-SO-101(SO)
Date Collected: 04/26/18 08:10
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154849-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	514693	04/27/18 09:44	BJP	TAL EDI

Client Sample ID: GC-SO-101(SO)
Date Collected: 04/26/18 08:10
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154849-1
Matrix: Solid
Percent Solids: 98.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514570	04/26/18 23:36	AVM	TAL EDI
Total/NA	Analysis	8260C		1	515499	05/01/18 14:49	AAT	TAL EDI

Client Sample ID: GC-Sump (SO)
Date Collected: 04/26/18 07:50
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154849-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	514693	04/27/18 09:44	BJP	TAL EDI

Client Sample ID: GC-Sump (SO)
Date Collected: 04/26/18 07:50
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154849-2
Matrix: Solid
Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514570	04/26/18 23:36	AVM	TAL EDI
Total/NA	Analysis	8260C		1	515499	05/01/18 15:14	AAT	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154849-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

New York	NELAP	2	11452	04-01-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

8260C

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
GC-SO-101(SO)	460-154849-1	109	113	99	102
GC-Sump (SO)	460-154849-2	104	105	97	99
	MB 460-515499/7	98	98	90	90
	LCS 460-515499/3	97	97	92	91
	LCSD 460-515499/4	103	104	99	98

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	61-149
DCA = 1,2-Dichloroethane-d4 (Surr)	78-135
TOL = Toluene-d8 (Surr)	73-121
BFB = 4-Bromofluorobenzene	67-126

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82845.D

Lab ID: LCS 460-515499/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0197	99	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0196	98	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0186	93	78-132	
1,1,2-Trichloroethane	0.0200	0.0186	93	76-124	
1,1-Dichloroethane	0.0200	0.0215	108	80-124	
1,1-Dichloroethene	0.0200	0.0198	99	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0187	93	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0182	91	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0172	86	65-129	
1,2-Dichlorobenzene	0.0200	0.0184	92	80-121	
1,2-Dichloroethane	0.0200	0.0201	100	68-120	
1,2-Dichloropropane	0.0200	0.0208	104	77-124	
1,3-Dichlorobenzene	0.0200	0.0180	90	79-124	
1,4-Dichlorobenzene	0.0200	0.0180	90	79-121	
1,4-Dioxane	0.400	0.381	95	67-150	
2-Butanone (MEK)	0.100	0.0849	85	61-140	
2-Hexanone	0.100	0.0944	94	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0986	99	80-120	
Acetone	0.100	0.0911	91	75-120	
Benzene	0.0200	0.0201	100	75-127	
Bromoform	0.0200	0.0170	85	19-150	
Bromomethane	0.0200	0.0196	98	59-136	
Carbon disulfide	0.0200	0.0206	103	74-130	
Carbon tetrachloride	0.0200	0.0189	95	77-138	
Chlorobenzene	0.0200	0.0183	92	80-120	
Chlorobromomethane	0.0200	0.0188	94	80-125	
Chlorodibromomethane	0.0200	0.0174	87	67-143	
Chloroethane	0.0200	0.0216	108	50-139	
Chloroform	0.0200	0.0204	102	80-122	
Chloromethane	0.0200	0.0208	104	66-128	
cis-1,2-Dichloroethene	0.0200	0.0190	95	80-123	
cis-1,3-Dichloropropene	0.0200	0.0191	96	75-124	
Cyclohexane	0.0200	0.0193	97	67-135	
Dichlorobromomethane	0.0200	0.0194	97	76-129	
Dichlorodifluoromethane	0.0200	0.0139	70	72-127	*
Ethylbenzene	0.0200	0.0186	93	79-124	
Ethylene Dibromide	0.0200	0.0183	91	80-122	
Isopropylbenzene	0.0200	0.0188	94	80-125	
Methyl acetate	0.0400	0.0383	96	73-123	
Methyl tert-butyl ether	0.0200	0.0198	99	80-120	
Methylcyclohexane	0.0200	0.0190	95	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82845.D

Lab ID: LCS 460-515499/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0200	100	79-128	
m-Xylene & p-Xylene	0.0200	0.0186	93	79-121	
o-Xylene	0.0200	0.0185	93	79-123	
Styrene	0.0200	0.0185	92	78-123	
Tetrachloroethene	0.0200	0.0178	89	73-130	
Toluene	0.0200	0.0192	96	75-122	
trans-1,2-Dichloroethene	0.0200	0.0197	98	80-129	
trans-1,3-Dichloropropene	0.0200	0.0187	93	72-121	
Trichloroethene	0.0200	0.0185	93	79-122	
Trichlorofluoromethane	0.0200	0.0202	101	68-136	
Vinyl chloride	0.0200	0.0208	104	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82846.D

Lab ID: LCSD 460-515499/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0191	95	3	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0198	99	1	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0183	91	2	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0190	95	2	30	76-124	
1,1-Dichloroethane	0.0200	0.0211	105	2	30	80-124	
1,1-Dichloroethene	0.0200	0.0193	96	3	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0183	91	2	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0179	90	1	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0176	88	2	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0178	89	3	30	80-121	
1,2-Dichloroethane	0.0200	0.0201	100	0	30	68-120	
1,2-Dichloropropane	0.0200	0.0205	102	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0179	89	1	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0176	88	2	30	79-121	
1,4-Dioxane	0.400	0.395	99	4	30	67-150	
2-Butanone (MEK)	0.100	0.0851	85	0	30	61-140	
2-Hexanone	0.100	0.0940	94	0	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0940	94	5	30	80-120	
Acetone	0.100	0.0862	86	6	30	75-120	
Benzene	0.0200	0.0197	99	2	30	75-127	
Bromoform	0.0200	0.0172	86	1	30	19-150	
Bromomethane	0.0200	0.0209	105	6	30	59-136	
Carbon disulfide	0.0200	0.0199	100	3	30	74-130	
Carbon tetrachloride	0.0200	0.0190	95	0	30	77-138	
Chlorobenzene	0.0200	0.0185	93	1	30	80-120	
Chlorobromomethane	0.0200	0.0187	94	0	30	80-125	
Chlorodibromomethane	0.0200	0.0174	87	1	30	67-143	
Chloroethane	0.0200	0.0221	110	2	30	50-139	
Chloroform	0.0200	0.0199	100	3	30	80-122	
Chloromethane	0.0200	0.0214	107	3	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0189	95	0	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0194	97	1	30	75-124	
Cyclohexane	0.0200	0.0189	94	3	30	67-135	
Dichlorobromomethane	0.0200	0.0195	98	1	30	76-129	
Dichlorodifluoromethane	0.0200	0.0144	72	3	30	72-127	
Ethylbenzene	0.0200	0.0182	91	2	30	79-124	
Ethylene Dibromide	0.0200	0.0186	93	2	30	80-122	
Isopropylbenzene	0.0200	0.0183	92	3	30	80-125	
Methyl acetate	0.0400	0.0359	90	6	30	73-123	
Methyl tert-butyl ether	0.0200	0.0206	103	4	30	80-120	
Methylcyclohexane	0.0200	0.0191	95	0	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82846.D

Lab ID: LCSD 460-515499/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0198	99	1	30	79-128	
m-Xylene & p-Xylene	0.0200	0.0180	90	3	30	79-121	
o-Xylene	0.0200	0.0180	90	3	30	79-123	
Styrene	0.0200	0.0183	92	1	30	78-123	
Tetrachloroethene	0.0200	0.0177	88	0	30	73-130	
Toluene	0.0200	0.0188	94	2	30	75-122	
trans-1,2-Dichloroethene	0.0200	0.0189	94	4	30	80-129	
trans-1,3-Dichloropropene	0.0200	0.0188	94	1	30	72-121	
Trichloroethene	0.0200	0.0186	93	0	30	79-122	
Trichlorofluoromethane	0.0200	0.0204	102	1	30	68-136	
Vinyl chloride	0.0200	0.0215	107	3	30	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Lab File ID: K82849.D Lab Sample ID: MB 460-515499/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS9 Date Analyzed: 05/01/2018 08:44

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-515499/3	K82845.D	05/01/2018 06:52
	LCSD 460-515499/4	K82846.D	05/01/2018 07:17
GC-SO-101(SO)	460-154849-1	K82864.D	05/01/2018 14:49
GC-Sump (SO)	460-154849-2	K82865.D	05/01/2018 15:14

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Lab File ID: K82294.D BFB Injection Date: 04/21/2018

Instrument ID: CVOAMS9 BFB Injection Time: 05:15

Analysis Batch No.: 512949

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.5	
75	30.0 - 60.0 % of mass 95	44.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	50.0 - 120.00 % of mass 95	92.2	
175	5.0 - 9.0 % of mass 174	7.1	(7.7) 1
176	95.0 - 101.0 % of mass 174	91.6	(99.4) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD1 460-512949/3	K82296.D	04/21/2018	06:04
	STD5 460-512949/4	K82297.D	04/21/2018	06:29
	STD20 460-512949/5	K82298.D	04/21/2018	06:54
	STD50 460-512949/6	K82299.D	04/21/2018	07:18
	STD200 460-512949/7	K82300.D	04/21/2018	07:42
	STD500 460-512949/8	K82301.D	04/21/2018	08:07

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Lab File ID: K82843.D BFB Injection Date: 05/01/2018

Instrument ID: CVOAMS9 BFB Injection Time: 06:00

Analysis Batch No.: 515499

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.8	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	86.5	
175	5.0 - 9.0 % of mass 174	6.9	(8.0) 1
176	95.0 - 101.0 % of mass 174	82.3	(95.1) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-515499/2	K82844.D	05/01/2018	06:28
	LCS 460-515499/3	K82845.D	05/01/2018	06:52
	LCSD 460-515499/4	K82846.D	05/01/2018	07:17
	MB 460-515499/7	K82849.D	05/01/2018	08:44
GC-SO-101(SO)	460-154849-1	K82864.D	05/01/2018	14:49
GC-Sump (SO)	460-154849-2	K82865.D	05/01/2018	15:14

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Sample No.: CCVIS 460-515499/2 Date Analyzed: 05/01/2018 06:28

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K82844.D Heated Purge: (Y/N) Y

Calibration ID: 67825

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		388928	3.36	244185	4.46	509602	5.59
UPPER LIMIT		777856	3.86	488370	4.96	1019204	6.09
LOWER LIMIT		194464	2.86	122093	3.96	254801	5.09
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-515499/3		406893	3.37	248885	4.46	516894	5.58
LCSD 460-515499/4		436760	3.36	264054	4.46	510977	5.58
MB 460-515499/7		404323	3.37	247328	4.46	523343	5.59
460-154849-1	GC-SO-101(SO)	429644	3.37	260271	4.46	462142	5.59
460-154849-2	GC-Sump (SO)	396351	3.38	241011	4.46	472276	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Sample No.: CCVIS 460-515499/2 Date Analyzed: 05/01/2018 06:28

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K82844.D Heated Purge: (Y/N) Y

Calibration ID: 67825

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		36938	6.29	458841	9.08	278839	11.52
UPPER LIMIT		73876	6.79	917682	9.58	557678	12.02
LOWER LIMIT		18469	5.79	229421	8.58	139420	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-515499/3		36998	6.30	463350	9.08	277712	11.52
LCSD 460-515499/4		38937	6.28	465981	9.08	283520	11.52
MB 460-515499/7		34883	6.29	462189	9.08	290423	11.52
460-154849-1	GC-SO-101(SO)	33492	6.29	416724	9.08	260270	11.52
460-154849-2	GC-Sump (SO)	32512	6.30	422080	9.08	260631	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-SO-101(SO) | Lab Sample ID: 460-154849-1

Matrix: Solid | Lab File ID: K82864.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:10

Sample wt/vol: 5.551(g) | Date Analyzed: 05/01/2018 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 1.6 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00021
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000084
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00042
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0084
78-93-3	2-Butanone (MEK)	0.0046	U	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00071
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.0046	U	0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00043
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00024
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U *	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-SO-101(SO) | Lab Sample ID: 460-154849-1

Matrix: Solid | Lab File ID: K82864.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:10

Sample wt/vol: 5.551(g) | Date Analyzed: 05/01/2018 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 1.6 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00016
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0039
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00011
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00054	J	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00018	J	0.00092	0.00016
95-47-6	o-Xylene	0.00092	U	0.00092	0.000087
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00057
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00024
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00037
75-01-4	Vinyl chloride	0.00092	U	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	109		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-SO-101(SO) | Lab Sample ID: 460-154849-1

Matrix: Solid | Lab File ID: K82864.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:10

Sample wt/vol: 5.551(g) | Date Analyzed: 05/01/2018 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 1.6 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82864.D				
Lims ID:	460-154849-A-1-A				
Client ID:	GC-SO-101(SO)				
Sample Type:	Client				
Inject. Date:	01-May-2018 14:49:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-154849-A-1-A				
Misc. Info.:	460-0071307-022				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	01-May-2018 16:51:43	Calib Date:	21-Apr-2018 08:07:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK017				
First Level Reviewer: delpolitov		Date:	01-May-2018 16:51:43		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.370	3.364	0.006	0	429644	1000.0	
26 Methylene Chloride	84	3.394	3.382	0.012	91	2548	0.5892	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	260271	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	96	202348	54.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.315	0.000	0	193834	56.3	
* 61 Fluorobenzene	96	5.589	5.589	0.000	99	462142	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.290	0.000	0	33492	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	633581	49.6	
* 89 Chlorobenzene-d5	117	9.082	9.082	0.000	85	416724	50.0	
93 m-Xylene & p-Xylene	106	9.350	9.357	-0.006	0	1389	0.2007	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	95	209921	50.8	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	260270	50.0	

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

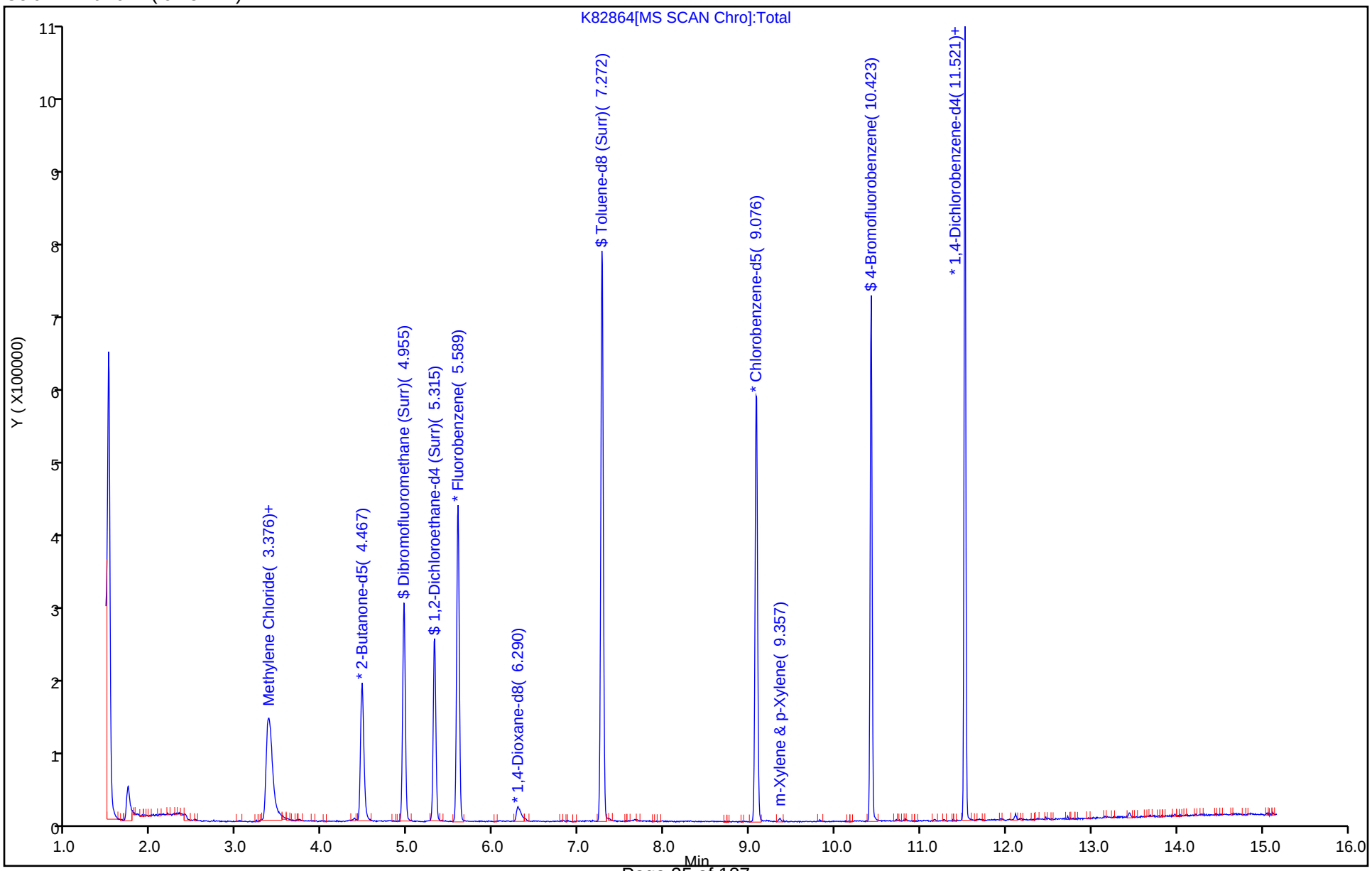
Report Date: 01-May-2018 16:51:44 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82864.D

Injection Date:	01-May-2018 14:49:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-154849-A-1-A	Lab Sample ID:	460-154849-1	Worklist Smp#:	22
Client ID:	GC-SO-101(SO)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



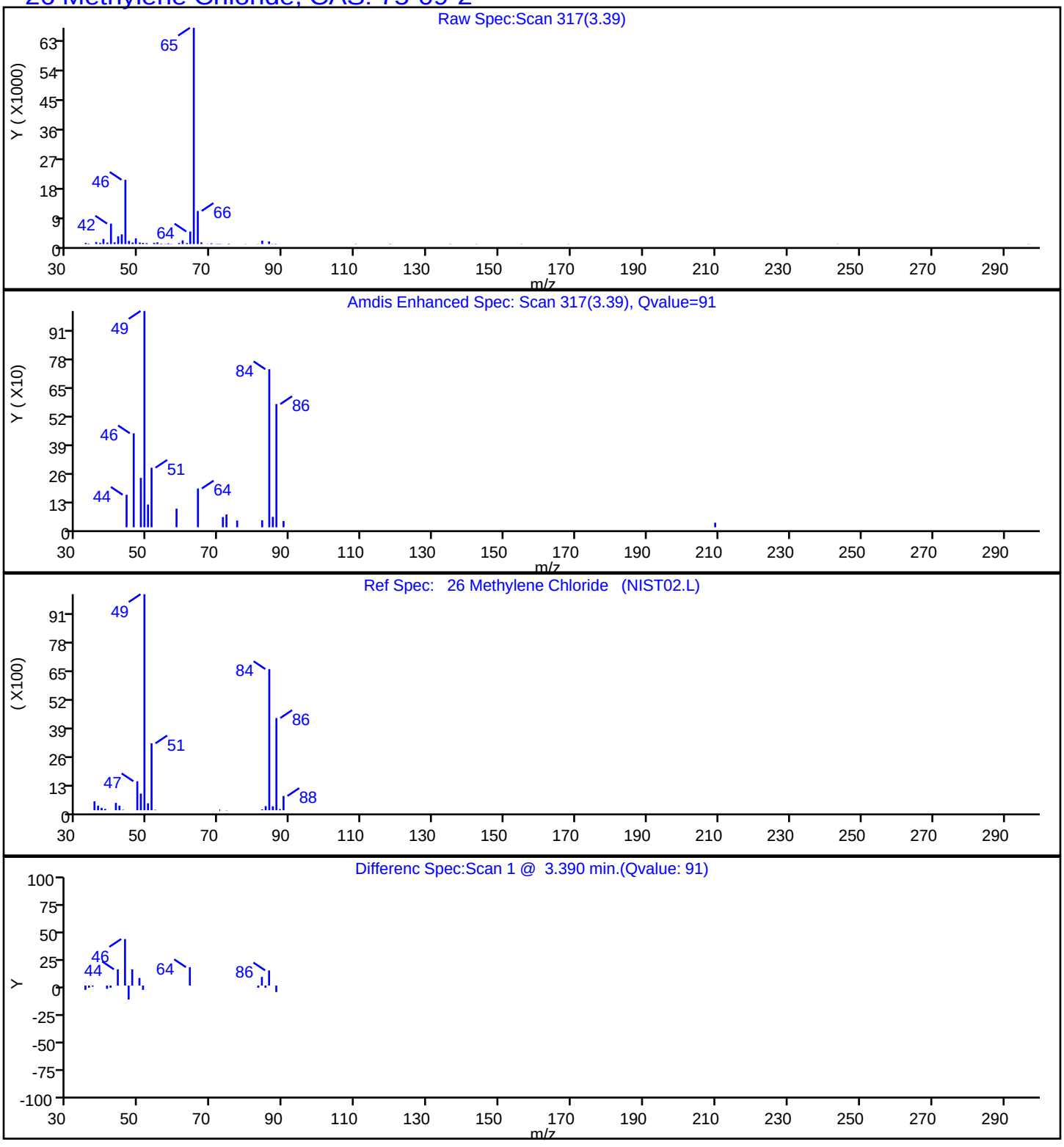
Report Date: 01-May-2018 16:51:44 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82864.D

Injection Date:	01-May-2018 14:49:30	Instrument ID:	CVOAMS9		
Lims ID:	460-154849-A-1-A	Lab Sample ID:	460-154849-1		
Client ID:	GC-SO-101(SO)				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

26 Methylene Chloride, CAS: 75-09-2

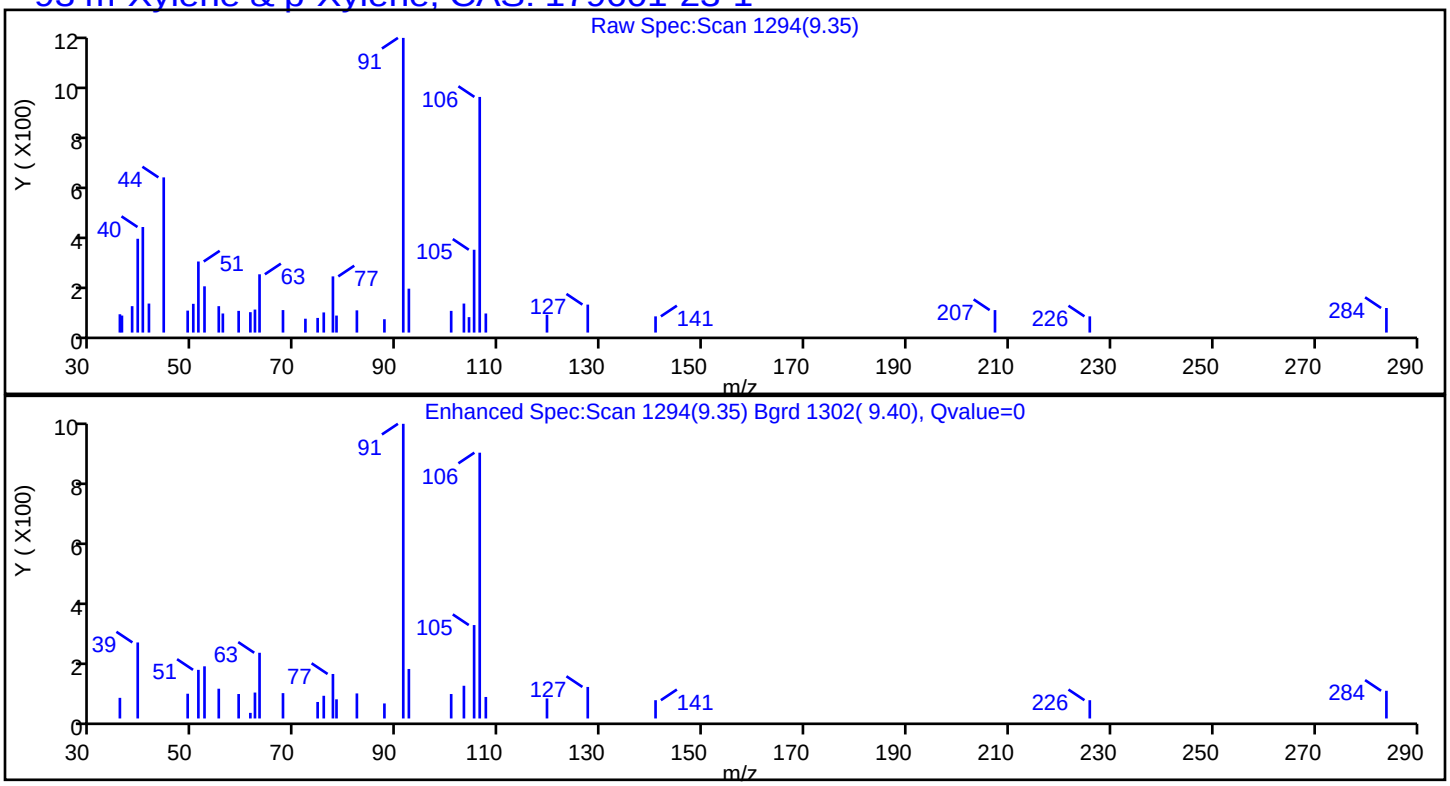


Report Date: 01-May-2018 16:51:44 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82864.D				
Injection Date:	01-May-2018 14:49:30	Instrument ID:	CVOAMS9		
Lims ID:	460-154849-A-1-A	Lab Sample ID:	460-154849-1		
Client ID:	GC-SO-101(SO)				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1



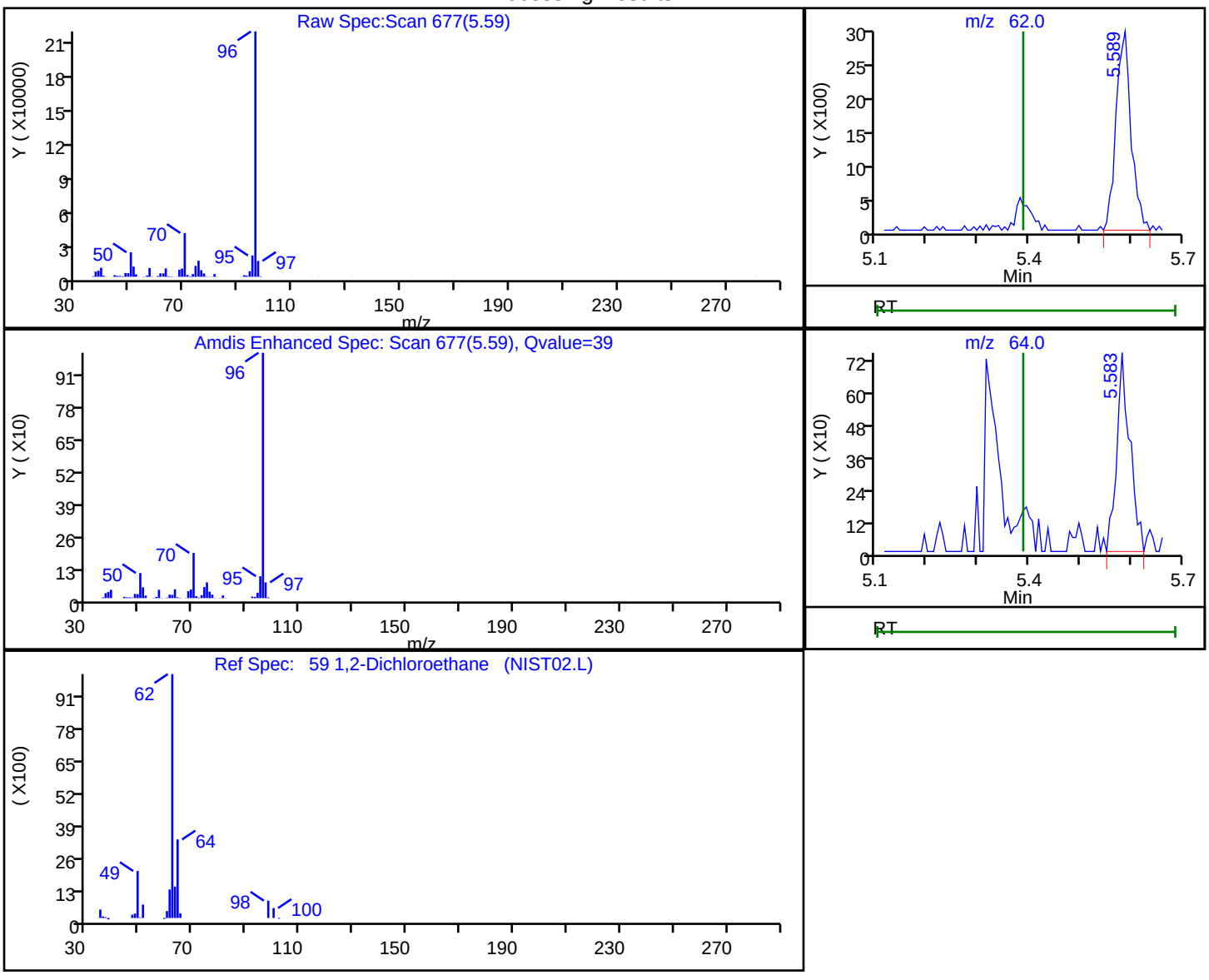
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82864.D		
Injection Date:	01-May-2018 14:49:30	Instrument ID:	CVOAMS9
Lims ID:	460-154849-A-1-A	Lab Sample ID:	460-154849-1
Client ID:	GC-SO-101(SO)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.59	62.00	6131	1.373350
5.58	64.00	1332	

Reviewer: delpolitov, 01-May-2018 16:51:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

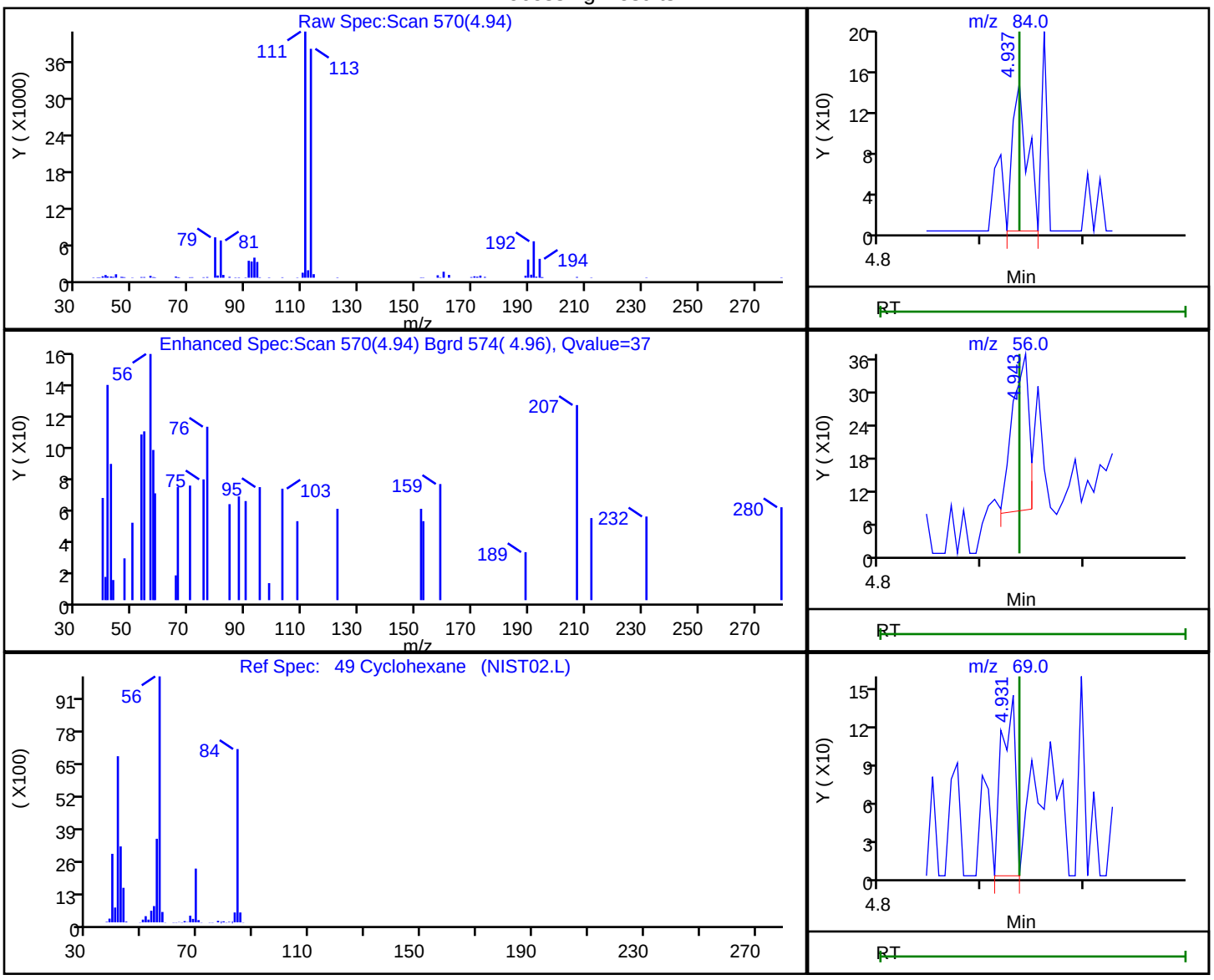
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82864.D		
Injection Date:	01-May-2018 14:49:30	Instrument ID:	CVOAMS9
Lims ID:	460-154849-A-1-A	Lab Sample ID:	460-154849-1
Client ID:	GC-SO-101(SO)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

49 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
4.94	84.00	144	0.457785
4.94	56.00	333	
4.93	69.00	132	

Reviewer: delpolitov, 01-May-2018 16:51:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

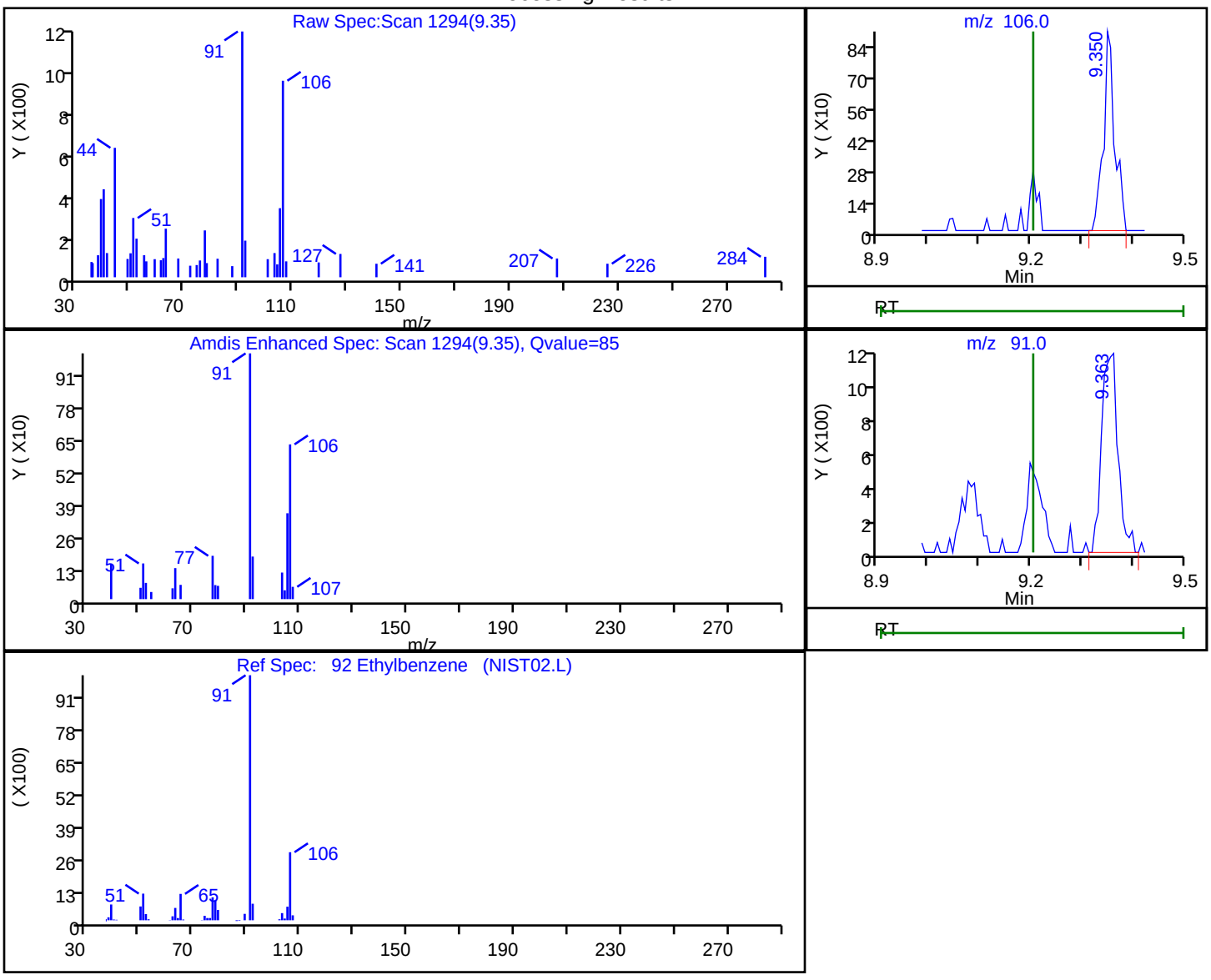
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82864.D		
Injection Date:	01-May-2018 14:49:30	Instrument ID:	CVOAMS9
Lims ID:	460-154849-A-1-A	Lab Sample ID:	460-154849-1
Client ID:	GC-SO-101(SO)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.35	106.00	1389	0.245011
9.36	91.00	2671	

Reviewer: delpolitov, 01-May-2018 16:51:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

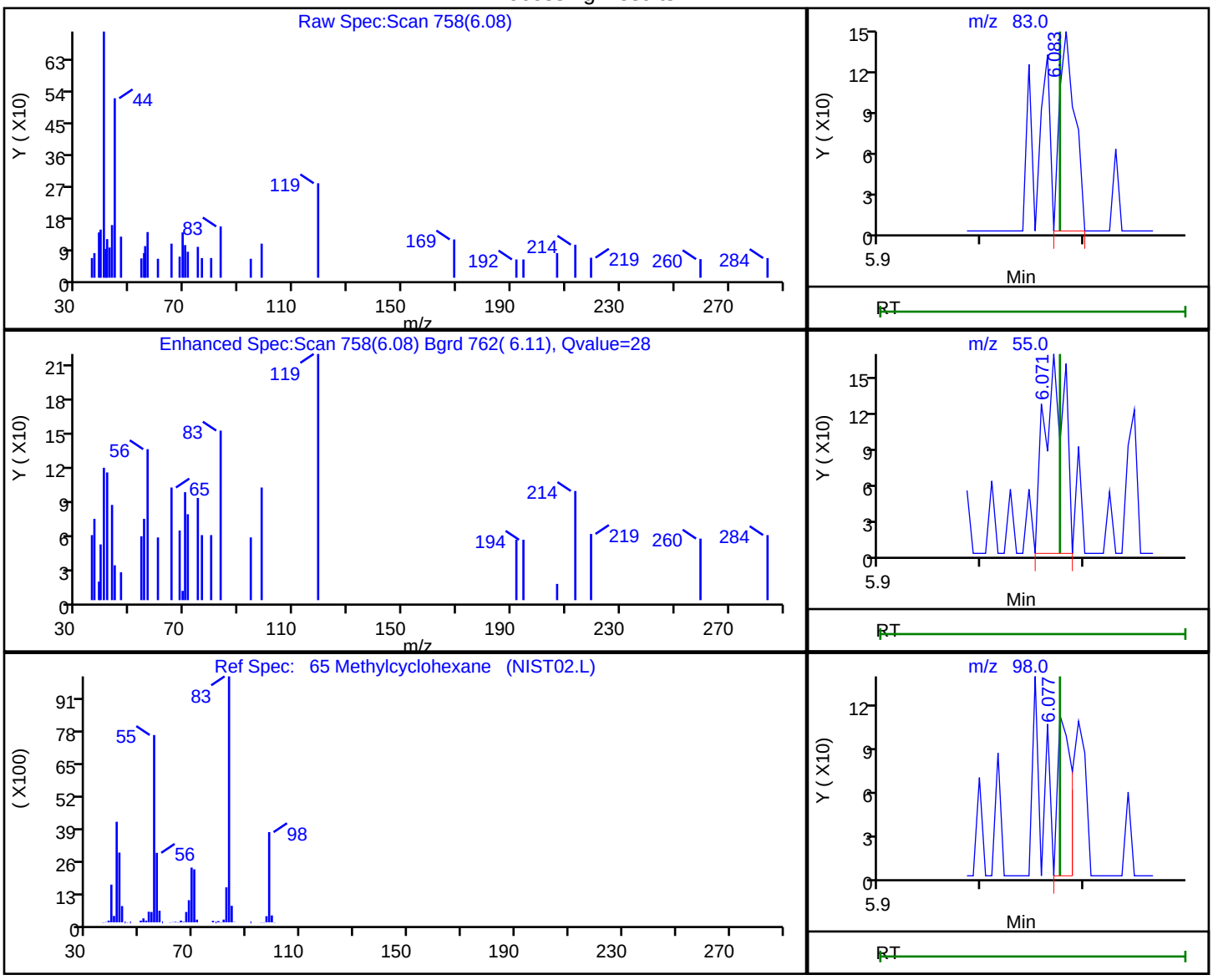
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82864.D		
Injection Date:	01-May-2018 14:49:30	Instrument ID:	CVOAMS9
Lims ID:	460-154849-A-1-A	Lab Sample ID:	460-154849-1
Client ID:	GC-SO-101(SO)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

65 Methylcyclohexane, CAS: 108-87-2

Processing Results



RT	Mass	Response	Amount
6.08	83.00	152	0.474910
6.07	55.00	232	
6.08	98.00	102	

Reviewer: delpolitov, 01-May-2018 16:51:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-Sump (SO) | Lab Sample ID: 460-154849-2

Matrix: Solid | Lab File ID: K82865.D

Analysis Method: 8260C | Date Collected: 04/26/2018 07:50

Sample wt/vol: 0.195(g) | Date Analyzed: 05/01/2018 15:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.1 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.030	U	0.030	0.0070
79-34-5	1,1,2,2-Tetrachloroethane	0.030	U	0.030	0.0064
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.030	U	0.030	0.0090
79-00-5	1,1,2-Trichloroethane	0.030	U	0.030	0.0053
75-34-3	1,1-Dichloroethane	0.030	U	0.030	0.0062
75-35-4	1,1-Dichloroethene	0.030	U	0.030	0.0067
87-61-6	1,2,3-Trichlorobenzene	0.030	U	0.030	0.0054
120-82-1	1,2,4-Trichlorobenzene	0.030	U	0.030	0.0027
96-12-8	1,2-Dibromo-3-Chloropropane	0.030	U	0.030	0.014
95-50-1	1,2-Dichlorobenzene	0.030	U	0.030	0.0043
107-06-2	1,2-Dichloroethane	0.030	U	0.030	0.0088
78-87-5	1,2-Dichloropropane	0.030	U	0.030	0.013
541-73-1	1,3-Dichlorobenzene	0.030	U	0.030	0.0047
106-46-7	1,4-Dichlorobenzene	0.030	U	0.030	0.0030
123-91-1	1,4-Dioxane	0.60	U	0.60	0.27
78-93-3	2-Butanone (MEK)	0.15	U	0.15	0.033
591-78-6	2-Hexanone	0.15	U	0.15	0.023
108-10-1	4-Methyl-2-pentanone (MIBK)	0.15	U	0.15	0.020
67-64-1	Acetone	0.15	U	0.15	0.11
71-43-2	Benzene	0.030	U	0.030	0.0077
75-25-2	Bromoform	0.030	U	0.030	0.013
74-83-9	Bromomethane	0.030	U	0.030	0.014
75-15-0	Carbon disulfide	0.030	U	0.030	0.0079
56-23-5	Carbon tetrachloride	0.030	U	0.030	0.0054
108-90-7	Chlorobenzene	0.030	U	0.030	0.0053
74-97-5	Chlorobromomethane	0.030	U	0.030	0.0084
124-48-1	Chlorodibromomethane	0.030	U	0.030	0.0058
75-00-3	Chloroethane	0.030	U	0.030	0.016
67-66-3	Chloroform	0.030	U	0.030	0.0095
74-87-3	Chloromethane	0.030	U	0.030	0.013
156-59-2	cis-1,2-Dichloroethene	0.030	U	0.030	0.0045
10061-01-5	cis-1,3-Dichloropropene	0.030	U	0.030	0.0082
110-82-7	Cyclohexane	0.030	U	0.030	0.0066
75-27-4	Dichlorobromomethane	0.030	U	0.030	0.0077
75-71-8	Dichlorodifluoromethane	0.030	U *	0.030	0.010

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-Sump (SO) | Lab Sample ID: 460-154849-2

Matrix: Solid | Lab File ID: K82865.D

Analysis Method: 8260C | Date Collected: 04/26/2018 07:50

Sample wt/vol: 0.195(g) | Date Analyzed: 05/01/2018 15:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.1 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.030	U	0.030	0.0059
106-93-4	Ethylene Dibromide	0.030	U	0.030	0.0054
98-82-8	Isopropylbenzene	0.030	U	0.030	0.0038
79-20-9	Methyl acetate	0.15	U	0.15	0.13
1634-04-4	Methyl tert-butyl ether	0.030	U	0.030	0.0037
108-87-2	Methylcyclohexane	0.030	U	0.030	0.0048
75-09-2	Methylene Chloride	0.020	J	0.030	0.0049
179601-23-1	m-Xylene & p-Xylene	0.022	J	0.030	0.0052
95-47-6	o-Xylene	0.0099	J	0.030	0.0028
100-42-5	Styrene	0.030	U	0.030	0.0037
127-18-4	Tetrachloroethene	0.030	U	0.030	0.0043
108-88-3	Toluene	0.030	U	0.030	0.019
156-60-5	trans-1,2-Dichloroethene	0.030	U	0.030	0.0073
10061-02-6	trans-1,3-Dichloropropene	0.030	U	0.030	0.0079
79-01-6	Trichloroethene	0.030	U	0.030	0.0043
75-69-4	Trichlorofluoromethane	0.030	U	0.030	0.012
75-01-4	Vinyl chloride	0.030	U	0.030	0.016

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		78-135
460-00-4	4-Bromofluorobenzene	99		67-126
1868-53-7	Dibromofluoromethane (Surr)	104		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-Sump (SO) | Lab Sample ID: 460-154849-2

Matrix: Solid | Lab File ID: K82865.D

Analysis Method: 8260C | Date Collected: 04/26/2018 07:50

Sample wt/vol: 0.195(g) | Date Analyzed: 05/01/2018 15:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.1 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D				
Lims ID:	460-154849-A-2-A				
Client ID:	GC-Sump (SO)				
Sample Type:	Client				
Inject. Date:	01-May-2018 15:14:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-154849-A-2-A				
Misc. Info.:	460-0071307-023				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	01-May-2018 16:52:09	Calib Date:	21-Apr-2018 08:07:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK017				
First Level Reviewer: delpolitov		Date:	01-May-2018 16:52:09		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.376	3.364	0.012	0	396351	1000.0	
26 Methylene Chloride	84	3.388	3.382	0.006	31	2901	0.6564	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	241011	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	96	196555	52.0	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.315	-0.006	0	184766	52.5	
* 61 Fluorobenzene	96	5.583	5.589	-0.006	99	472276	50.0	
* 67 1,4-Dioxane-d8	96	6.296	6.290	0.006	0	32512	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	623817	48.3	
* 89 Chlorobenzene-d5	117	9.076	9.082	-0.006	86	422080	50.0	
93 m-Xylene & p-Xylene	106	9.357	9.357	0.001	0	5259	0.7504	
95 o-Xylene	106	9.820	9.820	0.000	95	2419	0.3306	
$ 100 4-Bromofluorobenzene	174	10.424	10.423	0.001	96	206421	49.3	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	260631	50.0	

Reagents:

8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

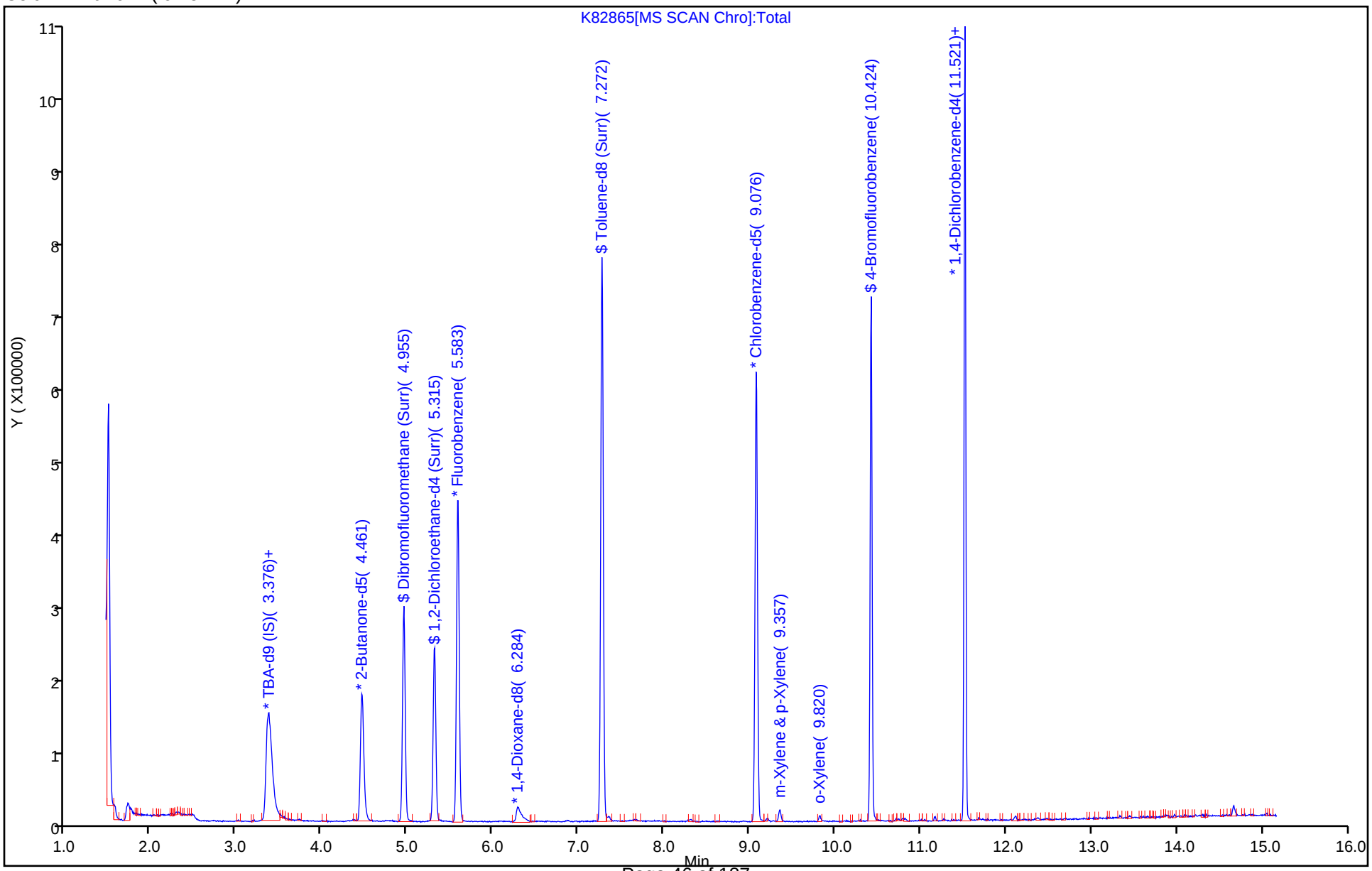
Report Date: 01-May-2018 16:52:09 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D

Injection Date:	01-May-2018 15:14:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	460-154849-A-2-A	Lab Sample ID:	460-154849-2	Worklist Smp#:	23
Client ID:	GC-Sump (SO)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



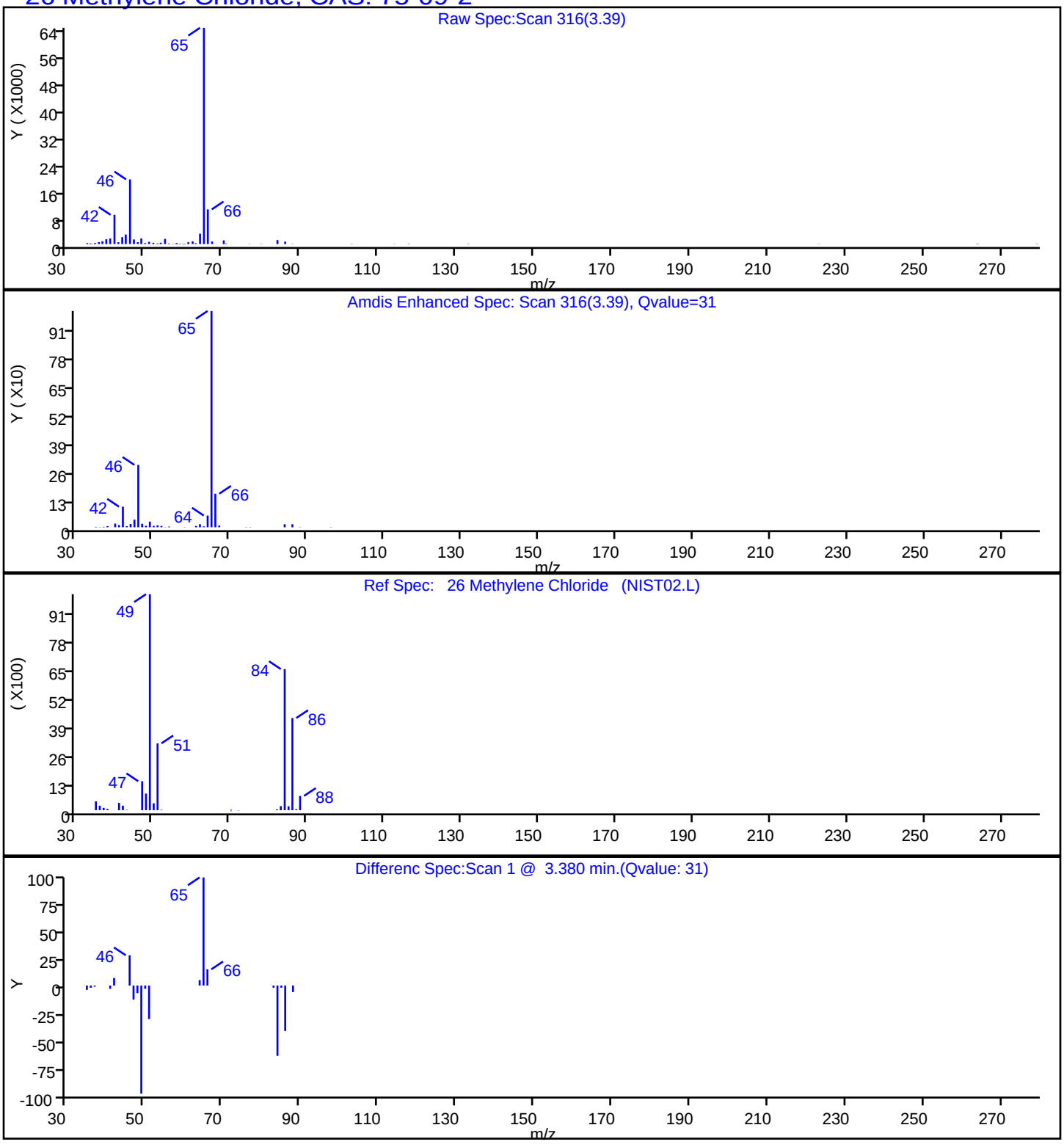
Report Date: 01-May-2018 16:52:09 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D

Injection Date:	01-May-2018 15:14:30	Instrument ID:	CVOAMS9		
Lims ID:	460-154849-A-2-A	Lab Sample ID:	460-154849-2		
Client ID:	GC-Sump (SO)				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

26 Methylene Chloride, CAS: 75-09-2



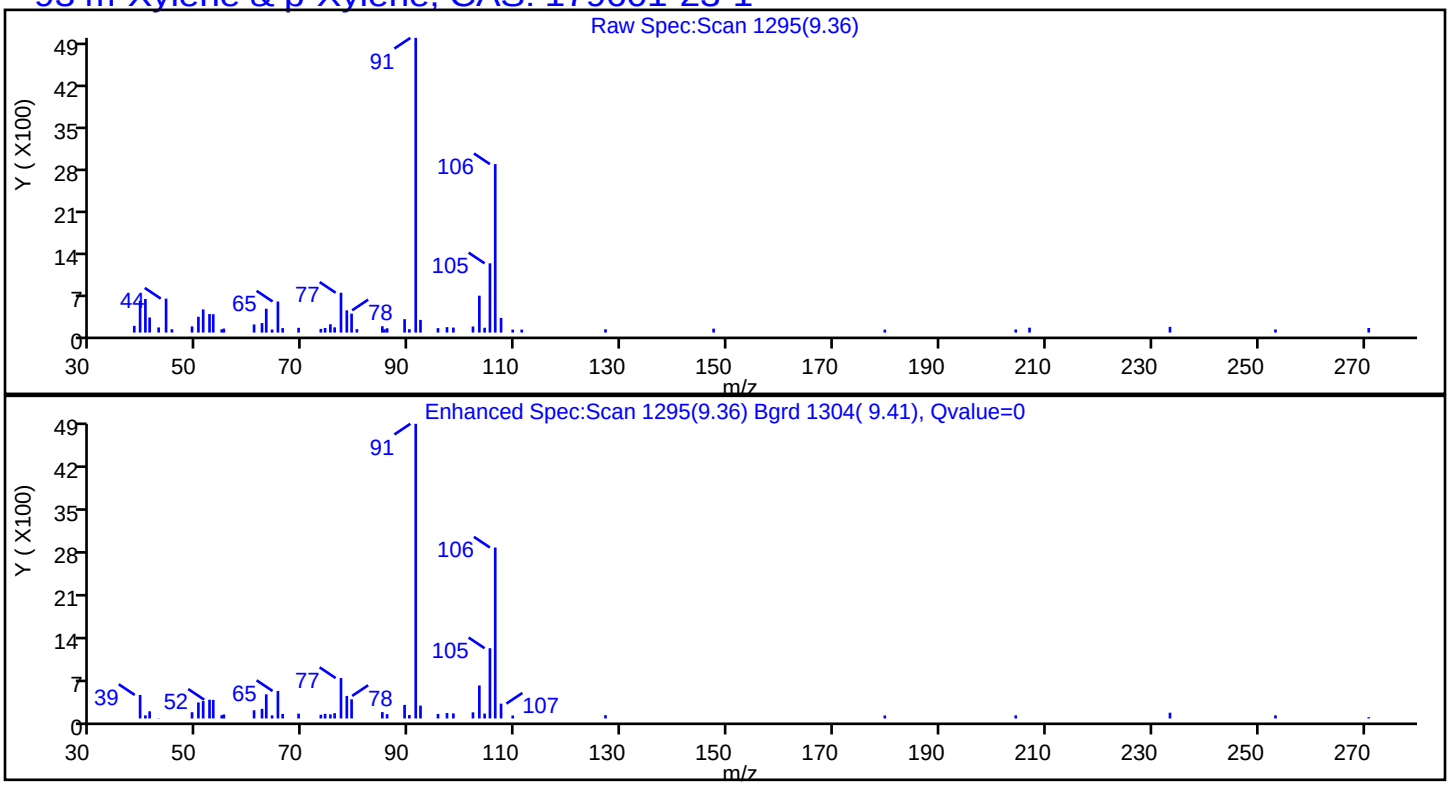
Report Date: 01-May-2018 16:52:10 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D

Injection Date:	01-May-2018 15:14:30	Instrument ID:	CVOAMS9		
Lims ID:	460-154849-A-2-A	Lab Sample ID:	460-154849-2		
Client ID:	GC-Sump (SO)				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1



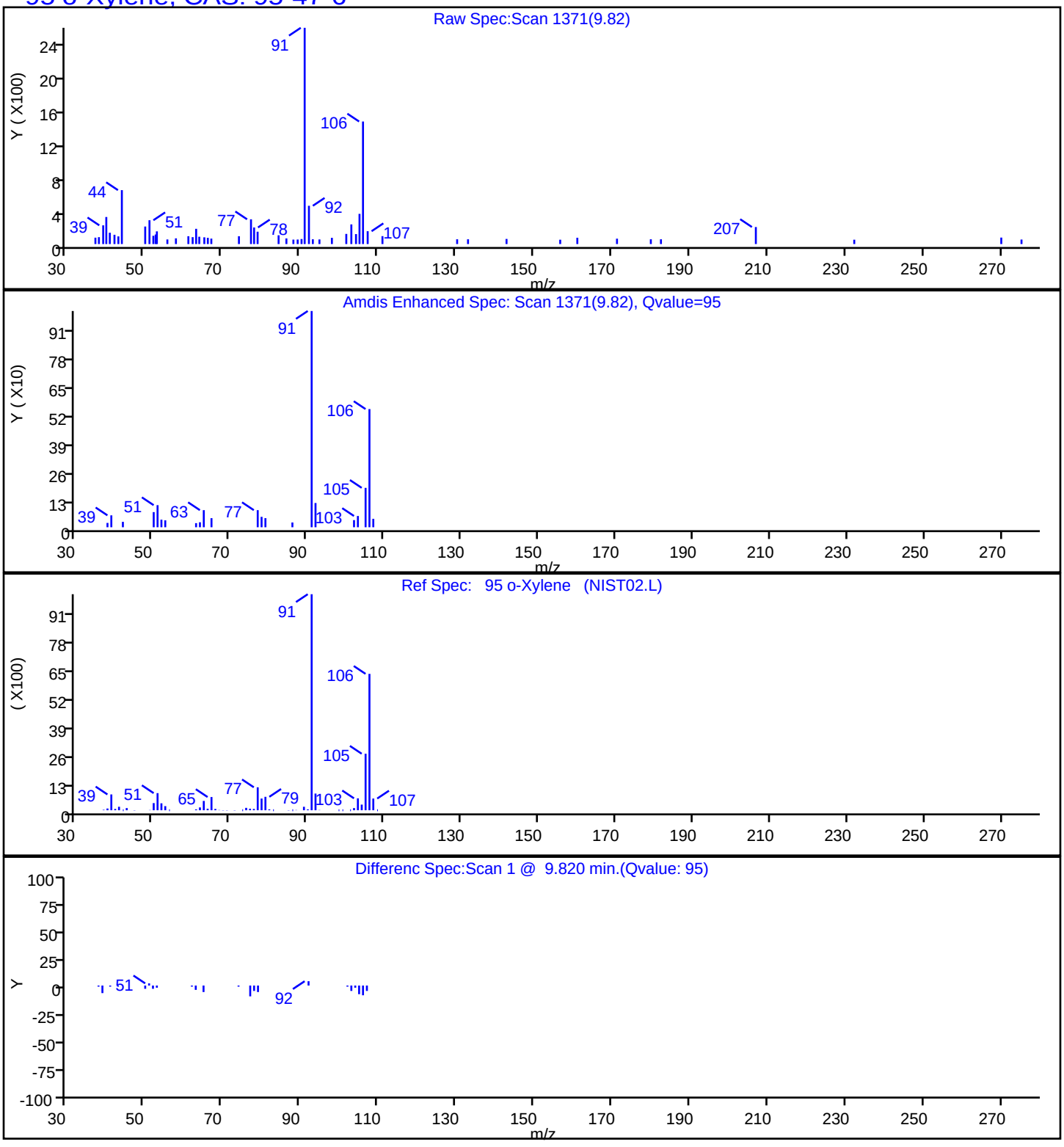
Report Date: 01-May-2018 16:52:10 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D

Injection Date:	01-May-2018 15:14:30	Instrument ID:	CVOAMS9		
Lims ID:	460-154849-A-2-A	Lab Sample ID:	460-154849-2		
Client ID:	GC-Sump (SO)				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6



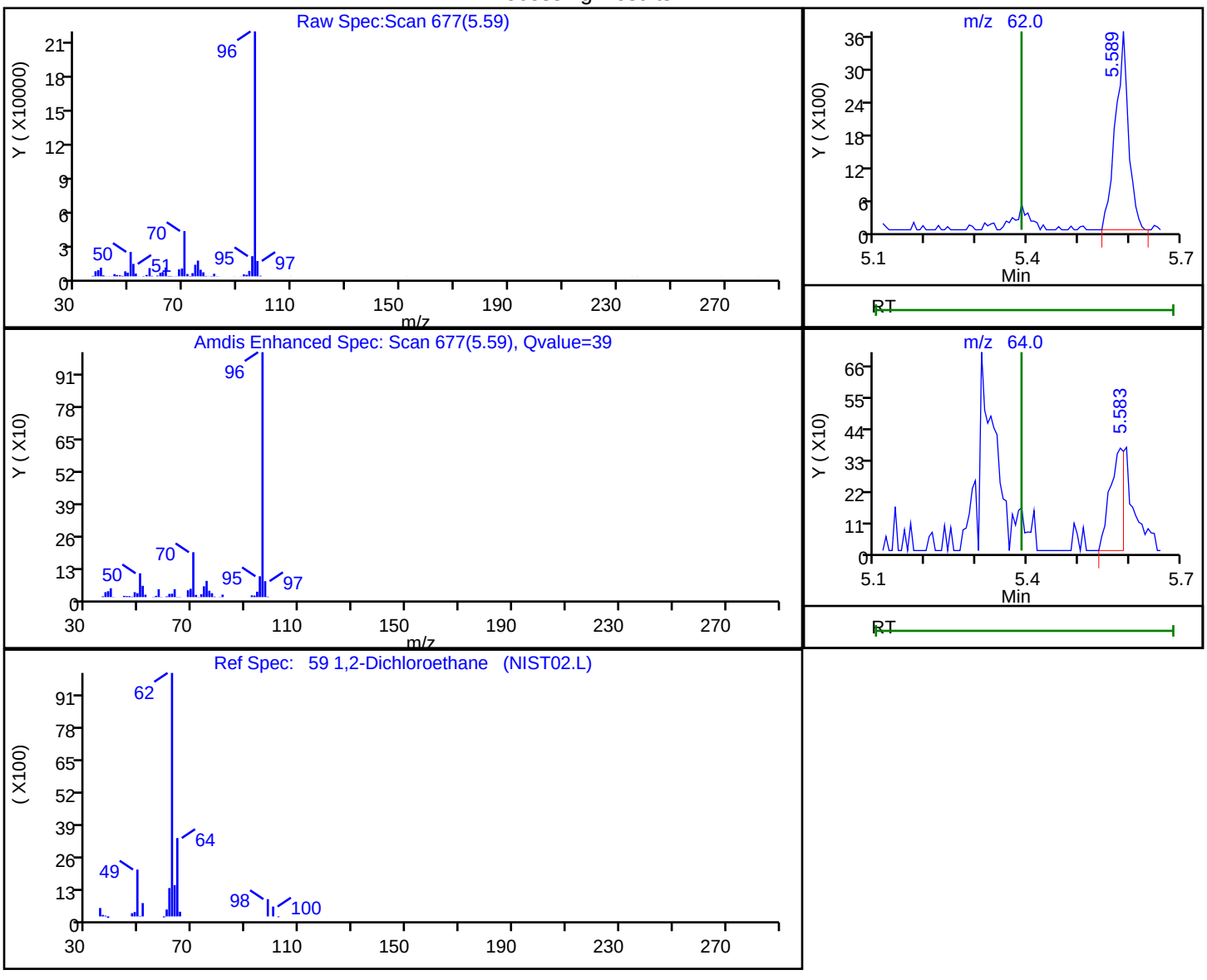
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D				
Injection Date:	01-May-2018 15:14:30	Instrument ID:	CVOAMS9		
Lims ID:	460-154849-A-2-A	Lab Sample ID:	460-154849-2		
Client ID:	GC-Sump (SO)				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.59	62.00	6518	1.428709
5.58	64.00	697	

Reviewer: delpolitov, 01-May-2018 16:52:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

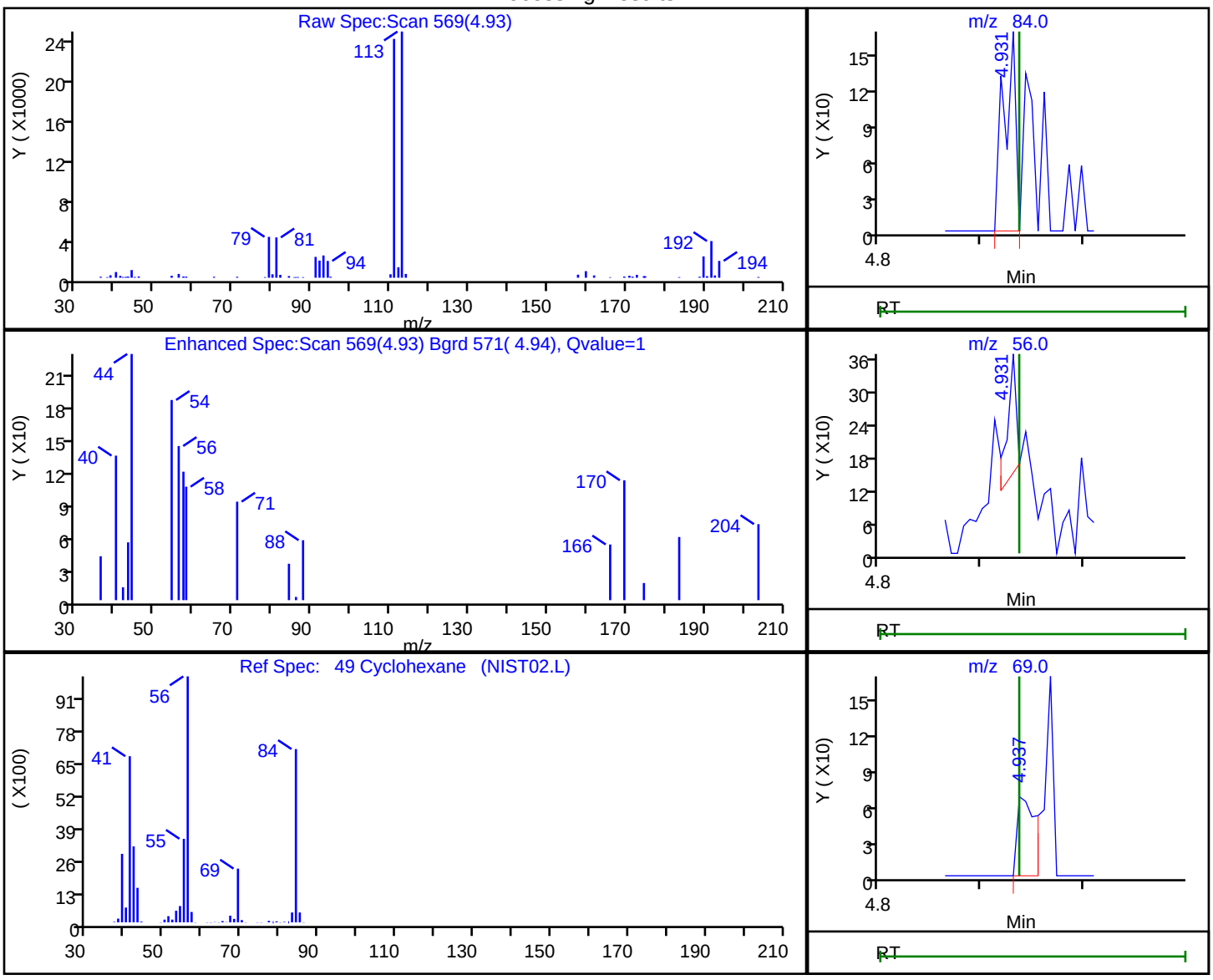
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D		
Injection Date:	01-May-2018 15:14:30	Instrument ID:	CVOAMS9
Lims ID:	460-154849-A-2-A	Lab Sample ID:	460-154849-2
Client ID:	GC-Sump (SO)		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

49 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
4.93	84.00	129	0.455194
4.93	56.00	131	
4.94	69.00	84	

Reviewer: delpolitov, 01-May-2018 16:52:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

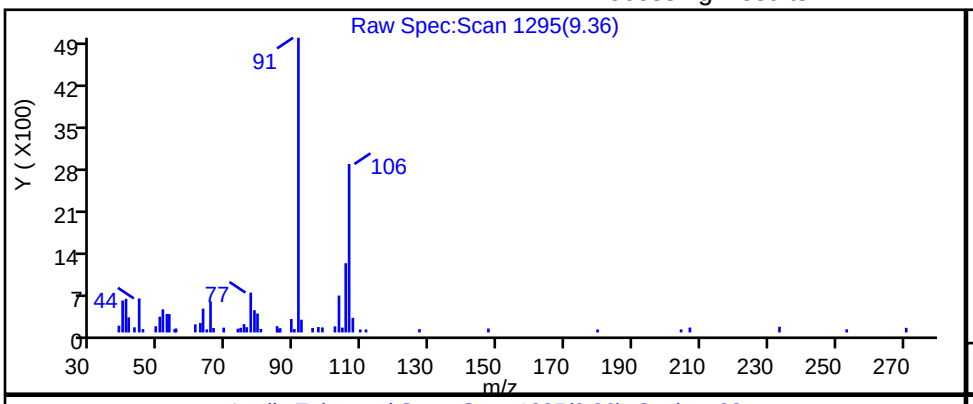
User Disabled Compound Report

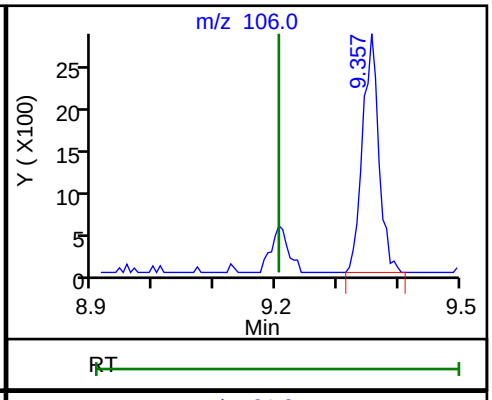
TestAmerica Edison

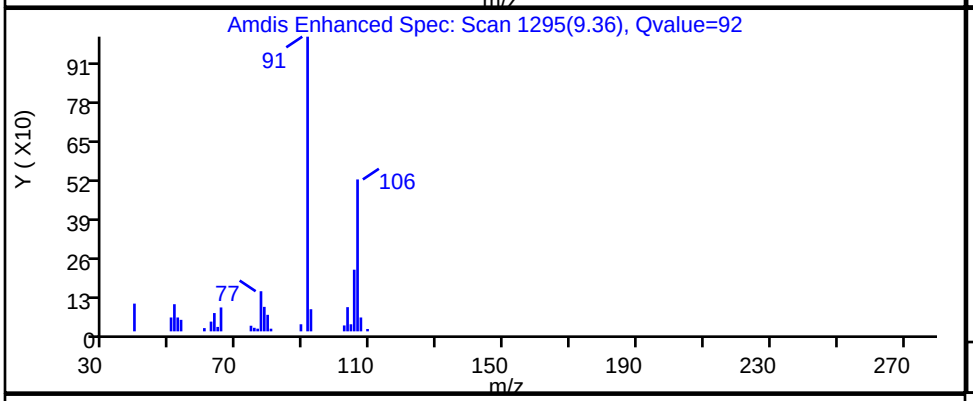
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D		
Injection Date:	01-May-2018 15:14:30	Instrument ID:	CVOAMS9
Lims ID:	460-154849-A-2-A	Lab Sample ID:	460-154849-2
Client ID:	GC-Sump (SO)		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

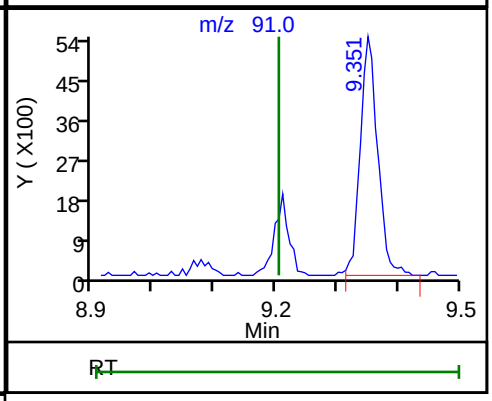
92 Ethylbenzene, CAS: 100-41-4

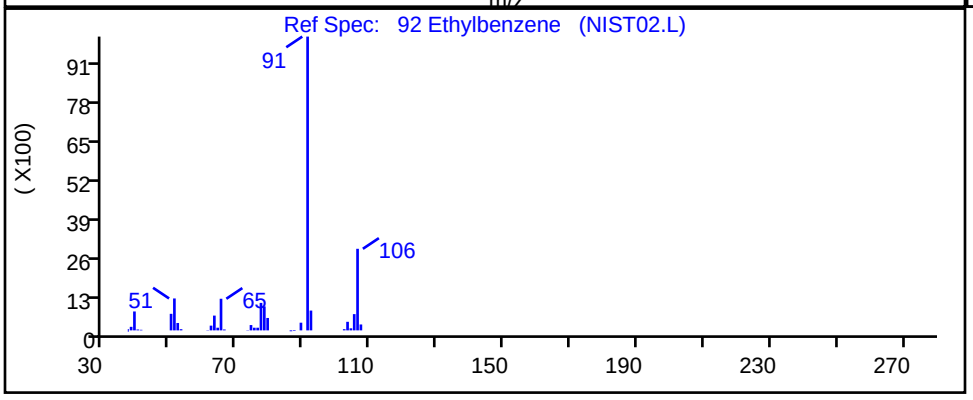
Processing Results











RT	Mass	Response	Amount
9.36	106.00	5258	0.915709
9.35	91.00	10886	

Reviewer: delpolitov, 01-May-2018 16:52:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

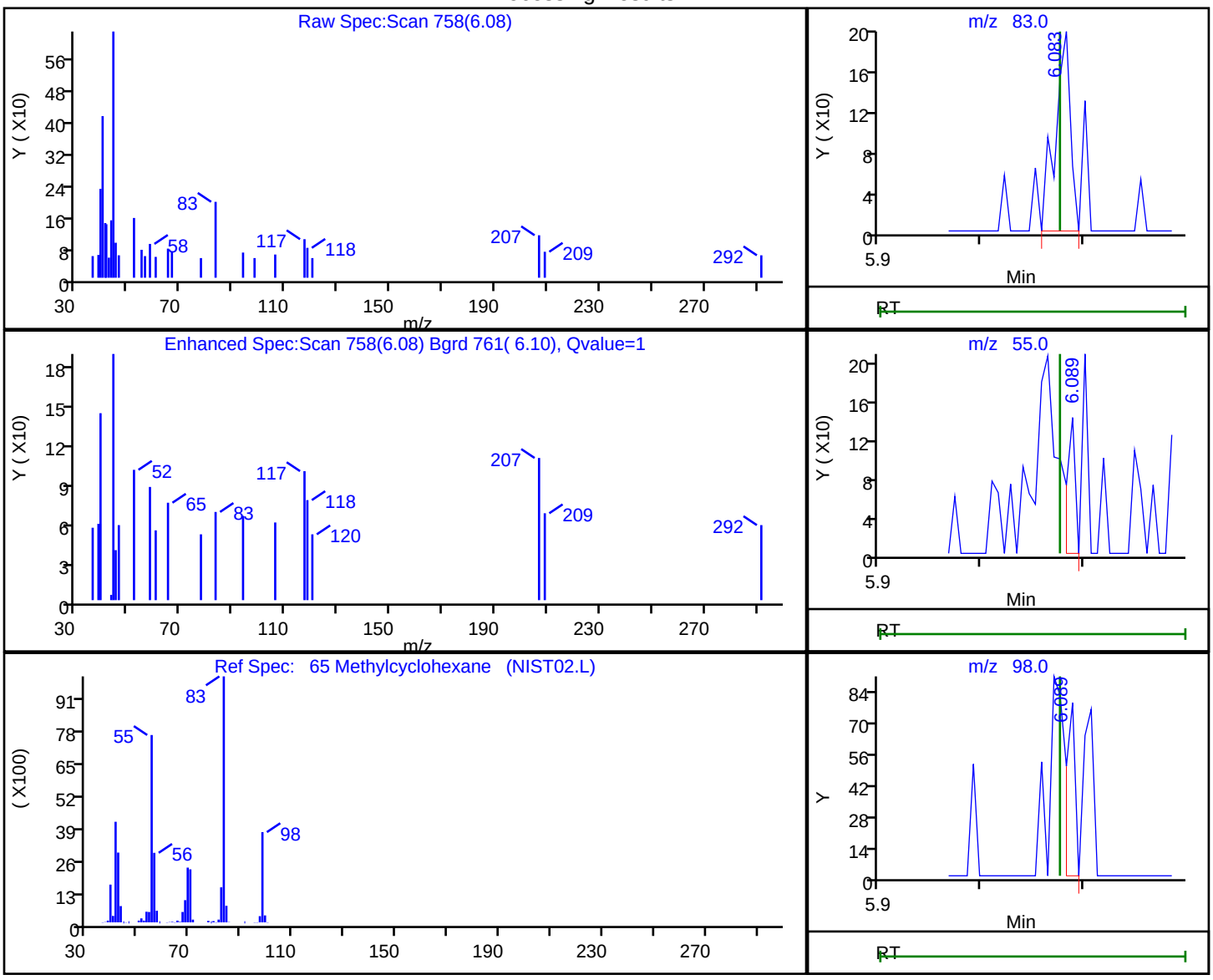
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82865.D		
Injection Date:	01-May-2018 15:14:30	Instrument ID:	CVOAMS9
Lims ID:	460-154849-A-2-A	Lab Sample ID:	460-154849-2
Client ID:	GC-Sump (SO)		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

65 Methylcyclohexane, CAS: 108-87-2

Processing Results



RT	Mass	Response	Amount
6.08	83.00	201	0.480297
6.09	55.00	78	
6.09	98.00	47	

Reviewer: delpolitov, 01-May-2018 16:52:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-512949/3	K82296.D
Level 2	STD5 460-512949/4	K82297.D
Level 3	STD20 460-512949/5	K82298.D
Level 4	STD50 460-512949/6	K82299.D
Level 5	STD200 460-512949/7	K82300.D
Level 6	STD500 460-512949/8	K82301.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	0.1840 0.3331	0.2999	0.3140	0.2977	0.4213	QuaF		0.4532	-0.000239						0.9970		0.9900
Dichlorodifluoromethane	0.4191 0.7119	0.6312	0.6240	0.6176	0.8831	QuaF		0.9403	-0.000453		0.1000				0.9970		0.9900
Chloromethane	0.6476 0.6198	0.5949	0.5714	0.5502	0.7487	Ave		0.6221			0.1000	11.4		20.0			
Vinyl chloride	0.5149 0.6229	0.6310	0.6058	0.5857	0.7704	Ave		0.6218			0.1000	13.5		20.0			
Butadiene	0.3711 0.5072	0.4494	0.4675	0.4557	0.6062	Ave		0.4762				16.3		20.0			
Bromomethane	0.5312 0.5026	0.4925	0.4947	0.4814	0.6018	Ave		0.5174			0.1000	8.6		20.0			
Chloroethane	0.2900 0.3121	0.2963	0.3098	0.3011	0.3722	Ave		0.3136			0.1000	9.5		20.0			
Dichlorofluoromethane	0.8773 0.8504	0.9055	0.9369	0.8953	1.0256	Ave		0.9152				6.7		20.0			
Trichlorofluoromethane	0.6703 0.8060	0.7993	0.8136	0.8100	0.9767	Ave		0.8127			0.1000	12.0		20.0			
Pentane	1.4291 1.7520	1.8792	1.9411	1.8065	2.1179	Ave		1.8210				12.6		20.0			
Ethanol	0.0519 0.0586	0.0649	0.0702	0.0583	0.0722	Ave		0.0627				12.4		20.0			
Ethyl ether	0.2694 0.2603	0.2494	0.2849	0.2642	0.3056	Ave		0.2723				7.4		20.0			
2-Methyl-1,3-butadiene	0.2484 0.3056	0.3041	0.3367	0.3175	0.3634	Ave		0.3126				12.3		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	0.2991 0.3871	0.4034	0.4308	0.4128	0.4793	Ave		0.4021				14.8		20.0			
Acrolein	1.4946 1.3517	1.1921	1.5565	1.6487	1.6512	Ave		1.4825				12.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3000 0.5040	0.4881	0.5279	0.5142	0.6145	Lin2	-0.245	0.5437			0.1000				0.9940		0.9900
1,1-Dichloroethene	0.3310 0.4061	0.4041	0.4326	0.4031	0.4840	Ave		0.4101			0.1000	12.1		20.0			
Acetone	1.5182 1.0786	1.2273	1.1518	1.1015	1.2994	Ave		1.2294			0.0500	13.3		20.0			
Iodomethane	0.8254 0.8441	0.8063	0.9136	0.8565	1.0010	Ave		0.8745				8.2		20.0			
Isopropyl alcohol	0.6883 0.7208	0.8313	0.7512	0.7713	0.8549	Ave		0.7696				8.3		20.0			
Carbon disulfide	1.3530 1.4995	1.4216	1.5995	1.4925	1.8109	Ave		1.5295			0.1000	10.5		20.0			
Allyl chloride	0.1961 0.2487	0.2333	0.2512	0.2421	0.2843	Ave		0.2426				11.8		20.0			
Methyl acetate	6.5144 6.3909	6.8910	6.7340	6.3749	7.5977	Ave		6.7505			0.1000	6.8		20.0			
Cyclopentene	0.7207 0.8814	0.8724	0.9680	0.9330	1.0506	Ave		0.9044				12.3		20.0			
Acetonitrile	1.6369 1.6355	1.7263	1.5545	1.4038	2.0201	Ave		1.6628				12.4		20.0			
Methylene Chloride	0.4961 0.4343	0.4408	0.4760	0.4488	0.5112	Ave		0.4679			0.1000	6.7		20.0			
2-Methyl-2-propanol	1.6416 1.4180	1.3508	1.5242	1.4216	1.6544	Ave		1.5018				8.4		20.0			
Methyl tert-butyl ether	1.1281 1.0674	1.0609	1.1842	1.1225	1.3066	Ave		1.1450			0.1000	8.0		20.0			
trans-1,2-Dichloroethene	0.4572 0.4135	0.4151	0.4555	0.4337	0.5050	Ave		0.4467			0.1000	7.7		20.0			
Acrylonitrile	0.1218 0.1179	0.1163	0.1245	0.1199	0.1406	Ave		0.1235				7.2		20.0			
Hexane	0.2560 0.3358	0.3306	0.3622	0.3469	0.4356	Ave		0.3445				16.8		20.0			
Isopropyl ether	1.2037 1.1280	1.1498	1.2748	1.1890	1.3223	Ave		1.2113				6.1		20.0			
1,1-Dichloroethane	0.6886 0.6728	0.6499	0.7345	0.6988	0.8132	Ave		0.7096			0.2000	8.2		20.0			
Vinyl acetate	1.6046 1.6620	1.7145	1.9508	1.8161	1.9825	Ave		1.7884				8.7		20.0			
2-Chloro-1,3-butadiene	0.3016 0.3536	0.3451	0.3848	0.3582	0.4203	Ave		0.3606				11.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	1.1625 1.0985	1.1040	1.2283	1.1510	1.2664	Ave		1.1685				5.8		20.0			
2,2-Dichloropropane	0.2276 0.2165	0.2095	0.2360	0.2145	0.2640	Ave		0.2280				8.8		20.0			
cis-1,2-Dichloroethene	0.4856 0.4761	0.4713	0.5140	0.4766	0.5644	Ave		0.4980			0.1000	7.2		20.0			
Ethyl acetate	0.4846 0.3877	0.3787	0.4162	0.3964	0.4379	Ave		0.4169				9.4		20.0			
2-Butanone (MEK)	0.5460 0.4484	0.4795	0.4749	0.4535	0.5266	Ave		0.4882			0.0500	8.1		20.0			
Methyl acrylate	0.2731 0.2712	0.2739	0.2715	0.2631	0.3077	Ave		0.2768				5.6		20.0			
Propionitrile	1.2213 1.3186	1.3761	1.4984	1.4052	1.5623	Ave		1.3970				8.8		20.0			
Tetrahydrofuran	0.6577 0.5382	0.6079	0.5747	0.5413	0.6234	Ave		0.5906				8.1		20.0			
Chlorobromomethane	0.2451 0.2440	0.2342	0.2580	0.2395	0.2790	Ave		0.2500				6.5		20.0			
Methacrylonitrile	0.1274 0.1355	0.1314	0.1413	0.1340	0.1525	Ave		0.1370				6.5		20.0			
Chloroform	0.7355 0.7109	0.7068	0.7658	0.7109	0.8379	Ave		0.7447			0.2000	6.8		20.0			
Cyclohexane	0.4211 0.6894	0.6646	0.7174	0.6979	0.8471	Lin2	-0.324	0.7419			0.1000				0.9940		0.9900
1,1,1-Trichloroethane	0.6210 0.7065	0.6795	0.7382	0.7048	0.8614	Ave		0.7185			0.1000	11.2		20.0			
Carbon tetrachloride	0.5129 0.6434	0.5759	0.6397	0.6295	0.7678	Ave		0.6282			0.1000	13.5		20.0			
1,1-Dichloropropene	0.4963 0.5383	0.5063	0.5566	0.5309	0.6511	Ave		0.5466				10.2		20.0			
Isobutyl alcohol	0.0365 0.0561	0.0487	0.0494	0.0494	0.0650	Ave		0.0509				18.5		20.0			
Benzene	1.6519 1.6965	1.6625	1.8023	1.7141	2.0635	Ave		1.7651			0.5000	8.8		20.0			
Isopropyl acetate	0.9745 1.0207	0.9755	1.0617	0.9688	1.1604	Ave		1.0269				7.3		20.0			
Tert-amyl methyl ether	0.3194 0.3581	0.3326	0.3698	0.3514	0.4022	Ave		0.3556				8.2		20.0			
1,2-Dichloroethane	0.5115 0.4630	0.4610	0.4833	0.4471	0.5321	Ave		0.4830			0.1000	6.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Heptane	0.2101 0.3272	0.3225	0.3478	0.3350	0.4173	Lin2	-0.150	0.3586							0.9910		0.9900
n-Butanol	0.2886 0.3435	0.2926	0.2949	0.2918	0.3692	Ave		0.3134				10.9		20.0			
Trichloroethene	0.4001 0.4218	0.4067	0.4284	0.4102	0.5008	Ave		0.4280			0.2000	8.7		20.0			
Ethyl acrylate	0.1793 0.2556	0.2331	0.2759	0.2519	0.3044	Ave		0.2500				16.9		20.0			
Methylcyclohexane	0.4962 0.8348	0.7743	0.8785	0.8396	1.0377	Lin2	-0.410	0.8974			0.1000				0.9920		0.9900
1,2-Dichloropropane	0.3807 0.3674	0.3571	0.3857	0.3584	0.4305	Ave		0.3800			0.1000	7.2		20.0			
Methyl methacrylate	0.2264 0.2643	0.2432	0.2663	0.2560	0.2985	Ave		0.2591				9.4		20.0			
1,4-Dioxane	1.2805 1.1126	1.5030	1.5440	1.3334	1.4801	Ave		1.3756				12.0		20.0			
n-Propyl acetate	0.3763 0.4344	0.3914	0.4294	0.4160	0.4892	Ave		0.4228				9.3		20.0			
Dibromomethane	0.2444 0.2528	0.2390	0.2598	0.2428	0.2859	Ave		0.2541				6.8		20.0			
Dichlorobromomethane	0.4685 0.5423	0.4697	0.5349	0.5015	0.6132	Ave		0.5217			0.2000	10.5		20.0			
2-Chloroethyl vinyl ether	0.1707 0.1884	0.1805	0.1930	0.1805	0.2114	Ave		0.1874				7.5		20.0			
2-Nitropropane	0.0747 0.0736	0.0562	0.0590	0.0575	0.0756	Ave		0.0661				14.2		20.0			
Epichlorohydrin	0.3218 0.3672	0.3542	0.3825	0.3744	0.4339	Ave		0.3723				9.9		20.0			
cis-1,3-Dichloropropene	0.5800 0.6465	0.5946	0.6485	0.6177	0.7578	Ave		0.6408			0.2000	9.9		20.0			
4-Methyl-2-pentanone (MIBK)	3.3296 3.5431	3.6074	3.8553	3.7044	4.2367	Ave		3.7128			0.0500	8.4		20.0			
Toluene	1.7803 1.7934	1.7443	1.8807	1.8314	2.1900	Ave		1.8700			0.4000	8.7		20.0			
trans-1,3-Dichloropropene	0.4977 0.5722	0.5144	0.5575	0.5372	0.6592	Ave		0.5564			0.1000	10.3		20.0			
Ethyl methacrylate	0.4102 0.4639	0.3985	0.4412	0.4437	0.5446	Ave		0.4504				11.5		20.0			
1,1,2-Trichloroethane	0.2955 0.2960	0.2997	0.3155	0.2911	0.3465	Ave		0.3074			0.1000	6.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.4734 0.5068	0.4923	0.5389	0.5097	0.6245	Ave		0.5243			0.2000	10.2		20.0			
1,3-Dichloropropane	0.5374 0.5525	0.5439	0.5798	0.5519	0.6468	Ave		0.5687				7.2		20.0			
2-Hexanone	2.0662 2.2715	2.3236	2.4628	2.3668	2.6973	Ave		2.3647			0.0500	8.9		20.0			
n-Butyl acetate	0.5535 0.4942	0.4383	0.4941	0.4899	0.5684	Ave		0.5064				9.4		20.0			
Chlorodibromomethane	0.4014 0.4764	0.4039	0.4359	0.4334	0.5387	Ave		0.4483			0.1000	11.6		20.0			
Ethylene Dibromide	0.3326 0.3807	0.3612	0.3946	0.3759	0.4430	Ave		0.3814			0.1000	9.7		20.0			
Chlorobenzene	1.1611 1.2164	1.1716	1.2651	1.2223	1.4489	Ave		1.2475			0.5000	8.5		20.0			
Ethylbenzene	0.6016 0.6719	0.6391	0.6914	0.6690	0.8081	Ave		0.6802			0.1000	10.3		20.0			
1,1,1,2-Tetrachloroethane	0.4489 0.5252	0.4503	0.4806	0.4792	0.6045	Ave		0.4981				11.9		20.0			
m-Xylene & p-Xylene	0.7501 0.8140	0.7725	0.8495	0.8135	0.9821	Ave		0.8303			0.1000	9.9		20.0			
n-Butyl acrylate	0.2364 0.2782	0.2394	0.2662	0.2575	0.3104	Ave		0.2647				10.4		20.0			
o-Xylene	0.7992 0.8542	0.8026	0.8836	0.8500	1.0119	Ave		0.8669			0.3000	9.0		20.0			
Styrene	1.1923 1.3443	1.2645	1.3914	1.3331	1.5918	Ave		1.3529			0.3000	10.1		20.0			
Amyl acetate (mixed isomers)	0.8716 0.9858	0.7970	0.9545	0.9843	1.1588	Ave		0.9587				12.8		20.0			
Bromoform	0.2651 0.3176	0.2603	0.2790	0.2804	0.3485	Ave		0.2918			0.1000	11.7		20.0			
Isopropylbenzene	1.9157 2.3264	2.1284	2.3988	2.3342	2.8428	Ave		2.3244			0.1000	13.3		20.0			
Bromobenzene	0.9424 0.9456	0.9365	0.9715	0.9486	1.1423	Ave		0.9812				8.1		20.0			
1,1,2,2-Tetrachloroethane	0.7827 0.8321	0.8168	0.8610	0.8456	0.9994	Ave		0.8563			0.3000	8.8		20.0			
N-Propylbenzene	3.6678 4.2408	4.1069	4.4991	4.4245	5.4059	Ave		4.3908				13.2		20.0			
1,2,3-Trichloropropane	0.2536 0.2352	0.2241	0.2413	0.2397	0.2874	Ave		0.2469				8.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.1921 0.1931	0.1823	0.1797	0.1922	0.2300	Ave		0.1949				9.3		20.0			
2-Chlorotoluene	2.5445 2.9451	2.7648	2.9472	2.9274	3.5598	Ave		2.9481				11.5		20.0			
4-Ethyltoluene	3.0649 3.6528	3.5635	3.8074	3.7518	4.3297	Ave		3.6950				11.1		20.0			
1,3,5-Trimethylbenzene	2.5821 3.3503	2.9437	3.2423	3.2668	4.1118	Ave		3.2495				15.6		20.0			
4-Chlorotoluene	2.2643 2.4089	2.3408	2.5408	2.4536	2.9919	Ave		2.5000				10.4		20.0			
Butyl Methacrylate	0.7190 0.9997	0.7516	0.9136	0.9334	1.1222	Ave		0.9066				16.7		20.0			
tert-Butylbenzene	1.9761 2.9477	2.4503	2.7155	2.7555	3.6004	Ave		2.7409				19.7		20.0			
1,2,4-Trimethylbenzene	2.8149 3.3645	3.0384	3.3793	3.3448	4.1453	Ave		3.3479				13.5		20.0			
sec-Butylbenzene	3.2041 4.4146	3.9835	4.4801	4.4541	5.7154	Ave		4.3753				18.7		20.0			
4-Isopropyltoluene	2.8329 4.0222	3.5269	3.9205	3.8798	4.9751	Ave		3.8596				18.1		20.0			
1,3-Dichlorobenzene	1.7523 1.8914	1.8166	1.9201	1.8440	2.2629	Ave		1.9146			0.6000	9.4		20.0			
1,4-Dichlorobenzene	1.8449 1.8699	1.8431	1.9367	1.8275	2.2230	Ave		1.9242			0.5000	7.9		20.0			
Benzyl chloride	1.2603 1.6157	1.2681	1.4836	1.4924	1.7842	Ave		1.4840				13.6		20.0			
Indan	3.0726 3.3699	3.2687	3.5457	3.4281	3.8888	Ave		3.4290				8.1		20.0			
p-Diethylbenzene	1.8873 2.0968	1.9678	2.1774	2.1322	2.4559	Ave		2.1195				9.3		20.0			
n-Butylbenzene	1.5407 1.9607	1.9048	2.0284	1.9789	2.4641	Ave		1.9796				14.9		20.0			
1,2-Dichlorobenzene	1.7696 1.8535	1.7893	1.9275	1.8527	2.2115	Ave		1.9007			0.4000	8.5		20.0			
1,2,4,5-Tetramethylbenzene	3.1008 3.8931	3.5249	3.8612	3.7835	4.4650	Ave		3.7714				11.9		20.0			
1,2-Dibromo-3-Chloropropane	0.2082 0.1730	0.1492	0.1689	0.1571	0.1997	Ave		0.1760			0.0500	13.3		20.0			
1,3,5-Trichlorobenzene	1.4962 1.6202	1.6707	1.7271	1.6463	1.8655	Ave		1.6710				7.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	1.5849 1.5596	1.5202	1.6507	1.5595	1.8898	Ave		1.6274			0.2000	8.3		20.0			
Hexachlorobutadiene	0.5589 0.8562	0.7300	0.7936	0.7841	1.0379	Ave		0.7934				19.8		20.0			
Naphthalene	3.6347 3.5647	3.4467	3.7190	3.6731	4.2909	Ave		3.7215				7.9		20.0			
1,2,3-Trichlorobenzene	1.5066 1.5066	1.4820	1.6327	1.5361	1.8450	Ave		1.5848				8.7		20.0			
Dibromofluoromethane (Surr)	0.3749 0.3925	0.3813	0.4046	0.3881	0.4610	Ave		0.4004				7.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3328 0.3956	0.3464	0.3624	0.3482	0.4491	Ave		0.3724				11.6		20.0			
Toluene-d8 (Surr)	1.3981 1.4779	1.4895	1.5027	1.5043	1.8148	Ave		1.5312				9.4		20.0			
4-Bromofluorobenzene	0.4626 0.4817	0.4888	0.4872	0.4827	0.5701	Ave		0.4955				7.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-512949/3	K82296.D
Level 2	STD5 460-512949/4	K82297.D
Level 3	STD20 460-512949/5	K82298.D
Level 4	STD50 460-512949/6	K82299.D
Level 5	STD200 460-512949/7	K82300.D
Level 6	STD500 460-512949/8	K82301.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	QuaF	1783 1738921	13714	57246	135885	663290	1.00 500	5.00	20.0	50.0	200
Dichlorodifluoromethane	FB	QuaF	4061 3716485	28865	113768	281893	1390269	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	6275 3235979	27205	104166	251138	1178713	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	4989 3252084	28857	110439	267346	1212827	1.00 500	5.00	20.0	50.0	200
Butadiene	FB	Ave	3596 2647680	20552	85231	207992	954435	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	5147 2623628	22521	90189	219717	947501	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	2810 1629405	13548	56487	137432	585994	1.00 500	5.00	20.0	50.0	200
Dichlorofluoromethane	FB	Ave	8501 4439412	41411	170807	408660	1614718	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	6495 4207662	36555	148322	369744	1537625	1.00 500	5.00	20.0	50.0	200
Pentane	TBAd9	Ave	1026 644307	5605	23533	56087	229927	2.00 1000	10.0	40.0	100	400
Ethanol	TBAd9	Ave	745 431300	3873	17016	36200	156699	40.0 20000	200	800	2000	8000
Ethyl ether	FB	Ave	2610 1359159	11404	51942	120615	481159	1.00 500	5.00	20.0	50.0	200
2-Methyl-1,3-butadiene	FB	Ave	2407 1595256	13908	61390	144944	572079	1.00 500	5.00	20.0	50.0	200
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	2898 2021149	18447	78531	188412	754521	1.00 500	5.00	20.0	50.0	200
Acrolein	TBAd9	Ave	53654 298249	71116	141525	204750	224076	100 600	200	300	400	500
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Lin2	2907 2631394	22321	96232	234718	967357	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1-Dichloroethene	FB	Ave	3207 2120050	18481	78869	183987	761927	1.00 500	5.00	20.0	50.0	200
Acetone	BUT	Ave	6532 2546708	23460	89929	214228	914399	5.00 2500	25.0	100	250	1000
Iodomethane	FB	Ave	7998 4406580	36873	166549	390955	1575995	1.00 500	5.00	20.0	50.0	200
Isopropyl alcohol	TBAd9	Ave	2471 1325334	12397	45536	119731	464092	10.0 5000	50.0	200	500	2000
Carbon disulfide	FB	Ave	13110 7828280	65013	291598	681245	2850970	1.00 500	5.00	20.0	50.0	200
Allyl chloride	FB	Ave	1900 1298603	10671	45800	110507	447657	1.00 500	5.00	20.0	50.0	200
Methyl acetate	TBAd9	Ave	4677 2350296	20554	81640	197921	824852	2.00 1000	10.0	40.0	100	400
Cyclopentene	FB	Ave	6983 4601331	39897	176477	425858	1654056	1.00 500	5.00	20.0	50.0	200
Acetonitrile	TBAd9	Ave	5876 3007230	25746	94229	217917	1096556	10.0 5000	50.0	200	500	2000
Methylene Chloride	FB	Ave	4807 2267418	20157	86781	204831	804876	1.00 500	5.00	20.0	50.0	200
2-Methyl-2-propanol	TBAd9	Ave	5893 2607412	20146	92394	220678	898055	10.0 5000	50.0	200	500	2000
Methyl tert-butyl ether	FB	Ave	10931 5572595	48516	215890	512367	2056964	1.00 500	5.00	20.0	50.0	200
trans-1,2-Dichloroethene	FB	Ave	4430 2158507	18984	83045	197978	795117	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	FB	Ave	11804 6155659	53187	226954	547259	2214143	10.0 5000	50.0	200	500	2000
Hexane	FB	Ave	2481 1753188	15117	66028	158325	685827	1.00 500	5.00	20.0	50.0	200
Isopropyl ether	FB	Ave	11663 5888682	52581	232407	542730	2081755	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	6672 3512423	29722	133908	318966	1280328	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	TBAd9	Ave	1152 611218	5114	23651	56384	215236	2.00 1000	10.0	40.0	100	400
2-Chloro-1,3-butadiene	FB	Ave	2922 1845762	15783	70159	163493	661720	1.00 500	5.00	20.0	50.0	200
Tert-butyl ethyl ether	FB	Ave	11264 5734878	50487	223930	525361	1993822	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	2205 1130284	9583	43028	97890	415649	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	4705 2485563	21552	93711	217535	888592	1.00 500	5.00	20.0	50.0	200
Ethyl acetate	BUT	Ave	834 366131	2896	12998	30841	123268	2.00 1000	10.0	40.0	100	400
2-Butanone (MEK)	BUT	Ave	2349 1058728	9167	37082	88204	370564	5.00 2500	25.0	100	250	1000
Methyl acrylate	FB	Ave	2646 1415871	12528	49505	120091	484396	1.00 500	5.00	20.0	50.0	200
Propionitrile	TBAd9	Ave	4384 2424610	20523	90833	218137	848054	10.0 5000	50.0	200	500	2000
Tetrahydrofuran	BUT	Ave	1132 508330	4648	17950	42114	175491	2.00 1000	10.0	40.0	100	400
Chlorobromomethane	FB	Ave	2375 1273941	10710	47033	109298	439271	1.00 500	5.00	20.0	50.0	200
Methacrylonitrile	FB	Ave	12347 7072143	60094	257668	611832	2401367	10.0 5000	50.0	200	500	2000
Chloroform	FB	Ave	7127 3711522	32324	139619	324500	1319220	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Lin2	4080 3599086	30391	130787	318574	1333622	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	6017 3688095	31073	134575	321683	1356087	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	4970 3358724	26337	116620	287335	1208842	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	4809 2810143	23153	101478	242321	1025023	1.00 500	5.00	20.0	50.0	200
Isobutyl alcohol	TBAd9	Ave	328 257835	1816	7482	19169	88200	25.0 12500	125	500	1250	5000
Benzene	CBNZd5	Ave	14163 8104906	68120	298894	699391	2907428	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	9442 5328646	44612	193555	442217	1826824	1.00 500	5.00	20.0	50.0	200
Tert-amyl methyl ether	FB	Ave	3095 1869432	15211	67413	160387	633125	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	4956 2417080	21080	88116	204081	837733	1.00 500	5.00	20.0	50.0	200
n-Heptane	FB	Lin2	2036 1708319	14748	63410	152930	657035	1.00 500	5.00	20.0	50.0	200
n-Butanol	TBAd9	Ave	2590 1578822	10911	44696	113225	501069	25.0 12500	125	500	1250	5000
Trichloroethene	FB	Ave	3877 2202078	18597	78099	187239	788359	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethyl acrylate	FB	Ave	1737 1334268	10661	50302	114987	479271	1.00 500	5.00	20.0	50.0	200
Methylcyclohexane	FB	Lin2	4808 4358031	35409	160154	383246	1633663	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	3689 1918282	16330	70324	163587	677752	1.00 500	5.00	20.0	50.0	200
Methyl methacrylate	FB	Ave	4388 2759376	22248	97082	233677	939861	2.00 1000	10.0	40.0	100	400
1,4-Dioxane	DXE	Ave	877 508319	4501	19683	44101	182927	20.0 10000	100	400	1000	4000
n-Propyl acetate	FB	Ave	3646 2267744	17898	78274	189871	770221	1.00 500	5.00	20.0	50.0	200
Dibromomethane	FB	Ave	2368 1319972	10929	47355	110836	450037	1.00 500	5.00	20.0	50.0	200
Dichlorobromomethane	FB	Ave	4540 2831025	21481	97507	228929	965440	1.00 500	5.00	20.0	50.0	200
2-Chloroethyl vinyl ether	FB	Ave	1654 983629	8256	35187	82379	332749	1.00 500	5.00	20.0	50.0	200
2-Nitropropane	FB	Ave	1447 768007	5140	21520	52529	237934	2.00 1000	10.0	40.0	100	400
Epichlorohydrin	BUT	Ave	5539 3467474	27081	119462	291301	1221469	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	CBNZ d5	Ave	4973 3088646	24362	107543	252036	1067716	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone (MIBK)	BUT	Ave	14326 8365424	68958	301016	720496	2981483	5.00 2500	25.0	100	250	1000
Toluene	CBNZ d5	Ave	15264 8567637	71471	311894	747261	3085741	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBNZ d5	Ave	4267 2733408	21076	92463	219201	928837	1.00 500	5.00	20.0	50.0	200
Ethyl methacrylate	CBNZ d5	Ave	3517 2216316	16330	73173	181055	767325	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBNZ d5	Ave	2534 1414170	12279	52328	118758	488174	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBNZ d5	Ave	4059 2420988	20170	89373	207952	879952	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBNZ d5	Ave	4608 2639253	22287	96148	225167	911348	1.00 500	5.00	20.0	50.0	200
2-Hexanone	BUT	Ave	8890 5363216	44418	192293	460327	1898172	5.00 2500	25.0	100	250	1000
n-Butyl acetate	CBNZ d5	Ave	4746 2360911	17958	81948	199906	800945	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorodibromomethane	CBNZ d5	Ave	3442 2276080	16548	72292	176836	758979	1.00 500	5.00	20.0	50.0	200
Ethylene Dibromide	CBNZ d5	Ave	2852 1818661	14800	65450	153385	624224	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBNZ d5	Ave	9955 5811100	48004	209801	498741	2041430	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBNZ d5	Ave	5158 3209924	26188	114672	272978	1138618	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3849 2508950	18451	79697	195525	851798	1.00 500	5.00	20.0	50.0	200
m-Xylene & p-Xylene	CBNZ d5	Ave	6431 3888694	31651	140882	331907	1383770	1.00 500	5.00	20.0	50.0	200
n-Butyl acrylate	CBNZ d5	Ave	2027 1329207	9810	44145	105075	437313	1.00 500	5.00	20.0	50.0	200
o-Xylene	CBNZ d5	Ave	6852 4080656	32885	146537	346813	1425714	1.00 500	5.00	20.0	50.0	200
Styrene	CBNZ d5	Ave	10223 6422101	51813	230759	543913	2242792	1.00 500	5.00	20.0	50.0	200
Amyl acetate (mixed isomers)	DCBd 4	Ave	4643 2839458	20015	96240	237847	943288	1.00 500	5.00	20.0	50.0	200
Bromoform	CBNZ d5	Ave	2273 1517237	10667	46276	114406	491016	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBNZ d5	Ave	16425 11114089	87209	397823	952388	4005467	1.00 500	5.00	20.0	50.0	200
Bromobenzene	DCBd 4	Ave	5020 2723772	23518	97954	229236	929815	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	4169 2396886	20514	86812	204328	813471	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCBd 4	Ave	19537 12214934	103139	453652	1069161	4400321	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichloropropane	DCBd 4	Ave	1351 677451	5627	24326	57916	233908	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1023 556327	4577	18120	46438	187256	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCBd 4	Ave	13554 8482907	69433	297170	707395	2897624	1.00 500	5.00	20.0	50.0	200
4-Ethyltoluene	DCBd 4	Ave	16326 10521378	89493	383910	906609	3524347	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCBd 4	Ave	13754 9650015	73926	326928	789412	3346980	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCBd 4	Ave	12061 6938442	58787	256190	592906	2435355	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Butyl Methacrylate	DCBd 4	Ave	3830 2879398	18876	92118	225545	913437	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCBd 4	Ave	10526 8490425	61537	273810	665846	2930675	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCBd 4	Ave	14994 9691103	76306	340746	808260	3374215	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCBd 4	Ave	17067 12715712	100039	451741	1076321	4652275	1.00 500	5.00	20.0	50.0	200
4-Isopropyltoluene	DCBd 4	Ave	15090 11585541	88574	395307	937541	4049655	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCBd 4	Ave	9334 5448058	45622	193604	445593	1841981	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCBd 4	Ave	9827 5385868	46286	195277	441606	1809471	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCBd 4	Ave	6713 4653939	31846	149594	360625	1452335	1.00 500	5.00	20.0	50.0	200
Indan	DCBd 4	Ave	16367 9706621	82088	357520	828385	3165421	1.00 500	5.00	20.0	50.0	200
p-Diethylbenzene	DCBd 4	Ave	10053 6039454	49418	219550	515228	1999034	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCBd 4	Ave	8207 5647585	47837	204531	478184	2005724	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCBd 4	Ave	9426 5338635	44936	194350	447709	1800117	1.00 500	5.00	20.0	50.0	200
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	16517 11213434	88523	389332	914277	3634463	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1109 498291	3746	17031	37957	162531	1.00 500	5.00	20.0	50.0	200
1,3,5-Trichlorobenzene	DCBd 4	Ave	7970 4666735	41958	174149	397827	1518526	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	8442 4492334	38177	166441	376853	1538270	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCBd 4	Ave	2977 2466219	18332	80021	189486	844813	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCBd 4	Ave	19361 10267513	86559	374994	887580	3492764	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichlorobenzene	DCBd 4	Ave	8025 4339553	37218	164633	371182	1501784	1.00 500	5.00	20.0	50.0	200
Dibromofluoromethane (Surr)	FB	Ave	181619 204895	174366	184398	177150	181438	50.0 50.0	50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	161239 206544	158398	165159	158945	176762	50.0 50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154849-1 Analy Batch No.: 512949

SDG No.:

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/21/2018 06:04 Calibration End Date: 04/21/2018 08:07 Calibration ID: 67825

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene-d8 (Surr)	CBNZ d5	Ave	599379 706025	610308	623036	613789	639250	50.0 50.0	50.0	50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	198309 230101	200277	202010	196938	200809	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 21-Apr-2018 06:04:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0070764-003
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:30:47 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:17:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.590	0.012	1	1783	1.00	0.4061	M
2 Dichlorodifluoromethane	85	1.639	1.626	0.013	76	4061	1.00	0.4458	
3 Chloromethane	50	1.809	1.803	0.006	97	6275	1.00	1.04	
4 Vinyl chloride	62	1.919	1.907	0.012	90	4989	1.00	0.8281	
5 Butadiene	54	1.919	1.907	0.012	97	3596	1.00	0.7794	
6 Bromomethane	94	2.212	2.212	0.000	98	5147	1.00	1.03	
7 Chloroethane	64	2.267	2.273	-0.006	97	2810	1.00	0.9248	
9 Dichlorofluoromethane	67	2.480	2.468	0.012	87	8501	1.00	0.9586	a
8 Trichlorofluoromethane	101	2.480	2.486	-0.006	65	6495	1.00	0.8248	
10 Pentane	72	2.504	2.498	0.006	99	1026	2.00	1.57	
12 Ethanol	46	2.669	2.687	-0.018	66	745	40.0	33.1	M
11 Ethyl ether	59	2.699	2.693	0.006	94	2610	1.00	0.9892	
13 2-Methyl-1,3-butadiene	53	2.724	2.718	0.006	88	2407	1.00	0.7946	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.748	0.012	80	2898	1.00	0.7439	
15 Acrolein	56	2.882	2.876	0.006	96	53654	100.0	100.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	31	2907	1.00	1.00	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	95	3207	1.00	0.8070	
18 Acetone	43	3.010	2.998	0.012	50	6532	5.00	6.17	M
19 Iodomethane	142	3.090	3.077	0.013	99	7998	1.00	0.9439	
22 Isopropyl alcohol	45	3.145	3.083	0.062	31	2471	10.0	8.94	a
20 Carbon disulfide	76	3.120	3.120	0.000	100	13110	1.00	0.8846	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	92	1900	1.00	0.8081	
23 Methyl acetate	43	3.260	3.248	0.012	98	4677	2.00	1.93	
24 Cyclopentene	67	3.266	3.266	0.000	90	6983	1.00	0.7969	
29 Acetonitrile	41	3.340	3.309	0.031	62	5876	10.0	9.84	Ma
* 25 TBA-d9 (IS)	65	3.376	3.352	0.024	0	358975	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	53	4807	1.00	1.06	
27 2-Methyl-2-propanol	59	3.431	3.419	0.012	34	5893	10.0	10.9	
28 Methyl tert-butyl ether	73	3.541	3.535	0.006	96	10931	1.00	0.9853	
30 trans-1,2-Dichloroethene	96	3.571	3.565	0.006	93	4430	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.644	3.638	0.006	91	11804	10.0	9.86	M
32 Hexane	43	3.724	3.717	0.007	93	2481	1.00	0.7432	
33 Isopropyl ether	45	3.937	3.931	0.006	93	11663	1.00	0.99	
35 Vinyl acetate	86	3.980	3.973	0.007	99	1152	2.00	1.79	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	94	6672	1.00	0.9703	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	71	2922	1.00	0.8363	
37 Tert-butyl ethyl ether	59	4.260	4.248	0.012	87	11264	1.00	0.99	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	215128	250.0	250.0	
39 2,2-Dichloropropane	79	4.498	4.492	0.006	51	2205	1.00	1.00	a
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	66	4705	1.00	0.9751	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	96	2349	5.00	5.59	
41 Ethyl acetate	70	4.516	4.510	0.006	87	834	2.00	2.32	
44 Methyl acrylate	55	4.571	4.565	0.006	65	2646	1.00	0.9867	
43 Propionitrile	54	4.656	4.644	0.012	98	4384	10.0	8.74	
45 Tetrahydrofuran	72	4.754	4.729	0.025	61	1132	2.00	2.23	a
46 Chlorobromomethane	128	4.742	4.742	0.000	83	2375	1.00	0.9806	
47 Methacrylonitrile	67	4.754	4.754	0.000	93	12347	10.0	9.30	
48 Chloroform	83	4.791	4.784	0.007	96	7127	1.00	0.9877	
49 Cyclohexane	84	4.931	4.937	-0.006	31	4080	1.00	1.00	
50 1,1,1-Trichloroethane	97	4.949	4.937	0.012	36	6017	1.00	0.8642	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	96	181619	50.0	46.8	
52 Carbon tetrachloride	117	5.065	5.065	0.000	93	4970	1.00	0.8165	
53 1,1-Dichloropropene	75	5.095	5.089	0.006	98	4809	1.00	0.9080	
56 Isobutyl alcohol	74	5.211	5.199	0.012	1	328	25.0	18.0	
54 Benzene	78	5.290	5.290	0.000	43	14163	1.00	0.9358	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	161239	50.0	44.7	
57 Isopropyl acetate	43	5.339	5.327	0.012	95	9442	1.00	0.9489	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	95	3095	1.00	0.8983	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	94	4956	1.00	1.06	
60 n-Heptane	57	5.431	5.437	-0.006	92	2036	1.00	1.00	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	484477	50.0	50.0	
62 n-Butanol	56	5.870	5.869	0.001	25	2590	25.0	23.0	Ma
63 Trichloroethene	95	5.949	5.943	0.006	98	3877	1.00	0.9349	
65 Methylcyclohexane	83	6.071	6.071	0.000	90	4808	1.00	1.01	M
64 Ethyl acrylate	56	6.065	6.071	-0.006	89	1737	1.00	0.7170	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	85	3689	1.00	1.00	
* 67 1,4-Dioxane-d8	96	6.290	6.284	0.006	0	34244	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	59	4388	2.00	1.75	
69 1,4-Dioxane	88	6.333	6.333	0.000	28	877	20.0	18.6	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	3646	1.00	0.8900	
71 Dibromomethane	93	6.363	6.369	-0.006	67	2368	1.00	0.9617	
72 Dichlorobromomethane	83	6.522	6.522	0.000	97	4540	1.00	0.8981	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	83	1654	1.00	0.9108	
74 2-Nitropropane	41	6.857	6.851	0.006	78	1447	2.00	2.26	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	5539	20.0	17.3	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	4973	1.00	0.9051	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	95	14326	5.00	4.48	
$ 78 Toluene-d8 (Surr)	98	7.266	7.272	-0.006	99	599379	50.0	45.7	
79 Toluene	91	7.351	7.351	0.000	93	15264	1.00	0.9520	
80 trans-1,3-Dichloropropene	75	7.699	7.698	0.001	98	4267	1.00	0.8945	
81 Ethyl methacrylate	69	7.717	7.711	0.006	83	3517	1.00	0.9108	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	93	2534	1.00	0.9615	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	95	4059	1.00	0.9030	
84 1,3-Dichloropropane	76	8.125	8.131	-0.006	90	4608	1.00	0.9450	
85 2-Hexanone	43	8.174	8.174	0.000	96	8890	5.00	4.37	
86 n-Butyl acetate	43	8.284	8.284	0.000	98	4746	1.00	1.09	
87 Chlorodibromomethane	129	8.363	8.369	-0.006	94	3442	1.00	0.8955	
88 Ethylene Dibromide	107	8.534	8.527	0.007	95	2852	1.00	0.8723	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	428696	50.0	50.0	
90 Chlorobenzene	112	9.107	9.113	-0.006	94	9955	1.00	0.9307	
92 Ethylbenzene	106	9.198	9.204	-0.006	97	5158	1.00	0.8844	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	60	3849	1.00	0.9012	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	6431	1.00	0.9034	
94 n-Butyl acrylate	73	9.783	9.783	0.000	95	2027	1.00	0.8932	
95 o-Xylene	106	9.820	9.820	0.000	93	6852	1.00	0.9219	
96 Styrene	104	9.851	9.850	0.001	97	10223	1.00	0.8813	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	4643	1.00	0.9092	
98 Bromoform	173	10.082	10.088	-0.006	94	2273	1.00	0.9084	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	16425	1.00	0.8242	
$ 100 4-Bromofluorobenzene	174	10.418	10.417	0.001	95	198309	50.0	46.7	
101 Bromobenzene	156	10.564	10.564	0.000	88	5020	1.00	0.9605	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	95	4169	1.00	0.9141	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	19537	1.00	0.8353	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	93	1351	1.00	1.03	
105 trans-1,4-Dichloro-2-buten	53	10.674	10.667	0.007	72	1023	1.00	0.9854	
106 2-Chlorotoluene	91	10.741	10.740	0.001	89	13554	1.00	0.8631	
107 4-Ethyltoluene	105	10.741	10.740	0.001	89	16326	1.00	0.8295	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	93	13754	1.00	0.7946	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	12061	1.00	0.9057	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	3830	1.00	0.7931	
111 tert-Butylbenzene	119	11.100	11.106	-0.006	92	10526	1.00	0.7210	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	14994	1.00	0.8408	
113 sec-Butylbenzene	105	11.308	11.307	0.001	98	17067	1.00	0.7323	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	97	15090	1.00	0.7340	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	97	9334	1.00	0.9153	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	94	266334	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	88	9827	1.00	0.9588	
118 Benzyl chloride	91	11.667	11.667	0.000	99	6713	1.00	0.8492	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	93	16367	1.00	0.8961	
120 p-Diethylbenzene	119	11.771	11.777	-0.006	92	10053	1.00	0.8904	a
121 n-Butylbenzene	92	11.795	11.795	0.000	95	8207	1.00	0.7783	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	9426	1.00	0.9310	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	16517	1.00	0.8222	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	92	1109	1.00	1.18	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	94	7970	1.00	0.8954	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	92	8442	1.00	0.9738	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	85	2977	1.00	0.7044	
128 Naphthalene	128	13.332	13.331	0.001	99	19361	1.00	0.9767	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.001	96	8025	1.00	0.9506	
S 130 1,2-Dichloroethene, Total	100				0		2.00	2.00	
S 131 Xylenes, Total	100				0		2.00	1.83	
S 132 Total BTEX	1				0		5.00	4.60	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	1.00	Units: uL	
ACROLEIN W_00075	Amount Added:	10.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	1.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 22:30:49 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D

Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9 Operator ID:

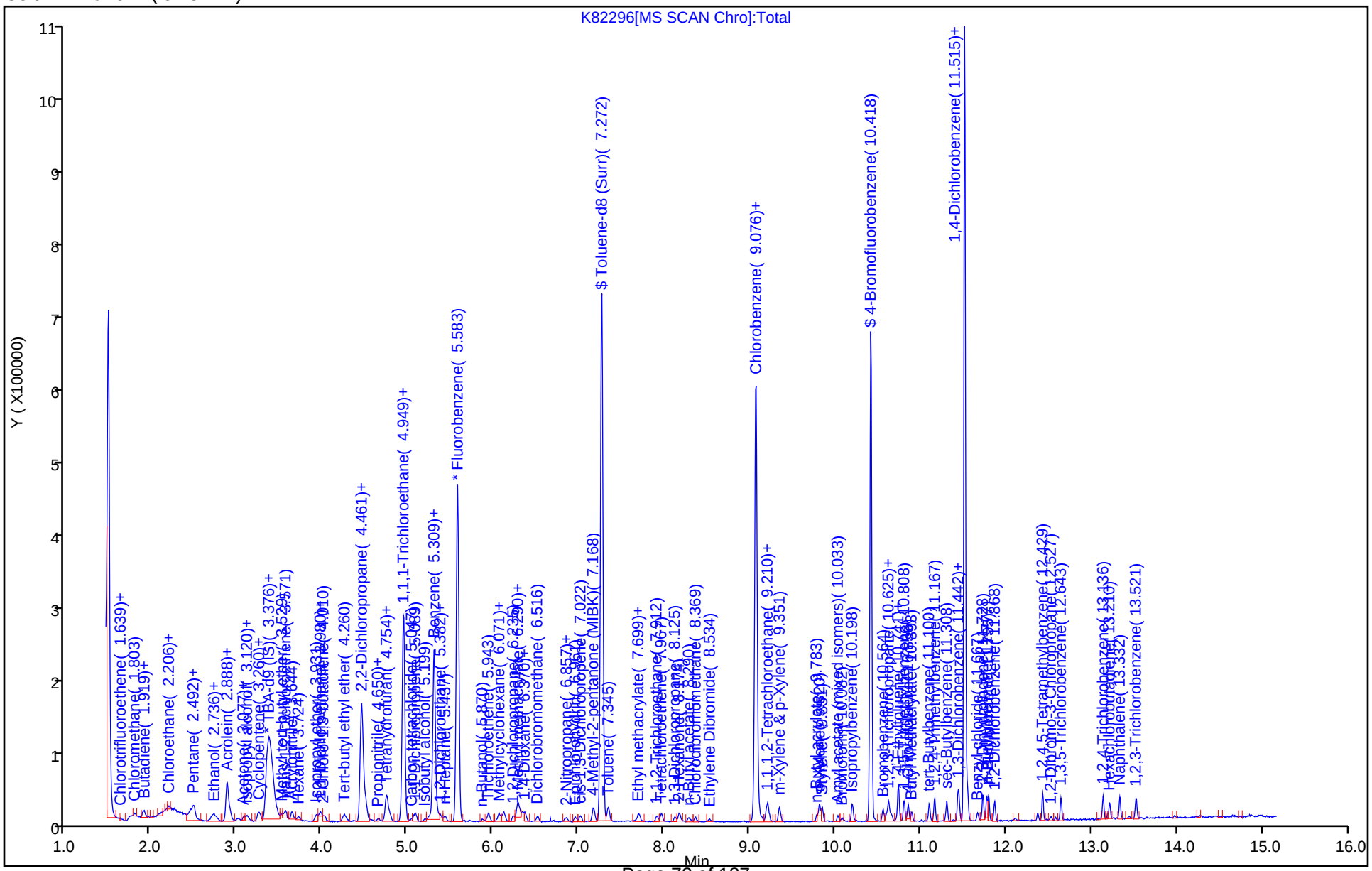
Lims ID: STD1 Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

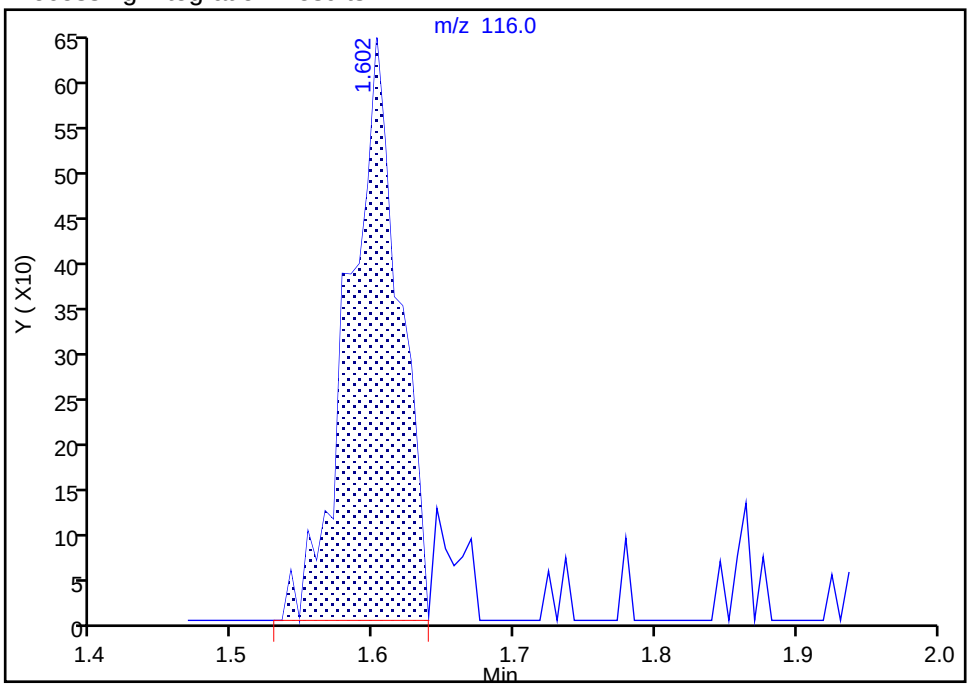
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

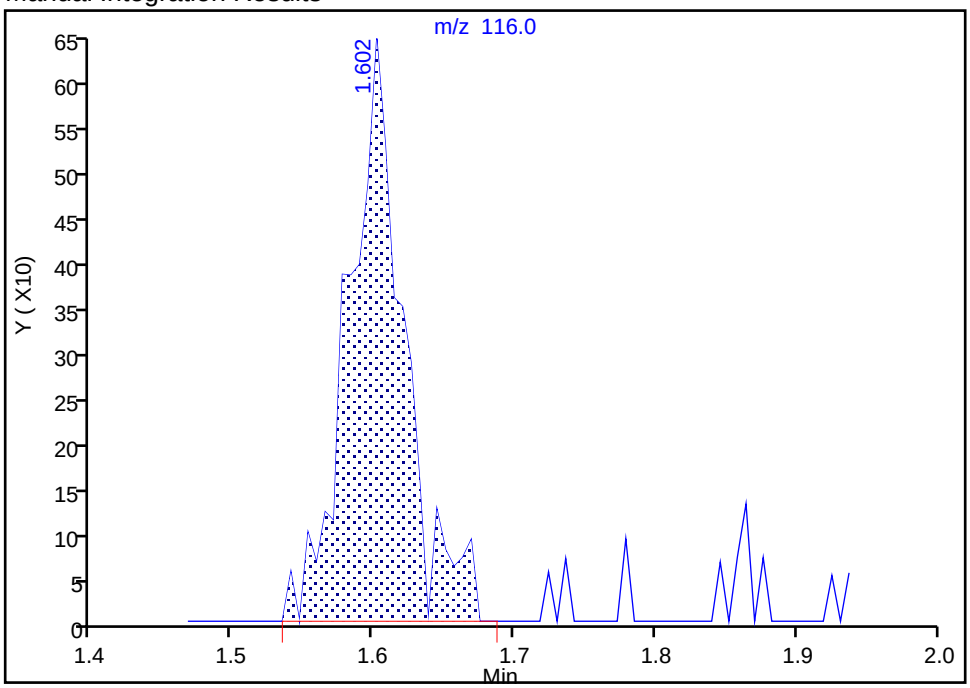
Processing Integration Results

RT: 1.60
Area: 1627
Amount: 0.370538
Amount Units: ug/l



Manual Integration Results

RT: 1.60
Area: 1783
Amount: 0.406073
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:03:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

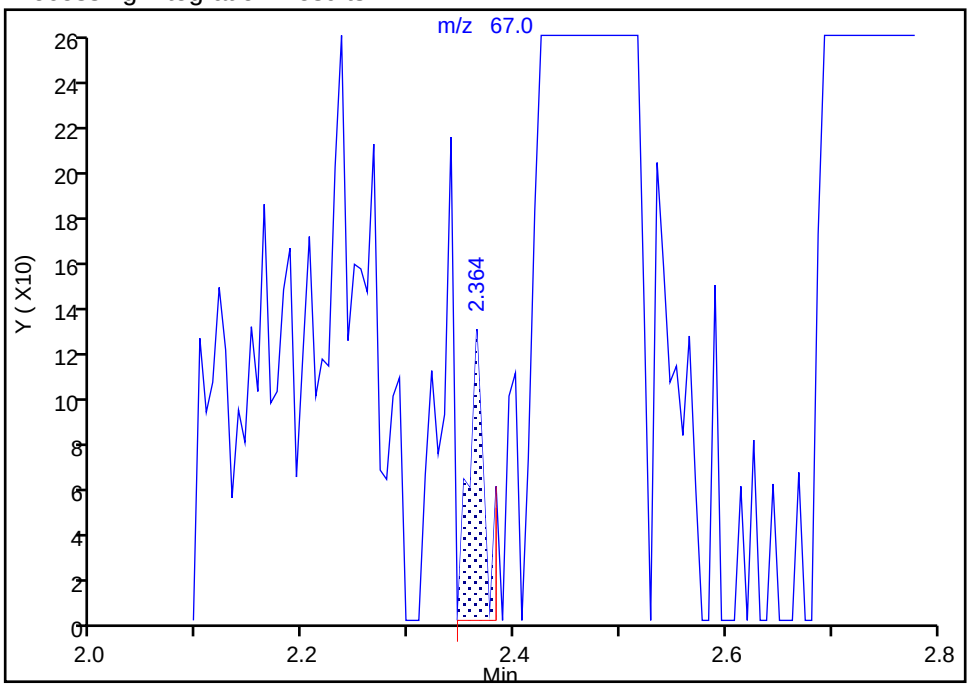
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

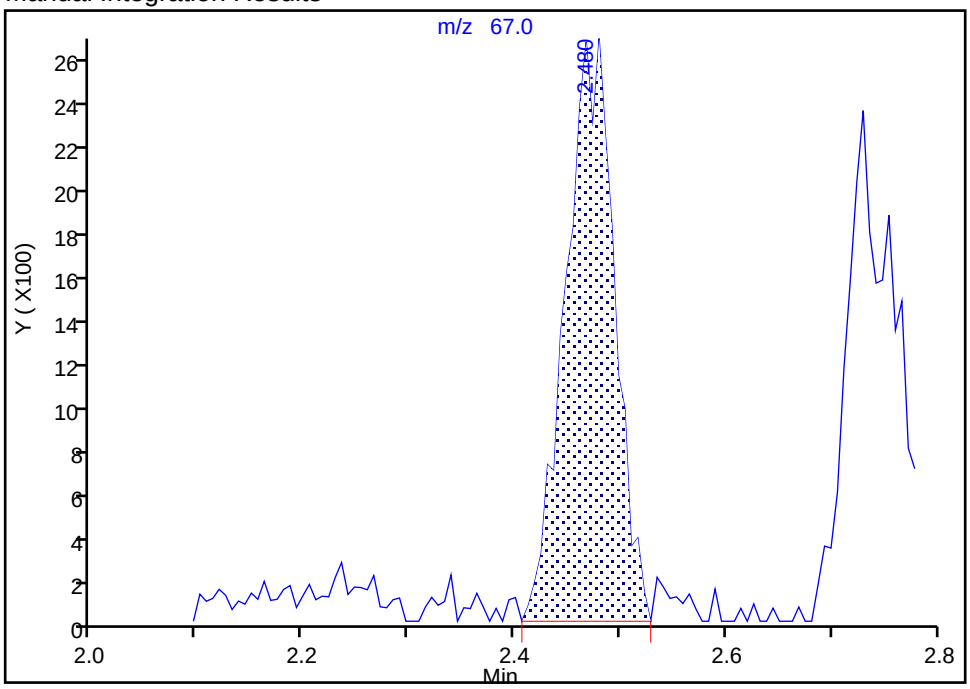
Processing Integration Results

RT: 2.36
Area: 134
Amount: 0.012483
Amount Units: ug/l



Manual Integration Results

RT: 2.48
Area: 8501
Amount: 0.958647
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:43:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

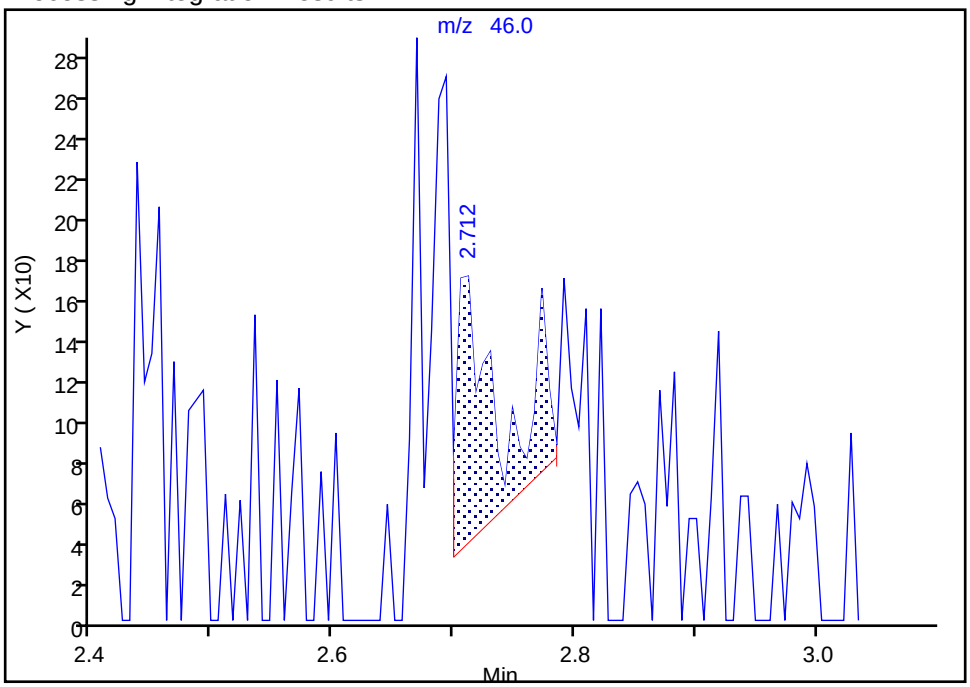
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethanol, CAS: 64-17-5

Signal: 1

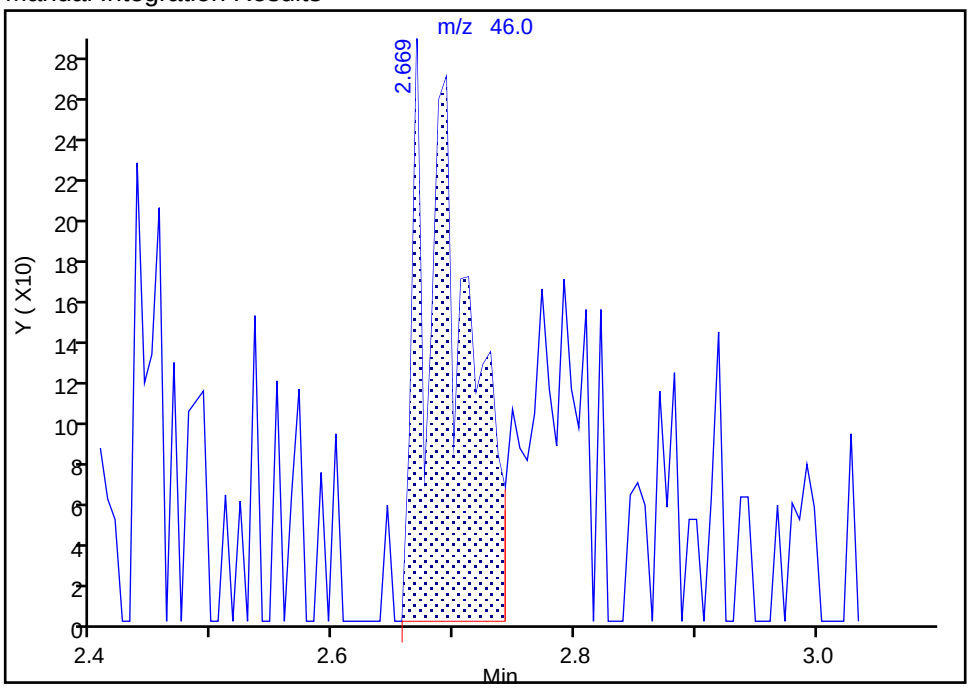
Processing Integration Results

RT: 2.71
Area: 305
Amount: 10.878772
Amount Units: ug/l



Manual Integration Results

RT: 2.67
Area: 745
Amount: 33.109289
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:43:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

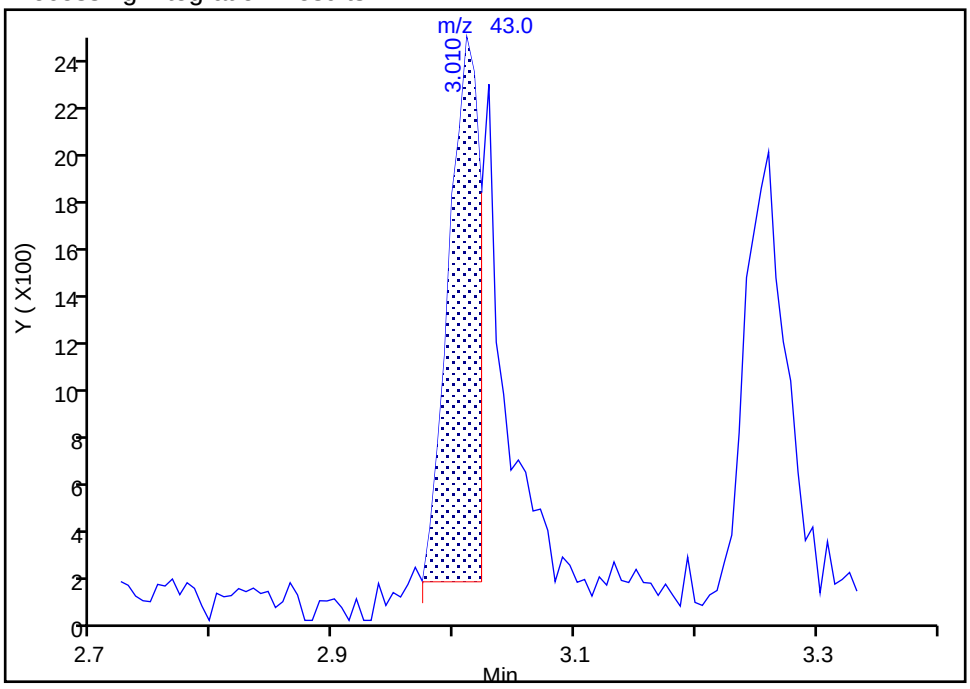
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

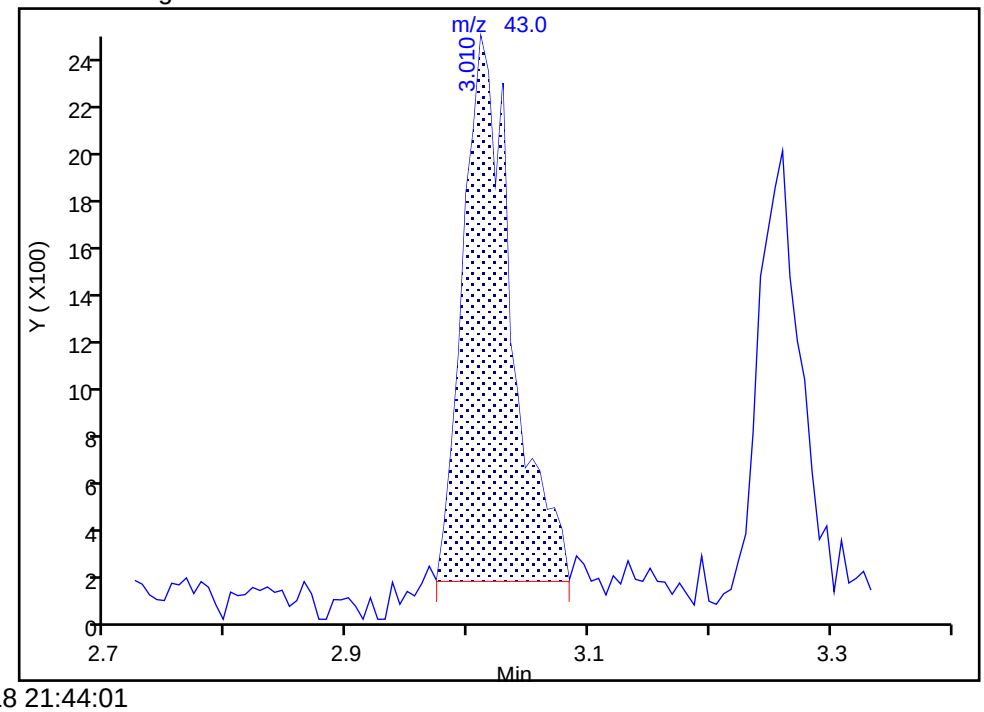
Processing Integration Results

RT: 3.01
Area: 4221
Amount: 4.303123
Amount Units: ug/l



Manual Integration Results

RT: 3.01
Area: 6532
Amount: 6.174212
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:44:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

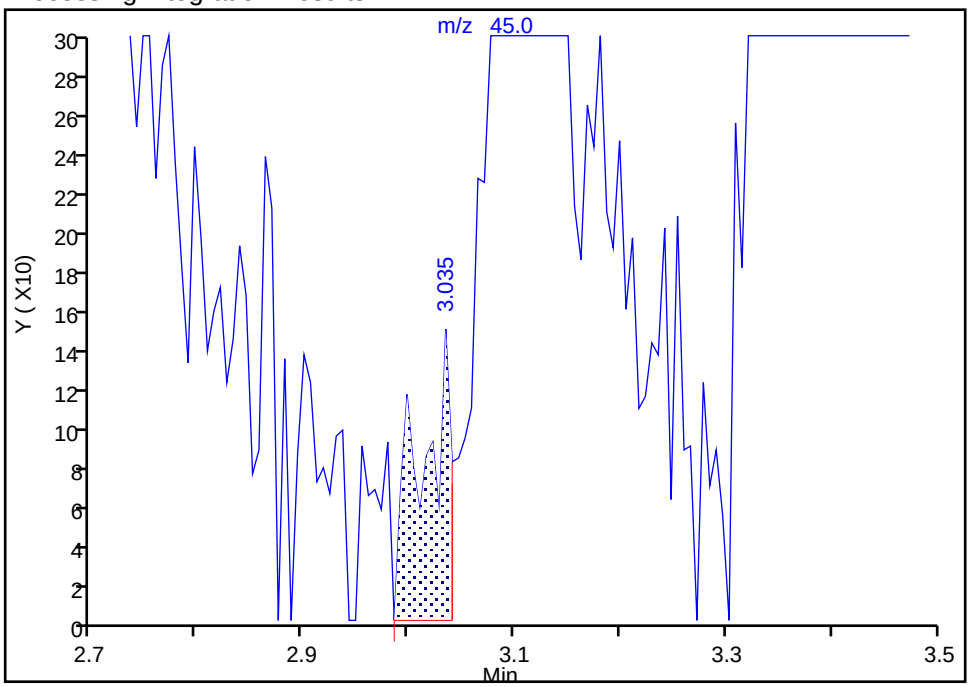
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

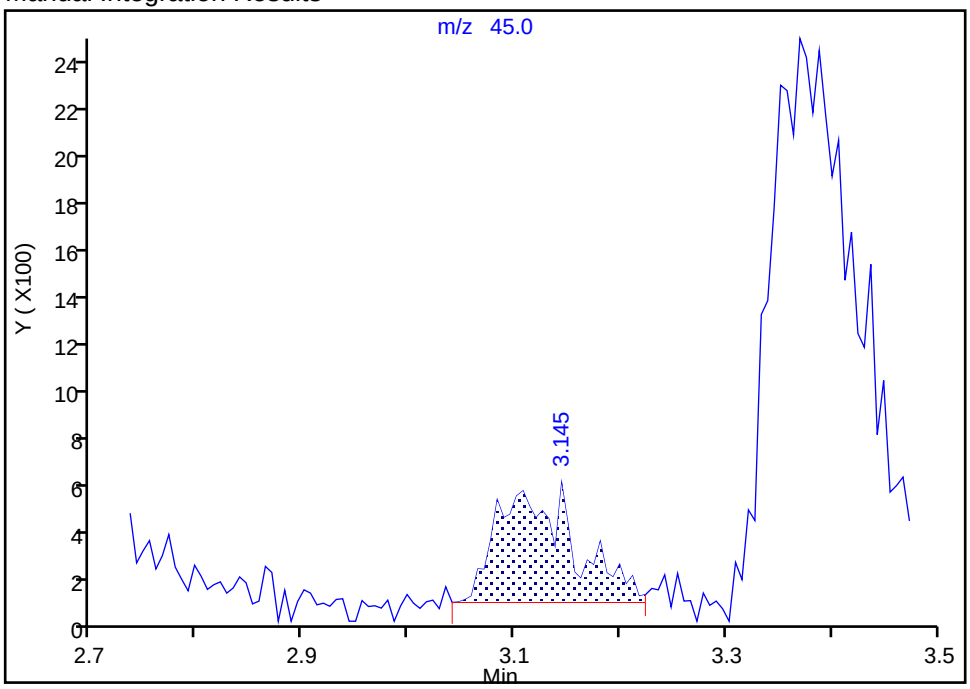
Processing Integration Results

RT: 3.03
Area: 280
Amount: 48.259715
Amount Units: ug/l



Manual Integration Results

RT: 3.14
Area: 2471
Amount: 8.943825
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:44:49
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

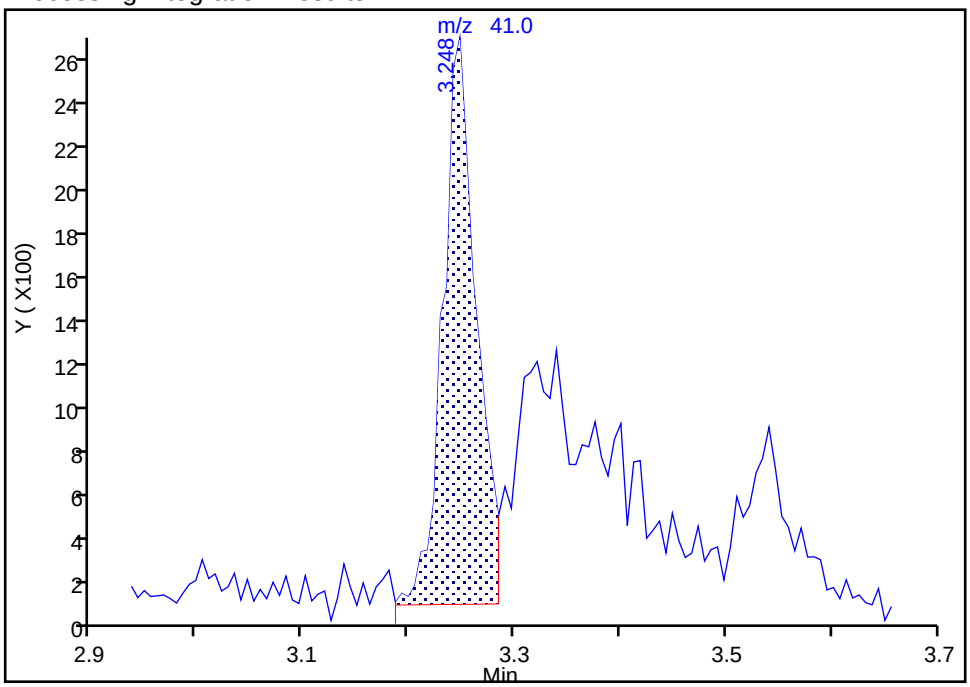
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

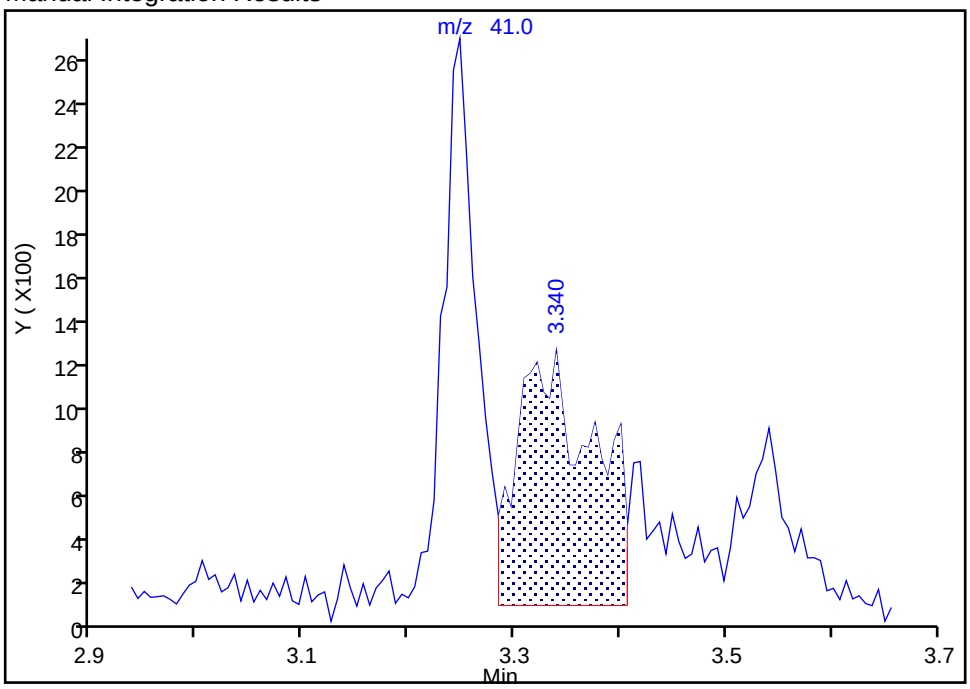
Processing Integration Results

RT: 3.25
Area: 5703
Amount: 8.656687
Amount Units: ug/l



Manual Integration Results

RT: 3.34
Area: 5876
Amount: 9.843912
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:03:16
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

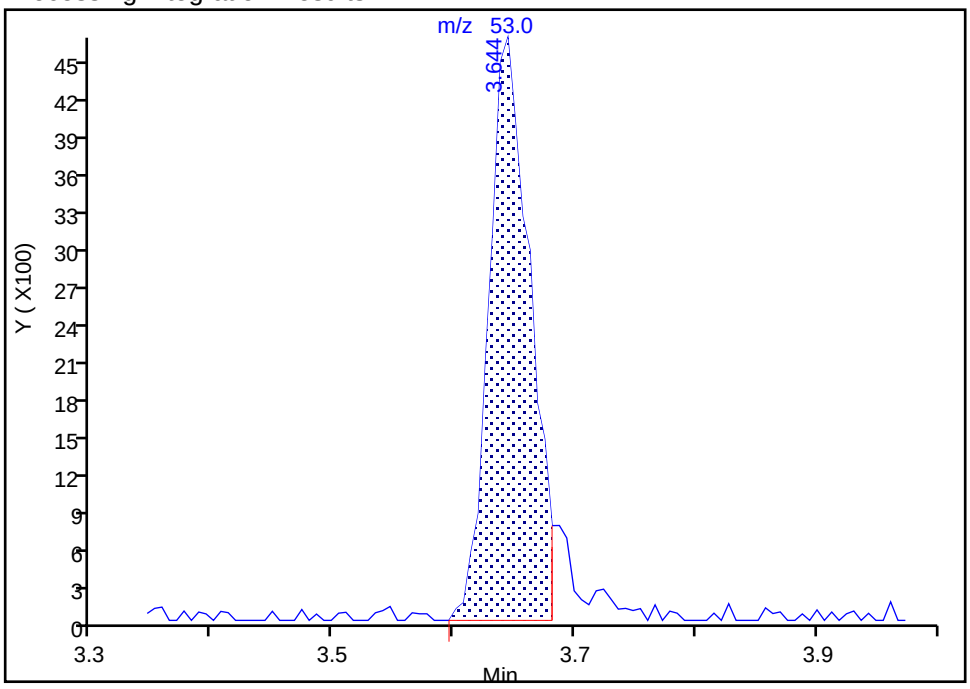
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

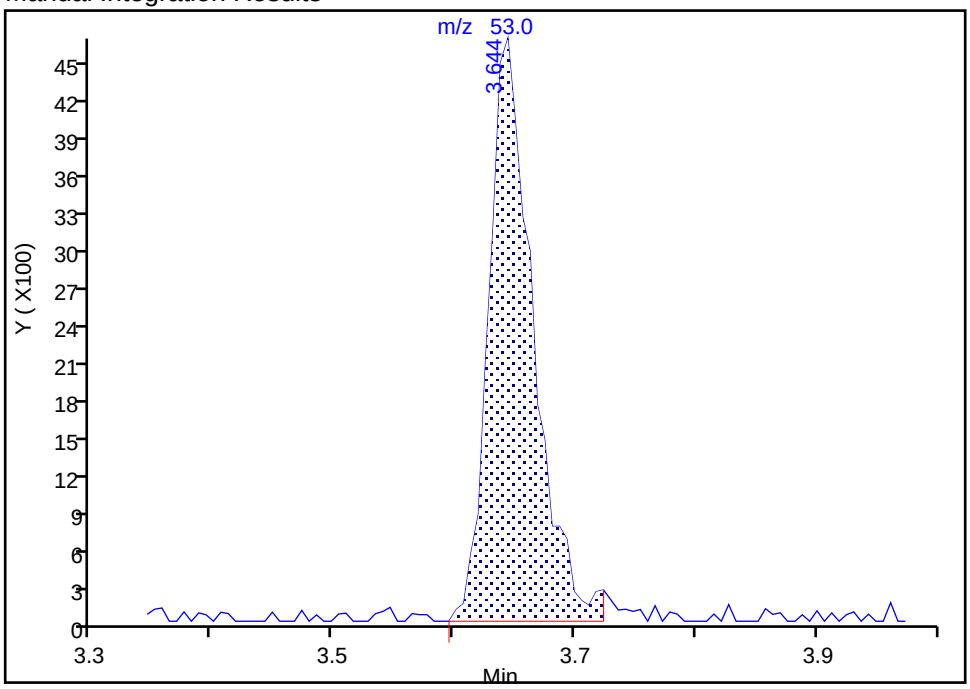
Processing Integration Results

RT: 3.64
Area: 10923
Amount: 9.240544
Amount Units: ug/l



Manual Integration Results

RT: 3.64
Area: 11804
Amount: 9.863326
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:45:42
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

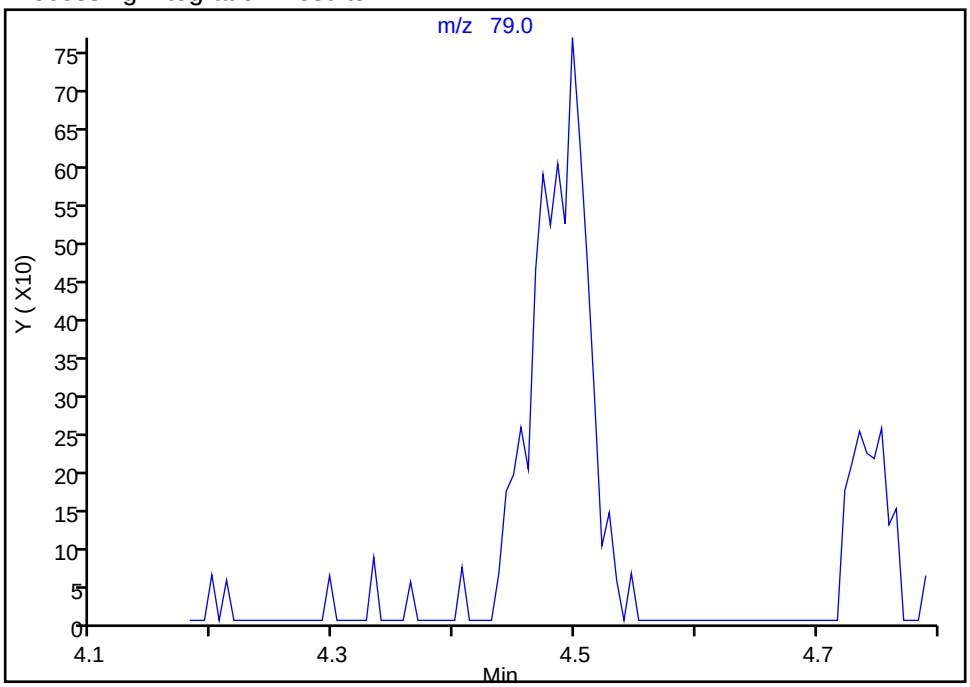
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

39 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

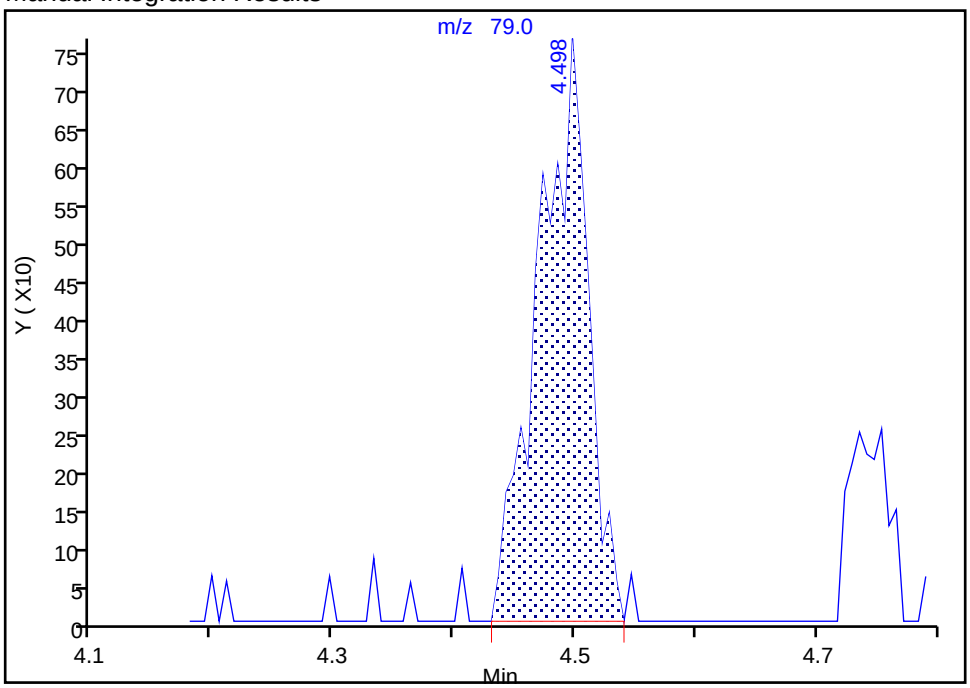
Not Detected
Expected RT: 4.49

Processing Integration Results



Manual Integration Results

RT: 4.50
Area: 2205
Amount: 0.998009
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:46:27
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

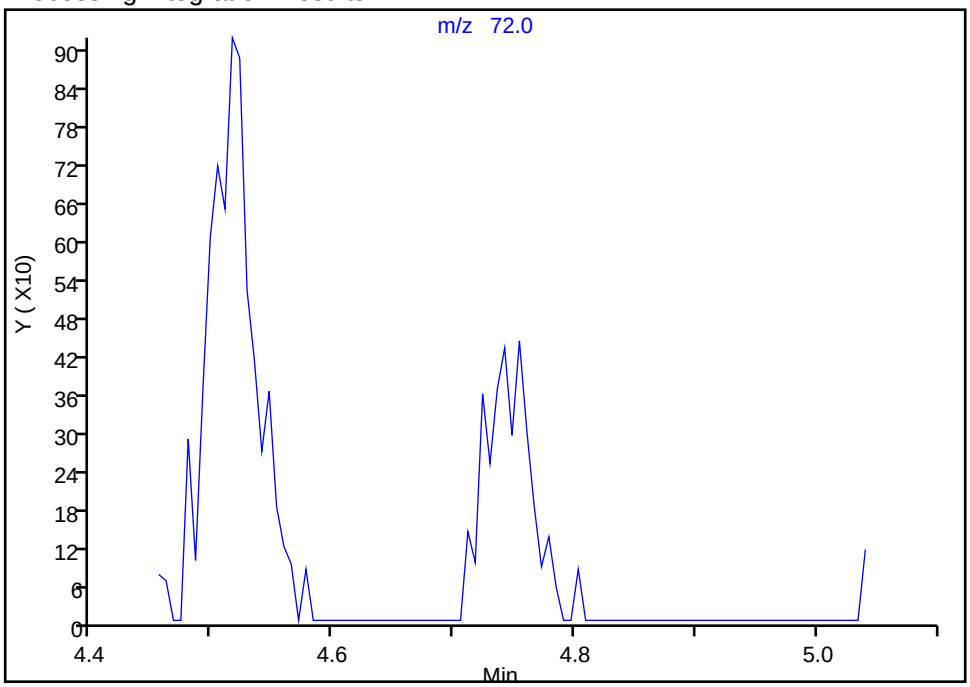
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

45 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

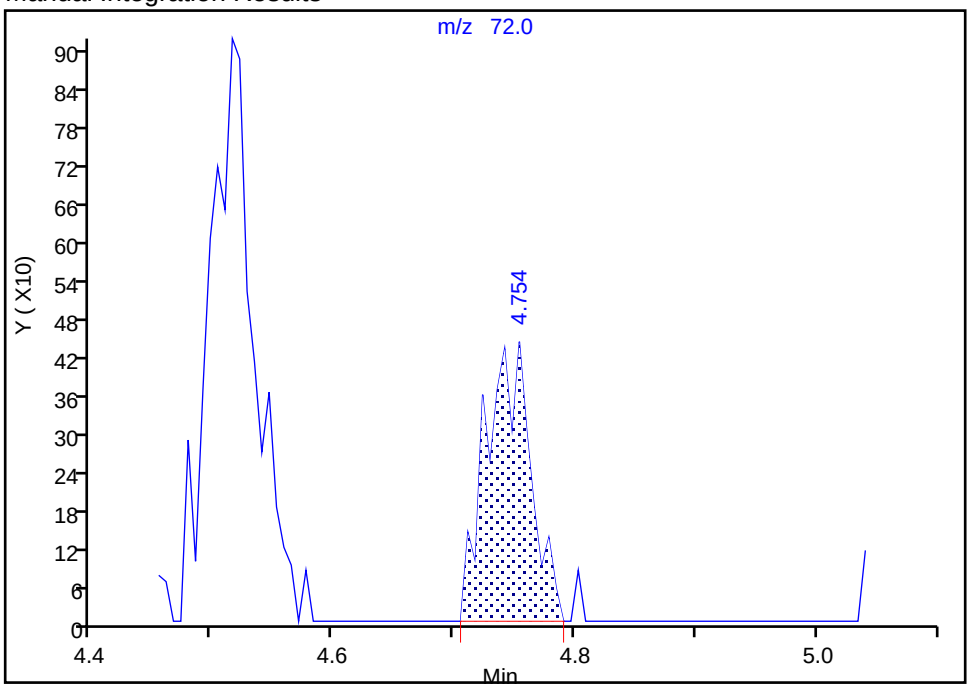
Not Detected
Expected RT: 4.73

Processing Integration Results



Manual Integration Results

RT: 4.75
Area: 1132
Amount: 2.227538
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:46:53
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

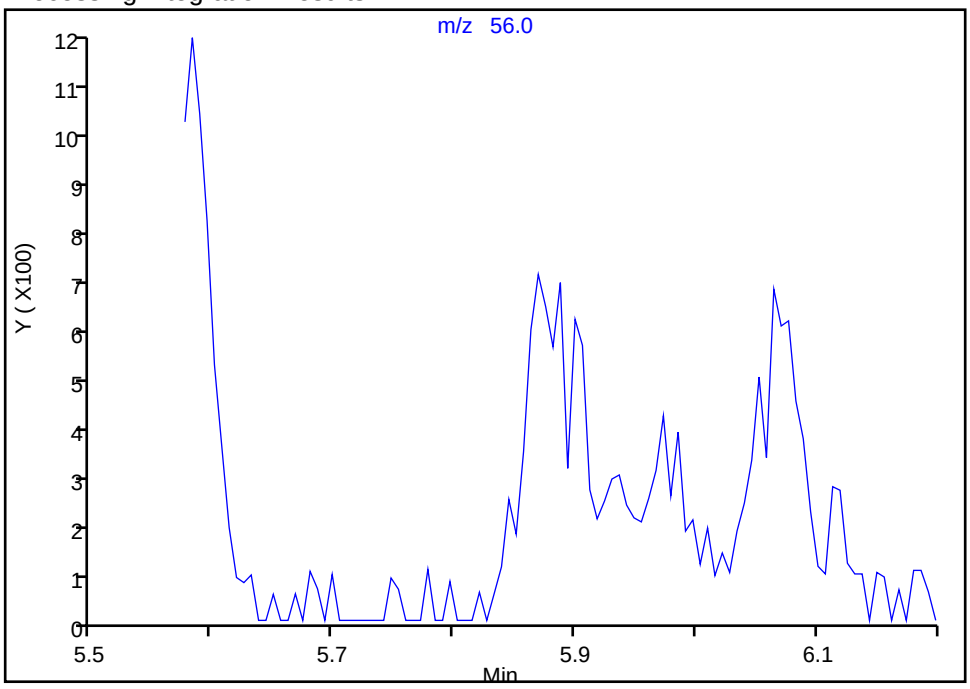
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

62 n-Butanol, CAS: 71-36-3

Signal: 1

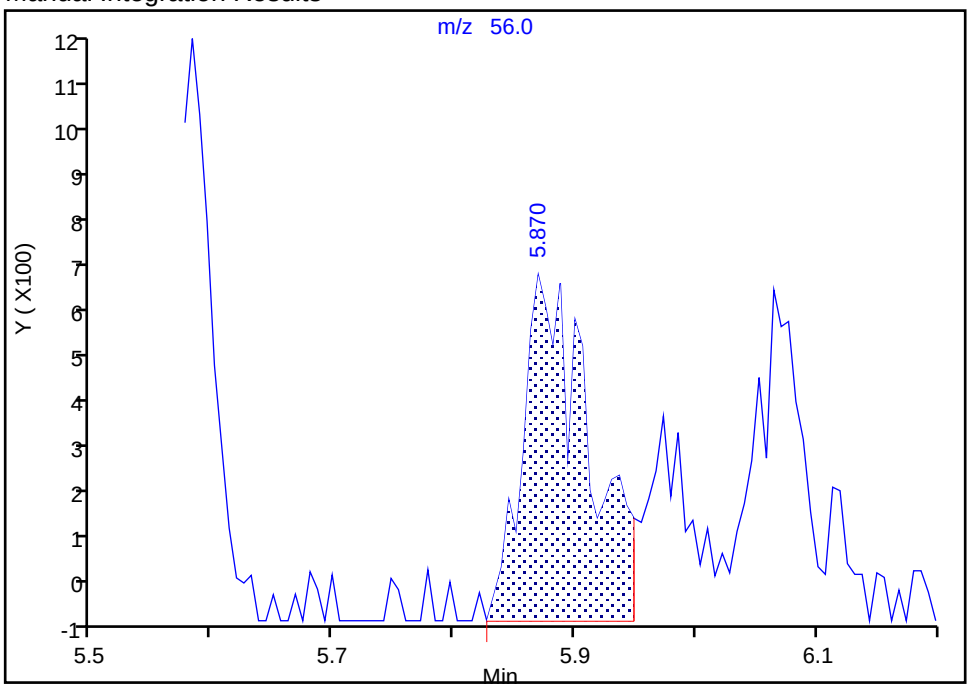
Not Detected
Expected RT: 5.87

Processing Integration Results



Manual Integration Results

RT: 5.87
Area: 2590
Amount: 23.019053
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:47:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

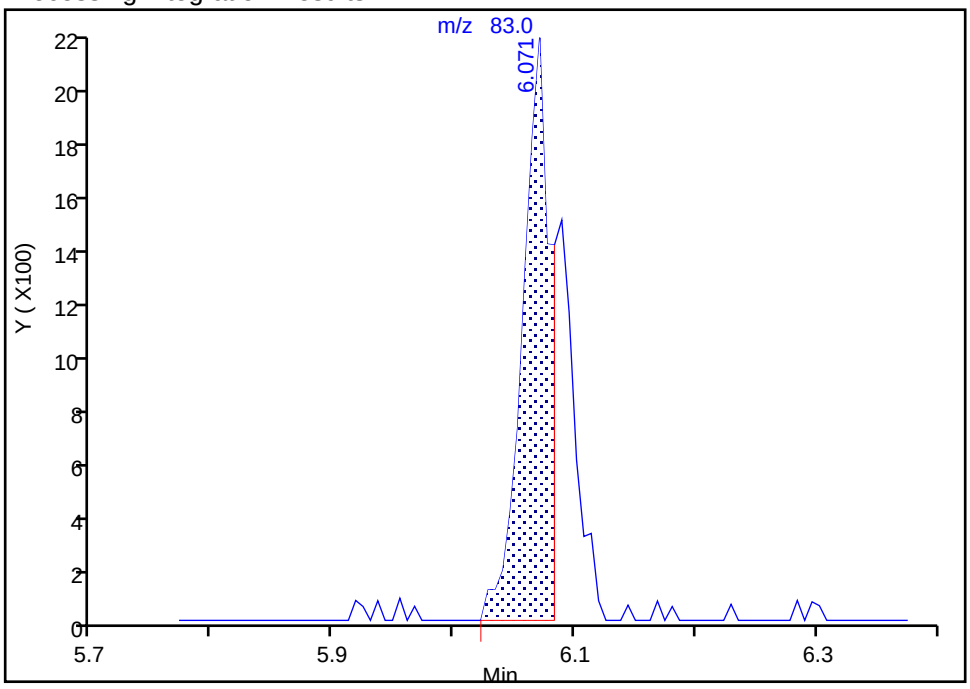
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

65 Methylcyclohexane, CAS: 108-87-2

Signal: 1

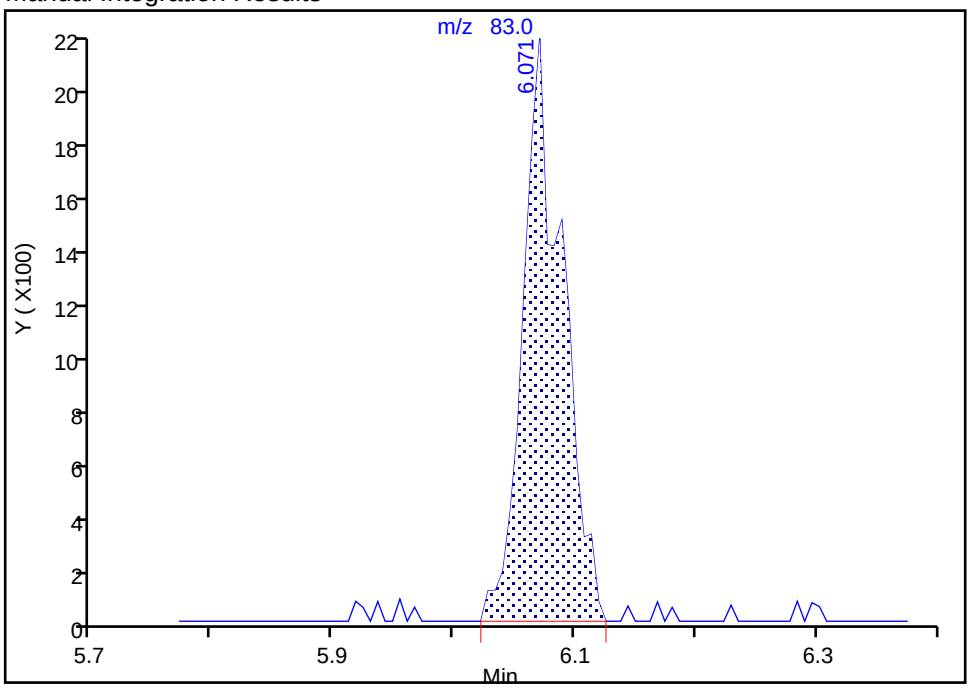
Processing Integration Results

RT: 6.07
Area: 3408
Amount: 0.312707
Amount Units: ug/l



Manual Integration Results

RT: 6.07
Area: 4808
Amount: 1.009532
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:47:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

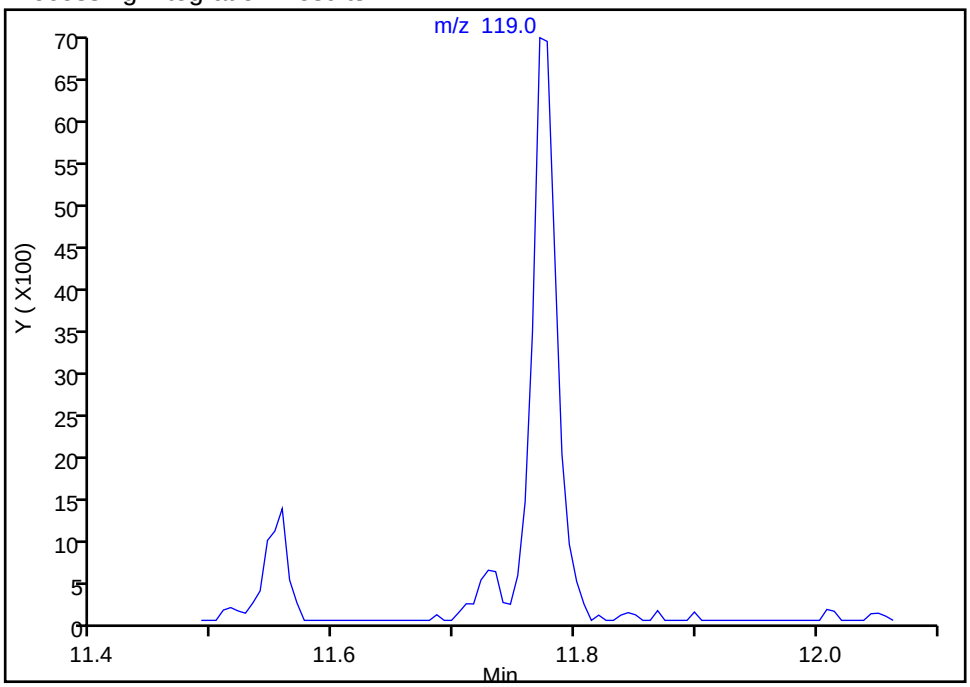
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82296.D
Injection Date: 21-Apr-2018 06:04:30 Instrument ID: CVOAMS9
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

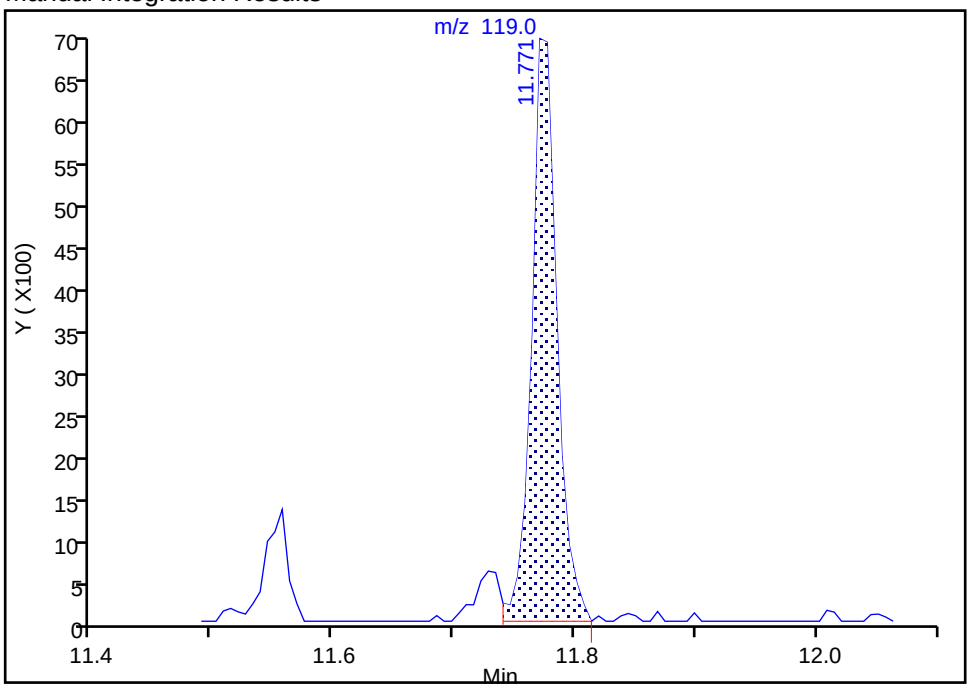
Not Detected
Expected RT: 11.78

Processing Integration Results



Manual Integration Results

RT: 11.77
Area: 10053
Amount: 0.890426
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:48:53
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 21-Apr-2018 06:29:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0070764-004
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:31:07 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:19:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.584	1.590	-0.006	79	13714	5.00	3.31	a
2 Dichlorodifluoromethane	85	1.627	1.626	0.001	99	28865	5.00	3.36	
3 Chloromethane	50	1.797	1.803	-0.006	99	27205	5.00	4.78	
5 Butadiene	54	1.901	1.907	-0.006	96	20552	5.00	4.72	
4 Vinyl chloride	62	1.901	1.907	-0.006	95	28857	5.00	5.07	
6 Bromomethane	94	2.206	2.212	-0.006	98	22521	5.00	4.76	
7 Chloroethane	64	2.261	2.273	-0.012	99	13548	5.00	4.72	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	41411	5.00	4.95	
8 Trichlorofluoromethane	101	2.474	2.486	-0.012	63	36555	5.00	4.92	a
10 Pentane	72	2.492	2.498	-0.006	96	5605	10.0	10.3	
12 Ethanol	46	2.687	2.687	0.000	84	3873	200.0	207.2	
11 Ethyl ether	59	2.699	2.693	0.006	95	11404	5.00	4.58	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	95	13908	5.00	4.86	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	88	18447	5.00	5.02	
15 Acrolein	56	2.870	2.876	-0.006	95	71116	200.0	160.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	75	22321	5.00	4.94	
17 1,1-Dichloroethene	96	2.907	2.919	-0.012	97	18481	5.00	4.93	
18 Acetone	43	2.998	2.998	0.000	87	23460	25.0	25.0	
19 Iodomethane	142	3.077	3.077	0.000	99	36873	5.00	4.61	
22 Isopropyl alcohol	45	3.084	3.083	0.001	1	12397	50.0	54.0	a
20 Carbon disulfide	76	3.108	3.120	-0.012	99	65013	5.00	4.65	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	92	10671	5.00	4.81	
23 Methyl acetate	43	3.242	3.248	-0.006	91	20554	10.0	10.2	
24 Cyclopentene	67	3.260	3.266	-0.006	93	39897	5.00	4.82	
29 Acetonitrile	41	3.315	3.309	0.006	93	25746	50.0	51.9	a
* 25 TBA-d9 (IS)	65	3.346	3.352	-0.006	0	298272	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.376	-0.006	92	20157	5.00	4.71	
27 2-Methyl-2-propanol	59	3.425	3.419	0.006	92	20146	50.0	45.0	
28 Methyl tert-butyl ether	73	3.529	3.535	-0.006	96	48516	5.00	4.63	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	92	18984	5.00	4.65	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.638	-0.006	95	53187	50.0	47.1	
32 Hexane	43	3.711	3.717	-0.006	93	15117	5.00	4.80	
33 Isopropyl ether	45	3.925	3.931	-0.006	96	52581	5.00	4.75	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	77	29722	5.00	4.58	
35 Vinyl acetate	86	3.968	3.973	-0.005	99	5114	10.0	9.59	
36 2-Chloro-1,3-butadiene	88	4.010	4.016	-0.006	91	15783	5.00	4.79	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	89	50487	5.00	4.72	
* 38 2-Butanone-d5	46	4.449	4.455	-0.006	0	191159	250.0	250.0	
39 2,2-Dichloropropane	79	4.474	4.492	-0.018	69	9583	5.00	4.59	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	89	21552	5.00	4.73	
41 Ethyl acetate	70	4.516	4.510	0.006	93	2896	10.0	9.08	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	96	9167	25.0	24.6	
44 Methyl acrylate	55	4.565	4.565	0.000	99	12528	5.00	4.95	
43 Propionitrile	54	4.650	4.644	0.006	97	20523	50.0	49.3	
45 Tetrahydrofuran	72	4.730	4.729	0.001	66	4648	10.0	10.3	
46 Chlorobromomethane	128	4.742	4.742	0.000	76	10710	5.00	4.68	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	60094	50.0	47.9	
48 Chloroform	83	4.784	4.784	0.000	99	32324	5.00	4.75	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	92	31073	5.00	4.73	
49 Cyclohexane	84	4.919	4.937	-0.018	93	30391	5.00	4.92	
$ 51 Dibromofluoromethane (Surr	113	4.943	4.949	-0.006	97	174366	50.0	47.6	
52 Carbon tetrachloride	117	5.065	5.065	0.000	99	26337	5.00	4.58	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	98	23153	5.00	4.63	
56 Isobutyl alcohol	74	5.181	5.199	-0.018	95	1816	125.0	119.7	
54 Benzene	78	5.290	5.290	0.000	94	68120	5.00	4.71	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.303	5.309	-0.006	0	158398	50.0	46.5	
57 Isopropyl acetate	43	5.327	5.327	0.000	97	44612	5.00	4.75	
58 Tert-amyl methyl ether	87	5.333	5.345	-0.012	97	15211	5.00	4.68	
59 1,2-Dichloroethane	62	5.376	5.382	-0.006	96	21080	5.00	4.77	
60 n-Heptane	57	5.431	5.437	-0.006	91	14748	5.00	4.91	
* 61 Fluorobenzene	96	5.577	5.583	-0.006	99	457315	50.0	50.0	
62 n-Butanol	56	5.863	5.869	-0.006	85	10911	125.0	116.7	
63 Trichloroethene	95	5.943	5.943	0.000	96	18597	5.00	4.75	
64 Ethyl acrylate	56	6.077	6.071	0.006	94	10661	5.00	4.66	
65 Methylcyclohexane	83	6.071	6.071	0.000	92	35409	5.00	4.77	
66 1,2-Dichloropropane	63	6.229	6.235	-0.006	88	16330	5.00	4.70	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	29947	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.296	-0.006	86	22248	10.0	9.39	
69 1,4-Dioxane	88	6.339	6.333	0.006	30	4501	100.0	109.3	
70 n-Propyl acetate	43	6.345	6.345	0.000	97	17898	5.00	4.63	
71 Dibromomethane	93	6.369	6.369	0.000	95	10929	5.00	4.70	
72 Dichlorobromomethane	83	6.510	6.522	-0.012	99	21481	5.00	4.50	
73 2-Chloroethyl vinyl ether	63	6.839	6.845	-0.006	81	8256	5.00	4.82	
74 2-Nitropropane	41	6.851	6.851	0.000	82	5140	10.0	8.50	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	27081	100.0	95.1	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	24362	5.00	4.64	
77 4-Methyl-2-pentanone (MIBK	43	7.168	7.174	-0.006	96	68958	25.0	24.3	
$ 78 Toluene-d8 (Surr)	98	7.266	7.272	-0.006	99	610308	50.0	48.6	
79 Toluene	91	7.345	7.351	-0.006	93	71471	5.00	4.66	
80 trans-1,3-Dichloropropene	75	7.692	7.698	-0.006	97	21076	5.00	4.62	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	16330	5.00	4.42	
82 1,1,2-Trichloroethane	83	7.912	7.918	-0.006	97	12279	5.00	4.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	20170	5.00	4.69	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	88	22287	5.00	4.78	
85 2-Hexanone	43	8.174	8.174	0.000	97	44418	25.0	24.6	
86 n-Butyl acetate	43	8.290	8.284	0.006	98	17958	5.00	4.33	
87 Chlorodibromomethane	129	8.363	8.369	-0.006	97	16548	5.00	4.50	
88 Ethylene Dibromide	107	8.528	8.527	0.001	100	14800	5.00	4.74	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	409743	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	48004	5.00	4.70	
92 Ethylbenzene	106	9.204	9.204	0.000	98	26188	5.00	4.70	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	94	18451	5.00	4.52	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	31651	5.00	4.65	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	9810	5.00	4.52	
95 o-Xylene	106	9.820	9.820	0.000	95	32885	5.00	4.63	
96 Styrene	104	9.851	9.850	0.001	96	51813	5.00	4.67	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	20015	5.00	4.16	
98 Bromoform	173	10.082	10.088	-0.006	96	10667	5.00	4.46	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	87209	5.00	4.58	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	200277	50.0	49.3	
101 Bromobenzene	156	10.564	10.564	0.000	89	23518	5.00	4.77	
102 1,1,2,2-Tetrachloroethane	83	10.594	10.600	-0.006	98	20514	5.00	4.77	
103 N-Propylbenzene	91	10.625	10.625	0.000	100	103139	5.00	4.68	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	95	5627	5.00	4.54	
105 trans-1,4-Dichloro-2-buten	53	10.661	10.667	-0.006	74	4577	5.00	4.68	
107 4-Ethyltoluene	105	10.741	10.740	0.001	90	89493	5.00	4.82	
106 2-Chlorotoluene	91	10.741	10.740	0.001	94	69433	5.00	4.69	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	73926	5.00	4.53	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	58787	5.00	4.68	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	18876	5.00	4.15	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	61537	5.00	4.47	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	76306	5.00	4.54	
113 sec-Butylbenzene	105	11.308	11.307	0.001	99	100039	5.00	4.55	
114 4-Isopropyltoluene	119	11.436	11.442	-0.006	98	88574	5.00	4.57	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	45622	5.00	4.74	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	251136	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	95	46286	5.00	4.79	
118 Benzyl chloride	91	11.667	11.667	0.000	99	31846	5.00	4.27	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	93	82088	5.00	4.77	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	49418	5.00	4.64	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	47837	5.00	4.81	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	44936	5.00	4.71	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	96	88523	5.00	4.67	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	93	3746	5.00	4.24	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	97	41958	5.00	5.00	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	38177	5.00	4.67	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	93	18332	5.00	4.60	
128 Naphthalene	128	13.332	13.331	0.001	99	86559	5.00	4.63	
129 1,2,3-Trichlorobenzene	180	13.521	13.527	-0.005	97	37218	5.00	4.68	
S 130 1,2-Dichloroethene, Total	100				0		10.0	9.38	
S 131 Xylenes, Total	100				0		10.0	9.28	
S 132 Total BTEX	1				0		25.0	23.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00256	Amount Added:	0.50	Units: uL	
ACROLEIN W_00075	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	0.50	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 22:31:09 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D

Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9 Operator ID:

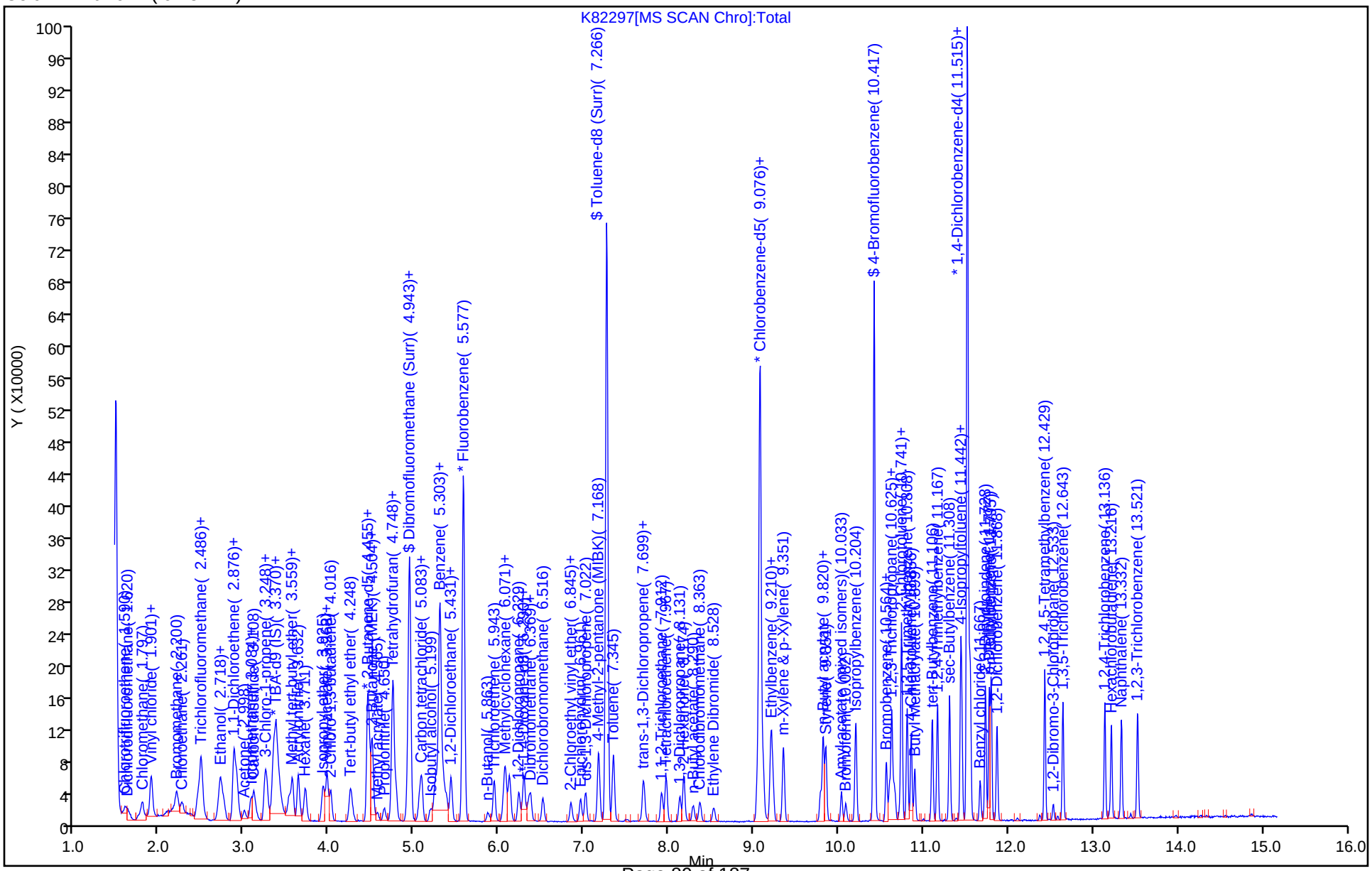
Lims ID: STD5 Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

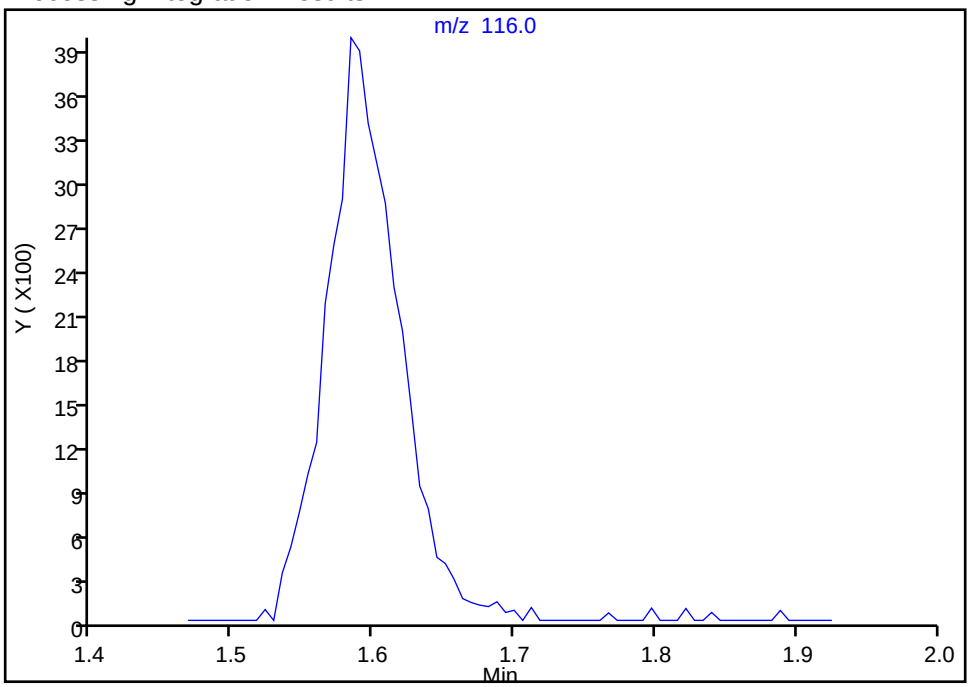
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Signal: 1

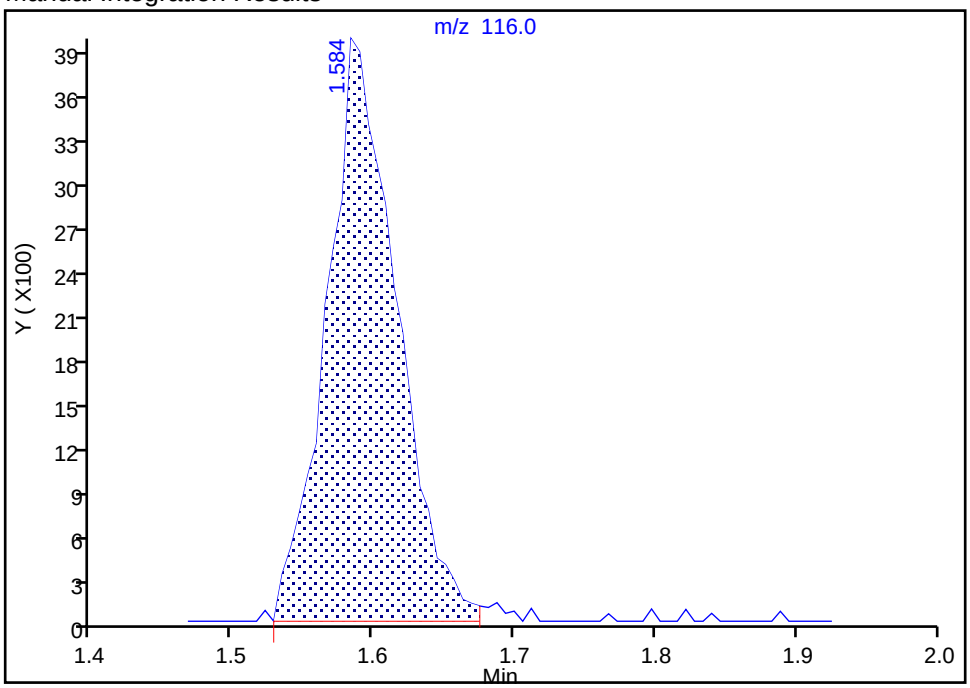
Not Detected
Expected RT: 1.59

Processing Integration Results



Manual Integration Results

RT: 1.58
Area: 13714
Amount: 3.313904
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:50:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

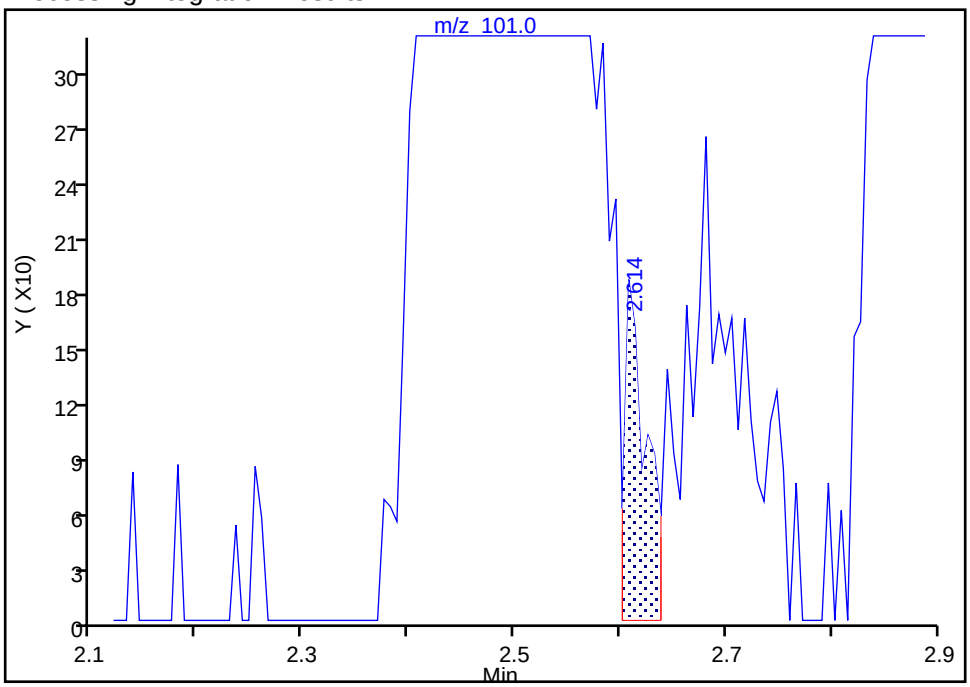
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

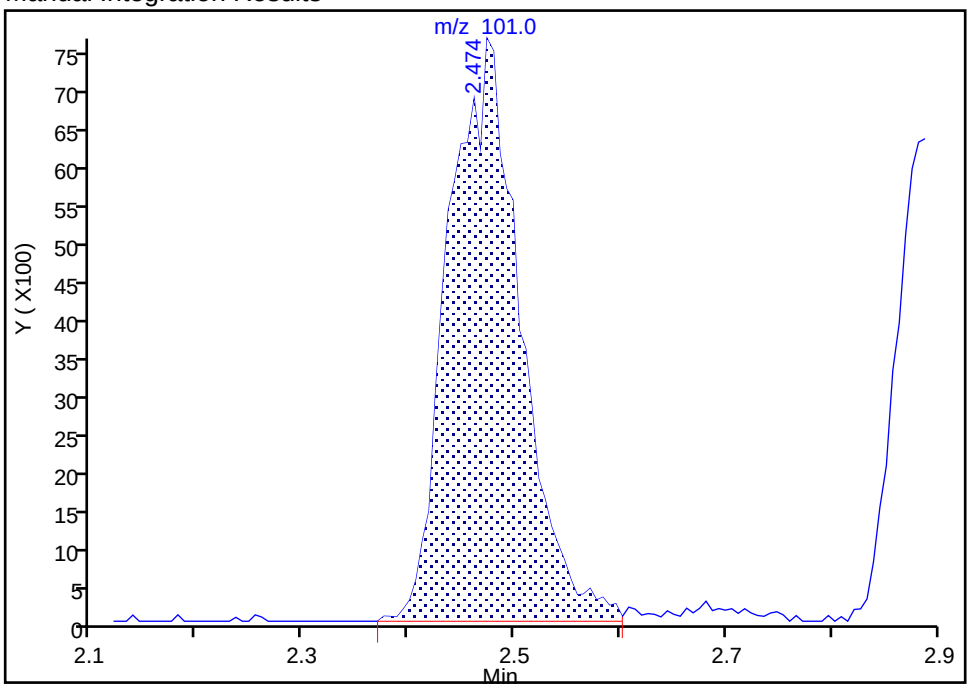
Processing Integration Results

RT: 2.61
Area: 269
Amount: 0.028056
Amount Units: ug/l



Manual Integration Results

RT: 2.47
Area: 36555
Amount: 4.918069
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:50:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

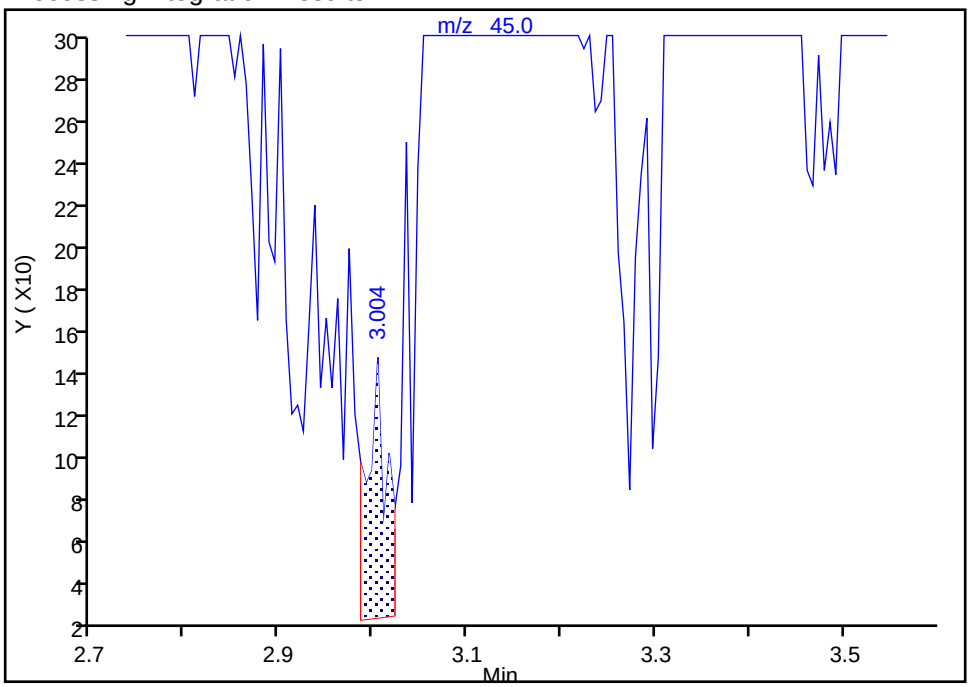
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

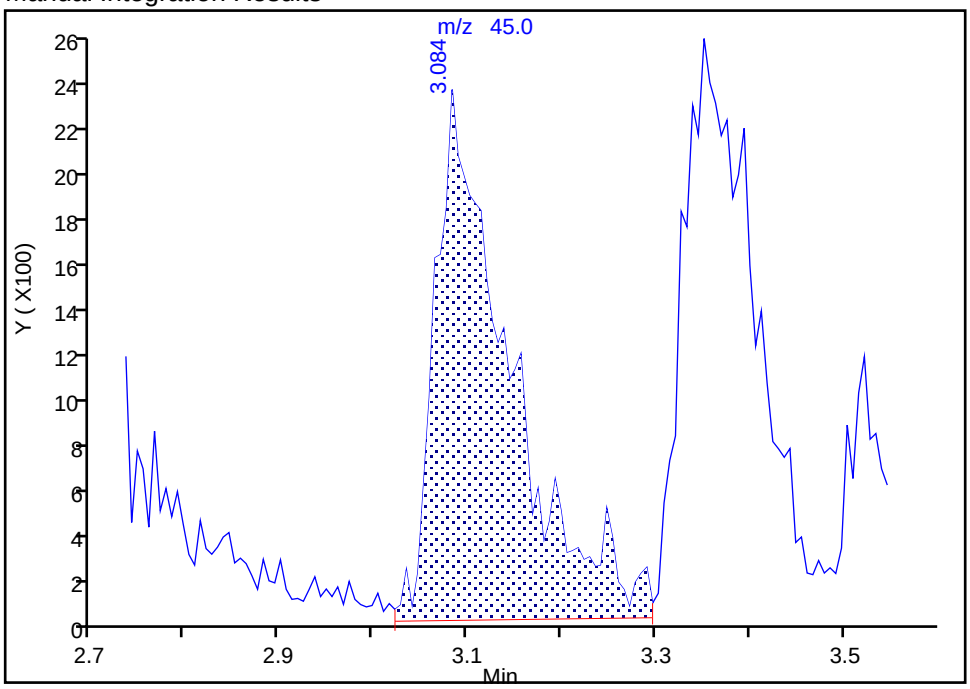
Processing Integration Results

RT: 3.00
Area: 180
Amount: 41.578724
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 12397
Amount: 54.003121
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:50:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

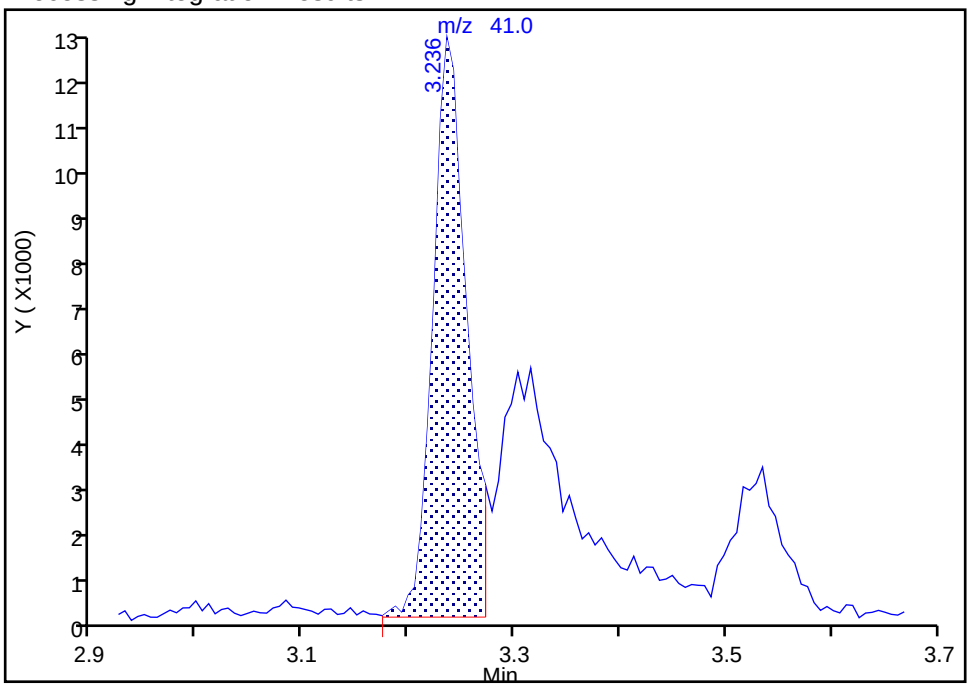
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82297.D
Injection Date: 21-Apr-2018 06:29:30 Instrument ID: CVOAMS9
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

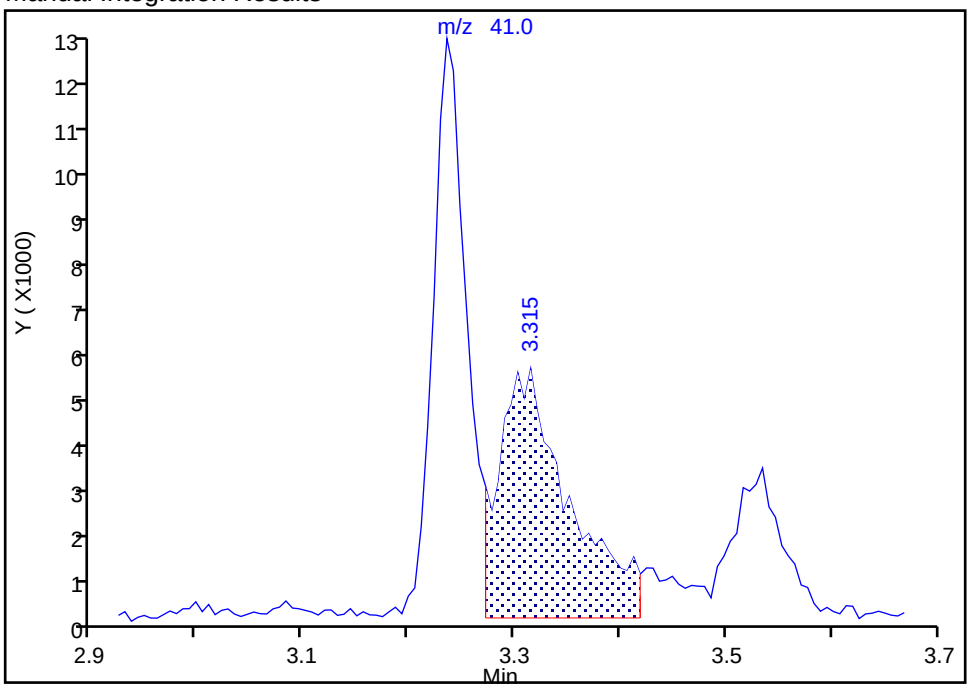
Processing Integration Results

RT: 3.24
Area: 28629
Amount: 41.676615
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 25746
Amount: 51.909571
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:50:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 21-Apr-2018 06:54:30 ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0070764-005
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:31:20 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:21:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.590	1.590	0.000	88	57246	20.0	14.0	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	98	113768	20.0	13.4	
3 Chloromethane	50	1.803	1.803	0.000	100	104166	20.0	18.4	
4 Vinyl chloride	62	1.907	1.907	0.000	94	110439	20.0	19.5	
5 Butadiene	54	1.907	1.907	0.000	97	85231	20.0	19.6	
6 Bromomethane	94	2.212	2.212	0.000	98	90189	20.0	19.1	
7 Chloroethane	64	2.273	2.273	0.000	100	56487	20.0	19.8	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	170807	20.0	20.5	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	61	148322	20.0	20.0	
10 Pentane	72	2.498	2.498	0.000	96	23533	40.0	42.6	
12 Ethanol	46	2.687	2.687	0.000	67	17016	800.0	895.7	
11 Ethyl ether	59	2.693	2.693	0.000	94	51942	20.0	20.9	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	96	61390	20.0	21.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	90	78531	20.0	21.4	
15 Acrolein	56	2.876	2.876	0.000	96	141525	300.0	315.0	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	82	96232	20.0	19.9	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	97	78869	20.0	21.1	
18 Acetone	43	2.998	2.998	0.000	87	89929	100.0	93.7	
19 Iodomethane	142	3.077	3.077	0.000	98	166549	20.0	20.9	
22 Isopropyl alcohol	45	3.083	3.083	0.000	1	45536	200.0	195.2	a
20 Carbon disulfide	76	3.120	3.120	0.000	99	291598	20.0	20.9	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	92	45800	20.0	20.7	
23 Methyl acetate	43	3.248	3.248	0.000	91	81640	40.0	39.9	
24 Cyclopentene	67	3.266	3.266	0.000	91	176477	20.0	21.4	
29 Acetonitrile	41	3.309	3.309	0.000	93	94229	200.0	187.0	a
* 25 TBA-d9 (IS)	65	3.352	3.352	0.000	0	303090	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	89	86781	20.0	20.3	
27 2-Methyl-2-propanol	59	3.419	3.419	0.000	96	92394	200.0	203.0	
28 Methyl tert-butyl ether	73	3.535	3.535	0.000	96	215890	20.0	20.7	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	93	83045	20.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	92	226954	200.0	201.6	
32 Hexane	43	3.717	3.717	0.000	93	66028	20.0	21.0	
33 Isopropyl ether	45	3.931	3.931	0.000	96	232407	20.0	21.0	
35 Vinyl acetate	86	3.973	3.973	0.000	99	23651	40.0	43.6	
34 1,1-Dichloroethane	63	3.973	3.973	0.000	75	133908	20.0	20.7	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	89	70159	20.0	21.3	
37 Tert-butyl ethyl ether	59	4.248	4.248	0.000	89	223930	20.0	21.0	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	195195	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.492	0.000	95	43028	20.0	20.7	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	97	93711	20.0	20.6	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	96	37082	100.0	97.3	
41 Ethyl acetate	70	4.510	4.510	0.000	93	12998	40.0	39.9	
44 Methyl acrylate	55	4.565	4.565	0.000	99	49505	20.0	19.6	
43 Propionitrile	54	4.644	4.644	0.000	98	90833	200.0	214.5	
45 Tetrahydrofuran	72	4.729	4.729	0.000	64	17950	40.0	38.9	
46 Chlorobromomethane	128	4.742	4.742	0.000	71	47033	20.0	20.6	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	257668	200.0	206.3	
48 Chloroform	83	4.784	4.784	0.000	99	139619	20.0	20.6	
49 Cyclohexane	84	4.937	4.937	0.000	92	130787	20.0	19.8	
50 1,1,1-Trichloroethane	97	4.937	4.937	0.000	94	134575	20.0	20.5	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	184398	50.0	50.5	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	116620	20.0	20.4	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	98	101478	20.0	20.4	
56 Isobutyl alcohol	74	5.199	5.199	0.000	94	7482	500.0	485.5	
54 Benzene	78	5.290	5.290	0.000	95	298894	20.0	20.4	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	165159	50.0	48.7	
57 Isopropyl acetate	43	5.327	5.327	0.000	96	193555	20.0	20.7	a
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	91	67413	20.0	20.8	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	88116	20.0	20.0	
60 n-Heptane	57	5.437	5.437	0.000	93	63410	20.0	19.8	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	455766	50.0	50.0	
62 n-Butanol	56	5.869	5.869	0.000	91	44696	500.0	470.5	
63 Trichloroethene	95	5.943	5.943	0.000	97	78099	20.0	20.0	
65 Methylcyclohexane	83	6.071	6.071	0.000	95	160154	20.0	20.0	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	50302	20.0	22.1	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	93	70324	20.0	20.3	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	31871	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.296	0.000	87	97082	40.0	41.1	
69 1,4-Dioxane	88	6.333	6.333	0.000	27	19683	400.0	449.0	
70 n-Propyl acetate	43	6.345	6.345	0.000	97	78274	20.0	20.3	
71 Dibromomethane	93	6.369	6.369	0.000	95	47355	20.0	20.4	
72 Dichlorobromomethane	83	6.522	6.522	0.000	98	97507	20.0	20.5	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	83	35187	20.0	20.6	
74 2-Nitropropane	41	6.851	6.851	0.000	78	21520	40.0	35.7	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	119462	400.0	410.9	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	89	107543	20.0	20.2	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	301016	100.0	103.8	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	623036	50.0	49.1	
79 Toluene	91	7.351	7.351	0.000	93	311894	20.0	20.1	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	92463	20.0	20.0	
81 Ethyl methacrylate	69	7.711	7.711	0.000	85	73173	20.0	19.6	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	97	52328	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	89373	20.0	20.6	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	89	96148	20.0	20.4	
85 2-Hexanone	43	8.174	8.174	0.000	95	192293	100.0	104.1	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	81948	20.0	19.5	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	72292	20.0	19.4	
88 Ethylene Dibromide	107	8.527	8.527	0.000	98	65450	20.0	20.7	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	83	414609	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	209801	20.0	20.3	
92 Ethylbenzene	106	9.204	9.204	0.000	98	114672	20.0	20.3	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	95	79697	20.0	19.3	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	140882	20.0	20.5	
94 n-Butyl acrylate	73	9.783	9.783	0.000	97	44145	20.0	20.1	
95 o-Xylene	106	9.820	9.820	0.000	95	146537	20.0	20.4	
96 Styrene	104	9.850	9.850	0.000	97	230759	20.0	20.6	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	96240	20.0	19.9	
98 Bromoform	173	10.088	10.088	0.000	97	46276	20.0	19.1	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	397823	20.0	20.6	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	202010	50.0	49.2	
101 Bromobenzene	156	10.564	10.564	0.000	92	97954	20.0	19.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	86812	20.0	20.1	
103 N-Propylbenzene	91	10.625	10.625	0.000	99	453652	20.0	20.5	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	24326	20.0	19.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	90	18120	20.0	18.4	
106 2-Chlorotoluene	91	10.740	10.740	0.000	88	297170	20.0	20.0	
107 4-Ethyltoluene	105	10.740	10.740	0.000	90	383910	20.0	20.6	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	326928	20.0	20.0	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	256190	20.0	20.3	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	92118	20.0	20.2	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	273810	20.0	19.8	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	340746	20.0	20.2	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	451741	20.0	20.5	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	395307	20.0	20.3	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	193604	20.0	20.1	
* 116 1,4-Dichlorobenzene-d4	152	11.515	11.515	0.000	93	252080	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	195277	20.0	20.1	
118 Benzyl chloride	91	11.667	11.667	0.000	99	149594	20.0	20.0	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	357520	20.0	20.7	
120 p-Diethylbenzene	119	11.777	11.777	0.000	96	219550	20.0	20.5	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	204531	20.0	20.5	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	194350	20.0	20.3	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	389332	20.0	20.5	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	93	17031	20.0	19.2	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	174149	20.0	20.7	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	166441	20.0	20.3	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	80021	20.0	20.0	
128 Naphthalene	128	13.331	13.331	0.000	99	374994	20.0	20.0	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	96	164633	20.0	20.6	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.0	
S 131 Xylenes, Total	100				0		40.0	40.8	
S 132 Total BTEX	1				0		100.0	101.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	3.00	Units: uL	
GASES Li_00256	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 22:31:22 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D

Injection Date: 21-Apr-2018 06:54:30 Instrument ID: CVOAMS9 Operator ID:

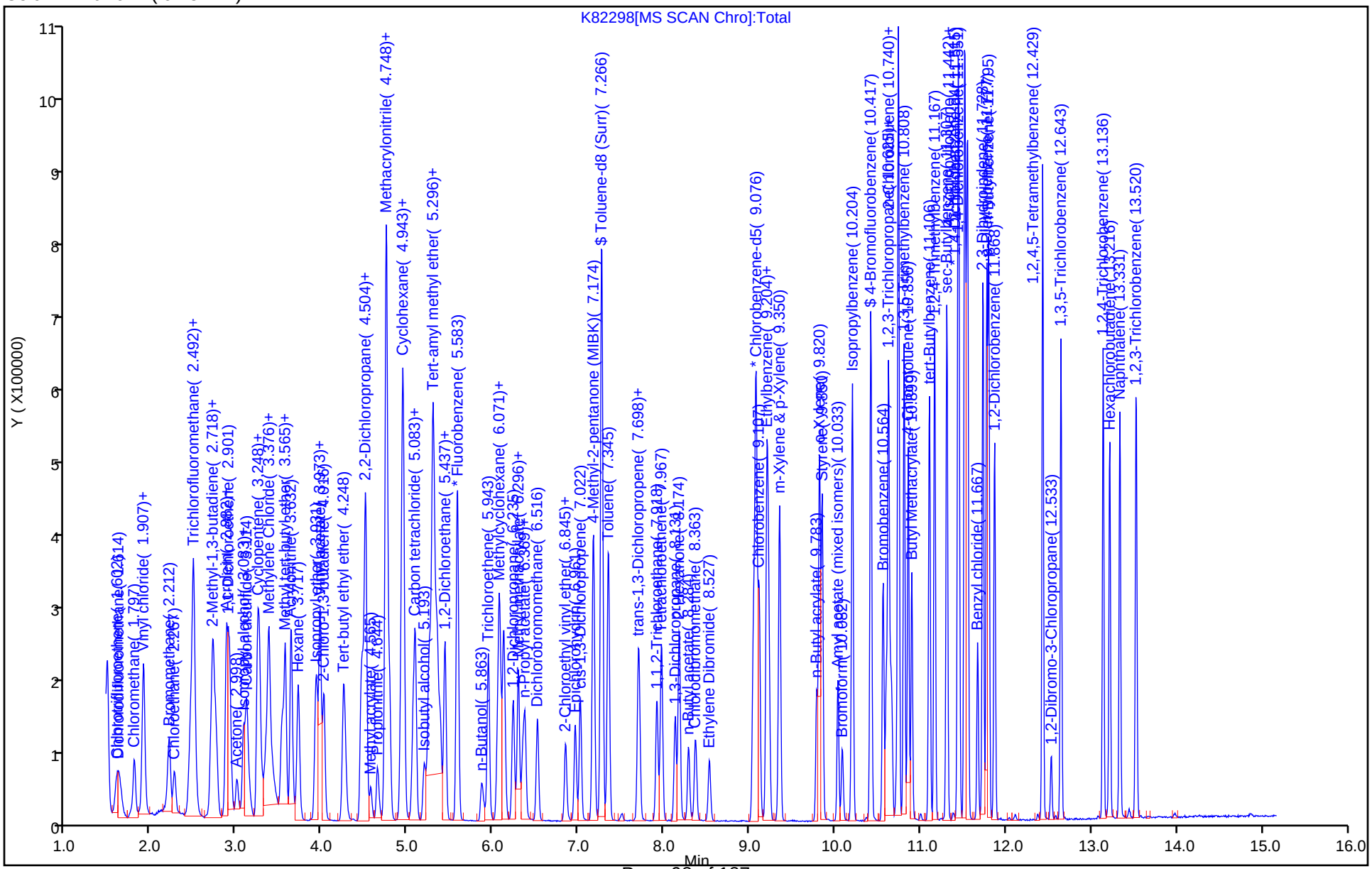
Lims ID: STD20 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

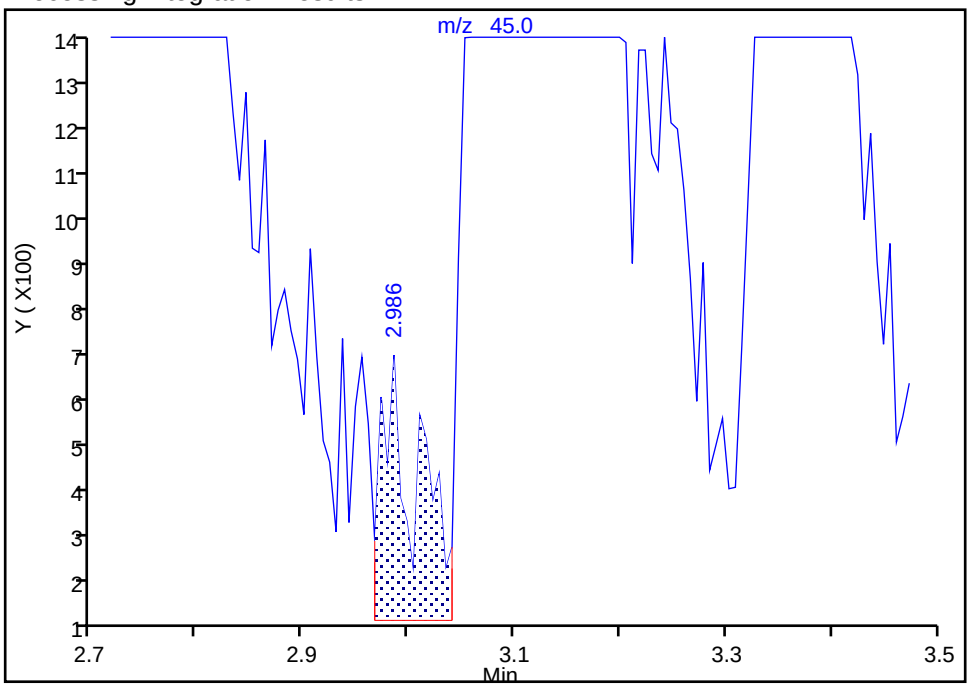
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D
Injection Date: 21-Apr-2018 06:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

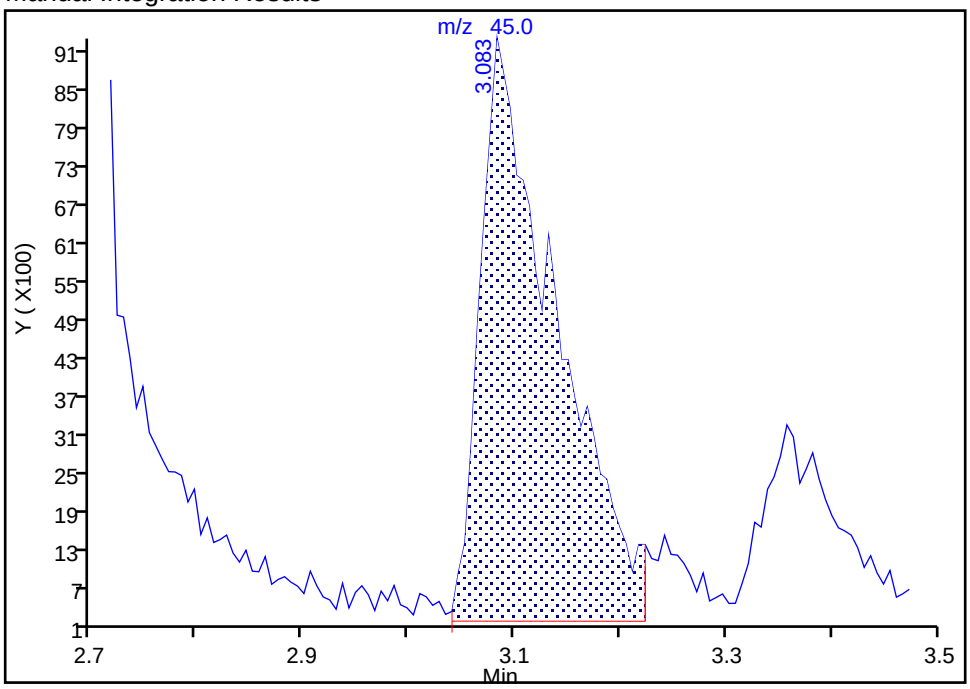
Processing Integration Results

RT: 2.99
Area: 1356
Amount: 5.239280
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 45536
Amount: 195.2082
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:39:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

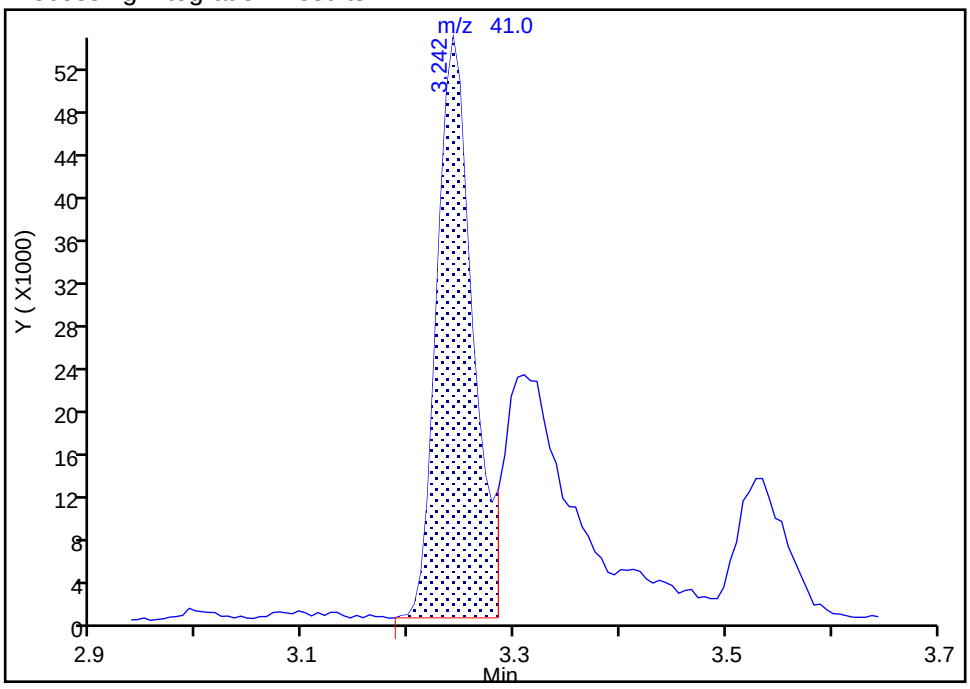
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D
Injection Date: 21-Apr-2018 06:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

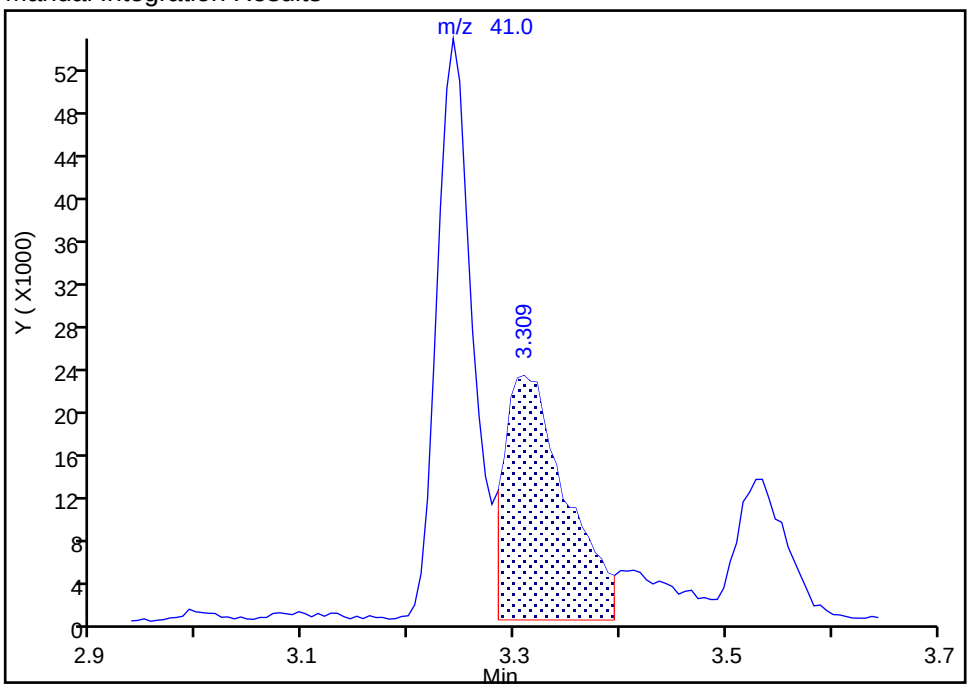
Processing Integration Results

RT: 3.24
Area: 129760
Amount: 244.4628
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 94229
Amount: 186.9662
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:39:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

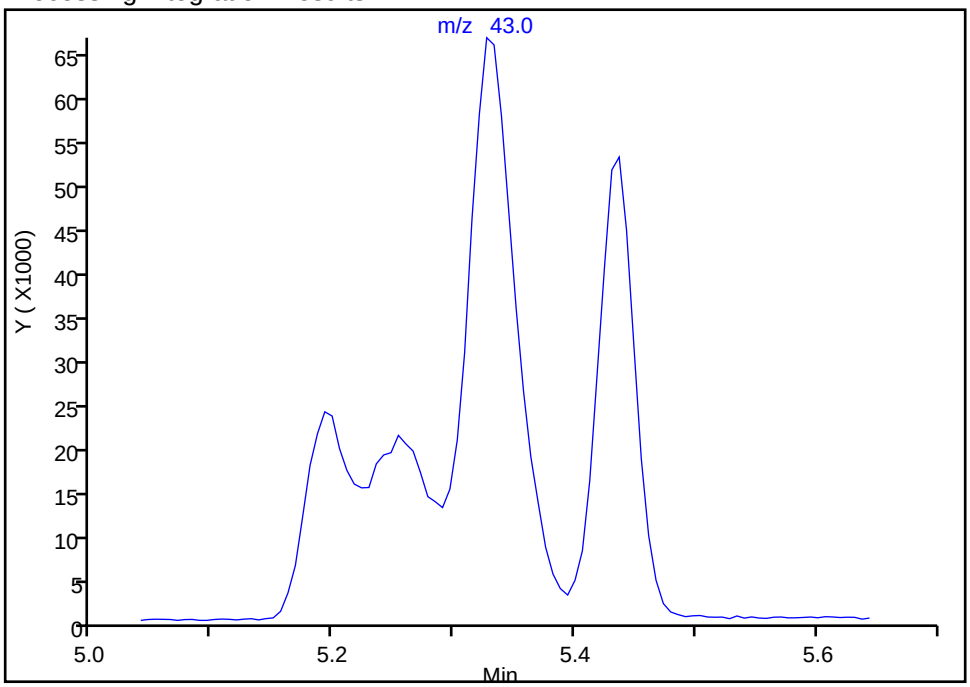
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82298.D
Injection Date: 21-Apr-2018 06:54:30 Instrument ID: CVOAMS9
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

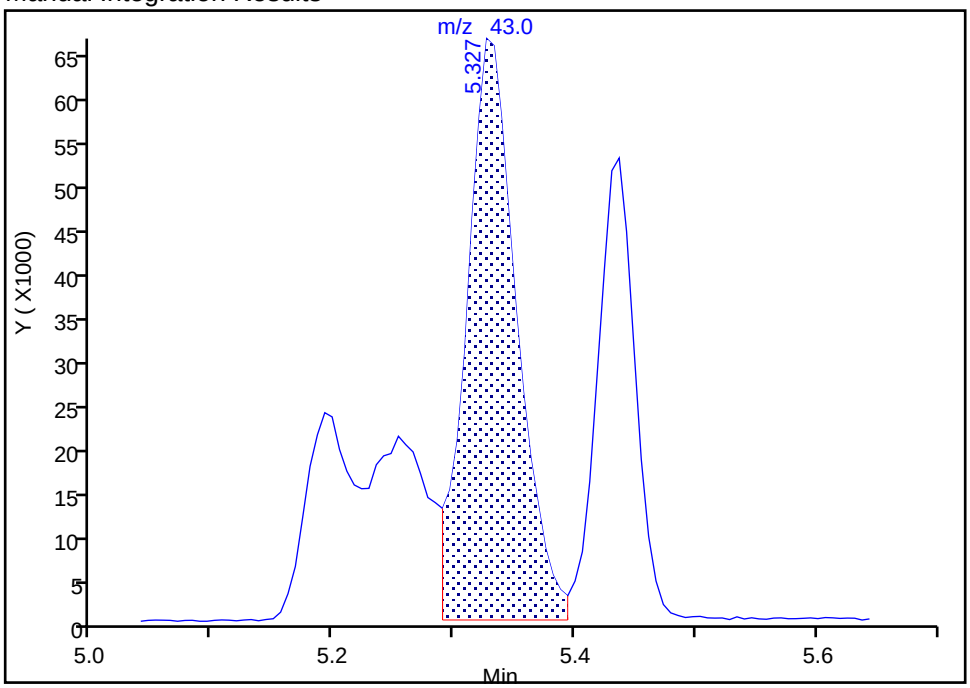
Not Detected
Expected RT: 5.33

Processing Integration Results



Manual Integration Results

RT: 5.33
Area: 193555
Amount: 20.677234
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:39:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 21-Apr-2018 07:18:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0070764-006
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:31:34 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:27:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.590	0.006	88	135885	50.0	33.4	
2 Dichlorodifluoromethane	85	1.626	1.626	0.000	99	281893	50.0	33.4	M
3 Chloromethane	50	1.803	1.803	0.000	99	251138	50.0	44.2	
5 Butadiene	54	1.913	1.907	0.006	97	207992	50.0	47.8	
4 Vinyl chloride	62	1.907	1.907	0.000	98	267346	50.0	47.1	
6 Bromomethane	94	2.212	2.212	0.000	99	219717	50.0	46.5	
7 Chloroethane	64	2.273	2.273	0.000	100	137432	50.0	48.0	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	98	408660	50.0	48.9	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	57	369744	50.0	49.8	
10 Pentane	72	2.492	2.498	-0.006	96	56087	100.0	99.2	
12 Ethanol	46	2.705	2.687	0.018	94	36200	2000.0	1860.2	
11 Ethyl ether	59	2.693	2.693	0.000	94	120615	50.0	48.5	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	97	144944	50.0	50.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.754	2.748	0.006	93	188412	50.0	51.3	
15 Acrolein	56	2.876	2.876	0.000	95	204750	400.0	444.9	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	99	234718	50.0	47.7	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	97	183987	50.0	49.1	
18 Acetone	43	2.998	2.998	0.000	87	214228	250.0	224.0	
19 Iodomethane	142	3.077	3.077	0.000	98	390955	50.0	49.0	
22 Isopropyl alcohol	45	3.090	3.083	0.007	1	119731	500.0	501.1	a
20 Carbon disulfide	76	3.114	3.120	-0.006	99	681245	50.0	48.8	
21 3-Chloro-1-propene	76	3.242	3.242	0.000	95	110507	50.0	49.9	
23 Methyl acetate	43	3.242	3.248	-0.006	99	197921	100.0	94.4	
24 Cyclopentene	67	3.266	3.266	0.000	92	425858	50.0	51.6	
29 Acetonitrile	41	3.309	3.309	0.000	94	217917	500.0	422.1	a
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	310467	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.376	0.000	88	204831	50.0	48.0	
27 2-Methyl-2-propanol	59	3.431	3.419	0.012	97	220678	500.0	473.3	
28 Methyl tert-butyl ether	73	3.528	3.535	-0.007	96	512367	50.0	49.0	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	92	197978	50.0	48.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	94	547259	500.0	485.4	
32 Hexane	43	3.724	3.717	0.007	93	158325	50.0	50.3	
33 Isopropyl ether	45	3.925	3.931	-0.006	97	542730	50.0	49.1	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	87	318966	50.0	49.2	
35 Vinyl acetate	86	3.980	3.973	0.007	100	56384	100.0	101.5	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	90	163493	50.0	49.7	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	89	525361	50.0	49.3	
* 38 2-Butanone-d5	46	4.449	4.455	-0.006	0	194496	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.492	-0.006	96	97890	50.0	47.0	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	98	217535	50.0	47.8	
41 Ethyl acetate	70	4.510	4.510	0.000	93	30841	100.0	95.1	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	88204	250.0	232.3	
44 Methyl acrylate	55	4.565	4.565	0.000	99	120091	50.0	47.5	
43 Propionitrile	54	4.644	4.644	0.000	98	218137	500.0	502.9	
45 Tetrahydrofuran	72	4.736	4.729	0.007	84	42114	100.0	91.7	
46 Chlorobromomethane	128	4.742	4.742	0.000	75	109298	50.0	47.9	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	611832	500.0	489.1	
48 Chloroform	83	4.784	4.784	0.000	99	324500	50.0	47.7	
50 1,1,1-Trichloroethane	97	4.943	4.937	0.006	97	321683	50.0	49.0	
49 Cyclohexane	84	4.937	4.937	0.000	89	318574	50.0	47.5	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	97	177150	50.0	48.5	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	287335	50.0	50.1	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	98	242321	50.0	48.6	
56 Isobutyl alcohol	74	5.193	5.199	-0.006	94	19169	1250.0	1214.2	
54 Benzene	78	5.290	5.290	0.000	96	699391	50.0	48.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	158945	50.0	46.8	
57 Isopropyl acetate	43	5.333	5.327	0.006	95	442217	50.0	47.2	
58 Tert-amyl methyl ether	87	5.339	5.345	-0.006	97	160387	50.0	49.4	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	204081	50.0	46.3	
60 n-Heptane	57	5.437	5.437	0.000	91	152930	50.0	47.1	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	456447	50.0	50.0	
62 n-Butanol	56	5.863	5.869	-0.006	88	113225	1250.0	1163.5	
63 Trichloroethene	95	5.943	5.943	0.000	97	187239	50.0	47.9	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	114987	50.0	50.4	
65 Methylcyclohexane	83	6.071	6.071	0.000	94	383246	50.0	47.2	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	93	163587	50.0	47.2	
* 67 1,4-Dioxane-d8	96	6.278	6.284	-0.006	0	33073	1000.0	1000.0	
68 Methyl methacrylate	41	6.290	6.296	-0.006	91	233677	100.0	98.8	
69 1,4-Dioxane	88	6.339	6.333	0.006	28	44101	1000.0	969.4	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	189871	50.0	49.2	
71 Dibromomethane	93	6.369	6.369	0.000	96	110836	50.0	47.8	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	98	228929	50.0	48.1	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	81	82379	50.0	48.1	
74 2-Nitropropane	41	6.851	6.851	0.000	80	52529	100.0	87.1	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	291301	1000.0	1005.6	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	252036	50.0	48.2	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	720496	250.0	249.4	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	613789	50.0	49.1	
79 Toluene	91	7.345	7.351	-0.006	93	747261	50.0	49.0	
80 trans-1,3-Dichloropropene	75	7.692	7.698	-0.006	98	219201	50.0	48.3	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	181055	50.0	49.3	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	118758	50.0	47.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.967	7.973	-0.006	97	207952	50.0	48.6	
84 1,3-Dichloropropane	76	8.125	8.131	-0.006	90	225167	50.0	48.5	
85 2-Hexanone	43	8.174	8.174	0.000	95	460327	250.0	250.2	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	199906	50.0	48.4	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	176836	50.0	48.3	
88 Ethylene Dibromide	107	8.527	8.527	0.000	99	153385	50.0	49.3	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	408020	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	98	498741	50.0	49.0	
92 Ethylbenzene	106	9.204	9.204	0.000	98	272978	50.0	49.2	
91 1,1,1,2-Tetrachloroethane	131	9.222	9.222	0.000	95	195525	50.0	48.1	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.000	0	331907	50.0	49.0	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	105075	50.0	48.6	
95 o-Xylene	106	9.820	9.820	0.000	95	346813	50.0	49.0	
96 Styrene	104	9.850	9.850	0.000	96	543913	50.0	49.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	90	237847	50.0	51.3	
98 Bromoform	173	10.082	10.088	-0.006	97	114406	50.0	48.0	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	952388	50.0	50.2	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	95	196938	50.0	48.7	
101 Bromobenzene	156	10.564	10.564	0.000	91	229236	50.0	48.3	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	204328	50.0	49.4	
103 N-Propylbenzene	91	10.625	10.625	0.000	100	1069161	50.0	50.4	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	96	57916	50.0	48.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	92	46438	50.0	49.3	
107 4-Ethyltoluene	105	10.740	10.740	0.000	90	906609	50.0	50.8	
106 2-Chlorotoluene	91	10.740	10.740	0.000	90	707395	50.0	49.6	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	789412	50.0	50.3	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	592906	50.0	49.1	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	225545	50.0	51.5	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	665846	50.0	50.3	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	808260	50.0	50.0	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	1076321	50.0	50.9	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	937541	50.0	50.3	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	445593	50.0	48.2	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	91	241646	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	441606	50.0	47.5	
118 Benzyl chloride	91	11.667	11.667	0.000	99	360625	50.0	50.3	
119 2,3-Dihydroindene	117	11.728	11.728	0.000	94	828385	50.0	50.0	
120 p-Diethylbenzene	119	11.777	11.777	0.000	95	515228	50.0	50.3	
121 n-Butylbenzene	92	11.795	11.795	0.000	97	478184	50.0	50.0	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	447709	50.0	48.7	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	914277	50.0	50.2	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	93	37957	50.0	44.6	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	397827	50.0	49.3	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	376853	50.0	47.9	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	189486	50.0	49.4	
128 Naphthalene	128	13.331	13.331	0.000	99	887580	50.0	49.3	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.001	96	371182	50.0	48.5	
S 130 1,2-Dichloroethene, Total	100				0		100.0	96.4	
S 131 Xylenes, Total	100				0		100.0	98.0	
S 132 Total BTEX	1				0		250.0	244.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
GASES Li_00256	Amount Added:	5.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	5.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

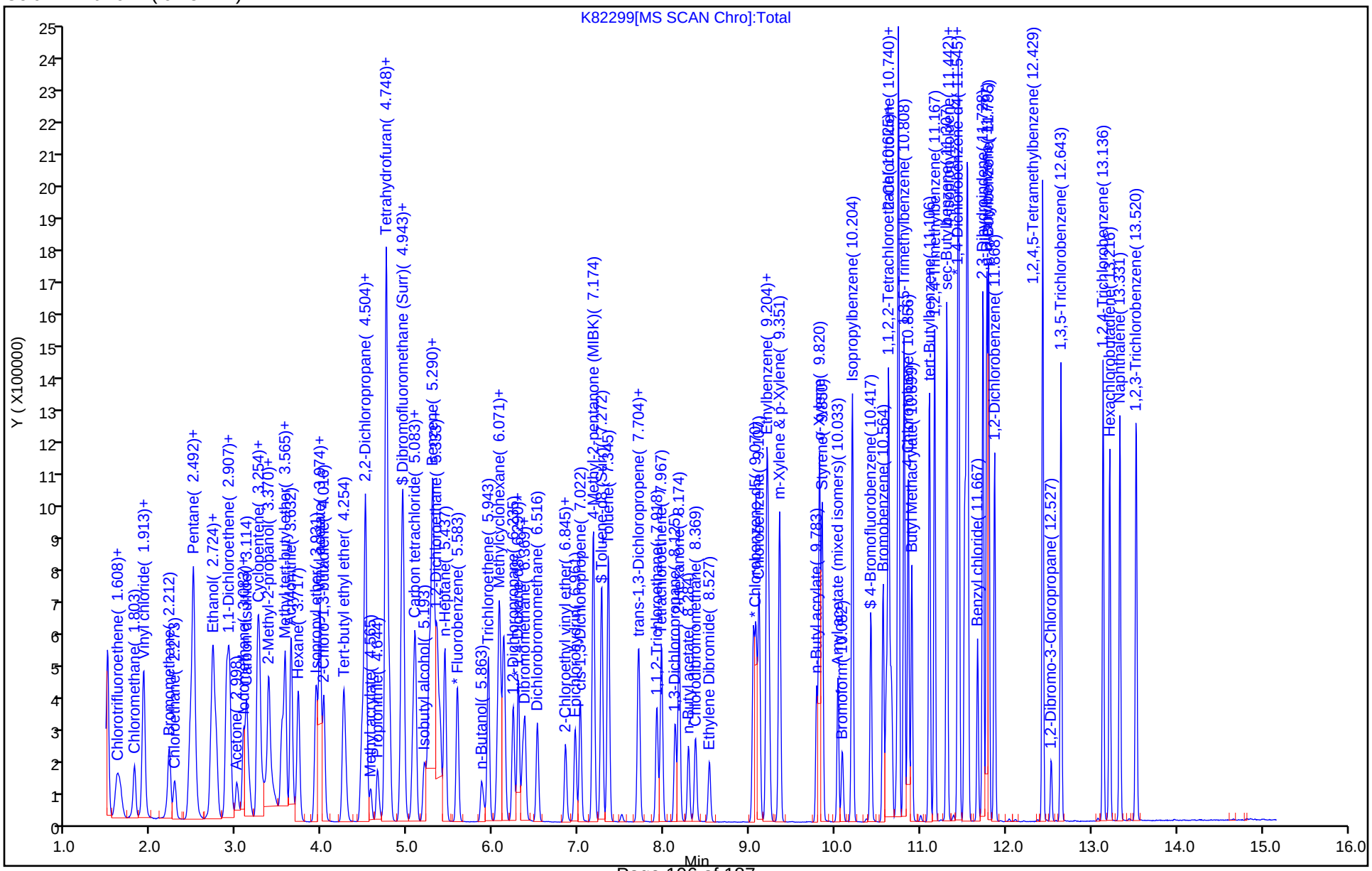
Report Date: 22-Apr-2018 22:31:36 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D

Injection Date:	21-Apr-2018 07:18:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD50			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

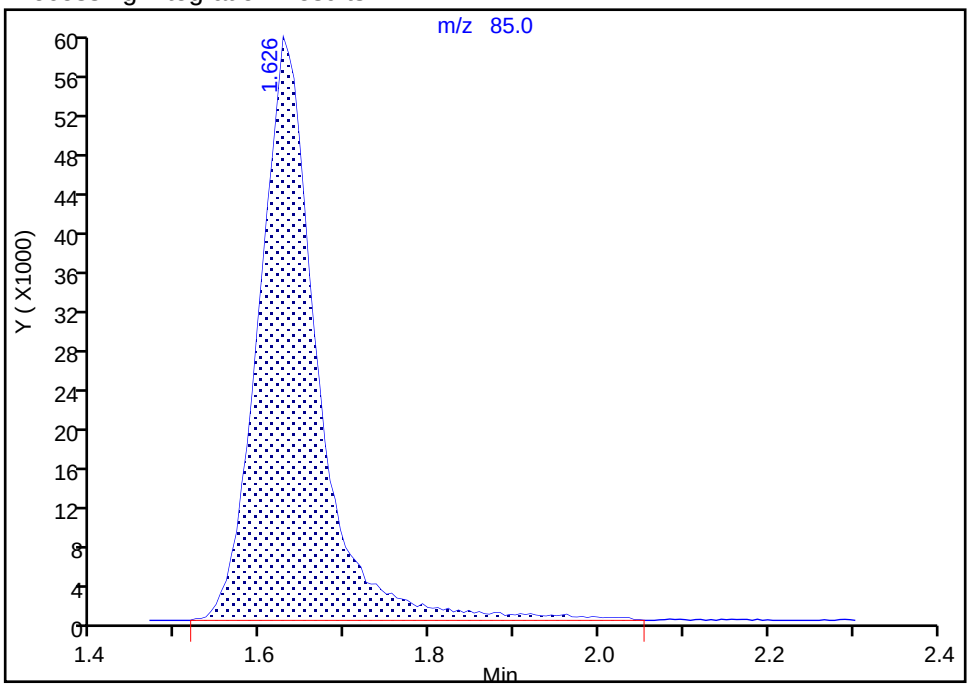
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D
Injection Date: 21-Apr-2018 07:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

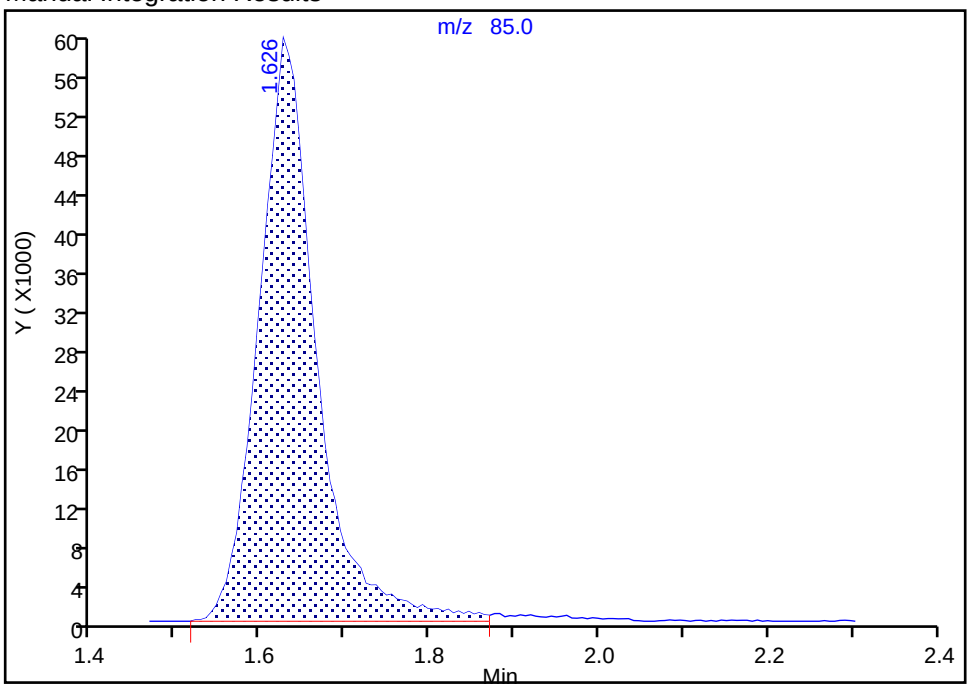
Processing Integration Results

RT: 1.63
Area: 286324
Amount: 33.415846
Amount Units: ug/l



Manual Integration Results

RT: 1.63
Area: 281893
Amount: 33.374911
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:08:10
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

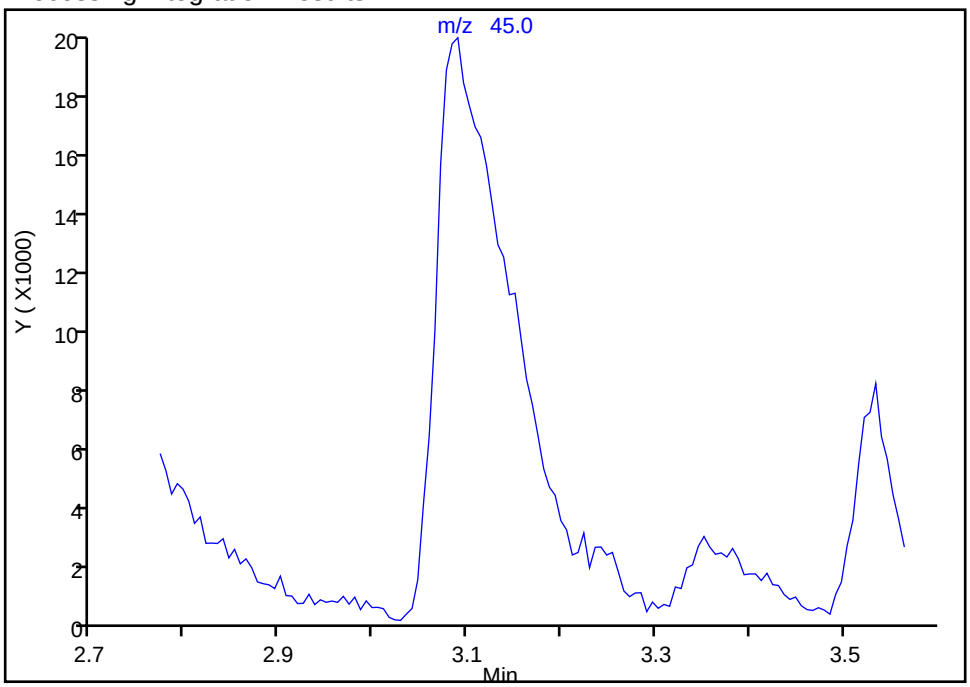
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D
Injection Date: 21-Apr-2018 07:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

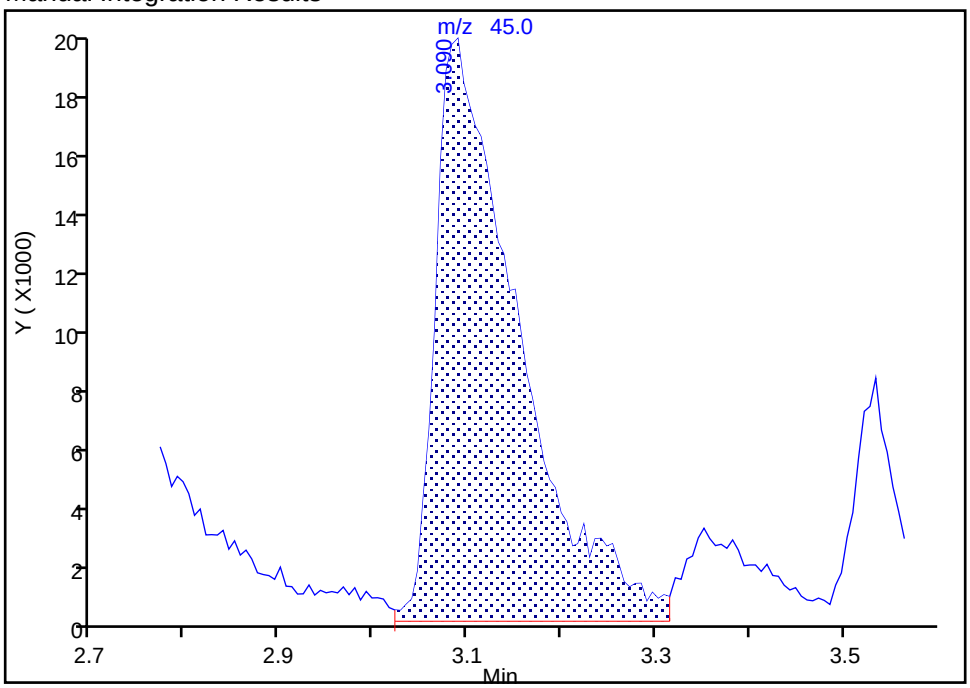
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.09
Area: 119731
Amount: 501.0787
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:51:44
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

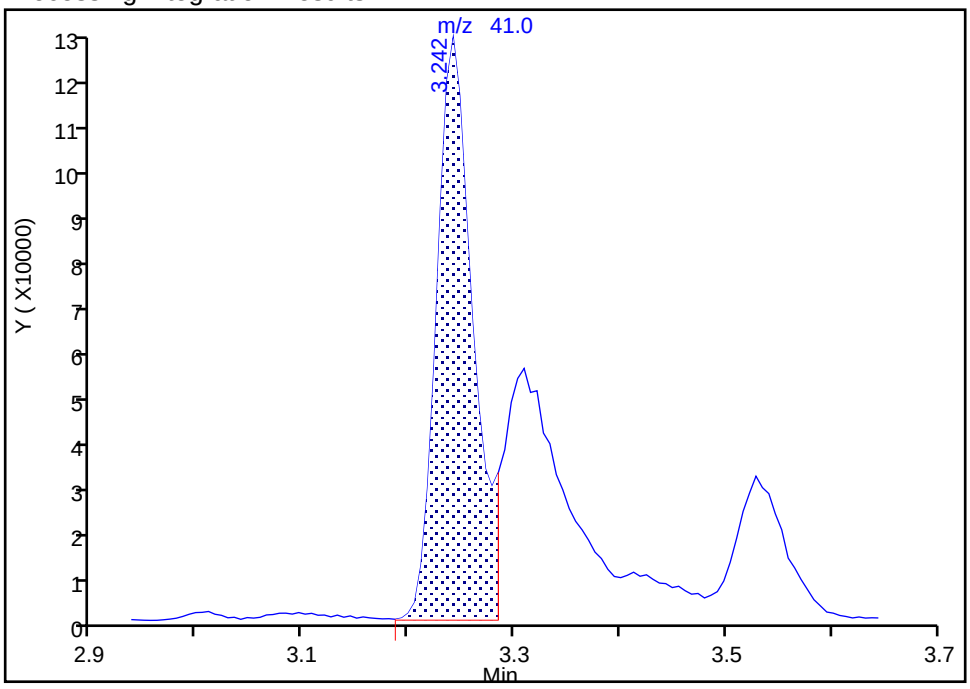
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82299.D
Injection Date: 21-Apr-2018 07:18:30 Instrument ID: CVOAMS9
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

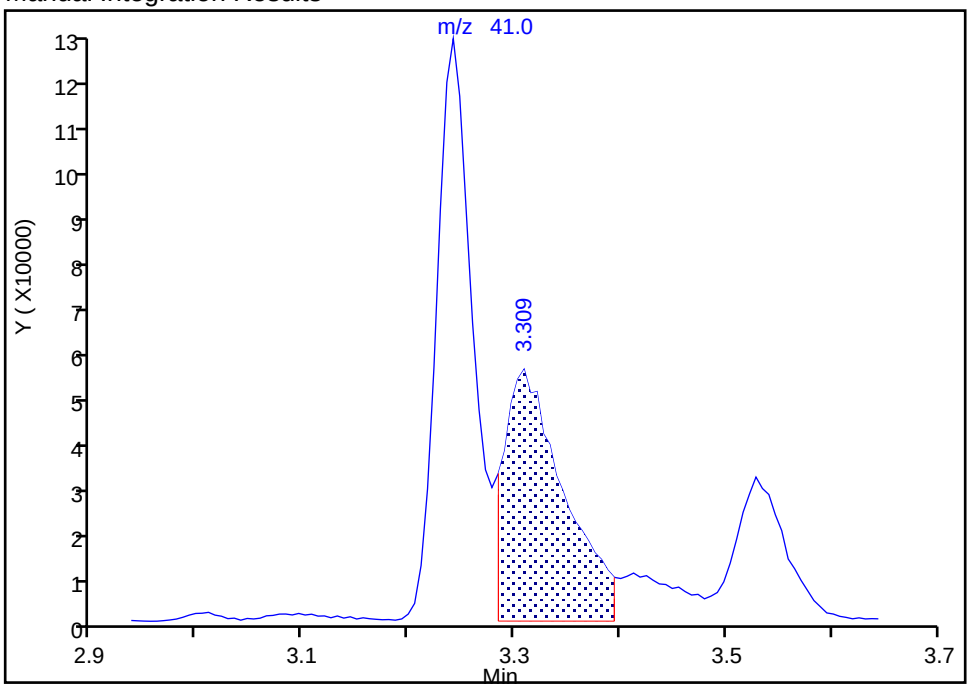
Processing Integration Results

RT: 3.24
Area: 309430
Amount: 440.3681
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 217917
Amount: 422.1102
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:51:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 21-Apr-2018 07:42:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0070764-007
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:31:48 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:29:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.590	1.590	0.000	87	663290	200.0	208.9	
2 Dichlorodifluoromethane	85	1.627	1.626	0.001	99	1390269	200.0	208.8	M
3 Chloromethane	50	1.803	1.803	0.000	99	1178713	200.0	240.7	
4 Vinyl chloride	62	1.907	1.907	0.000	98	1212827	200.0	247.8	
5 Butadiene	54	1.913	1.907	0.006	97	954435	200.0	254.6	
6 Bromomethane	94	2.212	2.212	0.000	99	947501	200.0	232.7	
7 Chloroethane	64	2.273	2.273	0.000	100	585994	200.0	237.4	
9 Dichlorofluoromethane	67	2.468	2.468	0.000	99	1614718	200.0	224.1	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	98	1537625	200.0	240.4	
10 Pentane	72	2.492	2.498	-0.006	97	229927	400.0	465.2	
12 Ethanol	46	2.699	2.687	0.012	68	156699	8000.0	9210.6	
11 Ethyl ether	59	2.693	2.693	0.000	93	481159	200.0	224.5	
13 2-Methyl-1,3-butadiene	53	2.718	2.718	0.000	96	572079	200.0	232.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.748	0.000	90	754521	200.0	238.4	
15 Acrolein	56	2.876	2.876	0.000	94	224076	500.0	556.9	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	98	967357	200.0	226.5	
17 1,1-Dichloroethene	96	2.913	2.919	-0.006	97	761927	200.0	236.0	
18 Acetone	43	2.998	2.998	0.000	87	914399	1000.0	1056.9	
19 Iodomethane	142	3.077	3.077	0.000	98	1575995	200.0	228.9	
22 Isopropyl alcohol	45	3.077	3.083	-0.006	1	464092	2000.0	2221.7	a
20 Carbon disulfide	76	3.114	3.120	-0.006	99	2850970	200.0	236.8	
21 3-Chloro-1-propene	76	3.236	3.242	-0.006	96	447657	200.0	234.4	
23 Methyl acetate	43	3.242	3.248	-0.006	99	824852	400.0	450.2	
24 Cyclopentene	67	3.260	3.266	-0.006	93	1654056	200.0	232.4	
29 Acetonitrile	41	3.309	3.309	0.000	96	1096556	2000.0	2429.7	a
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	271415	1000.0	1000.0	
26 Methylene Chloride	84	3.370	3.376	-0.006	89	804876	200.0	218.5	
27 2-Methyl-2-propanol	59	3.425	3.419	0.006	96	898055	2000.0	2203.2	
28 Methyl tert-butyl ether	73	3.529	3.535	-0.006	96	2056964	200.0	228.2	
30 trans-1,2-Dichloroethene	96	3.565	3.565	0.000	93	795117	200.0	226.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.632	3.638	-0.006	94	2214143	2000.0	2277.4	
32 Hexane	43	3.718	3.717	0.001	93	685827	200.0	252.9	
33 Isopropyl ether	45	3.925	3.931	-0.006	97	2081755	200.0	218.3	
35 Vinyl acetate	86	3.974	3.973	0.001	100	215236	400.0	443.4	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	74	1280328	200.0	229.2	
36 2-Chloro-1,3-butadiene	88	4.016	4.016	0.000	90	661720	200.0	233.1	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	89	1993822	200.0	216.8	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	175932	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.492	-0.006	94	415649	200.0	231.6	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	97	888592	200.0	226.7	
42 2-Butanone (MEK)	72	4.510	4.510	0.000	97	370564	1000.0	1078.7	
41 Ethyl acetate	70	4.504	4.510	-0.006	95	123268	400.0	420.1	
44 Methyl acrylate	55	4.565	4.565	0.000	100	484396	200.0	222.3	
43 Propionitrile	54	4.644	4.644	0.000	98	848054	2000.0	2236.6	
45 Tetrahydrofuran	72	4.730	4.729	0.001	91	175491	400.0	422.3	
46 Chlorobromomethane	128	4.736	4.742	-0.006	83	439271	200.0	223.2	
47 Methacrylonitrile	67	4.754	4.754	0.000	91	2401367	2000.0	2226.2	
48 Chloroform	83	4.784	4.784	0.000	99	1319220	200.0	225.1	
49 Cyclohexane	84	4.931	4.937	-0.006	90	1333622	200.0	228.8	
50 1,1,1-Trichloroethane	97	4.943	4.937	0.006	98	1356087	200.0	239.8	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	181438	50.0	57.6	
52 Carbon tetrachloride	117	5.065	5.065	0.000	97	1208842	200.0	244.5	
53 1,1-Dichloropropene	75	5.089	5.089	0.000	97	1025023	200.0	238.2	
56 Isobutyl alcohol	74	5.199	5.199	0.000	94	88200	5000.0	6390.6	
54 Benzene	78	5.290	5.290	0.000	96	2907428	200.0	233.8	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	176762	50.0	60.3	
57 Isopropyl acetate	43	5.327	5.327	0.000	96	1826824	200.0	226.0	
58 Tert-amyl methyl ether	87	5.339	5.345	-0.006	91	633125	200.0	226.2	
59 1,2-Dichloroethane	62	5.382	5.382	0.000	97	837733	200.0	220.3	
60 n-Heptane	57	5.437	5.437	0.000	91	657035	200.0	233.2	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	393586	50.0	50.0	
62 n-Butanol	56	5.864	5.869	-0.005	88	501069	5000.0	5890.0	
63 Trichloroethene	95	5.943	5.943	0.000	96	788359	200.0	234.0	
65 Methylcyclohexane	83	6.077	6.071	0.006	95	1633663	200.0	231.7	
64 Ethyl acrylate	56	6.071	6.071	0.000	98	479271	200.0	243.5	
66 1,2-Dichloropropane	63	6.235	6.235	0.000	92	677752	200.0	226.6	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	30898	1000.0	1000.0	M
68 Methyl methacrylate	41	6.290	6.296	-0.006	85	939861	400.0	460.8	
69 1,4-Dioxane	88	6.339	6.333	0.006	86	182927	4000.0	4303.8	
70 n-Propyl acetate	43	6.345	6.345	0.000	98	770221	200.0	231.4	
71 Dibromomethane	93	6.370	6.369	0.001	95	450037	200.0	225.0	
72 Dichlorobromomethane	83	6.516	6.522	-0.006	99	965440	200.0	235.1	
73 2-Chloroethyl vinyl ether	63	6.845	6.845	0.000	89	332749	200.0	225.5	
74 2-Nitropropane	41	6.851	6.851	0.000	92	237934	400.0	457.3	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	1221469	4000.0	4661.7	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	90	1067716	200.0	236.5	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	2981483	1000.0	1141.1	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	639250	50.0	59.3	
79 Toluene	91	7.345	7.351	-0.006	93	3085741	200.0	234.2	
80 trans-1,3-Dichloropropene	75	7.692	7.698	-0.006	98	928837	200.0	237.0	
81 Ethyl methacrylate	69	7.711	7.711	0.000	88	767325	200.0	241.8	
82 1,1,2-Trichloroethane	83	7.912	7.918	-0.006	96	488174	200.0	225.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	879952	200.0	238.3	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	90	911348	200.0	227.5	
85 2-Hexanone	43	8.174	8.174	0.000	95	1898172	1000.0	1140.7	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	800945	200.0	224.5	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	758979	200.0	240.3	
88 Ethylene Dibromide	107	8.528	8.527	0.001	99	624224	200.0	232.3	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	352250	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	2041430	200.0	232.3	
92 Ethylbenzene	106	9.204	9.204	0.000	98	1138618	200.0	237.6	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.222	0.001	96	851798	200.0	242.7	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	1383770	200.0	236.6	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	437313	200.0	234.5	
95 o-Xylene	106	9.820	9.820	0.000	95	1425714	200.0	233.4	
96 Styrene	104	9.851	9.850	0.001	96	2242792	200.0	235.3	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	943288	200.0	241.8	
98 Bromoform	173	10.088	10.088	0.000	98	491016	200.0	238.8	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	4005467	200.0	244.6	
$ 100 4-Bromofluorobenzene	174	10.417	10.417	0.000	96	200809	50.0	57.5	
101 Bromobenzene	156	10.564	10.564	0.000	92	929815	200.0	232.8	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	813471	200.0	233.4	
103 N-Propylbenzene	91	10.625	10.625	0.000	100	4400321	200.0	246.2	
104 1,2,3-Trichloropropane	110	10.649	10.649	0.000	97	233908	200.0	232.8	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	93	187256	200.0	236.1	
106 2-Chlorotoluene	91	10.741	10.740	0.001	92	2897624	200.0	241.5	
107 4-Ethyltoluene	105	10.741	10.740	0.001	89	3524347	200.0	234.4	
108 1,3,5-Trimethylbenzene	105	10.808	10.808	0.000	94	3346980	200.0	253.1	
109 4-Chlorotoluene	91	10.856	10.856	0.000	96	2435355	200.0	239.3	
110 Butyl Methacrylate	87	10.899	10.899	0.000	88	913437	200.0	247.6	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	2930675	200.0	262.7	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	3374215	200.0	247.6	
113 sec-Butylbenzene	105	11.308	11.307	0.001	99	4652275	200.0	261.3	
114 4-Isopropyltoluene	119	11.442	11.442	0.000	98	4049655	200.0	257.8	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	1841981	200.0	236.4	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	203497	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	1809471	200.0	231.1	
118 Benzyl chloride	91	11.667	11.667	0.000	99	1452335	200.0	240.5	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	94	3165421	200.0	226.8	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	1999034	200.0	231.7	a
121 n-Butylbenzene	92	11.801	11.795	0.006	97	2005724	200.0	248.9	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	98	1800117	200.0	232.7	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	3634463	200.0	236.8	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	94	162531	200.0	226.9	
125 1,3,5-Trichlorobenzene	180	12.643	12.643	0.000	98	1518526	200.0	223.3	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	1538270	200.0	232.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	844813	200.0	261.6	
128 Naphthalene	128	13.332	13.331	0.001	99	3492764	200.0	230.6	
129 1,2,3-Trichlorobenzene	180	13.527	13.527	0.001	96	1501784	200.0	232.8	
S 130 1,2-Dichloroethene, Total	100				0		400.0	452.8	
S 131 Xylenes, Total	100				0		400.0	470.0	
S 132 Total BTEX	1				0		1000.0	1175.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	5.00	Units: uL	
GASES Li_00256	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

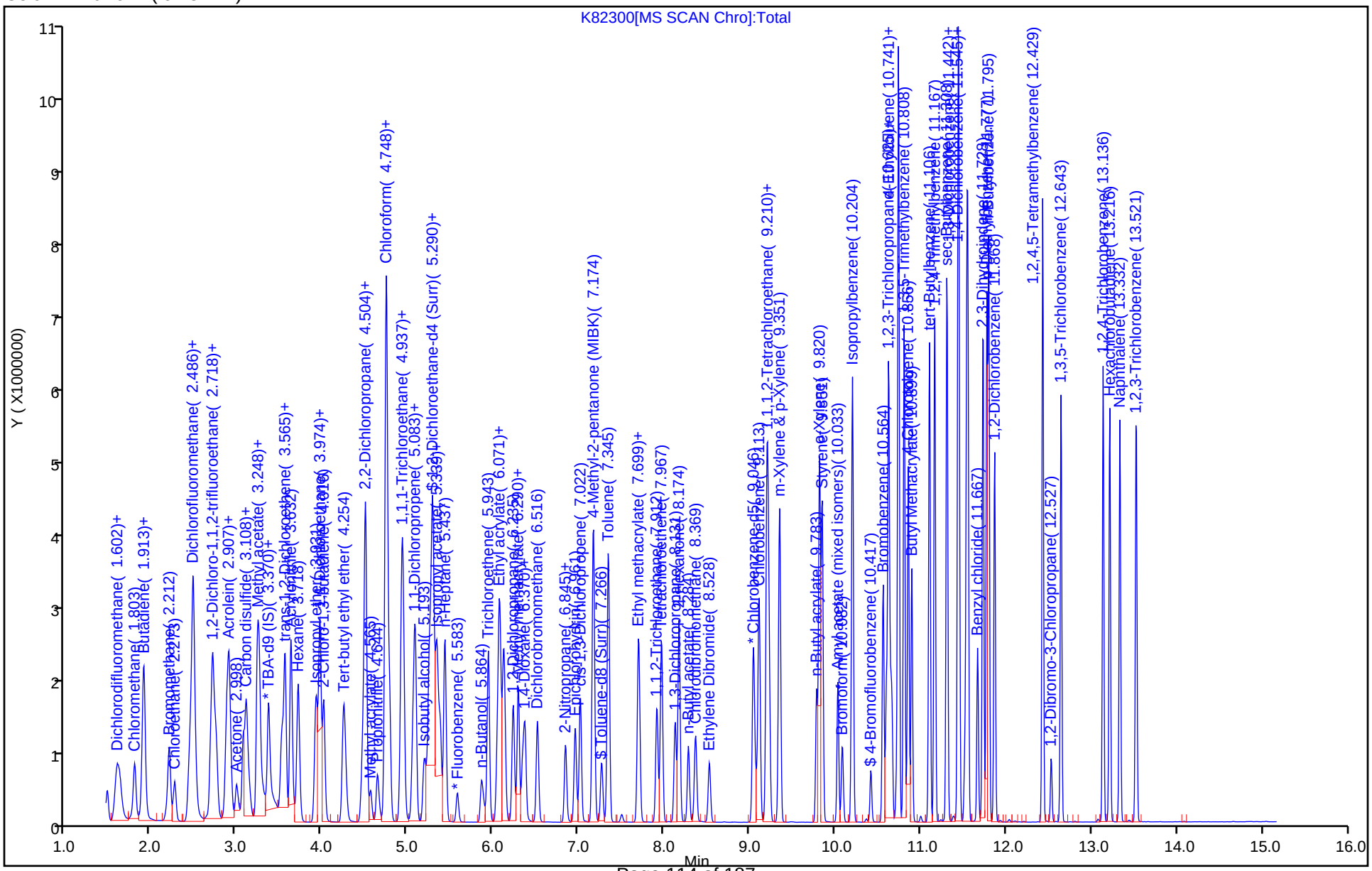
Report Date: 22-Apr-2018 22:31:50 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D

Injection Date:	21-Apr-2018 07:42:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	STD200			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

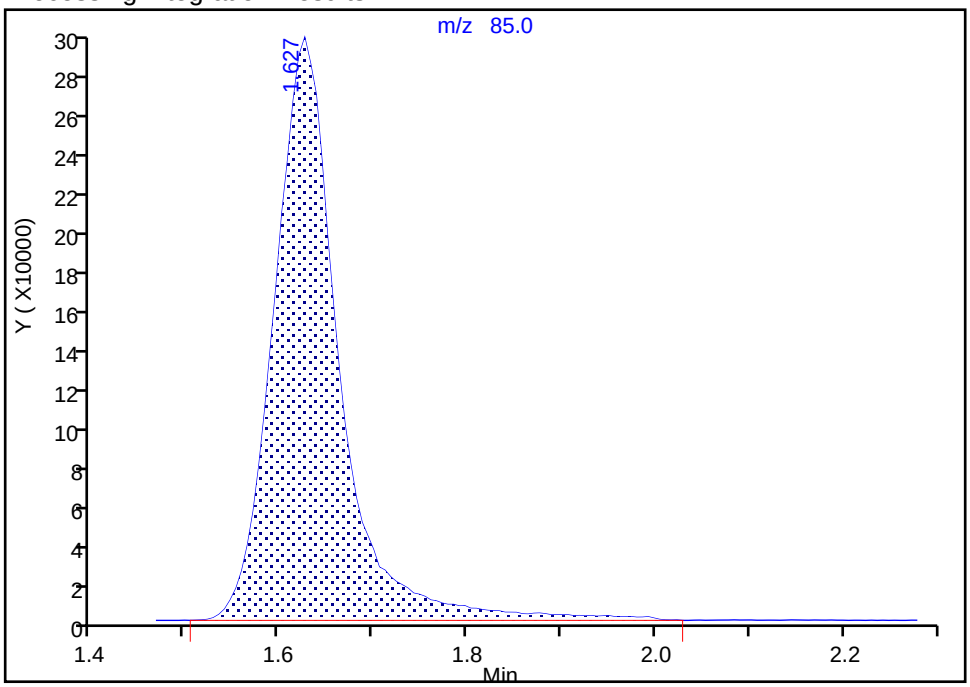
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

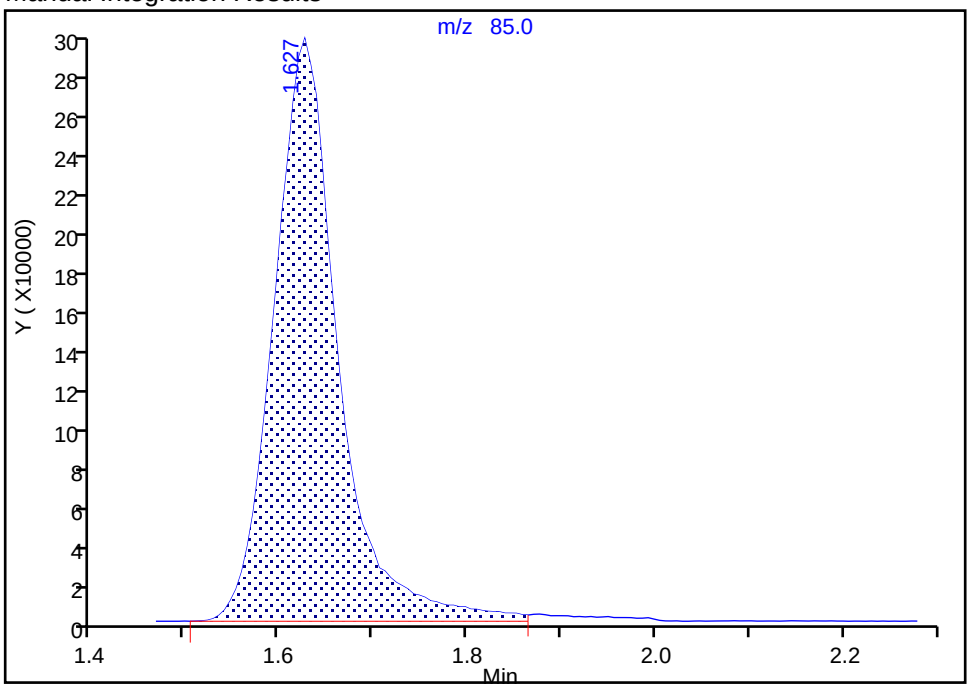
Processing Integration Results

RT: 1.63
Area: 1409043
Amount: 209.0964
Amount Units: ug/l



Manual Integration Results

RT: 1.63
Area: 1390269
Amount: 208.8443
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:09:06
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

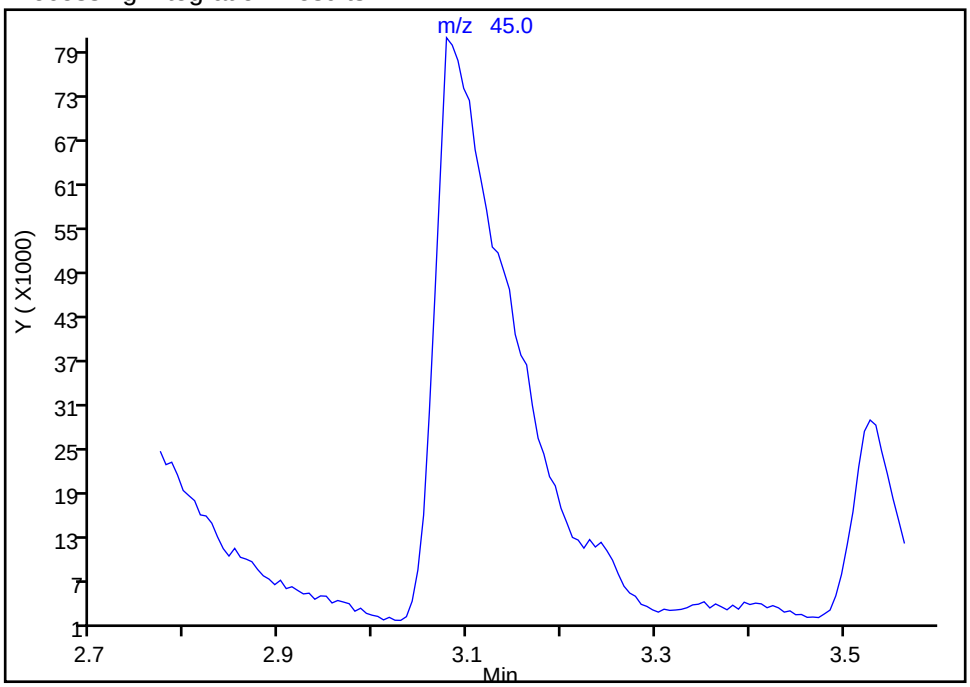
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

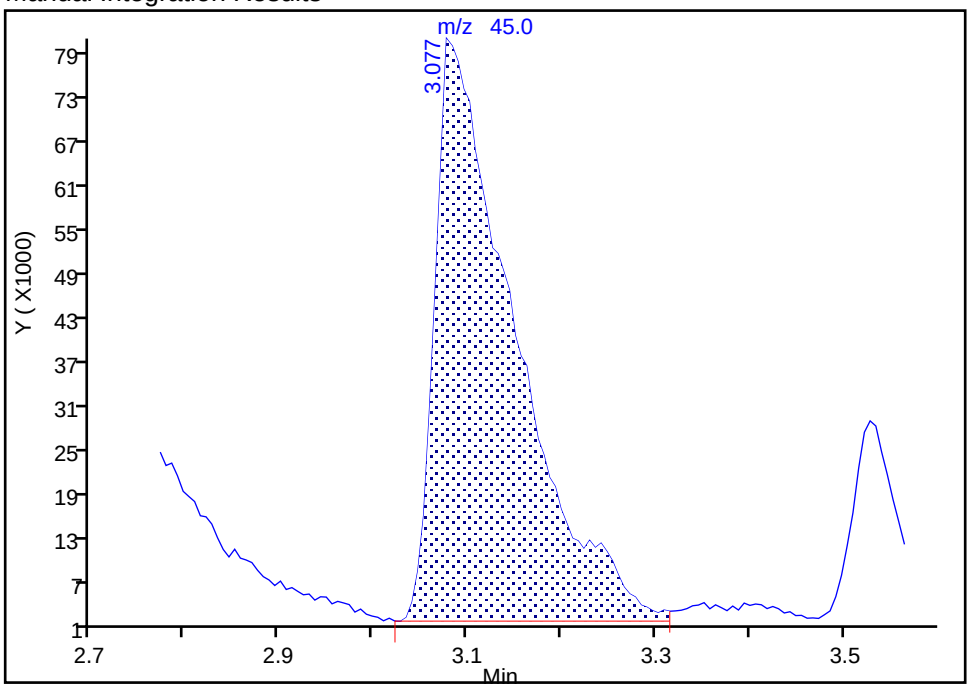
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.08
Area: 464092
Amount: 2221.6978
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:52:42
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

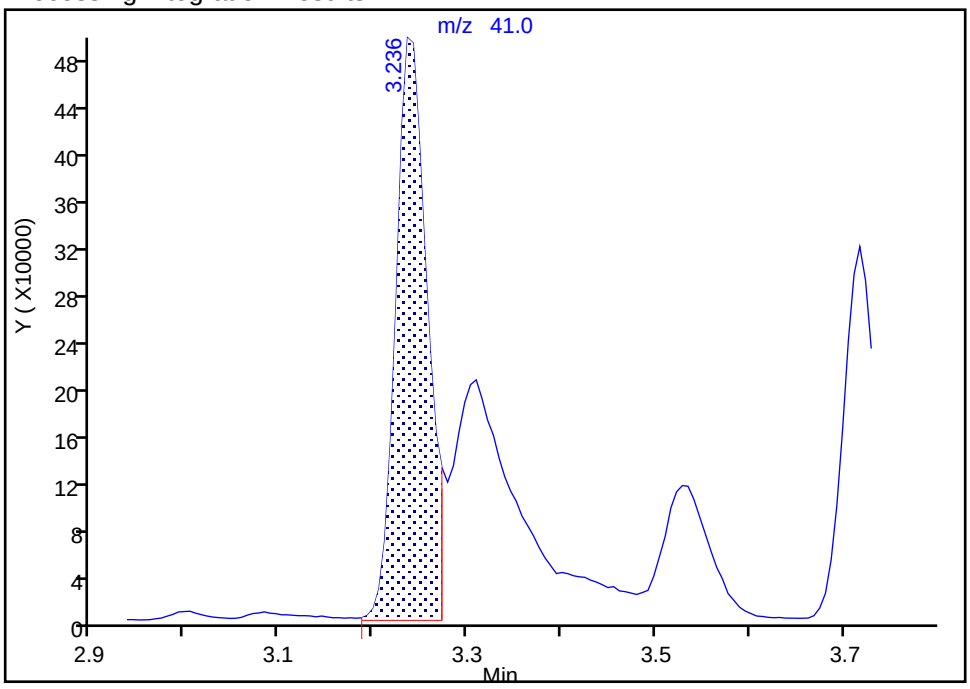
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

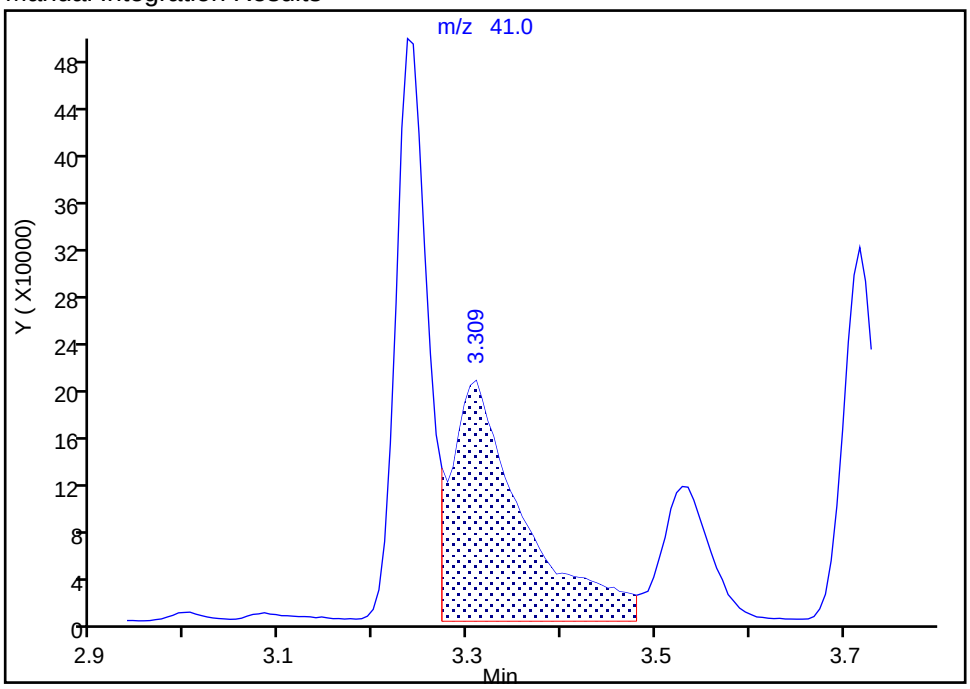
Processing Integration Results

RT: 3.24
Area: 1164811
Amount: 2089.2632
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 1096556
Amount: 2429.6691
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:52:48
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

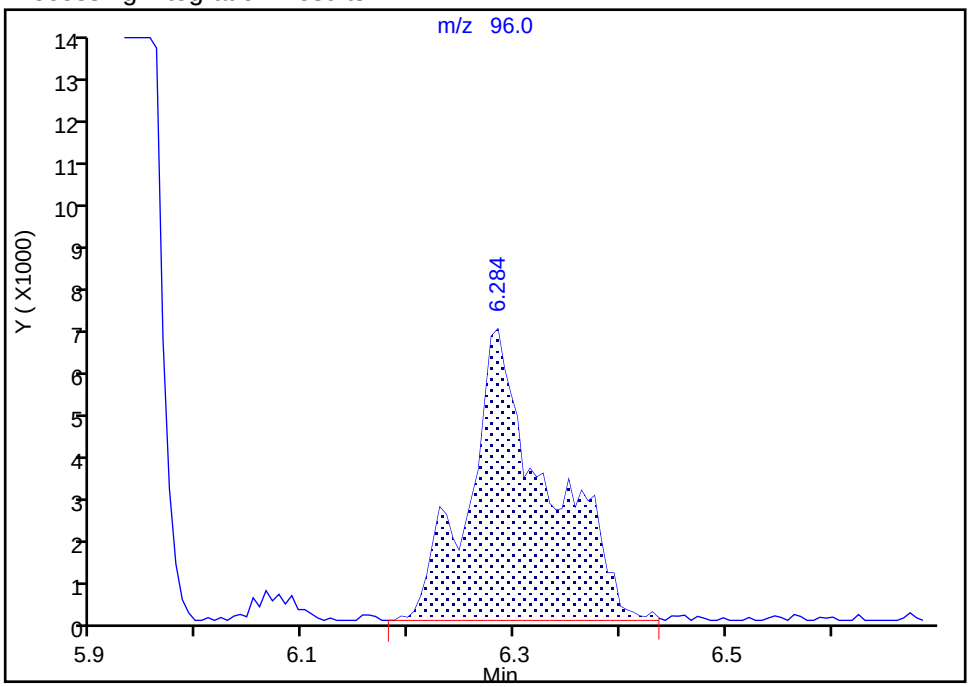
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

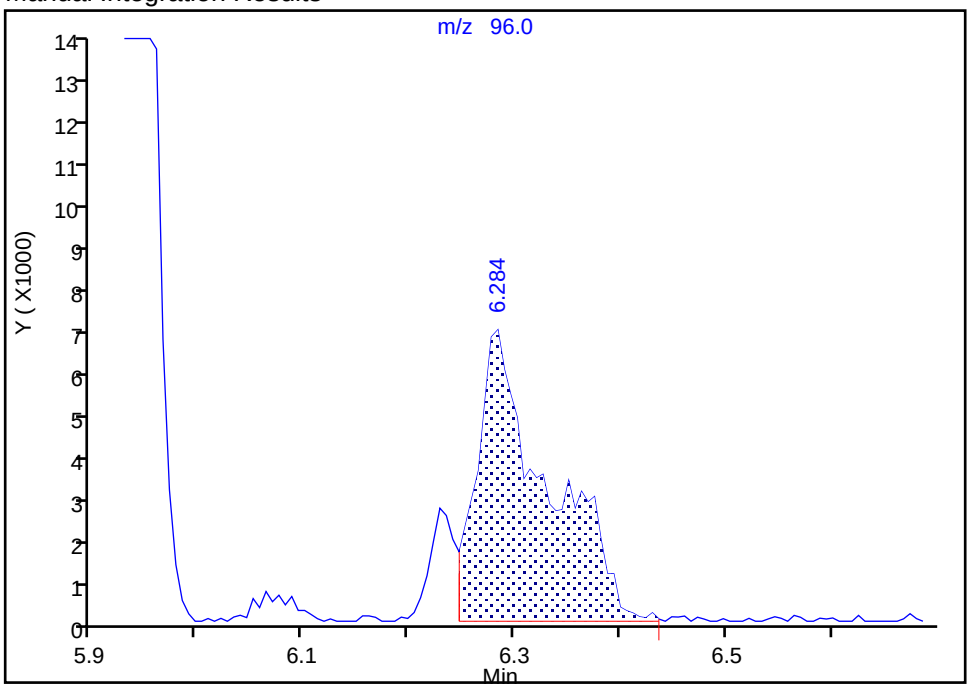
Processing Integration Results

RT: 6.28
Area: 34795
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.28
Area: 30898
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:58:19
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

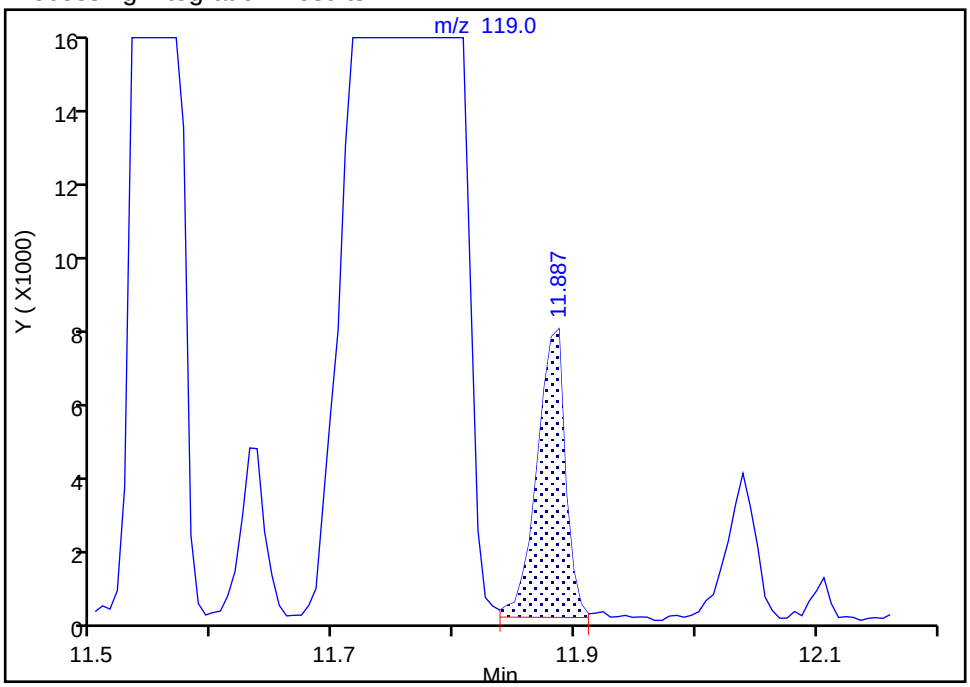
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82300.D
Injection Date: 21-Apr-2018 07:42:30 Instrument ID: CVOAMS9
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

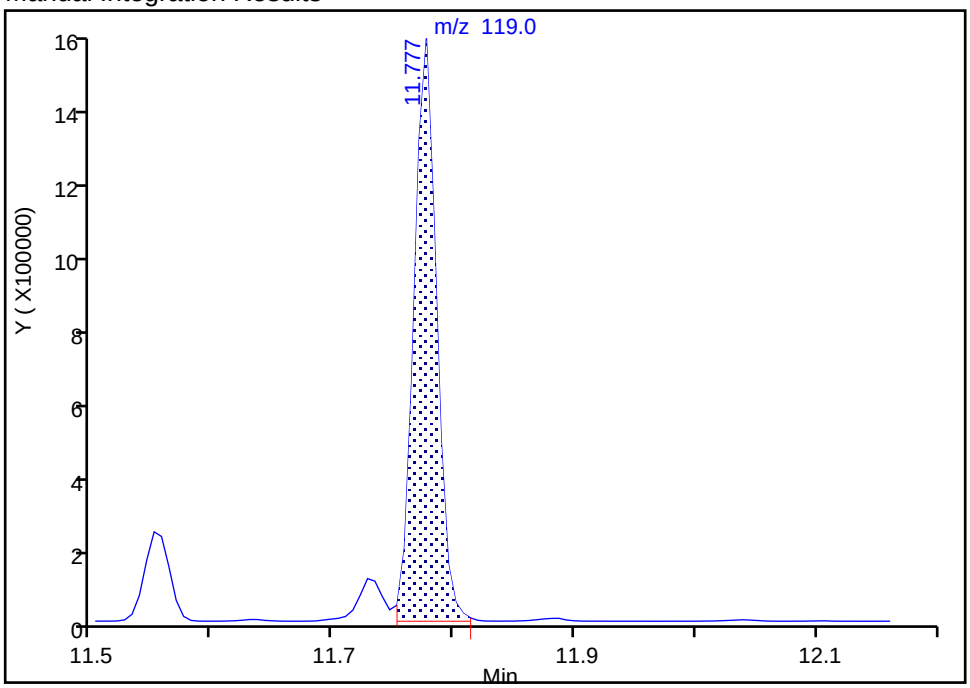
Processing Integration Results

RT: 11.89
Area: 12451
Amount: 2.240510
Amount Units: ug/l



Manual Integration Results

RT: 11.78
Area: 1999034
Amount: 231.7346
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:53:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 21-Apr-2018 08:07:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0070764-008
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 22:32:00 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: tupayachia Date: 21-Apr-2018 08:32:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.590	0.012	87	1738921	500.0	498.0	
2 Dichlorodifluoromethane	85	1.639	1.626	0.013	99	3716485	500.0	498.1	M
3 Chloromethane	50	1.821	1.803	0.018	99	3235979	500.0	498.2	
5 Butadiene	54	1.925	1.907	0.018	97	2647680	500.0	532.5	
4 Vinyl chloride	62	1.919	1.907	0.012	98	3252084	500.0	500.9	
6 Bromomethane	94	2.218	2.212	0.006	99	2623628	500.0	485.7	
7 Chloroethane	64	2.285	2.273	0.012	100	1629405	500.0	497.6	
9 Dichlorofluoromethane	67	2.480	2.468	0.012	99	4439412	500.0	464.6	
8 Trichlorofluoromethane	101	2.498	2.486	0.012	98	4207662	500.0	495.9	
10 Pentane	72	2.498	2.498	0.000	96	644307	1000.0	962.1	
12 Ethanol	46	2.699	2.687	0.012	87	431300	20000	18710	
11 Ethyl ether	59	2.699	2.693	0.006	94	1359159	500.0	478.0	
13 2-Methyl-1,3-butadiene	53	2.724	2.718	0.006	96	1595256	500.0	488.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.748	0.012	89	2021149	500.0	481.4	
15 Acrolein	56	2.882	2.876	0.006	95	298249	600.0	547.1	
16 1,1,2-Trichloro-1,2,2-trif	101	2.900	2.888	0.012	98	2631394	500.0	464.0	
17 1,1-Dichloroethene	96	2.925	2.919	0.006	97	2120050	500.0	495.1	
18 Acetone	43	3.004	2.998	0.006	87	2546708	2500.0	2193.3	
19 Iodomethane	142	3.083	3.077	0.006	99	4406580	500.0	482.6	
22 Isopropyl alcohol	45	3.089	3.083	0.006	2	1325334	5000.0	4682.5	Ma
20 Carbon disulfide	76	3.120	3.120	0.000	100	7828280	500.0	490.2	
21 3-Chloro-1-propene	76	3.248	3.242	0.006	95	1298603	500.0	512.6	
23 Methyl acetate	43	3.248	3.248	0.000	99	2350296	1000.0	946.7	
24 Cyclopentene	67	3.272	3.266	0.006	94	4601331	500.0	487.3	
29 Acetonitrile	41	3.309	3.309	0.000	95	3007230	5000.0	4917.7	a
* 25 TBA-d9 (IS)	65	3.358	3.352	0.006	0	367755	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.376	0.006	90	2267418	500.0	464.2	
27 2-Methyl-2-propanol	59	3.431	3.419	0.012	98	2607412	5000.0	4721.1	
28 Methyl tert-butyl ether	73	3.534	3.535	-0.001	96	5572595	500.0	466.1	
30 trans-1,2-Dichloroethene	96	3.571	3.565	0.006	93	2158507	500.0	462.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	94	6155659	5000.0	4773.3	
32 Hexane	43	3.723	3.717	0.006	93	1753188	500.0	487.4	
33 Isopropyl ether	45	3.937	3.931	0.006	97	5888682	500.0	465.6	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	74	3512423	500.0	474.0	
35 Vinyl acetate	86	3.980	3.973	0.007	100	611218	1000.0	929.3	
36 2-Chloro-1,3-butadiene	88	4.022	4.016	0.006	90	1845762	500.0	490.2	
37 Tert-butyl ethyl ether	59	4.254	4.248	0.006	90	5734878	500.0	470.1	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	236106	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.492	0.000	94	1130284	500.0	474.8	
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	98	2485563	500.0	478.0	
41 Ethyl acetate	70	4.510	4.510	0.000	97	366131	1000.0	929.9	
42 2-Butanone (MEK)	72	4.516	4.510	0.006	96	1058728	2500.0	2296.5	
44 Methyl acrylate	55	4.571	4.565	0.006	100	1415871	500.0	490.0	
43 Propionitrile	54	4.650	4.644	0.006	98	2424610	5000.0	4719.4	
45 Tetrahydrofuran	72	4.735	4.729	0.006	96	508330	1000.0	911.4	
46 Chlorobromomethane	128	4.742	4.742	0.000	82	1273941	500.0	488.1	
47 Methacrylonitrile	67	4.760	4.754	0.006	92	7072143	5000.0	4942.8	
48 Chloroform	83	4.790	4.784	0.006	99	3711522	500.0	477.4	
50 1,1,1-Trichloroethane	97	4.949	4.937	0.012	97	3688095	500.0	491.6	
49 Cyclohexane	84	4.937	4.937	0.000	90	3599086	500.0	465.1	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	97	204895	50.0	49.0	
52 Carbon tetrachloride	117	5.071	5.065	0.006	98	3358724	500.0	512.1	
53 1,1-Dichloropropene	75	5.095	5.089	0.006	97	2810143	500.0	492.4	
56 Isobutyl alcohol	74	5.199	5.199	0.000	93	257835	12500	13788	
54 Benzene	78	5.296	5.290	0.006	96	8104906	500.0	480.6	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.000	0	206544	50.0	53.1	M
57 Isopropyl acetate	43	5.333	5.327	0.006	96	5328646	500.0	497.0	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	92	1869432	500.0	503.5	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	97	2417080	500.0	479.3	
60 n-Heptane	57	5.437	5.437	0.000	91	1708319	500.0	456.7	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	522059	50.0	50.0	
62 n-Butanol	56	5.869	5.869	0.000	88	1578822	12500	13697	
63 Trichloroethene	95	5.949	5.943	0.006	97	2202078	500.0	492.8	
64 Ethyl acrylate	56	6.077	6.071	0.006	78	1334268	500.0	511.1	a
65 Methylcyclohexane	83	6.077	6.071	0.006	94	4358031	500.0	465.6	
66 1,2-Dichloropropane	63	6.241	6.235	0.006	92	1918282	500.0	483.5	
* 67 1,4-Dioxane-d8	96	6.284	6.284	0.000	0	45687	1000.0	1000.0	M
68 Methyl methacrylate	41	6.296	6.296	0.000	86	2759376	1000.0	1019.9	
69 1,4-Dioxane	88	6.345	6.333	0.012	27	508319	10000	8088.2	
70 n-Propyl acetate	43	6.351	6.345	0.006	99	2267744	500.0	513.7	
71 Dibromomethane	93	6.375	6.369	0.006	96	1319972	500.0	497.5	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	2831025	500.0	519.7	
73 2-Chloroethyl vinyl ether	63	6.851	6.845	0.006	95	983629	500.0	502.7	
74 2-Nitropropane	41	6.851	6.851	0.000	90	768007	1000.0	1112.9	
75 Epichlorohydrin	57	6.967	6.961	0.006	99	3467474	10000	9860.7	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	91	3088646	500.0	504.4	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	96	8365424	2500.0	2385.7	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	706025	50.0	48.3	
79 Toluene	91	7.351	7.351	0.000	93	8567637	500.0	479.5	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	98	2733408	500.0	514.2	
81 Ethyl methacrylate	69	7.711	7.711	-0.001	88	2216316	500.0	515.1	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	1414170	500.0	481.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	97	2420988	500.0	483.3	
84 1,3-Dichloropropane	76	8.131	8.131	0.000	89	2639253	500.0	485.7	
85 2-Hexanone	43	8.174	8.174	0.000	95	5363216	2500.0	2401.5	
86 n-Butyl acetate	43	8.284	8.284	0.000	99	2360911	500.0	487.9	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	2276080	500.0	531.4	
88 Ethylene Dibromide	107	8.534	8.527	0.007	99	1818661	500.0	499.1	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	82	477732	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	97	5811100	500.0	487.5	
92 Ethylbenzene	106	9.204	9.204	0.000	98	3209924	500.0	493.9	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.222	0.006	97	2508950	500.0	527.2	
93 m-Xylene & p-Xylene	106	9.350	9.350	0.000	0	3888694	500.0	490.2	
94 n-Butyl acrylate	73	9.783	9.783	0.000	98	1329207	500.0	525.6	
95 o-Xylene	106	9.820	9.820	0.000	95	4080656	500.0	492.7	
96 Styrene	104	9.850	9.850	0.000	96	6422101	500.0	496.8	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	91	2839458	500.0	514.1	
98 Bromoform	173	10.088	10.088	0.000	97	1517237	500.0	544.1	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	11114089	500.0	500.4	
$ 100 4-Bromofluorobenzene	174	10.423	10.417	0.006	97	230101	50.0	48.6	
101 Bromobenzene	156	10.564	10.564	0.000	91	2723772	500.0	481.9	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	2396886	500.0	485.9	
103 N-Propylbenzene	91	10.631	10.625	0.006	100	12214934	500.0	482.9	
104 1,2,3-Trichloropropane	110	10.655	10.649	0.006	98	677451	500.0	476.4	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	94	556327	500.0	495.5	
107 4-Ethyltoluene	105	10.747	10.740	0.006	89	10521378	500.0	494.3	
106 2-Chlorotoluene	91	10.747	10.740	0.006	95	8482907	500.0	499.5	
108 1,3,5-Trimethylbenzene	105	10.807	10.808	-0.001	94	9650015	500.0	515.5	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	6938442	500.0	481.8	
110 Butyl Methacrylate	87	10.899	10.899	0.000	89	2879398	500.0	551.3	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	8490425	500.0	537.7	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	9691103	500.0	502.5	a
113 sec-Butylbenzene	105	11.307	11.307	0.000	98	12715712	500.0	504.5	e
114 4-Isopropyltoluene	119	11.441	11.442	-0.001	97	11585541	500.0	521.1	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	5448058	500.0	494.0	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.515	0.006	95	288037	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	5385868	500.0	485.9	
118 Benzyl chloride	91	11.667	11.667	0.000	99	4653939	500.0	544.4	
119 2,3-Dihydroindene	117	11.734	11.728	0.006	94	9706621	500.0	491.4	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	6039454	500.0	494.6	a
121 n-Butylbenzene	92	11.801	11.795	0.006	98	5647585	500.0	495.2	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	5338635	500.0	487.6	
123 1,2,4,5-Tetramethylbenzene	119	12.435	12.429	0.006	97	11213434	500.0	516.1	
124 1,2-Dibromo-3-Chloropropan	75	12.527	12.533	-0.006	95	498291	500.0	491.5	
125 1,3,5-Trichlorobenzene	180	12.649	12.643	0.006	98	4666735	500.0	484.8	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	4492334	500.0	479.2	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	2466219	500.0	539.6	
128 Naphthalene	128	13.331	13.331	0.000	99	10267513	500.0	478.9	
129 1,2,3-Trichlorobenzene	180	13.526	13.527	0.000	96	4339553	500.0	475.3	
S 130 1,2-Dichloroethene, Total	100				0		1000.0	940.8	
S 131 Xylenes, Total	100				0		1000.0	982.9	
S 132 Total BTEX	1				0		2500.0	2436.9	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	6.00	Units: uL	
GASES Li_00256	Amount Added:	50.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	50.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 22:32:01 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9 Operator ID:

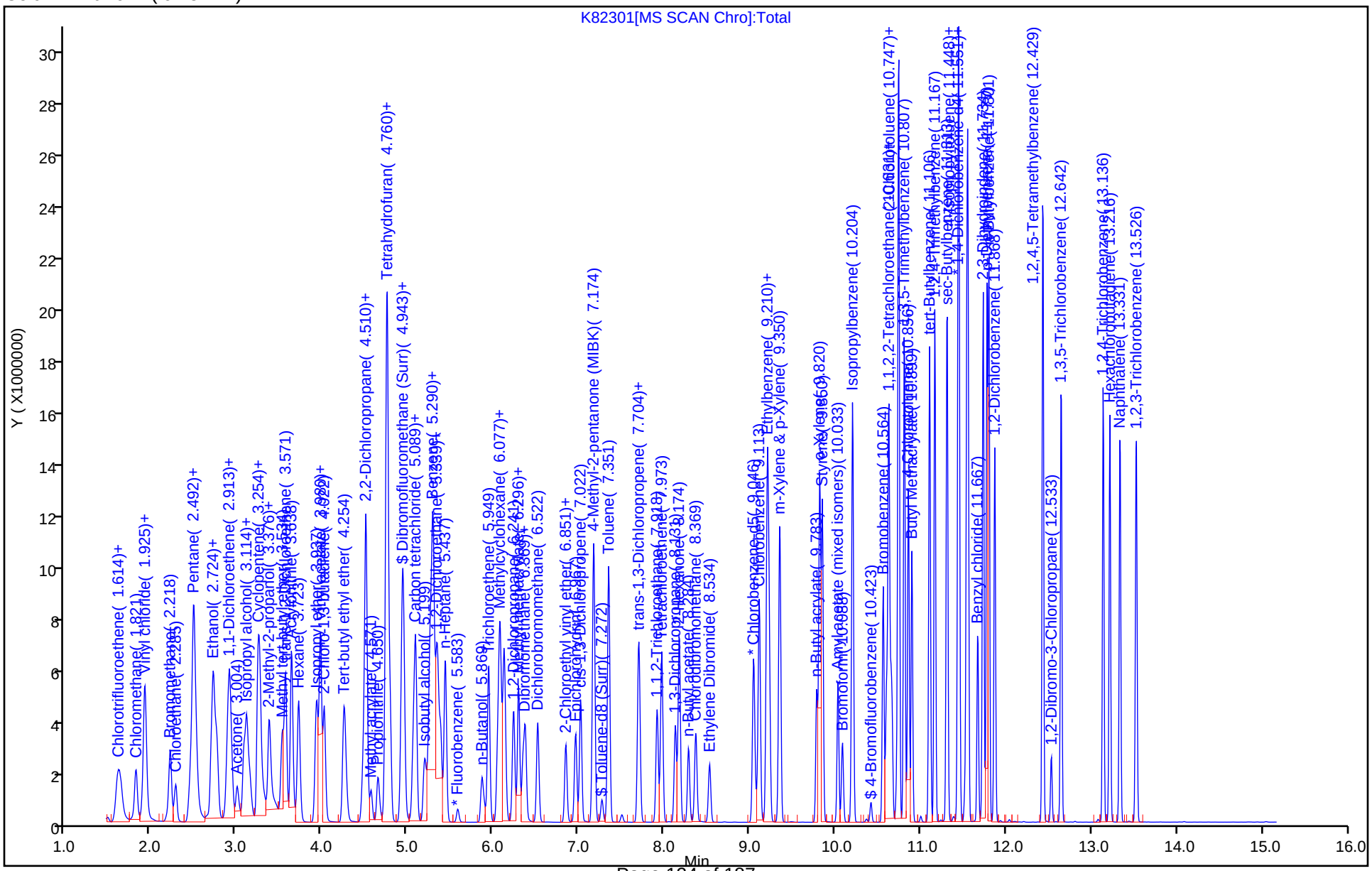
Lims ID: STD500 Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260S9 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

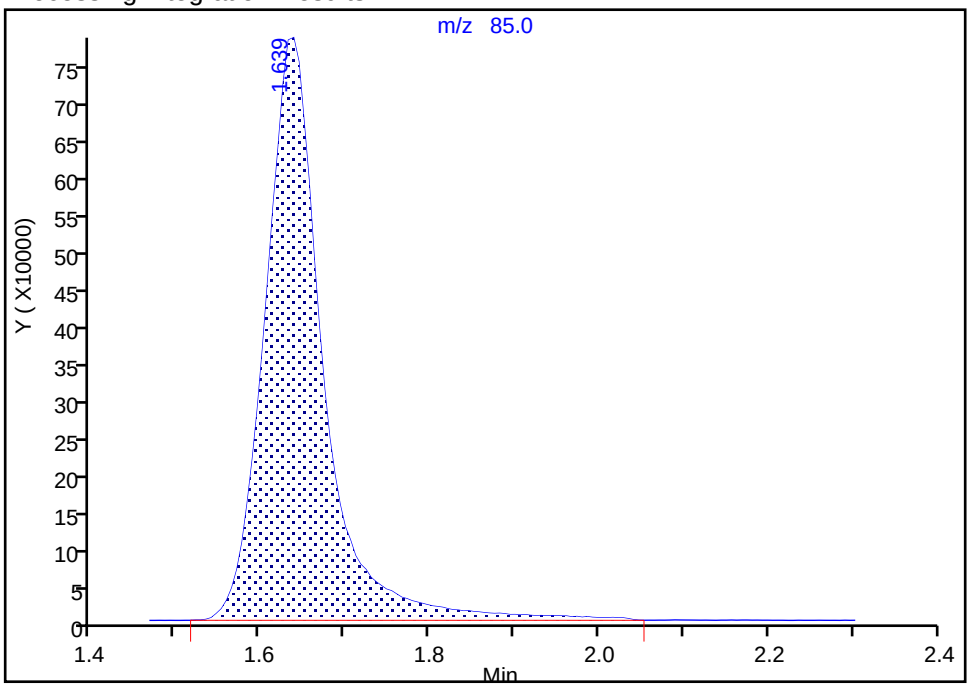
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

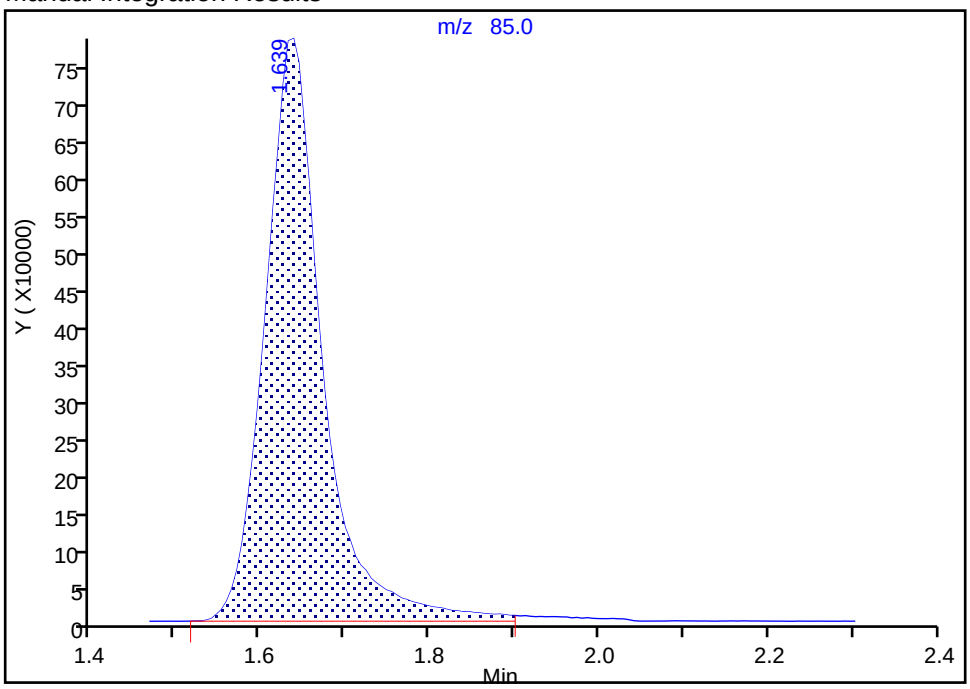
Processing Integration Results

RT: 1.64
Area: 3756420
Amount: 498.2303
Amount Units: ug/l



Manual Integration Results

RT: 1.64
Area: 3716485
Amount: 498.1382
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 22:09:52
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

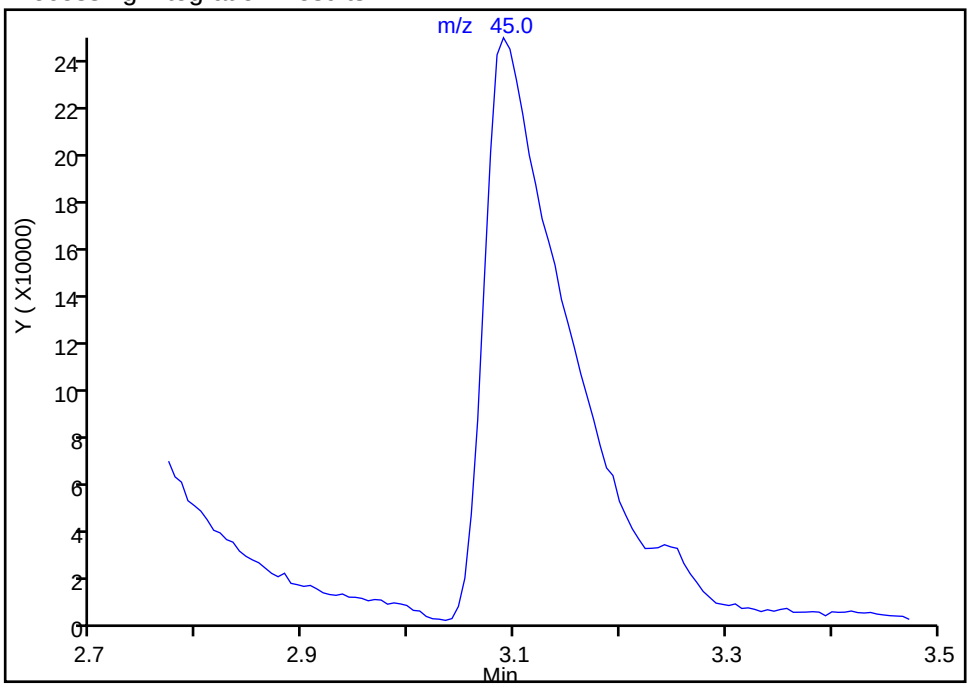
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

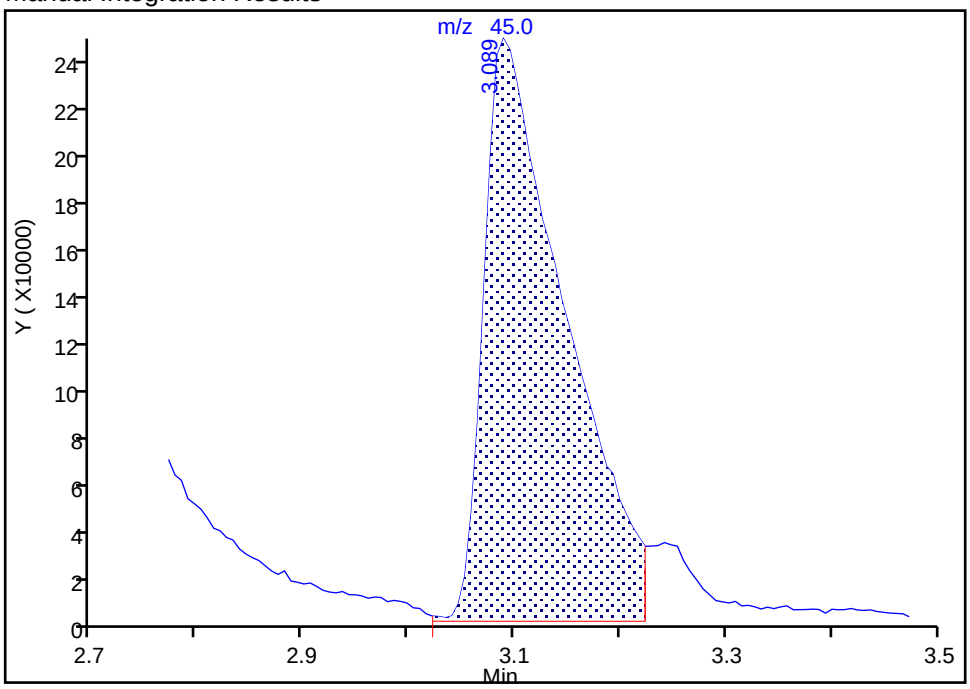
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.09
Area: 1325334
Amount: 4682.5400
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:55:54
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

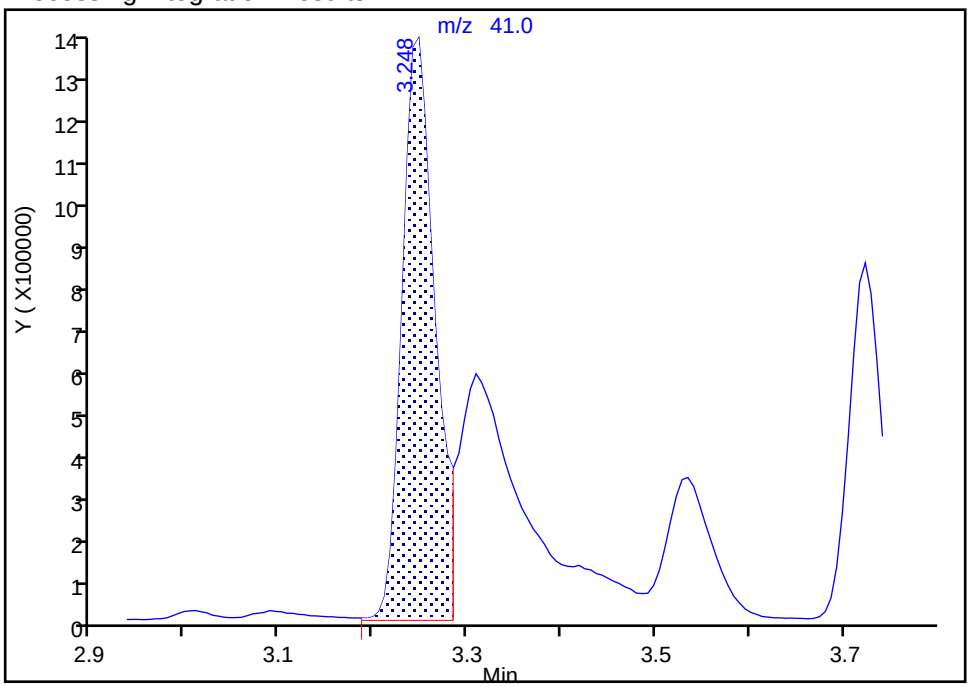
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D		
Injection Date:	21-Apr-2018 08:07:30	Instrument ID:	CVOAMS9
Lims ID:	STD500		
Client ID:			
Operator ID:		ALS Bottle#:	6 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

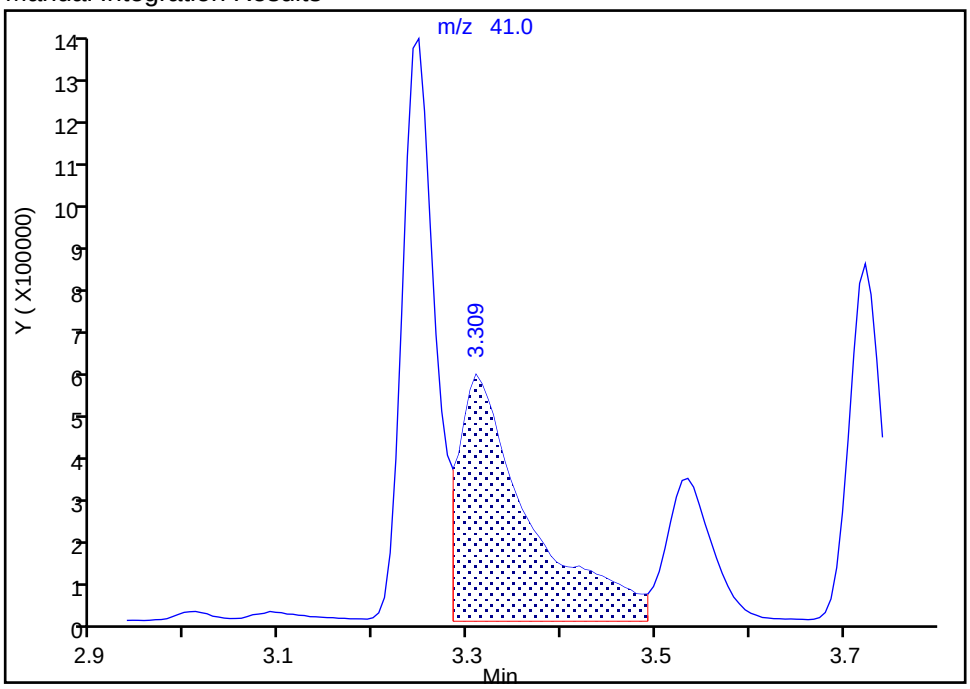
Processing Integration Results

RT: 3.25
Area: 3326990
Amount: 4988.6303
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 3007230
Amount: 4917.6568
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:56:02
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

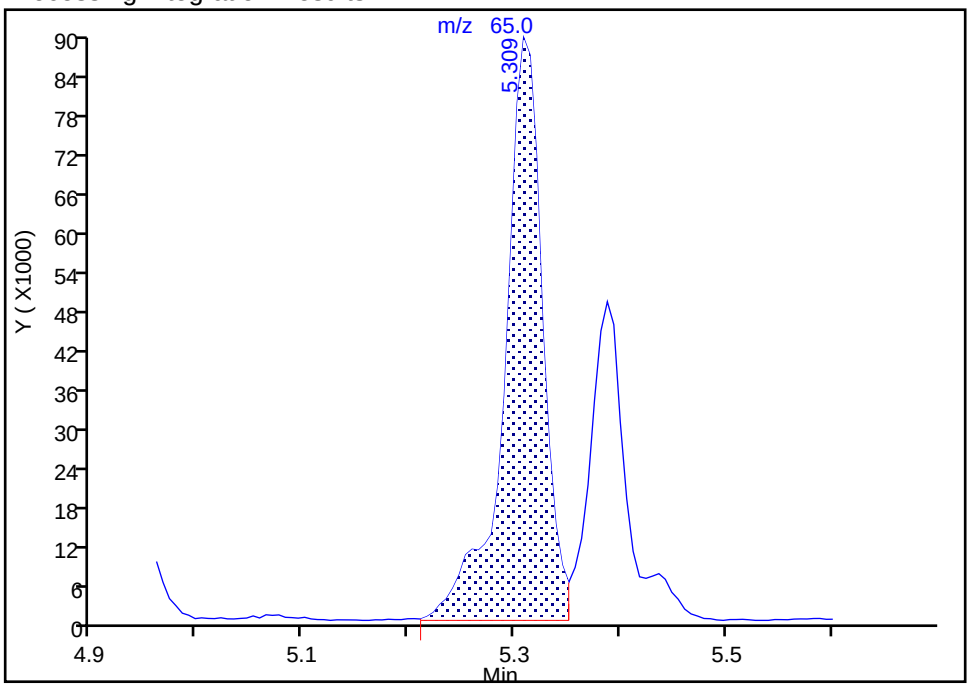
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D				
Injection Date:	21-Apr-2018 08:07:30	Instrument ID:	CVOAMS9		
Lims ID:	STD500				
Client ID:					
Operator ID:		ALS Bottle#:	6	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

$ 55 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

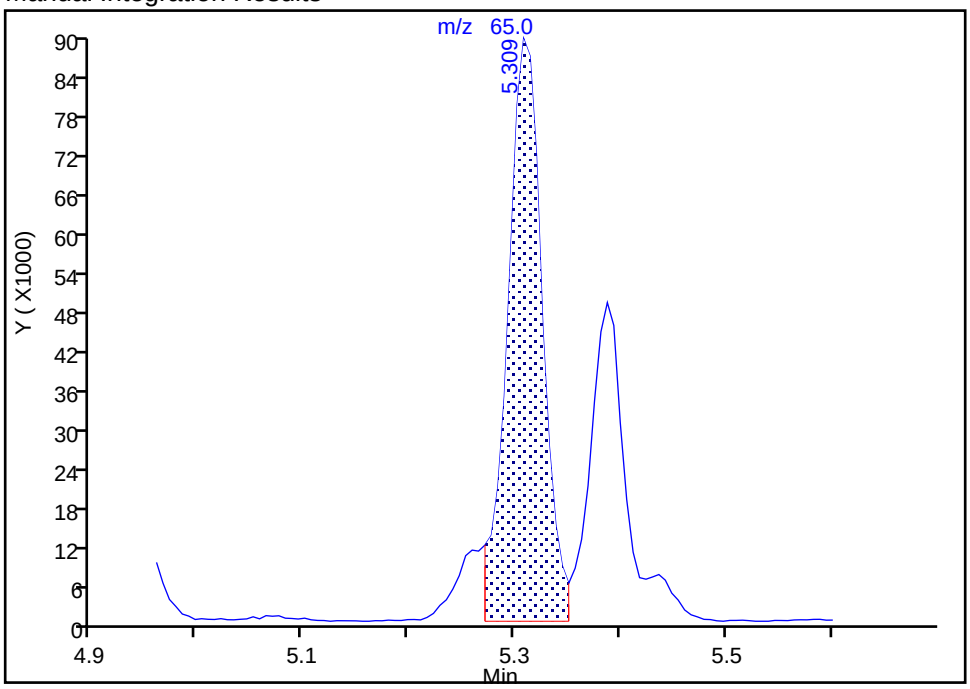
Processing Integration Results

RT: 5.31
Area: 225353
Amount: 57.034191
Amount Units: ug/l



Manual Integration Results

RT: 5.31
Area: 206544
Amount: 53.116699
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:57:10

Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

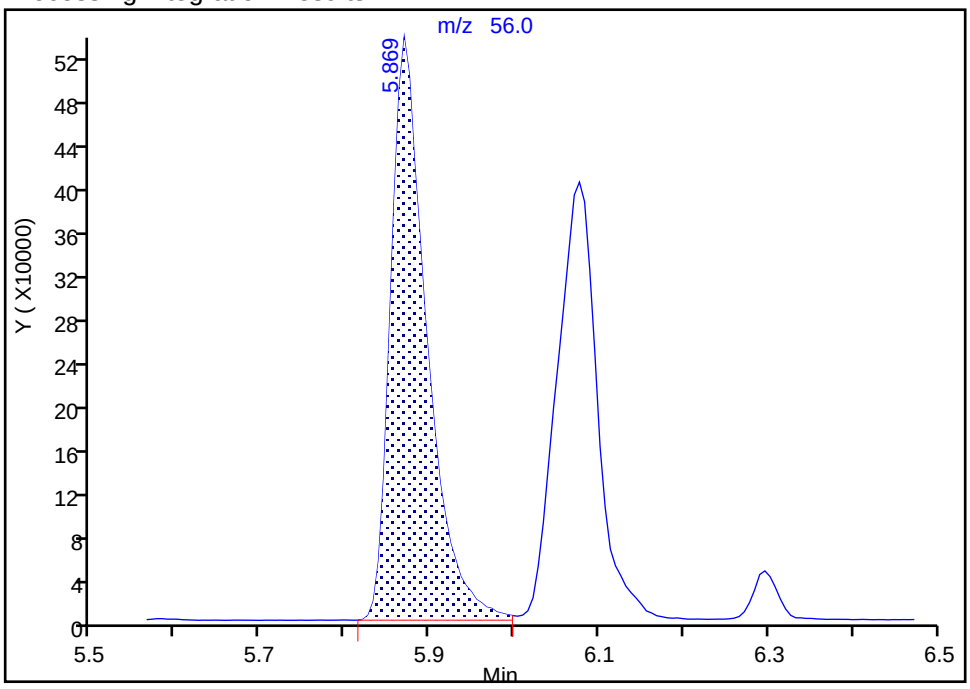
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

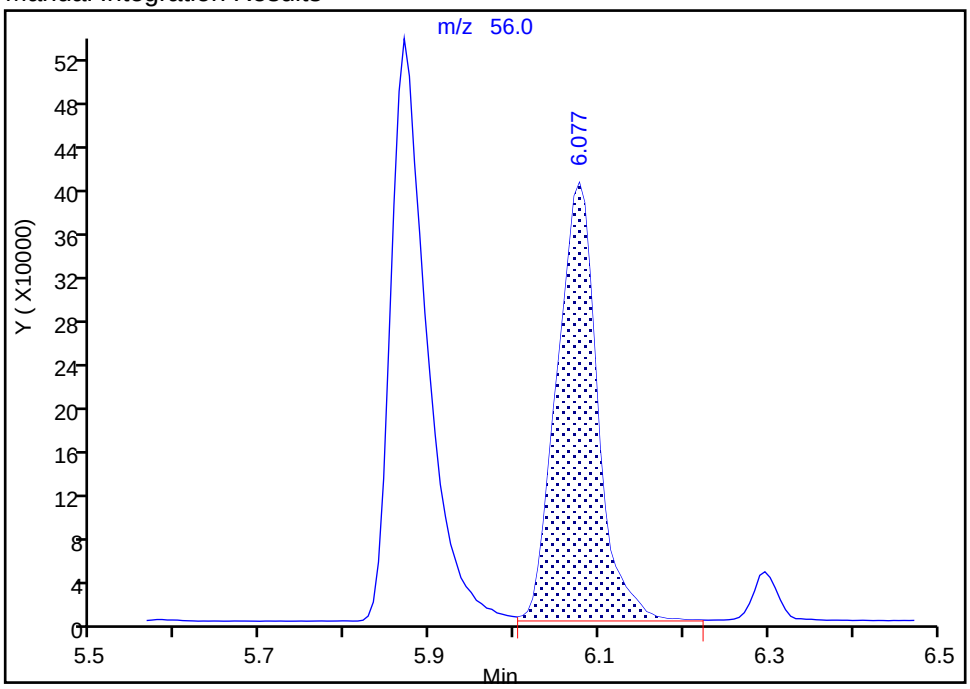
Processing Integration Results

RT: 5.87
Area: 1576918
Amount: 585.8716
Amount Units: ug/l



Manual Integration Results

RT: 6.08
Area: 1334268
Amount: 511.0781
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:56:21
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

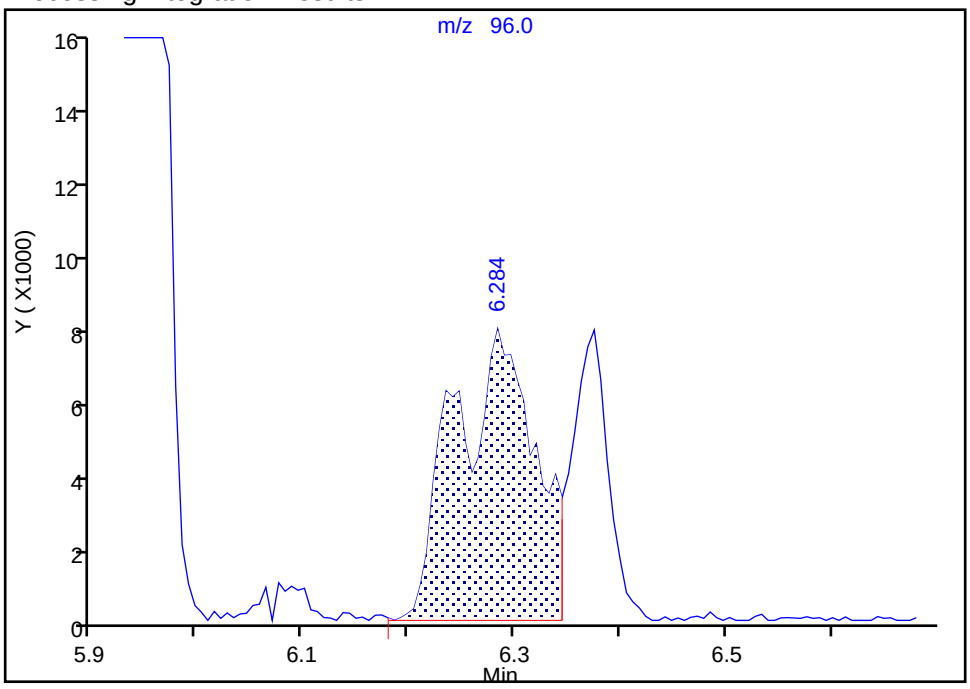
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

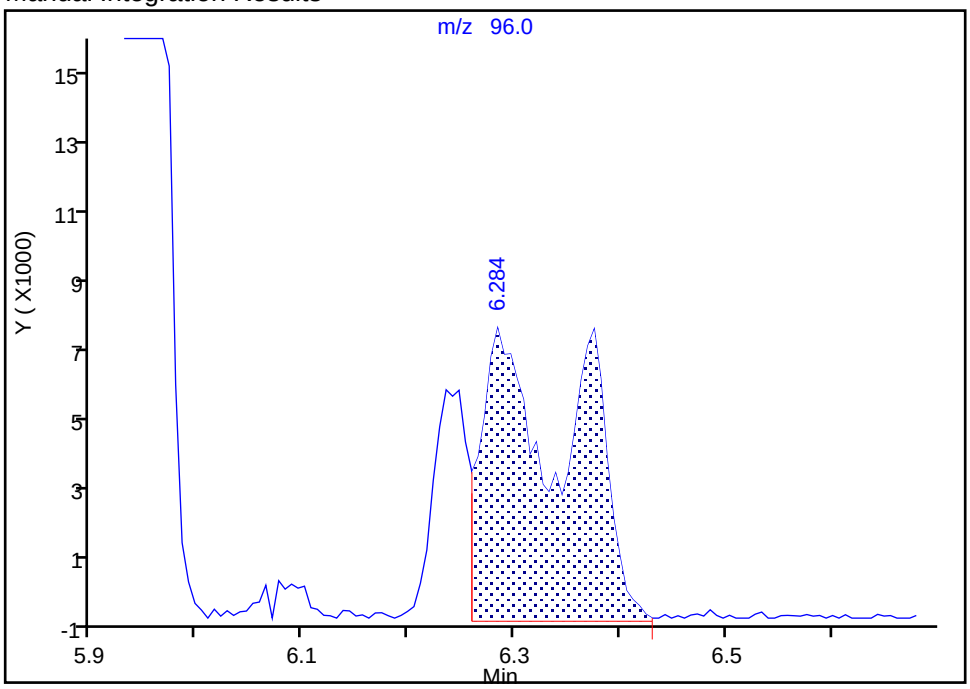
Processing Integration Results

RT: 6.28
Area: 40523
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.28
Area: 45687
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:57:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

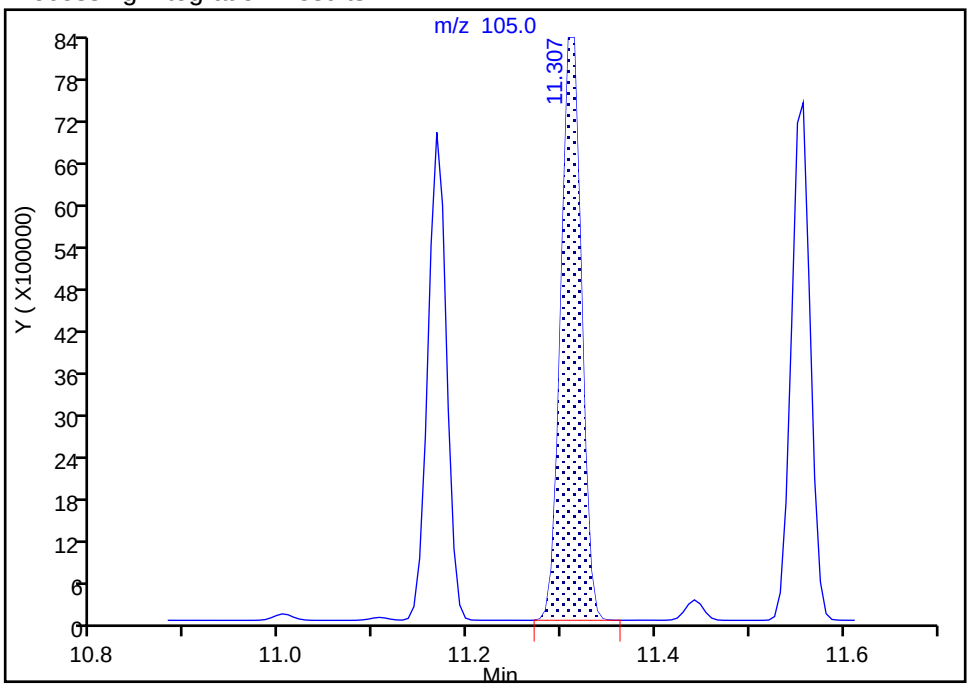
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D				
Injection Date:	21-Apr-2018 08:07:30	Instrument ID:	CVOAMS9		
Lims ID:	STD500				
Client ID:					
Operator ID:		ALS Bottle#:	6	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

112 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

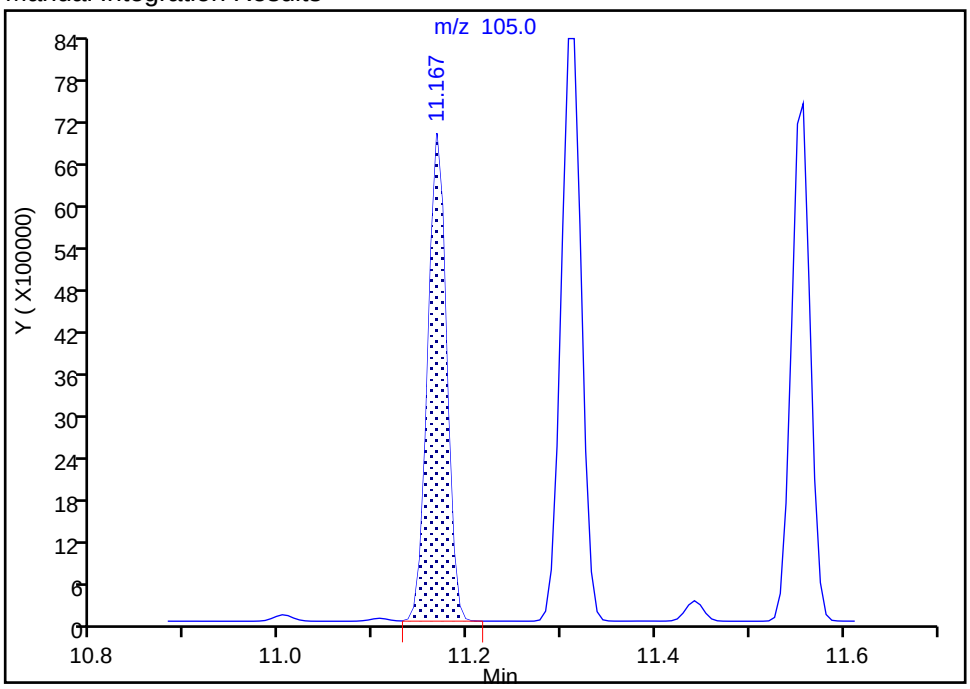
Processing Integration Results

RT: 11.31
Area: 12764329
Amount: 628.4537
Amount Units: ug/l



Manual Integration Results

RT: 11.17
Area: 9691103
Amount: 502.4868
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:56:43

Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

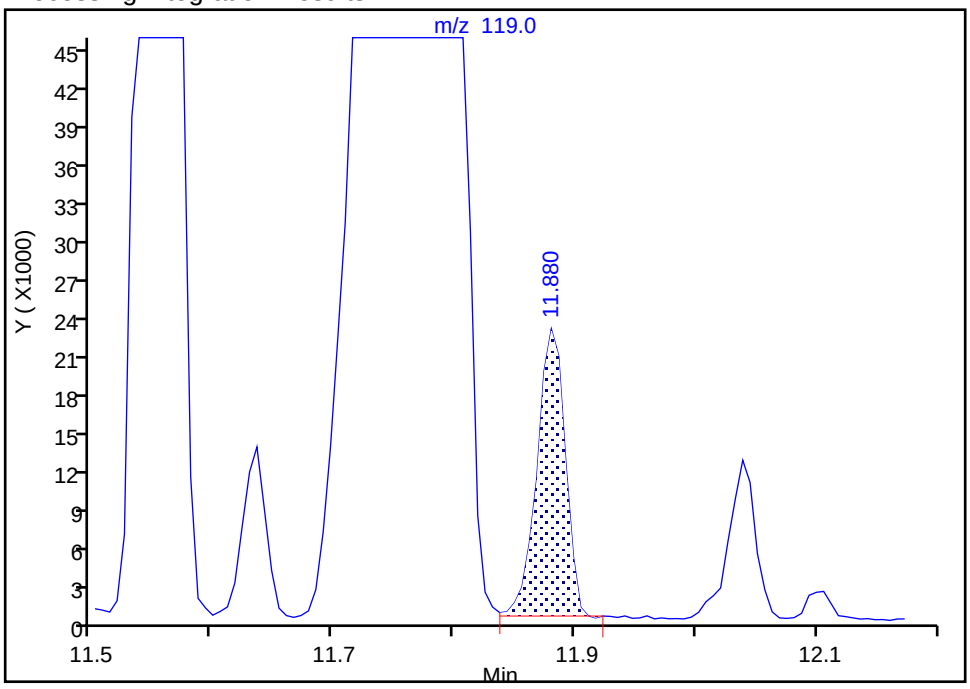
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D
Injection Date: 21-Apr-2018 08:07:30 Instrument ID: CVOAMS9
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

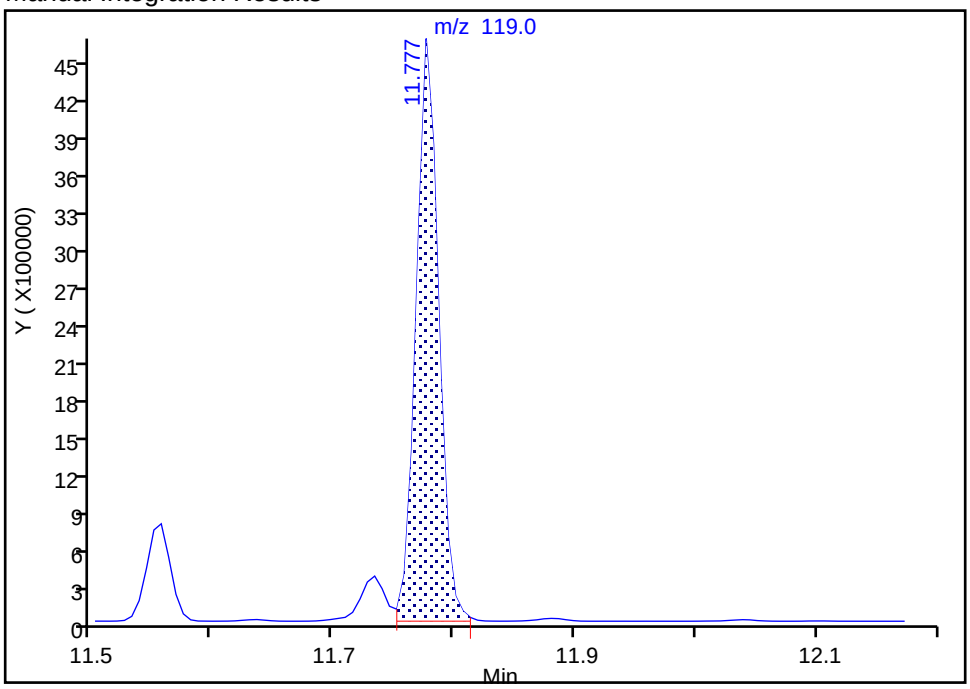
Processing Integration Results

RT: 11.88
Area: 36486
Amount: 3.573863
Amount Units: ug/l



Manual Integration Results

RT: 11.78
Area: 6039454
Amount: 494.6274
Amount Units: ug/l



Reviewer: delpolitov, 22-Apr-2018 21:56:55
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Lab Sample ID: CCVIS 460-515499/2 Calibration Date: 05/01/2018 06:28

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82844.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.2952		13.1	20.0	-34.4*	20.0
Dichlorodifluoromethane	QuaF		0.6894	0.1000	14.8	20.0	-26.2*	20.0
Chloromethane	Ave	0.6221	0.6821	0.1000	21.9	20.0	9.6	20.0
Butadiene	Ave	0.4762	0.5352		22.5	20.0	12.4	20.0
Vinyl chloride	Ave	0.6218	0.7070	0.1000	22.7	20.0	13.7	20.0
Bromomethane	Ave	0.5174	0.5439	0.1000	21.0	20.0	5.1	50.0
Chloroethane	Ave	0.3136	0.3510	0.1000	22.4	20.0	11.9	50.0
Dichlorofluoromethane	Ave	0.9152	1.051		23.0	20.0	14.9	20.0
Trichlorofluoromethane	Ave	0.8127	0.8193	0.1000	20.2	20.0	0.8	20.0
Pentane	Ave	1.821	1.668		36.6	40.0	-8.4	20.0
Ethanol	Ave	0.0627	0.0632		806	800	0.8	50.0
Ethyl ether	Ave	0.2723	0.2825		20.7	20.0	3.7	20.0
2-Methyl-1,3-butadiene	Ave	0.3126	0.3456		22.1	20.0	10.6	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.4021	0.3870		19.2	20.0	-3.8	20.0
Acrolein	Ave	1.482	1.525		309	300	2.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin2		0.4856	0.1000	18.3	20.0	-8.4	20.0
1,1-Dichloroethene	Ave	0.4101	0.3958	0.1000	19.3	20.0	-3.5	20.0
Acetone	Ave	1.229	1.145	0.0500	93.2	100	-6.8	50.0
Iodomethane	Ave	0.8745	0.7999		18.3	20.0	-8.5	20.0
Isopropyl alcohol	Ave	0.7696	0.7481		194	200	-2.8	50.0
Carbon disulfide	Ave	1.530	1.560	0.1000	20.4	20.0	2.0	50.0
Allyl chloride	Ave	0.2426	0.2439		20.1	20.0	0.5	20.0
Methyl acetate	Ave	6.750	6.574	0.1000	39.0	40.0	-2.6	20.0
Cyclopentene	Ave	0.9044	0.9832		21.7	20.0	8.7	20.0
Acetonitrile	Ave	1.663	1.551		187	200	-6.7	20.0
Methylene Chloride	Ave	0.4679	0.4569	0.1000	19.5	20.0	-2.3	20.0
2-Methyl-2-propanol	Ave	1.502	1.276		170	200	-15.0	50.0
Methyl tert-butyl ether	Ave	1.145	1.120	0.1000	19.6	20.0	-2.2	20.0
trans-1,2-Dichloroethene	Ave	0.4467	0.4204	0.1000	18.8	20.0	-5.9	20.0
Acrylonitrile	Ave	0.1235	0.1297		210	200	5.0	20.0
Hexane	Ave	0.3445	0.3978		23.1	20.0	15.5	20.0
Isopropyl ether	Ave	1.211	1.359		22.4	20.0	12.2	20.0
1,1-Dichloroethane	Ave	0.7096	0.7396	0.2000	20.8	20.0	4.2	20.0
Vinyl acetate	Ave	1.788	1.552		34.7	40.0	-13.2	20.0
2-Chloro-1,3-butadiene	Ave	0.3606	0.3591		19.9	20.0	-0.4	20.0
Tert-butyl ethyl ether	Ave	1.168	1.215		20.8	20.0	4.0	20.0
2,2-Dichloropropane	Ave	0.2280	0.2196		19.3	20.0	-3.7	20.0
cis-1,2-Dichloroethene	Ave	0.4980	0.4793	0.1000	19.2	20.0	-3.8	20.0
Ethyl acetate	Ave	0.4169	0.3364		32.3	40.0	-19.3	20.0
2-Butanone (MEK)	Ave	0.4882	0.4136	0.0500	84.7	100	-15.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Lab Sample ID: CCVIS 460-515499/2 Calibration Date: 05/01/2018 06:28

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82844.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2768	0.2740		19.8	20.0	-1.0	20.0
Propionitrile	Ave	1.397	1.338		192	200	-4.2	20.0
Tetrahydrofuran	Ave	0.5906	0.4982		33.7	40.0	-15.6	20.0
Chlorobromomethane	Ave	0.2500	0.2254		18.0	20.0	-9.8	20.0
Methacrylonitrile	Ave	0.1370	0.1358		198	200	-0.9	20.0
Chloroform	Ave	0.7447	0.7333	0.2000	19.7	20.0	-1.5	20.0
Cyclohexane	Lin2		0.6968	0.1000	19.2	20.0	-3.9	50.0
1,1,1-Trichloroethane	Ave	0.7185	0.7041	0.1000	19.6	20.0	-2.0	20.0
Carbon tetrachloride	Ave	0.6282	0.5963	0.1000	19.0	20.0	-5.1	20.0
1,1-Dichloropropene	Ave	0.5466	0.5528		20.2	20.0	1.1	20.0
Isobutyl alcohol	Ave	0.0509	0.0408		401	500	-19.7	50.0
Benzene	Ave	1.765	1.717	0.5000	19.5	20.0	-2.7	20.0
Isopropyl acetate	Ave	1.027	1.066		20.8	20.0	3.8	20.0
Tert-amyl methyl ether	Ave	0.3556	0.3371		19.0	20.0	-5.2	20.0
1,2-Dichloroethane	Ave	0.4830	0.4640	0.1000	19.2	20.0	-3.9	20.0
n-Heptane	Lin2		0.3638		20.7	20.0	3.5	20.0
n-Butanol	Ave	0.3134	0.2502		399	500	-20.2	50.0
Trichloroethene	Ave	0.4280	0.3953	0.2000	18.5	20.0	-7.6	20.0
Ethyl acrylate	Ave	0.2500	0.2624		21.0	20.0	4.9	20.0
Methylcyclohexane	Lin2		0.8309	0.1000	19.0	20.0	-5.1	50.0
1,2-Dichloropropane	Ave	0.3800	0.3756	0.1000	19.8	20.0	-1.2	20.0
Methyl methacrylate	Ave	0.2591	0.2734		42.2	40.0	5.5	20.0
1,4-Dioxane	Ave	1.376	1.309		381	400	-4.9	50.0
n-Propyl acetate	Ave	0.4228	0.4500		21.3	20.0	6.5	20.0
Dibromomethane	Ave	0.2541	0.2346		18.5	20.0	-7.7	20.0
Dichlorobromomethane	Ave	0.5217	0.4858	0.2000	18.6	20.0	-6.9	20.0
2-Nitropropane	Ave	0.0661	0.0566		34.3	40.0	-14.3	20.0
2-Chloroethyl vinyl ether	Ave	0.1874	0.1882		20.1	20.0	0.4	20.0
Epichlorohydrin	Ave	0.3723	0.3332		358	400	-10.5	20.0
cis-1,3-Dichloropropene	Ave	0.6408	0.6019	0.2000	18.8	20.0	-6.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.713	3.564	0.0500	96.0	100	-4.0	50.0
Toluene	Ave	1.870	1.745	0.4000	18.7	20.0	-6.7	20.0
trans-1,3-Dichloropropene	Ave	0.5564	0.5139	0.1000	18.5	20.0	-7.6	50.0
Ethyl methacrylate	Ave	0.4504	0.4170		18.5	20.0	-7.4	20.0
1,1,2-Trichloroethane	Ave	0.3074	0.2765	0.1000	18.0	20.0	-10.0	20.0
Tetrachloroethene	Ave	0.5243	0.4568	0.2000	17.4	20.0	-12.9	20.0
1,3-Dichloropropane	Ave	0.5687	0.5446		19.2	20.0	-4.2	20.0
2-Hexanone	Ave	2.365	2.242	0.0500	94.8	100	-5.2	50.0
n-Butyl acetate	Ave	0.5064	0.5261		20.8	20.0	3.9	20.0
Chlorodibromomethane	Ave	0.4483	0.3895	0.1000	17.4	20.0	-13.1	50.0
Ethylene Dibromide	Ave	0.3814	0.3472	0.1000	18.2	20.0	-9.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Lab Sample ID: CCVIS 460-515499/2 Calibration Date: 05/01/2018 06:28

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82844.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.248	1.129	0.5000	18.1	20.0	-9.5	20.0
Ethylbenzene	Ave	0.6802	0.6228	0.1000	18.3	20.0	-8.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4981	0.4427		17.8	20.0	-11.1	20.0
m-Xylene & p-Xylene	Ave	0.8303	0.7547	0.1000	18.2	20.0	-9.1	20.0
n-Butyl acrylate	Ave	0.2647	0.2433		18.4	20.0	-8.1	20.0
o-Xylene	Ave	0.8669	0.7834	0.3000	18.1	20.0	-9.6	20.0
Styrene	Ave	1.353	1.228	0.3000	18.1	20.0	-9.3	20.0
Amyl acetate (mixed isomers)	Ave	0.9587	1.007		21.0	20.0	5.0	20.0
Bromoform	Ave	0.2918	0.2383	0.1000	16.3	20.0	-18.3	20.0
Isopropylbenzene	Ave	2.324	2.141	0.1000	18.4	20.0	-7.9	20.0
Bromobenzene	Ave	0.9812	0.8465		17.3	20.0	-13.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8563	0.8172	0.3000	19.1	20.0	-4.6	20.0
N-Propylbenzene	Ave	4.391	4.201		19.1	20.0	-4.3	20.0
1,2,3-Trichloropropane	Ave	0.2469	0.2162		17.5	20.0	-12.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1949	0.1857		19.1	20.0	-4.7	20.0
2-Chlorotoluene	Ave	2.948	2.771		18.8	20.0	-6.0	20.0
4-Ethyltoluene	Ave	3.695	3.447		18.7	20.0	-6.7	20.0
1,3,5-Trimethylbenzene	Ave	3.249	2.972		18.3	20.0	-8.5	20.0
4-Chlorotoluene	Ave	2.500	2.338		18.7	20.0	-6.5	20.0
Butyl Methacrylate	Ave	0.9066	0.8321		18.4	20.0	-8.2	20.0
tert-Butylbenzene	Ave	2.741	2.446		17.8	20.0	-10.8	20.0
1,2,4-Trimethylbenzene	Ave	3.348	3.074		18.4	20.0	-8.2	20.0
sec-Butylbenzene	Ave	4.375	4.088		18.7	20.0	-6.6	20.0
4-Isopropyltoluene	Ave	3.860	3.512		18.2	20.0	-9.0	20.0
1,3-Dichlorobenzene	Ave	1.915	1.714	0.6000	17.9	20.0	-10.5	20.0
1,4-Dichlorobenzene	Ave	1.924	1.708	0.5000	17.8	20.0	-11.2	20.0
Benzyl chloride	Ave	1.484	1.319		17.8	20.0	-11.1	50.0
Indan	Ave	3.429	3.147		18.4	20.0	-8.2	20.0
p-Diethylbenzene	Ave	2.120	1.973		18.6	20.0	-6.9	20.0
n-Butylbenzene	Ave	1.980	1.945		19.6	20.0	-1.8	20.0
1,2-Dichlorobenzene	Ave	1.901	1.704	0.4000	17.9	20.0	-10.3	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.771	3.394		18.0	20.0	-10.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1760	0.1502	0.0500	17.1	20.0	-14.7	50.0
1,3,5-Trichlorobenzene	Ave	1.671	1.561		18.7	20.0	-6.6	20.0
1,2,4-Trichlorobenzene	Ave	1.627	1.471	0.2000	18.1	20.0	-9.6	20.0
Hexachlorobutadiene	Ave	0.7934	0.7304		18.4	20.0	-7.9	20.0
Naphthalene	Ave	3.722	3.164		17.0	20.0	-15.0	50.0
1,2,3-Trichlorobenzene	Ave	1.585	1.421		17.9	20.0	-10.4	20.0
Dibromofluoromethane (Surr)	Ave	0.4004	0.4019		50.2	50.0	0.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3724	0.3795		51.0	50.0	1.9	20.0
Toluene-d8 (Surr)	Ave	1.531	1.486		48.5	50.0	-3.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Lab Sample ID: CCVIS 460-515499/2 Calibration Date: 05/01/2018 06:28

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82844.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromofluorobenzene	Ave	0.4955	0.4793		48.4	50.0	-3.3	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82844.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-May-2018 06:28:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0071307-002
Operator ID: Instrument ID: CVOAMS9
Sublist: chrom-8260S9*sub40

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 01-May-2018 11:30:46 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: delpolitov Date: 01-May-2018 11:30:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.596	0.000	88	60178	20.0	13.1	
2 Dichlorodifluoromethane	85	1.632	1.632	0.000	98	140537	20.0	14.8	
3 Chloromethane	50	1.809	1.809	0.000	99	139042	20.0	21.9	
5 Butadiene	54	1.913	1.913	0.000	98	109093	20.0	22.5	
4 Vinyl chloride	62	1.919	1.919	0.000	93	144122	20.0	22.7	
6 Bromomethane	94	2.212	2.212	0.000	99	110871	20.0	21.0	
7 Chloroethane	64	2.279	2.279	0.000	99	71541	20.0	22.4	
9 Dichlorofluoromethane	67	2.474	2.474	0.000	98	214322	20.0	23.0	
8 Trichlorofluoromethane	101	2.486	2.486	0.000	56	167008	20.0	20.2	M
10 Pentane	72	2.498	2.498	0.000	97	25952	40.0	36.6	
11 Ethyl ether	59	2.705	2.705	0.000	95	57579	20.0	20.7	
12 Ethanol	46	2.699	2.699	0.000	69	19659	800.0	806.4	
13 2-Methyl-1,3-butadiene	53	2.730	2.730	0.000	98	70453	20.0	22.1	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.760	0.000	91	78878	20.0	19.2	
16 1,1,2-Trichloro-1,2,2-trif	101	2.888	2.888	0.000	96	98986	20.0	18.3	
15 Acrolein	56	2.882	2.882	0.000	96	177935	300.0	308.6	
17 1,1-Dichloroethene	96	2.919	2.919	0.000	97	80672	20.0	19.3	
18 Acetone	43	3.010	3.010	0.000	86	111869	100.0	93.2	
19 Iodomethane	142	3.083	3.083	0.000	99	163044	20.0	18.3	
20 Carbon disulfide	76	3.120	3.120	0.000	99	317960	20.0	20.4	
22 Isopropyl alcohol	45	3.114	3.114	0.000	1	58189	200.0	194.4	a
21 3-Chloro-1-propene	76	3.248	3.248	0.000	95	49725	20.0	20.1	
23 Methyl acetate	43	3.254	3.254	0.000	100	102265	40.0	39.0	
24 Cyclopentene	67	3.272	3.272	0.000	93	200417	20.0	21.7	
29 Acetonitrile	41	3.321	3.321	0.000	94	120668	200.0	186.6	a
* 25 TBA-d9 (IS)	65	3.364	3.364	0.000	0	388928	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.382	0.000	93	93137	20.0	19.5	
27 2-Methyl-2-propanol	59	3.443	3.443	0.000	91	99238	200.0	169.9	M
28 Methyl tert-butyl ether	73	3.541	3.541	0.000	97	228251	20.0	19.6	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	95	85687	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.638	3.638	0.000	93	264422	200.0	210.1	
32 Hexane	43	3.723	3.723	0.000	94	81083	20.0	23.1	
33 Isopropyl ether	45	3.937	3.937	0.000	96	277085	20.0	22.4	
35 Vinyl acetate	86	3.980	3.980	0.000	100	24152	40.0	34.7	
34 1,1-Dichloroethane	63	3.980	3.980	0.000	73	150756	20.0	20.8	
36 2-Chloro-1,3-butadiene	88	4.022	4.022	0.000	90	73193	20.0	19.9	
37 Tert-butyl ethyl ether	59	4.260	4.260	0.000	88	247667	20.0	20.8	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	244185	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.492	0.000	93	44754	20.0	19.3	
40 cis-1,2-Dichloroethene	96	4.510	4.510	0.000	89	97705	20.0	19.2	
41 Ethyl acetate	70	4.510	4.510	0.000	91	13142	40.0	32.3	
42 2-Butanone (MEK)	72	4.516	4.516	0.000	96	40402	100.0	84.7	
44 Methyl acrylate	55	4.571	4.571	0.000	99	55851	20.0	19.8	
43 Propionitrile	54	4.650	4.650	0.000	98	104063	200.0	191.5	
46 Chlorobromomethane	128	4.748	4.748	0.000	78	45938	20.0	18.0	
45 Tetrahydrofuran	72	4.742	4.742	0.000	64	19464	40.0	33.7	
47 Methacrylonitrile	67	4.760	4.760	0.000	93	276791	200.0	198.2	
48 Chloroform	83	4.790	4.790	0.000	99	149466	20.0	19.7	
49 Cyclohexane	84	4.937	4.937	0.000	94	142042	20.0	19.2	
50 1,1,1-Trichloroethane	97	4.949	4.949	0.000	97	143532	20.0	19.6	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	96	204822	50.0	50.2	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	121552	20.0	19.0	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	112689	20.0	20.2	
54 Benzene	78	5.296	5.296	0.000	96	315157	20.0	19.5	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.315	0.000	0	193407	50.0	51.0	
57 Isopropyl acetate	43	5.333	5.333	0.000	95	217317	20.0	20.8	
58 Tert-amyl methyl ether	87	5.345	5.345	0.000	92	68710	20.0	19.0	
56 Isobutyl alcohol	74	5.205	5.205	0.000	92	7939	500.0	401.4	a
59 1,2-Dichloroethane	62	5.388	5.388	0.000	97	94571	20.0	19.2	
60 n-Heptane	57	5.443	5.443	0.000	93	74149	20.0	20.7	
* 61 Fluorobenzene	96	5.589	5.589	0.000	99	509602	50.0	50.0	
62 n-Butanol	56	5.875	5.875	0.000	90	48659	500.0	399.2	
63 Trichloroethene	95	5.949	5.949	0.000	99	80572	20.0	18.5	
65 Methylcyclohexane	83	6.077	6.077	0.000	94	169374	20.0	19.0	
64 Ethyl acrylate	56	6.077	6.077	0.000	98	53482	20.0	21.0	
66 1,2-Dichloropropane	63	6.241	6.241	0.000	91	76555	20.0	19.8	
* 67 1,4-Dioxane-d8	96	6.290	6.290	0.000	0	36938	1000.0	1000.0	
68 Methyl methacrylate	41	6.302	6.302	0.000	90	111473	40.0	42.2	
69 1,4-Dioxane	88	6.345	6.345	0.000	28	19339	400.0	380.6	
70 n-Propyl acetate	43	6.351	6.351	0.000	99	91737	20.0	21.3	
71 Dibromomethane	93	6.375	6.375	0.000	98	47813	20.0	18.5	
72 Dichlorobromomethane	83	6.522	6.522	0.000	99	99023	20.0	18.6	
74 2-Nitropropane	41	6.845	6.845	0.000	76	23088	40.0	34.3	
73 2-Chloroethyl vinyl ether	63	6.851	6.851	0.000	82	38352	20.0	20.1	
75 Epichlorohydrin	57	6.961	6.961	0.000	99	130191	400.0	358.0	
76 cis-1,3-Dichloropropene	75	7.022	7.022	0.000	92	110471	20.0	18.8	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	97	348102	100.0	96.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	681728	50.0	48.5	
79 Toluene	91	7.351	7.351	0.000	93	320191	20.0	18.7	
80 trans-1,3-Dichloropropene	75	7.698	7.698	0.000	97	94310	20.0	18.5	
81 Ethyl methacrylate	69	7.717	7.717	0.000	90	76530	20.0	18.5	
82 1,1,2-Trichloroethane	83	7.918	7.918	0.000	96	50751	20.0	18.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.973	7.973	0.000	96	83830	20.0	17.4	
84 1,3-Dichloropropane	76	8.137	8.137	0.000	89	99949	20.0	19.2	
85 2-Hexanone	43	8.180	8.180	0.000	97	218988	100.0	94.8	
86 n-Butyl acetate	43	8.290	8.290	0.000	99	96565	20.0	20.8	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	71479	20.0	17.4	
88 Ethylene Dibromide	107	8.534	8.534	0.000	99	63719	20.0	18.2	
* 89 Chlorobenzene-d5	117	9.082	9.082	0.000	85	458841	50.0	50.0	
90 Chlorobenzene	112	9.113	9.113	0.000	96	207129	20.0	18.1	
92 Ethylbenzene	106	9.204	9.204	0.000	98	114308	20.0	18.3	
91 1,1,1,2-Tetrachloroethane	131	9.228	9.228	0.000	94	81247	20.0	17.8	
93 m-Xylene & p-Xylene	106	9.357	9.357	0.000	0	138507	20.0	18.2	
94 n-Butyl acrylate	73	9.789	9.789	0.000	97	44647	20.0	18.4	
95 o-Xylene	106	9.820	9.820	0.000	94	143782	20.0	18.1	
96 Styrene	104	9.856	9.856	0.000	96	225306	20.0	18.1	
97 Amyl acetate (mixed isomer	43	10.033	10.033	0.000	89	112312	20.0	21.0	
98 Bromoform	173	10.088	10.088	0.000	96	43737	20.0	16.3	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	393011	20.0	18.4	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	93	219940	50.0	48.4	
101 Bromobenzene	156	10.564	10.564	0.000	94	94410	20.0	17.3	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	91150	20.0	19.1	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	468615	20.0	19.1	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	96	24117	20.0	17.5	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	89	20707	20.0	19.1	
106 2-Chlorotoluene	91	10.746	10.746	0.000	93	309096	20.0	18.8	
107 4-Ethyltoluene	105	10.746	10.746	0.000	89	384493	20.0	18.7	
108 1,3,5-Trimethylbenzene	105	10.814	10.814	0.000	93	331482	20.0	18.3	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	260738	20.0	18.7	
110 Butyl Methacrylate	87	10.899	10.899	0.000	91	92810	20.0	18.4	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	272829	20.0	17.8	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	97	342846	20.0	18.4	
113 sec-Butylbenzene	105	11.313	11.313	0.000	99	455914	20.0	18.7	
114 4-Isopropyltoluene	119	11.441	11.441	0.000	98	391753	20.0	18.2	
115 1,3-Dichlorobenzene	146	11.454	11.454	0.000	98	191163	20.0	17.9	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	278839	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	190555	20.0	17.8	
118 Benzyl chloride	91	11.667	11.667	0.000	99	147116	20.0	17.8	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	350993	20.0	18.4	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	220044	20.0	18.6	a
121 n-Butylbenzene	92	11.801	11.801	0.000	98	216899	20.0	19.6	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	190111	20.0	17.9	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	378602	20.0	18.0	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	93	16750	20.0	17.1	
125 1,3,5-Trichlorobenzene	180	12.649	12.649	0.000	97	174116	20.0	18.7	
126 1,2,4-Trichlorobenzene	180	13.142	13.142	0.000	93	164042	20.0	18.1	
127 Hexachlorobutadiene	225	13.216	13.216	0.000	94	81468	20.0	18.4	
128 Naphthalene	128	13.337	13.337	0.000	99	352912	20.0	17.0	
129 1,2,3-Trichlorobenzene	180	13.526	13.526	0.000	96	158443	20.0	17.9	
S 130 1,2-Dichloroethene, Total	100				0		40.0	38.1	
S 131 Xylenes, Total	100				0		40.0	36.3	
S 132 Total BTEX	1				0		100.0	92.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00257	Amount Added:	2.00	Units: uL	
ACROLEIN W_00076	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

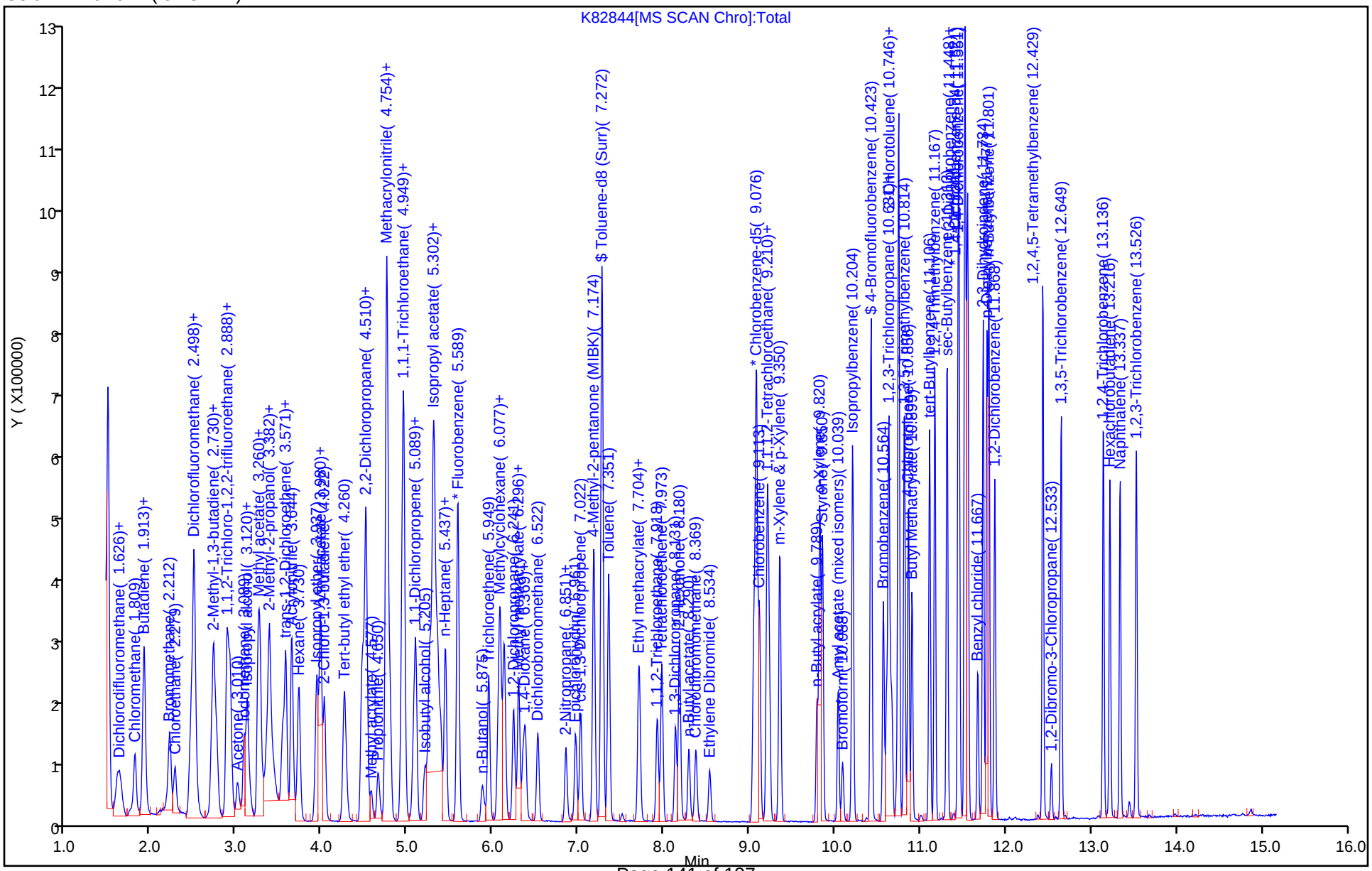
Report Date: 01-May-2018 11:30:48 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82844.D

Injection Date:	01-May-2018 06:28:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

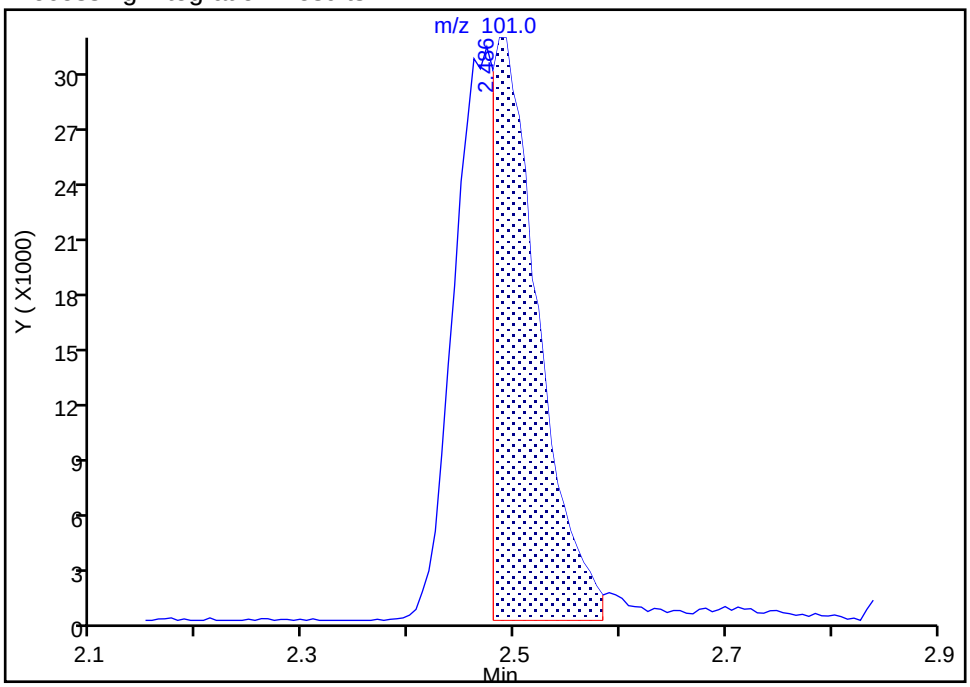
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82844.D
Injection Date: 01-May-2018 06:28:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

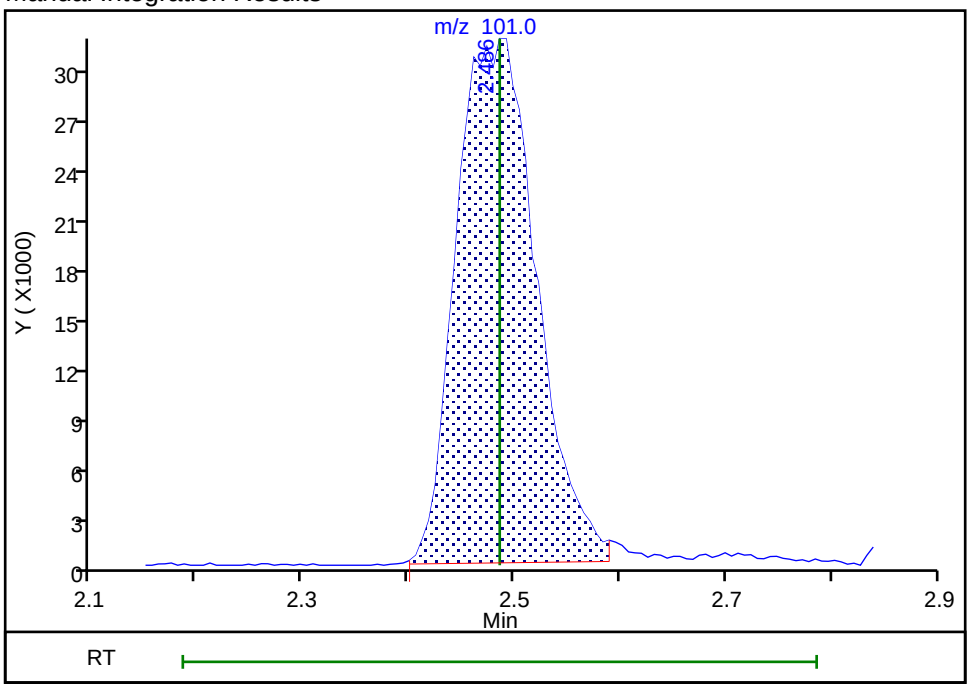
Processing Integration Results

RT: 2.49
Area: 97002
Amount: 11.711509
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 167008
Amount: 20.163664
Amount Units: ug/l



Reviewer: tupayachia, 01-May-2018 06:46:38
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

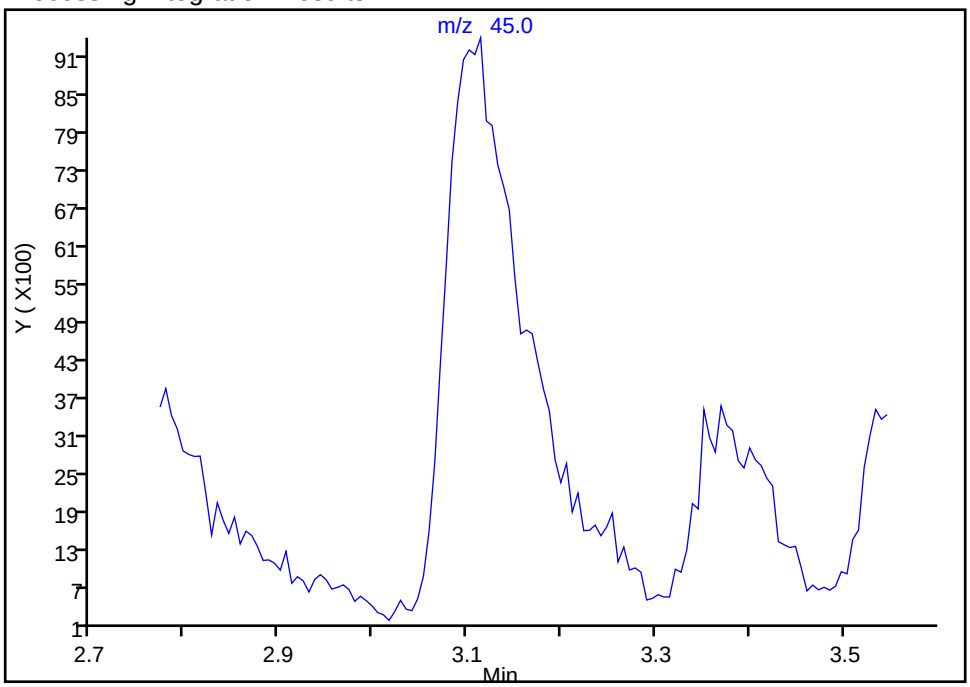
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82844.D
Injection Date: 01-May-2018 06:28:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

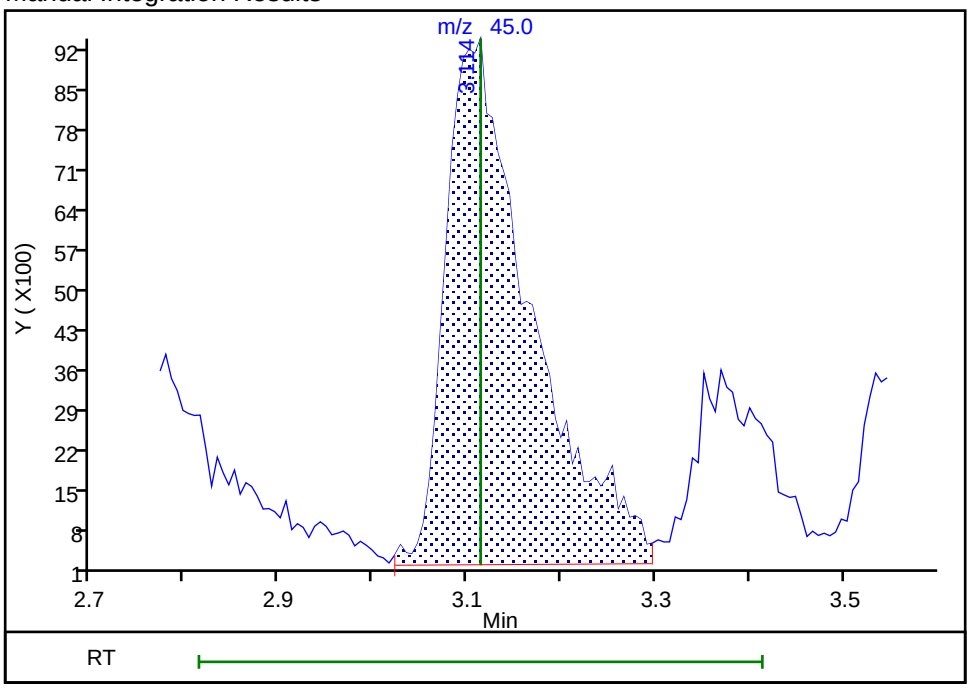
Not Detected
Expected RT: 3.11

Processing Integration Results



Manual Integration Results

RT: 3.11
Area: 58189
Amount: 194.3956
Amount Units: ug/l



Reviewer: tupayachia, 01-May-2018 06:46:49
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

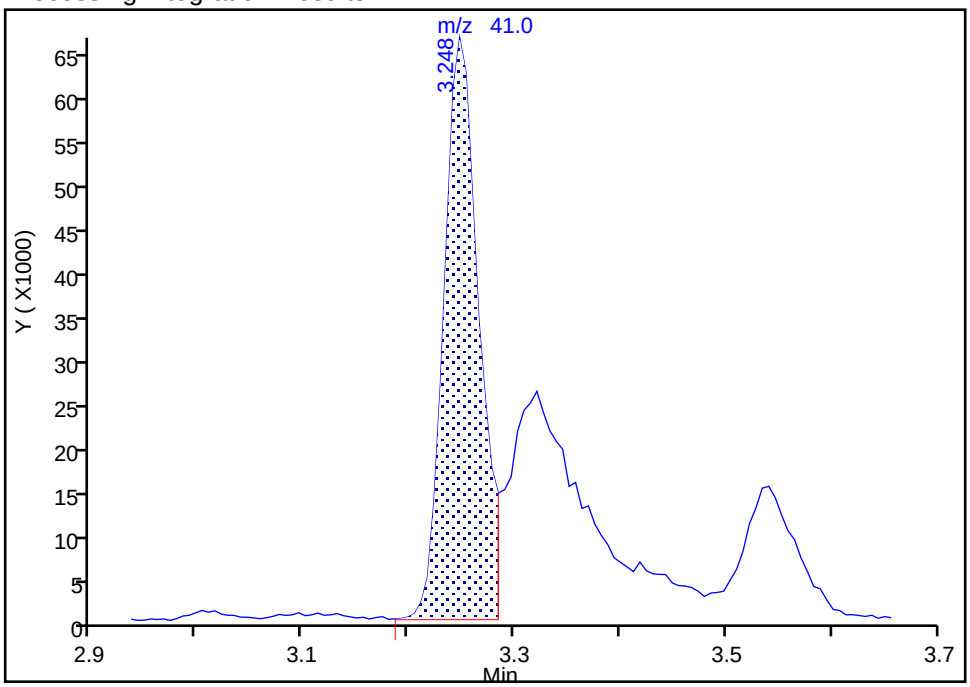
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82844.D
Injection Date: 01-May-2018 06:28:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Acetonitrile, CAS: 75-05-8

Signal: 1

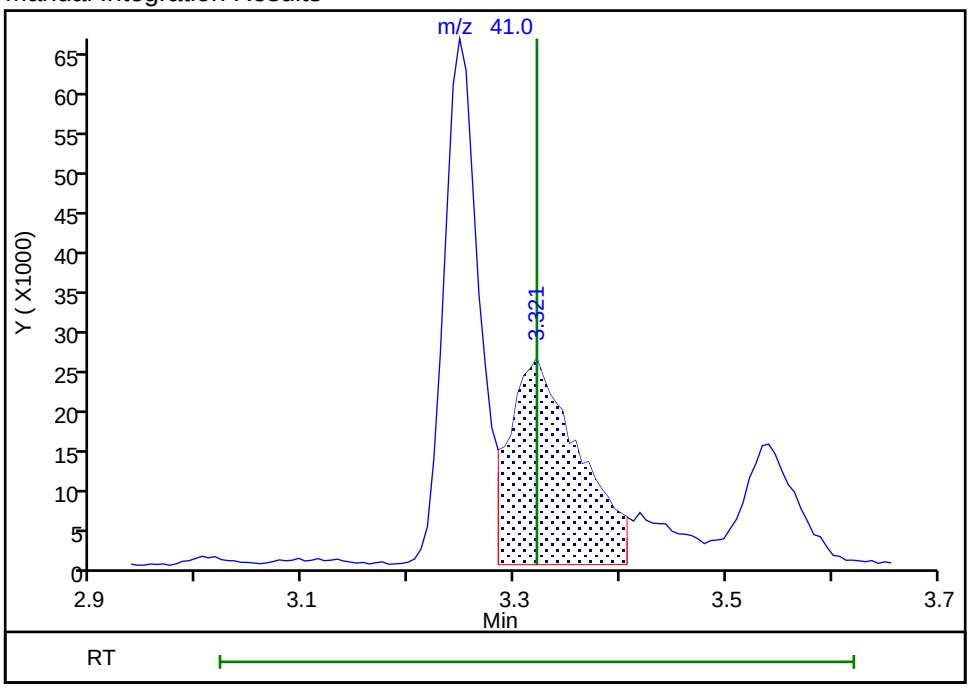
Processing Integration Results

RT: 3.25
Area: 152844
Amount: 236.3357
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 120668
Amount: 186.5834
Amount Units: ug/l



Reviewer: tupayachia, 01-May-2018 06:47:00
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

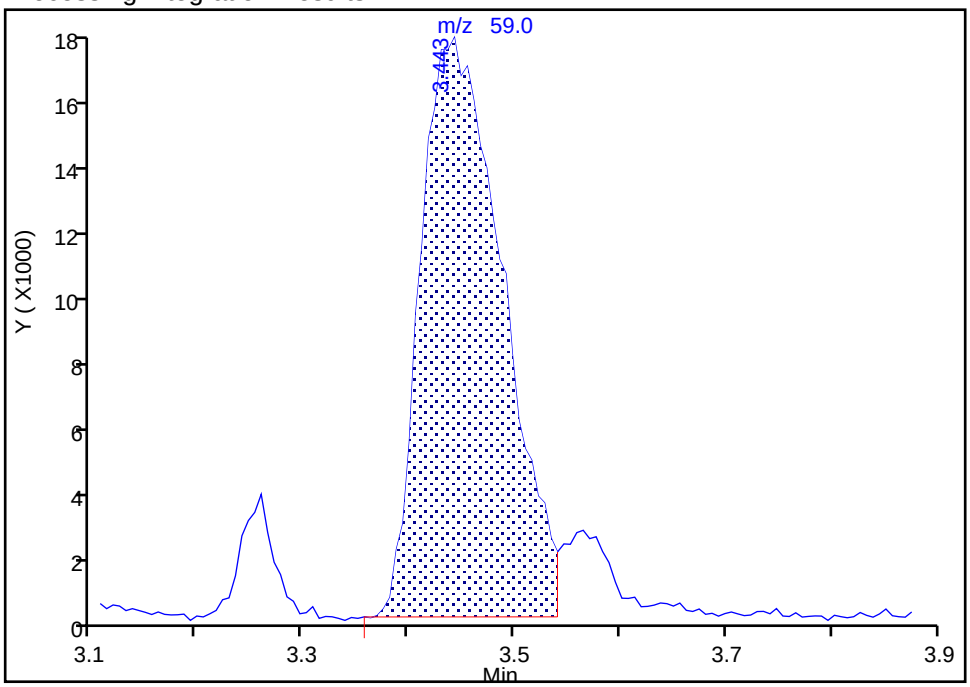
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82844.D
Injection Date: 01-May-2018 06:28:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

27 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

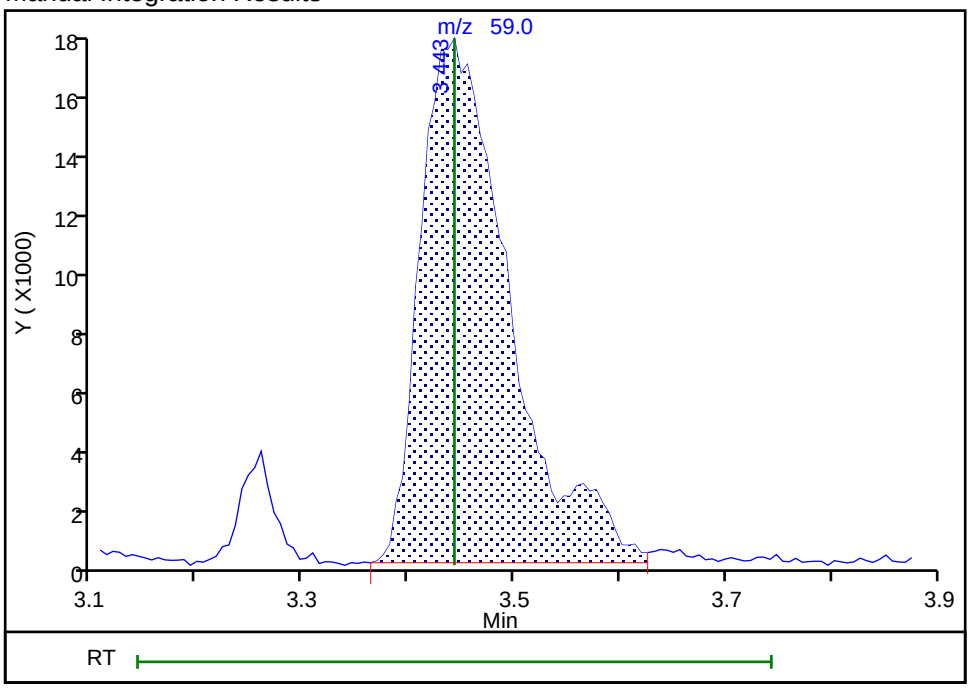
Processing Integration Results

RT: 3.44
Area: 91349
Amount: 156.3972
Amount Units: ug/l



Manual Integration Results

RT: 3.44
Area: 99238
Amount: 169.9038
Amount Units: ug/l



Reviewer: delpolitov, 01-May-2018 11:29:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

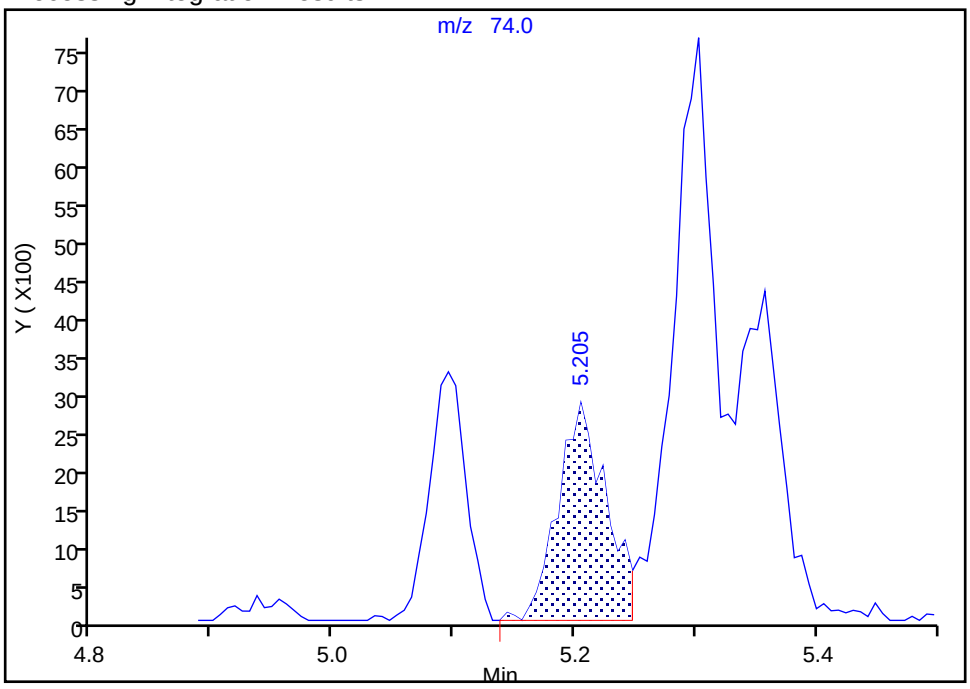
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82844.D
Injection Date: 01-May-2018 06:28:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

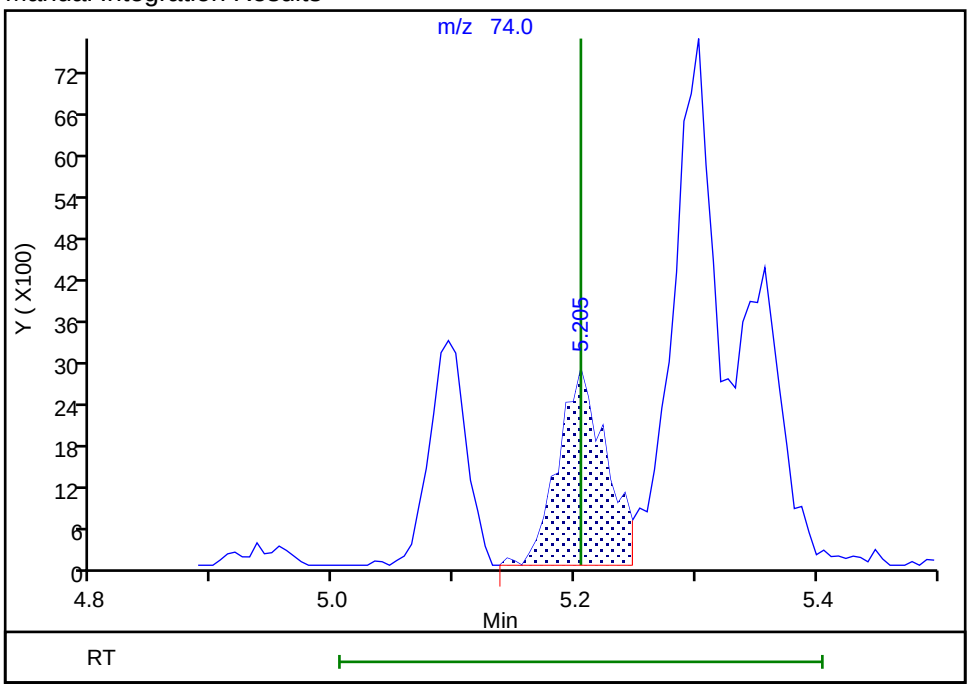
Processing Integration Results

RT: 5.20
Area: 7939
Amount: 401.4231
Amount Units: ug/l



Manual Integration Results

RT: 5.20
Area: 7939
Amount: 401.4231
Amount Units: ug/l



Reviewer: delpolitov, 01-May-2018 11:30:10
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

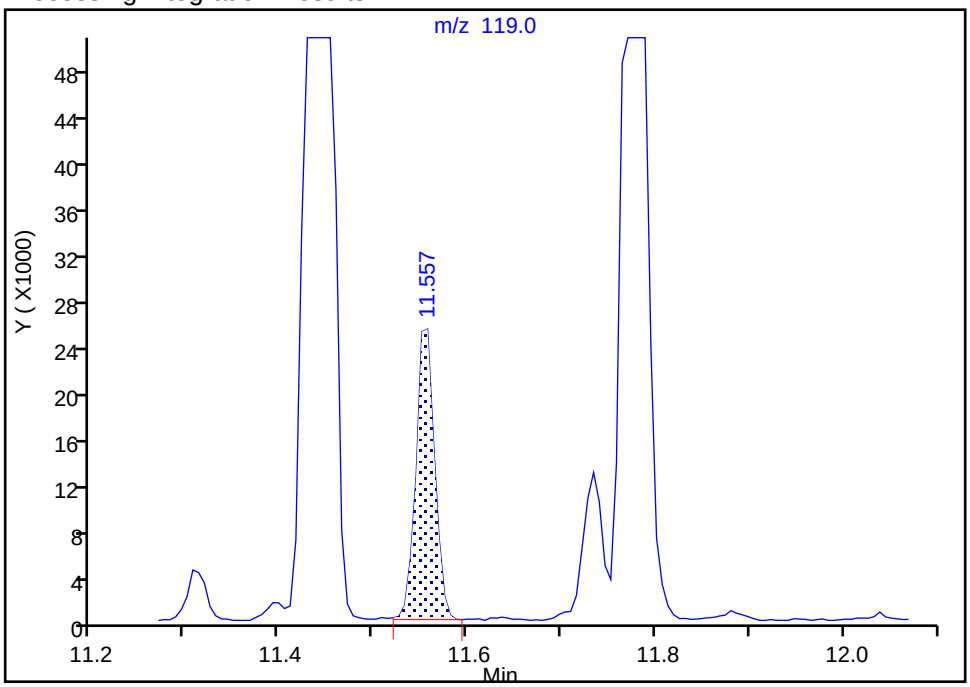
Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82844.D
Injection Date: 01-May-2018 06:28:30 Instrument ID: CVOAMS9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Signal: 1

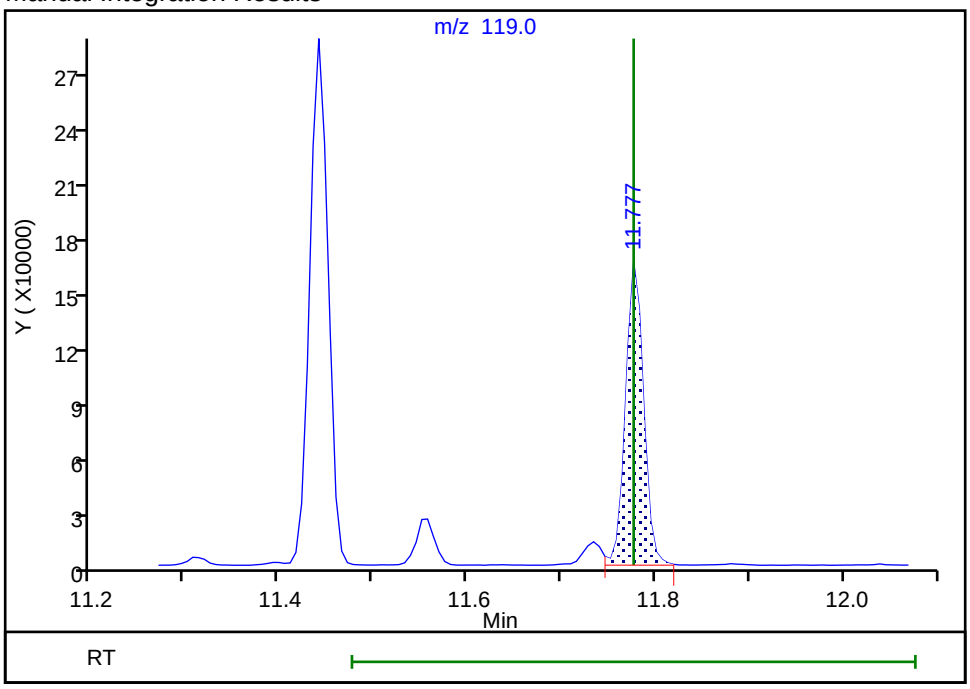
Processing Integration Results

RT: 11.56
Area: 34625
Amount: 2.929308
Amount Units: ug/l



Manual Integration Results

RT: 11.78
Area: 220044
Amount: 18.615930
Amount Units: ug/l



Reviewer: tupayachia, 01-May-2018 06:47:16
Audit Action: Assigned Compound ID Audit Reason: Baseline

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82294.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	21-Apr-2018 05:15:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0070764-001				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	22-Apr-2018 22:36:14	Calib Date:	21-Apr-2018 08:07:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK014				
First Level Reviewer: tupayachia		Date:	21-Apr-2018 05:23:36		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.329	4.329	0.000	95	21835	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

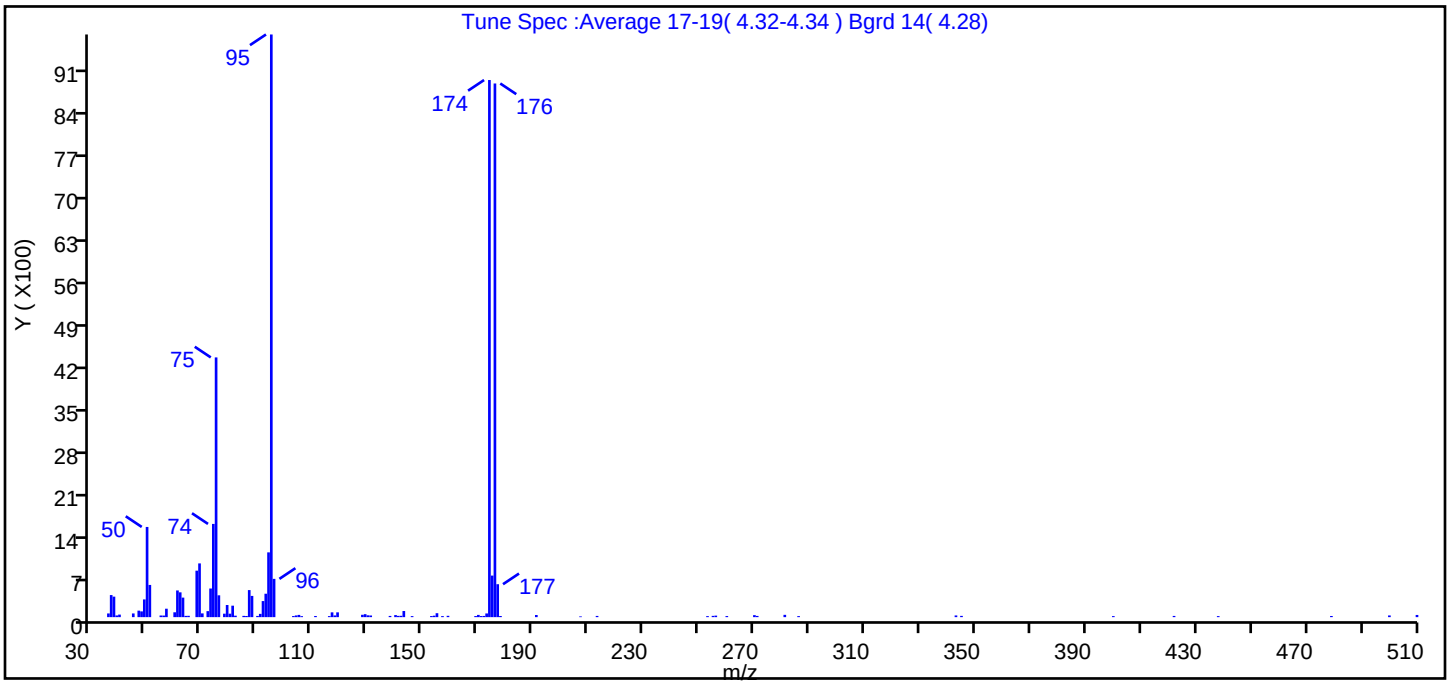
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82294.D
Injection Date: 21-Apr-2018 05:15:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.5
75	30 to 60% of m/z 95	44.6
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	92.2
175	5 to 9% of m/z 174	7.1 (7.7)
176	Greater than 95% but less than 101% of m/z 174	91.6 (99.4)
177	5 to 9% of m/z 176	5.7 (6.2)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82294.D\8260S9.rslt\spectra.d
Injection Date: 21-Apr-2018 05:15:30
Spectrum: Tune Spec :Average 17-19(4.32-4.34) Bgrd 14(4.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	61	74.00	1537	117.00	79	176.00	8798
37.00	364	75.00	4282	118.00	28	177.00	543
38.00	338	76.00	360	119.00	79	178.00	19
39.00	28	78.00	57	128.00	39	191.00	35
40.00	42	79.00	200	129.00	49	207.00	12
45.00	61	80.00	57	130.00	30	213.00	20
47.00	107	81.00	189	131.00	27	253.00	17
48.00	95	82.00	24	138.00	20	255.00	21
49.00	292	85.00	21	140.00	34	256.00	25
50.00	1487	86.00	19	141.00	21	260.00	18
51.00	531	87.00	446	142.00	22	270.00	33
55.00	27	88.00	350	143.00	101	271.00	20
56.00	26	90.00	20	146.00	17	281.00	38
57.00	139	91.00	54	153.00	18	286.00	17
60.00	80	92.00	265	154.00	24	343.00	28
61.00	440	93.00	386	155.00	65	345.00	21
62.00	409	94.00	1068	157.00	17	400.00	17
63.00	322	95.00	9606	159.00	22	422.00	20
64.00	21	96.00	631	169.00	18	438.00	17
65.00	22	103.00	18	170.00	37	479.00	19
68.00	766	104.00	28	171.00	18	500.00	28
69.00	886	105.00	37	172.00	20	510.00	36
70.00	62	106.00	16	173.00	61		
72.00	99	111.00	19	174.00	8855		
73.00	472	116.00	17	175.00	685		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82843.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-May-2018 06:00:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0071307-001				
Operator ID:		Instrument ID:	CVOAMS9		
Method:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\8260S9.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	01-May-2018 11:29:23	Calib Date:	21-Apr-2018 08:07:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK017				
First Level Reviewer: delpolitov		Date:	01-May-2018 11:29:23		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 134 BFB	95	4.329	4.329	0.000	94	34423	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

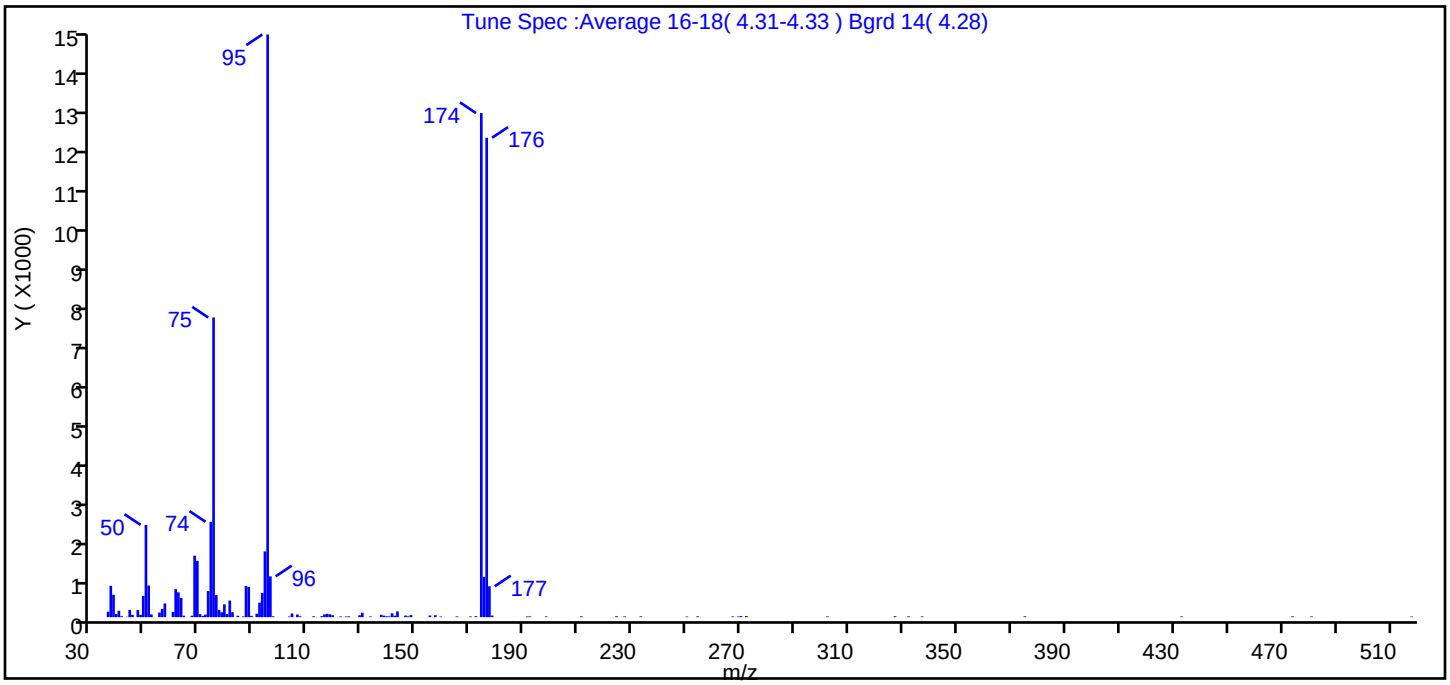
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82843.D
Injection Date: 01-May-2018 06:00:30 Instrument ID: CVOAMS9
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260S9 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.8
75	30 to 60% of m/z 95	51.4
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	86.5
175	5 to 9% of m/z 174	6.9 (8.0)
176	Greater than 95% but less than 101% of m/z 174	82.3 (95.1)
177	5 to 9% of m/z 176	5.3 (6.4)

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82843.D\8260S9.rslt\spectra.d
Injection Date: 01-May-2018 06:00:30
Spectrum: Tune Spec :Average 16-18(4.31-4.33) Bgrd 14(4.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	134	72.00	64	115.00	25	175.00	996
37.00	775	73.00	646	116.00	69	176.00	11866
38.00	553	74.00	2360	117.00	82	177.00	764
39.00	77	75.00	7417	118.00	71	178.00	39
40.00	158	76.00	545	119.00	48	191.00	18
41.00	23	77.00	179	122.00	17	192.00	19
43.00	9	78.00	121	124.00	16	198.00	20
44.00	179	79.00	317	125.00	20	211.00	21
45.00	57	80.00	78	129.00	45	224.00	23
47.00	175	81.00	411	130.00	110	227.00	18
48.00	57	82.00	122	133.00	17	233.00	20
49.00	526	84.00	34	137.00	58	250.00	16
50.00	2283	86.00	18	138.00	38	254.00	21
51.00	783	87.00	774	139.00	21	267.00	18
52.00	67	88.00	748	140.00	19	269.00	15
55.00	115	89.00	33	141.00	95	270.00	26
56.00	205	91.00	85	142.00	35	272.00	29
57.00	339	92.00	358	143.00	142	302.00	18
60.00	129	93.00	599	146.00	40	327.00	23
61.00	693	94.00	1627	147.00	20	332.00	19
62.00	614	95.00	14424	148.00	51	337.00	18
63.00	476	96.00	1010	155.00	41	375.00	21
64.00	36	97.00	22	157.00	48	433.00	18
67.00	35	103.00	16	159.00	16	474.00	19
68.00	1521	104.00	90	165.00	18	481.00	18
69.00	1394	106.00	65	170.00	18	518.00	16
70.00	74	107.00	22	172.00	25		
71.00	32	112.00	22	174.00	12479		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-515499/7

Matrix: Solid | Lab File ID: K82849.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/01/2018 08:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.0050	U	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-515499/7

Matrix: Solid | Lab File ID: K82849.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/01/2018 08:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		78-135
460-00-4	4-Bromofluorobenzene	90		67-126
1868-53-7	Dibromofluoromethane (Surr)	98		61-149
2037-26-5	Toluene-d8 (Surr)	90		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-515499/7

Matrix: Solid Lab File ID: K82849.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/01/2018 08:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515499 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I-TIC 8260C

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82849.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-May-2018 08:44:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0071307-007
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 01-May-2018 11:36:50 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: delpolitov Date: 01-May-2018 11:36:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 25 TBA-d9 (IS)	65	3.370	3.364	0.006	0	404323	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.461	4.461	0.000	0	247328	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.955	0.000	96	204839	50.0	48.9	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.315	5.315	0.000	0	190337	50.0	48.8	
* 61 Fluorobenzene	96	5.589	5.589	0.000	99	523343	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.290	6.290	0.000	0	34883	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	639912	50.0	45.2	
* 89 Chlorobenzene-d5	117	9.076	9.082	-0.006	85	462189	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	94	207006	50.0	45.2	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	95	290423	50.0	50.0	

Reagents:

8260SURR250_00172 Amount Added: 1.00 Units: uL Run Reagent
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

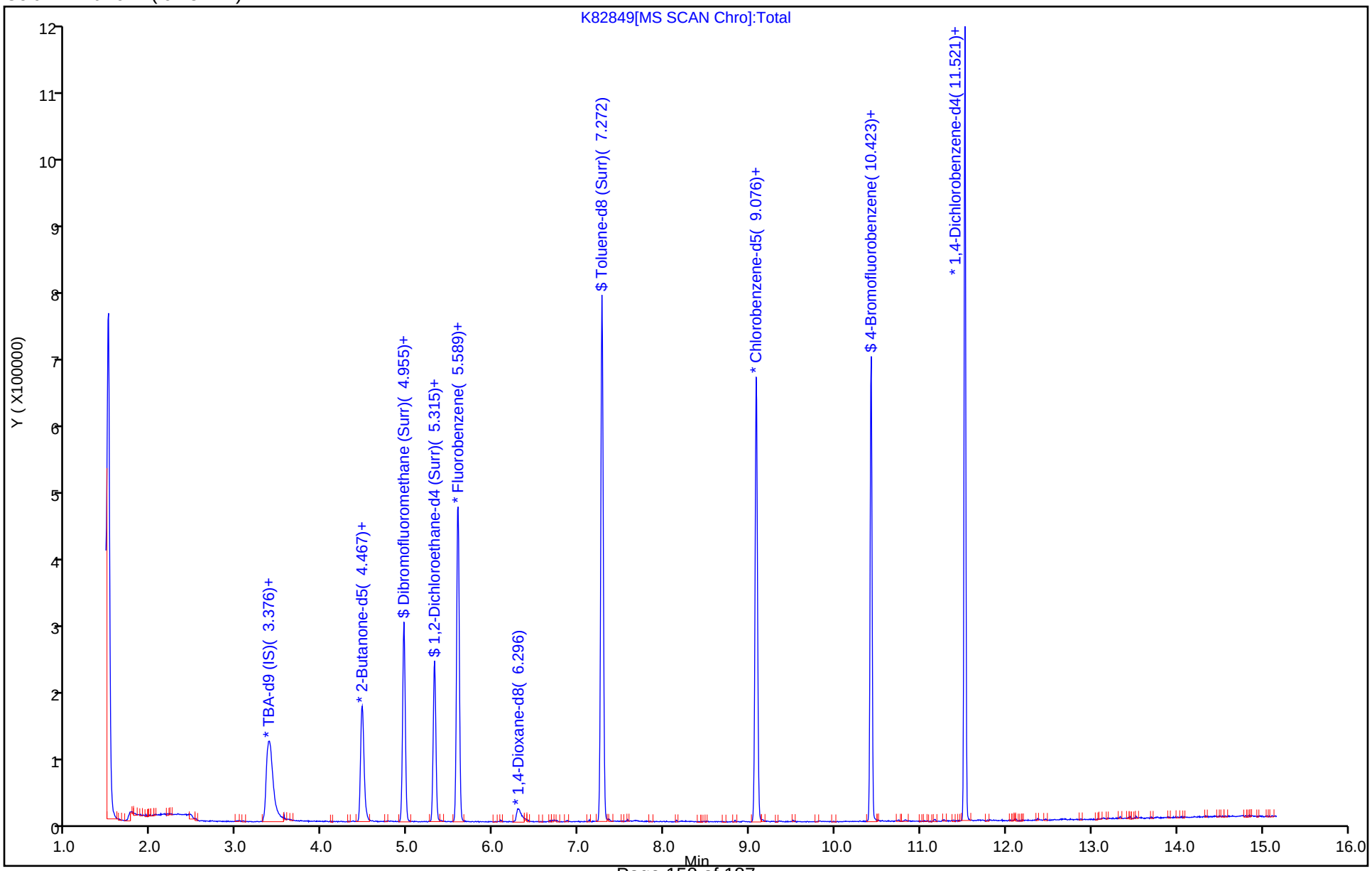
Report Date: 01-May-2018 11:36:50 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82849.D

Injection Date:	01-May-2018 08:44:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



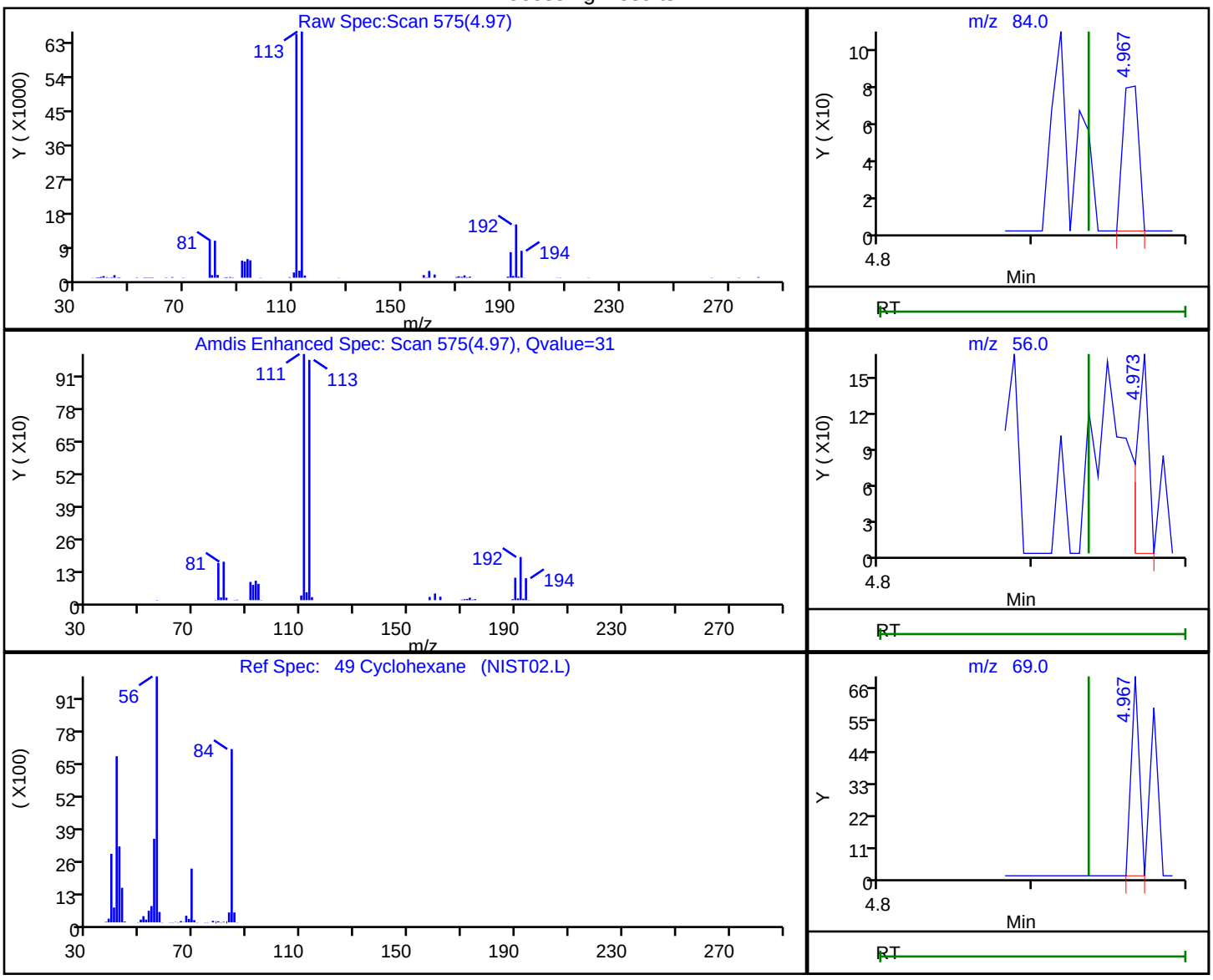
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82849.D		
Injection Date:	01-May-2018 08:44:30	Instrument ID:	CVOAMS9
Lims ID:	MB		
Client ID:			
Operator ID:		ALS Bottle#:	6 Worklist Smp#: 7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

49 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
4.97	84.00	56	0.443997
4.97	56.00	85	
4.97	69.00	26	

Reviewer: delpolitov, 01-May-2018 11:36:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-515499/3

Matrix: Solid | Lab File ID: K82845.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/01/2018 06:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0197		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0196		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0186		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0186		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0215		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0198		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0187		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0182		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0172		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0184		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0201		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0208		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0180		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0180		0.0010	0.00010
123-91-1	1,4-Dioxane	0.381		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0849		0.0050	0.0011
591-78-6	2-Hexanone	0.0944		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0986		0.0050	0.00066
67-64-1	Acetone	0.0911		0.0050	0.0038
71-43-2	Benzene	0.0201		0.0010	0.00026
75-25-2	Bromoform	0.0170		0.0010	0.00043
74-83-9	Bromomethane	0.0196		0.0010	0.00047
75-15-0	Carbon disulfide	0.0206		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0189		0.0010	0.00018
108-90-7	Chlorobenzene	0.0183		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0188		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0174		0.0010	0.00019
75-00-3	Chloroethane	0.0216		0.0010	0.00052
67-66-3	Chloroform	0.0204		0.0010	0.00032
74-87-3	Chloromethane	0.0208		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0190		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0191		0.0010	0.00027
110-82-7	Cyclohexane	0.0193		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0194		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0139		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-515499/3

Matrix: Solid | Lab File ID: K82845.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/01/2018 06:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0186		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0183		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0188		0.0010	0.00013
79-20-9	Methyl acetate	0.0383		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0198		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0190		0.0010	0.00016
75-09-2	Methylene Chloride	0.0200		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0186		0.0010	0.00017
95-47-6	o-Xylene	0.0185		0.0010	0.000095
100-42-5	Styrene	0.0185		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0178		0.0010	0.00014
108-88-3	Toluene	0.0192		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0197		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0187		0.0010	0.00027
79-01-6	Trichloroethene	0.0185		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0202		0.0010	0.00041
75-01-4	Vinyl chloride	0.0208		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		78-135
460-00-4	4-Bromofluorobenzene	91		67-126
1868-53-7	Dibromofluoromethane (Surr)	97		61-149
2037-26-5	Toluene-d8 (Surr)	92		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82845.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-May-2018 06:52:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0071307-003
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 01-May-2018 11:33:49 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: delpolitov Date: 01-May-2018 11:33:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.602	1.596	0.006	79	60489	20.0	13.0	a
2 Dichlorodifluoromethane	85	1.645	1.632	0.013	99	134658	20.0	13.9	
3 Chloromethane	50	1.809	1.797	0.012	99	134008	20.0	20.8	
5 Butadiene	54	1.919	1.895	0.024	97	109198	20.0	22.2	
4 Vinyl chloride	62	1.913	1.907	0.006	92	133765	20.0	20.8	
6 Bromomethane	94	2.218	2.199	0.019	98	105077	20.0	19.6	
7 Chloroethane	64	2.279	2.266	0.013	99	70067	20.0	21.6	
9 Dichlorofluoromethane	67	2.480	2.474	0.006	98	211667	20.0	22.4	
8 Trichlorofluoromethane	101	2.492	2.486	0.006	9	169613	20.0	20.2	M
10 Pentane	72	2.498	2.498	0.000	97	27613	40.0	37.3	
11 Ethyl ether	59	2.706	2.693	0.013	93	60803	20.0	21.6	
12 Ethanol	46	2.730	2.699	0.031	8	20772	800.0	814.4	a
13 2-Methyl-1,3-butadiene	53	2.730	2.724	0.006	98	72413	20.0	22.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.760	2.742	0.018	92	81761	20.0	19.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.876	0.018	96	102268	20.0	18.6	
15 Acrolein	56	2.888	2.882	0.006	97	190752	300.0	316.2	
17 1,1-Dichloroethene	96	2.925	2.925	0.000	96	84024	20.0	19.8	
18 Acetone	43	3.016	3.010	0.006	87	111478	100.0	91.1	
19 Iodomethane	142	3.083	3.083	0.000	99	171938	20.0	19.0	
20 Carbon disulfide	76	3.120	3.114	0.006	100	325003	20.0	20.6	
22 Isopropyl alcohol	45	3.108	3.150	-0.042	1	61937	200.0	197.8	a
21 3-Chloro-1-propene	76	3.248	3.248	0.000	91	50743	20.0	20.2	
23 Methyl acetate	43	3.254	3.254	0.000	98	105154	40.0	38.3	
24 Cyclopentene	67	3.272	3.272	0.000	92	206067	20.0	22.0	
29 Acetonitrile	41	3.321	3.315	0.006	97	145085	200.0	214.4	a
* 25 TBA-d9 (IS)	65	3.370	3.358	0.012	0	406893	1000.0	1000.0	
26 Methylene Chloride	84	3.382	3.370	0.012	93	96756	20.0	20.0	
27 2-Methyl-2-propanol	59	3.443	3.443	0.000	92	108053	200.0	176.8	
28 Methyl tert-butyl ether	73	3.541	3.522	0.019	96	233955	20.0	19.8	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	95	90879	20.0	19.7	
31 Acrylonitrile	53	3.644	3.644	0.000	93	281752	200.0	220.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.724	3.723	0.001	95	82315	20.0	23.1	
33 Isopropyl ether	45	3.937	3.925	0.012	97	289510	20.0	23.1	
35 Vinyl acetate	86	3.986	3.967	0.019	100	25280	40.0	34.7	
34 1,1-Dichloroethane	63	3.980	3.973	0.007	74	157931	20.0	21.5	
36 2-Chloro-1,3-butadiene	88	4.022	4.010	0.012	90	77803	20.0	20.9	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	89	255121	20.0	21.1	
* 38 2-Butanone-d5	46	4.461	4.455	0.006	0	248885	250.0	250.0	
39 2,2-Dichloropropane	79	4.492	4.479	0.013	94	45435	20.0	19.3	
40 cis-1,2-Dichloroethene	96	4.510	4.504	0.006	93	97765	20.0	19.0	
41 Ethyl acetate	70	4.516	4.510	0.006	91	14092	40.0	34.0	
42 2-Butanone (MEK)	72	4.522	4.516	0.006	96	41254	100.0	84.9	
44 Methyl acrylate	55	4.577	4.577	0.000	99	57648	20.0	20.1	
43 Propionitrile	54	4.656	4.650	0.006	98	109727	200.0	193.0	
46 Chlorobromomethane	128	4.742	4.735	0.007	81	48465	20.0	18.8	
45 Tetrahydrofuran	72	4.742	4.742	0.000	62	19733	40.0	33.6	
47 Methacrylonitrile	67	4.760	4.748	0.012	93	291323	200.0	205.6	
48 Chloroform	83	4.790	4.790	0.000	99	157419	20.0	20.4	
49 Cyclohexane	84	4.937	4.937	0.000	93	145014	20.0	19.3	
50 1,1,1-Trichloroethane	97	4.949	4.943	0.006	96	146475	20.0	19.7	
$ 51 Dibromofluoromethane (Surr	113	4.955	4.949	0.006	97	200576	50.0	48.5	
52 Carbon tetrachloride	117	5.071	5.071	0.000	97	122927	20.0	18.9	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	98	117419	20.0	20.8	
56 Isobutyl alcohol	74	5.217	5.205	0.012	93	9064	500.0	438.1	
54 Benzene	78	5.296	5.290	0.006	96	328011	20.0	20.1	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.001	0	186411	50.0	48.4	
57 Isopropyl acetate	43	5.333	5.333	0.000	96	223584	20.0	21.1	
58 Tert-amyl methyl ether	87	5.345	5.339	0.006	97	70988	20.0	19.3	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	96	100158	20.0	20.1	
60 n-Heptane	57	5.443	5.443	0.000	93	77888	20.0	21.4	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	516894	50.0	50.0	
62 n-Butanol	56	5.876	5.875	0.001	90	48802	500.0	382.7	
63 Trichloroethene	95	5.949	5.943	0.006	97	81927	20.0	18.5	
65 Methylcyclohexane	83	6.077	6.071	0.006	94	172476	20.0	19.0	
64 Ethyl acrylate	56	6.077	6.077	0.000	98	54631	20.0	21.1	
66 1,2-Dichloropropane	63	6.235	6.241	-0.006	91	81593	20.0	20.8	
* 67 1,4-Dioxane-d8	96	6.296	6.290	0.006	0	36998	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.290	0.006	91	115238	40.0	43.0	
69 1,4-Dioxane	88	6.345	6.351	-0.006	28	19371	400.0	380.6	
70 n-Propyl acetate	43	6.345	6.351	-0.006	99	95318	20.0	21.8	
71 Dibromomethane	93	6.376	6.369	0.007	98	50497	20.0	19.2	
72 Dichlorobromomethane	83	6.522	6.516	0.006	99	104478	20.0	19.4	
74 2-Nitropropane	41	6.851	6.851	0.000	78	22719	40.0	33.3	
73 2-Chloroethyl vinyl ether	63	6.851	6.851	0.000	81	39180	20.0	20.2	
75 Epichlorohydrin	57	6.967	6.967	0.000	99	131036	400.0	353.5	
76 cis-1,3-Dichloropropene	75	7.022	7.015	0.007	92	113564	20.0	19.1	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	97	364292	100.0	98.6	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	650280	50.0	45.8	
79 Toluene	91	7.351	7.351	0.000	93	332357	20.0	19.2	
80 trans-1,3-Dichloropropene	75	7.698	7.704	-0.006	97	96271	20.0	18.7	
81 Ethyl methacrylate	69	7.711	7.717	-0.006	91	81398	20.0	19.5	
82 1,1,2-Trichloroethane	83	7.918	7.912	0.006	97	53032	20.0	18.6	
83 Tetrachloroethene	166	7.973	7.967	0.006	97	86298	20.0	17.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.131	0.000	93	102998	20.0	19.5	
85 2-Hexanone	43	8.174	8.180	-0.006	97	222329	100.0	94.4	
86 n-Butyl acetate	43	8.284	8.290	-0.006	99	98681	20.0	21.0	
87 Chlorodibromomethane	129	8.369	8.369	0.000	97	72481	20.0	17.4	
88 Ethylene Dibromide	107	8.534	8.533	0.001	99	64670	20.0	18.3	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	84	463350	50.0	50.0	
90 Chlorobenzene	112	9.113	9.119	-0.006	96	211862	20.0	18.3	
92 Ethylbenzene	106	9.204	9.204	0.000	98	117552	20.0	18.6	
91 1,1,1,2-Tetrachloroethane	131	9.223	9.228	-0.005	96	81840	20.0	17.7	
93 m-Xylene & p-Xylene	106	9.351	9.350	0.001	0	143403	20.0	18.6	
94 n-Butyl acrylate	73	9.789	9.789	0.000	97	47879	20.0	19.5	
95 o-Xylene	106	9.820	9.820	0.000	94	148802	20.0	18.5	
96 Styrene	104	9.850	9.850	0.000	96	231462	20.0	18.5	
97 Amyl acetate (mixed isomer	43	10.033	10.039	-0.006	90	117324	20.0	22.0	
98 Bromoform	173	10.088	10.088	0.000	96	45913	20.0	17.0	
99 Isopropylbenzene	105	10.204	10.204	0.000	95	405602	20.0	18.8	
$ 100 4-Bromofluorobenzene	174	10.424	10.423	0.001	93	208537	50.0	45.4	
101 Bromobenzene	156	10.564	10.564	0.000	93	98217	20.0	18.0	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	93229	20.0	19.6	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	477911	20.0	19.6	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	97	24490	20.0	17.9	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	89	20935	20.0	19.3	
106 2-Chlorotoluene	91	10.741	10.746	-0.005	91	313015	20.0	19.1	
107 4-Ethyltoluene	105	10.741	10.746	-0.005	90	394889	20.0	19.2	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	93	337246	20.0	18.7	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	269377	20.0	19.4	
110 Butyl Methacrylate	87	10.899	10.899	0.000	91	99072	20.0	19.7	
111 tert-Butylbenzene	119	11.106	11.106	0.000	94	273883	20.0	18.0	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	98	350954	20.0	18.9	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	465596	20.0	19.2	
114 4-Isopropyltoluene	119	11.442	11.441	0.001	98	394308	20.0	18.4	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	96	191208	20.0	18.0	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	93	277712	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	96	192773	20.0	18.0	
118 Benzyl chloride	91	11.667	11.667	0.000	99	153451	20.0	18.6	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	358995	20.0	18.8	
120 p-Diethylbenzene	119	11.777	11.777	0.000	93	225949	20.0	19.2	a
121 n-Butylbenzene	92	11.801	11.801	0.000	98	219269	20.0	19.9	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	194394	20.0	18.4	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	385321	20.0	18.4	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	94	16777	20.0	17.2	
125 1,3,5-Trichlorobenzene	180	12.649	12.649	0.000	98	175415	20.0	18.9	
126 1,2,4-Trichlorobenzene	180	13.136	13.136	0.000	94	164129	20.0	18.2	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	93	80787	20.0	18.3	
128 Naphthalene	128	13.338	13.337	0.001	99	372982	20.0	18.0	
129 1,2,3-Trichlorobenzene	180	13.527	13.526	0.001	95	164563	20.0	18.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	38.7	
S 131 Xylenes, Total	100				0		40.0	37.2	
S 132 Total BTEX	1				0		100.0	95.0	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00257	Amount Added:	2.00	Units: uL	
ACROLEIN W_00076	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

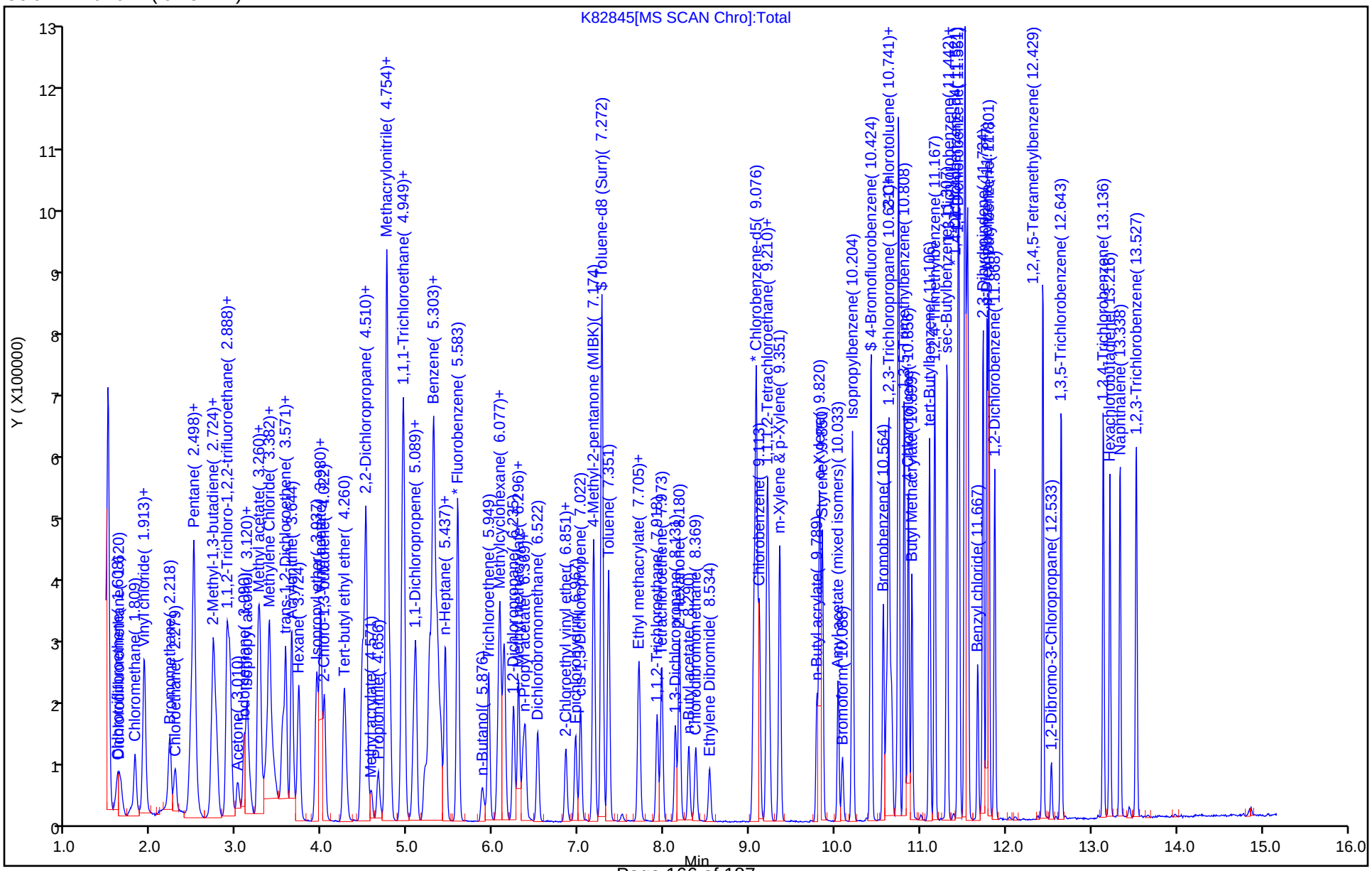
Report Date: 01-May-2018 11:33:51 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82845.D

Injection Date:	01-May-2018 06:52:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

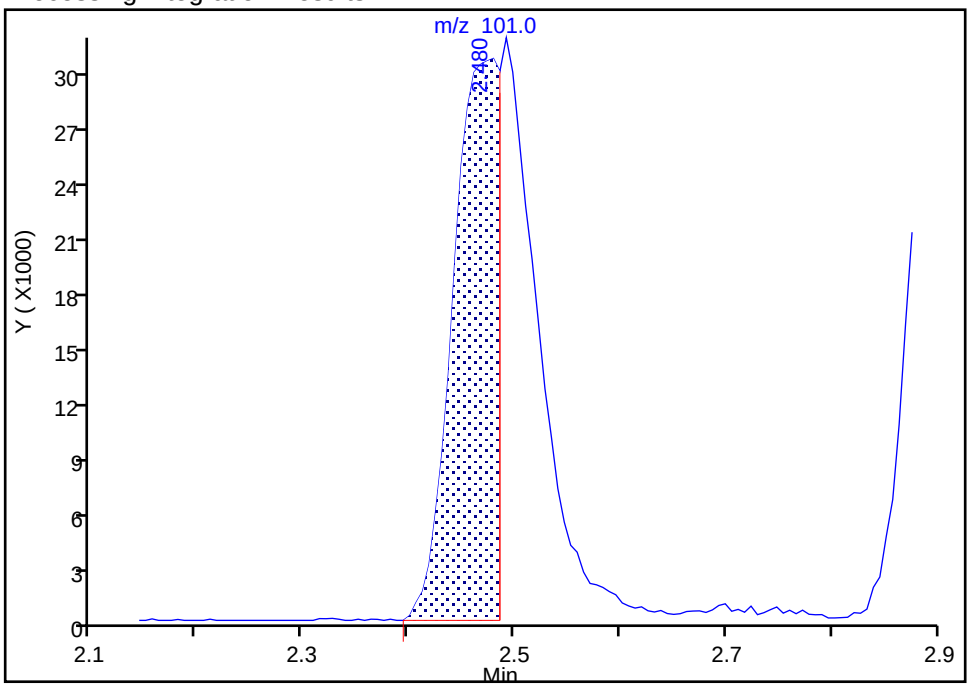
Data File:	\\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82845.D		
Injection Date:	01-May-2018 06:52:30	Instrument ID:	CVOAMS9
Lims ID:	LCS		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

8 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

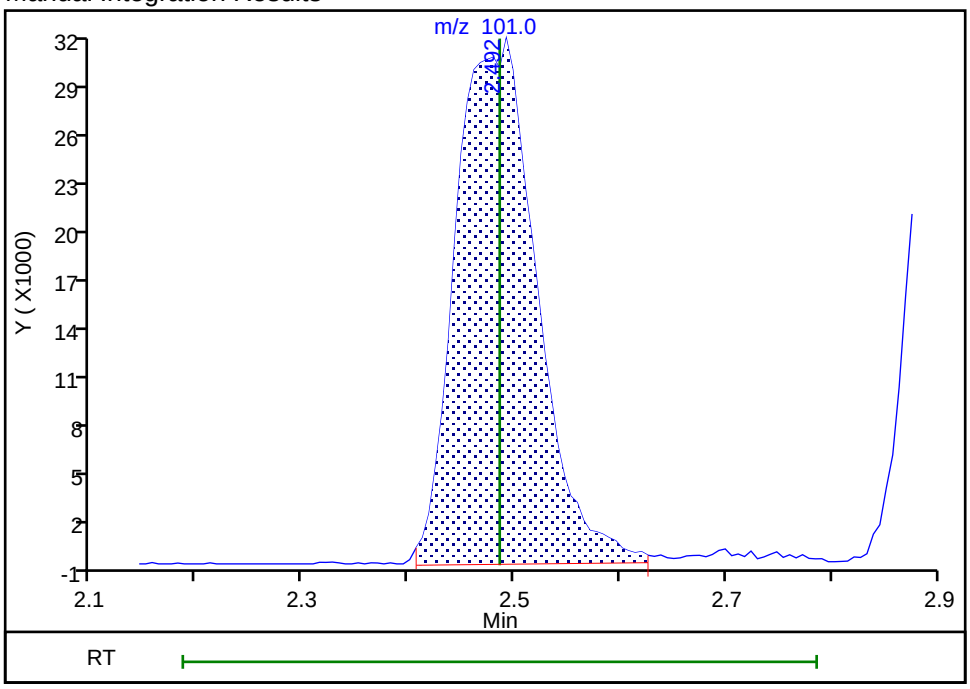
Processing Integration Results

RT: 2.48
Area: 94635
Amount: 11.264543
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 169613
Amount: 20.189285
Amount Units: ug/l



Reviewer: tupayachia, 01-May-2018 07:42:00

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-515499/4

Matrix: Solid | Lab File ID: K82846.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/01/2018 07:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0191		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0198		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0183		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0190		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0211		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0193		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0183		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0179		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0176		0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0178		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0201		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0205		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0179		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0176		0.0010	0.00010
123-91-1	1,4-Dioxane	0.395		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0851		0.0050	0.0011
591-78-6	2-Hexanone	0.0940		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0940		0.0050	0.00066
67-64-1	Acetone	0.0862		0.0050	0.0038
71-43-2	Benzene	0.0197		0.0010	0.00026
75-25-2	Bromoform	0.0172		0.0010	0.00043
74-83-9	Bromomethane	0.0209		0.0010	0.00047
75-15-0	Carbon disulfide	0.0199		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0190		0.0010	0.00018
108-90-7	Chlorobenzene	0.0185		0.0010	0.00018
74-97-5	Chlorobromomethane	0.0187		0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0174		0.0010	0.00019
75-00-3	Chloroethane	0.0221		0.0010	0.00052
67-66-3	Chloroform	0.0199		0.0010	0.00032
74-87-3	Chloromethane	0.0214		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0189		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0194		0.0010	0.00027
110-82-7	Cyclohexane	0.0189		0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0195		0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0144		0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-515499/4

Matrix: Solid | Lab File ID: K82846.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/01/2018 07:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0182		0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0186		0.0010	0.00018
98-82-8	Isopropylbenzene	0.0183		0.0010	0.00013
79-20-9	Methyl acetate	0.0359		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0206		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0191		0.0010	0.00016
75-09-2	Methylene Chloride	0.0198		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0180		0.0010	0.00017
95-47-6	o-Xylene	0.0180		0.0010	0.000095
100-42-5	Styrene	0.0183		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0177		0.0010	0.00014
108-88-3	Toluene	0.0188		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0189		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0188		0.0010	0.00027
79-01-6	Trichloroethene	0.0186		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0204		0.0010	0.00041
75-01-4	Vinyl chloride	0.0215		0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		78-135
460-00-4	4-Bromofluorobenzene	98		67-126
1868-53-7	Dibromofluoromethane (Surr)	103		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82846.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-May-2018 07:17:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0071307-004
Operator ID: Instrument ID: CVOAMS9

Method: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\8260S9.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 01-May-2018 11:35:05 Calib Date: 21-Apr-2018 08:07:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS9\20180421-70764.b\K82301.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: delpolitov Date: 01-May-2018 11:35:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.596	1.596	0.000	89	58653	20.0	12.7	
2 Dichlorodifluoromethane	85	1.633	1.632	0.001	97	137497	20.0	14.4	
3 Chloromethane	50	1.803	1.797	0.006	99	135858	20.0	21.4	
5 Butadiene	54	1.907	1.895	0.012	97	109021	20.0	22.4	
4 Vinyl chloride	62	1.907	1.907	0.000	97	136616	20.0	21.5	
6 Bromomethane	94	2.212	2.199	0.013	99	110725	20.0	20.9	
7 Chloroethane	64	2.273	2.266	0.007	99	70744	20.0	22.1	
9 Dichlorofluoromethane	67	2.468	2.474	-0.006	98	208173	20.0	22.3	
8 Trichlorofluoromethane	101	2.480	2.486	-0.006	55	169135	20.0	20.4	
10 Pentane	72	2.498	2.498	0.000	96	27669	40.0	34.8	
11 Ethyl ether	59	2.693	2.693	0.000	94	60112	20.0	21.6	
12 Ethanol	46	2.693	2.699	-0.006	73	22105	800.0	807.4	
13 2-Methyl-1,3-butadiene	53	2.718	2.724	-0.006	98	71529	20.0	22.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.748	2.742	0.006	91	78543	20.0	19.1	
16 1,1,2-Trichloro-1,2,2-trif	101	2.894	2.876	0.018	97	98893	20.0	18.3	
15 Acrolein	56	2.882	2.882	0.000	97	183189	300.0	282.9	
17 1,1-Dichloroethene	96	2.913	2.925	-0.012	97	80815	20.0	19.3	
18 Acetone	43	3.004	3.010	-0.006	87	111879	100.0	86.2	
19 Iodomethane	142	3.077	3.083	-0.006	98	167090	20.0	18.7	
20 Carbon disulfide	76	3.114	3.114	0.000	99	311187	20.0	19.9	
22 Isopropyl alcohol	45	3.090	3.150	-0.060	1	66360	200.0	197.4	a
21 3-Chloro-1-propene	76	3.242	3.248	-0.006	97	50576	20.0	20.4	
23 Methyl acetate	43	3.248	3.254	-0.006	99	105951	40.0	35.9	
24 Cyclopentene	67	3.266	3.272	-0.006	94	197981	20.0	21.4	
29 Acetonitrile	41	3.309	3.315	-0.006	91	124453	200.0	171.4	Ma
* 25 TBA-d9 (IS)	65	3.364	3.358	0.006	0	436760	1000.0	1000.0	
26 Methylene Chloride	84	3.376	3.370	0.006	93	94498	20.0	19.8	
27 2-Methyl-2-propanol	59	3.431	3.443	-0.012	94	111837	200.0	170.5	
28 Methyl tert-butyl ether	73	3.535	3.522	0.013	97	240709	20.0	20.6	
30 trans-1,2-Dichloroethene	96	3.571	3.571	0.000	96	86156	20.0	18.9	
31 Acrylonitrile	53	3.638	3.644	-0.006	94	285736	200.0	226.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.717	3.723	-0.006	94	82307	20.0	23.4	
33 Isopropyl ether	45	3.931	3.925	0.006	97	281994	20.0	22.8	
35 Vinyl acetate	86	3.980	3.967	0.013	100	24870	40.0	31.8	
34 1,1-Dichloroethane	63	3.974	3.973	0.001	70	152961	20.0	21.1	
36 2-Chloro-1,3-butadiene	88	4.022	4.010	0.012	90	75369	20.0	20.5	
37 Tert-butyl ethyl ether	59	4.254	4.254	0.000	88	253051	20.0	21.2	
* 38 2-Butanone-d5	46	4.455	4.455	0.000	0	264054	250.0	250.0	
39 2,2-Dichloropropane	79	4.486	4.479	0.007	96	45788	20.0	19.6	
40 cis-1,2-Dichloroethene	96	4.504	4.504	0.000	95	96359	20.0	18.9	
41 Ethyl acetate	70	4.510	4.510	0.000	92	14394	40.0	32.7	
42 2-Butanone (MEK)	72	4.516	4.516	0.000	96	43881	100.0	85.1	
44 Methyl acrylate	55	4.571	4.577	-0.006	100	60966	20.0	21.6	
43 Propionitrile	54	4.650	4.650	0.000	98	113913	200.0	186.7	
46 Chlorobromomethane	128	4.742	4.735	0.007	78	47795	20.0	18.7	
45 Tetrahydrofuran	72	4.736	4.742	-0.006	66	20428	40.0	32.7	
47 Methacrylonitrile	67	4.754	4.748	0.006	93	295250	200.0	210.8	
48 Chloroform	83	4.790	4.790	0.000	99	151708	20.0	19.9	
49 Cyclohexane	84	4.931	4.937	-0.006	94	139695	20.0	18.9	
50 1,1,1-Trichloroethane	97	4.943	4.943	0.000	97	140098	20.0	19.1	
$ 51 Dibromofluoromethane (Surr	113	4.949	4.949	0.000	96	211636	50.0	51.7	
52 Carbon tetrachloride	117	5.071	5.071	0.000	98	121713	20.0	19.0	
53 1,1-Dichloropropene	75	5.095	5.095	0.000	97	111462	20.0	20.0	
56 Isobutyl alcohol	74	5.193	5.205	-0.012	93	8618	500.0	388.0	
54 Benzene	78	5.290	5.290	0.000	95	324350	20.0	19.7	
$ 55 1,2-Dichloroethane-d4 (Sur	65	5.309	5.309	0.001	0	197914	50.0	52.0	
57 Isopropyl acetate	43	5.327	5.333	-0.006	96	235189	20.0	22.4	a
58 Tert-amyl methyl ether	87	5.345	5.339	0.006	92	71857	20.0	19.8	
59 1,2-Dichloroethane	62	5.388	5.382	0.006	97	99064	20.0	20.1	
60 n-Heptane	57	5.437	5.443	-0.006	94	74366	20.0	20.7	
* 61 Fluorobenzene	96	5.583	5.583	0.000	99	510977	50.0	50.0	
62 n-Butanol	56	5.870	5.875	-0.005	89	58512	500.0	427.4	
63 Trichloroethene	95	5.943	5.943	0.000	97	81319	20.0	18.6	
65 Methylcyclohexane	83	6.077	6.071	0.006	96	170939	20.0	19.1	
64 Ethyl acrylate	56	6.071	6.077	-0.006	93	53906	20.0	21.1	
66 1,2-Dichloropropane	63	6.235	6.241	-0.006	92	79418	20.0	20.5	
* 67 1,4-Dioxane-d8	96	6.278	6.290	-0.012	0	38937	1000.0	1000.0	
68 Methyl methacrylate	41	6.296	6.290	0.006	89	121810	40.0	46.0	
69 1,4-Dioxane	88	6.351	6.351	0.000	31	21153	400.0	394.9	
70 n-Propyl acetate	43	6.345	6.351	-0.006	99	100690	20.0	23.3	
71 Dibromomethane	93	6.375	6.369	0.006	97	51308	20.0	19.8	
72 Dichlorobromomethane	83	6.522	6.516	0.006	99	104142	20.0	19.5	
74 2-Nitropropane	41	6.851	6.851	0.000	77	25043	40.0	37.1	
73 2-Chloroethyl vinyl ether	63	6.851	6.851	0.000	80	41798	20.0	21.8	
75 Epichlorohydrin	57	6.961	6.967	-0.006	99	140280	400.0	356.7	
76 cis-1,3-Dichloropropene	75	7.022	7.015	0.007	92	115568	20.0	19.4	
77 4-Methyl-2-pentanone (MIBK	43	7.174	7.174	0.000	97	368586	100.0	94.0	
$ 78 Toluene-d8 (Surr)	98	7.272	7.272	0.000	99	705175	50.0	49.4	
79 Toluene	91	7.351	7.351	0.000	93	326875	20.0	18.8	
80 trans-1,3-Dichloropropene	75	7.698	7.704	-0.006	97	97354	20.0	18.8	
81 Ethyl methacrylate	69	7.711	7.717	-0.006	87	81822	20.0	19.5	
82 1,1,2-Trichloroethane	83	7.918	7.912	0.006	96	54441	20.0	19.0	
83 Tetrachloroethene	166	7.973	7.967	0.006	98	86469	20.0	17.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.131	8.131	0.000	90	103446	20.0	19.5	
85 2-Hexanone	43	8.174	8.180	-0.006	97	234753	100.0	94.0	
86 n-Butyl acetate	43	8.284	8.290	-0.006	99	105513	20.0	22.4	
87 Chlorodibromomethane	129	8.369	8.369	0.000	98	72526	20.0	17.4	
88 Ethylene Dibromide	107	8.534	8.533	0.001	98	66029	20.0	18.6	
* 89 Chlorobenzene-d5	117	9.076	9.076	0.000	85	465981	50.0	50.0	
90 Chlorobenzene	112	9.113	9.119	-0.006	96	215104	20.0	18.5	
92 Ethylbenzene	106	9.204	9.204	0.000	98	115567	20.0	18.2	
91 1,1,1,2-Tetrachloroethane	131	9.229	9.228	0.001	95	81720	20.0	17.6	
93 m-Xylene & p-Xylene	106	9.357	9.350	0.007	0	139321	20.0	18.0	
94 n-Butyl acrylate	73	9.789	9.789	0.000	97	49124	20.0	19.9	
95 o-Xylene	106	9.820	9.820	0.000	94	145745	20.0	18.0	
96 Styrene	104	9.850	9.850	0.000	97	230750	20.0	18.3	
97 Amyl acetate (mixed isomer	43	10.033	10.039	-0.006	89	120898	20.0	22.2	
98 Bromoform	173	10.088	10.088	0.000	96	46776	20.0	17.2	
99 Isopropylbenzene	105	10.204	10.204	0.000	96	397058	20.0	18.3	
$ 100 4-Bromofluorobenzene	174	10.423	10.423	0.000	95	226503	50.0	49.0	
101 Bromobenzene	156	10.564	10.564	0.000	94	96614	20.0	17.4	
102 1,1,2,2-Tetrachloroethane	83	10.600	10.600	0.000	98	95970	20.0	19.8	
103 N-Propylbenzene	91	10.631	10.631	0.000	99	465947	20.0	18.7	
104 1,2,3-Trichloropropane	110	10.655	10.655	0.000	97	25635	20.0	18.3	
105 trans-1,4-Dichloro-2-buten	53	10.667	10.667	0.000	92	21316	20.0	19.3	
106 2-Chlorotoluene	91	10.741	10.746	-0.006	93	311588	20.0	18.6	
107 4-Ethyltoluene	105	10.747	10.746	0.001	89	388452	20.0	18.5	
108 1,3,5-Trimethylbenzene	105	10.808	10.807	0.001	93	332696	20.0	18.1	
109 4-Chlorotoluene	91	10.856	10.856	0.000	97	258127	20.0	18.2	
110 Butyl Methacrylate	87	10.899	10.899	0.000	90	102100	20.0	19.9	
111 tert-Butylbenzene	119	11.106	11.106	0.000	95	273810	20.0	17.6	
112 1,2,4-Trimethylbenzene	105	11.167	11.167	0.000	98	346608	20.0	18.3	
113 sec-Butylbenzene	105	11.307	11.307	0.000	99	459571	20.0	18.5	
114 4-Isopropyltoluene	119	11.442	11.441	0.001	98	389082	20.0	17.8	
115 1,3-Dichlorobenzene	146	11.454	11.448	0.006	97	193931	20.0	17.9	
* 116 1,4-Dichlorobenzene-d4	152	11.521	11.521	0.000	94	283520	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.539	11.539	0.000	97	192178	20.0	17.6	
118 Benzyl chloride	91	11.667	11.667	0.000	99	154824	20.0	18.4	
119 2,3-Dihydroindene	117	11.734	11.734	0.000	94	357292	20.0	18.4	
120 p-Diethylbenzene	119	11.777	11.777	0.000	94	219390	20.0	18.3	a
121 n-Butylbenzene	92	11.801	11.801	0.000	97	216369	20.0	19.3	
122 1,2-Dichlorobenzene	146	11.868	11.868	0.000	97	191813	20.0	17.8	
123 1,2,4,5-Tetramethylbenzene	119	12.429	12.429	0.000	97	380002	20.0	17.8	
124 1,2-Dibromo-3-Chloropropan	75	12.533	12.533	0.000	95	17560	20.0	17.6	
125 1,3,5-Trichlorobenzene	180	12.649	12.649	0.000	98	170573	20.0	18.0	
126 1,2,4-Trichlorobenzene	180	13.142	13.136	0.006	94	165350	20.0	17.9	
127 Hexachlorobutadiene	225	13.216	13.215	0.001	94	79995	20.0	17.8	
128 Naphthalene	128	13.338	13.337	0.001	99	377294	20.0	17.9	
129 1,2,3-Trichlorobenzene	180	13.527	13.526	0.001	95	164109	20.0	18.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	37.8	
S 131 Xylenes, Total	100				0		40.0	36.0	
S 132 Total BTEX	1				0		100.0	92.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00257	Amount Added:	2.00	Units: uL	
ACROLEIN W_00076	Amount Added:	3.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	2.00	Units: uL	
8260SURR250_00172	Amount Added:	1.00	Units: uL	Run Reagent
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

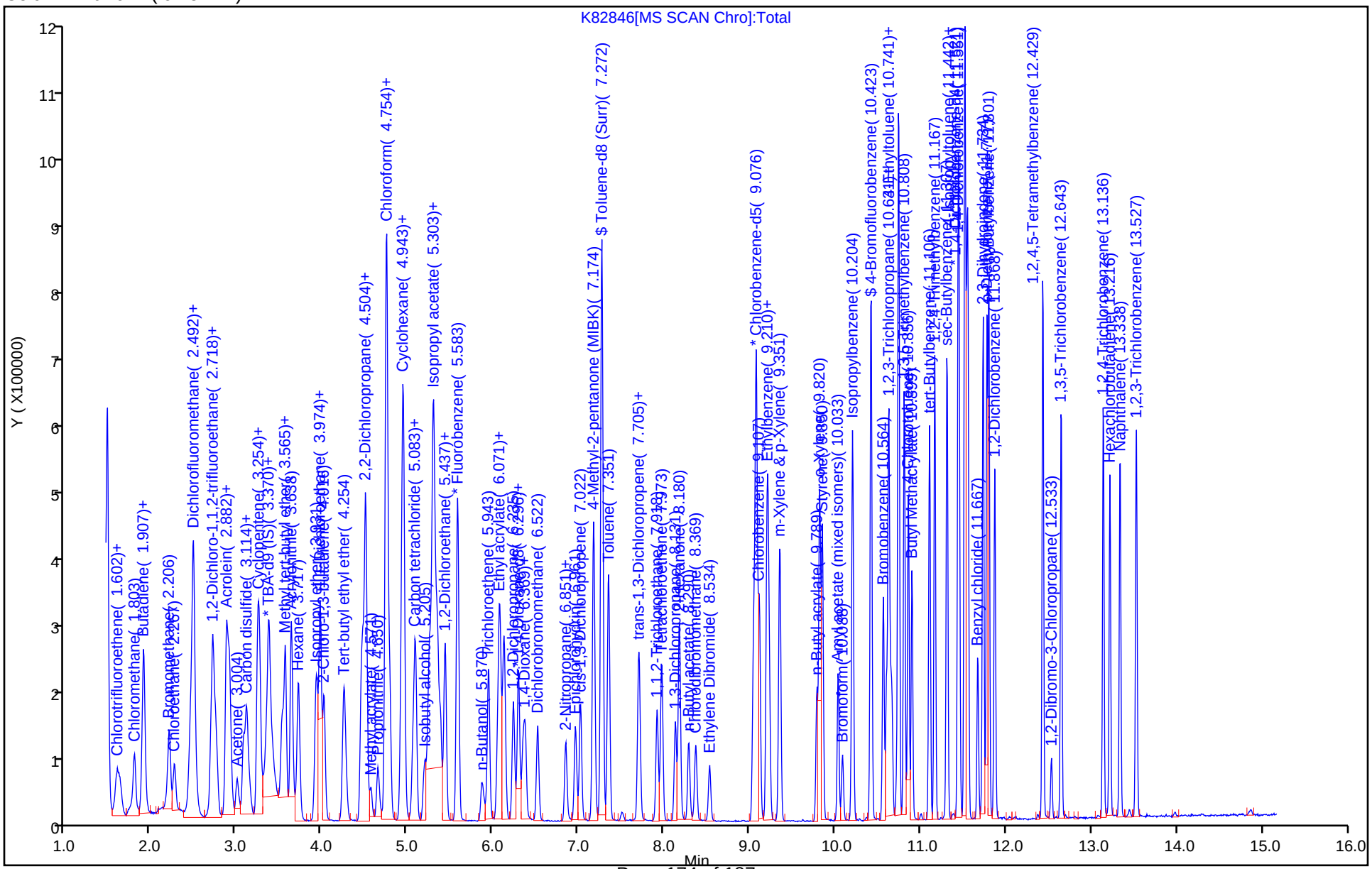
Report Date: 01-May-2018 11:35:06 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS9\20180501-71307.b\K82846.D

Injection Date:	01-May-2018 07:17:30	Instrument ID:	CVOAMS9	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260S9	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 04/21/2018 05:15

Analysis Batch Number: 512949 End Date: 04/21/2018 16:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-512949/1		04/21/2018 05:15	1	K82294.D	Rtx-624 0.25(mm)
STD1 460-512949/3 IC		04/21/2018 06:04	1	K82296.D	Rtx-624 0.25(mm)
STD5 460-512949/4 IC		04/21/2018 06:29	1	K82297.D	Rtx-624 0.25(mm)
STD20 460-512949/5 ICIS		04/21/2018 06:54	1	K82298.D	Rtx-624 0.25(mm)
STD50 460-512949/6 IC		04/21/2018 07:18	1	K82299.D	Rtx-624 0.25(mm)
STD200 460-512949/7 IC		04/21/2018 07:42	1	K82300.D	Rtx-624 0.25(mm)
STD500 460-512949/8 IC		04/21/2018 08:07	1	K82301.D	Rtx-624 0.25(mm)
ICV 460-512949/13		04/21/2018 10:08	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 10:33	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 10:57	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 11:45	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 12:10	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 12:34	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 12:58	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 13:22	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 13:47	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 14:11	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 14:35	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 14:59	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 15:23	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 15:48	1		Rtx-624 0.25(mm)
ZZZZZ		04/21/2018 16:12	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Instrument ID: CVOAMS9 Start Date: 05/01/2018 06:00

Analysis Batch Number: 515499 End Date: 05/01/2018 17:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-515499/1		05/01/2018 06:00	1	K82843.D	Rtx-624 0.25(mm)
CCVIS 460-515499/2		05/01/2018 06:28	1	K82844.D	Rtx-624 0.25(mm)
LCS 460-515499/3		05/01/2018 06:52	1	K82845.D	Rtx-624 0.25(mm)
LCSD 460-515499/4		05/01/2018 07:17	1	K82846.D	Rtx-624 0.25(mm)
MB 460-515499/7		05/01/2018 08:44	1	K82849.D	Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 09:08	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 09:33	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 09:58	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 10:22	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 10:47	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 13:36	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 14:00	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 14:25	1		Rtx-624 0.25(mm)
460-154849-1		05/01/2018 14:49	1	K82864.D	Rtx-624 0.25(mm)
460-154849-2		05/01/2018 15:14	1	K82865.D	Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 15:38	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 16:02	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 16:27	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 16:51	1		Rtx-624 0.25(mm)
ZZZZZ		05/01/2018 17:15	1		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Batch Number: 514570 Batch Start Date: 04/26/18 23:36 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 04/26/18 23:37

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
460-154849-A-1	GC-SO-101(SO)	5035, 8260C	T	+030.269 g	35.82 g	5.551 g	5 mL		
460-154849-A-2	GC-Sump (SO)	5035, 8260C	T	+030.405 g	30.60 g	0.195 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-154849-1

SDG No.:

Project: GEM Cleaners

Client Sample ID	Lab Sample ID
GC-SO-101(SO)	460-154849-1
GC-Sump (SO)	460-154849-2

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-154849-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 02/15/2007 17:07

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		1	
Percent Solids		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-154849-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/01/2007 16:49

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		1	
Percent Solids		1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/27/2018 09:44 End Date: 04/27/2018 09:44

Lab Sample ID	D / F	Type	Time	Analytes																			
				% Sol	Moist																		
ZZZZZZ			09:44																				
ZZZZZZ			09:44																				
ZZZZZZ			09:44																				
ZZZZZZ			09:44																				
460-154849-1	1	T	09:44	X	X																		
460-154849-2	1	T	09:44	X	X																		
ZZZZZZ			09:44																				
ZZZZZZ			09:44																				
ZZZZZZ			09:44																				
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ZZZZZZ			09:44																				
ZZZZZZ			09:44																				
ZZZZZZ			09:44																				
ZZZZZZ			09:44																				
460-154814-D-3 DU	1	T	09:44	X	X																		

Prep Types

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Batch Number: 514693 Batch Start Date: 04/27/18 09:44 Batch Analyst: Potts, Brandon J

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-154849-D-1	GC-SO-101(SO)	Moisture	T	93	1.05 g	8.38 g	8.26 g		
460-154849-D-2	GC-Sump (SO)	Moisture	T	94	1.04 g	7.84 g	6.88 g		
460-154814-D-3 DU		Moisture	T	110	1.05 g	6.89 g	5.23 g		

Batch Notes	
Balance ID	104
Date samples were placed in the oven	04/27/2018
Oven Temp In	104 Degrees C
Time samples were place in the oven	09:57
Date samples were removed from oven	04/28/2018
Oven Temp Out	104 Degrees C
Time Samples were removed from oven	06:30
Oven ID	3
Thermometer ID	146052
Temperature - Start - Uncorrected	104 Degrees C
Temperature - End - Uncorrected	104 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Lindsay O'Hara	Samplers Name (Printed): JMK / EE	Site/Project Identification: Gem Cleaners
Company: TRC Engineers Inc.	P. O. #: 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 1430 Broadway	Analysis Turnaround Time: Standard ☒	Regulatory Program: / DKQP: ☐
City: NY State: NY 10018	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone: 203-278-5305 Fax:		Job No: 154849

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs + 10 8260 + 1,4 Dioxane (low level)	SHORT HOLD	Sample Numbers
GC - Waste Drain (SO)	4/26	0810	S	4	x		1
GC - Sump (SO)	4/26	0750	S	4	x		2

GW

460-154849 Chain of Custody

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil: 2/1
6 = Other _____, 7 = Other _____ — Water:

Special Instructions: Please provide Cat B Deliverable to Equis NYSDEC EDP. Provide separate lab report

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC Engineers	4/26 | 1649	1)	TA
Relinquished by 2)	Company	Date / Time 4/26/18 | 2020	Received by 2)	Company TA Edi
Relinquished by 3)	Company	Date / Time |	Received by 3)	Company
Relinquished by 4)	Company	Date / Time |	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

1.4 / 1.7 1.7 / 1.1 IR # 11 10-C

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 154849

Number of Coolers: 2 IR Gun # 11

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.7 °C	2.7 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	4.8 °C	4.8 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 4/26/18

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-154849-1

Login Number: 154849
List Number: 1
Creator: Jara, Kelly D

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Job Number: 460-154781-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Emily Ebert

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
5/29/2018 1:27 PM

Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
05/29/2018
Revision: 1

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

Job Number: 460-154781-1

Job Description: GEM Cleaners

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
5/29/2018 1:27 PM

Jannel O Franklin

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 460-154781-1, Revision 1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

REVISION 1
The following report(s) required a revision: 460-154781-1. Details are as follows: Per client 5/23/18, inquiry into high reporting limits later revealed our reporting limit update for this Isotope dilution did not update appropriately due to the batching/merging of jobs; this has been addressed and your reporting limit has been adusted accordingly.

RECEIPT
The samples were received on 4/25/2018 7:30 PM and 4/26/2018 8:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.8º C, 1.4º C and 1.7º C.

Receipt Exceptions

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): GC-MW-DUP01(WG) (460-154781-11). The client was contacted and confirmed that this sample was collected in error and should not be analyzed.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples GC-MW-107(WG) (460-154781-1), GC-MW-102(WG) (460-154925-1), GC-MW-107D(WG) (460-154781-2), GC-MW-109(WG) (460-154925-2), GC-MW-108(WG) (460-154781-3), GC-MW-109M(WG) (460-154925-3), GC-MW-1B(WG) (460-154781-4), GC-MW-101(WG) (460-154925-4), GC-MW-103(WG) (460-154781-5), GC-MW-101D(WG) (460-154925-5), GC-MW-104(WG) (460-154781-6), GC-MW-106(WG) (460-154925-6), GC-MW-105(WG) (460-154781-7), GC-MW-3(WG) (460-154925-7), GC-DRAIN(WG) (460-154781-8), GC-TB-20180426 (460-154925-8), GC-Equipment Blank (460-154781-9), GC-Equipment Blank-2 (460-154925-9), GC-TB-20180425 (460-154781-10), GC-MW-110(WG) (460-154925-10), GC-MW-110D(WG) (460-154925-11) and GC-MW-2(WG) (460-154925-12) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 05/02/2018, 05/03/2018, 05/04/2018 and 05/05/2018.

The continuing calibration verification (CCV) associated with batch 460-516016 recovered above the upper control limit for Carbon tetrachloride, Chloroethane, Chloromethane, Dichlorodifluoromethane, Trichlorofluoromethane and Vinyl chloride. The response factor for 1,2-Dibromo-3-Chloropropane was below the minimum required. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-516291 was outside the method criteria for the following analyte(s): Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) associated with batch 460-516110 recovered above the upper control limit for Carbon tetrachloride and Trichlorofluoromethane. The response factor for 1,2-Dibromo-3-Chloropropane was below the minimum required. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 460-516299 recovered above the upper control limit for Carbon

tetrachloride, Chloroethane and Trichlorofluoromethane. The response factor for 1,2-Dibromo-3-Chloropropane was below the minimum required. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) for analytical batch 460-516299 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. Chloroethane failed the recovery criteria high for LCS 460-516299/4. Refer to the QC report for details.

Acetone was detected in method blank MB 460-516607/10 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Bromomethane, Carbon tetrachloride and Chloroethane failed the recovery criteria high for the MS of sample GC-MW-107(WG)MS (460-154781-1) in batch 460-516016. Bromomethane failed the recovery criteria high for the MSD of sample GC-MW-107(WG)MSD (460-154781-1) in batch 460-516016.

Bromomethane failed the recovery criteria high for the MS/MSD of sample 460-154828-2 in batch 460-516110.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

8270D, SIM, ISOTOPE DILUTION

Samples GC-MW-107(WG) (460-154781-1), GC-MW-102(WG) (460-154925-1), GC-MW-107D(WG) (460-154781-2), GC-MW-109(WG) (460-154925-2), GC-MW-108(WG) (460-154781-3), GC-MW-109M(WG) (460-154925-3), GC-MW-1B(WG) (460-154781-4), GC-MW-101(WG) (460-154925-4), GC-MW-103(WG) (460-154781-5), GC-MW-101D(WG) (460-154925-5), GC-MW-104(WG) (460-154781-6), GC-MW-106(WG) (460-154925-6), GC-MW-105(WG) (460-154781-7), GC-MW-3(WG) (460-154925-7), GC-DRAIN(WG) (460-154781-8), GC-Equipment Blank (460-154781-9), GC-Equipment Blank-2 (460-154925-9), GC-MW-110(WG) (460-154925-10), GC-MW-110D(WG) (460-154925-11) and GC-MW-2(WG) (460-154925-12) were analyzed for 8270D, SIM, Isotope Dilution in accordance with 8270D. The samples were prepared on 04/30/2018 and analyzed on 04/30/2018 and 05/01/2018.

No difficulties were encountered during the 8270D, SIM, Isotope Dilution analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-154781-1	GC-MW-107(WG)	Water	04/25/18 10:00	04/25/18 19:30
460-154781-2	GC-MW-107D(WG)	Water	04/25/18 11:15	04/25/18 19:30
460-154781-3	GC-MW-108(WG)	Water	04/25/18 11:50	04/25/18 19:30
460-154781-4	GC-MW-1B(WG)	Water	04/25/18 12:35	04/25/18 19:30
460-154781-5	GC-MW-103(WG)	Water	04/25/18 13:10	04/25/18 19:30
460-154781-6	GC-MW-104(WG)	Water	04/25/18 13:35	04/25/18 19:30
460-154781-7	GC-MW-105(WG)	Water	04/25/18 14:43	04/25/18 19:30
460-154781-8	GC-DRAIN(WG)	Water	04/25/18 14:00	04/25/18 19:30
460-154781-9	GC-Equipment Blank	Water	04/25/18 15:00	04/25/18 19:30
460-154781-10	GC-TB-20180425	Water	04/25/18 00:00	04/25/18 19:30
460-154925-1	GC-MW-102(WG)	Water	04/26/18 08:25	04/26/18 20:20
460-154925-2	GC-MW-109(WG)	Water	04/26/18 09:57	04/26/18 20:20
460-154925-3	GC-MW-109M(WG)	Water	04/26/18 09:00	04/26/18 20:20
460-154925-4	GC-MW-101(WG)	Water	04/26/18 11:15	04/26/18 20:20
460-154925-5	GC-MW-101D(WG)	Water	04/26/18 11:15	04/26/18 20:20
460-154925-6	GC-MW-106(WG)	Water	04/26/18 11:55	04/26/18 20:20
460-154925-7	GC-MW-3(WG)	Water	04/26/18 12:45	04/26/18 20:20
460-154925-8	GC-TB-20180426	Water	04/26/18 09:30	04/26/18 20:20
460-154925-9	GC-Equipment Blank-2	Water	04/26/18 09:30	04/26/18 20:20
460-154925-10	GC-MW-110(WG)	Water	04/26/18 13:35	04/26/18 20:20
460-154925-11	GC-MW-110D(WG)	Water	04/26/18 14:30	04/26/18 20:20
460-154925-12	GC-MW-2(WG)	Water	04/26/18 15:00	04/26/18 20:20

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

Client Sample ID: GC-MW-107(WG) — Lab Sample ID: 460-154781-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	8.8		1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-107D(WG) — Lab Sample ID: 460-154781-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.20	J	1.0	0.13	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-108(WG) — Lab Sample ID: 460-154781-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	35		1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-1B(WG) — Lab Sample ID: 460-154781-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.46	J	1.0	0.22	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.13	J	1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-103(WG) — Lab Sample ID: 460-154781-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.2		1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-104(WG) — Lab Sample ID: 460-154781-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.34	J	1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-105(WG) — Lab Sample ID: 460-154781-7

No Detections.

Client Sample ID: GC-DRAIN(WG) — Lab Sample ID: 460-154781-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.14	J	1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-Equipment Blank — Lab Sample ID: 460-154781-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.84	J	1.0	0.21	ug/L	1		8260C	Total/NA
Toluene	0.33	J	1.0	0.25	ug/L	1		8260C	Total/NA

Client Sample ID: GC-TB-20180425 — Lab Sample ID: 460-154781-10

No Detections.

Client Sample ID: GC-MW-102(WG) — Lab Sample ID: 460-154925-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.3	J	5.0	1.1	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-MW-102(WG) (Continued) — Lab Sample ID: 460-154925-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.4		1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-109(WG) — Lab Sample ID: 460-154925-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J	5.0	1.1	ug/L	1		8260C	Total/NA
Tetrachloroethene	12		1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-109M(WG) — Lab Sample ID: 460-154925-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.4	J	5.0	1.1	ug/L	1		8260C	Total/NA
Methylene Chloride	0.24	J	1.0	0.21	ug/L	1		8260C	Total/NA
Tetrachloroethene	52		1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-101(WG) — Lab Sample ID: 460-154925-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J	5.0	1.1	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.22	J	1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-101D(WG) — Lab Sample ID: 460-154925-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.6	J	5.0	1.1	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.18	J	1.0	0.13	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-106(WG) — Lab Sample ID: 460-154925-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J	5.0	1.1	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-3(WG) — Lab Sample ID: 460-154925-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.6	J	5.0	1.1	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.39	J	1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: GC-TB-20180426 — Lab Sample ID: 460-154925-8

No Detections.

Client Sample ID: GC-Equipment Blank-2 — Lab Sample ID: 460-154925-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.9	J	5.0	1.1	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-110(WG) — Lab Sample ID: 460-154925-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.3	J	5.0	1.1	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

Client Sample ID: GC-MW-110D(WG) — Lab Sample ID: 460-154925-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.5	J B	5.0	1.1	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-2(WG) — Lab Sample ID: 460-154925-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J	5.0	1.1	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.14	J	1.0	0.12	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: GC-MW-107(WG)

Date Collected: 04/25/18 10:00
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 00:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 00:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 00:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 00:14	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 00:14	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 00:14	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 00:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 00:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 00:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 00:14	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 00:14	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 00:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 00:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 00:14	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 00:14	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 00:14	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 00:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 00:14	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 00:14	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 00:14	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 00:14	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 00:14	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 00:14	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 00:14	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 00:14	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 00:14	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 00:14	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 00:14	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 00:14	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 00:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 00:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 00:14	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 00:14	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 00:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 00:14	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 00:14	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 00:14	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 00:14	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 00:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 00:14	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 00:14	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 00:14	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 00:14	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 00:14	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 00:14	1
Tetrachloroethene	**8.8**		1.0	0.12	ug/L			05/03/18 00:14	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 00:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 00:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 00:14	1

Client Sample ID: GC-MW-107(WG)

Lab Sample ID: 460-154781-1

Date Collected: 04/25/18 10:00

Matrix: Water

Date Received: 04/25/18 19:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 00:14	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 00:14	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 00:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 00:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*		*05/03/18 00:14*	*1*
4-Bromofluorobenzene	*91*		*77 - 124*		*05/03/18 00:14*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*05/03/18 00:14*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*05/03/18 00:14*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.016	ug/L		04/30/18 15:53	04/30/18 20:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*44*		*10 - 150*	*04/30/18 15:53*	*04/30/18 20:54*	*1*

Client Sample ID: GC-MW-107D(WG)

Lab Sample ID: 460-154781-2

Date Collected: 04/25/18 11:15

Matrix: Water

Date Received: 04/25/18 19:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 00:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 00:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 00:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 00:37	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 00:37	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 00:37	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 00:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 00:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 00:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 00:37	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 00:37	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 00:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 00:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 00:37	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 00:37	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 00:37	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 00:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 00:37	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 00:37	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 00:37	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 00:37	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 00:37	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 00:37	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 00:37	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 00:37	1

Client Sample ID: GC-MW-107D(WG)

Date Collected: 04/25/18 11:15
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 00:37	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 00:37	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 00:37	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 00:37	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 00:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 00:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 00:37	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 00:37	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 00:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 00:37	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 00:37	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 00:37	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 00:37	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 00:37	1
Methyl tert-butyl ether	**0.20**	**J**	1.0	0.13	ug/L			05/03/18 00:37	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 00:37	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 00:37	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 00:37	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 00:37	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 00:37	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/03/18 00:37	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 00:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 00:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 00:37	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 00:37	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 00:37	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 00:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 00:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*74 - 132*		*05/03/18 00:37*	*1*
4-Bromofluorobenzene	*90*		*77 - 124*		*05/03/18 00:37*	*1*
Dibromofluoromethane (Surr)	*107*		*72 - 131*		*05/03/18 00:37*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*05/03/18 00:37*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	04/30/18 21:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*43*		*10 - 150*	*04/30/18 15:53*	*04/30/18 21:48*	*1*

Client Sample ID: GC-MW-108(WG)

Date Collected: 04/25/18 11:50
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 01:00	1

Client Sample ID: GC-MW-108(WG)

Date Collected: 04/25/18 11:50
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 01:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 01:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 01:00	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 01:00	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 01:00	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 01:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 01:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 01:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 01:00	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 01:00	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 01:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 01:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 01:00	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 01:00	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 01:00	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 01:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 01:00	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 01:00	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 01:00	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 01:00	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 01:00	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 01:00	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 01:00	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 01:00	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 01:00	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 01:00	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 01:00	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 01:00	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 01:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 01:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 01:00	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 01:00	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 01:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 01:00	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 01:00	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 01:00	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 01:00	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 01:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 01:00	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 01:00	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 01:00	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 01:00	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 01:00	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 01:00	1
Tetrachloroethene	**35**		1.0	0.12	ug/L			05/03/18 01:00	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 01:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 01:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 01:00	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 01:00	1

Client Sample ID: GC-MW-108(WG)

Date Collected: 04/25/18 11:50
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 01:00	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 01:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 01:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*74 - 132*		*05/03/18 01:00*	*1*
4-Bromofluorobenzene	*92*		*77 - 124*		*05/03/18 01:00*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*05/03/18 01:00*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*05/03/18 01:00*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.016	ug/L		04/30/18 15:53	04/30/18 22:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*10 - 150*	*04/30/18 15:53*	*04/30/18 22:05*	*1*

Client Sample ID: GC-MW-1B(WG)

Date Collected: 04/25/18 12:35
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 20:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 20:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 20:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 20:30	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 20:30	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 20:30	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 20:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 20:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 20:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 20:30	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 20:30	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 20:30	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 20:30	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 20:30	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 20:30	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 20:30	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 20:30	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 20:30	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 20:30	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 20:30	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 20:30	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 20:30	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 20:30	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 20:30	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 20:30	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 20:30	1

Client Sample ID: GC-MW-1B(WG)

Date Collected: 04/25/18 12:35
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 20:30	1
Chloroethane	1.0	U *	1.0	0.37	ug/L			05/03/18 20:30	1
Chloroform	**0.46**	**J**	1.0	0.22	ug/L			05/03/18 20:30	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 20:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 20:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 20:30	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 20:30	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 20:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 20:30	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 20:30	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 20:30	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 20:30	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 20:30	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 20:30	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 20:30	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 20:30	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 20:30	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 20:30	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 20:30	1
Tetrachloroethene	**0.13**	**J**	1.0	0.12	ug/L			05/03/18 20:30	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 20:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 20:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 20:30	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 20:30	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 20:30	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 20:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 20:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*		*05/03/18 20:30*	*1*
4-Bromofluorobenzene	*90*		*77 - 124*		*05/03/18 20:30*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*05/03/18 20:30*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/03/18 20:30*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	04/30/18 22:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*04/30/18 15:53*	*04/30/18 22:23*	*1*

Client Sample ID: GC-MW-103(WG)

Date Collected: 04/25/18 13:10
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 01:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 01:47	1

Client Sample ID: GC-MW-103(WG)

Date Collected: 04/25/18 13:10
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 01:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 01:47	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 01:47	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 01:47	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 01:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 01:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 01:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 01:47	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 01:47	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 01:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 01:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 01:47	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 01:47	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 01:47	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 01:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 01:47	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 01:47	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 01:47	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 01:47	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 01:47	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 01:47	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 01:47	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 01:47	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 01:47	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 01:47	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 01:47	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 01:47	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 01:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 01:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 01:47	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 01:47	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 01:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 01:47	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 01:47	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 01:47	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 01:47	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 01:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 01:47	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 01:47	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 01:47	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 01:47	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 01:47	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 01:47	1
Tetrachloroethene	**1.2**		1.0	0.12	ug/L			05/03/18 01:47	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 01:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 01:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 01:47	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 01:47	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 01:47	1

Client Sample ID: GC-MW-103(WG)

Date Collected: 04/25/18 13:10
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 01:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 01:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*74 - 132*		*05/03/18 01:47*	*1*
4-Bromofluorobenzene	*91*		*77 - 124*		*05/03/18 01:47*	*1*
Dibromofluoromethane (Surr)	*112*		*72 - 131*		*05/03/18 01:47*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*05/03/18 01:47*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	04/30/18 22:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*49*		*10 - 150*	*04/30/18 15:53*	*04/30/18 22:41*	*1*

Client Sample ID: GC-MW-104(WG)

Date Collected: 04/25/18 13:35
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 02:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 02:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 02:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 02:10	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 02:10	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 02:10	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 02:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 02:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 02:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 02:10	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 02:10	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 02:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 02:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 02:10	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 02:10	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 02:10	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 02:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 02:10	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 02:10	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 02:10	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 02:10	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 02:10	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 02:10	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 02:10	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 02:10	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 02:10	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 02:10	1

Client Sample ID: GC-MW-104(WG)

Date Collected: 04/25/18 13:35
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 02:10	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 02:10	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 02:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 02:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 02:10	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 02:10	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 02:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 02:10	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 02:10	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 02:10	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 02:10	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 02:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 02:10	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 02:10	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 02:10	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 02:10	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 02:10	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 02:10	1
Tetrachloroethene	**0.34**	**J**	1.0	0.12	ug/L			05/03/18 02:10	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 02:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 02:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 02:10	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 02:10	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 02:10	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 02:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 02:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*74 - 132*		*05/03/18 02:10*	*1*
4-Bromofluorobenzene	*93*		*77 - 124*		*05/03/18 02:10*	*1*
Dibromofluoromethane (Surr)	*115*		*72 - 131*		*05/03/18 02:10*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*05/03/18 02:10*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	04/30/18 22:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*10 - 150*	*04/30/18 15:53*	*04/30/18 22:59*	*1*

Client Sample ID: GC-MW-105(WG)

Date Collected: 04/25/18 14:43
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 02:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 02:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 02:33	1

Client Sample ID: GC-MW-105(WG)

Date Collected: 04/25/18 14:43
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 02:33	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 02:33	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 02:33	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 02:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 02:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 02:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 02:33	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 02:33	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 02:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 02:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 02:33	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 02:33	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 02:33	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 02:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 02:33	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 02:33	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 02:33	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 02:33	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 02:33	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 02:33	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 02:33	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 02:33	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 02:33	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 02:33	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 02:33	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 02:33	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 02:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 02:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 02:33	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 02:33	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 02:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 02:33	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 02:33	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 02:33	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 02:33	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 02:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 02:33	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 02:33	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 02:33	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 02:33	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 02:33	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 02:33	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/03/18 02:33	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 02:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 02:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 02:33	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 02:33	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 02:33	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 02:33	1

Client Sample ID: GC-MW-105(WG)

Lab Sample ID: 460-154781-7

Date Collected: 04/25/18 14:43
Matrix: Water
Date Received: 04/25/18 19:30

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					05/03/18 02:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		74 - 132		05/03/18 02:33	1
4-Bromofluorobenzene	92		77 - 124		05/03/18 02:33	1
Dibromofluoromethane (Surr)	115		72 - 131		05/03/18 02:33	1
Toluene-d8 (Surr)	90		80 - 120		05/03/18 02:33	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.016	ug/L		04/30/18 15:53	04/30/18 23:16	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	37		10 - 150	04/30/18 15:53	04/30/18 23:16	1

Client Sample ID: GC-DRAIN(WG)

Lab Sample ID: 460-154781-8

Date Collected: 04/25/18 14:00
Matrix: Water
Date Received: 04/25/18 19:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 13:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 13:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 13:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 13:34	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 13:34	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 13:34	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 13:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 13:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 13:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 13:34	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 13:34	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 13:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 13:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 13:34	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 13:34	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 13:34	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 13:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 13:34	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 13:34	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 13:34	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 13:34	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 13:34	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 13:34	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 13:34	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 13:34	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 13:34	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 13:34	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 13:34	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 13:34	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 13:34	1

Client Sample ID: GC-DRAIN(WG)

Date Collected: 04/25/18 14:00
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 13:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 13:34	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 13:34	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 13:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 13:34	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 13:34	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 13:34	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 13:34	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 13:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 13:34	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 13:34	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 13:34	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 13:34	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 13:34	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 13:34	1
Tetrachloroethene	**0.14**	**J**	1.0	0.12	ug/L			05/03/18 13:34	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 13:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 13:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 13:34	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 13:34	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 13:34	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 13:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 13:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*74 - 132*		*05/03/18 13:34*	*1*
4-Bromofluorobenzene	*93*		*77 - 124*		*05/03/18 13:34*	*1*
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*05/03/18 13:34*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*05/03/18 13:34*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.016	ug/L		04/30/18 15:53	04/30/18 23:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*43*		*10 - 150*	*04/30/18 15:53*	*04/30/18 23:52*	*1*

Client Sample ID: GC-Equipment Blank

Date Collected: 04/25/18 15:00
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/02/18 21:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 21:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/02/18 21:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/02/18 21:33	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/02/18 21:33	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/02/18 21:33	1

Client Sample ID: GC-Equipment Blank

Date Collected: 04/25/18 15:00
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/02/18 21:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/02/18 21:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/02/18 21:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/02/18 21:33	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/02/18 21:33	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/02/18 21:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/02/18 21:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/02/18 21:33	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/02/18 21:33	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/02/18 21:33	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/02/18 21:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/02/18 21:33	1
Acetone	5.0	U	5.0	1.1	ug/L			05/02/18 21:33	1
Benzene	1.0	U	1.0	0.090	ug/L			05/02/18 21:33	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/02/18 21:33	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/02/18 21:33	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/02/18 21:33	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/02/18 21:33	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/02/18 21:33	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/02/18 21:33	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/02/18 21:33	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/02/18 21:33	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/02/18 21:33	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/02/18 21:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/02/18 21:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/02/18 21:33	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/02/18 21:33	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/02/18 21:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/02/18 21:33	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/02/18 21:33	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/02/18 21:33	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/02/18 21:33	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/02/18 21:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/02/18 21:33	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/02/18 21:33	1
Methylene Chloride	**0.84**	**J**	1.0	0.21	ug/L			05/02/18 21:33	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/02/18 21:33	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/02/18 21:33	1
Styrene	1.0	U	1.0	0.17	ug/L			05/02/18 21:33	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/02/18 21:33	1
Toluene	**0.33**	**J**	1.0	0.25	ug/L			05/02/18 21:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/02/18 21:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/02/18 21:33	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/02/18 21:33	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/02/18 21:33	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/02/18 21:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/02/18 21:33*	*1*

Client Sample ID: GC-Equipment Blank

Lab Sample ID: 460-154781-9

Date Collected: 04/25/18 15:00

Matrix: Water

Date Received: 04/25/18 19:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*74 - 132*		*05/02/18 21:33*	*1*
4-Bromofluorobenzene	*89*		*77 - 124*		*05/02/18 21:33*	*1*
Dibromofluoromethane (Surr)	*113*		*72 - 131*		*05/02/18 21:33*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*05/02/18 21:33*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.016	ug/L		04/30/18 15:53	04/30/18 23:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*75*		*10 - 150*	*04/30/18 15:53*	*04/30/18 23:34*	*1*

Client Sample ID: GC-TB-20180425

Lab Sample ID: 460-154781-10

Date Collected: 04/25/18 00:00

Matrix: Water

Date Received: 04/25/18 19:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/02/18 20:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 20:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/02/18 20:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/02/18 20:24	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/02/18 20:24	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/02/18 20:24	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/02/18 20:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/02/18 20:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/02/18 20:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/02/18 20:24	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/02/18 20:24	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/02/18 20:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/02/18 20:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/02/18 20:24	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/02/18 20:24	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/02/18 20:24	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/02/18 20:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/02/18 20:24	1
Acetone	5.0	U	5.0	1.1	ug/L			05/02/18 20:24	1
Benzene	1.0	U	1.0	0.090	ug/L			05/02/18 20:24	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/02/18 20:24	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/02/18 20:24	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/02/18 20:24	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/02/18 20:24	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/02/18 20:24	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/02/18 20:24	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/02/18 20:24	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/02/18 20:24	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/02/18 20:24	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/02/18 20:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/02/18 20:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/02/18 20:24	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/02/18 20:24	1

Client Sample ID: GC-TB-20180425

Date Collected: 04/25/18 00:00
Date Received: 04/25/18 19:30

Lab Sample ID: 460-154781-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/02/18 20:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/02/18 20:24	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/02/18 20:24	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/02/18 20:24	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/02/18 20:24	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/02/18 20:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/02/18 20:24	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/02/18 20:24	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/02/18 20:24	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/02/18 20:24	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/02/18 20:24	1
Styrene	1.0	U	1.0	0.17	ug/L			05/02/18 20:24	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/02/18 20:24	1
Toluene	1.0	U	1.0	0.25	ug/L			05/02/18 20:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/02/18 20:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/02/18 20:24	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/02/18 20:24	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/02/18 20:24	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/02/18 20:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/02/18 20:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*74 - 132*		*05/02/18 20:24*	*1*
4-Bromofluorobenzene	*89*		*77 - 124*		*05/02/18 20:24*	*1*
Dibromofluoromethane (Surr)	*114*		*72 - 131*		*05/02/18 20:24*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*05/02/18 20:24*	*1*

Client Sample ID: GC-MW-102(WG)

Date Collected: 04/26/18 08:25
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 05:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 05:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 05:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 05:30	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 05:30	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 05:30	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 05:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 05:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 05:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 05:30	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 05:30	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 05:30	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 05:30	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 05:30	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 05:30	1

Client Sample ID: GC-MW-102(WG)

Date Collected: 04/26/18 08:25
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 05:30	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 05:30	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 05:30	1
Acetone	**2.3**	**J**	5.0	1.1	ug/L			05/04/18 05:30	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 05:30	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 05:30	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 05:30	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 05:30	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 05:30	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 05:30	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 05:30	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 05:30	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 05:30	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 05:30	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 05:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 05:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 05:30	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 05:30	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 05:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 05:30	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 05:30	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 05:30	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 05:30	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 05:30	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 05:30	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 05:30	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 05:30	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 05:30	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 05:30	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 05:30	1
Tetrachloroethene	**1.4**		1.0	0.12	ug/L			05/04/18 05:30	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 05:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 05:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 05:30	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 05:30	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 05:30	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 05:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 05:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*74 - 132*		*05/04/18 05:30*	*1*
4-Bromofluorobenzene	*111*		*77 - 124*		*05/04/18 05:30*	*1*
Dibromofluoromethane (Surr)	*121*		*72 - 131*		*05/04/18 05:30*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*05/04/18 05:30*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 00:10	1

Client Sample ID: GC-MW-102(WG)

Date Collected: 04/26/18 08:25
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-1

Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	41		10 - 150	04/30/18 15:53	05/01/18 00:10	1

Client Sample ID: GC-MW-109(WG)

Date Collected: 04/26/18 09:57
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 05:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 05:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 05:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 05:55	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 05:55	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 05:55	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 05:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 05:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 05:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 05:55	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 05:55	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 05:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 05:55	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 05:55	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 05:55	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 05:55	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 05:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 05:55	1
Acetone	**1.6**	**J**	5.0	1.1	ug/L			05/04/18 05:55	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 05:55	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 05:55	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 05:55	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 05:55	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 05:55	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 05:55	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 05:55	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 05:55	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 05:55	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 05:55	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 05:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 05:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 05:55	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 05:55	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 05:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 05:55	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 05:55	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 05:55	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 05:55	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 05:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 05:55	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 05:55	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 05:55	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 05:55	1

Client Sample ID: GC-MW-109(WG)

Lab Sample ID: 460-154925-2

Date Collected: 04/26/18 09:57

Matrix: Water

Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 05:55	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 05:55	1
Tetrachloroethene	**12**		1.0	0.12	ug/L			05/04/18 05:55	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 05:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 05:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 05:55	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 05:55	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 05:55	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 05:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 05:55*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*05/04/18 05:55*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*05/04/18 05:55*	*1*
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*05/04/18 05:55*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/04/18 05:55*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 00:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*04/30/18 15:53*	*05/01/18 00:27*	*1*

Client Sample ID: GC-MW-109M(WG)

Lab Sample ID: 460-154925-3

Date Collected: 04/26/18 09:00

Matrix: Water

Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 06:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 06:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 06:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 06:21	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 06:21	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 06:21	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 06:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 06:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 06:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 06:21	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 06:21	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 06:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 06:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 06:21	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 06:21	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 06:21	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 06:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 06:21	1
Acetone	**2.4**	**J**	5.0	1.1	ug/L			05/04/18 06:21	1

Client Sample ID: GC-MW-109M(WG)

Date Collected: 04/26/18 09:00
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 06:21	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 06:21	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 06:21	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 06:21	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 06:21	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 06:21	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 06:21	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 06:21	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 06:21	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 06:21	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 06:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 06:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 06:21	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 06:21	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 06:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 06:21	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 06:21	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 06:21	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 06:21	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 06:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 06:21	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 06:21	1
Methylene Chloride	**0.24**	**J**	1.0	0.21	ug/L			05/04/18 06:21	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 06:21	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 06:21	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 06:21	1
Tetrachloroethene	**52**		1.0	0.12	ug/L			05/04/18 06:21	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 06:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 06:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 06:21	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 06:21	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 06:21	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 06:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 06:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*74 - 132*		*05/04/18 06:21*	*1*
4-Bromofluorobenzene	*110*		*77 - 124*		*05/04/18 06:21*	*1*
Dibromofluoromethane (Surr)	*117*		*72 - 131*		*05/04/18 06:21*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*05/04/18 06:21*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.016	ug/L		04/30/18 15:53	05/01/18 00:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*04/30/18 15:53*	*05/01/18 00:45*	*1*

Client Sample ID: GC-MW-101(WG)

Date Collected: 04/26/18 11:15
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 06:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 06:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 06:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 06:46	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 06:46	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 06:46	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 06:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 06:46	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 06:46	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 06:46	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 06:46	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 06:46	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 06:46	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 06:46	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 06:46	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 06:46	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 06:46	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 06:46	1
Acetone	**2.1**	**J**	5.0	1.1	ug/L			05/04/18 06:46	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 06:46	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 06:46	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 06:46	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 06:46	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 06:46	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 06:46	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 06:46	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 06:46	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 06:46	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 06:46	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 06:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 06:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 06:46	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 06:46	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 06:46	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 06:46	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 06:46	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 06:46	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 06:46	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 06:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 06:46	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 06:46	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 06:46	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 06:46	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 06:46	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 06:46	1
Tetrachloroethene	**0.22**	**J**	1.0	0.12	ug/L			05/04/18 06:46	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 06:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 06:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 06:46	1

Client Sample ID: GC-MW-101(WG)

Lab Sample ID: 460-154925-4

Date Collected: 04/26/18 11:15
Matrix: Water
Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 06:46	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 06:46	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 06:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 06:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/04/18 06:46*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*05/04/18 06:46*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*05/04/18 06:46*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/04/18 06:46*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 01:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*10 - 150*	*04/30/18 15:53*	*05/01/18 01:03*	*1*

Client Sample ID: GC-MW-101D(WG)

Lab Sample ID: 460-154925-5

Date Collected: 04/26/18 11:15
Matrix: Water
Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 07:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 07:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 07:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 07:11	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 07:11	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 07:11	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 07:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 07:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 07:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 07:11	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 07:11	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 07:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 07:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 07:11	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 07:11	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 07:11	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 07:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 07:11	1
Acetone	**3.6**	**J**	5.0	1.1	ug/L			05/04/18 07:11	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 07:11	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 07:11	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 07:11	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 07:11	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 07:11	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 07:11	1

Client Sample ID: GC-MW-101D(WG)

Date Collected: 04/26/18 11:15
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 07:11	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 07:11	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 07:11	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 07:11	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 07:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 07:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 07:11	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 07:11	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 07:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 07:11	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 07:11	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 07:11	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 07:11	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 07:11	1
Methyl tert-butyl ether	**0.18**	**J**	1.0	0.13	ug/L			05/04/18 07:11	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 07:11	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 07:11	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 07:11	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 07:11	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 07:11	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/04/18 07:11	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 07:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 07:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 07:11	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 07:11	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 07:11	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 07:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 07:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*74 - 132*		*05/04/18 07:11*	*1*
4-Bromofluorobenzene	*119*		*77 - 124*		*05/04/18 07:11*	*1*
Dibromofluoromethane (Surr)	*125*		*72 - 131*		*05/04/18 07:11*	*1*
Toluene-d8 (Surr)	*115*		*80 - 120*		*05/04/18 07:11*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 01:21	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*04/30/18 15:53*	*05/01/18 01:21*	*1*

Client Sample ID: GC-MW-106(WG)

Date Collected: 04/26/18 11:55
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 07:37	1

Client Sample ID: GC-MW-106(WG)

Date Collected: 04/26/18 11:55
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 07:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 07:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 07:37	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 07:37	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 07:37	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 07:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 07:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 07:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 07:37	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 07:37	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 07:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 07:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 07:37	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 07:37	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 07:37	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 07:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 07:37	1
Acetone	**2.8**	**J**	5.0	1.1	ug/L			05/04/18 07:37	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 07:37	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 07:37	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 07:37	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 07:37	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 07:37	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 07:37	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 07:37	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 07:37	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 07:37	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 07:37	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 07:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 07:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 07:37	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 07:37	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 07:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 07:37	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 07:37	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 07:37	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 07:37	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 07:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 07:37	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 07:37	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 07:37	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 07:37	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 07:37	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 07:37	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/04/18 07:37	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 07:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 07:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 07:37	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 07:37	1

Client Sample ID: GC-MW-106(WG)

Date Collected: 04/26/18 11:55
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 07:37	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 07:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 07:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*74 - 132*		*05/04/18 07:37*	*1*
4-Bromofluorobenzene	*110*		*77 - 124*		*05/04/18 07:37*	*1*
Dibromofluoromethane (Surr)	*117*		*72 - 131*		*05/04/18 07:37*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*05/04/18 07:37*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 01:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*04/30/18 15:53*	*05/01/18 01:39*	*1*

Client Sample ID: GC-MW-3(WG)

Date Collected: 04/26/18 12:45
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 08:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 08:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 08:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 08:02	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 08:02	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 08:02	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 08:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 08:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 08:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 08:02	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 08:02	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 08:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 08:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 08:02	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 08:02	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 08:02	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 08:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 08:02	1
Acetone	**2.6**	**J**	5.0	1.1	ug/L			05/04/18 08:02	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 08:02	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 08:02	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 08:02	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 08:02	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 08:02	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 08:02	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 08:02	1

Client Sample ID: GC-MW-3(WG)

Date Collected: 04/26/18 12:45
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 08:02	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 08:02	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 08:02	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 08:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 08:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 08:02	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 08:02	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 08:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 08:02	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 08:02	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 08:02	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 08:02	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 08:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 08:02	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 08:02	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 08:02	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 08:02	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 08:02	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 08:02	1
Tetrachloroethene	**0.39**	**J**	1.0	0.12	ug/L			05/04/18 08:02	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 08:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 08:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 08:02	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 08:02	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 08:02	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 08:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 08:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*74 - 132*		*05/04/18 08:02*	*1*
4-Bromofluorobenzene	*113*		*77 - 124*		*05/04/18 08:02*	*1*
Dibromofluoromethane (Surr)	*124*		*72 - 131*		*05/04/18 08:02*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*05/04/18 08:02*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 01:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*10 - 150*	*04/30/18 15:53*	*05/01/18 01:56*	*1*

Client Sample ID: GC-TB-20180426

Date Collected: 04/26/18 09:30
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 05:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 05:05	1

Client Sample ID: GC-TB-20180426

Date Collected: 04/26/18 09:30
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 05:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 05:05	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 05:05	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 05:05	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 05:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 05:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 05:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 05:05	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 05:05	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 05:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 05:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 05:05	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 05:05	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 05:05	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 05:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 05:05	1
Acetone	5.0	U	5.0	1.1	ug/L			05/04/18 05:05	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 05:05	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 05:05	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 05:05	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 05:05	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 05:05	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 05:05	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 05:05	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 05:05	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 05:05	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 05:05	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 05:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 05:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 05:05	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 05:05	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 05:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 05:05	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 05:05	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 05:05	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 05:05	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 05:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 05:05	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 05:05	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 05:05	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 05:05	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 05:05	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 05:05	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/04/18 05:05	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 05:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 05:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 05:05	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 05:05	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 05:05	1

Client Sample ID: GC-TB-20180426

Lab Sample ID: 460-154925-8

Date Collected: 04/26/18 09:30
Matrix: Water
Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 05:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 05:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*05/04/18 05:05*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*05/04/18 05:05*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*05/04/18 05:05*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/04/18 05:05*	*1*

Client Sample ID: GC-Equipment Blank-2

Lab Sample ID: 460-154925-9

Date Collected: 04/26/18 09:30
Matrix: Water
Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 08:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 08:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 08:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 08:27	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 08:27	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 08:27	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 08:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 08:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 08:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 08:27	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 08:27	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 08:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 08:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 08:27	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 08:27	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 08:27	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 08:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 08:27	1
Acetone	**2.9**	**J**	5.0	1.1	ug/L			05/04/18 08:27	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 08:27	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 08:27	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 08:27	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 08:27	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 08:27	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 08:27	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 08:27	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 08:27	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 08:27	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 08:27	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 08:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 08:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 08:27	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 08:27	1

Client Sample ID: GC-Equipment Blank-2

Lab Sample ID: 460-154925-9

Date Collected: 04/26/18 09:30

Matrix: Water

Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 08:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 08:27	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 08:27	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 08:27	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 08:27	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 08:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 08:27	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 08:27	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 08:27	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 08:27	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 08:27	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 08:27	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/04/18 08:27	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 08:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 08:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 08:27	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 08:27	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 08:27	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 08:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 08:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*		*05/04/18 08:27*	*1*
4-Bromofluorobenzene	*102*		*77 - 124*		*05/04/18 08:27*	*1*
Dibromofluoromethane (Surr)	*110*		*72 - 131*		*05/04/18 08:27*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/04/18 08:27*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.016	ug/L		04/30/18 15:53	05/01/18 02:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*04/30/18 15:53*	*05/01/18 02:14*	*1*

Client Sample ID: GC-MW-110(WG)

Lab Sample ID: 460-154925-10

Date Collected: 04/26/18 13:35

Matrix: Water

Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 08:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 08:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 08:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 08:52	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 08:52	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 08:52	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 08:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 08:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 08:52	1

Client Sample ID: GC-MW-110(WG)

Date Collected: 04/26/18 13:35
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 08:52	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 08:52	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 08:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 08:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 08:52	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 08:52	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 08:52	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 08:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 08:52	1
Acetone	**2.3**	**J**	5.0	1.1	ug/L			05/04/18 08:52	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 08:52	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 08:52	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 08:52	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 08:52	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 08:52	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 08:52	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 08:52	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 08:52	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 08:52	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 08:52	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 08:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 08:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 08:52	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 08:52	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 08:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 08:52	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 08:52	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 08:52	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 08:52	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 08:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 08:52	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 08:52	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 08:52	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 08:52	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 08:52	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 08:52	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/04/18 08:52	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 08:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 08:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 08:52	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 08:52	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 08:52	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 08:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 08:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*74 - 132*		*05/04/18 08:52*	*1*
4-Bromofluorobenzene	*99*		*77 - 124*		*05/04/18 08:52*	*1*

Client Sample ID: GC-MW-110(WG)

Lab Sample ID: 460-154925-10

Date Collected: 04/26/18 13:35
Matrix: Water
Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*05/04/18 08:52*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/04/18 08:52*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 02:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*10 - 150*	*04/30/18 15:53*	*05/01/18 02:32*	*1*

Client Sample ID: GC-MW-110D(WG)

Lab Sample ID: 460-154925-11

Date Collected: 04/26/18 14:30
Matrix: Water
Date Received: 04/26/18 20:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/05/18 02:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/05/18 02:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/05/18 02:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/05/18 02:22	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/05/18 02:22	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/05/18 02:22	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/05/18 02:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/05/18 02:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/05/18 02:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/05/18 02:22	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/05/18 02:22	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/05/18 02:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/05/18 02:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/05/18 02:22	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/05/18 02:22	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/05/18 02:22	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/05/18 02:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/05/18 02:22	1
Acetone	**3.5**	**J B**	5.0	1.1	ug/L			05/05/18 02:22	1
Benzene	1.0	U	1.0	0.090	ug/L			05/05/18 02:22	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/05/18 02:22	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/05/18 02:22	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/05/18 02:22	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/05/18 02:22	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/05/18 02:22	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/05/18 02:22	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/05/18 02:22	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/05/18 02:22	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/05/18 02:22	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/05/18 02:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/05/18 02:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/05/18 02:22	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/05/18 02:22	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/05/18 02:22	1

Client Sample ID: GC-MW-110D(WG)

Date Collected: 04/26/18 14:30
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/05/18 02:22	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/05/18 02:22	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/05/18 02:22	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/05/18 02:22	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/05/18 02:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/05/18 02:22	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/05/18 02:22	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/05/18 02:22	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/05/18 02:22	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/05/18 02:22	1
Styrene	1.0	U	1.0	0.17	ug/L			05/05/18 02:22	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/05/18 02:22	1
Toluene	1.0	U	1.0	0.25	ug/L			05/05/18 02:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/05/18 02:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/05/18 02:22	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/05/18 02:22	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/05/18 02:22	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/05/18 02:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/05/18 02:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*74 - 132*		*05/05/18 02:22*	*1*
4-Bromofluorobenzene	*115*		*77 - 124*		*05/05/18 02:22*	*1*
Dibromofluoromethane (Surr)	*125*		*72 - 131*		*05/05/18 02:22*	*1*
Toluene-d8 (Surr)	*115*		*80 - 120*		*05/05/18 02:22*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 02:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*04/30/18 15:53*	*05/01/18 02:50*	*1*

Client Sample ID: GC-MW-2(WG)

Date Collected: 04/26/18 15:00
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 17:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 17:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 17:32	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 17:32	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 17:32	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 17:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 17:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 17:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 17:32	1

Client Sample ID: GC-MW-2(WG)

Date Collected: 04/26/18 15:00
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 17:32	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 17:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 17:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 17:32	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 17:32	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 17:32	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 17:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 17:32	1
Acetone	**2.8**	**J**	5.0	1.1	ug/L			05/04/18 17:32	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 17:32	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 17:32	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 17:32	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 17:32	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 17:32	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 17:32	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 17:32	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 17:32	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 17:32	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 17:32	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 17:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 17:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 17:32	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 17:32	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 17:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 17:32	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 17:32	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 17:32	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 17:32	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 17:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 17:32	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 17:32	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 17:32	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 17:32	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 17:32	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 17:32	1
Tetrachloroethene	**0.14**	**J**	1.0	0.12	ug/L			05/04/18 17:32	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 17:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 17:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 17:32	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 17:32	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 17:32	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 17:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 17:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*05/04/18 17:32*	*1*
4-Bromofluorobenzene	*98*		*77 - 124*		*05/04/18 17:32*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*05/04/18 17:32*	*1*

Client Sample ID: GC-MW-2(WG)
Date Collected: 04/26/18 15:00
Date Received: 04/26/18 20:20

Lab Sample ID: 460-154925-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/04/18 17:32*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U	0.21	0.017	ug/L		04/30/18 15:53	05/01/18 03:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*10 - 150*	*04/30/18 15:53*	*05/01/18 03:07*	*1*

Surrogate Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(74-132)	(77-124)	(72-131)	(80-120)
460-154781-1	GC-MW-107(WG)	107	91	108	95
460-154781-1 MS	GC-MW-107(WG)	110	96	108	95
460-154781-1 MSD	GC-MW-107(WG)	104	94	104	92
460-154781-2	GC-MW-107D(WG)	111	90	107	92
460-154781-3	GC-MW-108(WG)	112	92	109	93
460-154781-4	GC-MW-1B(WG)	108	90	109	97
460-154781-5	GC-MW-103(WG)	115	91	112	94
460-154781-6	GC-MW-104(WG)	116	93	115	95
460-154781-7	GC-MW-105(WG)	117	92	115	90
460-154781-8	GC-DRAIN(WG)	112	93	111	95
460-154781-9	GC-Equipment Blank	114	89	113	93
460-154781-10	GC-TB-20180425	112	89	114	94
460-154828-A-2 MS	Matrix Spike	105	94	104	94
460-154828-B-2 MSD	Matrix Spike Duplicate	108	95	106	96
460-154925-1	GC-MW-102(WG)	115	111	121	110
460-154925-1 MS	GC-MW-102(WG)	106	106	109	102
460-154925-1 MSD	GC-MW-102(WG)	117	115	120	110
460-154925-2	GC-MW-109(WG)	106	104	111	103
460-154925-3	GC-MW-109M(WG)	115	110	117	110
460-154925-4	GC-MW-101(WG)	104	104	109	102
460-154925-5	GC-MW-101D(WG)	118	119	125	115
460-154925-6	GC-MW-106(WG)	113	110	117	108
460-154925-7	GC-MW-3(WG)	119	113	124	112
460-154925-8	GC-TB-20180426	105	104	109	102
460-154925-9	GC-Equipment Blank-2	103	102	110	100
460-154925-10	GC-MW-110(WG)	102	99	108	99
460-154925-11	GC-MW-110D(WG)	121	115	125	115
460-154925-12	GC-MW-2(WG)	105	98	108	99
460-155023-B-1 MS	Matrix Spike	115	113	121	108
460-155023-B-1 MSD	Matrix Spike Duplicate	108	104	111	101
LCS 460-516016/4	Lab Control Sample	110	98	108	94
LCS 460-516110/3	Lab Control Sample	102	100	104	94
LCS 460-516291/3	Lab Control Sample	119	118	122	113
LCS 460-516299/4	Lab Control Sample	103	96	107	99
LCS 460-516419/4	Lab Control Sample	103	102	105	98
LCS 460-516607/5	Lab Control Sample	107	104	108	102
LCSD 460-516291/4	Lab Control Sample Dup	103	105	108	101
LCSD 460-516299/5	Lab Control Sample Dup	104	97	105	96
LCSD 460-516419/13	Lab Control Sample Dup	100	98	102	96
MB 460-516016/8	Method Blank	111	96	109	94
MB 460-516110/7	Method Blank	105	94	106	95
MB 460-516291/8	Method Blank	105	105	109	105
MB 460-516299/8	Method Blank	104	91	104	94
MB 460-516419/7	Method Blank	101	99	106	99
MB 460-516607/10	Method Blank	105	100	110	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
		DXE
Lab Sample ID	Client Sample ID	(10-150)
460-154781-1	GC-MW-107(WG)	44
460-154781-1 MS	GC-MW-107(WG)	37
460-154781-1 MSD	GC-MW-107(WG)	37
460-154781-2	GC-MW-107D(WG)	43
460-154781-3	GC-MW-108(WG)	41
460-154781-4	GC-MW-1B(WG)	37
460-154781-5	GC-MW-103(WG)	49
460-154781-6	GC-MW-104(WG)	42
460-154781-7	GC-MW-105(WG)	37
460-154781-8	GC-DRAIN(WG)	43
460-154781-9	GC-Equipment Blank	75
460-154925-1	GC-MW-102(WG)	41
460-154925-2	GC-MW-109(WG)	40
460-154925-3	GC-MW-109M(WG)	35
460-154925-4	GC-MW-101(WG)	41
460-154925-5	GC-MW-101D(WG)	39
460-154925-6	GC-MW-106(WG)	40
460-154925-7	GC-MW-3(WG)	42
460-154925-9	GC-Equipment Blank-2	37
460-154925-10	GC-MW-110(WG)	41
460-154925-11	GC-MW-110D(WG)	38
460-154925-12	GC-MW-2(WG)	34
MB 460-515403/1-A	Method Blank	44

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
		DXE
Lab Sample ID	Client Sample ID	(10-200)
LCS 460-515403/2-A	Lab Control Sample	39

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-516016/8
Matrix: Water
Analysis Batch: 516016

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/02/18 19:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 19:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/02/18 19:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/02/18 19:53	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/02/18 19:53	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/02/18 19:53	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/02/18 19:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/02/18 19:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/02/18 19:53	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/02/18 19:53	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/02/18 19:53	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/02/18 19:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/02/18 19:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/02/18 19:53	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/02/18 19:53	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/02/18 19:53	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/02/18 19:53	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/02/18 19:53	1
Acetone	5.0	U	5.0	1.1	ug/L			05/02/18 19:53	1
Benzene	1.0	U	1.0	0.090	ug/L			05/02/18 19:53	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/02/18 19:53	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/02/18 19:53	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/02/18 19:53	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/02/18 19:53	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/02/18 19:53	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/02/18 19:53	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/02/18 19:53	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/02/18 19:53	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/02/18 19:53	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/02/18 19:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/02/18 19:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/02/18 19:53	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/02/18 19:53	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/02/18 19:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/02/18 19:53	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/02/18 19:53	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/02/18 19:53	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/02/18 19:53	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/02/18 19:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/02/18 19:53	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/02/18 19:53	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/02/18 19:53	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/02/18 19:53	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/02/18 19:53	1
Styrene	1.0	U	1.0	0.17	ug/L			05/02/18 19:53	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/02/18 19:53	1
Toluene	1.0	U	1.0	0.25	ug/L			05/02/18 19:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/02/18 19:53	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-516016/8
Matrix: Water
Analysis Batch: 516016

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/02/18 19:53	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/02/18 19:53	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/02/18 19:53	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/02/18 19:53	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/02/18 19:53*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*74 - 132*		*05/02/18 19:53*	*1*
4-Bromofluorobenzene	*96*		*77 - 124*		*05/02/18 19:53*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*05/02/18 19:53*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*05/02/18 19:53*	*1*

Lab Sample ID: LCS 460-516016/4
Matrix: Water
Analysis Batch: 516016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.6		ug/L		113	75 - 125
1,1,2,2-Tetrachloroethane	20.0	18.8		ug/L		94	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.5		ug/L		102	59 - 150
1,1,2-Trichloroethane	20.0	19.1		ug/L		96	78 - 120
1,1-Dichloroethane	20.0	21.2		ug/L		106	77 - 123
1,1-Dichloroethene	20.0	19.4		ug/L		97	74 - 123
1,2,3-Trichlorobenzene	20.0	18.3		ug/L		91	78 - 131
1,2,4-Trichlorobenzene	20.0	17.7		ug/L		88	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	17.9		ug/L		89	55 - 134
1,2-Dichlorobenzene	20.0	20.1		ug/L		100	80 - 120
1,2-Dichloroethane	20.0	22.0		ug/L		110	76 - 121
1,2-Dichloropropane	20.0	20.5		ug/L		103	77 - 123
1,3-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120
1,4-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120
1,4-Dioxane	400	412		ug/L		103	10 - 150
2-Butanone (MEK)	100	92.3		ug/L		92	64 - 120
2-Hexanone	100	83.4		ug/L		83	71 - 125
4-Methyl-2-pentanone (MIBK)	100	98.3		ug/L		98	78 - 124
Acetone	100	96.0		ug/L		96	39 - 150
Benzene	20.0	18.3		ug/L		92	77 - 121
Bromoform	20.0	15.9		ug/L		80	53 - 120
Bromomethane	20.0	27.3		ug/L		136	10 - 150
Carbon disulfide	20.0	16.5		ug/L		82	69 - 133
Carbon tetrachloride	20.0	25.1		ug/L		125	70 - 132
Chlorobenzene	20.0	19.8		ug/L		99	80 - 120
Chlorobromomethane	20.0	21.5		ug/L		108	77 - 127
Chlorodibromomethane	20.0	18.0		ug/L		90	73 - 120
Chloroethane	20.0	27.6		ug/L		138	52 - 150

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-516016/4
Matrix: Water
Analysis Batch: 516016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	20.0	21.5		ug/L		108	80 - 120
Chloromethane	20.0	23.3		ug/L		117	56 - 131
cis-1,2-Dichloroethene	20.0	21.1		ug/L		105	80 - 120
cis-1,3-Dichloropropene	20.0	17.4		ug/L		87	77 - 120
Cyclohexane	20.0	18.4		ug/L		92	56 - 150
Dichlorobromomethane	20.0	20.3		ug/L		102	76 - 120
Dichlorodifluoromethane	20.0	23.0		ug/L		115	50 - 131
Ethylbenzene	20.0	18.3		ug/L		91	80 - 120
Ethylene Dibromide	20.0	18.9		ug/L		95	80 - 120
Isopropylbenzene	20.0	19.1		ug/L		95	80 - 123
Methyl acetate	40.0	41.0		ug/L		103	66 - 144
Methyl tert-butyl ether	20.0	19.4		ug/L		97	79 - 122
Methylcyclohexane	20.0	18.1		ug/L		90	61 - 145
Methylene Chloride	20.0	21.3		ug/L		107	77 - 123
m-Xylene & p-Xylene	20.0	18.1		ug/L		90	80 - 120
o-Xylene	20.0	18.5		ug/L		92	80 - 120
Styrene	20.0	20.0		ug/L		100	80 - 120
Tetrachloroethene	20.0	18.7		ug/L		93	78 - 122
Toluene	20.0	18.8		ug/L		94	80 - 120
trans-1,2-Dichloroethene	20.0	20.4		ug/L		102	79 - 120
trans-1,3-Dichloropropene	20.0	18.1		ug/L		91	76 - 120
Trichloroethene	20.0	20.3		ug/L		102	77 - 120
Trichlorofluoromethane	20.0	25.6		ug/L		128	71 - 143
Vinyl chloride	20.0	25.7		ug/L		129	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*74 - 132*
4-Bromofluorobenzene	*98*		*77 - 124*
Dibromofluoromethane (Surr)	*108*		*72 - 131*
Toluene-d8 (Surr)	*94*		*80 - 120*

Lab Sample ID: 460-154781-1 MS
Matrix: Water
Analysis Batch: 516016

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	20.0	23.4		ug/L		117	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	20.0	19.3		ug/L		97	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	20.0	21.9		ug/L		109	59 - 150
1,1,2-Trichloroethane	1.0	U	20.0	19.7		ug/L		99	78 - 120
1,1-Dichloroethane	1.0	U	20.0	21.9		ug/L		109	77 - 123
1,1-Dichloroethene	1.0	U	20.0	20.3		ug/L		101	74 - 123
1,2,3-Trichlorobenzene	1.0	U	20.0	18.1		ug/L		90	78 - 131
1,2,4-Trichlorobenzene	1.0	U	20.0	17.7		ug/L		88	80 - 124
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	18.4		ug/L		92	55 - 134
1,2-Dichlorobenzene	1.0	U	20.0	20.9		ug/L		105	80 - 120
1,2-Dichloroethane	1.0	U	20.0	22.5		ug/L		113	76 - 121

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154781-1 MS
Matrix: Water
Analysis Batch: 516016

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	1.0	U	20.0	20.3		ug/L		101	77 - 123
1,3-Dichlorobenzene	1.0	U	20.0	21.4		ug/L		107	80 - 120
1,4-Dichlorobenzene	1.0	U	20.0	20.9		ug/L		104	80 - 120
1,4-Dioxane	50	U	400	340		ug/L		85	10 - 150
2-Butanone (MEK)	5.0	U	100	90.2		ug/L		90	64 - 120
2-Hexanone	5.0	U	100	77.1		ug/L		77	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U	100	95.2		ug/L		95	78 - 124
Acetone	5.0	U	100	101		ug/L		101	39 - 150
Benzene	1.0	U	20.0	20.3		ug/L		101	77 - 121
Bromoform	1.0	U	20.0	16.2		ug/L		81	53 - 120
Bromomethane	1.0	U	20.0	35.0	*	ug/L		175	10 - 150
Carbon disulfide	1.0	U	20.0	15.2		ug/L		76	69 - 133
Carbon tetrachloride	1.0	U	20.0	26.7	*	ug/L		133	70 - 132
Chlorobenzene	1.0	U	20.0	20.6		ug/L		103	80 - 120
Chlorobromomethane	1.0	U	20.0	21.2		ug/L		106	77 - 127
Chlorodibromomethane	1.0	U	20.0	17.8		ug/L		89	73 - 120
Chloroethane	1.0	U	20.0	30.7	*	ug/L		154	52 - 150
Chloroform	1.0	U	20.0	22.9		ug/L		115	80 - 120
Chloromethane	1.0	U	20.0	26.0		ug/L		130	56 - 131
cis-1,2-Dichloroethene	1.0	U	20.0	21.1		ug/L		106	80 - 120
cis-1,3-Dichloropropene	1.0	U	20.0	15.5		ug/L		78	77 - 120
Cyclohexane	1.0	U	20.0	19.1		ug/L		95	56 - 150
Dichlorobromomethane	1.0	U	20.0	20.4		ug/L		102	76 - 120
Dichlorodifluoromethane	1.0	U	20.0	23.8		ug/L		119	50 - 131
Ethylbenzene	1.0	U	20.0	19.4		ug/L		97	80 - 120
Ethylene Dibromide	1.0	U	20.0	19.3		ug/L		97	80 - 120
Isopropylbenzene	1.0	U	20.0	20.2		ug/L		101	80 - 123
Methyl acetate	5.0	U	40.0	42.4		ug/L		106	66 - 144
Methyl tert-butyl ether	1.0	U	20.0	18.4		ug/L		92	79 - 122
Methylcyclohexane	1.0	U	20.0	18.2		ug/L		91	61 - 145
Methylene Chloride	1.0	U	20.0	21.9		ug/L		110	77 - 123
m-Xylene & p-Xylene	1.0	U	20.0	17.8		ug/L		89	80 - 120
o-Xylene	1.0	U	20.0	18.5		ug/L		92	80 - 120
Styrene	1.0	U	20.0	19.3		ug/L		96	80 - 120
Tetrachloroethene	8.8		20.0	29.6		ug/L		104	78 - 122
Toluene	1.0	U	20.0	19.5		ug/L		98	80 - 120
trans-1,2-Dichloroethene	1.0	U	20.0	21.7		ug/L		108	79 - 120
trans-1,3-Dichloropropene	1.0	U	20.0	15.6		ug/L		78	76 - 120
Trichloroethene	1.0	U	20.0	20.0		ug/L		100	77 - 120
Trichlorofluoromethane	1.0	U	20.0	26.5		ug/L		132	71 - 143
Vinyl chloride	1.0	U	20.0	27.6		ug/L		138	62 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*74 - 132*
4-Bromofluorobenzene	*96*		*77 - 124*
Dibromofluoromethane (Surr)	*108*		*72 - 131*
Toluene-d8 (Surr)	*95*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154781-1 MSD
Matrix: Water
Analysis Batch: 516016

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	20.0	22.4		ug/L		112	75 - 125	5	30
1,1,2,2-Tetrachloroethane	1.0	U	20.0	19.9		ug/L		100	74 - 120	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	20.0	20.5		ug/L		102	59 - 150	6	30
1,1,2-Trichloroethane	1.0	U	20.0	19.0		ug/L		95	78 - 120	4	30
1,1-Dichloroethane	1.0	U	20.0	20.4		ug/L		102	77 - 123	7	30
1,1-Dichloroethene	1.0	U	20.0	19.0		ug/L		95	74 - 123	6	30
1,2,3-Trichlorobenzene	1.0	U	20.0	19.6		ug/L		98	78 - 131	8	30
1,2,4-Trichlorobenzene	1.0	U	20.0	18.6		ug/L		93	80 - 124	5	30
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	17.6		ug/L		88	55 - 134	4	30
1,2-Dichlorobenzene	1.0	U	20.0	20.6		ug/L		103	80 - 120	2	30
1,2-Dichloroethane	1.0	U	20.0	21.1		ug/L		105	76 - 121	7	30
1,2-Dichloropropane	1.0	U	20.0	19.2		ug/L		96	77 - 123	6	30
1,3-Dichlorobenzene	1.0	U	20.0	20.5		ug/L		102	80 - 120	4	30
1,4-Dichlorobenzene	1.0	U	20.0	19.7		ug/L		98	80 - 120	6	30
1,4-Dioxane	50	U	400	382		ug/L		96	10 - 150	12	30
2-Butanone (MEK)	5.0	U	100	84.7		ug/L		85	64 - 120	6	30
2-Hexanone	5.0	U	100	75.6		ug/L		76	71 - 125	2	30
4-Methyl-2-pentanone (MIBK)	5.0	U	100	95.3		ug/L		95	78 - 124	0	30
Acetone	5.0	U	100	97.5		ug/L		98	39 - 150	3	30
Benzene	1.0	U	20.0	18.8		ug/L		94	77 - 121	8	30
Bromoform	1.0	U	20.0	15.9		ug/L		80	53 - 120	2	30
Bromomethane	1.0	U	20.0	32.6	*	ug/L		163	10 - 150	7	30
Carbon disulfide	1.0	U	20.0	14.3		ug/L		72	69 - 133	6	30
Carbon tetrachloride	1.0	U	20.0	24.6		ug/L		123	70 - 132	8	30
Chlorobenzene	1.0	U	20.0	19.0		ug/L		95	80 - 120	8	30
Chlorobromomethane	1.0	U	20.0	20.1		ug/L		100	77 - 127	5	30
Chlorodibromomethane	1.0	U	20.0	17.1		ug/L		85	73 - 120	4	30
Chloroethane	1.0	U	20.0	28.6		ug/L		143	52 - 150	7	30
Chloroform	1.0	U	20.0	21.2		ug/L		106	80 - 120	8	30
Chloromethane	1.0	U	20.0	25.3		ug/L		126	56 - 131	3	30
cis-1,2-Dichloroethene	1.0	U	20.0	20.6		ug/L		103	80 - 120	3	30
cis-1,3-Dichloropropene	1.0	U	20.0	15.6		ug/L		78	77 - 120	0	30
Cyclohexane	1.0	U	20.0	18.0		ug/L		90	56 - 150	6	30
Dichlorobromomethane	1.0	U	20.0	19.3		ug/L		97	76 - 120	5	30
Dichlorodifluoromethane	1.0	U	20.0	24.0		ug/L		120	50 - 131	1	30
Ethylbenzene	1.0	U	20.0	18.4		ug/L		92	80 - 120	5	30
Ethylene Dibromide	1.0	U	20.0	18.7		ug/L		94	80 - 120	3	30
Isopropylbenzene	1.0	U	20.0	19.2		ug/L		96	80 - 123	5	30
Methyl acetate	5.0	U	40.0	38.3		ug/L		96	66 - 144	10	30
Methyl tert-butyl ether	1.0	U	20.0	18.0		ug/L		90	79 - 122	2	30
Methylcyclohexane	1.0	U	20.0	17.1		ug/L		85	61 - 145	6	30
Methylene Chloride	1.0	U	20.0	21.1		ug/L		105	77 - 123	4	30
m-Xylene & p-Xylene	1.0	U	20.0	17.9		ug/L		90	80 - 120	1	30
o-Xylene	1.0	U	20.0	18.1		ug/L		90	80 - 120	2	30
Styrene	1.0	U	20.0	17.7		ug/L		88	80 - 120	9	30
Tetrachloroethene	8.8		20.0	26.9		ug/L		90	78 - 122	10	30
Toluene	1.0	U	20.0	18.8		ug/L		94	80 - 120	4	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154781-1 MSD
Matrix: Water
Analysis Batch: 516016

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	1.0	U	20.0	19.7		ug/L		99	79 - 120	9	30
trans-1,3-Dichloropropene	1.0	U	20.0	16.1		ug/L		81	76 - 120	3	30
Trichloroethene	1.0	U	20.0	19.2		ug/L		96	77 - 120	4	30
Trichlorofluoromethane	1.0	U	20.0	24.5		ug/L		123	71 - 143	8	30
Vinyl chloride	1.0	U	20.0	25.8		ug/L		129	62 - 138	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*
4-Bromofluorobenzene	*94*		*77 - 124*
Dibromofluoromethane (Surr)	*104*		*72 - 131*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: MB 460-516110/7
Matrix: Water
Analysis Batch: 516110

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 07:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 07:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 07:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 07:03	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 07:03	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 07:03	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 07:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 07:03	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 07:03	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 07:03	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 07:03	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 07:03	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 07:03	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 07:03	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 07:03	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 07:03	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 07:03	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 07:03	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 07:03	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 07:03	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 07:03	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 07:03	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 07:03	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 07:03	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 07:03	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 07:03	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 07:03	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 07:03	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 07:03	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 07:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 07:03	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-516110/7
Matrix: Water
Analysis Batch: 516110

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 07:03	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 07:03	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 07:03	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 07:03	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 07:03	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 07:03	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 07:03	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 07:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 07:03	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 07:03	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 07:03	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 07:03	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 07:03	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 07:03	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/03/18 07:03	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 07:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 07:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 07:03	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 07:03	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 07:03	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 07:03	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 07:03*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*05/03/18 07:03*	*1*
4-Bromofluorobenzene	*94*		*77 - 124*		*05/03/18 07:03*	*1*
Dibromofluoromethane (Surr)	*106*		*72 - 131*		*05/03/18 07:03*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*05/03/18 07:03*	*1*

Lab Sample ID: LCS 460-516110/3
Matrix: Water
Analysis Batch: 516110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.4		ug/L		112	75 - 125
1,1,2,2-Tetrachloroethane	20.0	19.0		ug/L		95	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.0		ug/L		110	59 - 150
1,1,2-Trichloroethane	20.0	19.0		ug/L		95	78 - 120
1,1-Dichloroethane	20.0	20.6		ug/L		103	77 - 123
1,1-Dichloroethene	20.0	19.6		ug/L		98	74 - 123
1,2,3-Trichlorobenzene	20.0	19.6		ug/L		98	78 - 131
1,2,4-Trichlorobenzene	20.0	19.2		ug/L		96	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	17.6		ug/L		88	55 - 134
1,2-Dichlorobenzene	20.0	20.1		ug/L		101	80 - 120
1,2-Dichloroethane	20.0	20.0		ug/L		100	76 - 121

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-516110/3
Matrix: Water
Analysis Batch: 516110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	20.0	19.4		ug/L		97	77 - 123
1,3-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 120
1,4-Dichlorobenzene	20.0	20.5		ug/L		103	80 - 120
1,4-Dioxane	400	411		ug/L		103	10 - 150
2-Butanone (MEK)	100	95.3		ug/L		95	64 - 120
2-Hexanone	100	82.6		ug/L		83	71 - 125
4-Methyl-2-pentanone (MIBK)	100	104		ug/L		104	78 - 124
Acetone	100	106		ug/L		106	39 - 150
Benzene	20.0	19.4		ug/L		97	77 - 121
Bromoform	20.0	16.3		ug/L		82	53 - 120
Bromomethane	20.0	26.1		ug/L		130	10 - 150
Carbon disulfide	20.0	17.1		ug/L		85	69 - 133
Carbon tetrachloride	20.0	25.6		ug/L		128	70 - 132
Chlorobenzene	20.0	19.7		ug/L		98	80 - 120
Chlorobromomethane	20.0	20.2		ug/L		101	77 - 127
Chlorodibromomethane	20.0	17.8		ug/L		89	73 - 120
Chloroethane	20.0	24.9		ug/L		125	52 - 150
Chloroform	20.0	20.7		ug/L		104	80 - 120
Chloromethane	20.0	24.1		ug/L		120	56 - 131
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	80 - 120
cis-1,3-Dichloropropene	20.0	17.6		ug/L		88	77 - 120
Cyclohexane	20.0	19.5		ug/L		97	56 - 150
Dichlorobromomethane	20.0	18.9		ug/L		94	76 - 120
Dichlorodifluoromethane	20.0	21.9		ug/L		109	50 - 131
Ethylbenzene	20.0	18.9		ug/L		94	80 - 120
Ethylene Dibromide	20.0	18.6		ug/L		93	80 - 120
Isopropylbenzene	20.0	19.9		ug/L		99	80 - 123
Methyl acetate	40.0	41.9		ug/L		105	66 - 144
Methyl tert-butyl ether	20.0	18.8		ug/L		94	79 - 122
Methylcyclohexane	20.0	19.1		ug/L		96	61 - 145
Methylene Chloride	20.0	20.9		ug/L		105	77 - 123
m-Xylene & p-Xylene	20.0	19.0		ug/L		95	80 - 120
o-Xylene	20.0	18.9		ug/L		95	80 - 120
Styrene	20.0	19.9		ug/L		99	80 - 120
Tetrachloroethene	20.0	19.5		ug/L		97	78 - 122
Toluene	20.0	19.2		ug/L		96	80 - 120
trans-1,2-Dichloroethene	20.0	20.6		ug/L		103	79 - 120
trans-1,3-Dichloropropene	20.0	17.6		ug/L		88	76 - 120
Trichloroethene	20.0	18.8		ug/L		94	77 - 120
Trichlorofluoromethane	20.0	24.9		ug/L		125	71 - 143
Vinyl chloride	20.0	24.5		ug/L		123	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*74 - 132*
4-Bromofluorobenzene	*100*		*77 - 124*
Dibromofluoromethane (Surr)	*104*		*72 - 131*
Toluene-d8 (Surr)	*94*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154828-A-2 MS
Matrix: Water
Analysis Batch: 516110

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	20.0	22.6		ug/L		113	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	20.0	21.1		ug/L		105	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	20.0	22.5		ug/L		112	59 - 150
1,1,2-Trichloroethane	1.0	U	20.0	20.3		ug/L		102	78 - 120
1,1-Dichloroethane	1.0	U	20.0	21.2		ug/L		106	77 - 123
1,1-Dichloroethene	1.0	U	20.0	19.4		ug/L		97	74 - 123
1,2,3-Trichlorobenzene	1.0	U	20.0	18.1		ug/L		90	78 - 131
1,2,4-Trichlorobenzene	1.0	U	20.0	18.2		ug/L		91	80 - 124
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	19.6		ug/L		98	55 - 134
1,2-Dichlorobenzene	0.50	J	20.0	21.4		ug/L		104	80 - 120
1,2-Dichloroethane	1.0	U	20.0	22.0		ug/L		110	76 - 121
1,2-Dichloropropane	1.0	U	20.0	19.8		ug/L		99	77 - 123
1,3-Dichlorobenzene	1.0	U	20.0	21.5		ug/L		107	80 - 120
1,4-Dichlorobenzene	1.0	U	20.0	21.3		ug/L		106	80 - 120
1,4-Dioxane	50	U	400	373		ug/L		93	10 - 150
2-Butanone (MEK)	5.0	U	100	91.0		ug/L		91	64 - 120
2-Hexanone	5.0	U	100	79.3		ug/L		79	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U	100	102		ug/L		102	78 - 124
Acetone	5.0	U	100	103		ug/L		103	39 - 150
Benzene	0.13	J	20.0	20.1		ug/L		100	77 - 121
Bromoform	1.0	U	20.0	15.9		ug/L		80	53 - 120
Bromomethane	1.0	U	20.0	31.1	*	ug/L		156	10 - 150
Carbon disulfide	1.0	U	20.0	15.7		ug/L		78	69 - 133
Carbon tetrachloride	1.0	U	20.0	25.8		ug/L		129	70 - 132
Chlorobenzene	0.74	J	20.0	21.3		ug/L		103	80 - 120
Chlorobromomethane	1.0	U	20.0	20.9		ug/L		105	77 - 127
Chlorodibromomethane	1.0	U	20.0	18.0		ug/L		90	73 - 120
Chloroethane	1.0	U	20.0	28.5		ug/L		143	52 - 150
Chloroform	1.0	U	20.0	21.9		ug/L		110	80 - 120
Chloromethane	1.0	U	20.0	23.1		ug/L		116	56 - 131
cis-1,2-Dichloroethene	1.0	U	20.0	21.0		ug/L		105	80 - 120
cis-1,3-Dichloropropene	1.0	U	20.0	15.9		ug/L		79	77 - 120
Cyclohexane	1.0	U	20.0	18.9		ug/L		95	56 - 150
Dichlorobromomethane	1.0	U	20.0	19.5		ug/L		98	76 - 120
Dichlorodifluoromethane	1.0	U	20.0	23.0		ug/L		115	50 - 131
Ethylbenzene	1.0	U	20.0	19.0		ug/L		95	80 - 120
Ethylene Dibromide	1.0	U	20.0	19.7		ug/L		99	80 - 120
Isopropylbenzene	1.0	U	20.0	20.4		ug/L		102	80 - 123
Methyl acetate	5.0	U	40.0	46.1		ug/L		115	66 - 144
Methyl tert-butyl ether	1.0	U	20.0	17.8		ug/L		89	79 - 122
Methylcyclohexane	1.0	U	20.0	18.6		ug/L		93	61 - 145
Methylene Chloride	0.37	J	20.0	21.6		ug/L		106	77 - 123
m-Xylene & p-Xylene	1.0	U	20.0	18.8		ug/L		94	80 - 120
o-Xylene	1.0	U	20.0	18.3		ug/L		91	80 - 120
Styrene	1.0	U	20.0	18.1		ug/L		90	80 - 120
Tetrachloroethene	1.0	U	20.0	19.9		ug/L		99	78 - 122
Toluene	1.0	U	20.0	19.4		ug/L		97	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154828-A-2 MS
Matrix: Water
Analysis Batch: 516110

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	1.0	U	20.0	20.3		ug/L		101	79 - 120
trans-1,3-Dichloropropene	1.0	U	20.0	16.6		ug/L		83	76 - 120
Trichloroethene	1.0	U	20.0	19.7		ug/L		99	77 - 120
Trichlorofluoromethane	1.0	U	20.0	24.7		ug/L		124	71 - 143
Vinyl chloride	1.0	U	20.0	24.2		ug/L		121	62 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*
4-Bromofluorobenzene	*94*		*77 - 124*
Dibromofluoromethane (Surr)	*104*		*72 - 131*
Toluene-d8 (Surr)	*94*		*80 - 120*

Lab Sample ID: 460-154828-B-2 MSD
Matrix: Water
Analysis Batch: 516110

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	20.0	23.3		ug/L		117	75 - 125	3	30
1,1,2,2-Tetrachloroethane	1.0	U	20.0	21.2		ug/L		106	74 - 120	0	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	20.0	23.1		ug/L		115	59 - 150	3	30
1,1,2-Trichloroethane	1.0	U	20.0	19.6		ug/L		98	78 - 120	4	30
1,1-Dichloroethane	1.0	U	20.0	21.5		ug/L		107	77 - 123	1	30
1,1-Dichloroethene	1.0	U	20.0	20.2		ug/L		101	74 - 123	4	30
1,2,3-Trichlorobenzene	1.0	U	20.0	19.8		ug/L		99	78 - 131	9	30
1,2,4-Trichlorobenzene	1.0	U	20.0	19.1		ug/L		96	80 - 124	5	30
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	19.4		ug/L		97	55 - 134	1	30
1,2-Dichlorobenzene	0.50	J	20.0	21.7		ug/L		106	80 - 120	2	30
1,2-Dichloroethane	1.0	U	20.0	22.1		ug/L		110	76 - 121	0	30
1,2-Dichloropropane	1.0	U	20.0	20.0		ug/L		100	77 - 123	1	30
1,3-Dichlorobenzene	1.0	U	20.0	21.7		ug/L		108	80 - 120	1	30
1,4-Dichlorobenzene	1.0	U	20.0	20.9		ug/L		105	80 - 120	2	30
1,4-Dioxane	50	U	400	430		ug/L		107	10 - 150	14	30
2-Butanone (MEK)	5.0	U	100	91.2		ug/L		91	64 - 120	0	30
2-Hexanone	5.0	U	100	82.8		ug/L		83	71 - 125	4	30
4-Methyl-2-pentanone (MIBK)	5.0	U	100	101		ug/L		101	78 - 124	0	30
Acetone	5.0	U	100	99.9		ug/L		100	39 - 150	3	30
Benzene	0.13	J	20.0	19.8		ug/L		98	77 - 121	1	30
Bromoform	1.0	U	20.0	15.9		ug/L		80	53 - 120	0	30
Bromomethane	1.0	U	20.0	32.0	*	ug/L		160	10 - 150	3	30
Carbon disulfide	1.0	U	20.0	15.3		ug/L		77	69 - 133	2	30
Carbon tetrachloride	1.0	U	20.0	26.0		ug/L		130	70 - 132	1	30
Chlorobenzene	0.74	J	20.0	21.3		ug/L		103	80 - 120	0	30
Chlorobromomethane	1.0	U	20.0	20.6		ug/L		103	77 - 127	1	30
Chlorodibromomethane	1.0	U	20.0	17.4		ug/L		87	73 - 120	3	30
Chloroethane	1.0	U	20.0	27.9		ug/L		140	52 - 150	2	30
Chloroform	1.0	U	20.0	21.9		ug/L		109	80 - 120	0	30
Chloromethane	1.0	U	20.0	23.6		ug/L		118	56 - 131	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154828-B-2 MSD
Matrix: Water
Analysis Batch: 516110

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	1.0	U	20.0	21.0		ug/L		105	80 - 120	0	30
cis-1,3-Dichloropropene	1.0	U	20.0	16.7		ug/L		84	77 - 120	5	30
Cyclohexane	1.0	U	20.0	19.5		ug/L		98	56 - 150	3	30
Dichlorobromomethane	1.0	U	20.0	19.5		ug/L		98	76 - 120	0	30
Dichlorodifluoromethane	1.0	U	20.0	23.7		ug/L		118	50 - 131	3	30
Ethylbenzene	1.0	U	20.0	19.0		ug/L		95	80 - 120	0	30
Ethylene Dibromide	1.0	U	20.0	19.7		ug/L		98	80 - 120	0	30
Isopropylbenzene	1.0	U	20.0	20.4		ug/L		102	80 - 123	0	30
Methyl acetate	5.0	U	40.0	42.3		ug/L		106	66 - 144	9	30
Methyl tert-butyl ether	1.0	U	20.0	19.0		ug/L		95	79 - 122	7	30
Methylcyclohexane	1.0	U	20.0	18.9		ug/L		94	61 - 145	2	30
Methylene Chloride	0.37	J	20.0	21.4		ug/L		105	77 - 123	1	30
m-Xylene & p-Xylene	1.0	U	20.0	18.7		ug/L		93	80 - 120	1	30
o-Xylene	1.0	U	20.0	18.9		ug/L		95	80 - 120	4	30
Styrene	1.0	U	20.0	18.1		ug/L		91	80 - 120	0	30
Tetrachloroethene	1.0	U	20.0	20.4		ug/L		102	78 - 122	2	30
Toluene	1.0	U	20.0	19.5		ug/L		98	80 - 120	1	30
trans-1,2-Dichloroethene	1.0	U	20.0	20.3		ug/L		102	79 - 120	0	30
trans-1,3-Dichloropropene	1.0	U	20.0	17.0		ug/L		85	76 - 120	2	30
Trichloroethene	1.0	U	20.0	19.9		ug/L		100	77 - 120	1	30
Trichlorofluoromethane	1.0	U	20.0	25.4		ug/L		127	71 - 143	3	30
Vinyl chloride	1.0	U	20.0	26.2		ug/L		131	62 - 138	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*
4-Bromofluorobenzene	*95*		*77 - 124*
Dibromofluoromethane (Surr)	*106*		*72 - 131*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: MB 460-516291/8
Matrix: Water
Analysis Batch: 516291

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 00:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 00:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 00:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 00:27	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 00:27	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 00:27	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 00:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 00:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 00:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 00:27	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 00:27	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 00:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 00:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 00:27	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-516291/8
Matrix: Water
Analysis Batch: 516291

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 00:27	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 00:27	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 00:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 00:27	1
Acetone	5.0	U	5.0	1.1	ug/L			05/04/18 00:27	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 00:27	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 00:27	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 00:27	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 00:27	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 00:27	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 00:27	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 00:27	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 00:27	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 00:27	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 00:27	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 00:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 00:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 00:27	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 00:27	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 00:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 00:27	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 00:27	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 00:27	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 00:27	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 00:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 00:27	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 00:27	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 00:27	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 00:27	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 00:27	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 00:27	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/04/18 00:27	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 00:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 00:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 00:27	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 00:27	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 00:27	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 00:27	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 00:27*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*05/04/18 00:27*	*1*
4-Bromofluorobenzene	*105*		*77 - 124*		*05/04/18 00:27*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*05/04/18 00:27*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*05/04/18 00:27*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-516291/3
Matrix: Water
Analysis Batch: 516291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.3		ug/L		106	75 - 125
1,1,2,2-Tetrachloroethane	20.0	19.2		ug/L		96	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.5		ug/L		112	59 - 150
1,1,2-Trichloroethane	20.0	20.6		ug/L		103	78 - 120
1,1-Dichloroethane	20.0	23.2		ug/L		116	77 - 123
1,1-Dichloroethene	20.0	21.5		ug/L		108	74 - 123
1,2,3-Trichlorobenzene	20.0	21.9		ug/L		109	78 - 131
1,2,4-Trichlorobenzene	20.0	21.9		ug/L		109	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	17.9		ug/L		90	55 - 134
1,2-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 120
1,2-Dichloroethane	20.0	21.1		ug/L		105	76 - 121
1,2-Dichloropropane	20.0	22.3		ug/L		112	77 - 123
1,3-Dichlorobenzene	20.0	20.9		ug/L		104	80 - 120
1,4-Dichlorobenzene	20.0	19.9		ug/L		99	80 - 120
1,4-Dioxane	400	417		ug/L		104	10 - 150
2-Butanone (MEK)	100	104		ug/L		104	64 - 120
2-Hexanone	100	113		ug/L		113	71 - 125
4-Methyl-2-pentanone (MIBK)	100	114		ug/L		114	78 - 124
Acetone	100	100		ug/L		100	39 - 150
Benzene	20.0	21.0		ug/L		105	77 - 121
Bromoform	20.0	18.4		ug/L		92	53 - 120
Bromomethane	20.0	14.8		ug/L		74	10 - 150
Carbon disulfide	20.0	20.0		ug/L		100	69 - 133
Carbon tetrachloride	20.0	20.3		ug/L		101	70 - 132
Chlorobenzene	20.0	21.3		ug/L		107	80 - 120
Chlorobromomethane	20.0	23.6		ug/L		118	77 - 127
Chlorodibromomethane	20.0	19.4		ug/L		97	73 - 120
Chloroethane	20.0	20.8		ug/L		104	52 - 150
Chloroform	20.0	22.5		ug/L		112	80 - 120
Chloromethane	20.0	19.5		ug/L		97	56 - 131
cis-1,2-Dichloroethene	20.0	22.6		ug/L		113	80 - 120
cis-1,3-Dichloropropene	20.0	20.0		ug/L		100	77 - 120
Cyclohexane	20.0	23.0		ug/L		115	56 - 150
Dichlorobromomethane	20.0	21.4		ug/L		107	76 - 120
Dichlorodifluoromethane	20.0	21.8		ug/L		109	50 - 131
Ethylbenzene	20.0	21.1		ug/L		106	80 - 120
Ethylene Dibromide	20.0	21.5		ug/L		108	80 - 120
Isopropylbenzene	20.0	21.1		ug/L		105	80 - 123
Methyl acetate	40.0	45.2		ug/L		113	66 - 144
Methyl tert-butyl ether	20.0	22.1		ug/L		110	79 - 122
Methylcyclohexane	20.0	23.4		ug/L		117	61 - 145
Methylene Chloride	20.0	21.9		ug/L		110	77 - 123
m-Xylene & p-Xylene	20.0	21.5		ug/L		108	80 - 120
o-Xylene	20.0	21.5		ug/L		107	80 - 120
Styrene	20.0	21.5		ug/L		108	80 - 120
Tetrachloroethene	20.0	22.9		ug/L		115	78 - 122
Toluene	20.0	20.8		ug/L		104	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-516291/3
Matrix: Water
Analysis Batch: 516291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	20.0	21.3		ug/L		107	79 - 120
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	76 - 120
Trichloroethene	20.0	22.3		ug/L		111	77 - 120
Trichlorofluoromethane	20.0	24.0		ug/L		120	71 - 143
Vinyl chloride	20.0	21.0		ug/L		105	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*119*		*74 - 132*
4-Bromofluorobenzene	*118*		*77 - 124*
Dibromofluoromethane (Surr)	*122*		*72 - 131*
Toluene-d8 (Surr)	*113*		*80 - 120*

Lab Sample ID: LCSD 460-516291/4
Matrix: Water
Analysis Batch: 516291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	19.7		ug/L		98	75 - 125	8	30
1,1,2,2-Tetrachloroethane	20.0	18.0		ug/L		90	74 - 120	6	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.7		ug/L		104	59 - 150	8	30
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	78 - 120	8	30
1,1-Dichloroethane	20.0	20.9		ug/L		105	77 - 123	10	30
1,1-Dichloroethene	20.0	19.6		ug/L		98	74 - 123	9	30
1,2,3-Trichlorobenzene	20.0	20.5		ug/L		102	78 - 131	7	30
1,2,4-Trichlorobenzene	20.0	20.5		ug/L		102	80 - 124	7	30
1,2-Dibromo-3-Chloropropane	20.0	16.7		ug/L		83	55 - 134	7	30
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120	7	30
1,2-Dichloroethane	20.0	19.2		ug/L		96	76 - 121	9	30
1,2-Dichloropropane	20.0	20.7		ug/L		103	77 - 123	8	30
1,3-Dichlorobenzene	20.0	19.3		ug/L		97	80 - 120	8	30
1,4-Dichlorobenzene	20.0	18.3		ug/L		92	80 - 120	8	30
1,4-Dioxane	400	417		ug/L		104	10 - 150	0	30
2-Butanone (MEK)	100	100		ug/L		100	64 - 120	4	30
2-Hexanone	100	106		ug/L		106	71 - 125	7	30
4-Methyl-2-pentanone (MIBK)	100	105		ug/L		105	78 - 124	8	30
Acetone	100	92.4		ug/L		92	39 - 150	8	30
Benzene	20.0	19.6		ug/L		98	77 - 121	7	30
Bromoform	20.0	17.1		ug/L		85	53 - 120	7	30
Bromomethane	20.0	14.3		ug/L		72	10 - 150	4	30
Carbon disulfide	20.0	18.4		ug/L		92	69 - 133	9	30
Carbon tetrachloride	20.0	19.2		ug/L		96	70 - 132	5	30
Chlorobenzene	20.0	19.7		ug/L		98	80 - 120	8	30
Chlorobromomethane	20.0	21.6		ug/L		108	77 - 127	9	30
Chlorodibromomethane	20.0	18.1		ug/L		91	73 - 120	7	30
Chloroethane	20.0	18.8		ug/L		94	52 - 150	10	30
Chloroform	20.0	20.6		ug/L		103	80 - 120	8	30
Chloromethane	20.0	17.3		ug/L		87	56 - 131	12	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-516291/4
Matrix: Water
Analysis Batch: 516291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	20.0	19.9		ug/L		100	80 - 120	12	30
cis-1,3-Dichloropropene	20.0	18.5		ug/L		92	77 - 120	8	30
Cyclohexane	20.0	20.9		ug/L		105	56 - 150	9	30
Dichlorobromomethane	20.0	19.4		ug/L		97	76 - 120	10	30
Dichlorodifluoromethane	20.0	19.5		ug/L		98	50 - 131	11	30
Ethylbenzene	20.0	19.7		ug/L		98	80 - 120	7	30
Ethylene Dibromide	20.0	19.5		ug/L		97	80 - 120	10	30
Isopropylbenzene	20.0	19.8		ug/L		99	80 - 123	6	30
Methyl acetate	40.0	41.6		ug/L		104	66 - 144	8	30
Methyl tert-butyl ether	20.0	20.0		ug/L		100	79 - 122	10	30
Methylcyclohexane	20.0	21.0		ug/L		105	61 - 145	11	30
Methylene Chloride	20.0	19.9		ug/L		99	77 - 123	10	30
m-Xylene & p-Xylene	20.0	19.9		ug/L		99	80 - 120	8	30
o-Xylene	20.0	19.6		ug/L		98	80 - 120	9	30
Styrene	20.0	20.0		ug/L		100	80 - 120	8	30
Tetrachloroethene	20.0	21.0		ug/L		105	78 - 122	9	30
Toluene	20.0	19.3		ug/L		96	80 - 120	8	30
trans-1,2-Dichloroethene	20.0	19.0		ug/L		95	79 - 120	11	30
trans-1,3-Dichloropropene	20.0	18.6		ug/L		93	76 - 120	8	30
Trichloroethene	20.0	20.3		ug/L		101	77 - 120	9	30
Trichlorofluoromethane	20.0	22.3		ug/L		112	71 - 143	7	30
Vinyl chloride	20.0	19.4		ug/L		97	62 - 138	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*
4-Bromofluorobenzene	*105*		*77 - 124*
Dibromofluoromethane (Surr)	*108*		*72 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 460-154925-1 MS
Matrix: Water
Analysis Batch: 516291

Client Sample ID: GC-MW-102(WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	200	193		ug/L		97	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	200	176		ug/L		88	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	202		ug/L		101	59 - 150
1,1,2-Trichloroethane	1.0	U	200	186		ug/L		93	78 - 120
1,1-Dichloroethane	1.0	U	200	209		ug/L		104	77 - 123
1,1-Dichloroethene	1.0	U	200	195		ug/L		97	74 - 123
1,2,3-Trichlorobenzene	1.0	U	200	187		ug/L		94	78 - 131
1,2,4-Trichlorobenzene	1.0	U	200	187		ug/L		93	80 - 124
1,2-Dibromo-3-Chloropropane	1.0	U	200	156		ug/L		78	55 - 134
1,2-Dichlorobenzene	1.0	U	200	188		ug/L		94	80 - 120
1,2-Dichloroethane	1.0	U	200	185		ug/L		93	76 - 121
1,2-Dichloropropane	1.0	U	200	201		ug/L		100	77 - 123
1,3-Dichlorobenzene	1.0	U	200	187		ug/L		94	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154925-1 MS
Matrix: Water
Analysis Batch: 516291

Client Sample ID: GC-MW-102(WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	1.0	U	200	178		ug/L		89	80 - 120
1,4-Dioxane	50	U	4000	3730		ug/L		93	10 - 150
2-Butanone (MEK)	5.0	U	1000	979		ug/L		98	64 - 120
2-Hexanone	5.0	U	1000	1010		ug/L		101	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	1030		ug/L		103	78 - 124
Acetone	2.3	J	1000	900		ug/L		90	39 - 150
Benzene	1.0	U	200	194		ug/L		97	77 - 121
Bromoform	1.0	U	200	166		ug/L		83	53 - 120
Bromomethane	1.0	U	200	126		ug/L		63	10 - 150
Carbon disulfide	1.0	U	200	181		ug/L		90	69 - 133
Carbon tetrachloride	1.0	U	200	186		ug/L		93	70 - 132
Chlorobenzene	1.0	U	200	192		ug/L		96	80 - 120
Chlorobromomethane	1.0	U	200	204		ug/L		102	77 - 127
Chlorodibromomethane	1.0	U	200	175		ug/L		87	73 - 120
Chloroethane	1.0	U	200	186		ug/L		93	52 - 150
Chloroform	1.0	U	200	201		ug/L		100	80 - 120
Chloromethane	1.0	U	200	173		ug/L		87	56 - 131
cis-1,2-Dichloroethene	1.0	U	200	204		ug/L		102	80 - 120
cis-1,3-Dichloropropene	1.0	U	200	174		ug/L		87	77 - 120
Cyclohexane	1.0	U	200	202		ug/L		101	56 - 150
Dichlorobromomethane	1.0	U	200	189		ug/L		94	76 - 120
Dichlorodifluoromethane	1.0	U	200	194		ug/L		97	50 - 131
Ethylbenzene	1.0	U	200	194		ug/L		97	80 - 120
Ethylene Dibromide	1.0	U	200	191		ug/L		96	80 - 120
Isopropylbenzene	1.0	U	200	194		ug/L		97	80 - 123
Methyl acetate	5.0	U	400	395		ug/L		99	66 - 144
Methyl tert-butyl ether	1.0	U	200	199		ug/L		99	79 - 122
Methylcyclohexane	1.0	U	200	207		ug/L		103	61 - 145
Methylene Chloride	1.0	U	200	194		ug/L		97	77 - 123
m-Xylene & p-Xylene	1.0	U	200	192		ug/L		96	80 - 120
o-Xylene	1.0	U	200	189		ug/L		94	80 - 120
Styrene	1.0	U	200	192		ug/L		96	80 - 120
Tetrachloroethene	1.4		200	203		ug/L		101	78 - 122
Toluene	1.0	U	200	188		ug/L		94	80 - 120
trans-1,2-Dichloroethene	1.0	U	200	189		ug/L		94	79 - 120
trans-1,3-Dichloropropene	1.0	U	200	175		ug/L		87	76 - 120
Trichloroethene	1.0	U	200	202		ug/L		101	77 - 120
Trichlorofluoromethane	1.0	U	200	212		ug/L		106	71 - 143
Vinyl chloride	1.0	U	200	188		ug/L		94	62 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*
4-Bromofluorobenzene	*106*		*77 - 124*
Dibromofluoromethane (Surr)	*109*		*72 - 131*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154925-1 MSD
Matrix: Water
Analysis Batch: 516291

Client Sample ID: GC-MW-102(WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	200	206		ug/L		103	75 - 125	6	30
1,1,2,2-Tetrachloroethane	1.0	U	200	185		ug/L		93	74 - 120	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	218		ug/L		109	59 - 150	8	30
1,1,2-Trichloroethane	1.0	U	200	202		ug/L		101	78 - 120	8	30
1,1-Dichloroethane	1.0	U	200	226		ug/L		113	77 - 123	8	30
1,1-Dichloroethene	1.0	U	200	212		ug/L		106	74 - 123	9	30
1,2,3-Trichlorobenzene	1.0	U	200	207		ug/L		104	78 - 131	10	30
1,2,4-Trichlorobenzene	1.0	U	200	207		ug/L		104	80 - 124	10	30
1,2-Dibromo-3-Chloropropane	1.0	U	200	177		ug/L		89	55 - 134	12	30
1,2-Dichlorobenzene	1.0	U	200	203		ug/L		102	80 - 120	8	30
1,2-Dichloroethane	1.0	U	200	203		ug/L		101	76 - 121	9	30
1,2-Dichloropropane	1.0	U	200	214		ug/L		107	77 - 123	6	30
1,3-Dichlorobenzene	1.0	U	200	201		ug/L		100	80 - 120	7	30
1,4-Dichlorobenzene	1.0	U	200	189		ug/L		94	80 - 120	6	30
1,4-Dioxane	50	U	4000	3960		ug/L		99	10 - 150	6	30
2-Butanone (MEK)	5.0	U	1000	993		ug/L		99	64 - 120	1	30
2-Hexanone	5.0	U	1000	1080		ug/L		108	71 - 125	7	30
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	1090		ug/L		109	78 - 124	6	30
Acetone	2.3	J	1000	963		ug/L		96	39 - 150	7	30
Benzene	1.0	U	200	205		ug/L		103	77 - 121	6	30
Bromoform	1.0	U	200	177		ug/L		89	53 - 120	7	30
Bromomethane	1.0	U	200	160		ug/L		80	10 - 150	24	30
Carbon disulfide	1.0	U	200	194		ug/L		97	69 - 133	7	30
Carbon tetrachloride	1.0	U	200	207		ug/L		104	70 - 132	11	30
Chlorobenzene	1.0	U	200	206		ug/L		103	80 - 120	7	30
Chlorobromomethane	1.0	U	200	225		ug/L		112	77 - 127	10	30
Chlorodibromomethane	1.0	U	200	189		ug/L		95	73 - 120	8	30
Chloroethane	1.0	U	200	198		ug/L		99	52 - 150	6	30
Chloroform	1.0	U	200	219		ug/L		110	80 - 120	9	30
Chloromethane	1.0	U	200	195		ug/L		98	56 - 131	12	30
cis-1,2-Dichloroethene	1.0	U	200	216		ug/L		108	80 - 120	6	30
cis-1,3-Dichloropropene	1.0	U	200	189		ug/L		95	77 - 120	9	30
Cyclohexane	1.0	U	200	223		ug/L		111	56 - 150	10	30
Dichlorobromomethane	1.0	U	200	208		ug/L		104	76 - 120	10	30
Dichlorodifluoromethane	1.0	U	200	209		ug/L		104	50 - 131	8	30
Ethylbenzene	1.0	U	200	203		ug/L		102	80 - 120	5	30
Ethylene Dibromide	1.0	U	200	204		ug/L		102	80 - 120	7	30
Isopropylbenzene	1.0	U	200	204		ug/L		102	80 - 123	5	30
Methyl acetate	5.0	U	400	438		ug/L		110	66 - 144	10	30
Methyl tert-butyl ether	1.0	U	200	212		ug/L		106	79 - 122	6	30
Methylcyclohexane	1.0	U	200	224		ug/L		112	61 - 145	8	30
Methylene Chloride	1.0	U	200	214		ug/L		107	77 - 123	10	30
m-Xylene & p-Xylene	1.0	U	200	207		ug/L		104	80 - 120	7	30
o-Xylene	1.0	U	200	201		ug/L		100	80 - 120	6	30
Styrene	1.0	U	200	209		ug/L		104	80 - 120	8	30
Tetrachloroethene	1.4		200	218		ug/L		108	78 - 122	7	30
Toluene	1.0	U	200	200		ug/L		100	80 - 120	6	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-154925-1 MSD
Matrix: Water
Analysis Batch: 516291

Client Sample ID: GC-MW-102(WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	1.0	U	200	206		ug/L		103	79 - 120	9	30
trans-1,3-Dichloropropene	1.0	U	200	188		ug/L		94	76 - 120	8	30
Trichloroethene	1.0	U	200	215		ug/L		108	77 - 120	6	30
Trichlorofluoromethane	1.0	U	200	237		ug/L		118	71 - 143	11	30
Vinyl chloride	1.0	U	200	204		ug/L		102	62 - 138	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*117*		*74 - 132*
4-Bromofluorobenzene	*115*		*77 - 124*
Dibromofluoromethane (Surr)	*120*		*72 - 131*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: MB 460-516299/8
Matrix: Water
Analysis Batch: 516299

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/03/18 19:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/03/18 19:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/03/18 19:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/03/18 19:58	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/03/18 19:58	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/03/18 19:58	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/03/18 19:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/03/18 19:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/03/18 19:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/03/18 19:58	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/03/18 19:58	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/03/18 19:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 19:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/03/18 19:58	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/03/18 19:58	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/03/18 19:58	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/03/18 19:58	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/03/18 19:58	1
Acetone	5.0	U	5.0	1.1	ug/L			05/03/18 19:58	1
Benzene	1.0	U	1.0	0.090	ug/L			05/03/18 19:58	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/03/18 19:58	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/03/18 19:58	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/03/18 19:58	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/03/18 19:58	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/03/18 19:58	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/03/18 19:58	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/03/18 19:58	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/03/18 19:58	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/03/18 19:58	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/03/18 19:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/03/18 19:58	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-516299/8
Matrix: Water
Analysis Batch: 516299

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/03/18 19:58	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/03/18 19:58	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/03/18 19:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/03/18 19:58	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/03/18 19:58	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/03/18 19:58	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/03/18 19:58	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/03/18 19:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/03/18 19:58	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/03/18 19:58	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/03/18 19:58	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/03/18 19:58	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/03/18 19:58	1
Styrene	1.0	U	1.0	0.17	ug/L			05/03/18 19:58	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/03/18 19:58	1
Toluene	1.0	U	1.0	0.25	ug/L			05/03/18 19:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/03/18 19:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/03/18 19:58	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/03/18 19:58	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/03/18 19:58	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/03/18 19:58	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/18 19:58*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/03/18 19:58*	*1*
4-Bromofluorobenzene	*91*		*77 - 124*		*05/03/18 19:58*	*1*
Dibromofluoromethane (Surr)	*104*		*72 - 131*		*05/03/18 19:58*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*05/03/18 19:58*	*1*

Lab Sample ID: LCS 460-516299/4
Matrix: Water
Analysis Batch: 516299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.7		ug/L		113	75 - 125
1,1,2,2-Tetrachloroethane	20.0	19.2		ug/L		96	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.9		ug/L		109	59 - 150
1,1,2-Trichloroethane	20.0	20.6		ug/L		103	78 - 120
1,1-Dichloroethane	20.0	20.8		ug/L		104	77 - 123
1,1-Dichloroethene	20.0	19.4		ug/L		97	74 - 123
1,2,3-Trichlorobenzene	20.0	20.9		ug/L		104	78 - 131
1,2,4-Trichlorobenzene	20.0	19.1		ug/L		96	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	18.6		ug/L		93	55 - 134
1,2-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120
1,2-Dichloroethane	20.0	21.1		ug/L		105	76 - 121

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-516299/4
Matrix: Water
Analysis Batch: 516299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	20.0	19.3		ug/L		97	77 - 123
1,3-Dichlorobenzene	20.0	21.7		ug/L		109	80 - 120
1,4-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
1,4-Dioxane	400	375		ug/L		94	10 - 150
2-Butanone (MEK)	100	93.3		ug/L		93	64 - 120
2-Hexanone	100	76.6		ug/L		77	71 - 125
4-Methyl-2-pentanone (MIBK)	100	98.8		ug/L		99	78 - 124
Acetone	100	96.9		ug/L		97	39 - 150
Benzene	20.0	20.4		ug/L		102	77 - 121
Bromoform	20.0	18.5		ug/L		92	53 - 120
Bromomethane	20.0	27.9		ug/L		139	10 - 150
Carbon disulfide	20.0	16.8		ug/L		84	69 - 133
Carbon tetrachloride	20.0	25.7		ug/L		129	70 - 132
Chlorobenzene	20.0	19.7		ug/L		99	80 - 120
Chlorobromomethane	20.0	20.5		ug/L		102	77 - 127
Chlorodibromomethane	20.0	19.0		ug/L		95	73 - 120
Chloroethane	20.0	34.1	*	ug/L		170	52 - 150
Chloroform	20.0	21.2		ug/L		106	80 - 120
Chloromethane	20.0	24.8		ug/L		124	56 - 131
cis-1,2-Dichloroethene	20.0	20.9		ug/L		105	80 - 120
cis-1,3-Dichloropropene	20.0	18.4		ug/L		92	77 - 120
Cyclohexane	20.0	18.7		ug/L		93	56 - 150
Dichlorobromomethane	20.0	19.8		ug/L		99	76 - 120
Dichlorodifluoromethane	20.0	23.4		ug/L		117	50 - 131
Ethylbenzene	20.0	19.5		ug/L		97	80 - 120
Ethylene Dibromide	20.0	19.3		ug/L		97	80 - 120
Isopropylbenzene	20.0	20.5		ug/L		102	80 - 123
Methyl acetate	40.0	45.6		ug/L		114	66 - 144
Methyl tert-butyl ether	20.0	18.9		ug/L		95	79 - 122
Methylcyclohexane	20.0	18.6		ug/L		93	61 - 145
Methylene Chloride	20.0	20.4		ug/L		102	77 - 123
m-Xylene & p-Xylene	20.0	19.1		ug/L		95	80 - 120
o-Xylene	20.0	19.5		ug/L		97	80 - 120
Styrene	20.0	19.7		ug/L		98	80 - 120
Tetrachloroethene	20.0	20.7		ug/L		104	78 - 122
Toluene	20.0	19.9		ug/L		100	80 - 120
trans-1,2-Dichloroethene	20.0	19.7		ug/L		98	79 - 120
trans-1,3-Dichloropropene	20.0	18.7		ug/L		93	76 - 120
Trichloroethene	20.0	19.9		ug/L		99	77 - 120
Trichlorofluoromethane	20.0	26.4		ug/L		132	71 - 143
Vinyl chloride	20.0	25.9		ug/L		129	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*
4-Bromofluorobenzene	*96*		*77 - 124*
Dibromofluoromethane (Surr)	*107*		*72 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-516299/5
Matrix: Water
Analysis Batch: 516299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	21.5		ug/L		108	75 - 125	5	30
1,1,2,2-Tetrachloroethane	20.0	20.2		ug/L		101	74 - 120	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.0		ug/L		105	59 - 150	4	30
1,1,2-Trichloroethane	20.0	18.8		ug/L		94	78 - 120	9	30
1,1-Dichloroethane	20.0	20.5		ug/L		103	77 - 123	1	30
1,1-Dichloroethene	20.0	19.9		ug/L		99	74 - 123	2	30
1,2,3-Trichlorobenzene	20.0	21.0		ug/L		105	78 - 131	1	30
1,2,4-Trichlorobenzene	20.0	19.0		ug/L		95	80 - 124	0	30
1,2-Dibromo-3-Chloropropane	20.0	19.3		ug/L		97	55 - 134	4	30
1,2-Dichlorobenzene	20.0	20.7		ug/L		104	80 - 120	2	30
1,2-Dichloroethane	20.0	20.6		ug/L		103	76 - 121	3	30
1,2-Dichloropropane	20.0	19.0		ug/L		95	77 - 123	2	30
1,3-Dichlorobenzene	20.0	21.4		ug/L		107	80 - 120	1	30
1,4-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 120	1	30
1,4-Dioxane	400	408		ug/L		102	10 - 150	9	30
2-Butanone (MEK)	100	93.1		ug/L		93	64 - 120	0	30
2-Hexanone	100	78.0		ug/L		78	71 - 125	2	30
4-Methyl-2-pentanone (MIBK)	100	99.4		ug/L		99	78 - 124	1	30
Acetone	100	102		ug/L		102	39 - 150	5	30
Benzene	20.0	19.8		ug/L		99	77 - 121	3	30
Bromoform	20.0	17.1		ug/L		85	53 - 120	8	30
Bromomethane	20.0	25.8		ug/L		129	10 - 150	8	30
Carbon disulfide	20.0	17.1		ug/L		85	69 - 133	2	30
Carbon tetrachloride	20.0	24.7		ug/L		123	70 - 132	4	30
Chlorobenzene	20.0	19.3		ug/L		97	80 - 120	2	30
Chlorobromomethane	20.0	20.3		ug/L		101	77 - 127	1	30
Chlorodibromomethane	20.0	18.3		ug/L		91	73 - 120	4	30
Chloroethane	20.0	28.8		ug/L		144	52 - 150	17	30
Chloroform	20.0	20.9		ug/L		105	80 - 120	1	30
Chloromethane	20.0	23.2		ug/L		116	56 - 131	7	30
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	80 - 120	2	30
cis-1,3-Dichloropropene	20.0	18.0		ug/L		90	77 - 120	2	30
Cyclohexane	20.0	18.4		ug/L		92	56 - 150	1	30
Dichlorobromomethane	20.0	19.1		ug/L		95	76 - 120	4	30
Dichlorodifluoromethane	20.0	23.3		ug/L		116	50 - 131	1	30
Ethylbenzene	20.0	19.1		ug/L		95	80 - 120	2	30
Ethylene Dibromide	20.0	18.8		ug/L		94	80 - 120	3	30
Isopropylbenzene	20.0	19.9		ug/L		99	80 - 123	3	30
Methyl acetate	40.0	45.8		ug/L		114	66 - 144	0	30
Methyl tert-butyl ether	20.0	19.4		ug/L		97	79 - 122	3	30
Methylcyclohexane	20.0	18.1		ug/L		91	61 - 145	2	30
Methylene Chloride	20.0	21.0		ug/L		105	77 - 123	3	30
m-Xylene & p-Xylene	20.0	18.8		ug/L		94	80 - 120	1	30
o-Xylene	20.0	18.5		ug/L		92	80 - 120	5	30
Styrene	20.0	19.7		ug/L		98	80 - 120	0	30
Tetrachloroethene	20.0	19.2		ug/L		96	78 - 122	8	30
Toluene	20.0	18.9		ug/L		95	80 - 120	5	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-516299/5
Matrix: Water
Analysis Batch: 516299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene			20.0	20.0		ug/L		100	79 - 120	1	30
trans-1,3-Dichloropropene			20.0	17.2		ug/L		86	76 - 120	8	30
Trichloroethene			20.0	19.3		ug/L		96	77 - 120	3	30
Trichlorofluoromethane			20.0	25.3		ug/L		126	71 - 143	4	30
Vinyl chloride			20.0	24.4		ug/L		122	62 - 138	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*
4-Bromofluorobenzene	*97*		*77 - 124*
Dibromofluoromethane (Surr)	*105*		*72 - 131*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: MB 460-516419/7
Matrix: Water
Analysis Batch: 516419

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/04/18 12:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/04/18 12:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/04/18 12:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/04/18 12:05	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/04/18 12:05	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/04/18 12:05	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/04/18 12:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/04/18 12:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/04/18 12:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/04/18 12:05	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/04/18 12:05	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/04/18 12:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 12:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/04/18 12:05	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/04/18 12:05	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/04/18 12:05	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/04/18 12:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/04/18 12:05	1
Acetone	5.0	U	5.0	1.1	ug/L			05/04/18 12:05	1
Benzene	1.0	U	1.0	0.090	ug/L			05/04/18 12:05	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/04/18 12:05	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/04/18 12:05	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/04/18 12:05	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/04/18 12:05	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/04/18 12:05	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/04/18 12:05	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/04/18 12:05	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/04/18 12:05	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/04/18 12:05	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/04/18 12:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/04/18 12:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-516419/7
Matrix: Water
Analysis Batch: 516419

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/04/18 12:05	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/04/18 12:05	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/04/18 12:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/04/18 12:05	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/04/18 12:05	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/04/18 12:05	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/04/18 12:05	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/04/18 12:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/04/18 12:05	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/04/18 12:05	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/04/18 12:05	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/04/18 12:05	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/04/18 12:05	1
Styrene	1.0	U	1.0	0.17	ug/L			05/04/18 12:05	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/04/18 12:05	1
Toluene	1.0	U	1.0	0.25	ug/L			05/04/18 12:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/04/18 12:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/04/18 12:05	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/04/18 12:05	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/04/18 12:05	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/04/18 12:05	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2-Methyl-2-propanol	*3.04*	*J*	*ug/L*		*2.11*	*75-65-0*		*05/04/18 12:05*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/18 12:05*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*74 - 132*		*05/04/18 12:05*	*1*
4-Bromofluorobenzene	*99*		*77 - 124*		*05/04/18 12:05*	*1*
Dibromofluoromethane (Surr)	*106*		*72 - 131*		*05/04/18 12:05*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/04/18 12:05*	*1*

Lab Sample ID: LCS 460-516419/4
Matrix: Water
Analysis Batch: 516419

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.2		ug/L		96	75 - 125
1,1,2,2-Tetrachloroethane	20.0	16.9		ug/L		85	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.7		ug/L		89	59 - 150
1,1,2-Trichloroethane	20.0	18.4		ug/L		92	78 - 120
1,1-Dichloroethane	20.0	20.9		ug/L		105	77 - 123
1,1-Dichloroethene	20.0	19.2		ug/L		96	74 - 123
1,2,3-Trichlorobenzene	20.0	19.5		ug/L		97	78 - 131
1,2,4-Trichlorobenzene	20.0	19.4		ug/L		97	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	15.5		ug/L		78	55 - 134
1,2-Dichlorobenzene	20.0	19.1		ug/L		95	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-516419/4
Matrix: Water
Analysis Batch: 516419

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	20.0	19.1		ug/L		95	76 - 121
1,2-Dichloropropane	20.0	20.0		ug/L		100	77 - 123
1,3-Dichlorobenzene	20.0	18.8		ug/L		94	80 - 120
1,4-Dichlorobenzene	20.0	17.8		ug/L		89	80 - 120
1,4-Dioxane	400	394		ug/L		98	10 - 150
2-Butanone (MEK)	100	93.3		ug/L		93	64 - 120
2-Hexanone	100	100		ug/L		100	71 - 125
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	78 - 124
Acetone	100	91.4		ug/L		91	39 - 150
Benzene	20.0	19.3		ug/L		97	77 - 121
Bromoform	20.0	16.3		ug/L		82	53 - 120
Bromomethane	20.0	15.8		ug/L		79	10 - 150
Carbon disulfide	20.0	17.9		ug/L		90	69 - 133
Carbon tetrachloride	20.0	18.3		ug/L		91	70 - 132
Chlorobenzene	20.0	19.3		ug/L		97	80 - 120
Chlorobromomethane	20.0	21.0		ug/L		105	77 - 127
Chlorodibromomethane	20.0	18.0		ug/L		90	73 - 120
Chloroethane	20.0	18.7		ug/L		94	52 - 150
Chloroform	20.0	20.3		ug/L		102	80 - 120
Chloromethane	20.0	19.2		ug/L		96	56 - 131
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	80 - 120
cis-1,3-Dichloropropene	20.0	18.3		ug/L		91	77 - 120
Cyclohexane	20.0	18.5		ug/L		93	56 - 150
Dichlorobromomethane	20.0	19.6		ug/L		98	76 - 120
Dichlorodifluoromethane	20.0	16.7		ug/L		83	50 - 131
Ethylbenzene	20.0	19.2		ug/L		96	80 - 120
Ethylene Dibromide	20.0	19.1		ug/L		96	80 - 120
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 123
Methyl acetate	40.0	39.9		ug/L		100	66 - 144
Methyl tert-butyl ether	20.0	19.8		ug/L		99	79 - 122
Methylcyclohexane	20.0	17.9		ug/L		89	61 - 145
Methylene Chloride	20.0	19.7		ug/L		98	77 - 123
m-Xylene & p-Xylene	20.0	19.2		ug/L		96	80 - 120
o-Xylene	20.0	19.1		ug/L		96	80 - 120
Styrene	20.0	19.4		ug/L		97	80 - 120
Tetrachloroethene	20.0	19.8		ug/L		99	78 - 122
Toluene	20.0	18.9		ug/L		94	80 - 120
trans-1,2-Dichloroethene	20.0	19.3		ug/L		96	79 - 120
trans-1,3-Dichloropropene	20.0	18.0		ug/L		90	76 - 120
Trichloroethene	20.0	19.9		ug/L		100	77 - 120
Trichlorofluoromethane	20.0	20.1		ug/L		101	71 - 143
Vinyl chloride	20.0	18.7		ug/L		94	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*
4-Bromofluorobenzene	*102*		*77 - 124*
Dibromofluoromethane (Surr)	*105*		*72 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: LCSD 460-516419/13
Matrix: Water
Analysis Batch: 516419

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	19.8		ug/L		99	75 - 125	3	30
1,1,2,2-Tetrachloroethane	20.0	18.6		ug/L		93	74 - 120	10	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.6		ug/L		93	59 - 150	5	30
1,1,2-Trichloroethane	20.0	20.3		ug/L		102	78 - 120	10	30
1,1-Dichloroethane	20.0	22.2		ug/L		111	77 - 123	6	30
1,1-Dichloroethene	20.0	20.0		ug/L		100	74 - 123	4	30
1,2,3-Trichlorobenzene	20.0	20.2		ug/L		101	78 - 131	4	30
1,2,4-Trichlorobenzene	20.0	20.5		ug/L		103	80 - 124	6	30
1,2-Dibromo-3-Chloropropane	20.0	17.1		ug/L		85	55 - 134	9	30
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120	7	30
1,2-Dichloroethane	20.0	19.9		ug/L		99	76 - 121	4	30
1,2-Dichloropropane	20.0	21.5		ug/L		107	77 - 123	7	30
1,3-Dichlorobenzene	20.0	20.1		ug/L		100	80 - 120	7	30
1,4-Dichlorobenzene	20.0	19.3		ug/L		97	80 - 120	8	30
1,4-Dioxane	400	425		ug/L		106	10 - 150	8	30
2-Butanone (MEK)	100	100		ug/L		100	64 - 120	7	30
2-Hexanone	100	107		ug/L		107	71 - 125	6	30
4-Methyl-2-pentanone (MIBK)	100	110		ug/L		110	78 - 124	7	30
Acetone	100	95.1		ug/L		95	39 - 150	4	30
Benzene	20.0	20.7		ug/L		103	77 - 121	7	30
Bromoform	20.0	18.1		ug/L		90	53 - 120	10	30
Bromomethane	20.0	15.1		ug/L		76	10 - 150	4	30
Carbon disulfide	20.0	18.9		ug/L		94	69 - 133	5	30
Carbon tetrachloride	20.0	19.0		ug/L		95	70 - 132	4	30
Chlorobenzene	20.0	20.8		ug/L		104	80 - 120	7	30
Chlorobromomethane	20.0	22.1		ug/L		110	77 - 127	5	30
Chlorodibromomethane	20.0	18.8		ug/L		94	73 - 120	4	30
Chloroethane	20.0	19.2		ug/L		96	52 - 150	3	30
Chloroform	20.0	21.5		ug/L		108	80 - 120	6	30
Chloromethane	20.0	18.0		ug/L		90	56 - 131	6	30
cis-1,2-Dichloroethene	20.0	21.5		ug/L		107	80 - 120	8	30
cis-1,3-Dichloropropene	20.0	19.2		ug/L		96	77 - 120	5	30
Cyclohexane	20.0	19.1		ug/L		95	56 - 150	3	30
Dichlorobromomethane	20.0	20.6		ug/L		103	76 - 120	5	30
Dichlorodifluoromethane	20.0	12.9		ug/L		64	50 - 131	26	30
Ethylbenzene	20.0	20.6		ug/L		103	80 - 120	7	30
Ethylene Dibromide	20.0	20.3		ug/L		101	80 - 120	6	30
Isopropylbenzene	20.0	20.4		ug/L		102	80 - 123	7	30
Methyl acetate	40.0	41.4		ug/L		104	66 - 144	4	30
Methyl tert-butyl ether	20.0	20.7		ug/L		103	79 - 122	4	30
Methylcyclohexane	20.0	19.2		ug/L		96	61 - 145	7	30
Methylene Chloride	20.0	20.8		ug/L		104	77 - 123	6	30
m-Xylene & p-Xylene	20.0	20.7		ug/L		104	80 - 120	8	30
o-Xylene	20.0	20.8		ug/L		104	80 - 120	8	30
Styrene	20.0	20.7		ug/L		104	80 - 120	7	30
Tetrachloroethene	20.0	21.1		ug/L		106	78 - 122	6	30
Toluene	20.0	20.2		ug/L		101	80 - 120	7	30
trans-1,2-Dichloroethene	20.0	19.9		ug/L		100	79 - 120	3	30
trans-1,3-Dichloropropene	20.0	19.1		ug/L		95	76 - 120	6	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-516419/13
Matrix: Water
Analysis Batch: 516419

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene			20.0	20.7		ug/L		103	77 - 120	4	30
Trichlorofluoromethane			20.0	17.4		ug/L		87	71 - 143	15	30
Vinyl chloride			20.0	18.1		ug/L		91	62 - 138	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*74 - 132*
4-Bromofluorobenzene	*98*		*77 - 124*
Dibromofluoromethane (Surr)	*102*		*72 - 131*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: MB 460-516607/10
Matrix: Water
Analysis Batch: 516607

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.28	ug/L			05/05/18 01:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/05/18 01:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34	ug/L			05/05/18 01:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.080	ug/L			05/05/18 01:57	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/05/18 01:57	1
1,1-Dichloroethene	1.0	U	1.0	0.34	ug/L			05/05/18 01:57	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			05/05/18 01:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.27	ug/L			05/05/18 01:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23	ug/L			05/05/18 01:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.22	ug/L			05/05/18 01:57	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			05/05/18 01:57	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			05/05/18 01:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/05/18 01:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			05/05/18 01:57	1
1,4-Dioxane	50	U	50	8.7	ug/L			05/05/18 01:57	1
2-Butanone (MEK)	5.0	U	5.0	2.2	ug/L			05/05/18 01:57	1
2-Hexanone	5.0	U	5.0	0.72	ug/L			05/05/18 01:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63	ug/L			05/05/18 01:57	1
Acetone	1.28	J	5.0	1.1	ug/L			05/05/18 01:57	1
Benzene	1.0	U	1.0	0.090	ug/L			05/05/18 01:57	1
Bromoform	1.0	U	1.0	0.18	ug/L			05/05/18 01:57	1
Bromomethane	1.0	U	1.0	0.18	ug/L			05/05/18 01:57	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/05/18 01:57	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			05/05/18 01:57	1
Chlorobenzene	1.0	U	1.0	0.24	ug/L			05/05/18 01:57	1
Chlorobromomethane	1.0	U	1.0	0.30	ug/L			05/05/18 01:57	1
Chlorodibromomethane	1.0	U	1.0	0.22	ug/L			05/05/18 01:57	1
Chloroethane	1.0	U	1.0	0.37	ug/L			05/05/18 01:57	1
Chloroform	1.0	U	1.0	0.22	ug/L			05/05/18 01:57	1
Chloromethane	1.0	U	1.0	0.22	ug/L			05/05/18 01:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			05/05/18 01:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.16	ug/L			05/05/18 01:57	1
Cyclohexane	1.0	U	1.0	0.26	ug/L			05/05/18 01:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-516607/10
Matrix: Water
Analysis Batch: 516607

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			05/05/18 01:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.14	ug/L			05/05/18 01:57	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/05/18 01:57	1
Ethylene Dibromide	1.0	U	1.0	0.19	ug/L			05/05/18 01:57	1
Isopropylbenzene	1.0	U	1.0	0.32	ug/L			05/05/18 01:57	1
Methyl acetate	5.0	U	5.0	0.58	ug/L			05/05/18 01:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.13	ug/L			05/05/18 01:57	1
Methylcyclohexane	1.0	U	1.0	0.22	ug/L			05/05/18 01:57	1
Methylene Chloride	1.0	U	1.0	0.21	ug/L			05/05/18 01:57	1
m-Xylene & p-Xylene	1.0	U	1.0	0.28	ug/L			05/05/18 01:57	1
o-Xylene	1.0	U	1.0	0.32	ug/L			05/05/18 01:57	1
Styrene	1.0	U	1.0	0.17	ug/L			05/05/18 01:57	1
Tetrachloroethene	1.0	U	1.0	0.12	ug/L			05/05/18 01:57	1
Toluene	1.0	U	1.0	0.25	ug/L			05/05/18 01:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.18	ug/L			05/05/18 01:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/05/18 01:57	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			05/05/18 01:57	1
Trichlorofluoromethane	1.0	U	1.0	0.15	ug/L			05/05/18 01:57	1
Vinyl chloride	1.0	U	1.0	0.060	ug/L			05/05/18 01:57	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2-Methyl-2-propanol	*3.56*	*J*	*ug/L*		*2.10*	*75-65-0*		*05/05/18 01:57*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*05/05/18 01:57*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*05/05/18 01:57*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*05/05/18 01:57*	*1*
Dibromofluoromethane (Surr)	*110*		*72 - 131*		*05/05/18 01:57*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/05/18 01:57*	*1*

Lab Sample ID: LCS 460-516607/5
Matrix: Water
Analysis Batch: 516607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.0		ug/L		100	75 - 125
1,1,2,2-Tetrachloroethane	20.0	18.1		ug/L		91	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.6		ug/L		103	59 - 150
1,1,2-Trichloroethane	20.0	19.6		ug/L		98	78 - 120
1,1-Dichloroethane	20.0	21.5		ug/L		108	77 - 123
1,1-Dichloroethene	20.0	20.1		ug/L		101	74 - 123
1,2,3-Trichlorobenzene	20.0	20.1		ug/L		101	78 - 131
1,2,4-Trichlorobenzene	20.0	20.6		ug/L		103	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	16.8		ug/L		84	55 - 134
1,2-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 120
1,2-Dichloroethane	20.0	19.0		ug/L		95	76 - 121
1,2-Dichloropropane	20.0	20.6		ug/L		103	77 - 123

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-516607/5
Matrix: Water
Analysis Batch: 516607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120
1,4-Dichlorobenzene	20.0	19.0		ug/L		95	80 - 120
1,4-Dioxane	400	383		ug/L		96	10 - 150
2-Butanone (MEK)	100	94.3		ug/L		94	64 - 120
2-Hexanone	100	104		ug/L		104	71 - 125
4-Methyl-2-pentanone (MIBK)	100	106		ug/L		106	78 - 124
Acetone	100	93.9		ug/L		94	39 - 150
Benzene	20.0	20.2		ug/L		101	77 - 121
Bromoform	20.0	17.2		ug/L		86	53 - 120
Bromomethane	20.0	16.6		ug/L		83	10 - 150
Carbon disulfide	20.0	18.6		ug/L		93	69 - 133
Carbon tetrachloride	20.0	19.6		ug/L		98	70 - 132
Chlorobenzene	20.0	19.9		ug/L		100	80 - 120
Chlorobromomethane	20.0	21.4		ug/L		107	77 - 127
Chlorodibromomethane	20.0	18.5		ug/L		92	73 - 120
Chloroethane	20.0	19.3		ug/L		97	52 - 150
Chloroform	20.0	20.8		ug/L		104	80 - 120
Chloromethane	20.0	19.8		ug/L		99	56 - 131
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	80 - 120
cis-1,3-Dichloropropene	20.0	18.7		ug/L		93	77 - 120
Cyclohexane	20.0	21.1		ug/L		106	56 - 150
Dichlorobromomethane	20.0	20.0		ug/L		100	76 - 120
Dichlorodifluoromethane	20.0	22.4		ug/L		112	50 - 131
Ethylbenzene	20.0	20.1		ug/L		100	80 - 120
Ethylene Dibromide	20.0	19.7		ug/L		98	80 - 120
Isopropylbenzene	20.0	19.9		ug/L		99	80 - 123
Methyl acetate	40.0	40.6		ug/L		102	66 - 144
Methyl tert-butyl ether	20.0	20.2		ug/L		101	79 - 122
Methylcyclohexane	20.0	21.6		ug/L		108	61 - 145
Methylene Chloride	20.0	19.6		ug/L		98	77 - 123
m-Xylene & p-Xylene	20.0	19.9		ug/L		99	80 - 120
o-Xylene	20.0	19.7		ug/L		98	80 - 120
Styrene	20.0	19.9		ug/L		100	80 - 120
Tetrachloroethene	20.0	20.7		ug/L		103	78 - 122
Toluene	20.0	19.4		ug/L		97	80 - 120
trans-1,2-Dichloroethene	20.0	19.3		ug/L		97	79 - 120
trans-1,3-Dichloropropene	20.0	18.6		ug/L		93	76 - 120
Trichloroethene	20.0	20.8		ug/L		104	77 - 120
Trichlorofluoromethane	20.0	22.8		ug/L		114	71 - 143
Vinyl chloride	20.0	20.1		ug/L		101	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*
4-Bromofluorobenzene	*104*		*77 - 124*
Dibromofluoromethane (Surr)	*108*		*72 - 131*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-155023-B-1 MS
Matrix: Water
Analysis Batch: 516607

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	200	211		ug/L		106	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	200	192		ug/L		96	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	219		ug/L		110	59 - 150
1,1,2-Trichloroethane	1.0	U	200	208		ug/L		104	78 - 120
1,1-Dichloroethane	1.0	U	200	229		ug/L		114	77 - 123
1,1-Dichloroethene	1.0	U	200	216		ug/L		108	74 - 123
1,2,3-Trichlorobenzene	1.0	U	200	209		ug/L		104	78 - 131
1,2,4-Trichlorobenzene	1.0	U	200	206		ug/L		103	80 - 124
1,2-Dibromo-3-Chloropropane	1.0	U	200	173		ug/L		87	55 - 134
1,2-Dichlorobenzene	1.0	U	200	218		ug/L		109	80 - 120
1,2-Dichloroethane	1.0	U	200	212		ug/L		106	76 - 121
1,2-Dichloropropane	1.0	U	200	223		ug/L		112	77 - 123
1,3-Dichlorobenzene	1.0	U	200	207		ug/L		103	80 - 120
1,4-Dichlorobenzene	1.0	U	200	195		ug/L		98	80 - 120
1,4-Dioxane	50	U	4000	3990		ug/L		100	10 - 150
2-Butanone (MEK)	5.0	U	1000	998		ug/L		100	64 - 120
2-Hexanone	5.0	U	1000	1100		ug/L		110	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	1100		ug/L		110	78 - 124
Acetone	3.5	J B	1000	960		ug/L		96	39 - 150
Benzene	1.0	U	200	213		ug/L		107	77 - 121
Bromoform	1.0	U	200	180		ug/L		90	53 - 120
Bromomethane	1.0	U	200	146		ug/L		73	10 - 150
Carbon disulfide	1.0	U	200	198		ug/L		99	69 - 133
Carbon tetrachloride	1.0	U	200	211		ug/L		106	70 - 132
Chlorobenzene	1.0	U	200	210		ug/L		105	80 - 120
Chlorobromomethane	1.0	U	200	235		ug/L		118	77 - 127
Chlorodibromomethane	1.0	U	200	192		ug/L		96	73 - 120
Chloroethane	1.0	U	200	208		ug/L		104	52 - 150
Chloroform	1.0	U	200	226		ug/L		113	80 - 120
Chloromethane	1.0	U	200	206		ug/L		103	56 - 131
cis-1,2-Dichloroethene	1.0	U	200	219		ug/L		110	80 - 120
cis-1,3-Dichloropropene	1.0	U	200	189		ug/L		95	77 - 120
Cyclohexane	1.0	U	200	226		ug/L		113	56 - 150
Dichlorobromomethane	1.0	U	200	215		ug/L		107	76 - 120
Dichlorodifluoromethane	1.0	U	200	237		ug/L		118	50 - 131
Ethylbenzene	1.0	U	200	213		ug/L		106	80 - 120
Ethylene Dibromide	1.0	U	200	208		ug/L		104	80 - 120
Isopropylbenzene	1.0	U	200	209		ug/L		105	80 - 123
Methyl acetate	5.0	U	400	472		ug/L		118	66 - 144
Methyl tert-butyl ether	1.0	U	200	220		ug/L		110	79 - 122
Methylcyclohexane	1.0	U	200	229		ug/L		115	61 - 145
Methylene Chloride	0.26	J	200	220		ug/L		110	77 - 123
m-Xylene & p-Xylene	1.0	U	200	211		ug/L		106	80 - 120
o-Xylene	1.0	U	200	206		ug/L		103	80 - 120
Styrene	1.0	U	200	213		ug/L		107	80 - 120
Tetrachloroethene	1.0	U	200	222		ug/L		111	78 - 122
Toluene	1.0	U	200	207		ug/L		103	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-155023-B-1 MS
Matrix: Water
Analysis Batch: 516607

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	1.0	U	200	211		ug/L		106	79 - 120
trans-1,3-Dichloropropene	1.0	U	200	192		ug/L		96	76 - 120
Trichloroethene	1.0	U	200	223		ug/L		111	77 - 120
Trichlorofluoromethane	1.0	U	200	242		ug/L		121	71 - 143
Vinyl chloride	1.0	U	200	219		ug/L		109	62 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*74 - 132*
4-Bromofluorobenzene	*113*		*77 - 124*
Dibromofluoromethane (Surr)	*121*		*72 - 131*
Toluene-d8 (Surr)	*108*		*80 - 120*

Lab Sample ID: 460-155023-B-1 MSD
Matrix: Water
Analysis Batch: 516607

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	200	194		ug/L		97	75 - 125	8	30
1,1,2,2-Tetrachloroethane	1.0	U	200	187		ug/L		94	74 - 120	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	204		ug/L		102	59 - 150	7	30
1,1,2-Trichloroethane	1.0	U	200	191		ug/L		96	78 - 120	8	30
1,1-Dichloroethane	1.0	U	200	212		ug/L		106	77 - 123	8	30
1,1-Dichloroethene	1.0	U	200	199		ug/L		100	74 - 123	8	30
1,2,3-Trichlorobenzene	1.0	U	200	205		ug/L		103	78 - 131	2	30
1,2,4-Trichlorobenzene	1.0	U	200	202		ug/L		101	80 - 124	2	30
1,2-Dibromo-3-Chloropropane	1.0	U	200	180		ug/L		90	55 - 134	4	30
1,2-Dichlorobenzene	1.0	U	200	194		ug/L		97	80 - 120	12	30
1,2-Dichloroethane	1.0	U	200	196		ug/L		98	76 - 121	8	30
1,2-Dichloropropane	1.0	U	200	204		ug/L		102	77 - 123	9	30
1,3-Dichlorobenzene	1.0	U	200	189		ug/L		95	80 - 120	9	30
1,4-Dichlorobenzene	1.0	U	200	179		ug/L		90	80 - 120	9	30
1,4-Dioxane	50	U	4000	3930		ug/L		98	10 - 150	2	30
2-Butanone (MEK)	5.0	U	1000	951		ug/L		95	64 - 120	5	30
2-Hexanone	5.0	U	1000	1030		ug/L		103	71 - 125	7	30
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	1030		ug/L		103	78 - 124	7	30
Acetone	3.5	J B	1000	924		ug/L		92	39 - 150	4	30
Benzene	1.0	U	200	194		ug/L		97	77 - 121	9	30
Bromoform	1.0	U	200	175		ug/L		87	53 - 120	3	30
Bromomethane	1.0	U	200	131		ug/L		65	10 - 150	11	30
Carbon disulfide	1.0	U	200	186		ug/L		93	69 - 133	6	30
Carbon tetrachloride	1.0	U	200	189		ug/L		95	70 - 132	11	30
Chlorobenzene	1.0	U	200	195		ug/L		97	80 - 120	7	30
Chlorobromomethane	1.0	U	200	214		ug/L		107	77 - 127	9	30
Chlorodibromomethane	1.0	U	200	176		ug/L		88	73 - 120	9	30
Chloroethane	1.0	U	200	190		ug/L		95	52 - 150	9	30
Chloroform	1.0	U	200	207		ug/L		103	80 - 120	9	30
Chloromethane	1.0	U	200	170		ug/L		85	56 - 131	19	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-155023-B-1 MSD
Matrix: Water
Analysis Batch: 516607

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	1.0	U	200	188		ug/L		94	80 - 120	15	30
cis-1,3-Dichloropropene	1.0	U	200	175		ug/L		87	77 - 120	8	30
Cyclohexane	1.0	U	200	209		ug/L		104	56 - 150	8	30
Dichlorobromomethane	1.0	U	200	194		ug/L		97	76 - 120	10	30
Dichlorodifluoromethane	1.0	U	200	223		ug/L		111	50 - 131	6	30
Ethylbenzene	1.0	U	200	191		ug/L		95	80 - 120	11	30
Ethylene Dibromide	1.0	U	200	202		ug/L		101	80 - 120	3	30
Isopropylbenzene	1.0	U	200	195		ug/L		97	80 - 123	7	30
Methyl acetate	5.0	U	400	443		ug/L		111	66 - 144	6	30
Methyl tert-butyl ether	1.0	U	200	206		ug/L		103	79 - 122	6	30
Methylcyclohexane	1.0	U	200	209		ug/L		104	61 - 145	9	30
Methylene Chloride	0.26	J	200	199		ug/L		99	77 - 123	10	30
m-Xylene & p-Xylene	1.0	U	200	193		ug/L		97	80 - 120	9	30
o-Xylene	1.0	U	200	192		ug/L		96	80 - 120	7	30
Styrene	1.0	U	200	196		ug/L		98	80 - 120	8	30
Tetrachloroethene	1.0	U	200	201		ug/L		100	78 - 122	10	30
Toluene	1.0	U	200	190		ug/L		95	80 - 120	9	30
trans-1,2-Dichloroethene	1.0	U	200	194		ug/L		97	79 - 120	9	30
trans-1,3-Dichloropropene	1.0	U	200	183		ug/L		92	76 - 120	5	30
Trichloroethene	1.0	U	200	203		ug/L		102	77 - 120	9	30
Trichlorofluoromethane	1.0	U	200	220		ug/L		110	71 - 143	10	30
Vinyl chloride	1.0	U	200	198		ug/L		99	62 - 138	10	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*
4-Bromofluorobenzene	*104*		*77 - 124*
Dibromofluoromethane (Surr)	*111*		*72 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-515403/1-A
Matrix: Water
Analysis Batch: 515424

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.016	ug/L		04/30/18 15:53	04/30/18 20:19	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*44*		*10 - 150*	*04/30/18 15:53*	*04/30/18 20:19*	*1*

Lab Sample ID: LCS 460-515403/2-A
Matrix: Water
Analysis Batch: 515424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515403

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			1.60	1.68		ug/L		105	10 - 200		

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8	*39*		*10 - 200*

Lab Sample ID: 460-154781-1 MS
Matrix: Water
Analysis Batch: 515424

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA
Prep Batch: 515403

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	0.20	U	1.63	1.71		ug/L		105	70 - 130		

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
1,4-Dioxane-d8	*37*		*10 - 150*

Lab Sample ID: 460-154781-1 MSD
Matrix: Water
Analysis Batch: 515424

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA
Prep Batch: 515403

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.20	U	1.63	1.63		ug/L		100	70 - 130	4	20

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
1,4-Dioxane-d8	*37*		*10 - 150*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
*	MS or MSD is outside acceptance limits.
J	Indicates an estimated value.
*	LCS or LCSD is outside acceptance limits.
B	The analyte was found in an associated blank, as well as in the sample.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Analysis Batch: 516016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154781-1	GC-MW-107(WG)	Total/NA	Water	8260C	
460-154781-2	GC-MW-107D(WG)	Total/NA	Water	8260C	
460-154781-3	GC-MW-108(WG)	Total/NA	Water	8260C	
460-154781-5	GC-MW-103(WG)	Total/NA	Water	8260C	
460-154781-6	GC-MW-104(WG)	Total/NA	Water	8260C	
460-154781-7	GC-MW-105(WG)	Total/NA	Water	8260C	
460-154781-9	GC-Equipment Blank	Total/NA	Water	8260C	
460-154781-10	GC-TB-20180425	Total/NA	Water	8260C	
MB 460-516016/8	Method Blank	Total/NA	Water	8260C	
LCS 460-516016/4	Lab Control Sample	Total/NA	Water	8260C	
460-154781-1 MS	GC-MW-107(WG)	Total/NA	Water	8260C	
460-154781-1 MSD	GC-MW-107(WG)	Total/NA	Water	8260C	

Analysis Batch: 516110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154781-8	GC-DRAIN(WG)	Total/NA	Water	8260C	
MB 460-516110/7	Method Blank	Total/NA	Water	8260C	
LCS 460-516110/3	Lab Control Sample	Total/NA	Water	8260C	
460-154828-A-2 MS	Matrix Spike	Total/NA	Water	8260C	
460-154828-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 516291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154925-1	GC-MW-102(WG)	Total/NA	Water	8260C	
460-154925-2	GC-MW-109(WG)	Total/NA	Water	8260C	
460-154925-3	GC-MW-109M(WG)	Total/NA	Water	8260C	
460-154925-4	GC-MW-101(WG)	Total/NA	Water	8260C	
460-154925-5	GC-MW-101D(WG)	Total/NA	Water	8260C	
460-154925-6	GC-MW-106(WG)	Total/NA	Water	8260C	
460-154925-7	GC-MW-3(WG)	Total/NA	Water	8260C	
460-154925-8	GC-TB-20180426	Total/NA	Water	8260C	
460-154925-9	GC-Equipment Blank-2	Total/NA	Water	8260C	
460-154925-10	GC-MW-110(WG)	Total/NA	Water	8260C	
MB 460-516291/8	Method Blank	Total/NA	Water	8260C	
LCS 460-516291/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-516291/4	Lab Control Sample Dup	Total/NA	Water	8260C	
460-154925-1 MS	GC-MW-102(WG)	Total/NA	Water	8260C	
460-154925-1 MSD	GC-MW-102(WG)	Total/NA	Water	8260C	

Analysis Batch: 516299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154781-4	GC-MW-1B(WG)	Total/NA	Water	8260C	
MB 460-516299/8	Method Blank	Total/NA	Water	8260C	
LCS 460-516299/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-516299/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 516419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154925-12	GC-MW-2(WG)	Total/NA	Water	8260C	
MB 460-516419/7	Method Blank	Total/NA	Water	8260C	
LCS 460-516419/4	Lab Control Sample	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 516419 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 460-516419/13	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 516607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154925-11	GC-MW-110D(WG)	Total/NA	Water	8260C	
MB 460-516607/10	Method Blank	Total/NA	Water	8260C	
LCS 460-516607/5	Lab Control Sample	Total/NA	Water	8260C	
460-155023-B-1 MS	Matrix Spike	Total/NA	Water	8260C	
460-155023-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 515403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154781-1	GC-MW-107(WG)	Total/NA	Water	3510C	
460-154781-2	GC-MW-107D(WG)	Total/NA	Water	3510C	
460-154781-3	GC-MW-108(WG)	Total/NA	Water	3510C	
460-154781-4	GC-MW-1B(WG)	Total/NA	Water	3510C	
460-154781-5	GC-MW-103(WG)	Total/NA	Water	3510C	
460-154781-6	GC-MW-104(WG)	Total/NA	Water	3510C	
460-154781-7	GC-MW-105(WG)	Total/NA	Water	3510C	
460-154781-8	GC-DRAIN(WG)	Total/NA	Water	3510C	
460-154781-9	GC-Equipment Blank	Total/NA	Water	3510C	
460-154925-1	GC-MW-102(WG)	Total/NA	Water	3510C	
460-154925-2	GC-MW-109(WG)	Total/NA	Water	3510C	
460-154925-3	GC-MW-109M(WG)	Total/NA	Water	3510C	
460-154925-4	GC-MW-101(WG)	Total/NA	Water	3510C	
460-154925-5	GC-MW-101D(WG)	Total/NA	Water	3510C	
460-154925-6	GC-MW-106(WG)	Total/NA	Water	3510C	
460-154925-7	GC-MW-3(WG)	Total/NA	Water	3510C	
460-154925-9	GC-Equipment Blank-2	Total/NA	Water	3510C	
460-154925-10	GC-MW-110(WG)	Total/NA	Water	3510C	
460-154925-11	GC-MW-110D(WG)	Total/NA	Water	3510C	
460-154925-12	GC-MW-2(WG)	Total/NA	Water	3510C	
MB 460-515403/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-515403/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-154781-1 MS	GC-MW-107(WG)	Total/NA	Water	3510C	
460-154781-1 MSD	GC-MW-107(WG)	Total/NA	Water	3510C	

Analysis Batch: 515424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154781-1	GC-MW-107(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-2	GC-MW-107D(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-3	GC-MW-108(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-4	GC-MW-1B(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-5	GC-MW-103(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-6	GC-MW-104(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-7	GC-MW-105(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-8	GC-DRAIN(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-9	GC-Equipment Blank	Total/NA	Water	8270D SIM ID	515403

GC/MS Semi VOA (Continued)

Analysis Batch: 515424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-154925-1	GC-MW-102(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-2	GC-MW-109(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-3	GC-MW-109M(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-4	GC-MW-101(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-5	GC-MW-101D(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-6	GC-MW-106(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-7	GC-MW-3(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-9	GC-Equipment Blank-2	Total/NA	Water	8270D SIM ID	515403
460-154925-10	GC-MW-110(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-11	GC-MW-110D(WG)	Total/NA	Water	8270D SIM ID	515403
460-154925-12	GC-MW-2(WG)	Total/NA	Water	8270D SIM ID	515403
MB 460-515403/1-A	Method Blank	Total/NA	Water	8270D SIM ID	515403
LCS 460-515403/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	515403
460-154781-1 MS	GC-MW-107(WG)	Total/NA	Water	8270D SIM ID	515403
460-154781-1 MSD	GC-MW-107(WG)	Total/NA	Water	8270D SIM ID	515403

Client Sample ID: GC-MW-107(WG)

Lab Sample ID: 460-154781-1

Date Collected: 04/25/18 10:00

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516016	05/03/18 00:14	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 20:54	MDJ	TAL EDI

Client Sample ID: GC-MW-107D(WG)

Lab Sample ID: 460-154781-2

Date Collected: 04/25/18 11:15

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516016	05/03/18 00:37	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 21:48	MDJ	TAL EDI

Client Sample ID: GC-MW-108(WG)

Lab Sample ID: 460-154781-3

Date Collected: 04/25/18 11:50

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516016	05/03/18 01:00	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 22:05	MDJ	TAL EDI

Client Sample ID: GC-MW-1B(WG)

Lab Sample ID: 460-154781-4

Date Collected: 04/25/18 12:35

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516299	05/03/18 20:30	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 22:23	MDJ	TAL EDI

Client Sample ID: GC-MW-103(WG)

Lab Sample ID: 460-154781-5

Date Collected: 04/25/18 13:10

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516016	05/03/18 01:47	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 22:41	MDJ	TAL EDI

Client Sample ID: GC-MW-104(WG)

Lab Sample ID: 460-154781-6

Date Collected: 04/25/18 13:35

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516016	05/03/18 02:10	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 22:59	MDJ	TAL EDI

Client Sample ID: GC-MW-105(WG)

Lab Sample ID: 460-154781-7

Date Collected: 04/25/18 14:43

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516016	05/03/18 02:33	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 23:16	MDJ	TAL EDI

Client Sample ID: GC-DRAIN(WG)

Lab Sample ID: 460-154781-8

Date Collected: 04/25/18 14:00

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516110	05/03/18 13:34	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 23:52	MDJ	TAL EDI

Client Sample ID: GC-Equipment Blank

Lab Sample ID: 460-154781-9

Date Collected: 04/25/18 15:00

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516016	05/02/18 21:33	AAT	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	04/30/18 23:34	MDJ	TAL EDI

Client Sample ID: GC-TB-20180425

Lab Sample ID: 460-154781-10

Date Collected: 04/25/18 00:00

Matrix: Water

Date Received: 04/25/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516016	05/02/18 20:24	AAT	TAL EDI

Client Sample ID: GC-MW-102(WG)

Lab Sample ID: 460-154925-1

Date Collected: 04/26/18 08:25

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 05:30	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 00:10	MDJ	TAL EDI

Client Sample ID: GC-MW-109(WG)

Lab Sample ID: 460-154925-2

Date Collected: 04/26/18 09:57

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 05:55	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 00:27	MDJ	TAL EDI

Client Sample ID: GC-MW-109M(WG)

Lab Sample ID: 460-154925-3

Date Collected: 04/26/18 09:00

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 06:21	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 00:45	MDJ	TAL EDI

Client Sample ID: GC-MW-101(WG)

Lab Sample ID: 460-154925-4

Date Collected: 04/26/18 11:15

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 06:46	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 01:03	MDJ	TAL EDI

Client Sample ID: GC-MW-101D(WG)

Lab Sample ID: 460-154925-5

Date Collected: 04/26/18 11:15

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 07:11	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 01:21	MDJ	TAL EDI

Client Sample ID: GC-MW-106(WG)

Lab Sample ID: 460-154925-6

Date Collected: 04/26/18 11:55

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 07:37	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 01:39	MDJ	TAL EDI

Client Sample ID: GC-MW-3(WG)

Lab Sample ID: 460-154925-7

Date Collected: 04/26/18 12:45

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 08:02	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 01:56	MDJ	TAL EDI

Client Sample ID: GC-TB-20180426

Lab Sample ID: 460-154925-8

Date Collected: 04/26/18 09:30

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 05:05	MZS	TAL EDI

Client Sample ID: GC-Equipment Blank-2

Lab Sample ID: 460-154925-9

Date Collected: 04/26/18 09:30

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 08:27	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 02:14	MDJ	TAL EDI

Client Sample ID: GC-MW-110(WG)

Lab Sample ID: 460-154925-10

Date Collected: 04/26/18 13:35

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516291	05/04/18 08:52	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 02:32	MDJ	TAL EDI

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

Client Sample ID: GC-MW-110D(WG)

Lab Sample ID: 460-154925-11

Date Collected: 04/26/18 14:30

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516607	05/05/18 02:22	JXC	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 02:50	MDJ	TAL EDI

Client Sample ID: GC-MW-2(WG)

Lab Sample ID: 460-154925-12

Date Collected: 04/26/18 15:00

Matrix: Water

Date Received: 04/26/18 20:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	516419	05/04/18 17:32	MZS	TAL EDI
Total/NA	Prep	3510C			515403	04/30/18 15:53	GRB	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	515424	05/01/18 03:07	MDJ	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-154781-1

Laboratory: TestAmerica Edison

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8270D SIM ID	3510C	Water	1,4-Dioxane

8260C

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
GC-MW-107(WG)	460-154781-1	108	107	95	91
GC-MW-107D(WG)	460-154781-2	107	111	92	90
GC-MW-108(WG)	460-154781-3	109	112	93	92
GC-MW-1B(WG)	460-154781-4	109	108	97	90
GC-MW-103(WG)	460-154781-5	112	115	94	91
GC-MW-104(WG)	460-154781-6	115	116	95	93
GC-MW-105(WG)	460-154781-7	115	117	90	92
GC-DRAIN(WG)	460-154781-8	111	112	95	93
GC-Equipment Blank	460-154781-9	113	114	93	89
GC-TB-20180425	460-154781-10	114	112	94	89
GC-MW-102(WG)	460-154925-1	121	115	110	111
GC-MW-109(WG)	460-154925-2	111	106	103	104
GC-MW-109M(WG)	460-154925-3	117	115	110	110
GC-MW-101(WG)	460-154925-4	109	104	102	104
GC-MW-101D(WG)	460-154925-5	125	118	115	119
GC-MW-106(WG)	460-154925-6	117	113	108	110
GC-MW-3(WG)	460-154925-7	124	119	112	113
GC-TB-20180426	460-154925-8	109	105	102	104
GC-Equipment Blank-2	460-154925-9	110	103	100	102
GC-MW-110(WG)	460-154925-10	108	102	99	99
GC-MW-110D(WG)	460-154925-11	125	121	115	115
GC-MW-2(WG)	460-154925-12	108	105	99	98
	MB 460-516016/8	109	111	94	96
	MB 460-516110/7	106	105	95	94
	MB 460-516291/8	109	105	105	105
	MB 460-516299/8	104	104	94	91
	MB 460-516419/7	106	101	99	99
	MB 460-516607/10	110	105	102	100
	LCS 460-516016/4	108	110	94	98
	LCS 460-516110/3	104	102	94	100
	LCS 460-516291/3	122	119	113	118
	LCS 460-516299/4	107	103	99	96
	LCS 460-516419/4	105	103	98	102
	LCS 460-516607/5	108	107	102	104

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	72-131
DCA = 1,2-Dichloroethane-d4 (Surr)	74-132
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene	77-124

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	LCSD 460-516291/4	108	103	101	105
	LCSD 460-516299/5	105	104	96	97
	LCSD 460-516419/13	102	100	96	98
GC-MW-107(WG) MS	460-154781-1 MS	108	110	95	96
GC-MW-102(WG) MS	460-154925-1 MS	109	106	102	106
	460-154828-A-2 MS	104	105	94	94
	460-155023-B-1 MS	121	115	108	113
GC-MW-107(WG) MSD	460-154781-1 MSD	104	104	92	94
GC-MW-102(WG) MSD	460-154925-1 MSD	120	117	110	115
	460-154828-B-2 MSD	106	108	96	95
	460-155023-B-1 MSD	111	108	101	104

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	72-131
DCA = 1,2-Dichloroethane-d4 (Surr)	74-132
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene	77-124

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66515.D

Lab ID: LCS 460-516016/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	22.6	113	75-125	
1,1,2,2-Tetrachloroethane	20.0	18.8	94	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.5	102	59-150	
1,1,2-Trichloroethane	20.0	19.1	96	78-120	
1,1-Dichloroethane	20.0	21.2	106	77-123	
1,1-Dichloroethene	20.0	19.4	97	74-123	
1,2,3-Trichlorobenzene	20.0	18.3	91	78-131	
1,2,4-Trichlorobenzene	20.0	17.7	88	80-124	
1,2-Dibromo-3-Chloropropane	20.0	17.9	89	55-134	
1,2-Dichlorobenzene	20.0	20.1	100	80-120	
1,2-Dichloroethane	20.0	22.0	110	76-121	
1,2-Dichloropropane	20.0	20.5	103	77-123	
1,3-Dichlorobenzene	20.0	20.6	103	80-120	
1,4-Dichlorobenzene	20.0	19.6	98	80-120	
1,4-Dioxane	400	412	103	10-150	
2-Butanone (MEK)	100	92.3	92	64-120	
2-Hexanone	100	83.4	83	71-125	
4-Methyl-2-pentanone (MIBK)	100	98.3	98	78-124	
Acetone	100	96.0	96	39-150	
Benzene	20.0	18.3	92	77-121	
Bromoform	20.0	15.9	80	53-120	
Bromomethane	20.0	27.3	136	10-150	
Carbon disulfide	20.0	16.5	82	69-133	
Carbon tetrachloride	20.0	25.1	125	70-132	
Chlorobenzene	20.0	19.8	99	80-120	
Chlorobromomethane	20.0	21.5	108	77-127	
Chlorodibromomethane	20.0	18.0	90	73-120	
Chloroethane	20.0	27.6	138	52-150	
Chloroform	20.0	21.5	108	80-120	
Chloromethane	20.0	23.3	117	56-131	
cis-1,2-Dichloroethene	20.0	21.1	105	80-120	
cis-1,3-Dichloropropene	20.0	17.4	87	77-120	
Cyclohexane	20.0	18.4	92	56-150	
Dichlorobromomethane	20.0	20.3	102	76-120	
Dichlorodifluoromethane	20.0	23.0	115	50-131	
Ethylbenzene	20.0	18.3	91	80-120	
Ethylene Dibromide	20.0	18.9	95	80-120	
Isopropylbenzene	20.0	19.1	95	80-123	
Methyl acetate	40.0	41.0	103	66-144	
Methyl tert-butyl ether	20.0	19.4	97	79-122	
Methylcyclohexane	20.0	18.1	90	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66515.D

Lab ID: LCS 460-516016/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	21.3	107	77-123	
m-Xylene & p-Xylene	20.0	18.1	90	80-120	
o-Xylene	20.0	18.5	92	80-120	
Styrene	20.0	20.0	100	80-120	
Tetrachloroethene	20.0	18.7	93	78-122	
Toluene	20.0	18.8	94	80-120	
trans-1,2-Dichloroethene	20.0	20.4	102	79-120	
trans-1,3-Dichloropropene	20.0	18.1	91	76-120	
Trichloroethene	20.0	20.3	102	77-120	
Trichlorofluoromethane	20.0	25.6	128	71-143	
Vinyl chloride	20.0	25.7	129	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66541.D

Lab ID: LCS 460-516110/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	22.4	112	75-125	
1,1,2,2-Tetrachloroethane	20.0	19.0	95	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.0	110	59-150	
1,1,2-Trichloroethane	20.0	19.0	95	78-120	
1,1-Dichloroethane	20.0	20.6	103	77-123	
1,1-Dichloroethene	20.0	19.6	98	74-123	
1,2,3-Trichlorobenzene	20.0	19.6	98	78-131	
1,2,4-Trichlorobenzene	20.0	19.2	96	80-124	
1,2-Dibromo-3-Chloropropane	20.0	17.6	88	55-134	
1,2-Dichlorobenzene	20.0	20.1	101	80-120	
1,2-Dichloroethane	20.0	20.0	100	76-121	
1,2-Dichloropropane	20.0	19.4	97	77-123	
1,3-Dichlorobenzene	20.0	20.8	104	80-120	
1,4-Dichlorobenzene	20.0	20.5	103	80-120	
1,4-Dioxane	400	411	103	10-150	
2-Butanone (MEK)	100	95.3	95	64-120	
2-Hexanone	100	82.6	83	71-125	
4-Methyl-2-pentanone (MIBK)	100	104	104	78-124	
Acetone	100	106	106	39-150	
Benzene	20.0	19.4	97	77-121	
Bromoform	20.0	16.3	82	53-120	
Bromomethane	20.0	26.1	130	10-150	
Carbon disulfide	20.0	17.1	85	69-133	
Carbon tetrachloride	20.0	25.6	128	70-132	
Chlorobenzene	20.0	19.7	98	80-120	
Chlorobromomethane	20.0	20.2	101	77-127	
Chlorodibromomethane	20.0	17.8	89	73-120	
Chloroethane	20.0	24.9	125	52-150	
Chloroform	20.0	20.7	104	80-120	
Chloromethane	20.0	24.1	120	56-131	
cis-1,2-Dichloroethene	20.0	20.4	102	80-120	
cis-1,3-Dichloropropene	20.0	17.6	88	77-120	
Cyclohexane	20.0	19.5	97	56-150	
Dichlorobromomethane	20.0	18.9	94	76-120	
Dichlorodifluoromethane	20.0	21.9	109	50-131	
Ethylbenzene	20.0	18.9	94	80-120	
Ethylene Dibromide	20.0	18.6	93	80-120	
Isopropylbenzene	20.0	19.9	99	80-123	
Methyl acetate	40.0	41.9	105	66-144	
Methyl tert-butyl ether	20.0	18.8	94	79-122	
Methylcyclohexane	20.0	19.1	96	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66541.D

Lab ID: LCS 460-516110/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	20.9	105	77-123	
m-Xylene & p-Xylene	20.0	19.0	95	80-120	
o-Xylene	20.0	18.9	95	80-120	
Styrene	20.0	19.9	99	80-120	
Tetrachloroethene	20.0	19.5	97	78-122	
Toluene	20.0	19.2	96	80-120	
trans-1,2-Dichloroethene	20.0	20.6	103	79-120	
trans-1,3-Dichloropropene	20.0	17.6	88	76-120	
Trichloroethene	20.0	18.8	94	77-120	
Trichlorofluoromethane	20.0	24.9	125	71-143	
Vinyl chloride	20.0	24.5	123	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44702.D

Lab ID: LCS 460-516291/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	21.3	106	75-125	
1,1,2,2-Tetrachloroethane	20.0	19.2	96	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.5	112	59-150	
1,1,2-Trichloroethane	20.0	20.6	103	78-120	
1,1-Dichloroethane	20.0	23.2	116	77-123	
1,1-Dichloroethene	20.0	21.5	108	74-123	
1,2,3-Trichlorobenzene	20.0	21.9	109	78-131	
1,2,4-Trichlorobenzene	20.0	21.9	109	80-124	
1,2-Dibromo-3-Chloropropane	20.0	17.9	90	55-134	
1,2-Dichlorobenzene	20.0	20.9	105	80-120	
1,2-Dichloroethane	20.0	21.1	105	76-121	
1,2-Dichloropropane	20.0	22.3	112	77-123	
1,3-Dichlorobenzene	20.0	20.9	104	80-120	
1,4-Dichlorobenzene	20.0	19.9	99	80-120	
1,4-Dioxane	400	417	104	10-150	
2-Butanone (MEK)	100	104	104	64-120	
2-Hexanone	100	113	113	71-125	
4-Methyl-2-pentanone (MIBK)	100	114	114	78-124	
Acetone	100	100	100	39-150	
Benzene	20.0	21.0	105	77-121	
Bromoform	20.0	18.4	92	53-120	
Bromomethane	20.0	14.8	74	10-150	
Carbon disulfide	20.0	20.0	100	69-133	
Carbon tetrachloride	20.0	20.3	101	70-132	
Chlorobenzene	20.0	21.3	107	80-120	
Chlorobromomethane	20.0	23.6	118	77-127	
Chlorodibromomethane	20.0	19.4	97	73-120	
Chloroethane	20.0	20.8	104	52-150	
Chloroform	20.0	22.5	112	80-120	
Chloromethane	20.0	19.5	97	56-131	
cis-1,2-Dichloroethene	20.0	22.6	113	80-120	
cis-1,3-Dichloropropene	20.0	20.0	100	77-120	
Cyclohexane	20.0	23.0	115	56-150	
Dichlorobromomethane	20.0	21.4	107	76-120	
Dichlorodifluoromethane	20.0	21.8	109	50-131	
Ethylbenzene	20.0	21.1	106	80-120	
Ethylene Dibromide	20.0	21.5	108	80-120	
Isopropylbenzene	20.0	21.1	105	80-123	
Methyl acetate	40.0	45.2	113	66-144	
Methyl tert-butyl ether	20.0	22.1	110	79-122	
Methylcyclohexane	20.0	23.4	117	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44702.D

Lab ID: LCS 460-516291/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	21.9	110	77-123	
m-Xylene & p-Xylene	20.0	21.5	108	80-120	
o-Xylene	20.0	21.5	107	80-120	
Styrene	20.0	21.5	108	80-120	
Tetrachloroethene	20.0	22.9	115	78-122	
Toluene	20.0	20.8	104	80-120	
trans-1,2-Dichloroethene	20.0	21.3	107	79-120	
trans-1,3-Dichloropropene	20.0	20.1	100	76-120	
Trichloroethene	20.0	22.3	111	77-120	
Trichlorofluoromethane	20.0	24.0	120	71-143	
Vinyl chloride	20.0	21.0	105	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N665681.D

Lab ID: LCS 460-516299/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	22.7	113	75-125	
1,1,2,2-Tetrachloroethane	20.0	19.2	96	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.9	109	59-150	
1,1,2-Trichloroethane	20.0	20.6	103	78-120	
1,1-Dichloroethane	20.0	20.8	104	77-123	
1,1-Dichloroethene	20.0	19.4	97	74-123	
1,2,3-Trichlorobenzene	20.0	20.9	104	78-131	
1,2,4-Trichlorobenzene	20.0	19.1	96	80-124	
1,2-Dibromo-3-Chloropropane	20.0	18.6	93	55-134	
1,2-Dichlorobenzene	20.0	20.3	101	80-120	
1,2-Dichloroethane	20.0	21.1	105	76-121	
1,2-Dichloropropane	20.0	19.3	97	77-123	
1,3-Dichlorobenzene	20.0	21.7	109	80-120	
1,4-Dichlorobenzene	20.0	20.2	101	80-120	
1,4-Dioxane	400	375	94	10-150	
2-Butanone (MEK)	100	93.3	93	64-120	
2-Hexanone	100	76.6	77	71-125	
4-Methyl-2-pentanone (MIBK)	100	98.8	99	78-124	
Acetone	100	96.9	97	39-150	
Benzene	20.0	20.4	102	77-121	
Bromoform	20.0	18.5	92	53-120	
Bromomethane	20.0	27.9	139	10-150	
Carbon disulfide	20.0	16.8	84	69-133	
Carbon tetrachloride	20.0	25.7	129	70-132	
Chlorobenzene	20.0	19.7	99	80-120	
Chlorobromomethane	20.0	20.5	102	77-127	
Chlorodibromomethane	20.0	19.0	95	73-120	
Chloroethane	20.0	34.1	170	52-150	*
Chloroform	20.0	21.2	106	80-120	
Chloromethane	20.0	24.8	124	56-131	
cis-1,2-Dichloroethene	20.0	20.9	105	80-120	
cis-1,3-Dichloropropene	20.0	18.4	92	77-120	
Cyclohexane	20.0	18.7	93	56-150	
Dichlorobromomethane	20.0	19.8	99	76-120	
Dichlorodifluoromethane	20.0	23.4	117	50-131	
Ethylbenzene	20.0	19.5	97	80-120	
Ethylene Dibromide	20.0	19.3	97	80-120	
Isopropylbenzene	20.0	20.5	102	80-123	
Methyl acetate	40.0	45.6	114	66-144	
Methyl tert-butyl ether	20.0	18.9	95	79-122	
Methylcyclohexane	20.0	18.6	93	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N665681.D

Lab ID: LCS 460-516299/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	20.4	102	77-123	
m-Xylene & p-Xylene	20.0	19.1	95	80-120	
o-Xylene	20.0	19.5	97	80-120	
Styrene	20.0	19.7	98	80-120	
Tetrachloroethene	20.0	20.7	104	78-122	
Toluene	20.0	19.9	100	80-120	
trans-1,2-Dichloroethene	20.0	19.7	98	79-120	
trans-1,3-Dichloropropene	20.0	18.7	93	76-120	
Trichloroethene	20.0	19.9	99	77-120	
Trichlorofluoromethane	20.0	26.4	132	71-143	
Vinyl chloride	20.0	25.9	129	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44731.D

Lab ID: LCS 460-516419/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	19.2	96	75-125	
1,1,2,2-Tetrachloroethane	20.0	16.9	85	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.7	89	59-150	
1,1,2-Trichloroethane	20.0	18.4	92	78-120	
1,1-Dichloroethane	20.0	20.9	105	77-123	
1,1-Dichloroethene	20.0	19.2	96	74-123	
1,2,3-Trichlorobenzene	20.0	19.5	97	78-131	
1,2,4-Trichlorobenzene	20.0	19.4	97	80-124	
1,2-Dibromo-3-Chloropropane	20.0	15.5	78	55-134	
1,2-Dichlorobenzene	20.0	19.1	95	80-120	
1,2-Dichloroethane	20.0	19.1	95	76-121	
1,2-Dichloropropane	20.0	20.0	100	77-123	
1,3-Dichlorobenzene	20.0	18.8	94	80-120	
1,4-Dichlorobenzene	20.0	17.8	89	80-120	
1,4-Dioxane	400	394	98	10-150	
2-Butanone (MEK)	100	93.3	93	64-120	
2-Hexanone	100	100	100	71-125	
4-Methyl-2-pentanone (MIBK)	100	103	103	78-124	
Acetone	100	91.4	91	39-150	
Benzene	20.0	19.3	97	77-121	
Bromoform	20.0	16.3	82	53-120	
Bromomethane	20.0	15.8	79	10-150	
Carbon disulfide	20.0	17.9	90	69-133	
Carbon tetrachloride	20.0	18.3	91	70-132	
Chlorobenzene	20.0	19.3	97	80-120	
Chlorobromomethane	20.0	21.0	105	77-127	
Chlorodibromomethane	20.0	18.0	90	73-120	
Chloroethane	20.0	18.7	94	52-150	
Chloroform	20.0	20.3	102	80-120	
Chloromethane	20.0	19.2	96	56-131	
cis-1,2-Dichloroethene	20.0	19.8	99	80-120	
cis-1,3-Dichloropropene	20.0	18.3	91	77-120	
Cyclohexane	20.0	18.5	93	56-150	
Dichlorobromomethane	20.0	19.6	98	76-120	
Dichlorodifluoromethane	20.0	16.7	83	50-131	
Ethylbenzene	20.0	19.2	96	80-120	
Ethylene Dibromide	20.0	19.1	96	80-120	
Isopropylbenzene	20.0	19.0	95	80-123	
Methyl acetate	40.0	39.9	100	66-144	
Methyl tert-butyl ether	20.0	19.8	99	79-122	
Methylcyclohexane	20.0	17.9	89	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44731.D

Lab ID: LCS 460-516419/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	19.7	98	77-123	
m-Xylene & p-Xylene	20.0	19.2	96	80-120	
o-Xylene	20.0	19.1	96	80-120	
Styrene	20.0	19.4	97	80-120	
Tetrachloroethene	20.0	19.8	99	78-122	
Toluene	20.0	18.9	94	80-120	
trans-1,2-Dichloroethene	20.0	19.3	96	79-120	
trans-1,3-Dichloropropene	20.0	18.0	90	76-120	
Trichloroethene	20.0	19.9	100	77-120	
Trichlorofluoromethane	20.0	20.1	101	71-143	
Vinyl chloride	20.0	18.7	94	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44761.D

Lab ID: LCS 460-516607/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	20.0	100	75-125	
1,1,2,2-Tetrachloroethane	20.0	18.1	91	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.6	103	59-150	
1,1,2-Trichloroethane	20.0	19.6	98	78-120	
1,1-Dichloroethane	20.0	21.5	108	77-123	
1,1-Dichloroethene	20.0	20.1	101	74-123	
1,2,3-Trichlorobenzene	20.0	20.1	101	78-131	
1,2,4-Trichlorobenzene	20.0	20.6	103	80-124	
1,2-Dibromo-3-Chloropropane	20.0	16.8	84	55-134	
1,2-Dichlorobenzene	20.0	19.8	99	80-120	
1,2-Dichloroethane	20.0	19.0	95	76-121	
1,2-Dichloropropane	20.0	20.6	103	77-123	
1,3-Dichlorobenzene	20.0	19.6	98	80-120	
1,4-Dichlorobenzene	20.0	19.0	95	80-120	
1,4-Dioxane	400	383	96	10-150	
2-Butanone (MEK)	100	94.3	94	64-120	
2-Hexanone	100	104	104	71-125	
4-Methyl-2-pentanone (MIBK)	100	106	106	78-124	
Acetone	100	93.9	94	39-150	
Benzene	20.0	20.2	101	77-121	
Bromoform	20.0	17.2	86	53-120	
Bromomethane	20.0	16.6	83	10-150	
Carbon disulfide	20.0	18.6	93	69-133	
Carbon tetrachloride	20.0	19.6	98	70-132	
Chlorobenzene	20.0	19.9	100	80-120	
Chlorobromomethane	20.0	21.4	107	77-127	
Chlorodibromomethane	20.0	18.5	92	73-120	
Chloroethane	20.0	19.3	97	52-150	
Chloroform	20.0	20.8	104	80-120	
Chloromethane	20.0	19.8	99	56-131	
cis-1,2-Dichloroethene	20.0	20.4	102	80-120	
cis-1,3-Dichloropropene	20.0	18.7	93	77-120	
Cyclohexane	20.0	21.1	106	56-150	
Dichlorobromomethane	20.0	20.0	100	76-120	
Dichlorodifluoromethane	20.0	22.4	112	50-131	
Ethylbenzene	20.0	20.1	100	80-120	
Ethylene Dibromide	20.0	19.7	98	80-120	
Isopropylbenzene	20.0	19.9	99	80-123	
Methyl acetate	40.0	40.6	102	66-144	
Methyl tert-butyl ether	20.0	20.2	101	79-122	
Methylcyclohexane	20.0	21.6	108	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44761.D

Lab ID: LCS 460-516607/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	19.6	98	77-123	
m-Xylene & p-Xylene	20.0	19.9	99	80-120	
o-Xylene	20.0	19.7	98	80-120	
Styrene	20.0	19.9	100	80-120	
Tetrachloroethene	20.0	20.7	103	78-122	
Toluene	20.0	19.4	97	80-120	
trans-1,2-Dichloroethene	20.0	19.3	97	79-120	
trans-1,3-Dichloropropene	20.0	18.6	93	76-120	
Trichloroethene	20.0	20.8	104	77-120	
Trichlorofluoromethane	20.0	22.8	114	71-143	
Vinyl chloride	20.0	20.1	101	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44703.D

Lab ID: LCSD 460-516291/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	19.7	98	8	30	75-125	
1,1,2,2-Tetrachloroethane	20.0	18.0	90	6	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.7	104	8	30	59-150	
1,1,2-Trichloroethane	20.0	18.9	95	8	30	78-120	
1,1-Dichloroethane	20.0	20.9	105	10	30	77-123	
1,1-Dichloroethene	20.0	19.6	98	9	30	74-123	
1,2,3-Trichlorobenzene	20.0	20.5	102	7	30	78-131	
1,2,4-Trichlorobenzene	20.0	20.5	102	7	30	80-124	
1,2-Dibromo-3-Chloropropane	20.0	16.7	83	7	30	55-134	
1,2-Dichlorobenzene	20.0	19.6	98	7	30	80-120	
1,2-Dichloroethane	20.0	19.2	96	9	30	76-121	
1,2-Dichloropropane	20.0	20.7	103	8	30	77-123	
1,3-Dichlorobenzene	20.0	19.3	97	8	30	80-120	
1,4-Dichlorobenzene	20.0	18.3	92	8	30	80-120	
1,4-Dioxane	400	417	104	0	30	10-150	
2-Butanone (MEK)	100	100	100	4	30	64-120	
2-Hexanone	100	106	106	7	30	71-125	
4-Methyl-2-pentanone (MIBK)	100	105	105	8	30	78-124	
Acetone	100	92.4	92	8	30	39-150	
Benzene	20.0	19.6	98	7	30	77-121	
Bromoform	20.0	17.1	85	7	30	53-120	
Bromomethane	20.0	14.3	72	4	30	10-150	
Carbon disulfide	20.0	18.4	92	9	30	69-133	
Carbon tetrachloride	20.0	19.2	96	5	30	70-132	
Chlorobenzene	20.0	19.7	98	8	30	80-120	
Chlorobromomethane	20.0	21.6	108	9	30	77-127	
Chlorodibromomethane	20.0	18.1	91	7	30	73-120	
Chloroethane	20.0	18.8	94	10	30	52-150	
Chloroform	20.0	20.6	103	8	30	80-120	
Chloromethane	20.0	17.3	87	12	30	56-131	
cis-1,2-Dichloroethene	20.0	19.9	100	12	30	80-120	
cis-1,3-Dichloropropene	20.0	18.5	92	8	30	77-120	
Cyclohexane	20.0	20.9	105	9	30	56-150	
Dichlorobromomethane	20.0	19.4	97	10	30	76-120	
Dichlorodifluoromethane	20.0	19.5	98	11	30	50-131	
Ethylbenzene	20.0	19.7	98	7	30	80-120	
Ethylene Dibromide	20.0	19.5	97	10	30	80-120	
Isopropylbenzene	20.0	19.8	99	6	30	80-123	
Methyl acetate	40.0	41.6	104	8	30	66-144	
Methyl tert-butyl ether	20.0	20.0	100	10	30	79-122	
Methylcyclohexane	20.0	21.0	105	11	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44703.D

Lab ID: LCSD 460-516291/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	20.0	19.9	99	10	30	77-123	
m-Xylene & p-Xylene	20.0	19.9	99	8	30	80-120	
o-Xylene	20.0	19.6	98	9	30	80-120	
Styrene	20.0	20.0	100	8	30	80-120	
Tetrachloroethene	20.0	21.0	105	9	30	78-122	
Toluene	20.0	19.3	96	8	30	80-120	
trans-1,2-Dichloroethene	20.0	19.0	95	11	30	79-120	
trans-1,3-Dichloropropene	20.0	18.6	93	8	30	76-120	
Trichloroethene	20.0	20.3	101	9	30	77-120	
Trichlorofluoromethane	20.0	22.3	112	7	30	71-143	
Vinyl chloride	20.0	19.4	97	8	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N665682.D

Lab ID: LCSD 460-516299/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	21.5	108	5	30	75-125	
1,1,2,2-Tetrachloroethane	20.0	20.2	101	5	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.0	105	4	30	59-150	
1,1,2-Trichloroethane	20.0	18.8	94	9	30	78-120	
1,1-Dichloroethane	20.0	20.5	103	1	30	77-123	
1,1-Dichloroethene	20.0	19.9	99	2	30	74-123	
1,2,3-Trichlorobenzene	20.0	21.0	105	1	30	78-131	
1,2,4-Trichlorobenzene	20.0	19.0	95	0	30	80-124	
1,2-Dibromo-3-Chloropropane	20.0	19.3	97	4	30	55-134	
1,2-Dichlorobenzene	20.0	20.7	104	2	30	80-120	
1,2-Dichloroethane	20.0	20.6	103	3	30	76-121	
1,2-Dichloropropane	20.0	19.0	95	2	30	77-123	
1,3-Dichlorobenzene	20.0	21.4	107	1	30	80-120	
1,4-Dichlorobenzene	20.0	20.4	102	1	30	80-120	
1,4-Dioxane	400	408	102	9	30	10-150	
2-Butanone (MEK)	100	93.1	93	0	30	64-120	
2-Hexanone	100	78.0	78	2	30	71-125	
4-Methyl-2-pentanone (MIBK)	100	99.4	99	1	30	78-124	
Acetone	100	102	102	5	30	39-150	
Benzene	20.0	19.8	99	3	30	77-121	
Bromoform	20.0	17.1	85	8	30	53-120	
Bromomethane	20.0	25.8	129	8	30	10-150	
Carbon disulfide	20.0	17.1	85	2	30	69-133	
Carbon tetrachloride	20.0	24.7	123	4	30	70-132	
Chlorobenzene	20.0	19.3	97	2	30	80-120	
Chlorobromomethane	20.0	20.3	101	1	30	77-127	
Chlorodibromomethane	20.0	18.3	91	4	30	73-120	
Chloroethane	20.0	28.8	144	17	30	52-150	
Chloroform	20.0	20.9	105	1	30	80-120	
Chloromethane	20.0	23.2	116	7	30	56-131	
cis-1,2-Dichloroethene	20.0	20.4	102	2	30	80-120	
cis-1,3-Dichloropropene	20.0	18.0	90	2	30	77-120	
Cyclohexane	20.0	18.4	92	1	30	56-150	
Dichlorobromomethane	20.0	19.1	95	4	30	76-120	
Dichlorodifluoromethane	20.0	23.3	116	1	30	50-131	
Ethylbenzene	20.0	19.1	95	2	30	80-120	
Ethylene Dibromide	20.0	18.8	94	3	30	80-120	
Isopropylbenzene	20.0	19.9	99	3	30	80-123	
Methyl acetate	40.0	45.8	114	0	30	66-144	
Methyl tert-butyl ether	20.0	19.4	97	3	30	79-122	
Methylcyclohexane	20.0	18.1	91	2	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N665682.D

Lab ID: LCSD 460-516299/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	20.0	21.0	105	3	30	77-123	
m-Xylene & p-Xylene	20.0	18.8	94	1	30	80-120	
o-Xylene	20.0	18.5	92	5	30	80-120	
Styrene	20.0	19.7	98	0	30	80-120	
Tetrachloroethene	20.0	19.2	96	8	30	78-122	
Toluene	20.0	18.9	95	5	30	80-120	
trans-1,2-Dichloroethene	20.0	20.0	100	1	30	79-120	
trans-1,3-Dichloropropene	20.0	17.2	86	8	30	76-120	
Trichloroethene	20.0	19.3	96	3	30	77-120	
Trichlorofluoromethane	20.0	25.3	126	4	30	71-143	
Vinyl chloride	20.0	24.4	122	6	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44740.D

Lab ID: LCSD 460-516419/13 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	19.8	99	3	30	75-125	
1,1,2,2-Tetrachloroethane	20.0	18.6	93	10	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.6	93	5	30	59-150	
1,1,2-Trichloroethane	20.0	20.3	102	10	30	78-120	
1,1-Dichloroethane	20.0	22.2	111	6	30	77-123	
1,1-Dichloroethene	20.0	20.0	100	4	30	74-123	
1,2,3-Trichlorobenzene	20.0	20.2	101	4	30	78-131	
1,2,4-Trichlorobenzene	20.0	20.5	103	6	30	80-124	
1,2-Dibromo-3-Chloropropane	20.0	17.1	85	9	30	55-134	
1,2-Dichlorobenzene	20.0	20.6	103	7	30	80-120	
1,2-Dichloroethane	20.0	19.9	99	4	30	76-121	
1,2-Dichloropropane	20.0	21.5	107	7	30	77-123	
1,3-Dichlorobenzene	20.0	20.1	100	7	30	80-120	
1,4-Dichlorobenzene	20.0	19.3	97	8	30	80-120	
1,4-Dioxane	400	425	106	8	30	10-150	
2-Butanone (MEK)	100	100	100	7	30	64-120	
2-Hexanone	100	107	107	6	30	71-125	
4-Methyl-2-pentanone (MIBK)	100	110	110	7	30	78-124	
Acetone	100	95.1	95	4	30	39-150	
Benzene	20.0	20.7	103	7	30	77-121	
Bromoform	20.0	18.1	90	10	30	53-120	
Bromomethane	20.0	15.1	76	4	30	10-150	
Carbon disulfide	20.0	18.9	94	5	30	69-133	
Carbon tetrachloride	20.0	19.0	95	4	30	70-132	
Chlorobenzene	20.0	20.8	104	7	30	80-120	
Chlorobromomethane	20.0	22.1	110	5	30	77-127	
Chlorodibromomethane	20.0	18.8	94	4	30	73-120	
Chloroethane	20.0	19.2	96	3	30	52-150	
Chloroform	20.0	21.5	108	6	30	80-120	
Chloromethane	20.0	18.0	90	6	30	56-131	
cis-1,2-Dichloroethene	20.0	21.5	107	8	30	80-120	
cis-1,3-Dichloropropene	20.0	19.2	96	5	30	77-120	
Cyclohexane	20.0	19.1	95	3	30	56-150	
Dichlorobromomethane	20.0	20.6	103	5	30	76-120	
Dichlorodifluoromethane	20.0	12.9	64	26	30	50-131	
Ethylbenzene	20.0	20.6	103	7	30	80-120	
Ethylene Dibromide	20.0	20.3	101	6	30	80-120	
Isopropylbenzene	20.0	20.4	102	7	30	80-123	
Methyl acetate	40.0	41.4	104	4	30	66-144	
Methyl tert-butyl ether	20.0	20.7	103	4	30	79-122	
Methylcyclohexane	20.0	19.2	96	7	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44740.D

Lab ID: LCSD 460-516419/13 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	20.0	20.8	104	6	30	77-123	
m-Xylene & p-Xylene	20.0	20.7	104	8	30	80-120	
o-Xylene	20.0	20.8	104	8	30	80-120	
Styrene	20.0	20.7	104	7	30	80-120	
Tetrachloroethene	20.0	21.1	106	6	30	78-122	
Toluene	20.0	20.2	101	7	30	80-120	
trans-1,2-Dichloroethene	20.0	19.9	100	3	30	79-120	
trans-1,3-Dichloropropene	20.0	19.1	95	6	30	76-120	
Trichloroethene	20.0	20.7	103	4	30	77-120	
Trichlorofluoromethane	20.0	17.4	87	15	30	71-143	
Vinyl chloride	20.0	18.1	91	3	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66537.D

Lab ID: 460-154781-1 MS Client ID: GC-MW-107(WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	1.0 U	23.4	117	75-125	
1,1,2,2-Tetrachloroethane	20.0	1.0 U	19.3	97	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	1.0 U	21.9	109	59-150	
1,1,2-Trichloroethane	20.0	1.0 U	19.7	99	78-120	
1,1-Dichloroethane	20.0	1.0 U	21.9	109	77-123	
1,1-Dichloroethene	20.0	1.0 U	20.3	101	74-123	
1,2,3-Trichlorobenzene	20.0	1.0 U	18.1	90	78-131	
1,2,4-Trichlorobenzene	20.0	1.0 U	17.7	88	80-124	
1,2-Dibromo-3-Chloropropane	20.0	1.0 U	18.4	92	55-134	
1,2-Dichlorobenzene	20.0	1.0 U	20.9	105	80-120	
1,2-Dichloroethane	20.0	1.0 U	22.5	113	76-121	
1,2-Dichloropropane	20.0	1.0 U	20.3	101	77-123	
1,3-Dichlorobenzene	20.0	1.0 U	21.4	107	80-120	
1,4-Dichlorobenzene	20.0	1.0 U	20.9	104	80-120	
1,4-Dioxane	400	50 U	340	85	10-150	
2-Butanone (MEK)	100	5.0 U	90.2	90	64-120	
2-Hexanone	100	5.0 U	77.1	77	71-125	
4-Methyl-2-pentanone (MIBK)	100	5.0 U	95.2	95	78-124	
Acetone	100	5.0 U	101	101	39-150	
Benzene	20.0	1.0 U	20.3	101	77-121	
Bromoform	20.0	1.0 U	16.2	81	53-120	
Bromomethane	20.0	1.0 U	35.0	175	10-150	*
Carbon disulfide	20.0	1.0 U	15.2	76	69-133	
Carbon tetrachloride	20.0	1.0 U	26.7	133	70-132	*
Chlorobenzene	20.0	1.0 U	20.6	103	80-120	
Chlorobromomethane	20.0	1.0 U	21.2	106	77-127	
Chlorodibromomethane	20.0	1.0 U	17.8	89	73-120	
Chloroethane	20.0	1.0 U	30.7	154	52-150	*
Chloroform	20.0	1.0 U	22.9	115	80-120	
Chloromethane	20.0	1.0 U	26.0	130	56-131	
cis-1,2-Dichloroethene	20.0	1.0 U	21.1	106	80-120	
cis-1,3-Dichloropropene	20.0	1.0 U	15.5	78	77-120	
Cyclohexane	20.0	1.0 U	19.1	95	56-150	
Dichlorobromomethane	20.0	1.0 U	20.4	102	76-120	
Dichlorodifluoromethane	20.0	1.0 U	23.8	119	50-131	
Ethylbenzene	20.0	1.0 U	19.4	97	80-120	
Ethylene Dibromide	20.0	1.0 U	19.3	97	80-120	
Isopropylbenzene	20.0	1.0 U	20.2	101	80-123	
Methyl acetate	40.0	5.0 U	42.4	106	66-144	
Methyl tert-butyl ether	20.0	1.0 U	18.4	92	79-122	
Methylcyclohexane	20.0	1.0 U	18.2	91	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66537.D

Lab ID: 460-154781-1 MS Client ID: GC-MW-107(WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	1.0 U	21.9	110	77-123	
m-Xylene & p-Xylene	20.0	1.0 U	17.8	89	80-120	
o-Xylene	20.0	1.0 U	18.5	92	80-120	
Styrene	20.0	1.0 U	19.3	96	80-120	
Tetrachloroethene	20.0	8.8	29.6	104	78-122	
Toluene	20.0	1.0 U	19.5	98	80-120	
trans-1,2-Dichloroethene	20.0	1.0 U	21.7	108	79-120	
trans-1,3-Dichloropropene	20.0	1.0 U	15.6	78	76-120	
Trichloroethene	20.0	1.0 U	20.0	100	77-120	
Trichlorofluoromethane	20.0	1.0 U	26.5	132	71-143	
Vinyl chloride	20.0	1.0 U	27.6	138	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44714.D

Lab ID: 460-154925-1 MS Client ID: GC-MW-102(WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	200	1.0 U	193	97	75-125	
1,1,2,2-Tetrachloroethane	200	1.0 U	176	88	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	200	1.0 U	202	101	59-150	
1,1,2-Trichloroethane	200	1.0 U	186	93	78-120	
1,1-Dichloroethane	200	1.0 U	209	104	77-123	
1,1-Dichloroethene	200	1.0 U	195	97	74-123	
1,2,3-Trichlorobenzene	200	1.0 U	187	94	78-131	
1,2,4-Trichlorobenzene	200	1.0 U	187	93	80-124	
1,2-Dibromo-3-Chloropropane	200	1.0 U	156	78	55-134	
1,2-Dichlorobenzene	200	1.0 U	188	94	80-120	
1,2-Dichloroethane	200	1.0 U	185	93	76-121	
1,2-Dichloropropane	200	1.0 U	201	100	77-123	
1,3-Dichlorobenzene	200	1.0 U	187	94	80-120	
1,4-Dichlorobenzene	200	1.0 U	178	89	80-120	
1,4-Dioxane	4000	50 U	3730	93	10-150	
2-Butanone (MEK)	1000	5.0 U	979	98	64-120	
2-Hexanone	1000	5.0 U	1010	101	71-125	
4-Methyl-2-pentanone (MIBK)	1000	5.0 U	1030	103	78-124	
Acetone	1000	2.3 J	900	90	39-150	
Benzene	200	1.0 U	194	97	77-121	
Bromoform	200	1.0 U	166	83	53-120	
Bromomethane	200	1.0 U	126	63	10-150	
Carbon disulfide	200	1.0 U	181	90	69-133	
Carbon tetrachloride	200	1.0 U	186	93	70-132	
Chlorobenzene	200	1.0 U	192	96	80-120	
Chlorobromomethane	200	1.0 U	204	102	77-127	
Chlorodibromomethane	200	1.0 U	175	87	73-120	
Chloroethane	200	1.0 U	186	93	52-150	
Chloroform	200	1.0 U	201	100	80-120	
Chloromethane	200	1.0 U	173	87	56-131	
cis-1,2-Dichloroethene	200	1.0 U	204	102	80-120	
cis-1,3-Dichloropropene	200	1.0 U	174	87	77-120	
Cyclohexane	200	1.0 U	202	101	56-150	
Dichlorobromomethane	200	1.0 U	189	94	76-120	
Dichlorodifluoromethane	200	1.0 U	194	97	50-131	
Ethylbenzene	200	1.0 U	194	97	80-120	
Ethylene Dibromide	200	1.0 U	191	96	80-120	
Isopropylbenzene	200	1.0 U	194	97	80-123	
Methyl acetate	400	5.0 U	395	99	66-144	
Methyl tert-butyl ether	200	1.0 U	199	99	79-122	
Methylcyclohexane	200	1.0 U	207	103	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44714.D

Lab ID: 460-154925-1 MS Client ID: GC-MW-102(WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	200	1.0 U	194	97	77-123	
m-Xylene & p-Xylene	200	1.0 U	192	96	80-120	
o-Xylene	200	1.0 U	189	94	80-120	
Styrene	200	1.0 U	192	96	80-120	
Tetrachloroethene	200	1.4	203	101	78-122	
Toluene	200	1.0 U	188	94	80-120	
trans-1,2-Dichloroethene	200	1.0 U	189	94	79-120	
trans-1,3-Dichloropropene	200	1.0 U	175	87	76-120	
Trichloroethene	200	1.0 U	202	101	77-120	
Trichlorofluoromethane	200	1.0 U	212	106	71-143	
Vinyl chloride	200	1.0 U	188	94	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66553.D

Lab ID: 460-154828-A-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	1.0 U	22.6	113	75-125	
1,1,2,2-Tetrachloroethane	20.0	1.0 U	21.1	105	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	1.0 U	22.5	112	59-150	
1,1,2-Trichloroethane	20.0	1.0 U	20.3	102	78-120	
1,1-Dichloroethane	20.0	1.0 U	21.2	106	77-123	
1,1-Dichloroethene	20.0	1.0 U	19.4	97	74-123	
1,2,3-Trichlorobenzene	20.0	1.0 U	18.1	90	78-131	
1,2,4-Trichlorobenzene	20.0	1.0 U	18.2	91	80-124	
1,2-Dibromo-3-Chloropropane	20.0	1.0 U	19.6	98	55-134	
1,2-Dichlorobenzene	20.0	0.50 J	21.4	104	80-120	
1,2-Dichloroethane	20.0	1.0 U	22.0	110	76-121	
1,2-Dichloropropane	20.0	1.0 U	19.8	99	77-123	
1,3-Dichlorobenzene	20.0	1.0 U	21.5	107	80-120	
1,4-Dichlorobenzene	20.0	1.0 U	21.3	106	80-120	
1,4-Dioxane	400	50 U	373	93	10-150	
2-Butanone (MEK)	100	5.0 U	91.0	91	64-120	
2-Hexanone	100	5.0 U	79.3	79	71-125	
4-Methyl-2-pentanone (MIBK)	100	5.0 U	102	102	78-124	
Acetone	100	5.0 U	103	103	39-150	
Benzene	20.0	0.13 J	20.1	100	77-121	
Bromoform	20.0	1.0 U	15.9	80	53-120	
Bromomethane	20.0	1.0 U	31.1	156	10-150	*
Carbon disulfide	20.0	1.0 U	15.7	78	69-133	
Carbon tetrachloride	20.0	1.0 U	25.8	129	70-132	
Chlorobenzene	20.0	0.74 J	21.3	103	80-120	
Chlorobromomethane	20.0	1.0 U	20.9	105	77-127	
Chlorodibromomethane	20.0	1.0 U	18.0	90	73-120	
Chloroethane	20.0	1.0 U	28.5	143	52-150	
Chloroform	20.0	1.0 U	21.9	110	80-120	
Chloromethane	20.0	1.0 U	23.1	116	56-131	
cis-1,2-Dichloroethene	20.0	1.0 U	21.0	105	80-120	
cis-1,3-Dichloropropene	20.0	1.0 U	15.9	79	77-120	
Cyclohexane	20.0	1.0 U	18.9	95	56-150	
Dichlorobromomethane	20.0	1.0 U	19.5	98	76-120	
Dichlorodifluoromethane	20.0	1.0 U	23.0	115	50-131	
Ethylbenzene	20.0	1.0 U	19.0	95	80-120	
Ethylene Dibromide	20.0	1.0 U	19.7	99	80-120	
Isopropylbenzene	20.0	1.0 U	20.4	102	80-123	
Methyl acetate	40.0	5.0 U	46.1	115	66-144	
Methyl tert-butyl ether	20.0	1.0 U	17.8	89	79-122	
Methylcyclohexane	20.0	1.0 U	18.6	93	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66553.D

Lab ID: 460-154828-A-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	0.37 J	21.6	106	77-123	
m-Xylene & p-Xylene	20.0	1.0 U	18.8	94	80-120	
o-Xylene	20.0	1.0 U	18.3	91	80-120	
Styrene	20.0	1.0 U	18.1	90	80-120	
Tetrachloroethene	20.0	1.0 U	19.9	99	78-122	
Toluene	20.0	1.0 U	19.4	97	80-120	
trans-1,2-Dichloroethene	20.0	1.0 U	20.3	101	79-120	
trans-1,3-Dichloropropene	20.0	1.0 U	16.6	83	76-120	
Trichloroethene	20.0	1.0 U	19.7	99	77-120	
Trichlorofluoromethane	20.0	1.0 U	24.7	124	71-143	
Vinyl chloride	20.0	1.0 U	24.2	121	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44771.D

Lab ID: 460-155023-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	200	1.0 U	211	106	75-125	
1,1,2,2-Tetrachloroethane	200	1.0 U	192	96	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	200	1.0 U	219	110	59-150	
1,1,2-Trichloroethane	200	1.0 U	208	104	78-120	
1,1-Dichloroethane	200	1.0 U	229	114	77-123	
1,1-Dichloroethene	200	1.0 U	216	108	74-123	
1,2,3-Trichlorobenzene	200	1.0 U	209	104	78-131	
1,2,4-Trichlorobenzene	200	1.0 U	206	103	80-124	
1,2-Dibromo-3-Chloropropane	200	1.0 U	173	87	55-134	
1,2-Dichlorobenzene	200	1.0 U	218	109	80-120	
1,2-Dichloroethane	200	1.0 U	212	106	76-121	
1,2-Dichloropropane	200	1.0 U	223	112	77-123	
1,3-Dichlorobenzene	200	1.0 U	207	103	80-120	
1,4-Dichlorobenzene	200	1.0 U	195	98	80-120	
1,4-Dioxane	4000	50 U	3990	100	10-150	
2-Butanone (MEK)	1000	5.0 U	998	100	64-120	
2-Hexanone	1000	5.0 U	1100	110	71-125	
4-Methyl-2-pentanone (MIBK)	1000	5.0 U	1100	110	78-124	
Acetone	1000	3.5 J	960	96	39-150	
Benzene	200	1.0 U	213	107	77-121	
Bromoform	200	1.0 U	180	90	53-120	
Bromomethane	200	1.0 U	146	73	10-150	
Carbon disulfide	200	1.0 U	198	99	69-133	
Carbon tetrachloride	200	1.0 U	211	106	70-132	
Chlorobenzene	200	1.0 U	210	105	80-120	
Chlorobromomethane	200	1.0 U	235	118	77-127	
Chlorodibromomethane	200	1.0 U	192	96	73-120	
Chloroethane	200	1.0 U	208	104	52-150	
Chloroform	200	1.0 U	226	113	80-120	
Chloromethane	200	1.0 U	206	103	56-131	
cis-1,2-Dichloroethene	200	1.0 U	219	110	80-120	
cis-1,3-Dichloropropene	200	1.0 U	189	95	77-120	
Cyclohexane	200	1.0 U	226	113	56-150	
Dichlorobromomethane	200	1.0 U	215	107	76-120	
Dichlorodifluoromethane	200	1.0 U	237	118	50-131	
Ethylbenzene	200	1.0 U	213	106	80-120	
Ethylene Dibromide	200	1.0 U	208	104	80-120	
Isopropylbenzene	200	1.0 U	209	105	80-123	
Methyl acetate	400	5.0 U	472	118	66-144	
Methyl tert-butyl ether	200	1.0 U	220	110	79-122	
Methylcyclohexane	200	1.0 U	229	115	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44771.D

Lab ID: 460-155023-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	200	0.26 J	220	110	77-123	
m-Xylene & p-Xylene	200	1.0 U	211	106	80-120	
o-Xylene	200	1.0 U	206	103	80-120	
Styrene	200	1.0 U	213	107	80-120	
Tetrachloroethene	200	1.0 U	222	111	78-122	
Toluene	200	1.0 U	207	103	80-120	
trans-1,2-Dichloroethene	200	1.0 U	211	106	79-120	
trans-1,3-Dichloropropene	200	1.0 U	192	96	76-120	
Trichloroethene	200	1.0 U	223	111	77-120	
Trichlorofluoromethane	200	1.0 U	242	121	71-143	
Vinyl chloride	200	1.0 U	219	109	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66538.D

Lab ID: 460-154781-1 MSD Client ID: GC-MW-107(WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	22.4	112	5	30	75-125	
1,1,2,2-Tetrachloroethane	20.0	19.9	100	3	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.5	102	6	30	59-150	
1,1,2-Trichloroethane	20.0	19.0	95	4	30	78-120	
1,1-Dichloroethane	20.0	20.4	102	7	30	77-123	
1,1-Dichloroethene	20.0	19.0	95	6	30	74-123	
1,2,3-Trichlorobenzene	20.0	19.6	98	8	30	78-131	
1,2,4-Trichlorobenzene	20.0	18.6	93	5	30	80-124	
1,2-Dibromo-3-Chloropropane	20.0	17.6	88	4	30	55-134	
1,2-Dichlorobenzene	20.0	20.6	103	2	30	80-120	
1,2-Dichloroethane	20.0	21.1	105	7	30	76-121	
1,2-Dichloropropane	20.0	19.2	96	6	30	77-123	
1,3-Dichlorobenzene	20.0	20.5	102	4	30	80-120	
1,4-Dichlorobenzene	20.0	19.7	98	6	30	80-120	
1,4-Dioxane	400	382	96	12	30	10-150	
2-Butanone (MEK)	100	84.7	85	6	30	64-120	
2-Hexanone	100	75.6	76	2	30	71-125	
4-Methyl-2-pentanone (MIBK)	100	95.3	95	0	30	78-124	
Acetone	100	97.5	98	3	30	39-150	
Benzene	20.0	18.8	94	8	30	77-121	
Bromoform	20.0	15.9	80	2	30	53-120	
Bromomethane	20.0	32.6	163	7	30	10-150	*
Carbon disulfide	20.0	14.3	72	6	30	69-133	
Carbon tetrachloride	20.0	24.6	123	8	30	70-132	
Chlorobenzene	20.0	19.0	95	8	30	80-120	
Chlorobromomethane	20.0	20.1	100	5	30	77-127	
Chlorodibromomethane	20.0	17.1	85	4	30	73-120	
Chloroethane	20.0	28.6	143	7	30	52-150	
Chloroform	20.0	21.2	106	8	30	80-120	
Chloromethane	20.0	25.3	126	3	30	56-131	
cis-1,2-Dichloroethene	20.0	20.6	103	3	30	80-120	
cis-1,3-Dichloropropene	20.0	15.6	78	0	30	77-120	
Cyclohexane	20.0	18.0	90	6	30	56-150	
Dichlorobromomethane	20.0	19.3	97	5	30	76-120	
Dichlorodifluoromethane	20.0	24.0	120	1	30	50-131	
Ethylbenzene	20.0	18.4	92	5	30	80-120	
Ethylene Dibromide	20.0	18.7	94	3	30	80-120	
Isopropylbenzene	20.0	19.2	96	5	30	80-123	
Methyl acetate	40.0	38.3	96	10	30	66-144	
Methyl tert-butyl ether	20.0	18.0	90	2	30	79-122	
Methylcyclohexane	20.0	17.1	85	6	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66538.D

Lab ID: 460-154781-1 MSD Client ID: GC-MW-107(WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	20.0	21.1	105	4	30	77-123	
m-Xylene & p-Xylene	20.0	17.9	90	1	30	80-120	
o-Xylene	20.0	18.1	90	2	30	80-120	
Styrene	20.0	17.7	88	9	30	80-120	
Tetrachloroethene	20.0	26.9	90	10	30	78-122	
Toluene	20.0	18.8	94	4	30	80-120	
trans-1,2-Dichloroethene	20.0	19.7	99	9	30	79-120	
trans-1,3-Dichloropropene	20.0	16.1	81	3	30	76-120	
Trichloroethene	20.0	19.2	96	4	30	77-120	
Trichlorofluoromethane	20.0	24.5	123	8	30	71-143	
Vinyl chloride	20.0	25.8	129	7	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44715.D

Lab ID: 460-154925-1 MSD Client ID: GC-MW-102(WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	200	206	103	6	30	75-125	
1,1,2,2-Tetrachloroethane	200	185	93	5	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	200	218	109	8	30	59-150	
1,1,2-Trichloroethane	200	202	101	8	30	78-120	
1,1-Dichloroethane	200	226	113	8	30	77-123	
1,1-Dichloroethene	200	212	106	9	30	74-123	
1,2,3-Trichlorobenzene	200	207	104	10	30	78-131	
1,2,4-Trichlorobenzene	200	207	104	10	30	80-124	
1,2-Dibromo-3-Chloropropane	200	177	89	12	30	55-134	
1,2-Dichlorobenzene	200	203	102	8	30	80-120	
1,2-Dichloroethane	200	203	101	9	30	76-121	
1,2-Dichloropropane	200	214	107	6	30	77-123	
1,3-Dichlorobenzene	200	201	100	7	30	80-120	
1,4-Dichlorobenzene	200	189	94	6	30	80-120	
1,4-Dioxane	4000	3960	99	6	30	10-150	
2-Butanone (MEK)	1000	993	99	1	30	64-120	
2-Hexanone	1000	1080	108	7	30	71-125	
4-Methyl-2-pentanone (MIBK)	1000	1090	109	6	30	78-124	
Acetone	1000	963	96	7	30	39-150	
Benzene	200	205	103	6	30	77-121	
Bromoform	200	177	89	7	30	53-120	
Bromomethane	200	160	80	24	30	10-150	
Carbon disulfide	200	194	97	7	30	69-133	
Carbon tetrachloride	200	207	104	11	30	70-132	
Chlorobenzene	200	206	103	7	30	80-120	
Chlorobromomethane	200	225	112	10	30	77-127	
Chlorodibromomethane	200	189	95	8	30	73-120	
Chloroethane	200	198	99	6	30	52-150	
Chloroform	200	219	110	9	30	80-120	
Chloromethane	200	195	98	12	30	56-131	
cis-1,2-Dichloroethene	200	216	108	6	30	80-120	
cis-1,3-Dichloropropene	200	189	95	9	30	77-120	
Cyclohexane	200	223	111	10	30	56-150	
Dichlorobromomethane	200	208	104	10	30	76-120	
Dichlorodifluoromethane	200	209	104	8	30	50-131	
Ethylbenzene	200	203	102	5	30	80-120	
Ethylene Dibromide	200	204	102	7	30	80-120	
Isopropylbenzene	200	204	102	5	30	80-123	
Methyl acetate	400	438	110	10	30	66-144	
Methyl tert-butyl ether	200	212	106	6	30	79-122	
Methylcyclohexane	200	224	112	8	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44715.D

Lab ID: 460-154925-1 MSD Client ID: GC-MW-102(WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	200	214	107	10	30	77-123	
m-Xylene & p-Xylene	200	207	104	7	30	80-120	
o-Xylene	200	201	100	6	30	80-120	
Styrene	200	209	104	8	30	80-120	
Tetrachloroethene	200	218	108	7	30	78-122	
Toluene	200	200	100	6	30	80-120	
trans-1,2-Dichloroethene	200	206	103	9	30	79-120	
trans-1,3-Dichloropropene	200	188	94	8	30	76-120	
Trichloroethene	200	215	108	6	30	77-120	
Trichlorofluoromethane	200	237	118	11	30	71-143	
Vinyl chloride	200	204	102	8	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66554.D

Lab ID: 460-154828-B-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	23.3	117	3	30	75-125	
1,1,2,2-Tetrachloroethane	20.0	21.2	106	0	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.1	115	3	30	59-150	
1,1,2-Trichloroethane	20.0	19.6	98	4	30	78-120	
1,1-Dichloroethane	20.0	21.5	107	1	30	77-123	
1,1-Dichloroethene	20.0	20.2	101	4	30	74-123	
1,2,3-Trichlorobenzene	20.0	19.8	99	9	30	78-131	
1,2,4-Trichlorobenzene	20.0	19.1	96	5	30	80-124	
1,2-Dibromo-3-Chloropropane	20.0	19.4	97	1	30	55-134	
1,2-Dichlorobenzene	20.0	21.7	106	2	30	80-120	
1,2-Dichloroethane	20.0	22.1	110	0	30	76-121	
1,2-Dichloropropane	20.0	20.0	100	1	30	77-123	
1,3-Dichlorobenzene	20.0	21.7	108	1	30	80-120	
1,4-Dichlorobenzene	20.0	20.9	105	2	30	80-120	
1,4-Dioxane	400	430	107	14	30	10-150	
2-Butanone (MEK)	100	91.2	91	0	30	64-120	
2-Hexanone	100	82.8	83	4	30	71-125	
4-Methyl-2-pentanone (MIBK)	100	101	101	0	30	78-124	
Acetone	100	99.9	100	3	30	39-150	
Benzene	20.0	19.8	98	1	30	77-121	
Bromoform	20.0	15.9	80	0	30	53-120	
Bromomethane	20.0	32.0	160	3	30	10-150	*
Carbon disulfide	20.0	15.3	77	2	30	69-133	
Carbon tetrachloride	20.0	26.0	130	1	30	70-132	
Chlorobenzene	20.0	21.3	103	0	30	80-120	
Chlorobromomethane	20.0	20.6	103	1	30	77-127	
Chlorodibromomethane	20.0	17.4	87	3	30	73-120	
Chloroethane	20.0	27.9	140	2	30	52-150	
Chloroform	20.0	21.9	109	0	30	80-120	
Chloromethane	20.0	23.6	118	2	30	56-131	
cis-1,2-Dichloroethene	20.0	21.0	105	0	30	80-120	
cis-1,3-Dichloropropene	20.0	16.7	84	5	30	77-120	
Cyclohexane	20.0	19.5	98	3	30	56-150	
Dichlorobromomethane	20.0	19.5	98	0	30	76-120	
Dichlorodifluoromethane	20.0	23.7	118	3	30	50-131	
Ethylbenzene	20.0	19.0	95	0	30	80-120	
Ethylene Dibromide	20.0	19.7	98	0	30	80-120	
Isopropylbenzene	20.0	20.4	102	0	30	80-123	
Methyl acetate	40.0	42.3	106	9	30	66-144	
Methyl tert-butyl ether	20.0	19.0	95	7	30	79-122	
Methylcyclohexane	20.0	18.9	94	2	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66554.D

Lab ID: 460-154828-B-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	20.0	21.4	105	1	30	77-123	
m-Xylene & p-Xylene	20.0	18.7	93	1	30	80-120	
o-Xylene	20.0	18.9	95	4	30	80-120	
Styrene	20.0	18.1	91	0	30	80-120	
Tetrachloroethene	20.0	20.4	102	2	30	78-122	
Toluene	20.0	19.5	98	1	30	80-120	
trans-1,2-Dichloroethene	20.0	20.3	102	0	30	79-120	
trans-1,3-Dichloropropene	20.0	17.0	85	2	30	76-120	
Trichloroethene	20.0	19.9	100	1	30	77-120	
Trichlorofluoromethane	20.0	25.4	127	3	30	71-143	
Vinyl chloride	20.0	26.2	131	8	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44772.D

Lab ID: 460-155023-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	200	194	97	8	30	75-125	
1,1,2,2-Tetrachloroethane	200	187	94	2	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	200	204	102	7	30	59-150	
1,1,2-Trichloroethane	200	191	96	8	30	78-120	
1,1-Dichloroethane	200	212	106	8	30	77-123	
1,1-Dichloroethene	200	199	100	8	30	74-123	
1,2,3-Trichlorobenzene	200	205	103	2	30	78-131	
1,2,4-Trichlorobenzene	200	202	101	2	30	80-124	
1,2-Dibromo-3-Chloropropane	200	180	90	4	30	55-134	
1,2-Dichlorobenzene	200	194	97	12	30	80-120	
1,2-Dichloroethane	200	196	98	8	30	76-121	
1,2-Dichloropropane	200	204	102	9	30	77-123	
1,3-Dichlorobenzene	200	189	95	9	30	80-120	
1,4-Dichlorobenzene	200	179	90	9	30	80-120	
1,4-Dioxane	4000	3930	98	2	30	10-150	
2-Butanone (MEK)	1000	951	95	5	30	64-120	
2-Hexanone	1000	1030	103	7	30	71-125	
4-Methyl-2-pentanone (MIBK)	1000	1030	103	7	30	78-124	
Acetone	1000	924	92	4	30	39-150	
Benzene	200	194	97	9	30	77-121	
Bromoform	200	175	87	3	30	53-120	
Bromomethane	200	131	65	11	30	10-150	
Carbon disulfide	200	186	93	6	30	69-133	
Carbon tetrachloride	200	189	95	11	30	70-132	
Chlorobenzene	200	195	97	7	30	80-120	
Chlorobromomethane	200	214	107	9	30	77-127	
Chlorodibromomethane	200	176	88	9	30	73-120	
Chloroethane	200	190	95	9	30	52-150	
Chloroform	200	207	103	9	30	80-120	
Chloromethane	200	170	85	19	30	56-131	
cis-1,2-Dichloroethene	200	188	94	15	30	80-120	
cis-1,3-Dichloropropene	200	175	87	8	30	77-120	
Cyclohexane	200	209	104	8	30	56-150	
Dichlorobromomethane	200	194	97	10	30	76-120	
Dichlorodifluoromethane	200	223	111	6	30	50-131	
Ethylbenzene	200	191	95	11	30	80-120	
Ethylene Dibromide	200	202	101	3	30	80-120	
Isopropylbenzene	200	195	97	7	30	80-123	
Methyl acetate	400	443	111	6	30	66-144	
Methyl tert-butyl ether	200	206	103	6	30	79-122	
Methylcyclohexane	200	209	104	9	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P44772.D

Lab ID: 460-155023-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	200	199	99	10	30	77-123	
m-Xylene & p-Xylene	200	193	97	9	30	80-120	
o-Xylene	200	192	96	7	30	80-120	
Styrene	200	196	98	8	30	80-120	
Tetrachloroethene	200	201	100	10	30	78-122	
Toluene	200	190	95	9	30	80-120	
trans-1,2-Dichloroethene	200	194	97	9	30	79-120	
trans-1,3-Dichloropropene	200	183	92	5	30	76-120	
Trichloroethene	200	203	102	9	30	77-120	
Trichlorofluoromethane	200	220	110	10	30	71-143	
Vinyl chloride	200	198	99	10	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: N66519.D Lab Sample ID: MB 460-516016/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS11 Date Analyzed: 05/02/2018 19:53

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-516016/4	N66515.D	05/02/2018 18:20
GC-TB-20180425	460-154781-10	N66520.D	05/02/2018 20:24
GC-Equipment Blank	460-154781-9	N66523.D	05/02/2018 21:33
GC-MW-107(WG)	460-154781-1	N66527.D	05/03/2018 00:14
GC-MW-107D(WG)	460-154781-2	N66528.D	05/03/2018 00:37
GC-MW-108(WG)	460-154781-3	N66529.D	05/03/2018 01:00
GC-MW-103(WG)	460-154781-5	N66531.D	05/03/2018 01:47
GC-MW-104(WG)	460-154781-6	N66532.D	05/03/2018 02:10
GC-MW-105(WG)	460-154781-7	N66533.D	05/03/2018 02:33
GC-MW-107(WG) MS	460-154781-1 MS	N66537.D	05/03/2018 04:04
GC-MW-107(WG) MSD	460-154781-1 MSD	N66538.D	05/03/2018 04:27

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: N66545.D Lab Sample ID: MB 460-516110/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS11 Date Analyzed: 05/03/2018 07:03

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-516110/3	N66541.D	05/03/2018 05:31
	460-154828-A-2 MS	N66553.D	05/03/2018 10:08
	460-154828-B-2 MSD	N66554.D	05/03/2018 10:31
GC-DRAIN(WG)	460-154781-8	N66562.D	05/03/2018 13:34

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: N665685.D Lab Sample ID: MB 460-516299/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS11 Date Analyzed: 05/03/2018 19:58

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-516299/4	N665681.D	05/03/2018 18:27
	LCSD 460-516299/5	N665682.D	05/03/2018 18:50
GC-MW-1B(WG)	460-154781-4	N665686.D	05/03/2018 20:30

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: P44707.D Lab Sample ID: MB 460-516291/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS13 Date Analyzed: 05/04/2018 00:27

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-516291/3	P44702.D	05/03/2018 22:20
	LCSD 460-516291/4	P44703.D	05/03/2018 22:45
GC-MW-102(WG) MS	460-154925-1 MS	P44714.D	05/04/2018 03:24
GC-MW-102(WG) MSD	460-154925-1 MSD	P44715.D	05/04/2018 03:49
GC-TB-20180426	460-154925-8	P44718.D	05/04/2018 05:05
GC-MW-102(WG)	460-154925-1	P44719.D	05/04/2018 05:30
GC-MW-109(WG)	460-154925-2	P44720.D	05/04/2018 05:55
GC-MW-109M(WG)	460-154925-3	P44721.D	05/04/2018 06:21
GC-MW-101(WG)	460-154925-4	P44722.D	05/04/2018 06:46
GC-MW-101D(WG)	460-154925-5	P44723.D	05/04/2018 07:11
GC-MW-106(WG)	460-154925-6	P44724.D	05/04/2018 07:37
GC-MW-3(WG)	460-154925-7	P44725.D	05/04/2018 08:02
GC-Equipment Blank-2	460-154925-9	P44726.D	05/04/2018 08:27
GC-MW-110(WG)	460-154925-10	P44727.D	05/04/2018 08:52

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: P44734.D Lab Sample ID: MB 460-516419/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS13 Date Analyzed: 05/04/2018 12:05

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-516419/4	P44731.D	05/04/2018 10:29
	LCSD 460-516419/13	P44740.D	05/04/2018 14:49
GC-MW-2(WG)	460-154925-12	P44746.D	05/04/2018 17:32

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: P44766.D Lab Sample ID: MB 460-516607/10

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS13 Date Analyzed: 05/05/2018 01:57

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-516607/5	P44761.D	05/04/2018 23:50
GC-MW-110D(WG)	460-154925-11	P44767.D	05/05/2018 02:22
	460-155023-B-1 MS	P44771.D	05/05/2018 04:04
	460-155023-B-1 MSD	P44772.D	05/05/2018 04:29

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: N65797.D BFB Injection Date: 04/20/2018

Instrument ID: CVOAMS11 BFB Injection Time: 00:38

Analysis Batch No.: 512586

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.3	
75	30.0 - 60.0 % of mass 95	46.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	62.0	
175	5.0 - 9.0 % of mass 174	4.4	(7.1) 1
176	95.0 - 101.0 % of mass 174	60.3	(97.3) 1
177	5.0 - 9.0 % of mass 176	3.7	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD025 460-512586/2	N65798.D	04/20/2018	01:05
	STD8 460-512586/3	N65799.D	04/20/2018	01:29
	STD1 460-512586/4	N65800.D	04/20/2018	01:52
	STD5 460-512586/5	N65801.D	04/20/2018	02:15
	STD20 460-512586/6	N65802.D	04/20/2018	02:39
	STD50 460-512586/7	N65803.D	04/20/2018	03:02
	STD200 460-512586/8	N65804.D	04/20/2018	03:25
	STD500 460-512586/9	N65805.D	04/20/2018	03:48

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: N66512.D BFB Injection Date: 05/02/2018

Instrument ID: CVOAMS11 BFB Injection Time: 17:08

Analysis Batch No.: 516016

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.3	
75	30.0 - 60.0 % of mass 95	49.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	50.0 - 120.00 % of mass 95	66.3	
175	5.0 - 9.0 % of mass 174	4.9	(7.4) 1
176	95.0 - 101.0 % of mass 174	63.1	(95.1) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-516016/3	N66514.D	05/02/2018	17:57
	LCS 460-516016/4	N66515.D	05/02/2018	18:20
	MB 460-516016/8	N66519.D	05/02/2018	19:53
GC-TB-20180425	460-154781-10	N66520.D	05/02/2018	20:24
GC-Equipment Blank	460-154781-9	N66523.D	05/02/2018	21:33
GC-MW-107(WG)	460-154781-1	N66527.D	05/03/2018	00:14
GC-MW-107D(WG)	460-154781-2	N66528.D	05/03/2018	00:37
GC-MW-108(WG)	460-154781-3	N66529.D	05/03/2018	01:00
GC-MW-103(WG)	460-154781-5	N66531.D	05/03/2018	01:47
GC-MW-104(WG)	460-154781-6	N66532.D	05/03/2018	02:10
GC-MW-105(WG)	460-154781-7	N66533.D	05/03/2018	02:33
GC-MW-107(WG) MS	460-154781-1 MS	N66537.D	05/03/2018	04:04
GC-MW-107(WG) MSD	460-154781-1 MSD	N66538.D	05/03/2018	04:27

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: N66539.D BFB Injection Date: 05/03/2018

Instrument ID: CVOAMS11 BFB Injection Time: 04:45

Analysis Batch No.: 516110

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	50.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.4	(0.7) 1
174	50.0 - 120.00 % of mass 95	63.0	
175	5.0 - 9.0 % of mass 174	4.9	(7.8) 1
176	95.0 - 101.0 % of mass 174	60.7	(96.3) 1
177	5.0 - 9.0 % of mass 176	3.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-516110/2	N66540.D	05/03/2018	05:08
	LCS 460-516110/3	N66541.D	05/03/2018	05:31
	MB 460-516110/7	N66545.D	05/03/2018	07:03
	460-154828-A-2 MS	N66553.D	05/03/2018	10:08
	460-154828-B-2 MSD	N66554.D	05/03/2018	10:31
GC-DRAIN(WG)	460-154781-8	N66562.D	05/03/2018	13:34

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: N665678.D BFB Injection Date: 05/03/2018

Instrument ID: CVOAMS11 BFB Injection Time: 17:17

Analysis Batch No.: 516299

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	49.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	65.8	
175	5.0 - 9.0 % of mass 174	4.8	(7.4) 1
176	95.0 - 101.0 % of mass 174	63.7	(96.8) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-516299/3	N665680.D	05/03/2018	18:01
	LCS 460-516299/4	N665681.D	05/03/2018	18:27
	LCSD 460-516299/5	N665682.D	05/03/2018	18:50
	MB 460-516299/8	N665685.D	05/03/2018	19:58
GC-MW-1B(WG)	460-154781-4	N665686.D	05/03/2018	20:30

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: P43989.D BFB Injection Date: 04/20/2018

Instrument ID: CVOAMS13 BFB Injection Time: 01:16

Analysis Batch No.: 512577

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.5	
75	30.0 - 60.0 % of mass 95	51.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	78.9	
175	5.0 - 9.0 % of mass 174	6.1	(7.8) 1
176	95.0 - 101.0 % of mass 174	75.1	(95.2) 1
177	5.0 - 9.0 % of mass 176	5.2	(7.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8 460-512577/3	P43991.D	04/20/2018	02:35
	STD05 460-512577/4	P43992.D	04/20/2018	03:01
	STD5 460-512577/6	P43994.D	04/20/2018	03:51
	STD20 460-512577/7	P43995.D	04/20/2018	04:17
	STD1 460-512577/10	P43998.D	04/20/2018	06:00
	STD50 460-512577/11	P43999.D	04/20/2018	06:25
	STD200 460-512577/12	P44000.D	04/20/2018	06:50
	STD500 460-512577/13	P44001.D	04/20/2018	07:16

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: P44700.D BFB Injection Date: 05/03/2018

Instrument ID: CVOAMS13 BFB Injection Time: 21:30

Analysis Batch No.: 516291

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.2	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	50.0 - 120.00 % of mass 95	72.4	
175	5.0 - 9.0 % of mass 174	5.5	(7.6) 1
176	95.0 - 101.0 % of mass 174	71.9	(99.3) 1
177	5.0 - 9.0 % of mass 176	4.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-516291/2	P44701.D	05/03/2018	21:55
	LCS 460-516291/3	P44702.D	05/03/2018	22:20
	LCSD 460-516291/4	P44703.D	05/03/2018	22:45
	MB 460-516291/8	P44707.D	05/04/2018	00:27
GC-MW-102(WG) MS	460-154925-1 MS	P44714.D	05/04/2018	03:24
GC-MW-102(WG) MSD	460-154925-1 MSD	P44715.D	05/04/2018	03:49
GC-TB-20180426	460-154925-8	P44718.D	05/04/2018	05:05
GC-MW-102(WG)	460-154925-1	P44719.D	05/04/2018	05:30
GC-MW-109(WG)	460-154925-2	P44720.D	05/04/2018	05:55
GC-MW-109M(WG)	460-154925-3	P44721.D	05/04/2018	06:21
GC-MW-101(WG)	460-154925-4	P44722.D	05/04/2018	06:46
GC-MW-101D(WG)	460-154925-5	P44723.D	05/04/2018	07:11
GC-MW-106(WG)	460-154925-6	P44724.D	05/04/2018	07:37
GC-MW-3(WG)	460-154925-7	P44725.D	05/04/2018	08:02
GC-Equipment Blank-2	460-154925-9	P44726.D	05/04/2018	08:27
GC-MW-110(WG)	460-154925-10	P44727.D	05/04/2018	08:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: P44728.D BFB Injection Date: 05/04/2018

Instrument ID: CVOAMS13 BFB Injection Time: 09:13

Analysis Batch No.: 516419

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.8	
75	30.0 - 60.0 % of mass 95	51.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.9	(1.2) 1
174	50.0 - 120.00 % of mass 95	74.7	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.5	(95.8) 1
177	5.0 - 9.0 % of mass 176	5.2	(7.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-516419/2	P44729.D	05/04/2018	09:38
	LCS 460-516419/4	P44731.D	05/04/2018	10:29
	MB 460-516419/7	P44734.D	05/04/2018	12:05
	LCSD 460-516419/13	P44740.D	05/04/2018	14:49
GC-MW-2(WG)	460-154925-12	P44746.D	05/04/2018	17:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: P44757.D BFB Injection Date: 05/04/2018

Instrument ID: CVOAMS13 BFB Injection Time: 22:05

Analysis Batch No.: 516607

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.5	
75	30.0 - 60.0 % of mass 95	54.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	79.8	
175	5.0 - 9.0 % of mass 174	5.8	(7.3) 1
176	95.0 - 101.0 % of mass 174	77.8	(97.4) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-516607/3	P44759.D	05/04/2018	22:58
	LCS 460-516607/5	P44761.D	05/04/2018	23:50
	MB 460-516607/10	P44766.D	05/05/2018	01:57
GC-MW-110D(WG)	460-154925-11	P44767.D	05/05/2018	02:22
	460-155023-B-1 MS	P44771.D	05/05/2018	04:04
	460-155023-B-1 MSD	P44772.D	05/05/2018	04:29

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516016/3 Date Analyzed: 05/02/2018 17:57

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N66514.D Heated Purge: (Y/N) N

Calibration ID: 67783

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		136407	2.93	154087	4.04	787976	5.24
UPPER LIMIT		272814	3.43	308174	4.54	1575952	5.74
LOWER LIMIT		68204	2.43	77044	3.54	393988	4.74
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516016/4		145701	2.94	161831	4.04	821917	5.24
MB 460-516016/8		130618	2.95	134069	4.06	767729	5.24
460-154781-10	GC-TB-20180425	115498	2.94	121644	4.05	710639	5.25
460-154781-9	GC-Equipment Blank	114185	2.94	120917	4.05	676943	5.24
460-154781-1	GC-MW-107(WG)	121264	2.94	131659	4.05	751799	5.24
460-154781-2	GC-MW-107D(WG)	112583	2.94	129318	4.05	723342	5.24
460-154781-3	GC-MW-108(WG)	116390	2.93	126586	4.05	705682	5.24
460-154781-5	GC-MW-103(WG)	106756	2.94	119242	4.04	656236	5.24
460-154781-6	GC-MW-104(WG)	113663	2.93	123160	4.04	661115	5.24
460-154781-7	GC-MW-105(WG)	117829	2.94	130000	4.04	675558	5.24
460-154781-1 MS	GC-MW-107(WG) MS	115651	2.93	139999	4.04	715679	5.24
460-154781-1 MSD	GC-MW-107(WG) MSD	118805	2.94	145508	4.05	758834	5.24

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516016/3 Date Analyzed: 05/02/2018 17:57

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N66514.D Heated Purge: (Y/N) N

Calibration ID: 67783

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		20290	6.05	634071	9.18	302936	11.51
UPPER LIMIT		40580	6.55	1268142	9.68	605872	12.01
LOWER LIMIT		10145	5.55	317036	8.68	151468	11.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516016/4		22978	6.05	693627	9.18	332812	11.51
MB 460-516016/8		17173	6.06	621085	9.18	269424	11.51
460-154781-10	GC-TB-20180425	15400	6.05	552024	9.18	217909	11.51
460-154781-9	GC-Equipment Blank	16347	6.05	539061	9.18	226940	11.51
460-154781-1	GC-MW-107(WG)	15509	6.06	564926	9.18	233832	11.51
460-154781-2	GC-MW-107D(WG)	15697	6.05	565462	9.18	235748	11.51
460-154781-3	GC-MW-108(WG)	15137	6.05	547860	9.18	232013	11.51
460-154781-5	GC-MW-103(WG)	14000	6.05	506730	9.18	218965	11.51
460-154781-6	GC-MW-104(WG)	13882	6.05	509350	9.18	222598	11.51
460-154781-7	GC-MW-105(WG)	14451	6.06	533758	9.18	232862	11.51
460-154781-1 MS	GC-MW-107(WG) MS	17302	6.05	568570	9.18	271191	11.51
460-154781-1 MSD	GC-MW-107(WG) MSD	19451	6.05	606728	9.18	279102	11.51

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516110/2 Date Analyzed: 05/03/2018 05:08

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N66540.D Heated Purge: (Y/N) N

Calibration ID: 67783

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		124819	2.93	145183	4.05	810273	5.24
UPPER LIMIT		249638	3.43	290366	4.55	1620546	5.74
LOWER LIMIT		62410	2.43	72592	3.55	405137	4.74
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516110/3		129224	2.94	145800	4.05	828758	5.24
MB 460-516110/7		120085	2.93	133433	4.05	787898	5.24
460-154828-A-2 MS		115220	2.94	138222	4.05	736528	5.24
460-154828-B-2 MSD		129163	2.93	146866	4.05	766016	5.24
460-154781-8	GC-DRAIN(WG)	114072	2.94	125069	4.05	689445	5.24

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516110/2 Date Analyzed: 05/03/2018 05:08

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N66540.D Heated Purge: (Y/N) N

Calibration ID: 67783

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		20421	6.05	609432	9.18	286235	11.51
UPPER LIMIT		40842	6.55	1218864	9.68	572470	12.01
LOWER LIMIT		10211	5.55	304716	8.68	143118	11.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516110/3		20272	6.06	641536	9.18	303423	11.51
MB 460-516110/7		14726	6.05	584678	9.18	257749	11.51
460-154828-A-2 MS		17320	6.05	568091	9.18	269576	11.51
460-154828-B-2 MSD		19352	6.06	605981	9.18	283016	11.51
460-154781-8	GC-DRAIN(WG)	13088	6.06	511322	9.18	227167	11.51

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516299/3 Date Analyzed: 05/03/2018 18:01

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N665680.D Heated Purge: (Y/N) N

Calibration ID: 67783

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		131930	2.94	150339	4.06	801195	5.24
UPPER LIMIT		263860	3.44	300678	4.56	1602390	5.74
LOWER LIMIT		65965	2.44	75170	3.56	400598	4.74
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516299/4		125681	2.94	146029	4.05	786848	5.24
LCSD 460-516299/5		138875	2.94	158017	4.05	844675	5.24
MB 460-516299/8		122639	2.94	132420	4.05	757144	5.24
460-154781-4	GC-MW-1B(WG)	119341	2.94	127615	4.04	739736	5.24

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516299/3 Date Analyzed: 05/03/2018 18:01

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N665680.D Heated Purge: (Y/N) N

Calibration ID: 67783

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		19837	6.06	594015	9.18	279011	11.51
UPPER LIMIT		39674	6.56	1188030	9.68	558022	12.01
LOWER LIMIT		9919	5.56	297008	8.68	139506	11.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516299/4		21085	6.05	578464	9.18	267245	11.51
LCSD 460-516299/5		20361	6.05	630642	9.18	290158	11.51
MB 460-516299/8		14858	6.06	556690	9.18	236961	11.51
460-154781-4	GC-MW-1B(WG)	15550	6.05	535166	9.18	208472	11.51

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516291/2 Date Analyzed: 05/03/2018 21:55

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): P44701.D Heated Purge: (Y/N) N

Calibration ID: 67790

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		260808	2.06	341207	3.08	556740	3.66
UPPER LIMIT		521616	2.56	682414	3.58	1113480	4.16
LOWER LIMIT		130404	1.56	170604	2.58	278370	3.16
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516291/3		273186	2.06	341436	3.09	490474	3.66
LCSD 460-516291/4		323665	2.06	392924	3.09	562417	3.66
MB 460-516291/8		290646	2.06	362086	3.09	535109	3.66
460-154925-1 MS	GC-MW-102(WG) MS	311944	2.06	385796	3.09	551541	3.66
460-154925-1 MSD	GC-MW-102(WG) MSD	280071	2.06	351648	3.09	506684	3.66
460-154925-8	GC-TB-20180426	294153	2.06	363724	3.09	535832	3.66
460-154925-1	GC-MW-102(WG)	282299	2.06	344316	3.09	492351	3.66
460-154925-2	GC-MW-109(WG)	295317	2.05	366357	3.09	529344	3.66
460-154925-3	GC-MW-109M(WG)	275004	2.06	336222	3.09	484804	3.66
460-154925-4	GC-MW-101(WG)	287943	2.06	354698	3.08	530411	3.66
460-154925-5	GC-MW-101D(WG)	246414	2.06	307870	3.09	464335	3.66
460-154925-6	GC-MW-106(WG)	269803	2.05	337830	3.09	487367	3.66
460-154925-7	GC-MW-3(WG)	268504	2.05	330045	3.09	464256	3.66
460-154925-9	GC-Equipment Blank-2	286367	2.06	355378	3.09	521169	3.66
460-154925-10	GC-MW-110(WG)	289076	2.06	355633	3.09	524379	3.66

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516291/2 Date Analyzed: 05/03/2018 21:55

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): P44701.D Heated Purge: (Y/N) N

Calibration ID: 67790

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		30049	4.55	483464	7.08	269733	10.62
UPPER LIMIT		60098	5.05	966928	7.58	539466	11.12
LOWER LIMIT		15025	4.05	241732	6.58	134867	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516291/3		29775	4.55	434555	7.08	246974	10.61
LCSD 460-516291/4		33241	4.55	491027	7.08	276424	10.61
MB 460-516291/8		30727	4.55	455994	7.08	252002	10.62
460-154925-1 MS	GC-MW-102(WG) MS	34482	4.55	479265	7.08	271010	10.62
460-154925-1 MSD	GC-MW-102(WG) MSD	31011	4.55	448998	7.08	253381	10.61
460-154925-8	GC-TB-20180426	31308	4.55	469530	7.08	253298	10.62
460-154925-1	GC-MW-102(WG)	28254	4.55	431845	7.08	236367	10.62
460-154925-2	GC-MW-109(WG)	31991	4.55	463762	7.08	249898	10.62
460-154925-3	GC-MW-109M(WG)	30215	4.55	426441	7.08	234888	10.61
460-154925-4	GC-MW-101(WG)	29251	4.55	456222	7.08	250783	10.62
460-154925-5	GC-MW-101D(WG)	24792	4.55	397748	7.08	216457	10.62
460-154925-6	GC-MW-106(WG)	29102	4.55	428981	7.08	231672	10.62
460-154925-7	GC-MW-3(WG)	28817	4.55	416655	7.08	229323	10.62
460-154925-9	GC-Equipment Blank-2	30393	4.55	456051	7.08	247233	10.62
460-154925-10	GC-MW-110(WG)	31278	4.55	458107	7.08	249456	10.61

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516419/2 Date Analyzed: 05/04/2018 09:38

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): P44729.D Heated Purge: (Y/N) N

Calibration ID: 67790

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		273812	2.06	350303	3.09	547672	3.66
UPPER LIMIT		547624	2.56	700606	3.59	1095344	4.16
LOWER LIMIT		136906	1.56	175152	2.59	273836	3.16
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516419/4		298063	2.06	376745	3.09	553791	3.66
MB 460-516419/7		286367	2.06	354596	3.08	535920	3.66
LCSD 460-516419/13		302346	2.06	373150	3.09	551390	3.66
460-154925-12	GC-MW-2(WG)	322517	2.06	384312	3.09	524689	3.66

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516419/2 Date Analyzed: 05/04/2018 09:38

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): P44729.D Heated Purge: (Y/N) N

Calibration ID: 67790

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		30354	4.55	476165	7.08	271944	10.61
UPPER LIMIT		60708	5.05	952330	7.58	543888	11.11
LOWER LIMIT		15177	4.05	238083	6.58	135972	10.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516419/4		33775	4.56	487394	7.08	276252	10.61
MB 460-516419/7		31449	4.55	462023	7.08	253592	10.62
LCSD 460-516419/13		32369	4.55	478320	7.08	269836	10.61
460-154925-12	GC-MW-2(WG)	33309	4.55	456727	7.08	253452	10.62

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516607/3 Date Analyzed: 05/04/2018 22:58

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): P44759.D Heated Purge: (Y/N) N

Calibration ID: 67790

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		295814	2.06	367477	3.09	548366	3.67
UPPER LIMIT		591628	2.56	734954	3.59	1096732	4.17
LOWER LIMIT		147907	1.56	183739	2.59	274183	3.17
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516607/5		307742	2.06	384380	3.09	564779	3.66
MB 460-516607/10		301504	2.06	367197	3.09	532200	3.66
460-154925-11	GC-MW-110D(WG)	256498	2.06	314205	3.08	459976	3.66
460-155023-B-1 MS		308890	2.06	368195	3.09	494852	3.66
460-155023-B-1 MSD		368935	2.06	428452	3.09	541765	3.66

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-516607/3 Date Analyzed: 05/04/2018 22:58

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): P44759.D Heated Purge: (Y/N) N

Calibration ID: 67790

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		31662	4.55	479347	7.08	270403	10.61
UPPER LIMIT		63324	5.05	958694	7.58	540806	11.11
LOWER LIMIT		15831	4.05	239674	6.58	135202	10.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-516607/5		33776	4.55	491794	7.08	275799	10.61
MB 460-516607/10		30982	4.55	465771	7.08	256914	10.62
460-154925-11	GC-MW-110D(WG)	27718	4.55	404113	7.08	222671	10.62
460-155023-B-1 MS		33864	4.55	444313	7.08	252044	10.61
460-155023-B-1 MSD		40660	4.55	482013	7.08	275681	10.61

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) | Lab Sample ID: 460-154781-1

Matrix: Water | Lab File ID: N66527.D

Analysis Method: 8260C | Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 00:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) | Lab Sample ID: 460-154781-1

Matrix: Water | Lab File ID: N66527.D

Analysis Method: 8260C | Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 00:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	8.8		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		74-132
460-00-4	4-Bromofluorobenzene	91		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) Lab Sample ID: 460-154781-1

Matrix: Water Lab File ID: N66527.D

Analysis Method: 8260C Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 00:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66527.D
Lims ID: 460-154781-B-1
Client ID: GC-MW-107(WG)
Sample Type: Client
Inject. Date: 03-May-2018 00:14:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-1
Misc. Info.: 460-0071421-016
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:57:46 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: tupayachia Date: 03-May-2018 05:55:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.937	2.931	0.006	0	121264	1000.0	
* 39 2-Butanone-d5	46	4.050	4.044	0.006	0	131659	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.556	0.005	96	181949	53.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	173845	53.6	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	751799	50.0	
* 68 1,4-Dioxane-d8	96	6.058	6.052	0.006	0	15509	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	783566	47.3	
84 Tetrachloroethene	166	7.956	7.956	0.000	93	31340	8.83	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	564926	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	85	170001	45.3	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	233832	50.0	
129 Naphthalene	128	13.237	13.231	0.006	98	3104	0.4788	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

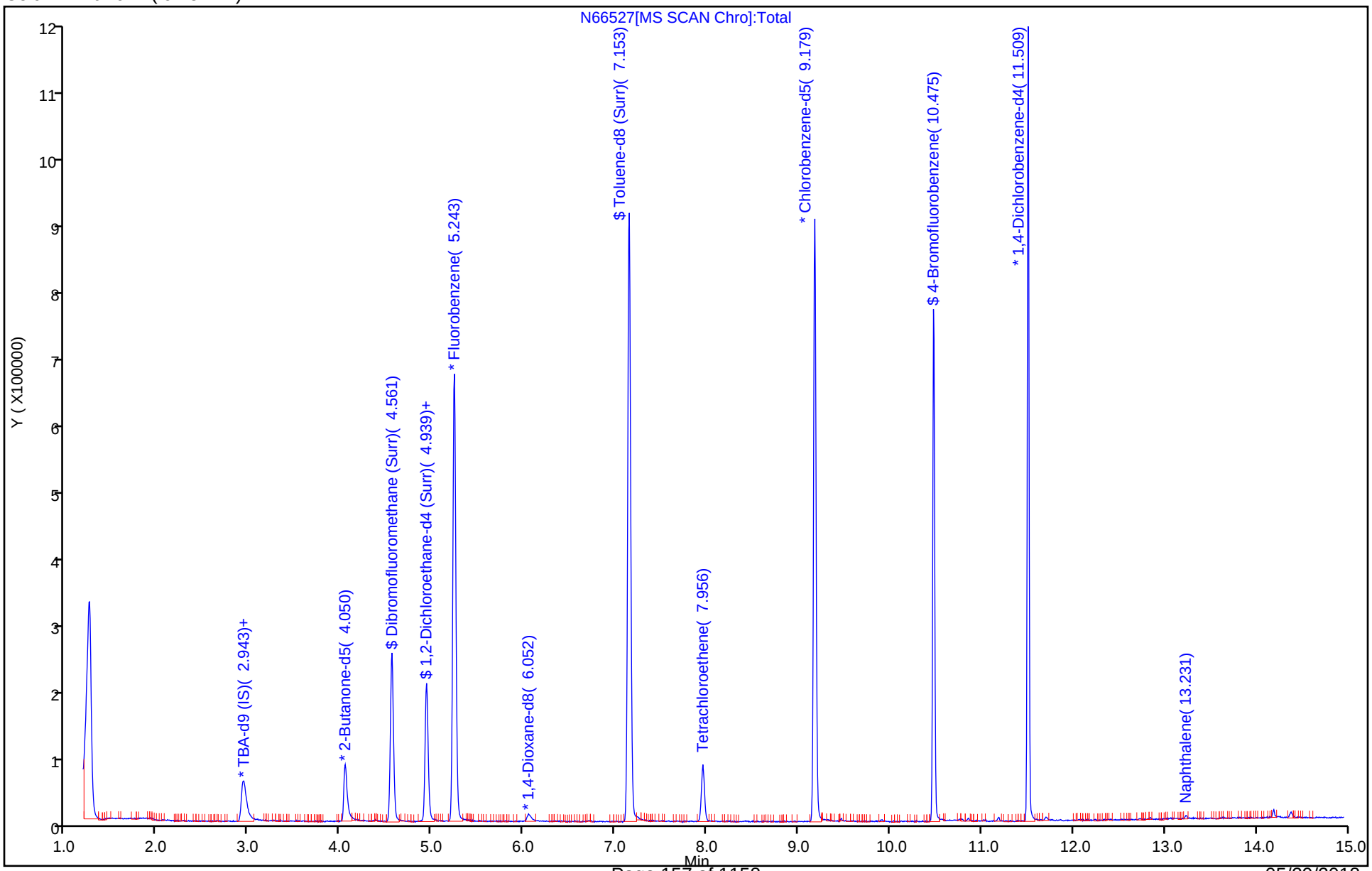
Report Date: 03-May-2018 18:00:51 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66527.D

Injection Date:	03-May-2018 00:14:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-1	Lab Sample ID:	460-154781-1	Worklist Smp#:	16
Client ID:	GC-MW-107(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)

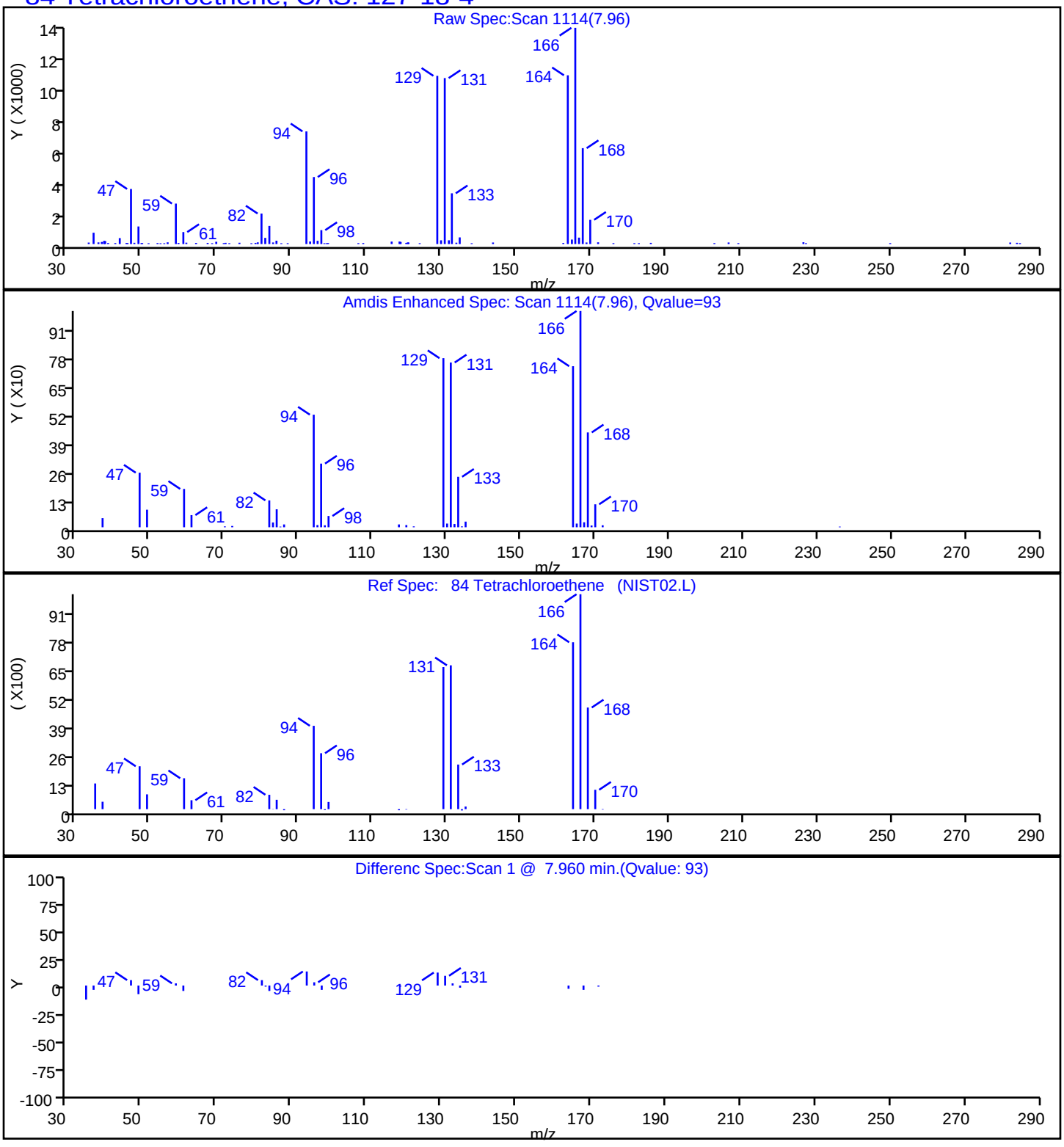


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66527.D

Injection Date:	03-May-2018 00:14:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-1	Lab Sample ID:	460-154781-1
Client ID:	GC-MW-107(WG)		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

84 Tetrachloroethene, CAS: 127-18-4



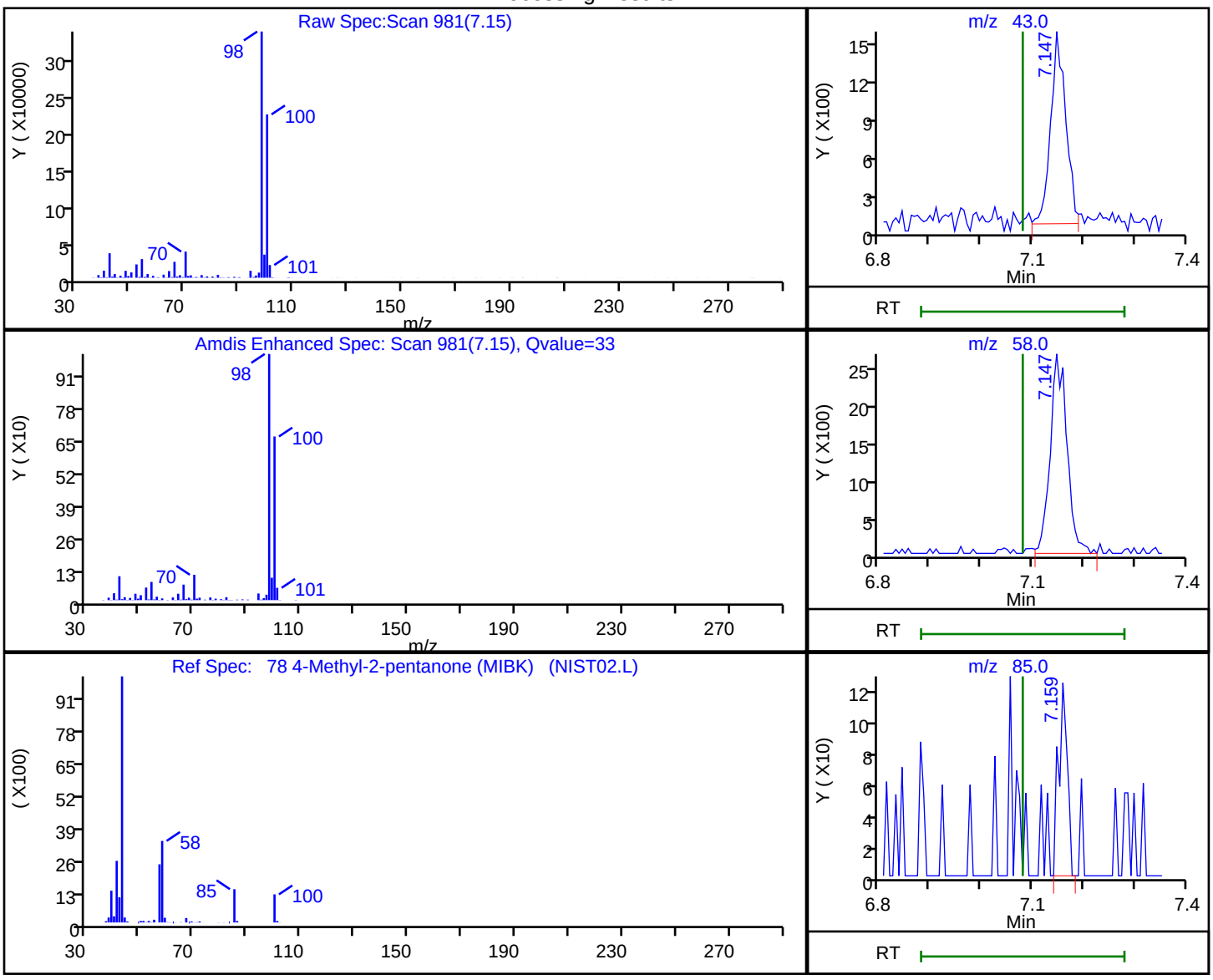
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66527.D		
Injection Date:	03-May-2018 00:14:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-1	Lab Sample ID:	460-154781-1
Client ID:	GC-MW-107(WG)		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	2999	2.101802
7.15	58.00	6036	
7.16	85.00	145	
7.15	100.00	520513	

Reviewer: tupayachia, 03-May-2018 05:55:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

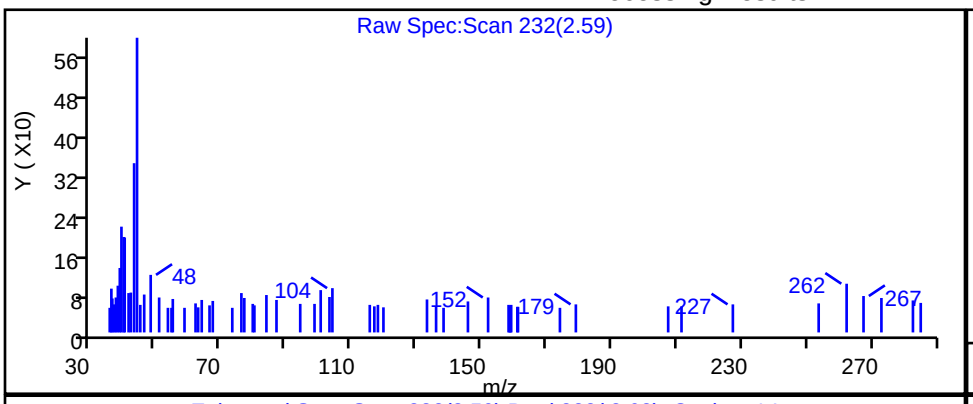
User Disabled Compound Report

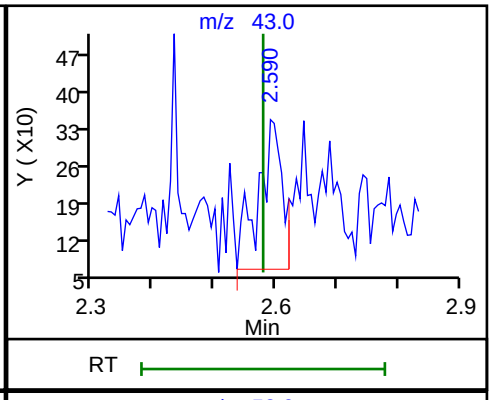
TestAmerica Edison

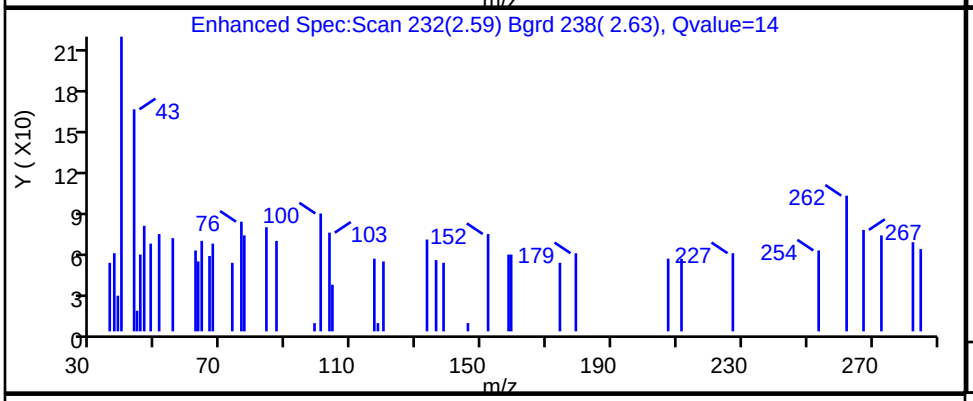
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66527.D		
Injection Date:	03-May-2018 00:14:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-1	Lab Sample ID:	460-154781-1
Client ID:	GC-MW-107(WG)		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

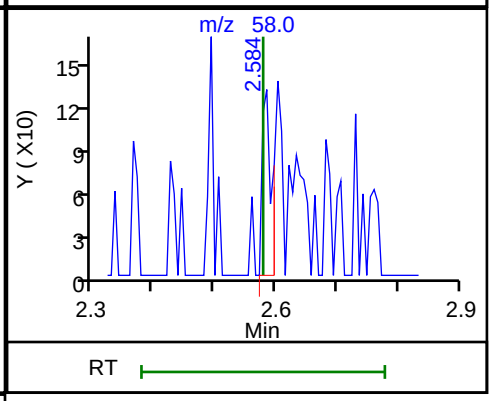
18 Acetone, CAS: 67-64-1

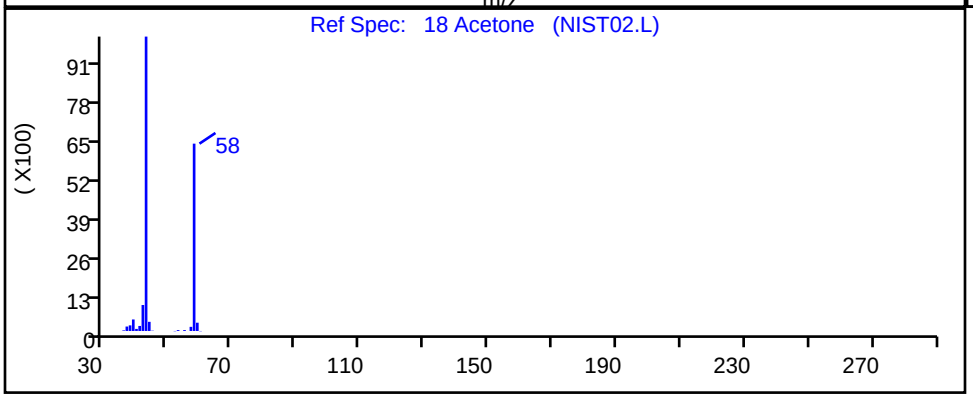
Processing Results











RT	Mass	Response	Amount
2.59	43.00	778	2.386131
2.58	58.00	135	

Reviewer: tupayachia, 03-May-2018 05:55:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

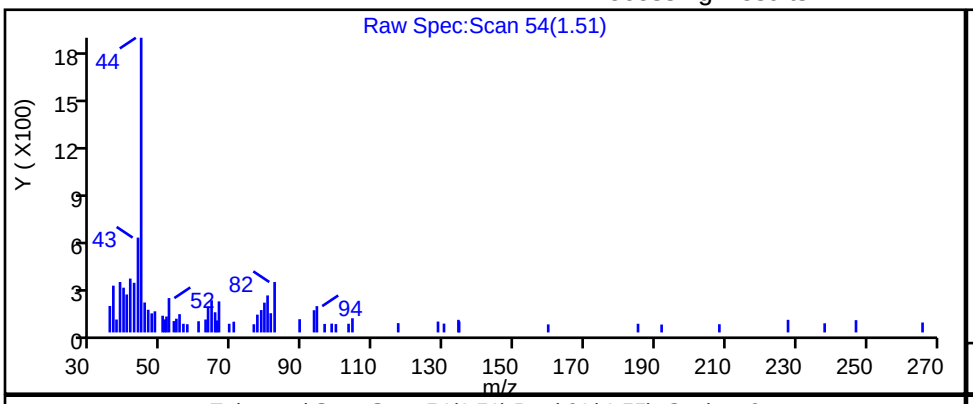
User Disabled Compound Report

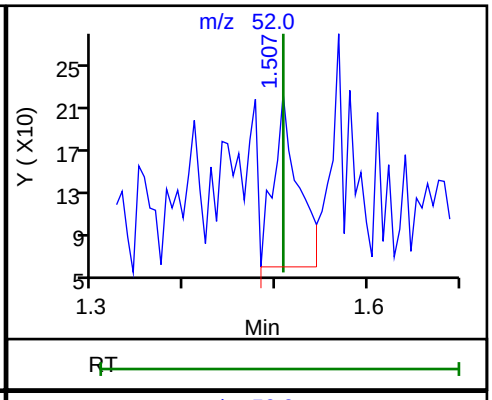
TestAmerica Edison

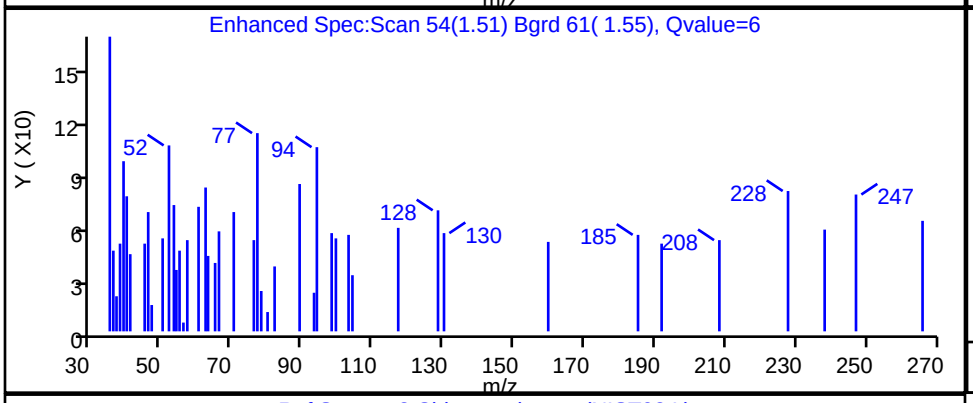
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66527.D		
Injection Date:	03-May-2018 00:14:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-1	Lab Sample ID:	460-154781-1
Client ID:	GC-MW-107(WG)		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

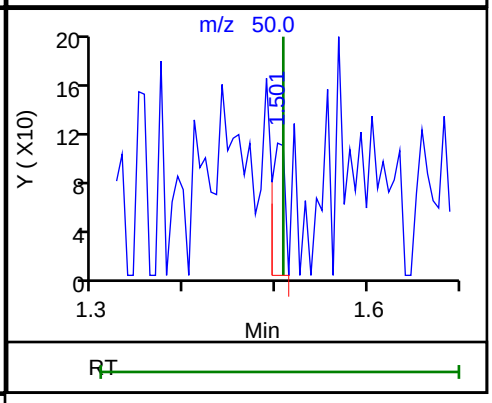
3 Chloromethane, CAS: 74-87-3

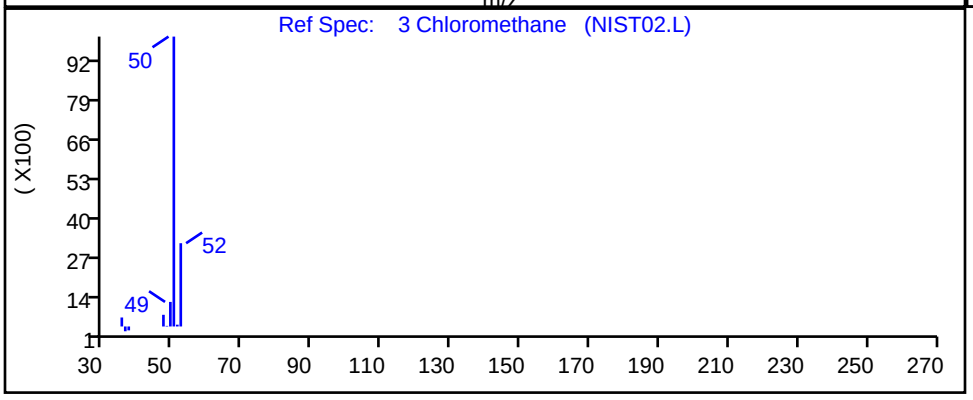
Processing Results











RT	Mass	Response	Amount
1.51	52.00	287	0.263302
1.50	50.00	106	

Reviewer: tupayachia, 03-May-2018 05:55:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 460-154781-2

Matrix: Water | Lab File ID: N66528.D

Analysis Method: 8260C | Date Collected: 04/25/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 00:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 460-154781-2

Matrix: Water | Lab File ID: N66528.D

Analysis Method: 8260C | Date Collected: 04/25/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 00:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	0.20	J	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		74-132
460-00-4	4-Bromofluorobenzene	90		77-124
1868-53-7	Dibromofluoromethane (Surr)	107		72-131
2037-26-5	Toluene-d8 (Surr)	92		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) Lab Sample ID: 460-154781-2

Matrix: Water Lab File ID: N66528.D

Analysis Method: 8260C Date Collected: 04/25/2018 11:15

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 00:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66528.D
Lims ID: 460-154781-B-2
Client ID: GC-MW-107D(WG)
Sample Type: Client
Inject. Date: 03-May-2018 00:37:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-2
Misc. Info.: 460-0071421-017
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:57:46 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: tupayachia Date: 03-May-2018 05:56:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.937	2.931	0.006	0	112583	1000.0	
29 Methyl tert-butyl ether	73	3.107	3.102	0.005	73	1525	0.1959	
* 39 2-Butanone-d5	46	4.050	4.044	0.006	0	129318	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.556	0.005	95	173927	53.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	172566	55.3	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	723342	50.0	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	15697	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	763249	46.0	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	565462	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	87	168133	44.8	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	235748	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

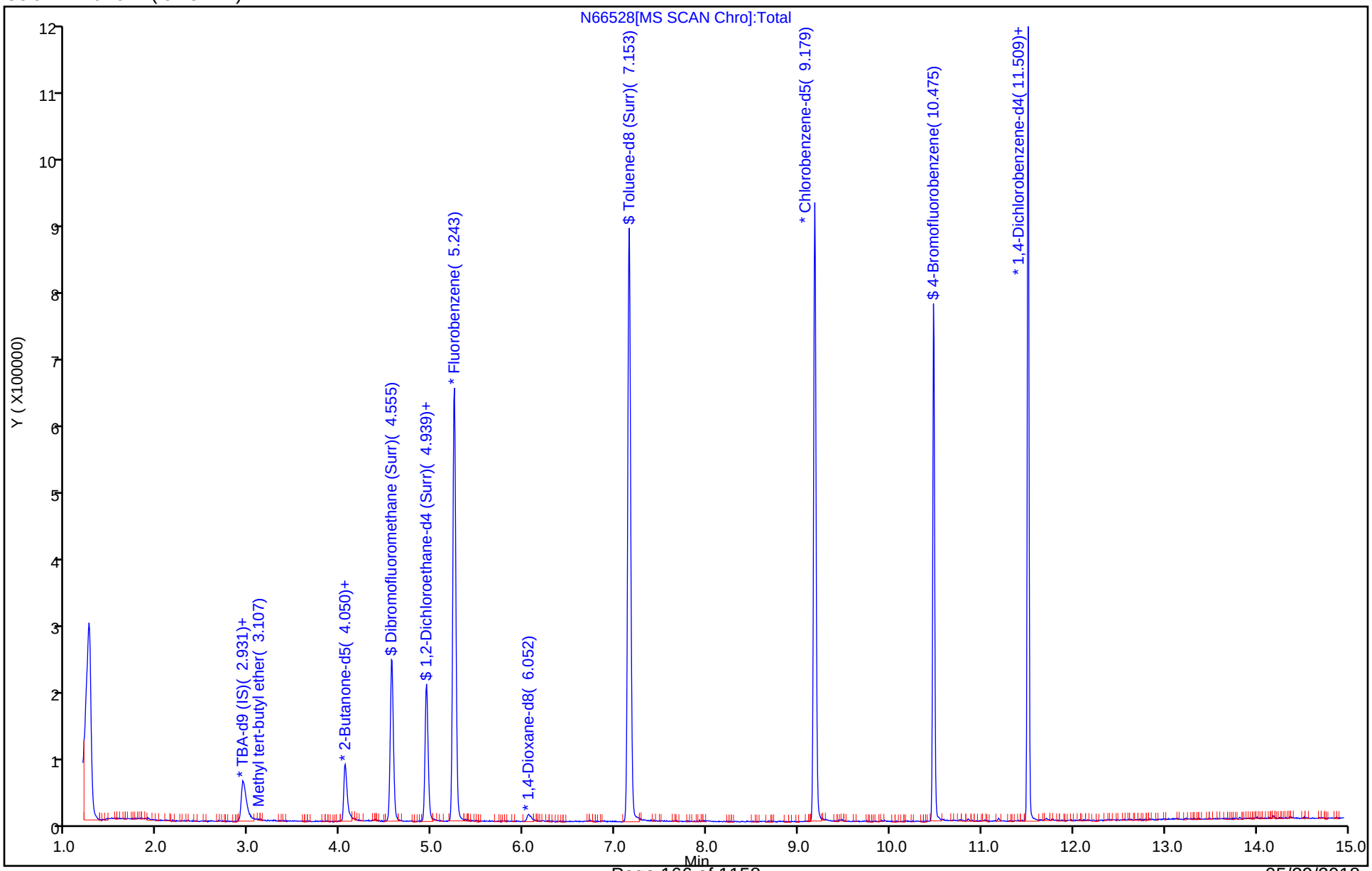
Report Date: 03-May-2018 18:01:01 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66528.D

Injection Date:	03-May-2018 00:37:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-2	Lab Sample ID:	460-154781-2	Worklist Smp#:	17
Client ID:	GC-MW-107D(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

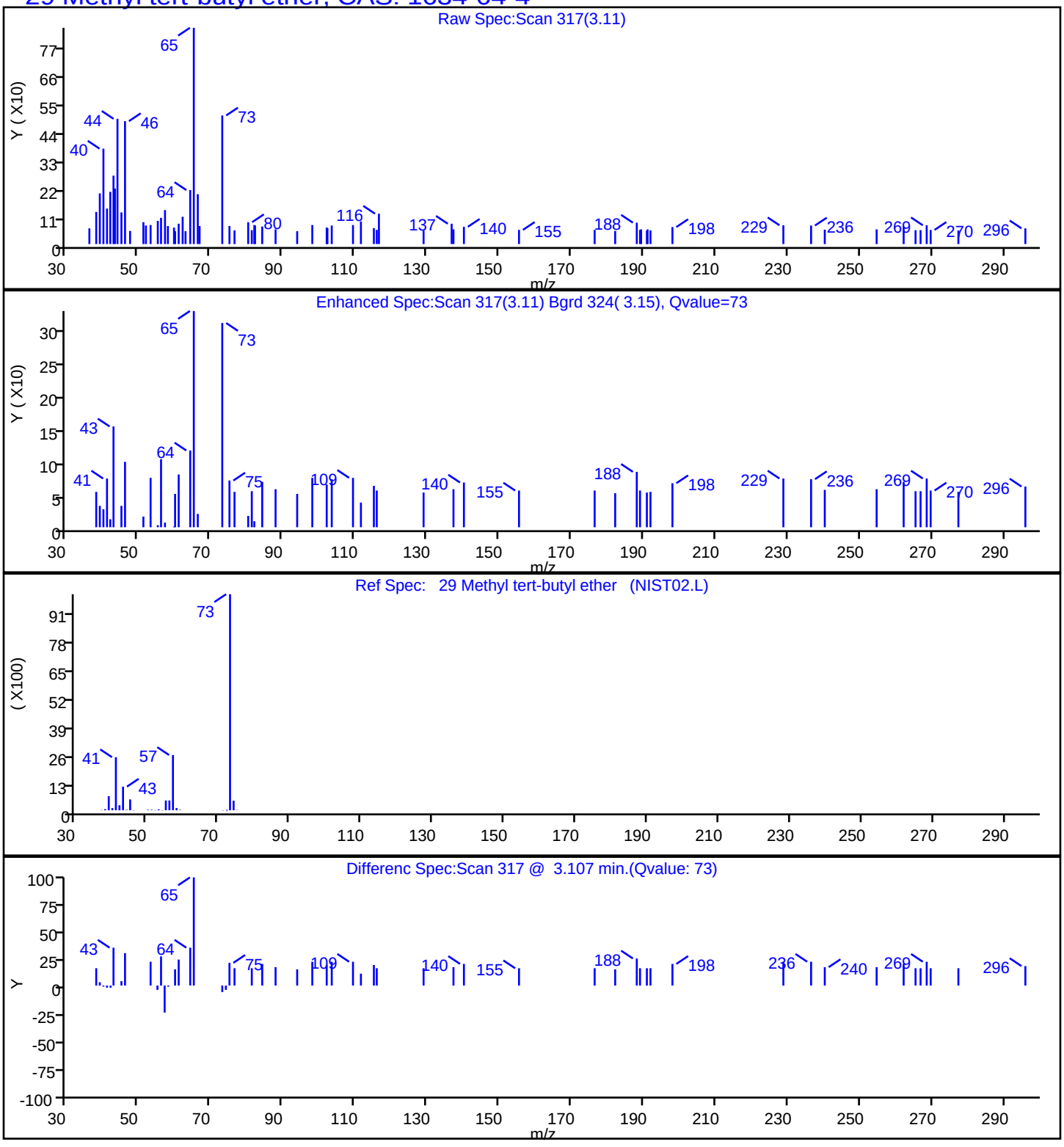
Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66528.D

Injection Date:	03-May-2018 00:37:30	Instrument ID:	CVOAMS11		
Lims ID:	460-154781-B-2	Lab Sample ID:	460-154781-2		
Client ID:	GC-MW-107D(WG)				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

29 Methyl tert-butyl ether, CAS: 1634-04-4



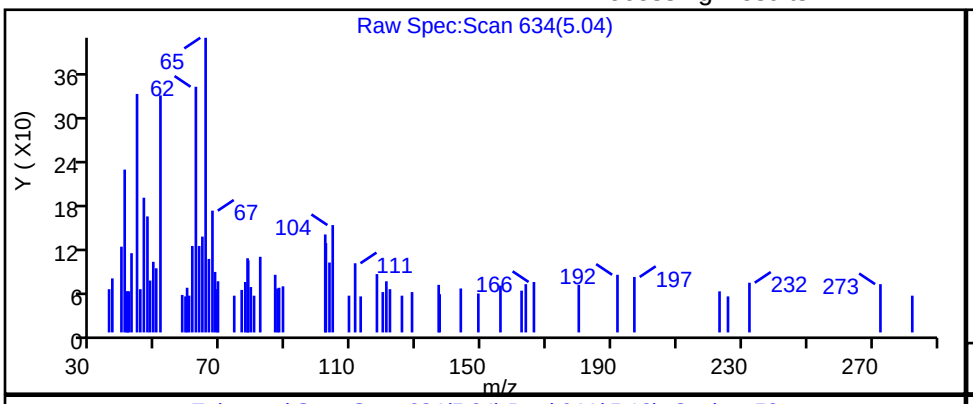
User Disabled Compound Report

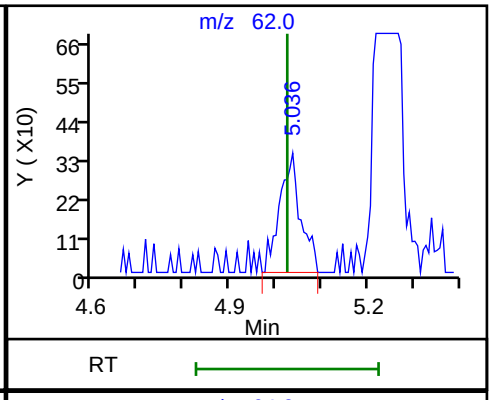
TestAmerica Edison

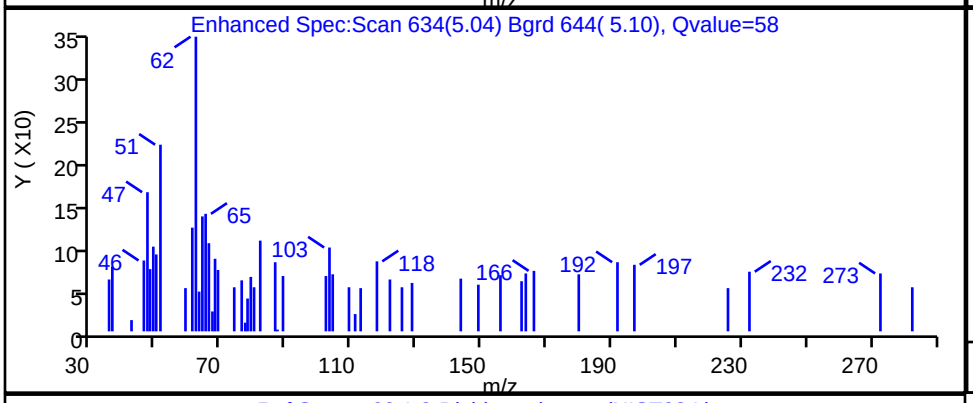
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66528.D		
Injection Date:	03-May-2018 00:37:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-2	Lab Sample ID:	460-154781-2
Client ID:	GC-MW-107D(WG)		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

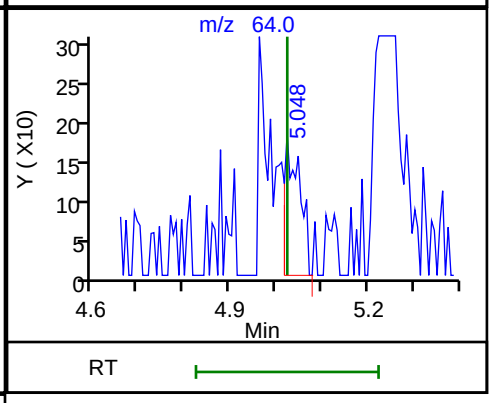
60 1,2-Dichloroethane, CAS: 107-06-2

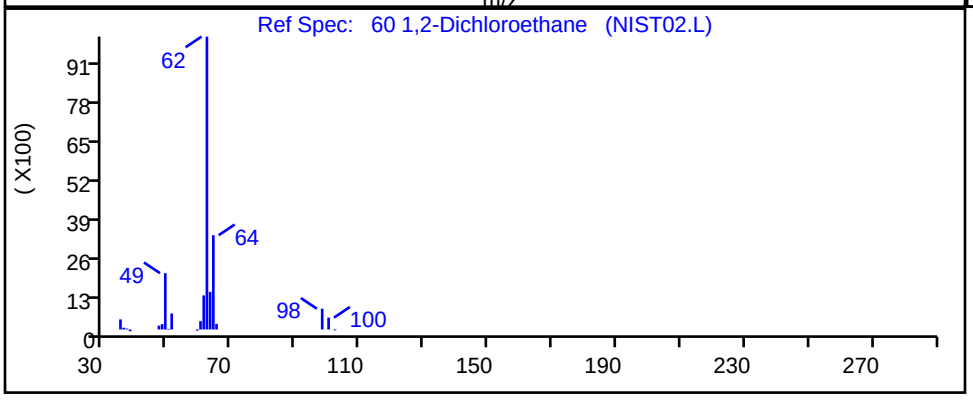
Processing Results











RT	Mass	Response	Amount
5.04	62.00	1090	0.298416
5.05	64.00	397	

Reviewer: tupayachia, 03-May-2018 05:56:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

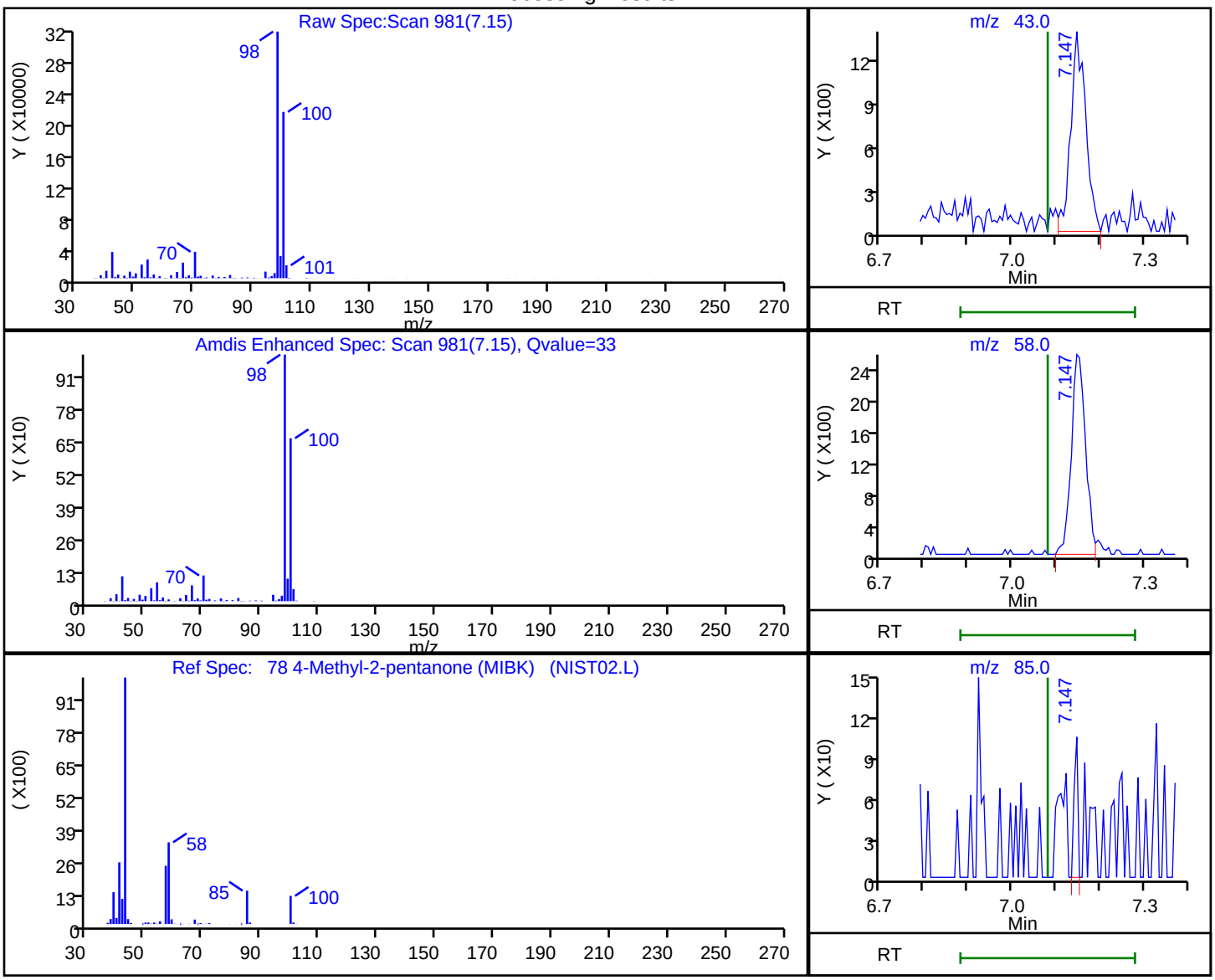
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66528.D		
Injection Date:	03-May-2018 00:37:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-2	Lab Sample ID:	460-154781-2
Client ID:	GC-MW-107D(WG)		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	3257	2.323938
7.15	58.00	5731	
7.15	85.00	62	
7.15	100.00	501379	

Reviewer: tupayachia, 03-May-2018 05:56:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

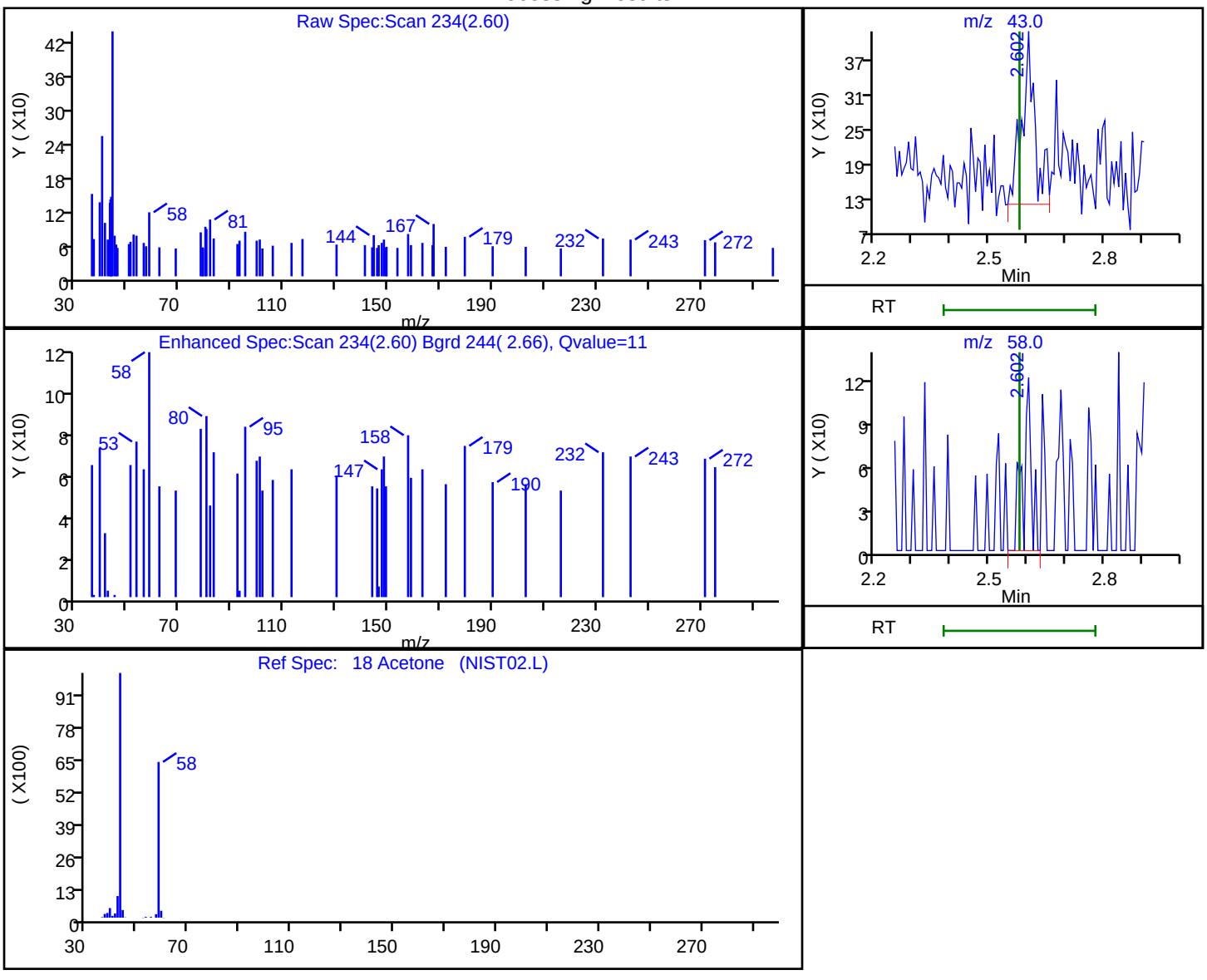
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66528.D		
Injection Date:	03-May-2018 00:37:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-2	Lab Sample ID:	460-154781-2
Client ID:	GC-MW-107D(WG)		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.60	43.00	711	2.220117
2.60	58.00	174	

Reviewer: tupayachia, 03-May-2018 05:56:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

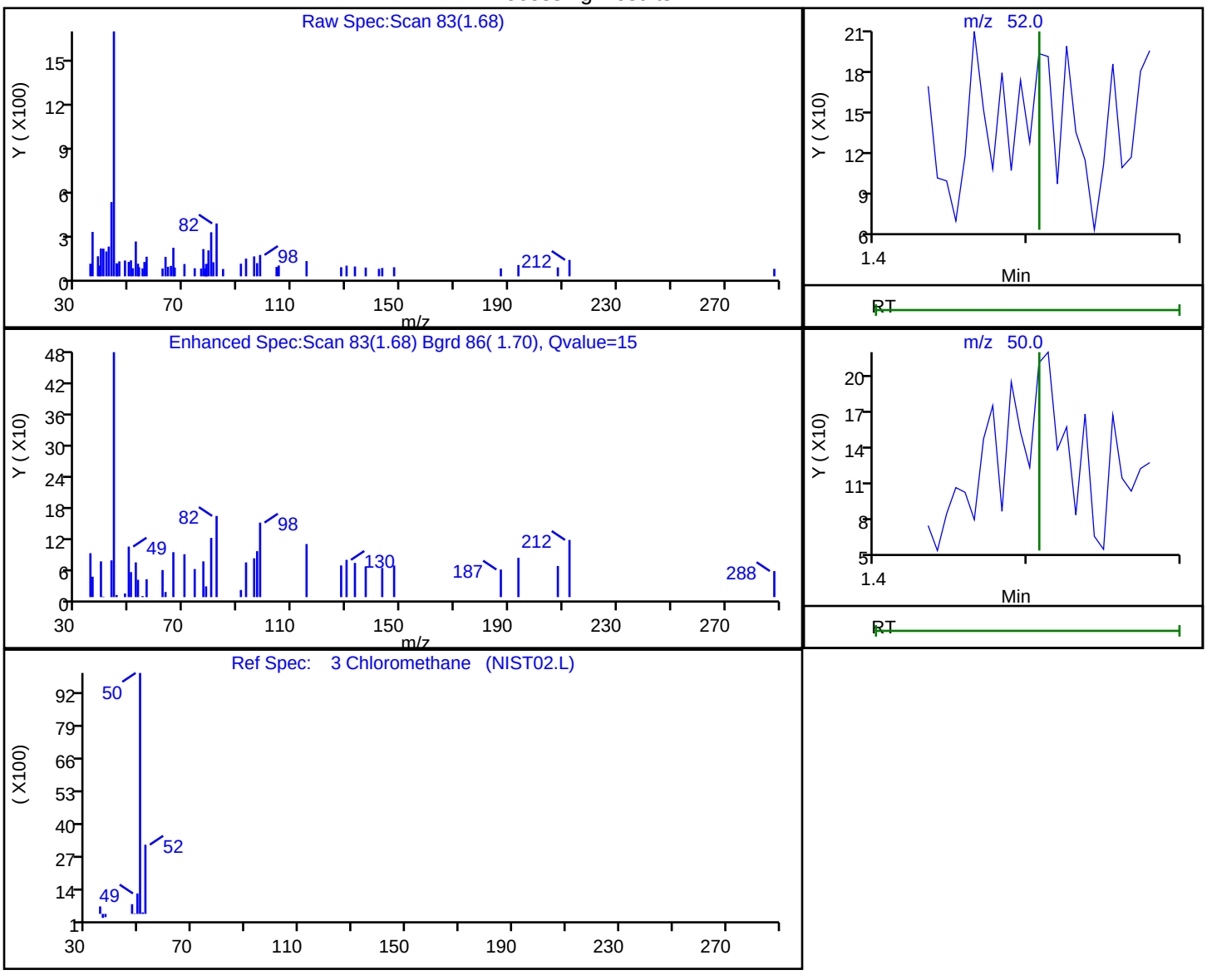
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66528.D		
Injection Date:	03-May-2018 00:37:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-2	Lab Sample ID:	460-154781-2
Client ID:	GC-MW-107D(WG)		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.68	52.00	259	0.241915
1.69	50.00	147	

Reviewer: tupayachia, 03-May-2018 05:56:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 460-154781-3

Matrix: Water | Lab File ID: N66529.D

Analysis Method: 8260C | Date Collected: 04/25/2018 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 460-154781-3

Matrix: Water | Lab File ID: N66529.D

Analysis Method: 8260C | Date Collected: 04/25/2018 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	35		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		74-132
460-00-4	4-Bromofluorobenzene	92		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	93		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-108(WG) Lab Sample ID: 460-154781-3

Matrix: Water Lab File ID: N66529.D

Analysis Method: 8260C Date Collected: 04/25/2018 11:50

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 01:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66529.D
Lims ID: 460-154781-B-3
Client ID: GC-MW-108(WG)
Sample Type: Client
Inject. Date: 03-May-2018 01:00:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-3
Misc. Info.: 460-0071421-018
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:57:46 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: tupayachia Date: 03-May-2018 05:56:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.931	2.931	0.000	0	116390	1000.0	
* 39 2-Butanone-d5	46	4.051	4.044	0.007	0	126586	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.556	-0.001	95	173468	54.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.933	4.939	-0.006	0	170144	55.9	
* 62 Fluorobenzene	96	5.237	5.243	-0.006	99	705682	50.0	
* 68 1,4-Dioxane-d8	96	6.046	6.052	-0.006	0	15137	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	747496	46.5	
84 Tetrachloroethene	166	7.956	7.956	0.000	92	121819	35.4	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	547860	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	84	167952	46.1	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	232013	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

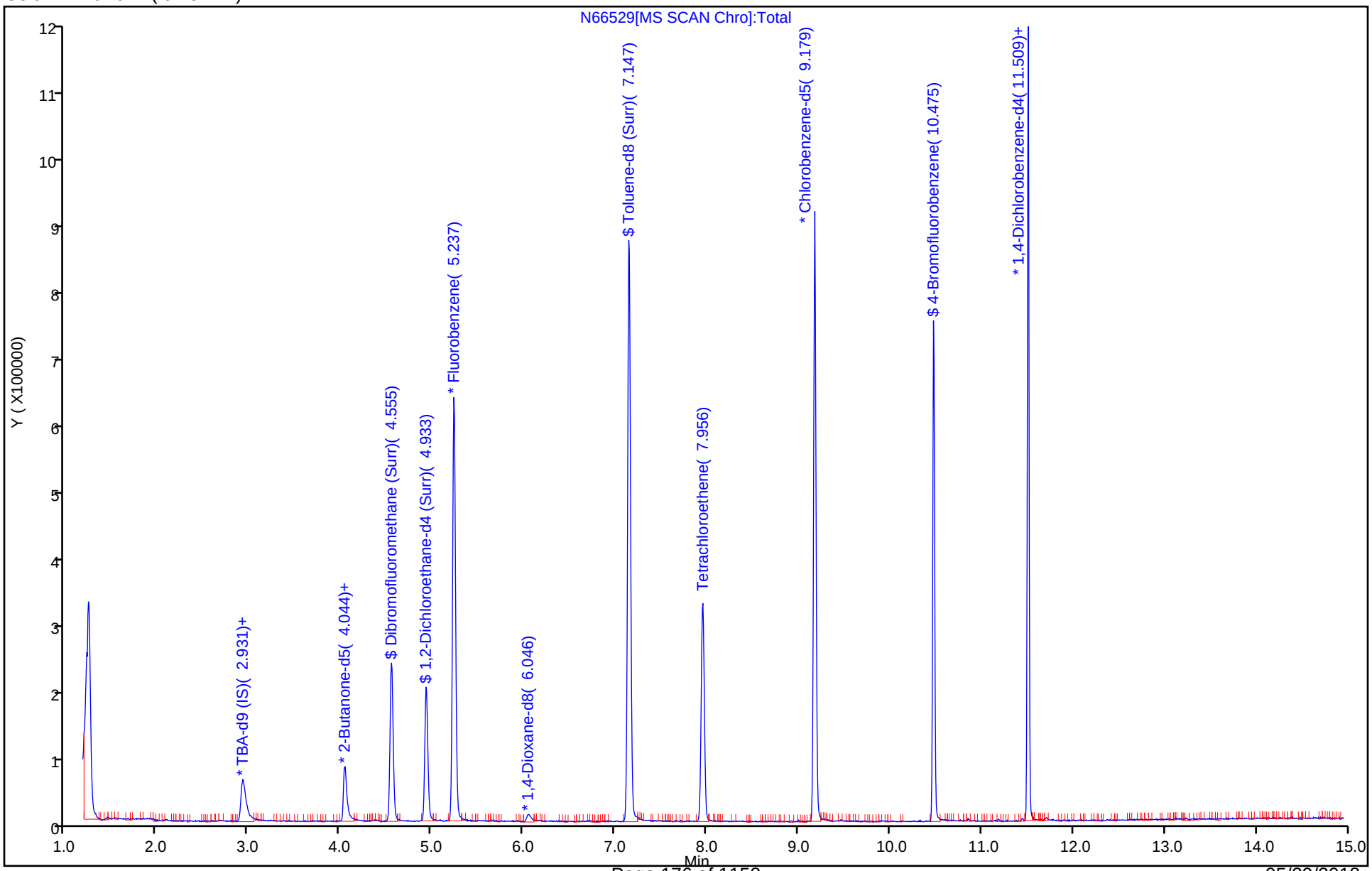
Report Date: 03-May-2018 18:01:12 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66529.D

Injection Date:	03-May-2018 01:00:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-3	Lab Sample ID:	460-154781-3	Worklist Smp#:	18
Client ID:	GC-MW-108(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)

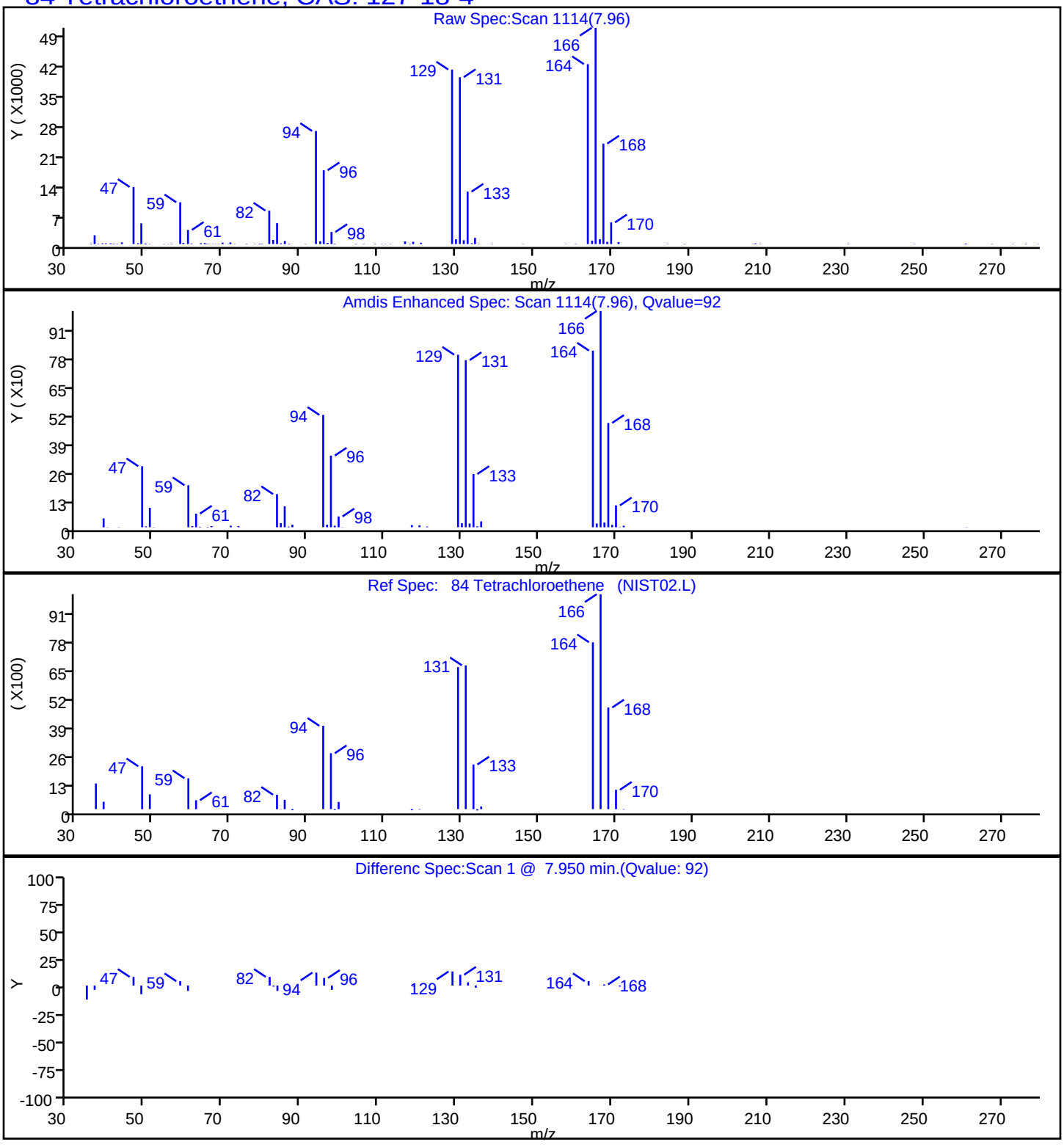


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66529.D

Injection Date:	03-May-2018 01:00:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-3	Lab Sample ID:	460-154781-3
Client ID:	GC-MW-108(WG)		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

84 Tetrachloroethene, CAS: 127-18-4



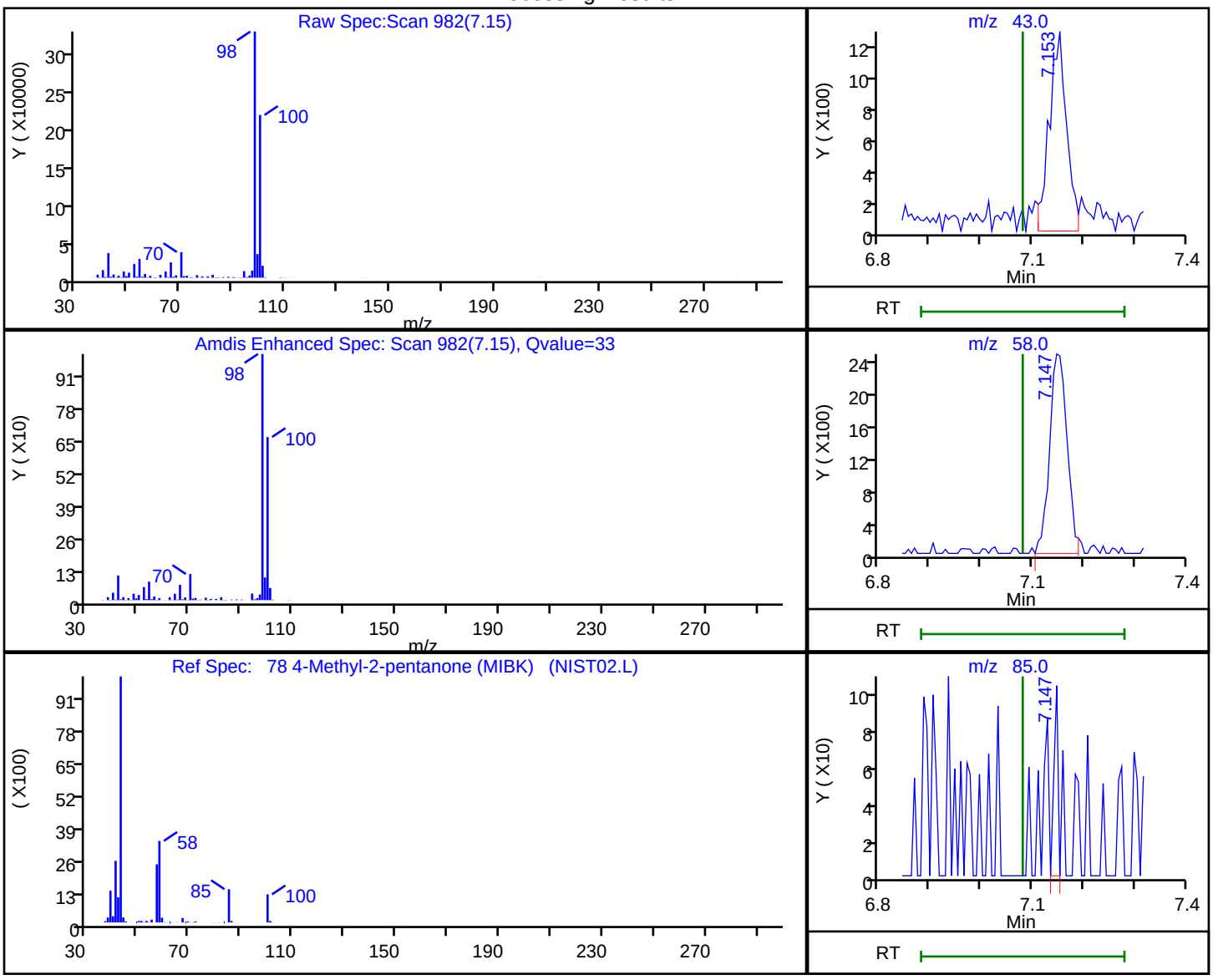
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66529.D				
Injection Date:	03-May-2018 01:00:30	Instrument ID:	CVOAMS11		
Lims ID:	460-154781-B-3	Lab Sample ID:	460-154781-3		
Client ID:	GC-MW-108(WG)				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	3065	2.234141
7.15	58.00	5967	
7.15	85.00	57	
7.15	100.00	495412	

Reviewer: tupayachia, 03-May-2018 05:56:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

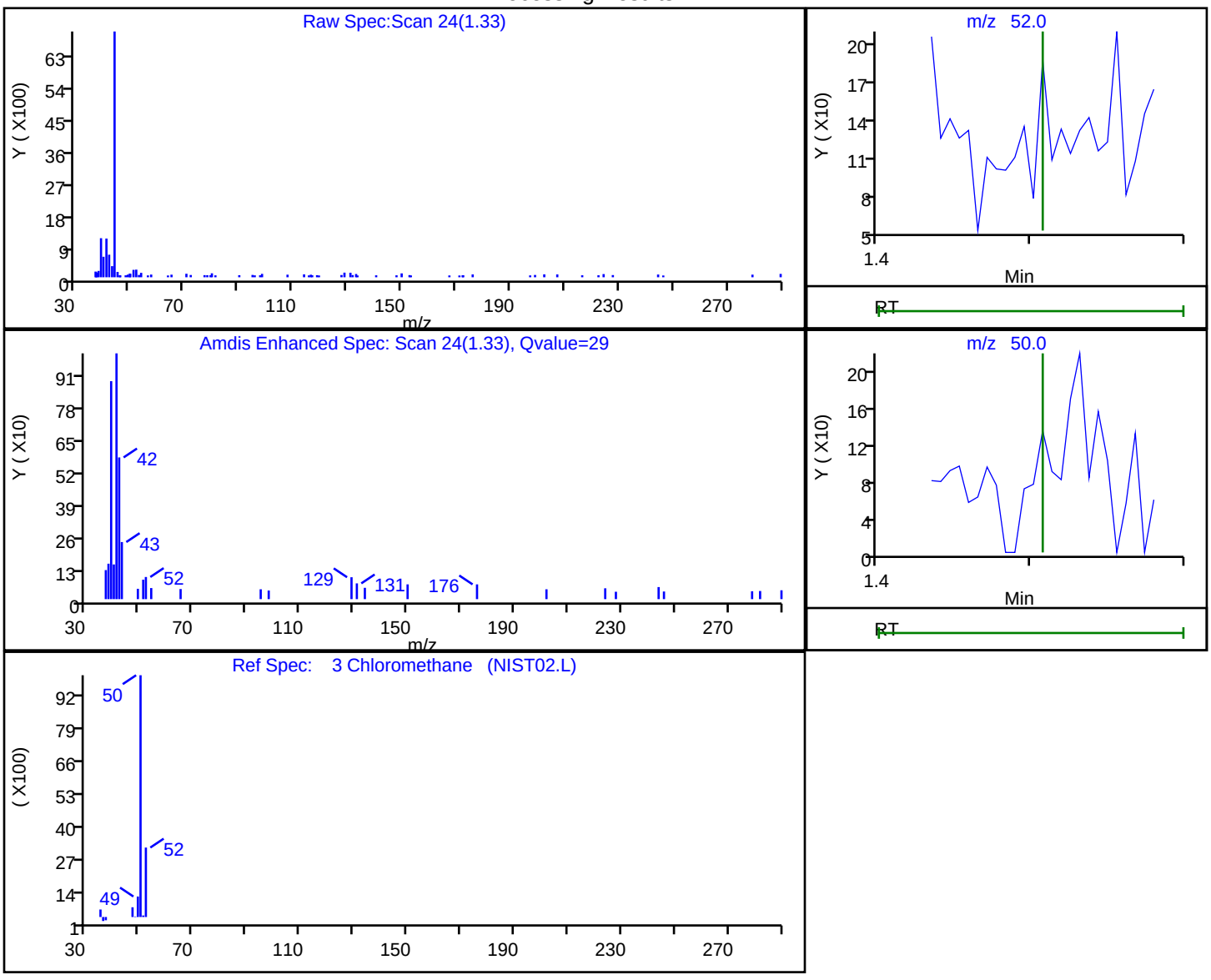
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66529.D				
Injection Date:	03-May-2018 01:00:30	Instrument ID:	CVOAMS11		
Lims ID:	460-154781-B-3	Lab Sample ID:	460-154781-3		
Client ID:	GC-MW-108(WG)				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.33	52.00	243	0.231869
1.31	50.00	130	

Reviewer: tupayachia, 03-May-2018 05:56:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 460-154781-4

Matrix: Water | Lab File ID: N665686.D

Analysis Method: 8260C | Date Collected: 04/25/2018 12:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 20:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U *	1.0	0.37
67-66-3	Chloroform	0.46	J	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 460-154781-4

Matrix: Water | Lab File ID: N665686.D

Analysis Method: 8260C | Date Collected: 04/25/2018 12:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 20:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.13	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		74-132
460-00-4	4-Bromofluorobenzene	90		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	97		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) Lab Sample ID: 460-154781-4

Matrix: Water Lab File ID: N665686.D

Analysis Method: 8260C Date Collected: 04/25/2018 12:35

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 20:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516299 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665686.D
Lims ID: 460-154781-C-4
Client ID: GC-MW-1B(WG)
Sample Type: Client
Inject. Date: 03-May-2018 20:30:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-C-4
Misc. Info.: 460-0071478-009
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 17:31:13 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: tupayachia Date: 04-May-2018 04:36:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.937	2.943	-0.006	0	119341	1000.0	
* 39 2-Butanone-d5	46	4.044	4.056	-0.012	0	127615	250.0	
48 Chloroform	83	4.385	4.397	-0.012	90	2884	0.4592	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.568	-0.013	95	181346	54.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.945	-0.007	0	171515	53.8	
* 62 Fluorobenzene	96	5.237	5.243	-0.006	99	739736	50.0	
* 68 1,4-Dioxane-d8	96	6.052	6.058	-0.006	0	15550	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.147	7.153	-0.006	99	758621	48.3	
84 Tetrachloroethene	166	7.950	7.956	-0.006	26	429	0.1276	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	535166	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	86	160895	45.2	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	208472	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

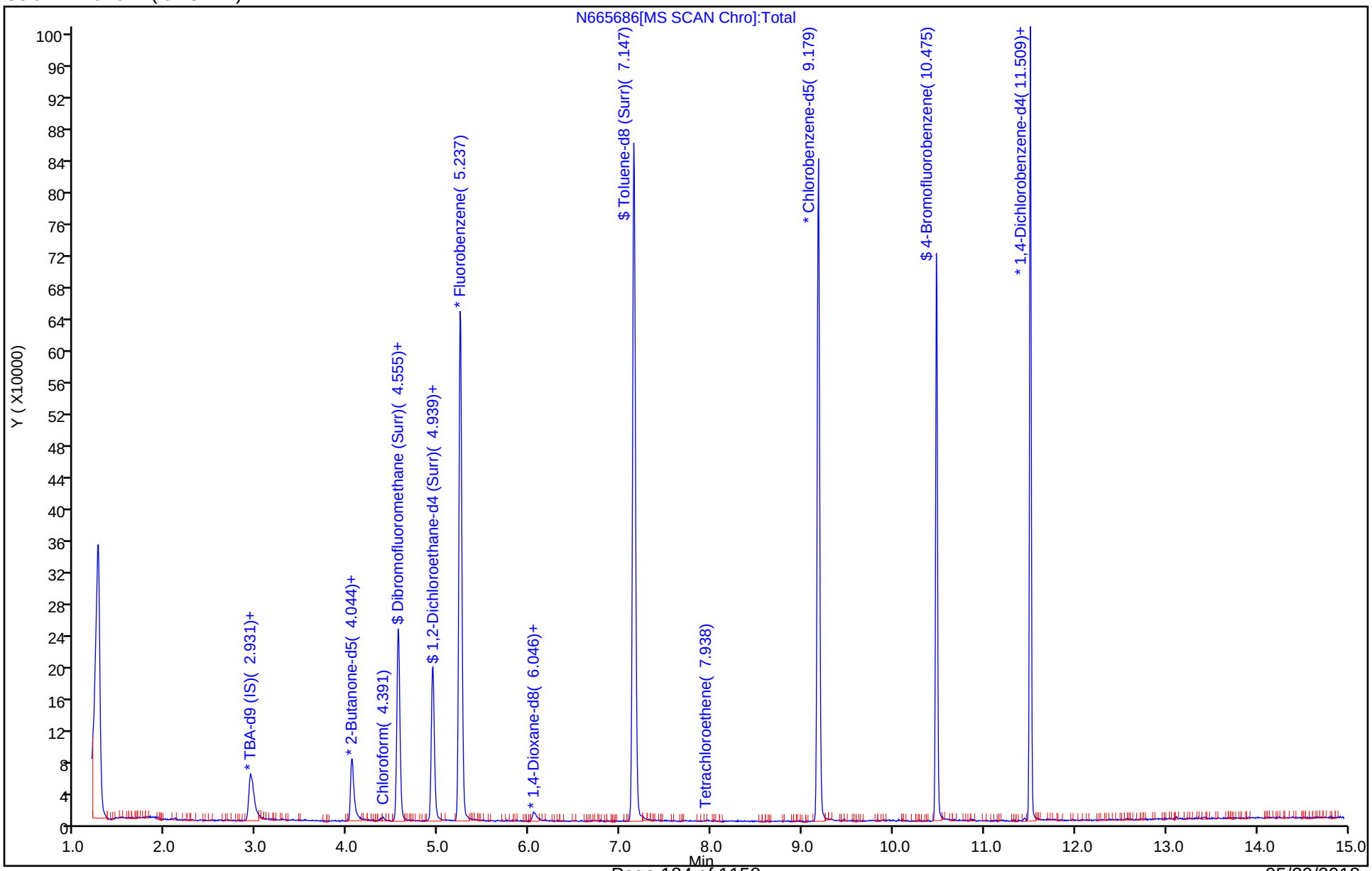
Report Date: 04-May-2018 17:31:14 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665686.D

Injection Date:	03-May-2018 20:30:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-C-4	Lab Sample ID:	460-154781-4	Worklist Smp#:	9
Client ID:	GC-MW-1B(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

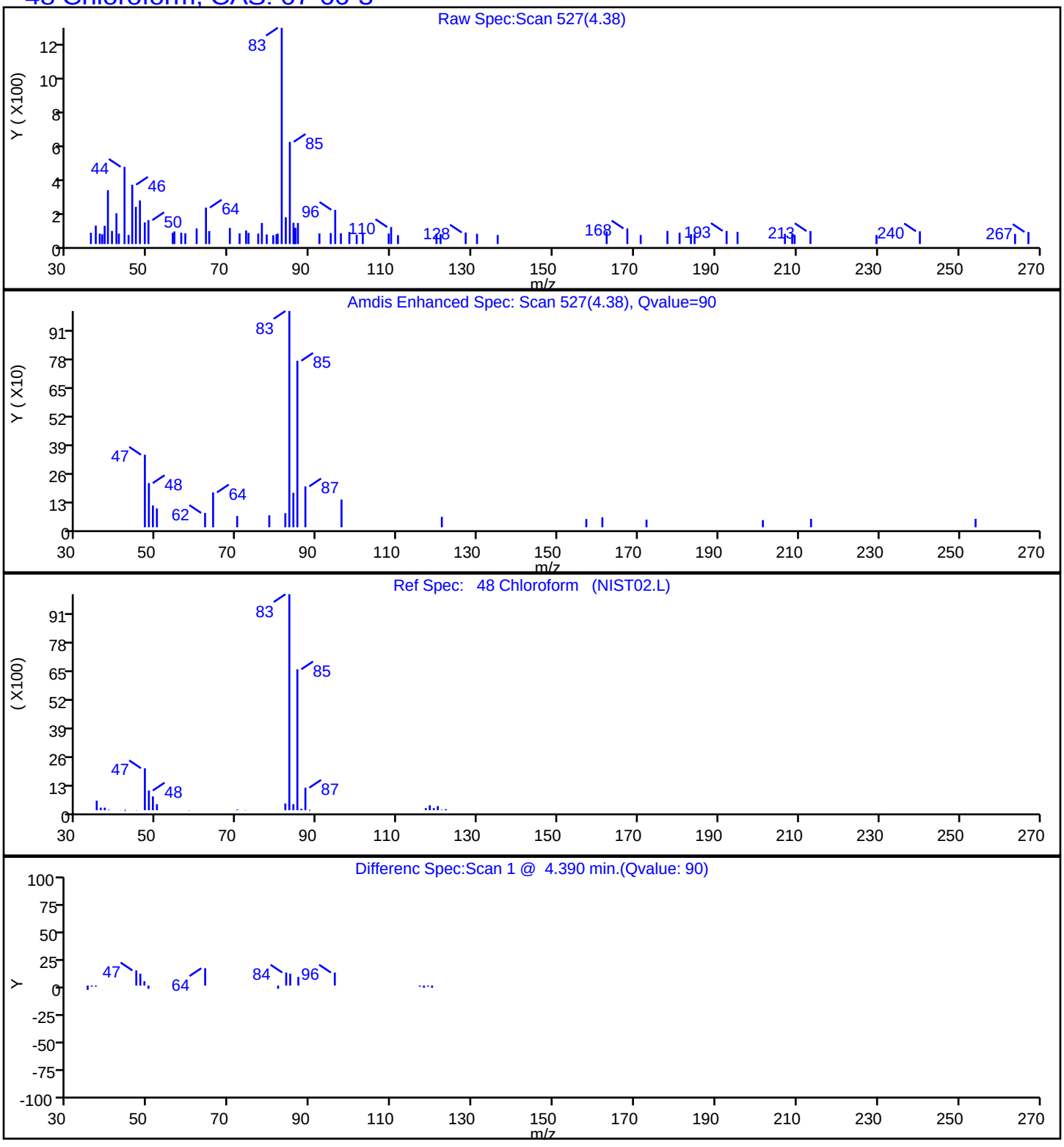
Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665686.D

Injection Date:	03-May-2018 20:30:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-C-4	Lab Sample ID:	460-154781-4
Client ID:	GC-MW-1B(WG)		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

48 Chloroform, CAS: 67-66-3

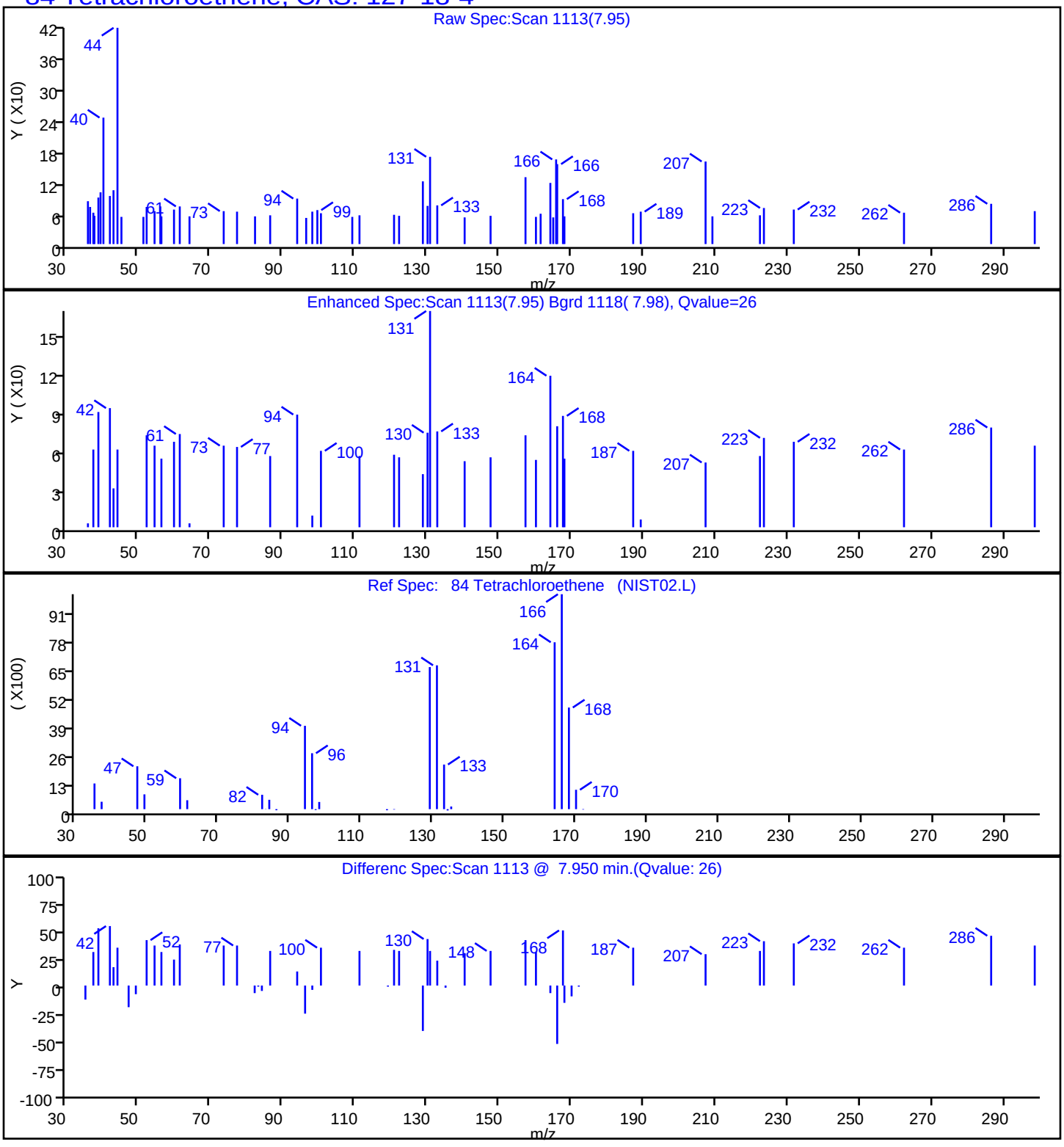


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665686.D

Injection Date:	03-May-2018 20:30:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-C-4	Lab Sample ID:	460-154781-4
Client ID:	GC-MW-1B(WG)		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

84 Tetrachloroethene, CAS: 127-18-4



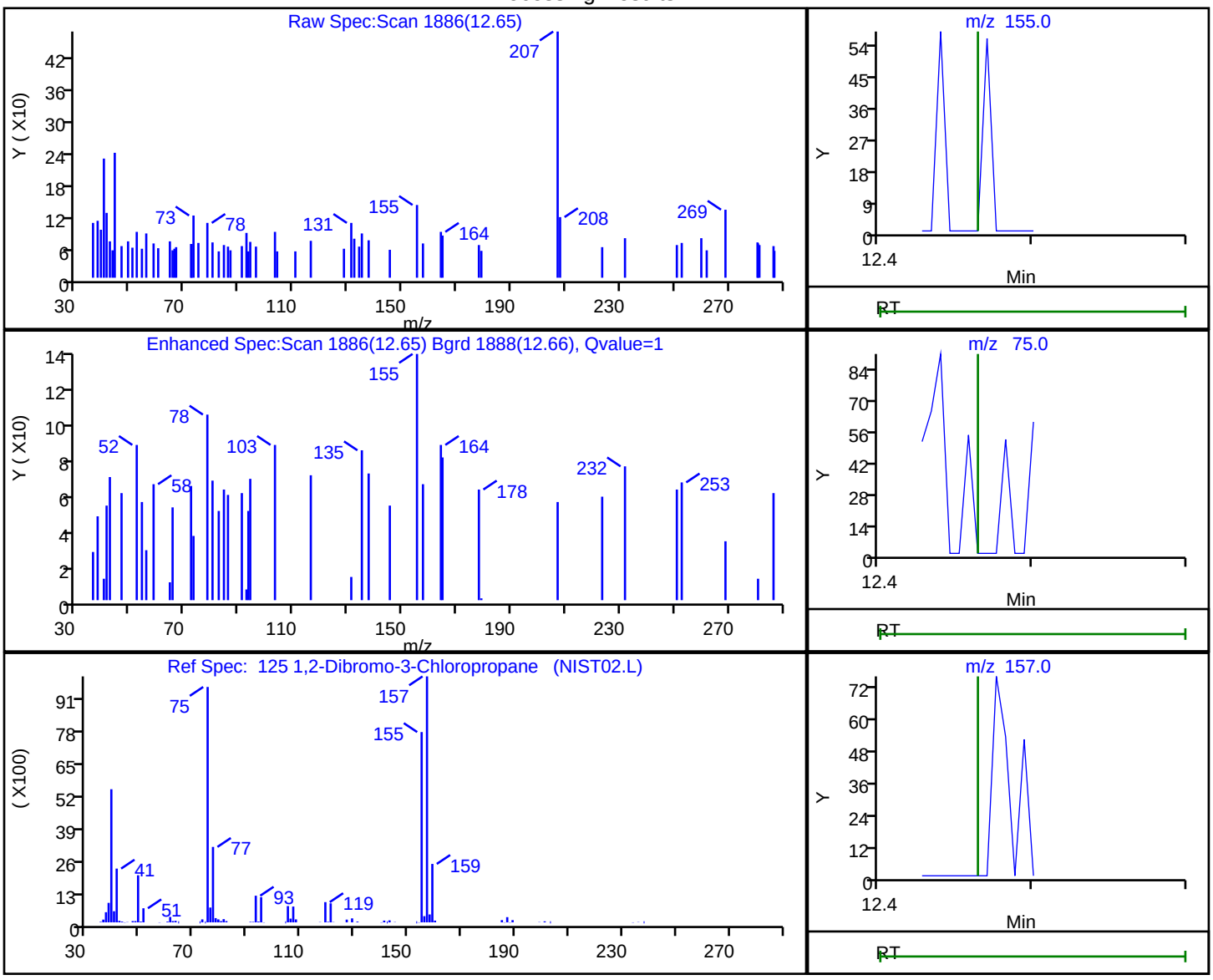
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665686.D
Injection Date: 03-May-2018 20:30:30 Instrument ID: CVOAMS11
Lims ID: 460-154781-C-4 Lab Sample ID: 460-154781-4
Client ID: GC-MW-1B(WG)
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results



RT	Mass	Response	Amount
12.65	155.00	50	0.247150
12.65	75.00	70	
12.66	157.00	49	

Reviewer: tupayachia, 04-May-2018 04:36:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

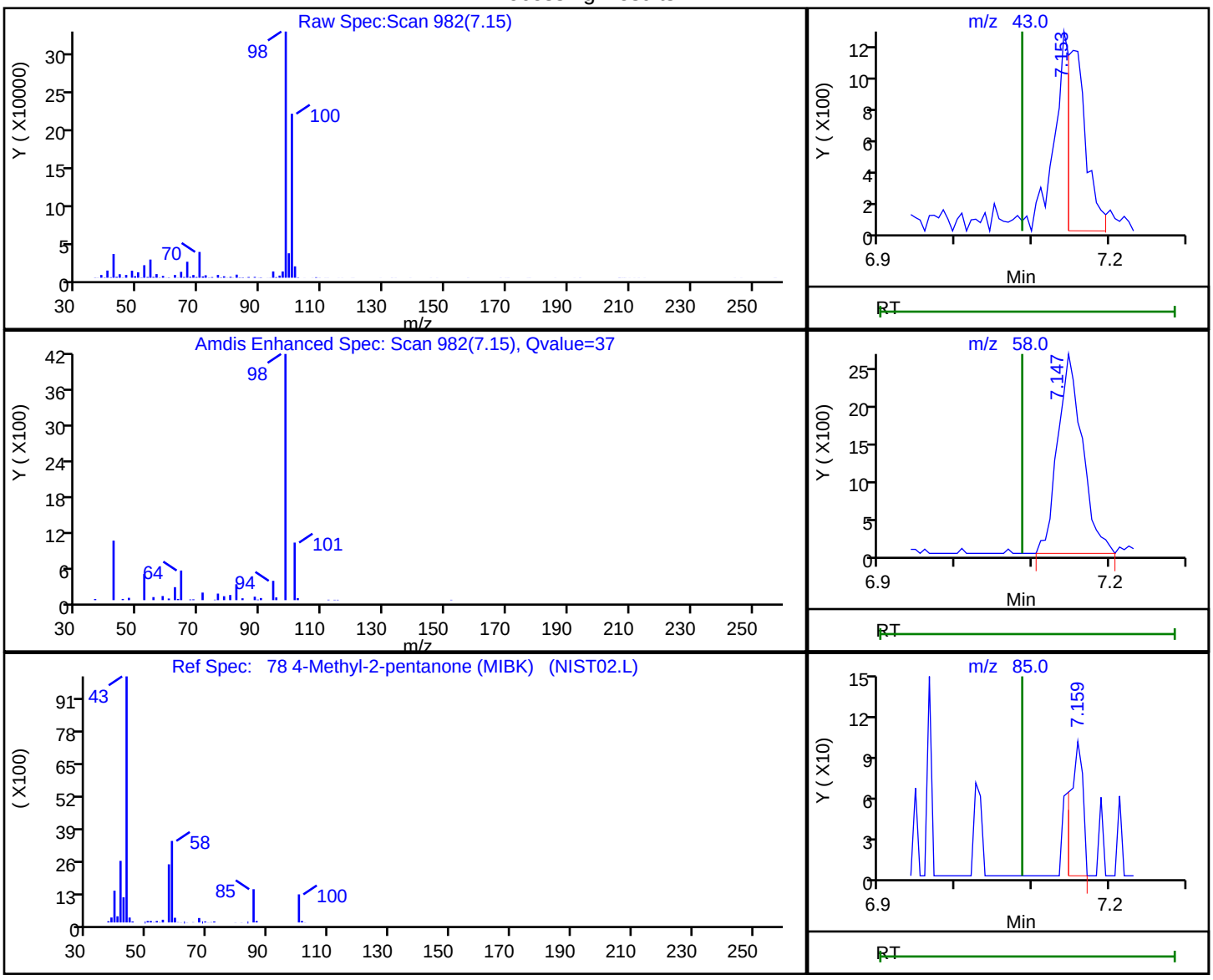
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665686.D		
Injection Date:	03-May-2018 20:30:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-C-4	Lab Sample ID:	460-154781-4
Client ID:	GC-MW-1B(WG)		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	1889	1.365828
7.15	58.00	6064	
7.16	85.00	112	
7.15	100.00	496325	

Reviewer: tupayachia, 04-May-2018 04:36:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

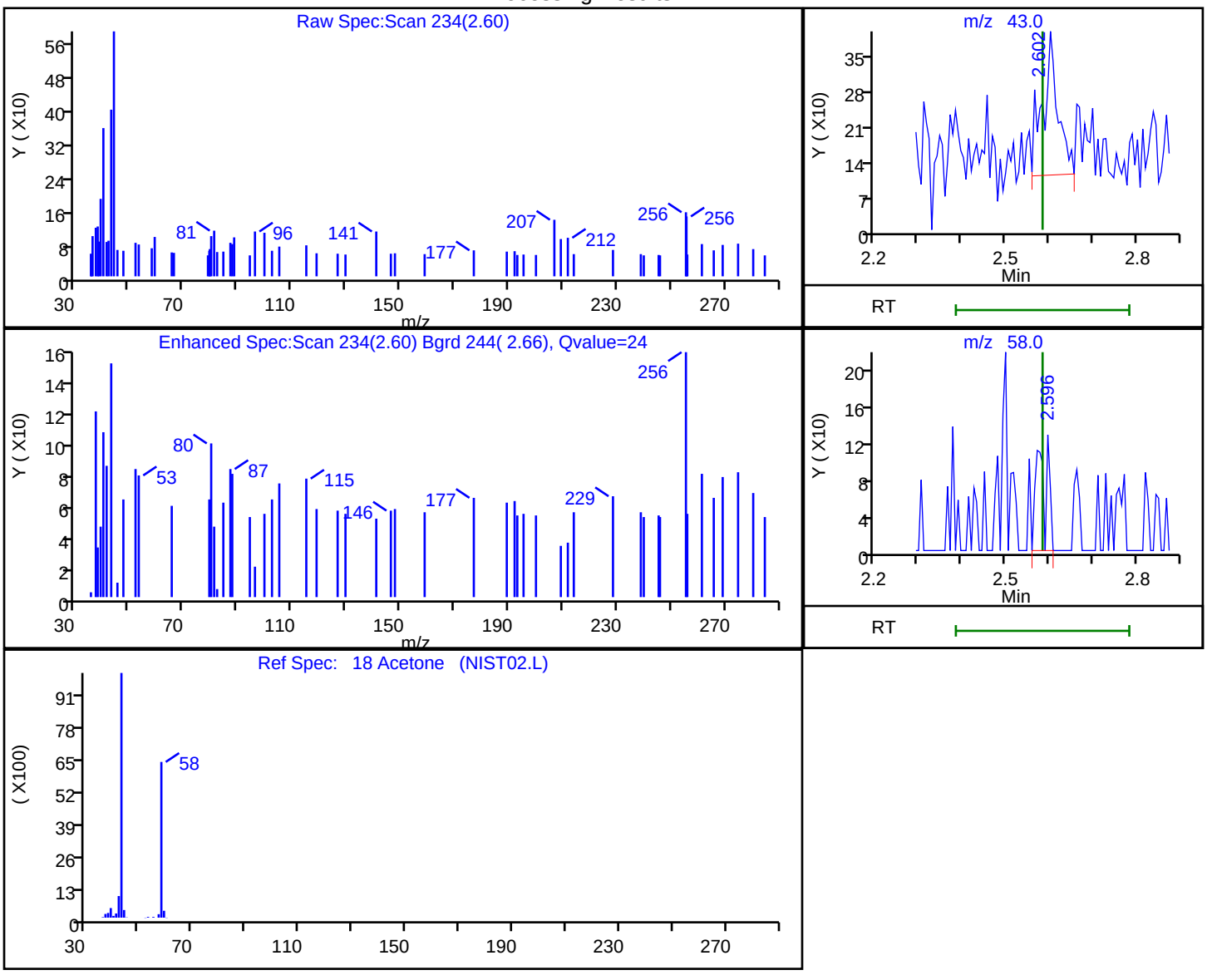
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665686.D		
Injection Date:	03-May-2018 20:30:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-C-4	Lab Sample ID:	460-154781-4
Client ID:	GC-MW-1B(WG)		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.60	43.00	696	2.202281
2.60	58.00	208	

Reviewer: tupayachia, 04-May-2018 04:36:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 460-154781-5

Matrix: Water | Lab File ID: N66531.D

Analysis Method: 8260C | Date Collected: 04/25/2018 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 460-154781-5

Matrix: Water | Lab File ID: N66531.D

Analysis Method: 8260C | Date Collected: 04/25/2018 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.2		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		74-132
460-00-4	4-Bromofluorobenzene	91		77-124
1868-53-7	Dibromofluoromethane (Surr)	112		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-103(WG) Lab Sample ID: 460-154781-5

Matrix: Water Lab File ID: N66531.D

Analysis Method: 8260C Date Collected: 04/25/2018 13:10

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 01:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66531.D
Lims ID: 460-154781-B-5
Client ID: GC-MW-103(WG)
Sample Type: Client
Inject. Date: 03-May-2018 01:47:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-5
Misc. Info.: 460-0071421-020
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:57:46 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: tupayachia Date: 03-May-2018 05:57:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.937	2.931	0.006	0	106756	1000.0	
* 39 2-Butanone-d5	46	4.044	4.044	0.000	0	119242	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.556	-0.001	96	164486	55.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	162803	57.6	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	656236	50.0	
* 68 1,4-Dioxane-d8	96	6.046	6.052	-0.006	0	14000	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	698811	47.0	
84 Tetrachloroethene	166	7.956	7.956	0.000	92	3786	1.19	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	506730	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	84	152576	45.3	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	98	218965	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

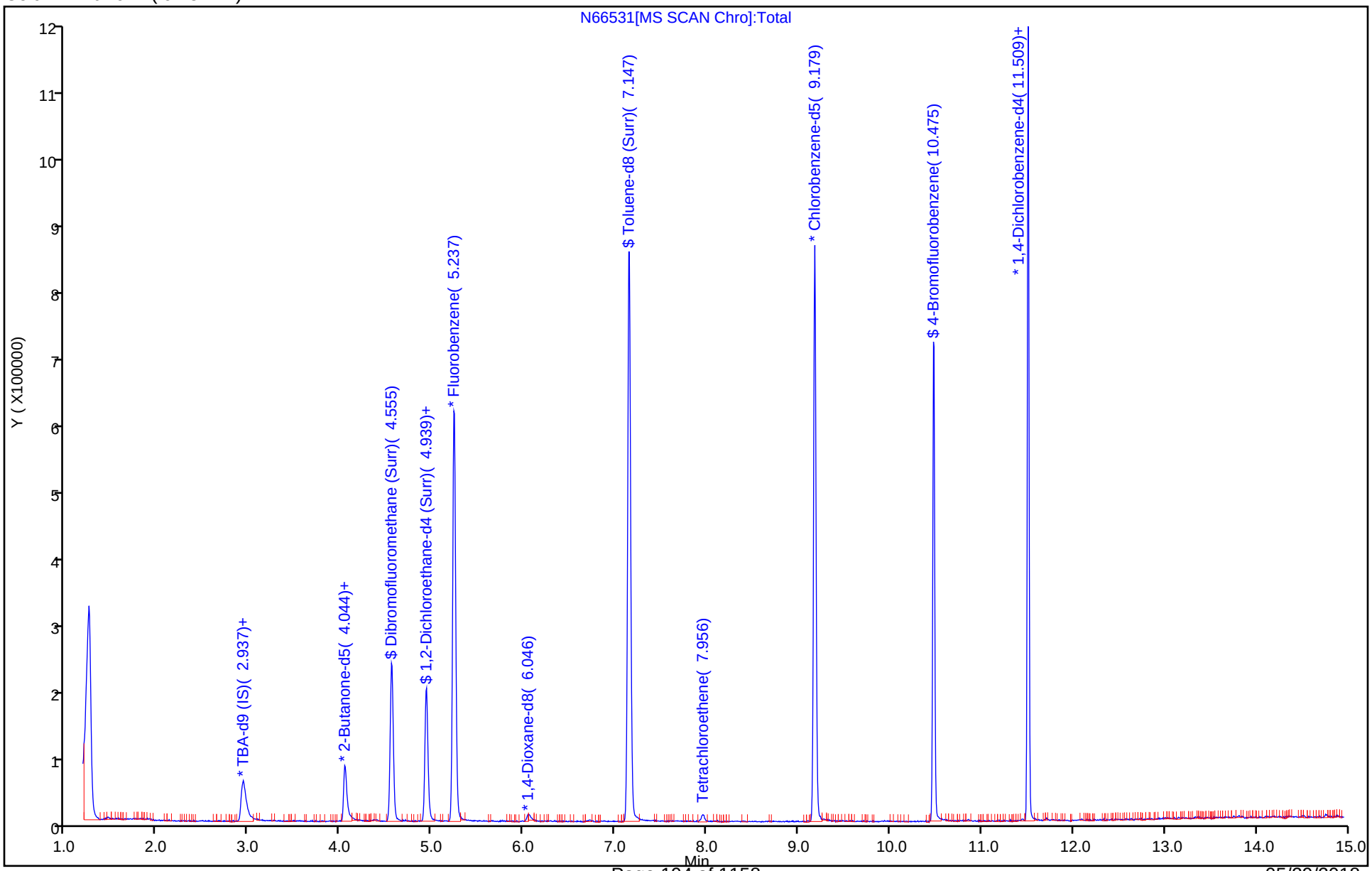
Report Date: 03-May-2018 18:01:32 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66531.D

Injection Date:	03-May-2018 01:47:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-5	Lab Sample ID:	460-154781-5	Worklist Smp#:	20
Client ID:	GC-MW-103(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

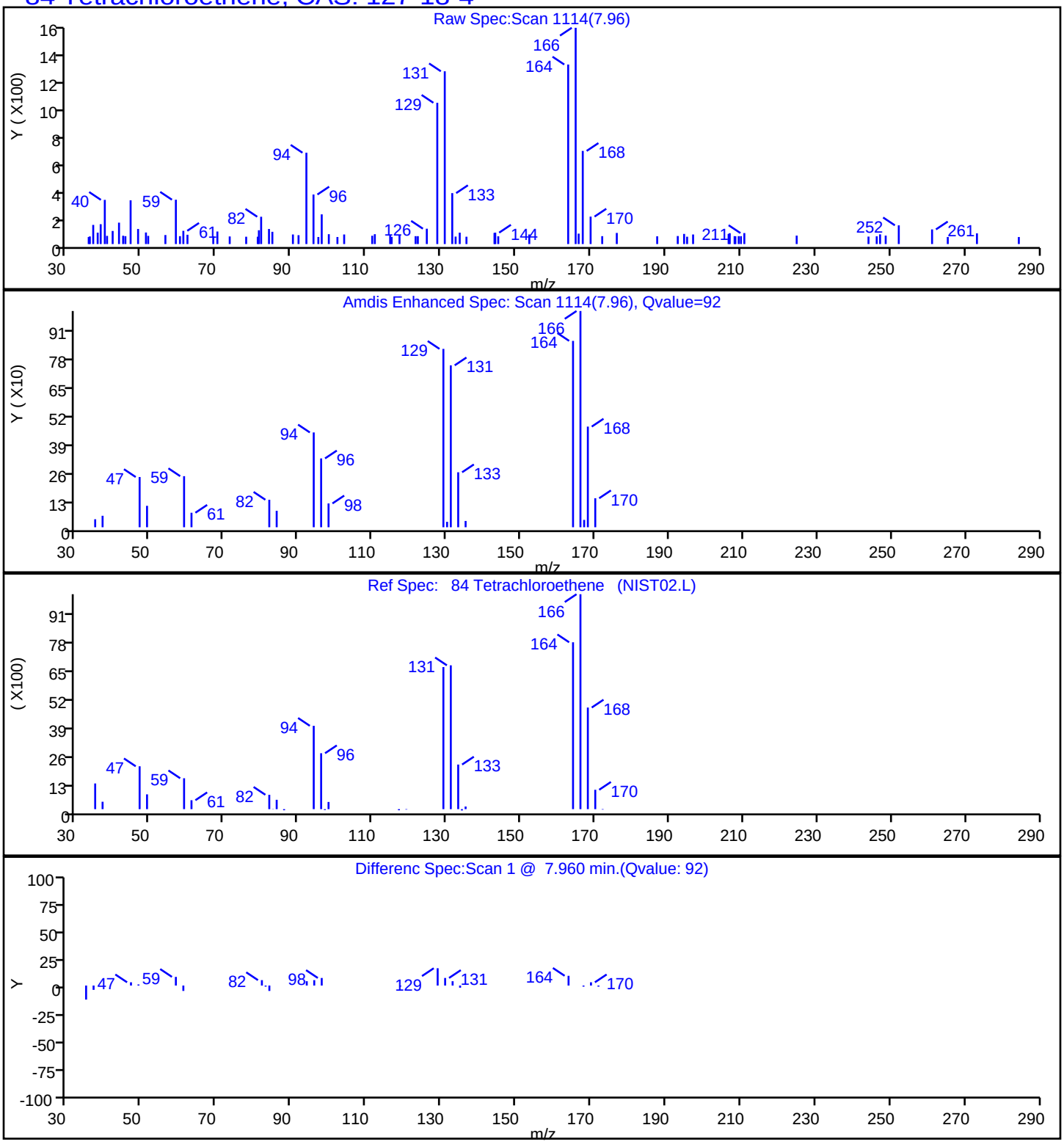
Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66531.D

Injection Date:	03-May-2018 01:47:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-5	Lab Sample ID:	460-154781-5
Client ID:	GC-MW-103(WG)		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

84 Tetrachloroethene, CAS: 127-18-4



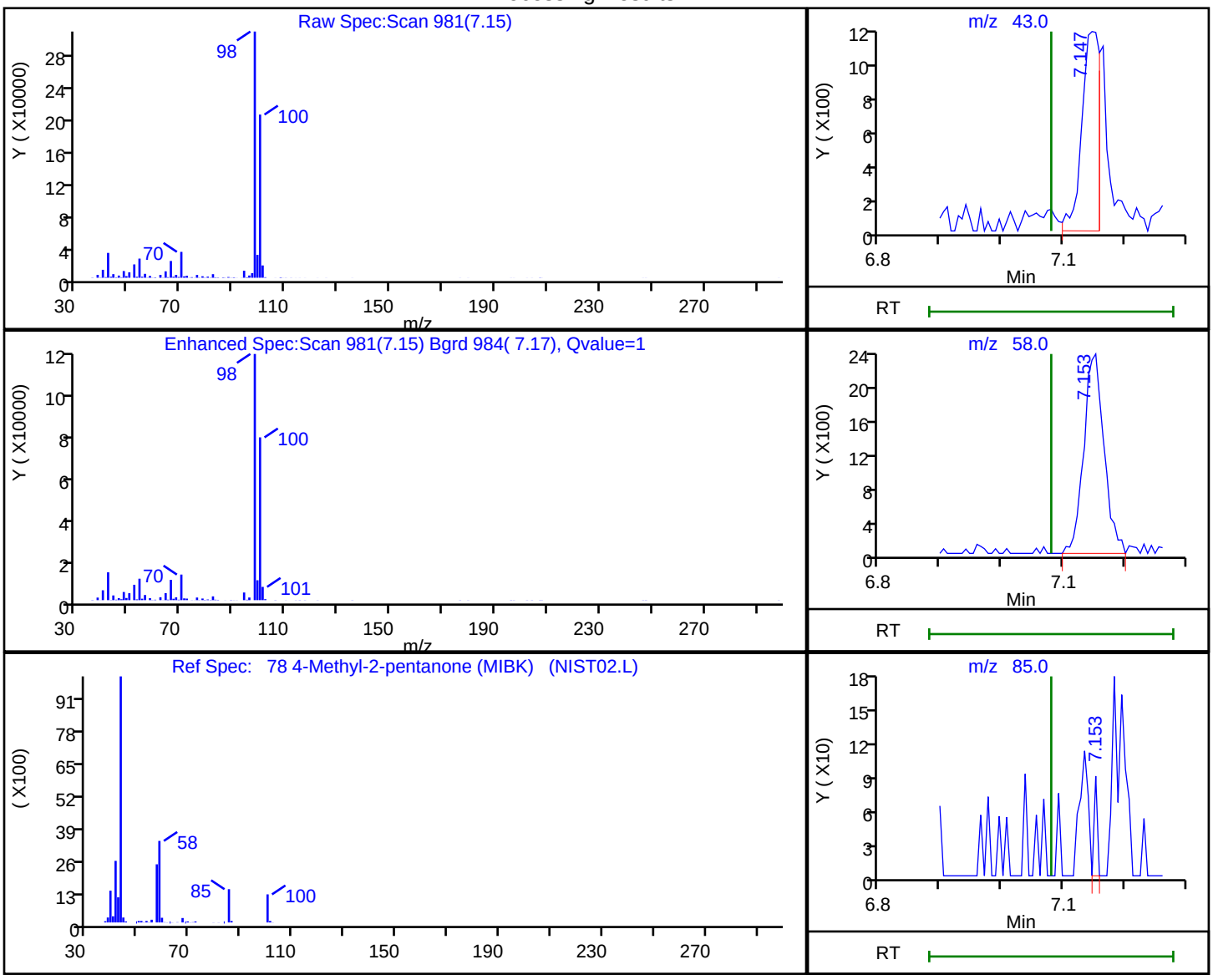
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66531.D		
Injection Date:	03-May-2018 01:47:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-5	Lab Sample ID:	460-154781-5
Client ID:	GC-MW-103(WG)		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	2421	1.873404
7.15	58.00	5361	
7.15	85.00	32	
7.15	100.00	463129	

Reviewer: tupayachia, 03-May-2018 05:57:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 460-154781-6

Matrix: Water | Lab File ID: N66532.D

Analysis Method: 8260C | Date Collected: 04/25/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 460-154781-6

Matrix: Water | Lab File ID: N66532.D

Analysis Method: 8260C | Date Collected: 04/25/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.34	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		74-132
460-00-4	4-Bromofluorobenzene	93		77-124
1868-53-7	Dibromofluoromethane (Surr)	115		72-131
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-104(WG) Lab Sample ID: 460-154781-6

Matrix: Water Lab File ID: N66532.D

Analysis Method: 8260C Date Collected: 04/25/2018 13:35

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 02:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66532.D
Lims ID: 460-154781-B-6
Client ID: GC-MW-104(WG)
Sample Type: Client
Inject. Date: 03-May-2018 02:10:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-6
Misc. Info.: 460-0071421-021
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:57:46 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: tupayachia Date: 03-May-2018 05:57:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.931	2.931	0.000	0	113663	1000.0	
* 39 2-Butanone-d5	46	4.044	4.044	0.000	0	123160	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.556	-0.001	95	170993	57.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	165504	58.1	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	661115	50.0	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	13882	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	707505	47.4	
84 Tetrachloroethene	166	7.962	7.956	0.006	86	1081	0.3379	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	87	509350	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	86	158111	46.7	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	222598	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

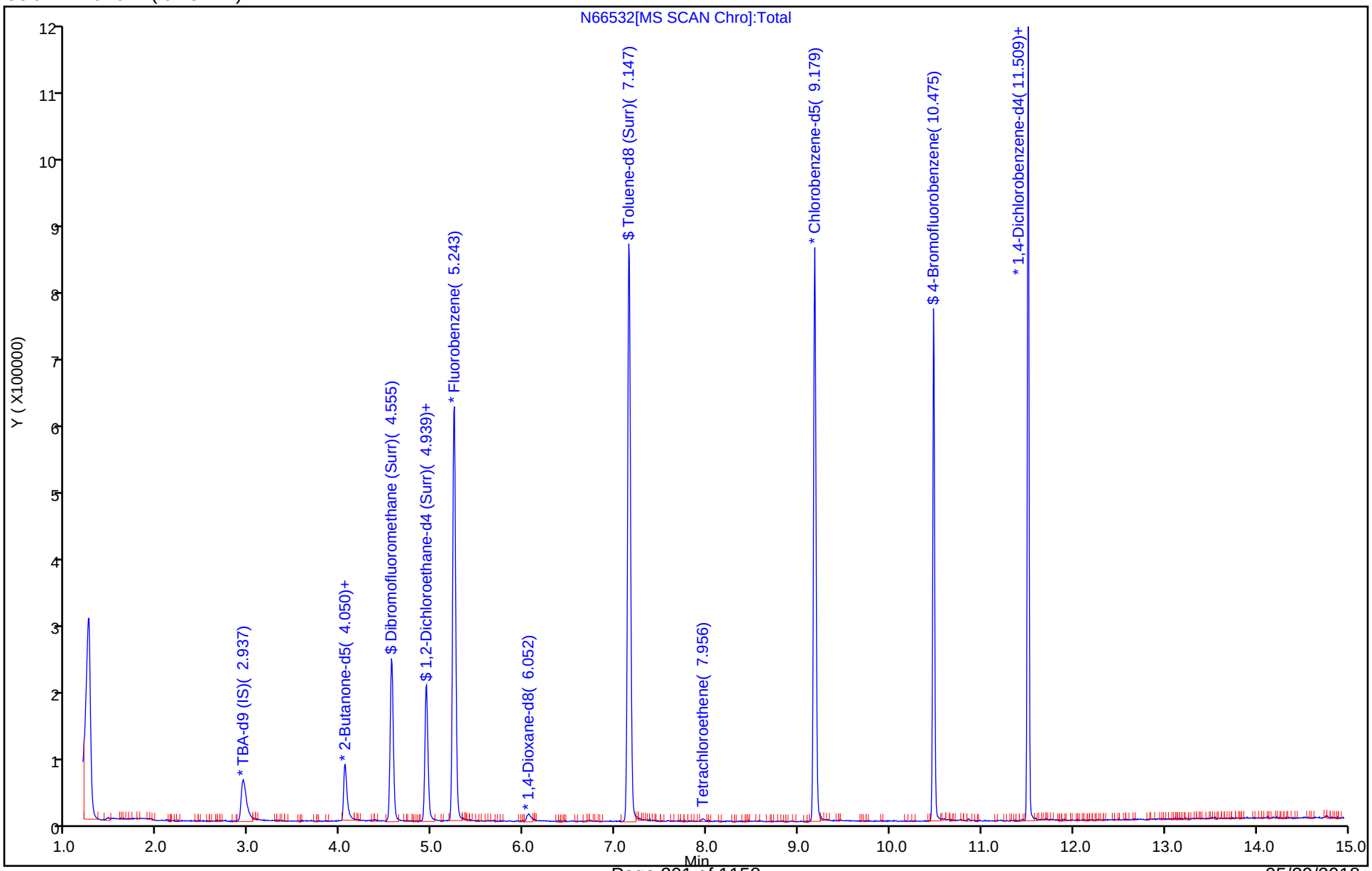
Report Date: 03-May-2018 18:01:38 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66532.D

Injection Date:	03-May-2018 02:10:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-6	Lab Sample ID:	460-154781-6	Worklist Smp#:	21
Client ID:	GC-MW-104(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

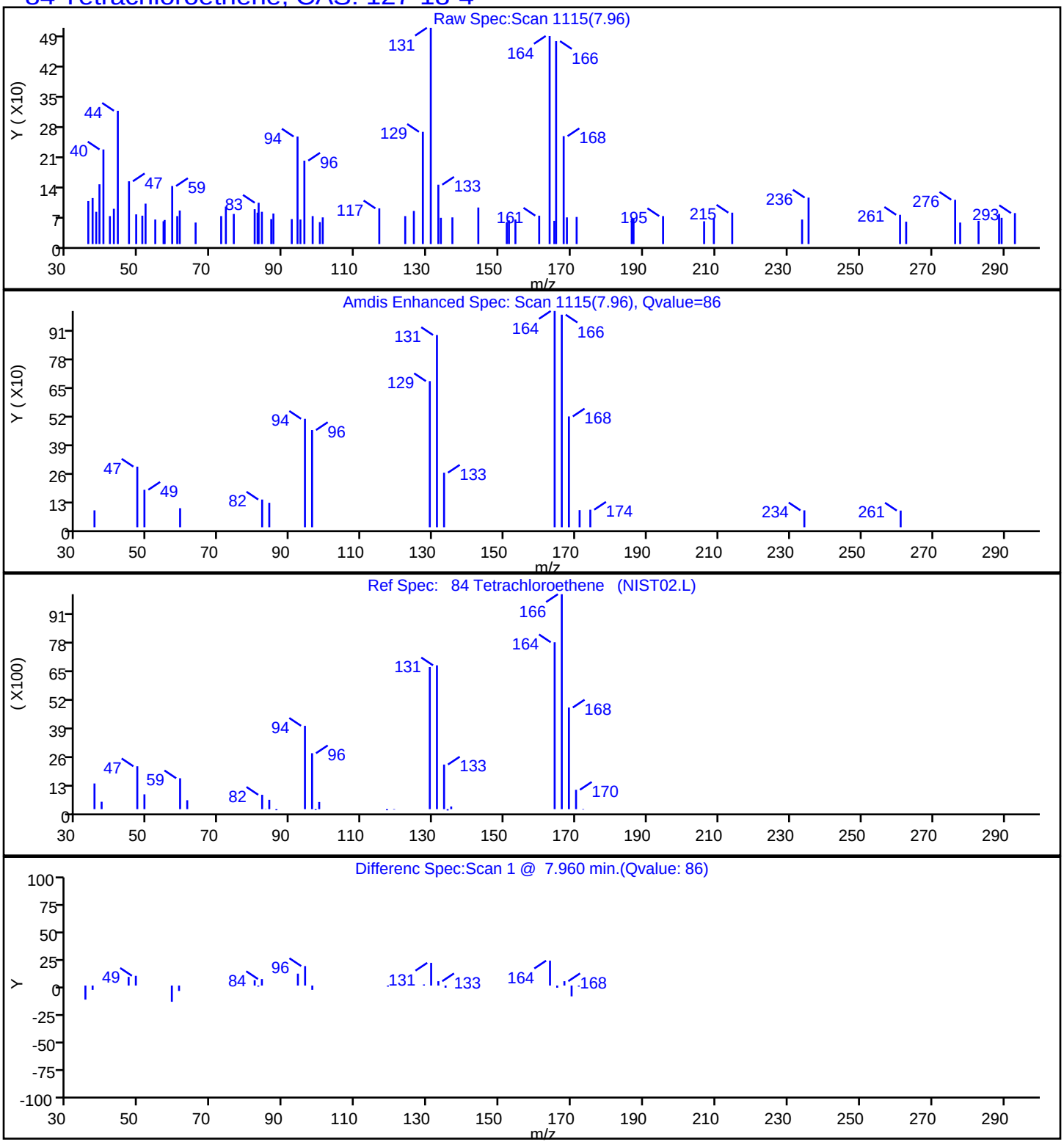
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66532.D		
Injection Date:	03-May-2018 02:10:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-6	Lab Sample ID:	460-154781-6
Client ID:	GC-MW-104(WG)		
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

84 Tetrachloroethene, CAS: 127-18-4



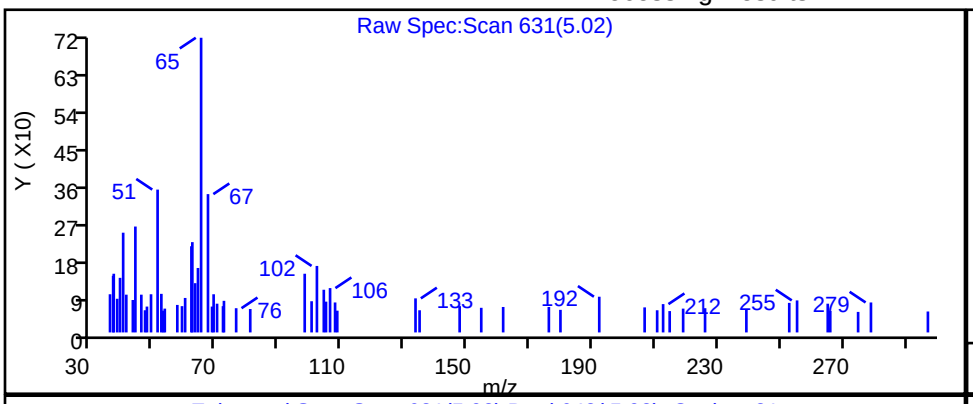
User Disabled Compound Report

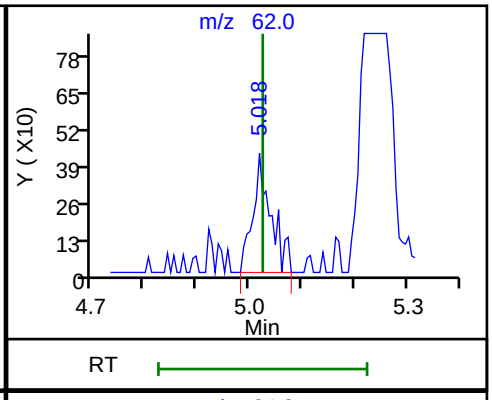
TestAmerica Edison

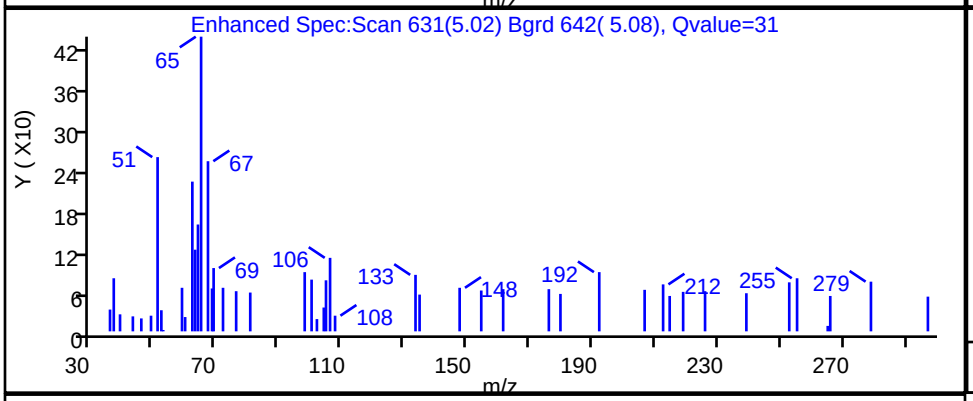
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66532.D		
Injection Date:	03-May-2018 02:10:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-6	Lab Sample ID:	460-154781-6
Client ID:	GC-MW-104(WG)		
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

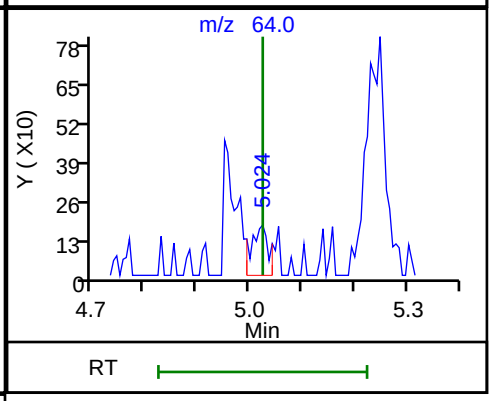
60 1,2-Dichloroethane, CAS: 107-06-2

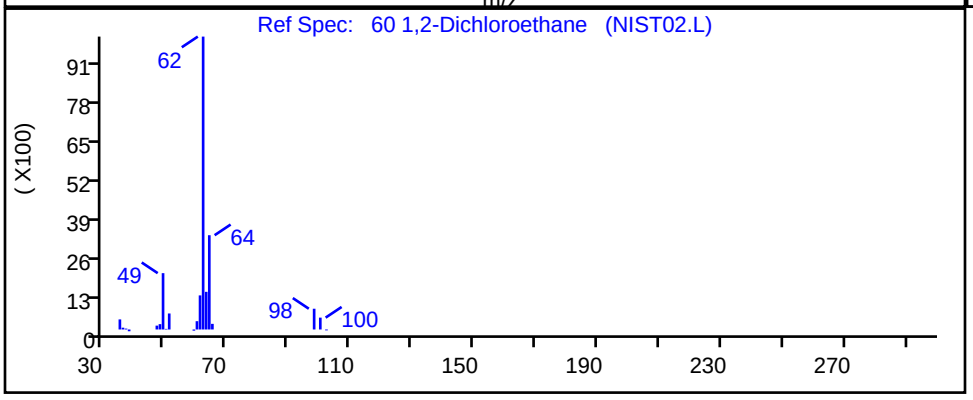
Processing Results











RT	Mass	Response	Amount
5.02	62.00	1027	0.307633
5.02	64.00	382	

Reviewer: tupayachia, 03-May-2018 05:57:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

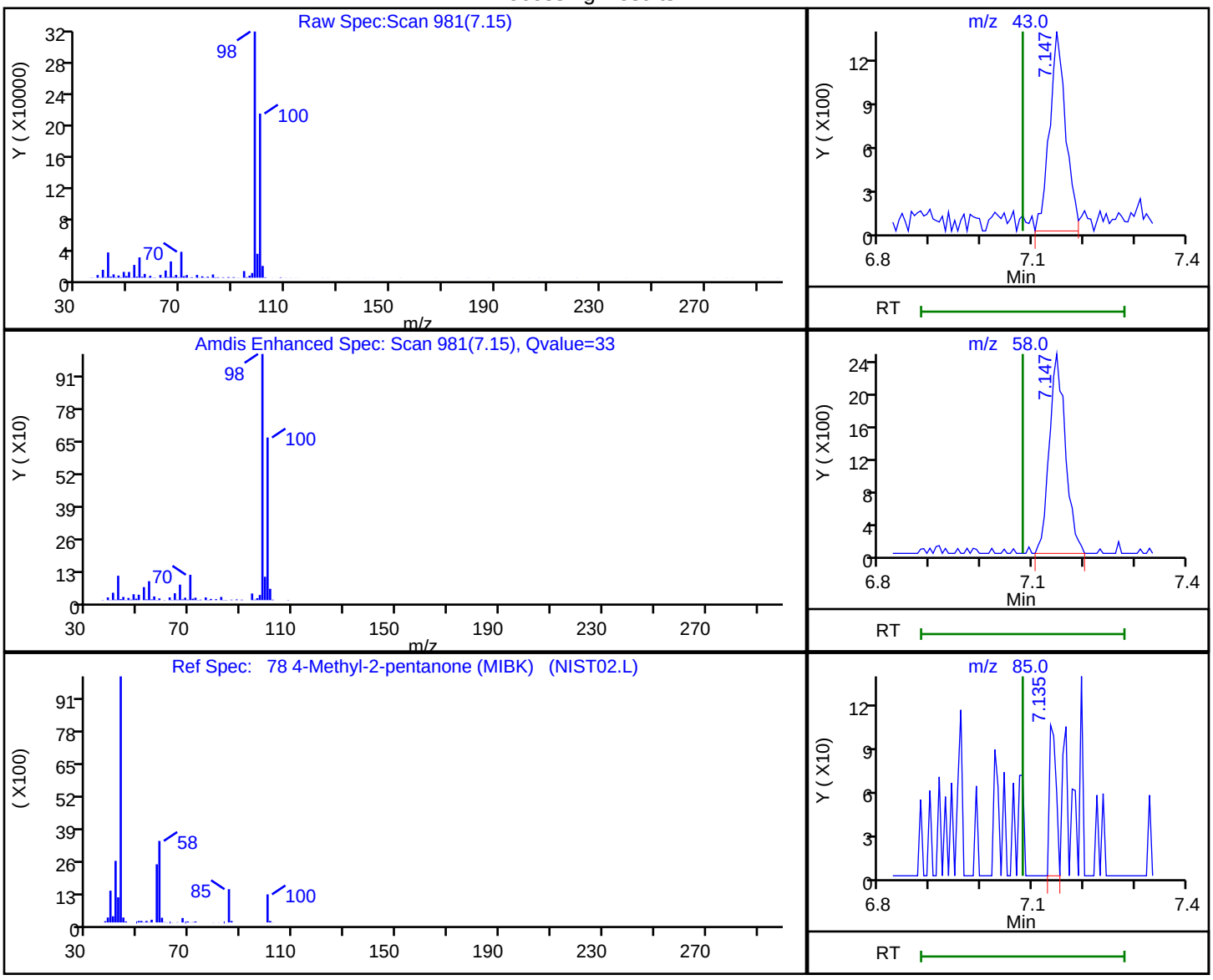
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66532.D		
Injection Date:	03-May-2018 02:10:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-6	Lab Sample ID:	460-154781-6
Client ID:	GC-MW-104(WG)		
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	2963	2.219871
7.15	58.00	5349	
7.13	85.00	89	
7.15	100.00	464365	

Reviewer: tupayachia, 03-May-2018 05:57:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

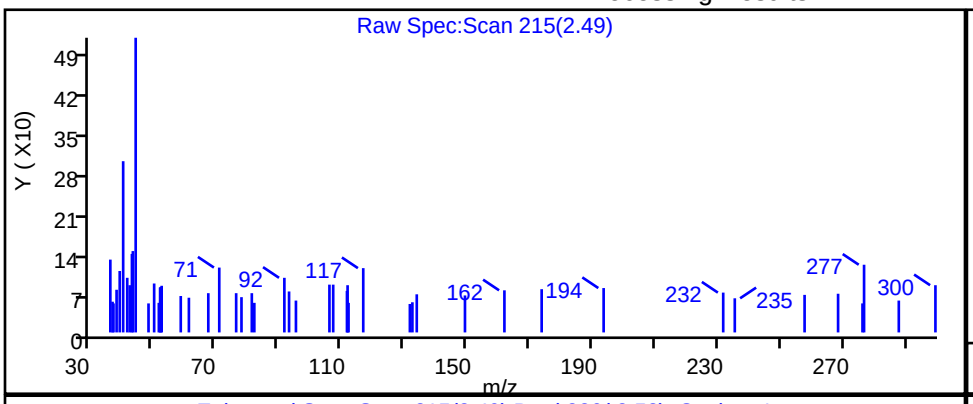
User Disabled Compound Report

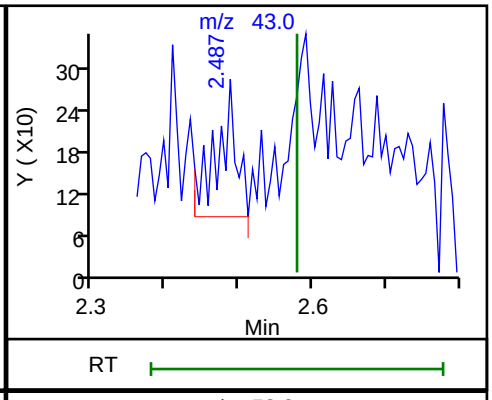
TestAmerica Edison

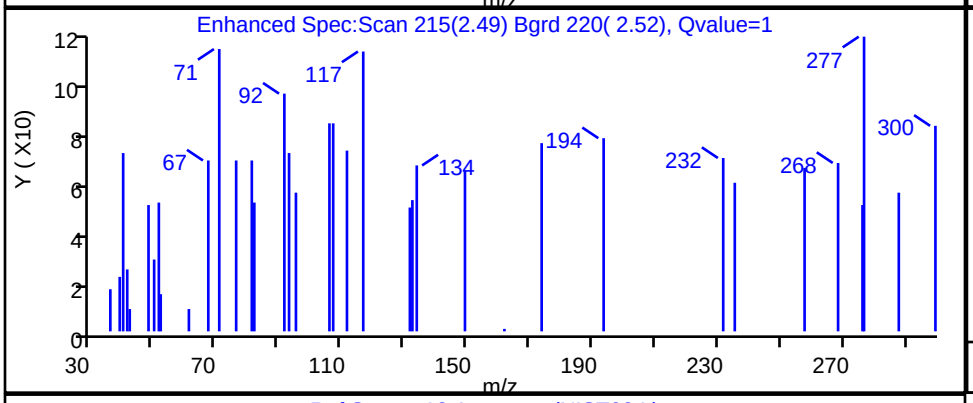
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66532.D		
Injection Date:	03-May-2018 02:10:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-6	Lab Sample ID:	460-154781-6
Client ID:	GC-MW-104(WG)		
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

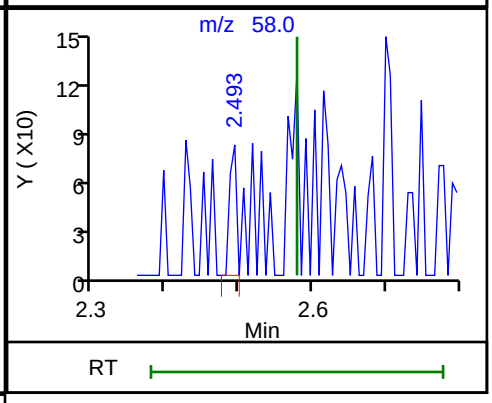
18 Acetone, CAS: 67-64-1

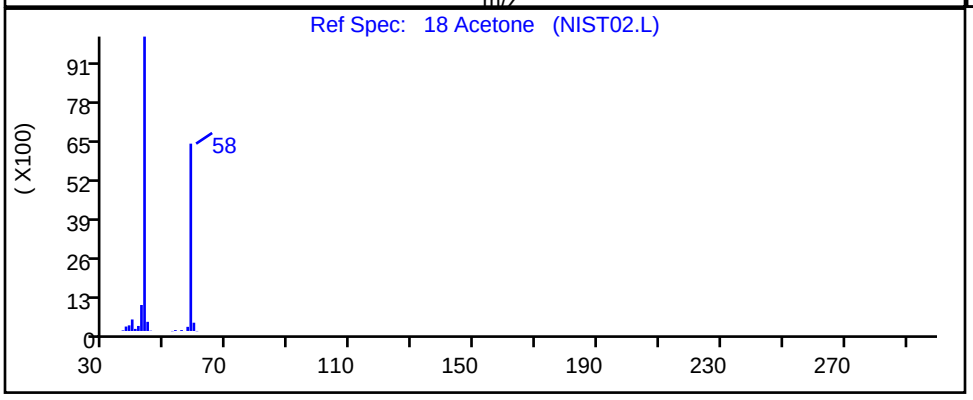
Processing Results











RT	Mass	Response	Amount
2.49	43.00	364	1.193430
2.49	58.00	53	

Reviewer: tupayachia, 03-May-2018 05:57:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 460-154781-7

Matrix: Water | Lab File ID: N66533.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:43

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 460-154781-7

Matrix: Water | Lab File ID: N66533.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:43

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		74-132
460-00-4	4-Bromofluorobenzene	92		77-124
1868-53-7	Dibromofluoromethane (Surr)	115		72-131
2037-26-5	Toluene-d8 (Surr)	90		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-105(WG) Lab Sample ID: 460-154781-7

Matrix: Water Lab File ID: N66533.D

Analysis Method: 8260C Date Collected: 04/25/2018 14:43

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 02:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66533.D
Lims ID: 460-154781-B-7
Client ID: GC-MW-105(WG)
Sample Type: Client
Inject. Date: 03-May-2018 02:33:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154802-B-1
Misc. Info.: 460-0071421-022
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 05:58:26 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: tupayachia Date: 03-May-2018 05:58:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.937	2.931	0.006	0	117829	1000.0	
* 39 2-Butanone-d5	46	4.044	4.044	0.000	0	130000	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.556	-0.001	95	174492	57.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	169709	58.3	
* 62 Fluorobenzene	96	5.237	5.243	-0.006	99	675558	50.0	
* 68 1,4-Dioxane-d8	96	6.058	6.052	0.006	0	14451	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	100	701610	44.8	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	533758	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	86	163070	46.0	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	232862	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

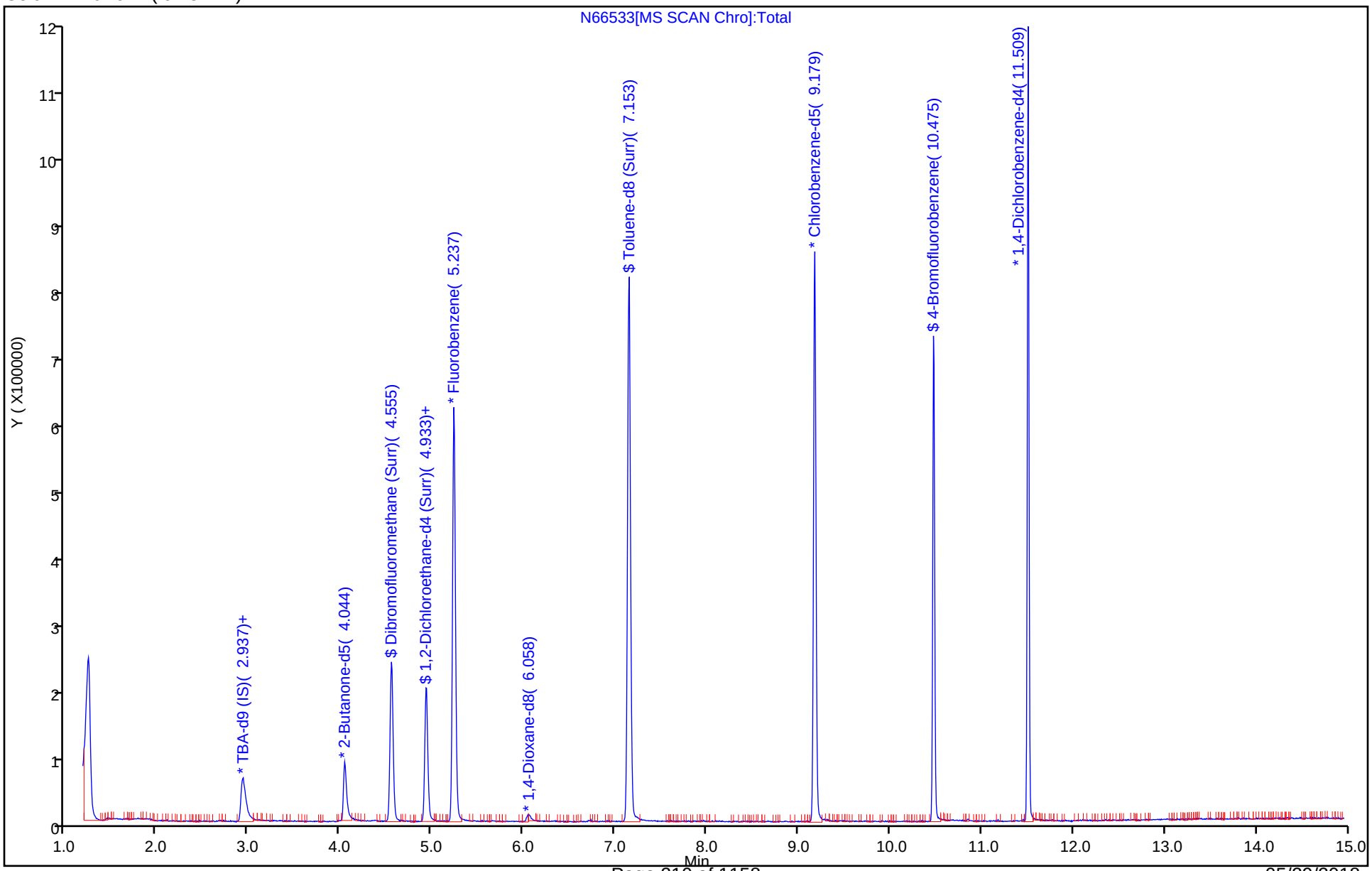
Report Date: 03-May-2018 05:58:27 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66533.D

Injection Date:	03-May-2018 02:33:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-7	Lab Sample ID:	460-154781-7	Worklist Smp#:	22
Client ID:	GC-MW-105(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



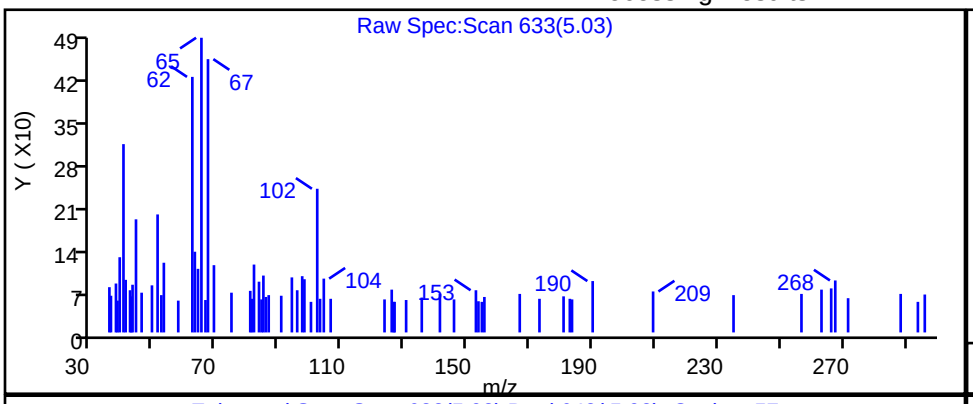
User Disabled Compound Report

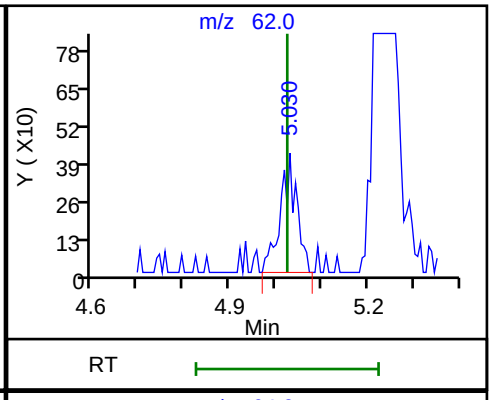
TestAmerica Edison

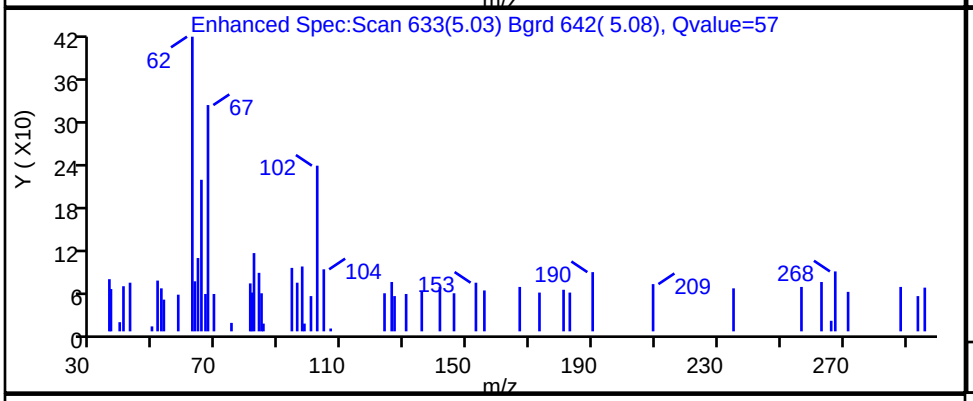
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66533.D				
Injection Date:	03-May-2018 02:33:30	Instrument ID:	CVOAMS11		
Lims ID:	460-154781-B-7	Lab Sample ID:	460-154781-7		
Client ID:	GC-MW-105(WG)				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

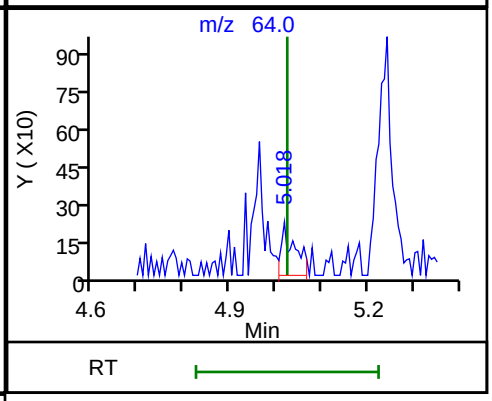
60 1,2-Dichloroethane, CAS: 107-06-2

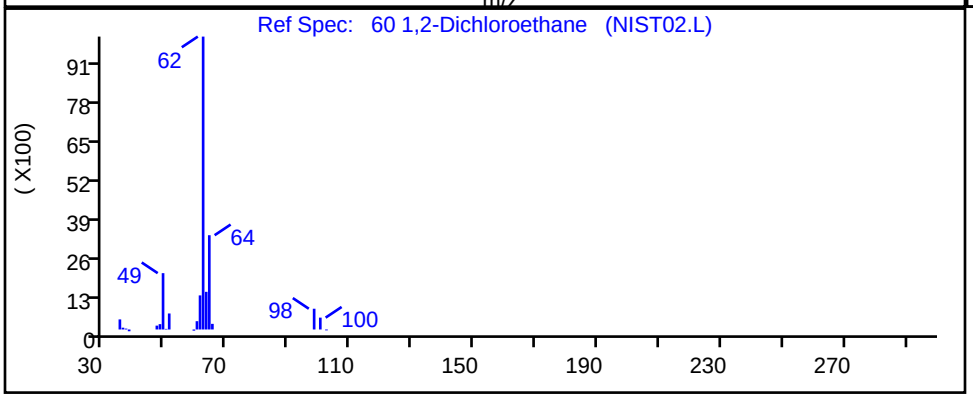
Processing Results











RT	Mass	Response	Amount
5.03	62.00	1028	0.301349
5.02	64.00	437	

Reviewer: tupayachia, 03-May-2018 05:58:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

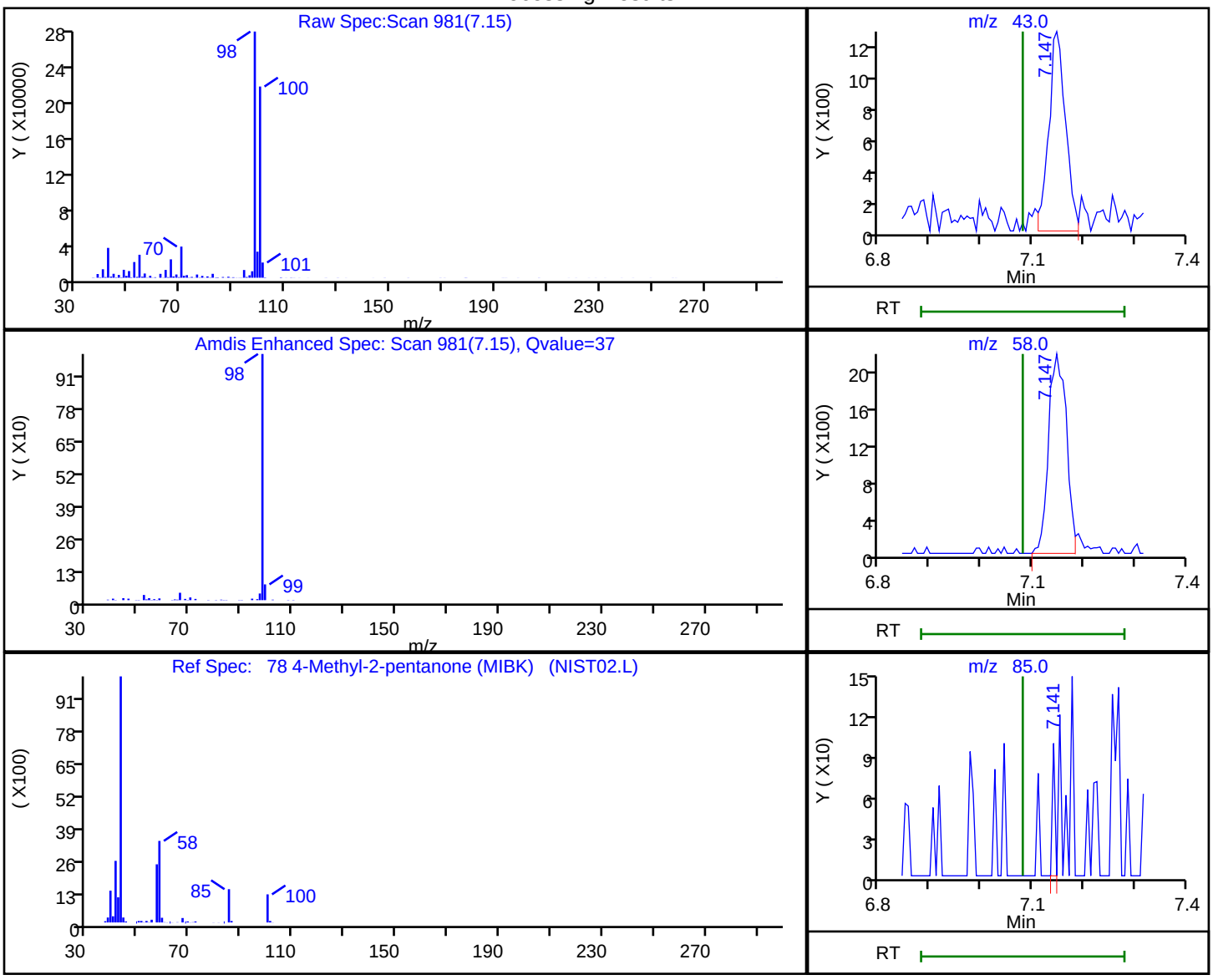
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66533.D		
Injection Date:	03-May-2018 02:33:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-7	Lab Sample ID:	460-154781-7
Client ID:	GC-MW-105(WG)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	2853	2.024996
7.15	58.00	5303	
7.14	85.00	35	
7.15	100.00	471024	

Reviewer: tupayachia, 03-May-2018 05:58:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

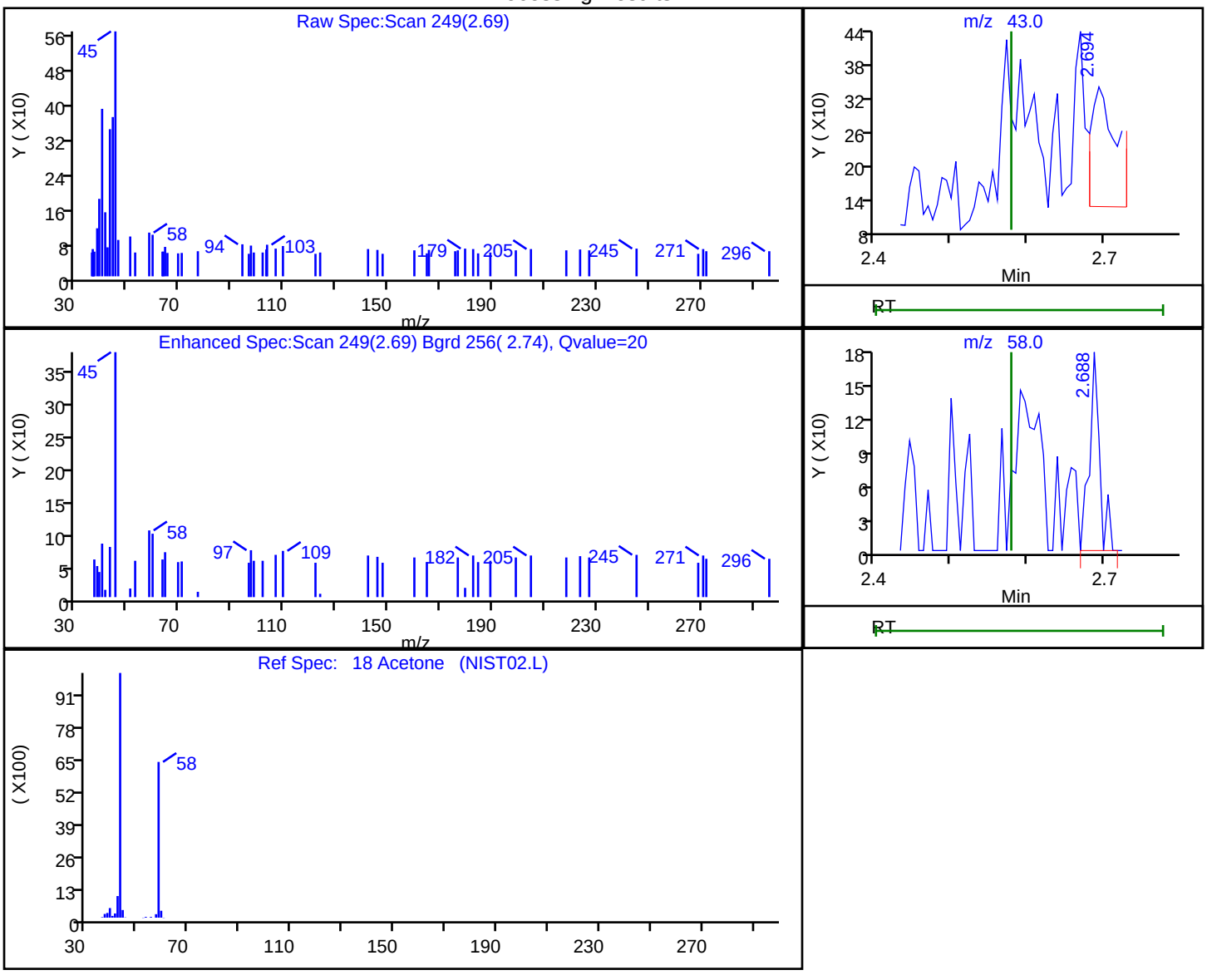
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66533.D		
Injection Date:	03-May-2018 02:33:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-7	Lab Sample ID:	460-154781-7
Client ID:	GC-MW-105(WG)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.69	43.00	450	1.397766
2.69	58.00	165	

Reviewer: tupayachia, 03-May-2018 05:58:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-DRAIN(WG) | Lab Sample ID: 460-154781-8

Matrix: Water | Lab File ID: N66562.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-DRAIN(WG) | Lab Sample ID: 460-154781-8

Matrix: Water | Lab File ID: N66562.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.14	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		74-132
460-00-4	4-Bromofluorobenzene	93		77-124
1868-53-7	Dibromofluoromethane (Surr)	111		72-131
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-DRAIN(WG) | Lab Sample ID: 460-154781-8

Matrix: Water | Lab File ID: N66562.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66562.D
Lims ID: 460-154781-B-8
Client ID: GC-DRAIN(WG)
Sample Type: Client
Inject. Date: 03-May-2018 13:34:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-8
Misc. Info.: 460-0071436-024
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 15:57:48 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: parekhv Date: 03-May-2018 18:10:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.937	2.931	0.006	0	114072	1000.0	
* 39 2-Butanone-d5	46	4.050	4.050	0.000	0	125069	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.555	0.000	95	171566	55.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.933	0.006	0	166334	56.0	
* 62 Fluorobenzene	96	5.243	5.237	0.006	99	689445	50.0	
* 68 1,4-Dioxane-d8	96	6.058	6.052	0.006	0	13088	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	714146	47.6	
84 Tetrachloroethene	166	7.968	7.956	0.012	57	460	0.1432	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	511322	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	85	157271	46.3	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	227167	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

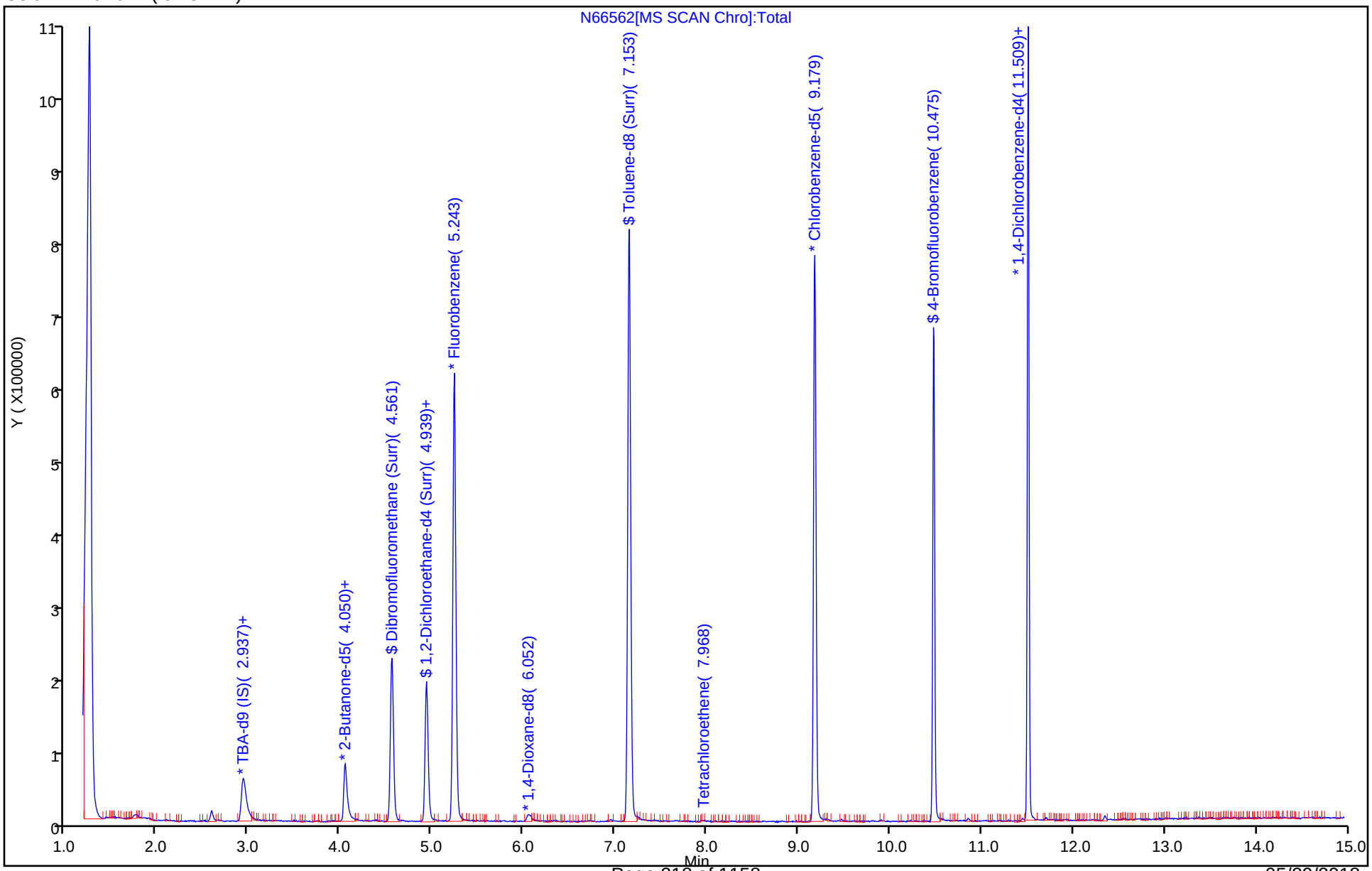
Report Date: 04-May-2018 15:58:02 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66562.D

Injection Date:	03-May-2018 13:34:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-8	Lab Sample ID:	460-154781-8	Worklist Smp#:	24
Client ID:	GC-DRAIN(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)

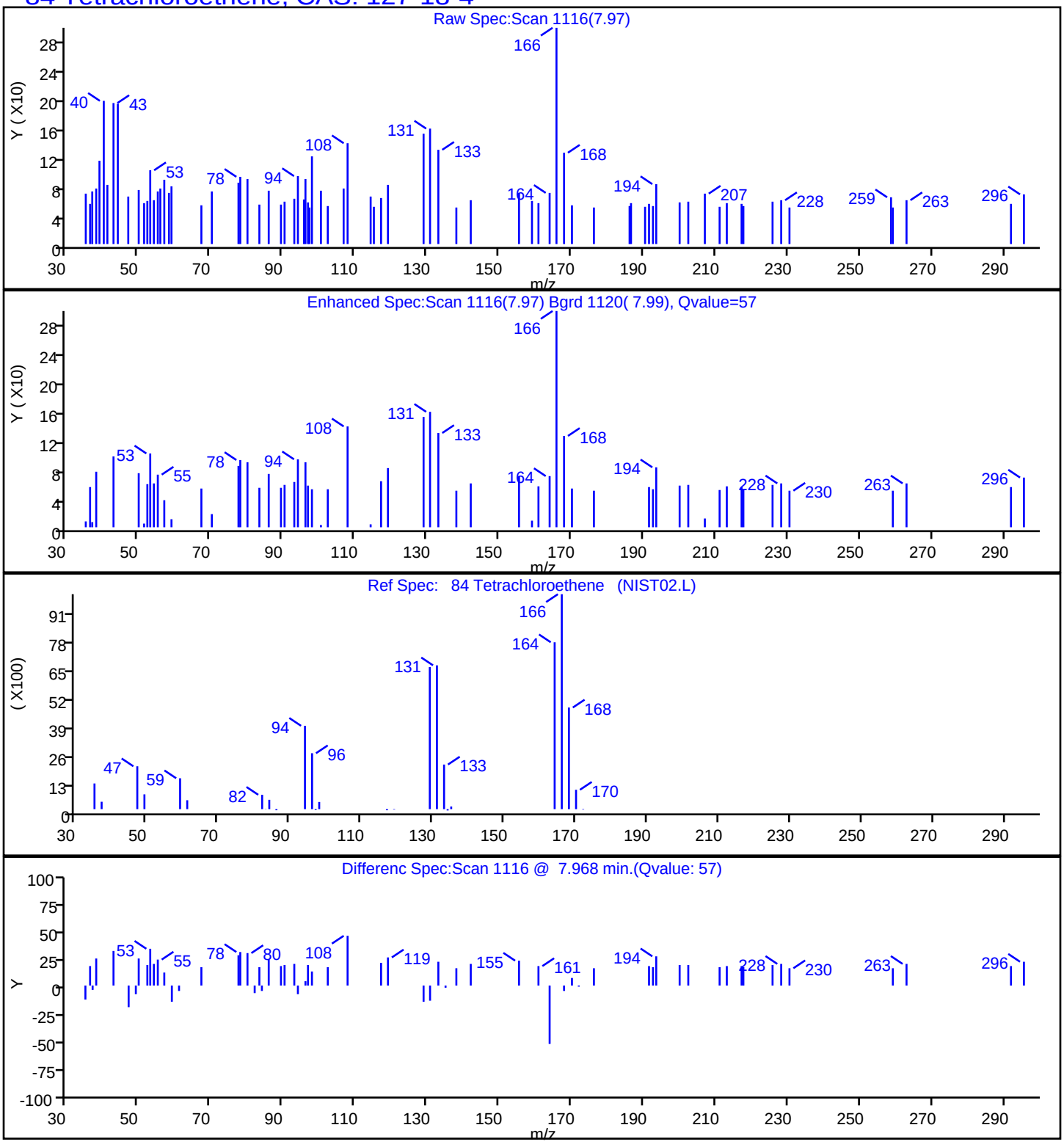


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66562.D

Injection Date:	03-May-2018 13:34:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-8	Lab Sample ID:	460-154781-8
Client ID:	GC-DRAIN(WG)		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

84 Tetrachloroethene, CAS: 127-18-4



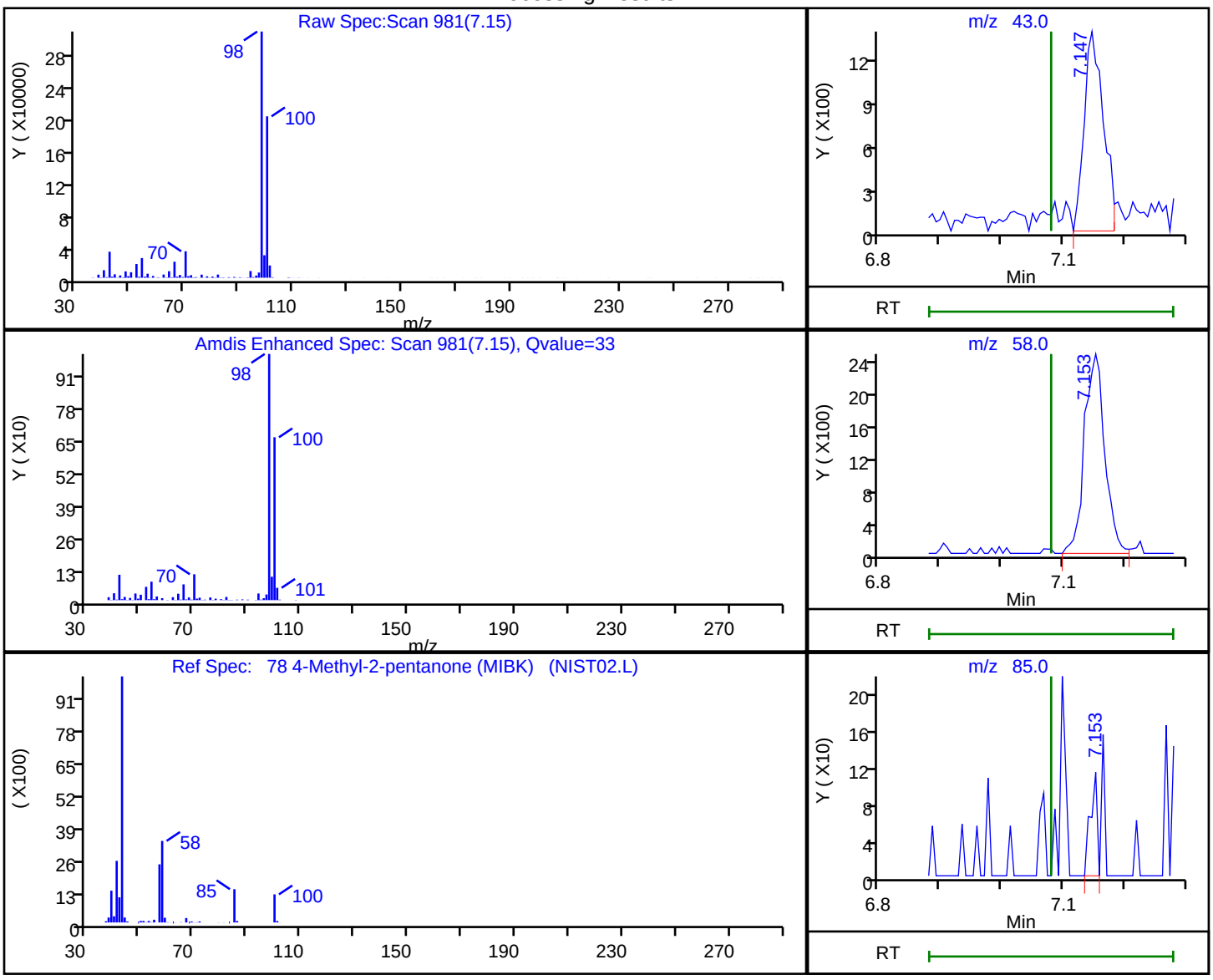
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66562.D				
Injection Date:	03-May-2018 13:34:30	Instrument ID:	CVOAMS11		
Lims ID:	460-154781-B-8	Lab Sample ID:	460-154781-8		
Client ID:	GC-DRAIN(WG)				
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	2898	2.138034
7.15	58.00	5755	
7.15	85.00	86	
7.15	100.00	467892	

Reviewer: parekhv, 03-May-2018 18:10:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

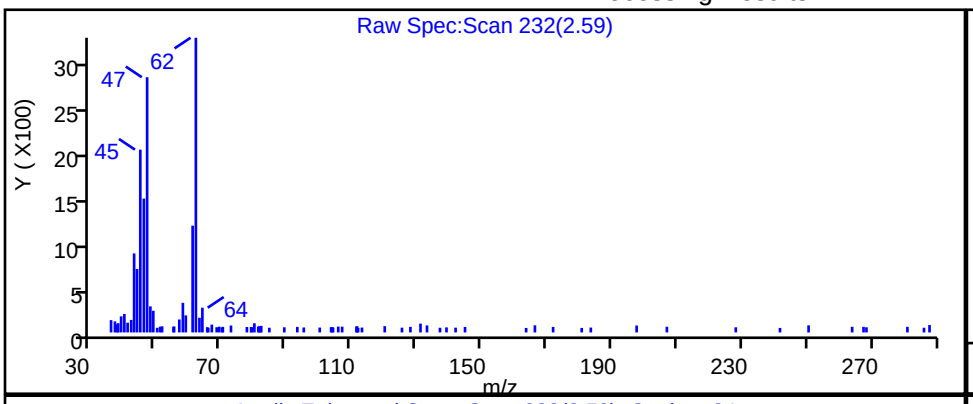
User Disabled Compound Report

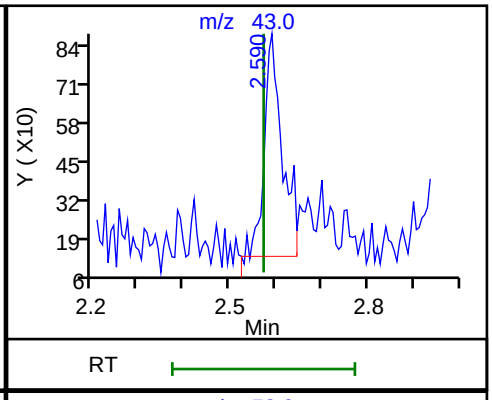
TestAmerica Edison

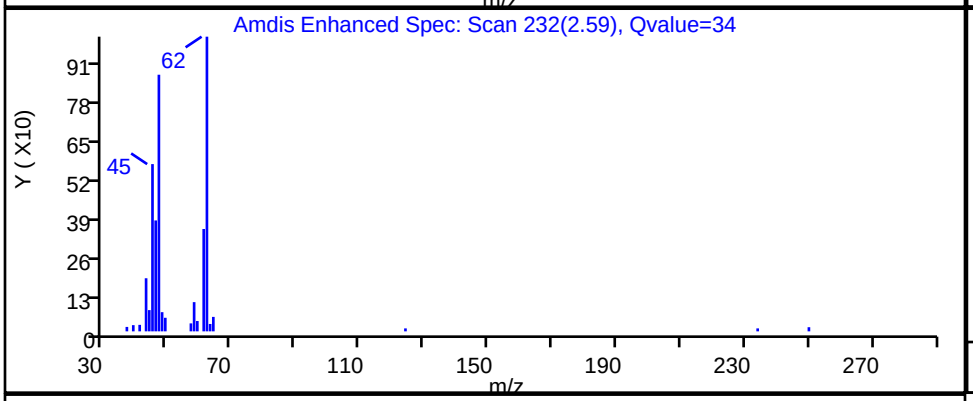
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66562.D				
Injection Date:	03-May-2018 13:34:30	Instrument ID:	CVOAMS11		
Lims ID:	460-154781-B-8	Lab Sample ID:	460-154781-8		
Client ID:	GC-DRAIN(WG)				
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

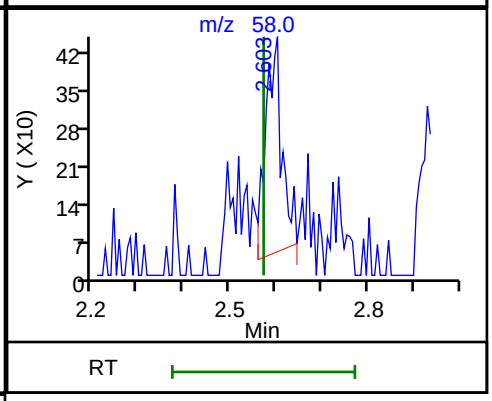
18 Acetone, CAS: 67-64-1

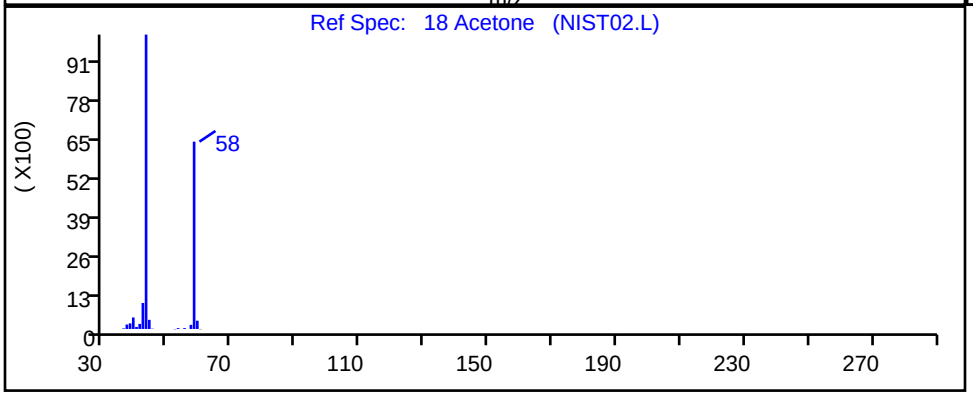
Processing Results











RT	Mass	Response	Amount
2.59	43.00	2070	6.683223
2.60	58.00	990	

Reviewer: xuyvo, 04-May-2018 15:57:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

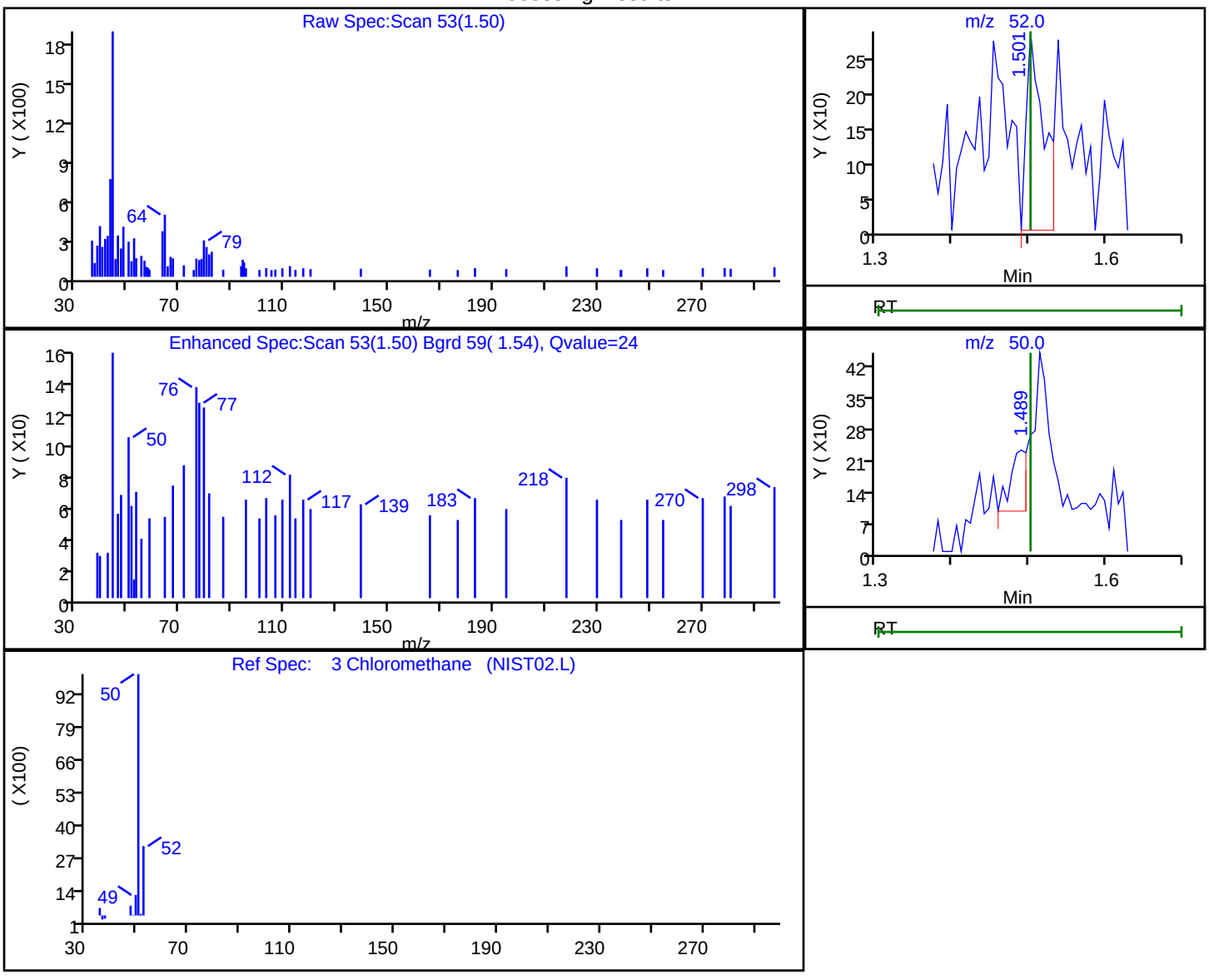
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66562.D		
Injection Date:	03-May-2018 13:34:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-8	Lab Sample ID:	460-154781-8
Client ID:	GC-DRAIN(WG)		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.50	52.00	447	0.431699
1.49	50.00	204	

Reviewer: parekhv, 03-May-2018 18:10:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank | Lab Sample ID: 460-154781-9

Matrix: Water | Lab File ID: N66523.D

Analysis Method: 8260C | Date Collected: 04/25/2018 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 21:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank | Lab Sample ID: 460-154781-9

Matrix: Water | Lab File ID: N66523.D

Analysis Method: 8260C | Date Collected: 04/25/2018 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 21:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	0.84	J	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	0.33	J	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		74-132
460-00-4	4-Bromofluorobenzene	89		77-124
1868-53-7	Dibromofluoromethane (Surr)	113		72-131
2037-26-5	Toluene-d8 (Surr)	93		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank Lab Sample ID: 460-154781-9

Matrix: Water Lab File ID: N66523.D

Analysis Method: 8260C Date Collected: 04/25/2018 15:00

Sample wt/vol: 5(mL) Date Analyzed: 05/02/2018 21:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66523.D
Lims ID: 460-154781-B-9
Client ID: GC-Equipment Blank
Sample Type: Client
Inject. Date: 02-May-2018 21:33:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-9
Misc. Info.: 460-0071421-012
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 05:43:17 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: tupayachia Date: 03-May-2018 05:43:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
26 Methylene Chloride	84	2.943	2.931	0.012	37	2802	0.8448	
* 27 TBA-d9 (IS)	65	2.937	2.931	0.006	0	114185	1000.0	
* 39 2-Butanone-d5	46	4.050	4.044	0.006	0	120917	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.556	0.005	95	171346	56.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	166401	57.0	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	676943	50.0	
* 68 1,4-Dioxane-d8	96	6.046	6.052	-0.006	0	16347	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	735168	46.5	
80 Toluene	91	7.238	7.238	0.000	94	5620	0.3251	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	539061	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	84	159439	44.5	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	98	226940	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

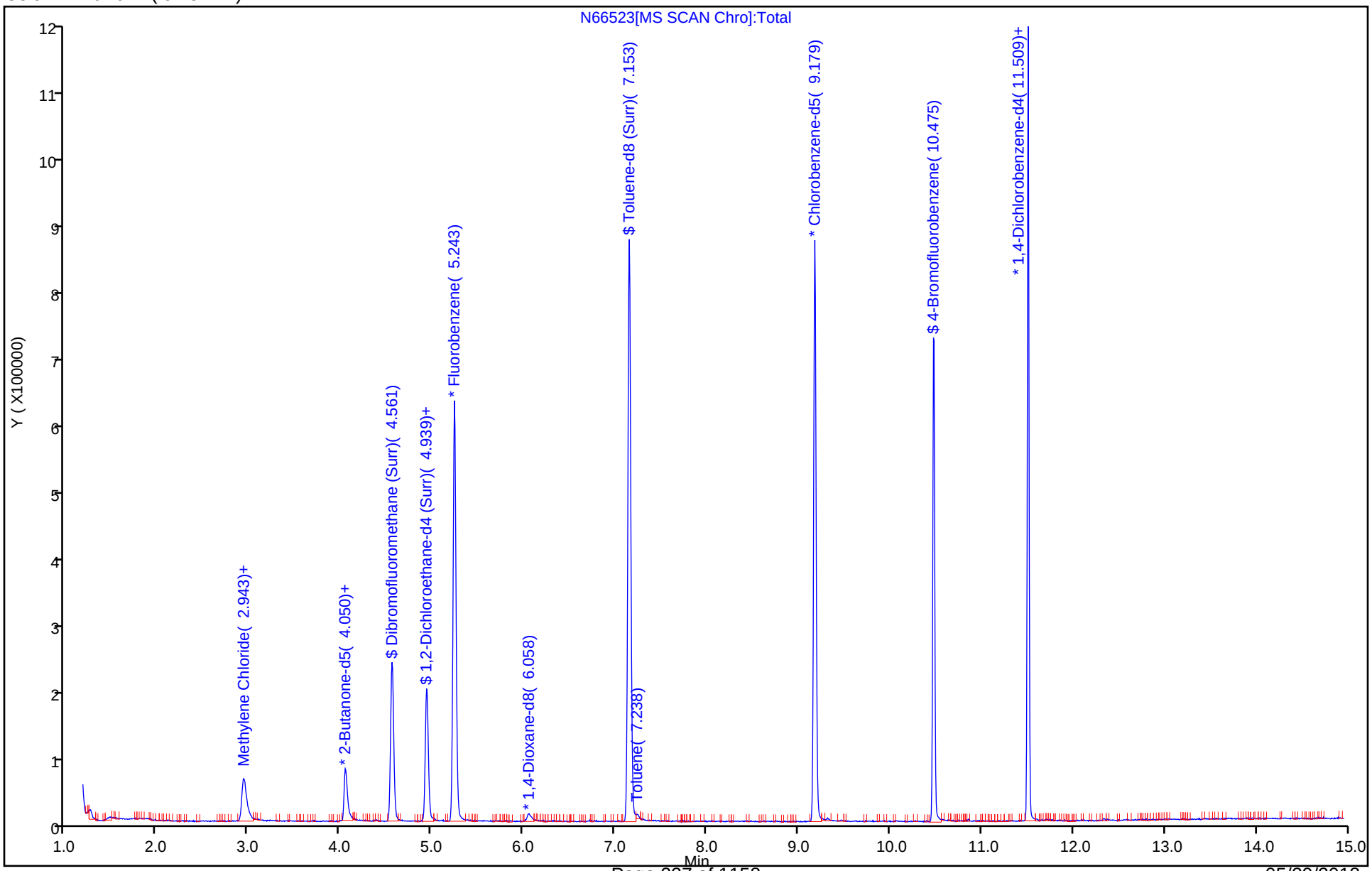
Report Date: 03-May-2018 05:43:17 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66523.D

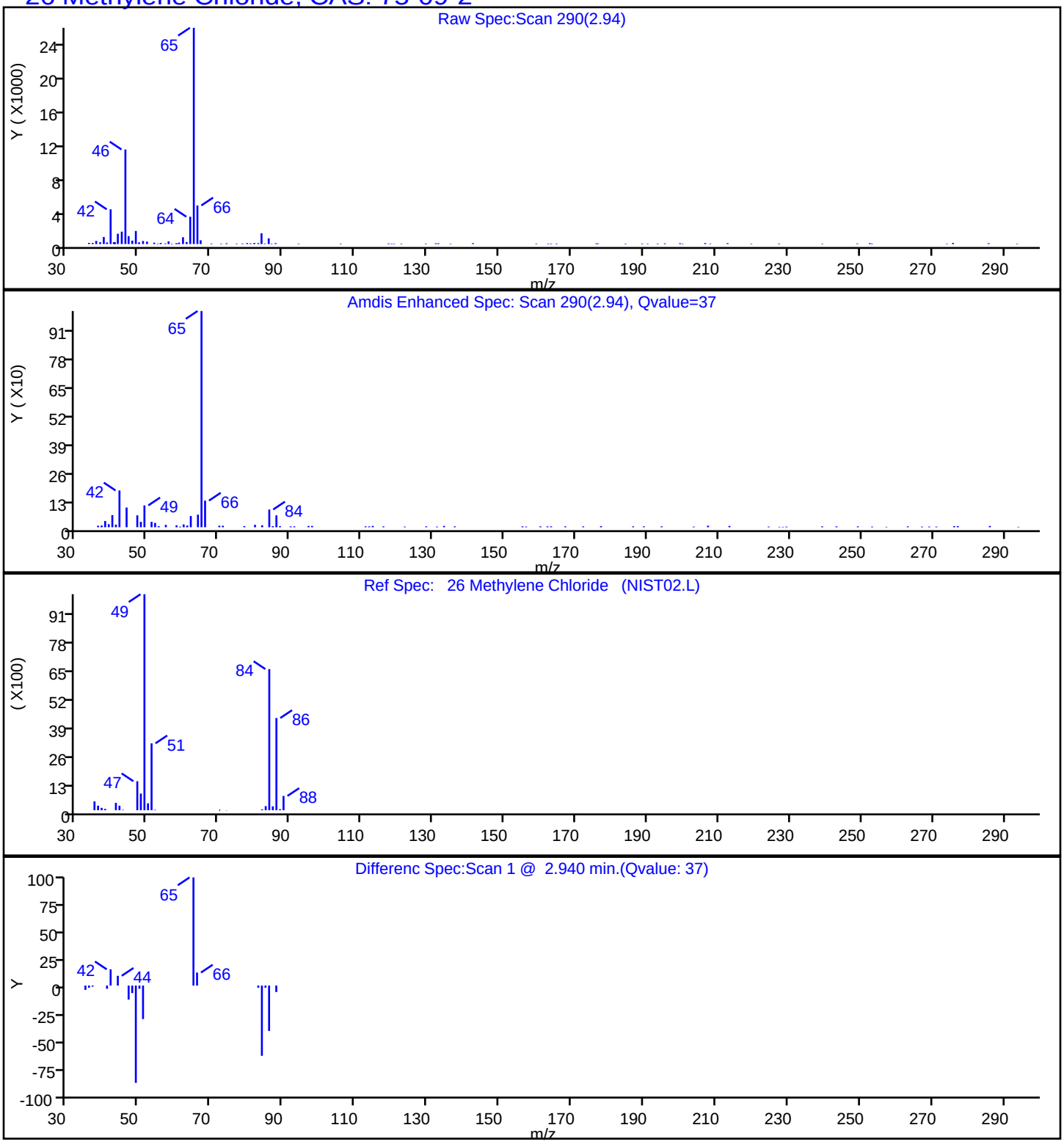
Injection Date:	02-May-2018 21:33:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-9	Lab Sample ID:	460-154781-9	Worklist Smp#:	12
Client ID:	GC-Equipment Blank				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66523.D
Injection Date: 02-May-2018 21:33:30 Instrument ID: CVOAMS11
Lims ID: 460-154781-B-9 Lab Sample ID: 460-154781-9
Client ID: GC-Equipment Blank
Operator ID: ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

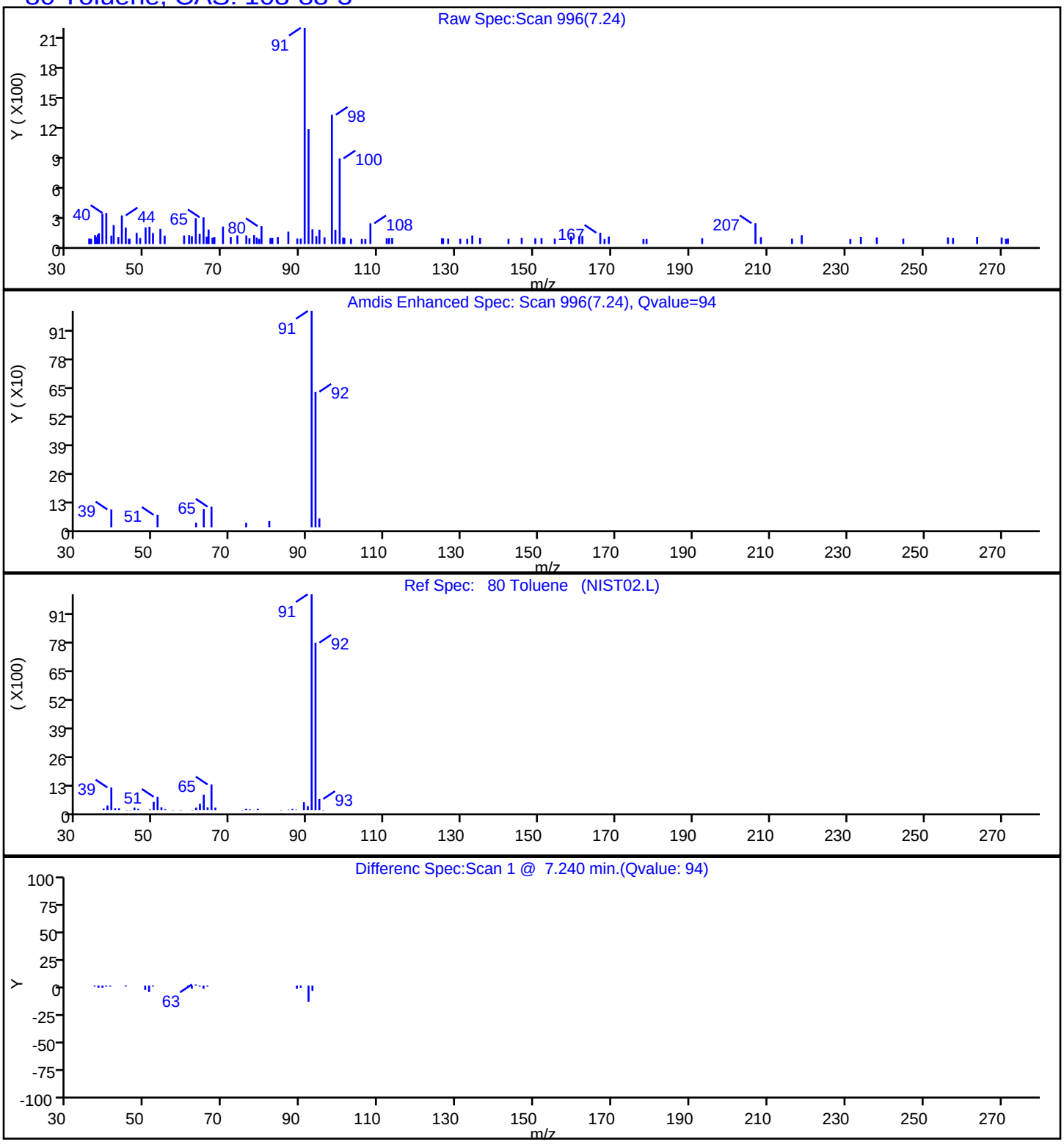
26 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66523.D		
Injection Date:	02-May-2018 21:33:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-9	Lab Sample ID:	460-154781-9
Client ID:	GC-Equipment Blank		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

80 Toluene, CAS: 108-88-3



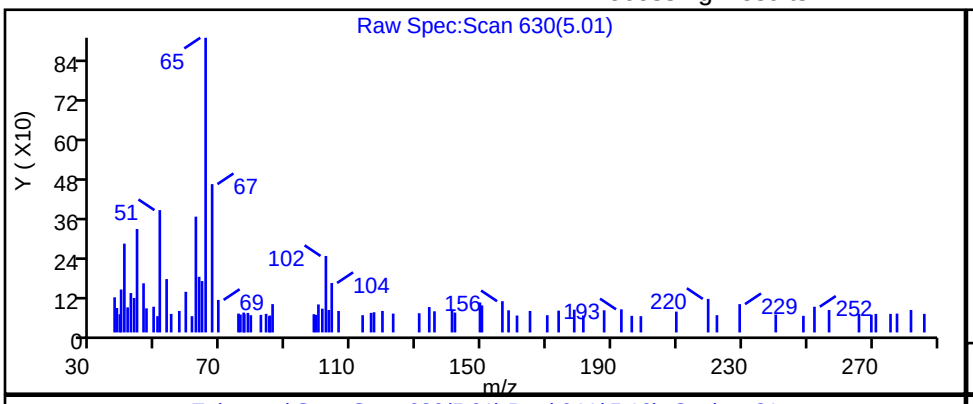
User Disabled Compound Report

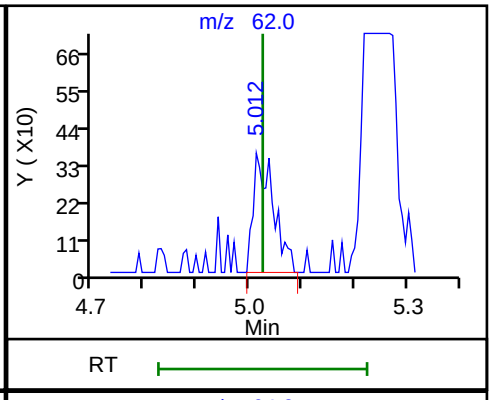
TestAmerica Edison

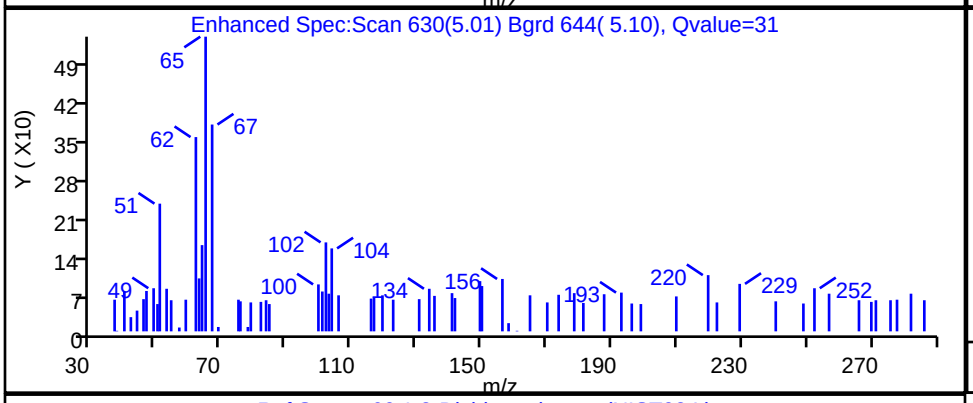
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66523.D		
Injection Date:	02-May-2018 21:33:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-9	Lab Sample ID:	460-154781-9
Client ID:	GC-Equipment Blank		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

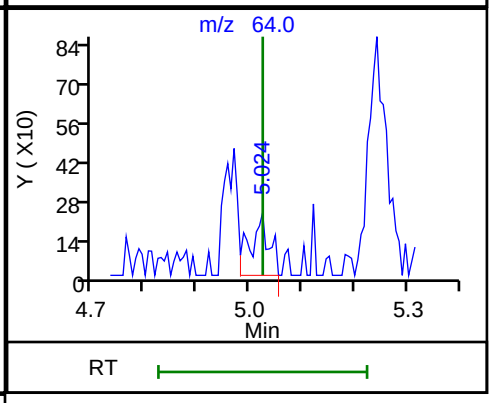
60 1,2-Dichloroethane, CAS: 107-06-2

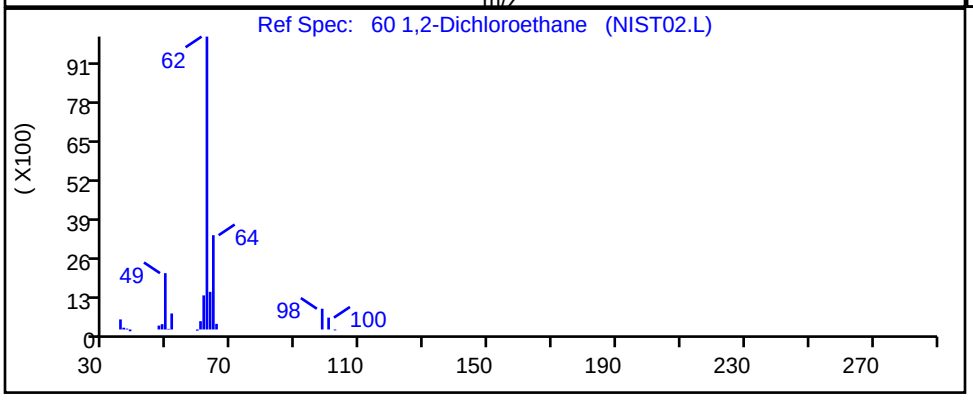
Processing Results











RT	Mass	Response	Amount
5.01	62.00	955	0.279377
5.02	64.00	554	

Reviewer: tupayachia, 03-May-2018 05:43:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

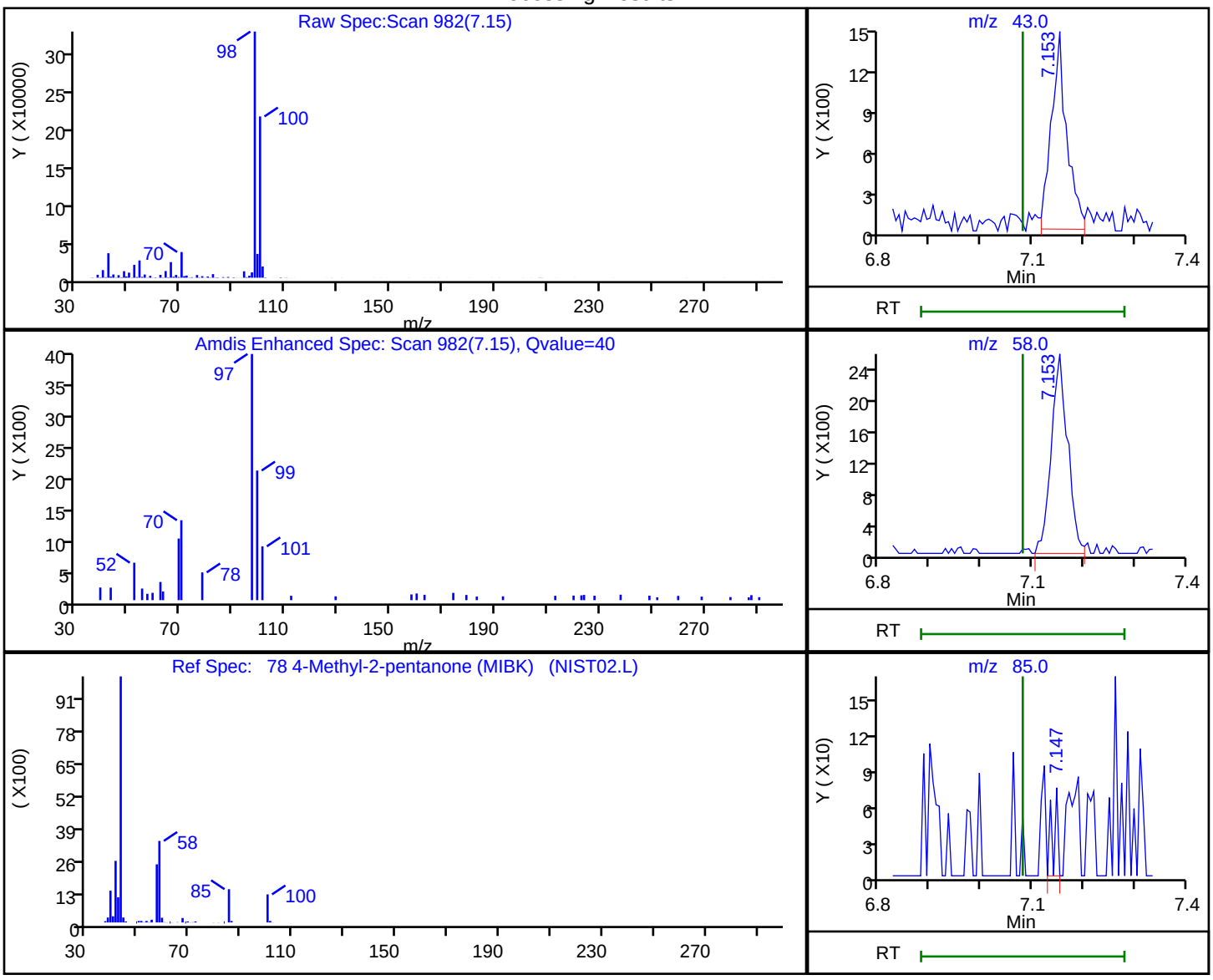
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66523.D				
Injection Date:	02-May-2018 21:33:30	Instrument ID:	CVOAMS11		
Lims ID:	460-154781-B-9	Lab Sample ID:	460-154781-9		
Client ID:	GC-Equipment Blank				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	2958	2.257234
7.15	58.00	5644	
7.15	85.00	49	
7.15	100.00	481863	

Reviewer: tupayachia, 03-May-2018 05:43:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

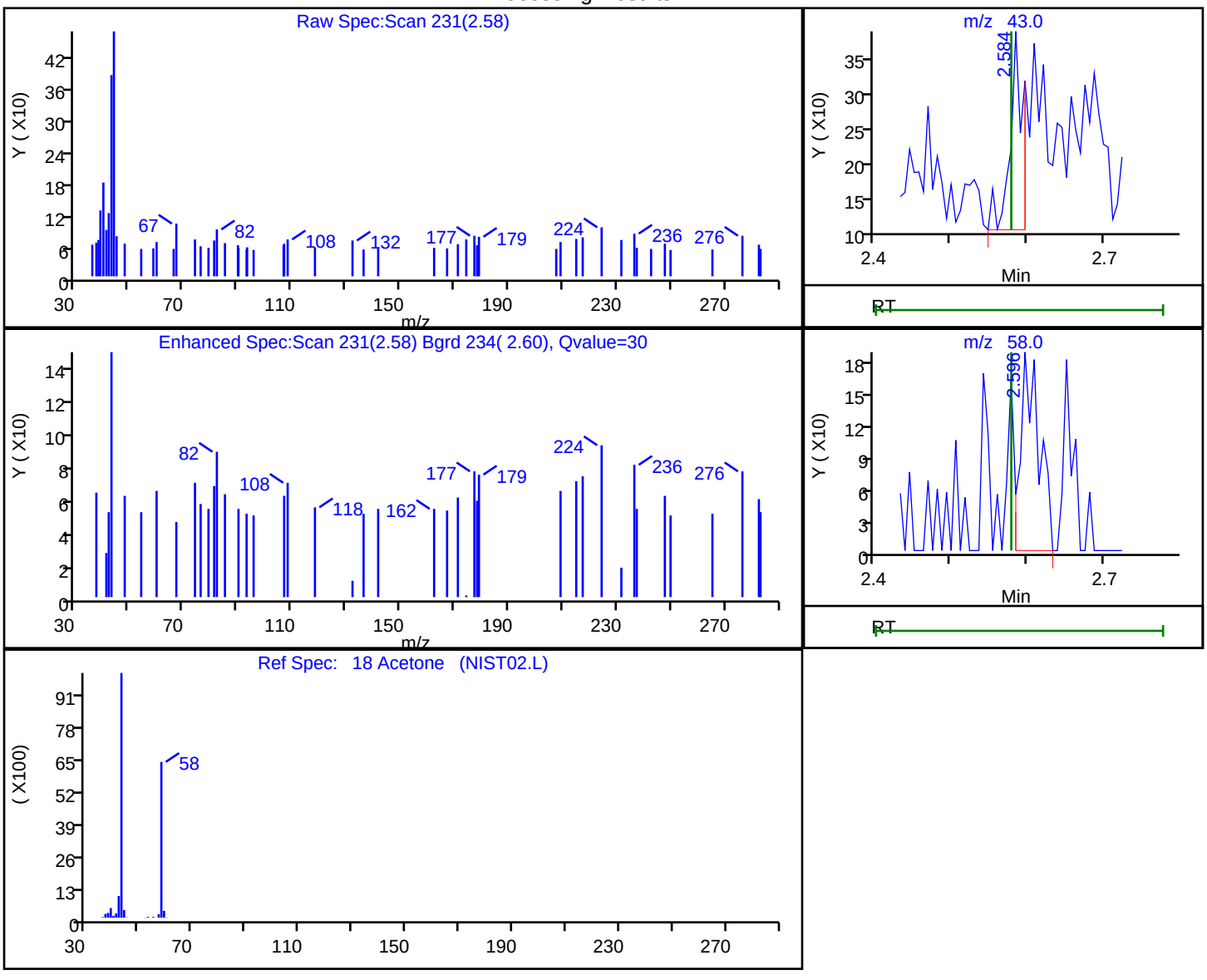
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66523.D		
Injection Date:	02-May-2018 21:33:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-9	Lab Sample ID:	460-154781-9
Client ID:	GC-Equipment Blank		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.58	43.00	328	1.095347
2.60	58.00	315	

Reviewer: tupayachia, 03-May-2018 05:43:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

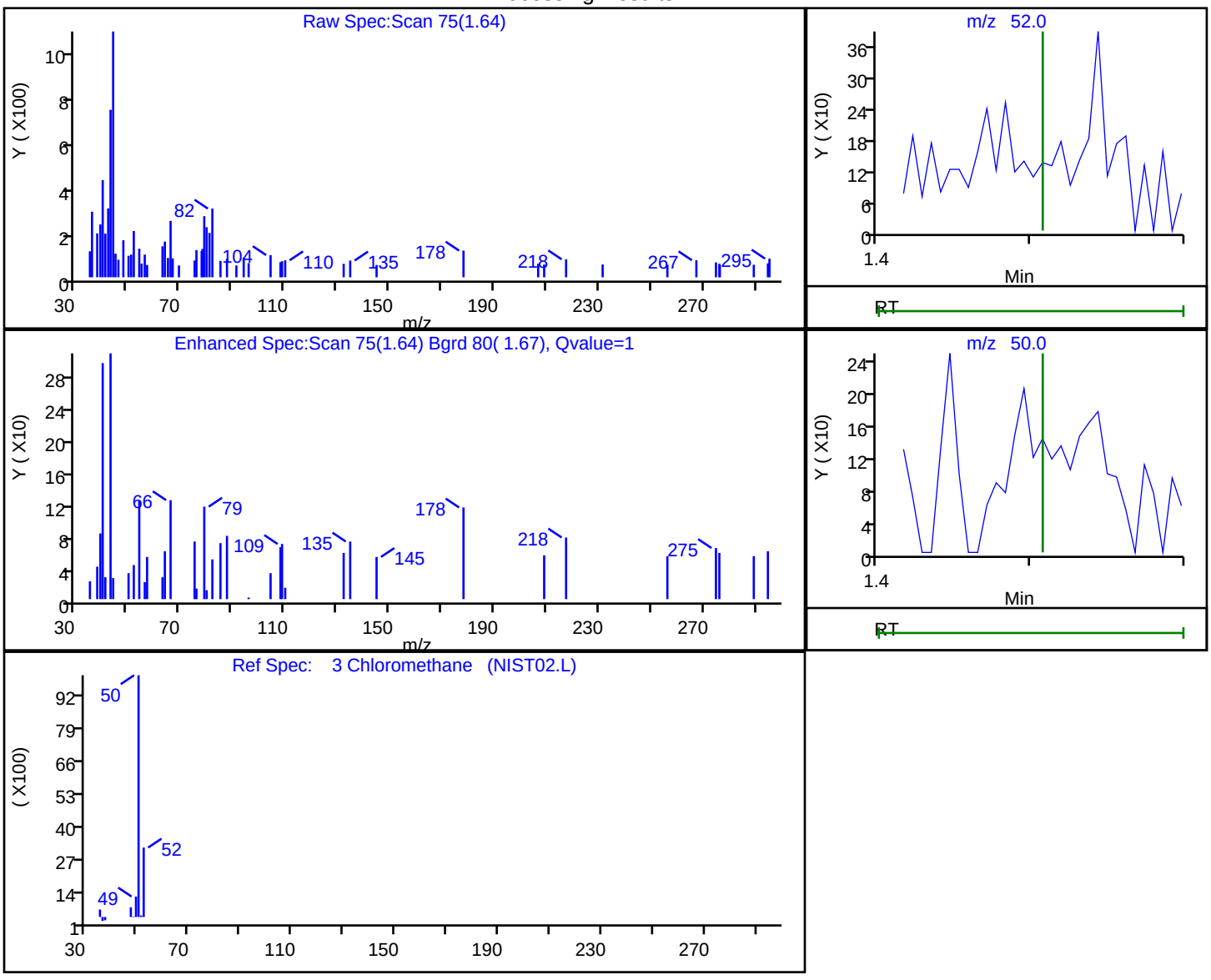
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66523.D		
Injection Date:	02-May-2018 21:33:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-9	Lab Sample ID:	460-154781-9
Client ID:	GC-Equipment Blank		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.64	52.00	267	0.266714
1.64	50.00	92	

Reviewer: tupayachia, 03-May-2018 05:43:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180425 | Lab Sample ID: 460-154781-10

Matrix: Water | Lab File ID: N66520.D

Analysis Method: 8260C | Date Collected: 04/25/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 20:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180425 | Lab Sample ID: 460-154781-10

Matrix: Water | Lab File ID: N66520.D

Analysis Method: 8260C | Date Collected: 04/25/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 20:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		74-132
460-00-4	4-Bromofluorobenzene	89		77-124
1868-53-7	Dibromofluoromethane (Surr)	114		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180425 Lab Sample ID: 460-154781-10

Matrix: Water Lab File ID: N66520.D

Analysis Method: 8260C Date Collected: 04/25/2018 00:00

Sample wt/vol: 5(mL) Date Analyzed: 05/02/2018 20:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66520.D
Lims ID: 460-154781-B-10
Client ID: GC-TB-20180425
Sample Type: Client
Inject. Date: 02-May-2018 20:24:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-10
Misc. Info.: 460-0071421-009
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 05:41:00 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: tupayachia Date: 03-May-2018 05:41:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.943	2.931	0.012	0	115498	1000.0	
* 39 2-Butanone-d5	46	4.050	4.044	0.006	0	121644	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.556	0.005	96	182017	57.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	172195	56.2	
* 62 Fluorobenzene	96	5.249	5.243	0.006	99	710639	50.0	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	15400	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	761091	47.0	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	552024	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	85	163964	44.7	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	217909	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

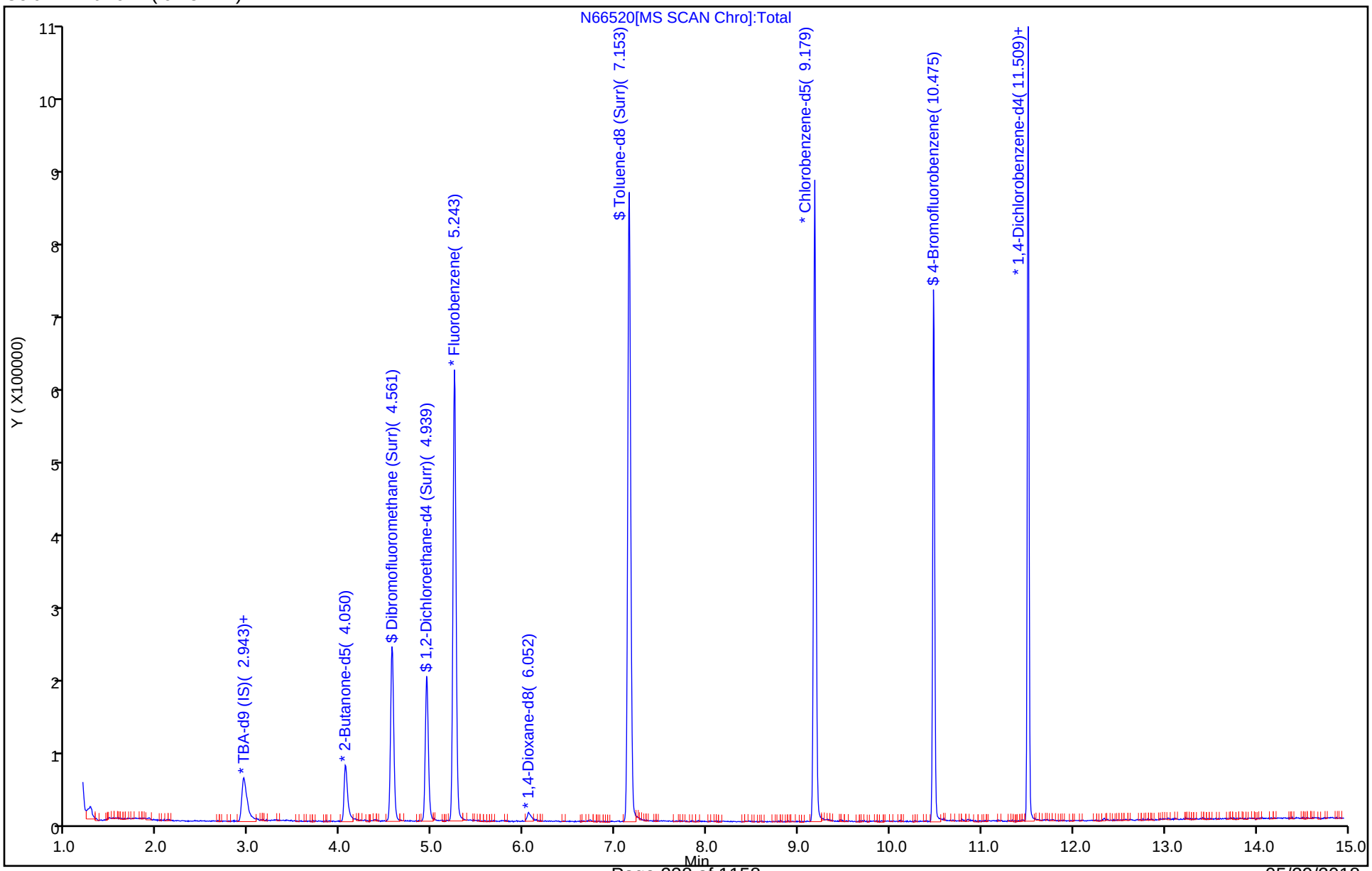
Report Date: 03-May-2018 05:41:01 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66520.D

Injection Date:	02-May-2018 20:24:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-10	Lab Sample ID:	460-154781-10	Worklist Smp#:	9
Client ID:	GC-TB-20180425				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



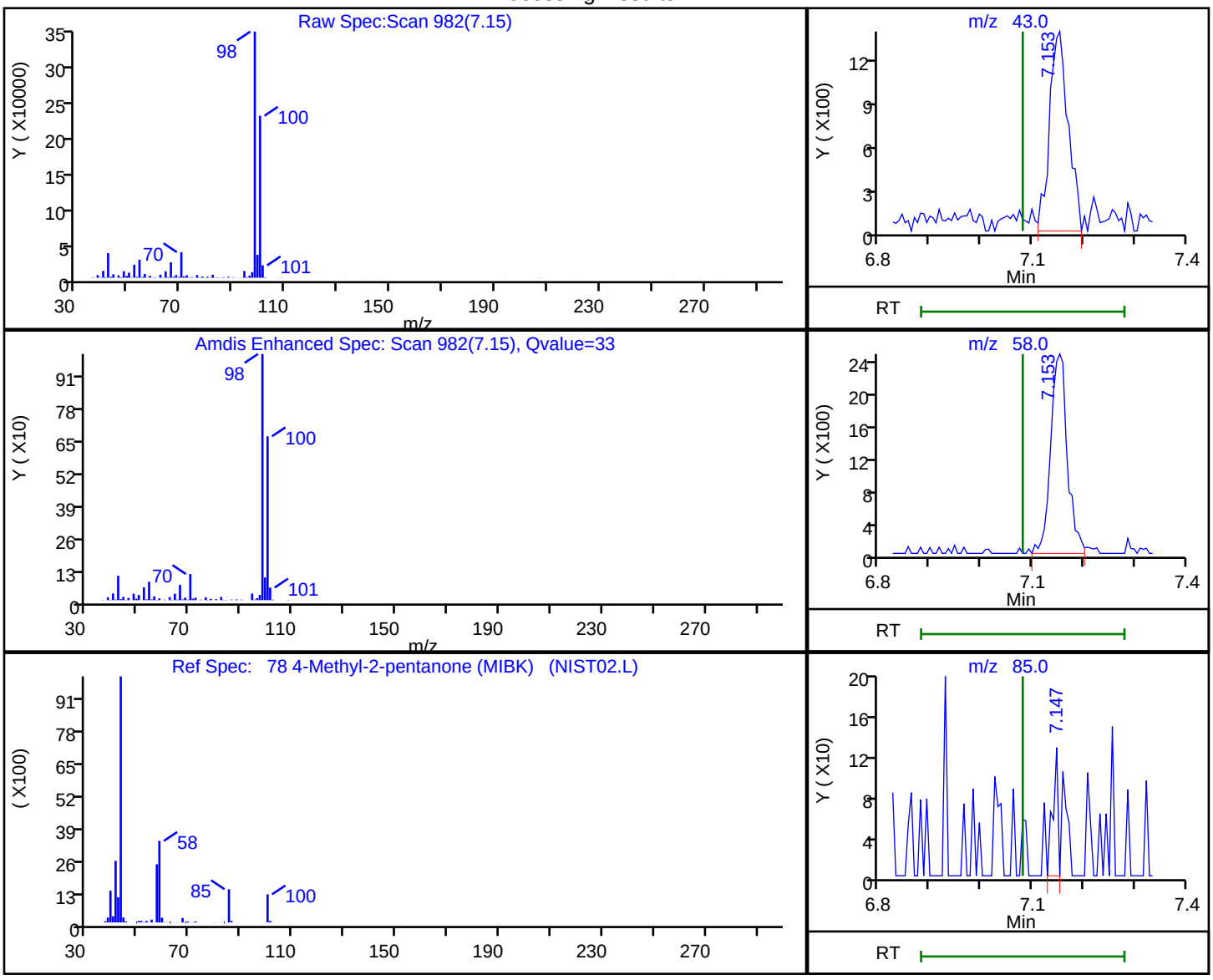
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66520.D		
Injection Date:	02-May-2018 20:24:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-10	Lab Sample ID:	460-154781-10
Client ID:	GC-TB-20180425		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	3333	2.528194
7.15	58.00	5678	
7.15	85.00	91	
7.15	100.00	506288	

Reviewer: tupayachia, 03-May-2018 05:41:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

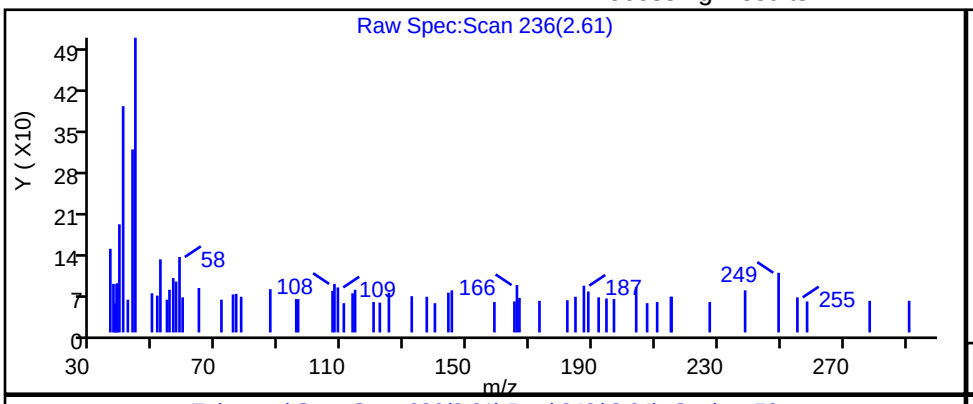
User Disabled Compound Report

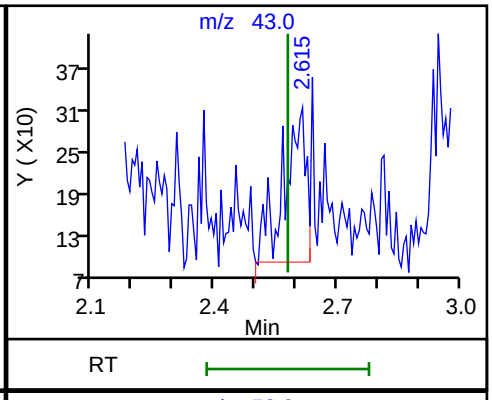
TestAmerica Edison

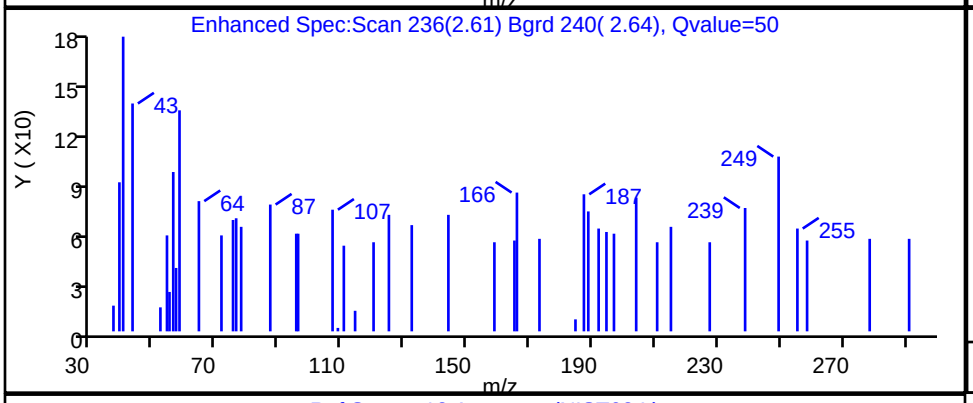
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66520.D		
Injection Date:	02-May-2018 20:24:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-10	Lab Sample ID:	460-154781-10
Client ID:	GC-TB-20180425		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

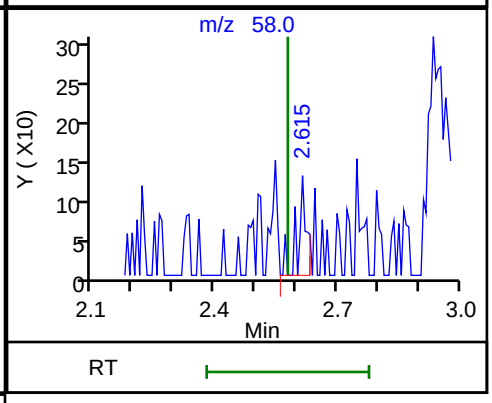
18 Acetone, CAS: 67-64-1

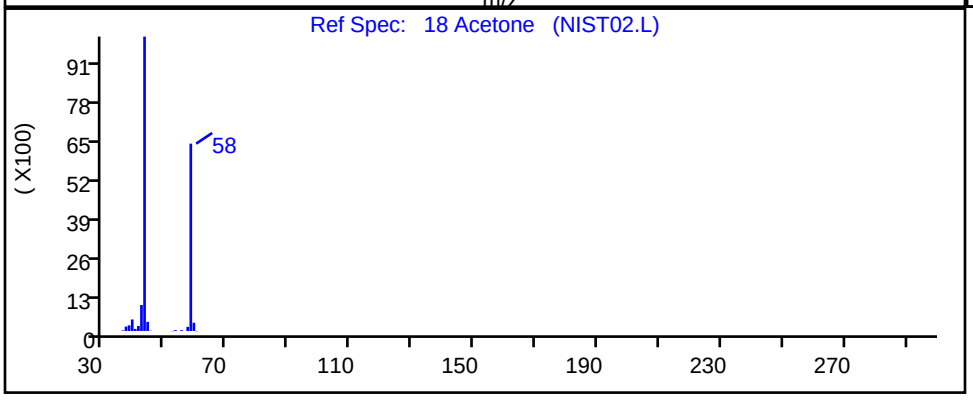
Processing Results











RT	Mass	Response	Amount
2.61	43.00	847	2.811629
2.61	58.00	178	

Reviewer: tupayachia, 03-May-2018 05:25:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

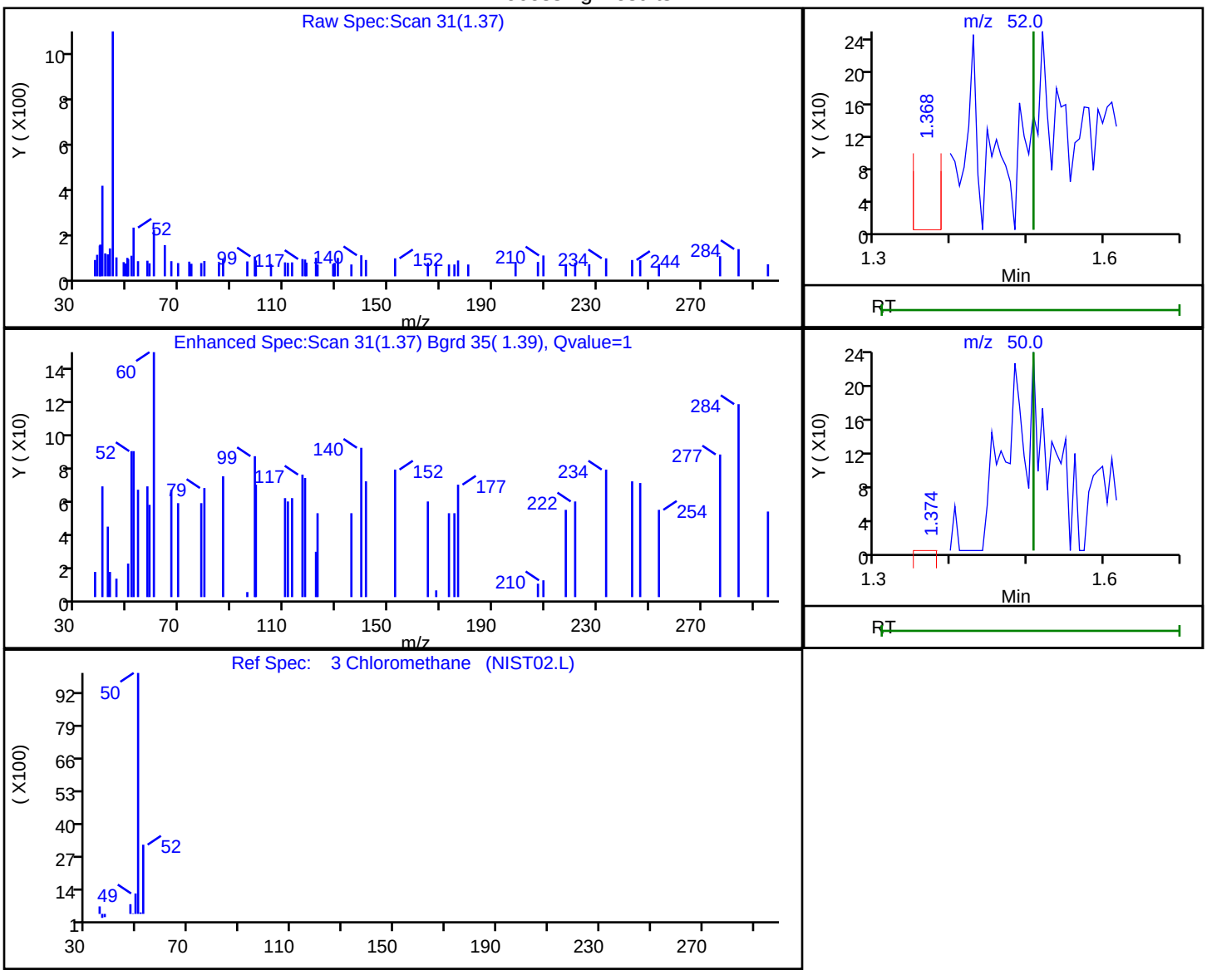
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66520.D		
Injection Date:	02-May-2018 20:24:30	Instrument ID:	CVOAMS11
Lims ID:	460-154781-B-10	Lab Sample ID:	460-154781-10
Client ID:	GC-TB-20180425		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.37	52.00	278	0.276043
1.37	50.00	110	

Reviewer: tupayachia, 03-May-2018 05:25:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) | Lab Sample ID: 460-154925-1

Matrix: Water | Lab File ID: P44719.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.3	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) | Lab Sample ID: 460-154925-1

Matrix: Water | Lab File ID: P44719.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.4		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		74-132
460-00-4	4-Bromofluorobenzene	111		77-124
1868-53-7	Dibromofluoromethane (Surr)	121		72-131
2037-26-5	Toluene-d8 (Surr)	110		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) Lab Sample ID: 460-154925-1

Matrix: Water Lab File ID: P44719.D

Analysis Method: 8260C Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 05:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44719.D
Lims ID: 460-154925-B-1
Client ID: GC-MW-102(WG)
Sample Type: Client
Inject. Date: 04-May-2018 05:30:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-1
Misc. Info.: 460-0071476-020
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 07:49:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
22 Isopropyl alcohol	45	1.837	1.838	-0.001	98	8591	35.2	
24 Acetone	43	1.902	1.902	0.000	84	2343	2.33	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	282299	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	0.000	90	958	2.72	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	157117	60.3	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	344316	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	205174	57.5	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	492351	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	28254	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	652571	55.2	
82 Tetrachloroethene	166	5.698	5.691	0.007	91	4379	1.39	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	431845	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	88	187320	55.5	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.620	-0.001	97	236367	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

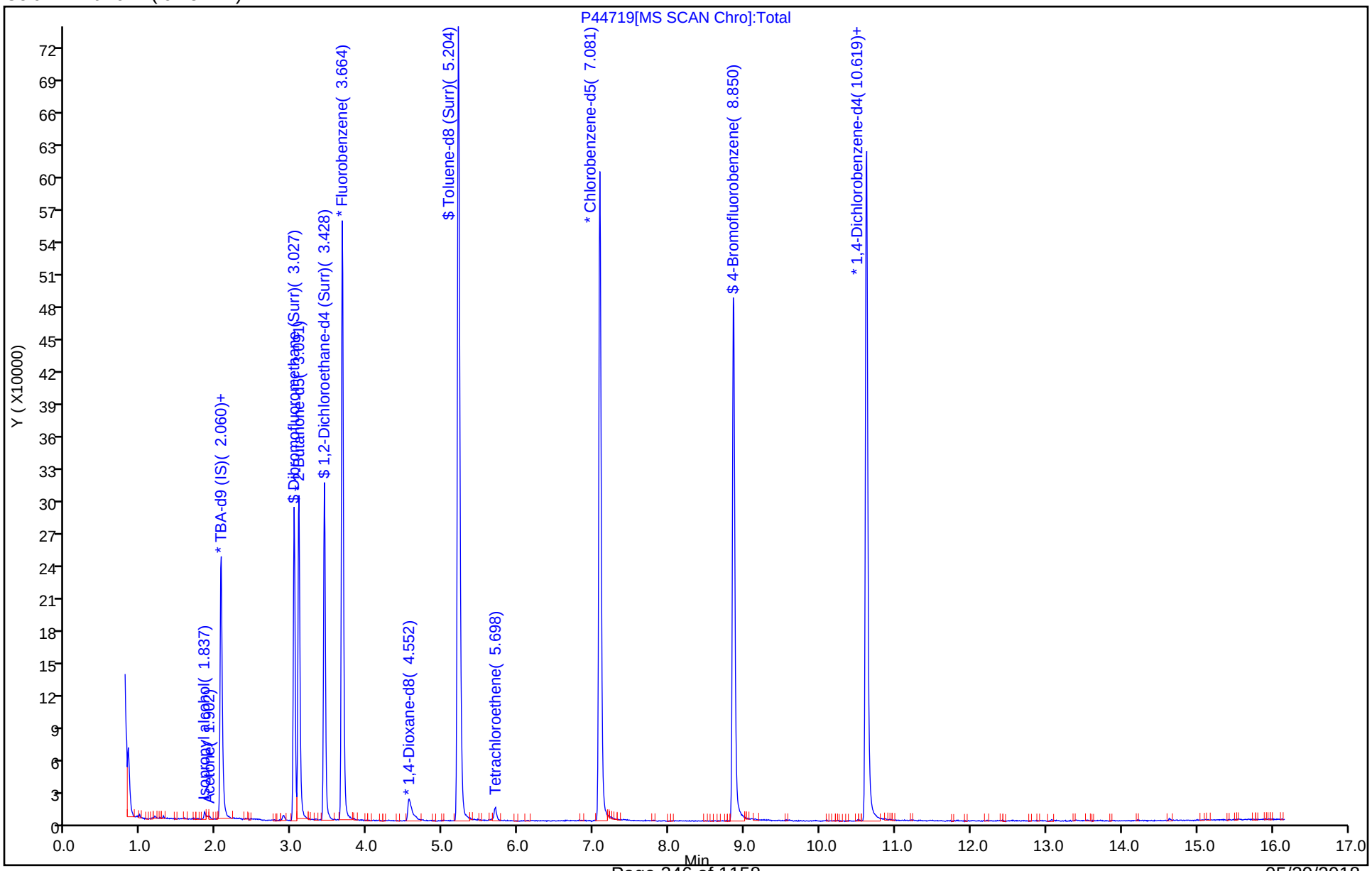
Report Date: 04-May-2018 08:41:43 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44719.D

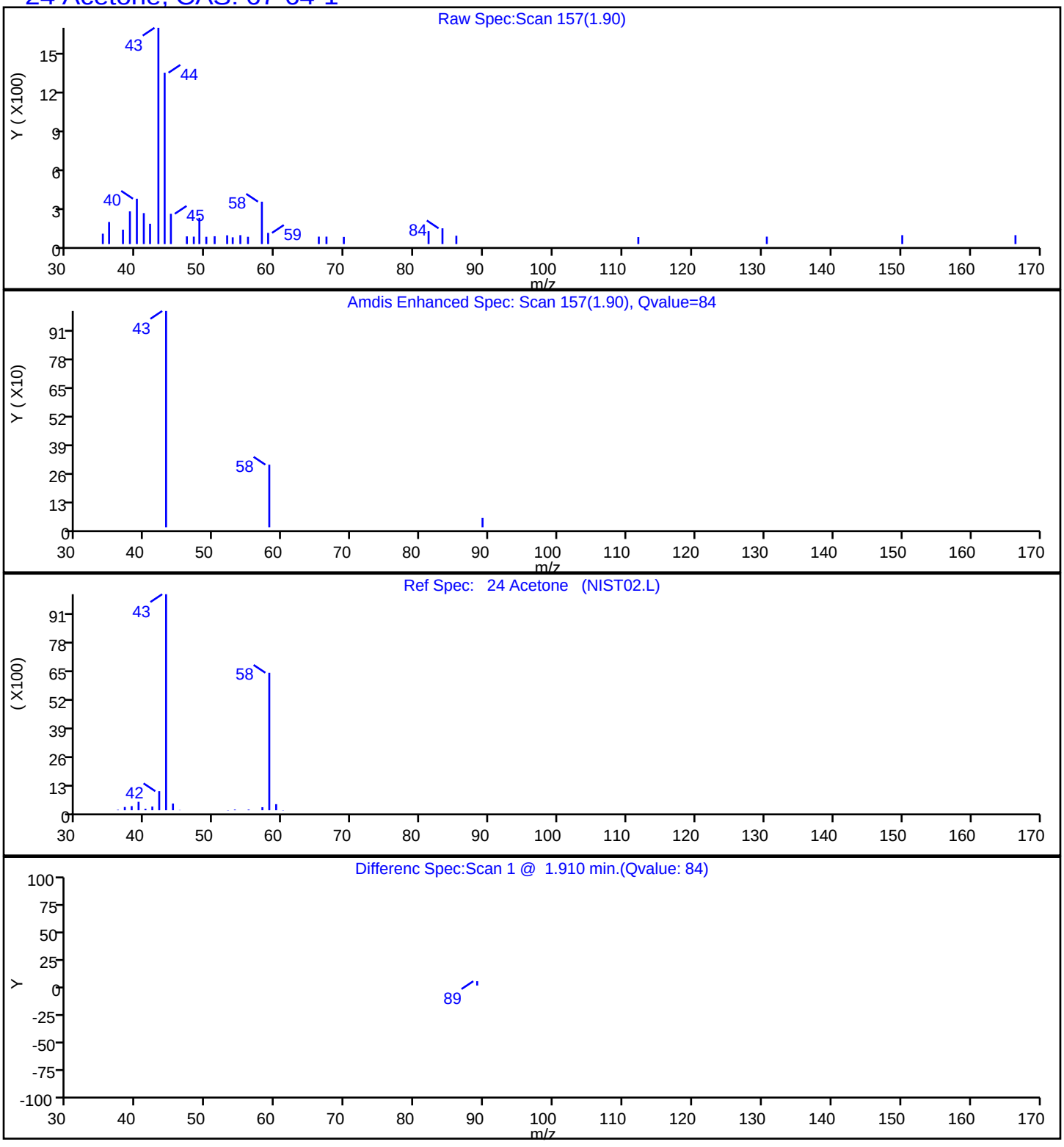
Injection Date:	04-May-2018 05:30:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-1	Lab Sample ID:	460-154925-1	Worklist Smp#:	20
Client ID:	GC-MW-102(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44719.D
Injection Date: 04-May-2018 05:30:30 Instrument ID: CVOAMS13
Lims ID: 460-154925-B-1 Lab Sample ID: 460-154925-1
Client ID: GC-MW-102(WG)
Operator ID: ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

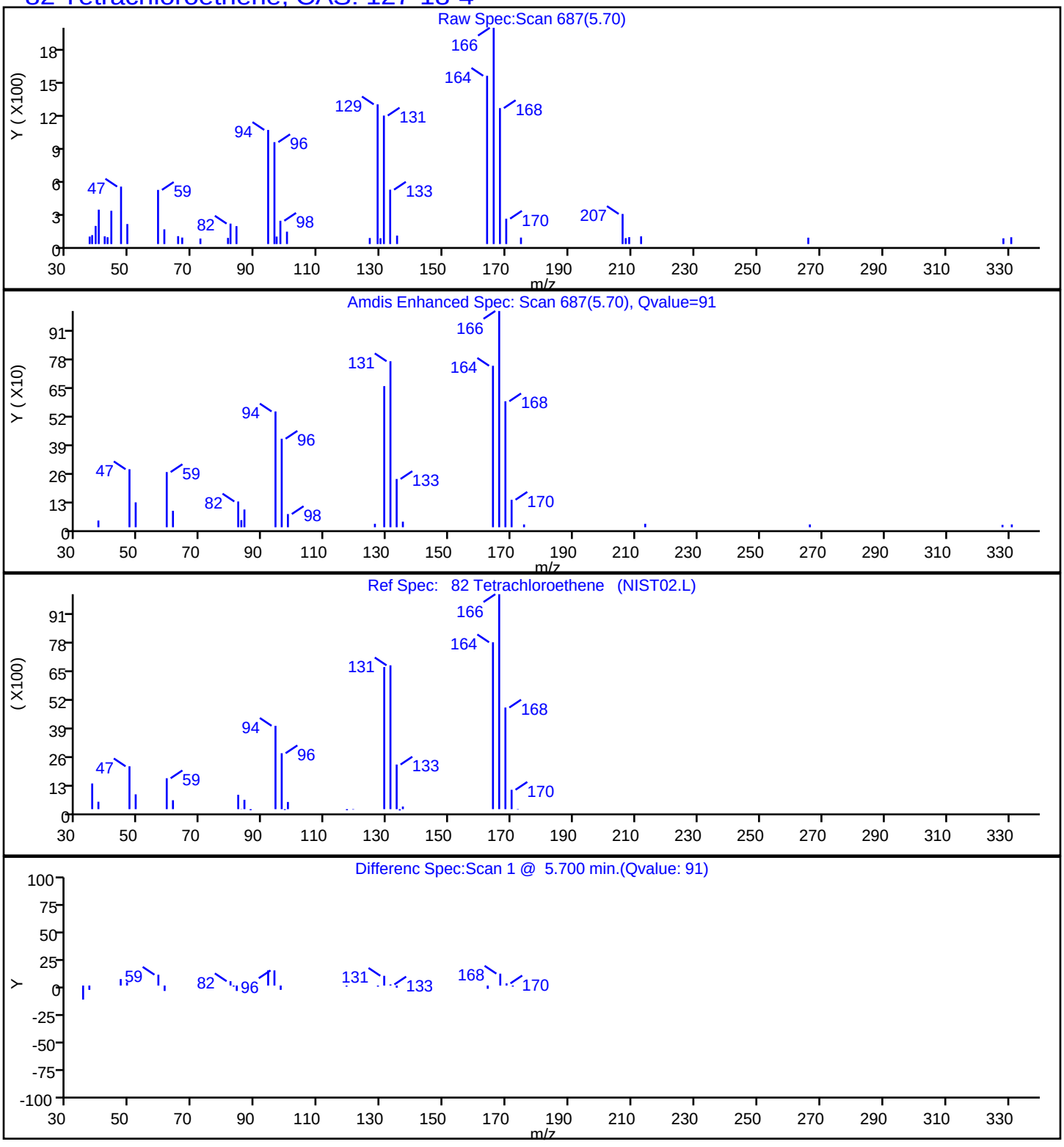
24 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44719.D		
Injection Date:	04-May-2018 05:30:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-1	Lab Sample ID:	460-154925-1
Client ID:	GC-MW-102(WG)		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

82 Tetrachloroethene, CAS: 127-18-4



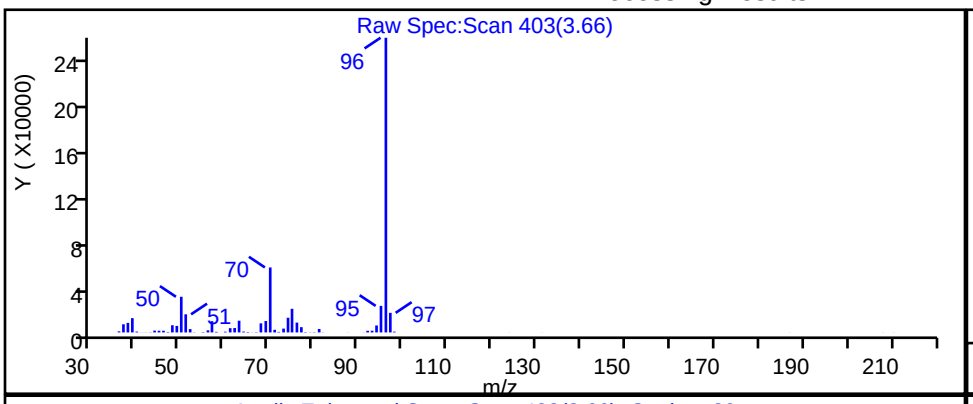
User Disabled Compound Report

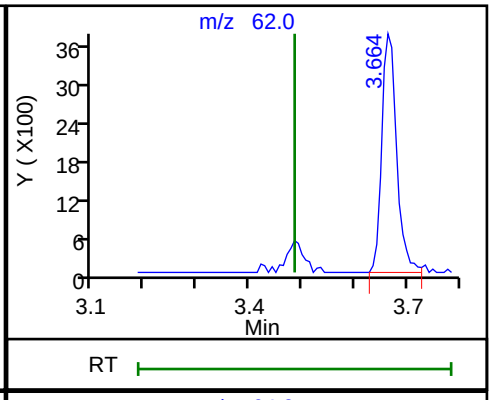
TestAmerica Edison

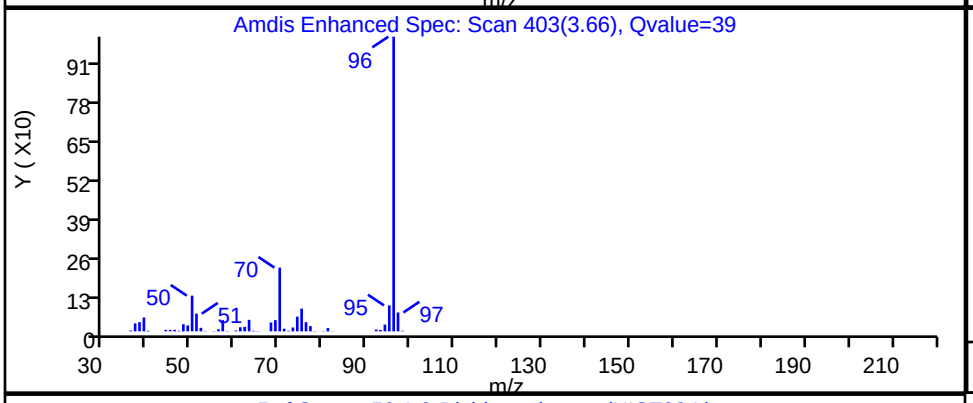
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44719.D		
Injection Date:	04-May-2018 05:30:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-1	Lab Sample ID:	460-154925-1
Client ID:	GC-MW-102(WG)		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

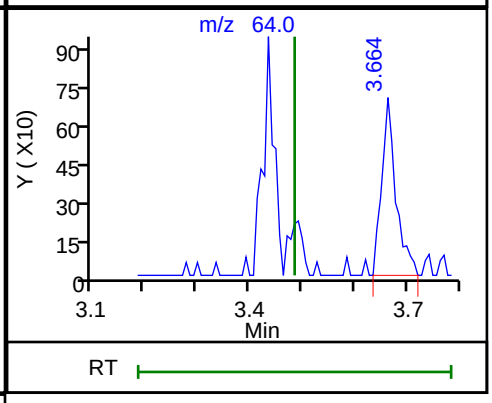
59 1,2-Dichloroethane, CAS: 107-06-2

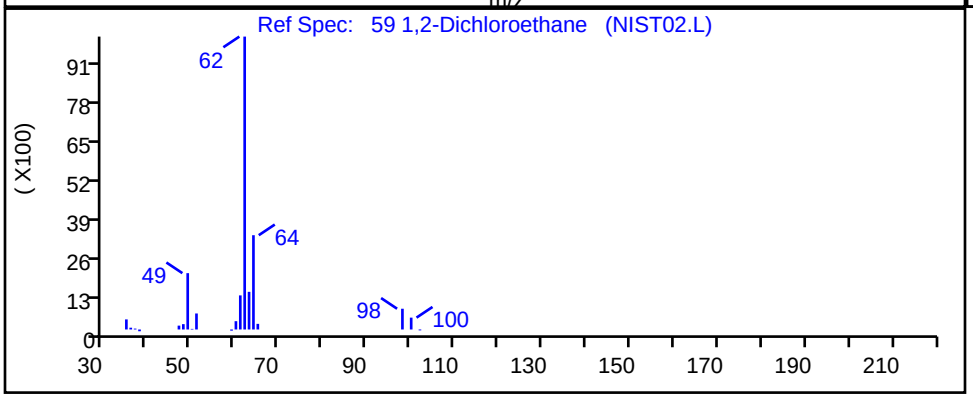
Processing Results











RT	Mass	Response	Amount
3.66	62.00	7490	1.542503
3.66	64.00	1338	

Reviewer: desais, 04-May-2018 07:49:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

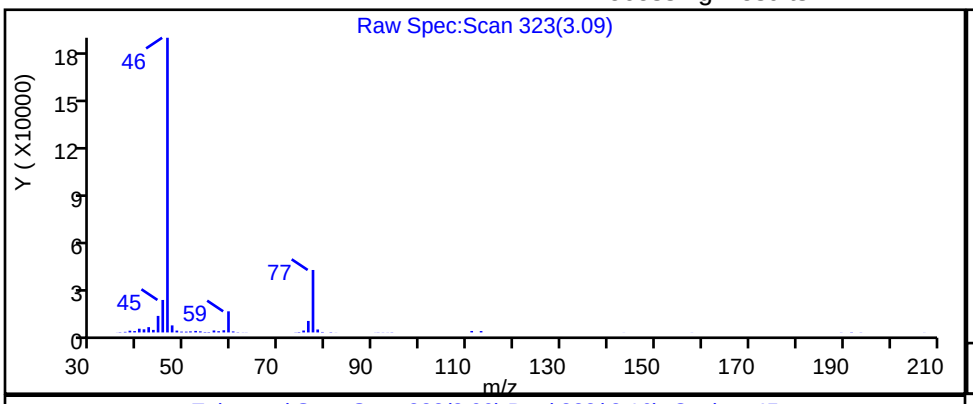
User Disabled Compound Report

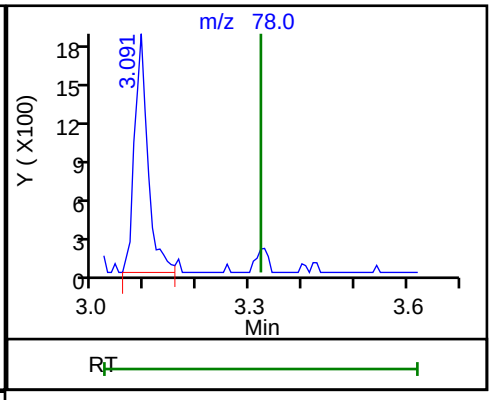
TestAmerica Edison

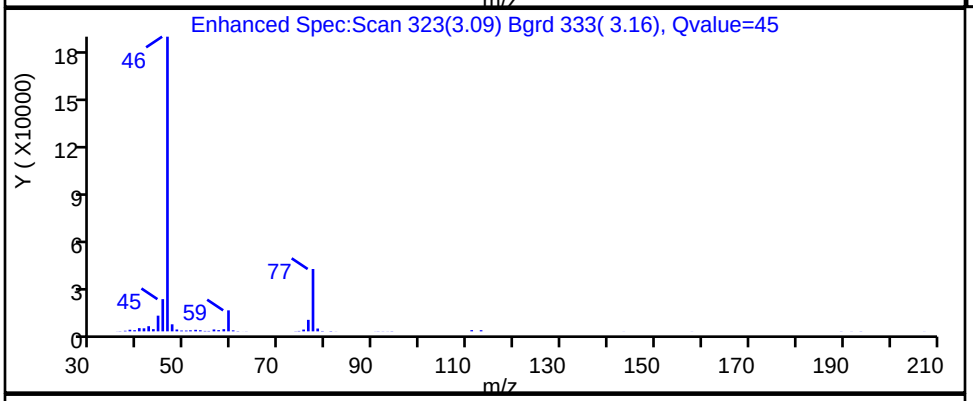
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44719.D		
Injection Date:	04-May-2018 05:30:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-1	Lab Sample ID:	460-154925-1
Client ID:	GC-MW-102(WG)		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

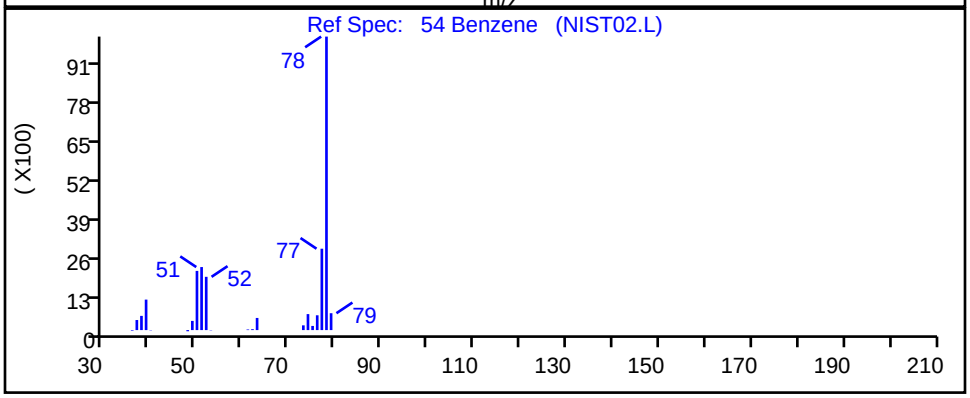
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.09	78.00	3260	0.238100

Reviewer: desais, 04-May-2018 07:49:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109(WG) | Lab Sample ID: 460-154925-2

Matrix: Water | Lab File ID: P44720.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:57

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	1.6	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109(WG) | Lab Sample ID: 460-154925-2

Matrix: Water | Lab File ID: P44720.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:57

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	12		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		74-132
460-00-4	4-Bromofluorobenzene	104		77-124
1868-53-7	Dibromofluoromethane (Surr)	111		72-131
2037-26-5	Toluene-d8 (Surr)	103		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109(WG) Lab Sample ID: 460-154925-2

Matrix: Water Lab File ID: P44720.D

Analysis Method: 8260C Date Collected: 04/26/2018 09:57

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 05:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44720.D
Lims ID: 460-154925-B-2
Client ID: GC-MW-109(WG)
Sample Type: Client
Inject. Date: 04-May-2018 05:55:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-2
Misc. Info.: 460-0071476-021
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 07:49:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	83	1698	1.59	
* 29 TBA-d9 (IS)	65	2.053	2.060	-0.007	0	295317	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	154980	55.3	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	366357	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	203442	53.1	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	529344	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	31991	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	653807	51.5	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	40042	11.8	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	463762	50.0	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	188121	51.9	
* 119 1,4-Dichlorobenzene-d4	152	10.620	10.620	0.000	97	249898	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

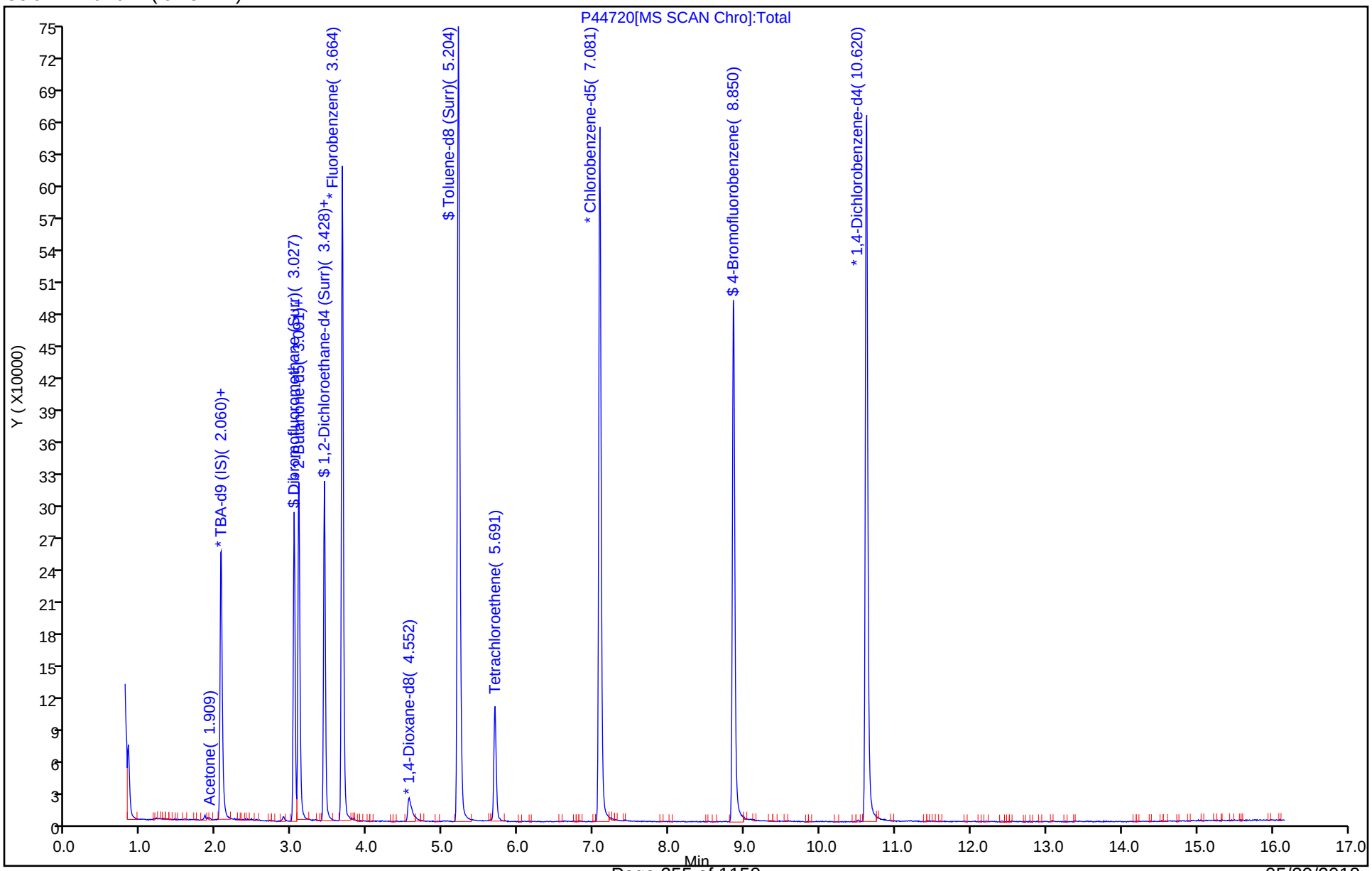
Report Date: 04-May-2018 08:41:45 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44720.D

Injection Date:	04-May-2018 05:55:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-2	Lab Sample ID:	460-154925-2	Worklist Smp#:	21
Client ID:	GC-MW-109(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

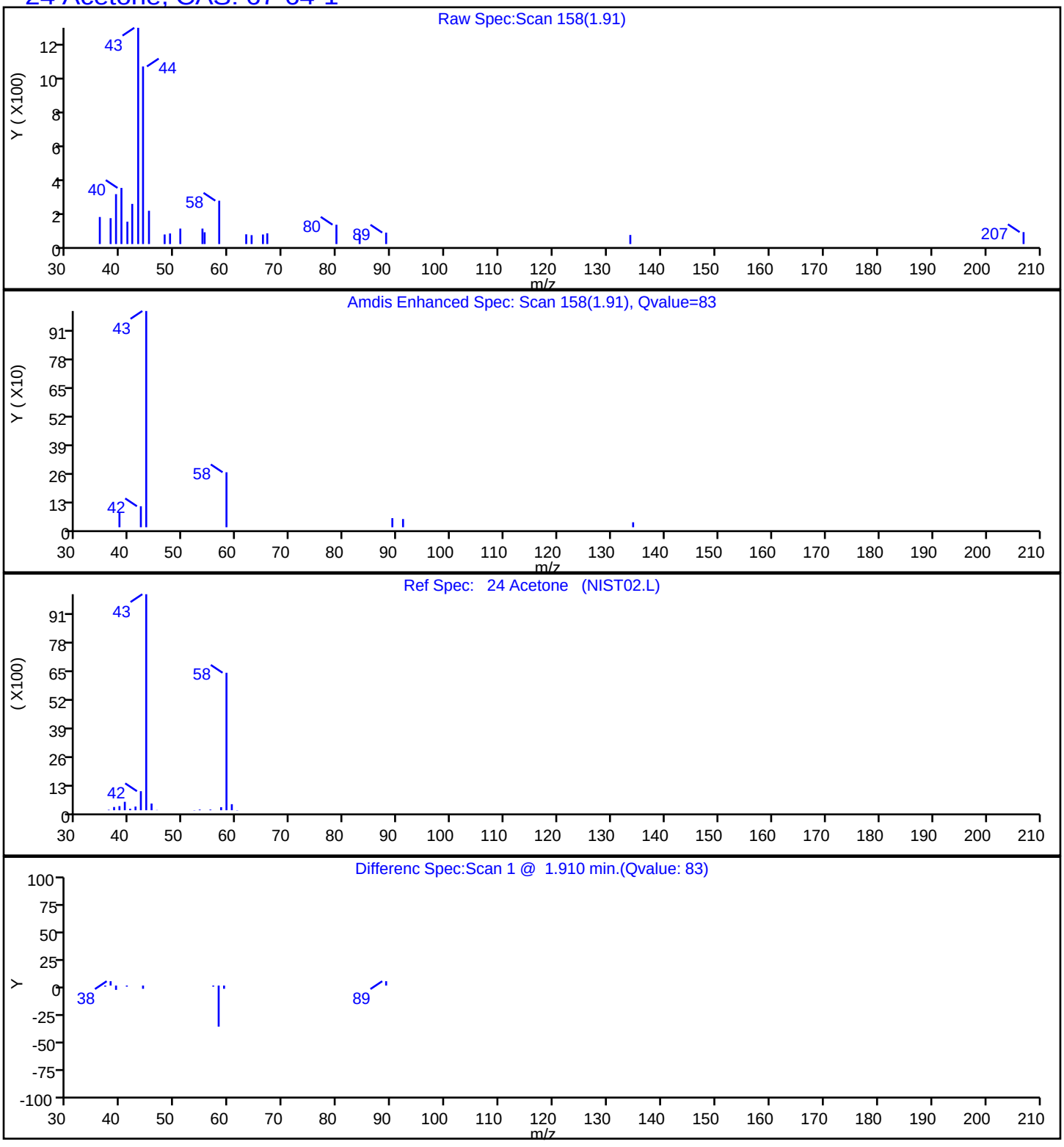
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44720.D				
Injection Date:	04-May-2018 05:55:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-2	Lab Sample ID:	460-154925-2		
Client ID:	GC-MW-109(WG)				
Operator ID:		ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

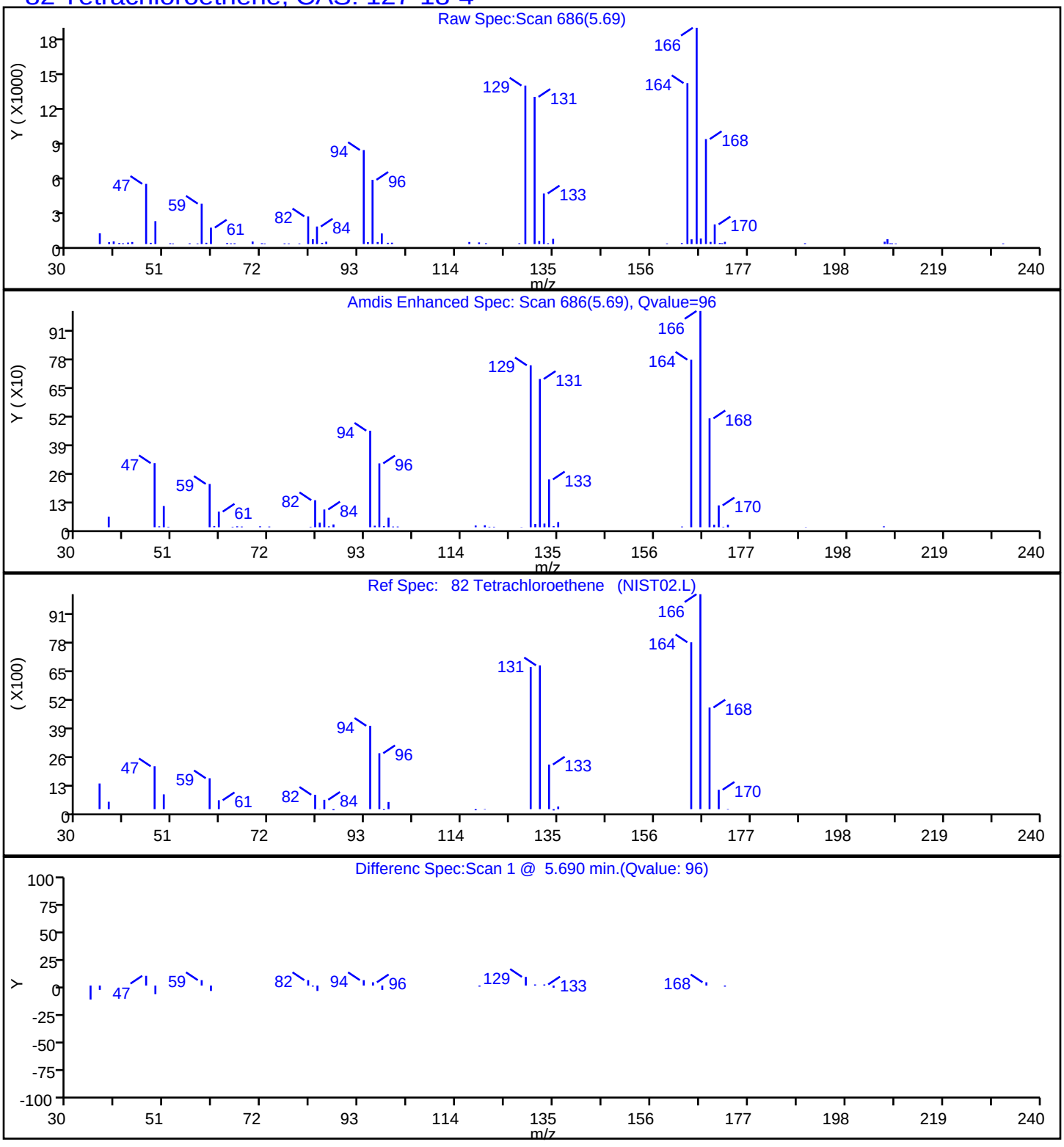
24 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44720.D		
Injection Date:	04-May-2018 05:55:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-2	Lab Sample ID:	460-154925-2
Client ID:	GC-MW-109(WG)		
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

82 Tetrachloroethene, CAS: 127-18-4



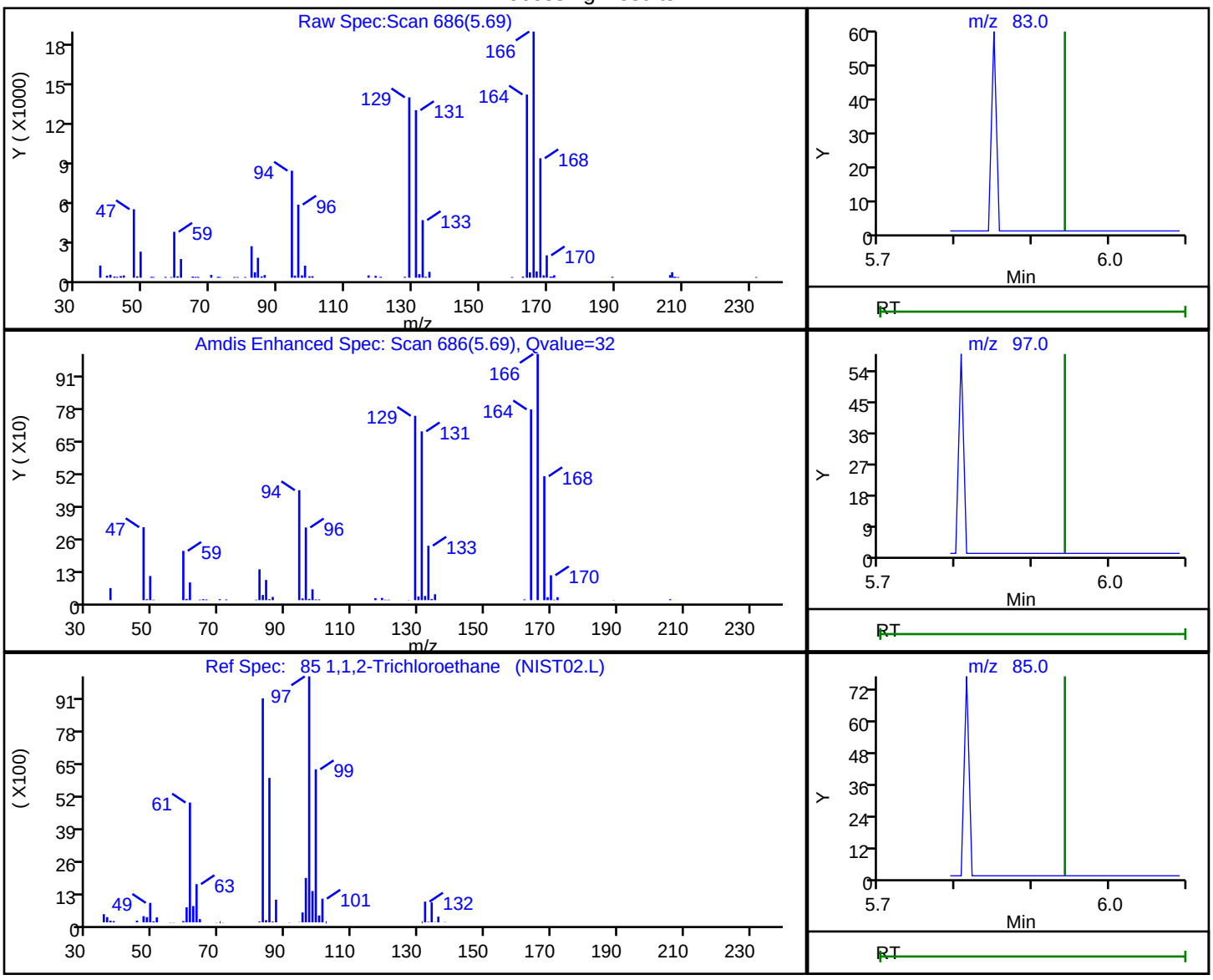
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44720.D				
Injection Date:	04-May-2018 05:55:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-2	Lab Sample ID:	460-154925-2		
Client ID:	GC-MW-109(WG)				
Operator ID:		ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

85 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
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5.69	97.00	214	
5.69	85.00	107	

Reviewer: desais, 04-May-2018 07:49:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

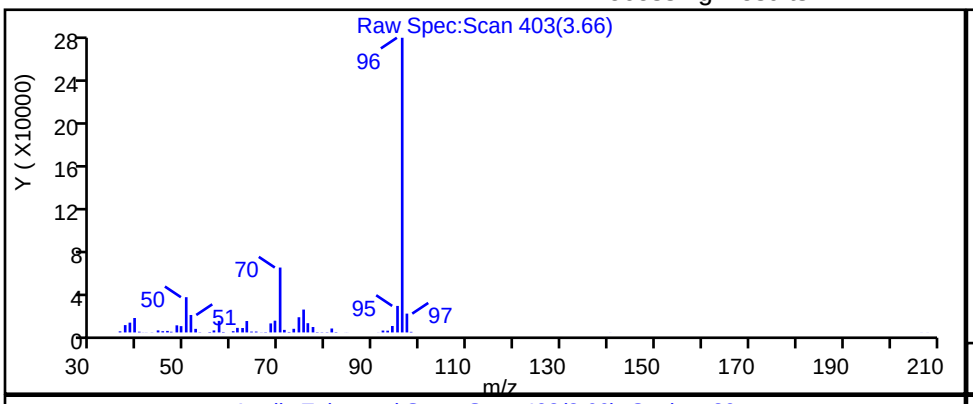
User Disabled Compound Report

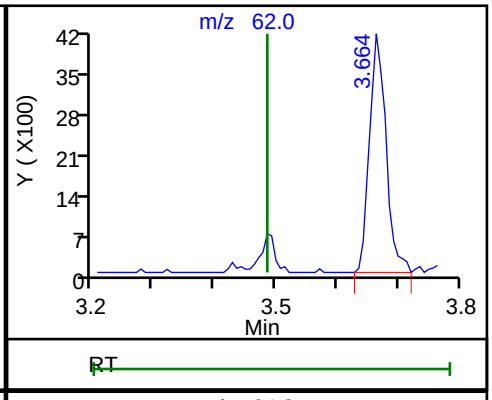
TestAmerica Edison

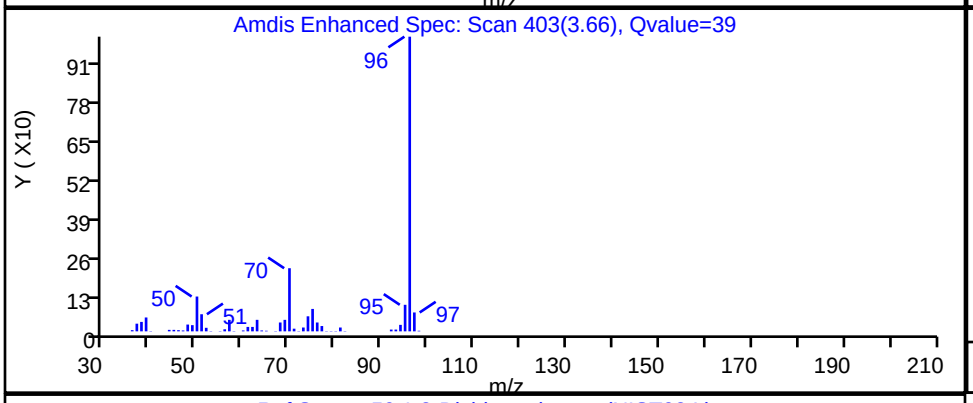
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44720.D				
Injection Date:	04-May-2018 05:55:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-2	Lab Sample ID:	460-154925-2		
Client ID:	GC-MW-109(WG)				
Operator ID:		ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

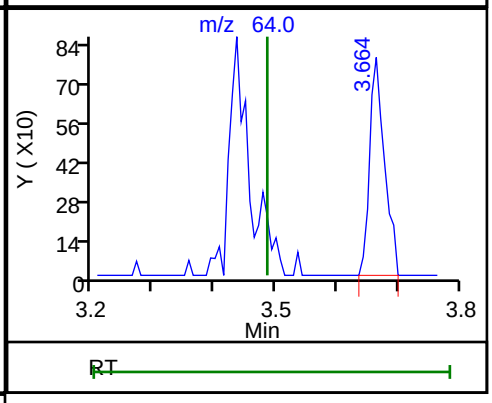
59 1,2-Dichloroethane, CAS: 107-06-2

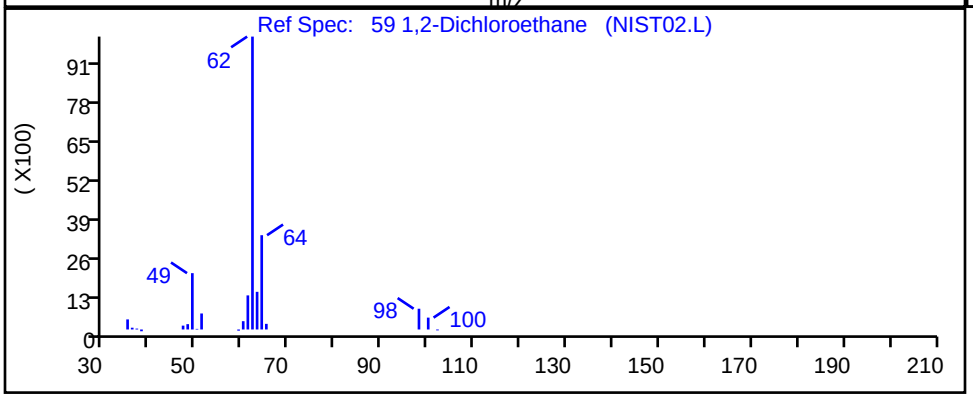
Processing Results











RT	Mass	Response	Amount
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3.66	64.00	1339	

Reviewer: desais, 04-May-2018 07:49:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

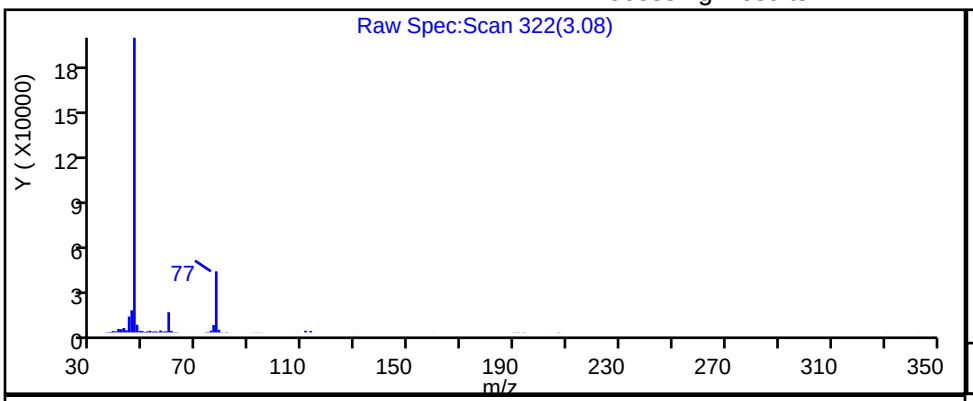
User Disabled Compound Report

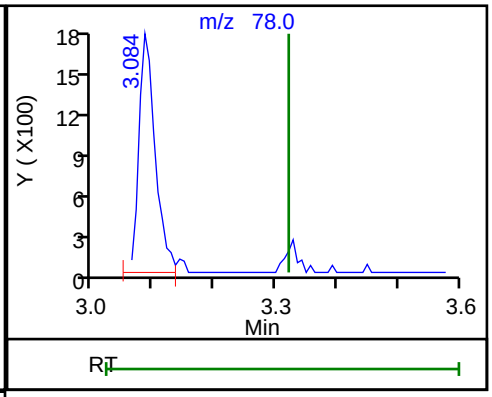
TestAmerica Edison

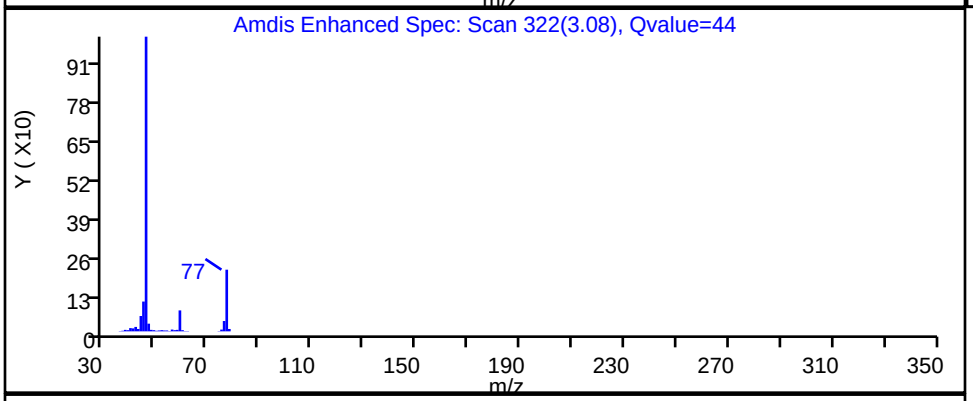
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44720.D		
Injection Date:	04-May-2018 05:55:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-2	Lab Sample ID:	460-154925-2
Client ID:	GC-MW-109(WG)		
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

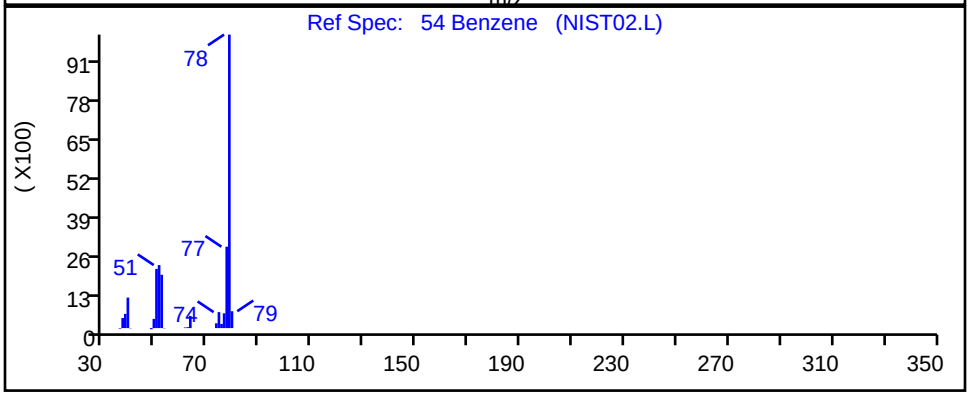
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.08	78.00	3183	0.216477

Reviewer: desais, 04-May-2018 07:49:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109M(WG) | Lab Sample ID: 460-154925-3

Matrix: Water | Lab File ID: P44721.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 06:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.4	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109M(WG) | Lab Sample ID: 460-154925-3

Matrix: Water | Lab File ID: P44721.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 06:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	0.24	J	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	52		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		74-132
460-00-4	4-Bromofluorobenzene	110		77-124
1868-53-7	Dibromofluoromethane (Surr)	117		72-131
2037-26-5	Toluene-d8 (Surr)	110		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109M(WG) Lab Sample ID: 460-154925-3

Matrix: Water Lab File ID: P44721.D

Analysis Method: 8260C Date Collected: 04/26/2018 09:00

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 06:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44721.D
Lims ID: 460-154925-B-3
Client ID: GC-MW-109M(WG)
Sample Type: Client
Inject. Date: 04-May-2018 06:21:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-3
Misc. Info.: 460-0071476-022
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 07:50:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
23 Methylene Chloride	84	1.873	1.881	-0.008	92	743	0.2407	
24 Acetone	43	1.909	1.902	0.007	84	2314	2.36	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	275004	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	150693	58.7	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	336222	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	201345	57.3	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	484804	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	30215	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	639580	54.8	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	162960	52.4	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	426441	50.0	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	182652	54.8	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.620	-0.008	96	234888	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

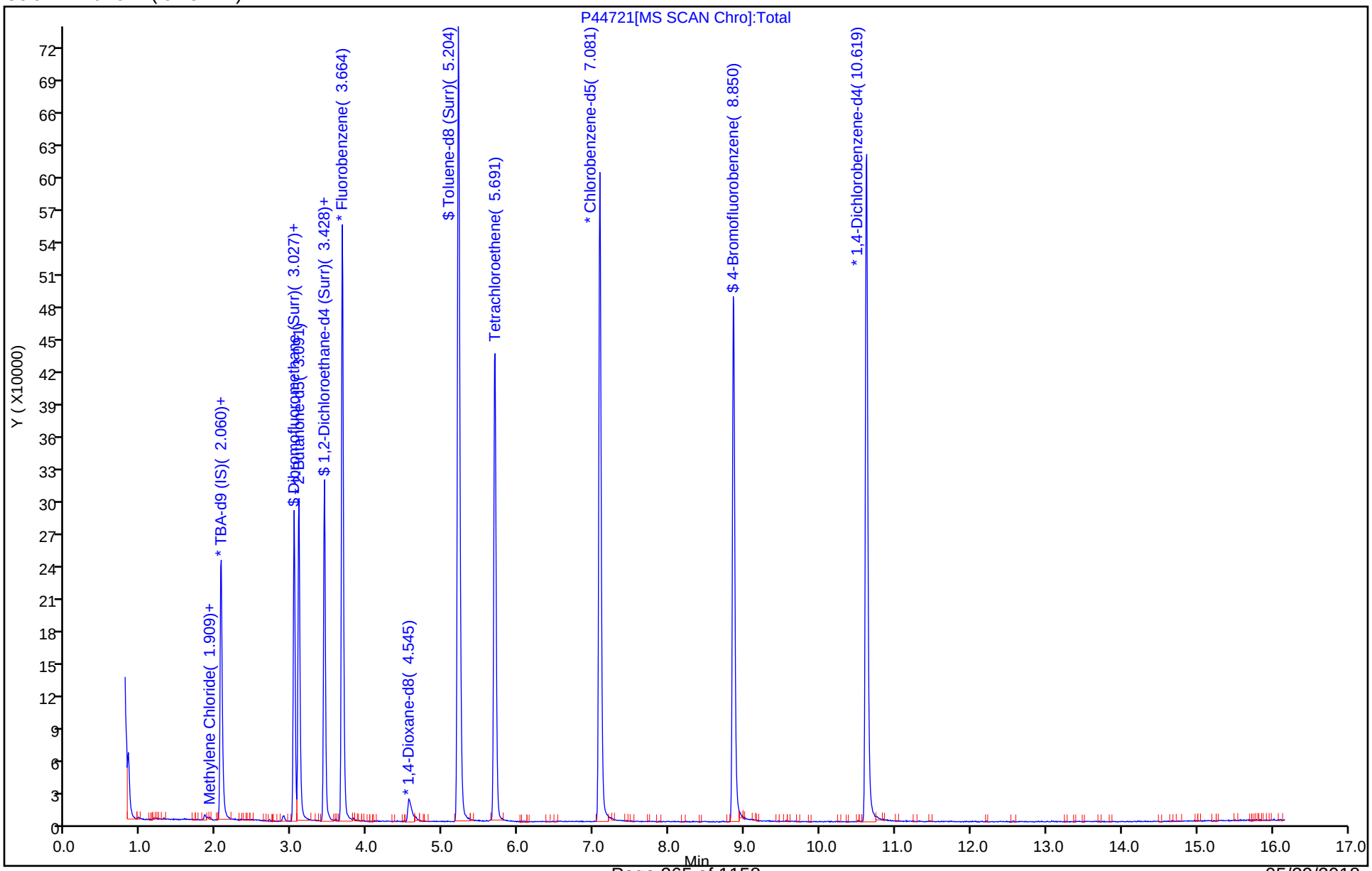
Report Date: 04-May-2018 08:41:47 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44721.D

Injection Date:	04-May-2018 06:21:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-3	Lab Sample ID:	460-154925-3	Worklist Smp#:	22
Client ID:	GC-MW-109M(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

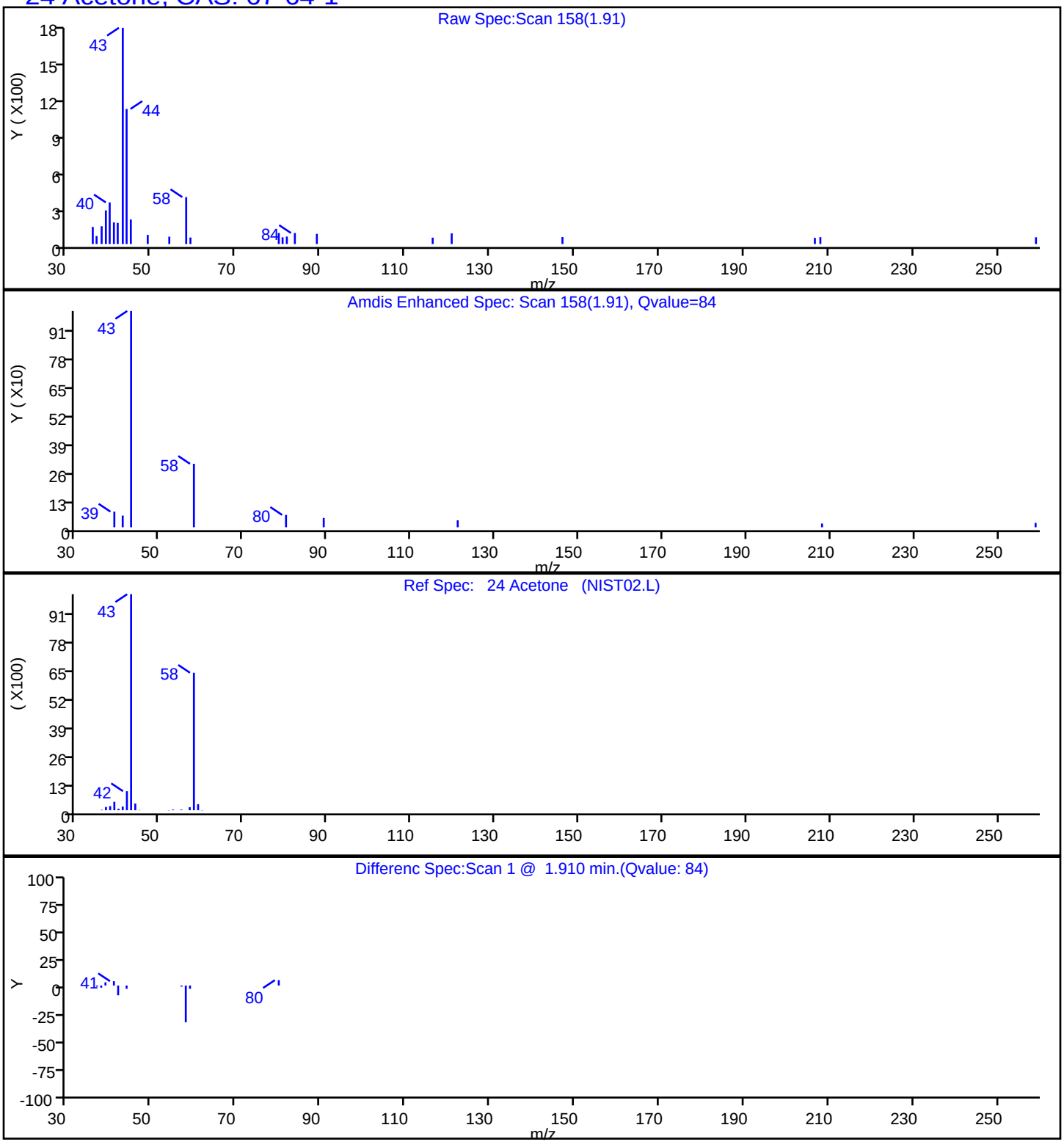
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44721.D				
Injection Date:	04-May-2018 06:21:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-3	Lab Sample ID:	460-154925-3		
Client ID:	GC-MW-109M(WG)				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

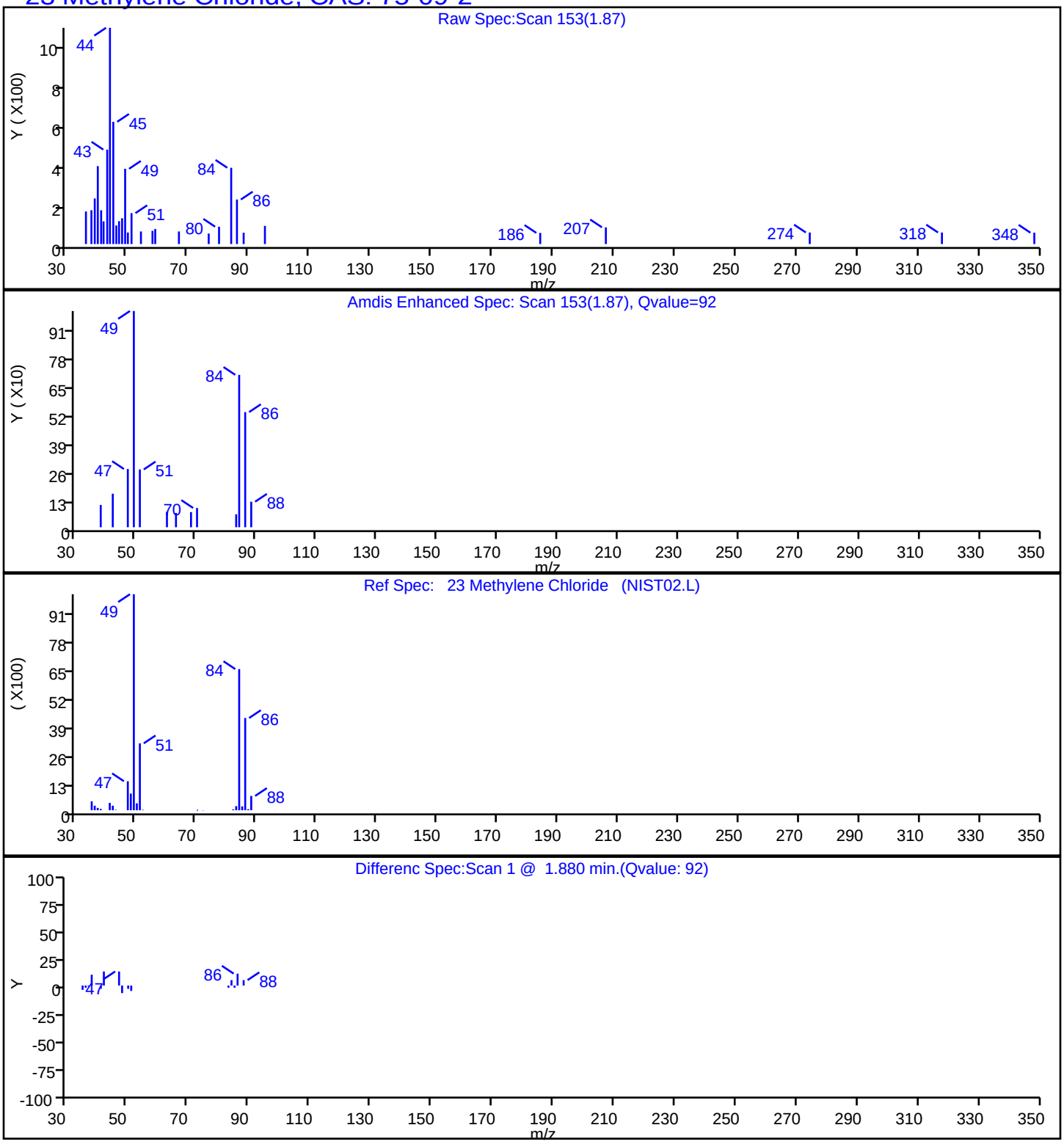
24 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44721.D		
Injection Date:	04-May-2018 06:21:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-3	Lab Sample ID:	460-154925-3
Client ID:	GC-MW-109M(WG)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

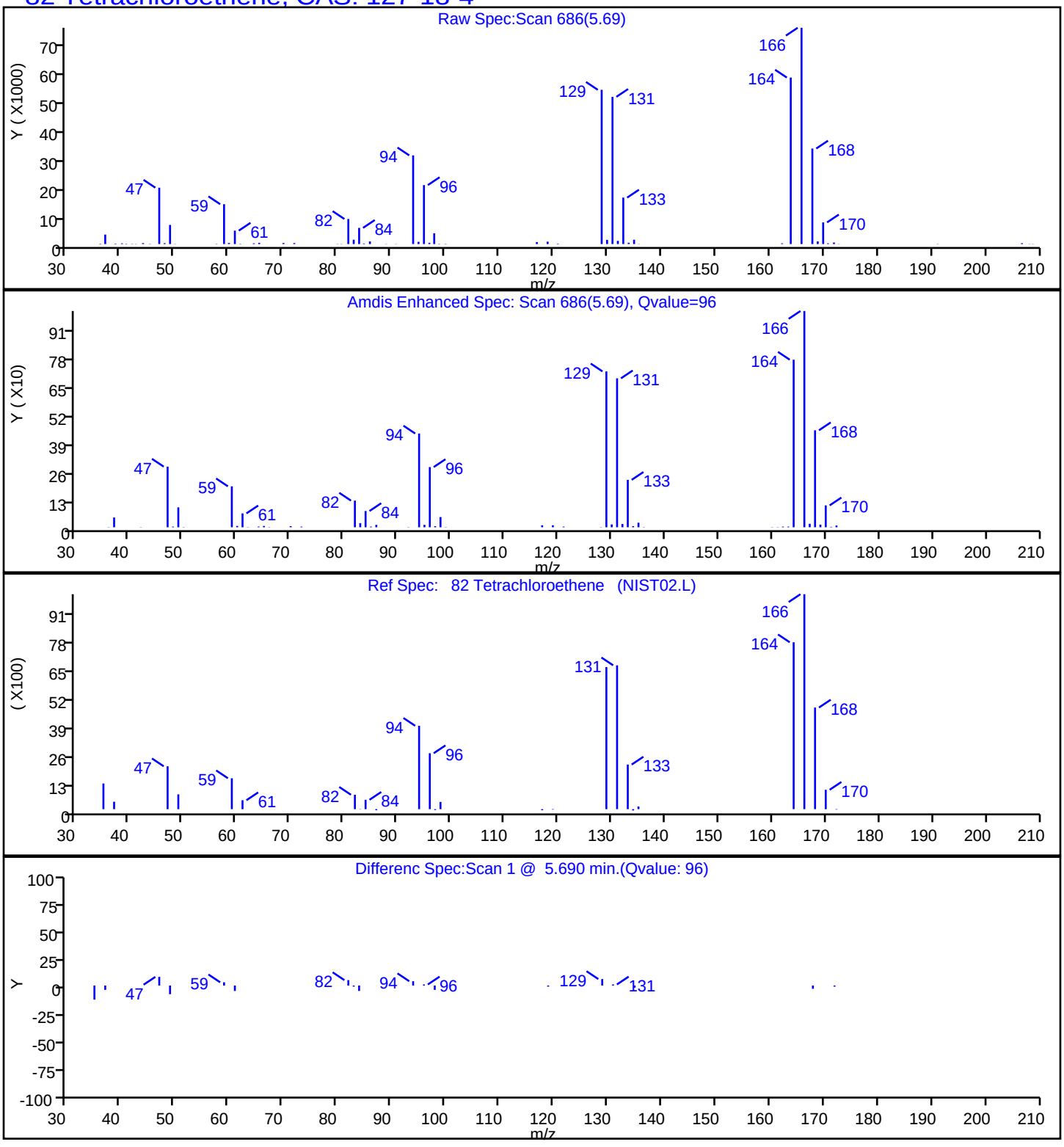
23 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44721.D		
Injection Date:	04-May-2018 06:21:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-3	Lab Sample ID:	460-154925-3
Client ID:	GC-MW-109M(WG)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

82 Tetrachloroethene, CAS: 127-18-4



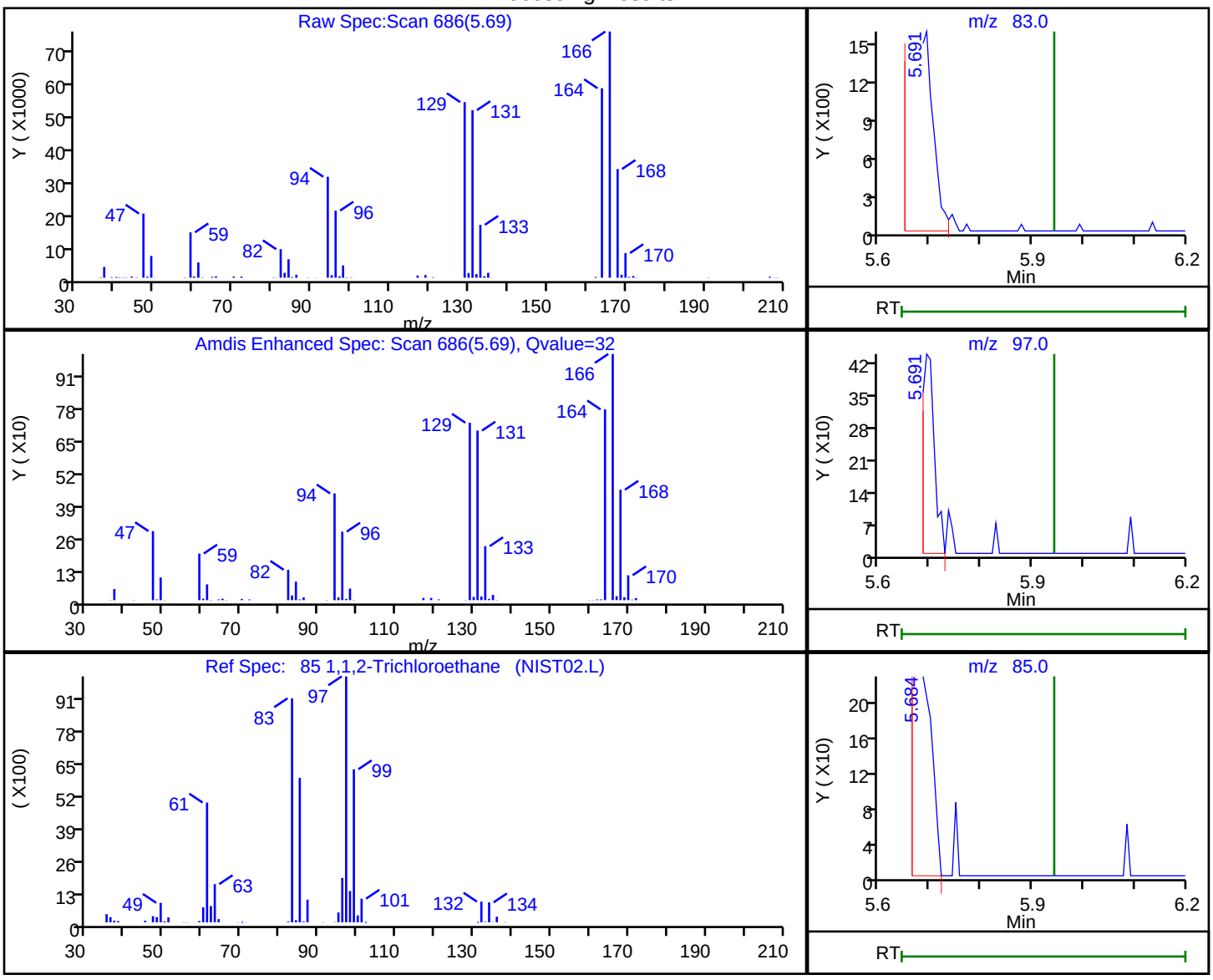
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44721.D				
Injection Date:	04-May-2018 06:21:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-3	Lab Sample ID:	460-154925-3		
Client ID:	GC-MW-109M(WG)				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

85 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
5.69	83.00	3339	1.324202
5.69	97.00	692	
5.68	85.00	471	

Reviewer: desais, 04-May-2018 07:50:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

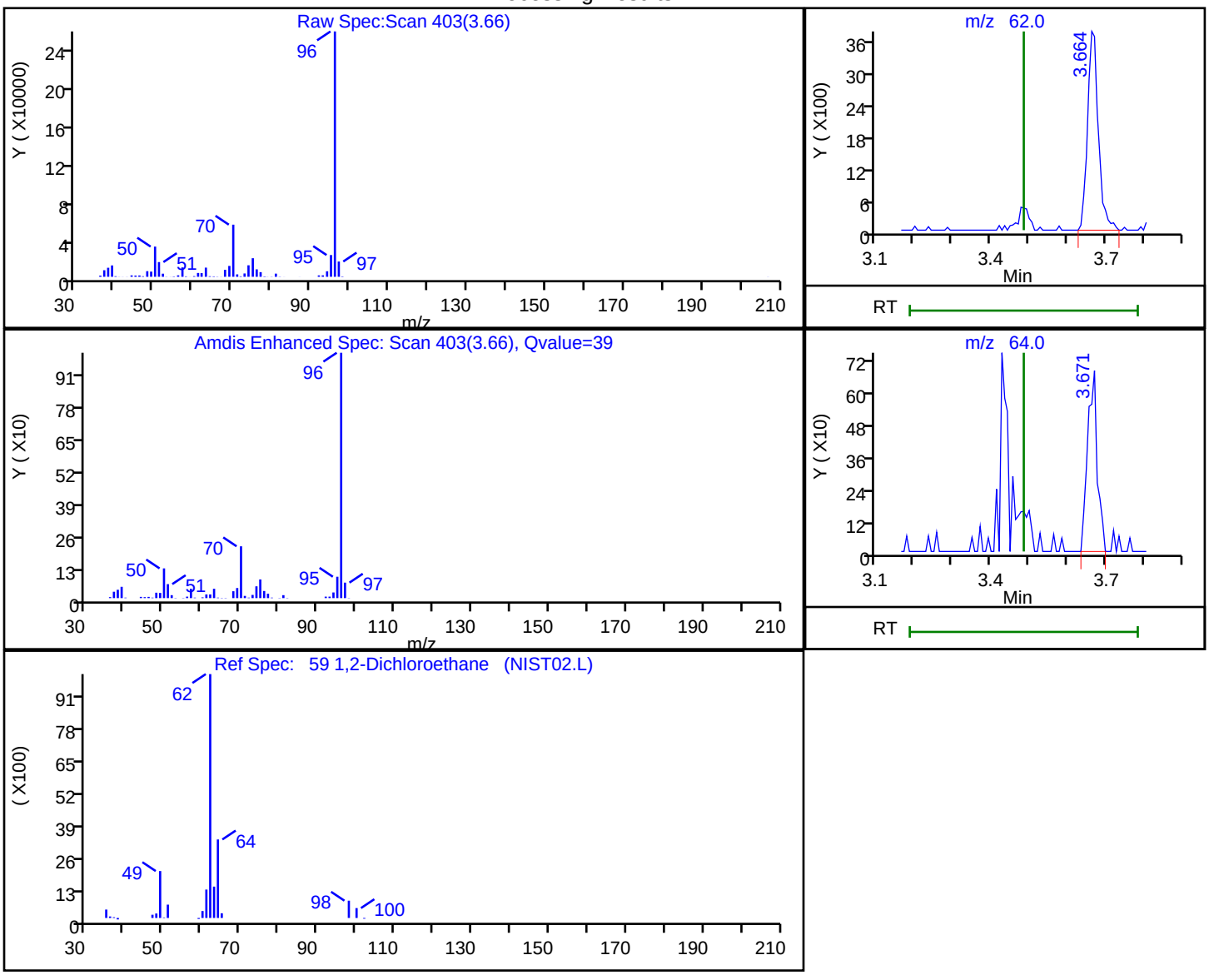
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44721.D				
Injection Date:	04-May-2018 06:21:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-3	Lab Sample ID:	460-154925-3		
Client ID:	GC-MW-109M(WG)				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.66	62.00	7455	1.559195
3.67	64.00	1200	

Reviewer: desais, 04-May-2018 07:50:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

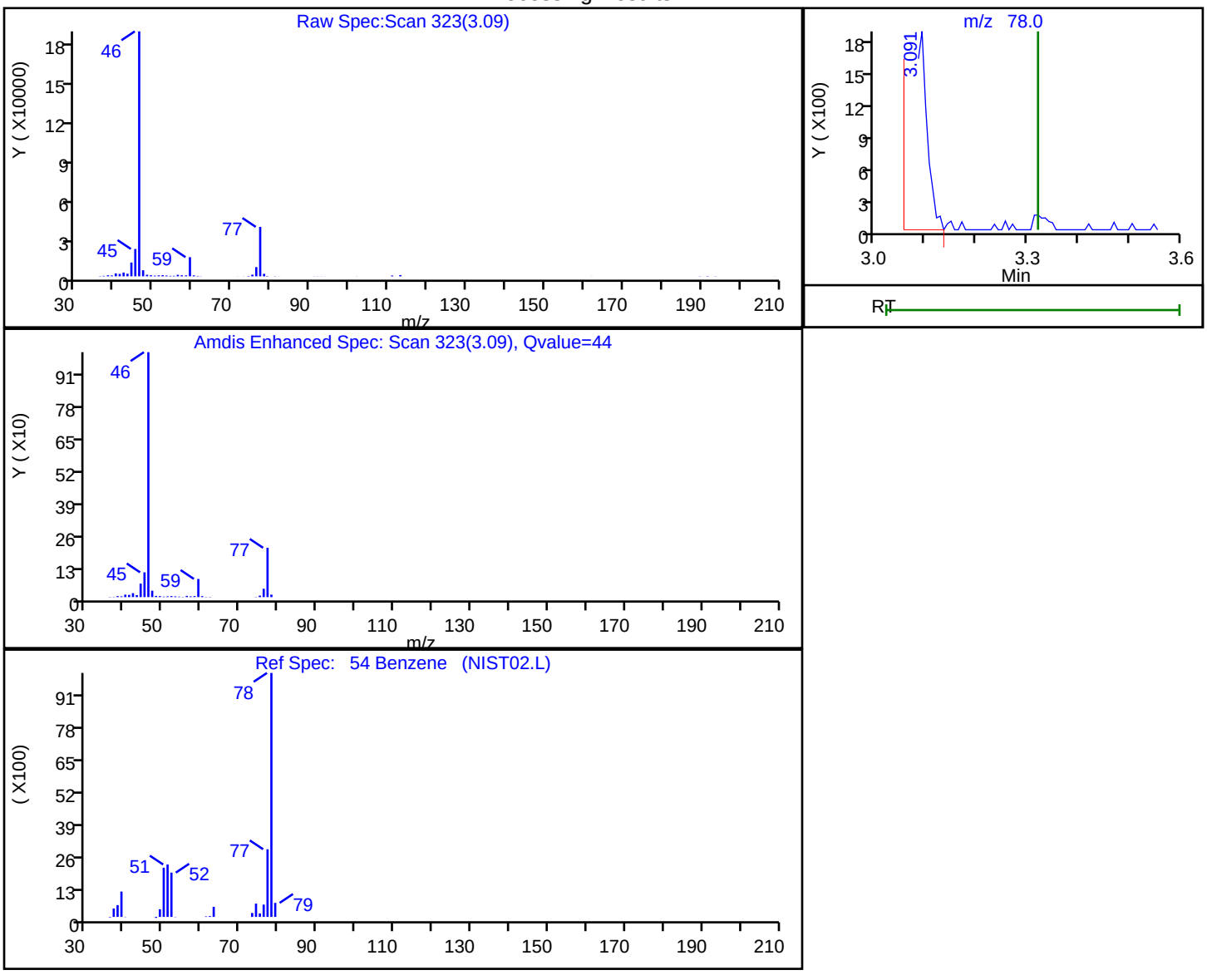
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44721.D				
Injection Date:	04-May-2018 06:21:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-3	Lab Sample ID:	460-154925-3		
Client ID:	GC-MW-109M(WG)				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

54 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.09	78.00	3209	0.237345

Reviewer: desais, 04-May-2018 07:50:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101(WG) | Lab Sample ID: 460-154925-4

Matrix: Water | Lab File ID: P44722.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 06:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.1	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101(WG) | Lab Sample ID: 460-154925-4

Matrix: Water | Lab File ID: P44722.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 06:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.22	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		74-132
460-00-4	4-Bromofluorobenzene	104		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101(WG) Lab Sample ID: 460-154925-4

Matrix: Water Lab File ID: P44722.D

Analysis Method: 8260C Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 06:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44722.D
Lims ID: 460-154925-B-4
Client ID: GC-MW-101(WG)
Sample Type: Client
Inject. Date: 04-May-2018 06:46:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-4
Misc. Info.: 460-0071476-023
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 14:55:46 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: desais Date: 04-May-2018 07:52:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	85	2141	2.07	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	287943	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	153074	54.5	
* 49 2-Butanone-d5	46	3.084	3.084	0.000	0	354698	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	200467	52.2	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	530411	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	29251	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	639440	51.2	
82 Tetrachloroethene	166	5.698	5.691	0.007	88	727	0.2185	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	456222	50.0	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	88	185027	51.9	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.620	-0.001	97	250783	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

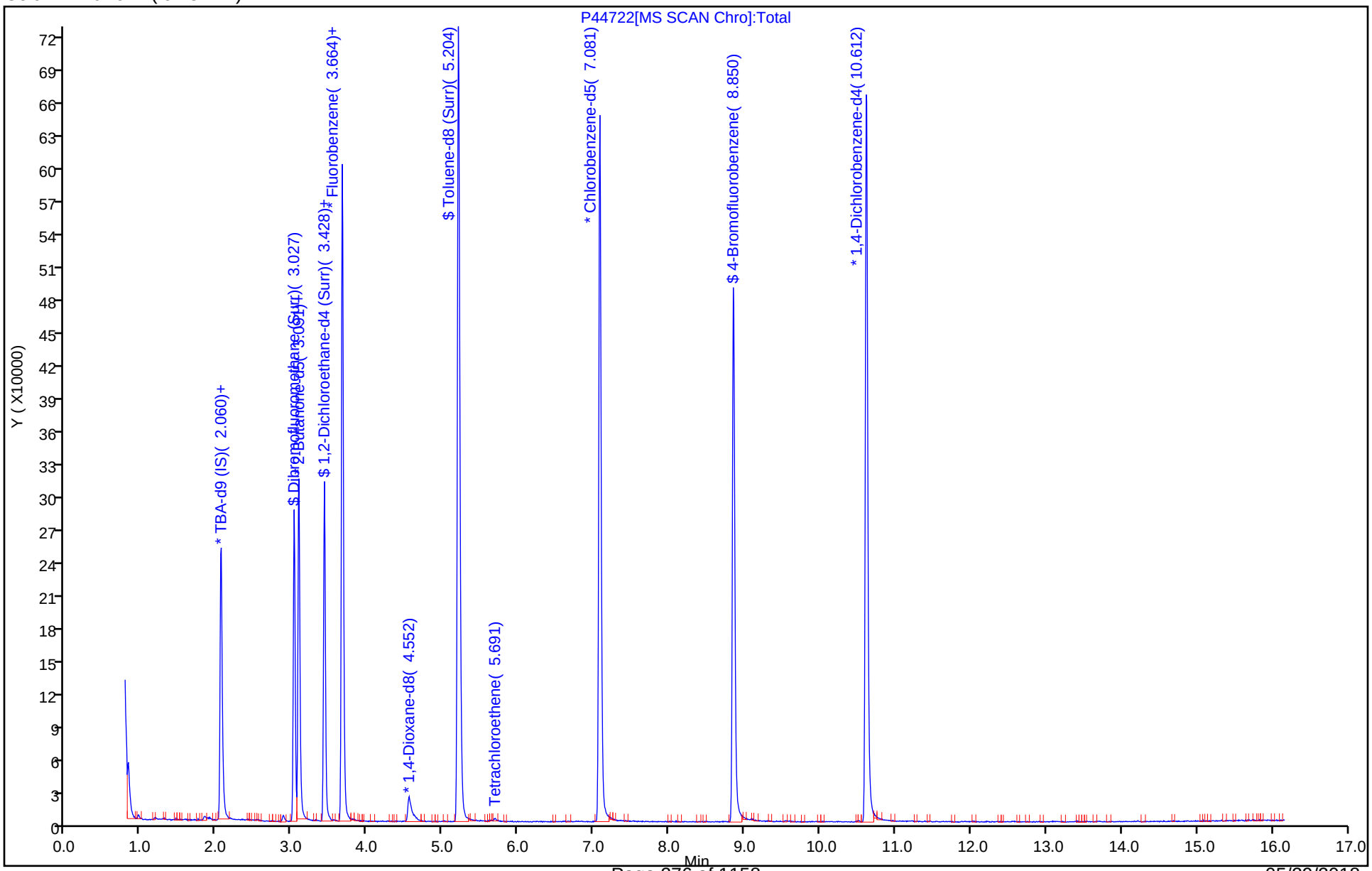
Report Date: 04-May-2018 14:55:50 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44722.D

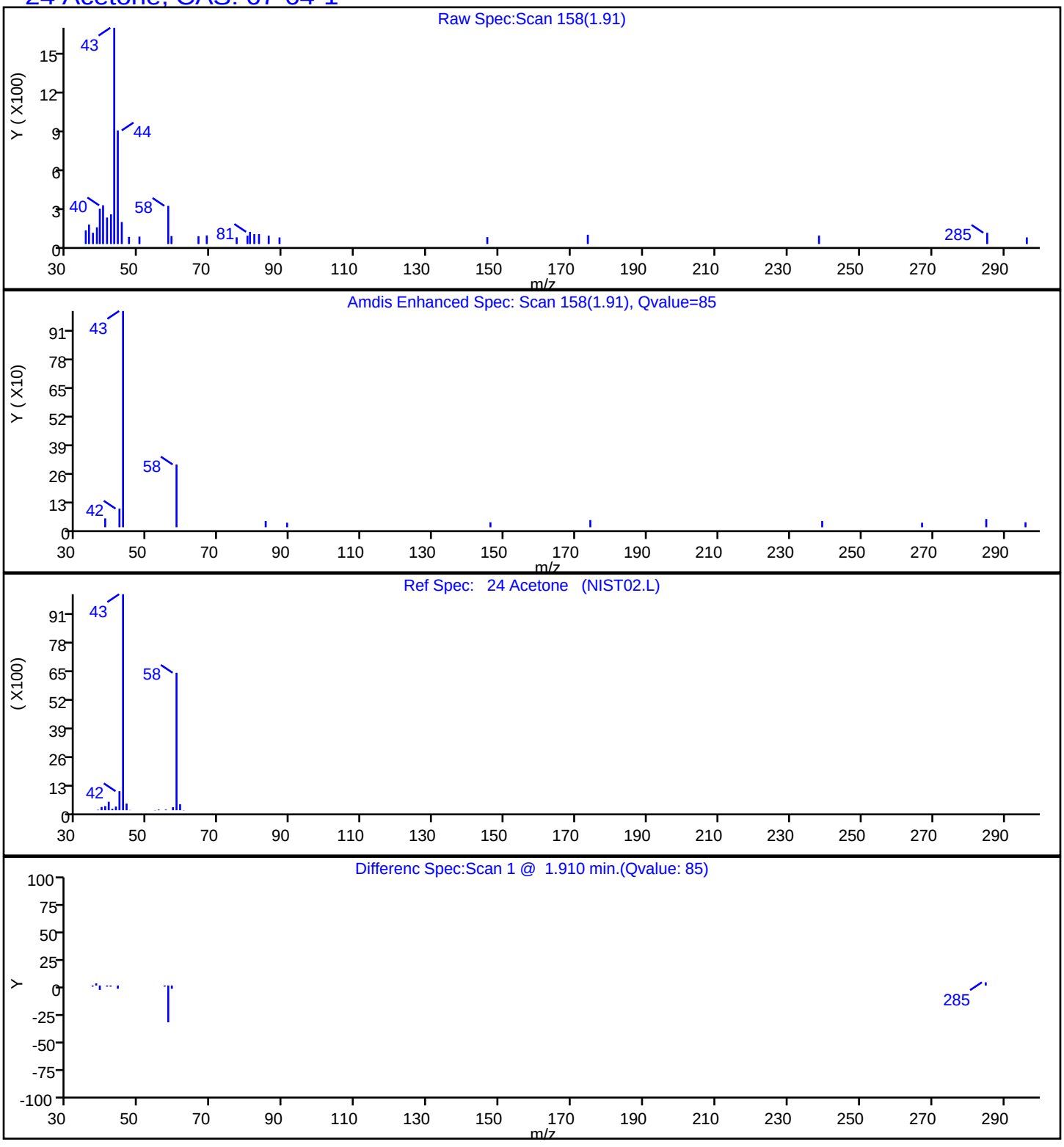
Injection Date:	04-May-2018 06:46:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-4	Lab Sample ID:	460-154925-4	Worklist Smp#:	23
Client ID:	GC-MW-101(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44722.D
Injection Date: 04-May-2018 06:46:30 Instrument ID: CVOAMS13
Lims ID: 460-154925-B-4 Lab Sample ID: 460-154925-4
Client ID: GC-MW-101(WG)
Operator ID: ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

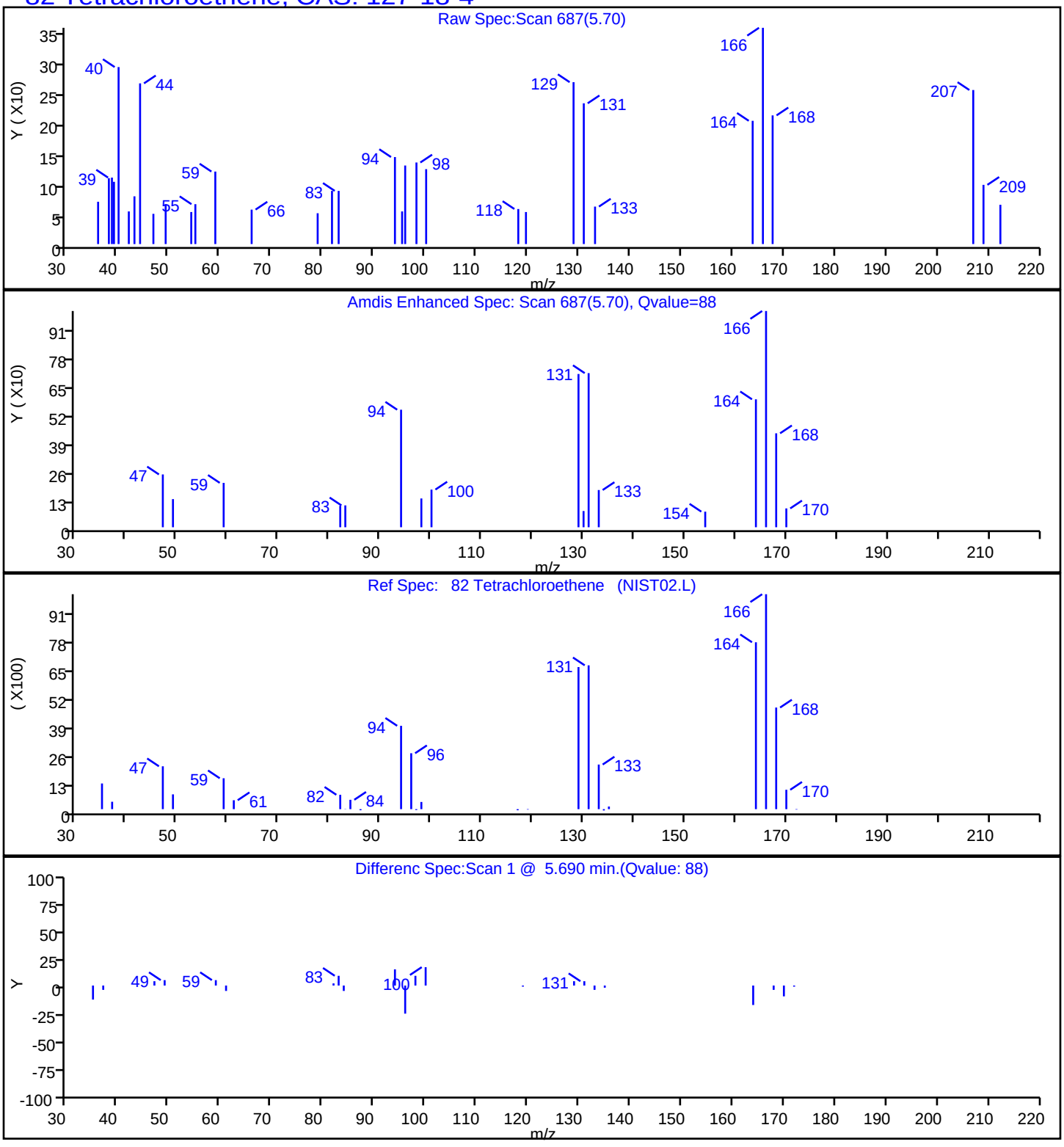
24 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44722.D

Injection Date:	04-May-2018 06:46:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-4	Lab Sample ID:	460-154925-4		
Client ID:	GC-MW-101(WG)				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

82 Tetrachloroethene, CAS: 127-18-4



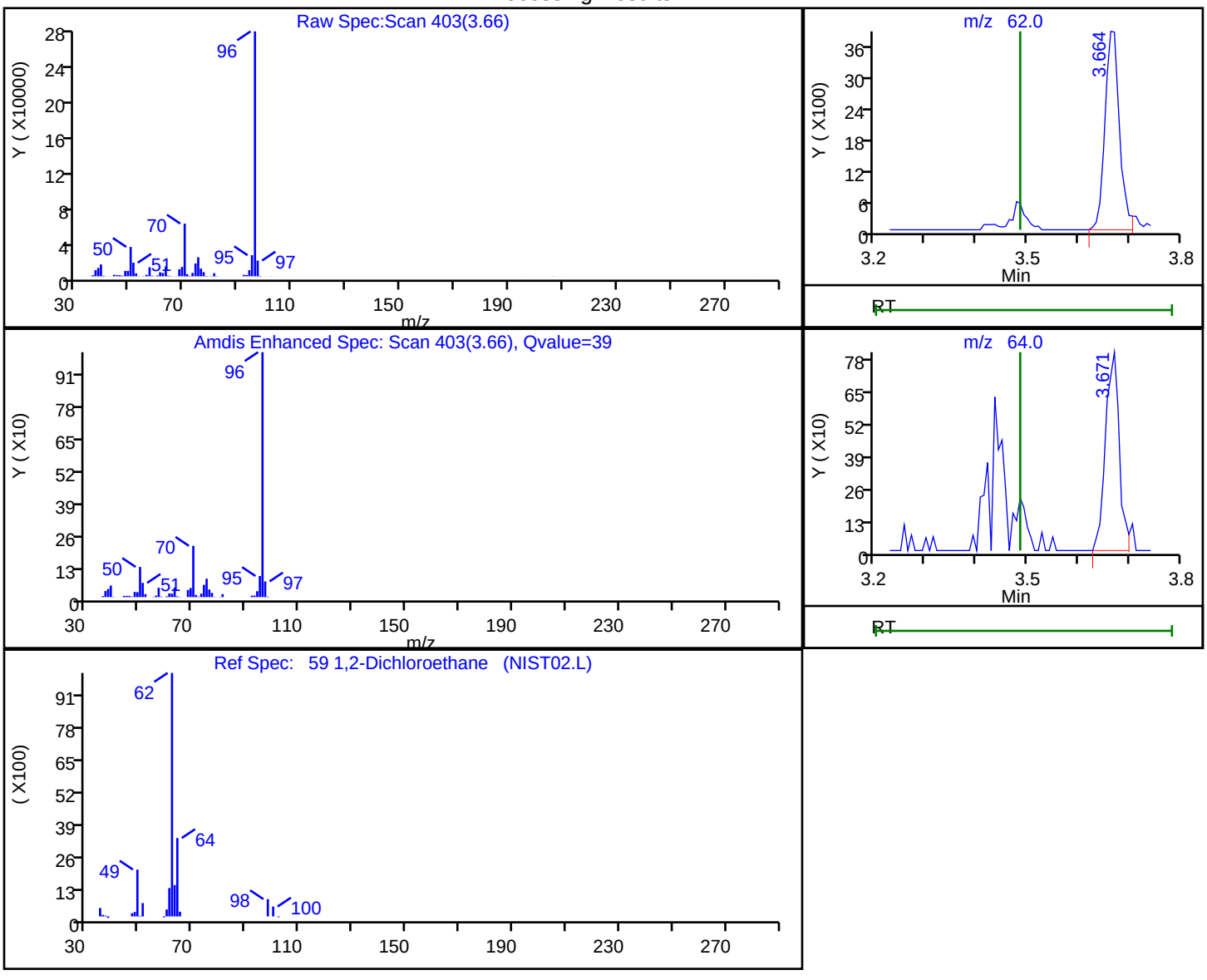
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44722.D		
Injection Date:	04-May-2018 06:46:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-4	Lab Sample ID:	460-154925-4
Client ID:	GC-MW-101(WG)		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.66	62.00	7616	1.455906
3.67	64.00	1517	

Reviewer: desais, 04-May-2018 07:52:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

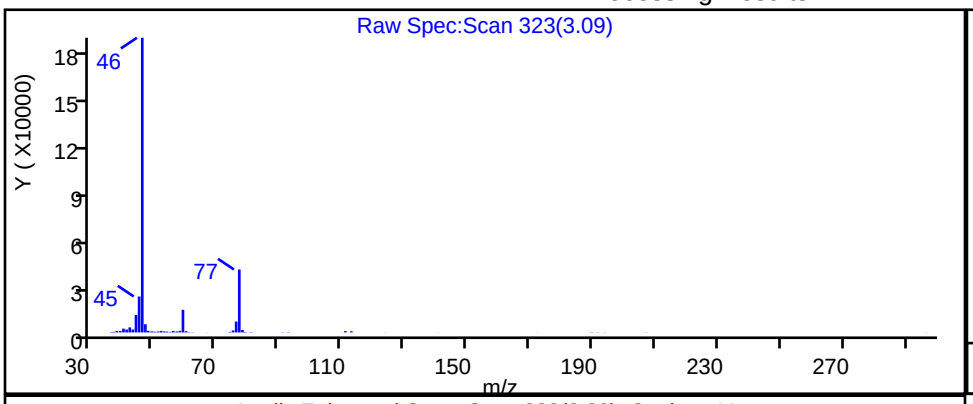
User Disabled Compound Report

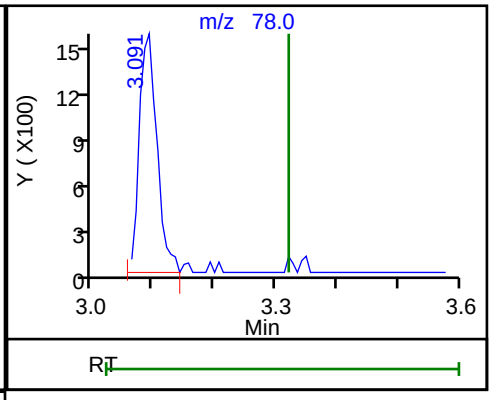
TestAmerica Edison

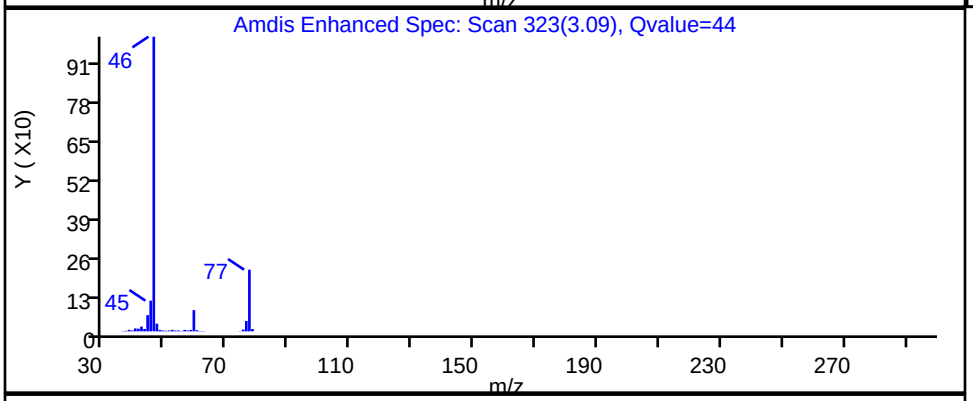
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44722.D				
Injection Date:	04-May-2018 06:46:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-4	Lab Sample ID:	460-154925-4		
Client ID:	GC-MW-101(WG)				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

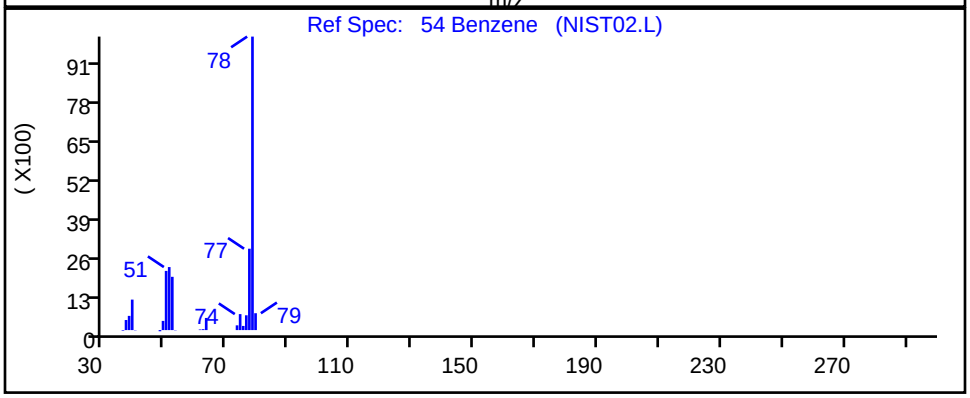
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.09	78.00	3167	0.218948

Reviewer: desais, 04-May-2018 07:52:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

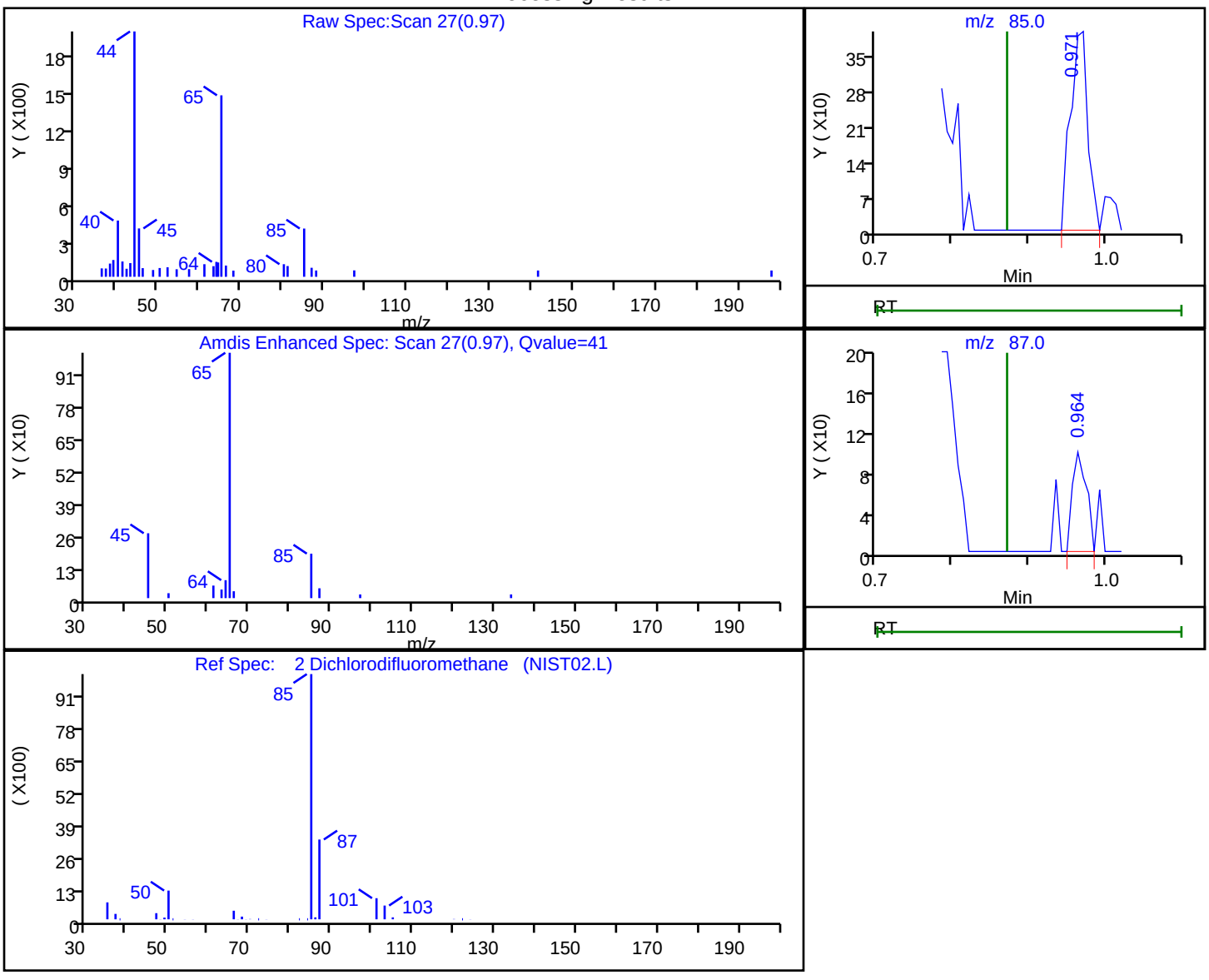
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44722.D				
Injection Date:	04-May-2018 06:46:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-4	Lab Sample ID:	460-154925-4		
Client ID:	GC-MW-101(WG)				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
0.97	85.00	619	0.151423
0.96	87.00	126	

Reviewer: baronm, 04-May-2018 14:55:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101D(WG) | Lab Sample ID: 460-154925-5

Matrix: Water | Lab File ID: P44723.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 07:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	3.6	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101D(WG) | Lab Sample ID: 460-154925-5

Matrix: Water | Lab File ID: P44723.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 07:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	0.18	J	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		74-132
460-00-4	4-Bromofluorobenzene	119		77-124
1868-53-7	Dibromofluoromethane (Surr)	125		72-131
2037-26-5	Toluene-d8 (Surr)	115		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101D(WG) Lab Sample ID: 460-154925-5

Matrix: Water Lab File ID: P44723.D

Analysis Method: 8260C Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 07:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44723.D
Lims ID: 460-154925-B-5
Client ID: GC-MW-101D(WG)
Sample Type: Client
Inject. Date: 04-May-2018 07:11:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-5
Misc. Info.: 460-0071476-024
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 07:55:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	82	3206	3.56	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	68	1539	0.1777	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	246414	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	153233	62.3	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	307870	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	198542	59.0	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	464335	50.0	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	24792	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	628977	57.7	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	397748	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	88	184808	59.4	
* 119 1,4-Dichlorobenzene-d4	152	10.620	10.620	0.000	97	216457	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

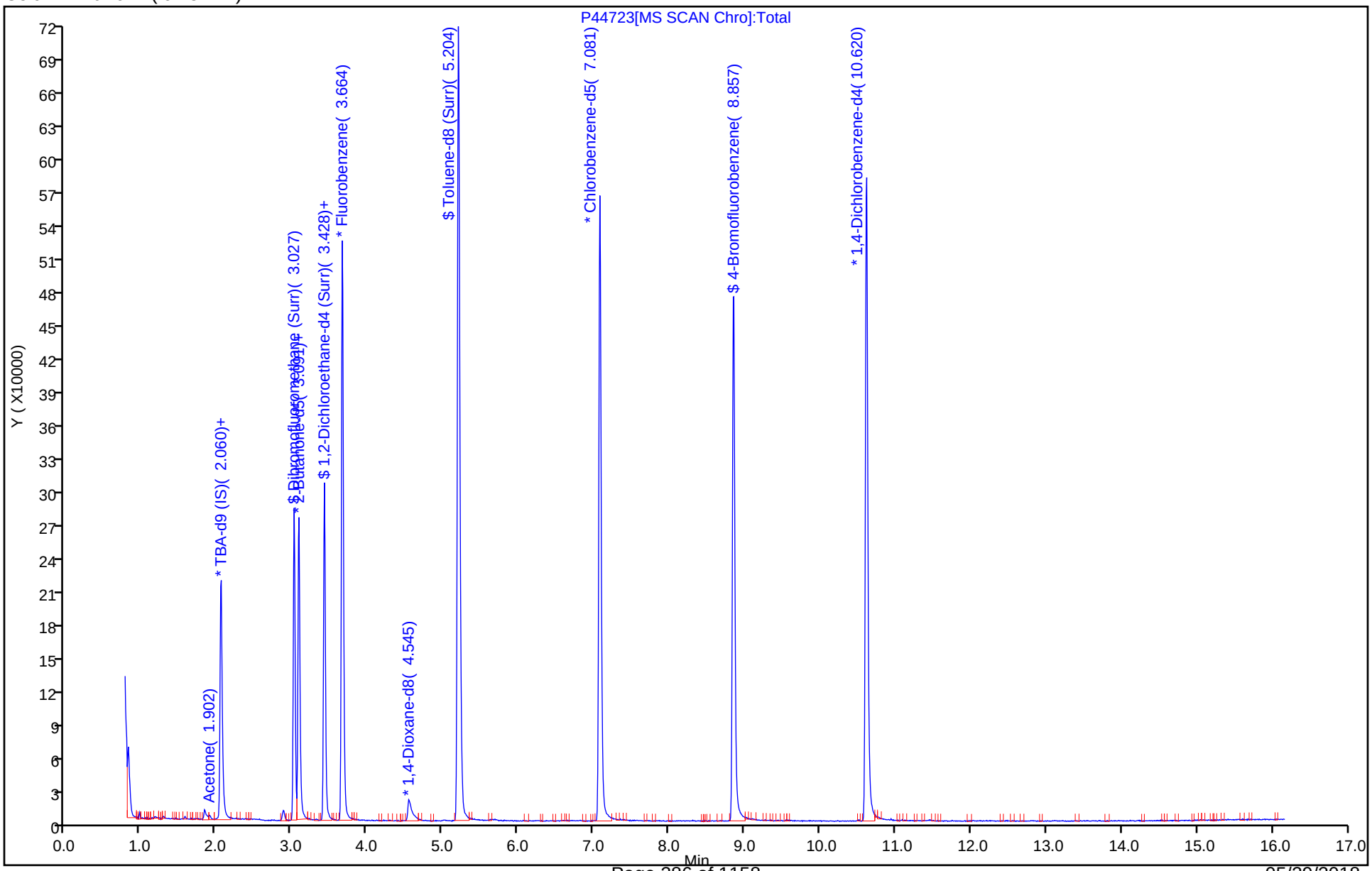
Report Date: 04-May-2018 08:41:50 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44723.D

Injection Date:	04-May-2018 07:11:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-5	Lab Sample ID:	460-154925-5	Worklist Smp#:	24
Client ID:	GC-MW-101D(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

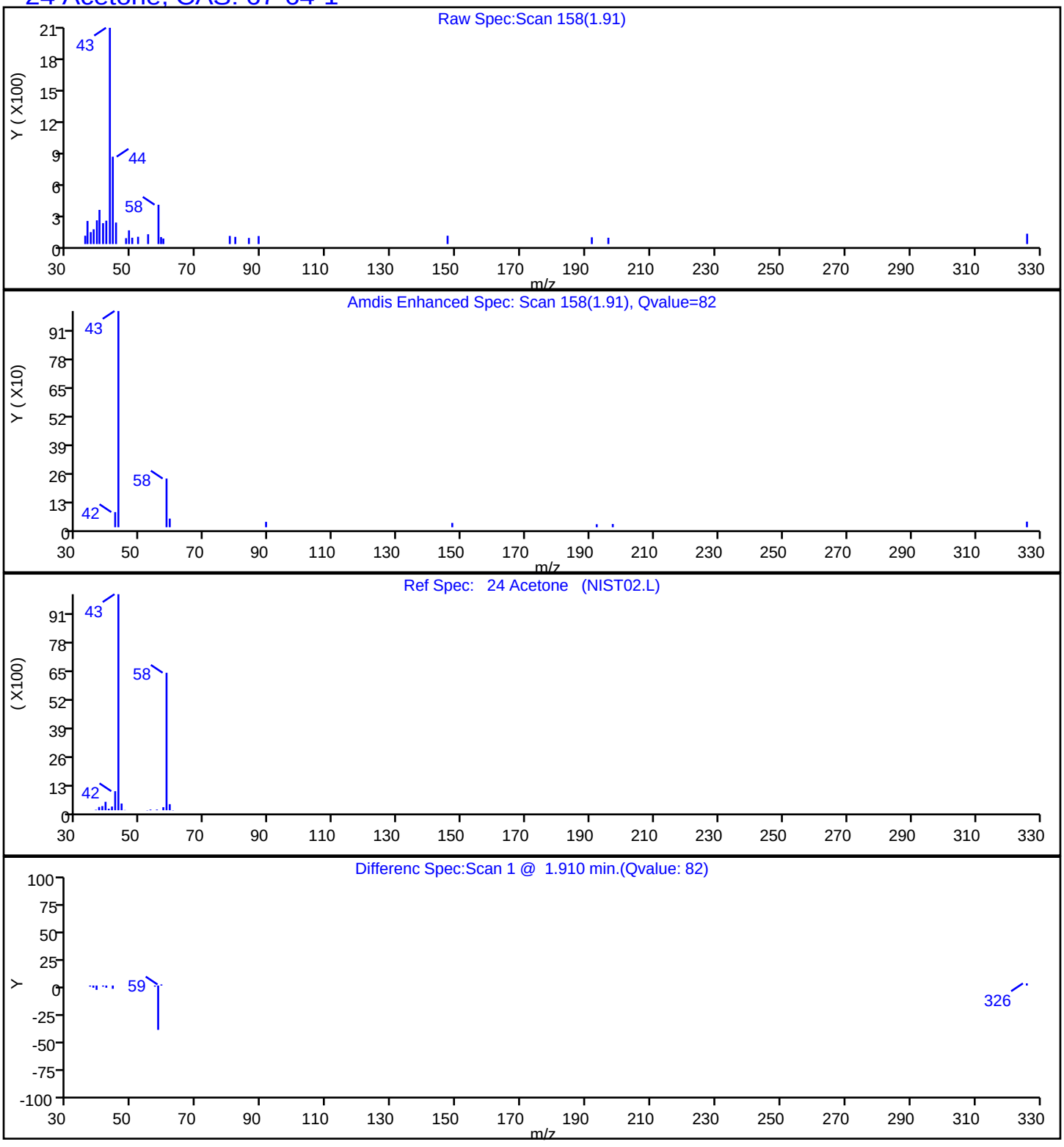
Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44723.D

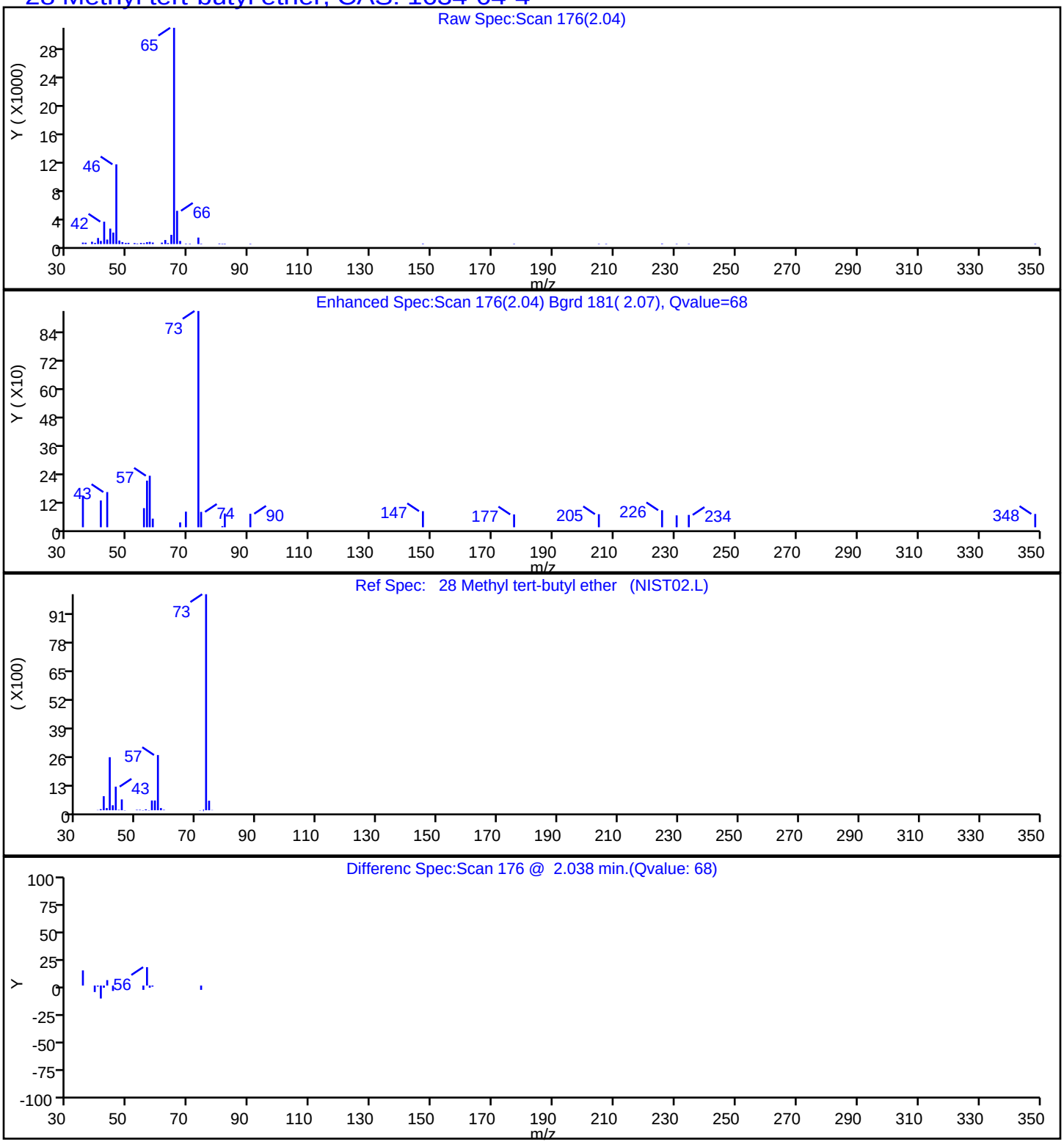
Injection Date:	04-May-2018 07:11:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-5	Lab Sample ID:	460-154925-5		
Client ID:	GC-MW-101D(WG)				
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44723.D
Injection Date: 04-May-2018 07:11:30 Instrument ID: CVOAMS13
Lims ID: 460-154925-B-5 Lab Sample ID: 460-154925-5
Client ID: GC-MW-101D(WG)
Operator ID: ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 Methyl tert-butyl ether, CAS: 1634-04-4



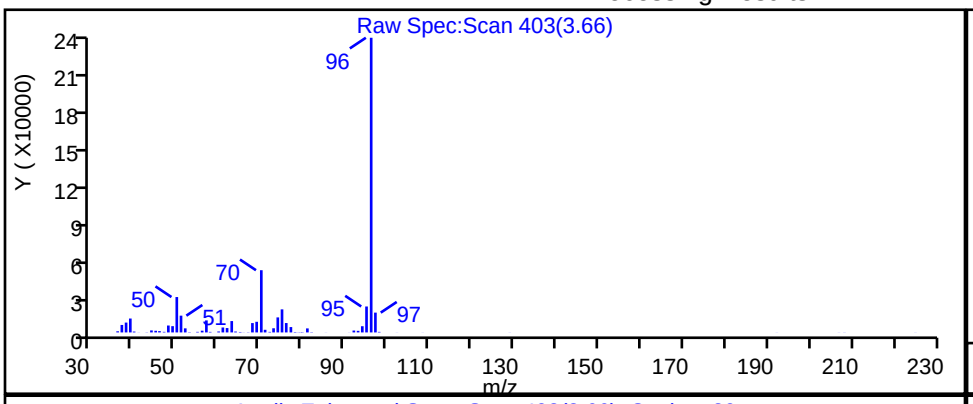
User Disabled Compound Report

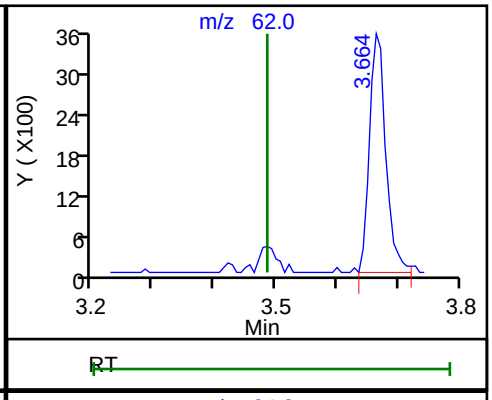
TestAmerica Edison

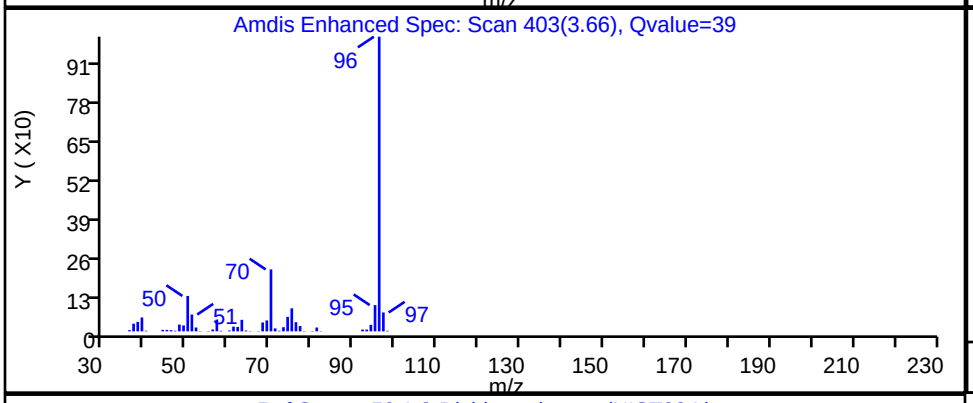
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44723.D				
Injection Date:	04-May-2018 07:11:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-5	Lab Sample ID:	460-154925-5		
Client ID:	GC-MW-101D(WG)				
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

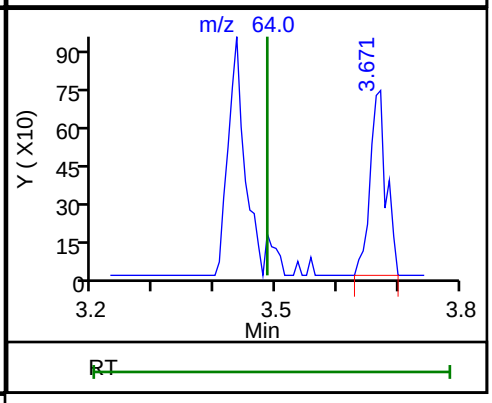
59 1,2-Dichloroethane, CAS: 107-06-2

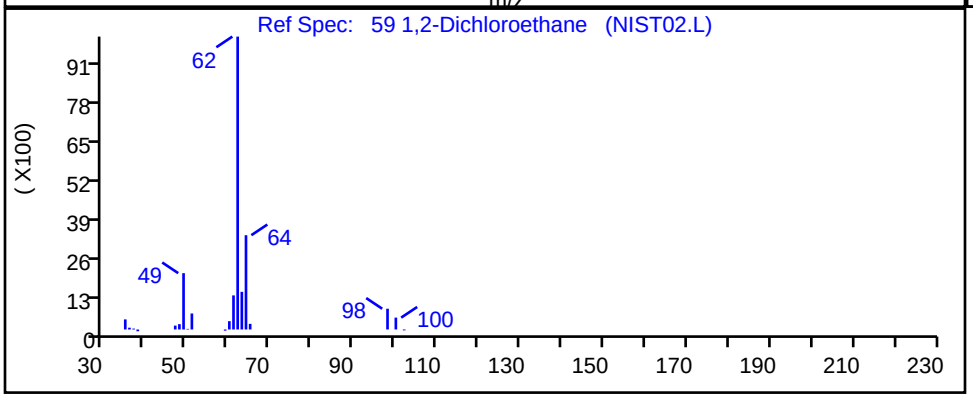
Processing Results











RT	Mass	Response	Amount
3.66	62.00	6594	1.439914
3.67	64.00	1360	

Reviewer: desais, 04-May-2018 07:55:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

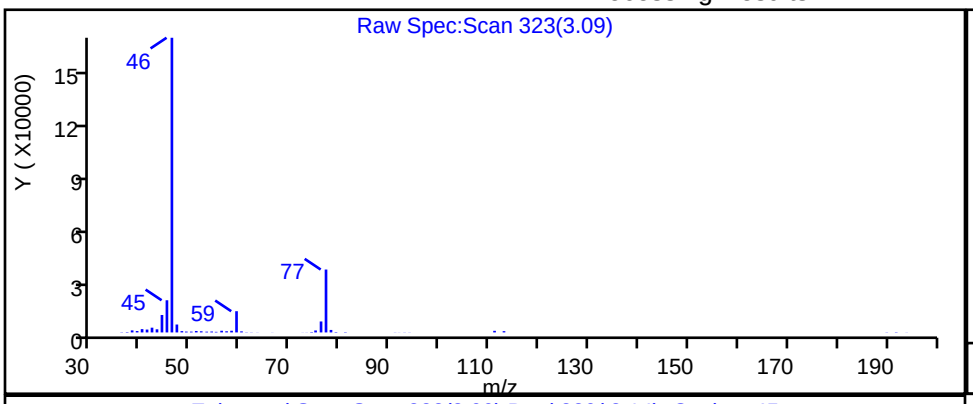
User Disabled Compound Report

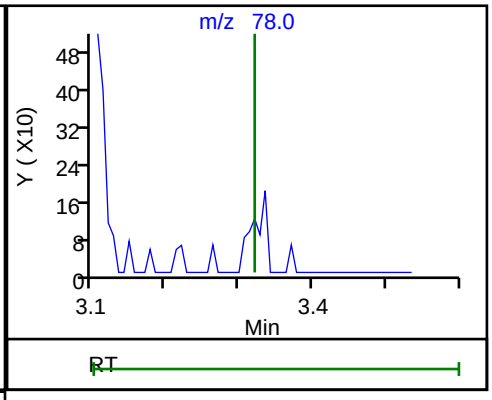
TestAmerica Edison

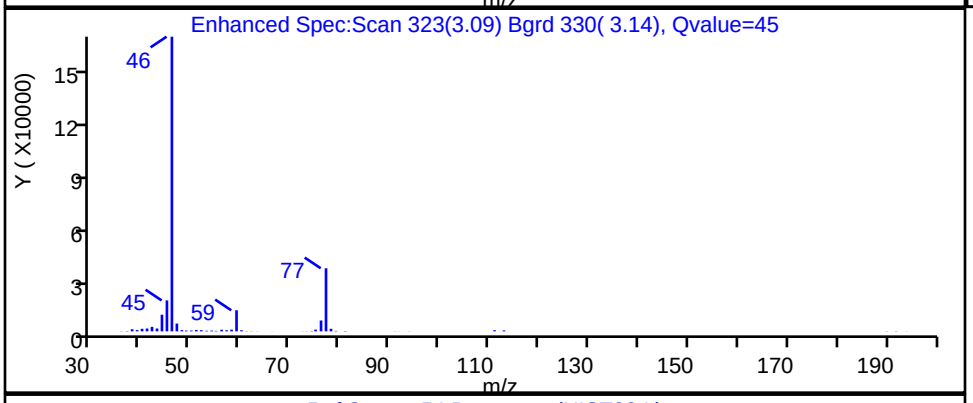
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44723.D		
Injection Date:	04-May-2018 07:11:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-5	Lab Sample ID:	460-154925-5
Client ID:	GC-MW-101D(WG)		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

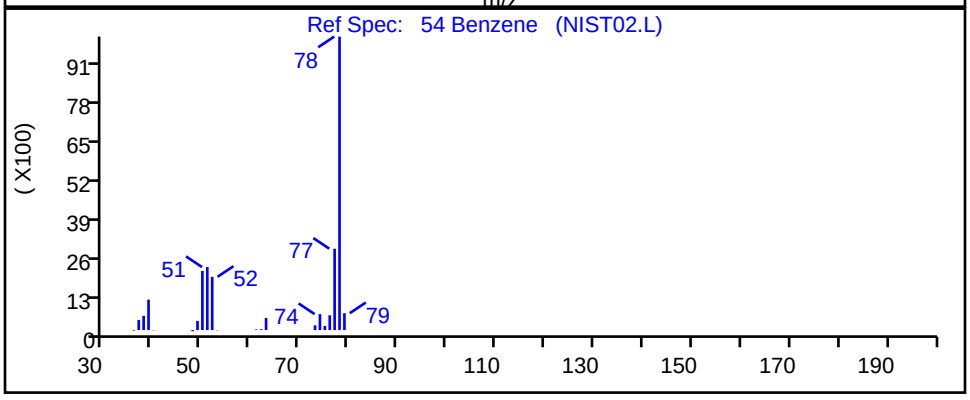
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.09	78.00	2578	0.204430

Reviewer: desais, 04-May-2018 07:55:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-106(WG) | Lab Sample ID: 460-154925-6

Matrix: Water | Lab File ID: P44724.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 07:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.8	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-106(WG) | Lab Sample ID: 460-154925-6

Matrix: Water | Lab File ID: P44724.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 07:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		74-132
460-00-4	4-Bromofluorobenzene	110		77-124
1868-53-7	Dibromofluoromethane (Surr)	117		72-131
2037-26-5	Toluene-d8 (Surr)	108		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-106(WG) | Lab Sample ID: 460-154925-6

Matrix: Water | Lab File ID: P44724.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 07:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44724.D
Lims ID: 460-154925-B-6
Client ID: GC-MW-106(WG)
Sample Type: Client
Inject. Date: 04-May-2018 07:37:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-6
Misc. Info.: 460-0071476-025
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 07:55:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	85	2777	2.81	
* 29 TBA-d9 (IS)	65	2.052	2.060	-0.008	0	269803	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.026	3.027	-0.001	96	151314	58.6	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	337830	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	200244	56.7	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	487367	50.0	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	29102	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	635149	54.1	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	428981	50.0	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	183876	54.8	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.620	-0.001	97	231672	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

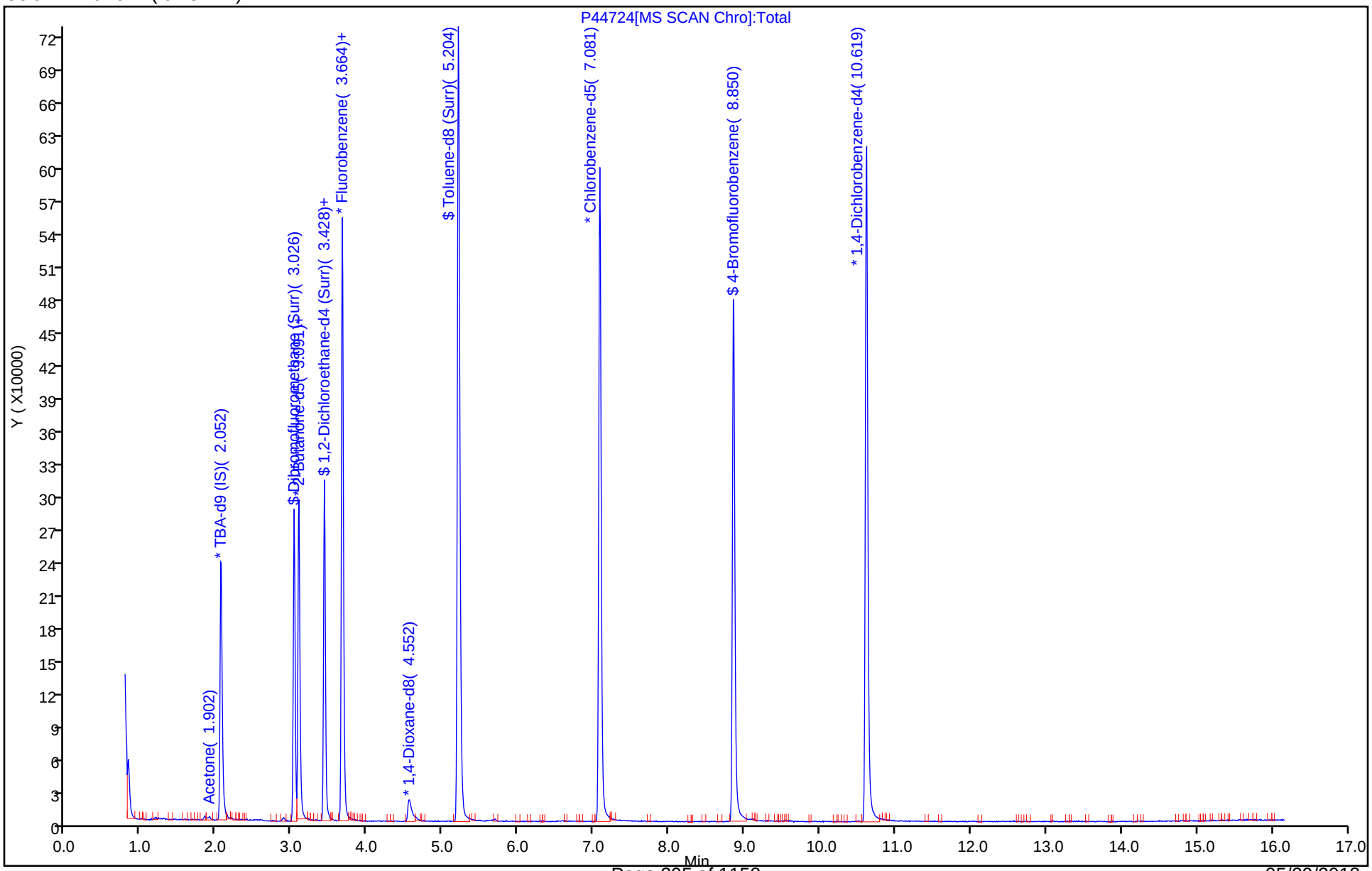
Report Date: 04-May-2018 08:41:52 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44724.D

Injection Date:	04-May-2018 07:37:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-6	Lab Sample ID:	460-154925-6	Worklist Smp#:	25
Client ID:	GC-MW-106(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)

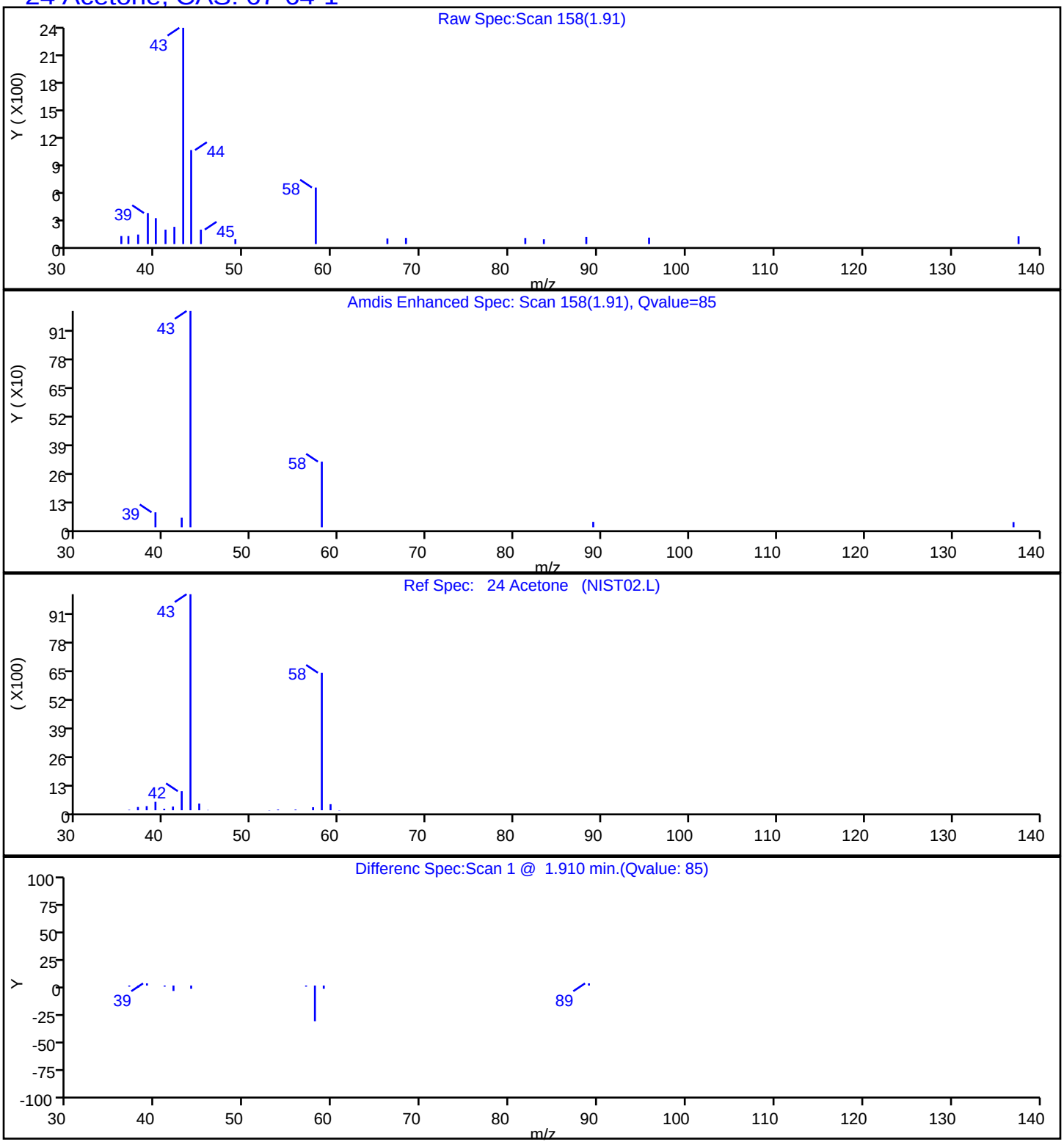


TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44724.D

Injection Date:	04-May-2018 07:37:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-6	Lab Sample ID:	460-154925-6		
Client ID:	GC-MW-106(WG)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1



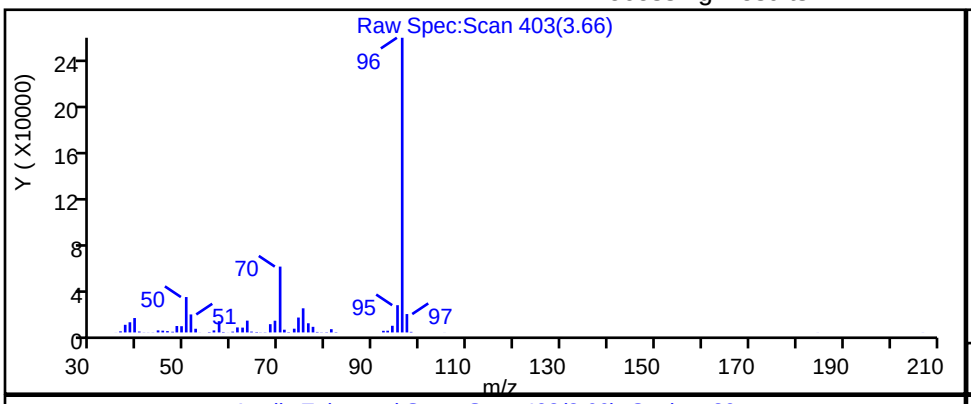
User Disabled Compound Report

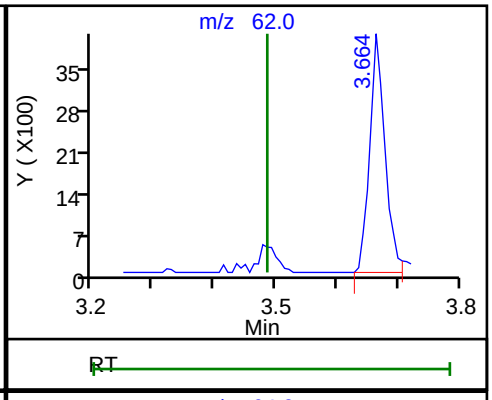
TestAmerica Edison

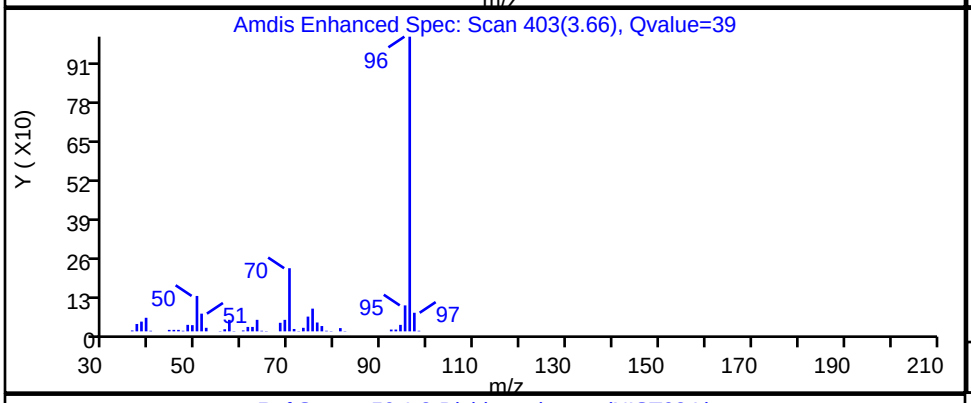
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44724.D				
Injection Date:	04-May-2018 07:37:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-6	Lab Sample ID:	460-154925-6		
Client ID:	GC-MW-106(WG)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

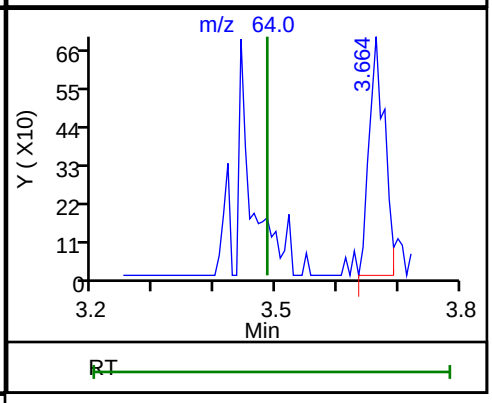
59 1,2-Dichloroethane, CAS: 107-06-2

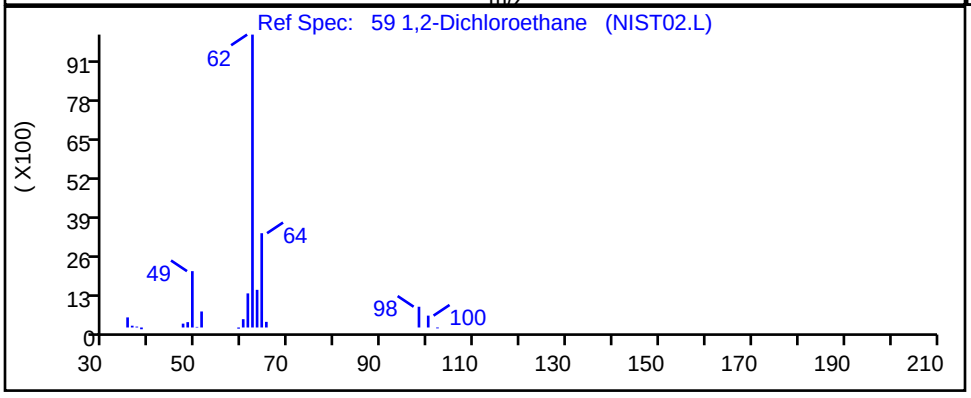
Processing Results











RT	Mass	Response	Amount
3.66	62.00	7139	1.485252
3.66	64.00	1231	

Reviewer: desais, 04-May-2018 07:55:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

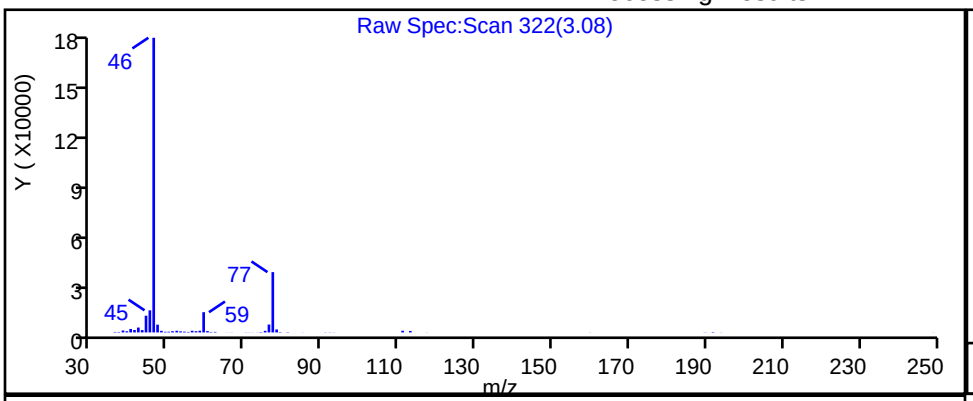
User Disabled Compound Report

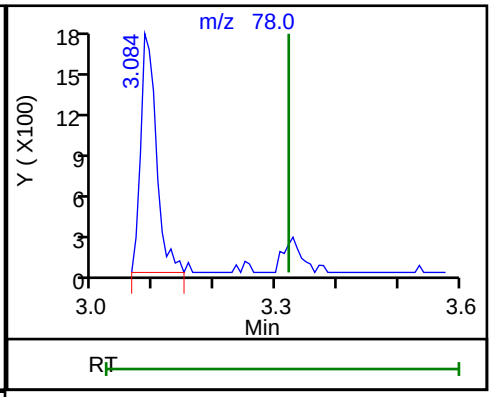
TestAmerica Edison

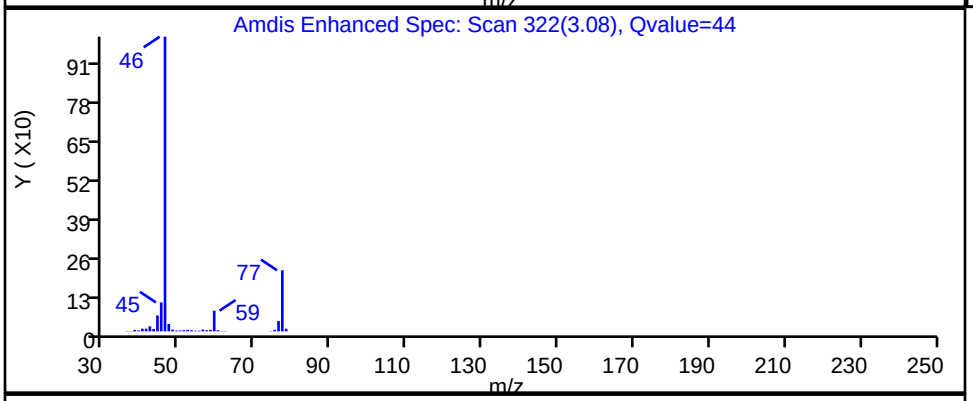
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44724.D		
Injection Date:	04-May-2018 07:37:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-6	Lab Sample ID:	460-154925-6
Client ID:	GC-MW-106(WG)		
Operator ID:		ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

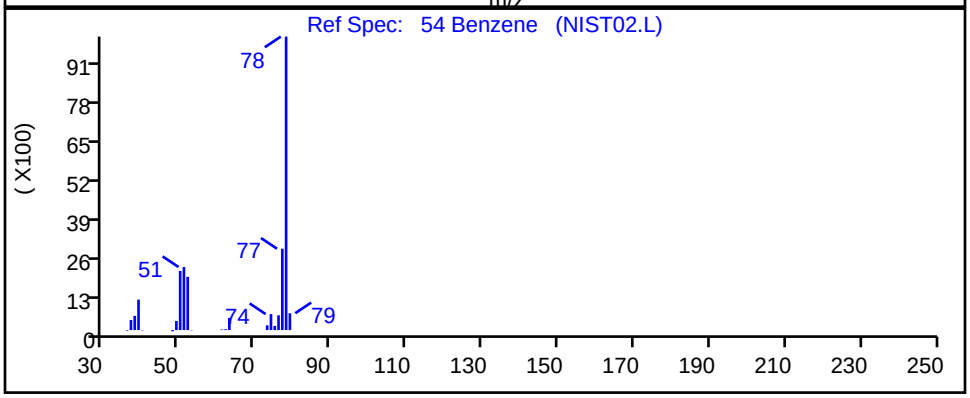
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.08	78.00	3092	0.227337

Reviewer: desais, 04-May-2018 07:55:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-3(WG) | Lab Sample ID: 460-154925-7

Matrix: Water | Lab File ID: P44725.D

Analysis Method: 8260C | Date Collected: 04/26/2018 12:45

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.6	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-3(WG) | Lab Sample ID: 460-154925-7

Matrix: Water | Lab File ID: P44725.D

Analysis Method: 8260C | Date Collected: 04/26/2018 12:45

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.39	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		74-132
460-00-4	4-Bromofluorobenzene	113		77-124
1868-53-7	Dibromofluoromethane (Surr)	124		72-131
2037-26-5	Toluene-d8 (Surr)	112		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-3(WG) | Lab Sample ID: 460-154925-7

Matrix: Water | Lab File ID: P44725.D

Analysis Method: 8260C | Date Collected: 04/26/2018 12:45

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44725.D
Lims ID: 460-154925-B-7
Client ID: GC-MW-3(WG)
Sample Type: Client
Inject. Date: 04-May-2018 08:02:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-7
Misc. Info.: 460-0071476-026
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 07:59:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	83	2535	2.63	
* 29 TBA-d9 (IS)	65	2.052	2.060	-0.008	0	268504	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	152140	61.9	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	330045	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	200107	59.5	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	464256	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	28817	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	639581	56.1	
82 Tetrachloroethene	166	5.698	5.691	0.007	91	1194	0.3929	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	416655	50.0	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	86	183727	56.4	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.620	-0.001	97	229323	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

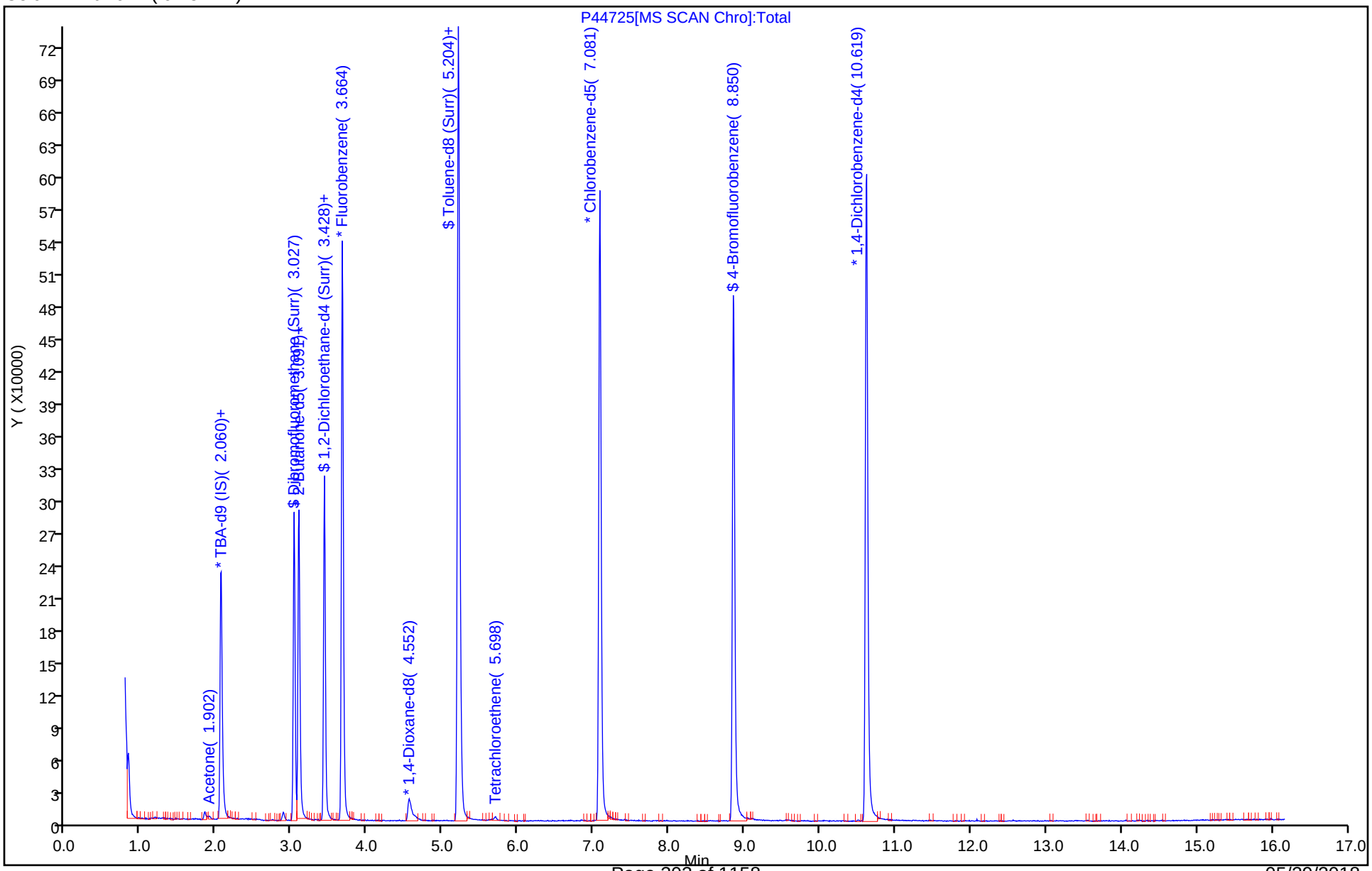
Report Date: 04-May-2018 08:41:54 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44725.D

Injection Date:	04-May-2018 08:02:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-7	Lab Sample ID:	460-154925-7	Worklist Smp#:	26
Client ID:	GC-MW-3(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



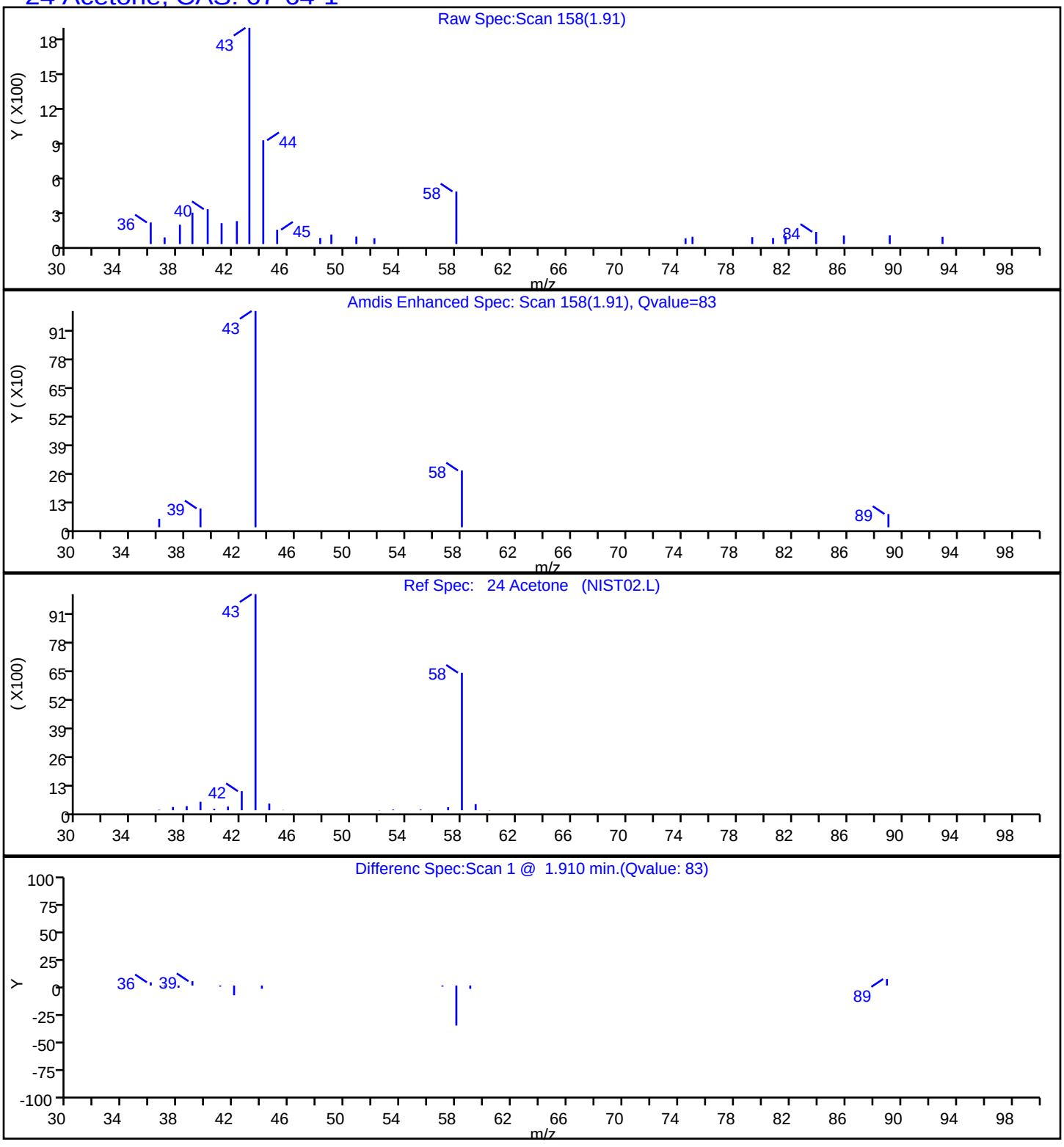
Report Date: 04-May-2018 08:41:54 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44725.D

Injection Date:	04-May-2018 08:02:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-7	Lab Sample ID:	460-154925-7		
Client ID:	GC-MW-3(WG)				
Operator ID:		ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

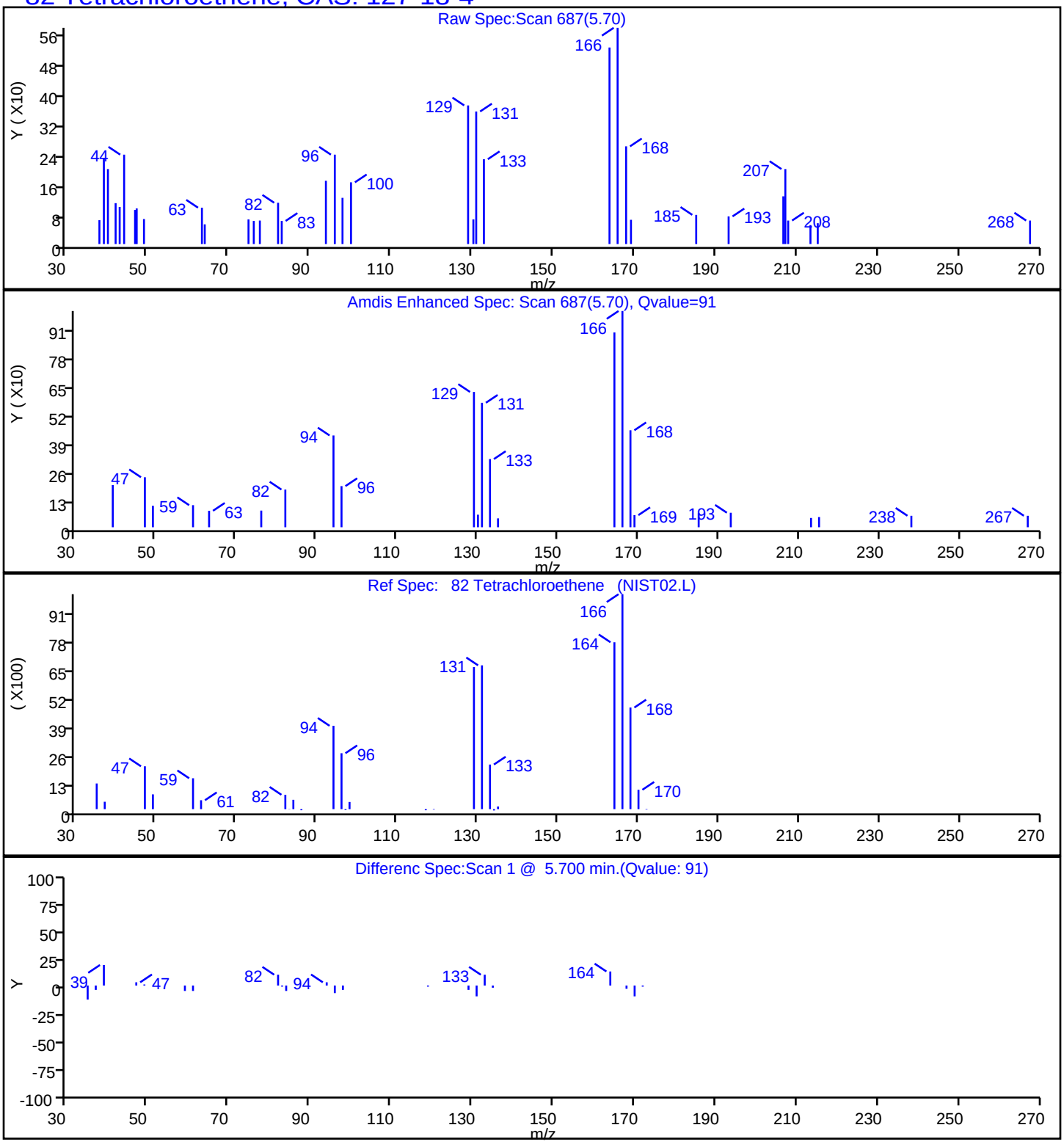
24 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44725.D		
Injection Date:	04-May-2018 08:02:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-7	Lab Sample ID:	460-154925-7
Client ID:	GC-MW-3(WG)		
Operator ID:		ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

82 Tetrachloroethene, CAS: 127-18-4



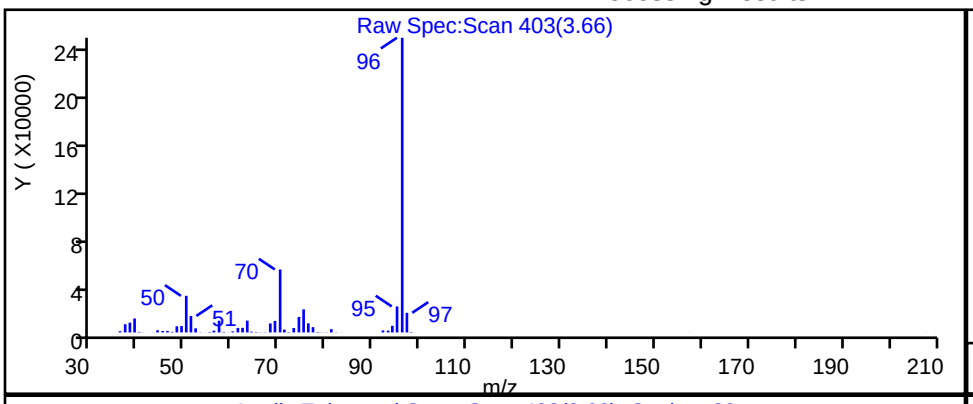
User Disabled Compound Report

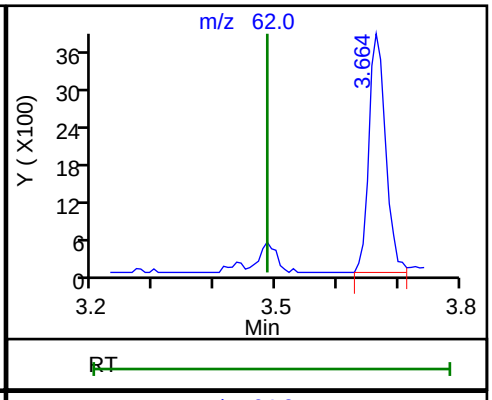
TestAmerica Edison

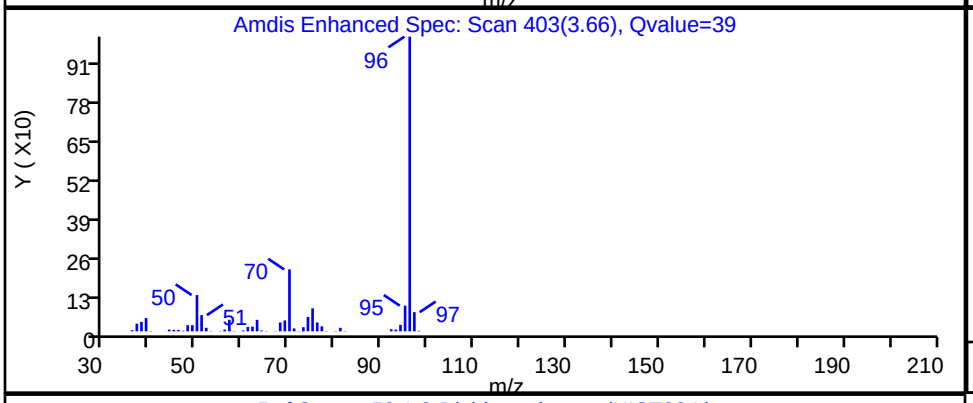
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44725.D		
Injection Date:	04-May-2018 08:02:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-7	Lab Sample ID:	460-154925-7
Client ID:	GC-MW-3(WG)		
Operator ID:		ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

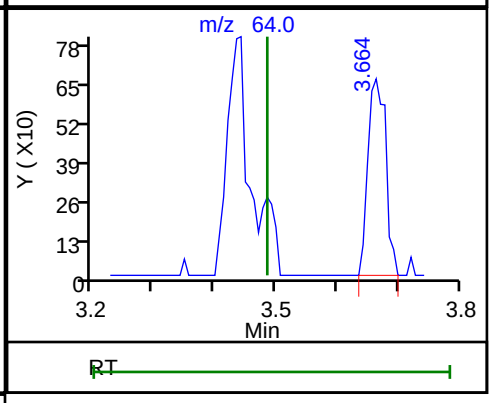
59 1,2-Dichloroethane, CAS: 107-06-2

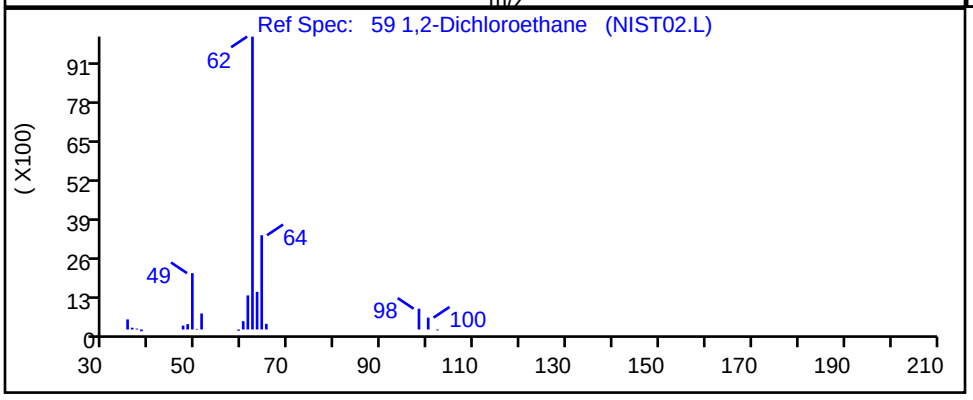
Processing Results











RT	Mass	Response	Amount
3.66	62.00	7269	1.587582
3.66	64.00	1352	

Reviewer: desais, 04-May-2018 07:59:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

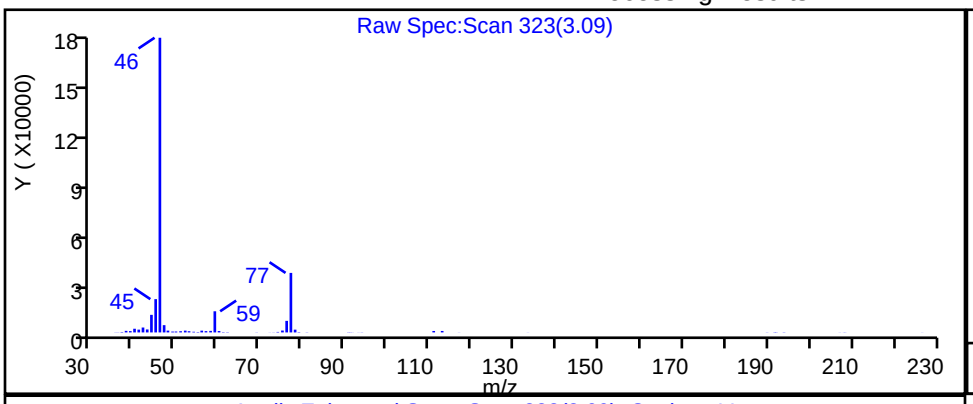
User Disabled Compound Report

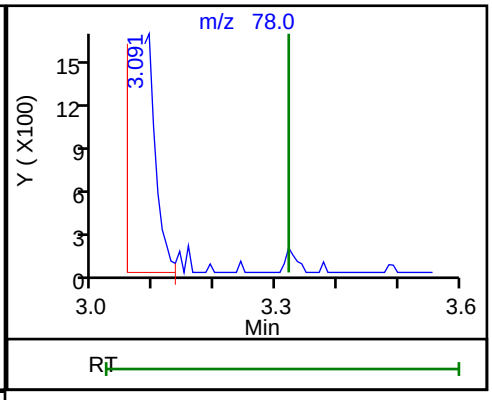
TestAmerica Edison

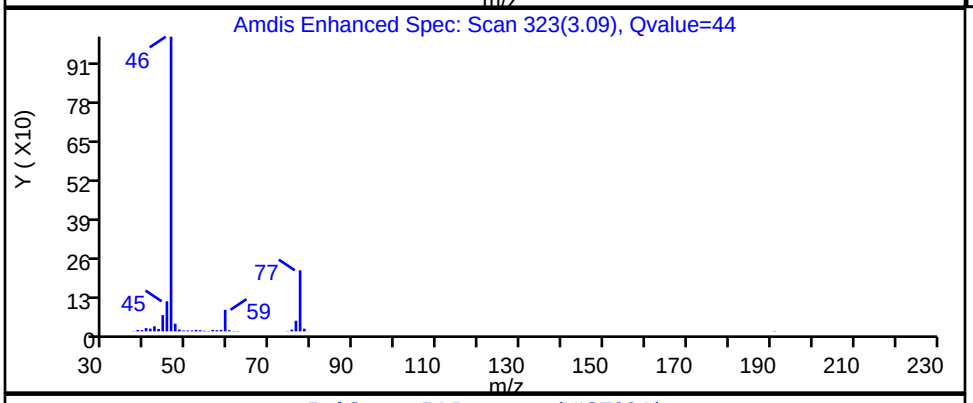
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44725.D		
Injection Date:	04-May-2018 08:02:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-7	Lab Sample ID:	460-154925-7
Client ID:	GC-MW-3(WG)		
Operator ID:		ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

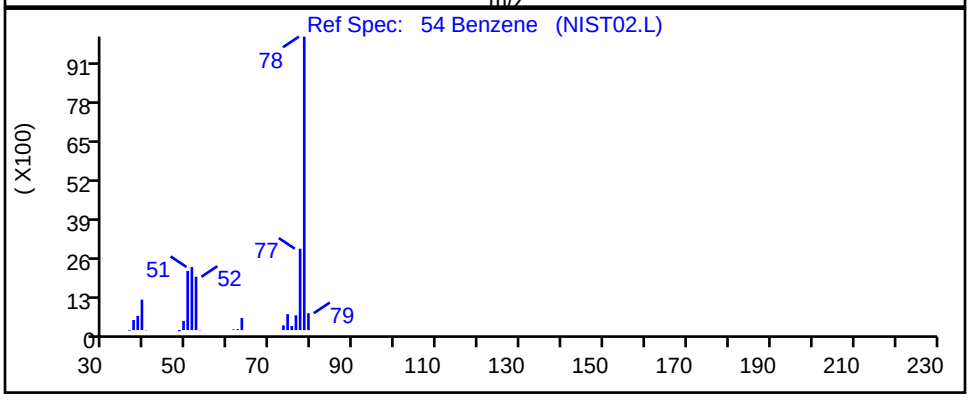
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.09	78.00	2908	0.220134

Reviewer: desais, 04-May-2018 07:59:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180426 | Lab Sample ID: 460-154925-8

Matrix: Water | Lab File ID: P44718.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180426 | Lab Sample ID: 460-154925-8

Matrix: Water | Lab File ID: P44718.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		74-132
460-00-4	4-Bromofluorobenzene	104		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180426 Lab Sample ID: 460-154925-8

Matrix: Water Lab File ID: P44718.D

Analysis Method: 8260C Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 05:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44718.D
Lims ID: 460-154925-B-8
Client ID: GC-TB-20180426
Sample Type: Client
Inject. Date: 04-May-2018 05:05:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-8
Misc. Info.: 460-0071476-019
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 07:28:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 29 TBA-d9 (IS)	65	2.059	2.060	-0.001	0	294153	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.026	3.027	-0.001	96	154494	54.4	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	363724	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	202996	52.3	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	535832	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	31308	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	99	654458	50.9	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	469530	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	90	190570	51.9	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.620	-0.001	97	253298	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

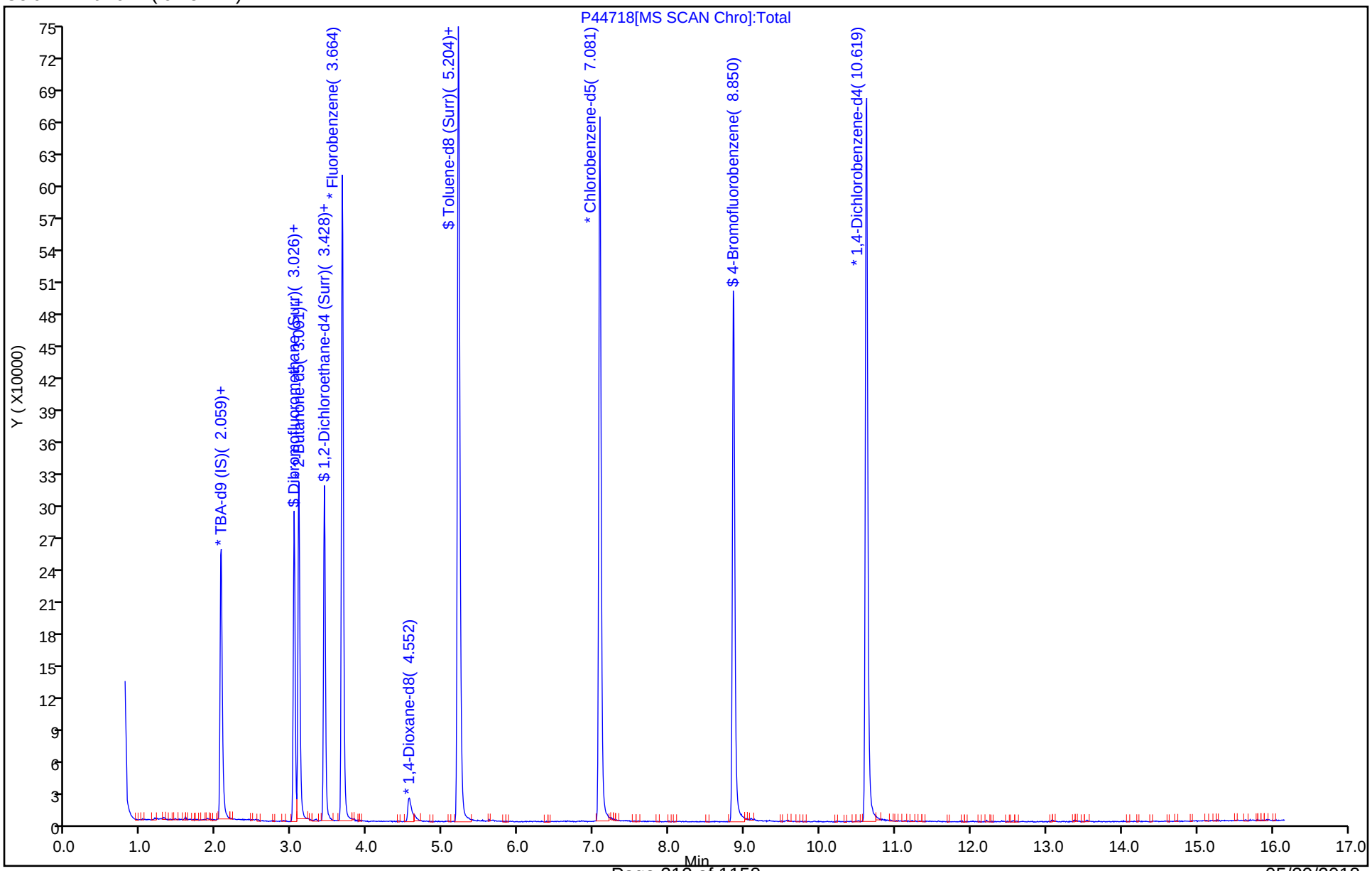
Report Date: 04-May-2018 08:41:41 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44718.D

Injection Date:	04-May-2018 05:05:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-8	Lab Sample ID:	460-154925-8	Worklist Smp#:	19
Client ID:	GC-TB-20180426				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



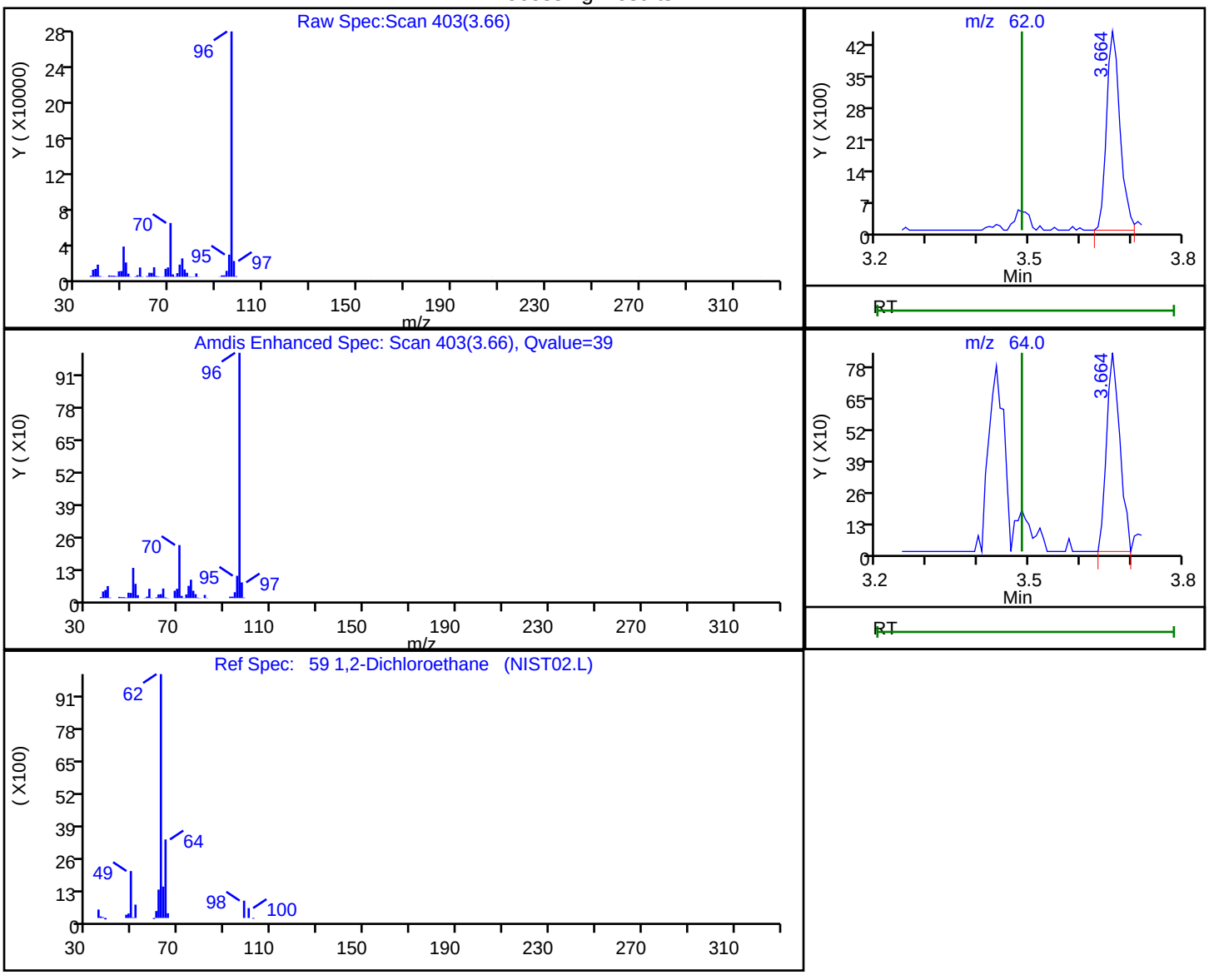
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44718.D				
Injection Date:	04-May-2018 05:05:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-8	Lab Sample ID:	460-154925-8		
Client ID:	GC-TB-20180426				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.66	62.00	8134	1.539198
3.66	64.00	1513	

Reviewer: desais, 04-May-2018 07:28:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

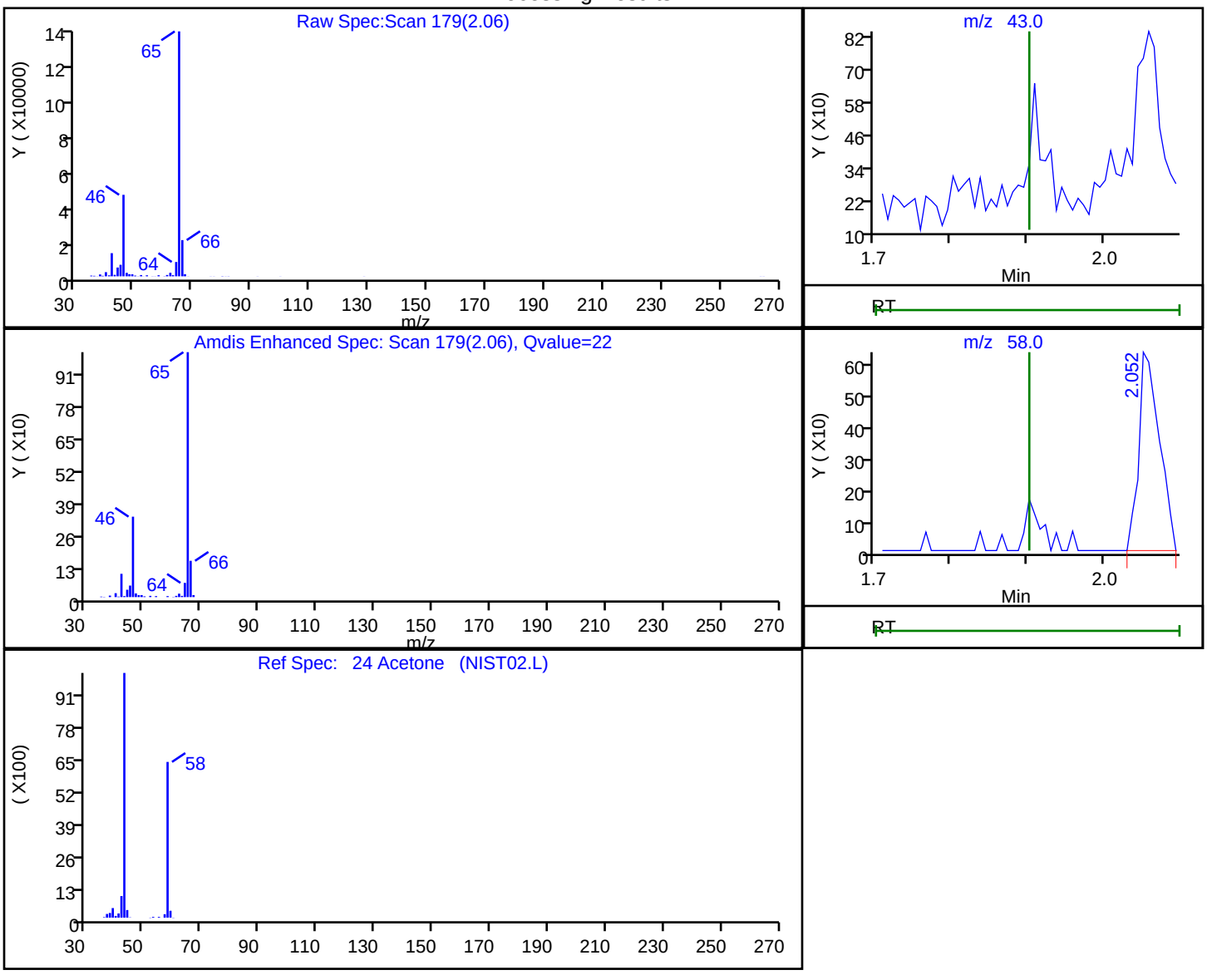
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44718.D		
Injection Date:	04-May-2018 05:05:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-8	Lab Sample ID:	460-154925-8
Client ID:	GC-TB-20180426		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

24 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.06	43.00	1238	1.164968
2.05	58.00	1192	

Reviewer: desais, 04-May-2018 07:28:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

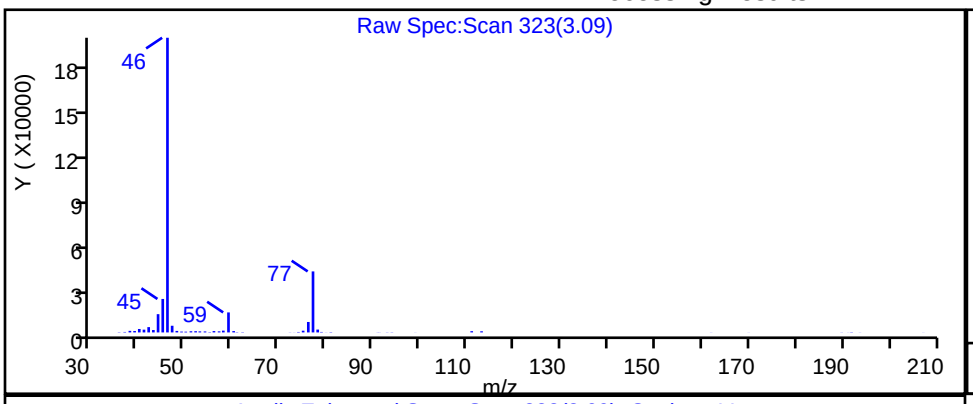
User Disabled Compound Report

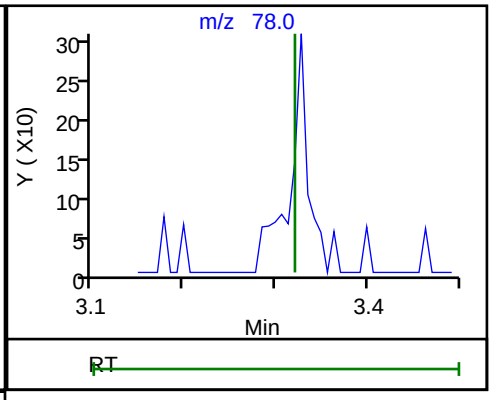
TestAmerica Edison

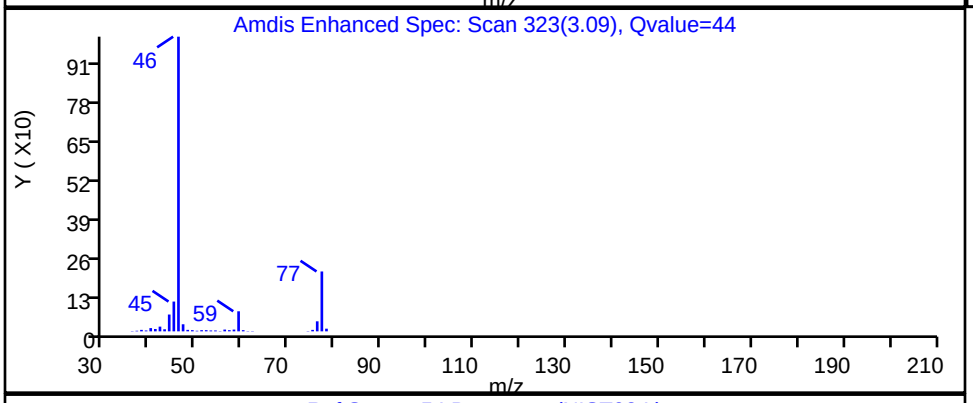
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44718.D		
Injection Date:	04-May-2018 05:05:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-8	Lab Sample ID:	460-154925-8
Client ID:	GC-TB-20180426		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

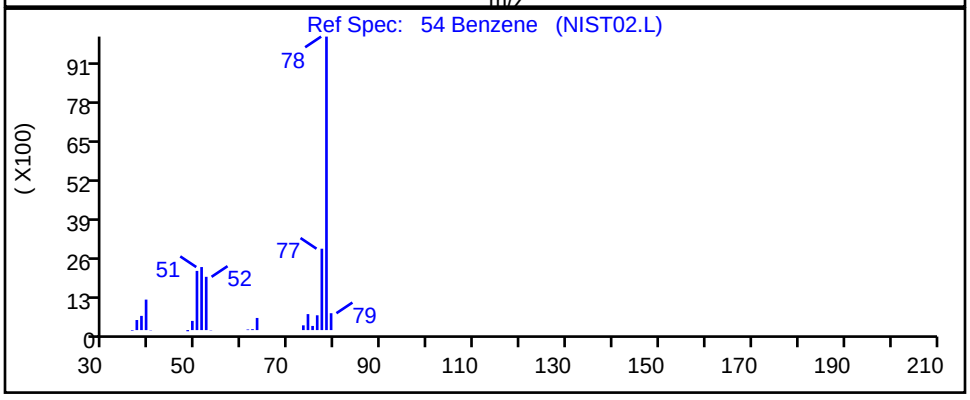
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.09	78.00	3197	0.214758

Reviewer: desais, 04-May-2018 07:28:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 | Lab Sample ID: 460-154925-9

Matrix: Water | Lab File ID: P44726.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.9	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 | Lab Sample ID: 460-154925-9

Matrix: Water | Lab File ID: P44726.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		74-132
460-00-4	4-Bromofluorobenzene	102		77-124
1868-53-7	Dibromofluoromethane (Surr)	110		72-131
2037-26-5	Toluene-d8 (Surr)	100		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 Lab Sample ID: 460-154925-9

Matrix: Water Lab File ID: P44726.D

Analysis Method: 8260C Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 08:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44726.D
Lims ID: 460-154925-B-9
Client ID: GC-Equipment Blank-2
Sample Type: Client
Inject. Date: 04-May-2018 08:27:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-9
Misc. Info.: 460-0071476-027
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 08:01:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	86	3046	2.93	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	286367	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	151749	55.0	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	355378	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	195315	51.7	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	521169	50.0	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	30393	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	626684	50.2	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	456051	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	89	181882	51.0	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.620	-0.001	97	247233	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

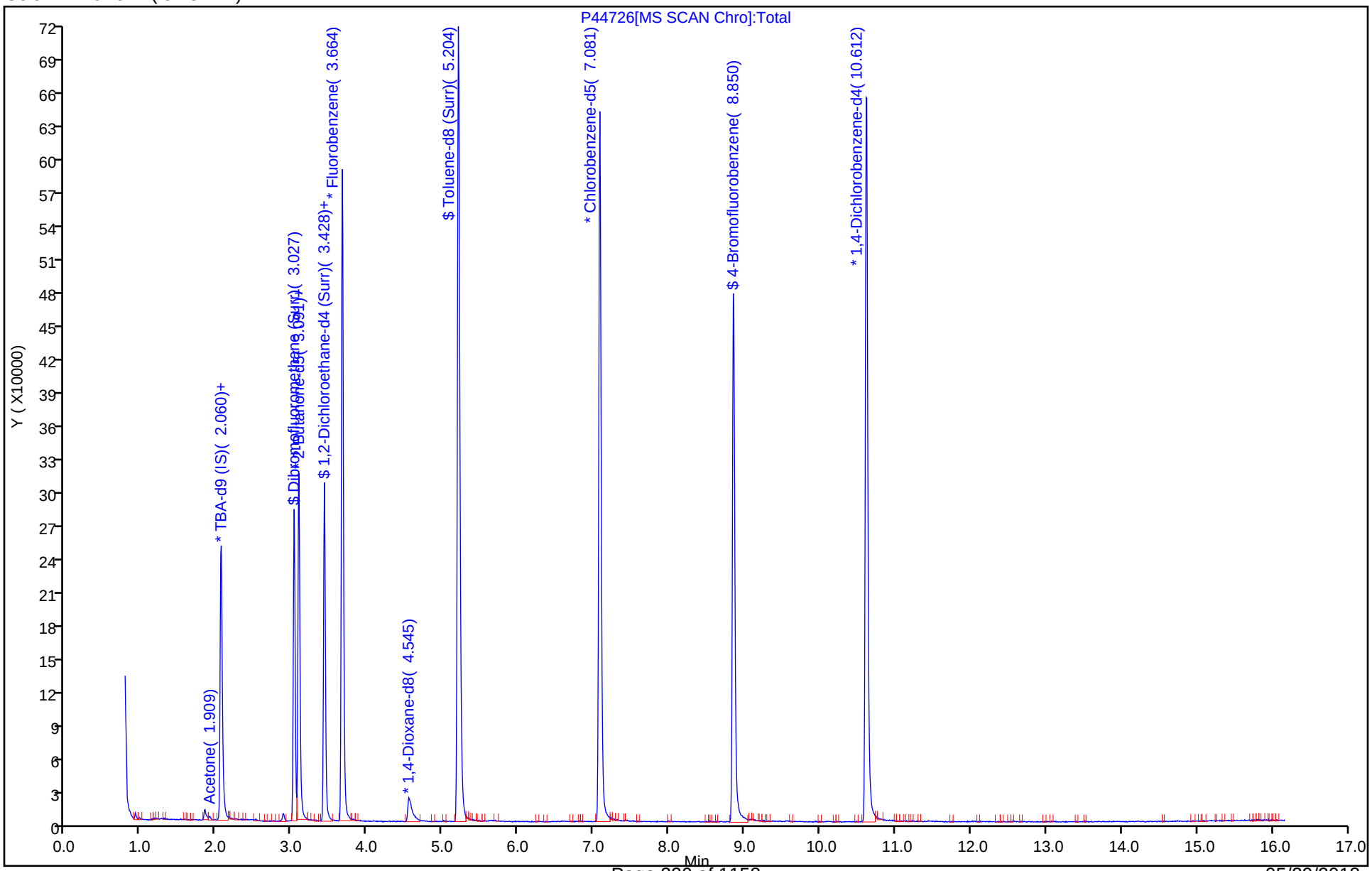
Report Date: 04-May-2018 08:41:55 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44726.D

Injection Date:	04-May-2018 08:27:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-9	Lab Sample ID:	460-154925-9	Worklist Smp#:	27
Client ID:	GC-Equipment Blank-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

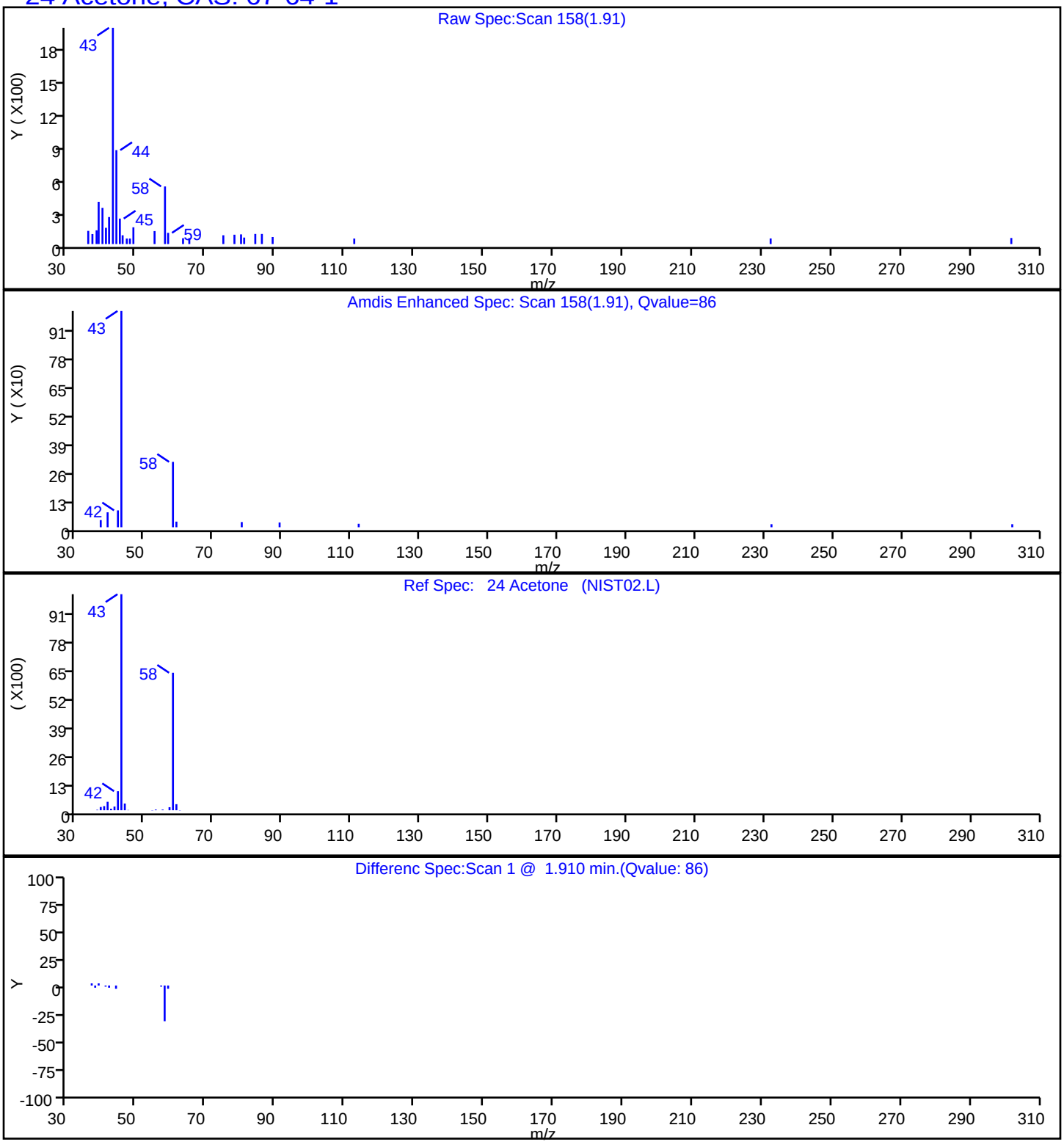
Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44726.D

Injection Date:	04-May-2018 08:27:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-9	Lab Sample ID:	460-154925-9
Client ID:	GC-Equipment Blank-2		
Operator ID:		ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

24 Acetone, CAS: 67-64-1



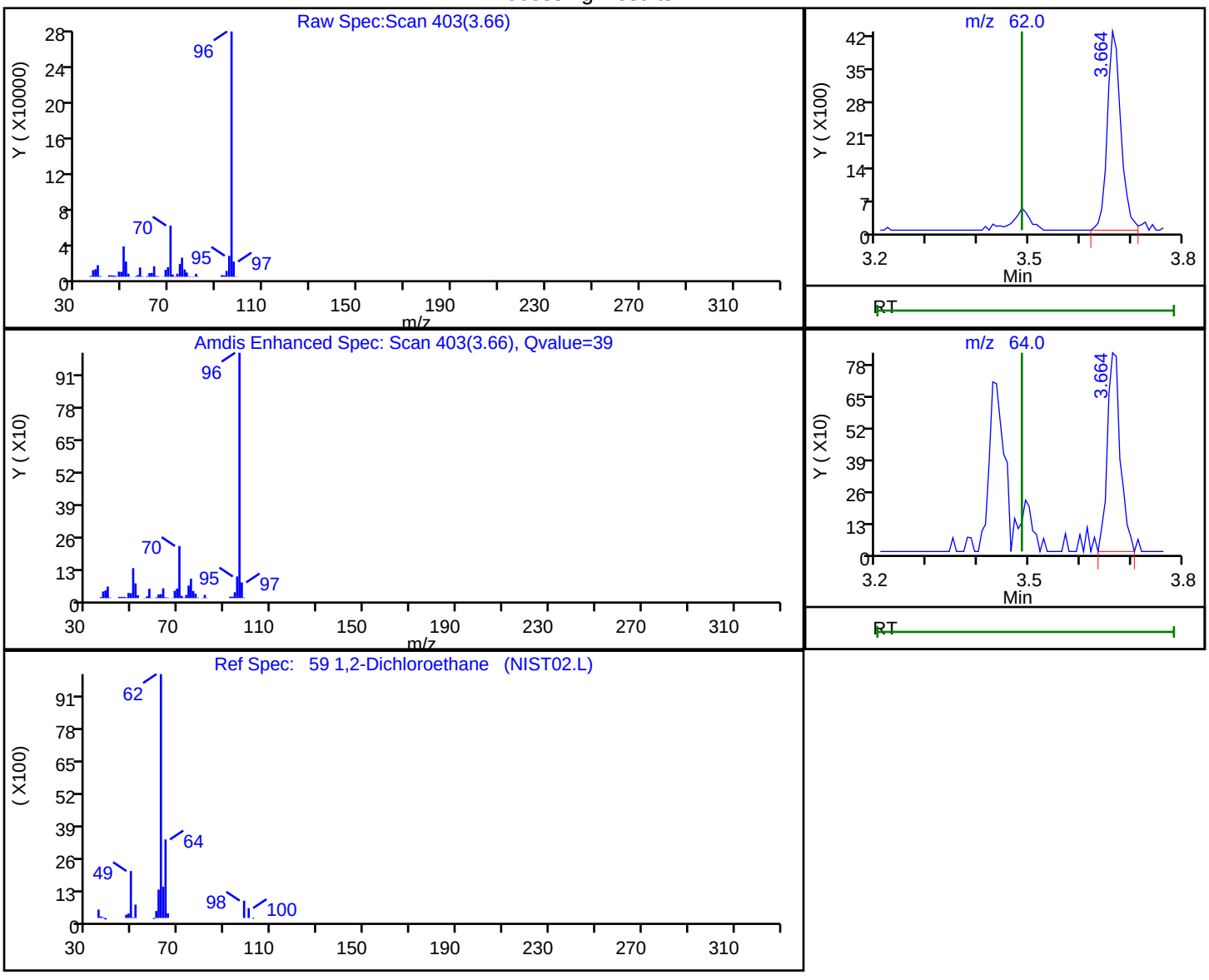
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44726.D		
Injection Date:	04-May-2018 08:27:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-9	Lab Sample ID:	460-154925-9
Client ID:	GC-Equipment Blank-2		
Operator ID:		ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.66	62.00	7883	1.533670
3.66	64.00	1467	

Reviewer: desais, 04-May-2018 08:01:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

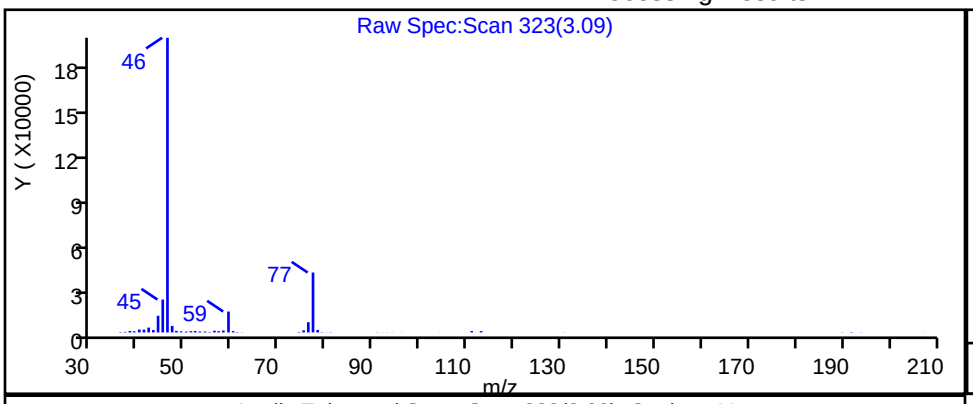
User Disabled Compound Report

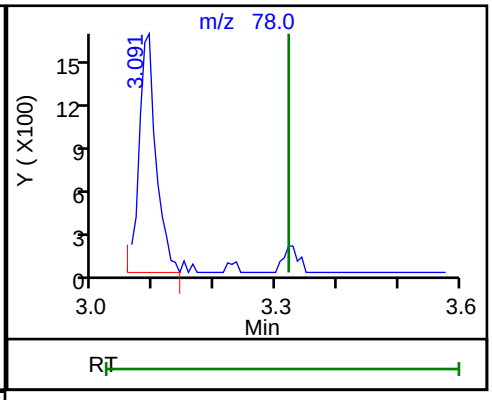
TestAmerica Edison

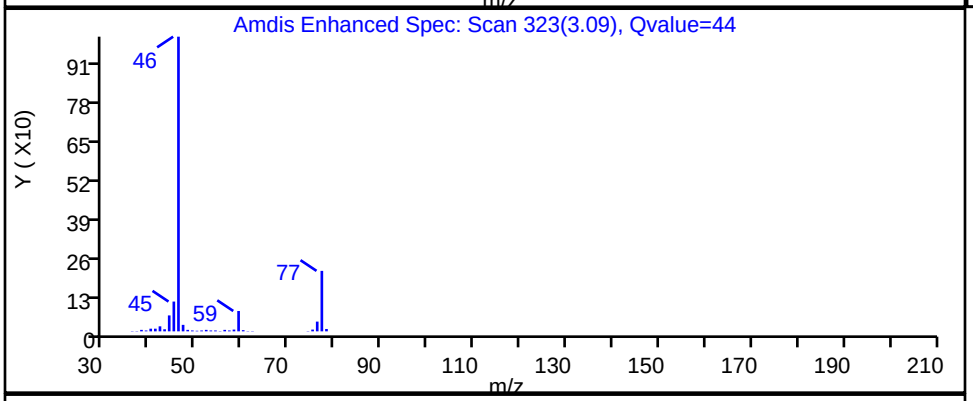
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44726.D		
Injection Date:	04-May-2018 08:27:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-9	Lab Sample ID:	460-154925-9
Client ID:	GC-Equipment Blank-2		
Operator ID:		ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

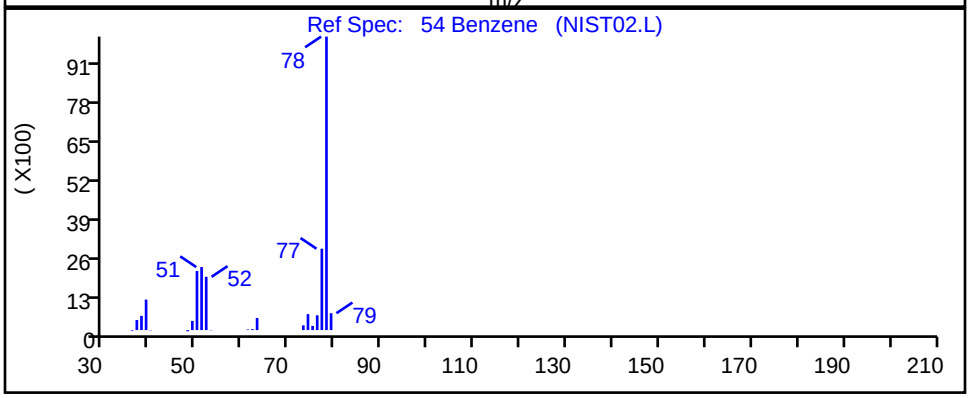
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.09	78.00	3049	0.210869

Reviewer: desais, 04-May-2018 08:01:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110(WG) | Lab Sample ID: 460-154925-10

Matrix: Water | Lab File ID: P44727.D

Analysis Method: 8260C | Date Collected: 04/26/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.3	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110(WG) | Lab Sample ID: 460-154925-10

Matrix: Water | Lab File ID: P44727.D

Analysis Method: 8260C | Date Collected: 04/26/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		74-132
460-00-4	4-Bromofluorobenzene	99		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110(WG) Lab Sample ID: 460-154925-10

Matrix: Water Lab File ID: P44727.D

Analysis Method: 8260C Date Collected: 04/26/2018 13:35

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 08:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44727.D
Lims ID: 460-154925-B-10
Client ID: GC-MW-110(WG)
Sample Type: Client
Inject. Date: 04-May-2018 08:52:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-10
Misc. Info.: 460-0071476-028
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 08:21:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	88	2383	2.29	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	289076	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	149933	54.0	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	355633	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	193539	51.0	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	524379	50.0	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	31278	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	619246	49.4	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	91	458107	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	92	176757	49.4	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.620	-0.008	97	249456	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

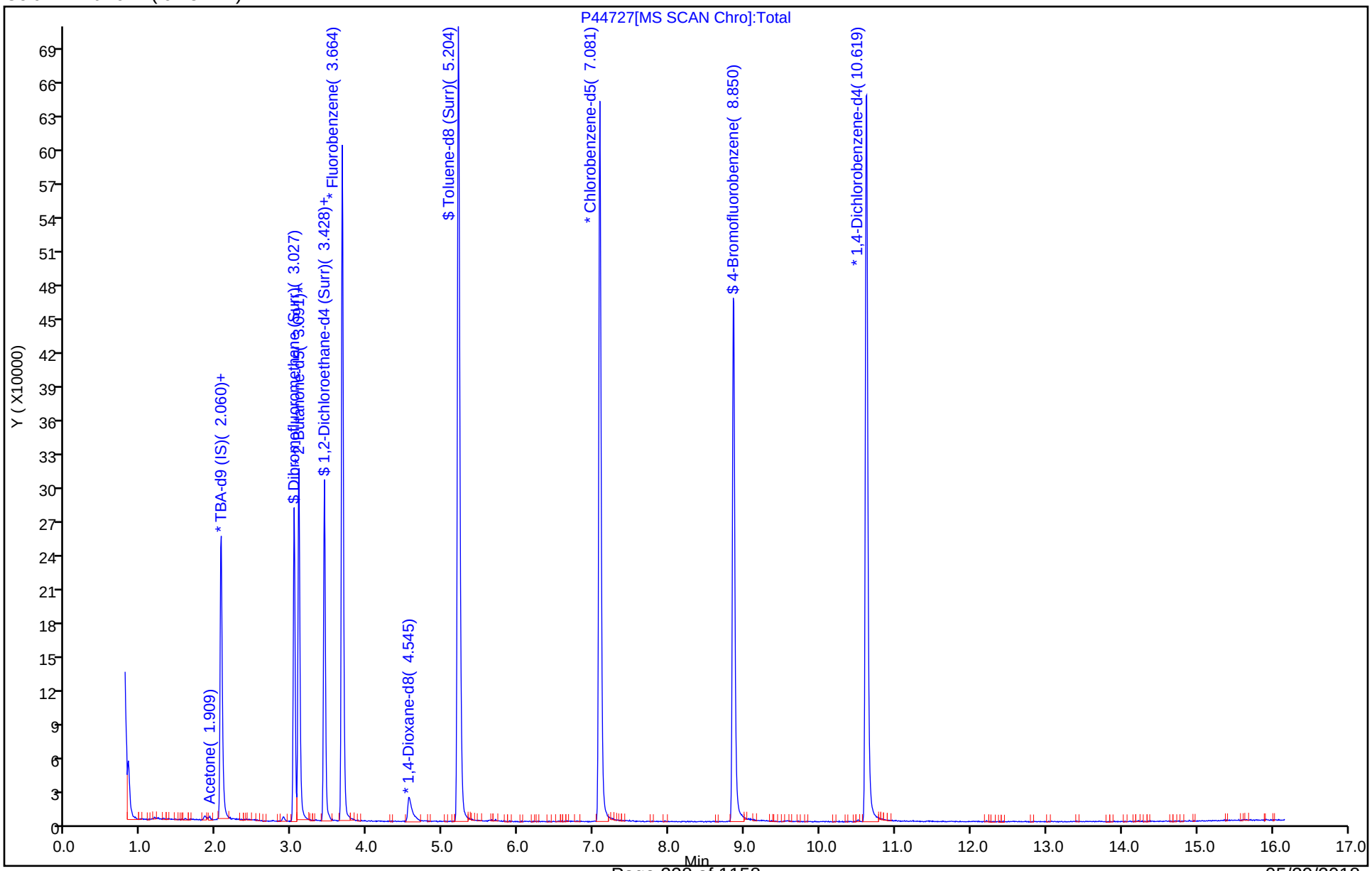
Report Date: 04-May-2018 08:41:57 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44727.D

Injection Date:	04-May-2018 08:52:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-10	Lab Sample ID:	460-154925-10	Worklist Smp#:	28
Client ID:	GC-MW-110(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

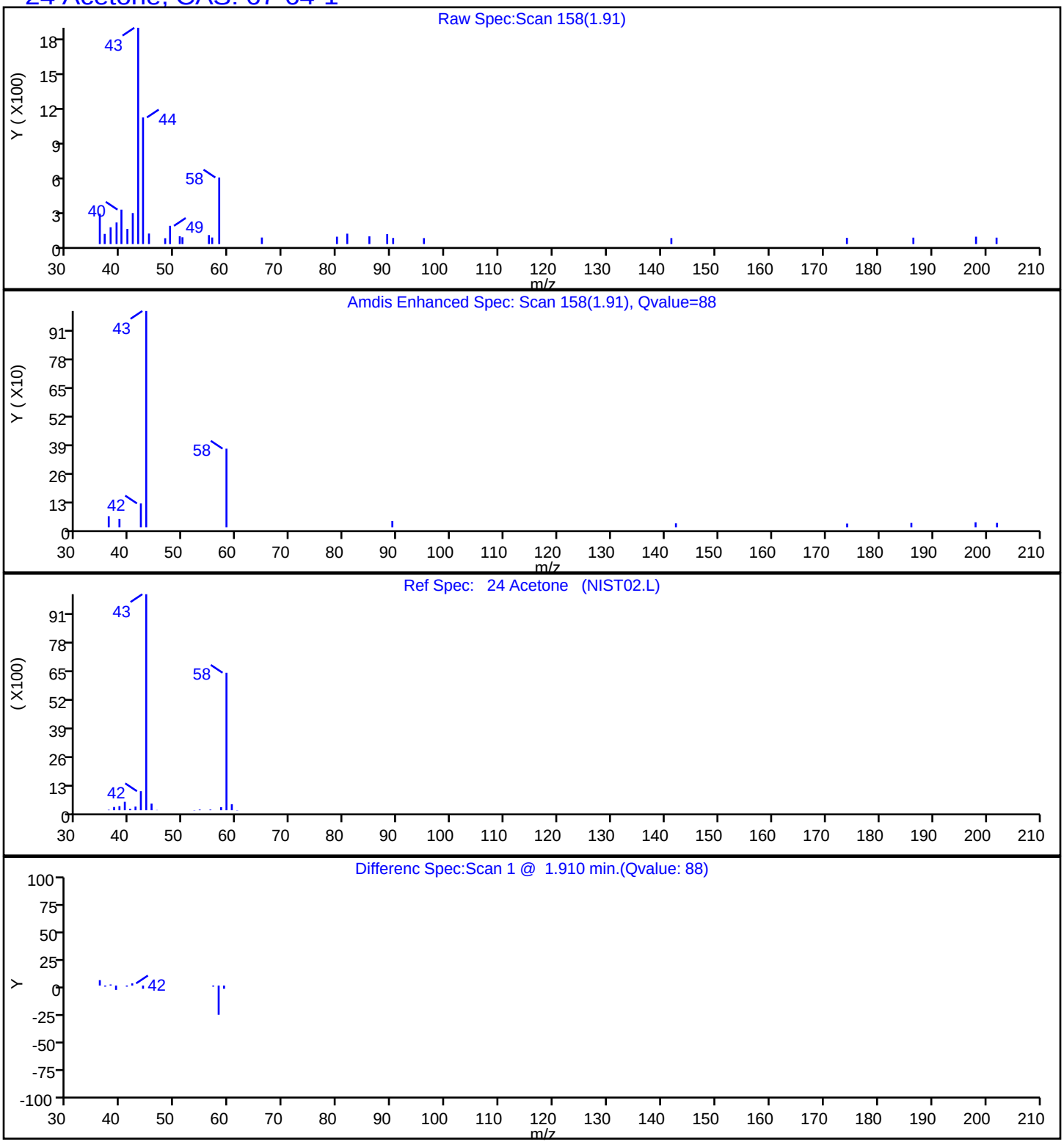
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44727.D				
Injection Date:	04-May-2018 08:52:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-10	Lab Sample ID:	460-154925-10		
Client ID:	GC-MW-110(WG)				
Operator ID:		ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1



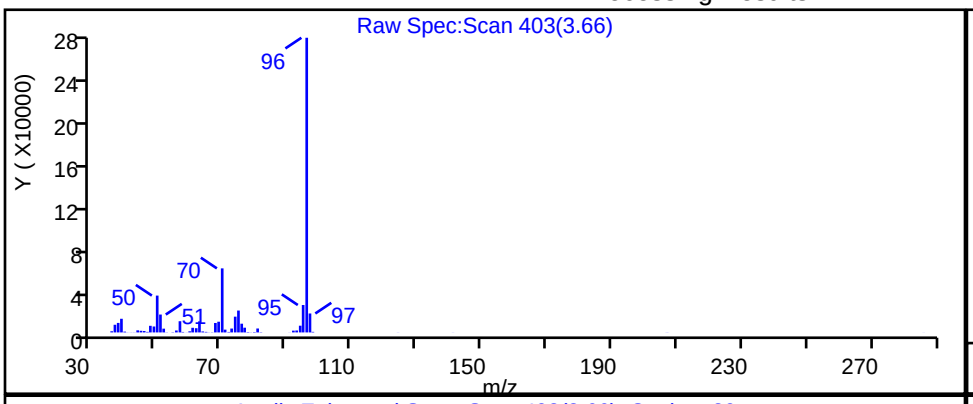
User Disabled Compound Report

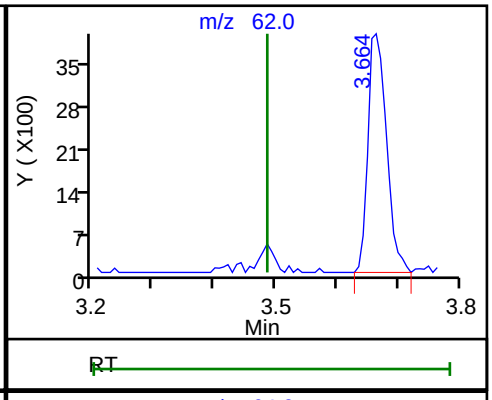
TestAmerica Edison

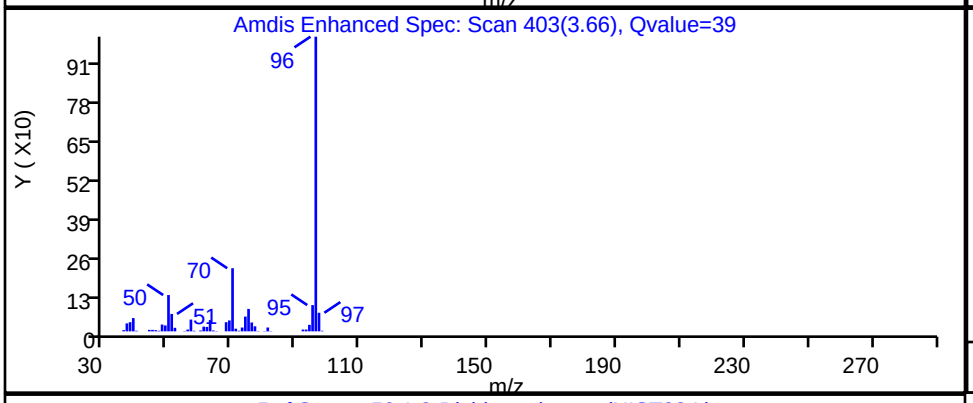
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44727.D				
Injection Date:	04-May-2018 08:52:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-10	Lab Sample ID:	460-154925-10		
Client ID:	GC-MW-110(WG)				
Operator ID:		ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

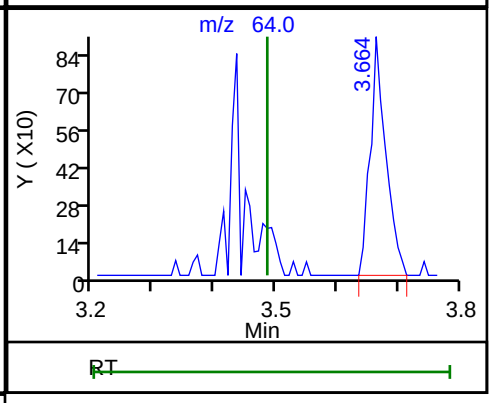
59 1,2-Dichloroethane, CAS: 107-06-2

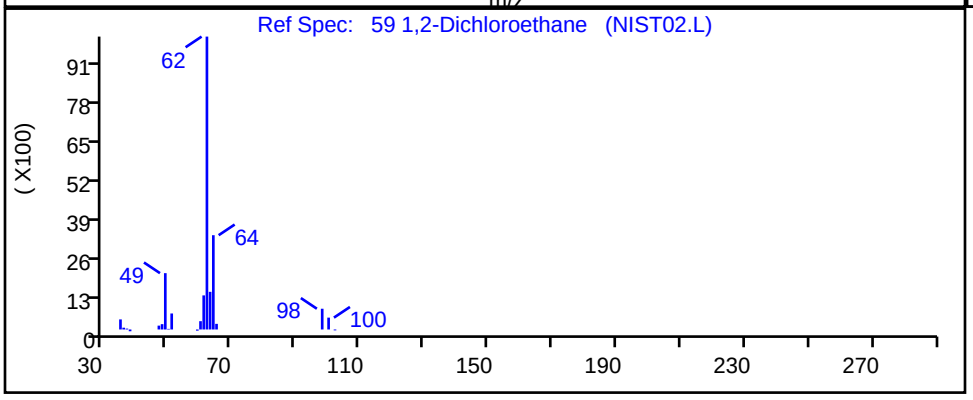
Processing Results











RT	Mass	Response	Amount
3.66	62.00	8338	1.612262
3.66	64.00	1615	

Reviewer: desais, 04-May-2018 08:21:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

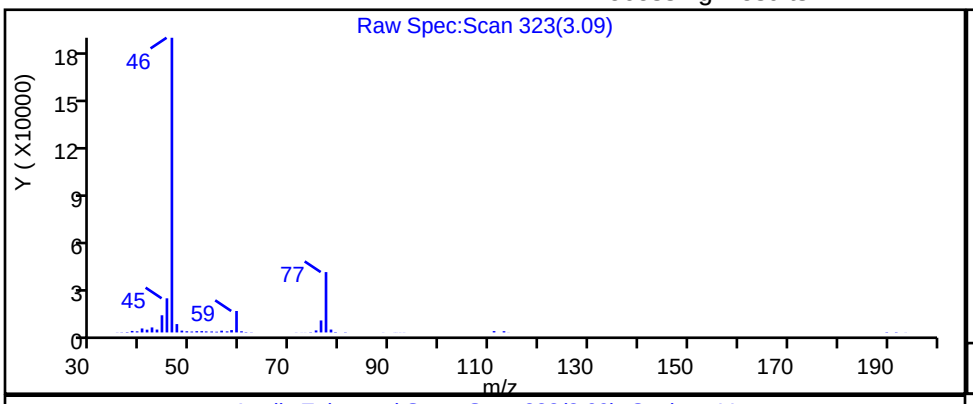
User Disabled Compound Report

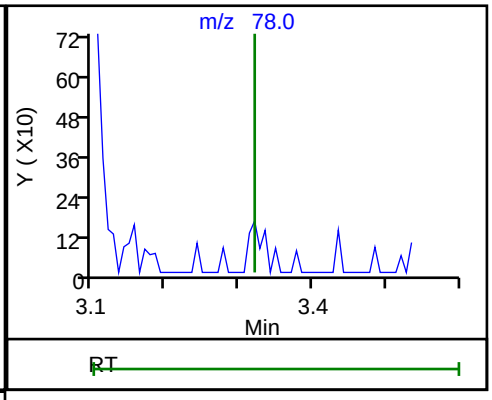
TestAmerica Edison

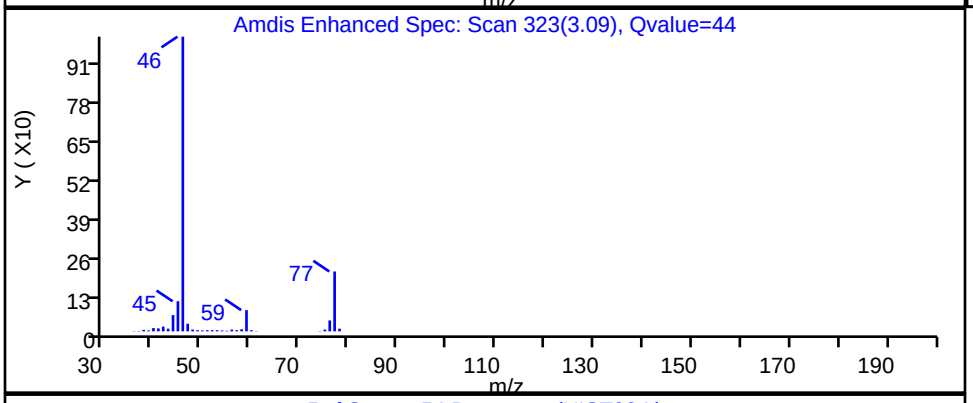
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44727.D		
Injection Date:	04-May-2018 08:52:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-10	Lab Sample ID:	460-154925-10
Client ID:	GC-MW-110(WG)		
Operator ID:		ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

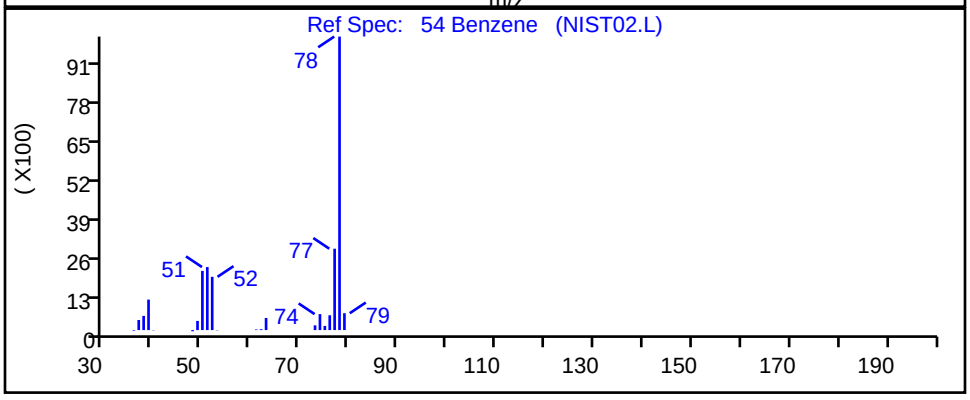
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.09	78.00	3325	0.228925

Reviewer: desais, 04-May-2018 08:21:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110D(WG) | Lab Sample ID: 460-154925-11

Matrix: Water | Lab File ID: P44767.D

Analysis Method: 8260C | Date Collected: 04/26/2018 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 02:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	3.5	J B	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110D(WG) | Lab Sample ID: 460-154925-11

Matrix: Water | Lab File ID: P44767.D

Analysis Method: 8260C | Date Collected: 04/26/2018 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 02:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		74-132
460-00-4	4-Bromofluorobenzene	115		77-124
1868-53-7	Dibromofluoromethane (Surr)	125		72-131
2037-26-5	Toluene-d8 (Surr)	115		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110D(WG) Lab Sample ID: 460-154925-11

Matrix: Water Lab File ID: P44767.D

Analysis Method: 8260C Date Collected: 04/26/2018 14:30

Sample wt/vol: 5(mL) Date Analyzed: 05/05/2018 02:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516607 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44767.D
Lims ID: 460-154925-C-11
Client ID: GC-MW-110D(WG)
Sample Type: Client
Inject. Date: 05-May-2018 02:22:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-C-11
Misc. Info.: 460-0071534-011
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 05-May-2018 21:16:35 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: chujia Date: 05-May-2018 21:41:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	83	3216	3.50	
* 29 TBA-d9 (IS)	65	2.060	2.059	0.001	0	256498	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.026	0.001	96	152788	62.7	
* 49 2-Butanone-d5	46	3.084	3.091	-0.007	0	314205	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	201783	60.6	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	98	459976	50.0	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	27718	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.211	-0.007	98	636416	57.5	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	404113	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	88	181273	57.4	
* 119 1,4-Dichlorobenzene-d4	152	10.620	10.612	0.008	97	222671	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

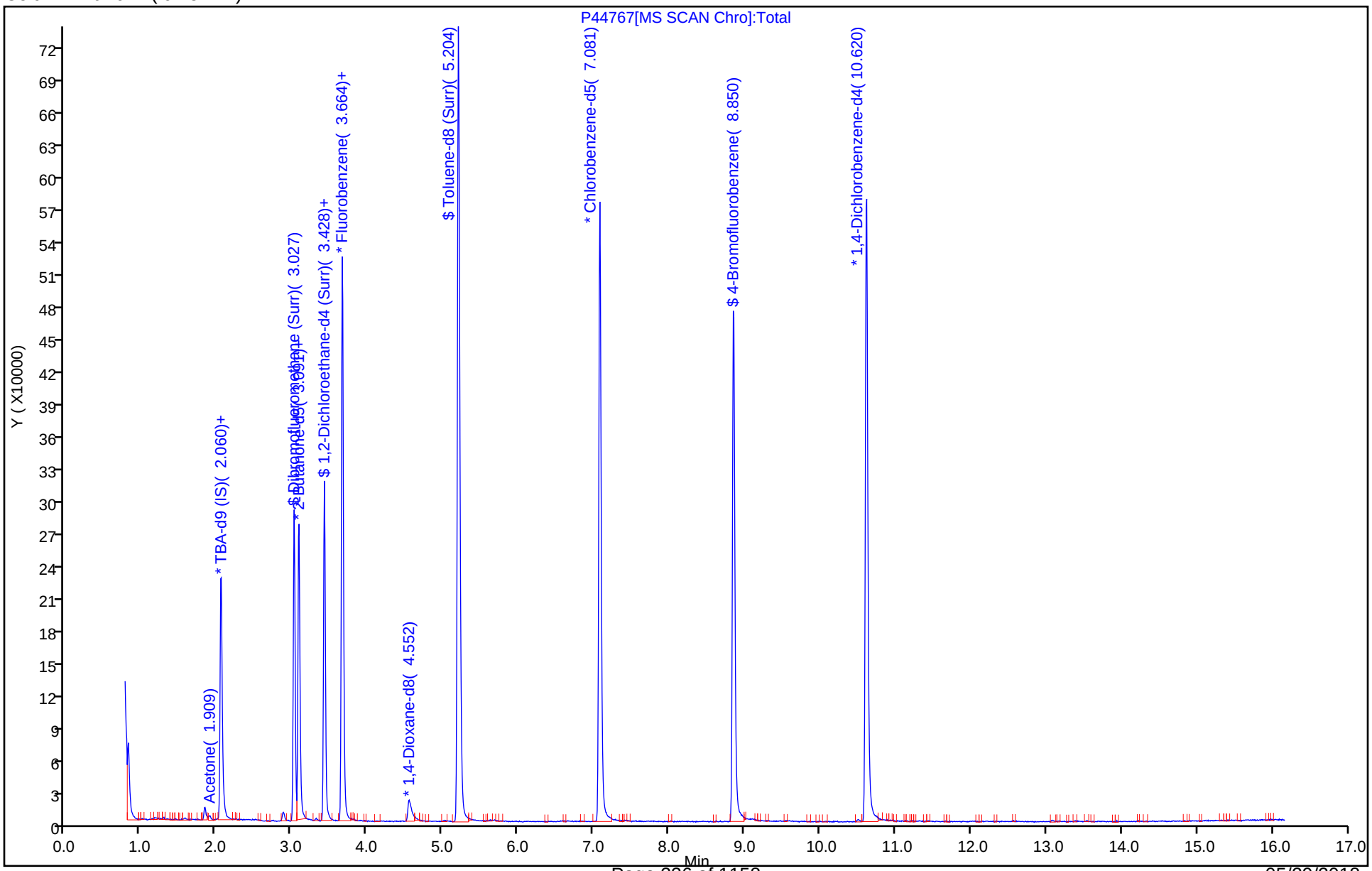
Report Date: 05-May-2018 21:41:03 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44767.D

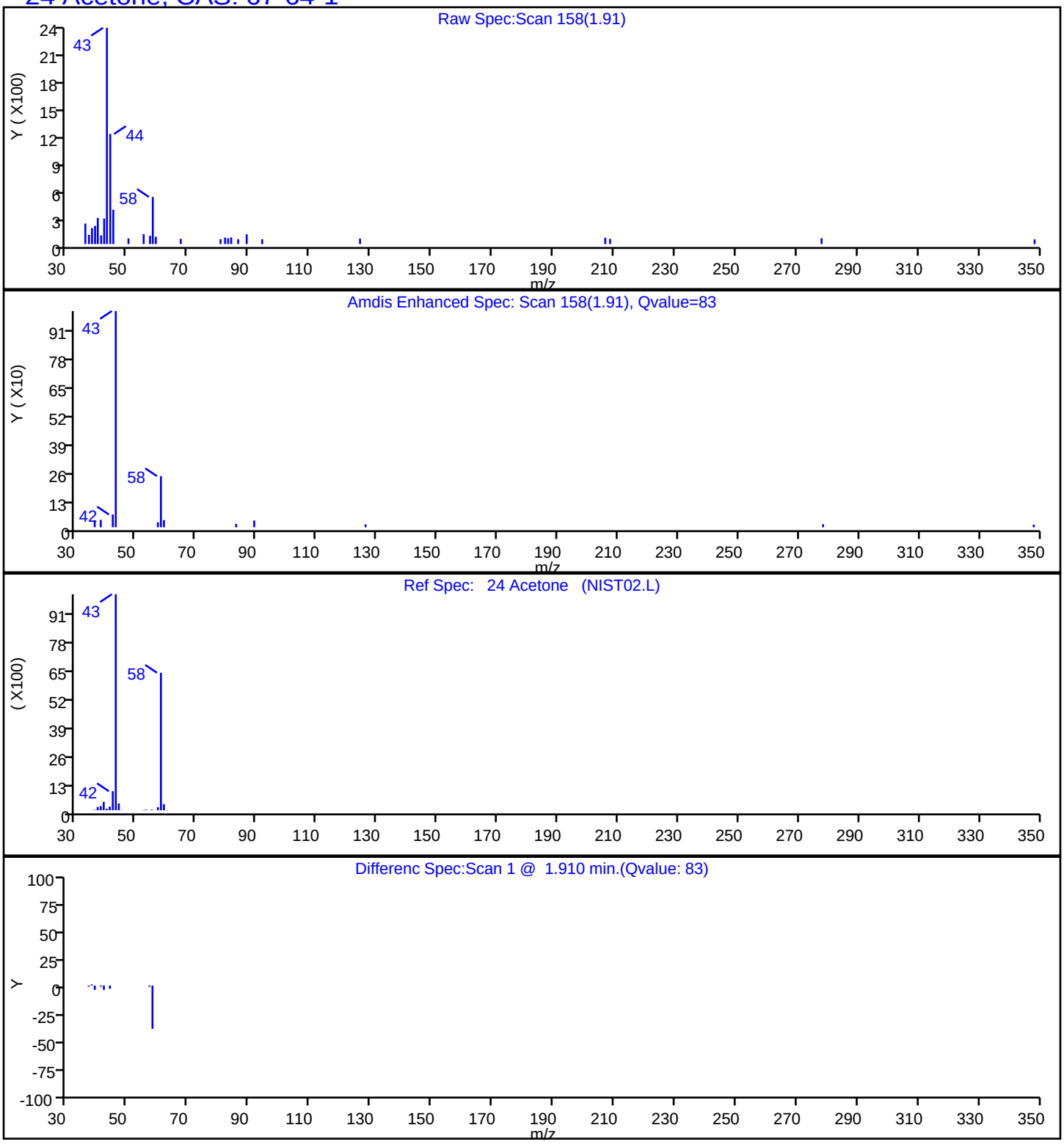
Injection Date:	05-May-2018 02:22:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-C-11	Lab Sample ID:	460-154925-11	Worklist Smp#:	11
Client ID:	GC-MW-110D(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44767.D
Injection Date: 05-May-2018 02:22:30 Instrument ID: CVOAMS13
Lims ID: 460-154925-C-11 Lab Sample ID: 460-154925-11
Client ID: GC-MW-110D(WG)
Operator ID: ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1



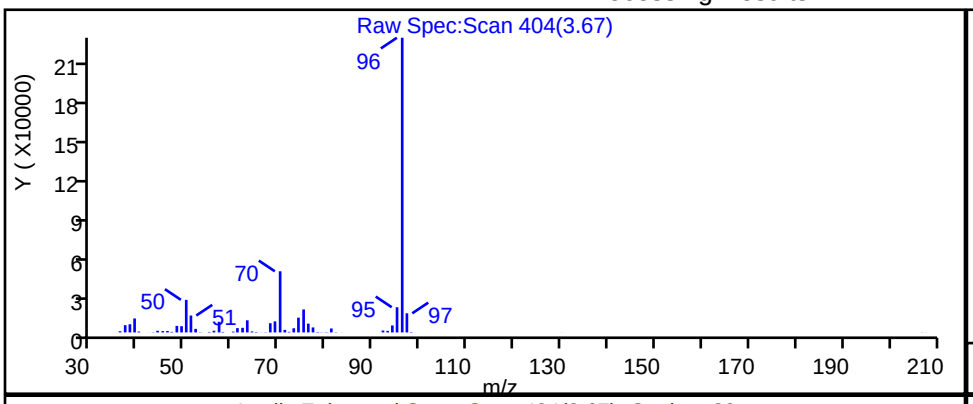
User Disabled Compound Report

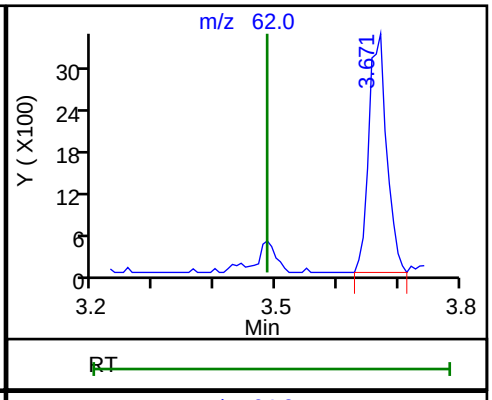
TestAmerica Edison

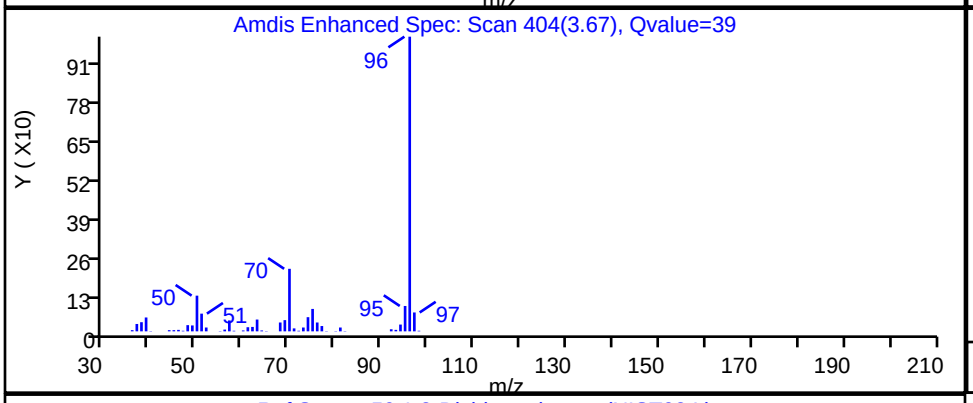
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44767.D		
Injection Date:	05-May-2018 02:22:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-C-11	Lab Sample ID:	460-154925-11
Client ID:	GC-MW-110D(WG)		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

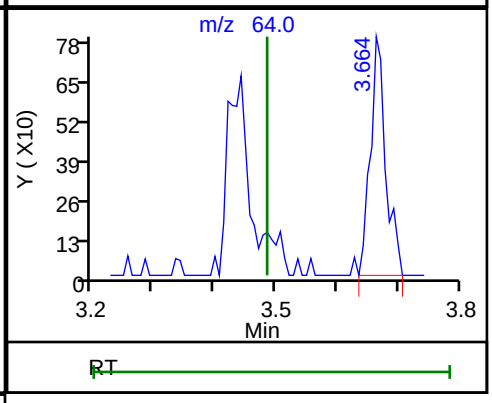
59 1,2-Dichloroethane, CAS: 107-06-2

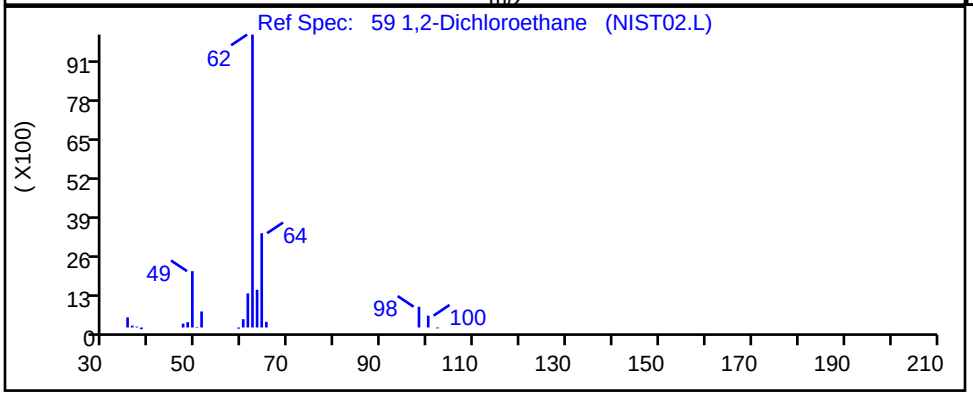
Processing Results











RT	Mass	Response	Amount
3.67	62.00	7042	1.552315
3.66	64.00	1395	

Reviewer: chujia, 05-May-2018 20:59:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

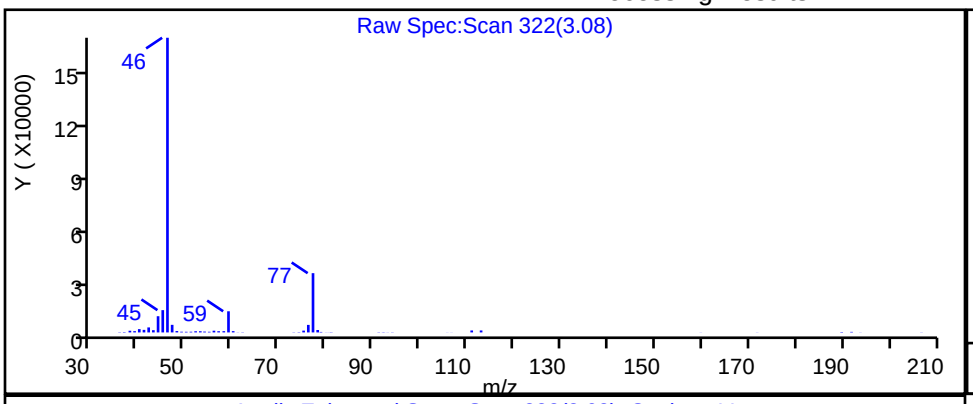
User Disabled Compound Report

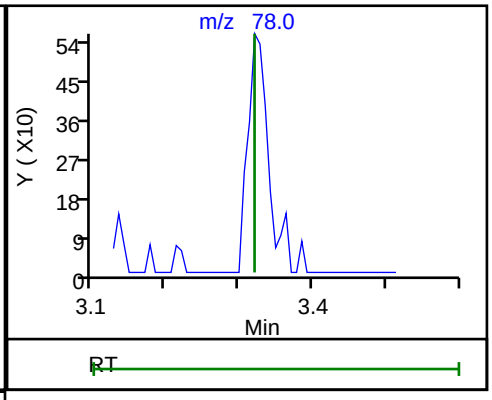
TestAmerica Edison

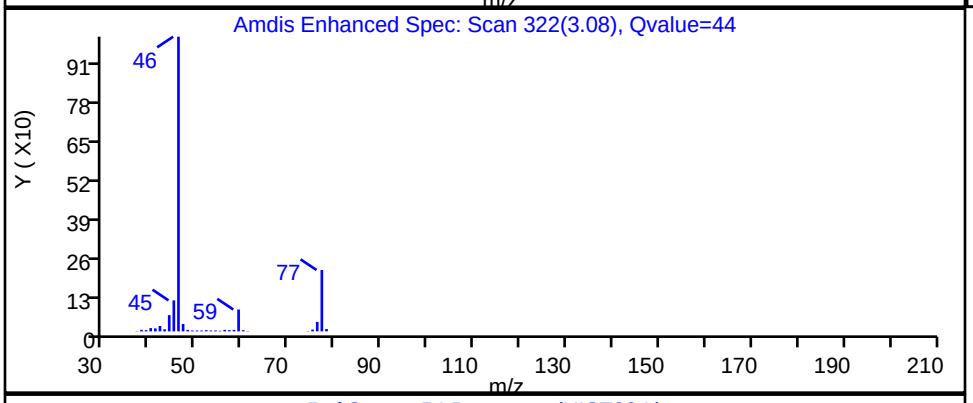
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44767.D		
Injection Date:	05-May-2018 02:22:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-C-11	Lab Sample ID:	460-154925-11
Client ID:	GC-MW-110D(WG)		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

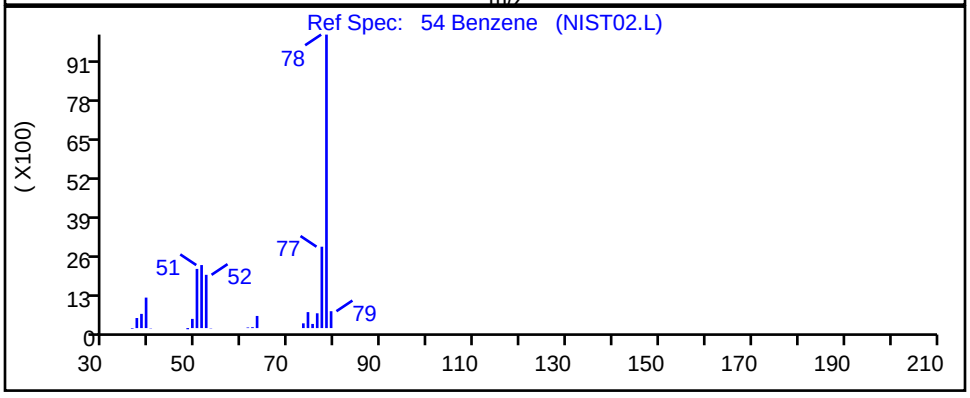
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.08	78.00	2492	0.194498

Reviewer: chujia, 05-May-2018 20:59:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-2(WG) | Lab Sample ID: 460-154925-12

Matrix: Water | Lab File ID: P44746.D

Analysis Method: 8260C | Date Collected: 04/26/2018 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 17:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.8	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-2(WG) | Lab Sample ID: 460-154925-12

Matrix: Water | Lab File ID: P44746.D

Analysis Method: 8260C | Date Collected: 04/26/2018 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 17:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.14	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		74-132
460-00-4	4-Bromofluorobenzene	98		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-2(WG) Lab Sample ID: 460-154925-12

Matrix: Water Lab File ID: P44746.D

Analysis Method: 8260C Date Collected: 04/26/2018 15:00

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 17:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516419 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44746.D
Lims ID: 460-154925-B-12
Client ID: GC-MW-2(WG)
Sample Type: Client
Inject. Date: 04-May-2018 17:32:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154925-B-12
Misc. Info.: 460-0071500-019
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 18:30:57 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: starzecm Date: 04-May-2018 18:31:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	85	3168	2.82	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	322517	1000.0	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.001	96	150747	54.2	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	384312	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	199703	52.6	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	98	524689	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	33309	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	621394	49.7	
82 Tetrachloroethene	166	5.698	5.691	0.007	79	459	0.1378	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	456727	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.850	0.007	89	175688	49.2	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.612	0.007	97	253452	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

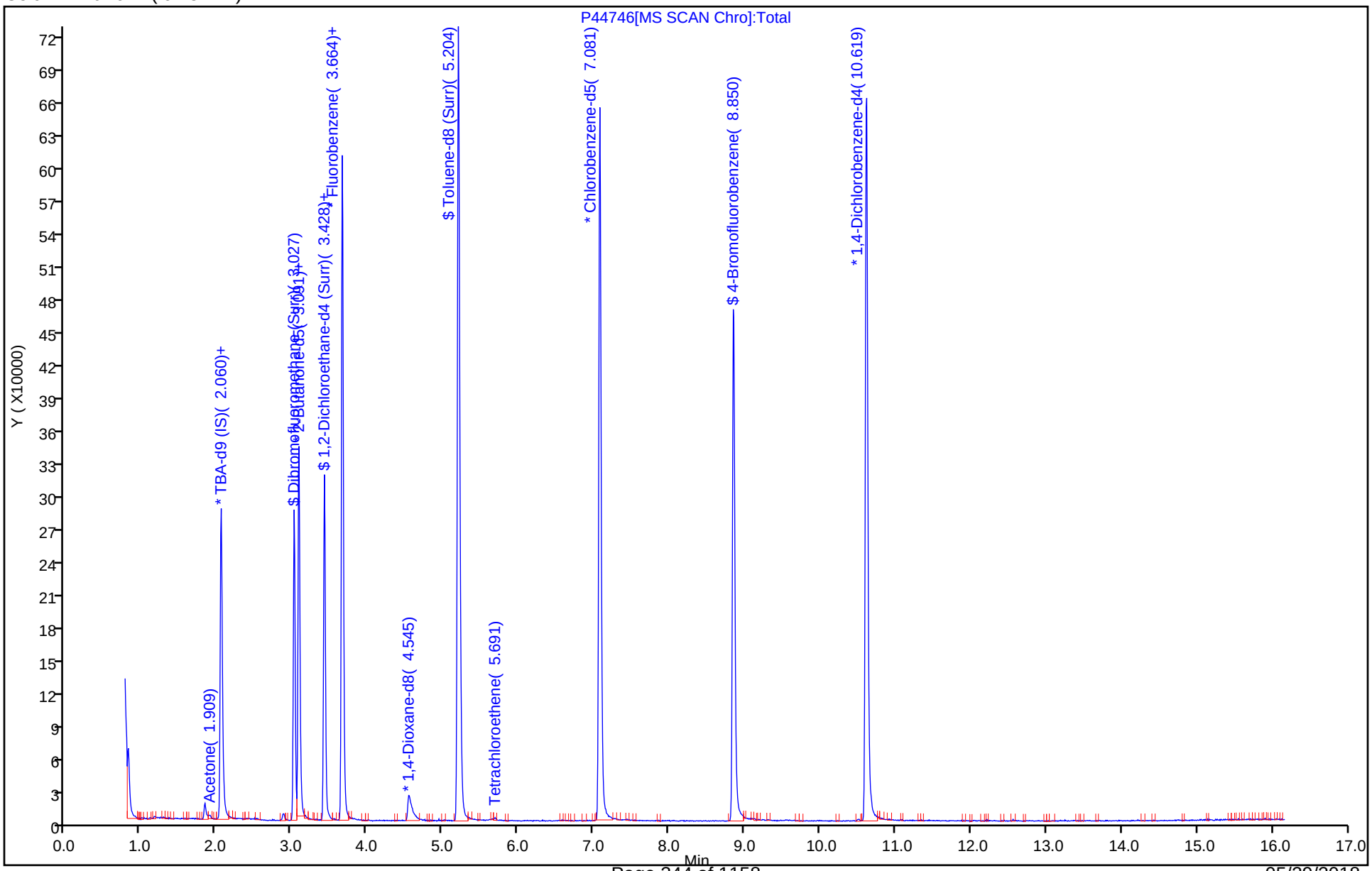
Report Date: 04-May-2018 18:31:04 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44746.D

Injection Date:	04-May-2018 17:32:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-B-12	Lab Sample ID:	460-154925-12	Worklist Smp#:	19
Client ID:	GC-MW-2(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

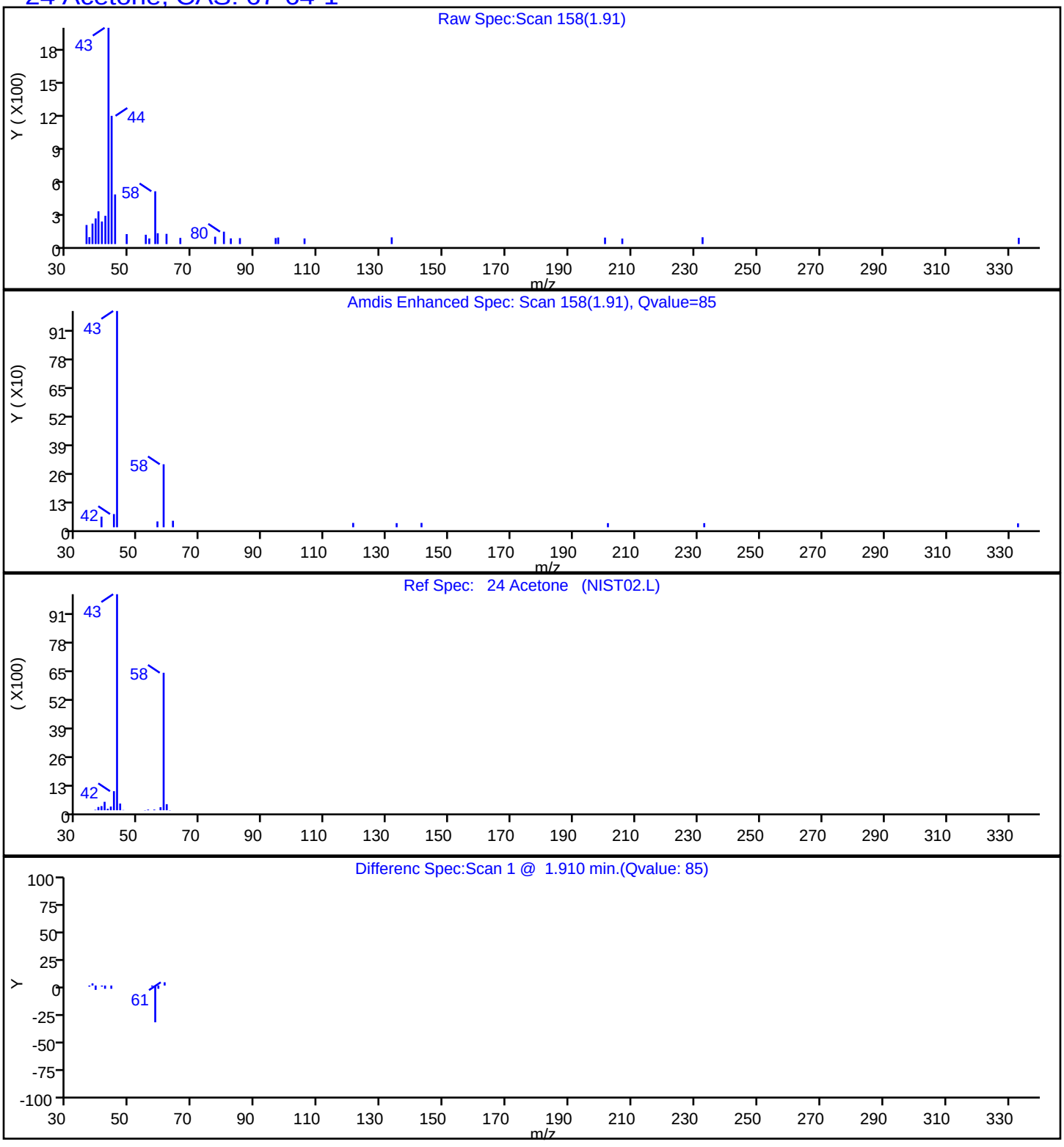
Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44746.D

Injection Date:	04-May-2018 17:32:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-12	Lab Sample ID:	460-154925-12		
Client ID:	GC-MW-2(WG)				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

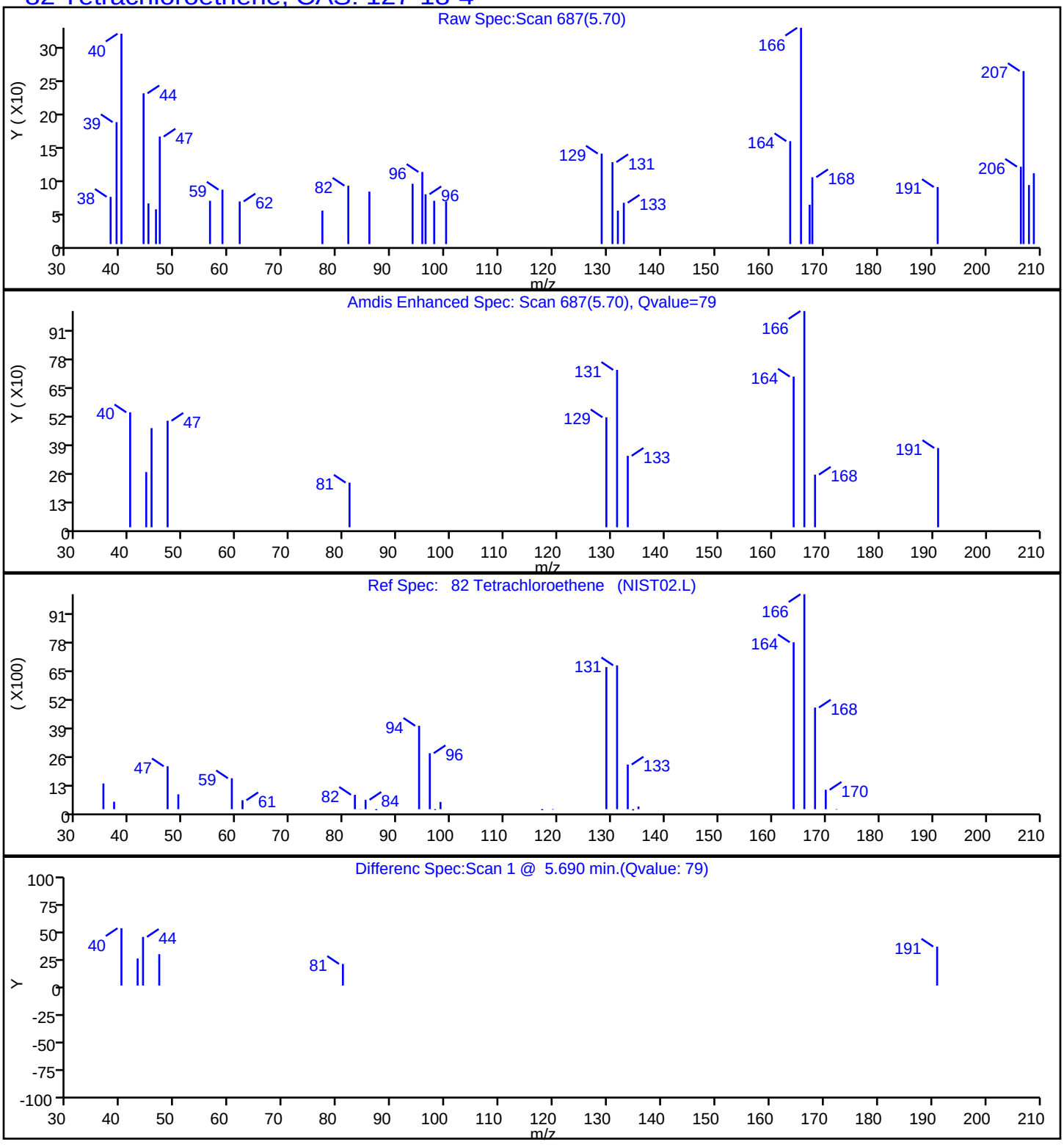
24 Acetone, CAS: 67-64-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44746.D		
Injection Date:	04-May-2018 17:32:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-12	Lab Sample ID:	460-154925-12
Client ID:	GC-MW-2(WG)		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

82 Tetrachloroethene, CAS: 127-18-4



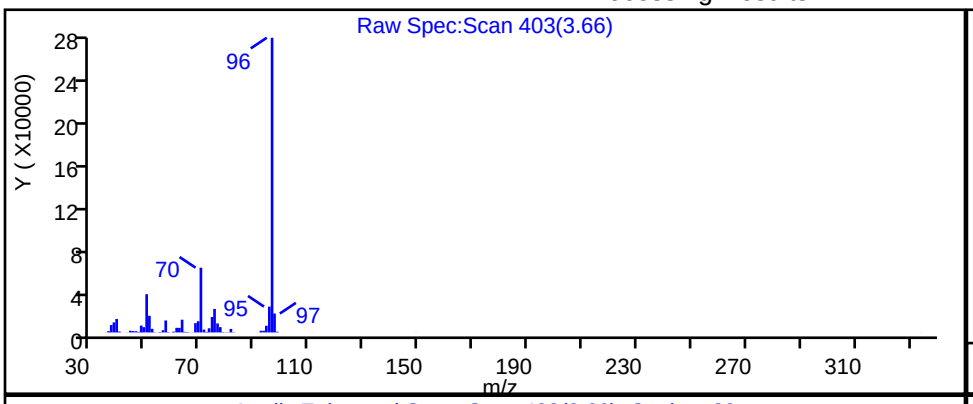
User Disabled Compound Report

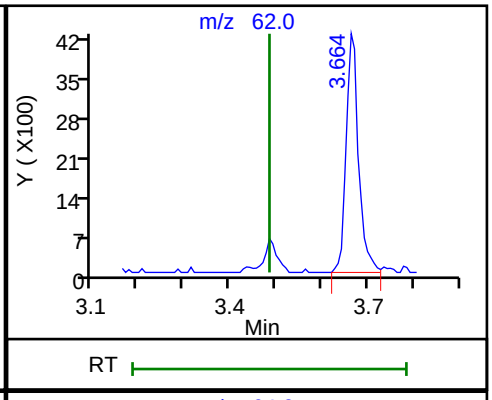
TestAmerica Edison

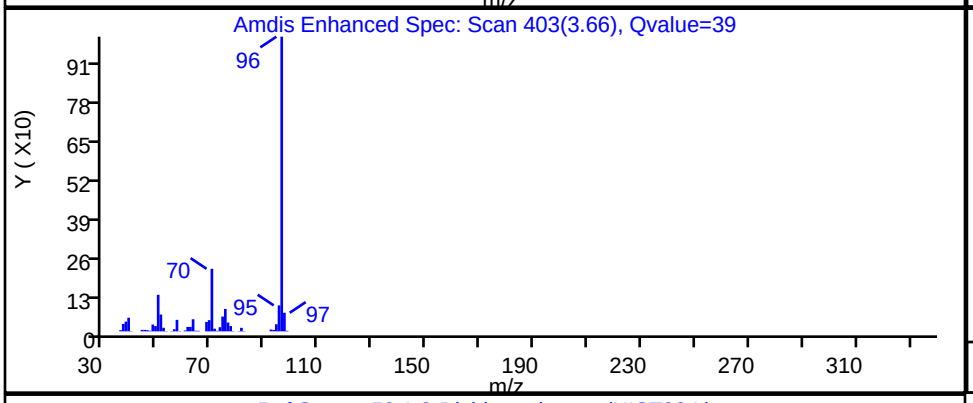
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44746.D		
Injection Date:	04-May-2018 17:32:30	Instrument ID:	CVOAMS13
Lims ID:	460-154925-B-12	Lab Sample ID:	460-154925-12
Client ID:	GC-MW-2(WG)		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

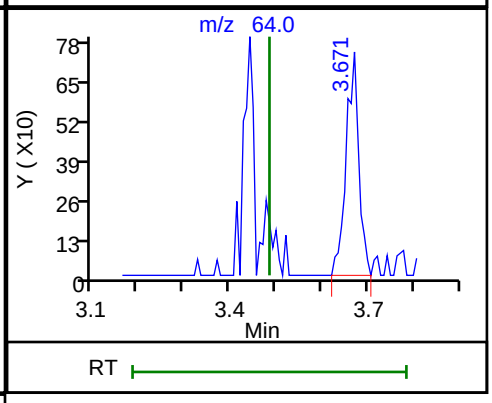
59 1,2-Dichloroethane, CAS: 107-06-2

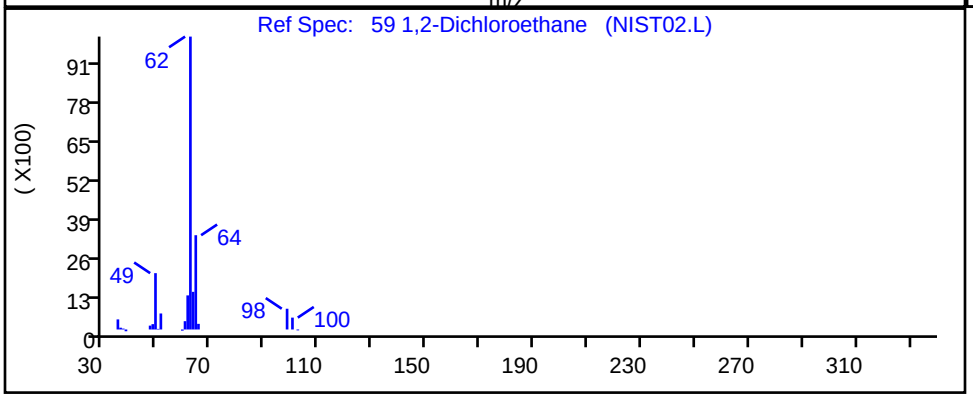
Processing Results











RT	Mass	Response	Amount
3.66	62.00	8009	1.547730
3.67	64.00	1438	

Reviewer: starzecm, 04-May-2018 18:31:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

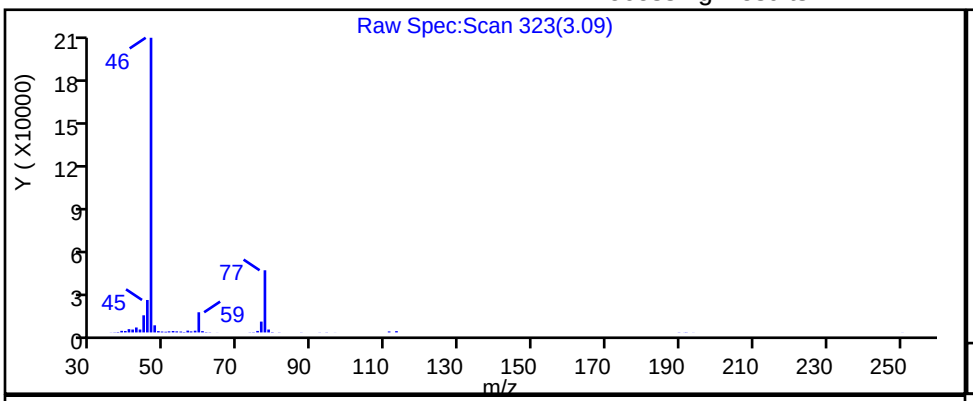
User Disabled Compound Report

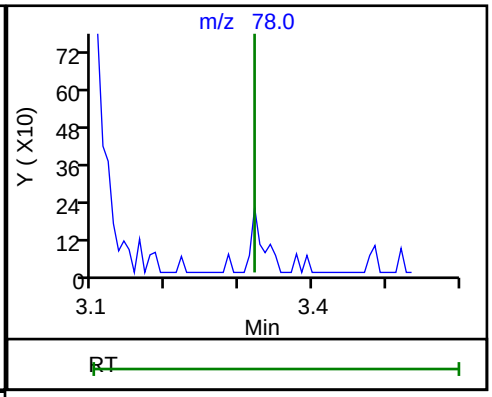
TestAmerica Edison

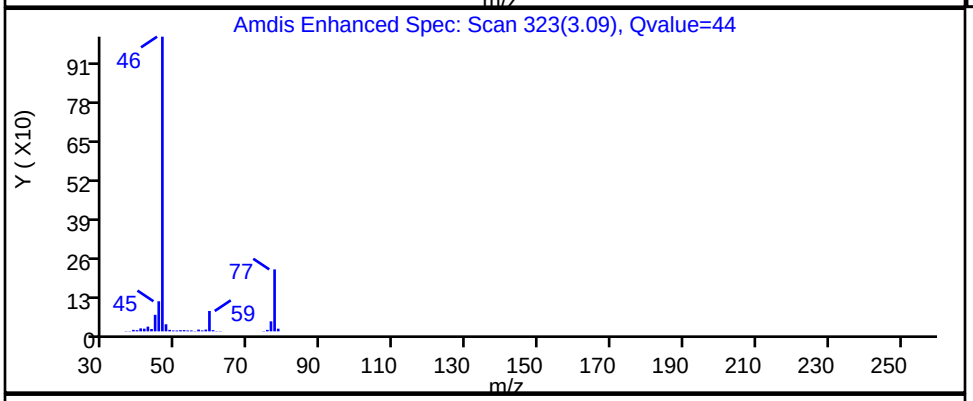
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44746.D				
Injection Date:	04-May-2018 17:32:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-12	Lab Sample ID:	460-154925-12		
Client ID:	GC-MW-2(WG)				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

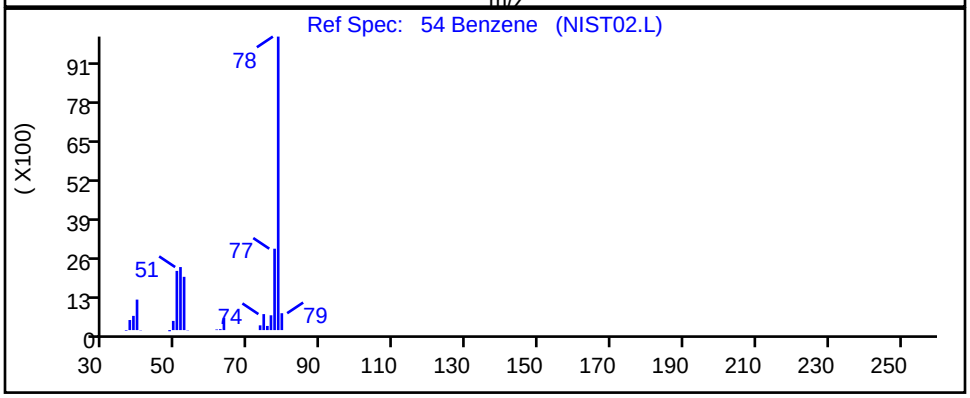
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.09	78.00	3609	0.249230

Reviewer: starzecm, 04-May-2018 18:31:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

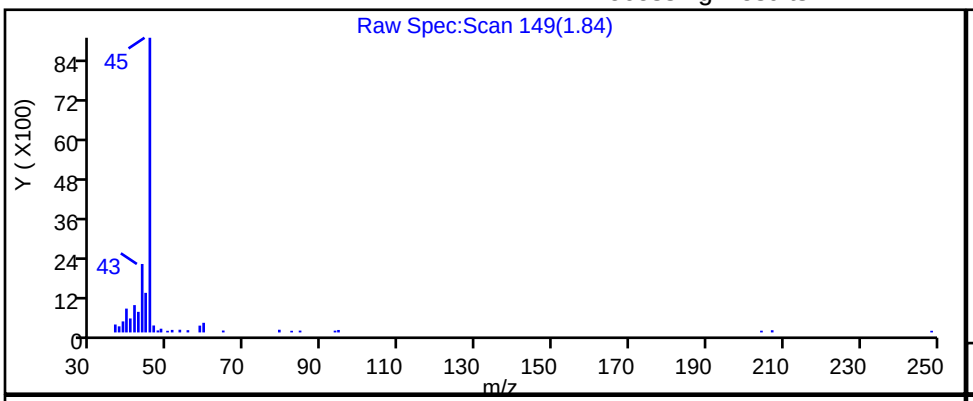
User Disabled Compound Report

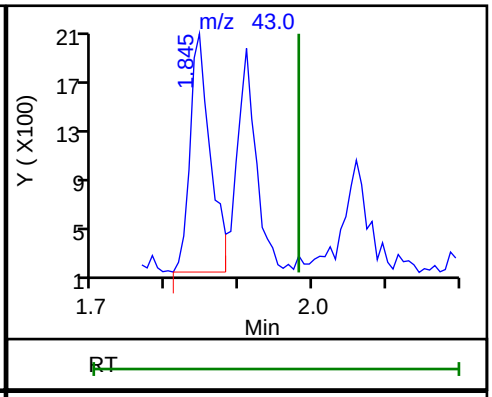
TestAmerica Edison

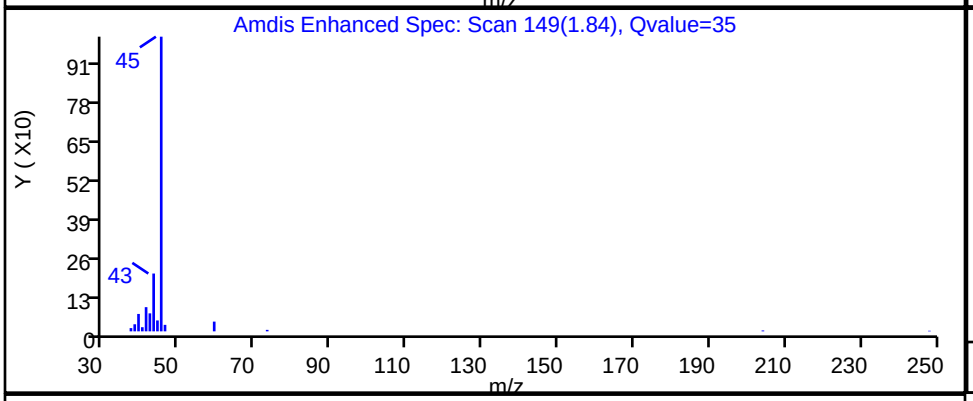
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44746.D				
Injection Date:	04-May-2018 17:32:30	Instrument ID:	CVOAMS13		
Lims ID:	460-154925-B-12	Lab Sample ID:	460-154925-12		
Client ID:	GC-MW-2(WG)				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

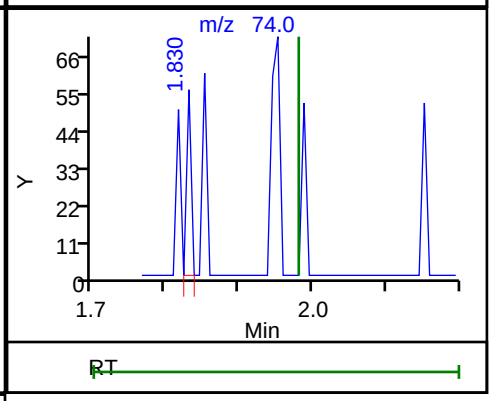
26 Methyl acetate, CAS: 79-20-9

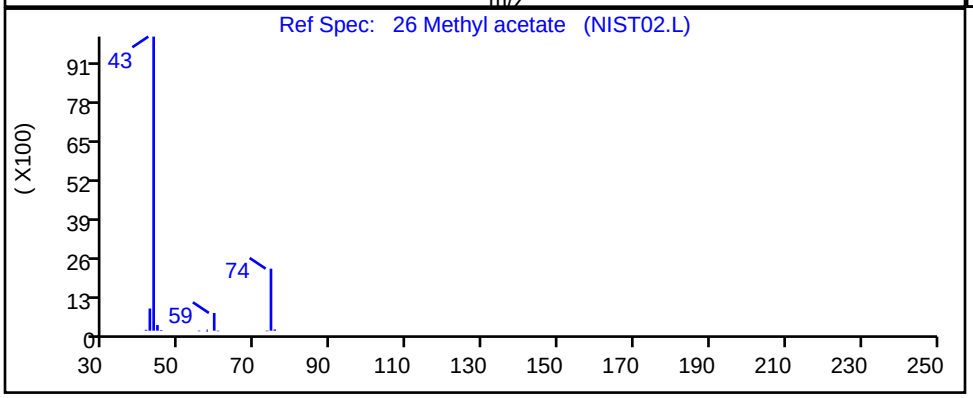
Processing Results











RT	Mass	Response	Amount
1.84	43.00	3677	1.349602
1.83	74.00	24	

Reviewer: starzecm, 04-May-2018 18:31:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8 460-512586/3	N65799.D
Level 2	STD025 460-512586/2	N65798.D
Level 3	STD1 460-512586/4	N65800.D
Level 4	STD5 460-512586/5	N65801.D
Level 5	STD20 460-512586/6	N65802.D
Level 6	STD50 460-512586/7	N65803.D
Level 7	STD200 460-512586/8	N65804.D
Level 8	STD500 460-512586/9	N65805.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	+++++ 0.1420	+++++ 0.2386	0.1250 0.2393	0.1425	0.1447	QuaF		0.2227	0.0000342						0.9980		0.9900
Dichlorodifluoromethane	+++++ 0.0965	+++++ 0.1559	0.1076 0.1543	0.1370	0.1120	Ave		0.1272			0.1000	19.9		20.0			
Chloromethane	+++++ 1.9128	+++++ 2.1026	2.2105 1.9714	2.1751	2.0462	Ave		2.0697			0.1000	5.6		20.0			
Vinyl chloride	+++++ 0.2373	+++++ 0.2933	0.2455 0.2471	0.3069	0.2615	Ave		0.2653			0.1000	10.7		20.0			
Butadiene	+++++ 0.1559	0.2123 0.2139	0.1954 0.1805	0.2117	0.1752	Ave		0.1921				11.7		20.0			
Bromomethane	+++++ 0.1767	+++++ 0.1931	0.1898 0.1497	0.2241	0.1928	Ave		0.1877			0.1000	12.9		20.0			
Chloroethane	+++++ 0.1234	+++++ 0.1420	0.1346 0.1171	0.1587	0.1359	Ave		0.1353			0.1000	10.8		20.0			
Dichlorofluoromethane	+++++ 0.4480	+++++ 0.5341	0.4724 0.4846	0.5388	0.4635	Ave		0.4902				7.7		20.0			
Trichlorofluoromethane	+++++ 0.3020	+++++ 0.4615	0.3146 0.4320	0.4090	0.3557	Ave		0.3791			0.1000	17.1		20.0			
Pentane	+++++ 4.8443	+++++ 5.2677	4.9364 4.0182	4.9953	5.1016	Ave		4.8606				9.0		20.0			
Ethanol	+++++ 0.0521	+++++ 0.0568	0.0741 0.0526	0.0303	0.0518	QuaF		0.0585	0						1.0000		0.9900
Ethyl ether	+++++ 0.1438	+++++ 0.1545	0.1484 0.1450	0.1341	0.1460	Ave		0.1453				4.6		20.0			
2-Methyl-1,3-butadiene	+++++ 0.1814	0.2919 0.2172	0.1730 0.1895	0.1779	0.1833	QuaF		0.2276	-0.000076						0.9990		0.9900
1,2-Dichloro-1,1,2-trifluoroethane	+++++ 0.2143	+++++ 0.2460	0.2010 0.2428	0.2125	0.2164	Ave		0.2222				8.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Acrolein	+++++ 2.0655	+++++ 1.7337	1.4415 1.4695	1.6019	1.8300	Ave		1.6904				14.0		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.2594	+++++ 0.3182	0.2382 0.3028	0.2620	0.2662	Ave		0.2745			0.1000	10.9		20.0			
1,1-Dichloroethene	+++++ 0.2205	+++++ 0.2623	0.1936 0.2502	0.2141	0.2194	Ave		0.2267			0.1000	11.1		20.0			
Acetone	+++++ 0.6035	+++++ 0.6136	0.7327 0.6276	0.5545	0.5828	Ave		0.6191			0.0500	9.9		20.0			
Iodomethane	+++++ 0.3497	+++++ 0.4089	0.3150 0.4131	0.3425	0.3468	Ave		0.3627				10.9		20.0			
Carbon disulfide	+++++ 0.7897	+++++ 0.9618	0.7535 0.9117	0.7864	0.7874	Ave		0.8318			0.1000	10.1		20.0			
Isopropyl alcohol	+++++ 0.5185	+++++ 0.5468	0.4948 0.5356	0.4332	0.5237	Ave		0.5088				8.1		20.0			
Allyl chloride	+++++ 0.1446	+++++ 0.1656	0.1304 0.1571	0.1248	0.1381	Ave		0.1434				10.9		20.0			
Cyclopentene	+++++ 0.5467	+++++ 0.6495	0.4958 0.5950	0.5369	0.5611	Ave		0.5642				9.4		20.0			
Methyl acetate	+++++ 2.2862	+++++ 2.1233	2.0475 1.9063	1.9829	2.3203	Ave		2.1111			0.1000	7.8		20.0			
Acetonitrile	+++++ 0.8027	+++++ 0.8180	2.3758 0.7400	1.1248	0.7107	QuaF		0.8595	-0.000024						1.0000		0.9900
Methylene Chloride	+++++ 0.2389	+++++ 0.2598	0.2288 0.2554	0.2385	0.2485	Ave		0.2450			0.1000	4.8		20.0			
2-Methyl-2-propanol	+++++ 1.0670	+++++ 1.0927	0.9114 1.1272	0.9497	1.1042	Ave		1.0421				8.6		20.0			
Methyl tert-butyl ether	+++++ 0.5409	+++++ 0.5997	0.4541 0.5950	0.5089	0.5292	Ave		0.5380			0.1000	10.2		20.0			
trans-1,2-Dichloroethene	+++++ 0.2510	+++++ 0.2850	0.2450 0.2719	0.2399	0.2535	Ave		0.2577			0.1000	6.7		20.0			
Acrylonitrile	4.5617 4.7647	+++++ 4.2969	3.8638 3.7774	4.2024	4.8727	Ave		4.3342				9.8		20.0			
Hexane	+++++ 0.3020	+++++ 0.3612	0.2783 0.3217	0.3065	0.3011	Ave		0.3118				9.0		20.0			
Isopropyl ether	+++++ 0.7004	+++++ 0.7541	0.6155 0.6879	0.6639	0.7094	Ave		0.6885				6.8		20.0			
1,1-Dichloroethane	+++++ 0.4281	+++++ 0.4617	0.4199 0.4238	0.4250	0.4382	Ave		0.4328			0.2000	3.6		20.0			
Vinyl acetate	+++++ 0.7665	+++++ 0.8787	0.5010 0.7812	0.5593	0.6551	QuaF		0.9145	-0.000132						0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chloro-1,3-butadiene	+++++ 0.2319	0.2962 0.2624	0.1914 0.2415	0.2153	0.2209	Ave		0.2371				14.4		20.0			
Tert-butyl ethyl ether	+++++ 0.6482	+++++ 0.7252	0.5428 0.7123	0.5888	0.6284	Ave		0.6409				11.0		20.0			
2,2-Dichloropropane	+++++ 0.1158	+++++ 0.1403	0.1148 0.1343	0.1145	0.1168	Ave		0.1227				9.3		20.0			
cis-1,2-Dichloroethene	+++++ 0.2831	+++++ 0.3092	0.2622 0.2925	0.2725	0.2795	Ave		0.2832			0.1000	5.8		20.0			
2-Butanone (MEK)	+++++ 0.3449	+++++ 0.3560	0.4133 0.3525	0.3285	0.3533	Ave		0.3581			0.0500	8.1		20.0			
Ethyl acetate	+++++ 0.3867	+++++ 0.3910	0.4565 0.3886	0.3356	0.3715	Ave		0.3883				10.1		20.0			
Methyl acrylate	+++++ 0.0935	+++++ 0.1071	0.0880 +++++	0.0629	0.0862	Ave		0.0875				18.3		20.0			
Propionitrile	+++++ 1.6536	+++++ 1.5797	1.2012 1.4099	1.3551	1.7730	Ave		1.4954				14.1		20.0			
Chlorobromomethane	+++++ 0.1027	+++++ 0.1133	0.0952 0.1136	0.0995	0.1051	Ave		0.1049				7.0		20.0			
Tetrahydrofuran	+++++ 0.4184	+++++ 0.4008	0.4074 0.3890	0.4613	0.4363	Ave		0.4189				6.3		20.0			
Methacrylonitrile	+++++ 0.0545	+++++ 0.0565	0.0430 0.0506	0.0489	0.0543	Ave		0.0513				9.6		20.0			
Chloroform	+++++ 0.4187	+++++ 0.4449	0.4170 0.4243	0.4121	0.4301	Ave		0.4245			0.2000	2.8		20.0			
Cyclohexane	+++++ 0.4252	+++++ 0.5167	0.3793 0.5071	0.4220	0.4317	Ave		0.4470			0.1000	12.0		20.0			
1,1,1-Trichloroethane	+++++ 0.3568	+++++ 0.4235	0.3195 0.4331	0.3271	0.3504	Ave		0.3684			0.1000	13.2		20.0			
Carbon tetrachloride	+++++ 0.2267	+++++ 0.3039	0.1932 +++++	0.2077	0.2130	Ave		0.2289			0.1000	19.1		20.0			
1,1-Dichloropropene	+++++ 0.3500	+++++ 0.3949	0.3157 0.3708	0.3358	0.3467	Ave		0.3523				7.8		20.0			
Isobutyl alcohol	+++++ 0.7760	+++++ 0.8758	0.6358 0.7549	0.6545	0.7522	Ave		0.7415				11.8		20.0			
2,2,4-Trimethylpentane	+++++ 0.5552	+++++ 0.7063	0.4938 0.6123	0.5244	0.5445	Ave		0.5727				13.3		20.0			
Benzene	+++++ 1.4531	+++++ 1.4976	1.4280 1.3442	1.4807	1.5043	Ave		1.4513			0.5000	4.1		20.0			
Tert-amyl methyl ether	+++++ 0.6601	+++++ 0.7454	0.5013 0.7461	0.5600	0.6285	Ave		0.6402				15.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isopropyl acetate	+++++ 0.0776	+++++ 0.0850	0.0854 0.0790	0.0725	0.0768	Ave		0.0794				6.3		20.0			
1,2-Dichloroethane	+++++ 0.2468	+++++ 0.2546	0.2826 0.2369	0.2415	0.2526	Ave		0.2525			0.1000	6.4		20.0			
n-Heptane	+++++ 0.1412	+++++ 0.1603	0.1364 0.1356	0.1350	0.1431	Ave		0.1419				6.7		20.0			
Trichloroethene	+++++ 0.2674	+++++ 0.2999	0.2523 0.2826	0.2575	0.2604	Ave		0.2700			0.2000	6.7		20.0			
n-Butanol	+++++ 0.1807	+++++ 0.2487	0.0906 0.2762	0.0416	0.1250	QuaF		0.2202	0.0000045						0.9990		0.9900
Methylcyclohexane	+++++ 0.4541	+++++ 0.5428	0.3848 0.5388	0.4330	0.4403	Ave		0.4656			0.1000	13.5		20.0			
Ethyl acrylate	+++++ 0.4435	+++++ 0.5350	0.2849 0.4944	0.3909	0.4318	QuaF		0.5437	-0.000097						0.9990		0.9900
1,2-Dichloropropane	+++++ 0.2526	+++++ 0.2730	0.2320 0.2555	0.2309	0.2515	Ave		0.2493			0.1000	6.4		20.0			
Methyl methacrylate	+++++ 0.0414	+++++ 0.0470	0.0275 0.0463	0.0329	0.0389	Ave		0.0390				19.7		20.0			
1,4-Dioxane	+++++ 1.2051	+++++ 0.9758	1.3093 0.8425	1.0687	1.1221	Ave		1.0873				15.2		20.0			
Dibromomethane	+++++ 0.1153	+++++ 0.1216	0.1109 0.1191	0.1107	0.1168	Ave		0.1157				3.8		20.0			
n-Propyl acetate	+++++ 0.1515	+++++ 0.1828	0.1106 0.1703	0.1270	0.1325	Ave		0.1458				18.8		20.0			
Dichlorobromomethane	+++++ 0.2754	+++++ 0.3140	0.2363 0.3193	0.2428	0.2665	Ave		0.2757			0.2000	12.7		20.0			
2-Nitropropane	+++++ 1.1862	+++++ 1.3722	2.7527 1.4207	1.5467	1.2612	QuaF		1.3163	0.0001052						1.0000		0.9900
2-Chloroethyl vinyl ether	+++++ 0.0961	+++++ 0.1091	0.0814 0.1102	0.0709	0.0898	Ave		0.0929				16.7		20.0			
Epichlorohydrin	0.2713 0.2779	+++++ 0.3000	0.1355 0.3053	0.1965	0.2561	QuaF		0.2926	0.0000013						1.0000		0.9900
cis-1,3-Dichloropropene	+++++ 0.4872	+++++ 0.5204	0.3930 0.5029	0.4149	0.4678	Ave		0.4643			0.2000	10.9		20.0			
4-Methyl-2-pentanone (MIBK)	+++++ 2.9900	+++++ 2.9477	2.0415 2.9015	2.3954	2.9804	Ave		2.7094			0.0500	14.7		20.0			
Toluene	+++++ 1.6391	+++++ 1.6147	1.5912 1.5340	1.5879	1.6534	Ave		1.6034			0.4000	2.7		20.0			
trans-1,3-Dichloropropene	+++++ 0.3671	+++++ 0.3963	0.2595 0.3960	0.2820	0.3231	Ave		0.3373			0.1000	17.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl methacrylate	+++++ 0.2025	+++++ 0.2400	0.1205 0.2395	0.1458	0.1850	QuaF		0.2337	0.0000119						1.0000		0.9900
1,1,2-Trichloroethane	+++++ 0.1963	+++++ 0.1947	0.1941 0.1891	0.1758	0.1997	Ave		0.1916			0.1000	4.4		20.0			
Tetrachloroethene	+++++ 0.3133	+++++ 0.3325	0.3002 0.3371	0.2992	0.3017	Ave		0.3140			0.2000	5.4		20.0			
1,3-Dichloropropane	+++++ 0.4176	+++++ 0.4023	0.3535 0.3961	0.3710	0.4095	Ave		0.3917				6.3		20.0			
2-Hexanone	+++++ 1.1155	+++++ 1.1630	0.6715 1.2436	0.8466	1.0573	QuaF		1.1066	0.0000548		0.0500				1.0000		0.9900
n-Butyl acetate	+++++ 0.2603	+++++ 0.2710	0.1675 0.2590	0.2059	0.2439	Ave		0.2346				17.0		20.0			
Chlorodibromomethane	+++++ 0.1811	+++++ 0.2116	0.1605 0.2286	0.1393	0.1687	Ave		0.1816			0.1000	18.3		20.0			
Ethylene Dibromide	+++++ 0.2110	+++++ 0.2127	0.1759 0.2078	0.1793	0.2013	Ave		0.1980			0.1000	8.2		20.0			
Chlorobenzene	+++++ 1.0019	+++++ 1.0031	0.9732 0.9827	0.9473	0.9997	Ave		0.9847			0.5000	2.2		20.0			
Ethylbenzene	+++++ 0.5733	+++++ 0.6023	0.5040 0.5466	0.5305	0.5621	Ave		0.5531			0.1000	6.2		20.0			
1,1,1,2-Tetrachloroethane	+++++ 0.2615	+++++ 0.2930	0.2206 0.3002	0.2134	0.2359	Ave		0.2541				14.5		20.0			
m-Xylene & p-Xylene	+++++ 0.6970	+++++ 0.7200	0.5875 0.6927	0.6596	0.6872	Ave		0.6740			0.1000	6.9		20.0			
o-Xylene	+++++ 0.7154	+++++ 0.7145	0.5583 0.6626	0.6298	0.6846	Ave		0.6609			0.3000	9.1		20.0			
n-Butyl acrylate	+++++ 0.1852	+++++ 0.1981	0.1000 0.1774	0.1256	0.1640	QuaF		0.2075	-0.000060						1.0000		0.9900
Styrene	+++++ 1.1402	+++++ 1.1523	0.8207 1.0515	0.9943	1.1199	Ave		1.0465			0.3000	12.0		20.0			
Bromoform	+++++ 0.1569	+++++ 0.1958	0.1270 0.2448	0.1218	0.1317	QuaF		0.1603	0.0001692		0.1000				1.0000		0.9900
Amyl acetate (mixed isomers)	+++++ 0.7588	+++++ 0.7868	0.3997 0.7688	0.4988	0.6619	QuaF		0.7901	-0.000042						1.0000		0.9900
Isopropylbenzene	+++++ 1.7642	+++++ 1.8600	1.4762 1.6593	1.6777	1.7803	Ave		1.7029			0.1000	7.8		20.0			
Bromobenzene	+++++ 0.7612	+++++ 0.7655	0.6765 0.7971	0.6646	0.7119	Ave		0.7295				7.3		20.0			
1,1,2,2-Tetrachloroethane	+++++ 0.5487	+++++ 0.5303	0.5067 0.5108	0.4825	0.5278	Ave		0.5178			0.3000	4.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
N-Propylbenzene	+++++ 4.5085	+++++ 4.4728	4.0463 3.8772	4.1670	4.3472	Ave		4.2365				5.9		20.0			
1,2,3-Trichloropropane	+++++ 0.1526	+++++ 0.1422	0.1297 0.1518	0.1404	0.1464	Ave		0.1439				5.9		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1049	+++++ 0.1148	0.0793 0.1201	0.0902	0.0963	Ave		0.1009				15.2		20.0			
2-Chlorotoluene	+++++ 3.1146	+++++ 3.0881	2.7837 2.7247	2.9541	3.1103	Ave		2.9626				5.8		20.0			
4-Ethyltoluene	+++++ 3.8872	+++++ 3.7625	3.2665 3.2037	3.4743	3.6904	Ave		3.5474				7.8		20.0			
1,3,5-Trimethylbenzene	+++++ 3.2398	+++++ 3.3121	2.5413 3.0571	2.9207	3.0955	Ave		3.0277				9.1		20.0			
4-Chlorotoluene	+++++ 2.8073	+++++ 2.7766	2.5116 2.6872	2.6764	2.7325	Ave		2.6986				3.9		20.0			
Butyl Methacrylate	+++++ 0.9949	+++++ 1.0696	0.4463 1.0690	0.6263	0.8295	QuaF		1.0534	0.0000323						1.0000		0.9900
tert-Butylbenzene	+++++ 2.5580	+++++ 2.6548	2.1780 2.4831	2.2190	2.3276	Ave		2.4034				8.0		20.0			
1,2,4-Trimethylbenzene	+++++ 3.4005	+++++ 3.4027	2.8809 3.1198	3.1268	3.2428	Ave		3.1956				6.2		20.0			
sec-Butylbenzene	+++++ 4.0114	+++++ 3.9613	3.1088 3.5655	3.5674	3.7897	Ave		3.6673				9.1		20.0			
1,3-Dichlorobenzene	+++++ 1.6238	+++++ 1.5887	1.4110 1.3087	1.4491	1.5255	Ave		1.4845			0.6000	7.9		20.0			
4-Isopropyltoluene	+++++ 3.3211	+++++ 3.3806	2.5978 2.7159	3.0349	3.2129	Ave		3.0439				10.6		20.0			
1,4-Dichlorobenzene	+++++ 1.5618	+++++ 1.5838	1.5187 1.4880	1.5018	1.5399	Ave		1.5323			0.5000	2.4		20.0			
1,2,3-Trimethylbenzene	+++++ 3.4764	+++++ 3.4481	2.9305 2.9680	3.2674	3.4020	Ave		3.2487				7.5		20.0			
Benzyl chloride	+++++ 0.5738	+++++ 0.7712	0.3396 0.8296	0.3699	0.4332	QuaF		0.7018	0.0002577						0.9990		0.9900
Indan	+++++ 3.1693	+++++ 3.1286	2.6860 2.7718	2.8611	3.0602	Ave		2.9462				6.8		20.0			
p-Diethylbenzene	+++++ 1.8001	+++++ 1.8381	1.4444 1.7088	1.7158	1.7770	Ave		1.7140				8.2		20.0			
n-Butylbenzene	+++++ 1.7485	+++++ 1.7174	1.4544 1.5164	1.6332	1.6539	Ave		1.6206				7.1		20.0			
1,2-Dichlorobenzene	+++++ 1.3856	+++++ 1.4463	1.2064 1.4263	1.3096	1.3381	Ave		1.3521			0.4000	6.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4,5-Tetramethylbenzene	+++++ 3.3467	+++++ 3.4864	2.3635 3.0597	2.7794	3.1157	Ave		3.0252				13.4		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0541	+++++ 0.0613	0.0440 +++++	0.0374	0.0458	Ave		0.0485		*	0.0500	19.1		20.0			
1,3,5-Trichlorobenzene	+++++ 1.0933	+++++ 1.1411	0.8711 1.1229	0.9691	1.0062	Ave		1.0339				10.1		20.0			
1,2,4-Trichlorobenzene	+++++ 0.8719	+++++ 0.8975	0.6314 0.9786	0.7218	0.7794	Ave		0.8134			0.2000	15.6		20.0			
Hexachlorobutadiene	+++++ 0.2654	+++++ 0.2836	0.2250 0.3145	0.2473	0.2331	Ave		0.2615				12.8		20.0			
Naphthalene	+++++ 1.5684	+++++ 1.6659	1.0759 +++++	1.1950	1.4266	Ave		1.3864				17.9		20.0			
1,2,3-Trichlorobenzene	+++++ 0.6374	+++++ 0.6947	0.5183 0.7773	0.5449	0.6051	Ave		0.6296				15.3		20.0			
Dibromofluoromethane (Surr)	0.2172 0.2216	+++++ 0.2381	0.2196 0.2264	0.2230	0.2274	Ave		0.2247				3.1		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2164 0.2077	+++++ 0.2189	0.2147 0.2224	0.2163	0.2122	Ave		0.2155				2.2		20.0			
Toluene-d8 (Surr)	1.4956 1.4569	+++++ 1.4542	1.5302 1.3870	1.4698	1.4713	Ave		1.4664				3.0		20.0			
4-Bromofluorobenzene	0.3242 0.3356	+++++ 0.3337	0.3314 0.3311	0.3359	0.3338	Ave		0.3322				1.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8 460-512586/3	N65799.D
Level 2	STD025 460-512586/2	N65798.D
Level 3	STD1 460-512586/4	N65800.D
Level 4	STD5 460-512586/5	N65801.D
Level 5	STD20 460-512586/6	N65802.D
Level 6	STD50 460-512586/7	N65803.D
Level 7	STD200 460-512586/8	N65804.D
Level 8	STD500 460-512586/9	N65805.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorotrifluoroethene	FB	QuaF	+++++ 148667	+++++ 936726	2602 2420349	14089	58100	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Dichlorodifluoromethane	FB	Ave	+++++ 100967	+++++ 612211	2241 1560572	13543	44953	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Chloromethane	BUT	Ave	+++++ 76177	+++++ 336793	1690 783540	8174	31079	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Vinyl chloride	FB	Ave	+++++ 248376	+++++ 1151398	5112 2499503	30349	105011	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Butadiene	FB	Ave	+++++ 163175	1141 839806	4068 1825878	20935	70361	+++++ 50.0	0.250 200	1.00 500	5.00	20.0
Bromomethane	FB	Ave	+++++ 184967	+++++ 758298	3951 1514553	22160	77413	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Chloroethane	FB	Ave	+++++ 129152	+++++ 557652	2803 1184106	15693	54560	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Dichlorofluoromethane	FB	Ave	+++++ 468873	+++++ 2096671	9836 4902050	53284	186108	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Trichlorofluoromethane	FB	Ave	+++++ 316142	+++++ 1811863	6549 4369417	40448	142832	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Pentane	TBAd 9	Ave	+++++ 85327	+++++ 400242	1666 860266	8326	32851	+++++ 100	+++++ 400	2.00 1000	10.0	40.0
Ethanol	TBAd 9	QuaF	+++++ 18351	+++++ 86383	500 225025	1010	6665	+++++ 2000	+++++ 8000	40.0 20000	200	800
Ethyl ether	FB	Ave	+++++ 150508	+++++ 606437	3090 1466496	13264	58604	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
2-Methyl-1,3-butadiene	FB	QuaF	+++++ 189899	1569 852540	3602 1916949	17593	73604	+++++ 50.0	0.250 200	1.00 500	5.00	20.0
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	+++++ 224308	+++++ 965632	4185 2455731	21016	86896	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Acrolein	TBAd 9	Ave	+++++ 36382	+++++ 65865	973 125842	5340	11784	+++++ 100	+++++ 200	4.00 400	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 271533	+++++ 1249351	4960 3062436	25910	106906	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,1-Dichloroethene	FB	Ave	+++++ 230777	+++++ 1029972	4031 2530967	21172	88114	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Acetone	BUT	Ave	+++++ 120173	+++++ 491432	2801 1247171	10419	44262	+++++ 250	+++++ 1000	5.00 2500	25.0	100
Iodomethane	FB	Ave	+++++ 366051	+++++ 1605292	6559 4178616	33866	139269	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Carbon disulfide	FB	Ave	+++++ 826595	+++++ 3775966	15688 9221195	77764	316182	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Isopropyl alcohol	TBAd9	Ave	+++++ 45668	+++++ 207748	835 573294	3610	16860	+++++ 500	+++++ 2000	10.0 5000	50.0	200
Allyl chloride	FB	Ave	+++++ 151302	+++++ 650145	2714 1589377	12340	55435	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Cyclopentene	FB	Ave	+++++ 572184	+++++ 2549819	10323 6018786	53087	225300	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Methyl acetate	TBAd9	Ave	+++++ 40269	+++++ 161328	691 408112	3305	14941	+++++ 100	+++++ 400	2.00 1000	10.0	40.0
Acetonitrile	TBAd9	QuaF	+++++ 70692	+++++ 310761	4009 792132	9374	22881	+++++ 500	+++++ 2000	10.0 5000	50.0	200
Methylene Chloride	FB	Ave	+++++ 250071	+++++ 1019803	4764 2582871	23589	99762	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
2-Methyl-2-propanol	TBAd9	Ave	+++++ 93973	+++++ 415116	1538 1206669	7915	35551	+++++ 500	+++++ 2000	10.0 5000	50.0	200
Methyl tert-butyl ether	FB	Ave	+++++ 566166	+++++ 2354515	9455 6018359	50319	212491	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
trans-1,2-Dichloroethene	FB	Ave	+++++ 262695	+++++ 1118917	5101 2750550	23722	101772	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Acrylonitrile	TBAd9	Ave	1632 419622	+++++ 1632395	6520 4043516	35022	156885	2.00 500	+++++ 2000	10.0 5000	50.0	200
Hexane	FB	Ave	+++++ 316098	+++++ 1417970	5794 3254408	30311	120891	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Isopropyl ether	FB	Ave	+++++ 733119	+++++ 2960623	12814 6958028	65649	284849	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,1-Dichloroethane	FB	Ave	+++++ 448090	+++++ 1812519	8743 4286901	42023	175958	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Vinyl acetate	BUT	QuaF	+++++ 61052	+++++ 281488	766 620995	4204	19899	+++++ 100	+++++ 400	2.00 1000	10.0	40.0
2-Chloro-1,3-butadiene	FB	Ave	+++++ 242729	1592 1030180	3985 2442731	21292	88695	+++++ 50.0	0.250 200	1.00 500	5.00	20.0
Tert-butyl ethyl ether	FB	Ave	+++++ 678445	+++++ 2846957	11301 7205293	58220	252318	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,2-Dichloropropane	FB	Ave	+++++ 121179	+++++ 550783	2390 1358348	11322	46888	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 296308	+++++ 1213837	5458 2958996	26944	112237	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
2-Butanone (MEK)	BUT	Ave	+++++ 68681	+++++ 285132	1580 700487	6172	26831	+++++ 250	+++++ 1000	5.00 2500	25.0	100
Ethyl acetate	BUT	Ave	+++++ 30798	+++++ 125246	698 308901	2522	11286	+++++ 100	+++++ 400	2.00 1000	10.0	40.0
Methyl acrylate	FB	Ave	+++++ 97840	+++++ 420365	1832 +++++	6217	34601	+++++ 50.0	+++++ 200	1.00 +++++	5.00	20.0
Propionitrile	TBAd9	Ave	+++++ 145632	+++++ 600120	2027 1509239	11293	57084	+++++ 500	+++++ 2000	10.0 5000	50.0	200
Chlorobromomethane	FB	Ave	+++++ 107454	+++++ 444643	1982 1148608	9838	42191	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Tetrahydrofuran	BUT	Ave	+++++ 33322	+++++ 128406	623 309211	3467	13255	+++++ 100	+++++ 400	2.00 1000	10.0	40.0
Methacrylonitrile	FB	Ave	+++++ 570537	+++++ 2216822	8950 5120722	48323	217854	+++++ 500	+++++ 2000	10.0 5000	50.0	200
Chloroform	FB	Ave	+++++ 438247	+++++ 1746523	8681 4291826	40755	172696	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Cyclohexane	FB	Ave	+++++ 445075	+++++ 2028354	7897 5128756	41732	173356	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,1,1-Trichloroethane	FB	Ave	+++++ 373454	+++++ 1662714	6651 4380430	32341	140717	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Carbon tetrachloride	FB	Ave	+++++ 237324	+++++ 1193243	4022 +++++	20534	85523	+++++ 50.0	+++++ 200	1.00 +++++	5.00	20.0
1,1-Dichloropropene	FB	Ave	+++++ 366391	+++++ 1550468	6572 3750391	33205	139219	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Isobutyl alcohol	TBAd9	Ave	+++++ 170859	+++++ 831835	2682 2020227	13637	60544	+++++ 1250	+++++ 5000	25.0 12500	125	500
2,2,4-Trimethylpentane	FB	Ave	+++++ 581083	+++++ 2772710	10280 6193389	51859	218652	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Benzene	CBNZ d5	Ave	+++++ 1101215	+++++ 4647266	20727 10917718	106066	437298	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Tert-amyl methyl ether	FB	Ave	+++++ 690907	+++++ 2926289	10437 7546416	55376	252380	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Isopropyl acetate	FB	Ave	+++++ 81229	+++++ 333747	1778 798899	7166	30835	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2-Dichloroethane	FB	Ave	+++++ 258290	+++++ 999482	5883 2396171	23880	101421	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
n-Heptane	FB	Ave	+++++ 147762	+++++ 629221	2840 1371735	13351	57454	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Trichloroethene	FB	Ave	+++++ 279847	+++++ 1177351	5252 2858598	25466	104552	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
n-Butanol	TBAd9	QuaF	+++++ 39794	+++++ 236200	382 739225	867	10059	+++++ 1250	+++++ 5000	25.0 12500	125	500
Methylcyclohexane	FB	Ave	+++++ 475273	+++++ 2130939	8012 5450049	42814	176778	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Ethyl acrylate	FB	QuaF	+++++ 464216	+++++ 2100576	5931 5000408	38656	173382	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2-Dichloropropane	FB	Ave	+++++ 264406	+++++ 1071977	4830 2584322	22830	100998	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Methyl methacrylate	FB	Ave	+++++ 86585	+++++ 369342	1145 937033	6498	31226	+++++ 100	+++++ 400	2.00 1000	10.0	40.0
1,4-Dioxane	DXE	Ave	+++++ 32266	+++++ 124061	1652 341635	2766	11467	+++++ 1000	+++++ 4000	50.0 10000	100	400
Dibromomethane	FB	Ave	+++++ 120681	+++++ 477493	2308 1204963	10951	46899	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
n-Propyl acetate	FB	Ave	+++++ 158589	+++++ 717737	2303 1722639	12563	53190	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Dichlorobromomethane	FB	Ave	+++++ 288240	+++++ 1232797	4919 3229825	24005	107017	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
2-Nitropropane	TBAd9	QuaF	+++++ 20894	+++++ 104260	929 304160	2578	8121	+++++ 100	+++++ 400	2.00 1000	10.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 100601	+++++ 428454	1695 1114745	7015	36039	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Epichlorohydrin	BUT	QuaF	1042 221343	+++++ 960948	2072 2427145	14766	77788	5.00 1000	+++++ 4000	20.0 10000	100	400
cis-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 369193	+++++ 1614792	5704 4084735	29718	135980	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
4-Methyl-2-pentanone (MIBK)	BUT	Ave	+++++ 595380	+++++ 2360859	7804 5766055	45010	226341	+++++ 250	+++++ 1000	5.00 2500	25.0	100
Toluene	CBNZ d5	Ave	+++++ 1242169	+++++ 5010491	23097 12459875	113743	480643	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 278227	+++++ 1229715	3766 3216068	20202	93941	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Ethyl methacrylate	FB	QuaF	+++++ 211904	+++++ 942131	2509 2422015	14422	74302	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 148790	+++++ 604318	2817 1535989	12591	58058	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Tetrachloroethene	CBNZ d5	Ave	+++++ 237399	+++++ 1031883	4358 2738356	21430	87709	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,3-Dichloropropane	CBNZ d5	Ave	+++++ 316452	+++++ 1248287	5131 3217532	26578	119041	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2-Hexanone	BUT	QuaF	+++++ 222128	+++++ 931487	2567 2471341	15907	80298	+++++ 250	+++++ 1000	5.00 2500	25.0	100
n-Butyl acetate	CBNZ d5	Ave	+++++ 197235	+++++ 841022	2432 2103684	14746	70904	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Chlorodibromomethane	CBNZ d5	Ave	+++++ 137238	+++++ 656660	2329 1857097	9976	49047	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Ethylene Dibromide	CBNZ d5	Ave	+++++ 159896	+++++ 659912	2553 1687914	12844	58515	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Chlorobenzene	CBNZ d5	Ave	+++++ 759250	+++++ 3112635	14126 7982172	67859	290631	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Ethylbenzene	CBNZ d5	Ave	+++++ 434430	+++++ 1868917	7315 4439836	38002	163395	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 198162	+++++ 909235	3202 2438516	15287	68589	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	+++++ 528224	+++++ 2234331	8528 5626183	47247	199779	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
o-Xylene	CBNZ d5	Ave	+++++ 542154	+++++ 2217064	8104 5382226	45113	199017	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
n-Butyl acrylate	CBNZ d5	QuaF	+++++ 140330	+++++ 614660	1452 1440629	8997	47671	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Styrene	CBNZ d5	Ave	+++++ 864113	+++++ 3575768	11913 8540907	71227	325573	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Bromoform	DCBd 4	QuaF	+++++ 54182	+++++ 283543	834 889818	3993	18108	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Amyl acetate (mixed isomers)	DCBd 4	QuaF	+++++ 261996	+++++ 1139214	2625 2794325	16359	90978	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Isopropylbenzene	CBNZ d5	Ave	+++++ 1336963	+++++ 5771867	21427 13477345	120176	517540	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Bromobenzene	DCBd 4	Ave	+++++ 262828	+++++ 1108407	4443 2897025	21797	97859	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	+++++ 189453	+++++ 767871	3328 1856579	15823	72554	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
N-Propylbenzene	DCBd 4	Ave	+++++ 1556692	+++++ 6476007	26574 14091596	136662	597559	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 52681	+++++ 205867	852 551738	4606	20125	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 36205	+++++ 166233	521 436650	2958	13238	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
2-Chlorotoluene	DCBd 4	Ave	+++++ 1075430	+++++ 4471219	18282 9902810	96882	427539	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
4-Ethyltoluene	DCBd 4	Ave	+++++ 1342192	+++++ 5447688	21453 11643762	113942	507276	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++ 1118634	+++++ 4795516	16690 11111045	95787	425504	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
4-Chlorotoluene	DCBd 4	Ave	+++++ 969299	+++++ 4020242	16495 9766604	87777	375614	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Butyl Methacrylate	DCBd 4	QuaF	+++++ 343511	+++++ 1548636	2931 3885431	20540	114018	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
tert-Butylbenzene	DCBd 4	Ave	+++++ 883233	+++++ 3843837	14304 9024627	72775	319951	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	+++++ 1174135	+++++ 4926754	18920 11338912	102548	445760	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
sec-Butylbenzene	DCBd 4	Ave	+++++ 1385068	+++++ 5735466	20417 12958613	116997	520928	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 560672	+++++ 2300213	9267 4756555	47526	209698	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
4-Isopropyltoluene	DCBd 4	Ave	+++++ 1146715	+++++ 4894730	17061 9871036	99534	441645	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 539245	+++++ 2293081	9974 5408302	49253	211668	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	+++++ 1200326	+++++ 4992463	19246 10787129	107159	467632	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Benzyl chloride	DCBd 4	QuaF	+++++ 198128	+++++ 1116660	2230 3015296	12131	59551	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Indan	DCBd 4	Ave	+++++ 1094313	+++++ 4529830	17640 10074144	93833	420660	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
p-Diethylbenzene	DCBd 4	Ave	+++++ 621530	+++++ 2661287	9486 6210785	56273	244260	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
n-Butylbenzene	DCBd 4	Ave	+++++ 603710	+++++ 2486588	9552 5511209	53564	227344	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	+++++ 478433	+++++ 2094013	7923 5183935	42949	183937	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	+++++ 1155561	+++++ 5047818	15522 11120630	91152	428282	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 18686	+++++ 88737	289 +++++	1228	6289	+++++ 50.0	+++++ 200	1.00 +++++	5.00	20.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	+++++ 377501	+++++ 1652108	5721 4081153	31784	138307	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 301055	+++++ 1299541	4147 3556565	23671	107139	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 91639	+++++ 410603	1478 1142942	8112	32046	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Naphthalene	DCBd 4	Ave	+++++ 541553	+++++ 2412016	7066 +++++	39192	196094	+++++ 50.0	+++++ 200	1.00 +++++	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512586

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 01:05 Calibration End Date: 04/20/2018 03:48 Calibration ID: 67783

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 220090	+++++ 1005802	3404 2825262	17871	83179	+++++ 50.0	+++++ 200	1.00 500	5.00	20.0
Dibromofluoromethane (Surr)	FB	Ave	226378 231931	+++++ 233676	228632 228957	220552	228261	50.0 50.0	+++++ 50.0	50.0 50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	225596 217352	+++++ 214829	223478 224954	213926	213061	50.0 50.0	+++++ 50.0	50.0 50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	1123202 1104116	+++++ 1128126	1110519 1126598	1052897	1069259	50.0 50.0	+++++ 50.0	50.0 50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	243475 254301	+++++ 258847	240503 268912	240580	242575	50.0 50.0	+++++ 50.0	50.0 50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Lims ID: STD025
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 20-Apr-2018 01:05:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: BLK
Misc. Info.: 460-0070690-002
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 14:40:02 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: kluseys Date: 20-Apr-2018 18:27:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.319	1.325	-0.006	1	967	0.2500	0.2019	
2 Dichlorodifluoromethane	87	1.374	1.349	0.025	19	450	0.2500	0.1645	
3 Chloromethane	52	1.501	1.495	0.006	72	644	0.2500	0.4140	
4 Vinyl chloride	62	1.580	1.587	-0.007	83	1470	0.2500	0.2577	
5 Butadiene	54	1.586	1.587	-0.001	51	1141	0.2500	0.2762	
6 Bromomethane	94	1.854	1.842	0.012	73	870	0.2500	0.2156	
7 Chloroethane	64	1.903	1.903	0.000	24	426	0.2500	0.1465	a
8 Dichlorofluoromethane	67	2.067	2.067	0.000	95	2852	0.2500	0.2706	
9 Trichlorofluoromethane	101	2.055	2.073	-0.018	47	2132	0.2500	0.2615	a
10 Pentane	72	2.104	2.104	0.000	97	1149	0.5000	1.34	
11 Ethanol	46	2.335	2.286	0.049	45	595		57.5	
12 Ethyl ether	59	2.292	2.292	0.000	83	1061	0.2500	0.3396	
13 2-Methyl-1,3-butadiene	53	2.310	2.311	-0.001	93	1569	0.2500	0.3207	
14 1,2-Dichloro-1,1,2-trifluo	117	2.335	2.341	-0.006	71	1422	0.2500	0.2977	
16 Acrolein	56	2.499	2.463	0.036	24	531		1.78	a
15 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.481	0.000	49	1508	0.2500	0.2555	a
17 1,1-Dichloroethene	96	2.487	2.487	0.000	96	1298	0.2500	0.2663	
18 Acetone	43	2.584	2.578	0.006	87	3840	1.25	8.25	
19 Iodomethane	142	2.639	2.639	0.000	96	2095	0.2500	0.2687	
20 Carbon disulfide	76	2.669	2.676	-0.007	100	6538	0.2500	0.3656	
21 Isopropyl alcohol	45	2.694	2.688	0.006	24	308	2.50	3.43	a
22 3-Chloro-1-propene	76	2.803	2.803	0.000	70	816	0.2500	0.2646	
24 Methyl acetate	74	2.815	2.822	-0.007	1	158	0.5000	0.4235	a
23 Cyclopentene	67	2.828	2.822	0.006	91	3289	0.2500	0.2711	
25 Acetonitrile	40	2.931	2.870	0.061	1	3801	2.50	25.0	a
26 Methylene Chloride	84	2.931	2.931	0.000	31	2149	0.2500	0.4080	
* 27 TBA-d9 (IS)	65	2.937	2.937	0.000	0	176708	1000.0	1000.0	
28 2-Methyl-2-propanol	59	2.998	3.010	-0.012	1	725	2.50	3.94	
29 Methyl tert-butyl ether	73	3.095	3.095	0.000	85	3107	0.2500	0.2686	
30 trans-1,2-Dichloroethene	96	3.126	3.120	0.006	89	1711	0.2500	0.3088	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.211	3.199	0.012	67	2285	2.50	2.98	
32 Hexane	57	3.278	3.284	-0.006	89	4496	0.2500	0.6706	
33 Isopropyl ether	45	3.503	3.503	0.000	85	3511	0.2500	0.2372	
34 1,1-Dichloroethane	63	3.527	3.527	0.000	62	2630	0.2500	0.2826	
35 Vinyl acetate	86	3.558	3.558	0.000	12	159	0.5000	0.2313	a
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	86	1592	0.2500	0.3123	
37 Tert-butyl ethyl ether	59	3.825	3.838	-0.013	87	3394	0.2500	0.2463	a
* 39 2-Butanone-d5	46	4.050	4.050	0.000	0	187910	250.0	250.0	
38 2,2-Dichloropropane	79	4.050	4.057	-0.007	26	491	0.2500	0.1861	Ma
40 cis-1,2-Dichloroethene	96	4.081	4.087	-0.006	87	1966	0.2500	0.3229	
41 2-Butanone (MEK)	72	4.129	4.105	0.024	40	768	1.25	2.85	a
42 Ethyl acetate	70	4.105	4.117	-0.012	29	142	0.5000	0.4865	
43 Methyl acrylate	55	4.172	4.172	0.000	1	164	0.2500	0.0872	M
44 Propionitrile	54	4.257	4.245	0.012	1	287	2.50	1.09	M
46 Chlorobromomethane	128	4.324	4.324	0.000	45	635	0.2500	0.2816	
45 Tetrahydrofuran	72	4.348	4.336	0.012	51	416	0.5000	1.32	
47 Methacrylonitrile	67	4.367	4.355	0.012	84	2147	2.50	1.95	
48 Chloroform	83	4.385	4.391	-0.006	98	2681	0.2500	0.2937	
49 Cyclohexane	84	4.525	4.519	0.006	90	3076	0.2500	0.3201	
50 1,1,1-Trichloroethane	97	4.531	4.537	-0.006	19	2008	0.2500	0.2535	a
$ 51 Dibromofluoromethane (Surr	113	4.561	4.555	0.006	95	242044	50.0	50.1	
52 Carbon tetrachloride	117	4.677	4.665	0.012	51	1413	0.2500	0.2871	
53 1,1-Dichloropropene	75	4.707	4.708	-0.001	90	2316	0.2500	0.3057	
58 Isobutyl alcohol	43	4.890	4.884	0.006	37	1642	6.25	12.5	a
54 Isooctane	57	4.878	4.884	-0.006	93	6082	0.2500	0.4939	
55 Benzene	78	4.920	4.914	0.006	93	8800	0.2500	0.3903	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	223025	50.0	48.1	
57 Tert-amyl methyl ether	73	5.005	5.000	0.005	84	3061	0.2500	0.2224	
59 Isopropyl acetate	61	5.005	5.012	-0.007	68	802	0.2500	0.4699	
60 1,2-Dichloroethane	62	5.024	5.024	0.000	67	2255	0.2500	0.4154	
61 n-Heptane	57	5.103	5.103	0.000	88	1499	0.2500	0.4912	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	1075048	50.0	50.0	
64 Trichloroethene	95	5.638	5.644	-0.006	86	2188	0.2500	0.3769	
63 n-Butanol	56	5.614	5.657	-0.043	24	114	6.25	2.93	
65 Methylcyclohexane	83	5.766	5.772	-0.006	92	3224	0.2500	0.3220	
66 Ethyl acrylate	55	5.766	5.772	-0.006	51	2683	0.2500	0.2295	Ma
67 1,2-Dichloropropane	63	5.973	5.967	0.006	58	1404	0.2500	0.2620	a
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	28618	1000.0	1000.0	
69 Methyl methacrylate	100	6.088	6.076	0.012	33	381	0.5000	0.4544	
71 Dibromomethane	93	6.125	6.119	0.006	32	758	0.2500	0.3046	
70 1,4-Dioxane	88	6.131	6.119	0.012	1	233	5.00	7.49	a
72 n-Propyl acetate	43	6.161	6.149	0.012	17	713	0.2500	0.2275	
73 Dichlorobromomethane	83	6.295	6.301	-0.006	79	1701	0.2500	0.2869	
74 2-Nitropropane	41	6.715	6.691	0.024	72	1402	0.5000	6.02	
75 2-Chloroethyl vinyl ether	63	6.709	6.703	0.006	5	552	0.2500	0.2763	a
76 Epichlorohydrin	57	6.831	6.819	0.012	1	599	5.00	2.72	
77 cis-1,3-Dichloropropene	75	6.885	6.873	0.012	81	1590	0.2500	0.2204	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	33	2204	1.25	1.08	Ma
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	1160791	50.0	51.0	
80 Toluene	91	7.244	7.238	0.006	92	8797	0.2500	0.3531	
81 trans-1,3-Dichloropropene	75	7.682	7.676	0.006	36	1346	0.2500	0.2568	
82 Ethyl methacrylate	69	7.737	7.725	0.012	48	855	0.2500	0.1701	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.938	7.926	0.012	47	1041	0.2500	0.3497	a
84 Tetrachloroethene	166	7.962	7.956	0.006	79	1547	0.2500	0.3171	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	86	1679	0.2500	0.2759	
86 2-Hexanone	58	8.260	8.266	-0.006	38	751	1.25	0.9029	a
87 n-Butyl acetate	43	8.424	8.419	0.006	36	1233	0.2500	0.3383	a
88 Chlorodibromomethane	129	8.437	8.437	0.000	85	768	0.2500	0.2722	
89 Ethylene Dibromide	107	8.607	8.595	0.012	50	801	0.2500	0.2604	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	776802	50.0	50.0	
91 Chlorobenzene	112	9.215	9.209	0.006	92	5310	0.2500	0.3471	
92 Ethylbenzene	106	9.313	9.319	-0.006	98	3070	0.2500	0.3573	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	84	1014	0.2500	0.2568	
94 m-Xylene & p-Xylene	106	9.465	9.459	0.006	0	3621	0.2500	0.3458	
96 o-Xylene	106	9.909	9.909	0.000	92	2847	0.2500	0.2773	
95 n-Butyl acrylate	73	9.927	9.921	0.006	96	768	0.2500	0.2383	
97 Styrene	104	9.945	9.939	0.006	96	3823	0.2500	0.2351	
99 Bromoform	173	10.164	10.152	0.012	1	291	0.2500	0.2737	a
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	56	711	0.2500	0.1358	
100 Isopropylbenzene	105	10.280	10.274	0.006	95	7174	0.2500	0.2712	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	83	258163	50.0	50.0	
102 Bromobenzene	156	10.602	10.603	0.000	98	1515	0.2500	0.3133	
103 1,1,2,2-Tetrachloroethane	83	10.669	10.663	0.006	41	983	0.2500	0.2864	
104 N-Propylbenzene	91	10.681	10.676	0.005	99	9414	0.2500	0.3352	
105 1,2,3-Trichloropropane	110	10.706	10.700	0.006	47	451	0.2500	0.4730	
106 trans-1,4-Dichloro-2-buten	53	10.736	10.724	0.012	1	257	0.2500	0.3841	a
107 2-Chlorotoluene	91	10.779	10.779	0.000	92	6348	0.2500	0.3233	
108 4-Ethyltoluene	105	10.791	10.791	0.000	96	7976	0.2500	0.3392	
109 1,3,5-Trimethylbenzene	105	10.858	10.852	0.006	92	5977	0.2500	0.2978	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	5384	0.2500	0.3010	
111 Butyl Methacrylate	87	10.961	10.961	0.000	82	1033	0.2500	0.1479	
112 tert-Butylbenzene	119	11.132	11.126	0.006	92	4237	0.2500	0.2660	
113 1,2,4-Trimethylbenzene	105	11.186	11.187	-0.001	97	6823	0.2500	0.3221	
114 sec-Butylbenzene	105	11.314	11.320	-0.006	99	7475	0.2500	0.3075	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	71	2955	0.2500	0.3003	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	97	6327	0.2500	0.3136	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	331418	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.533	11.527	0.006	46	3323	0.2500	0.3272	a
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	96	7454	0.2500	0.3462	
119 Benzyl chloride	91	11.649	11.655	-0.006	74	802	0.2500	0.1724	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	93	6902	0.2500	0.3534	
121 p-Diethylbenzene	119	11.764	11.758	0.006	95	3790	0.2500	0.3336	
122 n-Butylbenzene	92	11.783	11.783	0.000	96	3480	0.2500	0.3240	
123 1,2-Dichlorobenzene	146	11.837	11.831	0.006	90	2670	0.2500	0.2979	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	96	6617	0.2500	0.3300	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	1	30	0.2500	0.0933	Ma
126 1,3,5-Trichlorobenzene	180	12.567	12.568	-0.001	95	2294	0.2500	0.3347	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	91	2008	0.2500	0.3724	
128 Hexachlorobutadiene	225	13.115	13.121	-0.006	78	718	0.2500	0.4142	
129 Naphthalene	128	13.230	13.231	-0.001	99	7650	0.2500	0.8325	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	91	1865	0.2500	0.4469	
S 131 1,2-Dichloroethene, Total	100				0		0.5000	0.6317	
S 132 Xylenes, Total	100				0		0.5000	0.6231	
S 133 Total BTEX	1				0		1.25	1.72	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GAS Hi_00250	Amount Added:	0.25	Units: uL	
MIX I Hi_00093	Amount Added:	0.25	Units: uL	
MIX 2 Hi_00069	Amount Added:	0.25	Units: uL	
Ethanol mix_00014	Amount Added:	0.00	Units: uL	
ACRY/EPIH MIX_00048	Amount Added:	0.00	Units: uL	
14DIOXINTER_00083	Amount Added:	0.00	Units: uL	
ACROLEIN W_00075	Amount Added:	0.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 14:40:10 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D

Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11 Operator ID:

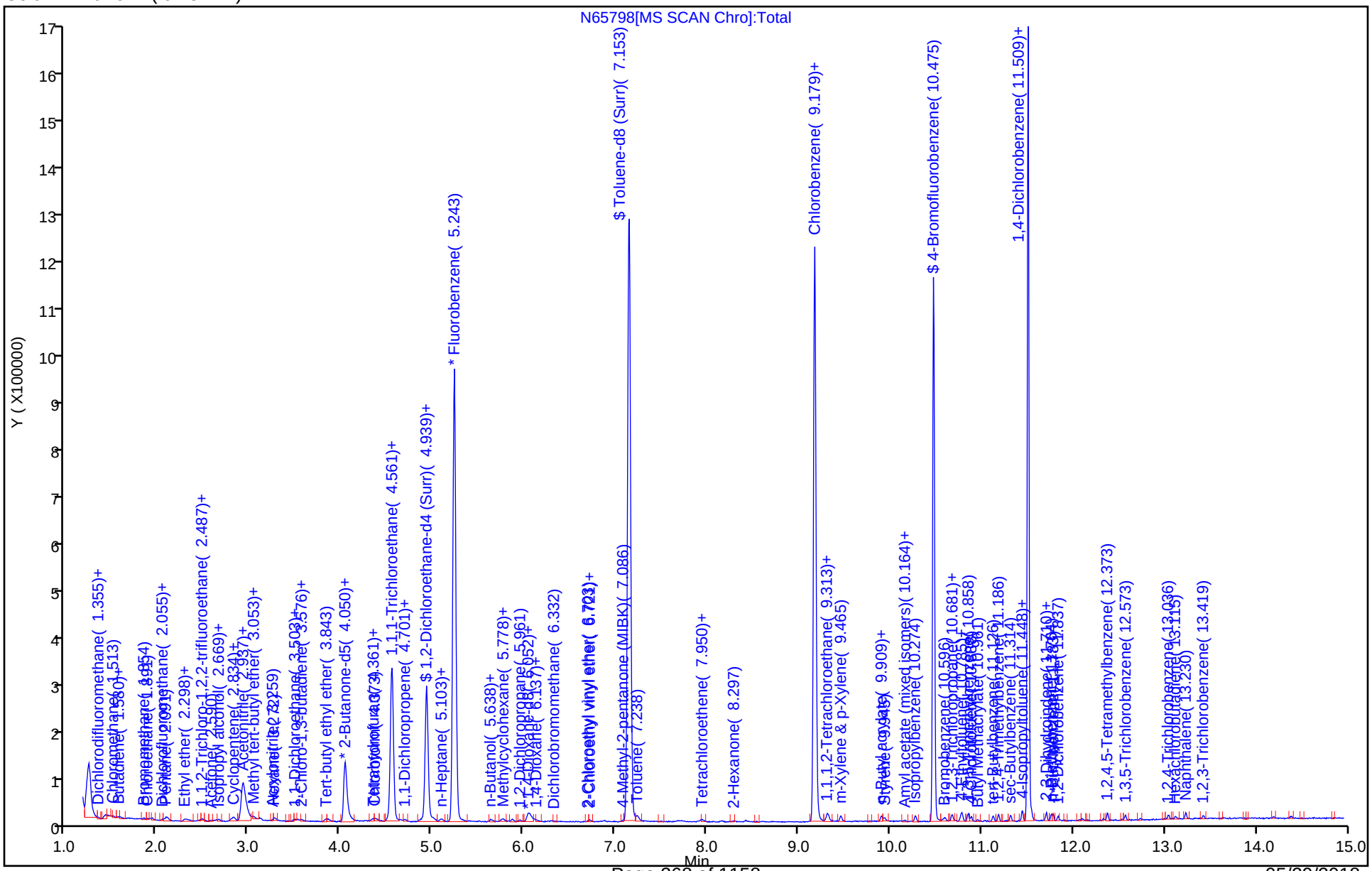
Lims ID: STD025 Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

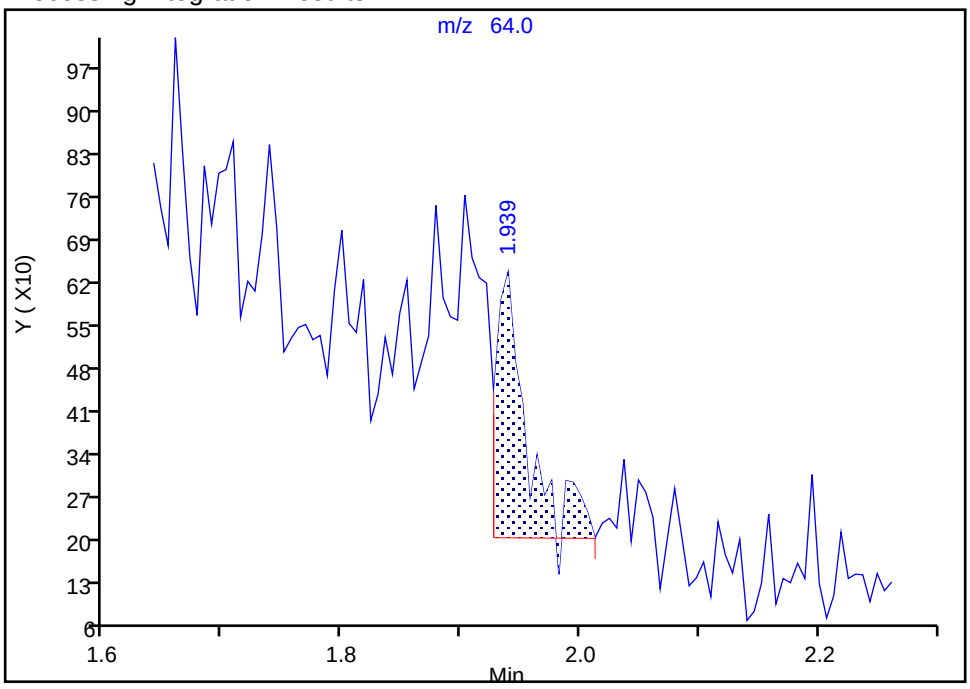
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

7 Chloroethane, CAS: 75-00-3

Signal: 1

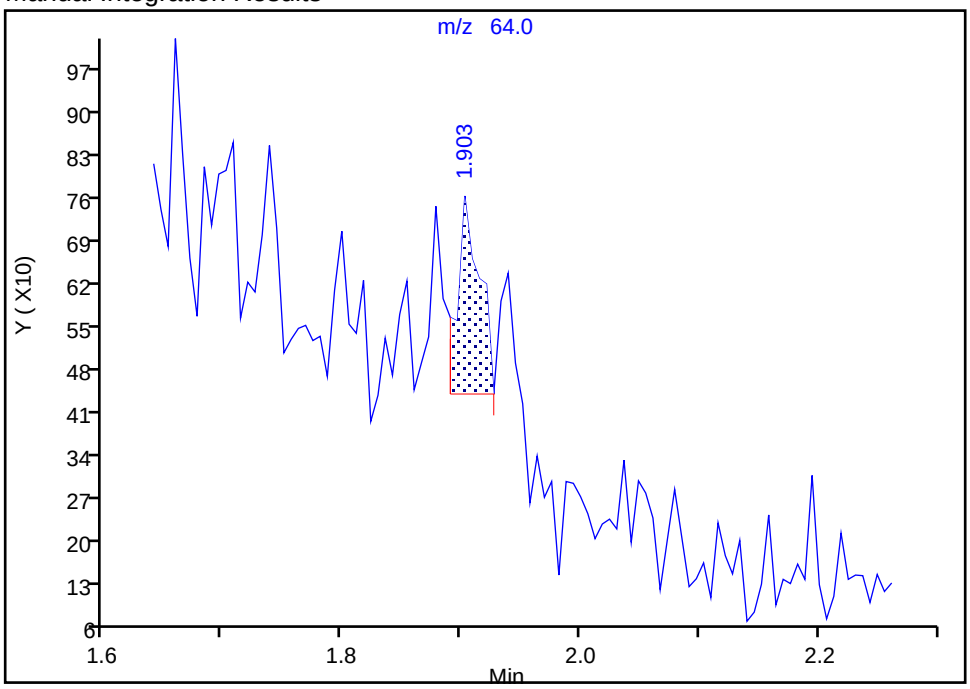
Processing Integration Results

RT: 1.94
Area: 795
Amount: 0.240562
Amount Units: ug/l



Manual Integration Results

RT: 1.90
Area: 426
Amount: 0.146454
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:41:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

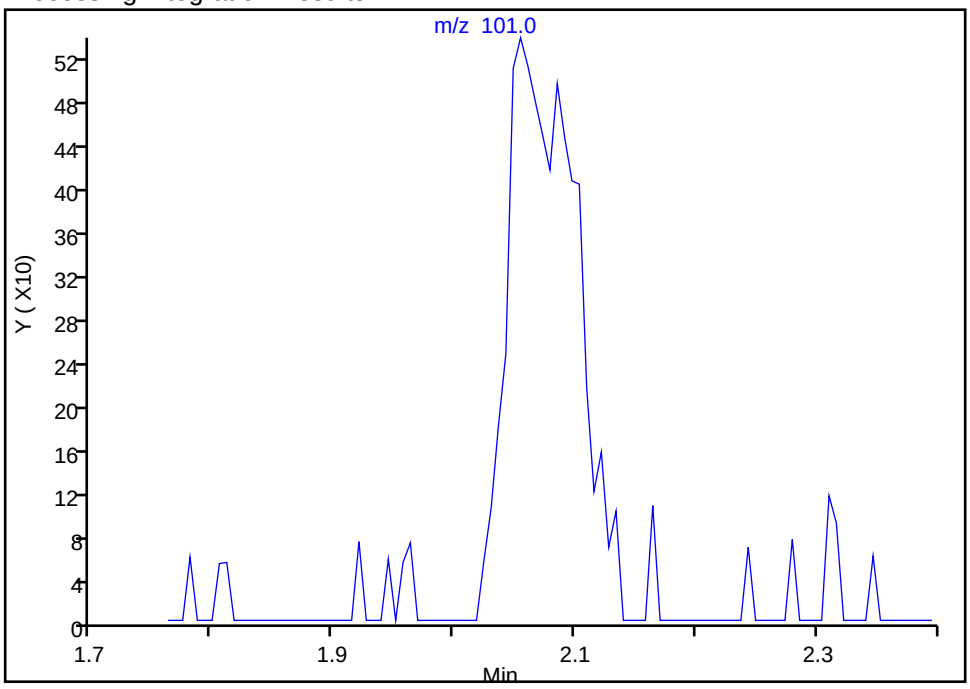
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

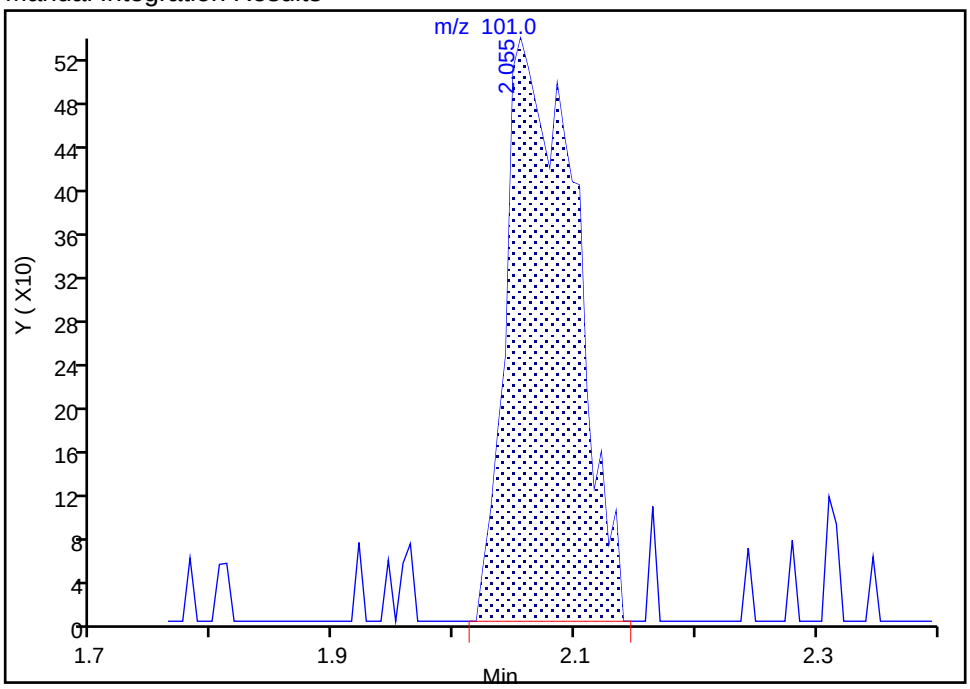
Not Detected
Expected RT: 2.07

Processing Integration Results



Manual Integration Results

RT: 2.05
Area: 2132
Amount: 0.261535
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:41:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

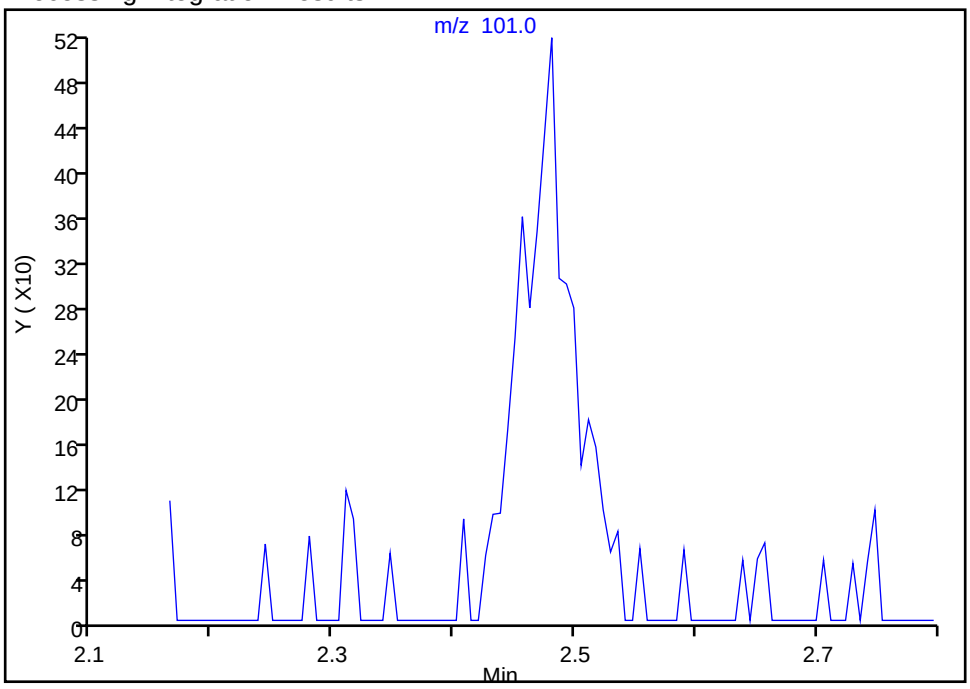
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

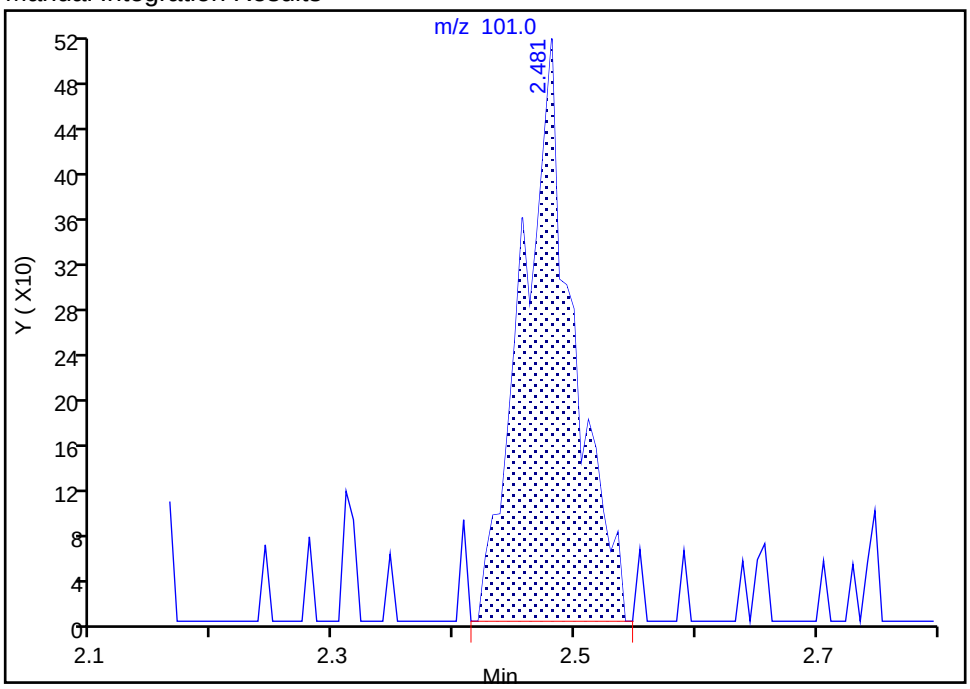
Not Detected
Expected RT: 2.48

Processing Integration Results



Manual Integration Results

RT: 2.48
Area: 1508
Amount: 0.255519
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:41:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

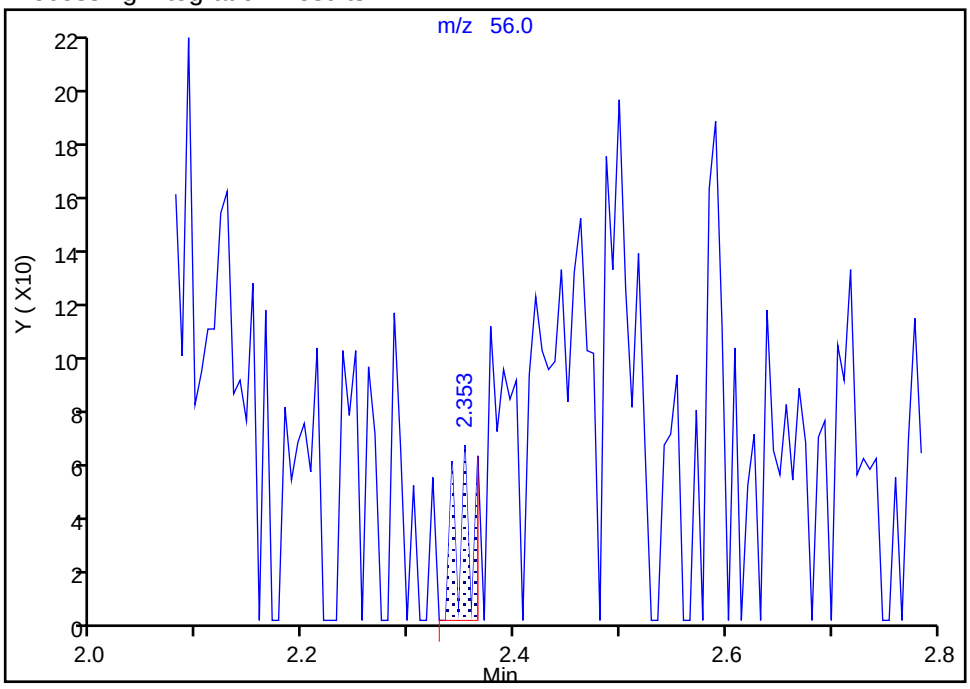
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

16 Acrolein, CAS: 107-02-8

Signal: 1

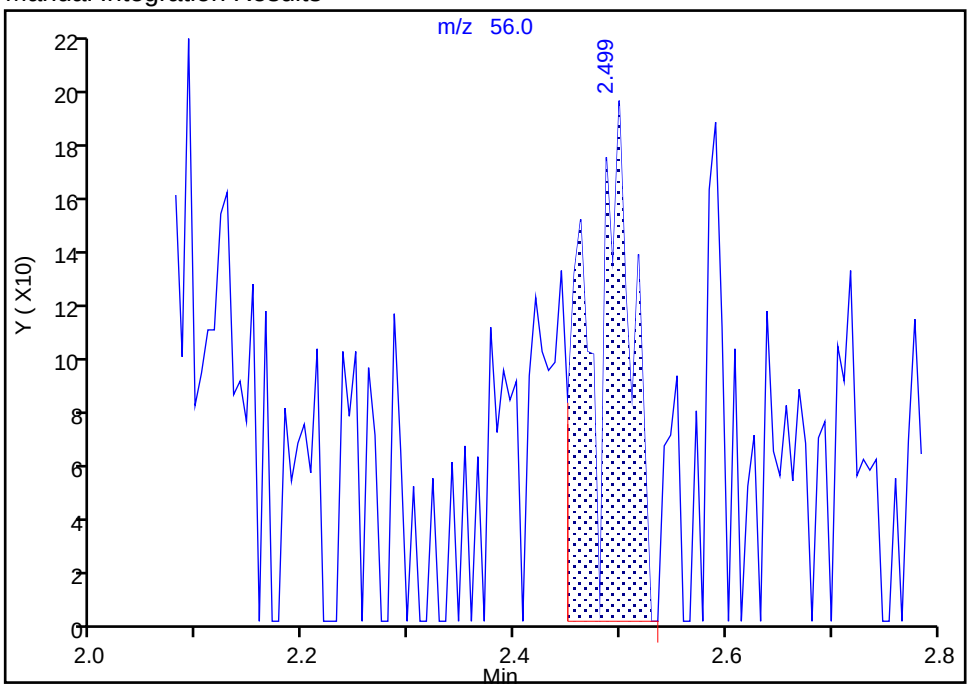
Processing Integration Results

RT: 2.35
Area: 68
Amount: 0.227654
Amount Units: ug/l



Manual Integration Results

RT: 2.50
Area: 531
Amount: 1.777710
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:41:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

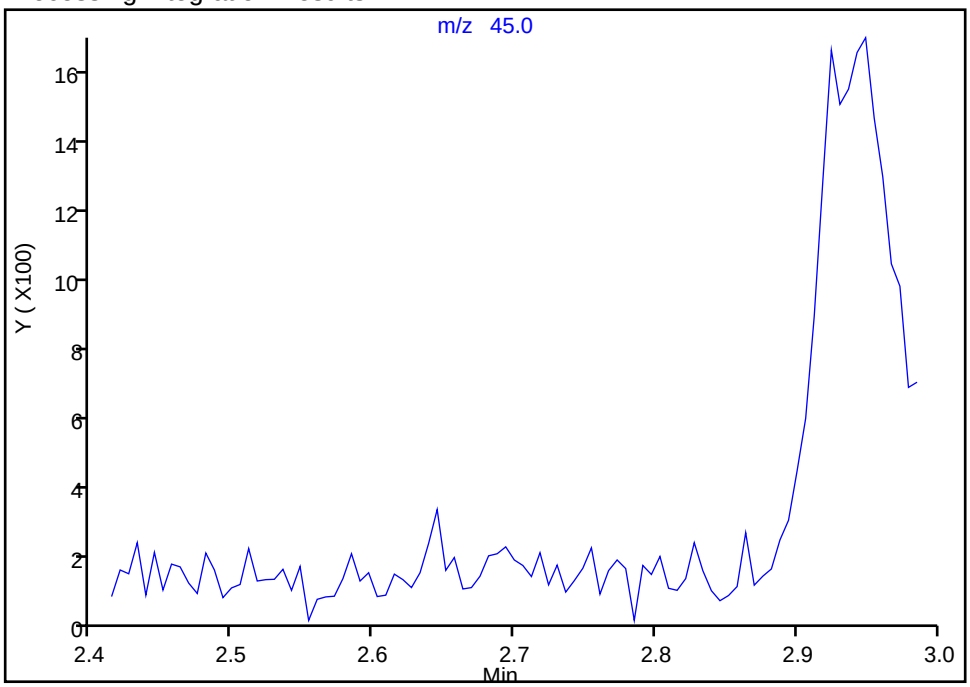
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

21 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

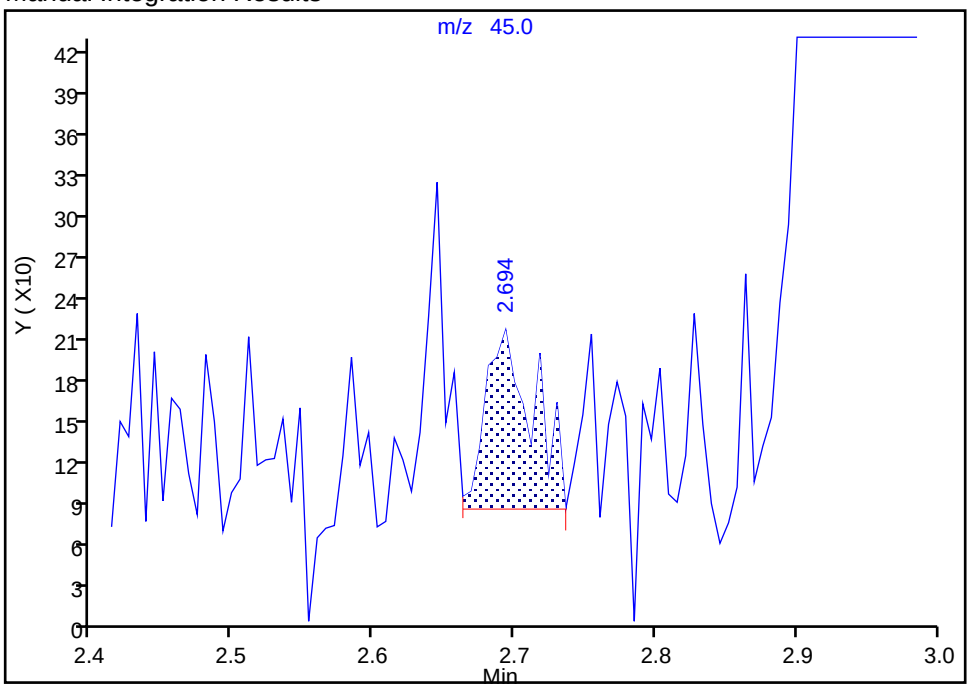
Not Detected
Expected RT: 2.69

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 308
Amount: 3.425905
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:41:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

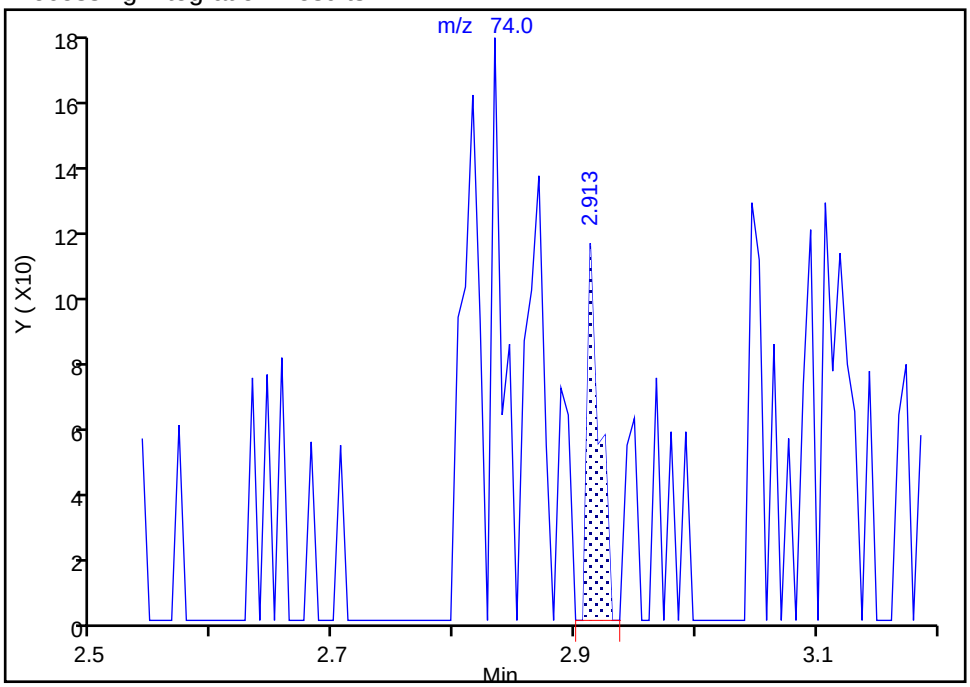
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

24 Methyl acetate, CAS: 79-20-9

Signal: 1

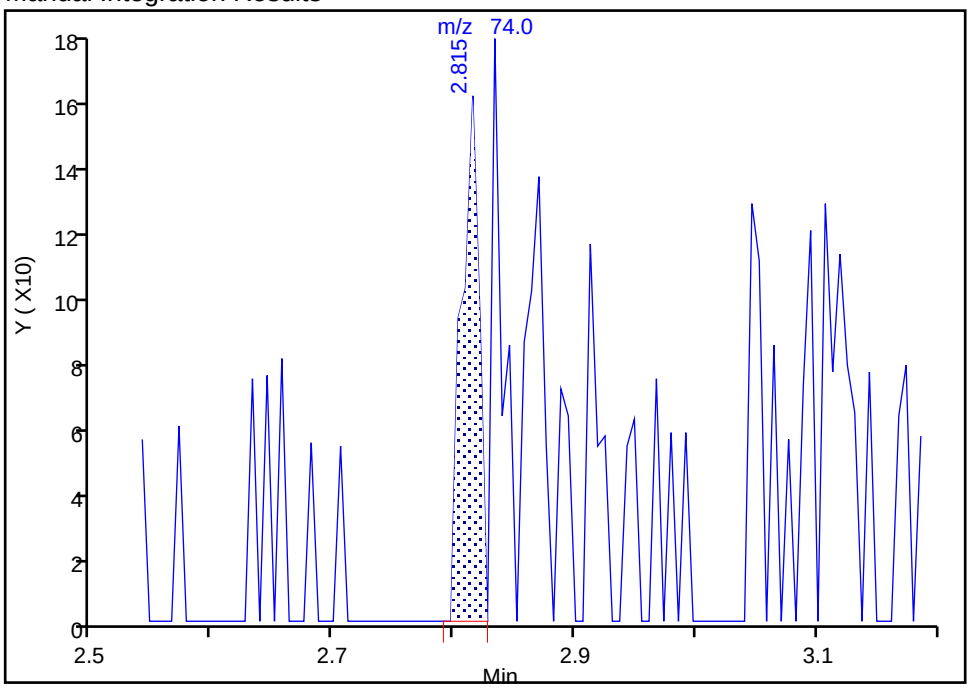
Processing Integration Results

RT: 2.91
Area: 80
Amount: 0.198887
Amount Units: ug/l



Manual Integration Results

RT: 2.82
Area: 158
Amount: 0.423547
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:41:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

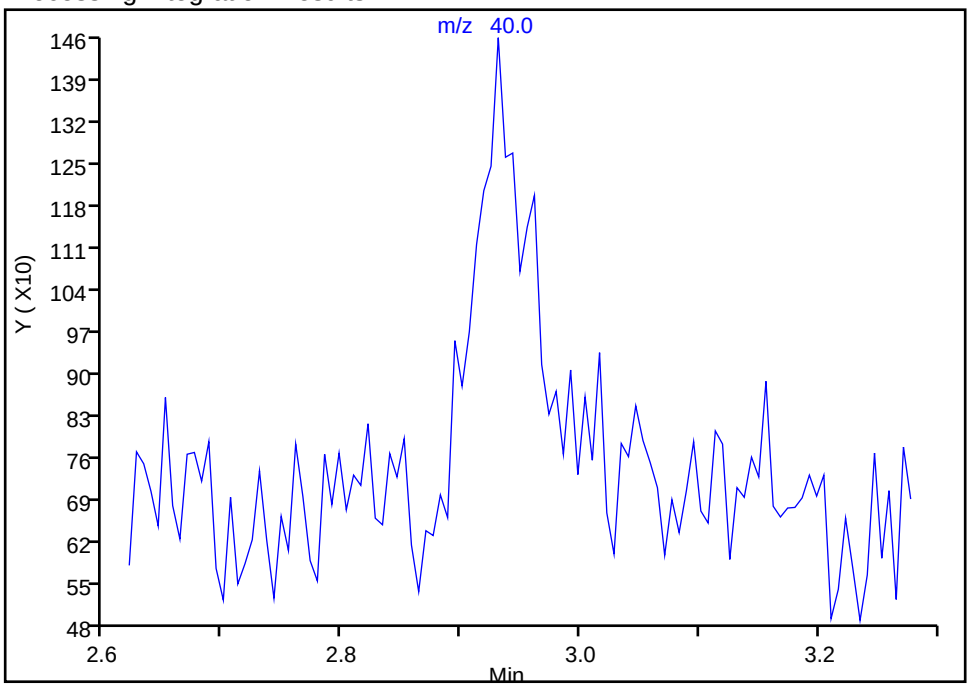
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

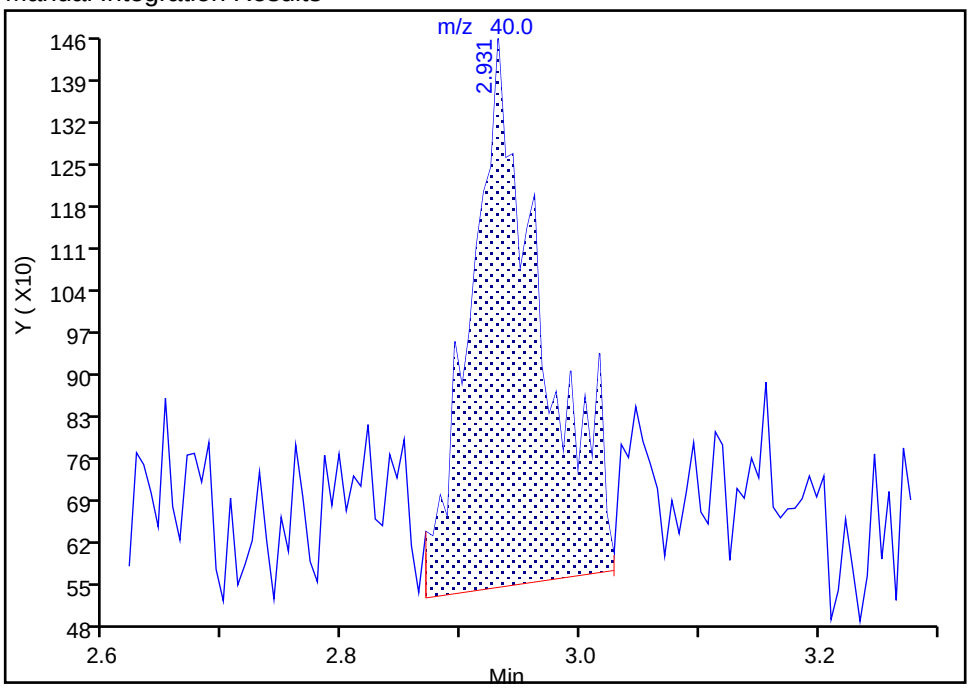
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 3801
Amount: 25.044164
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:41:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

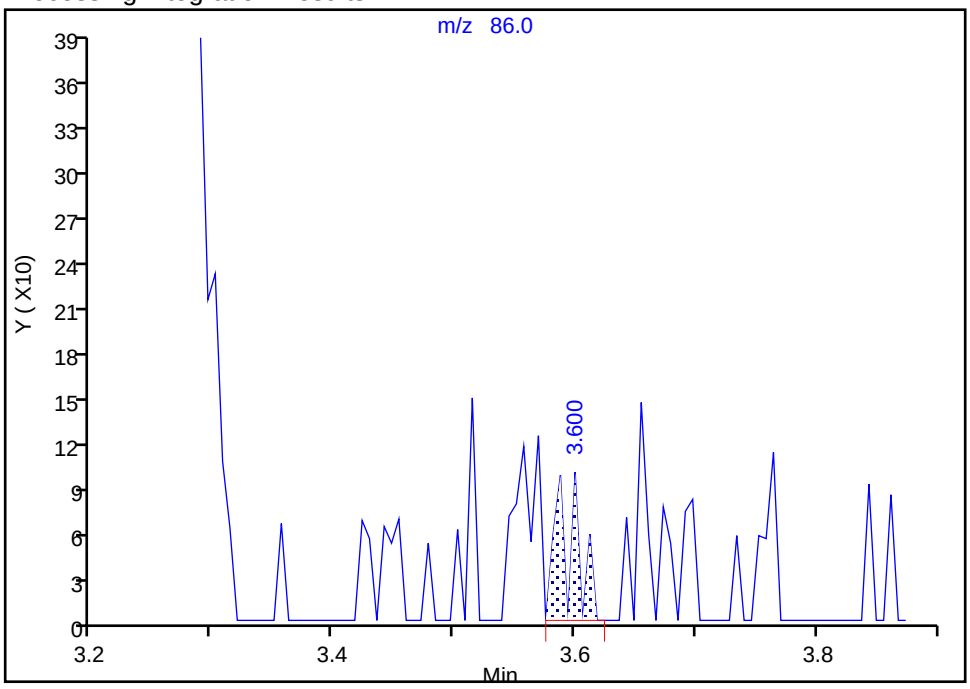
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

35 Vinyl acetate, CAS: 108-05-4

Signal: 1

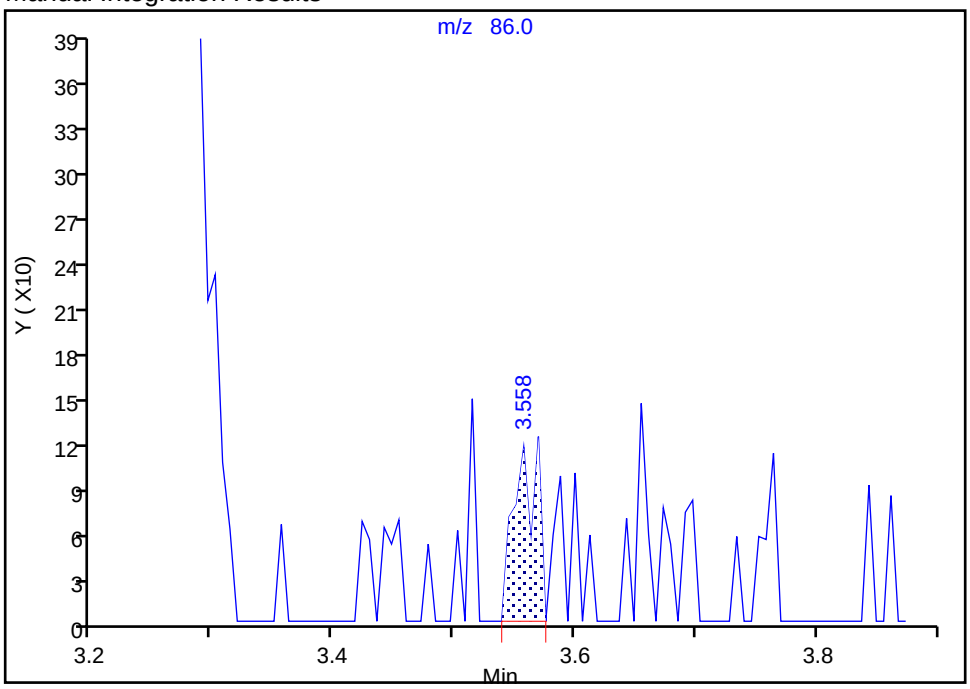
Processing Integration Results

RT: 3.60
Area: 112
Amount: 0.162941
Amount Units: ug/l



Manual Integration Results

RT: 3.56
Area: 159
Amount: 0.231318
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:42:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

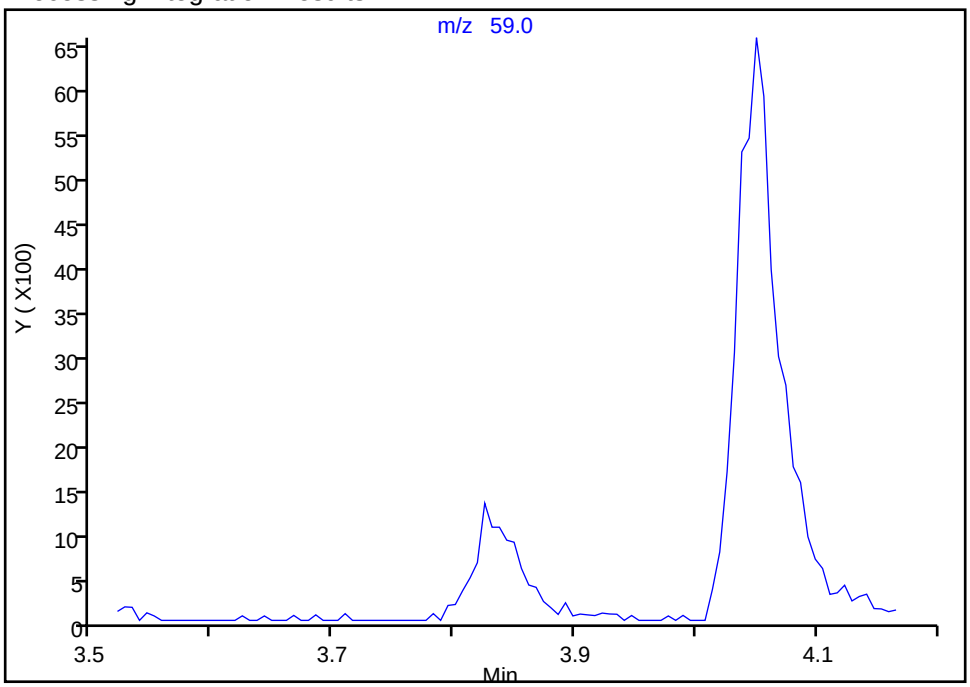
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D		
Injection Date:	20-Apr-2018 01:05:30	Instrument ID:	CVOAMS11
Lims ID:	STD025		
Client ID:			
Operator ID:		ALS Bottle#:	1 Worklist Smp#: 2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

37 Tert-butyl ethyl ether, CAS: 637-92-3

Signal: 1

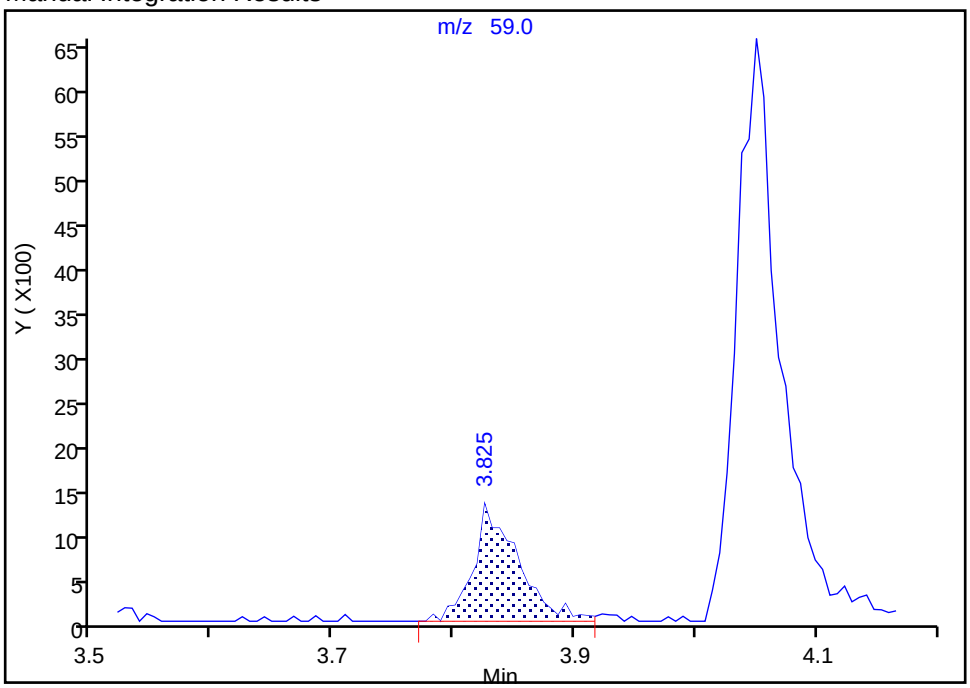
Not Detected
Expected RT: 3.84

Processing Integration Results



Manual Integration Results

RT: 3.83
Area: 3394
Amount: 0.246284
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:42:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

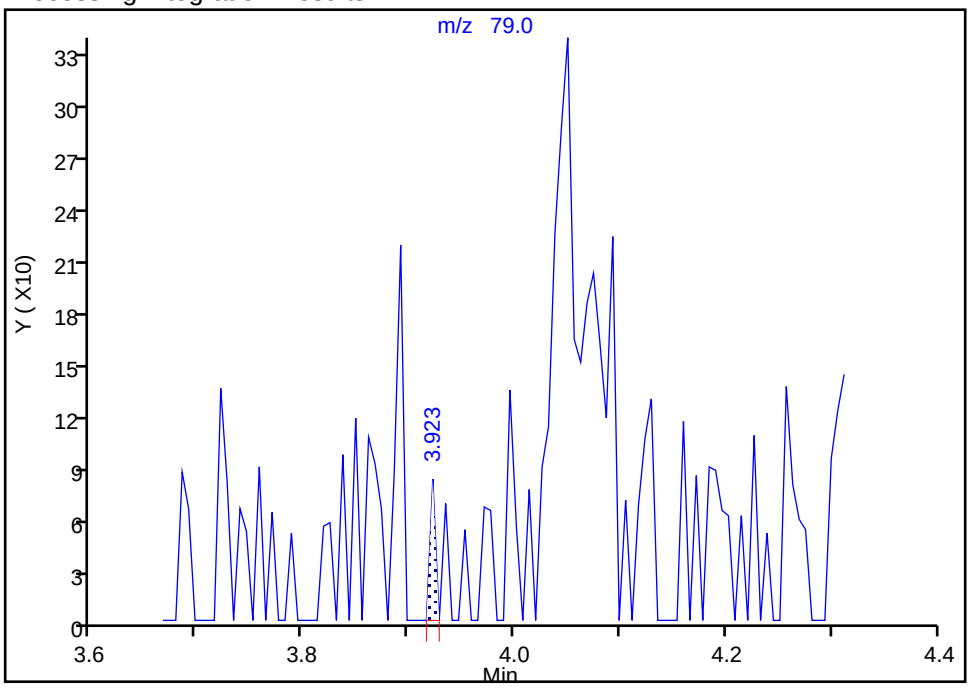
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

38 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

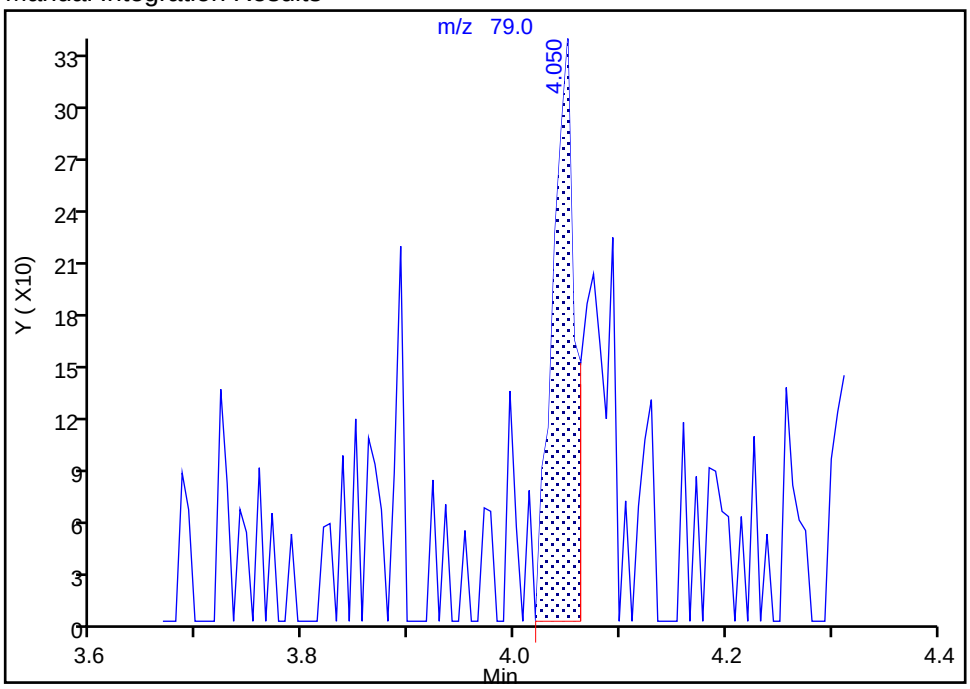
Processing Integration Results

RT: 3.92
Area: 30
Amount: 0.009976
Amount Units: ug/l



Manual Integration Results

RT: 4.05
Area: 491
Amount: 0.186058
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:42:50
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

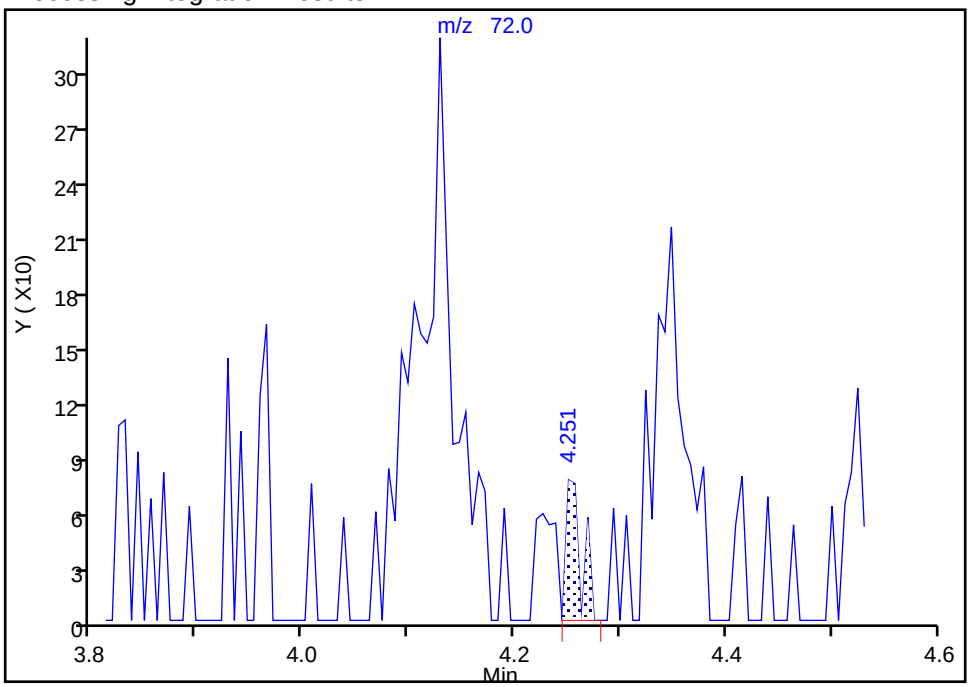
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

41 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

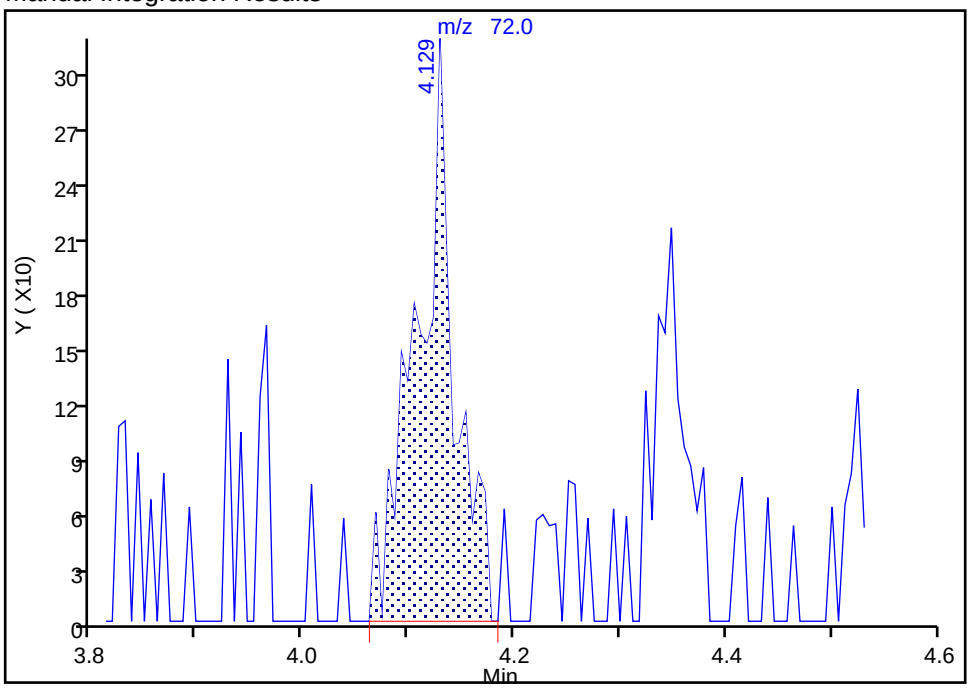
Processing Integration Results

RT: 4.25
Area: 74
Amount: 0.276195
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 768
Amount: 2.853431
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:43:06
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

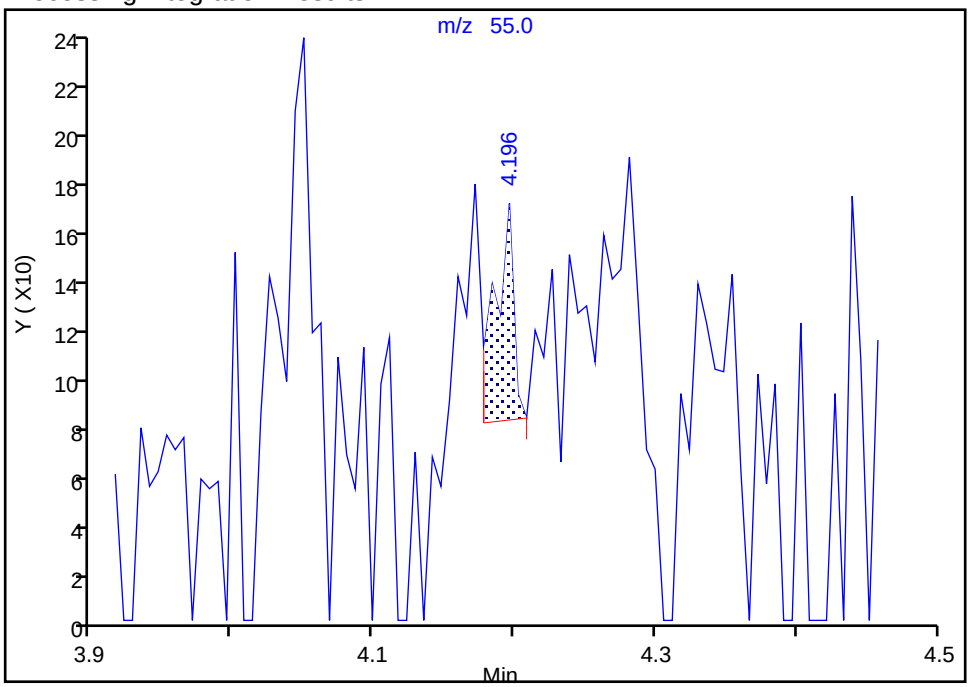
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

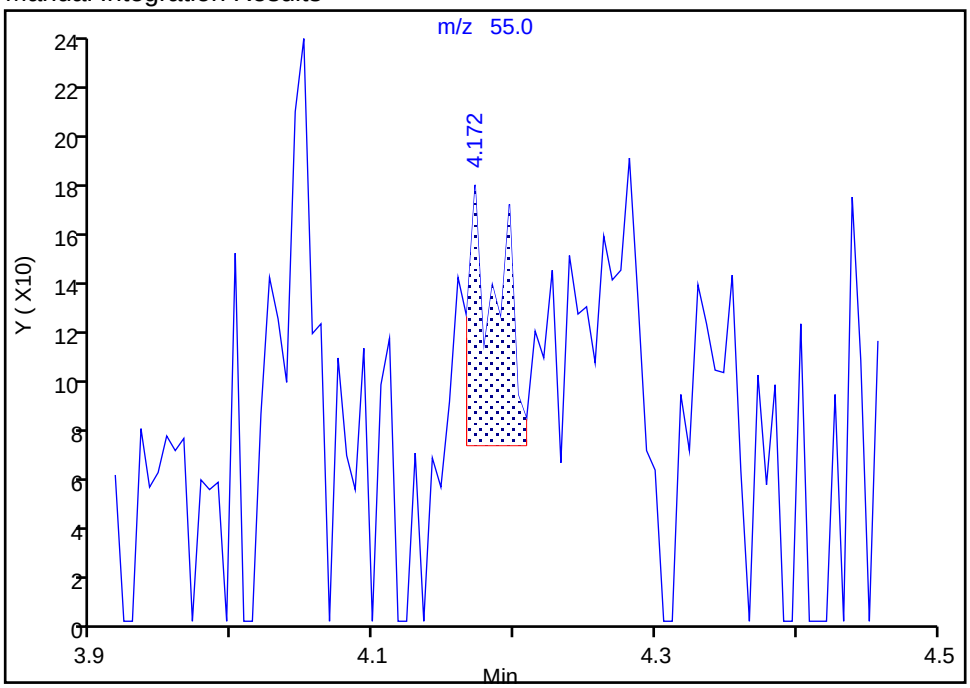
Processing Integration Results

RT: 4.20
Area: 83
Amount: 0.036643
Amount Units: ug/l



Manual Integration Results

RT: 4.17
Area: 164
Amount: 0.087155
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:43:21
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

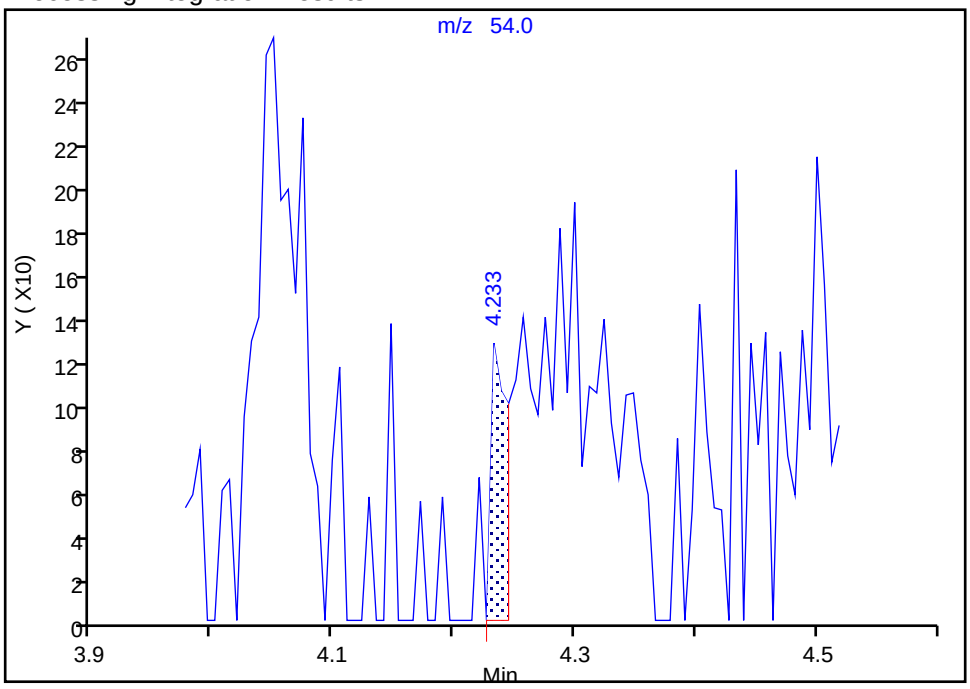
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Propionitrile, CAS: 107-12-0

Signal: 1

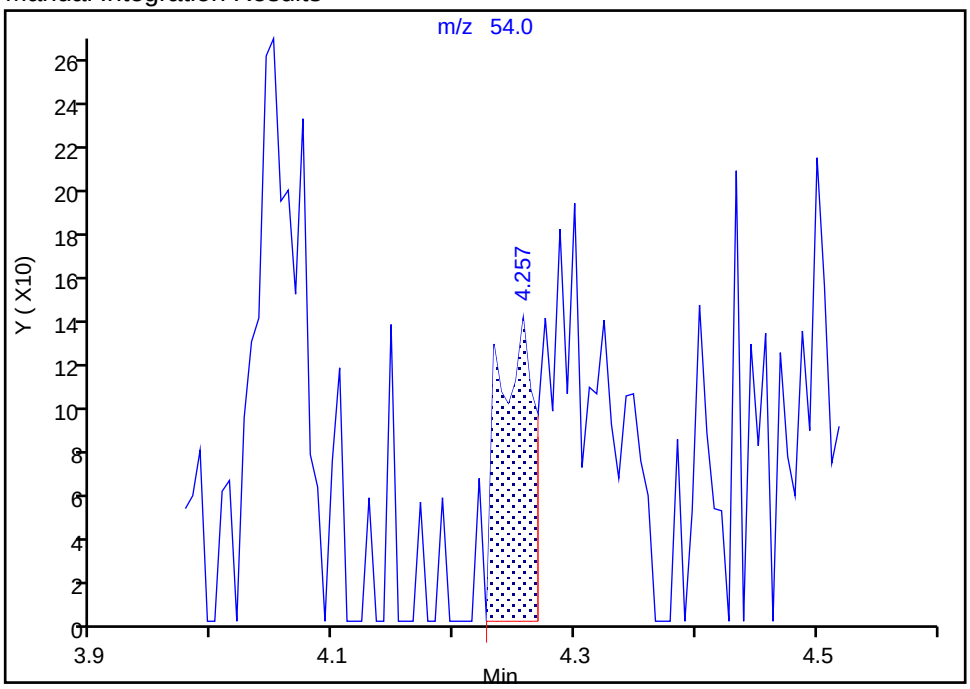
Processing Integration Results

RT: 4.23
Area: 122
Amount: 0.407830
Amount Units: ug/l



Manual Integration Results

RT: 4.26
Area: 287
Amount: 1.086093
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:43:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

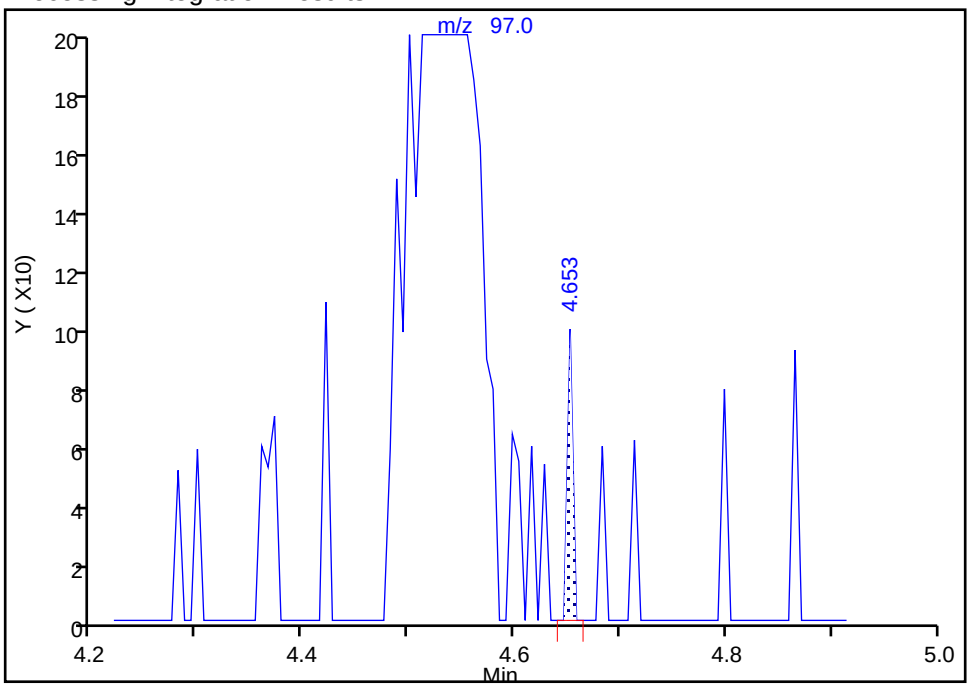
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D		
Injection Date:	20-Apr-2018 01:05:30	Instrument ID:	CVOAMS11
Lims ID:	STD025		
Client ID:			
Operator ID:		ALS Bottle#:	1 Worklist Smp#: 2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

50 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

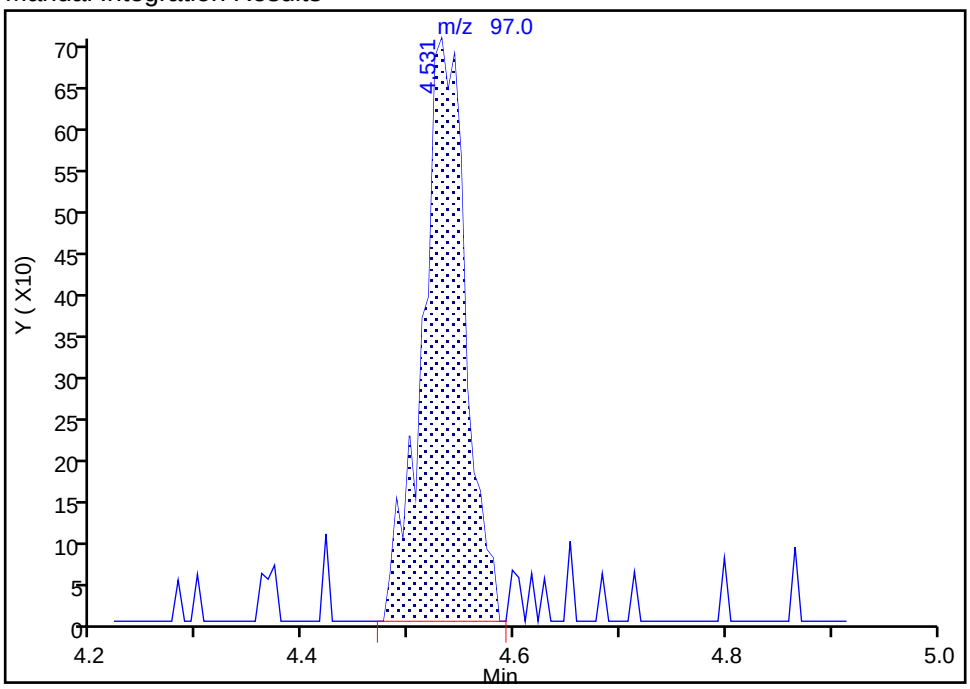
Processing Integration Results

RT: 4.65
Area: 35
Amount: 0.004000
Amount Units: ug/l



Manual Integration Results

RT: 4.53
Area: 2008
Amount: 0.253511
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:43:45
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

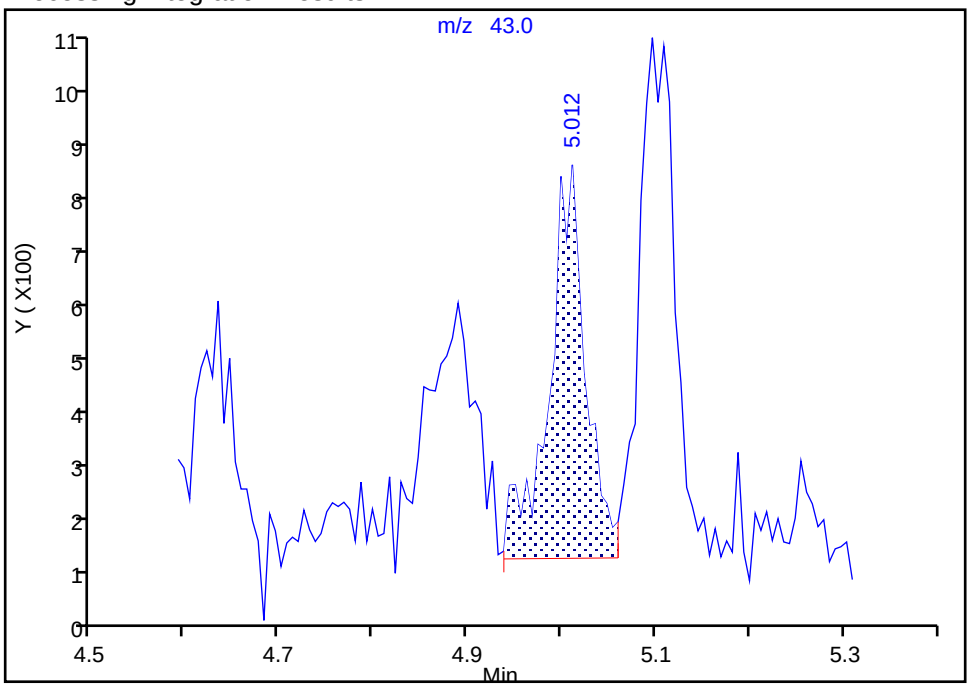
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

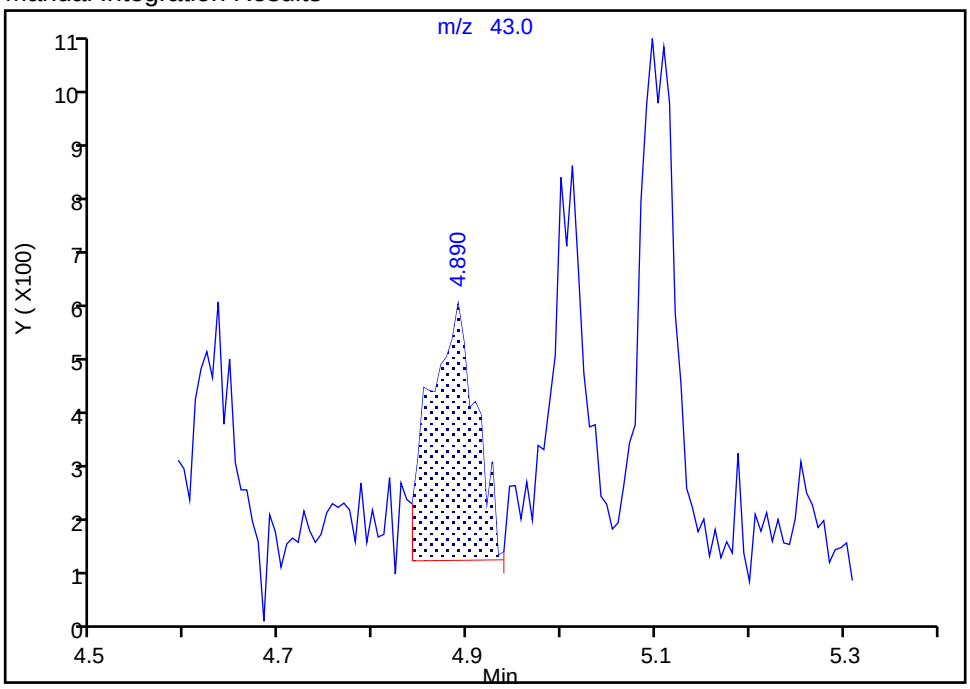
Processing Integration Results

RT: 5.01
Area: 2010
Amount: 18.061457
Amount Units: ug/l



Manual Integration Results

RT: 4.89
Area: 1642
Amount: 12.530965
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:43:52
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

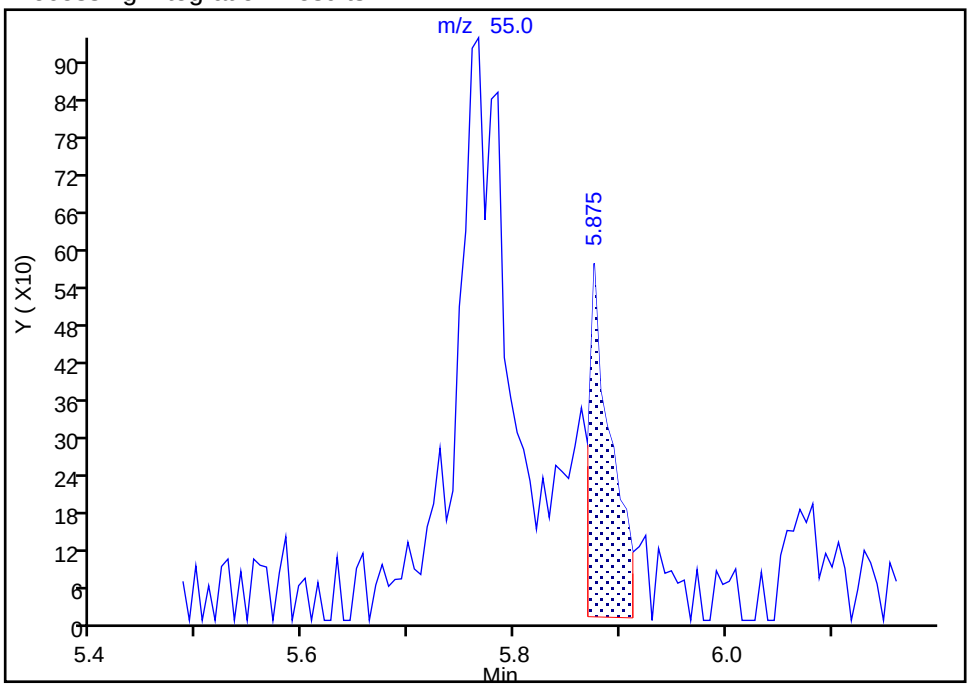
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

66 Ethyl acrylate, CAS: 140-88-5

Signal: 1

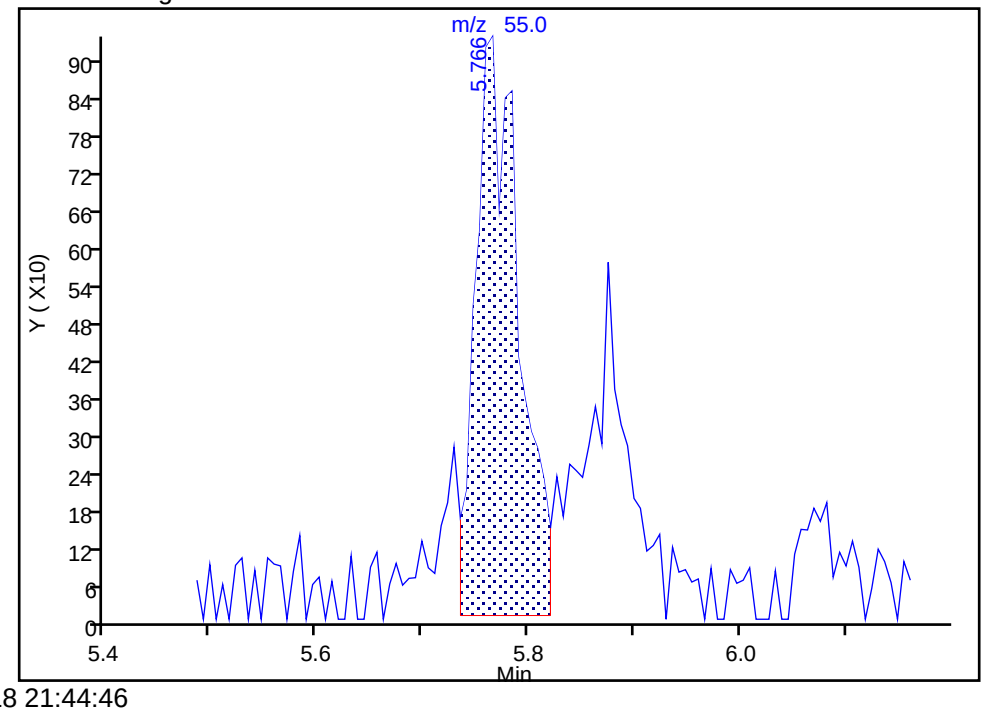
Processing Integration Results

RT: 5.88
Area: 828
Amount: 0.074128
Amount Units: ug/l



Manual Integration Results

RT: 5.77
Area: 2683
Amount: 0.229531
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:44:46
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

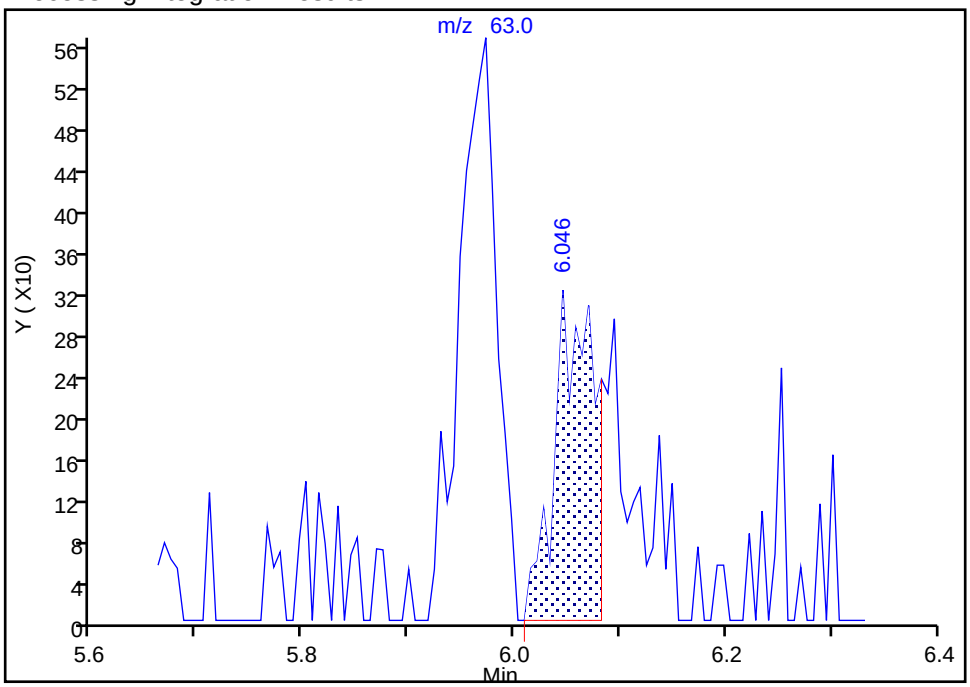
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D		
Injection Date:	20-Apr-2018 01:05:30	Instrument ID:	CVOAMS11
Lims ID:	STD025		
Client ID:			
Operator ID:		ALS Bottle#:	1 Worklist Smp#: 2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

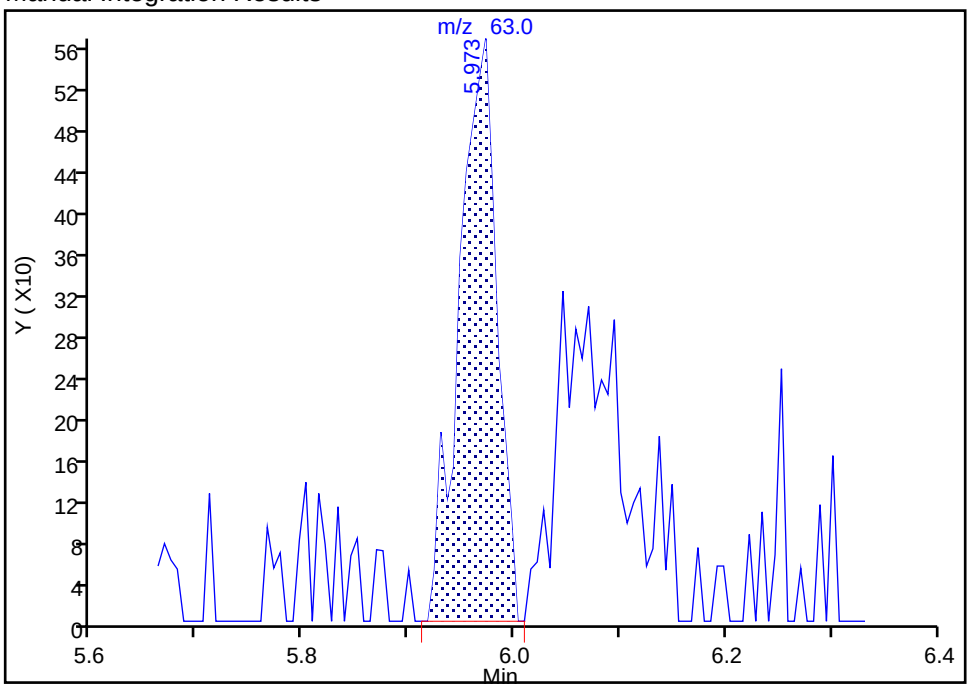
Processing Integration Results

RT: 6.05
Area: 835
Amount: 0.164667
Amount Units: ug/l



Manual Integration Results

RT: 5.97
Area: 1404
Amount: 0.261974
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:44:55
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

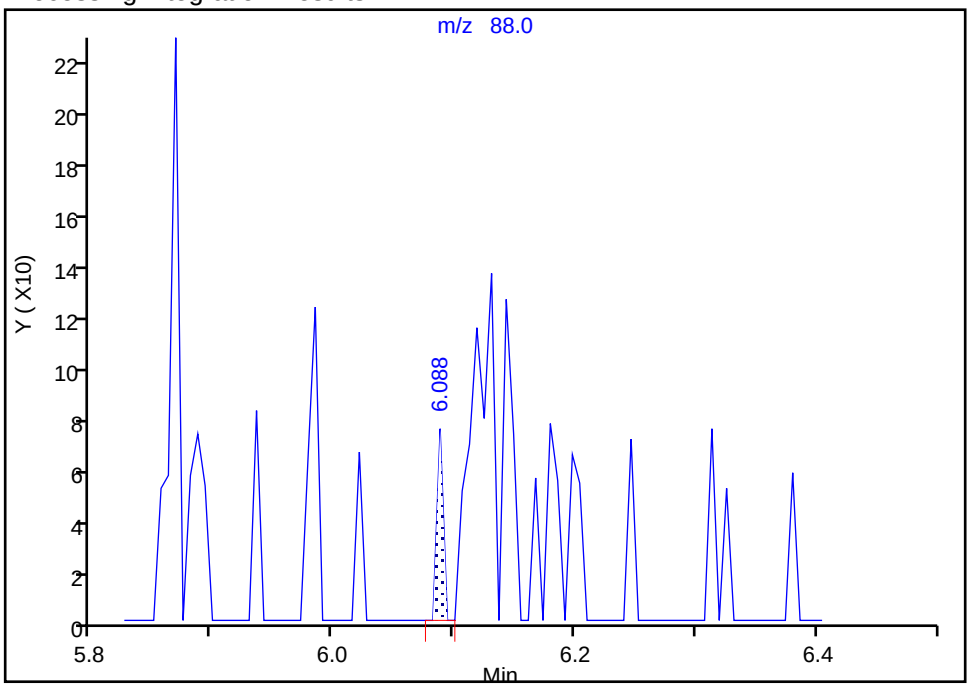
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

Signal: 1

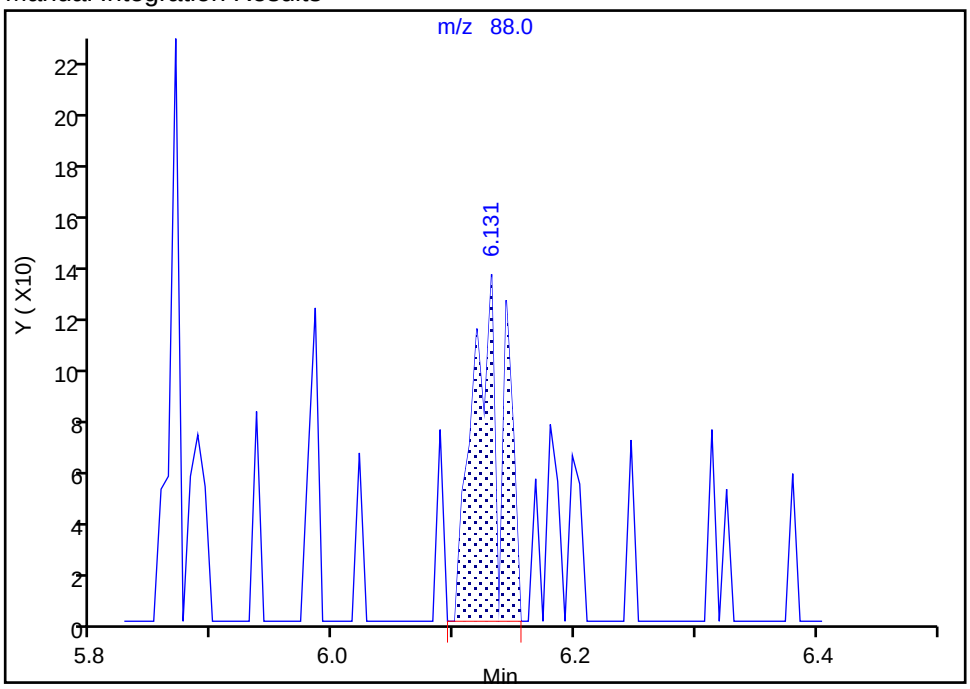
Processing Integration Results

RT: 6.09
Area: 27
Amount: 0.868406
Amount Units: ug/l



Manual Integration Results

RT: 6.13
Area: 233
Amount: 7.488344
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:45:04
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

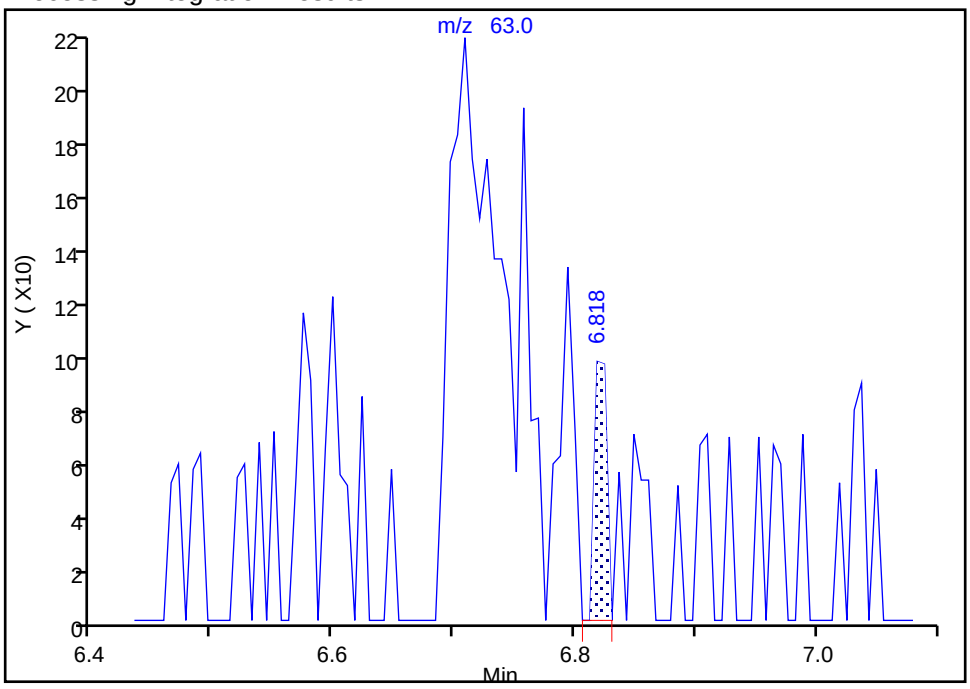
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

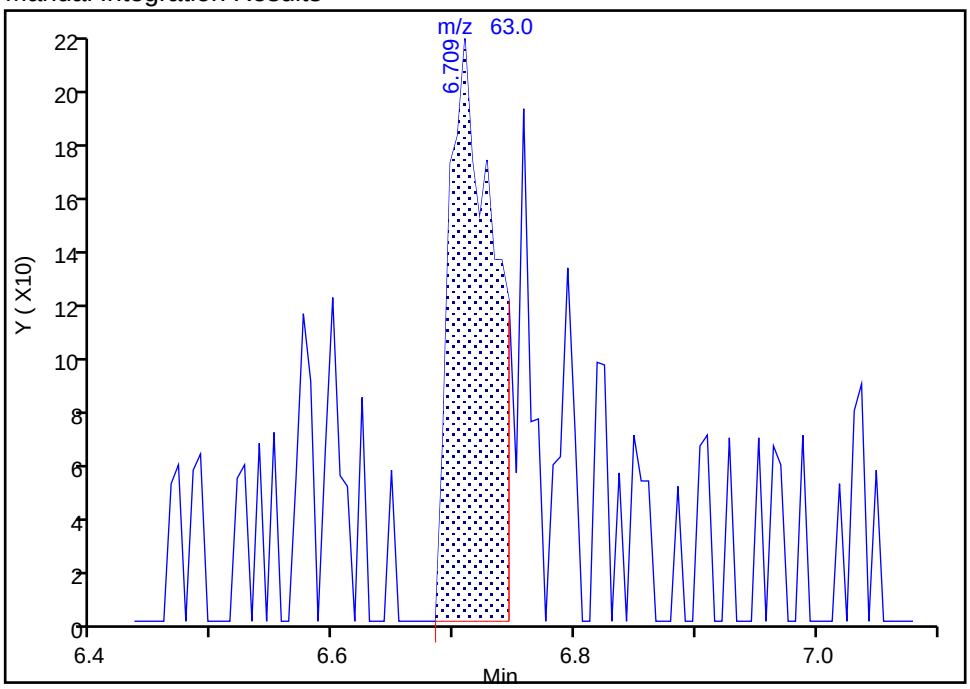
Processing Integration Results

RT: 6.82
Area: 70
Amount: 0.030651
Amount Units: ug/l



Manual Integration Results

RT: 6.71
Area: 552
Amount: 0.276273
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:45:14
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

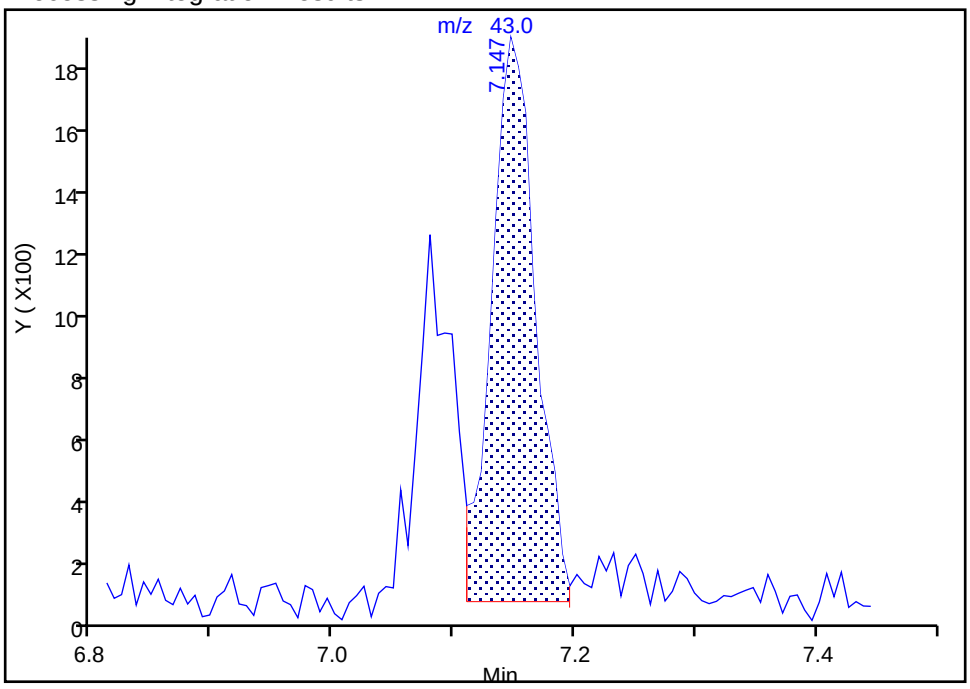
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

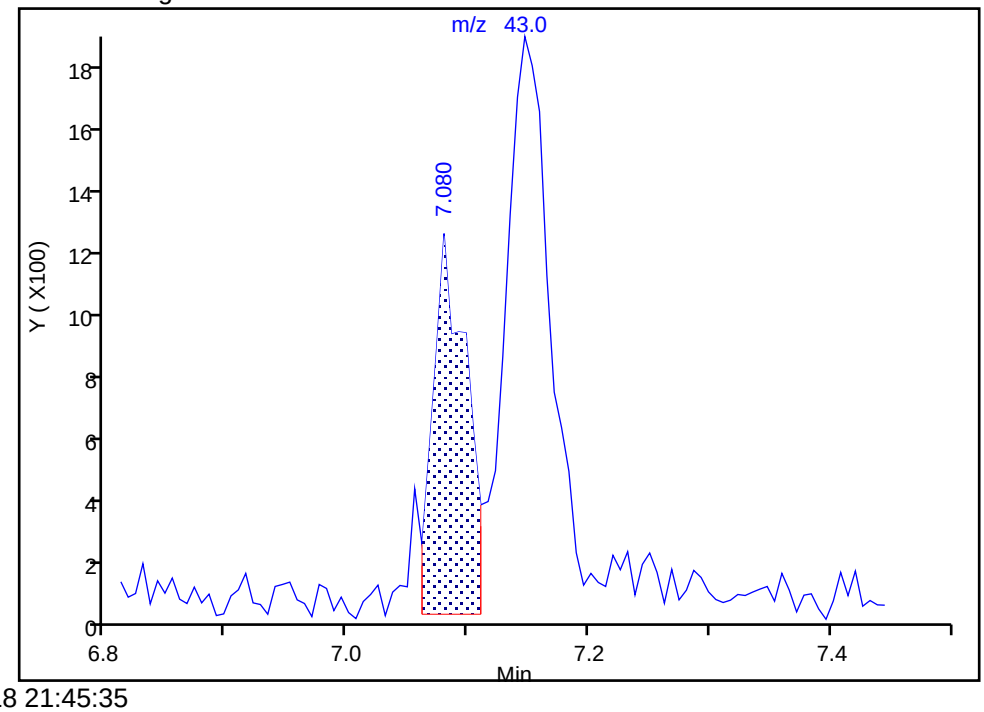
Processing Integration Results

RT: 7.15
Area: 4304
Amount: 1.921326
Amount Units: ug/l



Manual Integration Results

RT: 7.08
Area: 2204
Amount: 1.082250
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:45:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

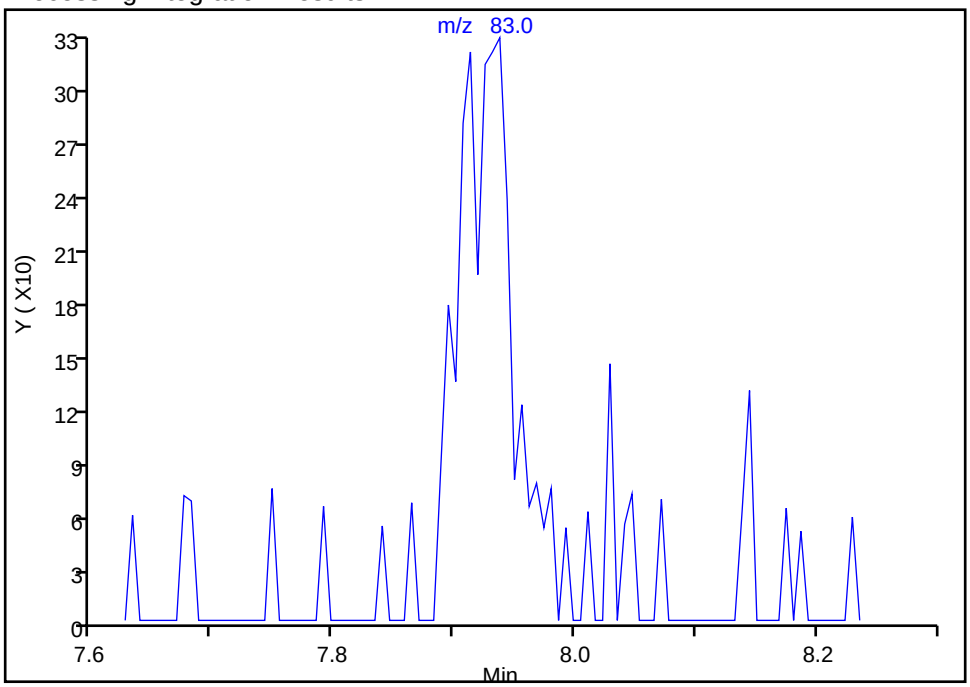
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

83 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

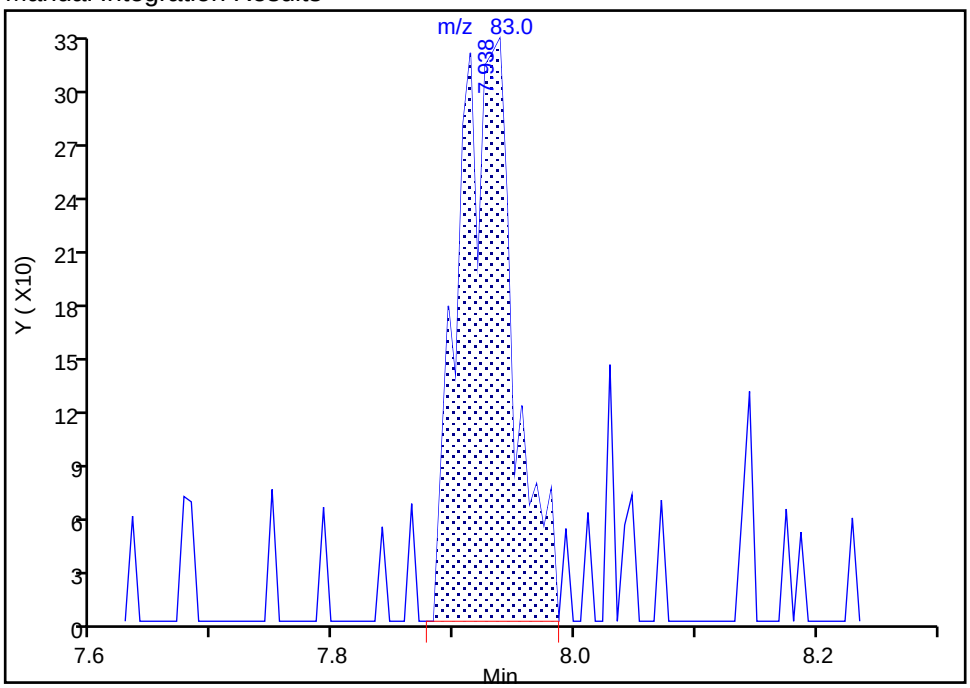
Not Detected
Expected RT: 7.93

Processing Integration Results



Manual Integration Results

RT: 7.94
Area: 1041
Amount: 0.349671
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:45:55
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

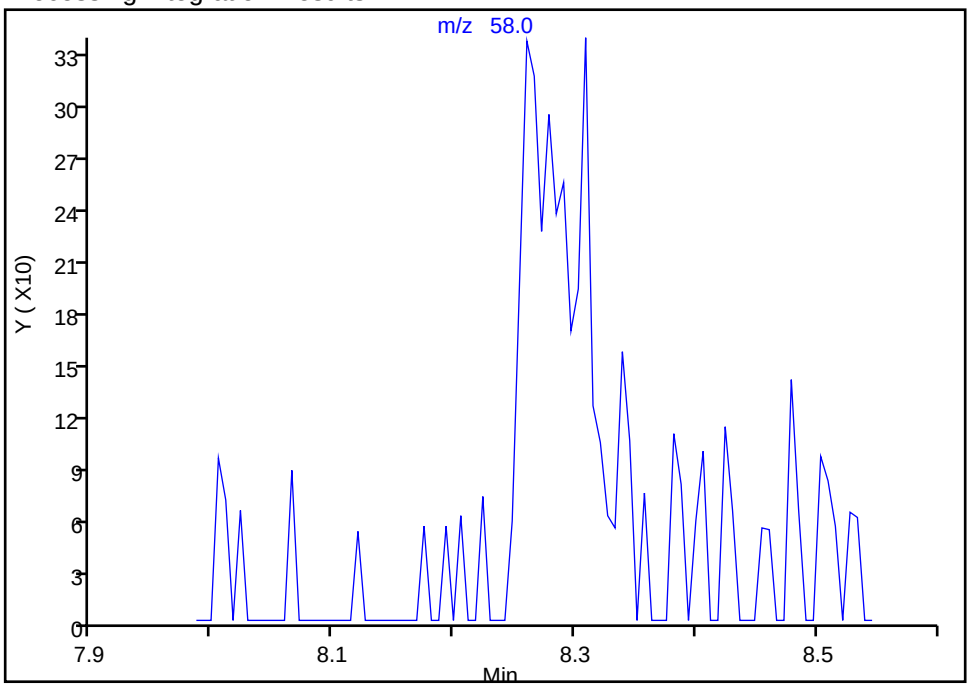
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

86 2-Hexanone, CAS: 591-78-6

Signal: 1

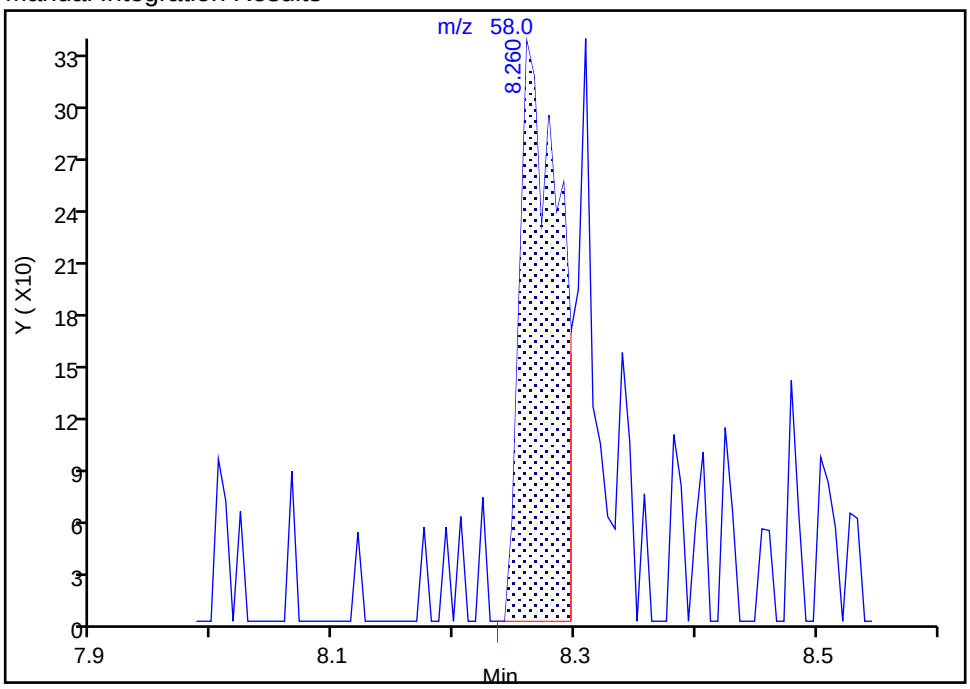
Not Detected
Expected RT: 8.27

Processing Integration Results



Manual Integration Results

RT: 8.26
Area: 751
Amount: 0.902857
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:46:01
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

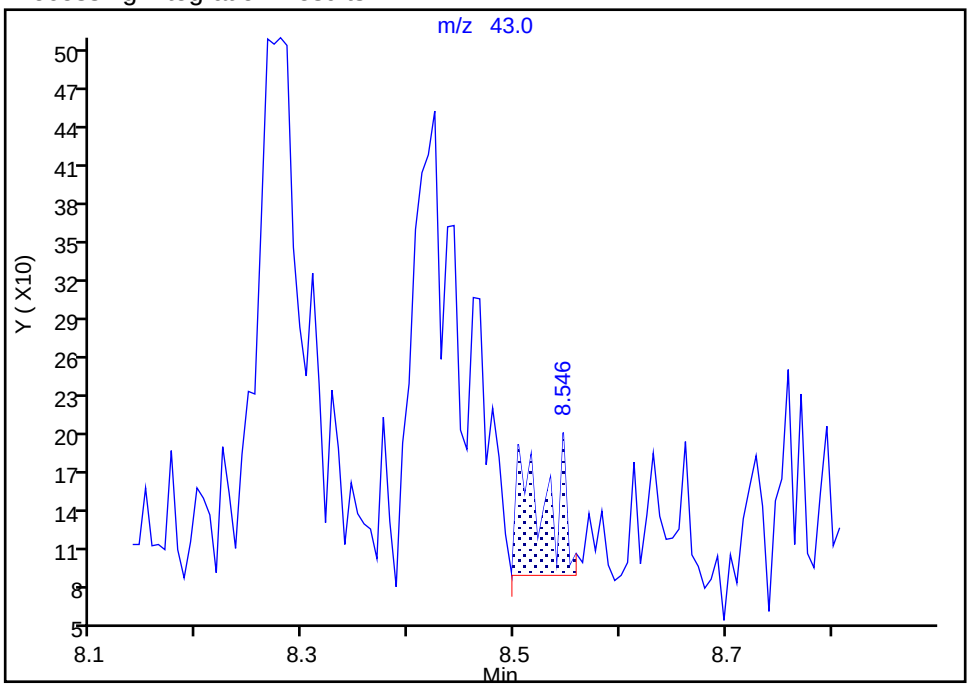
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

87 n-Butyl acetate, CAS: 123-86-4

Signal: 1

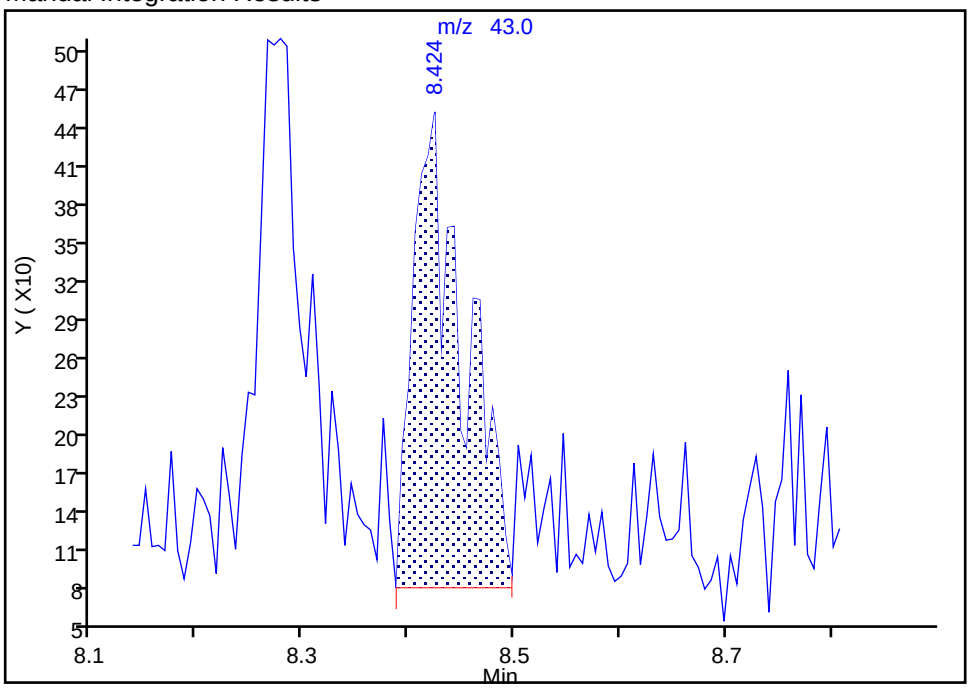
Processing Integration Results

RT: 8.55
Area: 201
Amount: 0.046903
Amount Units: ug/l



Manual Integration Results

RT: 8.42
Area: 1233
Amount: 0.338296
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:46:06
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

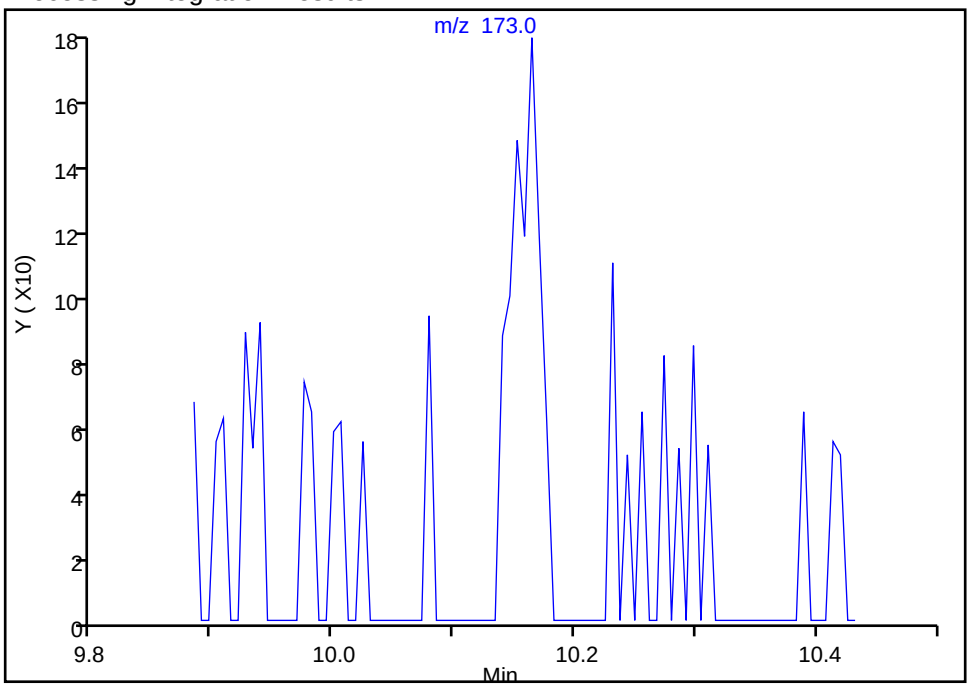
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

99 Bromoform, CAS: 75-25-2

Signal: 1

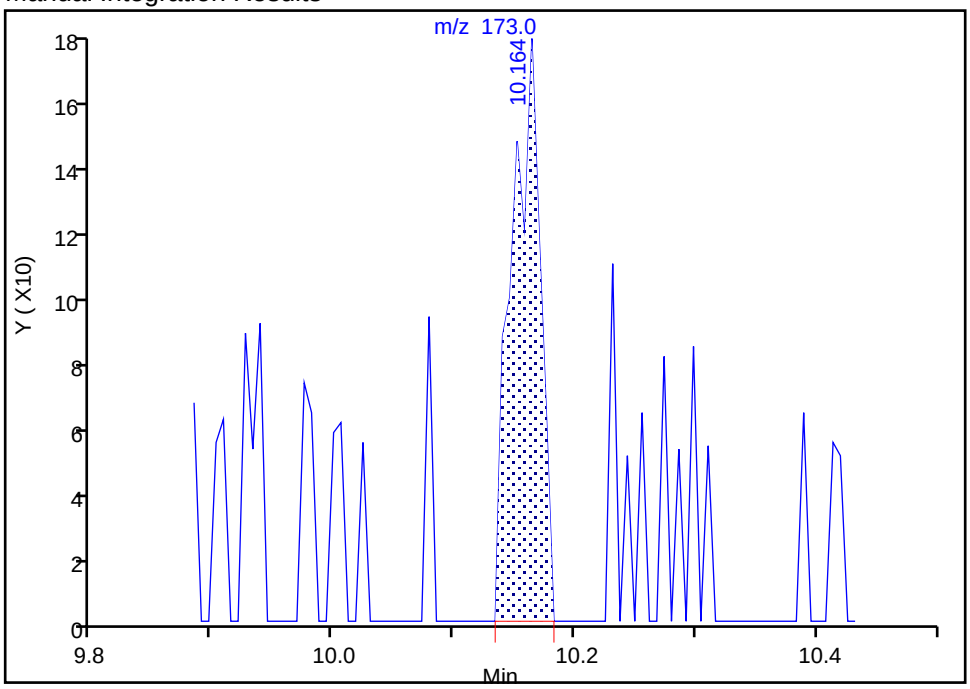
Not Detected
Expected RT: 10.15

Processing Integration Results



Manual Integration Results

RT: 10.16
Area: 291
Amount: 0.273741
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:46:21
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

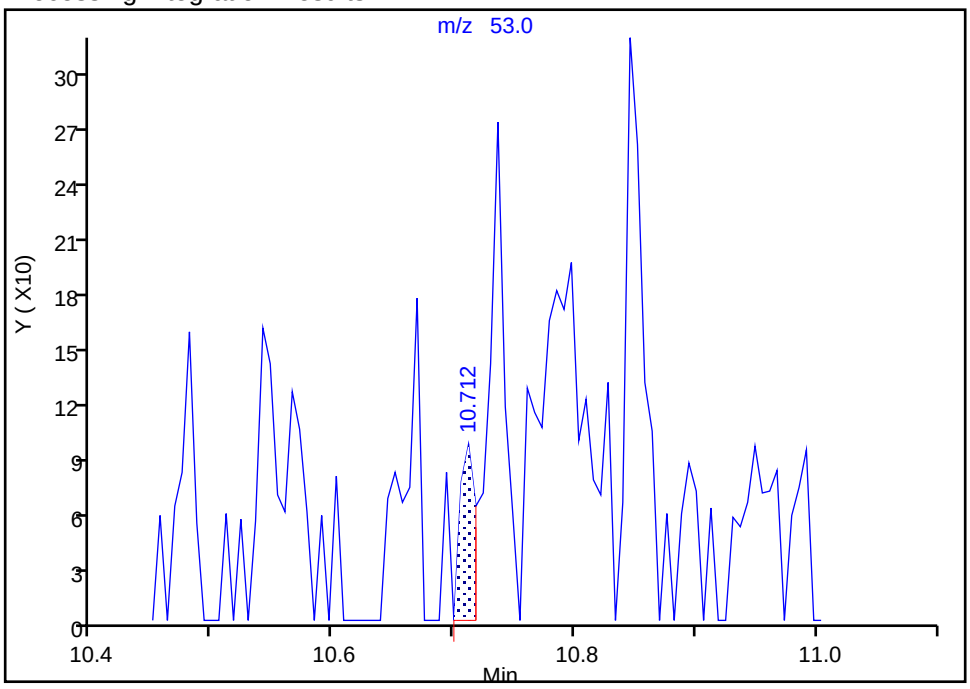
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

106 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

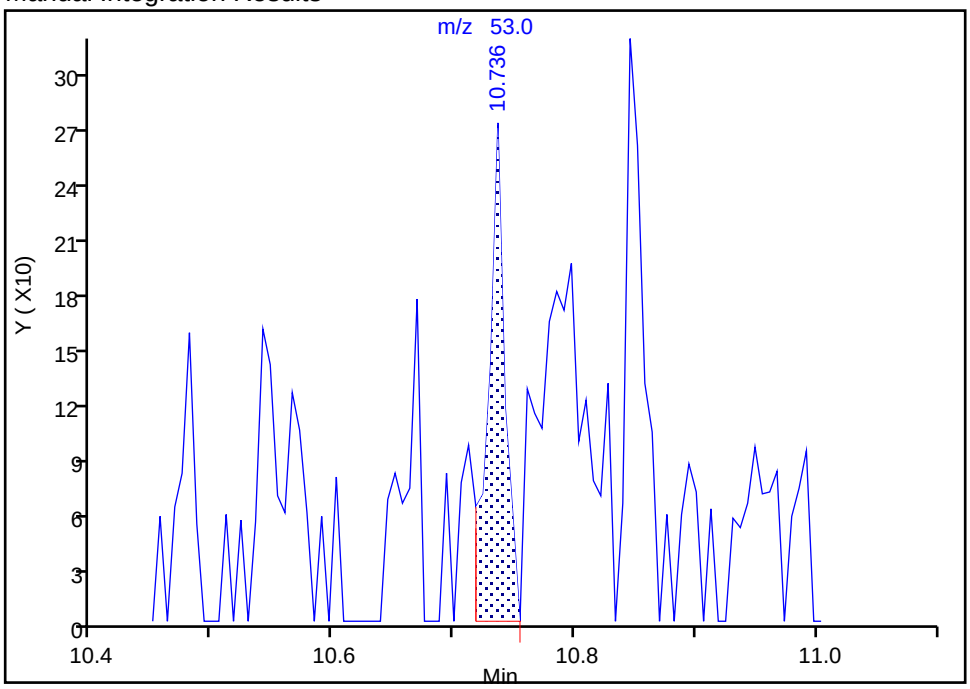
Processing Integration Results

RT: 10.71
Area: 84
Amount: 0.115337
Amount Units: ug/l



Manual Integration Results

RT: 10.74
Area: 257
Amount: 0.384119
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:46:36
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

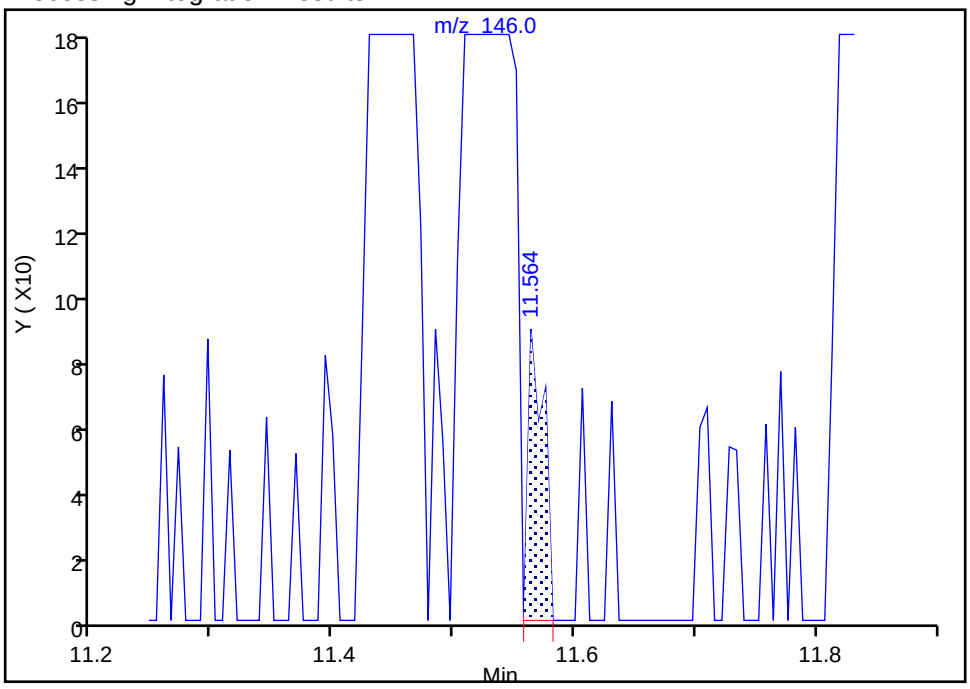
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

118 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

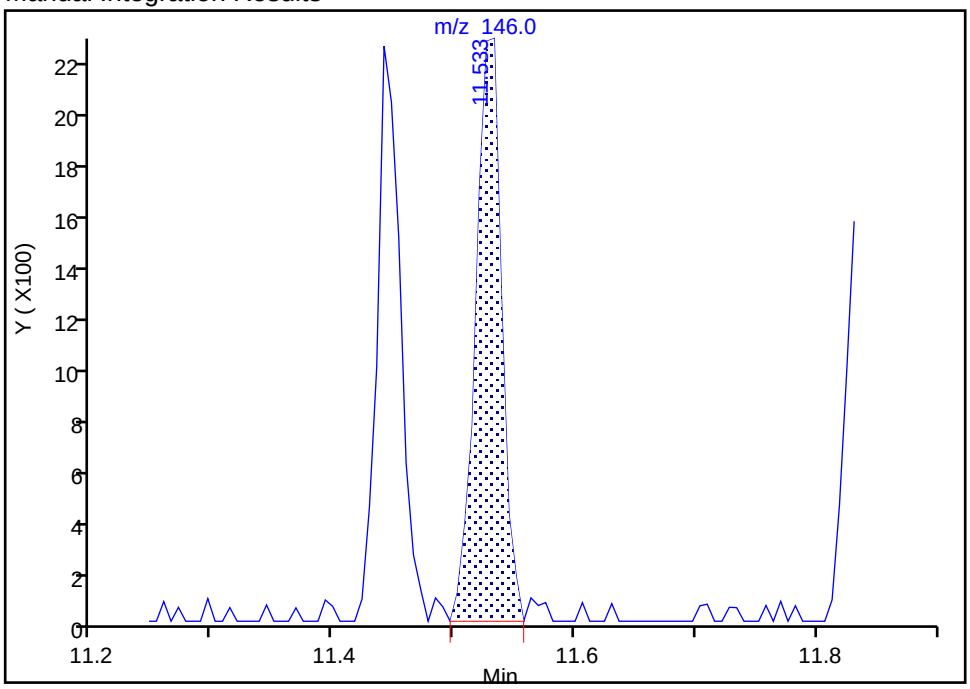
Processing Integration Results

RT: 11.56
Area: 80
Amount: 0.007380
Amount Units: ug/l



Manual Integration Results

RT: 11.53
Area: 3323
Amount: 0.327172
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:46:48
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

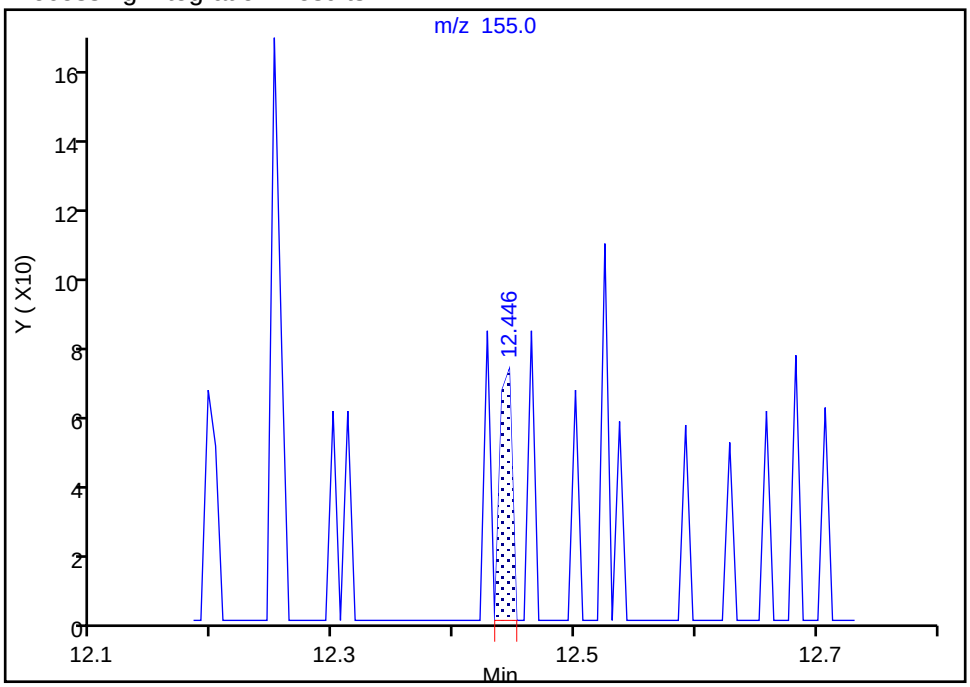
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65798.D
Injection Date: 20-Apr-2018 01:05:30 Instrument ID: CVOAMS11
Lims ID: STD025
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

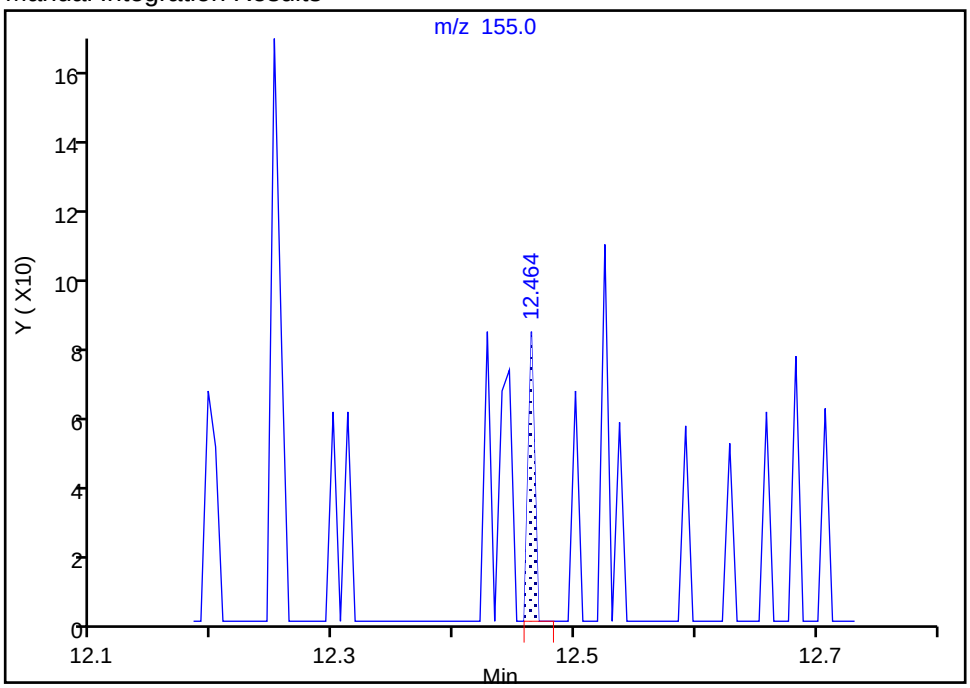
Processing Integration Results

RT: 12.45
Area: 50
Amount: 0.152803
Amount Units: ug/l



Manual Integration Results

RT: 12.46
Area: 30
Amount: 0.093279
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:47:06
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Lims ID: STD8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 20-Apr-2018 01:29:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD7
Misc. Info.: 460-0070690-003
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 14:40:25 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: kluseys Date: 20-Apr-2018 18:29:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.931	2.937	-0.006	0	178882	1000.0	1000.0	
31 Acrylonitrile	53	3.241	3.199	0.042	73	1632	2.00	2.10	
* 39 2-Butanone-d5	46	4.050	4.050	0.000	0	192019	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.555	0.006	95	226378	50.0	48.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	225596	50.0	50.2	
* 62 Fluorobenzene	96	5.237	5.243	-0.006	99	1042458	50.0	50.0	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	26731	1000.0	1000.0	
76 Epichlorohydrin	57	6.824	6.819	0.005	80	1042	5.00	4.64	Ma
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	100	1123202	50.0	51.0	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	751001	50.0	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	84	243475	50.0	48.8	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	338552	50.0	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	0.00	Units: uL	
GAS Hi_00250	Amount Added:	0.00	Units: uL	
14DIOXINTER_00083	Amount Added:	0.00	Units: uL	
ACRY/EPIH MIX_00048	Amount Added:	2.00	Units: uL	
Ethanol mix_00014	Amount Added:	0.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	0.00	Units: uL	
MIX I Hi_00093	Amount Added:	0.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

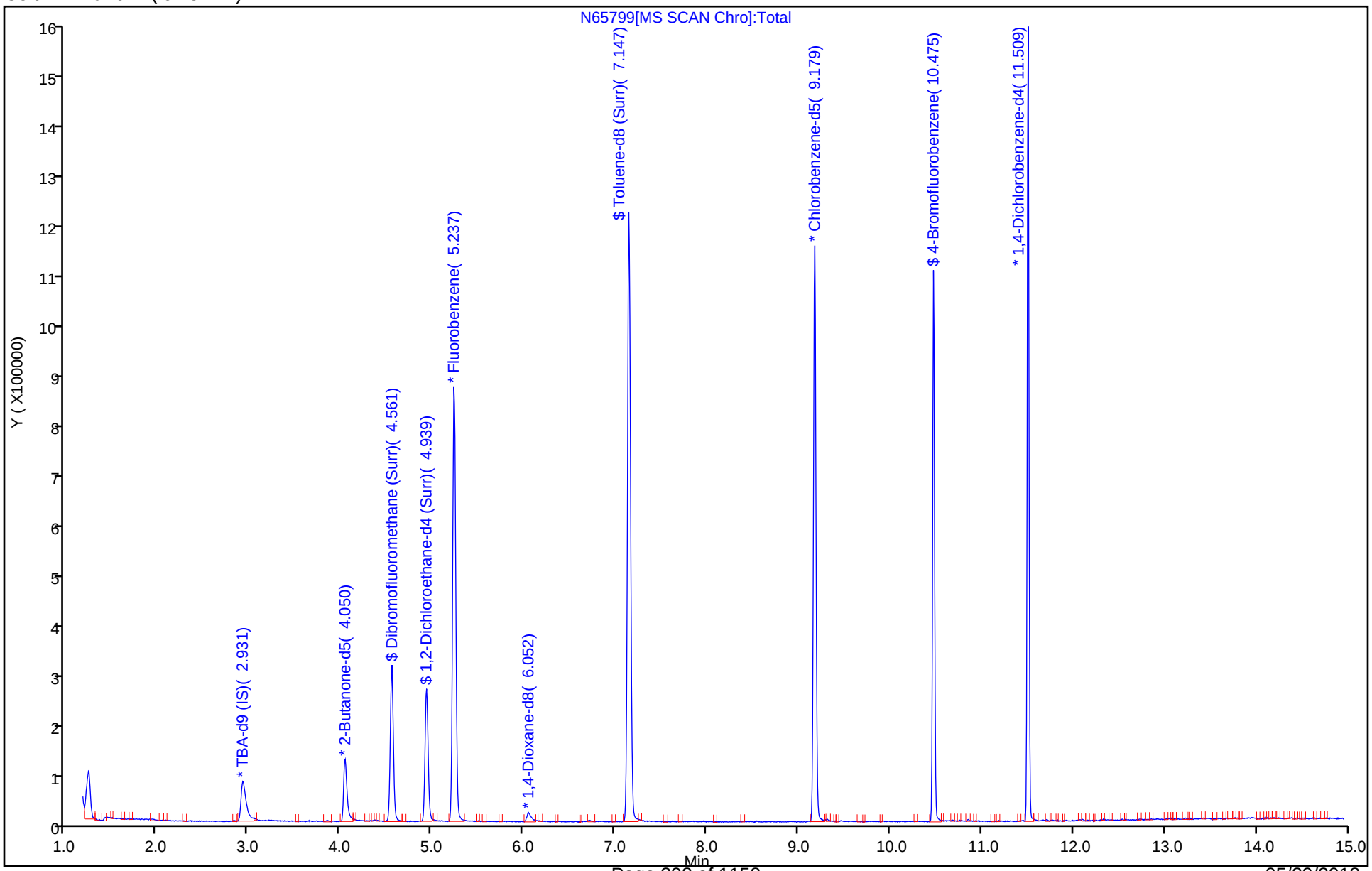
Report Date: 22-Apr-2018 14:40:43 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D

Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	STD8			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

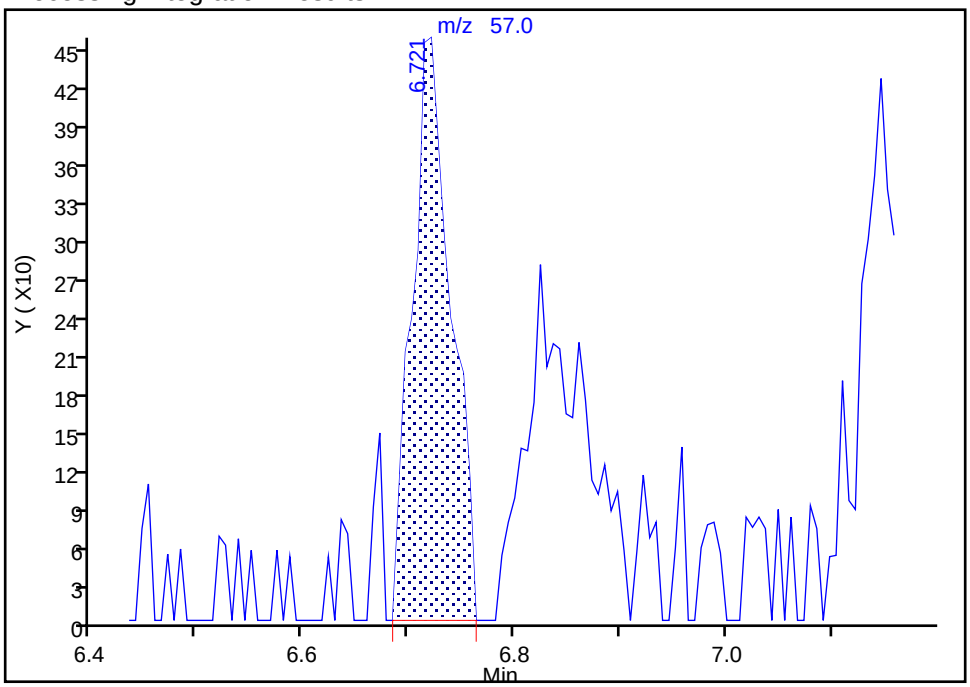
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

76 Epichlorohydrin, CAS: 106-89-8

Signal: 1

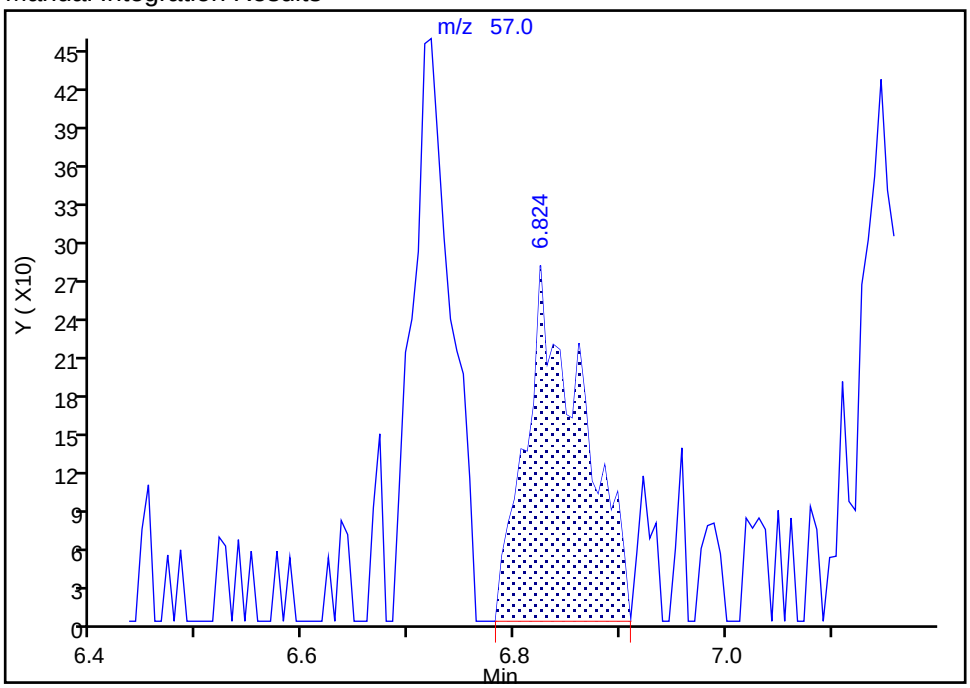
Processing Integration Results

RT: 6.72
Area: 1163
Amount: 5.177516
Amount Units: ug/l



Manual Integration Results

RT: 6.82
Area: 1042
Amount: 4.636032
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:07:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

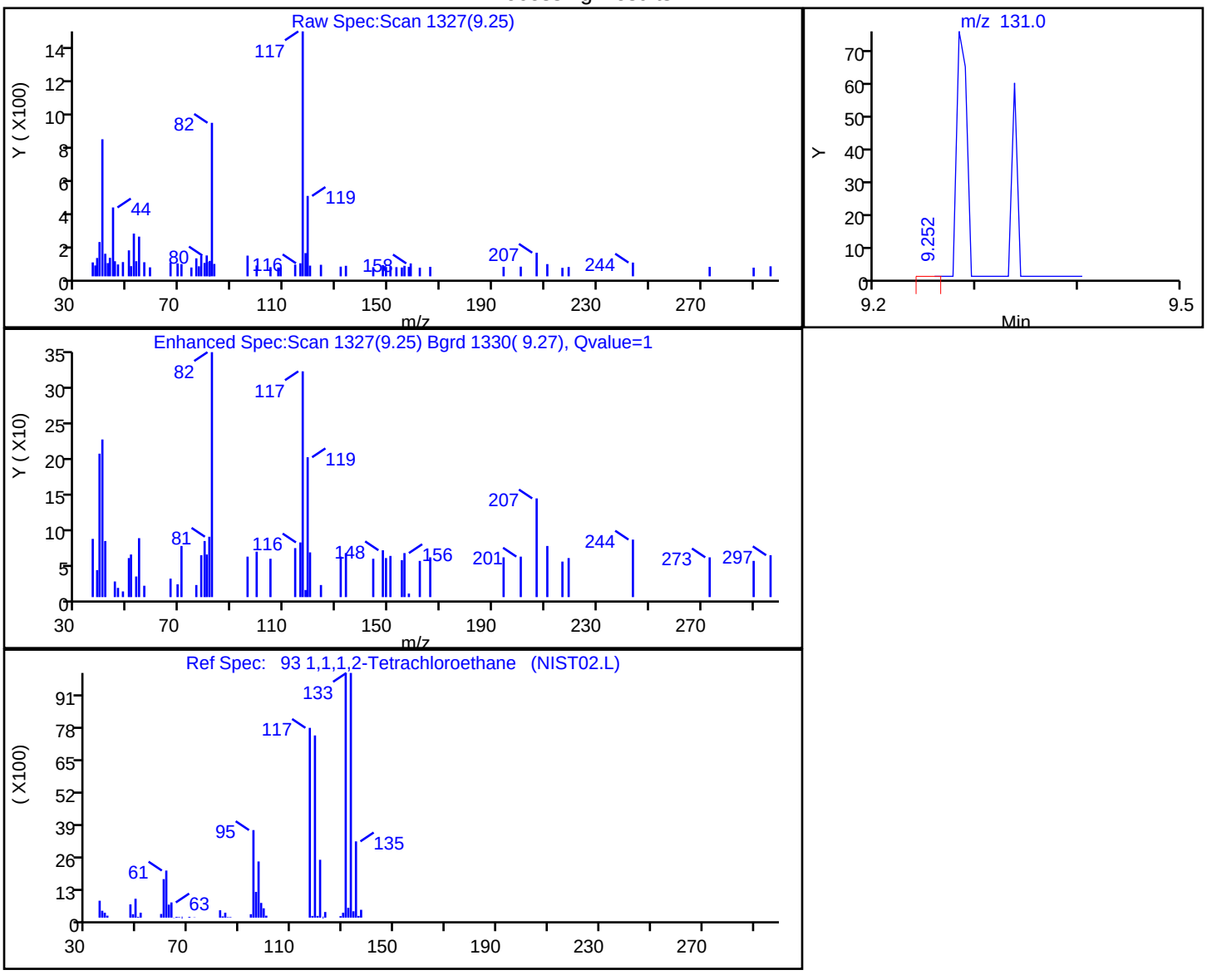
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
9.25	131.00	44	0.011483

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

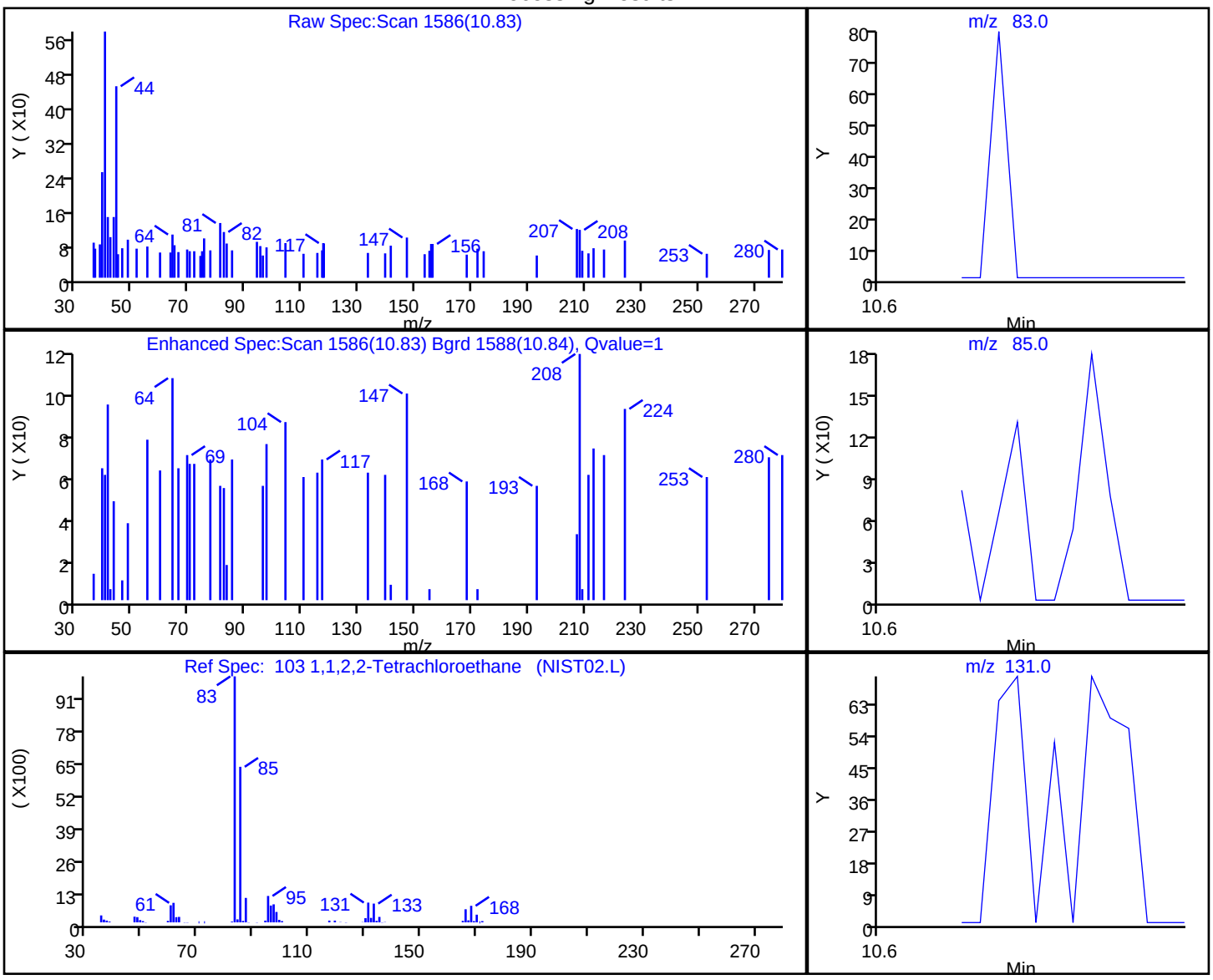
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

103 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
10.83	83.00	29	0.008103
10.83	85.00	43	
10.82	131.00	20	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

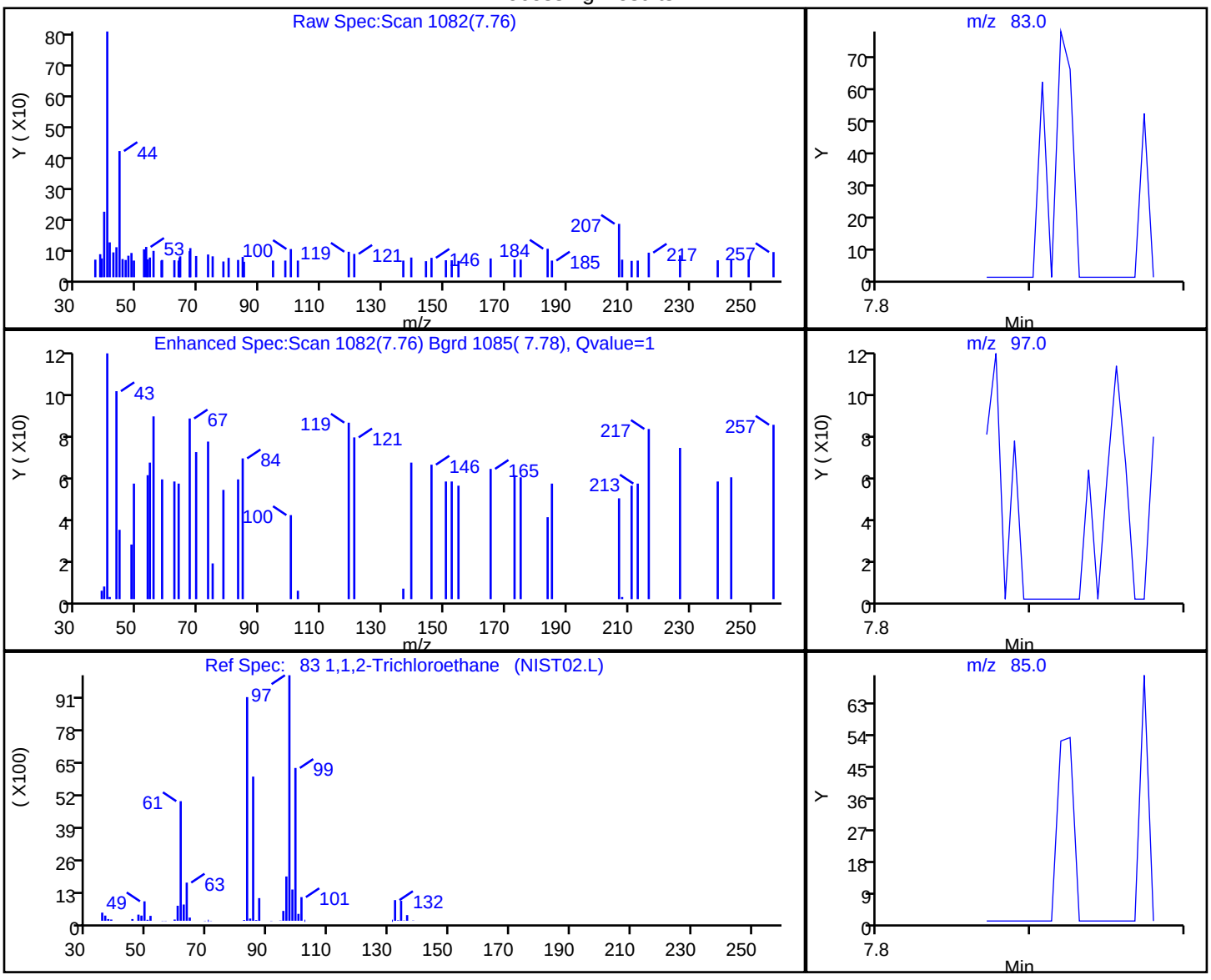
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D		
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11
Lims ID:	STD8		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
7.76	83.00	40	0.013427
7.77	97.00	47	
7.76	85.00	24	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

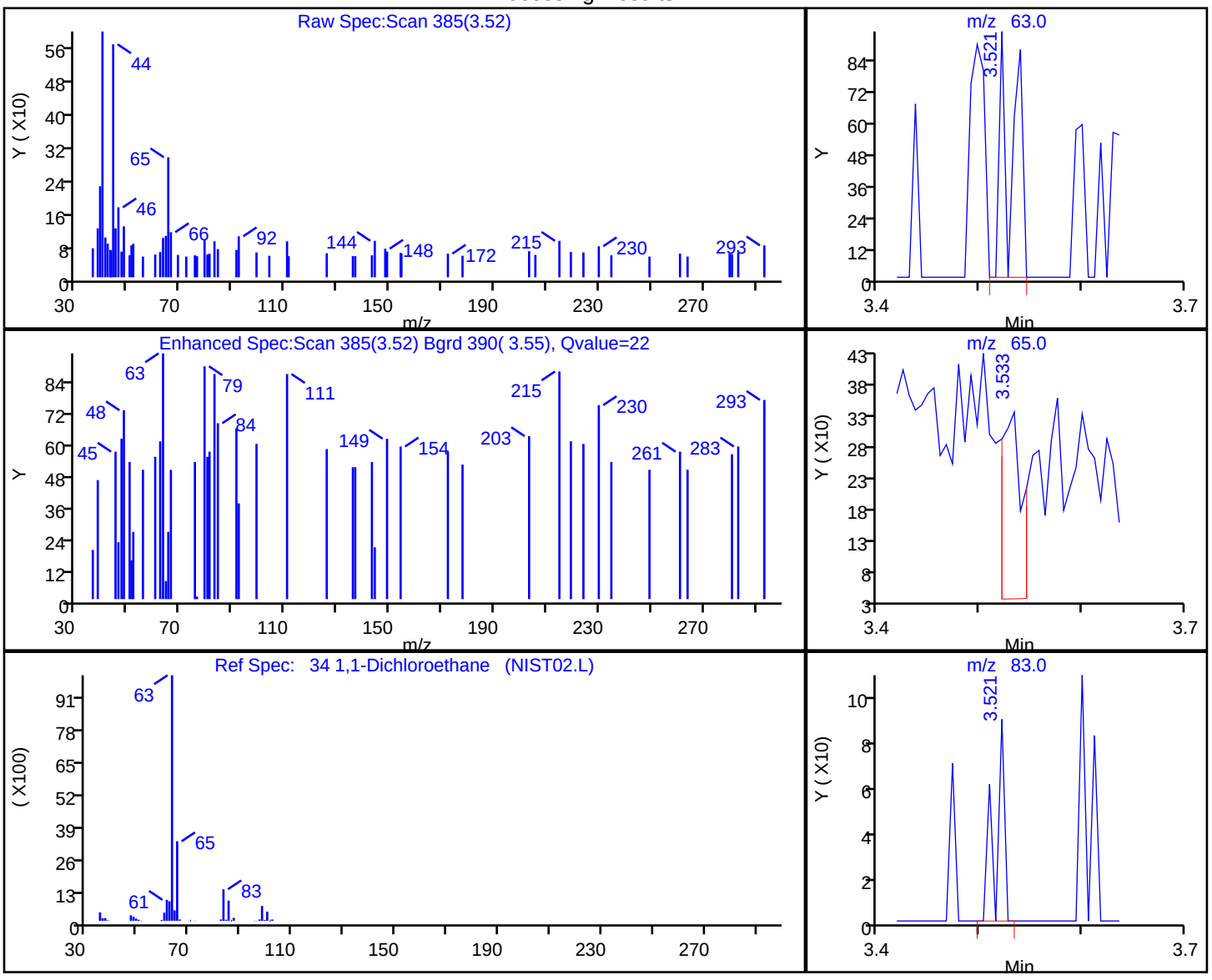
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

34 1,1-Dichloroethane, CAS: 75-34-3

Processing Results



RT	Mass	Response	Amount
3.52	63.00	89	0.009683
3.53	65.00	409	
3.52	83.00	53	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

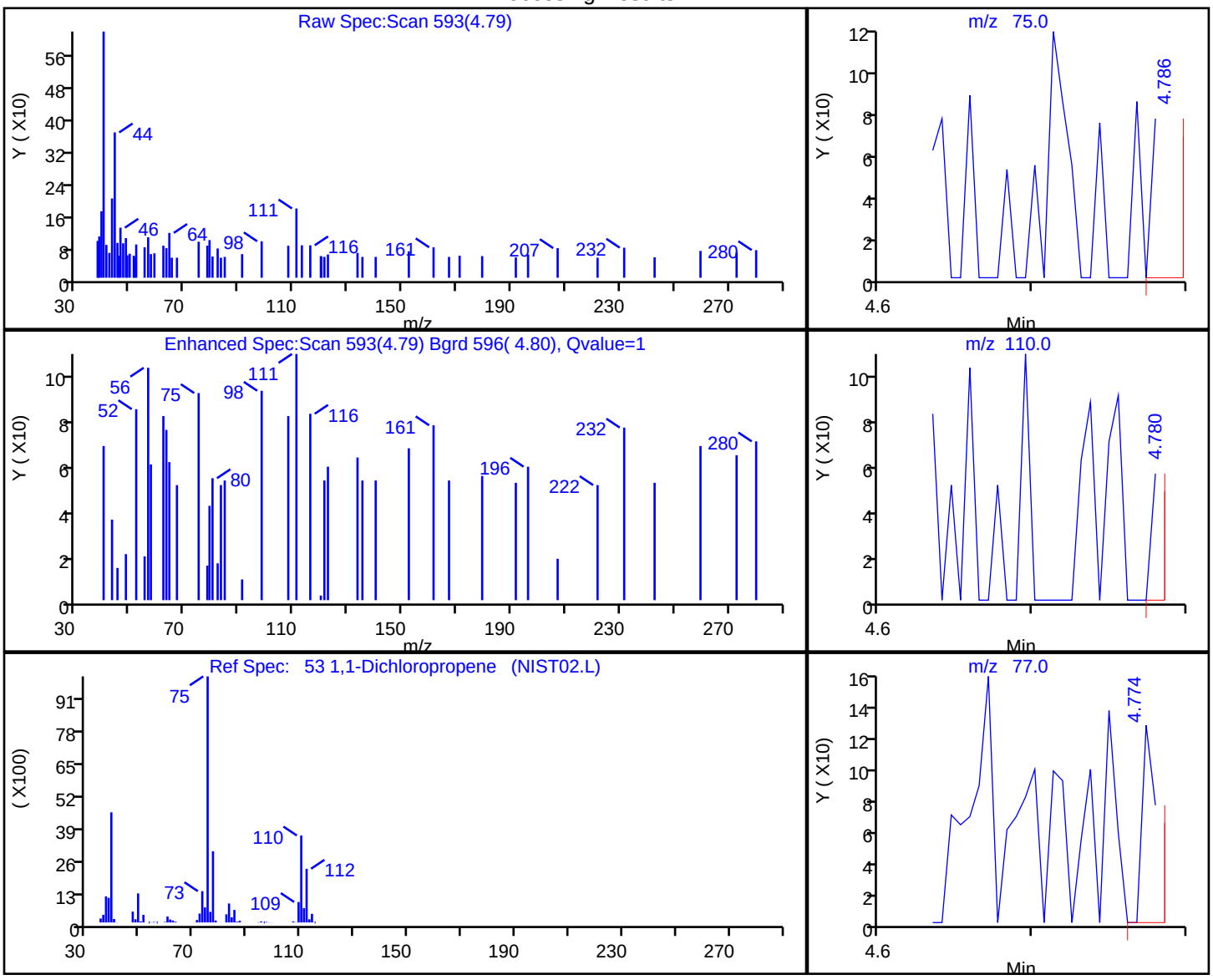
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

53 1,1-Dichloropropene, CAS: 563-58-6

Processing Results



RT	Mass	Response	Amount
4.79	75.00	60	0.007916
4.78	110.00	20	
4.77	77.00	70	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

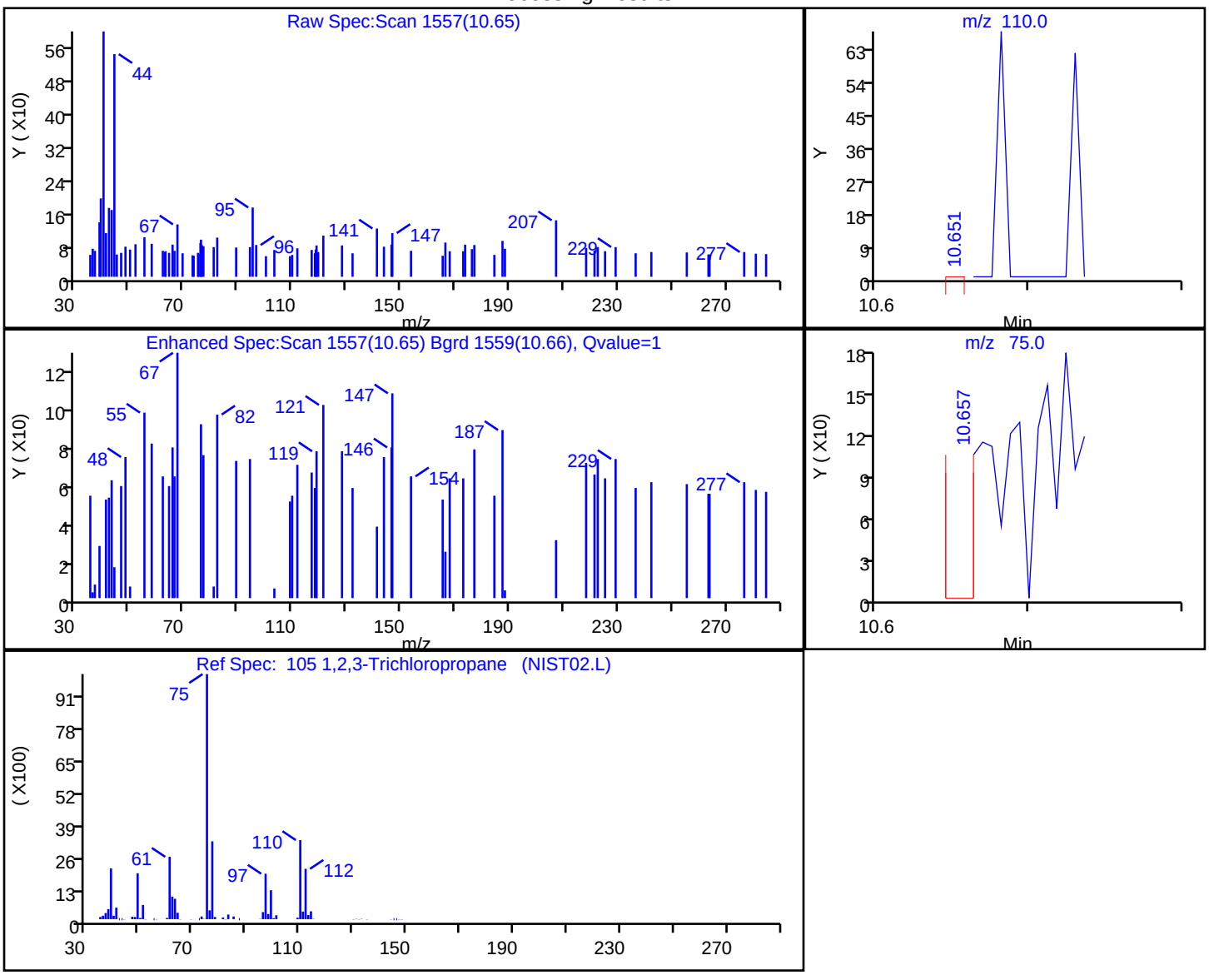
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

105 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
10.65	110.00	19	0.017301
10.66	75.00	129	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

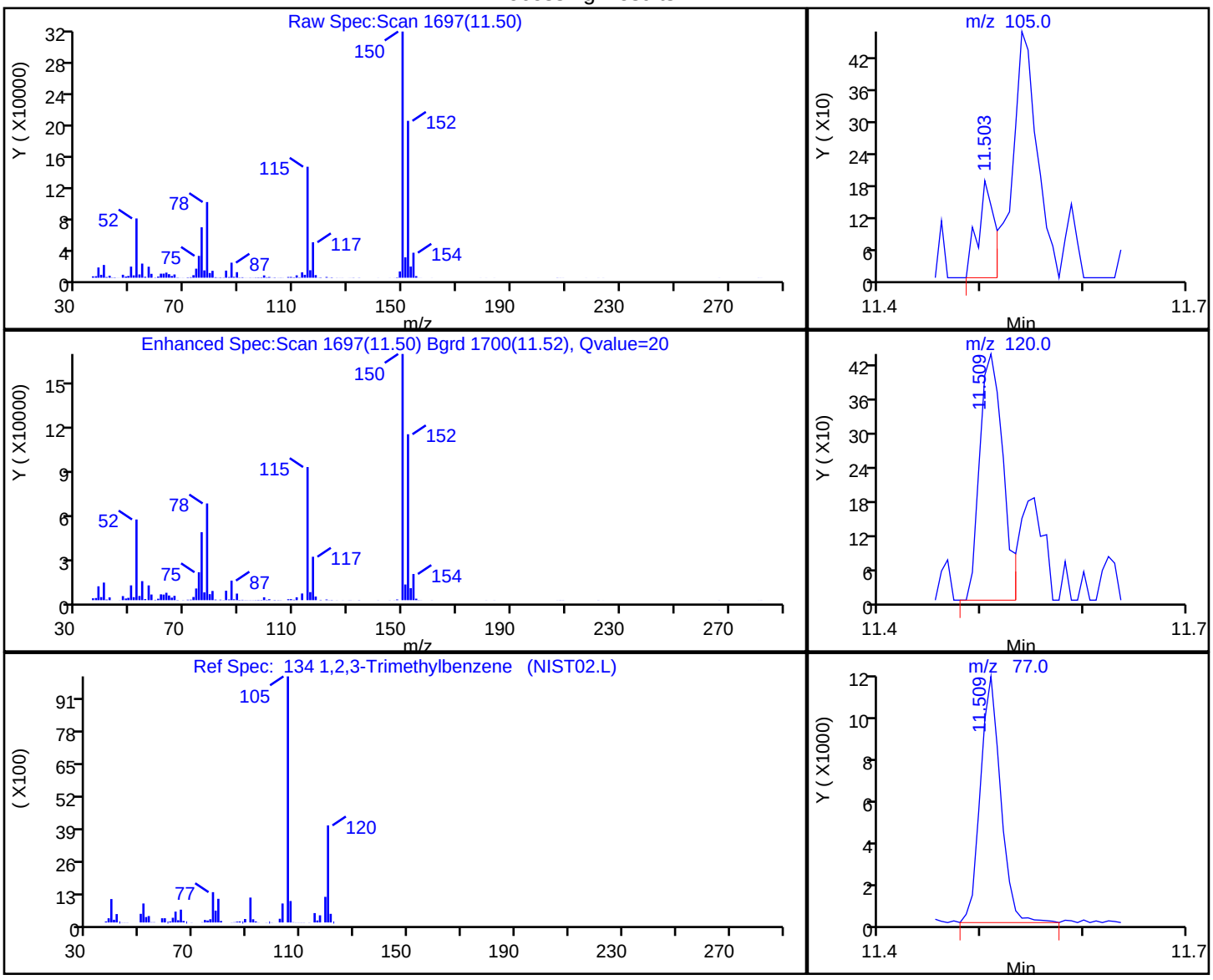
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

134 1,2,3-Trimethylbenzene, CAS: 526-73-8

Processing Results



RT	Mass	Response	Amount
11.50	105.00	206	0.008877
11.51	120.00	701	
11.51	77.00	15929	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

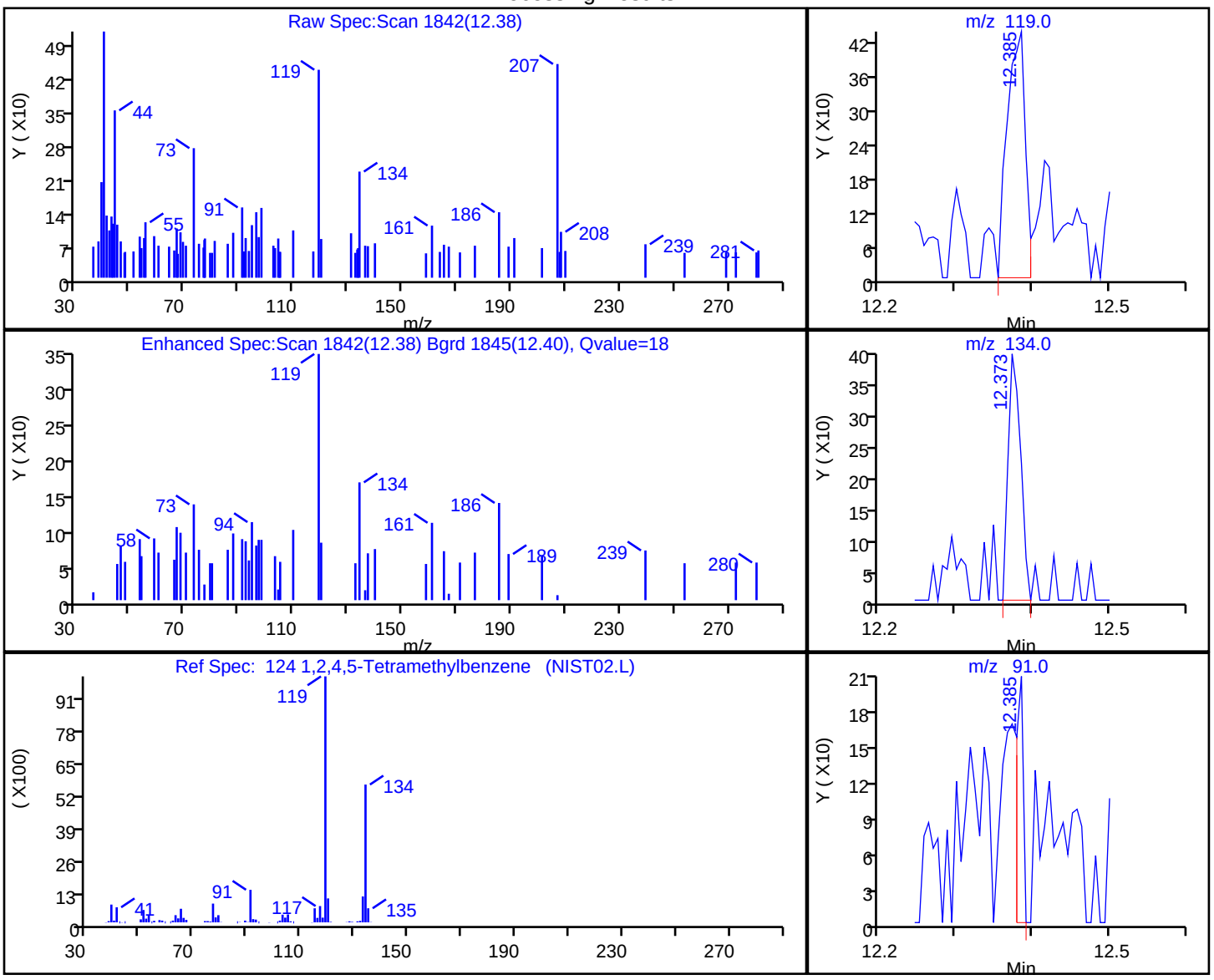
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

124 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Processing Results



RT	Mass	Response	Amount
12.38	119.00	719	0.033566
12.37	134.00	452	
12.38	91.00	129	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

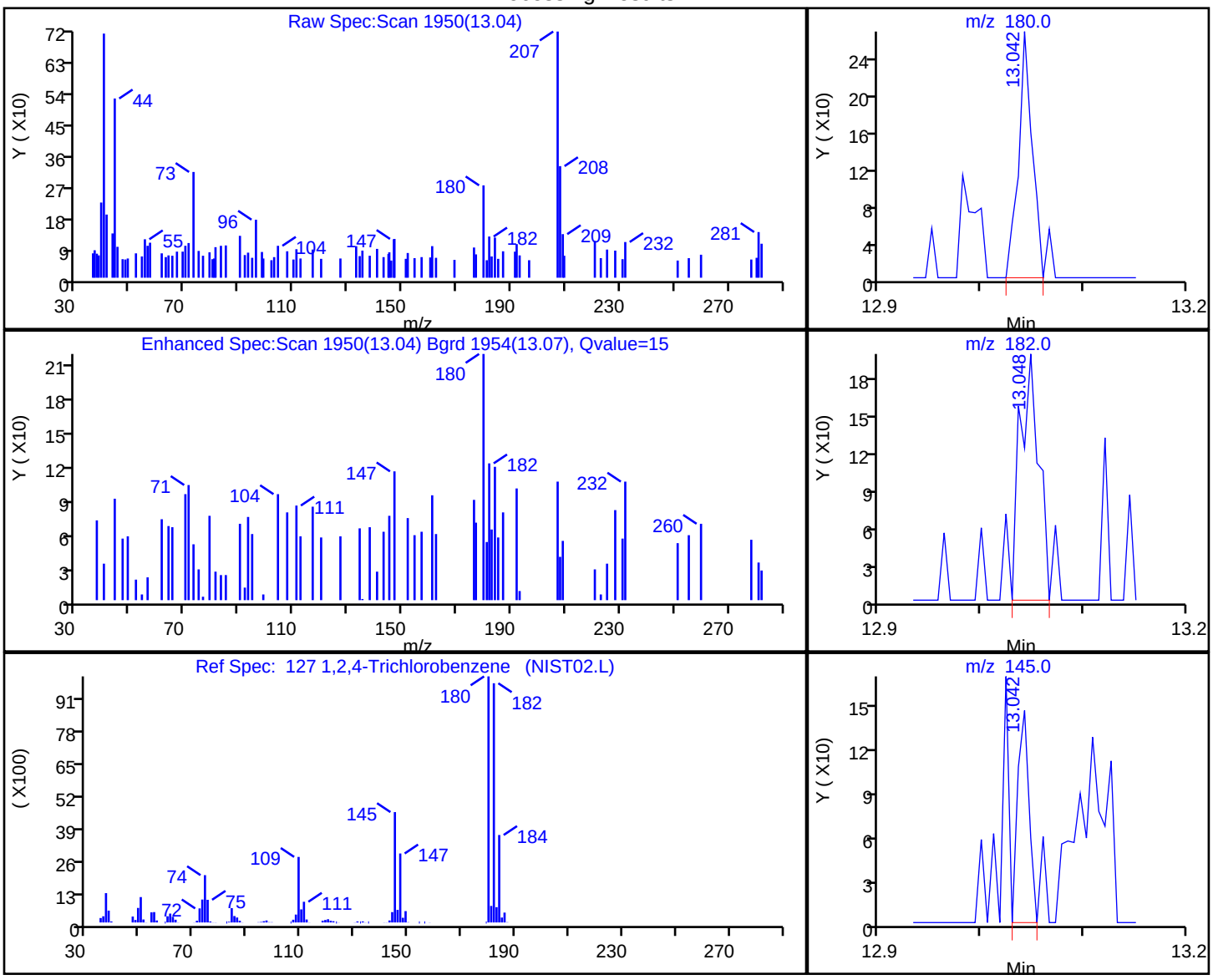
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D		
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11
Lims ID:	STD8		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

127 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
13.04	180.00	251	0.043934
13.05	182.00	247	
13.04	145.00	111	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

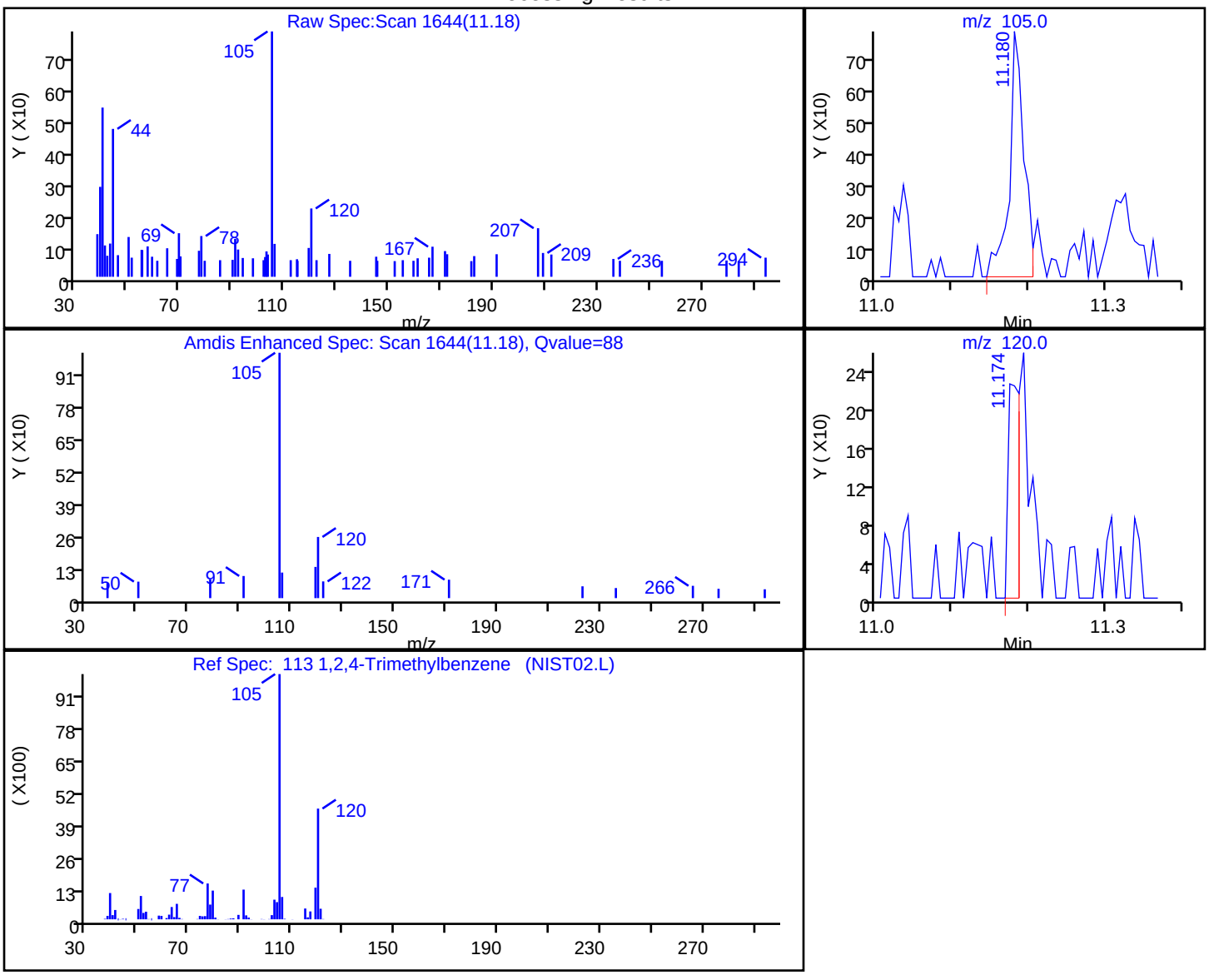
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

113 1,2,4-Trimethylbenzene, CAS: 95-63-6

Processing Results



RT	Mass	Response	Amount
11.18	105.00	1041	0.046207
11.17	120.00	237	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

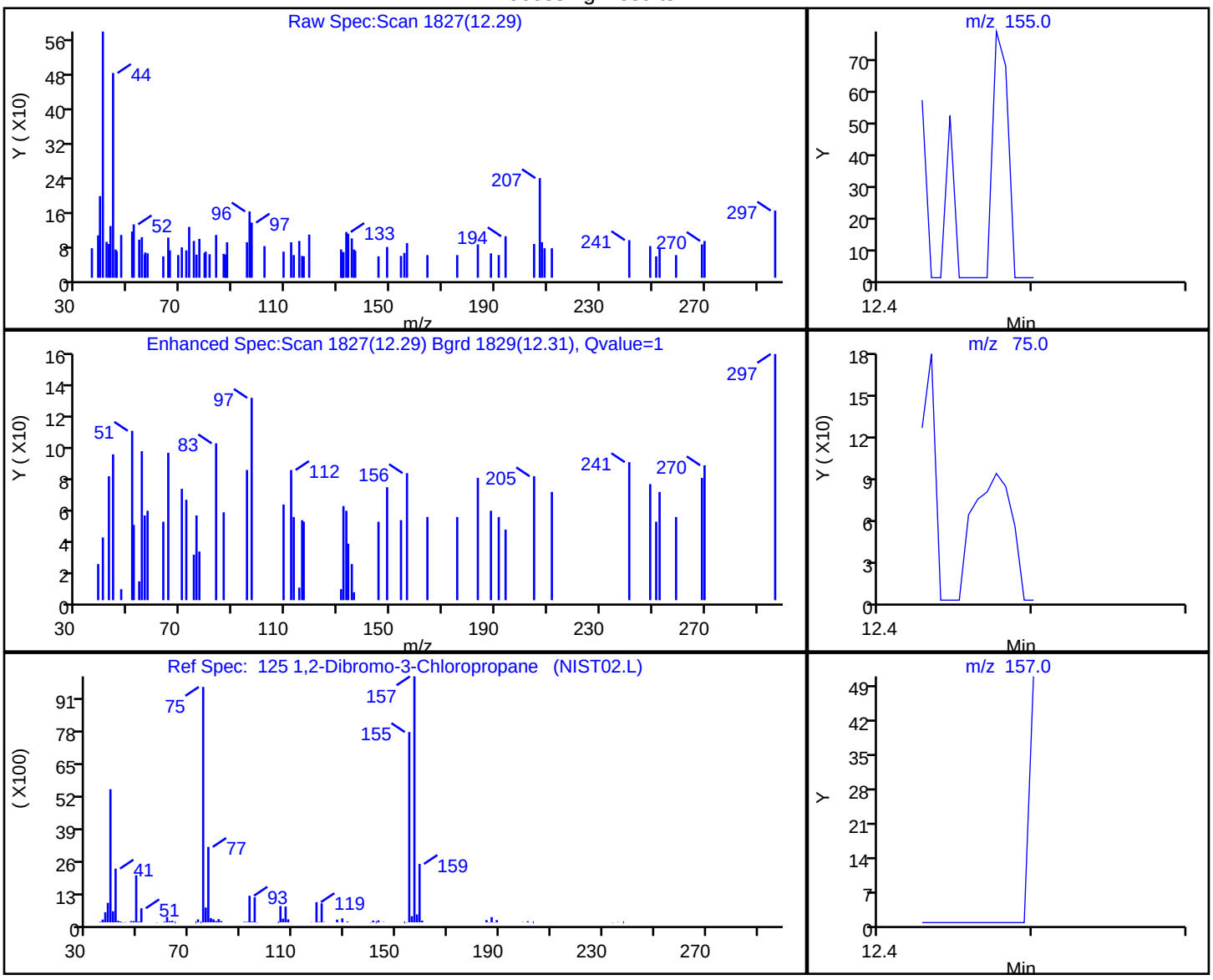
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results



RT	Mass	Response	Amount
12.29	155.00	21	0.065099
12.29	75.00	97	
12.30	157.00	34	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

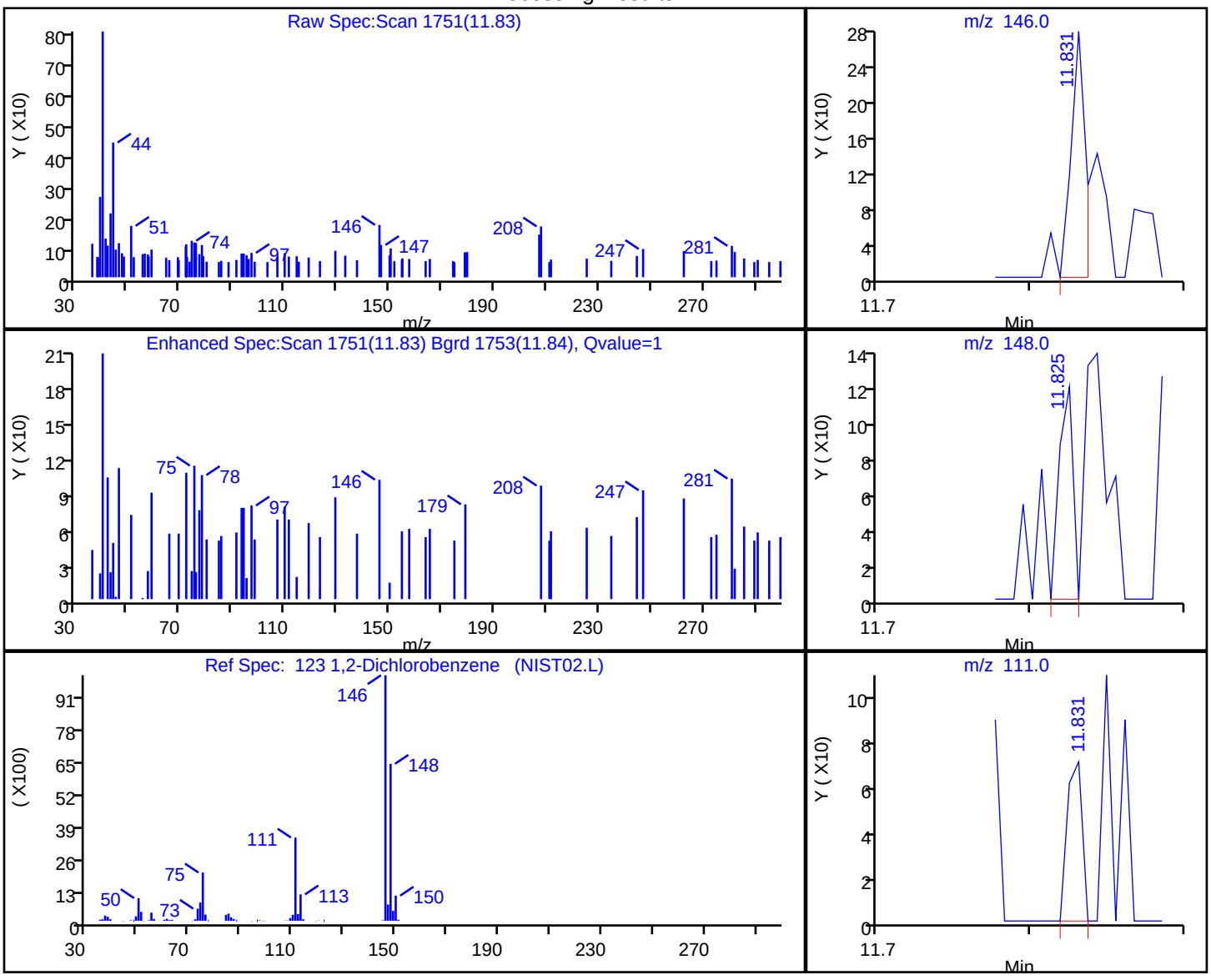
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D		
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11
Lims ID:	STD8		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

123 1,2-Dichlorobenzene, CAS: 95-50-1

Processing Results



RT	Mass	Response	Amount
11.83	146.00	181	0.019244
11.83	148.00	76	
11.83	111.00	46	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

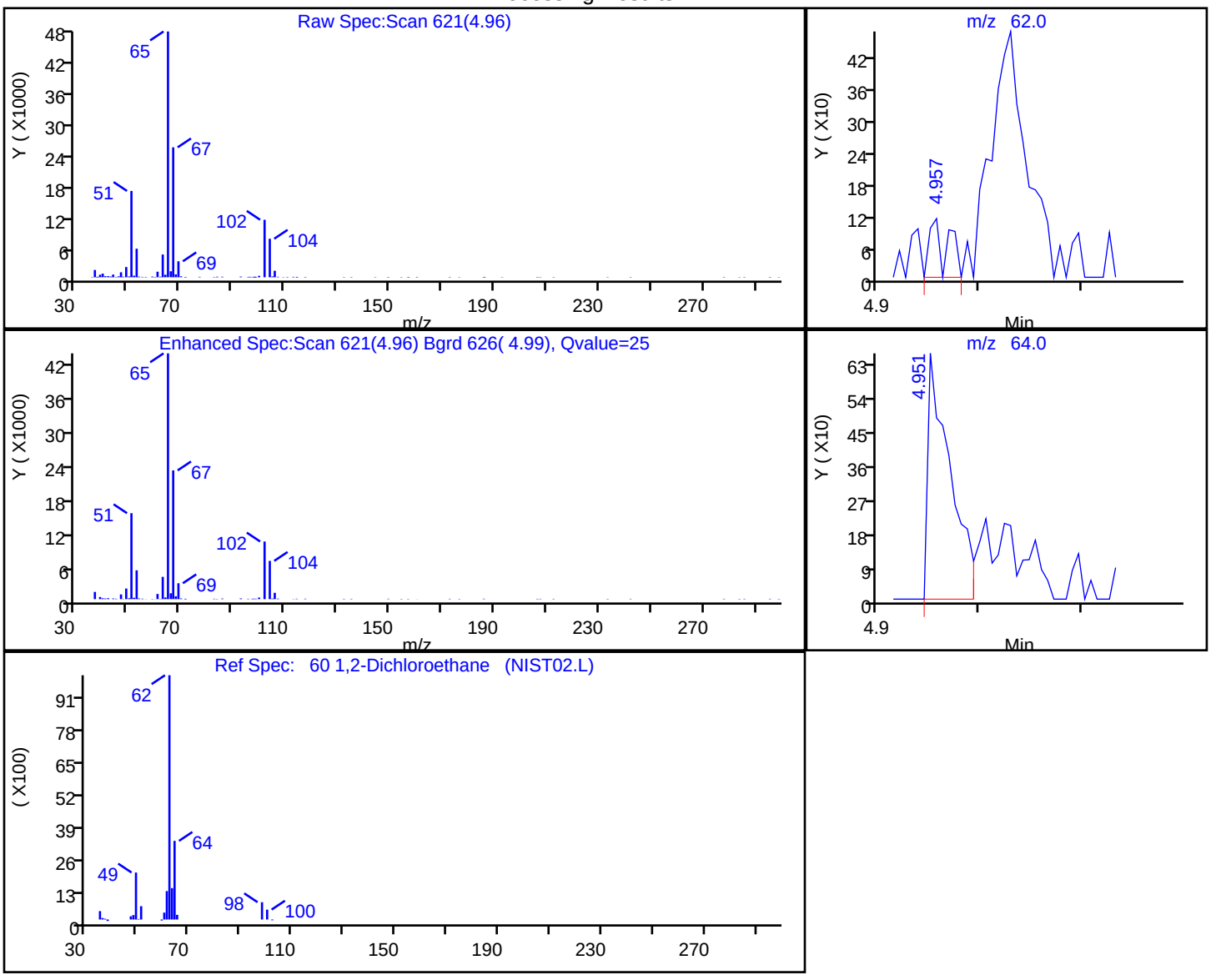
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.96	62.00	138	0.025093
4.95	64.00	994	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

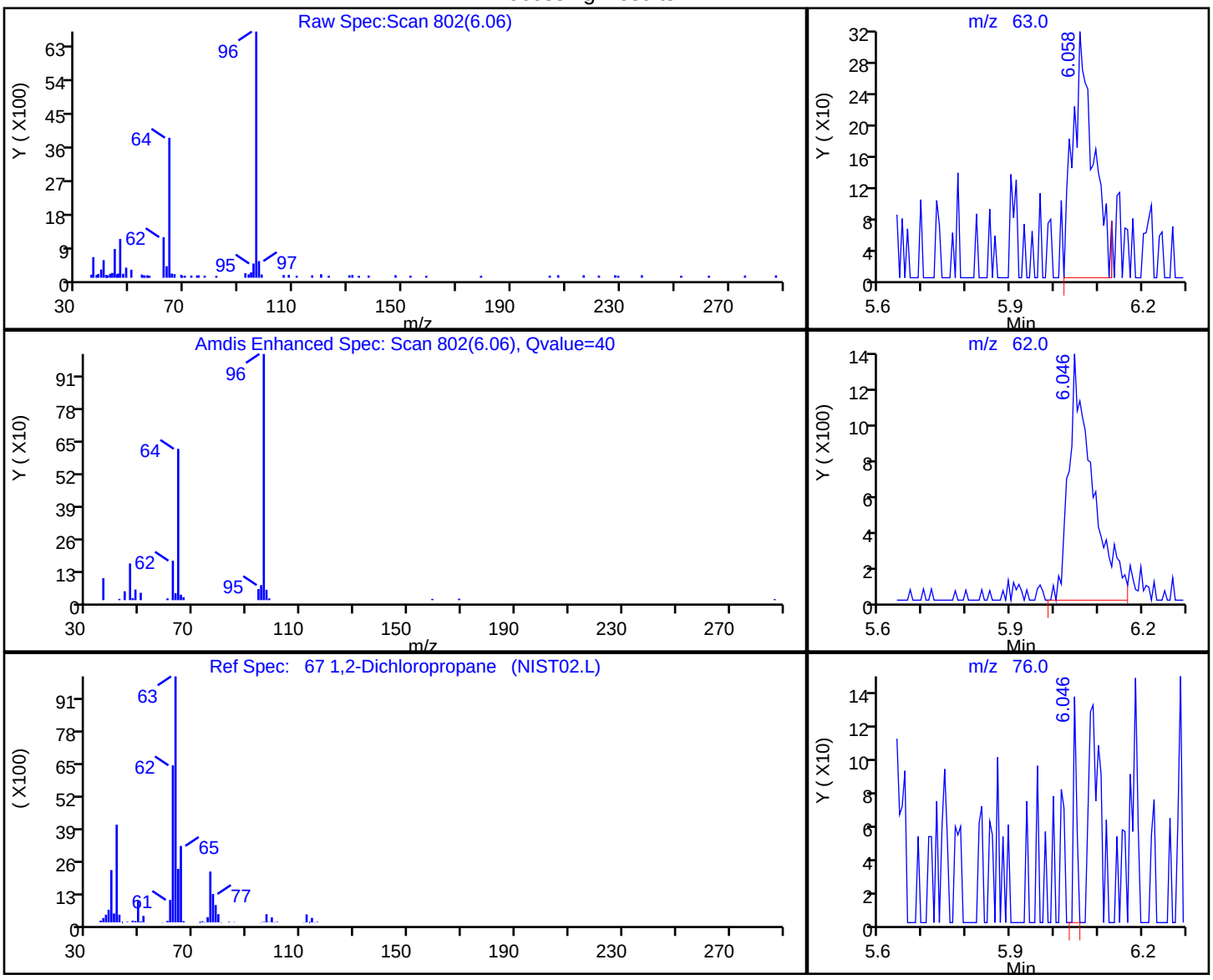
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
6.06	63.00	1019	0.194748
6.05	62.00	5113	
6.05	76.00	69	
5.97	112.00	0	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

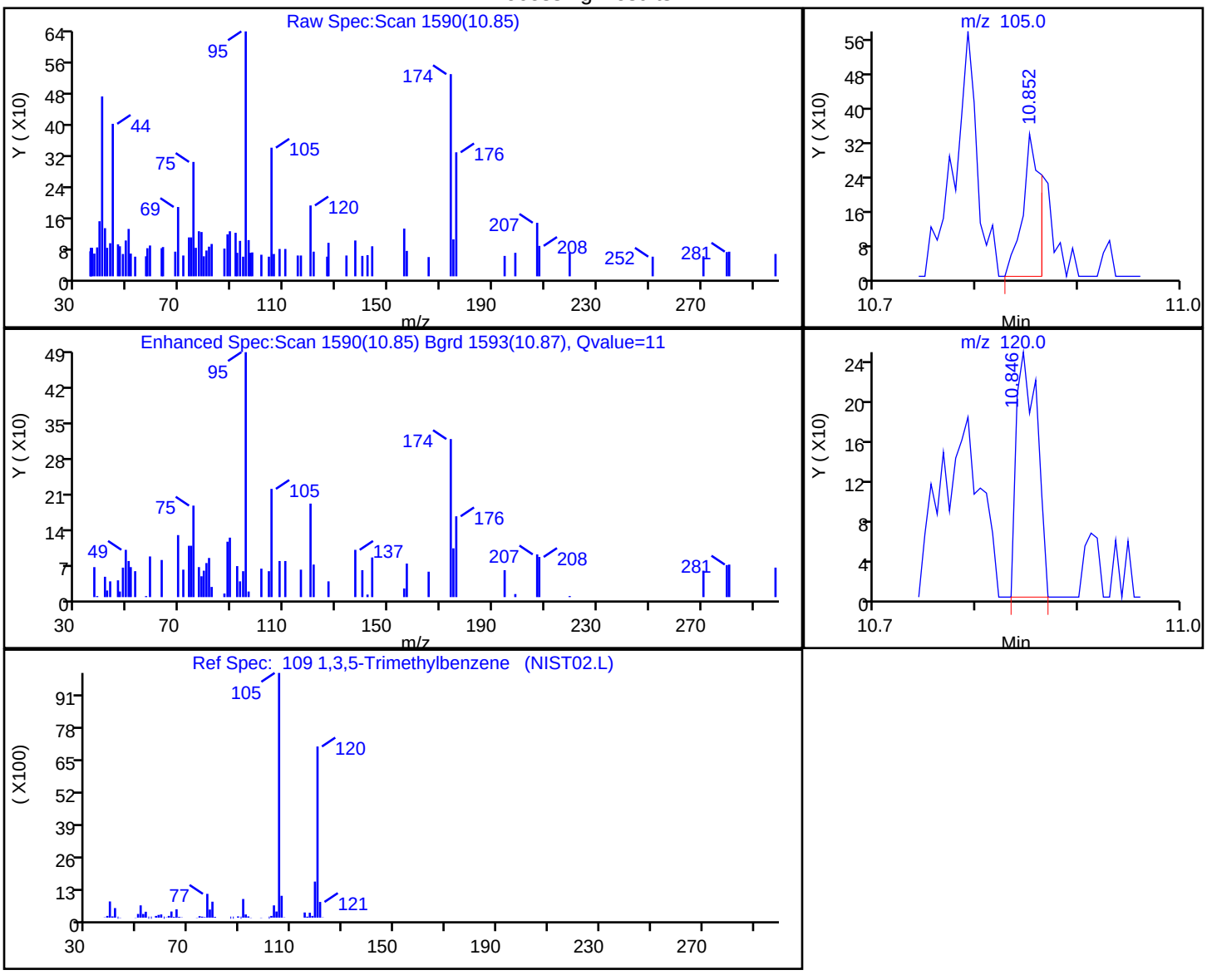
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

109 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
10.85	105.00	401	0.019040
10.85	120.00	347	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

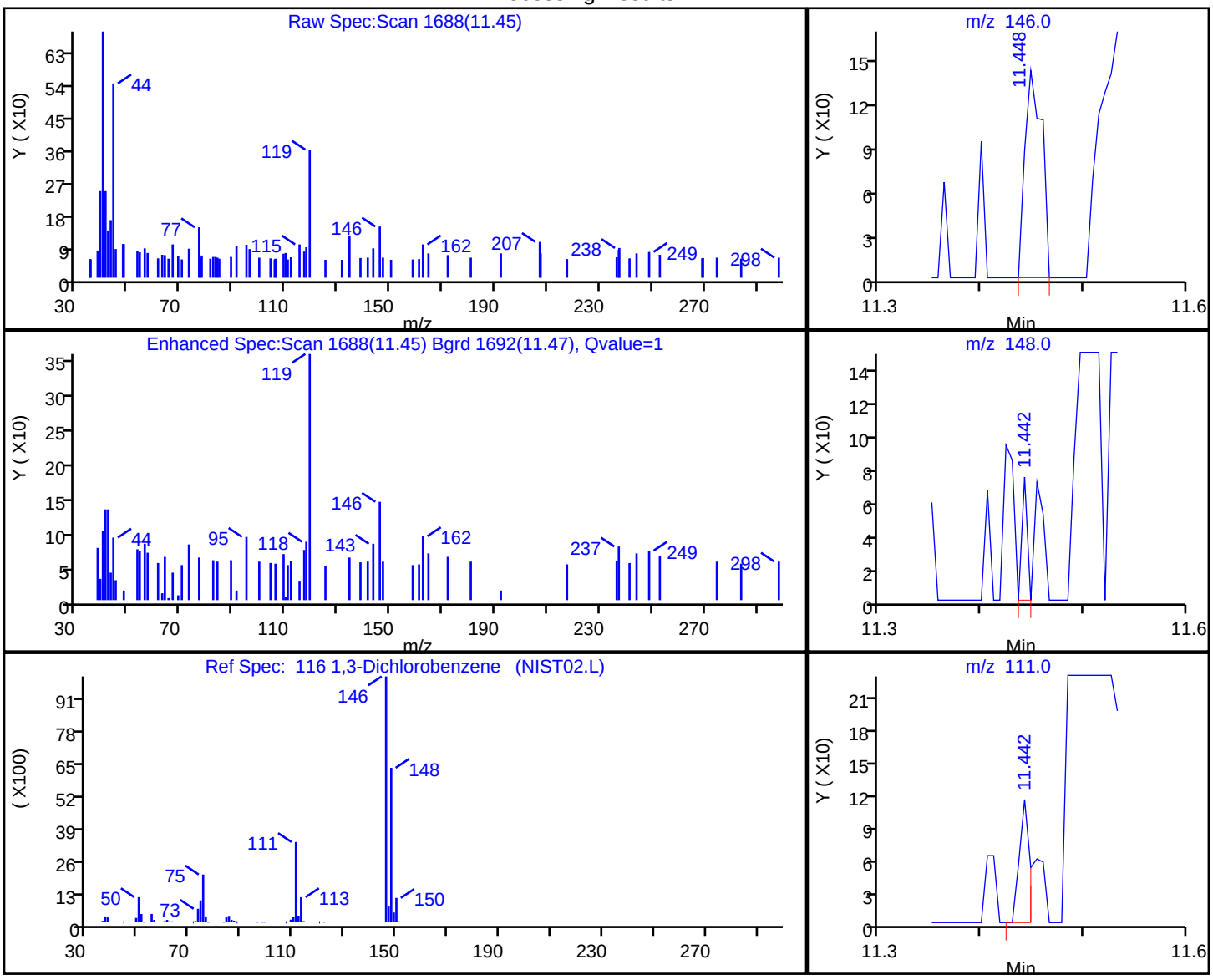
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

116 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
11.45	146.00	164	0.015860
11.44	148.00	27	
11.44	111.00	80	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

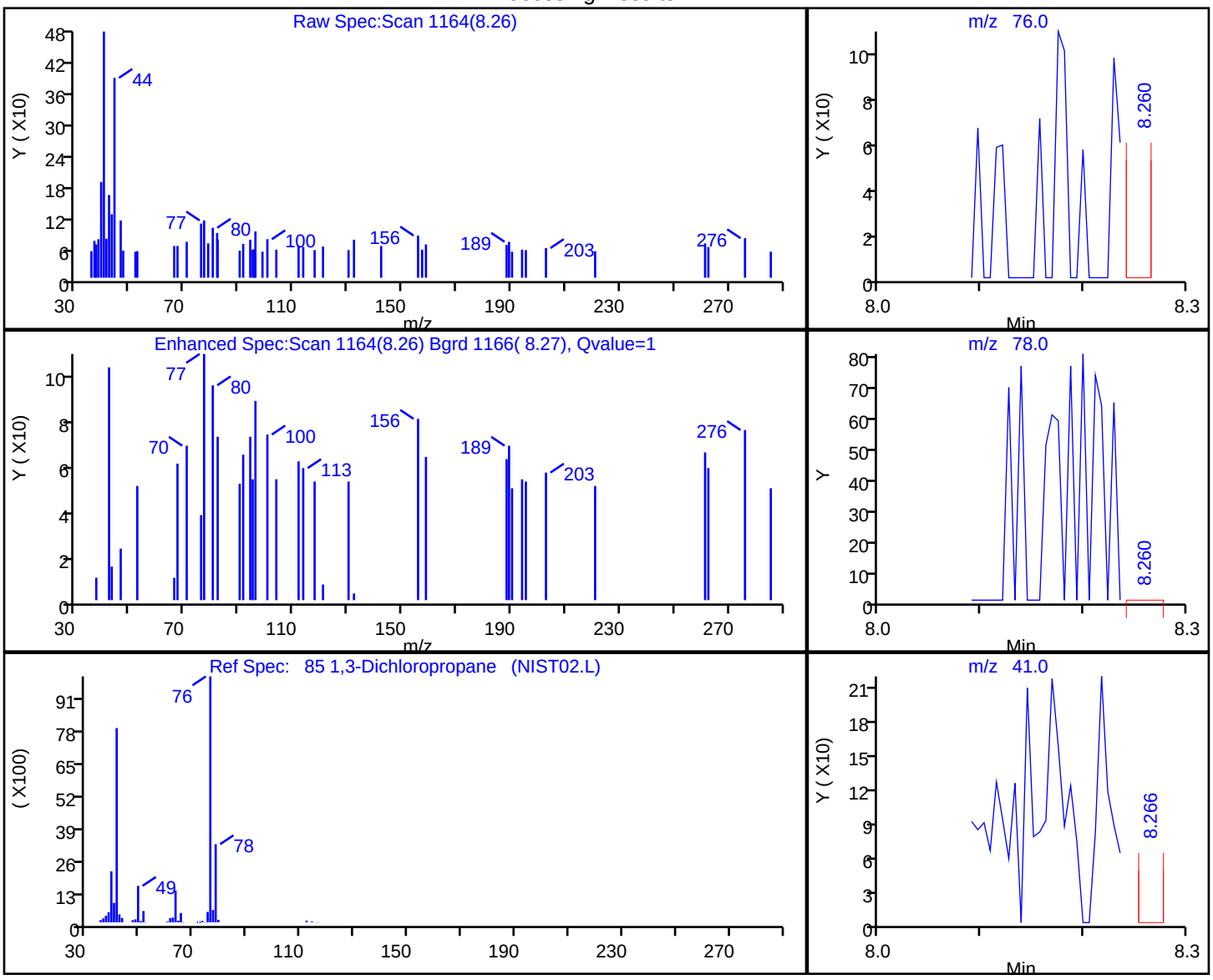
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

85 1,3-Dichloropropane, CAS: 142-28-9

Processing Results



RT	Mass	Response	Amount
8.26	76.00	73	0.012228
8.26	78.00	98	
8.27	41.00	131	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

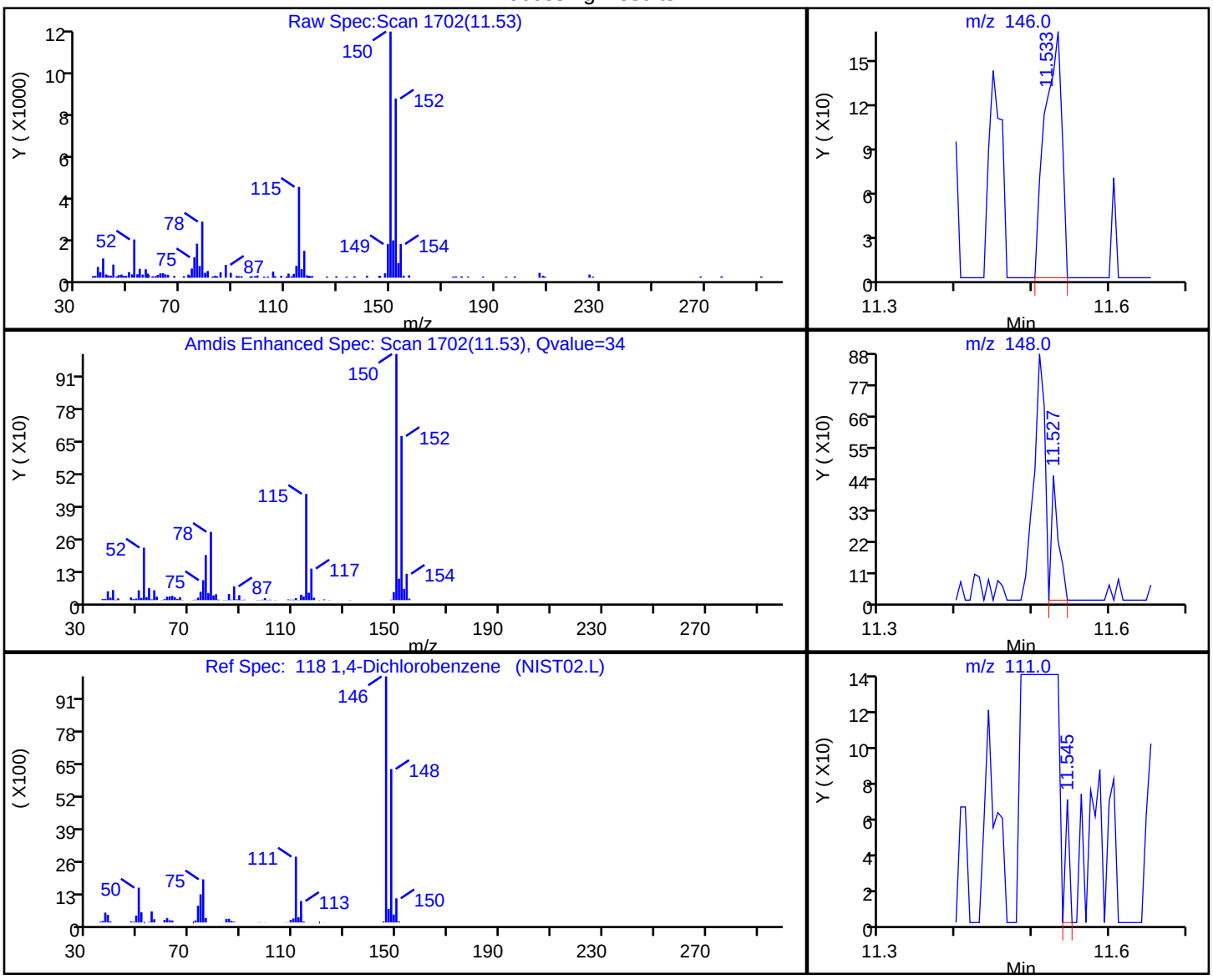
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

118 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
11.53	146.00	260	0.024001
11.53	148.00	284	
11.55	111.00	24	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

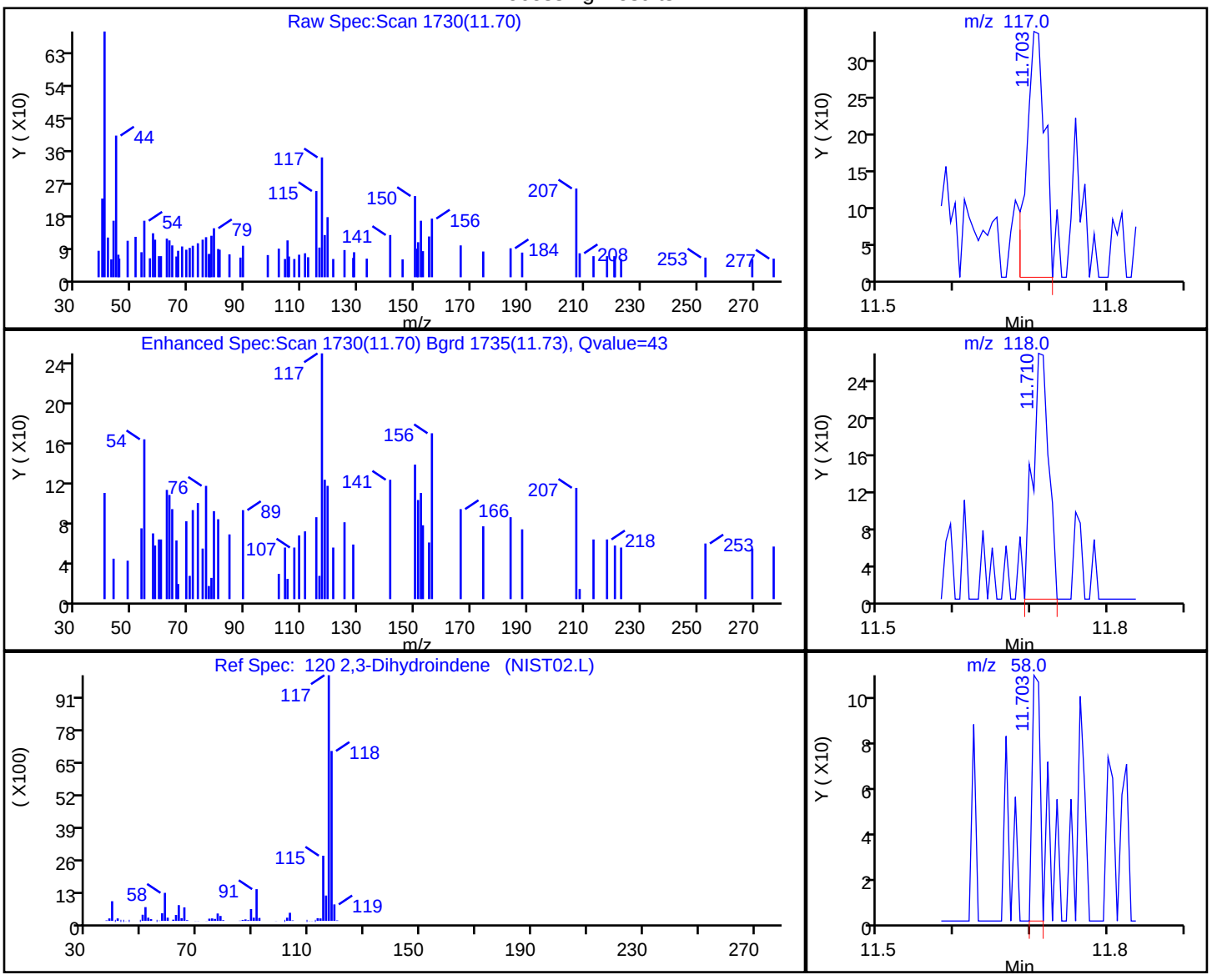
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 2,3-Dihydroindene, CAS: 496-11-7

Processing Results



RT	Mass	Response	Amount
11.70	117.00	550	0.026032
11.71	118.00	388	
11.70	58.00	76	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

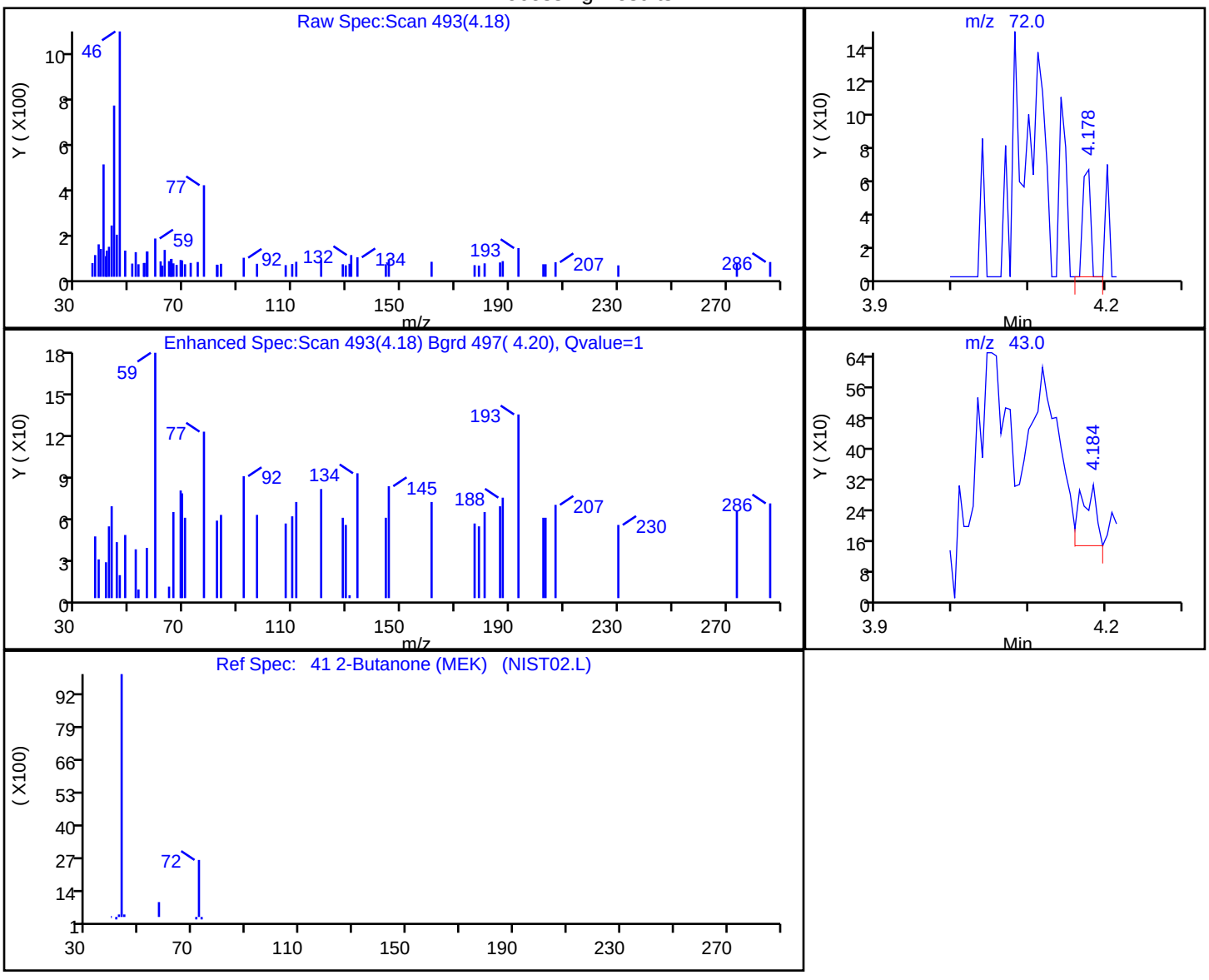
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

41 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
4.18	72.00	44	0.160709
4.18	43.00	220	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

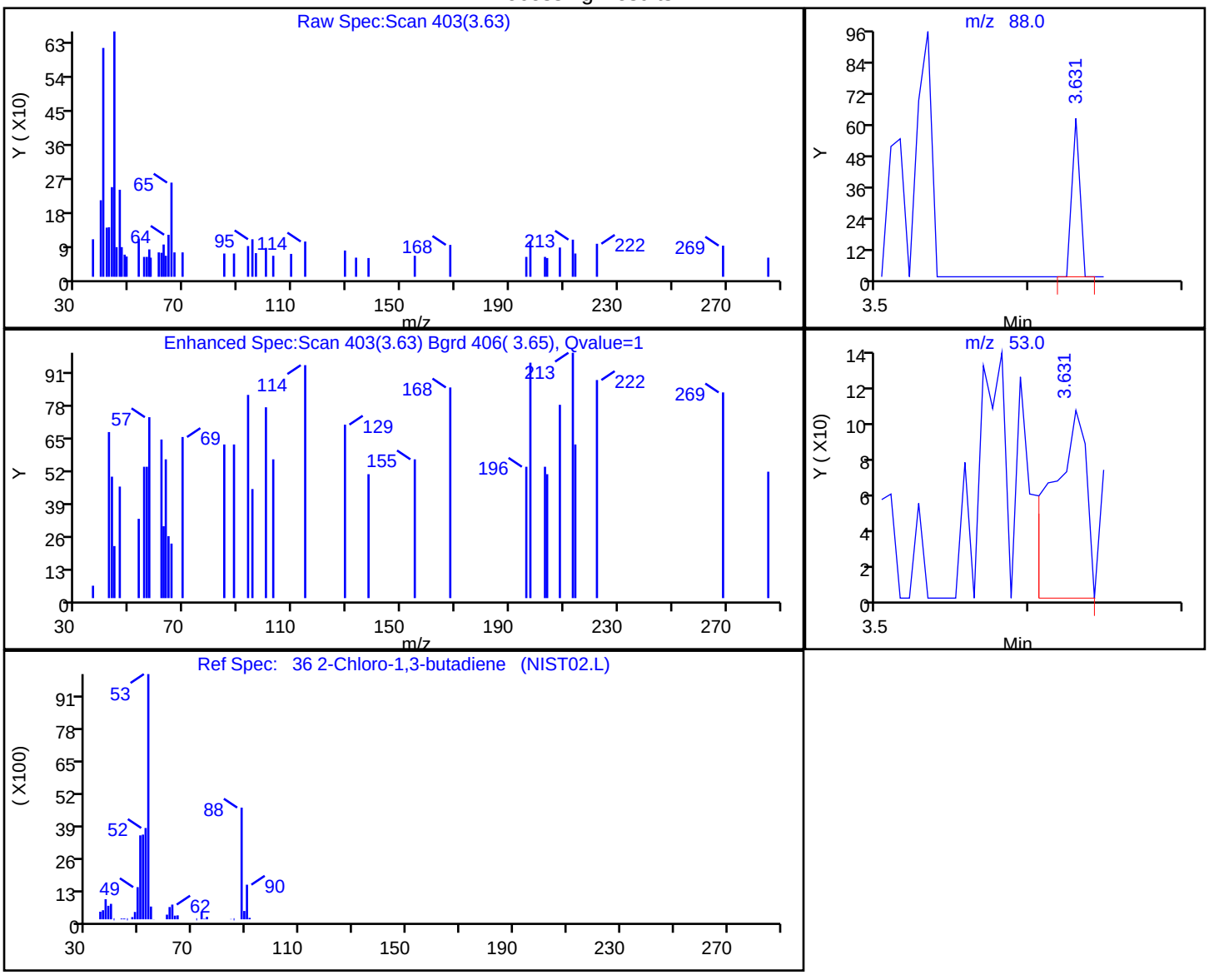
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

36 2-Chloro-1,3-butadiene, CAS: 126-99-8

Processing Results



RT	Mass	Response	Amount
3.63	88.00	23	0.004653
3.63	53.00	158	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

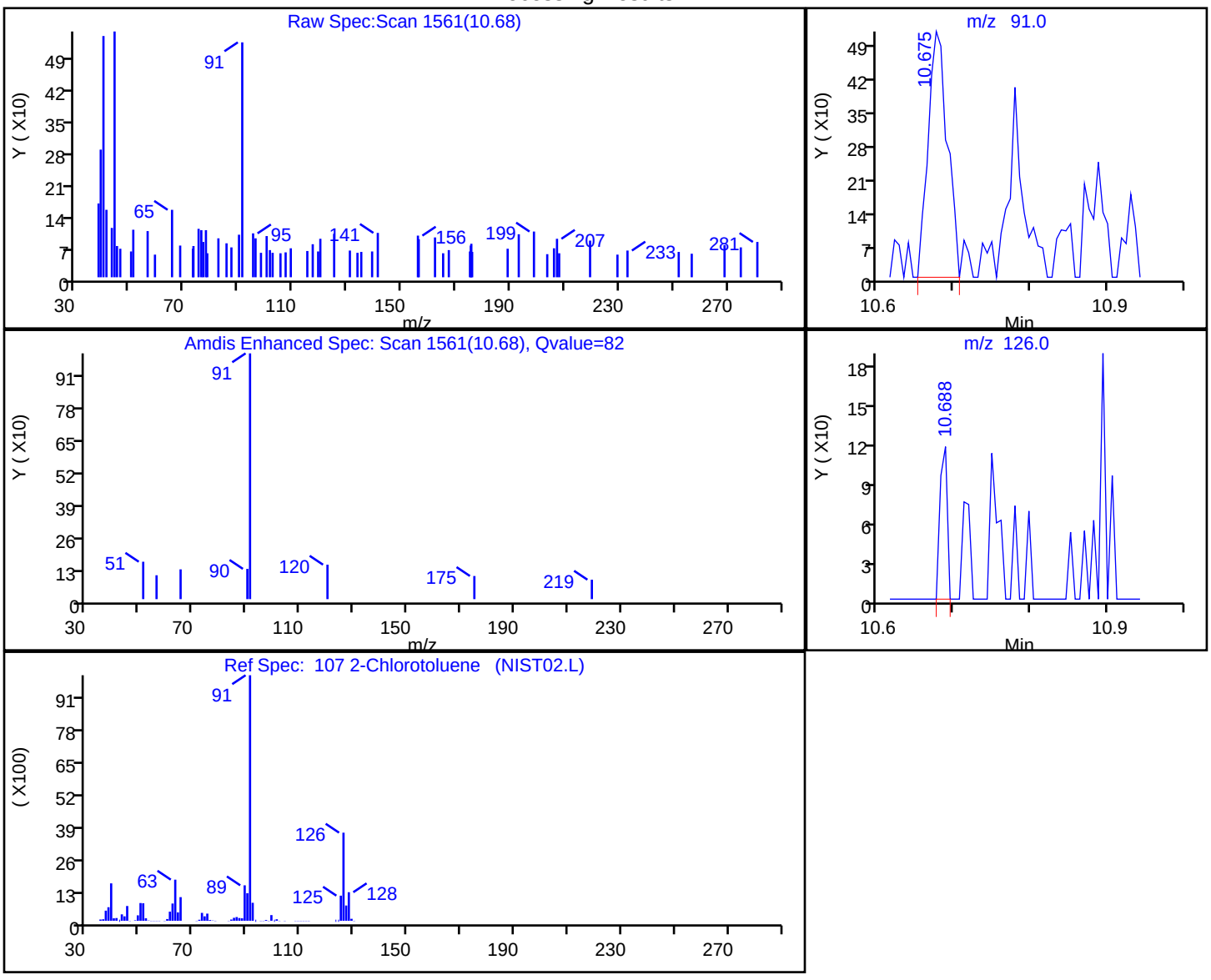
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

107 2-Chlorotoluene, CAS: 95-49-8

Processing Results



RT	Mass	Response	Amount
10.68	91.00	910	0.042707
10.69	126.00	77	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

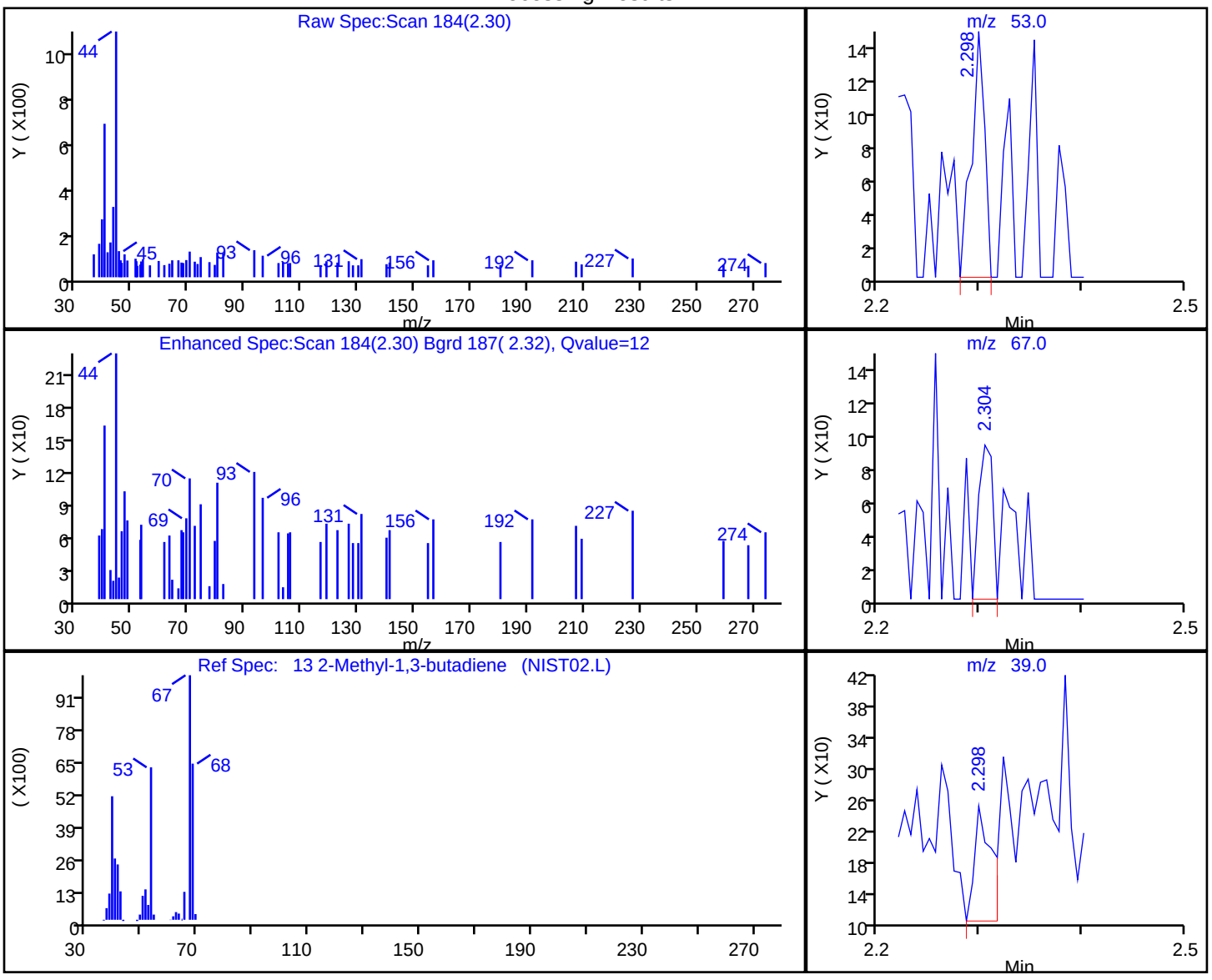
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

13 2-Methyl-1,3-butadiene, CAS: 78-79-5

Processing Results



RT	Mass	Response	Amount
2.30	53.00	132	0.027822
2.30	67.00	89	
2.30	39.00	170	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

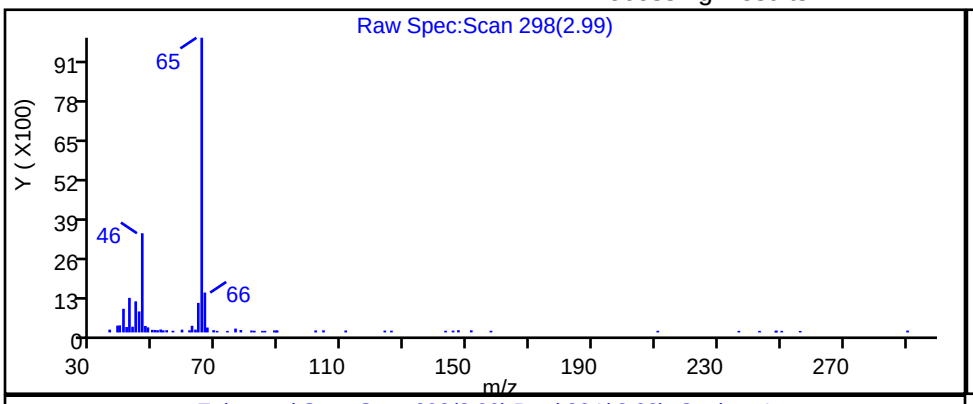
User Disabled Compound Report

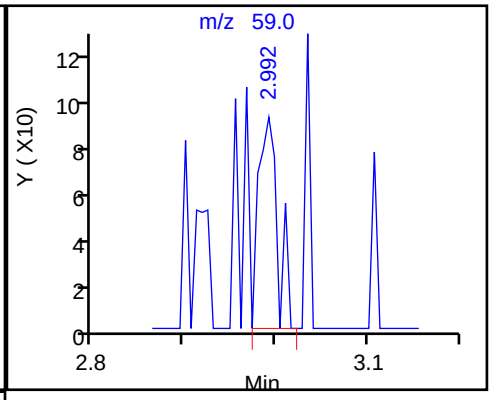
TestAmerica Edison

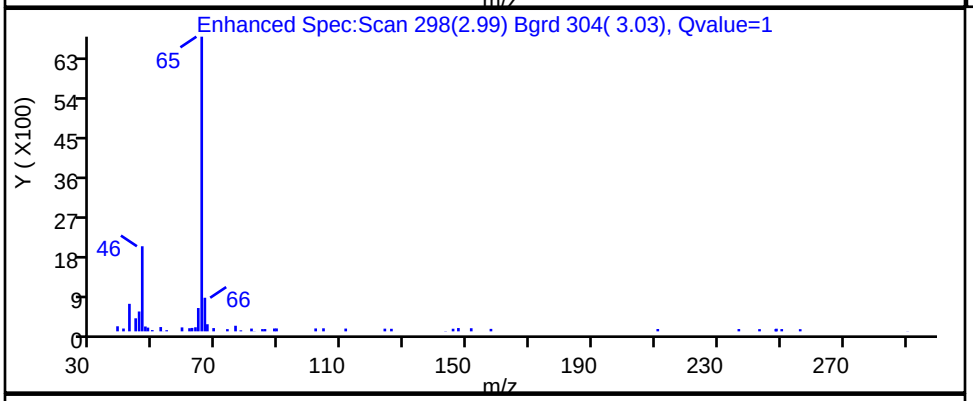
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

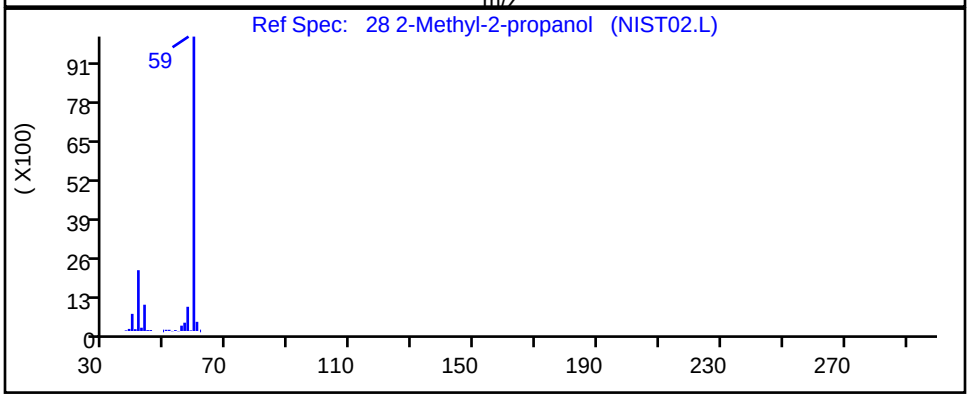
28 2-Methyl-2-propanol, CAS: 75-65-0

Processing Results









RT	Mass	Response	Amount
2.99	59.00	132	0.690238

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

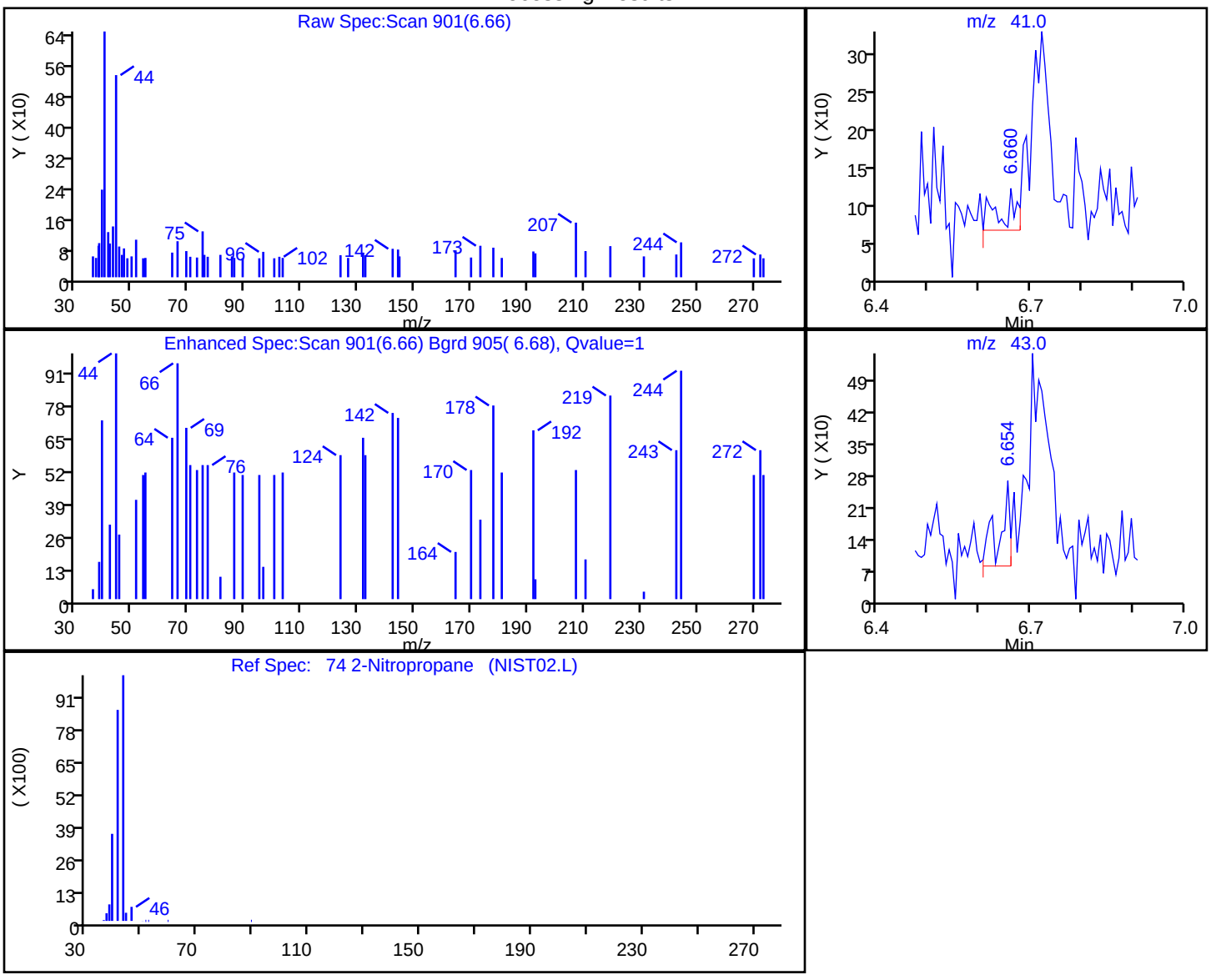
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Processing Results



RT	Mass	Response	Amount
6.66	41.00	115	-13.758865
6.65	43.00	267	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

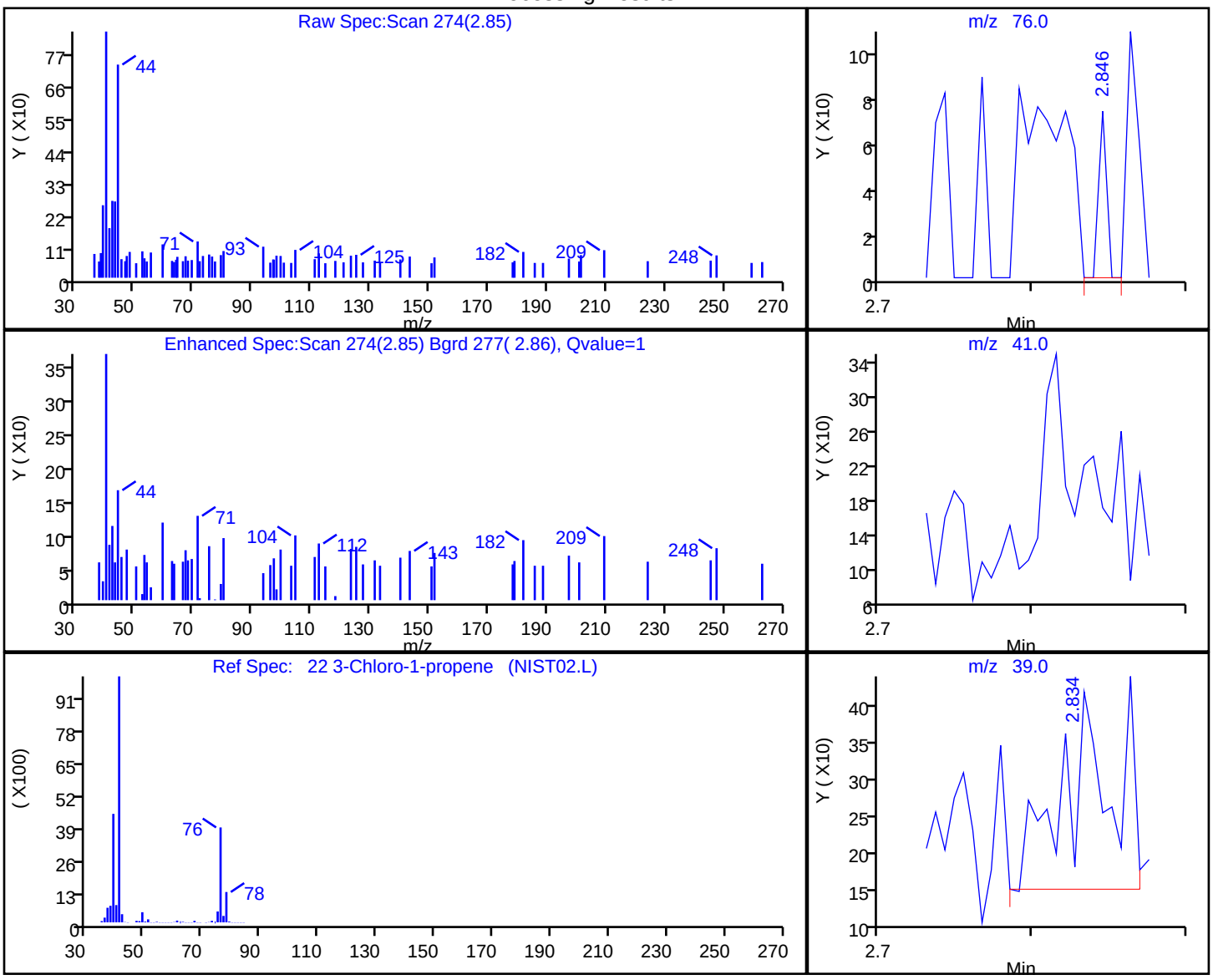
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

22 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
2.85	76.00	27	0.008955
2.86	41.00	224	
2.83	39.00	602	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

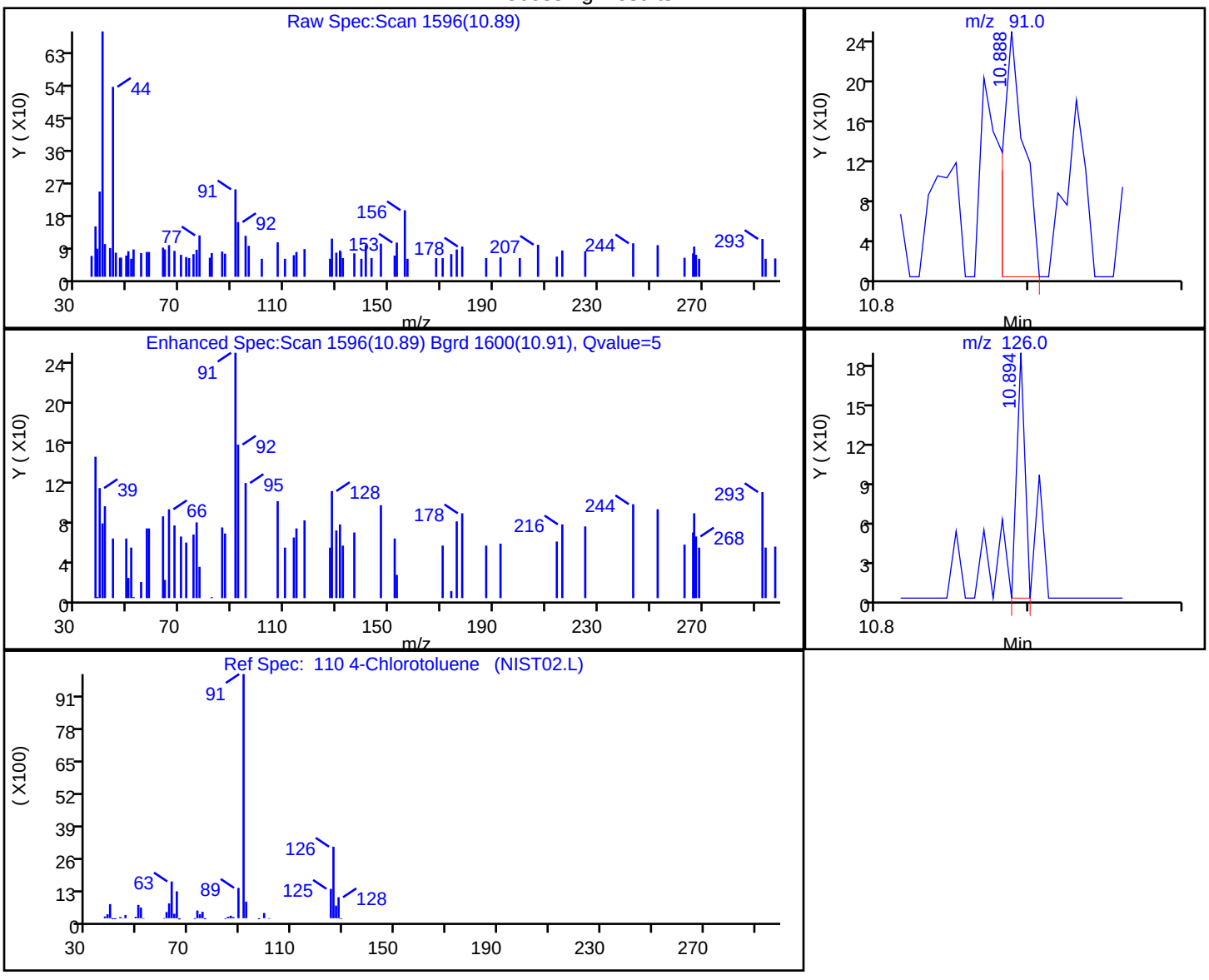
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

110 4-Chlorotoluene, CAS: 106-43-4

Processing Results



RT	Mass	Response	Amount
10.89	91.00	225	0.011965
10.89	126.00	68	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

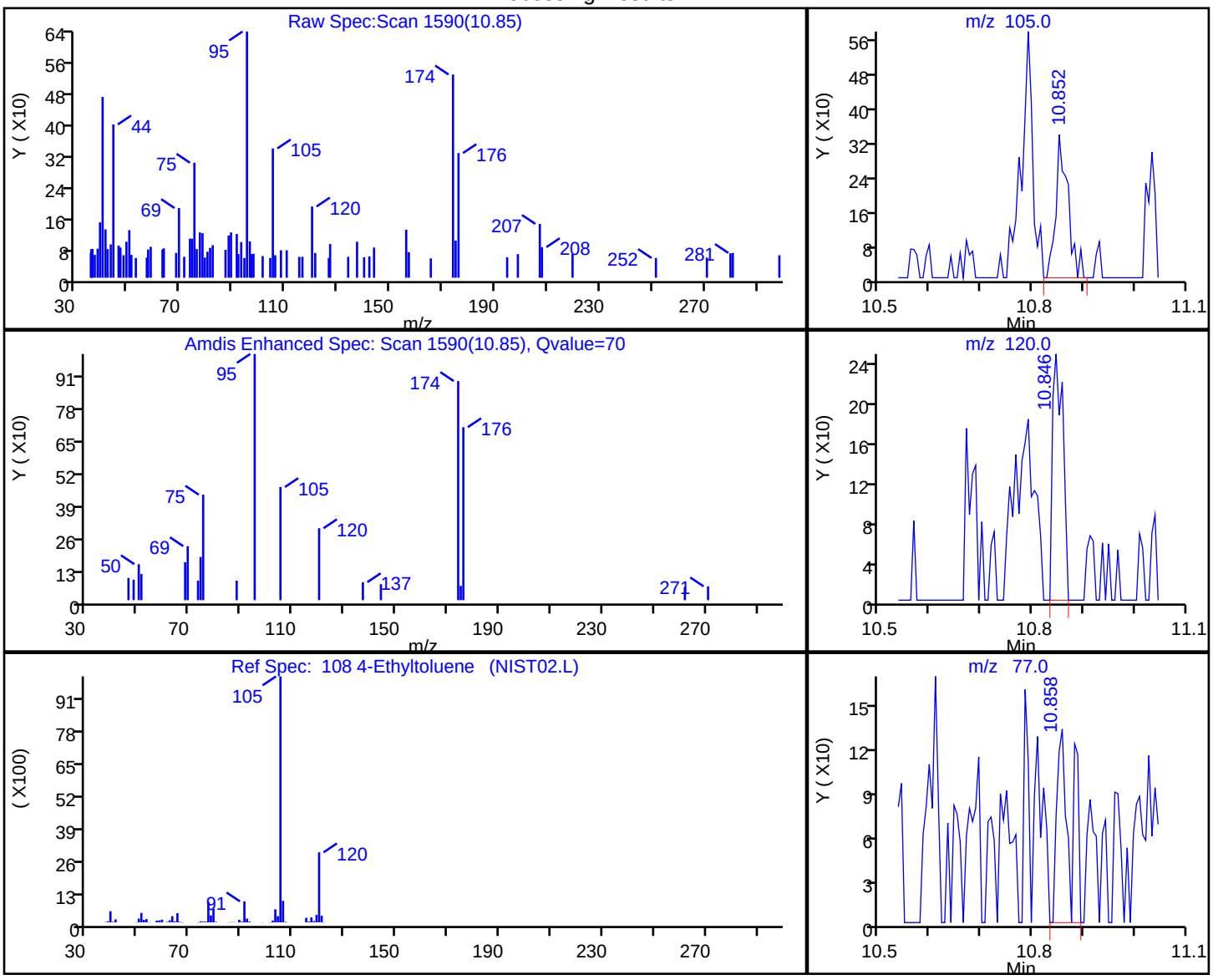
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

108 4-Ethyltoluene, CAS: 622-96-8

Processing Results



RT	Mass	Response	Amount
10.85	105.00	554	0.021946
10.85	120.00	347	
10.86	77.00	252	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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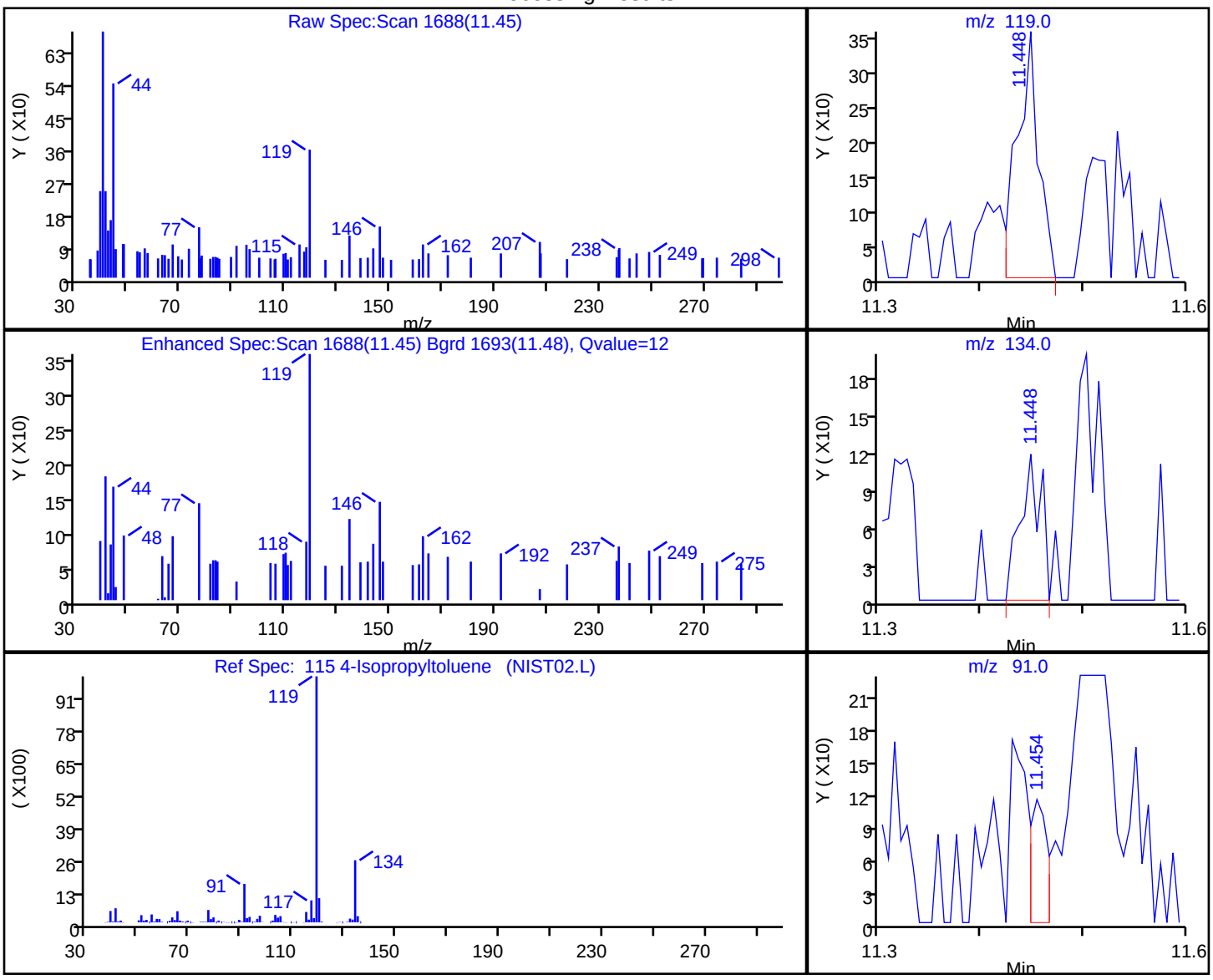
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

115 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
11.45	119.00	522	0.024439
11.45	134.00	167	
11.45	91.00	132	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

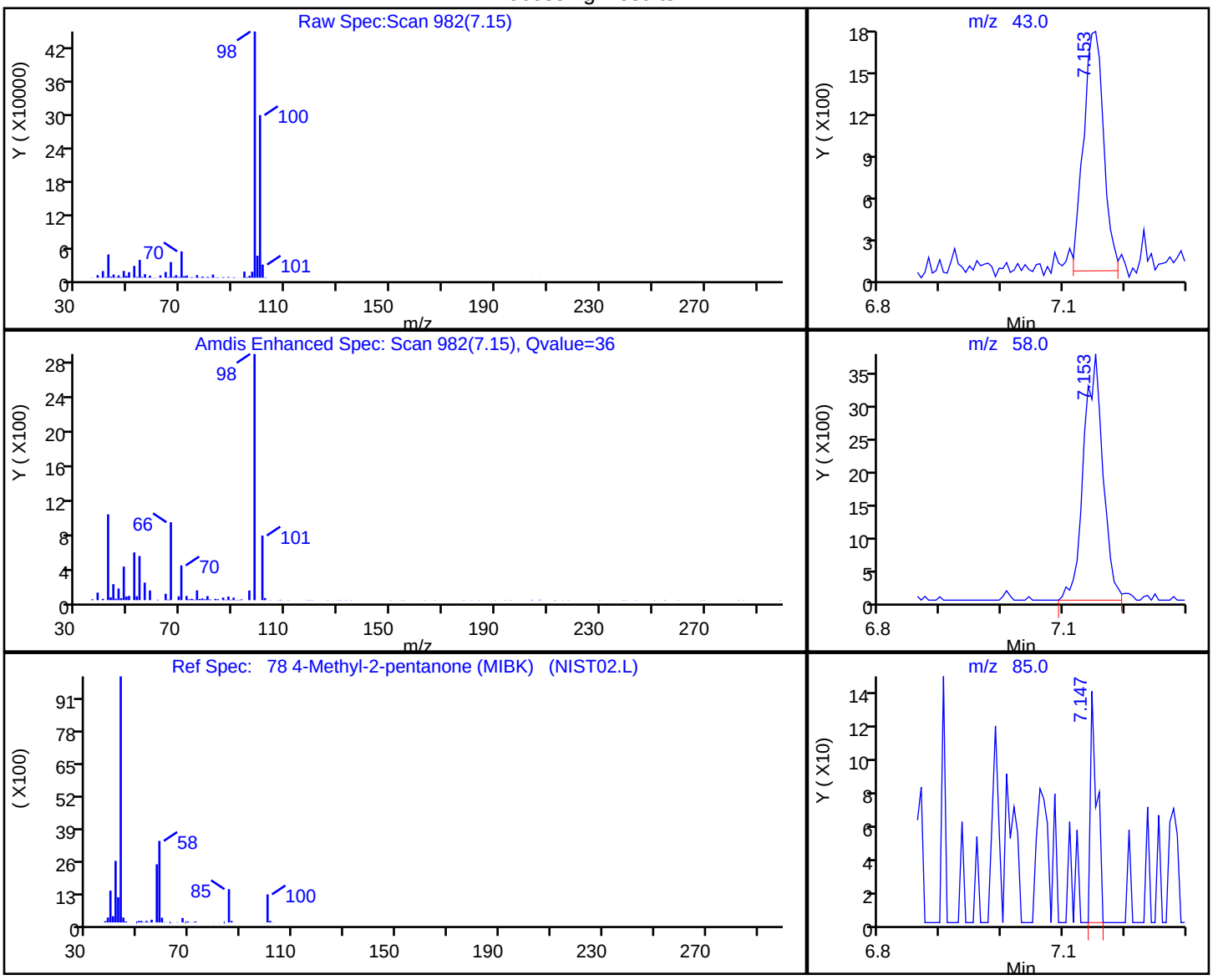
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	3805	1.864160
7.15	58.00	8152	
7.15	85.00	105	
7.15	100.00	739241	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

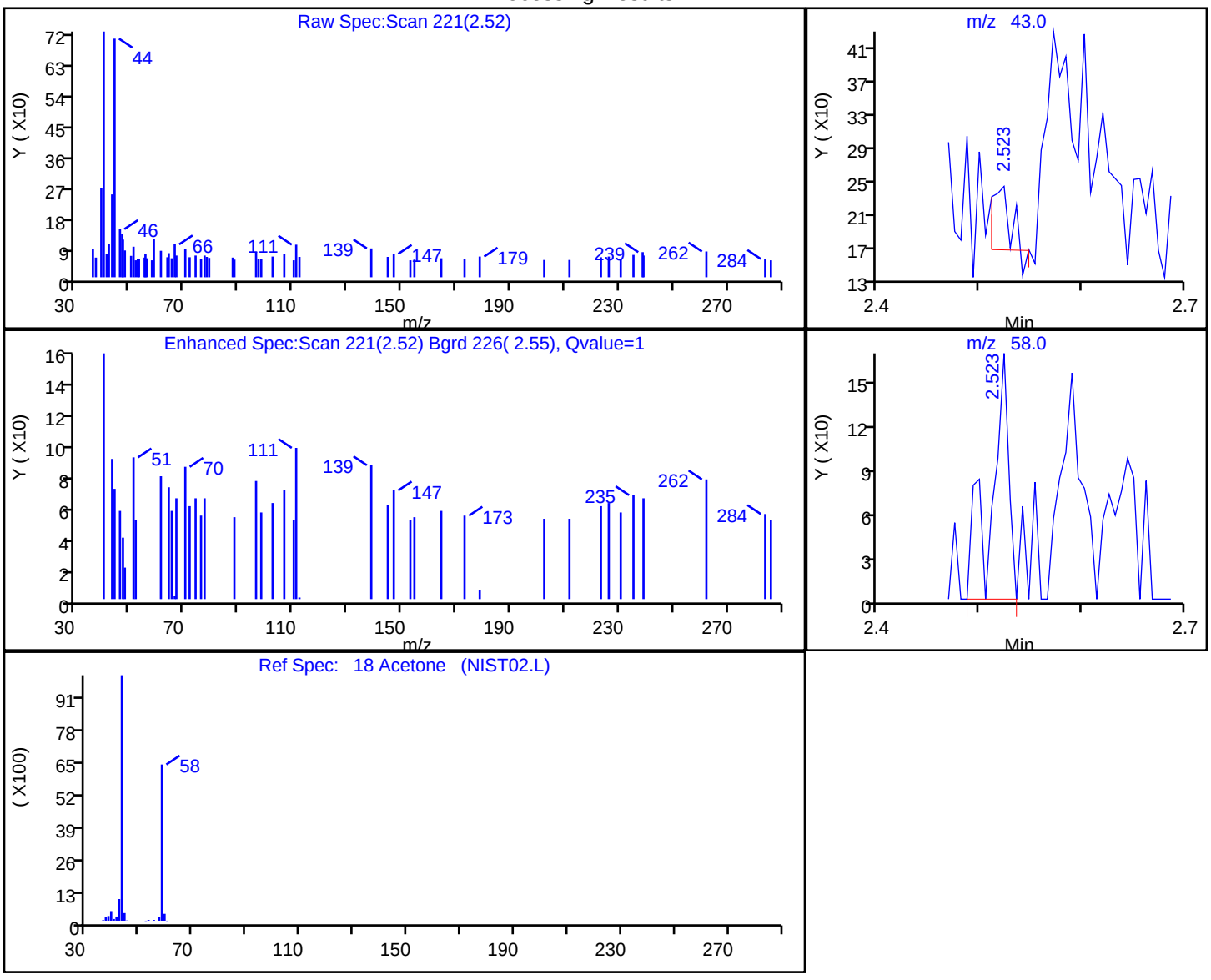
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.52	43.00	82	0.095789
2.52	58.00	197	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

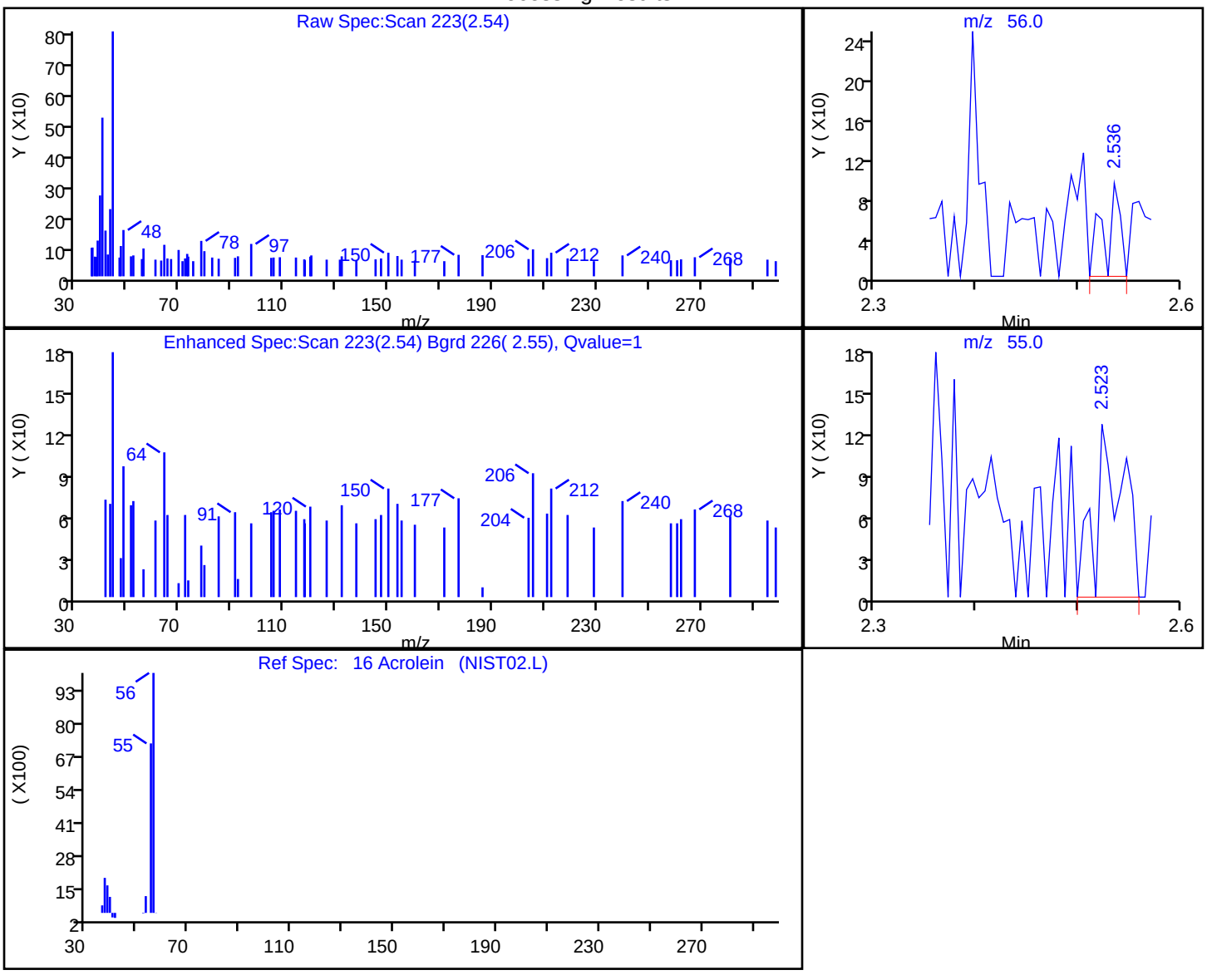
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

16 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
2.54	56.00	99	0.327409
2.52	55.00	239	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

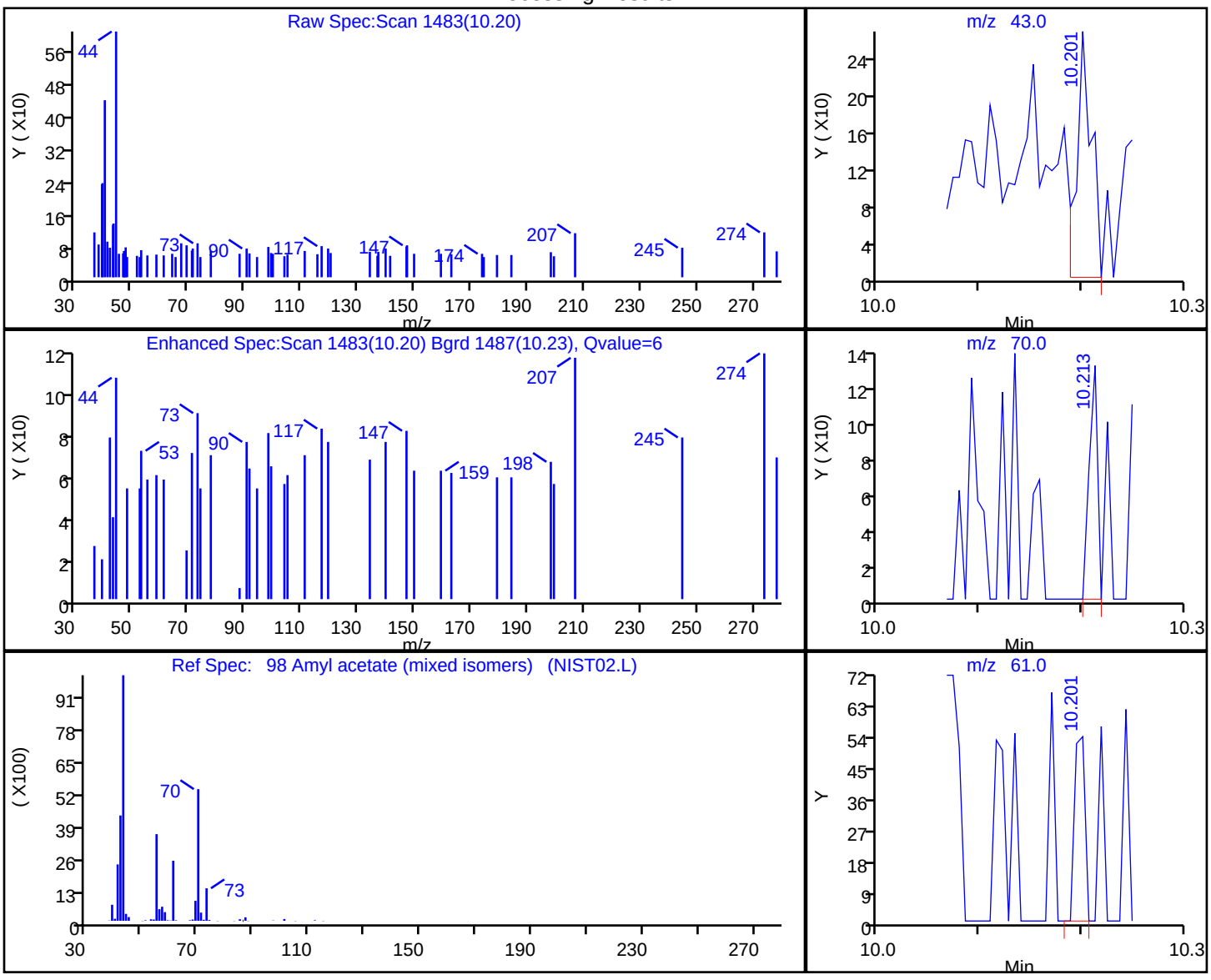
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

98 Amyl acetate (mixed isomers), CAS: 628-63-7

Processing Results



RT	Mass	Response	Amount
10.20	43.00	265	0.049534
10.21	70.00	76	
10.20	61.00	39	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

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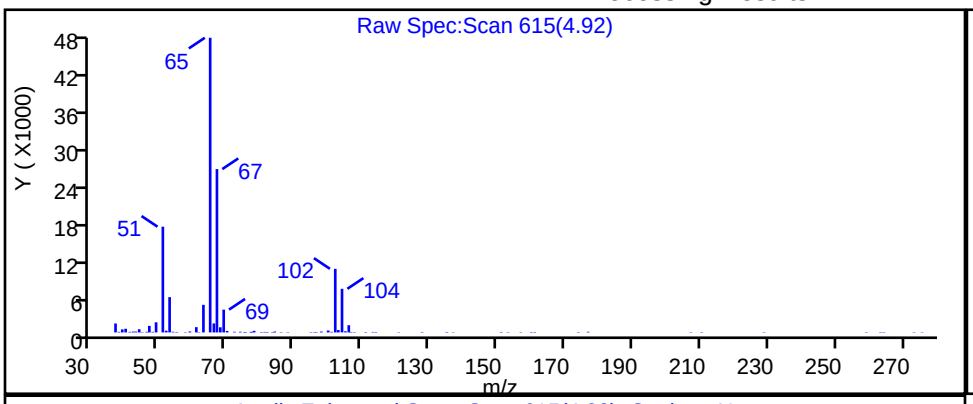
User Disabled Compound Report

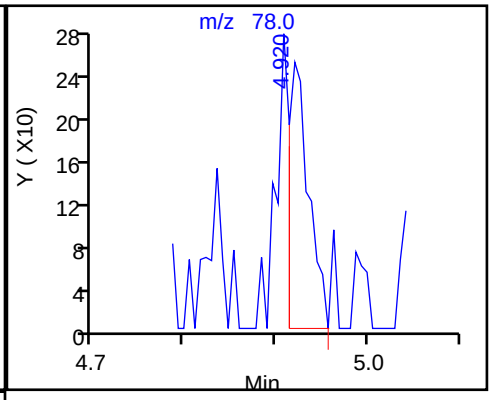
TestAmerica Edison

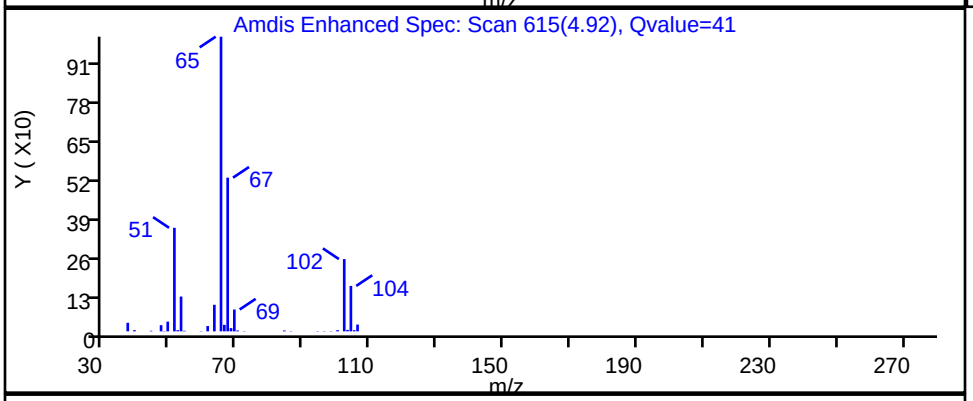
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

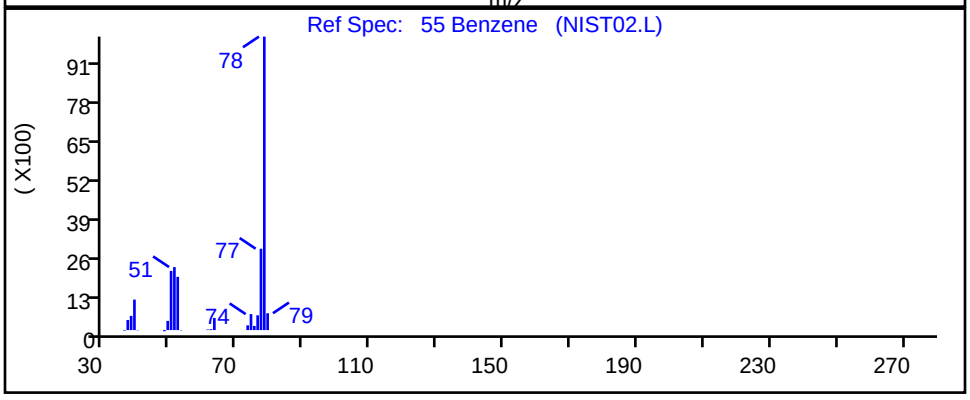
55 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
4.92	78.00	379	0.016096

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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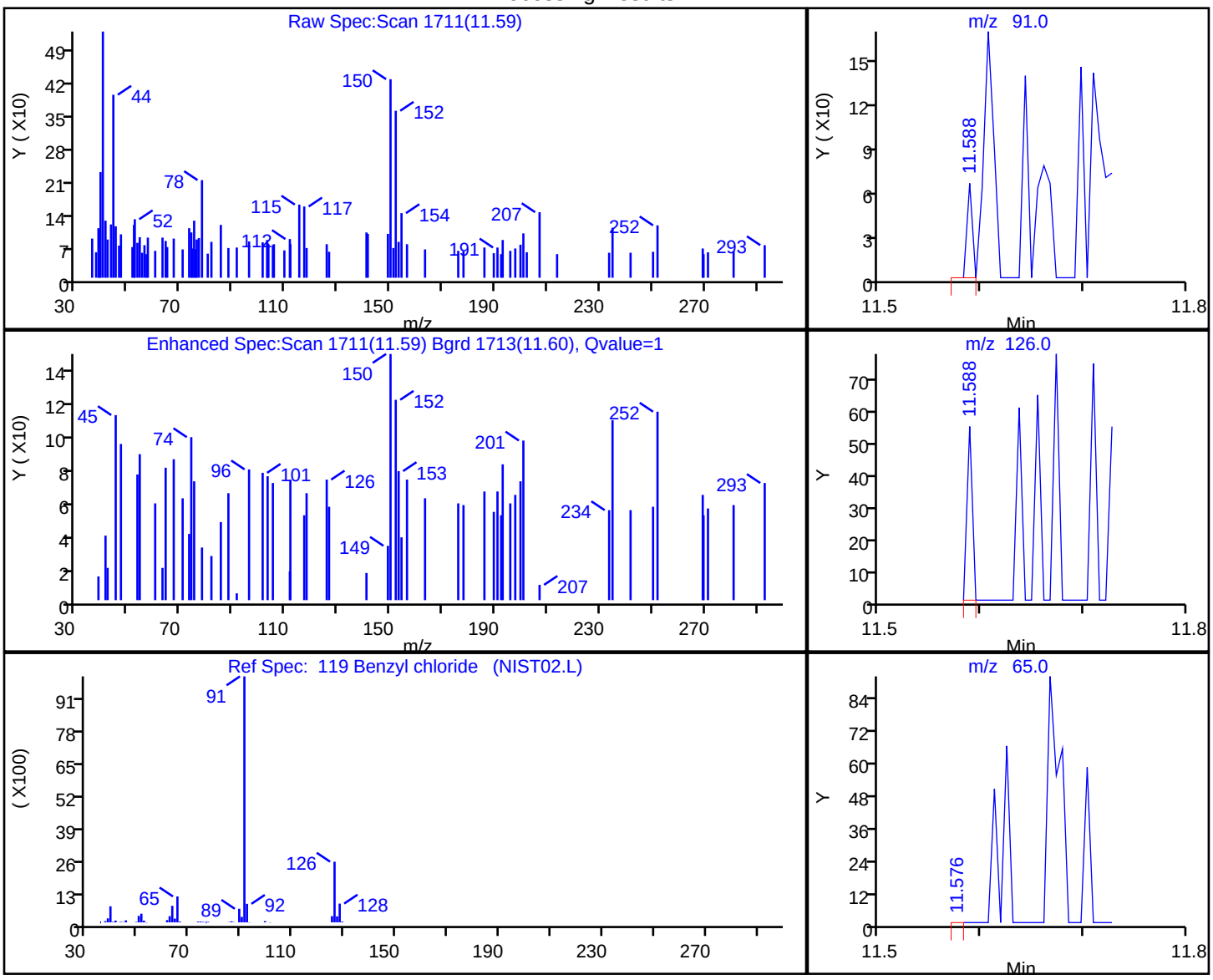
TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

119 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
11.59	91.00	43	0.009050
11.59	126.00	20	
11.58	65.00	38	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

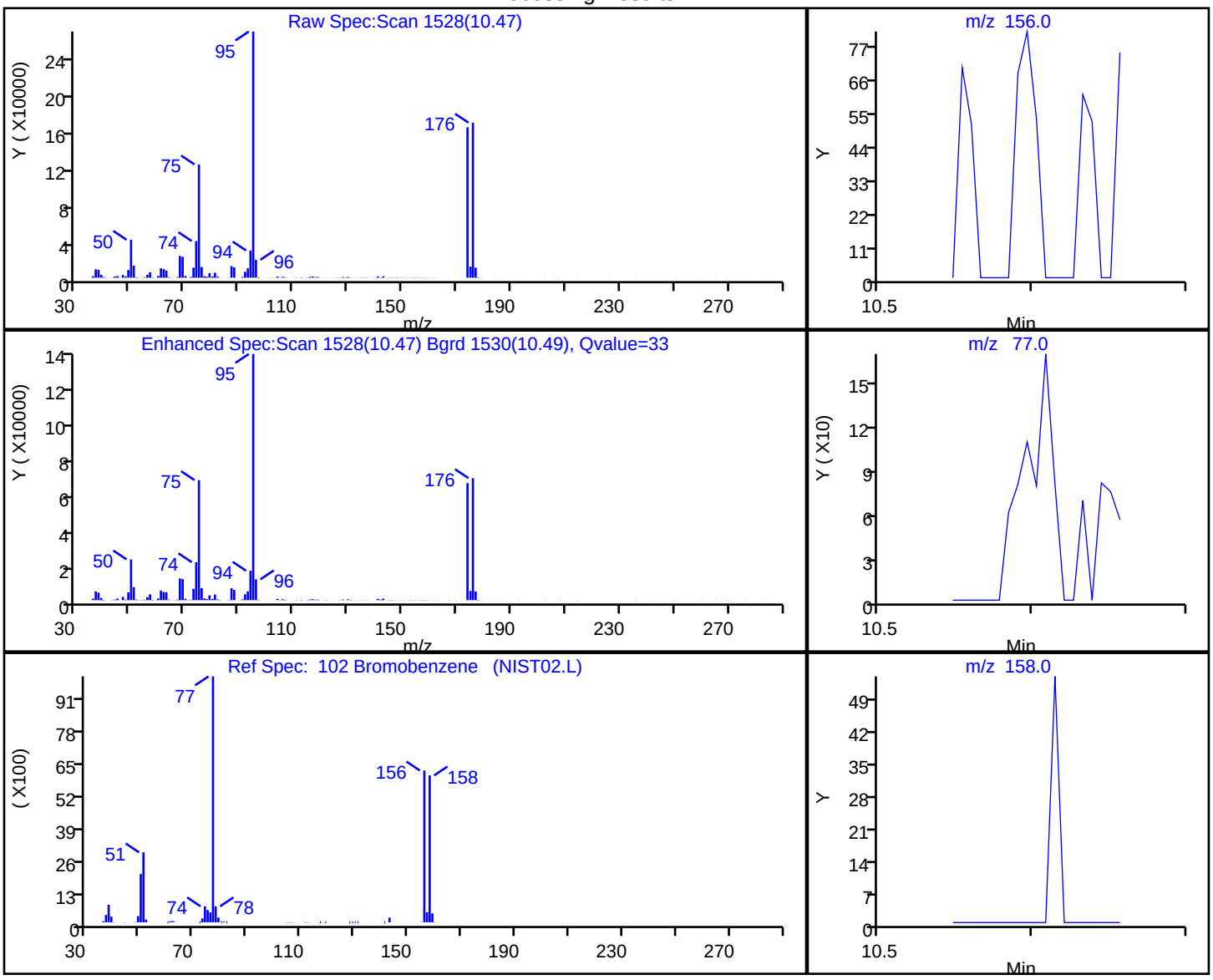
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

102 Bromobenzene, CAS: 108-86-1

Processing Results



RT	Mass	Response	Amount
10.47	156.00	96	0.018757
10.47	77.00	2222	
10.47	158.00	57	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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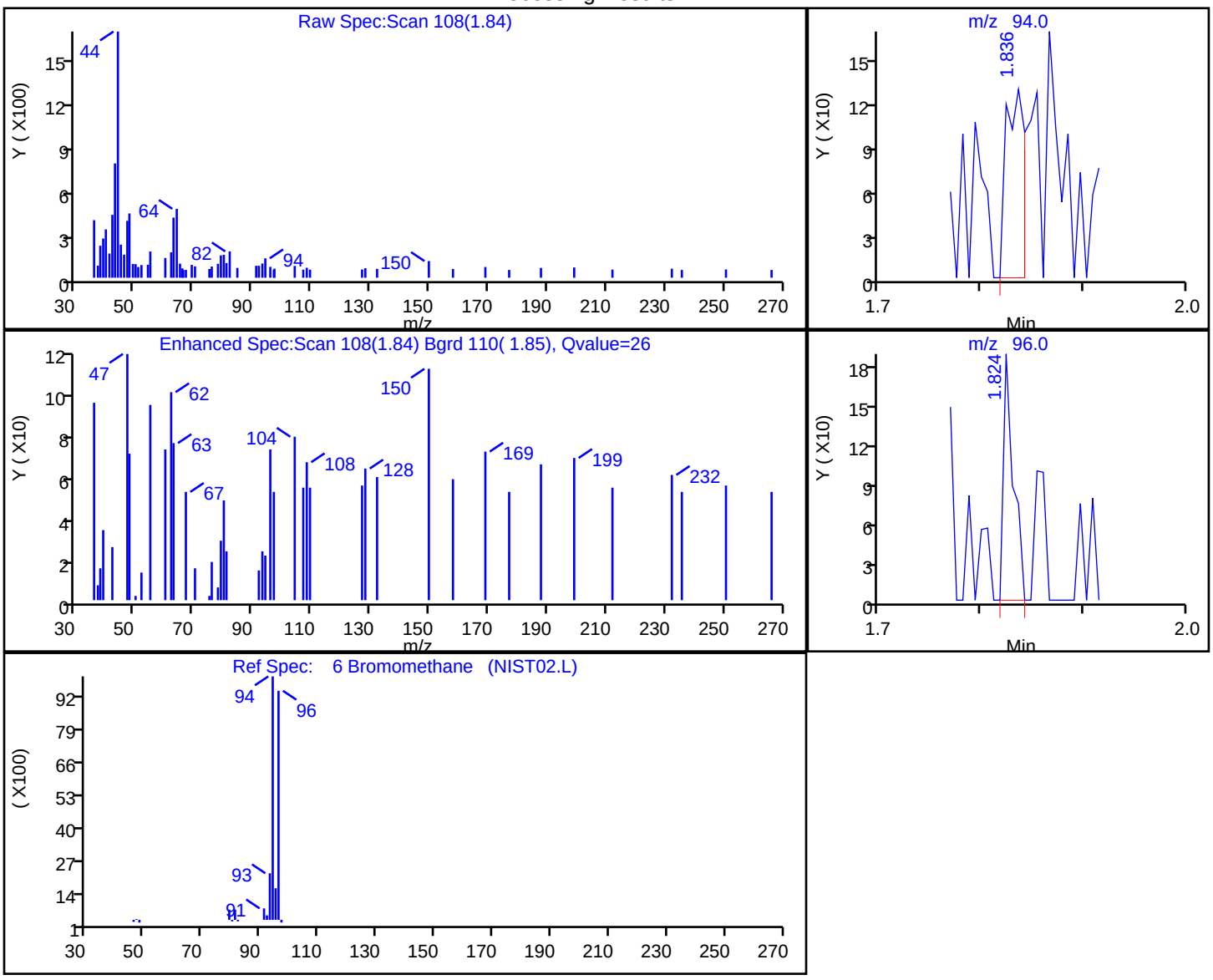
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

6 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
1.84	94.00	161	0.041964
1.82	96.00	123	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

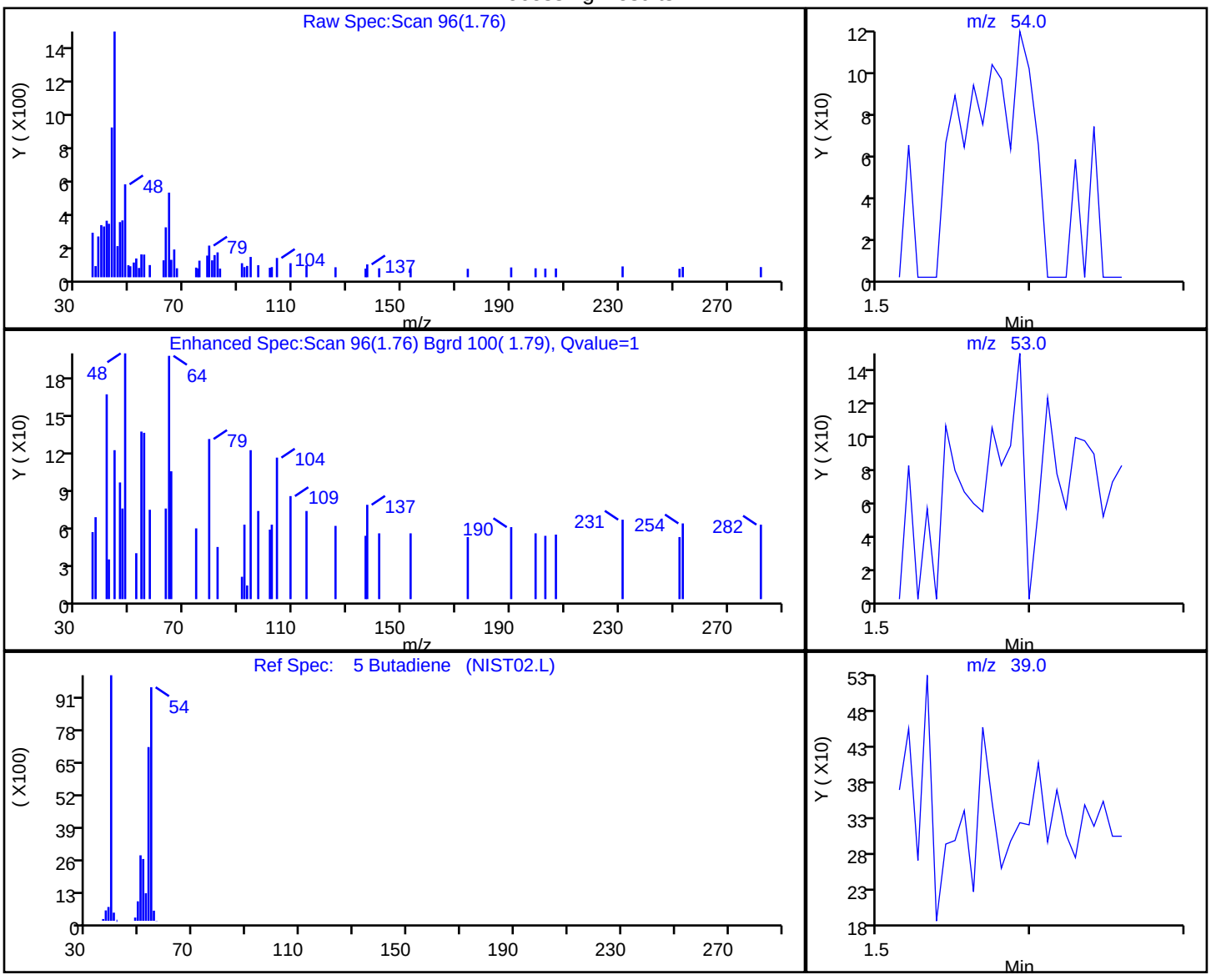
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

5 Butadiene, CAS: 106-99-0

Processing Results



RT	Mass	Response	Amount
1.76	54.00	81	0.020221
1.78	53.00	104	
1.76	39.00	132	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

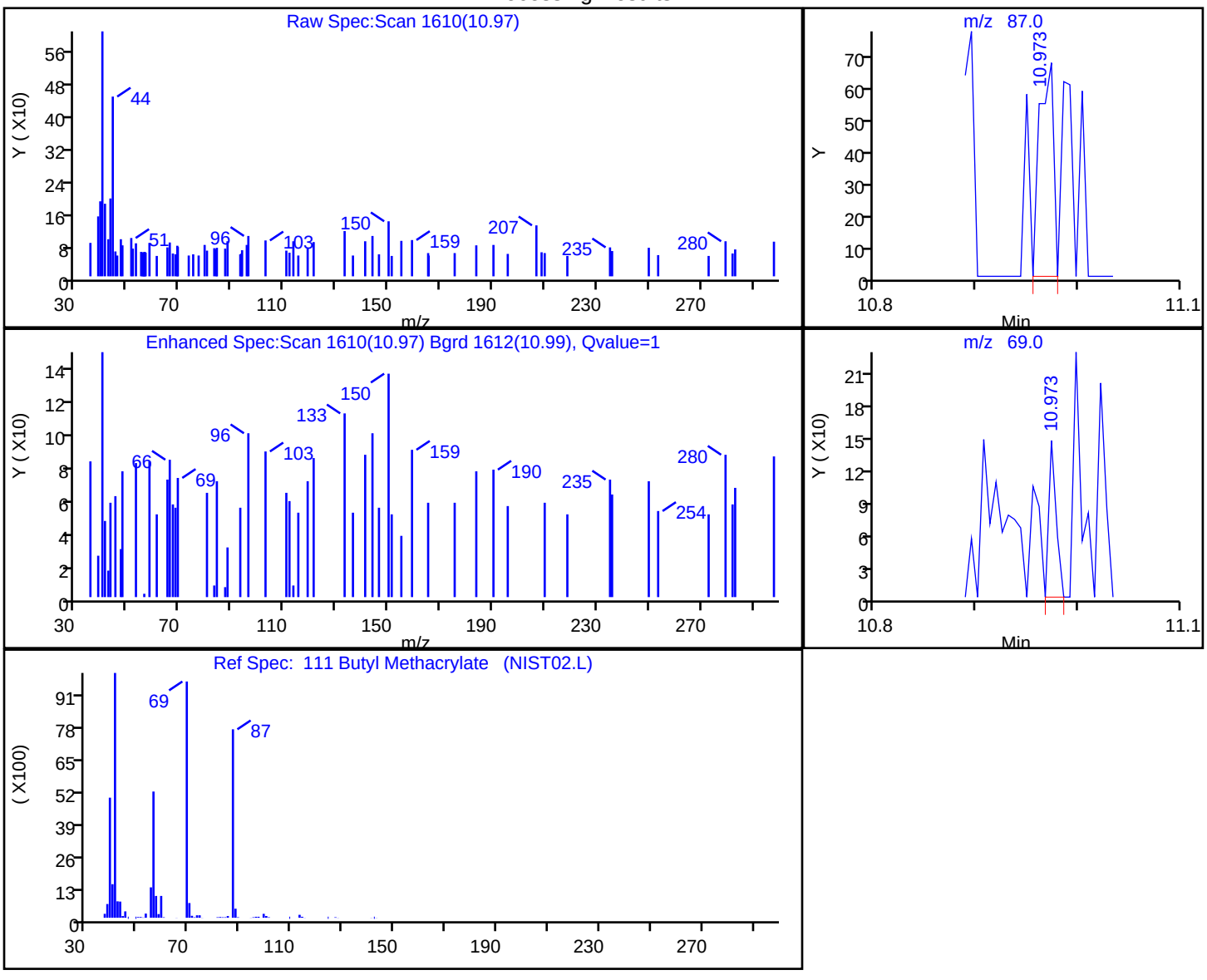
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

111 Butyl Methacrylate, CAS: 97-88-1

Processing Results



RT	Mass	Response	Amount
10.97	87.00	65	0.009113
10.97	69.00	74	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

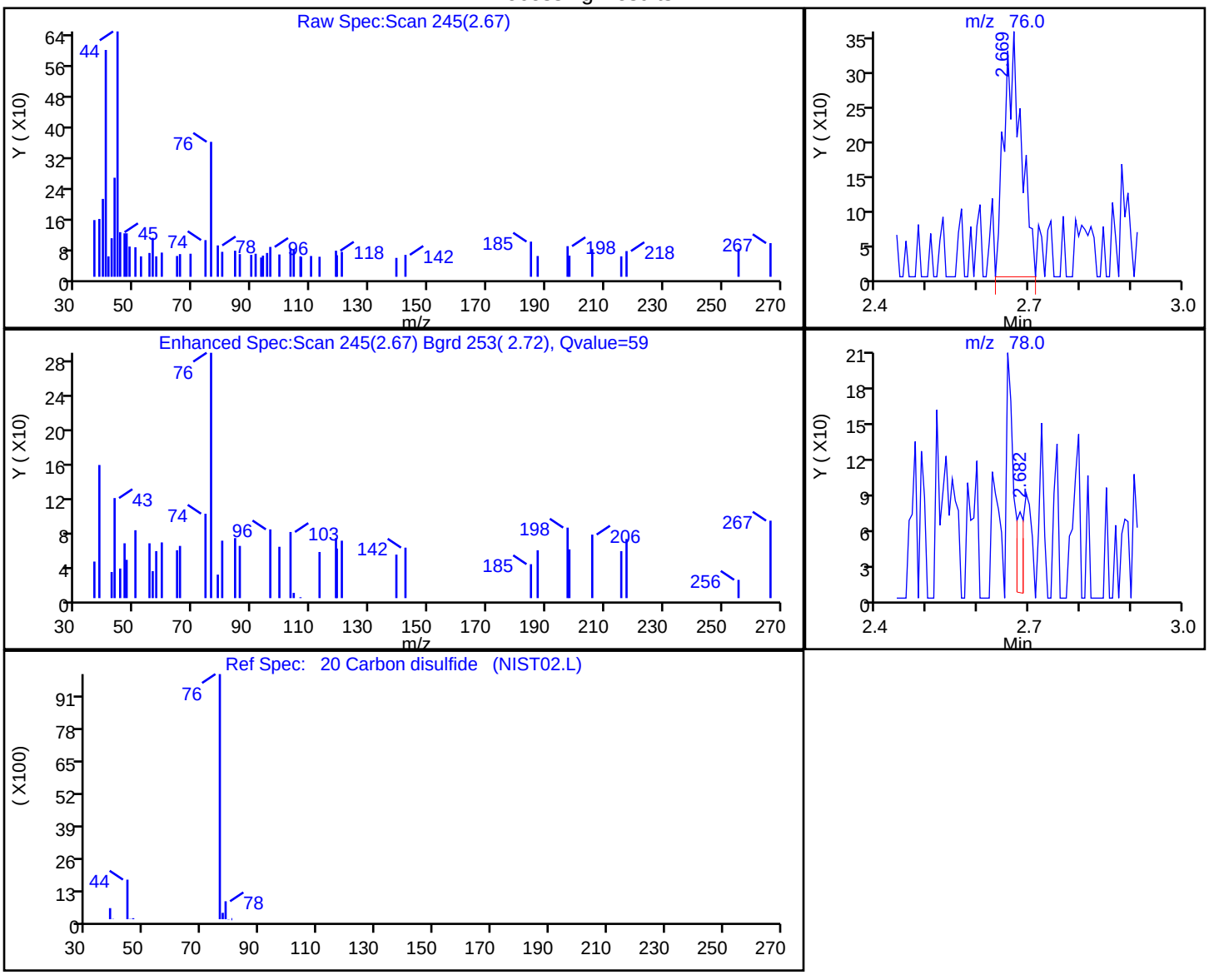
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
2.67	76.00	825	0.044626
2.68	78.00	68	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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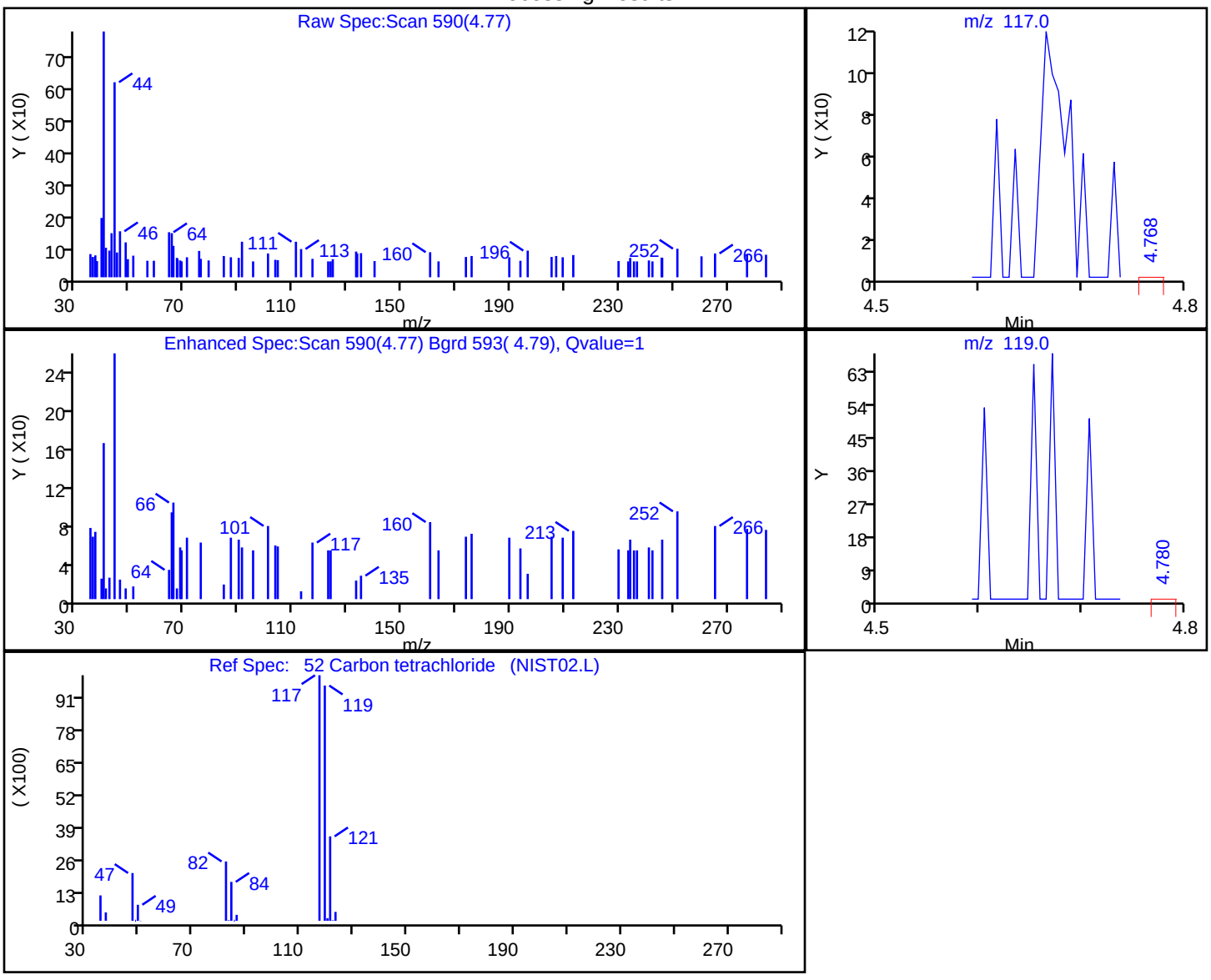
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
4.77	117.00	21	0.003669
4.78	119.00	25	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

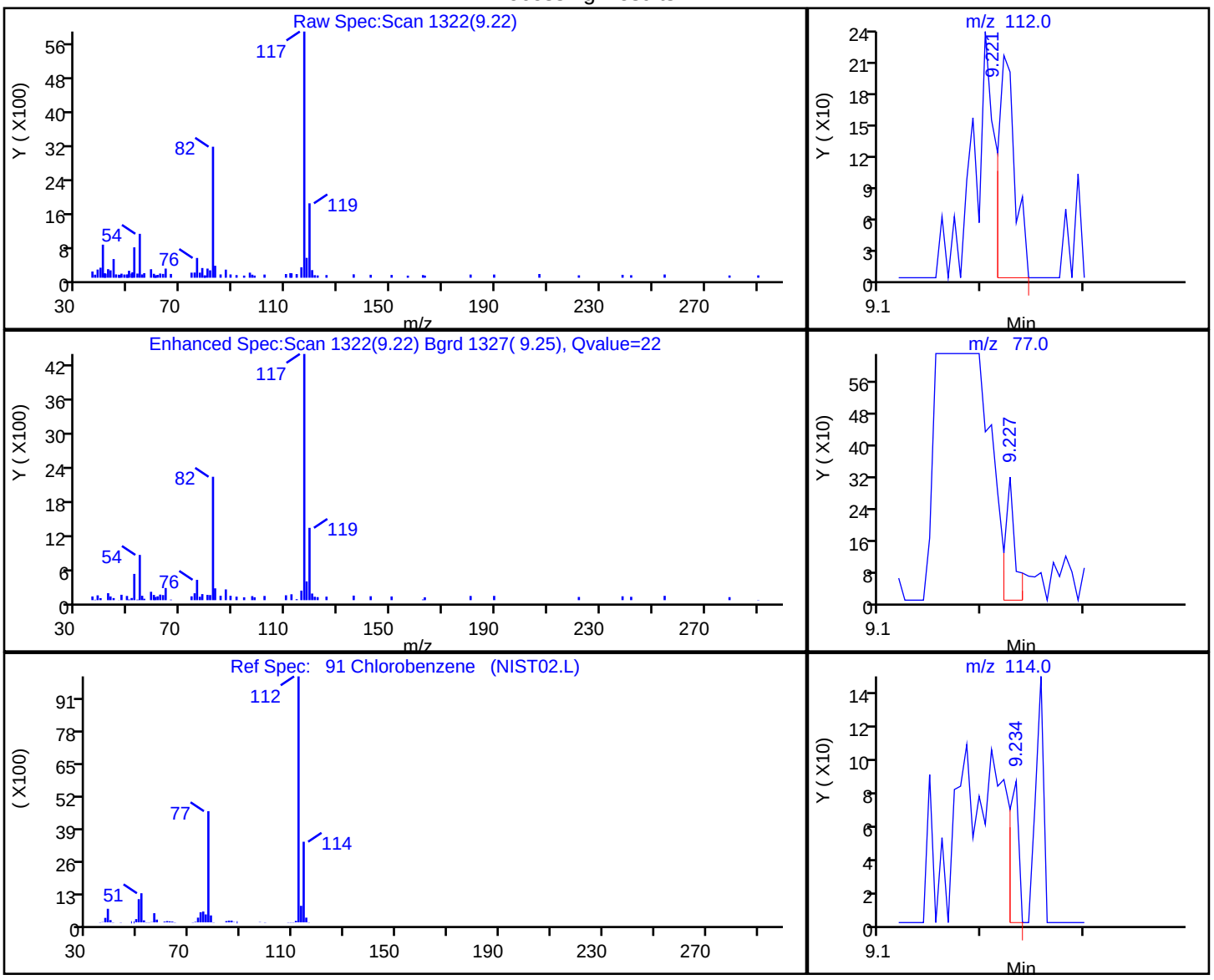
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

91 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
9.22	112.00	242	0.015503
9.23	77.00	210	
9.23	114.00	56	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

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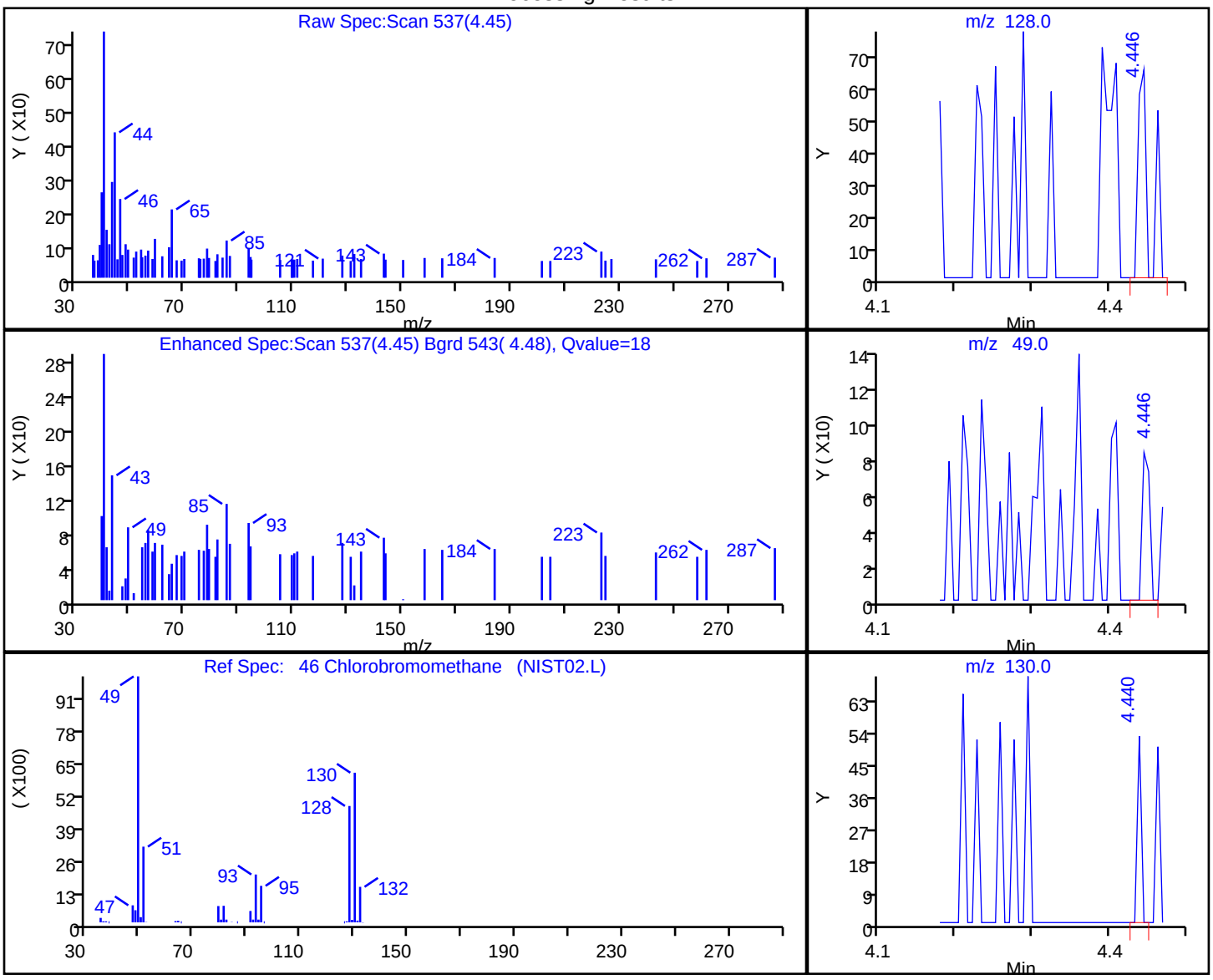
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

46 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
4.45	128.00	65	0.029200
4.45	49.00	57	
4.44	130.00	19	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

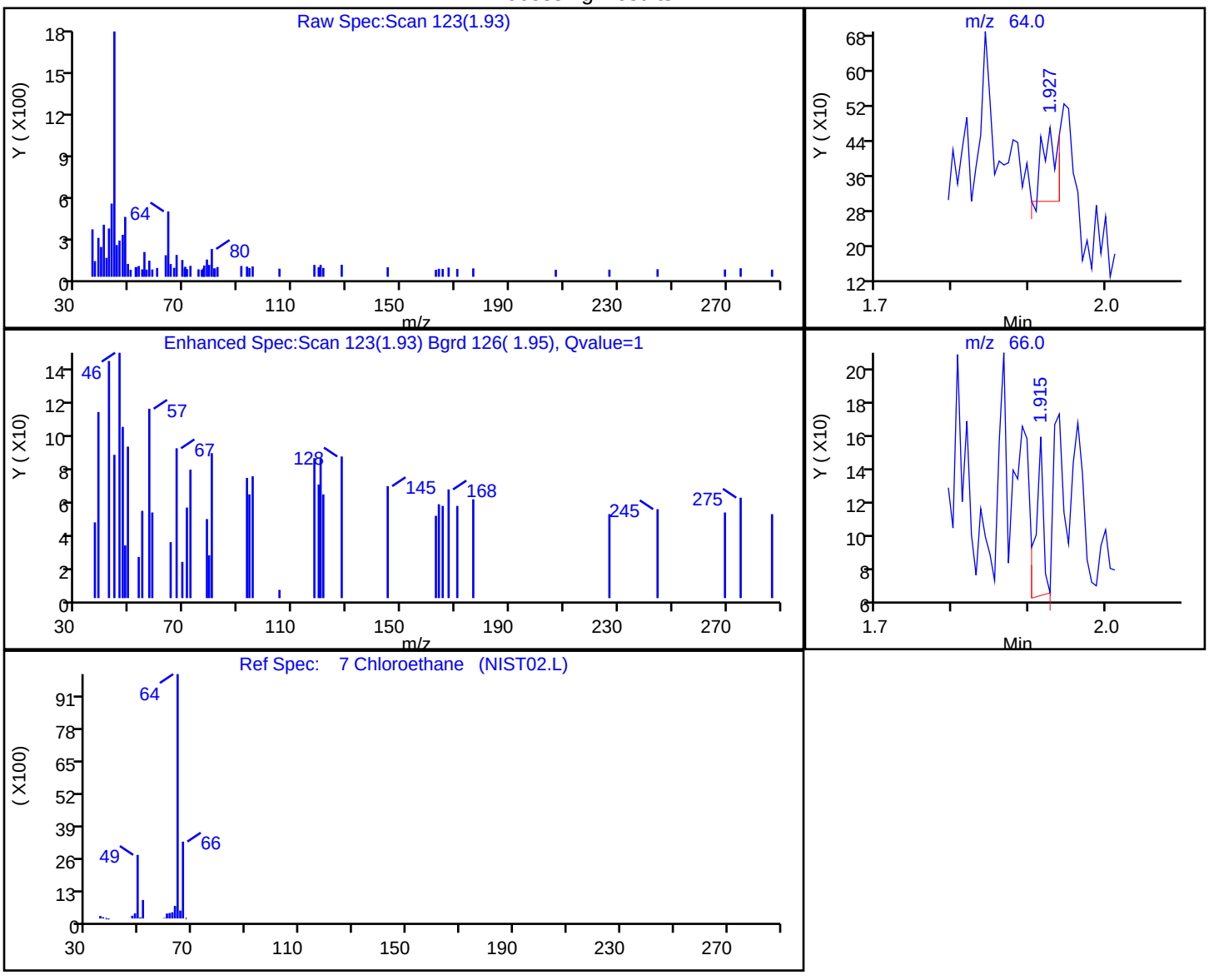
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

7 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
1.93	64.00	225	0.070207
1.92	66.00	61	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

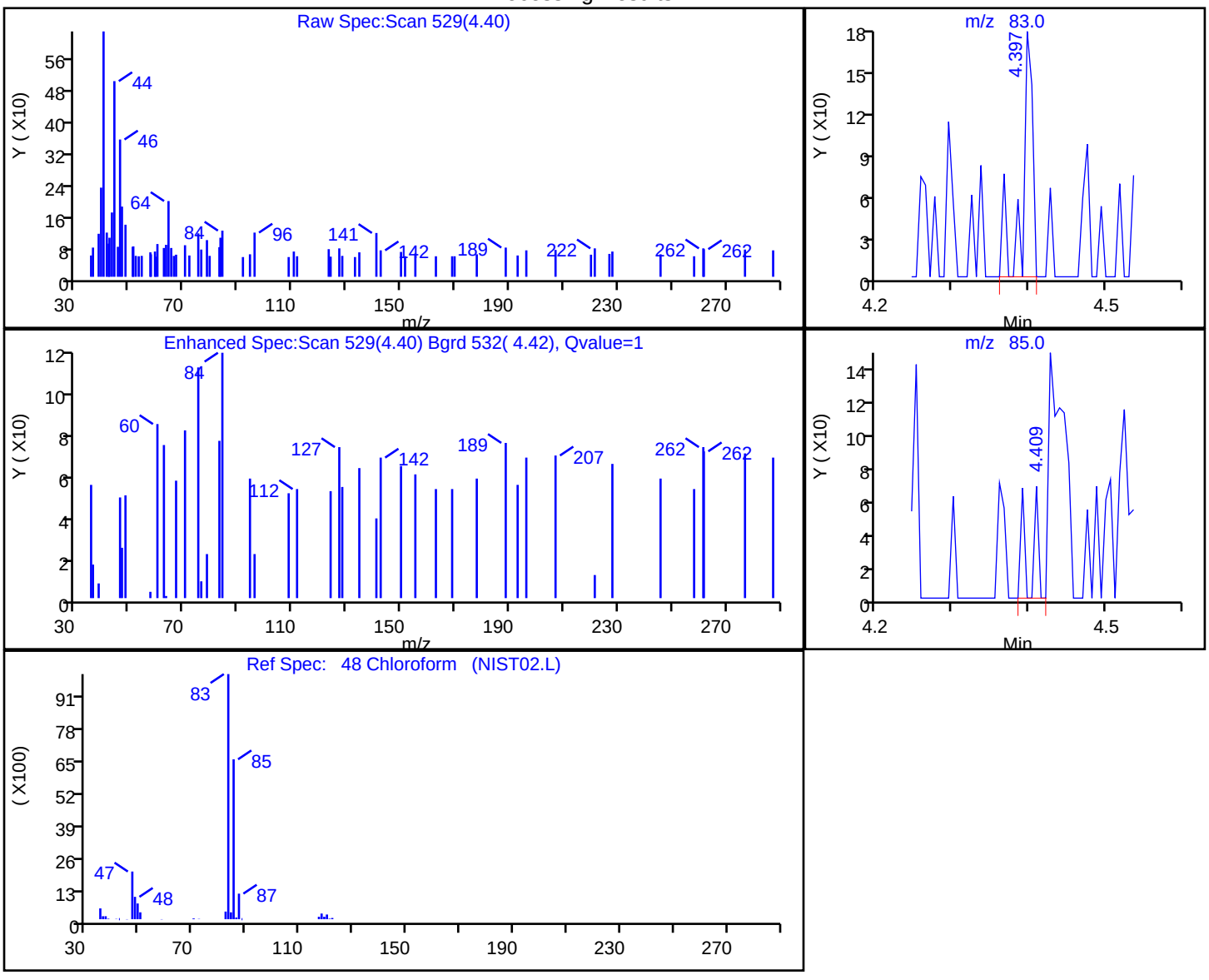
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

48 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
4.40	83.00	160	0.017637
4.41	85.00	49	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

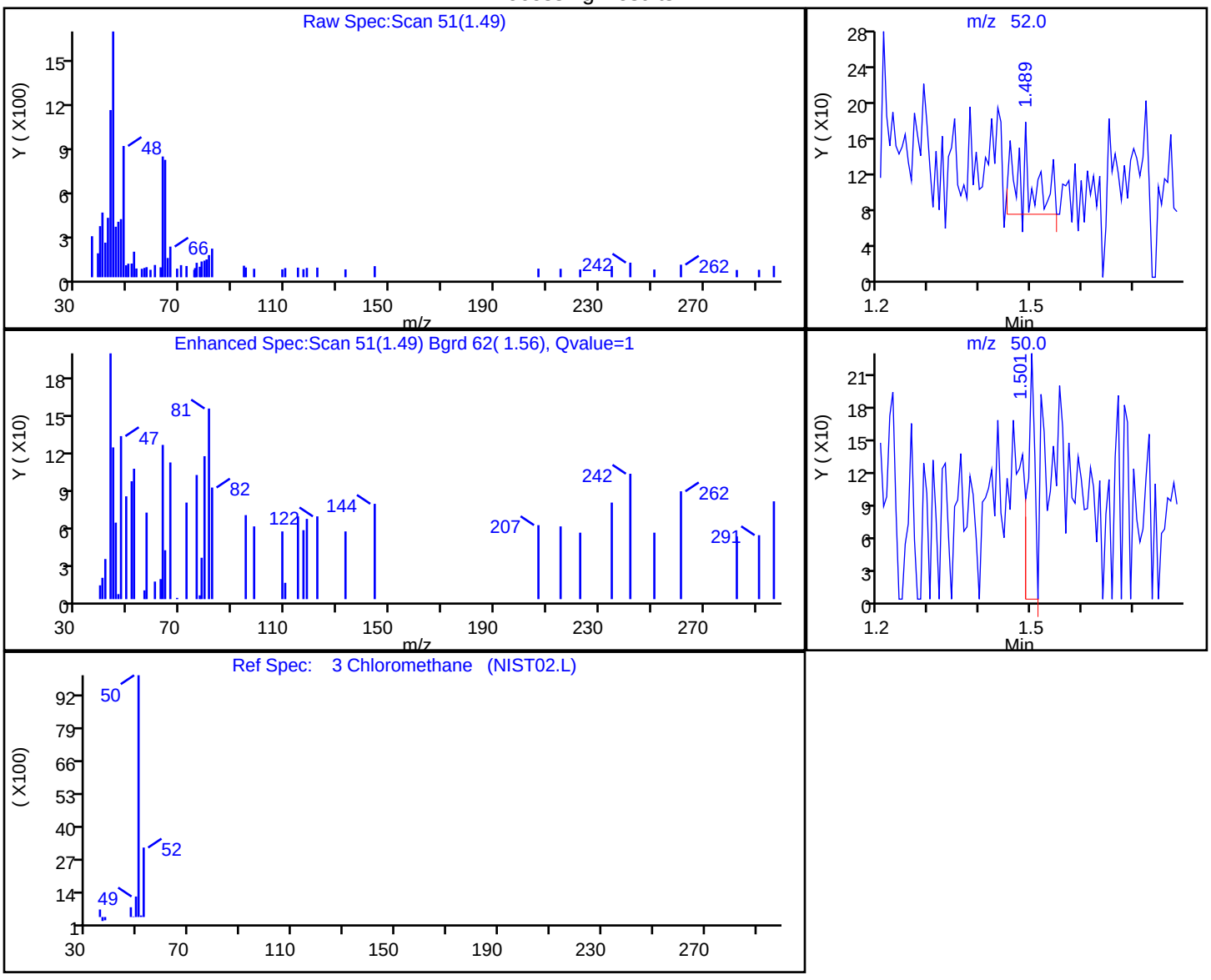
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.49	52.00	205	0.124022
1.50	50.00	206	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

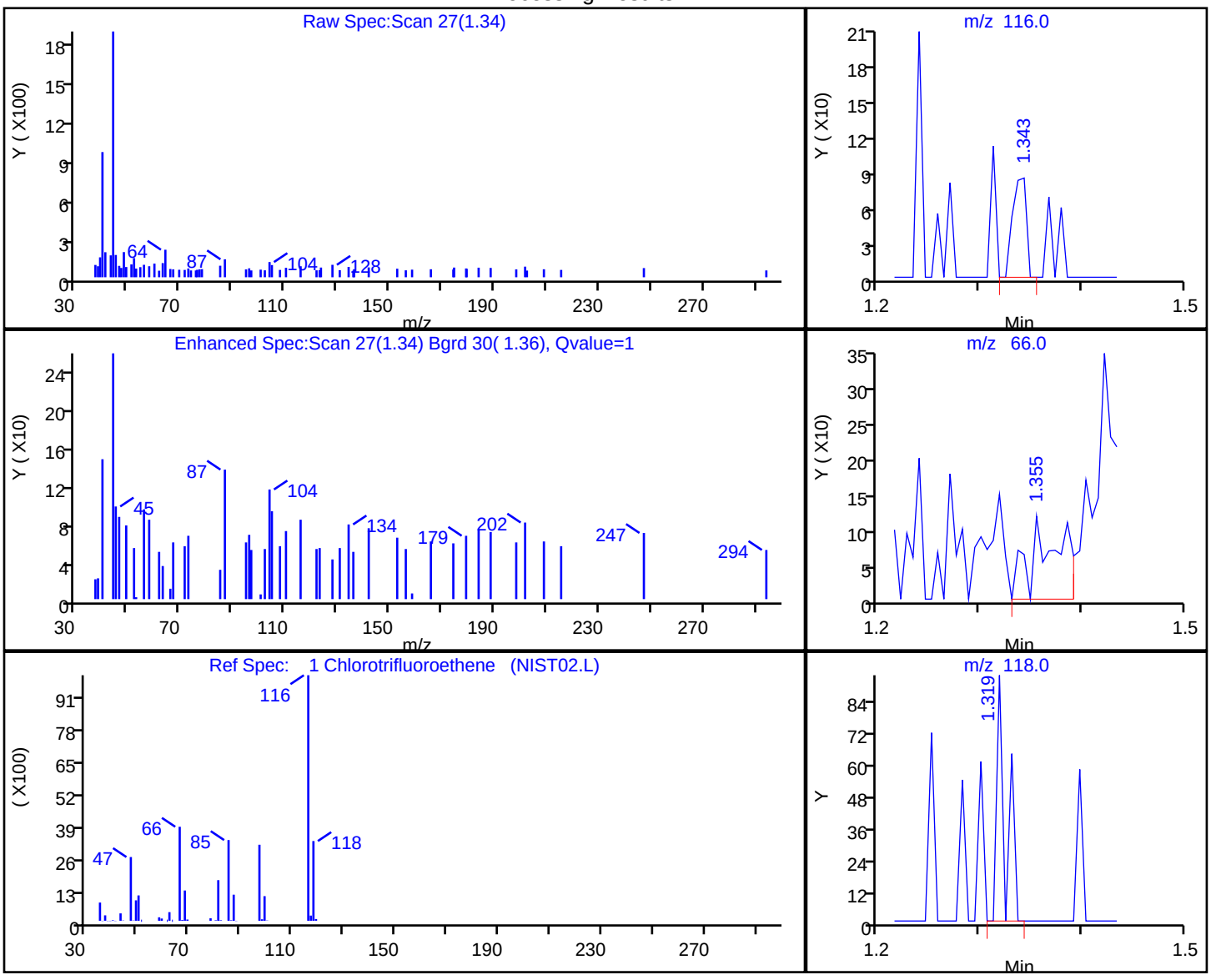
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Chlorotrifluoroethene, CAS: 79-38-9

Processing Results



RT	Mass	Response	Amount
1.34	116.00	79	0.017015
1.36	66.00	245	
1.32	118.00	58	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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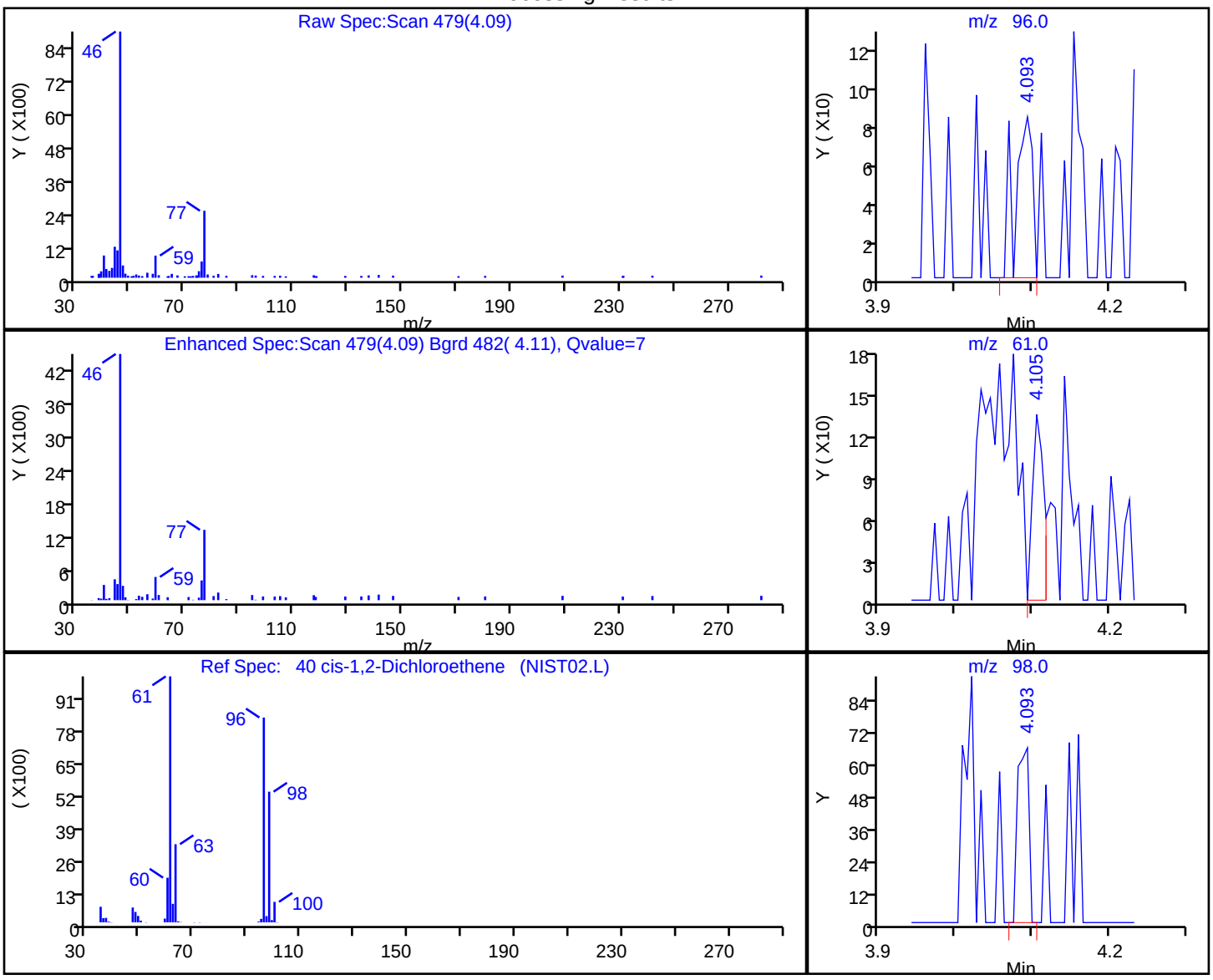
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

40 cis-1,2-Dichloroethene, CAS: 156-59-2

Processing Results



RT	Mass	Response	Amount
4.09	96.00	128	0.020814
4.11	61.00	138	
4.09	98.00	68	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

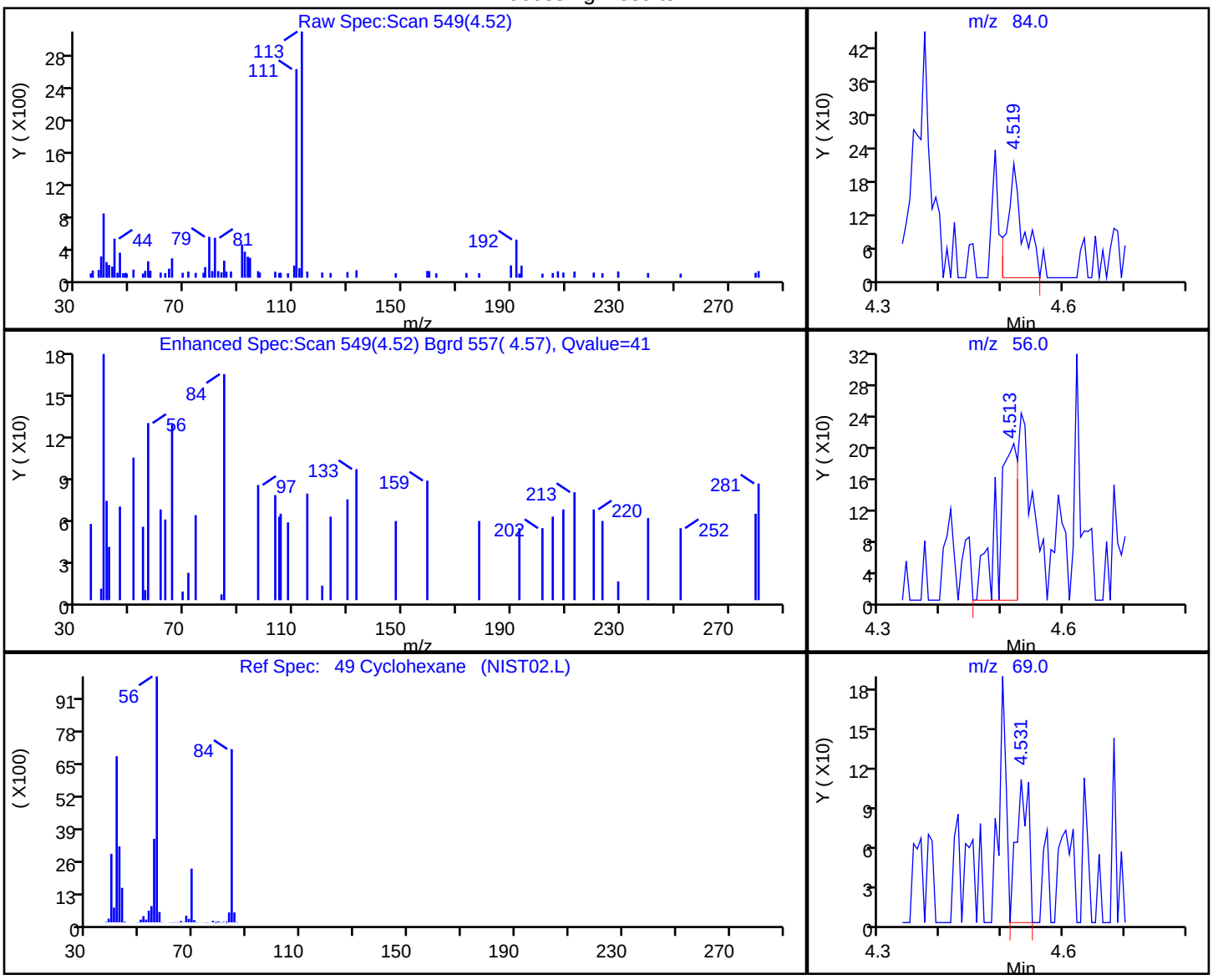
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

49 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
4.52	84.00	360	0.037142
4.51	56.00	461	
4.53	69.00	147	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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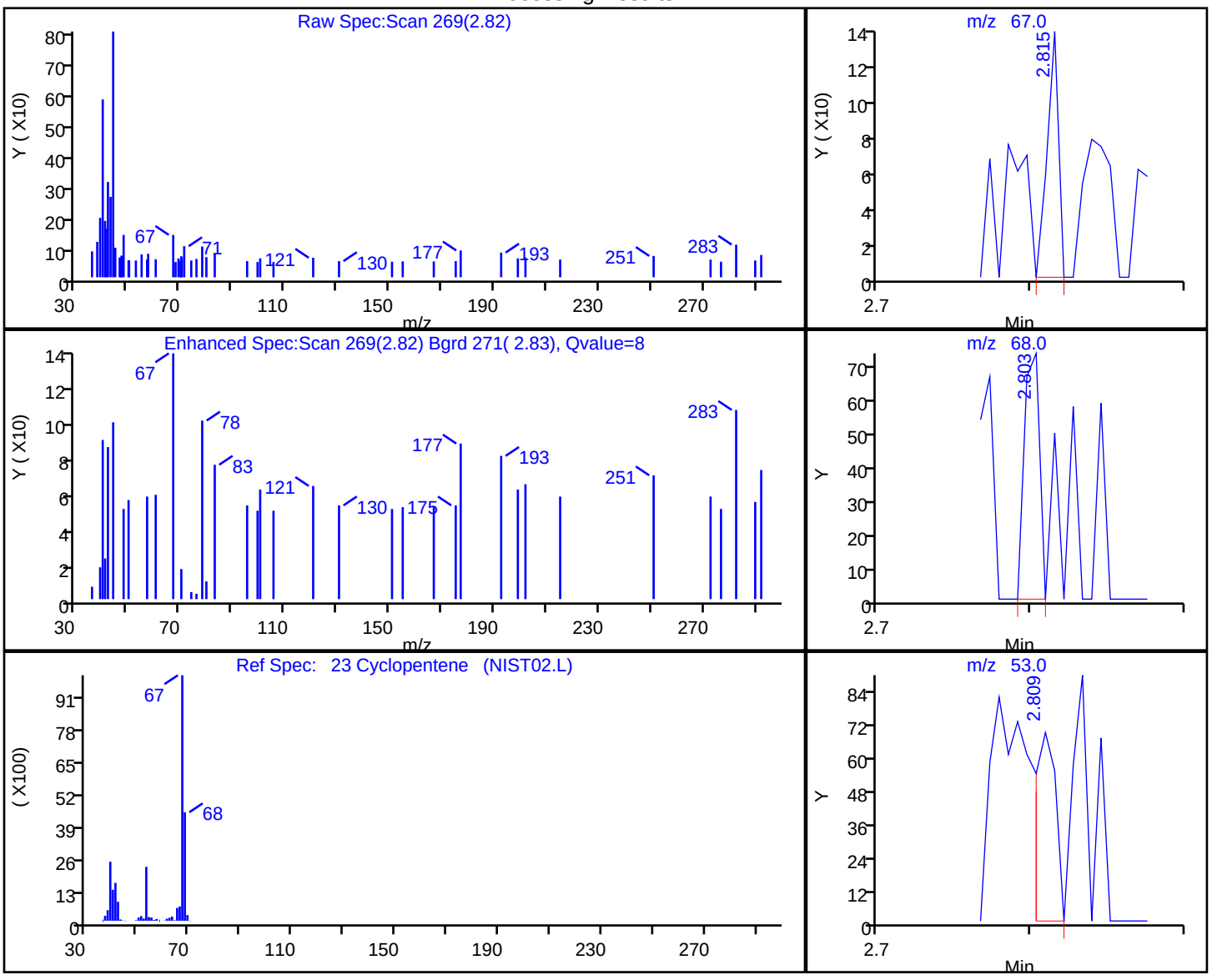
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

23 Cyclopentene, CAS: 142-29-0

Processing Results



RT	Mass	Response	Amount
2.82	67.00	72	0.006048
2.80	68.00	51	
2.81	53.00	65	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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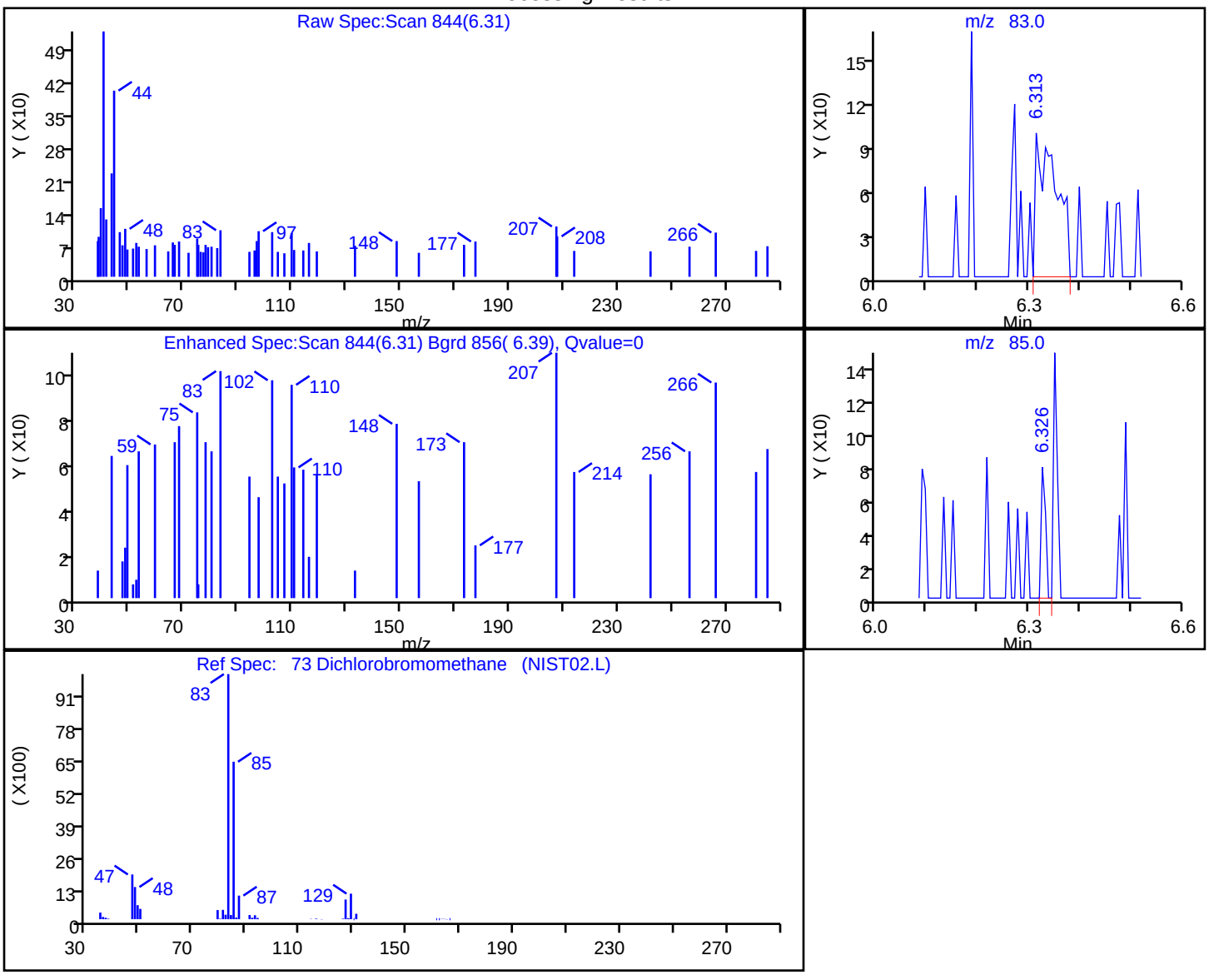
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

73 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
6.31	83.00	279	0.047533
6.33	85.00	48	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

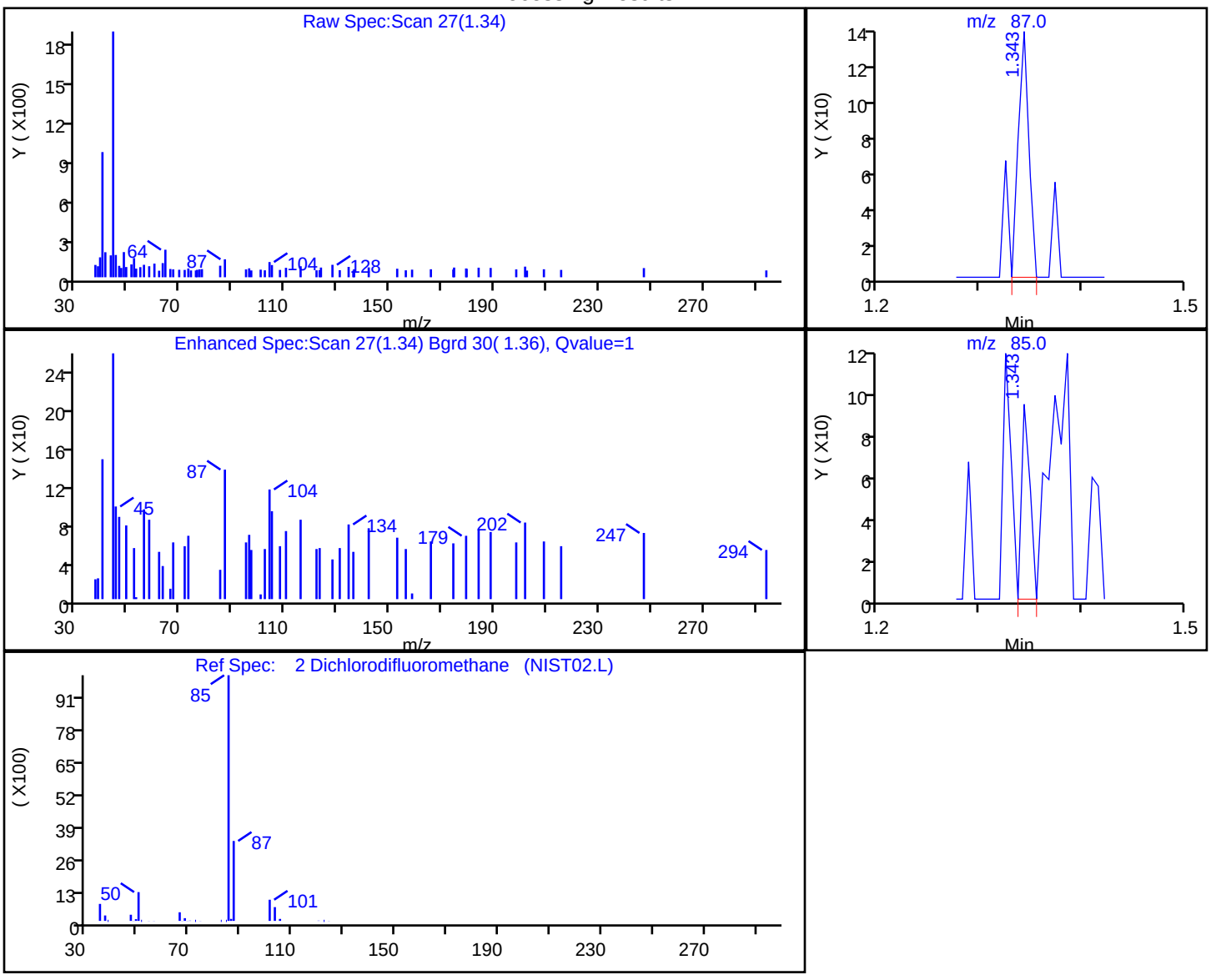
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.34	87.00	99	0.032364
1.34	85.00	50	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

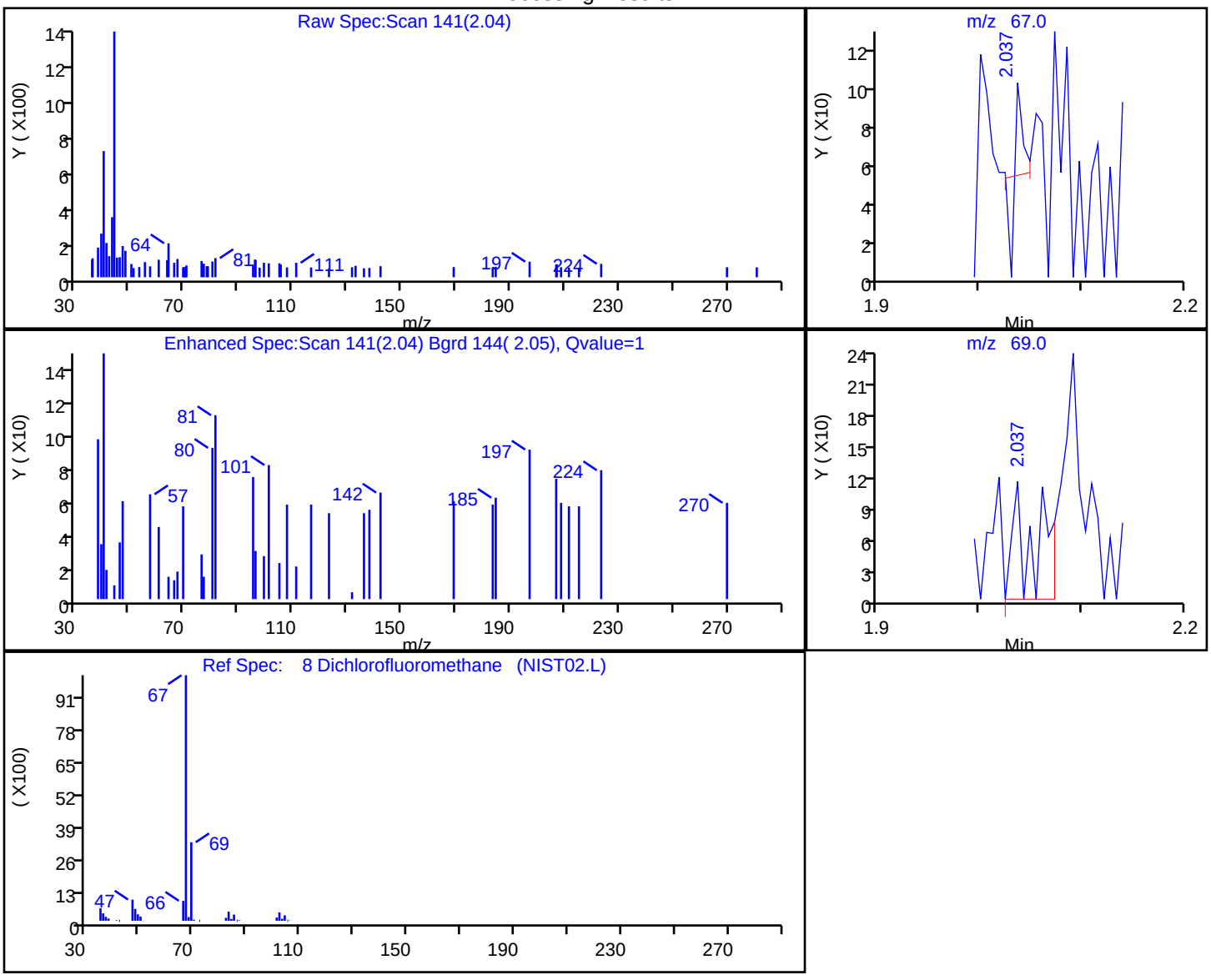
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 Dichlorofluoromethane, CAS: 75-43-4

Processing Results



RT	Mass	Response	Amount
2.04	67.00	7	0.000676
2.04	69.00	174	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

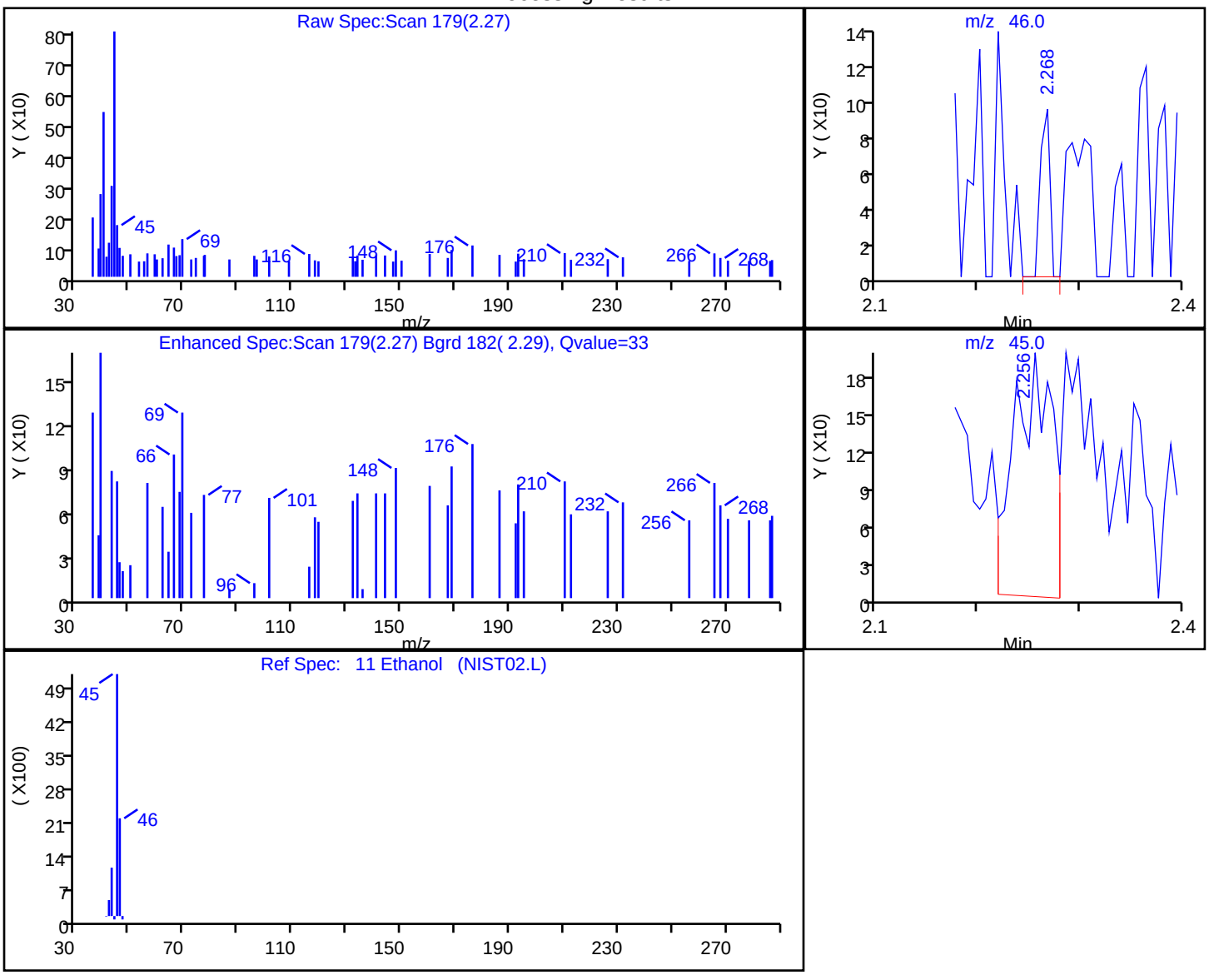
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Processing Results



RT	Mass	Response	Amount
2.27	46.00	61	12.947169
2.26	45.00	508	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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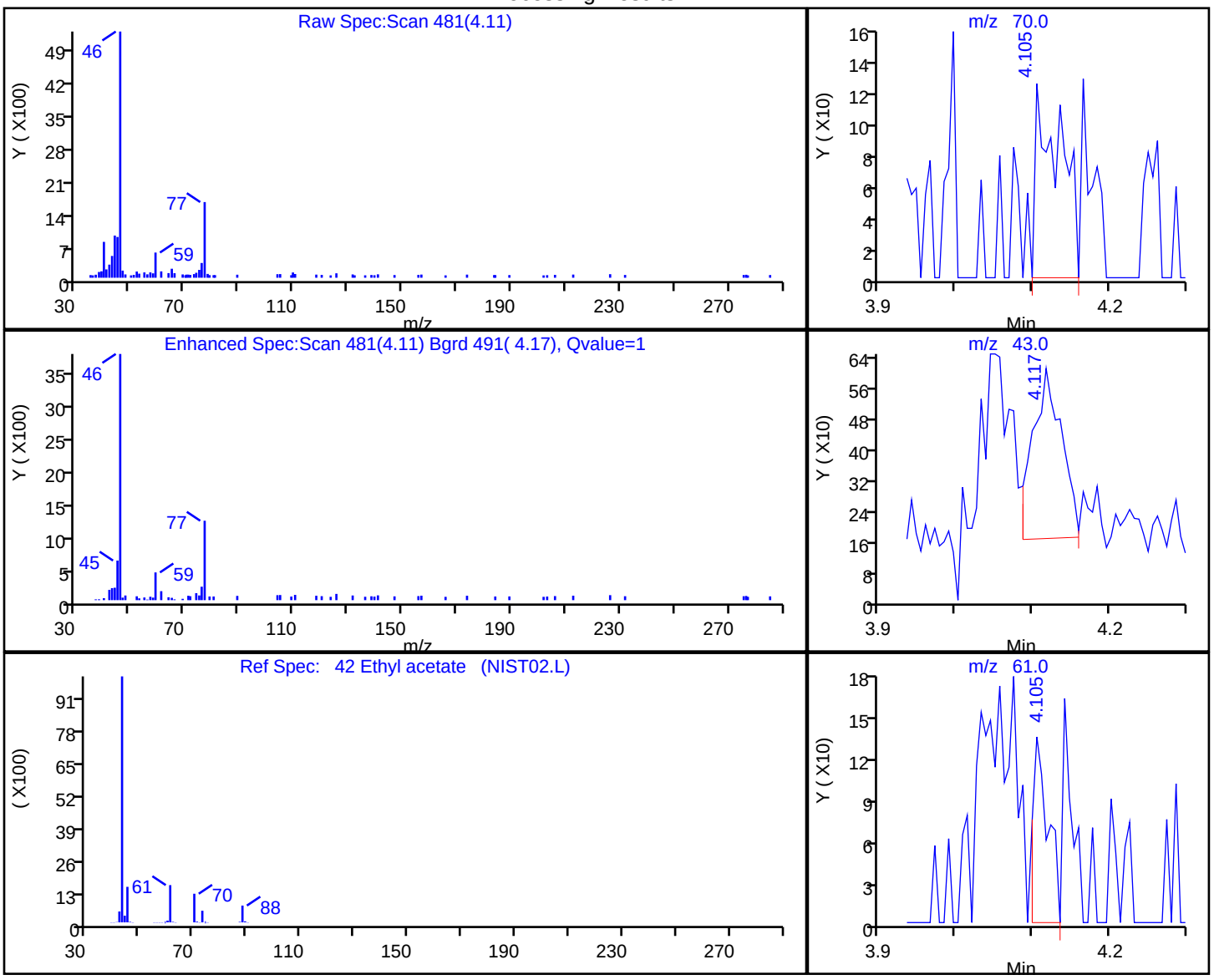
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

42 Ethyl acetate, CAS: 141-78-6

Processing Results



RT	Mass	Response	Amount
4.11	70.00	270	0.908807
4.12	43.00	1165	
4.11	61.00	188	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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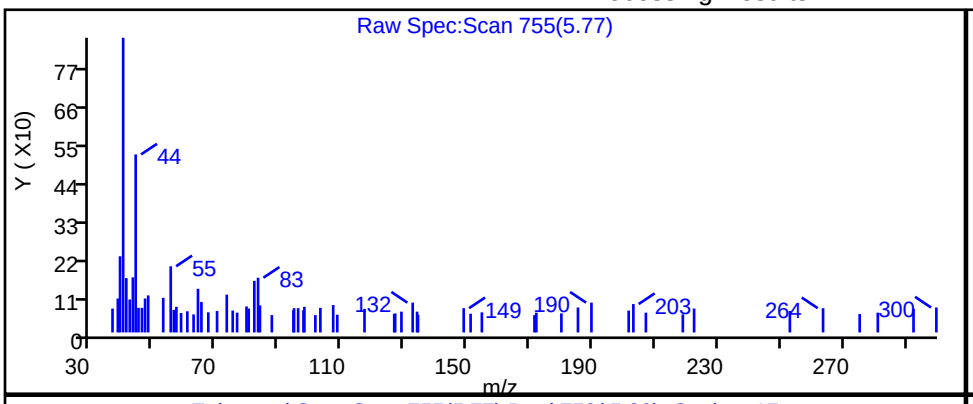
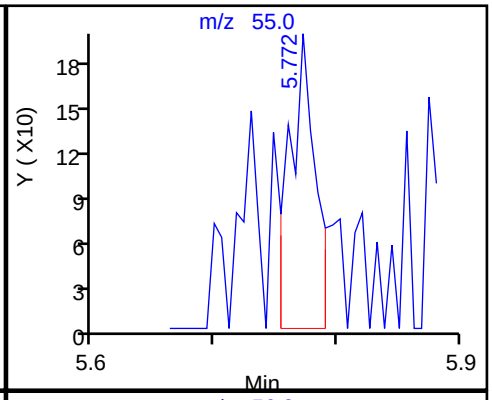
TestAmerica Edison

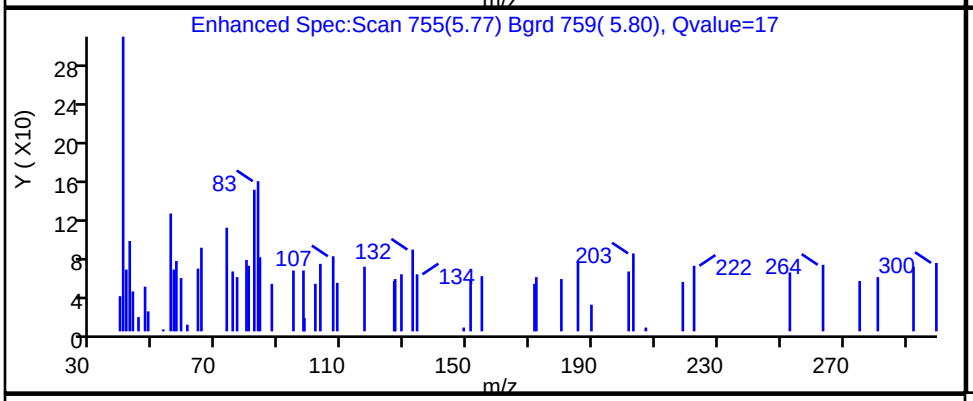
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

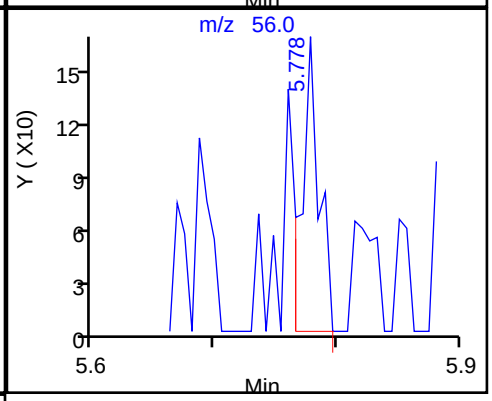
66 Ethyl acrylate, CAS: 140-88-5

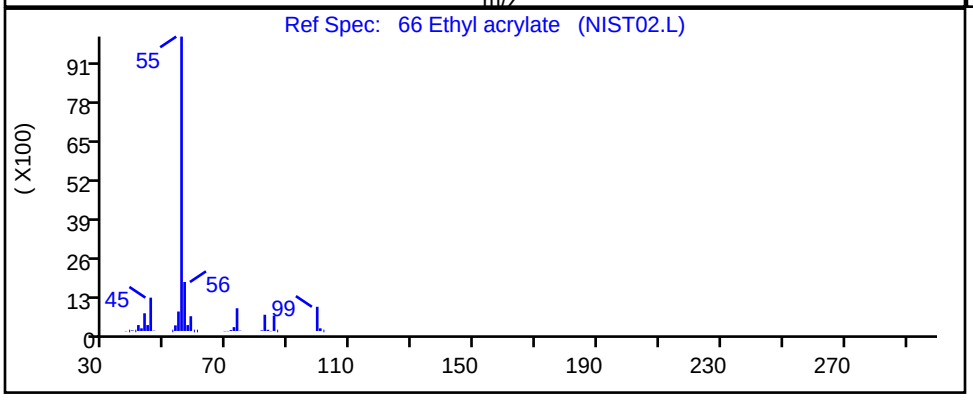
Processing Results











RT	Mass	Response	Amount
5.77	55.00	284	0.026220
5.78	56.00	157	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

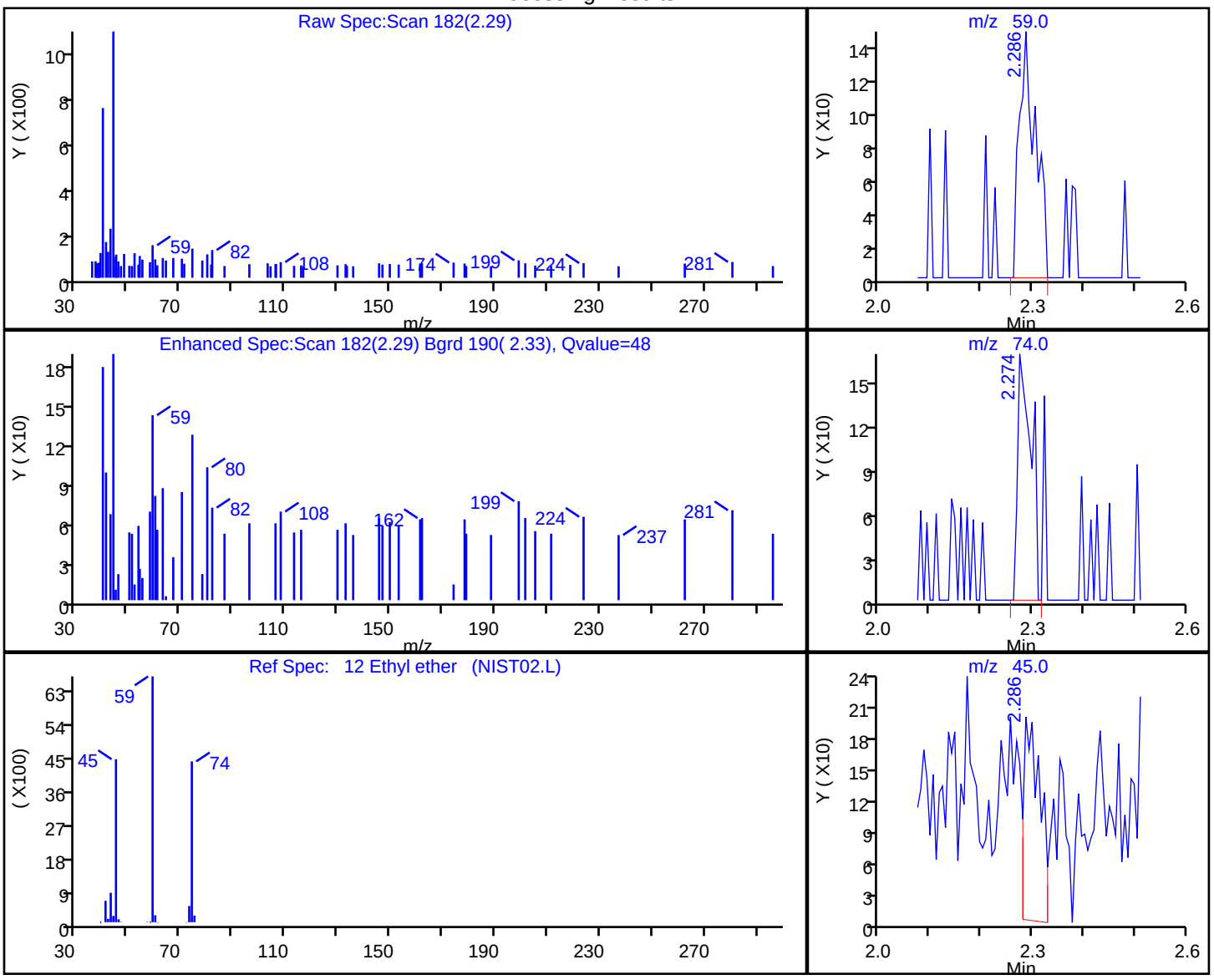
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

12 Ethyl ether, CAS: 60-29-7

Processing Results



RT	Mass	Response	Amount
2.29	59.00	314	0.099523
2.27	74.00	303	
2.29	45.00	427	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

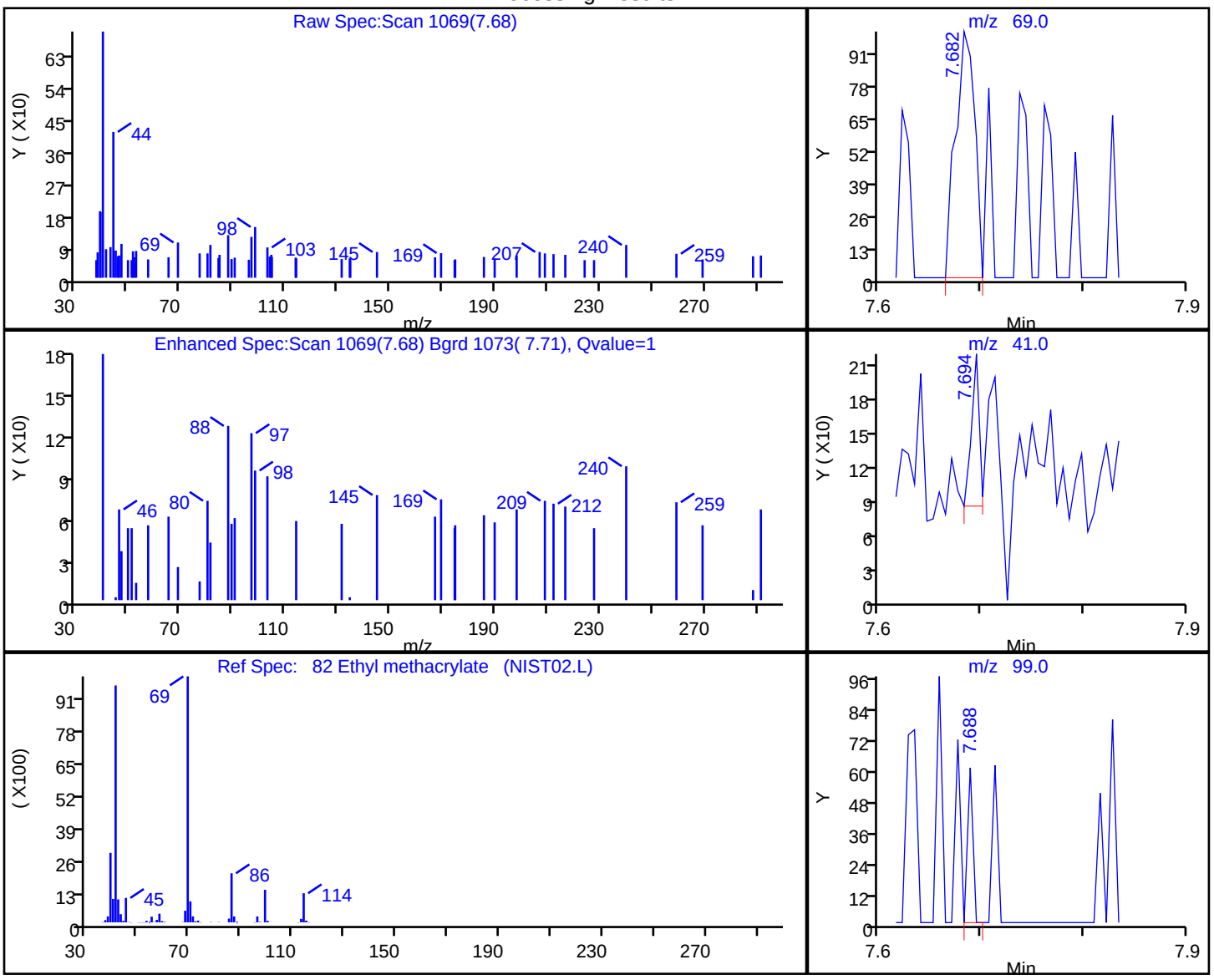
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

82 Ethyl methacrylate, CAS: 97-63-2

Processing Results



RT	Mass	Response	Amount
7.68	69.00	131	0.026882
7.69	41.00	69	
7.69	99.00	22	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

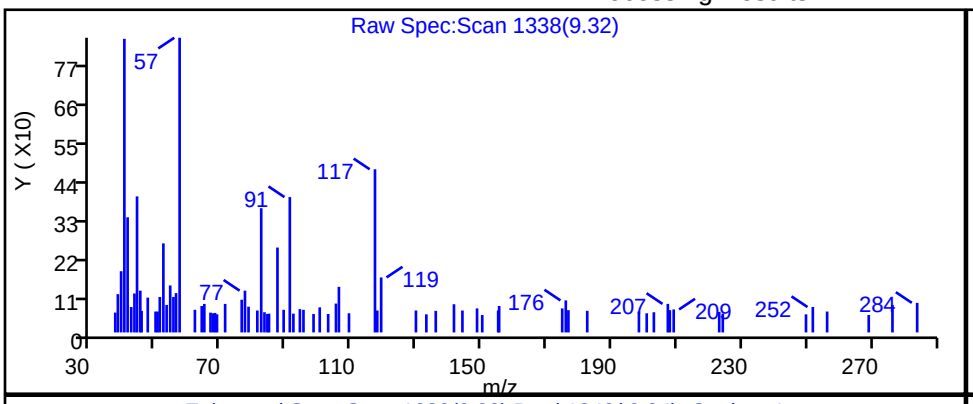
User Disabled Compound Report

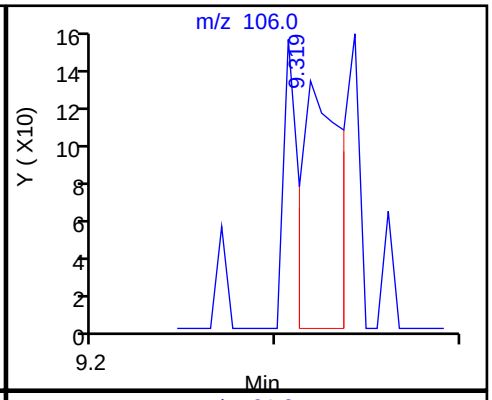
TestAmerica Edison

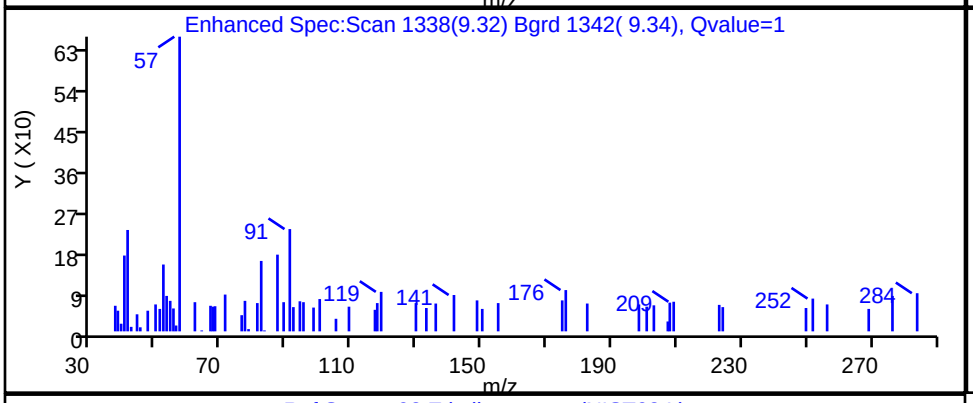
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

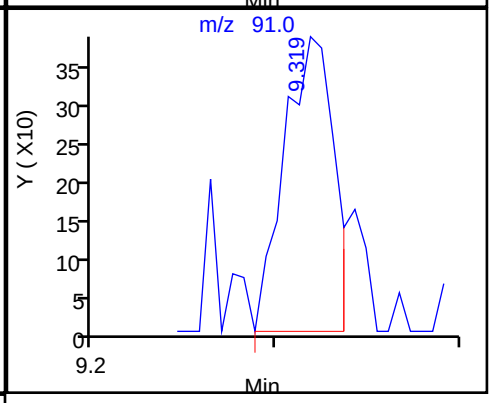
92 Ethylbenzene, CAS: 100-41-4

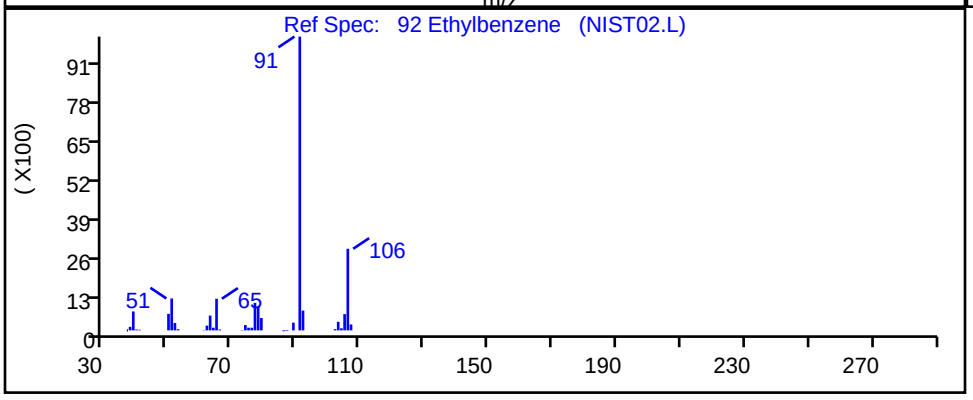
Processing Results











RT	Mass	Response	Amount
9.32	106.00	195	0.022116
9.32	91.00	735	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

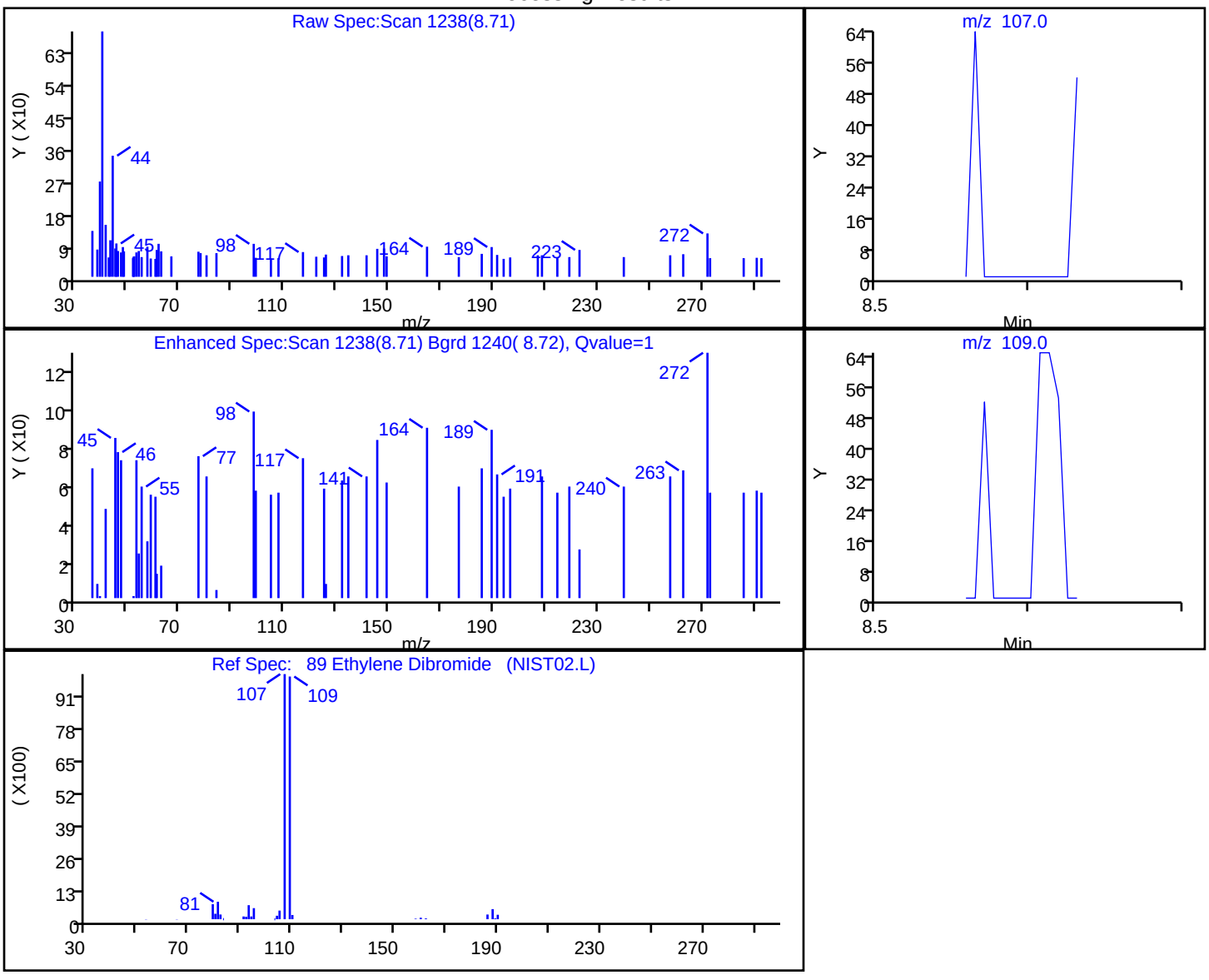
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

89 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
8.71	107.00	19	0.006417
8.72	109.00	41	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

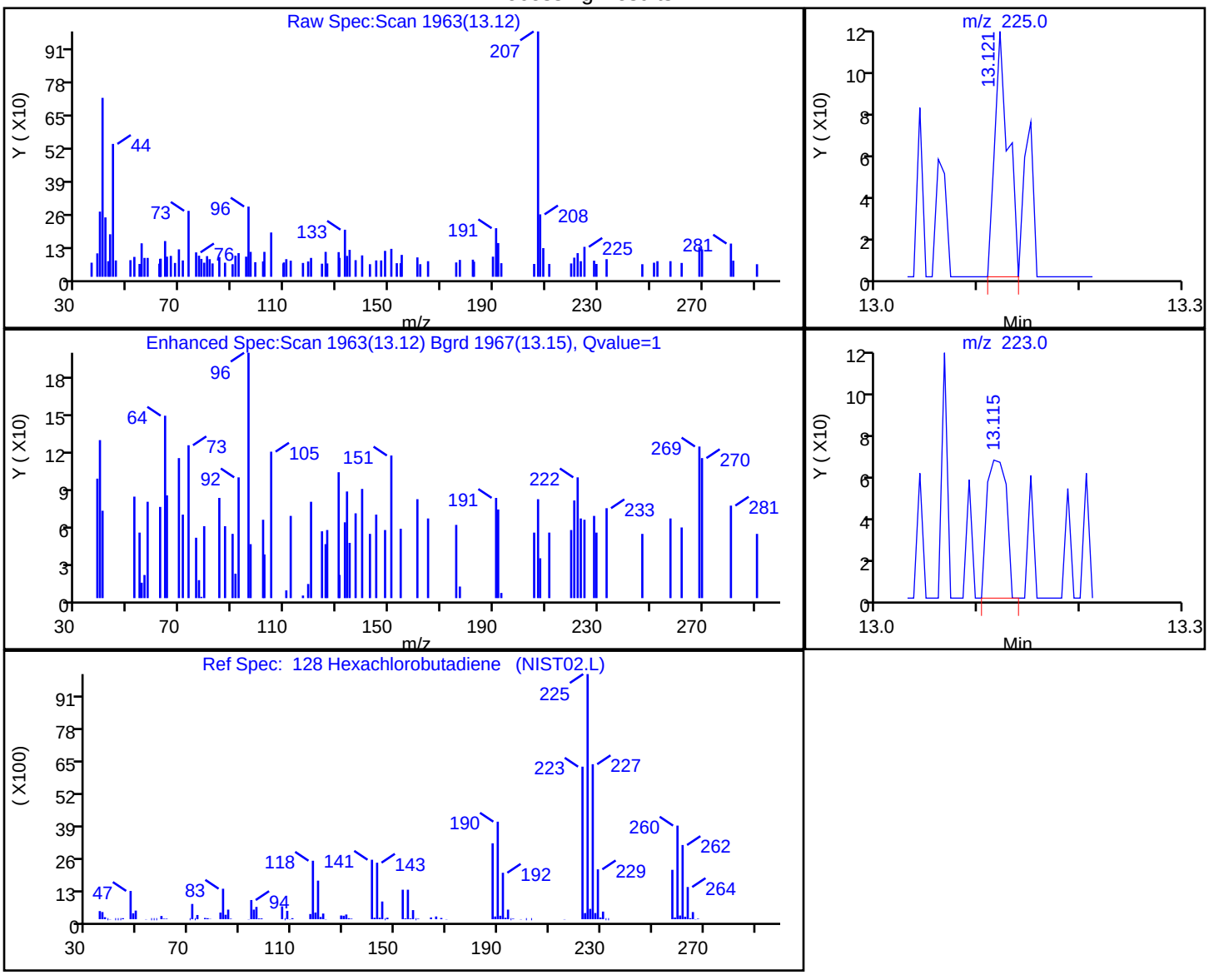
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

128 Hexachlorobutadiene, CAS: 87-68-3

Processing Results



RT	Mass	Response	Amount
13.12	225.00	110	0.062038
13.11	223.00	84	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

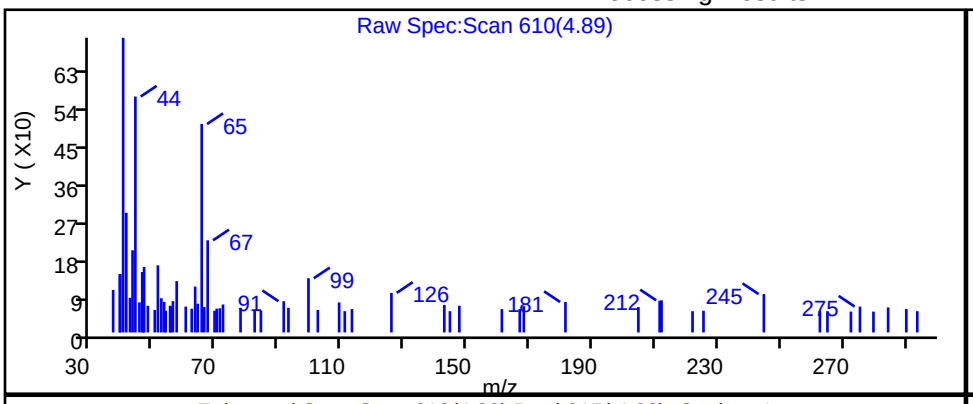
User Disabled Compound Report

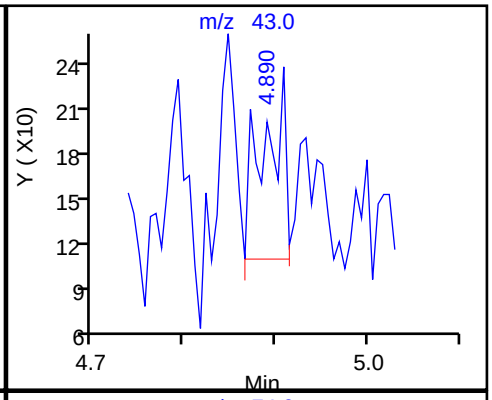
TestAmerica Edison

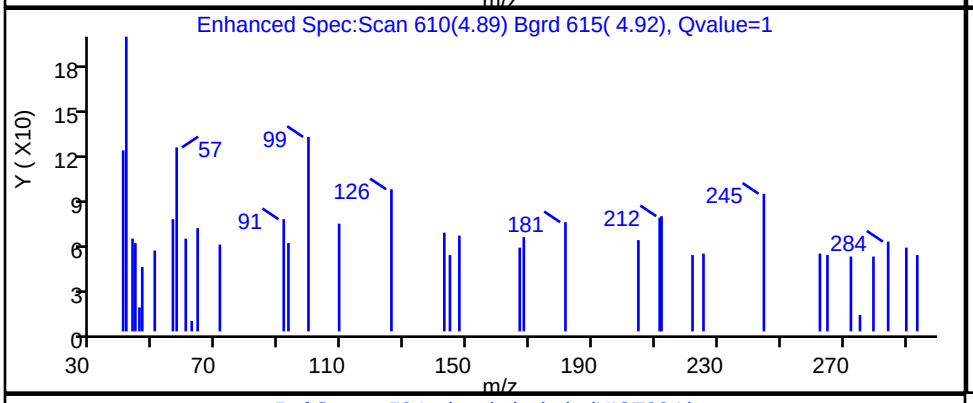
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

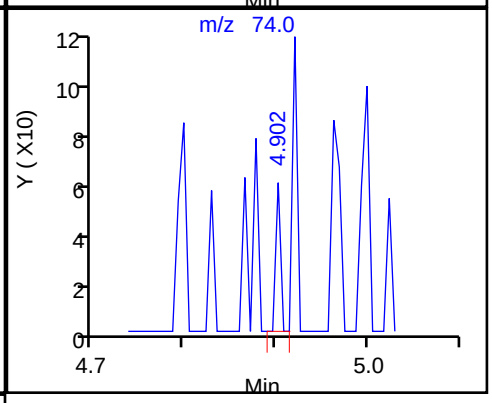
58 Isobutyl alcohol, CAS: 78-83-1

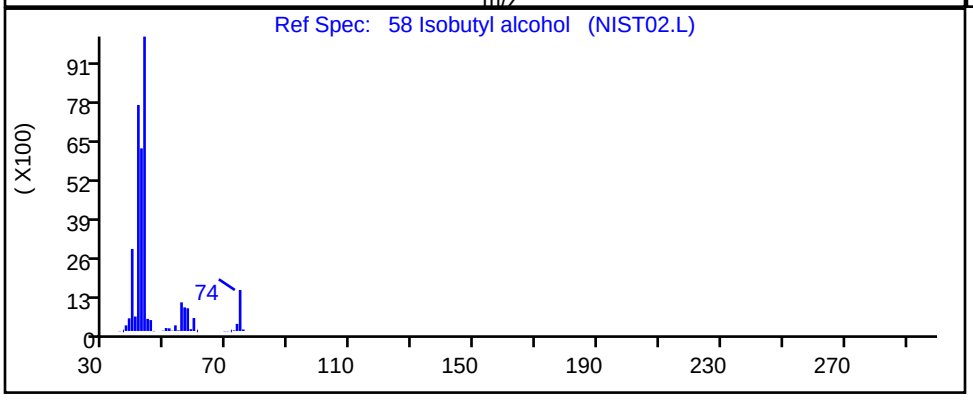
Processing Results











RT	Mass	Response	Amount
4.89	43.00	197	1.751996
4.90	74.00	21	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

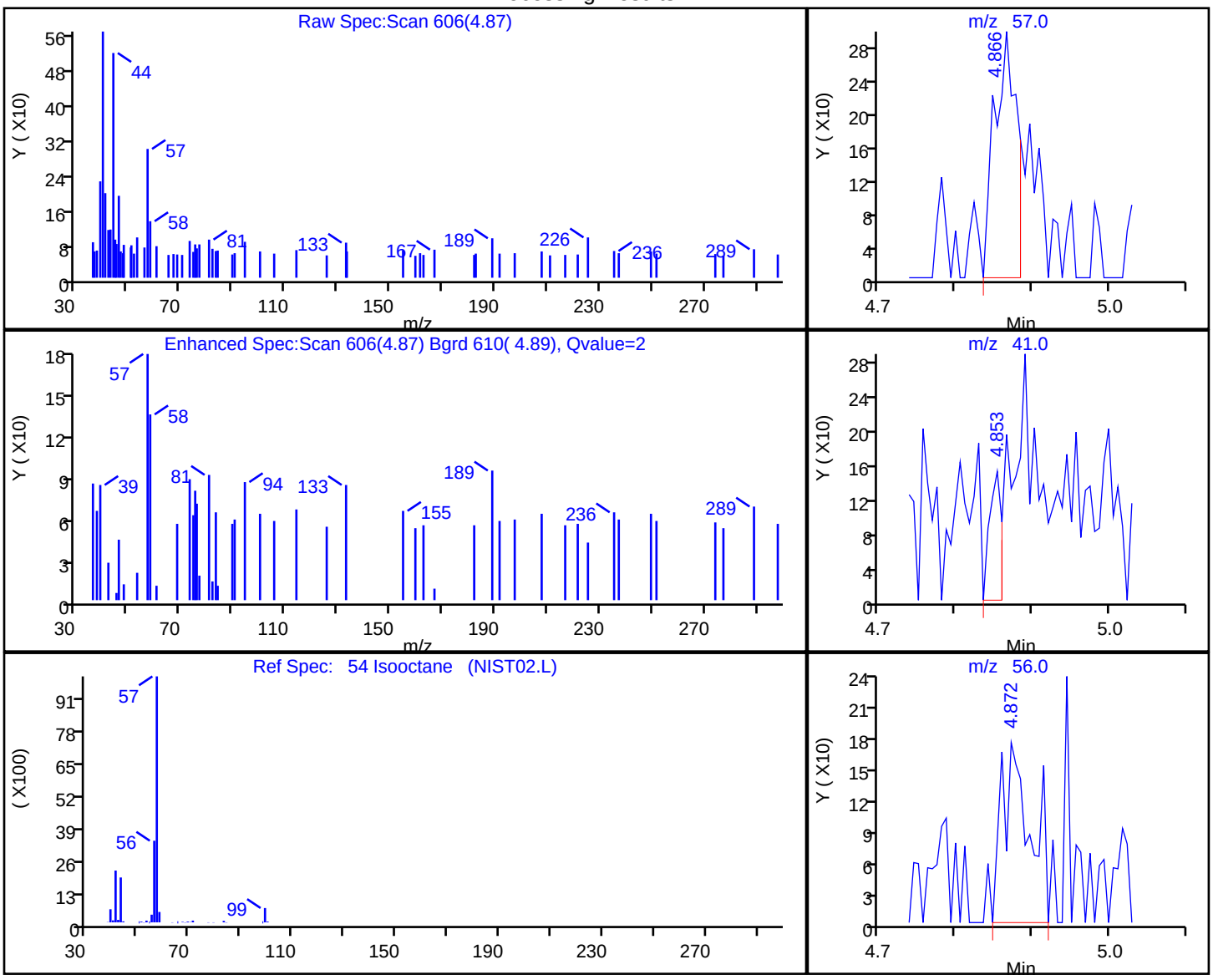
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

54 Isooctane, CAS: 540-84-1

Processing Results



RT	Mass	Response	Amount
4.87	57.00	587	0.038232
4.85	41.00	162	
4.87	56.00	446	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

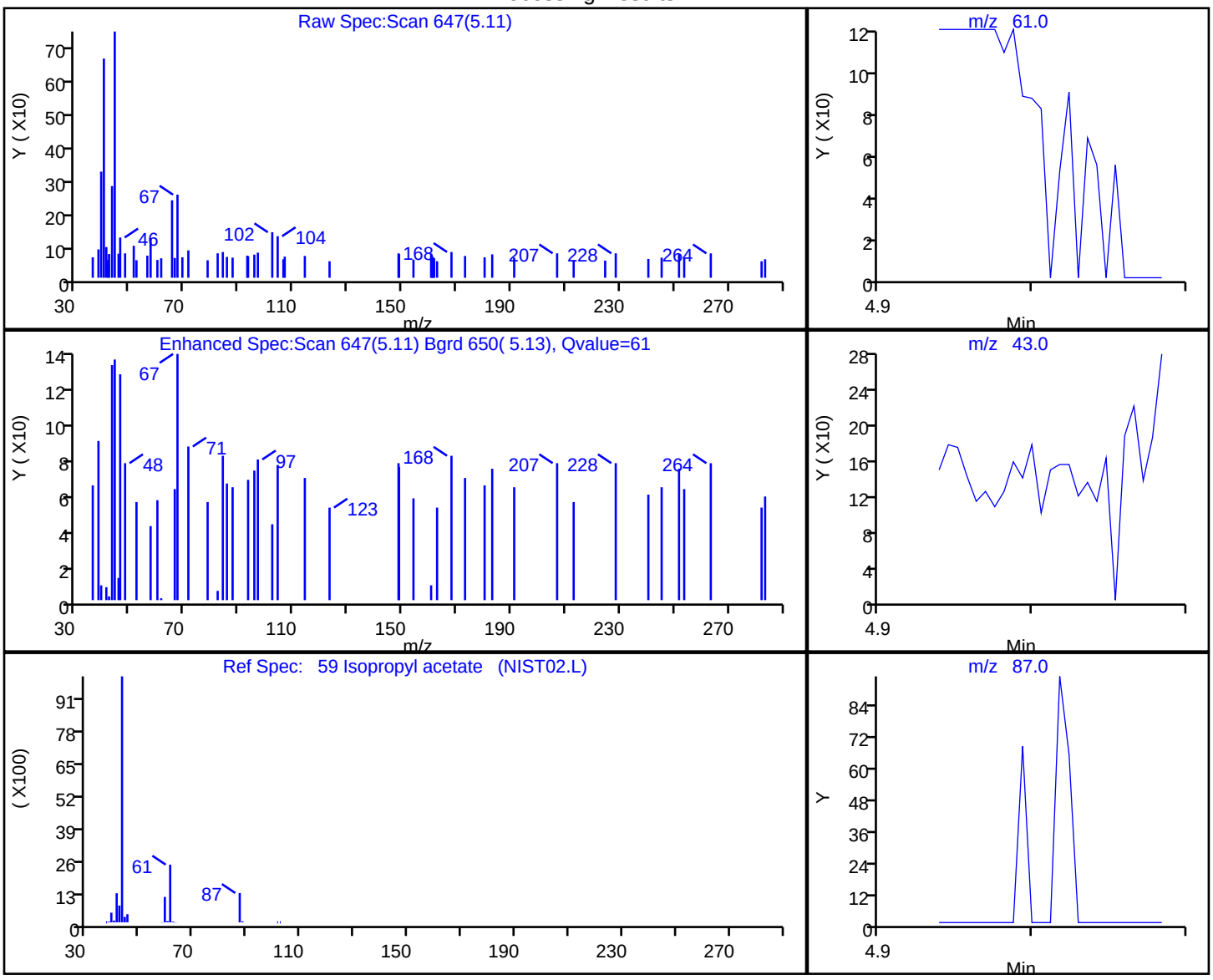
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

59 Isopropyl acetate, CAS: 108-21-4

Processing Results



RT	Mass	Response	Amount
5.11	61.00	22	0.012083
5.10	43.00	794	
5.10	87.00	115	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

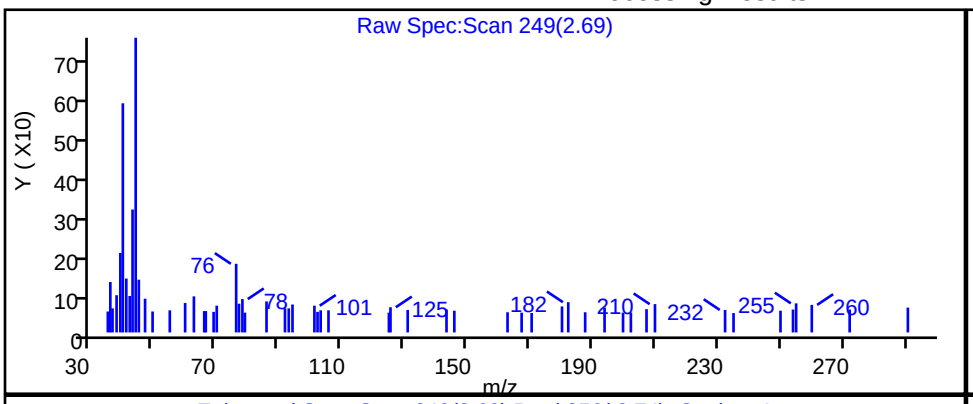
User Disabled Compound Report

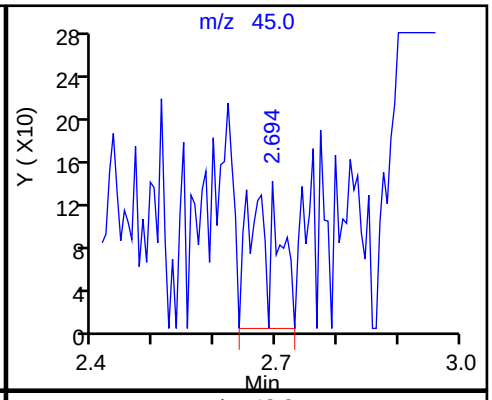
TestAmerica Edison

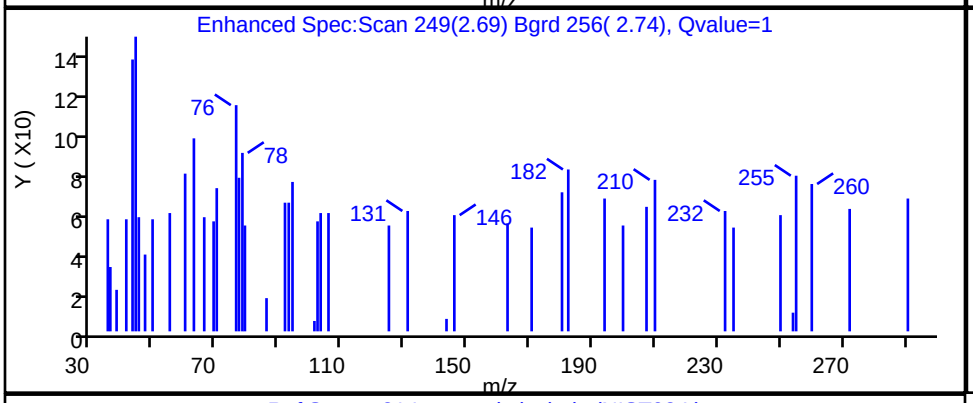
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

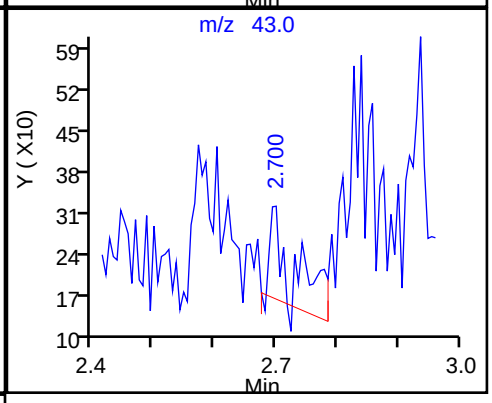
21 Isopropyl alcohol, CAS: 67-63-0

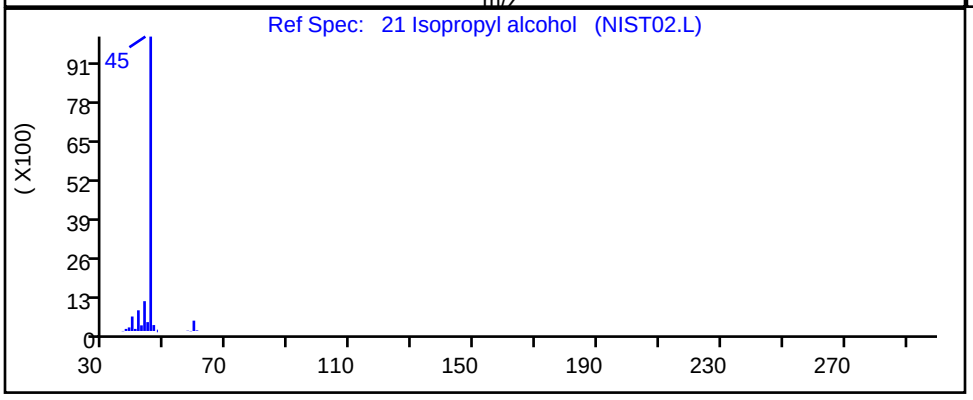
Processing Results











RT	Mass	Response	Amount
2.69	45.00	440	4.481800
2.70	43.00	431	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

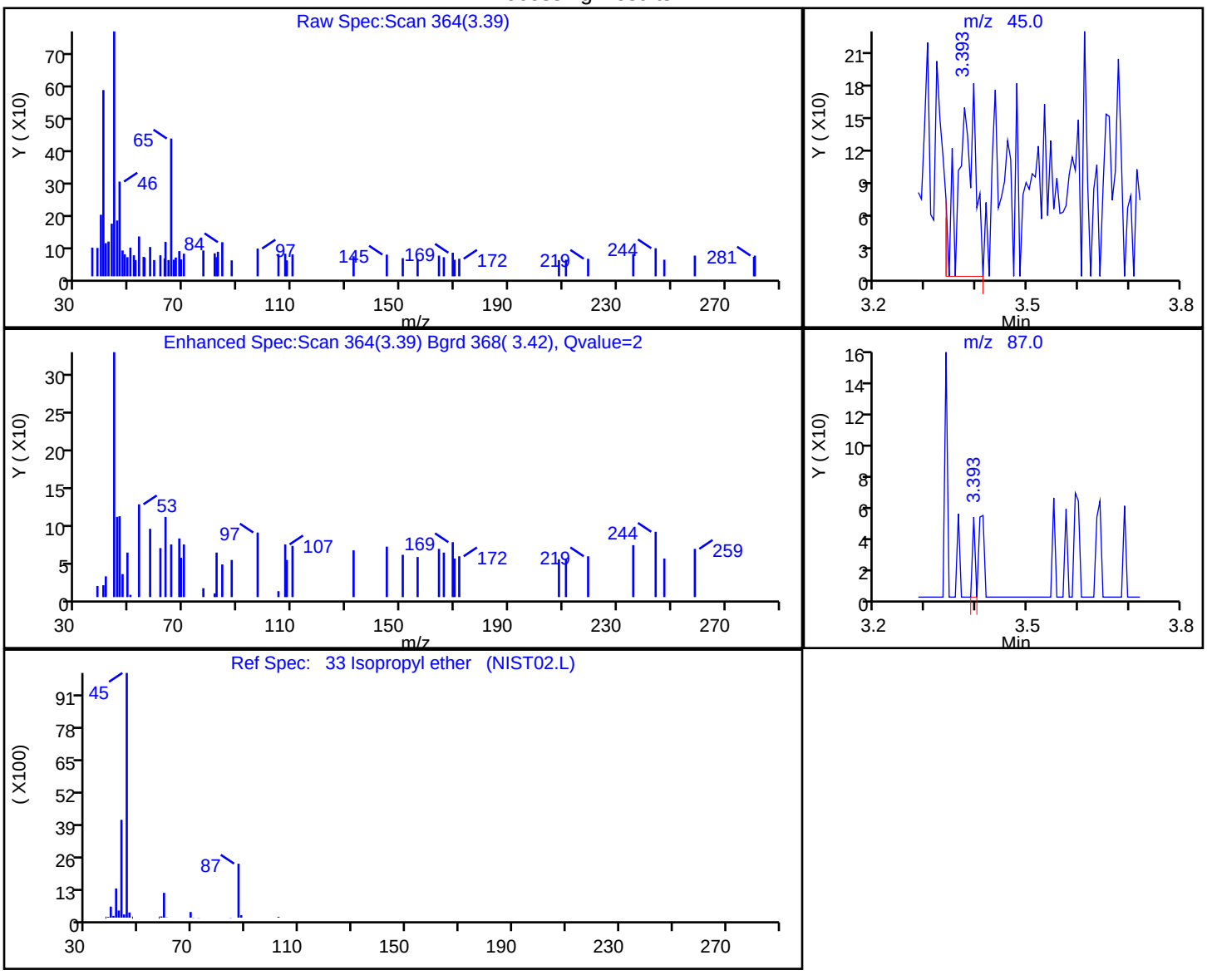
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

33 Isopropyl ether, CAS: 108-20-3

Processing Results



RT	Mass	Response	Amount
3.39	45.00	384	0.026947
3.39	87.00	18	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

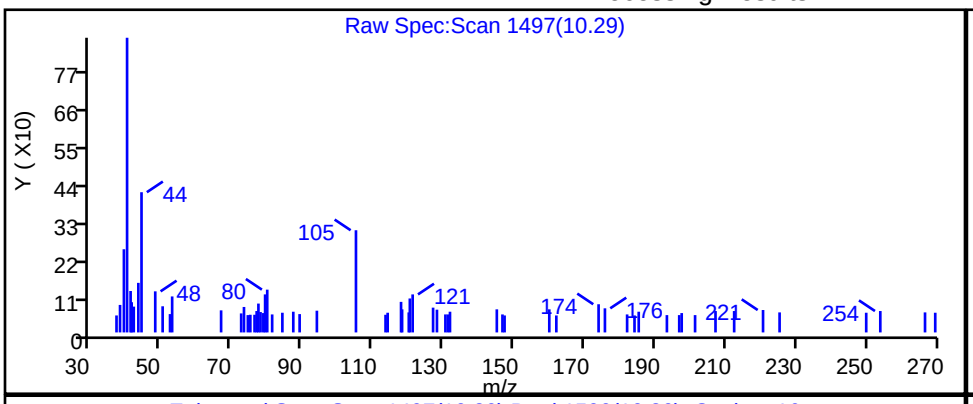
User Disabled Compound Report

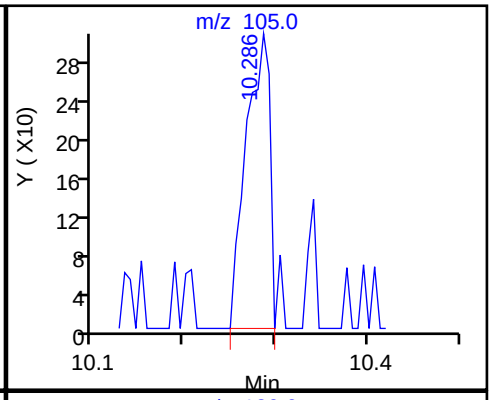
TestAmerica Edison

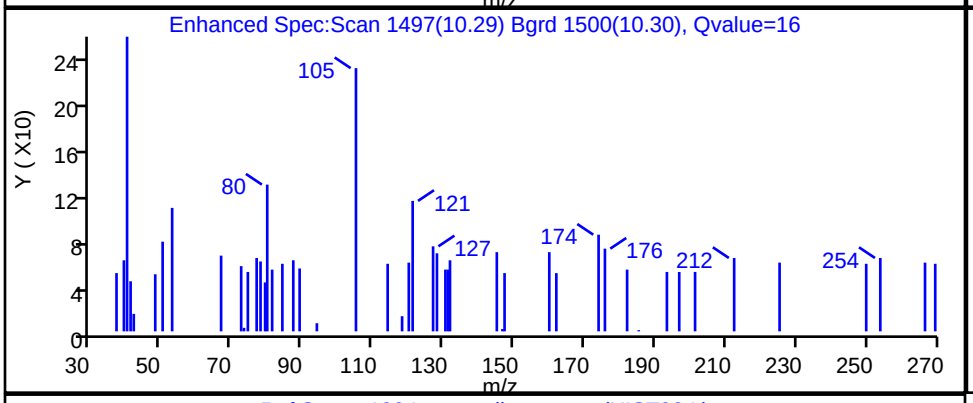
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

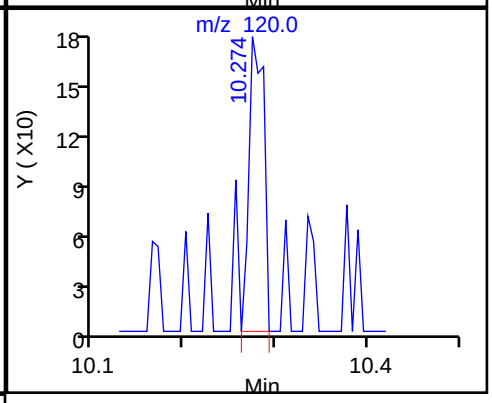
100 Isopropylbenzene, CAS: 98-82-8

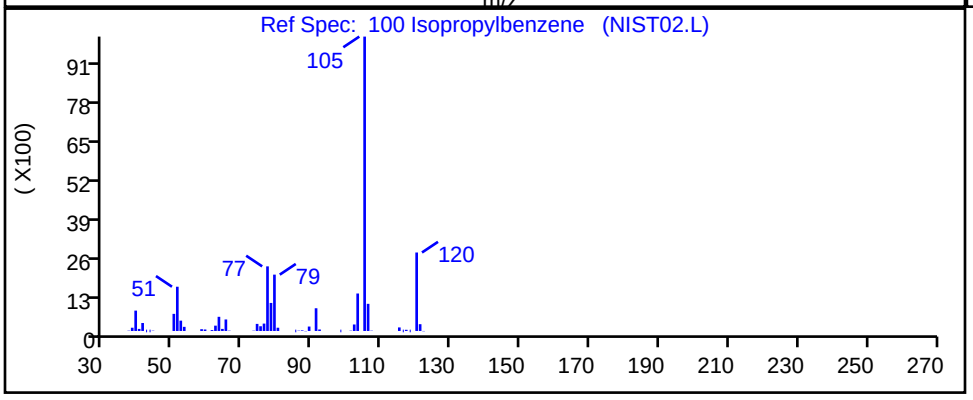
Processing Results











RT	Mass	Response	Amount
10.29	105.00	540	0.020860
10.27	120.00	199	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

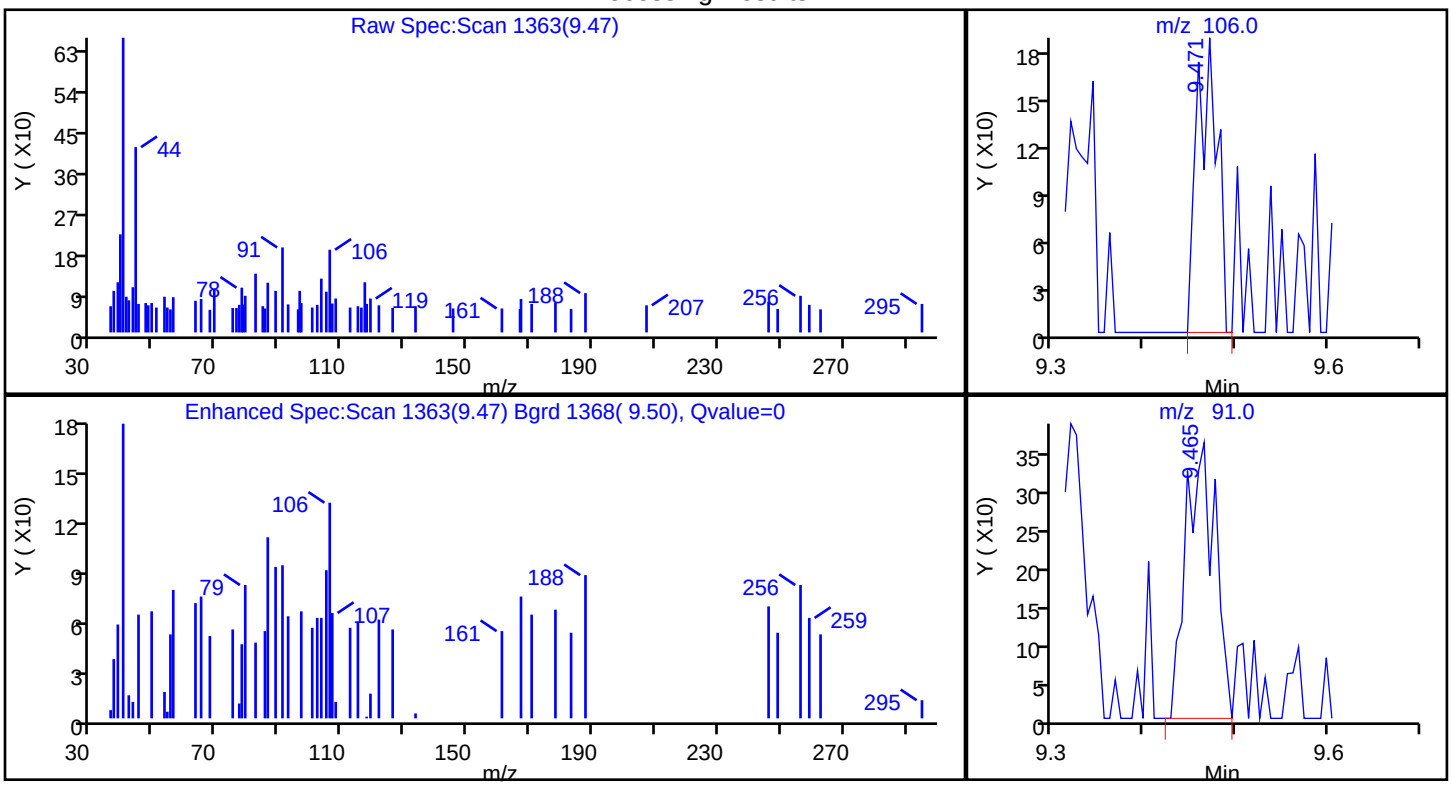
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

94 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
9.47	106.00	281	0.026316
9.46	91.00	808	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

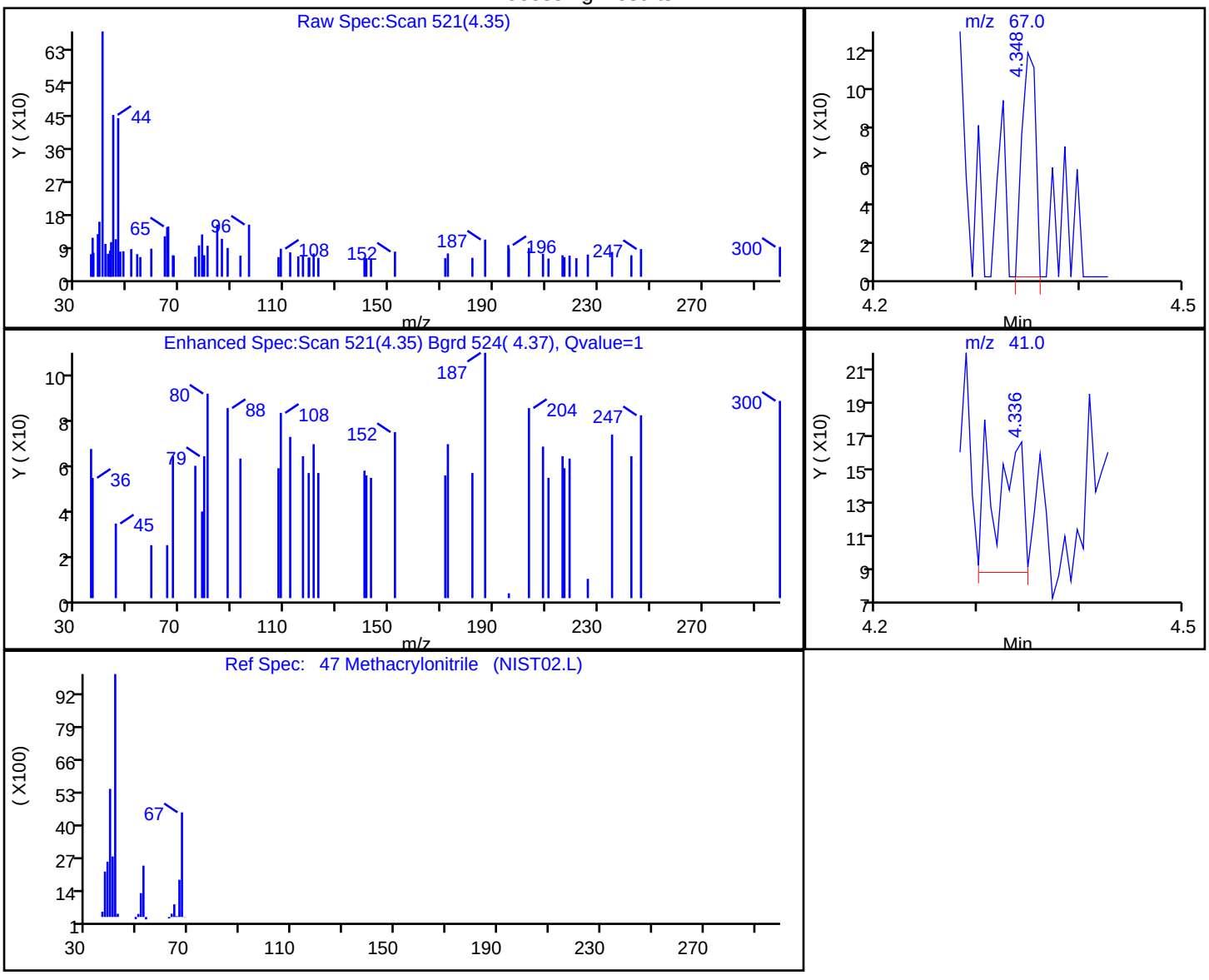
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

47 Methacrylonitrile, CAS: 126-98-7

Processing Results



RT	Mass	Response	Amount
4.35	67.00	109	0.105266
4.34	41.00	149	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

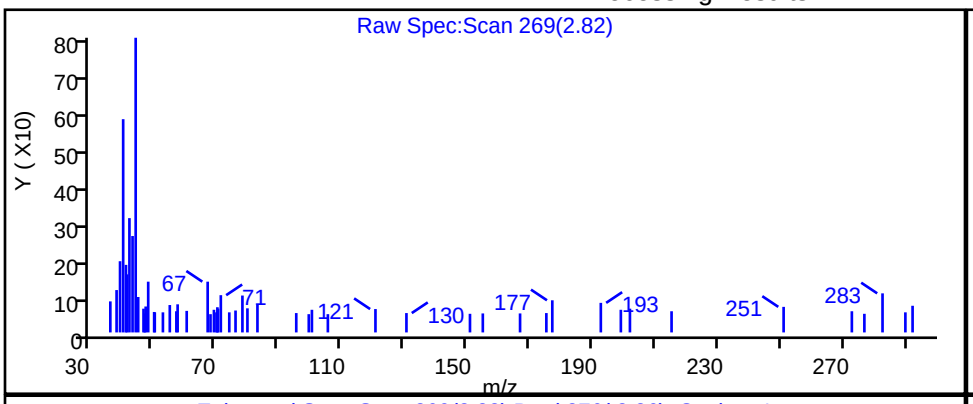
User Disabled Compound Report

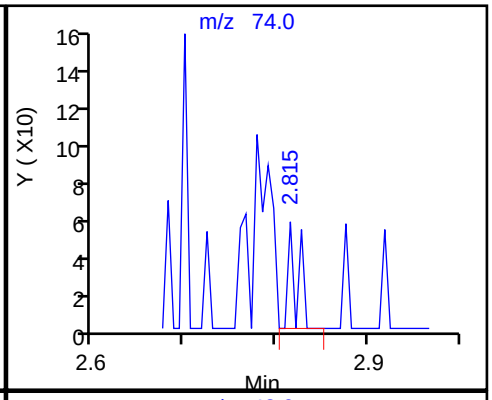
TestAmerica Edison

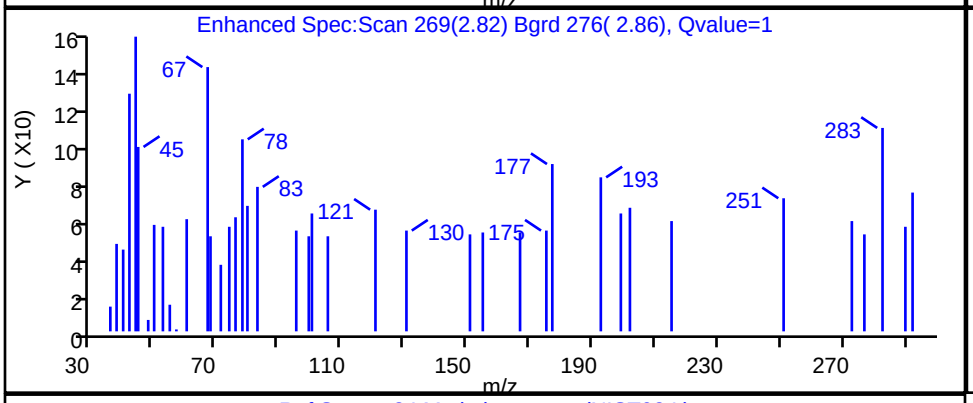
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

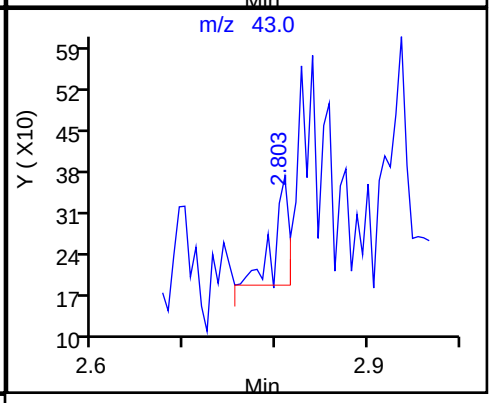
24 Methyl acetate, CAS: 79-20-9

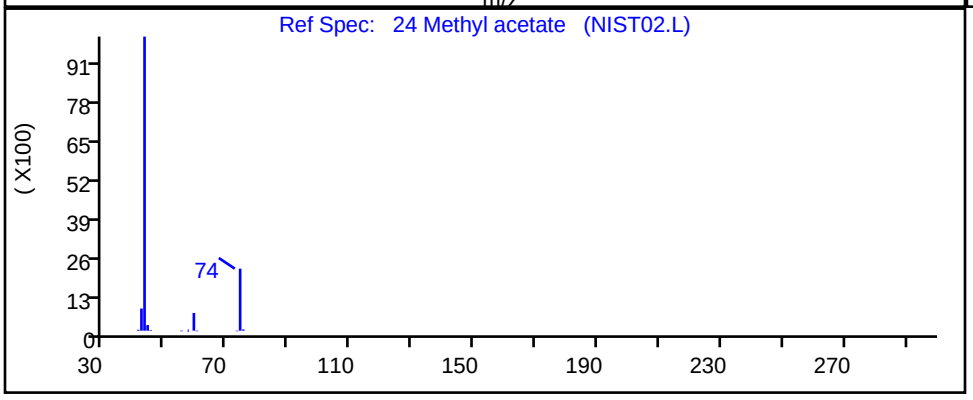
Processing Results











RT	Mass	Response	Amount
2.82	74.00	39	0.095777
2.80	43.00	207	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

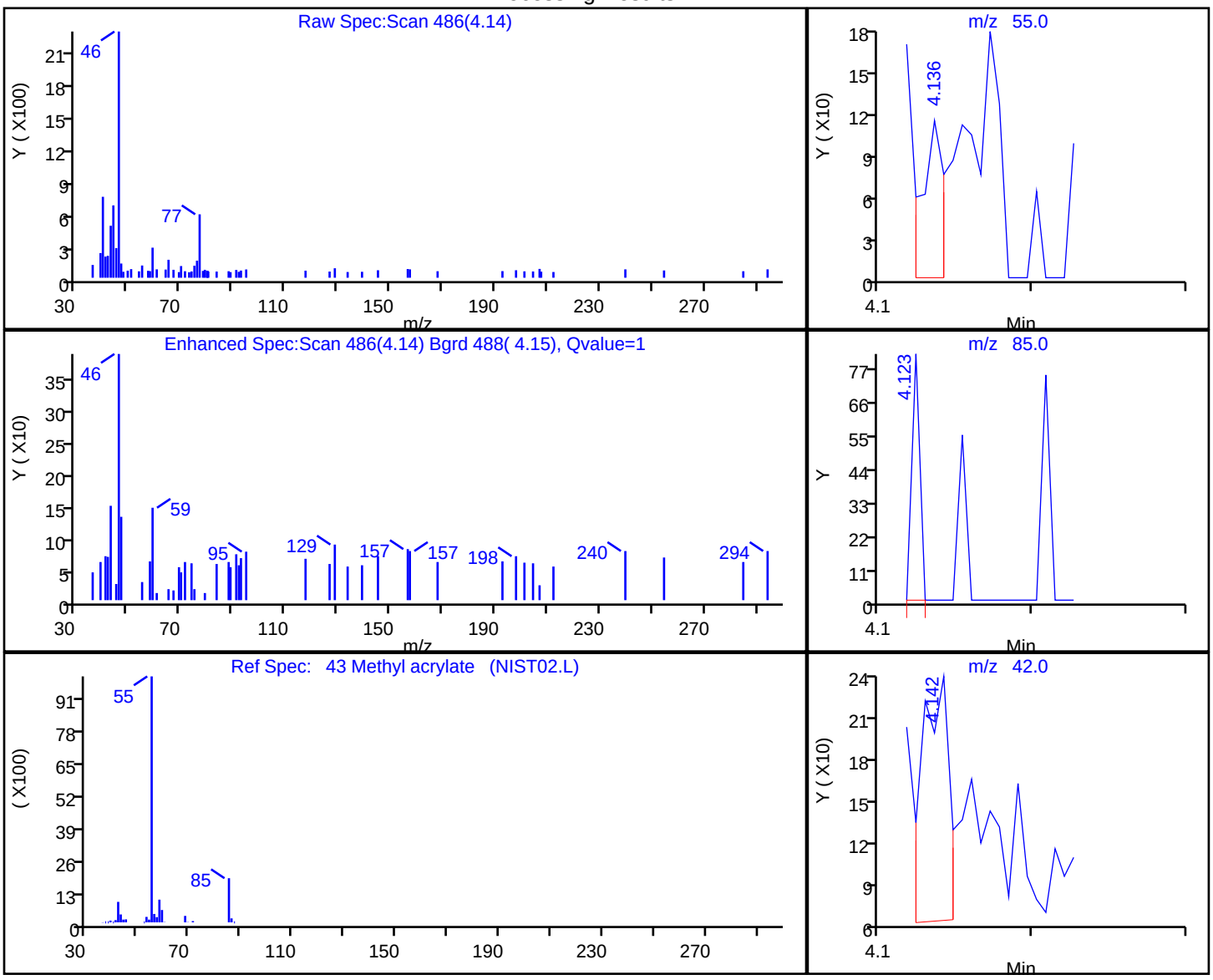
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

43 Methyl acrylate, CAS: 96-33-3

Processing Results



RT	Mass	Response	Amount
4.14	55.00	110	0.050081
4.12	85.00	30	
4.14	42.00	212	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

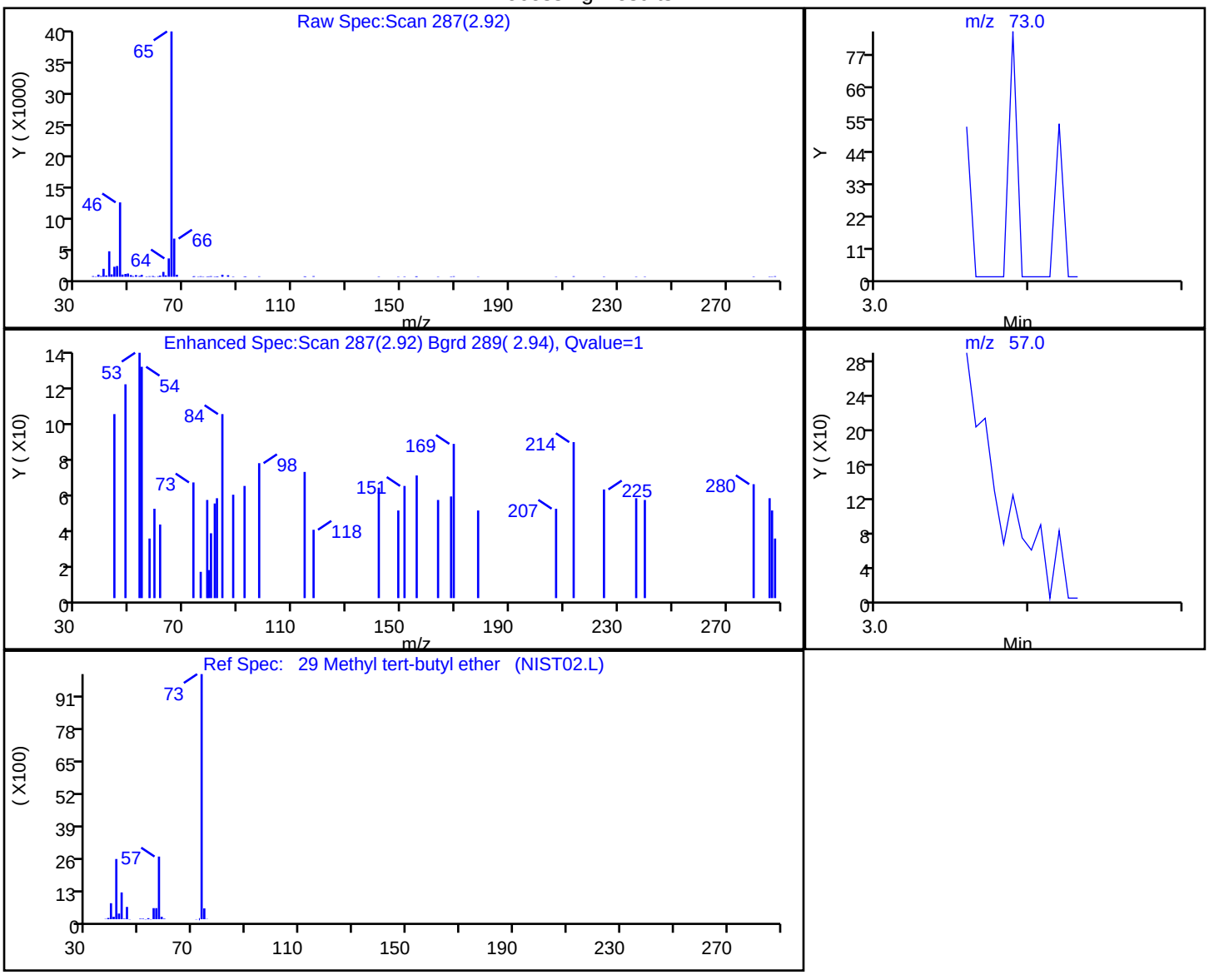
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

29 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
2.92	73.00	78	0.006312
2.92	57.00	149	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

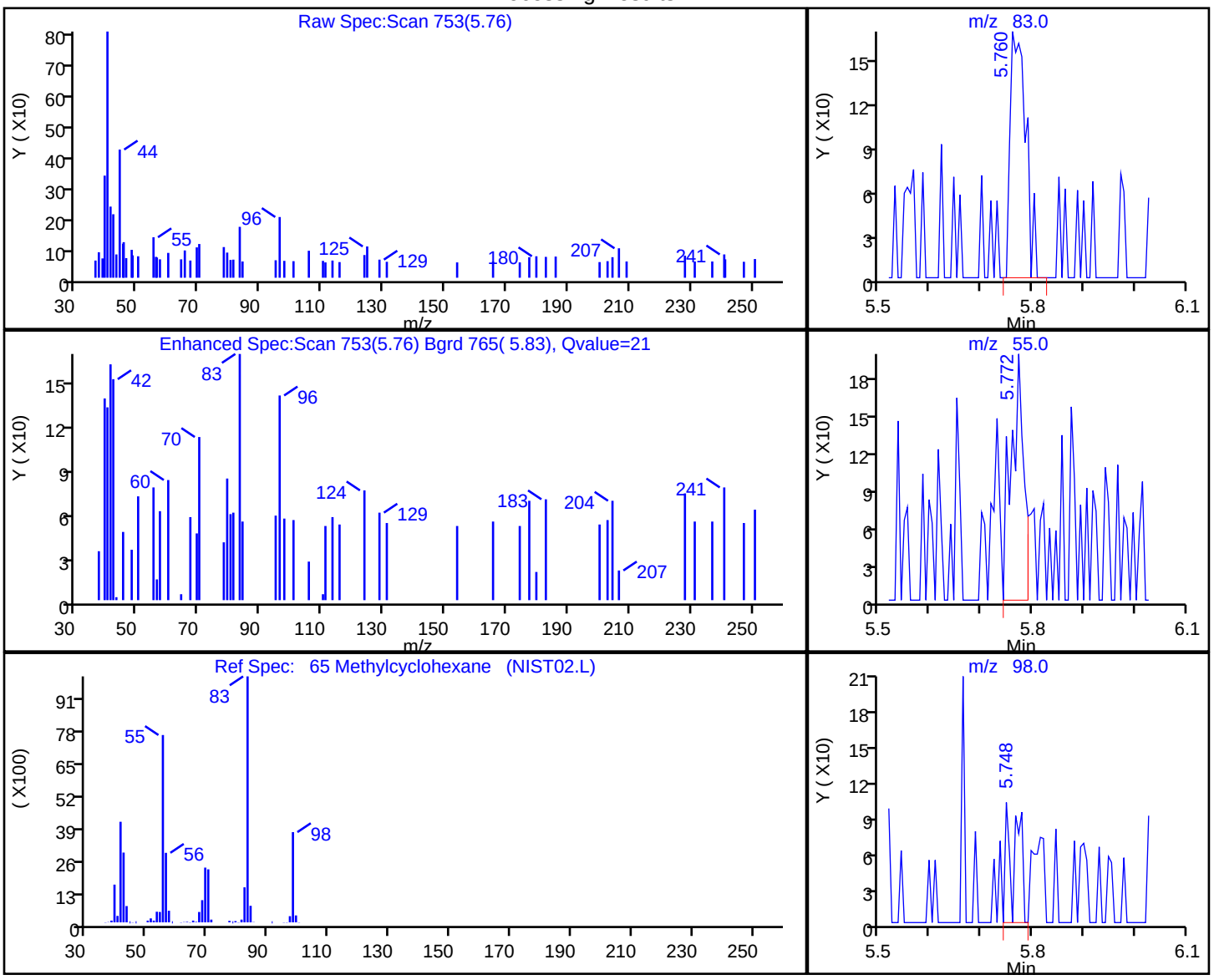
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

65 Methylcyclohexane, CAS: 108-87-2

Processing Results



RT	Mass	Response	Amount
5.76	83.00	354	0.035024
5.77	55.00	330	
5.75	98.00	151	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

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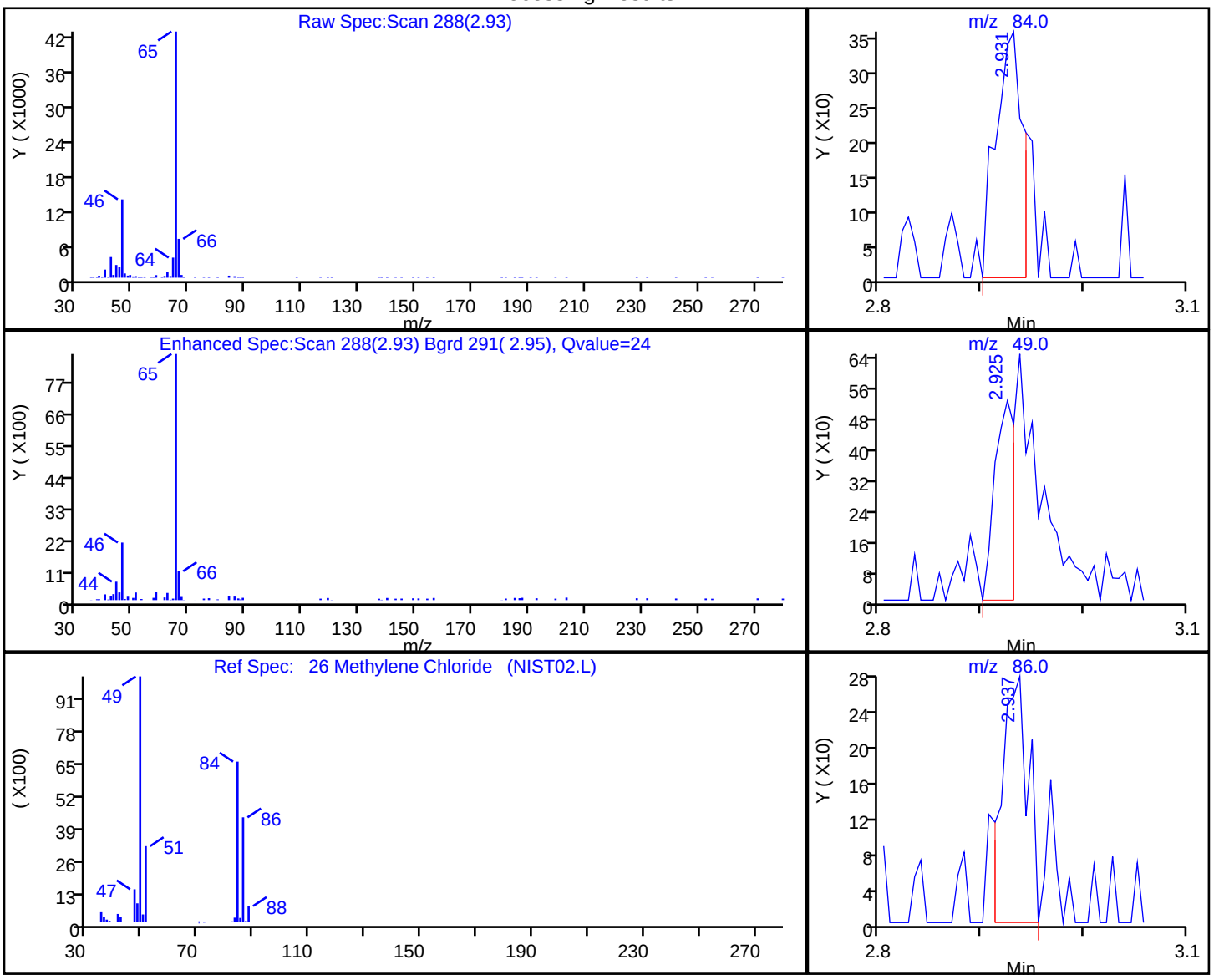
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
2.93	84.00	637	0.117877
2.92	49.00	706	
2.94	86.00	497	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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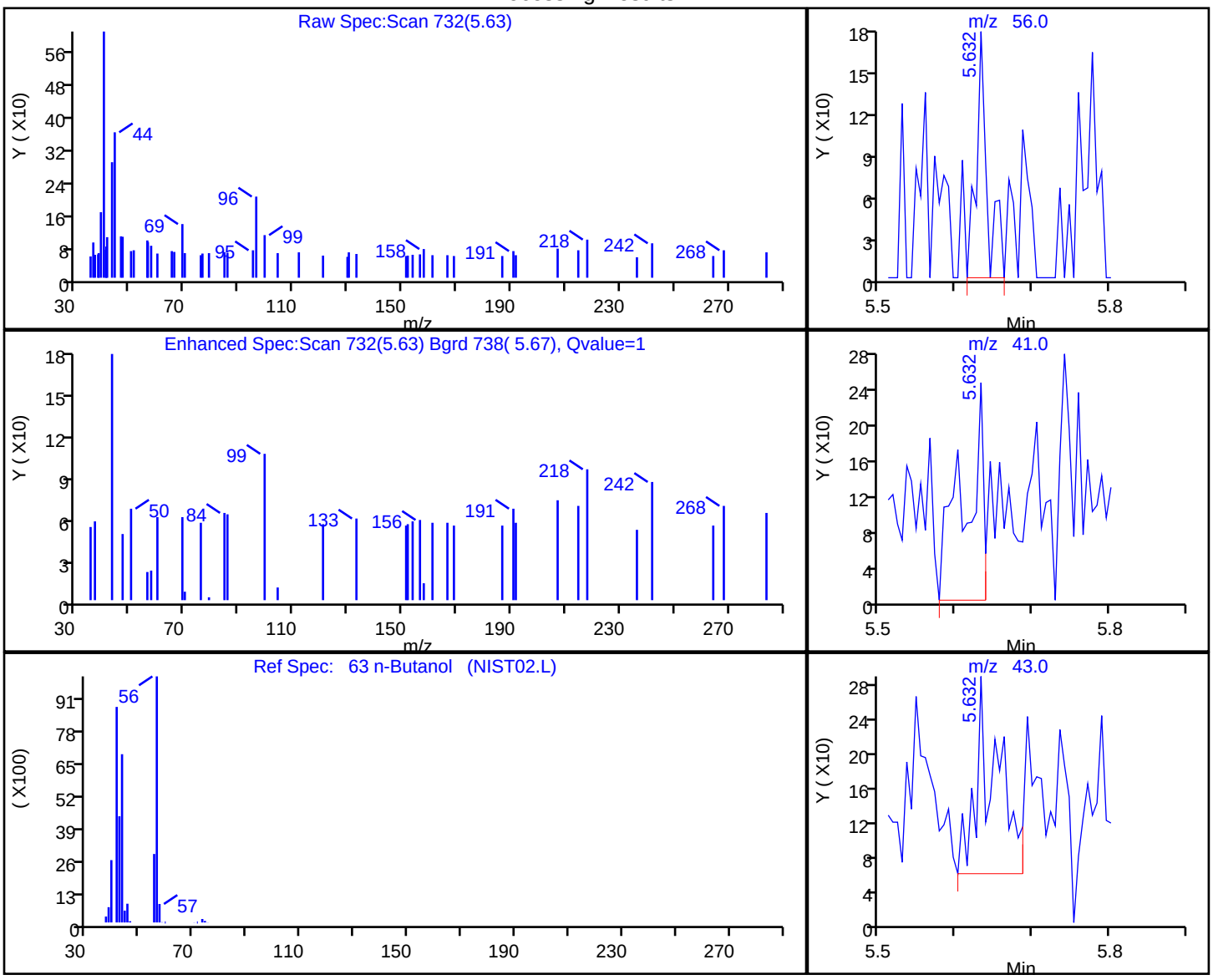
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

63 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
5.63	56.00	179	5.224194
5.63	41.00	414	
5.63	43.00	450	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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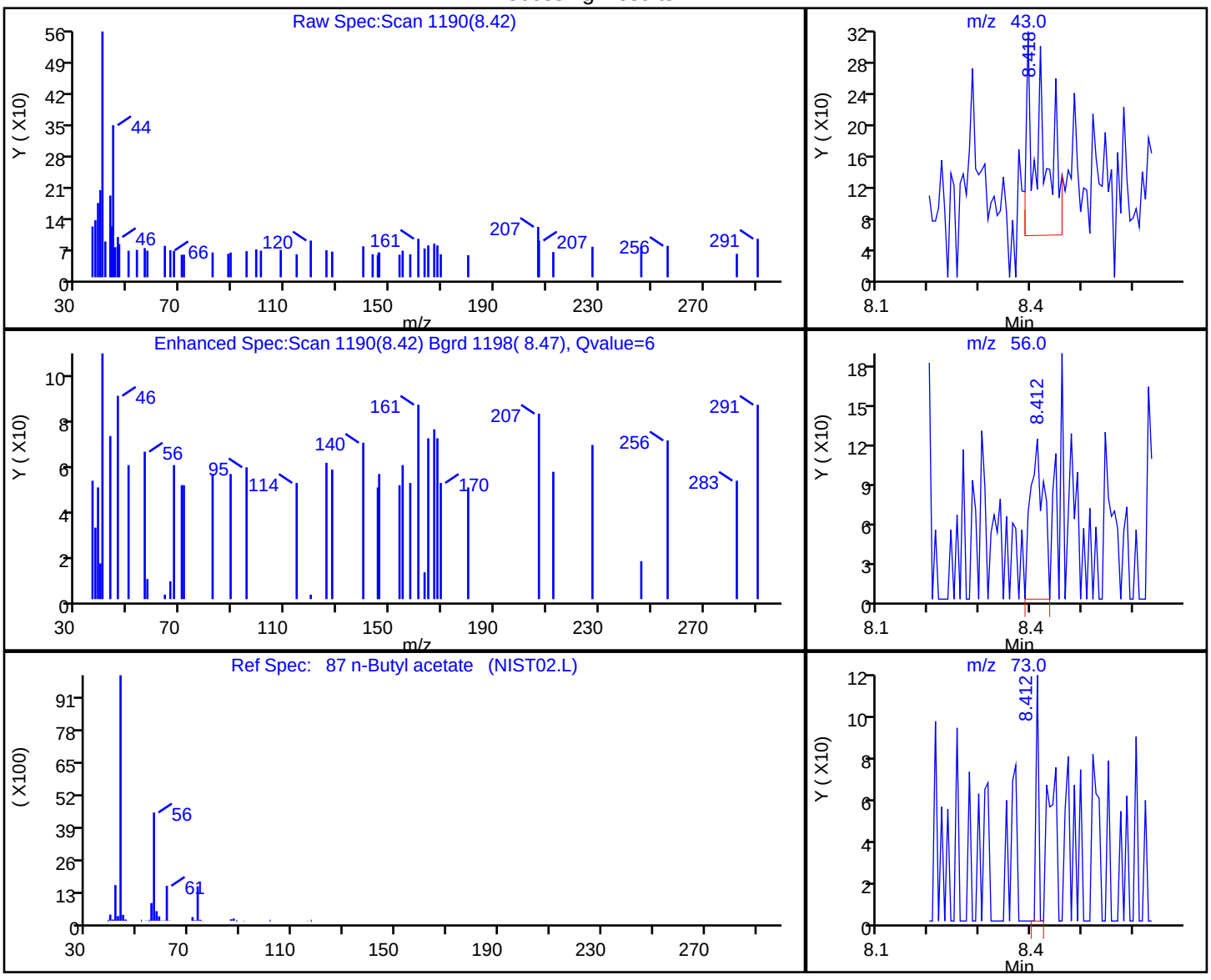
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

87 n-Butyl acetate, CAS: 123-86-4

Processing Results



RT	Mass	Response	Amount
8.42	43.00	512	0.138323
8.41	56.00	215	
8.41	73.00	41	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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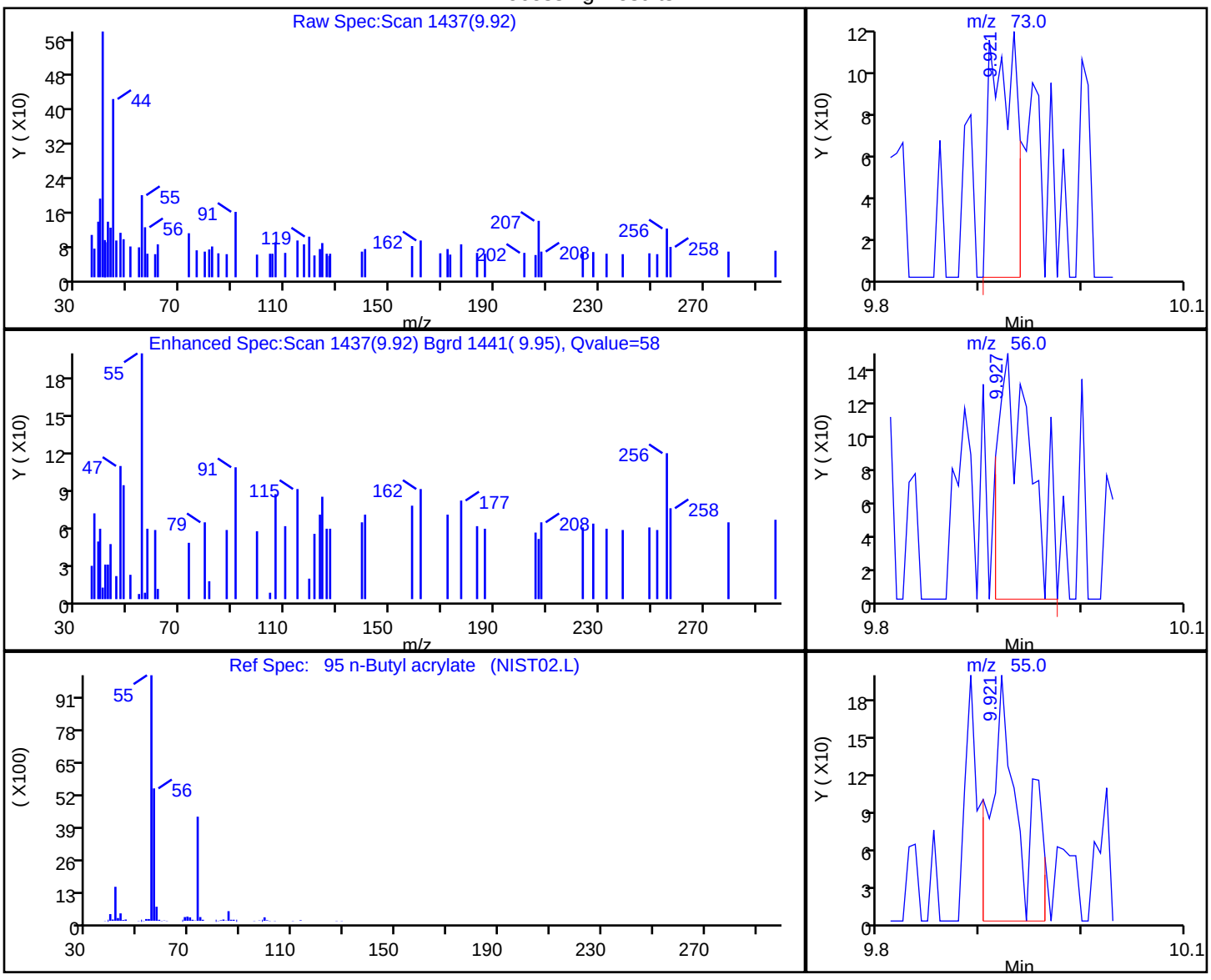
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 n-Butyl acrylate, CAS: 141-32-2

Processing Results



RT	Mass	Response	Amount
9.92	73.00	199	0.063854
9.93	56.00	324	
9.92	55.00	377	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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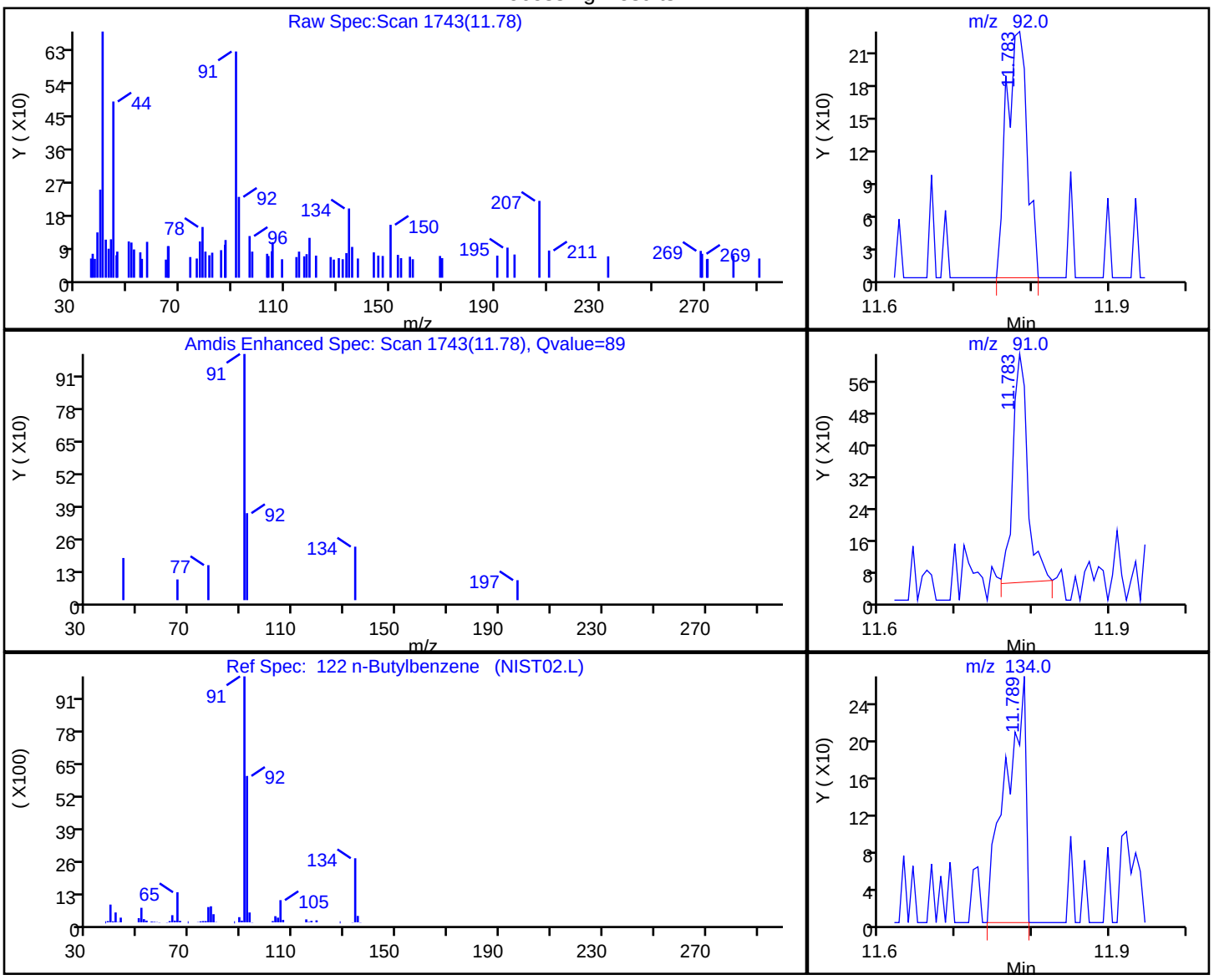
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

122 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
11.78	92.00	416	0.036373
11.78	91.00	773	
11.79	134.00	469	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

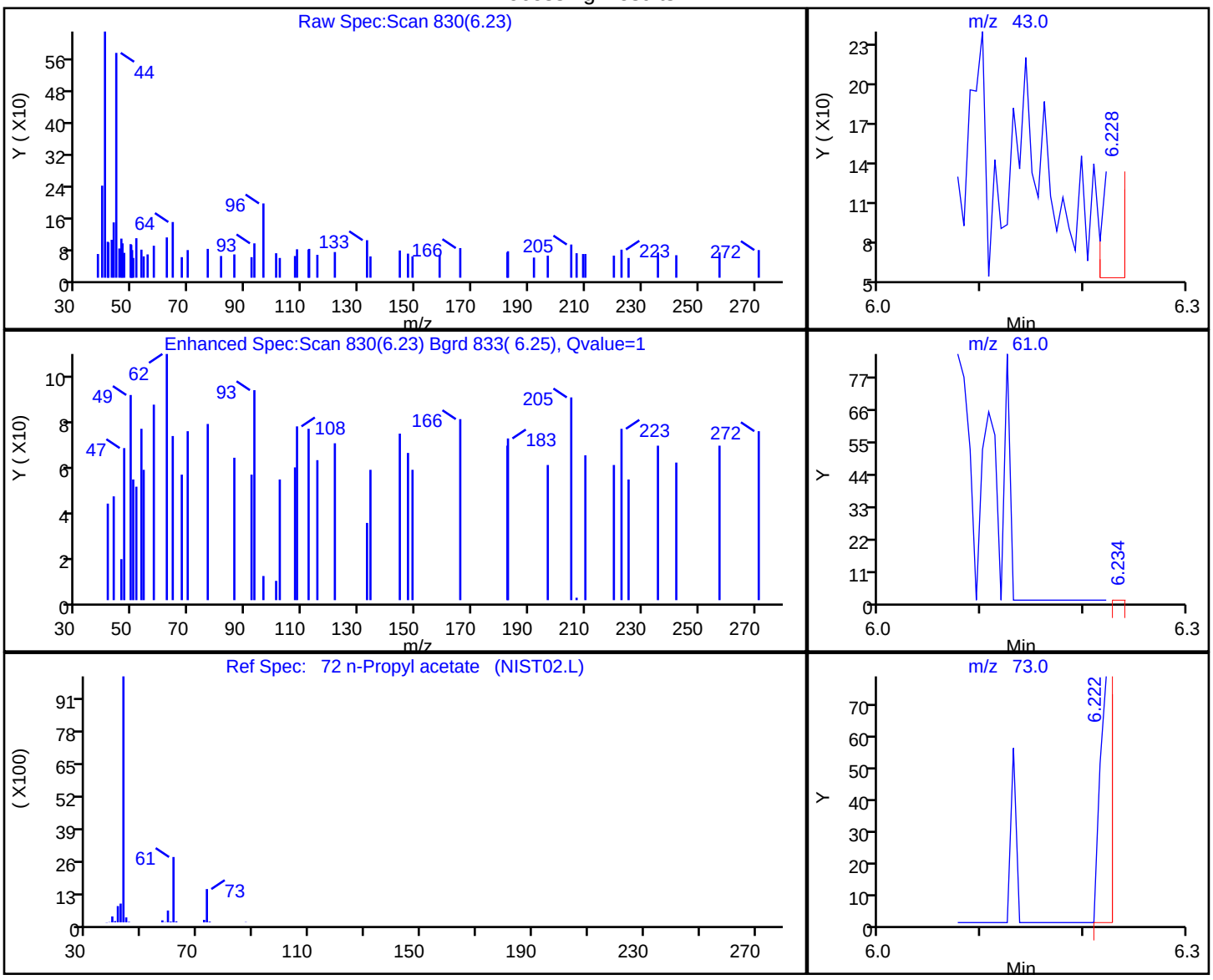
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

72 n-Propyl acetate, CAS: 109-60-4

Processing Results



RT	Mass	Response	Amount
6.23	43.00	96	0.031994
6.23	61.00	22	
6.22	73.00	47	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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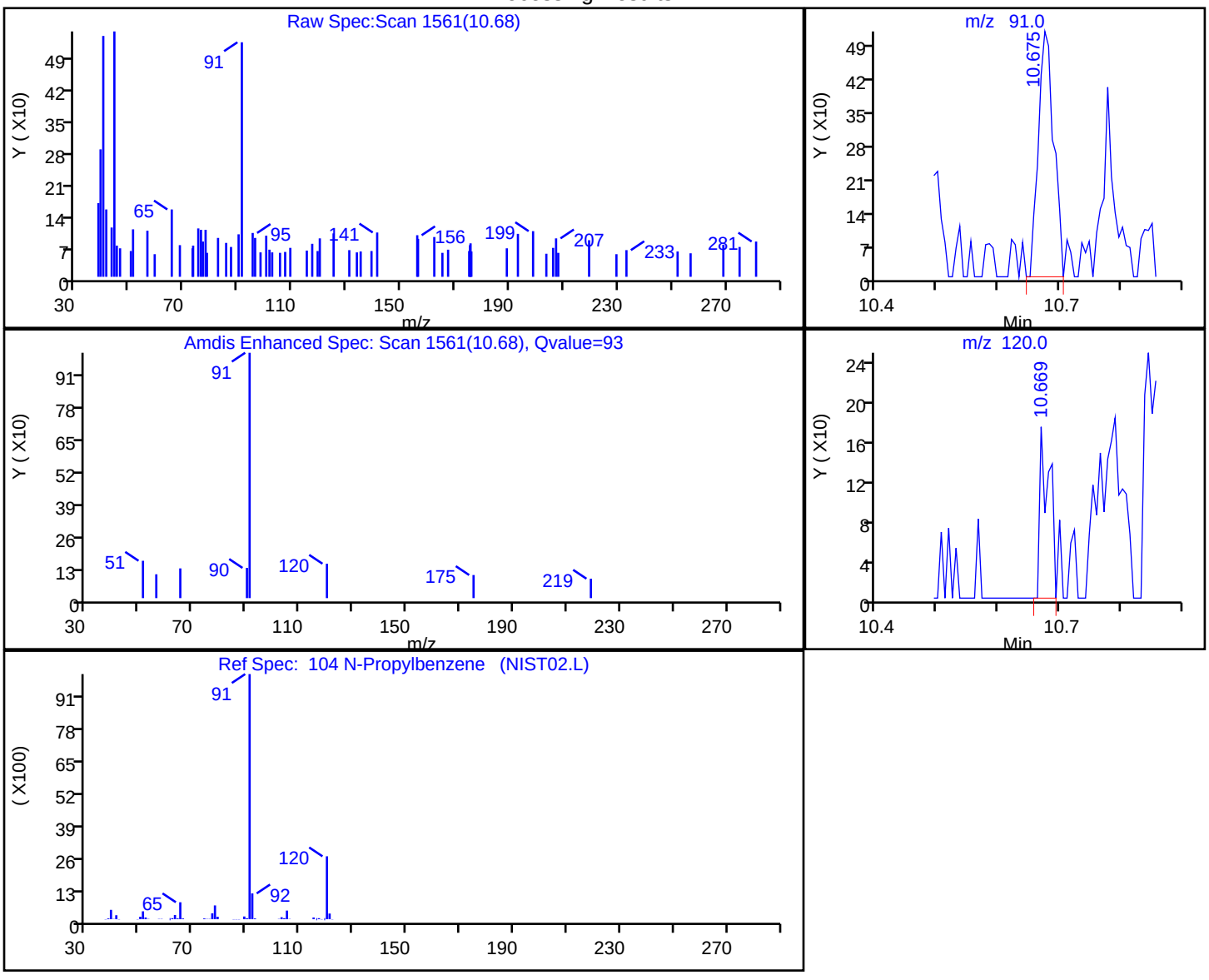
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

104 N-Propylbenzene, CAS: 103-65-1

Processing Results



RT	Mass	Response	Amount
10.68	91.00	910	0.030250
10.67	120.00	188	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

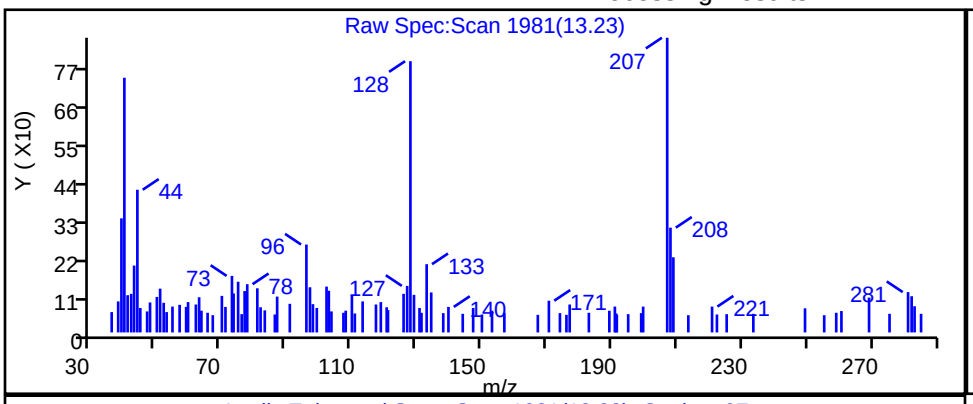
User Disabled Compound Report

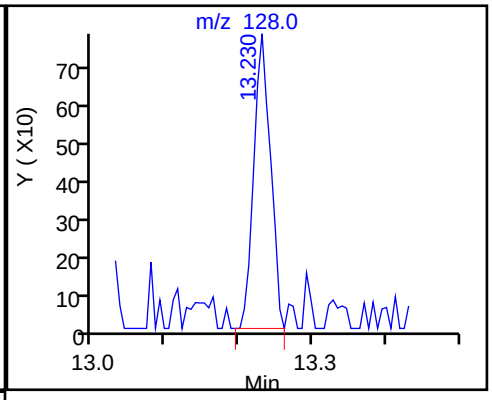
TestAmerica Edison

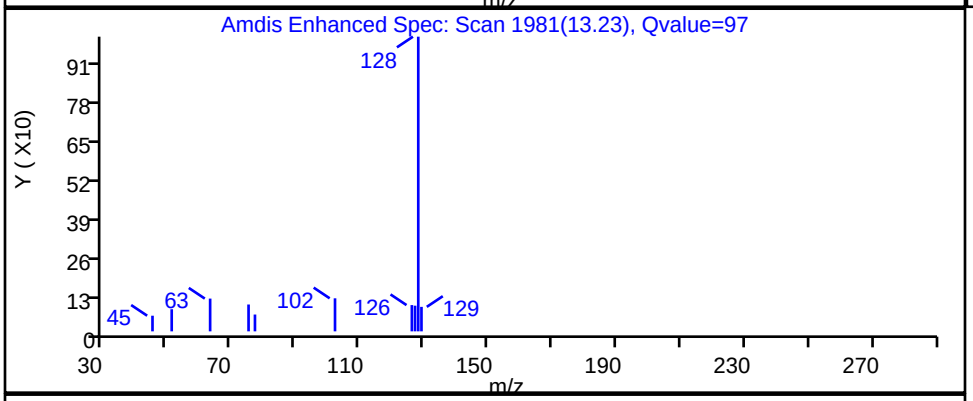
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

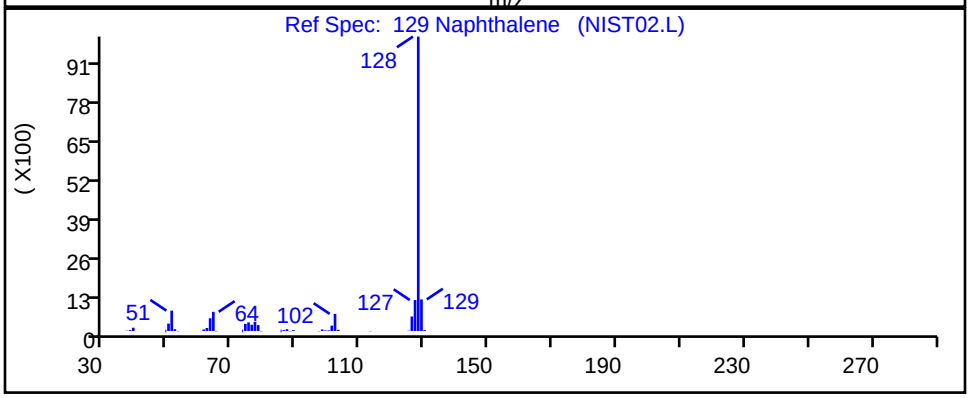
129 Naphthalene, CAS: 91-20-3

Processing Results









RT	Mass	Response	Amount
13.23	128.00	1248	0.121083

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

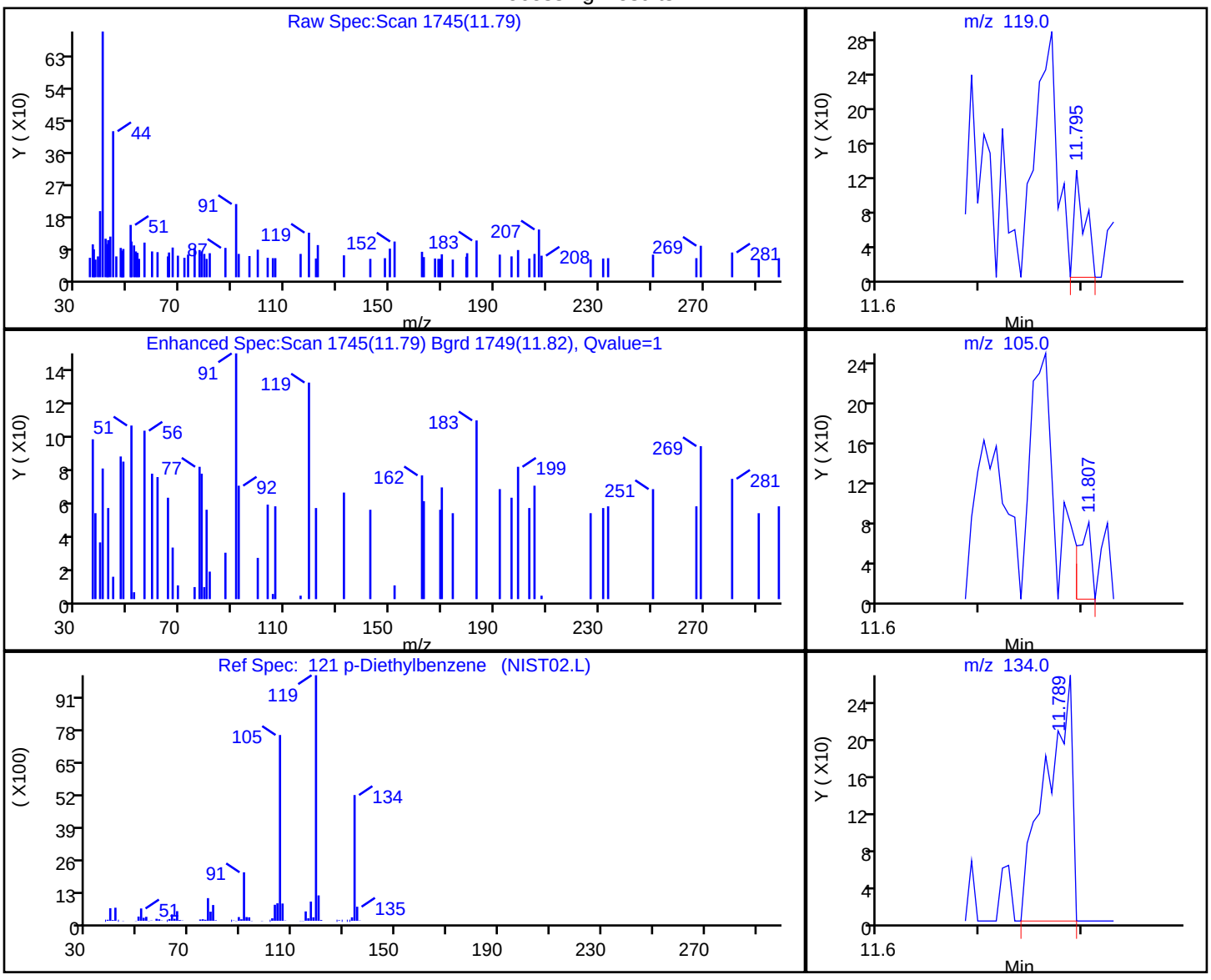
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D				
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

121 p-Diethylbenzene, CAS: 105-05-5

Processing Results



RT	Mass	Response	Amount
11.79	119.00	93	0.007648
11.81	105.00	68	
11.79	134.00	469	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

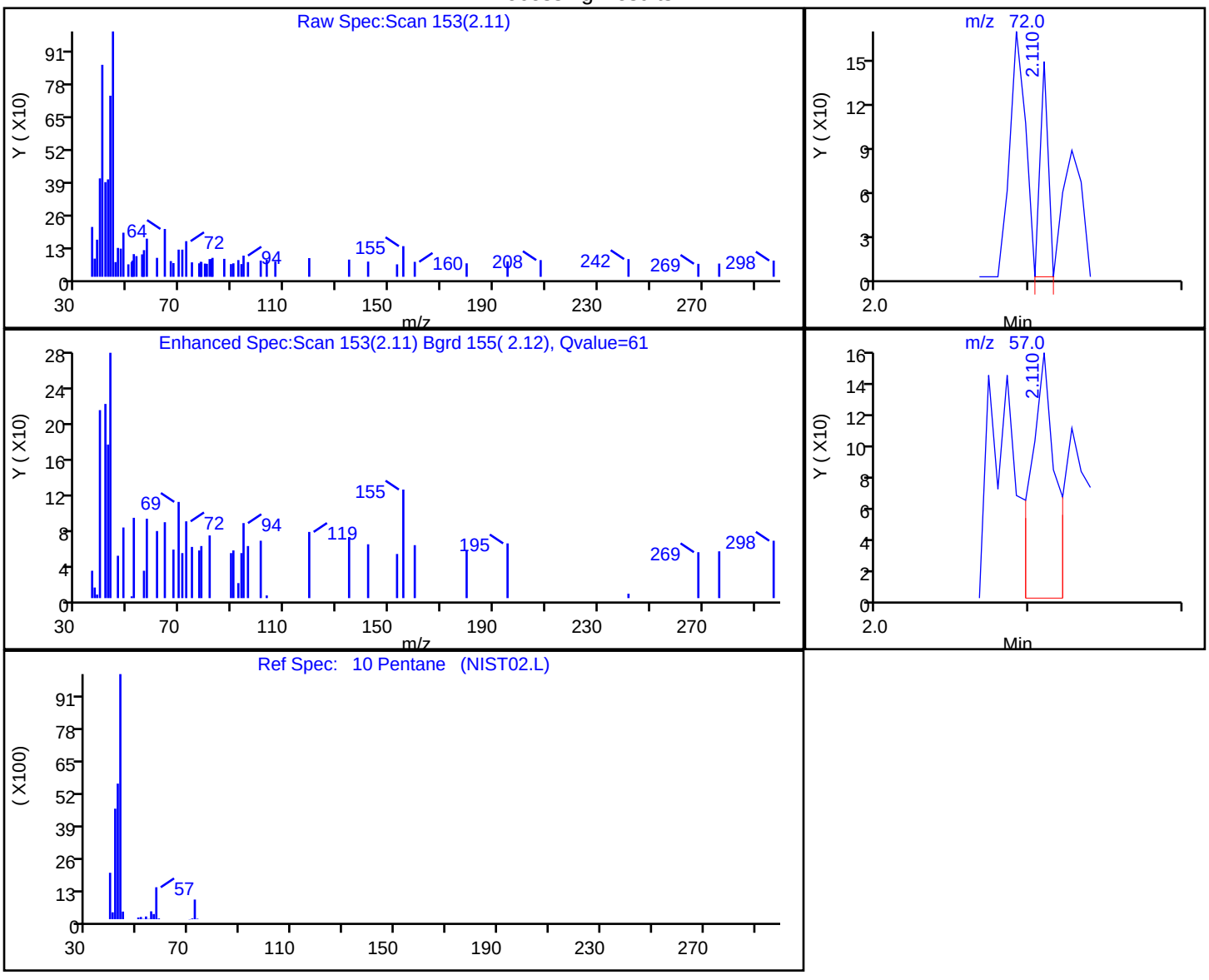
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

10 Pentane, CAS: 109-66-0

Processing Results



RT	Mass	Response	Amount
2.11	72.00	52	0.048982
2.11	57.00	166	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

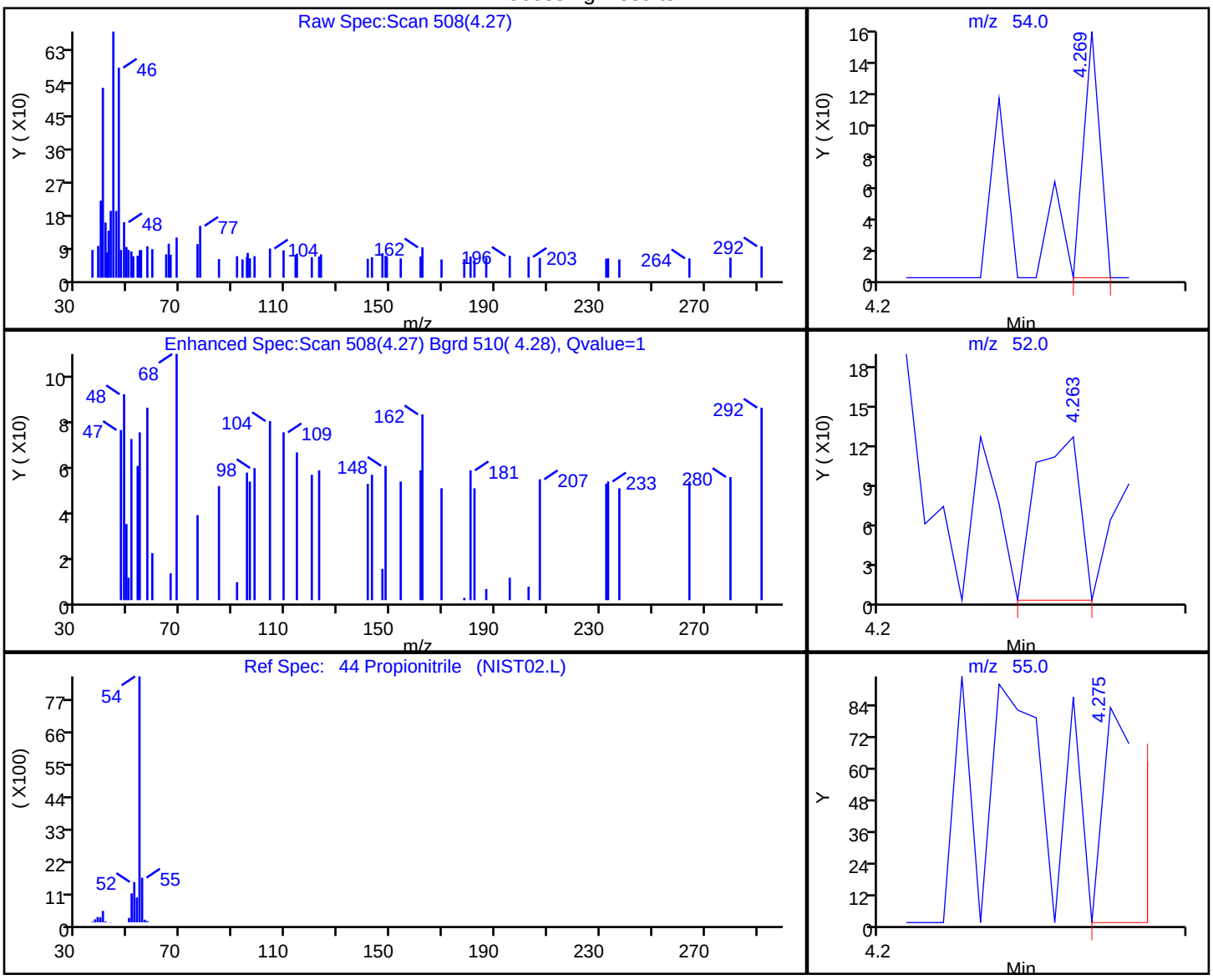
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Propionitrile, CAS: 107-12-0

Processing Results



RT	Mass	Response	Amount
4.27	54.00	55	0.181622
4.26	52.00	121	
4.28	55.00	74	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
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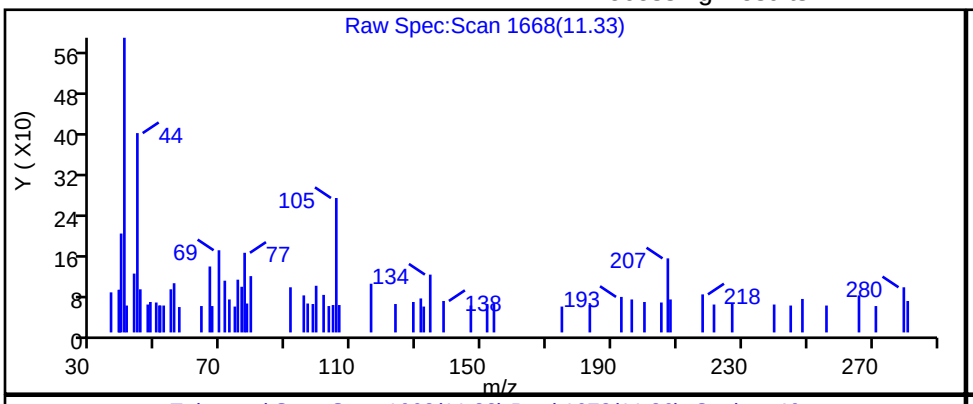
User Disabled Compound Report

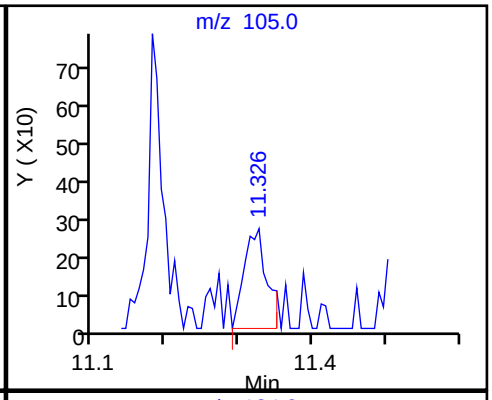
TestAmerica Edison

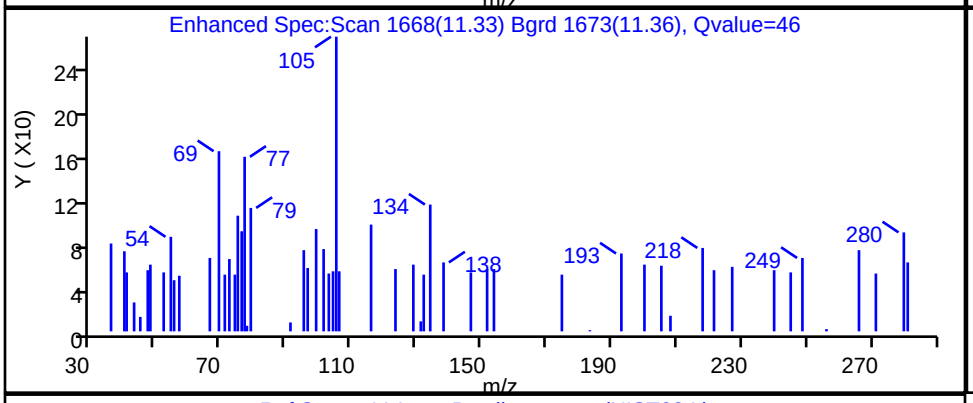
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

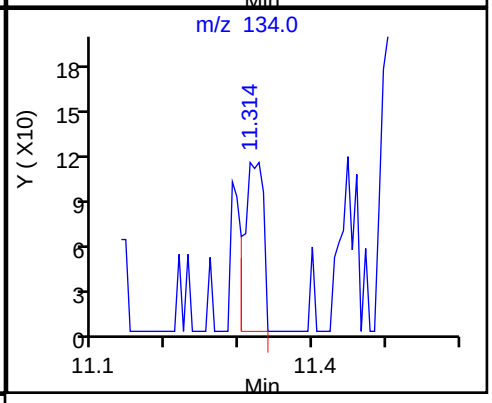
114 sec-Butylbenzene, CAS: 135-98-8

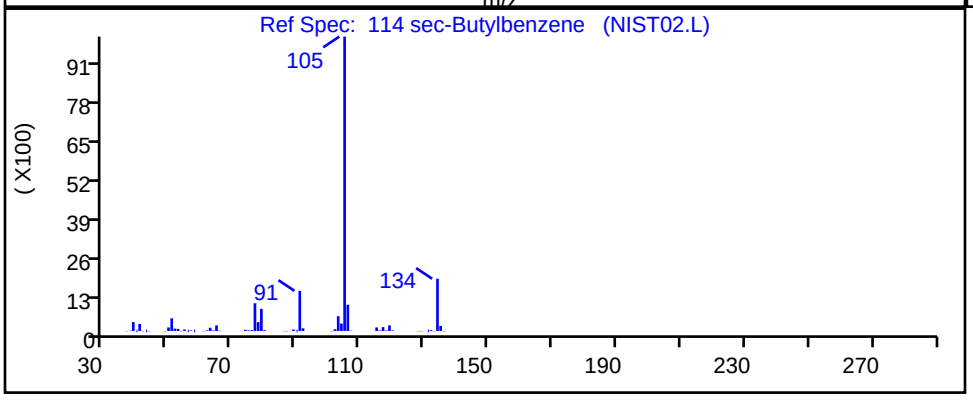
Processing Results











RT	Mass	Response	Amount
11.33	105.00	572	0.022302
11.31	134.00	205	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

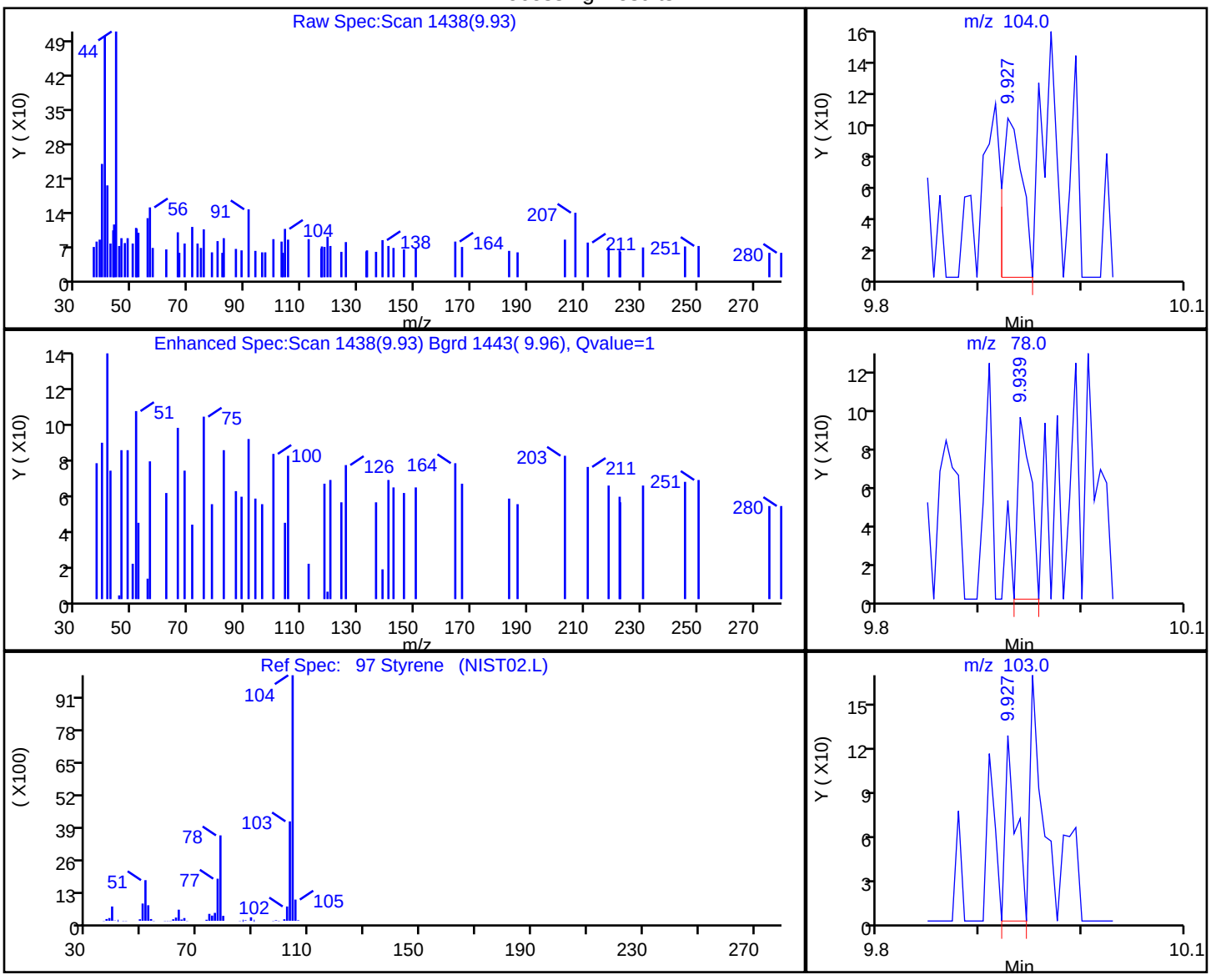
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

97 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
9.93	104.00	132	0.008470
9.94	78.00	83	
9.93	103.00	91	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

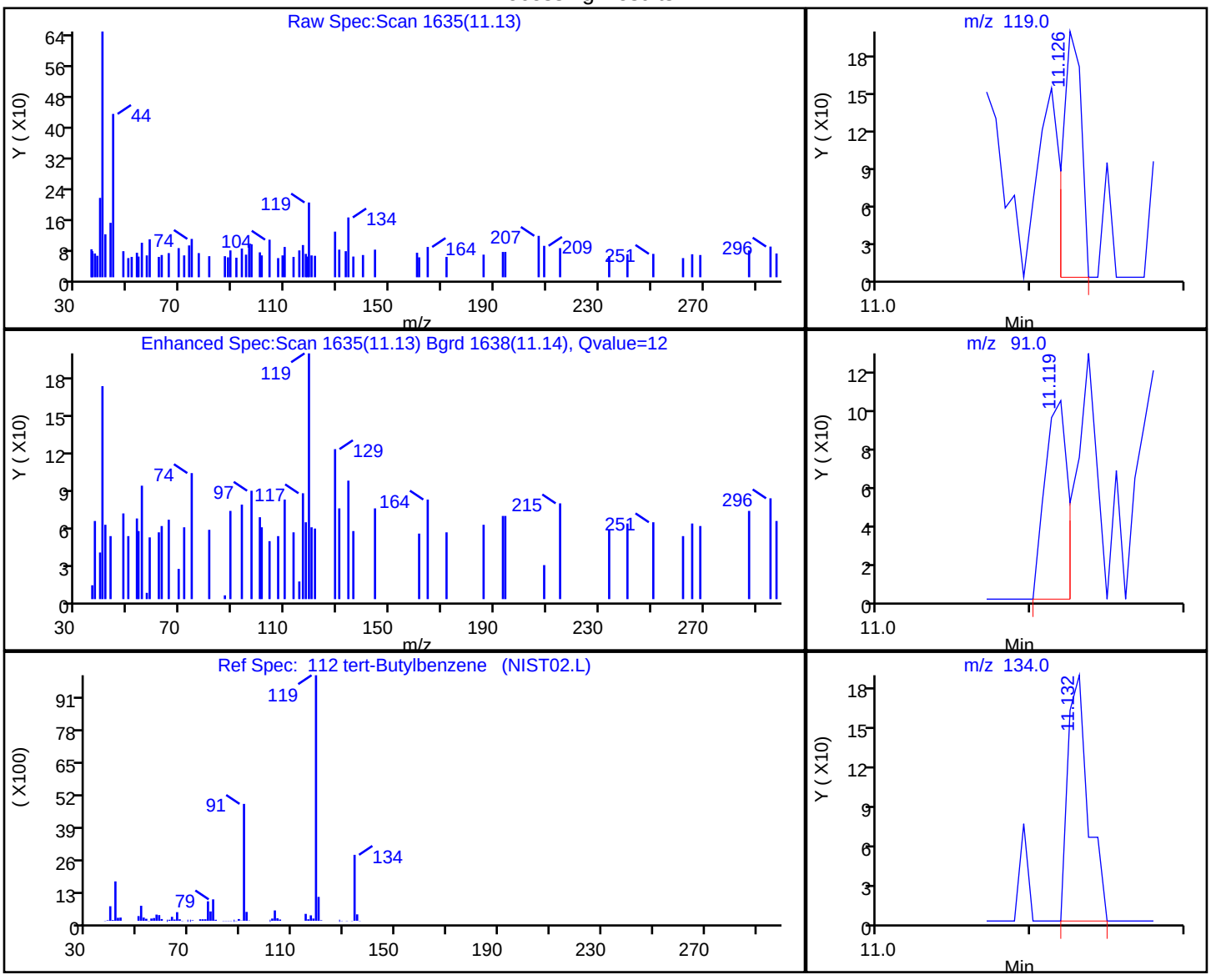
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D		
Injection Date:	20-Apr-2018 01:29:30	Instrument ID:	CVOAMS11
Lims ID:	STD8		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

112 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
11.13	119.00	163	0.009926
11.12	91.00	111	
11.13	134.00	169	

Reviewer: delpolitov, 20-Apr-2018 22:07:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

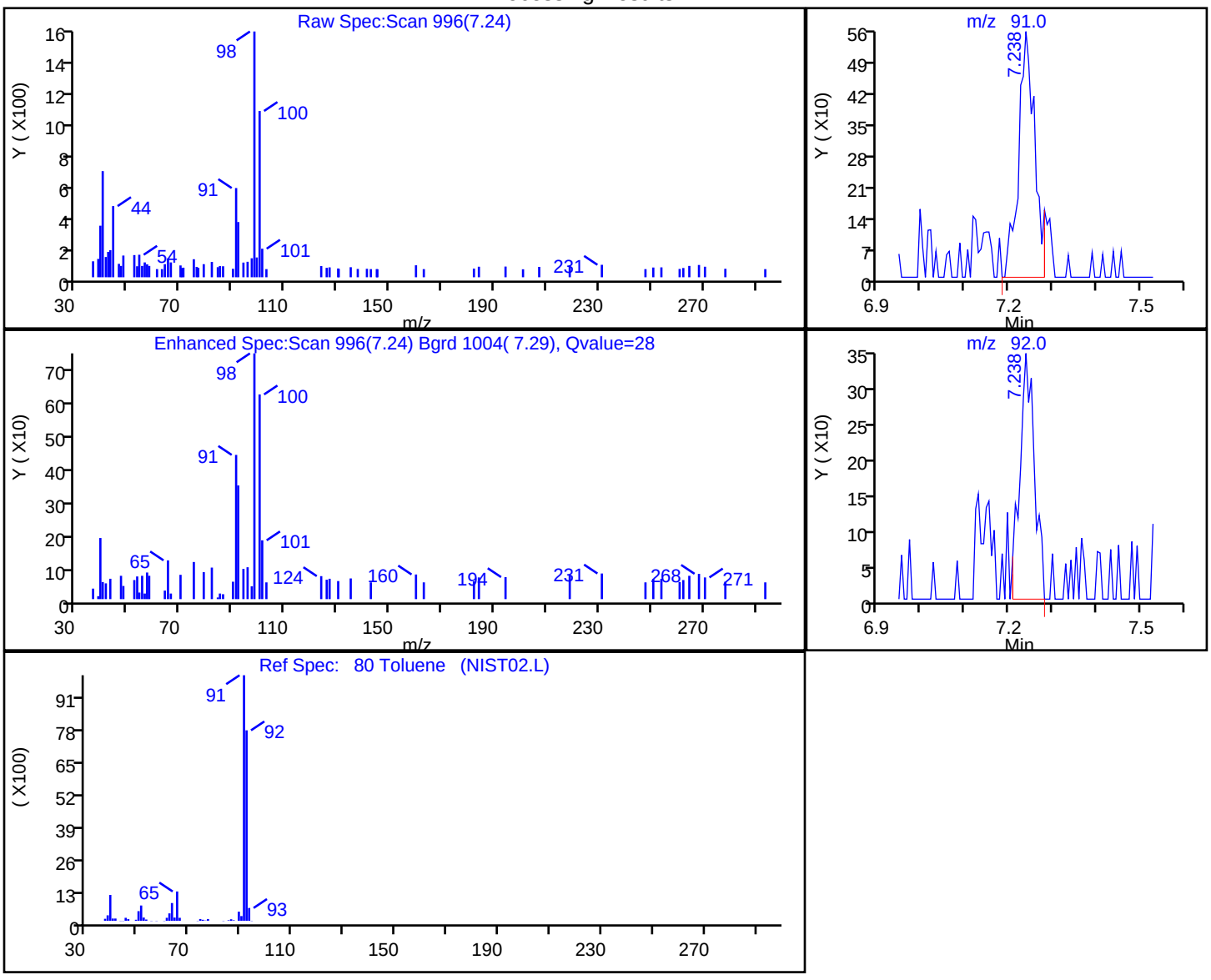
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

80 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
7.24	91.00	1438	0.056387
7.24	92.00	808	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

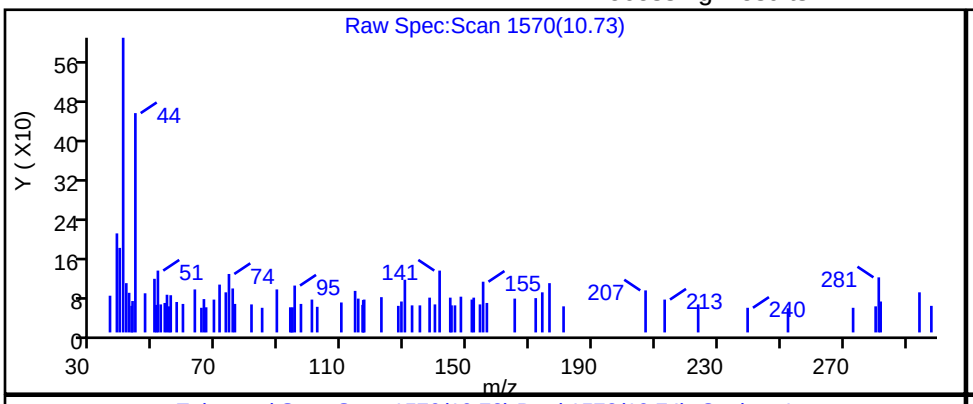
User Disabled Compound Report

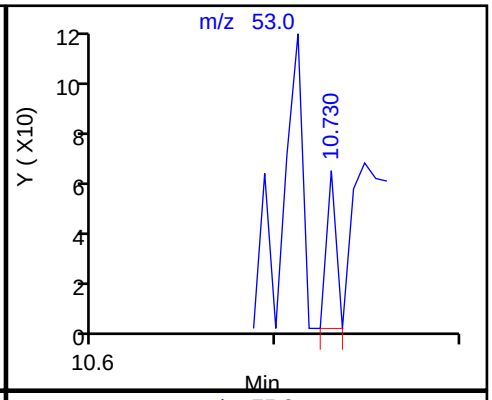
TestAmerica Edison

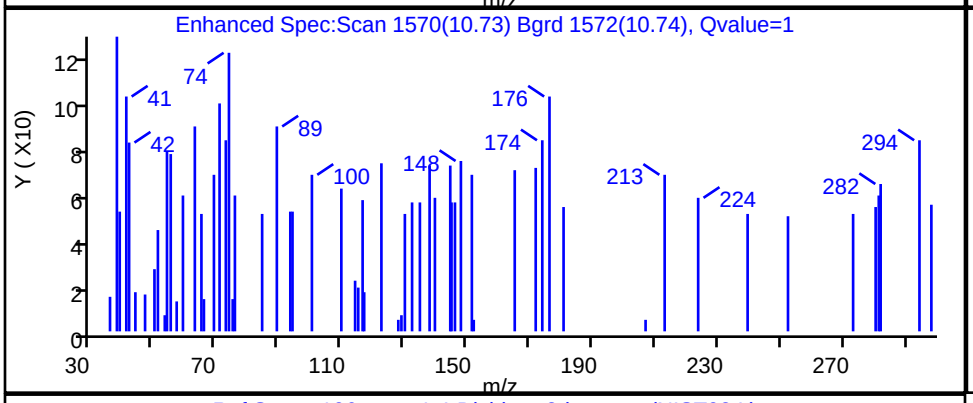
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

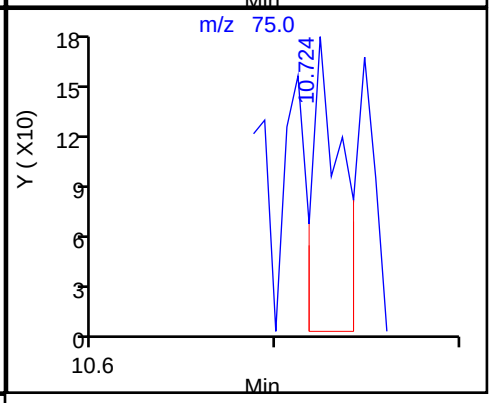
106 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

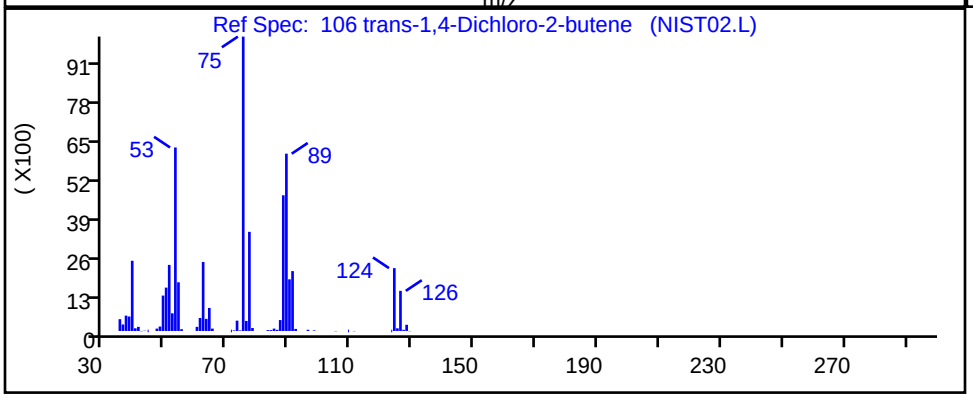
Processing Results











RT	Mass	Response	Amount
10.73	53.00	22	0.029571
10.72	75.00	189	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

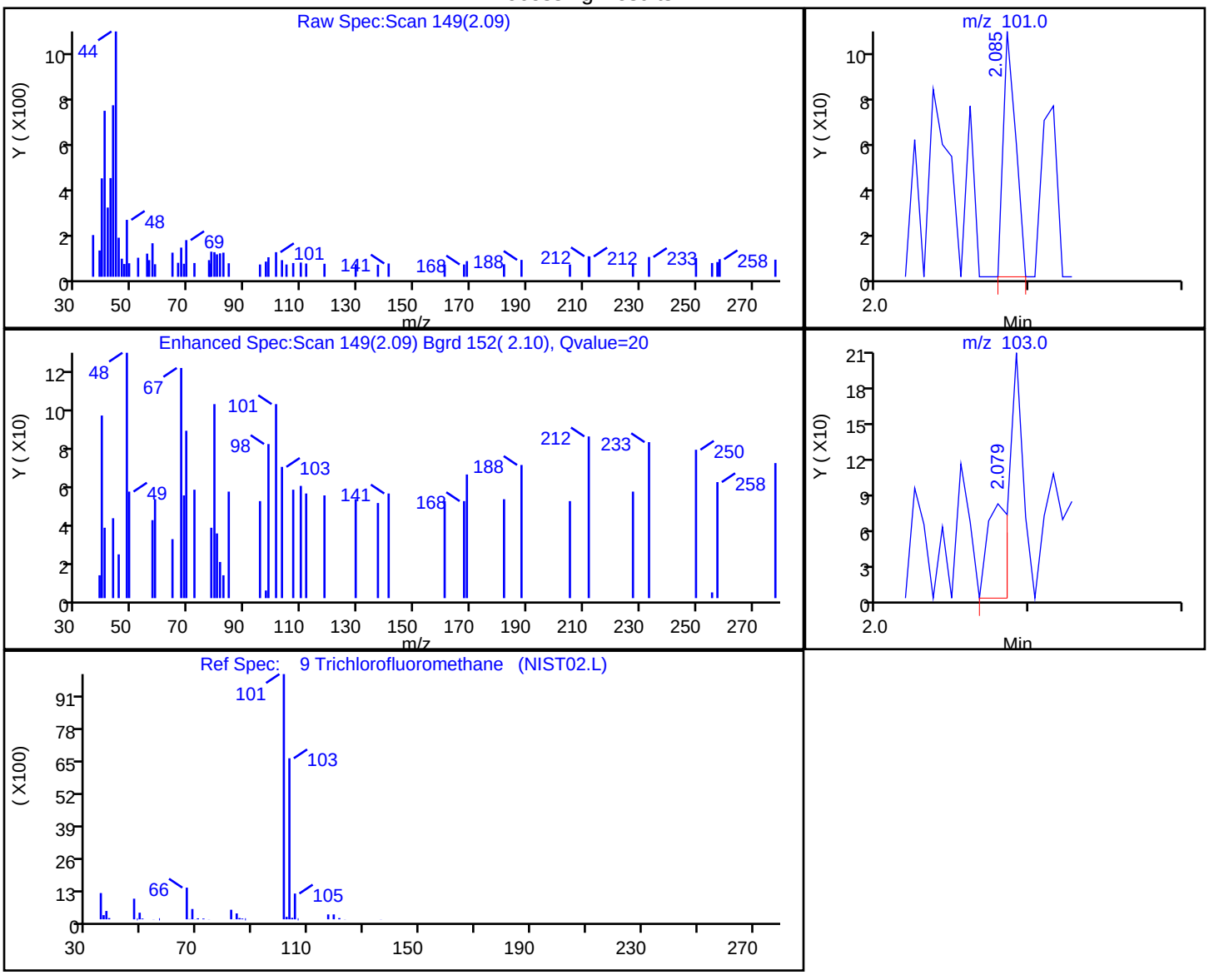
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Trichlorofluoromethane, CAS: 75-69-4

Processing Results



RT	Mass	Response	Amount
2.09	101.00	57	0.006016
2.08	103.00	77	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

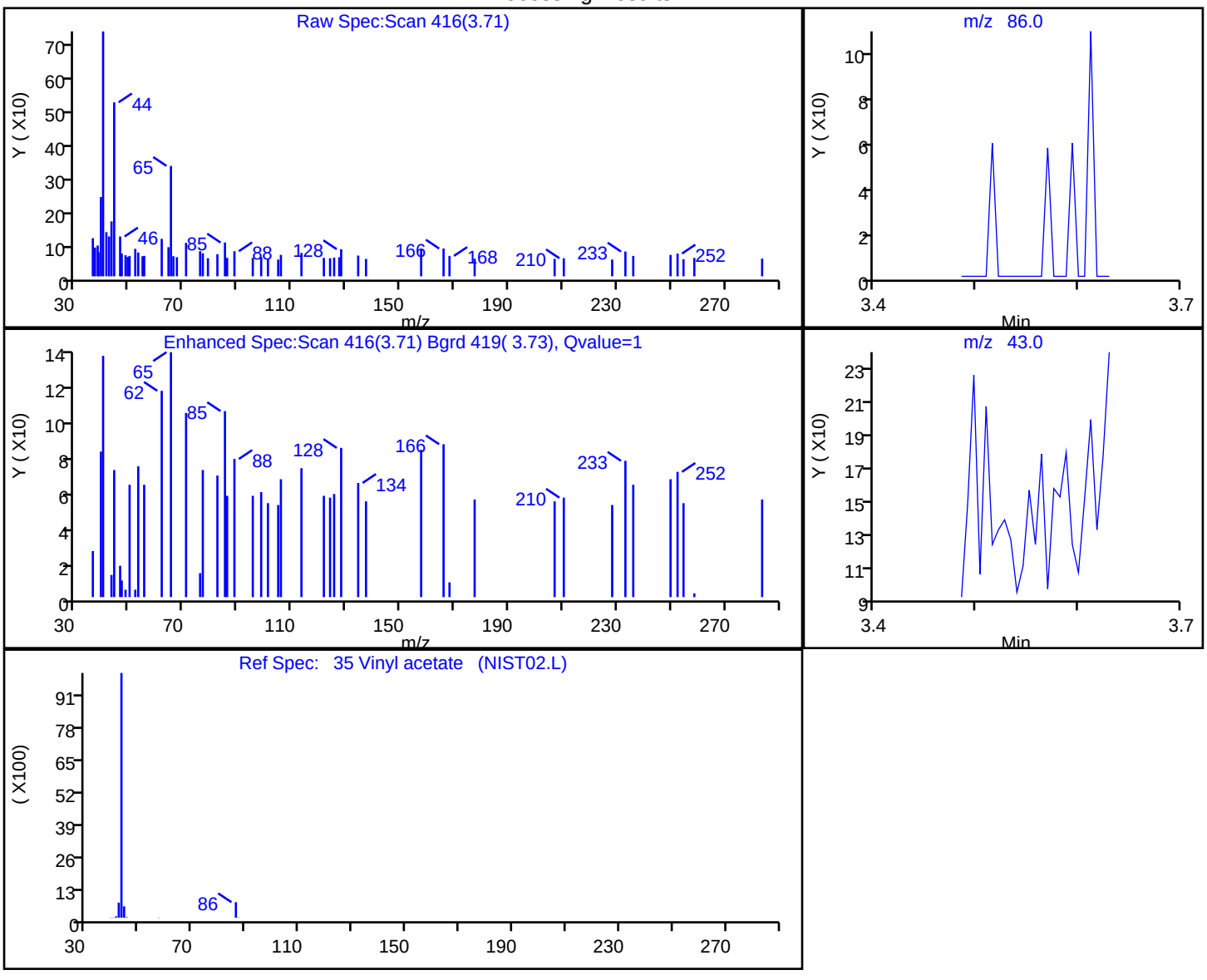
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

35 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
3.71	86.00	20	0.028473
3.70	43.00	219	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

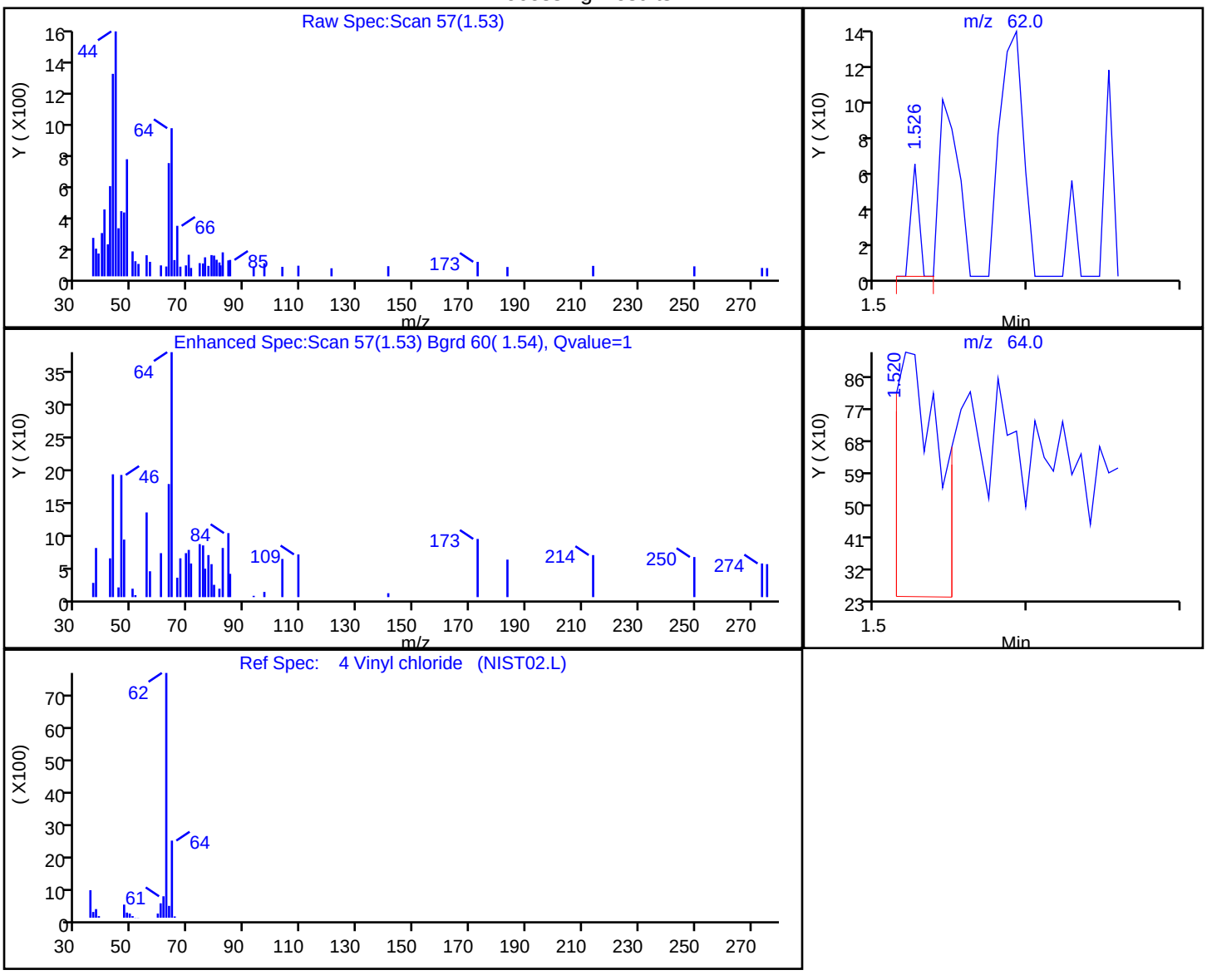
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65799.D
Injection Date: 20-Apr-2018 01:29:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

4 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.53	62.00	22	0.003960
1.52	64.00	1350	

Reviewer: delpolitov, 20-Apr-2018 22:07:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 20-Apr-2018 01:52:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0070690-004
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 14:41:21 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: boykink Date: 20-Apr-2018 03:09:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.313	1.325	-0.012	85	2602	1.00	0.5612	
2 Dichlorodifluoromethane	87	1.337	1.349	-0.012	64	2241	1.00	0.8462	Ma
3 Chloromethane	52	1.502	1.495	0.007	98	1690	1.00	1.07	
4 Vinyl chloride	62	1.575	1.587	-0.012	96	5112	1.00	0.9256	
5 Butadiene	54	1.581	1.587	-0.006	70	4068	1.00	1.02	
6 Bromomethane	94	1.830	1.842	-0.012	96	3951	1.00	1.01	
7 Chloroethane	64	1.897	1.903	-0.006	93	2803	1.00	1.00	
8 Dichlorofluoromethane	67	2.061	2.067	-0.006	97	9836	1.00	0.9637	
9 Trichlorofluoromethane	101	2.073	2.073	0.000	72	6549	1.00	0.8297	
10 Pentane	72	2.098	2.104	-0.006	94	1666	2.00	2.03	
11 Ethanol	46	2.286	2.286	0.000	75	500	40.0	50.6	
12 Ethyl ether	59	2.286	2.292	-0.006	92	3090	1.00	1.02	
13 2-Methyl-1,3-butadiene	53	2.298	2.311	-0.013	94	3602	1.00	0.7605	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.341	0.000	70	4185	1.00	0.9048	
16 Acrolein	56	2.463	2.463	0.000	37	973	4.00	3.41	
15 1,1,2-Trichloro-1,2,2-trif	101	2.469	2.481	-0.012	78	4960	1.00	0.8679	a
17 1,1-Dichloroethene	96	2.487	2.487	0.000	97	4031	1.00	0.8540	
18 Acetone	43	2.584	2.578	0.006	57	2801	5.00	5.92	
19 Iodomethane	142	2.633	2.639	-0.006	97	6559	1.00	0.8686	
20 Carbon disulfide	76	2.664	2.676	-0.012	98	15688	1.00	0.9059	
21 Isopropyl alcohol	45	2.694	2.688	0.006	1	835	10.0	9.73	a
22 3-Chloro-1-propene	76	2.797	2.803	-0.006	92	2714	1.00	0.9089	
24 Methyl acetate	74	2.858	2.822	0.036	47	691	2.00	1.94	a
23 Cyclopentene	67	2.822	2.822	0.000	94	10323	1.00	0.8789	
25 Acetonitrile	40	2.937	2.870	0.067	12	4009	10.0	27.7	Ma
26 Methylene Chloride	84	2.931	2.931	0.000	33	4764	1.00	0.9341	
* 27 TBA-d9 (IS)	65	2.931	2.937	-0.006	0	168745	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.004	3.010	-0.006	1	1538	10.0	8.75	
29 Methyl tert-butyl ether	73	3.083	3.095	-0.012	97	9455	1.00	0.8442	
30 trans-1,2-Dichloroethene	96	3.126	3.120	0.006	89	5101	1.00	0.9507	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.205	3.199	0.006	99	6520	10.0	8.91	
32 Hexane	57	3.272	3.284	-0.012	92	5794	1.00	0.8925	
33 Isopropyl ether	45	3.497	3.503	-0.006	98	12814	1.00	0.8939	
34 1,1-Dichloroethane	63	3.527	3.527	0.000	97	8743	1.00	0.9703	
35 Vinyl acetate	86	3.558	3.558	0.000	55	766	2.00	1.10	M
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	91	3985	1.00	0.8073	
37 Tert-butyl ethyl ether	59	3.832	3.838	-0.006	90	11301	1.00	0.8469	
* 39 2-Butanone-d5	46	4.044	4.050	-0.006	0	191135	250.0	250.0	
38 2,2-Dichloropropane	79	4.051	4.057	-0.006	49	2390	1.00	0.9353	
40 cis-1,2-Dichloroethene	96	4.081	4.087	-0.006	96	5458	1.00	0.9258	
41 2-Butanone (MEK)	72	4.111	4.105	0.006	97	1580	5.00	5.77	
42 Ethyl acetate	70	4.130	4.117	0.013	92	698	2.00	2.35	
43 Methyl acrylate	55	4.178	4.172	0.006	14	1832	1.00	1.01	M
44 Propionitrile	54	4.257	4.245	0.012	29	2027	10.0	8.03	M
46 Chlorobromomethane	128	4.324	4.324	0.000	59	1982	1.00	0.9077	
45 Tetrahydrofuran	72	4.361	4.336	0.025	27	623	2.00	1.95	M
47 Methacrylonitrile	67	4.355	4.355	0.000	87	8950	10.0	8.38	
48 Chloroform	83	4.385	4.391	-0.006	97	8681	1.00	0.9822	
49 Cyclohexane	84	4.513	4.519	-0.006	86	7897	1.00	0.8486	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	35	6651	1.00	0.8672	
$ 51 Dibromofluoromethane (Surr	113	4.556	4.555	0.001	96	228632	50.0	48.9	
52 Carbon tetrachloride	117	4.665	4.665	0.000	89	4022	1.00	0.8440	
53 1,1-Dichloropropene	75	4.695	4.708	-0.013	97	6572	1.00	0.8959	
58 Isobutyl alcohol	43	4.878	4.884	-0.006	1	2682	25.0	21.4	a
54 Isooctane	57	4.878	4.884	-0.006	98	10280	1.00	0.8621	
55 Benzene	78	4.914	4.914	0.000	95	20727	1.00	0.9839	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	223478	50.0	49.8	
57 Tert-amyl methyl ether	73	5.000	5.000	0.000	90	10437	1.00	0.7830	
59 Isopropyl acetate	61	5.012	5.012	0.000	65	1778	1.00	1.08	
60 1,2-Dichloroethane	62	5.030	5.024	0.006	95	5883	1.00	1.12	
61 n-Heptane	57	5.103	5.103	0.000	90	2840	1.00	0.9611	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	1040989	50.0	50.0	
64 Trichloroethene	95	5.638	5.644	-0.006	94	5252	1.00	0.9343	
63 n-Butanol	56	5.705	5.657	0.048	1	382	25.0	10.3	Ma
65 Methylcyclohexane	83	5.772	5.772	0.000	92	8012	1.00	0.8265	
66 Ethyl acrylate	55	5.766	5.772	-0.006	72	5931	1.00	0.5240	
67 1,2-Dichloropropane	63	5.967	5.967	0.000	91	4830	1.00	0.9307	
* 68 1,4-Dioxane-d8	96	6.046	6.052	-0.006	0	25234	1000.0	1000.0	
69 Methyl methacrylate	100	6.095	6.076	0.019	95	1145	2.00	1.41	
71 Dibromomethane	93	6.119	6.119	0.000	89	2308	1.00	0.9578	
70 1,4-Dioxane	88	6.113	6.119	-0.006	18	1652	50.0	60.2	a
72 n-Propyl acetate	43	6.162	6.149	0.013	87	2303	1.00	0.7587	
73 Dichlorobromomethane	83	6.295	6.301	-0.006	97	4919	1.00	0.8569	
74 2-Nitropropane	41	6.715	6.691	0.024	74	929	2.00	4.18	
75 2-Chloroethyl vinyl ether	63	6.715	6.703	0.012	68	1695	1.00	0.8761	a
76 Epichlorohydrin	57	6.831	6.819	0.012	91	2072	20.0	9.26	
77 cis-1,3-Dichloropropene	75	6.873	6.873	0.000	89	5704	1.00	0.8463	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	96	7804	5.00	3.77	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	1110519	50.0	52.2	
80 Toluene	91	7.238	7.238	0.000	94	23097	1.00	0.99	
81 trans-1,3-Dichloropropene	75	7.682	7.676	0.006	94	3766	1.00	0.7691	
82 Ethyl methacrylate	69	7.731	7.725	0.006	85	2509	1.00	0.5156	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.914	7.926	-0.012	96	2817	1.00	1.01	
84 Tetrachloroethene	166	7.950	7.956	-0.006	91	4358	1.00	0.9562	
85 1,3-Dichloropropane	76	8.169	8.163	0.006	90	5131	1.00	0.9025	
86 2-Hexanone	58	8.279	8.266	0.013	94	2567	5.00	3.03	
87 n-Butyl acetate	43	8.425	8.419	0.007	90	2432	1.00	0.7142	
88 Chlorodibromomethane	129	8.431	8.437	-0.006	93	2329	1.00	0.8834	
89 Ethylene Dibromide	107	8.607	8.595	0.012	98	2553	1.00	0.8884	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	725756	50.0	50.0	
91 Chlorobenzene	112	9.216	9.209	0.007	97	14126	1.00	0.9884	
92 Ethylbenzene	106	9.313	9.319	-0.006	98	7315	1.00	0.9111	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	85	3202	1.00	0.8681	
94 m-Xylene & p-Xylene	106	9.465	9.459	0.006	0	8528	1.00	0.8717	
96 o-Xylene	106	9.909	9.909	0.000	93	8104	1.00	0.8448	
95 n-Butyl acrylate	73	9.933	9.921	0.012	39	1452	1.00	0.4822	a
97 Styrene	104	9.939	9.939	0.000	96	11913	1.00	0.7843	
99 Bromoform	173	10.152	10.152	0.000	63	834	1.00	0.7914	
98 Amyl acetate (mixed isomer	43	10.165	10.158	0.007	92	2625	1.00	0.5059	
100 Isopropylbenzene	105	10.280	10.274	0.006	95	21427	1.00	0.8668	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	82	240503	50.0	49.9	
102 Bromobenzene	156	10.603	10.603	0.001	94	4443	1.00	0.9274	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	97	3328	1.00	0.9786	
104 N-Propylbenzene	91	10.676	10.676	0.000	98	26574	1.00	0.9551	
105 1,2,3-Trichloropropane	110	10.700	10.700	0.000	90	852	1.00	0.9018	
106 trans-1,4-Dichloro-2-buten	53	10.730	10.724	0.006	1	521	1.00	0.7859	a
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	18282	1.00	0.9396	
108 4-Ethyltoluene	105	10.791	10.791	0.000	98	21453	1.00	0.9208	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	94	16690	1.00	0.8393	
110 4-Chlorotoluene	91	10.889	10.888	0.000	98	16495	1.00	0.9307	
111 Butyl Methacrylate	87	10.962	10.961	0.001	90	2931	1.00	0.4237	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	14304	1.00	0.9062	
113 1,2,4-Trimethylbenzene	105	11.187	11.187	0.000	95	18920	1.00	0.9015	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	20417	1.00	0.8477	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	86	9267	1.00	0.9505	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	97	17061	1.00	0.8534	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	328374	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	9974	1.00	0.99	
134 1,2,3-Trimethylbenzene	105	11.546	11.545	0.001	98	19246	1.00	0.9020	
119 Benzyl chloride	91	11.655	11.655	0.000	96	2230	1.00	0.4838	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	93	17640	1.00	0.9117	
121 p-Diethylbenzene	119	11.758	11.758	0.000	89	9486	1.00	0.8427	
122 n-Butylbenzene	92	11.783	11.783	0.000	98	9552	1.00	0.8975	
123 1,2-Dichlorobenzene	146	11.831	11.831	0.000	93	7923	1.00	0.8923	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	98	15522	1.00	0.7813	
125 1,2-Dibromo-3-Chloropropan	155	12.458	12.464	-0.006	38	289	1.00	0.9069	
126 1,3,5-Trichlorobenzene	180	12.568	12.568	0.000	94	5721	1.00	0.8425	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	93	4147	1.00	0.7763	
128 Hexachlorobutadiene	225	13.115	13.121	-0.006	87	1478	1.00	0.8606	
129 Naphthalene	128	13.231	13.231	0.000	98	7066	1.00	0.7761	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	93	3404	1.00	0.8232	
S 131 1,2-Dichloroethene, Total	100				0		2.00	1.88	
S 132 Xylenes, Total	100				0		2.00	1.72	
S 133 Total BTEX	1				0		5.00	4.60	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
GAS Hi_00250	Amount Added:	1.00	Units: uL	
14DIOXINTER_00083	Amount Added:	30.00	Units: uL	
Ethanol mix_00014	Amount Added:	1.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	1.00	Units: uL	
MIX I Hi_00093	Amount Added:	1.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 14:41:28 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D

Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11 Operator ID:

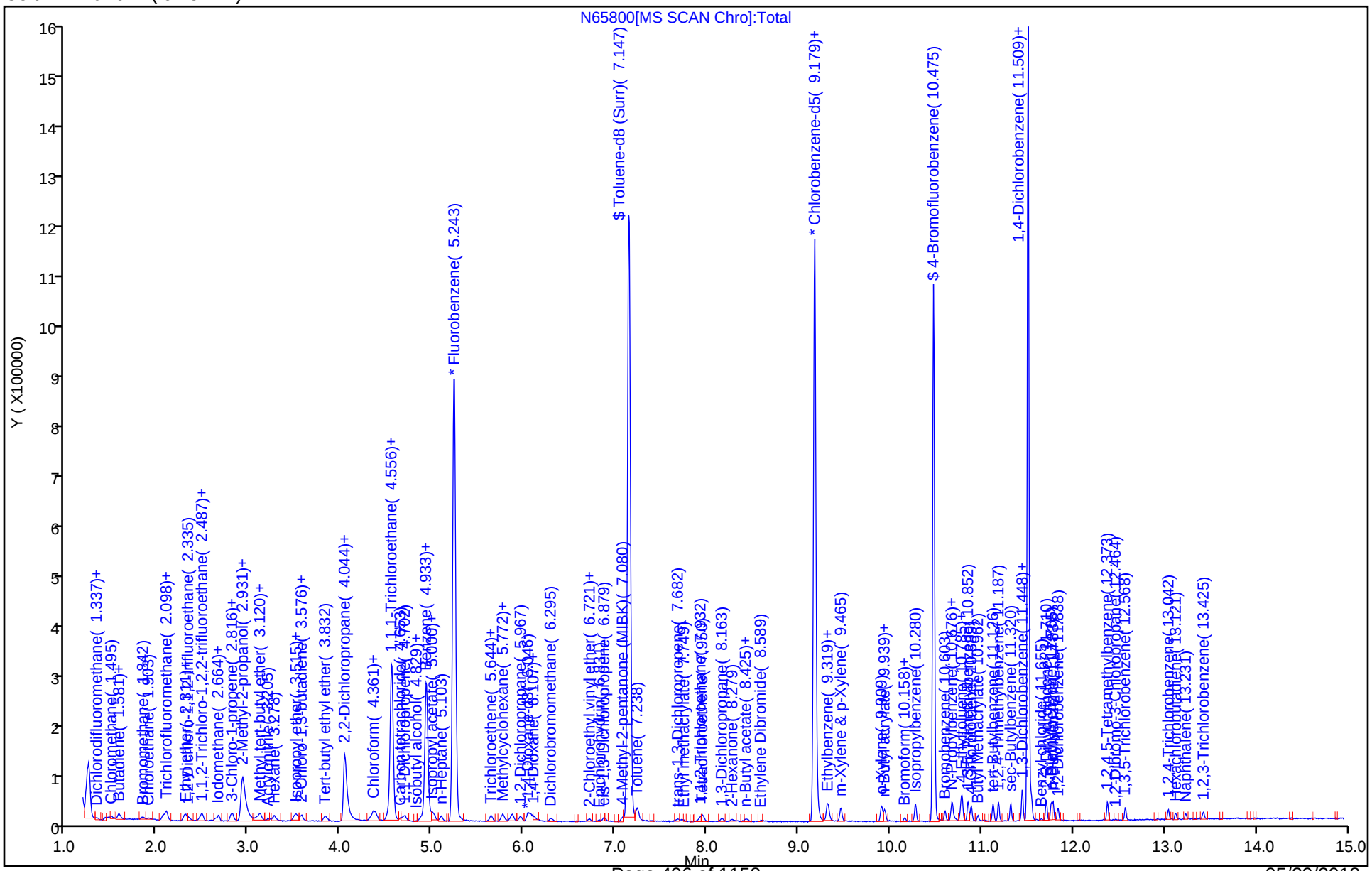
Lims ID: STD1 Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

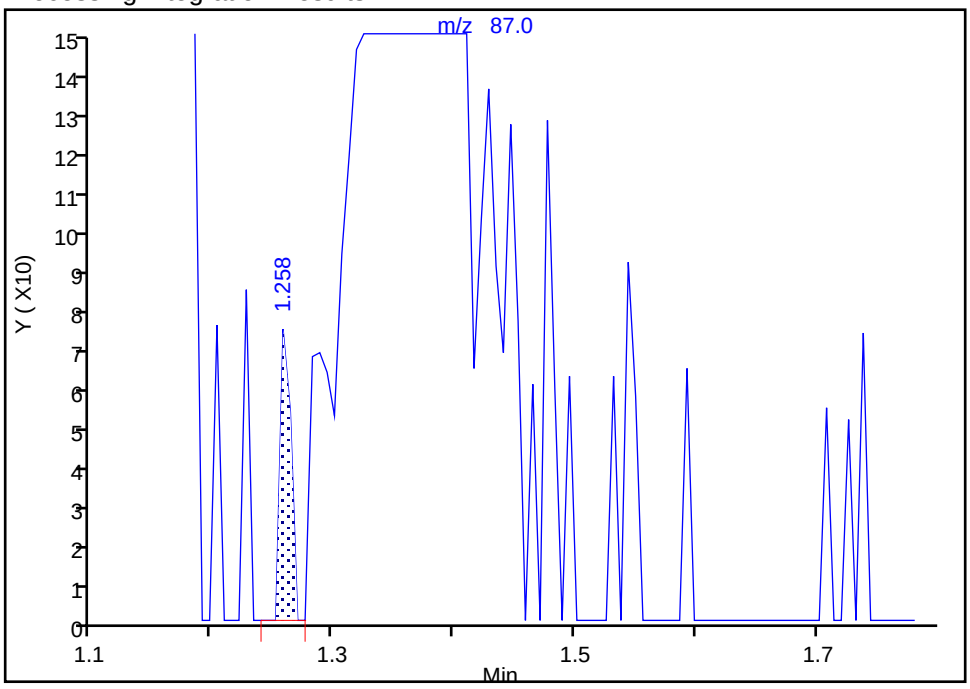
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

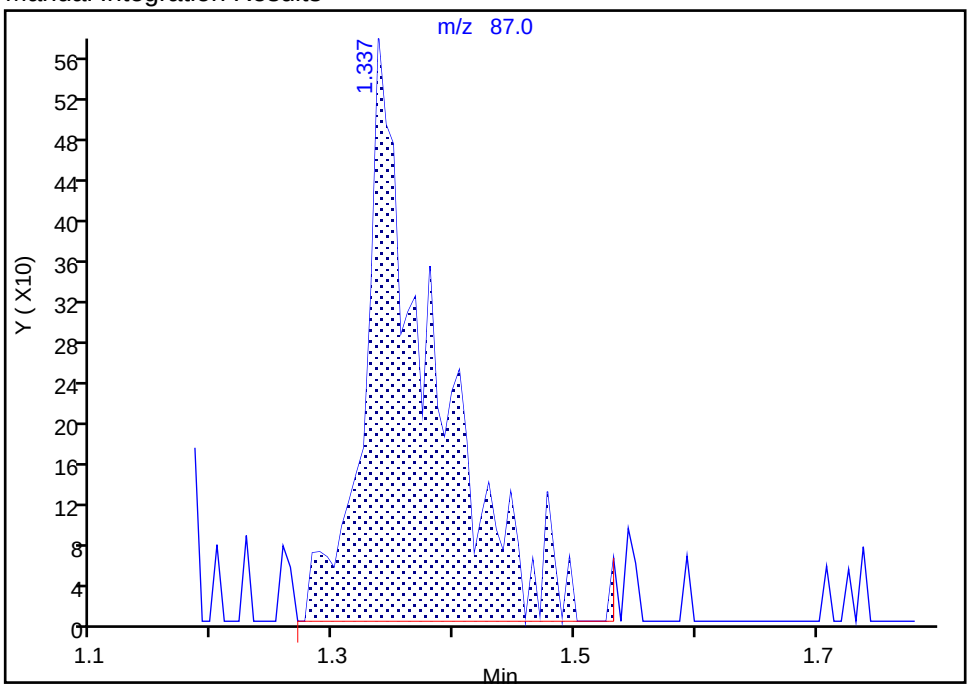
Processing Integration Results

RT: 1.26
Area: 46
Amount: 0.015059
Amount Units: ug/l



Manual Integration Results

RT: 1.34
Area: 2241
Amount: 0.846170
Amount Units: ug/l



Reviewer: delpolitov, 21-Apr-2018 09:26:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

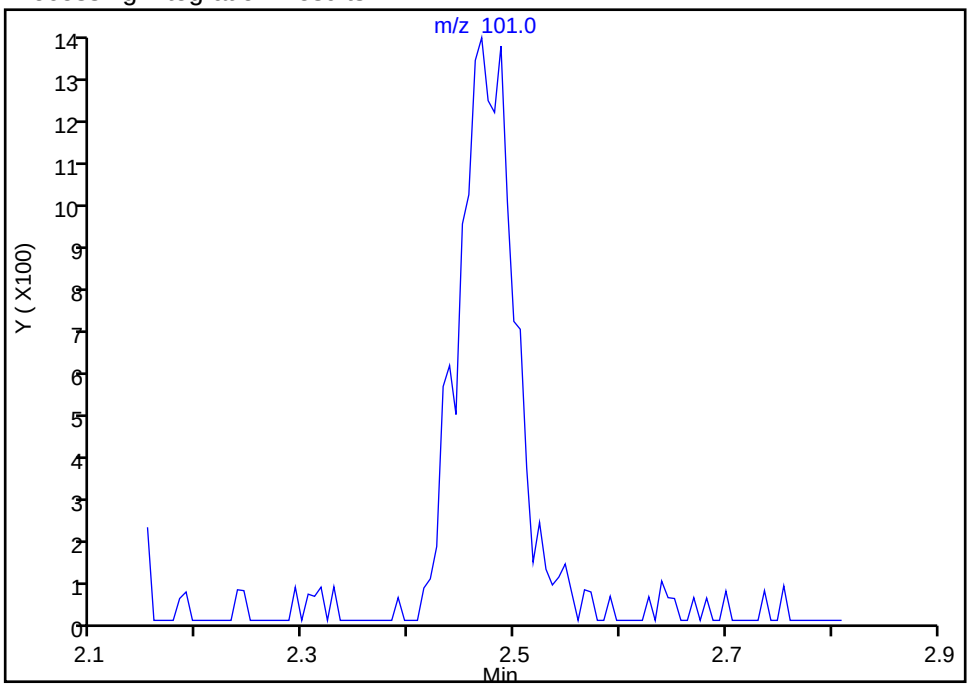
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

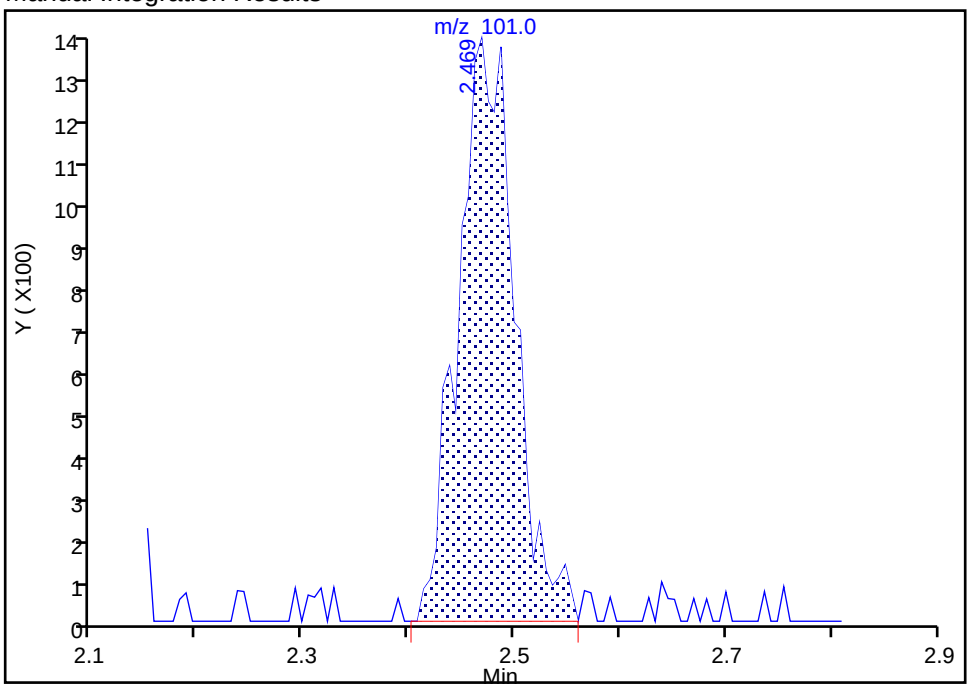
Not Detected
Expected RT: 2.48

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 4960
Amount: 0.867931
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:10:23
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

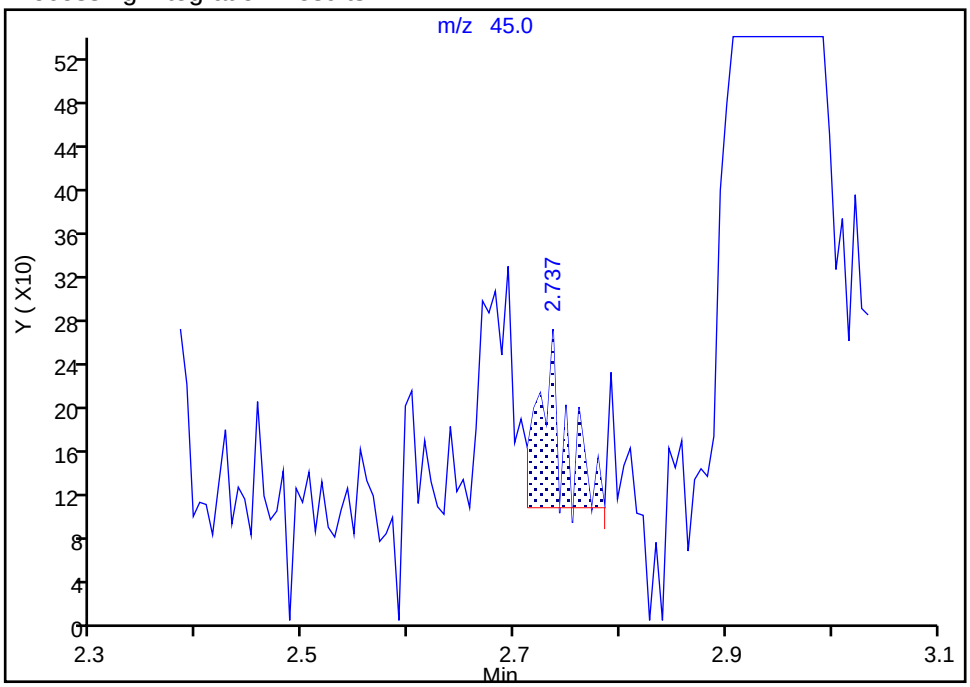
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

21 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

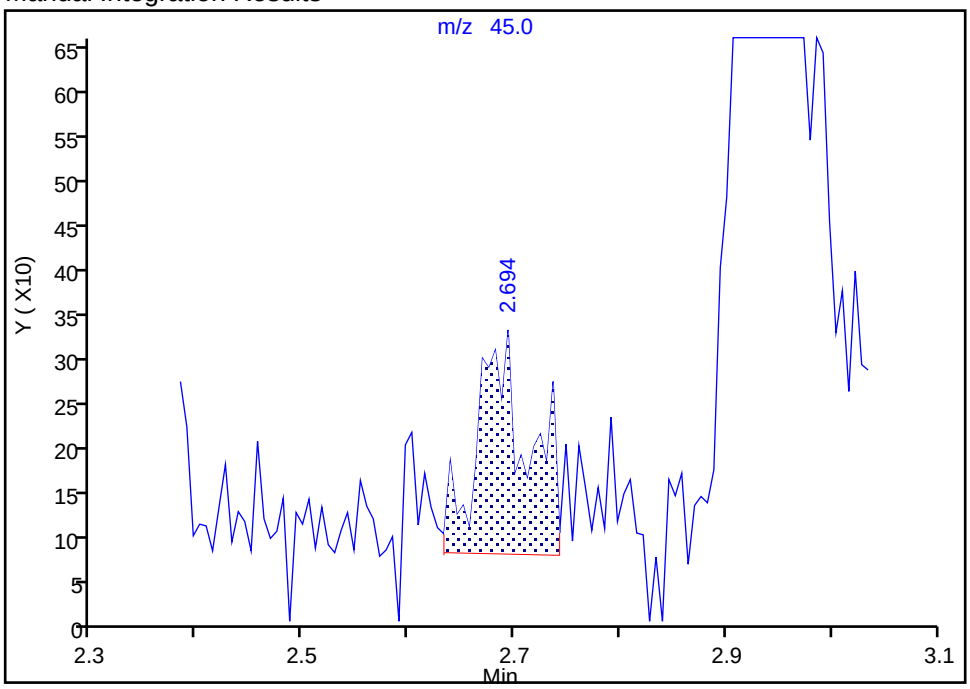
Processing Integration Results

RT: 2.74
Area: 274
Amount: 2.958577
Amount Units: ug/l



Manual Integration Results

RT: 2.69
Area: 835
Amount: 9.726046
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:10:42
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

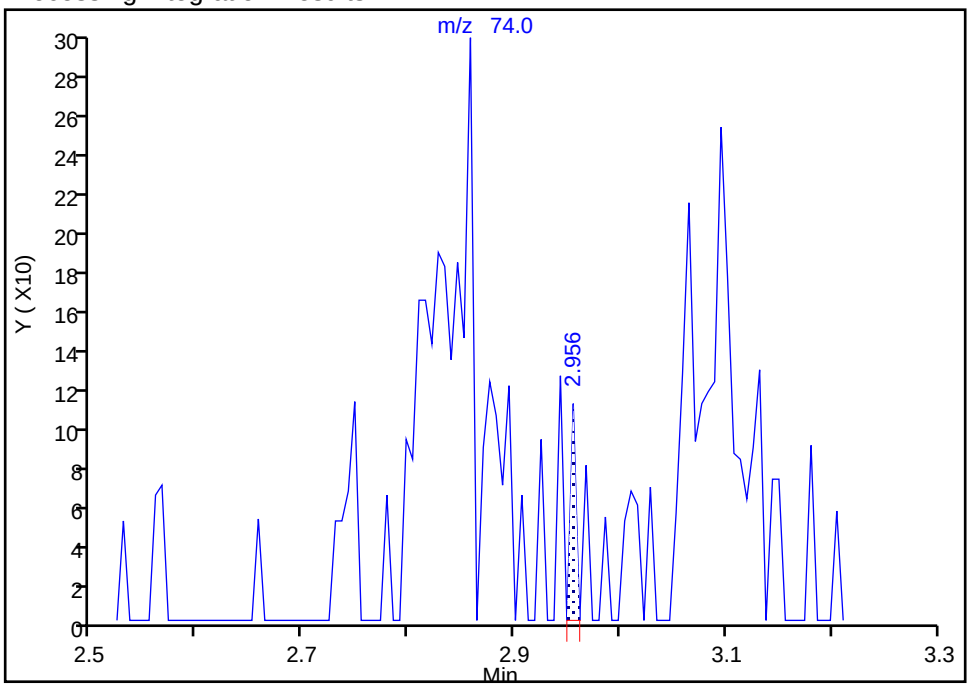
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

24 Methyl acetate, CAS: 79-20-9

Signal: 1

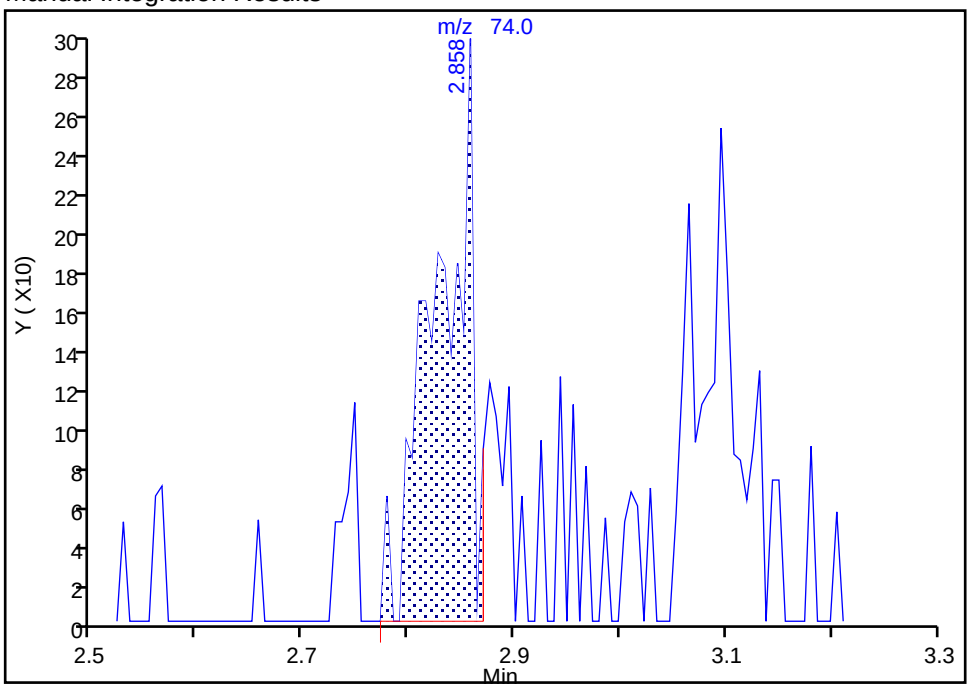
Processing Integration Results

RT: 2.96
Area: 40
Amount: 0.104134
Amount Units: ug/l



Manual Integration Results

RT: 2.86
Area: 691
Amount: 1.939758
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:10:50
Audit Action: Assigned Compound ID Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

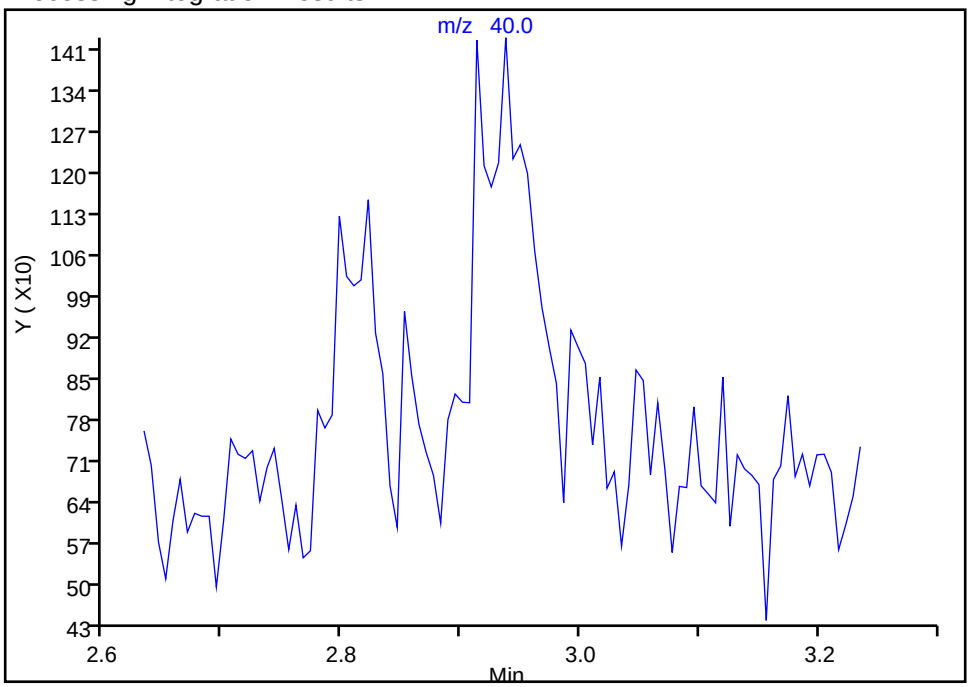
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

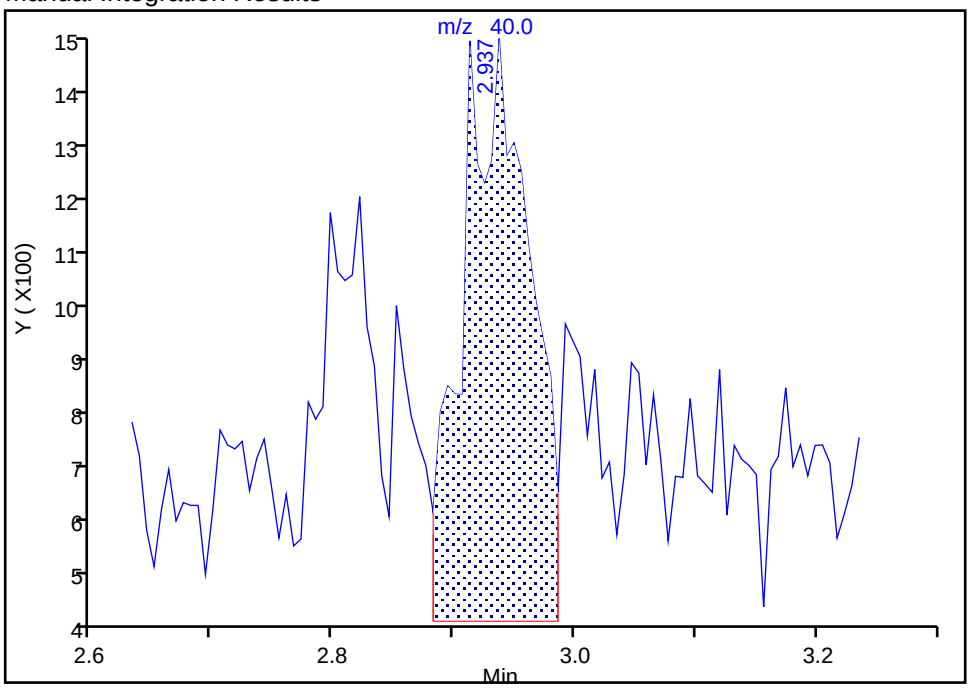
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 4009
Amount: 27.663147
Amount Units: ug/l



Reviewer: delpolitov, 21-Apr-2018 08:03:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

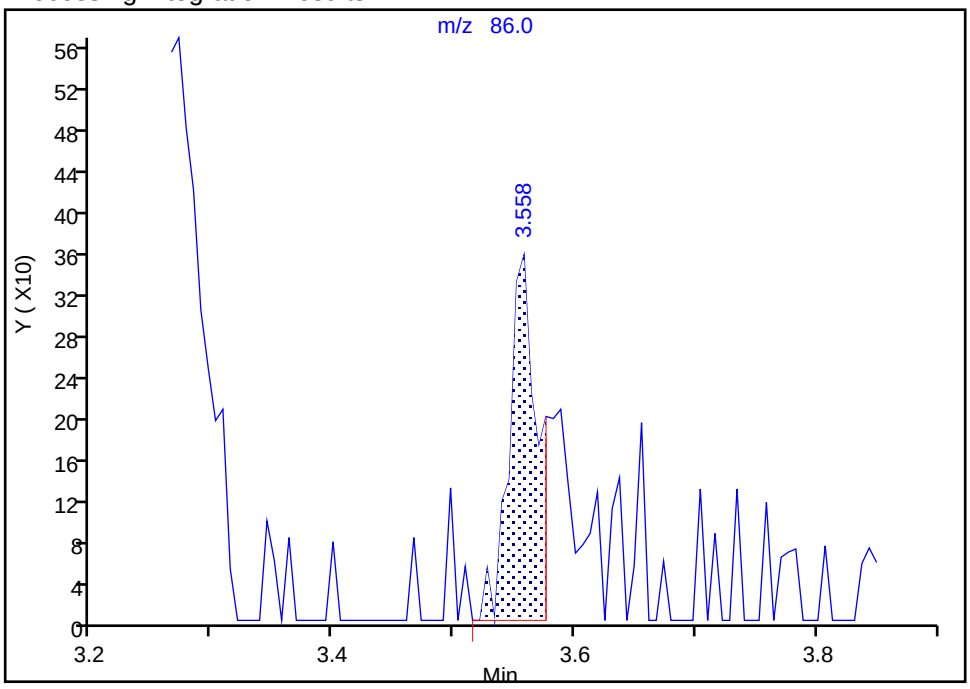
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

35 Vinyl acetate, CAS: 108-05-4

Signal: 1

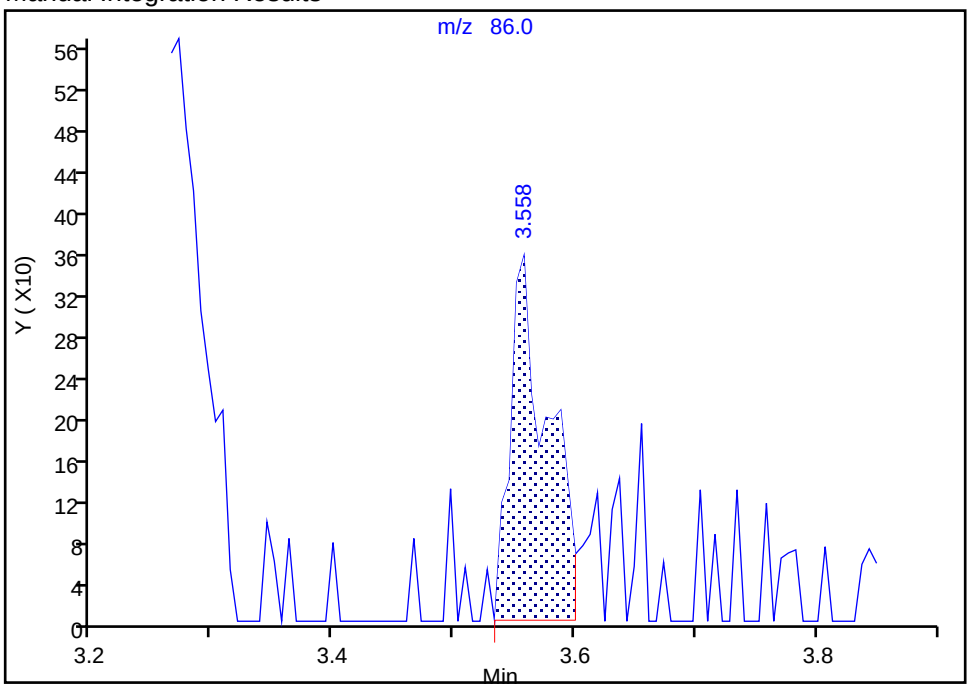
Processing Integration Results

RT: 3.56
Area: 571
Amount: 1.002349
Amount Units: ug/l



Manual Integration Results

RT: 3.56
Area: 766
Amount: 1.095735
Amount Units: ug/l



Reviewer: delpolitov, 21-Apr-2018 08:04:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

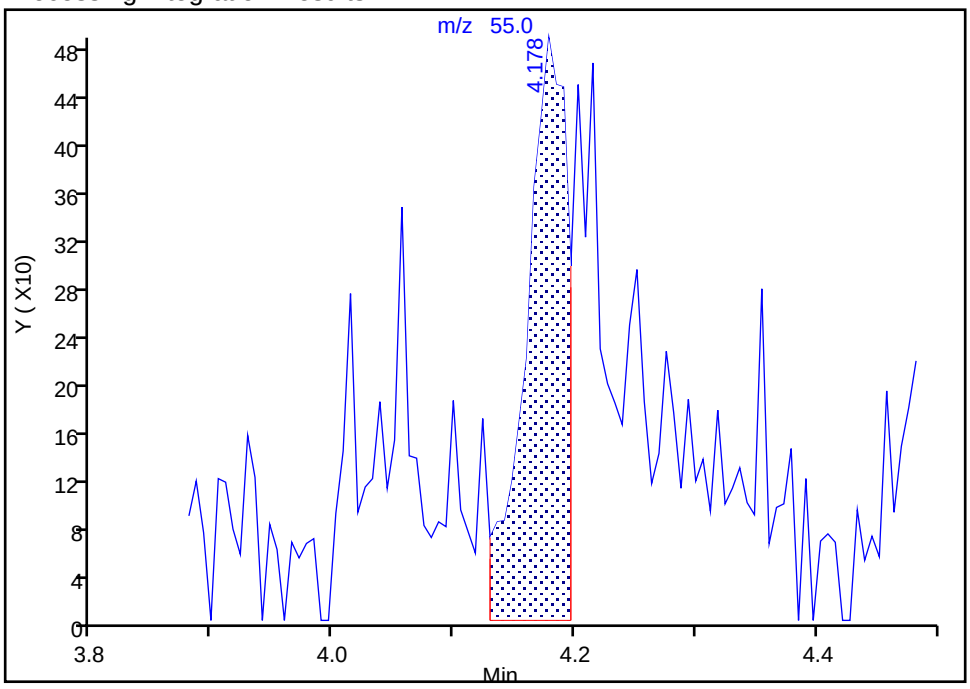
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

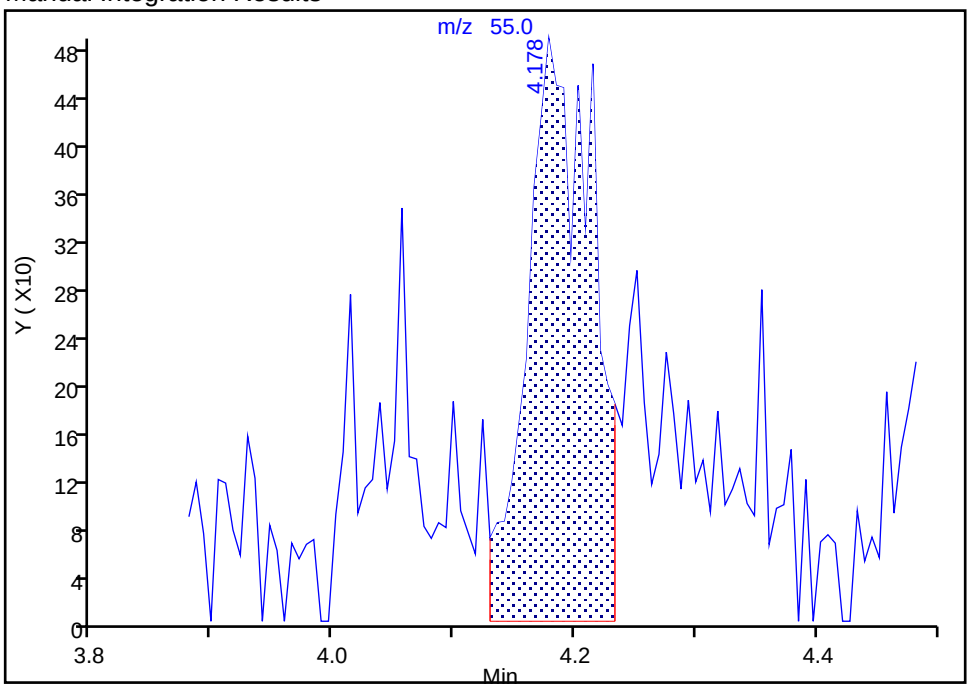
Processing Integration Results

RT: 4.18
Area: 1163
Amount: 0.530227
Amount Units: ug/l



Manual Integration Results

RT: 4.18
Area: 1832
Amount: 1.005440
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:11:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

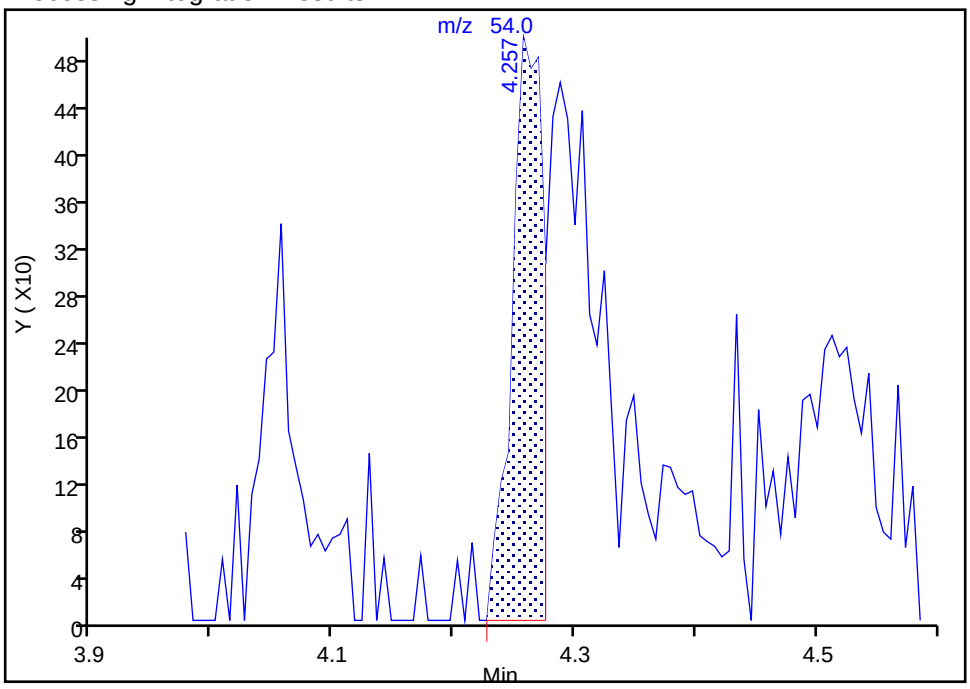
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Propionitrile, CAS: 107-12-0

Signal: 1

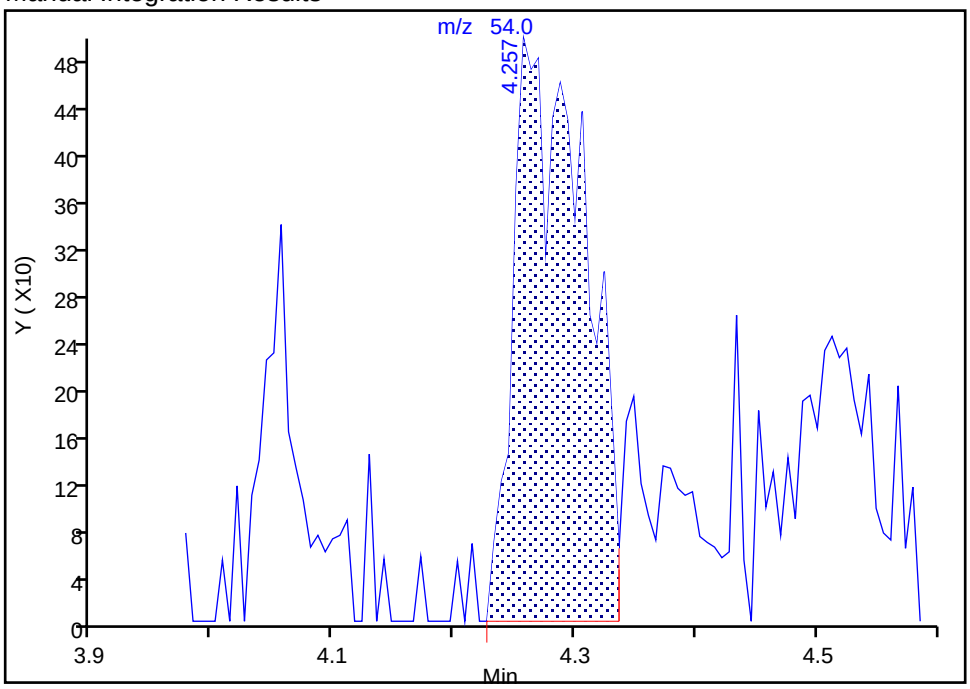
Processing Integration Results

RT: 4.26
Area: 892
Amount: 3.122832
Amount Units: ug/l



Manual Integration Results

RT: 4.26
Area: 2027
Amount: 8.032746
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:11:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

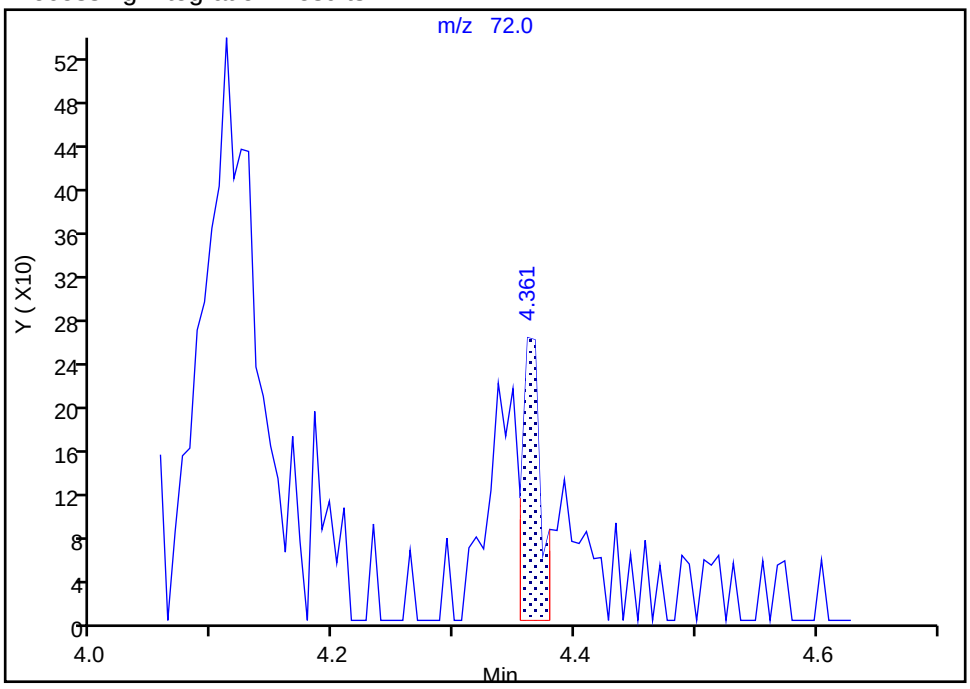
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

45 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

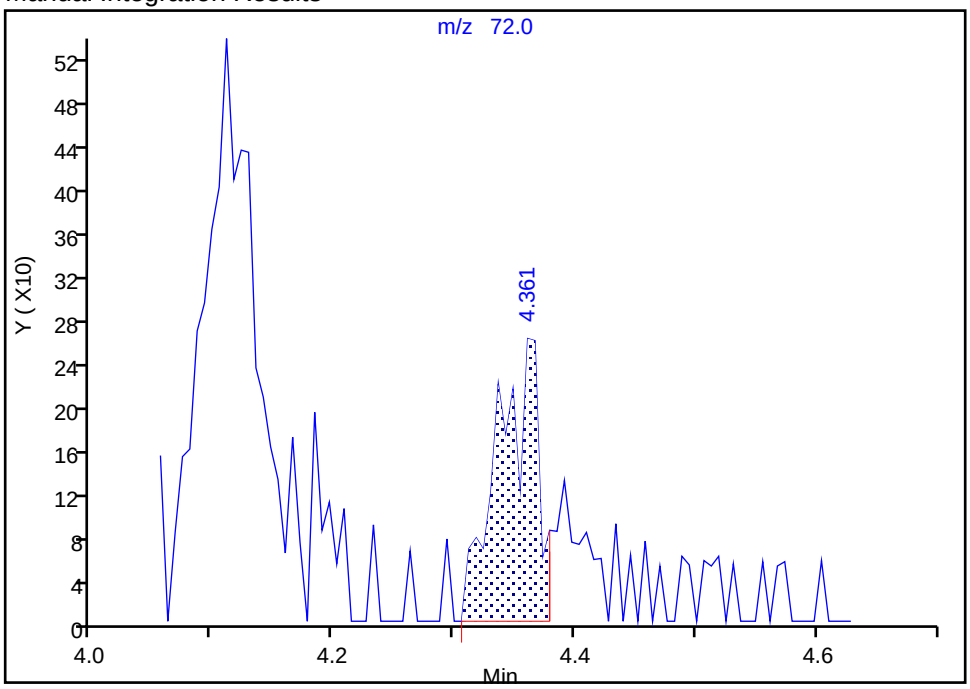
Processing Integration Results

RT: 4.36
Area: 282
Amount: 0.897451
Amount Units: ug/l



Manual Integration Results

RT: 4.36
Area: 623
Amount: 1.945405
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:11:46
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

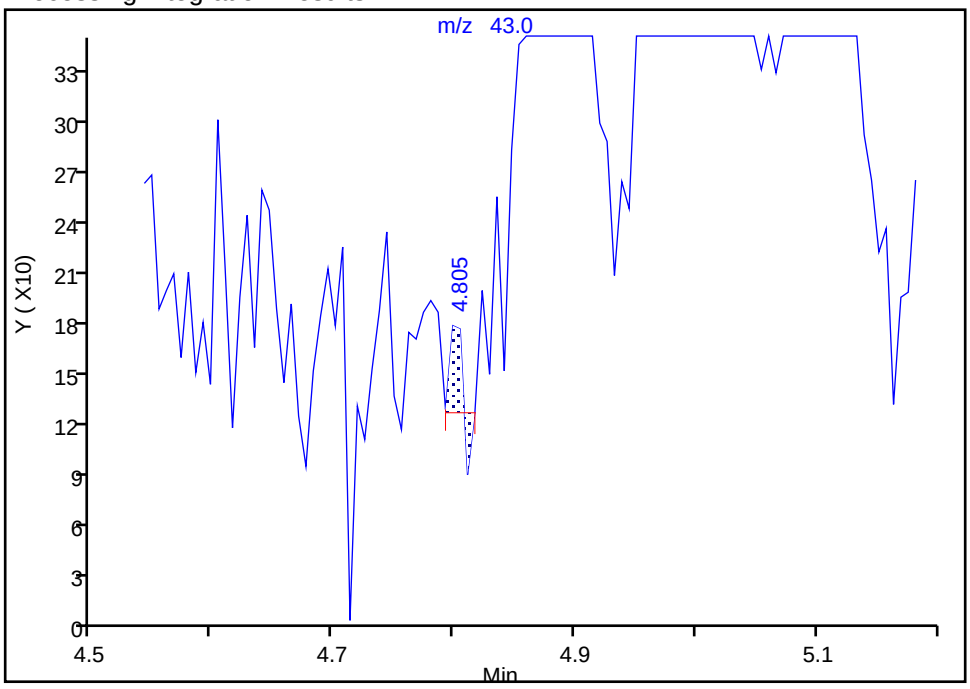
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

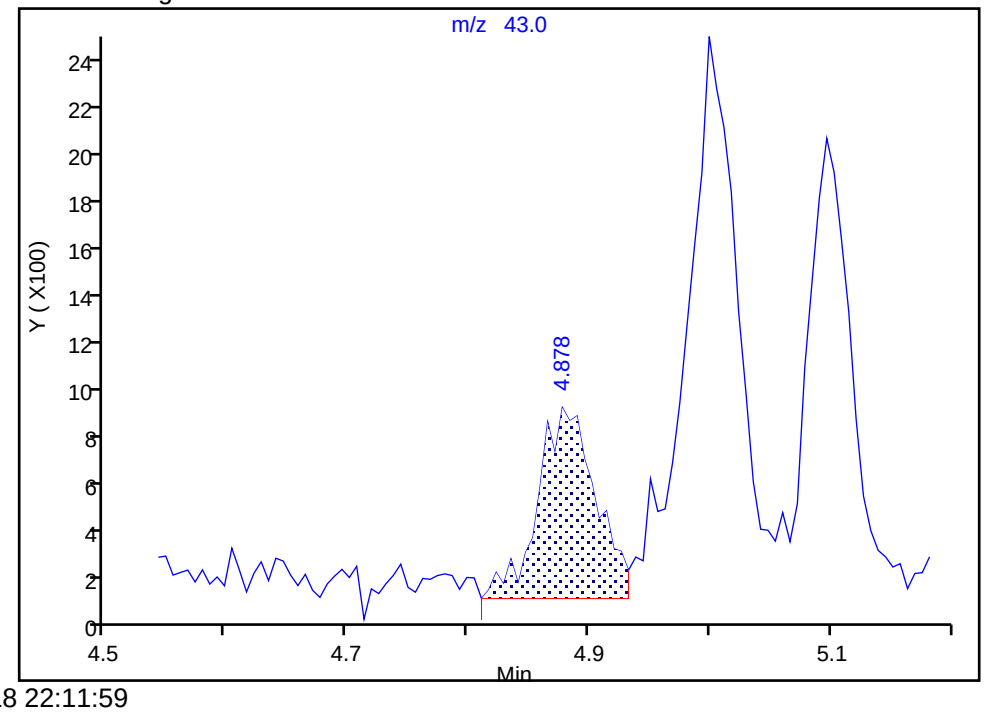
Processing Integration Results

RT: 4.80
Area: 24
Amount: 0.226303
Amount Units: ug/l



Manual Integration Results

RT: 4.88
Area: 2682
Amount: 21.433616
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:11:59
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

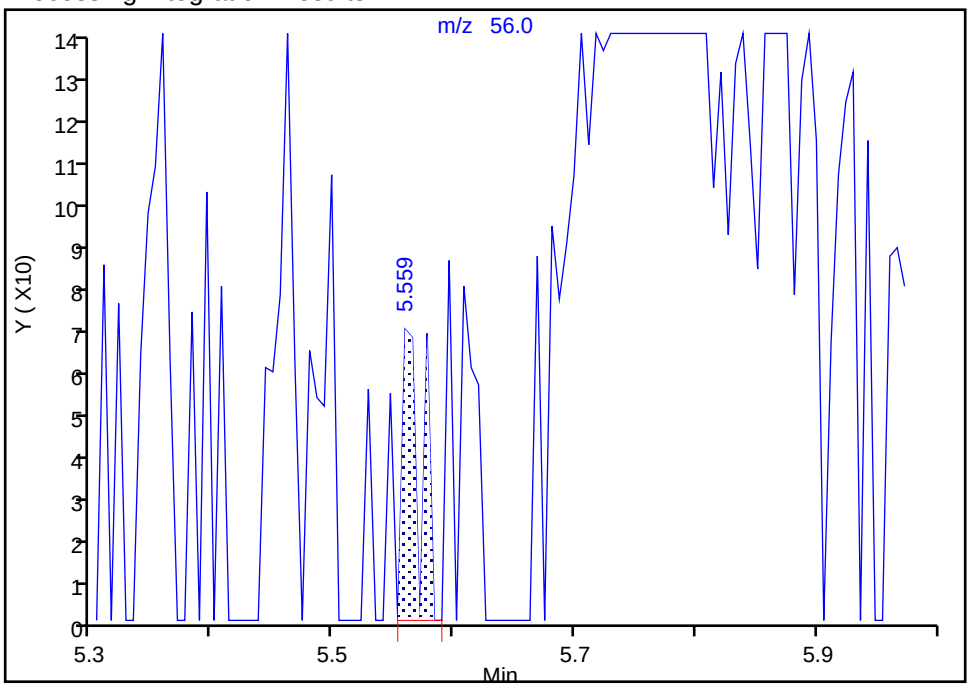
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

63 n-Butanol, CAS: 71-36-3

Signal: 1

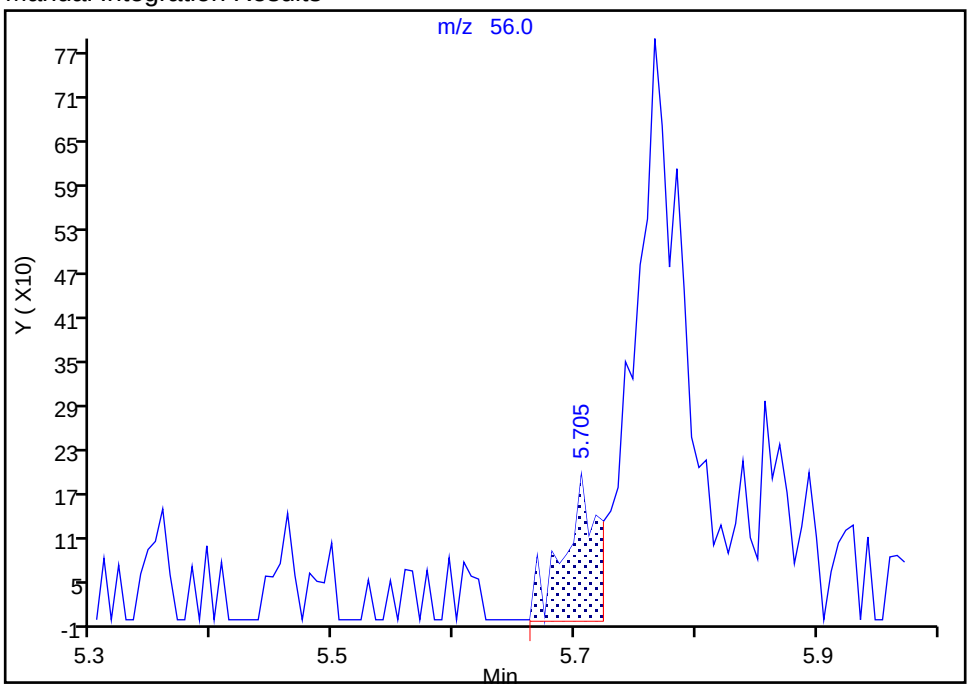
Processing Integration Results

RT: 5.56
Area: 73
Amount: 2.258525
Amount Units: ug/l



Manual Integration Results

RT: 5.71
Area: 382
Amount: 10.280155
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:12:15
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

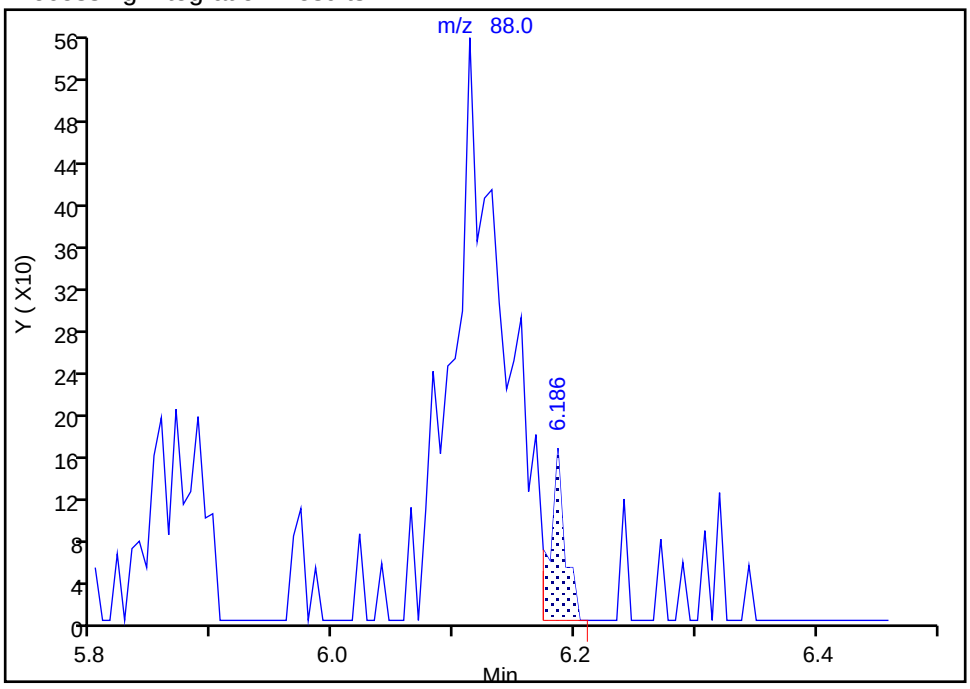
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

Signal: 1

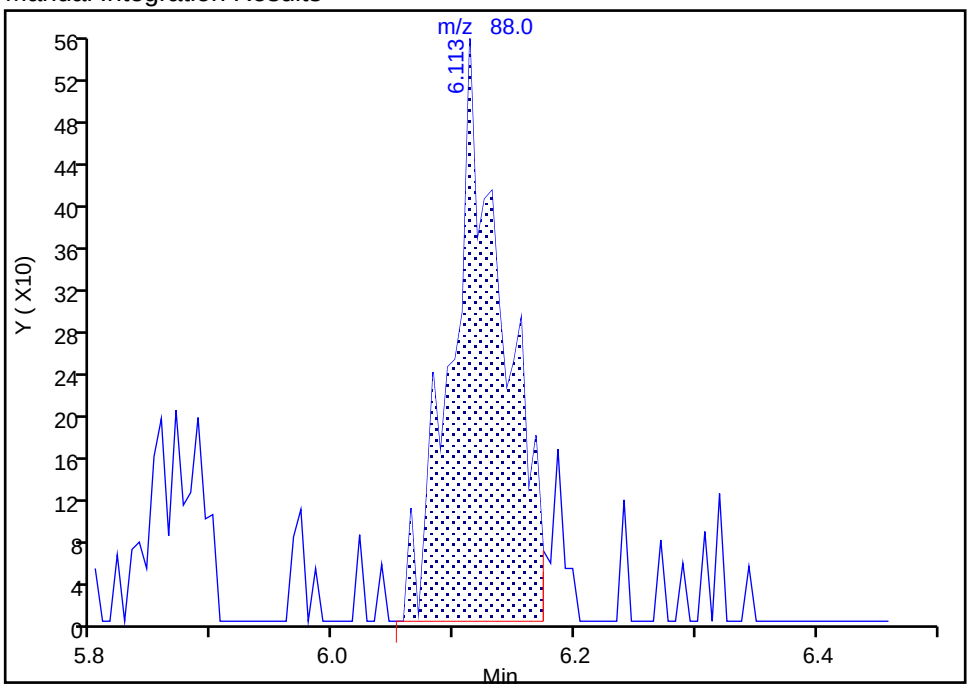
Processing Integration Results

RT: 6.19
Area: 141
Amount: 5.143643
Amount Units: ug/l



Manual Integration Results

RT: 6.11
Area: 1652
Amount: 60.213393
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:12:27
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

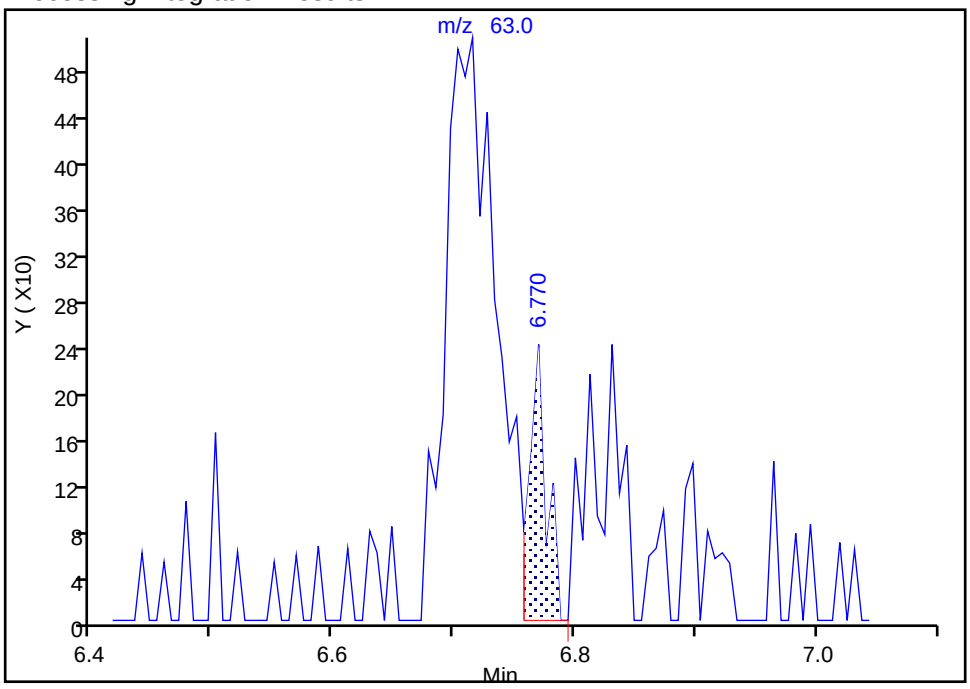
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

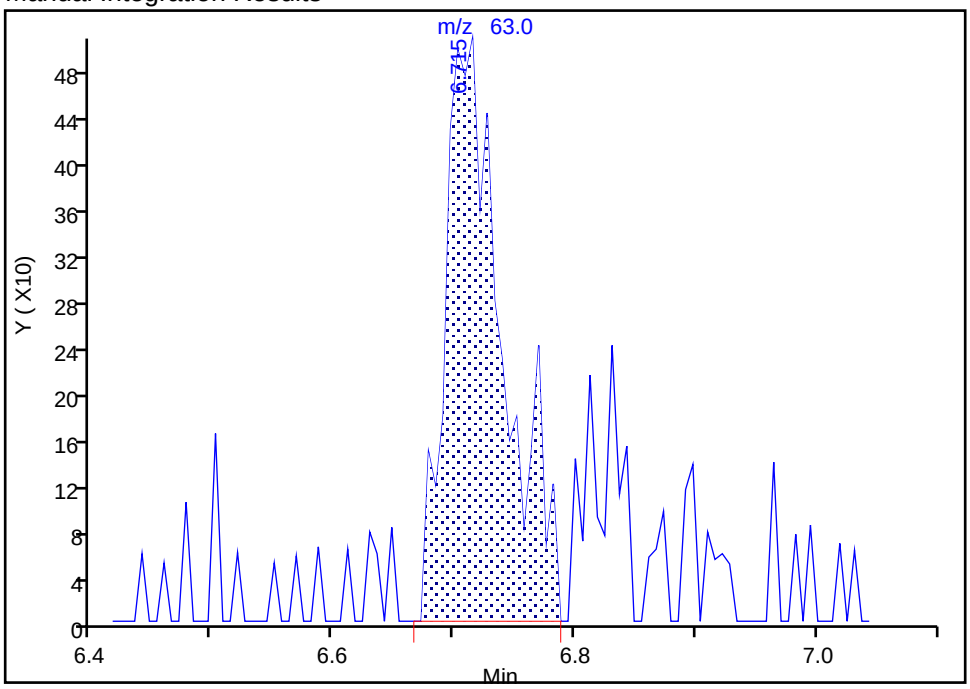
Processing Integration Results

RT: 6.77
Area: 236
Amount: 0.106718
Amount Units: ug/l



Manual Integration Results

RT: 6.72
Area: 1695
Amount: 0.876093
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:12:34
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

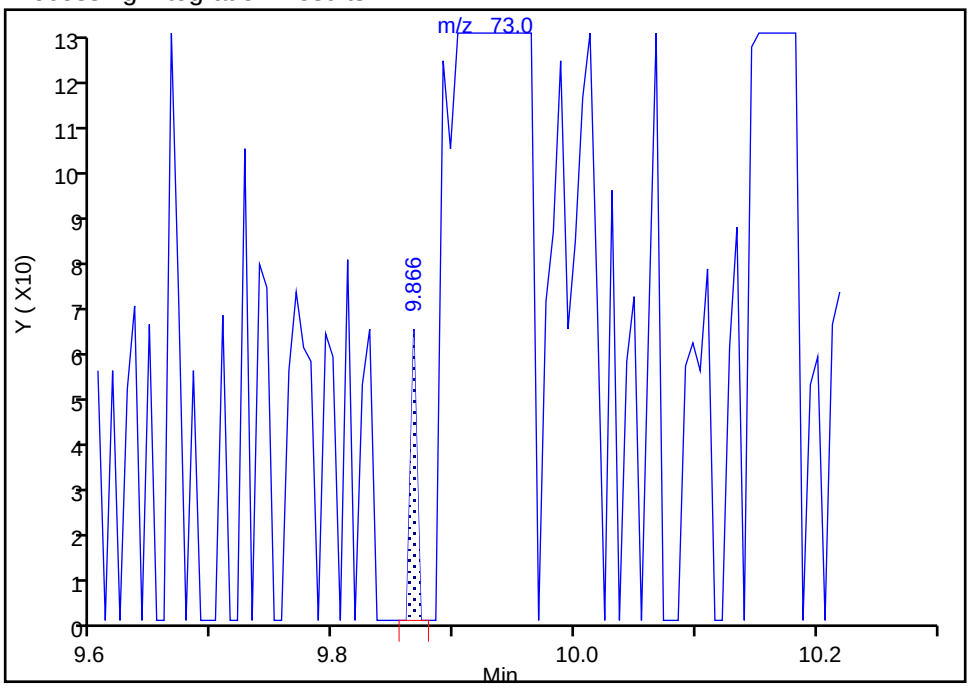
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 n-Butyl acrylate, CAS: 141-32-2

Signal: 1

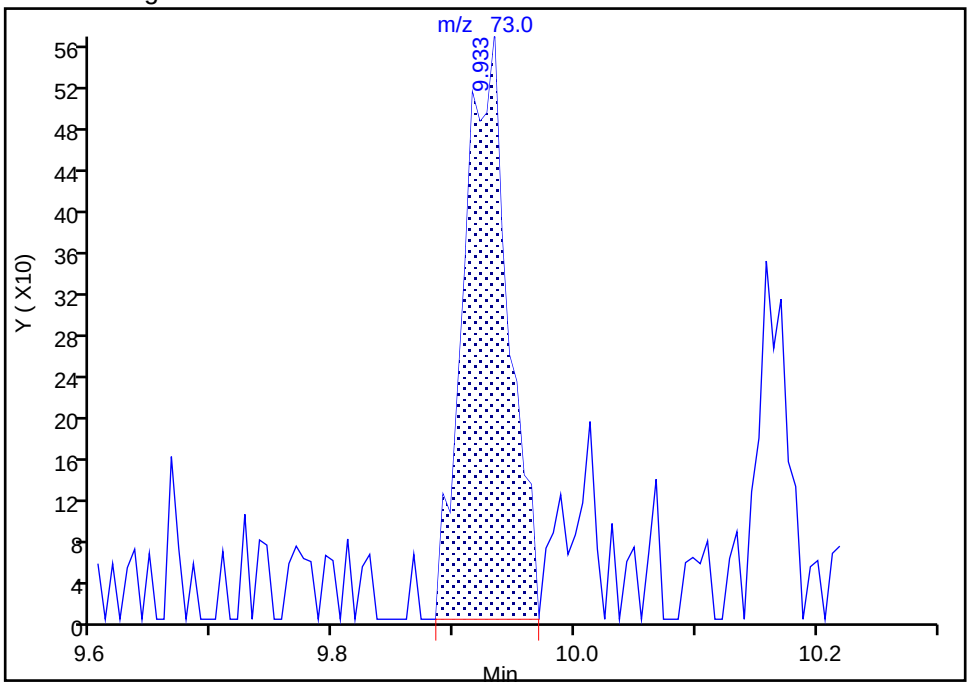
Processing Integration Results

RT: 9.87
Area: 23
Amount: 0.007637
Amount Units: ug/l



Manual Integration Results

RT: 9.93
Area: 1452
Amount: 0.482159
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:12:50
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

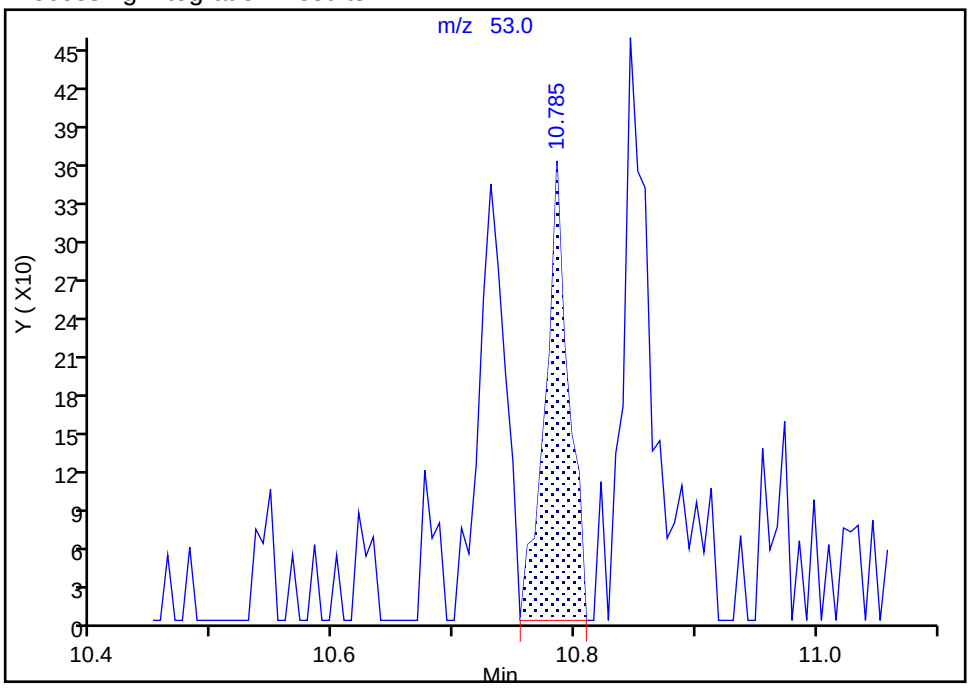
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65800.D
Injection Date: 20-Apr-2018 01:52:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

106 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

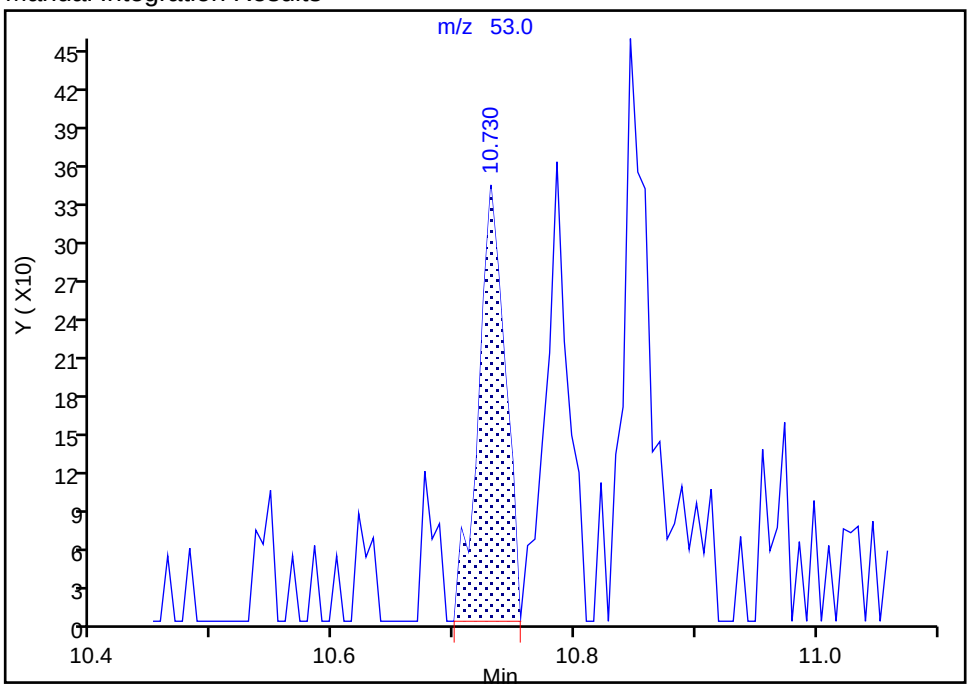
Processing Integration Results

RT: 10.79
Area: 477
Amount: 0.660951
Amount Units: ug/l



Manual Integration Results

RT: 10.73
Area: 521
Amount: 0.785919
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:13:00
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 20-Apr-2018 02:15:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0070690-005
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 14:41:43 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: boykink Date: 20-Apr-2018 02:36:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.325	1.325	0.000	87	14089	5.00	3.20	
2 Dichlorodifluoromethane	87	1.361	1.349	0.012	99	13543	5.00	5.38	M
3 Chloromethane	52	1.507	1.495	0.012	99	8174	5.00	5.25	
5 Butadiene	54	1.587	1.587	0.000	64	20935	5.00	5.51	
4 Vinyl chloride	62	1.593	1.587	0.006	97	30349	5.00	5.78	
6 Bromomethane	94	1.848	1.842	0.006	98	22160	5.00	5.97	
7 Chloroethane	64	1.909	1.903	0.006	94	15693	5.00	5.87	a
8 Dichlorofluoromethane	67	2.073	2.067	0.006	98	53284	5.00	5.50	
9 Trichlorofluoromethane	101	2.079	2.073	0.006	62	40448	5.00	5.39	
10 Pentane	72	2.110	2.104	0.006	96	8326	10.0	10.3	
11 Ethanol	46	2.274	2.286	-0.012	54	1010	200.0	103.6	a
12 Ethyl ether	59	2.292	2.292	0.000	94	13264	5.00	4.62	
13 2-Methyl-1,3-butadiene	53	2.311	2.311	-0.001	93	17593	5.00	3.91	
14 1,2-Dichloro-1,1,2-trifluo	117	2.353	2.341	0.012	93	21016	5.00	4.78	
16 Acrolein	56	2.475	2.463	0.012	44	5340	20.0	19.0	
15 1,1,2-Trichloro-1,2,2-trif	101	2.475	2.481	-0.006	94	25910	5.00	4.77	
17 1,1-Dichloroethene	96	2.493	2.487	0.006	98	21172	5.00	4.72	
18 Acetone	43	2.584	2.578	0.006	90	10419	25.0	22.4	
19 Iodomethane	142	2.639	2.639	0.000	96	33866	5.00	4.72	
20 Carbon disulfide	76	2.676	2.676	0.000	99	77764	5.00	4.73	
21 Isopropyl alcohol	45	2.688	2.688	0.000	24	3610	50.0	42.6	
22 3-Chloro-1-propene	76	2.809	2.803	0.006	94	12340	5.00	4.35	
23 Cyclopentene	67	2.828	2.822	0.006	94	53087	5.00	4.76	
24 Methyl acetate	74	2.834	2.822	0.012	35	3305	10.0	9.39	
25 Acetonitrile	40	2.919	2.870	0.049	5	9374	50.0	65.6	a
26 Methylene Chloride	84	2.931	2.931	0.000	95	23589	5.00	4.87	
* 27 TBA-d9 (IS)	65	2.943	2.937	0.006	0	166678	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.010	3.010	0.000	97	7915	50.0	45.6	
29 Methyl tert-butyl ether	73	3.101	3.095	0.006	96	50319	5.00	4.73	
30 trans-1,2-Dichloroethene	96	3.126	3.120	0.006	94	23722	5.00	4.65	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.211	3.199	0.012	93	35022	50.0	48.5	
32 Hexane	57	3.290	3.284	0.006	92	30311	5.00	4.92	
33 Isopropyl ether	45	3.497	3.503	-0.006	96	65649	5.00	4.82	
34 1,1-Dichloroethane	63	3.533	3.527	0.006	98	42023	5.00	4.91	
35 Vinyl acetate	86	3.576	3.558	0.018	100	4204	10.0	6.12	
36 2-Chloro-1,3-butadiene	88	3.582	3.576	0.006	90	21292	5.00	4.54	
37 Tert-butyl ethyl ether	59	3.837	3.838	-0.001	91	58220	5.00	4.59	
* 39 2-Butanone-d5	46	4.050	4.050	0.000	0	187900	250.0	250.0	
38 2,2-Dichloropropane	79	4.056	4.057	-0.001	57	11322	5.00	4.66	
40 cis-1,2-Dichloroethene	96	4.087	4.087	0.000	98	26944	5.00	4.81	
41 2-Butanone (MEK)	72	4.117	4.105	0.012	97	6172	25.0	22.9	
42 Ethyl acetate	70	4.129	4.117	0.012	96	2522	10.0	8.64	
43 Methyl acrylate	55	4.190	4.172	0.018	98	6217	5.00	3.59	
44 Propionitrile	54	4.257	4.245	0.012	96	11293	50.0	45.3	
46 Chlorobromomethane	128	4.330	4.324	0.006	90	9838	5.00	4.74	
45 Tetrahydrofuran	72	4.342	4.336	0.006	42	3467	10.0	11.0	
47 Methacrylonitrile	67	4.361	4.355	0.006	89	48323	50.0	47.6	
48 Chloroform	83	4.391	4.391	0.000	99	40755	5.00	4.85	
49 Cyclohexane	84	4.519	4.519	0.000	88	41732	5.00	4.72	
50 1,1,1-Trichloroethane	97	4.543	4.537	0.006	98	32341	5.00	4.44	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.555	0.006	96	220552	50.0	49.6	
52 Carbon tetrachloride	117	4.671	4.665	0.006	96	20534	5.00	4.54	
53 1,1-Dichloropropene	75	4.707	4.708	-0.001	98	33205	5.00	4.77	
54 Isooctane	57	4.890	4.884	0.006	97	51859	5.00	4.58	
58 Isobutyl alcohol	43	4.896	4.884	0.012	38	13637	125.0	110.3	a
55 Benzene	78	4.920	4.914	0.006	94	106066	5.00	5.10	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.945	4.939	0.006	0	213926	50.0	50.2	
57 Tert-amyl methyl ether	73	5.006	5.000	0.006	92	55376	5.00	4.37	
59 Isopropyl acetate	61	5.018	5.012	0.006	73	7166	5.00	4.56	a
60 1,2-Dichloroethane	62	5.030	5.024	0.006	97	23880	5.00	4.78	
61 n-Heptane	57	5.103	5.103	0.000	86	13351	5.00	4.76	
* 62 Fluorobenzene	96	5.249	5.243	0.006	99	988851	50.0	50.0	
64 Trichloroethene	95	5.644	5.644	0.000	98	25466	5.00	4.77	
63 n-Butanol	56	5.675	5.657	0.018	22	867	125.0	23.6	
66 Ethyl acrylate	55	5.772	5.772	0.000	71	38656	5.00	3.60	
65 Methylcyclohexane	83	5.772	5.772	0.000	91	42814	5.00	4.65	
67 1,2-Dichloropropane	63	5.967	5.967	0.000	92	22830	5.00	4.63	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	25883	1000.0	1000.0	
69 Methyl methacrylate	100	6.088	6.076	0.012	89	6498	10.0	8.43	
70 1,4-Dioxane	88	6.113	6.119	-0.006	11	2766	100.0	98.3	a
71 Dibromomethane	93	6.119	6.119	0.000	91	10951	5.00	4.78	
72 n-Propyl acetate	43	6.155	6.149	0.006	96	12563	5.00	4.36	
73 Dichlorobromomethane	83	6.301	6.301	0.000	99	24005	5.00	4.40	
74 2-Nitropropane	41	6.685	6.691	-0.006	81	2578	10.0	11.7	a
75 2-Chloroethyl vinyl ether	63	6.703	6.703	0.000	89	7015	5.00	3.82	
76 Epichlorohydrin	57	6.831	6.819	0.012	98	14766	100.0	67.1	M
77 cis-1,3-Dichloropropene	75	6.879	6.873	0.006	89	29718	5.00	4.47	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	96	45010	25.0	22.1	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	1052897	50.0	50.1	
80 Toluene	91	7.244	7.238	0.006	94	113743	5.00	4.95	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	97	20202	5.00	4.18	
82 Ethyl methacrylate	69	7.725	7.725	0.000	90	14422	5.00	3.12	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.913	7.926	-0.013	94	12591	5.00	4.59	
84 Tetrachloroethene	166	7.956	7.956	0.000	92	21430	5.00	4.76	
85 1,3-Dichloropropane	76	8.169	8.163	0.006	92	26578	5.00	4.74	
86 2-Hexanone	58	8.266	8.266	0.000	94	15907	25.0	19.1	
87 n-Butyl acetate	43	8.425	8.419	0.006	94	14746	5.00	4.39	
88 Chlorodibromomethane	129	8.443	8.437	0.006	98	9976	5.00	3.83	
89 Ethylene Dibromide	107	8.601	8.595	0.006	98	12844	5.00	4.53	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	87	716330	50.0	50.0	
91 Chlorobenzene	112	9.221	9.209	0.012	98	67859	5.00	4.81	
92 Ethylbenzene	106	9.319	9.319	0.000	98	38002	5.00	4.80	
93 1,1,1,2-Tetrachloroethane	131	9.337	9.331	0.006	88	15287	5.00	4.20	
94 m-Xylene & p-Xylene	106	9.465	9.459	0.006	0	47247	5.00	4.89	
96 o-Xylene	106	9.909	9.909	0.000	94	45113	5.00	4.76	
95 n-Butyl acrylate	73	9.921	9.921	0.000	99	8997	5.00	3.03	
97 Styrene	104	9.939	9.939	0.000	95	71227	5.00	4.75	
99 Bromoform	173	10.152	10.152	0.000	92	3993	5.00	3.78	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	94	16359	5.00	3.16	
100 Isopropylbenzene	105	10.280	10.274	0.006	95	120176	5.00	4.93	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	83	240580	50.0	50.5	
102 Bromobenzene	156	10.602	10.603	0.000	95	21797	5.00	4.56	
103 1,1,2,2-Tetrachloroethane	83	10.669	10.663	0.006	96	15823	5.00	4.66	
104 N-Propylbenzene	91	10.675	10.676	-0.001	99	136662	5.00	4.92	
105 1,2,3-Trichloropropane	110	10.706	10.700	0.006	96	4606	5.00	4.88	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	65	2958	5.00	4.47	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	96882	5.00	4.99	
108 4-Ethyltoluene	105	10.791	10.791	0.000	98	113942	5.00	4.90	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	93	95787	5.00	4.82	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	87777	5.00	4.96	
111 Butyl Methacrylate	87	10.961	10.961	0.000	88	20540	5.00	2.97	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	72775	5.00	4.62	
113 1,2,4-Trimethylbenzene	105	11.186	11.187	-0.001	97	102548	5.00	4.89	
114 sec-Butylbenzene	105	11.320	11.320	0.000	100	116997	5.00	4.86	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	70	47526	5.00	4.88	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	98	99534	5.00	4.99	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	327961	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	93	49253	5.00	4.90	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	99	107159	5.00	5.03	
119 Benzyl chloride	91	11.655	11.655	0.000	98	12131	5.00	2.63	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	95	93833	5.00	4.86	
121 p-Diethylbenzene	119	11.758	11.758	0.000	94	56273	5.00	5.01	
122 n-Butylbenzene	92	11.783	11.783	0.000	98	53564	5.00	5.04	
123 1,2-Dichlorobenzene	146	11.831	11.831	0.000	93	42949	5.00	4.84	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	97	91152	5.00	4.59	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	90	1228	5.00	3.86	
126 1,3,5-Trichlorobenzene	180	12.574	12.568	0.006	97	31784	5.00	4.69	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	94	23671	5.00	4.44	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	89	8112	5.00	4.73	
129 Naphthalene	128	13.231	13.231	0.000	99	39192	5.00	4.31	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	94	17871	5.00	4.33	
S 131 1,2-Dichloroethene, Total	100				0		10.0	9.47	
S 132 Xylenes, Total	100				0		10.0	9.66	
S 133 Total BTEX	1				0		25.0	24.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
GAS Hi_00250	Amount Added:	1.00	Units: uL	
Ethanol mix_00014	Amount Added:	1.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	1.00	Units: uL	
MIX I Hi_00093	Amount Added:	1.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 14:41:50 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D

Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11 Operator ID:

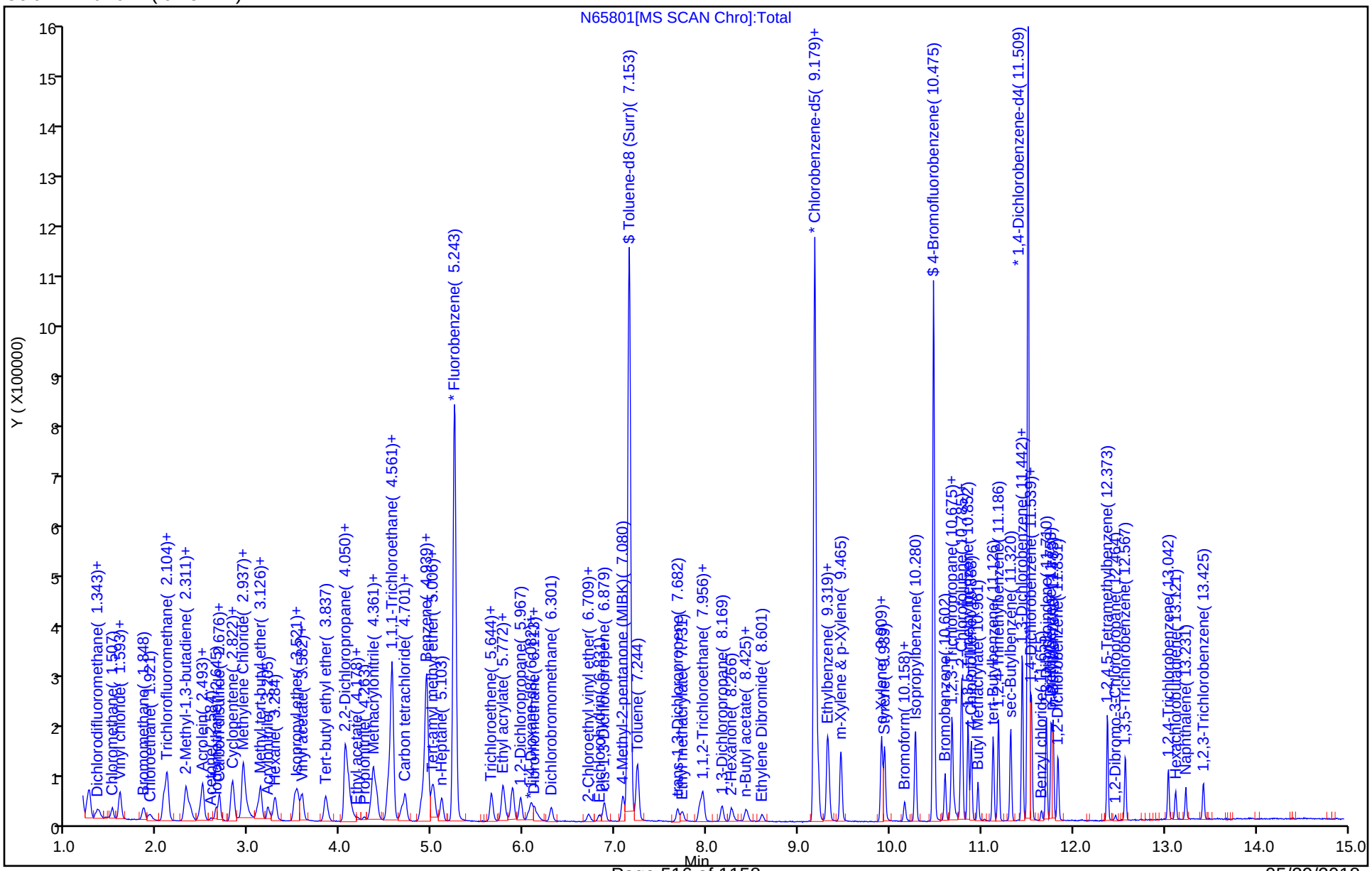
Lims ID: STD5 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

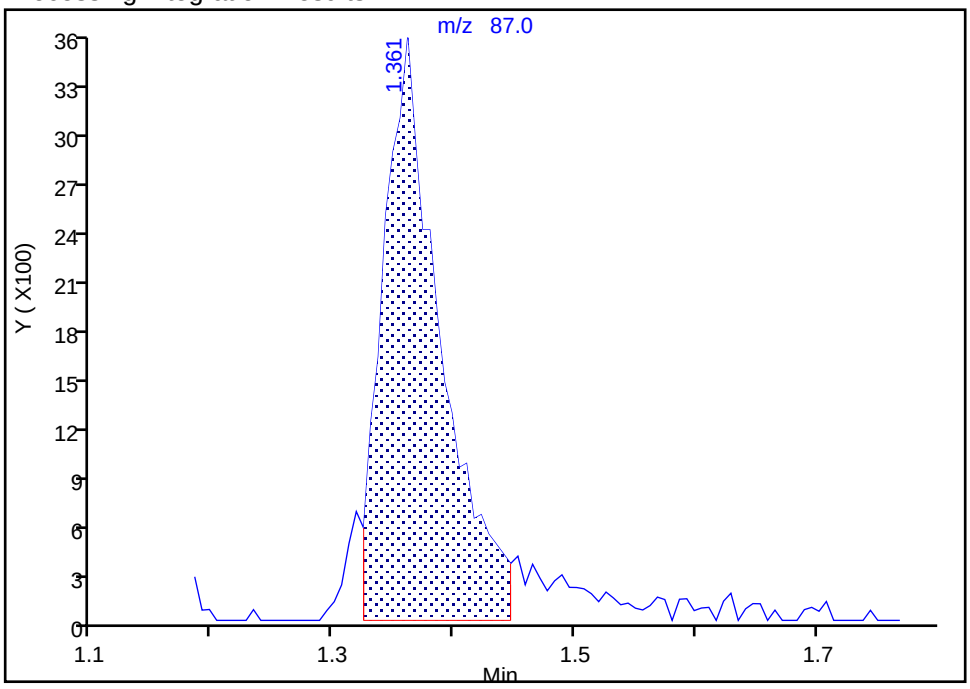
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

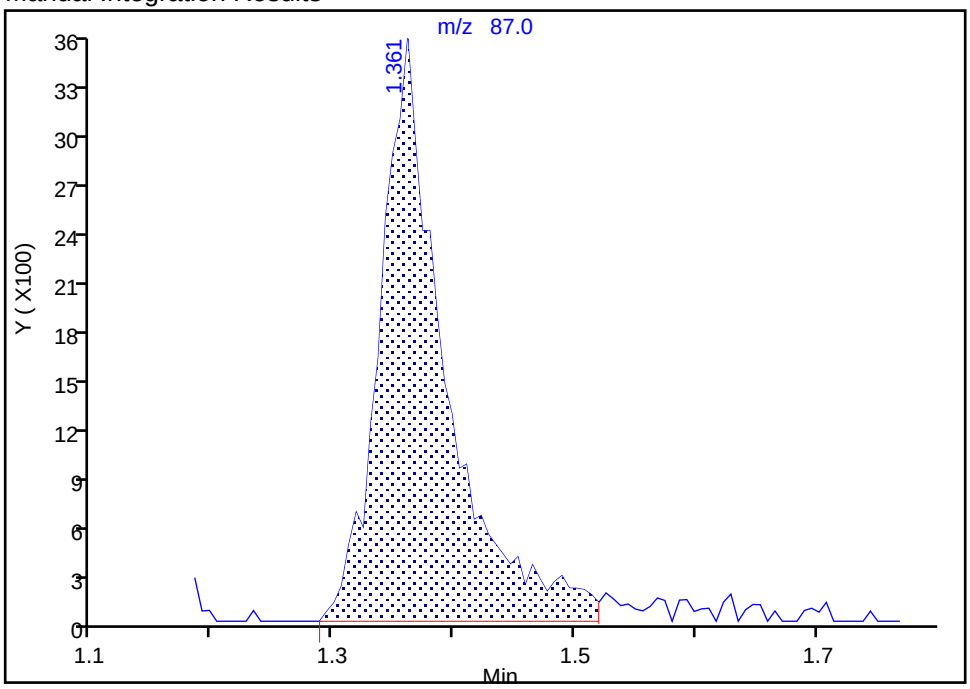
Processing Integration Results

RT: 1.36
Area: 11961
Amount: 4.693483
Amount Units: ug/l



Manual Integration Results

RT: 1.36
Area: 13543
Amount: 5.383270
Amount Units: ug/l



Reviewer: delpolitov, 21-Apr-2018 08:19:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

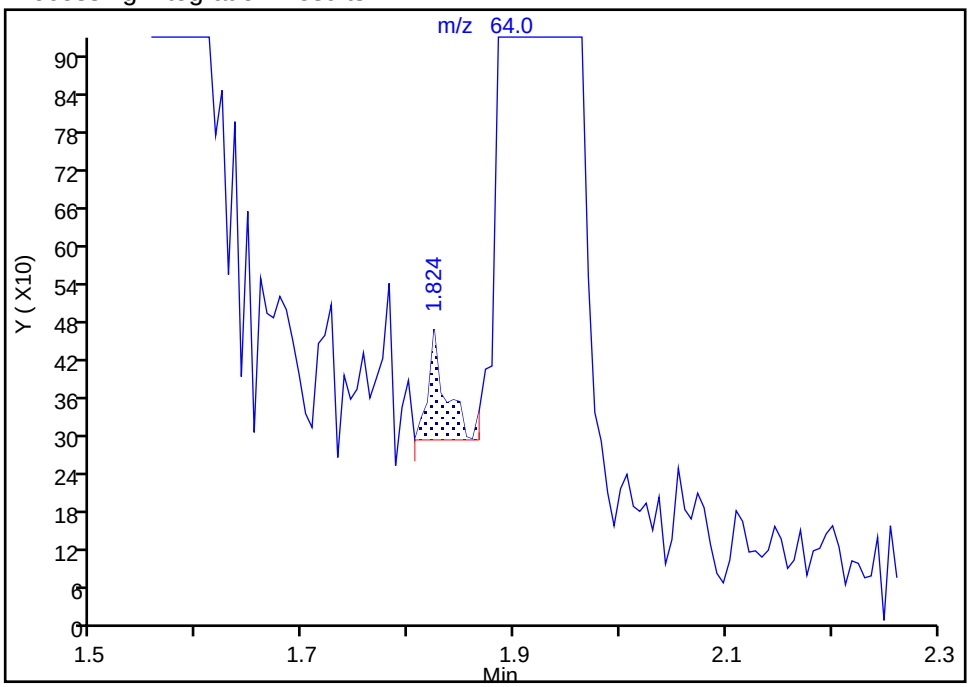
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

7 Chloroethane, CAS: 75-00-3

Signal: 1

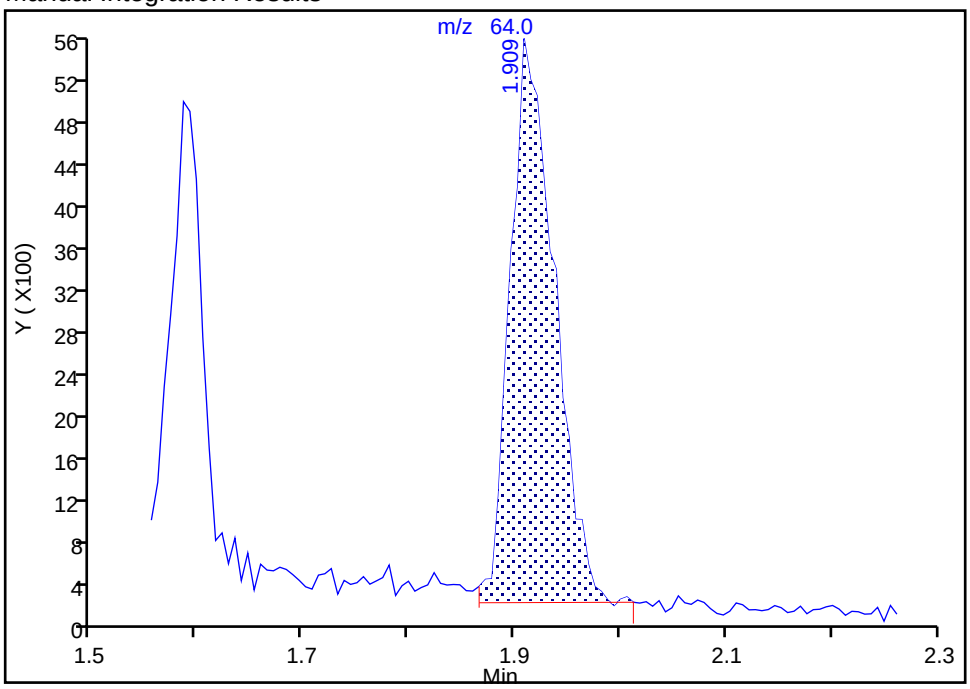
Processing Integration Results

RT: 1.82
Area: 213
Amount: 0.070065
Amount Units: ug/l



Manual Integration Results

RT: 1.91
Area: 15693
Amount: 5.865371
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:13:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

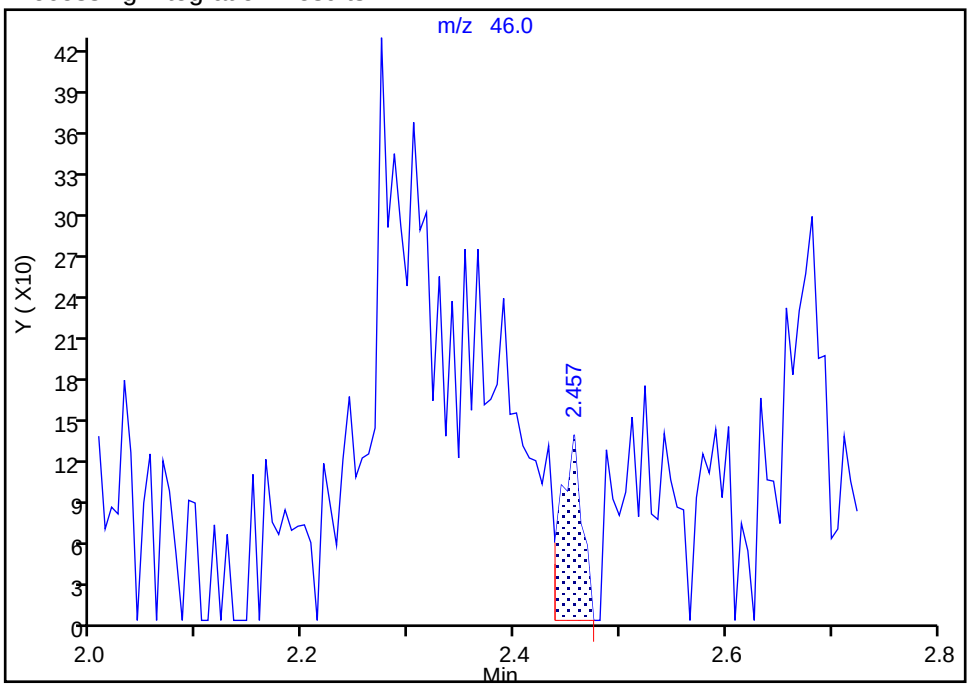
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D		
Injection Date:	20-Apr-2018 02:15:30	Instrument ID:	CVOAMS11
Lims ID:	STD5		
Client ID:			
Operator ID:		ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

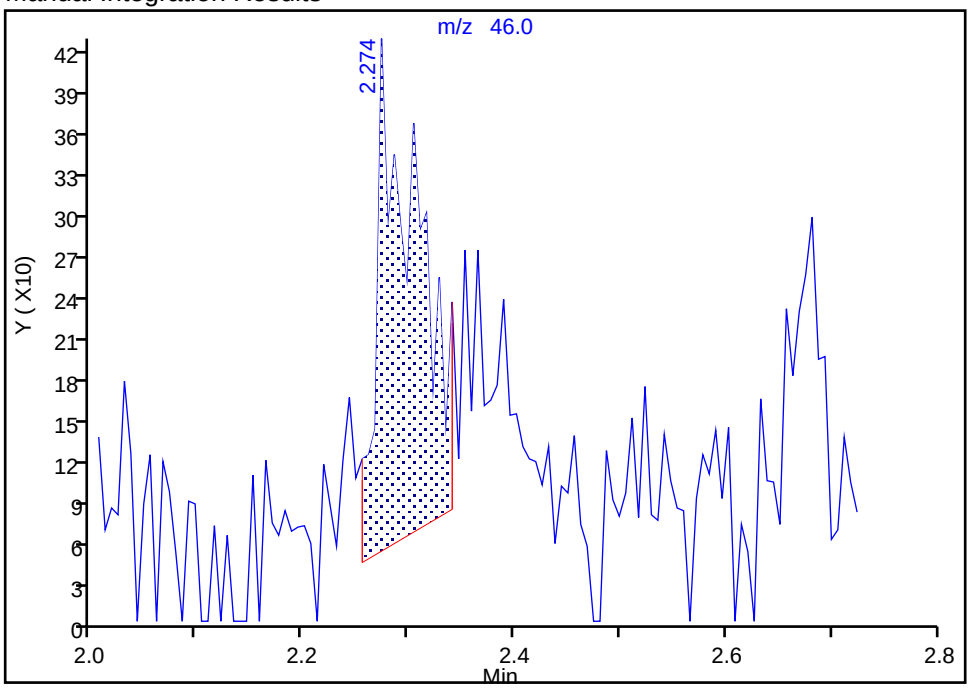
Processing Integration Results

RT: 2.46
Area: 187
Amount: 42.596601
Amount Units: ug/l



Manual Integration Results

RT: 2.27
Area: 1010
Amount: 103.5589
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:13:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

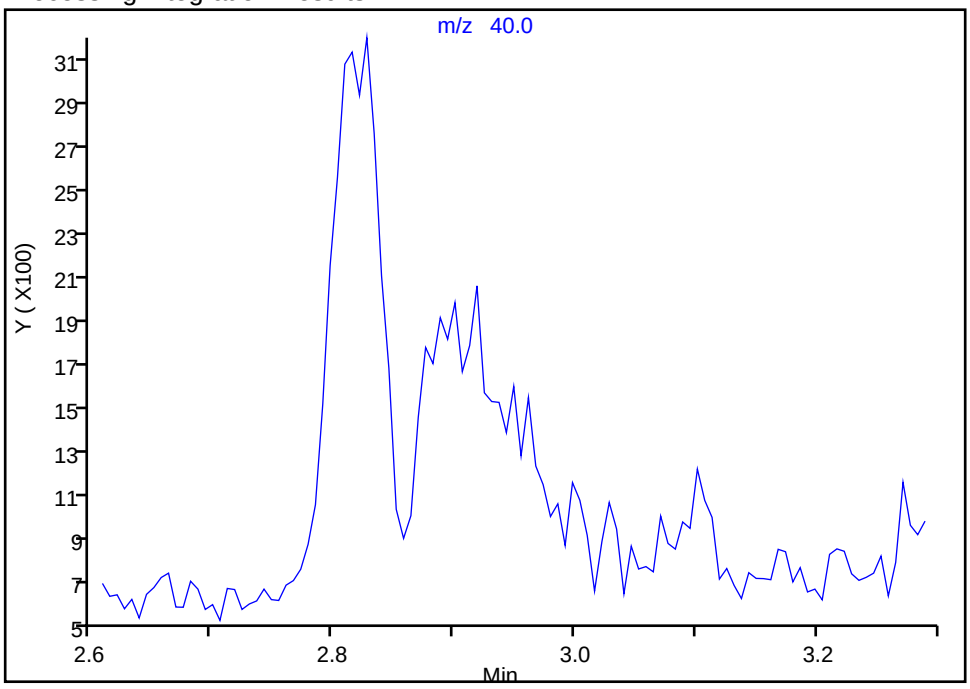
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

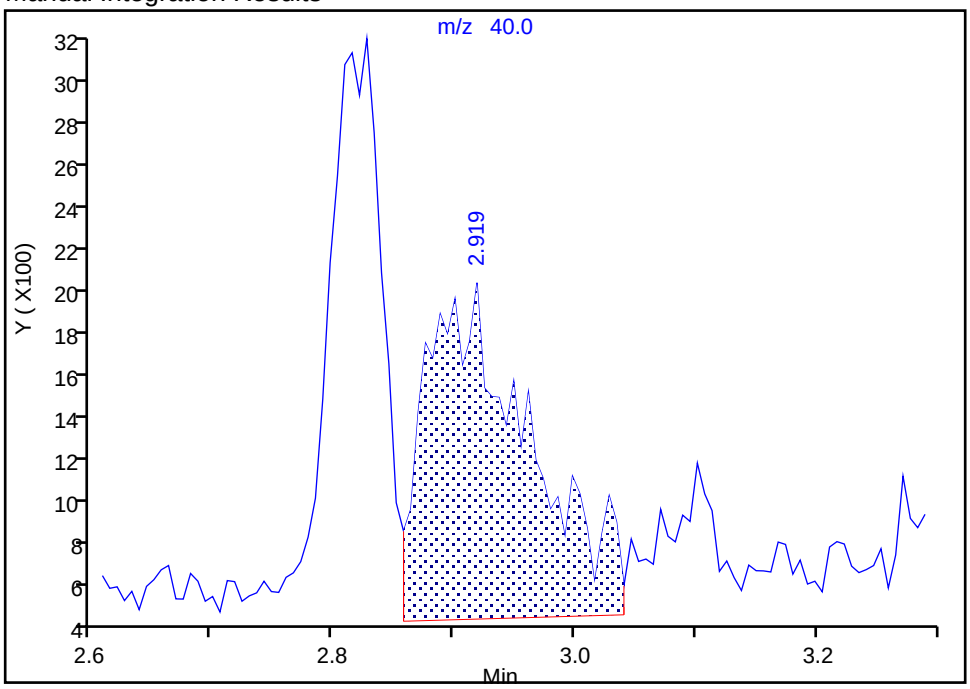
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.92
Area: 9374
Amount: 65.554112
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:14:05
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

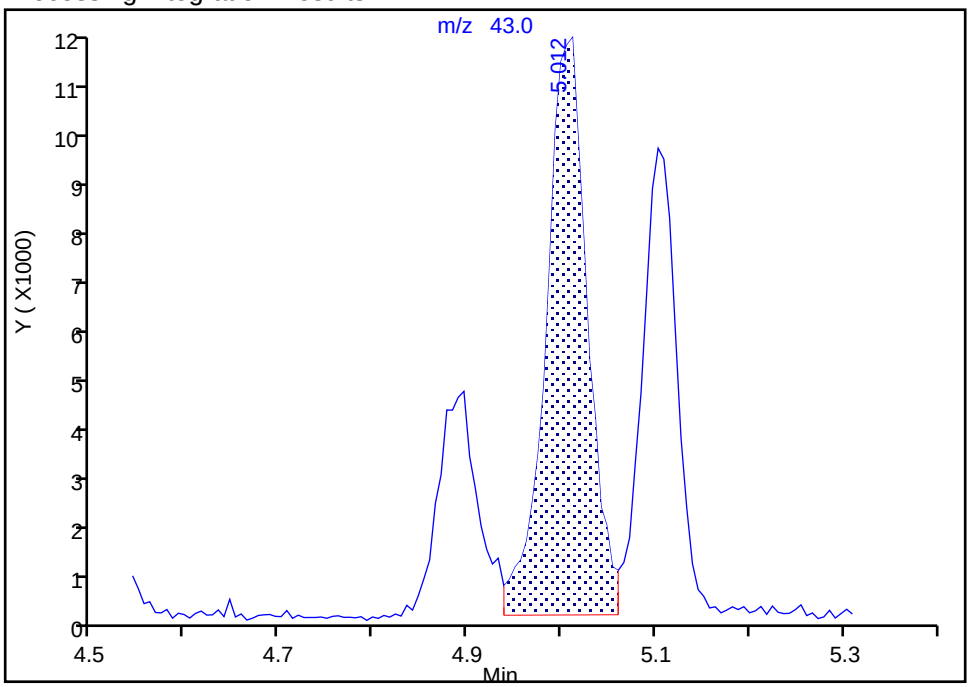
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

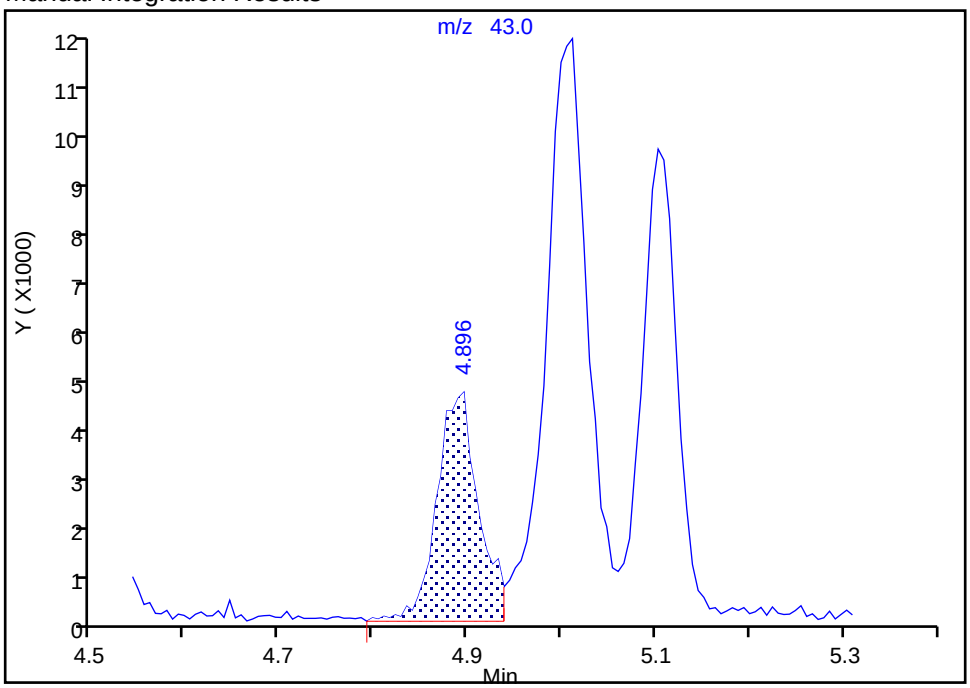
Processing Integration Results

RT: 5.01
Area: 34493
Amount: 317.5814
Amount Units: ug/l



Manual Integration Results

RT: 4.90
Area: 13637
Amount: 110.3337
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:14:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

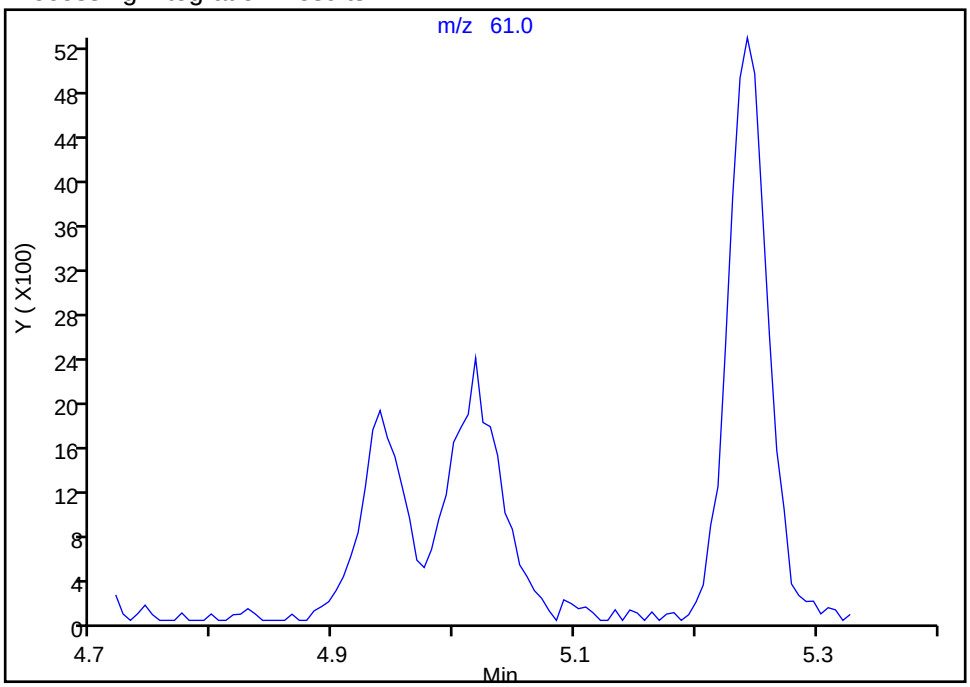
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

59 Isopropyl acetate, CAS: 108-21-4

Signal: 1

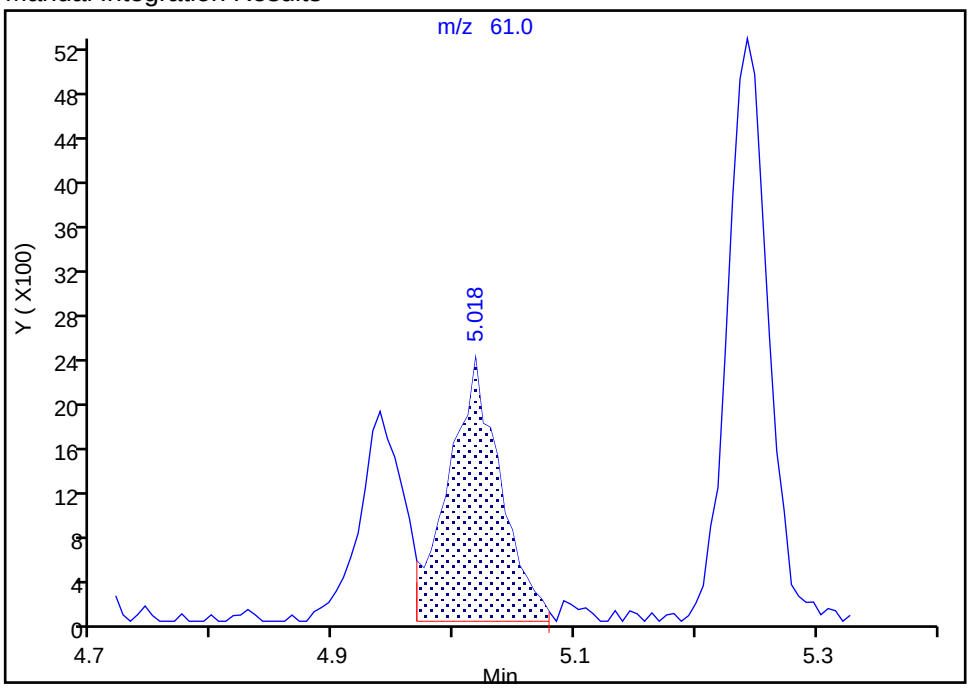
Not Detected
Expected RT: 5.01

Processing Integration Results



Manual Integration Results

RT: 5.02
Area: 7166
Amount: 4.564816
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:14:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

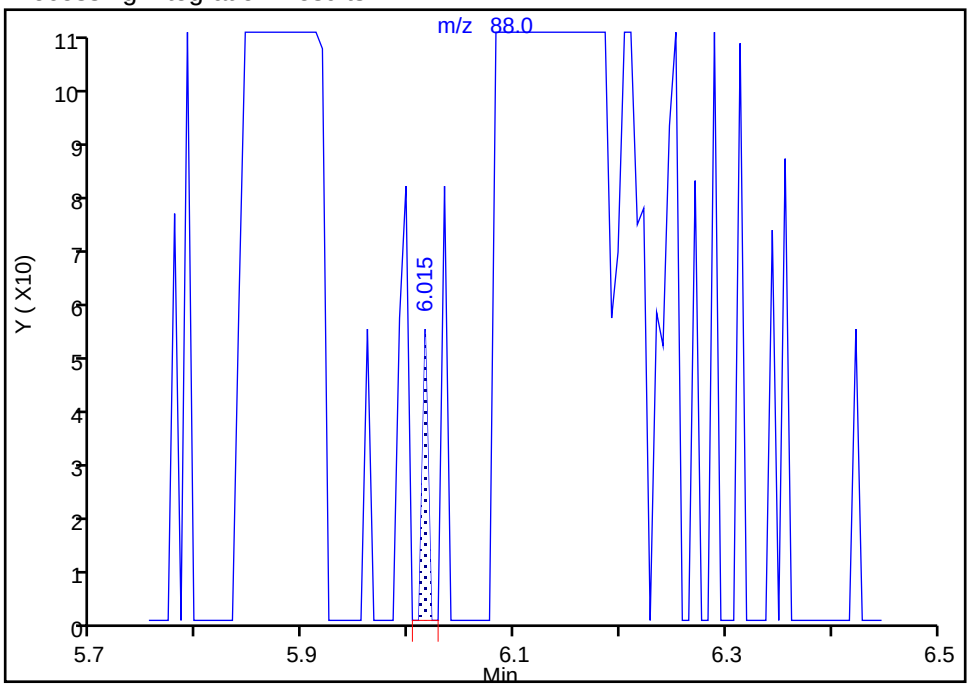
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

Signal: 1

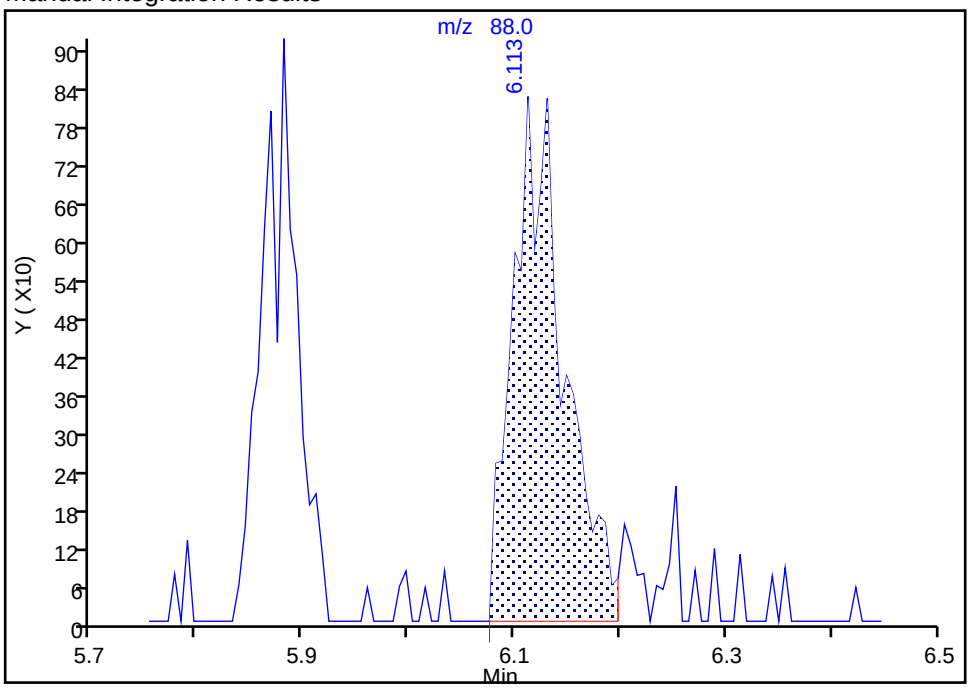
Processing Integration Results

RT: 6.02
Area: 19
Amount: 0.675386
Amount Units: ug/l



Manual Integration Results

RT: 6.11
Area: 2766
Amount: 98.289408
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:14:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

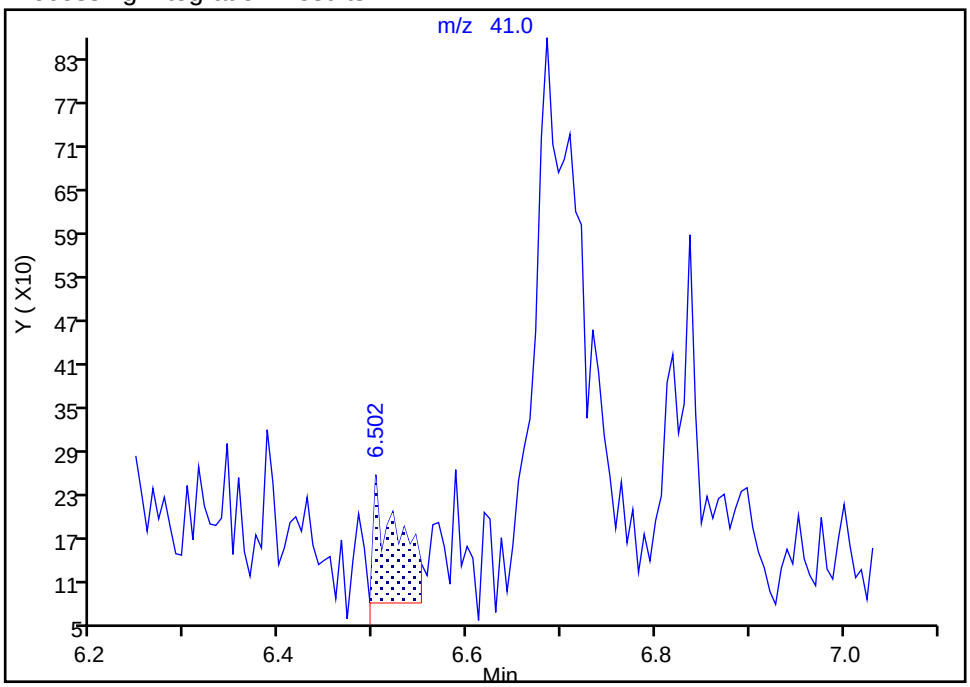
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Signal: 1

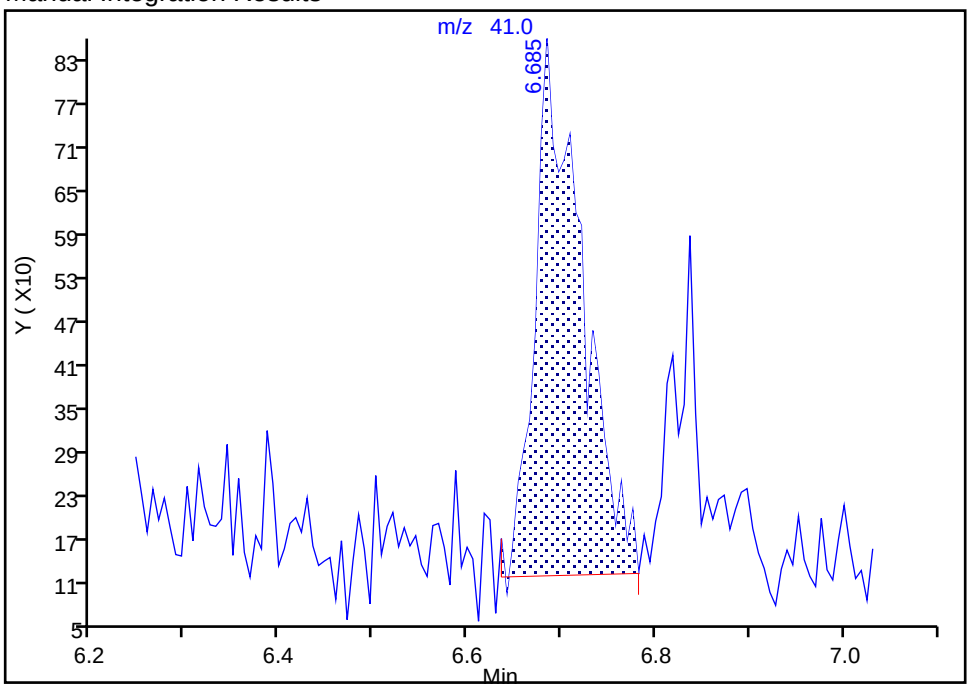
Processing Integration Results

RT: 6.50
Area: 325
Amount: -11.127865
Amount Units: ug/l



Manual Integration Results

RT: 6.68
Area: 2578
Amount: 11.739356
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:14:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

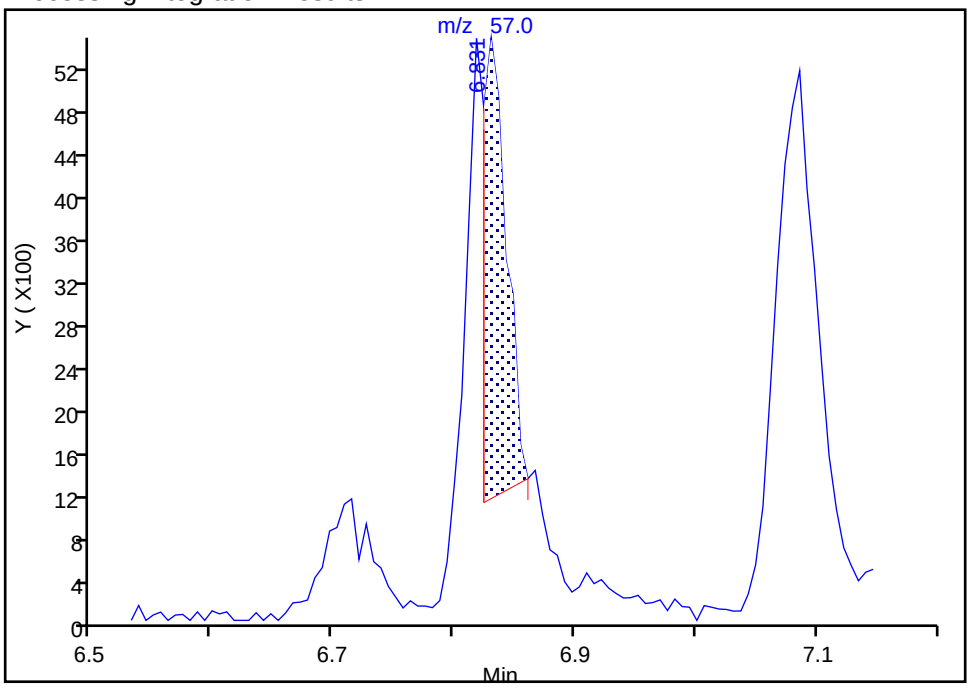
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65801.D
Injection Date: 20-Apr-2018 02:15:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

76 Epichlorohydrin, CAS: 106-89-8

Signal: 1

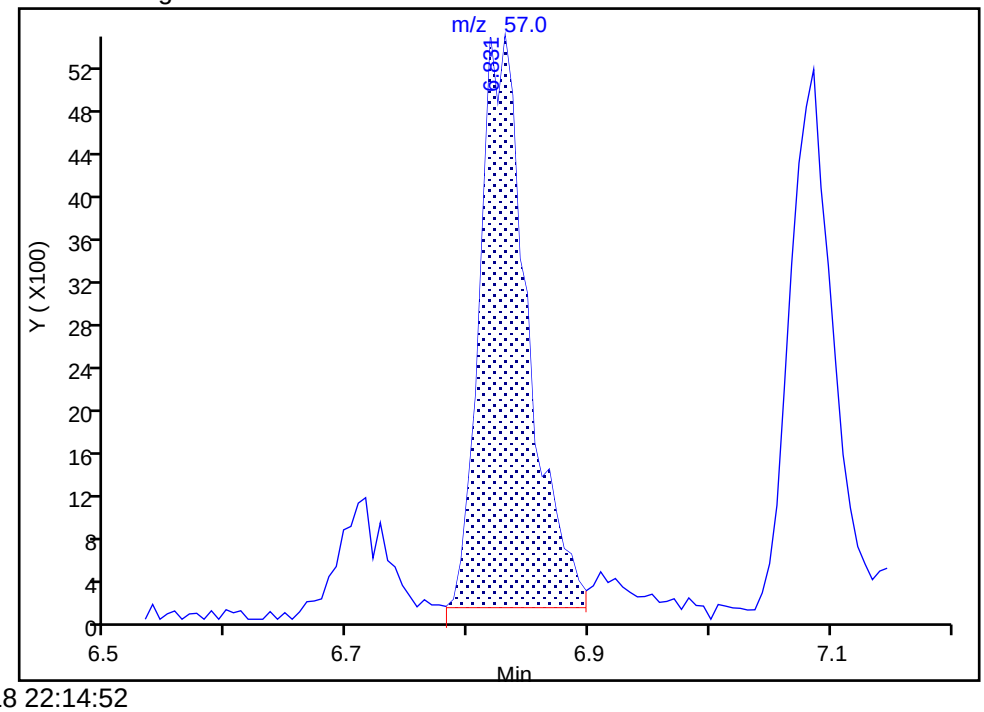
Processing Integration Results

RT: 6.83
Area: 5898
Amount: 26.830097
Amount Units: ug/l



Manual Integration Results

RT: 6.83
Area: 14766
Amount: 67.118164
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:14:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65802.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 20-Apr-2018 02:39:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0070690-006
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 14:42:07 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: boykink Date: 20-Apr-2018 02:59:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.325	1.325	0.000	87	58100	20.0	13.0	
2 Dichlorodifluoromethane	87	1.349	1.349	0.000	99	44953	20.0	17.6	
3 Chloromethane	52	1.495	1.495	0.000	98	31079	20.0	19.8	
4 Vinyl chloride	62	1.587	1.587	0.000	98	105011	20.0	19.7	
5 Butadiene	54	1.587	1.587	0.000	87	70361	20.0	18.2	
6 Bromomethane	94	1.842	1.842	0.000	99	77413	20.0	20.5	
7 Chloroethane	64	1.903	1.903	0.000	98	54560	20.0	20.1	
8 Dichlorofluoromethane	67	2.067	2.067	0.000	98	186108	20.0	18.9	
9 Trichlorofluoromethane	101	2.073	2.073	0.000	67	142832	20.0	18.8	
10 Pentane	72	2.104	2.104	0.000	96	32851	40.0	42.0	
11 Ethanol	46	2.286	2.286	0.000	69	6665	800.0	709.7	
12 Ethyl ether	59	2.292	2.292	0.000	92	58604	20.0	20.1	
13 2-Methyl-1,3-butadiene	53	2.311	2.311	0.000	94	73604	20.0	16.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.341	0.000	94	86896	20.0	19.5	
16 Acrolein	56	2.463	2.463	0.000	94	11784	40.0	43.3	
15 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.481	0.000	96	106906	20.0	19.4	
17 1,1-Dichloroethene	96	2.487	2.487	0.000	98	88114	20.0	19.4	
18 Acetone	43	2.578	2.578	0.000	89	44262	100.0	94.1	
19 Iodomethane	142	2.639	2.639	0.000	97	139269	20.0	19.1	
20 Carbon disulfide	76	2.676	2.676	0.000	99	316182	20.0	18.9	
21 Isopropyl alcohol	45	2.688	2.688	0.000	25	16860	200.0	205.9	
22 3-Chloro-1-propene	76	2.803	2.803	0.000	91	55435	20.0	19.3	
24 Methyl acetate	74	2.822	2.822	0.000	98	14941	40.0	44.0	
23 Cyclopentene	67	2.822	2.822	0.000	93	225300	20.0	19.9	
25 Acetonitrile	40	2.870	2.870	0.000	86	22881	200.0	166.1	a
26 Methylene Chloride	84	2.931	2.931	0.000	89	99762	20.0	20.3	
* 27 TBA-d9 (IS)	65	2.937	2.937	0.000	0	160984	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.010	3.010	0.000	91	35551	200.0	211.9	
29 Methyl tert-butyl ether	73	3.095	3.095	0.000	97	212491	20.0	19.7	
30 trans-1,2-Dichloroethene	96	3.120	3.120	0.000	93	101772	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.199	3.199	0.000	95	156885	200.0	224.8	
32 Hexane	57	3.284	3.284	0.000	90	120891	20.0	19.3	
33 Isopropyl ether	45	3.503	3.503	0.000	95	284849	20.0	20.6	
34 1,1-Dichloroethane	63	3.527	3.527	0.000	99	175958	20.0	20.3	
35 Vinyl acetate	86	3.558	3.558	0.000	99	19899	40.0	28.8	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	90	88695	20.0	18.6	
37 Tert-butyl ethyl ether	59	3.838	3.838	0.000	90	252318	20.0	19.6	
* 39 2-Butanone-d5	46	4.050	4.050	0.000	0	189860	250.0	250.0	
38 2,2-Dichloropropane	79	4.057	4.057	0.000	87	46888	20.0	19.0	
40 cis-1,2-Dichloroethene	96	4.087	4.087	0.000	99	112237	20.0	19.7	
41 2-Butanone (MEK)	72	4.105	4.105	0.000	98	26831	100.0	98.7	
42 Ethyl acetate	70	4.117	4.117	0.000	97	11286	40.0	38.3	
43 Methyl acrylate	55	4.172	4.172	0.000	99	34601	20.0	19.7	
44 Propionitrile	54	4.245	4.245	0.000	98	57084	200.0	237.1	
46 Chlorobromomethane	128	4.324	4.324	0.000	91	42191	20.0	20.0	
45 Tetrahydrofuran	72	4.336	4.336	0.000	83	13255	40.0	41.7	
47 Methacrylonitrile	67	4.355	4.355	0.000	90	217854	200.0	211.6	
48 Chloroform	83	4.391	4.391	0.000	99	172696	20.0	20.3	
49 Cyclohexane	84	4.519	4.519	0.000	88	173356	20.0	19.3	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	98	140717	20.0	19.0	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.555	0.000	96	228261	50.0	50.6	
52 Carbon tetrachloride	117	4.665	4.665	0.000	97	85523	20.0	18.6	
53 1,1-Dichloropropene	75	4.708	4.708	0.000	98	139219	20.0	19.7	
58 Isobutyl alcohol	43	4.884	4.884	0.000	42	60544	500.0	507.2	a
54 Isooctane	57	4.884	4.884	0.000	96	218652	20.0	19.0	
55 Benzene	78	4.914	4.914	0.000	96	437298	20.0	20.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	213061	50.0	49.2	
57 Tert-amyl methyl ether	73	5.000	5.000	0.000	90	252380	20.0	19.6	
59 Isopropyl acetate	61	5.012	5.012	0.000	95	30835	20.0	19.3	
60 1,2-Dichloroethane	62	5.024	5.024	0.000	98	101421	20.0	20.0	
61 n-Heptane	57	5.103	5.103	0.000	88	57454	20.0	20.2	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	1003836	50.0	50.0	
64 Trichloroethene	95	5.644	5.644	0.000	98	104552	20.0	19.3	
63 n-Butanol	56	5.657	5.657	0.000	24	10059	500.0	282.2	
65 Methylcyclohexane	83	5.772	5.772	0.000	90	176778	20.0	18.9	
66 Ethyl acrylate	55	5.772	5.772	0.000	96	173382	20.0	15.9	
67 1,2-Dichloropropane	63	5.967	5.967	0.000	93	100998	20.0	20.2	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	25548	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.076	0.000	84	31226	40.0	39.9	
71 Dibromomethane	93	6.119	6.119	0.000	91	46899	20.0	20.2	
70 1,4-Dioxane	88	6.119	6.119	0.000	37	11467	400.0	412.8	
72 n-Propyl acetate	43	6.149	6.149	0.000	96	53190	20.0	18.2	
73 Dichlorobromomethane	83	6.301	6.301	0.000	99	107017	20.0	19.3	
74 2-Nitropropane	41	6.691	6.691	0.000	68	8121	40.0	38.2	
75 2-Chloroethyl vinyl ether	63	6.703	6.703	0.000	95	36039	20.0	19.3	
76 Epichlorohydrin	57	6.819	6.819	0.000	98	77788	400.0	349.5	
77 cis-1,3-Dichloropropene	75	6.873	6.873	0.000	90	135980	20.0	20.1	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	95	226341	100.0	110.0	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	1069259	50.0	50.2	
80 Toluene	91	7.238	7.238	0.000	93	480643	20.0	20.6	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	97	93941	20.0	19.2	
82 Ethyl methacrylate	69	7.725	7.725	0.000	89	74302	20.0	15.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.926	7.926	0.000	96	58058	20.0	20.8	
84 Tetrachloroethene	166	7.956	7.956	0.000	93	87709	20.0	19.2	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	91	119041	20.0	20.9	
86 2-Hexanone	58	8.266	8.266	0.000	94	80298	100.0	95.1	
87 n-Butyl acetate	43	8.419	8.419	0.000	98	70904	20.0	20.8	
88 Chlorodibromomethane	129	8.437	8.437	0.000	97	49047	20.0	18.6	
89 Ethylene Dibromide	107	8.595	8.595	0.000	98	58515	20.0	20.3	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	726768	50.0	50.0	
91 Chlorobenzene	112	9.209	9.209	0.000	94	290631	20.0	20.3	
92 Ethylbenzene	106	9.319	9.319	0.000	98	163395	20.0	20.3	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	91	68589	20.0	18.6	
94 m-Xylene & p-Xylene	106	9.459	9.459	0.000	0	199779	20.0	20.4	
96 o-Xylene	106	9.909	9.909	0.000	93	199017	20.0	20.7	
95 n-Butyl acrylate	73	9.921	9.921	0.000	98	47671	20.0	15.9	
97 Styrene	104	9.939	9.939	0.000	96	325573	20.0	21.4	
99 Bromoform	173	10.152	10.152	0.000	94	18108	20.0	16.2	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	94	90978	20.0	16.8	
100 Isopropylbenzene	105	10.274	10.274	0.000	96	517540	20.0	20.9	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	84	242575	50.0	50.2	
102 Bromobenzene	156	10.603	10.603	0.000	94	97859	20.0	19.5	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	98	72554	20.0	20.4	
104 N-Propylbenzene	91	10.676	10.676	0.000	99	597559	20.0	20.5	
105 1,2,3-Trichloropropane	110	10.700	10.700	0.000	94	20125	20.0	20.4	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	67	13238	20.0	19.1	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	427539	20.0	21.0	
108 4-Ethyltoluene	105	10.791	10.791	0.000	98	507276	20.0	20.8	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	93	425504	20.0	20.4	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	375614	20.0	20.3	
111 Butyl Methacrylate	87	10.961	10.961	0.000	88	114018	20.0	15.7	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	319951	20.0	19.4	
113 1,2,4-Trimethylbenzene	105	11.187	11.187	0.000	97	445760	20.0	20.3	
114 sec-Butylbenzene	105	11.320	11.320	0.000	100	520928	20.0	20.7	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	71	209698	20.0	20.6	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	98	441645	20.0	21.1	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	343649	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	211668	20.0	20.1	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	98	467632	20.0	20.9	
119 Benzyl chloride	91	11.655	11.655	0.000	99	59551	20.0	12.3	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	420660	20.0	20.8	
121 p-Diethylbenzene	119	11.758	11.758	0.000	93	244260	20.0	20.7	
122 n-Butylbenzene	92	11.783	11.783	0.000	97	227344	20.0	20.4	
123 1,2-Dichlorobenzene	146	11.831	11.831	0.000	93	183937	20.0	19.8	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	97	428282	20.0	20.6	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	92	6289	20.0	18.9	
126 1,3,5-Trichlorobenzene	180	12.568	12.568	0.000	96	138307	20.0	19.5	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	94	107139	20.0	19.2	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	93	32046	20.0	17.8	
129 Naphthalene	128	13.231	13.231	0.000	99	196094	20.0	20.6	
130 1,2,3-Trichlorobenzene	180	13.419	13.419	0.000	94	83179	20.0	19.2	
S 131 1,2-Dichloroethene, Total	100				0		40.0	39.4	
S 132 Xylenes, Total	100				0		40.0	41.1	
S 133 Total BTEX	1				0		100.0	102.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
GAS Hi_00250	Amount Added:	2.00	Units: uL	
Ethanol mix_00014	Amount Added:	2.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	2.00	Units: uL	
MIX I Hi_00093	Amount Added:	2.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 14:42:12 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65802.D

Injection Date: 20-Apr-2018 02:39:30 Instrument ID: CVOAMS11 Operator ID:

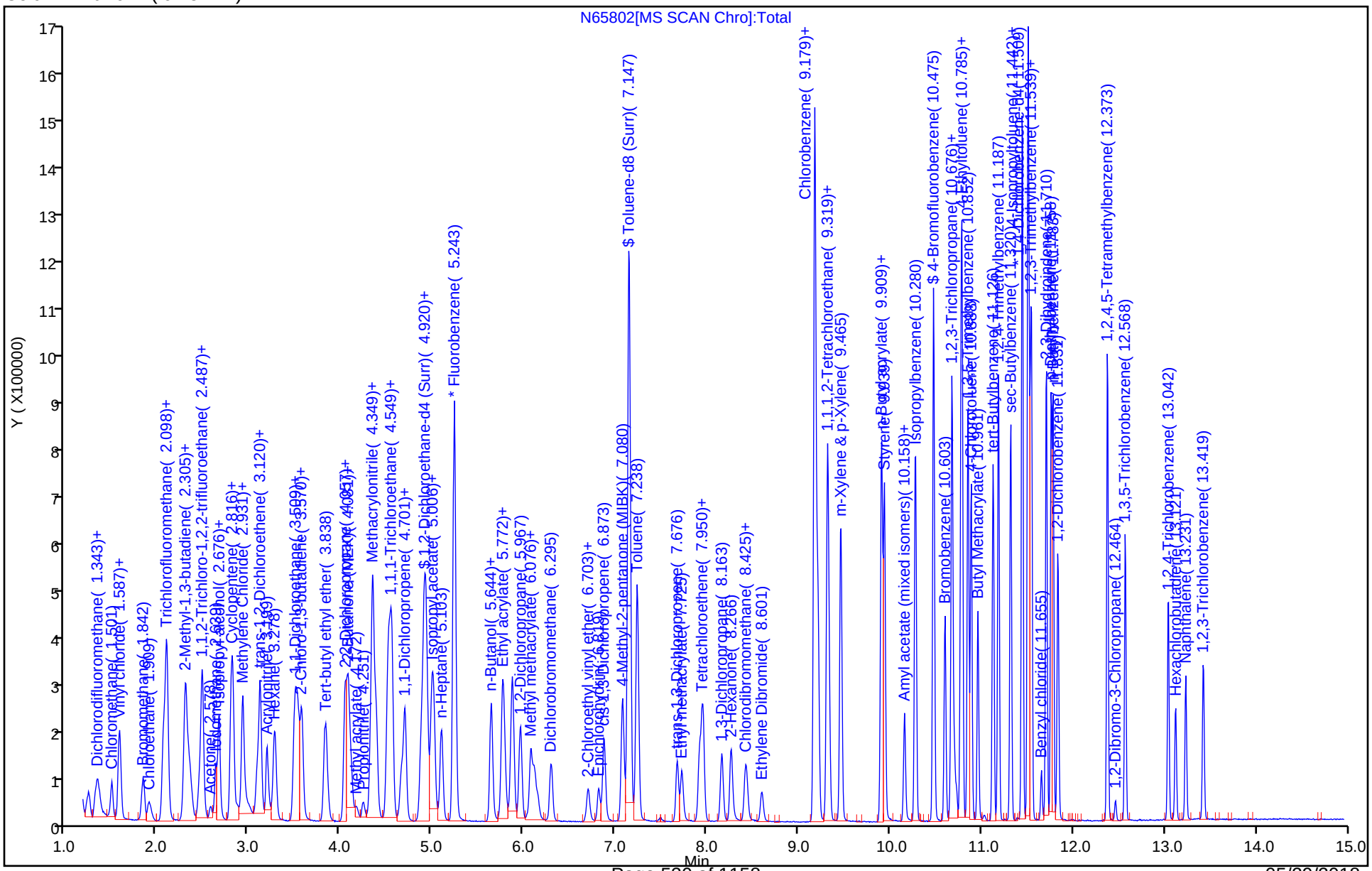
Lims ID: STD20 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

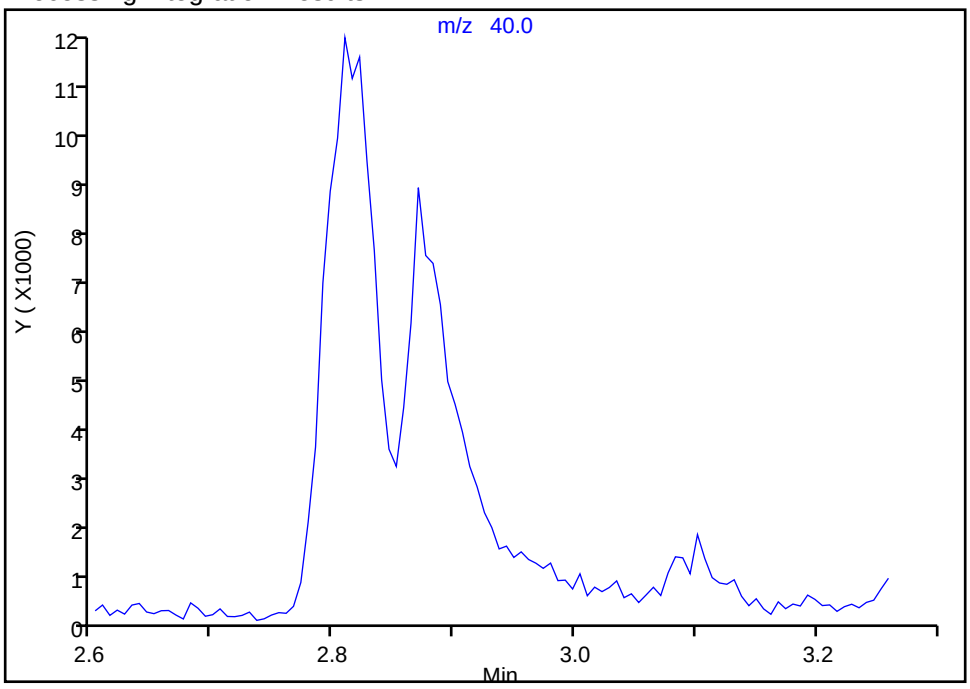
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65802.D
Injection Date: 20-Apr-2018 02:39:30 Instrument ID: CVOAMS11
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

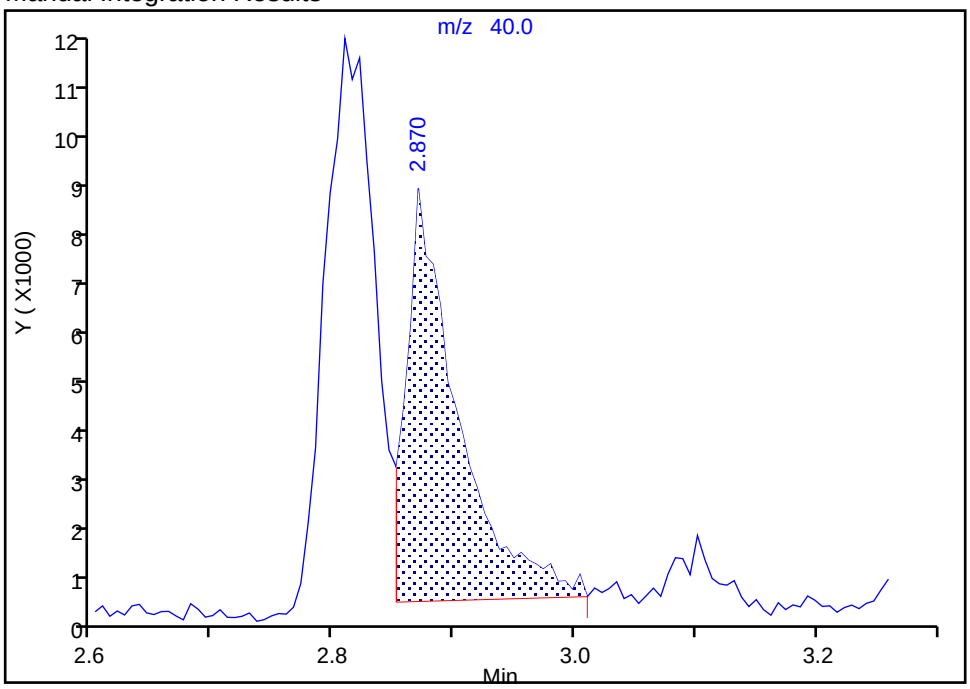
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.87
Area: 22881
Amount: 166.1348
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:15:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

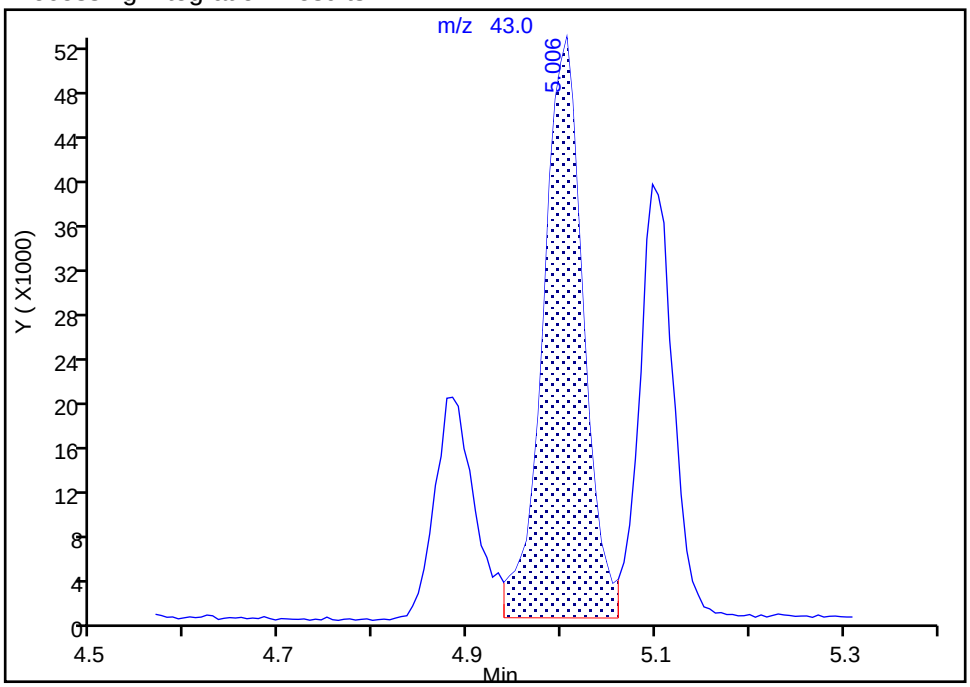
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65802.D
Injection Date: 20-Apr-2018 02:39:30 Instrument ID: CVOAMS11
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

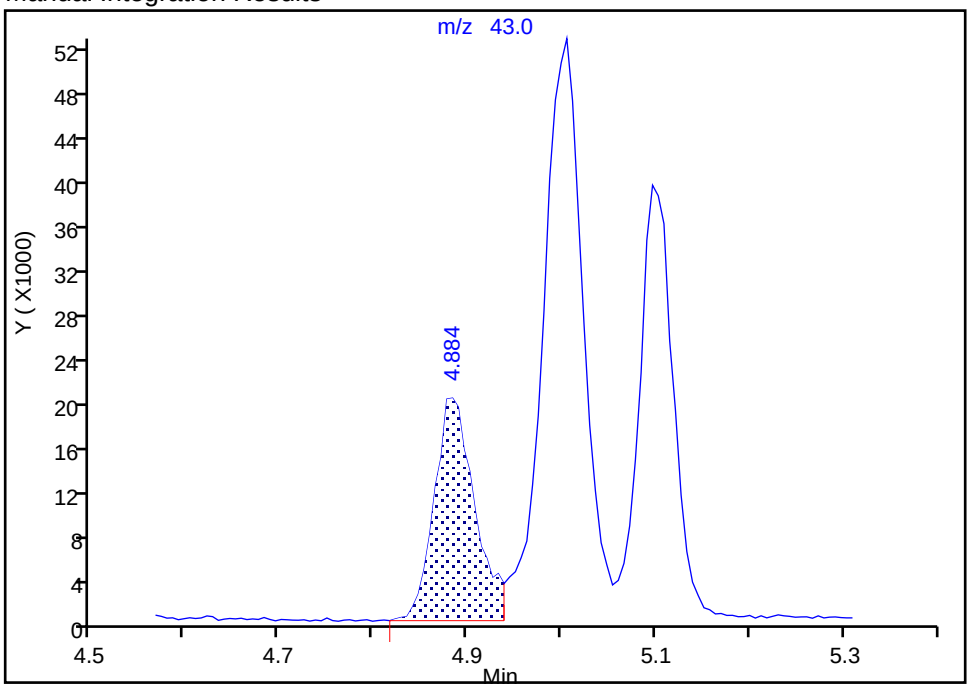
Processing Integration Results

RT: 5.01
Area: 156614
Amount: 554.2627
Amount Units: ug/l



Manual Integration Results

RT: 4.88
Area: 60544
Amount: 507.1728
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 21:15:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 20-Apr-2018 03:02:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0070690-007
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 14:42:29 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: boykink Date: 20-Apr-2018 03:31:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.319	1.325	-0.006	88	148667	50.0	31.7	
2 Dichlorodifluoromethane	87	1.349	1.349	0.000	99	100967	50.0	37.9	M
3 Chloromethane	52	1.501	1.495	0.006	99	76177	50.0	46.2	
5 Butadiene	54	1.580	1.587	-0.007	64	163175	50.0	40.6	
4 Vinyl chloride	62	1.580	1.587	-0.007	98	248376	50.0	44.7	
6 Bromomethane	94	1.842	1.842	0.000	99	184967	50.0	47.1	
7 Chloroethane	64	1.909	1.903	0.006	98	129152	50.0	45.6	
8 Dichlorofluoromethane	67	2.073	2.067	0.006	99	468873	50.0	45.7	
9 Trichlorofluoromethane	101	2.073	2.073	0.000	72	316142	50.0	39.8	
10 Pentane	72	2.104	2.104	0.000	97	85327	100.0	99.7	
11 Ethanol	46	2.268	2.286	-0.018	81	18351	2000.0	1796.0	a
12 Ethyl ether	59	2.286	2.292	-0.006	93	150508	50.0	49.5	
13 2-Methyl-1,3-butadiene	53	2.304	2.311	-0.007	94	189899	50.0	40.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.341	0.000	93	224308	50.0	48.2	
16 Acrolein	56	2.456	2.463	-0.007	92	36382	100.0	122.2	
15 1,1,2-Trichloro-1,2,2-trif	101	2.475	2.481	-0.006	94	271533	50.0	47.3	
17 1,1-Dichloroethene	96	2.487	2.487	0.000	97	230777	50.0	48.6	
18 Acetone	43	2.572	2.578	-0.006	89	120173	250.0	243.7	
19 Iodomethane	142	2.633	2.639	-0.006	97	366051	50.0	48.2	
20 Carbon disulfide	76	2.669	2.676	-0.007	98	826595	50.0	47.5	
21 Isopropyl alcohol	45	2.669	2.688	-0.019	25	45668	500.0	509.6	
22 3-Chloro-1-propene	76	2.797	2.803	-0.006	91	151302	50.0	50.4	
23 Cyclopentene	67	2.822	2.822	0.000	94	572184	50.0	48.4	
24 Methyl acetate	74	2.815	2.822	-0.007	96	40269	100.0	108.3	
25 Acetonitrile	40	2.864	2.870	-0.006	96	70692	500.0	473.2	a
26 Methylene Chloride	84	2.925	2.931	-0.006	90	250071	50.0	48.8	
* 27 TBA-d9 (IS)	65	2.931	2.937	-0.006	0	176139	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.010	3.010	0.000	98	93973	500.0	512.0	
29 Methyl tert-butyl ether	73	3.095	3.095	0.000	97	566166	50.0	50.3	
30 trans-1,2-Dichloroethene	96	3.120	3.120	0.000	94	262695	50.0	48.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.187	3.199	-0.012	96	419622	500.0	549.7	
32 Hexane	57	3.278	3.284	-0.006	90	316098	50.0	48.4	
33 Isopropyl ether	45	3.497	3.503	-0.006	96	733119	50.0	50.9	
34 1,1-Dichloroethane	63	3.527	3.527	0.000	99	448090	50.0	49.5	
35 Vinyl acetate	86	3.545	3.558	-0.013	100	61052	100.0	84.9	
36 2-Chloro-1,3-butadiene	88	3.570	3.576	-0.006	89	242729	50.0	48.9	
37 Tert-butyl ethyl ether	59	3.831	3.838	-0.007	91	678445	50.0	50.6	
* 39 2-Butanone-d5	46	4.044	4.050	-0.006	0	199125	250.0	250.0	
38 2,2-Dichloropropane	79	4.050	4.057	-0.007	95	121179	50.0	47.2	
40 cis-1,2-Dichloroethene	96	4.081	4.087	-0.006	98	296308	50.0	50.0	
41 2-Butanone (MEK)	72	4.105	4.105	0.000	97	68681	250.0	240.8	
42 Ethyl acetate	70	4.111	4.117	-0.006	95	30798	100.0	99.6	
43 Methyl acrylate	55	4.166	4.172	-0.006	100	97840	50.0	53.4	
44 Propionitrile	54	4.245	4.245	0.000	98	145632	500.0	552.9	
46 Chlorobromomethane	128	4.324	4.324	0.000	88	107454	50.0	48.9	
45 Tetrahydrofuran	72	4.330	4.336	-0.006	47	33322	100.0	99.9	
47 Methacrylonitrile	67	4.348	4.355	-0.007	89	570537	500.0	531.4	
48 Chloroform	83	4.385	4.391	-0.006	99	438247	50.0	49.3	
49 Cyclohexane	84	4.519	4.519	0.000	88	445075	50.0	47.6	
50 1,1,1-Trichloroethane	97	4.531	4.537	-0.006	98	373454	50.0	48.4	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.555	0.000	95	231931	50.0	49.3	
52 Carbon tetrachloride	117	4.665	4.665	0.000	97	237324	50.0	49.5	
53 1,1-Dichloropropene	75	4.701	4.708	-0.007	99	366391	50.0	49.7	
54 Isooctane	57	4.878	4.884	-0.006	95	581083	50.0	48.5	
58 Isobutyl alcohol	43	4.878	4.884	-0.006	5	170859	1250.0	1308.1	a
55 Benzene	78	4.914	4.914	0.000	95	1101215	50.0	50.1	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.933	4.939	-0.007	0	217352	50.0	48.2	
57 Tert-amyl methyl ether	73	4.999	5.000	-0.001	93	690907	50.0	51.6	
59 Isopropyl acetate	61	5.012	5.012	0.000	95	81229	50.0	48.9	
60 1,2-Dichloroethane	62	5.024	5.024	0.000	98	258290	50.0	48.9	
61 n-Heptane	57	5.103	5.103	0.000	87	147762	50.0	49.7	
* 62 Fluorobenzene	96	5.237	5.243	-0.006	99	1046682	50.0	50.0	
64 Trichloroethene	95	5.644	5.644	0.000	99	279847	50.0	49.5	
63 n-Butanol	56	5.644	5.657	-0.013	28	39794	1250.0	1005.5	a
66 Ethyl acrylate	55	5.772	5.772	0.000	98	464216	50.0	41.1	M
65 Methylcyclohexane	83	5.772	5.772	0.000	94	475273	50.0	48.8	
67 1,2-Dichloropropane	63	5.961	5.967	-0.006	93	264406	50.0	50.7	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	26774	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.076	0.000	83	86585	100.0	106.1	
70 1,4-Dioxane	88	6.107	6.119	-0.012	34	32266	1000.0	1108.4	
71 Dibromomethane	93	6.113	6.119	-0.006	92	120681	50.0	49.8	
72 n-Propyl acetate	43	6.149	6.149	0.000	96	158589	50.0	52.0	
73 Dichlorobromomethane	83	6.295	6.301	-0.006	99	288240	50.0	49.9	
74 2-Nitropropane	41	6.685	6.691	-0.006	67	20894	100.0	89.5	a
75 2-Chloroethyl vinyl ether	63	6.703	6.703	0.000	95	100601	50.0	51.7	
76 Epichlorohydrin	57	6.818	6.819	-0.001	99	221343	1000.0	945.7	
77 cis-1,3-Dichloropropene	75	6.879	6.873	0.006	90	369193	50.0	52.5	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	95	595380	250.0	275.9	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	100	1104116	50.0	49.7	
80 Toluene	91	7.238	7.238	0.000	92	1242169	50.0	51.1	
81 trans-1,3-Dichloropropene	75	7.670	7.676	-0.006	93	278227	50.0	54.4	
82 Ethyl methacrylate	69	7.725	7.725	0.000	87	211904	50.0	43.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.913	7.926	-0.013	96	148790	50.0	51.2	
84 Tetrachloroethene	166	7.956	7.956	0.000	93	237399	50.0	49.9	
85 1,3-Dichloropropane	76	8.157	8.163	-0.006	90	316452	50.0	53.3	
86 2-Hexanone	58	8.260	8.266	-0.006	94	222128	250.0	248.9	
87 n-Butyl acetate	43	8.418	8.419	0.000	97	197235	50.0	55.5	
88 Chlorodibromomethane	129	8.437	8.437	0.000	98	137238	50.0	49.9	
89 Ethylene Dibromide	107	8.601	8.595	0.006	96	159896	50.0	53.3	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	757834	50.0	50.0	
91 Chlorobenzene	112	9.209	9.209	0.000	95	759250	50.0	50.9	
92 Ethylbenzene	106	9.313	9.319	-0.006	98	434430	50.0	51.8	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	92	198162	50.0	51.5	
94 m-Xylene & p-Xylene	106	9.465	9.459	0.006	0	528224	50.0	51.7	
96 o-Xylene	106	9.903	9.909	-0.006	93	542154	50.0	54.1	
95 n-Butyl acrylate	73	9.921	9.921	0.000	98	140330	50.0	45.2	
97 Styrene	104	9.939	9.939	0.000	97	864113	50.0	54.5	
99 Bromoform	173	10.152	10.152	0.000	94	54182	50.0	46.6	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	93	261996	50.0	48.1	
100 Isopropylbenzene	105	10.280	10.274	0.006	96	1336963	50.0	51.8	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	83	254301	50.0	50.5	
102 Bromobenzene	156	10.602	10.603	0.000	97	262828	50.0	52.2	
103 1,1,2,2-Tetrachloroethane	83	10.669	10.663	0.006	98	189453	50.0	53.0	
104 N-Propylbenzene	91	10.675	10.676	-0.001	99	1556692	50.0	53.2	
105 1,2,3-Trichloropropane	110	10.706	10.700	0.006	95	52681	50.0	53.0	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	64	36205	50.0	51.9	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	1075430	50.0	52.6	
108 4-Ethyltoluene	105	10.791	10.791	0.000	98	1342192	50.0	54.8	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	1118634	50.0	53.5	
110 4-Chlorotoluene	91	10.882	10.888	-0.006	98	969299	50.0	52.0	
111 Butyl Methacrylate	87	10.961	10.961	0.000	86	343511	50.0	47.2	
112 tert-Butylbenzene	119	11.126	11.126	0.000	94	883233	50.0	53.2	
113 1,2,4-Trimethylbenzene	105	11.186	11.187	-0.001	97	1174135	50.0	53.2	
114 sec-Butylbenzene	105	11.320	11.320	0.000	100	1385068	50.0	54.7	
116 1,3-Dichlorobenzene	146	11.448	11.442	0.006	70	560672	50.0	54.7	
115 4-Isopropyltoluene	119	11.442	11.448	-0.006	97	1146715	50.0	54.6	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	345282	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	92	539245	50.0	51.0	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	98	1200326	50.0	53.5	
119 Benzyl chloride	91	11.655	11.655	0.000	99	198128	50.0	40.3	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	1094313	50.0	53.8	
121 p-Diethylbenzene	119	11.758	11.758	0.000	92	621530	50.0	52.5	
122 n-Butylbenzene	92	11.783	11.783	0.000	98	603710	50.0	53.9	
123 1,2-Dichlorobenzene	146	11.837	11.831	0.006	94	478433	50.0	51.2	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	97	1155561	50.0	55.3	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	95	18686	50.0	55.8	
126 1,3,5-Trichlorobenzene	180	12.573	12.568	0.005	96	377501	50.0	52.9	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	93	301055	50.0	53.6	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	89	91639	50.0	50.7	
129 Naphthalene	128	13.231	13.231	-0.001	99	541553	50.0	56.6	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	94	220090	50.0	50.6	
S 131 1,2-Dichloroethene, Total	100				0		100.0	98.7	
S 132 Xylenes, Total	100				0		100.0	105.8	
S 133 Total BTEX	1				0		250.0	258.8	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	10.00	Units: uL	
GAS Hi_00250	Amount Added:	5.00	Units: uL	
Ethanol mix_00014	Amount Added:	5.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	5.00	Units: uL	
MIX I Hi_00093	Amount Added:	5.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 14:42:36 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D

Injection Date: 20-Apr-2018 03:02:30 Instrument ID: CVOAMS11 Operator ID:

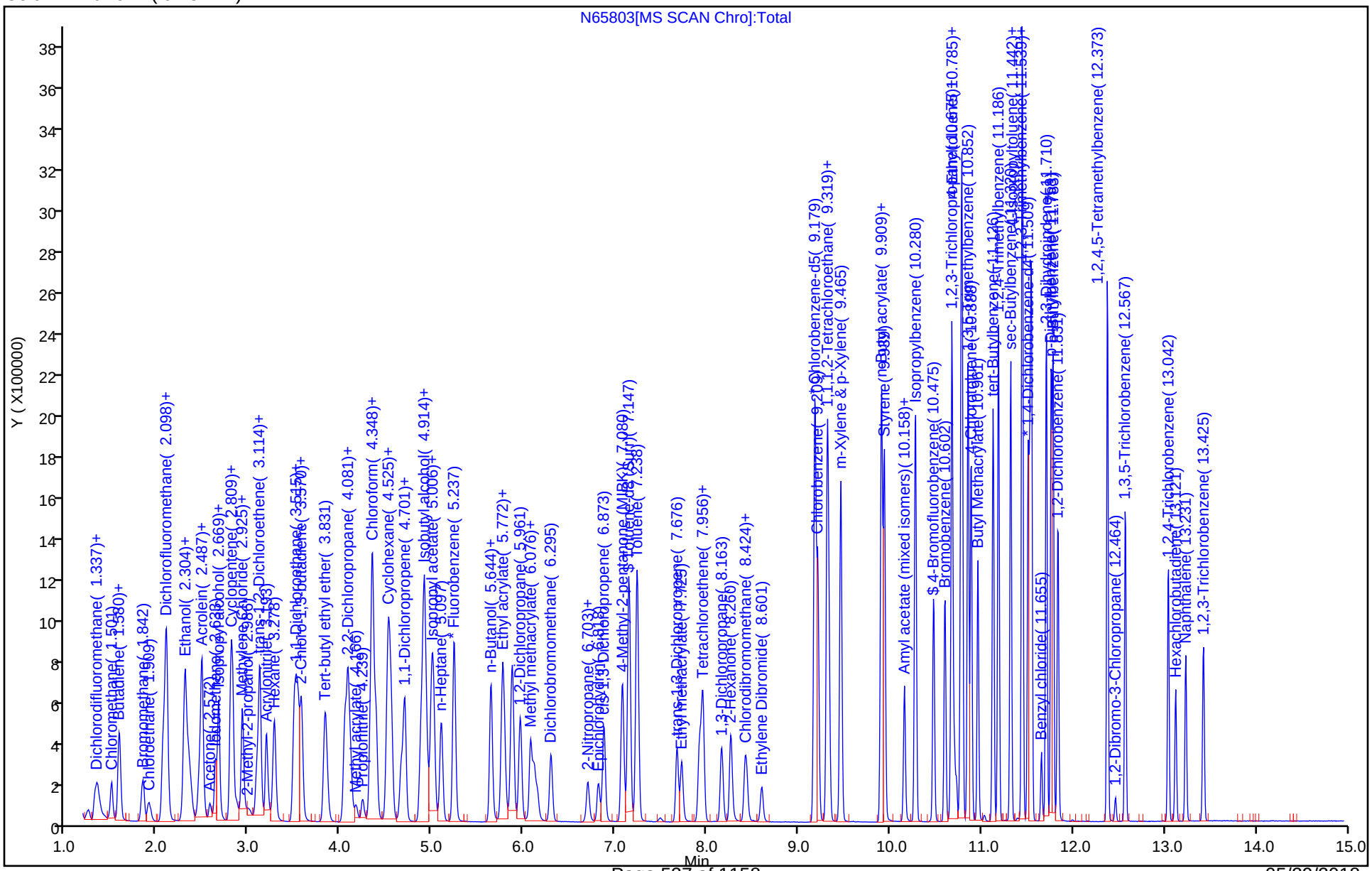
Lims ID: STD50 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

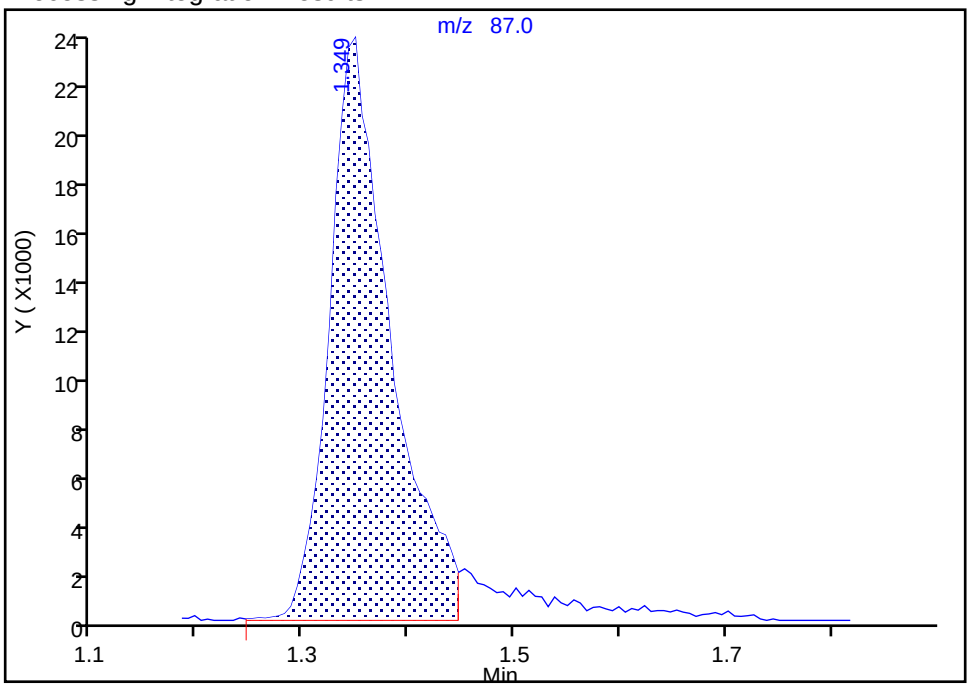
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D
Injection Date: 20-Apr-2018 03:02:30 Instrument ID: CVOAMS11
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

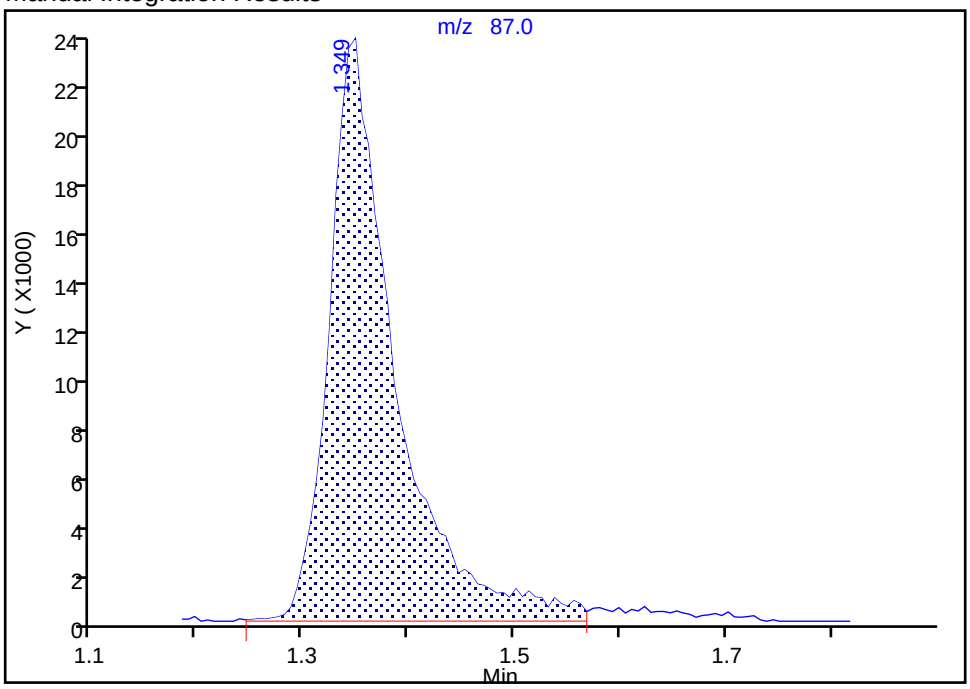
Processing Integration Results

RT: 1.35
Area: 93325
Amount: 30.281311
Amount Units: ug/l



Manual Integration Results

RT: 1.35
Area: 100967
Amount: 37.916378
Amount Units: ug/l



Reviewer: delpolitov, 21-Apr-2018 09:27:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

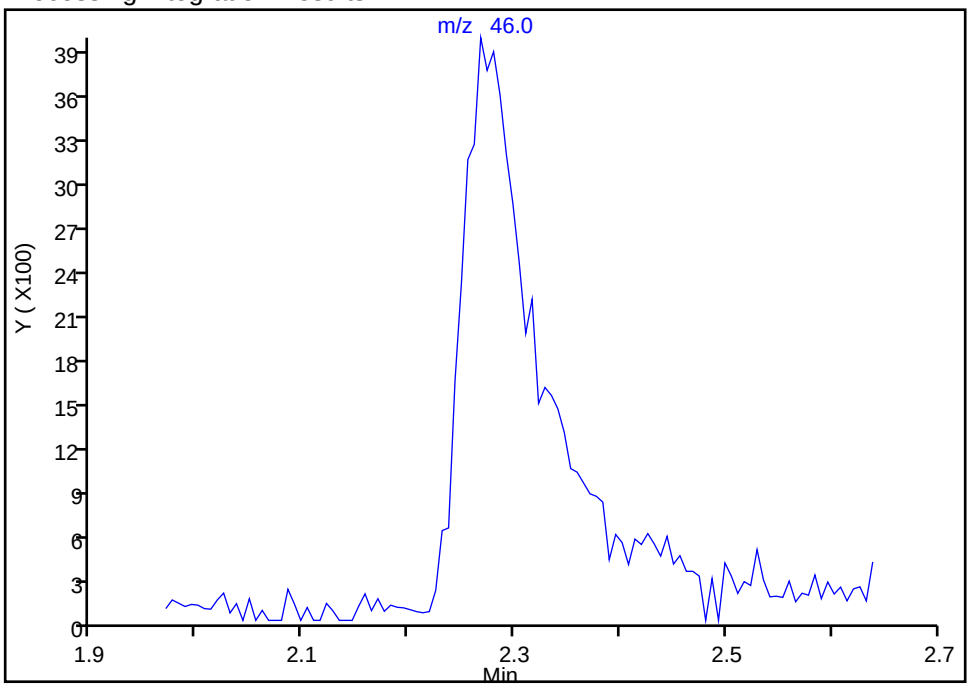
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D
Injection Date: 20-Apr-2018 03:02:30 Instrument ID: CVOAMS11
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

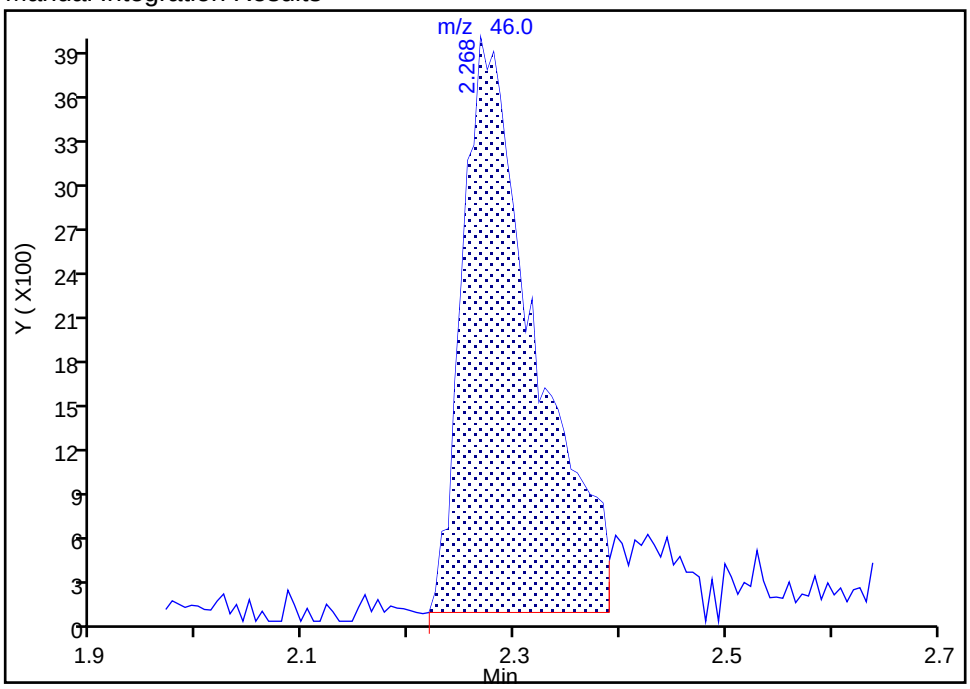
Not Detected
Expected RT: 2.29

Processing Integration Results



Manual Integration Results

RT: 2.27
Area: 18351
Amount: 1795.9897
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:16:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

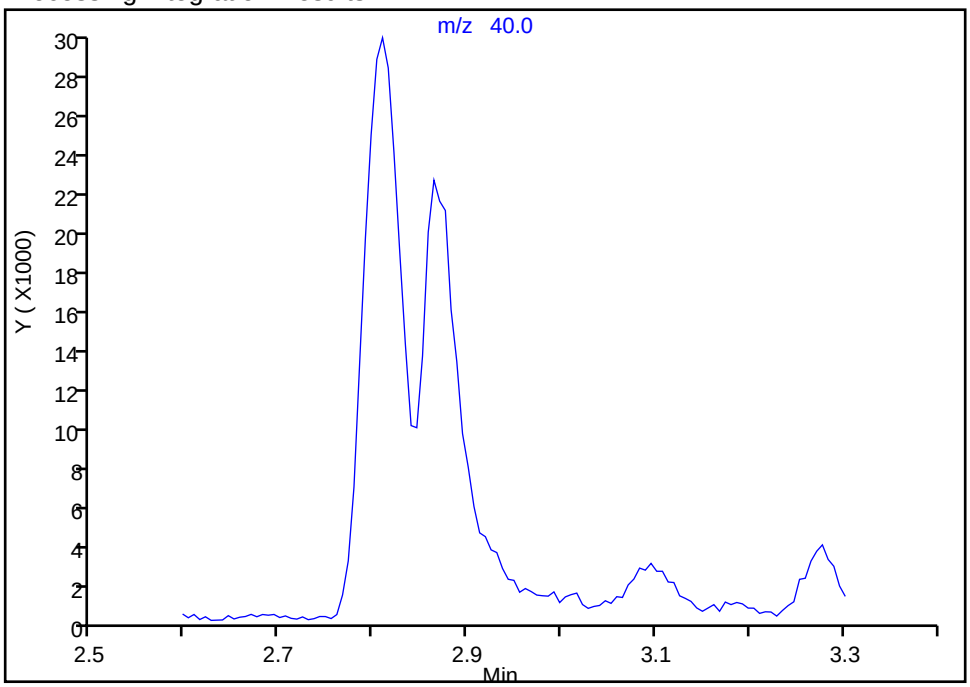
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D
Injection Date: 20-Apr-2018 03:02:30 Instrument ID: CVOAMS11
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

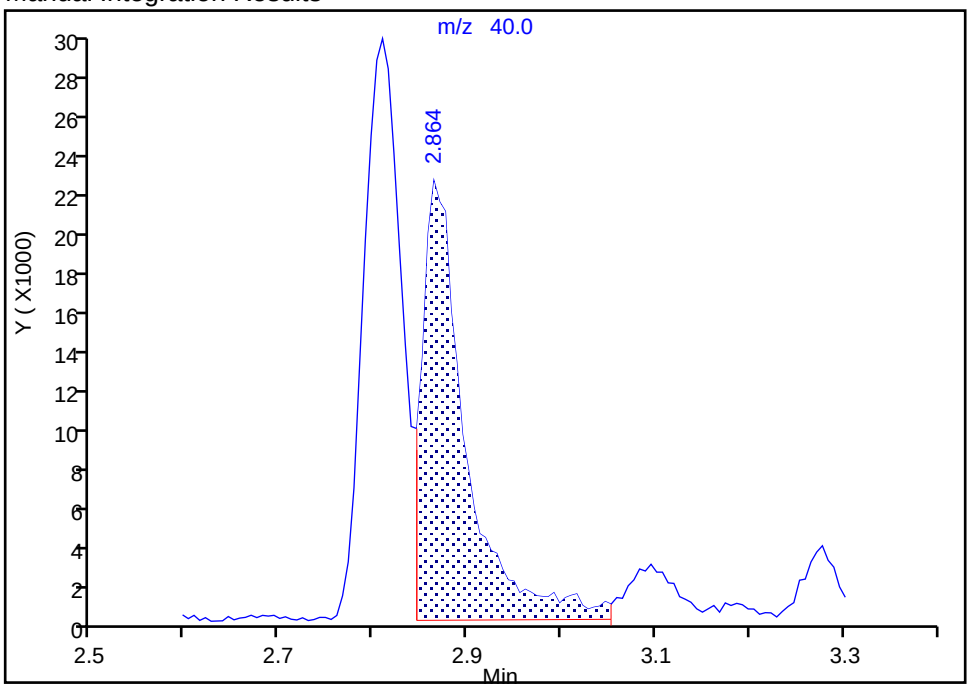
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.86
Area: 70692
Amount: 473.1654
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:16:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

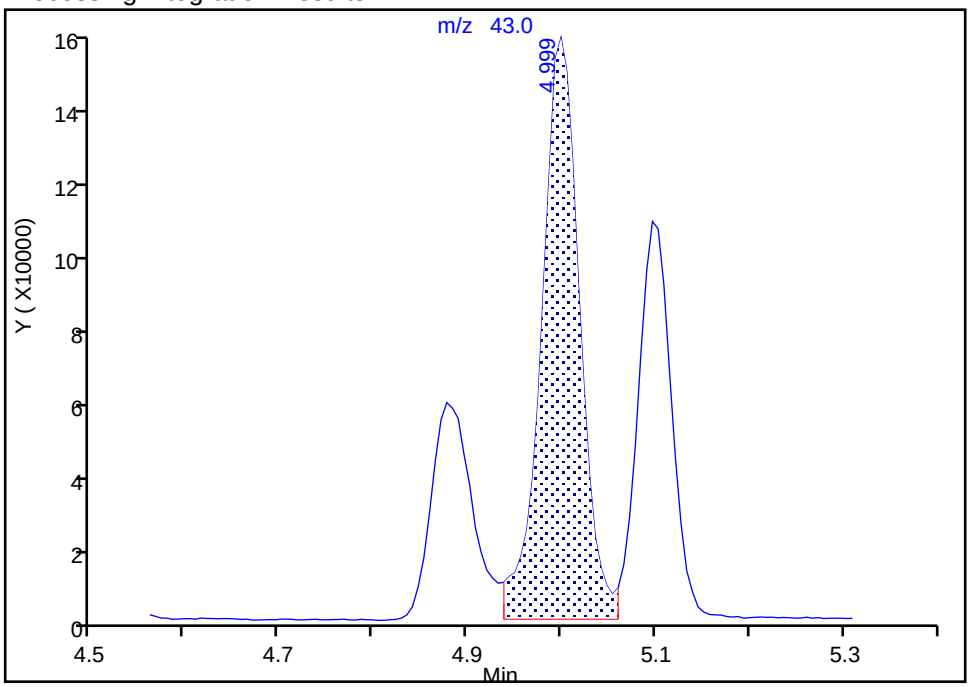
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D
Injection Date: 20-Apr-2018 03:02:30 Instrument ID: CVOAMS11
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

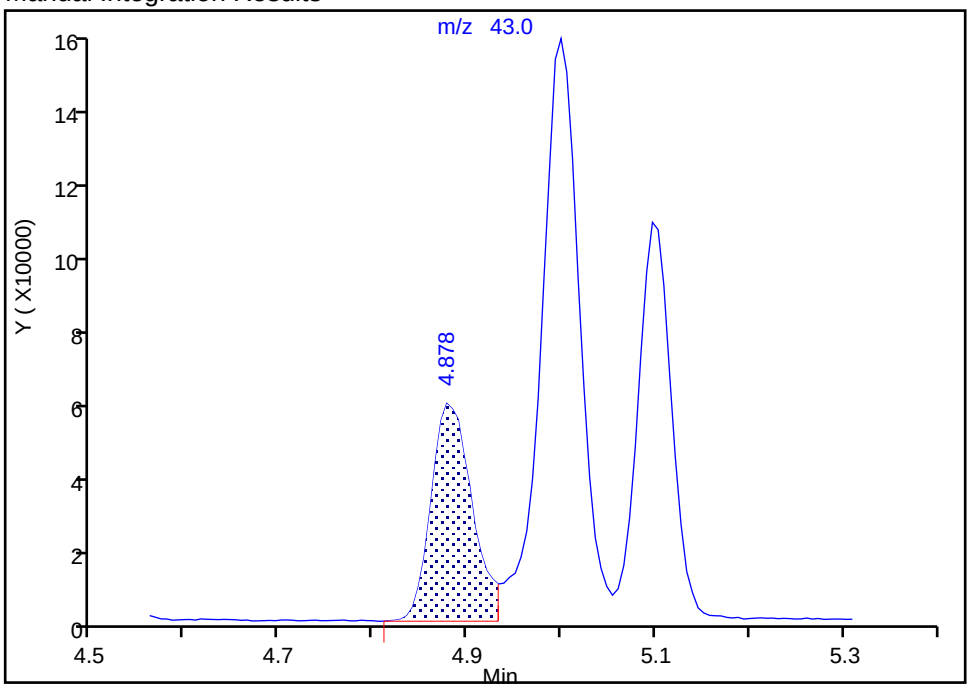
Processing Integration Results

RT: 5.00
Area: 426865
Amount: 2892.1146
Amount Units: ug/l



Manual Integration Results

RT: 4.88
Area: 170859
Amount: 1308.1270
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:16:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

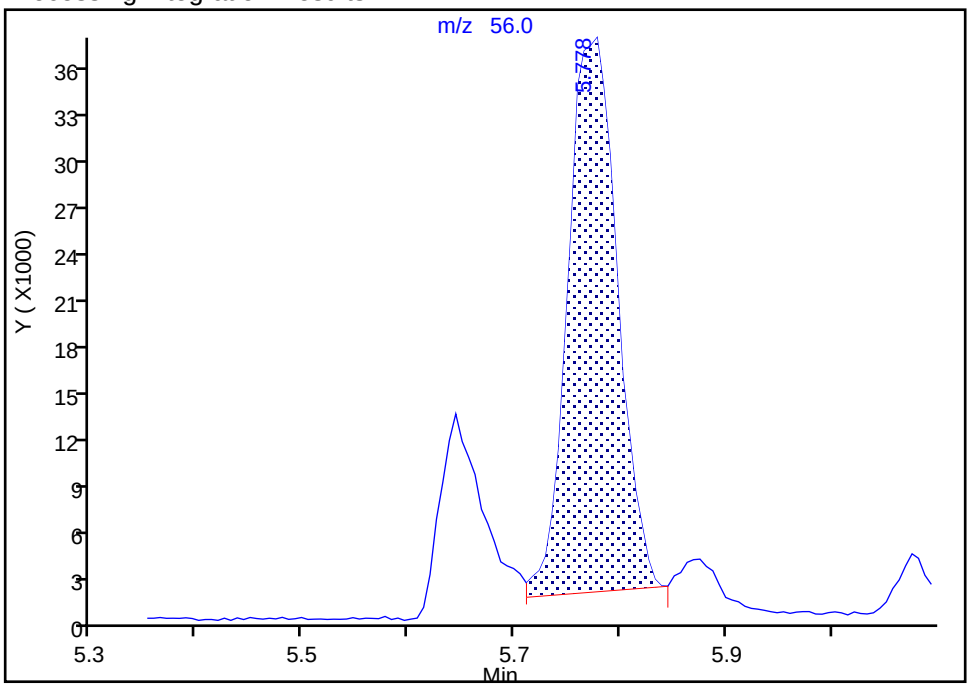
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D
Injection Date: 20-Apr-2018 03:02:30 Instrument ID: CVOAMS11
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

63 n-Butanol, CAS: 71-36-3

Signal: 1

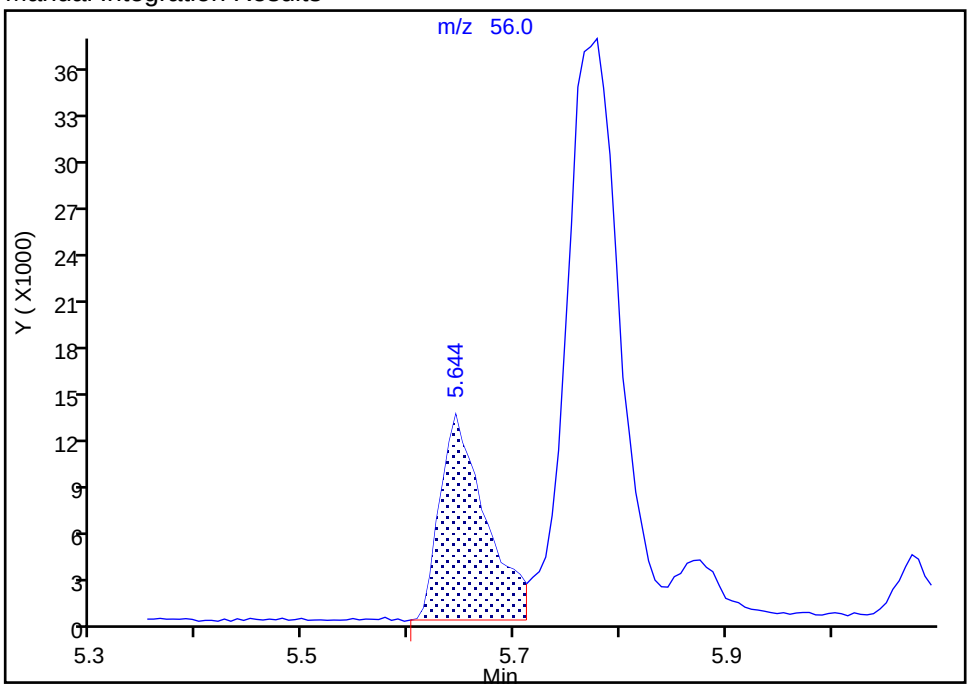
Processing Integration Results

RT: 5.78
Area: 116422
Amount: 3271.9960
Amount Units: ug/l



Manual Integration Results

RT: 5.64
Area: 39794
Amount: 1005.4560
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:17:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

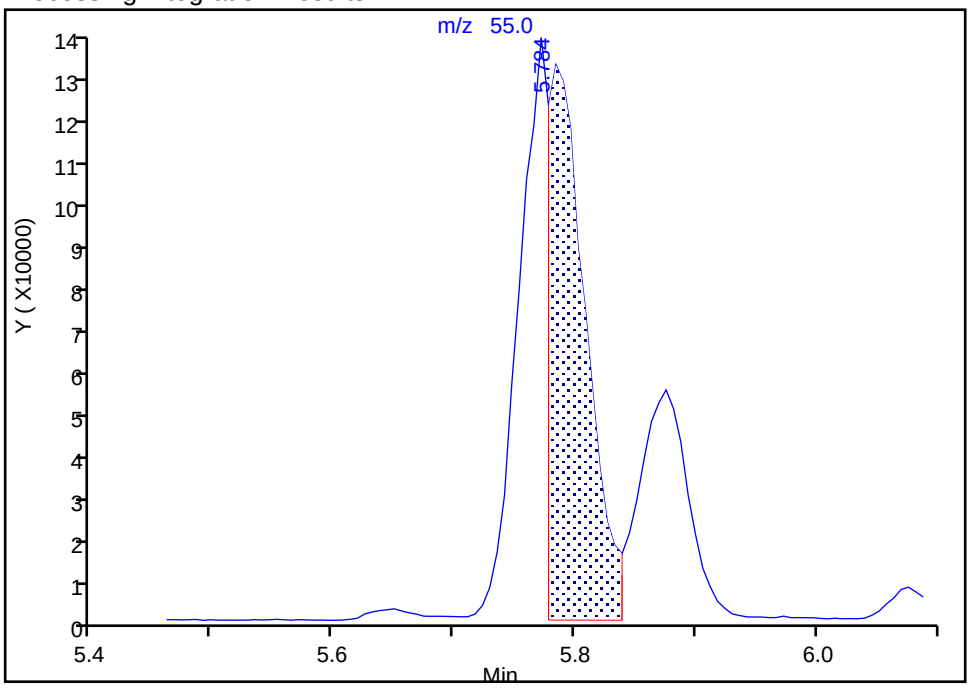
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D
Injection Date: 20-Apr-2018 03:02:30 Instrument ID: CVOAMS11
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

66 Ethyl acrylate, CAS: 140-88-5

Signal: 1

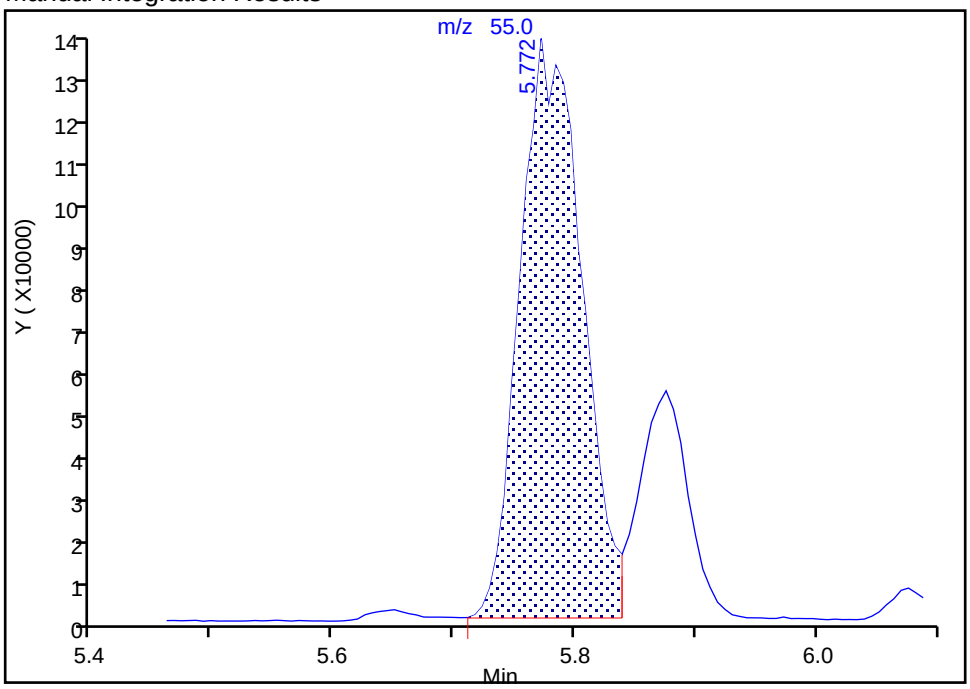
Processing Integration Results

RT: 5.78
Area: 278621
Amount: 25.680055
Amount Units: ug/l



Manual Integration Results

RT: 5.77
Area: 464216
Amount: 41.090932
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:17:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

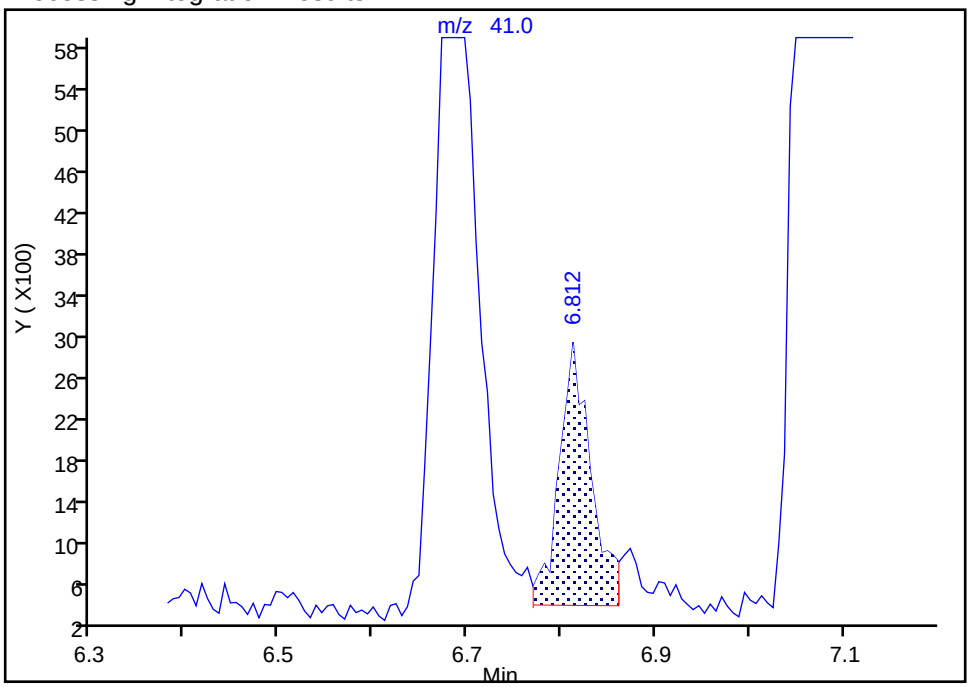
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65803.D
Injection Date: 20-Apr-2018 03:02:30 Instrument ID: CVOAMS11
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Signal: 1

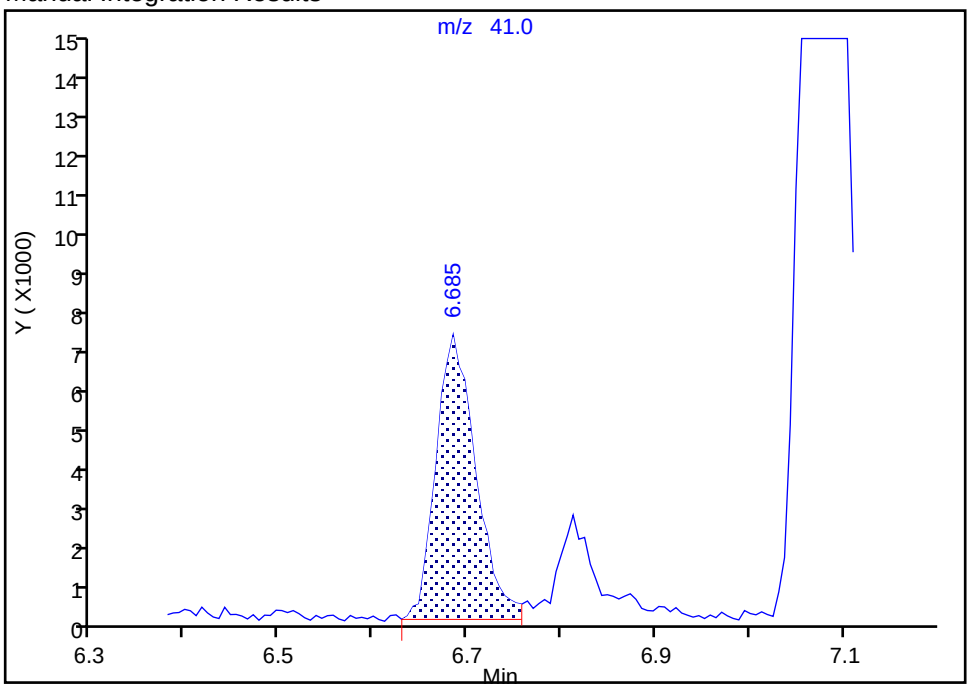
Processing Integration Results

RT: 6.81
Area: 5950
Amount: 36.036396
Amount Units: ug/l



Manual Integration Results

RT: 6.68
Area: 20894
Amount: 89.478676
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:17:23
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65804.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 20-Apr-2018 03:25:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0070690-008
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 14:42:53 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: tupayachia Date: 20-Apr-2018 04:35:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.319	1.325	-0.006	89	936726	200.0	207.7	
2 Dichlorodifluoromethane	87	1.343	1.349	-0.006	99	612211	200.0	245.2	
3 Chloromethane	52	1.495	1.495	0.000	98	336793	200.0	203.2	
4 Vinyl chloride	62	1.580	1.587	-0.007	98	1151398	200.0	221.1	
5 Butadiene	54	1.580	1.587	-0.007	93	839806	200.0	222.7	
6 Bromomethane	94	1.842	1.842	0.000	99	758298	200.0	205.8	
7 Chloroethane	64	1.909	1.903	0.006	99	557652	200.0	210.0	
8 Dichlorofluoromethane	67	2.067	2.067	0.000	99	2096671	200.0	217.9	
9 Trichlorofluoromethane	101	2.073	2.073	0.000	96	1811863	200.0	243.4	
10 Pentane	72	2.098	2.104	-0.006	96	400242	400.0	433.5	
11 Ethanol	46	2.256	2.286	-0.030	91	86383	8000.0	8101.6	a
12 Ethyl ether	59	2.280	2.292	-0.012	93	606437	200.0	212.6	
13 2-Methyl-1,3-butadiene	53	2.304	2.311	-0.007	94	852540	200.0	204.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.341	0.000	85	965632	200.0	221.4	
16 Acrolein	56	2.450	2.463	-0.013	93	65865	200.0	205.1	
15 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.481	0.000	95	1249351	200.0	231.9	
17 1,1-Dichloroethene	96	2.487	2.487	0.000	96	1029972	200.0	231.4	
18 Acetone	43	2.566	2.578	-0.012	88	491432	1000.0	991.1	
19 Iodomethane	142	2.633	2.639	-0.006	97	1605292	200.0	225.5	
20 Carbon disulfide	76	2.663	2.676	-0.013	98	3775966	200.0	231.3	
21 Isopropyl alcohol	45	2.669	2.688	-0.019	26	207748	2000.0	2149.7	
22 3-Chloro-1-propene	76	2.797	2.803	-0.006	92	650145	200.0	230.9	
24 Methyl acetate	74	2.809	2.822	-0.013	97	161328	400.0	402.3	
23 Cyclopentene	67	2.822	2.822	0.000	94	2549819	200.0	230.2	
25 Acetonitrile	40	2.864	2.870	-0.006	97	310761	2000.0	2016.2	a
26 Methylene Chloride	84	2.925	2.931	-0.006	89	1019803	200.0	212.1	
* 27 TBA-d9 (IS)	65	2.931	2.937	-0.006	0	189952	1000.0	1000.0	
28 2-Methyl-2-propanol	59	2.998	3.010	-0.012	99	415116	2000.0	2097.2	
29 Methyl tert-butyl ether	73	3.095	3.095	0.000	96	2354515	200.0	223.0	
30 trans-1,2-Dichloroethene	96	3.114	3.120	-0.006	92	1118917	200.0	221.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.187	3.199	-0.012	95	1632395	2000.0	1982.8	
32 Hexane	57	3.272	3.284	-0.012	89	1417970	200.0	231.7	
33 Isopropyl ether	45	3.503	3.503	0.000	95	2960623	200.0	219.0	
34 1,1-Dichloroethane	63	3.521	3.527	-0.006	99	1812519	200.0	213.3	
35 Vinyl acetate	86	3.545	3.558	-0.013	99	281488	400.0	408.5	
36 2-Chloro-1,3-butadiene	88	3.570	3.576	-0.006	90	1030180	200.0	221.4	
37 Tert-butyl ethyl ether	59	3.831	3.838	-0.007	90	2846957	200.0	226.3	
* 39 2-Butanone-d5	46	4.044	4.050	-0.006	0	200227	250.0	250.0	
38 2,2-Dichloropropane	79	4.056	4.057	-0.001	94	550783	200.0	228.6	
40 cis-1,2-Dichloroethene	96	4.081	4.087	-0.006	99	1213837	200.0	218.4	
41 2-Butanone (MEK)	72	4.099	4.105	-0.006	98	285132	1000.0	994.2	
42 Ethyl acetate	70	4.105	4.117	-0.012	95	125246	400.0	402.7	
43 Methyl acrylate	55	4.166	4.172	-0.006	99	420365	200.0	244.7	
44 Propionitrile	54	4.233	4.245	-0.012	98	600120	2000.0	2112.7	
46 Chlorobromomethane	128	4.324	4.324	0.000	92	444643	200.0	216.0	
45 Tetrahydrofuran	72	4.324	4.336	-0.012	73	128406	400.0	382.8	
47 Methacrylonitrile	67	4.349	4.355	-0.007	88	2216822	2000.0	2202.0	
48 Chloroform	83	4.385	4.391	-0.006	99	1746523	200.0	209.6	
49 Cyclohexane	84	4.519	4.519	0.000	86	2028354	200.0	231.2	
50 1,1,1-Trichloroethane	97	4.531	4.537	-0.006	98	1662714	200.0	229.9	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.555	0.000	97	233676	50.0	53.0	
52 Carbon tetrachloride	117	4.665	4.665	0.000	98	1193243	200.0	265.6	
53 1,1-Dichloropropene	75	4.695	4.708	-0.013	99	1550468	200.0	224.2	
58 Isobutyl alcohol	43	4.884	4.884	0.000	90	831835	5000.0	5905.6	
54 Isooctane	57	4.890	4.884	0.006	97	2772710	200.0	246.6	
55 Benzene	78	4.914	4.914	0.000	95	4647266	200.0	206.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	214829	50.0	50.8	
57 Tert-amyl methyl ether	73	4.999	5.000	-0.001	87	2926289	200.0	232.8	
59 Isopropyl acetate	61	5.006	5.012	-0.006	80	333747	200.0	214.2	
60 1,2-Dichloroethane	62	5.018	5.024	-0.006	97	999482	200.0	201.7	
61 n-Heptane	57	5.097	5.103	-0.006	88	629221	200.0	225.8	
* 62 Fluorobenzene	96	5.237	5.243	-0.006	99	981490	50.0	50.0	
64 Trichloroethene	95	5.638	5.644	-0.006	99	1177351	200.0	222.1	
63 n-Butanol	56	5.632	5.657	-0.025	84	236200	5000.0	5112.4	
65 Methylcyclohexane	83	5.772	5.772	0.000	94	2130939	200.0	233.1	
66 Ethyl acrylate	55	5.778	5.772	0.006	98	2100576	200.0	204.3	
67 1,2-Dichloropropane	63	5.961	5.967	-0.006	93	1071977	200.0	219.1	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	31784	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.076	0.000	83	369342	400.0	482.5	
71 Dibromomethane	93	6.113	6.119	-0.006	94	477493	200.0	210.2	
70 1,4-Dioxane	88	6.107	6.119	-0.012	86	124061	4000.0	3590.0	
72 n-Propyl acetate	43	6.143	6.149	-0.006	97	717737	200.0	250.8	
73 Dichlorobromomethane	83	6.295	6.301	-0.006	99	1232797	200.0	227.8	
74 2-Nitropropane	41	6.685	6.691	-0.006	91	104260	400.0	404.0	
75 2-Chloroethyl vinyl ether	63	6.697	6.703	-0.006	95	428454	200.0	234.9	
76 Epichlorohydrin	57	6.812	6.819	-0.007	99	960948	4000.0	4029.1	
77 cis-1,3-Dichloropropene	75	6.873	6.873	0.000	90	1614792	200.0	224.1	
78 4-Methyl-2-pentanone (MIBK	43	7.074	7.080	-0.006	93	2360859	1000.0	1088.0	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	1128126	50.0	49.6	
80 Toluene	91	7.238	7.238	0.000	95	5010491	200.0	201.4	
81 trans-1,3-Dichloropropene	75	7.670	7.676	-0.006	95	1229715	200.0	235.0	
82 Ethyl methacrylate	69	7.725	7.725	0.000	87	942131	200.0	203.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.920	7.926	-0.006	97	604318	200.0	203.3	
84 Tetrachloroethene	166	7.956	7.956	0.000	94	1031883	200.0	211.8	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	91	1248287	200.0	205.4	
86 2-Hexanone	58	8.260	8.266	-0.006	94	931487	1000.0	1001.3	
87 n-Butyl acetate	43	8.412	8.419	-0.006	97	841022	200.0	231.1	
88 Chlorodibromomethane	129	8.431	8.437	-0.006	98	656660	200.0	233.0	
89 Ethylene Dibromide	107	8.601	8.595	0.006	98	659912	200.0	214.8	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	775770	50.0	50.0	
91 Chlorobenzene	112	9.209	9.209	0.000	95	3112635	200.0	203.7	
92 Ethylbenzene	106	9.313	9.319	-0.006	97	1868917	200.0	217.8	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	95	909235	200.0	230.6	
94 m-Xylene & p-Xylene	106	9.459	9.459	0.000	0	2234331	200.0	213.7	
96 o-Xylene	106	9.903	9.909	-0.006	94	2217064	200.0	216.2	
95 n-Butyl acrylate	73	9.915	9.921	-0.006	99	614660	200.0	202.8	
97 Styrene	104	9.939	9.939	0.000	95	3575768	200.0	220.2	
99 Bromoform	173	10.152	10.152	0.000	93	283543	200.0	201.5	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	93	1139214	200.0	201.3	
100 Isopropylbenzene	105	10.280	10.274	0.006	95	5771867	200.0	218.5	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	84	258847	50.0	50.2	
102 Bromobenzene	156	10.602	10.603	0.000	97	1108407	200.0	209.9	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	98	767871	200.0	204.8	
104 N-Propylbenzene	91	10.675	10.676	-0.001	99	6476007	200.0	211.2	
105 1,2,3-Trichloropropane	110	10.706	10.700	0.006	97	205867	200.0	197.7	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	81	166233	200.0	227.5	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	4471219	200.0	208.5	
108 4-Ethyltoluene	105	10.791	10.791	0.000	98	5447688	200.0	212.1	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	4795516	200.0	218.8	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	4020242	200.0	205.8	
111 Butyl Methacrylate	87	10.961	10.961	0.000	85	1548636	200.0	201.8	
112 tert-Butylbenzene	119	11.126	11.126	0.000	95	3843837	200.0	220.9	
113 1,2,4-Trimethylbenzene	105	11.186	11.187	-0.001	97	4926754	200.0	213.0	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	5735466	200.0	216.0	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	92	2300213	200.0	214.0	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	98	4894730	200.0	222.1	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	95	361969	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	2293081	200.0	206.7	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	97	4992463	200.0	212.3	
119 Benzyl chloride	91	11.655	11.655	0.000	99	1116660	200.0	204.5	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	4529830	200.0	212.4	
121 p-Diethylbenzene	119	11.758	11.758	0.000	93	2661287	200.0	214.5	
122 n-Butylbenzene	92	11.783	11.783	0.000	98	2486588	200.0	211.9	
123 1,2-Dichlorobenzene	146	11.831	11.831	0.000	95	2094013	200.0	213.9	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	97	5047818	200.0	230.5	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	98	88737	200.0	252.6	
126 1,3,5-Trichlorobenzene	180	12.567	12.568	-0.001	97	1652108	200.0	220.7	
127 1,2,4-Trichlorobenzene	180	13.036	13.042	-0.006	94	1299541	200.0	220.7	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	90	410603	200.0	216.9	
129 Naphthalene	128	13.231	13.231	0.000	99	2412016	200.0	240.3	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	96	1005802	200.0	220.7	
S 131 1,2-Dichloroethene, Total	100				0		400.0	439.6	
S 132 Xylenes, Total	100				0		400.0	429.9	
S 133 Total BTEX	1				0		1000.0	1055.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	20.00	Units: uL	
GAS Hi_00250	Amount Added:	20.00	Units: uL	
Ethanol mix_00014	Amount Added:	20.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	20.00	Units: uL	
MIX I Hi_00093	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

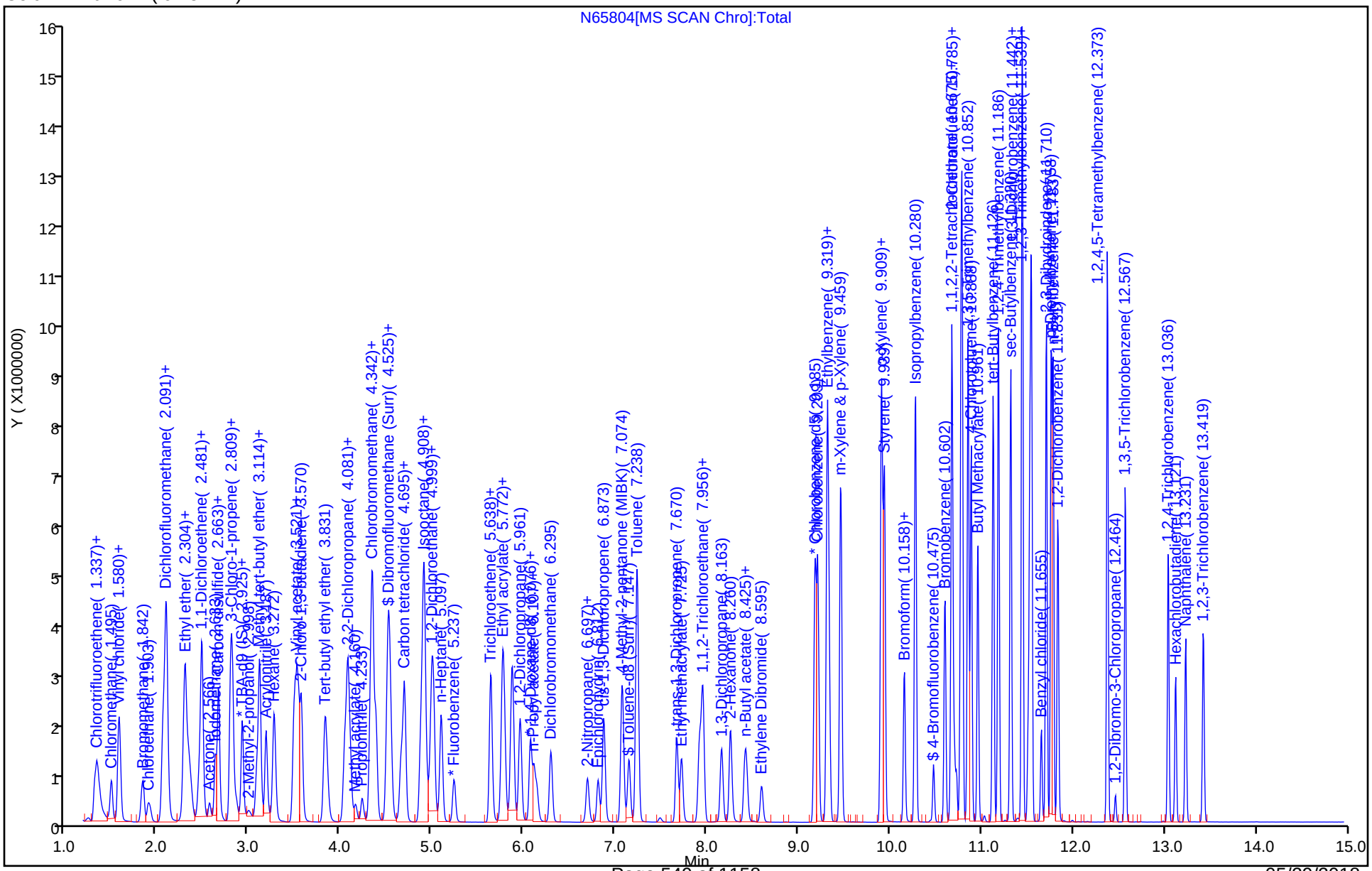
Report Date: 22-Apr-2018 14:42:58 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65804.D

Injection Date:	20-Apr-2018 03:25:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	STD200			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

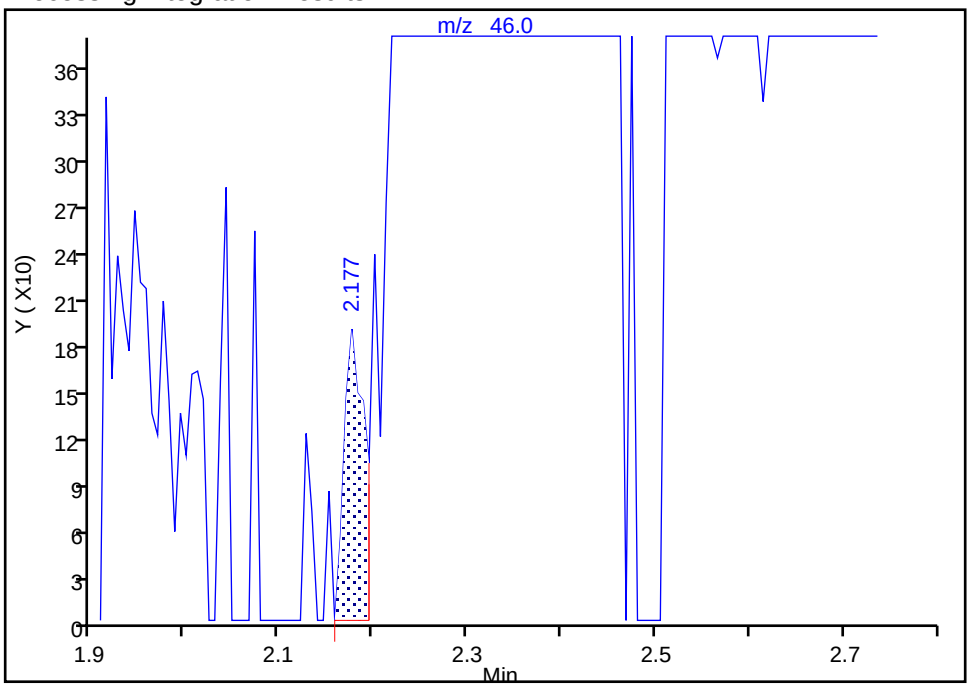
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65804.D
Injection Date: 20-Apr-2018 03:25:30 Instrument ID: CVOAMS11
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

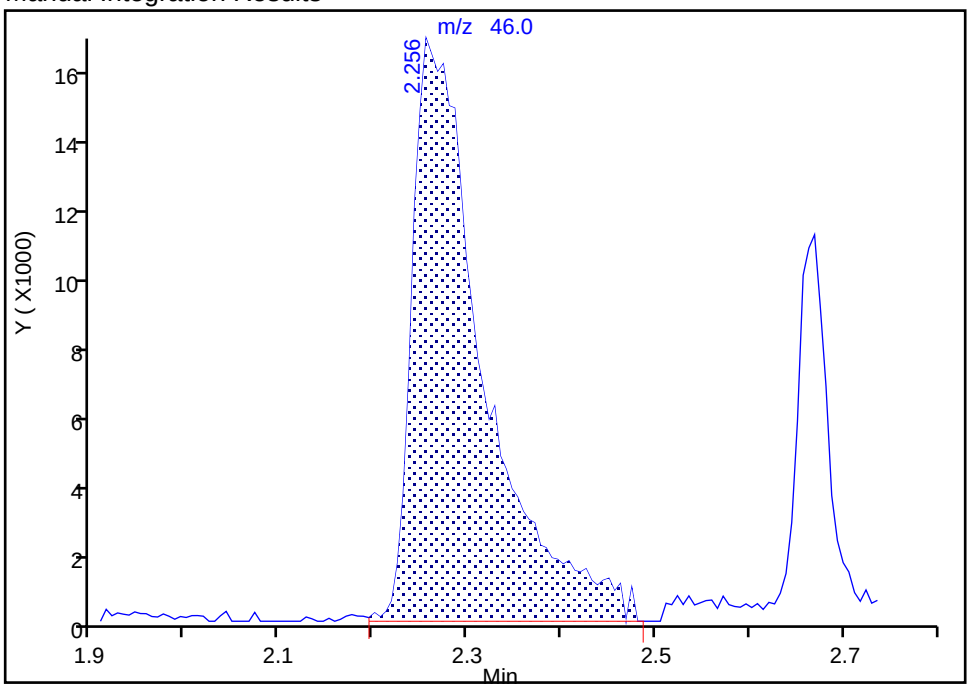
RT: 2.18
Area: 282
Amount: 42.727544
Amount Units: ug/l

Processing Integration Results



RT: 2.26
Area: 86383
Amount: 8101.5548
Amount Units: ug/l

Manual Integration Results



Reviewer: delpolitov, 20-Apr-2018 22:19:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

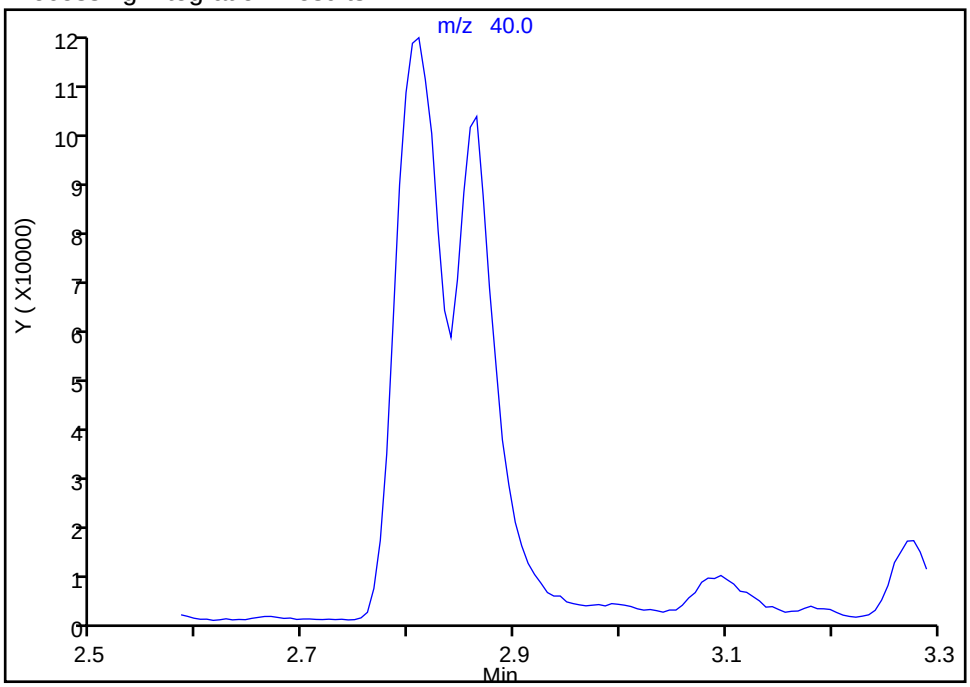
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65804.D		
Injection Date:	20-Apr-2018 03:25:30	Instrument ID:	CVOAMS11
Lims ID:	STD200		
Client ID:			
Operator ID:		ALS Bottle#:	7 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

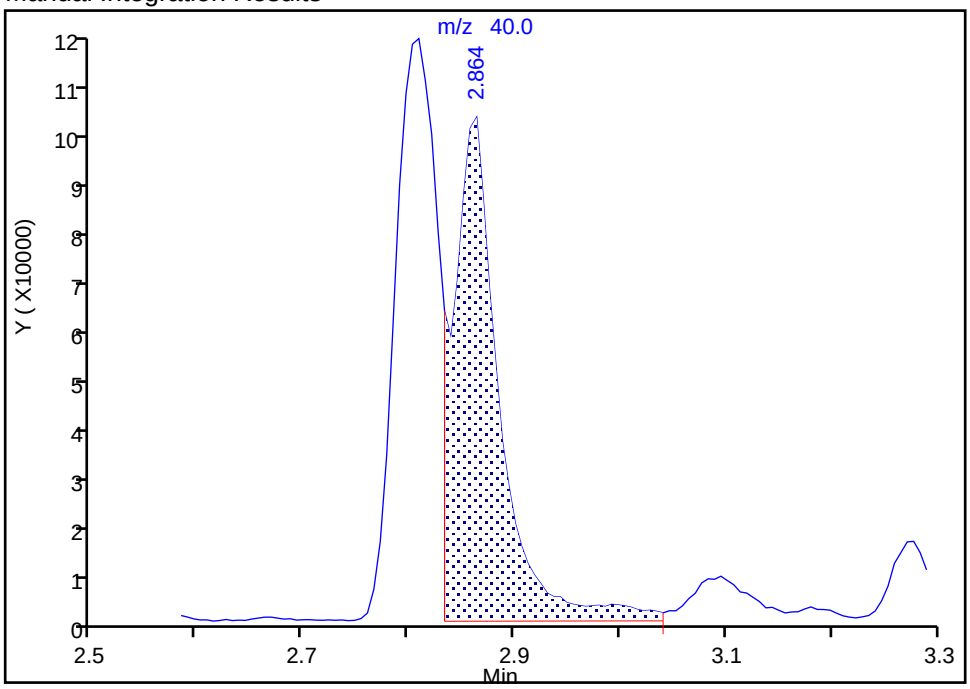
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.86
Area: 310761
Amount: 2016.1690
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:19:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 20-Apr-2018 03:48:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0070690-009
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 22-Apr-2018 14:43:10 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: boykink Date: 20-Apr-2018 04:49:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.325	1.325	0.000	87	2420349	500.0	499.0	
2 Dichlorodifluoromethane	87	1.356	1.349	0.007	99	1560572	500.0	606.4	
3 Chloromethane	52	1.508	1.495	0.013	99	783540	500.0	476.2	
5 Butadiene	54	1.593	1.587	0.006	93	1825878	500.0	469.8	
4 Vinyl chloride	62	1.587	1.587	0.000	97	2499503	500.0	465.8	
6 Bromomethane	94	1.848	1.842	0.006	98	1514553	500.0	398.8	
7 Chloroethane	64	1.915	1.903	0.012	99	1184106	500.0	432.7	
8 Dichlorofluoromethane	67	2.079	2.067	0.012	99	4902050	500.0	494.3	
9 Trichlorofluoromethane	101	2.086	2.073	0.013	98	4369417	500.0	569.7	
10 Pentane	72	2.104	2.104	0.000	96	860266	1000.0	826.7	
11 Ethanol	46	2.262	2.286	-0.024	92	225025	20000	19984	a
12 Ethyl ether	59	2.286	2.292	-0.006	93	1466496	500.0	498.9	
13 2-Methyl-1,3-butadiene	53	2.311	2.311	0.000	93	1916949	500.0	499.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.353	2.341	0.012	90	2455731	500.0	546.4	
16 Acrolein	56	2.457	2.463	-0.006	93	125842	400.0	347.7	
15 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.481	0.000	96	3062436	500.0	551.5	
17 1,1-Dichloroethene	96	2.493	2.487	0.006	95	2530967	500.0	551.9	
18 Acetone	43	2.572	2.578	-0.006	89	1247171	2500.0	2534.1	
19 Iodomethane	142	2.639	2.639	0.000	97	4178616	500.0	569.5	
20 Carbon disulfide	76	2.676	2.676	0.000	98	9221195	500.0	548.0	
21 Isopropyl alcohol	45	2.676	2.688	-0.012	98	573294	5000.0	5263.3	
22 3-Chloro-1-propene	76	2.803	2.803	0.000	94	1589377	500.0	547.8	
23 Cyclopentene	67	2.828	2.822	0.006	93	6018786	500.0	527.4	
24 Methyl acetate	74	2.816	2.822	-0.006	96	408112	1000.0	903.0	
25 Acetonitrile	40	2.864	2.870	-0.006	96	792132	5000.0	4997.3	a
26 Methylene Chloride	84	2.937	2.931	0.006	86	2582871	500.0	521.2	
* 27 TBA-d9 (IS)	65	2.943	2.937	0.006	0	214091	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.010	3.010	0.000	99	1206669	5000.0	5408.8	
29 Methyl tert-butyl ether	73	3.102	3.095	0.007	96	6018359	500.0	553.0	
30 trans-1,2-Dichloroethene	96	3.120	3.120	0.000	91	2750550	500.0	527.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.193	3.199	-0.006	95	4043516	5000.0	4357.6	
32 Hexane	57	3.278	3.284	-0.006	88	3254408	500.0	515.9	
33 Isopropyl ether	45	3.503	3.503	0.000	96	6958028	500.0	499.5	
34 1,1-Dichloroethane	63	3.533	3.527	0.006	99	4286901	500.0	489.6	
35 Vinyl acetate	86	3.552	3.558	-0.006	99	620995	1000.0	998.6	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	89	2442731	500.0	509.3	
37 Tert-butyl ethyl ether	59	3.838	3.838	0.000	90	7205293	500.0	555.7	
* 39 2-Butanone-d5	46	4.044	4.050	-0.006	0	198730	250.0	250.0	
38 2,2-Dichloropropane	79	4.057	4.057	0.000	94	1358348	500.0	547.1	
40 cis-1,2-Dichloroethene	96	4.081	4.087	-0.006	99	2958996	500.0	516.6	
41 2-Butanone (MEK)	72	4.099	4.105	-0.006	98	700487	2500.0	2460.9	
42 Ethyl acetate	70	4.111	4.117	-0.006	95	308901	1000.0	1000.8	
43 Methyl acrylate	55	4.166	4.172	-0.006	99	1071103	500.0	605.0	
44 Propionitrile	54	4.239	4.245	-0.006	98	1509239	5000.0	4714.1	
46 Chlorobromomethane	128	4.324	4.324	0.000	93	1148608	500.0	541.4	
45 Tetrahydrofuran	72	4.330	4.336	-0.006	73	309211	1000.0	928.7	
47 Methacrylonitrile	67	4.355	4.355	0.000	86	5120722	5000.0	4935.7	
48 Chloroform	83	4.391	4.391	0.000	100	4291826	500.0	499.8	
49 Cyclohexane	84	4.525	4.519	0.006	84	5128756	500.0	567.2	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	97	4380430	500.0	587.8	
$ 51 Dibromofluoromethane (Surr	113	4.562	4.555	0.007	96	228957	50.0	50.4	
52 Carbon tetrachloride	117	4.671	4.665	0.006	98	3362546	500.0	726.2	
53 1,1-Dichloropropene	75	4.702	4.708	-0.006	99	3750391	500.0	526.2	
54 Isooctane	57	4.896	4.884	0.012	96	6193389	500.0	534.5	
58 Isobutyl alcohol	43	4.878	4.884	-0.006	31	2020227	12500	12725	a
55 Benzene	78	4.914	4.914	0.000	94	10917718	500.0	463.1	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	224954	50.0	51.6	
57 Tert-amyl methyl ether	73	5.000	5.000	0.000	88	7546416	500.0	582.7	
59 Isopropyl acetate	61	5.006	5.012	-0.006	95	798899	500.0	497.5	
60 1,2-Dichloroethane	62	5.024	5.024	0.000	98	2396171	500.0	469.1	
61 n-Heptane	57	5.103	5.103	0.000	87	1371735	500.0	477.8	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	1011484	50.0	50.0	
64 Trichloroethene	95	5.644	5.644	0.000	99	2858598	500.0	523.3	
63 n-Butanol	56	5.632	5.657	-0.025	83	739225	12500	12488	
66 Ethyl acrylate	55	5.784	5.772	0.012	99	5000408	500.0	499.3	
65 Methylcyclohexane	83	5.778	5.772	0.006	93	5450049	500.0	578.6	
67 1,2-Dichloropropane	63	5.961	5.967	-0.006	93	2584322	500.0	512.5	
* 68 1,4-Dioxane-d8	96	6.046	6.052	-0.006	0	40551	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.076	0.000	82	937033	1000.0	1187.9	
70 1,4-Dioxane	88	6.107	6.119	-0.012	89	341635	10000	7748.7	
71 Dibromomethane	93	6.119	6.119	0.000	98	1204963	500.0	514.6	
72 n-Propyl acetate	43	6.149	6.149	0.000	96	1722639	500.0	584.1	
73 Dichlorobromomethane	83	6.295	6.301	-0.006	99	3229825	500.0	579.1	
74 2-Nitropropane	41	6.685	6.691	-0.006	87	304160	1000.0	999.5	
75 2-Chloroethyl vinyl ether	63	6.703	6.703	0.000	95	1114745	500.0	593.0	
76 Epichlorohydrin	57	6.813	6.819	-0.007	98	2427145	10000	9996.2	
77 cis-1,3-Dichloropropene	75	6.879	6.873	0.006	89	4084735	500.0	541.5	
78 4-Methyl-2-pentanone (MIBK	43	7.074	7.080	-0.006	93	5766055	2500.0	2677.2	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	97	1126598	50.0	47.3	
80 Toluene	91	7.244	7.238	0.006	94	12459875	500.0	478.4	
81 trans-1,3-Dichloropropene	75	7.670	7.676	-0.006	95	3216068	500.0	586.9	
82 Ethyl methacrylate	69	7.725	7.725	0.000	87	2422015	500.0	499.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.920	7.926	-0.006	96	1535989	500.0	493.4	
84 Tetrachloroethene	166	7.956	7.956	0.000	95	2738356	500.0	536.8	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	90	3217532	500.0	505.7	
86 2-Hexanone	58	8.260	8.266	-0.006	92	2471341	2500.0	2499.8	
87 n-Butyl acetate	43	8.412	8.419	-0.006	97	2103684	500.0	552.0	
88 Chlorodibromomethane	129	8.431	8.437	-0.006	98	1857097	500.0	629.4	
89 Ethylene Dibromide	107	8.595	8.595	0.000	99	1687914	500.0	524.8	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	85	812236	50.0	50.0	
91 Chlorobenzene	112	9.209	9.209	0.000	96	7982172	500.0	499.0	
92 Ethylbenzene	106	9.319	9.319	0.000	97	4439836	500.0	494.1	
93 1,1,1,2-Tetrachloroethane	131	9.337	9.331	0.006	96	2438516	500.0	590.7	
94 m-Xylene & p-Xylene	106	9.465	9.459	0.006	0	5626183	500.0	513.9	
96 o-Xylene	106	9.909	9.909	0.000	94	5382226	500.0	501.3	
95 n-Butyl acrylate	73	9.921	9.921	0.000	98	1440629	500.0	499.5	
97 Styrene	104	9.939	9.939	0.000	96	8540907	500.0	502.4	
99 Bromoform	173	10.152	10.152	0.000	94	889818	500.0	499.9	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	92	2794325	500.0	499.8	
100 Isopropylbenzene	105	10.280	10.274	0.006	95	13477345	500.0	487.2	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	86	268912	50.0	49.8	
102 Bromobenzene	156	10.603	10.603	0.001	99	2897025	500.0	546.3	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	99	1856579	500.0	493.2	
104 N-Propylbenzene	91	10.682	10.676	0.006	99	14091596	500.0	457.6	e
105 1,2,3-Trichloropropane	110	10.706	10.700	0.006	96	551738	500.0	527.6	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	91	436650	500.0	595.1	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	9902810	500.0	459.8	a
108 4-Ethyltoluene	105	10.791	10.791	0.000	97	11643762	500.0	451.5	
109 1,3,5-Trimethylbenzene	105	10.858	10.852	0.006	93	11111045	500.0	504.8	
110 4-Chlorotoluene	91	10.889	10.888	0.000	96	9766604	500.0	497.9	
111 Butyl Methacrylate	87	10.962	10.961	0.001	83	3885431	500.0	499.7	
112 tert-Butylbenzene	119	11.126	11.126	0.000	94	9024627	500.0	516.6	
113 1,2,4-Trimethylbenzene	105	11.187	11.187	0.000	97	11338912	500.0	488.1	
114 sec-Butylbenzene	105	11.320	11.320	0.000	97	12958613	500.0	486.1	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	94	4756555	500.0	440.8	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	97	9871036	500.0	446.1	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	98	363449	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	5408302	500.0	485.6	
134 1,2,3-Trimethylbenzene	105	11.546	11.545	0.001	98	10787129	500.0	456.8	
119 Benzyl chloride	91	11.655	11.655	0.000	99	3015296	500.0	499.5	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	95	10074144	500.0	470.4	
121 p-Diethylbenzene	119	11.758	11.758	0.000	93	6210785	500.0	498.5	
122 n-Butylbenzene	92	11.783	11.783	0.000	98	5511209	500.0	467.8	
123 1,2-Dichlorobenzene	146	11.838	11.831	0.007	95	5183935	500.0	527.5	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	97	11120630	500.0	505.7	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	99	264540	500.0	750.0	
126 1,3,5-Trichlorobenzene	180	12.574	12.568	0.006	97	4081153	500.0	543.0	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	94	3556565	500.0	601.5	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	90	1142942	500.0	601.3	
129 Naphthalene	128	13.231	13.231	0.000	99	6828096	500.0	677.6	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	95	2825262	500.0	617.3	
S 131 1,2-Dichloroethene, Total	100				0		1000.0	1044.1	
S 132 Xylenes, Total	100				0		1000.0	1015.2	
S 133 Total BTEX	1				0		2500.0	2450.8	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	40.00	Units: uL	
GAS Hi_00250	Amount Added:	50.00	Units: uL	
Ethanol mix_00014	Amount Added:	50.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	50.00	Units: uL	
MIX I Hi_00093	Amount Added:	50.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 22-Apr-2018 14:43:13 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Injection Date: 20-Apr-2018 03:48:30 Instrument ID: CVOAMS11 Operator ID:

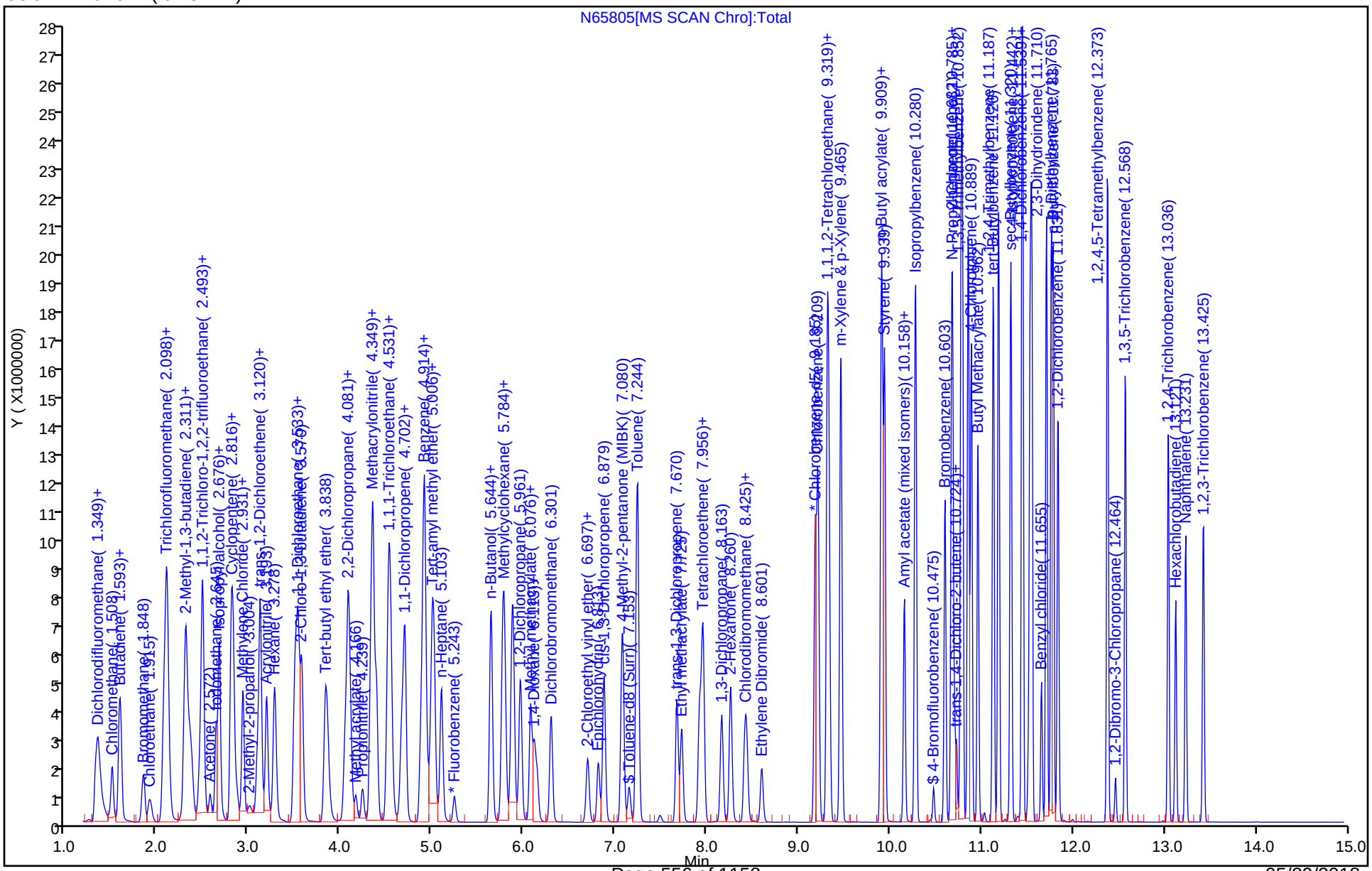
Lims ID: STD500 Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

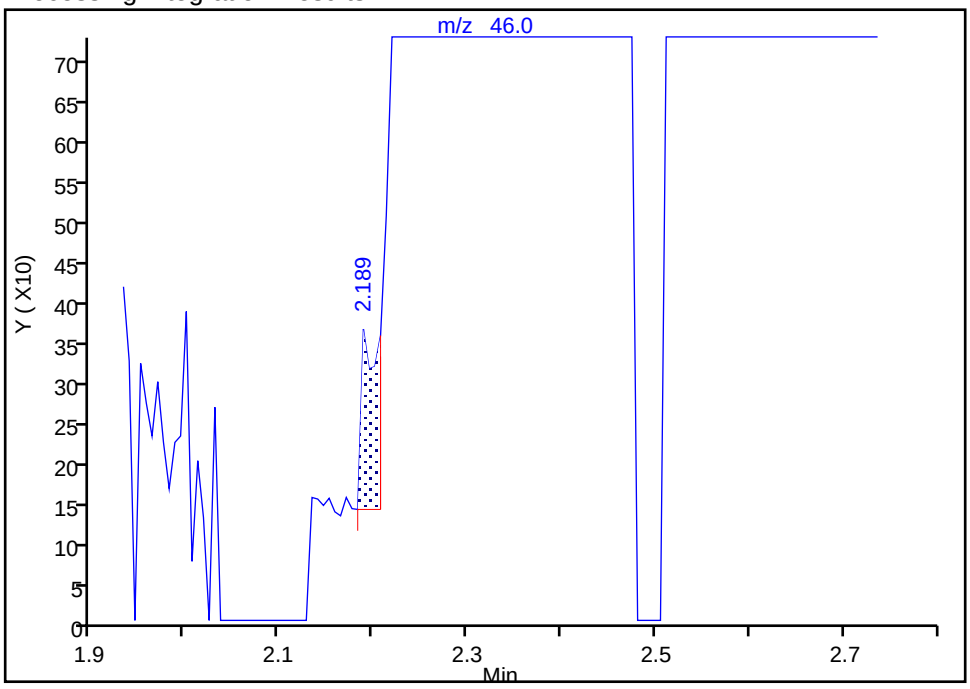
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D
Injection Date: 20-Apr-2018 03:48:30 Instrument ID: CVOAMS11
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

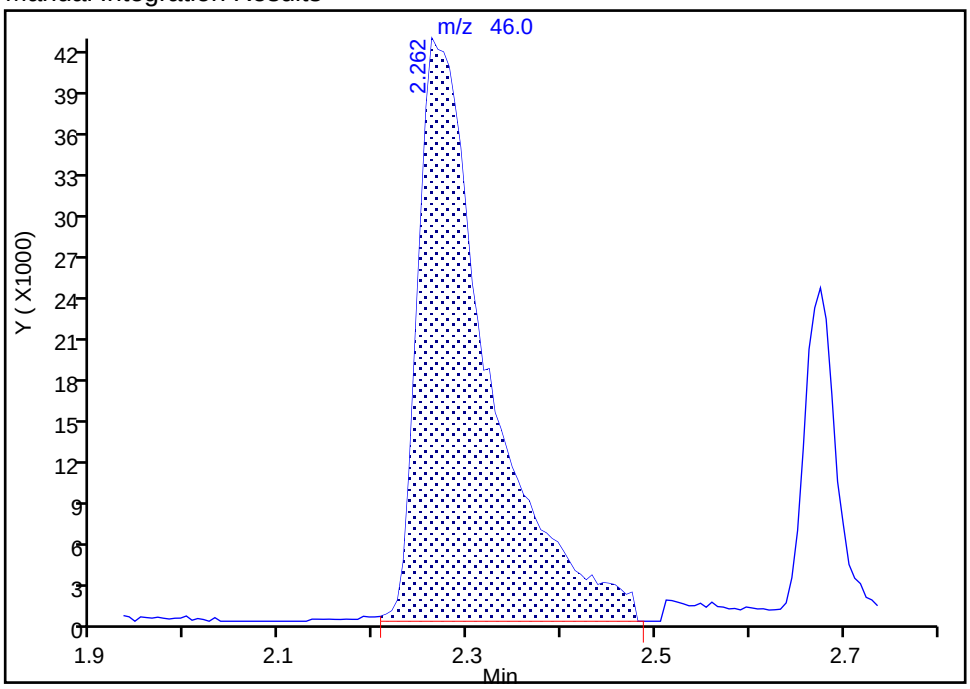
Processing Integration Results

RT: 2.19
Area: 292
Amount: 30.865504
Amount Units: ug/l



Manual Integration Results

RT: 2.26
Area: 225025
Amount: 19984
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:21:05
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

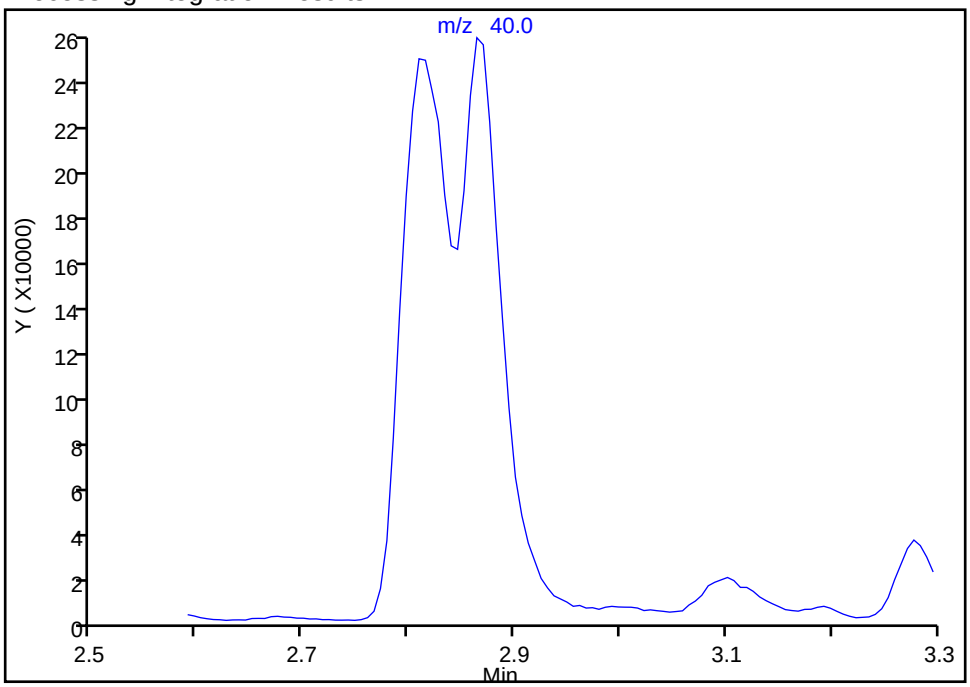
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D
Injection Date: 20-Apr-2018 03:48:30 Instrument ID: CVOAMS11
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

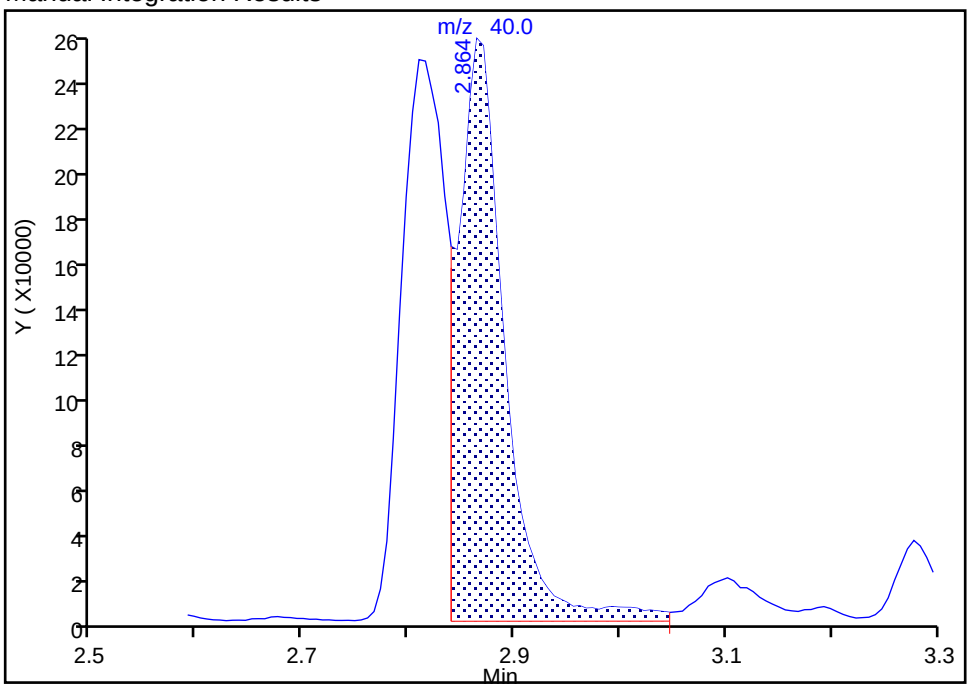
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.86
Area: 792132
Amount: 4997.2527
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:21:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

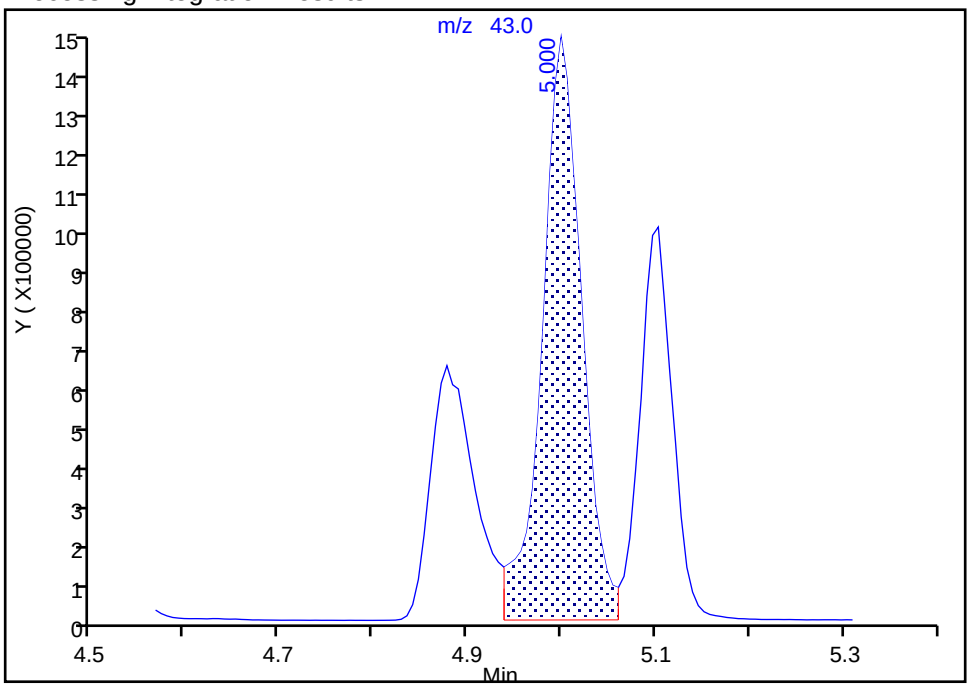
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D
Injection Date: 20-Apr-2018 03:48:30 Instrument ID: CVOAMS11
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

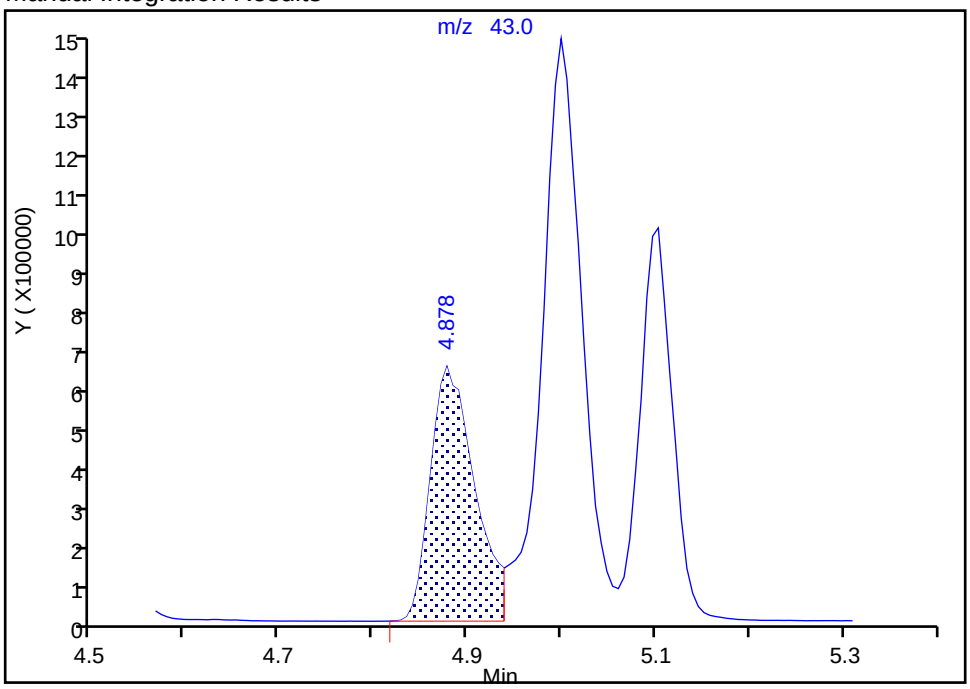
Processing Integration Results

RT: 5.00
Area: 4134556
Amount: 12506
Amount Units: ug/l



Manual Integration Results

RT: 4.88
Area: 2020227
Amount: 12725
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:21:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

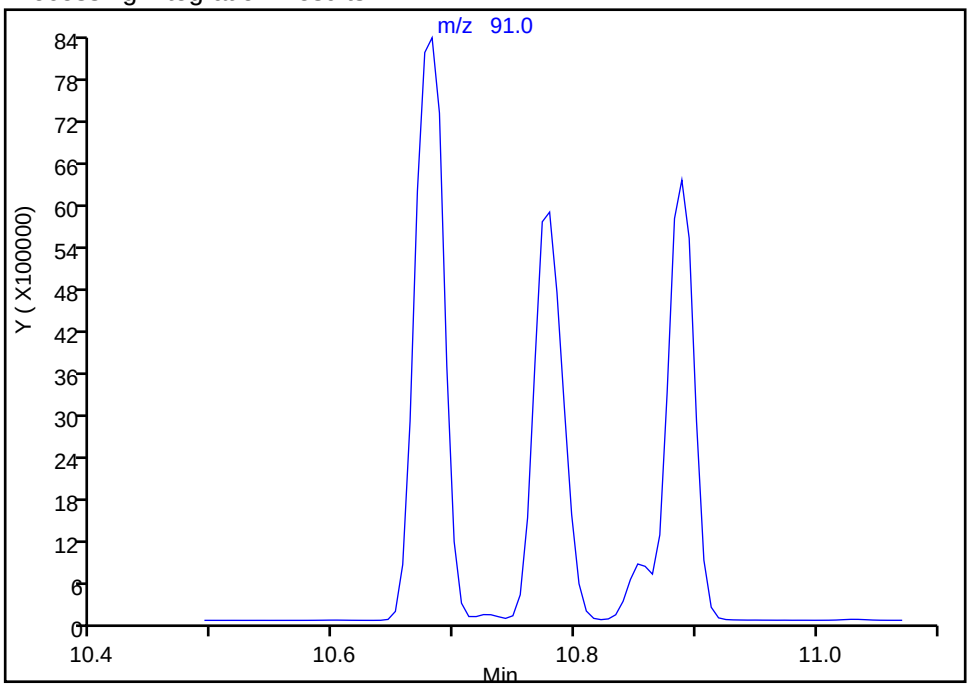
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D
Injection Date: 20-Apr-2018 03:48:30 Instrument ID: CVOAMS11
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

107 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

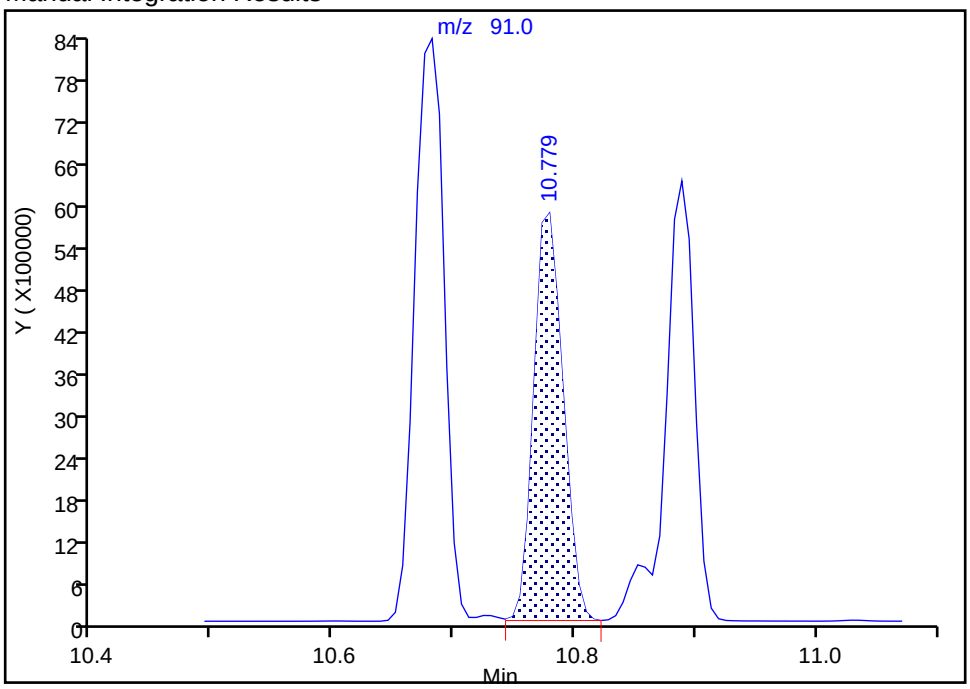
Not Detected
Expected RT: 10.78

Processing Integration Results



Manual Integration Results

RT: 10.78
Area: 9902810
Amount: 459.8477
Amount Units: ug/l



Reviewer: delpolitov, 20-Apr-2018 22:21:46
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8 460-512577/3	P43991.D
Level 2	STD05 460-512577/4	P43992.D
Level 3	STD1 460-512577/10	P43998.D
Level 4	STD5 460-512577/6	P43994.D
Level 5	STD20 460-512577/7	P43995.D
Level 6	STD50 460-512577/11	P43999.D
Level 7	STD200 460-512577/12	P44000.D
Level 8	STD500 460-512577/13	P44001.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	+++++ 0.1188	0.1225 0.1600	0.1068 0.1542	0.1125	0.1204	Ave		0.1279				16.2		20.0			
Dichlorodifluoromethane	+++++ 0.3028	0.4332 0.4214	0.3662 0.3986	0.4036	0.3717	Ave		0.3854			0.1000	11.3		20.0			
Chloromethane	+++++ 0.3247	0.4466 0.3708	0.3636 0.3820	0.3649	0.3353	Ave		0.3697			0.1000	10.7		20.0			
Vinyl chloride	+++++ 0.3599	0.5041 0.3982	0.4455 0.3821	0.4343	0.3836	Ave		0.4154			0.1000	11.9		20.0			
Butadiene	+++++ 0.3014	0.4049 0.3861	0.3783 0.3674	0.3794	0.3481	Ave		0.3665				9.1		20.0			
Bromomethane	+++++ 1.1202	1.2679 1.3095	1.2257 1.1774	1.2915	1.2075	Ave		1.2285			0.1000	5.4		20.0			
Chloroethane	+++++ 0.2130	0.2717 0.2008	0.2584 +++++	0.2569	0.2199	Ave		0.2368			0.1000	12.3		20.0			
Pentane	+++++ 1.6493	1.9936 1.8914	1.6611 1.4067	1.7586	1.7113	Ave		1.7246				10.9		20.0			
Trichlorofluoromethane	+++++ 0.3405	0.4810 0.4240	0.3993 0.3703	0.4298	0.3962	Ave		0.4059			0.1000	11.1		20.0			
Dichlorofluoromethane	+++++ 0.5223	0.6040 0.5261	0.5432 0.4768	0.5820	0.5351	Ave		0.5414				7.7		20.0			
2-Methyl-1,3-butadiene	+++++ 0.4061	0.4327 0.4203	0.3671 0.3873	0.3887	0.4235	Ave		0.4037				5.9		20.0			
Ethyl ether	+++++ 0.2764	0.2700 0.2693	0.2822 0.2547	0.2768	0.2744	Ave		0.2720				3.2		20.0			
Ethanol	+++++ 0.0669	0.0498 0.0656	0.0747 0.0635	0.0617	0.0708	Ave		0.0647				12.2		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	+++++ 0.3615	0.3798 0.3517	0.3826 0.3423	0.3722	0.3687	Ave		0.3655				4.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloroethene	+++++ 0.2470	0.2408 0.2457	0.2443 0.2454	0.2554	0.2486	Ave		0.2468			0.1000	1.8		20.0			
Carbon disulfide	+++++ 0.9649	1.1042 0.9842	0.9745 0.9528	0.9114	0.9387	Ave		0.9758			0.1000	6.3		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.2613	0.2653 0.2655	0.2291 0.2492	0.2594	0.2554	Ave		0.2550			0.1000	5.0		20.0			
Iodomethane	+++++ 0.2515	0.0742 0.3057	0.0854 0.2819	0.0958	0.1668	QuaF		0.3086	-0.000052						0.9990		0.9900
Cyclopentene	+++++ 0.7136	0.7231 0.7244	0.6370 0.7015	0.6975	0.7215	Ave		0.7027				4.4		20.0			
Acrolein	+++++ 1.1654	1.1111 1.3448	0.8580 1.3835	0.9601	0.9601	Ave		1.1119				18.0		20.0			
Allyl chloride	+++++ 0.1774	0.1840 0.1682	0.1910 0.1505	0.1773	0.1756	Ave		0.1749				7.4		20.0			
Isopropyl alcohol	+++++ 0.8024	1.0601 0.7905	0.9671 0.7681	0.8372	0.8196	Ave		0.8636				12.5		20.0			
Methylene Chloride	+++++ 0.3133	0.3234 0.3017	0.3621 0.2991	0.3170	0.3122	Ave		0.3184			0.1000	6.6		20.0			
Acetone	+++++ 0.6368	0.9454 0.6290	0.8267 +++++	0.6847	0.6599	Ave		0.7304			0.0500	17.5		20.0			
trans-1,2-Dichloroethene	+++++ 0.2846	0.3533 0.2777	0.3125 0.2729	0.2732	0.2830	Ave		0.2939			0.1000	10.0		20.0			
Methyl acetate	+++++ 0.2420	0.2570 0.2568	0.2696 0.2663	0.2517	0.2739	Ave		0.2596			0.1000	4.3		20.0			
Hexane	+++++ 0.0717	0.0913 0.0811	0.0684 0.0794	0.0760	0.0791	Ave		0.0782				9.4		20.0			
Methyl tert-butyl ether	+++++ 0.9434	0.9313 0.9281	0.9339 0.8999	0.9598	0.9314	Ave		0.9326			0.1000	1.9		20.0			
2-Methyl-2-propanol	+++++ 1.2134	1.3752 1.1997	1.2940 1.1867	1.2520	1.2017	Ave		1.2461				5.5		20.0			
Acetonitrile	+++++ 1.5546	1.5219 1.5610	1.4950 1.3574	1.5597	1.5263	Ave		1.5108				4.8		20.0			
Isopropyl ether	+++++ 1.2233	1.1897 1.1993	1.2214 1.1826	1.2195	1.2148	Ave		1.2072				1.4		20.0			
2-Chloro-1,3-butadiene	+++++ 0.2683	0.2641 0.2743	0.2602 0.2596	0.2650	0.2759	Ave		0.2668				2.4		20.0			
1,1-Dichloroethane	+++++ 0.5894	0.5839 0.5587	0.5752 0.5543	0.5763	0.5895	Ave		0.5753			0.2000	2.4		20.0			
Acrylonitrile	0.1574 0.1365	0.1292 0.1364	0.1343 0.1295	0.1378	0.1372	Ave		0.1373				6.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	+++++ 1.0970	1.0370 1.0841	1.0546 1.0611	1.1311	1.0920	Ave		1.0796				2.9		20.0			
Vinyl acetate	+++++ 0.8047	0.7055 0.8523	0.8898 0.7223	0.8813	0.8626	Ave		0.8169				9.3		20.0			
cis-1,2-Dichloroethene	+++++ 0.3444	0.3576 0.3188	0.3487 0.3320	0.3355	0.3386	Ave		0.3394			0.1000	3.7		20.0			
2,2-Dichloropropane	+++++ 0.4973	0.5477 0.4742	0.5159 0.4350	0.4790	0.4971	Ave		0.4923				7.2		20.0			
Cyclohexane	+++++ 0.5913	0.6246 0.6281	0.5498 0.6136	0.5843	0.5991	Ave		0.5987			0.1000	4.5		20.0			
Chlorobromomethane	+++++ 0.1542	0.1641 0.1396	0.1477 0.1350	0.1555	0.1499	Ave		0.1494				6.6		20.0			
Chloroform	+++++ 0.5611	0.5867 0.5331	0.5648 0.5241	0.5568	0.5634	Ave		0.5557			0.2000	3.8		20.0			
Carbon tetrachloride	+++++ 0.3946	0.4096 0.4013	0.3744 0.3870	0.3719	0.3748	Ave		0.3877			0.1000	3.8		20.0			
Ethyl acetate	+++++ 0.2802	0.4267 0.2851	0.2913 0.2771	0.2840	0.2876	Ave		0.3046				17.7		20.0			
Methyl acrylate	+++++ 0.3324	0.3400 0.3324	0.2788 0.3243	0.3246	0.3218	Ave		0.3220				6.2		20.0			
Tetrahydrofuran	+++++ 1.0453	1.0606 1.0501	1.0670 1.0189	1.0317	1.0554	Ave		1.0470				1.6		20.0			
1,1,1-Trichloroethane	+++++ 0.4825	0.5137 0.4722	0.4660 0.4609	0.4715	0.4740	Ave		0.4773			0.1000	3.6		20.0			
2-Butanone (MEK)	+++++ 0.2919	0.3469 0.3021	0.3055 0.2967	0.2998	0.2965	Ave		0.3056			0.0500	6.1		20.0			
1,1-Dichloropropene	+++++ 0.4557	0.4977 0.4542	0.5185 0.4435	0.4954	0.4555	Ave		0.4744				6.1		20.0			
2,2,4-Trimethylpentane	+++++ 1.1228	1.2981 1.1801	1.1696 1.1209	1.1581	1.1747	Ave		1.1749				5.1		20.0			
n-Heptane	+++++ 0.3130	0.3251 0.3410	0.3103 0.3144	0.3205	0.3246	Ave		0.3213				3.2		20.0			
Benzene	+++++ 1.6288	1.5810 1.6206	1.5224 1.5879	1.5301	1.6261	Ave		1.5853			0.5000	2.8		20.0			
Propionitrile	+++++ 1.7856	1.8141 1.8063	1.6828 1.6859	1.8143	1.7594	Ave		1.7641				3.3		20.0			
Methacrylonitrile	+++++ 0.1471	0.1324 0.1398	0.1349 0.1309	0.1495	0.1454	Ave		0.1400				5.3		20.0			
Tert-amyl methyl ether	+++++ 1.0321	0.9149 1.0135	0.9687 1.0024	1.0215	1.0148	Ave		0.9954				4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloroethane	+++++ 0.4639	0.6162 0.4423	0.5474 0.4353	0.4868	0.4599	Ave		0.4931			0.1000	13.4		20.0			
Isobutyl alcohol	+++++ 0.5723	0.4907 0.5900	0.4830 0.5798	0.5295	0.5536	Ave		0.5427				7.9		20.0			
Isopropyl acetate	+++++ 0.7372	0.6908 0.7356	0.6586 0.7320	0.7354	0.7327	Ave		0.7175				4.3		20.0			
Methylcyclohexane	+++++ 0.5608	0.5775 0.5842	0.5516 0.5942	0.5663	0.5716	Ave		0.5723			0.1000	2.5		20.0			
Trichloroethene	+++++ 0.3139	0.3573 0.3056	0.2923 0.2980	0.2927	0.3067	Ave		0.3095			0.2000	7.3		20.0			
Dibromomethane	+++++ 0.2019	0.1996 0.1993	0.2075 0.2002	0.2020	0.2013	Ave		0.2017				1.4		20.0			
n-Butanol	+++++ 0.3537	0.2704 0.3605	0.2961 0.3554	0.3126	0.3260	Ave		0.3249				10.5		20.0			
1,2-Dichloropropane	+++++ 0.3532	0.3493 0.3543	0.3455 0.3546	0.3514	0.3486	Ave		0.3510			0.1000	1.0		20.0			
Ethyl acrylate	+++++ 0.4851	0.4056 0.4815	0.3571 0.4792	0.4527	0.4676	Ave		0.4470				10.8		20.0			
Dichlorobromomethane	+++++ 0.4468	0.3958 0.4429	0.4037 0.4420	0.4255	0.4330	Ave		0.4271			0.2000	4.7		20.0			
Methyl methacrylate	+++++ 0.0904	0.0684 0.0899	0.0826 0.0868	0.0906	0.0899	Ave		0.0855				9.5		20.0			
1,4-Dioxane	+++++ 1.2574	1.2069 1.3310	1.1400 1.4093	1.3077	1.2137	Ave		1.2666				7.1		20.0			
n-Propyl acetate	+++++ 0.5466	0.4062 0.5466	0.4720 0.5435	0.5408	0.5374	Ave		0.5133				10.6		20.0			
2-Chloroethyl vinyl ether	+++++ 0.2501	0.1967 0.2408	0.2298 0.2339	0.2492	0.2451	Ave		0.2351				7.9		20.0			
cis-1,3-Dichloropropene	+++++ 0.6614	0.5805 0.6721	0.6177 0.6677	0.6167	0.6535	Ave		0.6385			0.2000	5.4		20.0			
Toluene	+++++ 1.7319	1.9353 1.6918	1.7395 1.6541	1.6571	1.7425	Ave		1.7360			0.4000	5.5		20.0			
Epichlorohydrin	0.2529 0.2578	0.2111 0.2617	0.2174 0.2551	0.2466	0.2595	Ave		0.2453				8.0		20.0			
2-Nitropropane	+++++ 0.0987	0.1280 0.1014	0.0761 0.1011	0.0994	0.0972	Ave		0.1003				15.1		20.0			
Tetrachloroethene	+++++ 0.3775	0.3484 0.3711	0.3616 0.3662	0.3533	0.3748	Ave		0.3647			0.2000	3.0		20.0			
4-Methyl-2-pentanone (MIBK)	+++++ 2.6283	2.3152 2.6278	2.3095 2.5187	2.5809	2.6531	Ave		2.5191			0.0500	5.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	+++++ 0.6182	0.5453 0.6394	0.5073 0.6307	0.5722	0.6051	Ave		0.5883			0.1000	8.3		20.0			
1,1,2-Trichloroethane	+++++ 0.2964	0.2957 0.3062	0.2859 0.3066	0.2875	0.2913	Ave		0.2956			0.1000	2.8		20.0			
Ethyl methacrylate	+++++ 0.4783	0.3370 0.4735	0.3630 0.4773	0.4507	0.4711	Ave		0.4358				13.7		20.0			
Chlorodibromomethane	+++++ 0.3759	0.3122 0.3960	0.3128 0.4035	0.3455	0.3601	Ave		0.3580			0.1000	10.3		20.0			
1,3-Dichloropropane	+++++ 0.6330	0.5766 0.6383	0.5534 0.6401	0.6059	0.6173	Ave		0.6092				5.5		20.0			
Ethylene Dibromide	+++++ 0.3546	0.3128 0.3660	0.2905 0.3676	0.3313	0.3435	Ave		0.3381			0.1000	8.5		20.0			
n-Butyl acetate	+++++ 0.7250	0.6600 0.7491	0.6352 0.7501	0.6814	0.7131	Ave		0.7020				6.3		20.0			
2-Hexanone	+++++ 1.8642	1.6297 1.8542	1.5626 1.8016	1.8178	1.8658	Ave		1.7708			0.0500	7.0		20.0			
Chlorobenzene	+++++ 1.0369	1.1598 1.0184	1.0379 1.0078	1.0058	1.0390	Ave		1.0436			0.5000	5.1		20.0			
Ethylbenzene	+++++ 0.5848	0.5733 0.5728	0.5920 0.5664	0.5679	0.5783	Ave		0.5765			0.1000	1.6		20.0			
1,1,1,2-Tetrachloroethane	+++++ 0.3526	0.3276 0.3587	0.3255 0.3558	0.3334	0.3471	Ave		0.3429				4.0		20.0			
m-Xylene & p-Xylene	+++++ 0.7157	0.6999 0.7109	0.6431 0.7091	0.6855	0.7174	Ave		0.6974			0.1000	3.8		20.0			
o-Xylene	+++++ 0.6949	0.6960 0.6807	0.6609 0.6832	0.6661	0.6901	Ave		0.6817			0.3000	2.0		20.0			
Bromoform	+++++ 0.2449	0.1808 0.2590	0.1873 0.2640	0.2131	0.2305	Ave		0.2257			0.1000	14.7		20.0			
Styrene	+++++ 1.2023	1.0684 1.1996	1.0239 1.1862	1.1238	1.1928	Ave		1.1424			0.3000	6.3		20.0			
n-Butyl acrylate	+++++ 0.3288	0.2131 0.3366	0.2459 0.3344	0.2990	0.3264	Ave		0.2978				16.5		20.0			
Isopropylbenzene	+++++ 1.8544	1.9098 1.8180	1.8482 1.8201	1.7580	1.8569	Ave		1.8379			0.1000	2.5		20.0			
Amyl acetate (mixed isomers)	+++++ 1.6718	1.4852 1.6953	1.2146 1.6549	1.5660	1.6372	Ave		1.5607				10.8		20.0			
Bromobenzene	+++++ 0.8274	0.8256 0.8133	0.7925 0.8021	0.8376	0.8029	Ave		0.8145				2.0		20.0			
N-Propylbenzene	+++++ 4.2695	4.2087 4.1907	4.2589 4.1422	4.1042	4.2547	Ave		4.2041				1.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.8809	0.9157 0.8961	0.8435 0.8707	0.8895	0.8684	Ave		0.8807			0.3000	2.6		20.0			
2-Chlorotoluene	+++++ 2.9212	2.9551 2.8439	2.8661 2.7830	2.7905	2.8707	Ave		2.8615				2.2		20.0			
4-Ethyltoluene	+++++ 3.5153	3.4311 3.4641	3.3192 3.3144	3.3618	3.5081	Ave		3.4163				2.5		20.0			
1,2,3-Trichloropropane	+++++ 0.2514	0.2347 0.2572	0.2341 0.2559	0.2686	0.2547	Ave		0.2510				5.0		20.0			
1,3,5-Trimethylbenzene	+++++ 2.9738	3.0914 2.9046	2.7367 2.9013	2.8594	2.9500	Ave		2.9167				3.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.3005	0.3599 0.3120	0.3137 0.3169	0.2891	0.2872	Ave		0.3114				7.9		20.0			
4-Chlorotoluene	+++++ 2.6937	2.6192 2.6747	2.6773 2.6527	2.5367	2.6209	Ave		2.6393				2.0		20.0			
tert-Butylbenzene	+++++ 2.4658	2.2940 2.4153	2.3609 2.4133	2.3940	2.4629	Ave		2.4009				2.5		20.0			
1,2,4-Trimethylbenzene	+++++ 3.0244	2.7670 2.9255	2.9229 2.8125	2.8435	3.0053	Ave		2.9002				3.3		20.0			
Butyl Methacrylate	+++++ 1.1099	0.8271 1.1201	0.9554 1.0711	1.0090	1.0790	Ave		1.0245				10.2		20.0			
sec-Butylbenzene	+++++ 3.7744	3.8342 3.7320	3.6916 3.7317	3.6260	3.7850	Ave		3.7393				1.8		20.0			
1,3-Dichlorobenzene	+++++ 1.5763	1.5974 1.5554	1.4752 1.5021	1.5508	1.5472	Ave		1.5435			0.6000	2.7		20.0			
4-Isopropyltoluene	+++++ 3.1847	3.0189 3.1594	3.0097 3.1153	3.0487	3.1813	Ave		3.1026				2.5		20.0			
1,4-Dichlorobenzene	+++++ 1.6086	1.9978 1.5985	1.7280 1.5768	1.5924	1.5955	Ave		1.6711			0.5000	9.1		20.0			
1,2,3-Trimethylbenzene	+++++ 3.1525	3.0697 3.0574	3.0237 2.9804	2.9640	3.1219	Ave		3.0528				2.3		20.0			
Indan	+++++ 3.0416	2.9842 2.9700	2.7725 2.8765	2.9851	3.0263	Ave		2.9509				3.2		20.0			
Benzyl chloride	+++++ 0.3250	0.3298 0.3489	0.2824 0.3138	0.3245	0.3355	Ave		0.3228				6.5		20.0			
p-Diethylbenzene	+++++ 1.6994	1.7283 1.7049	1.5493 1.6384	1.5680	1.6635	Ave		1.6503				4.2		20.0			
n-Butylbenzene	+++++ 3.0309	2.9383 3.0476	2.9040 3.0346	2.8225	3.0005	Ave		2.9684				2.8		20.0			
1,2-Dichlorobenzene	+++++ 1.5279	1.4925 1.4916	1.3576 1.4671	1.4838	1.4879	Ave		1.4726			0.4000	3.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4,5-Tetramethylbenzene	+++++ 2.7950	2.6246 2.7989	2.4325 2.6806	2.6381	2.7402	Ave		2.6729				4.7		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1621	0.1515 0.1714	0.1446 0.1697	0.1543	0.1619	Ave		0.1594			0.0500	6.1		20.0			
1,3,5-Trichlorobenzene	+++++ 1.1257	1.1359 1.1302	1.0799 1.0716	1.0828	1.1274	Ave		1.1076				2.5		20.0			
1,2,4-Trichlorobenzene	+++++ 0.9910	1.0111 1.0138	0.9631 0.9750	0.9101	0.9806	Ave		0.9778			0.2000	3.6		20.0			
Hexachlorobutadiene	+++++ 0.4891	0.4939 0.4870	0.4809 0.4667	0.4563	0.4840	Ave		0.4797				2.8		20.0			
Naphthalene	+++++ 2.1963	2.2898 2.3405	2.0287 2.3306	2.1167	2.1476	Ave		2.2072				5.3		20.0			
1,2,3-Trichlorobenzene	+++++ 0.8839	0.9470 0.8957	0.8691 0.8770	0.8504	0.8654	Ave		0.8841				3.5		20.0			
Dibromofluoromethane (Surr)	0.2675 0.2631	0.2677 0.2536	0.2674 0.2421	0.2956	0.2614	Ave		0.2648				5.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3608 0.3597	0.3592 0.3552	0.3609 0.3558	0.3982	0.3470	Ave		0.3621				4.2		20.0			
Toluene-d8 (Surr)	1.3680 1.3566	1.3707 1.3735	1.3663 1.3240	1.4727	1.3226	Ave		1.3693				3.4		20.0			
4-Bromofluorobenzene	0.3896 0.3888	0.3922 0.3890	0.3871 0.3794	0.4204	0.3806	Ave		0.3909				3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8 460-512577/3	P43991.D
Level 2	STD05 460-512577/4	P43992.D
Level 3	STD1 460-512577/10	P43998.D
Level 4	STD5 460-512577/6	P43994.D
Level 5	STD20 460-512577/7	P43995.D
Level 6	STD50 460-512577/11	P43999.D
Level 7	STD200 460-512577/12	P44000.D
Level 8	STD500 460-512577/13	P44001.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Ave	+++++ 71454	731 408033	1247 1022651	5997	29153	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Dichlorodifluoromethane	FB	Ave	+++++ 182080	2585 1074361	4275 2643644	21521	89981	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Chloromethane	FB	Ave	+++++ 195287	2665 945477	4245 2533711	19458	81159	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Vinyl chloride	FB	Ave	+++++ 216410	3008 1015313	5201 2534101	23161	92854	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Butadiene	FB	Ave	+++++ 181216	2416 984387	4416 2436607	20232	84262	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Bromomethane	BUT	Ave	+++++ 95949	1089 461494	2070 1086465	10103	41619	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Chloroethane	FB	Ave	+++++ 128059	1621 512041	3016 +++++	13698	53225	+++++ 50.0	0.500 200	1.00 +++++	5.00	20.0
Pentane	TBAd 9	Ave	+++++ 57070	715 271627	1180 541455	5745	24127	+++++ 100	1.00 400	2.00 1000	10.0	40.0
Trichlorofluoromethane	FB	Ave	+++++ 204746	2870 1081053	4661 2456172	22922	95911	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Dichlorofluoromethane	FB	Ave	+++++ 314063	3604 1341514	6341 3162162	31040	129522	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2-Methyl-1,3-butadiene	FB	Ave	+++++ 244188	2582 1071691	4285 2568981	20728	102523	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Ethyl ether	FB	Ave	+++++ 166208	1611 686721	3294 1689012	14762	66409	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Ethanol	TBAd 9	Ave	+++++ 46273	357 188501	1061 489117	4030	19972	+++++ 2000	20.0 8000	40.0 20000	200	800
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	+++++ 217367	2266 896625	4466 2270362	19850	89246	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,1-Dichloroethene	FB	Ave	+++++ 148561	1437 626559	2852 1627927	13622	60187	+++++ 50.0	0.500 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Carbon disulfide	FB	Ave	+++++ 580228	6589 2509366	11376 6319407	48603	227224	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 157119	1583 676939	2674 1652510	13835	61826	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Iodomethane	FB	QuaF	+++++ 151223	443 779344	997 1869659	5109	40377	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Cyclopentene	FB	Ave	+++++ 429126	4315 1847111	7436 4652524	37198	174651	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Acrolein	TBAd9	Ave	+++++ 40327	797 96566	1219 213013	6273	13537	+++++ 100	2.00 200	4.00 400	20.0	40.0
Allyl chloride	FB	Ave	+++++ 106664	1098 428968	2230 997981	9453	42512	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Isopropyl alcohol	TBAd9	Ave	+++++ 138824	1901 567619	3435 1478313	13674	57779	+++++ 500	5.00 2000	10.0 5000	50.0	200
Methylene Chloride	FB	Ave	+++++ 188419	1930 769269	4227 1983949	16903	75569	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Acetone	BUT	Ave	+++++ 272733	4060 1108439	6981 +++++	26782	113715	+++++ 250	2.50 1000	5.00 +++++	25.0	100
trans-1,2-Dichloroethene	FB	Ave	+++++ 171134	2108 708011	3648 1809744	14567	68511	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Methyl acetate	FB	Ave	+++++ 291039	3067 1309468	6295 3533036	26849	132620	+++++ 100	1.00 400	2.00 1000	10.0	40.0
Hexane	FB	Ave	+++++ 43114	545 206826	799 526596	4055	19137	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Methyl tert-butyl ether	FB	Ave	+++++ 567333	5557 2366496	10902 5968756	51185	225447	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2-Methyl-2-propanol	TBAd9	Ave	+++++ 209939	2466 861495	4596 2283905	20450	84711	+++++ 500	5.00 2000	10.0 5000	50.0	200
Acetonitrile	TBAd9	Ave	+++++ 268974	2729 1120870	5310 2612449	25476	107597	+++++ 500	5.00 2000	10.0 5000	50.0	200
Isopropyl ether	FB	Ave	+++++ 735634	7099 3058022	14258 7843897	65037	294050	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2-Chloro-1,3-butadiene	FB	Ave	+++++ 161354	1576 699283	3037 1721606	14134	66792	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,1-Dichloroethane	FB	Ave	+++++ 354459	3484 1424431	6715 3676656	30734	142687	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Acrylonitrile	FB	Ave	3692 821035	7708 3477210	15674 8587568	73491	332109	2.00 500	5.00 2000	10.0 5000	50.0	200
Tert-butyl ethyl ether	FB	Ave	+++++ 659685	6188 2764072	12311 7038025	60322	264338	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Vinyl acetate	FB	Ave	+++++ 967767	8420 4346516	20773 9581862	93993	417622	+++++ 100	1.00 400	2.00 1000	10.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	+++++ 207112	2134 812824	4071 2201969	17890	81951	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2,2-Dichloropropane	FB	Ave	+++++ 299057	3268 1209068	6022 2885315	25545	120337	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Cyclohexane	FB	Ave	+++++ 355591	3727 1601535	6418 4069860	31162	145016	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Chlorobromomethane	FB	Ave	+++++ 92756	979 355869	1724 895232	8295	36290	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Chloroform	FB	Ave	+++++ 337423	3501 1359391	6593 3476175	29693	136382	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Carbon tetrachloride	FB	Ave	+++++ 237292	2444 1023213	4370 2566821	19835	90733	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Ethyl acetate	BUT	Ave	+++++ 48004	733 200967	984 511492	4443	19825	+++++ 100	1.00 400	2.00 1000	10.0	40.0
Methyl acrylate	FB	Ave	+++++ 199879	2029 847640	3255 2150651	17309	77898	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Tetrahydrofuran	BUT	Ave	+++++ 179071	1822 740178	3604 1880466	16141	72752	+++++ 100	1.00 400	2.00 1000	10.0	40.0
1,1,1-Trichloroethane	FB	Ave	+++++ 290175	3065 1204071	5440 3057022	25143	114741	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2-Butanone (MEK)	BUT	Ave	+++++ 125016	1490 532357	2580 1368933	11727	51090	+++++ 250	2.50 1000	5.00 2500	25.0	100
1,1-Dichloropropene	FB	Ave	+++++ 274013	2970 1158068	6053 2941387	26421	110256	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2,2,4-Trimethylpentane	FB	Ave	+++++ 675178	7746 3009091	13653 7434537	61761	284359	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
n-Heptane	FB	Ave	+++++ 188238	1940 869499	3622 2085090	17093	78576	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Benzene	CBNZ d5	Ave	+++++ 809378	7732 3317155	14754 8458892	69217	324927	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Propionitrile	TBAd 9	Ave	+++++ 308938	3253 1297078	5977 3244698	29634	124027	+++++ 500	5.00 2000	10.0 5000	50.0	200
Methacrylonitrile	FB	Ave	+++++ 884305	7903 3564171	15749 8680209	79725	351963	+++++ 500	5.00 2000	10.0 5000	50.0	200
Tert-amyl methyl ether	FB	Ave	+++++ 620655	5459 2584186	11308 6648506	54476	245635	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,2-Dichloroethane	FB	Ave	+++++ 278958	3677 1127717	6390 2887076	25960	111335	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Isobutyl alcohol	TBAd 9	Ave	+++++ 247557	2200 1059163	4289 2789500	21623	97565	+++++ 1250	12.5 5000	25.0 12500	125	500
Isopropyl acetate	FB	Ave	+++++ 443322	4122 1875558	7688 4854972	39217	177364	+++++ 50.0	0.500 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Methylcyclohexane	FB	Ave	+++++ 337227	3446 1489650	6439 3941042	30199	138356	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Trichloroethene	FB	Ave	+++++ 188758	2132 779143	3412 1976792	15612	74245	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Dibromomethane	FB	Ave	+++++ 121417	1191 508107	2422 1327513	10771	48719	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
n-Butanol	TBAd9	Ave	+++++ 153000	1212 647153	2629 1710224	12763	57449	+++++ 1250	12.5 5000	25.0 12500	125	500
1,2-Dichloropropane	FB	Ave	+++++ 212409	2084 903424	4033 2352125	18738	84382	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Ethyl acrylate	FB	Ave	+++++ 291736	2420 1227607	4169 3177974	24141	113198	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Dichlorobromomethane	FB	Ave	+++++ 268697	2362 1129194	4712 2931417	22689	104821	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Methyl methacrylate	FB	Ave	+++++ 108770	816 458644	1928 1151908	9667	43516	+++++ 100	1.00 400	2.00 1000	10.0	40.0
1,4-Dioxane	DXE	Ave	+++++ 45781	1145 187320	2133 493984	4395	17884	+++++ 1000	25.0 4000	50.0 10000	100	400
n-Propyl acetate	FB	Ave	+++++ 328674	2424 1393729	5510 3604614	28842	130083	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 150408	1174 614004	2682 1551015	13288	59340	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 328664	2839 1375634	5986 3557150	27896	130579	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Toluene	CBNZ d5	Ave	+++++ 860617	9465 3463017	16858 8811911	74964	348179	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Epichlorohydrin	BUT	Ave	2196 441586	3626 1844275	7344 4707180	38589	178915	5.00 1000	10.0 4000	20.0 10000	100	400
2-Nitropropane	FB	Ave	+++++ 118757	1528 517244	1776 1341328	10607	47049	+++++ 100	1.00 400	2.00 1000	10.0	40.0
Tetrachloroethene	CBNZ d5	Ave	+++++ 187595	1704 759626	3504 1950888	15981	74887	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
4-Methyl-2-pentanone (MIBK)	BUT	Ave	+++++ 1125626	9943 4630462	19502 11621118	100949	457222	+++++ 250	2.50 1000	5.00 2500	25.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 307192	2667 1308875	4916 3360024	25883	120901	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 147292	1446 626671	2771 1633290	13006	58200	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Ethyl methacrylate	FB	Ave	+++++ 287623	2011 1207322	4237 3165446	24034	114032	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Chlorodibromomethane	CBNZ d5	Ave	+++++ 186781	1527 810632	3031 2149619	15631	71960	+++++ 50.0	0.500 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,3-Dichloropropane	CBNZ d5	Ave	+++++ 314563	2820 1306565	5363 3410101	27408	123338	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Ethylene Dibromide	CBNZ d5	Ave	+++++ 176224	1530 749225	2815 1958409	14987	68640	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
n-Butyl acetate	CBNZ d5	Ave	+++++ 360286	3228 1533404	6156 3995867	30825	142483	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2-Hexanone	BUT	Ave	+++++ 798377	6999 3267257	13195 8312258	71101	321541	+++++ 250	2.50 1000	5.00 2500	25.0	100
Chlorobenzene	CBNZ d5	Ave	+++++ 515230	5672 2084629	10058 5368823	45498	207619	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Ethylbenzene	CBNZ d5	Ave	+++++ 290591	2804 1172555	5737 3017188	25690	115549	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 175232	1602 734239	3154 1895228	15083	69351	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	+++++ 355653	3423 1455206	6232 3777529	31009	143350	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
o-Xylene	CBNZ d5	Ave	+++++ 345313	3404 1393246	6405 3639479	30134	137892	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Bromoform	CBNZ d5	Ave	+++++ 121702	884 530193	1815 1406611	9639	46059	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Styrene	CBNZ d5	Ave	+++++ 597422	5225 2455571	9923 6319001	50839	238335	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
n-Butyl acrylate	CBNZ d5	Ave	+++++ 163391	1042 689046	2383 1781568	13528	65222	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Isopropylbenzene	CBNZ d5	Ave	+++++ 921488	9340 3721245	17911 9696150	79527	371045	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Amyl acetate (mixed isomers)	DCBd 4	Ave	+++++ 441887	3891 1848711	6241 4728386	37324	175029	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Bromobenzene	DCBd 4	Ave	+++++ 218696	2163 886838	4072 2291767	19962	85837	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
N-Propylbenzene	DCBd 4	Ave	+++++ 1128549	11026 4569893	21884 11835023	97818	454851	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	+++++ 232849	2399 977130	4334 2487868	21201	92838	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
2-Chlorotoluene	DCBd 4	Ave	+++++ 772160	7742 3101153	14727 7951482	66506	306889	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
4-Ethyltoluene	DCBd 4	Ave	+++++ 929191	8989 3777461	17055 9470008	80122	375036	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 66450	615 280467	1203 731165	6402	27233	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++ 786057	8099 3167369	14062 8289503	68150	315371	+++++ 50.0	0.500 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 79427	943 340279	1612 905549	6891	30703	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
4-Chlorotoluene	DCBd 4	Ave	+++++ 712015	6862 2916738	13757 7579213	60459	280188	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
tert-Butylbenzene	DCBd 4	Ave	+++++ 651783	6010 2633834	12131 6895175	57058	263298	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	+++++ 799429	7249 3190207	15019 8035938	67771	321286	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Butyl Methacrylate	DCBd 4	Ave	+++++ 293387	2167 1221473	4909 3060497	24048	115353	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
sec-Butylbenzene	DCBd 4	Ave	+++++ 997668	10045 4069594	18969 10662268	86419	404639	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 416653	4185 1696105	7580 4291887	36962	165407	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
4-Isopropyltoluene	DCBd 4	Ave	+++++ 841790	7909 3445255	15465 8901205	72660	340095	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 425184	5234 1743140	8879 4505295	37953	170565	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	+++++ 833284	8042 3334033	15537 8515754	70642	333748	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Indan	DCBd 4	Ave	+++++ 803974	7818 3238705	14246 8218681	71144	323522	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Benzyl chloride	DCBd 4	Ave	+++++ 85906	864 380450	1451 896498	7734	35862	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
p-Diethylbenzene	DCBd 4	Ave	+++++ 449197	4528 1859149	7961 4681364	37371	177839	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
n-Butylbenzene	DCBd 4	Ave	+++++ 801141	7698 3323339	14922 8670529	67270	320768	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	+++++ 403858	3910 1626557	6976 4191809	35363	159060	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	+++++ 738786	6876 3052145	12499 7659157	62876	292939	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 42844	397 186942	743 484865	3678	17309	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	+++++ 297545	2976 1232451	5549 3061743	25806	120523	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 261952	2649 1105553	4949 2785805	21690	104827	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 129274	1294 531050	2471 1333506	10874	51742	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Naphthalene	DCBd 4	Ave	+++++ 580545	5999 2552213	10424 6658897	50447	229589	+++++ 50.0	0.500 200	1.00 500	5.00	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 512577

SDG No.:

Instrument ID: CVOAMS13 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2018 02:35 Calibration End Date: 04/20/2018 07:16 Calibration ID: 67790

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 233644	2481 976745	4466 2505806	20267	92520	+++++ 50.0	0.500 200	1.00 500	5.00	20.0
Dibromofluoromethane (Surr)	FB	Ave	156883 158217	159749 161669	156101 160561	157622	158205	50.0 50.0	50.0 50.0	50.0 50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	211669 216299	214332 226432	210668 235968	212359	209977	50.0 50.0	50.0 50.0	50.0 50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	665831 674097	670334 702842	662057 705324	666224	660714	50.0 50.0	50.0 50.0	50.0 50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	189613 193205	191810 199073	187577 202108	190164	190141	50.0 50.0	50.0 50.0	50.0 50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Lims ID: STD8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 20-Apr-2018 02:35:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD8
Misc. Info.: 460-0070689-003
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 14:01:10 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: desais Date: 20-Apr-2018 08:24:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 29 TBA-d9 (IS)	65	2.052	2.060	-0.008	0	361443	1000.0	1000.0	
35 Acrylonitrile	53	2.375	2.375	0.000	92	3692	2.00	2.29	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	156883	50.0	50.5	
* 49 2-Butanone-d5	46	3.084	3.091	-0.007	0	434203	250.0	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	211669	50.0	49.8	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	586588	50.0	50.0	
* 72 1,4-Dioxane-d8	96	4.545	4.545	0.000	0	36467	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	99	665831	50.0	50.0	
80 Epichlorohydrin	57	5.297	5.290	0.007	95	2196	5.00	5.16	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	486732	50.0	50.0	
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	85	189613	50.0	49.8	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	98	258172	50.0	50.0	

Reagents:

ACROLEIN W_00075	Amount Added:	0.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	0.00	Units: uL	
14DIOXINTER_00083	Amount Added:	0.00	Units: uL	
ACRY/EPIH MIX_00048	Amount Added:	2.00	Units: uL	
Ethanol mix_00014	Amount Added:	0.00	Units: uL	
GAS Hi_00250	Amount Added:	0.00	Units: uL	
MIX I Hi_00093	Amount Added:	0.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

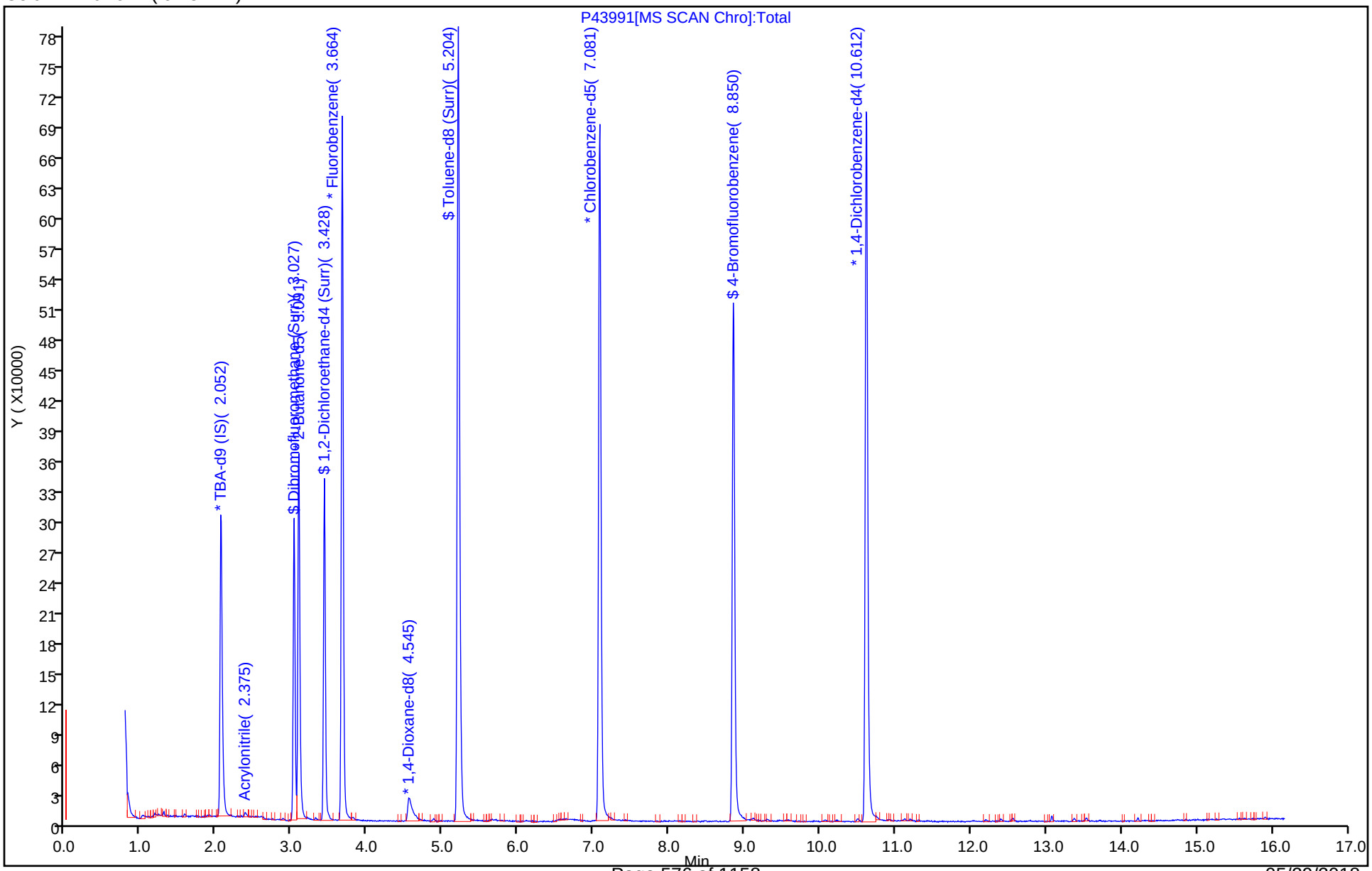
Report Date: 23-Apr-2018 14:01:41 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D

Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	STD8			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



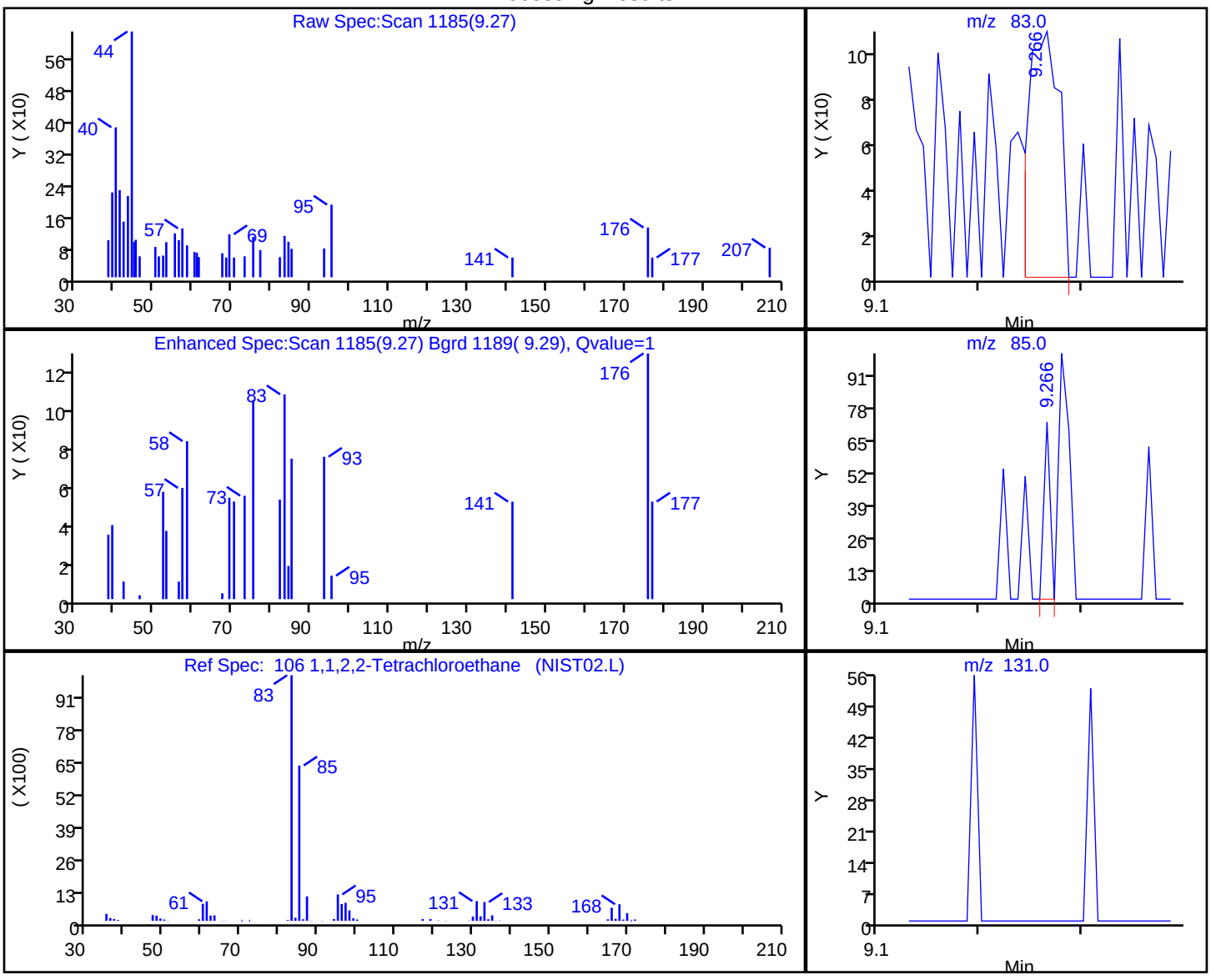
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

106 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
9.27	83.00	220	0.048379
9.27	85.00	31	
9.26	131.00	0	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

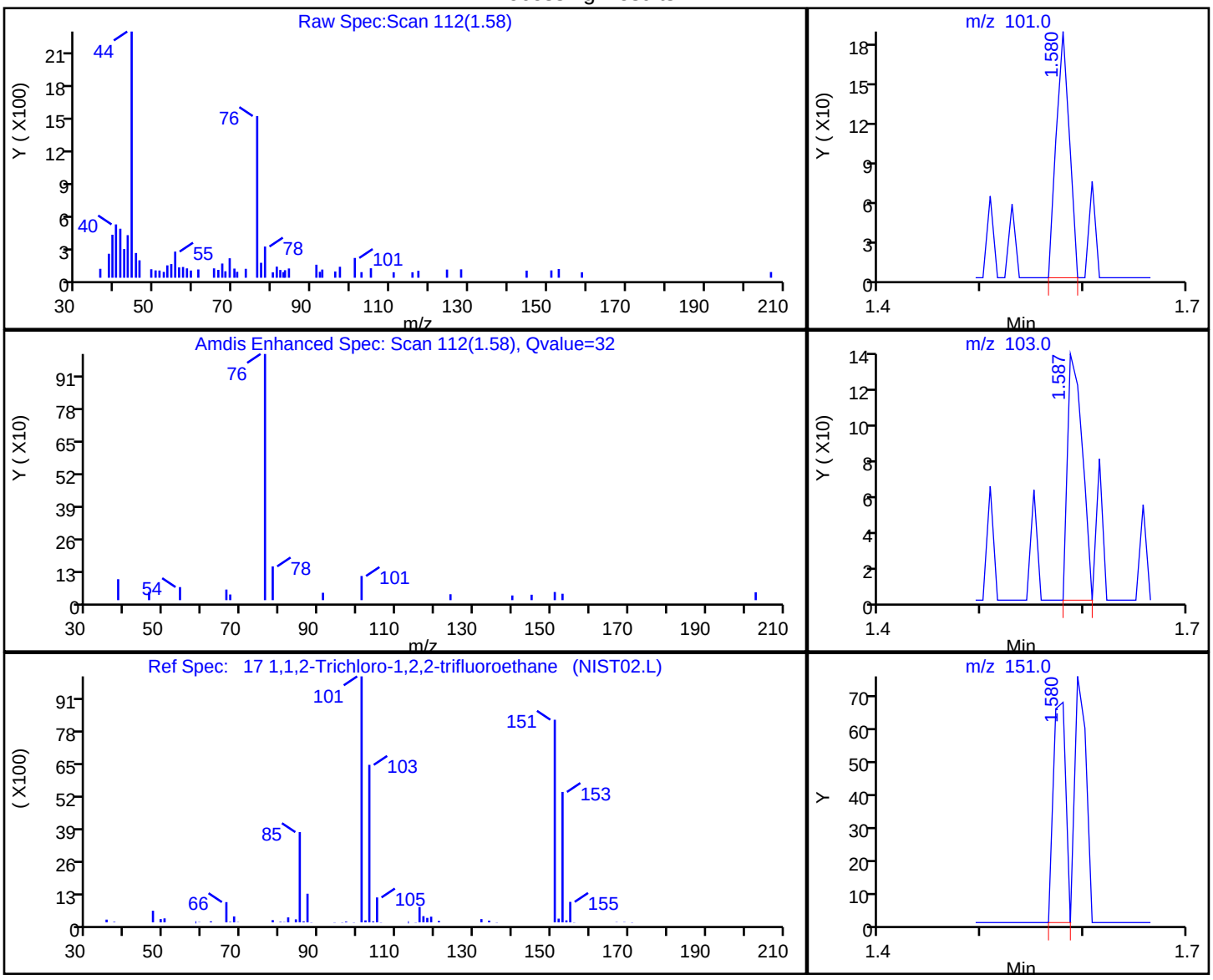
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

17 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Processing Results



RT	Mass	Response	Amount
1.58	101.00	164	0.054816
1.59	103.00	135	
1.58	151.00	58	
1.59	85.00	67	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

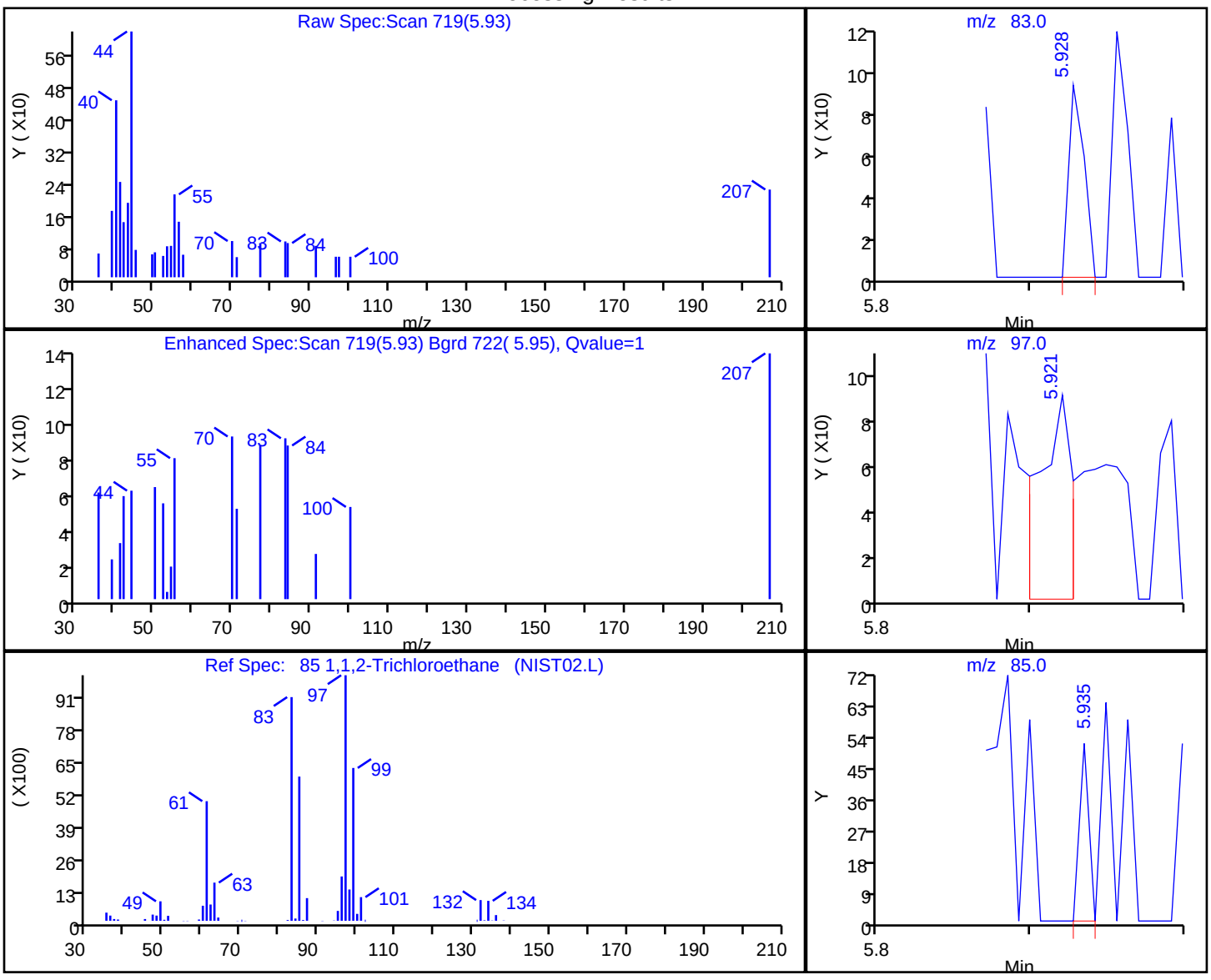
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

85 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
5.93	83.00	62	0.021543
5.92	97.00	131	
5.93	85.00	22	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

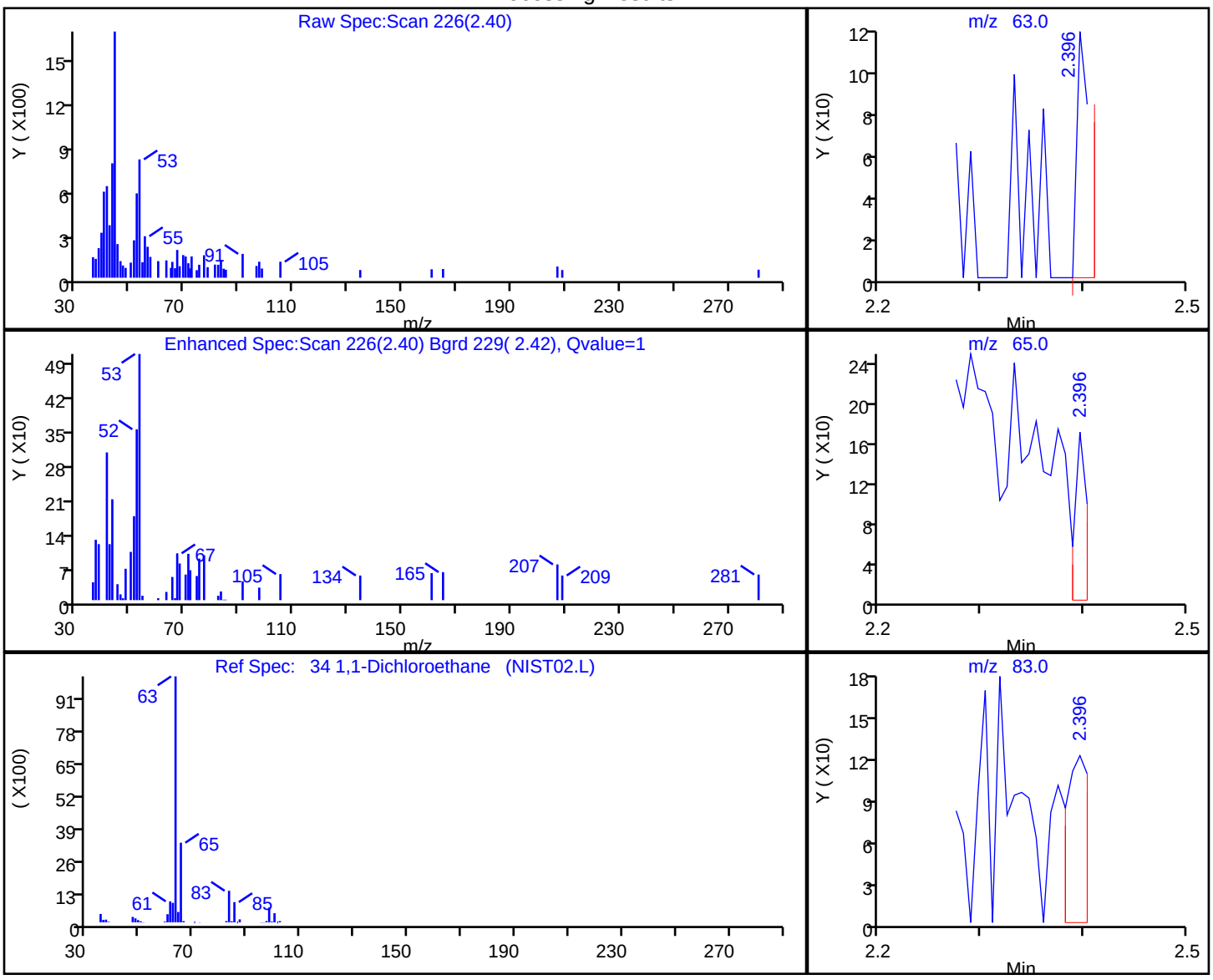
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D				
Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

34 1,1-Dichloroethane, CAS: 75-34-3

Processing Results



RT	Mass	Response	Amount
2.40	63.00	84	0.012445
2.40	65.00	138	
2.40	83.00	177	

Reviewer: delpolitov, 23-Apr-2018 12:29:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

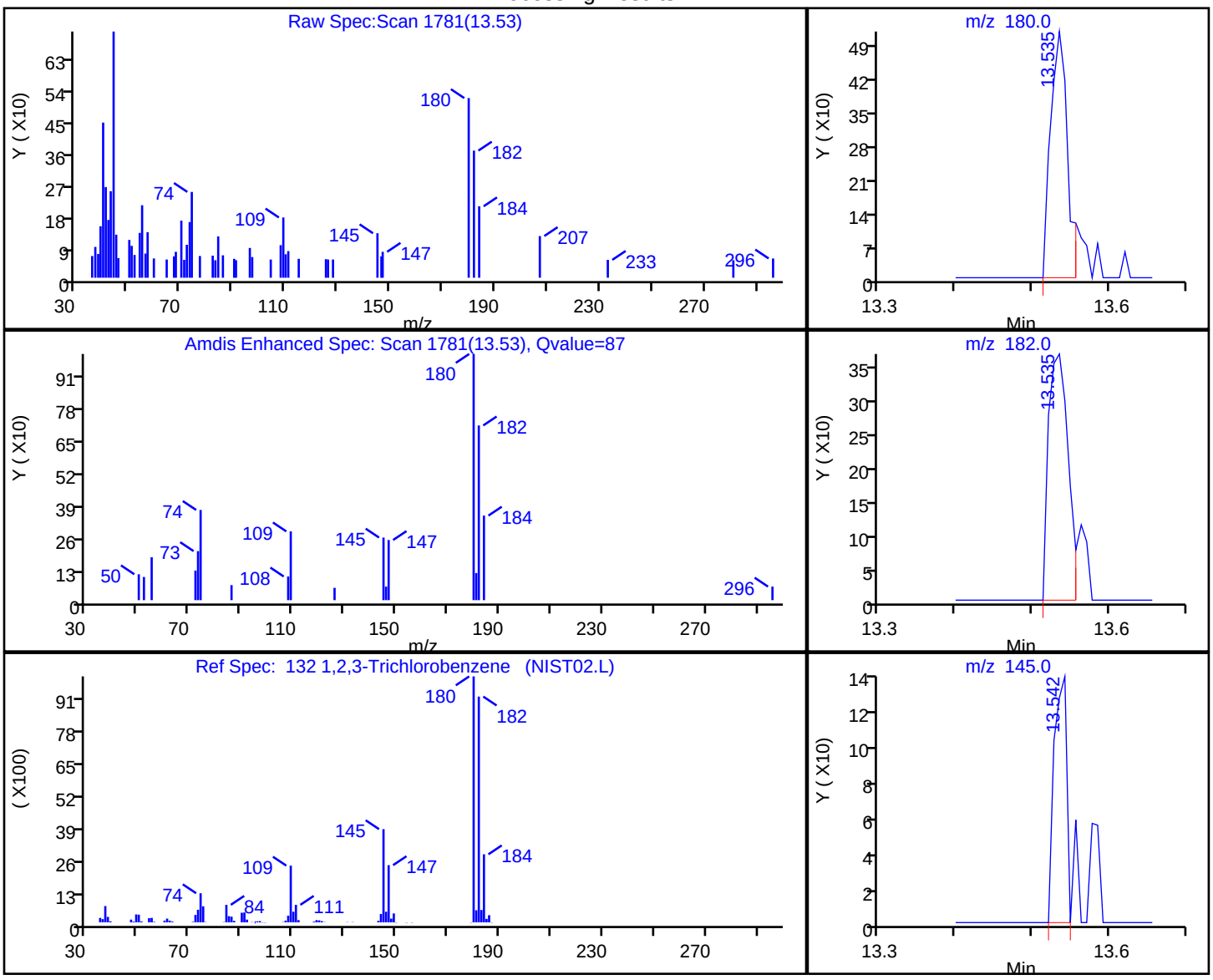
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

132 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results



RT	Mass	Response	Amount
13.53	180.00	786	0.172182
13.53	182.00	654	
13.54	145.00	159	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

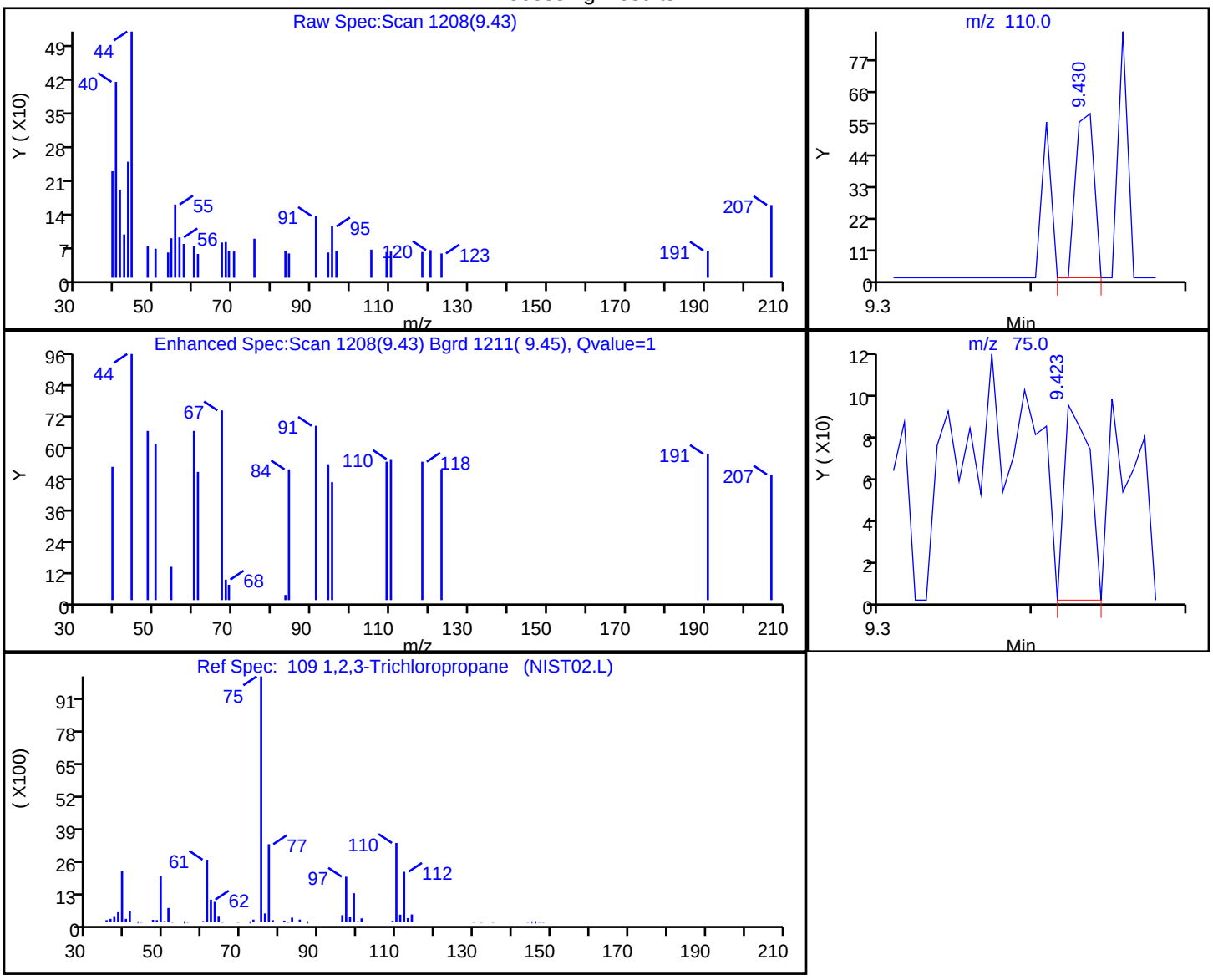
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

109 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
9.43	110.00	49	0.037814
9.42	75.00	105	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

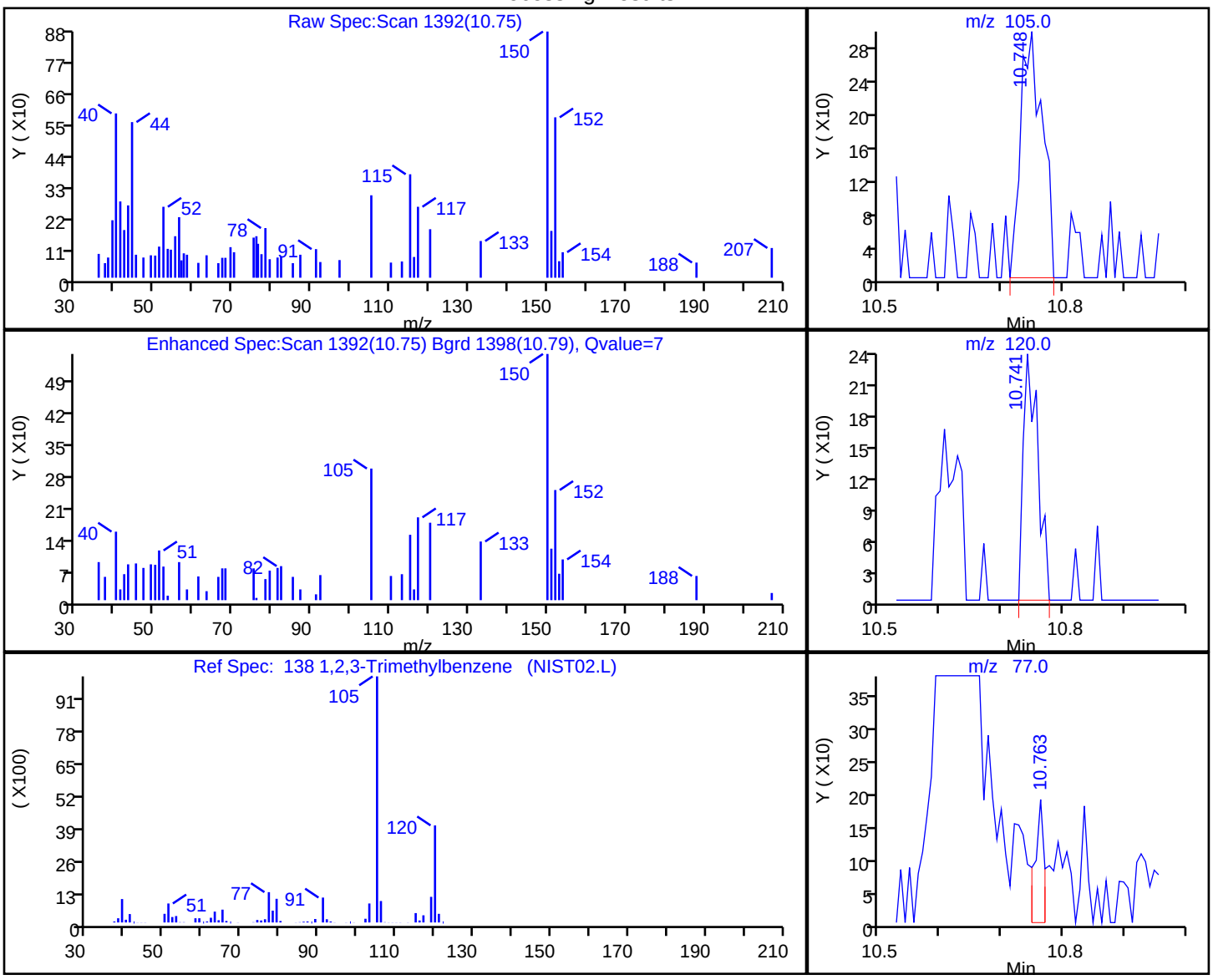
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D				
Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

138 1,2,3-Trimethylbenzene, CAS: 526-73-8

Processing Results



RT	Mass	Response	Amount
10.75	105.00	728	
10.74	120.00	393	
10.76	77.00	193	

Reviewer: delpolitov, 23-Apr-2018 12:29:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

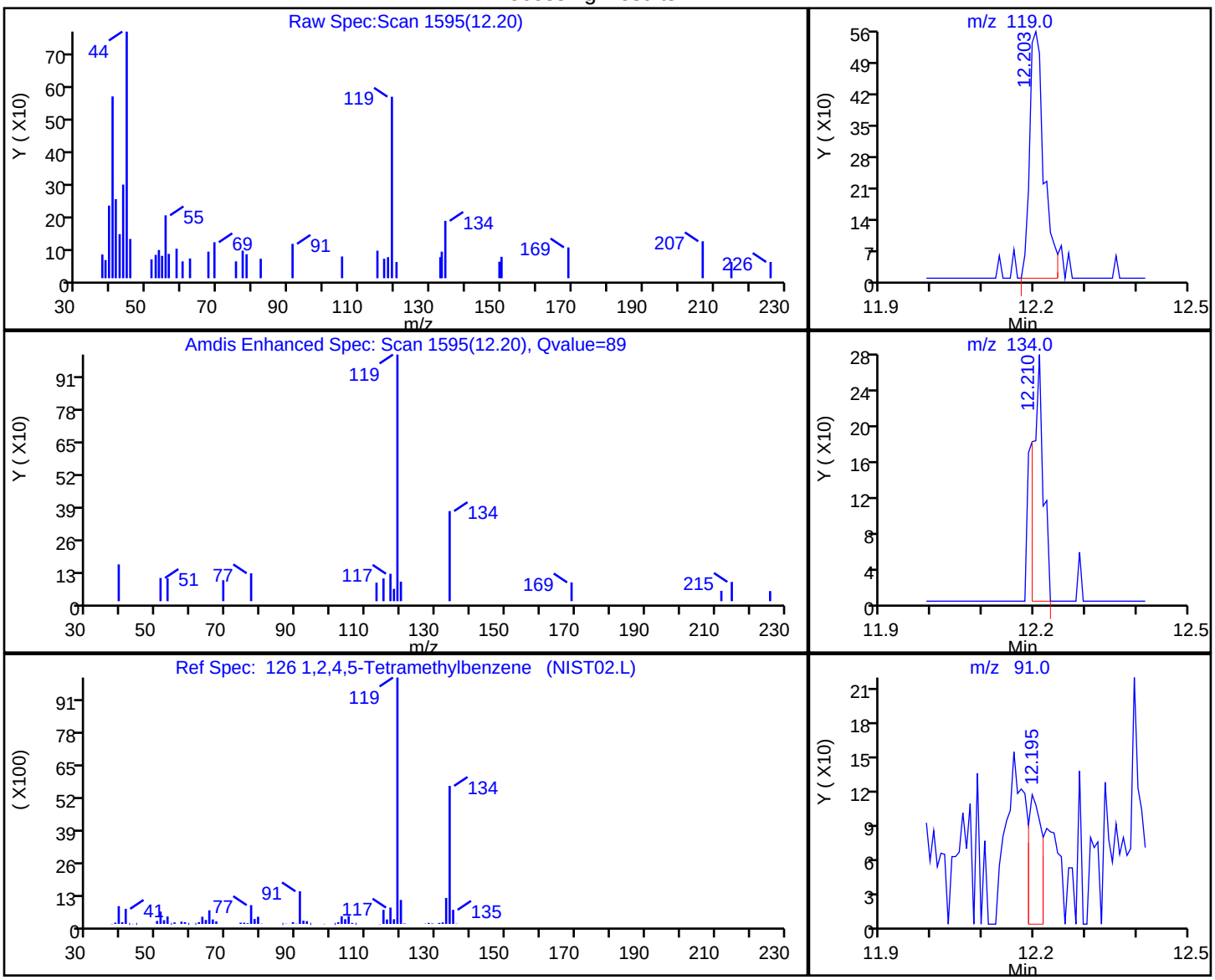
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

126 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Processing Results



RT	Mass	Response	Amount
12.20	119.00	1087	0.078762
12.21	134.00	361	
12.20	91.00	206	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

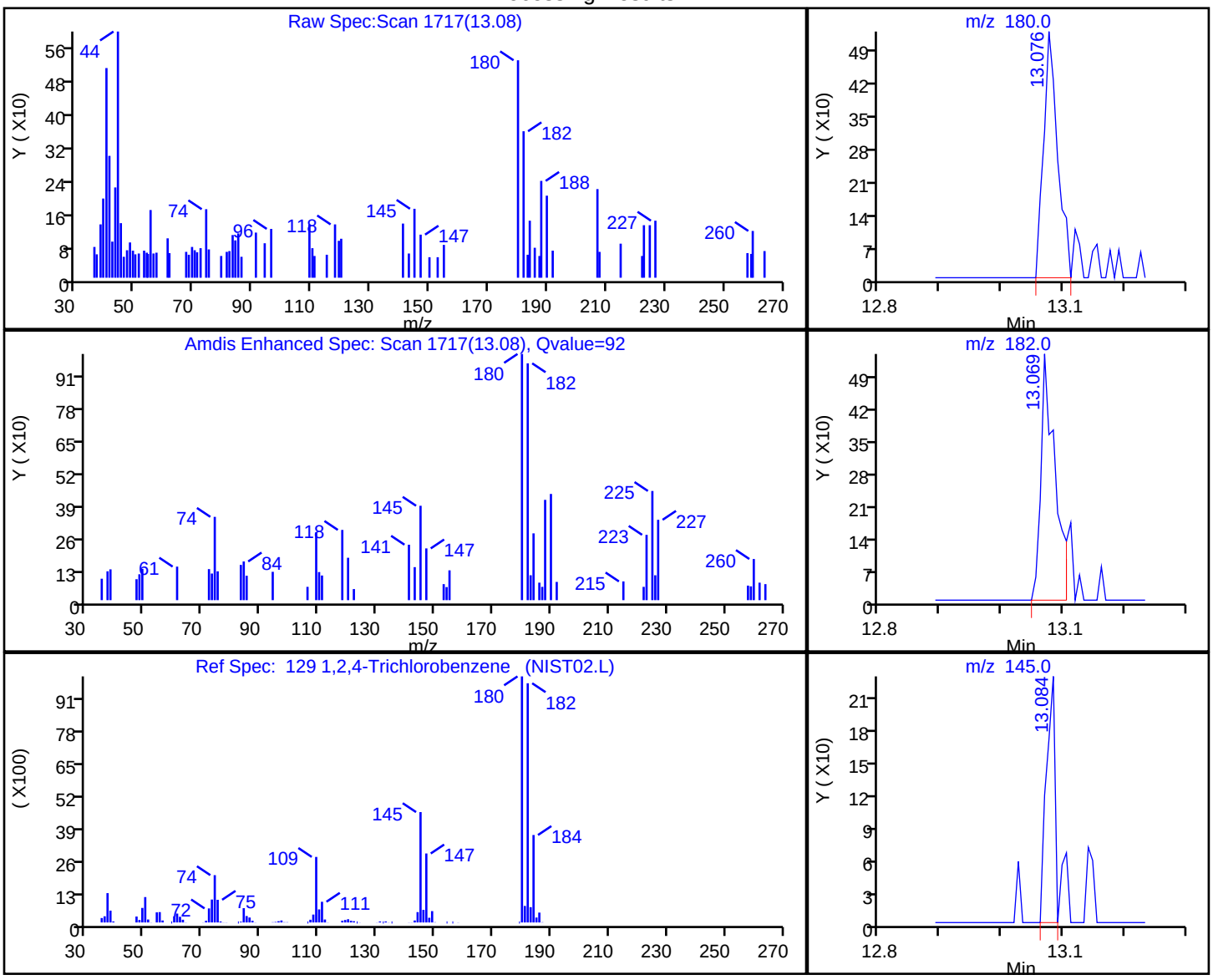
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

129 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
13.08	180.00	848	0.167956
13.07	182.00	854	
13.08	145.00	220	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

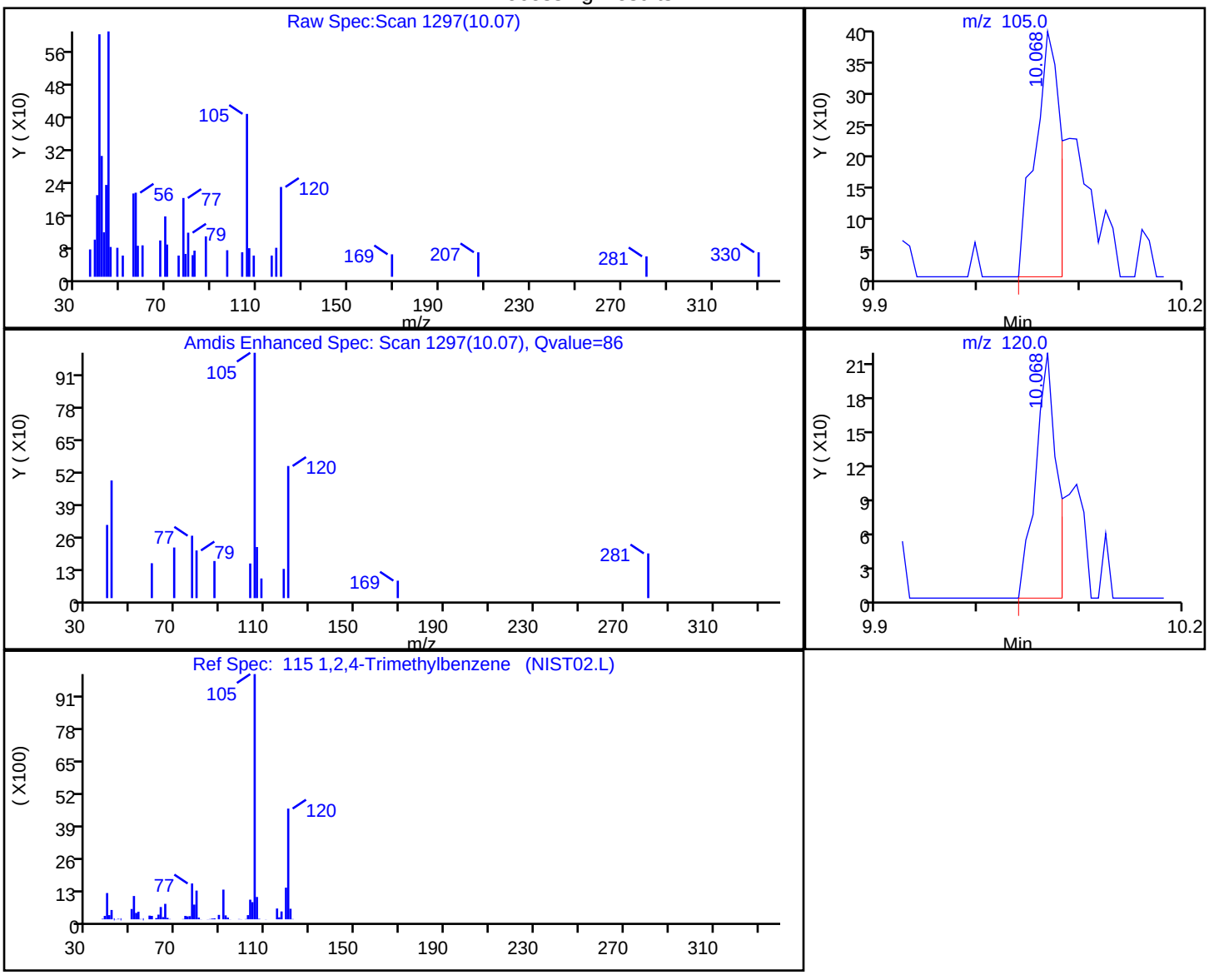
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

115 1,2,4-Trimethylbenzene, CAS: 95-63-6

Processing Results



RT	Mass	Response	Amount
10.07	105.00	669	0.044675
10.07	120.00	314	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

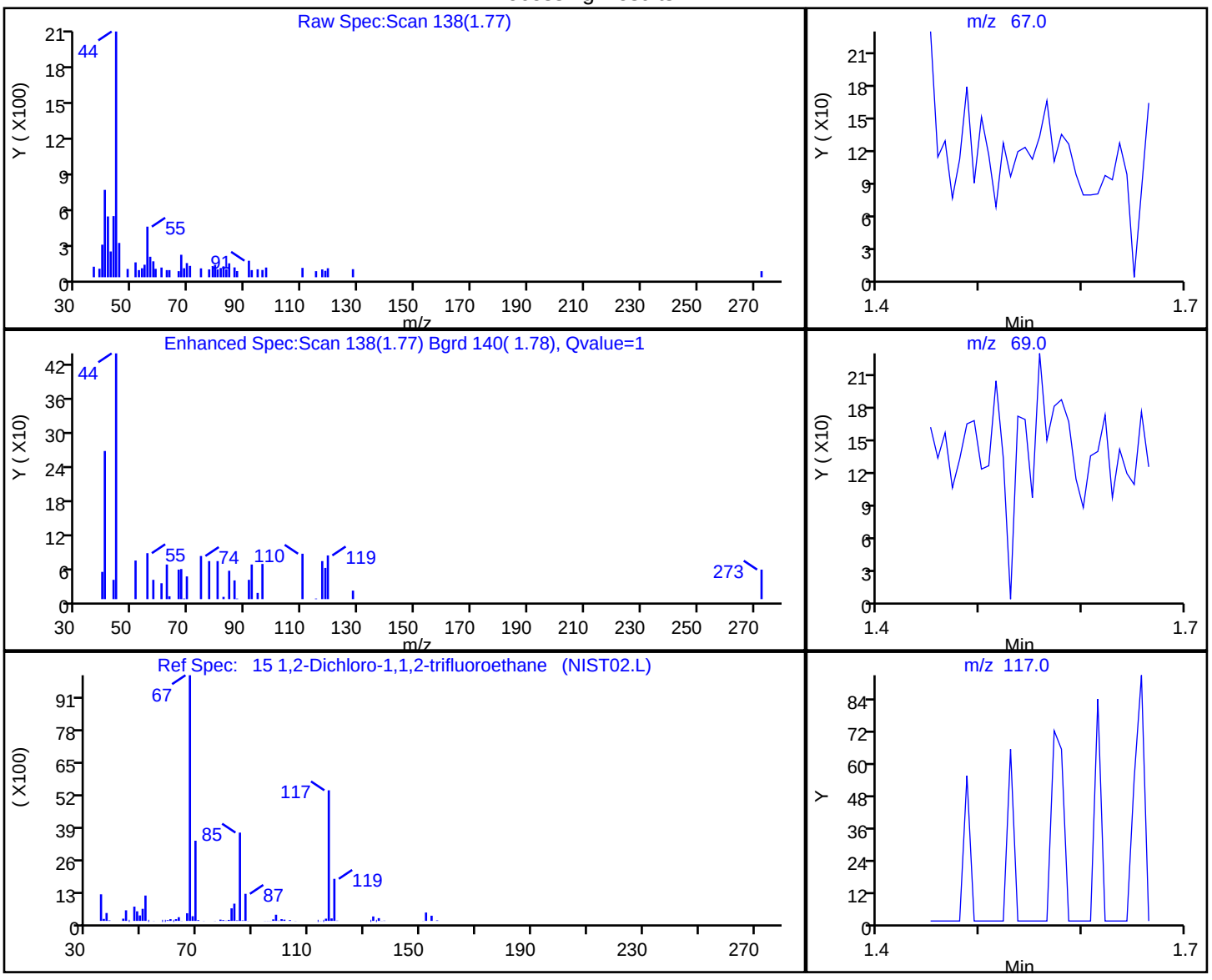
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 1,2-Dichloro-1,1,2-trifluoroethane, CAS: 354-23-4

Processing Results



RT	Mass	Response	Amount
1.77	67.00	368	0.085816
1.75	69.00	308	
1.77	117.00	29	
1.77	119.00	101	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

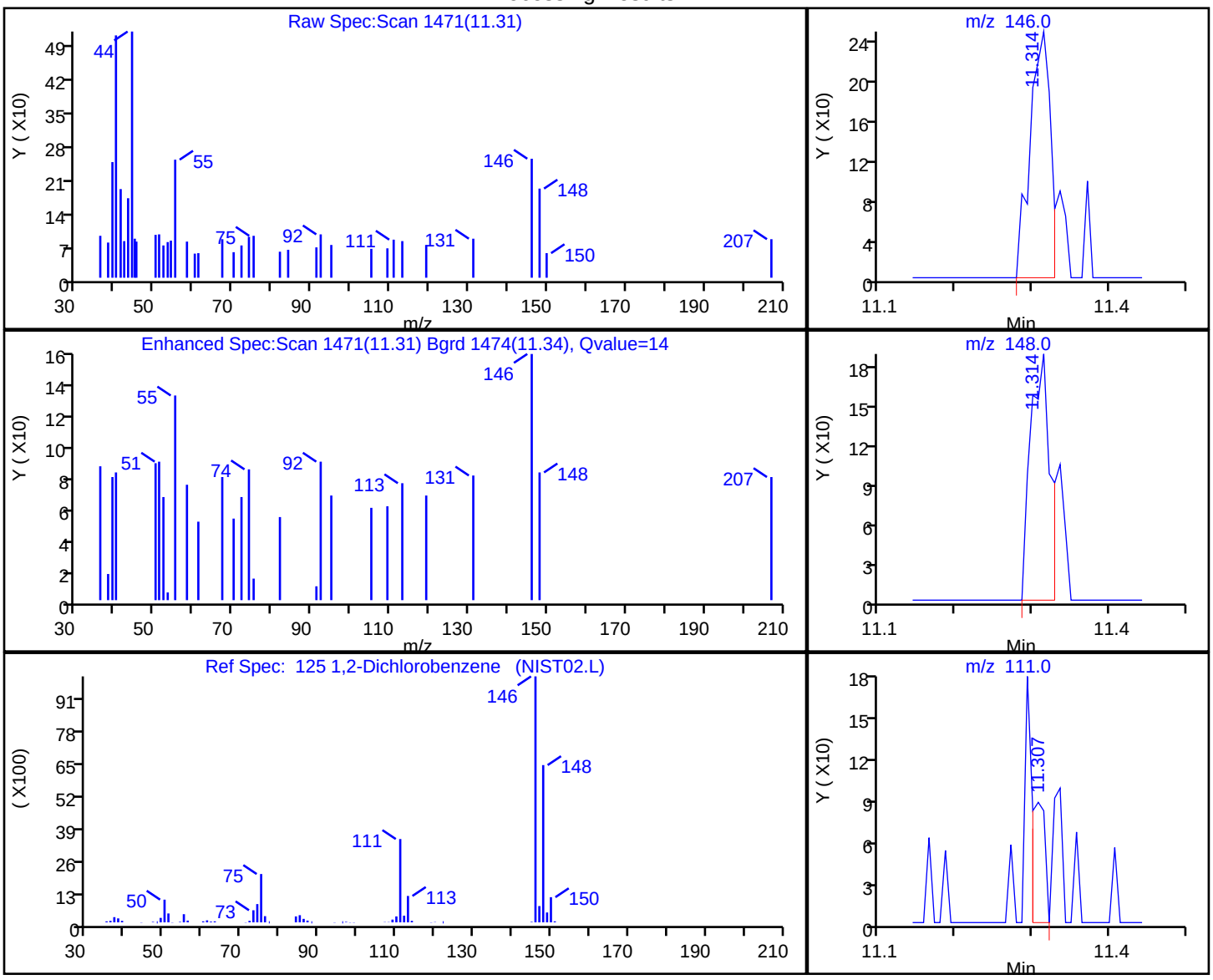
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dichlorobenzene, CAS: 95-50-1

Processing Results



RT	Mass	Response	Amount
11.31	146.00	459	0.060365
11.31	148.00	330	
11.31	111.00	104	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

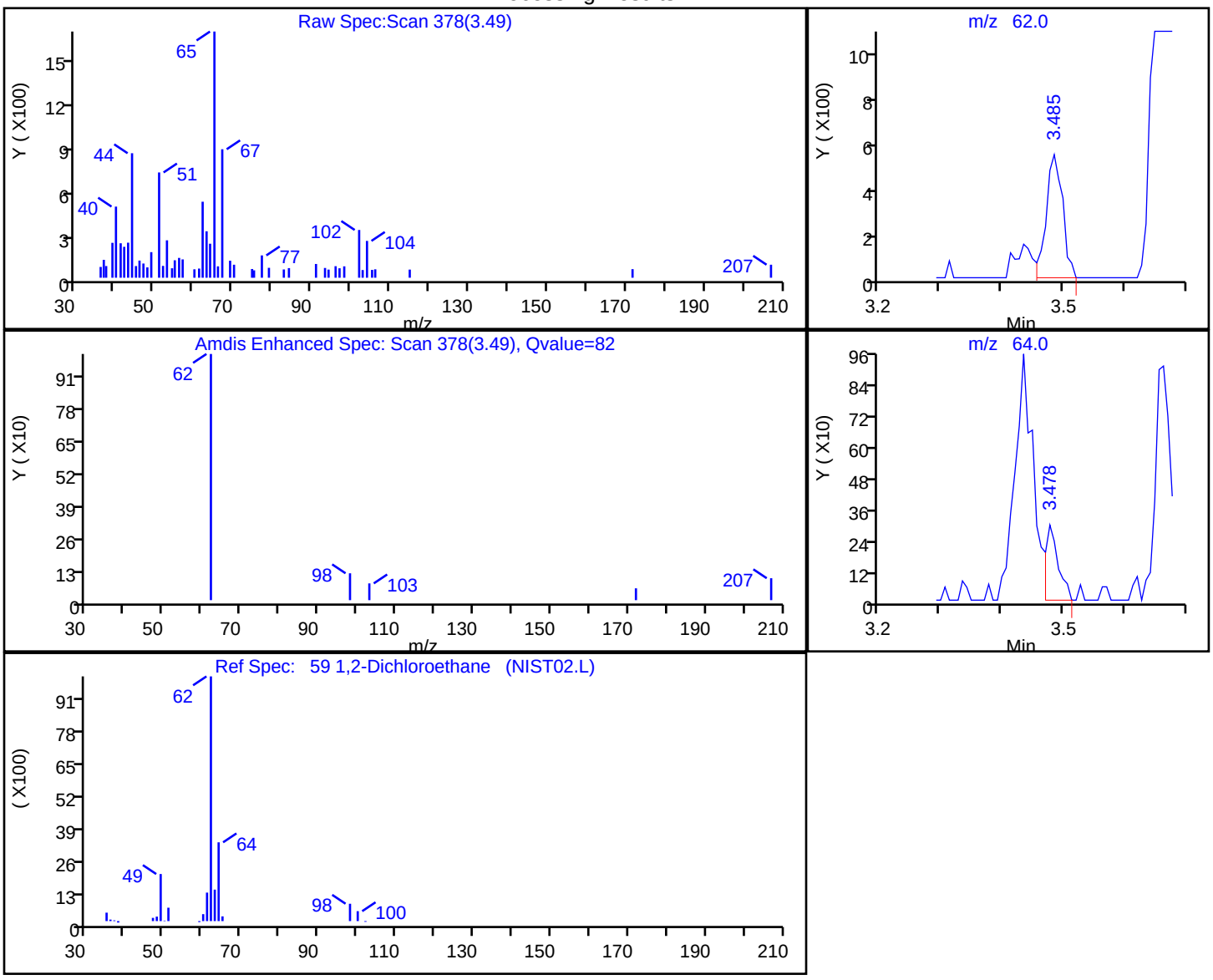
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.49	62.00	963	0.166461
3.48	64.00	420	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

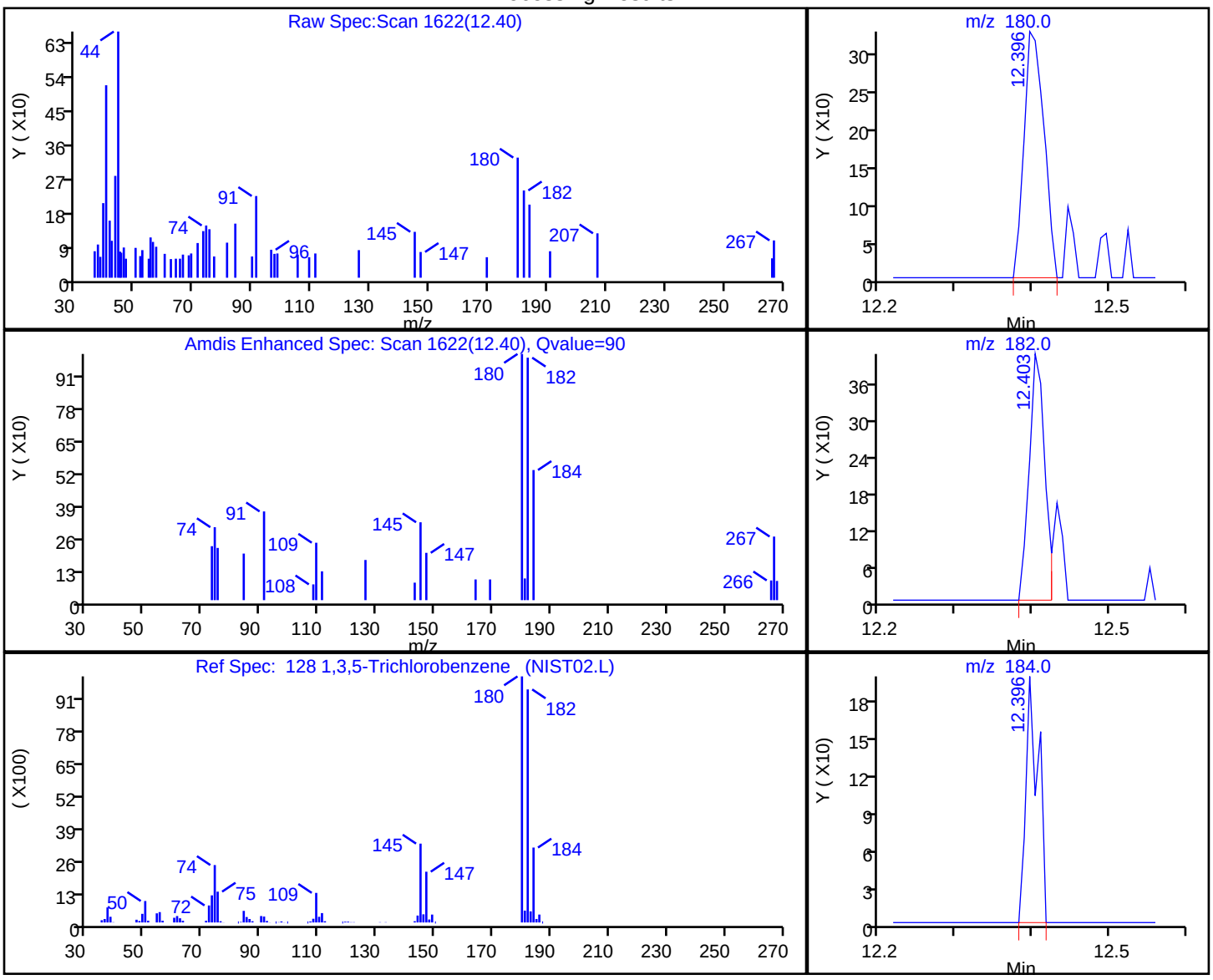
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D		
Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13
Lims ID:	STD8		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

128 1,3,5-Trichlorobenzene, CAS: 108-70-3

Processing Results



RT	Mass	Response	Amount
12.40	180.00	583	0.102373
12.40	182.00	584	
12.40	184.00	222	

Reviewer: delpolitov, 23-Apr-2018 12:29:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

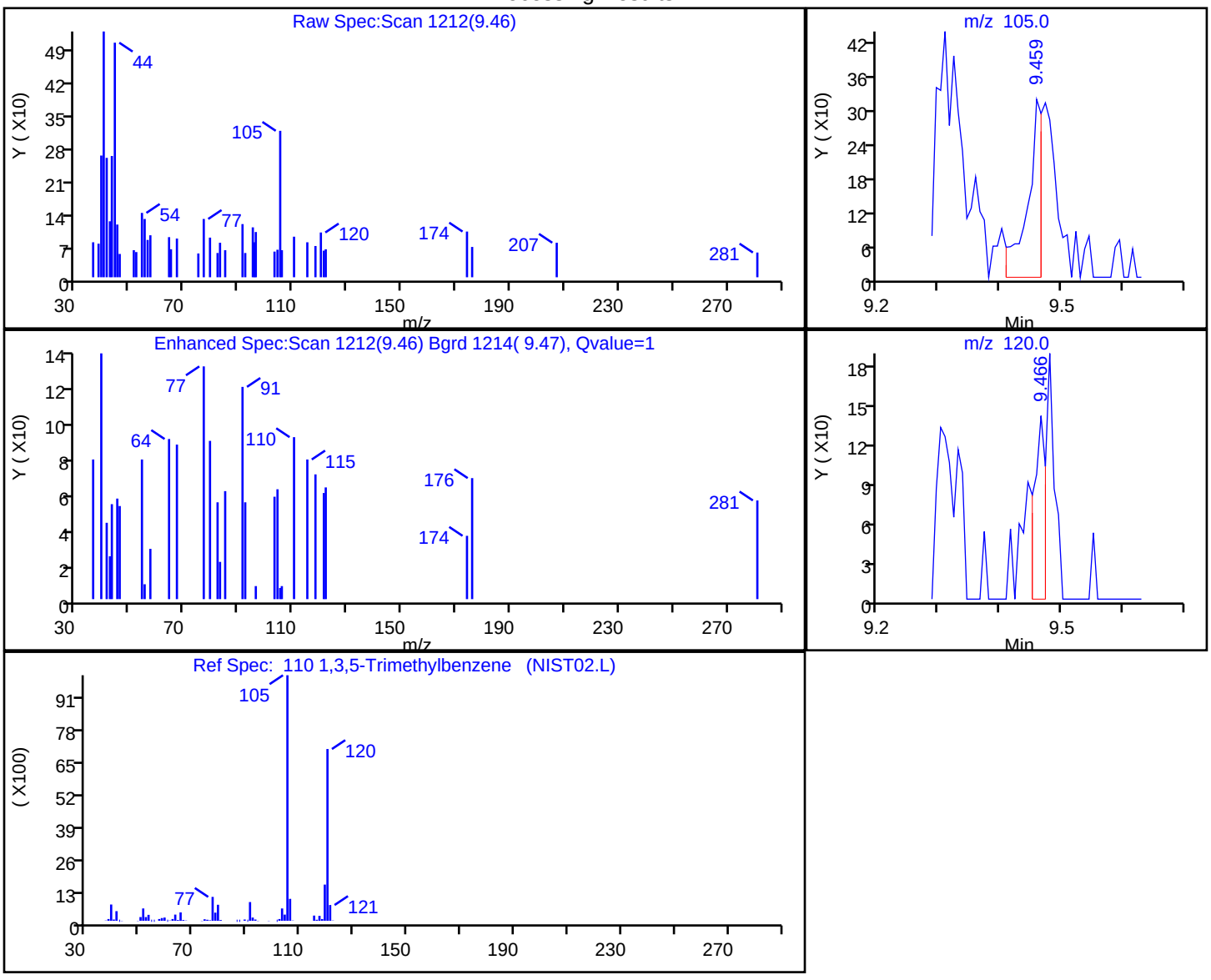
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

110 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
9.46	105.00	519	0.034461
9.47	120.00	180	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

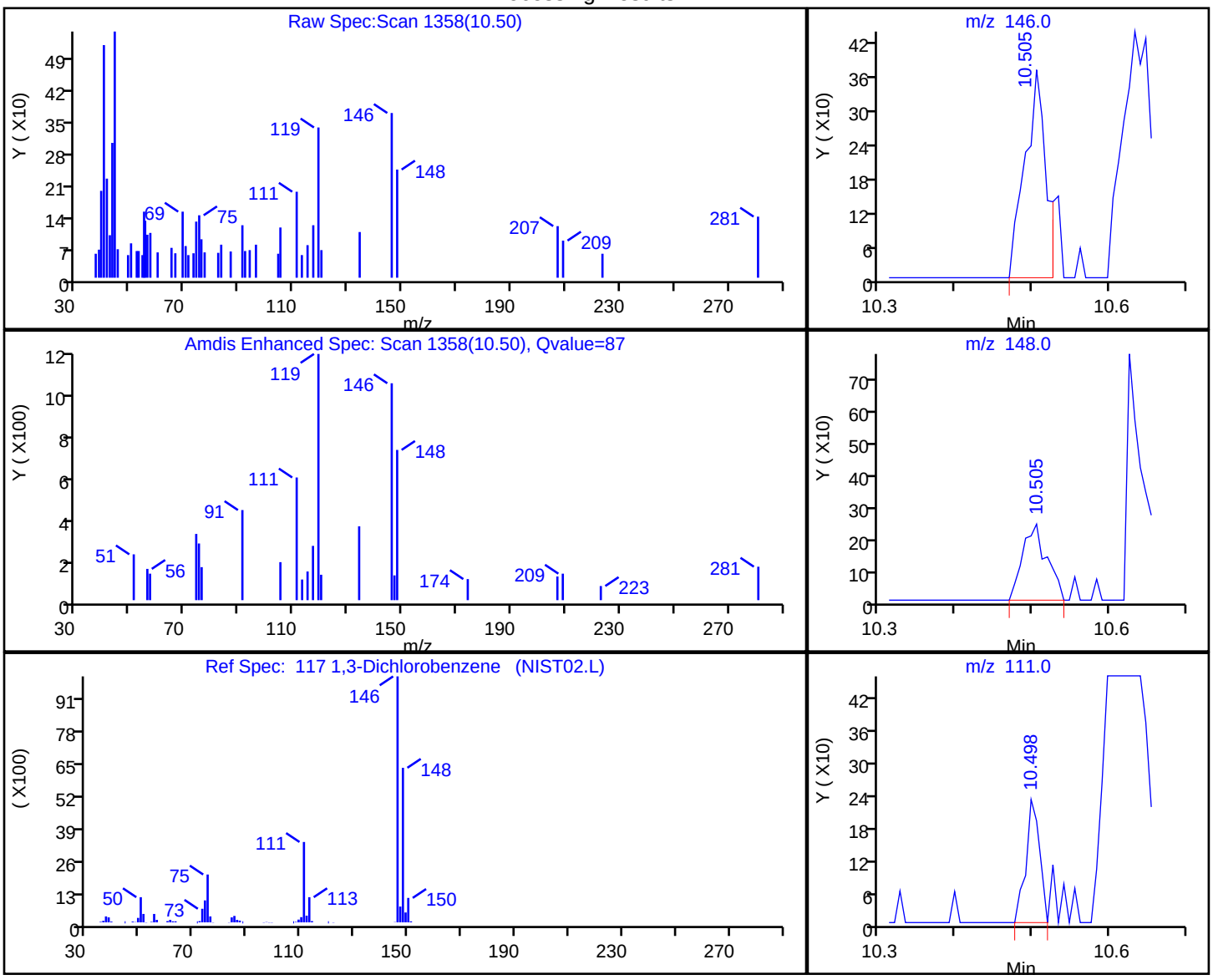
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

117 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
10.50	146.00	694	0.087079
10.50	148.00	526	
10.50	111.00	286	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

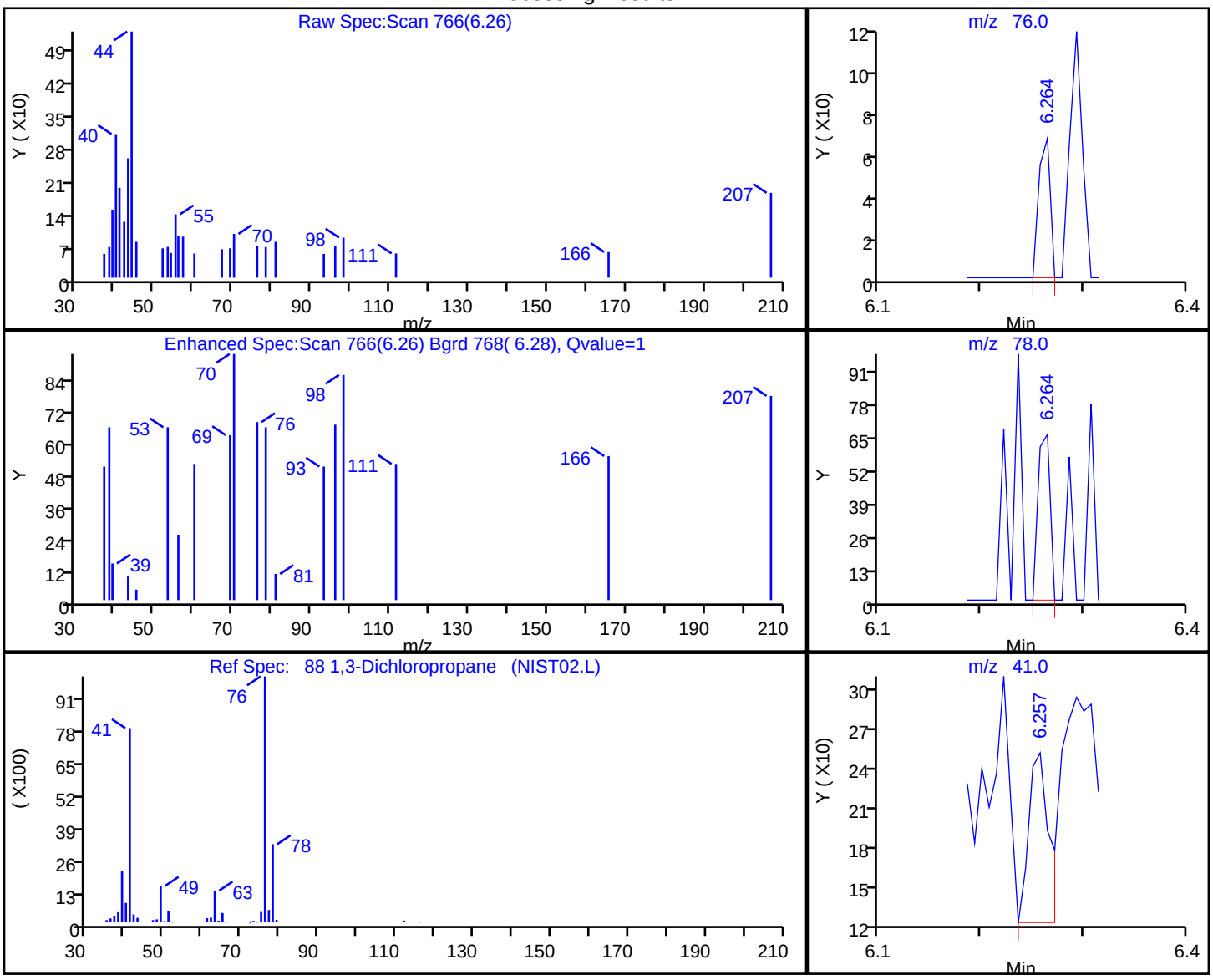
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D				
Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

88 1,3-Dichloropropane, CAS: 142-28-9

Processing Results



RT	Mass	Response	Amount
6.26	76.00	53	0.008937
6.26	78.00	55	
6.26	41.00	168	

Reviewer: delpolitov, 23-Apr-2018 12:29:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

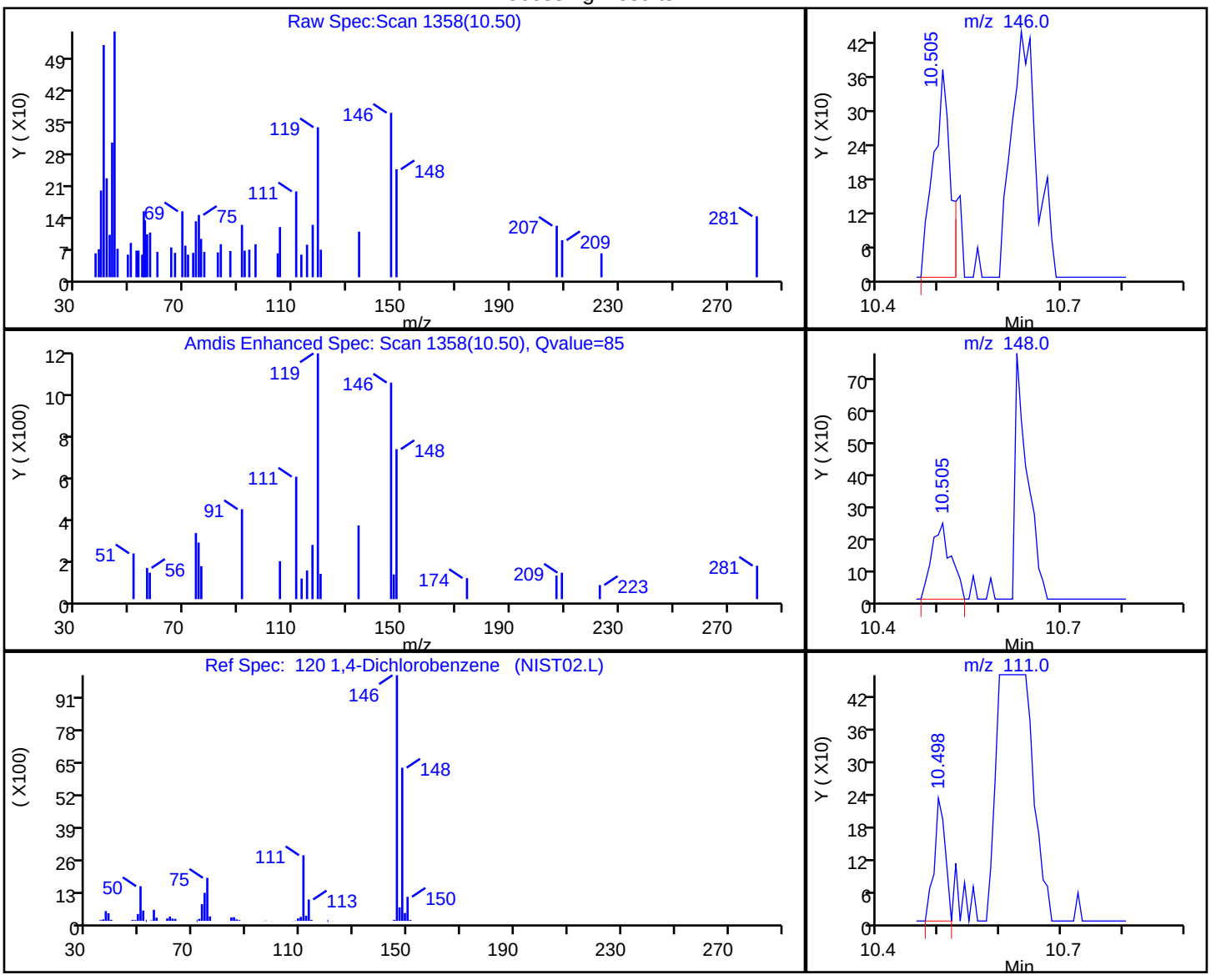
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
10.50	146.00	694	0.083356
10.50	148.00	526	
10.50	111.00	286	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

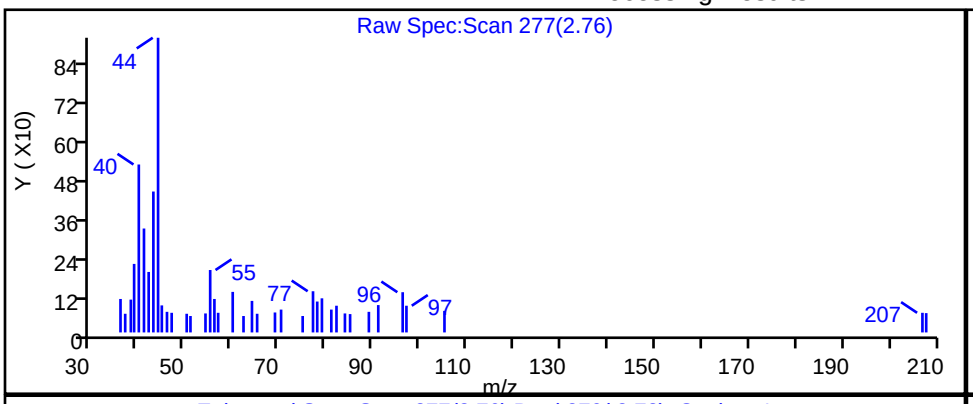
User Disabled Compound Report

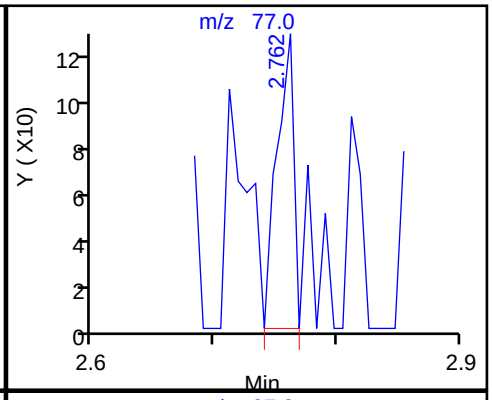
TestAmerica Edison

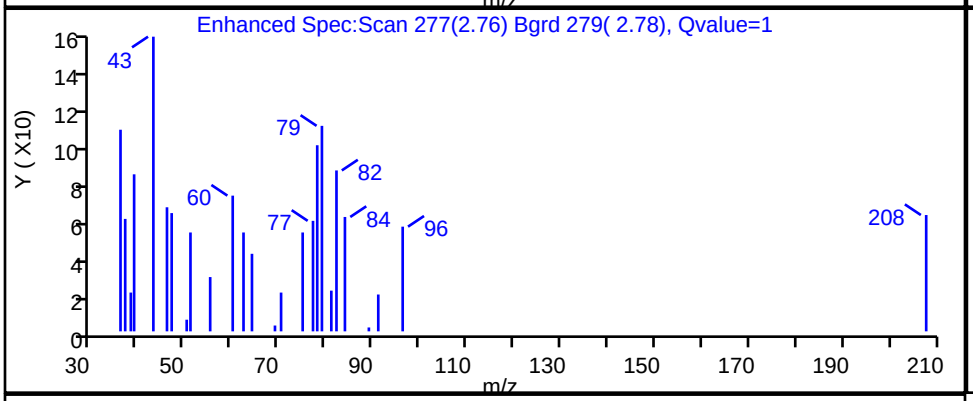
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

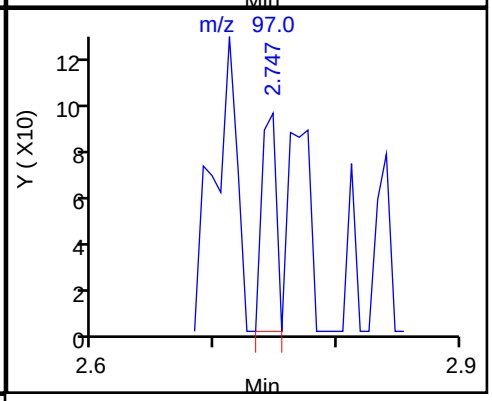
39 2,2-Dichloropropane, CAS: 594-20-7

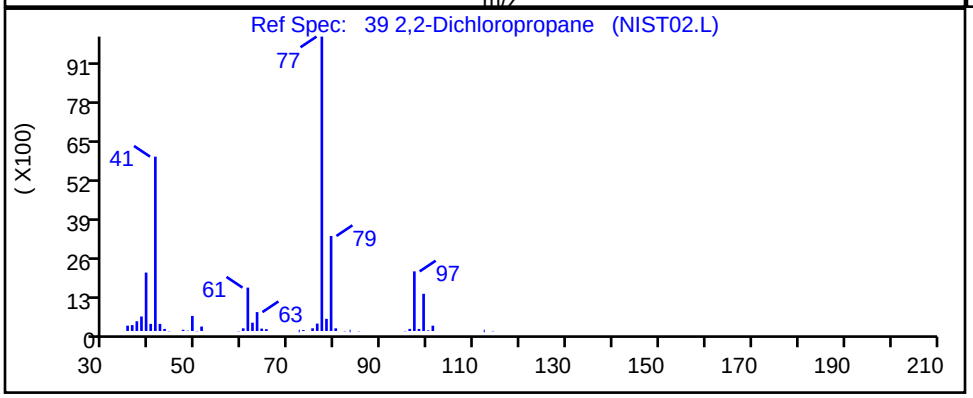
Processing Results











RT	Mass	Response	Amount
2.76	77.00	122	0.021123
2.75	97.00	75	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

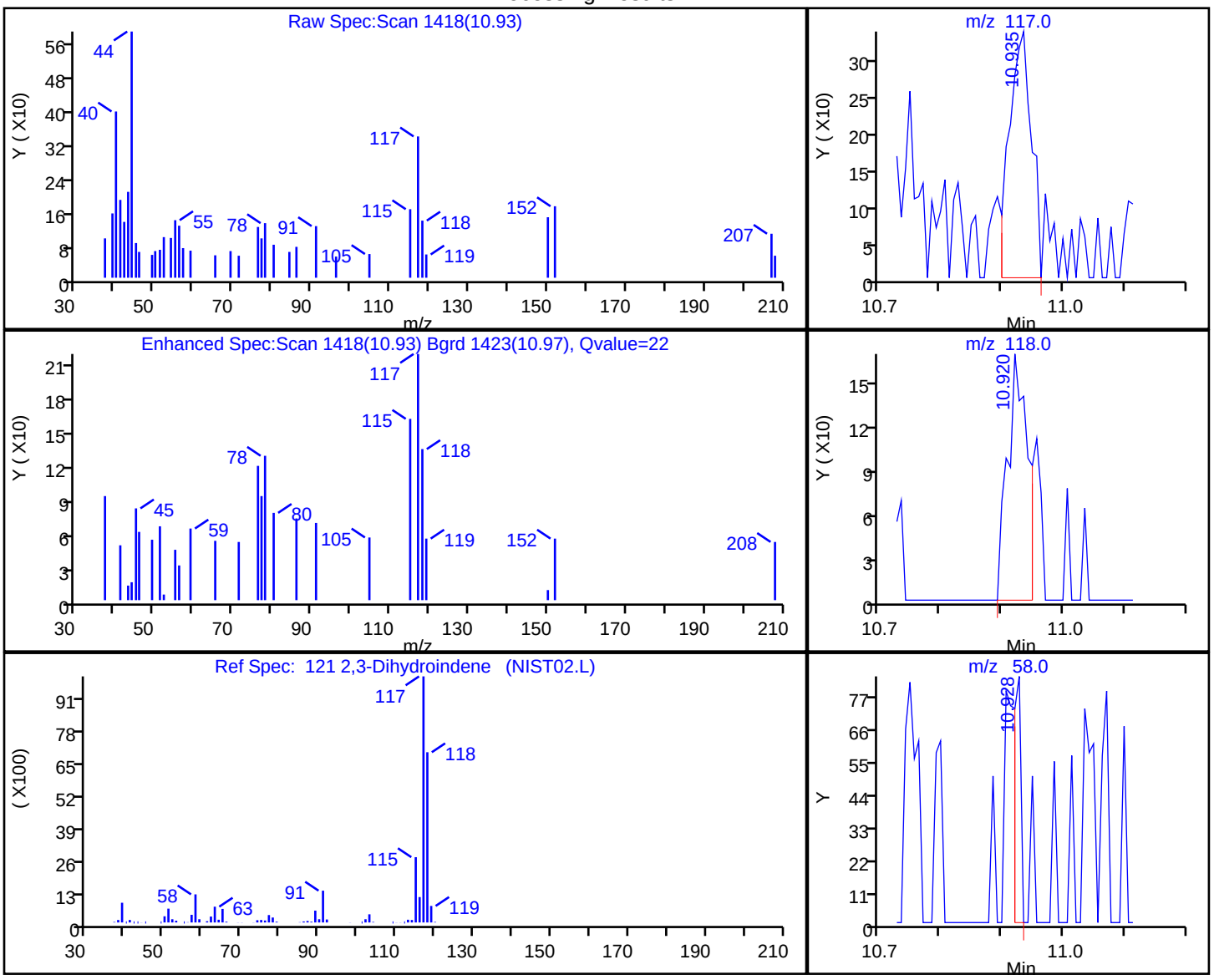
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

121 2,3-Dihydroindene, CAS: 496-11-7

Processing Results



RT	Mass	Response	Amount
10.93	117.00	844	0.055393
10.92	118.00	370	
10.93	58.00	68	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

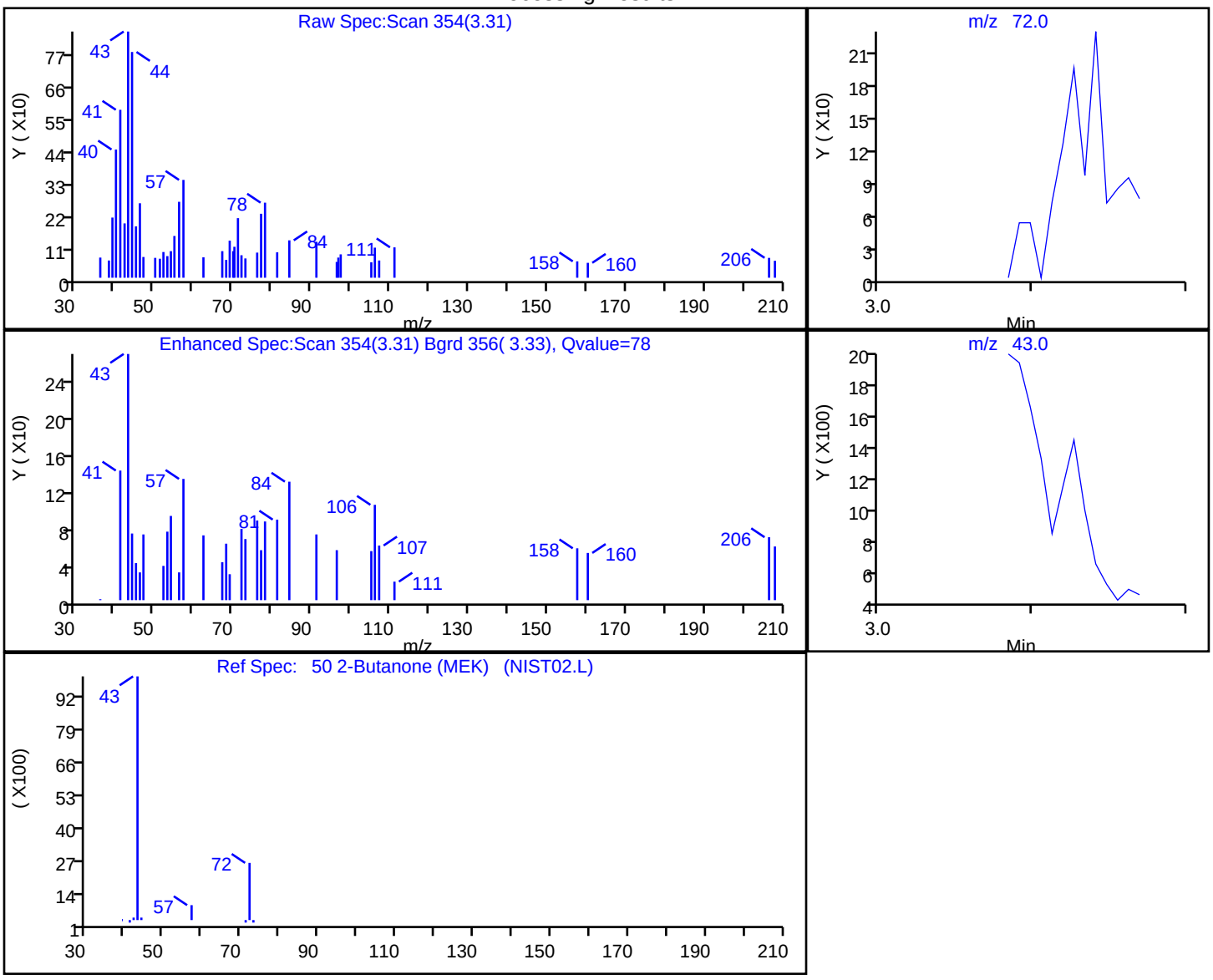
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

50 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.31	72.00	33	0.062068
3.31	43.00	1157	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

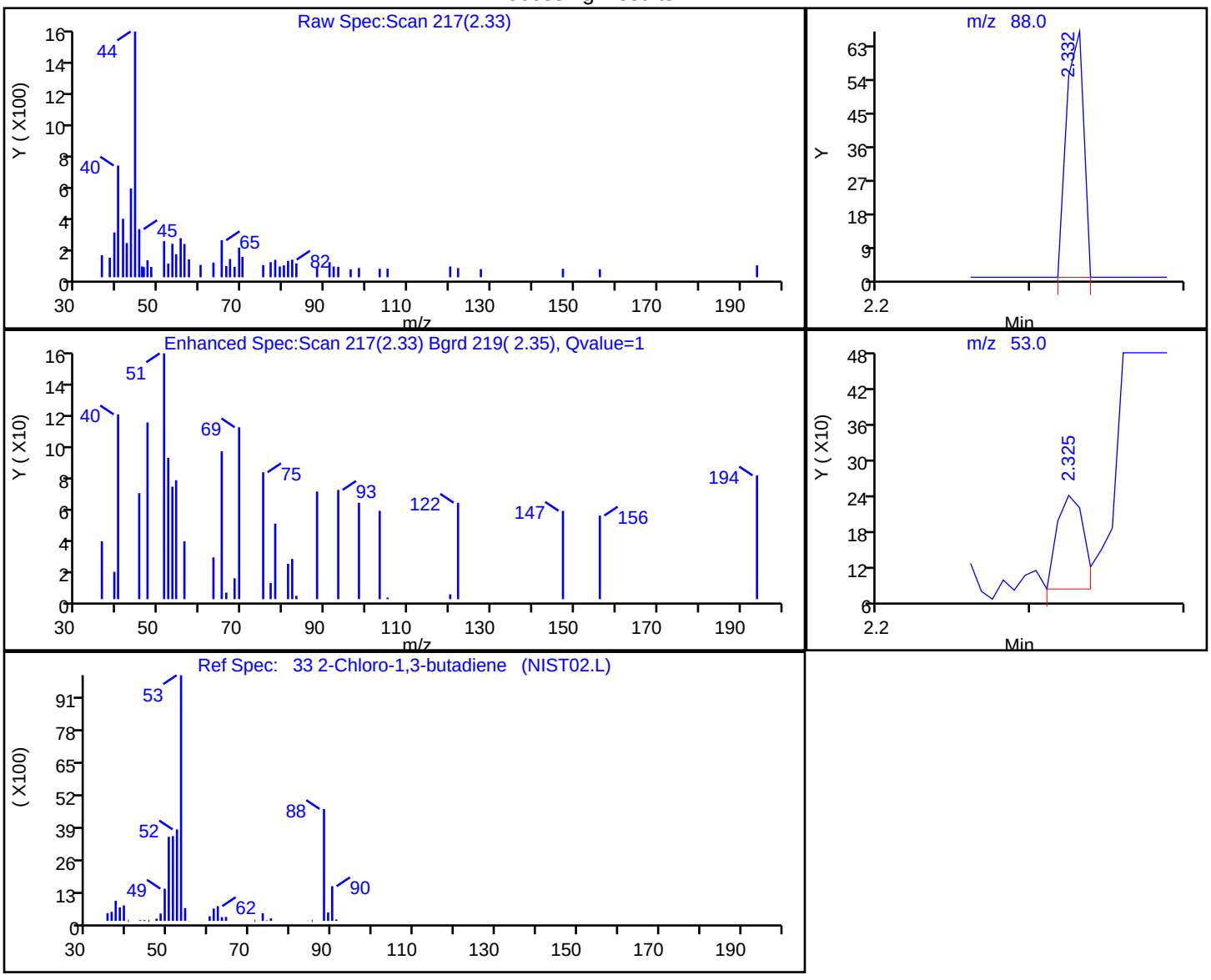
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

33 2-Chloro-1,3-butadiene, CAS: 126-99-8

Processing Results



RT	Mass	Response	Amount
2.33	88.00	52	0.015716
2.32	53.00	191	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

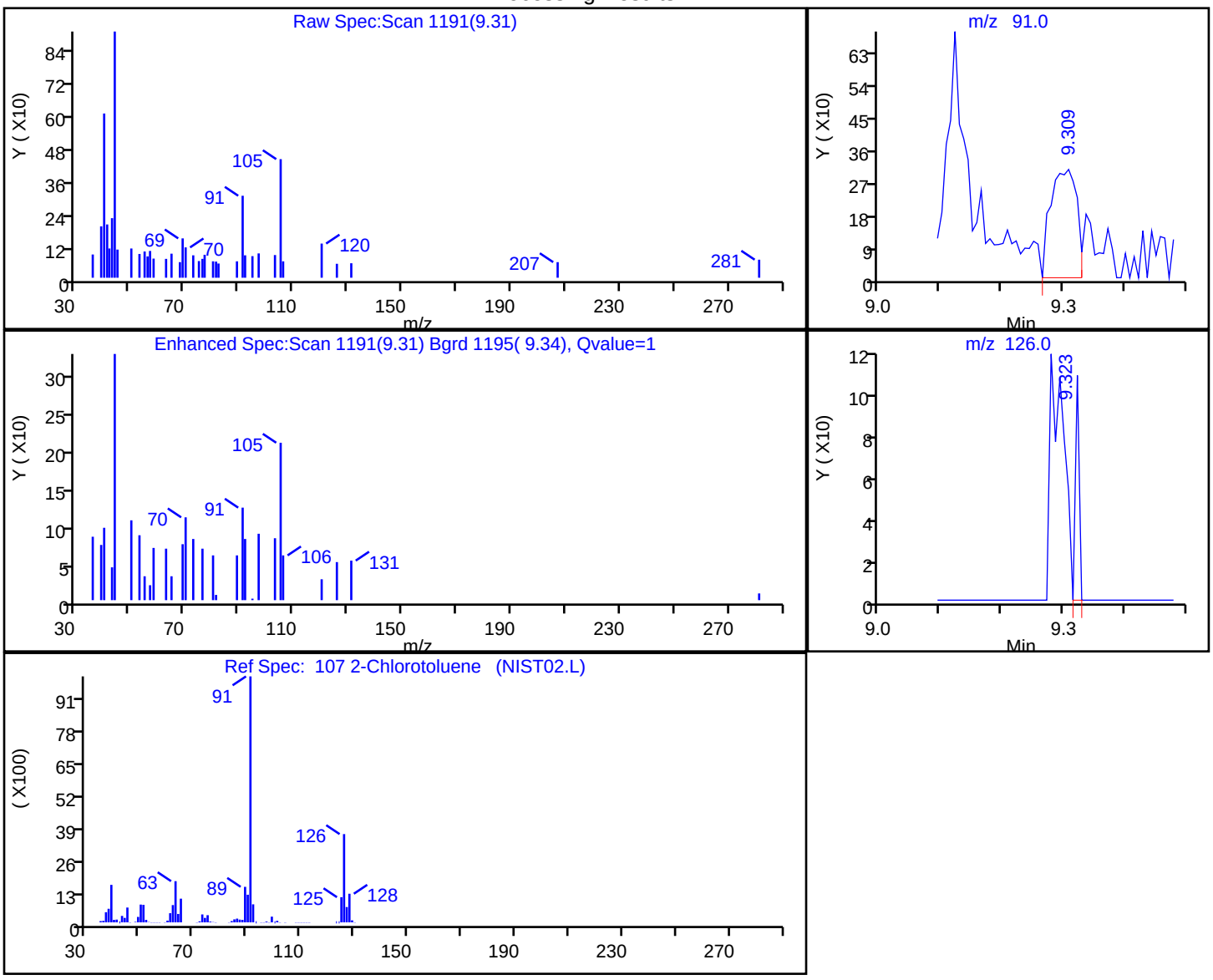
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

107 2-Chlorotoluene, CAS: 95-49-8

Processing Results



RT	Mass	Response	Amount
9.31	91.00	896	0.060642
9.32	126.00	45	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

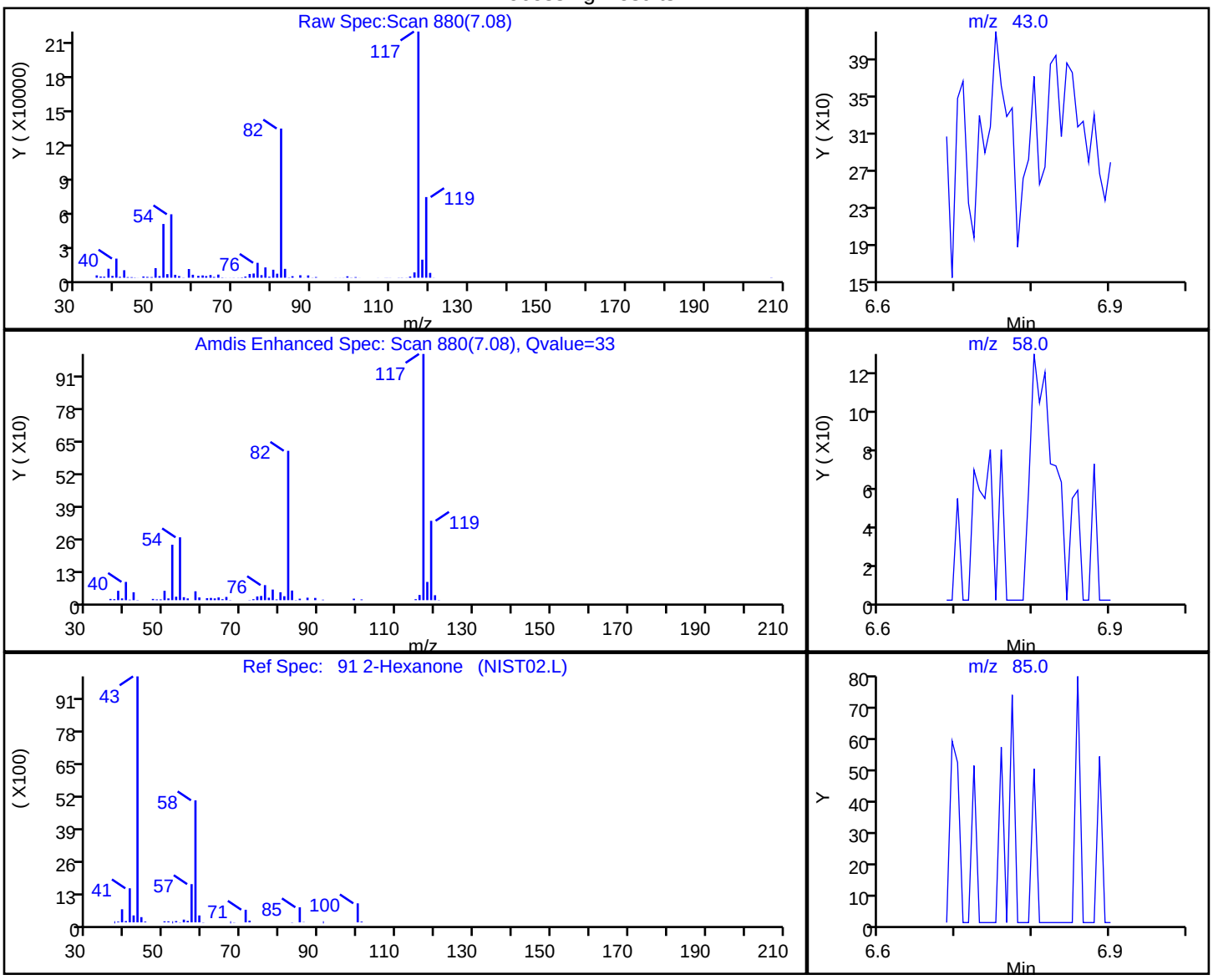
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

91 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
7.08	43.00	607	0.197359
7.08	58.00	17396	
7.08	85.00	3111	
7.08	100.00	208	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

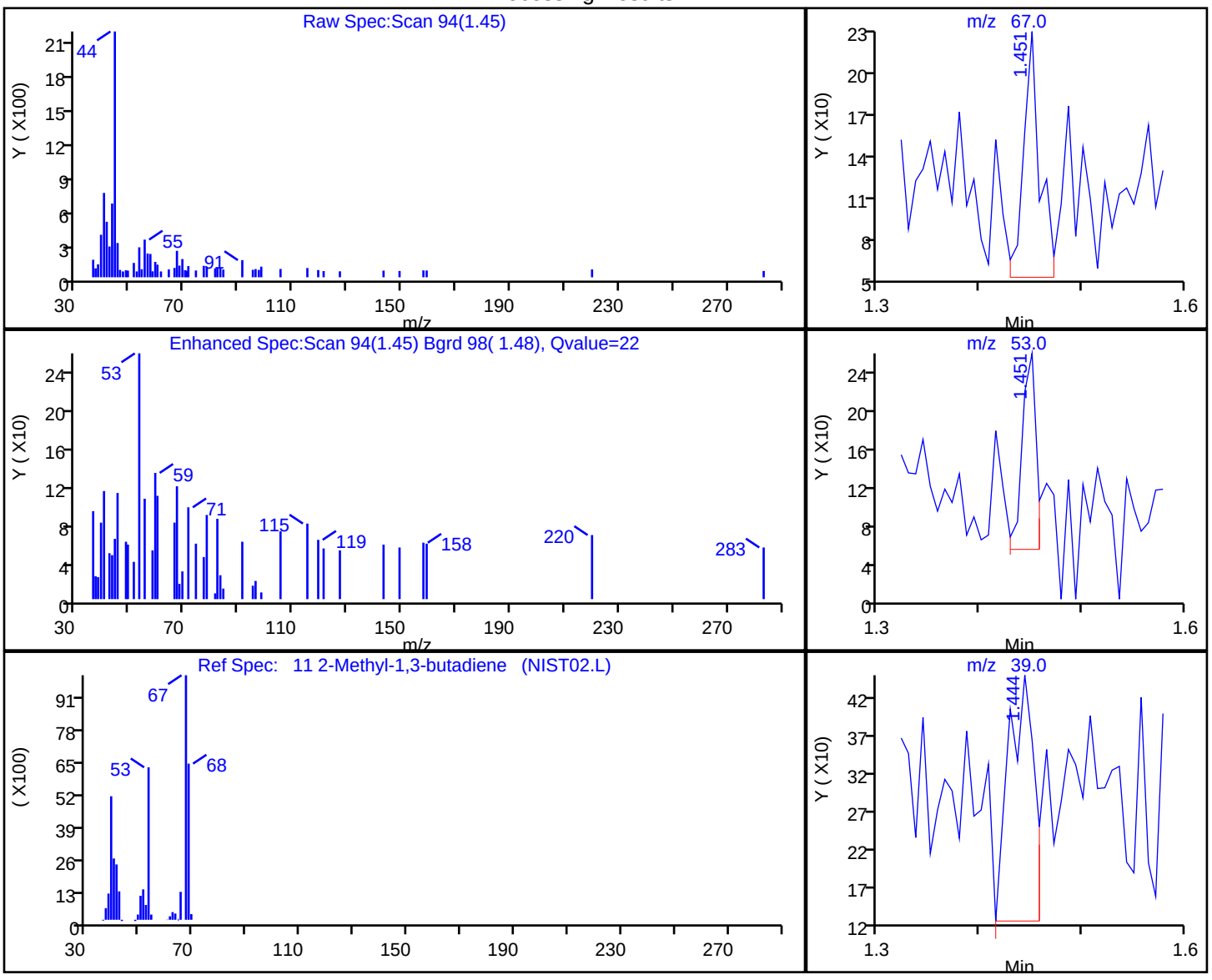
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 2-Methyl-1,3-butadiene, CAS: 78-79-5

Processing Results



RT	Mass	Response	Amount
1.45	67.00	187	0.036422
1.45	53.00	199	
1.44	39.00	561	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

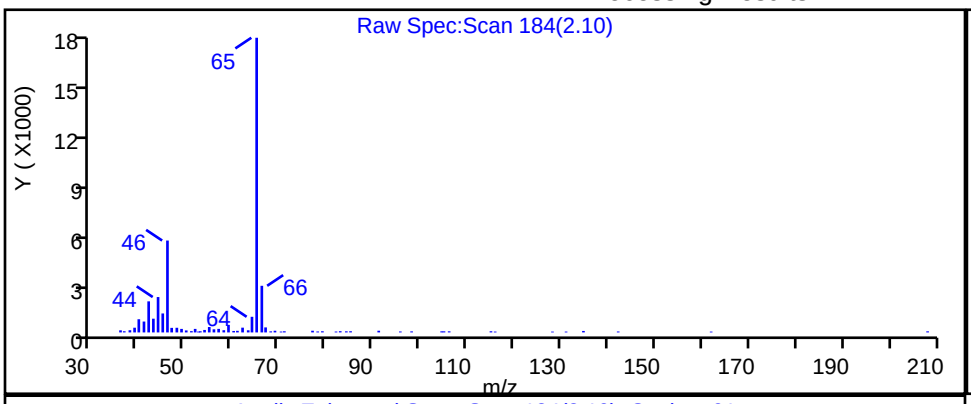
User Disabled Compound Report

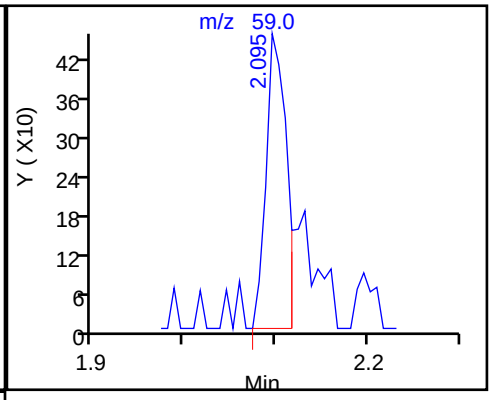
TestAmerica Edison

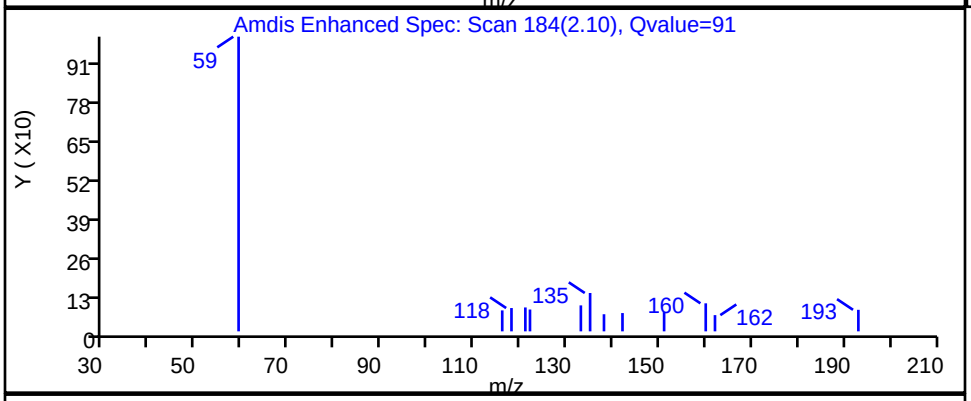
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

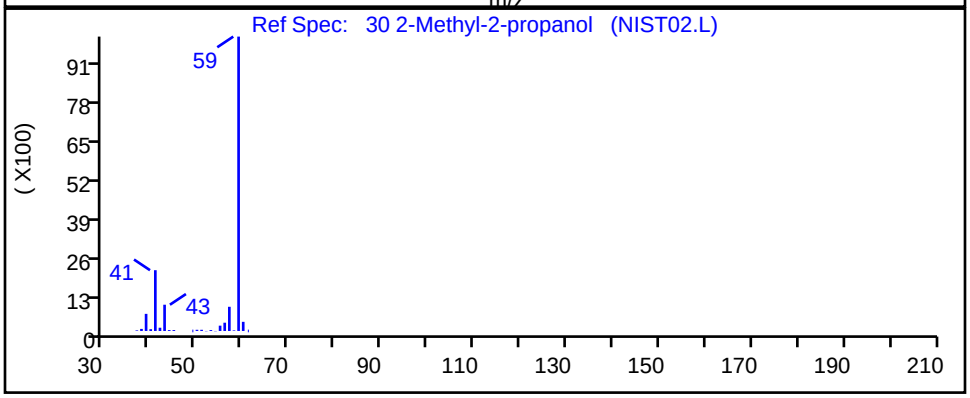
30 2-Methyl-2-propanol, CAS: 75-65-0

Processing Results









RT	Mass	Response	Amount
2.10	59.00	694	1.540874

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

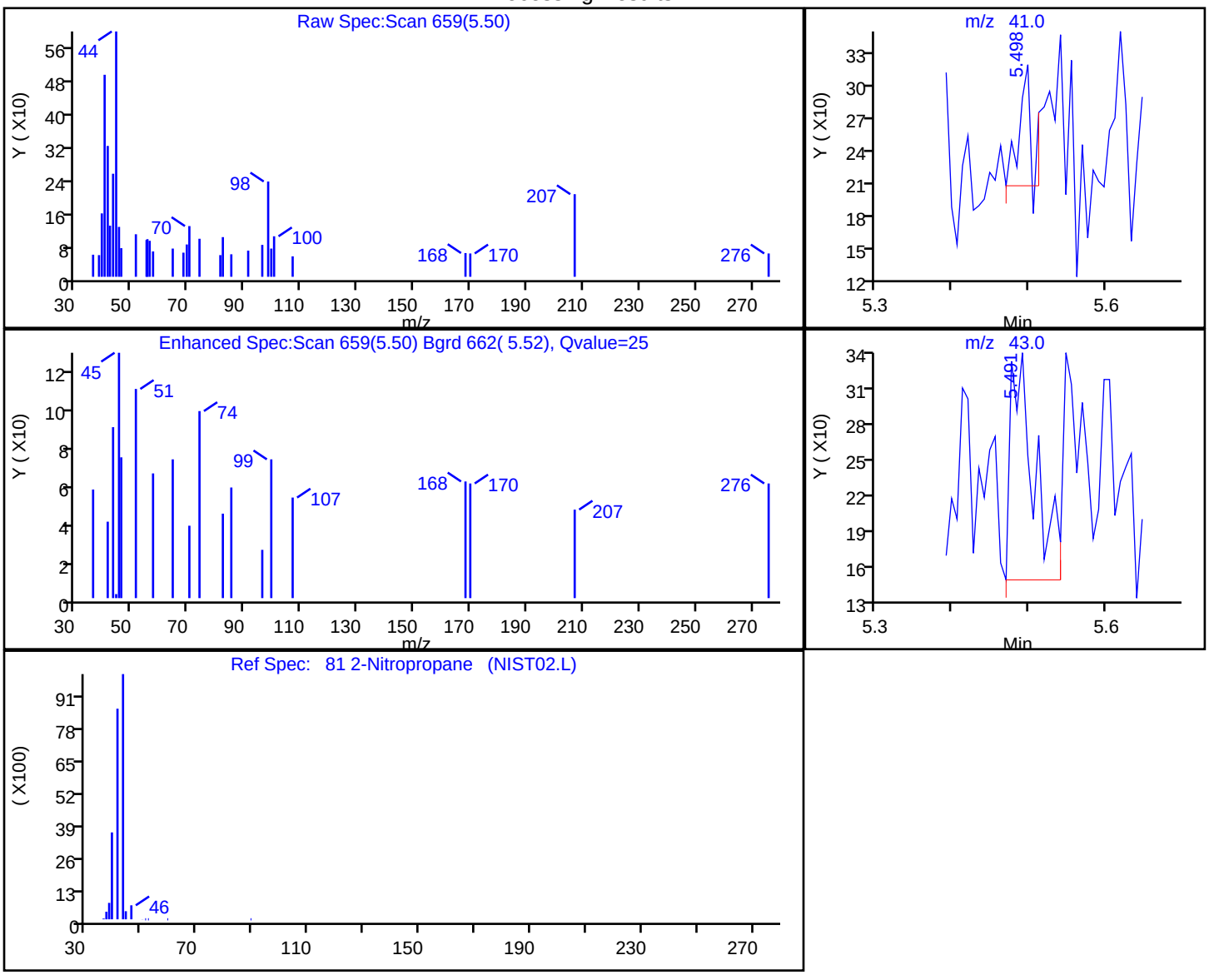
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

81 2-Nitropropane, CAS: 79-46-9

Processing Results



RT	Mass	Response	Amount
5.50	41.00	123	0.104540
5.49	43.00	403	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

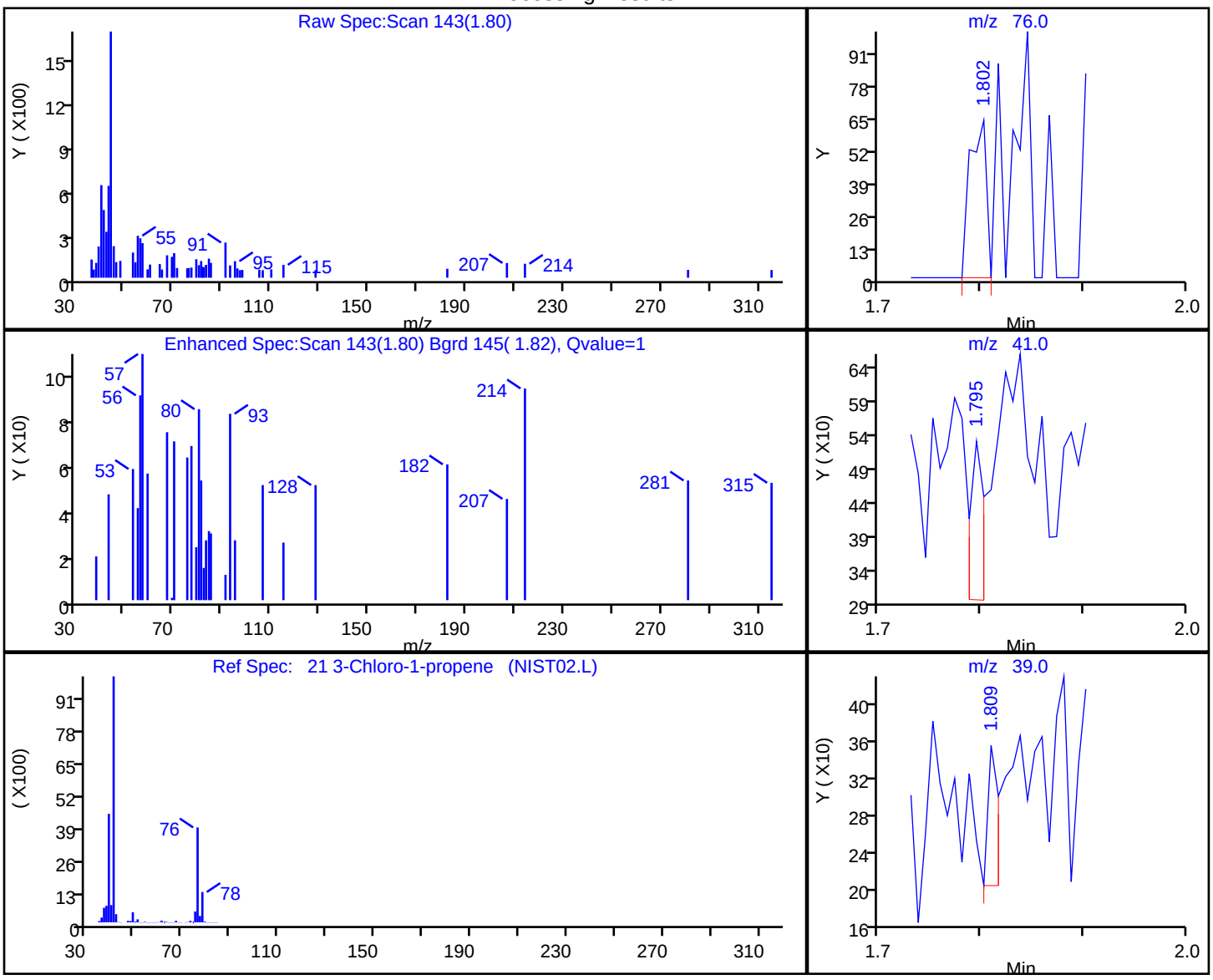
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

21 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
1.80	76.00	72	0.035098
1.79	41.00	218	
1.81	39.00	101	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

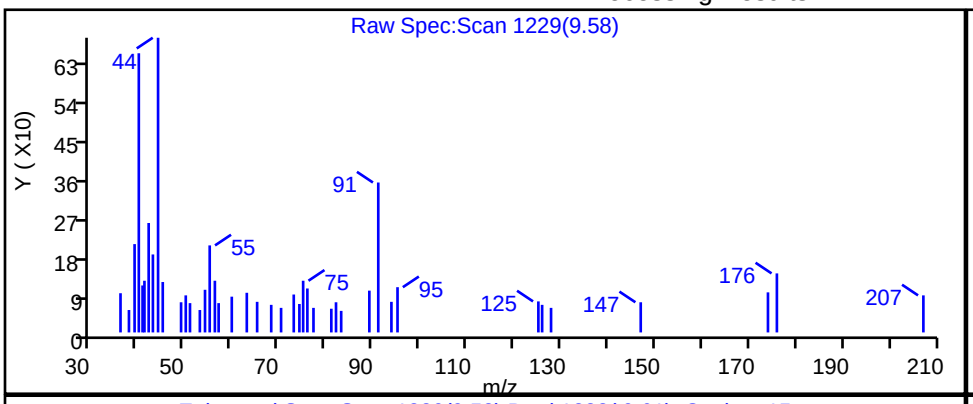
User Disabled Compound Report

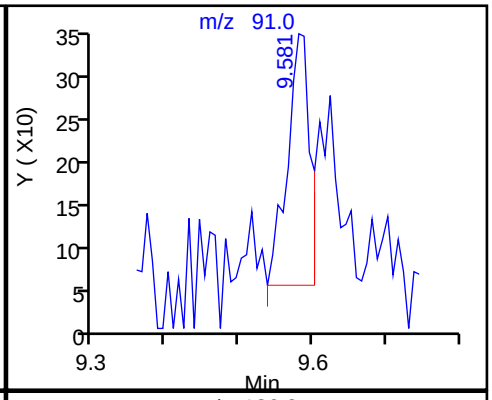
TestAmerica Edison

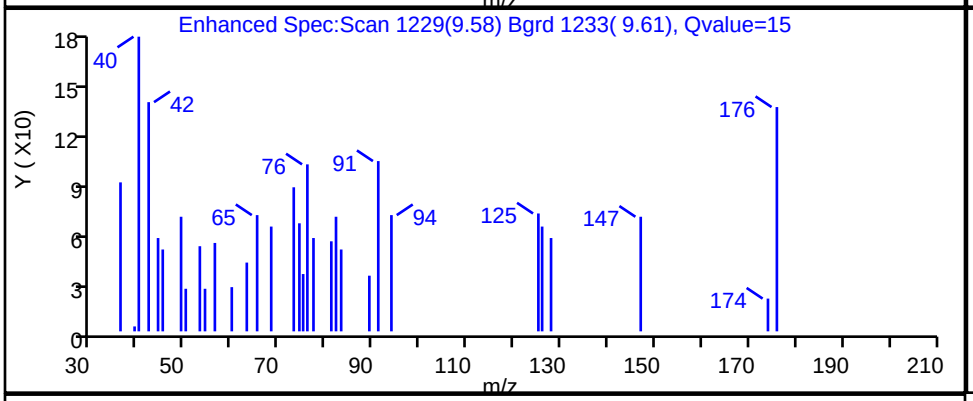
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D				
Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

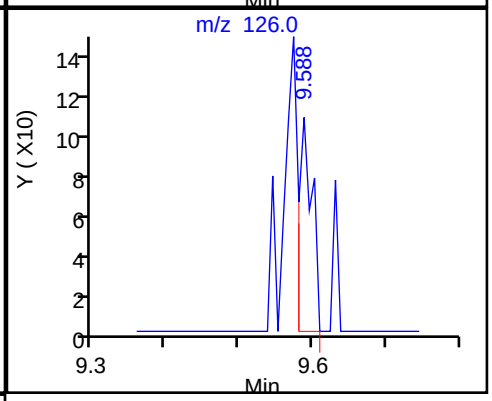
112 4-Chlorotoluene, CAS: 106-43-4

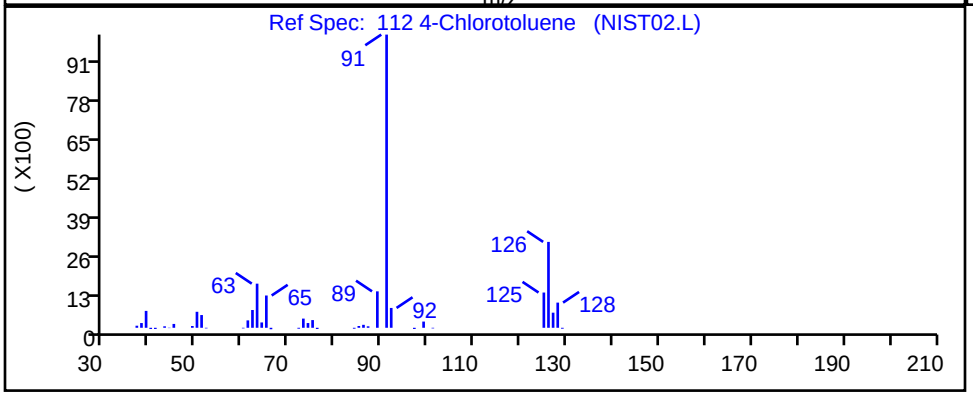
Processing Results











RT	Mass	Response	Amount
9.58	91.00	637	0.046742
9.59	126.00	132	

Reviewer: delpolitov, 23-Apr-2018 12:29:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

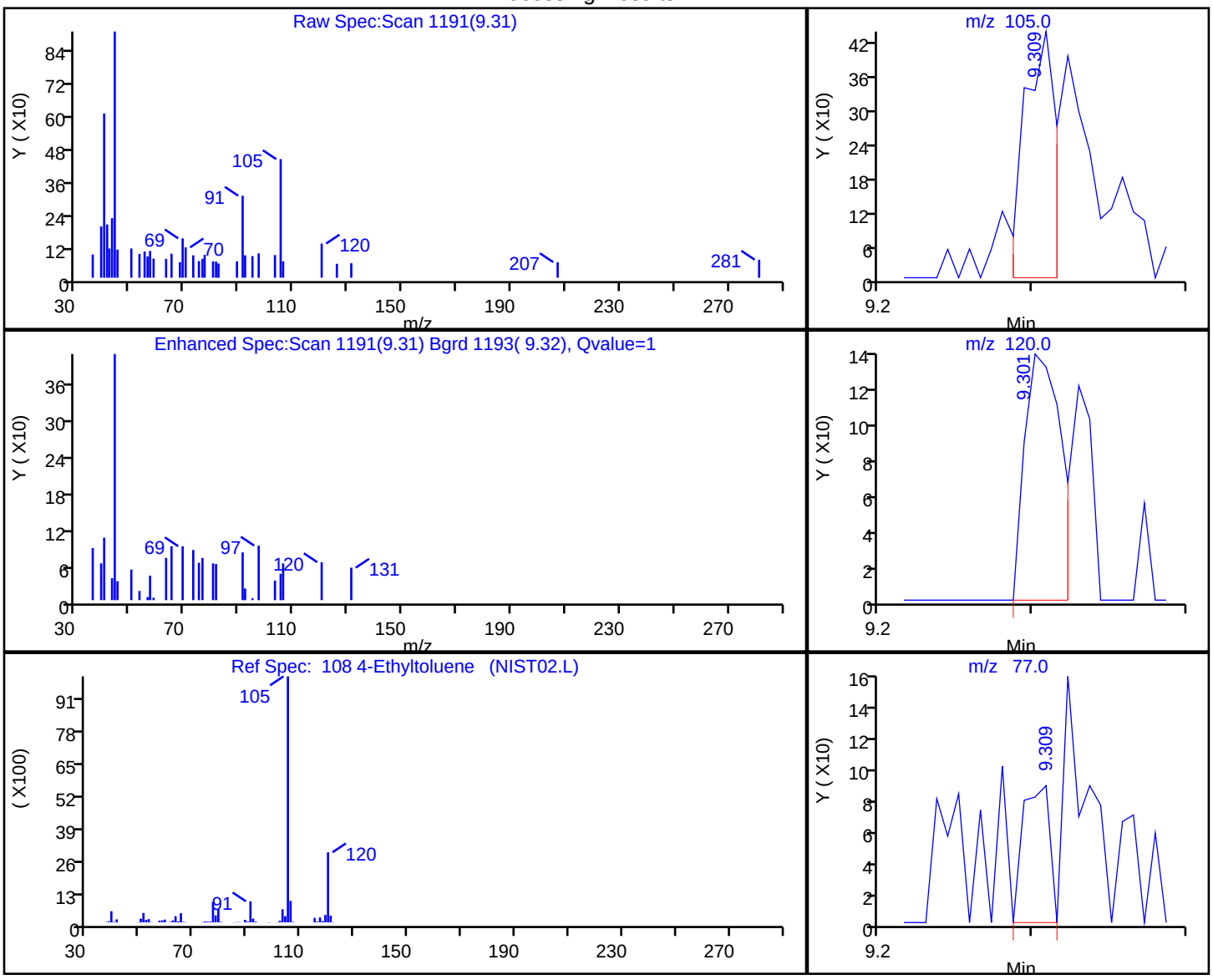
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

108 4-Ethyltoluene, CAS: 622-96-8

Processing Results



RT	Mass	Response	Amount
9.31	105.00	619	0.035091
9.30	120.00	219	
9.31	77.00	101	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

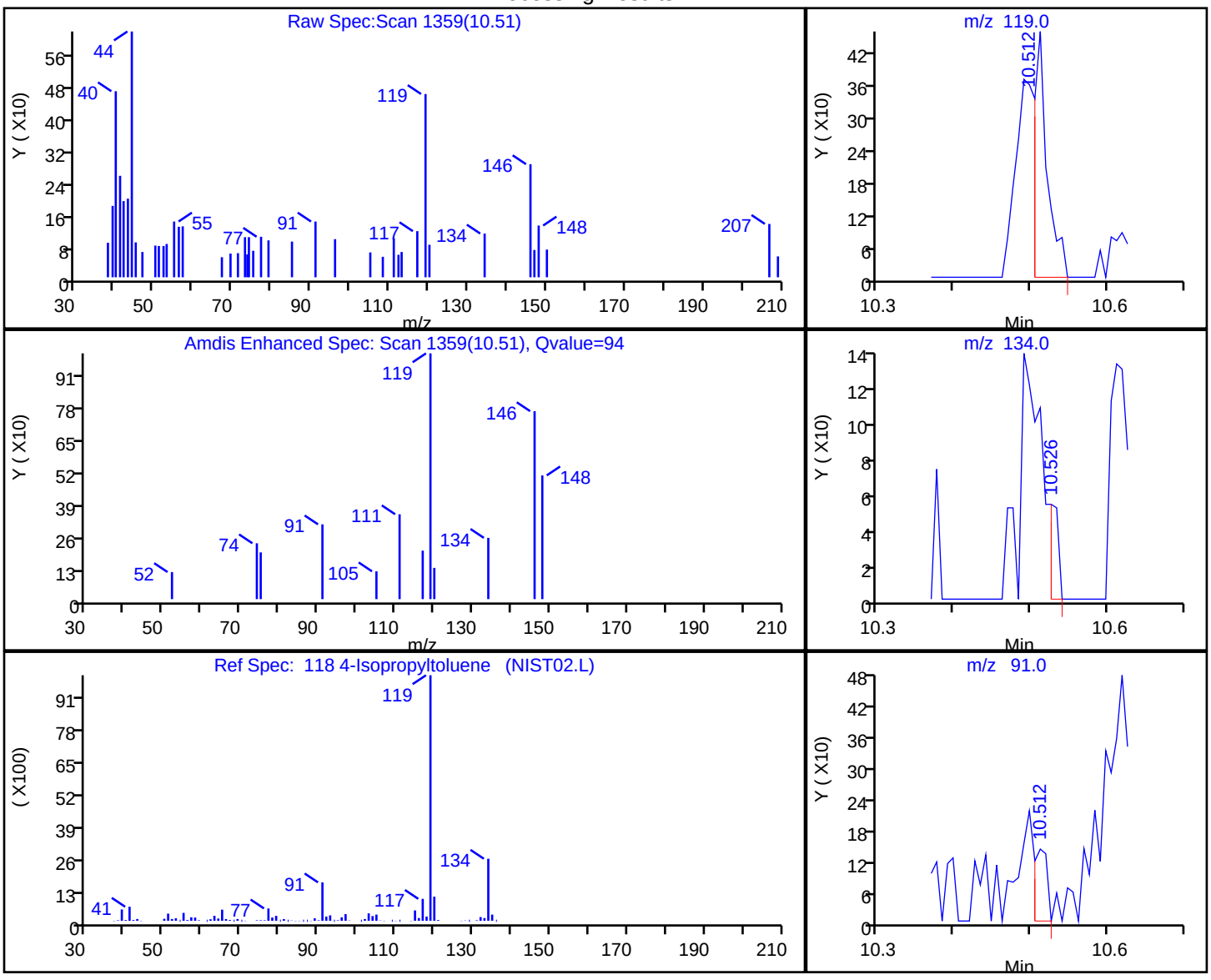
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

118 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
10.51	119.00	542	0.033833
10.53	134.00	46	
10.51	91.00	165	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

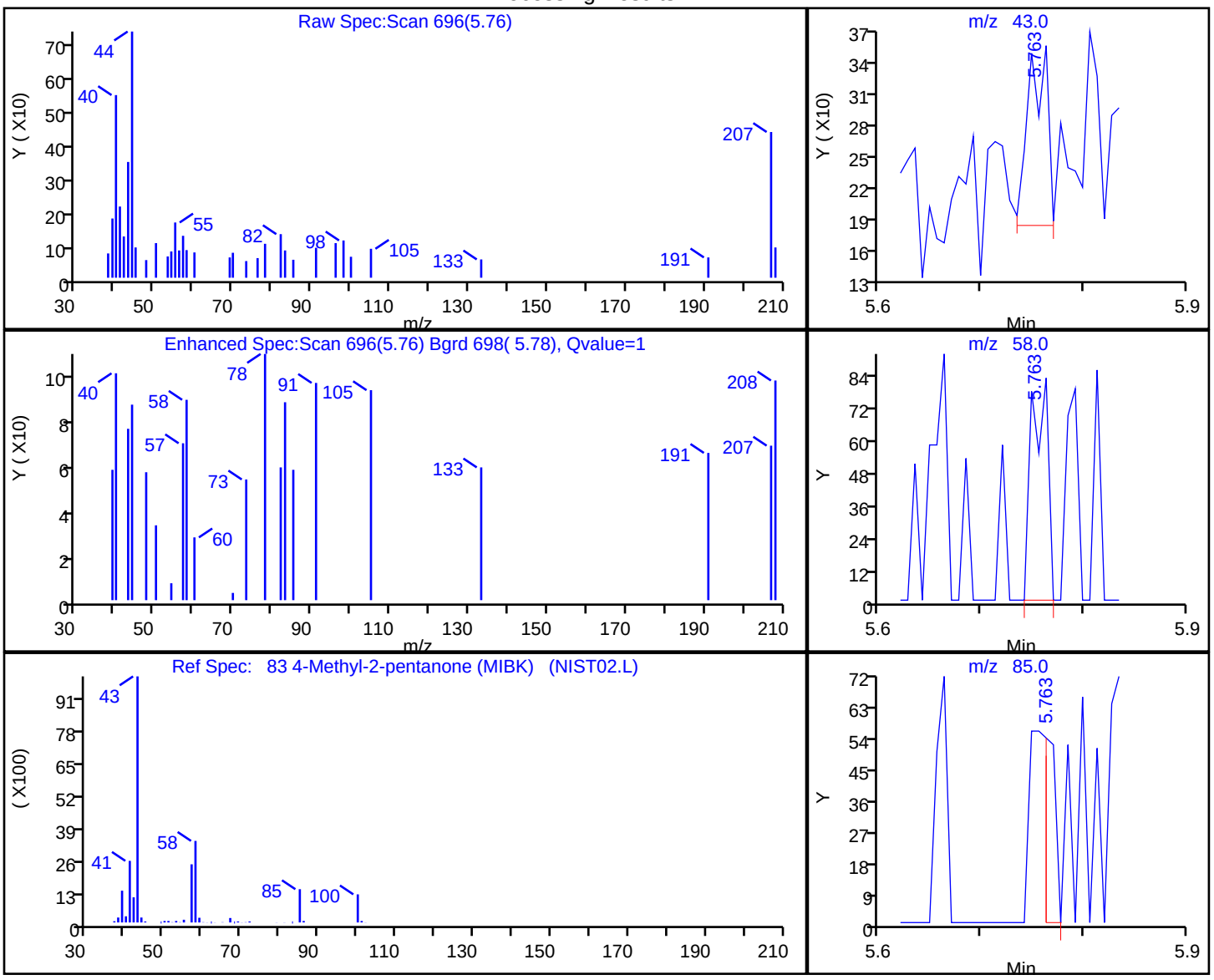
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

83 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
5.76	43.00	217	0.049419
5.76	58.00	93	
5.76	85.00	46	
5.75	100.00	66	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

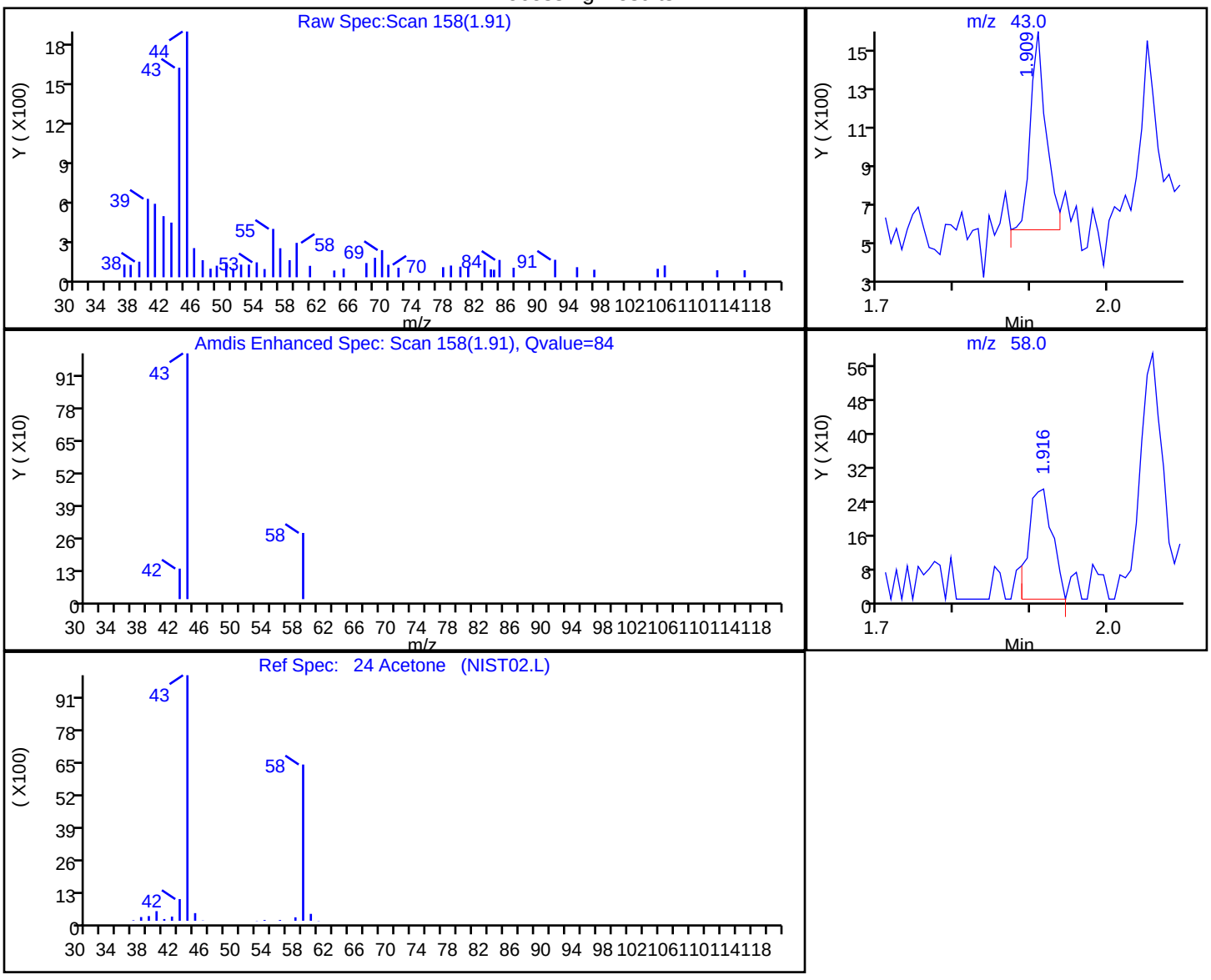
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
1.91	43.00	1355	1.193137
1.92	58.00	567	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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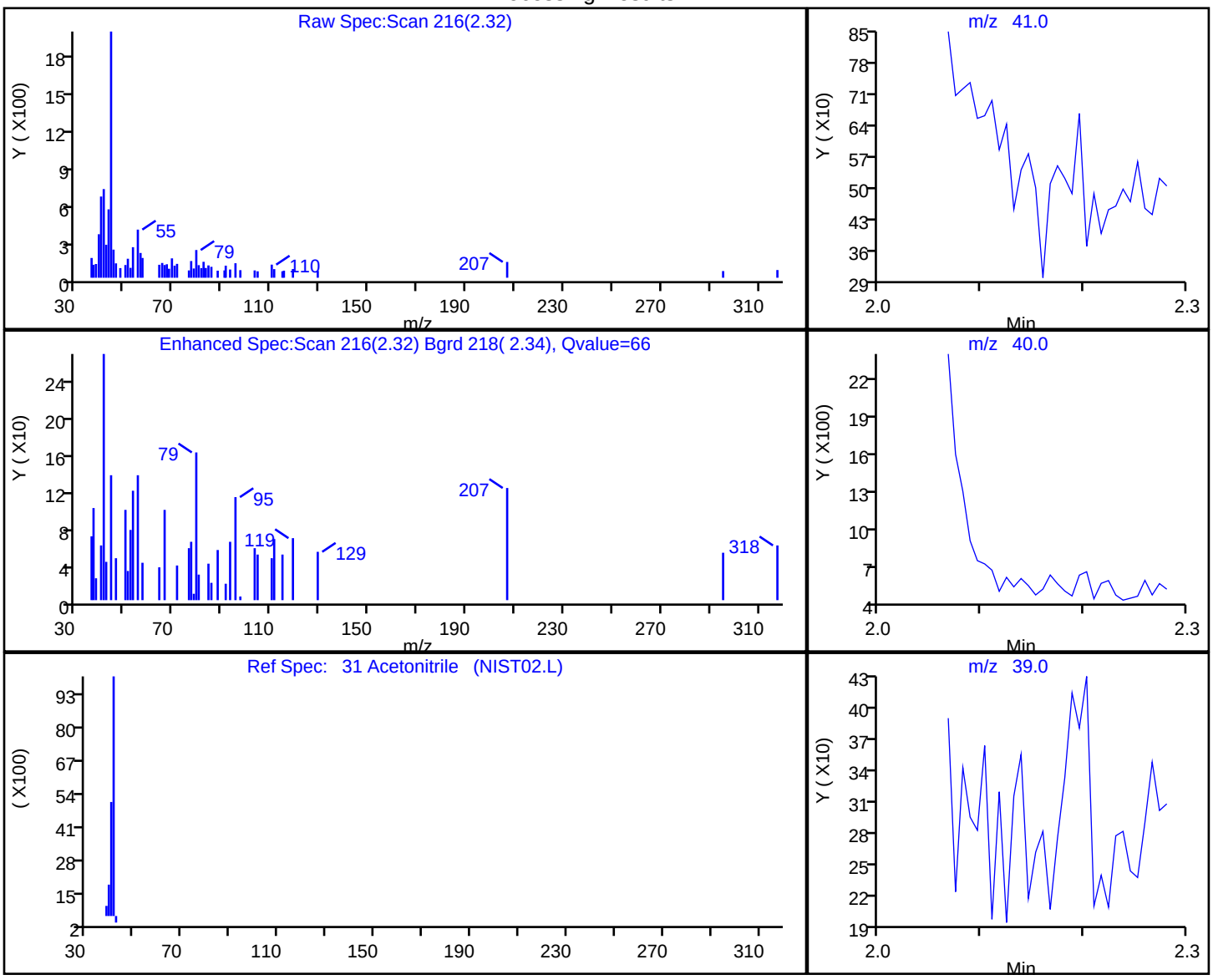
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

31 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
2.32	41.00	334	0.611630
2.33	40.00	227	
2.32	39.00	195	
2.33	38.00	136	

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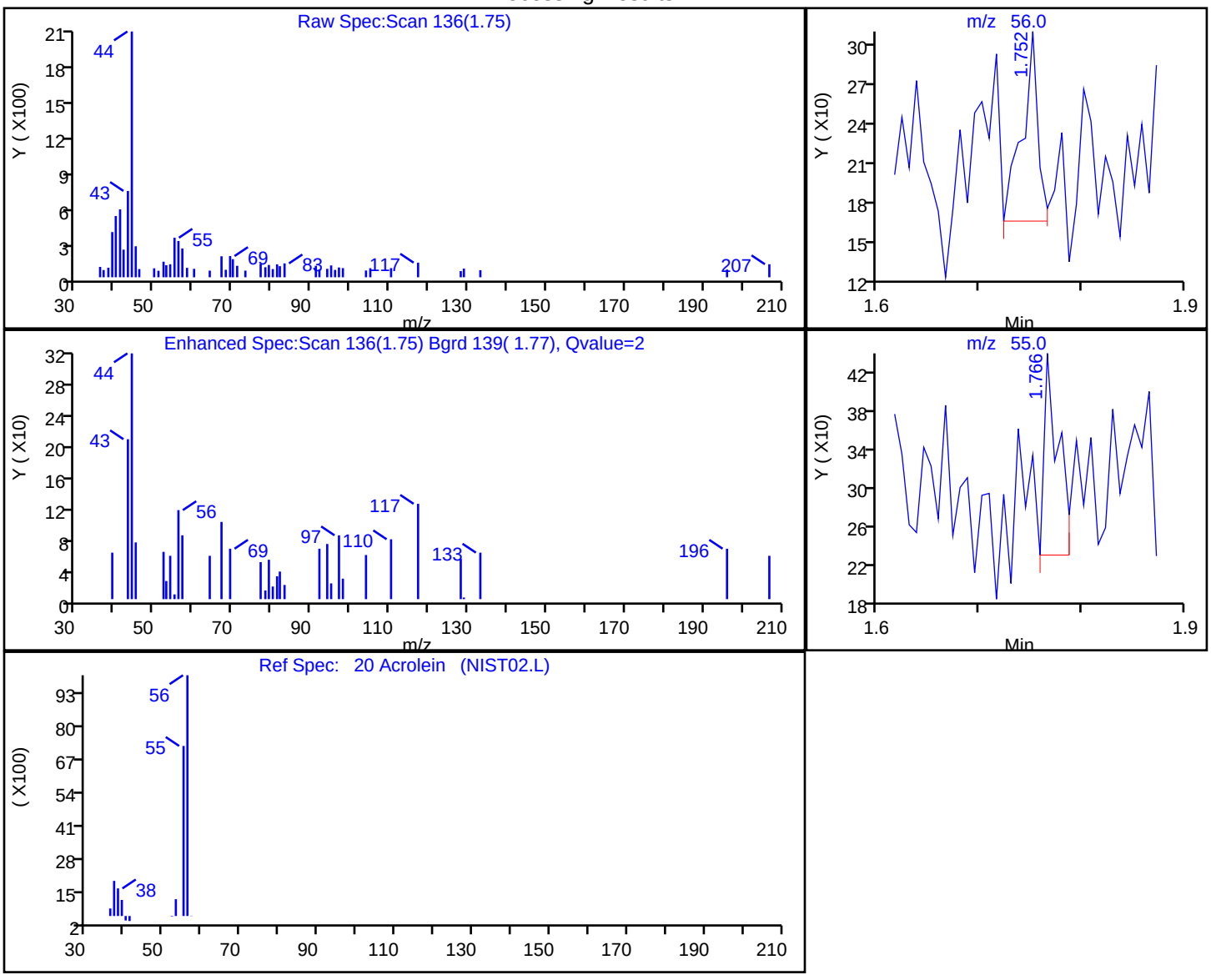
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
1.75	56.00	144	0.333163
1.77	55.00	201	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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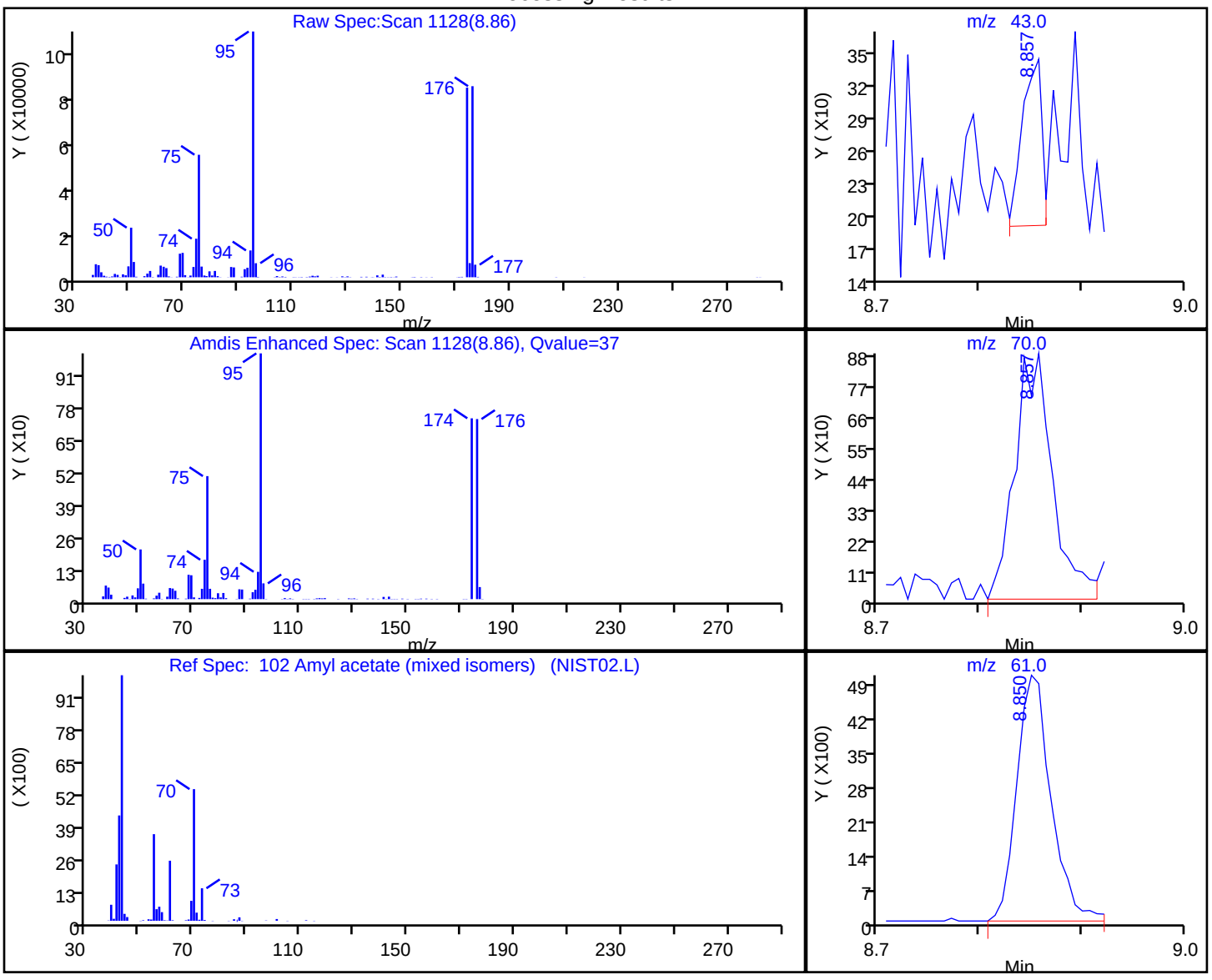
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

102 Amyl acetate (mixed isomers), CAS: 628-63-7

Processing Results



RT	Mass	Response	Amount
8.86	43.00	204	0.023080
8.86	70.00	2262	
8.85	61.00	11819	

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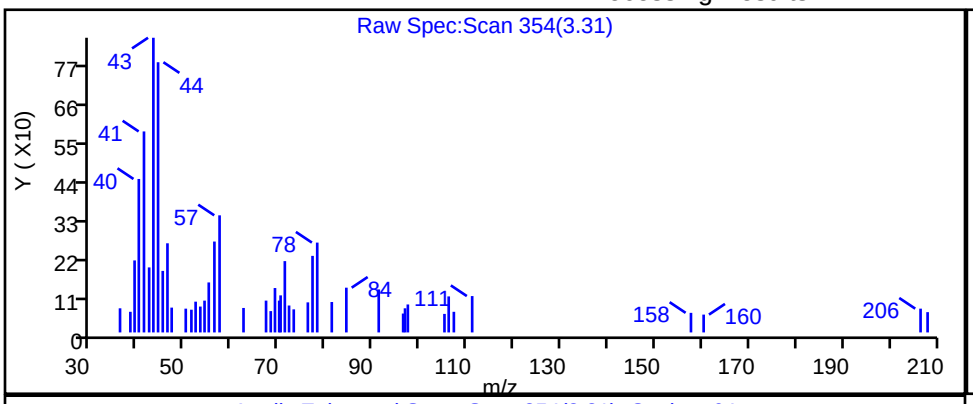
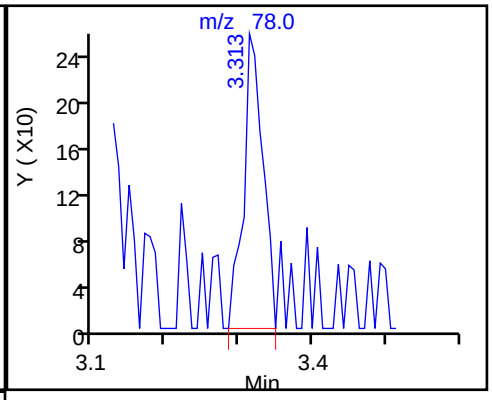
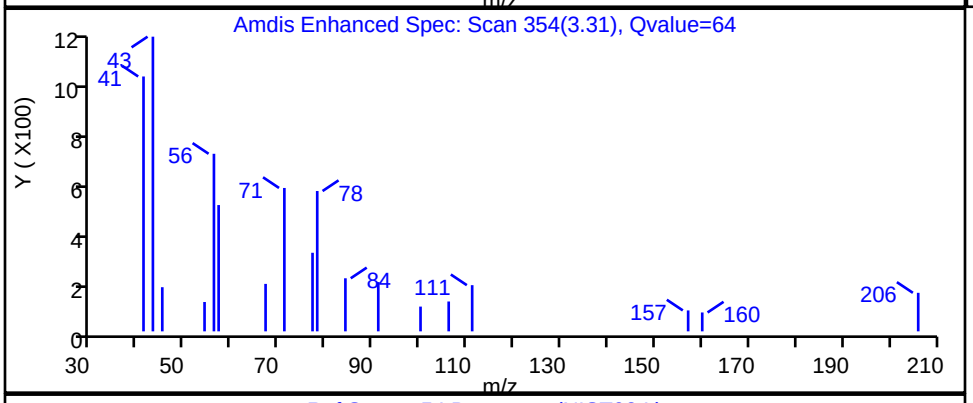
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

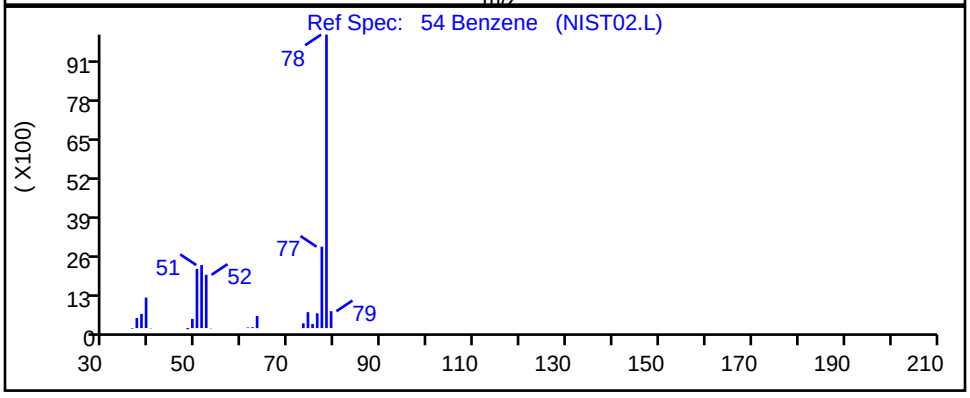
54 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
3.31	78.00	473	0.030651

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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User Disabled Compound Report

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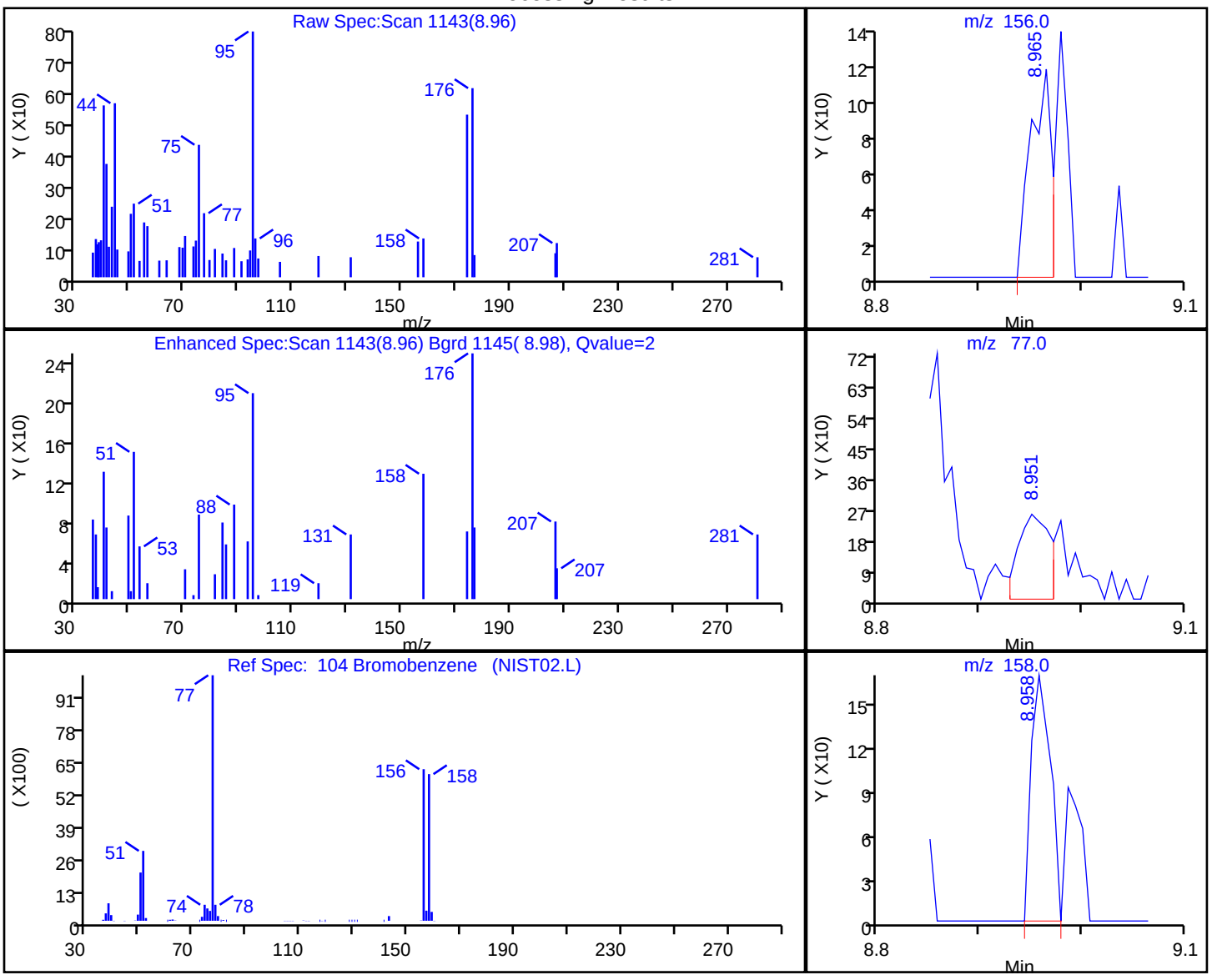
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

104 Bromobenzene, CAS: 108-86-1

Processing Results



RT	Mass	Response	Amount
8.96	156.00	168	0.039948
8.95	77.00	549	
8.96	158.00	214	

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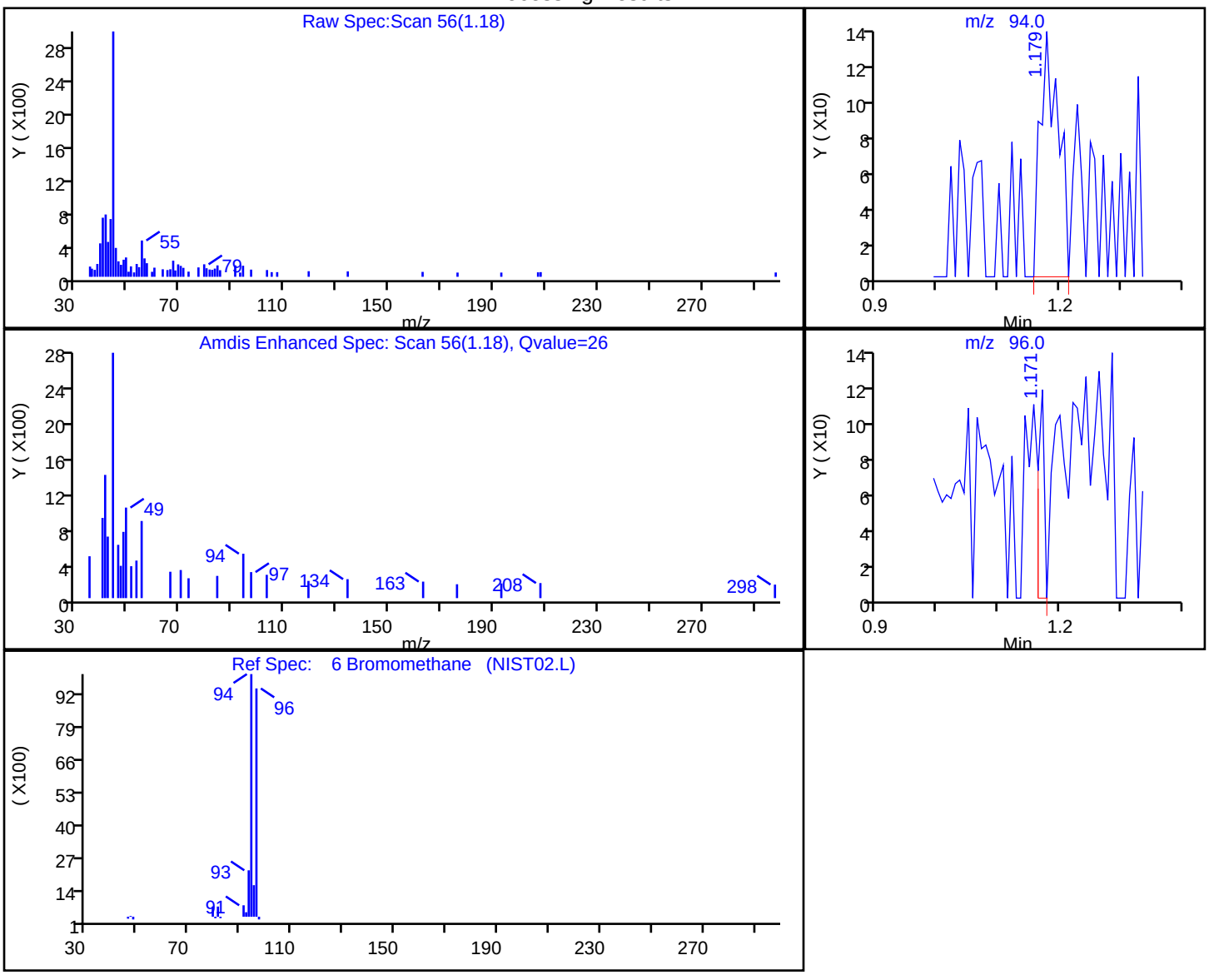
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

6 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
1.18	94.00	268	0.125603
1.17	96.00	78	

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User Disabled Compound Report

TestAmerica Edison

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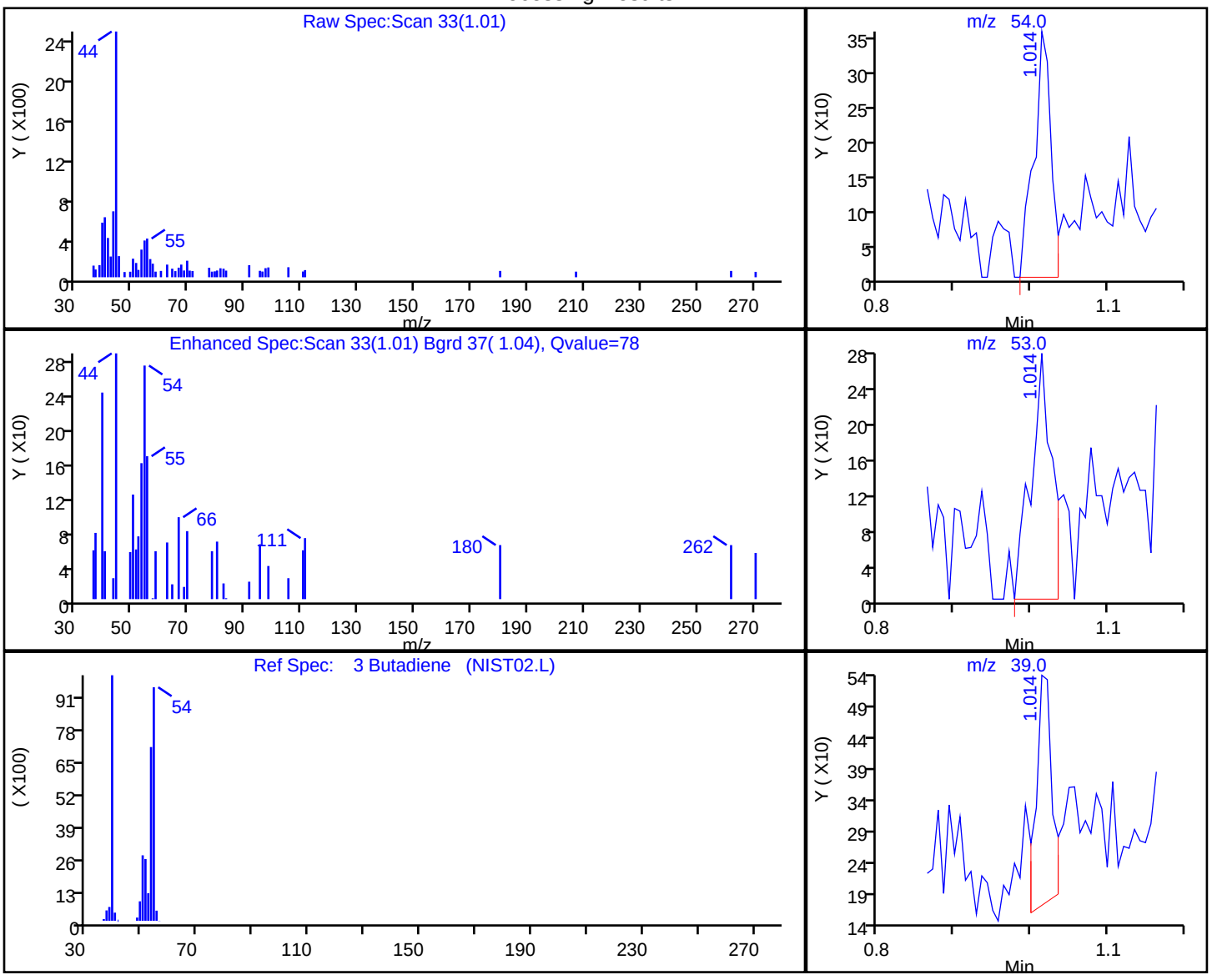
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Butadiene, CAS: 106-99-0

Processing Results



RT	Mass	Response	Amount
1.01	54.00	565	0.125240
1.01	53.00	512	
1.01	39.00	523	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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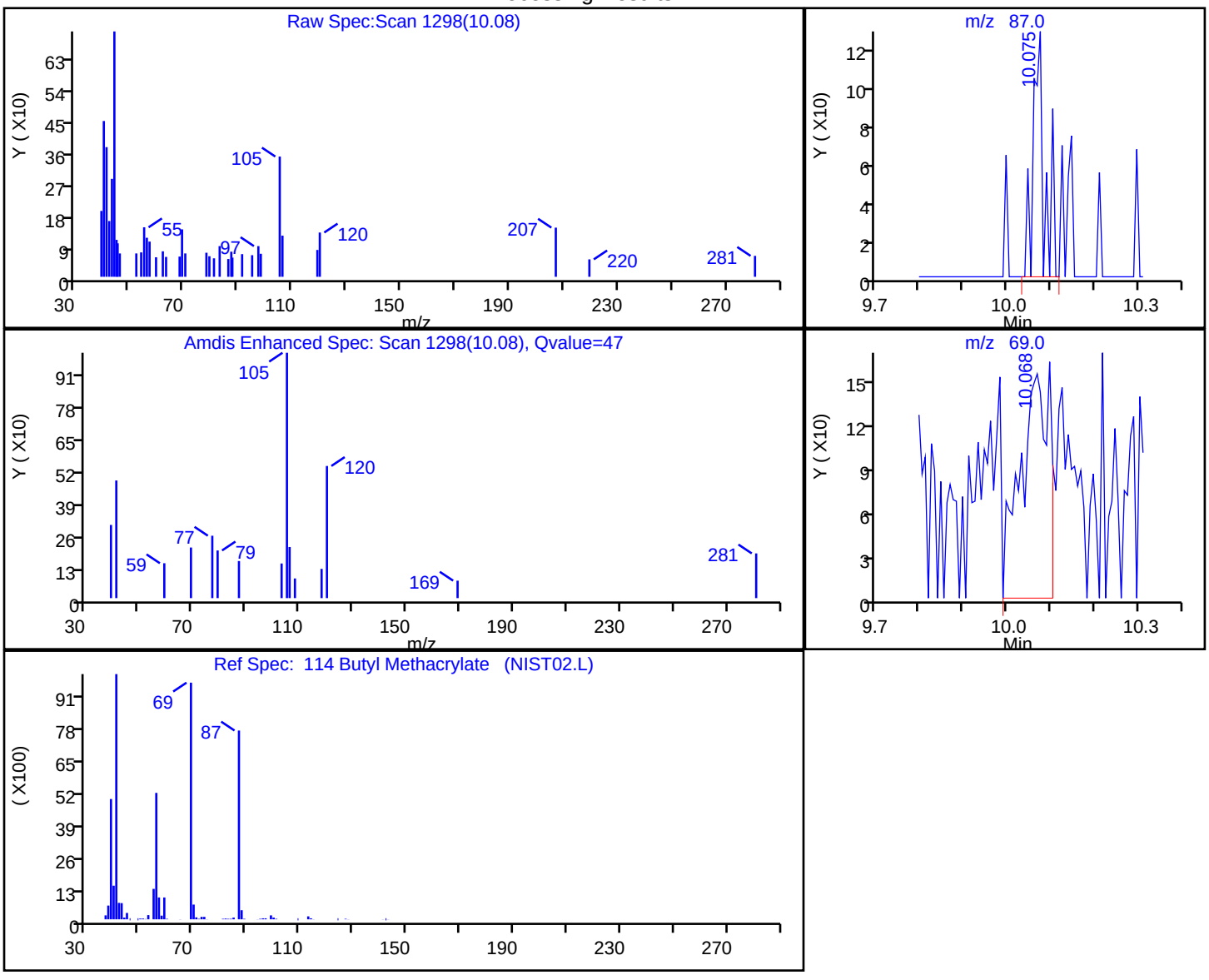
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

114 Butyl Methacrylate, CAS: 97-88-1

Processing Results



RT	Mass	Response	Amount
10.08	87.00	226	0.042721
10.07	69.00	689	

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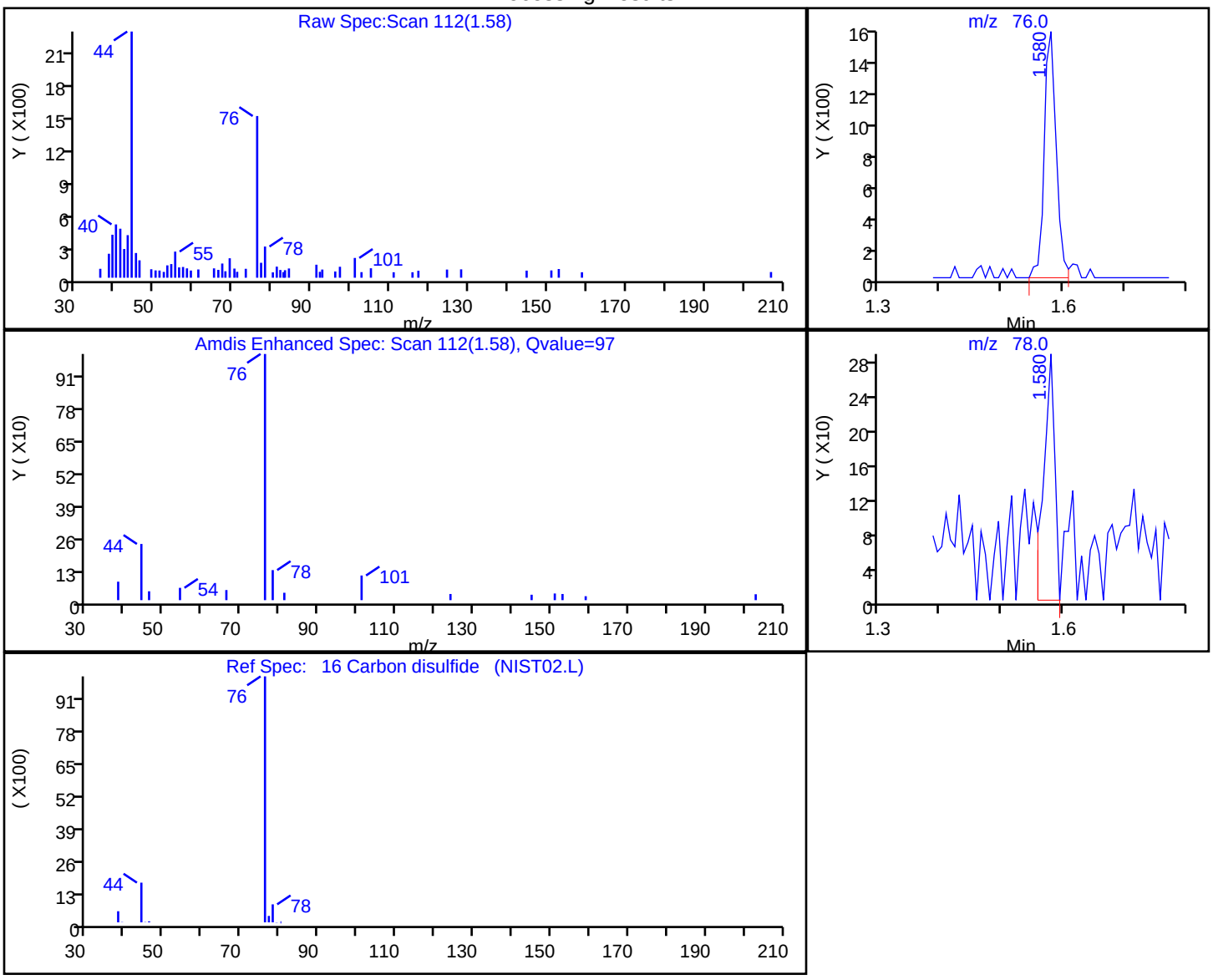
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

16 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
1.58	76.00	2050	0.179070
1.58	78.00	360	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

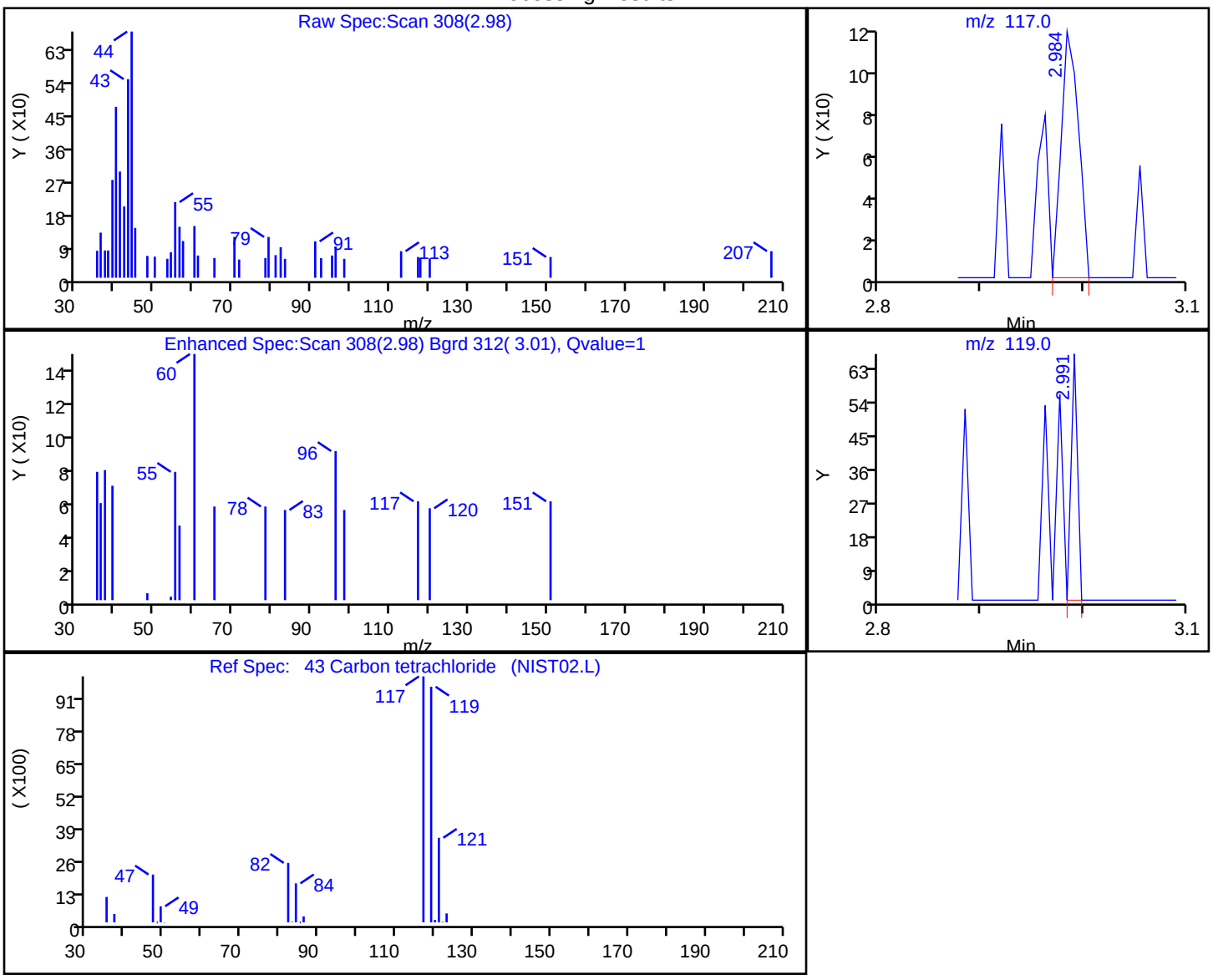
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
2.98	117.00	132	0.029024
2.99	119.00	29	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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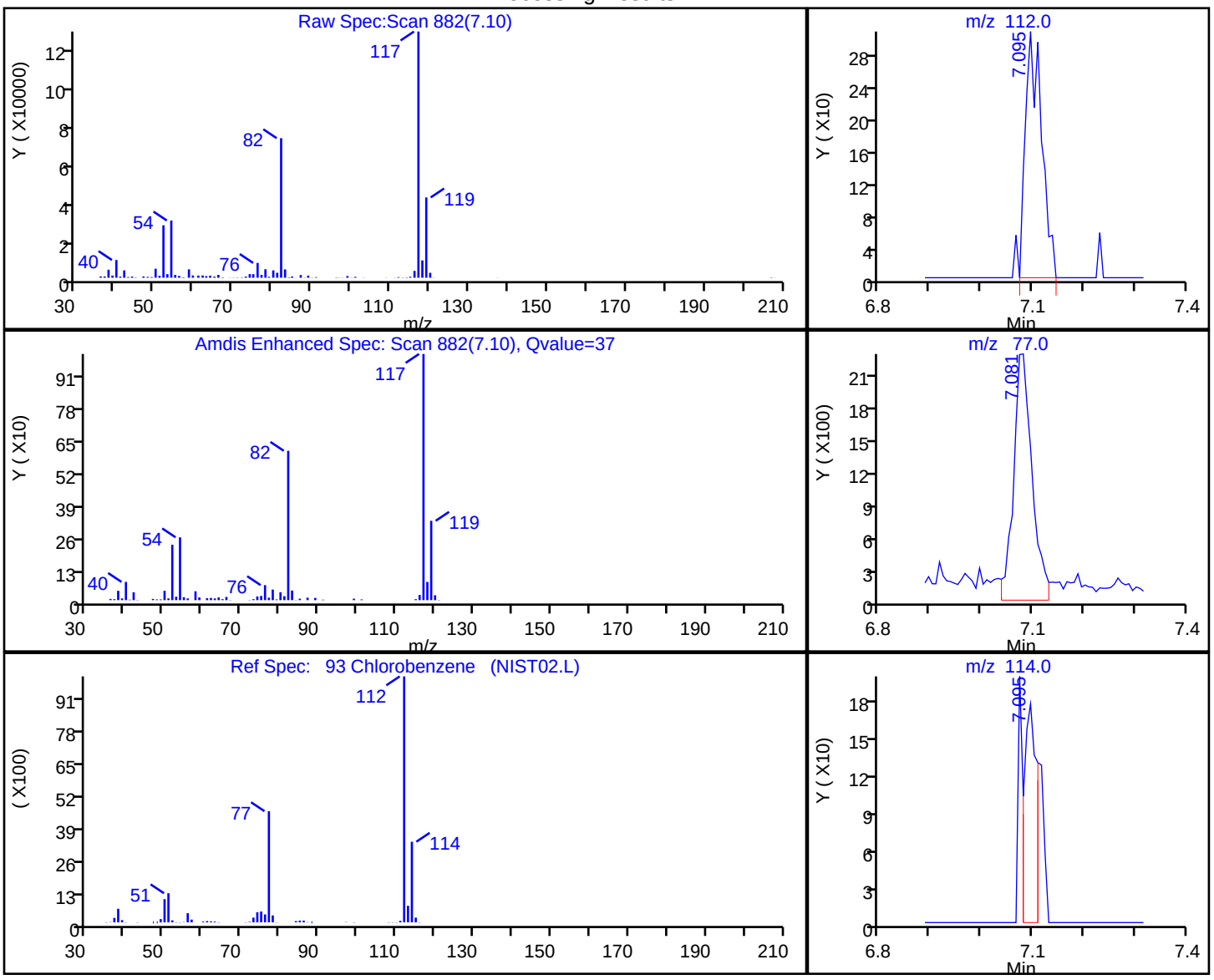
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

93 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
7.10	112.00	668	0.065751
7.08	77.00	5731	
7.10	114.00	298	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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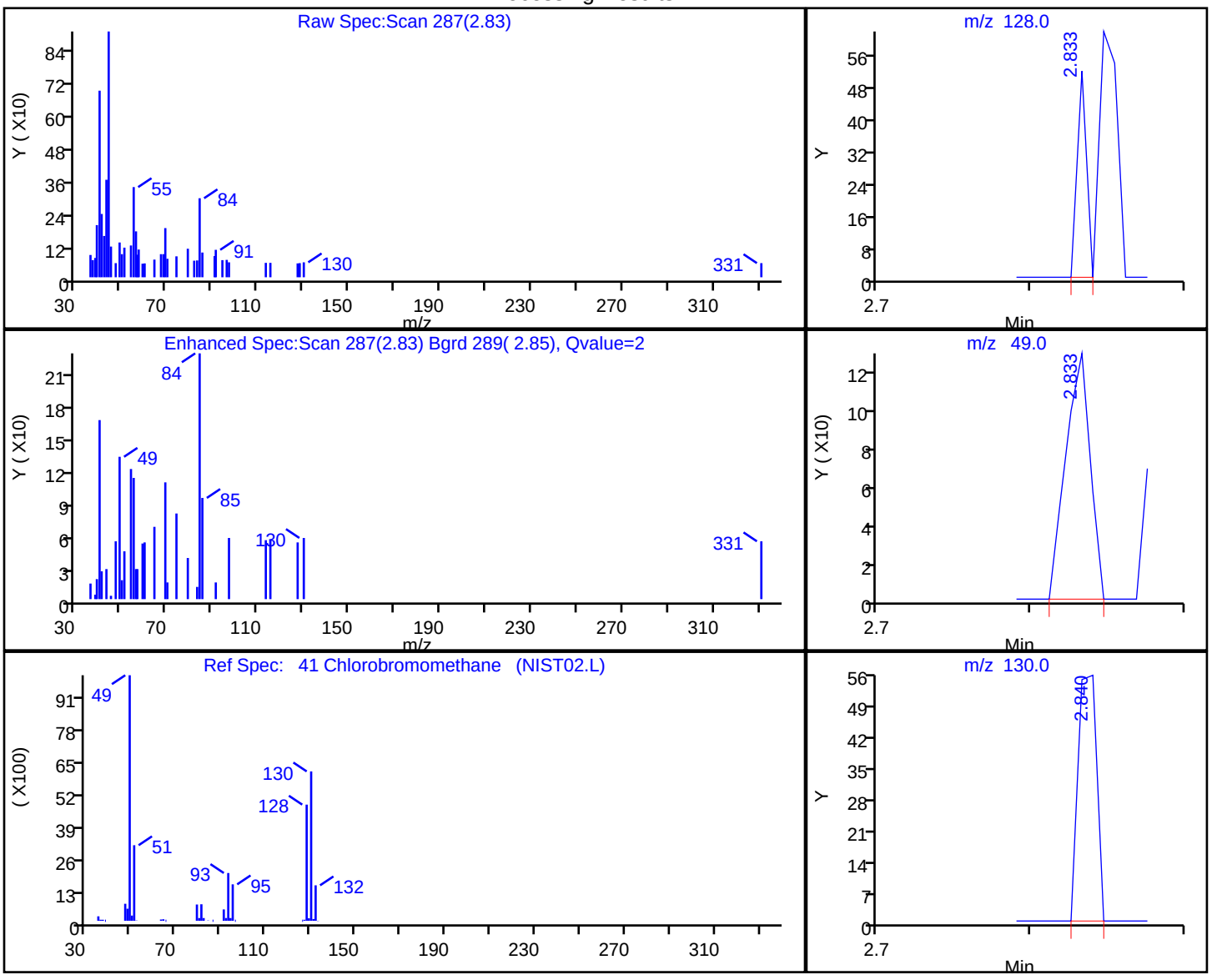
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D				
Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

41 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
2.83	128.00	22	0.012549
2.83	49.00	143	
2.84	130.00	48	

Reviewer: delpolitov, 23-Apr-2018 12:29:38

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TestAmerica Edison

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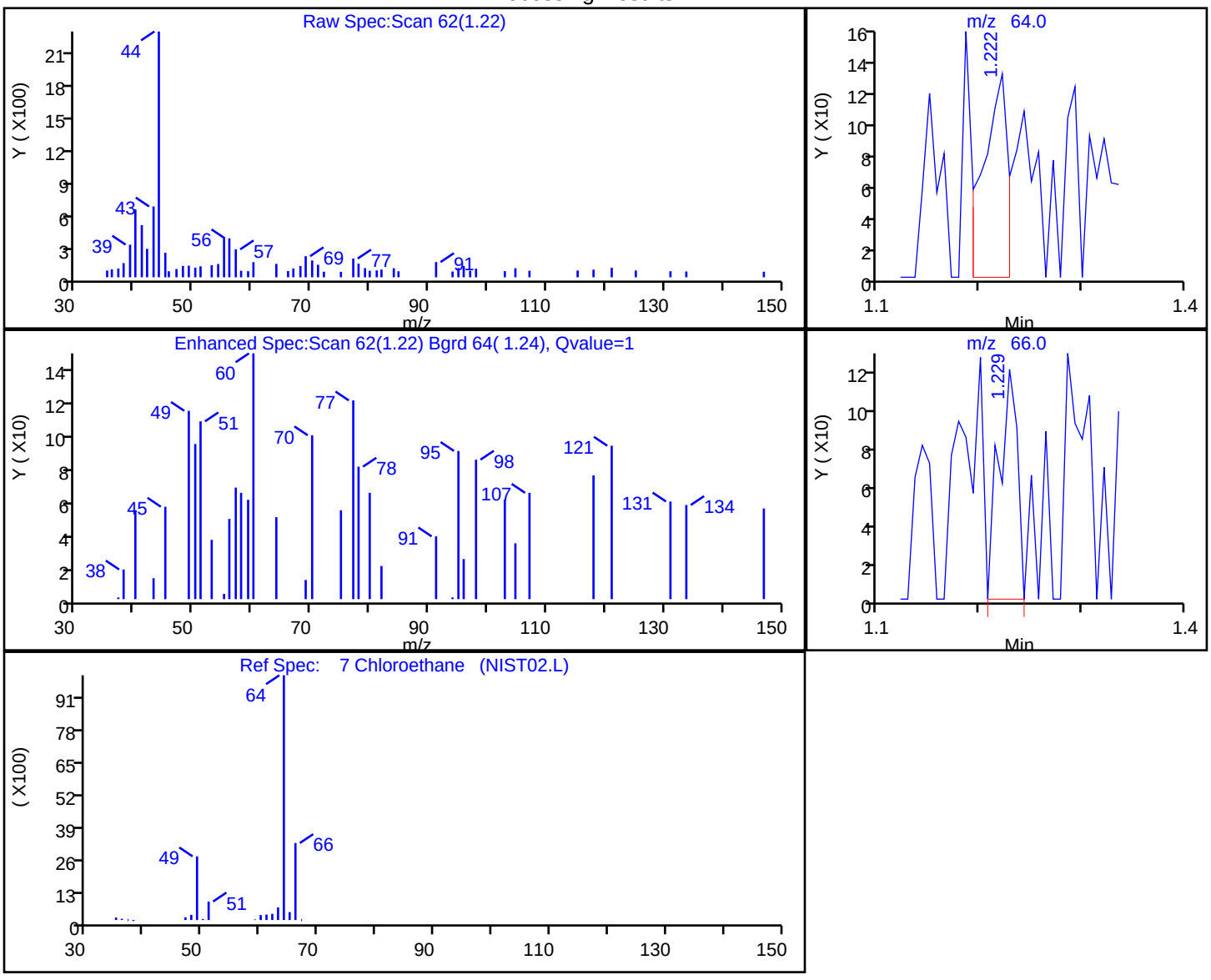
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

7 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
1.22	64.00	208	0.070498
1.23	66.00	144	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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TestAmerica Edison

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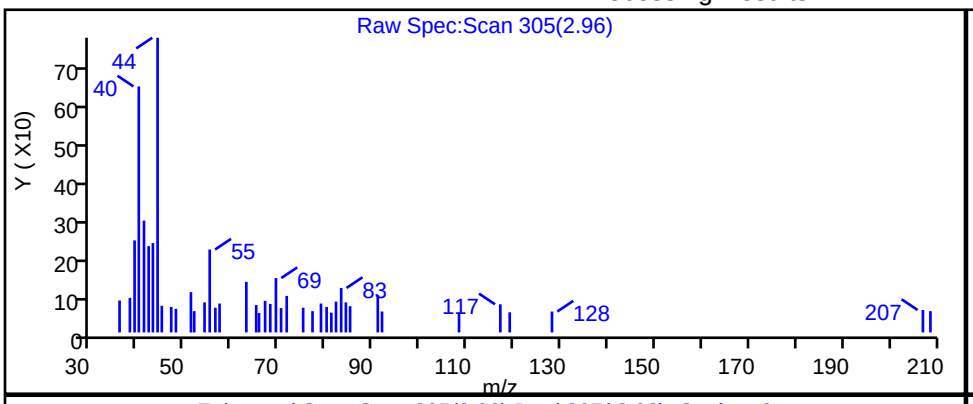
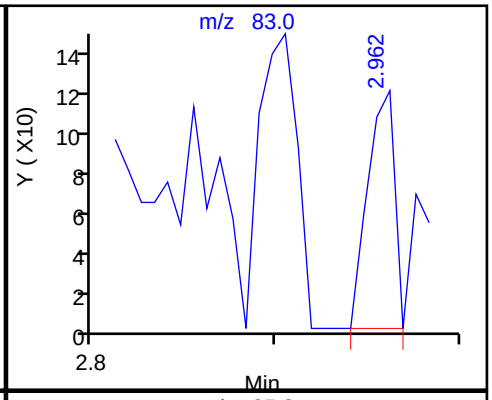
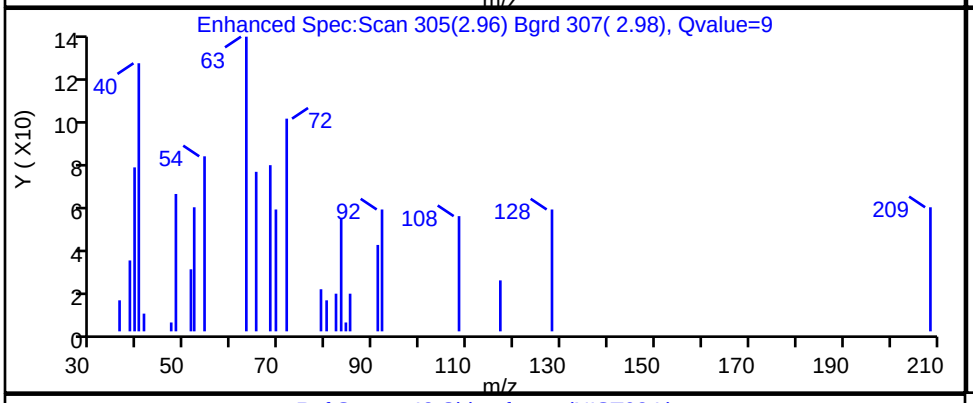
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

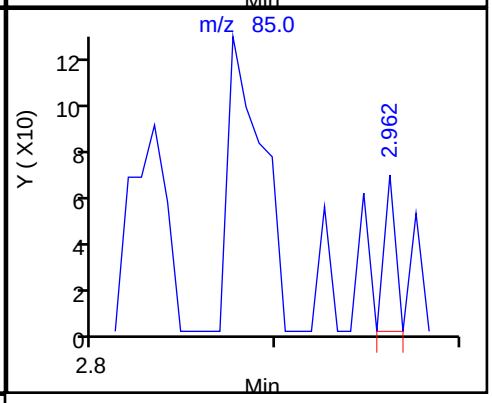
42 Chloroform, CAS: 67-66-3

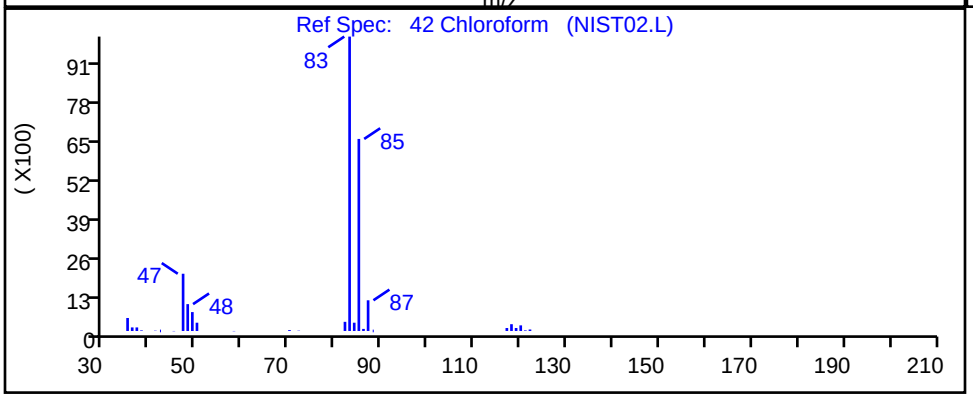
Processing Results











RT	Mass	Response	Amount
2.96	83.00	119	0.018252
2.96	85.00	30	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

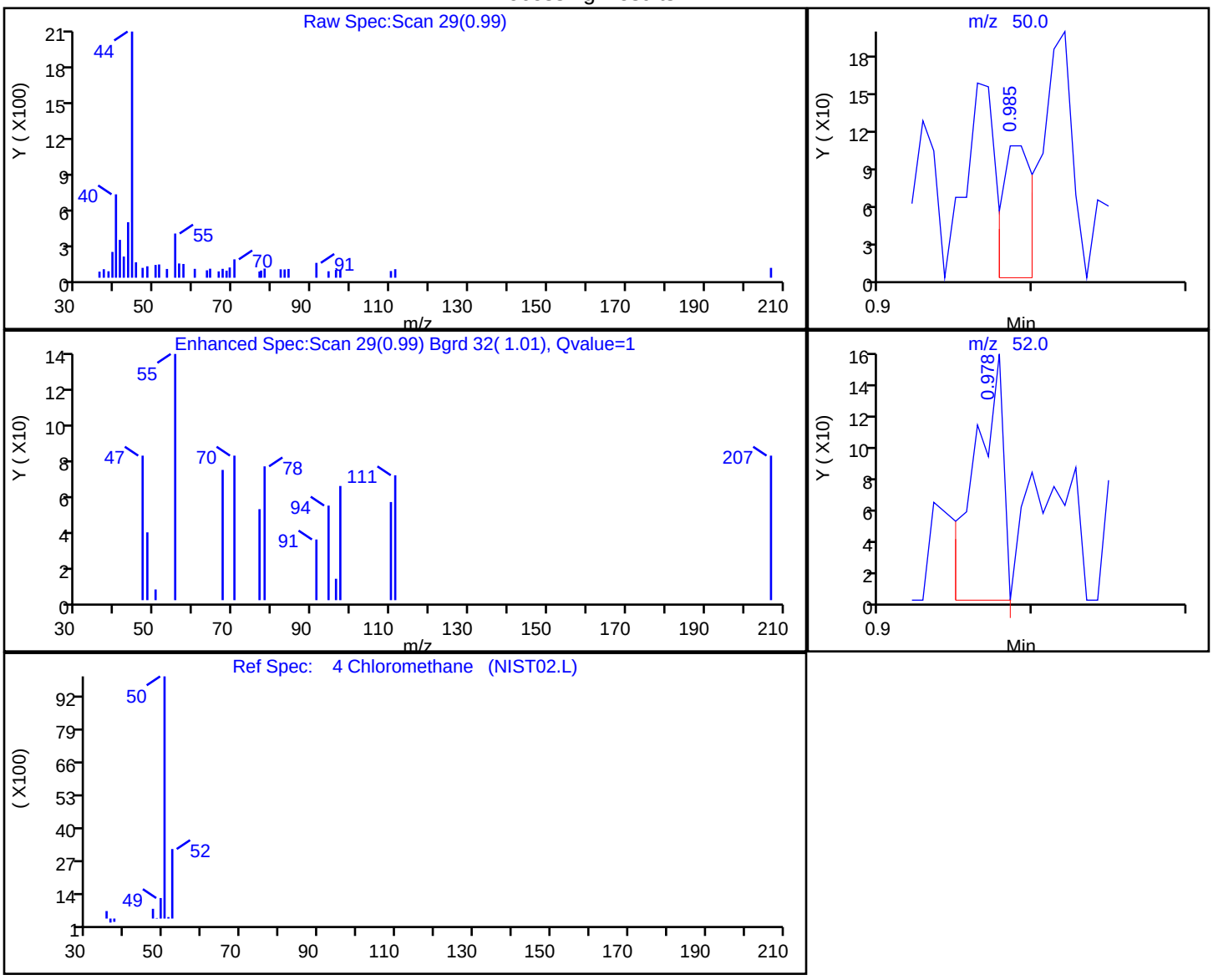
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

4 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
0.99	50.00	148	0.034122
0.98	52.00	199	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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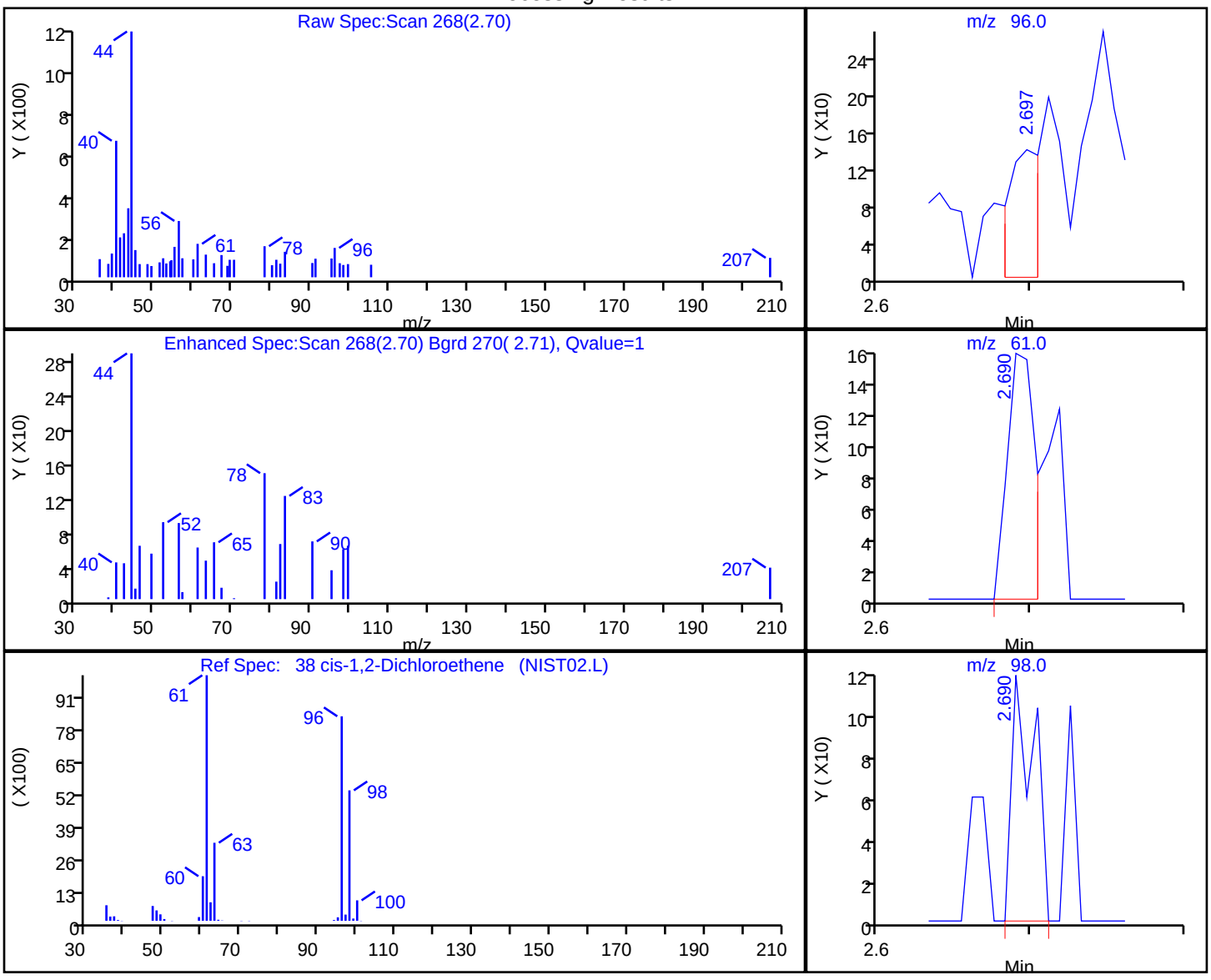
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

38 cis-1,2-Dichloroethene, CAS: 156-59-2

Processing Results



RT	Mass	Response	Amount
2.70	96.00	200	0.050233
2.69	61.00	201	
2.69	98.00	115	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

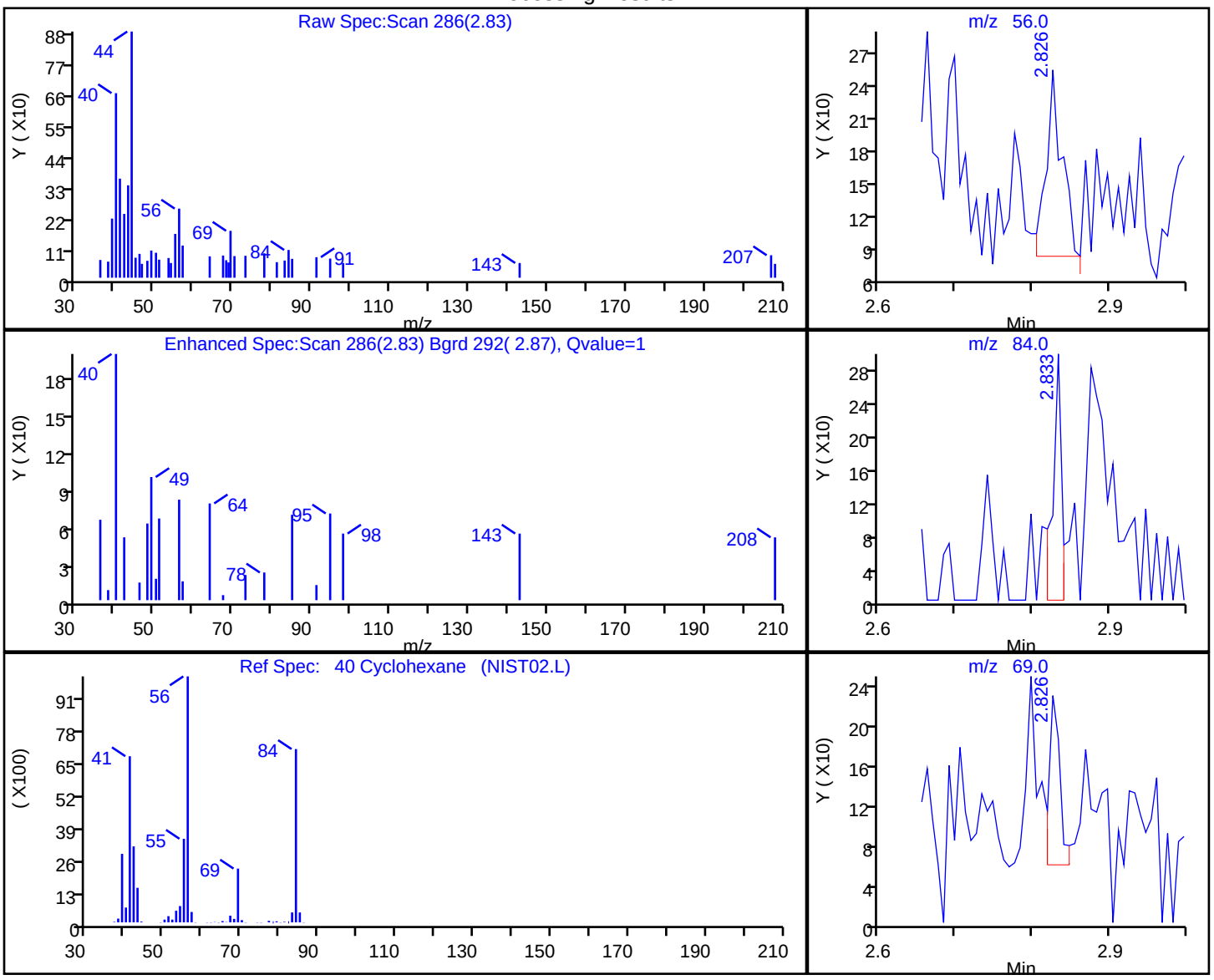
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

40 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
2.83	56.00	238	0.033885
2.83	84.00	232	
2.83	69.00	165	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

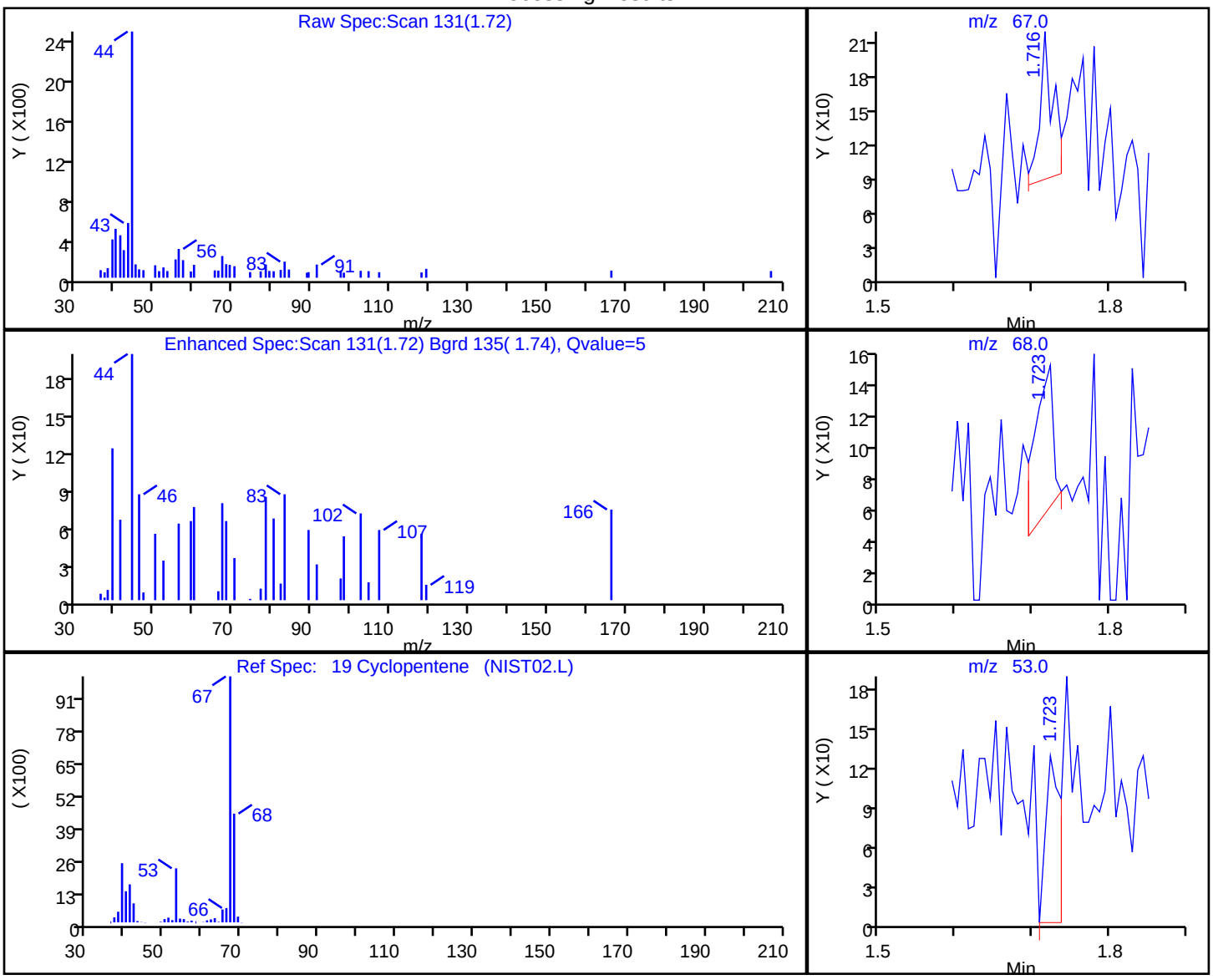
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

19 Cyclopentene, CAS: 142-29-0

Processing Results



RT	Mass	Response	Amount
1.72	67.00	157	0.019045
1.72	68.00	153	
1.72	53.00	169	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

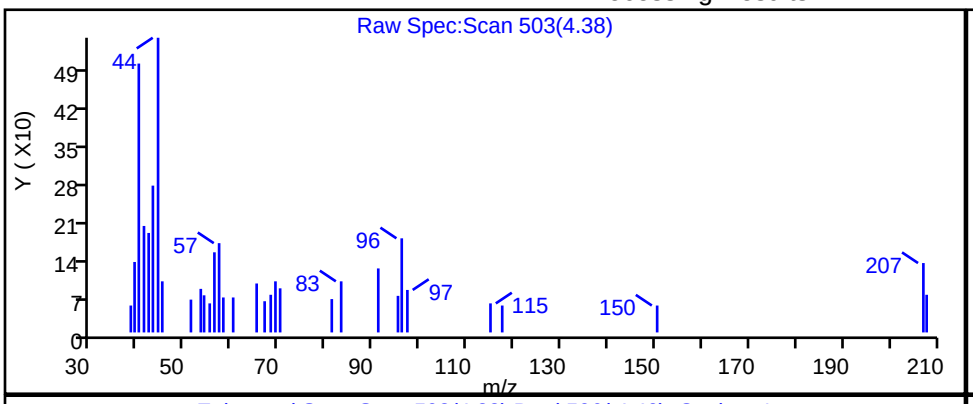
User Disabled Compound Report

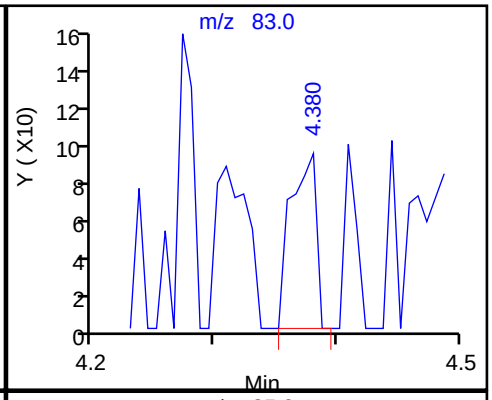
TestAmerica Edison

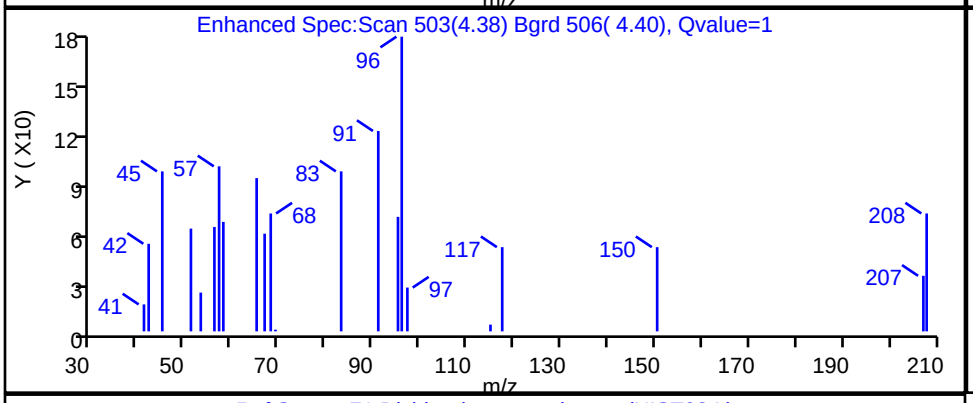
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

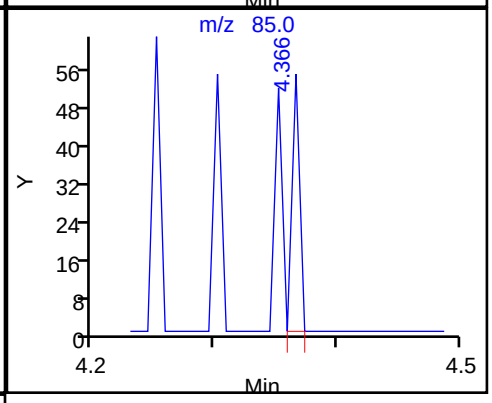
71 Dichlorobromomethane, CAS: 75-27-4

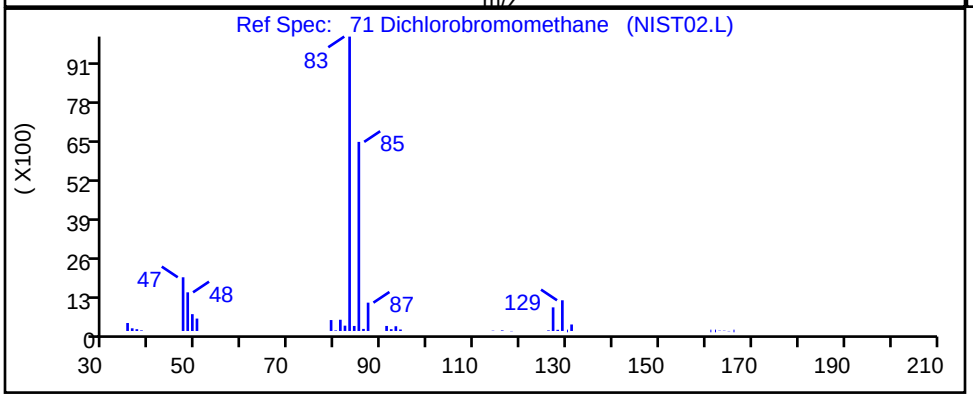
Processing Results











RT	Mass	Response	Amount
4.38	83.00	138	0.027542
4.37	85.00	24	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

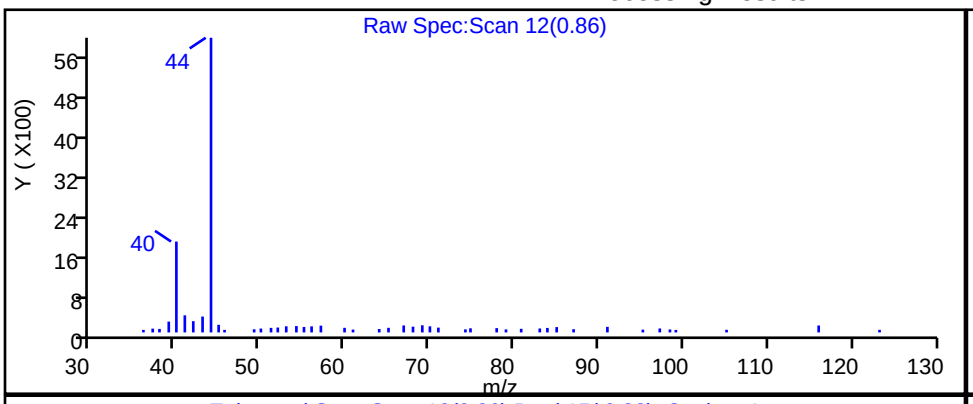
User Disabled Compound Report

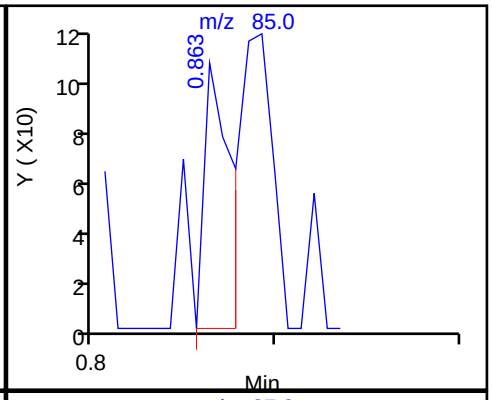
TestAmerica Edison

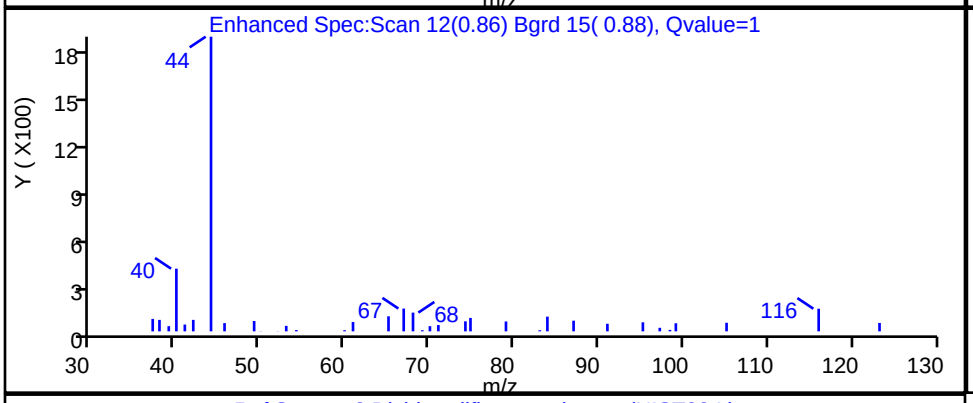
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D				
Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

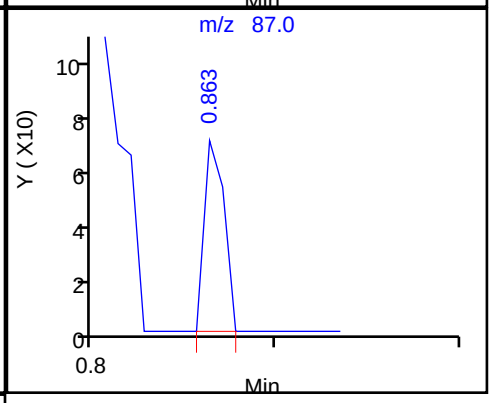
2 Dichlorodifluoromethane, CAS: 75-71-8

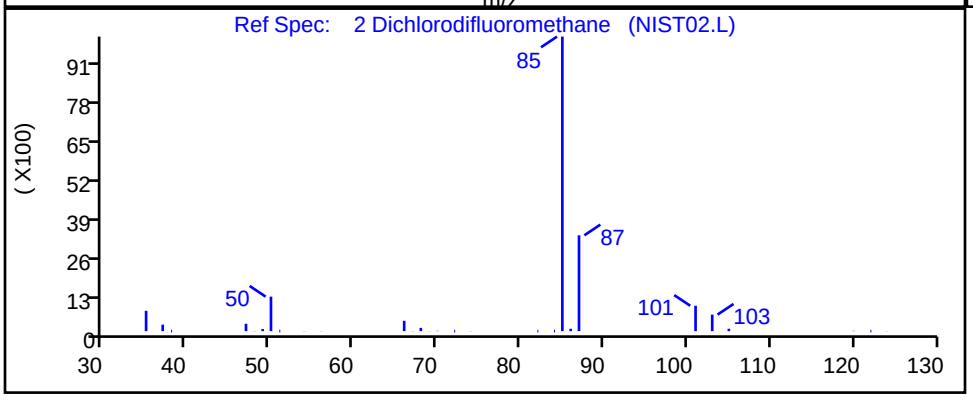
Processing Results











RT	Mass	Response	Amount
0.86	85.00	108	0.023889
0.86	87.00	50	

Reviewer: delpolitov, 23-Apr-2018 12:29:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

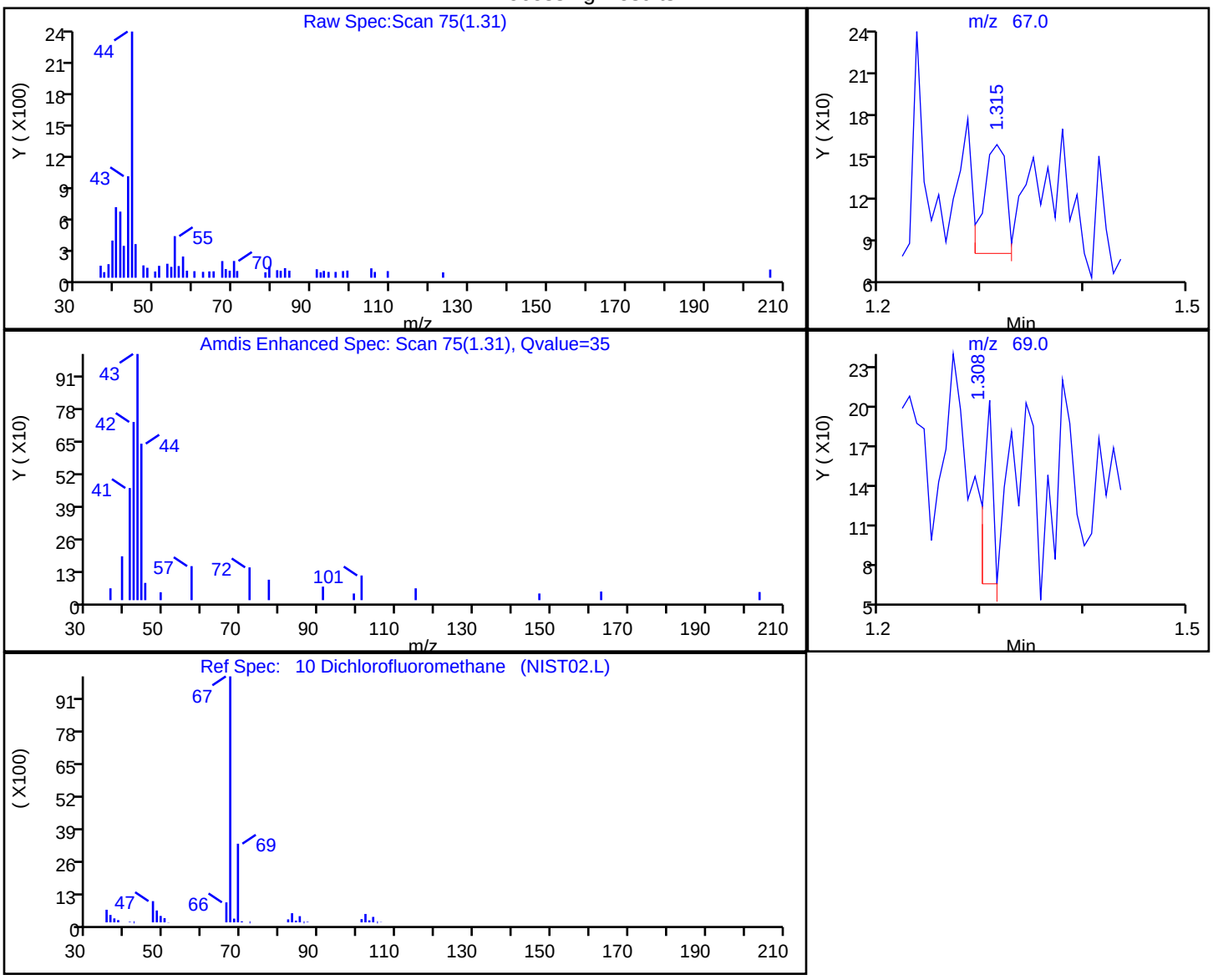
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

10 Dichlorofluoromethane, CAS: 75-43-4

Processing Results



RT	Mass	Response	Amount
1.31	67.00	115	0.018107
1.31	69.00	83	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

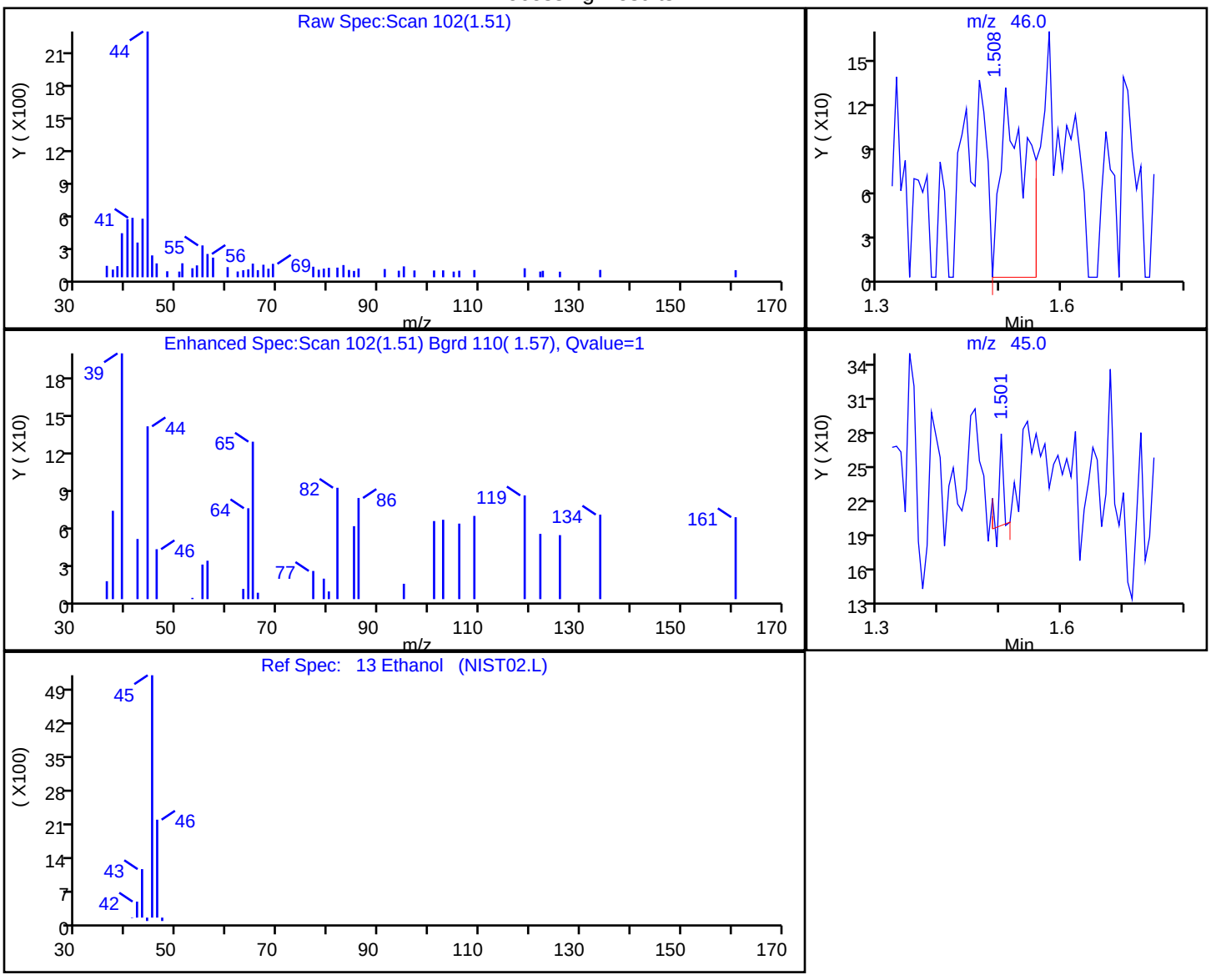
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

13 Ethanol, CAS: 64-17-5

Processing Results



RT	Mass	Response	Amount
1.51	46.00	357	15.263043
1.50	45.00	38	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

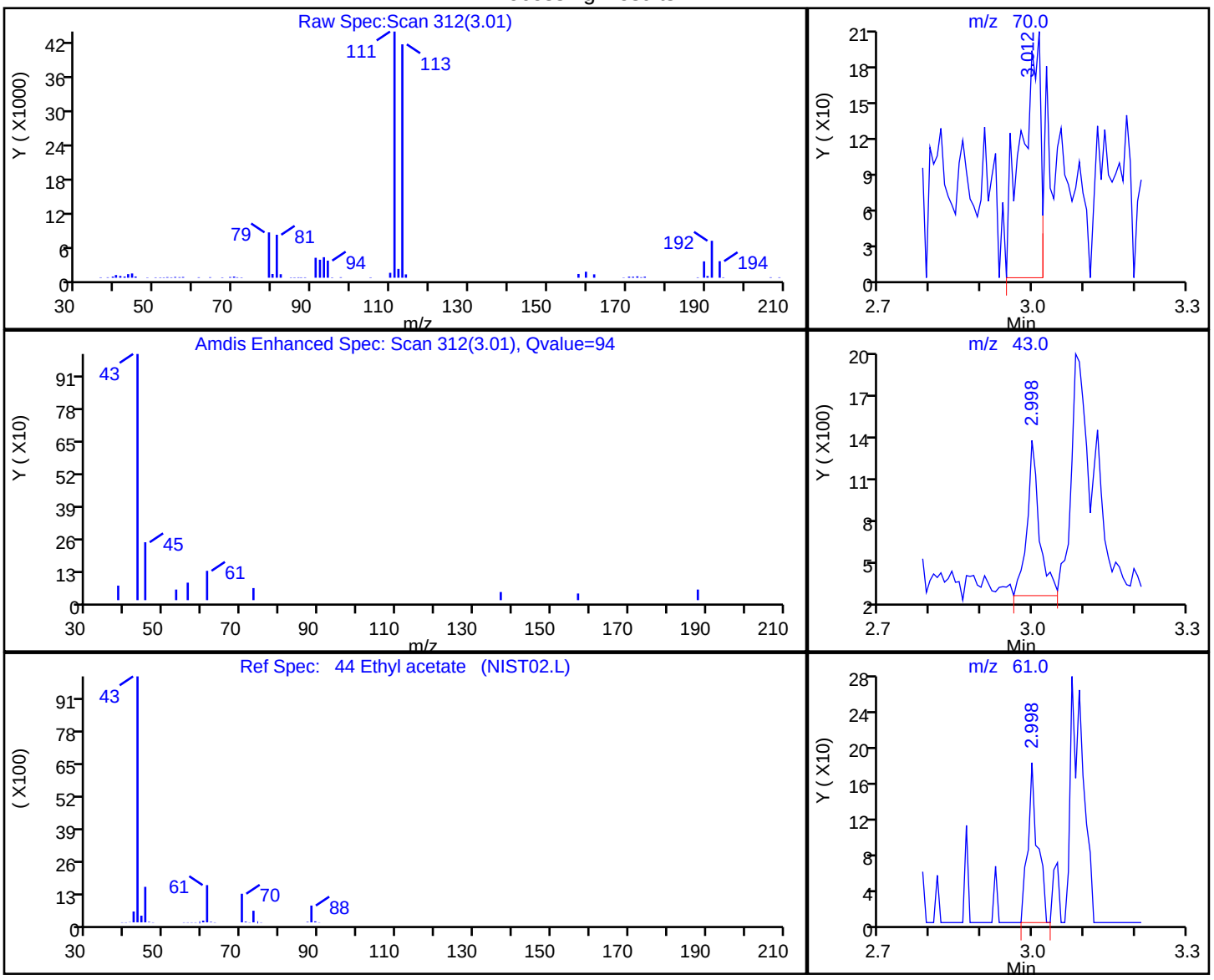
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Ethyl acetate, CAS: 141-78-6

Processing Results



RT	Mass	Response	Amount
3.01	70.00	535	1.065677
3.00	43.00	1875	
3.00	61.00	234	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

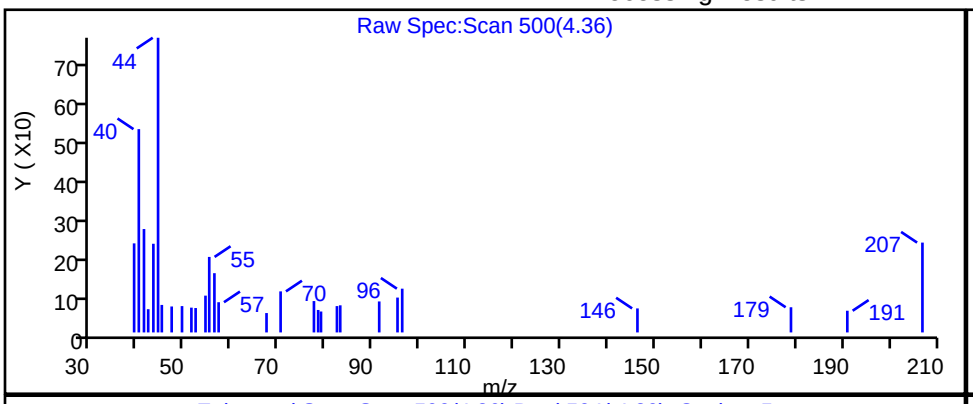
User Disabled Compound Report

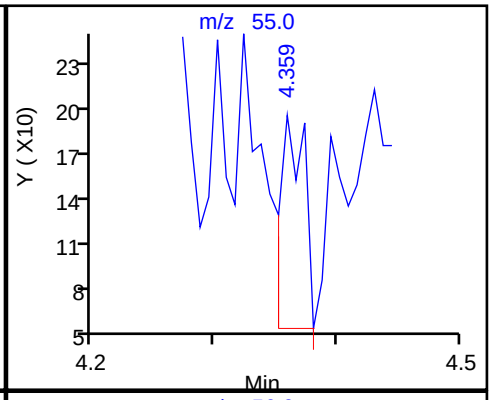
TestAmerica Edison

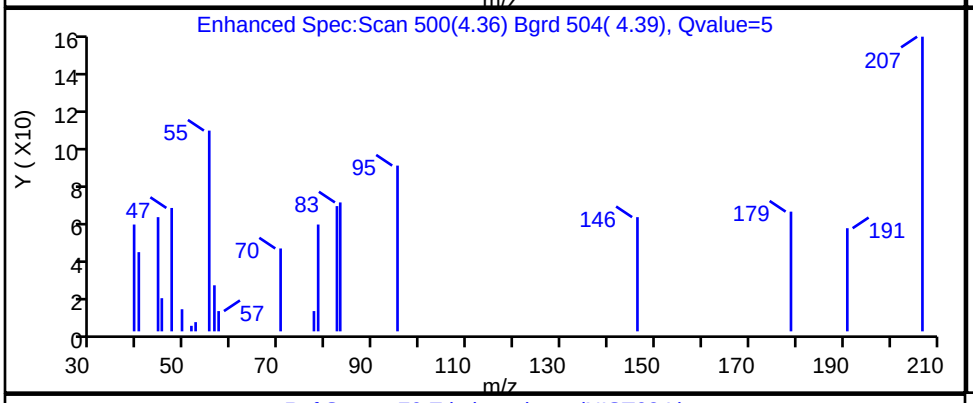
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

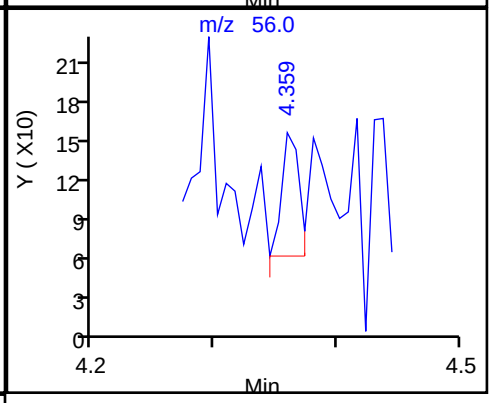
70 Ethyl acrylate, CAS: 140-88-5

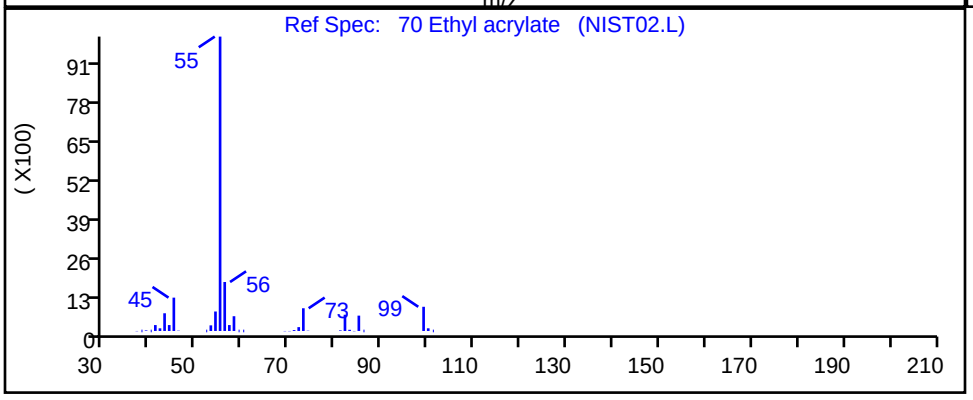
Processing Results











RT	Mass	Response	Amount
4.36	55.00	193	0.036806
4.36	56.00	95	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

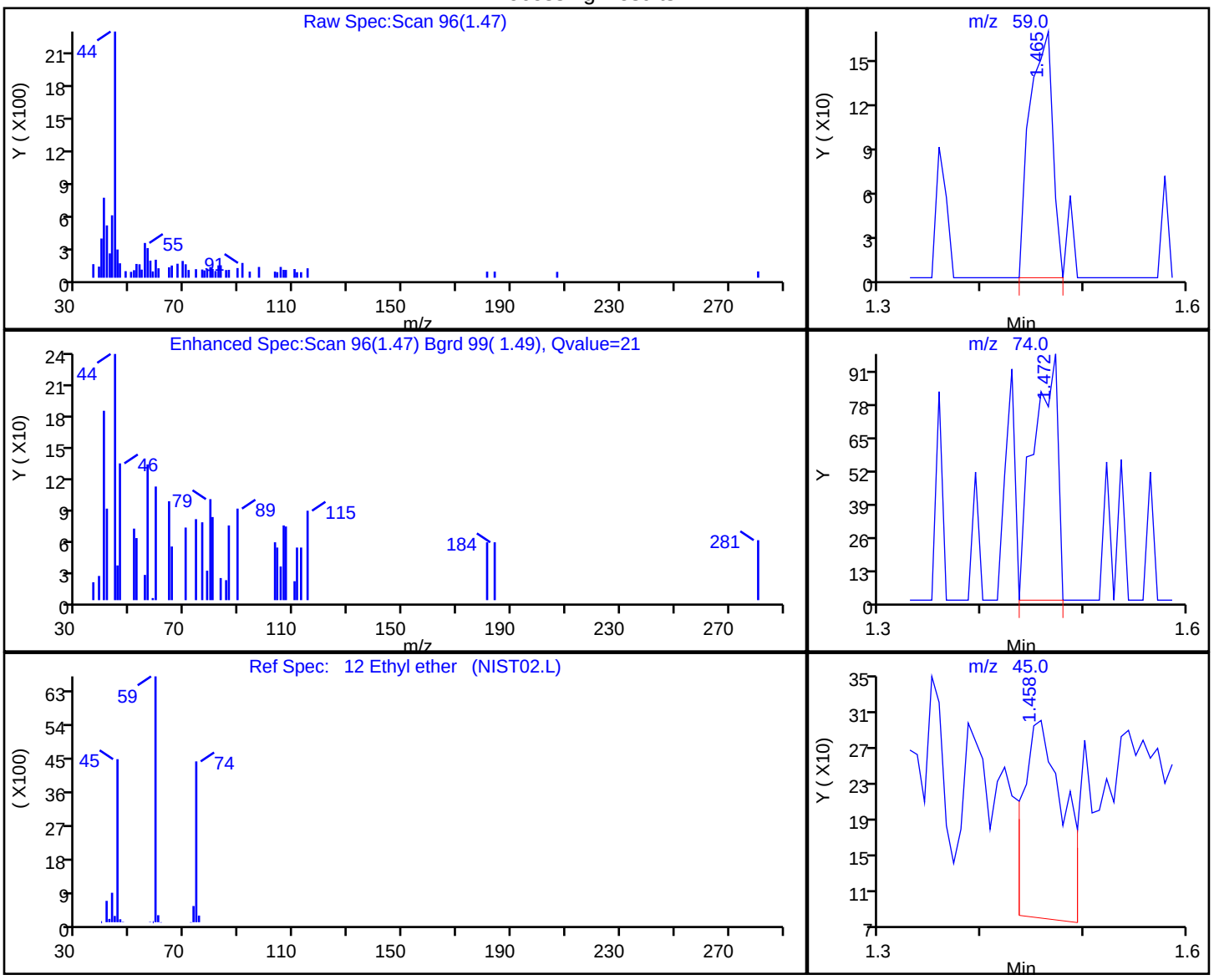
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 Ethyl ether, CAS: 60-29-7

Processing Results



RT	Mass	Response	Amount
1.47	59.00	253	0.079297
1.47	74.00	160	
1.46	45.00	601	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

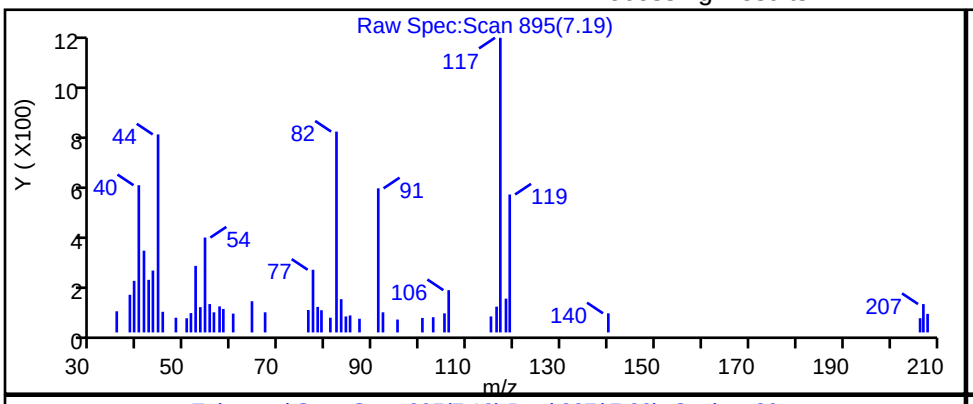
User Disabled Compound Report

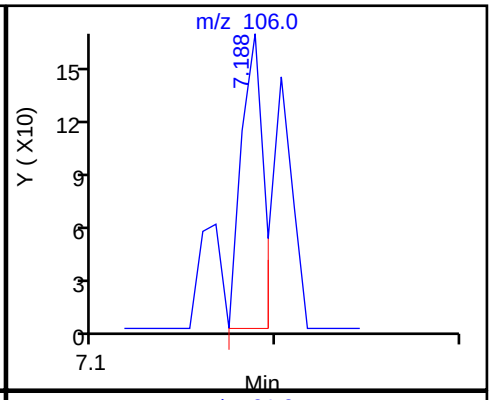
TestAmerica Edison

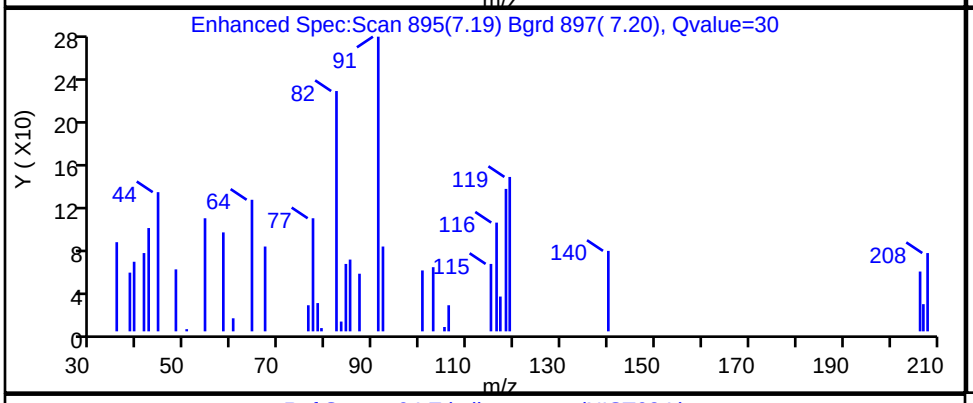
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

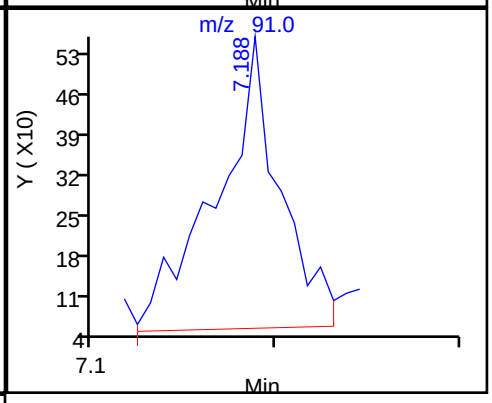
94 Ethylbenzene, CAS: 100-41-4

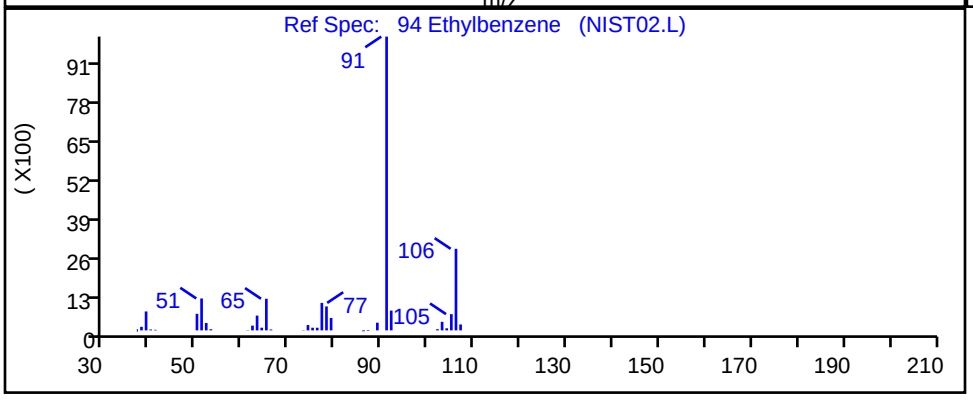
Processing Results











RT	Mass	Response	Amount
7.19	106.00	139	0.024768
7.19	91.00	1240	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

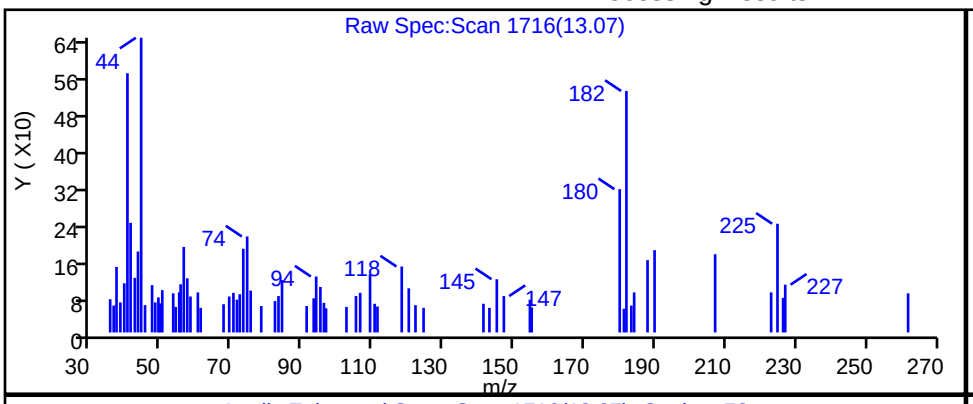
User Disabled Compound Report

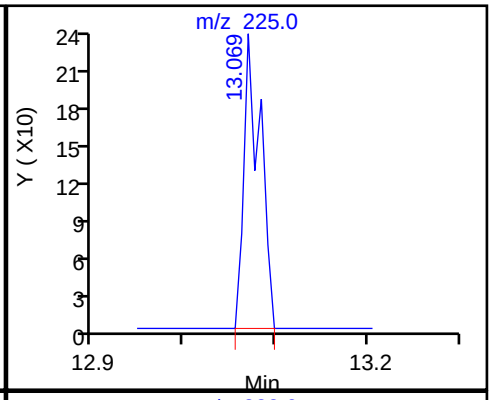
TestAmerica Edison

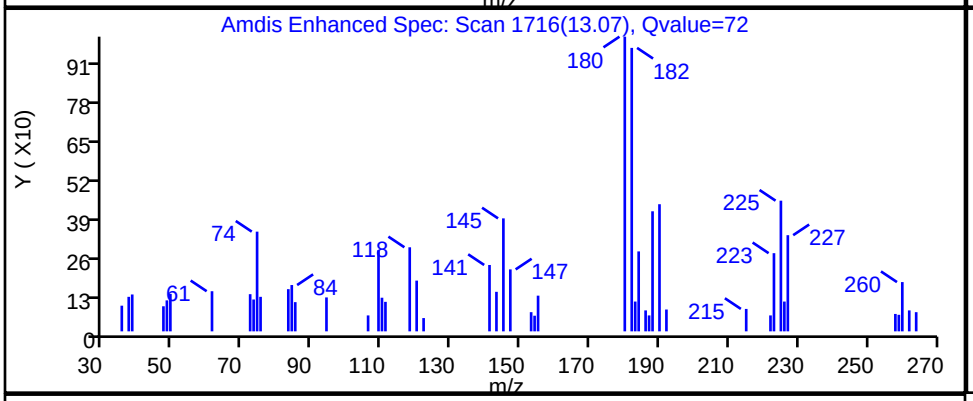
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

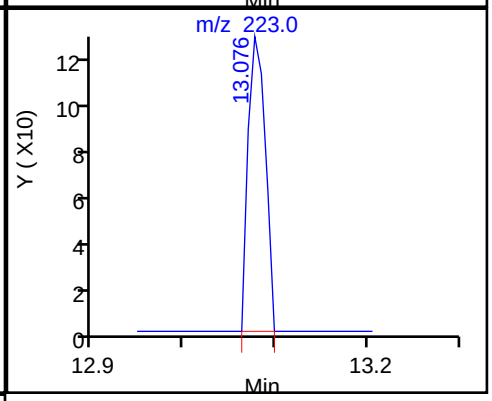
130 Hexachlorobutadiene, CAS: 87-68-3

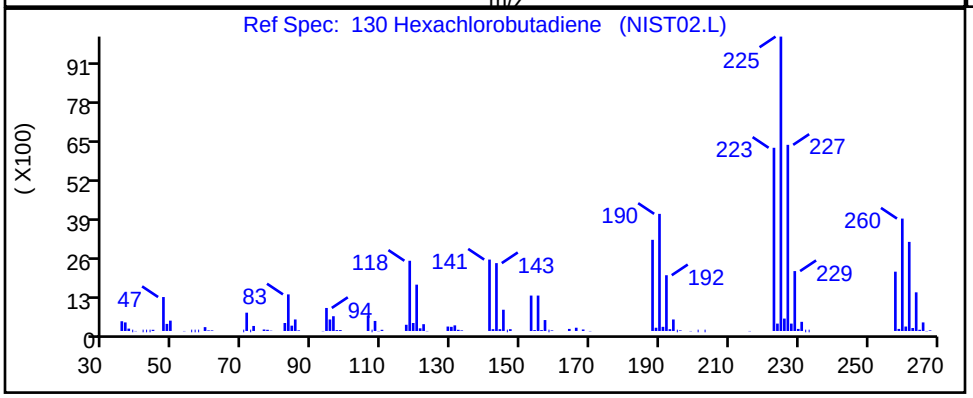
Processing Results











RT	Mass	Response	Amount
13.07	225.00	300	0.121121
13.08	223.00	167	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

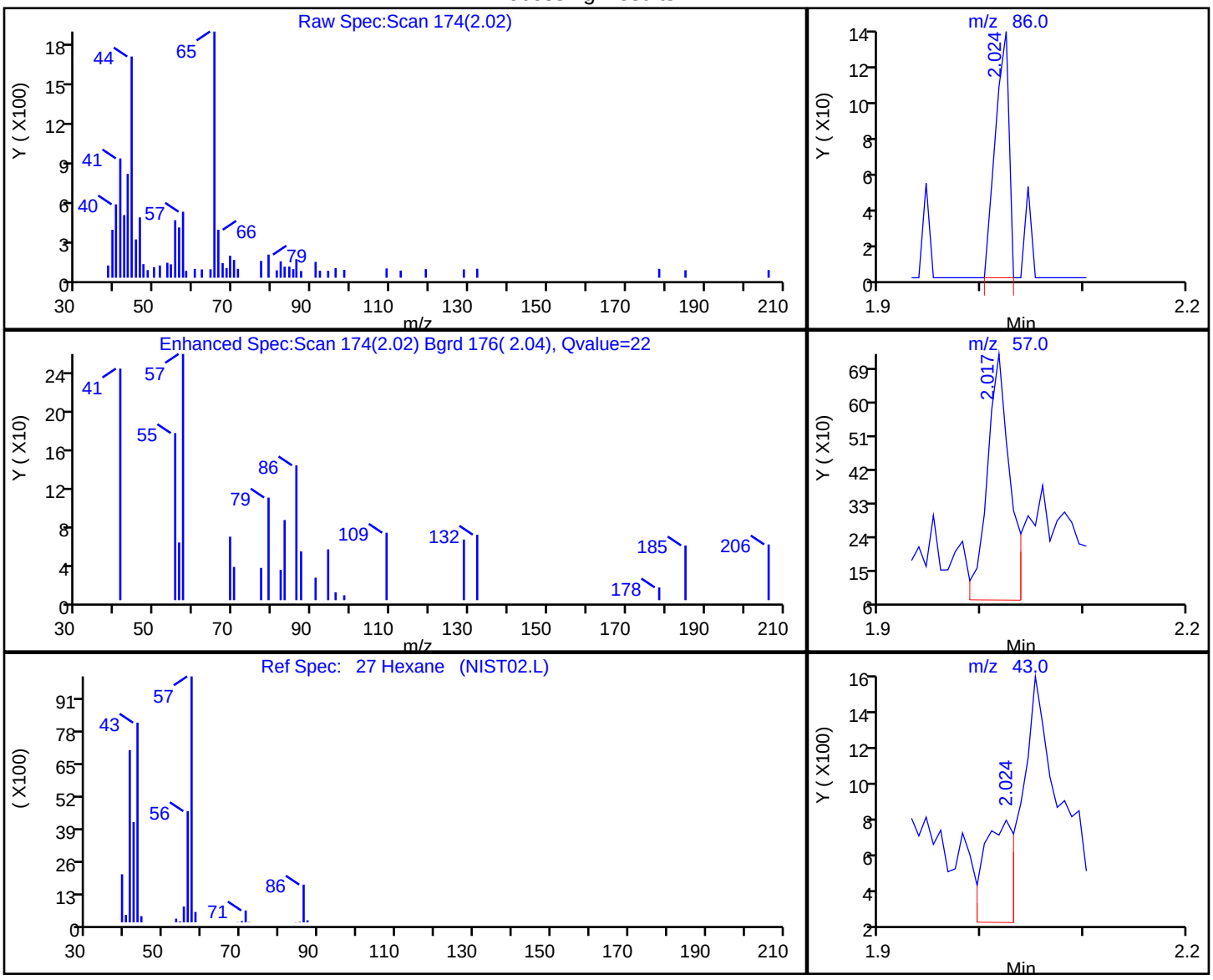
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D				
Injection Date:	20-Apr-2018 02:35:30	Instrument ID:	CVOAMS13		
Lims ID:	STD8				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

27 Hexane, CAS: 110-54-3

Processing Results



RT	Mass	Response	Amount
2.02	86.00	128	0.139601
2.02	57.00	1031	
2.02	43.00	1077	
2.02	56.00	757	

Reviewer: delpolitov, 23-Apr-2018 12:29:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

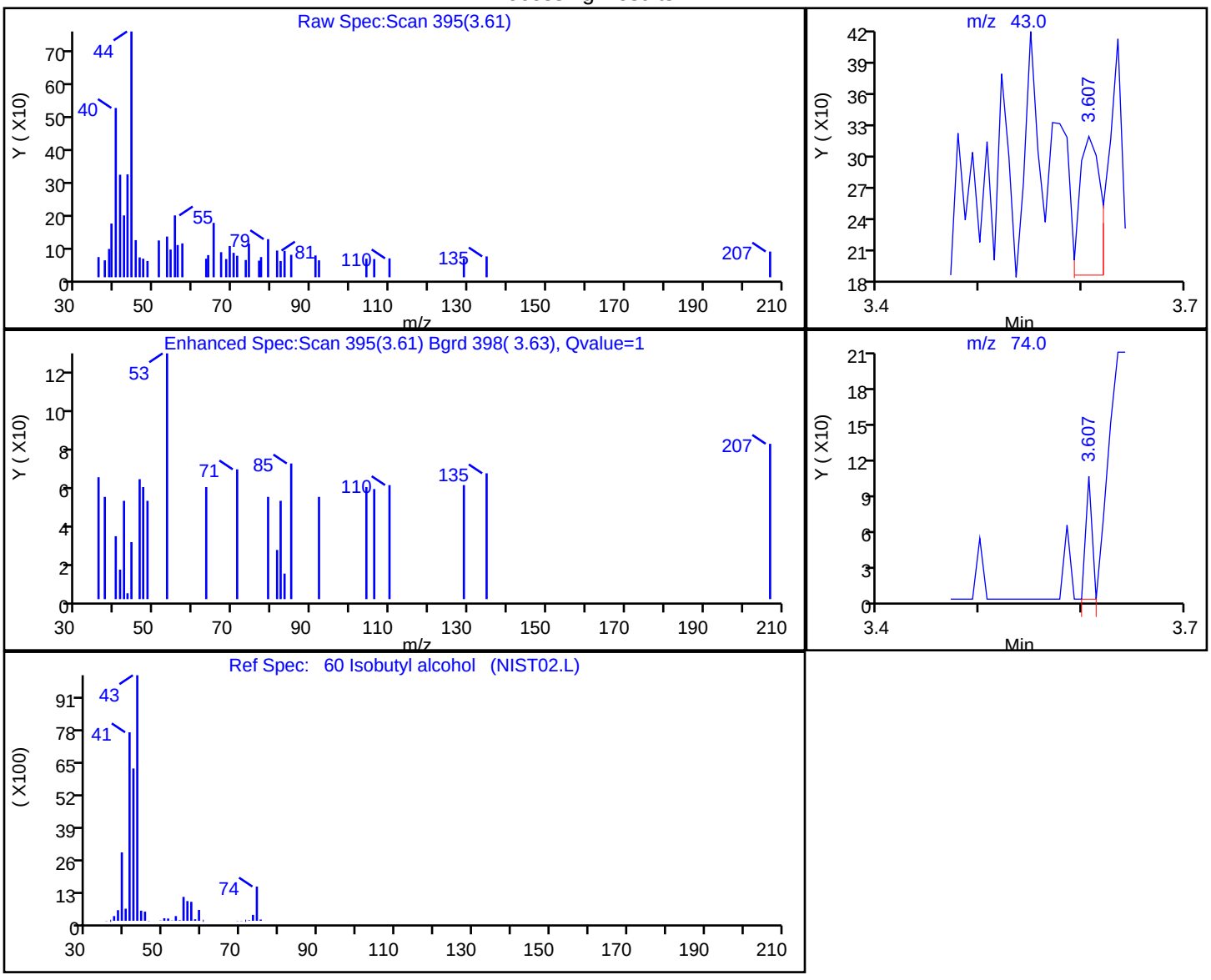
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

60 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
3.61	43.00	186	0.948206
3.61	74.00	44	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

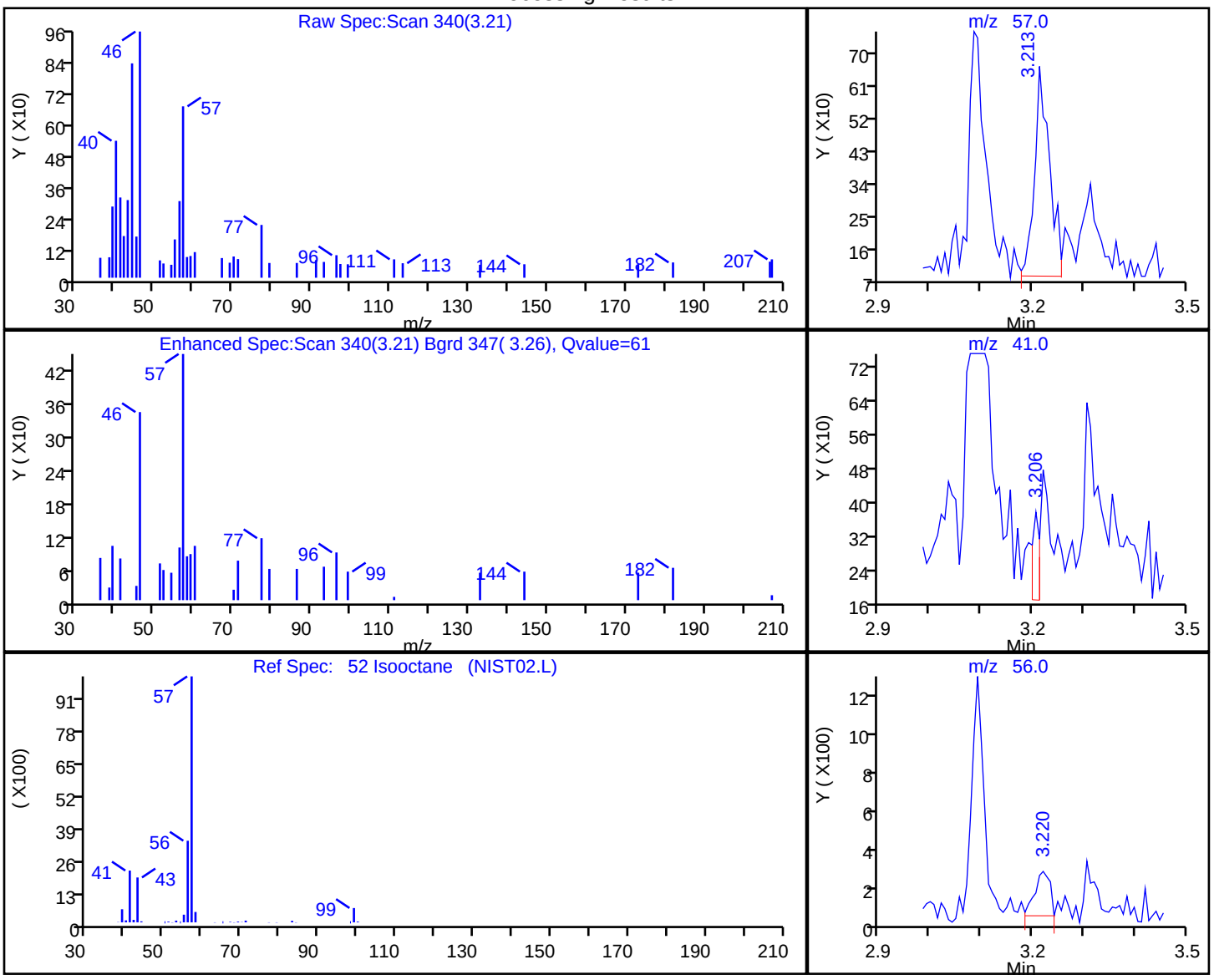
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

52 Isooctane, CAS: 540-84-1

Processing Results



RT	Mass	Response	Amount
3.21	57.00	1195	0.086695
3.21	41.00	206	
3.22	56.00	431	

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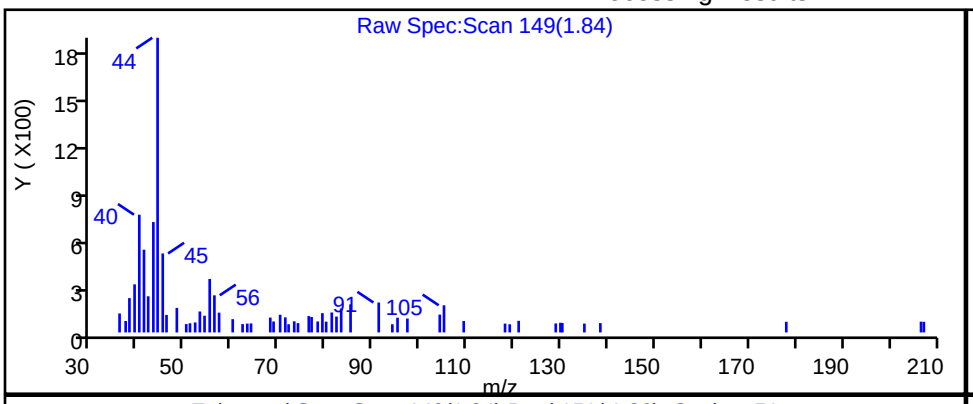
User Disabled Compound Report

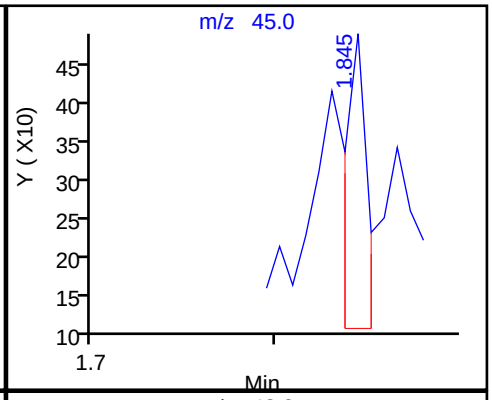
TestAmerica Edison

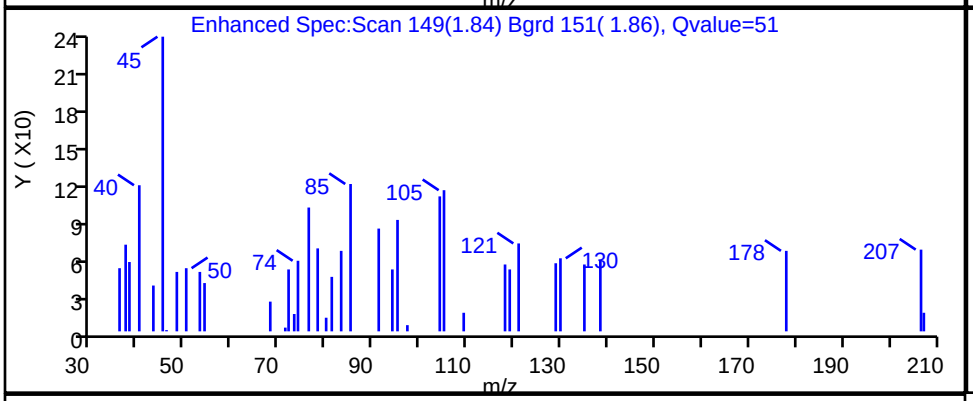
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

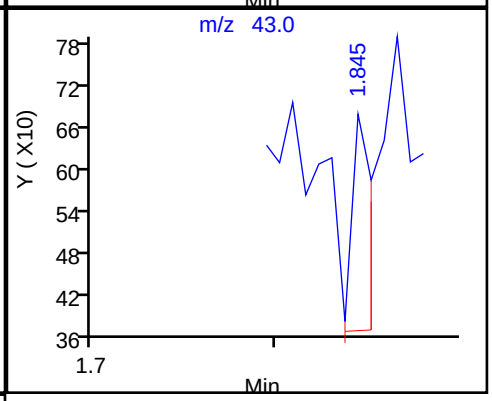
22 Isopropyl alcohol, CAS: 67-63-0

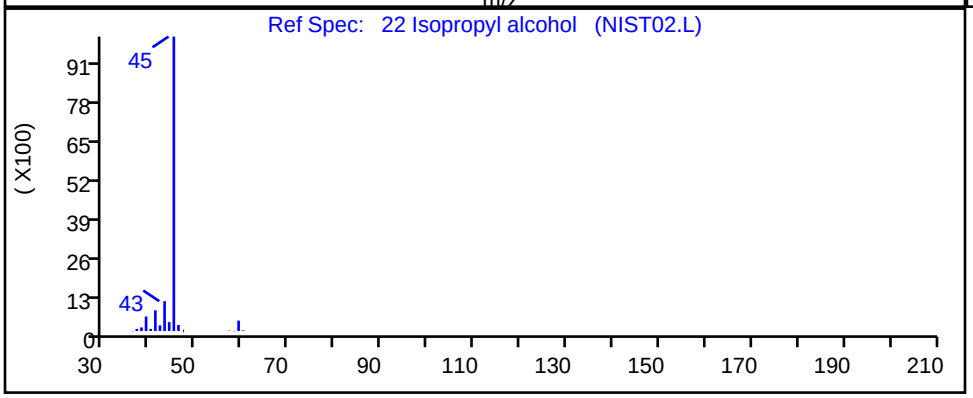
Processing Results











RT	Mass	Response	Amount
1.84	45.00	315	1.009192
1.84	43.00	231	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

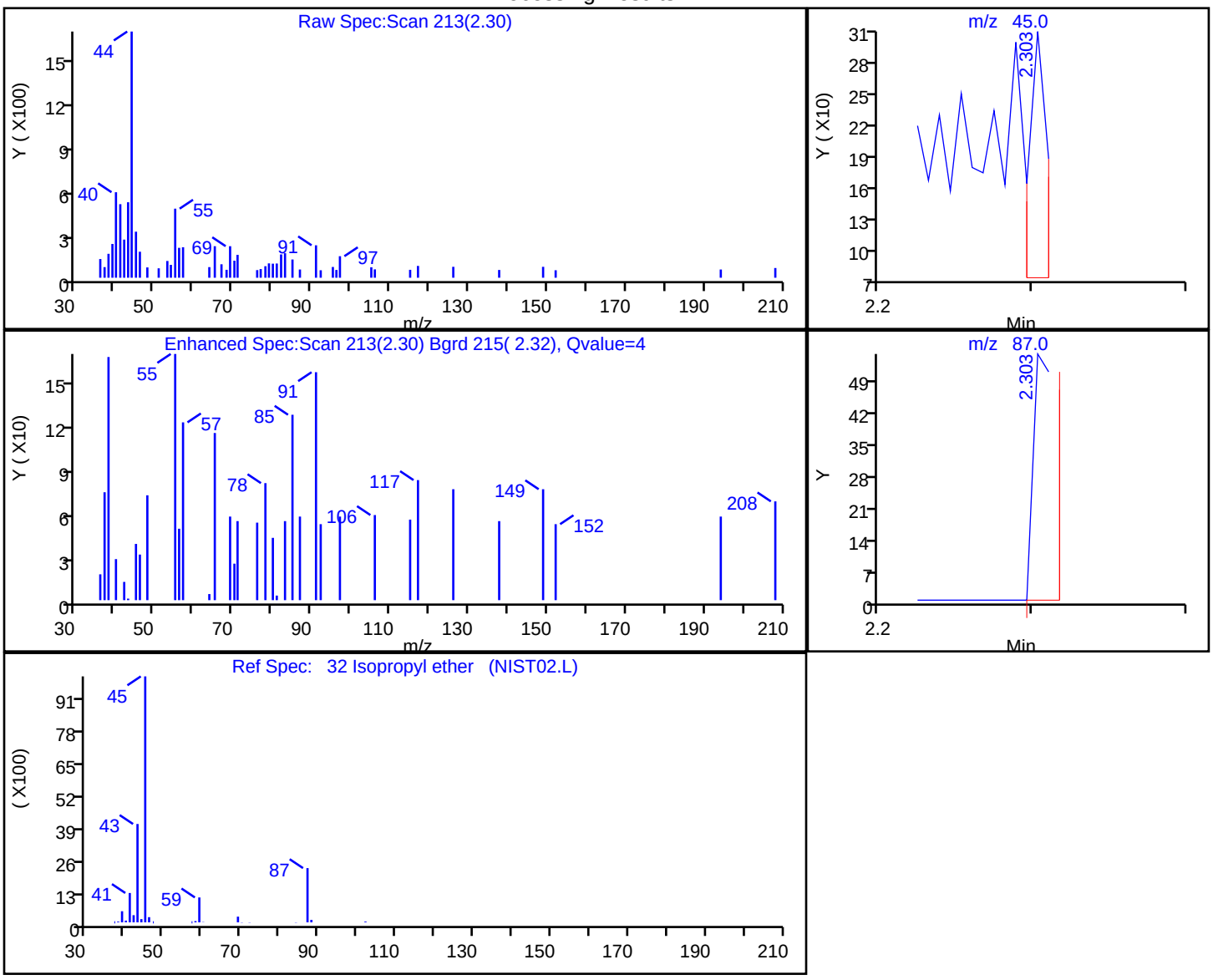
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

32 Isopropyl ether, CAS: 108-20-3

Processing Results



RT	Mass	Response	Amount
2.30	45.00	184	0.012844
2.30	87.00	46	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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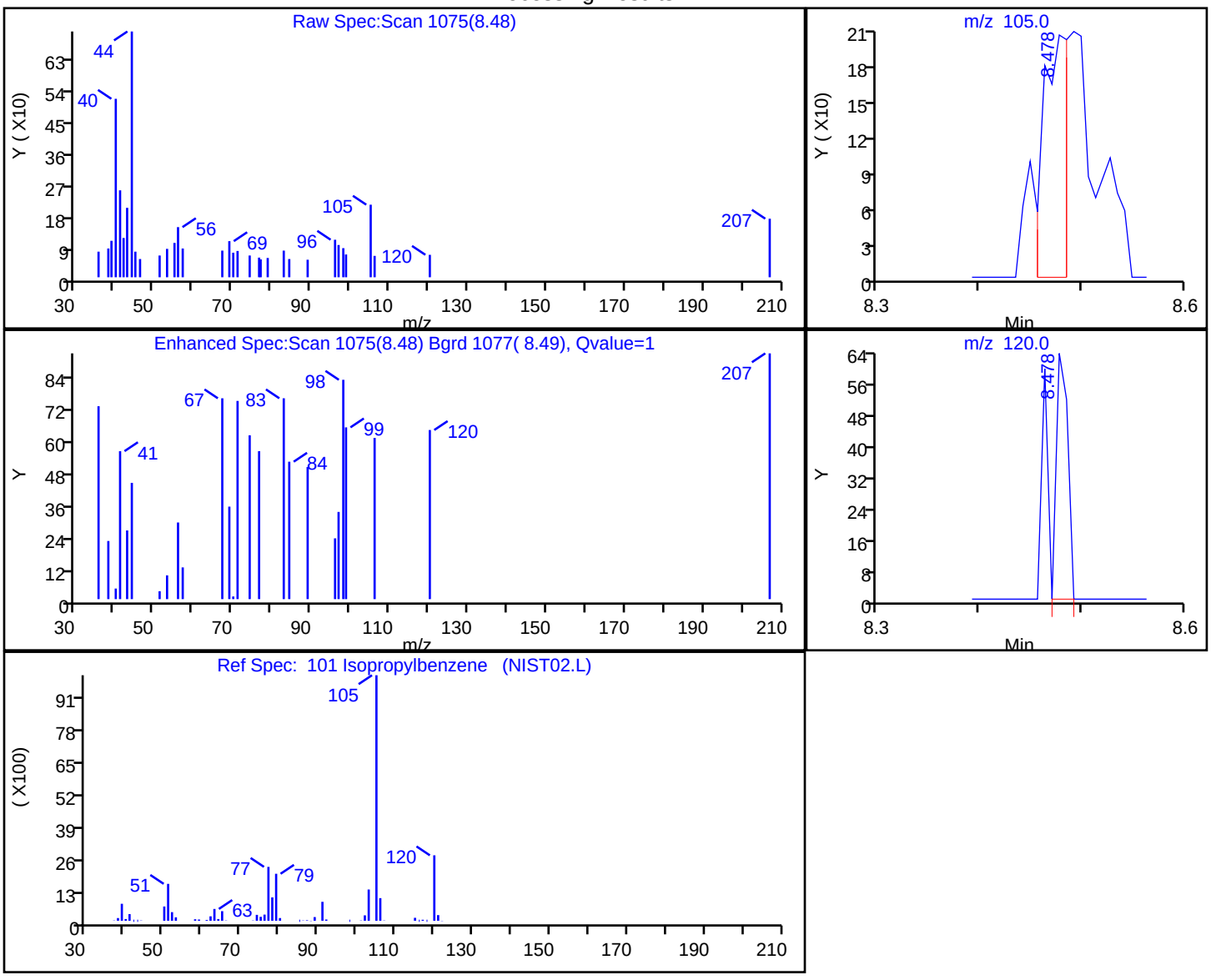
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

101 Isopropylbenzene, CAS: 98-82-8

Processing Results



RT	Mass	Response	Amount
8.48	105.00	349	0.019507
8.48	120.00	50	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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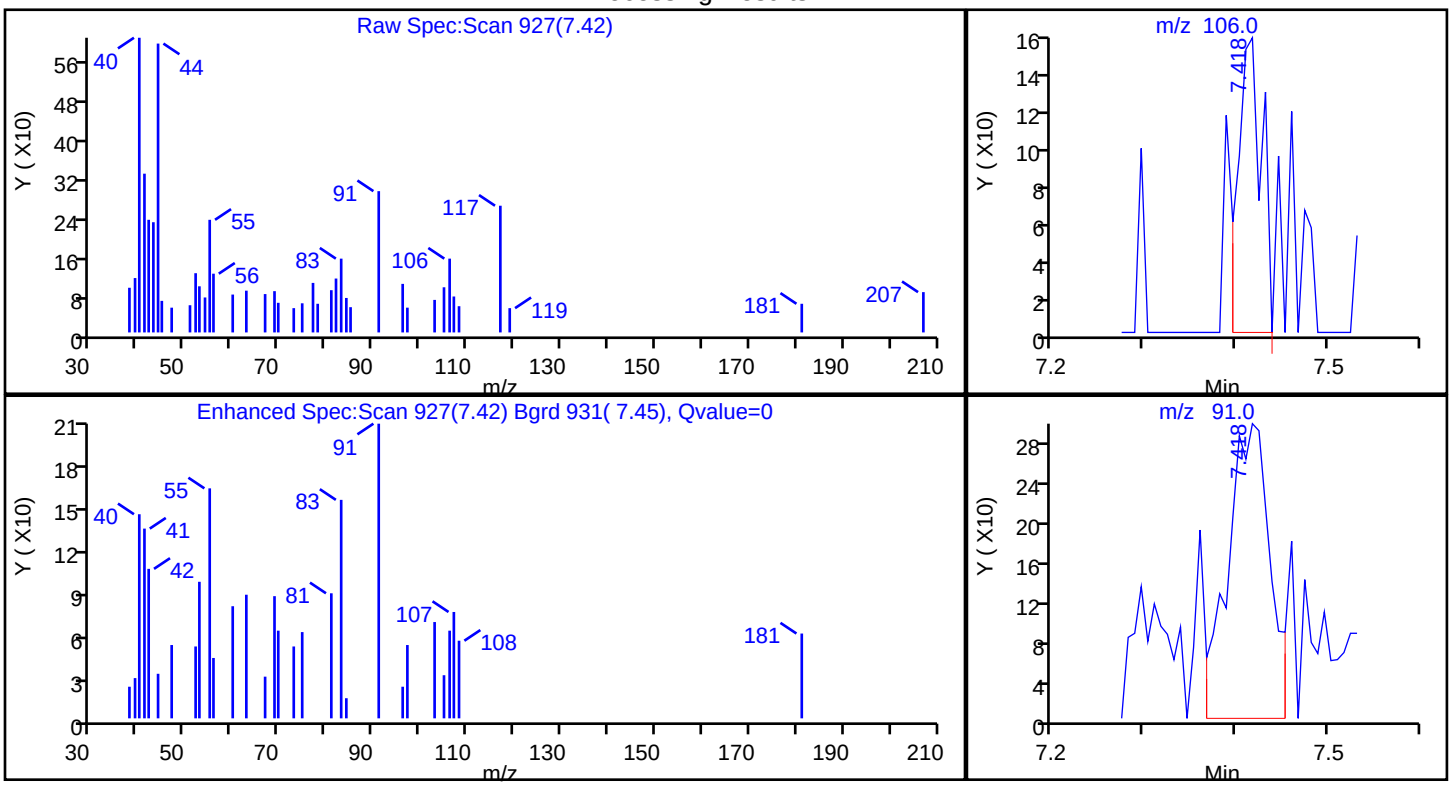
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

96 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
7.42	106.00	274	0.040362
7.42	91.00	945	

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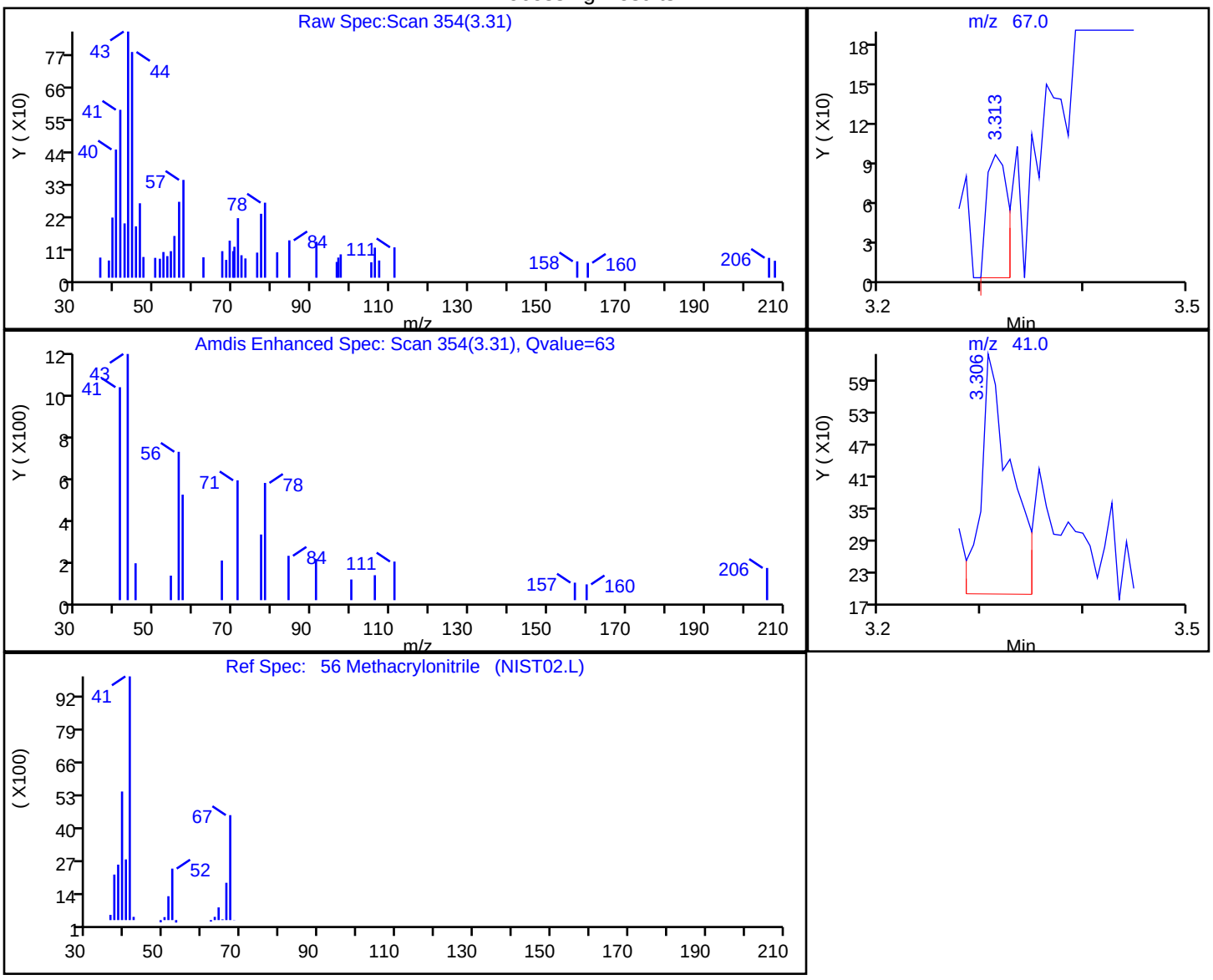
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

56 Methacrylonitrile, CAS: 126-98-7

Processing Results



RT	Mass	Response	Amount
3.31	67.00	130	0.079152
3.31	41.00	909	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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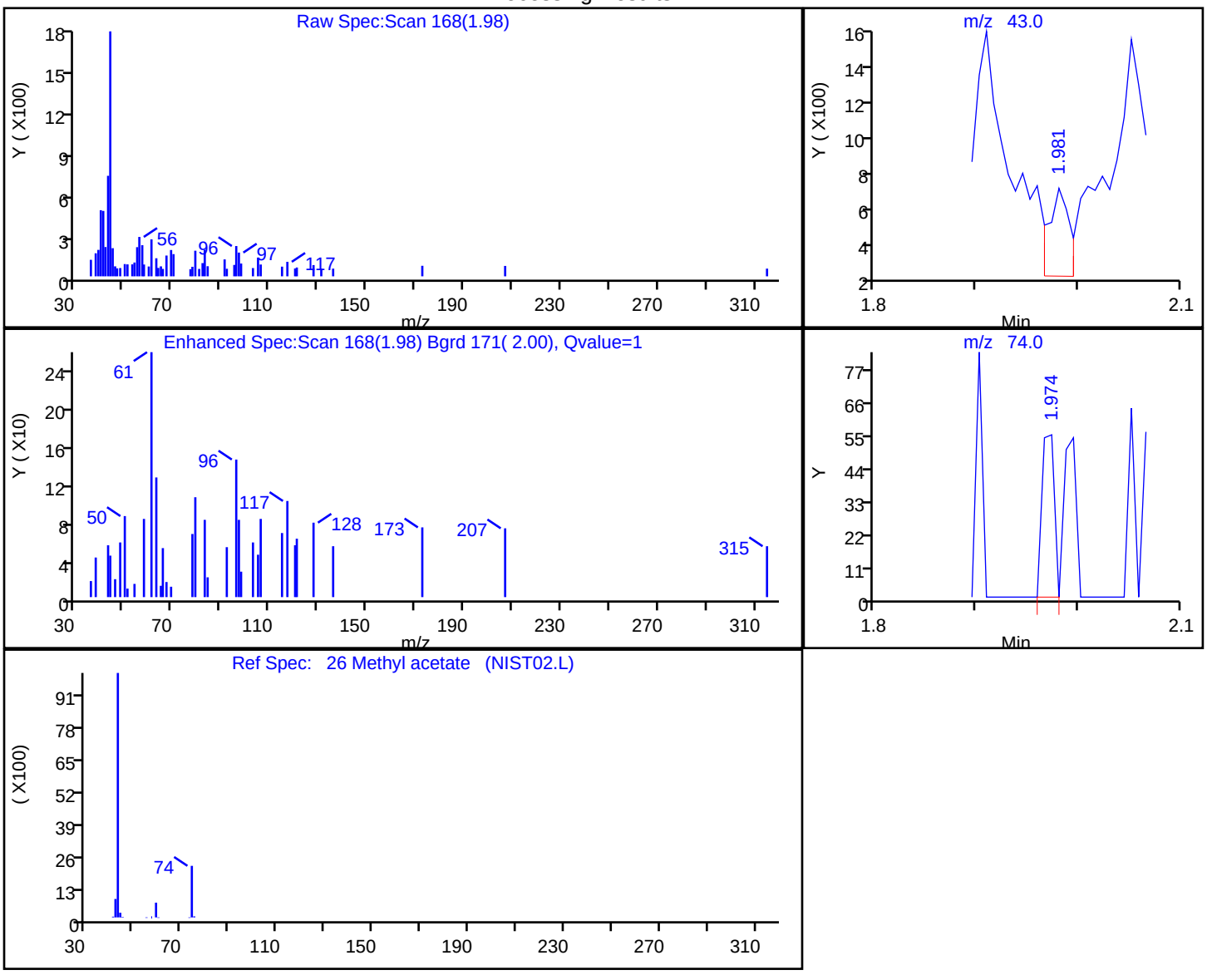
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

26 Methyl acetate, CAS: 79-20-9

Processing Results



RT	Mass	Response	Amount
1.98	43.00	695	0.209440
1.97	74.00	47	

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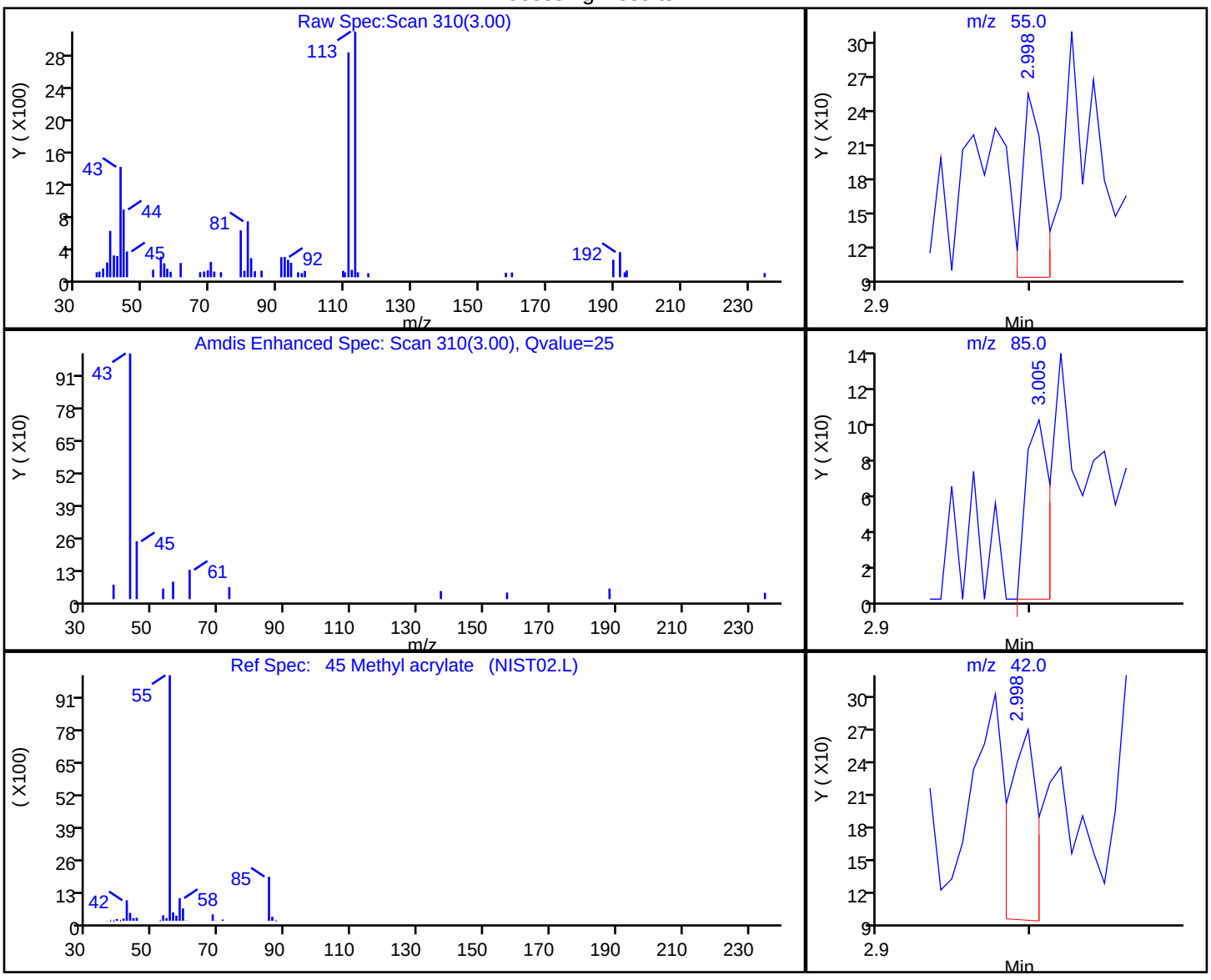
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

45 Methyl acrylate, CAS: 96-33-3

Processing Results



RT	Mass	Response	Amount
3.00	55.00	149	0.039437
3.01	85.00	103	
3.00	42.00	220	

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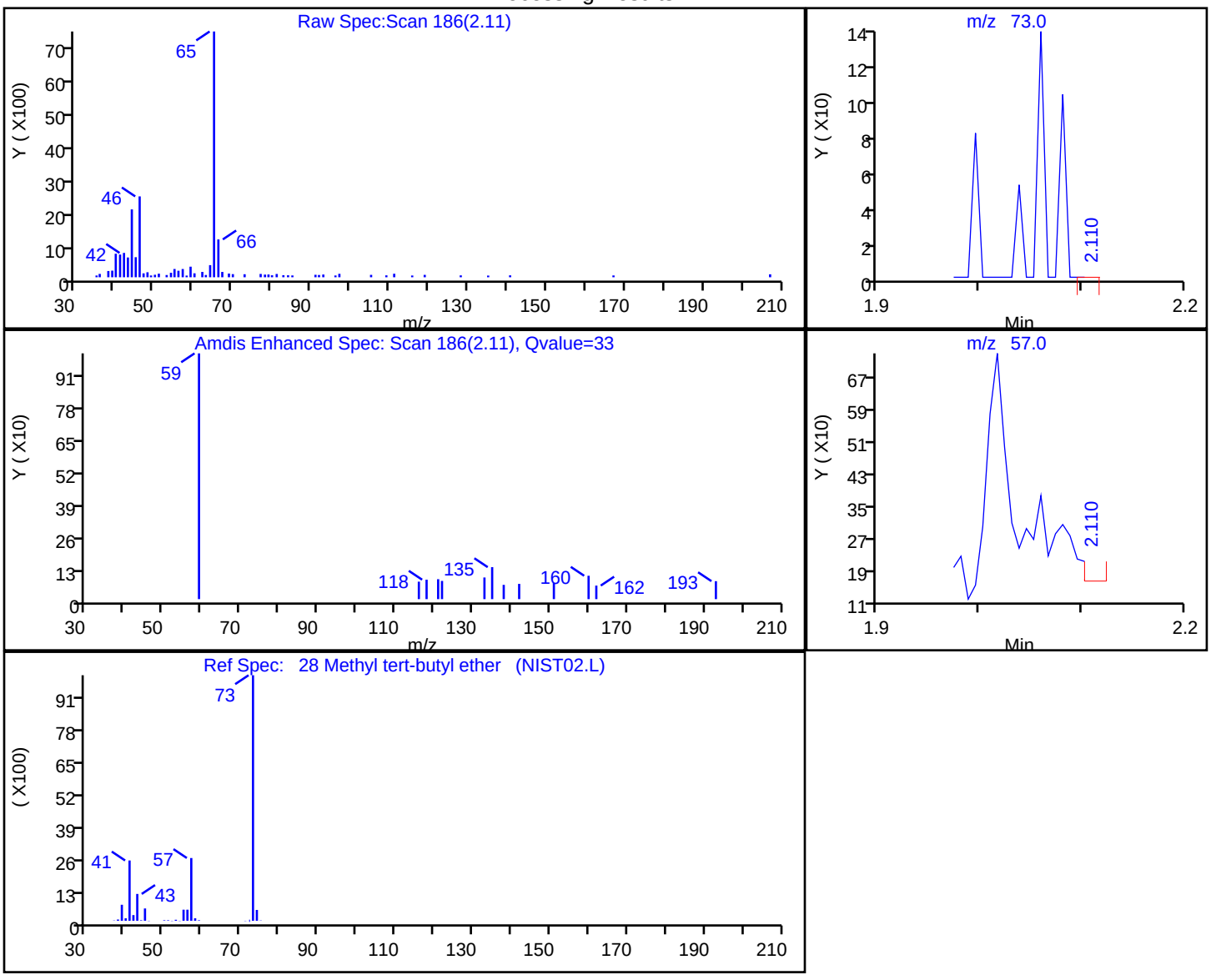
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
2.11	73.00	40	0.003656
2.11	57.00	232	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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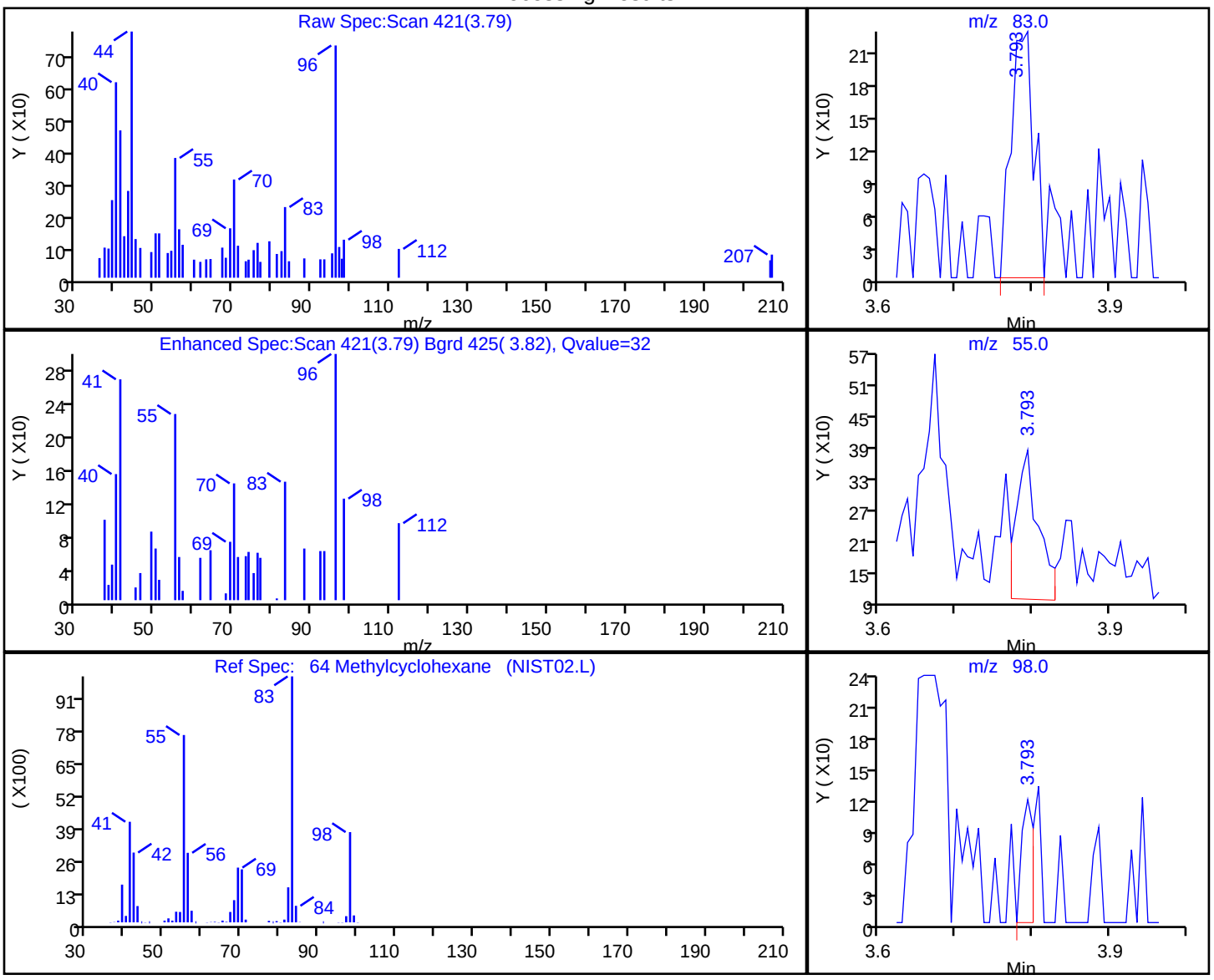
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Methylcyclohexane, CAS: 108-87-2

Processing Results



RT	Mass	Response	Amount
3.79	83.00	465	0.069256
3.79	55.00	577	
3.79	98.00	130	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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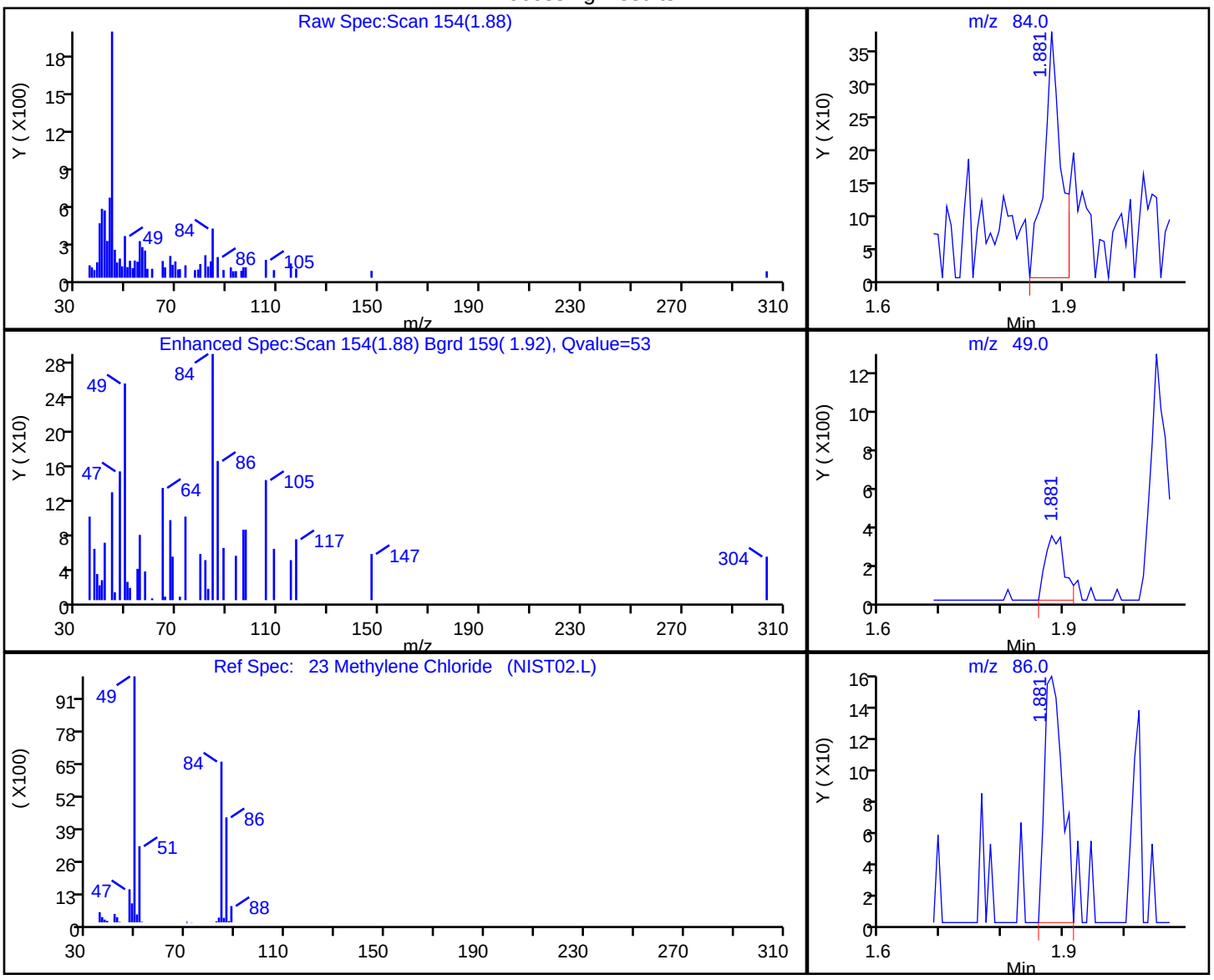
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

23 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
1.88	84.00	707	0.184335
1.88	49.00	694	
1.88	86.00	328	

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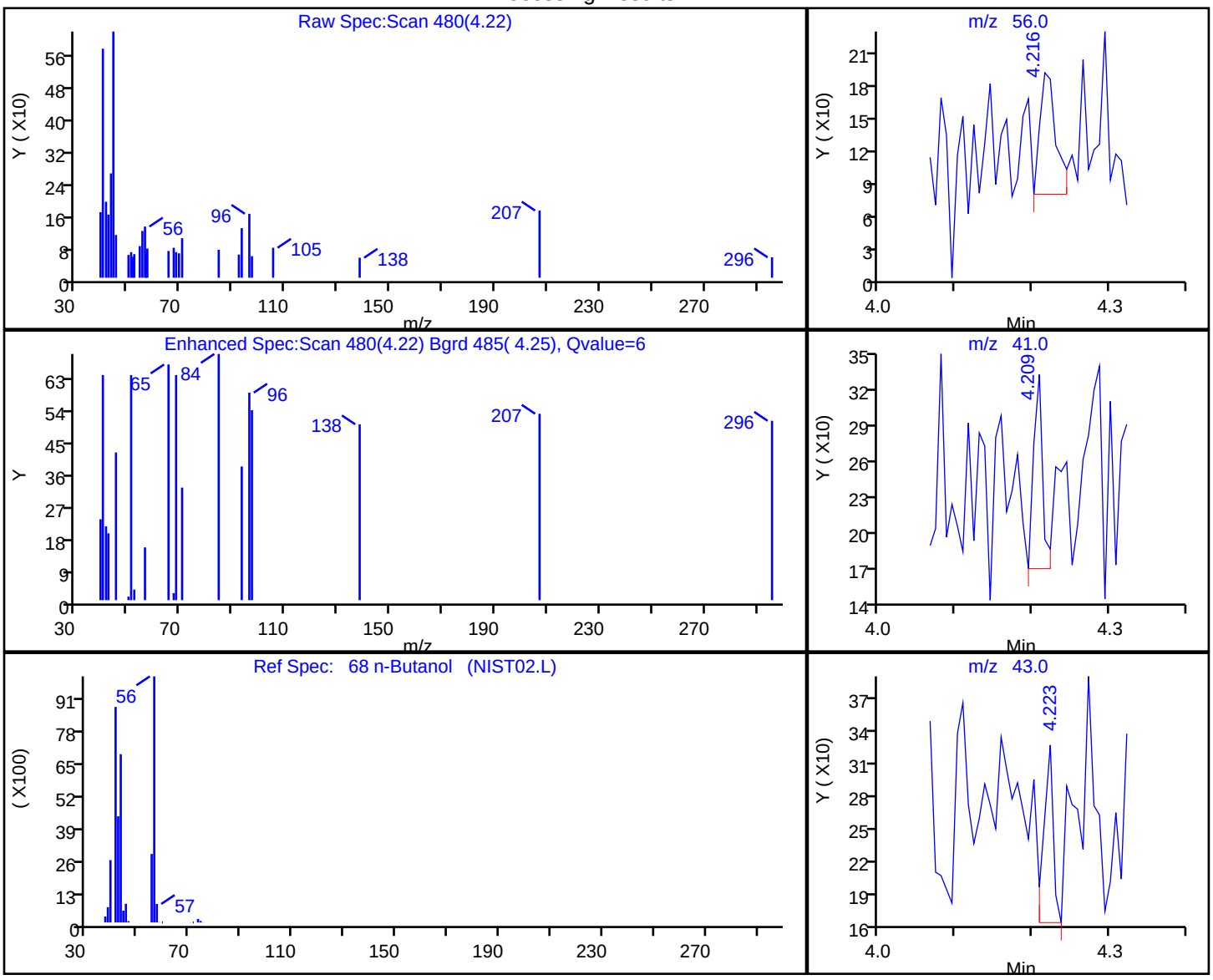
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

68 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
4.22	56.00	164	1.253551
4.21	41.00	131	
4.22	43.00	130	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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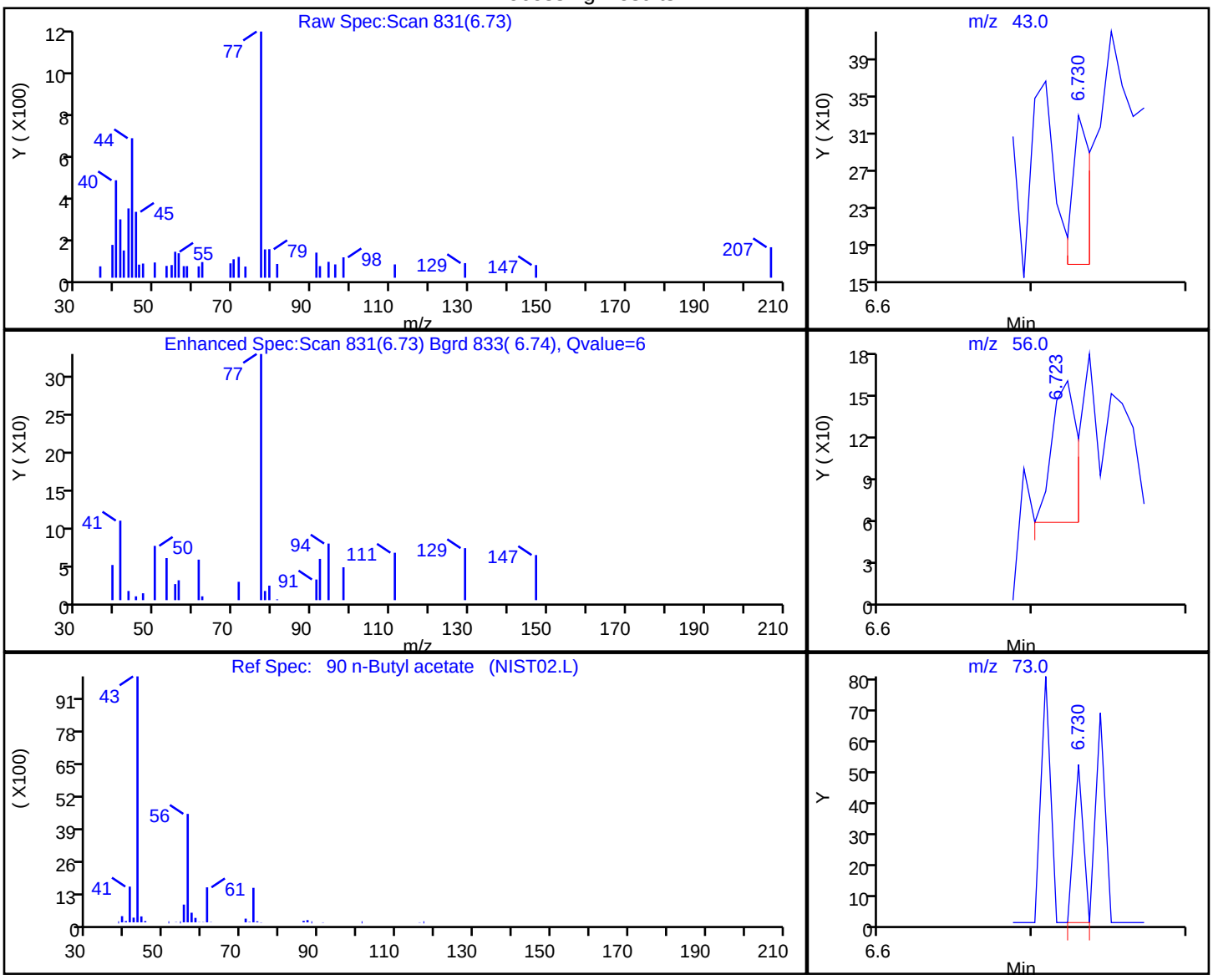
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

90 n-Butyl acetate, CAS: 123-86-4

Processing Results



RT	Mass	Response	Amount
6.73	43.00	129	0.018877
6.72	56.00	115	
6.73	73.00	22	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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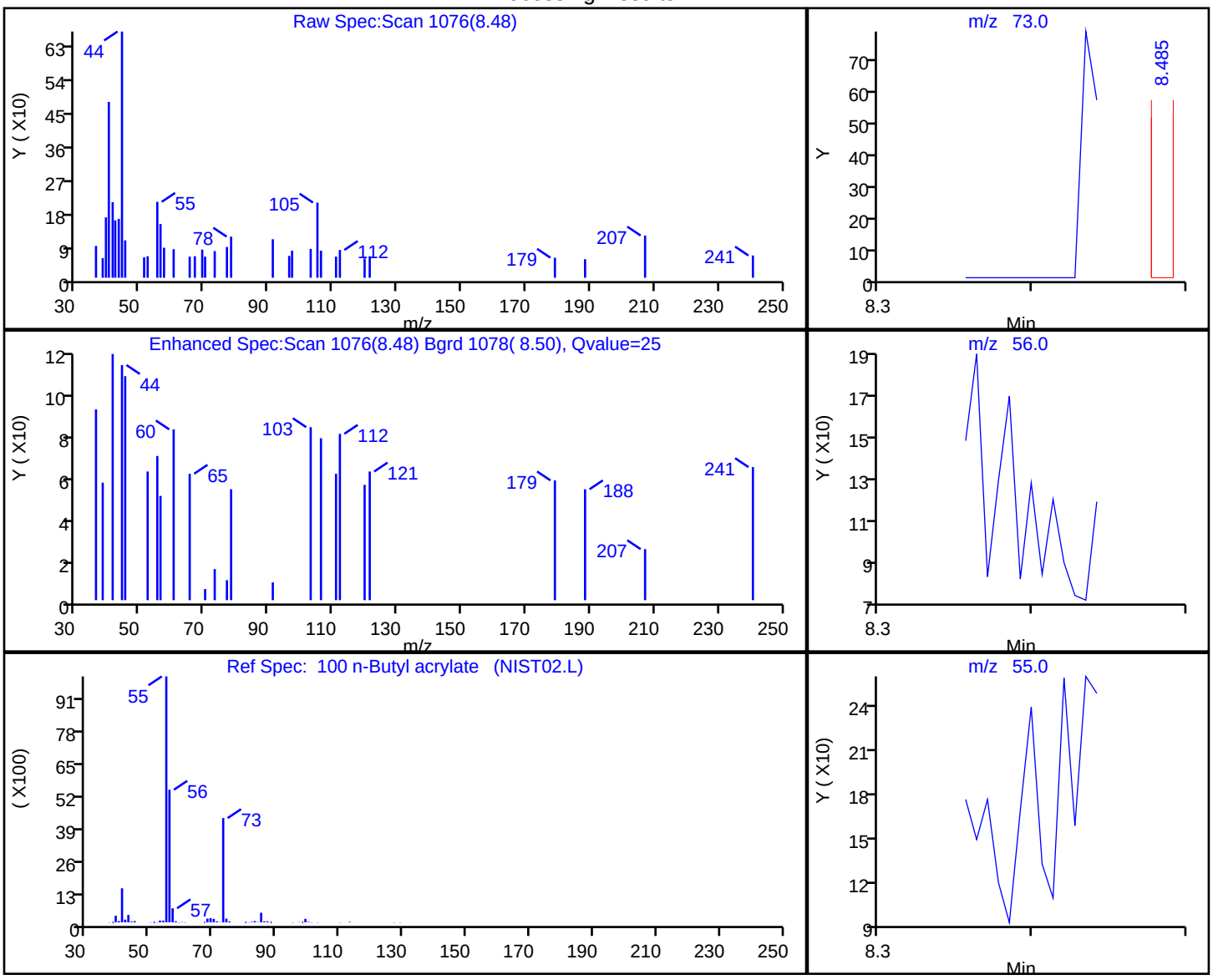
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

100 n-Butyl acrylate, CAS: 141-32-2

Processing Results



RT	Mass	Response	Amount
8.48	73.00	31	0.010695
8.48	56.00	152	
8.48	55.00	107	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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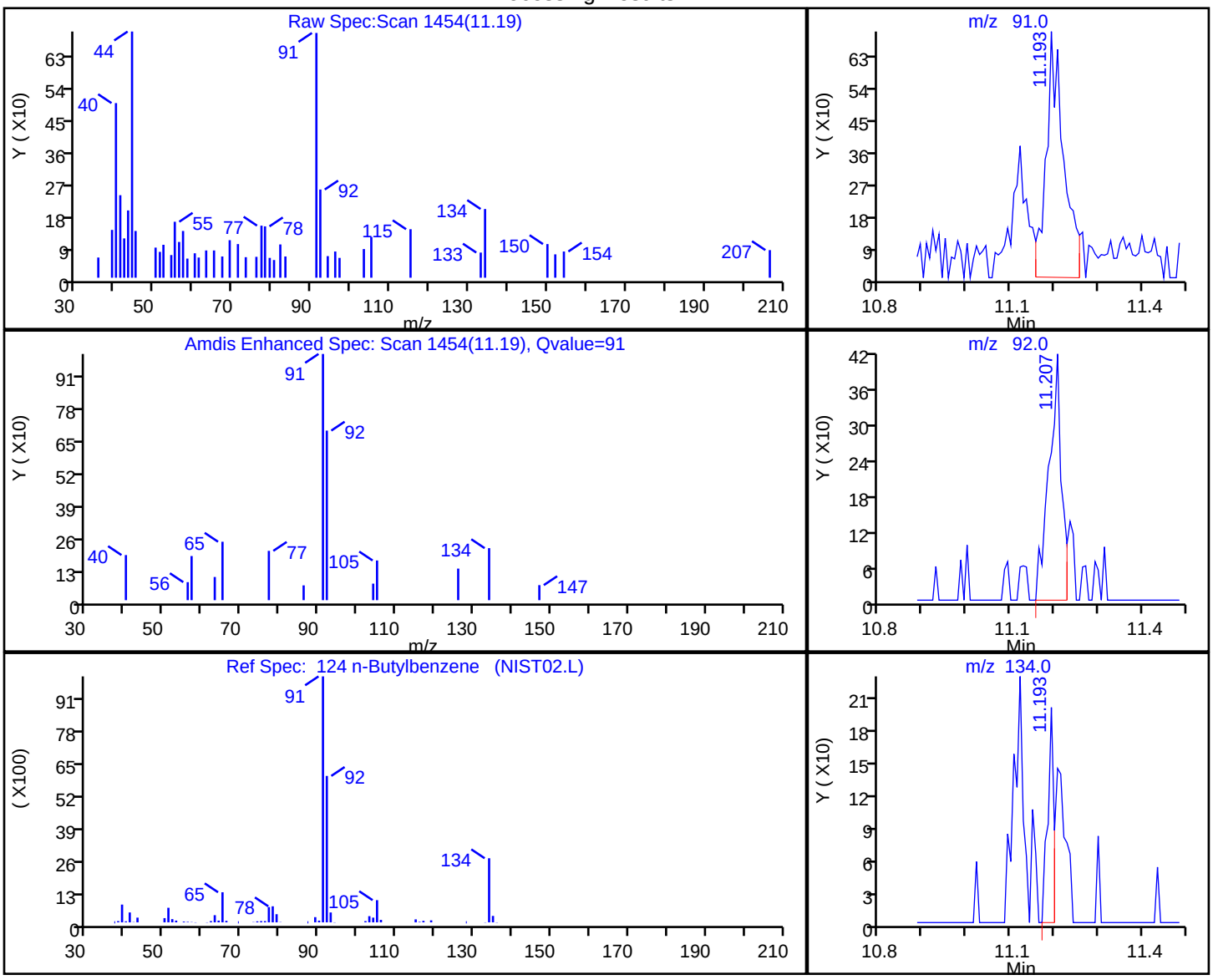
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

124 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
11.19	91.00	1920	0.125270
11.21	92.00	834	
11.19	134.00	189	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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User Disabled Compound Report

TestAmerica Edison

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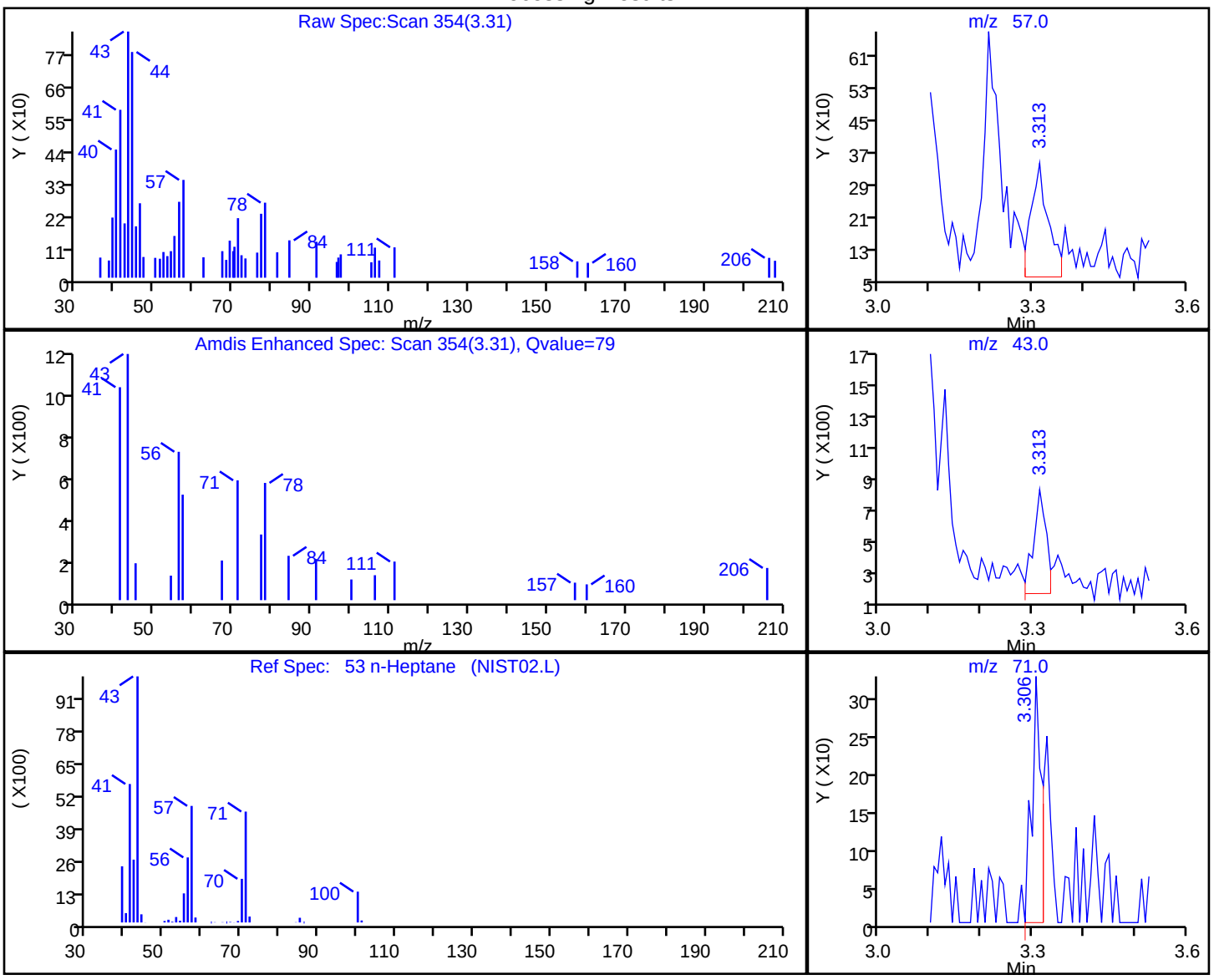
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

53 n-Heptane, CAS: 142-82-5

Processing Results



RT	Mass	Response	Amount
3.31	57.00	671	0.178024
3.31	43.00	1088	
3.31	71.00	424	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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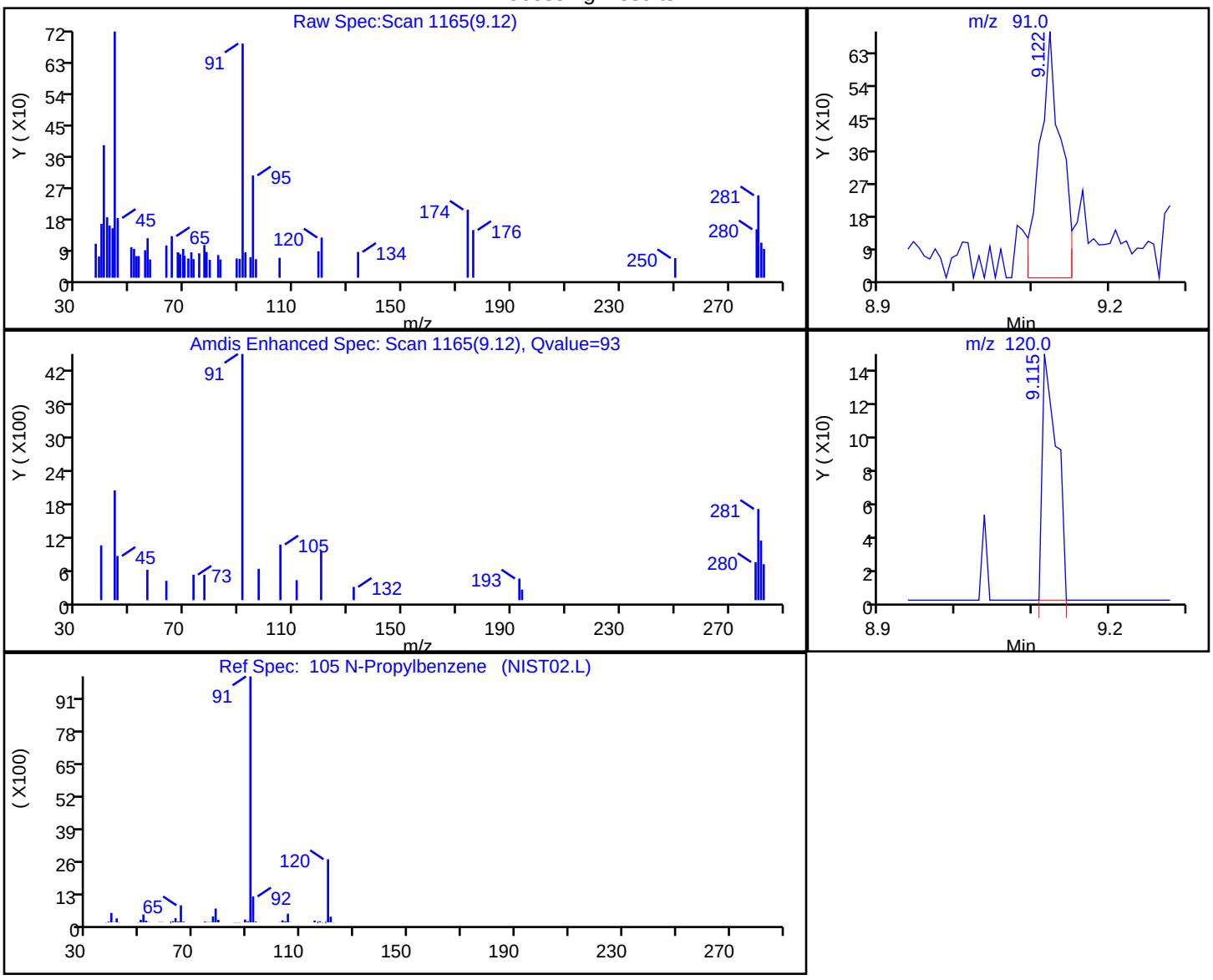
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

105 N-Propylbenzene, CAS: 103-65-1

Processing Results



RT	Mass	Response	Amount
9.12	91.00	1309	0.060301
9.12	120.00	189	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

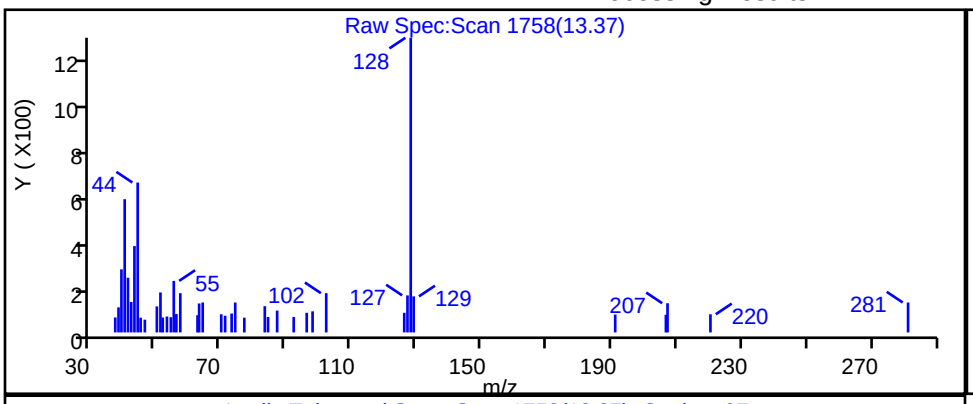
User Disabled Compound Report

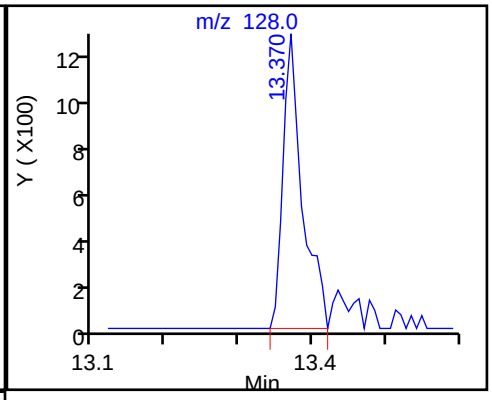
TestAmerica Edison

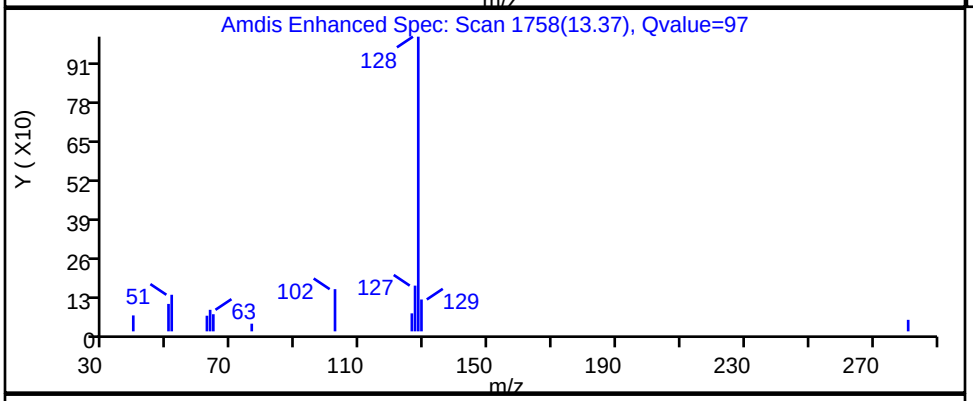
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

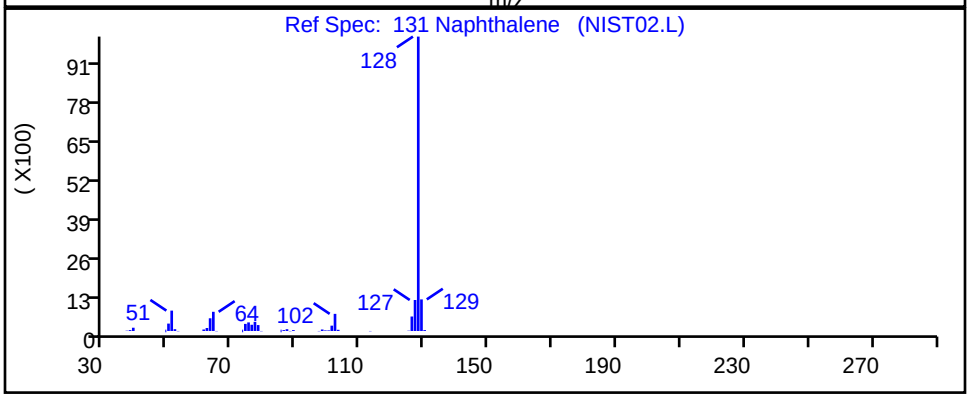
131 Naphthalene, CAS: 91-20-3

Processing Results









RT	Mass	Response	Amount
13.37	128.00	2197	0.195155

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

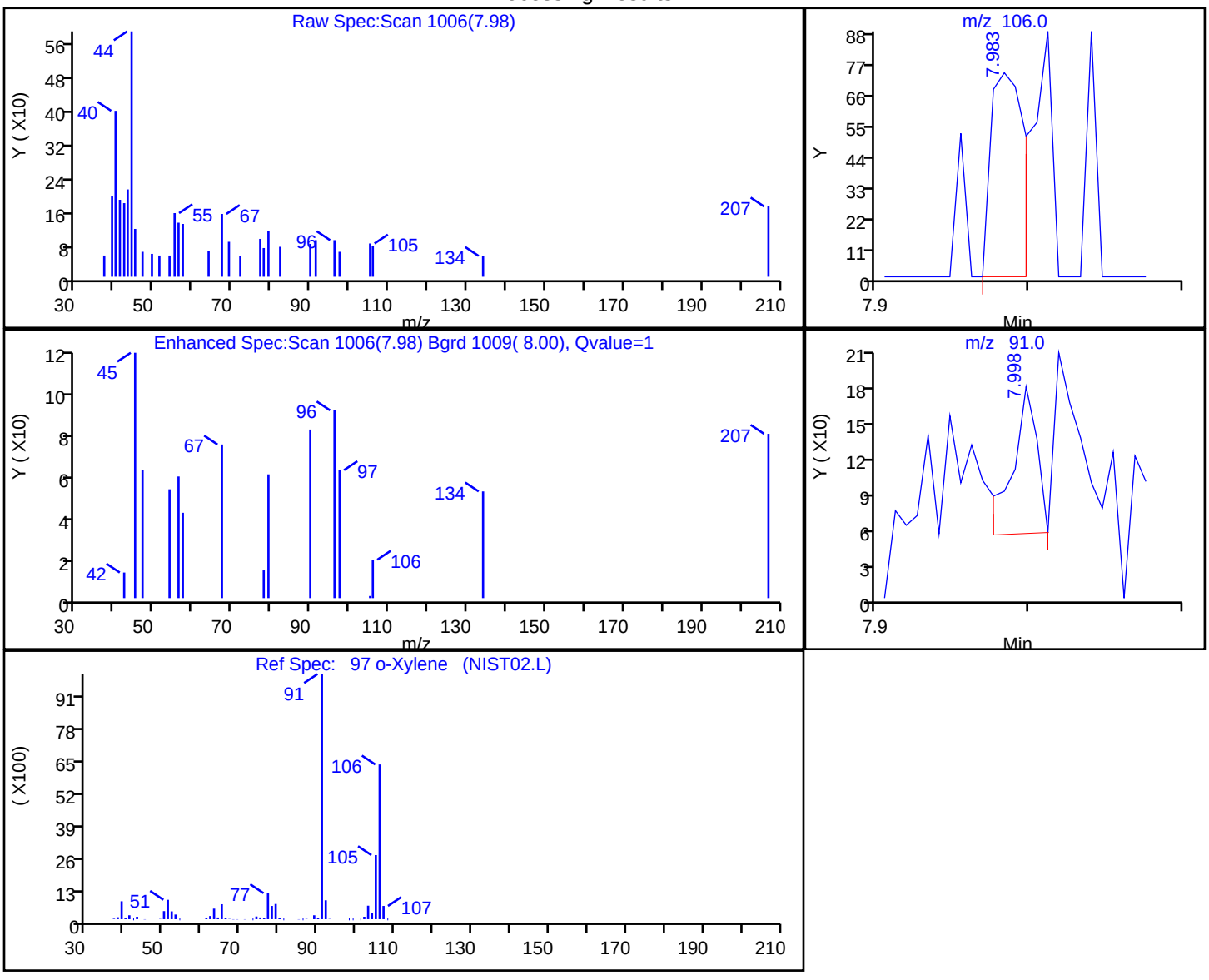
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

97 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
7.98	106.00	113	0.017028
8.00	91.00	137	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

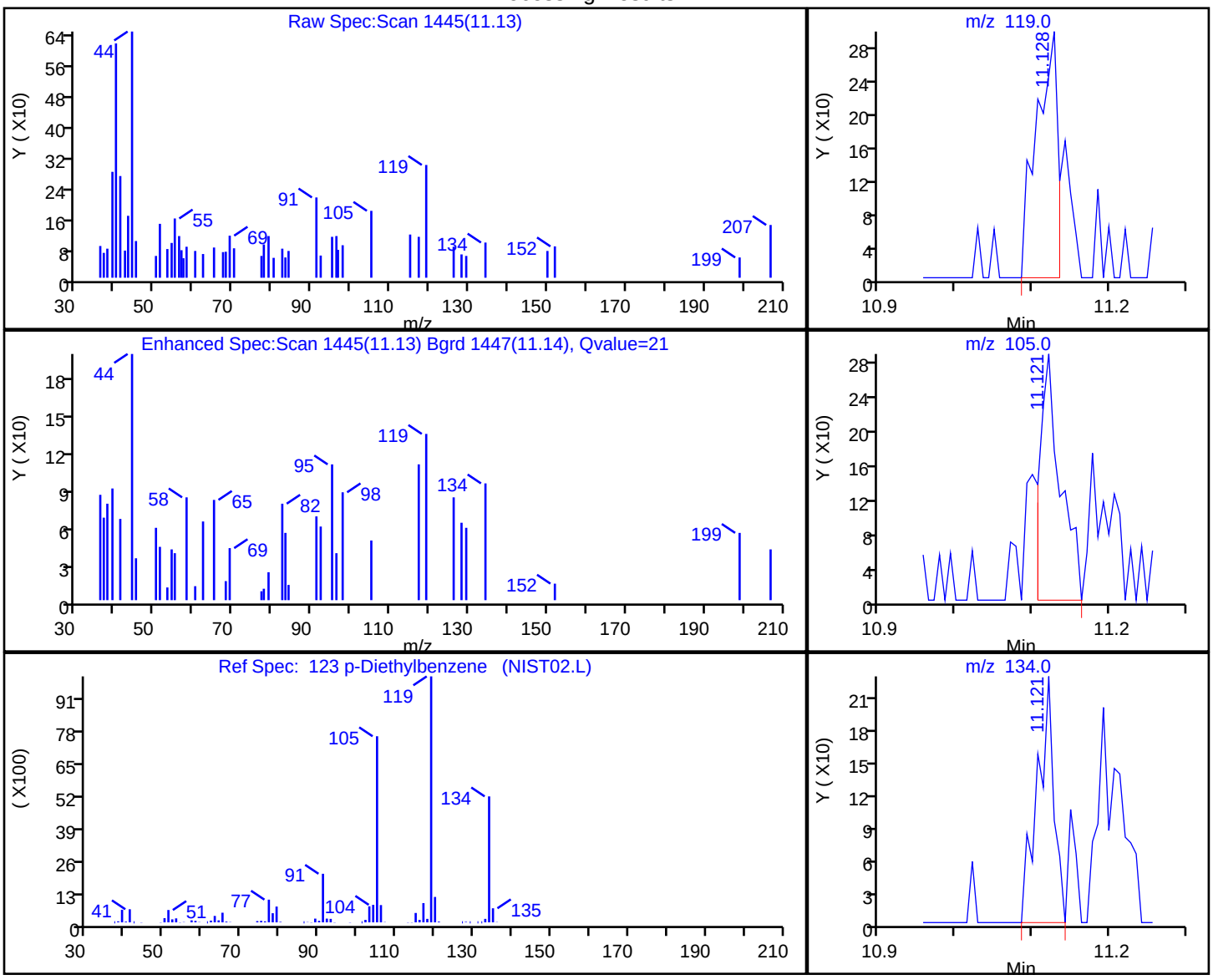
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

123 p-Diethylbenzene, CAS: 105-05-5

Processing Results



RT	Mass	Response	Amount
11.13	119.00	571	0.067010
11.12	105.00	533	
11.12	134.00	336	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

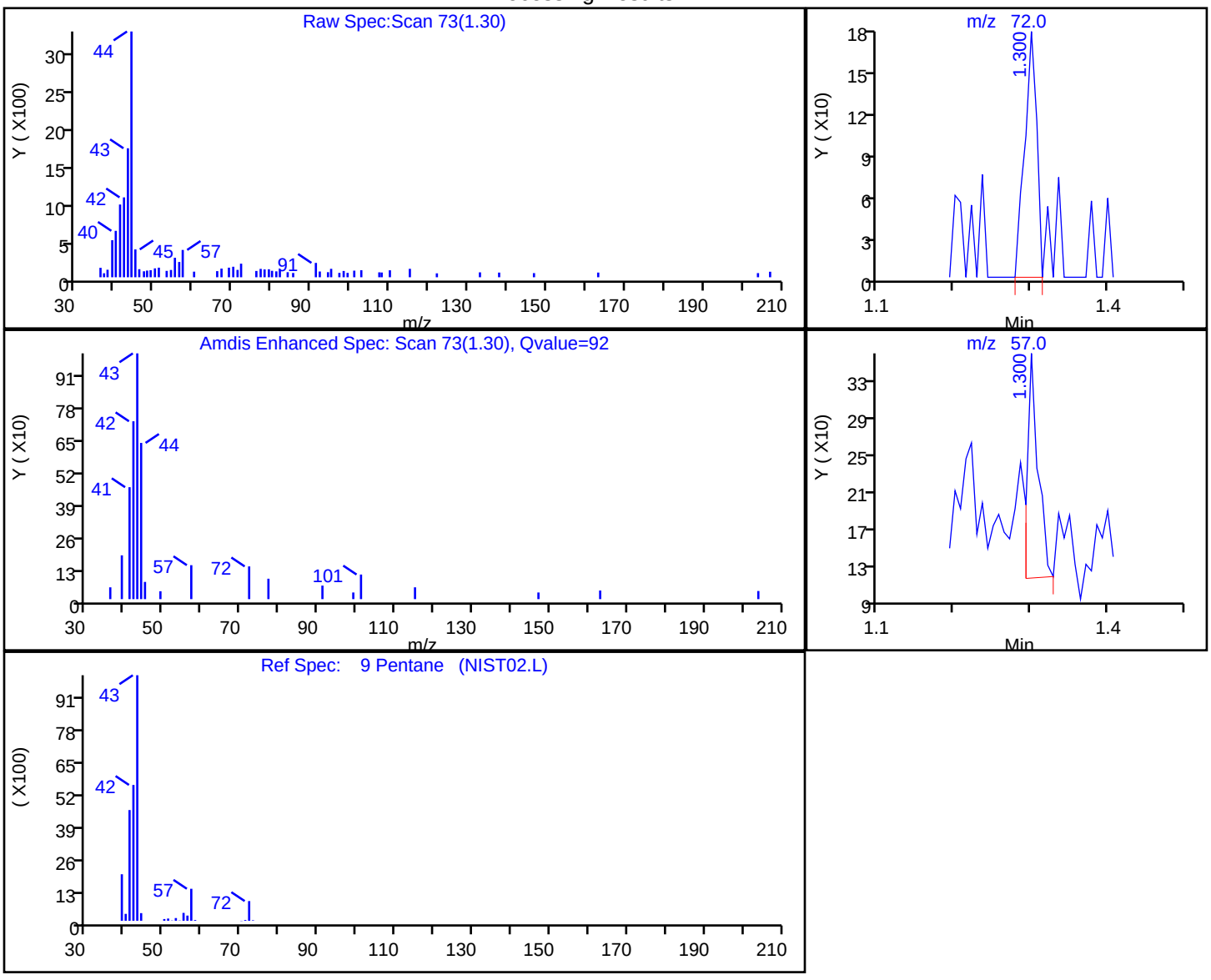
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Pentane, CAS: 109-66-0

Processing Results



RT	Mass	Response	Amount
1.30	72.00	194	0.311230
1.30	57.00	229	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

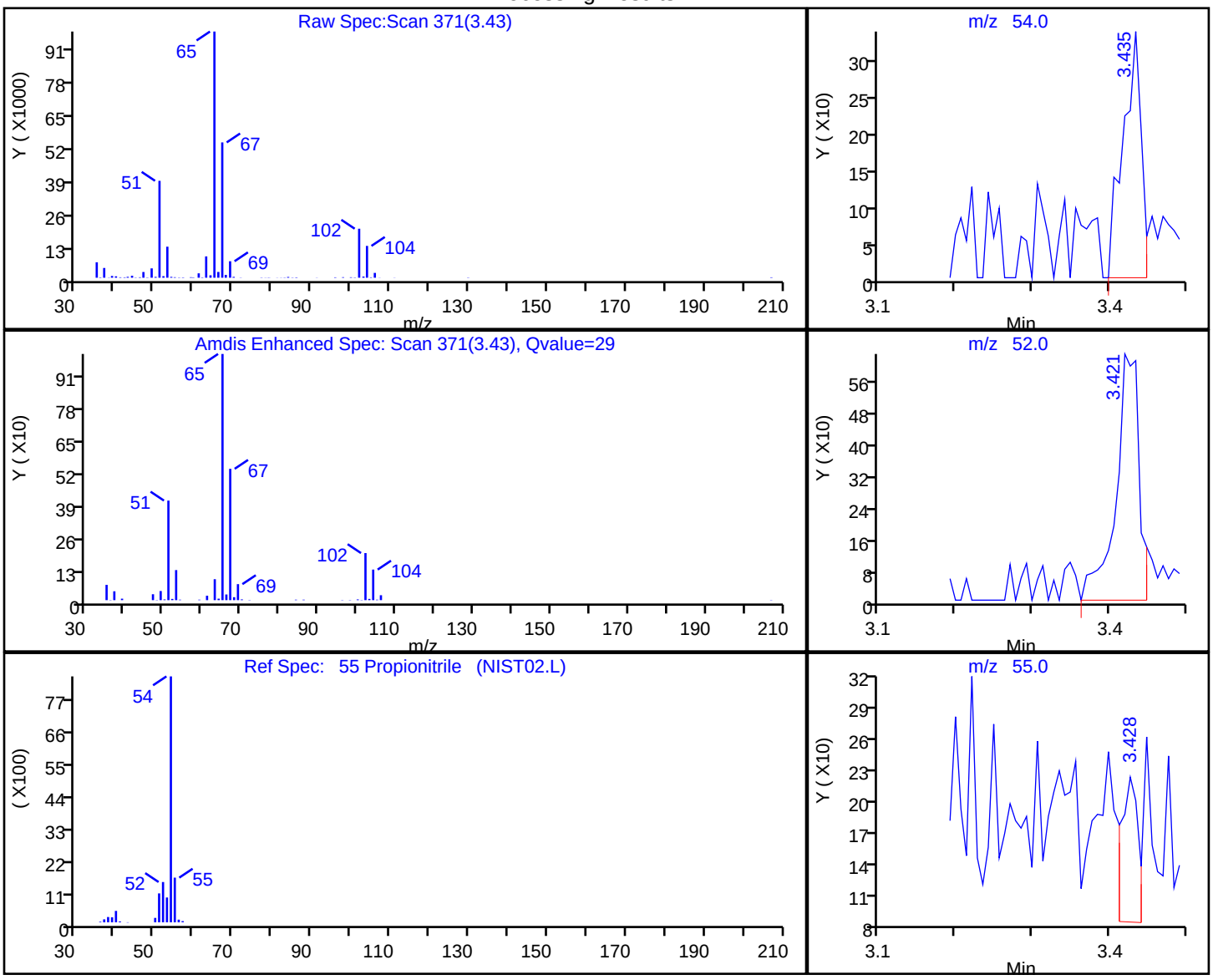
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

55 Propionitrile, CAS: 107-12-0

Processing Results



RT	Mass	Response	Amount
3.43	54.00	557	0.873581
3.42	52.00	1332	
3.43	55.00	213	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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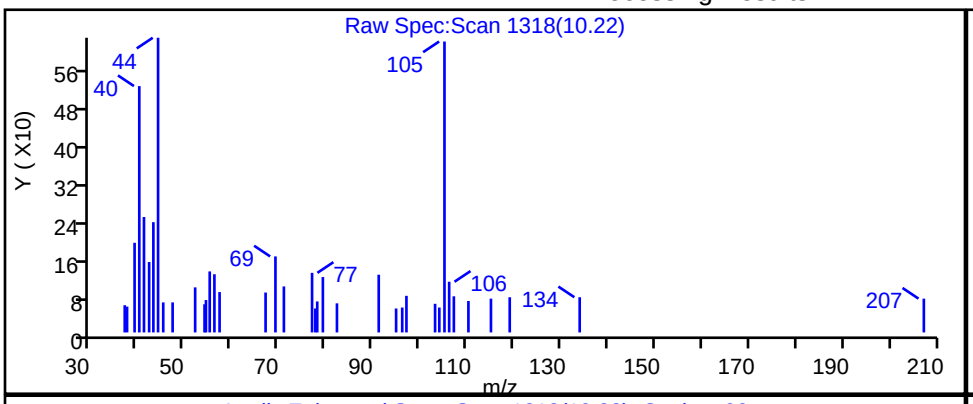
User Disabled Compound Report

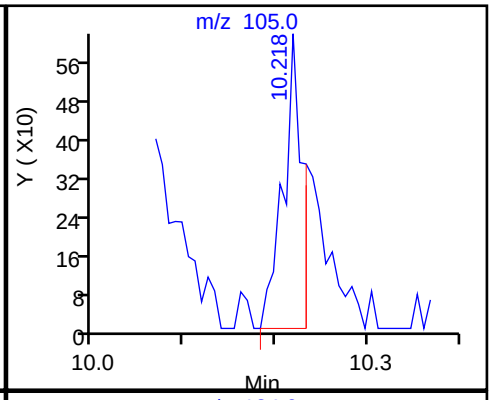
TestAmerica Edison

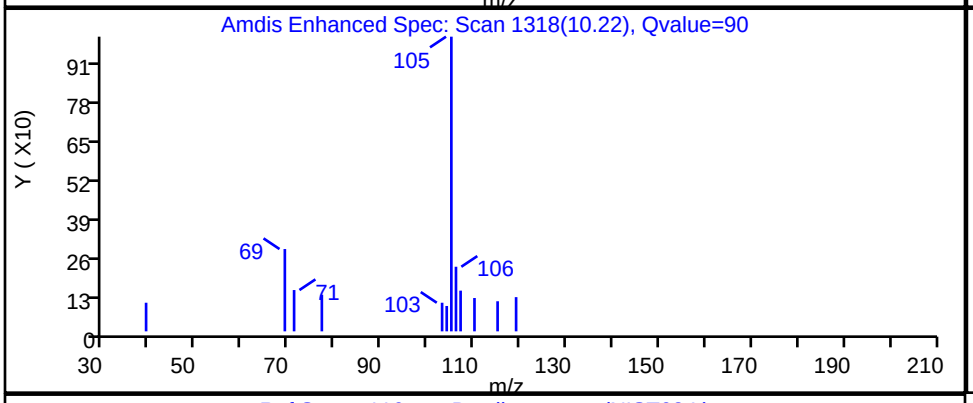
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

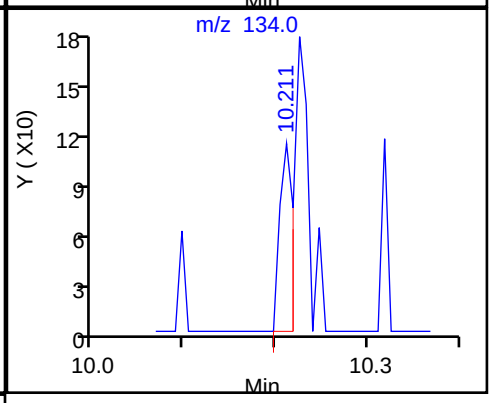
116 sec-Butylbenzene, CAS: 135-98-8

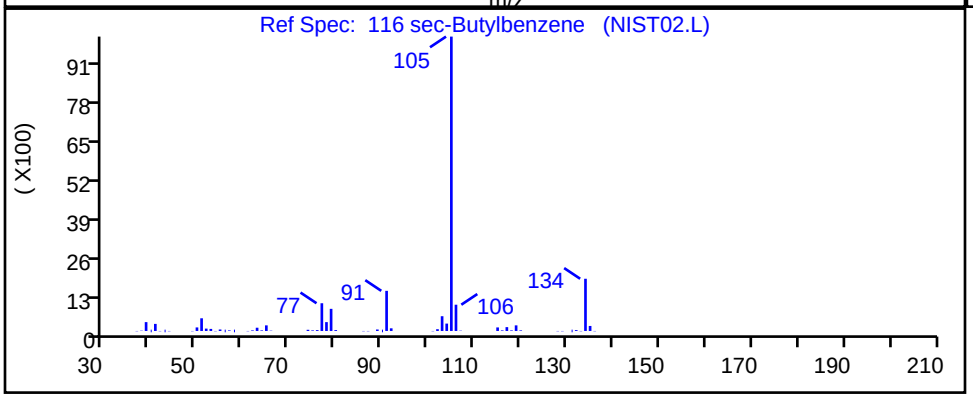
Processing Results











RT	Mass	Response	Amount
10.22	105.00	895	0.046355
10.21	134.00	114	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

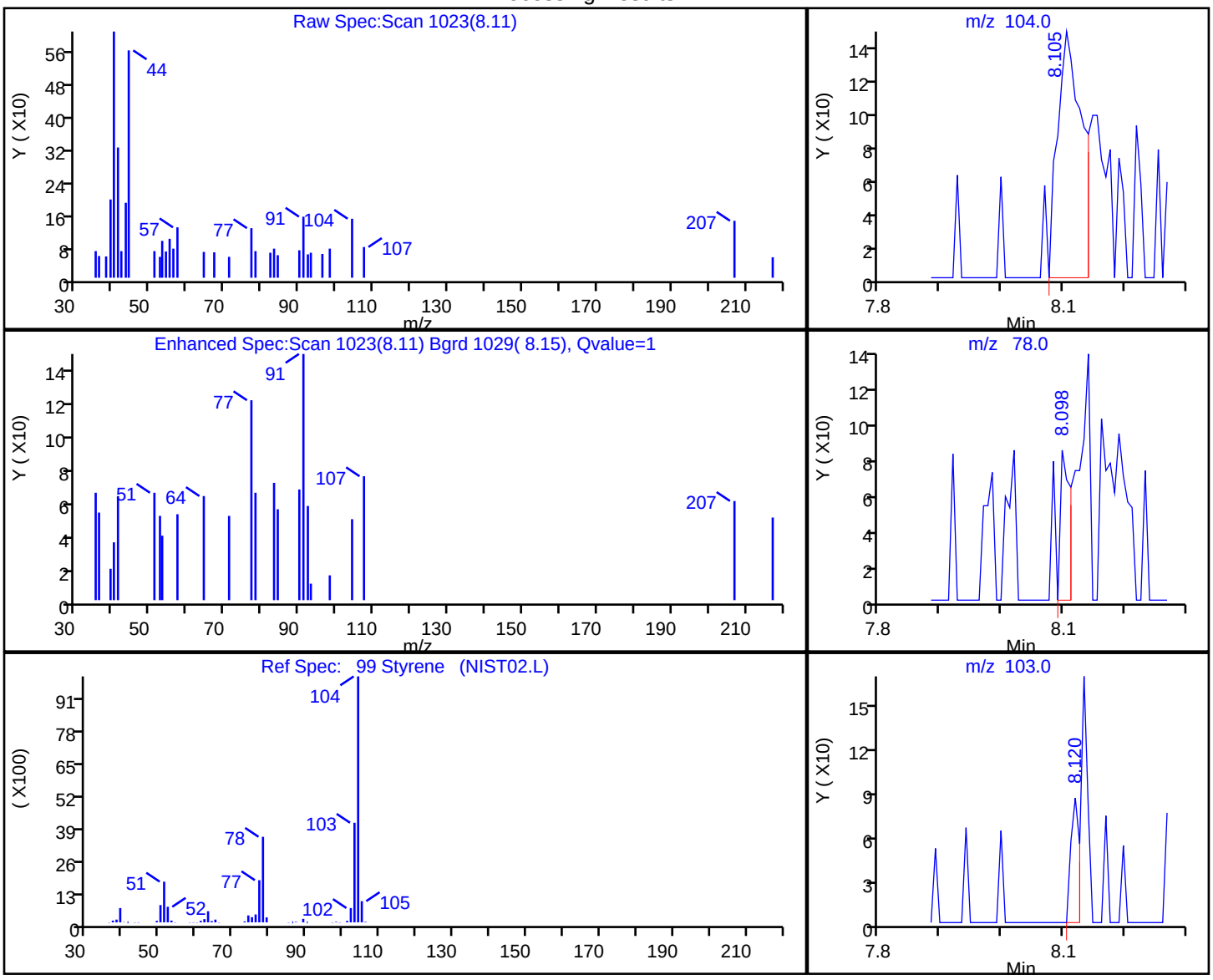
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

99 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
8.11	104.00	394	0.036219
8.10	78.00	89	
8.12	103.00	82	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

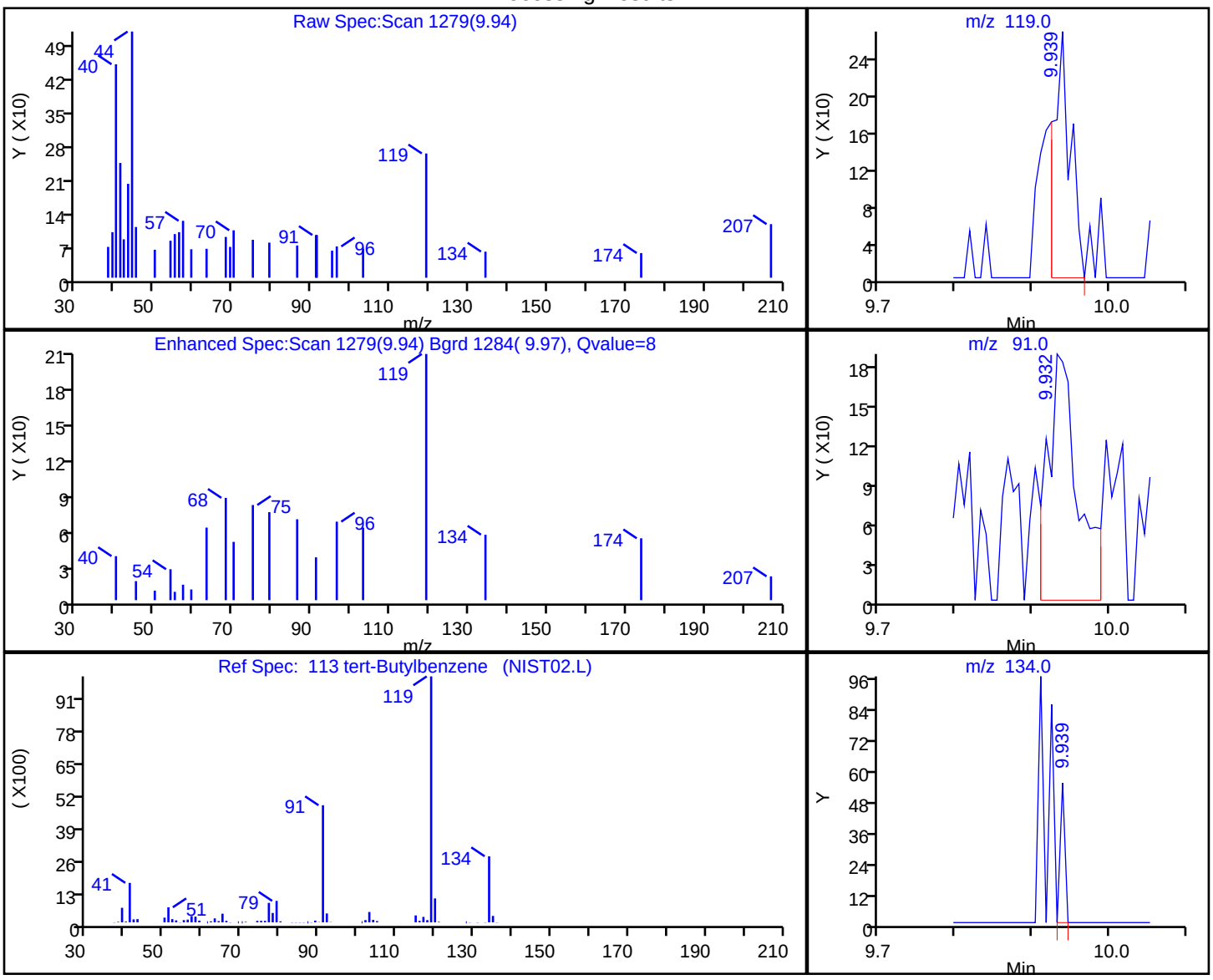
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

113 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
9.94	119.00	394	0.031782
9.93	91.00	512	
9.94	134.00	24	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

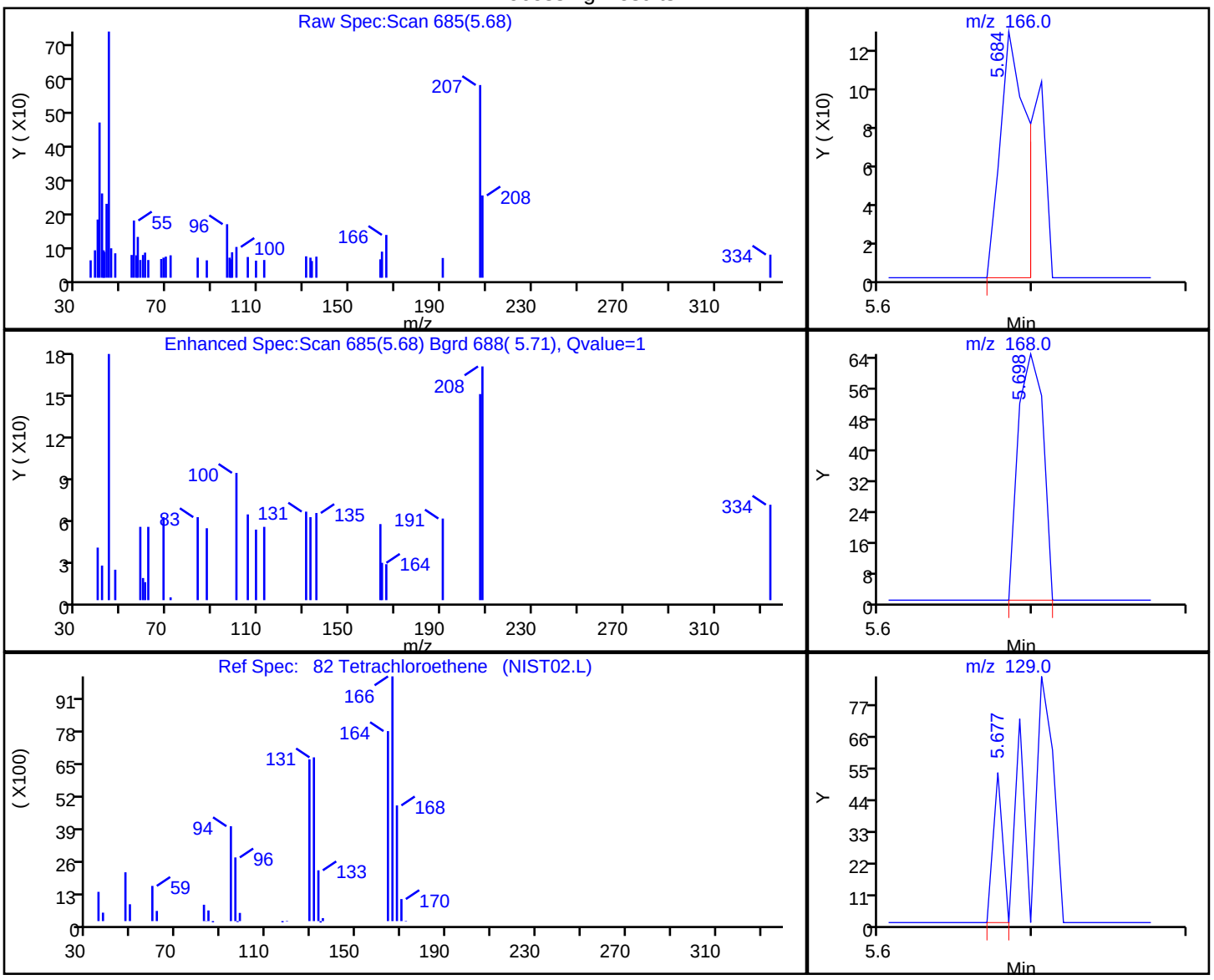
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

82 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
5.68	166.00	154	0.043592
5.70	168.00	73	
5.68	129.00	23	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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User Disabled Compound Report

TestAmerica Edison

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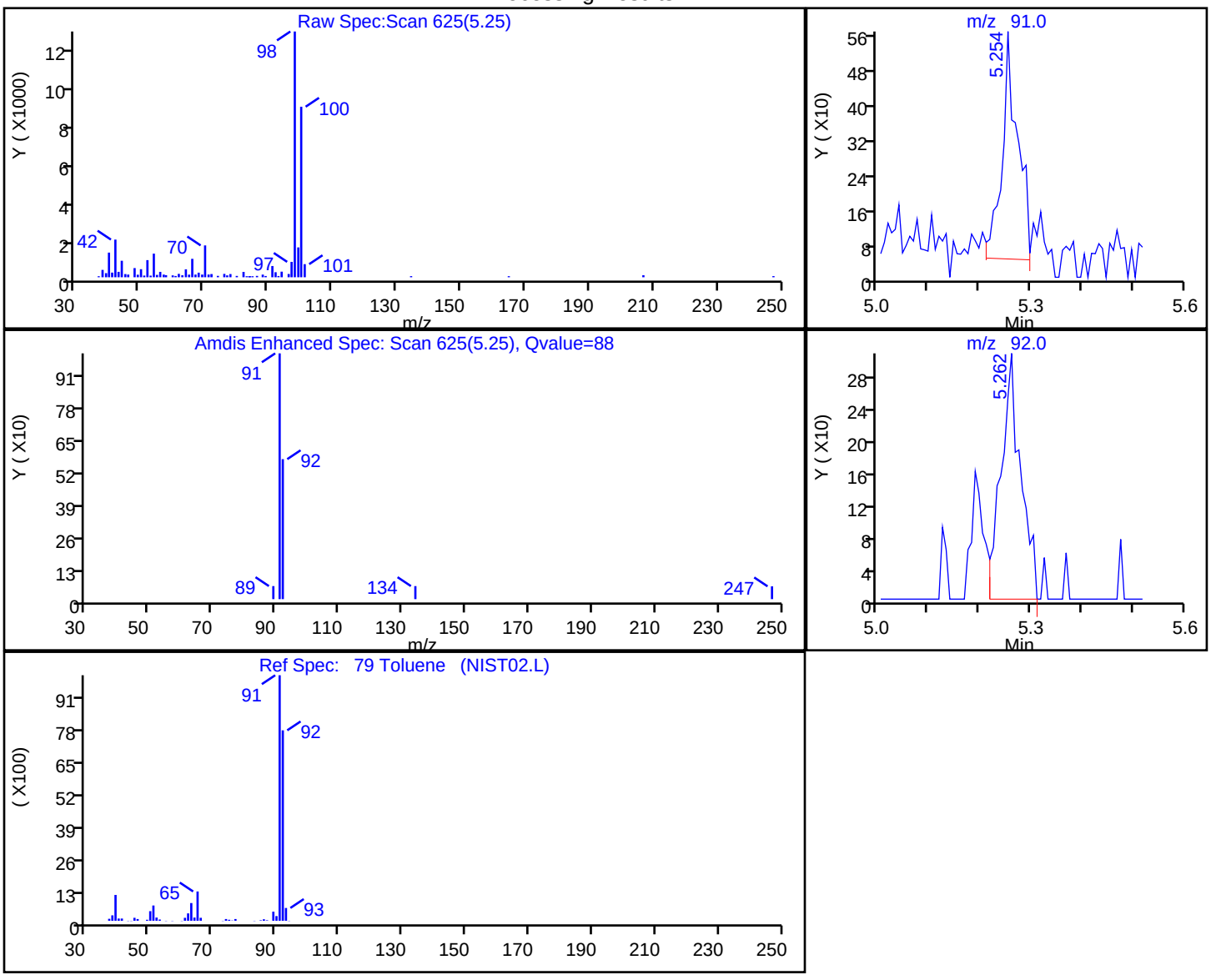
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

79 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
5.25	91.00	1117	0.066095
5.26	92.00	828	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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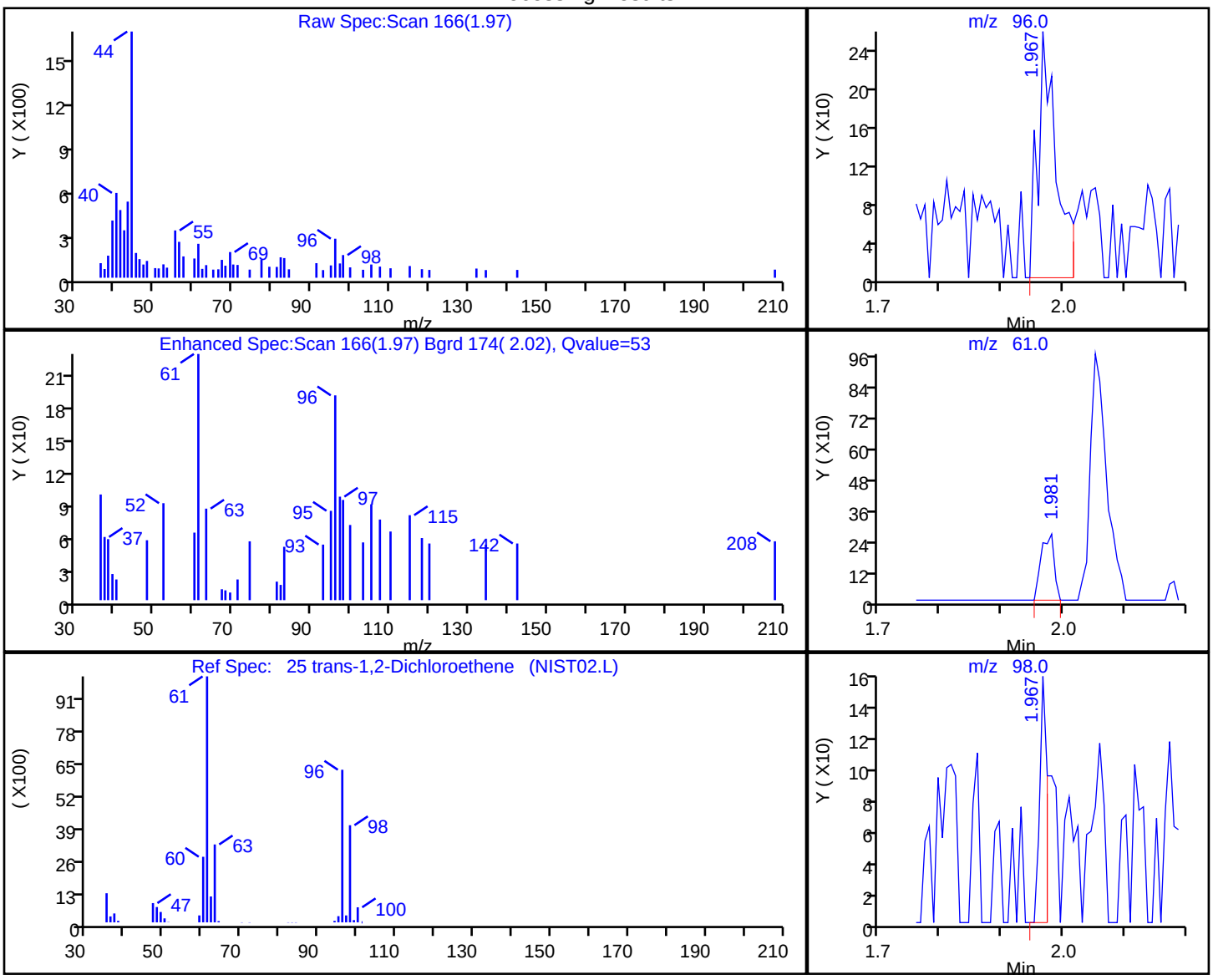
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
1.97	96.00	542	0.156558
1.98	61.00	382	
1.97	98.00	126	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
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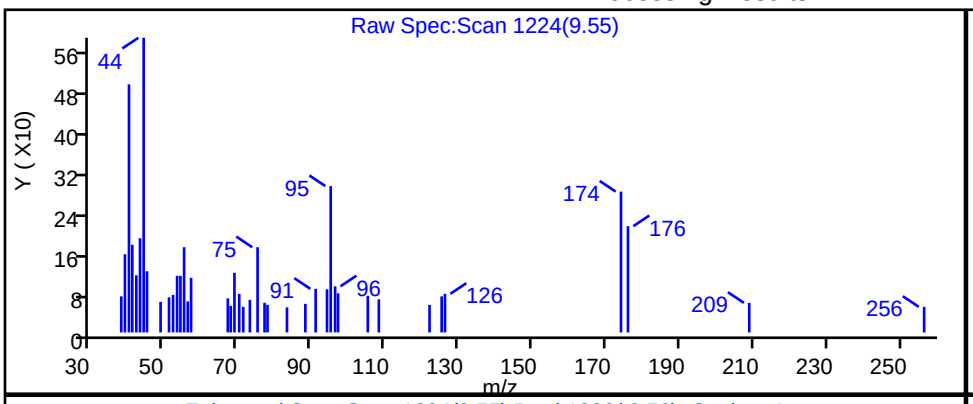
User Disabled Compound Report

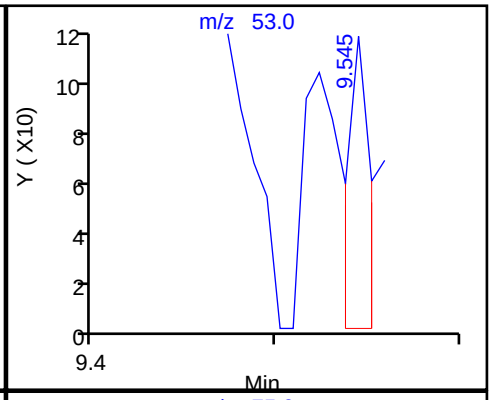
TestAmerica Edison

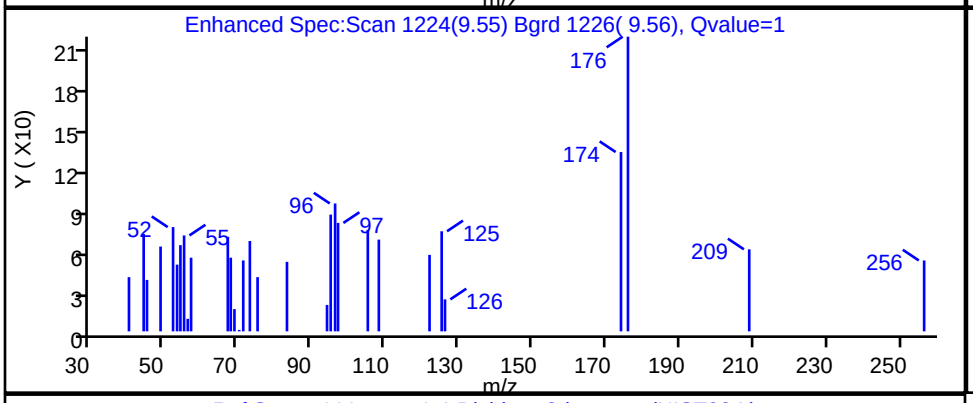
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

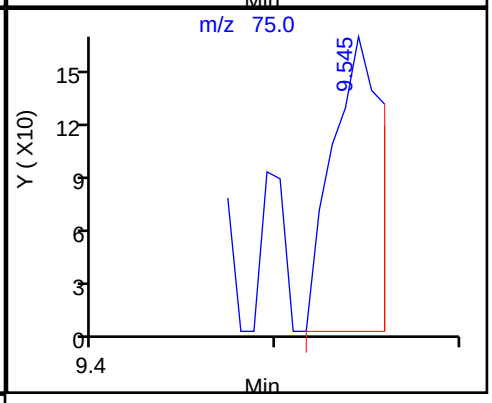
111 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

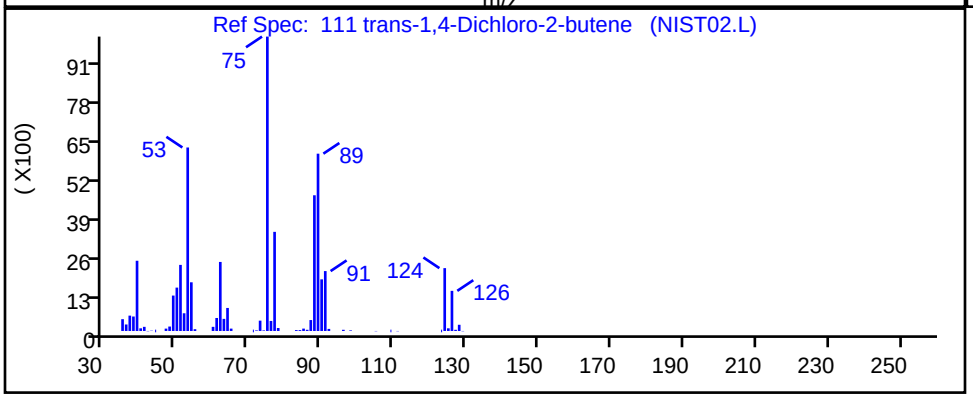
Processing Results











RT	Mass	Response	Amount
9.55	53.00	97	0.061396
9.55	75.00	321	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

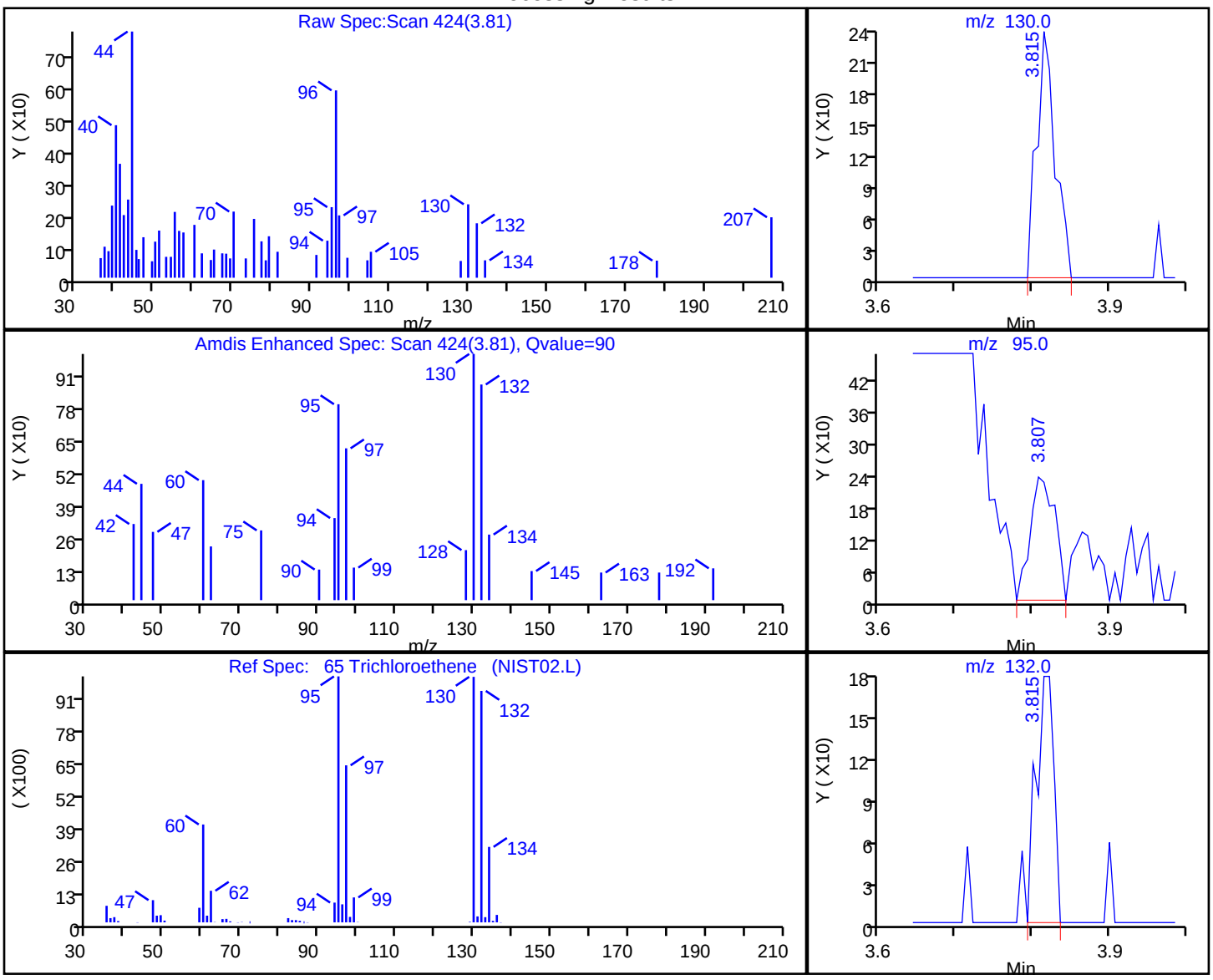
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

65 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
3.81	130.00	389	0.107130
3.81	95.00	524	
3.81	132.00	275	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

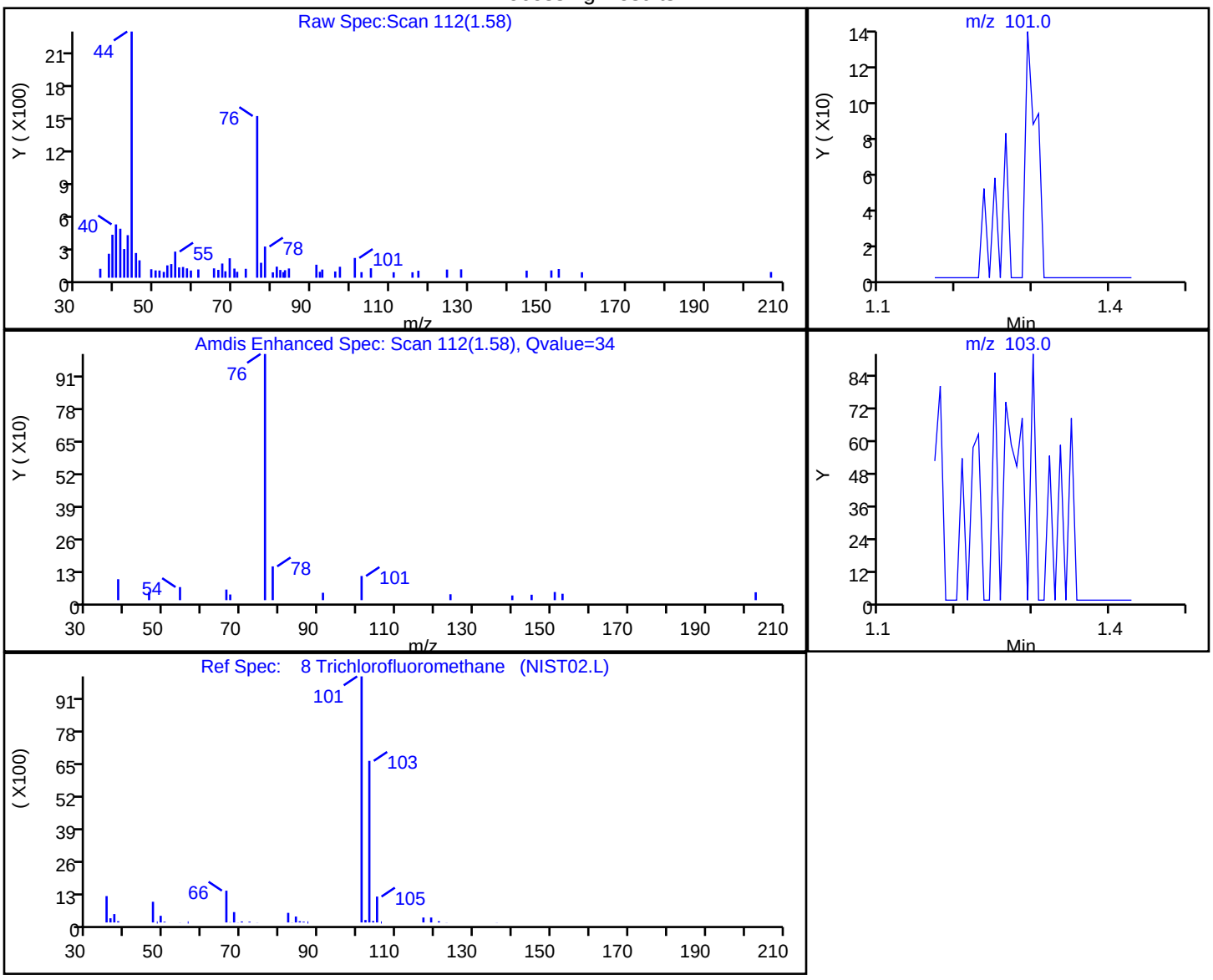
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 Trichlorofluoromethane, CAS: 75-69-4

Processing Results



RT	Mass	Response	Amount
1.58	101.00	164	0.034442
1.59	103.00	168	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

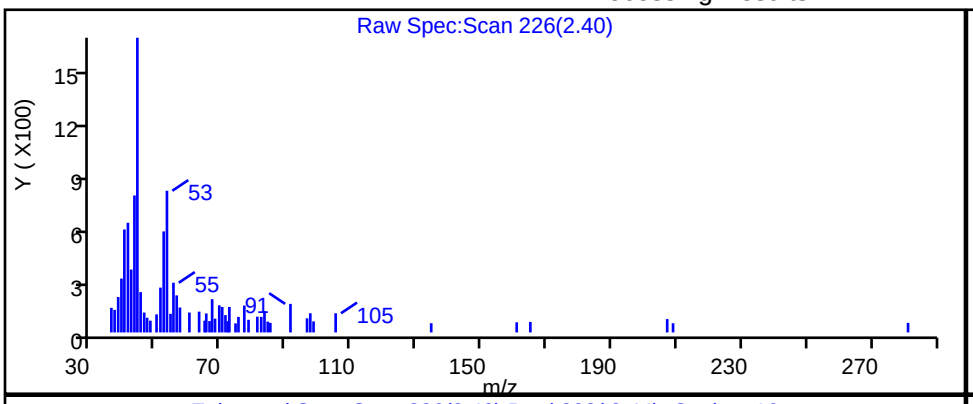
User Disabled Compound Report

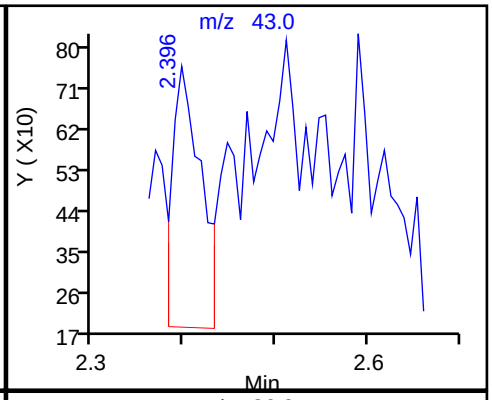
TestAmerica Edison

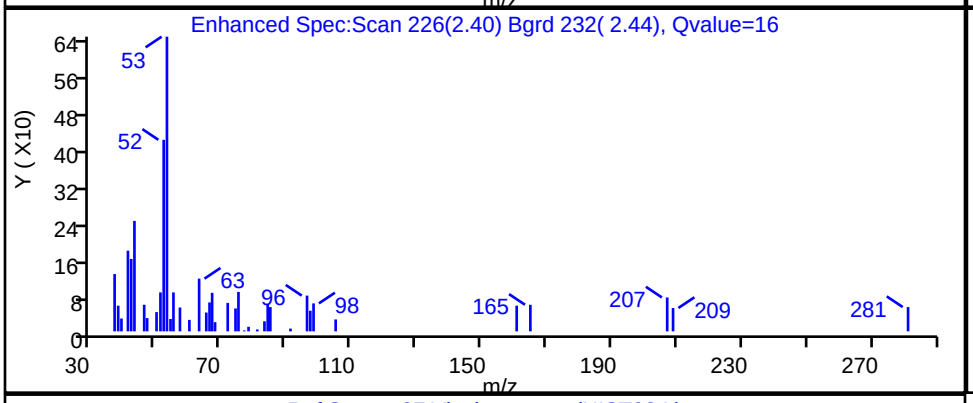
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

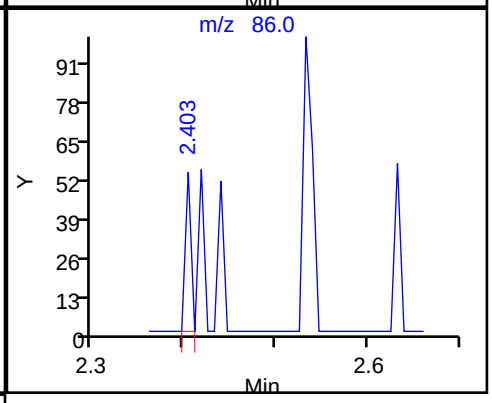
37 Vinyl acetate, CAS: 108-05-4

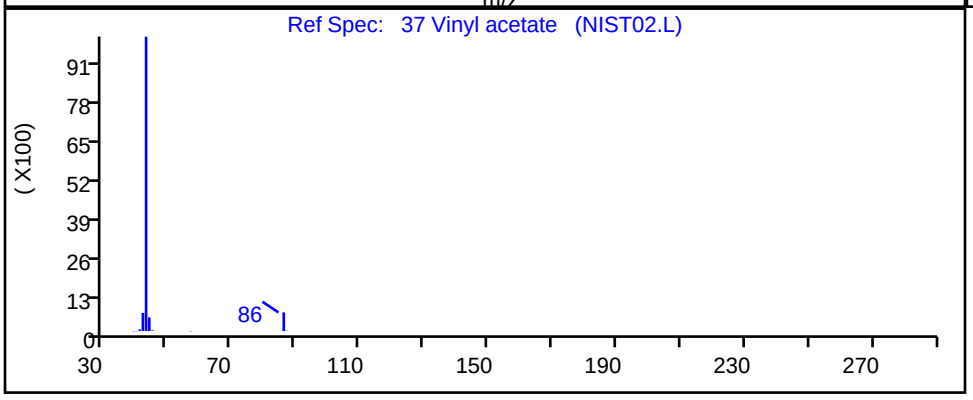
Processing Results











RT	Mass	Response	Amount
2.40	43.00	1276	0.129072
2.40	86.00	23	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

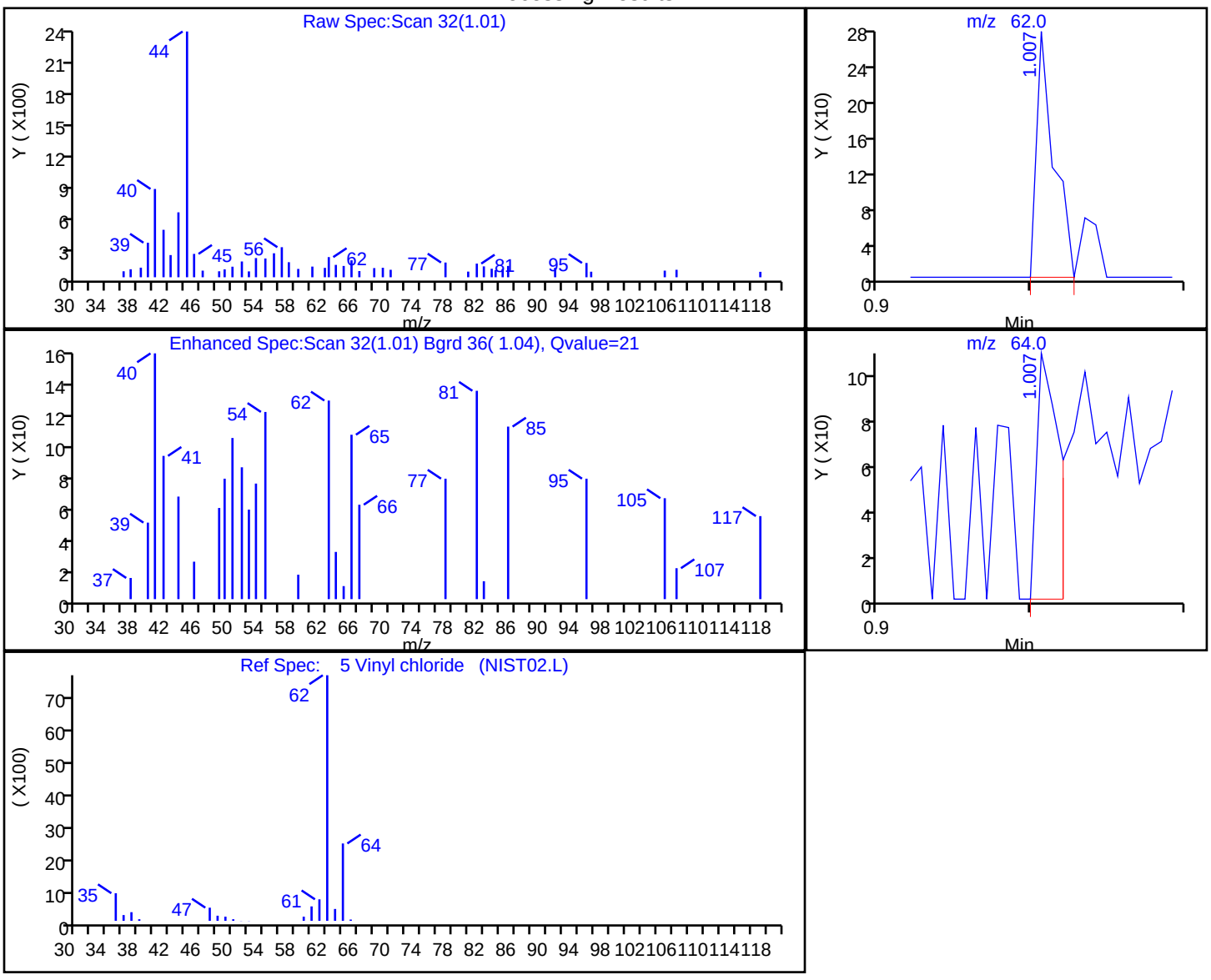
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43991.D
Injection Date: 20-Apr-2018 02:35:30 Instrument ID: CVOAMS13
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

5 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.01	62.00	219	0.044940
1.01	64.00	108	

Reviewer: delpolitov, 23-Apr-2018 12:29:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Lims ID: STD05
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 20-Apr-2018 03:01:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD05
Misc. Info.: 460-0070689-004
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 14:03:05 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: boykink Date: 20-Apr-2018 02:49:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.863	0.000	85	731	0.5000	0.4789	
2 Dichlorodifluoromethane	85	0.871	0.870	0.001	50	2585	0.5000	0.5621	
4 Chloromethane	50	0.978	0.985	-0.007	97	2665	0.5000	0.6040	
5 Vinyl chloride	62	1.014	1.007	0.007	75	3008	0.5000	0.6068	
3 Butadiene	54	1.014	1.014	0.000	97	2416	0.5000	0.5524	
6 Bromomethane	94	1.171	1.164	0.007	95	1089	0.5000	0.5160	
7 Chloroethane	64	1.229	1.229	0.000	97	1621	0.5000	0.5737	M
9 Pentane	72	1.300	1.300	0.000	95	715	1.00	1.16	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	58	2870	0.5000	0.5925	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	97	3604	0.5000	0.5578	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	94	2582	0.5000	0.5360	
12 Ethyl ether	59	1.458	1.458	0.000	87	1611	0.5000	0.4964	
13 Ethanol	46	1.537	1.537	0.000	75	357	20.0	15.4	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	76	2266	0.5000	0.5195	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	90	1437	0.5000	0.4879	
16 Carbon disulfide	76	1.580	1.580	0.000	100	6589	0.5000	0.5658	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	37	1583	0.5000	0.5201	
18 Iodomethane	142	1.659	1.644	0.015	17	443	0.5000	0.1203	
19 Cyclopentene	67	1.723	1.723	0.000	96	4315	0.5000	0.5146	
20 Acrolein	56	1.744	1.744	0.000	50	797	2.00	2.00	M
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	1098	0.5000	0.5262	
22 Isopropyl alcohol	45	1.838	1.838	0.000	97	1901	5.00	6.14	
23 Methylene Chloride	84	1.881	1.880	0.001	97	1930	0.5000	0.5079	
24 Acetone	43	1.909	1.902	0.007	85	4060	2.50	3.24	M
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	97	2108	0.5000	0.6011	
26 Methyl acetate	43	1.981	1.981	0.000	48	3067	1.00	0.9899	
27 Hexane	86	2.017	2.017	0.000	72	545	0.5000	0.5843	
28 Methyl tert-butyl ether	73	2.031	2.038	-0.007	91	5557	0.5000	0.4993	
* 29 TBA-d9 (IS)	65	2.052	2.060	-0.008	0	358641	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.095	2.103	-0.008	91	2466	5.00	5.52	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.174	2.174	0.000	99	2729	5.00	5.04	
32 Isopropyl ether	45	2.275	2.267	0.008	97	7099	0.5000	0.4927	
33 2-Chloro-1,3-butadiene	88	2.332	2.325	0.007	91	1576	0.5000	0.4950	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	98	3484	0.5000	0.5074	
35 Acrylonitrile	53	2.375	2.375	0.000	94	7708	5.00	4.71	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	81	6188	0.5000	0.4803	
37 Vinyl acetate	43	2.518	2.511	0.007	99	8420	1.00	0.8636	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	2134	0.5000	0.5269	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	95	3268	0.5000	0.5562	
40 Cyclohexane	56	2.826	2.826	0.000	94	3727	0.5000	0.5216	
41 Chlorobromomethane	128	2.833	2.833	0.000	75	979	0.5000	0.5490	
42 Chloroform	83	2.898	2.898	0.000	96	3501	0.5000	0.5279	
43 Carbon tetrachloride	117	2.984	2.984	0.000	71	2444	0.5000	0.5283	
44 Ethyl acetate	70	2.998	2.998	0.000	96	733	1.00	1.40	
45 Methyl acrylate	55	3.005	2.998	0.007	43	2029	0.5000	0.5279	
46 Tetrahydrofuran	42	3.012	3.005	0.007	34	1822	1.00	1.01	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	159749	50.0	50.6	
48 1,1,1-Trichloroethane	97	3.027	3.034	-0.007	48	3065	0.5000	0.5381	
* 49 2-Butanone-d5	46	3.084	3.091	-0.007	0	429459	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	98	1490	2.50	2.84	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	49	2970	0.5000	0.5246	a
52 Isooctane	57	3.220	3.220	0.000	96	7746	0.5000	0.5524	
53 n-Heptane	57	3.320	3.313	0.007	63	1940	0.5000	0.5060	
54 Benzene	78	3.320	3.320	0.000	97	7732	0.5000	0.4987	
55 Propionitrile	54	3.349	3.342	0.007	35	3253	5.00	5.14	
56 Methacrylonitrile	67	3.363	3.363	0.000	94	7903	5.00	4.73	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	214332	50.0	49.6	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	37	5459	0.5000	0.4595	
59 1,2-Dichloroethane	62	3.492	3.485	0.007	94	3677	0.5000	0.6248	
60 Isobutyl alcohol	43	3.557	3.557	0.000	92	2200	12.5	11.3	
61 t-Amyl alcohol	59	3.643	3.628	0.015	32	1926	5.00	5.36	a
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	596701	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	93	4122	0.5000	0.4814	
64 Methylcyclohexane	83	3.793	3.793	0.000	87	3446	0.5000	0.5045	
65 Trichloroethene	130	3.815	3.815	0.001	94	2132	0.5000	0.5772	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	91	5281	0.5000	0.4871	
67 Dibromomethane	93	4.194	4.187	0.007	94	1191	0.5000	0.4949	
68 n-Butanol	56	4.216	4.194	0.022	37	1212	12.5	10.4	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	85	2084	0.5000	0.4975	
70 Ethyl acrylate	55	4.373	4.359	0.014	82	2420	0.5000	0.4537	
71 Dichlorobromomethane	83	4.366	4.359	0.007	95	2362	0.5000	0.4634	
* 72 1,4-Dioxane-d8	96	4.552	4.545	0.007	0	37947	1000.0	1000.0	M
73 Methyl methacrylate	100	4.552	4.552	0.000	47	816	1.00	0.7995	
74 1,4-Dioxane	88	4.574	4.574	0.000	27	1145	25.0	23.8	
75 n-Propyl acetate	43	4.724	4.710	0.014	97	2424	0.5000	0.3957	
76 2-Chloroethyl vinyl ether	63	4.982	4.975	0.007	95	1174	0.5000	0.4185	
77 cis-1,3-Dichloropropene	75	5.011	5.004	0.007	97	2839	0.5000	0.4546	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	670334	50.0	50.0	
79 Toluene	91	5.262	5.261	0.001	89	9465	0.5000	0.5574	
80 Epichlorohydrin	57	5.290	5.290	0.000	96	3626	10.0	8.61	
81 2-Nitropropane	41	5.519	5.519	0.000	92	1528	1.00	1.28	
82 Tetrachloroethene	166	5.691	5.691	0.000	88	1704	0.5000	0.4777	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.727	0.007	96	9943	2.50	2.30	
84 trans-1,3-Dichloropropene	75	5.777	5.763	0.014	92	2667	0.5000	0.4635	
85 1,1,2-Trichloroethane	83	5.935	5.935	0.000	90	1446	0.5000	0.5000	
86 Ethyl methacrylate	69	6.035	6.021	0.014	91	2011	0.5000	0.3866	
87 Chlorodibromomethane	129	6.143	6.135	0.008	95	1527	0.5000	0.4361	
88 1,3-Dichloropropane	76	6.257	6.250	0.007	96	2820	0.5000	0.4732	
89 Ethylene Dibromide	107	6.393	6.386	0.007	97	1530	0.5000	0.4627	
90 n-Butyl acetate	43	6.744	6.730	0.014	97	3228	0.5000	0.4701	
91 2-Hexanone	43	6.809	6.794	0.015	97	6999	2.50	2.30	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	489062	50.0	50.0	
93 Chlorobenzene	112	7.095	7.102	-0.007	94	5672	0.5000	0.5556	
94 Ethylbenzene	106	7.196	7.181	0.015	97	2804	0.5000	0.4973	
95 1,1,1,2-Tetrachloroethane	131	7.217	7.210	0.007	84	1602	0.5000	0.4776	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	3423	0.5000	0.5018	
97 o-Xylene	106	7.998	7.991	0.007	94	3404	0.5000	0.5105	
98 Bromoform	173	8.069	8.055	0.014	92	884	0.5000	0.4005	
99 Styrene	104	8.105	8.077	0.029	94	5225	0.5000	0.4676	
100 n-Butyl acrylate	73	8.435	8.399	0.036	95	1042	0.5000	0.3578	
101 Isopropylbenzene	105	8.478	8.478	0.000	94	9340	0.5000	0.5196	
102 Amyl acetate (mixed isomer	43	8.836	8.814	0.022	37	3891	0.5000	0.4758	a
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	85	191810	50.0	50.2	
104 Bromobenzene	156	8.965	8.958	0.007	95	2163	0.5000	0.5068	
105 N-Propylbenzene	91	9.115	9.108	0.007	99	11026	0.5000	0.5005	
106 1,1,2,2-Tetrachloroethane	83	9.259	9.258	0.000	59	2399	0.5000	0.5199	
107 2-Chlorotoluene	91	9.294	9.287	0.007	95	7742	0.5000	0.5164	
108 4-Ethyltoluene	105	9.309	9.301	0.008	92	8989	0.5000	0.5022	
109 1,2,3-Trichloropropane	110	9.395	9.395	0.001	90	615	0.5000	0.4677	
110 1,3,5-Trimethylbenzene	105	9.466	9.459	0.007	93	8099	0.5000	0.5299	
111 trans-1,4-Dichloro-2-buten	53	9.581	9.516	0.065	54	943	0.5000	0.5780	
112 4-Chlorotoluene	91	9.567	9.552	0.014	97	6862	0.5000	0.4962	
113 tert-Butylbenzene	119	9.925	9.925	0.000	89	6010	0.5000	0.4777	
114 Butyl Methacrylate	87	10.061	10.054	0.007	60	2167	0.5000	0.4037	
115 1,2,4-Trimethylbenzene	105	10.068	10.054	0.014	95	7249	0.5000	0.4770	
116 sec-Butylbenzene	105	10.226	10.218	0.008	98	10045	0.5000	0.5127	
117 1,3-Dichlorobenzene	146	10.498	10.483	0.015	75	4185	0.5000	0.5175	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	97	7909	0.5000	0.4865	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.612	0.007	97	261984	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.634	0.007	36	5234	0.5000	0.5978	a
138 1,2,3-Trimethylbenzene	105	10.756	10.741	0.015	98	8042	0.5000	0.5028	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	7818	0.5000	0.5056	
122 Benzyl chloride	126	11.114	11.092	0.022	95	864	0.5000	0.5108	
123 p-Diethylbenzene	119	11.114	11.106	0.008	81	4528	0.5000	0.5237	
124 n-Butylbenzene	91	11.193	11.185	0.008	98	7698	0.5000	0.4949	
125 1,2-Dichlorobenzene	146	11.307	11.293	0.014	92	3910	0.5000	0.5067	
126 1,2,4,5-Tetramethylbenzene	119	12.203	12.202	0.000	97	6876	0.5000	0.4910	
127 1,2-Dibromo-3-Chloropropan	157	12.353	12.346	0.007	75	397	0.5000	0.4754	
128 1,3,5-Trichlorobenzene	180	12.396	12.389	0.007	85	2976	0.5000	0.5128	a
129 1,2,4-Trichlorobenzene	180	13.076	13.062	0.014	91	2649	0.5000	0.5170	
130 Hexachlorobutadiene	225	13.069	13.076	-0.007	85	1294	0.5000	0.5148	
131 Naphthalene	128	13.363	13.356	0.007	98	5999	0.5000	0.5187	
132 1,2,3-Trichlorobenzene	180	13.535	13.528	0.007	94	2481	0.5000	0.5356	
S 133 1,2-Dichloroethene, Total	100				0		1.00	1.13	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		1.00	0.9181	
S 135 Xylenes, Total	100				0		1.00	1.01	
S 137 Total BTEX	1				0		2.50	2.57	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MIX 2 Hi_00069	Amount Added:	0.50	Units: uL		
Ethanol mix_00014	Amount Added:	0.50	Units: uL		
ACROLEIN W_00075	Amount Added:	2.00	Units: uL		
14DIOXINTER_00083	Amount Added:	15.00	Units: uL		
GAS Hi_00250	Amount Added:	0.50	Units: uL		
MIX I Hi_00093	Amount Added:	0.50	Units: uL		
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent	

Report Date: 23-Apr-2018 14:03:13 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D

Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13 Operator ID:

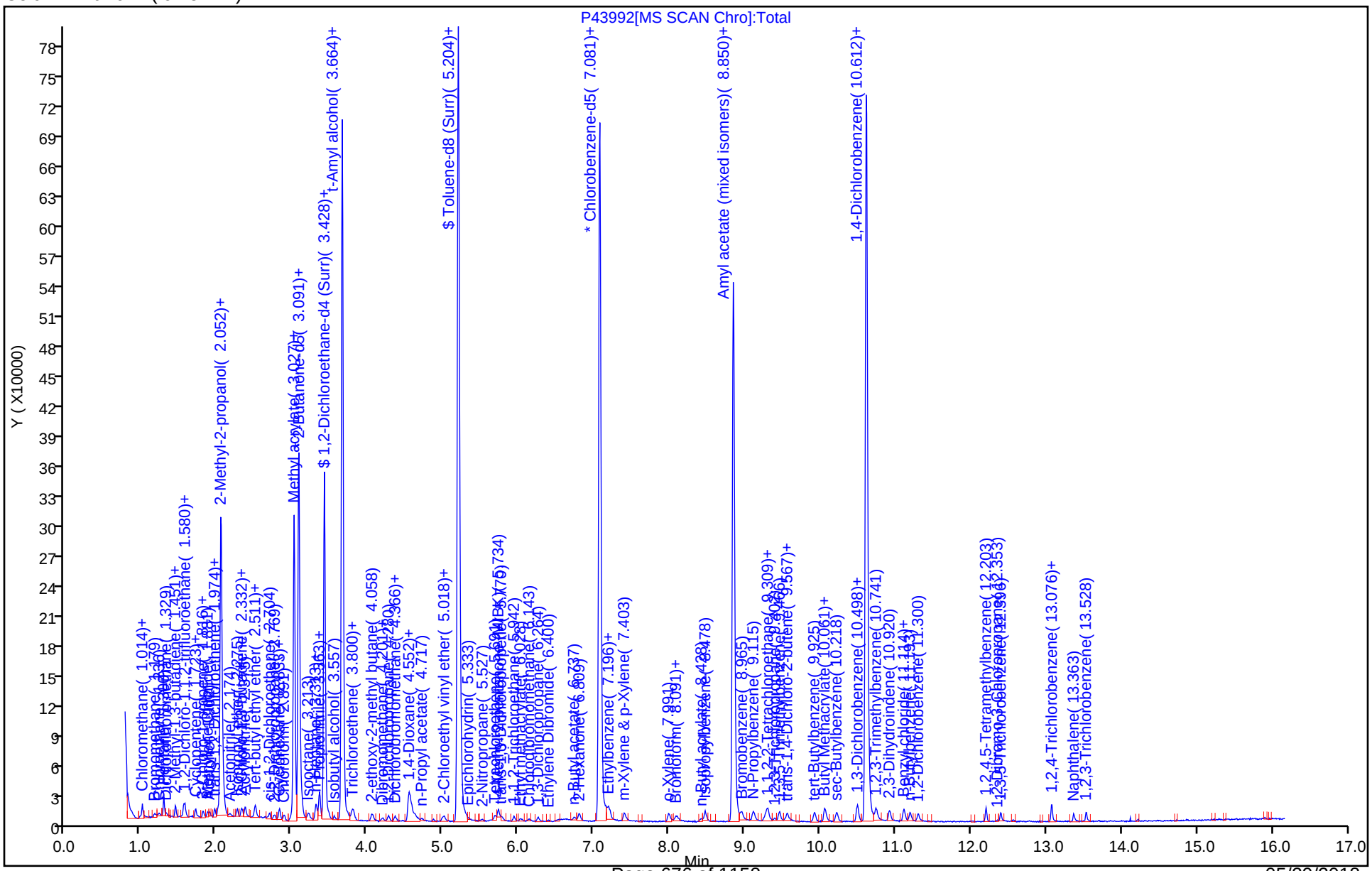
Lims ID: STD05 Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

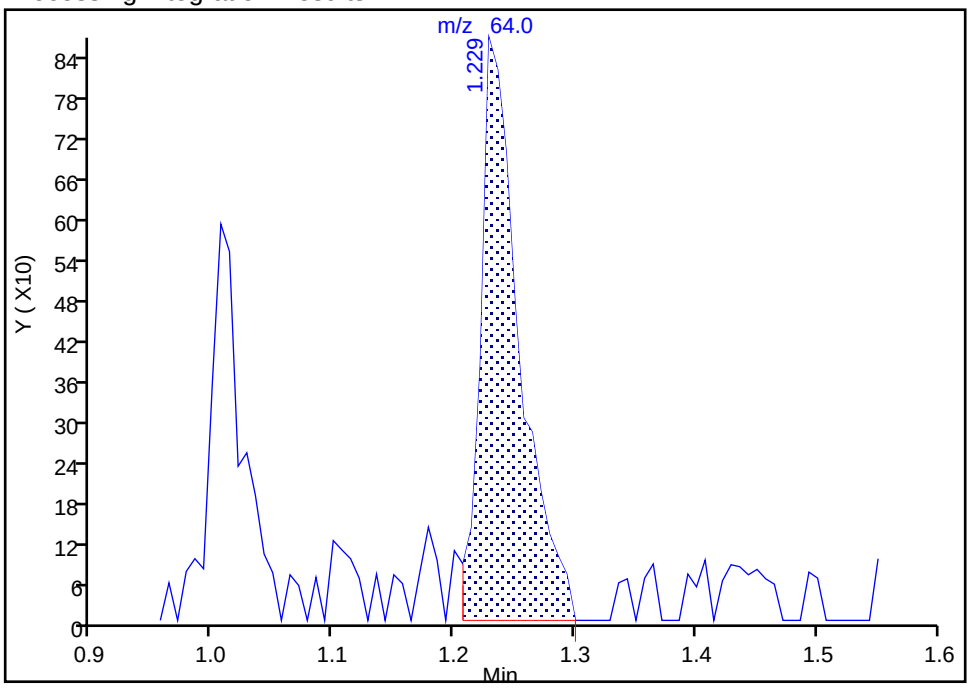
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13
Lims ID: STD05
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

7 Chloroethane, CAS: 75-00-3

Signal: 1

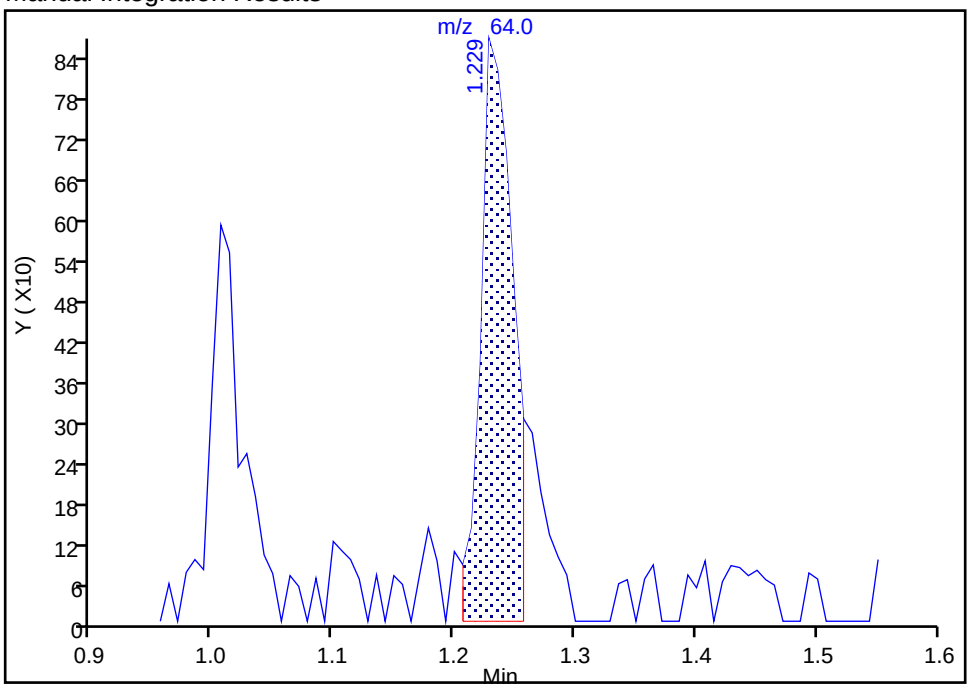
Processing Integration Results

RT: 1.23
Area: 1951
Amount: 0.650447
Amount Units: ug/l



Manual Integration Results

RT: 1.23
Area: 1621
Amount: 0.573711
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 13:03:08
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

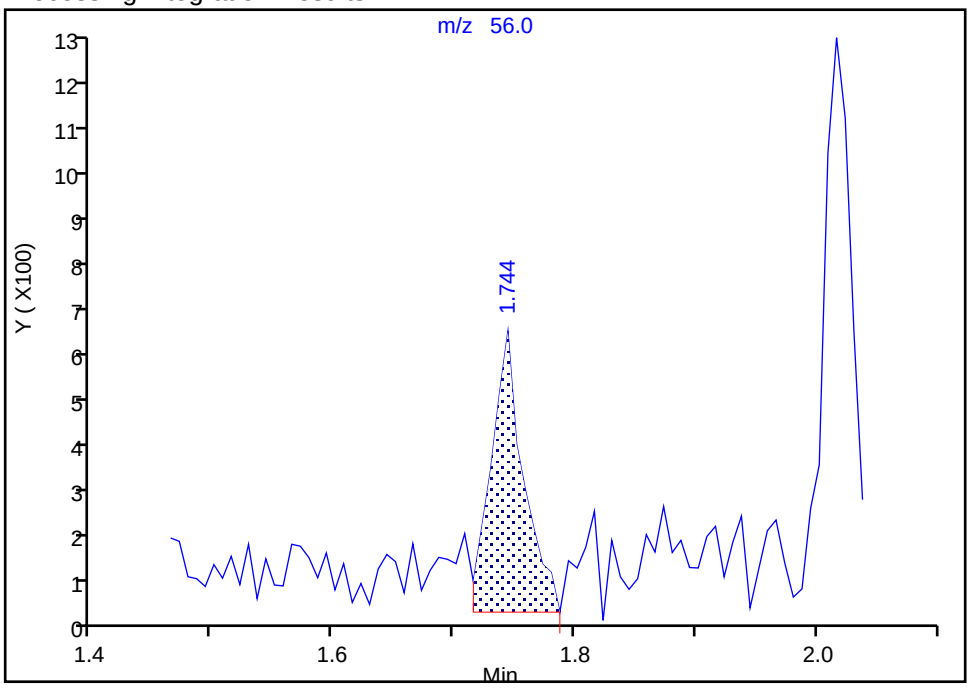
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13
Lims ID: STD05
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

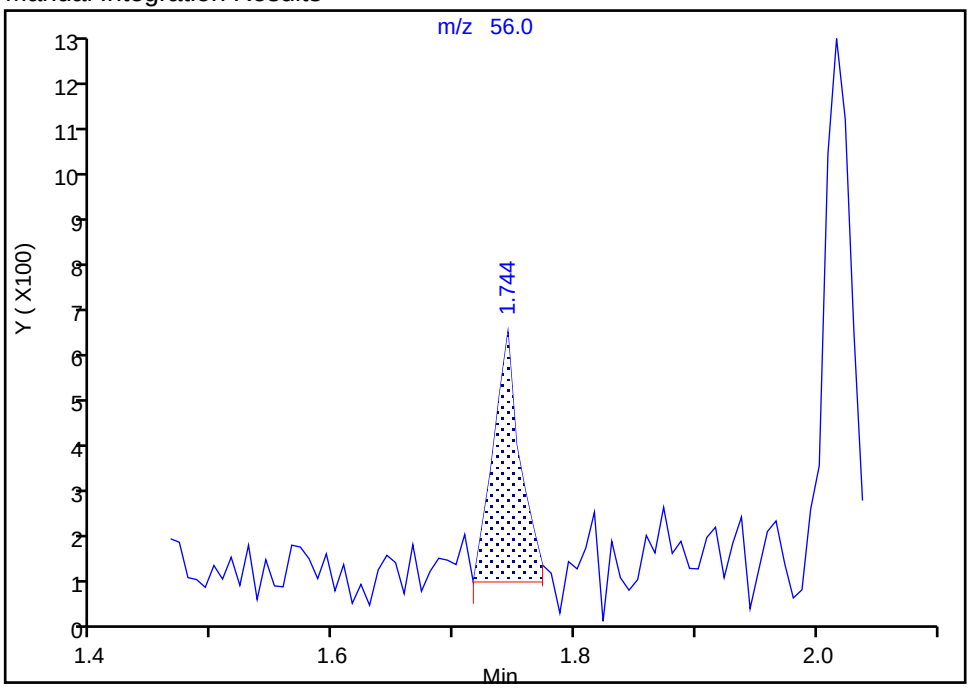
Processing Integration Results

RT: 1.74
Area: 1080
Amount: 2.515903
Amount Units: ug/l



Manual Integration Results

RT: 1.74
Area: 797
Amount: 1.998682
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 13:06:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

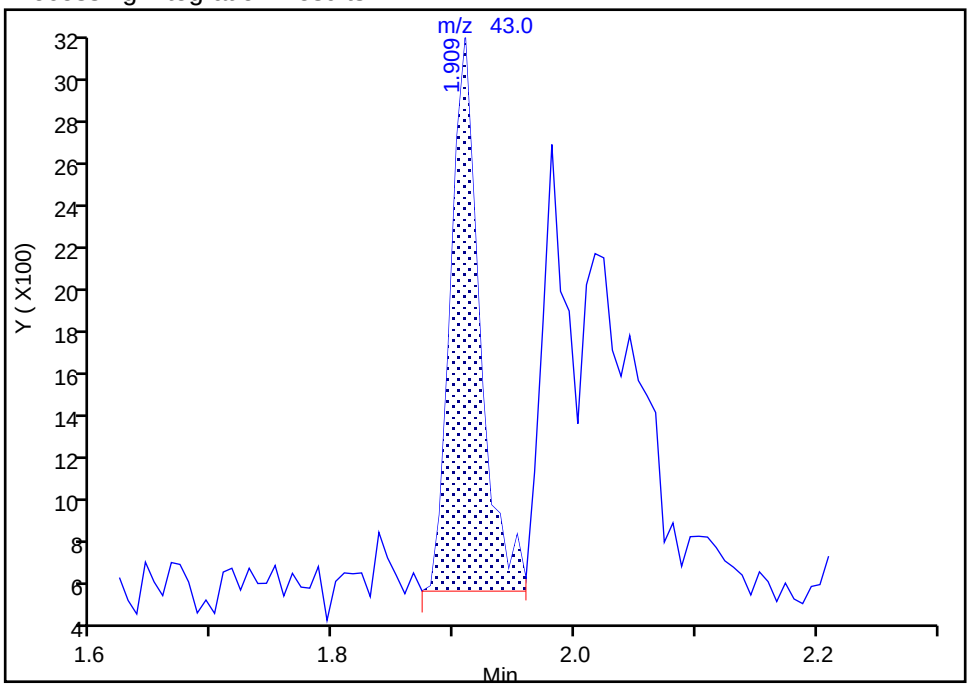
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13
Lims ID: STD05
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 1

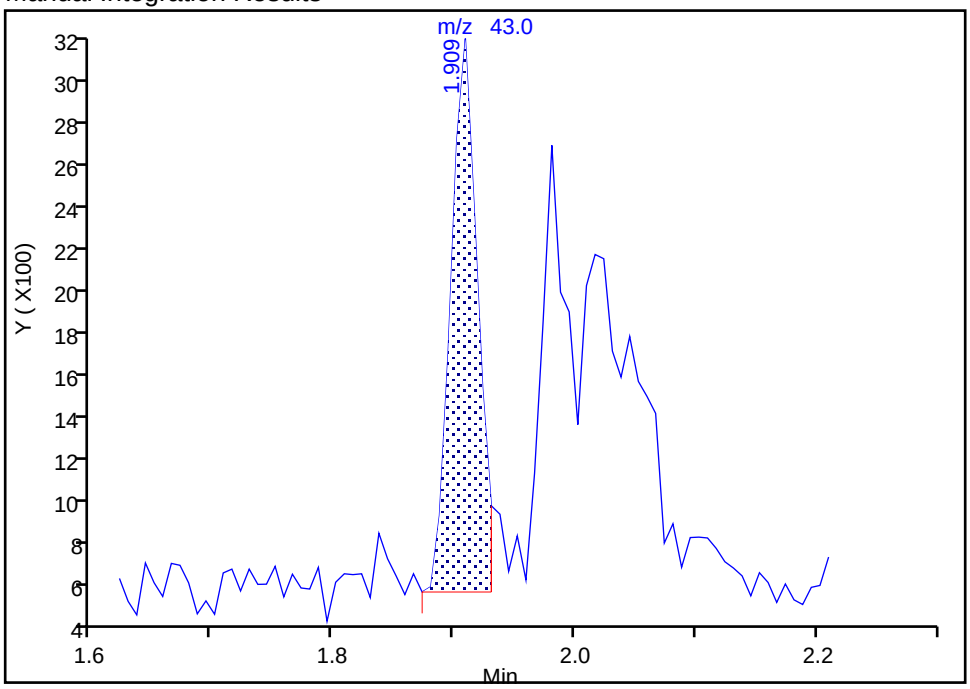
Processing Integration Results

RT: 1.91
Area: 4399
Amount: 3.916721
Amount Units: ug/l



Manual Integration Results

RT: 1.91
Area: 4060
Amount: 3.235710
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 13:06:56
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

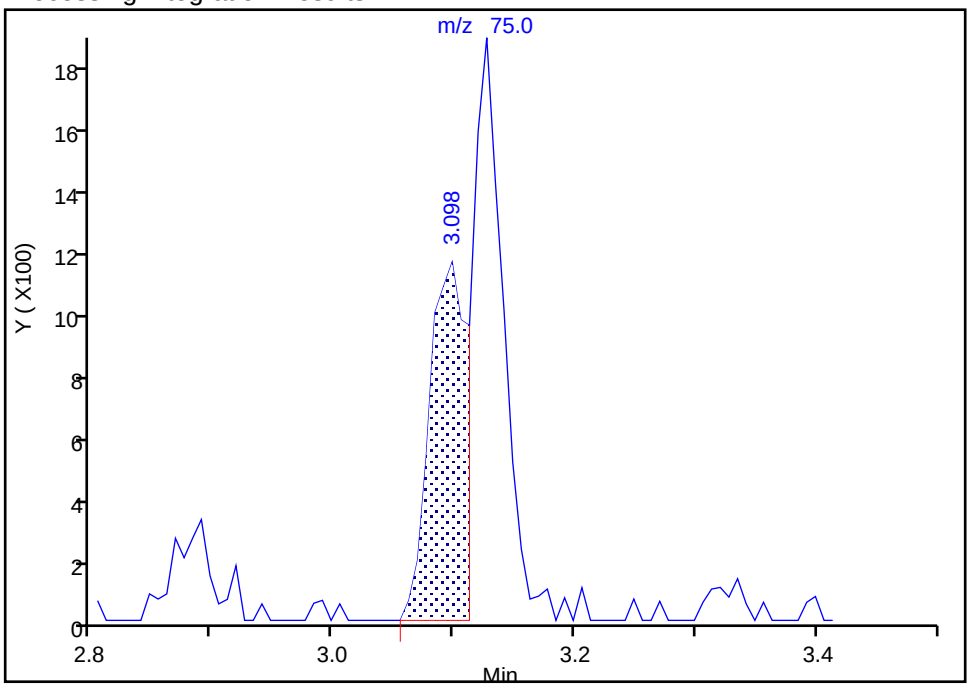
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13
Lims ID: STD05
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

51 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

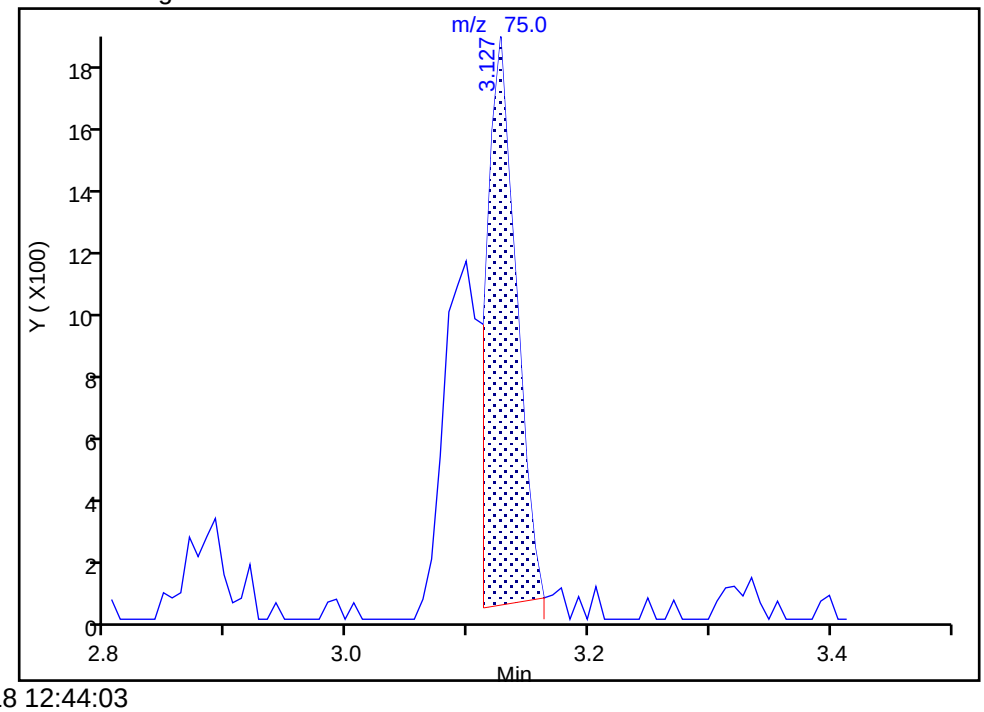
Processing Integration Results

RT: 3.10
Area: 2444
Amount: 0.445251
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 2970
Amount: 0.524639
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:44:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

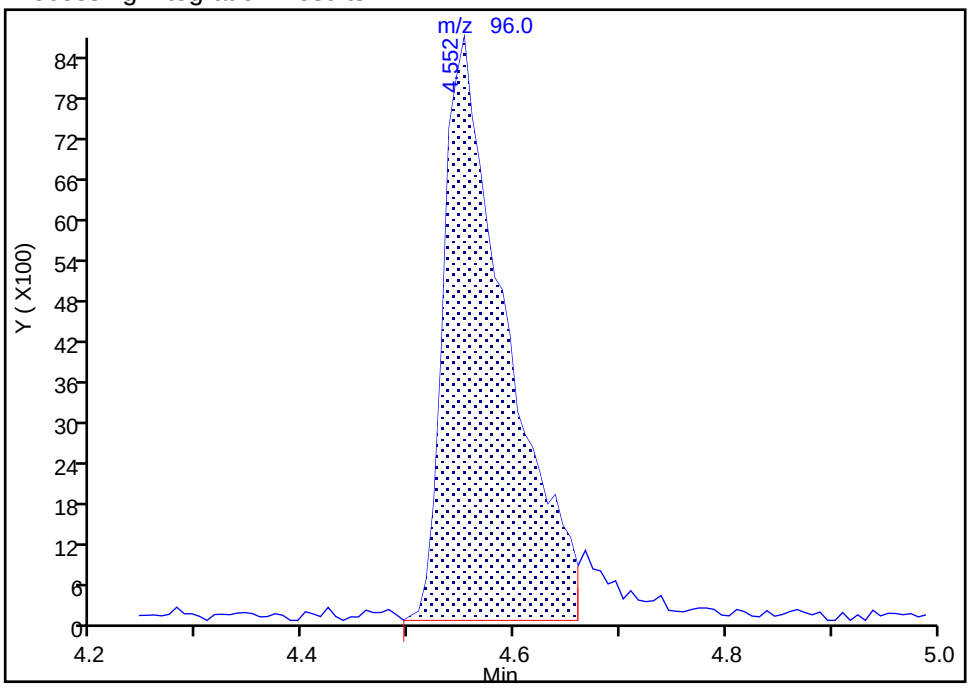
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13
Lims ID: STD05
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 72 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

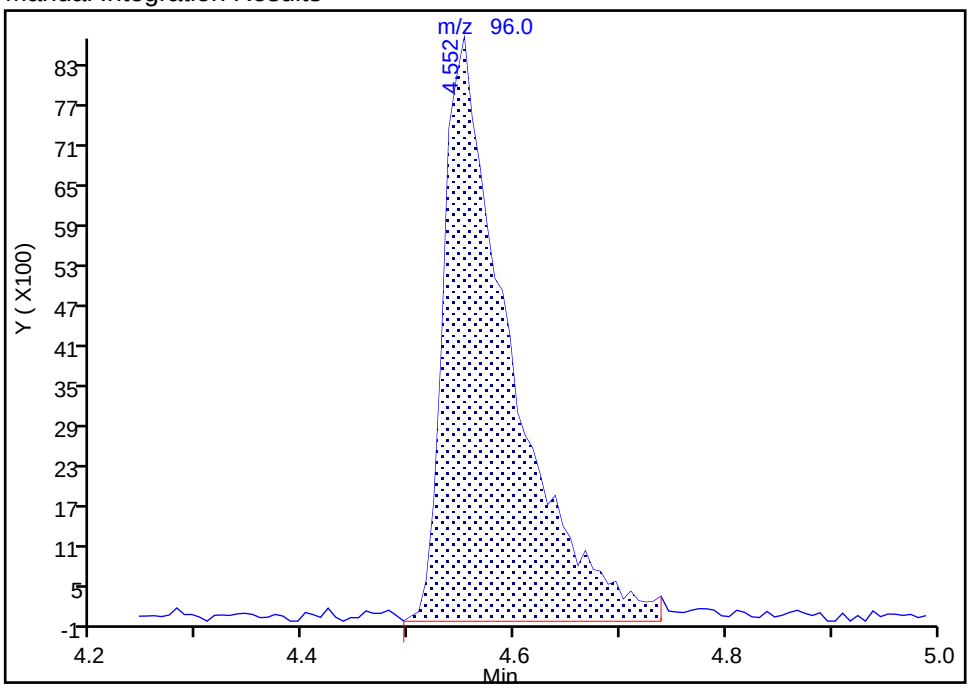
Processing Integration Results

RT: 4.55
Area: 35488
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 4.55
Area: 37947
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:45:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

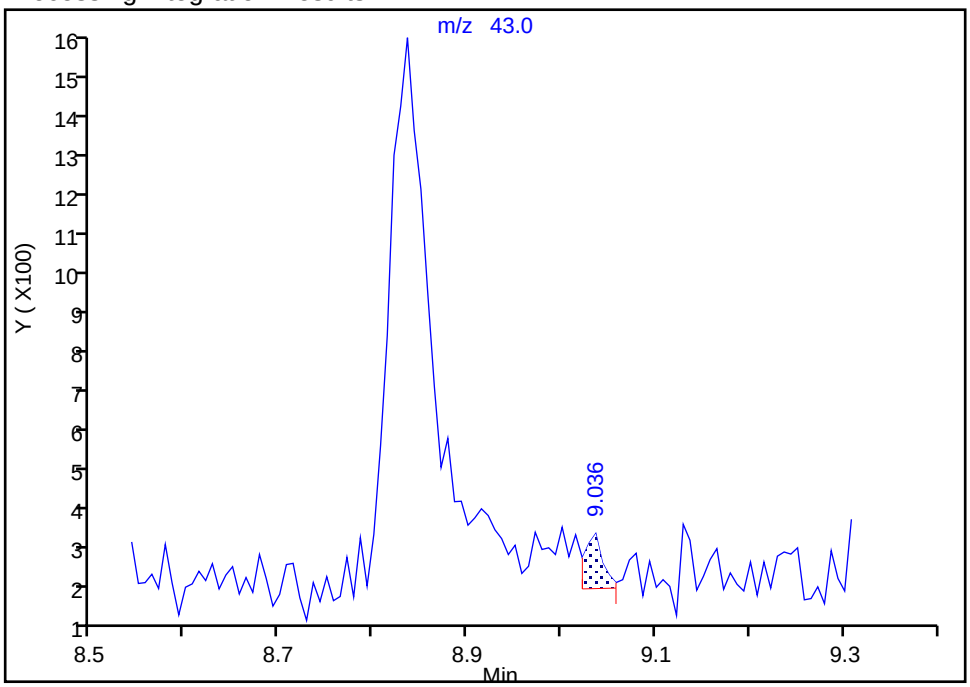
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13
Lims ID: STD05
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

102 Amyl acetate (mixed isomers), CAS: 628-63-7

Signal: 1

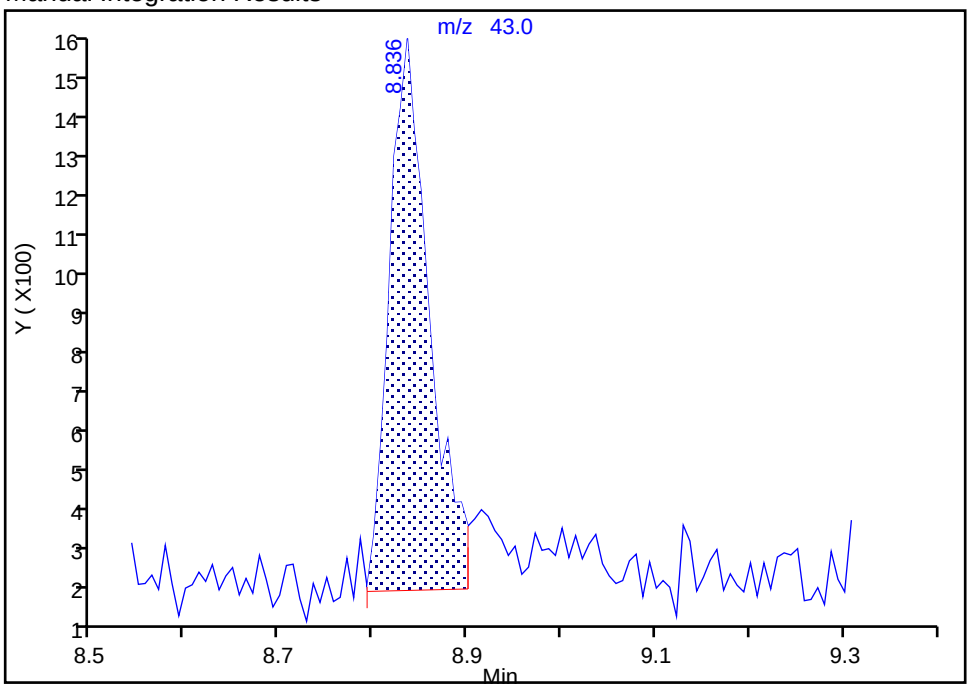
Processing Integration Results

RT: 9.04
Area: 180
Amount: 0.020069
Amount Units: ug/l



Manual Integration Results

RT: 8.84
Area: 3891
Amount: 0.475807
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:44:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

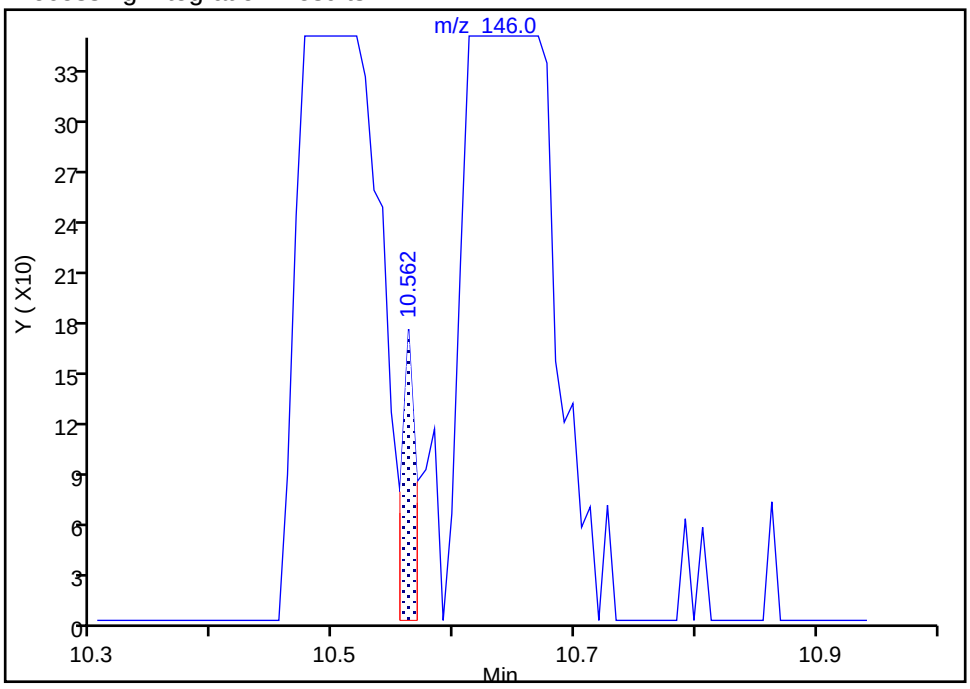
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13
Lims ID: STD05
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

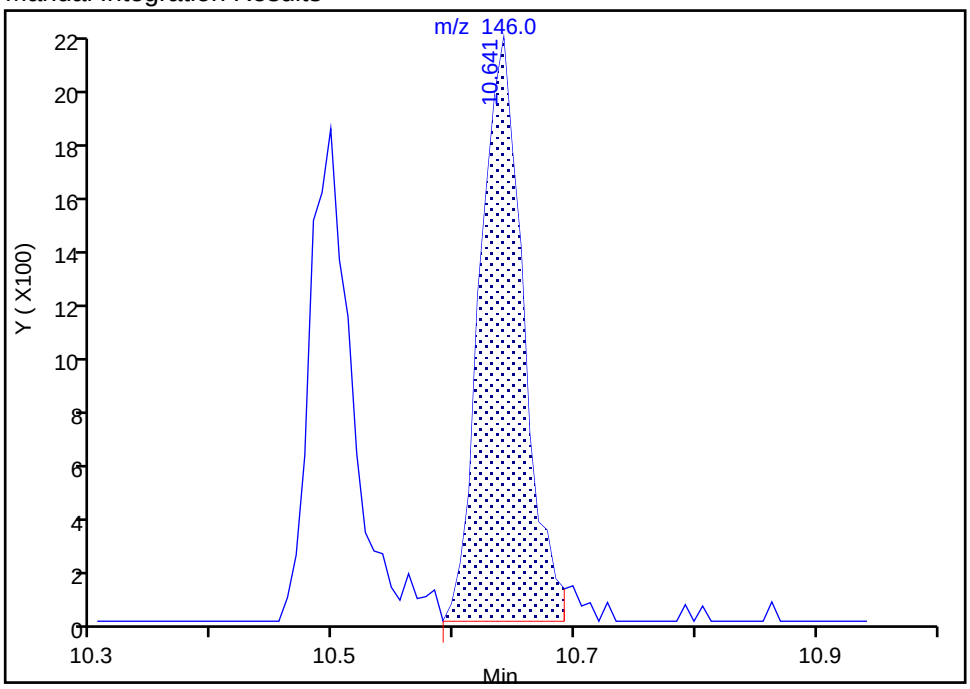
Processing Integration Results

RT: 10.56
Area: 142
Amount: 0.016807
Amount Units: ug/l



Manual Integration Results

RT: 10.64
Area: 5234
Amount: 0.597763
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:44:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

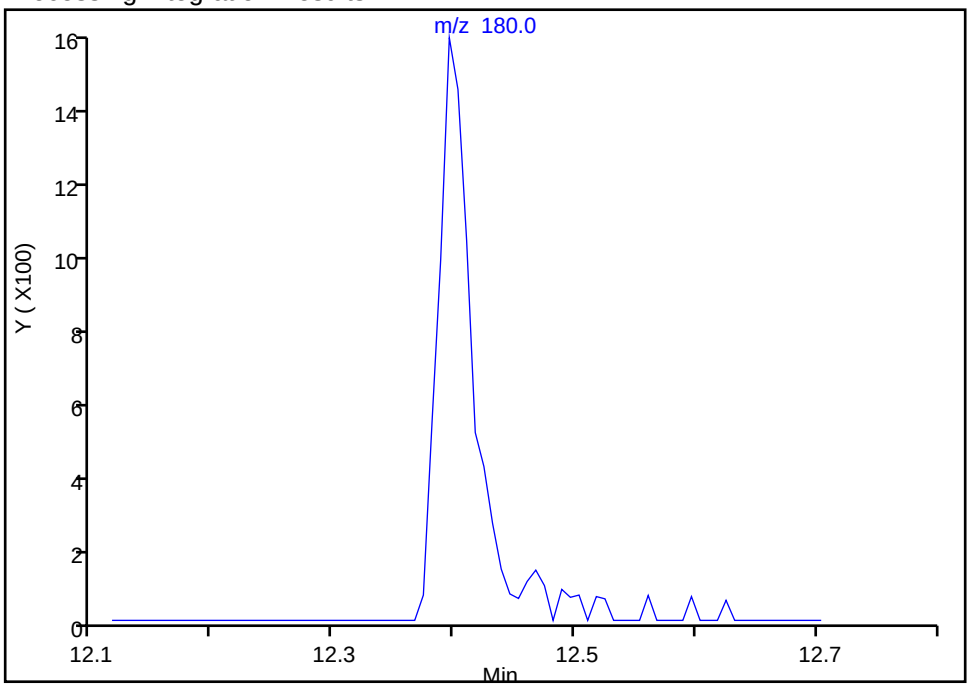
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43992.D
Injection Date: 20-Apr-2018 03:01:30 Instrument ID: CVOAMS13
Lims ID: STD05
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

128 1,3,5-Trichlorobenzene, CAS: 108-70-3

Signal: 1

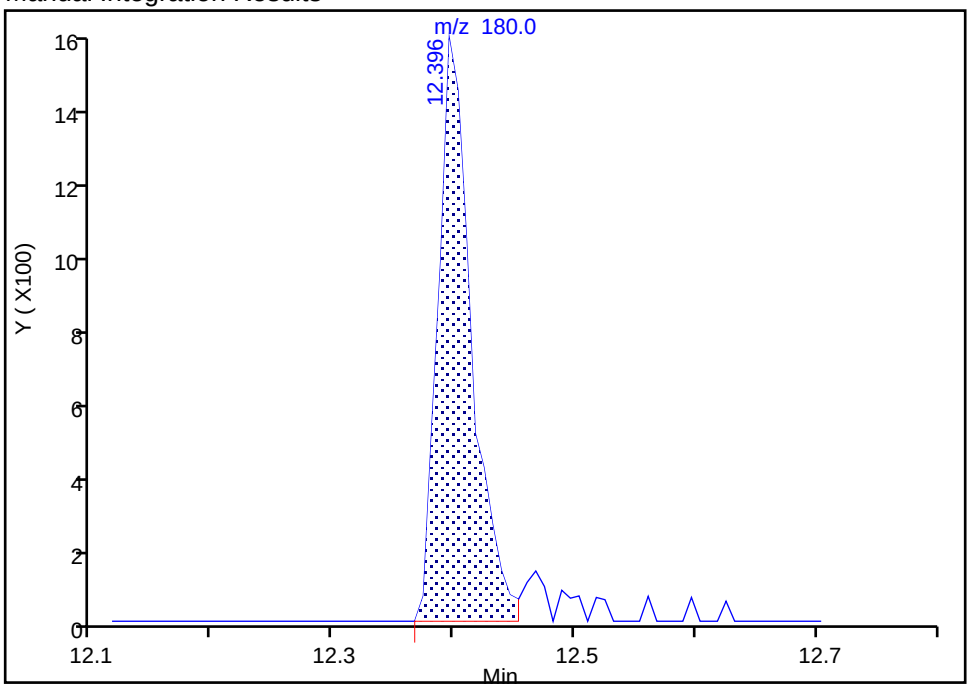
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 12.40
Area: 2976
Amount: 0.512779
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:44:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43994.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 20-Apr-2018 03:51:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0070689-006
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 14:03:38 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: desais Date: 20-Apr-2018 08:25:41

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1	Chlorotrifluoroethene	116	0.863	0.863	0.000	90	5997	5.00	4.40	
2	Dichlorodifluoromethane	85	0.870	0.870	0.000	98	21521	5.00	5.24	
4	Chloromethane	50	0.985	0.985	0.000	99	19458	5.00	4.93	
5	Vinyl chloride	62	1.007	1.007	0.000	98	23161	5.00	5.23	
3	Butadiene	54	1.014	1.014	0.000	99	20232	5.00	5.18	
6	Bromomethane	94	1.164	1.164	0.000	97	10103	5.00	5.26	
7	Chloroethane	64	1.229	1.229	0.000	99	13698	5.00	5.42	
8	Trichlorofluoromethane	101	1.300	1.300	0.000	98	22922	5.00	5.30	
9	Pentane	72	1.300	1.300	0.000	98	5745	10.0	10.2	
10	Dichlorofluoromethane	67	1.329	1.329	0.000	98	31040	5.00	5.38	
11	2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	95	20728	5.00	4.81	
12	Ethyl ether	59	1.458	1.458	0.000	96	14762	5.00	5.09	
13	Ethanol	46	1.537	1.537	0.000	98	4030	200.0	190.6	
14	1,1-Dichloroethene	96	1.565	1.558	0.007	97	13622	5.00	5.18	
15	1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	83	19850	5.00	5.09	
17	1,1,2-Trichloro-1,2,2-trif	101	1.587	1.580	0.007	97	13835	5.00	5.09	
16	Carbon disulfide	76	1.580	1.580	0.000	100	48603	5.00	4.67	
18	Iodomethane	142	1.644	1.644	0.000	100	5109	5.00	1.55	
19	Cyclopentene	67	1.723	1.723	0.000	97	37198	5.00	4.96	
20	Acrolein	56	1.744	1.744	0.000	95	6273	20.0	17.3	
21	3-Chloro-1-propene	76	1.816	1.816	0.000	90	9453	5.00	5.07	
22	Isopropyl alcohol	45	1.837	1.838	-0.001	96	13674	50.0	48.5	
23	Methylene Chloride	84	1.880	1.880	0.000	97	16903	5.00	4.98	
24	Acetone	43	1.902	1.902	0.000	86	26782	25.0	23.4	
25	trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	14567	5.00	4.65	
26	Methyl acetate	43	1.981	1.981	0.000	100	26849	10.0	9.70	
27	Hexane	86	2.017	2.017	0.000	90	4055	5.00	4.86	
28	Methyl tert-butyl ether	73	2.038	2.038	0.000	94	51185	5.00	5.15	
* 29	TBA-d9 (IS)	65	2.059	2.060	-0.001	0	326675	1000.0	1000.0	
30	2-Methyl-2-propanol	59	2.102	2.103	-0.001	98	20450	50.0	50.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.181	2.174	0.007	98	25476	50.0	51.6	
32 Isopropyl ether	45	2.267	2.267	0.000	97	65037	5.00	5.05	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	-0.001	93	14134	5.00	4.97	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	100	30734	5.00	5.01	
35 Acrylonitrile	53	2.375	2.375	0.000	94	73491	50.0	50.2	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	87	60322	5.00	5.24	
37 Vinyl acetate	43	2.511	2.511	0.000	100	93993	10.0	10.8	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	17890	5.00	4.94	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	25545	5.00	4.86	
40 Cyclohexane	56	2.833	2.826	0.007	93	31162	5.00	4.88	
41 Chlorobromomethane	128	2.833	2.833	0.000	97	8295	5.00	5.20	
42 Chloroform	83	2.898	2.898	0.000	98	29693	5.00	5.01	
43 Carbon tetrachloride	117	2.984	2.984	0.000	97	19835	5.00	4.80	
45 Methyl acrylate	55	2.998	2.998	0.000	60	17309	5.00	5.04	
44 Ethyl acetate	70	2.998	2.998	0.000	98	4443	10.0	9.32	
46 Tetrahydrofuran	42	3.012	3.005	0.007	94	16141	10.0	9.85	
$ 47 Dibromofluoromethane (Surr	113	3.026	3.027	-0.001	96	157622	50.0	55.8	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	97	25143	5.00	4.94	
* 49 2-Butanone-d5	46	3.084	3.091	-0.007	0	391144	250.0	250.0	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	81	26421	5.00	5.22	a
50 2-Butanone (MEK)	72	3.127	3.127	0.000	99	11727	25.0	24.5	
52 Isooctane	57	3.213	3.220	-0.007	98	61761	5.00	4.93	
53 n-Heptane	57	3.306	3.313	-0.007	92	17093	5.00	4.99	
54 Benzene	78	3.320	3.320	0.000	97	69217	5.00	4.83	
55 Propionitrile	54	3.342	3.342	0.000	97	29634	50.0	51.4	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	79725	50.0	53.4	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	212359	50.0	55.0	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	54476	5.00	5.13	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	25960	5.00	4.94	
60 Isobutyl alcohol	43	3.557	3.557	0.000	97	21623	125.0	122.0	
61 t-Amyl alcohol	59	3.628	3.628	0.000	97	16561	50.0	50.6	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	533288	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	39217	5.00	5.12	
64 Methylcyclohexane	83	3.800	3.793	0.007	94	30199	5.00	4.95	
65 Trichloroethene	130	3.814	3.815	0.000	97	15612	5.00	4.73	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	92	49197	5.00	5.08	
67 Dibromomethane	93	4.187	4.187	0.000	95	10771	5.00	5.01	
68 n-Butanol	56	4.201	4.194	0.007	96	12763	125.0	120.2	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	86	18738	5.00	5.01	
71 Dichlorobromomethane	83	4.366	4.359	0.007	98	22689	5.00	4.98	
70 Ethyl acrylate	55	4.359	4.359	0.000	90	24141	5.00	5.06	
* 72 1,4-Dioxane-d8	96	4.552	4.545	0.007	0	33609	1000.0	1000.0	
73 Methyl methacrylate	100	4.559	4.552	0.007	93	9667	10.0	10.6	
74 1,4-Dioxane	88	4.581	4.574	0.007	93	4395	100.0	103.2	
75 n-Propyl acetate	43	4.717	4.710	0.007	99	28842	5.00	5.27	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	13288	5.00	5.30	
77 cis-1,3-Dichloropropene	75	5.011	5.004	0.007	98	27896	5.00	4.83	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	666224	50.0	53.8	
79 Toluene	91	5.261	5.261	0.000	93	74964	5.00	4.77	
80 Epichlorohydrin	57	5.290	5.290	0.000	100	38589	100.0	100.6	
81 2-Nitropropane	41	5.519	5.519	0.000	98	10607	10.0	9.92	
82 Tetrachloroethene	166	5.684	5.691	-0.007	92	15981	5.00	4.84	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.727	0.007	99	100949	25.0	25.6	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	98	25883	5.00	4.86	
85 1,1,2-Trichloroethane	83	5.942	5.935	0.007	94	13006	5.00	4.86	
86 Ethyl methacrylate	69	6.021	6.021	0.000	93	24034	5.00	5.17	
87 Chlorodibromomethane	129	6.142	6.135	0.007	98	15631	5.00	4.83	
88 1,3-Dichloropropane	76	6.257	6.250	0.007	97	27408	5.00	4.97	
89 Ethylene Dibromide	107	6.393	6.386	0.007	99	14987	5.00	4.90	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	30825	5.00	4.85	
91 2-Hexanone	43	6.794	6.794	0.000	99	71101	25.0	25.7	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	452378	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	91	45498	5.00	4.82	
94 Ethylbenzene	106	7.181	7.181	0.000	99	25690	5.00	4.93	
95 1,1,1,2-Tetrachloroethane	131	7.217	7.210	0.007	93	15083	5.00	4.86	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	31009	5.00	4.91	
97 o-Xylene	106	7.990	7.991	-0.001	93	30134	5.00	4.89	
98 Bromoform	173	8.055	8.055	0.000	94	9639	5.00	4.72	
99 Styrene	104	8.084	8.077	0.008	93	50839	5.00	4.92	
100 n-Butyl acrylate	73	8.406	8.399	0.007	96	13528	5.00	5.02	
101 Isopropylbenzene	105	8.478	8.478	0.000	97	79527	5.00	4.78	
102 Amyl acetate (mixed isomer	43	8.821	8.814	0.007	90	37324	5.00	5.02	a
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	85	190164	50.0	53.8	
104 Bromobenzene	156	8.957	8.958	-0.001	95	19962	5.00	5.14	
105 N-Propylbenzene	91	9.115	9.108	0.007	99	97818	5.00	4.88	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	98	21201	5.00	5.05	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	66506	5.00	4.88	
108 4-Ethyltoluene	105	9.301	9.301	0.000	97	80122	5.00	4.92	
109 1,2,3-Trichloropropane	110	9.394	9.395	0.000	96	6402	5.00	5.35	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	68150	5.00	4.90	
111 trans-1,4-Dichloro-2-buten	53	9.531	9.516	0.015	84	6891	5.00	4.64	
112 4-Chlorotoluene	91	9.552	9.552	0.000	98	60459	5.00	4.81	
113 tert-Butylbenzene	119	9.924	9.925	-0.001	93	57058	5.00	4.99	
115 1,2,4-Trimethylbenzene	105	10.061	10.054	0.007	95	67771	5.00	4.90	
114 Butyl Methacrylate	87	10.061	10.054	0.007	63	24048	5.00	4.92	
116 sec-Butylbenzene	105	10.218	10.218	0.000	98	86419	5.00	4.85	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	94	36962	5.00	5.02	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	97	72660	5.00	4.91	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	97	238334	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.634	0.007	92	37953	5.00	4.76	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	70642	5.00	4.85	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	71144	5.00	5.06	
122 Benzyl chloride	126	11.099	11.092	0.007	97	7734	5.00	5.03	
123 p-Diethylbenzene	119	11.106	11.106	0.000	91	37371	5.00	4.75	
124 n-Butylbenzene	91	11.192	11.185	0.007	99	67270	5.00	4.75	
125 1,2-Dichlorobenzene	146	11.300	11.293	0.007	94	35363	5.00	5.04	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.202	0.000	97	62876	5.00	4.94	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	91	3678	5.00	4.84	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	25806	5.00	4.89	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	21690	5.00	4.65	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	91	10874	5.00	4.76	
131 Naphthalene	128	13.356	13.356	0.000	99	50447	5.00	4.79	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	94	20267	5.00	4.81	
S 133 1,2-Dichloroethene, Total	100				0		10.0	9.59	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		10.0	9.69	
S 135 Xylenes, Total	100				0		10.0	9.80	
S 137 Total BTEX	1				0		25.0	24.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	4.00	Units: uL		
MIX 2 Hi_00069	Amount Added:	1.00	Units: uL		
Ethanol mix_00014	Amount Added:	1.00	Units: uL		
GAS Hi_00250	Amount Added:	1.00	Units: uL		
MIX I Hi_00093	Amount Added:	1.00	Units: uL		
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent	

Report Date: 23-Apr-2018 14:03:41 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43994.D

Injection Date: 20-Apr-2018 03:51:30 Instrument ID: CVOAMS13 Operator ID:

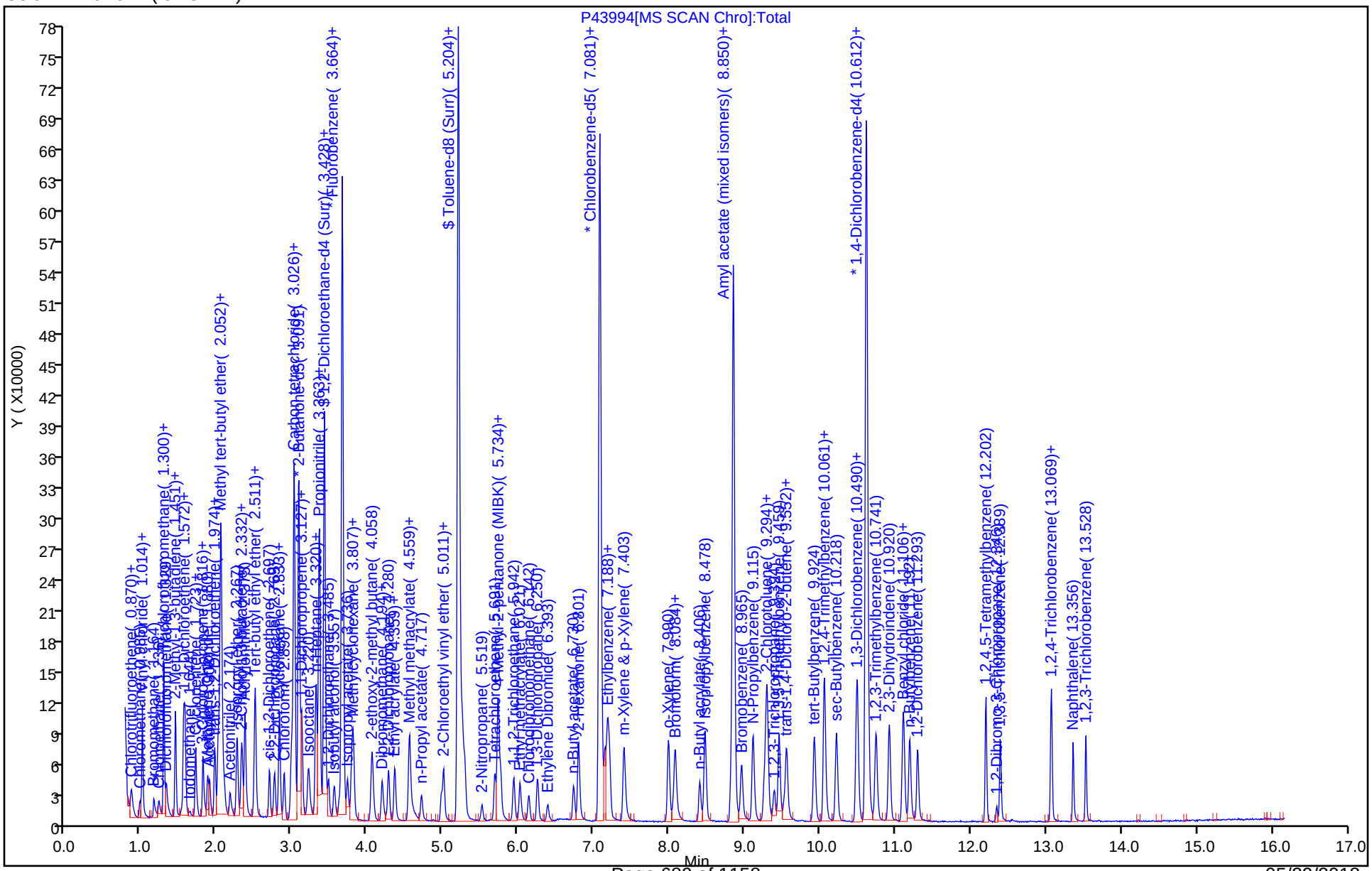
Lims ID: STD5 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

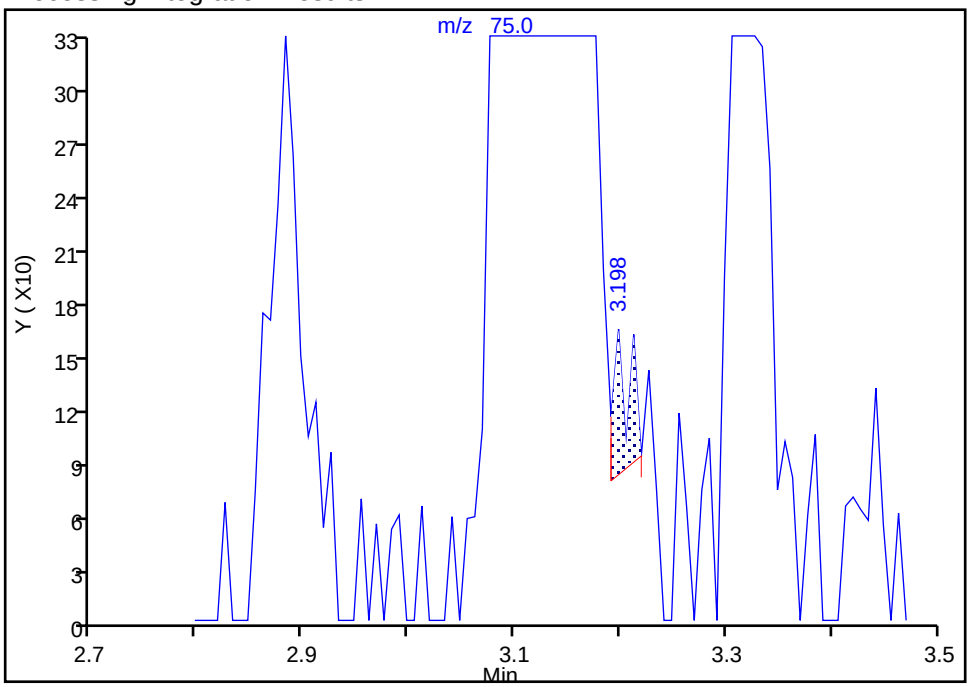
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43994.D
Injection Date: 20-Apr-2018 03:51:30 Instrument ID: CVOAMS13
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

51 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

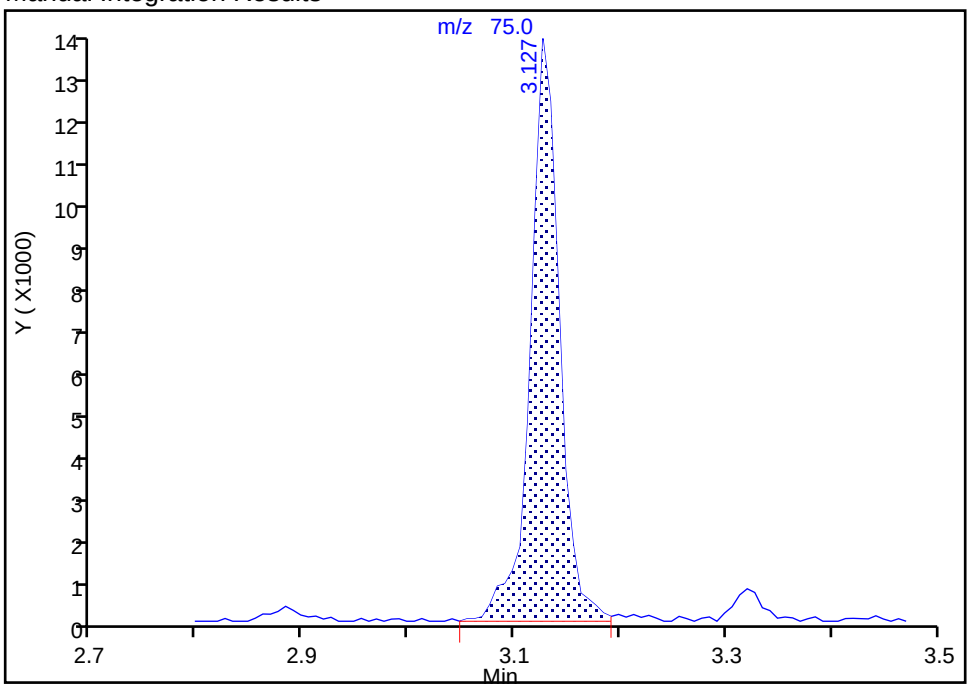
Processing Integration Results

RT: 3.20
Area: 87
Amount: 0.017734
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 26421
Amount: 5.222136
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:47:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

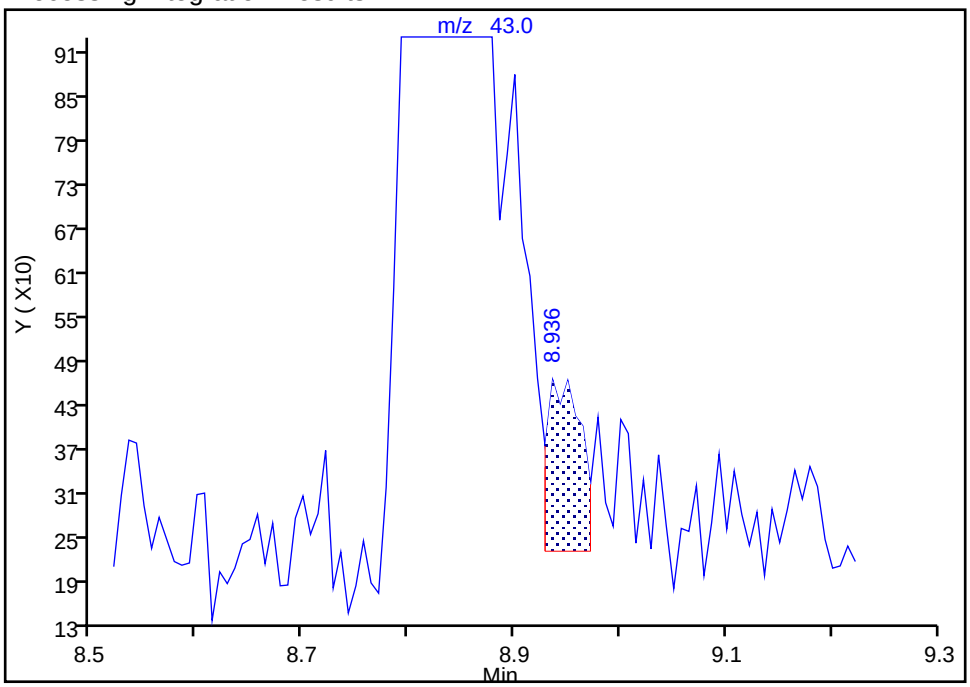
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43994.D
Injection Date: 20-Apr-2018 03:51:30 Instrument ID: CVOAMS13
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

102 Amyl acetate (mixed isomers), CAS: 628-63-7

Signal: 1

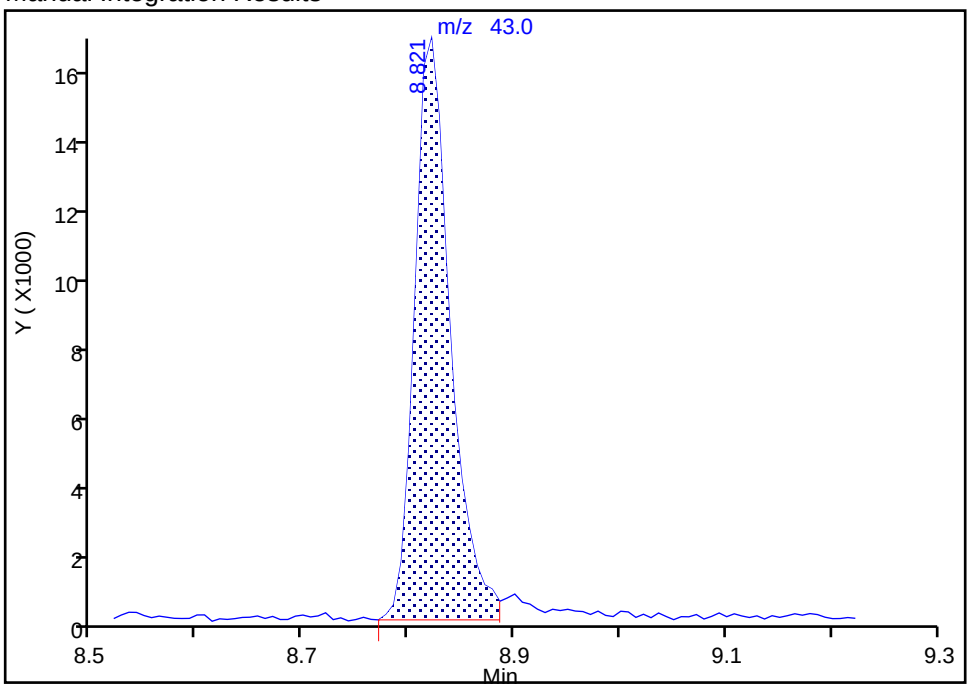
Processing Integration Results

RT: 8.94
Area: 538
Amount: 0.065935
Amount Units: ug/l



Manual Integration Results

RT: 8.82
Area: 37324
Amount: 5.017030
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:48:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43995.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 20-Apr-2018 04:17:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0070689-007
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 14:04:02 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: boykink Date: 20-Apr-2018 03:52:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.863	0.000	91	29153	20.0	18.8	
2 Dichlorodifluoromethane	85	0.870	0.870	0.000	99	89981	20.0	19.3	
4 Chloromethane	50	0.985	0.985	0.000	99	81159	20.0	18.1	
5 Vinyl chloride	62	1.007	1.007	0.000	98	92854	20.0	18.5	
3 Butadiene	54	1.014	1.014	0.000	99	84262	20.0	19.0	
6 Bromomethane	94	1.164	1.164	0.000	99	41619	20.0	19.7	
7 Chloroethane	64	1.229	1.229	0.000	100	53225	20.0	18.6	
9 Pentane	72	1.300	1.300	0.000	97	24127	40.0	39.7	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	98	95911	20.0	19.5	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	129522	20.0	19.8	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	97	102523	20.0	21.0	
12 Ethyl ether	59	1.458	1.458	0.000	92	66409	20.0	20.2	
13 Ethanol	46	1.537	1.537	0.000	99	19972	800.0	875.6	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	84	89246	20.0	20.2	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	97	60187	20.0	20.2	
16 Carbon disulfide	76	1.580	1.580	0.000	100	227224	20.0	19.2	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	91	61826	20.0	20.0	
18 Iodomethane	142	1.644	1.644	0.000	100	40377	20.0	10.8	
19 Cyclopentene	67	1.723	1.723	0.000	97	174651	20.0	20.5	
20 Acrolein	56	1.744	1.744	0.000	96	13537	40.0	34.5	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	42512	20.0	20.1	
22 Isopropyl alcohol	45	1.838	1.838	0.000	97	57779	200.0	189.8	
23 Methylene Chloride	84	1.880	1.880	0.000	98	75569	20.0	19.6	
24 Acetone	43	1.902	1.902	0.000	85	113715	100.0	90.3	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	68511	20.0	19.3	
26 Methyl acetate	43	1.981	1.981	0.000	99	132620	40.0	42.2	
27 Hexane	86	2.017	2.017	0.000	95	19137	20.0	20.2	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	94	225447	20.0	20.0	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	352476	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	0.000	99	84711	200.0	192.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.174	2.174	0.000	99	107597	200.0	202.0	
32 Isopropyl ether	45	2.267	2.267	0.000	97	294050	20.0	20.1	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	93	66792	20.0	20.7	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	142687	20.0	20.5	
35 Acrylonitrile	53	2.375	2.375	0.000	93	332109	200.0	199.9	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	87	264338	20.0	20.2	
37 Vinyl acetate	43	2.511	2.511	0.000	100	417622	40.0	42.2	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	94	81951	20.0	20.0	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	98	120337	20.0	20.2	
40 Cyclohexane	56	2.826	2.826	0.000	95	145016	20.0	20.0	
41 Chlorobromomethane	128	2.833	2.833	0.000	96	36290	20.0	20.1	
42 Chloroform	83	2.898	2.898	0.000	97	136382	20.0	20.3	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	90733	20.0	19.3	
44 Ethyl acetate	70	2.998	2.998	0.000	99	19825	40.0	37.8	
45 Methyl acrylate	55	2.998	2.998	0.000	96	77898	20.0	20.0	
46 Tetrahydrofuran	42	3.005	3.005	0.000	94	72752	40.0	40.3	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	158205	50.0	49.4	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	98	114741	20.0	19.9	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	430832	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	99	51090	100.0	97.0	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	93	110256	20.0	19.2	
52 Isooctane	57	3.220	3.220	0.000	98	284359	20.0	20.0	
53 n-Heptane	57	3.313	3.313	0.000	94	78576	20.0	20.2	
54 Benzene	78	3.320	3.320	0.000	96	324927	20.0	20.5	
55 Propionitrile	54	3.342	3.342	0.000	94	124027	200.0	199.5	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	351963	200.0	207.7	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	209977	50.0	47.9	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	99	245635	20.0	20.4	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	111335	20.0	18.7	
60 Isobutyl alcohol	43	3.557	3.557	0.000	98	97565	500.0	510.0	
61 t-Amyl alcohol	59	3.628	3.628	0.000	98	69095	200.0	195.8	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	605148	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	177364	20.0	20.4	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	138356	20.0	20.0	
65 Trichloroethene	130	3.815	3.815	0.000	97	74245	20.0	19.8	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	90	223106	20.0	20.3	
67 Dibromomethane	93	4.187	4.187	0.000	95	48719	20.0	20.0	
68 n-Butanol	56	4.194	4.194	0.000	90	57449	500.0	501.6	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	84382	20.0	19.9	
70 Ethyl acrylate	55	4.359	4.359	0.000	97	113198	20.0	20.9	
71 Dichlorobromomethane	83	4.359	4.359	0.000	98	104821	20.0	20.3	
* 72 1,4-Dioxane-d8	96	4.545	4.545	0.000	0	36837	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.552	0.000	93	43516	40.0	42.0	
74 1,4-Dioxane	88	4.574	4.574	0.000	98	17884	400.0	383.3	
75 n-Propyl acetate	43	4.710	4.710	0.000	100	130083	20.0	20.9	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	59340	20.0	20.9	
77 cis-1,3-Dichloropropene	75	5.004	5.004	0.000	97	130579	20.0	20.5	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	660714	50.0	48.3	
79 Toluene	91	5.261	5.261	0.000	93	348179	20.0	20.1	
80 Epichlorohydrin	57	5.290	5.290	0.000	99	178915	400.0	423.3	
81 2-Nitropropane	41	5.519	5.519	0.000	98	47049	40.0	38.8	
82 Tetrachloroethene	166	5.691	5.691	0.000	97	74887	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.727	5.727	0.000	99	457222	100.0	105.3	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	96	120901	20.0	20.6	
85 1,1,2-Trichloroethane	83	5.935	5.935	0.000	95	58200	20.0	19.7	
86 Ethyl methacrylate	69	6.021	6.021	0.000	92	114032	20.0	21.6	
87 Chlorodibromomethane	129	6.135	6.135	0.000	98	71960	20.0	20.1	
88 1,3-Dichloropropane	76	6.250	6.250	0.000	97	123338	20.0	20.3	
89 Ethylene Dibromide	107	6.386	6.386	0.000	98	68640	20.0	20.3	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	142483	20.0	20.3	
91 2-Hexanone	43	6.794	6.794	0.000	98	321541	100.0	105.4	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	90	499543	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	98	207619	20.0	19.9	
94 Ethylbenzene	106	7.181	7.181	0.000	99	115549	20.0	20.1	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	94	69351	20.0	20.2	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	143350	20.0	20.6	
97 o-Xylene	106	7.991	7.991	0.000	93	137892	20.0	20.2	
98 Bromoform	173	8.055	8.055	0.000	94	46059	20.0	20.4	
99 Styrene	104	8.077	8.077	0.000	93	238335	20.0	20.9	
100 n-Butyl acrylate	73	8.399	8.399	0.000	95	65222	20.0	21.9	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	371045	20.0	20.2	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	88	175029	20.0	21.0	
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	85	190141	50.0	48.7	
104 Bromobenzene	156	8.958	8.958	0.000	95	85837	20.0	19.7	
105 N-Propylbenzene	91	9.108	9.108	0.000	99	454851	20.0	20.2	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	98	92838	20.0	19.7	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	306889	20.0	20.1	
108 4-Ethyltoluene	105	9.301	9.301	0.000	98	375036	20.0	20.5	
109 1,2,3-Trichloropropane	110	9.395	9.395	0.000	97	27233	20.0	20.3	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	315371	20.0	20.2	
111 trans-1,4-Dichloro-2-buten	53	9.516	9.516	0.000	88	30703	20.0	18.4	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	280188	20.0	19.9	
113 tert-Butylbenzene	119	9.925	9.925	0.000	93	263298	20.0	20.5	
114 Butyl Methacrylate	87	10.054	10.054	0.000	66	115353	20.0	21.1	
115 1,2,4-Trimethylbenzene	105	10.054	10.054	0.000	95	321286	20.0	20.7	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	404639	20.0	20.2	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	94	165407	20.0	20.0	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	97	340095	20.0	20.5	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	97	267262	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.634	0.000	92	170565	20.0	19.1	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	333748	20.0	20.5	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	323522	20.0	20.5	
122 Benzyl chloride	126	11.092	11.092	0.000	96	35862	20.0	20.8	
123 p-Diethylbenzene	119	11.106	11.106	0.000	91	177839	20.0	20.2	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	320768	20.0	20.2	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	94	159060	20.0	20.2	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.202	0.000	97	292939	20.0	20.5	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	95	17309	20.0	20.3	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	120523	20.0	20.4	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	104827	20.0	20.1	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	92	51742	20.0	20.2	
131 Naphthalene	128	13.356	13.356	0.000	99	229589	20.0	19.5	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	95	92520	20.0	19.6	
S 133 1,2-Dichloroethene, Total	100				0		40.0	39.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		40.0	41.0	
S 135 Xylenes, Total	100				0		40.0	40.8	
S 137 Total BTEX	1				0		100.0	101.5	

Reagents:

MIX 2 Hi_00069	Amount Added:	2.00	Units: uL		
Ethanol mix_00014	Amount Added:	2.00	Units: uL		
ACROLEIN W_00075	Amount Added:	4.00	Units: uL		
GAS Hi_00250	Amount Added:	2.00	Units: uL		
MIX I Hi_00093	Amount Added:	2.00	Units: uL		
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent	

Report Date: 23-Apr-2018 14:04:06 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43995.D

Injection Date: 20-Apr-2018 04:17:30 Instrument ID: CVOAMS13 Operator ID:

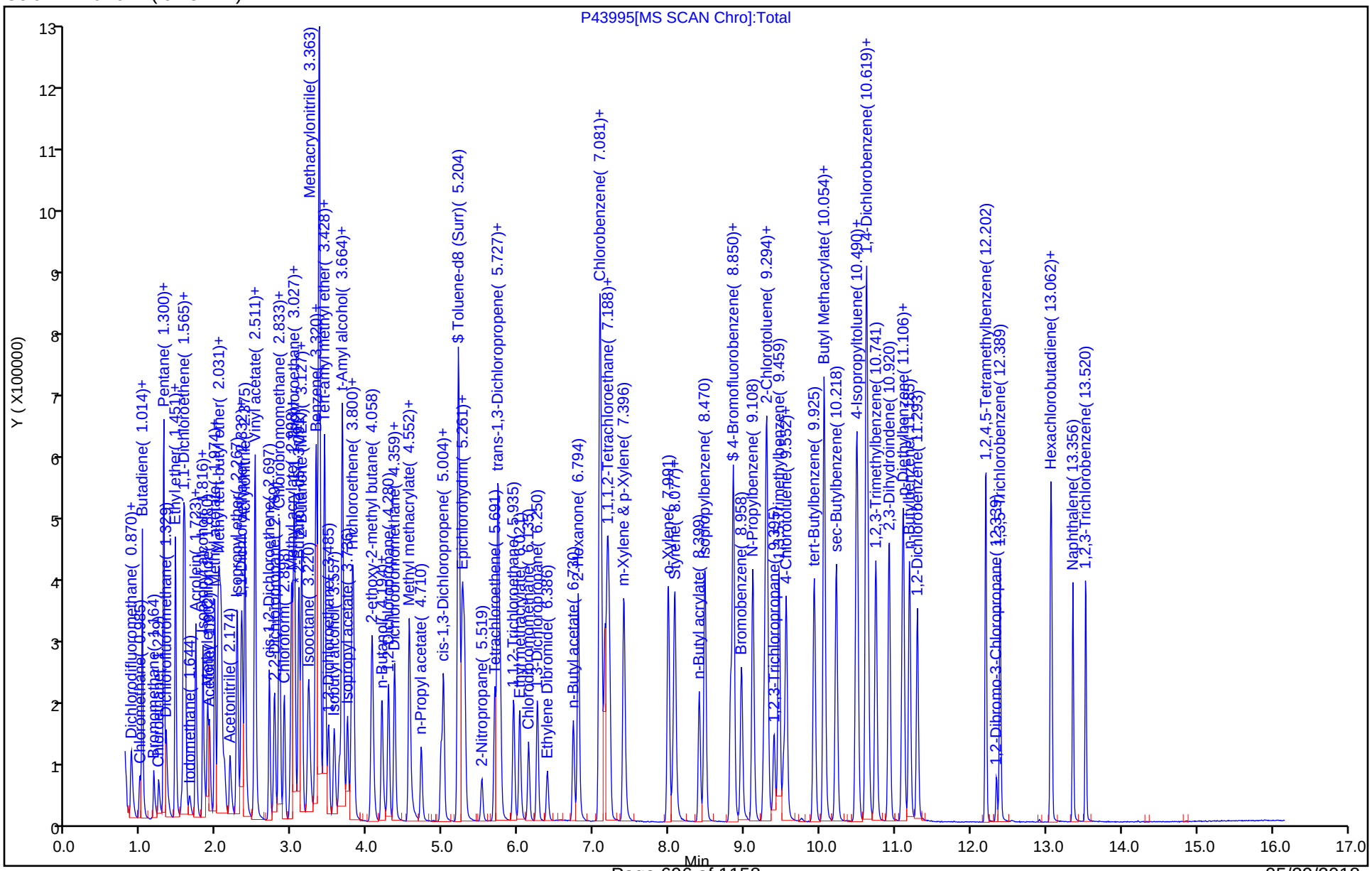
Lims ID: STD20 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 20-Apr-2018 06:00:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0070689-010
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 14:04:23 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: desais Date: 20-Apr-2018 08:26:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.864	0.863	0.001	88	1247	1.00	0.8353	
2 Dichlorodifluoromethane	85	0.871	0.870	0.001	99	4275	1.00	0.9504	
4 Chloromethane	50	0.985	0.985	0.000	98	4245	1.00	0.9836	
5 Vinyl chloride	62	1.007	1.007	0.000	77	5201	1.00	1.07	
3 Butadiene	54	1.014	1.014	0.000	97	4416	1.00	1.03	
6 Bromomethane	94	1.164	1.164	0.000	96	2070	1.00	1.00	
7 Chloroethane	64	1.229	1.229	0.000	97	3016	1.00	1.09	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	94	4661	1.00	0.9838	
9 Pentane	72	1.300	1.300	0.000	96	1180	2.00	1.93	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	98	6341	1.00	1.00	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	95	4285	1.00	0.9093	
12 Ethyl ether	59	1.458	1.458	0.000	93	3294	1.00	1.04	
13 Ethanol	46	1.537	1.537	0.000	97	1061	40.0	46.2	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	93	2852	1.00	0.99	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	75	4466	1.00	1.05	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	40	2674	1.00	0.8982	
16 Carbon disulfide	76	1.580	1.580	0.000	100	11376	1.00	1.00	
18 Iodomethane	142	1.644	1.644	0.000	95	997	1.00	0.2768	
19 Cyclopentene	67	1.723	1.723	0.000	98	7436	1.00	0.9065	
20 Acrolein	56	1.737	1.744	-0.007	94	1219	4.00	3.09	M
21 3-Chloro-1-propene	76	1.816	1.816	0.000	91	2230	1.00	1.09	
22 Isopropyl alcohol	45	1.838	1.838	0.000	96	3435	10.0	11.2	
23 Methylene Chloride	84	1.881	1.880	0.001	95	4227	1.00	1.14	
24 Acetone	43	1.909	1.902	0.007	86	6981	5.00	5.66	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	96	3648	1.00	1.06	
26 Methyl acetate	43	1.981	1.981	0.000	99	6295	2.00	2.08	
27 Hexane	86	2.017	2.017	0.000	64	799	1.00	0.8758	
28 Methyl tert-butyl ether	73	2.031	2.038	-0.007	91	10902	1.00	1.00	
* 29 TBA-d9 (IS)	65	2.053	2.060	-0.007	0	355185	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	0.000	92	4596	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.174	2.174	0.000	100	5310	10.0	9.90	
32 Isopropyl ether	45	2.267	2.267	0.000	97	14258	1.00	1.01	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	94	3037	1.00	0.9752	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	6715	1.00	1.00	
35 Acrylonitrile	53	2.375	2.375	0.000	94	15674	10.0	9.78	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	87	12311	1.00	0.9769	
37 Vinyl acetate	43	2.518	2.511	0.007	100	20773	2.00	2.18	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	4071	1.00	1.03	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	97	6022	1.00	1.05	
40 Cyclohexane	56	2.826	2.826	0.000	94	6418	1.00	0.9183	
41 Chlorobromomethane	128	2.833	2.833	0.000	84	1724	1.00	0.9883	
42 Chloroform	83	2.898	2.898	0.000	98	6593	1.00	1.02	
43 Carbon tetrachloride	117	2.984	2.984	0.000	95	4370	1.00	0.9657	
45 Methyl acrylate	55	3.005	2.998	0.007	51	3255	1.00	0.8658	
44 Ethyl acetate	70	2.998	2.998	0.000	96	984	2.00	1.91	
46 Tetrahydrofuran	42	3.012	3.005	0.007	33	3604	2.00	2.04	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	156101	50.0	50.5	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	36	5440	1.00	0.9764	
* 49 2-Butanone-d5	46	3.084	3.091	-0.007	0	422206	250.0	250.0	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	66	6053	1.00	1.09	a
50 2-Butanone (MEK)	72	3.134	3.127	0.007	97	2580	5.00	5.00	
52 Isooctane	57	3.213	3.220	-0.007	98	13653	1.00	1.00	
53 n-Heptane	57	3.306	3.313	-0.007	60	3622	1.00	0.9658	
54 Benzene	78	3.320	3.320	0.000	97	14754	1.00	0.9604	
55 Propionitrile	54	3.342	3.342	0.000	94	5977	10.0	9.54	
56 Methacrylonitrile	67	3.363	3.363	0.000	94	15749	10.0	9.64	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	210668	50.0	49.8	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	39	11308	1.00	0.9732	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	94	6390	1.00	1.11	
60 Isobutyl alcohol	43	3.557	3.557	0.000	97	4289	25.0	22.3	
61 t-Amyl alcohol	59	3.636	3.628	0.008	52	3498	10.0	9.84	a
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	583669	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	97	7688	1.00	0.9179	
64 Methylcyclohexane	83	3.793	3.793	0.000	95	6439	1.00	0.9638	
65 Trichloroethene	130	3.815	3.815	0.001	95	3412	1.00	0.9444	
66 2-ethoxy-2-methyl butane	59	4.065	4.058	0.007	91	10552	1.00	1.00	
67 Dibromomethane	93	4.194	4.187	0.007	88	2422	1.00	1.03	
68 n-Butanol	56	4.216	4.194	0.022	91	2629	25.0	22.8	M
69 1,2-Dichloropropane	63	4.280	4.280	0.000	88	4033	1.00	0.9843	
71 Dichlorobromomethane	83	4.359	4.359	0.000	96	4712	1.00	0.9451	
70 Ethyl acrylate	55	4.366	4.359	0.007	81	4169	1.00	0.7990	
* 72 1,4-Dioxane-d8	96	4.552	4.545	0.007	0	37422	1000.0	1000.0	M
73 Methyl methacrylate	100	4.560	4.552	0.008	64	1928	2.00	1.93	
74 1,4-Dioxane	88	4.588	4.574	0.014	80	2133	50.0	45.0	
75 n-Propyl acetate	43	4.717	4.710	0.007	98	5510	1.00	0.9196	
76 2-Chloroethyl vinyl ether	63	4.989	4.975	0.014	95	2682	1.00	0.9773	
77 cis-1,3-Dichloropropene	75	5.011	5.004	0.007	98	5986	1.00	0.9674	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	662057	50.0	49.9	
79 Toluene	91	5.254	5.261	-0.007	93	16858	1.00	1.00	
80 Epichlorohydrin	57	5.297	5.290	0.007	98	7344	20.0	17.7	
81 2-Nitropropane	41	5.527	5.519	0.008	98	1776	2.00	1.52	
82 Tetrachloroethene	166	5.691	5.691	0.000	93	3504	1.00	0.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.727	0.007	97	19502	5.00	4.58	
84 trans-1,3-Dichloropropene	75	5.770	5.763	0.007	96	4916	1.00	0.8623	
85 1,1,2-Trichloroethane	83	5.949	5.935	0.014	93	2771	1.00	0.9671	
86 Ethyl methacrylate	69	6.028	6.021	0.007	91	4237	1.00	0.8328	
87 Chlorodibromomethane	129	6.143	6.135	0.008	96	3031	1.00	0.8736	
88 1,3-Dichloropropane	76	6.257	6.250	0.007	94	5363	1.00	0.9084	
89 Ethylene Dibromide	107	6.386	6.386	0.000	99	2815	1.00	0.8592	
90 n-Butyl acetate	43	6.737	6.730	0.007	98	6156	1.00	0.9049	
91 2-Hexanone	43	6.809	6.794	0.015	97	13195	5.00	4.41	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	484552	50.0	50.0	
93 Chlorobenzene	112	7.095	7.102	-0.007	85	10058	1.00	0.99	
94 Ethylbenzene	106	7.181	7.181	0.000	98	5737	1.00	1.03	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	89	3154	1.00	0.9490	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	6232	1.00	0.9221	
97 o-Xylene	106	7.998	7.991	0.007	92	6405	1.00	0.9695	
98 Bromoform	173	8.062	8.055	0.007	93	1815	1.00	0.8300	
99 Styrene	104	8.091	8.077	0.015	95	9923	1.00	0.8963	M
100 n-Butyl acrylate	73	8.421	8.399	0.021	98	2383	1.00	0.8258	
101 Isopropylbenzene	105	8.485	8.478	0.007	96	17911	1.00	1.01	
102 Amyl acetate (mixed isomer	43	8.829	8.814	0.015	44	6241	1.00	0.7782	a
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	85	187577	50.0	49.5	
104 Bromobenzene	156	8.965	8.958	0.007	93	4072	1.00	0.9730	
105 N-Propylbenzene	91	9.115	9.108	0.007	98	21884	1.00	1.01	
106 1,1,2,2-Tetrachloroethane	83	9.266	9.258	0.008	98	4334	1.00	0.9577	
107 2-Chlorotoluene	91	9.294	9.287	0.007	97	14727	1.00	1.00	
108 4-Ethyltoluene	105	9.302	9.301	0.001	98	17055	1.00	0.9716	
109 1,2,3-Trichloropropane	110	9.402	9.395	0.008	92	1203	1.00	0.9329	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	94	14062	1.00	0.9383	
111 trans-1,4-Dichloro-2-buten	53	9.538	9.516	0.022	60	1612	1.00	1.01	M
112 4-Chlorotoluene	91	9.567	9.552	0.015	98	13757	1.00	1.01	
113 tert-Butylbenzene	119	9.932	9.925	0.007	91	12131	1.00	0.9833	
115 1,2,4-Trimethylbenzene	105	10.061	10.054	0.007	94	15019	1.00	1.01	
114 Butyl Methacrylate	87	10.068	10.054	0.014	60	4909	1.00	0.9325	
116 sec-Butylbenzene	105	10.226	10.218	0.008	99	18969	1.00	0.9873	
117 1,3-Dichlorobenzene	146	10.491	10.483	0.008	90	7580	1.00	0.9557	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	97	15465	1.00	0.9701	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	98	256918	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.634	0.000	90	8879	1.00	1.03	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	15537	1.00	0.99	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	14246	1.00	0.9395	
122 Benzyl chloride	126	11.107	11.092	0.015	95	1451	1.00	0.8747	
123 p-Diethylbenzene	119	11.114	11.106	0.008	81	7961	1.00	0.9388	
124 n-Butylbenzene	91	11.193	11.185	0.008	97	14922	1.00	0.9783	
125 1,2-Dichlorobenzene	146	11.300	11.293	0.007	93	6976	1.00	0.9219	
126 1,2,4,5-Tetramethylbenzene	119	12.203	12.202	0.001	98	12499	1.00	0.9101	
127 1,2-Dibromo-3-Chloropropan	157	12.353	12.346	0.007	90	743	1.00	0.9073	
128 1,3,5-Trichlorobenzene	180	12.396	12.389	0.007	94	5549	1.00	0.9750	
129 1,2,4-Trichlorobenzene	180	13.069	13.062	0.007	90	4949	1.00	0.9850	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	90	2471	1.00	1.00	
131 Naphthalene	128	13.363	13.356	0.007	98	10424	1.00	0.9191	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	94	4466	1.00	0.9831	
S 133 1,2-Dichloroethene, Total	100				0		2.00	2.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		2.00	1.83	
S 135 Xylenes, Total	100				0		2.00	1.89	
S 137 Total BTEX	1				0		5.00	4.88	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00075	Amount Added:	4.00	Units: uL	
MIX 2 Hi_00069	Amount Added:	1.00	Units: uL	
Ethanol mix_00014	Amount Added:	1.00	Units: uL	
GAS Hi_00250	Amount Added:	1.00	Units: uL	
MIX I Hi_00093	Amount Added:	1.00	Units: uL	
14DIOXINTER_00083	Amount Added:	30.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

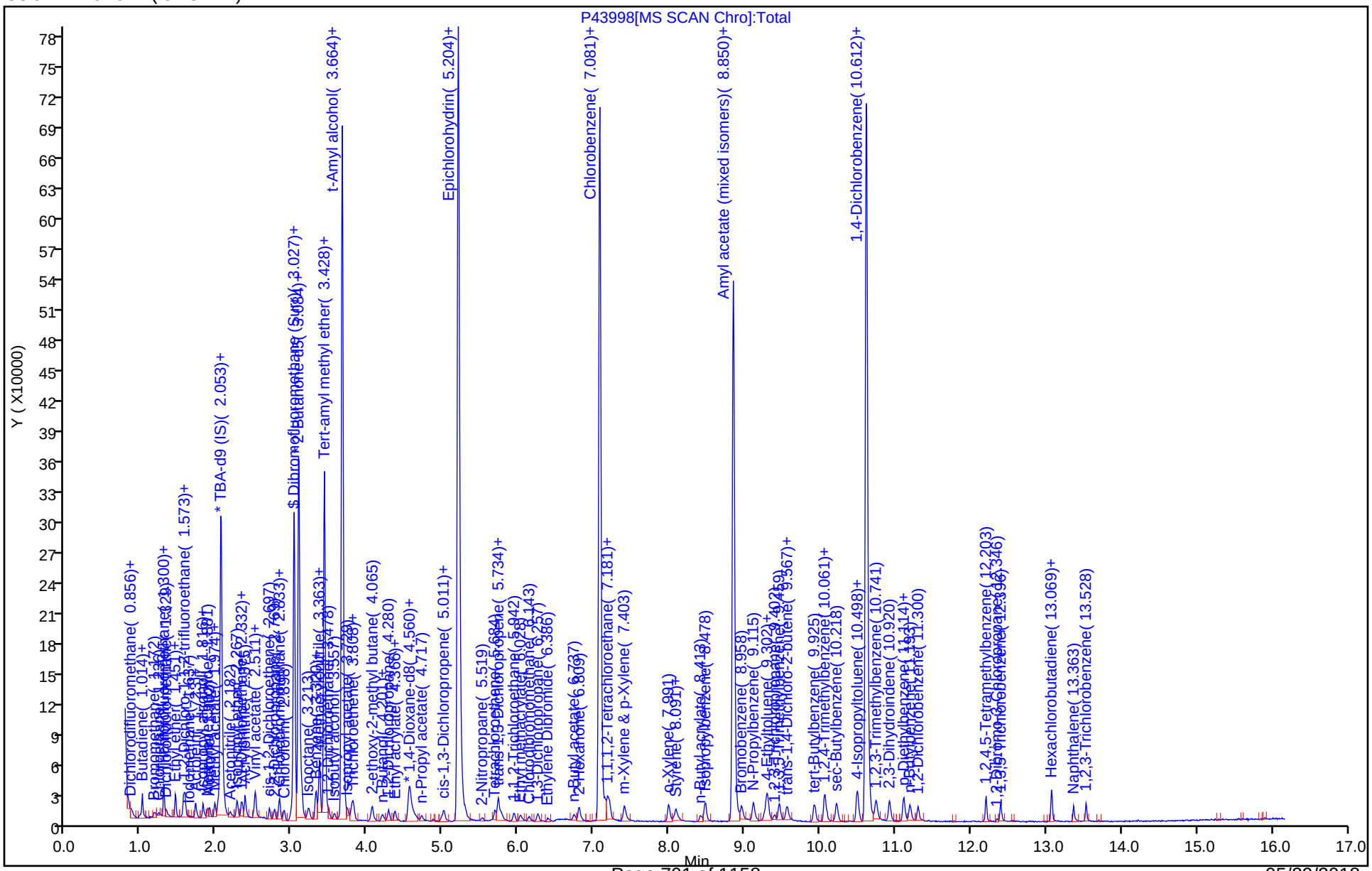
Report Date: 23-Apr-2018 14:04:26 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D

Injection Date:	20-Apr-2018 06:00:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	STD1			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

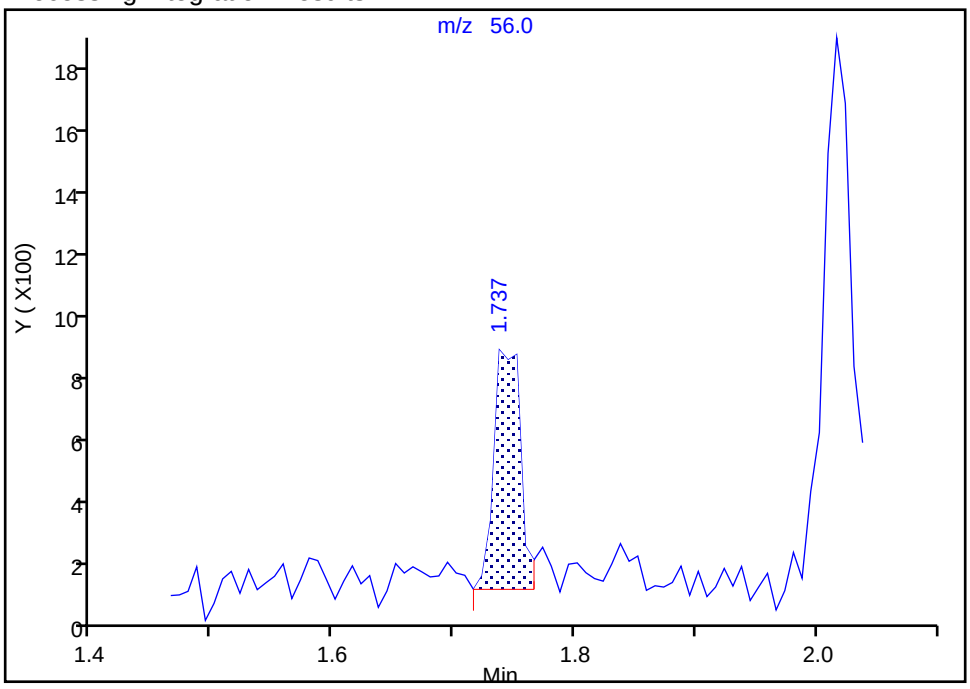
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D
Injection Date: 20-Apr-2018 06:00:30 Instrument ID: CVOAMS13
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

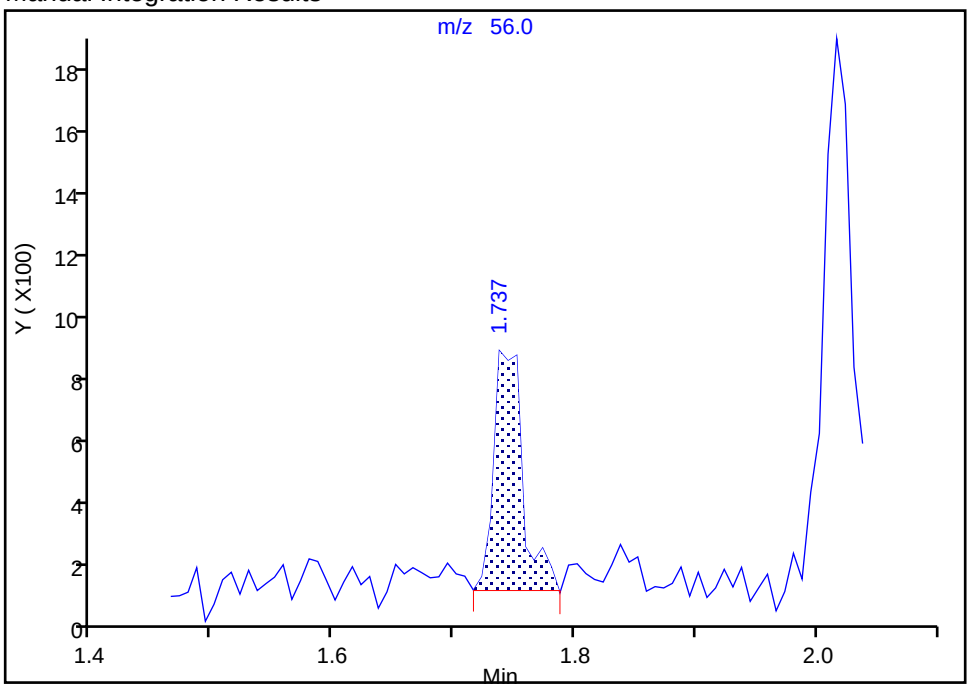
Processing Integration Results

RT: 1.74
Area: 1132
Amount: 2.662671
Amount Units: ug/l



Manual Integration Results

RT: 1.74
Area: 1219
Amount: 3.086699
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 13:04:49
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

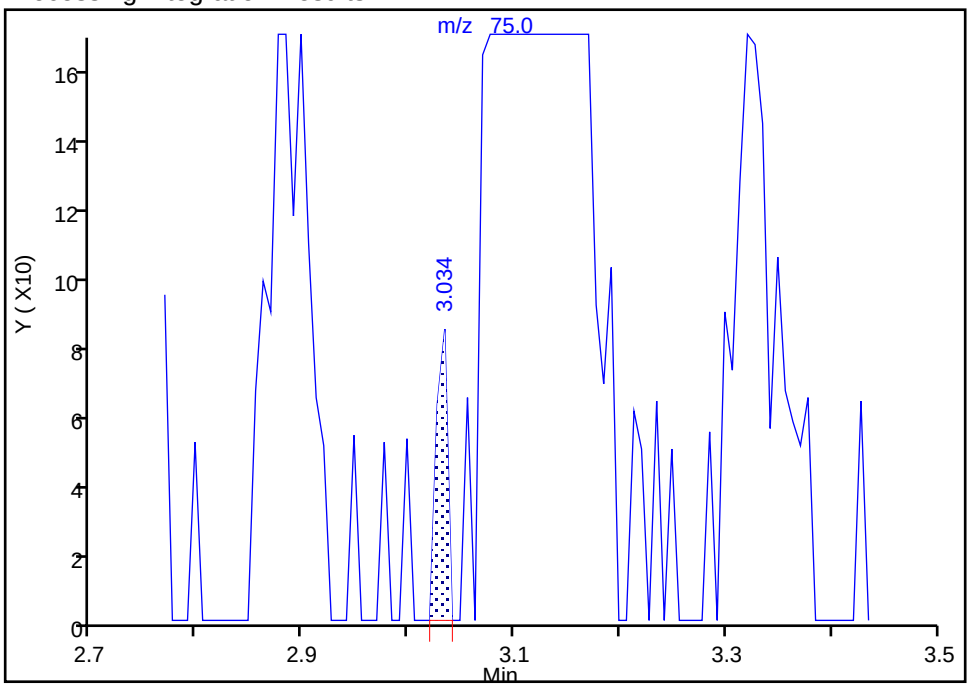
Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D				
Injection Date:	20-Apr-2018 06:00:30	Instrument ID:	CVOAMS13		
Lims ID:	STD1				
Client ID:					
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

51 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

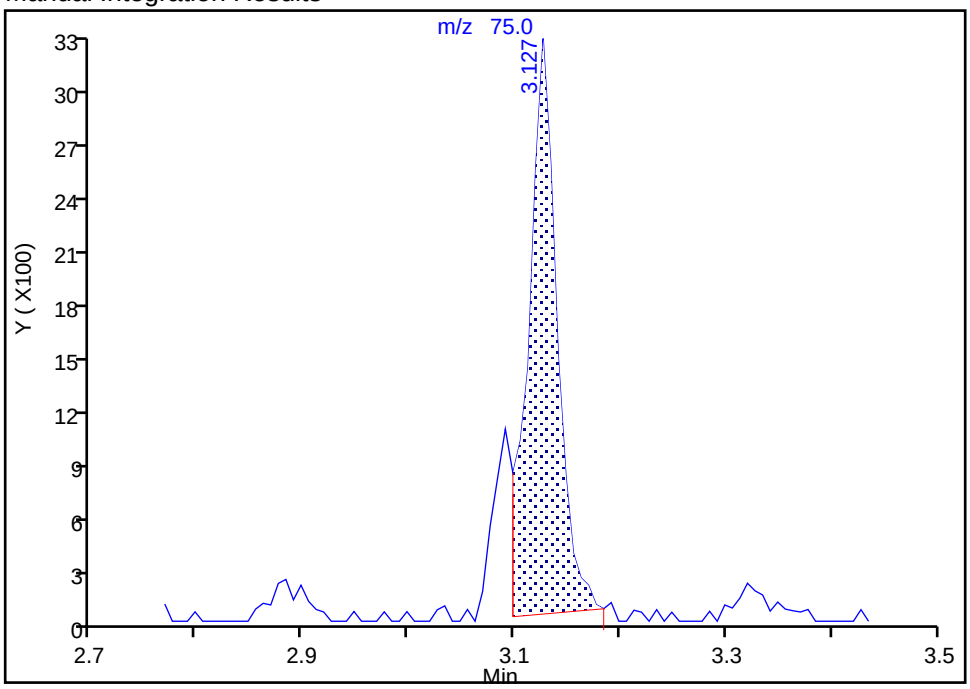
Processing Integration Results

RT: 3.03
Area: 64
Amount: 0.011900
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 6053
Amount: 1.093112
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:49:31

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

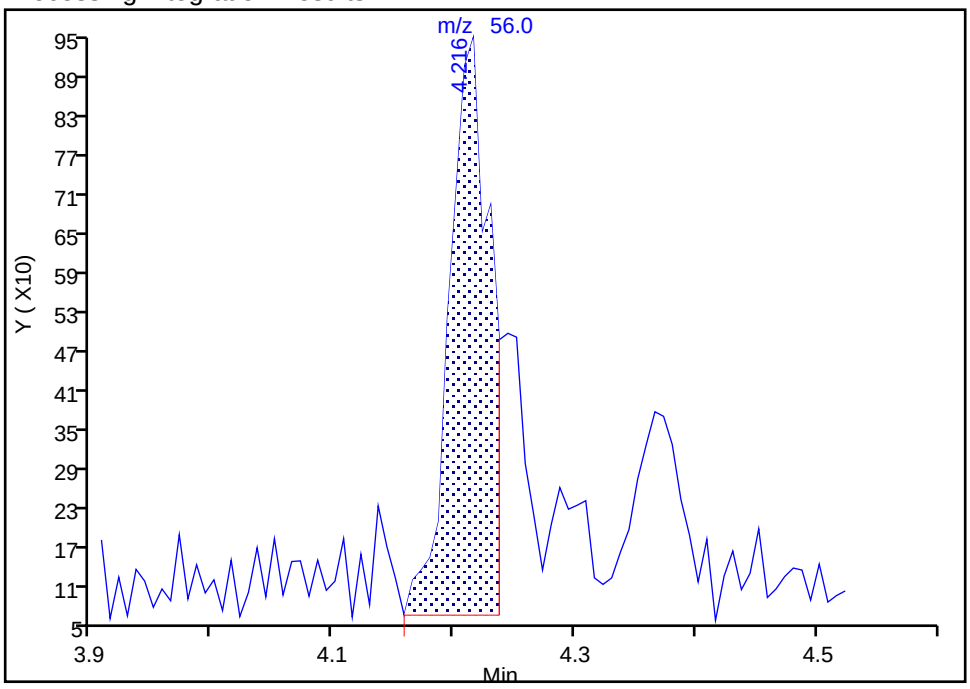
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D
Injection Date: 20-Apr-2018 06:00:30 Instrument ID: CVOAMS13
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

68 n-Butanol, CAS: 71-36-3

Signal: 1

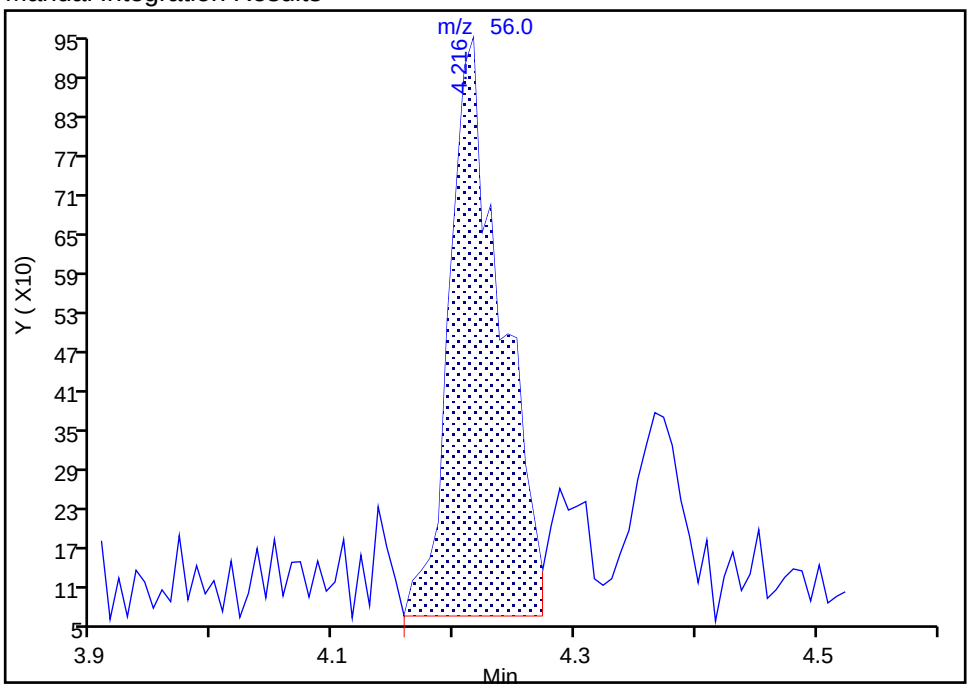
Processing Integration Results

RT: 4.22
Area: 2067
Amount: 18.401490
Amount Units: ug/l



Manual Integration Results

RT: 4.22
Area: 2629
Amount: 22.778426
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:49:51
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

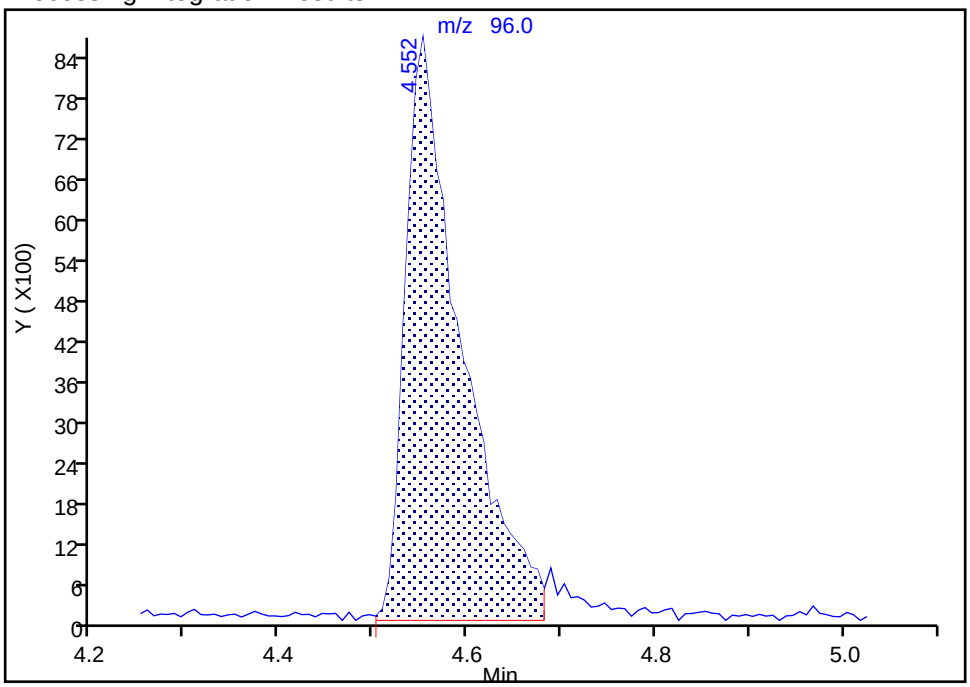
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D
Injection Date: 20-Apr-2018 06:00:30 Instrument ID: CVOAMS13
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 72 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

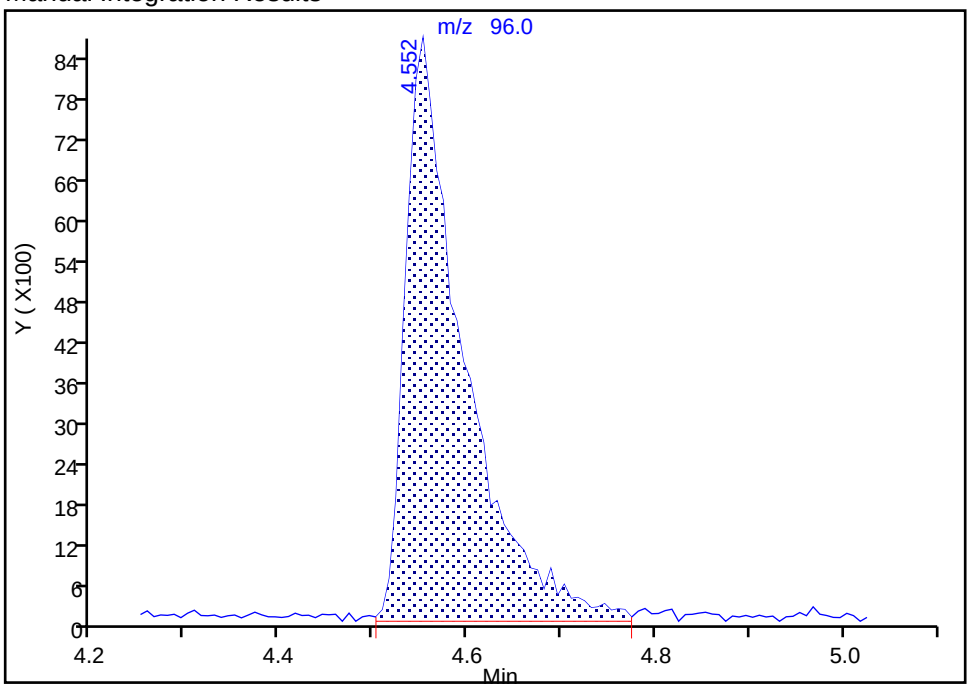
Processing Integration Results

RT: 4.55
Area: 35741
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 4.55
Area: 37422
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:51:11
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

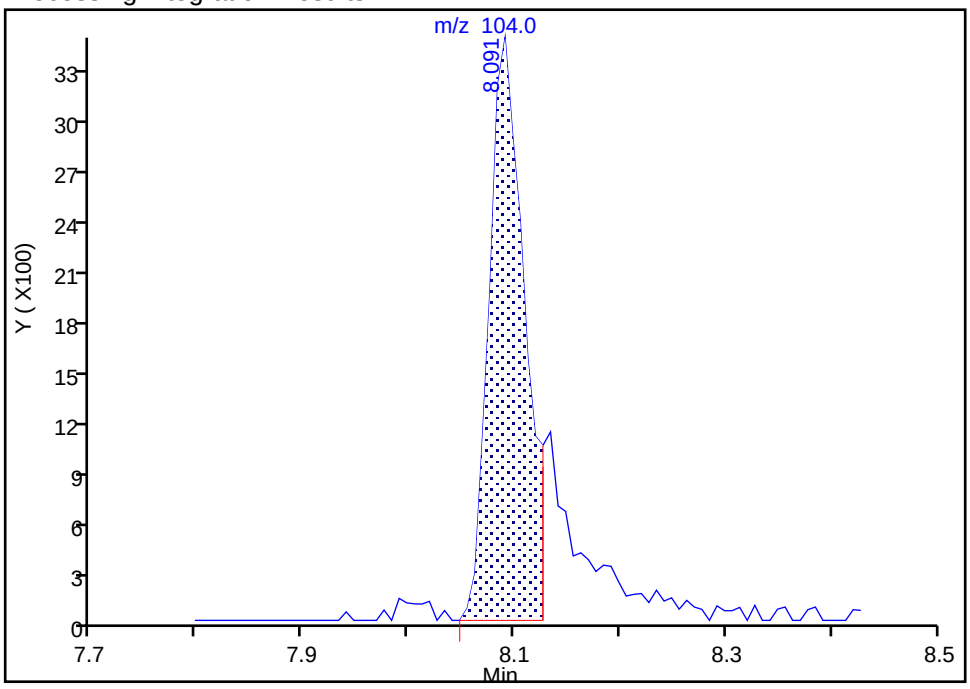
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D
Injection Date: 20-Apr-2018 06:00:30 Instrument ID: CVOAMS13
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

99 Styrene, CAS: 100-42-5

Signal: 1

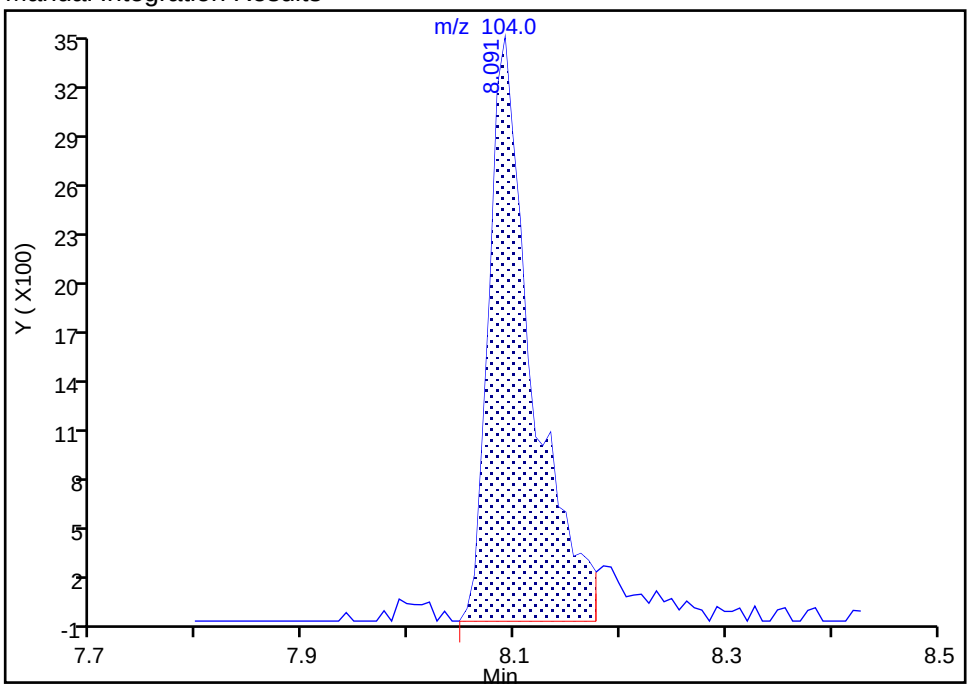
Processing Integration Results

RT: 8.09
Area: 8231
Amount: 0.760051
Amount Units: ug/l



Manual Integration Results

RT: 8.09
Area: 9923
Amount: 0.896285
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:50:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

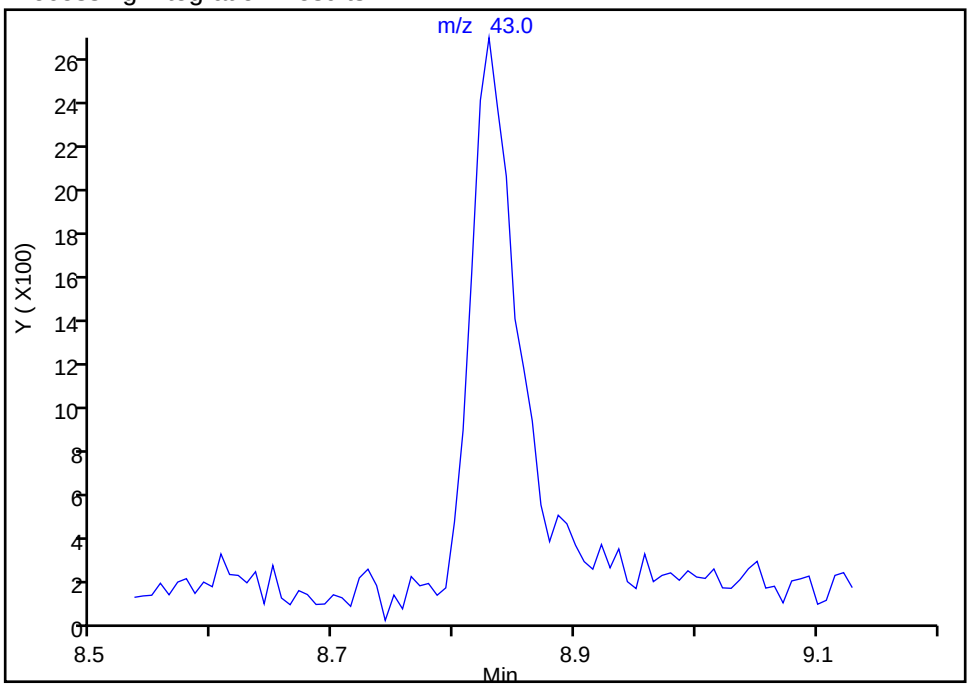
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D
Injection Date: 20-Apr-2018 06:00:30 Instrument ID: CVOAMS13
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

102 Amyl acetate (mixed isomers), CAS: 628-63-7

Signal: 1

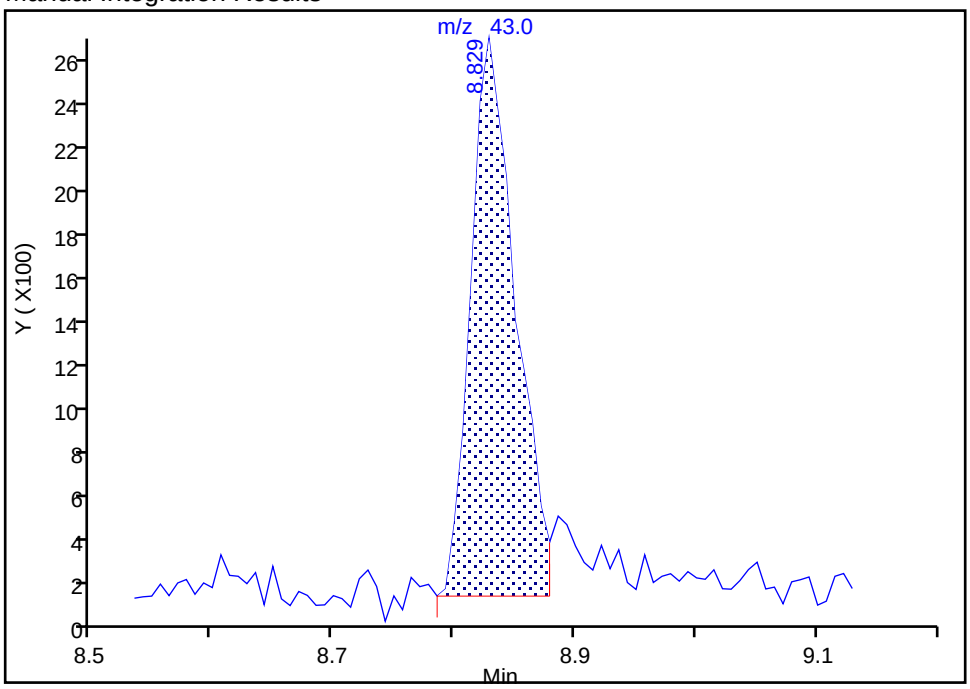
Not Detected
Expected RT: 8.81

Processing Integration Results



Manual Integration Results

RT: 8.83
Area: 6241
Amount: 0.778223
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:50:26
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

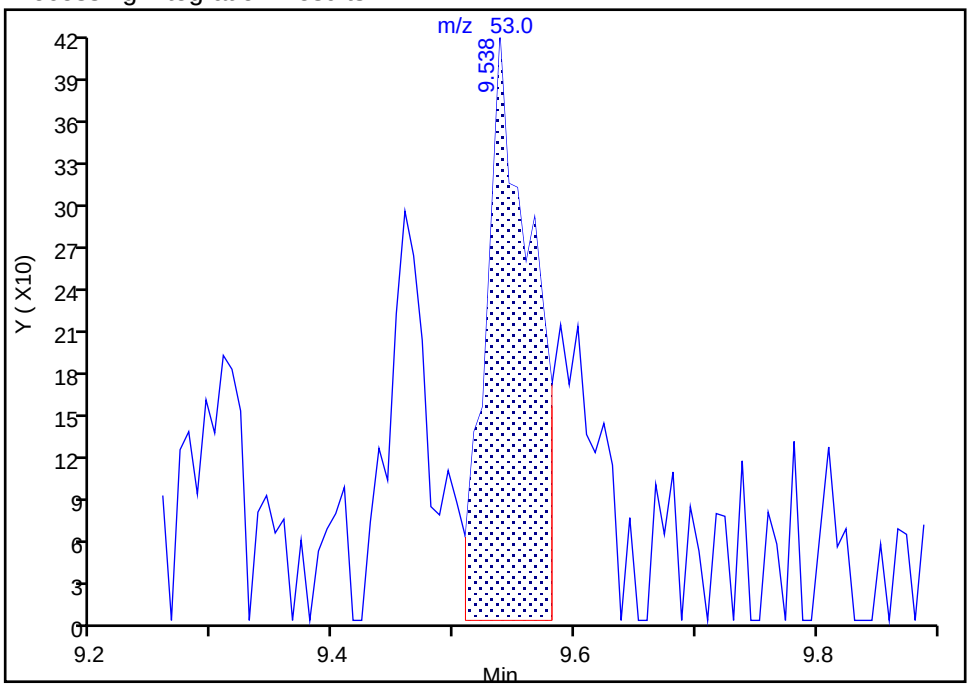
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43998.D
Injection Date: 20-Apr-2018 06:00:30 Instrument ID: CVOAMS13
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

111 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

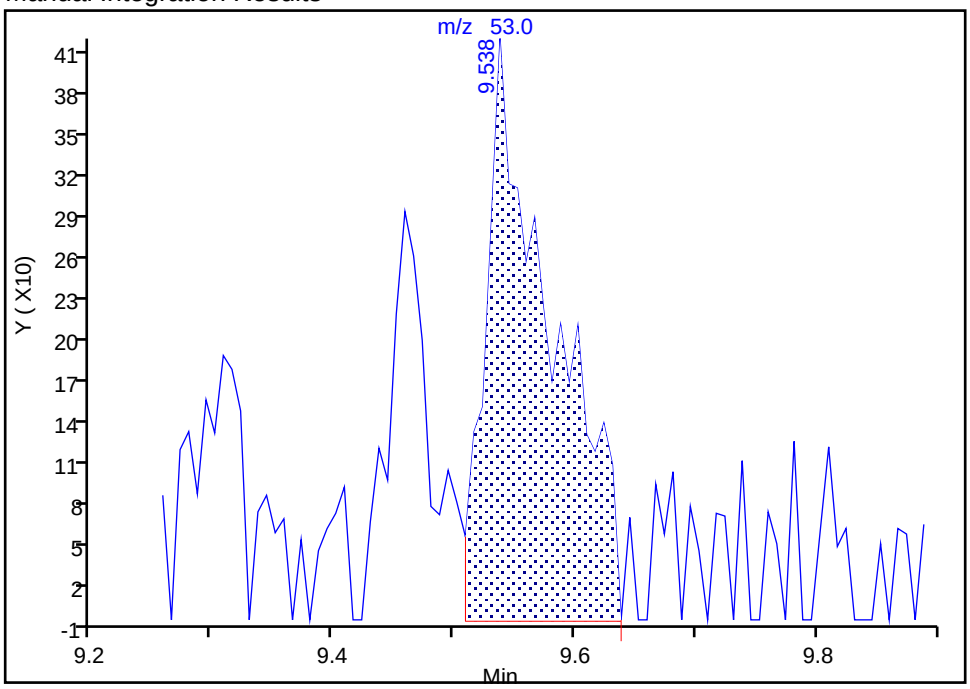
Processing Integration Results

RT: 9.54
Area: 1130
Amount: 0.740627
Amount Units: ug/l



Manual Integration Results

RT: 9.54
Area: 1612
Amount: 1.007600
Amount Units: ug/l



Reviewer: delpolitov, 23-Apr-2018 12:50:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43999.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 20-Apr-2018 06:25:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0070689-011
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 14:04:45 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: desais Date: 20-Apr-2018 08:19:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.863	0.000	90	71454	50.0	46.5	
2 Dichlorodifluoromethane	85	0.871	0.870	0.001	99	182080	50.0	39.3	
4 Chloromethane	50	0.985	0.985	0.000	99	195287	50.0	43.9	
5 Vinyl chloride	62	1.007	1.007	0.000	98	216410	50.0	43.3	
3 Butadiene	54	1.014	1.014	0.000	99	181216	50.0	41.1	
6 Bromomethane	94	1.164	1.164	0.000	98	95949	50.0	45.6	
7 Chloroethane	64	1.229	1.229	0.000	100	128059	50.0	45.0	
9 Pentane	72	1.300	1.300	0.000	96	57070	100.0	95.6	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	59	204746	50.0	41.9	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	314063	50.0	48.2	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	96	244188	50.0	50.3	
12 Ethyl ether	59	1.458	1.458	0.000	92	166208	50.0	50.8	
13 Ethanol	46	1.537	1.537	0.000	99	46273	2000.0	2066.5	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	87	217367	50.0	49.4	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	96	148561	50.0	50.1	
16 Carbon disulfide	76	1.580	1.580	0.000	100	580228	50.0	49.4	
17 1,1,2-Trichloro-1,2,2-trif	101	1.587	1.580	0.007	93	157119	50.0	51.2	
18 Iodomethane	142	1.637	1.644	-0.007	99	151223	50.0	41.0	
19 Cyclopentene	67	1.723	1.723	0.000	97	429126	50.0	50.8	
20 Acrolein	56	1.745	1.744	0.001	95	40327	100.0	104.8	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	91	106664	50.0	50.7	
22 Isopropyl alcohol	45	1.845	1.838	0.007	97	138824	500.0	464.6	
23 Methylene Chloride	84	1.881	1.880	0.001	98	188419	50.0	49.2	
24 Acetone	43	1.902	1.902	0.000	85	272733	250.0	218.0	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	99	171134	50.0	48.4	
26 Methyl acetate	43	1.981	1.981	0.000	100	291039	100.0	93.2	
27 Hexane	86	2.017	2.017	0.000	95	43114	50.0	45.9	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	91	567333	50.0	50.6	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	346027	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.110	2.103	0.007	99	209939	500.0	486.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.174	2.174	0.000	99	268974	500.0	514.5	
32 Isopropyl ether	45	2.267	2.267	0.000	98	735634	50.0	50.7	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	93	161354	50.0	50.3	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	100	354459	50.0	51.2	
35 Acrylonitrile	53	2.375	2.375	0.000	94	821035	500.0	497.3	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	659685	50.0	50.8	
37 Vinyl acetate	43	2.511	2.511	0.000	100	967767	100.0	98.5	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	94	207112	50.0	50.7	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	98	299057	50.0	50.5	
40 Cyclohexane	56	2.833	2.826	0.007	94	355591	50.0	49.4	
41 Chlorobromomethane	128	2.833	2.833	0.000	80	92756	50.0	51.6	
42 Chloroform	83	2.898	2.898	0.000	98	337423	50.0	50.5	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	237292	50.0	50.9	
44 Ethyl acetate	70	2.998	2.998	0.000	99	48004	100.0	92.0	
45 Methyl acrylate	55	2.998	2.998	0.000	97	199879	50.0	51.6	
46 Tetrahydrofuran	42	3.005	3.005	0.000	94	179071	100.0	99.8	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	158217	50.0	49.7	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	99	290175	50.0	50.6	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	428265	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	99	125016	250.0	238.8	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	93	274013	50.0	48.0	
52 Isooctane	57	3.220	3.220	0.000	98	675178	50.0	47.8	
53 n-Heptane	57	3.313	3.313	0.000	94	188238	50.0	48.7	
54 Benzene	78	3.320	3.320	0.000	97	809378	50.0	51.4	
55 Propionitrile	54	3.342	3.342	0.000	97	308938	500.0	506.1	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	884305	500.0	525.2	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	216299	50.0	49.7	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	99	620655	50.0	51.8	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	278958	50.0	47.0	
60 Isobutyl alcohol	43	3.557	3.557	0.000	98	247557	1250.0	1318.2	
61 t-Amyl alcohol	59	3.628	3.628	0.000	98	174564	500.0	503.9	
* 62 Fluorobenzene	96	3.671	3.664	0.007	98	601347	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	443322	50.0	51.4	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	337227	50.0	49.0	
65 Trichloroethene	130	3.815	3.815	0.001	97	188758	50.0	50.7	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	91	558072	50.0	51.1	
67 Dibromomethane	93	4.187	4.187	0.000	96	121417	50.0	50.1	
68 n-Butanol	56	4.194	4.194	0.000	90	153000	1250.0	1360.7	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	212409	50.0	50.3	
70 Ethyl acrylate	55	4.352	4.359	-0.007	98	291736	50.0	54.3	
71 Dichlorobromomethane	83	4.359	4.359	0.000	99	268697	50.0	52.3	
* 72 1,4-Dioxane-d8	96	4.552	4.545	0.007	0	36410	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.552	0.000	93	108770	100.0	105.7	
74 1,4-Dioxane	88	4.581	4.574	0.007	99	45781	1000.0	992.7	
75 n-Propyl acetate	43	4.710	4.710	0.000	99	328674	50.0	53.2	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	150408	50.0	53.2	
77 cis-1,3-Dichloropropene	75	5.004	5.004	0.000	97	328664	50.0	51.8	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	674097	50.0	49.5	
79 Toluene	91	5.262	5.261	0.001	93	860617	50.0	49.9	
80 Epichlorohydrin	57	5.290	5.290	0.000	99	441586	1000.0	1051.0	
81 2-Nitropropane	41	5.512	5.519	-0.007	98	118757	100.0	98.5	
82 Tetrachloroethene	166	5.691	5.691	0.000	97	187595	50.0	51.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.727	5.727	0.000	99	1125626	250.0	260.8	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	97	307192	50.0	52.5	
85 1,1,2-Trichloroethane	83	5.935	5.935	0.000	95	147292	50.0	50.1	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	287623	50.0	54.9	
87 Chlorodibromomethane	129	6.135	6.135	0.000	98	186781	50.0	52.5	
88 1,3-Dichloropropane	76	6.250	6.250	0.000	97	314563	50.0	52.0	
89 Ethylene Dibromide	107	6.386	6.386	0.000	99	176224	50.0	52.5	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	360286	50.0	51.6	
91 2-Hexanone	43	6.794	6.794	0.000	98	798377	250.0	263.2	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	88	496918	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	91	515230	50.0	49.7	
94 Ethylbenzene	106	7.181	7.181	0.000	99	290591	50.0	50.7	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	94	175232	50.0	51.4	
96 m-Xylene & p-Xylene	106	7.396	7.403	-0.007	0	355653	50.0	51.3	
97 o-Xylene	106	7.991	7.991	0.000	93	345313	50.0	51.0	
98 Bromoform	173	8.055	8.055	0.000	94	121702	50.0	54.3	
99 Styrene	104	8.077	8.077	0.001	93	597422	50.0	52.6	
100 n-Butyl acrylate	73	8.399	8.399	0.000	96	163391	50.0	55.2	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	921488	50.0	50.4	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	88	441887	50.0	53.6	
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	86	193205	50.0	49.7	
104 Bromobenzene	156	8.958	8.958	0.000	95	218696	50.0	50.8	
105 N-Propylbenzene	91	9.108	9.108	0.000	98	1128549	50.0	50.8	
106 1,1,2,2-Tetrachloroethane	83	9.259	9.258	0.001	98	232849	50.0	50.0	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	772160	50.0	51.0	
108 4-Ethyltoluene	105	9.302	9.301	0.001	98	929191	50.0	51.4	
109 1,2,3-Trichloropropane	110	9.395	9.395	0.001	98	66450	50.0	50.1	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	786057	50.0	51.0	
111 trans-1,4-Dichloro-2-buten	53	9.516	9.516	0.000	87	79427	50.0	48.3	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	712015	50.0	51.0	
113 tert-Butylbenzene	119	9.925	9.925	0.000	93	651783	50.0	51.4	
114 Butyl Methacrylate	87	10.054	10.054	0.000	67	293387	50.0	54.2	
115 1,2,4-Trimethylbenzene	105	10.054	10.054	0.000	95	799429	50.0	52.1	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	997668	50.0	50.5	
117 1,3-Dichlorobenzene	146	10.476	10.483	-0.007	94	416653	50.0	51.1	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	97	841790	50.0	51.3	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	264326	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.634	0.000	93	425184	50.0	48.1	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	833284	50.0	51.6	
121 2,3-Dihydroindene	117	10.913	10.920	-0.007	94	803974	50.0	51.5	
122 Benzyl chloride	126	11.085	11.092	-0.007	97	85906	50.0	50.3	
123 p-Diethylbenzene	119	11.107	11.106	0.001	92	449197	50.0	51.5	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	801141	50.0	51.1	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	94	403858	50.0	51.9	
126 1,2,4,5-Tetramethylbenzene	119	12.203	12.202	0.001	97	738786	50.0	52.3	
127 1,2-Dibromo-3-Chloropropan	157	12.339	12.346	-0.007	95	42844	50.0	50.9	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	297545	50.0	50.8	
129 1,2,4-Trichlorobenzene	180	13.055	13.062	-0.007	94	261952	50.0	50.7	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	93	129274	50.0	51.0	
131 Naphthalene	128	13.356	13.356	0.000	99	580545	50.0	49.8	
132 1,2,3-Trichlorobenzene	180	13.521	13.528	-0.007	95	233644	50.0	50.0	
S 133 1,2-Dichloroethene, Total	100				0		100.0	99.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		100.0	104.3	
S 135 Xylenes, Total	100				0		100.0	102.3	
S 137 Total BTEX	1				0		250.0	254.3	

Reagents:

MIX 2 Hi_00069	Amount Added:	5.00	Units: uL		
ACROLEIN W_00075	Amount Added:	10.00	Units: uL		
Ethanol mix_00014	Amount Added:	5.00	Units: uL		
GAS Hi_00250	Amount Added:	5.00	Units: uL		
MIX I Hi_00093	Amount Added:	5.00	Units: uL		
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent	

Report Date: 23-Apr-2018 14:04:50 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43999.D

Injection Date: 20-Apr-2018 06:25:30 Instrument ID: CVOAMS13 Operator ID:

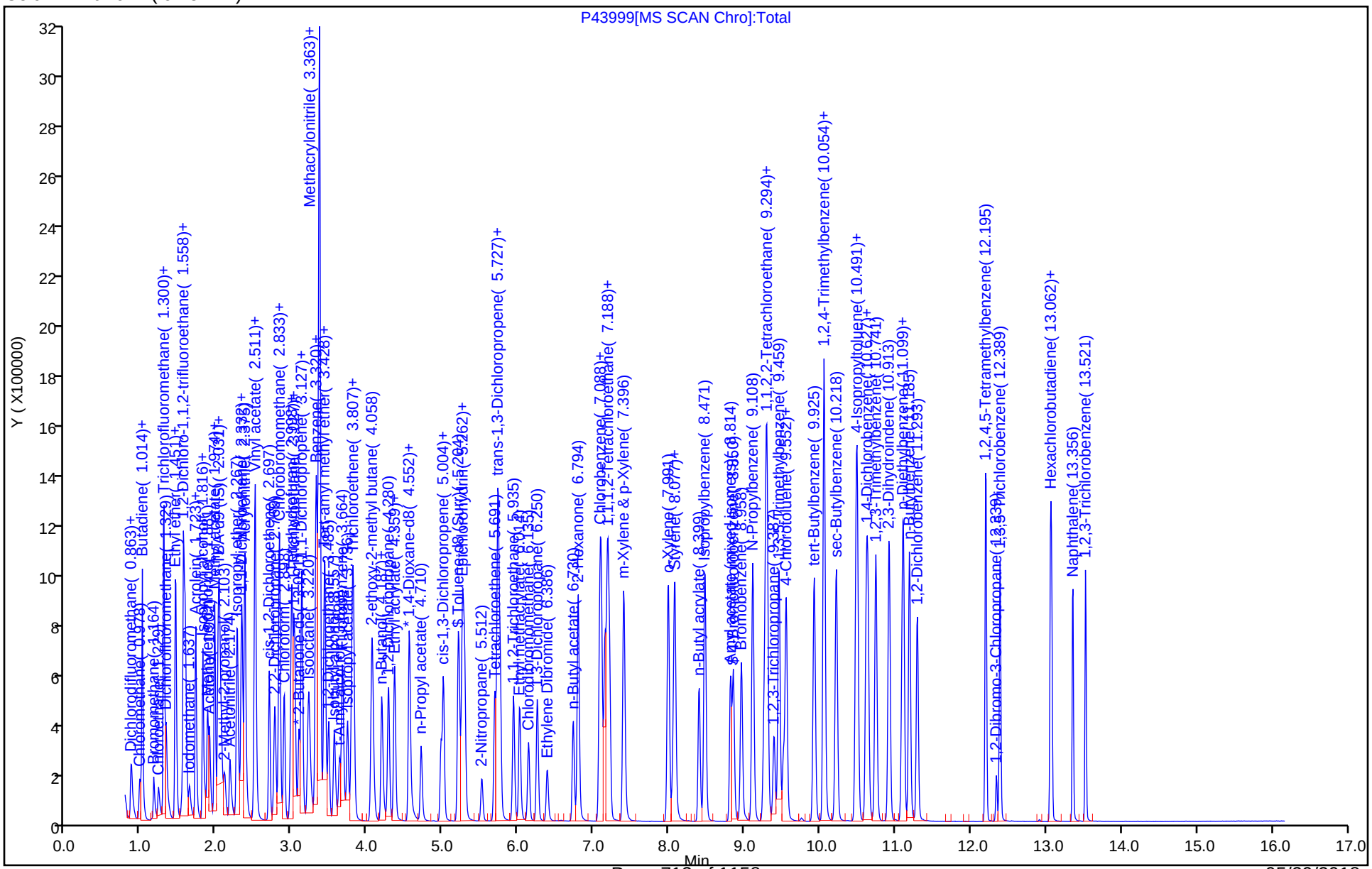
Lims ID: STD50 Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 10

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44000.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 20-Apr-2018 06:50:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0070689-012
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 14:05:05 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: desais Date: 20-Apr-2018 08:20:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.863	0.000	91	408033	200.0	250.3	
2 Dichlorodifluoromethane	85	0.871	0.870	0.001	99	1074361	200.0	218.7	
4 Chloromethane	50	0.978	0.985	-0.007	99	945477	200.0	200.6	
5 Vinyl chloride	62	1.007	1.007	0.000	99	1015313	200.0	191.7	
3 Butadiene	54	1.021	1.014	0.007	97	984387	200.0	210.7	
6 Bromomethane	94	1.164	1.164	0.000	98	461494	200.0	213.2	
7 Chloroethane	64	1.229	1.229	0.000	100	512041	200.0	169.6	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	98	1081053	200.0	208.9	
9 Pentane	72	1.300	1.300	0.000	96	271627	400.0	438.7	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	1341514	200.0	194.4	
11 2-Methyl-1,3-butadiene	67	1.458	1.451	0.007	96	1071691	200.0	208.2	
12 Ethyl ether	59	1.458	1.458	0.000	78	686721	200.0	198.1	
13 Ethanol	46	1.537	1.537	0.000	99	188501	8000.0	8113.2	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	96	626559	200.0	199.2	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	86	896625	200.0	192.4	
17 1,1,2-Trichloro-1,2,2-trif	101	1.587	1.580	0.007	96	676939	200.0	208.2	
16 Carbon disulfide	76	1.580	1.580	0.000	100	2509366	200.0	201.7	
18 Iodomethane	142	1.637	1.644	-0.007	99	779344	200.0	205.3	
19 Cyclopentene	67	1.723	1.723	0.000	97	1847111	200.0	206.2	
20 Acrolein	56	1.744	1.744	0.000	94	96566	200.0	241.9	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	91	428968	200.0	192.4	
22 Isopropyl alcohol	45	1.845	1.838	0.007	97	567619	2000.0	1830.7	
23 Methylene Chloride	84	1.881	1.880	0.001	97	769269	200.0	189.5	
24 Acetone	43	1.909	1.902	0.007	85	1108439	1000.0	861.2	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	708011	200.0	189.0	
26 Methyl acetate	43	1.981	1.981	0.000	99	1309468	400.0	395.6	
27 Hexane	86	2.031	2.017	0.014	92	206826	200.0	207.6	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	86	2366496	200.0	199.1	
* 29 TBA-d9 (IS)	65	2.067	2.060	0.007	0	359034	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.110	2.103	0.007	99	861495	2000.0	1925.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.174	2.174	0.000	98	1120870	2000.0	2066.3	
32 Isopropyl ether	45	2.282	2.267	0.015	97	3058022	200.0	198.7	
33 2-Chloro-1,3-butadiene	88	2.339	2.325	0.014	94	699283	200.0	205.6	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	1424431	200.0	194.2	
35 Acrylonitrile	53	2.375	2.375	0.000	94	3477210	2000.0	1986.9	
36 Tert-butyl ethyl ether	59	2.511	2.504	0.007	88	2764072	200.0	200.8	
37 Vinyl acetate	43	2.518	2.511	0.007	100	4346516	400.0	417.3	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	94	812824	200.0	187.9	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	98	1209068	200.0	192.6	
40 Cyclohexane	56	2.840	2.826	0.014	95	1601535	200.0	209.8	
41 Chlorobromomethane	128	2.833	2.833	0.000	96	355869	200.0	186.8	
42 Chloroform	83	2.891	2.898	-0.008	98	1359391	200.0	191.9	
43 Carbon tetrachloride	117	2.991	2.984	0.007	98	1023213	200.0	207.0	
45 Methyl acrylate	55	3.005	2.998	0.007	97	847640	200.0	206.5	
44 Ethyl acetate	70	2.998	2.998	0.000	99	200967	400.0	374.4	
46 Tetrahydrofuran	42	3.005	3.005	0.000	95	740178	400.0	401.2	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	161669	50.0	47.9	
48 1,1,1-Trichloroethane	97	3.041	3.034	0.007	99	1204071	200.0	197.9	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	440530	250.0	250.0	
51 1,1-Dichloropropene	75	3.141	3.127	0.014	94	1158068	200.0	191.5	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	100	532357	1000.0	988.5	
52 Isooctane	57	3.227	3.220	0.007	98	3009091	200.0	200.9	
53 n-Heptane	57	3.313	3.313	0.000	95	869499	200.0	212.3	
54 Benzene	78	3.335	3.320	0.015	97	3317155	200.0	204.5	
55 Propionitrile	54	3.356	3.342	0.014	95	1297078	2000.0	2047.9	
56 Methacrylonitrile	67	3.370	3.363	0.007	94	3564171	2000.0	1997.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.435	3.428	0.007	0	226432	50.0	49.0	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	99	2584186	200.0	203.6	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	1127717	200.0	179.4	
60 Isobutyl alcohol	43	3.564	3.557	0.007	97	1059163	5000.0	5435.7	
61 t-Amyl alcohol	59	3.635	3.628	0.007	99	709899	2000.0	1975.0	
* 62 Fluorobenzene	96	3.671	3.664	0.007	98	637439	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	99	1875558	200.0	205.0	
64 Methylcyclohexane	83	3.800	3.793	0.007	94	1489650	200.0	204.2	
65 Trichloroethene	130	3.822	3.815	0.008	97	779143	200.0	197.5	
66 2-ethoxy-2-methyl butane	59	4.065	4.058	0.007	90	2308302	200.0	199.3	
67 Dibromomethane	93	4.187	4.187	0.000	95	508107	200.0	197.6	
68 n-Butanol	56	4.194	4.194	0.000	90	647153	5000.0	5547.0	
69 1,2-Dichloropropane	63	4.287	4.280	0.007	89	903424	200.0	201.9	
71 Dichlorobromomethane	83	4.366	4.359	0.007	99	1129194	200.0	207.4	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	1227607	200.0	215.4	
* 72 1,4-Dioxane-d8	96	4.552	4.545	0.007	0	35183	1000.0	1000.0	
73 Methyl methacrylate	100	4.560	4.552	0.008	93	458644	400.0	420.6	
74 1,4-Dioxane	88	4.574	4.574	0.000	99	187320	4000.0	4203.6	
75 n-Propyl acetate	43	4.710	4.710	0.000	99	1393729	200.0	213.0	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	614004	200.0	204.9	
77 cis-1,3-Dichloropropene	75	5.011	5.004	0.007	97	1375634	200.0	210.5	
$ 78 Toluene-d8 (Surr)	98	5.211	5.204	0.007	98	702842	50.0	50.2	
79 Toluene	91	5.261	5.261	0.000	93	3463017	200.0	194.9	
80 Epichlorohydrin	57	5.290	5.290	0.000	100	1844275	4000.0	4267.4	
81 2-Nitropropane	41	5.519	5.519	0.000	98	517244	400.0	404.5	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	759626	200.0	203.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.727	0.007	98	4630462	1000.0	1043.1	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	95	1308875	200.0	217.4	
85 1,1,2-Trichloroethane	83	5.942	5.935	0.007	95	626671	200.0	207.1	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	1207322	200.0	217.3	
87 Chlorodibromomethane	129	6.143	6.135	0.008	98	810632	200.0	221.2	
88 1,3-Dichloropropane	76	6.257	6.250	0.007	97	1306565	200.0	209.5	
89 Ethylene Dibromide	107	6.386	6.386	0.000	98	749225	200.0	216.5	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	1533404	200.0	213.4	
91 2-Hexanone	43	6.794	6.794	0.000	98	3267257	1000.0	1047.1	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	511729	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	91	2084629	200.0	195.2	
94 Ethylbenzene	106	7.188	7.181	0.007	99	1172555	200.0	198.7	
95 1,1,1,2-Tetrachloroethane	131	7.217	7.210	0.007	95	734239	200.0	209.2	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	1455206	200.0	203.9	
97 o-Xylene	106	7.991	7.991	0.000	93	1393246	200.0	199.7	
98 Bromoform	173	8.055	8.055	0.000	94	530193	200.0	229.6	
99 Styrene	104	8.077	8.077	0.001	92	2455571	200.0	210.0	
100 n-Butyl acrylate	73	8.399	8.399	0.000	96	689046	200.0	226.1	
101 Isopropylbenzene	105	8.478	8.478	0.000	97	3721245	200.0	197.8	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	89	1848711	200.0	217.2	
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	85	199073	50.0	49.8	
104 Bromobenzene	156	8.958	8.958	0.000	95	886838	200.0	199.7	
105 N-Propylbenzene	91	9.115	9.108	0.007	98	4569893	200.0	199.4	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	99	977130	200.0	203.5	
107 2-Chlorotoluene	91	9.287	9.287	0.000	97	3101153	200.0	198.8	
108 4-Ethyltoluene	105	9.301	9.301	0.000	98	3777461	200.0	202.8	
109 1,2,3-Trichloropropane	110	9.395	9.395	0.001	98	280467	200.0	205.0	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	3167369	200.0	199.2	
111 trans-1,4-Dichloro-2-buten	53	9.516	9.516	0.000	91	340279	200.0	200.4	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	2916738	200.0	202.7	
113 tert-Butylbenzene	119	9.925	9.925	0.000	94	2633834	200.0	201.2	
115 1,2,4-Trimethylbenzene	105	10.061	10.054	0.007	95	3190207	200.0	201.7	
114 Butyl Methacrylate	87	10.061	10.054	0.007	67	1221473	200.0	218.7	
116 sec-Butylbenzene	105	10.218	10.218	0.000	98	4069594	200.0	199.6	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	94	1696105	200.0	201.5	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	97	3445255	200.0	203.7	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.612	0.007	97	272618	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.634	0.007	93	1743140	200.0	191.3	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	3334033	200.0	200.3	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	3238705	200.0	201.3	
122 Benzyl chloride	126	11.092	11.092	0.000	97	380450	200.0	216.1	
123 p-Diethylbenzene	119	11.114	11.106	0.008	92	1859149	200.0	206.6	
124 n-Butylbenzene	91	11.192	11.185	0.007	98	3323339	200.0	205.3	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	94	1626557	200.0	202.6	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.202	0.000	97	3052145	200.0	209.4	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	96	186942	200.0	215.1	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	1232451	200.0	204.1	
129 1,2,4-Trichlorobenzene	180	13.055	13.062	-0.007	94	1105553	200.0	207.4	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	92	531050	200.0	203.0	
131 Naphthalene	128	13.356	13.356	0.000	99	2552213	200.0	212.1	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	95	976745	200.0	202.6	
S 133 1,2-Dichloroethene, Total	100				0		400.0	376.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		400.0	427.9	
S 135 Xylenes, Total	100				0		400.0	403.6	
S 137 Total BTEX	1				0		1000.0	1001.7	

Reagents:

MIX 2 Hi_00069	Amount Added:	20.00	Units: uL		
ACROLEIN W_00075	Amount Added:	20.00	Units: uL		
Ethanol mix_00014	Amount Added:	20.00	Units: uL		
GAS Hi_00250	Amount Added:	20.00	Units: uL		
MIX I Hi_00093	Amount Added:	20.00	Units: uL		
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent	
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent	

Report Date: 23-Apr-2018 14:05:08 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44000.D

Injection Date: 20-Apr-2018 06:50:30 Instrument ID: CVOAMS13 Operator ID:

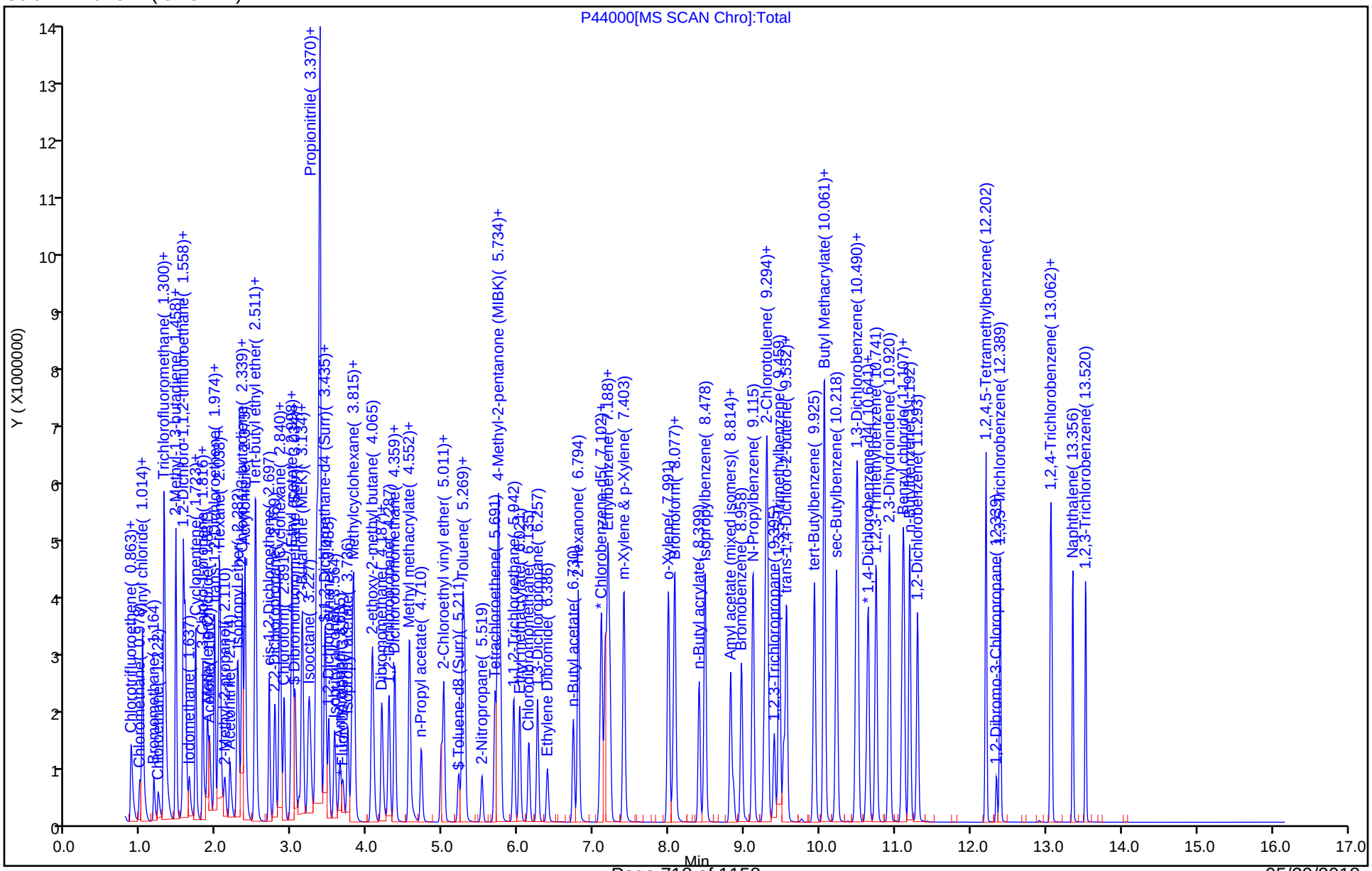
Lims ID: STD200 Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 11

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 20-Apr-2018 07:16:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0070689-013
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 23-Apr-2018 14:05:23 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: desais Date: 20-Apr-2018 08:21:18

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
	1 Chlorotrifluoroethene	116	0.856	0.863	-0.007	90	1022651	500.0	602.8	
	2 Dichlorodifluoromethane	85	0.870	0.870	0.000	99	2643644	500.0	517.2	
	4 Chloromethane	50	0.985	0.985	0.000	98	2533711	500.0	516.6	
	5 Vinyl chloride	62	1.007	1.007	0.000	99	2534101	500.0	459.9	
	3 Butadiene	54	1.021	1.014	0.007	95	2436607	500.0	501.2	
	6 Bromomethane	94	1.164	1.164	0.000	98	1086465	500.0	479.2	
	7 Chloroethane	64	1.221	1.229	-0.008	99	780609	500.0	248.6	
	9 Pentane	72	1.293	1.300	-0.007	96	541455	1000.0	815.7	
	8 Trichlorofluoromethane	101	1.300	1.300	0.000	96	2456172	500.0	456.2	
	10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	3162162	500.0	440.3	
	11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	96	2568981	500.0	479.8	
	12 Ethyl ether	59	1.458	1.458	0.000	93	1689012	500.0	468.2	
	13 Ethanol	46	1.558	1.537	0.021	99	489117	20000	19636	
	15 1,2-Dichloro-1,1,2-trifluo	67	1.565	1.558	0.007	82	2270362	500.0	468.2	
	14 1,1-Dichloroethene	96	1.565	1.558	0.007	96	1627927	500.0	497.3	
	16 Carbon disulfide	76	1.572	1.580	-0.008	100	6319407	500.0	488.2	
	17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	95	1652510	500.0	488.5	
	18 Iodomethane	142	1.637	1.644	-0.007	100	1869659	500.0	499.2	
	19 Cyclopentene	67	1.716	1.723	-0.007	97	4652524	500.0	499.1	
	20 Acrolein	56	1.744	1.744	0.000	93	213013	400.0	497.7	
	21 3-Chloro-1-propene	76	1.823	1.816	0.007	91	997981	500.0	430.3	
	22 Isopropyl alcohol	45	1.866	1.838	0.028	98	1478313	5000.0	4447.3	
	23 Methylene Chloride	84	1.880	1.880	0.000	98	1983949	500.0	469.7	
	24 Acetone	43	1.909	1.902	0.007	86	2720524	2500.0	2018.2	
	25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	99	1809744	500.0	464.3	
	26 Methyl acetate	43	1.981	1.981	0.000	100	3533036	1000.0	1025.9	
	27 Hexane	86	2.031	2.017	0.014	82	526596	500.0	507.9	
	28 Methyl tert-butyl ether	73	2.038	2.038	0.000	96	5968756	500.0	482.5	
*	29 TBA-d9 (IS)	65	2.081	2.060	0.021	0	384918	1000.0	1000.0	
	30 2-Methyl-2-propanol	59	2.124	2.103	0.021	99	2283905	5000.0	4761.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.181	2.174	0.007	98	2612449	5000.0	4492.2	
32 Isopropyl ether	45	2.289	2.267	0.022	97	7843897	500.0	489.8	
33 2-Chloro-1,3-butadiene	88	2.332	2.325	0.007	93	1721606	500.0	486.5	
34 1,1-Dichloroethane	63	2.346	2.339	0.007	100	3676656	500.0	481.8	
35 Acrylonitrile	53	2.382	2.375	0.007	94	8587568	5000.0	4716.0	
36 Tert-butyl ethyl ether	59	2.518	2.504	0.014	88	7038025	500.0	491.5	
37 Vinyl acetate	43	2.518	2.511	0.007	100	9581862	1000.0	884.2	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	94	2201969	500.0	489.1	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	98	2885315	500.0	441.8	
40 Cyclohexane	56	2.840	2.826	0.014	94	4069860	500.0	512.5	
41 Chlorobromomethane	128	2.840	2.833	0.007	60	895232	500.0	451.6	
42 Chloroform	83	2.898	2.898	0.000	98	3476175	500.0	471.6	
43 Carbon tetrachloride	117	2.991	2.984	0.007	98	2566821	500.0	499.2	
44 Ethyl acetate	70	3.005	2.998	0.007	99	511492	1000.0	909.9	
45 Methyl acrylate	55	3.005	2.998	0.007	99	2150651	500.0	503.4	
46 Tetrahydrofuran	42	3.012	3.005	0.007	94	1880466	1000.0	973.2	
$ 47 Dibromofluoromethane (Surr	113	3.034	3.027	0.007	95	160561	50.0	45.7	
48 1,1,1-Trichloroethane	97	3.041	3.034	0.007	97	3057022	500.0	482.9	
* 49 2-Butanone-d5	46	3.098	3.091	0.007	0	461386	250.0	250.0	
50 2-Butanone (MEK)	72	3.134	3.127	0.007	99	1368933	2500.0	2426.9	
51 1,1-Dichloropropene	75	3.141	3.127	0.014	94	2941387	500.0	467.5	
52 Isooctane	57	3.234	3.220	0.014	99	7434537	500.0	477.0	
53 n-Heptane	57	3.320	3.313	0.007	82	2085090	500.0	489.3	
54 Benzene	78	3.342	3.320	0.022	96	8458892	500.0	500.8	
55 Propionitrile	54	3.377	3.342	0.035	97	3244698	5000.0	4778.5	
56 Methacrylonitrile	67	3.385	3.363	0.022	94	8680209	5000.0	4674.2	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.442	3.428	0.014	0	235968	50.0	49.1	
58 Tert-amyl methyl ether	73	3.442	3.435	0.007	98	6648506	500.0	503.5	
59 1,2-Dichloroethane	62	3.492	3.485	0.007	97	2887076	500.0	441.4	
60 Isobutyl alcohol	43	3.578	3.557	0.021	97	2789500	12500	13353	
61 t-Amyl alcohol	59	3.650	3.628	0.022	99	1842666	5000.0	4781.7	
* 62 Fluorobenzene	96	3.678	3.664	0.014	98	663249	50.0	50.0	
63 Isopropyl acetate	43	3.743	3.736	0.007	98	4854972	500.0	510.1	
64 Methylcyclohexane	83	3.807	3.793	0.014	94	3941042	500.0	519.1	
65 Trichloroethene	130	3.829	3.815	0.015	96	1976792	500.0	481.5	
66 2-ethoxy-2-methyl butane	59	4.072	4.058	0.014	91	5919647	500.0	491.2	
67 Dibromomethane	93	4.187	4.187	0.000	95	1327513	500.0	496.3	
68 n-Butanol	56	4.216	4.194	0.022	90	1710224	12500	13673	
69 1,2-Dichloropropane	63	4.287	4.280	0.007	89	2352125	500.0	505.2	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	3177974	500.0	536.0	
71 Dichlorobromomethane	83	4.366	4.359	0.007	99	2931417	500.0	517.4	
* 72 1,4-Dioxane-d8	96	4.559	4.545	0.014	0	35052	1000.0	1000.0	
73 Methyl methacrylate	100	4.559	4.552	0.007	93	1151908	1000.0	1015.3	
74 1,4-Dioxane	88	4.588	4.574	0.014	99	493984	10000	11127	
75 n-Propyl acetate	43	4.717	4.710	0.007	99	3604614	500.0	529.4	
76 2-Chloroethyl vinyl ether	63	4.982	4.975	0.007	96	1551015	500.0	497.4	
77 cis-1,3-Dichloropropene	75	5.018	5.004	0.014	97	3557150	500.0	522.9	
$ 78 Toluene-d8 (Surr)	98	5.211	5.204	0.007	98	705324	50.0	48.3	
79 Toluene	91	5.269	5.261	0.008	93	8811911	500.0	476.4	
80 Epichlorohydrin	57	5.304	5.290	0.014	100	4707180	10000	10400	
81 2-Nitropropane	41	5.526	5.519	0.007	97	1341328	1000.0	1008.3	
82 Tetrachloroethene	166	5.698	5.691	0.007	96	1950888	500.0	502.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.748	5.727	0.021	98	11621118	2500.0	2499.7	
84 trans-1,3-Dichloropropene	75	5.777	5.763	0.014	96	3360024	500.0	536.0	
85 1,1,2-Trichloroethane	83	5.949	5.935	0.014	95	1633290	500.0	518.5	
86 Ethyl methacrylate	69	6.028	6.021	0.007	91	3165446	500.0	547.5	
87 Chlorodibromomethane	129	6.150	6.135	0.015	98	2149619	500.0	563.5	
88 1,3-Dichloropropane	76	6.264	6.250	0.014	97	3410101	500.0	525.4	
89 Ethylene Dibromide	107	6.393	6.386	0.007	98	1958409	500.0	543.7	
90 n-Butyl acetate	43	6.737	6.730	0.007	98	3995867	500.0	534.2	
91 2-Hexanone	43	6.809	6.794	0.015	98	8312258	2500.0	2543.4	
* 92 Chlorobenzene-d5	117	7.088	7.081	0.007	90	532726	50.0	50.0	
93 Chlorobenzene	112	7.109	7.102	0.007	91	5368823	500.0	482.8	
94 Ethylbenzene	106	7.203	7.181	0.022	99	3017188	500.0	491.2	
95 1,1,1,2-Tetrachloroethane	131	7.224	7.210	0.014	95	1895228	500.0	518.7	
96 m-Xylene & p-Xylene	106	7.410	7.403	0.007	0	3777529	500.0	508.4	
97 o-Xylene	106	7.998	7.991	0.007	93	3639479	500.0	501.1	
98 Bromoform	173	8.062	8.055	0.007	94	1406611	500.0	585.0	
99 Styrene	104	8.084	8.077	0.008	93	6319001	500.0	519.1	
100 n-Butyl acrylate	73	8.406	8.399	0.007	96	1781568	500.0	561.6	
101 Isopropylbenzene	105	8.485	8.478	0.007	97	9696150	500.0	495.2	
102 Amyl acetate (mixed isomer	43	8.821	8.814	0.007	89	4728386	500.0	530.2	
$ 103 4-Bromofluorobenzene	174	8.857	8.850	0.007	85	202108	50.0	48.5	
104 Bromobenzene	156	8.965	8.958	0.007	95	2291767	500.0	492.4	
105 N-Propylbenzene	91	9.122	9.108	0.014	98	11835023	500.0	492.6	
106 1,1,2,2-Tetrachloroethane	83	9.273	9.258	0.015	99	2487868	500.0	494.3	
107 2-Chlorotoluene	91	9.294	9.287	0.007	97	7951482	500.0	486.3	
108 4-Ethyltoluene	105	9.316	9.301	0.015	98	9470008	500.0	485.1	
109 1,2,3-Trichloropropane	110	9.402	9.395	0.008	98	731165	500.0	509.8	
110 1,3,5-Trimethylbenzene	105	9.473	9.459	0.014	92	8289503	500.0	497.3	
111 trans-1,4-Dichloro-2-buten	53	9.531	9.516	0.015	88	905549	500.0	509.0	
112 4-Chlorotoluene	91	9.566	9.552	0.014	99	7579213	500.0	502.5	
113 tert-Butylbenzene	119	9.939	9.925	0.014	93	6895175	500.0	502.6	
114 Butyl Methacrylate	87	10.068	10.054	0.014	67	3060497	500.0	522.7	
115 1,2,4-Trimethylbenzene	105	10.068	10.054	0.014	95	8035938	500.0	484.9	
116 sec-Butylbenzene	105	10.233	10.218	0.015	98	10662268	500.0	499.0	
117 1,3-Dichlorobenzene	146	10.490	10.483	0.007	96	4291887	500.0	486.6	
118 4-Isopropyltoluene	119	10.512	10.498	0.014	99	8901205	500.0	502.1	
* 119 1,4-Dichlorobenzene-d4	152	10.626	10.612	0.014	97	285721	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.655	10.634	0.021	93	4505295	500.0	471.8	
138 1,2,3-Trimethylbenzene	105	10.755	10.741	0.014	99	8515754	500.0	488.1	
121 2,3-Dihydroindene	117	10.934	10.920	0.014	94	8218681	500.0	487.4	
122 Benzyl chloride	126	11.099	11.092	0.007	97	896498	500.0	486.0	
123 p-Diethylbenzene	119	11.121	11.106	0.015	92	4681364	500.0	496.4	
124 n-Butylbenzene	91	11.200	11.185	0.015	99	8670529	500.0	511.2	
125 1,2-Dichlorobenzene	146	11.307	11.293	0.014	94	4191809	500.0	498.1	
126 1,2,4,5-Tetramethylbenzene	119	12.210	12.202	0.008	97	7659157	500.0	501.5	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	97	484865	500.0	532.4	
128 1,3,5-Trichlorobenzene	180	12.396	12.389	0.007	96	3061743	500.0	483.7	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	2785805	500.0	498.6	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	96	1333506	500.0	486.5	
131 Naphthalene	128	13.356	13.356	0.000	99	6658897	500.0	528.0	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	95	2505806	500.0	496.0	
S 133 1,2-Dichloroethene, Total	100				0		1000.0	953.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		1000.0	1058.9	
S 135 Xylenes, Total	100				0		1000.0	1009.5	
S 137 Total BTEX	1				0		2500.0	2477.9	

Reagents:

MIX 2 Hi_00069	Amount Added:	50.00	Units: uL	
ACROLEIN W_00075	Amount Added:	40.00	Units: uL	
Ethanol mix_00014	Amount Added:	50.00	Units: uL	
GAS Hi_00250	Amount Added:	50.00	Units: uL	
MIX I Hi_00093	Amount Added:	50.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00169	Amount Added:	1.00	Units: uL	Run Reagent

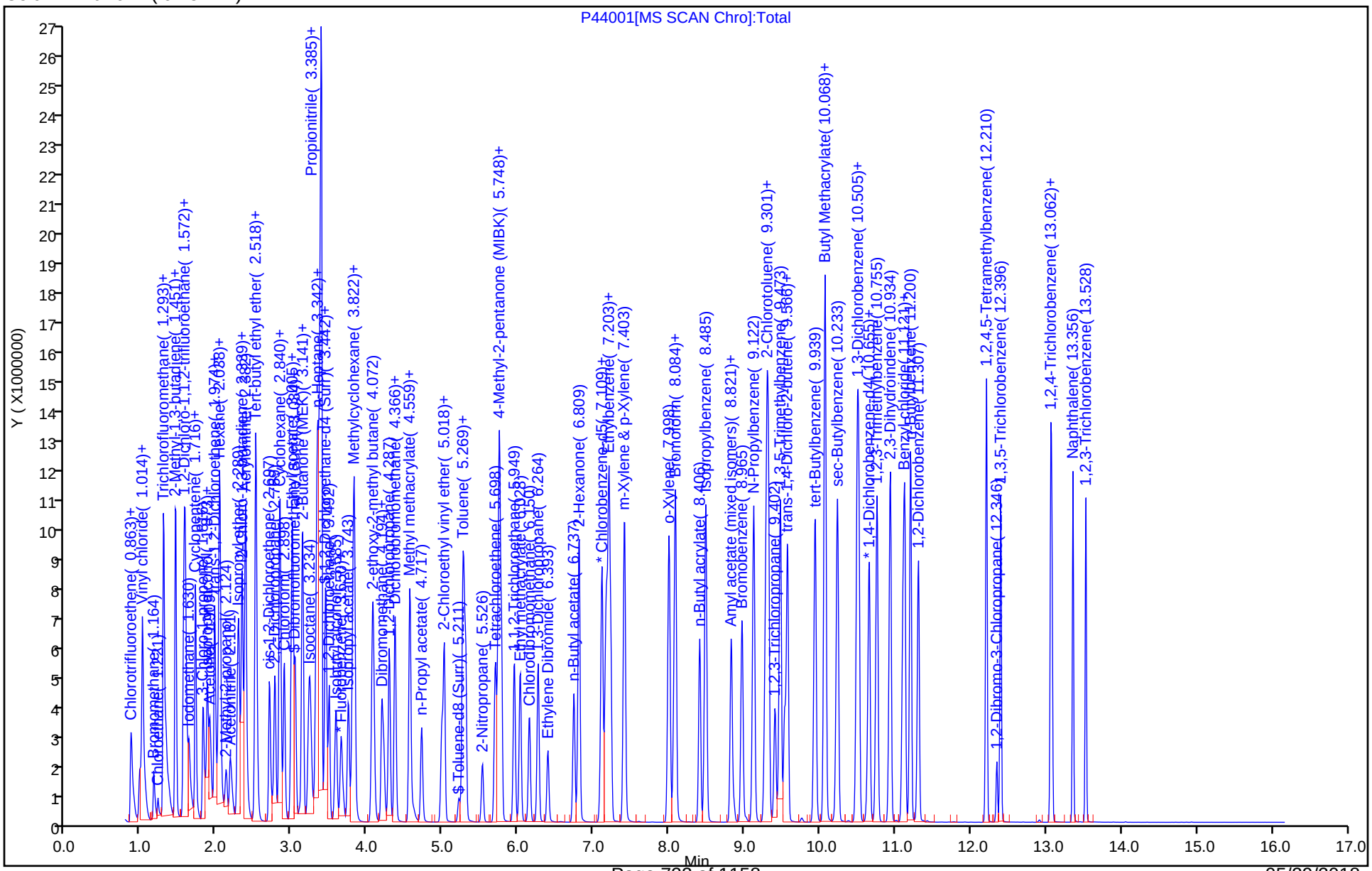
Report Date: 23-Apr-2018 14:05:26 Chrom Revision: 2.2 17-Apr-2018 19:19:24

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Injection Date:	20-Apr-2018 07:16:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	STD500			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516016/3 Calibration Date: 05/02/2018 17:57

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66514.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.1865		16.7	20.0	-16.4	20.0
Dichlorodifluoromethane	Ave	0.1272	0.1532	0.1000	24.1	20.0	20.4*	20.0
Chloromethane	Ave	2.070	2.603	0.1000	25.1	20.0	25.7*	20.0
Vinyl chloride	Ave	0.2653	0.3509	0.1000	26.5	20.0	32.3*	20.0
Butadiene	Ave	0.1921	0.2474		25.7	20.0	28.7*	20.0
Bromomethane	Ave	0.1877	0.2664	0.1000	28.4	20.0	41.9	50.0
Chloroethane	Ave	0.1353	0.2134	0.1000	31.5	20.0	57.7*	50.0
Dichlorofluoromethane	Ave	0.4902	0.5845		23.8	20.0	19.2	20.0
Trichlorofluoromethane	Ave	0.3791	0.5133	0.1000	27.1	20.0	35.4*	20.0
Pentane	Ave	4.861	5.326		43.8	40.0	9.6	20.0
Ethanol	QuaF		0.0589		808	800	1.0	50.0
Ethyl ether	Ave	0.1453	0.1383		19.0	20.0	-4.8	20.0
2-Methyl-1,3-butadiene	QuaF		0.1916		16.9	20.0	-15.3	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2222	0.2367		21.3	20.0	6.6	20.0
Acrolein	Ave	1.690	1.759		41.6	40.0	4.1	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2745	0.2943	0.1000	21.4	20.0	7.2	20.0
1,1-Dichloroethene	Ave	0.2267	0.2290	0.1000	20.2	20.0	1.0	20.0
Acetone	Ave	0.6191	0.5876	0.0500	94.9	100	-5.1	50.0
Iodomethane	Ave	0.3627	0.3554		19.6	20.0	-2.0	20.0
Carbon disulfide	Ave	0.8318	0.7052	0.1000	17.0	20.0	-15.2	50.0
Isopropyl alcohol	Ave	0.5088	0.5070		199	200	-0.4	50.0
Allyl chloride	Ave	0.1434	0.1312		18.3	20.0	-8.5	20.0
Cyclopentene	Ave	0.5642	0.5535		19.6	20.0	-1.9	20.0
Methyl acetate	Ave	2.111	2.286	0.1000	43.3	40.0	8.3	20.0
Acetonitrile	QuaF		0.9192		215	200	7.6	20.0
Methylene Chloride	Ave	0.2450	0.2656	0.1000	21.7	20.0	8.4	20.0
2-Methyl-2-propanol	Ave	1.042	1.042		200	200	-0.0	50.0
Methyl tert-butyl ether	Ave	0.5380	0.5073	0.1000	18.9	20.0	-5.7	20.0
trans-1,2-Dichloroethene	Ave	0.2577	0.2656	0.1000	20.6	20.0	3.1	20.0
Acrylonitrile	Ave	4.334	4.508		208	200	4.0	20.0
Hexane	Ave	0.3118	0.3036		19.5	20.0	-2.6	20.0
Isopropyl ether	Ave	0.6885	0.6959		20.2	20.0	1.1	20.0
1,1-Dichloroethane	Ave	0.4328	0.4664	0.2000	21.6	20.0	7.8	20.0
Vinyl acetate	QuaF		0.6916		30.4	40.0	-24.0*	20.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2276		19.2	20.0	-4.0	20.0
Tert-butyl ethyl ether	Ave	0.6409	0.5958		18.6	20.0	-7.0	20.0
2,2-Dichloropropane	Ave	0.1227	0.1298		21.2	20.0	5.8	20.0
cis-1,2-Dichloroethene	Ave	0.2832	0.2997	0.1000	21.2	20.0	5.8	20.0
2-Butanone (MEK)	Ave	0.3581	0.3197	0.0500	89.3	100	-10.7	50.0
Ethyl acetate	Ave	0.3883	0.3606		37.2	40.0	-7.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516016/3 Calibration Date: 05/02/2018 17:57

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66514.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.0875	0.0752		17.2	20.0	-14.1	20.0
Propionitrile	Ave	1.495	1.444		193	200	-3.4	20.0
Chlorobromomethane	Ave	0.1049	0.1086		20.7	20.0	3.6	20.0
Tetrahydrofuran	Ave	0.4189	0.3530		33.7	40.0	-15.7	20.0
Methacrylonitrile	Ave	0.0513	0.0511		199	200	-0.4	20.0
Chloroform	Ave	0.4245	0.4704	0.2000	22.2	20.0	10.8	20.0
Cyclohexane	Ave	0.4470	0.4271	0.1000	19.1	20.0	-4.5	50.0
1,1,1-Trichloroethane	Ave	0.3684	0.4264	0.1000	23.1	20.0	15.7	20.0
Carbon tetrachloride	Ave	0.2289	0.3006	0.1000	26.3	20.0	31.3*	20.0
1,1-Dichloropropene	Ave	0.3523	0.3569		20.3	20.0	1.3	20.0
2,2,4-Trimethylpentane	Ave	0.5727	0.5472		19.1	20.0	-4.5	20.0
Isobutyl alcohol	Ave	0.7415	0.7571		511	500	2.1	50.0
Benzene	Ave	1.451	1.409	0.5000	19.4	20.0	-2.9	20.0
Tert-amyl methyl ether	Ave	0.6402	0.5927		18.5	20.0	-7.4	20.0
Isopropyl acetate	Ave	0.0794	0.0771		19.4	20.0	-2.8	20.0
1,2-Dichloroethane	Ave	0.2525	0.2706	0.1000	21.4	20.0	7.2	20.0
n-Heptane	Ave	0.1419	0.1440		20.3	20.0	1.4	20.0
Trichloroethene	Ave	0.2700	0.2710	0.2000	20.1	20.0	0.4	20.0
n-Butanol	QuaF		0.1098		248	500	-50.4*	50.0
Methylcyclohexane	Ave	0.4656	0.4357	0.1000	18.7	20.0	-6.4	50.0
Ethyl acrylate	QuaF		0.4173		15.4	20.0	-23.0*	20.0
1,2-Dichloropropane	Ave	0.2493	0.2525	0.1000	20.3	20.0	1.3	20.0
Methyl methacrylate	Ave	0.0390	0.0356		36.5	40.0	-8.6	20.0
Dibromomethane	Ave	0.1157	0.1188		20.5	20.0	2.7	20.0
1,4-Dioxane	Ave	1.087	1.167		429	400	7.3	50.0
n-Propyl acetate	Ave	0.1458	0.1301		17.8	20.0	-10.8	20.0
Dichlorobromomethane	Ave	0.2757	0.2808	0.2000	20.4	20.0	1.8	20.0
2-Nitropropane	QuaF		1.972		59.6	40.0	49.1*	20.0
2-Chloroethyl vinyl ether	Ave	0.0929	0.0717		15.4	20.0	-22.8*	20.0
Epichlorohydrin	QuaF		0.2290		313	400	-21.9*	20.0
cis-1,3-Dichloropropene	Ave	0.4643	0.4102	0.2000	17.7	20.0	-11.7	50.0
4-Methyl-2-pentanone (MIBK)	Ave	2.709	2.536	0.0500	93.6	100	-6.4	50.0
Toluene	Ave	1.603	1.568	0.4000	19.6	20.0	-2.2	20.0
trans-1,3-Dichloropropene	Ave	0.3373	0.3006	0.1000	17.8	20.0	-10.9	50.0
Ethyl methacrylate	QuaF		0.1651		14.1	20.0	-29.4*	20.0
1,1,2-Trichloroethane	Ave	0.1916	0.1838	0.1000	19.2	20.0	-4.1	20.0
Tetrachloroethene	Ave	0.3140	0.3106	0.2000	19.8	20.0	-1.1	20.0
1,3-Dichloropropane	Ave	0.3917	0.3686		18.8	20.0	-5.9	20.0
2-Hexanone	QuaF		0.8615	0.0500	77.6	100	-22.4	50.0
n-Butyl acetate	Ave	0.2346	0.1946		16.6	20.0	-17.1	20.0
Chlorodibromomethane	Ave	0.1816	0.1689	0.1000	18.6	20.0	-7.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516016/3 Calibration Date: 05/02/2018 17:57

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66514.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	0.1980	0.1859	0.1000	18.8	20.0	-6.1	20.0
Chlorobenzene	Ave	0.9847	1.004	0.5000	20.4	20.0	2.0	20.0
Ethylbenzene	Ave	0.5531	0.5380	0.1000	19.5	20.0	-2.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2541	0.2579		20.3	20.0	1.5	20.0
m-Xylene & p-Xylene	Ave	0.6740	0.6342	0.1000	18.8	20.0	-5.9	20.0
o-Xylene	Ave	0.6609	0.6285	0.3000	19.0	20.0	-4.9	20.0
n-Butyl acrylate	QuaF		0.1420		13.7	20.0	-31.3*	20.0
Styrene	Ave	1.047	1.073	0.3000	20.5	20.0	2.5	20.0
Bromoform	QuaF		0.1378	0.1000	16.9	20.0	-15.5	20.0
Amyl acetate (mixed isomers)	QuaF		0.5343		13.5	20.0	-32.3*	20.0
Isopropylbenzene	Ave	1.703	1.720	0.1000	20.2	20.0	1.0	20.0
Bromobenzene	Ave	0.7295	0.7004		19.2	20.0	-4.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5178	0.4752	0.3000	18.4	20.0	-8.2	20.0
N-Propylbenzene	Ave	4.236	4.228		20.0	20.0	-0.2	20.0
1,2,3-Trichloropropane	Ave	0.1439	0.1461		20.3	20.0	1.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1009	0.0893		17.7	20.0	-11.5	20.0
2-Chlorotoluene	Ave	2.963	3.108		21.0	20.0	4.9	20.0
4-Ethyltoluene	Ave	3.547	3.645		20.6	20.0	2.8	20.0
1,3,5-Trimethylbenzene	Ave	3.028	3.068		20.3	20.0	1.3	20.0
4-Chlorotoluene	Ave	2.699	2.732		20.2	20.0	1.2	20.0
Butyl Methacrylate	QuaF		0.7268		13.8	20.0	-31.0*	20.0
tert-Butylbenzene	Ave	2.403	2.288		19.0	20.0	-4.8	20.0
1,2,4-Trimethylbenzene	Ave	3.196	3.176		19.9	20.0	-0.6	20.0
sec-Butylbenzene	Ave	3.667	3.717		20.3	20.0	1.3	20.0
1,3-Dichlorobenzene	Ave	1.484	1.527	0.6000	20.6	20.0	2.9	20.0
4-Isopropyltoluene	Ave	3.044	3.248		21.3	20.0	6.7	20.0
1,4-Dichlorobenzene	Ave	1.532	1.542	0.5000	20.1	20.0	0.6	20.0
1,2,3-Trimethylbenzene	Ave	3.249	3.373		20.8	20.0	3.8	20.0
Benzyl chloride	QuaF		0.5304		15.0	20.0	-24.8	50.0
Indan	Ave	2.946	2.998		20.4	20.0	1.8	20.0
p-Diethylbenzene	Ave	1.714	1.784		20.8	20.0	4.1	20.0
n-Butylbenzene	Ave	1.621	1.711		21.1	20.0	5.6	20.0
1,2-Dichlorobenzene	Ave	1.352	1.369	0.4000	20.3	20.0	1.3	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.025	2.874		19.0	20.0	-5.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0485	0.0437*	0.0500	18.0	20.0	-10.0	50.0
1,3,5-Trichlorobenzene	Ave	1.034	1.012		19.6	20.0	-2.1	20.0
1,2,4-Trichlorobenzene	Ave	0.8134	0.7547	0.2000	18.6	20.0	-7.2	20.0
Hexachlorobutadiene	Ave	0.2615	0.2701		20.7	20.0	3.3	20.0
Naphthalene	Ave	1.386	1.269		18.3	20.0	-8.5	50.0
1,2,3-Trichlorobenzene	Ave	0.6296	0.6051		19.2	20.0	-3.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2247	0.2415		53.7	50.0	7.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516016/3 Calibration Date: 05/02/2018 17:57

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66514.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.2155	0.2325		53.9	50.0	7.9	20.0
Toluene-d8 (Surr)	Ave	1.466	1.368		46.6	50.0	-6.7	20.0
4-Bromofluorobenzene	Ave	0.3322	0.3242		48.8	50.0	-2.4	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66514.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 02-May-2018 17:57:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0071421-003
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:29:44 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: parekhv Date: 02-May-2018 18:42:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.325	1.325	0.000	87	58796	20.0	16.7	
2 Dichlorodifluoromethane	87	1.349	1.349	0.000	99	48280	20.0	24.1	
3 Chloromethane	52	1.508	1.508	0.000	98	32082	20.0	25.1	
4 Vinyl chloride	62	1.587	1.587	0.000	98	110592	20.0	26.5	
5 Butadiene	54	1.593	1.593	0.000	68	77966	20.0	25.7	
6 Bromomethane	94	1.842	1.842	0.000	98	83973	20.0	28.4	
7 Chloroethane	64	1.915	1.915	0.000	99	67265	20.0	31.5	
8 Dichlorofluoromethane	67	2.073	2.073	0.000	97	184223	20.0	23.8	
9 Trichlorofluoromethane	101	2.073	2.073	0.000	86	161798	20.0	27.1	
10 Pentane	72	2.104	2.104	0.000	96	29062	40.0	43.8	
11 Ethanol	46	2.274	2.274	0.000	76	6428	800.0	808.2	
12 Ethyl ether	59	2.292	2.292	0.000	93	43574	20.0	19.0	
13 2-Methyl-1,3-butadiene	53	2.305	2.305	0.000	96	60381	20.0	16.9	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.341	0.000	93	74616	20.0	21.3	
16 Acrolein	56	2.463	2.463	0.000	91	9597	40.0	41.6	
15 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.481	0.000	93	92771	20.0	21.4	
17 1,1-Dichloroethene	96	2.487	2.487	0.000	98	72188	20.0	20.2	
18 Acetone	43	2.578	2.578	0.000	87	36219	100.0	94.9	
19 Iodomethane	142	2.639	2.639	0.000	99	112007	20.0	19.6	
20 Carbon disulfide	76	2.670	2.670	0.000	99	222283	20.0	17.0	
21 Isopropyl alcohol	45	2.682	2.682	0.000	25	13831	200.0	199.3	
22 3-Chloro-1-propene	76	2.803	2.803	0.000	91	41365	20.0	18.3	
24 Methyl acetate	74	2.822	2.822	0.000	38	12472	40.0	43.3	
23 Cyclopentene	67	2.822	2.822	0.000	90	174469	20.0	19.6	
25 Acetonitrile	40	2.870	2.870	0.000	96	25076	200.0	215.2	a
26 Methylene Chloride	84	2.931	2.931	0.000	88	83717	20.0	21.7	
* 27 TBA-d9 (IS)	65	2.931	2.931	0.000	0	136407	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.004	3.004	0.000	8	28419	200.0	199.9	
29 Methyl tert-butyl ether	73	3.102	3.102	0.000	97	159882	20.0	18.9	
30 trans-1,2-Dichloroethene	96	3.120	3.120	0.000	94	83724	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.193	3.193	0.000	94	122988	200.0	208.0	
32 Hexane	57	3.278	3.278	0.000	93	95692	20.0	19.5	
33 Isopropyl ether	45	3.503	3.503	0.000	94	219324	20.0	20.2	
34 1,1-Dichloroethane	63	3.527	3.527	0.000	99	147002	20.0	21.6	
35 Vinyl acetate	86	3.552	3.552	0.000	99	17050	40.0	30.4	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	91	71728	20.0	19.2	
37 Tert-butyl ethyl ether	59	3.832	3.832	0.000	91	187785	20.0	18.6	
* 39 2-Butanone-d5	46	4.044	4.044	0.000	0	154087	250.0	250.0	
38 2,2-Dichloropropane	79	4.057	4.057	0.000	93	40924	20.0	21.2	
40 cis-1,2-Dichloroethene	96	4.087	4.087	0.000	98	94447	20.0	21.2	
41 2-Butanone (MEK)	72	4.105	4.105	0.000	96	19702	100.0	89.3	
42 Ethyl acetate	70	4.124	4.124	0.000	97	8891	40.0	37.2	
43 Methyl acrylate	55	4.172	4.172	0.000	99	23699	20.0	17.2	
44 Propionitrile	54	4.245	4.245	0.000	97	39396	200.0	193.1	
46 Chlorobromomethane	128	4.330	4.330	0.000	88	34242	20.0	20.7	
45 Tetrahydrofuran	72	4.336	4.336	0.000	40	8703	40.0	33.7	
47 Methacrylonitrile	67	4.355	4.355	0.000	91	160943	200.0	199.1	
48 Chloroform	83	4.391	4.391	0.000	99	148254	20.0	22.2	
49 Cyclohexane	84	4.519	4.519	0.000	90	134611	20.0	19.1	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	99	134397	20.0	23.1	
$ 51 Dibromofluoromethane (Surr	113	4.556	4.556	0.000	95	190316	50.0	53.7	
52 Carbon tetrachloride	117	4.665	4.665	0.000	98	94739	20.0	26.3	
53 1,1-Dichloropropene	75	4.702	4.702	0.000	98	112490	20.0	20.3	
54 Isooctane	57	4.884	4.884	0.000	94	172480	20.0	19.1	
55 Benzene	78	4.914	4.914	0.000	96	357390	20.0	19.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	183162	50.0	53.9	
57 Tert-amyl methyl ether	73	5.000	5.000	0.000	91	186801	20.0	18.5	
58 Isobutyl alcohol	43	4.884	4.884	0.000	43	51639	500.0	510.5	a
59 Isopropyl acetate	61	5.012	5.012	0.000	79	24309	20.0	19.4	
60 1,2-Dichloroethane	62	5.024	5.024	0.000	98	85278	20.0	21.4	
61 n-Heptane	57	5.103	5.103	0.000	88	45371	20.0	20.3	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	787976	50.0	50.0	
64 Trichloroethene	95	5.644	5.644	0.000	97	85415	20.0	20.1	
63 n-Butanol	56	5.663	5.663	0.000	83	7487	500.0	248.0	
65 Methylcyclohexane	83	5.772	5.772	0.000	91	137332	20.0	18.7	
66 Ethyl acrylate	55	5.778	5.778	0.000	70	131523	20.0	15.4	
67 1,2-Dichloropropane	63	5.961	5.961	0.000	90	79592	20.0	20.3	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	20290	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.076	0.000	86	22457	40.0	36.5	
71 Dibromomethane	93	6.113	6.113	0.000	91	37458	20.0	20.5	
70 1,4-Dioxane	88	6.119	6.119	0.000	38	9472	400.0	429.4	
72 n-Propyl acetate	43	6.155	6.155	0.000	98	40996	20.0	17.8	
73 Dichlorobromomethane	83	6.295	6.295	0.000	99	88505	20.0	20.4	
74 2-Nitropropane	41	6.685	6.685	0.000	93	10760	40.0	59.6	
75 2-Chloroethyl vinyl ether	63	6.703	6.703	0.000	94	22602	20.0	15.4	
76 Epichlorohydrin	57	6.819	6.819	0.000	99	56445	400.0	312.5	
77 cis-1,3-Dichloropropene	75	6.873	6.873	0.000	91	104046	20.0	17.7	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	95	156302	100.0	93.6	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	867284	50.0	46.6	
80 Toluene	91	7.238	7.238	0.000	93	397714	20.0	19.6	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	94	76251	20.0	17.8	
82 Ethyl methacrylate	69	7.725	7.725	0.000	88	52031	20.0	14.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.926	7.926	0.000	94	46627	20.0	19.2	
84 Tetrachloroethene	166	7.956	7.956	0.000	93	78778	20.0	19.8	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	92	93482	20.0	18.8	
86 2-Hexanone	58	8.266	8.266	0.000	95	53097	100.0	77.6	
87 n-Butyl acetate	43	8.419	8.419	0.000	97	49345	20.0	16.6	
88 Chlorodibromomethane	129	8.431	8.431	0.000	97	42848	20.0	18.6	
89 Ethylene Dibromide	107	8.601	8.601	0.000	99	47152	20.0	18.8	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	634071	50.0	50.0	
91 Chlorobenzene	112	9.216	9.216	0.000	95	254759	20.0	20.4	
92 Ethylbenzene	106	9.319	9.319	0.000	98	136452	20.0	19.5	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	92	65404	20.0	20.3	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	160858	20.0	18.8	
96 o-Xylene	106	9.909	9.909	0.000	93	159399	20.0	19.0	
95 n-Butyl acrylate	73	9.921	9.921	0.000	98	36005	20.0	13.7	
97 Styrene	104	9.939	9.939	0.000	96	272023	20.0	20.5	
99 Bromoform	173	10.152	10.152	0.000	93	16702	20.0	16.9	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	94	64741	20.0	13.5	
100 Isopropylbenzene	105	10.280	10.280	0.000	96	436199	20.0	20.2	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	83	205565	50.0	48.8	
102 Bromobenzene	156	10.603	10.603	0.000	95	84875	20.0	19.2	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	98	57581	20.0	18.4	
104 N-Propylbenzene	91	10.676	10.676	0.000	99	512368	20.0	20.0	
105 1,2,3-Trichloropropane	110	10.706	10.706	0.000	95	17698	20.0	20.3	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	68	10822	20.0	17.7	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	376612	20.0	21.0	
108 4-Ethyltoluene	105	10.785	10.785	0.000	98	441712	20.0	20.6	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	371808	20.0	20.3	
110 4-Chlorotoluene	91	10.889	10.889	0.000	97	331012	20.0	20.2	
111 Butyl Methacrylate	87	10.962	10.962	0.000	90	88070	20.0	13.8	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	277209	20.0	19.0	
113 1,2,4-Trimethylbenzene	105	11.187	11.187	0.000	98	384813	20.0	19.9	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	450379	20.0	20.3	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	70	185036	20.0	20.6	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	97	393602	20.0	21.3	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	302936	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	186842	20.0	20.1	
134 1,2,3-Trimethylbenzene	105	11.546	11.546	0.000	98	408780	20.0	20.8	
119 Benzyl chloride	91	11.655	11.655	0.000	98	64275	20.0	15.0	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	93	363270	20.0	20.4	
121 p-Diethylbenzene	119	11.758	11.758	0.000	92	216125	20.0	20.8	
122 n-Butylbenzene	92	11.783	11.783	0.000	96	207282	20.0	21.1	
123 1,2-Dichlorobenzene	146	11.831	11.831	0.000	93	165927	20.0	20.3	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	97	348229	20.0	19.0	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	91	5294	20.0	18.0	
126 1,3,5-Trichlorobenzene	180	12.568	12.568	0.000	96	122596	20.0	19.6	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	93	91452	20.0	18.6	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	87	32732	20.0	20.7	
129 Naphthalene	128	13.231	13.231	0.000	99	153795	20.0	18.3	
130 1,2,3-Trichlorobenzene	180	13.419	13.419	0.000	94	73327	20.0	19.2	
S 131 1,2-Dichloroethene, Total	100				0		40.0	41.8	
S 132 Xylenes, Total	100				0		40.0	37.8	
S 133 Total BTEX	1				0		100.0	96.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 03-May-2018 17:29:51 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66514.D

Injection Date: 02-May-2018 17:57:30 Instrument ID: CVOAMS11 Operator ID:

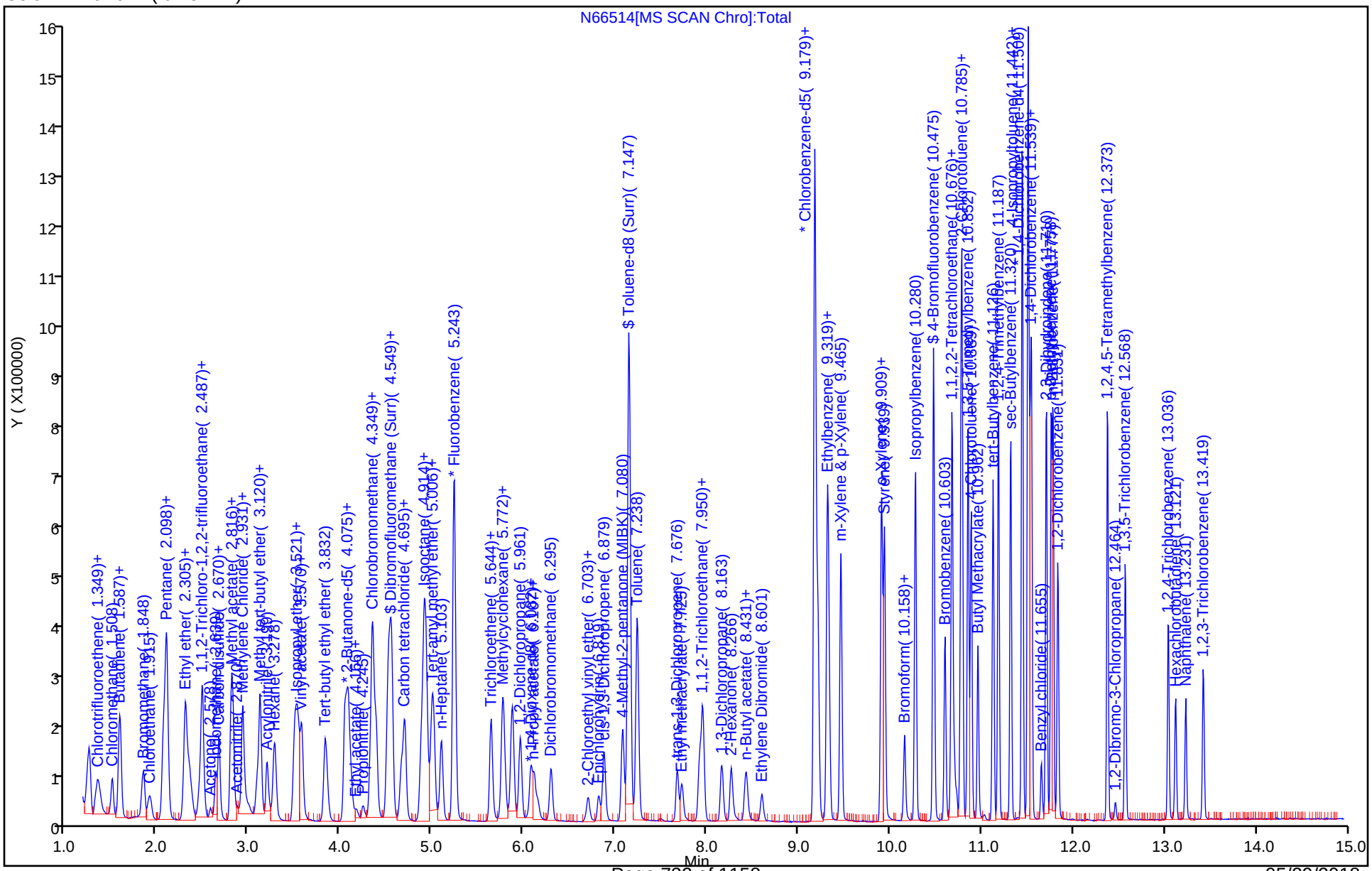
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

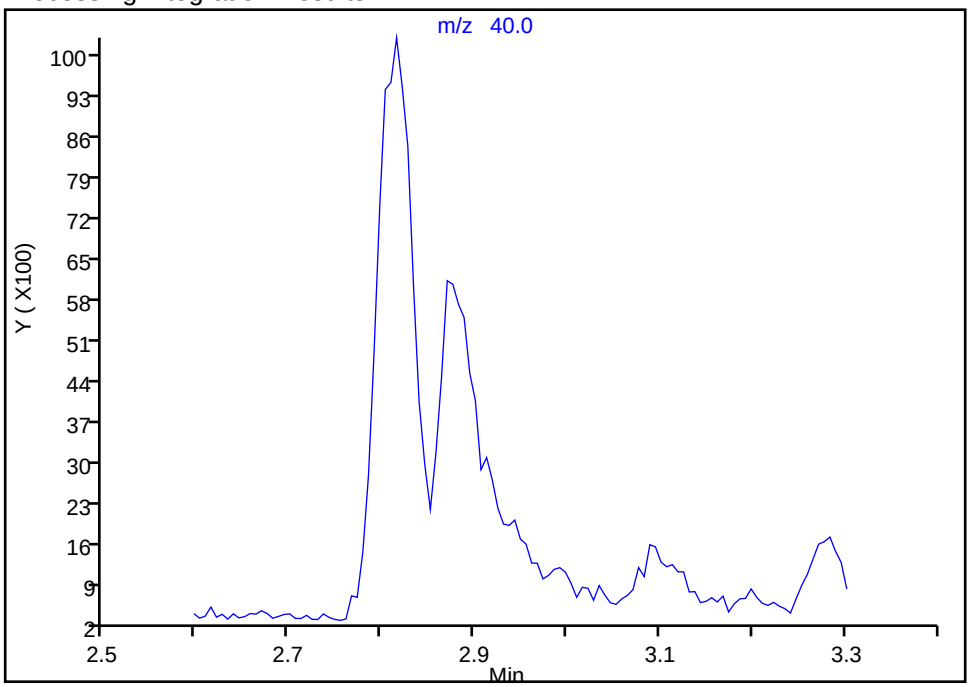
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66514.D
Injection Date: 02-May-2018 17:57:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

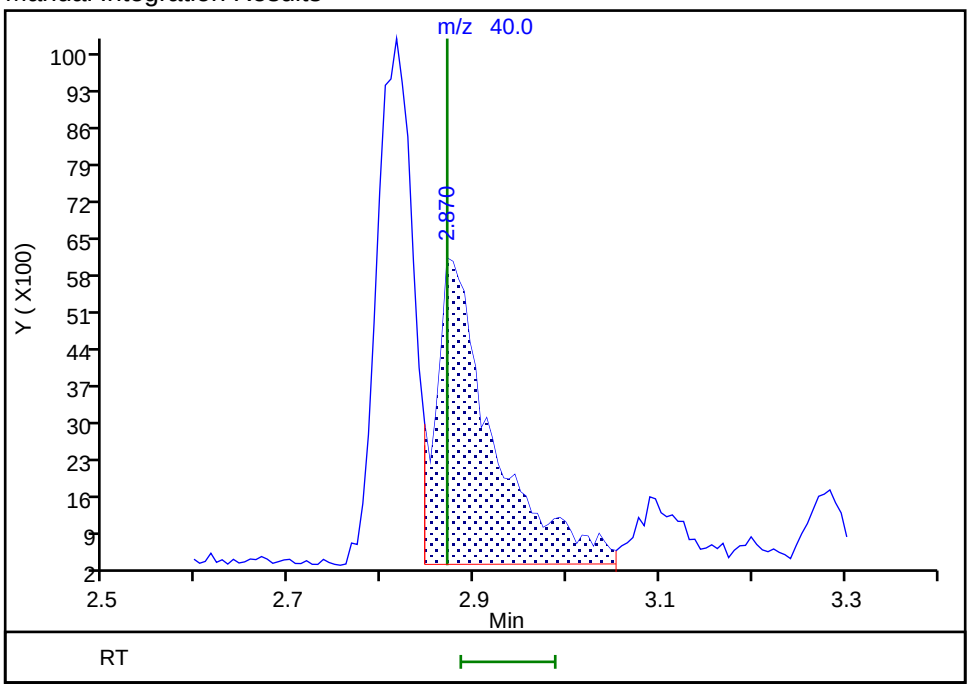
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.87
Area: 25076
Amount: 215.1708
Amount Units: ug/l



Reviewer: parekhv, 02-May-2018 18:35:13
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

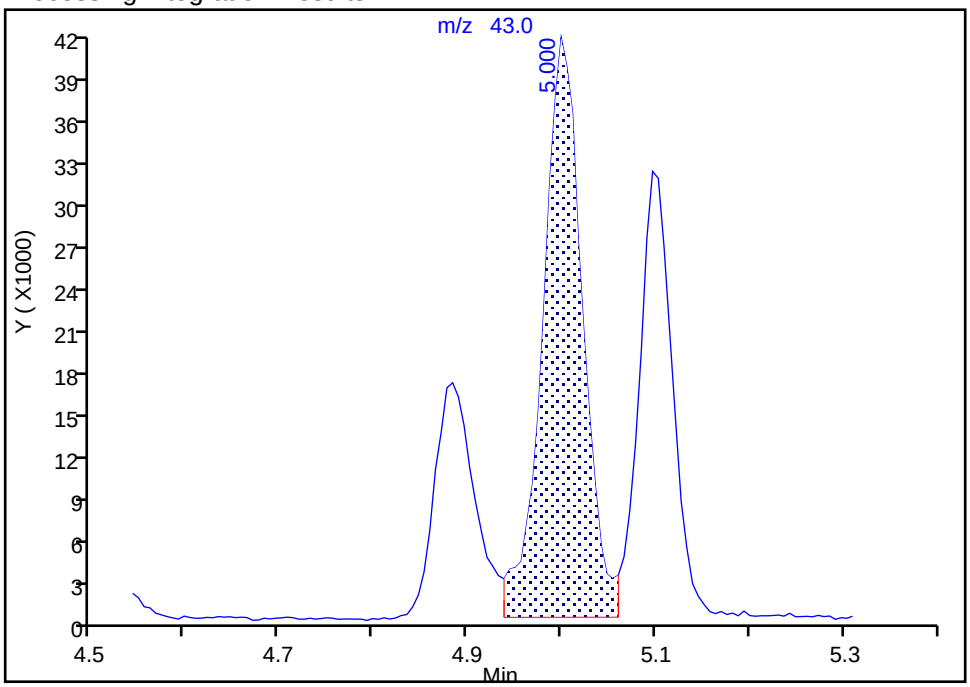
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66514.D
Injection Date: 02-May-2018 17:57:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

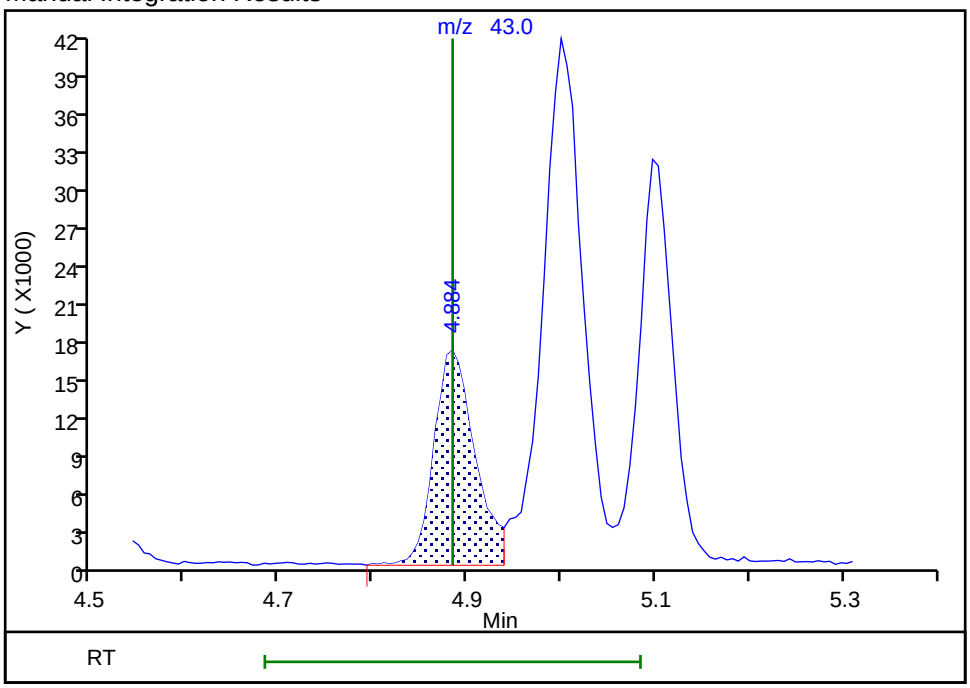
Processing Integration Results

RT: 5.00
Area: 122324
Amount: 1209.3238
Amount Units: ug/l



Manual Integration Results

RT: 4.88
Area: 51639
Amount: 510.5153
Amount Units: ug/l



Reviewer: baronm, 03-May-2018 17:29:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516110/2 Calibration Date: 05/03/2018 05:08

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66540.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.1994		17.9	20.0	-10.7	20.0
Dichlorodifluoromethane	Ave	0.1272	0.1492	0.1000	23.5	20.0	17.3	20.0
Chloromethane	Ave	2.070	2.436	0.1000	23.5	20.0	17.7	20.0
Vinyl chloride	Ave	0.2653	0.3142	0.1000	23.7	20.0	18.5	20.0
Butadiene	Ave	0.1921	0.2318		24.1	20.0	20.7*	20.0
Bromomethane	Ave	0.1877	0.2407	0.1000	25.6	20.0	28.2	50.0
Chloroethane	Ave	0.1353	0.1680	0.1000	24.8	20.0	24.2	50.0
Dichlorofluoromethane	Ave	0.4902	0.5192		21.2	20.0	5.9	20.0
Trichlorofluoromethane	Ave	0.3791	0.4654	0.1000	24.6	20.0	22.8*	20.0
Pentane	Ave	4.861	6.263		51.5	40.0	28.9*	20.0
Ethanol	QuaF		0.0512		703	800	-12.2	50.0
Ethyl ether	Ave	0.1453	0.1364		18.8	20.0	-6.1	20.0
2-Methyl-1,3-butadiene	QuaF		0.1892		16.7	20.0	-16.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2222	0.2365		21.3	20.0	6.5	20.0
Acrolein	Ave	1.690	1.959		46.3	40.0	15.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2745	0.2975	0.1000	21.7	20.0	8.4	20.0
1,1-Dichloroethene	Ave	0.2267	0.2230	0.1000	19.7	20.0	-1.6	20.0
Acetone	Ave	0.6191	0.6483	0.0500	105	100	4.7	50.0
Iodomethane	Ave	0.3627	0.3392		18.7	20.0	-6.5	20.0
Carbon disulfide	Ave	0.8318	0.6765	0.1000	16.3	20.0	-18.7	50.0
Isopropyl alcohol	Ave	0.5088	0.5153		203	200	1.3	50.0
Allyl chloride	Ave	0.1434	0.1348		18.8	20.0	-6.0	20.0
Cyclopentene	Ave	0.5642	0.5482		19.4	20.0	-2.8	20.0
Methyl acetate	Ave	2.111	2.270	0.1000	43.0	40.0	7.5	20.0
Acetonitrile	QuaF		1.030		241	200	20.6*	20.0
Methylene Chloride	Ave	0.2450	0.2456	0.1000	20.1	20.0	0.3	20.0
2-Methyl-2-propanol	Ave	1.042	1.041		200	200	-0.0	50.0
Methyl tert-butyl ether	Ave	0.5380	0.4740	0.1000	17.6	20.0	-11.9	20.0
trans-1,2-Dichloroethene	Ave	0.2577	0.2605	0.1000	20.2	20.0	1.1	20.0
Acrylonitrile	Ave	4.334	4.758		220	200	9.8	20.0
Hexane	Ave	0.3118	0.3206		20.6	20.0	2.8	20.0
Isopropyl ether	Ave	0.6885	0.6575		19.1	20.0	-4.5	20.0
1,1-Dichloroethane	Ave	0.4328	0.4457	0.2000	20.6	20.0	3.0	20.0
Vinyl acetate	QuaF		0.7182		31.6	40.0	-21.1*	20.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2155		18.2	20.0	-9.1	20.0
Tert-butyl ethyl ether	Ave	0.6409	0.5587		17.4	20.0	-12.8	20.0
2,2-Dichloropropane	Ave	0.1227	0.1292		21.0	20.0	5.2	20.0
cis-1,2-Dichloroethene	Ave	0.2832	0.2866	0.1000	20.2	20.0	1.2	20.0
2-Butanone (MEK)	Ave	0.3581	0.3524	0.0500	98.4	100	-1.6	50.0
Ethyl acetate	Ave	0.3883	0.3523		36.3	40.0	-9.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516110/2 Calibration Date: 05/03/2018 05:08

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66540.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.0875	0.0723		16.5	20.0	-17.4	20.0
Propionitrile	Ave	1.495	1.533		205	200	2.5	20.0
Chlorobromomethane	Ave	0.1049	0.1043		19.9	20.0	-0.6	20.0
Tetrahydrofuran	Ave	0.4189	0.3990		38.1	40.0	-4.7	20.0
Methacrylonitrile	Ave	0.0513	0.0484		189	200	-5.7	20.0
Chloroform	Ave	0.4245	0.4501	0.2000	21.2	20.0	6.0	20.0
Cyclohexane	Ave	0.4470	0.4266	0.1000	19.1	20.0	-4.6	50.0
1,1,1-Trichloroethane	Ave	0.3684	0.4053	0.1000	22.0	20.0	10.0	20.0
Carbon tetrachloride	Ave	0.2289	0.2917	0.1000	25.5	20.0	27.4*	20.0
1,1-Dichloropropene	Ave	0.3523	0.3396		19.3	20.0	-3.6	20.0
Isobutyl alcohol	Ave	0.7415	0.8196		553	500	10.5	50.0
2,2,4-Trimethylpentane	Ave	0.5727	0.5704		19.9	20.0	-0.4	20.0
Benzene	Ave	1.451	1.460	0.5000	20.1	20.0	0.6	20.0
Tert-amyl methyl ether	Ave	0.6402	0.5570		17.4	20.0	-13.0	20.0
Isopropyl acetate	Ave	0.0794	0.0716		18.0	20.0	-9.8	20.0
1,2-Dichloroethane	Ave	0.2525	0.2606	0.1000	20.6	20.0	3.2	20.0
n-Heptane	Ave	0.1419	0.1488		21.0	20.0	4.8	20.0
Trichloroethene	Ave	0.2700	0.2585	0.2000	19.2	20.0	-4.2	20.0
n-Butanol	QuaF		0.1383		312	500	-37.6	50.0
Ethyl acrylate	QuaF		0.4208		15.5	20.0	-22.4*	20.0
Methylcyclohexane	Ave	0.4656	0.4342	0.1000	18.6	20.0	-6.8	50.0
1,2-Dichloropropane	Ave	0.2493	0.2379	0.1000	19.1	20.0	-4.6	20.0
Methyl methacrylate	Ave	0.0390	0.0333		34.2	40.0	-14.5	20.0
1,4-Dioxane	Ave	1.087	1.136		418	400	4.5	50.0
Dibromomethane	Ave	0.1157	0.1116		19.3	20.0	-3.6	20.0
n-Propyl acetate	Ave	0.1458	0.1241		17.0	20.0	-14.9	20.0
Dichlorobromomethane	Ave	0.2757	0.2652	0.2000	19.2	20.0	-3.8	20.0
2-Nitropropane	QuaF		1.944		58.8	40.0	47.0*	20.0
2-Chloroethyl vinyl ether	Ave	0.0929	0.0701		15.1	20.0	-24.6*	20.0
Epichlorohydrin	QuaF		0.2395		327	400	-18.3	20.0
cis-1,3-Dichloropropene	Ave	0.4643	0.4091	0.2000	17.6	20.0	-11.9	50.0
4-Methyl-2-pentanone (MIBK)	Ave	2.709	2.751	0.0500	102	100	1.5	50.0
Toluene	Ave	1.603	1.578	0.4000	19.7	20.0	-1.6	20.0
trans-1,3-Dichloropropene	Ave	0.3373	0.2962	0.1000	17.6	20.0	-12.2	50.0
Ethyl methacrylate	QuaF		0.1504		12.9	20.0	-35.7*	20.0
1,1,2-Trichloroethane	Ave	0.1916	0.1799	0.1000	18.8	20.0	-6.1	20.0
Tetrachloroethene	Ave	0.3140	0.3194	0.2000	20.3	20.0	1.7	20.0
1,3-Dichloropropane	Ave	0.3917	0.3624		18.5	20.0	-7.5	20.0
2-Hexanone	QuaF		0.9106	0.0500	82.0	100	-18.0	50.0
n-Butyl acetate	Ave	0.2346	0.1939		16.5	20.0	-17.3	20.0
Chlorodibromomethane	Ave	0.1816	0.1645	0.1000	18.1	20.0	-9.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516110/2 Calibration Date: 05/03/2018 05:08

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66540.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	0.1980	0.1904	0.1000	19.2	20.0	-3.8	20.0
Chlorobenzene	Ave	0.9847	0.9824	0.5000	20.0	20.0	-0.2	20.0
Ethylbenzene	Ave	0.5531	0.5414	0.1000	19.6	20.0	-2.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2541	0.2663		21.0	20.0	4.8	20.0
m-Xylene & p-Xylene	Ave	0.6740	0.6366	0.1000	18.9	20.0	-5.6	20.0
o-Xylene	Ave	0.6609	0.6186	0.3000	18.7	20.0	-6.4	20.0
n-Butyl acrylate	QuaF		0.1359		13.2	20.0	-34.2*	20.0
Styrene	Ave	1.047	1.051	0.3000	20.1	20.0	0.5	20.0
Bromoform	QuaF		0.1324	0.1000	16.2	20.0	-18.8	20.0
Amyl acetate (mixed isomers)	QuaF		0.5456		13.8	20.0	-30.9*	20.0
Isopropylbenzene	Ave	1.703	1.753	0.1000	20.6	20.0	3.0	20.0
Bromobenzene	Ave	0.7295	0.7179		19.7	20.0	-1.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5178	0.4981	0.3000	19.2	20.0	-3.8	20.0
N-Propylbenzene	Ave	4.236	4.378		20.7	20.0	3.3	20.0
1,2,3-Trichloropropane	Ave	0.1439	0.1452		20.2	20.0	0.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1009	0.0932		18.5	20.0	-7.6	20.0
2-Chlorotoluene	Ave	2.963	3.066		20.7	20.0	3.5	20.0
4-Ethyltoluene	Ave	3.547	3.685		20.8	20.0	3.9	20.0
1,3,5-Trimethylbenzene	Ave	3.028	3.121		20.6	20.0	3.1	20.0
4-Chlorotoluene	Ave	2.699	2.754		20.4	20.0	2.1	20.0
Butyl Methacrylate	QuaF		0.7407		14.1	20.0	-29.7*	20.0
tert-Butylbenzene	Ave	2.403	2.424		20.2	20.0	0.9	20.0
1,2,4-Trimethylbenzene	Ave	3.196	3.190		20.0	20.0	-0.2	20.0
sec-Butylbenzene	Ave	3.667	3.783		20.6	20.0	3.1	20.0
1,3-Dichlorobenzene	Ave	1.484	1.570	0.6000	21.2	20.0	5.8	20.0
4-Isopropyltoluene	Ave	3.044	3.272		21.5	20.0	7.5	20.0
1,4-Dichlorobenzene	Ave	1.532	1.571	0.5000	20.5	20.0	2.5	20.0
1,2,3-Trimethylbenzene	Ave	3.249	3.404		21.0	20.0	4.8	20.0
Benzyl chloride	QuaF		0.5331		15.1	20.0	-24.5	50.0
Indan	Ave	2.946	2.973		20.2	20.0	0.9	20.0
p-Diethylbenzene	Ave	1.714	1.844		21.5	20.0	7.6	20.0
n-Butylbenzene	Ave	1.621	1.789		22.1	20.0	10.4	20.0
1,2-Dichlorobenzene	Ave	1.352	1.360	0.4000	20.1	20.0	0.6	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.025	2.922		19.3	20.0	-3.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0485	0.0393*	0.0500	16.2	20.0	-19.0	50.0
1,3,5-Trichlorobenzene	Ave	1.034	1.023		19.8	20.0	-1.0	20.0
1,2,4-Trichlorobenzene	Ave	0.8134	0.7680	0.2000	18.9	20.0	-5.6	20.0
Hexachlorobutadiene	Ave	0.2615	0.2771		21.2	20.0	6.0	20.0
Naphthalene	Ave	1.386	1.287		18.6	20.0	-7.2	50.0
1,2,3-Trichlorobenzene	Ave	0.6296	0.6310		20.0	20.0	0.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2247	0.2294		51.0	50.0	2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516110/2 Calibration Date: 05/03/2018 05:08

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66540.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.2155	0.2188		50.8	50.0	1.5	20.0
Toluene-d8 (Surr)	Ave	1.466	1.406		47.9	50.0	-4.1	20.0
4-Bromofluorobenzene	Ave	0.3322	0.3215		48.4	50.0	-3.2	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66540.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-May-2018 05:08:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0071436-002
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 14:25:54 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: delpolitov Date: 03-May-2018 14:25:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.319	1.319	0.000	88	64610	20.0	17.9	
2 Dichlorodifluoromethane	87	1.349	1.349	0.000	99	48342	20.0	23.5	
3 Chloromethane	52	1.501	1.501	0.000	99	28297	20.0	23.5	
4 Vinyl chloride	62	1.581	1.581	0.000	98	101844	20.0	23.7	
5 Butadiene	54	1.587	1.587	0.000	92	75140	20.0	24.1	
6 Bromomethane	94	1.842	1.842	0.000	98	78004	20.0	25.6	
7 Chloroethane	64	1.903	1.903	0.000	99	54447	20.0	24.8	
8 Dichlorofluoromethane	67	2.067	2.067	0.000	97	168291	20.0	21.2	
9 Trichlorofluoromethane	101	2.079	2.079	0.000	72	150844	20.0	24.6	
10 Pentane	72	2.098	2.098	0.000	97	31272	40.0	51.5	
11 Ethanol	46	2.274	2.274	0.000	73	5117	800.0	702.8	
12 Ethyl ether	59	2.286	2.286	0.000	92	44206	20.0	18.8	
13 2-Methyl-1,3-butadiene	53	2.304	2.304	0.000	95	61316	20.0	16.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.335	2.335	0.000	92	76660	20.0	21.3	
16 Acrolein	56	2.457	2.457	0.000	37	9779	40.0	46.3	
15 1,1,2-Trichloro-1,2,2-trif	101	2.475	2.475	0.000	94	96416	20.0	21.7	
17 1,1-Dichloroethene	96	2.487	2.487	0.000	98	72283	20.0	19.7	
18 Acetone	43	2.572	2.572	0.000	88	37649	100.0	104.7	
19 Iodomethane	142	2.633	2.633	0.000	99	109952	20.0	18.7	
20 Carbon disulfide	76	2.669	2.669	0.000	99	219273	20.0	16.3	
21 Isopropyl alcohol	45	2.676	2.676	0.000	25	12864	200.0	202.6	
22 3-Chloro-1-propene	76	2.797	2.797	0.000	91	43673	20.0	18.8	
24 Methyl acetate	74	2.815	2.815	0.000	38	11333	40.0	43.0	
23 Cyclopentene	67	2.815	2.815	0.000	91	177687	20.0	19.4	
25 Acetonitrile	40	2.870	2.870	0.000	93	25709	200.0	241.3	a
26 Methylene Chloride	84	2.931	2.931	0.000	91	79612	20.0	20.1	
* 27 TBA-d9 (IS)	65	2.931	2.931	0.000	0	124819	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.004	3.004	0.000	91	25990	200.0	199.8	
29 Methyl tert-butyl ether	73	3.095	3.095	0.000	97	153620	20.0	17.6	
30 trans-1,2-Dichloroethene	96	3.120	3.120	0.000	94	84420	20.0	20.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.199	3.199	0.000	97	118779	200.0	219.6	
32 Hexane	57	3.278	3.278	0.000	92	103905	20.0	20.6	
33 Isopropyl ether	45	3.503	3.503	0.000	96	213102	20.0	19.1	
34 1,1-Dichloroethane	63	3.527	3.527	0.000	99	144440	20.0	20.6	
35 Vinyl acetate	86	3.552	3.552	0.000	99	16683	40.0	31.6	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	92	69849	20.0	18.2	
37 Tert-butyl ethyl ether	59	3.838	3.838	0.000	91	181063	20.0	17.4	
* 39 2-Butanone-d5	46	4.050	4.050	0.000	0	145183	250.0	250.0	
38 2,2-Dichloropropane	79	4.057	4.057	0.000	91	41866	20.0	21.0	
40 cis-1,2-Dichloroethene	96	4.081	4.081	0.000	99	92878	20.0	20.2	
41 2-Butanone (MEK)	72	4.111	4.111	0.000	96	20462	100.0	98.4	
42 Ethyl acetate	70	4.117	4.117	0.000	96	8183	40.0	36.3	
43 Methyl acrylate	55	4.172	4.172	0.000	99	23439	20.0	16.5	
44 Propionitrile	54	4.245	4.245	0.000	98	38258	200.0	205.0	
46 Chlorobromomethane	128	4.324	4.324	0.000	90	33803	20.0	19.9	
45 Tetrahydrofuran	72	4.330	4.330	0.000	60	9268	40.0	38.1	
47 Methacrylonitrile	67	4.349	4.349	0.000	91	156769	200.0	188.6	
48 Chloroform	83	4.385	4.385	0.000	99	145877	20.0	21.2	
49 Cyclohexane	84	4.519	4.519	0.000	90	138255	20.0	19.1	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	98	131376	20.0	22.0	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.555	0.000	95	185909	50.0	51.0	
52 Carbon tetrachloride	117	4.665	4.665	0.000	98	94544	20.0	25.5	
53 1,1-Dichloropropene	75	4.701	4.701	0.000	98	110056	20.0	19.3	
58 Isobutyl alcohol	43	4.878	4.878	0.000	40	51152	500.0	552.6	a
54 Isooctane	57	4.884	4.884	0.000	95	184871	20.0	19.9	
55 Benzene	78	4.914	4.914	0.000	96	355799	20.0	20.1	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.933	4.933	0.000	0	177275	50.0	50.8	
57 Tert-amyl methyl ether	73	4.999	4.999	0.000	87	180537	20.0	17.4	
59 Isopropyl acetate	61	5.006	5.006	0.000	77	23206	20.0	18.0	
60 1,2-Dichloroethane	62	5.018	5.018	0.000	98	84451	20.0	20.6	
61 n-Heptane	57	5.097	5.097	0.000	89	48223	20.0	21.0	
* 62 Fluorobenzene	96	5.237	5.237	0.000	99	810273	50.0	50.0	
64 Trichloroethene	95	5.638	5.638	0.000	99	83794	20.0	19.2	
63 n-Butanol	56	5.650	5.650	0.000	22	8628	500.0	312.0	a
65 Methylcyclohexane	83	5.772	5.772	0.000	93	140722	20.0	18.6	
66 Ethyl acrylate	55	5.772	5.772	0.000	95	136382	20.0	15.5	
67 1,2-Dichloropropane	63	5.961	5.961	0.000	91	77109	20.0	19.1	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	20421	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.076	0.000	86	21608	40.0	34.2	
70 1,4-Dioxane	88	6.107	6.107	0.000	37	9282	400.0	418.1	
71 Dibromomethane	93	6.113	6.113	0.000	92	36161	20.0	19.3	
72 n-Propyl acetate	43	6.155	6.155	0.000	98	40223	20.0	17.0	
73 Dichlorobromomethane	83	6.301	6.301	0.000	99	85957	20.0	19.2	
74 2-Nitropropane	41	6.685	6.685	0.000	81	9706	40.0	58.8	a
75 2-Chloroethyl vinyl ether	63	6.709	6.709	0.000	95	22716	20.0	15.1	
76 Epichlorohydrin	57	6.818	6.818	0.000	99	55643	400.0	327.0	
77 cis-1,3-Dichloropropene	75	6.879	6.879	0.000	92	99733	20.0	17.6	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	96	159757	100.0	101.5	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	856680	50.0	47.9	
80 Toluene	91	7.238	7.238	0.000	93	384711	20.0	19.7	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	95	72195	20.0	17.6	
82 Ethyl methacrylate	69	7.725	7.725	0.000	89	48740	20.0	12.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.920	7.920	0.000	94	43850	20.0	18.8	
84 Tetrachloroethene	166	7.956	7.956	0.000	93	77860	20.0	20.3	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	92	88349	20.0	18.5	
86 2-Hexanone	58	8.266	8.266	0.000	95	52879	100.0	82.0	
87 n-Butyl acetate	43	8.418	8.418	0.000	97	47278	20.0	16.5	
88 Chlorodibromomethane	129	8.437	8.437	0.000	96	40109	20.0	18.1	
89 Ethylene Dibromide	107	8.601	8.601	0.000	97	46423	20.0	19.2	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	87	609432	50.0	50.0	
91 Chlorobenzene	112	9.209	9.209	0.000	95	239484	20.0	20.0	
92 Ethylbenzene	106	9.319	9.319	0.000	98	131975	20.0	19.6	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	91	64913	20.0	21.0	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	155173	20.0	18.9	
96 o-Xylene	106	9.909	9.909	0.000	93	150787	20.0	18.7	
95 n-Butyl acrylate	73	9.921	9.921	0.000	97	33138	20.0	13.2	
97 Styrene	104	9.939	9.939	0.000	97	256307	20.0	20.1	
99 Bromoform	173	10.152	10.152	0.000	93	15153	20.0	16.2	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	94	62472	20.0	13.8	
100 Isopropylbenzene	105	10.280	10.280	0.000	95	427412	20.0	20.6	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	83	195942	50.0	48.4	
102 Bromobenzene	156	10.602	10.602	0.000	96	82199	20.0	19.7	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	98	57033	20.0	19.2	
104 N-Propylbenzene	91	10.675	10.675	0.000	99	501248	20.0	20.7	
105 1,2,3-Trichloropropane	110	10.706	10.706	0.000	94	16620	20.0	20.2	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	69	10674	20.0	18.5	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	350996	20.0	20.7	
108 4-Ethyltoluene	105	10.791	10.791	0.000	98	421859	20.0	20.8	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	357371	20.0	20.6	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	315333	20.0	20.4	
111 Butyl Methacrylate	87	10.961	10.961	0.000	89	84804	20.0	14.1	
112 tert-Butylbenzene	119	11.126	11.126	0.000	94	277551	20.0	20.2	
113 1,2,4-Trimethylbenzene	105	11.186	11.186	0.000	98	365189	20.0	20.0	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	433099	20.0	20.6	
116 1,3-Dichlorobenzene	146	11.448	11.448	0.000	68	179790	20.0	21.2	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	97	374568	20.0	21.5	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	286235	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	179837	20.0	20.5	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	98	389786	20.0	21.0	
119 Benzyl chloride	91	11.655	11.655	0.000	98	61032	20.0	15.1	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	340414	20.0	20.2	
121 p-Diethylbenzene	119	11.758	11.758	0.000	92	211166	20.0	21.5	
122 n-Butylbenzene	92	11.783	11.783	0.000	98	204850	20.0	22.1	
123 1,2-Dichlorobenzene	146	11.837	11.837	0.000	94	155658	20.0	20.1	
124 1,2,4,5-Tetramethylbenzene	119	12.379	12.379	0.000	97	334546	20.0	19.3	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	91	4499	20.0	16.2	
126 1,3,5-Trichlorobenzene	180	12.574	12.574	0.000	96	117153	20.0	19.8	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	91	87931	20.0	18.9	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	87	31729	20.0	21.2	
129 Naphthalene	128	13.231	13.231	0.000	99	147326	20.0	18.6	
130 1,2,3-Trichlorobenzene	180	13.425	13.425	0.000	95	72244	20.0	20.0	
S 131 1,2-Dichloroethene, Total	100				0		40.0	40.5	
S 132 Xylenes, Total	100				0		40.0	37.6	
S 133 Total BTEX	1				0		100.0	97.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 03-May-2018 14:25:59 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66540.D

Injection Date: 03-May-2018 05:08:30 Instrument ID: CVOAMS11 Operator ID:

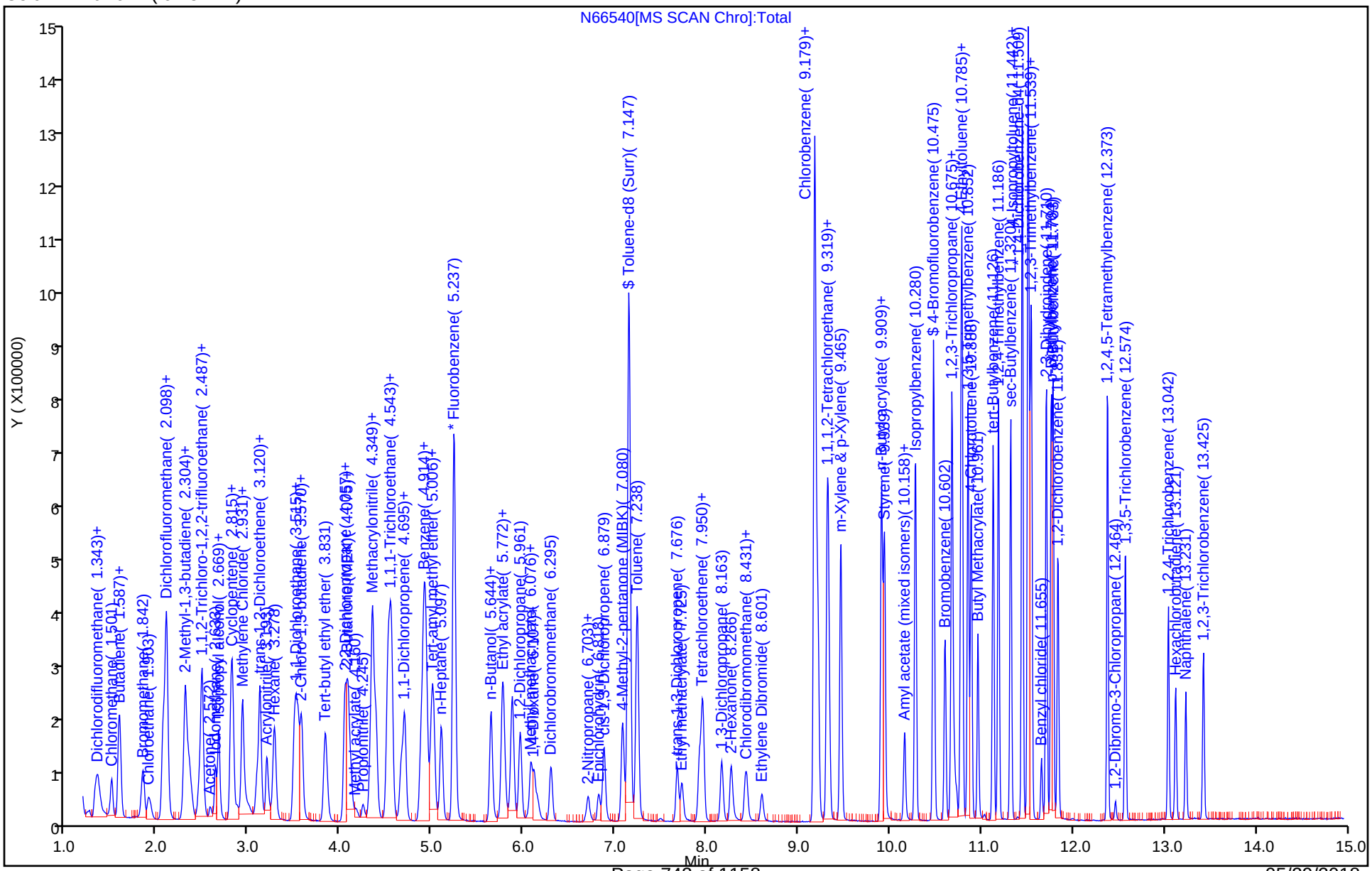
Lims ID: CCVIS Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

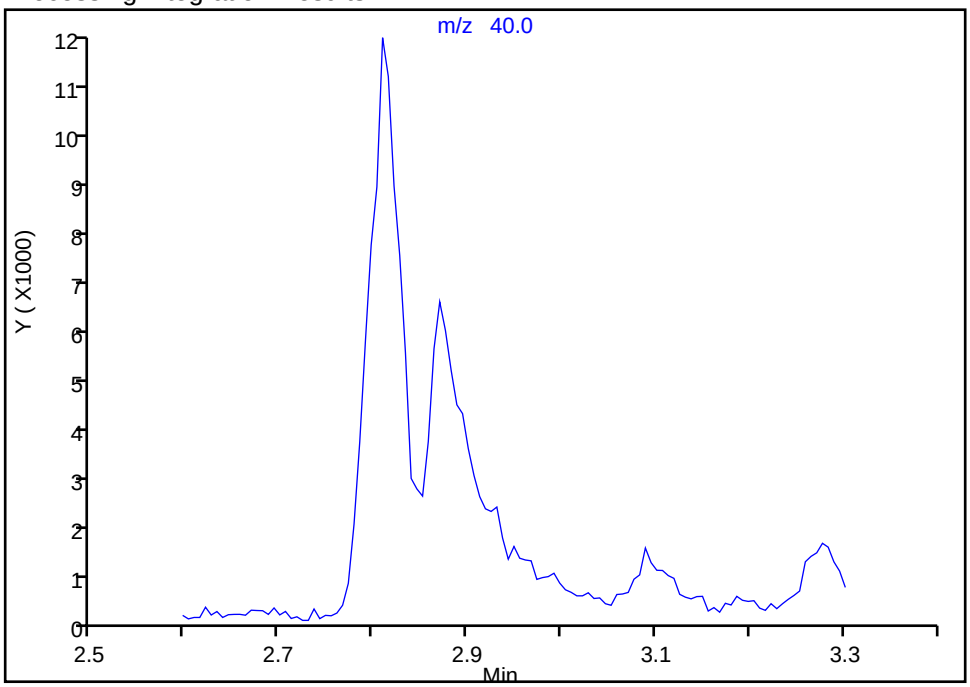
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66540.D
Injection Date: 03-May-2018 05:08:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

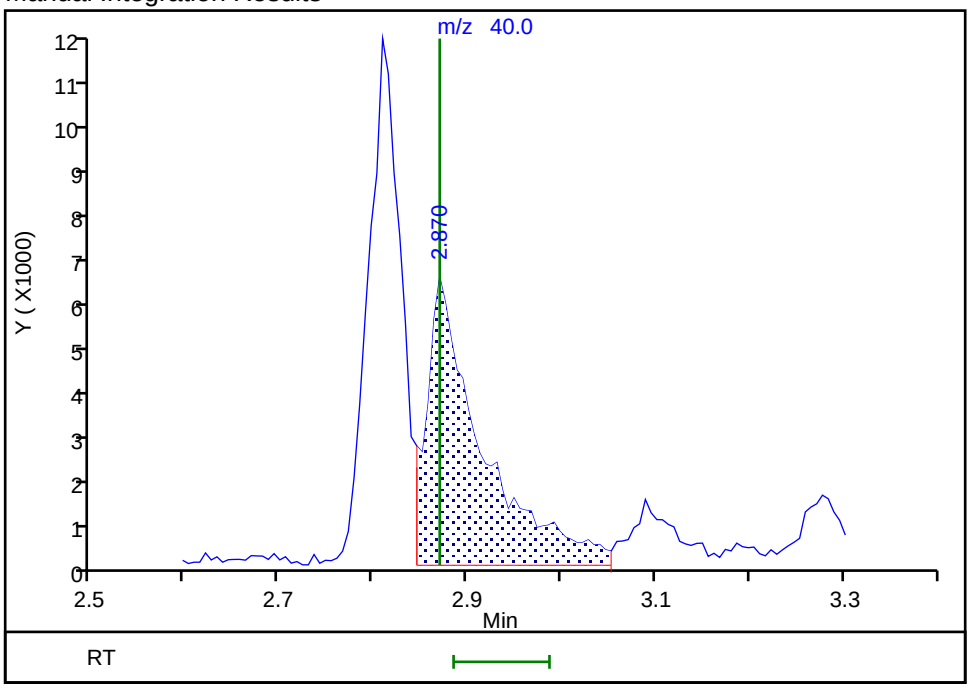
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.87
Area: 25709
Amount: 241.2584
Amount Units: ug/l



Reviewer: tupayachia, 03-May-2018 05:29:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

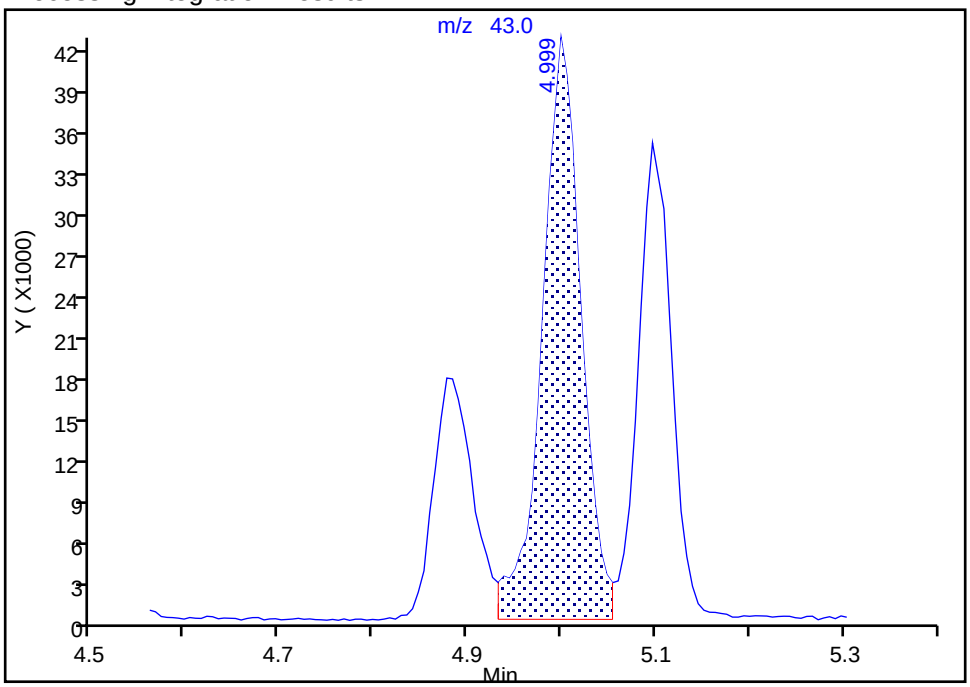
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66540.D
Injection Date: 03-May-2018 05:08:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

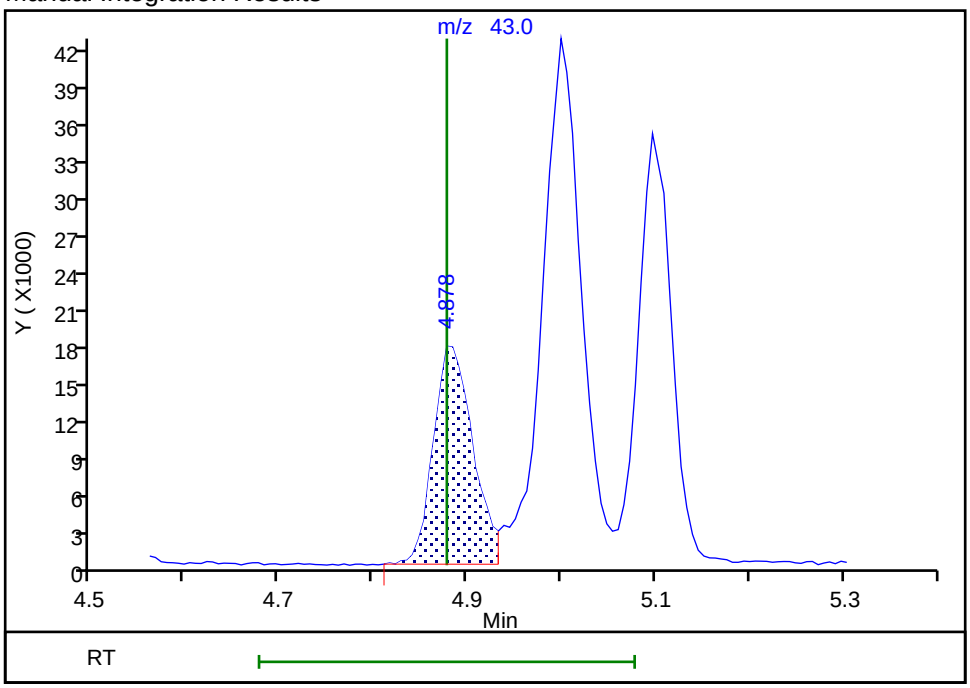
Processing Integration Results

RT: 5.00
Area: 121441
Amount: 1312.0555
Amount Units: ug/l



Manual Integration Results

RT: 4.88
Area: 51152
Amount: 552.6491
Amount Units: ug/l



Reviewer: tupayachia, 03-May-2018 05:29:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

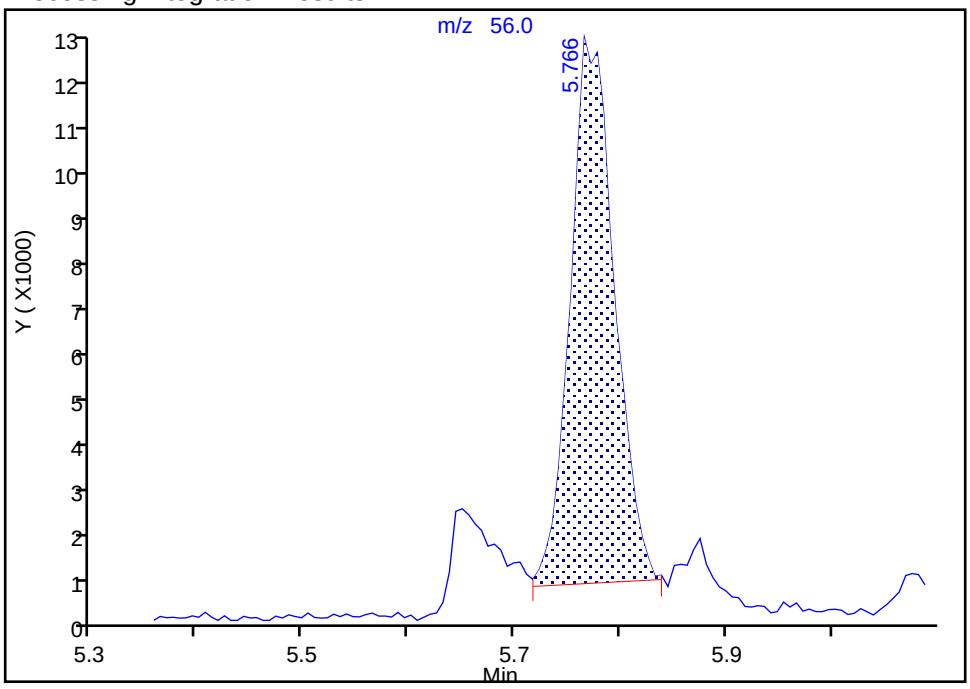
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66540.D
Injection Date: 03-May-2018 05:08:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

63 n-Butanol, CAS: 71-36-3

Signal: 1

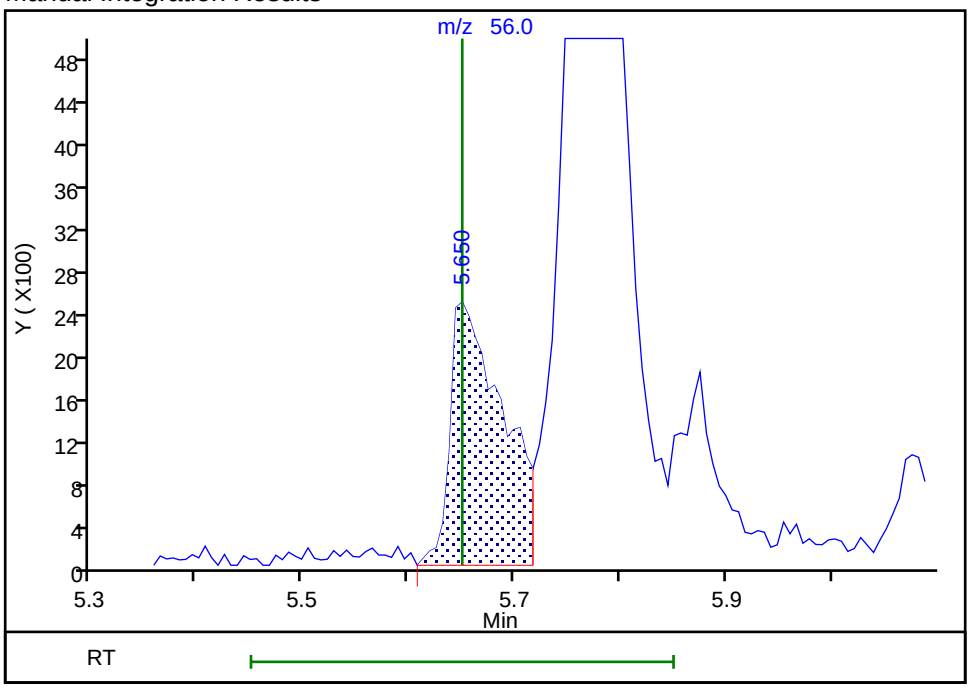
Processing Integration Results

RT: 5.77
Area: 34747
Amount: 1233.2626
Amount Units: ug/l



Manual Integration Results

RT: 5.65
Area: 8628
Amount: 311.9754
Amount Units: ug/l



Reviewer: tupayachia, 03-May-2018 05:28:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

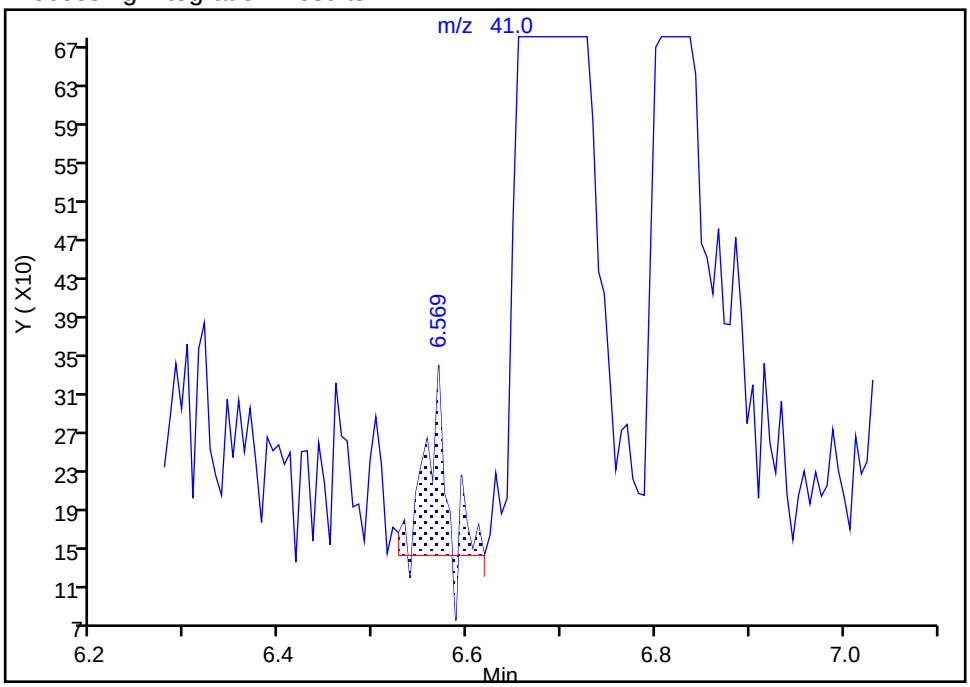
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66540.D
Injection Date: 03-May-2018 05:08:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Signal: 1

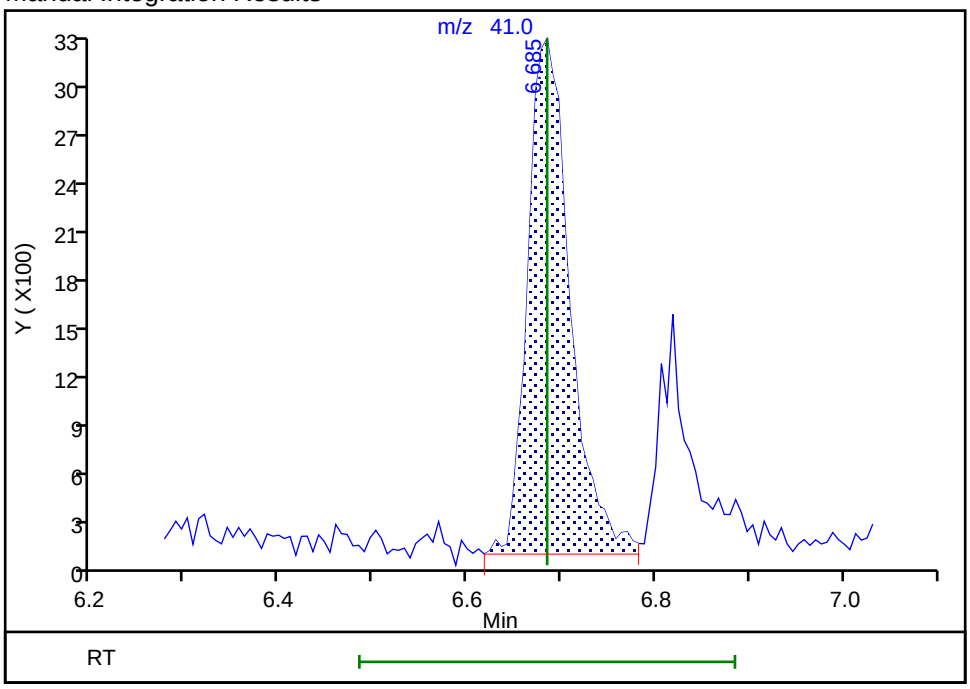
Processing Integration Results

RT: 6.57
Area: 283
Amount: 1.722236
Amount Units: ug/l



Manual Integration Results

RT: 6.68
Area: 9706
Amount: 58.799167
Amount Units: ug/l



Reviewer: tupayachia, 03-May-2018 05:27:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516299/3 Calibration Date: 05/03/2018 18:01

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N665680.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.1805		16.2	20.0	-19.2	20.0
Dichlorodifluoromethane	Ave	0.1272	0.1383	0.1000	21.7	20.0	8.7	20.0
Chloromethane	Ave	2.070	2.369	0.1000	22.9	20.0	14.5	20.0
Vinyl chloride	Ave	0.2653	0.3087	0.1000	23.3	20.0	16.4	20.0
Butadiene	Ave	0.1921	0.2205		23.0	20.0	14.8	20.0
Bromomethane	Ave	0.1877	0.2416	0.1000	25.7	20.0	28.7	50.0
Chloroethane	Ave	0.1353	0.2049	0.1000	30.3	20.0	51.5*	50.0
Dichlorofluoromethane	Ave	0.4902	0.5487		22.4	20.0	11.9	20.0
Trichlorofluoromethane	Ave	0.3791	0.4648	0.1000	24.5	20.0	22.6*	20.0
Pentane	Ave	4.861	5.198		42.8	40.0	6.9	20.0
Ethanol	QuaF		0.0521		715	800	-10.7	50.0
Ethyl ether	Ave	0.1453	0.1350		18.6	20.0	-7.1	20.0
2-Methyl-1,3-butadiene	QuaF		0.1747		15.4	20.0	-22.8*	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2222	0.2248		20.2	20.0	1.2	20.0
Acrolein	Ave	1.690	1.679		39.7	40.0	-0.7	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2745	0.2795	0.1000	20.4	20.0	1.8	20.0
1,1-Dichloroethene	Ave	0.2267	0.2097	0.1000	18.5	20.0	-7.5	20.0
Acetone	Ave	0.6191	0.6202	0.0500	100	100	0.2	50.0
Iodomethane	Ave	0.3627	0.3426		18.9	20.0	-5.5	20.0
Carbon disulfide	Ave	0.8318	0.6769	0.1000	16.3	20.0	-18.6	50.0
Isopropyl alcohol	Ave	0.5088	0.5115		201	200	0.5	50.0
Allyl chloride	Ave	0.1434	0.1287		18.0	20.0	-10.2	20.0
Methyl acetate	Ave	2.111	2.216	0.1000	42.0	40.0	5.0	20.0
Cyclopentene	Ave	0.5642	0.5157		18.3	20.0	-8.6	20.0
Acetonitrile	QuaF		0.9651		226	200	13.0	20.0
Methylene Chloride	Ave	0.2450	0.2536	0.1000	20.7	20.0	3.5	20.0
2-Methyl-2-propanol	Ave	1.042	1.053		202	200	1.1	50.0
Methyl tert-butyl ether	Ave	0.5380	0.5010	0.1000	18.6	20.0	-6.9	20.0
trans-1,2-Dichloroethene	Ave	0.2577	0.2479	0.1000	19.2	20.0	-3.8	20.0
Acrylonitrile	Ave	4.334	4.771		220	200	10.1	20.0
Hexane	Ave	0.3118	0.2781		17.8	20.0	-10.8	20.0
Isopropyl ether	Ave	0.6885	0.6712		19.5	20.0	-2.5	20.0
1,1-Dichloroethane	Ave	0.4328	0.4350	0.2000	20.1	20.0	0.5	20.0
Vinyl acetate	QuaF		0.6872		30.2	40.0	-24.5*	20.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2079		17.5	20.0	-12.3	20.0
Tert-butyl ethyl ether	Ave	0.6409	0.5793		18.1	20.0	-9.6	20.0
2,2-Dichloropropane	Ave	0.1227	0.1278		20.8	20.0	4.1	20.0
cis-1,2-Dichloroethene	Ave	0.2832	0.2834	0.1000	20.0	20.0	0.0	20.0
2-Butanone (MEK)	Ave	0.3581	0.3261	0.0500	91.1	100	-8.9	50.0
Ethyl acetate	Ave	0.3883	0.3440		35.4	40.0	-11.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516299/3 Calibration Date: 05/03/2018 18:01

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N665680.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.0875	0.0756		17.3	20.0	-13.7	20.0
Propionitrile	Ave	1.495	1.507		202	200	0.8	20.0
Chlorobromomethane	Ave	0.1049	0.1077		20.5	20.0	2.7	20.0
Tetrahydrofuran	Ave	0.4189	0.3896		37.2	40.0	-7.0	20.0
Methacrylonitrile	Ave	0.0513	0.0490		191	200	-4.5	20.0
Chloroform	Ave	0.4245	0.4432	0.2000	20.9	20.0	4.4	20.0
Cyclohexane	Ave	0.4470	0.3845	0.1000	17.2	20.0	-14.0	50.0
1,1,1-Trichloroethane	Ave	0.3684	0.3937	0.1000	21.4	20.0	6.9	20.0
Carbon tetrachloride	Ave	0.2289	0.2772	0.1000	24.2	20.0	21.1*	20.0
1,1-Dichloropropene	Ave	0.3523	0.3067		17.4	20.0	-13.0	20.0
2,2,4-Trimethylpentane	Ave	0.5727	0.4954		17.3	20.0	-13.5	20.0
Isobutyl alcohol	Ave	0.7415	0.7458		503	500	0.6	50.0
Benzene	Ave	1.451	1.441	0.5000	19.9	20.0	-0.7	20.0
Tert-amyl methyl ether	Ave	0.6402	0.5672		17.7	20.0	-11.4	20.0
Isopropyl acetate	Ave	0.0794	0.0732		18.4	20.0	-7.8	20.0
1,2-Dichloroethane	Ave	0.2525	0.2645	0.1000	21.0	20.0	4.8	20.0
n-Heptane	Ave	0.1419	0.1249		17.6	20.0	-12.0	20.0
Trichloroethene	Ave	0.2700	0.2445	0.2000	18.1	20.0	-9.5	20.0
n-Butanol	QuaF		0.1181		267	500	-46.6	50.0
Ethyl acrylate	QuaF		0.3952		14.6	20.0	-27.1*	20.0
Methylcyclohexane	Ave	0.4656	0.3879	0.1000	16.7	20.0	-16.7	50.0
1,2-Dichloropropane	Ave	0.2493	0.2339	0.1000	18.8	20.0	-6.1	20.0
Methyl methacrylate	Ave	0.0390	0.0330		33.8	40.0	-15.4	20.0
1,4-Dioxane	Ave	1.087	1.101		405	400	1.3	50.0
Dibromomethane	Ave	0.1157	0.1159		20.0	20.0	0.0	20.0
n-Propyl acetate	Ave	0.1458	0.1154		15.8	20.0	-20.8*	20.0
Dichlorobromomethane	Ave	0.2757	0.2615	0.2000	19.0	20.0	-5.2	20.0
2-Chloroethyl vinyl ether	Ave	0.0929	0.0705		15.2	20.0	-24.1*	20.0
Epichlorohydrin	QuaF		0.2262		309	400	-22.8*	20.0
cis-1,3-Dichloropropene	Ave	0.4643	0.4082	0.2000	17.6	20.0	-12.1	50.0
2-Nitropropane	QuaF		7.360		220	40.0	449.5*	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.709	2.671	0.0500	98.6	100	-1.4	50.0
Toluene	Ave	1.603	1.498	0.4000	18.7	20.0	-6.6	20.0
trans-1,3-Dichloropropene	Ave	0.3373	0.3046	0.1000	18.1	20.0	-9.7	50.0
Ethyl methacrylate	QuaF		0.1502		12.8	20.0	-35.8*	20.0
1,1,2-Trichloroethane	Ave	0.1916	0.1842	0.1000	19.2	20.0	-3.9	20.0
Tetrachloroethene	Ave	0.3140	0.3016	0.2000	19.2	20.0	-3.9	20.0
1,3-Dichloropropane	Ave	0.3917	0.3644		18.6	20.0	-7.0	20.0
2-Hexanone	QuaF		0.8636	0.0500	77.7	100	-22.3	50.0
n-Butyl acetate	Ave	0.2346	0.2072		17.7	20.0	-11.7	20.0
Chlorodibromomethane	Ave	0.1816	0.1690	0.1000	18.6	20.0	-6.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516299/3 Calibration Date: 05/03/2018 18:01

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N665680.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	0.1980	0.1901	0.1000	19.2	20.0	-4.0	20.0
Chlorobenzene	Ave	0.9847	0.9682	0.5000	19.7	20.0	-1.7	20.0
Ethylbenzene	Ave	0.5531	0.5038	0.1000	18.2	20.0	-8.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2541	0.2696		21.2	20.0	6.1	20.0
m-Xylene & p-Xylene	Ave	0.6740	0.6022	0.1000	17.9	20.0	-10.7	20.0
o-Xylene	Ave	0.6609	0.6116	0.3000	18.5	20.0	-7.5	20.0
n-Butyl acrylate	QuaF		0.1436		13.9	20.0	-30.5*	20.0
Styrene	Ave	1.047	1.007	0.3000	19.2	20.0	-3.8	20.0
Bromoform	QuaF		0.1406	0.1000	17.2	20.0	-13.8	20.0
Amyl acetate (mixed isomers)	QuaF		0.5757		14.6	20.0	-27.1*	20.0
Isopropylbenzene	Ave	1.703	1.657	0.1000	19.5	20.0	-2.7	20.0
Bromobenzene	Ave	0.7295	0.7019		19.2	20.0	-3.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5178	0.5199	0.3000	20.1	20.0	0.4	20.0
N-Propylbenzene	Ave	4.236	4.143		19.6	20.0	-2.2	20.0
1,2,3-Trichloropropane	Ave	0.1439	0.1471		20.4	20.0	2.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1009	0.0960		19.0	20.0	-4.9	20.0
2-Chlorotoluene	Ave	2.963	2.968		20.0	20.0	0.2	20.0
4-Ethyltoluene	Ave	3.547	3.489		19.7	20.0	-1.7	20.0
1,3,5-Trimethylbenzene	Ave	3.028	3.026		20.0	20.0	-0.0	20.0
4-Chlorotoluene	Ave	2.699	2.705		20.0	20.0	0.2	20.0
Butyl Methacrylate	QuaF		0.7616		14.5	20.0	-27.7*	20.0
tert-Butylbenzene	Ave	2.403	2.228		18.5	20.0	-7.3	20.0
1,2,4-Trimethylbenzene	Ave	3.196	3.143		19.7	20.0	-1.7	20.0
sec-Butylbenzene	Ave	3.667	3.647		19.9	20.0	-0.5	20.0
1,3-Dichlorobenzene	Ave	1.484	1.541	0.6000	20.8	20.0	3.8	20.0
4-Isopropyltoluene	Ave	3.044	3.156		20.7	20.0	3.7	20.0
1,4-Dichlorobenzene	Ave	1.532	1.526	0.5000	19.9	20.0	-0.4	20.0
1,2,3-Trimethylbenzene	Ave	3.249	3.372		20.8	20.0	3.8	20.0
Benzyl chloride	QuaF		0.5653		16.0	20.0	-19.9	50.0
Indan	Ave	2.946	2.861		19.4	20.0	-2.9	20.0
p-Diethylbenzene	Ave	1.714	1.747		20.4	20.0	1.9	20.0
n-Butylbenzene	Ave	1.621	1.650		20.4	20.0	1.8	20.0
1,2-Dichlorobenzene	Ave	1.352	1.331	0.4000	19.7	20.0	-1.6	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.025	2.803		18.5	20.0	-7.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0485	0.0461*	0.0500	19.0	20.0	-5.0	50.0
1,3,5-Trichlorobenzene	Ave	1.034	1.000		19.4	20.0	-3.2	20.0
1,2,4-Trichlorobenzene	Ave	0.8134	0.7578	0.2000	18.6	20.0	-6.8	20.0
Hexachlorobutadiene	Ave	0.2615	0.2592		19.8	20.0	-0.9	20.0
Naphthalene	Ave	1.386	1.323		19.1	20.0	-4.6	50.0
1,2,3-Trichlorobenzene	Ave	0.6296	0.6464		20.5	20.0	2.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2247	0.2281		50.7	50.0	1.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516299/3 Calibration Date: 05/03/2018 18:01

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N665680.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.2155	0.2206		51.2	50.0	2.4	20.0
Toluene-d8 (Surr)	Ave	1.466	1.402		47.8	50.0	-4.4	20.0
4-Bromofluorobenzene	Ave	0.3322	0.3171		47.7	50.0	-4.6	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665680.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-May-2018 18:01:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0071478-003
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 17:24:42 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: xuyvo Date: 04-May-2018 17:24:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.343	1.343	0.000	88	57843	20.0	16.2	
2 Dichlorodifluoromethane	87	1.374	1.374	0.000	99	44332	20.0	21.7	
3 Chloromethane	52	1.520	1.520	0.000	98	28494	20.0	22.9	
4 Vinyl chloride	62	1.599	1.599	0.000	97	98930	20.0	23.3	
5 Butadiene	54	1.605	1.605	0.000	70	70662	20.0	23.0	
6 Bromomethane	94	1.854	1.854	0.000	99	77410	20.0	25.7	
7 Chloroethane	64	1.927	1.927	0.000	99	65663	20.0	30.3	
8 Dichlorofluoromethane	67	2.079	2.079	0.000	98	175842	20.0	22.4	
9 Trichlorofluoromethane	101	2.091	2.091	0.000	96	148960	20.0	24.5	
10 Pentane	72	2.116	2.116	0.000	97	27432	40.0	42.8	
11 Ethanol	46	2.298	2.298	0.000	70	5499	800.0	714.6	
12 Ethyl ether	59	2.298	2.298	0.000	91	43278	20.0	18.6	
13 2-Methyl-1,3-butadiene	53	2.317	2.317	0.000	97	55981	20.0	15.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.353	2.353	0.000	93	72047	20.0	20.2	
16 Acrolein	56	2.469	2.469	0.000	42	8859	40.0	39.7	
15 1,1,2-Trichloro-1,2,2-trif	101	2.493	2.493	0.000	92	89569	20.0	20.4	
17 1,1-Dichloroethene	96	2.499	2.499	0.000	98	67198	20.0	18.5	
18 Acetone	43	2.584	2.584	0.000	87	37298	100.0	100.2	
19 Iodomethane	142	2.645	2.645	0.000	99	109782	20.0	18.9	
20 Carbon disulfide	76	2.682	2.682	0.000	99	216916	20.0	16.3	
21 Isopropyl alcohol	45	2.688	2.688	0.000	25	13496	200.0	201.1	
22 3-Chloro-1-propene	76	2.809	2.809	0.000	90	41253	20.0	18.0	
24 Methyl acetate	74	2.828	2.828	0.000	40	11696	40.0	42.0	
23 Cyclopentene	67	2.834	2.834	0.000	94	165278	20.0	18.3	
25 Acetonitrile	40	2.888	2.888	0.000	92	25464	200.0	226.0	a
26 Methylene Chloride	84	2.937	2.937	0.000	90	81277	20.0	20.7	
* 27 TBA-d9 (IS)	65	2.943	2.943	0.000	0	131930	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.016	3.016	0.000	91	27796	200.0	202.2	
29 Methyl tert-butyl ether	73	3.107	3.107	0.000	97	160546	20.0	18.6	
30 trans-1,2-Dichloroethene	96	3.132	3.132	0.000	94	79447	20.0	19.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.205	3.205	0.000	95	125887	200.0	220.2	
32 Hexane	57	3.284	3.284	0.000	92	89130	20.0	17.8	
33 Isopropyl ether	45	3.509	3.509	0.000	94	215113	20.0	19.5	
34 1,1-Dichloroethane	63	3.539	3.539	0.000	99	139399	20.0	20.1	
35 Vinyl acetate	86	3.552	3.552	0.000	99	16530	40.0	30.2	
36 2-Chloro-1,3-butadiene	88	3.582	3.582	0.000	91	66637	20.0	17.5	
37 Tert-butyl ethyl ether	59	3.837	3.837	0.000	91	185667	20.0	18.1	
* 39 2-Butanone-d5	46	4.056	4.056	0.000	0	150339	250.0	250.0	
38 2,2-Dichloropropane	79	4.056	4.056	0.000	95	40942	20.0	20.8	
40 cis-1,2-Dichloroethene	96	4.087	4.087	0.000	97	90823	20.0	20.0	
41 2-Butanone (MEK)	72	4.117	4.117	0.000	96	19607	100.0	91.1	
42 Ethyl acetate	70	4.123	4.123	0.000	96	8274	40.0	35.4	
43 Methyl acrylate	55	4.178	4.178	0.000	99	24212	20.0	17.3	
44 Propionitrile	54	4.251	4.251	0.000	96	39756	200.0	201.5	
46 Chlorobromomethane	128	4.330	4.330	0.000	87	34510	20.0	20.5	
45 Tetrahydrofuran	72	4.342	4.342	0.000	42	9372	40.0	37.2	
47 Methacrylonitrile	67	4.361	4.361	0.000	91	156974	200.0	191.0	
48 Chloroform	83	4.397	4.397	0.000	98	142021	20.0	20.9	
49 Cyclohexane	84	4.525	4.525	0.000	90	123230	20.0	17.2	
50 1,1,1-Trichloroethane	97	4.543	4.543	0.000	98	126160	20.0	21.4	
$ 51 Dibromofluoromethane (Surr	113	4.568	4.568	0.000	95	182763	50.0	50.7	
52 Carbon tetrachloride	117	4.671	4.671	0.000	97	88844	20.0	24.2	
53 1,1-Dichloropropene	75	4.701	4.701	0.000	96	98286	20.0	17.4	
54 Isooctane	57	4.890	4.890	0.000	94	158754	20.0	17.3	
55 Benzene	78	4.914	4.914	0.000	96	342276	20.0	19.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.945	4.945	0.000	0	176770	50.0	51.2	
58 Isobutyl alcohol	43	4.890	4.890	0.000	44	49199	500.0	502.9	a
57 Tert-amyl methyl ether	73	5.006	5.006	0.000	90	181773	20.0	17.7	
59 Isopropyl acetate	61	5.018	5.018	0.000	76	23462	20.0	18.4	a
60 1,2-Dichloroethane	62	5.024	5.024	0.000	98	84761	20.0	21.0	
61 n-Heptane	57	5.103	5.103	0.000	86	40038	20.0	17.6	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	801195	50.0	50.0	
64 Trichloroethene	95	5.650	5.650	0.000	99	78341	20.0	18.1	
63 n-Butanol	56	5.663	5.663	0.000	16	7793	500.0	266.8	a
65 Methylcyclohexane	83	5.778	5.778	0.000	92	124314	20.0	16.7	
66 Ethyl acrylate	55	5.778	5.778	0.000	97	126664	20.0	14.6	
67 1,2-Dichloropropane	63	5.967	5.967	0.000	88	74970	20.0	18.8	
* 68 1,4-Dioxane-d8	96	6.058	6.058	0.000	0	19837	1000.0	1000.0	
69 Methyl methacrylate	100	6.088	6.088	0.000	84	21141	40.0	33.8	
70 1,4-Dioxane	88	6.113	6.113	0.000	37	8739	400.0	405.2	
71 Dibromomethane	93	6.119	6.119	0.000	92	37126	20.0	20.0	
72 n-Propyl acetate	43	6.155	6.155	0.000	97	36984	20.0	15.8	
73 Dichlorobromomethane	83	6.301	6.301	0.000	99	83789	20.0	19.0	
75 2-Chloroethyl vinyl ether	63	6.709	6.709	0.000	92	22602	20.0	15.2	
76 Epichlorohydrin	57	6.825	6.825	0.000	98	54410	400.0	308.8	
74 2-Nitropropane	41	7.080	7.080	0.000	52	38838	40.0	219.8	a
77 cis-1,3-Dichloropropene	75	6.879	6.879	0.000	92	96998	20.0	17.6	
78 4-Methyl-2-pentanone (MIBK	43	7.086	7.086	0.000	96	160614	100.0	98.6	
$ 79 Toluene-d8 (Surr)	98	7.153	7.153	0.000	99	833056	50.0	47.8	
80 Toluene	91	7.244	7.244	0.000	93	355909	20.0	18.7	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	96	72379	20.0	18.1	
82 Ethyl methacrylate	69	7.731	7.731	0.000	88	48134	20.0	12.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.920	7.920	0.000	94	43773	20.0	19.2	
84 Tetrachloroethene	166	7.956	7.956	0.000	94	71663	20.0	19.2	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	93	86579	20.0	18.6	
86 2-Hexanone	58	8.272	8.272	0.000	95	51932	100.0	77.7	
87 n-Butyl acetate	43	8.418	8.418	0.000	98	49233	20.0	17.7	
88 Chlorodibromomethane	129	8.437	8.437	0.000	97	40166	20.0	18.6	
89 Ethylene Dibromide	107	8.601	8.601	0.000	99	45171	20.0	19.2	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	594015	50.0	50.0	
91 Chlorobenzene	112	9.215	9.215	0.000	95	230040	20.0	19.7	
92 Ethylbenzene	106	9.313	9.313	0.000	98	119694	20.0	18.2	
93 1,1,1,2-Tetrachloroethane	131	9.337	9.337	0.000	91	64060	20.0	21.2	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	143079	20.0	17.9	
96 o-Xylene	106	9.909	9.909	0.000	94	145307	20.0	18.5	
95 n-Butyl acrylate	73	9.927	9.927	0.000	97	34130	20.0	13.9	
97 Styrene	104	9.939	9.939	0.000	94	239193	20.0	19.2	
99 Bromoform	173	10.152	10.152	0.000	92	15696	20.0	17.2	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	94	64255	20.0	14.6	
100 Isopropylbenzene	105	10.280	10.280	0.000	95	393829	20.0	19.5	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	82	188351	50.0	47.7	
102 Bromobenzene	156	10.602	10.602	0.000	97	78331	20.0	19.2	
103 1,1,2,2-Tetrachloroethane	83	10.669	10.669	0.000	97	58024	20.0	20.1	
104 N-Propylbenzene	91	10.681	10.681	0.000	99	462382	20.0	19.6	
105 1,2,3-Trichloropropane	110	10.700	10.700	0.000	96	16415	20.0	20.4	
106 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	75	10709	20.0	19.0	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	331194	20.0	20.0	
108 4-Ethyltoluene	105	10.785	10.785	0.000	98	389364	20.0	19.7	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	337697	20.0	20.0	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	301872	20.0	20.0	
111 Butyl Methacrylate	87	10.961	10.961	0.000	89	85000	20.0	14.5	
112 tert-Butylbenzene	119	11.126	11.126	0.000	92	248698	20.0	18.5	
113 1,2,4-Trimethylbenzene	105	11.186	11.186	0.000	98	350744	20.0	19.7	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	407063	20.0	19.9	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	91	172019	20.0	20.8	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	98	352248	20.0	20.7	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	279011	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	170323	20.0	19.9	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	98	376321	20.0	20.8	
119 Benzyl chloride	91	11.655	11.655	0.000	98	63086	20.0	16.0	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	319299	20.0	19.4	
121 p-Diethylbenzene	119	11.758	11.758	0.000	92	195010	20.0	20.4	
122 n-Butylbenzene	92	11.783	11.783	0.000	97	184111	20.0	20.4	
123 1,2-Dichlorobenzene	146	11.831	11.831	0.000	92	148519	20.0	19.7	
124 1,2,4,5-Tetramethylbenzene	119	12.379	12.379	0.000	96	312877	20.0	18.5	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	91	5143	20.0	19.0	
126 1,3,5-Trichlorobenzene	180	12.573	12.573	0.000	96	111646	20.0	19.4	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	93	84570	20.0	18.6	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	88	28923	20.0	19.8	
129 Naphthalene	128	13.231	13.231	0.000	99	147624	20.0	19.1	
130 1,2,3-Trichlorobenzene	180	13.425	13.425	0.000	95	72135	20.0	20.5	
S 131 1,2-Dichloroethene, Total	100				0		40.0	39.3	
S 132 Xylenes, Total	100				0		40.0	36.4	
S 133 Total BTEX	1				0		100.0	93.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 17:24:53 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665680.D

Injection Date: 03-May-2018 18:01:30 Instrument ID: CVOAMS11 Operator ID:

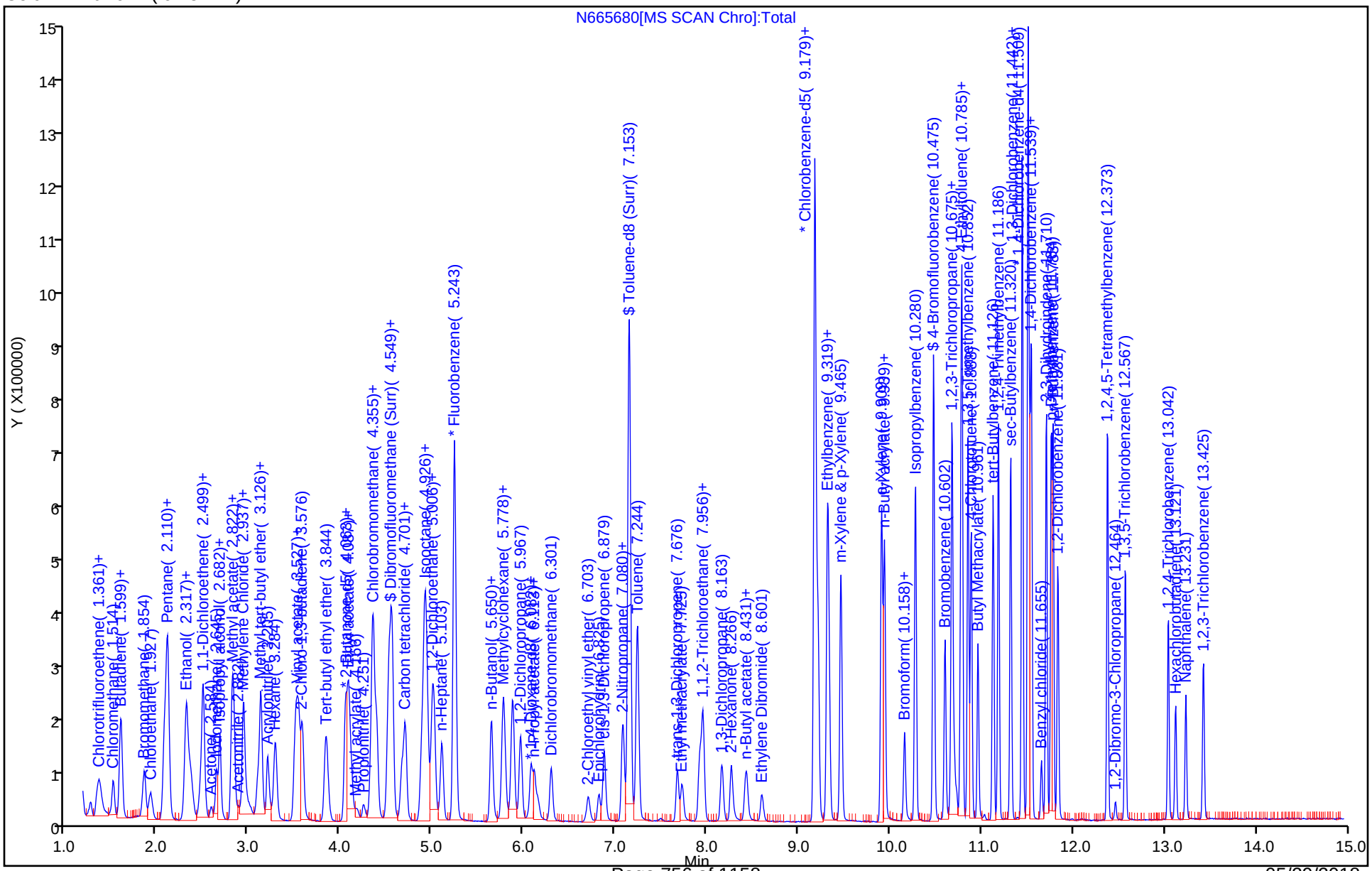
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

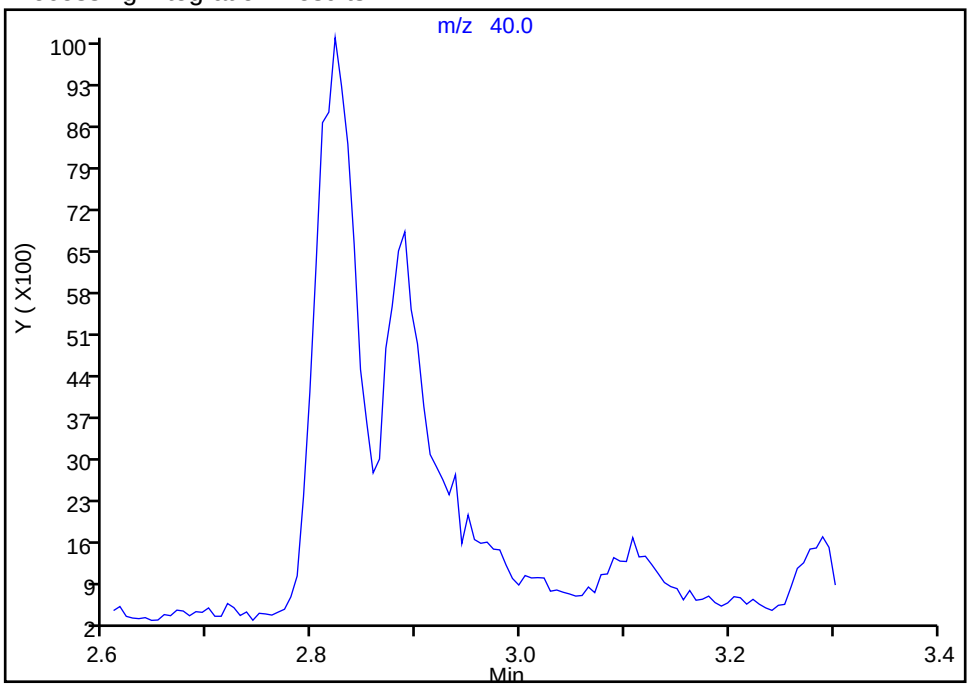
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665680.D
Injection Date: 03-May-2018 18:01:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

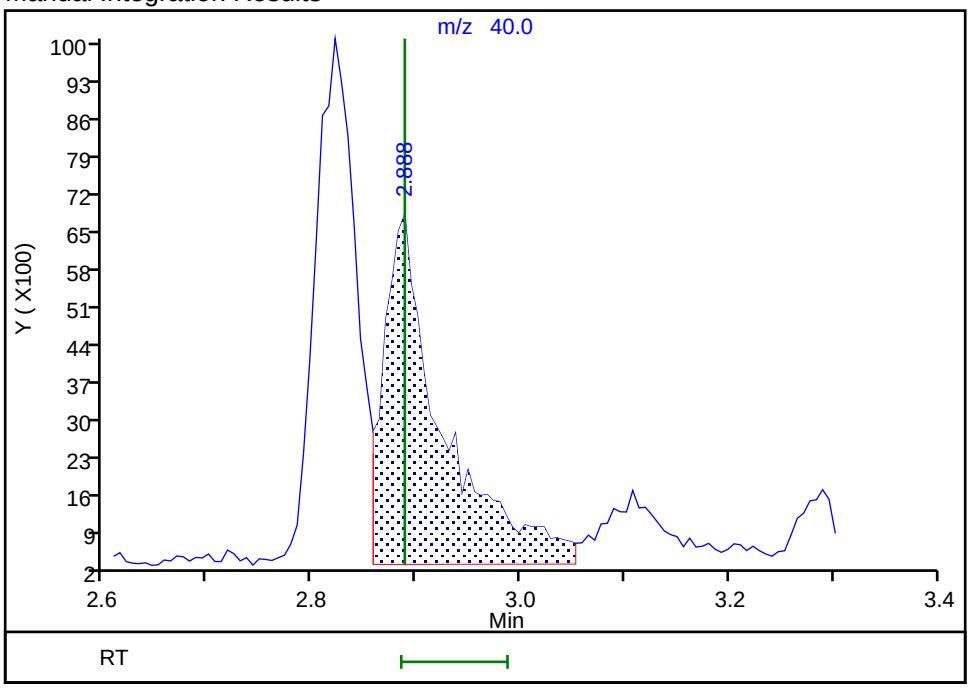
Not Detected
Expected RT: 2.89

Processing Integration Results



Manual Integration Results

RT: 2.89
Area: 25464
Amount: 225.9830
Amount Units: ug/l



Reviewer: parekhv, 03-May-2018 18:25:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

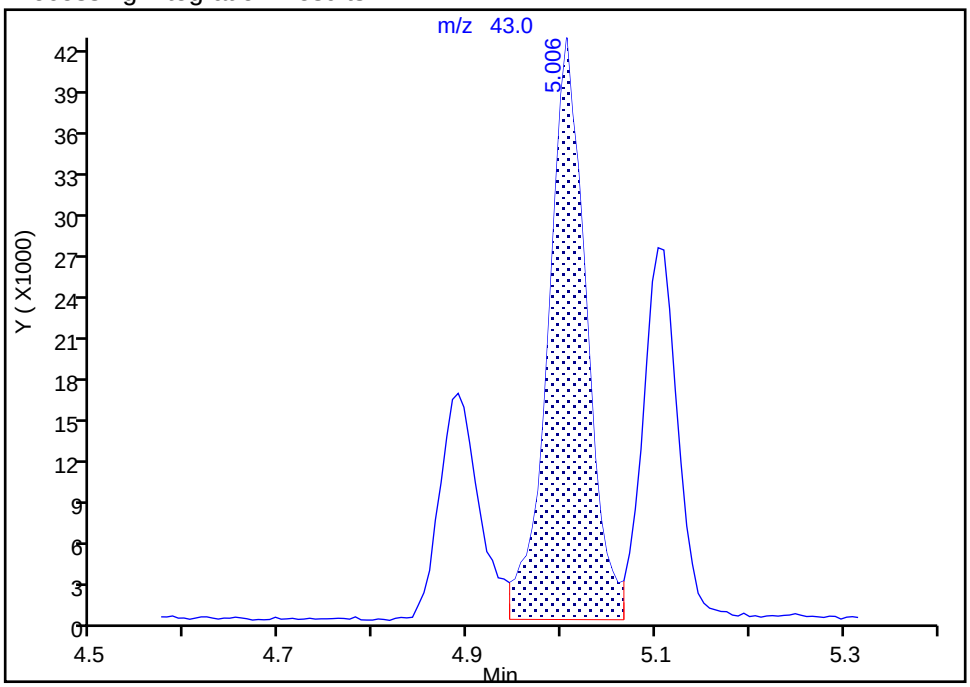
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665680.D
Injection Date: 03-May-2018 18:01:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

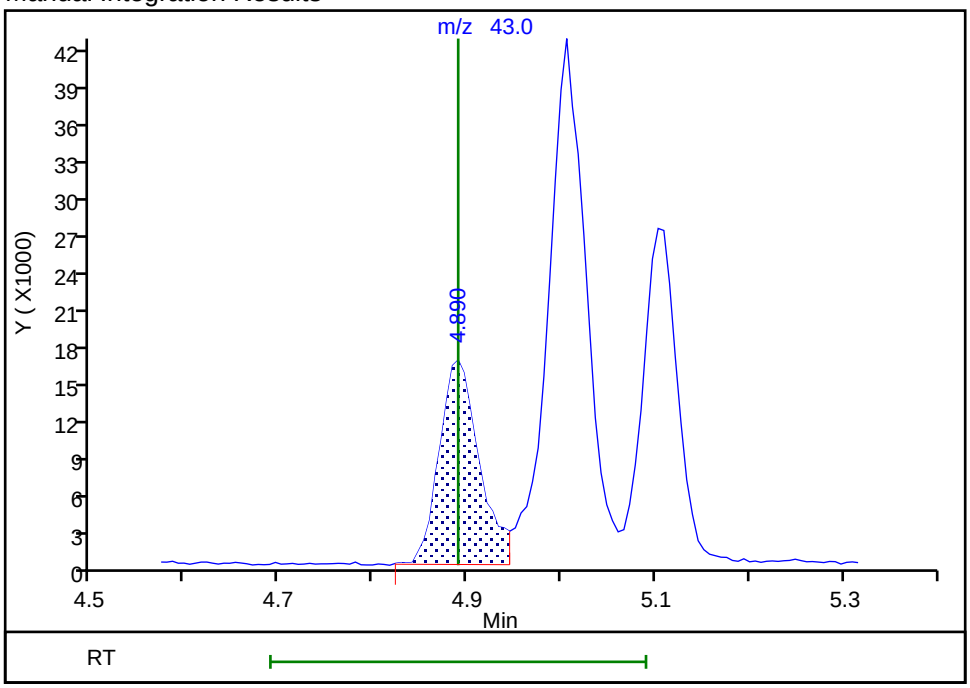
Processing Integration Results

RT: 5.01
Area: 120889
Amount: 1235.6936
Amount Units: ug/l



Manual Integration Results

RT: 4.89
Area: 49199
Amount: 502.8984
Amount Units: ug/l



Reviewer: xuyvo, 04-May-2018 17:24:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

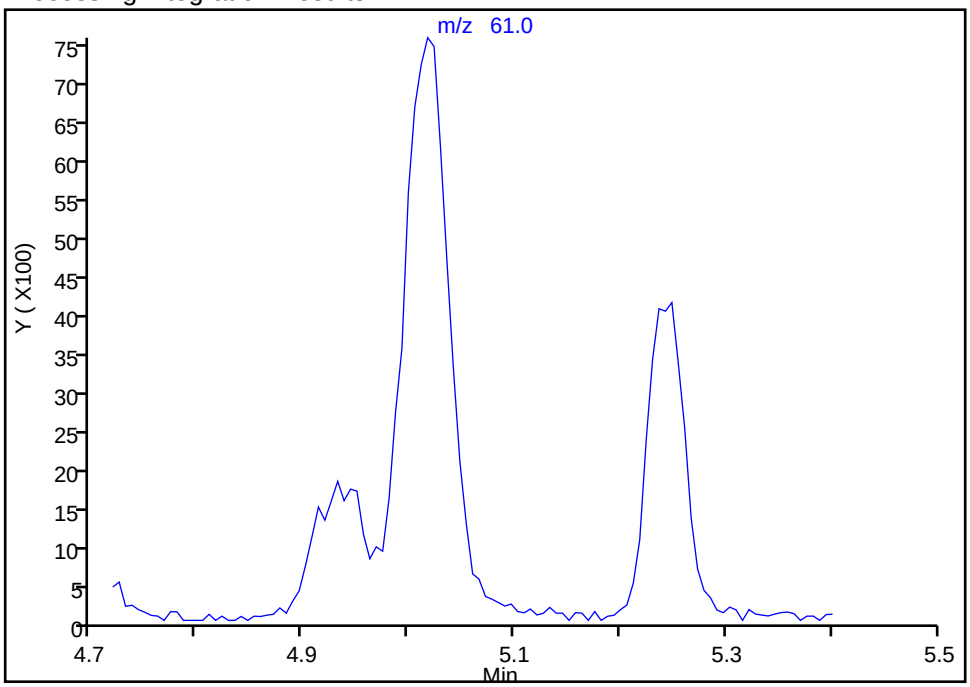
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665680.D
Injection Date: 03-May-2018 18:01:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

59 Isopropyl acetate, CAS: 108-21-4

Signal: 1

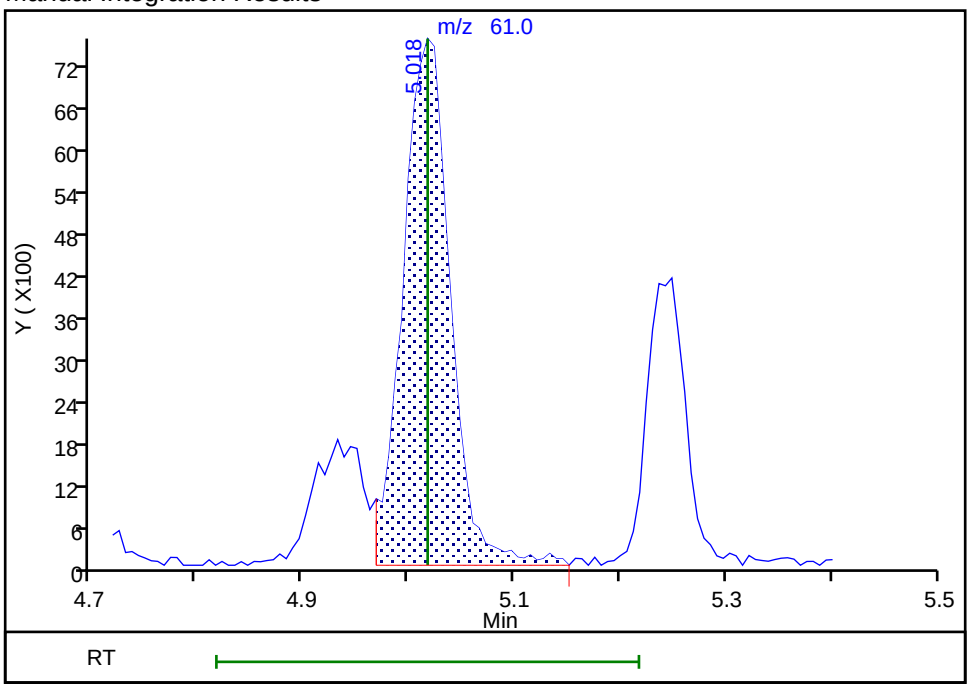
Not Detected
Expected RT: 5.02

Processing Integration Results



Manual Integration Results

RT: 5.02
Area: 23462
Amount: 18.446083
Amount Units: ug/l



Reviewer: parekhv, 03-May-2018 18:25:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

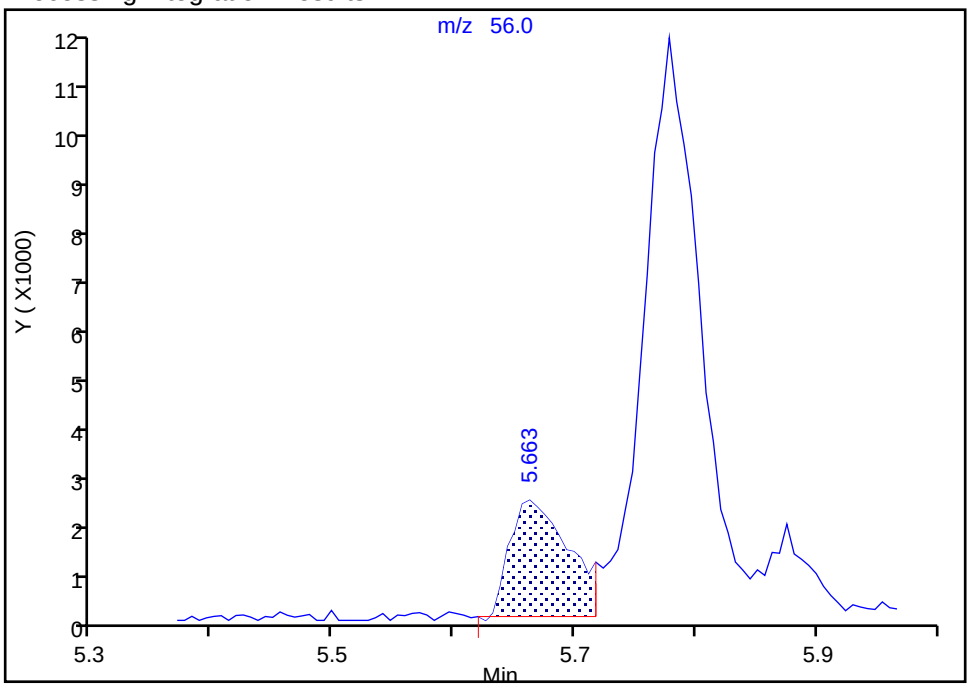
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665680.D
Injection Date: 03-May-2018 18:01:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

63 n-Butanol, CAS: 71-36-3

Signal: 1

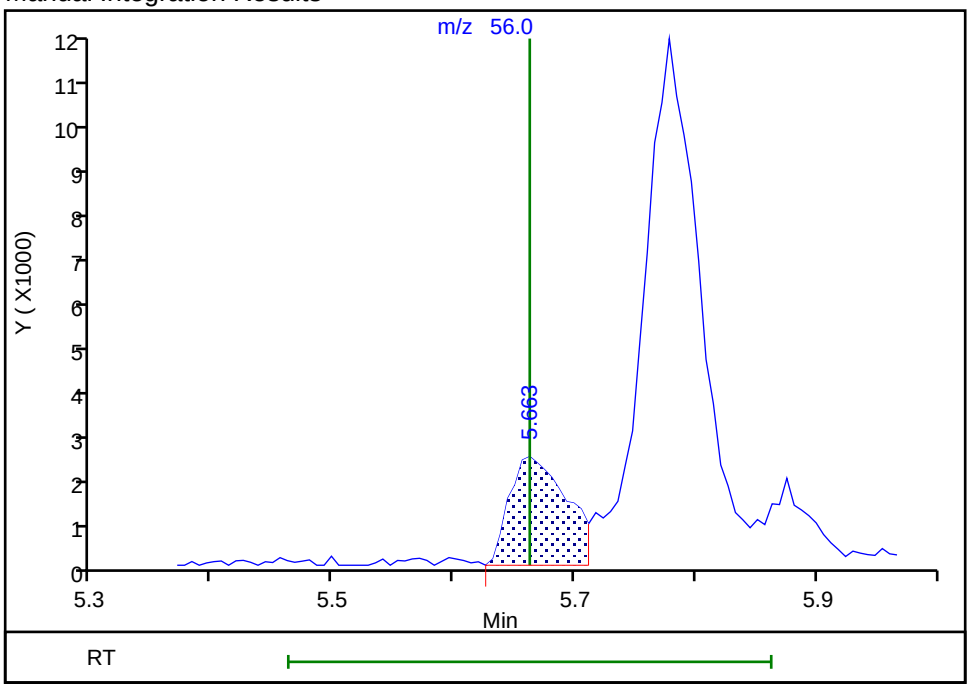
Processing Integration Results

RT: 5.66
Area: 7772
Amount: 266.1251
Amount Units: ug/l



Manual Integration Results

RT: 5.66
Area: 7793
Amount: 266.8403
Amount Units: ug/l



Reviewer: xuyvo, 04-May-2018 17:24:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

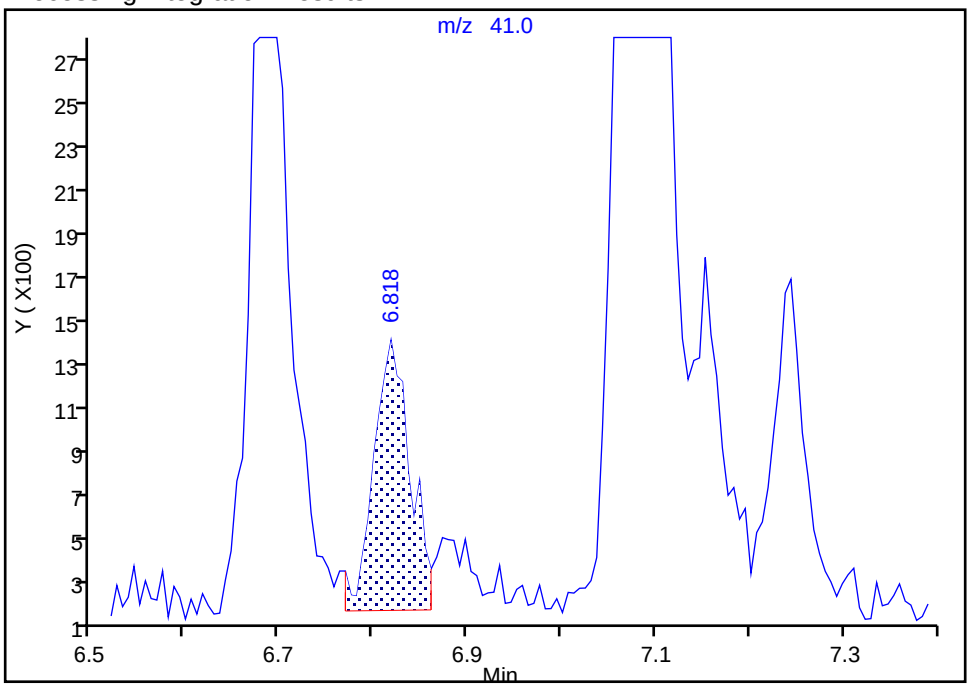
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665680.D
Injection Date: 03-May-2018 18:01:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Signal: 1

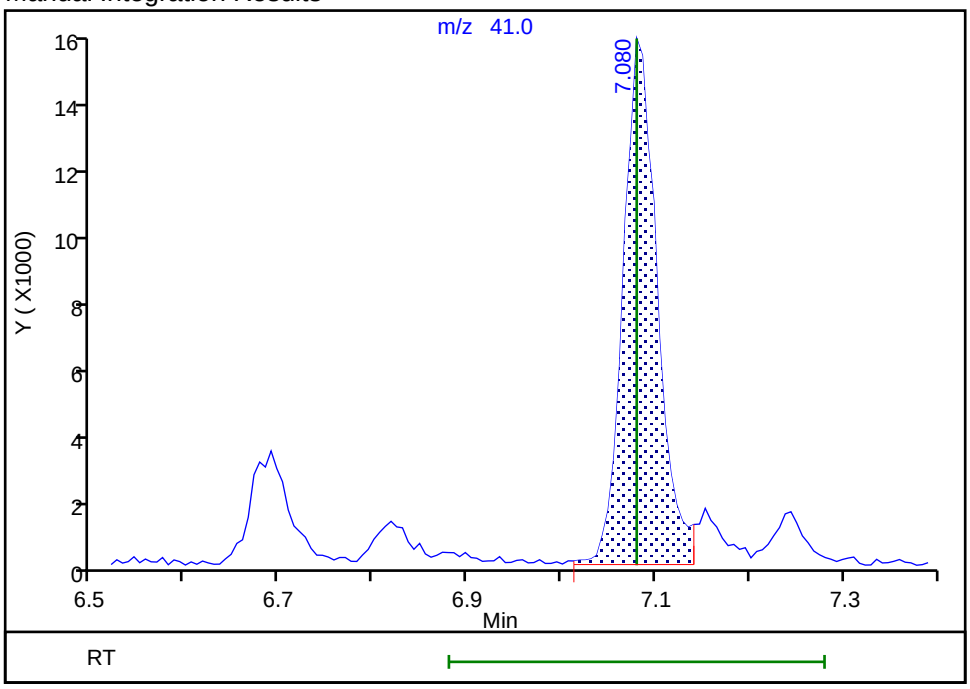
Processing Integration Results

RT: 6.82
Area: 3353
Amount: 19.278286
Amount Units: ug/l



Manual Integration Results

RT: 7.08
Area: 38838
Amount: 219.7866
Amount Units: ug/l



Reviewer: parekhv, 03-May-2018 18:26:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516291/2 Calibration Date: 05/03/2018 21:55

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1279	0.0686		10.7	20.0	-46.4*	20.0
Dichlorodifluoromethane	Ave	0.3854	0.3675	0.1000	19.1	20.0	-4.6	20.0
Chloromethane	Ave	0.3697	0.3512	0.1000	19.0	20.0	-5.0	20.0
Vinyl chloride	Ave	0.4154	0.3851	0.1000	18.5	20.0	-7.3	20.0
Butadiene	Ave	0.3665	0.3835		20.9	20.0	4.6	20.0
Bromomethane	Ave	1.229	0.8880	0.1000	14.5	20.0	-27.7	50.0
Chloroethane	Ave	0.2368	0.2164	0.1000	18.3	20.0	-8.6	50.0
Pentane	Ave	1.725	2.135		49.5	40.0	23.8*	20.0
Trichlorofluoromethane	Ave	0.4059	0.4416	0.1000	21.8	20.0	8.8	20.0
Dichlorofluoromethane	Ave	0.5414	0.5882		21.7	20.0	8.7	20.0
2-Methyl-1,3-butadiene	Ave	0.4037	0.4137		20.5	20.0	2.5	20.0
Ethyl ether	Ave	0.2720	0.2695		19.8	20.0	-0.9	20.0
Ethanol	Ave	0.0647	0.0693		857	800	7.1	50.0
1,1-Dichloroethene	Ave	0.2468	0.2385	0.1000	19.3	20.0	-3.3	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3655	0.3752		20.5	20.0	2.7	20.0
Carbon disulfide	Ave	0.9758	0.8778	0.1000	18.0	20.0	-10.0	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2550	0.2544	0.1000	19.9	20.0	-0.3	20.0
Iodomethane	QuaF		0.1053		6.83	20.0	-65.8*	20.0
Cyclopentene	Ave	0.7027	0.7022		20.0	20.0	-0.0	20.0
Acrolein	Ave	1.112	1.688		60.7	40.0	51.8*	50.0
Allyl chloride	Ave	0.1749	0.1689		19.3	20.0	-3.4	20.0
Isopropyl alcohol	Ave	0.8636	0.8050		186	200	-6.8	50.0
Methylene Chloride	Ave	0.3184	0.3106	0.1000	19.5	20.0	-2.4	20.0
Acetone	Ave	0.7304	0.6713	0.0500	91.9	100	-8.1	50.0
trans-1,2-Dichloroethene	Ave	0.2939	0.2742	0.1000	18.7	20.0	-6.7	20.0
Methyl acetate	Ave	0.2596	0.2445	0.1000	37.7	40.0	-5.8	20.0
Hexane	Ave	0.0782	0.0817		20.9	20.0	4.5	20.0
Methyl tert-butyl ether	Ave	0.9326	0.8755	0.1000	18.8	20.0	-6.1	20.0
2-Methyl-2-propanol	Ave	1.246	1.205		193	200	-3.3	50.0
Acetonitrile	Ave	1.511	1.843		244	200	22.0*	20.0
Isopropyl ether	Ave	1.207	1.240		20.5	20.0	2.7	20.0
2-Chloro-1,3-butadiene	Ave	0.2668	0.2612		19.6	20.0	-2.1	20.0
1,1-Dichloroethane	Ave	0.5753	0.5864	0.2000	20.4	20.0	1.9	20.0
Acrylonitrile	Ave	0.1373	0.1264		184	200	-7.9	20.0
Tert-butyl ethyl ether	Ave	1.080	1.056		19.6	20.0	-2.2	20.0
Vinyl acetate	Ave	0.8169	0.8107		39.7	40.0	-0.8	20.0
cis-1,2-Dichloroethene	Ave	0.3394	0.3310	0.1000	19.5	20.0	-2.5	20.0
2,2-Dichloropropane	Ave	0.4923	0.4672		19.0	20.0	-5.1	20.0
Chlorobromomethane	Ave	0.1494	0.1550		20.7	20.0	3.7	20.0
Cyclohexane	Ave	0.5987	0.6123	0.1000	20.5	20.0	2.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516291/2 Calibration Date: 05/03/2018 21:55

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	0.5557	0.5576	0.2000	20.1	20.0	0.3	20.0
Carbon tetrachloride	Ave	0.3877	0.3568	0.1000	18.4	20.0	-8.0	20.0
Ethyl acetate	Ave	0.3046	0.2798		36.7	40.0	-8.1	20.0
Methyl acrylate	Ave	0.3220	0.2868		17.8	20.0	-10.9	20.0
Tetrahydrofuran	Ave	1.047	1.071		40.9	40.0	2.3	20.0
1,1,1-Trichloroethane	Ave	0.4773	0.4521	0.1000	18.9	20.0	-5.3	20.0
1,1-Dichloropropene	Ave	0.4744	0.4670		19.7	20.0	-1.6	20.0
2-Butanone (MEK)	Ave	0.3056	0.2934	0.0500	96.0	100	-4.0	50.0
2,2,4-Trimethylpentane	Ave	1.175	1.229		20.9	20.0	4.6	20.0
n-Heptane	Ave	0.3213	0.3465		21.6	20.0	7.8	20.0
Benzene	Ave	1.585	1.530	0.5000	19.3	20.0	-3.5	20.0
Propionitrile	Ave	1.764	1.944		220	200	10.2	20.0
Methacrylonitrile	Ave	0.1400	0.1331		190	200	-5.0	20.0
Tert-amyl methyl ether	Ave	0.995	0.9246		18.6	20.0	-7.1	20.0
1,2-Dichloroethane	Ave	0.4931	0.4532	0.1000	18.4	20.0	-8.1	20.0
Isobutyl alcohol	Ave	0.5427	0.4449		410	500	-18.0	50.0
Isopropyl acetate	Ave	0.7175	0.6077		16.9	20.0	-15.3	20.0
Methylcyclohexane	Ave	0.5723	0.5958	0.1000	20.8	20.0	4.1	50.0
Trichloroethene	Ave	0.3095	0.3055	0.2000	19.7	20.0	-1.3	20.0
Dibromomethane	Ave	0.2017	0.1926		19.1	20.0	-4.5	20.0
n-Butanol	Ave	0.3249	0.2589		398	500	-20.3	50.0
1,2-Dichloropropane	Ave	0.3510	0.3465	0.1000	19.7	20.0	-1.3	20.0
Dichlorobromomethane	Ave	0.4271	0.3998	0.2000	18.7	20.0	-6.4	20.0
Ethyl acrylate	Ave	0.4470	0.3885		17.4	20.0	-13.1	20.0
Methyl methacrylate	Ave	0.0855	0.0797		37.3	40.0	-6.8	20.0
1,4-Dioxane	Ave	1.267	1.164		368	400	-8.1	50.0
n-Propyl acetate	Ave	0.5133	0.4391		17.1	20.0	-14.5	20.0
2-Chloroethyl vinyl ether	Ave	0.2351	0.2230		19.0	20.0	-5.2	20.0
cis-1,3-Dichloropropene	Ave	0.6385	0.5561	0.2000	17.4	20.0	-12.9	50.0
Toluene	Ave	1.736	1.638	0.4000	18.9	20.0	-5.6	20.0
Epichlorohydrin	Ave	0.2453	0.2409		393	400	-1.8	20.0
2-Nitropropane	Ave	0.1003	0.0666		26.6	40.0	-33.6*	20.0
Tetrachloroethene	Ave	0.3647	0.3739	0.2000	20.5	20.0	2.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.519	2.626	0.0500	104	100	4.2	50.0
trans-1,3-Dichloropropene	Ave	0.5883	0.5075	0.1000	17.3	20.0	-13.7	50.0
1,1,2-Trichloroethane	Ave	0.2956	0.2736	0.1000	18.5	20.0	-7.4	20.0
Ethyl methacrylate	Ave	0.4358	0.4008		18.4	20.0	-8.0	20.0
Chlorodibromomethane	Ave	0.3580	0.3026	0.1000	16.9	20.0	-15.5	50.0
1,3-Dichloropropane	Ave	0.6092	0.5740		18.8	20.0	-5.8	20.0
Ethylene Dibromide	Ave	0.3381	0.3117	0.1000	18.4	20.0	-7.8	20.0
n-Butyl acetate	Ave	0.7020	0.5491		15.6	20.0	-21.8*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516291/2 Calibration Date: 05/03/2018 21:55

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Hexanone	Ave	1.771	1.750	0.0500	98.8	100	-1.2	50.0
Chlorobenzene	Ave	1.044	0.998	0.5000	19.1	20.0	-4.4	20.0
Ethylbenzene	Ave	0.5765	0.5565	0.1000	19.3	20.0	-3.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3429	0.3090		18.0	20.0	-9.9	20.0
m-Xylene & p-Xylene	Ave	0.6974	0.6701	0.1000	19.2	20.0	-3.9	20.0
o-Xylene	Ave	0.6817	0.6438	0.3000	18.9	20.0	-5.6	20.0
Bromoform	Ave	0.2257	0.1745	0.1000	15.5	20.0	-22.7*	20.0
Styrene	Ave	1.142	1.101	0.3000	19.3	20.0	-3.6	20.0
n-Butyl acrylate	Ave	0.2978	0.2445		16.4	20.0	-17.9	20.0
Isopropylbenzene	Ave	1.838	1.757	0.1000	19.1	20.0	-4.4	20.0
Amyl acetate (mixed isomers)	Ave	1.561	1.197		15.3	20.0	-23.3*	20.0
Bromobenzene	Ave	0.8145	0.7584		18.6	20.0	-6.9	20.0
N-Propylbenzene	Ave	4.204	3.860		18.4	20.0	-8.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8807	0.7146	0.3000	16.2	20.0	-18.9	20.0
2-Chlorotoluene	Ave	2.861	2.620		18.3	20.0	-8.5	20.0
4-Ethyltoluene	Ave	3.416	3.190		18.7	20.0	-6.6	20.0
1,2,3-Trichloropropane	Ave	0.2510	0.2106		16.8	20.0	-16.1	20.0
1,3,5-Trimethylbenzene	Ave	2.917	2.687		18.4	20.0	-7.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3114	0.1944		12.5	20.0	-37.6*	20.0
4-Chlorotoluene	Ave	2.639	2.396		18.2	20.0	-9.2	20.0
tert-Butylbenzene	Ave	2.401	2.215		18.4	20.0	-7.8	20.0
1,2,4-Trimethylbenzene	Ave	2.900	2.711		18.7	20.0	-6.5	20.0
Butyl Methacrylate	Ave	1.025	0.8338		16.3	20.0	-18.6	20.0
sec-Butylbenzene	Ave	3.739	3.412		18.3	20.0	-8.7	20.0
1,3-Dichlorobenzene	Ave	1.543	1.460	0.6000	18.9	20.0	-5.4	20.0
4-Isopropyltoluene	Ave	3.103	2.885		18.6	20.0	-7.0	20.0
1,4-Dichlorobenzene	Ave	1.671	1.510	0.5000	18.1	20.0	-9.7	20.0
1,2,3-Trimethylbenzene	Ave	3.053	2.801		18.3	20.0	-8.3	20.0
Indan	Ave	2.951	2.753		18.7	20.0	-6.7	20.0
Benzyl chloride	Ave	0.3228	0.2097		13.0	20.0	-35.0	50.0
p-Diethylbenzene	Ave	1.650	1.544		18.7	20.0	-6.4	20.0
n-Butylbenzene	Ave	2.968	2.740		18.5	20.0	-7.7	20.0
1,2-Dichlorobenzene	Ave	1.473	1.402	0.4000	19.0	20.0	-4.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.673	2.526		18.9	20.0	-5.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1594	0.1187	0.0500	14.9	20.0	-25.5	50.0
1,3,5-Trichlorobenzene	Ave	1.108	1.086		19.6	20.0	-1.9	20.0
1,2,4-Trichlorobenzene	Ave	0.9778	0.9237	0.2000	18.9	20.0	-5.5	20.0
Hexachlorobutadiene	Ave	0.4797	0.4792		20.0	20.0	-0.1	20.0
Naphthalene	Ave	2.207	1.680		15.2	20.0	-23.9	50.0
1,2,3-Trichlorobenzene	Ave	0.8841	0.7954		18.0	20.0	-10.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2648	0.2862		54.0	50.0	8.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516291/2 Calibration Date: 05/03/2018 21:55

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.3621	0.3661		50.5	50.0	1.1	20.0
Toluene-d8 (Surr)	Ave	1.369	1.386		50.6	50.0	1.2	20.0
4-Bromofluorobenzene	Ave	0.3909	0.4109		52.6	50.0	5.1	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44701.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-May-2018 21:55:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0071476-002
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:06 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: starzecm Date: 03-May-2018 23:39:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.856	0.856	0.000	90	15279	20.0	10.7	
2 Dichlorodifluoromethane	85	0.871	0.871	0.000	99	81835	20.0	19.1	
4 Chloromethane	50	0.978	0.978	0.000	98	78205	20.0	19.0	
5 Vinyl chloride	62	1.007	1.007	0.000	98	85764	20.0	18.5	
3 Butadiene	54	1.014	1.014	0.000	98	85396	20.0	20.9	
6 Bromomethane	94	1.164	1.164	0.000	98	24239	20.0	14.5	
7 Chloroethane	64	1.229	1.229	0.000	99	48189	20.0	18.3	
9 Pentane	72	1.293	1.293	0.000	96	22272	40.0	49.5	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	96	98335	20.0	21.8	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	130996	20.0	21.7	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	99	92138	20.0	20.5	
12 Ethyl ether	59	1.458	1.458	0.000	95	60008	20.0	19.8	
13 Ethanol	46	1.537	1.537	0.000	100	14462	800.0	856.9	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	95	53120	20.0	19.3	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	85	83559	20.0	20.5	
16 Carbon disulfide	76	1.573	1.573	0.000	100	195480	20.0	18.0	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	94	56642	20.0	19.9	
18 Iodomethane	142	1.637	1.637	0.000	99	23456	20.0	6.83	
19 Cyclopentene	67	1.723	1.723	0.000	97	156371	20.0	20.0	
20 Acrolein	56	1.737	1.737	0.000	96	17612	40.0	60.7	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	91	37606	20.0	19.3	
22 Isopropyl alcohol	45	1.838	1.838	0.000	97	41988	200.0	186.4	
23 Methylene Chloride	84	1.881	1.881	0.000	99	69174	20.0	19.5	
24 Acetone	43	1.902	1.902	0.000	85	91624	100.0	91.9	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	61067	20.0	18.7	
26 Methyl acetate	43	1.981	1.981	0.000	99	108880	40.0	37.7	
27 Hexane	86	2.017	2.017	0.000	95	18187	20.0	20.9	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	92	194959	20.0	18.8	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	260808	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	0.000	99	62847	200.0	193.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.174	2.174	0.000	100	96131	200.0	244.0	
32 Isopropyl ether	45	2.267	2.267	0.000	97	276126	20.0	20.5	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	93	58164	20.0	19.6	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	100	130589	20.0	20.4	
35 Acrylonitrile	53	2.375	2.375	0.000	94	281498	200.0	184.2	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	235115	20.0	19.6	
37 Vinyl acetate	43	2.511	2.511	0.000	100	361066	40.0	39.7	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	73717	20.0	19.5	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	104053	20.0	19.0	
40 Cyclohexane	56	2.833	2.833	0.000	95	136346	20.0	20.5	
41 Chlorobromomethane	128	2.833	2.833	0.000	95	34519	20.0	20.7	
42 Chloroform	83	2.898	2.898	0.000	98	124170	20.0	20.1	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	79462	20.0	18.4	
44 Ethyl acetate	70	2.998	2.998	0.000	98	15274	40.0	36.7	
45 Methyl acrylate	55	2.998	2.998	0.000	96	63873	20.0	17.8	
46 Tetrahydrofuran	42	3.005	3.005	0.000	94	58464	40.0	40.9	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	97	159346	50.0	54.0	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	97	100669	20.0	18.9	
* 49 2-Butanone-d5	46	3.084	3.084	0.000	0	341207	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	98	40041	100.0	96.0	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	95	103989	20.0	19.7	
52 Isooctane	57	3.220	3.220	0.000	98	273770	20.0	20.9	
53 n-Heptane	57	3.313	3.313	0.000	94	77163	20.0	21.6	
54 Benzene	78	3.320	3.320	0.000	96	295857	20.0	19.3	
55 Propionitrile	54	3.342	3.342	0.000	99	101425	200.0	220.5	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	296323	200.0	190.1	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	203793	50.0	50.5	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	205907	20.0	18.6	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	100920	20.0	18.4	
60 Isobutyl alcohol	43	3.557	3.557	0.000	99	58018	500.0	409.9	
61 t-Amyl alcohol	59	3.628	3.628	0.000	94	38822	200.0	148.7	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	556740	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	135329	20.0	16.9	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	132672	20.0	20.8	
65 Trichloroethene	130	3.815	3.815	0.000	97	68036	20.0	19.7	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	91	188870	20.0	18.7	
67 Dibromomethane	93	4.187	4.187	0.000	97	42887	20.0	19.1	
68 n-Butanol	56	4.201	4.201	0.000	91	33765	500.0	398.4	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	77155	20.0	19.7	
70 Ethyl acrylate	55	4.359	4.359	0.000	97	86526	20.0	17.4	
71 Dichlorobromomethane	83	4.359	4.359	0.000	98	89038	20.0	18.7	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	30049	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.552	0.000	94	35490	40.0	37.3	
74 1,4-Dioxane	88	4.574	4.574	0.000	95	13996	400.0	367.7	
75 n-Propyl acetate	43	4.710	4.710	0.000	99	97775	20.0	17.1	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	49651	20.0	19.0	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	97	107546	20.0	17.4	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	99	669978	50.0	50.6	
79 Toluene	91	5.262	5.262	0.000	93	316849	20.0	18.9	
80 Epichlorohydrin	57	5.290	5.290	0.000	98	131504	400.0	392.9	
81 2-Nitropropane	41	5.519	5.519	0.000	99	29663	40.0	26.6	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	72313	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.734	0.000	98	358339	100.0	104.2	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	94	98139	20.0	17.3	
85 1,1,2-Trichloroethane	83	5.942	5.942	0.000	94	52918	20.0	18.5	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	89245	20.0	18.4	
87 Chlorodibromomethane	129	6.135	6.135	0.000	97	58520	20.0	16.9	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	97	111005	20.0	18.8	
89 Ethylene Dibromide	107	6.386	6.386	0.000	97	60272	20.0	18.4	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	106188	20.0	15.6	
91 2-Hexanone	43	6.794	6.794	0.000	98	238790	100.0	98.8	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	483464	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	94	193012	20.0	19.1	
94 Ethylbenzene	106	7.181	7.181	0.000	99	107619	20.0	19.3	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	59751	20.0	18.0	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	129579	20.0	19.2	
97 o-Xylene	106	7.991	7.991	0.000	93	124503	20.0	18.9	
98 Bromoform	173	8.055	8.055	0.000	95	33752	20.0	15.5	
99 Styrene	104	8.077	8.077	0.000	94	212895	20.0	19.3	
100 n-Butyl acrylate	73	8.406	8.406	0.000	96	47283	20.0	16.4	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	339734	20.0	19.1	
102 Amyl acetate (mixed isomer	43	8.822	8.822	0.000	89	129163	20.0	15.3	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	87	198644	50.0	52.6	
104 Bromobenzene	156	8.958	8.958	0.000	96	81823	20.0	18.6	
105 N-Propylbenzene	91	9.108	9.108	0.000	99	416494	20.0	18.4	
106 1,1,2,2-Tetrachloroethane	83	9.259	9.259	0.000	98	77100	20.0	16.2	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	282644	20.0	18.3	
108 4-Ethyltoluene	105	9.302	9.302	0.000	98	344143	20.0	18.7	
109 1,2,3-Trichloropropane	110	9.395	9.395	0.000	97	22722	20.0	16.8	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	289865	20.0	18.4	
111 trans-1,4-Dichloro-2-buten	53	9.524	9.524	0.000	80	20976	20.0	12.5	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	258501	20.0	18.2	
113 tert-Butylbenzene	119	9.925	9.925	0.000	93	238948	20.0	18.4	
115 1,2,4-Trimethylbenzene	105	10.054	10.054	0.000	95	292464	20.0	18.7	
114 Butyl Methacrylate	87	10.054	10.054	0.000	58	89956	20.0	16.3	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	368151	20.0	18.3	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	95	157506	20.0	18.9	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	311262	20.0	18.6	
* 119 1,4-Dichlorobenzene-d4	152	10.620	10.620	0.000	96	269733	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.634	0.000	94	162871	20.0	18.1	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	302156	20.0	18.3	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	297079	20.0	18.7	
122 Benzyl chloride	126	11.092	11.092	0.000	97	22626	20.0	13.0	
123 p-Diethylbenzene	119	11.107	11.107	0.000	93	166617	20.0	18.7	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	295573	20.0	18.5	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	151300	20.0	19.0	
126 1,2,4,5-Tetramethylbenzene	119	12.203	12.203	0.000	97	272572	20.0	18.9	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	93	12804	20.0	14.9	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	117191	20.0	19.6	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	99660	20.0	18.9	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	51700	20.0	20.0	
131 Naphthalene	128	13.356	13.356	0.000	99	181286	20.0	15.2	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	95	85815	20.0	18.0	
S 133 1,2-Dichloroethene, Total	100				0		40.0	38.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		40.0	34.7	
S 135 Xylenes, Total	100				0		40.0	38.1	
S 137 Total BTEX	1				0		100.0	95.6	

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 08:41:09 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44701.D

Injection Date: 03-May-2018 21:55:30 Instrument ID: CVOAMS13 Operator ID:

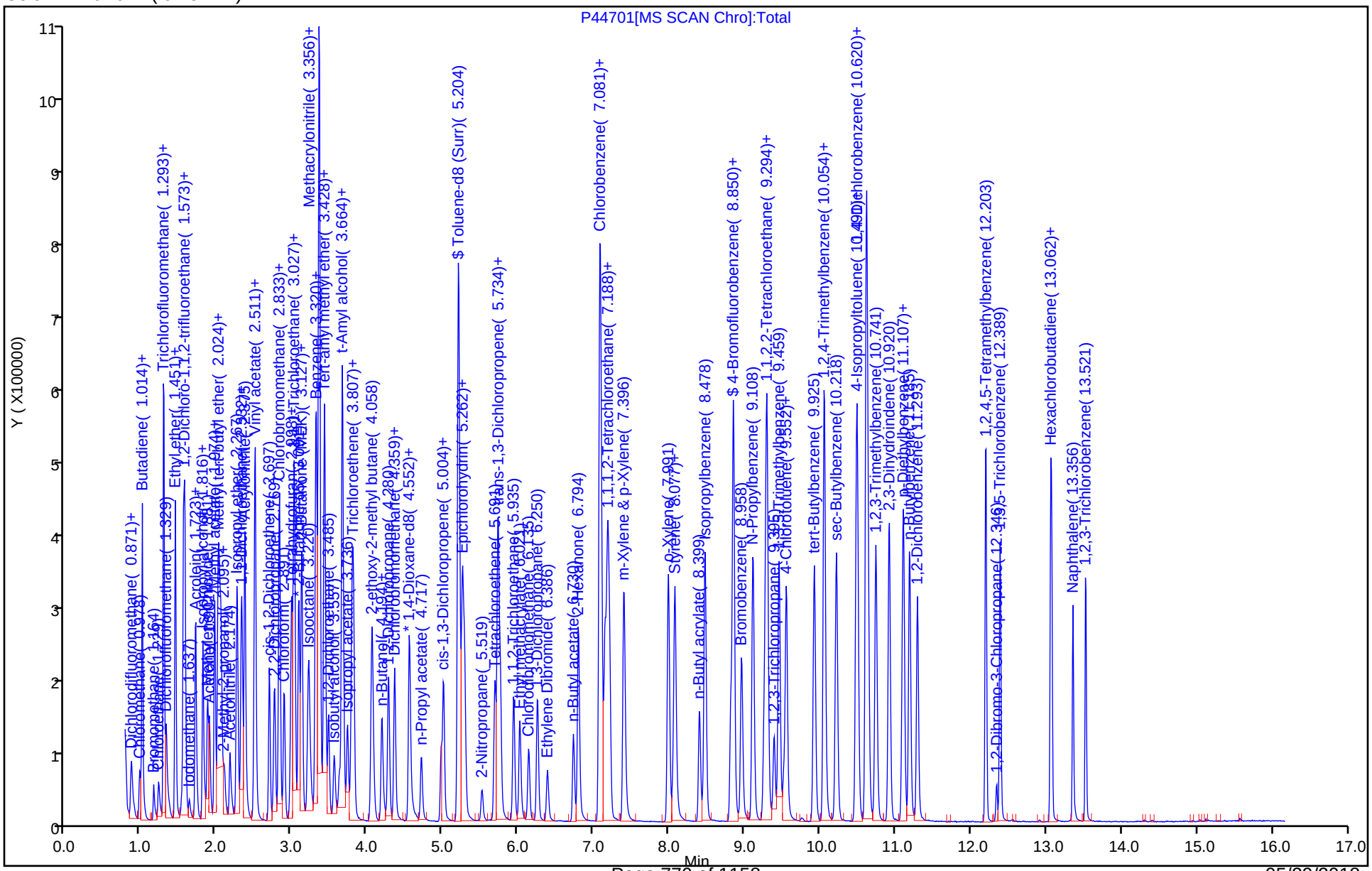
Lims ID: CCVIS Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516419/2 Calibration Date: 05/04/2018 09:38

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44729.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1279	0.0754		11.8	20.0	-41.0*	20.0
Dichlorodifluoromethane	Ave	0.3854	0.3531	0.1000	18.3	20.0	-8.4	20.0
Chloromethane	Ave	0.3697	0.4075	0.1000	22.0	20.0	10.2	20.0
Vinyl chloride	Ave	0.4154	0.4255	0.1000	20.5	20.0	2.4	20.0
Butadiene	Ave	0.3665	0.3972		21.7	20.0	8.4	20.0
Bromomethane	Ave	1.229	1.015	0.1000	16.5	20.0	-17.4	50.0
Chloroethane	Ave	0.2368	0.2541	0.1000	21.5	20.0	7.3	50.0
Pentane	Ave	1.725	1.699		39.4	40.0	-1.5	20.0
Trichlorofluoromethane	Ave	0.4059	0.4467	0.1000	22.0	20.0	10.1	20.0
Dichlorofluoromethane	Ave	0.5414	0.6615		24.4	20.0	22.2*	20.0
2-Methyl-1,3-butadiene	Ave	0.4037	0.3791		18.8	20.0	-6.1	20.0
Ethyl ether	Ave	0.2720	0.2910		21.4	20.0	7.0	20.0
Ethanol	Ave	0.0647	0.0718		888	800	11.0	50.0
1,1-Dichloroethene	Ave	0.2468	0.2408	0.1000	19.5	20.0	-2.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3655	0.3736		20.4	20.0	2.2	20.0
Carbon disulfide	Ave	0.9758	0.8873	0.1000	18.2	20.0	-9.1	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2550	0.2225	0.1000	17.4	20.0	-12.8	20.0
Iodomethane	QuaF		0.1488		9.66	20.0	-51.7*	20.0
Cyclopentene	Ave	0.7027	0.6736		19.2	20.0	-4.1	20.0
Acrolein	Ave	1.112	2.054		73.9	40.0	84.7*	50.0
Allyl chloride	Ave	0.1749	0.1768		20.2	20.0	1.1	20.0
Isopropyl alcohol	Ave	0.8636	0.8228		191	200	-4.7	50.0
Methylene Chloride	Ave	0.3184	0.3319	0.1000	20.8	20.0	4.2	20.0
Acetone	Ave	0.7304	0.7147	0.0500	97.8	100	-2.2	50.0
trans-1,2-Dichloroethene	Ave	0.2939	0.2920	0.1000	19.9	20.0	-0.6	20.0
Methyl acetate	Ave	0.2596	0.2620	0.1000	40.4	40.0	0.9	20.0
Hexane	Ave	0.0782	0.0674		17.3	20.0	-13.7	20.0
Methyl tert-butyl ether	Ave	0.9326	0.9281	0.1000	19.9	20.0	-0.5	20.0
2-Methyl-2-propanol	Ave	1.246	1.233		198	200	-1.1	50.0
Acetonitrile	Ave	1.511	1.894		251	200	25.3*	20.0
Isopropyl ether	Ave	1.207	1.303		21.6	20.0	7.9	20.0
2-Chloro-1,3-butadiene	Ave	0.2668	0.2632		19.7	20.0	-1.4	20.0
1,1-Dichloroethane	Ave	0.5753	0.6359	0.2000	22.1	20.0	10.5	20.0
Acrylonitrile	Ave	0.1373	0.1369		199	200	-0.3	20.0
Tert-butyl ethyl ether	Ave	1.080	1.157		21.4	20.0	7.2	20.0
Vinyl acetate	Ave	0.8169	0.8504		41.6	40.0	4.1	20.0
cis-1,2-Dichloroethene	Ave	0.3394	0.3710	0.1000	21.9	20.0	9.3	20.0
2,2-Dichloropropane	Ave	0.4923	0.4796		19.5	20.0	-2.6	20.0
Cyclohexane	Ave	0.5987	0.5292	0.1000	17.7	20.0	-11.6	50.0
Chlorobromomethane	Ave	0.1494	0.1640		22.0	20.0	9.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516419/2 Calibration Date: 05/04/2018 09:38

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44729.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	0.5557	0.5992	0.2000	21.6	20.0	7.8	20.0
Carbon tetrachloride	Ave	0.3877	0.3464	0.1000	17.9	20.0	-10.6	20.0
Ethyl acetate	Ave	0.3046	0.2796		36.7	40.0	-8.2	20.0
Methyl acrylate	Ave	0.3220	0.3047		18.9	20.0	-5.4	20.0
Tetrahydrofuran	Ave	1.047	1.121		42.8	40.0	7.1	20.0
1,1,1-Trichloroethane	Ave	0.4773	0.4706	0.1000	19.7	20.0	-1.4	20.0
1,1-Dichloropropene	Ave	0.4744	0.4687		19.8	20.0	-1.2	20.0
2-Butanone (MEK)	Ave	0.3056	0.3004	0.0500	98.3	100	-1.7	50.0
2,2,4-Trimethylpentane	Ave	1.175	1.038		17.7	20.0	-11.6	20.0
n-Heptane	Ave	0.3213	0.2786		17.3	20.0	-13.3	20.0
Benzene	Ave	1.585	1.631	0.5000	20.6	20.0	2.9	20.0
Propionitrile	Ave	1.764	1.893		215	200	7.3	20.0
Methacrylonitrile	Ave	0.1400	0.1443		206	200	3.1	20.0
Tert-amyl methyl ether	Ave	0.995	0.999		20.1	20.0	0.3	20.0
1,2-Dichloroethane	Ave	0.4931	0.4824	0.1000	19.6	20.0	-2.2	20.0
Isobutyl alcohol	Ave	0.5427	0.4741		437	500	-12.6	50.0
Isopropyl acetate	Ave	0.7175	0.6606		18.4	20.0	-7.9	20.0
Methylcyclohexane	Ave	0.5723	0.5084	0.1000	17.8	20.0	-11.2	50.0
Trichloroethene	Ave	0.3095	0.3253	0.2000	21.0	20.0	5.1	20.0
Dibromomethane	Ave	0.2017	0.2107		20.9	20.0	4.5	20.0
n-Butanol	Ave	0.3249	0.2662		410	500	-18.1	50.0
1,2-Dichloropropane	Ave	0.3510	0.3728	0.1000	21.2	20.0	6.2	20.0
Dichlorobromomethane	Ave	0.4271	0.4349	0.2000	20.4	20.0	1.8	20.0
Ethyl acrylate	Ave	0.4470	0.4255		19.0	20.0	-4.8	20.0
Methyl methacrylate	Ave	0.0855	0.0824		38.5	40.0	-3.7	20.0
1,4-Dioxane	Ave	1.267	1.279		404	400	1.0	50.0
n-Propyl acetate	Ave	0.5133	0.4783		18.6	20.0	-6.8	20.0
2-Chloroethyl vinyl ether	Ave	0.2351	0.2368		20.1	20.0	0.7	20.0
cis-1,3-Dichloropropene	Ave	0.6385	0.6104	0.2000	19.1	20.0	-4.4	50.0
Toluene	Ave	1.736	1.728	0.4000	19.9	20.0	-0.4	20.0
Epichlorohydrin	Ave	0.2453	0.2534		413	400	3.3	20.0
2-Nitropropane	Ave	0.1003	0.0710		28.3	40.0	-29.2*	20.0
Tetrachloroethene	Ave	0.3647	0.3743	0.2000	20.5	20.0	2.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.519	2.682	0.0500	106	100	6.5	50.0
trans-1,3-Dichloropropene	Ave	0.5883	0.5540	0.1000	18.8	20.0	-5.8	50.0
1,1,2-Trichloroethane	Ave	0.2956	0.2898	0.1000	19.6	20.0	-2.0	20.0
Ethyl methacrylate	Ave	0.4358	0.4286		19.7	20.0	-1.7	20.0
Chlorodibromomethane	Ave	0.3580	0.3294	0.1000	18.4	20.0	-8.0	50.0
1,3-Dichloropropane	Ave	0.6092	0.6143		20.2	20.0	0.8	20.0
Ethylene Dibromide	Ave	0.3381	0.3279	0.1000	19.4	20.0	-3.0	20.0
n-Butyl acetate	Ave	0.7020	0.5797		16.5	20.0	-17.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516419/2 Calibration Date: 05/04/2018 09:38

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44729.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Hexanone	Ave	1.771	1.815	0.0500	102	100	2.5	50.0
Chlorobenzene	Ave	1.044	1.067	0.5000	20.4	20.0	2.2	20.0
Ethylbenzene	Ave	0.5765	0.5874	0.1000	20.4	20.0	1.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3429	0.3251		19.0	20.0	-5.2	20.0
m-Xylene & p-Xylene	Ave	0.6974	0.7077	0.1000	20.3	20.0	1.5	20.0
o-Xylene	Ave	0.6817	0.6800	0.3000	19.9	20.0	-0.3	20.0
Bromoform	Ave	0.2257	0.1877	0.1000	16.6	20.0	-16.8	20.0
Styrene	Ave	1.142	1.143	0.3000	20.0	20.0	0.0	20.0
n-Butyl acrylate	Ave	0.2978	0.2466		16.6	20.0	-17.2	20.0
Isopropylbenzene	Ave	1.838	1.827	0.1000	19.9	20.0	-0.6	20.0
Amyl acetate (mixed isomers)	Ave	1.561	1.235		15.8	20.0	-20.9*	20.0
Bromobenzene	Ave	0.8145	0.7871		19.3	20.0	-3.4	20.0
N-Propylbenzene	Ave	4.204	3.868		18.4	20.0	-8.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8807	0.7548	0.3000	17.1	20.0	-14.3	20.0
2-Chlorotoluene	Ave	2.861	2.697		18.9	20.0	-5.7	20.0
4-Ethyltoluene	Ave	3.416	3.237		18.9	20.0	-5.3	20.0
1,2,3-Trichloropropane	Ave	0.2510	0.2326		18.5	20.0	-7.3	20.0
1,3,5-Trimethylbenzene	Ave	2.917	2.715		18.6	20.0	-6.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3114	0.2101		13.5	20.0	-32.5*	20.0
4-Chlorotoluene	Ave	2.639	2.466		18.7	20.0	-6.6	20.0
tert-Butylbenzene	Ave	2.401	2.243		18.7	20.0	-6.6	20.0
1,2,4-Trimethylbenzene	Ave	2.900	2.767		19.1	20.0	-4.6	20.0
Butyl Methacrylate	Ave	1.025	0.8606		16.8	20.0	-16.0	20.0
sec-Butylbenzene	Ave	3.739	3.396		18.2	20.0	-9.2	20.0
1,3-Dichlorobenzene	Ave	1.543	1.507	0.6000	19.5	20.0	-2.4	20.0
4-Isopropyltoluene	Ave	3.103	2.902		18.7	20.0	-6.5	20.0
1,4-Dichlorobenzene	Ave	1.671	1.568	0.5000	18.8	20.0	-6.2	20.0
1,2,3-Trimethylbenzene	Ave	3.053	2.893		19.0	20.0	-5.2	20.0
Indan	Ave	2.951	2.844		19.3	20.0	-3.6	20.0
Benzyl chloride	Ave	0.3228	0.2114		13.1	20.0	-34.5	50.0
p-Diethylbenzene	Ave	1.650	1.537		18.6	20.0	-6.9	20.0
n-Butylbenzene	Ave	2.968	2.758		18.6	20.0	-7.1	20.0
1,2-Dichlorobenzene	Ave	1.473	1.447	0.4000	19.6	20.0	-1.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.673	2.588		19.4	20.0	-3.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1594	0.1233	0.0500	15.5	20.0	-22.7	50.0
1,3,5-Trichlorobenzene	Ave	1.108	1.112		20.1	20.0	0.4	20.0
1,2,4-Trichlorobenzene	Ave	0.9778	0.9534	0.2000	19.5	20.0	-2.5	20.0
Hexachlorobutadiene	Ave	0.4797	0.4703		19.6	20.0	-1.9	20.0
Naphthalene	Ave	2.207	1.776		16.1	20.0	-19.5	50.0
1,2,3-Trichlorobenzene	Ave	0.8841	0.8247		18.7	20.0	-6.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2648	0.2868		54.1	50.0	8.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516419/2 Calibration Date: 05/04/2018 09:38

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44729.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.3621	0.3625		50.0	50.0	0.0	20.0
Toluene-d8 (Surr)	Ave	1.369	1.360		49.6	50.0	-0.7	20.0
4-Bromofluorobenzene	Ave	0.3909	0.4053		51.8	50.0	3.7	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44729.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 04-May-2018 09:38:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0071500-002
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 11:52:05 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 09:31:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.856	0.856	0.000	89	16517	20.0	11.8	
2 Dichlorodifluoromethane	85	0.871	0.871	0.000	99	77352	20.0	18.3	
4 Chloromethane	50	0.978	0.978	0.000	99	89276	20.0	22.0	
5 Vinyl chloride	62	1.007	1.007	0.000	97	93219	20.0	20.5	
3 Butadiene	54	1.014	1.014	0.000	98	87019	20.0	21.7	
6 Bromomethane	94	1.164	1.164	0.000	98	28439	20.0	16.5	
7 Chloroethane	64	1.229	1.229	0.000	100	55657	20.0	21.5	
9 Pentane	72	1.293	1.293	0.000	96	18606	40.0	39.4	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	97	97866	20.0	22.0	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	144915	20.0	24.4	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	96	83045	20.0	18.8	
12 Ethyl ether	59	1.458	1.458	0.000	93	63738	20.0	21.4	
13 Ethanol	46	1.537	1.537	0.000	99	15733	800.0	887.9	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	94	52758	20.0	19.5	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	84	81848	20.0	20.4	
16 Carbon disulfide	76	1.573	1.573	0.000	100	194373	20.0	18.2	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	95	48738	20.0	17.4	
18 Iodomethane	142	1.637	1.637	0.000	99	32605	20.0	9.66	
19 Cyclopentene	67	1.723	1.723	0.000	96	147573	20.0	19.2	
20 Acrolein	56	1.737	1.737	0.000	94	22493	40.0	73.9	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	38741	20.0	20.2	
22 Isopropyl alcohol	45	1.845	1.845	0.000	96	45059	200.0	190.6	
23 Methylene Chloride	84	1.881	1.881	0.000	99	72715	20.0	20.8	
24 Acetone	43	1.902	1.902	0.000	85	100138	100.0	97.8	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	63960	20.0	19.9	
26 Methyl acetate	43	1.981	1.981	0.000	99	114779	40.0	40.4	
27 Hexane	86	2.017	2.017	0.000	95	14772	20.0	17.3	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	93	203309	20.0	19.9	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	273812	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	0.000	99	67502	200.0	197.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.174	2.174	0.000	99	103695	200.0	250.7	
32 Isopropyl ether	45	2.267	2.267	0.000	97	285345	20.0	21.6	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	93	57647	20.0	19.7	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	139315	20.0	22.1	
35 Acrylonitrile	53	2.375	2.375	0.000	93	299842	200.0	199.4	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	253513	20.0	21.4	
37 Vinyl acetate	43	2.511	2.511	0.000	100	372579	40.0	41.6	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	81281	20.0	21.9	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	105057	20.0	19.5	
40 Cyclohexane	56	2.826	2.826	0.000	95	115933	20.0	17.7	
41 Chlorobromomethane	128	2.833	2.833	0.000	96	35934	20.0	22.0	
42 Chloroform	83	2.898	2.898	0.000	98	131265	20.0	21.6	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	75892	20.0	17.9	
44 Ethyl acetate	70	2.991	2.991	0.000	98	15670	40.0	36.7	
45 Methyl acrylate	55	2.998	2.998	0.000	97	66748	20.0	18.9	
46 Tetrahydrofuran	42	3.005	3.005	0.000	93	62832	40.0	42.8	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	97	157056	50.0	54.1	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	98	103102	20.0	19.7	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	350303	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	98	42096	100.0	98.3	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	96	102680	20.0	19.8	
52 Isooctane	57	3.220	3.220	0.000	98	227457	20.0	17.7	
53 n-Heptane	57	3.313	3.313	0.000	96	61030	20.0	17.3	
54 Benzene	78	3.320	3.320	0.000	96	310635	20.0	20.6	
55 Propionitrile	54	3.342	3.342	0.000	94	103675	200.0	214.6	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	316166	200.0	206.2	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	198504	50.0	50.0	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	218808	20.0	20.1	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	105681	20.0	19.6	
60 Isobutyl alcohol	43	3.557	3.557	0.000	97	64910	500.0	436.8	
61 t-Amyl alcohol	59	3.628	3.628	0.000	95	44475	200.0	162.2	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	547672	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	144720	20.0	18.4	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	111376	20.0	17.8	
65 Trichloroethene	130	3.815	3.815	0.000	98	71255	20.0	21.0	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	92	196734	20.0	19.8	
67 Dibromomethane	93	4.187	4.187	0.000	96	46164	20.0	20.9	
68 n-Butanol	56	4.201	4.201	0.000	91	36437	500.0	409.5	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	88	81668	20.0	21.2	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	93205	20.0	19.0	
71 Dichlorobromomethane	83	4.359	4.359	0.000	99	95270	20.0	20.4	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	30354	1000.0	1000.0	
73 Methyl methacrylate	100	4.560	4.560	0.000	93	36101	40.0	38.5	
74 1,4-Dioxane	88	4.574	4.574	0.000	93	15526	400.0	403.8	
75 n-Propyl acetate	43	4.710	4.710	0.000	99	104778	20.0	18.6	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	97	51883	20.0	20.1	
77 cis-1,3-Dichloropropene	75	5.004	5.004	0.000	96	116263	20.0	19.1	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	647384	50.0	49.6	
79 Toluene	91	5.262	5.262	0.000	94	329205	20.0	19.9	
80 Epichlorohydrin	57	5.290	5.290	0.000	100	142021	400.0	413.3	
81 2-Nitropropane	41	5.519	5.519	0.000	99	31124	40.0	28.3	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	71292	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.734	0.000	98	375756	100.0	106.5	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	95	105519	20.0	18.8	
85 1,1,2-Trichloroethane	83	5.942	5.942	0.000	95	55194	20.0	19.6	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	93886	20.0	19.7	
87 Chlorodibromomethane	129	6.135	6.135	0.000	98	62741	20.0	18.4	
88 1,3-Dichloropropane	76	6.250	6.250	0.000	97	117000	20.0	20.2	
89 Ethylene Dibromide	107	6.386	6.386	0.000	99	62453	20.0	19.4	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	110403	20.0	16.5	
91 2-Hexanone	43	6.794	6.794	0.000	99	254288	100.0	102.5	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	90	476165	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	92	203139	20.0	20.4	
94 Ethylbenzene	106	7.181	7.181	0.000	99	111872	20.0	20.4	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	61921	20.0	19.0	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	134793	20.0	20.3	
97 o-Xylene	106	7.991	7.991	0.000	93	129514	20.0	19.9	
98 Bromoform	173	8.055	8.055	0.000	94	35745	20.0	16.6	
99 Styrene	104	8.077	8.077	0.000	94	217621	20.0	20.0	
100 n-Butyl acrylate	73	8.399	8.399	0.000	95	46969	20.0	16.6	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	347925	20.0	19.9	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	90	134354	20.0	15.8	
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	87	192990	50.0	51.8	
104 Bromobenzene	156	8.958	8.958	0.000	97	85619	20.0	19.3	
105 N-Propylbenzene	91	9.108	9.108	0.000	99	420720	20.0	18.4	
106 1,1,2,2-Tetrachloroethane	83	9.259	9.259	0.000	98	82105	20.0	17.1	
107 2-Chlorotoluene	91	9.287	9.287	0.000	97	293415	20.0	18.9	
108 4-Ethyltoluene	105	9.301	9.301	0.000	97	352064	20.0	18.9	
109 1,2,3-Trichloropropane	110	9.395	9.395	0.000	97	25300	20.0	18.5	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	93	295291	20.0	18.6	
111 trans-1,4-Dichloro-2-buten	53	9.524	9.524	0.000	82	22856	20.0	13.5	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	268262	20.0	18.7	
113 tert-Butylbenzene	119	9.925	9.925	0.000	93	243968	20.0	18.7	
115 1,2,4-Trimethylbenzene	105	10.054	10.054	0.000	96	301001	20.0	19.1	
114 Butyl Methacrylate	87	10.061	10.061	0.000	92	93611	20.0	16.8	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	369413	20.0	18.2	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	96	163916	20.0	19.5	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	315656	20.0	18.7	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	271944	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.634	0.000	94	170549	20.0	18.8	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	314724	20.0	19.0	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	309395	20.0	19.3	
122 Benzyl chloride	126	11.092	11.092	0.000	97	22997	20.0	13.1	
123 p-Diethylbenzene	119	11.107	11.107	0.000	92	167192	20.0	18.6	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	300051	20.0	18.6	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	157370	20.0	19.6	
126 1,2,4,5-Tetramethylbenzene	119	12.203	12.203	0.000	97	281569	20.0	19.4	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	94	13409	20.0	15.5	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	97	120932	20.0	20.1	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	103711	20.0	19.5	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	51163	20.0	19.6	
131 Naphthalene	128	13.356	13.356	0.000	99	193188	20.0	16.1	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	94	89713	20.0	18.7	
S 133 1,2-Dichloroethene, Total	100				0		40.0	41.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		40.0	38.0	
S 135 Xylenes, Total	100				0		40.0	40.2	
S 137 Total BTEX	1				0		100.0	101.1	

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 11:52:08 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44729.D

Injection Date: 04-May-2018 09:38:30 Instrument ID: CVOAMS13 Operator ID:

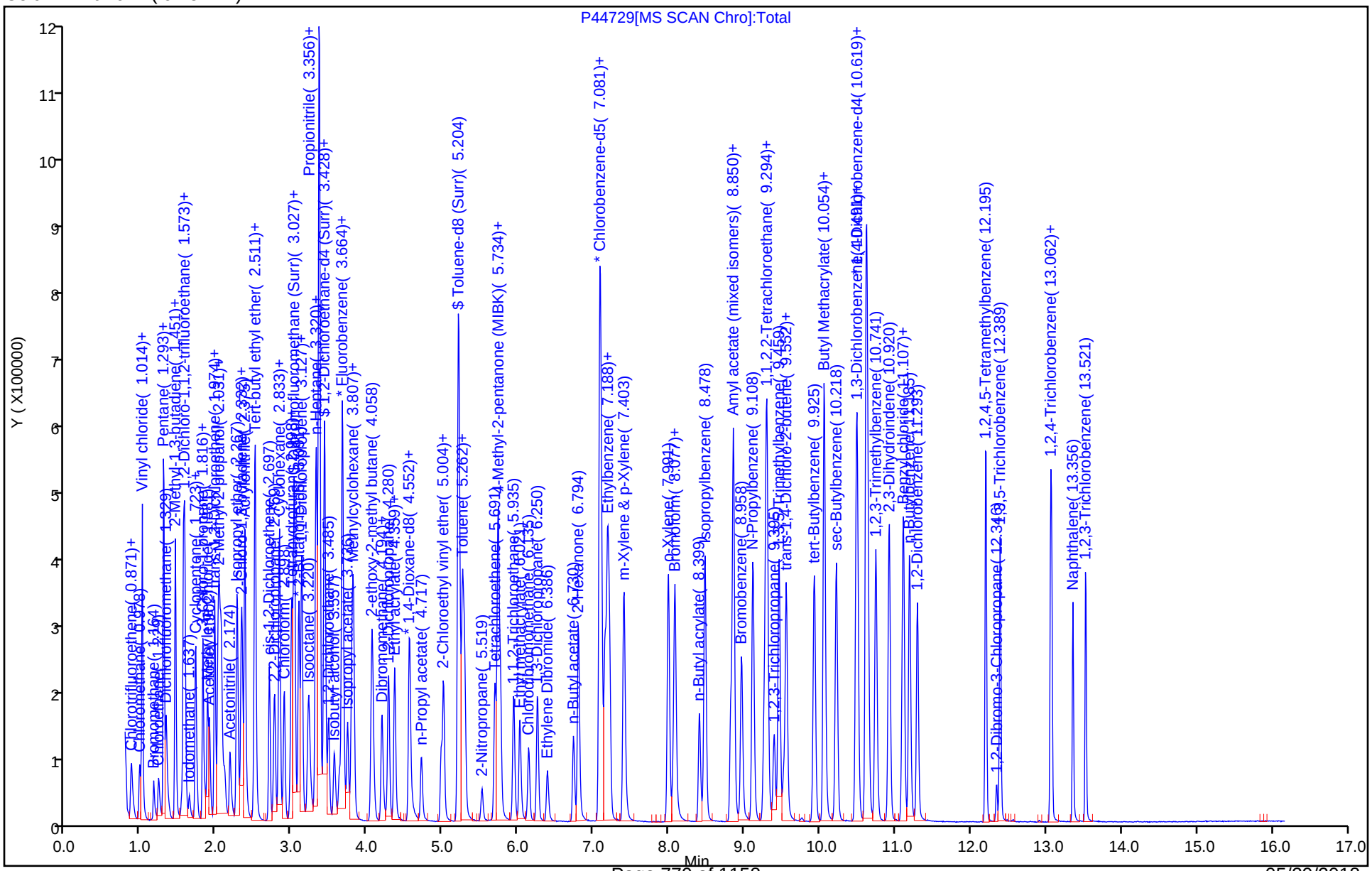
Lims ID: CCVIS Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516607/3 Calibration Date: 05/04/2018 22:58

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44759.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1279	0.1103		17.2	20.0	-13.8	20.0
Dichlorodifluoromethane	Ave	0.3854	0.4201	0.1000	21.8	20.0	9.0	20.0
Chloromethane	Ave	0.3697	0.3609	0.1000	19.5	20.0	-2.4	20.0
Vinyl chloride	Ave	0.4154	0.4109	0.1000	19.8	20.0	-1.1	20.0
Butadiene	Ave	0.3665	0.4017		21.9	20.0	9.6	20.0
Bromomethane	Ave	1.229	0.9562	0.1000	15.6	20.0	-22.2	50.0
Chloroethane	Ave	0.2368	0.2283	0.1000	19.3	20.0	-3.6	50.0
Pentane	Ave	1.725	1.974		45.8	40.0	14.4	20.0
Trichlorofluoromethane	Ave	0.4059	0.4502	0.1000	22.2	20.0	10.9	20.0
Dichlorofluoromethane	Ave	0.5414	0.5940		21.9	20.0	9.7	20.0
2-Methyl-1,3-butadiene	Ave	0.4037	0.4240		21.0	20.0	5.0	20.0
Ethyl ether	Ave	0.2720	0.2704		19.9	20.0	-0.6	20.0
Ethanol	Ave	0.0647	0.0709		876	800	9.5	50.0
1,1-Dichloroethene	Ave	0.2468	0.2420	0.1000	19.6	20.0	-1.9	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3655	0.3781		20.7	20.0	3.4	20.0
Carbon disulfide	Ave	0.9758	0.8696	0.1000	17.8	20.0	-10.9	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2550	0.2593	0.1000	20.3	20.0	1.7	20.0
Iodomethane	QuaF		0.1731		11.2	20.0	-43.8*	20.0
Cyclopentene	Ave	0.7027	0.7265		20.7	20.0	3.4	20.0
Acrolein	Ave	1.112	1.976		71.1	40.0	77.7*	50.0
Allyl chloride	Ave	0.1749	0.1668		19.1	20.0	-4.6	20.0
Isopropyl alcohol	Ave	0.8636	0.8089		187	200	-6.3	50.0
Methylene Chloride	Ave	0.3184	0.3140	0.1000	19.7	20.0	-1.4	20.0
Acetone	Ave	0.7304	0.6708	0.0500	91.8	100	-8.2	50.0
trans-1,2-Dichloroethene	Ave	0.2939	0.2745	0.1000	18.7	20.0	-6.6	20.0
Methyl acetate	Ave	0.2596	0.2570	0.1000	39.6	40.0	-1.0	20.0
Hexane	Ave	0.0782	0.0789		20.2	20.0	1.0	20.0
Methyl tert-butyl ether	Ave	0.9326	0.9075	0.1000	19.5	20.0	-2.7	20.0
2-Methyl-2-propanol	Ave	1.246	1.172		188	200	-5.9	50.0
Acetonitrile	Ave	1.511	1.703		225	200	12.7	20.0
Isopropyl ether	Ave	1.207	1.243		20.6	20.0	3.0	20.0
2-Chloro-1,3-butadiene	Ave	0.2668	0.2617		19.6	20.0	-1.9	20.0
1,1-Dichloroethane	Ave	0.5753	0.5942	0.2000	20.7	20.0	3.3	20.0
Acrylonitrile	Ave	0.1373	0.1364		199	200	-0.6	20.0
Tert-butyl ethyl ether	Ave	1.080	1.056		19.6	20.0	-2.1	20.0
Vinyl acetate	Ave	0.8169	0.8299		40.6	40.0	1.6	20.0
cis-1,2-Dichloroethene	Ave	0.3394	0.3411	0.1000	20.1	20.0	0.5	20.0
2,2-Dichloropropane	Ave	0.4923	0.4611		18.7	20.0	-6.3	20.0
Chlorobromomethane	Ave	0.1494	0.1538		20.6	20.0	2.9	20.0
Cyclohexane	Ave	0.5987	0.6157	0.1000	20.6	20.0	2.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516607/3 Calibration Date: 05/04/2018 22:58

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44759.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	0.5557	0.5603	0.2000	20.2	20.0	0.8	20.0
Carbon tetrachloride	Ave	0.3877	0.3656	0.1000	18.9	20.0	-5.7	20.0
Ethyl acetate	Ave	0.3046	0.2644		34.7	40.0	-13.2	20.0
Methyl acrylate	Ave	0.3220	0.3095		19.2	20.0	-3.9	20.0
Tetrahydrofuran	Ave	1.047	1.068		40.8	40.0	2.0	20.0
1,1,1-Trichloroethane	Ave	0.4773	0.4562	0.1000	19.1	20.0	-4.4	20.0
1,1-Dichloropropene	Ave	0.4744	0.4667		19.7	20.0	-1.6	20.0
2-Butanone (MEK)	Ave	0.3056	0.2874	0.0500	94.0	100	-6.0	50.0
2,2,4-Trimethylpentane	Ave	1.175	1.244		21.2	20.0	5.9	20.0
n-Heptane	Ave	0.3213	0.3361		20.9	20.0	4.6	20.0
Benzene	Ave	1.585	1.547	0.5000	19.5	20.0	-2.4	20.0
Propionitrile	Ave	1.764	1.850		210	200	4.9	20.0
Methacrylonitrile	Ave	0.1400	0.1417		202	200	1.2	20.0
Tert-amyl methyl ether	Ave	0.995	0.9607		19.3	20.0	-3.5	20.0
1,2-Dichloroethane	Ave	0.4931	0.4638	0.1000	18.8	20.0	-6.0	20.0
Isobutyl alcohol	Ave	0.5427	0.4827		445	500	-11.1	50.0
Isopropyl acetate	Ave	0.7175	0.6589		18.4	20.0	-8.2	20.0
Methylcyclohexane	Ave	0.5723	0.5983	0.1000	20.9	20.0	4.5	50.0
Trichloroethene	Ave	0.3095	0.3125	0.2000	20.2	20.0	1.0	20.0
Dibromomethane	Ave	0.2017	0.2028		20.1	20.0	0.6	20.0
n-Butanol	Ave	0.3249	0.2750		423	500	-15.4	50.0
1,2-Dichloropropane	Ave	0.3510	0.3528	0.1000	20.1	20.0	0.5	20.0
Dichlorobromomethane	Ave	0.4271	0.4071	0.2000	19.1	20.0	-4.7	20.0
Ethyl acrylate	Ave	0.4470	0.4304		19.3	20.0	-3.7	20.0
Methyl methacrylate	Ave	0.0855	0.0811		37.9	40.0	-5.2	20.0
1,4-Dioxane	Ave	1.267	1.251		395	400	-1.3	50.0
n-Propyl acetate	Ave	0.5133	0.4802		18.7	20.0	-6.4	20.0
2-Chloroethyl vinyl ether	Ave	0.2351	0.2283		19.4	20.0	-2.9	20.0
cis-1,3-Dichloropropene	Ave	0.6385	0.5644	0.2000	17.7	20.0	-11.6	50.0
Toluene	Ave	1.736	1.630	0.4000	18.8	20.0	-6.1	20.0
Epichlorohydrin	Ave	0.2453	0.2446		399	400	-0.3	20.0
2-Nitropropane	Ave	0.1003	0.0690		27.5	40.0	-31.2*	20.0
Tetrachloroethene	Ave	0.3647	0.3635	0.2000	19.9	20.0	-0.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.519	2.604	0.0500	103	100	3.4	50.0
trans-1,3-Dichloropropene	Ave	0.5883	0.5250	0.1000	17.8	20.0	-10.8	50.0
1,1,2-Trichloroethane	Ave	0.2956	0.2750	0.1000	18.6	20.0	-7.0	20.0
Ethyl methacrylate	Ave	0.4358	0.4238		19.4	20.0	-2.8	20.0
Chlorodibromomethane	Ave	0.3580	0.3132	0.1000	17.5	20.0	-12.5	50.0
1,3-Dichloropropane	Ave	0.6092	0.5898		19.4	20.0	-3.2	20.0
Ethylene Dibromide	Ave	0.3381	0.3166	0.1000	18.7	20.0	-6.3	20.0
n-Butyl acetate	Ave	0.7020	0.5819		16.6	20.0	-17.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516607/3 Calibration Date: 05/04/2018 22:58

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44759.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Hexanone	Ave	1.771	1.784	0.0500	101	100	0.7	50.0
Chlorobenzene	Ave	1.044	1.006	0.5000	19.3	20.0	-3.6	20.0
Ethylbenzene	Ave	0.5765	0.5566	0.1000	19.3	20.0	-3.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3429	0.3112		18.1	20.0	-9.3	20.0
m-Xylene & p-Xylene	Ave	0.6974	0.6737	0.1000	19.3	20.0	-3.4	20.0
o-Xylene	Ave	0.6817	0.6587	0.3000	19.3	20.0	-3.4	20.0
Bromoform	Ave	0.2257	0.1828	0.1000	16.2	20.0	-19.0	20.0
Styrene	Ave	1.142	1.110	0.3000	19.4	20.0	-2.9	20.0
n-Butyl acrylate	Ave	0.2978	0.2533		17.0	20.0	-14.9	20.0
Isopropylbenzene	Ave	1.838	1.759	0.1000	19.1	20.0	-4.3	20.0
Amyl acetate (mixed isomers)	Ave	1.561	1.258		16.1	20.0	-19.4	20.0
Bromobenzene	Ave	0.8145	0.7544		18.5	20.0	-7.4	20.0
N-Propylbenzene	Ave	4.204	3.789		18.0	20.0	-9.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8807	0.7467	0.3000	17.0	20.0	-15.2	20.0
2-Chlorotoluene	Ave	2.861	2.590		18.1	20.0	-9.5	20.0
4-Ethyltoluene	Ave	3.416	3.137		18.4	20.0	-8.2	20.0
1,2,3-Trichloropropane	Ave	0.2510	0.2307		18.4	20.0	-8.1	20.0
1,3,5-Trimethylbenzene	Ave	2.917	2.620		18.0	20.0	-10.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3114	0.2086		13.4	20.0	-33.0*	20.0
4-Chlorotoluene	Ave	2.639	2.354		17.8	20.0	-10.8	20.0
tert-Butylbenzene	Ave	2.401	2.202		18.3	20.0	-8.3	20.0
1,2,4-Trimethylbenzene	Ave	2.900	2.640		18.2	20.0	-9.0	20.0
Butyl Methacrylate	Ave	1.025	0.8454		16.5	20.0	-17.5	20.0
sec-Butylbenzene	Ave	3.739	3.379		18.1	20.0	-9.6	20.0
1,3-Dichlorobenzene	Ave	1.543	1.455	0.6000	18.9	20.0	-5.7	20.0
4-Isopropyltoluene	Ave	3.103	2.836		18.3	20.0	-8.6	20.0
1,4-Dichlorobenzene	Ave	1.671	1.514	0.5000	18.1	20.0	-9.4	20.0
1,2,3-Trimethylbenzene	Ave	3.053	2.788		18.3	20.0	-8.7	20.0
Indan	Ave	2.951	2.694		18.3	20.0	-8.7	20.0
Benzyl chloride	Ave	0.3228	0.2185		13.5	20.0	-32.3	50.0
p-Diethylbenzene	Ave	1.650	1.503		18.2	20.0	-8.9	20.0
n-Butylbenzene	Ave	2.968	2.669		18.0	20.0	-10.1	20.0
1,2-Dichlorobenzene	Ave	1.473	1.416	0.4000	19.2	20.0	-3.9	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.673	2.492		18.6	20.0	-6.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1594	0.1255	0.0500	15.7	20.0	-21.3	50.0
1,3,5-Trichlorobenzene	Ave	1.108	1.100		19.9	20.0	-0.7	20.0
1,2,4-Trichlorobenzene	Ave	0.9778	0.9175	0.2000	18.8	20.0	-6.2	20.0
Hexachlorobutadiene	Ave	0.4797	0.4869		20.3	20.0	1.5	20.0
Naphthalene	Ave	2.207	1.921		17.4	20.0	-12.9	50.0
1,2,3-Trichlorobenzene	Ave	0.8841	0.8366		18.9	20.0	-5.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2648	0.2826		53.4	50.0	6.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516607/3 Calibration Date: 05/04/2018 22:58

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44759.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.3621	0.3782		52.2	50.0	4.4	20.0
Toluene-d8 (Surr)	Ave	1.369	1.362		49.7	50.0	-0.5	20.0
4-Bromofluorobenzene	Ave	0.3909	0.3957		50.6	50.0	1.2	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44759.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 04-May-2018 22:58:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0071534-003
Operator ID: Instrument ID: CVOAMS13
Sublist: chrom-8260W_13*sub51

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 07-May-2018 12:26:04 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: xuyvo Date: 07-May-2018 12:26:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.856	0.856	0.000	90	24195	20.0	17.2	
2 Dichlorodifluoromethane	85	0.870	0.870	0.000	99	92137	20.0	21.8	
4 Chloromethane	50	0.978	0.978	0.000	99	79165	20.0	19.5	
5 Vinyl chloride	62	1.006	1.006	0.000	98	90127	20.0	19.8	
3 Butadiene	54	1.014	1.014	0.000	98	88112	20.0	21.9	
6 Bromomethane	94	1.164	1.164	0.000	99	28110	20.0	15.6	
7 Chloroethane	64	1.229	1.229	0.000	100	50072	20.0	19.3	
9 Pentane	72	1.293	1.293	0.000	97	23354	40.0	45.8	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	97	98738	20.0	22.2	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	130280	20.0	21.9	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	97	93004	20.0	21.0	
12 Ethyl ether	59	1.458	1.458	0.000	90	59316	20.0	19.9	
13 Ethanol	46	1.537	1.537	0.000	100	16770	800.0	876.0	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	95	53090	20.0	19.6	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	85	82924	20.0	20.7	
16 Carbon disulfide	76	1.572	1.572	0.000	100	190740	20.0	17.8	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	93	56865	20.0	20.3	
18 Iodomethane	142	1.637	1.637	0.000	99	37971	20.0	11.2	
19 Cyclopentene	67	1.723	1.723	0.000	97	159361	20.0	20.7	
20 Acrolein	56	1.737	1.737	0.000	95	23382	40.0	71.1	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	36589	20.0	19.1	
22 Isopropyl alcohol	45	1.845	1.845	0.000	97	47856	200.0	187.3	
23 Methylene Chloride	84	1.880	1.880	0.000	98	68873	20.0	19.7	
24 Acetone	43	1.902	1.902	0.000	85	98605	100.0	91.8	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	60208	20.0	18.7	
26 Methyl acetate	43	1.981	1.981	0.000	99	112741	40.0	39.6	
27 Hexane	86	2.016	2.016	0.000	95	17314	20.0	20.2	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	94	199051	20.0	19.5	
* 29 TBA-d9 (IS)	65	2.059	2.059	0.000	0	295814	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.102	2.102	0.000	99	69343	200.0	188.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acetonitrile	41	2.174	2.174	0.000	98	100781	200.0	225.5	
32 Isopropyl ether	45	2.267	2.267	0.000	97	272631	20.0	20.6	
33 2-Chloro-1,3-butadiene	88	2.324	2.324	0.000	93	57405	20.0	19.6	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	130341	20.0	20.7	
35 Acrylonitrile	53	2.375	2.375	0.000	94	299228	200.0	198.8	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	231713	20.0	19.6	
37 Vinyl acetate	43	2.511	2.511	0.000	100	364076	40.0	40.6	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	74821	20.0	20.1	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	95	101150	20.0	18.7	
40 Cyclohexane	56	2.833	2.833	0.000	96	135055	20.0	20.6	
41 Chlorobromomethane	128	2.833	2.833	0.000	95	33732	20.0	20.6	
42 Chloroform	83	2.898	2.898	0.000	98	122890	20.0	20.2	
43 Carbon tetrachloride	117	2.983	2.983	0.000	97	80193	20.0	18.9	
44 Ethyl acetate	70	2.998	2.998	0.000	98	15543	40.0	34.7	
45 Methyl acrylate	55	2.998	2.998	0.000	97	67892	20.0	19.2	
46 Tetrahydrofuran	42	3.005	3.005	0.000	94	62777	40.0	40.8	
$ 47 Dibromofluoromethane (Surr	113	3.026	3.026	0.000	97	154961	50.0	53.4	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	95	100056	20.0	19.1	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	367477	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	99	42245	100.0	94.0	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	94	102375	20.0	19.7	
52 Isooctane	57	3.220	3.220	0.000	98	272828	20.0	21.2	
53 n-Heptane	57	3.313	3.313	0.000	94	73731	20.0	20.9	
54 Benzene	78	3.320	3.320	0.000	96	296680	20.0	19.5	
55 Propionitrile	54	3.342	3.342	0.000	95	109445	200.0	209.7	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	310823	200.0	202.4	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	207367	50.0	52.2	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	210721	20.0	19.3	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	101724	20.0	18.8	
60 Isobutyl alcohol	43	3.557	3.557	0.000	97	71401	500.0	444.7	
61 t-Amyl alcohol	59	3.628	3.628	0.000	95	47615	200.0	160.8	
* 62 Fluorobenzene	96	3.671	3.671	0.000	98	548366	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	144529	20.0	18.4	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	131237	20.0	20.9	
65 Trichloroethene	130	3.814	3.814	0.000	98	68542	20.0	20.2	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	92	188440	20.0	18.9	
67 Dibromomethane	93	4.187	4.187	0.000	96	44480	20.0	20.1	
68 n-Butanol	56	4.194	4.194	0.000	92	40674	500.0	423.1	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	77391	20.0	20.1	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	94407	20.0	19.3	
71 Dichlorobromomethane	83	4.359	4.359	0.000	98	89297	20.0	19.1	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	31662	1000.0	1000.0	
73 Methyl methacrylate	100	4.559	4.559	0.000	93	35588	40.0	37.9	
74 1,4-Dioxane	88	4.581	4.581	0.000	99	15839	400.0	395.0	
75 n-Propyl acetate	43	4.717	4.717	0.000	99	105340	20.0	18.7	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	50075	20.0	19.4	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	97	108212	20.0	17.7	
$ 78 Toluene-d8 (Surr)	98	5.211	5.211	0.000	98	652786	50.0	49.7	
79 Toluene	91	5.261	5.261	0.000	93	312446	20.0	18.8	
80 Epichlorohydrin	57	5.290	5.290	0.000	99	143788	400.0	398.9	
81 2-Nitropropane	41	5.519	5.519	0.000	98	30279	40.0	27.5	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	69703	20.0	19.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.734	0.000	98	382704	100.0	103.4	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	94	100660	20.0	17.8	
85 1,1,2-Trichloroethane	83	5.942	5.942	0.000	94	52720	20.0	18.6	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	92961	20.0	19.4	
87 Chlorodibromomethane	129	6.135	6.135	0.000	98	60045	20.0	17.5	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	97	113081	20.0	19.4	
89 Ethylene Dibromide	107	6.386	6.386	0.000	98	60704	20.0	18.7	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	111571	20.0	16.6	
91 2-Hexanone	43	6.794	6.794	0.000	99	262230	100.0	100.7	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	479347	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	96	192945	20.0	19.3	
94 Ethylbenzene	106	7.181	7.181	0.000	99	106723	20.0	19.3	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	94	59664	20.0	18.1	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	129166	20.0	19.3	
97 o-Xylene	106	7.990	7.990	0.000	93	126296	20.0	19.3	
98 Bromoform	173	8.055	8.055	0.000	95	35041	20.0	16.2	
99 Styrene	104	8.076	8.076	0.000	94	212781	20.0	19.4	
100 n-Butyl acrylate	73	8.399	8.399	0.000	96	48568	20.0	17.0	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	337265	20.0	19.1	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	89	136070	20.0	16.1	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	88	189681	50.0	50.6	
104 Bromobenzene	156	8.965	8.965	0.000	97	81592	20.0	18.5	
105 N-Propylbenzene	91	9.115	9.115	0.000	99	409827	20.0	18.0	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	97	80764	20.0	17.0	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	280151	20.0	18.1	
108 4-Ethyltoluene	105	9.301	9.301	0.000	98	339339	20.0	18.4	
109 1,2,3-Trichloropropane	110	9.394	9.394	0.000	97	24947	20.0	18.4	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	93	283398	20.0	18.0	
111 trans-1,4-Dichloro-2-buten	53	9.516	9.516	0.000	82	22565	20.0	13.4	
112 4-Chlorotoluene	91	9.552	9.552	0.000	98	254564	20.0	17.8	
113 tert-Butylbenzene	119	9.924	9.924	0.000	94	238139	20.0	18.3	
115 1,2,4-Trimethylbenzene	105	10.053	10.053	0.000	95	285587	20.0	18.2	
114 Butyl Methacrylate	87	10.053	10.053	0.000	60	91435	20.0	16.5	
116 sec-Butylbenzene	105	10.218	10.218	0.000	98	365456	20.0	18.1	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	95	157354	20.0	18.9	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	306696	20.0	18.3	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	270403	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.641	0.000	94	163772	20.0	18.1	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	301569	20.0	18.3	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	291399	20.0	18.3	
122 Benzyl chloride	126	11.092	11.092	0.000	96	23633	20.0	13.5	
123 p-Diethylbenzene	119	11.106	11.106	0.000	93	162616	20.0	18.2	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	288655	20.0	18.0	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	153110	20.0	19.2	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.202	0.000	97	269509	20.0	18.6	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	91	13570	20.0	15.7	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	97	118930	20.0	19.9	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	99241	20.0	18.8	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	52661	20.0	20.3	
131 Naphthalene	128	13.356	13.356	0.000	99	207826	20.0	17.4	
132 1,2,3-Trichlorobenzene	180	13.527	13.527	0.000	94	90487	20.0	18.9	
S 133 1,2-Dichloroethene, Total	100				0		40.0	38.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 1,3-Dichloropropene, Total	100				0		40.0	35.5	
S 135 Xylenes, Total	100				0		40.0	38.6	
S 137 Total BTEX	1				0		100.0	96.2	

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 07-May-2018 12:26:08 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44759.D

Injection Date: 04-May-2018 22:58:30 Instrument ID: CVOAMS13 Operator ID:

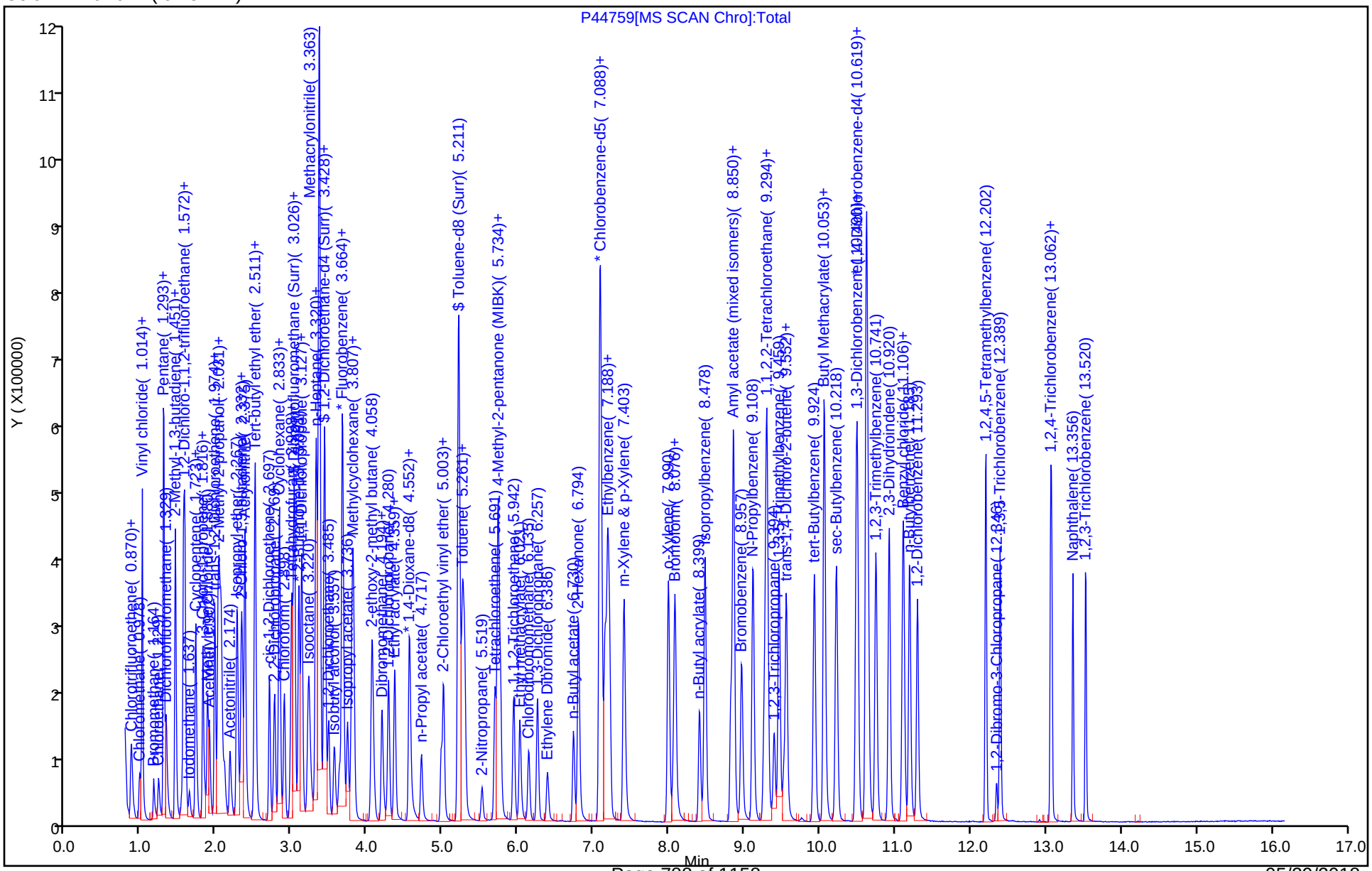
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65797.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Apr-2018 00:38:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070690-001
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 21-Apr-2018 11:35:27 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 135 BFB	95	3.147	3.147	0.000	79	124003	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

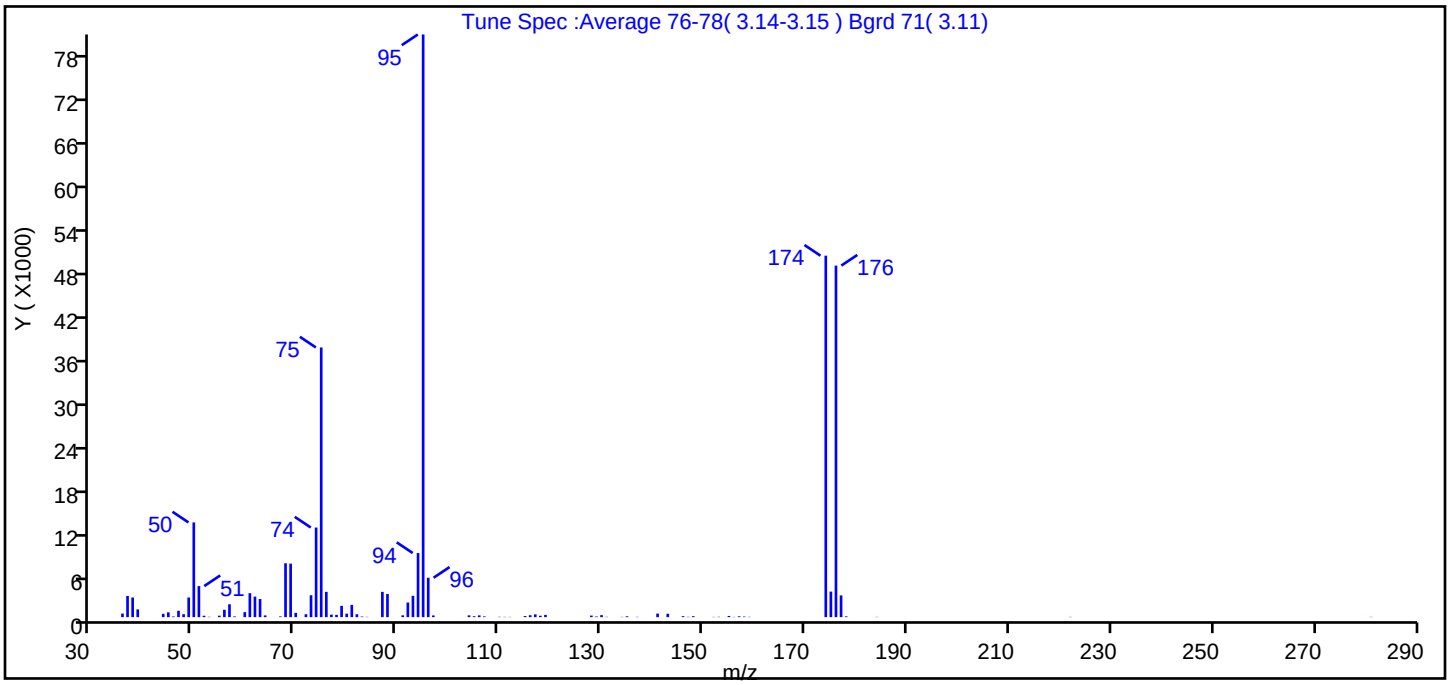
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65797.D
Injection Date: 20-Apr-2018 00:38:30 Instrument ID: CVOAMS11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 135 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.3
75	30 to 60% of m/z 95	46.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	62.0
175	5 to 9% of m/z 174	4.4 (7.1)
176	Greater than 95% but less than 101% of m/z 174	60.3 (97.3)
177	5 to 9% of m/z 176	3.7 (6.2)

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65797.D\8260W_11.rslt\spectra.d
Injection Date: 20-Apr-2018 00:38:30
Spectrum: Tune Spec :Average 76-78(3.14-3.15) Bgrd 71(3.11)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 88

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	493	64.00	239	93.00	2938	135.00	117
37.00	2915	67.00	99	94.00	8835	137.00	40
38.00	2707	68.00	7423	95.00	80288	141.00	486
39.00	1068	69.00	7373	96.00	5429	143.00	469
44.00	456	70.00	590	97.00	234	146.00	131
45.00	661	72.00	401	104.00	245	147.00	45
46.00	90	73.00	3018	105.00	125	148.00	131
47.00	878	74.00	12348	106.00	245	152.00	35
48.00	407	75.00	37160	107.00	103	153.00	47
49.00	2708	76.00	3485	110.00	47	155.00	165
50.00	13051	77.00	347	111.00	38	156.00	33
51.00	4279	78.00	311	112.00	34	157.00	117
52.00	193	79.00	1558	115.00	154	158.00	78
53.00	47	80.00	481	116.00	264	159.00	43
55.00	202	81.00	1690	117.00	383	174.00	49808
56.00	1017	82.00	394	118.00	194	175.00	3521
57.00	1774	83.00	79	119.00	307	176.00	48440
58.00	97	84.00	39	128.00	214	177.00	2998
60.00	693	87.00	3481	129.00	89	178.00	107
61.00	3305	88.00	3192	130.00	277	184.00	35
62.00	2832	91.00	248	131.00	43	222.00	36
63.00	2495	92.00	2017	134.00	36	281.00	38

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66512.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 02-May-2018 17:08:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0071421-001
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 02-May-2018 17:47:21 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: parekhv Date: 02-May-2018 17:47:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 135 BFB	95	3.129	3.129	0.000	81	277422	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

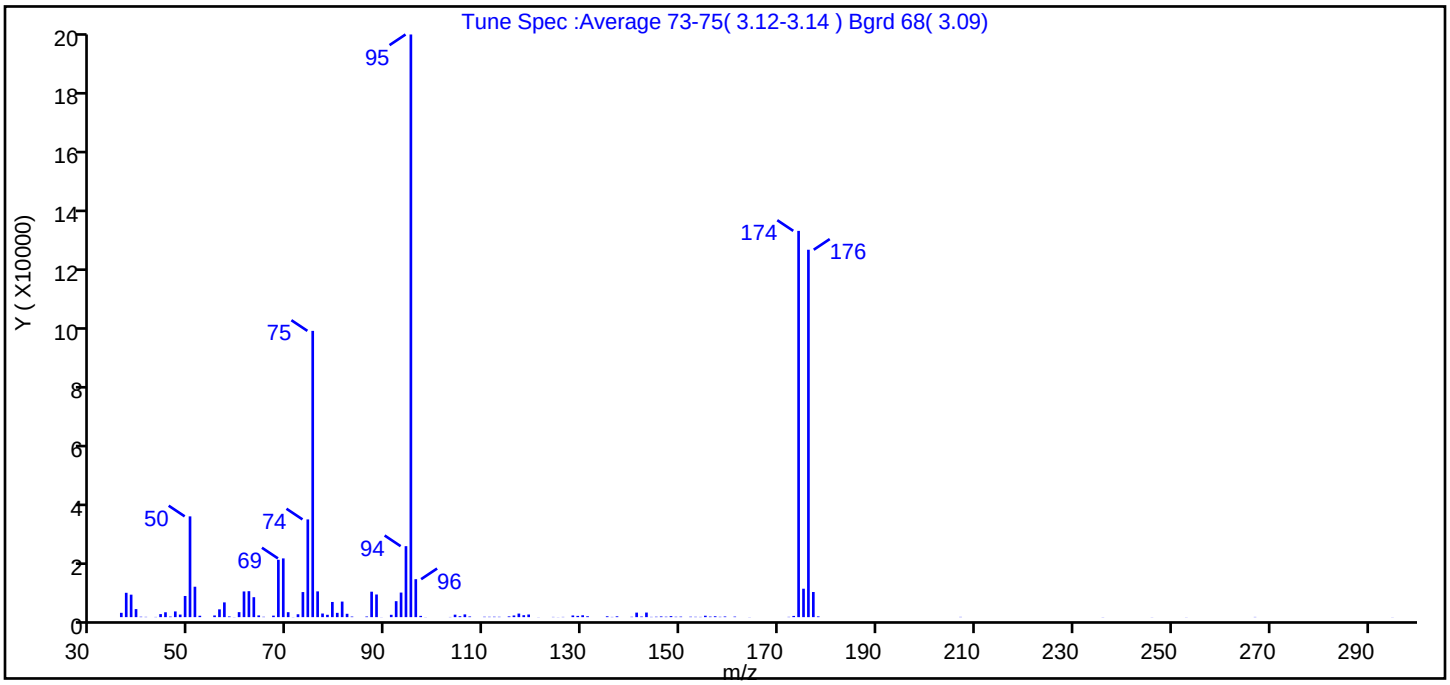
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66512.D
Injection Date: 02-May-2018 17:08:30 Instrument ID: CVOAMS11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 135 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.3
75	30 to 60% of m/z 95	49.1
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	66.3
175	5 to 9% of m/z 174	4.9 (7.4)
176	Greater than 95% but less than 101% of m/z 174	63.1 (95.1)
177	5 to 9% of m/z 176	4.3 (6.8)

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66512.D\8260W_11.rslt\spectra.d
Injection Date: 02-May-2018 17:08:30
Spectrum: Tune Spec :Average 73-75(3.12-3.14) Bgrd 68(3.09)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1423	69.00	19304	105.00	302	146.00	239
37.00	8002	70.00	1624	106.00	904	147.00	147
38.00	7389	71.00	42	107.00	219	148.00	347
39.00	2644	72.00	945	110.00	131	149.00	131
40.00	135	73.00	8241	111.00	120	150.00	174
41.00	94	74.00	32120	112.00	140	152.00	142
43.00	70	75.00	94080	113.00	118	153.00	113
44.00	997	76.00	8469	115.00	251	154.00	84
45.00	1601	77.00	1193	116.00	548	155.00	463
46.00	178	78.00	778	117.00	1175	156.00	185
47.00	1878	79.00	4988	118.00	641	157.00	294
48.00	840	80.00	1412	119.00	867	158.00	114
49.00	6954	81.00	5115	121.00	36	159.00	223
50.00	33120	82.00	1105	124.00	78	161.00	181
51.00	9998	83.00	190	125.00	37	164.00	41
52.00	460	86.00	210	126.00	80	172.00	93
55.00	552	87.00	8363	128.00	550	173.00	399
56.00	2567	88.00	7448	129.00	416	174.00	126944
57.00	4849	89.00	35	130.00	617	175.00	9341
58.00	226	91.00	770	131.00	290	176.00	120744
59.00	41	92.00	5247	135.00	287	177.00	8264
60.00	1643	93.00	8079	136.00	78	178.00	233
61.00	8443	94.00	23328	137.00	275	207.00	82
62.00	8535	95.00	191488	140.00	123	236.00	43
63.00	6556	96.00	12475	141.00	1489	246.00	35
64.00	571	97.00	417	142.00	198	253.00	34
65.00	119	98.00	40	143.00	1509	267.00	72
67.00	492	103.00	61	144.00	90	295.00	34
68.00	18848	104.00	814	145.00	139		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66539.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-May-2018 04:45:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0071436-001
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 14:25:03 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: delpolitov Date: 03-May-2018 14:25:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 135 BFB	95	3.154	3.154	0.000	79	25381	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

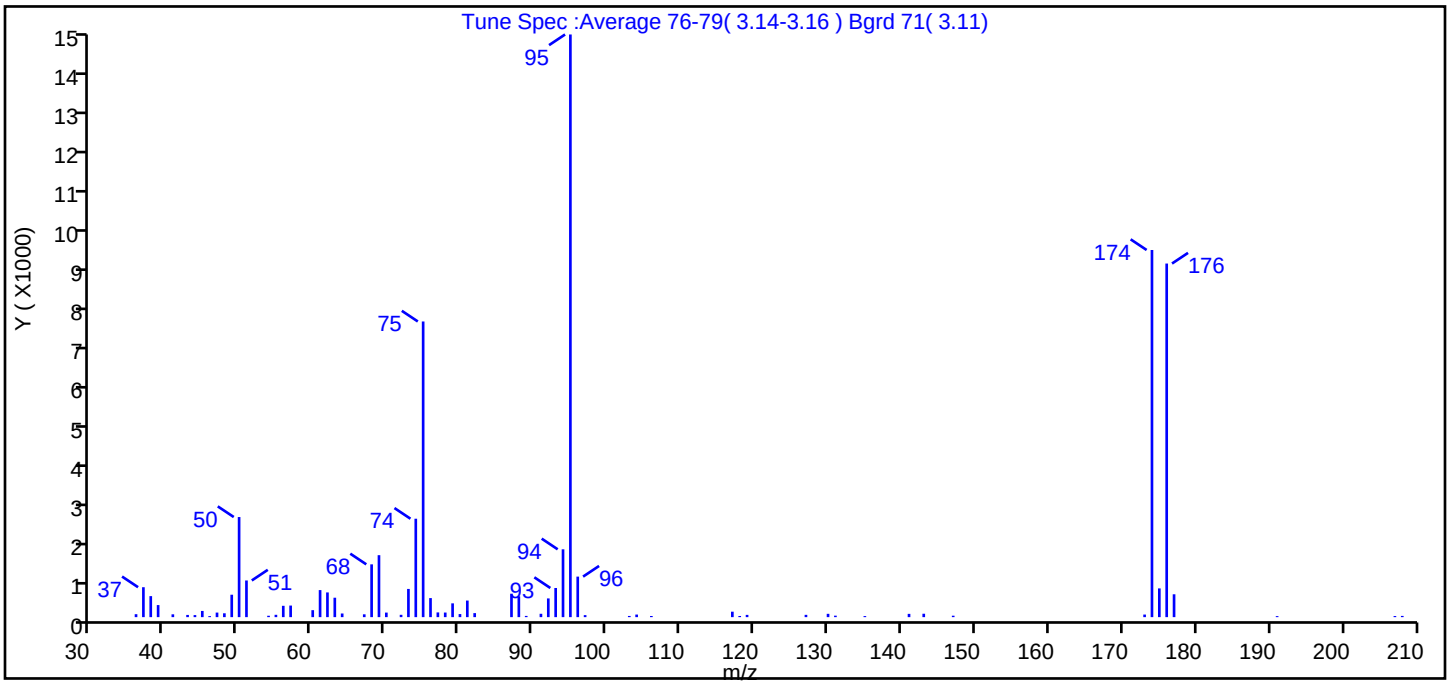
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66539.D
Injection Date: 03-May-2018 04:45:30 Instrument ID: CVOAMS11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 135 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.2
75	30 to 60% of m/z 95	50.7
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.4 (0.7)
174	50 to 120% of m/z 95	63.0
175	5 to 9% of m/z 174	4.9 (7.8)
176	Greater than 95% but less than 101% of m/z 174	60.7 (96.3)
177	5 to 9% of m/z 176	3.9 (6.5)

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66539.D\8260W_11.rslt\spectra.d
Injection Date: 03-May-2018 04:45:30
Spectrum: Tune Spec :Average 76-79(3.14-3.16) Bgrd 71(3.11)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	72	60.00	170	81.00	404	127.00	56
37.00	729	61.00	659	82.00	98	130.00	81
38.00	512	62.00	602	87.00	571	131.00	36
39.00	294	63.00	473	88.00	508	135.00	26
41.00	69	64.00	89	89.00	30	141.00	80
43.00	54	67.00	69	91.00	82	143.00	83
44.00	50	68.00	1286	92.00	456	147.00	35
45.00	151	69.00	1509	93.00	710	173.00	63
46.00	25	70.00	111	94.00	1652	174.00	8942
47.00	111	72.00	57	95.00	14191	175.00	700
48.00	94	73.00	687	96.00	987	176.00	8612
49.00	546	74.00	2397	97.00	49	177.00	557
50.00	2438	75.00	7201	103.00	29	191.00	25
51.00	893	76.00	464	104.00	63	207.00	27
54.00	34	77.00	115	106.00	28	208.00	30
55.00	57	78.00	112	117.00	133		
56.00	276	79.00	336	118.00	28		
57.00	282	80.00	75	119.00	55		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665678.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-May-2018 17:17:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0071478-001
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 18:44:56 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: parekhv Date: 03-May-2018 18:44:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 135 BFB	95	3.129	3.129	0.000	80	264429	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

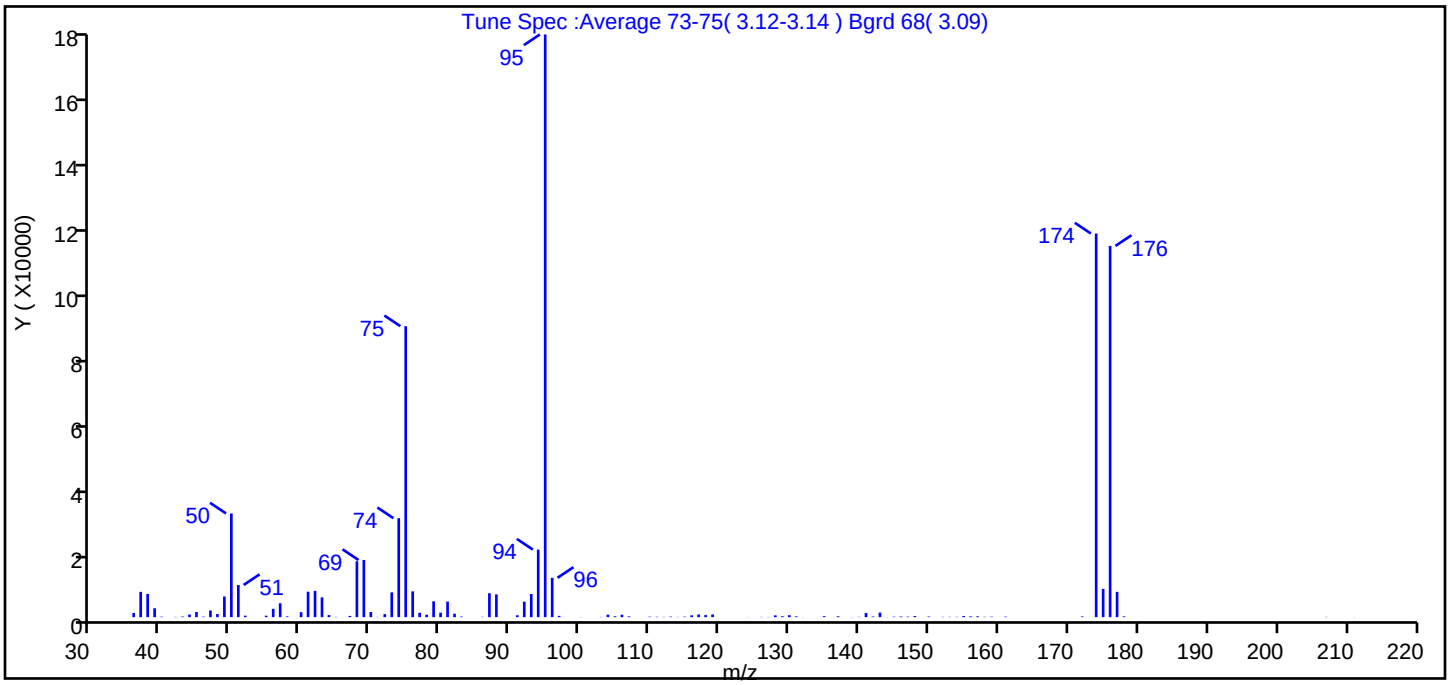
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665678.D
Injection Date: 03-May-2018 17:17:30 Instrument ID: CVOAMS11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 135 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.8
75	30 to 60% of m/z 95	49.9
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	65.8
175	5 to 9% of m/z 174	4.8 (7.4)
176	Greater than 95% but less than 101% of m/z 174	63.7 (96.8)
177	5 to 9% of m/z 176	4.3 (6.8)

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665678.D\8260W_11.rslt\spectra.d
Injection Date: 03-May-2018 17:17:30
Spectrum: Tune Spec :Average 73-75(3.12-3.14) Bgrd 68(3.09)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1264	68.00	17112	103.00	81	141.00	1254
37.00	7743	69.00	17496	104.00	769	142.00	190
38.00	7094	70.00	1577	105.00	268	143.00	1398
39.00	2718	71.00	68	106.00	731	144.00	37
40.00	141	72.00	923	107.00	237	145.00	144
42.00	78	73.00	7588	110.00	143	146.00	198
43.00	189	74.00	30304	111.00	118	147.00	165
44.00	787	75.00	89104	112.00	82	148.00	342
45.00	1566	76.00	7896	113.00	161	150.00	192
46.00	148	77.00	1337	114.00	72	152.00	88
47.00	2052	78.00	732	115.00	154	153.00	100
48.00	947	79.00	4867	116.00	558	154.00	97
49.00	6319	80.00	1360	117.00	830	155.00	337
50.00	31752	81.00	4759	118.00	640	156.00	233
51.00	9854	82.00	1051	119.00	832	157.00	260
52.00	456	83.00	181	124.00	41	158.00	100
55.00	451	86.00	102	126.00	76	159.00	143
56.00	2547	87.00	7322	127.00	56	161.00	157
57.00	4245	88.00	6972	128.00	547	172.00	210
58.00	225	91.00	574	129.00	276	174.00	117488
60.00	1517	92.00	4740	130.00	609	175.00	8645
61.00	7791	93.00	7090	131.00	233	176.00	113680
62.00	8044	94.00	20680	132.00	39	177.00	7743
63.00	6046	95.00	178432	135.00	298	178.00	231
64.00	638	96.00	12043	137.00	268	207.00	75
65.00	80	97.00	400	139.00	34	211.00	34
67.00	382	100.00	38	140.00	84		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43989.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Apr-2018 01:16:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0070689-001
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 20-Apr-2018 09:05:18 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: boykink Date: 20-Apr-2018 01:15:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 78 Toluene-d8 (Surr)	98	5.103	5.103	0.000	1	33	NR	NR	
$ 139 BFB	95	2.179	2.179	0.000	83	70625	NR	NR	a

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
a - User Assigned ID

Reagents:

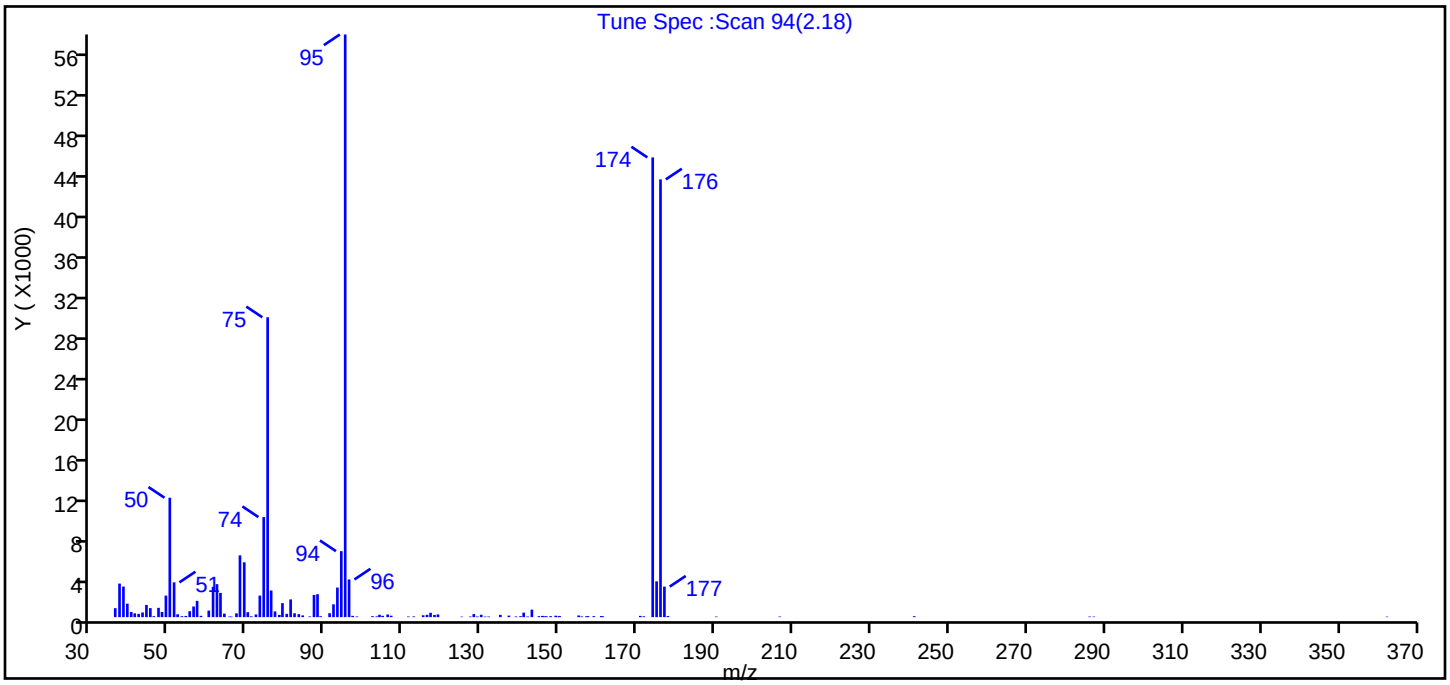
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43989.D
Injection Date: 20-Apr-2018 01:16:30 Instrument ID: CVOAMS13
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 139 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.5
75	30 to 60% of m/z 95	51.5
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	78.9
175	5 to 9% of m/z 174	6.1 (7.8)
176	Greater than 95% but less than 101% of m/z 174	75.1 (95.2)
177	5 to 9% of m/z 176	5.2 (7.0)

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P43989.D\8260W_13.rslt\spectra.d
Injection Date: 20-Apr-2018 01:16:30
Spectrum: Tune Spec :Scan 94(2.18)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	878	65.80	54	96.90	127	144.70	95
37.10	3286	67.10	369	98.00	65	145.60	125
38.10	2991	68.00	6047	102.00	90	146.10	83
39.10	1318	69.10	5370	103.10	72	146.60	90
40.10	505	70.00	486	103.80	235	147.70	99
41.00	374	70.90	80	104.60	128	149.00	142
42.00	318	72.10	261	105.90	262	149.50	53
43.00	458	73.10	2108	106.80	138	150.00	117
44.00	1197	74.10	9794	111.20	62	154.90	164
45.00	883	75.10	29352	112.60	73	155.70	69
45.90	94	76.00	2609	115.00	186	156.90	85
47.10	914	77.00	562	116.00	225	157.30	96
48.00	509	78.10	221	116.90	425	158.80	98
49.00	2108	78.90	1373	117.90	216	160.70	108
50.00	11688	80.00	323	118.80	266	161.10	78
51.10	3405	81.00	1739	124.90	50	170.70	124
52.00	281	82.00	378	127.10	58	171.60	81
53.10	92	83.10	289	128.00	299	173.90	45000
54.10	118	84.10	170	128.90	64	174.90	3503
55.10	578	85.90	67	129.90	231	175.90	42848
56.10	1044	87.00	2174	130.90	53	176.90	2989
57.00	1593	87.90	2246	131.80	62	177.80	103
58.00	129	88.70	89	134.80	226	190.20	56
60.00	639	91.00	384	137.00	152	206.50	57
61.10	2964	92.00	1256	138.80	68	241.00	93
62.10	3229	93.00	2894	140.00	90	286.00	58
63.00	2372	94.00	6458	140.80	441	287.10	52
64.00	346	95.00	57032	141.80	63	362.30	50
65.30	57	96.00	3689	142.90	734		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44700.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-May-2018 21:30:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0071476-001
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:03 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: starzecm Date: 03-May-2018 23:39:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 139 BFB	95	2.157	2.157	0.000	83	36128	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

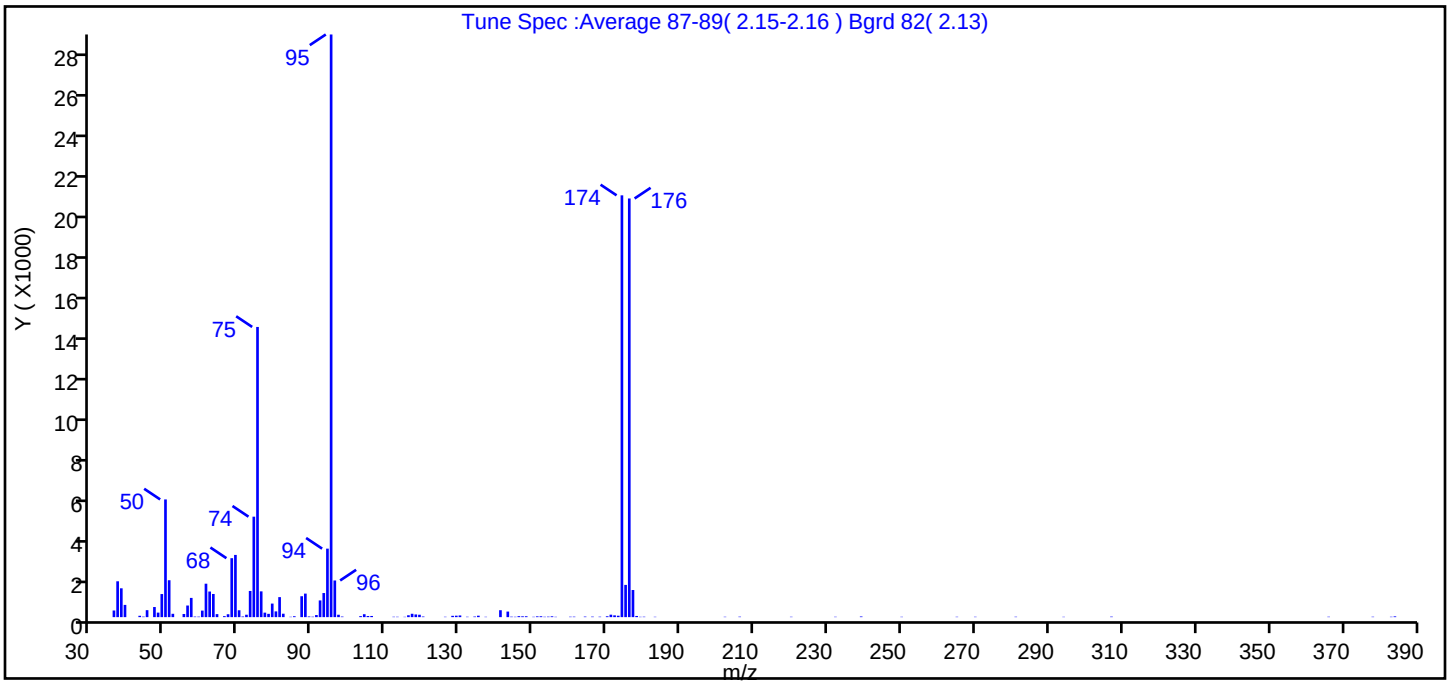
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44700.D
Injection Date: 03-May-2018 21:30:30 Instrument ID: CVOAMS13
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 139 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.2
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	72.4
175	5 to 9% of m/z 174	5.5 (7.6)
176	Greater than 95% but less than 101% of m/z 174	71.9 (99.3)
177	5 to 9% of m/z 176	4.7 (6.5)

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44700.D\8260W_13.rslt\spectra.d
Injection Date: 03-May-2018 21:30:30
Spectrum: Tune Spec :Average 87-89(2.15-2.16) Bgrd 82(2.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 120

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	322	73.00	1268	115.00	16	164.00	27
37.00	1737	74.00	4867	116.00	91	166.00	25
38.00	1397	75.00	14057	117.00	163	168.00	22
39.00	593	76.00	1249	118.00	131	170.00	42
43.00	66	77.00	218	119.00	117	171.00	119
44.00	25	78.00	160	120.00	30	172.00	87
45.00	338	79.00	657	126.00	18	173.00	69
47.00	490	80.00	279	128.00	64	174.00	20432
48.00	219	81.00	970	129.00	71	175.00	1562
49.00	1119	82.00	166	130.00	82	176.00	20280
50.00	5702	84.00	17	132.00	19	177.00	1314
51.00	1788	85.00	43	134.00	29	178.00	57
52.00	162	87.00	1013	135.00	70	179.00	16
55.00	153	88.00	1140	137.00	17	180.00	21
56.00	563	89.00	33	141.00	336	183.00	17
57.00	932	90.00	22	143.00	270	202.00	18
58.00	27	91.00	101	144.00	23	206.00	23
59.00	24	92.00	810	145.00	18	220.00	18
60.00	317	93.00	1168	146.00	48	232.00	18
61.00	1620	94.00	3318	147.00	40	239.00	32
62.00	1241	95.00	28224	148.00	43	250.00	17
63.00	1122	96.00	1776	150.00	17	265.00	18
64.00	146	97.00	116	151.00	38	270.00	18
66.00	49	98.00	28	152.00	43	281.00	20
67.00	140	103.00	49	153.00	18	294.00	16
68.00	2856	104.00	142	154.00	24	307.00	25
69.00	3014	105.00	54	155.00	40	366.00	20
70.00	333	106.00	57	156.00	16	378.00	20
71.00	31	112.00	19	160.00	21	383.00	19
72.00	117	113.00	18	161.00	23	384.00	37

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44728.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	04-May-2018 09:13:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0071500-001				
Operator ID:		Instrument ID:	CVOAMS13		
Method:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\8260W_13.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	04-May-2018 11:52:01	Calib Date:	20-Apr-2018 07:16:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK002				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 139 BFB	95	2.157	2.157	0.000	83	44108	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

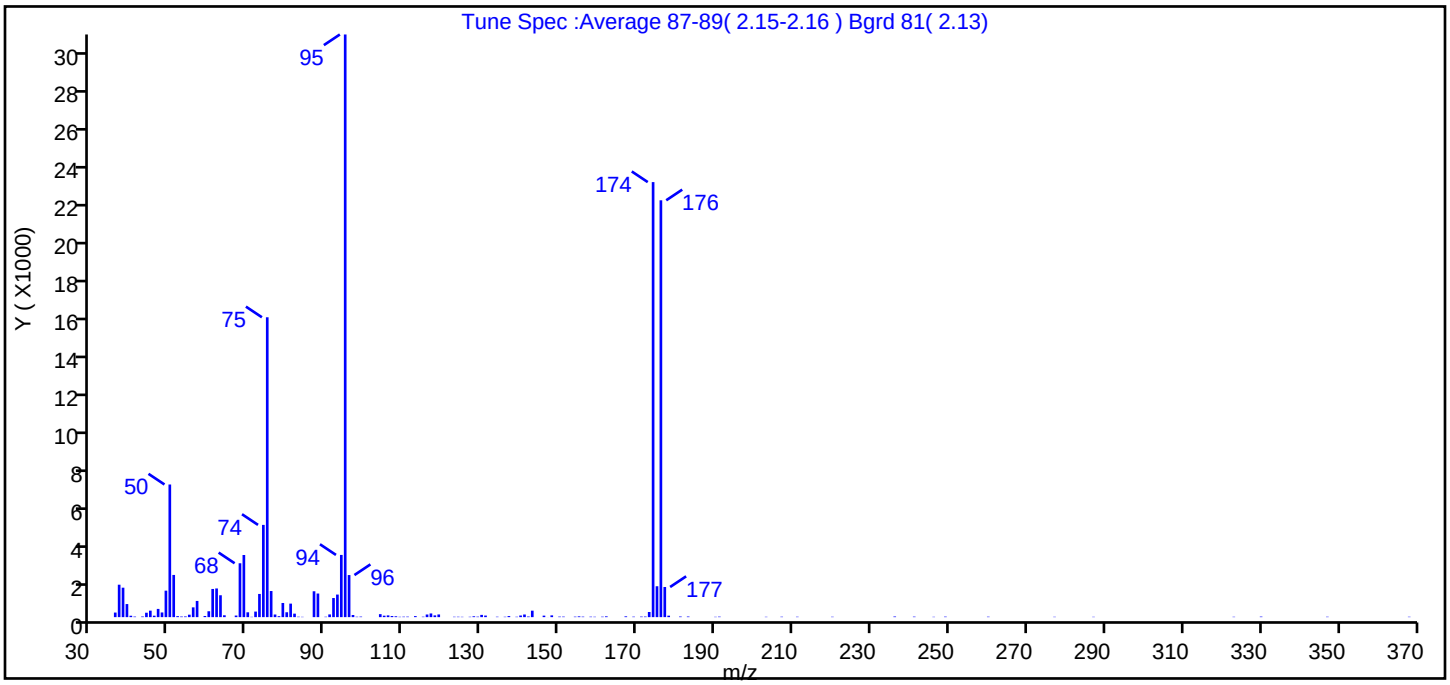
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44728.D
Injection Date: 04-May-2018 09:13:30 Instrument ID: CVOAMS13
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 139 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.8
75	30 to 60% of m/z 95	51.5
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.9 (1.2)
174	50 to 120% of m/z 95	74.7
175	5 to 9% of m/z 174	5.3 (7.1)
176	Greater than 95% but less than 101% of m/z 174	71.5 (95.8)
177	5 to 9% of m/z 176	5.2 (7.2)

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44728.D\8260W_13.rslt\spectra.d
Injection Date: 04-May-2018 09:13:30
Spectrum: Tune Spec :Average 87-89(2.15-2.16) Bgrd 81(2.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 128

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	238	72.00	289	111.00	26	159.00	20
37.00	1684	73.00	1204	113.00	54	161.00	24
38.00	1529	74.00	4789	115.00	23	162.00	41
39.00	679	75.00	15567	116.00	137	167.00	41
40.00	73	76.00	1356	117.00	192	169.00	25
41.00	28	77.00	137	118.00	92	171.00	29
43.00	34	78.00	49	119.00	139	172.00	30
44.00	229	79.00	735	123.00	20	173.00	267
45.00	337	80.00	253	124.00	21	174.00	22584
46.00	75	81.00	702	125.00	17	175.00	1604
47.00	427	82.00	181	127.00	19	176.00	21640
48.00	243	83.00	23	128.00	44	177.00	1565
49.00	1375	84.00	16	129.00	25	178.00	76
50.00	6886	87.00	1343	130.00	117	181.00	32
51.00	2191	88.00	1226	131.00	82	183.00	32
52.00	51	90.00	21	134.00	22	190.00	17
53.00	31	91.00	141	136.00	20	191.00	26
54.00	36	92.00	992	137.00	56	203.00	18
55.00	127	93.00	1172	139.00	20	207.00	22
56.00	508	94.00	3230	140.00	85	211.00	21
57.00	841	95.00	30248	141.00	137	220.00	20
59.00	60	96.00	2185	142.00	32	236.00	33
60.00	306	97.00	111	143.00	336	241.00	26
61.00	1463	98.00	21	146.00	78	246.00	17
62.00	1489	99.00	28	147.00	2	249.00	26
63.00	1136	104.00	155	148.00	92	260.00	23
64.00	97	105.00	76	150.00	27	277.00	18
67.00	83	106.00	91	151.00	27	287.00	17
68.00	2797	107.00	58	154.00	25	323.00	19
69.00	3226	108.00	44	155.00	40	330.00	28
70.00	251	109.00	18	156.00	26	347.00	21
71.00	16	110.00	24	158.00	24	368.00	20

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44757.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	04-May-2018 22:05:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0071534-001				
Operator ID:		Instrument ID:	CVOAMS13		
Method:	\\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\8260W_13.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	05-May-2018 00:22:38	Calib Date:	20-Apr-2018 07:16:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK005				
First Level Reviewer: starzecm		Date:	05-May-2018 00:22:38		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 139 BFB	95	2.157	2.157	0.000	86	48233	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

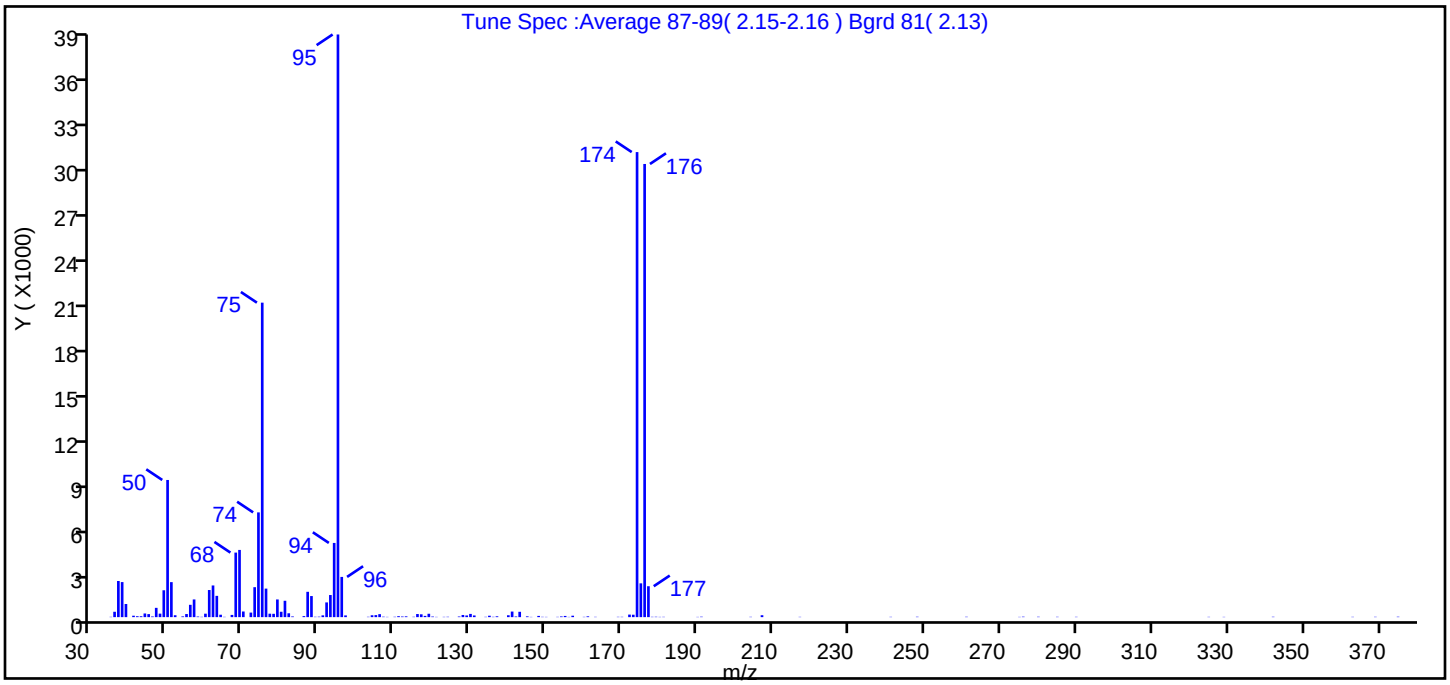
BFB_00016 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44757.D
Injection Date: 04-May-2018 22:05:30 Instrument ID: CVOAMS13
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 139 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.5
75	30 to 60% of m/z 95	54.0
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	79.8
175	5 to 9% of m/z 174	5.8 (7.3)
176	Greater than 95% but less than 101% of m/z 174	77.8 (97.4)
177	5 to 9% of m/z 176	5.3 (6.8)

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44757.D\8260W_13.rslt\spectra.d
Injection Date: 04-May-2018 22:05:30
Spectrum: Tune Spec :Average 87-89(2.15-2.16) Bgrd 81(2.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 133

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	20	73.00	1956	116.00	203	169.00	21
36.00	351	74.00	6841	117.00	185	170.00	21
37.00	2360	75.00	20536	118.00	82	172.00	167
38.00	2289	76.00	1863	119.00	221	173.00	158
39.00	858	77.00	225	120.00	39	174.00	30368
41.00	93	78.00	218	121.00	17	175.00	2207
42.00	60	79.00	1155	123.00	19	176.00	29592
43.00	58	80.00	352	124.00	24	177.00	2019
44.00	239	81.00	1069	127.00	41	178.00	22
45.00	198	82.00	252	128.00	141	179.00	26
46.00	44	83.00	45	129.00	110	180.00	17
47.00	607	86.00	67	130.00	211	181.00	20
48.00	229	87.00	1654	131.00	110	190.00	16
49.00	1755	88.00	1377	134.00	21	191.00	29
50.00	8957	89.00	25	135.00	93	204.00	21
51.00	2286	90.00	31	136.00	22	207.00	125
52.00	124	91.00	117	137.00	55	217.00	19
54.00	49	92.00	962	140.00	123	241.00	20
55.00	203	93.00	1444	141.00	365	248.00	26
56.00	805	94.00	4846	142.00	42	261.00	25
57.00	1156	95.00	38048	143.00	349	275.00	17
58.00	40	96.00	2627	145.00	51	276.00	30
59.00	20	97.00	113	146.00	16	280.00	26
60.00	226	103.00	23	148.00	81	285.00	22
61.00	1771	104.00	123	149.00	21	290.00	21
62.00	2069	105.00	133	150.00	17	325.00	19
63.00	1390	106.00	195	153.00	19	329.00	17
64.00	158	107.00	30	154.00	46	342.00	25
65.00	19	108.00	17	155.00	79	363.00	20
67.00	145	110.00	24	156.00	16	369.00	22
68.00	4215	111.00	62	157.00	93	375.00	28
69.00	4389	112.00	41	160.00	19		
70.00	369	113.00	52	161.00	52		

Report Date: 05-May-2018 00:22:38 Chrom Revision: 2.2 26-Apr-2018 11:26:08
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44757.D\8260W_13.rslt\spectra.d
Injection Date: 04-May-2018 22:05:30
Spectrum: Tune Spec :Average 87-89(2.15-2.16) Bgrd 81(2.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 133

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	297	115.00	24	163.00	20		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-516016/8

Matrix: Water Lab File ID: N66519.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/02/2018 19:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516016/8

Matrix: Water | Lab File ID: N66519.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 19:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		74-132
460-00-4	4-Bromofluorobenzene	96		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-516016/8

Matrix: Water Lab File ID: N66519.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/02/2018 19:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66519.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-May-2018 19:53:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0071421-008
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:57:46 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: baronm Date: 03-May-2018 17:35:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.949	2.931	0.018	0	130618	1000.0	1000.0	
* 39 2-Butanone-d5	46	4.056	4.044	0.012	0	134069	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.556	0.005	95	188632	50.0	54.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.938	4.939	-0.001	0	183624	50.0	55.5	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	767729	50.0	50.0	
* 68 1,4-Dioxane-d8	96	6.064	6.052	0.012	0	17173	1000.0	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	859682	50.0	47.2	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	621085	50.0	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	85	198030	50.0	48.0	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	269424	50.0	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

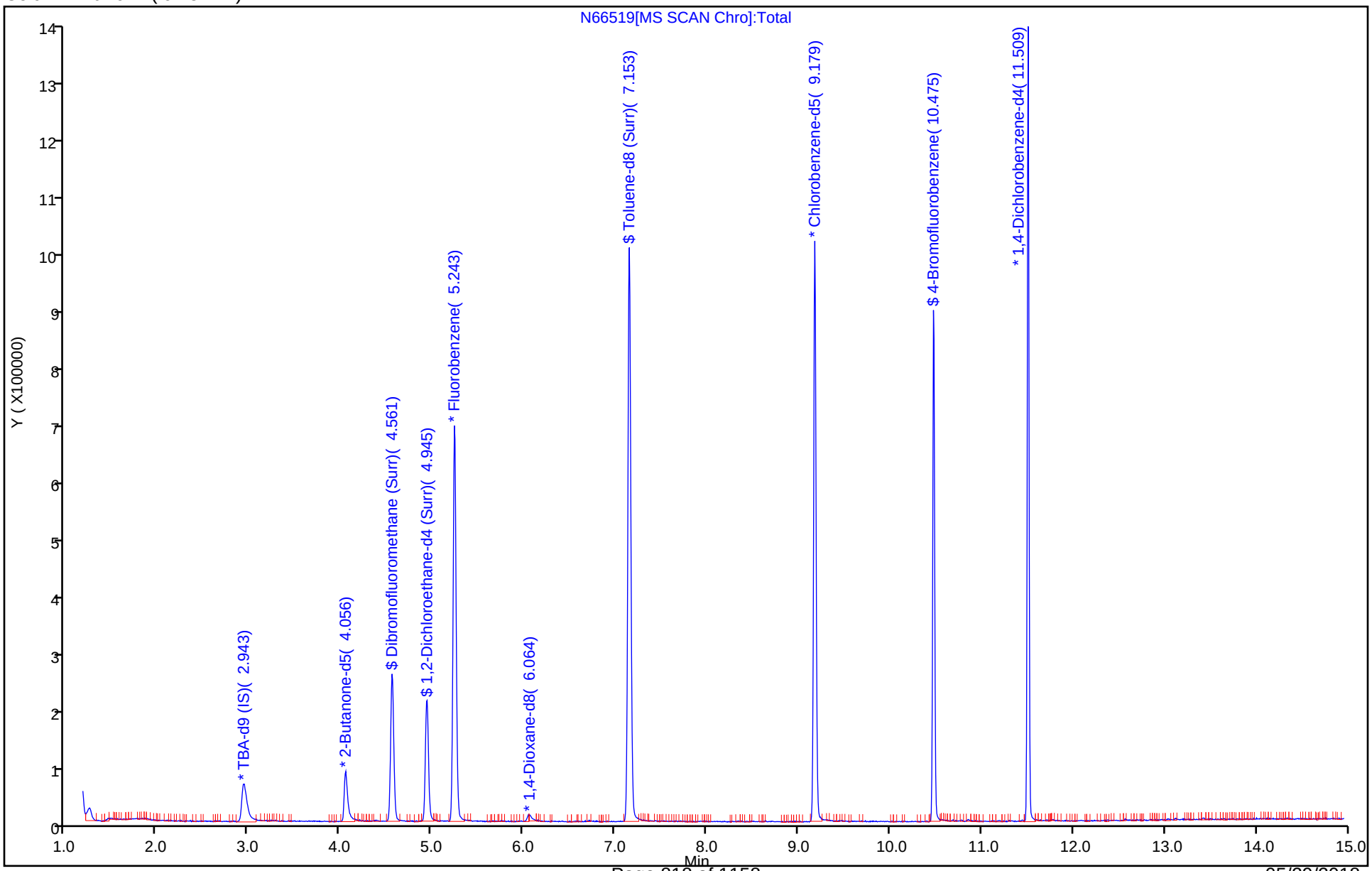
Report Date: 03-May-2018 18:11:46 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66519.D

Injection Date:	02-May-2018 19:53:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



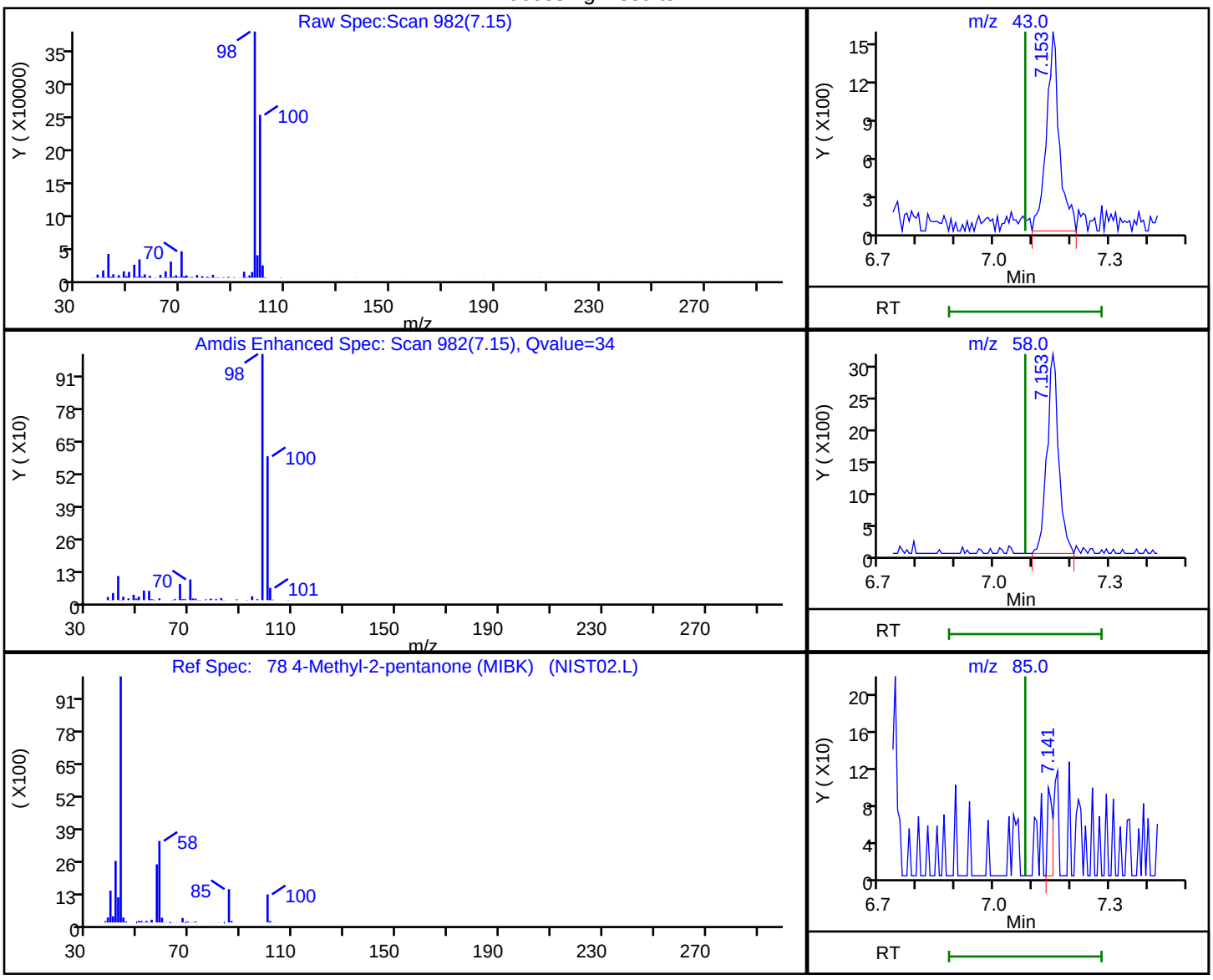
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66519.D
Injection Date: 02-May-2018 19:53:30 Instrument ID: CVOAMS11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	3723	2.562303
7.15	58.00	6585	
7.14	85.00	87	
7.15	100.00	570721	

Reviewer: parekhv, 02-May-2018 20:11:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-516110/7

Matrix: Water Lab File ID: N66545.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 07:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516110 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516110/7

Matrix: Water | Lab File ID: N66545.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 07:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		74-132
460-00-4	4-Bromofluorobenzene	94		77-124
1868-53-7	Dibromofluoromethane (Surr)	106		72-131
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-516110/7

Matrix: Water Lab File ID: N66545.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 07:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516110 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66545.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-May-2018 07:03:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0071436-007
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 14:30:43 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: delpolitov Date: 03-May-2018 14:30:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.931	2.931	0.000	0	120085	1000.0	1000.0	
* 39 2-Butanone-d5	46	4.050	4.050	0.000	0	133433	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.555	0.006	95	187100	50.0	52.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.933	0.005	0	178820	50.0	52.7	
* 62 Fluorobenzene	96	5.243	5.237	0.006	99	787898	50.0	50.0	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	14726	1000.0	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	817968	50.0	47.7	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	584678	50.0	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	85	183555	50.0	47.2	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	257749	50.0	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

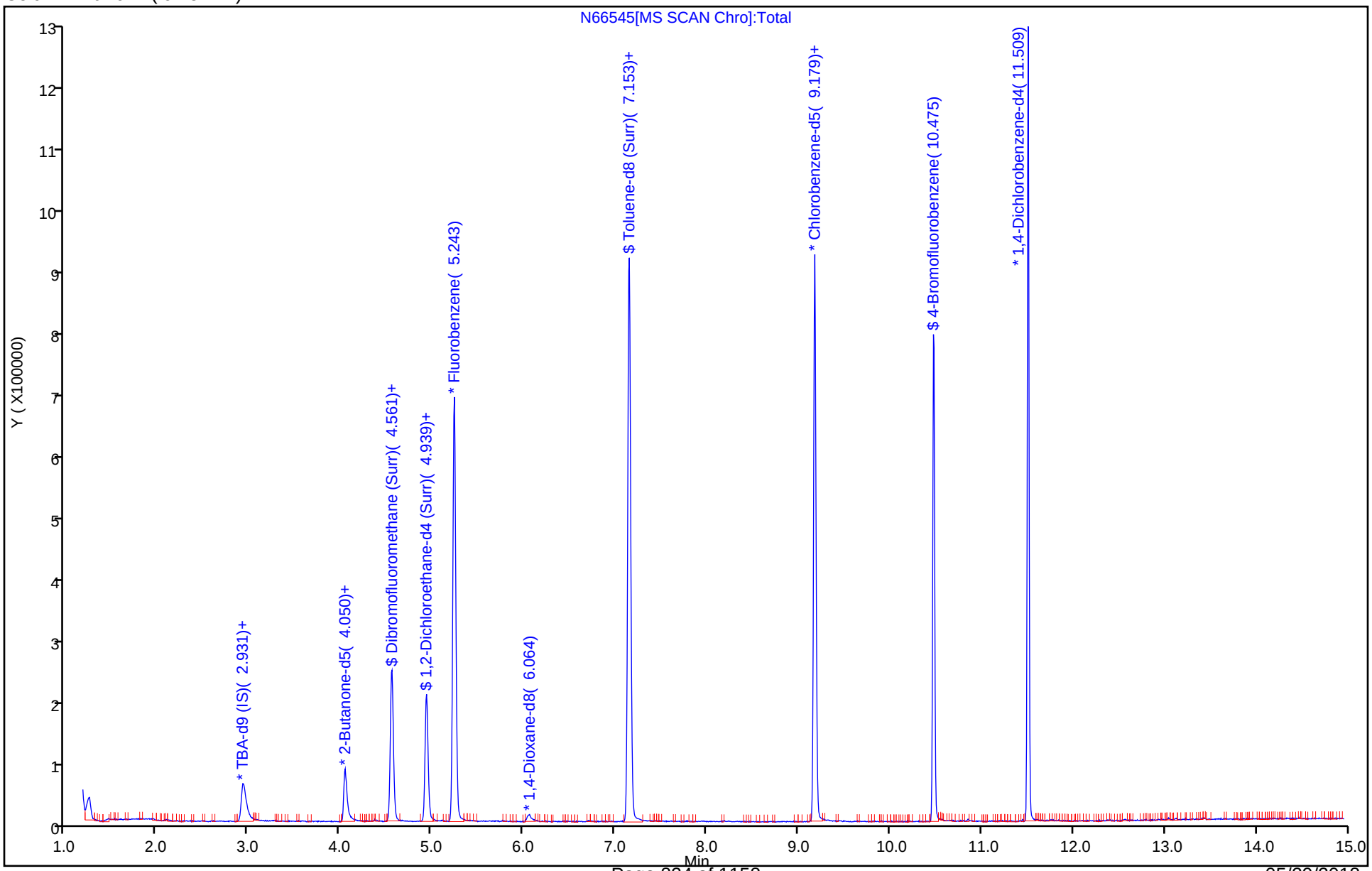
Report Date: 03-May-2018 14:30:46 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66545.D

Injection Date:	03-May-2018 07:03:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



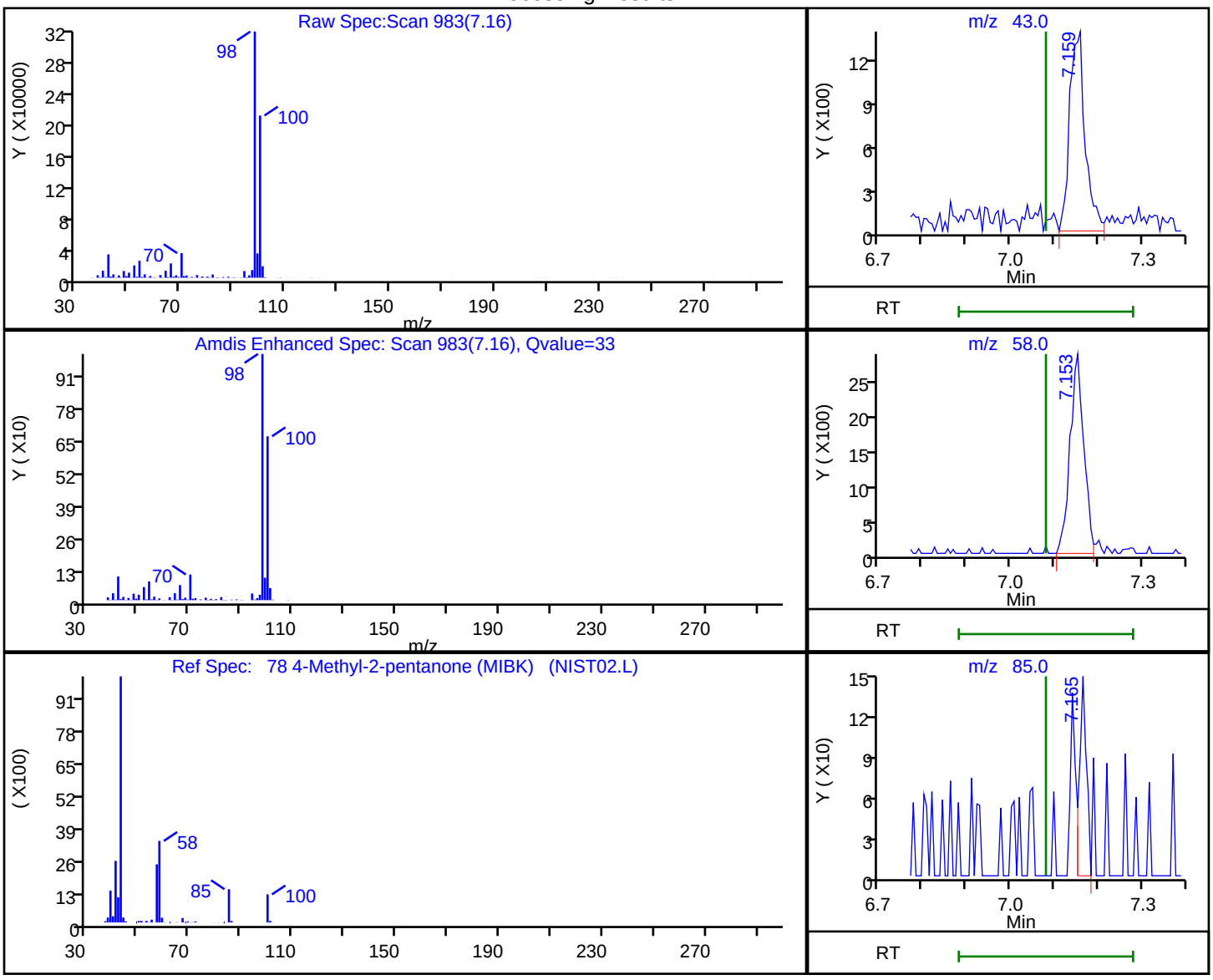
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66545.D
Injection Date: 03-May-2018 07:03:30 Instrument ID: CVOAMS11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.16	43.00	3426	2.369136
7.15	58.00	6128	
7.17	85.00	161	
7.15	100.00	541646	

Reviewer: delpolitov, 03-May-2018 14:30:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516291/8

Matrix: Water | Lab File ID: P44707.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 00:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516291/8

Matrix: Water | Lab File ID: P44707.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 00:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		74-132
460-00-4	4-Bromofluorobenzene	105		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	105		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-516291/8

Matrix: Water Lab File ID: P44707.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 00:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44707.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 04-May-2018 00:27:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0071476-008
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 14:50:07 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: baronm Date: 04-May-2018 14:50:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	290646	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	0.000	28	1241		3.43	M
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	154530	50.0	54.5	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	362086	250.0	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	202907	50.0	52.4	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	535109	50.0	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	30727	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	99	654341	50.0	52.4	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	455994	50.0	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	89	187803	50.0	52.7	
* 119 1,4-Dichlorobenzene-d4	152	10.620	10.620	0.000	97	252002	50.0	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 04-May-2018 14:50:14 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44707.D

Injection Date: 04-May-2018 00:27:30 Instrument ID: CVOAMS13 Operator ID:

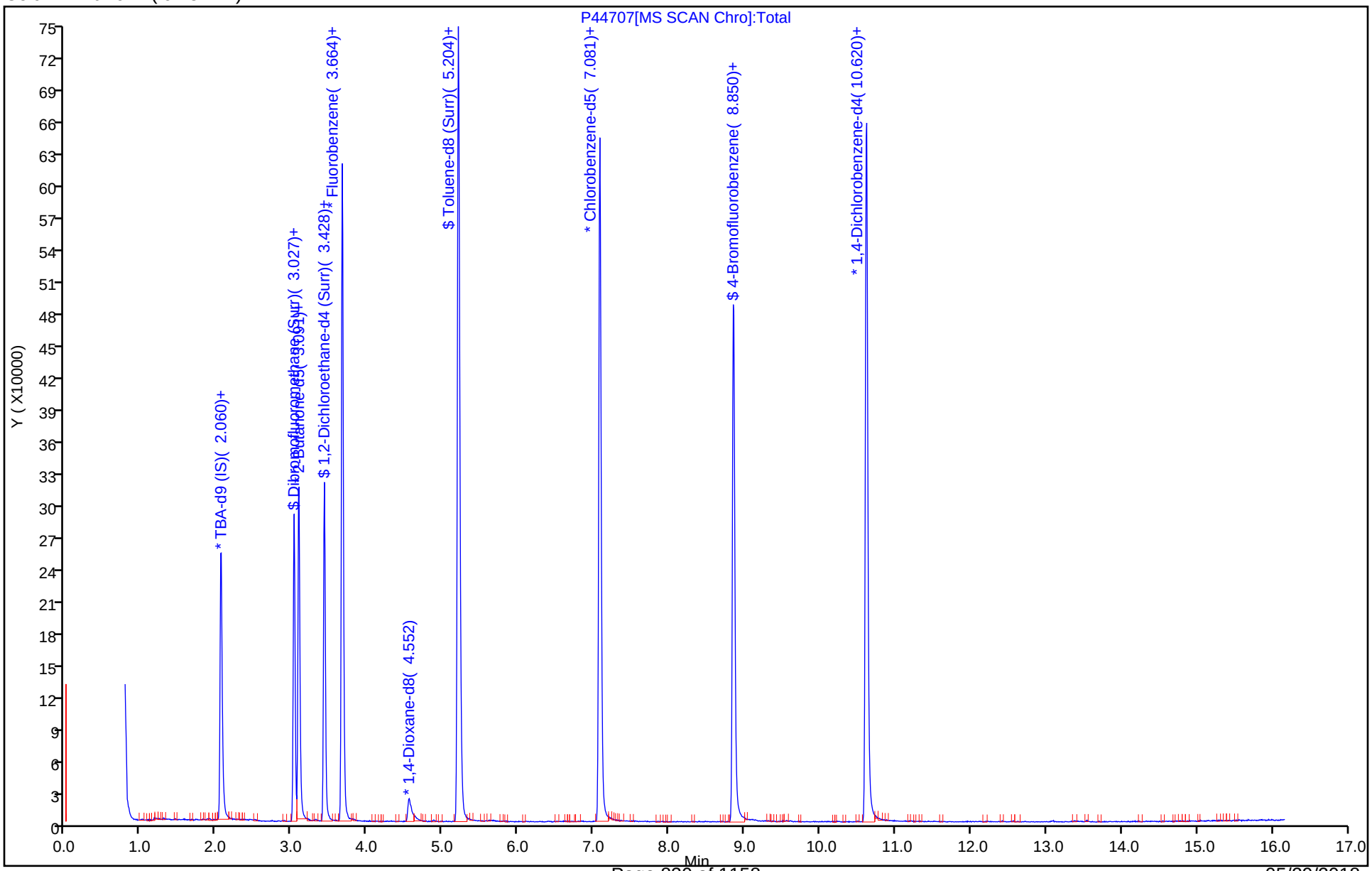
Lims ID: MB Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516299/8

Matrix: Water | Lab File ID: N665685.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 19:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516299/8

Matrix: Water | Lab File ID: N665685.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 19:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		74-132
460-00-4	4-Bromofluorobenzene	91		77-124
1868-53-7	Dibromofluoromethane (Surr)	104		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516299/8

Matrix: Water | Lab File ID: N665685.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 19:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665685.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-May-2018 19:58:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0071478-008
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 17:50:33 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: parekhv Date: 03-May-2018 20:26:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	2.943	2.943	0.000	0	122639	1000.0	1000.0	
* 39 2-Butanone-d5	46	4.050	4.056	-0.006	0	132420	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.568	-0.007	95	177551	50.0	52.2	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.945	-0.006	0	168951	50.0	51.8	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	757144	50.0	50.0	
* 68 1,4-Dioxane-d8	96	6.058	6.058	0.000	0	14858	1000.0	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.153	7.153	0.000	99	765457	50.0	46.9	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	556690	50.0	50.0	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	86	167815	50.0	45.4	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	236961	50.0	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00171 Amount Added: 1.00 Units: uL Run Reagent

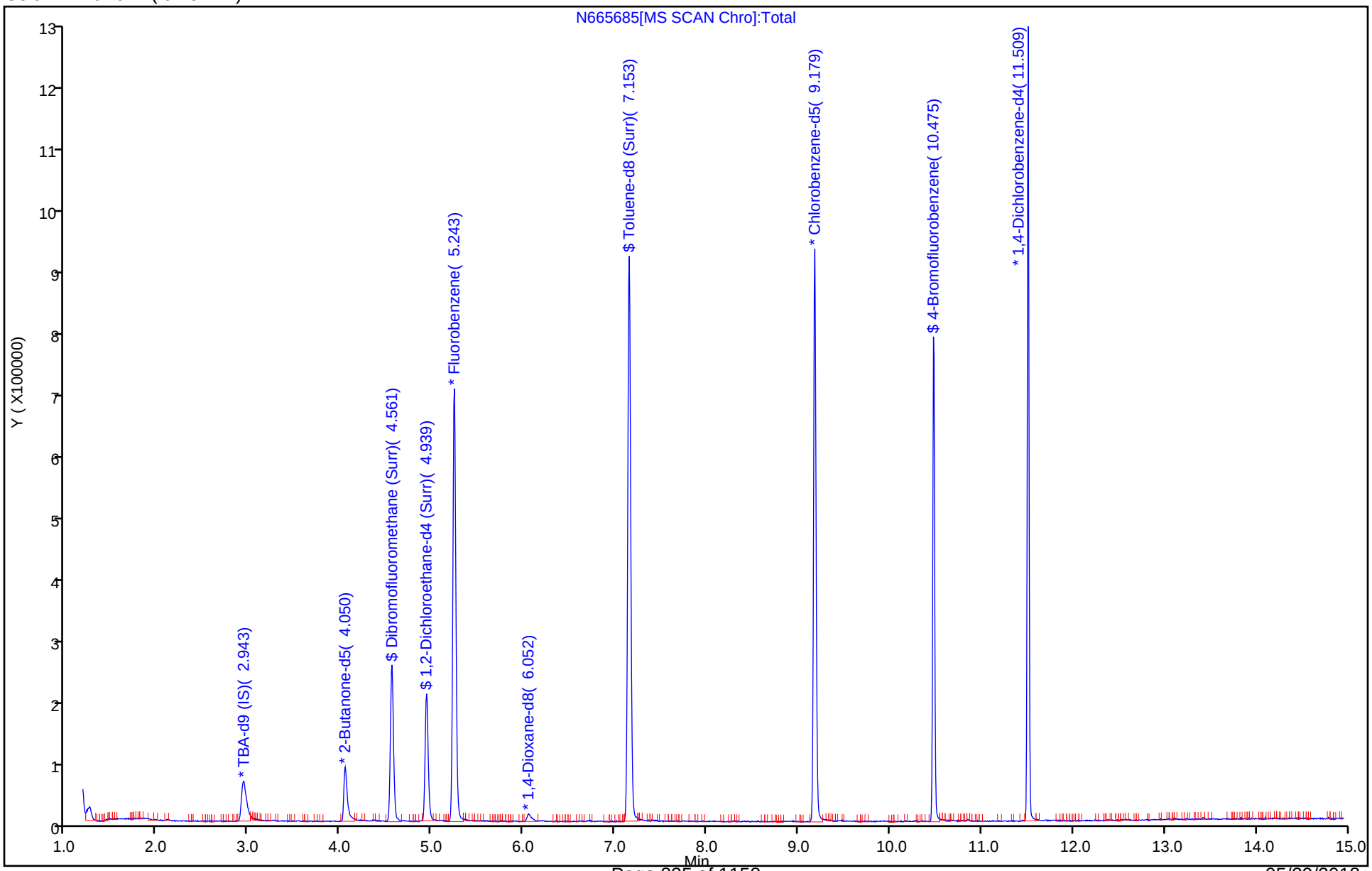
Report Date: 04-May-2018 17:54:40 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665685.D

Injection Date:	03-May-2018 19:58:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



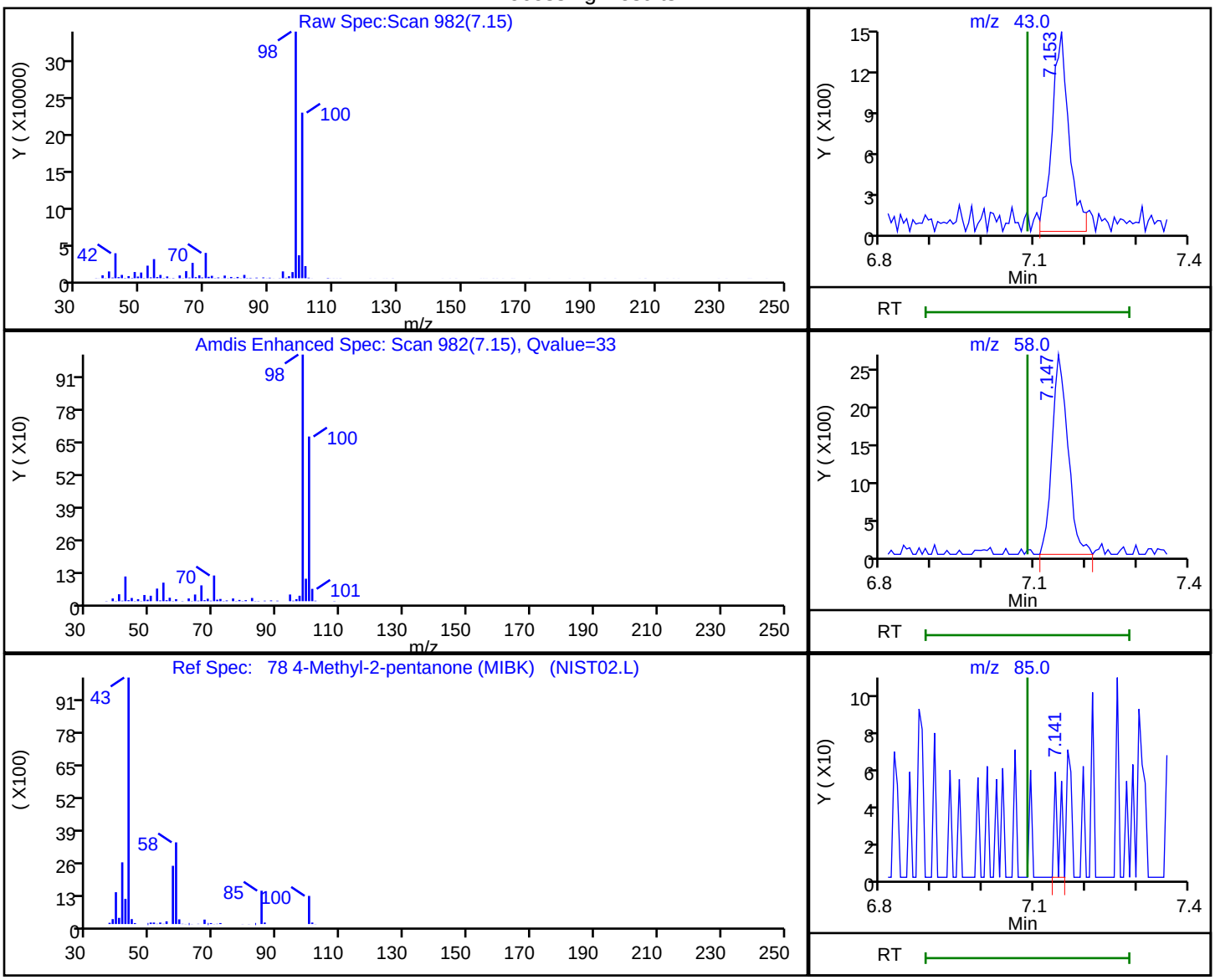
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665685.D
Injection Date: 03-May-2018 19:58:30 Instrument ID: CVOAMS11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

78 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.15	43.00	3402	2.370536
7.15	58.00	5721	
7.14	85.00	40	
7.15	100.00	508792	

Reviewer: parekhv, 03-May-2018 20:26:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

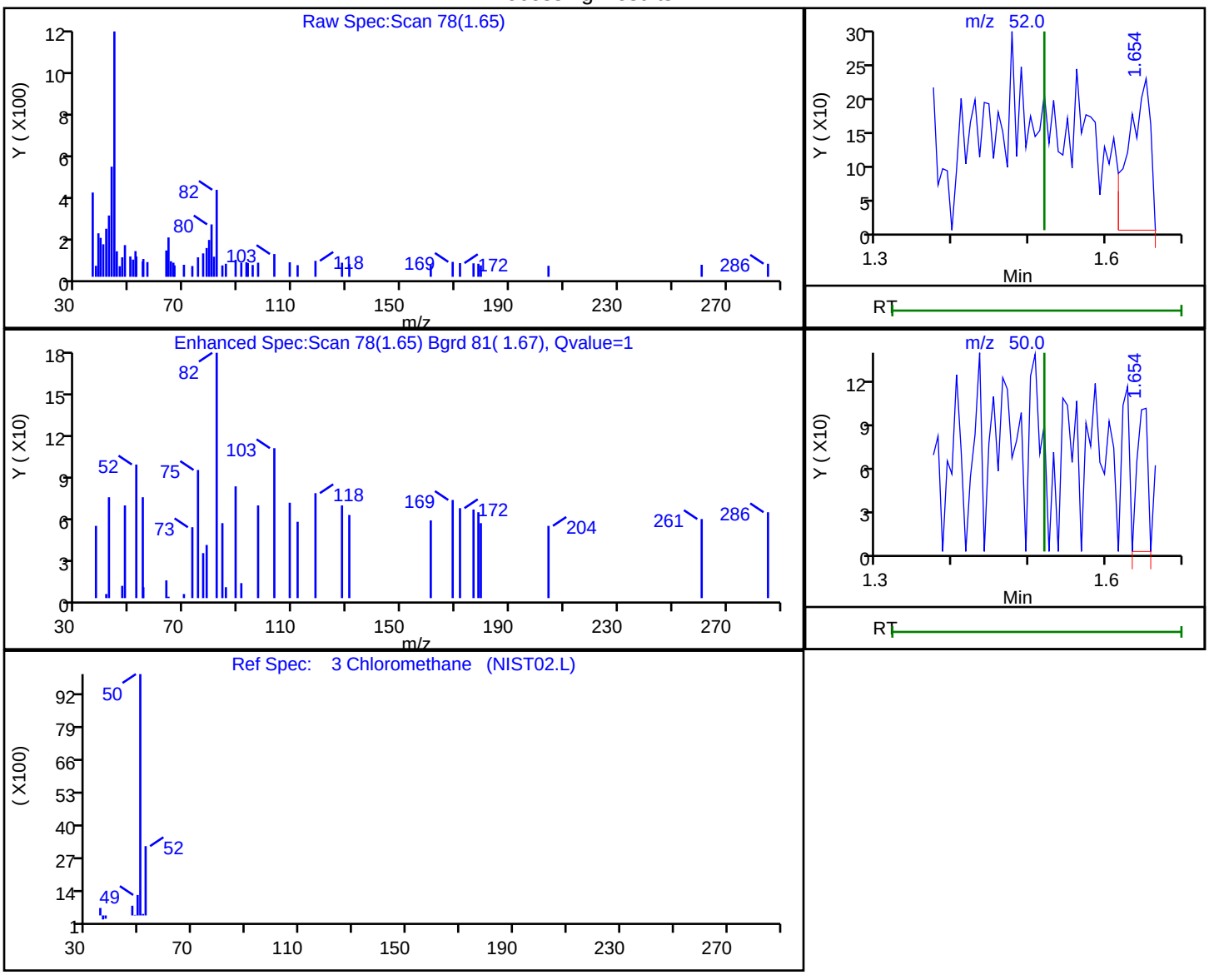
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665685.D
Injection Date: 03-May-2018 19:58:30 Instrument ID: CVOAMS11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.65	52.00	424	0.386754
1.65	50.00	94	

Reviewer: parekhv, 03-May-2018 20:26:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516419/7

Matrix: Water | Lab File ID: P44734.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 12:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516419/7

Matrix: Water | Lab File ID: P44734.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 12:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		74-132
460-00-4	4-Bromofluorobenzene	99		77-124
1868-53-7	Dibromofluoromethane (Surr)	106		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516419/7

Matrix: Water | Lab File ID: P44734.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 12:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 3.04

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
75-65-0	2-Methyl-2-propanol	2.11	3.04	J	91%

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44734.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 04-May-2018 12:05:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0071500-007
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 14:46:11 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 04-May-2018 14:46:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	286367	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.110	2.102	0.008	91	1086		3.04	M
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.001	96	150080	50.0	52.9	
* 49 2-Butanone-d5	46	3.084	3.091	-0.007	0	354596	250.0	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	196940	50.0	50.7	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	98	535920	50.0	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	31449	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	628543	50.0	49.7	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	462023	50.0	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.850	0.007	87	179168	50.0	49.6	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.612	0.007	97	253592	50.0	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

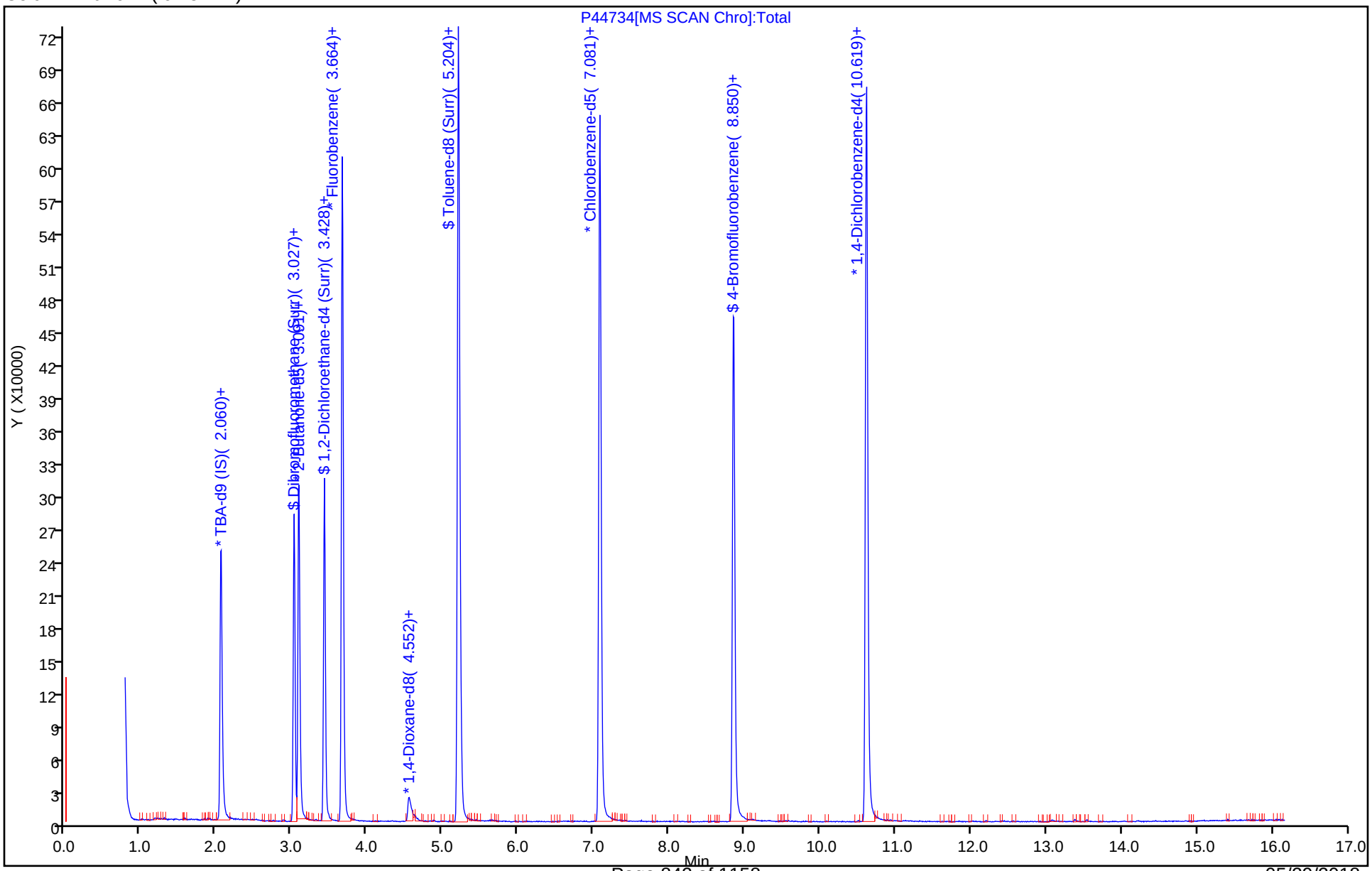
Report Date: 04-May-2018 14:46:22 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44734.D

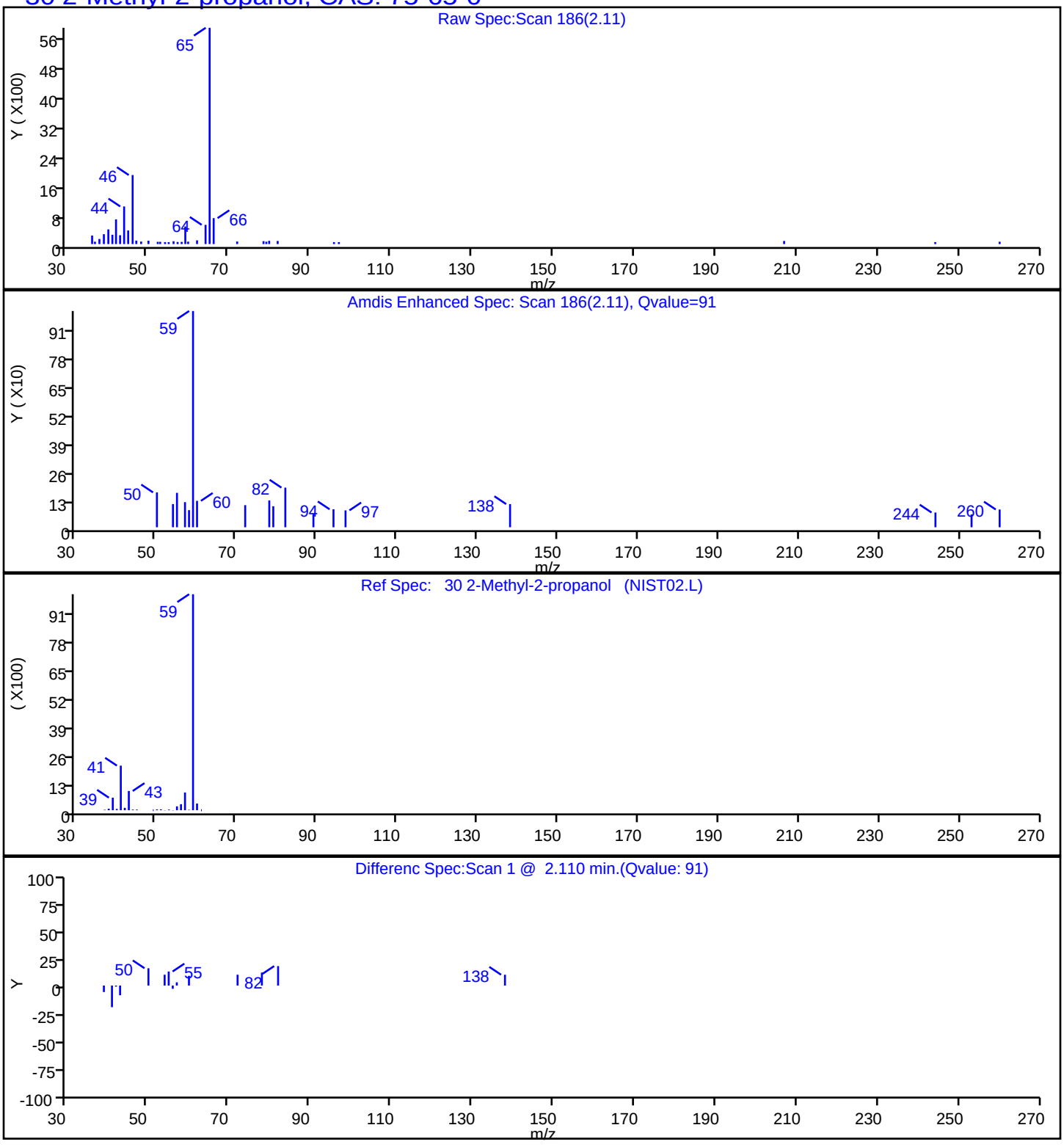
Injection Date:	04-May-2018 12:05:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44734.D
Injection Date: 04-May-2018 12:05:30 Instrument ID: CVOAMS13
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

30 2-Methyl-2-propanol, CAS: 75-65-0



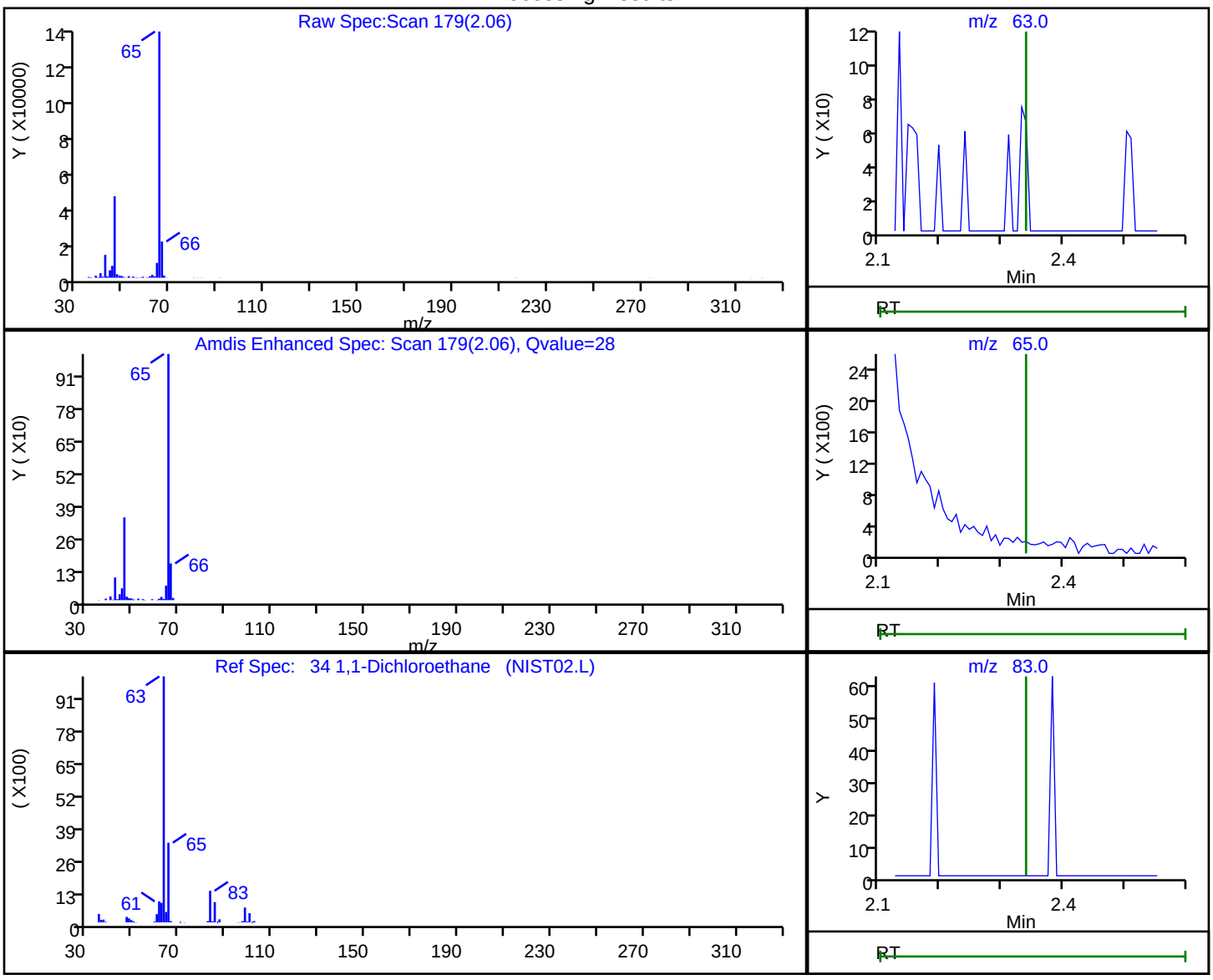
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44734.D
Injection Date: 04-May-2018 12:05:30 Instrument ID: CVOAMS13
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

34 1,1-Dichloroethane, CAS: 75-34-3

Processing Results



RT	Mass	Response	Amount
2.06	63.00	1537	0.249244
2.06	65.00	286367	
2.05	83.00	49	

Reviewer: desais, 04-May-2018 11:50:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

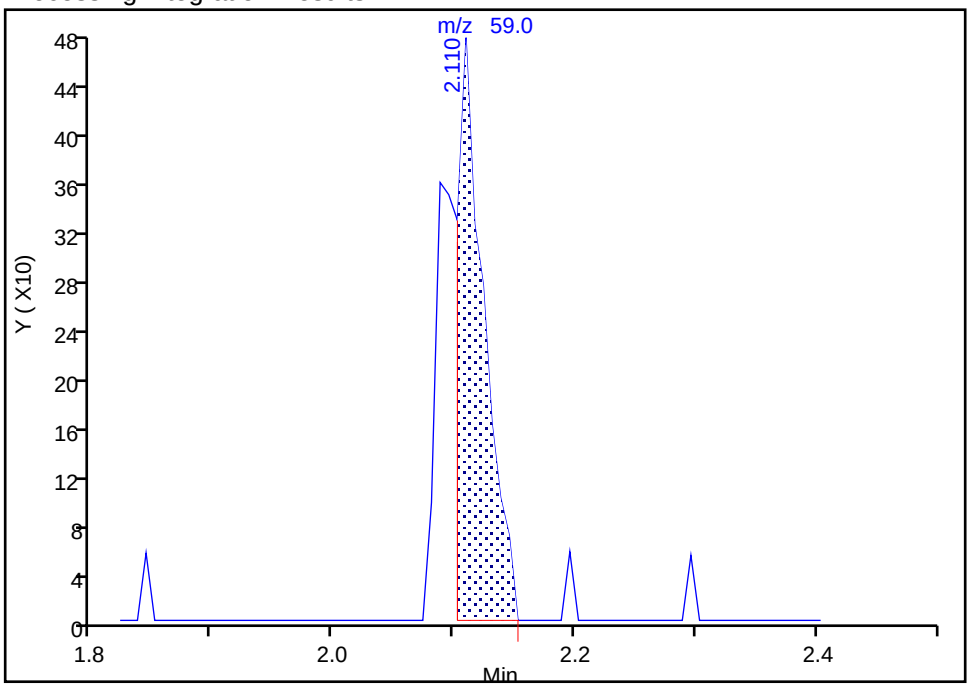
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44734.D
Injection Date: 04-May-2018 12:05:30 Instrument ID: CVOAMS13
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

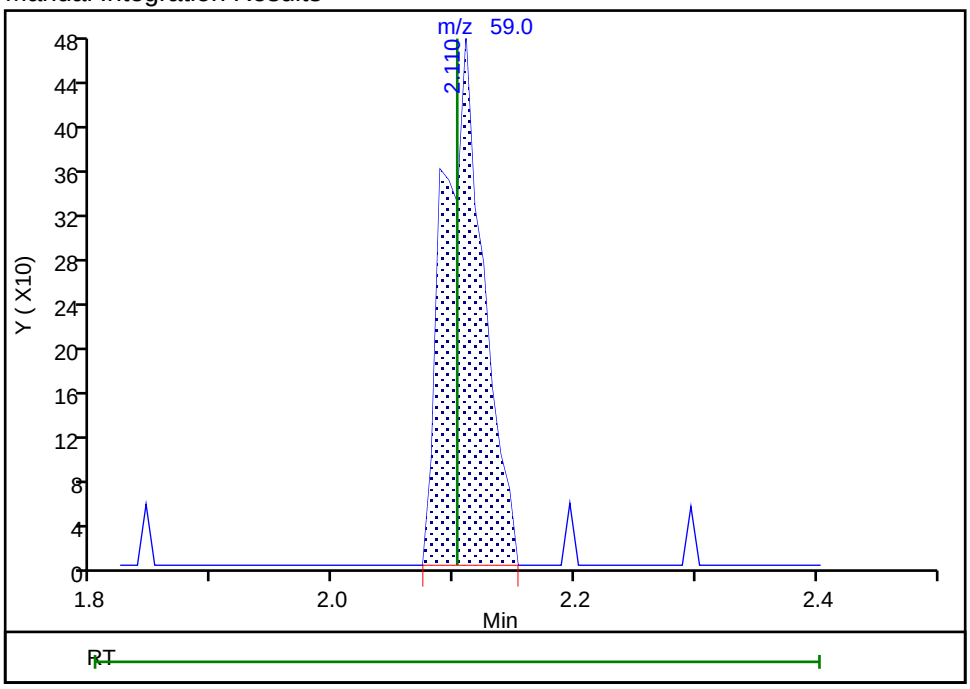
Processing Integration Results

RT: 2.11
Area: 742
Amount: 2.079354
Amount Units: ug/l



Manual Integration Results

RT: 2.11
Area: 1086
Amount: 3.043367
Amount Units: ug/l



Reviewer: delpolitov, 04-May-2018 14:45:49
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516607/10

Matrix: Water | Lab File ID: P44766.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 01:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	1.28	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516607/10

Matrix: Water | Lab File ID: P44766.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 01:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		74-132
460-00-4	4-Bromofluorobenzene	100		77-124
1868-53-7	Dibromofluoromethane (Surr)	110		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516607/10

Matrix: Water | Lab File ID: P44766.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 01:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 3.56

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
75-65-0	2-Methyl-2-propanol	2.10	3.56	J	92%

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44766.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-May-2018 01:57:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0071534-010
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 07-May-2018 12:30:19 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: xuyvo Date: 07-May-2018 12:30:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Acetone	43	1.909	1.902	0.007	83	1374		1.28	
* 29 TBA-d9 (IS)	65	2.059	2.059	0.000	0	301504	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.102	2.102	0.000	92	1336		3.56	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.026	0.000	96	154520	50.0	54.8	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	367197	250.0	250.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	202444	50.0	52.5	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	98	532200	50.0	50.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	30982	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.211	-0.007	98	649141	50.0	50.9	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	465771	50.0	50.0	
$ 103 4-Bromofluorobenzene	174	8.857	8.857	0.000	86	181356	50.0	49.8	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.612	0.007	97	256914	50.0	50.0	

Reagents:

8260ISNEW_00121 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00174 Amount Added: 1.00 Units: uL Run Reagent

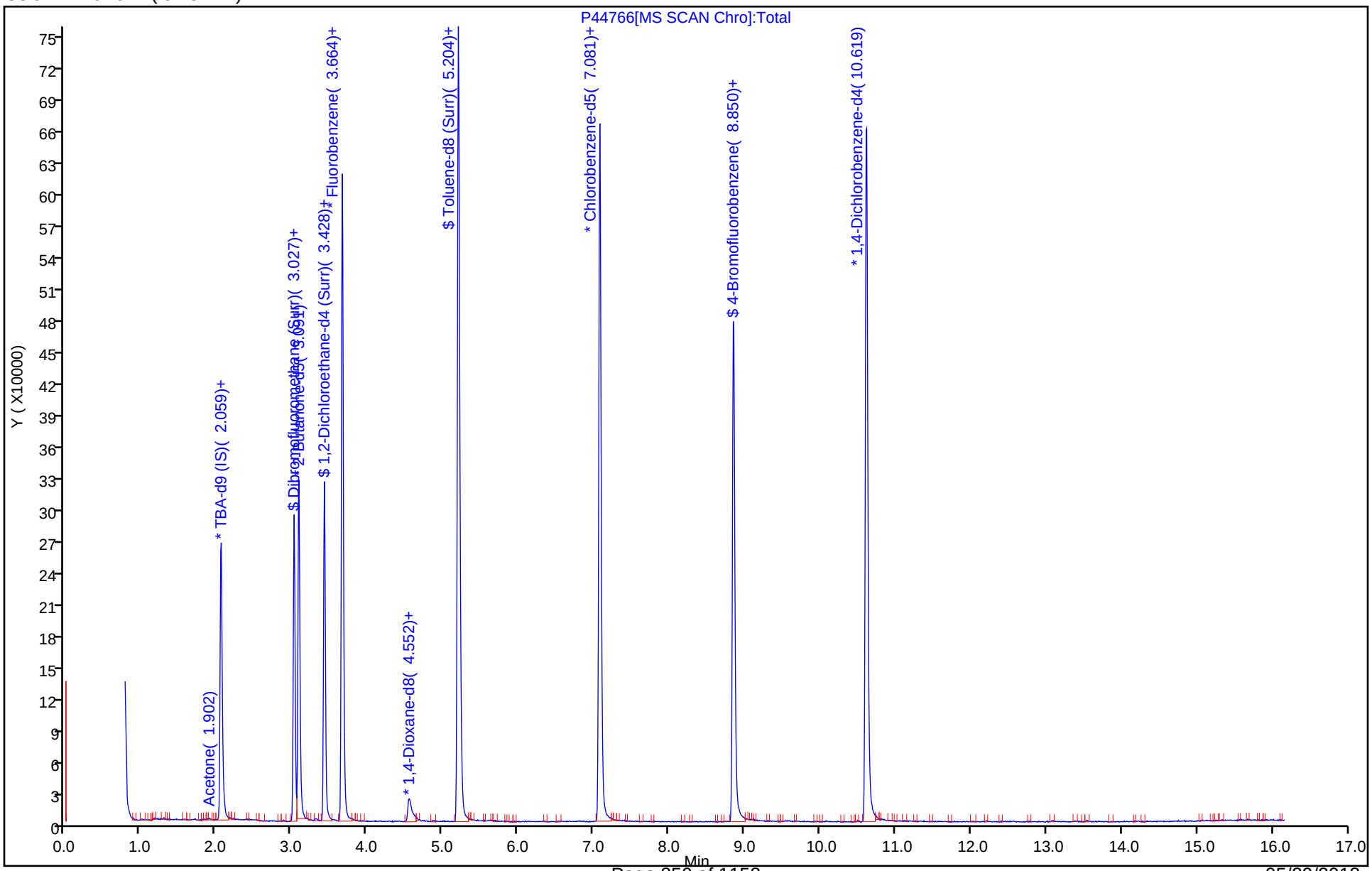
Report Date: 07-May-2018 12:30:27 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44766.D

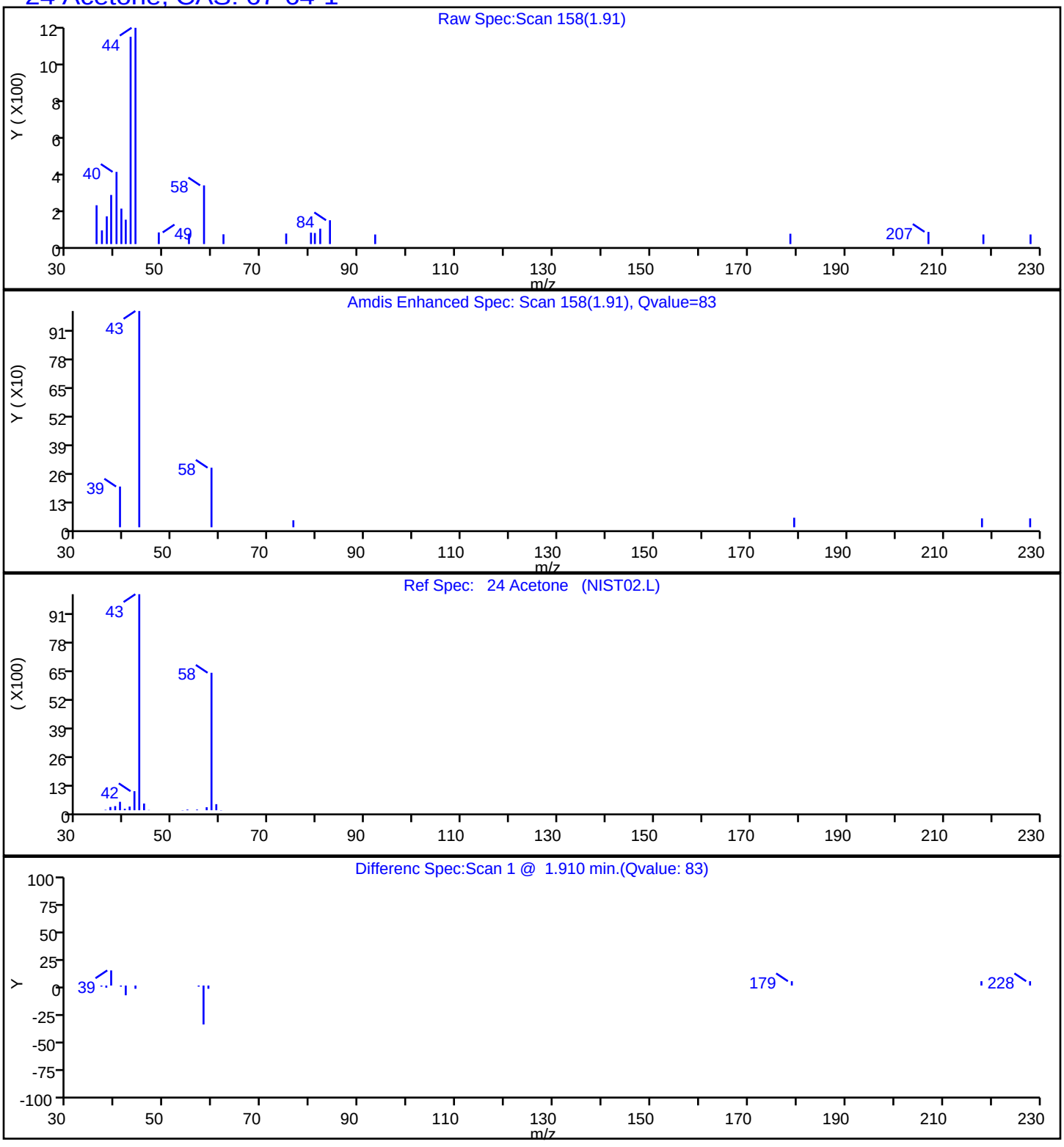
Injection Date:	05-May-2018 01:57:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	MB			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



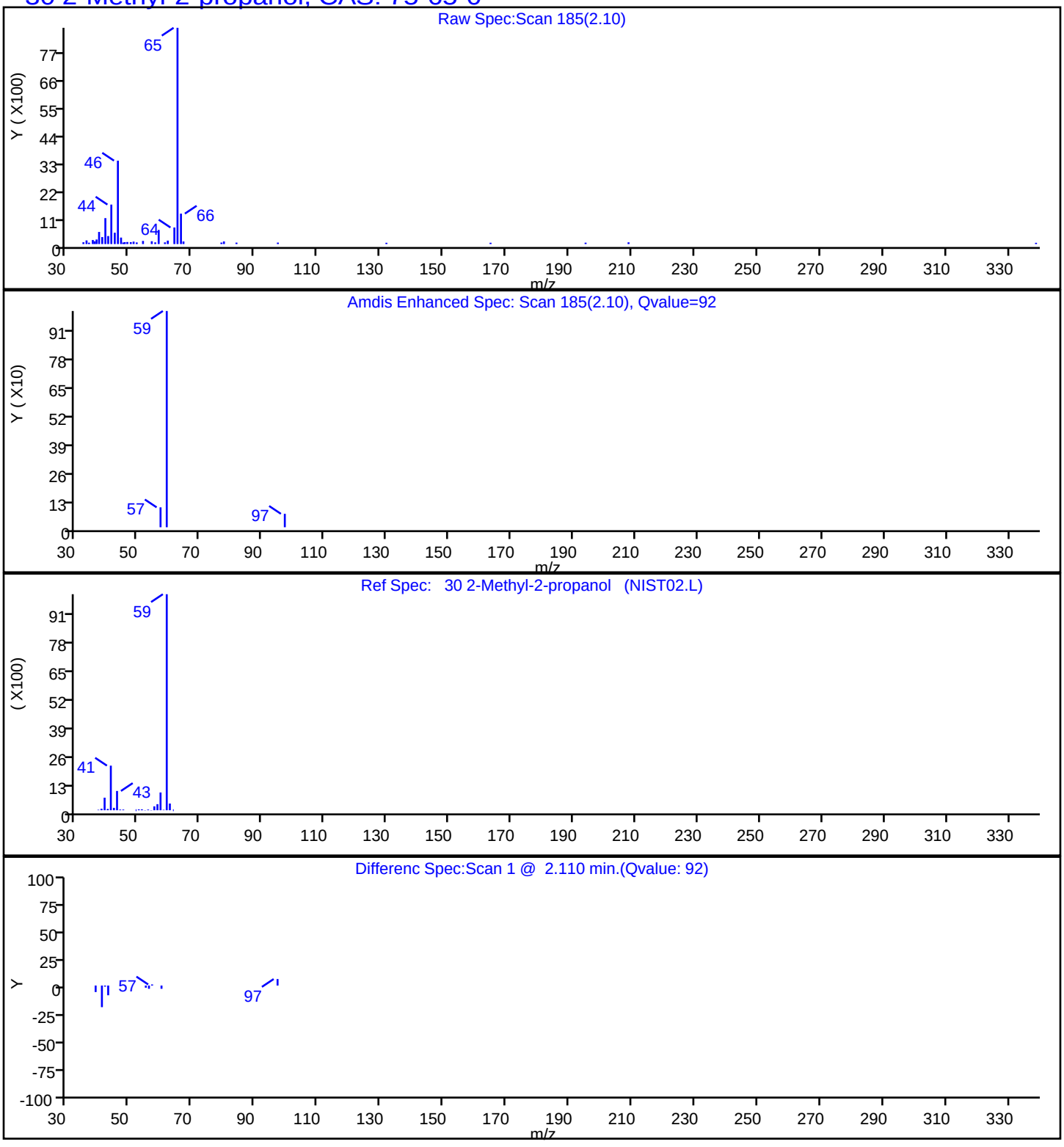
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44766.D
Injection Date: 05-May-2018 01:57:30 Instrument ID: CVOAMS13
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44766.D
Injection Date: 05-May-2018 01:57:30 Instrument ID: CVOAMS13
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

30 2-Methyl-2-propanol, CAS: 75-65-0



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516016/4

Matrix: Water | Lab File ID: N66515.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 18:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	22.6		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	18.8		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20.5		1.0	0.34
79-00-5	1,1,2-Trichloroethane	19.1		1.0	0.080
75-34-3	1,1-Dichloroethane	21.2		1.0	0.24
75-35-4	1,1-Dichloroethene	19.4		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	18.3		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	17.7		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	17.9		1.0	0.23
95-50-1	1,2-Dichlorobenzene	20.1		1.0	0.22
107-06-2	1,2-Dichloroethane	22.0		1.0	0.25
78-87-5	1,2-Dichloropropane	20.5		1.0	0.18
541-73-1	1,3-Dichlorobenzene	20.6		1.0	0.33
106-46-7	1,4-Dichlorobenzene	19.6		1.0	0.33
123-91-1	1,4-Dioxane	412		50	8.7
78-93-3	2-Butanone (MEK)	92.3		5.0	2.2
591-78-6	2-Hexanone	83.4		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	98.3		5.0	0.63
67-64-1	Acetone	96.0		5.0	1.1
71-43-2	Benzene	18.3		1.0	0.090
75-25-2	Bromoform	15.9		1.0	0.18
74-83-9	Bromomethane	27.3		1.0	0.18
75-15-0	Carbon disulfide	16.5		1.0	0.22
56-23-5	Carbon tetrachloride	25.1		1.0	0.33
108-90-7	Chlorobenzene	19.8		1.0	0.24
74-97-5	Chlorobromomethane	21.5		1.0	0.30
124-48-1	Chlorodibromomethane	18.0		1.0	0.22
75-00-3	Chloroethane	27.6		1.0	0.37
67-66-3	Chloroform	21.5		1.0	0.22
74-87-3	Chloromethane	23.3		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	21.1		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	17.4		1.0	0.16
110-82-7	Cyclohexane	18.4		1.0	0.26
75-27-4	Dichlorobromomethane	20.3		1.0	0.15
75-71-8	Dichlorodifluoromethane	23.0		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516016/4

Matrix: Water | Lab File ID: N66515.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 18:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	18.3		1.0	0.30
106-93-4	Ethylene Dibromide	18.9		1.0	0.19
98-82-8	Isopropylbenzene	19.1		1.0	0.32
79-20-9	Methyl acetate	41.0		5.0	0.58
1634-04-4	Methyl tert-butyl ether	19.4		1.0	0.13
108-87-2	Methylcyclohexane	18.1		1.0	0.22
75-09-2	Methylene Chloride	21.3		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	18.1		1.0	0.28
95-47-6	o-Xylene	18.5		1.0	0.32
100-42-5	Styrene	20.0		1.0	0.17
127-18-4	Tetrachloroethene	18.7		1.0	0.12
108-88-3	Toluene	18.8		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	20.4		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	18.1		1.0	0.19
79-01-6	Trichloroethene	20.3		1.0	0.22
75-69-4	Trichlorofluoromethane	25.6		1.0	0.15
75-01-4	Vinyl chloride	25.7		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		74-132
460-00-4	4-Bromofluorobenzene	98		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66515.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-May-2018 18:20:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0071421-004
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:31:01 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: parekhv Date: 02-May-2018 19:13:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.319	1.325	-0.006	87	55581	20.0	15.1	
2 Dichlorodifluoromethane	87	1.349	1.349	0.000	99	48001	20.0	23.0	
3 Chloromethane	52	1.508	1.508	0.000	98	31231	20.0	23.3	
4 Vinyl chloride	62	1.587	1.587	0.000	97	112279	20.0	25.7	
5 Butadiene	54	1.587	1.593	-0.006	94	82574	20.0	26.1	
6 Bromomethane	94	1.842	1.842	0.000	99	84194	20.0	27.3	
7 Chloroethane	64	1.909	1.915	-0.006	99	61473	20.0	27.6	
8 Dichlorofluoromethane	67	2.073	2.073	0.000	98	190032	20.0	23.6	
9 Trichlorofluoromethane	101	2.073	2.073	0.000	94	159349	20.0	25.6	
10 Pentane	72	2.098	2.104	-0.006	97	29229	40.0	41.3	
11 Ethanol	46	2.274	2.274	0.000	74	6814	800.0	802.1	
12 Ethyl ether	59	2.286	2.292	-0.006	90	46302	20.0	19.4	
13 2-Methyl-1,3-butadiene	53	2.305	2.305	0.000	96	61857	20.0	16.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.341	0.000	91	75871	20.0	20.8	
16 Acrolein	56	2.463	2.463	0.000	94	9470	40.0	38.5	
15 1,1,2-Trichloro-1,2,2-trif	101	2.475	2.481	-0.006	93	92376	20.0	20.5	
17 1,1-Dichloroethene	96	2.487	2.487	0.000	98	72359	20.0	19.4	
18 Acetone	43	2.578	2.578	0.000	87	38458	100.0	96.0	
19 Iodomethane	142	2.633	2.639	-0.006	99	117147	20.0	19.6	
20 Carbon disulfide	76	2.670	2.670	0.000	99	225187	20.0	16.5	
21 Isopropyl alcohol	45	2.682	2.682	0.000	25	14611	200.0	197.1	
22 3-Chloro-1-propene	76	2.797	2.803	-0.006	91	44975	20.0	19.1	
24 Methyl acetate	74	2.822	2.822	0.000	40	12612	40.0	41.0	
23 Cyclopentene	67	2.822	2.822	0.000	90	177010	20.0	19.1	
25 Acetonitrile	40	2.876	2.870	0.006	93	26825	200.0	215.5	a
26 Methylene Chloride	84	2.931	2.931	0.000	89	85838	20.0	21.3	
* 27 TBA-d9 (IS)	65	2.937	2.931	0.006	0	145701	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.004	3.004	0.000	91	31063	200.0	204.6	
29 Methyl tert-butyl ether	73	3.095	3.102	-0.007	97	171349	20.0	19.4	
30 trans-1,2-Dichloroethene	96	3.120	3.120	0.000	94	86484	20.0	20.4	
31 Acrylonitrile	53	3.193	3.193	0.000	95	131729	200.0	208.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.278	3.278	0.000	92	97223	20.0	19.0	
33 Isopropyl ether	45	3.503	3.503	0.000	94	231492	20.0	20.5	
34 1,1-Dichloroethane	63	3.527	3.527	0.000	99	150936	20.0	21.2	
35 Vinyl acetate	86	3.552	3.552	0.000	99	18822	40.0	31.9	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	91	73546	20.0	18.9	
37 Tert-butyl ethyl ether	59	3.832	3.832	0.000	91	199384	20.0	18.9	
* 39 2-Butanone-d5	46	4.044	4.044	0.000	0	161831	250.0	250.0	
38 2,2-Dichloropropane	79	4.051	4.057	-0.006	94	42136	20.0	20.9	
40 cis-1,2-Dichloroethene	96	4.081	4.087	-0.006	99	98118	20.0	21.1	
41 2-Butanone (MEK)	72	4.105	4.105	0.000	97	21394	100.0	92.3	
42 Ethyl acetate	70	4.117	4.124	-0.007	95	9475	40.0	37.7	
43 Methyl acrylate	55	4.178	4.172	0.006	98	27251	20.0	18.9	
44 Propionitrile	54	4.239	4.245	-0.006	96	43162	200.0	198.1	
46 Chlorobromomethane	128	4.324	4.330	-0.006	87	37071	20.0	21.5	
45 Tetrahydrofuran	72	4.343	4.336	0.007	42	10904	40.0	40.2	
47 Methacrylonitrile	67	4.355	4.355	0.000	91	173191	200.0	205.4	
48 Chloroform	83	4.385	4.391	-0.006	99	150285	20.0	21.5	
49 Cyclohexane	84	4.519	4.519	0.000	88	135430	20.0	18.4	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	98	136839	20.0	22.6	
$ 51 Dibromofluoromethane (Surr	113	4.562	4.556	0.006	94	200076	50.0	54.2	
52 Carbon tetrachloride	117	4.665	4.665	0.000	98	94431	20.0	25.1	
53 1,1-Dichloropropene	75	4.702	4.702	0.000	98	114595	20.0	19.8	
54 Isooctane	57	4.884	4.884	0.000	95	177463	20.0	18.8	
58 Isobutyl alcohol	43	4.890	4.884	0.006	43	52271	500.0	483.8	a
55 Benzene	78	4.914	4.914	0.000	96	369104	20.0	18.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	0.000	0	195469	50.0	55.2	
57 Tert-amyl methyl ether	73	5.000	5.000	0.000	88	192431	20.0	18.3	
59 Isopropyl acetate	61	5.006	5.012	-0.006	95	25858	20.0	19.8	
60 1,2-Dichloroethane	62	5.024	5.024	0.000	98	91146	20.0	22.0	
61 n-Heptane	57	5.097	5.103	-0.006	86	45353	20.0	19.4	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	821917	50.0	50.0	
64 Trichloroethene	95	5.644	5.644	0.000	97	90199	20.0	20.3	
63 n-Butanol	56	5.657	5.663	-0.006	22	9410	500.0	291.6	a
65 Methylcyclohexane	83	5.772	5.772	0.000	93	138482	20.0	18.1	
66 Ethyl acrylate	55	5.772	5.778	-0.006	98	137049	20.0	15.4	
67 1,2-Dichloropropane	63	5.967	5.961	0.006	90	84047	20.0	20.5	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	22978	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.076	0.000	84	23966	40.0	37.4	
71 Dibromomethane	93	6.113	6.113	0.000	91	41130	20.0	21.6	
70 1,4-Dioxane	88	6.125	6.119	0.006	41	10294	400.0	412.0	
72 n-Propyl acetate	43	6.155	6.155	0.000	99	43081	20.0	18.0	
73 Dichlorobromomethane	83	6.302	6.295	0.007	99	92229	20.0	20.3	
74 2-Nitropropane	41	6.685	6.685	0.000	88	11047	40.0	57.3	a
75 2-Chloroethyl vinyl ether	63	6.703	6.703	0.000	96	25783	20.0	16.9	
76 Epichlorohydrin	57	6.819	6.819	0.000	99	61971	400.0	326.7	
77 cis-1,3-Dichloropropene	75	6.879	6.873	0.006	91	111970	20.0	17.4	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	96	172332	100.0	98.3	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	953051	50.0	46.8	
80 Toluene	91	7.238	7.238	0.000	93	417330	20.0	18.8	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	95	84935	20.0	18.1	
82 Ethyl methacrylate	69	7.725	7.725	0.000	88	58973	20.0	15.3	
83 1,1,2-Trichloroethane	83	7.920	7.926	-0.006	95	50796	20.0	19.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Tetrachloroethene	166	7.962	7.956	0.006	92	81391	20.0	18.7	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	93	101563	20.0	18.7	
86 2-Hexanone	58	8.266	8.266	0.000	95	59972	100.0	83.4	
87 n-Butyl acetate	43	8.425	8.419	0.006	97	55590	20.0	17.1	
88 Chlorodibromomethane	129	8.437	8.431	0.006	97	45341	20.0	18.0	
89 Ethylene Dibromide	107	8.607	8.601	0.006	100	52017	20.0	18.9	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	87	693627	50.0	50.0	
91 Chlorobenzene	112	9.216	9.216	0.000	95	269818	20.0	19.8	
92 Ethylbenzene	106	9.313	9.319	-0.006	98	140133	20.0	18.3	
93 1,1,1,2-Tetrachloroethane	131	9.337	9.331	0.006	91	71193	20.0	20.2	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	168993	20.0	18.1	
96 o-Xylene	106	9.909	9.909	0.000	94	169244	20.0	18.5	
95 n-Butyl acrylate	73	9.921	9.921	0.000	98	40674	20.0	14.2	
97 Styrene	104	9.939	9.939	0.000	96	290760	20.0	20.0	
99 Bromoform	173	10.152	10.152	0.000	91	17266	20.0	15.9	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	94	73599	20.0	14.0	
100 Isopropylbenzene	105	10.280	10.280	0.000	96	451124	20.0	19.1	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	83	226620	50.0	49.2	
102 Bromobenzene	156	10.603	10.603	0.000	97	95757	20.0	19.7	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	98	64923	20.0	18.8	
104 N-Propylbenzene	91	10.676	10.676	0.000	99	541677	20.0	19.2	
105 1,2,3-Trichloropropane	110	10.706	10.706	0.000	92	18866	20.0	19.7	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	67	11634	20.0	17.3	
107 2-Chlorotoluene	91	10.779	10.779	0.000	97	387743	20.0	19.7	
108 4-Ethyltoluene	105	10.791	10.785	0.006	98	468990	20.0	19.9	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	386196	20.0	19.2	
110 4-Chlorotoluene	91	10.889	10.889	0.001	97	347055	20.0	19.3	
111 Butyl Methacrylate	87	10.962	10.962	0.000	90	93648	20.0	13.4	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	289126	20.0	18.1	
113 1,2,4-Trimethylbenzene	105	11.187	11.187	0.000	97	405664	20.0	19.1	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	465314	20.0	19.1	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	71	203192	20.0	20.6	
115 4-Isopropyltoluene	119	11.442	11.448	-0.006	97	411994	20.0	20.3	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	332812	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	95	200082	20.0	19.6	
134 1,2,3-Trimethylbenzene	105	11.546	11.546	0.000	98	429576	20.0	19.9	
119 Benzyl chloride	91	11.655	11.655	0.000	98	69223	20.0	14.7	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	393847	20.0	20.1	
121 p-Diethylbenzene	119	11.758	11.758	0.000	92	229223	20.0	20.1	
122 n-Butylbenzene	92	11.783	11.783	0.000	98	218409	20.0	20.2	
123 1,2-Dichlorobenzene	146	11.831	11.831	0.000	94	180544	20.0	20.1	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	97	369741	20.0	18.4	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	92	5771	20.0	17.9	
126 1,3,5-Trichlorobenzene	180	12.568	12.568	0.000	96	125192	20.0	18.2	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	94	95701	20.0	17.7	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	87	34006	20.0	19.5	
129 Naphthalene	128	13.231	13.231	0.000	99	167734	20.0	18.2	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	94	76561	20.0	18.3	
S 131 1,2-Dichloroethene, Total	100				0		40.0	41.5	
S 132 Xylenes, Total	100				0		40.0	36.5	
S 133 Total BTEX	1				0		100.0	91.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 03-May-2018 17:32:53 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66515.D

Injection Date: 02-May-2018 18:20:30 Instrument ID: CVOAMS11 Operator ID:

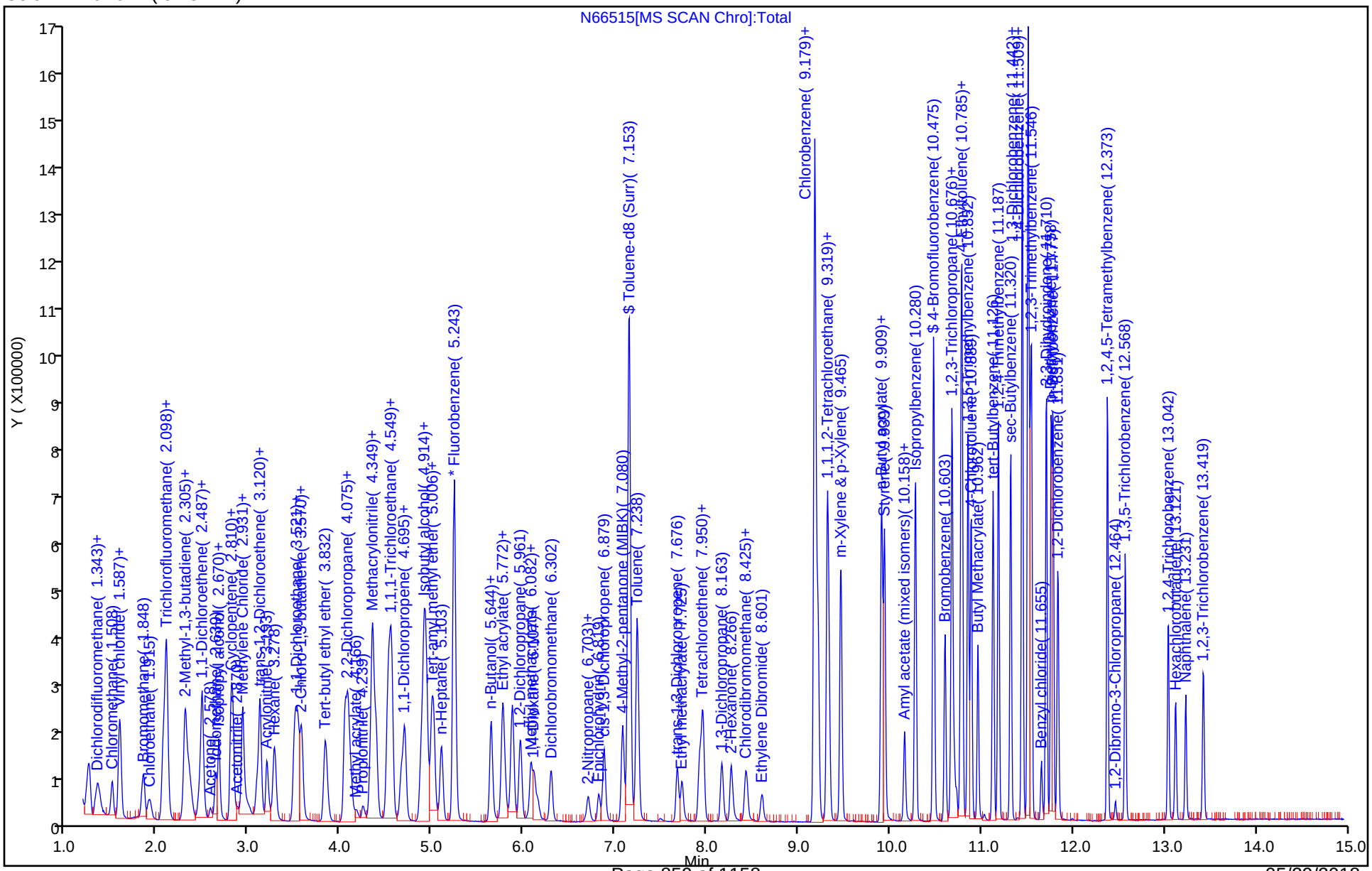
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 460-516110/3

Matrix: Water Lab File ID: N66541.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 05:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516110 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	22.4		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	19.0		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	22.0		1.0	0.34
79-00-5	1,1,2-Trichloroethane	19.0		1.0	0.080
75-34-3	1,1-Dichloroethane	20.6		1.0	0.24
75-35-4	1,1-Dichloroethene	19.6		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	19.6		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	19.2		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	17.6		1.0	0.23
95-50-1	1,2-Dichlorobenzene	20.1		1.0	0.22
107-06-2	1,2-Dichloroethane	20.0		1.0	0.25
78-87-5	1,2-Dichloropropane	19.4		1.0	0.18
541-73-1	1,3-Dichlorobenzene	20.8		1.0	0.33
106-46-7	1,4-Dichlorobenzene	20.5		1.0	0.33
123-91-1	1,4-Dioxane	411		50	8.7
78-93-3	2-Butanone (MEK)	95.3		5.0	2.2
591-78-6	2-Hexanone	82.6		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	104		5.0	0.63
67-64-1	Acetone	106		5.0	1.1
71-43-2	Benzene	19.4		1.0	0.090
75-25-2	Bromoform	16.3		1.0	0.18
74-83-9	Bromomethane	26.1		1.0	0.18
75-15-0	Carbon disulfide	17.1		1.0	0.22
56-23-5	Carbon tetrachloride	25.6		1.0	0.33
108-90-7	Chlorobenzene	19.7		1.0	0.24
74-97-5	Chlorobromomethane	20.2		1.0	0.30
124-48-1	Chlorodibromomethane	17.8		1.0	0.22
75-00-3	Chloroethane	24.9		1.0	0.37
67-66-3	Chloroform	20.7		1.0	0.22
74-87-3	Chloromethane	24.1		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	20.4		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	17.6		1.0	0.16
110-82-7	Cyclohexane	19.5		1.0	0.26
75-27-4	Dichlorobromomethane	18.9		1.0	0.15
75-71-8	Dichlorodifluoromethane	21.9		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516110/3

Matrix: Water | Lab File ID: N66541.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 05:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	18.9		1.0	0.30
106-93-4	Ethylene Dibromide	18.6		1.0	0.19
98-82-8	Isopropylbenzene	19.9		1.0	0.32
79-20-9	Methyl acetate	41.9		5.0	0.58
1634-04-4	Methyl tert-butyl ether	18.8		1.0	0.13
108-87-2	Methylcyclohexane	19.1		1.0	0.22
75-09-2	Methylene Chloride	20.9		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	19.0		1.0	0.28
95-47-6	o-Xylene	18.9		1.0	0.32
100-42-5	Styrene	19.9		1.0	0.17
127-18-4	Tetrachloroethene	19.5		1.0	0.12
108-88-3	Toluene	19.2		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	20.6		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	17.6		1.0	0.19
79-01-6	Trichloroethene	18.8		1.0	0.22
75-69-4	Trichlorofluoromethane	24.9		1.0	0.15
75-01-4	Vinyl chloride	24.5		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		74-132
460-00-4	4-Bromofluorobenzene	100		77-124
1868-53-7	Dibromofluoromethane (Surr)	104		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66541.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-May-2018 05:31:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0071436-003
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 14:27:40 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: delpolitov Date: 03-May-2018 14:27:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.331	1.319	0.012	92	68124	20.0	18.4	
2 Dichlorodifluoromethane	87	1.355	1.349	0.006	99	46141	20.0	21.9	
3 Chloromethane	52	1.507	1.501	0.006	99	29051	20.0	24.1	
4 Vinyl chloride	62	1.593	1.581	0.012	98	107907	20.0	24.5	
5 Butadiene	54	1.599	1.587	0.012	93	80314	20.0	25.2	
6 Bromomethane	94	1.854	1.842	0.012	99	81186	20.0	26.1	
7 Chloroethane	64	1.915	1.903	0.012	98	55845	20.0	24.9	
8 Dichlorofluoromethane	67	2.073	2.067	0.006	97	178471	20.0	22.0	
9 Trichlorofluoromethane	101	2.079	2.079	0.000	78	156570	20.0	24.9	
10 Pentane	72	2.110	2.098	0.012	95	32540	40.0	51.8	
11 Ethanol	46	2.286	2.274	0.012	98	5083	800.0	674.2	
12 Ethyl ether	59	2.292	2.286	0.006	96	46179	20.0	19.2	
13 2-Methyl-1,3-butadiene	53	2.310	2.304	0.006	96	63627	20.0	17.0	
14 1,2-Dichloro-1,1,2-trifluo	117	2.347	2.335	0.012	92	76557	20.0	20.8	
16 Acrolein	56	2.469	2.457	0.012	42	9727	40.0	44.5	
15 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.475	0.006	93	100299	20.0	22.0	
17 1,1-Dichloroethene	96	2.493	2.487	0.006	98	73545	20.0	19.6	
18 Acetone	43	2.584	2.572	0.012	87	38136	100.0	105.6	
19 Iodomethane	142	2.639	2.633	0.006	99	117600	20.0	19.6	
20 Carbon disulfide	76	2.675	2.669	0.006	99	235686	20.0	17.1	
21 Isopropyl alcohol	45	2.682	2.676	0.006	25	12619	200.0	191.9	
22 3-Chloro-1-propene	76	2.809	2.797	0.012	92	43910	20.0	18.5	
24 Methyl acetate	74	2.828	2.815	0.013	44	11429	40.0	41.9	
23 Cyclopentene	67	2.828	2.815	0.013	90	190787	20.0	20.4	
25 Acetonitrile	40	2.882	2.870	0.012	86	21617	200.0	195.7	a
26 Methylene Chloride	84	2.937	2.931	0.006	90	85060	20.0	20.9	
* 27 TBA-d9 (IS)	65	2.943	2.931	0.012	0	129224	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.010	3.004	0.006	91	27058	200.0	200.9	
29 Methyl tert-butyl ether	73	3.101	3.095	0.006	97	167461	20.0	18.8	
30 trans-1,2-Dichloroethene	96	3.126	3.120	0.006	93	88108	20.0	20.6	
31 Acrylonitrile	53	3.199	3.199	0.000	96	127592	200.0	227.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.284	3.278	0.006	92	105627	20.0	20.4	
33 Isopropyl ether	45	3.503	3.503	0.000	94	227201	20.0	19.9	
34 1,1-Dichloroethane	63	3.533	3.527	0.006	99	148008	20.0	20.6	
35 Vinyl acetate	86	3.558	3.552	0.006	99	17930	40.0	33.8	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	91	73325	20.0	18.7	
37 Tert-butyl ethyl ether	59	3.844	3.838	0.006	91	194403	20.0	18.3	
* 39 2-Butanone-d5	46	4.050	4.050	0.000	0	145800	250.0	250.0	
38 2,2-Dichloropropane	79	4.056	4.057	-0.001	94	43541	20.0	21.4	
40 cis-1,2-Dichloroethene	96	4.087	4.081	0.006	98	95908	20.0	20.4	
41 2-Butanone (MEK)	72	4.111	4.111	0.000	97	19897	100.0	95.3	
42 Ethyl acetate	70	4.123	4.117	0.006	96	9042	40.0	39.9	
43 Methyl acrylate	55	4.178	4.172	0.006	99	24287	20.0	16.7	
44 Propionitrile	54	4.251	4.245	0.006	98	40925	200.0	211.8	
46 Chlorobromomethane	128	4.324	4.324	0.000	87	35032	20.0	20.2	
45 Tetrahydrofuran	72	4.330	4.330	0.000	43	9260	40.0	37.9	
47 Methacrylonitrile	67	4.355	4.349	0.006	91	160458	200.0	188.8	
48 Chloroform	83	4.391	4.385	0.006	99	145691	20.0	20.7	
49 Cyclohexane	84	4.525	4.519	0.006	90	144224	20.0	19.5	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	98	136789	20.0	22.4	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.555	0.006	95	194066	50.0	52.1	
52 Carbon tetrachloride	117	4.671	4.665	0.006	98	96947	20.0	25.6	
53 1,1-Dichloropropene	75	4.707	4.701	0.006	98	112782	20.0	19.3	
58 Isobutyl alcohol	43	4.890	4.878	0.012	40	52583	500.0	548.7	a
54 Isooctane	57	4.884	4.884	0.000	95	190685	20.0	20.1	
55 Benzene	78	4.914	4.914	0.000	96	360358	20.0	19.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.933	0.006	0	181994	50.0	50.9	
57 Tert-amyl methyl ether	73	4.999	4.999	0.000	90	185678	20.0	17.5	
59 Isopropyl acetate	61	5.018	5.006	0.012	78	24304	20.0	18.5	
60 1,2-Dichloroethane	62	5.024	5.018	0.006	97	83675	20.0	20.0	
61 n-Heptane	57	5.103	5.097	0.006	87	46648	20.0	19.8	
* 62 Fluorobenzene	96	5.243	5.237	0.006	99	828758	50.0	50.0	
64 Trichloroethene	95	5.644	5.638	0.006	99	84174	20.0	18.8	
63 n-Butanol	56	5.656	5.650	0.006	1	8218	500.0	287.2	a
65 Methylcyclohexane	83	5.778	5.772	0.006	91	147712	20.0	19.1	
66 Ethyl acrylate	55	5.778	5.772	0.006	94	141288	20.0	15.7	
67 1,2-Dichloropropane	63	5.967	5.961	0.006	90	80241	20.0	19.4	
* 68 1,4-Dioxane-d8	96	6.058	6.052	0.006	0	20272	1000.0	1000.0	
69 Methyl methacrylate	100	6.082	6.076	0.006	84	22649	40.0	35.0	
70 1,4-Dioxane	88	6.113	6.107	0.006	36	9068	400.0	411.4	
71 Dibromomethane	93	6.119	6.113	0.006	91	36613	20.0	19.1	
72 n-Propyl acetate	43	6.161	6.155	0.006	98	41025	20.0	17.0	
73 Dichlorobromomethane	83	6.295	6.301	-0.006	99	86262	20.0	18.9	
74 2-Nitropropane	41	6.678	6.685	-0.007	88	9791	40.0	57.3	a
75 2-Chloroethyl vinyl ether	63	6.709	6.709	0.000	96	22323	20.0	14.5	
76 Epichlorohydrin	57	6.818	6.818	0.000	98	56132	400.0	328.4	
77 cis-1,3-Dichloropropene	75	6.879	6.879	0.000	91	104790	20.0	17.6	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	97	164892	100.0	104.4	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	888442	50.0	47.2	
80 Toluene	91	7.244	7.238	0.006	93	394686	20.0	19.2	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	97	76342	20.0	17.6	
82 Ethyl methacrylate	69	7.731	7.725	0.006	88	52640	20.0	13.6	
83 1,1,2-Trichloroethane	83	7.920	7.920	0.000	95	46640	20.0	19.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Tetrachloroethene	166	7.956	7.956	0.000	93	78485	20.0	19.5	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	92	94579	20.0	18.8	
86 2-Hexanone	58	8.266	8.266	0.000	95	53506	100.0	82.6	
87 n-Butyl acetate	43	8.424	8.418	0.006	98	52703	20.0	17.5	
88 Chlorodibromomethane	129	8.437	8.437	0.000	97	41586	20.0	17.8	
89 Ethylene Dibromide	107	8.601	8.601	0.000	99	47265	20.0	18.6	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	87	641536	50.0	50.0	
91 Chlorobenzene	112	9.209	9.209	0.000	93	248386	20.0	19.7	
92 Ethylbenzene	106	9.319	9.319	0.000	98	133862	20.0	18.9	
93 1,1,1,2-Tetrachloroethane	131	9.337	9.331	0.006	93	65810	20.0	20.2	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	164643	20.0	19.0	
96 o-Xylene	106	9.909	9.909	0.000	92	160684	20.0	18.9	
95 n-Butyl acrylate	73	9.921	9.921	0.000	97	36640	20.0	13.8	
97 Styrene	104	9.939	9.939	0.000	96	266941	20.0	19.9	
99 Bromoform	173	10.152	10.152	0.000	93	16165	20.0	16.3	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	95	67959	20.0	14.2	
100 Isopropylbenzene	105	10.280	10.280	0.000	96	434758	20.0	19.9	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	84	212734	50.0	49.9	
102 Bromobenzene	156	10.602	10.602	0.000	97	89170	20.0	20.1	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	97	59747	20.0	19.0	
104 N-Propylbenzene	91	10.681	10.675	0.006	99	515573	20.0	20.1	
105 1,2,3-Trichloropropane	110	10.700	10.706	-0.006	95	17842	20.0	20.4	
106 trans-1,4-Dichloro-2-buten	53	10.730	10.724	0.006	72	11153	20.0	18.2	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	368491	20.0	20.5	
108 4-Ethyltoluene	105	10.791	10.791	0.000	98	440065	20.0	20.4	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	370623	20.0	20.2	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	326397	20.0	19.9	
111 Butyl Methacrylate	87	10.961	10.961	0.000	90	88581	20.0	13.9	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	274480	20.0	18.8	
113 1,2,4-Trimethylbenzene	105	11.186	11.186	0.000	98	376564	20.0	19.4	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	454013	20.0	20.4	
116 1,3-Dichlorobenzene	146	11.442	11.448	-0.006	69	187617	20.0	20.8	
115 4-Isopropyltoluene	119	11.442	11.448	-0.006	97	395027	20.0	21.4	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	303423	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	190728	20.0	20.5	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	98	413450	20.0	21.0	
119 Benzyl chloride	91	11.655	11.655	0.000	98	65662	20.0	15.3	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	366363	20.0	20.5	
121 p-Diethylbenzene	119	11.758	11.758	0.000	91	209571	20.0	20.1	
122 n-Butylbenzene	92	11.783	11.783	0.000	93	203988	20.0	20.7	
123 1,2-Dichlorobenzene	146	11.831	11.837	-0.006	93	165221	20.0	20.1	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.379	-0.006	96	350475	20.0	19.1	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	91	5169	20.0	17.6	
126 1,3,5-Trichlorobenzene	180	12.567	12.574	-0.007	95	123255	20.0	19.6	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	93	94905	20.0	19.2	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	89	32055	20.0	20.2	
129 Naphthalene	128	13.230	13.231	-0.001	99	157270	20.0	18.7	
130 1,2,3-Trichlorobenzene	180	13.425	13.425	0.000	94	74894	20.0	19.6	
S 131 1,2-Dichloroethene, Total	100				0		40.0	41.1	
S 132 Xylenes, Total	100				0		40.0	38.0	
S 133 Total BTEX	1				0		100.0	95.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 03-May-2018 14:27:44 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66541.D

Injection Date: 03-May-2018 05:31:30 Instrument ID: CVOAMS11 Operator ID:

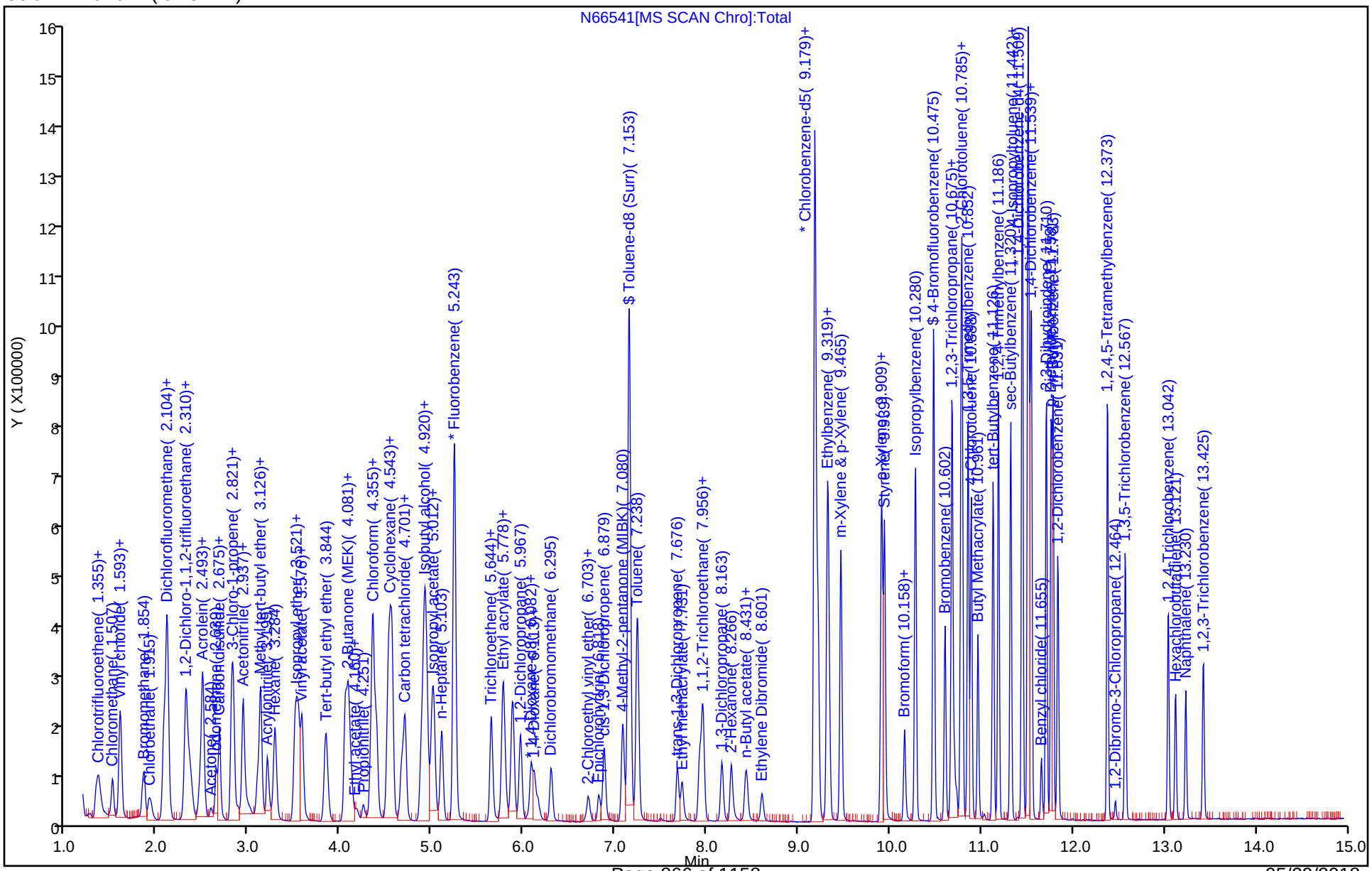
Lims ID: LCS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516291/3

Matrix: Water | Lab File ID: P44702.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 22:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	21.3		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	19.2		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	22.5		1.0	0.34
79-00-5	1,1,2-Trichloroethane	20.6		1.0	0.080
75-34-3	1,1-Dichloroethane	23.2		1.0	0.24
75-35-4	1,1-Dichloroethene	21.5		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	21.9		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	21.9		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	17.9		1.0	0.23
95-50-1	1,2-Dichlorobenzene	20.9		1.0	0.22
107-06-2	1,2-Dichloroethane	21.1		1.0	0.25
78-87-5	1,2-Dichloropropane	22.3		1.0	0.18
541-73-1	1,3-Dichlorobenzene	20.9		1.0	0.33
106-46-7	1,4-Dichlorobenzene	19.9		1.0	0.33
123-91-1	1,4-Dioxane	417		50	8.7
78-93-3	2-Butanone (MEK)	104		5.0	2.2
591-78-6	2-Hexanone	113		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	114		5.0	0.63
67-64-1	Acetone	100		5.0	1.1
71-43-2	Benzene	21.0		1.0	0.090
75-25-2	Bromoform	18.4		1.0	0.18
74-83-9	Bromomethane	14.8		1.0	0.18
75-15-0	Carbon disulfide	20.0		1.0	0.22
56-23-5	Carbon tetrachloride	20.3		1.0	0.33
108-90-7	Chlorobenzene	21.3		1.0	0.24
74-97-5	Chlorobromomethane	23.6		1.0	0.30
124-48-1	Chlorodibromomethane	19.4		1.0	0.22
75-00-3	Chloroethane	20.8		1.0	0.37
67-66-3	Chloroform	22.5		1.0	0.22
74-87-3	Chloromethane	19.5		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	22.6		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	20.0		1.0	0.16
110-82-7	Cyclohexane	23.0		1.0	0.26
75-27-4	Dichlorobromomethane	21.4		1.0	0.15
75-71-8	Dichlorodifluoromethane	21.8		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516291/3

Matrix: Water | Lab File ID: P44702.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 22:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	21.1		1.0	0.30
106-93-4	Ethylene Dibromide	21.5		1.0	0.19
98-82-8	Isopropylbenzene	21.1		1.0	0.32
79-20-9	Methyl acetate	45.2		5.0	0.58
1634-04-4	Methyl tert-butyl ether	22.1		1.0	0.13
108-87-2	Methylcyclohexane	23.4		1.0	0.22
75-09-2	Methylene Chloride	21.9		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	21.5		1.0	0.28
95-47-6	o-Xylene	21.5		1.0	0.32
100-42-5	Styrene	21.5		1.0	0.17
127-18-4	Tetrachloroethene	22.9		1.0	0.12
108-88-3	Toluene	20.8		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	21.3		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	20.1		1.0	0.19
79-01-6	Trichloroethene	22.3		1.0	0.22
75-69-4	Trichlorofluoromethane	24.0		1.0	0.15
75-01-4	Vinyl chloride	21.0		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		74-132
460-00-4	4-Bromofluorobenzene	118		77-124
1868-53-7	Dibromofluoromethane (Surr)	122		72-131
2037-26-5	Toluene-d8 (Surr)	113		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44702.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-May-2018 22:20:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0071476-003
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: starzecm Date: 03-May-2018 23:40:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.856	0.856	0.000	90	15810	20.0	12.6	
2 Dichlorodifluoromethane	85	0.871	0.871	0.000	99	82545	20.0	21.8	
4 Chloromethane	50	0.985	0.985	0.000	99	70654	20.0	19.5	
5 Vinyl chloride	62	1.007	1.007	0.000	98	85510	20.0	21.0	
3 Butadiene	54	1.014	1.014	0.000	98	84195	20.0	23.4	
6 Bromomethane	94	1.164	1.164	0.000	96	24914	20.0	14.8	
7 Chloroethane	64	1.229	1.229	0.000	100	48352	20.0	20.8	
9 Pentane	72	1.293	1.293	0.000	96	21798	40.0	46.3	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	97	95517	20.0	24.0	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	98	127735	20.0	24.1	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	97	91903	20.0	23.2	
12 Ethyl ether	59	1.458	1.458	0.000	93	61182	20.0	22.9	
13 Ethanol	46	1.537	1.537	0.000	99	16888	800.0	955.3	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	94	52127	20.0	21.5	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	84	82936	20.0	23.1	
16 Carbon disulfide	76	1.573	1.573	0.000	100	191853	20.0	20.0	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	96	56254	20.0	22.5	
18 Iodomethane	142	1.637	1.637	0.000	99	29622	20.0	9.80	
19 Cyclopentene	67	1.723	1.723	0.000	97	158025	20.0	22.9	
20 Acrolein	56	1.737	1.737	0.000	94	20114	40.0	66.2	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	37068	20.0	21.6	
22 Isopropyl alcohol	45	1.845	1.845	0.000	96	48193	200.0	204.3	
23 Methylene Chloride	84	1.881	1.881	0.000	99	68425	20.0	21.9	
24 Acetone	43	1.902	1.902	0.000	85	100222	100.0	100.5	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	61429	20.0	21.3	
26 Methyl acetate	43	1.981	1.981	0.000	100	115084	40.0	45.2	
27 Hexane	86	2.017	2.017	0.000	95	17389	20.0	22.7	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	96	202049	20.0	22.1	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	273186	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	0.000	99	70721	200.0	207.7	
31 Acetonitrile	41	2.174	2.174	0.000	98	100810	200.0	244.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	270283	20.0	22.8	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	94	55803	20.0	21.3	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	130748	20.0	23.2	
35 Acrylonitrile	53	2.375	2.375	0.000	95	302624	200.0	224.7	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	87	238003	20.0	22.5	
37 Vinyl acetate	43	2.511	2.511	0.000	100	376386	40.0	47.0	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	75071	20.0	22.6	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	106919	20.0	22.1	
40 Cyclohexane	56	2.833	2.833	0.000	95	134801	20.0	23.0	
41 Chlorobromomethane	128	2.833	2.833	0.000	93	34594	20.0	23.6	
42 Chloroform	83	2.898	2.898	0.000	98	122466	20.0	22.5	
43 Carbon tetrachloride	117	2.984	2.984	0.000	97	77091	20.0	20.3	
44 Ethyl acetate	70	2.998	2.998	0.000	98	16440	40.0	39.5	
45 Methyl acrylate	55	2.998	2.998	0.000	98	68087	20.0	21.6	
46 Tetrahydrofuran	42	3.005	3.005	0.000	93	63434	40.0	44.4	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	158965	50.0	61.2	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	98	99690	20.0	21.3	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	341436	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	100	43423	100.0	104.0	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	93	101179	20.0	21.7	
52 Isooctane	57	3.220	3.220	0.000	98	275875	20.0	23.9	
53 n-Heptane	57	3.313	3.313	0.000	96	77116	20.0	24.5	
54 Benzene	78	3.320	3.320	0.000	96	289687	20.0	21.0	
55 Propionitrile	54	3.342	3.342	0.000	96	110306	200.0	228.9	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	321453	200.0	234.1	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	210595	50.0	59.3	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	214671	20.0	22.0	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	101959	20.0	21.1	
60 Isobutyl alcohol	43	3.557	3.557	0.000	98	71297	500.0	480.9	
61 t-Amyl alcohol	59	3.628	3.628	0.000	94	48472	200.0	177.2	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	490474	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	147448	20.0	21.0	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	131362	20.0	23.4	
65 Trichloroethene	130	3.815	3.815	0.000	98	67601	20.0	22.3	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	91	191485	20.0	21.5	
67 Dibromomethane	93	4.187	4.187	0.000	96	44432	20.0	22.5	
68 n-Butanol	56	4.201	4.201	0.000	95	40002	500.0	450.6	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	76894	20.0	22.3	
70 Ethyl acrylate	55	4.359	4.359	0.000	97	96283	20.0	22.0	
71 Dichlorobromomethane	83	4.359	4.359	0.000	99	89861	20.0	21.4	
* 72 1,4-Dioxane-d8	96	4.545	4.545	0.000	0	29775	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.552	0.000	94	37857	40.0	45.1	
74 1,4-Dioxane	88	4.588	4.588	0.000	93	15720	400.0	416.8	
75 n-Propyl acetate	43	4.710	4.710	0.000	99	109573	20.0	21.8	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	51217	20.0	22.2	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	96	111212	20.0	20.0	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	670961	50.0	56.4	
79 Toluene	91	5.262	5.262	0.000	93	313461	20.0	20.8	
80 Epichlorohydrin	57	5.290	5.290	0.000	98	149438	400.0	446.1	
81 2-Nitropropane	41	5.519	5.519	0.000	98	32361	40.0	32.9	
82 Tetrachloroethene	166	5.691	5.691	0.000	97	72636	20.0	22.9	
83 4-Methyl-2-pentanone (MIBK	43	5.727	5.727	0.000	98	392330	100.0	114.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	97	102624	20.0	20.1	
85 1,1,2-Trichloroethane	83	5.935	5.935	0.000	94	52914	20.0	20.6	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	97338	20.0	22.8	
87 Chlorodibromomethane	129	6.135	6.135	0.000	98	60393	20.0	19.4	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	97	114745	20.0	21.7	
89 Ethylene Dibromide	107	6.386	6.386	0.000	97	63303	20.0	21.5	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	117758	20.0	19.3	
91 2-Hexanone	43	6.794	6.794	0.000	98	272928	100.0	112.8	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	434555	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	92	193533	20.0	21.3	
94 Ethylbenzene	106	7.181	7.181	0.000	99	105796	20.0	21.1	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	58692	20.0	19.7	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	130420	20.0	21.5	
97 o-Xylene	106	7.991	7.991	0.000	93	127087	20.0	21.5	
98 Bromoform	173	8.055	8.055	0.000	95	35993	20.0	18.4	
99 Styrene	104	8.077	8.077	0.000	93	213883	20.0	21.5	
100 n-Butyl acrylate	73	8.399	8.399	0.000	96	51734	20.0	20.0	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	336308	20.0	21.1	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	89	139689	20.0	18.1	
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	87	200832	50.0	59.1	
104 Bromobenzene	156	8.965	8.965	0.000	97	81711	20.0	20.3	
105 N-Propylbenzene	91	9.108	9.108	0.000	99	410038	20.0	19.7	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	98	83451	20.0	19.2	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	282736	20.0	20.0	
108 4-Ethyltoluene	105	9.301	9.301	0.000	98	342678	20.0	20.3	
109 1,2,3-Trichloropropane	110	9.395	9.395	0.000	97	24477	20.0	19.7	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	287017	20.0	19.9	
111 trans-1,4-Dichloro-2-buten	53	9.516	9.516	0.000	82	23777	20.0	15.5	
112 4-Chlorotoluene	91	9.552	9.552	0.000	98	260436	20.0	20.0	
113 tert-Butylbenzene	119	9.925	9.925	0.000	93	236938	20.0	20.0	
115 1,2,4-Trimethylbenzene	105	10.054	10.054	0.000	96	292704	20.0	20.4	
114 Butyl Methacrylate	87	10.054	10.054	0.000	61	94068	20.0	18.6	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	368944	20.0	20.0	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	94	159044	20.0	20.9	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	312847	20.0	20.4	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	246974	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.634	0.000	93	163951	20.0	19.9	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	305001	20.0	20.2	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	95	298657	20.0	20.5	
122 Benzyl chloride	126	11.092	11.092	0.000	97	24682	20.0	15.5	
123 p-Diethylbenzene	119	11.107	11.107	0.000	92	164932	20.0	20.2	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	292678	20.0	20.0	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	152379	20.0	20.9	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.202	0.000	97	276266	20.0	20.9	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	91	14103	20.0	17.9	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	97	120528	20.0	22.0	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	105772	20.0	21.9	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	52322	20.0	22.1	
131 Naphthalene	128	13.356	13.356	0.000	99	216402	20.0	19.8	
132 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	95	95527	20.0	21.9	
S 133 1,2-Dichloroethene, Total	100				0		40.0	43.9	
S 134 1,3-Dichloropropene, Total	100				0		40.0	40.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 135 Xylenes, Total	100				0		40.0	43.0	
S 137 Total BTEX	1				0		100.0	105.9	

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 08:41:15 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44702.D

Injection Date: 03-May-2018 22:20:30 Instrument ID: CVOAMS13 Operator ID:

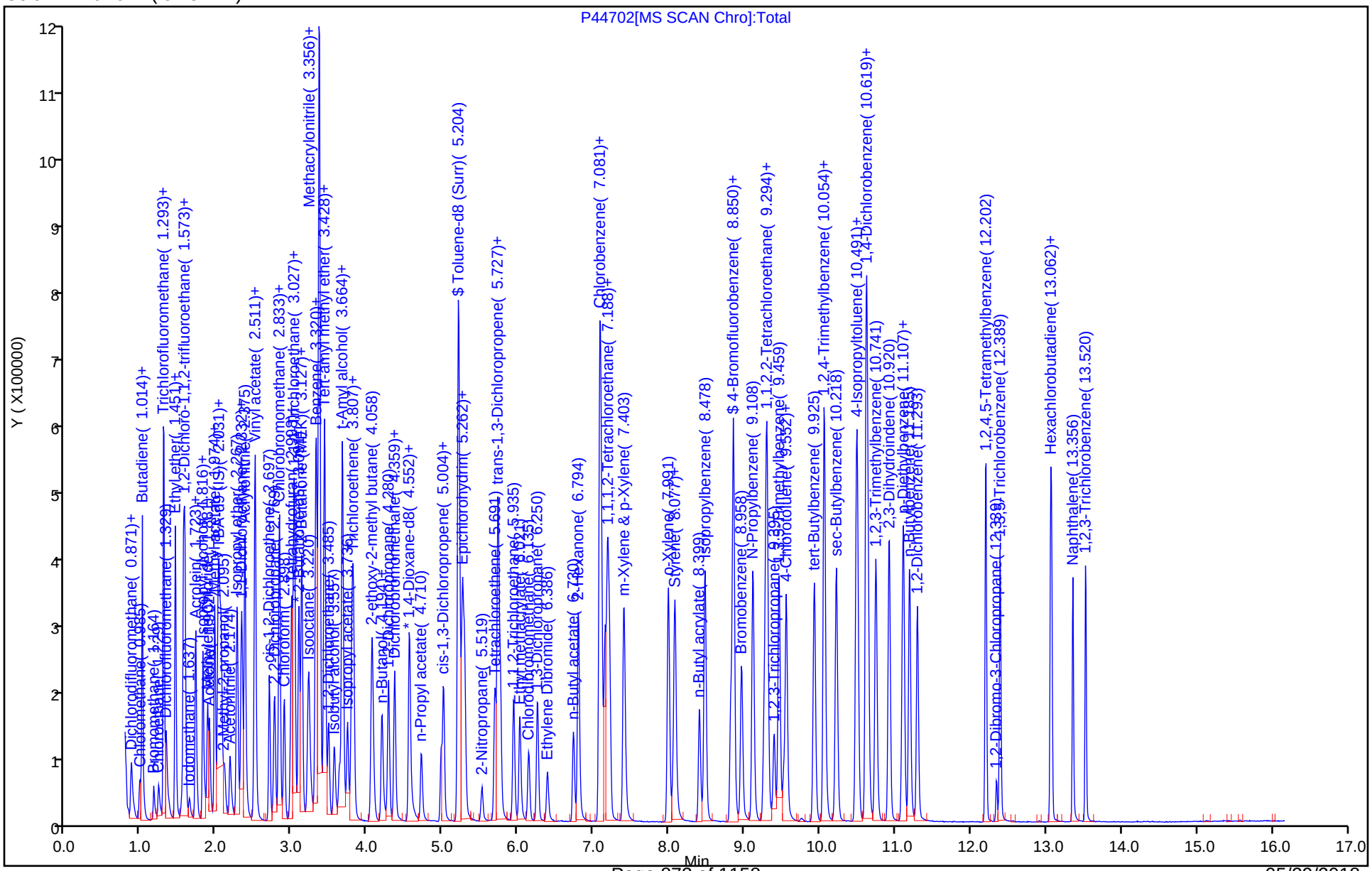
Lims ID: LCS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516299/4

Matrix: Water | Lab File ID: N665681.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 18:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	22.7		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	19.2		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	21.9		1.0	0.34
79-00-5	1,1,2-Trichloroethane	20.6		1.0	0.080
75-34-3	1,1-Dichloroethane	20.8		1.0	0.24
75-35-4	1,1-Dichloroethene	19.4		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	20.9		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	19.1		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	18.6		1.0	0.23
95-50-1	1,2-Dichlorobenzene	20.3		1.0	0.22
107-06-2	1,2-Dichloroethane	21.1		1.0	0.25
78-87-5	1,2-Dichloropropane	19.3		1.0	0.18
541-73-1	1,3-Dichlorobenzene	21.7		1.0	0.33
106-46-7	1,4-Dichlorobenzene	20.2		1.0	0.33
123-91-1	1,4-Dioxane	375		50	8.7
78-93-3	2-Butanone (MEK)	93.3		5.0	2.2
591-78-6	2-Hexanone	76.6		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	98.8		5.0	0.63
67-64-1	Acetone	96.9		5.0	1.1
71-43-2	Benzene	20.4		1.0	0.090
75-25-2	Bromoform	18.5		1.0	0.18
74-83-9	Bromomethane	27.9		1.0	0.18
75-15-0	Carbon disulfide	16.8		1.0	0.22
56-23-5	Carbon tetrachloride	25.7		1.0	0.33
108-90-7	Chlorobenzene	19.7		1.0	0.24
74-97-5	Chlorobromomethane	20.5		1.0	0.30
124-48-1	Chlorodibromomethane	19.0		1.0	0.22
75-00-3	Chloroethane	34.1		1.0	0.37
67-66-3	Chloroform	21.2		1.0	0.22
74-87-3	Chloromethane	24.8		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	20.9		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	18.4		1.0	0.16
110-82-7	Cyclohexane	18.7		1.0	0.26
75-27-4	Dichlorobromomethane	19.8		1.0	0.15
75-71-8	Dichlorodifluoromethane	23.4		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516299/4

Matrix: Water | Lab File ID: N665681.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 18:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.5		1.0	0.30
106-93-4	Ethylene Dibromide	19.3		1.0	0.19
98-82-8	Isopropylbenzene	20.5		1.0	0.32
79-20-9	Methyl acetate	45.6		5.0	0.58
1634-04-4	Methyl tert-butyl ether	18.9		1.0	0.13
108-87-2	Methylcyclohexane	18.6		1.0	0.22
75-09-2	Methylene Chloride	20.4		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	19.1		1.0	0.28
95-47-6	o-Xylene	19.5		1.0	0.32
100-42-5	Styrene	19.7		1.0	0.17
127-18-4	Tetrachloroethene	20.7		1.0	0.12
108-88-3	Toluene	19.9		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	19.7		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	18.7		1.0	0.19
79-01-6	Trichloroethene	19.9		1.0	0.22
75-69-4	Trichlorofluoromethane	26.4		1.0	0.15
75-01-4	Vinyl chloride	25.9		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		74-132
460-00-4	4-Bromofluorobenzene	96		77-124
1868-53-7	Dibromofluoromethane (Surr)	107		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665681.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-May-2018 18:27:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0071478-004
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 17:26:43 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: parekhv Date: 03-May-2018 19:00:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.325	1.343	-0.018	89	64367	20.0	18.3	
2 Dichlorodifluoromethane	87	1.355	1.374	-0.019	99	46893	20.0	23.4	
3 Chloromethane	52	1.501	1.520	-0.019	99	29957	20.0	24.8	
4 Vinyl chloride	62	1.587	1.599	-0.012	98	107997	20.0	25.9	
5 Butadiene	54	1.587	1.605	-0.018	93	73775	20.0	24.4	
6 Bromomethane	94	1.842	1.854	-0.012	99	82406	20.0	27.9	
7 Chloroethane	64	1.915	1.927	-0.012	98	72572	20.0	34.1	
8 Dichlorofluoromethane	67	2.073	2.079	-0.006	98	177627	20.0	23.0	
9 Trichlorofluoromethane	101	2.073	2.091	-0.018	83	157279	20.0	26.4	
10 Pentane	72	2.104	2.116	-0.012	96	29551	40.0	48.4	
11 Ethanol	46	2.292	2.298	-0.006	69	5523	800.0	753.5	
12 Ethyl ether	59	2.292	2.298	-0.006	93	44498	20.0	19.5	
13 2-Methyl-1,3-butadiene	53	2.305	2.317	-0.012	96	58144	20.0	16.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.353	-0.012	95	74925	20.0	21.4	
16 Acrolein	56	2.463	2.469	-0.006	42	8505	40.0	40.0	
15 1,1,2-Trichloro-1,2,2-trif	101	2.487	2.493	-0.006	93	94443	20.0	21.9	
17 1,1-Dichloroethene	96	2.487	2.499	-0.012	98	69116	20.0	19.4	
18 Acetone	43	2.578	2.584	-0.006	88	35035	100.0	96.9	
19 Iodomethane	142	2.639	2.645	-0.006	98	108958	20.0	19.1	
20 Carbon disulfide	76	2.670	2.682	-0.012	99	219603	20.0	16.8	
21 Isopropyl alcohol	45	2.682	2.688	-0.006	24	12006	200.0	187.8	
22 3-Chloro-1-propene	76	2.803	2.809	-0.006	90	42270	20.0	18.7	
24 Methyl acetate	74	2.816	2.828	-0.012	91	12111	40.0	45.6	
23 Cyclopentene	67	2.822	2.834	-0.012	92	172028	20.0	19.4	
25 Acetonitrile	40	2.870	2.888	-0.018	92	22809	200.0	212.4	a
26 Methylene Chloride	84	2.931	2.937	-0.006	89	78749	20.0	20.4	
* 27 TBA-d9 (IS)	65	2.937	2.943	-0.006	0	125681	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.016	3.016	0.000	93	26926	200.0	205.6	
29 Methyl tert-butyl ether	73	3.095	3.107	-0.012	97	160077	20.0	18.9	
30 trans-1,2-Dichloroethene	96	3.120	3.132	-0.012	93	79755	20.0	19.7	
31 Acrylonitrile	53	3.199	3.205	-0.006	96	122239	200.0	224.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.284	3.284	0.000	92	95849	20.0	19.5	
33 Isopropyl ether	45	3.509	3.509	0.000	94	219444	20.0	20.3	
34 1,1-Dichloroethane	63	3.533	3.539	-0.006	99	141515	20.0	20.8	
35 Vinyl acetate	86	3.552	3.552	0.000	99	17049	40.0	32.1	
36 2-Chloro-1,3-butadiene	88	3.576	3.582	-0.006	92	70261	20.0	18.8	
37 Tert-butyl ethyl ether	59	3.838	3.837	0.001	92	189178	20.0	18.8	
* 39 2-Butanone-d5	46	4.051	4.056	-0.005	0	146029	250.0	250.0	
38 2,2-Dichloropropane	79	4.057	4.056	0.001	91	42061	20.0	21.8	
40 cis-1,2-Dichloroethene	96	4.087	4.087	0.000	97	93253	20.0	20.9	
41 2-Butanone (MEK)	72	4.105	4.117	-0.012	97	19506	100.0	93.3	
42 Ethyl acetate	70	4.117	4.123	-0.006	95	8740	40.0	38.5	
43 Methyl acrylate	55	4.172	4.178	-0.006	98	23903	20.0	17.4	
44 Propionitrile	54	4.245	4.251	-0.006	98	40368	200.0	214.8	
46 Chlorobromomethane	128	4.324	4.330	-0.006	87	33827	20.0	20.5	
45 Tetrahydrofuran	72	4.330	4.342	-0.012	41	10045	40.0	41.1	
47 Methacrylonitrile	67	4.355	4.361	-0.006	91	156773	200.0	194.2	
48 Chloroform	83	4.391	4.397	-0.006	99	141796	20.0	21.2	
49 Cyclohexane	84	4.525	4.525	0.000	88	131375	20.0	18.7	
50 1,1,1-Trichloroethane	97	4.531	4.543	-0.012	98	131570	20.0	22.7	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.568	-0.013	95	188586	50.0	53.3	
52 Carbon tetrachloride	117	4.671	4.671	0.000	97	92686	20.0	25.7	
53 1,1-Dichloropropene	75	4.701	4.701	0.000	98	107434	20.0	19.4	
54 Isooctane	57	4.884	4.890	-0.006	95	167066	20.0	18.5	
58 Isobutyl alcohol	43	4.884	4.890	-0.006	40	51451	500.0	552.1	a
55 Benzene	78	4.914	4.914	0.000	97	342534	20.0	20.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.945	-0.006	0	175504	50.0	51.7	
57 Tert-amyl methyl ether	73	5.000	5.006	-0.006	88	183728	20.0	18.2	
59 Isopropyl acetate	61	5.018	5.018	0.000	0	22476	20.0	18.0	a
60 1,2-Dichloroethane	62	5.018	5.024	-0.006	98	83827	20.0	21.1	
61 n-Heptane	57	5.097	5.103	-0.006	87	43954	20.0	19.7	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	786848	50.0	50.0	
64 Trichloroethene	95	5.644	5.650	-0.006	97	84505	20.0	19.9	
63 n-Butanol	56	5.657	5.663	-0.006	3	8097	500.0	290.9	a
65 Methylcyclohexane	83	5.772	5.778	-0.006	92	136030	20.0	18.6	
66 Ethyl acrylate	55	5.778	5.778	0.000	72	130549	20.0	15.3	
67 1,2-Dichloropropane	63	5.961	5.967	-0.006	90	75726	20.0	19.3	
* 68 1,4-Dioxane-d8	96	6.052	6.058	-0.006	0	21085	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.088	-0.012	84	21690	40.0	35.3	
70 1,4-Dioxane	88	6.107	6.113	-0.006	35	8592	400.0	374.8	
71 Dibromomethane	93	6.113	6.119	-0.006	91	36800	20.0	20.2	
72 n-Propyl acetate	43	6.149	6.155	-0.006	97	37630	20.0	16.4	
73 Dichlorobromomethane	83	6.301	6.301	0.000	99	86007	20.0	19.8	
75 2-Chloroethyl vinyl ether	63	6.703	6.709	-0.006	92	22667	20.0	15.5	
76 Epichlorohydrin	57	6.819	6.825	-0.005	99	52100	400.0	304.4	
77 cis-1,3-Dichloropropene	75	6.873	6.879	-0.006	92	98984	20.0	18.4	
74 2-Nitropropane	41	7.080	7.080	0.000	64	41549	40.0	246.3	a
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.086	-0.006	96	156300	100.0	98.8	
$ 79 Toluene-d8 (Surr)	98	7.153	7.153	0.000	99	842619	50.0	49.7	
80 Toluene	91	7.238	7.244	-0.006	93	369291	20.0	19.9	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	94	72845	20.0	18.7	
82 Ethyl methacrylate	69	7.725	7.731	-0.006	88	48142	20.0	13.1	
83 1,1,2-Trichloroethane	83	7.920	7.920	0.000	94	45643	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Tetrachloroethene	166	7.956	7.956	0.000	93	75297	20.0	20.7	
85 1,3-Dichloropropane	76	8.157	8.163	-0.006	92	85950	20.0	19.0	
86 2-Hexanone	58	8.266	8.272	-0.006	96	49723	100.0	76.6	
87 n-Butyl acetate	43	8.419	8.418	0.001	97	46296	20.0	17.1	
88 Chlorodibromomethane	129	8.437	8.437	0.000	97	39909	20.0	19.0	
89 Ethylene Dibromide	107	8.601	8.601	0.000	98	44223	20.0	19.3	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	578464	50.0	50.0	
91 Chlorobenzene	112	9.209	9.215	-0.006	95	224737	20.0	19.7	
92 Ethylbenzene	106	9.319	9.313	0.006	98	124741	20.0	19.5	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.337	-0.006	91	66211	20.0	22.5	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	148711	20.0	19.1	
96 o-Xylene	106	9.903	9.909	-0.006	94	148966	20.0	19.5	
95 n-Butyl acrylate	73	9.921	9.927	-0.006	97	33088	20.0	13.8	
97 Styrene	104	9.939	9.939	0.000	94	238022	20.0	19.7	
99 Bromoform	173	10.152	10.152	0.000	92	16127	20.0	18.5	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	95	62174	20.0	14.7	
100 Isopropylbenzene	105	10.280	10.280	0.000	96	403704	20.0	20.5	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	83	184911	50.0	48.1	
102 Bromobenzene	156	10.603	10.602	0.001	97	79472	20.0	20.4	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.669	-0.006	98	53069	20.0	19.2	
104 N-Propylbenzene	91	10.682	10.681	0.001	99	459006	20.0	20.3	
105 1,2,3-Trichloropropane	110	10.700	10.700	0.000	96	15998	20.0	20.8	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.730	-0.006	65	10073	20.0	18.7	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	327317	20.0	20.7	
108 4-Ethyltoluene	105	10.785	10.785	0.000	99	392156	20.0	20.7	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	334491	20.0	20.7	
110 4-Chlorotoluene	91	10.882	10.888	-0.006	97	288299	20.0	20.0	
111 Butyl Methacrylate	87	10.961	10.961	0.000	89	83370	20.0	14.8	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	271962	20.0	21.2	
113 1,2,4-Trimethylbenzene	105	11.187	11.186	0.001	97	350449	20.0	20.5	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	422455	20.0	21.6	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	69	172384	20.0	21.7	
115 4-Isopropyltoluene	119	11.442	11.448	-0.006	98	358877	20.0	22.1	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	267245	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	165634	20.0	20.2	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	98	380528	20.0	21.9	
119 Benzyl chloride	91	11.655	11.655	0.000	98	59835	20.0	15.9	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	323007	20.0	20.5	
121 p-Diethylbenzene	119	11.758	11.758	0.000	92	198661	20.0	21.7	
122 n-Butylbenzene	92	11.783	11.783	0.000	97	190104	20.0	21.9	
123 1,2-Dichlorobenzene	146	11.837	11.831	0.006	93	146428	20.0	20.3	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.379	-0.006	96	312145	20.0	19.3	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	90	4815	20.0	18.6	
126 1,3,5-Trichlorobenzene	180	12.574	12.573	0.001	96	110018	20.0	19.9	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	93	83050	20.0	19.1	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	87	29461	20.0	21.1	
129 Naphthalene	128	13.231	13.231	0.000	99	142259	20.0	19.2	
130 1,2,3-Trichlorobenzene	180	13.425	13.425	0.000	95	70176	20.0	20.9	
S 131 1,2-Dichloroethene, Total	100				0		40.0	40.6	
S 132 Xylenes, Total	100				0		40.0	38.6	
S 133 Total BTEX	1				0		100.0	98.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 17:26:49 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665681.D

Injection Date: 03-May-2018 18:27:30 Instrument ID: CVOAMS11 Operator ID:

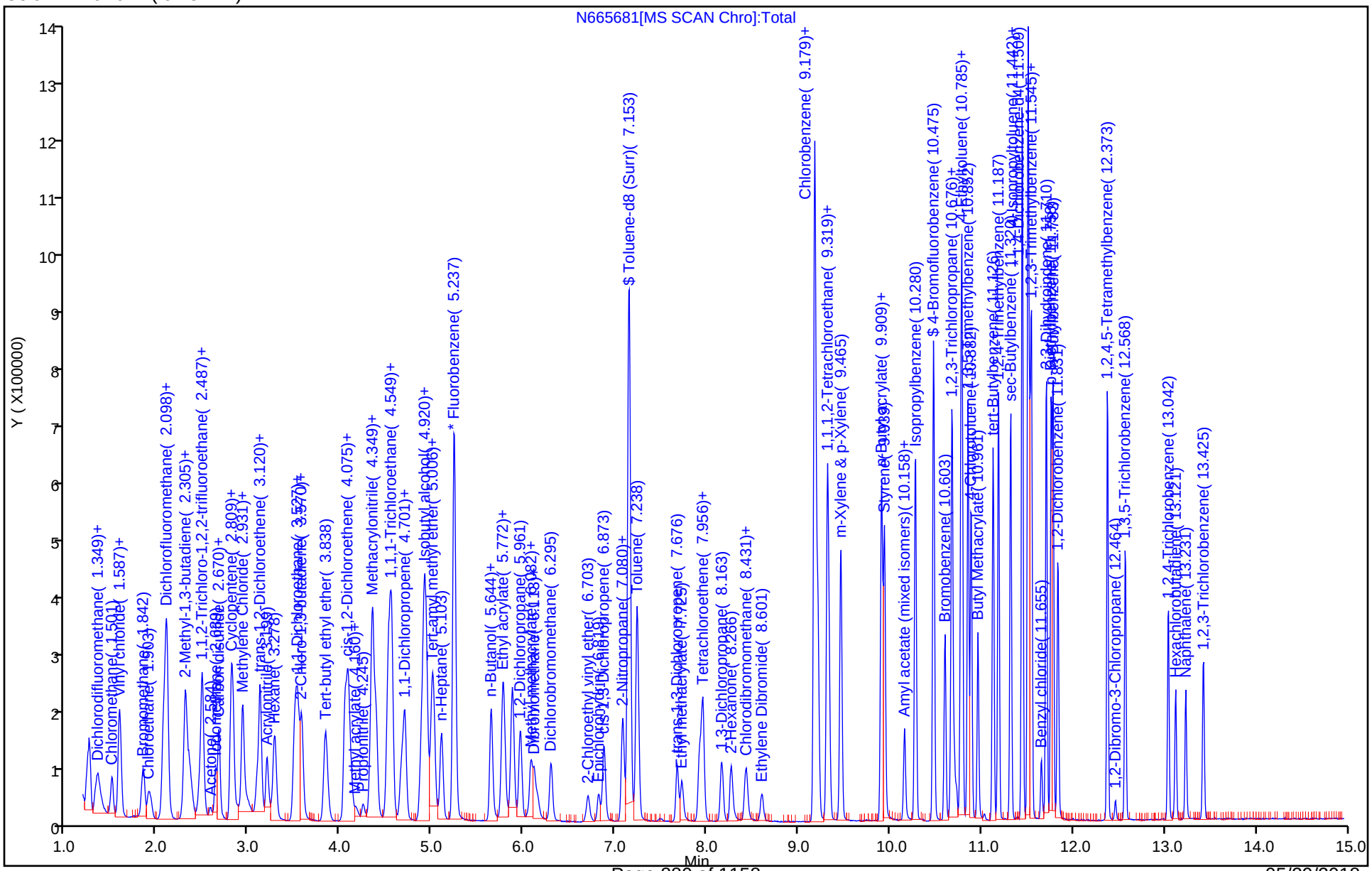
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516419/4

Matrix: Water | Lab File ID: P44731.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 10:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	19.2		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	16.9		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	17.7		1.0	0.34
79-00-5	1,1,2-Trichloroethane	18.4		1.0	0.080
75-34-3	1,1-Dichloroethane	20.9		1.0	0.24
75-35-4	1,1-Dichloroethene	19.2		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	19.5		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	19.4		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	15.5		1.0	0.23
95-50-1	1,2-Dichlorobenzene	19.1		1.0	0.22
107-06-2	1,2-Dichloroethane	19.1		1.0	0.25
78-87-5	1,2-Dichloropropane	20.0		1.0	0.18
541-73-1	1,3-Dichlorobenzene	18.8		1.0	0.33
106-46-7	1,4-Dichlorobenzene	17.8		1.0	0.33
123-91-1	1,4-Dioxane	394		50	8.7
78-93-3	2-Butanone (MEK)	93.3		5.0	2.2
591-78-6	2-Hexanone	100		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	103		5.0	0.63
67-64-1	Acetone	91.4		5.0	1.1
71-43-2	Benzene	19.3		1.0	0.090
75-25-2	Bromoform	16.3		1.0	0.18
74-83-9	Bromomethane	15.8		1.0	0.18
75-15-0	Carbon disulfide	17.9		1.0	0.22
56-23-5	Carbon tetrachloride	18.3		1.0	0.33
108-90-7	Chlorobenzene	19.3		1.0	0.24
74-97-5	Chlorobromomethane	21.0		1.0	0.30
124-48-1	Chlorodibromomethane	18.0		1.0	0.22
75-00-3	Chloroethane	18.7		1.0	0.37
67-66-3	Chloroform	20.3		1.0	0.22
74-87-3	Chloromethane	19.2		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	19.8		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	18.3		1.0	0.16
110-82-7	Cyclohexane	18.5		1.0	0.26
75-27-4	Dichlorobromomethane	19.6		1.0	0.15
75-71-8	Dichlorodifluoromethane	16.7		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516419/4

Matrix: Water | Lab File ID: P44731.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 10:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.2		1.0	0.30
106-93-4	Ethylene Dibromide	19.1		1.0	0.19
98-82-8	Isopropylbenzene	19.0		1.0	0.32
79-20-9	Methyl acetate	39.9		5.0	0.58
1634-04-4	Methyl tert-butyl ether	19.8		1.0	0.13
108-87-2	Methylcyclohexane	17.9		1.0	0.22
75-09-2	Methylene Chloride	19.7		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	19.2		1.0	0.28
95-47-6	o-Xylene	19.1		1.0	0.32
100-42-5	Styrene	19.4		1.0	0.17
127-18-4	Tetrachloroethene	19.8		1.0	0.12
108-88-3	Toluene	18.9		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	19.3		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	18.0		1.0	0.19
79-01-6	Trichloroethene	19.9		1.0	0.22
75-69-4	Trichlorofluoromethane	20.1		1.0	0.15
75-01-4	Vinyl chloride	18.7		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		74-132
460-00-4	4-Bromofluorobenzene	102		77-124
1868-53-7	Dibromofluoromethane (Surr)	105		72-131
2037-26-5	Toluene-d8 (Surr)	98		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44731.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-May-2018 10:29:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0071500-004
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 14:42:40 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 04-May-2018 14:42:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.856	0.007	90	18088	20.0	12.8	
2 Dichlorodifluoromethane	85	0.870	0.870	0.000	99	71069	20.0	16.7	
4 Chloromethane	50	0.978	0.978	0.000	99	78536	20.0	19.2	
5 Vinyl chloride	62	1.007	1.007	0.000	98	86182	20.0	18.7	
3 Butadiene	54	1.014	1.014	0.000	98	80726	20.0	19.9	
6 Bromomethane	94	1.164	1.164	0.000	97	29245	20.0	15.8	
7 Chloroethane	64	1.229	1.229	0.000	100	49056	20.0	18.7	
9 Pentane	72	1.293	1.293	0.000	97	18398	40.0	35.8	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	96	90434	20.0	20.1	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	129753	20.0	21.6	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	97	84915	20.0	19.0	
12 Ethyl ether	59	1.458	1.458	0.000	93	61280	20.0	20.3	
13 Ethanol	46	1.537	1.537	0.000	100	16583	800.0	859.7	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	94	52410	20.0	19.2	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	84	78789	20.0	19.5	
16 Carbon disulfide	76	1.572	1.572	0.000	100	193968	20.0	17.9	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	96	50102	20.0	17.7	
18 Iodomethane	142	1.637	1.637	0.000	100	38864	20.0	11.4	
19 Cyclopentene	67	1.723	1.723	0.000	97	151139	20.0	19.4	
20 Acrolein	56	1.737	1.744	-0.007	94	21328	40.0	64.4	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	37155	20.0	19.2	
22 Isopropyl alcohol	45	1.845	1.845	0.000	96	49183	200.0	191.1	
23 Methylene Chloride	84	1.880	1.880	0.000	98	69360	20.0	19.7	
24 Acetone	43	1.909	1.902	0.007	85	100619	100.0	91.4	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	97	62799	20.0	19.3	
26 Methyl acetate	43	1.981	1.981	0.000	99	114627	40.0	39.9	
27 Hexane	86	2.017	2.017	0.000	96	15166	20.0	17.5	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	94	204715	20.0	19.8	
* 29 TBA-d9 (IS)	65	2.059	2.060	-0.001	0	298063	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.102	2.102	0.000	98	70341	200.0	189.4	
31 Acetonitrile	41	2.174	2.174	0.000	98	102562	200.0	227.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	279114	20.0	20.9	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	93	56889	20.0	19.3	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	133463	20.0	20.9	
35 Acrylonitrile	53	2.375	2.375	0.000	93	300936	200.0	197.9	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	243047	20.0	20.3	
37 Vinyl acetate	43	2.511	2.511	0.000	100	374139	40.0	41.3	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	94	74586	20.0	19.8	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	101805	20.0	18.7	
40 Cyclohexane	56	2.833	2.833	0.000	94	122972	20.0	18.5	
41 Chlorobromomethane	128	2.833	2.833	0.000	94	34717	20.0	21.0	
42 Chloroform	83	2.898	2.898	0.000	98	125228	20.0	20.3	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	78523	20.0	18.3	
44 Ethyl acetate	70	2.998	2.998	0.000	98	17060	40.0	37.2	
45 Methyl acrylate	55	2.998	2.998	0.000	97	68386	20.0	19.2	
46 Tetrahydrofuran	42	3.012	3.005	0.007	94	64867	40.0	41.1	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	97	153581	50.0	52.4	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	97	101363	20.0	19.2	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	376745	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	99	42994	100.0	93.3	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	95	101840	20.0	19.4	
52 Isooctane	57	3.220	3.220	0.000	98	231225	20.0	17.8	
53 n-Heptane	57	3.313	3.313	0.000	94	64274	20.0	18.1	
54 Benzene	78	3.320	3.320	0.000	96	298663	20.0	19.3	
55 Propionitrile	54	3.342	3.342	0.000	95	110214	200.0	209.6	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	315101	200.0	203.2	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	206298	50.0	51.4	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	97	215811	20.0	19.6	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	104318	20.0	19.1	
60 Isobutyl alcohol	43	3.564	3.564	0.000	96	71081	500.0	439.4	
61 t-Amyl alcohol	59	3.628	3.628	0.000	95	47883	200.0	160.5	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	98	553791	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	156679	20.0	19.7	
64 Methylcyclohexane	83	3.800	3.793	0.007	94	113228	20.0	17.9	
65 Trichloroethene	130	3.814	3.814	0.000	98	68243	20.0	19.9	
66 2-ethoxy-2-methyl butane	59	4.058	4.065	-0.007	91	194277	20.0	19.3	
67 Dibromomethane	93	4.187	4.187	0.000	97	45010	20.0	20.2	
68 n-Butanol	56	4.201	4.201	0.000	93	39721	500.0	410.1	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	90	77860	20.0	20.0	
70 Ethyl acrylate	55	4.359	4.359	0.000	97	97554	20.0	19.7	
71 Dichlorobromomethane	83	4.359	4.359	0.000	98	92627	20.0	19.6	
* 72 1,4-Dioxane-d8	96	4.559	4.552	0.007	0	33775	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.552	0.000	93	38483	40.0	40.6	
74 1,4-Dioxane	88	4.574	4.574	0.000	96	16846	400.0	393.8	
75 n-Propyl acetate	43	4.717	4.717	0.000	99	109590	20.0	19.3	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	51101	20.0	19.6	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	96	113685	20.0	18.3	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	652728	50.0	48.9	
79 Toluene	91	5.261	5.261	0.000	93	319422	20.0	18.9	
80 Epichlorohydrin	57	5.290	5.290	0.000	100	145017	400.0	392.4	
81 2-Nitropropane	41	5.512	5.519	-0.007	99	31967	40.0	28.8	
82 Tetrachloroethene	166	5.691	5.691	0.000	97	70499	20.0	19.8	
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.734	0.000	98	389593	100.0	102.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	94	103210	20.0	18.0	
85 1,1,2-Trichloroethane	83	5.942	5.942	0.000	94	53066	20.0	18.4	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	95884	20.0	19.9	
87 Chlorodibromomethane	129	6.135	6.135	0.000	98	62934	20.0	18.0	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	96	117618	20.0	19.8	
89 Ethylene Dibromide	107	6.386	6.386	0.000	98	63036	20.0	19.1	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	116384	20.0	17.0	
91 2-Hexanone	43	6.794	6.794	0.000	98	267079	100.0	100.1	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	487394	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	93	196656	20.0	19.3	
94 Ethylbenzene	106	7.188	7.188	0.000	99	107816	20.0	19.2	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	61146	20.0	18.3	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	130446	20.0	19.2	
97 o-Xylene	106	7.990	7.991	0.000	93	127091	20.0	19.1	
98 Bromoform	173	8.055	8.055	0.000	95	35921	20.0	16.3	
99 Styrene	104	8.076	8.076	0.000	94	216310	20.0	19.4	
100 n-Butyl acrylate	73	8.399	8.399	0.000	96	49830	20.0	17.2	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	340143	20.0	19.0	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	89	138770	20.0	16.1	
$ 103 4-Bromofluorobenzene	174	8.850	8.850	0.000	87	194201	50.0	51.0	
104 Bromobenzene	156	8.965	8.965	0.000	97	82482	20.0	18.3	
105 N-Propylbenzene	91	9.115	9.108	0.007	99	414750	20.0	17.9	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	98	82319	20.0	16.9	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	284686	20.0	18.0	
108 4-Ethyltoluene	105	9.301	9.301	0.000	98	345024	20.0	18.3	
109 1,2,3-Trichloropropane	110	9.394	9.394	0.000	97	24258	20.0	17.5	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	93	289520	20.0	18.0	
111 trans-1,4-Dichloro-2-buten	53	9.516	9.516	0.000	81	23725	20.0	13.8	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	264206	20.0	18.1	
113 tert-Butylbenzene	119	9.925	9.925	-0.001	94	240378	20.0	18.1	
115 1,2,4-Trimethylbenzene	105	10.053	10.053	0.000	95	293185	20.0	18.3	
114 Butyl Methacrylate	87	10.053	10.053	0.000	60	93754	20.0	16.6	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	365204	20.0	17.7	
117 1,3-Dichlorobenzene	146	10.476	10.483	-0.007	94	160102	20.0	18.8	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	308631	20.0	18.0	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	276252	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.641	0.000	94	164052	20.0	17.8	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	307169	20.0	18.2	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	302813	20.0	18.6	
122 Benzyl chloride	126	11.092	11.092	0.000	97	23027	20.0	12.9	
123 p-Diethylbenzene	119	11.106	11.106	0.000	93	164877	20.0	18.1	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	291708	20.0	17.8	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	155170	20.0	19.1	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.202	0.000	97	281507	20.0	19.1	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	91	13686	20.0	15.5	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	118880	20.0	19.4	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	104824	20.0	19.4	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	51598	20.0	19.5	
131 Naphthalene	128	13.356	13.356	0.000	99	219031	20.0	18.0	
132 1,2,3-Trichlorobenzene	180	13.520	13.520	0.000	95	95052	20.0	19.5	
S 133 1,2-Dichloroethene, Total	100				0		40.0	39.1	
S 134 1,3-Dichloropropene, Total	100				0		40.0	36.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 135 Xylenes, Total	100				0		40.0	38.3	
S 137 Total BTEX	1				0		100.0	95.7	

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 14:42:53 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44731.D

Injection Date: 04-May-2018 10:29:30 Instrument ID: CVOAMS13 Operator ID:

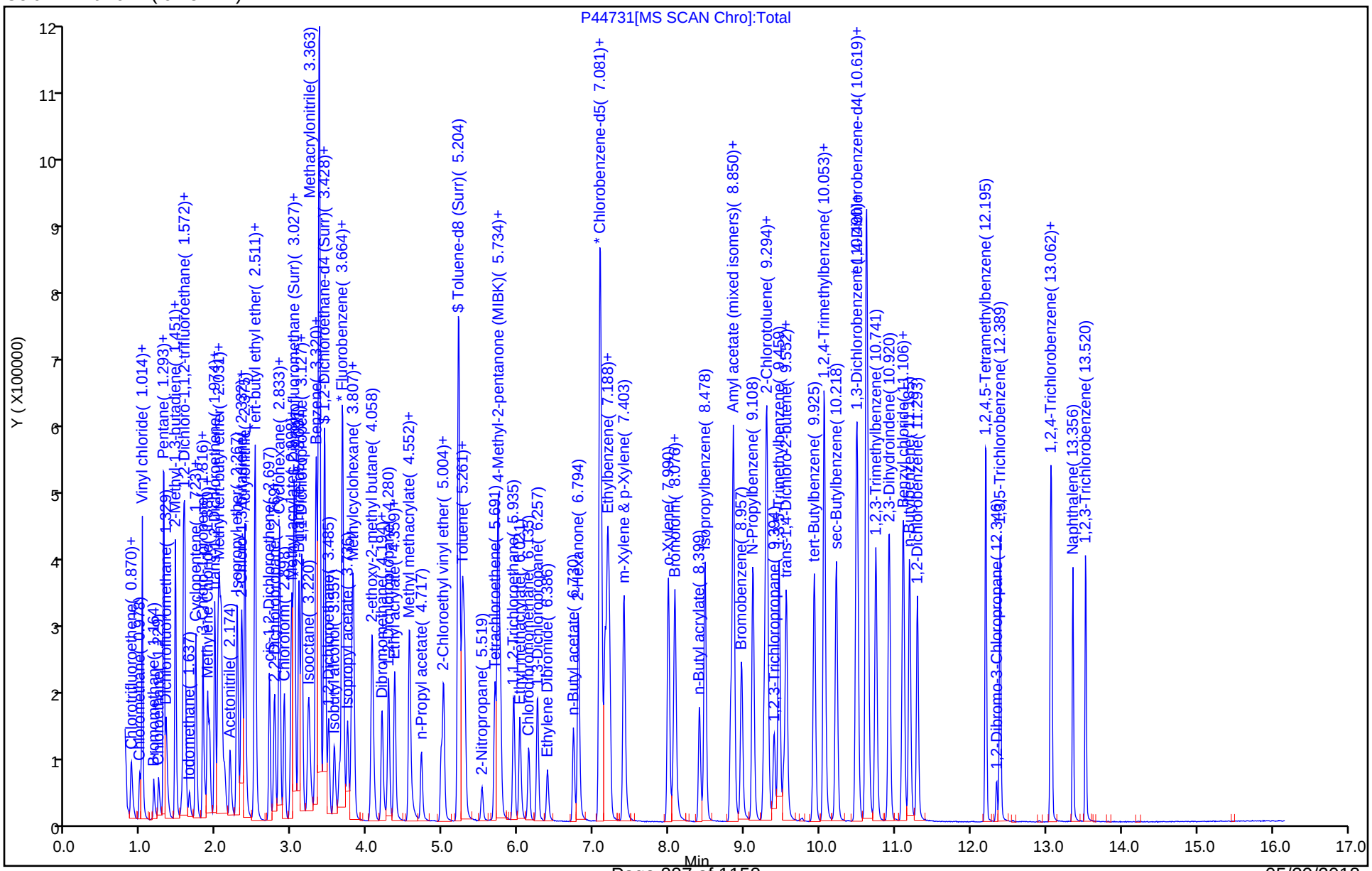
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516607/5

Matrix: Water | Lab File ID: P44761.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 23:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	20.0		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	18.1		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20.6		1.0	0.34
79-00-5	1,1,2-Trichloroethane	19.6		1.0	0.080
75-34-3	1,1-Dichloroethane	21.5		1.0	0.24
75-35-4	1,1-Dichloroethene	20.1		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	20.1		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	20.6		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	16.8		1.0	0.23
95-50-1	1,2-Dichlorobenzene	19.8		1.0	0.22
107-06-2	1,2-Dichloroethane	19.0		1.0	0.25
78-87-5	1,2-Dichloropropane	20.6		1.0	0.18
541-73-1	1,3-Dichlorobenzene	19.6		1.0	0.33
106-46-7	1,4-Dichlorobenzene	19.0		1.0	0.33
123-91-1	1,4-Dioxane	383		50	8.7
78-93-3	2-Butanone (MEK)	94.3		5.0	2.2
591-78-6	2-Hexanone	104		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	106		5.0	0.63
67-64-1	Acetone	93.9		5.0	1.1
71-43-2	Benzene	20.2		1.0	0.090
75-25-2	Bromoform	17.2		1.0	0.18
74-83-9	Bromomethane	16.6		1.0	0.18
75-15-0	Carbon disulfide	18.6		1.0	0.22
56-23-5	Carbon tetrachloride	19.6		1.0	0.33
108-90-7	Chlorobenzene	19.9		1.0	0.24
74-97-5	Chlorobromomethane	21.4		1.0	0.30
124-48-1	Chlorodibromomethane	18.5		1.0	0.22
75-00-3	Chloroethane	19.3		1.0	0.37
67-66-3	Chloroform	20.8		1.0	0.22
74-87-3	Chloromethane	19.8		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	20.4		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	18.7		1.0	0.16
110-82-7	Cyclohexane	21.1		1.0	0.26
75-27-4	Dichlorobromomethane	20.0		1.0	0.15
75-71-8	Dichlorodifluoromethane	22.4		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-516607/5

Matrix: Water | Lab File ID: P44761.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 23:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	20.1		1.0	0.30
106-93-4	Ethylene Dibromide	19.7		1.0	0.19
98-82-8	Isopropylbenzene	19.9		1.0	0.32
79-20-9	Methyl acetate	40.6		5.0	0.58
1634-04-4	Methyl tert-butyl ether	20.2		1.0	0.13
108-87-2	Methylcyclohexane	21.6		1.0	0.22
75-09-2	Methylene Chloride	19.6		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	19.9		1.0	0.28
95-47-6	o-Xylene	19.7		1.0	0.32
100-42-5	Styrene	19.9		1.0	0.17
127-18-4	Tetrachloroethene	20.7		1.0	0.12
108-88-3	Toluene	19.4		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	19.3		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	18.6		1.0	0.19
79-01-6	Trichloroethene	20.8		1.0	0.22
75-69-4	Trichlorofluoromethane	22.8		1.0	0.15
75-01-4	Vinyl chloride	20.1		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		74-132
460-00-4	4-Bromofluorobenzene	104		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44761.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-May-2018 23:50:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0071534-005
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 07-May-2018 12:26:04 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: xuyvo Date: 07-May-2018 12:27:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.856	0.007	90	26501	20.0	18.3	
2 Dichlorodifluoromethane	85	0.871	0.870	0.001	99	97543	20.0	22.4	
4 Chloromethane	50	0.978	0.978	0.000	98	82686	20.0	19.8	
5 Vinyl chloride	62	1.007	1.006	0.001	98	94409	20.0	20.1	
3 Butadiene	54	1.014	1.014	0.000	99	94049	20.0	22.7	
6 Bromomethane	94	1.164	1.164	0.000	98	31441	20.0	16.6	
7 Chloroethane	64	1.229	1.229	0.000	99	51734	20.0	19.3	
9 Pentane	72	1.293	1.293	0.000	97	23963	40.0	45.2	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	97	104672	20.0	22.8	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	136367	20.0	22.3	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	97	98396	20.0	21.6	
12 Ethyl ether	59	1.458	1.458	0.000	93	64481	20.0	21.0	
13 Ethanol	46	1.537	1.537	0.000	98	17448	800.0	876.1	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	94	56116	20.0	20.1	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	84	86992	20.0	21.1	
16 Carbon disulfide	76	1.573	1.572	0.001	100	204718	20.0	18.6	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	96	59212	20.0	20.6	
18 Iodomethane	142	1.637	1.637	0.000	99	45311	20.0	13.0	
19 Cyclopentene	67	1.723	1.723	0.000	97	168239	20.0	21.2	
20 Acrolein	56	1.744	1.737	0.007	95	23921	40.0	69.9	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	38866	20.0	19.7	
22 Isopropyl alcohol	45	1.845	1.845	0.000	97	51169	200.0	192.5	
23 Methylene Chloride	84	1.881	1.880	0.001	99	70571	20.0	19.6	
24 Acetone	43	1.902	1.902	0.000	85	105472	100.0	93.9	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	97	64216	20.0	19.3	
26 Methyl acetate	43	1.981	1.981	0.000	99	119150	40.0	40.6	
27 Hexane	86	2.017	2.016	0.001	96	18260	20.0	20.7	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	95	212436	20.0	20.2	
* 29 TBA-d9 (IS)	65	2.060	2.059	0.001	0	307742	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.102	0.001	99	75083	200.0	195.8	
31 Acetonitrile	41	2.174	2.174	0.000	98	106618	200.0	229.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	288022	20.0	21.1	
33 2-Chloro-1,3-butadiene	88	2.325	2.324	0.001	94	60854	20.0	20.2	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	139906	20.0	21.5	
35 Acrylonitrile	53	2.375	2.375	0.000	93	317549	200.0	204.8	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	247884	20.0	20.3	
37 Vinyl acetate	43	2.511	2.511	0.000	100	393057	40.0	42.6	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	78012	20.0	20.4	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	105481	20.0	19.0	
40 Cyclohexane	56	2.826	2.833	-0.007	94	142816	20.0	21.1	
41 Chlorobromomethane	128	2.833	2.833	0.000	97	36103	20.0	21.4	
42 Chloroform	83	2.898	2.898	0.000	98	130608	20.0	20.8	
43 Carbon tetrachloride	117	2.984	2.983	0.001	98	85761	20.0	19.6	
44 Ethyl acetate	70	2.998	2.998	0.000	98	18075	40.0	38.6	
45 Methyl acrylate	55	2.998	2.998	0.000	93	71570	20.0	19.7	
46 Tetrahydrofuran	42	3.005	3.005	0.000	94	67001	40.0	41.6	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.026	0.001	96	161600	50.0	54.0	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	97	108059	20.0	20.0	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	384380	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	99	44303	100.0	94.3	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	93	106369	20.0	19.9	
52 Isooctane	57	3.220	3.220	0.000	98	289516	20.0	21.8	
53 n-Heptane	57	3.313	3.313	0.000	95	79511	20.0	21.9	
54 Benzene	78	3.320	3.320	0.000	96	314211	20.0	20.2	
55 Propionitrile	54	3.342	3.342	0.000	98	115035	200.0	211.9	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	332200	200.0	210.1	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	217811	50.0	53.3	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	225133	20.0	20.0	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	105701	20.0	19.0	
60 Isobutyl alcohol	43	3.557	3.557	0.000	95	75859	500.0	454.2	
61 t-Amyl alcohol	59	3.628	3.628	0.000	95	49668	200.0	161.2	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	98	564779	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	155737	20.0	19.2	
64 Methylcyclohexane	83	3.800	3.793	0.007	95	139459	20.0	21.6	
65 Trichloroethene	130	3.815	3.814	0.001	97	72553	20.0	20.8	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	92	202378	20.0	19.7	
67 Dibromomethane	93	4.187	4.187	0.000	95	47235	20.0	20.7	
68 n-Butanol	56	4.201	4.194	0.007	91	43907	500.0	439.1	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	88	81518	20.0	20.6	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	103544	20.0	20.5	
71 Dichlorobromomethane	83	4.359	4.359	0.000	99	96372	20.0	20.0	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	33776	1000.0	1000.0	
73 Methyl methacrylate	100	4.560	4.559	0.001	93	39617	40.0	41.0	
74 1,4-Dioxane	88	4.581	4.581	0.000	40	16389	400.0	383.1	
75 n-Propyl acetate	43	4.710	4.717	-0.007	100	115097	20.0	19.9	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	53599	20.0	20.2	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	97	117349	20.0	18.7	
$ 78 Toluene-d8 (Surr)	98	5.204	5.211	-0.007	98	685141	50.0	50.9	
79 Toluene	91	5.262	5.261	0.001	94	331853	20.0	19.4	
80 Epichlorohydrin	57	5.290	5.290	0.000	99	153235	400.0	406.4	
81 2-Nitropropane	41	5.519	5.519	0.000	99	33890	40.0	29.9	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	74136	20.0	20.7	
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.734	0.000	99	411167	100.0	106.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	97	107673	20.0	18.6	
85 1,1,2-Trichloroethane	83	5.942	5.942	0.000	94	56936	20.0	19.6	
86 Ethyl methacrylate	69	6.021	6.021	0.000	92	99360	20.0	20.2	
87 Chlorodibromomethane	129	6.135	6.135	0.000	99	65113	20.0	18.5	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	97	119412	20.0	19.9	
89 Ethylene Dibromide	107	6.386	6.386	0.000	97	65476	20.0	19.7	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	122492	20.0	17.7	
91 2-Hexanone	43	6.794	6.794	0.000	99	284310	100.0	104.4	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	491794	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	92	204479	20.0	19.9	
94 Ethylbenzene	106	7.188	7.181	0.007	99	113971	20.0	20.1	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	63306	20.0	18.8	
96 m-Xylene & p-Xylene	106	7.396	7.403	-0.007	0	136362	20.0	19.9	
97 o-Xylene	106	7.991	7.990	0.001	93	131891	20.0	19.7	
98 Bromoform	173	8.055	8.055	0.000	94	38158	20.0	17.2	
99 Styrene	104	8.077	8.076	0.001	93	224044	20.0	19.9	
100 n-Butyl acrylate	73	8.399	8.399	0.000	96	52188	20.0	17.8	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	359578	20.0	19.9	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	89	145906	20.0	16.9	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	200438	50.0	52.1	
104 Bromobenzene	156	8.965	8.965	0.000	97	86765	20.0	19.3	
105 N-Propylbenzene	91	9.108	9.115	-0.007	99	436988	20.0	18.8	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	98	88152	20.0	18.1	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	299704	20.0	19.0	
108 4-Ethyltoluene	105	9.301	9.301	0.000	98	366277	20.0	19.4	
109 1,2,3-Trichloropropane	110	9.395	9.394	0.001	98	26228	20.0	18.9	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	302267	20.0	18.8	
111 trans-1,4-Dichloro-2-buten	53	9.524	9.516	0.008	83	25070	20.0	14.6	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	269916	20.0	18.5	
113 tert-Butylbenzene	119	9.925	9.924	0.001	93	249904	20.0	18.9	
115 1,2,4-Trimethylbenzene	105	10.054	10.053	0.001	95	310090	20.0	19.4	
114 Butyl Methacrylate	87	10.054	10.053	0.001	61	101498	20.0	18.0	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	389072	20.0	18.9	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	94	167238	20.0	19.6	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	328351	20.0	19.2	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	275799	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.641	0.000	94	175138	20.0	19.0	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	316405	20.0	18.8	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	314680	20.0	19.3	
122 Benzyl chloride	126	11.092	11.092	0.000	97	25378	20.0	14.3	
123 p-Diethylbenzene	119	11.107	11.106	0.001	92	174060	20.0	19.1	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	309613	20.0	18.9	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	160684	20.0	19.8	
126 1,2,4,5-Tetramethylbenzene	119	12.203	12.202	0.000	97	290283	20.0	19.7	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	92	14804	20.0	16.8	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	125135	20.0	20.5	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	111105	20.0	20.6	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	54331	20.0	20.5	
131 Naphthalene	128	13.356	13.356	0.000	99	228143	20.0	18.7	
132 1,2,3-Trichlorobenzene	180	13.528	13.527	0.001	95	98143	20.0	20.1	
S 133 1,2-Dichloroethene, Total	100				0		40.0	39.7	
S 134 1,3-Dichloropropene, Total	100				0		40.0	37.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 135 Xylenes, Total	100				0		40.0	39.6	
S 137 Total BTEX	1				0		100.0	99.2	

Reagents:

GASES Li_00258	Amount Added: 20.00	Units: uL	
ACROLEIN W_00076	Amount Added: 4.00	Units: uL	
8260MIX1COMB_00079	Amount Added: 20.00	Units: uL	
8260ISNEW_00121	Amount Added: 1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 07-May-2018 12:27:47 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44761.D

Injection Date: 04-May-2018 23:50:30 Instrument ID: CVOAMS13 Operator ID:

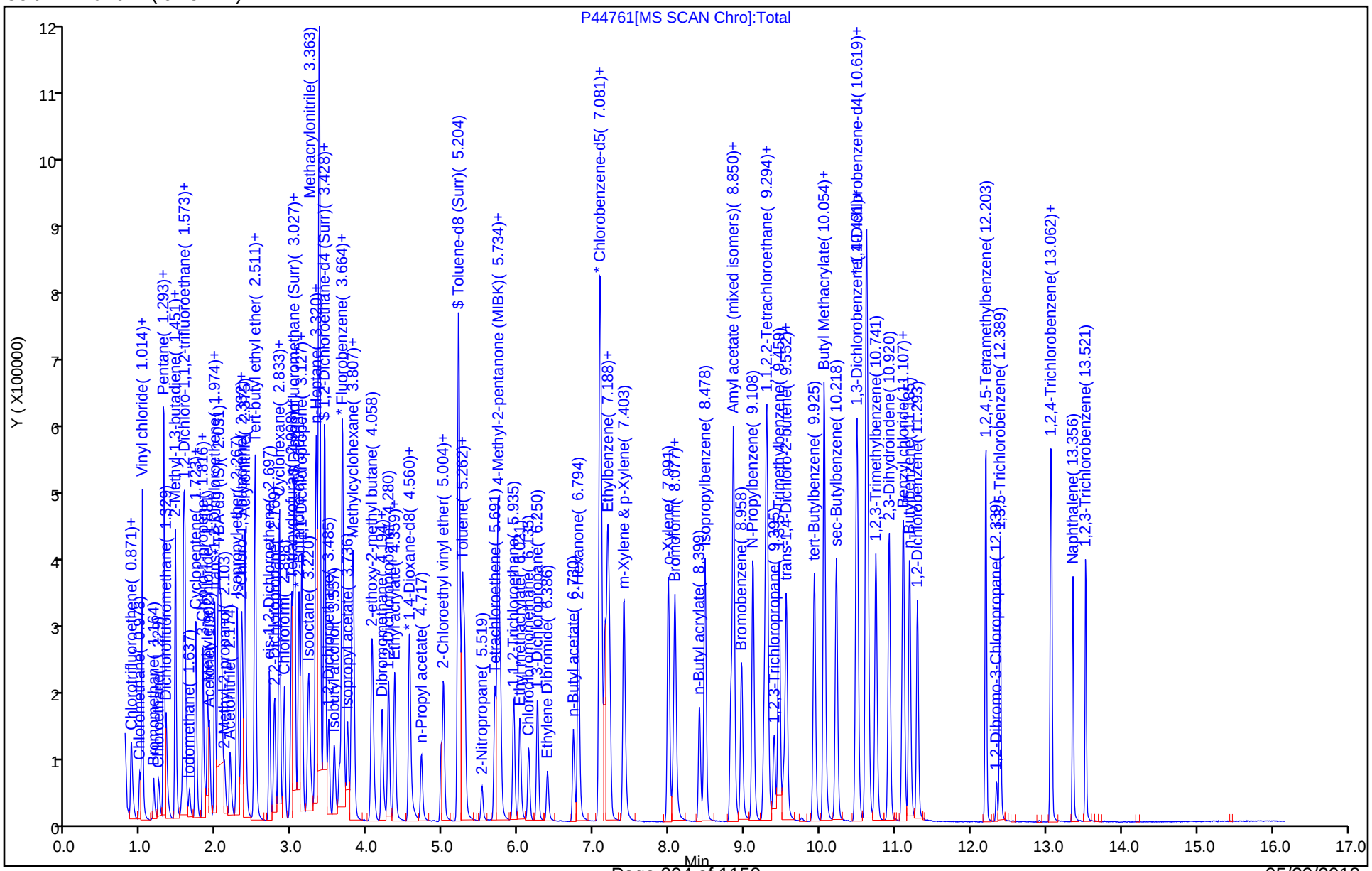
Lims ID: LCS Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-516291/4

Matrix: Water | Lab File ID: P44703.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 22:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	19.7		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	18.0		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20.7		1.0	0.34
79-00-5	1,1,2-Trichloroethane	18.9		1.0	0.080
75-34-3	1,1-Dichloroethane	20.9		1.0	0.24
75-35-4	1,1-Dichloroethene	19.6		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	20.5		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	20.5		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	16.7		1.0	0.23
95-50-1	1,2-Dichlorobenzene	19.6		1.0	0.22
107-06-2	1,2-Dichloroethane	19.2		1.0	0.25
78-87-5	1,2-Dichloropropane	20.7		1.0	0.18
541-73-1	1,3-Dichlorobenzene	19.3		1.0	0.33
106-46-7	1,4-Dichlorobenzene	18.3		1.0	0.33
123-91-1	1,4-Dioxane	417		50	8.7
78-93-3	2-Butanone (MEK)	100		5.0	2.2
591-78-6	2-Hexanone	106		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	105		5.0	0.63
67-64-1	Acetone	92.4		5.0	1.1
71-43-2	Benzene	19.6		1.0	0.090
75-25-2	Bromoform	17.1		1.0	0.18
74-83-9	Bromomethane	14.3		1.0	0.18
75-15-0	Carbon disulfide	18.4		1.0	0.22
56-23-5	Carbon tetrachloride	19.2		1.0	0.33
108-90-7	Chlorobenzene	19.7		1.0	0.24
74-97-5	Chlorobromomethane	21.6		1.0	0.30
124-48-1	Chlorodibromomethane	18.1		1.0	0.22
75-00-3	Chloroethane	18.8		1.0	0.37
67-66-3	Chloroform	20.6		1.0	0.22
74-87-3	Chloromethane	17.3		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	19.9		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	18.5		1.0	0.16
110-82-7	Cyclohexane	20.9		1.0	0.26
75-27-4	Dichlorobromomethane	19.4		1.0	0.15
75-71-8	Dichlorodifluoromethane	19.5		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-516291/4

Matrix: Water | Lab File ID: P44703.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 22:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.7		1.0	0.30
106-93-4	Ethylene Dibromide	19.5		1.0	0.19
98-82-8	Isopropylbenzene	19.8		1.0	0.32
79-20-9	Methyl acetate	41.6		5.0	0.58
1634-04-4	Methyl tert-butyl ether	20.0		1.0	0.13
108-87-2	Methylcyclohexane	21.0		1.0	0.22
75-09-2	Methylene Chloride	19.9		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	19.9		1.0	0.28
95-47-6	o-Xylene	19.6		1.0	0.32
100-42-5	Styrene	20.0		1.0	0.17
127-18-4	Tetrachloroethene	21.0		1.0	0.12
108-88-3	Toluene	19.3		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	19.0		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	18.6		1.0	0.19
79-01-6	Trichloroethene	20.3		1.0	0.22
75-69-4	Trichlorofluoromethane	22.3		1.0	0.15
75-01-4	Vinyl chloride	19.4		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		74-132
460-00-4	4-Bromofluorobenzene	105		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	101		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44703.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 03-May-2018 22:45:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0071476-004
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: starzecm Date: 03-May-2018 23:41:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.856	0.007	90	18399	20.0	12.8	
2 Dichlorodifluoromethane	85	0.870	0.871	-0.001	99	84590	20.0	19.5	
4 Chloromethane	50	0.985	0.978	0.007	99	71947	20.0	17.3	
5 Vinyl chloride	62	1.007	1.007	0.000	98	90476	20.0	19.4	
3 Butadiene	54	1.014	1.014	0.000	99	89043	20.0	21.6	
6 Bromomethane	94	1.164	1.164	0.000	99	27650	20.0	14.3	
7 Chloroethane	64	1.229	1.229	0.000	99	50177	20.0	18.8	
9 Pentane	72	1.300	1.293	0.007	98	22963	40.0	41.1	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	97	101859	20.0	22.3	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	133934	20.0	22.0	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	98	95606	20.0	21.1	
12 Ethyl ether	59	1.458	1.458	0.000	94	62810	20.0	20.5	
13 Ethanol	46	1.537	1.537	0.000	98	17777	800.0	848.7	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	95	54412	20.0	19.6	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	83	85614	20.0	20.8	
16 Carbon disulfide	76	1.580	1.573	0.007	100	201813	20.0	18.4	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	97	59399	20.0	20.7	
18 Iodomethane	142	1.637	1.637	0.000	100	34435	20.0	9.94	
19 Cyclopentene	67	1.723	1.723	0.000	97	161752	20.0	20.5	
20 Acrolein	56	1.737	1.737	0.000	94	22571	40.0	62.7	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	37952	20.0	19.3	
22 Isopropyl alcohol	45	1.845	1.838	0.007	97	52351	200.0	187.3	
23 Methylene Chloride	84	1.880	1.881	-0.001	98	71207	20.0	19.9	
24 Acetone	43	1.902	1.902	0.000	85	106090	100.0	92.4	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	62968	20.0	19.0	
26 Methyl acetate	43	1.981	1.981	0.000	99	121361	40.0	41.6	
27 Hexane	86	2.017	2.017	0.000	90	17727	20.0	20.2	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	91	209555	20.0	20.0	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	323665	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	0.000	100	77431	200.0	192.0	
31 Acetonitrile	41	2.174	2.174	0.000	98	106635	200.0	218.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	282074	20.0	20.8	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	94	60052	20.0	20.0	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	100	135373	20.0	20.9	
35 Acrylonitrile	53	2.375	2.375	0.000	92	315876	200.0	204.6	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	87	244259	20.0	20.1	
37 Vinyl acetate	43	2.511	2.511	0.000	100	392284	40.0	42.7	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	76000	20.0	19.9	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	107911	20.0	19.5	
40 Cyclohexane	56	2.833	2.833	0.000	95	141082	20.0	20.9	
41 Chlorobromomethane	128	2.833	2.833	0.000	95	36270	20.0	21.6	
42 Chloroform	83	2.898	2.898	0.000	98	129011	20.0	20.6	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	83730	20.0	19.2	
44 Ethyl acetate	70	2.998	2.998	0.000	99	17717	40.0	37.0	
45 Methyl acrylate	55	2.998	2.998	0.000	95	72419	20.0	20.0	
46 Tetrahydrofuran	42	3.005	3.005	0.000	94	68856	40.0	41.8	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	97	160864	50.0	54.0	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	97	105754	20.0	19.7	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	392924	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	100	48026	100.0	100.0	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	95	107036	20.0	20.1	
52 Isooctane	57	3.313	3.220	0.093	48	70723	20.0	5.35	
53 n-Heptane	57	3.313	3.313	0.000	96	73634	20.0	20.4	
54 Benzene	78	3.320	3.320	0.000	96	304771	20.0	19.6	
55 Propionitrile	54	3.342	3.342	0.000	97	118098	200.0	206.8	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	334860	200.0	212.6	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	209132	50.0	51.3	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	225383	20.0	20.1	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	106335	20.0	19.2	
60 Isobutyl alcohol	43	3.557	3.557	0.000	97	77484	500.0	441.1	
61 t-Amyl alcohol	59	3.628	3.628	0.000	95	54378	200.0	167.8	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	562417	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	156690	20.0	19.4	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	135300	20.0	21.0	
65 Trichloroethene	130	3.815	3.815	-0.001	97	70596	20.0	20.3	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	91	201594	20.0	19.7	
67 Dibromomethane	93	4.187	4.187	0.000	97	44878	20.0	19.8	
68 n-Butanol	56	4.194	4.201	-0.007	90	45010	500.0	428.0	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	81612	20.0	20.7	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	101605	20.0	20.2	
71 Dichlorobromomethane	83	4.359	4.359	0.000	98	93214	20.0	19.4	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	33241	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.552	0.000	94	39499	40.0	41.1	
74 1,4-Dioxane	88	4.574	4.574	0.000	97	17577	400.0	417.5	
75 n-Propyl acetate	43	4.710	4.710	0.000	99	116364	20.0	20.2	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	97	54192	20.0	20.5	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	96	115853	20.0	18.5	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	679992	50.0	50.6	
79 Toluene	91	5.261	5.262	-0.001	94	328246	20.0	19.3	
80 Epichlorohydrin	57	5.290	5.290	0.000	99	154216	400.0	400.1	
81 2-Nitropropane	41	5.519	5.519	0.000	99	34513	40.0	30.6	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	75187	20.0	21.0	
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.734	0.000	99	415396	100.0	104.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	94	107315	20.0	18.6	
85 1,1,2-Trichloroethane	83	5.935	5.942	-0.007	94	54996	20.0	18.9	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	102199	20.0	20.8	
87 Chlorodibromomethane	129	6.135	6.135	0.000	98	63811	20.0	18.1	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	96	117412	20.0	19.6	
89 Ethylene Dibromide	107	6.386	6.386	0.000	98	64610	20.0	19.5	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	119514	20.0	17.3	
91 2-Hexanone	43	6.794	6.794	0.000	98	294032	100.0	105.6	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	491027	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	92	201710	20.0	19.7	
94 Ethylbenzene	106	7.188	7.181	0.007	99	111383	20.0	19.7	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	94	62936	20.0	18.7	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	136046	20.0	19.9	
97 o-Xylene	106	7.991	7.991	0.000	93	130914	20.0	19.6	
98 Bromoform	173	8.055	8.055	0.000	94	37811	20.0	17.1	
99 Styrene	104	8.077	8.077	-0.001	93	223835	20.0	20.0	
100 n-Butyl acrylate	73	8.399	8.406	-0.007	96	54203	20.0	18.5	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	357086	20.0	19.8	
102 Amyl acetate (mixed isomer	43	8.814	8.822	-0.008	89	148811	20.0	17.2	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	201981	50.0	52.6	
104 Bromobenzene	156	8.965	8.958	0.007	97	86947	20.0	19.3	
105 N-Propylbenzene	91	9.108	9.108	0.000	98	434687	20.0	18.7	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.259	-0.001	98	87685	20.0	18.0	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	294028	20.0	18.6	
108 4-Ethyltoluene	105	9.301	9.302	-0.001	98	358561	20.0	19.0	
109 1,2,3-Trichloropropane	110	9.395	9.395	-0.001	97	26493	20.0	19.1	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	93	295213	20.0	18.3	
111 trans-1,4-Dichloro-2-buten	53	9.523	9.524	-0.001	82	25645	20.0	14.9	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	271983	20.0	18.6	
113 tert-Butylbenzene	119	9.925	9.925	0.000	96	250635	20.0	18.9	
115 1,2,4-Trimethylbenzene	105	10.054	10.054	0.000	96	304510	20.0	19.0	
114 Butyl Methacrylate	87	10.054	10.054	0.000	60	98709	20.0	17.4	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	387353	20.0	18.7	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	95	165117	20.0	19.3	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	327190	20.0	19.1	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.620	-0.008	96	276424	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.634	0.000	93	169239	20.0	18.3	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	319816	20.0	18.9	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	314523	20.0	19.3	
122 Benzyl chloride	126	11.092	11.092	0.000	97	26881	20.0	15.1	
123 p-Diethylbenzene	119	11.106	11.107	-0.001	92	171757	20.0	18.8	
124 n-Butylbenzene	91	11.185	11.185	0.000	99	304675	20.0	18.6	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	159231	20.0	19.6	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.203	-0.001	97	289044	20.0	19.6	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	92	14673	20.0	16.7	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	125699	20.0	20.5	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	95	110665	20.0	20.5	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	55019	20.0	20.7	
131 Naphthalene	128	13.356	13.356	0.000	99	231622	20.0	19.0	
132 1,2,3-Trichlorobenzene	180	13.520	13.528	-0.008	95	100059	20.0	20.5	
S 133 1,2-Dichloroethene, Total	100				0		40.0	39.0	
S 134 1,3-Dichloropropene, Total	100				0		40.0	37.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 135 Xylenes, Total	100				0		40.0	39.4	
S 137 Total BTEX	1				0		100.0	97.9	

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 08:41:21 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44703.D

Injection Date: 03-May-2018 22:45:30 Instrument ID: CVOAMS13 Operator ID:

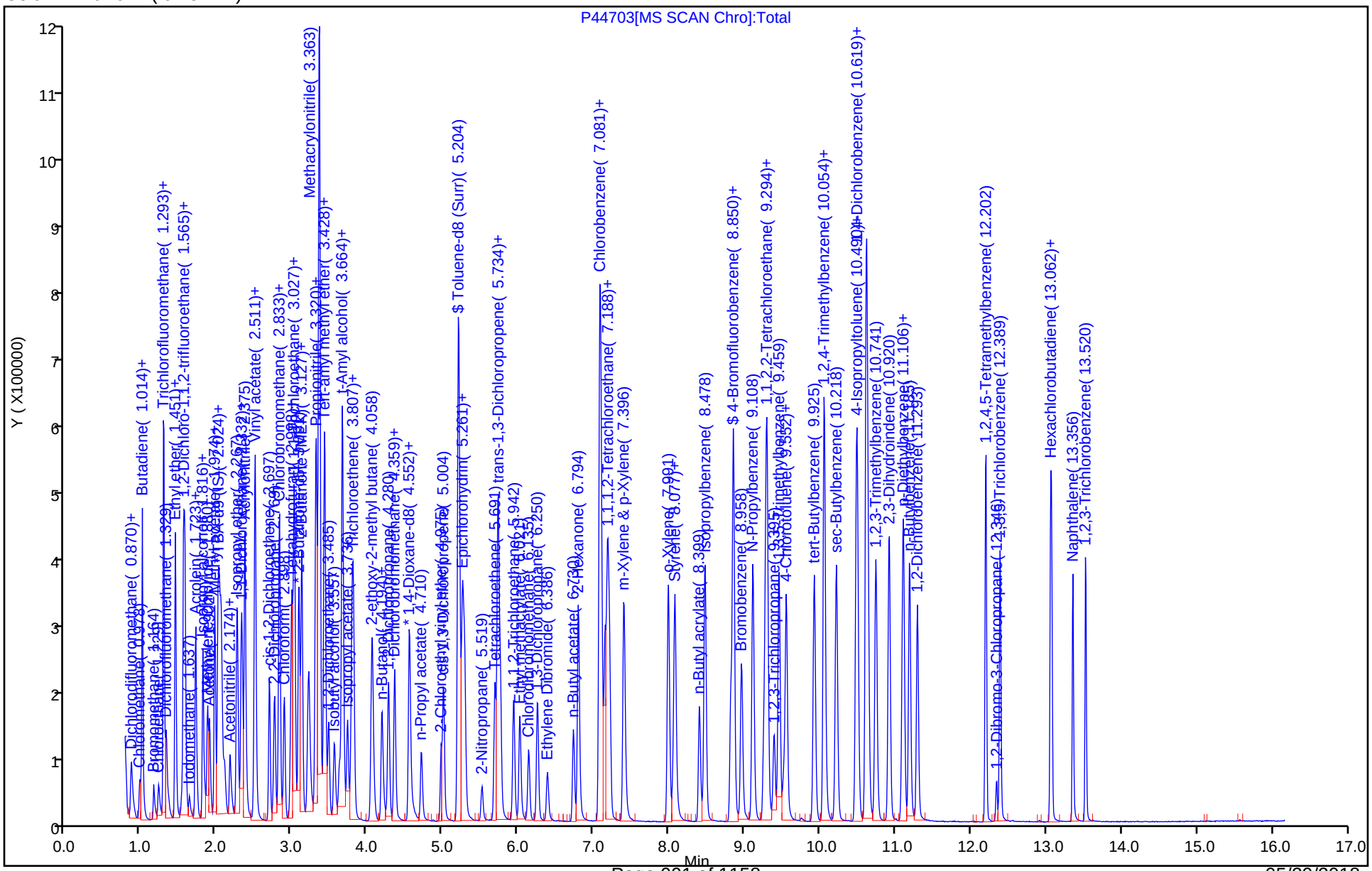
Lims ID: LCSD Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-516299/5

Matrix: Water | Lab File ID: N665682.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 18:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	21.5		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	20.2		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	21.0		1.0	0.34
79-00-5	1,1,2-Trichloroethane	18.8		1.0	0.080
75-34-3	1,1-Dichloroethane	20.5		1.0	0.24
75-35-4	1,1-Dichloroethene	19.9		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	21.0		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	19.0		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	19.3		1.0	0.23
95-50-1	1,2-Dichlorobenzene	20.7		1.0	0.22
107-06-2	1,2-Dichloroethane	20.6		1.0	0.25
78-87-5	1,2-Dichloropropane	19.0		1.0	0.18
541-73-1	1,3-Dichlorobenzene	21.4		1.0	0.33
106-46-7	1,4-Dichlorobenzene	20.4		1.0	0.33
123-91-1	1,4-Dioxane	408		50	8.7
78-93-3	2-Butanone (MEK)	93.1		5.0	2.2
591-78-6	2-Hexanone	78.0		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	99.4		5.0	0.63
67-64-1	Acetone	102		5.0	1.1
71-43-2	Benzene	19.8		1.0	0.090
75-25-2	Bromoform	17.1		1.0	0.18
74-83-9	Bromomethane	25.8		1.0	0.18
75-15-0	Carbon disulfide	17.1		1.0	0.22
56-23-5	Carbon tetrachloride	24.7		1.0	0.33
108-90-7	Chlorobenzene	19.3		1.0	0.24
74-97-5	Chlorobromomethane	20.3		1.0	0.30
124-48-1	Chlorodibromomethane	18.3		1.0	0.22
75-00-3	Chloroethane	28.8		1.0	0.37
67-66-3	Chloroform	20.9		1.0	0.22
74-87-3	Chloromethane	23.2		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	20.4		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	18.0		1.0	0.16
110-82-7	Cyclohexane	18.4		1.0	0.26
75-27-4	Dichlorobromomethane	19.1		1.0	0.15
75-71-8	Dichlorodifluoromethane	23.3		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-516299/5

Matrix: Water | Lab File ID: N665682.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 18:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.1		1.0	0.30
106-93-4	Ethylene Dibromide	18.8		1.0	0.19
98-82-8	Isopropylbenzene	19.9		1.0	0.32
79-20-9	Methyl acetate	45.8		5.0	0.58
1634-04-4	Methyl tert-butyl ether	19.4		1.0	0.13
108-87-2	Methylcyclohexane	18.1		1.0	0.22
75-09-2	Methylene Chloride	21.0		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	18.8		1.0	0.28
95-47-6	o-Xylene	18.5		1.0	0.32
100-42-5	Styrene	19.7		1.0	0.17
127-18-4	Tetrachloroethene	19.2		1.0	0.12
108-88-3	Toluene	18.9		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	20.0		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	17.2		1.0	0.19
79-01-6	Trichloroethene	19.3		1.0	0.22
75-69-4	Trichlorofluoromethane	25.3		1.0	0.15
75-01-4	Vinyl chloride	24.4		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		74-132
460-00-4	4-Bromofluorobenzene	97		77-124
1868-53-7	Dibromofluoromethane (Surr)	105		72-131
2037-26-5	Toluene-d8 (Surr)	96		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665682.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 03-May-2018 18:50:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0071478-005
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 17:28:26 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: parekhv Date: 03-May-2018 20:15:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.331	1.343	-0.012	89	64158	20.0	17.0	
2 Dichlorodifluoromethane	87	1.362	1.374	-0.012	99	50055	20.0	23.3	
3 Chloromethane	52	1.508	1.520	-0.012	99	30292	20.0	23.2	
4 Vinyl chloride	62	1.593	1.599	-0.006	98	109386	20.0	24.4	
5 Butadiene	54	1.599	1.605	-0.006	92	77497	20.0	23.9	
6 Bromomethane	94	1.848	1.854	-0.006	98	81954	20.0	25.8	
7 Chloroethane	64	1.927	1.927	0.000	99	65730	20.0	28.8	
8 Dichlorofluoromethane	67	2.073	2.079	-0.006	97	187221	20.0	22.6	
9 Trichlorofluoromethane	101	2.079	2.091	-0.012	82	161998	20.0	25.3	
10 Pentane	72	2.104	2.116	-0.012	97	31061	40.0	46.0	
11 Ethanol	46	2.280	2.298	-0.018	75	6597	800.0	814.8	
12 Ethyl ether	59	2.292	2.298	-0.006	93	48536	20.0	19.8	
13 2-Methyl-1,3-butadiene	53	2.311	2.317	-0.006	96	62253	20.0	16.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.353	-0.012	92	78767	20.0	21.0	
16 Acrolein	56	2.463	2.469	-0.006	44	9537	40.0	40.6	
15 1,1,2-Trichloro-1,2,2-trif	101	2.493	2.493	0.000	92	97217	20.0	21.0	
17 1,1-Dichloroethene	96	2.493	2.499	-0.006	97	76040	20.0	19.9	
18 Acetone	43	2.584	2.584	0.000	87	39886	100.0	101.9	
19 Iodomethane	142	2.639	2.645	-0.006	100	118636	20.0	19.4	
20 Carbon disulfide	76	2.676	2.682	-0.006	99	240046	20.0	17.1	
21 Isopropyl alcohol	45	2.682	2.688	-0.006	1	14257	200.0	201.8	a
22 3-Chloro-1-propene	76	2.803	2.809	-0.006	90	45109	20.0	18.6	
24 Methyl acetate	74	2.828	2.828	0.000	39	13413	40.0	45.8	
23 Cyclopentene	67	2.828	2.834	-0.006	90	184987	20.0	19.4	
25 Acetonitrile	40	2.882	2.888	-0.006	83	18919	200.0	159.2	a
26 Methylene Chloride	84	2.931	2.937	-0.006	90	86885	20.0	21.0	
* 27 TBA-d9 (IS)	65	2.937	2.943	-0.006	0	138875	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.016	3.016	0.000	94	31049	200.0	214.6	
29 Methyl tert-butyl ether	73	3.101	3.107	-0.006	97	176388	20.0	19.4	
30 trans-1,2-Dichloroethene	96	3.126	3.132	-0.006	93	86885	20.0	20.0	
31 Acrylonitrile	53	3.199	3.205	-0.006	96	131823	200.0	219.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.284	3.284	0.000	92	99997	20.0	19.0	
33 Isopropyl ether	45	3.503	3.509	-0.006	94	235904	20.0	20.3	
34 1,1-Dichloroethane	63	3.533	3.539	-0.006	99	150204	20.0	20.5	
35 Vinyl acetate	86	3.558	3.552	0.006	99	18374	40.0	31.9	
36 2-Chloro-1,3-butadiene	88	3.582	3.582	0.000	91	73985	20.0	18.5	
37 Tert-butyl ethyl ether	59	3.838	3.837	0.001	91	203769	20.0	18.8	
* 39 2-Butanone-d5	46	4.050	4.056	-0.006	0	158017	250.0	250.0	
38 2,2-Dichloropropane	79	4.057	4.056	0.001	94	42255	20.0	20.4	
40 cis-1,2-Dichloroethene	96	4.087	4.087	0.000	99	97770	20.0	20.4	
41 2-Butanone (MEK)	72	4.111	4.117	-0.006	96	21062	100.0	93.1	
42 Ethyl acetate	70	4.117	4.123	-0.006	95	8620	40.0	35.1	
43 Methyl acrylate	55	4.178	4.178	0.000	98	25516	20.0	17.3	
44 Propionitrile	54	4.245	4.251	-0.006	97	42263	200.0	203.5	
46 Chlorobromomethane	128	4.324	4.330	-0.006	88	35893	20.0	20.3	
45 Tetrahydrofuran	72	4.336	4.342	-0.006	39	10482	40.0	39.6	
47 Methacrylonitrile	67	4.349	4.361	-0.012	91	165337	200.0	190.8	
48 Chloroform	83	4.391	4.397	-0.006	99	149973	20.0	20.9	
49 Cyclohexane	84	4.525	4.525	0.000	90	138952	20.0	18.4	
50 1,1,1-Trichloroethane	97	4.543	4.543	0.000	98	134100	20.0	21.5	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.568	-0.007	95	199325	50.0	52.5	
52 Carbon tetrachloride	117	4.671	4.671	0.000	97	95325	20.0	24.7	
53 1,1-Dichloropropene	75	4.701	4.701	0.000	98	113136	20.0	19.0	
54 Isooctane	57	4.884	4.890	-0.006	94	176262	20.0	18.2	
58 Isobutyl alcohol	43	4.890	4.890	0.000	41	51889	500.0	503.9	a
55 Benzene	78	4.914	4.914	0.000	96	362249	20.0	19.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.945	-0.006	0	188471	50.0	51.8	
57 Tert-amyl methyl ether	73	5.000	5.006	-0.006	87	195853	20.0	18.1	
59 Isopropyl acetate	61	5.018	5.018	0.000	78	24265	20.0	18.1	a
60 1,2-Dichloroethane	62	5.018	5.024	-0.006	97	87677	20.0	20.6	
61 n-Heptane	57	5.103	5.103	0.000	86	43252	20.0	18.0	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	844675	50.0	50.0	
64 Trichloroethene	95	5.644	5.650	-0.006	98	87888	20.0	19.3	
63 n-Butanol	56	5.663	5.663	0.000	22	8196	500.0	266.6	a
65 Methylcyclohexane	83	5.778	5.778	0.000	92	142620	20.0	18.1	
66 Ethyl acrylate	55	5.784	5.778	0.006	97	135172	20.0	14.8	
67 1,2-Dichloropropane	63	5.961	5.967	-0.006	89	80010	20.0	19.0	
* 68 1,4-Dioxane-d8	96	6.052	6.058	-0.006	0	20361	1000.0	1000.0	
69 Methyl methacrylate	100	6.082	6.088	-0.006	83	23206	40.0	35.2	
70 1,4-Dioxane	88	6.107	6.113	-0.006	38	9041	400.0	408.4	
71 Dibromomethane	93	6.119	6.119	0.000	92	38254	20.0	19.6	
72 n-Propyl acetate	43	6.155	6.155	0.000	98	41479	20.0	16.8	
73 Dichlorobromomethane	83	6.301	6.301	0.000	99	88879	20.0	19.1	
75 2-Chloroethyl vinyl ether	63	6.709	6.709	0.000	95	24058	20.0	15.3	
76 Epichlorohydrin	57	6.819	6.825	-0.006	99	57667	400.0	311.4	
77 cis-1,3-Dichloropropene	75	6.879	6.879	0.000	91	105584	20.0	18.0	
74 2-Nitropropane	41	7.080	7.080	0.000	62	41255	40.0	221.8	a
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.086	-0.006	96	170274	100.0	99.4	
$ 79 Toluene-d8 (Surr)	98	7.153	7.153	0.000	99	887899	50.0	48.0	
80 Toluene	91	7.238	7.244	-0.006	93	383014	20.0	18.9	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	97	73321	20.0	17.2	
82 Ethyl methacrylate	69	7.725	7.731	-0.006	89	53667	20.0	13.6	
83 1,1,2-Trichloroethane	83	7.920	7.920	0.000	95	45387	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Tetrachloroethene	166	7.956	7.956	0.000	93	75853	20.0	19.2	
85 1,3-Dichloropropane	76	8.163	8.163	0.000	92	94454	20.0	19.1	
86 2-Hexanone	58	8.266	8.272	-0.006	94	54759	100.0	78.0	
87 n-Butyl acetate	43	8.418	8.418	0.000	97	49797	20.0	16.8	
88 Chlorodibromomethane	129	8.437	8.437	0.000	98	41817	20.0	18.3	
89 Ethylene Dibromide	107	8.601	8.601	0.000	98	46976	20.0	18.8	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	630642	50.0	50.0	
91 Chlorobenzene	112	9.215	9.215	0.000	95	239694	20.0	19.3	
92 Ethylbenzene	106	9.319	9.313	0.006	98	133226	20.0	19.1	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.337	-0.006	92	66778	20.0	20.8	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	159720	20.0	18.8	
96 o-Xylene	106	9.909	9.909	0.000	92	154122	20.0	18.5	
95 n-Butyl acrylate	73	9.921	9.927	-0.006	98	36678	20.0	14.1	
97 Styrene	104	9.939	9.939	0.000	95	259419	20.0	19.7	
99 Bromoform	173	10.152	10.152	0.000	93	16162	20.0	17.1	
98 Amyl acetate (mixed isomer	43	10.164	10.158	0.006	94	69385	20.0	15.1	
100 Isopropylbenzene	105	10.274	10.280	-0.006	96	427280	20.0	19.9	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	86	203321	50.0	48.5	
102 Bromobenzene	156	10.602	10.602	0.000	97	83131	20.0	19.6	
103 1,1,2,2-Tetrachloroethane	83	10.669	10.669	0.000	98	60793	20.0	20.2	
104 N-Propylbenzene	91	10.682	10.681	0.001	99	500106	20.0	20.3	
105 1,2,3-Trichloropropane	110	10.700	10.700	0.000	94	17554	20.0	21.0	
106 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	1	11140	20.0	19.0	a
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	350340	20.0	20.4	
108 4-Ethyltoluene	105	10.791	10.785	0.006	98	428179	20.0	20.8	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	359522	20.0	20.5	
110 4-Chlorotoluene	91	10.888	10.888	0.000	98	318680	20.0	20.3	
111 Butyl Methacrylate	87	10.961	10.961	0.000	89	88353	20.0	14.4	
112 tert-Butylbenzene	119	11.126	11.126	0.000	94	270325	20.0	19.4	
113 1,2,4-Trimethylbenzene	105	11.187	11.186	0.000	97	379307	20.0	20.5	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	441708	20.0	20.8	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	69	184490	20.0	21.4	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	97	377421	20.0	21.4	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	290158	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	95	181296	20.0	20.4	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	98	400327	20.0	21.2	
119 Benzyl chloride	91	11.655	11.655	0.000	98	61273	20.0	15.0	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	355666	20.0	20.8	
121 p-Diethylbenzene	119	11.758	11.758	0.000	93	209073	20.0	21.0	
122 n-Butylbenzene	92	11.783	11.783	0.000	98	197823	20.0	21.0	
123 1,2-Dichlorobenzene	146	11.837	11.831	0.006	94	162518	20.0	20.7	
124 1,2,4,5-Tetramethylbenzene	119	12.379	12.379	0.000	97	325217	20.0	18.5	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	88	5436	20.0	19.3	
126 1,3,5-Trichlorobenzene	180	12.567	12.573	-0.006	96	118534	20.0	19.8	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	94	89787	20.0	19.0	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	87	30725	20.0	20.2	
129 Naphthalene	128	13.231	13.231	0.000	99	158537	20.0	19.7	
130 1,2,3-Trichlorobenzene	180	13.425	13.425	0.000	95	76672	20.0	21.0	
S 131 1,2-Dichloroethene, Total	100				0		40.0	40.4	
S 132 Xylenes, Total	100				0		40.0	37.3	
S 133 Total BTEX	1				0		100.0	95.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 17:28:36 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71478.b\N665682.D

Injection Date: 03-May-2018 18:50:30 Instrument ID: CVOAMS11 Operator ID:

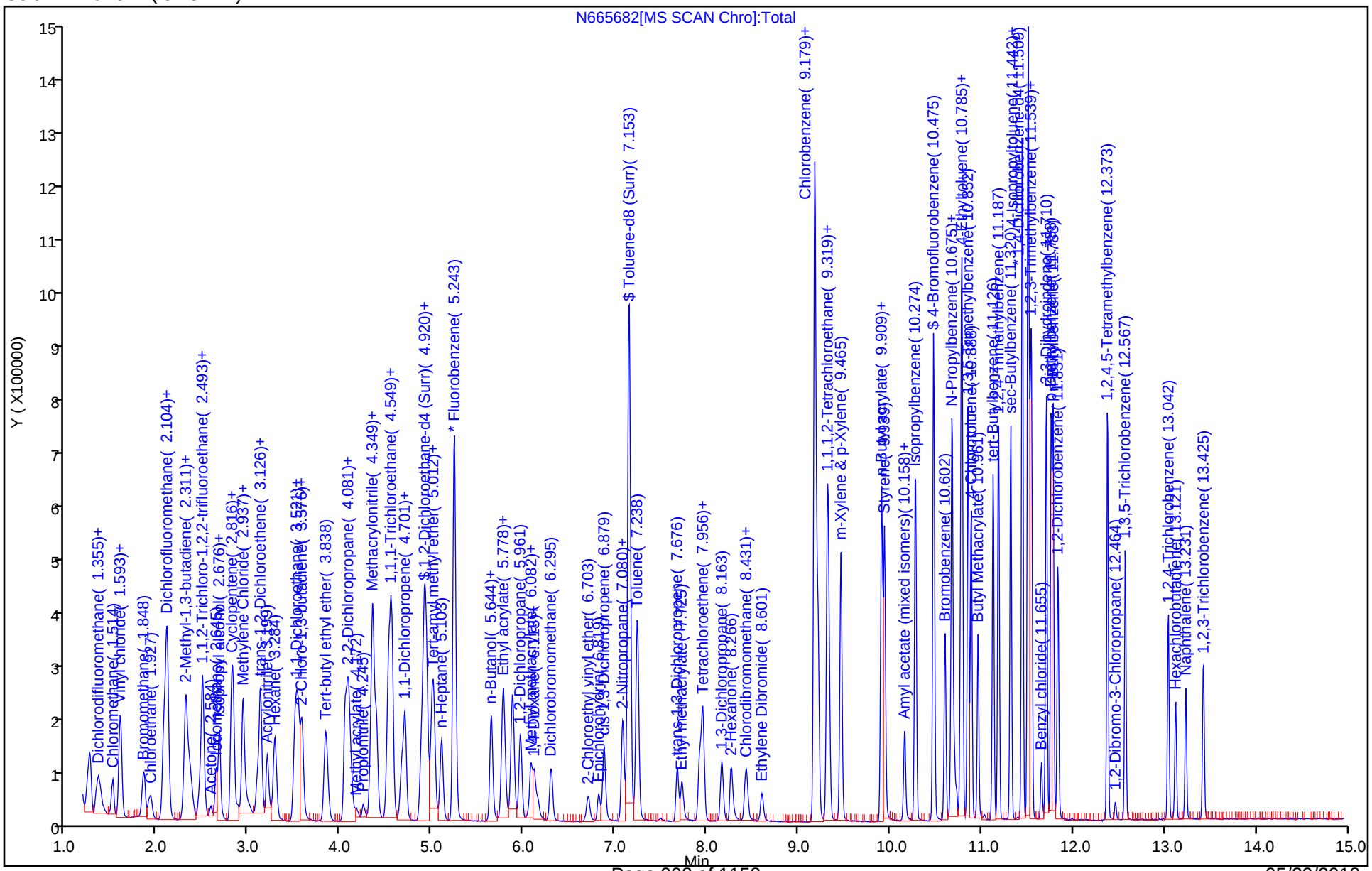
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-516419/13

Matrix: Water | Lab File ID: P44740.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	19.8		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	18.6		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18.6		1.0	0.34
79-00-5	1,1,2-Trichloroethane	20.3		1.0	0.080
75-34-3	1,1-Dichloroethane	22.2		1.0	0.24
75-35-4	1,1-Dichloroethene	20.0		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	20.2		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	20.5		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	17.1		1.0	0.23
95-50-1	1,2-Dichlorobenzene	20.6		1.0	0.22
107-06-2	1,2-Dichloroethane	19.9		1.0	0.25
78-87-5	1,2-Dichloropropane	21.5		1.0	0.18
541-73-1	1,3-Dichlorobenzene	20.1		1.0	0.33
106-46-7	1,4-Dichlorobenzene	19.3		1.0	0.33
123-91-1	1,4-Dioxane	425		50	8.7
78-93-3	2-Butanone (MEK)	100		5.0	2.2
591-78-6	2-Hexanone	107		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	110		5.0	0.63
67-64-1	Acetone	95.1		5.0	1.1
71-43-2	Benzene	20.7		1.0	0.090
75-25-2	Bromoform	18.1		1.0	0.18
74-83-9	Bromomethane	15.1		1.0	0.18
75-15-0	Carbon disulfide	18.9		1.0	0.22
56-23-5	Carbon tetrachloride	19.0		1.0	0.33
108-90-7	Chlorobenzene	20.8		1.0	0.24
74-97-5	Chlorobromomethane	22.1		1.0	0.30
124-48-1	Chlorodibromomethane	18.8		1.0	0.22
75-00-3	Chloroethane	19.2		1.0	0.37
67-66-3	Chloroform	21.5		1.0	0.22
74-87-3	Chloromethane	18.0		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	21.5		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	19.2		1.0	0.16
110-82-7	Cyclohexane	19.1		1.0	0.26
75-27-4	Dichlorobromomethane	20.6		1.0	0.15
75-71-8	Dichlorodifluoromethane	12.9		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-516419/13

Matrix: Water | Lab File ID: P44740.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	20.6		1.0	0.30
106-93-4	Ethylene Dibromide	20.3		1.0	0.19
98-82-8	Isopropylbenzene	20.4		1.0	0.32
79-20-9	Methyl acetate	41.4		5.0	0.58
1634-04-4	Methyl tert-butyl ether	20.7		1.0	0.13
108-87-2	Methylcyclohexane	19.2		1.0	0.22
75-09-2	Methylene Chloride	20.8		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	20.7		1.0	0.28
95-47-6	o-Xylene	20.8		1.0	0.32
100-42-5	Styrene	20.7		1.0	0.17
127-18-4	Tetrachloroethene	21.1		1.0	0.12
108-88-3	Toluene	20.2		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	19.9		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	19.1		1.0	0.19
79-01-6	Trichloroethene	20.7		1.0	0.22
75-69-4	Trichlorofluoromethane	17.4		1.0	0.15
75-01-4	Vinyl chloride	18.1		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		74-132
460-00-4	4-Bromofluorobenzene	98		77-124
1868-53-7	Dibromofluoromethane (Surr)	102		72-131
2037-26-5	Toluene-d8 (Surr)	96		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44740.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 04-May-2018 14:49:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0071500-013
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 14:51:15 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: desais Date: 04-May-2018 14:09:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.856	0.007	90	20291	20.0	14.4	
2 Dichlorodifluoromethane	85	0.871	0.870	0.001	99	54671	20.0	12.9	
4 Chloromethane	50	0.978	0.978	0.000	99	73463	20.0	18.0	
5 Vinyl chloride	62	1.007	1.007	0.000	98	82923	20.0	18.1	
3 Butadiene	54	1.014	1.014	0.000	99	70609	20.0	17.5	
6 Bromomethane	94	1.164	1.164	0.000	97	27748	20.0	15.1	
7 Chloroethane	64	1.229	1.229	0.000	100	50248	20.0	19.2	
9 Pentane	72	1.300	1.293	0.007	97	19360	40.0	37.1	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	97	77806	20.0	17.4	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	133841	20.0	22.4	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	96	89969	20.0	20.2	
12 Ethyl ether	59	1.458	1.458	0.000	99	65776	20.0	21.9	
13 Ethanol	46	1.537	1.537	0.000	99	17209	800.0	879.6	M
14 1,1-Dichloroethene	96	1.558	1.558	0.000	94	54440	20.0	20.0	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	84	82779	20.0	20.5	
16 Carbon disulfide	76	1.580	1.572	0.008	100	202995	20.0	18.9	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	94	52380	20.0	18.6	
18 Iodomethane	142	1.637	1.637	0.000	100	36856	20.0	10.9	
19 Cyclopentene	67	1.723	1.723	0.000	97	155092	20.0	20.0	
20 Acrolein	56	1.744	1.744	0.000	95	22482	40.0	66.9	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	40223	20.0	20.9	
22 Isopropyl alcohol	45	1.845	1.845	0.000	97	51741	200.0	198.2	
23 Methylene Chloride	84	1.881	1.880	0.001	98	73011	20.0	20.8	
24 Acetone	43	1.902	1.902	0.000	85	103692	100.0	95.1	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	97	64540	20.0	19.9	
26 Methyl acetate	43	1.981	1.981	0.000	100	118541	40.0	41.4	
27 Hexane	86	2.017	2.017	0.000	95	15616	20.0	18.1	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	95	212782	20.0	20.7	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	302346	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.102	0.001	99	73840	200.0	196.0	
31 Acetonitrile	41	2.174	2.174	0.000	99	107614	200.0	235.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	288567	20.0	21.7	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	94	59317	20.0	20.2	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	141053	20.0	22.2	
35 Acrylonitrile	53	2.375	2.375	0.000	94	318196	200.0	210.2	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	247043	20.0	20.8	
37 Vinyl acetate	43	2.511	2.511	0.000	100	396966	40.0	44.1	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	94	80332	20.0	21.5	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	95	110215	20.0	20.3	
40 Cyclohexane	56	2.833	2.833	0.000	94	125838	20.0	19.1	
41 Chlorobromomethane	128	2.833	2.833	0.000	95	36375	20.0	22.1	
42 Chloroform	83	2.898	2.898	0.000	98	131921	20.0	21.5	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	81044	20.0	19.0	
44 Ethyl acetate	70	2.998	2.998	0.000	99	17333	40.0	38.1	
45 Methyl acrylate	55	2.998	2.998	0.000	97	72218	20.0	20.3	
46 Tetrahydrofuran	42	3.005	3.005	0.000	94	67618	40.0	43.3	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.001	96	149494	50.0	51.2	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	96	104092	20.0	19.8	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	373150	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	100	45661	100.0	100.1	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	94	106781	20.0	20.4	
52 Isooctane	57	3.220	3.220	0.000	98	249770	20.0	19.3	
53 n-Heptane	57	3.313	3.313	0.000	93	69541	20.0	19.6	
54 Benzene	78	3.320	3.320	0.000	96	313858	20.0	20.7	
55 Propionitrile	54	3.342	3.342	0.000	95	116782	200.0	219.0	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	333837	200.0	216.2	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	199990	50.0	50.1	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	221985	20.0	20.2	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	108130	20.0	19.9	
60 Isobutyl alcohol	43	3.557	3.564	-0.007	95	74515	500.0	454.1	
61 t-Amyl alcohol	59	3.628	3.628	0.000	97	49294	200.0	162.9	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	99	551390	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	99	156053	20.0	19.7	
64 Methylcyclohexane	83	3.793	3.793	0.000	95	121190	20.0	19.2	
65 Trichloroethene	130	3.815	3.814	0.001	97	70639	20.0	20.7	
66 2-ethoxy-2-methyl butane	59	4.058	4.065	-0.007	91	202680	20.0	20.2	
67 Dibromomethane	93	4.187	4.187	0.000	95	48041	20.0	21.6	
68 n-Butanol	56	4.201	4.201	0.000	91	43550	500.0	443.3	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	83033	20.0	21.5	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	98848	20.0	20.1	
71 Dichlorobromomethane	83	4.359	4.359	0.000	99	97085	20.0	20.6	
* 72 1,4-Dioxane-d8	96	4.552	4.552	0.000	0	32369	1000.0	1000.0	
73 Methyl methacrylate	100	4.560	4.552	0.008	94	39123	40.0	41.5	
74 1,4-Dioxane	88	4.574	4.574	0.000	98	17417	400.0	424.8	
75 n-Propyl acetate	43	4.710	4.717	-0.007	99	115623	20.0	20.4	
76 2-Chloroethyl vinyl ether	63	4.975	4.975	0.000	96	53345	20.0	20.6	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	96	117300	20.0	19.2	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	626007	50.0	47.8	
79 Toluene	91	5.261	5.261	0.000	93	336063	20.0	20.2	
80 Epichlorohydrin	57	5.290	5.290	0.000	100	155846	400.0	425.7	
81 2-Nitropropane	41	5.519	5.519	0.000	99	34402	40.0	31.1	
82 Tetrachloroethene	166	5.691	5.691	0.000	95	73739	20.0	21.1	
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.734	0.000	99	412322	100.0	109.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	94	107326	20.0	19.1	
85 1,1,2-Trichloroethane	83	5.935	5.942	-0.007	94	57423	20.0	20.3	
86 Ethyl methacrylate	69	6.021	6.021	0.000	92	98375	20.0	20.5	
87 Chlorodibromomethane	129	6.135	6.135	0.000	97	64290	20.0	18.8	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	97	120320	20.0	20.6	
89 Ethylene Dibromide	107	6.386	6.386	0.000	99	65581	20.0	20.3	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	120641	20.0	18.0	
91 2-Hexanone	43	6.794	6.794	0.000	98	281886	100.0	106.6	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	478320	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	92	207672	20.0	20.8	
94 Ethylbenzene	106	7.181	7.188	-0.007	99	113410	20.0	20.6	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	63887	20.0	19.5	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	138313	20.0	20.7	
97 o-Xylene	106	7.991	7.991	0.001	93	135488	20.0	20.8	
98 Bromoform	173	8.055	8.055	0.000	95	39027	20.0	18.1	
99 Styrene	104	8.077	8.076	0.001	94	226755	20.0	20.7	
100 n-Butyl acrylate	73	8.399	8.399	0.000	95	52054	20.0	18.3	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	358123	20.0	20.4	
102 Amyl acetate (mixed isomer	43	8.822	8.814	0.008	89	144590	20.0	17.2	
$ 103 4-Bromofluorobenzene	174	8.857	8.850	0.007	87	183592	50.0	49.1	
104 Bromobenzene	156	8.965	8.965	0.000	97	88351	20.0	20.1	
105 N-Propylbenzene	91	9.115	9.108	0.007	99	435077	20.0	19.2	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	98	88626	20.0	18.6	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	301511	20.0	19.5	
108 4-Ethyltoluene	105	9.301	9.301	0.000	98	364034	20.0	19.7	
109 1,2,3-Trichloropropane	110	9.395	9.394	0.001	98	25880	20.0	19.1	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	93	304638	20.0	19.4	
111 trans-1,4-Dichloro-2-buten	53	9.516	9.516	0.000	83	26137	20.0	15.6	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	278831	20.0	19.6	
113 tert-Butylbenzene	119	9.925	9.925	0.000	94	250598	20.0	19.3	
115 1,2,4-Trimethylbenzene	105	10.054	10.053	0.001	95	309648	20.0	19.8	
114 Butyl Methacrylate	87	10.061	10.053	0.008	84	98812	20.0	17.9	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	385953	20.0	19.1	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	94	167055	20.0	20.1	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	97	326920	20.0	19.5	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	269836	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.641	0.000	94	174056	20.0	19.3	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	325751	20.0	19.8	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	319417	20.0	20.1	
122 Benzyl chloride	126	11.092	11.092	0.000	97	26534	20.0	15.2	
123 p-Diethylbenzene	119	11.107	11.106	0.001	92	174894	20.0	19.6	
124 n-Butylbenzene	91	11.185	11.185	0.000	99	303385	20.0	18.9	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	163340	20.0	20.6	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.202	0.000	97	288909	20.0	20.0	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	94	14701	20.0	17.1	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	124717	20.0	20.9	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	108251	20.0	20.5	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	53391	20.0	20.6	
131 Naphthalene	128	13.356	13.356	0.000	99	210879	20.0	17.7	
132 1,2,3-Trichlorobenzene	180	13.528	13.520	0.008	95	96540	20.0	20.2	
S 133 1,2-Dichloroethene, Total	100				0		40.0	41.4	
S 134 1,3-Dichloropropene, Total	100				0		40.0	38.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 135 Xylenes, Total	100				0		40.0	41.5	
S 137 Total BTEX	1				0		100.0	103.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 14:51:21 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71500.b\P44740.D

Injection Date: 04-May-2018 14:49:30 Instrument ID: CVOAMS13 Operator ID:

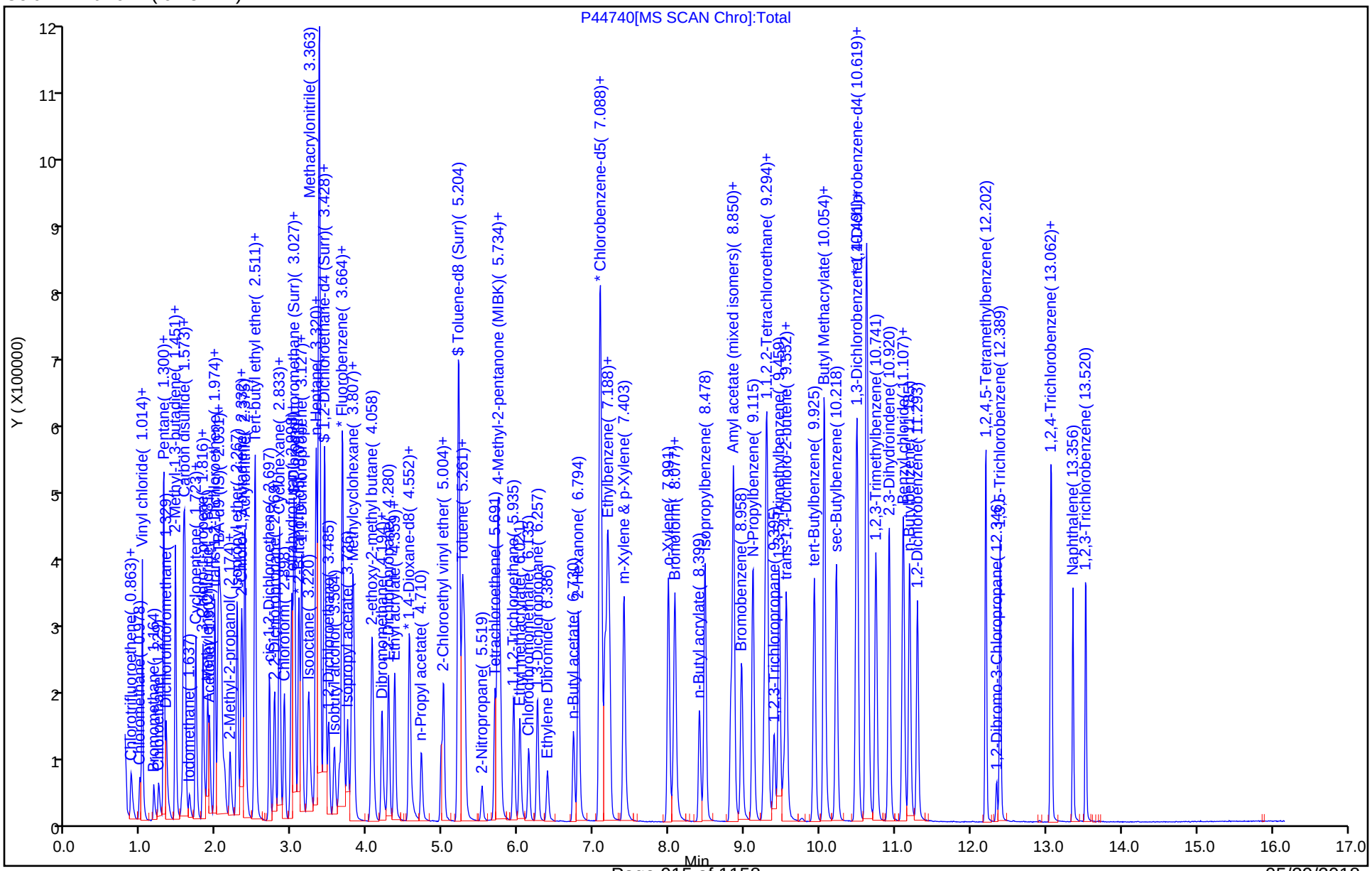
Lims ID: LCSD Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 12

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MS | Lab Sample ID: 460-154781-1 MS

Matrix: Water | Lab File ID: N66537.D

Analysis Method: 8260C | Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 04:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	23.4		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	19.3		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	21.9		1.0	0.34
79-00-5	1,1,2-Trichloroethane	19.7		1.0	0.080
75-34-3	1,1-Dichloroethane	21.9		1.0	0.24
75-35-4	1,1-Dichloroethene	20.3		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	18.1		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	17.7		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	18.4		1.0	0.23
95-50-1	1,2-Dichlorobenzene	20.9		1.0	0.22
107-06-2	1,2-Dichloroethane	22.5		1.0	0.25
78-87-5	1,2-Dichloropropane	20.3		1.0	0.18
541-73-1	1,3-Dichlorobenzene	21.4		1.0	0.33
106-46-7	1,4-Dichlorobenzene	20.9		1.0	0.33
123-91-1	1,4-Dioxane	340		50	8.7
78-93-3	2-Butanone (MEK)	90.2		5.0	2.2
591-78-6	2-Hexanone	77.1		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	95.2		5.0	0.63
67-64-1	Acetone	101		5.0	1.1
71-43-2	Benzene	20.3		1.0	0.090
75-25-2	Bromoform	16.2		1.0	0.18
74-83-9	Bromomethane	35.0		1.0	0.18
75-15-0	Carbon disulfide	15.2		1.0	0.22
56-23-5	Carbon tetrachloride	26.7		1.0	0.33
108-90-7	Chlorobenzene	20.6		1.0	0.24
74-97-5	Chlorobromomethane	21.2		1.0	0.30
124-48-1	Chlorodibromomethane	17.8		1.0	0.22
75-00-3	Chloroethane	30.7		1.0	0.37
67-66-3	Chloroform	22.9		1.0	0.22
74-87-3	Chloromethane	26.0		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	21.1		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	15.5		1.0	0.16
110-82-7	Cyclohexane	19.1		1.0	0.26
75-27-4	Dichlorobromomethane	20.4		1.0	0.15
75-71-8	Dichlorodifluoromethane	23.8		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MS | Lab Sample ID: 460-154781-1 MS

Matrix: Water | Lab File ID: N66537.D

Analysis Method: 8260C | Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 04:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.4		1.0	0.30
106-93-4	Ethylene Dibromide	19.3		1.0	0.19
98-82-8	Isopropylbenzene	20.2		1.0	0.32
79-20-9	Methyl acetate	42.4		5.0	0.58
1634-04-4	Methyl tert-butyl ether	18.4		1.0	0.13
108-87-2	Methylcyclohexane	18.2		1.0	0.22
75-09-2	Methylene Chloride	21.9		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	17.8		1.0	0.28
95-47-6	o-Xylene	18.5		1.0	0.32
100-42-5	Styrene	19.3		1.0	0.17
127-18-4	Tetrachloroethene	29.6		1.0	0.12
108-88-3	Toluene	19.5		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	21.7		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	15.6		1.0	0.19
79-01-6	Trichloroethene	20.0		1.0	0.22
75-69-4	Trichlorofluoromethane	26.5		1.0	0.15
75-01-4	Vinyl chloride	27.6		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		74-132
460-00-4	4-Bromofluorobenzene	96		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	95		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66537.D
Lims ID: 460-154781-B-1 MS
Client ID: GC-MW-107(WG)
Sample Type: MS
Inject. Date: 03-May-2018 04:04:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-1 MS
Misc. Info.: 460-0071421-026
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:42:00 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: tupayachia Date: 03-May-2018 06:05:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.325	1.325	0.000	88	51165	20.0	16.0	
2 Dichlorodifluoromethane	87	1.349	1.349	0.000	99	43311	20.0	23.8	
3 Chloromethane	52	1.501	1.508	-0.007	98	30127	20.0	26.0	
4 Vinyl chloride	62	1.580	1.587	-0.007	97	104636	20.0	27.6	
5 Butadiene	54	1.587	1.593	-0.006	69	73309	20.0	26.7	
6 Bromomethane	94	1.842	1.842	0.000	99	94108	20.0	35.0	
7 Chloroethane	64	1.909	1.915	-0.006	99	59503	20.0	30.7	
8 Dichlorofluoromethane	67	2.067	2.073	-0.006	97	167577	20.0	23.9	
9 Trichlorofluoromethane	101	2.067	2.073	-0.006	84	143732	20.0	26.5	
10 Pentane	72	2.104	2.104	0.000	96	23334	40.0	41.5	
11 Ethanol	46	2.274	2.274	0.000	75	5165	800.0	765.8	
12 Ethyl ether	59	2.286	2.292	-0.006	93	38694	20.0	18.6	
13 2-Methyl-1,3-butadiene	53	2.304	2.305	-0.001	95	47651	20.0	14.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.341	0.000	92	72016	20.0	22.6	
16 Acrolein	56	2.463	2.463	0.000	37	7586	40.0	38.8	
15 1,1,2-Trichloro-1,2,2-trif	101	2.475	2.481	-0.006	92	85893	20.0	21.9	
17 1,1-Dichloroethene	96	2.487	2.487	0.000	98	65796	20.0	20.3	
18 Acetone	43	2.578	2.578	0.000	87	34859	100.0	100.5	
19 Iodomethane	142	2.633	2.639	-0.006	100	98834	20.0	19.0	
20 Carbon disulfide	76	2.669	2.670	-0.001	99	181138	20.0	15.2	
21 Isopropyl alcohol	45	2.669	2.682	-0.013	25	11682	200.0	198.5	
22 3-Chloro-1-propene	76	2.797	2.803	-0.006	91	32287	20.0	15.7	
24 Methyl acetate	74	2.809	2.822	-0.013	40	10352	40.0	42.4	
23 Cyclopentene	67	2.822	2.822	0.000	94	143799	20.0	17.8	
25 Acetonitrile	40	2.870	2.870	0.000	95	21690	200.0	219.5	a
26 Methylene Chloride	84	2.931	2.931	0.000	90	76838	20.0	21.9	
* 27 TBA-d9 (IS)	65	2.931	2.931	0.000	0	115651	1000.0	1000.0	
28 2-Methyl-2-propanol	59	2.998	3.004	-0.006	96	23456	200.0	194.6	
29 Methyl tert-butyl ether	73	3.095	3.102	-0.007	97	141874	20.0	18.4	
30 trans-1,2-Dichloroethene	96	3.120	3.120	0.000	93	79898	20.0	21.7	
31 Acrylonitrile	53	3.193	3.193	0.000	94	113372	200.0	226.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.278	3.278	0.000	92	77637	20.0	17.4	
33 Isopropyl ether	45	3.497	3.503	-0.006	95	193917	20.0	19.7	
34 1,1-Dichloroethane	63	3.527	3.527	0.000	99	135429	20.0	21.9	
35 Vinyl acetate	86	3.552	3.552	0.000	99	13531	40.0	26.5	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	91	65530	20.0	19.3	
37 Tert-butyl ethyl ether	59	3.831	3.832	-0.001	90	163119	20.0	17.8	
* 39 2-Butanone-d5	46	4.044	4.044	0.000	0	139999	250.0	250.0	
38 2,2-Dichloropropane	79	4.044	4.057	-0.013	84	30970	20.0	17.6	
40 cis-1,2-Dichloroethene	96	4.081	4.087	-0.006	98	85638	20.0	21.1	
41 2-Butanone (MEK)	72	4.105	4.105	0.000	97	18084	100.0	90.2	
42 Ethyl acetate	70	4.117	4.124	-0.007	95	7146	40.0	32.9	
43 Methyl acrylate	55	4.172	4.172	0.000	99	21327	20.0	17.0	
44 Propionitrile	54	4.239	4.245	-0.006	97	36083	200.0	208.6	
46 Chlorobromomethane	128	4.324	4.330	-0.006	88	31763	20.0	21.2	
45 Tetrahydrofuran	72	4.336	4.336	0.000	42	9098	40.0	38.8	
47 Methacrylonitrile	67	4.349	4.355	-0.007	92	145397	200.0	198.1	
48 Chloroform	83	4.385	4.391	-0.006	99	139255	20.0	22.9	
49 Cyclohexane	84	4.519	4.519	0.000	89	122194	20.0	19.1	
50 1,1,1-Trichloroethane	97	4.531	4.537	-0.006	98	123350	20.0	23.4	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.556	0.005	95	174468	50.0	54.2	
52 Carbon tetrachloride	117	4.665	4.665	0.000	97	87329	20.0	26.7	
53 1,1-Dichloropropene	75	4.701	4.702	-0.001	97	101150	20.0	20.1	
54 Isooctane	57	4.884	4.884	0.000	95	141137	20.0	17.2	
58 Isobutyl alcohol	43	4.884	4.884	0.000	45	41997	500.0	489.7	a
55 Benzene	78	4.914	4.914	0.000	96	334559	20.0	20.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.933	4.939	-0.006	0	169286	50.0	54.9	
57 Tert-amyl methyl ether	73	4.999	5.000	-0.001	90	163339	20.0	17.8	
59 Isopropyl acetate	61	5.012	5.012	0.000	81	21225	20.0	18.7	
60 1,2-Dichloroethane	62	5.018	5.024	-0.006	98	81359	20.0	22.5	
61 n-Heptane	57	5.103	5.103	0.000	87	35536	20.0	17.5	
* 62 Fluorobenzene	96	5.237	5.243	-0.006	99	715679	50.0	50.0	
64 Trichloroethene	95	5.644	5.644	0.000	99	77466	20.0	20.0	
63 n-Butanol	56	5.656	5.663	-0.007	22	7117	500.0	277.9	
65 Methylcyclohexane	83	5.772	5.772	0.000	93	121159	20.0	18.2	
66 Ethyl acrylate	55	5.772	5.778	-0.006	95	121161	20.0	15.6	
67 1,2-Dichloropropane	63	5.967	5.961	0.006	88	72343	20.0	20.3	
* 68 1,4-Dioxane-d8	96	6.046	6.052	-0.006	0	17302	1000.0	1000.0	
69 Methyl methacrylate	100	6.076	6.076	0.000	85	18933	40.0	33.9	
71 Dibromomethane	93	6.113	6.113	0.000	92	35782	20.0	21.6	
70 1,4-Dioxane	88	6.113	6.119	-0.006	33	6396	400.0	340.0	
72 n-Propyl acetate	43	6.155	6.155	0.000	98	33826	20.0	16.2	
73 Dichlorobromomethane	83	6.301	6.295	0.006	99	80403	20.0	20.4	
74 2-Nitropropane	41	6.685	6.685	0.000	99	8291	40.0	54.2	
76 Epichlorohydrin	57	6.825	6.819	0.006	99	21843	400.0	133.2	
77 cis-1,3-Dichloropropene	75	6.879	6.873	0.006	91	82024	20.0	15.5	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	97	144414	100.0	95.2	
$ 79 Toluene-d8 (Surr)	98	7.147	7.147	0.000	99	790272	50.0	47.4	
80 Toluene	91	7.238	7.238	0.000	93	356306	20.0	19.5	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	97	59957	20.0	15.6	
82 Ethyl methacrylate	69	7.731	7.725	0.006	88	44511	20.0	13.3	
83 1,1,2-Trichloroethane	83	7.920	7.926	-0.006	94	42956	20.0	19.7	
84 Tetrachloroethene	166	7.956	7.956	0.000	93	105677	20.0	29.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,3-Dichloropropane	76	8.163	8.163	0.000	93	84680	20.0	19.0	
86 2-Hexanone	58	8.266	8.266	0.000	95	47980	100.0	77.1	
87 n-Butyl acetate	43	8.418	8.419	-0.001	97	41974	20.0	15.7	
88 Chlorodibromomethane	129	8.437	8.431	0.006	98	36828	20.0	17.8	
89 Ethylene Dibromide	107	8.601	8.601	0.000	99	43459	20.0	19.3	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	87	568570	50.0	50.0	
91 Chlorobenzene	112	9.215	9.216	-0.001	95	230676	20.0	20.6	
92 Ethylbenzene	106	9.319	9.319	0.000	98	122027	20.0	19.4	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	90	61078	20.0	21.1	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	136326	20.0	17.8	
96 o-Xylene	106	9.909	9.909	0.000	93	138791	20.0	18.5	
95 n-Butyl acrylate	73	9.921	9.921	0.000	98	33771	20.0	14.4	
97 Styrene	104	9.939	9.939	0.000	95	229669	20.0	19.3	
99 Bromoform	173	10.152	10.152	0.000	93	14357	20.0	16.2	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	96	55458	20.0	12.9	
100 Isopropylbenzene	105	10.280	10.280	0.000	96	391878	20.0	20.2	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	82	182063	50.0	48.2	
102 Bromobenzene	156	10.602	10.603	-0.001	96	78885	20.0	19.9	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	97	54257	20.0	19.3	
104 N-Propylbenzene	91	10.675	10.676	-0.001	99	442506	20.0	19.3	
105 1,2,3-Trichloropropane	110	10.700	10.706	-0.006	93	16719	20.0	21.4	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	64	8374	20.0	15.3	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	324016	20.0	20.2	
108 4-Ethyltoluene	105	10.785	10.785	0.000	98	379459	20.0	19.7	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	327285	20.0	19.9	
110 4-Chlorotoluene	91	10.888	10.889	0.000	97	299494	20.0	20.5	
111 Butyl Methacrylate	87	10.961	10.962	-0.001	90	79763	20.0	14.0	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	245422	20.0	18.8	
113 1,2,4-Trimethylbenzene	105	11.186	11.187	-0.001	97	336178	20.0	19.4	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	403414	20.0	20.3	
116 1,3-Dichlorobenzene	146	11.448	11.442	0.006	71	172244	20.0	21.4	
115 4-Isopropyltoluene	119	11.442	11.448	-0.006	97	342195	20.0	20.7	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	271191	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	173423	20.0	20.9	
134 1,2,3-Trimethylbenzene	105	11.545	11.546	-0.001	98	375943	20.0	21.3	
119 Benzyl chloride	91	11.655	11.655	0.000	98	42878	20.0	11.2	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	317986	20.0	19.9	
121 p-Diethylbenzene	119	11.758	11.758	0.000	91	186109	20.0	20.0	
122 n-Butylbenzene	92	11.783	11.783	0.000	96	182233	20.0	20.7	
123 1,2-Dichlorobenzene	146	11.831	11.831	0.000	94	153454	20.0	20.9	
124 1,2,4,5-Tetramethylbenzene	119	12.379	12.373	0.006	96	290679	20.0	17.7	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	93	4841	20.0	18.4	
126 1,3,5-Trichlorobenzene	180	12.574	12.568	0.006	97	107449	20.0	19.2	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	94	77948	20.0	17.7	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	87	27643	20.0	19.5	
129 Naphthalene	128	13.231	13.231	0.000	99	127201	20.0	16.9	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	96	61776	20.0	18.1	
S 131 1,2-Dichloroethene, Total	100				0		40.0	42.8	
S 132 Xylenes, Total	100				0		40.0	36.3	
S 133 Total BTEX	1				0		100.0	95.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

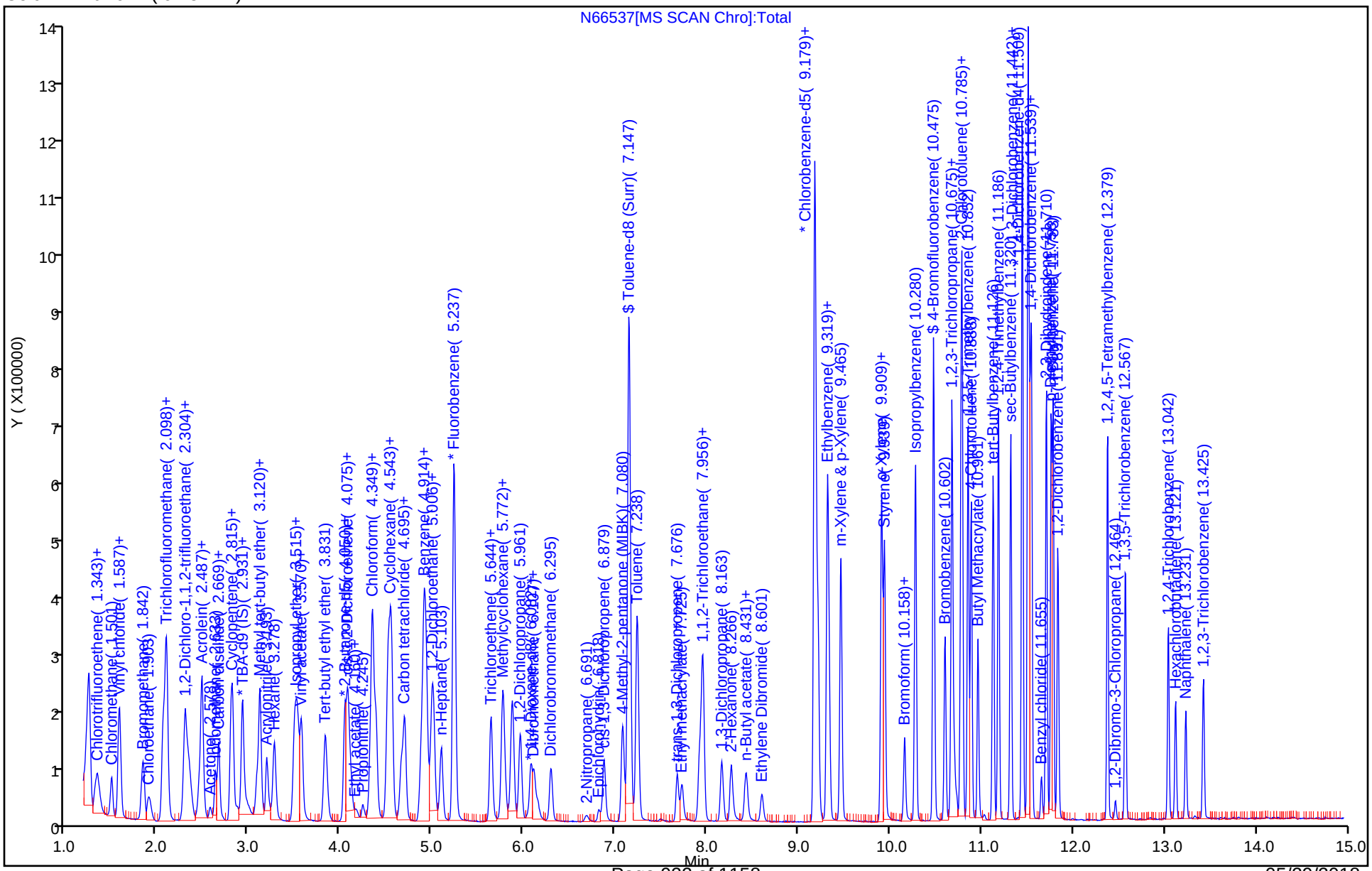
Report Date: 03-May-2018 17:42:03 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66537.D

Injection Date:	03-May-2018 04:04:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-1 MS			Worklist Smp#:	26
Client ID:	GC-MW-107(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) MS | Lab Sample ID: 460-154925-1 MS

Matrix: Water | Lab File ID: P44714.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 03:24

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	193		10	2.8
79-34-5	1,1,2,2-Tetrachloroethane	176		10	1.9
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	202		10	3.4
79-00-5	1,1,2-Trichloroethane	186		10	0.80
75-34-3	1,1-Dichloroethane	209		10	2.4
75-35-4	1,1-Dichloroethene	195		10	3.4
87-61-6	1,2,3-Trichlorobenzene	187		10	3.5
120-82-1	1,2,4-Trichlorobenzene	187		10	2.7
96-12-8	1,2-Dibromo-3-Chloropropane	156		10	2.3
95-50-1	1,2-Dichlorobenzene	188		10	2.2
107-06-2	1,2-Dichloroethane	185		10	2.5
78-87-5	1,2-Dichloropropane	201		10	1.8
541-73-1	1,3-Dichlorobenzene	187		10	3.3
106-46-7	1,4-Dichlorobenzene	178		10	3.3
123-91-1	1,4-Dioxane	3730		500	87
78-93-3	2-Butanone (MEK)	979		50	22
591-78-6	2-Hexanone	1010		50	7.2
108-10-1	4-Methyl-2-pentanone (MIBK)	1030		50	6.3
67-64-1	Acetone	900		50	11
71-43-2	Benzene	194		10	0.90
75-25-2	Bromoform	166		10	1.8
74-83-9	Bromomethane	126		10	1.8
75-15-0	Carbon disulfide	181		10	2.2
56-23-5	Carbon tetrachloride	186		10	3.3
108-90-7	Chlorobenzene	192		10	2.4
74-97-5	Chlorobromomethane	204		10	3.0
124-48-1	Chlorodibromomethane	175		10	2.2
75-00-3	Chloroethane	186		10	3.7
67-66-3	Chloroform	201		10	2.2
74-87-3	Chloromethane	173		10	2.2
156-59-2	cis-1,2-Dichloroethene	204		10	2.6
10061-01-5	cis-1,3-Dichloropropene	174		10	1.6
110-82-7	Cyclohexane	202		10	2.6
75-27-4	Dichlorobromomethane	189		10	1.5
75-71-8	Dichlorodifluoromethane	194		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) MS | Lab Sample ID: 460-154925-1 MS

Matrix: Water | Lab File ID: P44714.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 03:24

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	194		10	3.0
106-93-4	Ethylene Dibromide	191		10	1.9
98-82-8	Isopropylbenzene	194		10	3.2
79-20-9	Methyl acetate	395		50	5.8
1634-04-4	Methyl tert-butyl ether	199		10	1.3
108-87-2	Methylcyclohexane	207		10	2.2
75-09-2	Methylene Chloride	194		10	2.1
179601-23-1	m-Xylene & p-Xylene	192		10	2.8
95-47-6	o-Xylene	189		10	3.2
100-42-5	Styrene	192		10	1.7
127-18-4	Tetrachloroethene	203		10	1.2
108-88-3	Toluene	188		10	2.5
156-60-5	trans-1,2-Dichloroethene	189		10	1.8
10061-02-6	trans-1,3-Dichloropropene	175		10	1.9
79-01-6	Trichloroethene	202		10	2.2
75-69-4	Trichlorofluoromethane	212		10	1.5
75-01-4	Vinyl chloride	188		10	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		74-132
460-00-4	4-Bromofluorobenzene	106		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44714.D
Lims ID: 460-154925-A-1 MS
Client ID:
Sample Type: MS
Inject. Date: 04-May-2018 03:24:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 460-154925-A-1 MS
Misc. Info.: 460-0071476-015
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 14:53:11 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: desais Date: 04-May-2018 07:24:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.856	0.856	0.000	91	17243	20.0	12.2	
2 Dichlorodifluoromethane	85	0.870	0.871	-0.001	99	82329	20.0	19.4	
4 Chloromethane	50	0.985	0.978	0.007	99	70620	20.0	17.3	
5 Vinyl chloride	62	1.007	1.007	0.000	98	86201	20.0	18.8	
3 Butadiene	54	1.014	1.014	0.000	98	86259	20.0	21.3	
6 Bromomethane	94	1.164	1.164	0.000	97	23824	20.0	12.6	
7 Chloroethane	64	1.229	1.229	0.000	99	48640	20.0	18.6	
9 Pentane	72	1.293	1.293	0.000	97	21634	40.0	40.2	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	98	94743	20.0	21.2	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	98	128590	20.0	21.5	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	96	90384	20.0	20.3	
12 Ethyl ether	59	1.458	1.458	0.000	92	61162	20.0	20.4	
13 Ethanol	46	1.537	1.537	0.000	100	10972	800.0	543.5	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	95	53049	20.0	19.5	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	85	83537	20.0	20.7	
16 Carbon disulfide	76	1.580	1.573	0.007	100	194454	20.0	18.1	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	93	56700	20.0	20.2	
18 Iodomethane	142	1.637	1.637	0.000	99	27075	20.0	7.97	
19 Cyclopentene	67	1.723	1.723	0.000	97	159399	20.0	20.6	
20 Acrolein	56	1.737	1.737	0.000	95	19750	40.0	56.9	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	36163	20.0	18.7	
22 Isopropyl alcohol	45	1.845	1.838	0.007	97	50855	200.0	188.8	
23 Methylene Chloride	84	1.880	1.881	-0.001	98	68196	20.0	19.4	
24 Acetone	43	1.902	1.902	0.000	85	101390	100.0	90.0	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	99	61186	20.0	18.9	
26 Methyl acetate	43	1.981	1.981	0.000	99	113259	40.0	39.5	
27 Hexane	86	2.017	2.017	0.000	95	16835	20.0	19.5	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	94	204222	20.0	19.9	
* 29 TBA-d9 (IS)	65	2.060	2.060	0.000	0	311944	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.103	-0.001	99	73048	200.0	187.9	
31 Acetonitrile	41	2.174	2.174	0.000	99	102606	200.0	217.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	270532	20.0	20.3	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	94	56769	20.0	19.3	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	132491	20.0	20.9	
35 Acrylonitrile	53	2.375	2.375	0.000	94	301889	200.0	199.4	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	89	230034	20.0	19.3	
37 Vinyl acetate	43	2.511	2.511	0.000	100	371935	40.0	41.3	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	94	76259	20.0	20.4	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	99219	20.0	18.3	
40 Cyclohexane	56	2.826	2.833	-0.007	96	133368	20.0	20.2	
41 Chlorobromomethane	128	2.833	2.833	0.000	94	33668	20.0	20.4	
42 Chloroform	83	2.898	2.898	0.000	98	123066	20.0	20.1	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	79737	20.0	18.6	
44 Ethyl acetate	70	2.998	2.998	0.000	98	16519	40.0	35.1	
45 Methyl acrylate	55	2.998	2.998	0.000	95	70247	20.0	19.8	
46 Tetrahydrofuran	42	3.005	3.005	0.000	93	65274	40.0	40.4	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.027	0.000	96	159459	50.0	54.6	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	97	101807	20.0	19.3	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	385796	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	99	46180	100.0	97.9	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	94	102279	20.0	19.5	
52 Isooctane	57	3.220	3.220	0.000	98	268624	20.0	20.7	
53 n-Heptane	57	3.313	3.313	0.000	94	72838	20.0	20.6	
54 Benzene	78	3.320	3.320	0.000	96	294269	20.0	19.4	
55 Propionitrile	54	3.342	3.342	0.000	94	112328	200.0	204.1	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	318218	200.0	206.1	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	212113	50.0	53.1	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	212735	20.0	19.4	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	100729	20.0	18.5	
60 Isobutyl alcohol	43	3.557	3.557	0.000	96	74533	500.0	440.3	
61 t-Amyl alcohol	59	3.628	3.628	0.000	96	50291	200.0	161.0	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	551541	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	149368	20.0	18.9	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	130428	20.0	20.7	
65 Trichloroethene	130	3.814	3.815	-0.001	97	69099	20.0	20.2	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	91	188710	20.0	18.8	
67 Dibromomethane	93	4.187	4.187	0.000	97	44919	20.0	20.2	
68 n-Butanol	56	4.201	4.201	0.000	95	41088	500.0	405.3	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	77634	20.0	20.1	
70 Ethyl acrylate	55	4.359	4.359	0.000	97	95843	20.0	19.4	
71 Dichlorobromomethane	83	4.359	4.359	0.000	99	88878	20.0	18.9	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	34482	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.552	0.000	94	37389	40.0	39.6	
74 1,4-Dioxane	88	4.581	4.574	0.007	99	16294	400.0	373.1	
75 n-Propyl acetate	43	4.717	4.710	0.007	99	112208	20.0	19.8	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	97	106364	20.0	17.4	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	98	672634	50.0	51.2	
79 Toluene	91	5.261	5.262	-0.001	93	313360	20.0	18.8	
80 Epichlorohydrin	57	5.290	5.290	0.000	99	145941	400.0	385.6	
81 2-Nitropropane	41	5.519	5.519	0.000	99	31200	40.0	28.2	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	70822	20.0	20.3	
83 4-Methyl-2-pentanone (MIBK	43	5.734	5.734	0.000	98	399595	100.0	102.8	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	98	98475	20.0	17.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,2-Trichloroethane	83	5.935	5.942	-0.007	94	52781	20.0	18.6	
86 Ethyl methacrylate	69	6.021	6.021	0.000	92	94502	20.0	19.7	
87 Chlorodibromomethane	129	6.135	6.135	0.000	97	59905	20.0	17.5	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	97	113703	20.0	19.5	
89 Ethylene Dibromide	107	6.386	6.386	0.000	98	61973	20.0	19.1	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	119182	20.0	17.7	
91 2-Hexanone	43	6.794	6.794	0.000	99	274815	100.0	100.6	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	90	479265	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	94	191843	20.0	19.2	
94 Ethylbenzene	106	7.188	7.181	0.007	99	107413	20.0	19.4	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	59015	20.0	18.0	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	128573	20.0	19.2	
97 o-Xylene	106	7.991	7.991	0.000	93	123383	20.0	18.9	
98 Bromoform	173	8.055	8.055	0.000	95	35854	20.0	16.6	
99 Styrene	104	8.076	8.077	-0.001	93	210681	20.0	19.2	
100 n-Butyl acrylate	73	8.399	8.406	-0.007	96	49505	20.0	17.3	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	341242	20.0	19.4	
102 Amyl acetate (mixed isomer	43	8.814	8.822	-0.008	88	144177	20.0	17.0	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	198605	50.0	53.0	
104 Bromobenzene	156	8.958	8.958	0.000	95	82134	20.0	18.6	
105 N-Propylbenzene	91	9.108	9.108	0.000	98	409892	20.0	18.0	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.259	-0.001	98	84093	20.0	17.6	
107 2-Chlorotoluene	91	9.287	9.287	0.000	97	280993	20.0	18.1	
108 4-Ethyltoluene	105	9.301	9.302	-0.001	98	340141	20.0	18.4	
109 1,2,3-Trichloropropane	110	9.394	9.395	-0.001	97	24600	20.0	18.1	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	93	285608	20.0	18.1	
111 trans-1,4-Dichloro-2-buten	53	9.523	9.524	-0.001	81	23770	20.0	14.1	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	257891	20.0	18.0	
113 tert-Butylbenzene	119	9.925	9.925	0.000	94	237313	20.0	18.2	
115 1,2,4-Trimethylbenzene	105	10.053	10.054	-0.001	96	288313	20.0	18.3	
114 Butyl Methacrylate	87	10.061	10.054	0.007	90	93591	20.0	16.9	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	372106	20.0	18.4	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	96	156648	20.0	18.7	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	312233	20.0	18.6	
* 119 1,4-Dichlorobenzene-d4	152	10.619	10.620	-0.001	96	271010	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.634	0.000	93	160878	20.0	17.8	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	303941	20.0	18.4	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	293892	20.0	18.4	
122 Benzyl chloride	126	11.092	11.092	0.000	97	21736	20.0	12.4	
123 p-Diethylbenzene	119	11.106	11.107	-0.001	93	163869	20.0	18.3	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	290919	20.0	18.1	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	149829	20.0	18.8	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.203	-0.001	97	272293	20.0	18.8	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	92	13509	20.0	15.6	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	97	118285	20.0	19.7	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	98947	20.0	18.7	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	50551	20.0	19.4	
131 Naphthalene	128	13.356	13.356	0.000	99	203573	20.0	17.0	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	95	89717	20.0	18.7	
S 133 1,2-Dichloroethene, Total	100				0		40.0	39.2	
S 134 1,3-Dichloropropene, Total	100				0		40.0	34.8	
S 135 Xylenes, Total	100				0		40.0	38.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Total BTEX	1				0		100.0	95.8	

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 04-May-2018 14:53:15 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44714.D

Injection Date: 04-May-2018 03:24:30 Instrument ID: CVOAMS13 Operator ID:

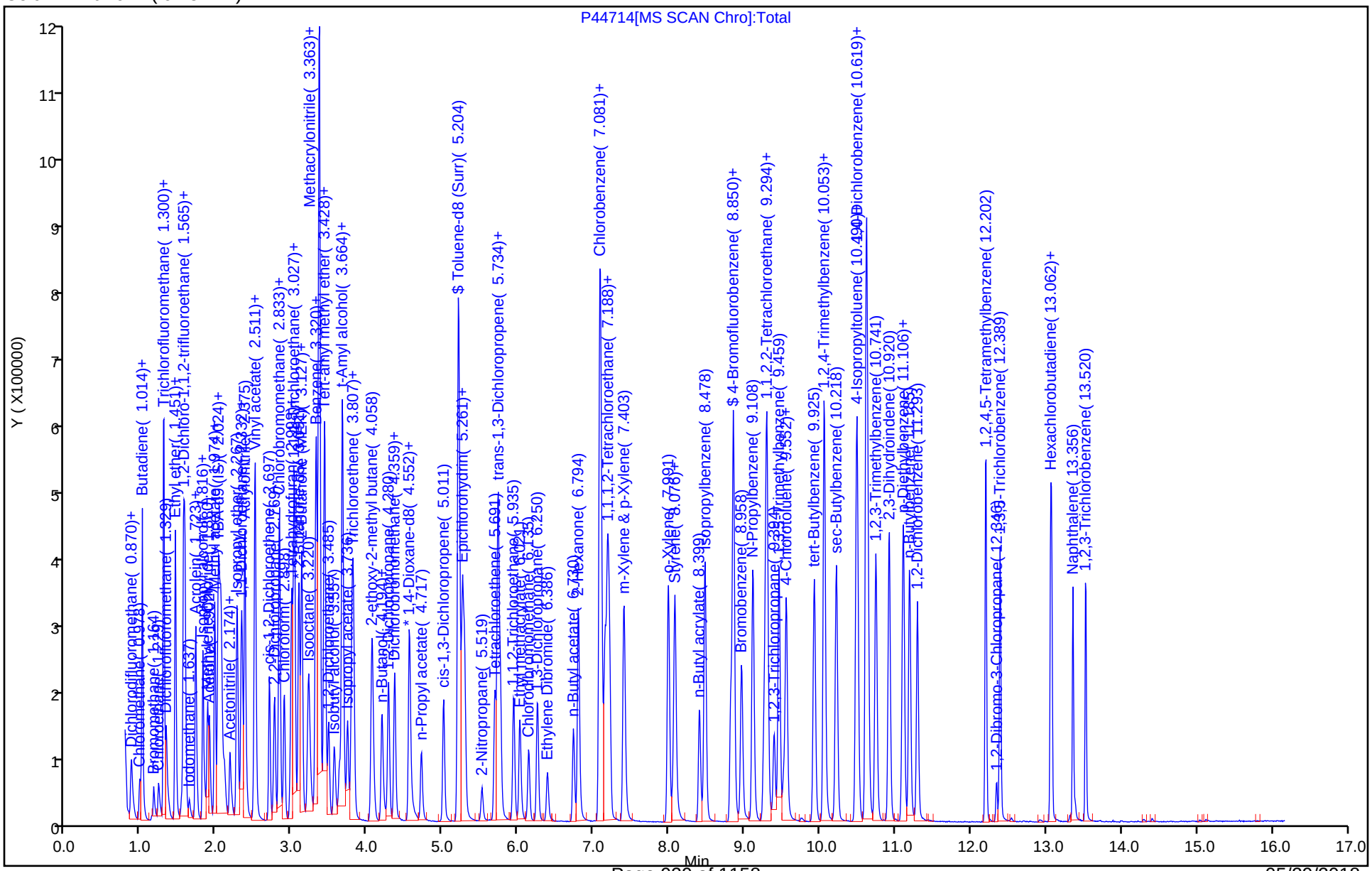
Lims ID: 460-154925-A-1 MS Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 10.0000 ALS Bottle#: 14

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-154828-A-2 MS

Matrix: Water | Lab File ID: N66553.D

Analysis Method: 8260C | Date Collected: 04/25/2018 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 10:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	22.6		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	21.1		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	22.5		1.0	0.34
79-00-5	1,1,2-Trichloroethane	20.3		1.0	0.080
75-34-3	1,1-Dichloroethane	21.2		1.0	0.24
75-35-4	1,1-Dichloroethene	19.4		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	18.1		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	18.2		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	19.6		1.0	0.23
95-50-1	1,2-Dichlorobenzene	21.4		1.0	0.22
107-06-2	1,2-Dichloroethane	22.0		1.0	0.25
78-87-5	1,2-Dichloropropane	19.8		1.0	0.18
541-73-1	1,3-Dichlorobenzene	21.5		1.0	0.33
106-46-7	1,4-Dichlorobenzene	21.3		1.0	0.33
123-91-1	1,4-Dioxane	373		50	8.7
78-93-3	2-Butanone (MEK)	91.0		5.0	2.2
591-78-6	2-Hexanone	79.3		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	102		5.0	0.63
67-64-1	Acetone	103		5.0	1.1
71-43-2	Benzene	20.1		1.0	0.090
75-25-2	Bromoform	15.9		1.0	0.18
74-83-9	Bromomethane	31.1		1.0	0.18
75-15-0	Carbon disulfide	15.7		1.0	0.22
56-23-5	Carbon tetrachloride	25.8		1.0	0.33
108-90-7	Chlorobenzene	21.3		1.0	0.24
74-97-5	Chlorobromomethane	20.9		1.0	0.30
124-48-1	Chlorodibromomethane	18.0		1.0	0.22
75-00-3	Chloroethane	28.5		1.0	0.37
67-66-3	Chloroform	21.9		1.0	0.22
74-87-3	Chloromethane	23.1		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	21.0		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	15.9		1.0	0.16
110-82-7	Cyclohexane	18.9		1.0	0.26
75-27-4	Dichlorobromomethane	19.5		1.0	0.15
75-71-8	Dichlorodifluoromethane	23.0		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-154828-A-2 MS

Matrix: Water | Lab File ID: N66553.D

Analysis Method: 8260C | Date Collected: 04/25/2018 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 10:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.0		1.0	0.30
106-93-4	Ethylene Dibromide	19.7		1.0	0.19
98-82-8	Isopropylbenzene	20.4		1.0	0.32
79-20-9	Methyl acetate	46.1		5.0	0.58
1634-04-4	Methyl tert-butyl ether	17.8		1.0	0.13
108-87-2	Methylcyclohexane	18.6		1.0	0.22
75-09-2	Methylene Chloride	21.6		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	18.8		1.0	0.28
95-47-6	o-Xylene	18.3		1.0	0.32
100-42-5	Styrene	18.1		1.0	0.17
127-18-4	Tetrachloroethene	19.9		1.0	0.12
108-88-3	Toluene	19.4		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	20.3		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	16.6		1.0	0.19
79-01-6	Trichloroethene	19.7		1.0	0.22
75-69-4	Trichlorofluoromethane	24.7		1.0	0.15
75-01-4	Vinyl chloride	24.2		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		74-132
460-00-4	4-Bromofluorobenzene	94		77-124
1868-53-7	Dibromofluoromethane (Surr)	104		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66553.D
Lims ID: 460-154828-A-2 MS
Client ID: MW-10
Sample Type: MS
Inject. Date: 03-May-2018 10:08:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154828-A-2 MS
Misc. Info.: 460-0071436-015
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 15:52:00 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: xuyvo Date: 04-May-2018 15:52:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.325	1.319	0.006	91	58222	20.0	17.7	
2 Dichlorodifluoromethane	87	1.362	1.349	0.013	99	43171	20.0	23.0	
3 Chloromethane	52	1.508	1.501	0.007	98	26446	20.0	23.1	
4 Vinyl chloride	62	1.593	1.581	0.012	98	94702	20.0	24.2	
5 Butadiene	54	1.593	1.587	0.006	72	68852	20.0	24.3	
6 Bromomethane	94	1.848	1.842	0.006	98	86069	20.0	31.1	
7 Chloroethane	64	1.909	1.903	0.006	99	56832	20.0	28.5	
8 Dichlorofluoromethane	67	2.079	2.067	0.012	96	156828	20.0	21.7	M
9 Trichlorofluoromethane	101	2.079	2.079	0.000	97	138015	20.0	24.7	
10 Pentane	72	2.104	2.098	0.006	95	26247	40.0	46.9	
11 Ethanol	46	2.286	2.274	0.012	70	3975	800.0	591.1	
12 Ethyl ether	59	2.298	2.286	0.012	90	37261	20.0	17.4	
13 2-Methyl-1,3-butadiene	53	2.311	2.304	0.007	95	50857	20.0	15.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.347	2.335	0.012	92	72294	20.0	22.1	
16 Acrolein	56	2.469	2.457	0.012	29	7477	40.0	38.4	
15 1,1,2-Trichloro-1,2,2-trif	101	2.487	2.475	0.012	64	90888	20.0	22.5	
17 1,1-Dichloroethene	96	2.493	2.487	0.006	98	64692	20.0	19.4	
18 Acetone	43	2.584	2.572	0.012	86	35172	100.0	102.8	
19 Iodomethane	142	2.639	2.633	0.006	99	102129	20.0	19.1	
20 Carbon disulfide	76	2.676	2.669	0.007	99	191963	20.0	15.7	
21 Isopropyl alcohol	45	2.694	2.676	0.018	98	12559	200.0	214.2	
22 3-Chloro-1-propene	76	2.803	2.797	0.006	90	33374	20.0	15.8	
24 Methyl acetate	74	2.822	2.815	0.007	39	11216	40.0	46.1	
23 Cyclopentene	67	2.828	2.815	0.013	90	157260	20.0	18.9	
25 Acetonitrile	40	2.889	2.870	0.019	90	22062	200.0	224.2	a
26 Methylene Chloride	84	2.937	2.931	0.006	89	77834	20.0	21.6	
* 27 TBA-d9 (IS)	65	2.943	2.931	0.012	0	115220	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.010	3.004	0.006	98	24353	200.0	202.8	
29 Methyl tert-butyl ether	73	3.101	3.095	0.006	97	140985	20.0	17.8	
30 trans-1,2-Dichloroethene	96	3.126	3.120	0.006	93	76976	20.0	20.3	
31 Acrylonitrile	53	3.199	3.199	0.000	95	113138	200.0	226.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.284	3.278	0.006	91	84419	20.0	18.4	
33 Isopropyl ether	45	3.509	3.503	0.006	93	194256	20.0	19.2	
34 1,1-Dichloroethane	63	3.533	3.527	0.006	99	135310	20.0	21.2	
35 Vinyl acetate	86	3.558	3.552	0.006	99	14509	40.0	28.8	
36 2-Chloro-1,3-butadiene	88	3.582	3.576	0.006	92	62575	20.0	17.9	
37 Tert-butyl ethyl ether	59	3.838	3.838	0.000	90	165747	20.0	17.6	
* 39 2-Butanone-d5	46	4.051	4.050	0.001	0	138222	250.0	250.0	
38 2,2-Dichloropropane	79	4.057	4.057	0.000	93	36969	20.0	20.4	
40 cis-1,2-Dichloroethene	96	4.087	4.081	0.006	99	87524	20.0	21.0	
41 2-Butanone (MEK)	72	4.111	4.111	0.000	97	18014	100.0	91.0	
42 Ethyl acetate	70	4.117	4.117	0.000	94	8202	40.0	38.2	
43 Methyl acrylate	55	4.178	4.172	0.006	98	21817	20.0	16.9	
44 Propionitrile	54	4.251	4.245	0.006	97	36693	200.0	213.0	
46 Chlorobromomethane	128	4.324	4.324	0.000	86	32307	20.0	20.9	
45 Tetrahydrofuran	72	4.343	4.330	0.013	49	8859	40.0	38.3	
47 Methacrylonitrile	67	4.355	4.349	0.006	91	148258	200.0	196.2	
48 Chloroform	83	4.391	4.385	0.006	98	137095	20.0	21.9	
49 Cyclohexane	84	4.525	4.519	0.006	88	124531	20.0	18.9	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	98	122808	20.0	22.6	
$ 51 Dibromofluoromethane (Surr	113	4.562	4.555	0.007	95	172689	50.0	52.2	
52 Carbon tetrachloride	117	4.671	4.665	0.006	98	86924	20.0	25.8	
53 1,1-Dichloropropene	75	4.701	4.701	0.000	98	98434	20.0	19.0	
58 Isobutyl alcohol	43	4.884	4.878	0.006	43	46204	500.0	540.8	a
54 Isooctane	57	4.884	4.884	0.000	95	156223	20.0	18.5	
55 Benzene	78	4.914	4.914	0.000	96	330636	20.0	20.1	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.933	0.006	0	167074	50.0	52.6	
57 Tert-amyl methyl ether	73	5.006	4.999	0.007	89	165248	20.0	17.5	
59 Isopropyl acetate	61	5.012	5.006	0.006	78	21859	20.0	18.7	
60 1,2-Dichloroethane	62	5.024	5.018	0.006	98	81920	20.0	22.0	
61 n-Heptane	57	5.103	5.097	0.006	87	38435	20.0	18.4	
* 62 Fluorobenzene	96	5.243	5.237	0.006	99	736528	50.0	50.0	
64 Trichloroethene	95	5.644	5.638	0.006	98	78376	20.0	19.7	
63 n-Butanol	56	5.657	5.650	0.007	22	7961	500.0	311.8	
65 Methylcyclohexane	83	5.778	5.772	0.006	91	127537	20.0	18.6	
66 Ethyl acrylate	55	5.778	5.772	0.006	69	124460	20.0	15.6	
67 1,2-Dichloropropane	63	5.967	5.961	0.006	92	72870	20.0	19.8	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	17320	1000.0	1000.0	
69 Methyl methacrylate	100	6.082	6.076	0.006	85	19853	40.0	34.6	
70 1,4-Dioxane	88	6.125	6.107	0.018	32	7025	400.0	373.1	
71 Dibromomethane	93	6.119	6.113	0.006	90	36995	20.0	21.7	
72 n-Propyl acetate	43	6.155	6.155	0.000	97	39006	20.0	18.2	
73 Dichlorobromomethane	83	6.301	6.301	0.000	99	79221	20.0	19.5	
74 2-Nitropropane	41	6.685	6.685	0.000	99	8405	40.0	55.2	
76 Epichlorohydrin	57	6.819	6.818	0.001	99	43097	400.0	266.1	
77 cis-1,3-Dichloropropene	75	6.879	6.879	0.000	92	83749	20.0	15.9	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	96	152531	100.0	101.8	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	100	783313	50.0	47.0	
80 Toluene	91	7.244	7.238	0.006	93	352806	20.0	19.4	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	96	63810	20.0	16.6	
82 Ethyl methacrylate	69	7.731	7.725	0.006	87	45258	20.0	13.1	
83 1,1,2-Trichloroethane	83	7.926	7.920	0.006	95	44253	20.0	20.3	
84 Tetrachloroethene	166	7.956	7.956	0.000	92	70972	20.0	19.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,3-Dichloropropane	76	8.163	8.163	0.000	92	86037	20.0	19.3	
86 2-Hexanone	58	8.273	8.266	0.007	96	48735	100.0	79.3	
87 n-Butyl acetate	43	8.425	8.418	0.007	98	46023	20.0	17.3	
88 Chlorodibromomethane	129	8.437	8.437	0.000	97	37095	20.0	18.0	
89 Ethylene Dibromide	107	8.601	8.601	0.000	99	44413	20.0	19.7	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	89	568091	50.0	50.0	
91 Chlorobenzene	112	9.215	9.209	0.006	95	237744	20.0	21.3	
92 Ethylbenzene	106	9.319	9.319	0.000	99	119639	20.0	19.0	
93 1,1,1,2-Tetrachloroethane	131	9.337	9.331	0.006	90	62269	20.0	21.6	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	143875	20.0	18.8	
96 o-Xylene	106	9.909	9.909	0.000	94	137043	20.0	18.3	
95 n-Butyl acrylate	73	9.921	9.921	0.000	98	31846	20.0	13.6	
97 Styrene	104	9.939	9.939	0.000	96	215129	20.0	18.1	
99 Bromoform	173	10.152	10.152	0.000	93	13997	20.0	15.9	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	96	58273	20.0	13.7	
100 Isopropylbenzene	105	10.280	10.280	0.000	95	393982	20.0	20.4	
$ 101 4-Bromofluorobenzene	174	10.475	10.475	0.000	81	177664	50.0	47.1	
102 Bromobenzene	156	10.603	10.602	0.001	96	79208	20.0	20.1	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	98	58808	20.0	21.1	
104 N-Propylbenzene	91	10.676	10.675	0.001	99	459426	20.0	20.1	
105 1,2,3-Trichloropropane	110	10.706	10.706	0.000	96	16784	20.0	21.6	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	66	9442	20.0	17.3	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	336210	20.0	21.0	
108 4-Ethyltoluene	105	10.785	10.791	-0.006	98	384486	20.0	20.1	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	330954	20.0	20.3	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	295449	20.0	20.3	
111 Butyl Methacrylate	87	10.961	10.961	0.000	90	76858	20.0	13.5	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	247108	20.0	19.1	
113 1,2,4-Trimethylbenzene	105	11.187	11.186	0.001	97	340298	20.0	19.8	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	402031	20.0	20.3	
116 1,3-Dichlorobenzene	146	11.442	11.448	-0.006	70	171900	20.0	21.5	
115 4-Isopropyltoluene	119	11.442	11.448	-0.006	97	339983	20.0	20.7	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	269576	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	175638	20.0	21.3	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	99	372449	20.0	21.3	
119 Benzyl chloride	91	11.655	11.655	0.000	98	57377	20.0	15.1	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	320820	20.0	20.2	
121 p-Diethylbenzene	119	11.758	11.758	0.000	92	191958	20.0	20.8	
122 n-Butylbenzene	92	11.783	11.783	0.000	97	189745	20.0	21.7	
123 1,2-Dichlorobenzene	146	11.831	11.837	-0.006	94	155637	20.0	21.4	
124 1,2,4,5-Tetramethylbenzene	119	12.379	12.379	0.000	97	294874	20.0	18.1	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	91	5133	20.0	19.6	
126 1,3,5-Trichlorobenzene	180	12.574	12.574	0.000	96	108264	20.0	19.4	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	93	79795	20.0	18.2	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	88	30408	20.0	21.6	
129 Naphthalene	128	13.231	13.231	0.000	99	127216	20.0	17.0	
130 1,2,3-Trichlorobenzene	180	13.425	13.425	0.000	96	61326	20.0	18.1	
S 131 1,2-Dichloroethene, Total	100				0		40.0	41.3	
S 132 Xylenes, Total	100				0		40.0	37.0	
S 133 Total BTEX	1				0		100.0	95.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

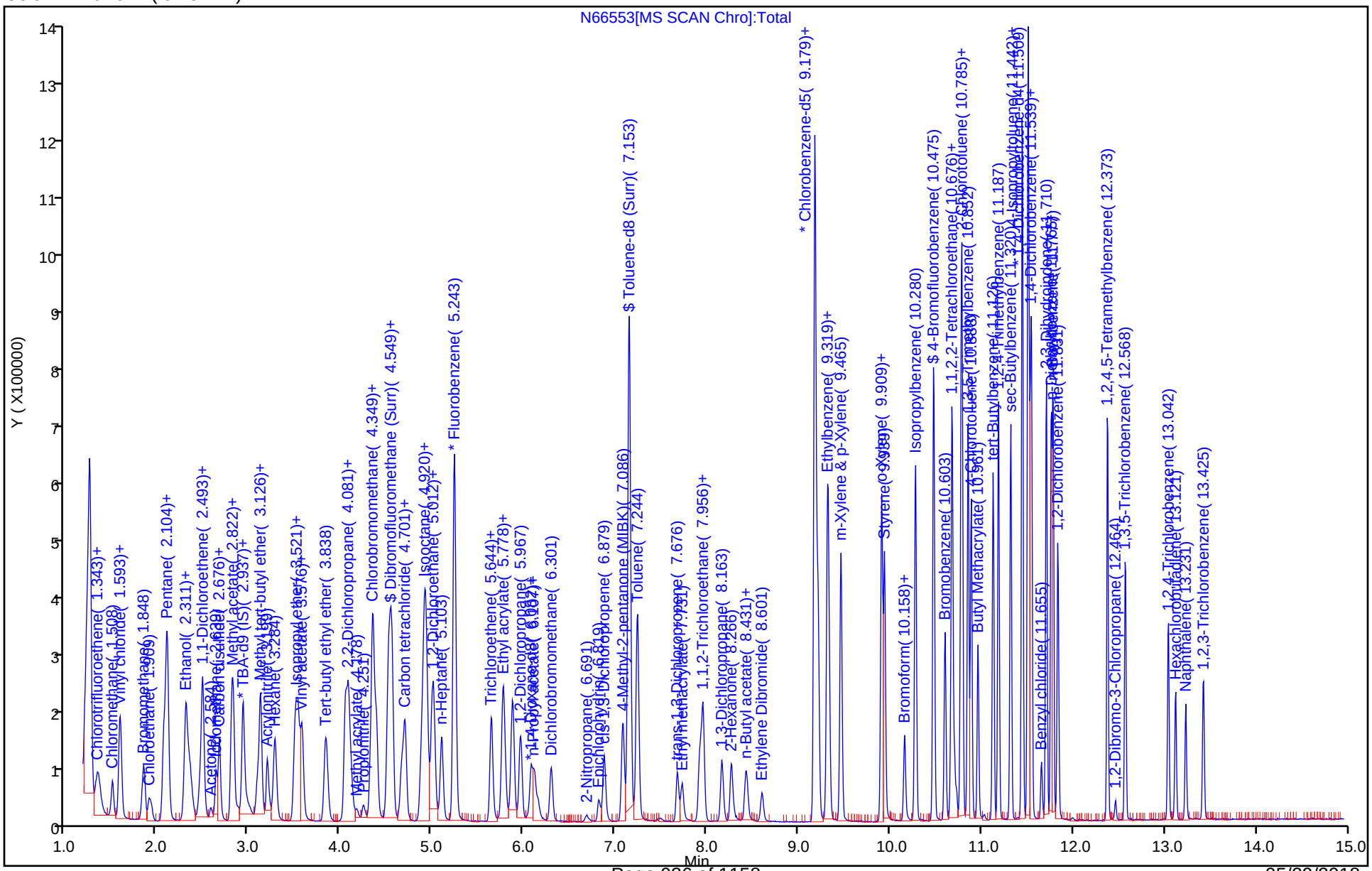
Report Date: 04-May-2018 15:52:02 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66553.D

Injection Date:	03-May-2018 10:08:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154828-A-2 MS			Worklist Smp#:	15
Client ID:	MW-10				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-155023-B-1 MS

Matrix: Water | Lab File ID: P44771.D

Analysis Method: 8260C | Date Collected: 04/30/2018 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 04:04

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	211		10	2.8
79-34-5	1,1,2,2-Tetrachloroethane	192		10	1.9
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	219		10	3.4
79-00-5	1,1,2-Trichloroethane	208		10	0.80
75-34-3	1,1-Dichloroethane	229		10	2.4
75-35-4	1,1-Dichloroethene	216		10	3.4
87-61-6	1,2,3-Trichlorobenzene	209		10	3.5
120-82-1	1,2,4-Trichlorobenzene	206		10	2.7
96-12-8	1,2-Dibromo-3-Chloropropane	173		10	2.3
95-50-1	1,2-Dichlorobenzene	218		10	2.2
107-06-2	1,2-Dichloroethane	212		10	2.5
78-87-5	1,2-Dichloropropane	223		10	1.8
541-73-1	1,3-Dichlorobenzene	207		10	3.3
106-46-7	1,4-Dichlorobenzene	195		10	3.3
123-91-1	1,4-Dioxane	3990		500	87
78-93-3	2-Butanone (MEK)	998		50	22
591-78-6	2-Hexanone	1100		50	7.2
108-10-1	4-Methyl-2-pentanone (MIBK)	1100		50	6.3
67-64-1	Acetone	960		50	11
71-43-2	Benzene	213		10	0.90
75-25-2	Bromoform	180		10	1.8
74-83-9	Bromomethane	146		10	1.8
75-15-0	Carbon disulfide	198		10	2.2
56-23-5	Carbon tetrachloride	211		10	3.3
108-90-7	Chlorobenzene	210		10	2.4
74-97-5	Chlorobromomethane	235		10	3.0
124-48-1	Chlorodibromomethane	192		10	2.2
75-00-3	Chloroethane	208		10	3.7
67-66-3	Chloroform	226		10	2.2
74-87-3	Chloromethane	206		10	2.2
156-59-2	cis-1,2-Dichloroethene	219		10	2.6
10061-01-5	cis-1,3-Dichloropropene	189		10	1.6
110-82-7	Cyclohexane	226		10	2.6
75-27-4	Dichlorobromomethane	215		10	1.5
75-71-8	Dichlorodifluoromethane	237		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-155023-B-1 MS

Matrix: Water | Lab File ID: P44771.D

Analysis Method: 8260C | Date Collected: 04/30/2018 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 04:04

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	213		10	3.0
106-93-4	Ethylene Dibromide	208		10	1.9
98-82-8	Isopropylbenzene	209		10	3.2
79-20-9	Methyl acetate	472		50	5.8
1634-04-4	Methyl tert-butyl ether	220		10	1.3
108-87-2	Methylcyclohexane	229		10	2.2
75-09-2	Methylene Chloride	220		10	2.1
179601-23-1	m-Xylene & p-Xylene	211		10	2.8
95-47-6	o-Xylene	206		10	3.2
100-42-5	Styrene	213		10	1.7
127-18-4	Tetrachloroethene	222		10	1.2
108-88-3	Toluene	207		10	2.5
156-60-5	trans-1,2-Dichloroethene	211		10	1.8
10061-02-6	trans-1,3-Dichloropropene	192		10	1.9
79-01-6	Trichloroethene	223		10	2.2
75-69-4	Trichlorofluoromethane	242		10	1.5
75-01-4	Vinyl chloride	219		10	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		74-132
460-00-4	4-Bromofluorobenzene	113		77-124
1868-53-7	Dibromofluoromethane (Surr)	121		72-131
2037-26-5	Toluene-d8 (Surr)	108		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44771.D
Lims ID: 460-155023-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 05-May-2018 04:04:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 460-155023-B-1 MS
Misc. Info.: 460-0071534-015
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 07-May-2018 12:34:18 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chujia Date: 05-May-2018 21:06:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.856	0.856	0.000	90	24919	20.0	19.7	
2 Dichlorodifluoromethane	85	0.871	0.870	0.001	99	90348	20.0	23.7	
4 Chloromethane	50	0.985	0.978	0.007	98	75491	20.0	20.6	
5 Vinyl chloride	62	1.007	1.006	0.001	98	89839	20.0	21.9	
3 Butadiene	54	1.014	1.014	0.000	99	86050	20.0	23.7	
6 Bromomethane	94	1.164	1.164	0.000	99	26383	20.0	14.6	
7 Chloroethane	64	1.229	1.229	0.000	99	48665	20.0	20.8	
9 Pentane	72	1.293	1.293	0.000	98	21557	40.0	40.5	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	97	97381	20.0	24.2	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	129382	20.0	24.1	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	97	91361	20.0	22.9	
12 Ethyl ether	59	1.458	1.458	0.000	92	61494	20.0	22.8	
13 Ethanol	46	1.537	1.537	0.000	99	17724	800.0	886.7	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	94	52672	20.0	21.6	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	84	84110	20.0	23.3	
16 Carbon disulfide	76	1.573	1.572	0.001	100	191351	20.0	19.8	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	95	55341	20.0	21.9	
18 Iodomethane	142	1.637	1.637	0.000	99	30716	20.0	10.1	
19 Cyclopentene	67	1.723	1.723	0.000	97	157415	20.0	22.6	
20 Acrolein	56	1.745	1.737	0.008	97	21516	40.0	62.6	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	91	37014	20.0	21.4	
22 Isopropyl alcohol	45	1.845	1.845	0.000	97	52778	200.0	197.9	
23 Methylene Chloride	84	1.881	1.880	0.001	98	69226	20.0	22.0	
24 Acetone	43	1.909	1.902	0.007	85	103287	100.0	96.0	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	61496	20.0	21.1	
26 Methyl acetate	43	1.981	1.981	0.000	99	121365	40.0	47.2	
27 Hexane	86	2.017	2.016	0.001	95	16513	20.0	21.3	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	95	202749	20.0	22.0	
* 29 TBA-d9 (IS)	65	2.060	2.059	0.001	0	308890	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.102	0.001	99	76619	200.0	199.1	
31 Acetonitrile	41	2.174	2.174	0.000	99	105247	200.0	225.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	273343	20.0	22.9	
33 2-Chloro-1,3-butadiene	88	2.325	2.324	0.001	94	57661	20.0	21.8	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	130230	20.0	22.9	
35 Acrylonitrile	53	2.375	2.375	0.000	94	309123	200.0	227.5	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	242600	20.0	22.7	
37 Vinyl acetate	43	2.511	2.511	0.000	100	384381	40.0	47.5	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	73666	20.0	21.9	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	97	100685	20.0	20.7	
40 Cyclohexane	56	2.826	2.833	-0.007	95	133834	20.0	22.6	
41 Chlorobromomethane	128	2.833	2.833	0.000	95	34796	20.0	23.5	
42 Chloroform	83	2.898	2.898	0.000	98	124432	20.0	22.6	
43 Carbon tetrachloride	117	2.984	2.983	0.001	97	80998	20.0	21.1	
44 Ethyl acetate	70	2.998	2.998	0.000	98	17005	40.0	37.9	
45 Methyl acrylate	55	2.998	2.998	0.000	96	69218	20.0	21.7	
46 Tetrahydrofuran	42	3.005	3.005	0.000	93	67932	40.0	44.1	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.026	0.001	96	158720	50.0	60.6	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	98	99877	20.0	21.1	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	368195	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	100	44943	100.0	99.8	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	93	102979	20.0	21.9	
52 Isooctane	57	3.220	3.220	0.000	98	270081	20.0	23.2	
53 n-Heptane	57	3.306	3.313	-0.007	94	71557	20.0	22.5	
54 Benzene	78	3.320	3.320	0.000	96	300420	20.0	21.3	
55 Propionitrile	54	3.342	3.342	0.000	97	117813	200.0	216.2	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	327227	200.0	236.2	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	205221	50.0	57.3	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	97	215889	20.0	21.9	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	103439	20.0	21.2	
60 Isobutyl alcohol	43	3.557	3.557	0.000	98	73897	500.0	440.8	
61 t-Amyl alcohol	59	3.628	3.628	0.000	96	49950	200.0	161.5	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	98	494852	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	152117	20.0	21.4	
64 Methylcyclohexane	83	3.793	3.793	0.000	95	129723	20.0	22.9	
65 Trichloroethene	130	3.815	3.814	0.001	97	68227	20.0	22.3	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	91	192244	20.0	21.4	
67 Dibromomethane	93	4.187	4.187	0.000	96	44095	20.0	22.1	
68 n-Butanol	56	4.194	4.194	0.000	91	43588	500.0	434.3	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	88	77571	20.0	22.3	
70 Ethyl acrylate	55	4.359	4.359	0.000	97	97812	20.0	22.1	
71 Dichlorobromomethane	83	4.359	4.359	0.000	99	90684	20.0	21.5	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	33864	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.559	-0.007	94	37857	40.0	44.7	
74 1,4-Dioxane	88	4.581	4.581	0.000	97	17100	400.0	398.7	
75 n-Propyl acetate	43	4.710	4.717	-0.007	99	108415	20.0	21.3	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	96	107447	20.0	18.9	
$ 78 Toluene-d8 (Surr)	98	5.204	5.211	-0.007	98	655156	50.0	53.8	
79 Toluene	91	5.262	5.261	0.001	93	319060	20.0	20.7	
80 Epichlorohydrin	57	5.290	5.290	0.000	99	150608	400.0	417.0	
81 2-Nitropropane	41	5.519	5.519	0.000	99	32389	40.0	32.6	
82 Tetrachloroethene	166	5.691	5.691	0.000	97	71821	20.0	22.2	
83 4-Methyl-2-pentanone (MIBK	43	5.727	5.734	-0.007	98	407274	100.0	109.8	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	94	100320	20.0	19.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,2-Trichloroethane	83	5.935	5.942	-0.007	94	54590	20.0	20.8	
86 Ethyl methacrylate	69	6.021	6.021	0.000	92	95680	20.0	22.2	
87 Chlorodibromomethane	129	6.136	6.135	0.001	98	61138	20.0	19.2	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	97	115121	20.0	21.3	
89 Ethylene Dibromide	107	6.386	6.386	0.000	100	62383	20.0	20.8	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	115724	20.0	18.6	
91 2-Hexanone	43	6.795	6.794	0.000	99	287493	100.0	110.2	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	90	444313	50.0	50.0	
93 Chlorobenzene	112	7.103	7.102	0.000	92	194523	20.0	21.0	
94 Ethylbenzene	106	7.181	7.181	0.000	99	109030	20.0	21.3	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	59571	20.0	19.5	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	130995	20.0	21.1	
97 o-Xylene	106	7.991	7.990	0.001	93	124992	20.0	20.6	
98 Bromoform	173	8.055	8.055	0.000	95	36115	20.0	18.0	
99 Styrene	104	8.077	8.076	0.001	93	216351	20.0	21.3	
100 n-Butyl acrylate	73	8.399	8.399	0.000	95	50070	20.0	18.9	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	341501	20.0	20.9	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	89	142102	20.0	18.1	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	195532	50.0	56.3	
104 Bromobenzene	156	8.958	8.965	-0.007	96	82474	20.0	20.1	
105 N-Propylbenzene	91	9.108	9.115	-0.007	99	418094	20.0	19.7	
106 1,1,2,2-Tetrachloroethane	83	9.259	9.258	0.001	97	85042	20.0	19.2	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	285098	20.0	19.8	
108 4-Ethyltoluene	105	9.302	9.301	0.001	98	349898	20.0	20.3	
109 1,2,3-Trichloropropane	110	9.395	9.394	0.001	98	25295	20.0	20.0	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	289919	20.0	19.7	
111 trans-1,4-Dichloro-2-buten	53	9.516	9.516	0.000	84	24527	20.0	15.6	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	260052	20.0	19.5	
113 tert-Butylbenzene	119	9.925	9.924	0.001	93	243412	20.0	20.1	
115 1,2,4-Trimethylbenzene	105	10.054	10.053	0.001	96	295682	20.0	20.2	
114 Butyl Methacrylate	87	10.054	10.053	0.001	78	93055	20.0	18.0	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	373473	20.0	19.8	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	95	160906	20.0	20.7	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	99	313946	20.0	20.1	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	252044	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.634	10.641	-0.007	93	164670	20.0	19.5	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	310114	20.0	20.2	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	299387	20.0	20.1	
122 Benzyl chloride	126	11.092	11.092	0.000	97	22018	20.0	13.5	
123 p-Diethylbenzene	119	11.107	11.106	0.001	94	166305	20.0	20.0	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	298093	20.0	19.9	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	161736	20.0	21.8	
126 1,2,4,5-Tetramethylbenzene	119	12.195	12.202	-0.007	97	274827	20.0	20.4	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	90	13925	20.0	17.3	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	97	120652	20.0	21.6	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	101644	20.0	20.6	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	51378	20.0	21.2	
131 Naphthalene	128	13.356	13.356	0.000	99	215658	20.0	19.4	
132 1,2,3-Trichlorobenzene	180	13.521	13.527	-0.006	95	92998	20.0	20.9	
S 133 1,2-Dichloroethene, Total	100				0		40.0	43.1	
S 134 1,3-Dichloropropene, Total	100				0		40.0	38.1	
S 135 Xylenes, Total	100				0		40.0	41.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Total BTEX	1				0		100.0	105.1	

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

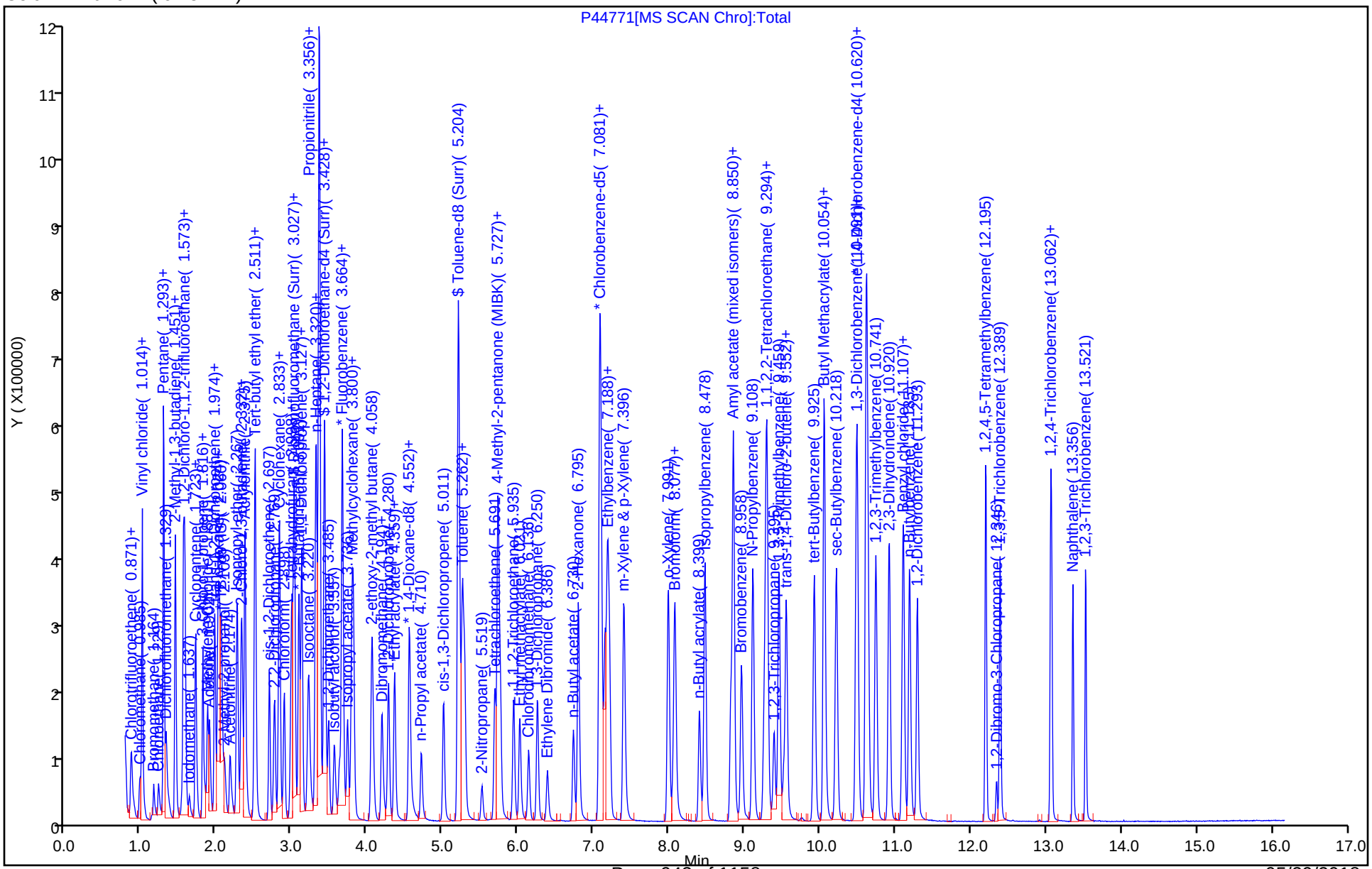
Report Date: 07-May-2018 12:34:20 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44771.D

Injection Date:	05-May-2018 04:04:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-155023-B-1 MS			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	14
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MSD | Lab Sample ID: 460-154781-1 MSD

Matrix: Water | Lab File ID: N66538.D

Analysis Method: 8260C | Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 04:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	22.4		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	19.9		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20.5		1.0	0.34
79-00-5	1,1,2-Trichloroethane	19.0		1.0	0.080
75-34-3	1,1-Dichloroethane	20.4		1.0	0.24
75-35-4	1,1-Dichloroethene	19.0		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	19.6		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	18.6		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	17.6		1.0	0.23
95-50-1	1,2-Dichlorobenzene	20.6		1.0	0.22
107-06-2	1,2-Dichloroethane	21.1		1.0	0.25
78-87-5	1,2-Dichloropropane	19.2		1.0	0.18
541-73-1	1,3-Dichlorobenzene	20.5		1.0	0.33
106-46-7	1,4-Dichlorobenzene	19.7		1.0	0.33
123-91-1	1,4-Dioxane	382		50	8.7
78-93-3	2-Butanone (MEK)	84.7		5.0	2.2
591-78-6	2-Hexanone	75.6		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	95.3		5.0	0.63
67-64-1	Acetone	97.5		5.0	1.1
71-43-2	Benzene	18.8		1.0	0.090
75-25-2	Bromoform	15.9		1.0	0.18
74-83-9	Bromomethane	32.6		1.0	0.18
75-15-0	Carbon disulfide	14.3		1.0	0.22
56-23-5	Carbon tetrachloride	24.6		1.0	0.33
108-90-7	Chlorobenzene	19.0		1.0	0.24
74-97-5	Chlorobromomethane	20.1		1.0	0.30
124-48-1	Chlorodibromomethane	17.1		1.0	0.22
75-00-3	Chloroethane	28.6		1.0	0.37
67-66-3	Chloroform	21.2		1.0	0.22
74-87-3	Chloromethane	25.3		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	20.6		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	15.6		1.0	0.16
110-82-7	Cyclohexane	18.0		1.0	0.26
75-27-4	Dichlorobromomethane	19.3		1.0	0.15
75-71-8	Dichlorodifluoromethane	24.0		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MSD | Lab Sample ID: 460-154781-1 MSD

Matrix: Water | Lab File ID: N66538.D

Analysis Method: 8260C | Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 04:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	18.4		1.0	0.30
106-93-4	Ethylene Dibromide	18.7		1.0	0.19
98-82-8	Isopropylbenzene	19.2		1.0	0.32
79-20-9	Methyl acetate	38.3		5.0	0.58
1634-04-4	Methyl tert-butyl ether	18.0		1.0	0.13
108-87-2	Methylcyclohexane	17.1		1.0	0.22
75-09-2	Methylene Chloride	21.1		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	17.9		1.0	0.28
95-47-6	o-Xylene	18.1		1.0	0.32
100-42-5	Styrene	17.7		1.0	0.17
127-18-4	Tetrachloroethene	26.9		1.0	0.12
108-88-3	Toluene	18.8		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	19.7		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	16.1		1.0	0.19
79-01-6	Trichloroethene	19.2		1.0	0.22
75-69-4	Trichlorofluoromethane	24.5		1.0	0.15
75-01-4	Vinyl chloride	25.8		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		74-132
460-00-4	4-Bromofluorobenzene	94		77-124
1868-53-7	Dibromofluoromethane (Surr)	104		72-131
2037-26-5	Toluene-d8 (Surr)	92		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66538.D
Lims ID: 460-154781-B-1 MSD
Client ID: GC-MW-107(WG)
Sample Type: MSD
Inject. Date: 03-May-2018 04:27:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154781-B-1 MSD
Misc. Info.: 460-0071421-027
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 03-May-2018 17:42:18 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: tupayachia Date: 03-May-2018 06:06:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.325	1.325	0.000	88	51029	20.0	15.1	
2 Dichlorodifluoromethane	87	1.355	1.349	0.006	99	46307	20.0	24.0	
3 Chloromethane	52	1.501	1.508	-0.007	98	30437	20.0	25.3	
4 Vinyl chloride	62	1.586	1.587	-0.001	97	103937	20.0	25.8	
5 Butadiene	54	1.586	1.593	-0.007	74	77405	20.0	26.5	
6 Bromomethane	94	1.848	1.842	0.006	98	92901	20.0	32.6	
7 Chloroethane	64	1.909	1.915	-0.006	98	58786	20.0	28.6	
8 Dichlorofluoromethane	67	2.073	2.073	0.000	97	168009	20.0	22.6	
9 Trichlorofluoromethane	101	2.085	2.073	0.012	83	141147	20.0	24.5	
10 Pentane	72	2.110	2.104	0.006	95	24054	40.0	41.7	
11 Ethanol	46	2.286	2.274	0.012	73	5659	800.0	817.0	
12 Ethyl ether	59	2.292	2.292	0.000	91	40178	20.0	18.2	
13 2-Methyl-1,3-butadiene	53	2.310	2.305	0.005	97	47536	20.0	13.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.341	2.341	0.000	92	72120	20.0	21.4	
16 Acrolein	56	2.462	2.463	-0.001	44	8785	40.0	43.7	
15 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.481	0.000	92	85377	20.0	20.5	
17 1,1-Dichloroethene	96	2.493	2.487	0.006	99	65387	20.0	19.0	
18 Acetone	43	2.578	2.578	0.000	88	35148	100.0	97.5	
19 Iodomethane	142	2.639	2.639	0.000	99	102105	20.0	18.6	
20 Carbon disulfide	76	2.675	2.670	0.005	99	180526	20.0	14.3	
21 Isopropyl alcohol	45	2.682	2.682	0.000	25	12542	200.0	207.5	
22 3-Chloro-1-propene	76	2.803	2.803	0.000	91	33577	20.0	15.4	
24 Methyl acetate	74	2.821	2.822	-0.001	39	9600	40.0	38.3	
23 Cyclopentene	67	2.821	2.822	-0.001	93	144917	20.0	16.9	
25 Acetonitrile	40	2.870	2.870	0.000	96	19153	200.0	188.6	a
26 Methylene Chloride	84	2.931	2.931	0.000	89	78320	20.0	21.1	
* 27 TBA-d9 (IS)	65	2.937	2.931	0.006	0	118805	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.004	3.004	0.000	99	24546	200.0	198.3	
29 Methyl tert-butyl ether	73	3.095	3.102	-0.007	97	147049	20.0	18.0	
30 trans-1,2-Dichloroethene	96	3.126	3.120	0.006	94	77095	20.0	19.7	
31 Acrylonitrile	53	3.199	3.193	0.006	95	114507	200.0	222.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.278	3.278	0.000	92	76230	20.0	16.1	
33 Isopropyl ether	45	3.503	3.503	0.000	94	197999	20.0	18.9	
34 1,1-Dichloroethane	63	3.533	3.527	0.006	99	133973	20.0	20.4	
35 Vinyl acetate	86	3.551	3.552	-0.001	99	14288	40.0	26.9	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	92	62706	20.0	17.4	
37 Tert-butyl ethyl ether	59	3.837	3.832	0.005	91	167840	20.0	17.3	
* 39 2-Butanone-d5	46	4.050	4.044	0.006	0	145508	250.0	250.0	
38 2,2-Dichloropropane	79	4.062	4.057	0.005	86	30802	20.0	16.5	
40 cis-1,2-Dichloroethene	96	4.087	4.087	0.000	99	88516	20.0	20.6	
41 2-Butanone (MEK)	72	4.111	4.105	0.006	97	17644	100.0	84.7	
42 Ethyl acetate	70	4.123	4.124	-0.001	97	7632	40.0	33.8	
43 Methyl acrylate	55	4.178	4.172	0.006	99	21393	20.0	16.1	
44 Propionitrile	54	4.245	4.245	0.000	97	37241	200.0	209.6	
46 Chlorobromomethane	128	4.324	4.330	-0.006	85	31991	20.0	20.1	
45 Tetrahydrofuran	72	4.330	4.336	-0.006	35	8453	40.0	34.7	
47 Methacrylonitrile	67	4.348	4.355	-0.007	91	150438	200.0	193.3	
48 Chloroform	83	4.385	4.391	-0.006	99	136440	20.0	21.2	
49 Cyclohexane	84	4.519	4.519	0.000	89	122393	20.0	18.0	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	98	124966	20.0	22.4	
$ 51 Dibromofluoromethane (Surr	113	4.561	4.556	0.005	95	178167	50.0	52.2	
52 Carbon tetrachloride	117	4.671	4.665	0.006	97	85443	20.0	24.6	
53 1,1-Dichloropropene	75	4.701	4.702	-0.001	98	101431	20.0	19.0	
54 Isooctane	57	4.884	4.884	0.000	94	145932	20.0	16.8	
58 Isobutyl alcohol	43	4.884	4.884	0.000	43	44213	500.0	501.9	a
55 Benzene	78	4.914	4.914	0.000	96	331170	20.0	18.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.939	-0.001	0	170569	50.0	52.1	
57 Tert-amyl methyl ether	73	4.999	5.000	-0.001	87	170763	20.0	17.6	
59 Isopropyl acetate	61	5.012	5.012	0.000	79	22168	20.0	18.4	
60 1,2-Dichloroethane	62	5.024	5.024	0.000	98	80792	20.0	21.1	
61 n-Heptane	57	5.103	5.103	0.000	89	34585	20.0	16.1	
* 62 Fluorobenzene	96	5.243	5.243	0.000	99	758834	50.0	50.0	
64 Trichloroethene	95	5.644	5.644	0.000	98	78738	20.0	19.2	
63 n-Butanol	56	5.662	5.663	-0.001	89	8013	500.0	304.5	
65 Methylcyclohexane	83	5.778	5.772	0.006	92	120834	20.0	17.1	
66 Ethyl acrylate	55	5.778	5.778	0.000	72	121613	20.0	14.8	
67 1,2-Dichloropropane	63	5.967	5.961	0.006	87	72536	20.0	19.2	
* 68 1,4-Dioxane-d8	96	6.052	6.052	0.000	0	19451	1000.0	1000.0	
69 Methyl methacrylate	100	6.082	6.076	0.006	86	21032	40.0	35.5	
71 Dibromomethane	93	6.119	6.113	0.006	89	36154	20.0	20.6	
70 1,4-Dioxane	88	6.119	6.119	0.000	33	8085	400.0	382.3	
72 n-Propyl acetate	43	6.155	6.155	0.000	98	34779	20.0	15.7	
73 Dichlorobromomethane	83	6.301	6.295	0.006	99	80870	20.0	19.3	
74 2-Nitropropane	41	6.684	6.685	-0.001	96	9272	40.0	59.0	
76 Epichlorohydrin	57	6.818	6.819	-0.001	98	23176	400.0	136.0	
77 cis-1,3-Dichloropropene	75	6.879	6.873	0.006	92	87862	20.0	15.6	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	97	150327	100.0	95.3	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	817543	50.0	45.9	
80 Toluene	91	7.238	7.238	0.000	93	365031	20.0	18.8	
81 trans-1,3-Dichloropropene	75	7.676	7.676	0.000	97	65947	20.0	16.1	
82 Ethyl methacrylate	69	7.731	7.725	0.006	88	46322	20.0	13.0	
83 1,1,2-Trichloroethane	83	7.919	7.926	-0.007	94	44155	20.0	19.0	
84 Tetrachloroethene	166	7.956	7.956	0.000	92	102518	20.0	26.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,3-Dichloropropane	76	8.169	8.163	0.006	92	85356	20.0	18.0	
86 2-Hexanone	58	8.266	8.266	0.000	96	48858	100.0	75.6	
87 n-Butyl acetate	43	8.418	8.419	-0.001	97	42857	20.0	15.1	
88 Chlorodibromomethane	129	8.437	8.431	0.006	98	37612	20.0	17.1	
89 Ethylene Dibromide	107	8.601	8.601	0.000	99	44992	20.0	18.7	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	87	606728	50.0	50.0	
91 Chlorobenzene	112	9.209	9.216	-0.007	93	227029	20.0	19.0	
92 Ethylbenzene	106	9.319	9.319	0.000	98	123828	20.0	18.4	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	91	61290	20.0	19.9	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	146408	20.0	17.9	
96 o-Xylene	106	9.909	9.909	0.000	94	145017	20.0	18.1	
95 n-Butyl acrylate	73	9.921	9.921	0.000	97	33066	20.0	13.2	
97 Styrene	104	9.939	9.939	0.000	95	224767	20.0	17.7	
99 Bromoform	173	10.152	10.152	0.000	93	14493	20.0	15.9	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	94	56452	20.0	12.8	
100 Isopropylbenzene	105	10.280	10.280	0.000	95	396120	20.0	19.2	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	83	188906	50.0	46.9	
102 Bromobenzene	156	10.602	10.603	-0.001	96	78278	20.0	19.2	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	97	57527	20.0	19.9	
104 N-Propylbenzene	91	10.681	10.676	0.005	99	450230	20.0	19.0	
105 1,2,3-Trichloropropane	110	10.700	10.706	-0.006	96	16724	20.0	20.8	
106 trans-1,4-Dichloro-2-buten	53	10.681	10.724	-0.043	48	2160	20.0	3.83	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	330295	20.0	20.0	
108 4-Ethyltoluene	105	10.791	10.785	0.006	98	384543	20.0	19.4	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	92	327425	20.0	19.4	
110 4-Chlorotoluene	91	10.888	10.889	0.000	97	290173	20.0	19.3	
111 Butyl Methacrylate	87	10.961	10.962	-0.001	90	80527	20.0	13.7	
112 tert-Butylbenzene	119	11.126	11.126	0.000	94	255946	20.0	19.1	
113 1,2,4-Trimethylbenzene	105	11.186	11.187	-0.001	97	336661	20.0	18.9	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	413081	20.0	20.2	
116 1,3-Dichlorobenzene	146	11.442	11.442	0.000	70	169649	20.0	20.5	
115 4-Isopropyltoluene	119	11.448	11.448	0.000	97	348869	20.0	20.5	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	96	279102	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	168087	20.0	19.7	
134 1,2,3-Trimethylbenzene	105	11.545	11.546	-0.001	99	371394	20.0	20.5	
119 Benzyl chloride	91	11.655	11.655	0.000	98	43152	20.0	11.0	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	321343	20.0	19.5	
121 p-Diethylbenzene	119	11.758	11.758	0.000	91	184900	20.0	19.3	
122 n-Butylbenzene	92	11.783	11.783	0.000	97	179073	20.0	19.8	
123 1,2-Dichlorobenzene	146	11.837	11.831	0.006	94	155202	20.0	20.6	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.373	0.000	96	291832	20.0	17.3	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	91	4776	20.0	17.6	
126 1,3,5-Trichlorobenzene	180	12.573	12.568	0.005	96	105877	20.0	18.3	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	92	84639	20.0	18.6	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	93	29607	20.0	20.3	
129 Naphthalene	128	13.230	13.231	-0.001	99	145966	20.0	18.9	
130 1,2,3-Trichlorobenzene	180	13.425	13.419	0.006	94	68957	20.0	19.6	
S 131 1,2-Dichloroethene, Total	100				0		40.0	40.3	
S 132 Xylenes, Total	100				0		40.0	36.0	
S 133 Total BTEX	1				0		100.0	92.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

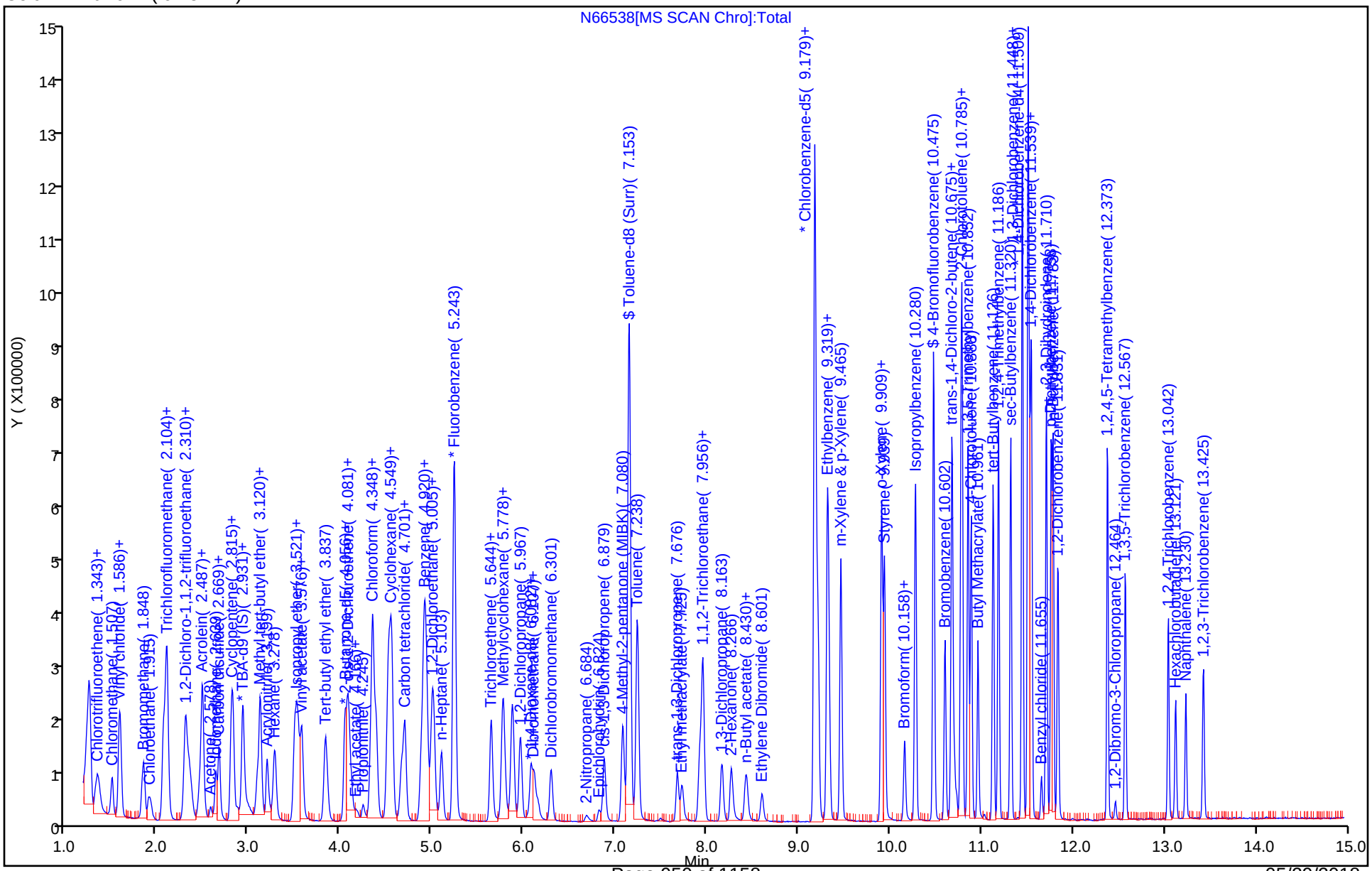
Report Date: 03-May-2018 17:42:21 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180502-71421.b\N66538.D

Injection Date:	03-May-2018 04:27:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154781-B-1 MSD			Worklist Smp#:	27
Client ID:	GC-MW-107(WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) MSD | Lab Sample ID: 460-154925-1 MSD

Matrix: Water | Lab File ID: P44715.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 03:49

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	206		10	2.8
79-34-5	1,1,2,2-Tetrachloroethane	185		10	1.9
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	218		10	3.4
79-00-5	1,1,2-Trichloroethane	202		10	0.80
75-34-3	1,1-Dichloroethane	226		10	2.4
75-35-4	1,1-Dichloroethene	212		10	3.4
87-61-6	1,2,3-Trichlorobenzene	207		10	3.5
120-82-1	1,2,4-Trichlorobenzene	207		10	2.7
96-12-8	1,2-Dibromo-3-Chloropropane	177		10	2.3
95-50-1	1,2-Dichlorobenzene	203		10	2.2
107-06-2	1,2-Dichloroethane	203		10	2.5
78-87-5	1,2-Dichloropropane	214		10	1.8
541-73-1	1,3-Dichlorobenzene	201		10	3.3
106-46-7	1,4-Dichlorobenzene	189		10	3.3
123-91-1	1,4-Dioxane	3960		500	87
78-93-3	2-Butanone (MEK)	993		50	22
591-78-6	2-Hexanone	1080		50	7.2
108-10-1	4-Methyl-2-pentanone (MIBK)	1090		50	6.3
67-64-1	Acetone	963		50	11
71-43-2	Benzene	205		10	0.90
75-25-2	Bromoform	177		10	1.8
74-83-9	Bromomethane	160		10	1.8
75-15-0	Carbon disulfide	194		10	2.2
56-23-5	Carbon tetrachloride	207		10	3.3
108-90-7	Chlorobenzene	206		10	2.4
74-97-5	Chlorobromomethane	225		10	3.0
124-48-1	Chlorodibromomethane	189		10	2.2
75-00-3	Chloroethane	198		10	3.7
67-66-3	Chloroform	219		10	2.2
74-87-3	Chloromethane	195		10	2.2
156-59-2	cis-1,2-Dichloroethene	216		10	2.6
10061-01-5	cis-1,3-Dichloropropene	189		10	1.6
110-82-7	Cyclohexane	223		10	2.6
75-27-4	Dichlorobromomethane	208		10	1.5
75-71-8	Dichlorodifluoromethane	209		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) MSD | Lab Sample ID: 460-154925-1 MSD

Matrix: Water | Lab File ID: P44715.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 03:49

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	203		10	3.0
106-93-4	Ethylene Dibromide	204		10	1.9
98-82-8	Isopropylbenzene	204		10	3.2
79-20-9	Methyl acetate	438		50	5.8
1634-04-4	Methyl tert-butyl ether	212		10	1.3
108-87-2	Methylcyclohexane	224		10	2.2
75-09-2	Methylene Chloride	214		10	2.1
179601-23-1	m-Xylene & p-Xylene	207		10	2.8
95-47-6	o-Xylene	201		10	3.2
100-42-5	Styrene	209		10	1.7
127-18-4	Tetrachloroethene	218		10	1.2
108-88-3	Toluene	200		10	2.5
156-60-5	trans-1,2-Dichloroethene	206		10	1.8
10061-02-6	trans-1,3-Dichloropropene	188		10	1.9
79-01-6	Trichloroethene	215		10	2.2
75-69-4	Trichlorofluoromethane	237		10	1.5
75-01-4	Vinyl chloride	204		10	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		74-132
460-00-4	4-Bromofluorobenzene	115		77-124
1868-53-7	Dibromofluoromethane (Surr)	120		72-131
2037-26-5	Toluene-d8 (Surr)	110		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44715.D
Lims ID: 460-154925-A-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 04-May-2018 03:49:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 460-154925-A-1 MSD
Misc. Info.: 460-0071476-016
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 08:41:13 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: desais Date: 04-May-2018 07:27:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.856	0.007	90	19675	20.0	15.2	
2 Dichlorodifluoromethane	85	0.870	0.871	-0.001	99	81588	20.0	20.9	
4 Chloromethane	50	0.978	0.978	0.000	98	73168	20.0	19.5	
5 Vinyl chloride	62	1.007	1.007	0.000	97	85898	20.0	20.4	
3 Butadiene	54	1.014	1.014	0.000	98	86444	20.0	23.3	
6 Bromomethane	94	1.164	1.164	0.000	99	27593	20.0	16.0	
7 Chloroethane	64	1.229	1.229	0.000	99	47456	20.0	19.8	
9 Pentane	72	1.300	1.293	0.007	96	22707	40.0	47.0	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	97	97353	20.0	23.7	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	128720	20.0	23.5	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	95	91044	20.0	22.3	
12 Ethyl ether	59	1.458	1.458	0.000	89	59701	20.0	21.7	
13 Ethanol	46	1.537	1.537	0.000	98	10662	800.0	588.3	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	94	53078	20.0	21.2	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	82	83682	20.0	22.6	
16 Carbon disulfide	76	1.572	1.573	-0.001	100	192206	20.0	19.4	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	97	56333	20.0	21.8	
18 Iodomethane	142	1.637	1.637	0.000	99	33576	20.0	10.8	
19 Cyclopentene	67	1.723	1.723	0.000	97	157774	20.0	22.2	
20 Acrolein	56	1.737	1.737	0.000	94	18916	40.0	60.7	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	36465	20.0	20.6	
22 Isopropyl alcohol	45	1.845	1.838	0.007	97	48820	200.0	201.9	
23 Methylene Chloride	84	1.880	1.881	-0.001	99	69072	20.0	21.4	
24 Acetone	43	1.902	1.902	0.000	85	98920	100.0	96.3	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	61299	20.0	20.6	
26 Methyl acetate	43	1.981	1.981	0.000	99	115333	40.0	43.8	
27 Hexane	86	2.017	2.017	0.000	95	16430	20.0	20.7	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	90	200183	20.0	21.2	
* 29 TBA-d9 (IS)	65	2.059	2.060	-0.001	0	280071	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.102	2.103	-0.001	99	70474	200.0	201.9	
31 Acetonitrile	41	2.174	2.174	0.000	99	102791	200.0	242.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	270255	20.0	22.1	
33 2-Chloro-1,3-butadiene	88	2.325	2.325	0.000	94	55938	20.0	20.7	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	131705	20.0	22.6	
35 Acrylonitrile	53	2.375	2.375	0.000	95	301801	200.0	217.0	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	236906	20.0	21.7	
37 Vinyl acetate	43	2.511	2.511	0.000	100	375312	40.0	45.3	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	93	74308	20.0	21.6	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	97	97695	20.0	19.6	
40 Cyclohexane	56	2.826	2.833	-0.007	95	135074	20.0	22.3	
41 Chlorobromomethane	128	2.833	2.833	0.000	96	34026	20.0	22.5	
42 Chloroform	83	2.898	2.898	0.000	97	123511	20.0	21.9	
43 Carbon tetrachloride	117	2.984	2.984	0.000	98	81443	20.0	20.7	
44 Ethyl acetate	70	2.998	2.998	0.000	98	16440	40.0	38.4	
45 Methyl acrylate	55	2.998	2.998	0.000	98	67086	20.0	20.6	
46 Tetrahydrofuran	42	3.005	3.005	0.000	94	63594	40.0	43.2	
$ 47 Dibromofluoromethane (Surr	113	3.026	3.027	-0.001	97	161012	50.0	60.0	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	99	99556	20.0	20.6	
* 49 2-Butanone-d5	46	3.091	3.084	0.007	0	351648	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	99	42694	100.0	99.3	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	95	103226	20.0	21.5	
52 Isooctane	57	3.220	3.220	0.000	98	267587	20.0	22.5	
53 n-Heptane	57	3.313	3.313	0.000	94	72304	20.0	22.2	
54 Benzene	78	3.320	3.320	0.000	96	292381	20.0	20.5	
55 Propionitrile	54	3.342	3.342	0.000	95	112129	200.0	227.0	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	316353	200.0	223.0	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	214627	50.0	58.5	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	213026	20.0	21.1	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	101301	20.0	20.3	
60 Isobutyl alcohol	43	3.557	3.557	0.000	97	72181	500.0	474.9	
61 t-Amyl alcohol	59	3.628	3.628	0.000	95	48819	200.0	174.1	
* 62 Fluorobenzene	96	3.664	3.664	0.000	98	506684	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	146750	20.0	20.2	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	129650	20.0	22.4	
65 Trichloroethene	130	3.814	3.815	-0.001	98	67448	20.0	21.5	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	91	190566	20.0	20.7	
67 Dibromomethane	93	4.187	4.187	0.000	96	43879	20.0	21.5	
68 n-Butanol	56	4.201	4.201	0.000	93	40945	500.0	449.9	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	89	76006	20.0	21.4	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	95462	20.0	21.1	
71 Dichlorobromomethane	83	4.359	4.359	0.000	97	89988	20.0	20.8	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	31011	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.552	0.000	94	35742	40.0	41.2	
74 1,4-Dioxane	88	4.581	4.574	0.007	98	15541	400.0	395.7	
75 n-Propyl acetate	43	4.710	4.710	0.000	99	107470	20.0	20.7	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	96	108582	20.0	18.9	
$ 78 Toluene-d8 (Surr)	98	5.204	5.204	0.000	99	677249	50.0	55.1	
79 Toluene	91	5.261	5.262	-0.001	93	312015	20.0	20.0	
80 Epichlorohydrin	57	5.290	5.290	0.000	100	141290	400.0	409.6	
81 2-Nitropropane	41	5.519	5.519	0.000	99	31825	40.0	31.3	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	71351	20.0	21.8	
83 4-Methyl-2-pentanone (MIBK	43	5.727	5.734	-0.007	98	385869	100.0	108.9	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	95	99571	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,2-Trichloroethane	83	5.935	5.942	-0.007	94	53541	20.0	20.2	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	94066	20.0	21.3	
87 Chlorodibromomethane	129	6.135	6.135	0.000	98	60872	20.0	18.9	
88 1,3-Dichloropropane	76	6.257	6.257	0.000	97	114604	20.0	20.9	
89 Ethylene Dibromide	107	6.386	6.386	0.000	98	62071	20.0	20.4	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	114880	20.0	18.2	
91 2-Hexanone	43	6.794	6.794	0.000	99	268427	100.0	107.8	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	90	448998	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	95	192898	20.0	20.6	
94 Ethylbenzene	106	7.181	7.181	0.000	99	105304	20.0	20.3	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	60166	20.0	19.5	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	129799	20.0	20.7	
97 o-Xylene	106	7.990	7.991	-0.001	93	123036	20.0	20.1	
98 Bromoform	173	8.055	8.055	0.000	95	35937	20.0	17.7	
99 Styrene	104	8.076	8.077	-0.001	94	214115	20.0	20.9	
100 n-Butyl acrylate	73	8.399	8.406	-0.007	96	49360	20.0	18.5	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	335903	20.0	20.4	
102 Amyl acetate (mixed isomer	43	8.814	8.822	-0.008	89	139691	20.0	17.7	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	202517	50.0	57.7	
104 Bromobenzene	156	8.957	8.958	-0.001	96	81344	20.0	19.7	
105 N-Propylbenzene	91	9.108	9.108	0.000	98	412862	20.0	19.4	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.259	-0.001	98	82659	20.0	18.5	
107 2-Chlorotoluene	91	9.287	9.287	0.000	97	281287	20.0	19.4	
108 4-Ethyltoluene	105	9.301	9.302	-0.001	98	339195	20.0	19.6	
109 1,2,3-Trichloropropane	110	9.394	9.395	-0.001	98	24098	20.0	18.9	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	285581	20.0	19.3	
111 trans-1,4-Dichloro-2-buten	53	9.523	9.524	-0.001	83	23667	20.0	15.0	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	258497	20.0	19.3	
113 tert-Butylbenzene	119	9.925	9.925	-0.001	93	238786	20.0	19.6	
115 1,2,4-Trimethylbenzene	105	10.053	10.054	-0.001	96	286508	20.0	19.5	
114 Butyl Methacrylate	87	10.053	10.054	-0.001	60	93643	20.0	18.0	
116 sec-Butylbenzene	105	10.218	10.218	0.000	99	369065	20.0	19.5	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	95	157141	20.0	20.1	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	97	308315	20.0	19.6	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.620	-0.008	96	253381	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.634	0.007	93	159977	20.0	18.9	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	301023	20.0	19.5	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	295310	20.0	19.7	
122 Benzyl chloride	126	11.092	11.092	0.000	96	22060	20.0	13.5	
123 p-Diethylbenzene	119	11.106	11.107	-0.001	93	163401	20.0	19.5	
124 n-Butylbenzene	91	11.185	11.185	0.000	98	288582	20.0	19.2	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	151605	20.0	20.3	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.203	-0.001	97	273637	20.0	20.2	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	94	14297	20.0	17.7	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	96	117930	20.0	21.0	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	102618	20.0	20.7	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	94	52687	20.0	21.7	
131 Naphthalene	128	13.356	13.356	0.000	99	210232	20.0	18.8	
132 1,2,3-Trichlorobenzene	180	13.528	13.528	0.000	95	92824	20.0	20.7	
S 133 1,2-Dichloroethene, Total	100				0		40.0	42.2	
S 134 1,3-Dichloropropene, Total	100				0		40.0	37.8	
S 135 Xylenes, Total	100				0		40.0	40.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Total BTEX	1				0		100.0	101.7	

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

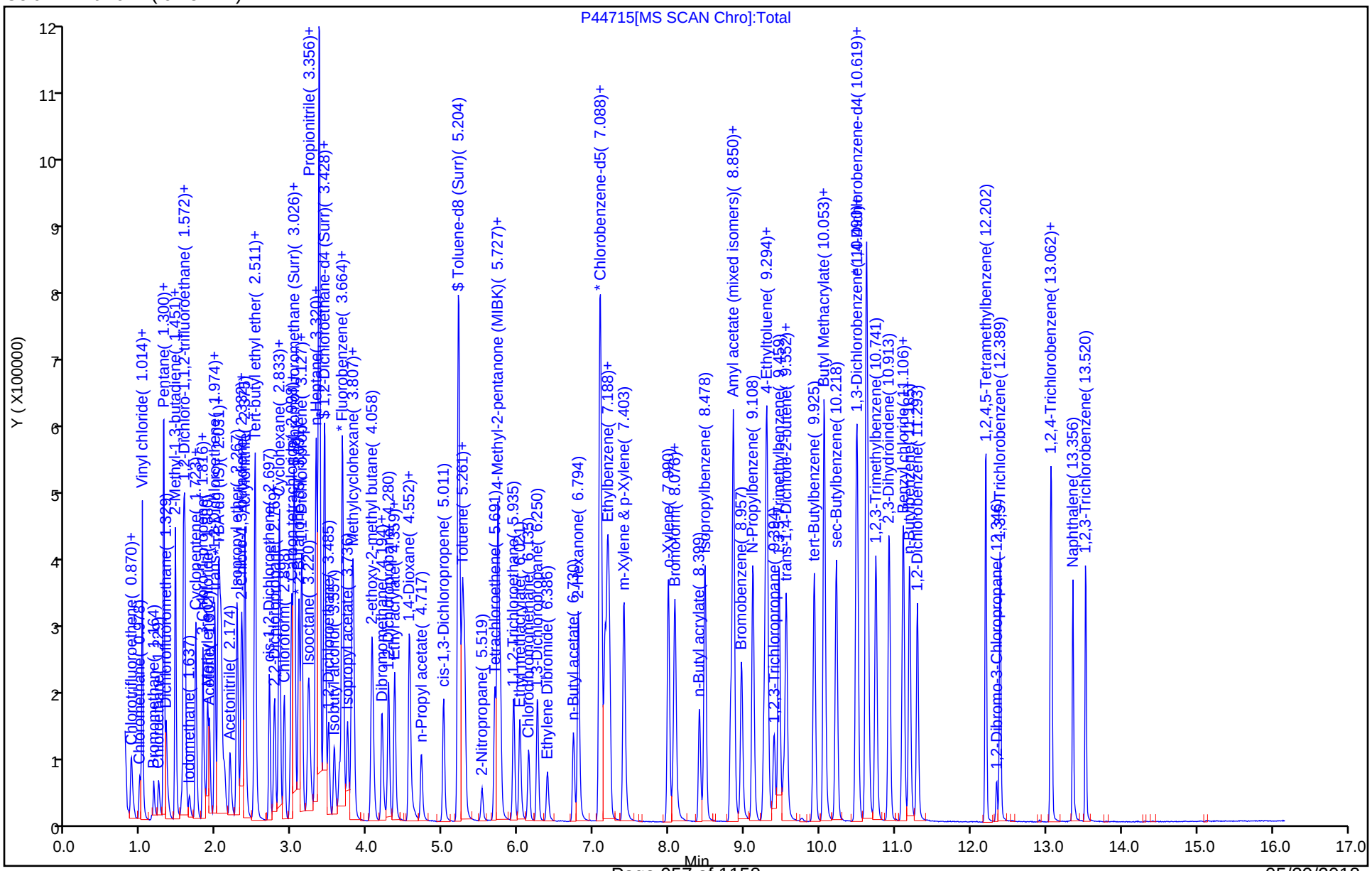
Report Date: 04-May-2018 08:41:38 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180503-71476.b\P44715.D

Injection Date:	04-May-2018 03:49:30	Instrument ID:	CVOAMS13	Operator ID:	
Lims ID:	460-154925-A-1 MSD			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	15
Method:	8260W_13	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-154828-B-2 MSD

Matrix: Water | Lab File ID: N66554.D

Analysis Method: 8260C | Date Collected: 04/25/2018 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 10:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	23.3		1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	21.2		1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	23.1		1.0	0.34
79-00-5	1,1,2-Trichloroethane	19.6		1.0	0.080
75-34-3	1,1-Dichloroethane	21.5		1.0	0.24
75-35-4	1,1-Dichloroethene	20.2		1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	19.8		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	19.1		1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	19.4		1.0	0.23
95-50-1	1,2-Dichlorobenzene	21.7		1.0	0.22
107-06-2	1,2-Dichloroethane	22.1		1.0	0.25
78-87-5	1,2-Dichloropropane	20.0		1.0	0.18
541-73-1	1,3-Dichlorobenzene	21.7		1.0	0.33
106-46-7	1,4-Dichlorobenzene	20.9		1.0	0.33
123-91-1	1,4-Dioxane	430		50	8.7
78-93-3	2-Butanone (MEK)	91.2		5.0	2.2
591-78-6	2-Hexanone	82.8		5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	101		5.0	0.63
67-64-1	Acetone	99.9		5.0	1.1
71-43-2	Benzene	19.8		1.0	0.090
75-25-2	Bromoform	15.9		1.0	0.18
74-83-9	Bromomethane	32.0		1.0	0.18
75-15-0	Carbon disulfide	15.3		1.0	0.22
56-23-5	Carbon tetrachloride	26.0		1.0	0.33
108-90-7	Chlorobenzene	21.3		1.0	0.24
74-97-5	Chlorobromomethane	20.6		1.0	0.30
124-48-1	Chlorodibromomethane	17.4		1.0	0.22
75-00-3	Chloroethane	27.9		1.0	0.37
67-66-3	Chloroform	21.9		1.0	0.22
74-87-3	Chloromethane	23.6		1.0	0.22
156-59-2	cis-1,2-Dichloroethene	21.0		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	16.7		1.0	0.16
110-82-7	Cyclohexane	19.5		1.0	0.26
75-27-4	Dichlorobromomethane	19.5		1.0	0.15
75-71-8	Dichlorodifluoromethane	23.7		1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-154828-B-2 MSD

Matrix: Water | Lab File ID: N66554.D

Analysis Method: 8260C | Date Collected: 04/25/2018 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 10:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.0		1.0	0.30
106-93-4	Ethylene Dibromide	19.7		1.0	0.19
98-82-8	Isopropylbenzene	20.4		1.0	0.32
79-20-9	Methyl acetate	42.3		5.0	0.58
1634-04-4	Methyl tert-butyl ether	19.0		1.0	0.13
108-87-2	Methylcyclohexane	18.9		1.0	0.22
75-09-2	Methylene Chloride	21.4		1.0	0.21
179601-23-1	m-Xylene & p-Xylene	18.7		1.0	0.28
95-47-6	o-Xylene	18.9		1.0	0.32
100-42-5	Styrene	18.1		1.0	0.17
127-18-4	Tetrachloroethene	20.4		1.0	0.12
108-88-3	Toluene	19.5		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	20.3		1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	17.0		1.0	0.19
79-01-6	Trichloroethene	19.9		1.0	0.22
75-69-4	Trichlorofluoromethane	25.4		1.0	0.15
75-01-4	Vinyl chloride	26.2		1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		74-132
460-00-4	4-Bromofluorobenzene	95		77-124
1868-53-7	Dibromofluoromethane (Surr)	106		72-131
2037-26-5	Toluene-d8 (Surr)	96		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66554.D
Lims ID: 460-154828-B-2 MSD
Client ID: MW-10
Sample Type: MSD
Inject. Date: 03-May-2018 10:31:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-154828-B-2 MSD
Misc. Info.: 460-0071436-016
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 04-May-2018 15:53:10 Calib Date: 20-Apr-2018 03:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180419-70690.b\N65805.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: parekhv Date: 03-May-2018 18:21:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.331	1.319	0.012	93	63381	20.0	18.5	
2 Dichlorodifluoromethane	87	1.355	1.349	0.006	99	46140	20.0	23.7	
3 Chloromethane	52	1.501	1.501	0.000	98	28712	20.0	23.6	
4 Vinyl chloride	62	1.587	1.581	0.006	98	106351	20.0	26.2	
5 Butadiene	54	1.593	1.587	0.006	90	76728	20.0	26.1	
6 Bromomethane	94	1.848	1.842	0.006	99	92092	20.0	32.0	
7 Chloroethane	64	1.909	1.903	0.006	99	57838	20.0	27.9	
8 Dichlorofluoromethane	67	2.073	2.067	0.006	97	171646	20.0	22.9	
9 Trichlorofluoromethane	101	2.073	2.079	-0.006	73	147743	20.0	25.4	
10 Pentane	72	2.104	2.098	0.006	95	28682	40.0	45.7	
11 Ethanol	46	2.280	2.274	0.006	78	5307	800.0	704.3	
12 Ethyl ether	59	2.292	2.286	0.006	93	42532	20.0	19.1	
13 2-Methyl-1,3-butadiene	53	2.311	2.304	0.007	95	56786	20.0	16.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.347	2.335	0.012	80	77063	20.0	22.6	
16 Acrolein	56	2.475	2.457	0.018	34	6918	40.0	31.7	
15 1,1,2-Trichloro-1,2,2-trif	101	2.475	2.475	0.000	93	96979	20.0	23.1	
17 1,1-Dichloroethene	96	2.487	2.487	0.000	98	70119	20.0	20.2	
18 Acetone	43	2.578	2.572	0.006	86	36337	100.0	99.9	
19 Iodomethane	142	2.639	2.633	0.006	99	108541	20.0	19.5	
20 Carbon disulfide	76	2.676	2.669	0.007	99	195370	20.0	15.3	
21 Isopropyl alcohol	45	2.676	2.676	0.000	25	15468	200.0	235.4	
22 3-Chloro-1-propene	76	2.803	2.797	0.006	91	38450	20.0	17.5	
24 Methyl acetate	74	2.822	2.815	0.007	93	11540	40.0	42.3	
23 Cyclopentene	67	2.822	2.815	0.007	95	170636	20.0	19.7	
25 Acetonitrile	40	2.870	2.870	0.000	93	24109	200.0	218.5	a
26 Methylene Chloride	84	2.931	2.931	0.000	89	80376	20.0	21.4	
* 27 TBA-d9 (IS)	65	2.931	2.931	0.000	0	129163	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.010	3.004	0.006	91	25942	200.0	192.7	
29 Methyl tert-butyl ether	73	3.101	3.095	0.006	97	156525	20.0	19.0	
30 trans-1,2-Dichloroethene	96	3.120	3.120	0.000	95	80228	20.0	20.3	
31 Acrylonitrile	53	3.193	3.199	-0.006	94	119445	200.0	213.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	3.284	3.278	0.006	92	94310	20.0	19.7	
33 Isopropyl ether	45	3.503	3.503	0.000	94	210556	20.0	20.0	
34 1,1-Dichloroethane	63	3.533	3.527	0.006	99	142316	20.0	21.5	
35 Vinyl acetate	86	3.552	3.552	0.000	99	16635	40.0	31.1	
36 2-Chloro-1,3-butadiene	88	3.576	3.576	0.000	92	66393	20.0	18.3	
37 Tert-butyl ethyl ether	59	3.838	3.838	0.000	90	179059	20.0	18.2	
* 39 2-Butanone-d5	46	4.051	4.050	0.001	0	146866	250.0	250.0	
38 2,2-Dichloropropane	79	4.057	4.057	0.000	93	39345	20.0	20.9	
40 cis-1,2-Dichloroethene	96	4.081	4.081	0.000	99	91253	20.0	21.0	
41 2-Butanone (MEK)	72	4.111	4.111	0.000	96	19192	100.0	91.2	
42 Ethyl acetate	70	4.117	4.117	0.000	95	8208	40.0	36.0	
43 Methyl acrylate	55	4.178	4.172	0.006	99	23526	20.0	17.5	
44 Propionitrile	54	4.245	4.245	0.000	97	37664	200.0	195.0	
46 Chlorobromomethane	128	4.324	4.324	0.000	89	33168	20.0	20.6	
45 Tetrahydrofuran	72	4.336	4.330	0.006	57	9690	40.0	39.4	
47 Methacrylonitrile	67	4.355	4.349	0.006	91	156776	200.0	199.5	
48 Chloroform	83	4.385	4.385	0.000	99	142150	20.0	21.9	
49 Cyclohexane	84	4.525	4.519	0.006	91	133852	20.0	19.5	
50 1,1,1-Trichloroethane	97	4.537	4.537	0.000	97	131694	20.0	23.3	
$ 51 Dibromofluoromethane (Surr	113	4.555	4.555	0.000	95	181671	50.0	52.8	
52 Carbon tetrachloride	117	4.665	4.665	0.000	97	91091	20.0	26.0	
53 1,1-Dichloropropene	75	4.701	4.701	0.000	97	105404	20.0	19.5	
58 Isobutyl alcohol	43	4.884	4.878	0.006	18	49633	500.0	518.2	a
54 Isooctane	57	4.884	4.884	0.000	95	164939	20.0	18.8	
55 Benzene	78	4.914	4.914	0.000	96	348334	20.0	19.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	4.939	4.933	0.006	0	178656	50.0	54.1	
57 Tert-amyl methyl ether	73	5.006	4.999	0.007	91	175849	20.0	17.9	
59 Isopropyl acetate	61	5.018	5.006	0.012	4	22917	20.0	18.8	a
60 1,2-Dichloroethane	62	5.018	5.018	0.000	98	85365	20.0	22.1	
61 n-Heptane	57	5.103	5.097	0.006	86	42258	20.0	19.4	
* 62 Fluorobenzene	96	5.243	5.237	0.006	99	766016	50.0	50.0	
64 Trichloroethene	95	5.644	5.638	0.006	97	82387	20.0	19.9	
63 n-Butanol	56	5.663	5.650	0.013	22	8647	500.0	302.2	
65 Methylcyclohexane	83	5.778	5.772	0.006	91	134806	20.0	18.9	
66 Ethyl acrylate	55	5.778	5.772	0.006	97	132522	20.0	16.0	
67 1,2-Dichloropropane	63	5.967	5.961	0.006	88	76351	20.0	20.0	
* 68 1,4-Dioxane-d8	96	6.058	6.052	0.006	0	19352	1000.0	1000.0	
69 Methyl methacrylate	100	6.082	6.076	0.006	86	21224	40.0	35.5	
70 1,4-Dioxane	88	6.113	6.107	0.006	37	9047	400.0	430.0	
71 Dibromomethane	93	6.113	6.113	0.000	92	36659	20.0	20.7	
72 n-Propyl acetate	43	6.155	6.155	0.000	97	39238	20.0	17.6	
73 Dichlorobromomethane	83	6.301	6.301	0.000	99	82421	20.0	19.5	
74 2-Nitropropane	41	6.685	6.685	0.000	99	8713	40.0	51.0	
76 Epichlorohydrin	57	6.825	6.818	0.007	99	43075	400.0	250.3	
77 cis-1,3-Dichloropropene	75	6.879	6.879	0.000	92	94187	20.0	16.7	
78 4-Methyl-2-pentanone (MIBK	43	7.080	7.080	0.000	96	161282	100.0	101.3	
$ 79 Toluene-d8 (Surr)	98	7.153	7.147	0.006	99	848799	50.0	47.8	
80 Toluene	91	7.238	7.238	0.000	93	379294	20.0	19.5	
81 trans-1,3-Dichloropropene	75	7.682	7.676	0.006	96	69605	20.0	17.0	
82 Ethyl methacrylate	69	7.731	7.725	0.006	87	50342	20.0	14.0	
83 1,1,2-Trichloroethane	83	7.926	7.920	0.006	94	45567	20.0	19.6	
84 Tetrachloroethene	166	7.956	7.956	0.000	94	77617	20.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,3-Dichloropropane	76	8.163	8.163	0.000	92	92189	20.0	19.4	
86 2-Hexanone	58	8.273	8.266	0.007	95	54025	100.0	82.8	
87 n-Butyl acetate	43	8.419	8.418	0.001	97	48255	20.0	17.0	
88 Chlorodibromomethane	129	8.437	8.437	0.000	98	38272	20.0	17.4	
89 Ethylene Dibromide	107	8.607	8.601	0.006	97	47161	20.0	19.7	
* 90 Chlorobenzene-d5	117	9.179	9.179	0.000	86	605981	50.0	50.0	
91 Chlorobenzene	112	9.215	9.209	0.006	95	254057	20.0	21.3	
92 Ethylbenzene	106	9.319	9.319	0.000	99	127036	20.0	19.0	
93 1,1,1,2-Tetrachloroethane	131	9.331	9.331	0.000	93	64742	20.0	21.0	
94 m-Xylene & p-Xylene	106	9.465	9.465	0.000	0	152384	20.0	18.7	
96 o-Xylene	106	9.909	9.909	0.000	94	151568	20.0	18.9	
95 n-Butyl acrylate	73	9.921	9.921	0.000	98	34148	20.0	13.6	
97 Styrene	104	9.939	9.939	0.000	94	230089	20.0	18.1	
99 Bromoform	173	10.152	10.152	0.000	93	14699	20.0	15.9	
98 Amyl acetate (mixed isomer	43	10.158	10.158	0.000	93	62845	20.0	14.1	
100 Isopropylbenzene	105	10.280	10.280	0.000	95	421103	20.0	20.4	
$ 101 4-Bromofluorobenzene	174	10.481	10.475	0.006	86	190309	50.0	47.3	
102 Bromobenzene	156	10.603	10.602	0.001	97	83520	20.0	20.2	
103 1,1,2,2-Tetrachloroethane	83	10.663	10.663	0.000	98	62019	20.0	21.2	
104 N-Propylbenzene	91	10.682	10.675	0.007	99	478689	20.0	20.0	
105 1,2,3-Trichloropropane	110	10.700	10.706	-0.006	95	17641	20.0	21.7	
106 trans-1,4-Dichloro-2-buten	53	10.724	10.724	0.000	69	9951	20.0	17.4	
107 2-Chlorotoluene	91	10.779	10.779	0.000	96	353454	20.0	21.1	
108 4-Ethyltoluene	105	10.791	10.791	0.000	98	421184	20.0	21.0	
109 1,3,5-Trimethylbenzene	105	10.852	10.852	0.000	93	342006	20.0	20.0	
110 4-Chlorotoluene	91	10.888	10.888	0.000	97	309787	20.0	20.3	
111 Butyl Methacrylate	87	10.961	10.961	0.000	90	82853	20.0	13.9	
112 tert-Butylbenzene	119	11.126	11.126	0.000	93	261613	20.0	19.2	
113 1,2,4-Trimethylbenzene	105	11.187	11.186	0.001	97	352835	20.0	19.5	
114 sec-Butylbenzene	105	11.320	11.320	0.000	99	428032	20.0	20.6	
116 1,3-Dichlorobenzene	146	11.442	11.448	-0.006	71	182110	20.0	21.7	
115 4-Isopropyltoluene	119	11.442	11.448	-0.006	97	361755	20.0	21.0	
* 117 1,4-Dichlorobenzene-d4	152	11.509	11.509	0.000	97	283016	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.527	11.527	0.000	94	181576	20.0	20.9	
134 1,2,3-Trimethylbenzene	105	11.545	11.545	0.000	98	386301	20.0	21.0	
119 Benzyl chloride	91	11.655	11.655	0.000	98	59739	20.0	15.0	
120 2,3-Dihydroindene	117	11.710	11.710	0.000	94	348949	20.0	20.9	
121 p-Diethylbenzene	119	11.758	11.758	0.000	92	199768	20.0	20.6	
122 n-Butylbenzene	92	11.783	11.783	0.000	97	196346	20.0	21.4	
123 1,2-Dichlorobenzene	146	11.837	11.837	0.000	93	166419	20.0	21.7	
124 1,2,4,5-Tetramethylbenzene	119	12.373	12.379	-0.006	97	311265	20.0	18.2	
125 1,2-Dibromo-3-Chloropropan	155	12.464	12.464	0.000	92	5316	20.0	19.4	
126 1,3,5-Trichlorobenzene	180	12.568	12.574	-0.006	96	114572	20.0	19.6	
127 1,2,4-Trichlorobenzene	180	13.042	13.042	0.000	93	88022	20.0	19.1	
128 Hexachlorobutadiene	225	13.121	13.121	0.000	88	31839	20.0	21.5	
129 Naphthalene	128	13.231	13.231	0.000	99	148647	20.0	18.9	
130 1,2,3-Trichlorobenzene	180	13.425	13.425	0.000	93	70388	20.0	19.8	
S 131 1,2-Dichloroethene, Total	100				0		40.0	41.4	
S 132 Xylenes, Total	100				0		40.0	37.6	
S 133 Total BTEX	1				0		100.0	95.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00171	Amount Added:	1.00	Units: uL	Run Reagent

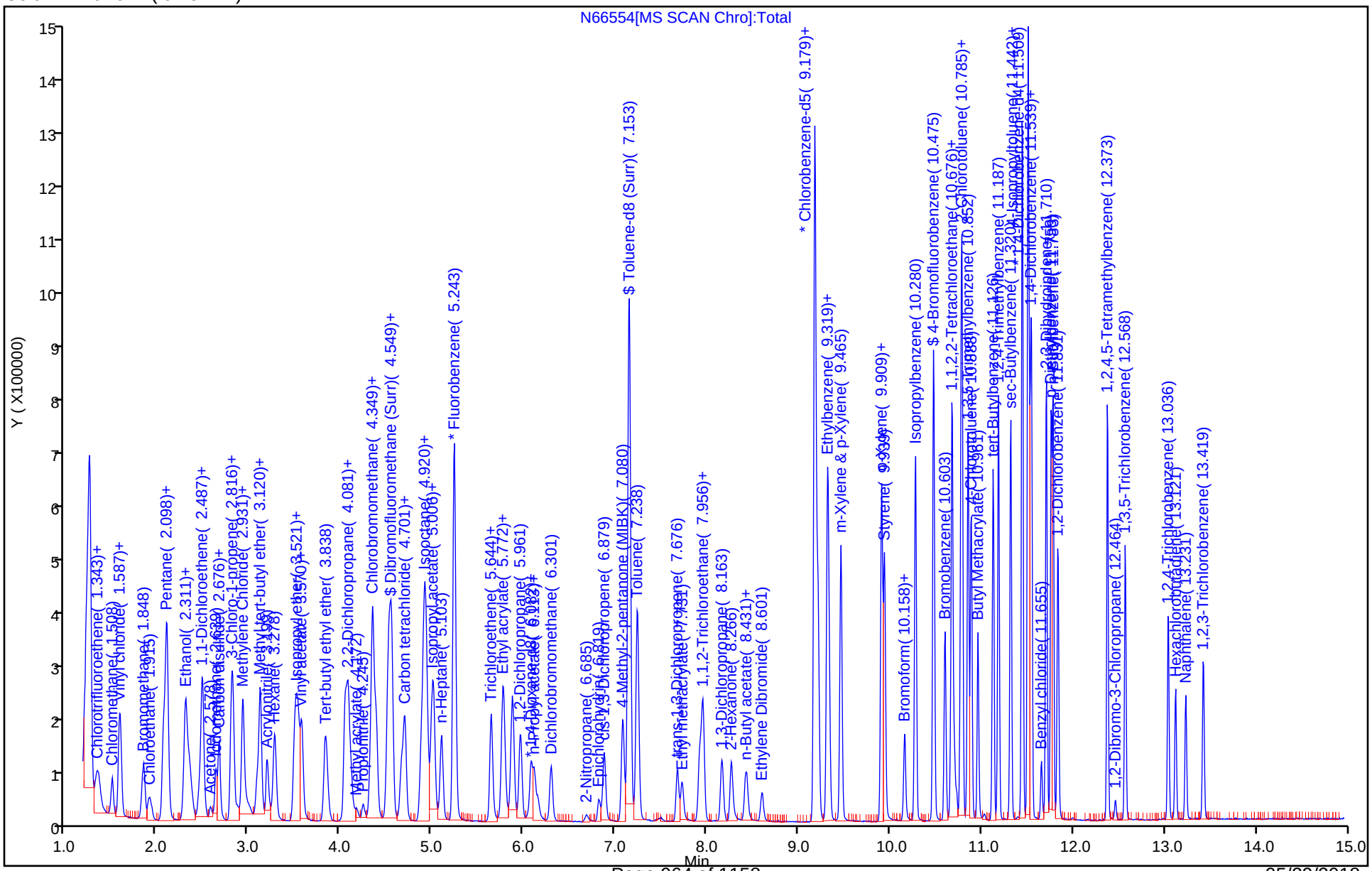
Report Date: 04-May-2018 15:53:13 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180503-71436.b\N66554.D

Injection Date:	03-May-2018 10:31:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-154828-B-2 MSD			Worklist Smp#:	16
Client ID:	MW-10				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-155023-B-1 MSD

Matrix: Water | Lab File ID: P44772.D

Analysis Method: 8260C | Date Collected: 04/30/2018 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 04:29

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	194		10	2.8
79-34-5	1,1,2,2-Tetrachloroethane	187		10	1.9
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	204		10	3.4
79-00-5	1,1,2-Trichloroethane	191		10	0.80
75-34-3	1,1-Dichloroethane	212		10	2.4
75-35-4	1,1-Dichloroethene	199		10	3.4
87-61-6	1,2,3-Trichlorobenzene	205		10	3.5
120-82-1	1,2,4-Trichlorobenzene	202		10	2.7
96-12-8	1,2-Dibromo-3-Chloropropane	180		10	2.3
95-50-1	1,2-Dichlorobenzene	194		10	2.2
107-06-2	1,2-Dichloroethane	196		10	2.5
78-87-5	1,2-Dichloropropane	204		10	1.8
541-73-1	1,3-Dichlorobenzene	189		10	3.3
106-46-7	1,4-Dichlorobenzene	179		10	3.3
123-91-1	1,4-Dioxane	3930		500	87
78-93-3	2-Butanone (MEK)	951		50	22
591-78-6	2-Hexanone	1030		50	7.2
108-10-1	4-Methyl-2-pentanone (MIBK)	1030		50	6.3
67-64-1	Acetone	924		50	11
71-43-2	Benzene	194		10	0.90
75-25-2	Bromoform	175		10	1.8
74-83-9	Bromomethane	131		10	1.8
75-15-0	Carbon disulfide	186		10	2.2
56-23-5	Carbon tetrachloride	189		10	3.3
108-90-7	Chlorobenzene	195		10	2.4
74-97-5	Chlorobromomethane	214		10	3.0
124-48-1	Chlorodibromomethane	176		10	2.2
75-00-3	Chloroethane	190		10	3.7
67-66-3	Chloroform	207		10	2.2
74-87-3	Chloromethane	170		10	2.2
156-59-2	cis-1,2-Dichloroethene	188		10	2.6
10061-01-5	cis-1,3-Dichloropropene	175		10	1.6
110-82-7	Cyclohexane	209		10	2.6
75-27-4	Dichlorobromomethane	194		10	1.5
75-71-8	Dichlorodifluoromethane	223		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-155023-B-1 MSD

Matrix: Water | Lab File ID: P44772.D

Analysis Method: 8260C | Date Collected: 04/30/2018 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 04:29

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	191		10	3.0
106-93-4	Ethylene Dibromide	202		10	1.9
98-82-8	Isopropylbenzene	195		10	3.2
79-20-9	Methyl acetate	443		50	5.8
1634-04-4	Methyl tert-butyl ether	206		10	1.3
108-87-2	Methylcyclohexane	209		10	2.2
75-09-2	Methylene Chloride	199		10	2.1
179601-23-1	m-Xylene & p-Xylene	193		10	2.8
95-47-6	o-Xylene	192		10	3.2
100-42-5	Styrene	196		10	1.7
127-18-4	Tetrachloroethene	201		10	1.2
108-88-3	Toluene	190		10	2.5
156-60-5	trans-1,2-Dichloroethene	194		10	1.8
10061-02-6	trans-1,3-Dichloropropene	183		10	1.9
79-01-6	Trichloroethene	203		10	2.2
75-69-4	Trichlorofluoromethane	220		10	1.5
75-01-4	Vinyl chloride	198		10	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		74-132
460-00-4	4-Bromofluorobenzene	104		77-124
1868-53-7	Dibromofluoromethane (Surr)	111		72-131
2037-26-5	Toluene-d8 (Surr)	101		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44772.D
Lims ID: 460-155023-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 05-May-2018 04:29:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 460-155023-B-1 MSD
Misc. Info.: 460-0071534-016
Operator ID: Instrument ID: CVOAMS13

Method: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\8260W_13.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 07-May-2018 12:35:22 Calib Date: 20-Apr-2018 07:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS13\20180419-70689.b\P44001.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chujia Date: 05-May-2018 21:07:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	0.863	0.856	0.007	90	25195	20.0	18.2	
2 Dichlorodifluoromethane	85	0.871	0.870	0.001	99	92998	20.0	22.3	
4 Chloromethane	50	0.985	0.978	0.007	32	68271	20.0	17.0	a
5 Vinyl chloride	62	1.007	1.006	0.001	97	89202	20.0	19.8	
3 Butadiene	54	1.014	1.014	0.000	97	87745	20.0	22.1	
6 Bromomethane	94	1.164	1.164	0.000	98	27520	20.0	13.1	
7 Chloroethane	64	1.229	1.229	0.000	100	48715	20.0	19.0	
9 Pentane	72	1.300	1.293	0.007	97	21997	40.0	34.6	
8 Trichlorofluoromethane	101	1.300	1.300	0.000	98	96674	20.0	22.0	
10 Dichlorofluoromethane	67	1.329	1.329	0.000	99	129440	20.0	22.1	
11 2-Methyl-1,3-butadiene	67	1.451	1.451	0.000	96	91209	20.0	20.9	
12 Ethyl ether	59	1.458	1.458	0.000	90	62723	20.0	21.3	
13 Ethanol	46	1.537	1.537	0.000	99	20116	800.0	842.6	
14 1,1-Dichloroethene	96	1.558	1.558	0.000	94	53252	20.0	19.9	
15 1,2-Dichloro-1,1,2-trifluo	67	1.558	1.558	0.000	84	85143	20.0	21.5	
16 Carbon disulfide	76	1.580	1.572	0.008	100	196854	20.0	18.6	
17 1,1,2-Trichloro-1,2,2-trif	101	1.580	1.580	0.000	98	56376	20.0	20.4	
18 Iodomethane	142	1.637	1.637	0.000	99	36203	20.0	10.8	
19 Cyclopentene	67	1.723	1.723	0.000	97	157204	20.0	20.6	
20 Acrolein	56	1.737	1.737	0.000	96	21888	40.0	53.4	
21 3-Chloro-1-propene	76	1.816	1.816	0.000	90	36864	20.0	19.5	
22 Isopropyl alcohol	45	1.845	1.845	0.000	97	60348	200.0	189.4	
23 Methylene Chloride	84	1.881	1.880	0.001	99	68561	20.0	19.9	
24 Acetone	43	1.902	1.902	0.000	85	115610	100.0	92.4	
25 trans-1,2-Dichloroethene	96	1.974	1.974	0.000	98	61769	20.0	19.4	
26 Methyl acetate	43	1.981	1.981	0.000	100	124643	40.0	44.3	
27 Hexane	86	2.017	2.016	0.001	95	16820	20.0	19.9	
28 Methyl tert-butyl ether	73	2.038	2.038	0.000	95	208273	20.0	20.6	
* 29 TBA-d9 (IS)	65	2.060	2.059	0.001	0	368935	1000.0	1000.0	
30 2-Methyl-2-propanol	59	2.103	2.102	0.001	99	87363	200.0	190.0	
31 Acetonitrile	41	2.174	2.174	0.000	99	114054	200.0	204.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45	2.267	2.267	0.000	97	272863	20.0	20.9	
33 2-Chloro-1,3-butadiene	88	2.325	2.324	0.001	93	58496	20.0	20.2	
34 1,1-Dichloroethane	63	2.339	2.339	0.000	99	131908	20.0	21.2	
35 Acrylonitrile	53	2.375	2.375	0.000	93	334763	200.0	225.1	
36 Tert-butyl ethyl ether	59	2.504	2.504	0.000	88	238410	20.0	20.4	
37 Vinyl acetate	43	2.511	2.511	0.000	100	398672	40.0	45.0	
38 cis-1,2-Dichloroethene	96	2.697	2.697	0.000	92	69143	20.0	18.8	
39 2,2-Dichloropropane	77	2.769	2.769	0.000	96	95854	20.0	18.0	
40 Cyclohexane	56	2.826	2.833	-0.007	96	135461	20.0	20.9	
41 Chlorobromomethane	128	2.833	2.833	0.000	95	34684	20.0	21.4	
42 Chloroform	83	2.898	2.898	0.000	98	124393	20.0	20.7	
43 Carbon tetrachloride	117	2.984	2.983	0.001	98	79539	20.0	18.9	
44 Ethyl acetate	70	2.998	2.998	0.000	99	19391	40.0	37.1	
45 Methyl acrylate	55	2.998	2.998	0.000	98	75770	20.0	21.7	
46 Tetrahydrofuran	42	3.005	3.005	0.000	95	72549	40.0	40.4	
$ 47 Dibromofluoromethane (Surr	113	3.027	3.026	0.001	96	159133	50.0	55.5	
48 1,1,1-Trichloroethane	97	3.034	3.034	0.000	99	100452	20.0	19.4	
* 49 2-Butanone-d5	46	3.091	3.091	0.000	0	428452	250.0	250.0	
50 2-Butanone (MEK)	72	3.127	3.127	0.000	98	49801	100.0	95.1	
51 1,1-Dichloropropene	75	3.127	3.127	0.000	96	103577	20.0	20.2	
52 Isooctane	57	3.220	3.220	0.000	99	268435	20.0	21.1	
53 n-Heptane	57	3.313	3.313	0.000	96	69649	20.0	20.0	
54 Benzene	78	3.320	3.320	0.000	96	296748	20.0	19.4	
55 Propionitrile	54	3.342	3.342	0.000	97	124349	200.0	191.1	
56 Methacrylonitrile	67	3.363	3.363	0.000	95	346723	200.0	228.6	
$ 57 1,2-Dichloroethane-d4 (Sur	65	3.428	3.428	0.000	0	211616	50.0	53.9	
58 Tert-amyl methyl ether	73	3.435	3.435	0.000	98	221320	20.0	20.5	
59 1,2-Dichloroethane	62	3.485	3.485	0.000	97	104545	20.0	19.6	
60 Isobutyl alcohol	43	3.557	3.557	0.000	97	88007	500.0	439.5	
61 t-Amyl alcohol	59	3.628	3.628	0.000	95	62516	200.0	169.3	
* 62 Fluorobenzene	96	3.664	3.671	-0.007	98	541765	50.0	50.0	
63 Isopropyl acetate	43	3.736	3.736	0.000	98	161420	20.0	20.8	
64 Methylcyclohexane	83	3.793	3.793	0.000	94	129393	20.0	20.9	
65 Trichloroethene	130	3.815	3.814	0.001	97	68119	20.0	20.3	
66 2-ethoxy-2-methyl butane	59	4.058	4.058	0.000	90	193817	20.0	19.7	
67 Dibromomethane	93	4.187	4.187	0.000	97	45811	20.0	21.0	
68 n-Butanol	56	4.194	4.194	0.000	91	52084	500.0	434.5	
69 1,2-Dichloropropane	63	4.280	4.280	0.000	88	77608	20.0	20.4	
70 Ethyl acrylate	55	4.359	4.359	0.000	98	106308	20.0	22.0	
71 Dichlorobromomethane	83	4.359	4.359	0.000	98	89932	20.0	19.4	
* 72 1,4-Dioxane-d8	96	4.545	4.552	-0.007	0	40660	1000.0	1000.0	
73 Methyl methacrylate	100	4.552	4.559	-0.007	93	41490	40.0	44.8	
74 1,4-Dioxane	88	4.595	4.581	0.014	95	20225	400.0	392.7	
75 n-Propyl acetate	43	4.710	4.717	-0.007	99	121338	20.0	21.8	
77 cis-1,3-Dichloropropene	75	5.011	5.011	0.000	96	107685	20.0	17.5	
$ 78 Toluene-d8 (Surr)	98	5.204	5.211	-0.007	98	666178	50.0	50.5	
79 Toluene	91	5.261	5.261	0.000	93	317712	20.0	19.0	
80 Epichlorohydrin	57	5.290	5.290	0.000	100	163634	400.0	389.3	
81 2-Nitropropane	41	5.519	5.519	0.000	100	35687	40.0	32.8	
82 Tetrachloroethene	166	5.691	5.691	0.000	96	70495	20.0	20.1	
83 4-Methyl-2-pentanone (MIBK	43	5.727	5.734	-0.007	99	442948	100.0	102.6	
84 trans-1,3-Dichloropropene	75	5.763	5.763	0.000	94	103811	20.0	18.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,2-Trichloroethane	83	5.935	5.942	-0.007	94	54449	20.0	19.1	
86 Ethyl methacrylate	69	6.021	6.021	0.000	91	103547	20.0	21.9	
87 Chlorodibromomethane	129	6.135	6.135	0.000	97	60821	20.0	17.6	
88 1,3-Dichloropropane	76	6.250	6.257	-0.007	97	118730	20.0	20.2	
89 Ethylene Dibromide	107	6.386	6.386	0.000	98	65730	20.0	20.2	
90 n-Butyl acetate	43	6.730	6.730	0.000	98	130398	20.0	19.3	
91 2-Hexanone	43	6.794	6.794	0.000	98	312083	100.0	102.8	
* 92 Chlorobenzene-d5	117	7.081	7.081	0.000	89	482013	50.0	50.0	
93 Chlorobenzene	112	7.102	7.102	0.000	92	196113	20.0	19.5	
94 Ethylbenzene	106	7.188	7.181	0.007	99	106128	20.0	19.1	
95 1,1,1,2-Tetrachloroethane	131	7.210	7.210	0.000	93	61527	20.0	18.6	
96 m-Xylene & p-Xylene	106	7.403	7.403	0.000	0	129893	20.0	19.3	
97 o-Xylene	106	7.991	7.990	0.001	93	125980	20.0	19.2	
98 Bromoform	173	8.055	8.055	0.000	95	38023	20.0	17.5	
99 Styrene	104	8.077	8.076	0.001	94	215934	20.0	19.6	
100 n-Butyl acrylate	73	8.399	8.399	0.000	96	54304	20.0	18.9	
101 Isopropylbenzene	105	8.478	8.478	0.000	96	344619	20.0	19.5	
102 Amyl acetate (mixed isomer	43	8.814	8.814	0.000	89	152466	20.0	17.7	
$ 103 4-Bromofluorobenzene	174	8.850	8.857	-0.007	87	196212	50.0	52.1	
104 Bromobenzene	156	8.965	8.965	0.000	97	83979	20.0	18.7	
105 N-Propylbenzene	91	9.108	9.115	-0.007	99	415898	20.0	17.9	
106 1,1,2,2-Tetrachloroethane	83	9.258	9.258	0.000	98	90895	20.0	18.7	
107 2-Chlorotoluene	91	9.287	9.287	0.000	96	286734	20.0	18.2	
108 4-Ethyltoluene	105	9.301	9.301	0.000	98	349005	20.0	18.5	
109 1,2,3-Trichloropropane	110	9.387	9.394	-0.007	97	27122	20.0	19.6	
110 1,3,5-Trimethylbenzene	105	9.459	9.459	0.000	92	290925	20.0	18.1	
111 trans-1,4-Dichloro-2-buten	53	9.523	9.516	0.007	82	28294	20.0	16.5	
112 4-Chlorotoluene	91	9.552	9.552	0.000	99	264026	20.0	18.1	
113 tert-Butylbenzene	119	9.925	9.924	0.001	93	242963	20.0	18.4	
115 1,2,4-Trimethylbenzene	105	10.054	10.053	0.001	96	294643	20.0	18.4	
114 Butyl Methacrylate	87	10.054	10.053	0.001	62	97538	20.0	17.3	
116 sec-Butylbenzene	105	10.218	10.218	0.000	98	375284	20.0	18.2	
117 1,3-Dichlorobenzene	146	10.483	10.483	0.000	95	160998	20.0	18.9	
118 4-Isopropyltoluene	119	10.498	10.498	0.000	98	313731	20.0	18.3	
* 119 1,4-Dichlorobenzene-d4	152	10.612	10.612	0.000	96	275681	50.0	50.0	
120 1,4-Dichlorobenzene	146	10.641	10.641	0.000	94	165281	20.0	17.9	
138 1,2,3-Trimethylbenzene	105	10.741	10.741	0.000	99	309673	20.0	18.4	
121 2,3-Dihydroindene	117	10.920	10.920	0.000	94	302669	20.0	18.6	
122 Benzyl chloride	126	11.092	11.092	0.000	96	24260	20.0	13.6	
123 p-Diethylbenzene	119	11.107	11.106	0.001	94	165810	20.0	18.2	
124 n-Butylbenzene	91	11.185	11.185	0.000	99	298182	20.0	18.2	
125 1,2-Dichlorobenzene	146	11.293	11.293	0.000	95	157139	20.0	19.4	
126 1,2,4,5-Tetramethylbenzene	119	12.202	12.202	0.000	98	279525	20.0	19.0	
127 1,2-Dibromo-3-Chloropropan	157	12.346	12.346	0.000	94	15777	20.0	18.0	
128 1,3,5-Trichlorobenzene	180	12.389	12.389	0.000	97	122088	20.0	20.0	
129 1,2,4-Trichlorobenzene	180	13.062	13.062	0.000	94	108986	20.0	20.2	
130 Hexachlorobutadiene	225	13.076	13.076	0.000	93	53333	20.0	20.2	
131 Naphthalene	128	13.356	13.356	0.000	99	240988	20.0	19.8	
132 1,2,3-Trichlorobenzene	180	13.528	13.527	0.001	95	100140	20.0	20.5	
S 133 1,2-Dichloroethene, Total	100				0		40.0	38.2	
S 134 1,3-Dichloropropene, Total	100				0		40.0	35.8	
S 135 Xylenes, Total	100				0		40.0	38.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Total BTEX	1				0		100.0	96.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00258	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00079	Amount Added:	20.00	Units: uL	
ACROLEIN W_00076	Amount Added:	4.00	Units: uL	
8260ISNEW_00121	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00174	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 07-May-2018 12:35:23 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44772.D

Injection Date: 05-May-2018 04:29:30 Instrument ID: CVOAMS13 Operator ID:

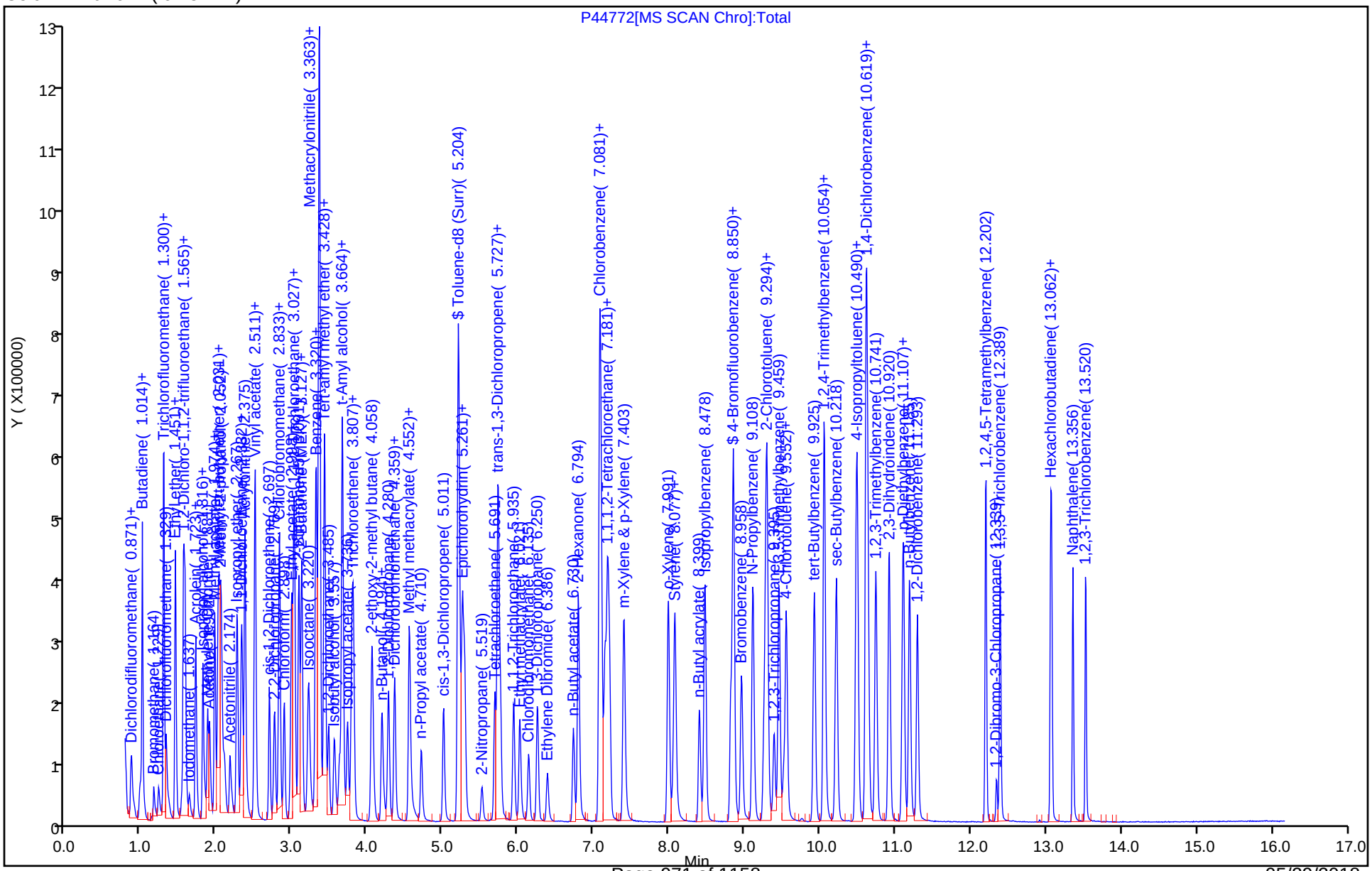
Lims ID: 460-155023-B-1 MSD Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 10.0000 ALS Bottle#: 15

Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

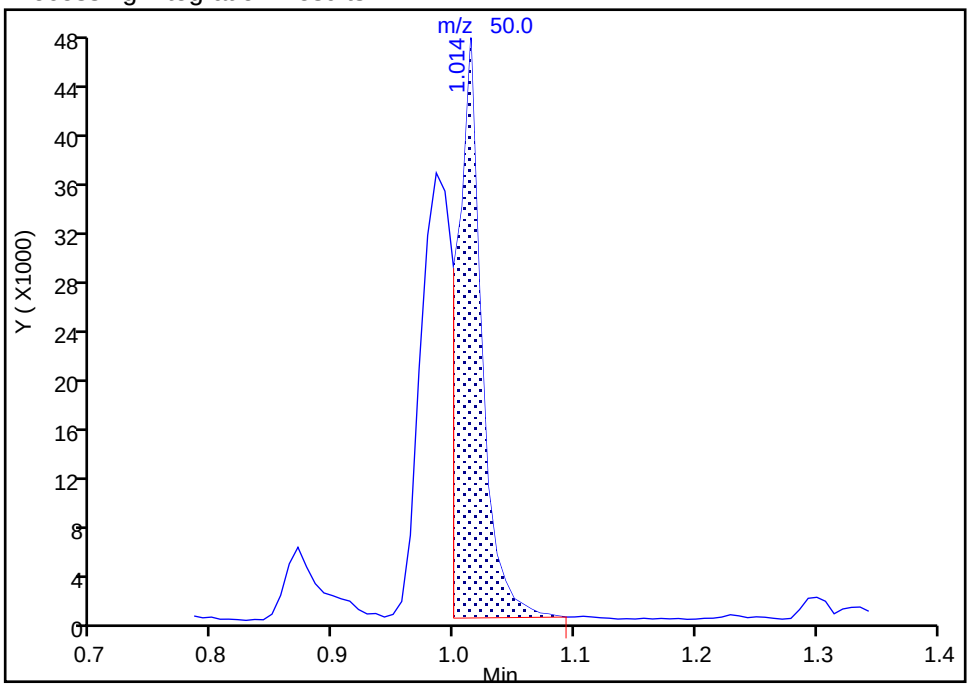
Data File: \\ChromNA\Edison\ChromData\CVOAMS13\20180504-71534.b\P44772.D
Injection Date: 05-May-2018 04:29:30 Instrument ID: CVOAMS13
Lims ID: 460-155023-B-1 MSD
Client ID:
Operator ID: ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Method: 8260W_13 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

4 Chloromethane, CAS: 74-87-3

Signal: 1

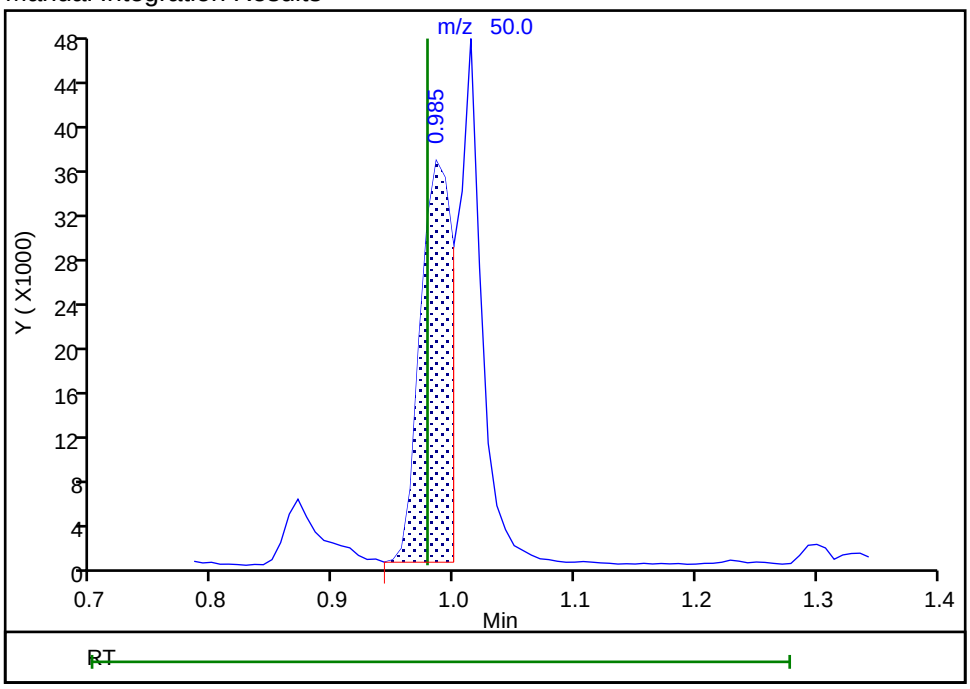
Processing Integration Results

RT: 1.01
Area: 68368
Amount: 17.066551
Amount Units: ug/l



Manual Integration Results

RT: 0.99
Area: 68271
Amount: 17.042337
Amount Units: ug/l



Reviewer: xuyvo, 07-May-2018 12:34:33
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CVOAMS11 Start Date: 04/20/2018 00:38

Analysis Batch Number: 512586 End Date: 04/20/2018 06:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-512586/1		04/20/2018 00:38	1	N65797.D	Rtx-624 0.25(mm)
STD025 460-512586/2 IC		04/20/2018 01:05	1	N65798.D	Rtx-624 0.25(mm)
STD8 460-512586/3 IC		04/20/2018 01:29	1	N65799.D	Rtx-624 0.25(mm)
STD1 460-512586/4 IC		04/20/2018 01:52	1	N65800.D	Rtx-624 0.25(mm)
STD5 460-512586/5 IC		04/20/2018 02:15	1	N65801.D	Rtx-624 0.25(mm)
STD20 460-512586/6 ICIS		04/20/2018 02:39	1	N65802.D	Rtx-624 0.25(mm)
STD50 460-512586/7 IC		04/20/2018 03:02	1	N65803.D	Rtx-624 0.25(mm)
STD200 460-512586/8 IC		04/20/2018 03:25	1	N65804.D	Rtx-624 0.25(mm)
STD500 460-512586/9 IC		04/20/2018 03:48	1	N65805.D	Rtx-624 0.25(mm)
ICV 460-512586/13		04/20/2018 06:18	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CVOAMS11 Start Date: 05/02/2018 17:08

Analysis Batch Number: 516016 End Date: 05/03/2018 04:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-516016/1		05/02/2018 17:08	1	N66512.D	Rtx-624 0.25(mm)
CCVIS 460-516016/3		05/02/2018 17:57	1	N66514.D	Rtx-624 0.25(mm)
LCS 460-516016/4		05/02/2018 18:20	1	N66515.D	Rtx-624 0.25(mm)
ZZZZZ		05/02/2018 18:43	1		Rtx-624 0.25(mm)
MB 460-516016/8		05/02/2018 19:53	1	N66519.D	Rtx-624 0.25(mm)
460-154781-10		05/02/2018 20:24	1	N66520.D	Rtx-624 0.25(mm)
ZZZZZ		05/02/2018 20:47	1		Rtx-624 0.25(mm)
ZZZZZ		05/02/2018 21:10	1		Rtx-624 0.25(mm)
460-154781-9		05/02/2018 21:33	1	N66523.D	Rtx-624 0.25(mm)
460-154781-1		05/03/2018 00:14	1	N66527.D	Rtx-624 0.25(mm)
460-154781-2		05/03/2018 00:37	1	N66528.D	Rtx-624 0.25(mm)
460-154781-3		05/03/2018 01:00	1	N66529.D	Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 01:23	1		Rtx-624 0.25(mm)
460-154781-5		05/03/2018 01:47	1	N66531.D	Rtx-624 0.25(mm)
460-154781-6		05/03/2018 02:10	1	N66532.D	Rtx-624 0.25(mm)
460-154781-7		05/03/2018 02:33	1	N66533.D	Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 02:56	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 03:19	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 03:42	1		Rtx-624 0.25(mm)
460-154781-1 MS		05/03/2018 04:04	1	N66537.D	Rtx-624 0.25(mm)
460-154781-1 MSD		05/03/2018 04:27	1	N66538.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CVOAMS11 Start Date: 05/03/2018 04:45

Analysis Batch Number: 516110 End Date: 05/03/2018 15:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-516110/1		05/03/2018 04:45	1	N66539.D	Rtx-624 0.25(mm)
CCVIS 460-516110/2		05/03/2018 05:08	1	N66540.D	Rtx-624 0.25(mm)
LCS 460-516110/3		05/03/2018 05:31	1	N66541.D	Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 05:54	1		Rtx-624 0.25(mm)
MB 460-516110/7		05/03/2018 07:03	1	N66545.D	Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 07:27	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 07:50	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 08:13	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 08:37	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 08:59	1		Rtx-624 0.25(mm)
460-154828-A-2 MS		05/03/2018 10:08	1	N66553.D	Rtx-624 0.25(mm)
460-154828-B-2 MSD		05/03/2018 10:31	1	N66554.D	Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 11:17	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 11:40	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 12:03	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 12:26	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 12:49	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 13:11	1		Rtx-624 0.25(mm)
460-154781-8		05/03/2018 13:34	1	N66562.D	Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 13:57	1		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 14:43	2		Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 15:05	5		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CVOAMS11 Start Date: 05/03/2018 17:17

Analysis Batch Number: 516299 End Date: 05/04/2018 03:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-516299/1		05/03/2018 17:17	1	N665678.D	Rtx-624 0.25(mm)
CCVIS 460-516299/3		05/03/2018 18:01	1	N665680.D	Rtx-624 0.25(mm)
LCS 460-516299/4		05/03/2018 18:27	1	N665681.D	Rtx-624 0.25(mm)
LCSD 460-516299/5		05/03/2018 18:50	1	N665682.D	Rtx-624 0.25(mm)
MB 460-516299/8		05/03/2018 19:58	1	N665685.D	Rtx-624 0.25(mm)
460-154781-4		05/03/2018 20:30	1	N665686.D	Rtx-624 0.25(mm)
ZZZZZ		05/03/2018 20:53	1		Rtx-624 0.25(mm)
ZZZZZ		05/04/2018 03:24	200		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CVOAMS13 Start Date: 04/20/2018 01:16

Analysis Batch Number: 512577 End Date: 04/20/2018 09:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-512577/1		04/20/2018 01:16	1	P43989.D	Rtx-624 0.25(mm)
STD8 460-512577/3 IC		04/20/2018 02:35	1	P43991.D	Rtx-624 0.25(mm)
STD05 460-512577/4 IC		04/20/2018 03:01	1	P43992.D	Rtx-624 0.25(mm)
STD5 460-512577/6 IC		04/20/2018 03:51	1	P43994.D	Rtx-624 0.25(mm)
STD20 460-512577/7 ICIS		04/20/2018 04:17	1	P43995.D	Rtx-624 0.25(mm)
STD1 460-512577/10 IC		04/20/2018 06:00	1	P43998.D	Rtx-624 0.25(mm)
STD50 460-512577/11 IC		04/20/2018 06:25	1	P43999.D	Rtx-624 0.25(mm)
STD200 460-512577/12 IC		04/20/2018 06:50	1	P44000.D	Rtx-624 0.25(mm)
STD500 460-512577/13 IC		04/20/2018 07:16	1	P44001.D	Rtx-624 0.25(mm)
ICV 460-512577/17		04/20/2018 09:11	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CVOAMS13 Start Date: 05/03/2018 21:30

Analysis Batch Number: 516291 End Date: 05/04/2018 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-516291/1		05/03/2018 21:30	1	P44700.D	Rtx-624 0.25(mm)
CCVIS 460-516291/2		05/03/2018 21:55	1	P44701.D	Rtx-624 0.25(mm)
LCS 460-516291/3		05/03/2018 22:20	1	P44702.D	Rtx-624 0.25(mm)
LCSD 460-516291/4		05/03/2018 22:45	1	P44703.D	Rtx-624 0.25(mm)
MB 460-516291/8		05/04/2018 00:27	1	P44707.D	Rtx-624 0.25(mm)
ZZZZZ		05/04/2018 01:17	1		Rtx-624 0.25(mm)
ZZZZZ		05/04/2018 01:43	1		Rtx-624 0.25(mm)
ZZZZZ		05/04/2018 02:58	1		Rtx-624 0.25(mm)
460-154925-1 MS		05/04/2018 03:24	10	P44714.D	Rtx-624 0.25(mm)
460-154925-1 MSD		05/04/2018 03:49	10	P44715.D	Rtx-624 0.25(mm)
460-154925-8		05/04/2018 05:05	1	P44718.D	Rtx-624 0.25(mm)
460-154925-1		05/04/2018 05:30	1	P44719.D	Rtx-624 0.25(mm)
460-154925-2		05/04/2018 05:55	1	P44720.D	Rtx-624 0.25(mm)
460-154925-3		05/04/2018 06:21	1	P44721.D	Rtx-624 0.25(mm)
460-154925-4		05/04/2018 06:46	1	P44722.D	Rtx-624 0.25(mm)
460-154925-5		05/04/2018 07:11	1	P44723.D	Rtx-624 0.25(mm)
460-154925-6		05/04/2018 07:37	1	P44724.D	Rtx-624 0.25(mm)
460-154925-7		05/04/2018 08:02	1	P44725.D	Rtx-624 0.25(mm)
460-154925-9		05/04/2018 08:27	1	P44726.D	Rtx-624 0.25(mm)
460-154925-10		05/04/2018 08:52	1	P44727.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CVOAMS13 Start Date: 05/04/2018 09:13

Analysis Batch Number: 516419 End Date: 05/04/2018 20:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-516419/1		05/04/2018 09:13	1	P44728.D	Rtx-624 0.25(mm)
CCVIS 460-516419/2		05/04/2018 09:38	1	P44729.D	Rtx-624 0.25(mm)
LCS 460-516419/4		05/04/2018 10:29	1	P44731.D	Rtx-624 0.25(mm)
MB 460-516419/7		05/04/2018 12:05	1	P44734.D	Rtx-624 0.25(mm)
LCSD 460-516419/13		05/04/2018 14:49	1	P44740.D	Rtx-624 0.25(mm)
460-154925-12		05/04/2018 17:32	1	P44746.D	Rtx-624 0.25(mm)
ZZZZZ		05/04/2018 20:04	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CVOAMS13 Start Date: 05/04/2018 22:05

Analysis Batch Number: 516607 End Date: 05/05/2018 06:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-516607/1		05/04/2018 22:05	1	P44757.D	Rtx-624 0.25(mm)
CCVIS 460-516607/3		05/04/2018 22:58	1	P44759.D	Rtx-624 0.25(mm)
LCS 460-516607/5		05/04/2018 23:50	1	P44761.D	Rtx-624 0.25(mm)
ZZZZZ		05/05/2018 00:16	1		Rtx-624 0.25(mm)
MB 460-516607/10		05/05/2018 01:57	1	P44766.D	Rtx-624 0.25(mm)
460-154925-11		05/05/2018 02:22	1	P44767.D	Rtx-624 0.25(mm)
ZZZZZ		05/05/2018 02:48	1		Rtx-624 0.25(mm)
460-155023-B-1 MS		05/05/2018 04:04	10	P44771.D	Rtx-624 0.25(mm)
460-155023-B-1 MSD		05/05/2018 04:29	10	P44772.D	Rtx-624 0.25(mm)
ZZZZZ		05/05/2018 05:45	1		Rtx-624 0.25(mm)
ZZZZZ		05/05/2018 06:10	1		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 516016 Batch Start Date: 05/02/18 17:08 Batch Analyst: Tupayachi, Audberto

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260ISNEW 00120	8260MIX1COMB 00079	8260SURR250 00171	ACROLEIN W 00076
BFB 460-516016/1		8260C		5 mL	0				
CCVIS 460-516016/3		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCS 460-516016/4		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
MB 460-516016/8		8260C		5 mL	5 mL	1 uL		1 uL	
460-154781-B-10	GC-TB-20180425	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154781-B-9	GC-Equipment Blank	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154781-B-1	GC-MW-107(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154781-B-2	GC-MW-107D(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154781-B-3	GC-MW-108(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154781-B-5	GC-MW-103(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154781-B-6	GC-MW-104(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154781-B-7	GC-MW-105(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154781-B-1 MS	GC-MW-107(WG)	8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-154781-B-1 MSD	GC-MW-107(WG)	8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00016	GASES Li 00258				
BFB 460-516016/1		8260C		1 uL					
CCVIS 460-516016/3		8260C			20 uL				
LCS 460-516016/4		8260C			20 uL				
MB 460-516016/8		8260C							
460-154781-B-10	GC-TB-20180425	8260C	T						
460-154781-B-9	GC-Equipment Blank	8260C	T						
460-154781-B-1	GC-MW-107(WG)	8260C	T						
460-154781-B-2	GC-MW-107D(WG)	8260C	T						
460-154781-B-3	GC-MW-108(WG)	8260C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 516016 Batch Start Date: 05/02/18 17:08 Batch Analyst: Tupayachi, Audberto

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00016	GASES Li 00258				
460-154781-B-5	GC-MW-103(WG)	8260C	T						
460-154781-B-6	GC-MW-104(WG)	8260C	T						
460-154781-B-7	GC-MW-105(WG)	8260C	T						
460-154781-B-1 MS	GC-MW-107(WG)	8260C	T		20 uL				
460-154781-B-1 MSD	GC-MW-107(WG)	8260C	T		20 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 516110 Batch Start Date: 05/03/18 04:45 Batch Analyst: Tupayachi, Audberto

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260ISNEW 00120	8260MIX1COMB 00079	8260SURR250 00171	ACROLEIN W 00076
BFB 460-516110/1		8260C		5 mL	0				
CCVIS 460-516110/2		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCS 460-516110/3		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
MB 460-516110/7		8260C		5 mL	5 mL	1 uL		1 uL	
460-154828-A-2 MS	MW-10	8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-154828-B-2 MSD	MW-10	8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-154781-B-8	GC-DRAIN(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00016	GASES Li 00258				
BFB 460-516110/1		8260C		1 uL					
CCVIS 460-516110/2		8260C			20 uL				
LCS 460-516110/3		8260C			20 uL				
MB 460-516110/7		8260C							
460-154828-A-2 MS	MW-10	8260C	T		20 uL				
460-154828-B-2 MSD	MW-10	8260C	T		20 uL				
460-154781-B-8	GC-DRAIN(WG)	8260C	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 516291 Batch Start Date: 05/03/18 21:30 Batch Analyst: Starzec, Margaret

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260ISNEW 00121	8260MIX1COMB 00079	8260SURR250 00174	ACROLEIN W 00076
BFB 460-516291/1		8260C		5 mL	5 mL				
CCVIS 460-516291/2		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCS 460-516291/3		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCSD 460-516291/4		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
MB 460-516291/8		8260C		5 mL	5 mL	1 uL		1 uL	
460-154925-A-1 MS	GC-MW-102(WG)	8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-154925-A-1 MSD	GC-MW-102(WG)	8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-154925-B-8	GC-TB-20180426	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-1	GC-MW-102(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-2	GC-MW-109(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-3	GC-MW-109M(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-4	GC-MW-101(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-5	GC-MW-101D(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-6	GC-MW-106(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-7	GC-MW-3(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-9	GC-Equipment Blank-2	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-154925-B-10	GC-MW-110(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00016	GASES Li 00258				
BFB 460-516291/1		8260C		1 uL					
CCVIS 460-516291/2		8260C			20 uL				
LCS 460-516291/3		8260C			20 uL				
LCSD 460-516291/4		8260C			20 uL				
MB 460-516291/8		8260C							
460-154925-A-1 MS	GC-MW-102(WG)	8260C	T		20 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 516291 Batch Start Date: 05/03/18 21:30 Batch Analyst: Starzec, Margaret

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00016	GASES Li 00258				
460-154925-A-1 MSD	GC-MW-102(WG)	8260C	T		20 uL				
460-154925-B-8	GC-TB-20180426	8260C	T						
460-154925-B-1	GC-MW-102(WG)	8260C	T						
460-154925-B-2	GC-MW-109(WG)	8260C	T						
460-154925-B-3	GC-MW-109M(WG)	8260C	T						
460-154925-B-4	GC-MW-101(WG)	8260C	T						
460-154925-B-5	GC-MW-101D(WG)	8260C	T						
460-154925-B-6	GC-MW-106(WG)	8260C	T						
460-154925-B-7	GC-MW-3(WG)	8260C	T						
460-154925-B-9	GC-Equipment Blank-2	8260C	T						
460-154925-B-10	GC-MW-110(WG)	8260C	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 516299 Batch Start Date: 05/03/18 17:17 Batch Analyst: Tupayachi, Audberto

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260ISNEW 00120	8260MIX1COMB 00079	8260SURR250 00171	ACROLEIN W 00076
BFB 460-516299/1		8260C		5 mL	0				
CCVIS 460-516299/3		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCS 460-516299/4		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCSD 460-516299/5		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
MB 460-516299/8		8260C		5 mL	5 mL	1 uL		1 uL	
460-154781-C-4	GC-MW-1B(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00016	GASES Li 00258				
BFB 460-516299/1		8260C		1 uL					
CCVIS 460-516299/3		8260C			20 uL				
LCS 460-516299/4		8260C			20 uL				
LCSD 460-516299/5		8260C			20 uL				
MB 460-516299/8		8260C							
460-154781-C-4	GC-MW-1B(WG)	8260C	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 516419 Batch Start Date: 05/04/18 09:13 Batch Analyst: Starzec, Margaret

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260ISNEW 00121	8260MIX1COMB 00079	8260SURR250 00174	ACROLEIN W 00076
BFB 460-516419/1		8260C		5 mL	5 mL				
CCVIS 460-516419/2		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCS 460-516419/4		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
MB 460-516419/7		8260C		5 mL	5 mL	1 uL		1 uL	
LCSD 460-516419/13		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-154925-B-12	GC-MW-2(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00016	GASES Li 00258				
BFB 460-516419/1		8260C		1 uL					
CCVIS 460-516419/2		8260C			20 uL				
LCS 460-516419/4		8260C			20 uL				
MB 460-516419/7		8260C							
LCSD 460-516419/13		8260C			20 uL				
460-154925-B-12	GC-MW-2(WG)	8260C	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 516607 Batch Start Date: 05/04/18 22:05 Batch Analyst: Chu, Jia-min X

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260ISNEW 00121	8260MIX1COMB 00079	8260SURR250 00174	ACROLEIN W 00076
BFB 460-516607/1		8260C		5 mL	5 mL				
CCVIS 460-516607/3		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCS 460-516607/5		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
MB 460-516607/10		8260C		5 mL	5 mL	1 uL		1 uL	
460-154925-C-11	GC-MW-110D(WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-155023-B-1 MS		8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-155023-B-1 MSD		8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00016	GASES Li 00258				
BFB 460-516607/1		8260C		1 uL					
CCVIS 460-516607/3		8260C			20 uL				
LCS 460-516607/5		8260C			20 uL				
MB 460-516607/10		8260C							
460-154925-C-11	GC-MW-110D(WG)	8260C	T						
460-155023-B-1 MS		8260C	T		20 uL				
460-155023-B-1 MSD		8260C	T		20 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8270D_SIM_MS_ID

Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DXE #
GC-MW-107(WG)	460-154781-1	44
GC-MW-107D(WG)	460-154781-2	43
GC-MW-108(WG)	460-154781-3	41
GC-MW-1B(WG)	460-154781-4	37
GC-MW-103(WG)	460-154781-5	49
GC-MW-104(WG)	460-154781-6	42
GC-MW-105(WG)	460-154781-7	37
GC-DRAIN(WG)	460-154781-8	43
GC-Equipment Blank	460-154781-9	75
GC-MW-102(WG)	460-154925-1	41
GC-MW-109(WG)	460-154925-2	40
GC-MW-109M(WG)	460-154925-3	35
GC-MW-101(WG)	460-154925-4	41
GC-MW-101D(WG)	460-154925-5	39
GC-MW-106(WG)	460-154925-6	40
GC-MW-3(WG)	460-154925-7	42
GC-Equipment Blank-2	460-154925-9	37
GC-MW-110(WG)	460-154925-10	41
GC-MW-110D(WG)	460-154925-11	38
GC-MW-2(WG)	460-154925-12	34
	MB 460-515403/1-A	44
GC-MW-107(WG) MS	460-154781-1 MS	37
GC-MW-107(WG) MSD	460-154781-1 MSD	37

	QC LIMITS
DXE = 1,4-Dioxane-d8	10-150

Column to be used to flag recovery values

FORM II 8270D SIM ID

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DXE #
	LCS 460-515403/2-A	39

	QC LIMITS
DXE = 1,4-Dioxane-d8	10-200

Column to be used to flag recovery values

FORM II 8270D SIM ID

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C28858.D

Lab ID: LCS 460-515403/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	1.60	1.68	105	10-200	
1,4-Dioxane-d8	32.0	12.6	39	10-200	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C28860.D

Lab ID: 460-154781-1 MS Client ID: GC-MW-107(WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	1.63	0.20 U	1.71	105	70-130	
1,4-Dioxane-d8	32.7	14	12.2	37	10-150	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C28861.D

Lab ID: 460-154781-1 MSD Client ID: GC-MW-107(WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	1.63	1.63	100	4	20	70-130	
1,4-Dioxane-d8	32.7	12.2	37			10-150	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: C28857.D Lab Sample ID: MB 460-515403/1-A

Matrix: Water Date Extracted: 04/30/2018 15:53

Instrument ID: CBNAMS13 Date Analyzed: 04/30/2018 20:19

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-515403/2-A	C28858.D	04/30/2018 20:36
GC-MW-107(WG)	460-154781-1	C28859.D	04/30/2018 20:54
GC-MW-107(WG) MS	460-154781-1 MS	C28860.D	04/30/2018 21:12
GC-MW-107(WG) MSD	460-154781-1 MSD	C28861.D	04/30/2018 21:30
GC-MW-107D(WG)	460-154781-2	C28862.D	04/30/2018 21:48
GC-MW-108(WG)	460-154781-3	C28863.D	04/30/2018 22:05
GC-MW-1B(WG)	460-154781-4	C28864.D	04/30/2018 22:23
GC-MW-103(WG)	460-154781-5	C28865.D	04/30/2018 22:41
GC-MW-104(WG)	460-154781-6	C28866.D	04/30/2018 22:59
GC-MW-105(WG)	460-154781-7	C28867.D	04/30/2018 23:16
GC-Equipment Blank	460-154781-9	C28868.D	04/30/2018 23:34
GC-DRAIN(WG)	460-154781-8	C28869.D	04/30/2018 23:52
GC-MW-102(WG)	460-154925-1	C28870.D	05/01/2018 00:10
GC-MW-109(WG)	460-154925-2	C28871.D	05/01/2018 00:27
GC-MW-109M(WG)	460-154925-3	C28872.D	05/01/2018 00:45
GC-MW-101(WG)	460-154925-4	C28873.D	05/01/2018 01:03
GC-MW-101D(WG)	460-154925-5	C28874.D	05/01/2018 01:21
GC-MW-106(WG)	460-154925-6	C28875.D	05/01/2018 01:39
GC-MW-3(WG)	460-154925-7	C28876.D	05/01/2018 01:56
GC-Equipment Blank-2	460-154925-9	C28877.D	05/01/2018 02:14
GC-MW-110(WG)	460-154925-10	C28878.D	05/01/2018 02:32
GC-MW-110D(WG)	460-154925-11	C28879.D	05/01/2018 02:50
GC-MW-2(WG)	460-154925-12	C28880.D	05/01/2018 03:07

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: C28845.D DFTPP Injection Date: 04/30/2018

Instrument ID: CBNAMS13 DFTPP Injection Time: 09:04

Analysis Batch No.: 515312

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	45.7	
68	Less than 2.0 % of mass 69	0.8	(1.9) 1
69	Mass 69 relative abundance	44.7	
70	Less than 2.0 % of mass 69	0.3	(0.7) 1
127	40.0 - 60.0 % of mass 198	51.3	
197	Less than 1.0 % of mass 198	0.4	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.9	
275	10.0 - 30.0 % of mass 198	25.4	
365	Greater than 1.0 % of mass 198	3.1	
441	Present but less than mass 443	11.7	(81.7) 3
442	Greater than 40.0 % of mass 198	76.8	
443	17.0 - 23.0 % of mass 442	14.3	(18.6) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 460-515312/2	C28846A.D	04/30/2018	09:40
	STD8 460-515312/3	C28847.D	04/30/2018	10:03
	STD7 460-515312/4	C28848.D	04/30/2018	10:21
	STD6 460-515312/5	C28849.D	04/30/2018	10:38
	STD4 460-515312/6	C28850.D	04/30/2018	10:56
	STD3 460-515312/7	C28851.D	04/30/2018	11:14
	STD2 460-515312/8	C28852.D	04/30/2018	11:32
	STD1 460-515312/9	C28853.D	04/30/2018	11:50

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: C28855.D DFTPP Injection Date: 04/30/2018

Instrument ID: CBNAMS13 DFTPP Injection Time: 19:42

Analysis Batch No.: 515424

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	43.2
68	Less than 2.0 % of mass 69	0.6 (1.5) 1
69	Mass 69 relative abundance	42.2
70	Less than 2.0 % of mass 69	0.2 (0.5) 1
127	40.0 - 60.0 % of mass 198	49.7
197	Less than 1.0 % of mass 198	0.5
198	Base Peak, 100 % relative abundance	100.0
199	5.0- 9.0 % of mass 198	6.4
275	10.0 - 30.0 % of mass 198	24.4
365	Greater than 1.0 % of mass 198	2.7
441	Present but less than mass 443	12.7 (83.5) 3
442	Greater than 40.0 % of mass 198	79.7
443	17.0 - 23.0 % of mass 442	15.2 (19.1) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-515424/2	C28856.D	04/30/2018	20:01
	MB 460-515403/1-A	C28857.D	04/30/2018	20:19
	LCS 460-515403/2-A	C28858.D	04/30/2018	20:36
GC-MW-107(WG)	460-154781-1	C28859.D	04/30/2018	20:54
GC-MW-107(WG) MS	460-154781-1 MS	C28860.D	04/30/2018	21:12
GC-MW-107(WG) MSD	460-154781-1 MSD	C28861.D	04/30/2018	21:30
GC-MW-107D(WG)	460-154781-2	C28862.D	04/30/2018	21:48
GC-MW-108(WG)	460-154781-3	C28863.D	04/30/2018	22:05
GC-MW-1B(WG)	460-154781-4	C28864.D	04/30/2018	22:23
GC-MW-103(WG)	460-154781-5	C28865.D	04/30/2018	22:41
GC-MW-104(WG)	460-154781-6	C28866.D	04/30/2018	22:59
GC-MW-105(WG)	460-154781-7	C28867.D	04/30/2018	23:16
GC-Equipment Blank	460-154781-9	C28868.D	04/30/2018	23:34
GC-DRAIN(WG)	460-154781-8	C28869.D	04/30/2018	23:52
GC-MW-102(WG)	460-154925-1	C28870.D	05/01/2018	00:10
GC-MW-109(WG)	460-154925-2	C28871.D	05/01/2018	00:27
GC-MW-109M(WG)	460-154925-3	C28872.D	05/01/2018	00:45
GC-MW-101(WG)	460-154925-4	C28873.D	05/01/2018	01:03
GC-MW-101D(WG)	460-154925-5	C28874.D	05/01/2018	01:21
GC-MW-106(WG)	460-154925-6	C28875.D	05/01/2018	01:39
GC-MW-3(WG)	460-154925-7	C28876.D	05/01/2018	01:56
GC-Equipment Blank-2	460-154925-9	C28877.D	05/01/2018	02:14
GC-MW-110(WG)	460-154925-10	C28878.D	05/01/2018	02:32
GC-MW-110D(WG)	460-154925-11	C28879.D	05/01/2018	02:50

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab File ID: C28855.D DFTPP Injection Date: 04/30/2018

Instrument ID: CBNAMS13 DFTPP Injection Time: 19:42

Analysis Batch No.: 515424

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	43.2	
68	Less than 2.0 % of mass 69	0.6	(1.5) 1
69	Mass 69 relative abundance	42.2	
70	Less than 2.0 % of mass 69	0.2	(0.5) 1
127	40.0 - 60.0 % of mass 198	49.7	
197	Less than 1.0 % of mass 198	0.5	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.4	
275	10.0 - 30.0 % of mass 198	24.4	
365	Greater than 1.0 % of mass 198	2.7	
441	Present but less than mass 443	12.7	(83.5) 3
442	Greater than 40.0 % of mass 198	79.7	
443	17.0 - 23.0 % of mass 442	15.2	(19.1) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
GC-MW-2(WG)	460-154925-12	C28880.D	05/01/2018	03:07

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Sample No.: CCVIS 460-515424/2 Date Analyzed: 04/30/2018 20:01

Instrument ID: CBNAMS13 GC Column: Rtxi-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): C28856.D Heated Purge: (Y/N) N

Calibration ID: 68194

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		480682	6.43				
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 460-515403/1-A		449883	6.43				
LCS 460-515403/2-A		418716	6.43				
460-154781-1	GC-MW-107(WG)	390787	6.43				
460-154781-1 MS	GC-MW-107(WG) MS	437774	6.43				
460-154781-1 MSD	GC-MW-107(WG) MSD	436446	6.43				
460-154781-2	GC-MW-107D(WG)	463434	6.43				
460-154781-3	GC-MW-108(WG)	424701	6.43				
460-154781-4	GC-MW-1B(WG)	447946	6.43				
460-154781-5	GC-MW-103(WG)	389633	6.43				
460-154781-6	GC-MW-104(WG)	465580	6.43				
460-154781-7	GC-MW-105(WG)	443136	6.43				
460-154781-9	GC-Equipment Blank	391294	6.43				
460-154781-8	GC-DRAIN(WG)	407219	6.43				
460-154925-1	GC-MW-102(WG)	437998	6.43				
460-154925-2	GC-MW-109(WG)	418338	6.43				
460-154925-3	GC-MW-109M(WG)	403925	6.43				
460-154925-4	GC-MW-101(WG)	440827	6.43				
460-154925-5	GC-MW-101D(WG)	424804	6.43				
460-154925-6	GC-MW-106(WG)	433380	6.43				
460-154925-7	GC-MW-3(WG)	437715	6.43				
460-154925-9	GC-Equipment Blank-2	437094	6.43				
460-154925-10	GC-MW-110(WG)	426567	6.43				
460-154925-11	GC-MW-110D(WG)	428812	6.43				
460-154925-12	GC-MW-2(WG)	459246	6.43				

Column used to flag values outside QC limits

FORM VIII 8270D SIM ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) | Lab Sample ID: 460-154781-1

Matrix: Water | Lab File ID: C28859.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 10:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 04/30/2018 20:54

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	44		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28859.D
Lims ID: 460-154781-F-1-C
Client ID: GC-MW-107(WG)
Sample Type: Client
Inject. Date: 30-Apr-2018 20:54:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-005
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 13:23:47 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1000321	1.76	44.0	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	97	390787	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

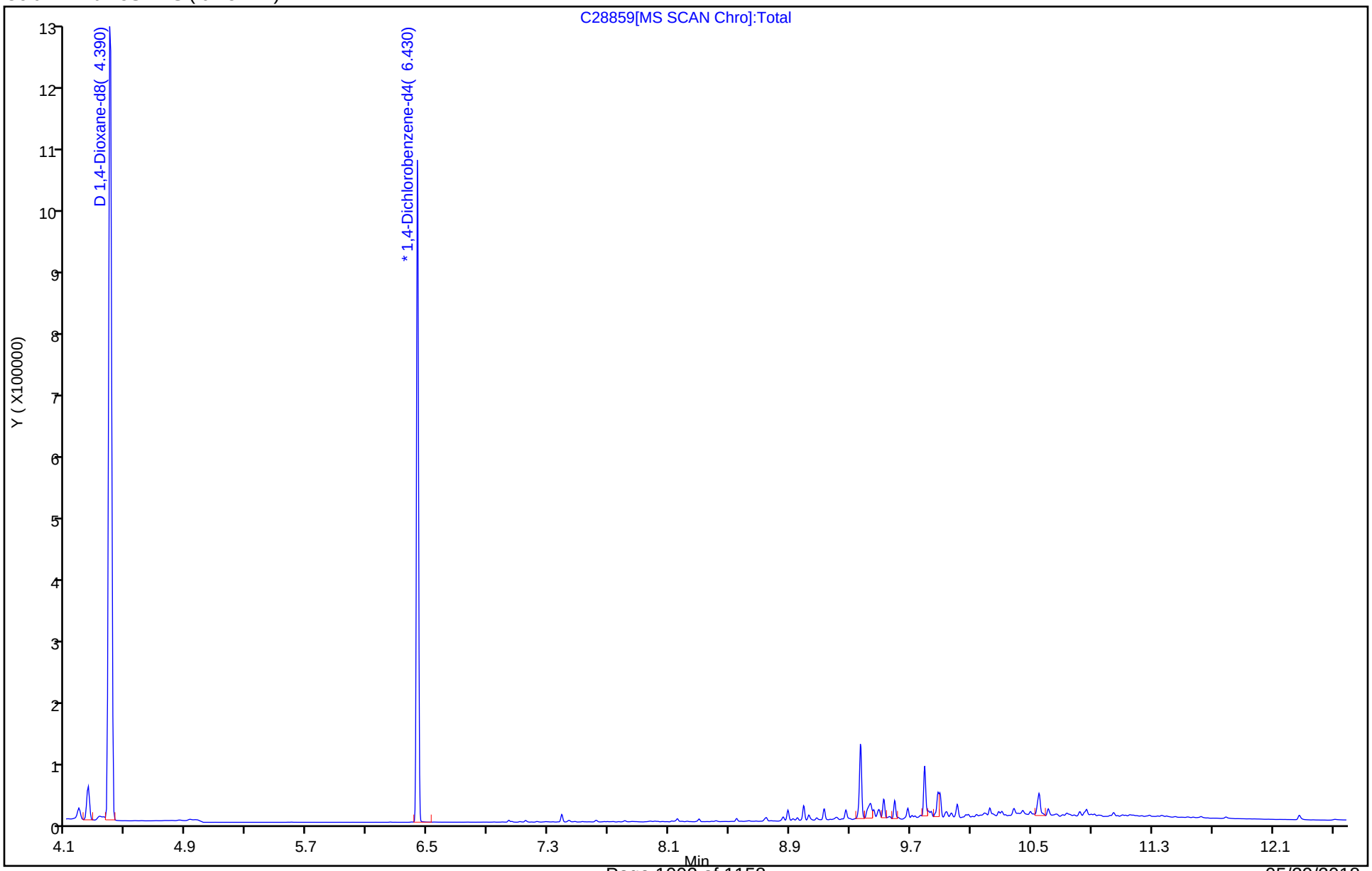
Report Date: 01-May-2018 13:23:48 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28859.D

Injection Date:	30-Apr-2018 20:54:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-F-1-C	Lab Sample ID:	460-154781-1	Worklist Smp#:	5
Client ID:	GC-MW-107(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

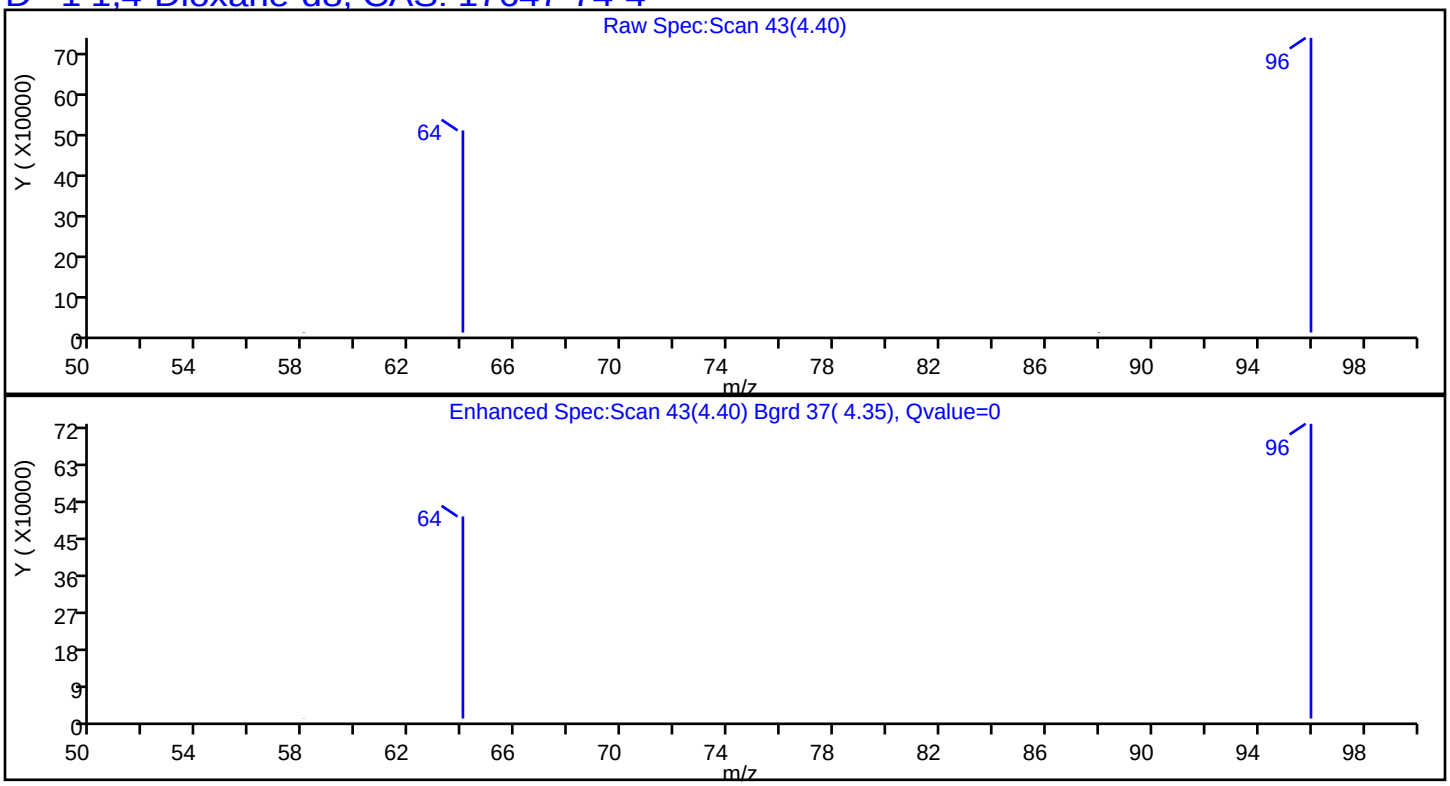
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28859.D				
Injection Date:	30-Apr-2018 20:54:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154781-F-1-C	Lab Sample ID:	460-154781-1		
Client ID:	GC-MW-107(WG)				
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



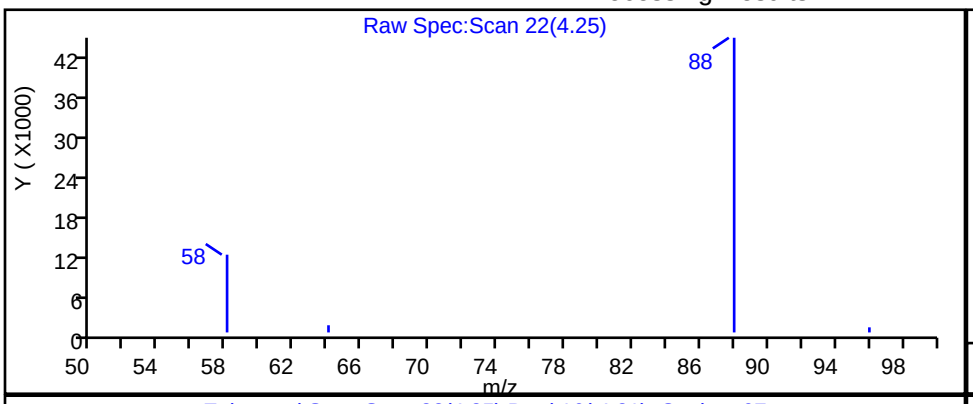
User Disabled Compound Report

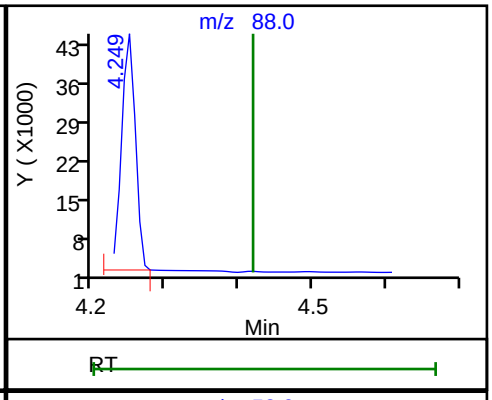
TestAmerica Edison

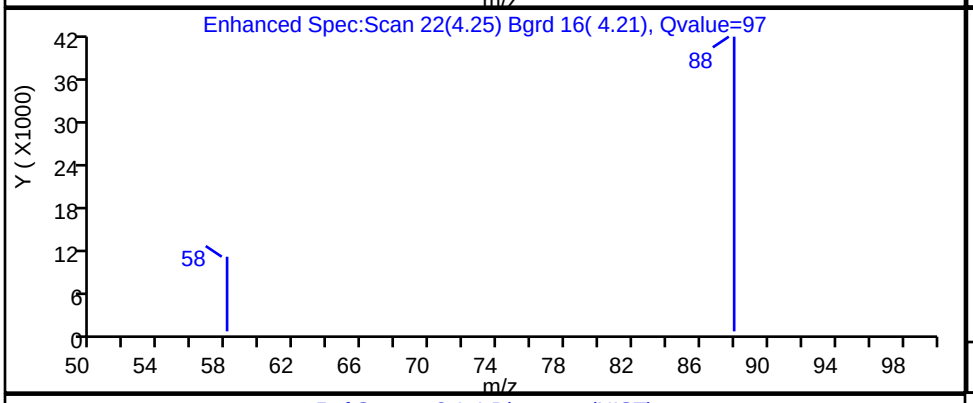
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28859.D		
Injection Date:	30-Apr-2018 20:54:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-F-1-C	Lab Sample ID:	460-154781-1
Client ID:	GC-MW-107(WG)		
Operator ID:		ALS Bottle#:	5 Worklist Smp#: 5
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

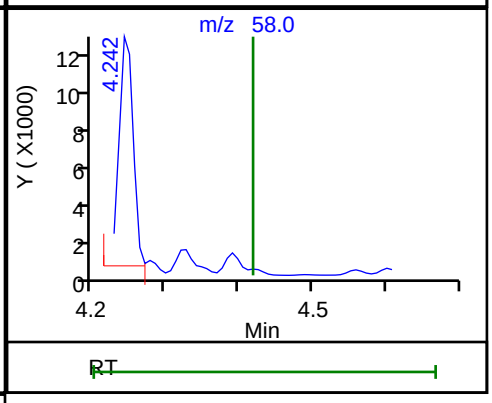
2 1,4-Dioxane, CAS: 123-91-1

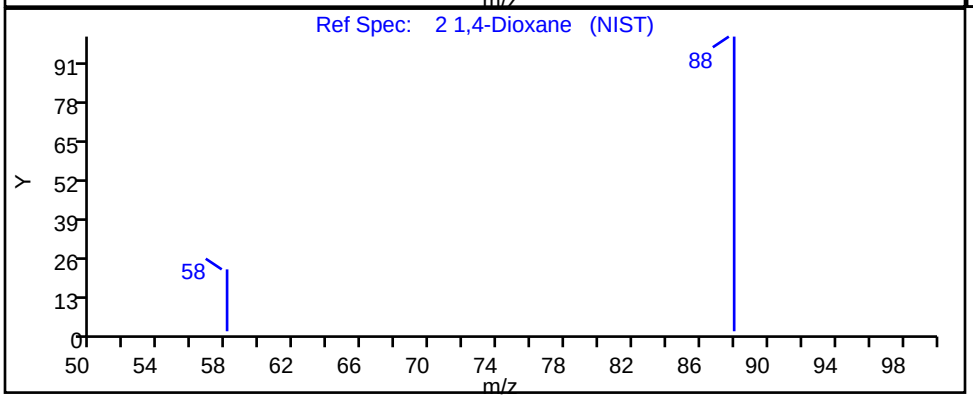
Processing Results











RT	Mass	Response	Amount
4.25	88.00	56305	0.181236
4.24	58.00	15854	

Reviewer: khlungprakhons, 01-May-2018 17:11:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 460-154781-2

Matrix: Water | Lab File ID: C28862.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 11:15

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 04/30/2018 21:48

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	43		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28862.D
Lims ID: 460-154781-E-2-A
Client ID: GC-MW-107D(WG)
Sample Type: Client
Inject. Date: 30-Apr-2018 21:48:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-008
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:12:51

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1171834	1.74	43.5	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	463434	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

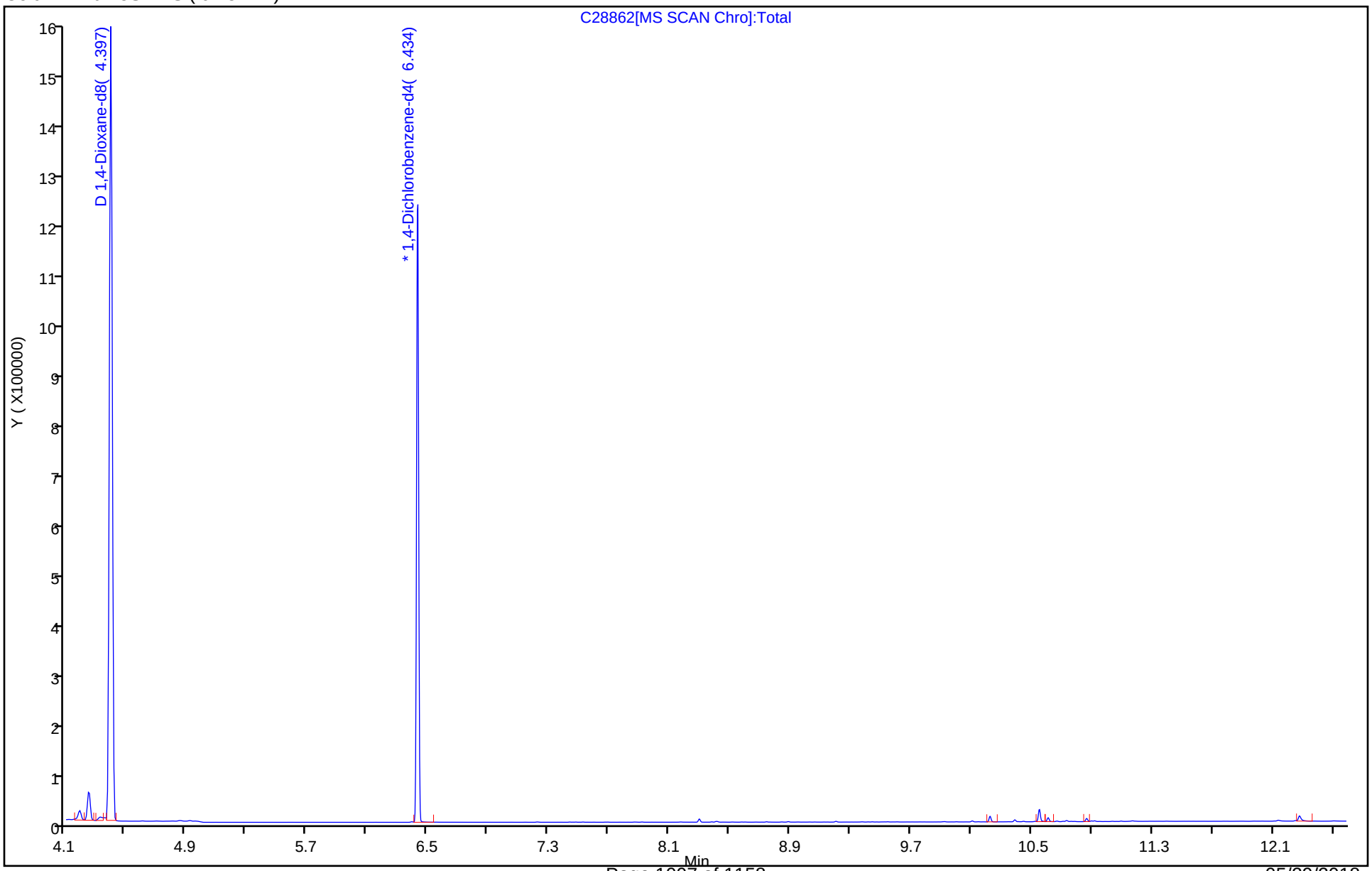
Report Date: 01-May-2018 10:25:42 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28862.D

Injection Date:	30-Apr-2018 21:48:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-E-2-A	Lab Sample ID:	460-154781-2	Worklist Smp#:	8
Client ID:	GC-MW-107D(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

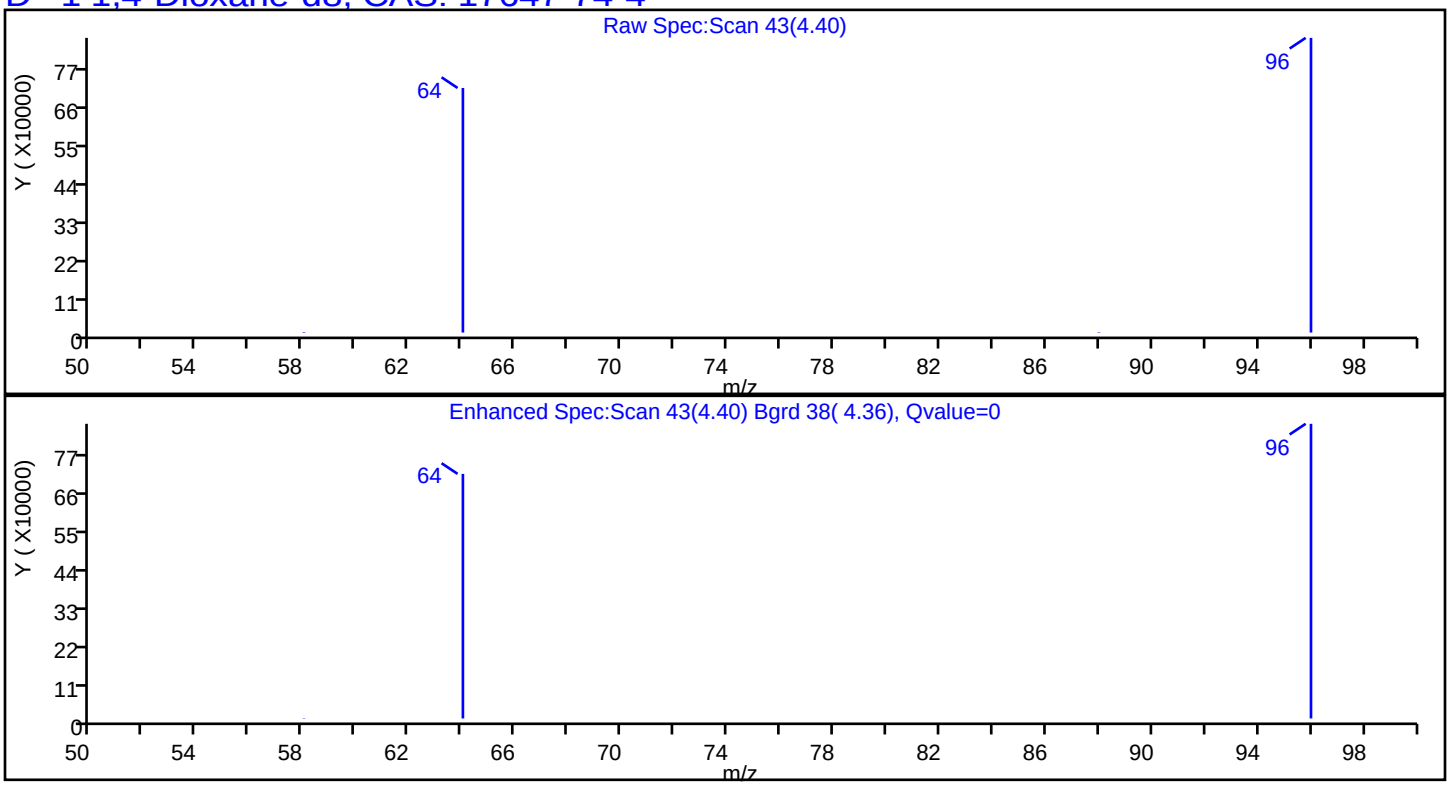
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28862.D				
Injection Date:	30-Apr-2018 21:48:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154781-E-2-A	Lab Sample ID:	460-154781-2		
Client ID:	GC-MW-107D(WG)				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



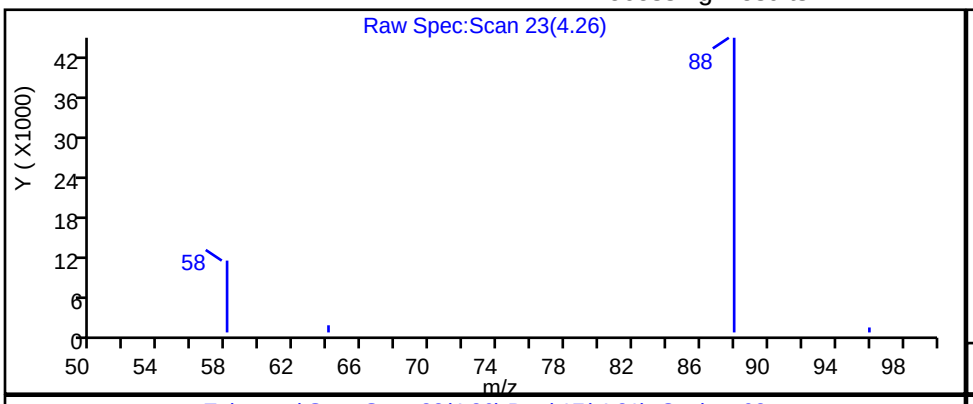
User Disabled Compound Report

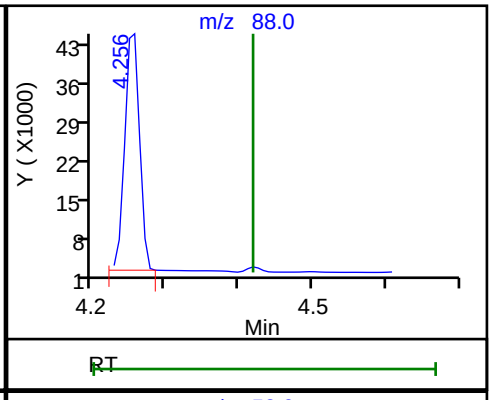
TestAmerica Edison

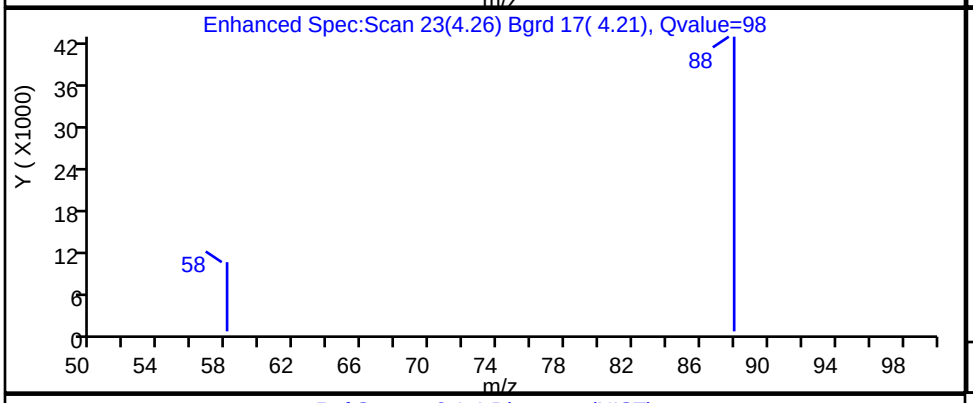
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28862.D		
Injection Date:	30-Apr-2018 21:48:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-E-2-A	Lab Sample ID:	460-154781-2
Client ID:	GC-MW-107D(WG)		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 8
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

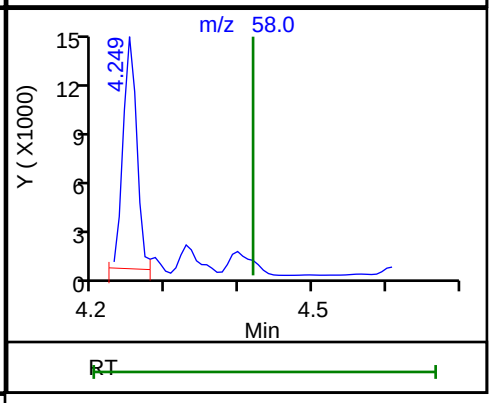
2 1,4-Dioxane, CAS: 123-91-1

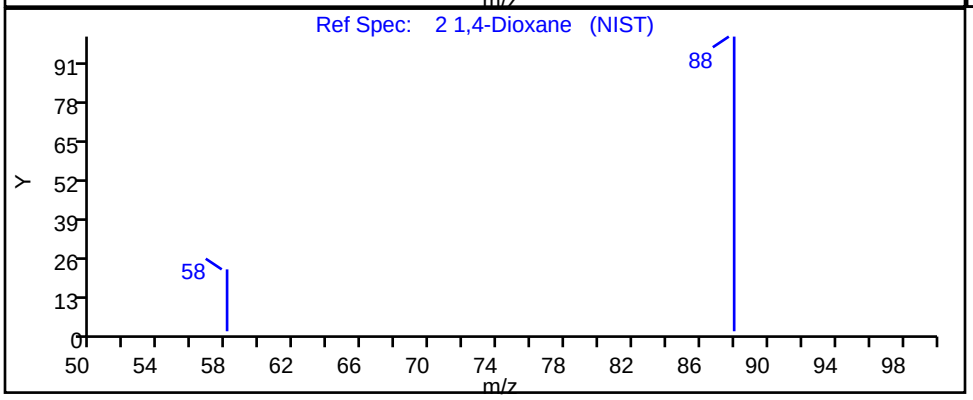
Processing Results











RT	Mass	Response	Amount
4.26	88.00	60652	0.166654
4.25	58.00	17580	

Reviewer: khlungprakhons, 01-May-2018 17:12:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 460-154781-3

Matrix: Water | Lab File ID: C28863.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 11:50

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 04/30/2018 22:05

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28863.D
Lims ID: 460-154781-E-3-A
Client ID: GC-MW-108(WG)
Sample Type: Client
Inject. Date: 30-Apr-2018 22:05:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-009
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:13:04

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1010185	1.64	40.9	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	424701	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

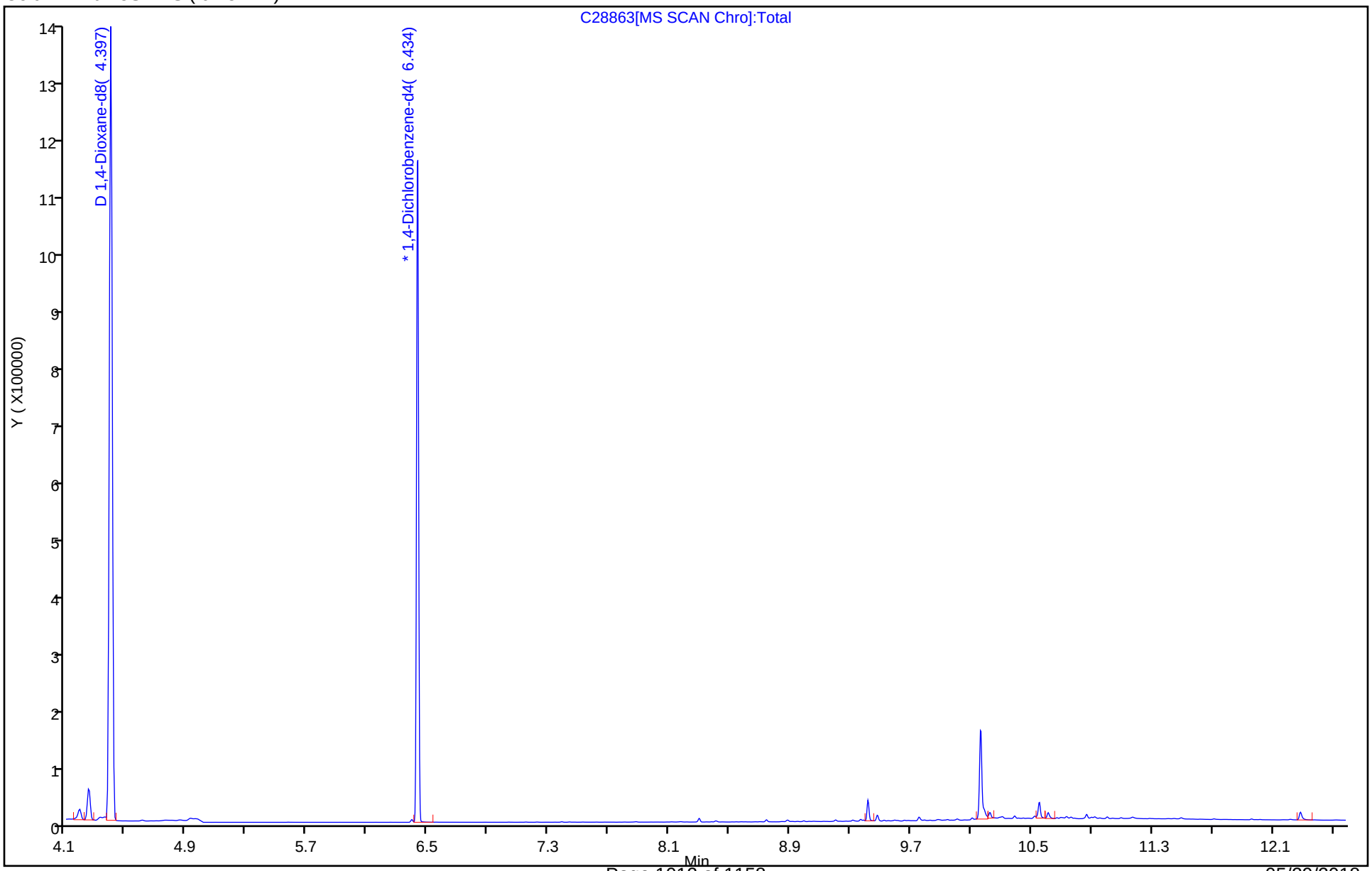
Report Date: 01-May-2018 10:25:45 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28863.D

Injection Date:	30-Apr-2018 22:05:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-E-3-A	Lab Sample ID:	460-154781-3	Worklist Smp#:	9
Client ID:	GC-MW-108(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

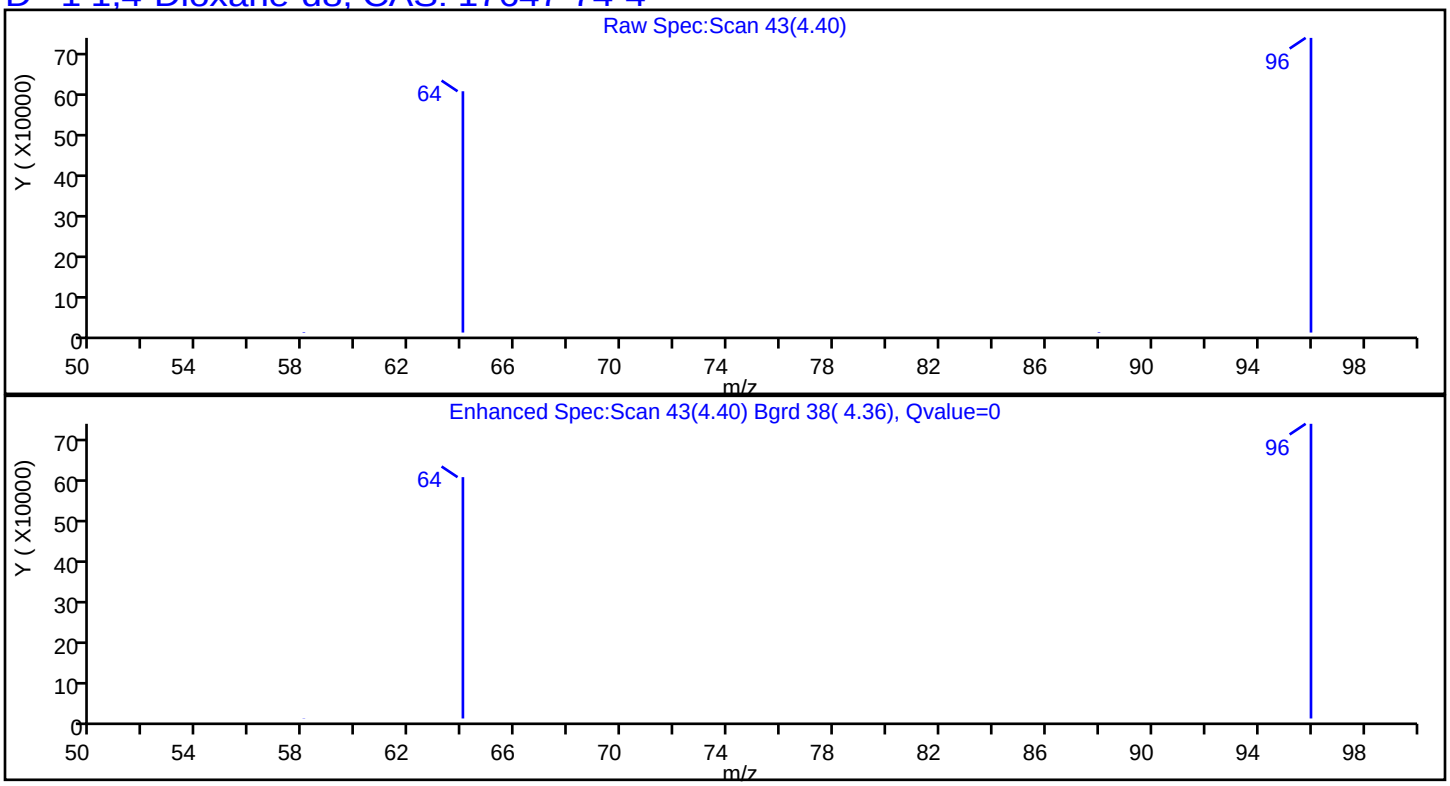
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28863.D		
Injection Date:	30-Apr-2018 22:05:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-E-3-A	Lab Sample ID:	460-154781-3
Client ID:	GC-MW-108(WG)		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 9
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



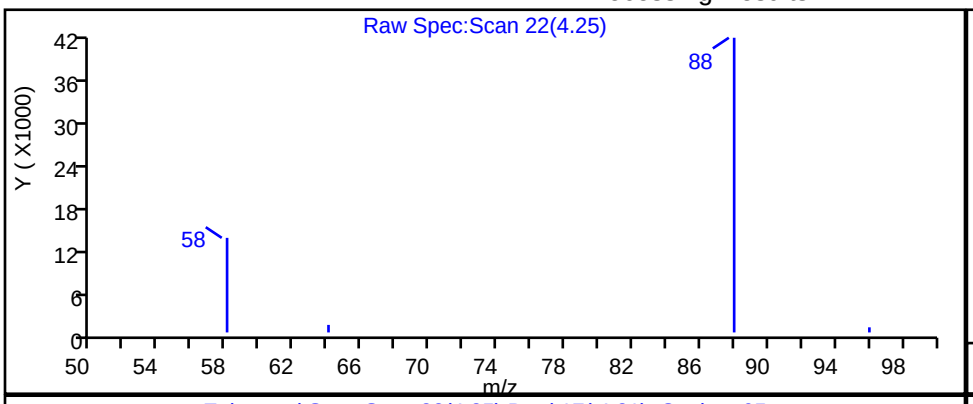
User Disabled Compound Report

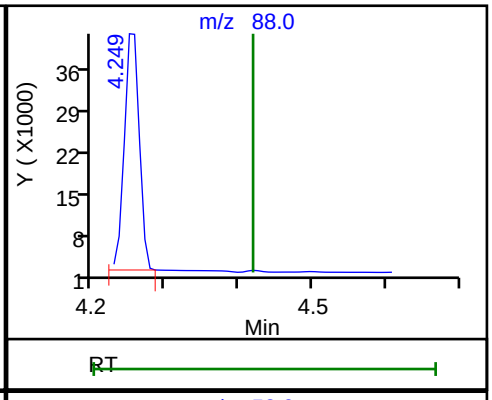
TestAmerica Edison

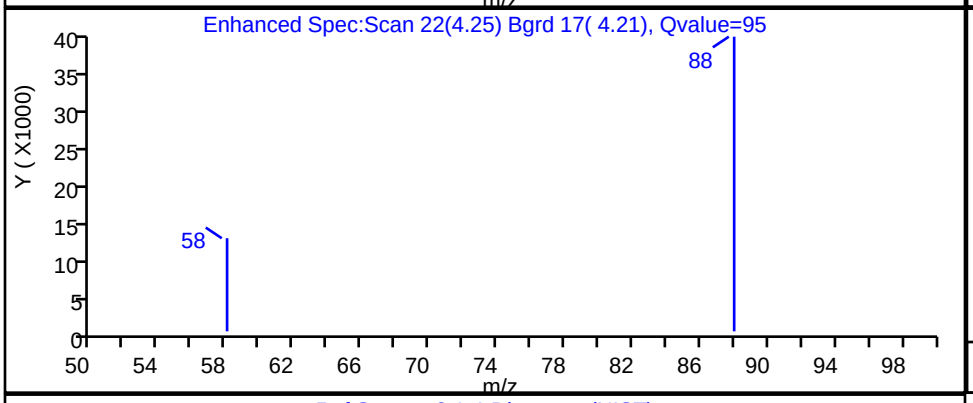
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28863.D		
Injection Date:	30-Apr-2018 22:05:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-E-3-A	Lab Sample ID:	460-154781-3
Client ID:	GC-MW-108(WG)		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 9
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

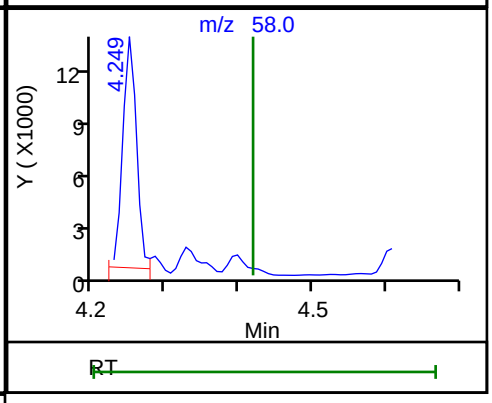
2 1,4-Dioxane, CAS: 123-91-1

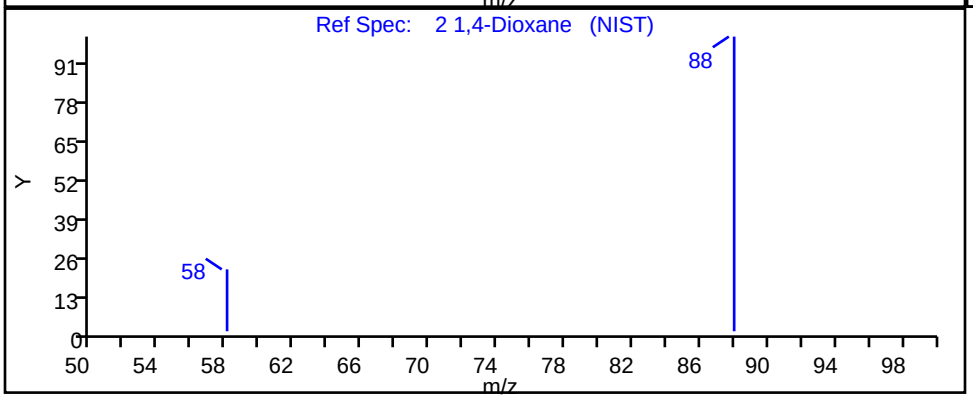
Processing Results











RT	Mass	Response	Amount
4.25	88.00	56966	0.181573
4.25	58.00	16566	

Reviewer: khlungprakhons, 01-May-2018 17:13:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 460-154781-4

Matrix: Water | Lab File ID: C28864.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 12:35

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 04/30/2018 22:23

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28864.D
Lims ID: 460-154781-E-4-A
Client ID: GC-MW-1B(WG)
Sample Type: Client
Inject. Date: 30-Apr-2018 22:23:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-010
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:13:16

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	963455	1.48	37.0	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	447946	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

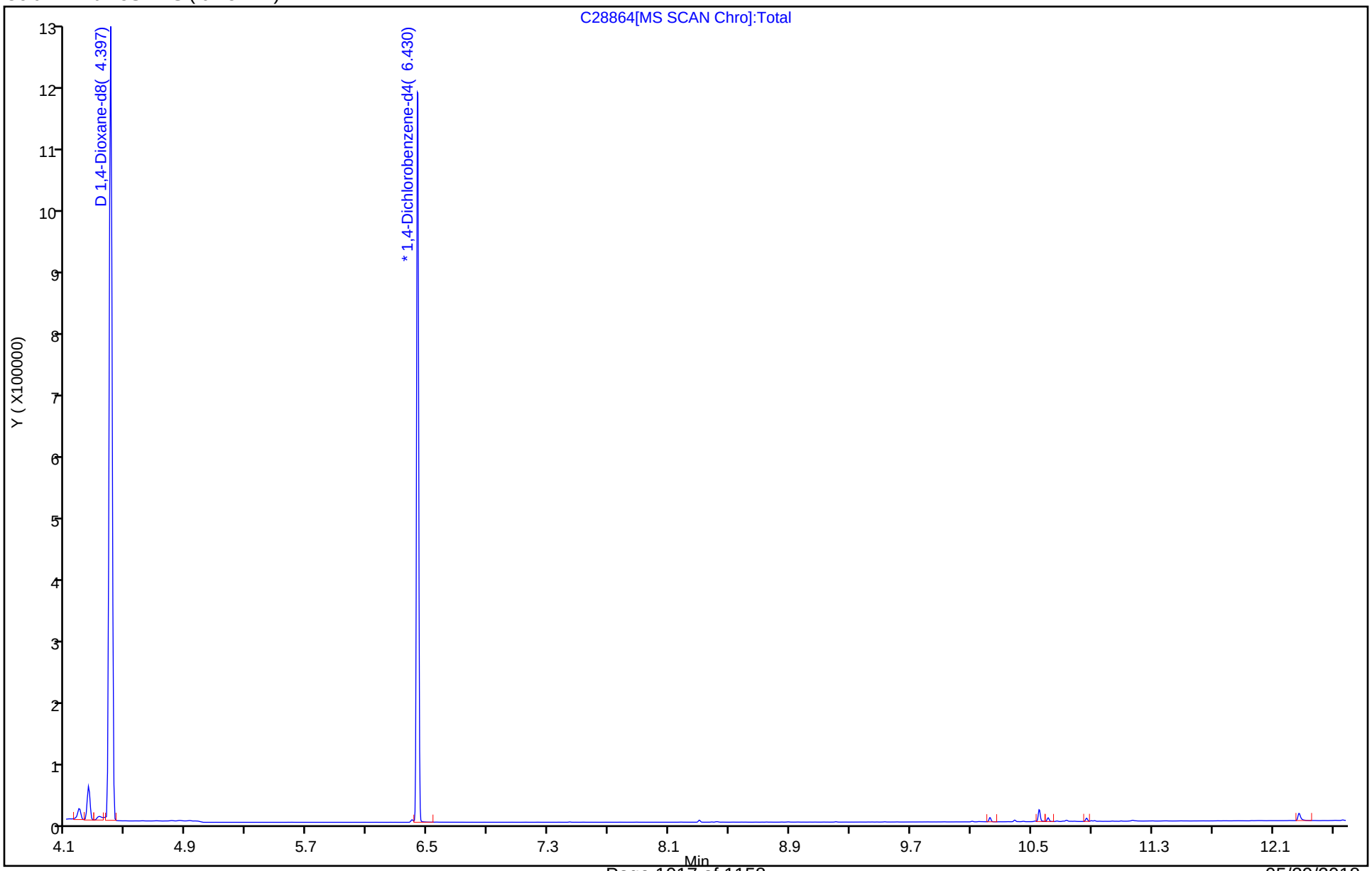
Report Date: 01-May-2018 10:25:48 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28864.D

Injection Date:	30-Apr-2018 22:23:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-E-4-A	Lab Sample ID:	460-154781-4	Worklist Smp#:	10
Client ID:	GC-MW-1B(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

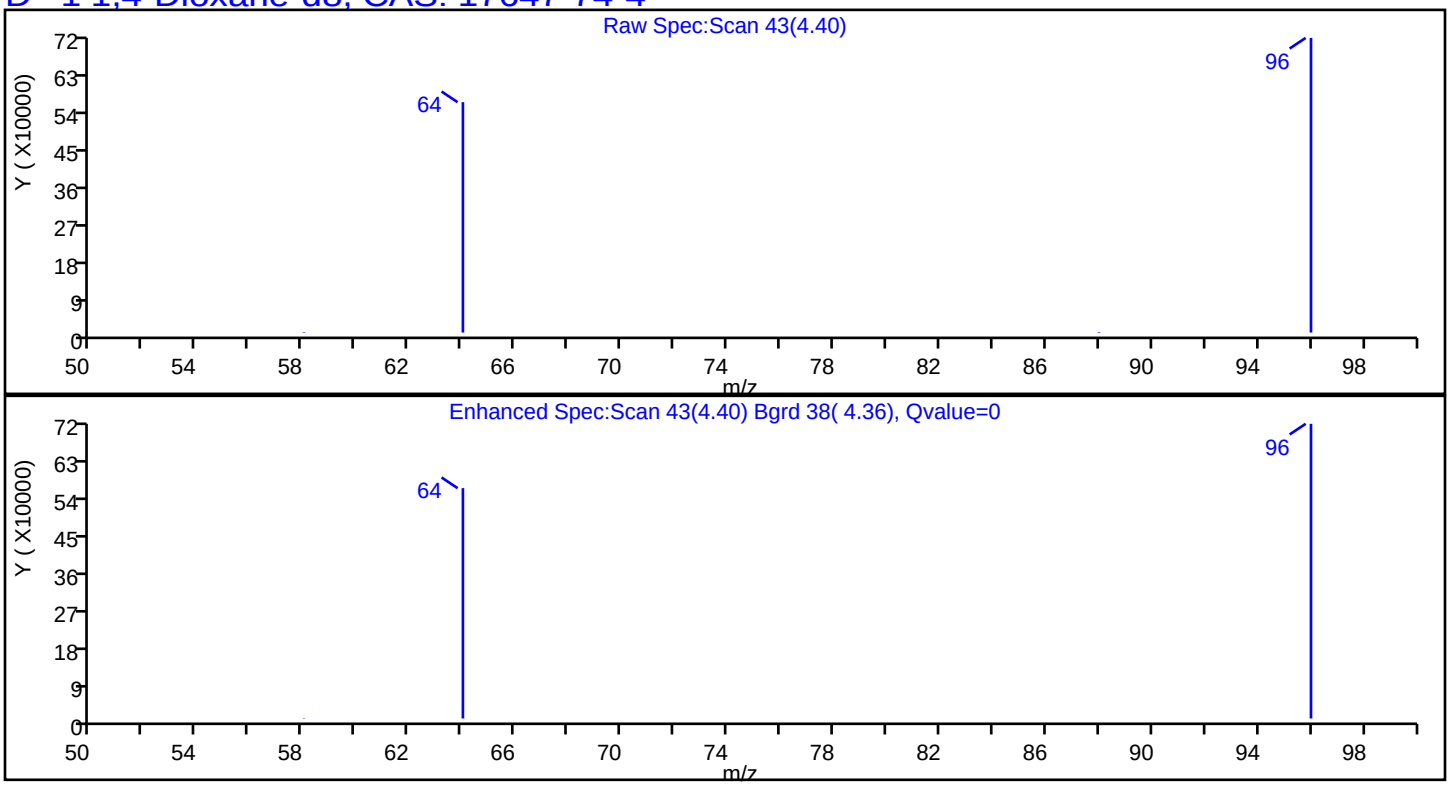
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28864.D				
Injection Date:	30-Apr-2018 22:23:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154781-E-4-A	Lab Sample ID:	460-154781-4		
Client ID:	GC-MW-1B(WG)				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



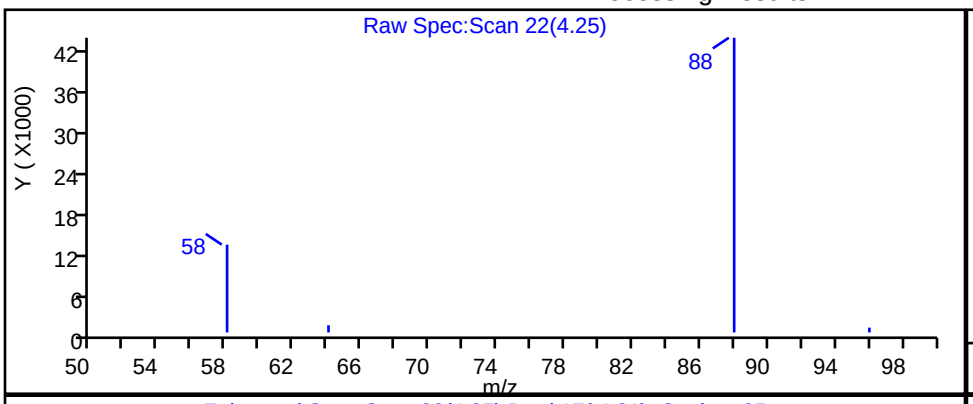
User Disabled Compound Report

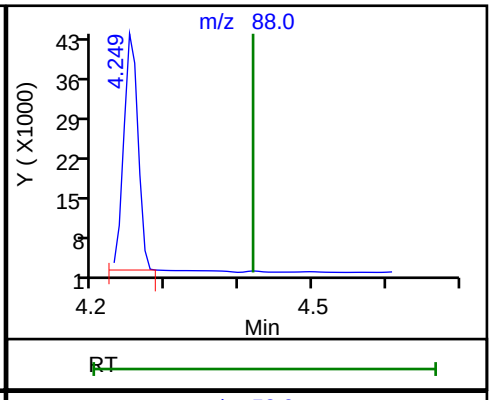
TestAmerica Edison

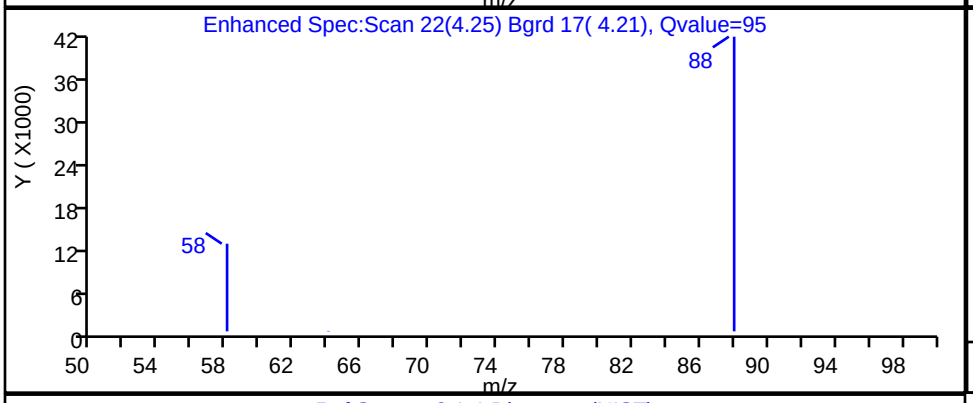
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28864.D		
Injection Date:	30-Apr-2018 22:23:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-E-4-A	Lab Sample ID:	460-154781-4
Client ID:	GC-MW-1B(WG)		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 10
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

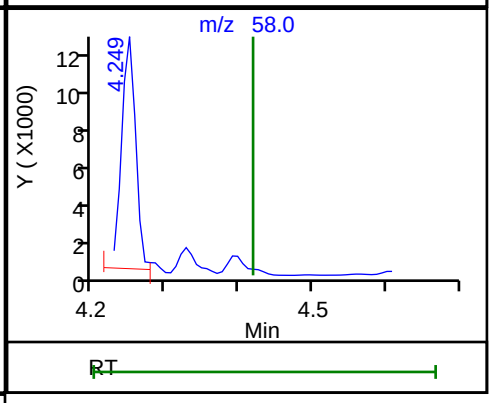
2 1,4-Dioxane, CAS: 123-91-1

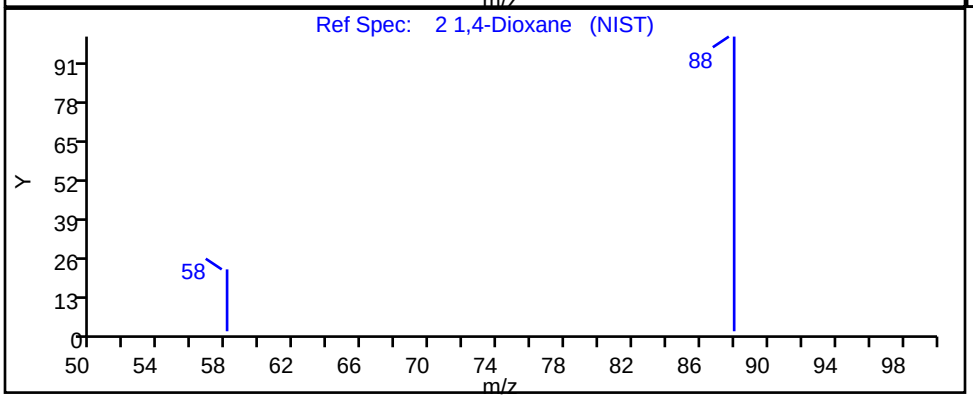
Processing Results











RT	Mass	Response	Amount
4.25	88.00	56860	0.190026
4.25	58.00	16661	

Reviewer: khlungprakhons, 01-May-2018 17:13:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 460-154781-5

Matrix: Water | Lab File ID: C28865.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 13:10

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 04/30/2018 22:41

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	49		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28865.D
Lims ID: 460-154781-E-5-A
Client ID: GC-MW-103(WG)
Sample Type: Client
Inject. Date: 30-Apr-2018 22:41:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-011
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:13:31

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1105482	1.95	48.8	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	389633	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

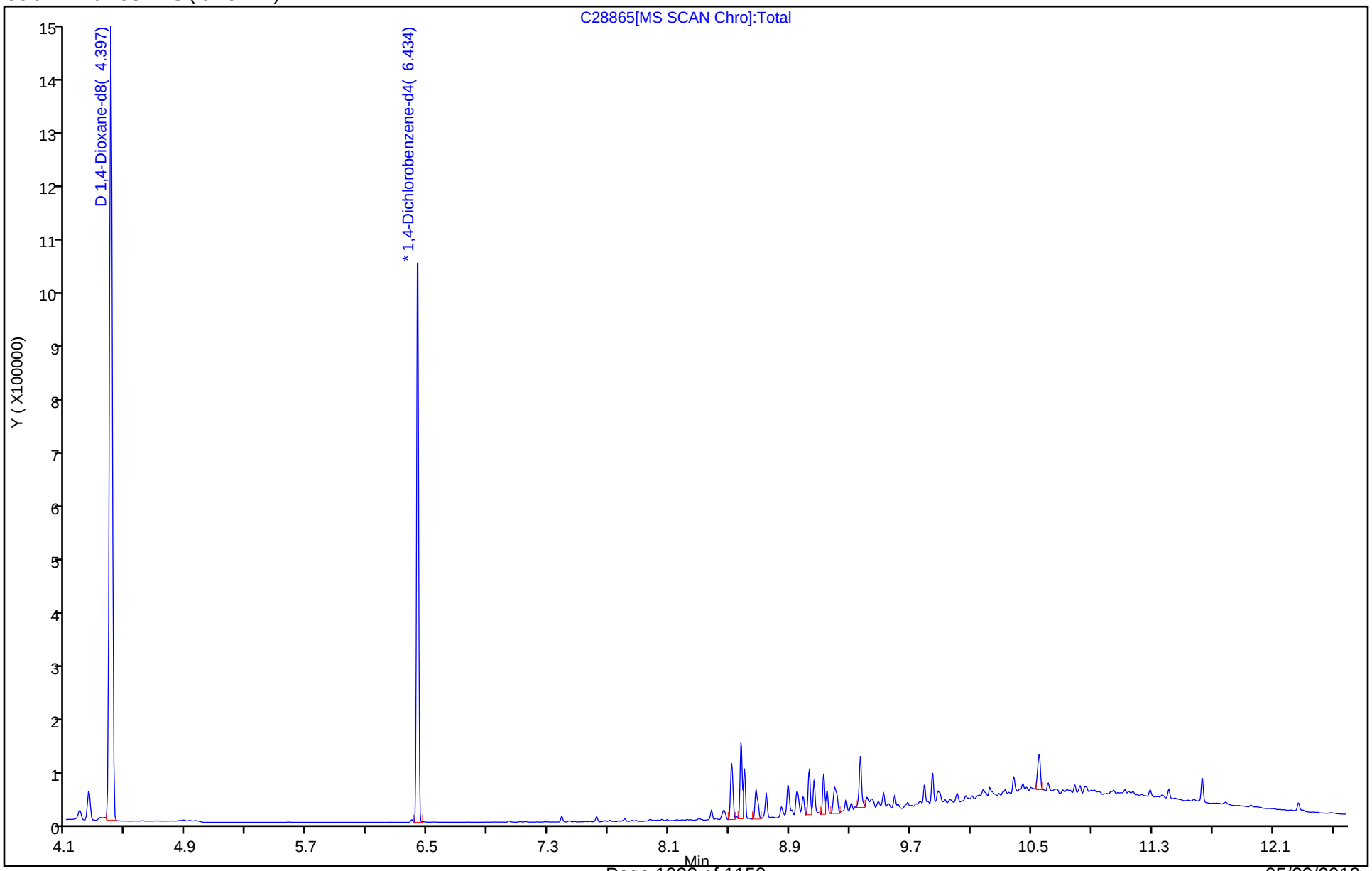
Report Date: 01-May-2018 10:25:51 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28865.D

Injection Date:	30-Apr-2018 22:41:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-E-5-A	Lab Sample ID:	460-154781-5	Worklist Smp#:	11
Client ID:	GC-MW-103(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)

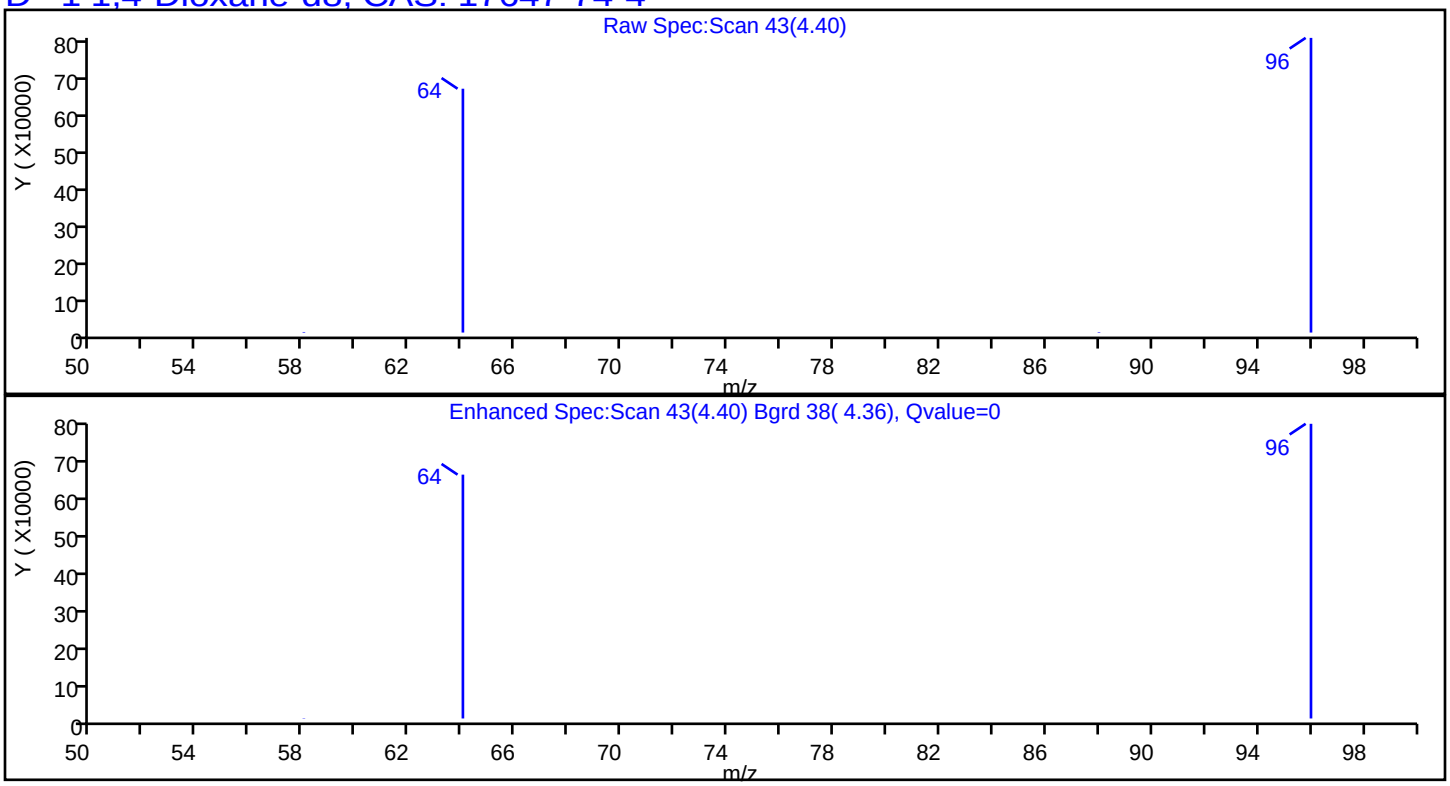


Report Date: 01-May-2018 10:25:51 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28865.D				
Injection Date:	30-Apr-2018 22:41:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154781-E-5-A	Lab Sample ID:	460-154781-5		
Client ID:	GC-MW-103(WG)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



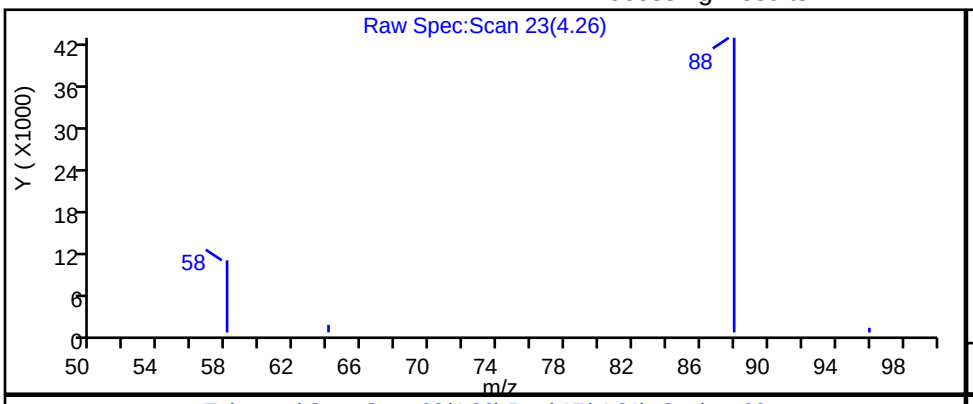
User Disabled Compound Report

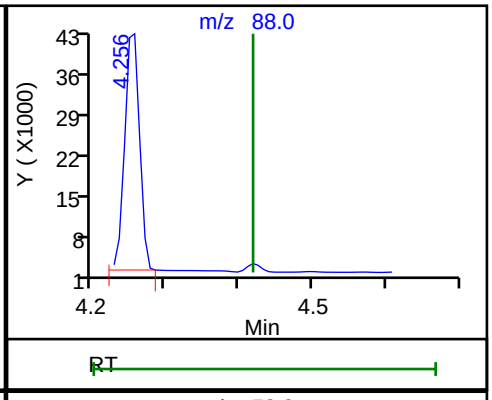
TestAmerica Edison

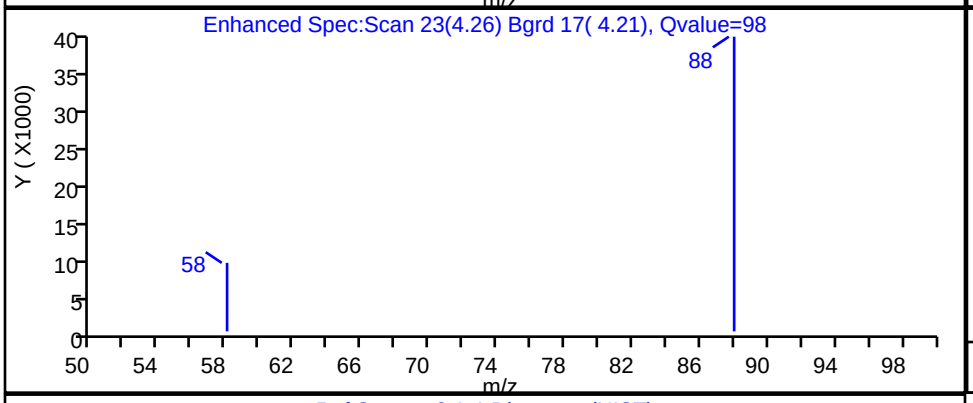
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28865.D		
Injection Date:	30-Apr-2018 22:41:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-E-5-A	Lab Sample ID:	460-154781-5
Client ID:	GC-MW-103(WG)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 11
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

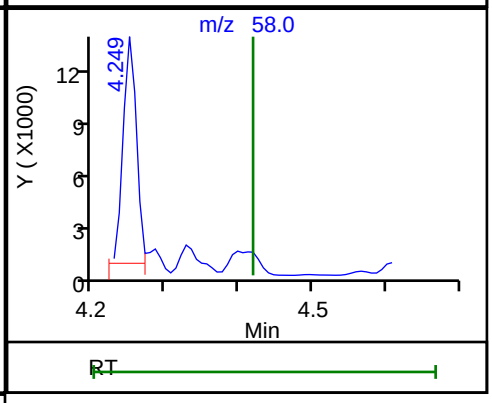
2 1,4-Dioxane, CAS: 123-91-1

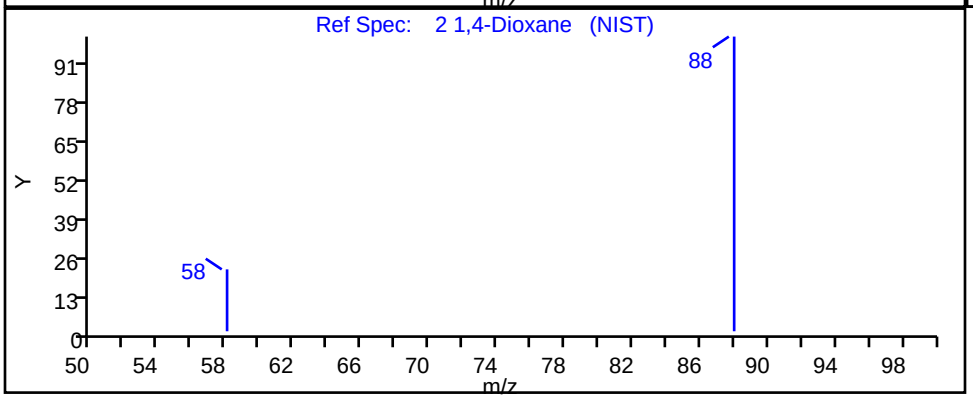
Processing Results











RT	Mass	Response	Amount
4.26	88.00	57416	0.167231
4.25	58.00	15786	

Reviewer: khlungprakhons, 01-May-2018 17:13:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 460-154781-6

Matrix: Water | Lab File ID: C28866.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 13:35

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 04/30/2018 22:59

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	42		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28866.D
Lims ID: 460-154781-E-6-A
Client ID: GC-MW-104(WG)
Sample Type: Client
Inject. Date: 30-Apr-2018 22:59:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-012
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:13:44

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1124862	1.66	41.6	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	465580	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

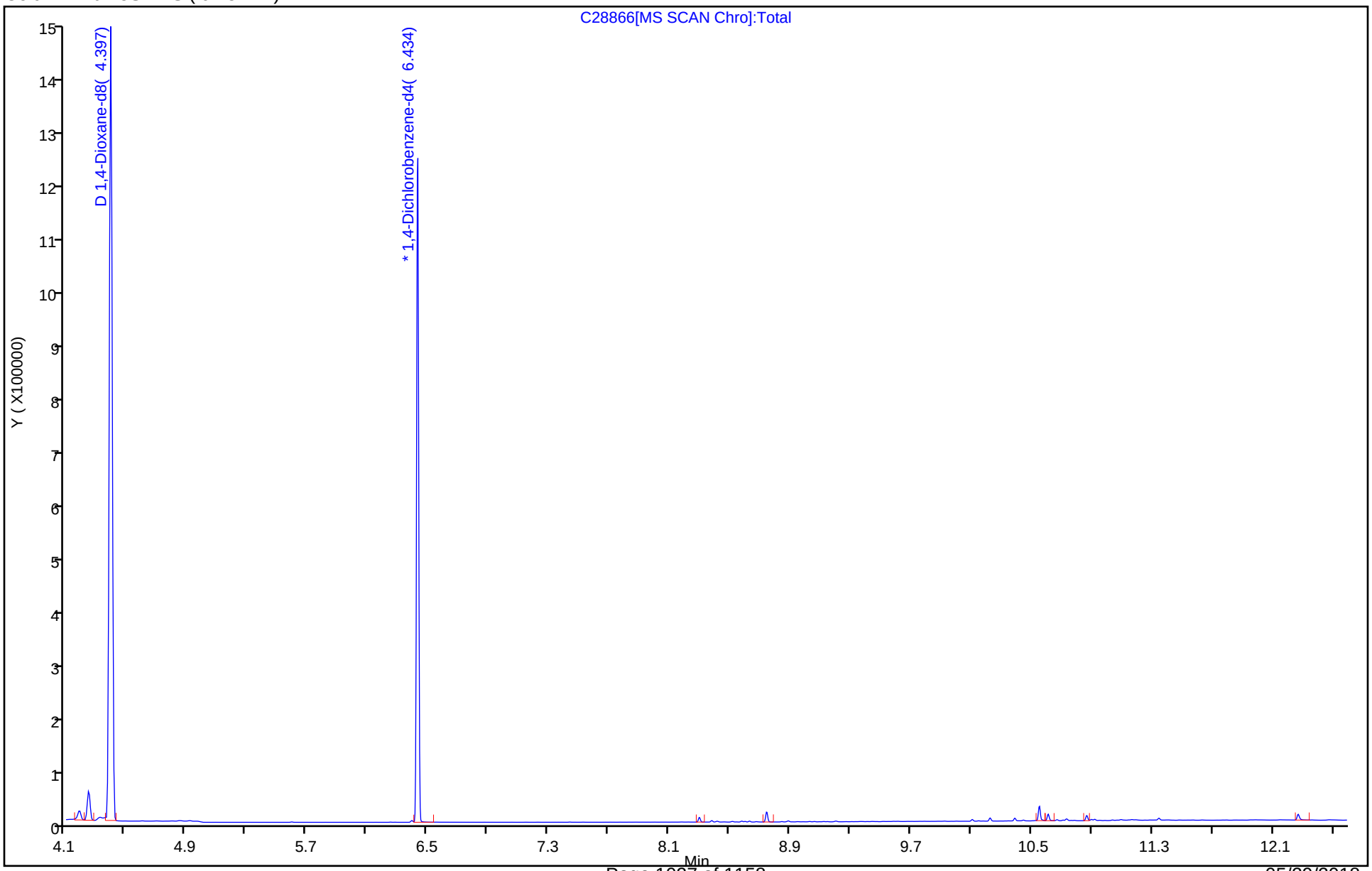
Report Date: 01-May-2018 10:25:55 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28866.D

Injection Date:	30-Apr-2018 22:59:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-E-6-A	Lab Sample ID:	460-154781-6	Worklist Smp#:	12
Client ID:	GC-MW-104(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

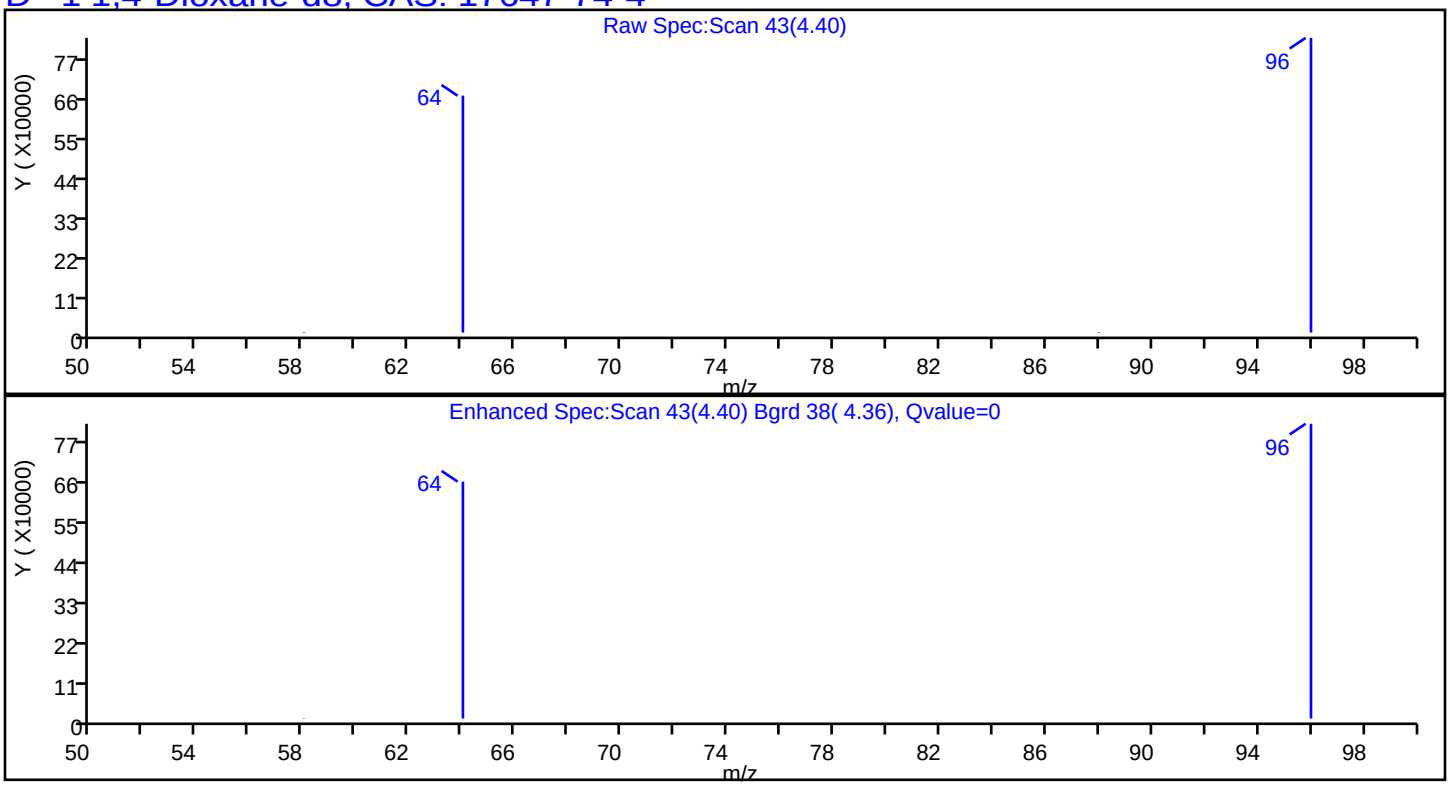
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28866.D				
Injection Date:	30-Apr-2018 22:59:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154781-E-6-A	Lab Sample ID:	460-154781-6		
Client ID:	GC-MW-104(WG)				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



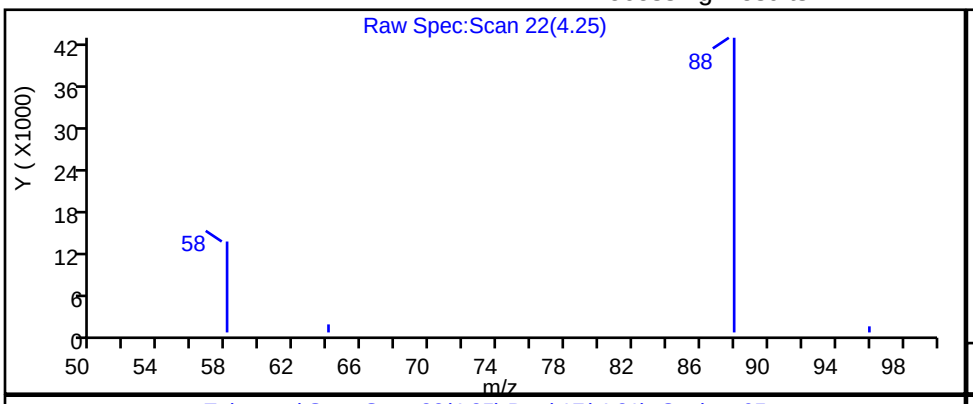
User Disabled Compound Report

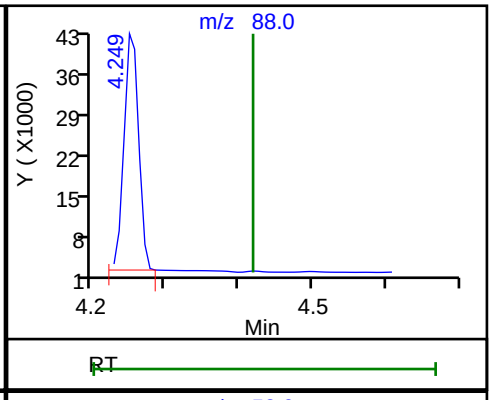
TestAmerica Edison

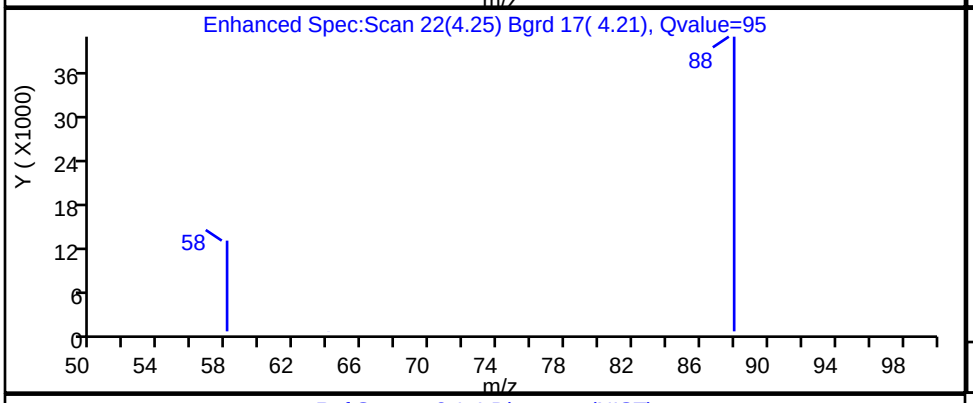
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28866.D		
Injection Date:	30-Apr-2018 22:59:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-E-6-A	Lab Sample ID:	460-154781-6
Client ID:	GC-MW-104(WG)		
Operator ID:		ALS Bottle#:	12 Worklist Smp#: 12
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

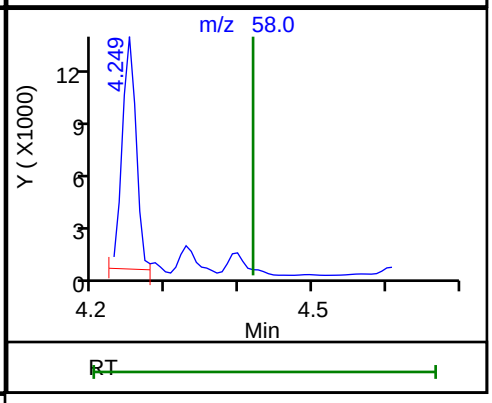
2 1,4-Dioxane, CAS: 123-91-1

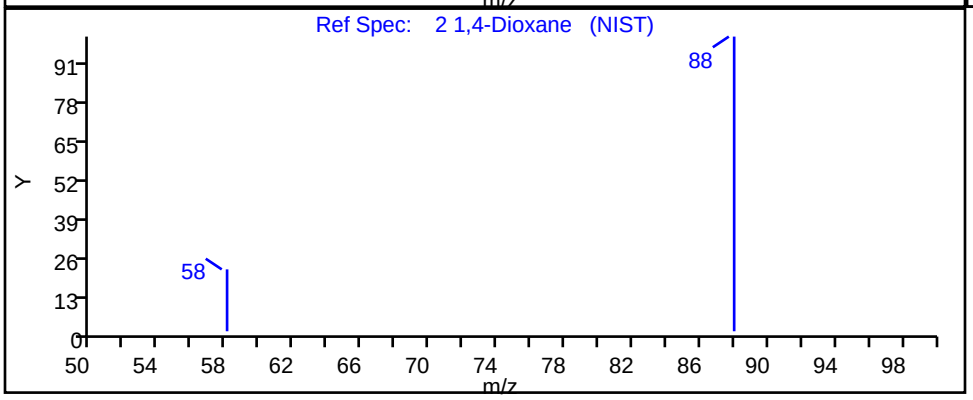
Processing Results











RT	Mass	Response	Amount
4.25	88.00	57512	0.164625
4.25	58.00	16671	

Reviewer: khlungprakhons, 01-May-2018 17:13:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 460-154781-7

Matrix: Water | Lab File ID: C28867.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 14:43

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 250(mL) | Date Analyzed: 04/30/2018 23:16

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28867.D
Lims ID: 460-154781-F-7-A
Client ID: GC-MW-105(WG)
Sample Type: Client
Inject. Date: 30-Apr-2018 23:16:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-013
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:13:57

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	948206	1.47	36.8	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	443136	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

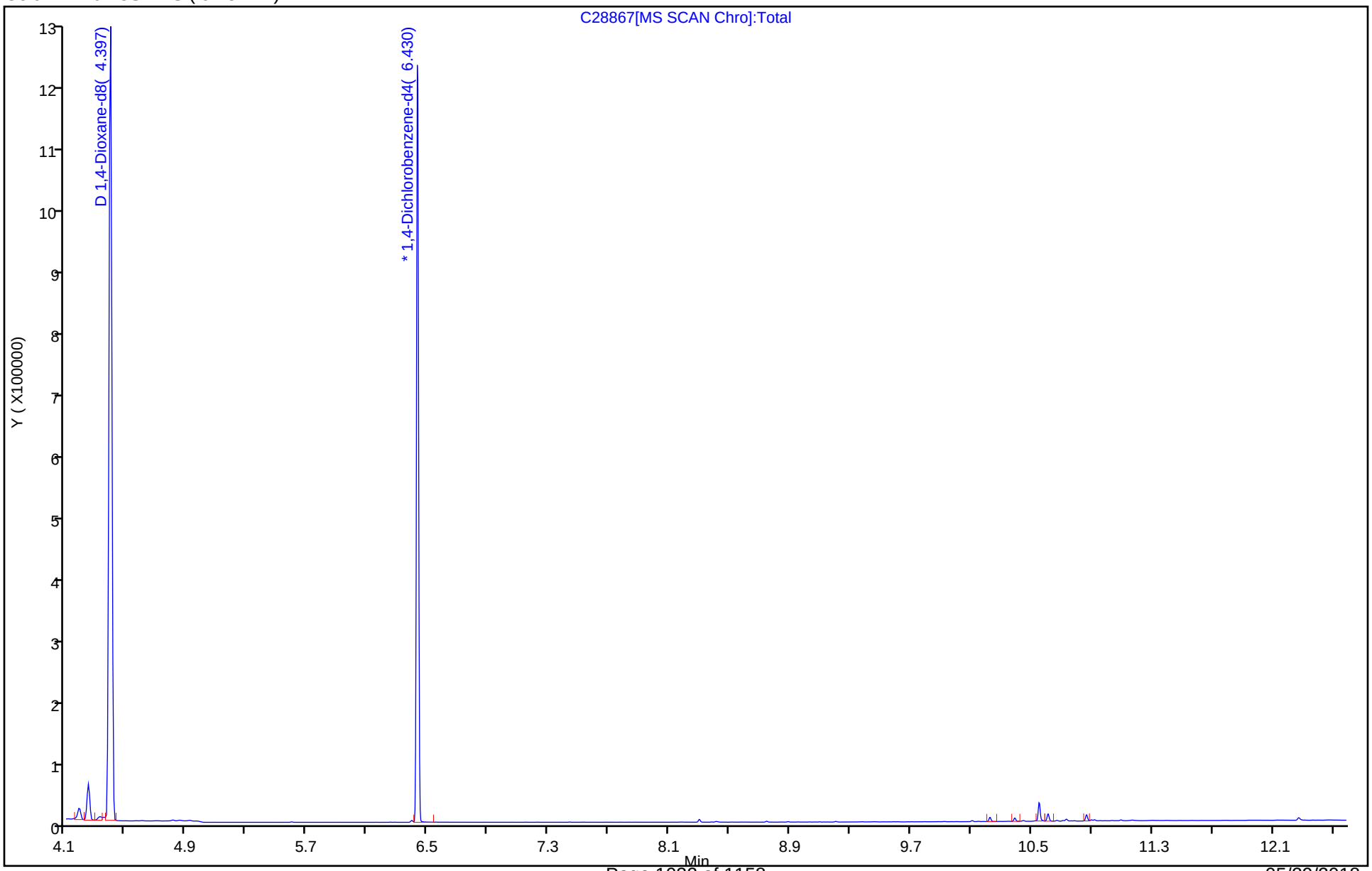
Report Date: 01-May-2018 10:25:58 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28867.D

Injection Date:	30-Apr-2018 23:16:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-F-7-A	Lab Sample ID:	460-154781-7	Worklist Smp#:	13
Client ID:	GC-MW-105(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

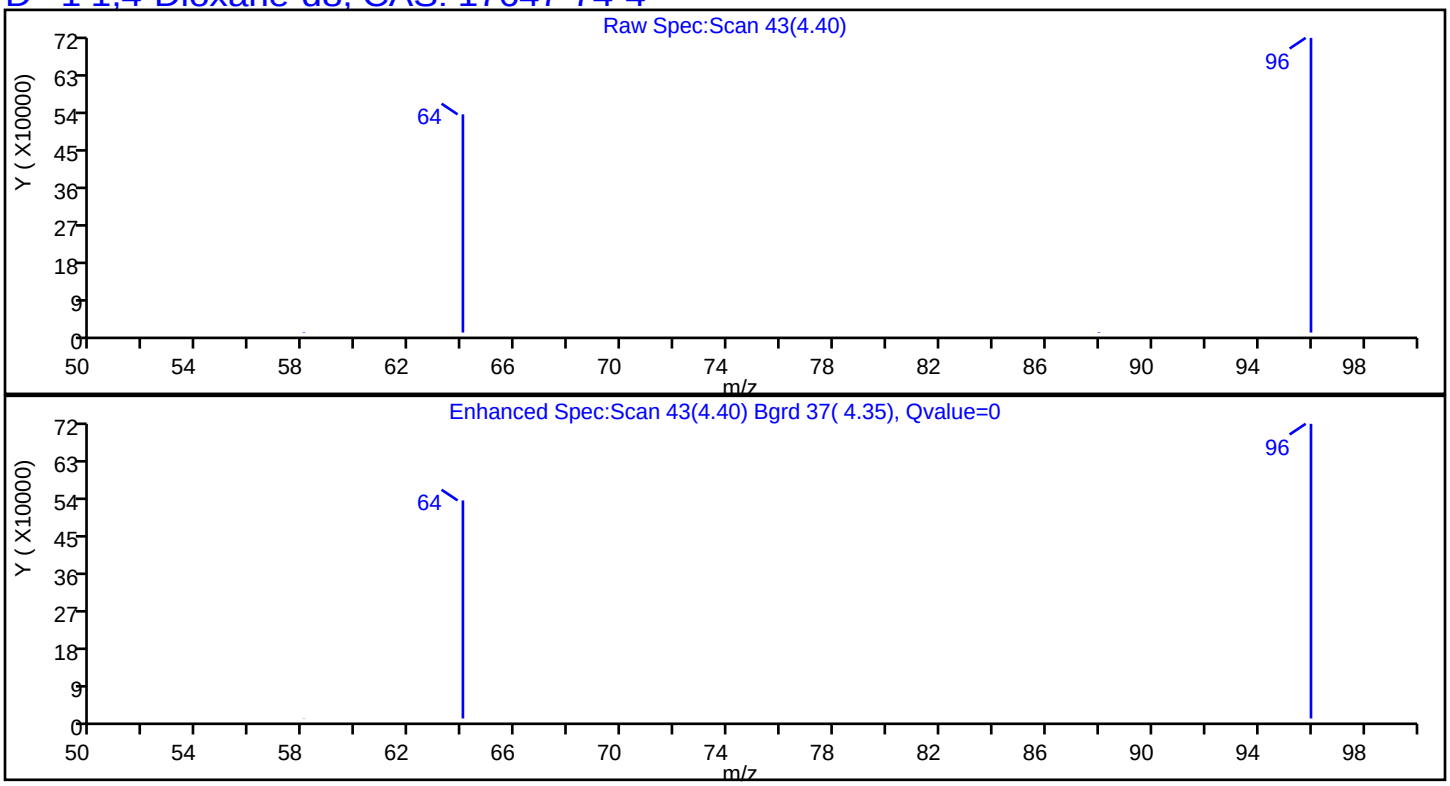
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28867.D				
Injection Date:	30-Apr-2018 23:16:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154781-F-7-A	Lab Sample ID:	460-154781-7		
Client ID:	GC-MW-105(WG)				
Operator ID:		ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



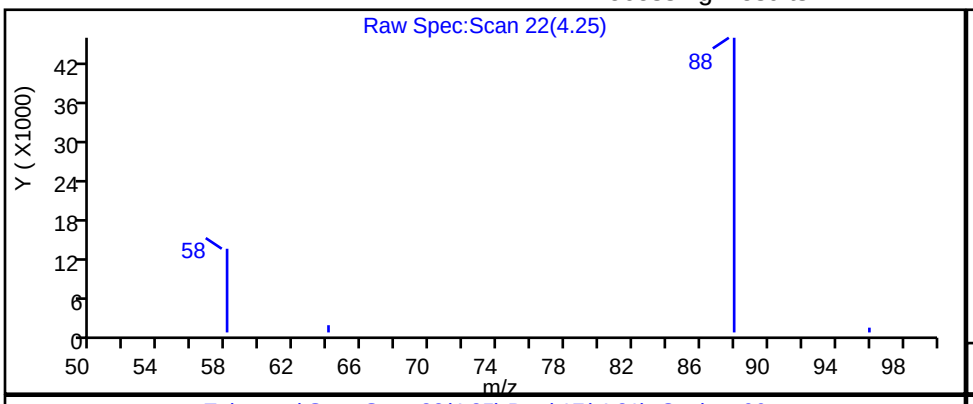
User Disabled Compound Report

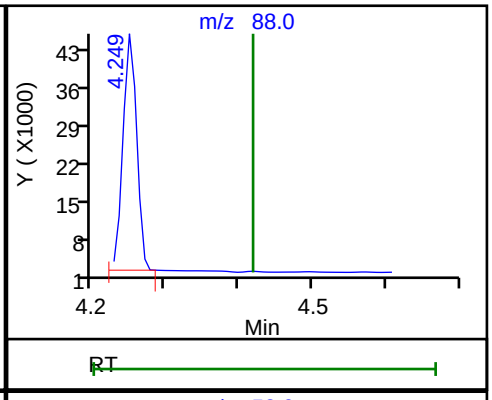
TestAmerica Edison

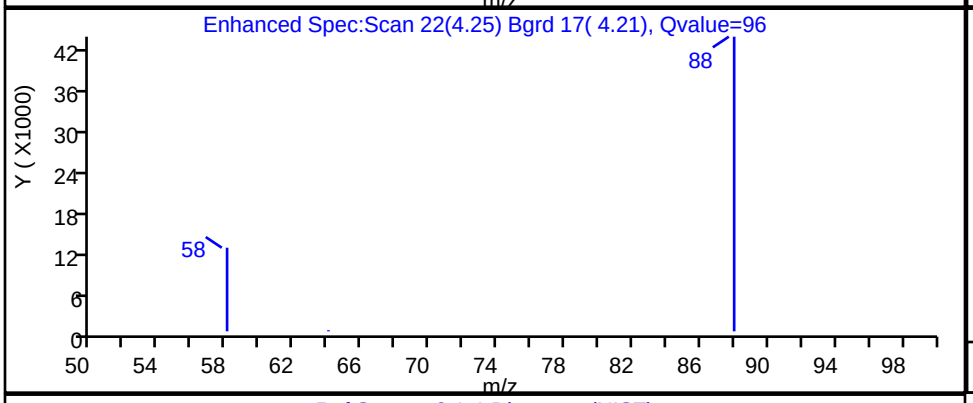
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28867.D		
Injection Date:	30-Apr-2018 23:16:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-F-7-A	Lab Sample ID:	460-154781-7
Client ID:	GC-MW-105(WG)		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 13
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

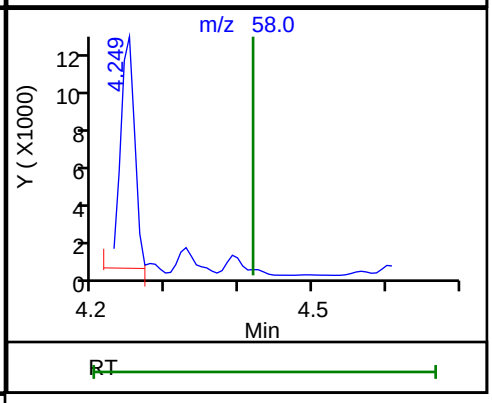
2 1,4-Dioxane, CAS: 123-91-1

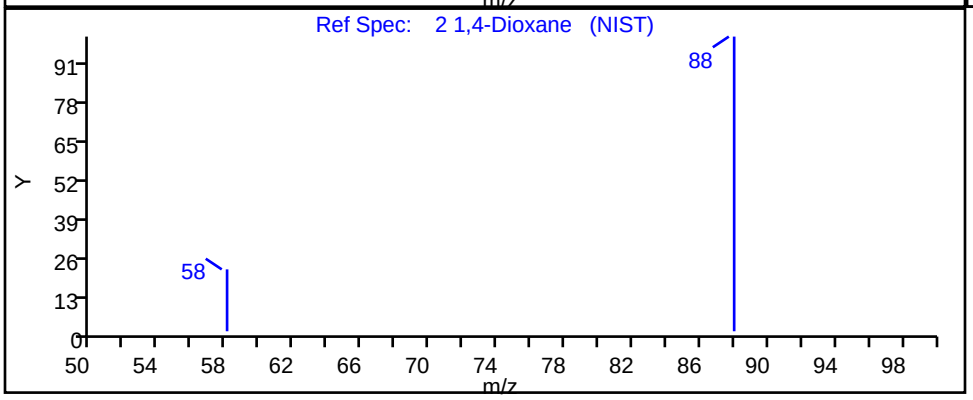
Processing Results











RT	Mass	Response	Amount
4.25	88.00	57183	0.194178
4.25	58.00	16363	

Reviewer: khlungprakhons, 01-May-2018 17:13:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-DRAIN(WG) | Lab Sample ID: 460-154781-8

Matrix: Water | Lab File ID: C28869.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 14:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 04/30/2018 23:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	43		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28869.D
Lims ID: 460-154781-E-8-A
Client ID: GC-DRAIN(WG)
Sample Type: Client
Inject. Date: 30-Apr-2018 23:52:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-015
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:14:29

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1021419	1.73	43.1	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	407219	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

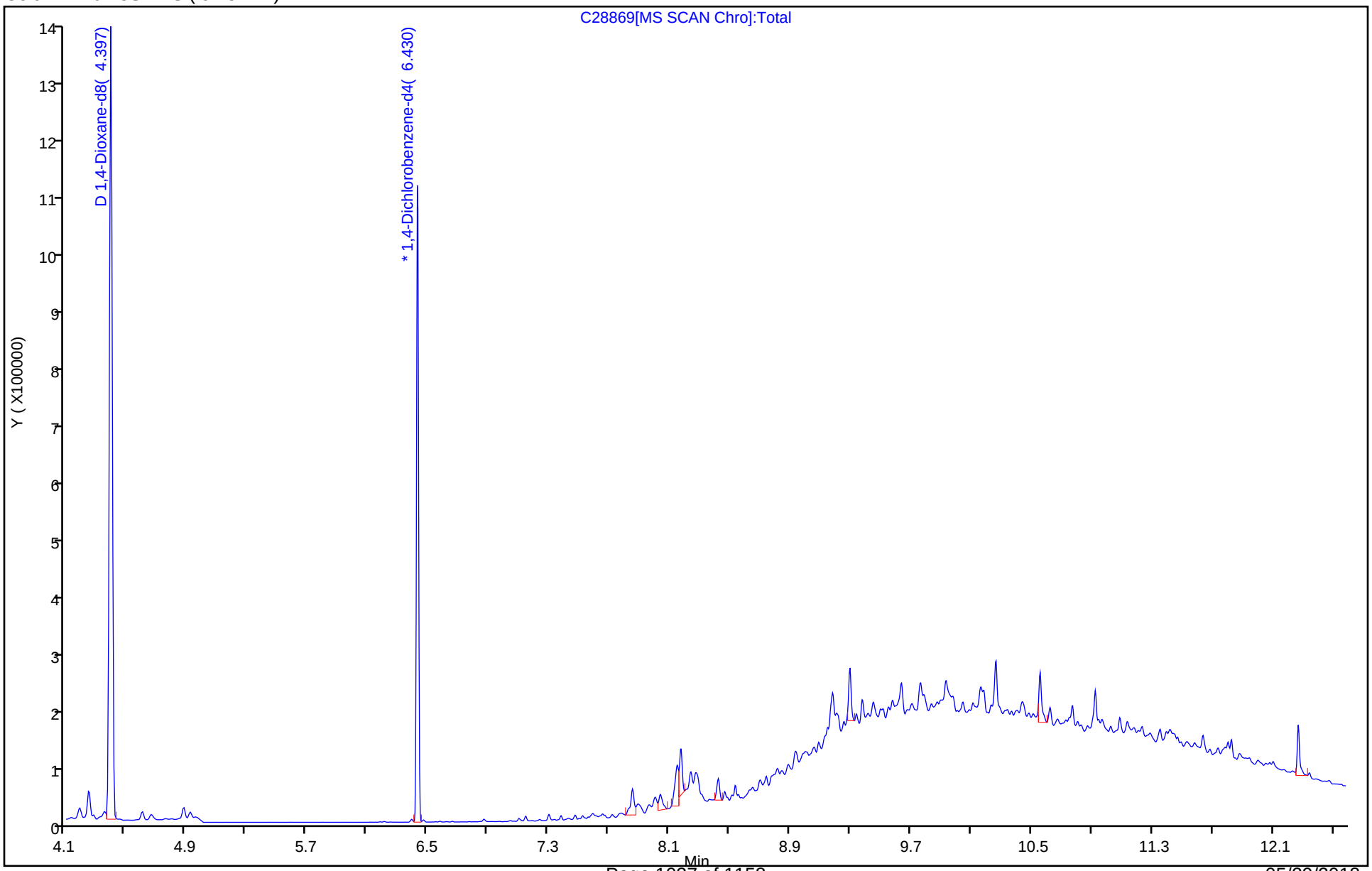
Report Date: 01-May-2018 10:26:03 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28869.D

Injection Date:	30-Apr-2018 23:52:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-E-8-A	Lab Sample ID:	460-154781-8	Worklist Smp#:	15
Client ID:	GC-DRAIN(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

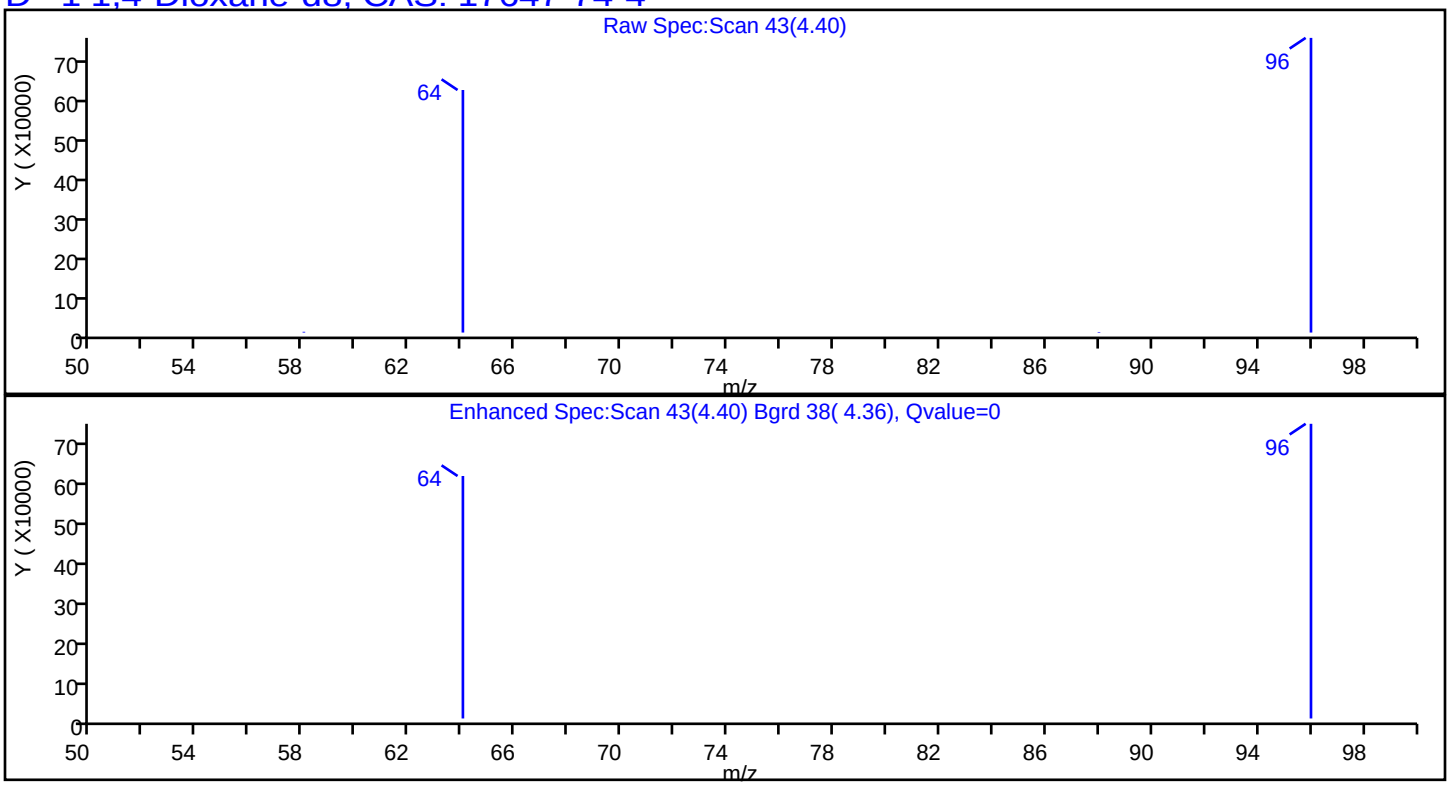
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28869.D				
Injection Date:	30-Apr-2018 23:52:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154781-E-8-A	Lab Sample ID:	460-154781-8		
Client ID:	GC-DRAIN(WG)				
Operator ID:		ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



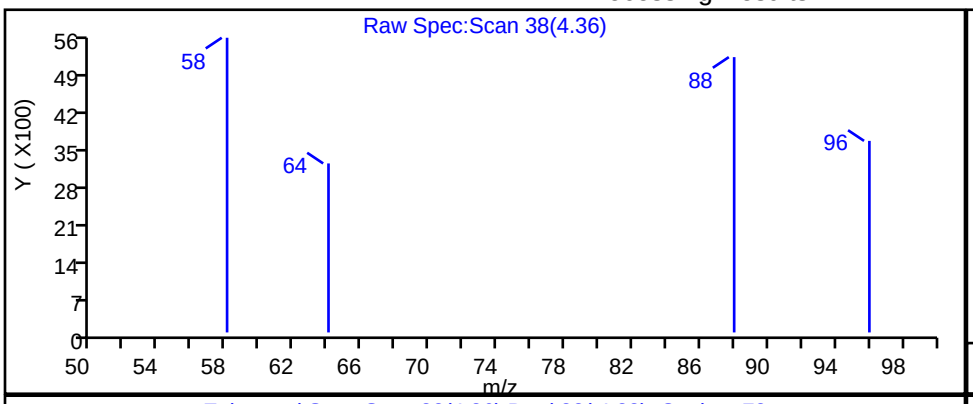
User Disabled Compound Report

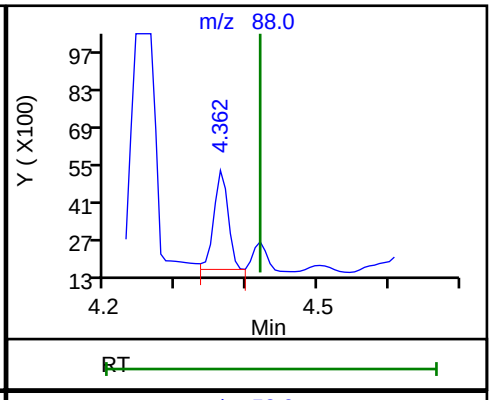
TestAmerica Edison

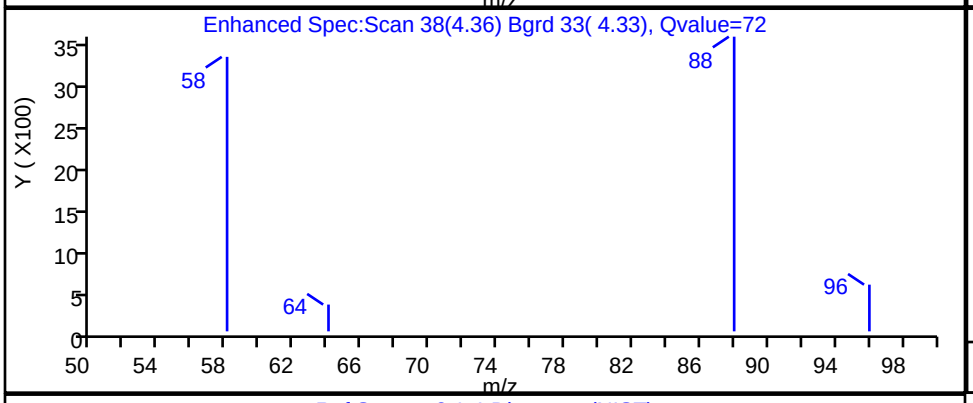
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28869.D		
Injection Date:	30-Apr-2018 23:52:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-E-8-A	Lab Sample ID:	460-154781-8
Client ID:	GC-DRAIN(WG)		
Operator ID:		ALS Bottle#:	15 Worklist Smp#: 15
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

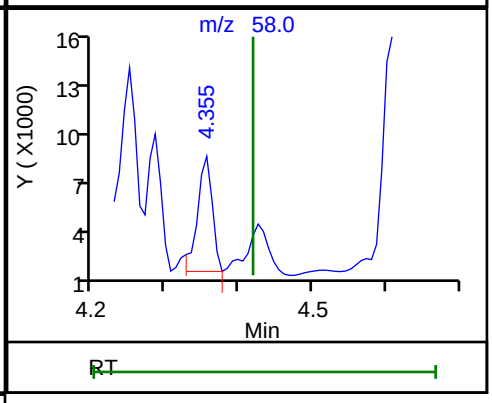
2 1,4-Dioxane, CAS: 123-91-1

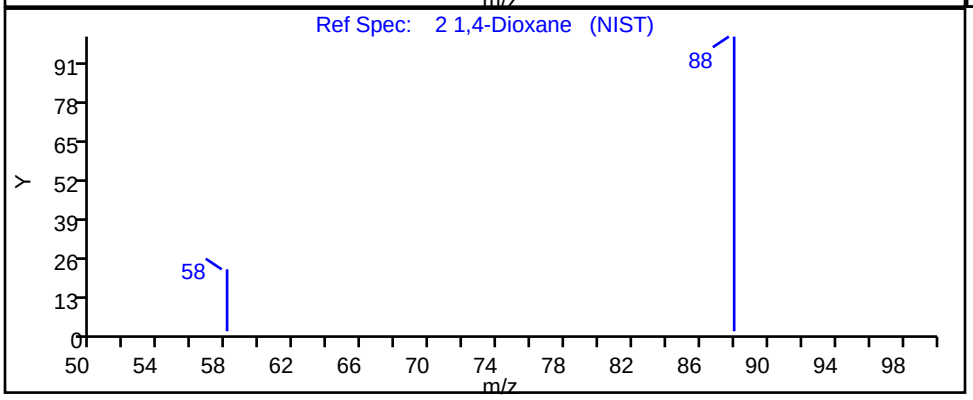
Processing Results











RT	Mass	Response	Amount
4.36	88.00	5289	0.016673
4.35	58.00	9732	

Reviewer: khlungprakhons, 01-May-2018 17:14:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank | Lab Sample ID: 460-154781-9

Matrix: Water | Lab File ID: C28868.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 15:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 250(mL) | Date Analyzed: 04/30/2018 23:34

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	75		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28868.D
Lims ID: 460-154781-F-9-A
Client ID: GC-Equipment Blank
Sample Type: Client
Inject. Date: 30-Apr-2018 23:34:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-014
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:14:12

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1698617	2.99	74.7	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	391294	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

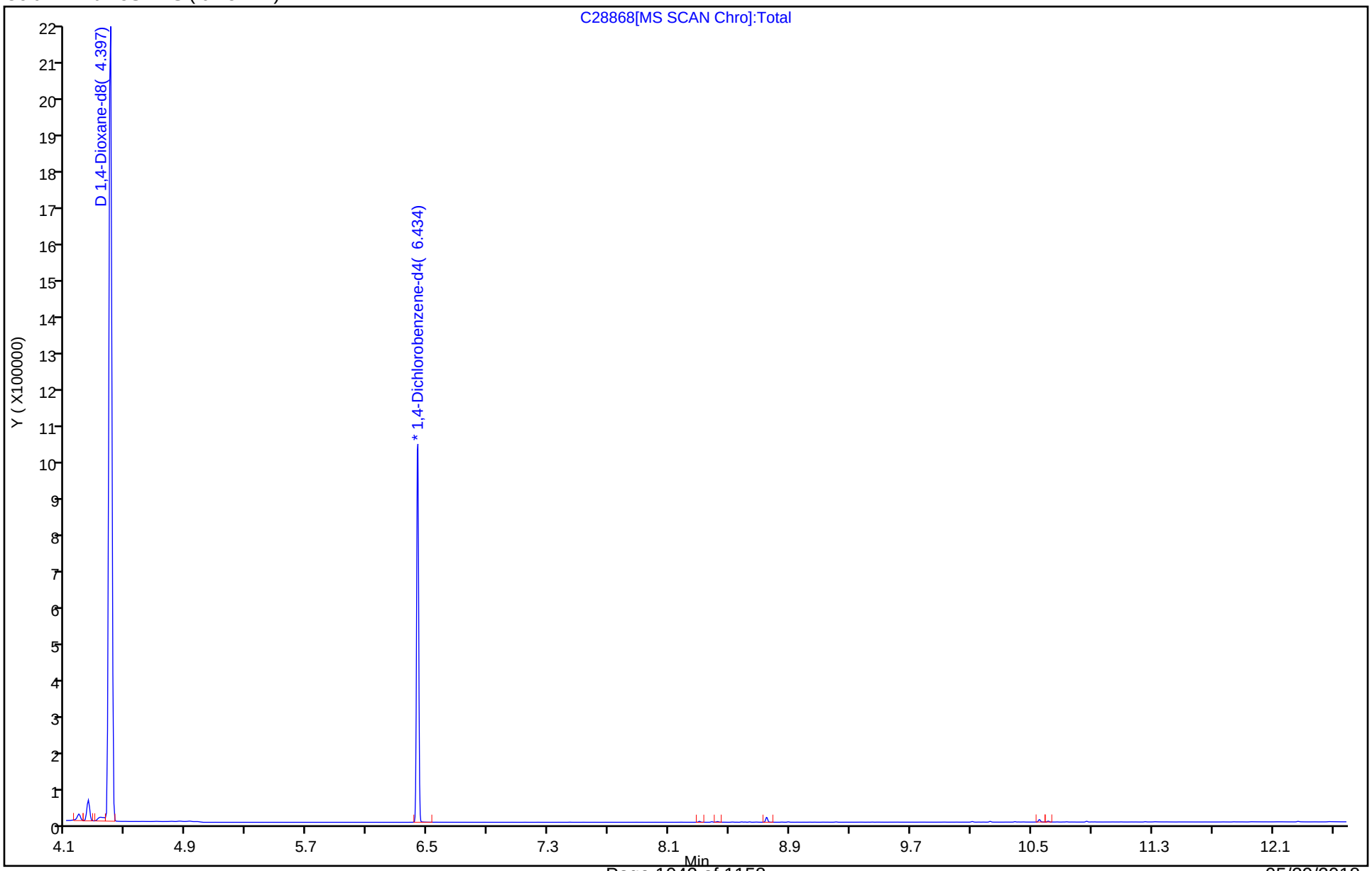
Report Date: 01-May-2018 10:26:01 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28868.D

Injection Date:	30-Apr-2018 23:34:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-F-9-A	Lab Sample ID:	460-154781-9	Worklist Smp#:	14
Client ID:	GC-Equipment Blank				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)

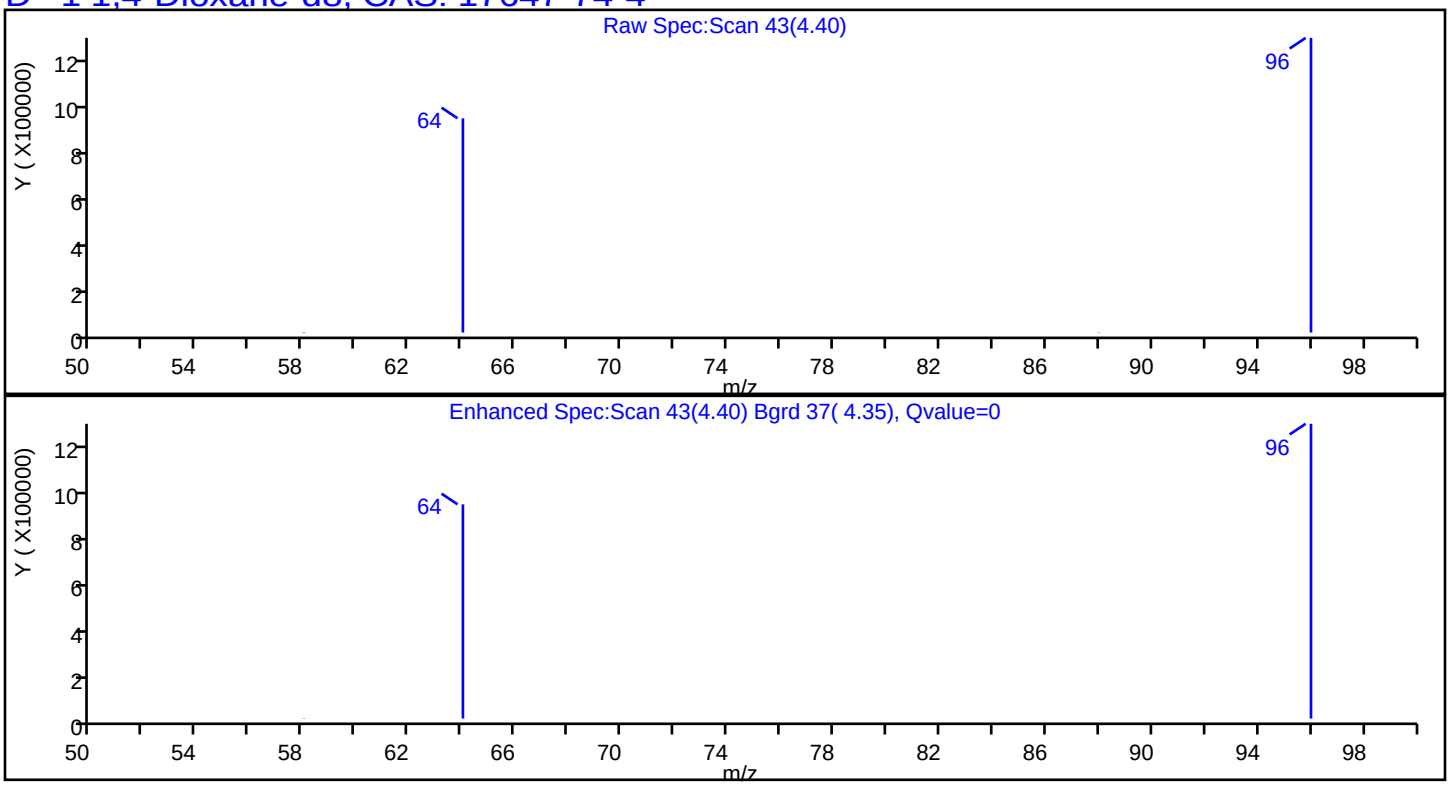


Report Date: 01-May-2018 10:26:01 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28868.D				
Injection Date:	30-Apr-2018 23:34:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154781-F-9-A	Lab Sample ID:	460-154781-9		
Client ID:	GC-Equipment Blank				
Operator ID:		ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



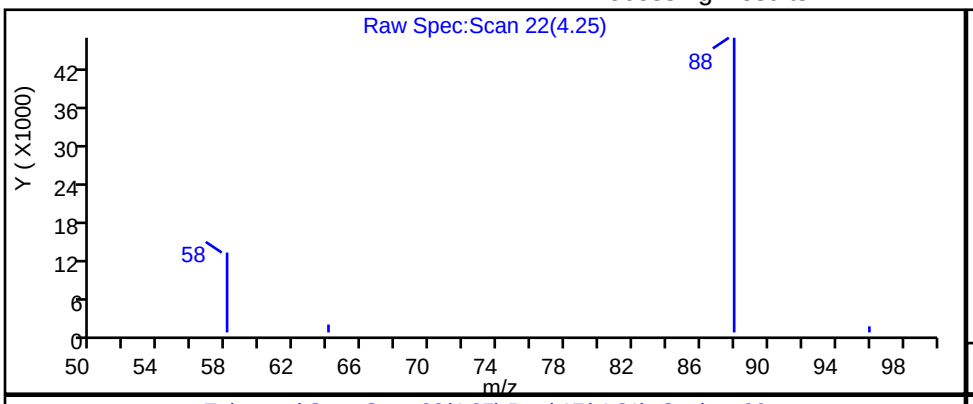
User Disabled Compound Report

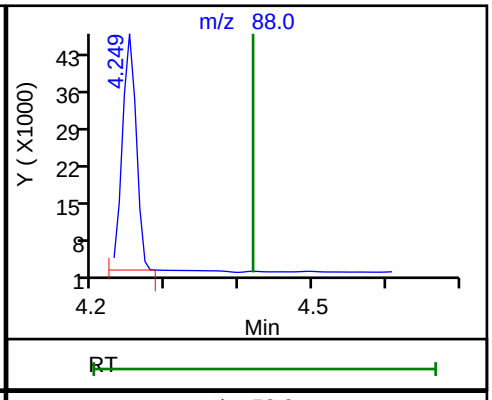
TestAmerica Edison

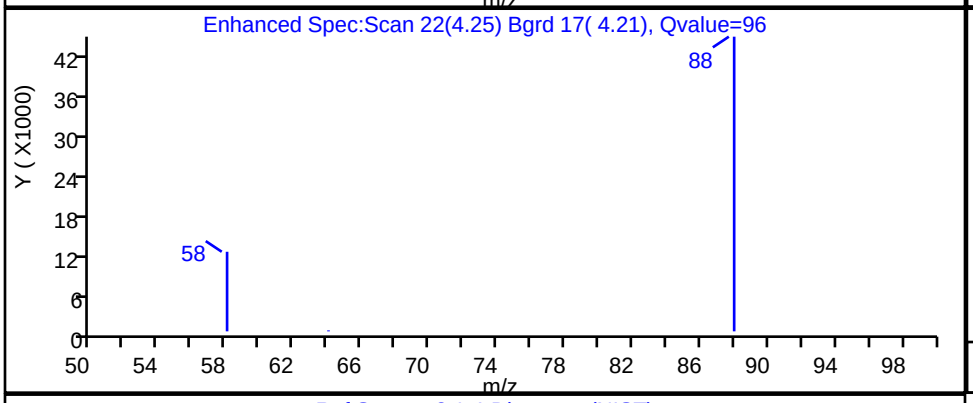
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28868.D		
Injection Date:	30-Apr-2018 23:34:30	Instrument ID:	CBNAMS13
Lims ID:	460-154781-F-9-A	Lab Sample ID:	460-154781-9
Client ID:	GC-Equipment Blank		
Operator ID:		ALS Bottle#:	14 Worklist Smp#: 14
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

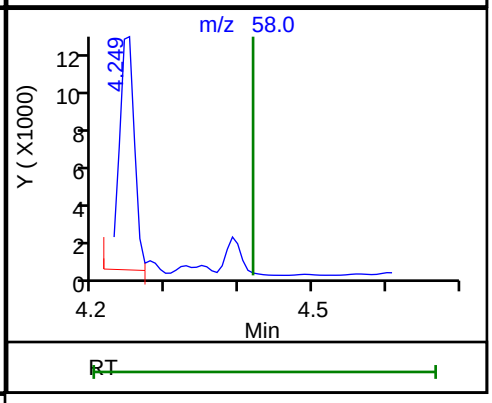
2 1,4-Dioxane, CAS: 123-91-1

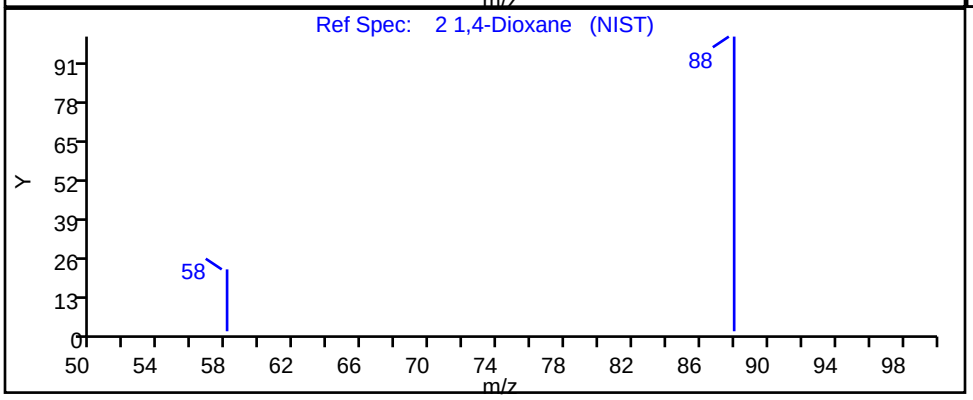
Processing Results











RT	Mass	Response	Amount
4.25	88.00	59056	0.111945
4.25	58.00	17369	

Reviewer: khlungprakhons, 01-May-2018 17:14:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) | Lab Sample ID: 460-154925-1

Matrix: Water | Lab File ID: C28870.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 08:25

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 00:10

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28870.D
Lims ID: 460-154925-F-1-A
Client ID: GC-MW-102 (WG)
Sample Type: Client
Inject. Date: 01-May-2018 00:10:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-016
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:14:42

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1046091	1.64	41.1	
*	4 1,4-Dichlorobenzene-d4	152	6.433	6.434	-0.001	98	437998	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

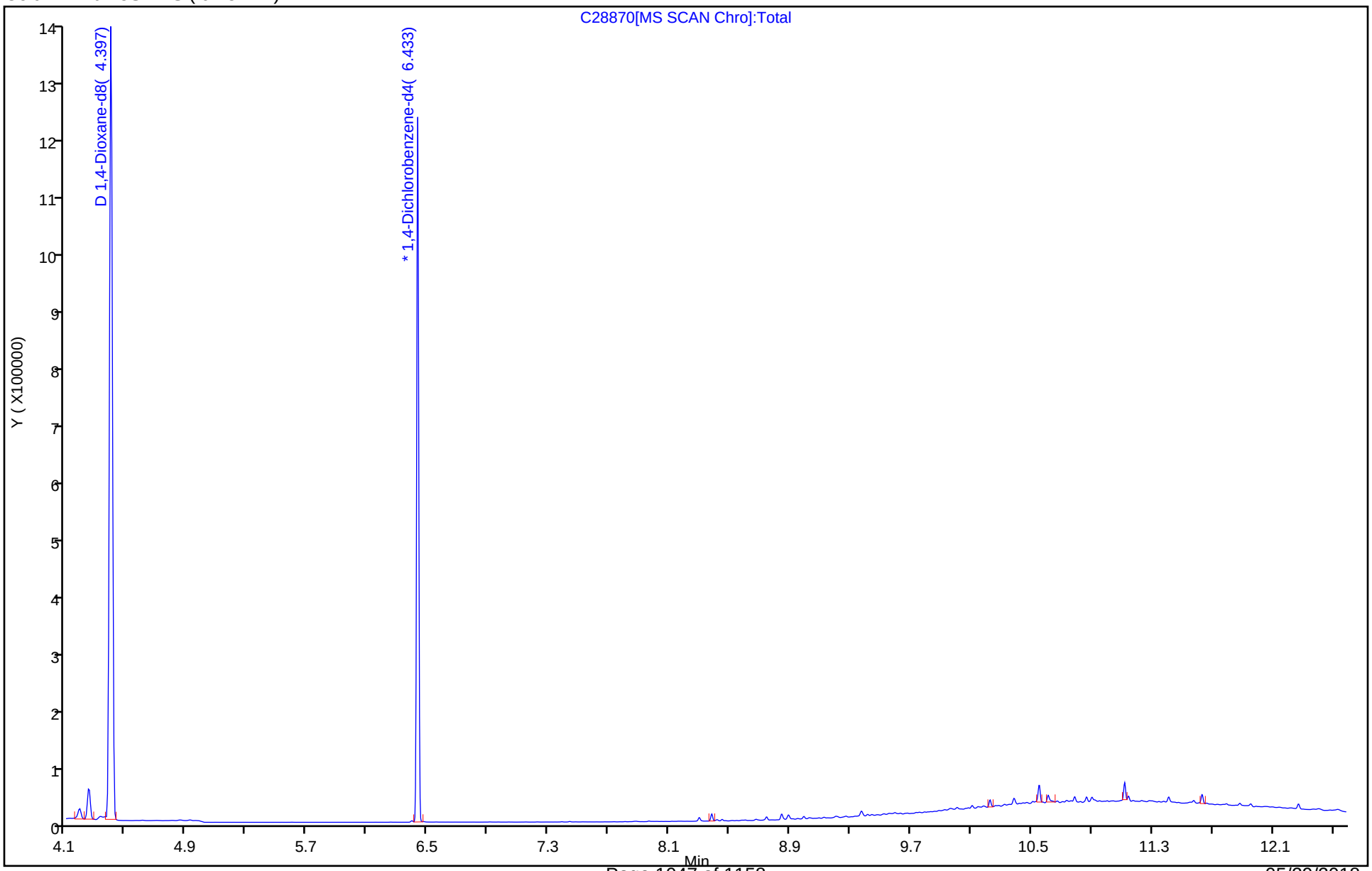
Report Date: 01-May-2018 10:26:06 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28870.D

Injection Date:	01-May-2018 00:10:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-F-1-A	Lab Sample ID:	460-154925-1	Worklist Smp#:	16
Client ID:	GC-MW-102 (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)

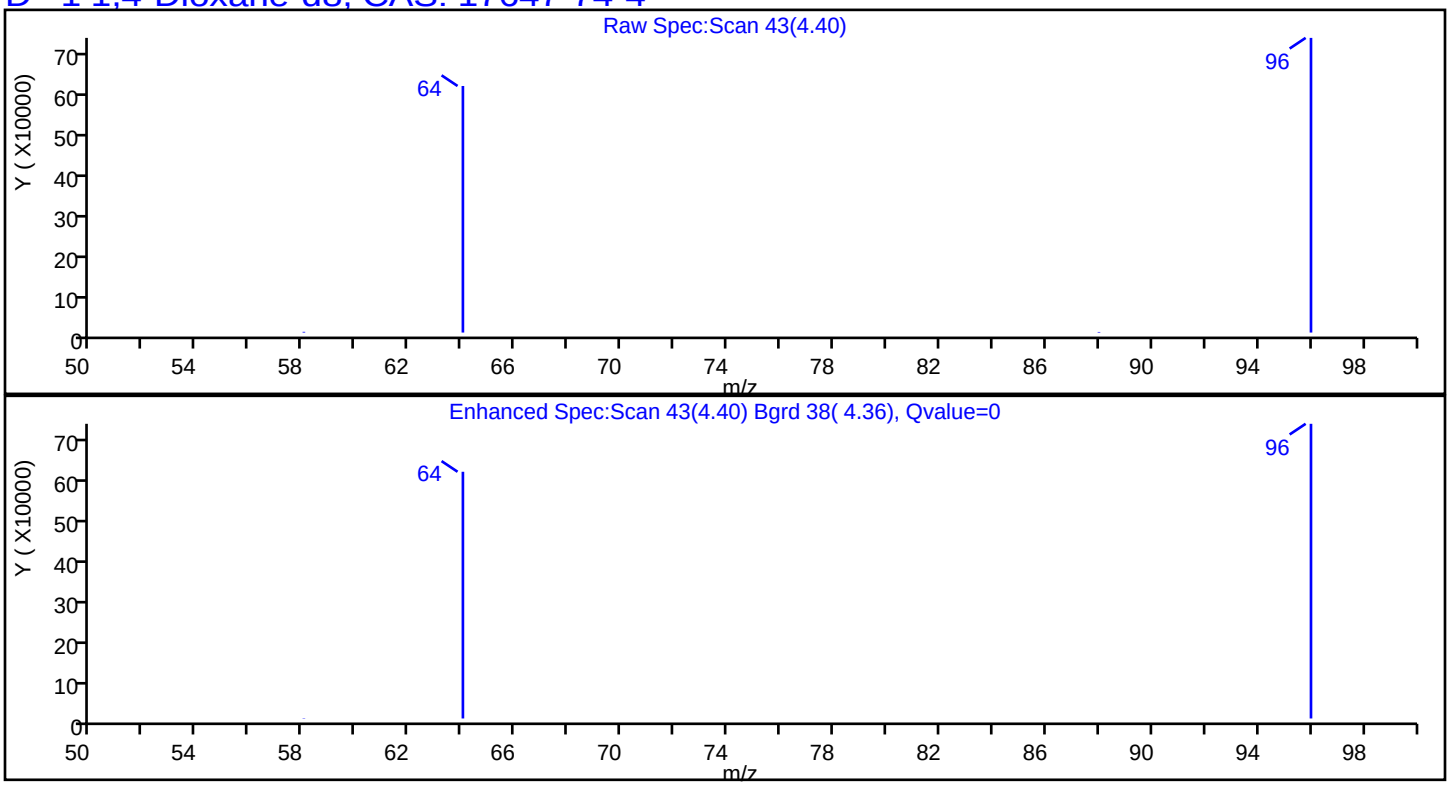


Report Date: 01-May-2018 10:26:06 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28870.D				
Injection Date:	01-May-2018 00:10:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-F-1-A	Lab Sample ID:	460-154925-1		
Client ID:	GC-MW-102 (WG)				
Operator ID:		ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



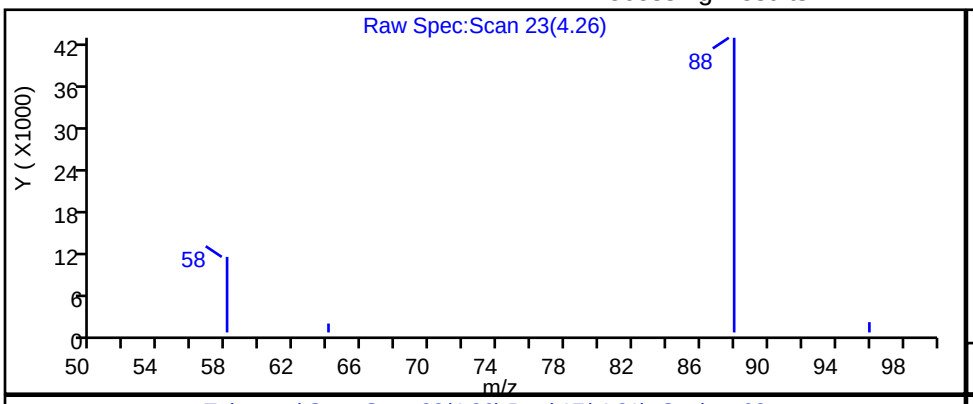
User Disabled Compound Report

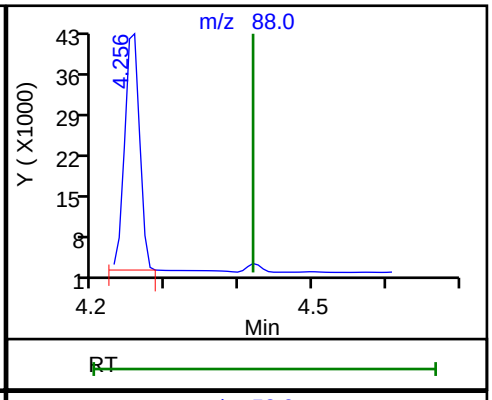
TestAmerica Edison

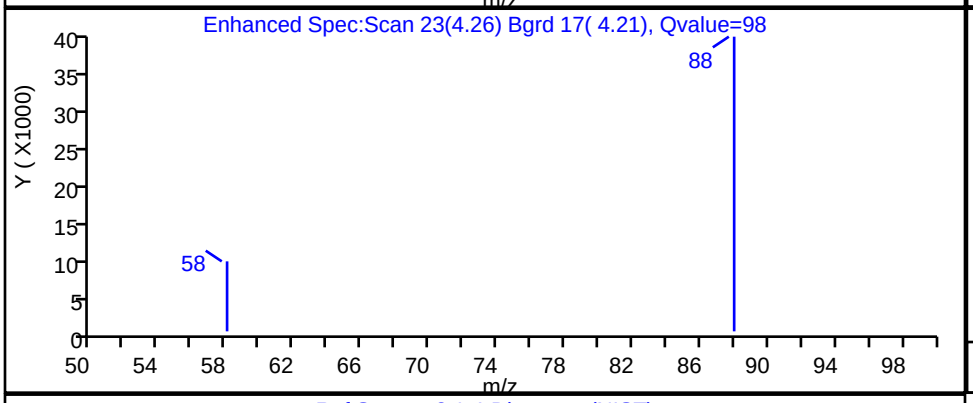
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28870.D		
Injection Date:	01-May-2018 00:10:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-F-1-A	Lab Sample ID:	460-154925-1
Client ID:	GC-MW-102 (WG)		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 16
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

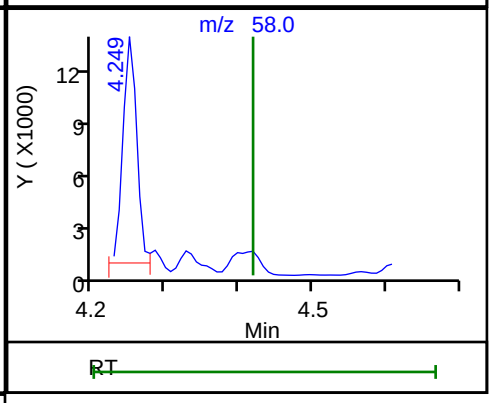
2 1,4-Dioxane, CAS: 123-91-1

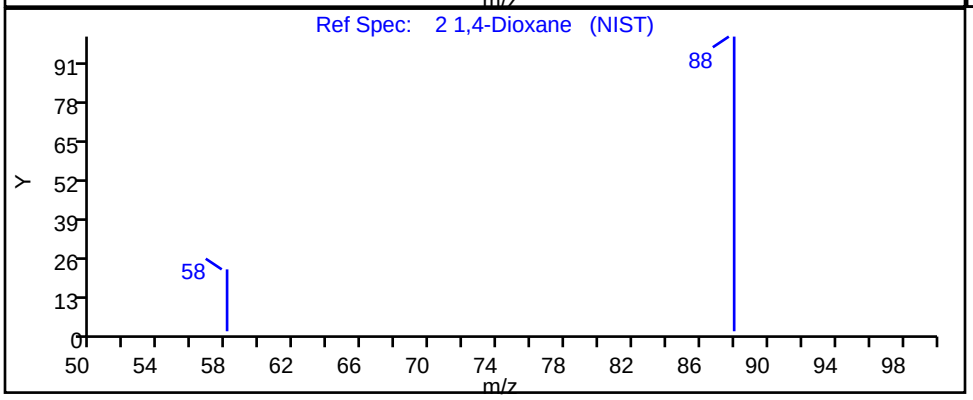
Processing Results











RT	Mass	Response	Amount
4.26	88.00	57585	0.177246
4.25	58.00	16191	

Reviewer: khlungprakhons, 01-May-2018 17:14:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109(WG) | Lab Sample ID: 460-154925-2

Matrix: Water | Lab File ID: C28871.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 09:57

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 00:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	40		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28871.D
Lims ID: 460-154925-D-2-A
Client ID: GC-MW-109 (WG)
Sample Type: Client
Inject. Date: 01-May-2018 00:27:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-017
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:14:54

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	972607	1.60	40.0	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	418338	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

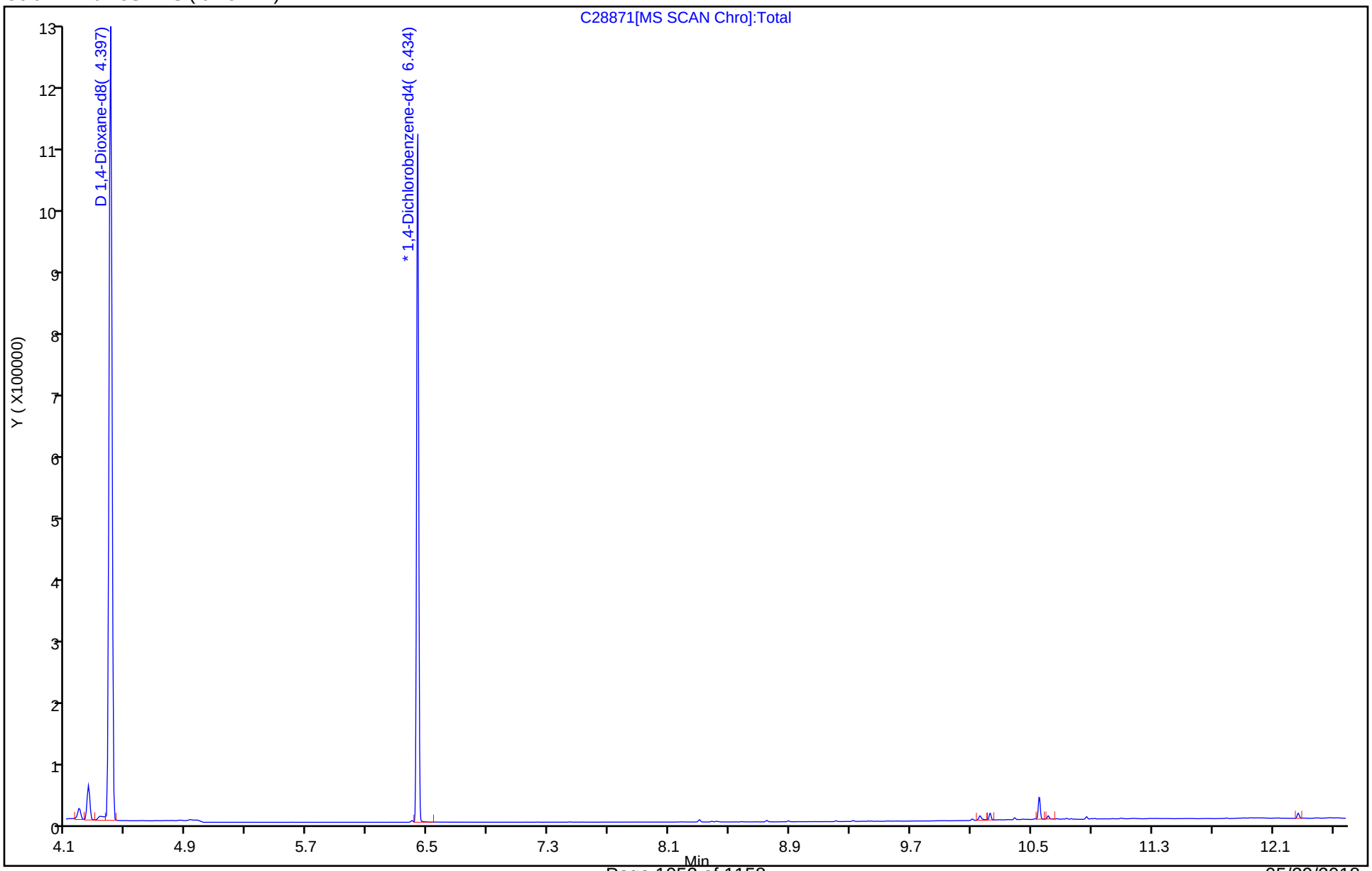
Report Date: 01-May-2018 10:26:09 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28871.D

Injection Date:	01-May-2018 00:27:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-D-2-A	Lab Sample ID:	460-154925-2	Worklist Smp#:	17
Client ID:	GC-MW-109 (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)

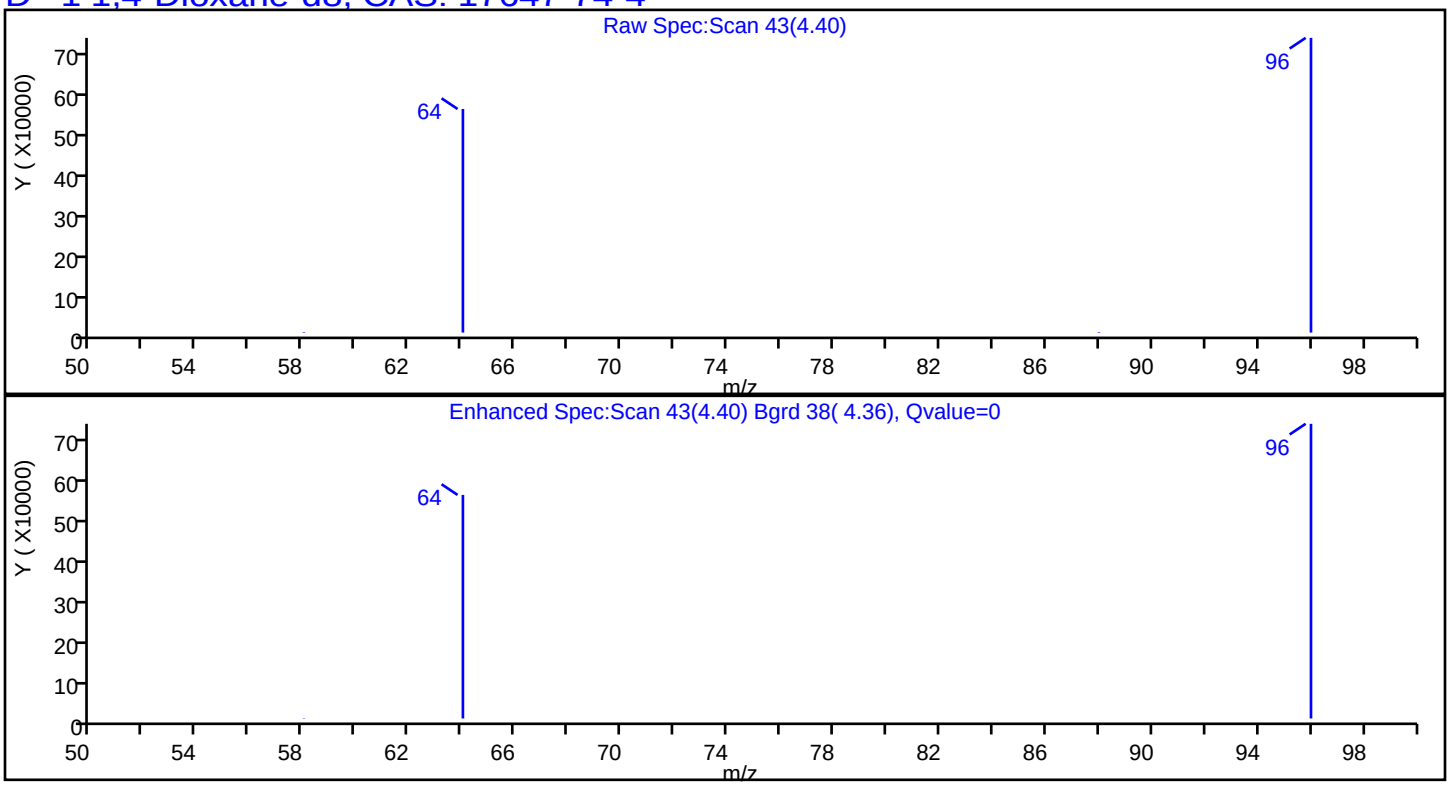


Report Date: 01-May-2018 10:26:09 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28871.D				
Injection Date:	01-May-2018 00:27:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-D-2-A	Lab Sample ID:	460-154925-2		
Client ID:	GC-MW-109 (WG)				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



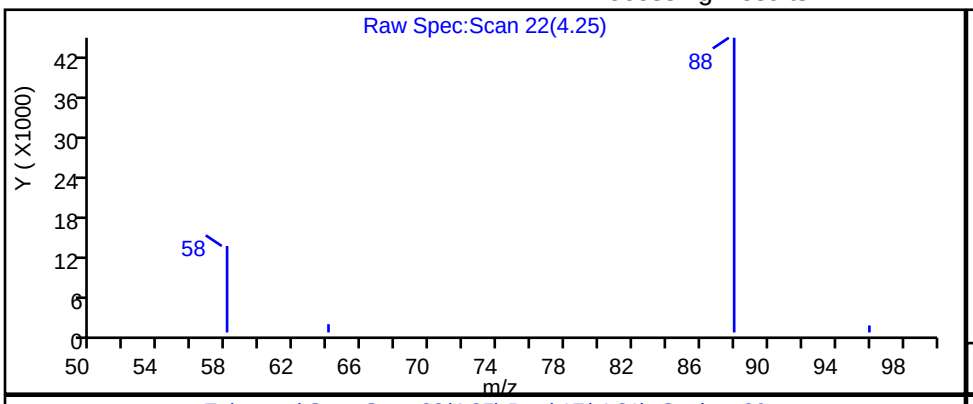
User Disabled Compound Report

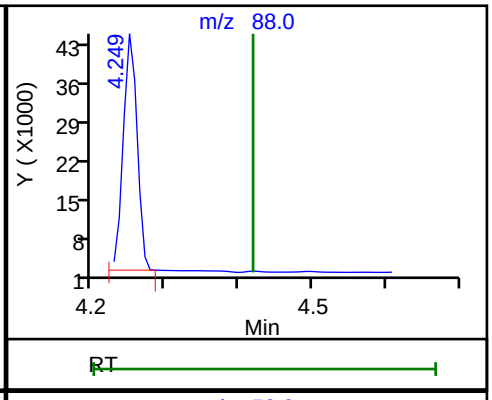
TestAmerica Edison

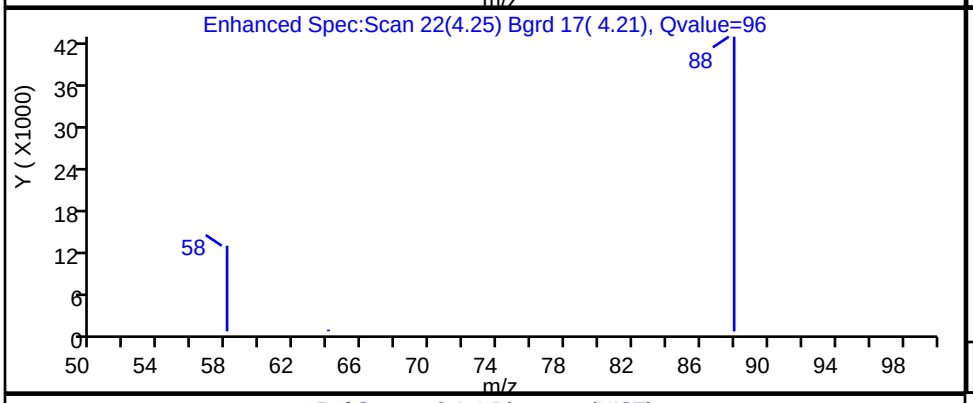
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28871.D		
Injection Date:	01-May-2018 00:27:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-D-2-A	Lab Sample ID:	460-154925-2
Client ID:	GC-MW-109 (WG)		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 17
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

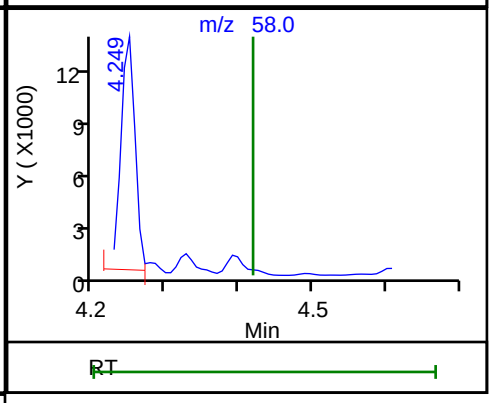
2 1,4-Dioxane, CAS: 123-91-1

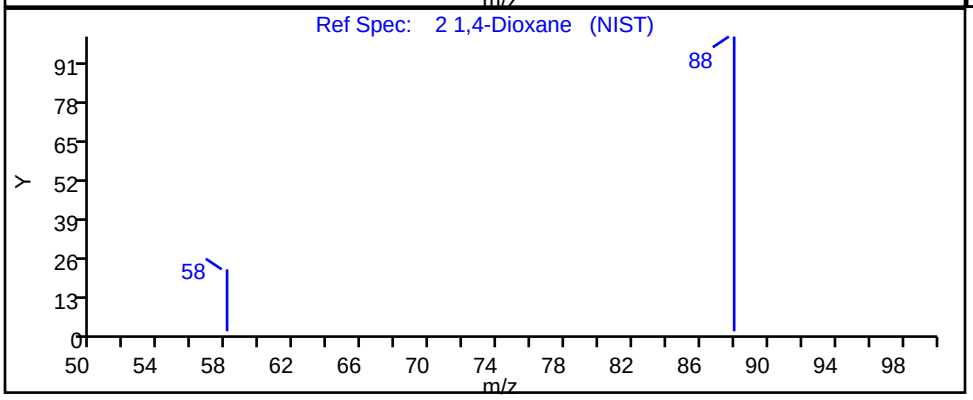
Processing Results











RT	Mass	Response	Amount
4.25	88.00	57044	0.188847
4.25	58.00	16759	

Reviewer: khlungprakhons, 01-May-2018 17:14:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109M(WG) | Lab Sample ID: 460-154925-3

Matrix: Water | Lab File ID: C28872.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 09:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 05/01/2018 00:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	35		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28872.D
Lims ID: 460-154925-F-3-A
Client ID: GC-MW-109 M (WG)
Sample Type: Client
Inject. Date: 01-May-2018 00:45:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-018
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:15:06

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	824129	1.40	35.1	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	403925	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

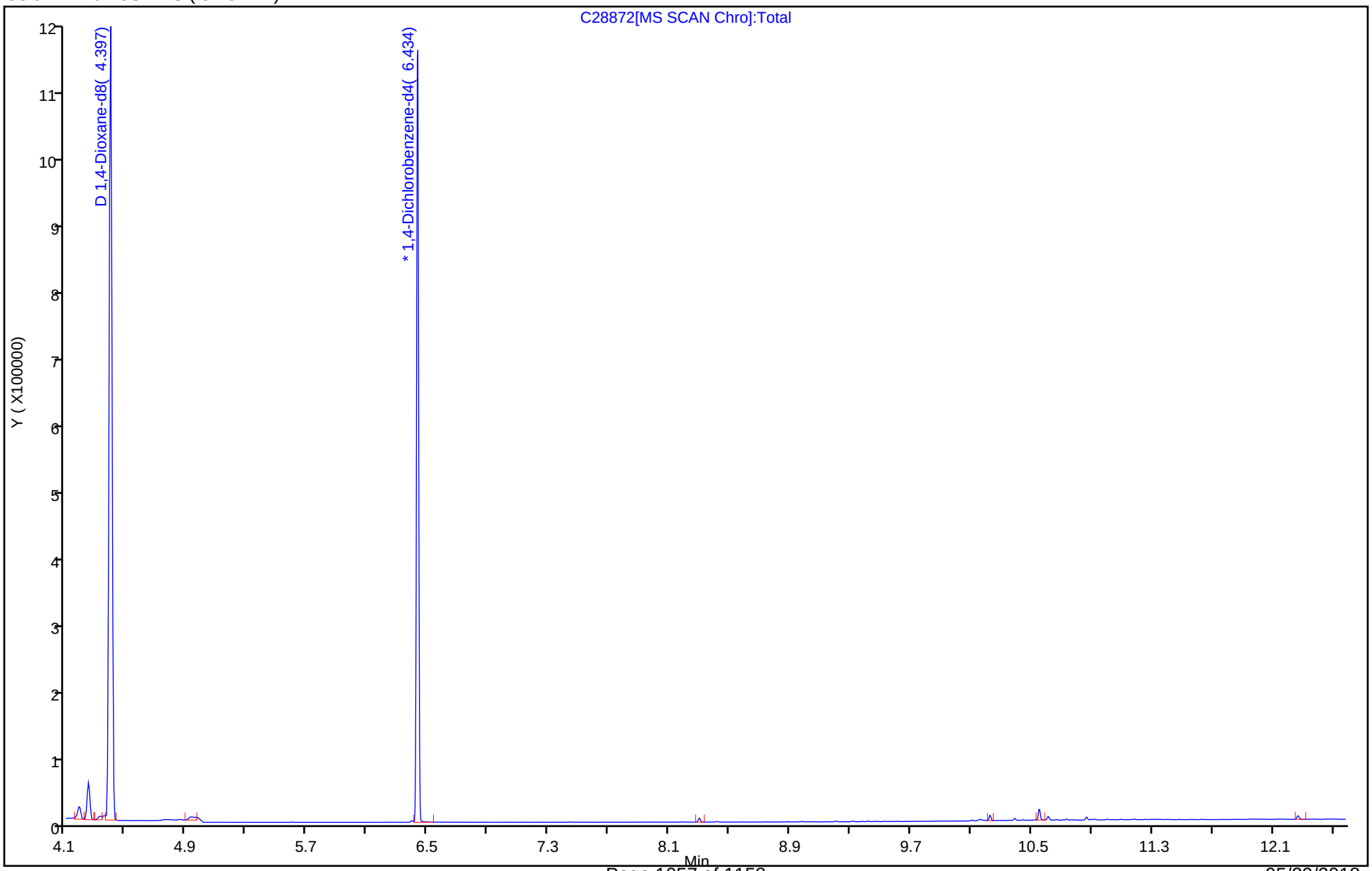
Report Date: 01-May-2018 10:26:12 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28872.D

Injection Date:	01-May-2018 00:45:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-F-3-A	Lab Sample ID:	460-154925-3	Worklist Smp#:	18
Client ID:	GC-MW-109 M (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

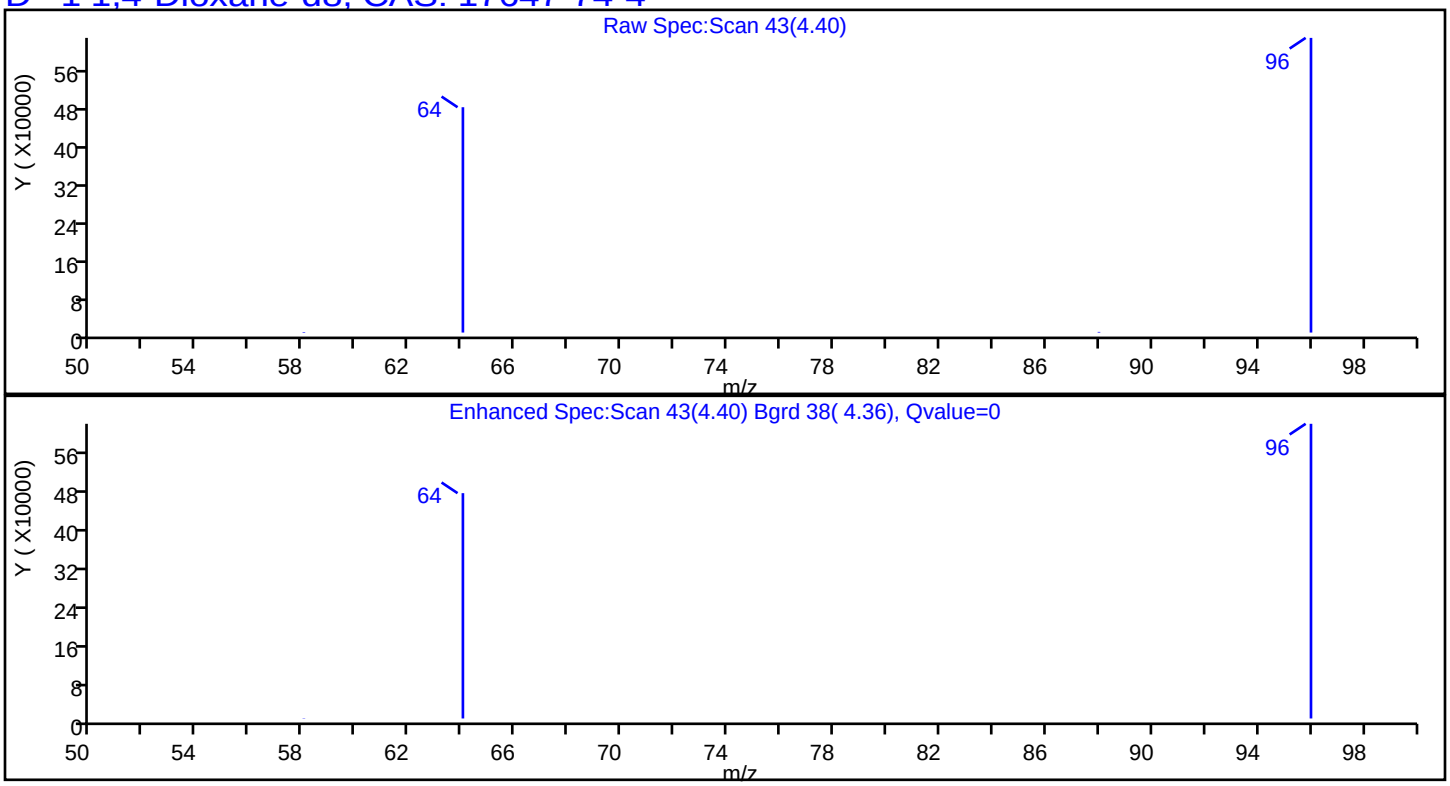
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28872.D				
Injection Date:	01-May-2018 00:45:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-F-3-A	Lab Sample ID:	460-154925-3		
Client ID:	GC-MW-109 M (WG)				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



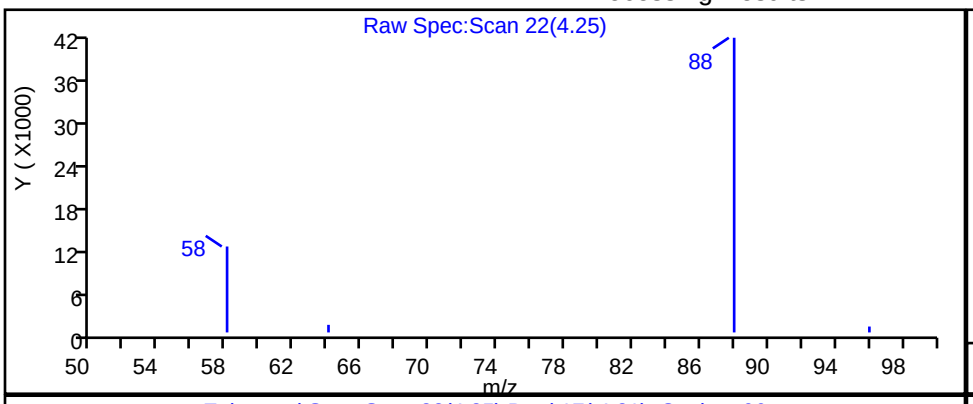
User Disabled Compound Report

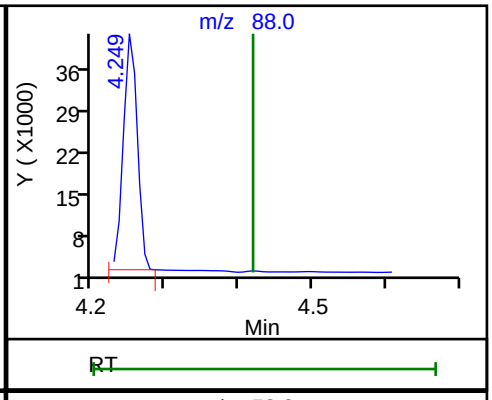
TestAmerica Edison

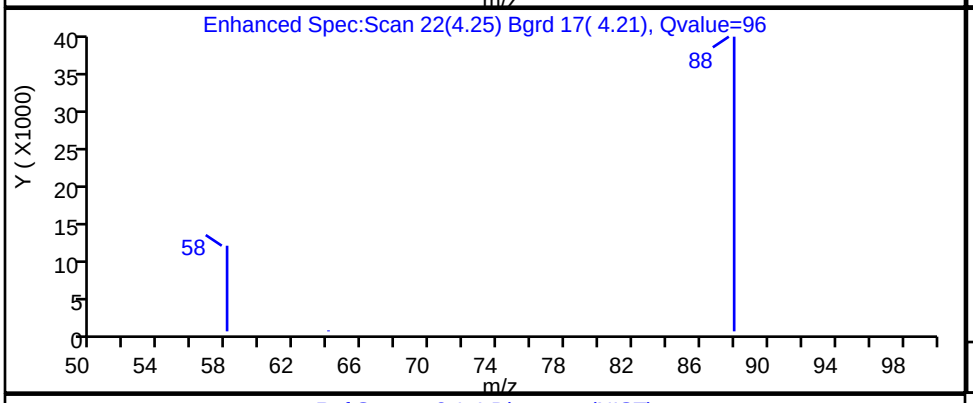
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28872.D		
Injection Date:	01-May-2018 00:45:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-F-3-A	Lab Sample ID:	460-154925-3
Client ID:	GC-MW-109 M (WG)		
Operator ID:		ALS Bottle#:	18 Worklist Smp#: 18
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

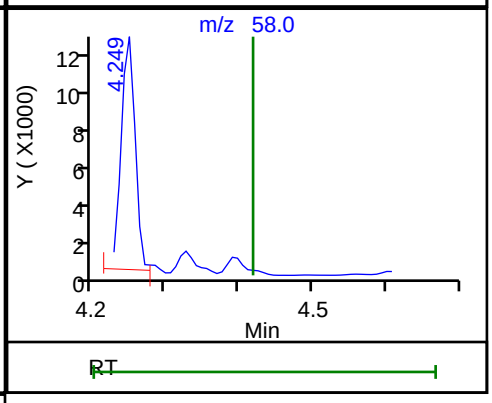
2 1,4-Dioxane, CAS: 123-91-1

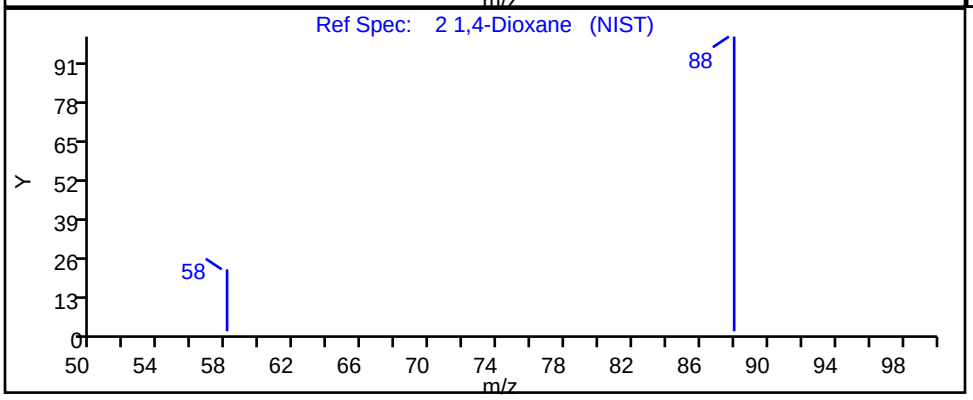
Processing Results











RT	Mass	Response	Amount
4.25	88.00	52868	0.206554
4.25	58.00	15291	

Reviewer: khlungprakhons, 01-May-2018 17:15:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101(WG) | Lab Sample ID: 460-154925-4

Matrix: Water | Lab File ID: C28873.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 11:15

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 01:03

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28873.D
Lims ID: 460-154925-D-4-A
Client ID: GC-MW-101 (WG)
Sample Type: Client
Inject. Date: 01-May-2018 01:03:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-019
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:15:19

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1039744	1.62	40.6	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	440827	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

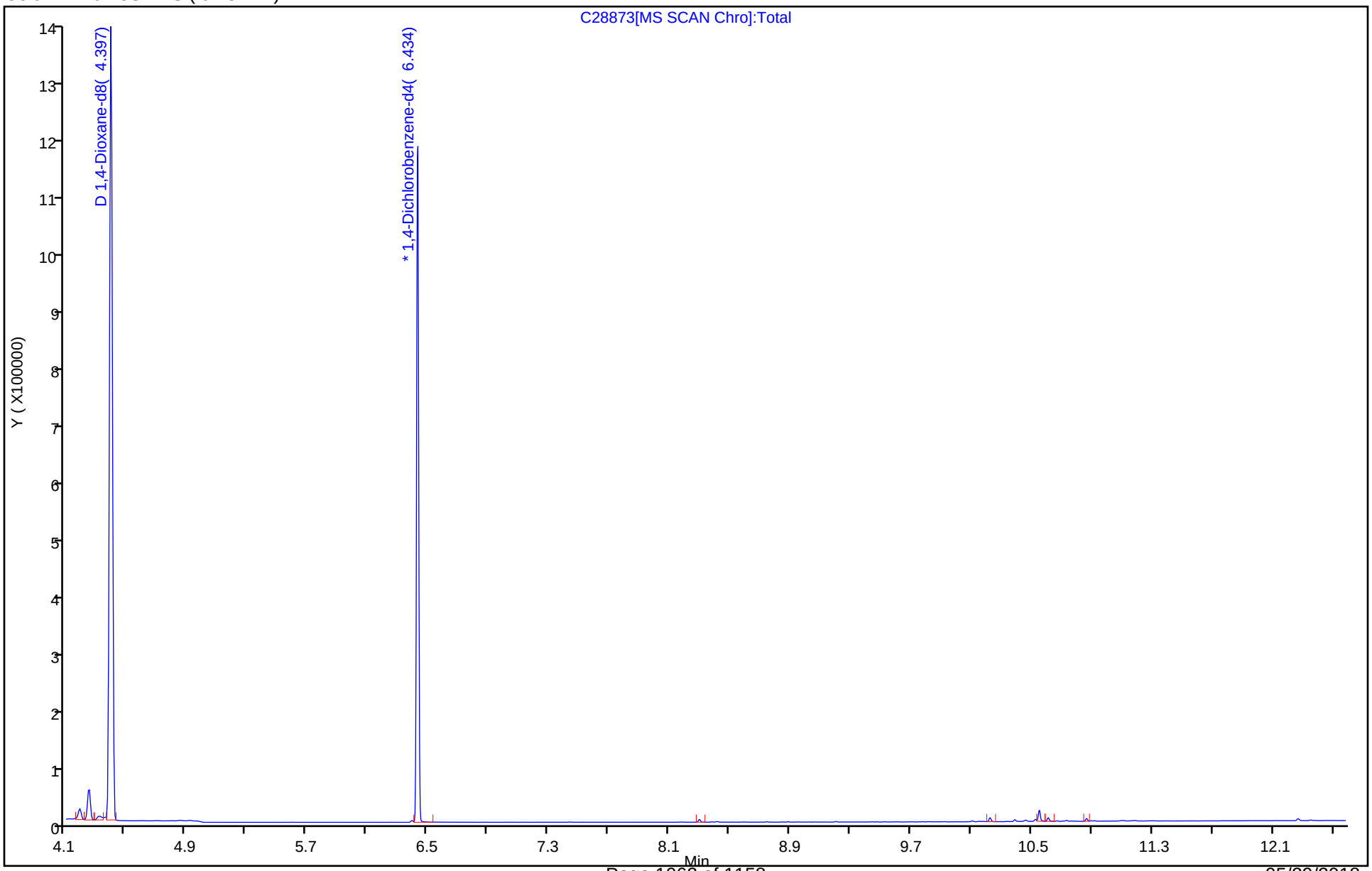
Report Date: 01-May-2018 10:26:15 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28873.D

Injection Date:	01-May-2018 01:03:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-D-4-A	Lab Sample ID:	460-154925-4	Worklist Smp#:	19
Client ID:	GC-MW-101 (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

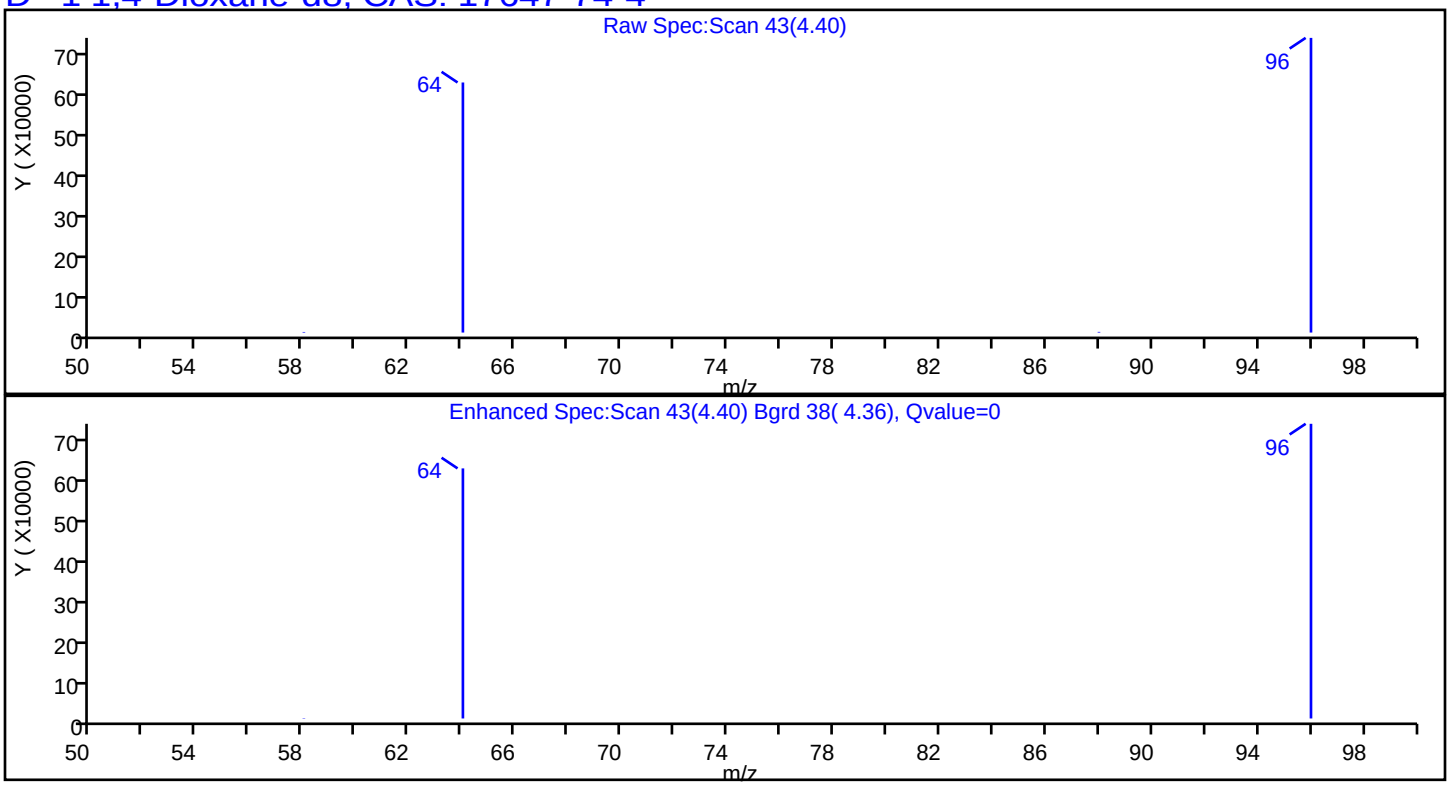
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28873.D				
Injection Date:	01-May-2018 01:03:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-D-4-A	Lab Sample ID:	460-154925-4		
Client ID:	GC-MW-101 (WG)				
Operator ID:		ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



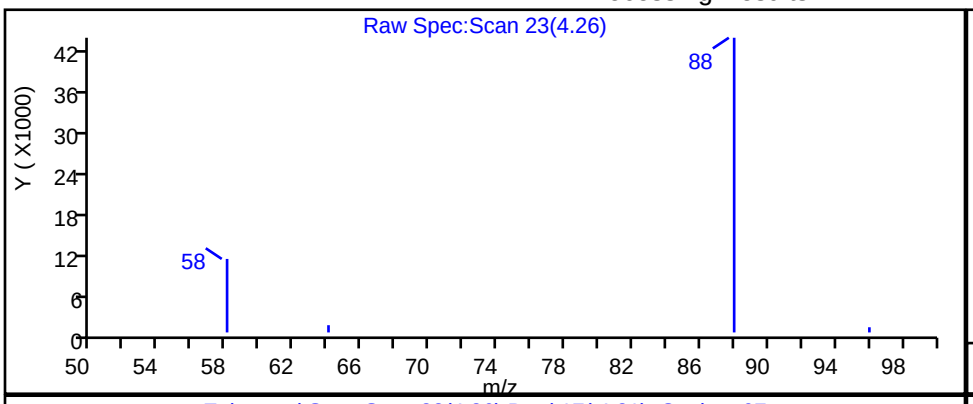
User Disabled Compound Report

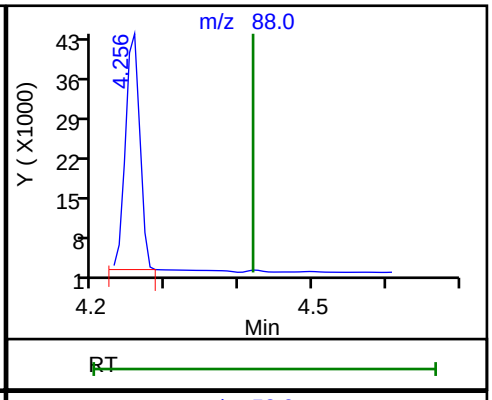
TestAmerica Edison

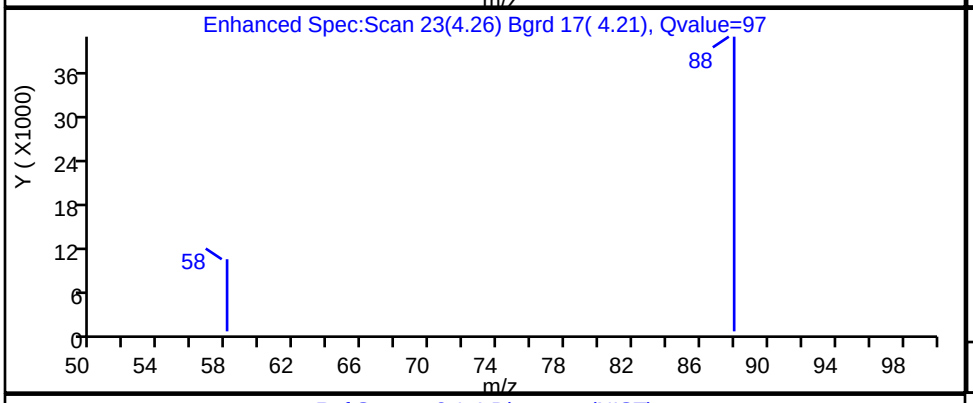
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28873.D		
Injection Date:	01-May-2018 01:03:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-D-4-A	Lab Sample ID:	460-154925-4
Client ID:	GC-MW-101 (WG)		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 19
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

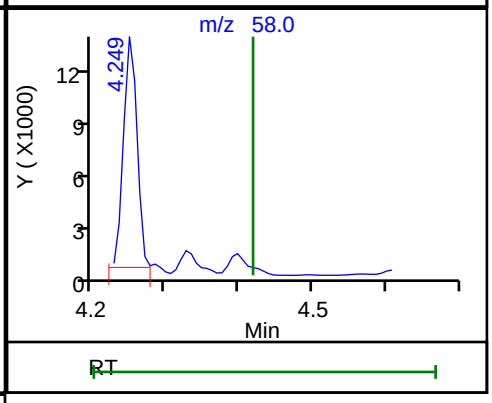
2 1,4-Dioxane, CAS: 123-91-1

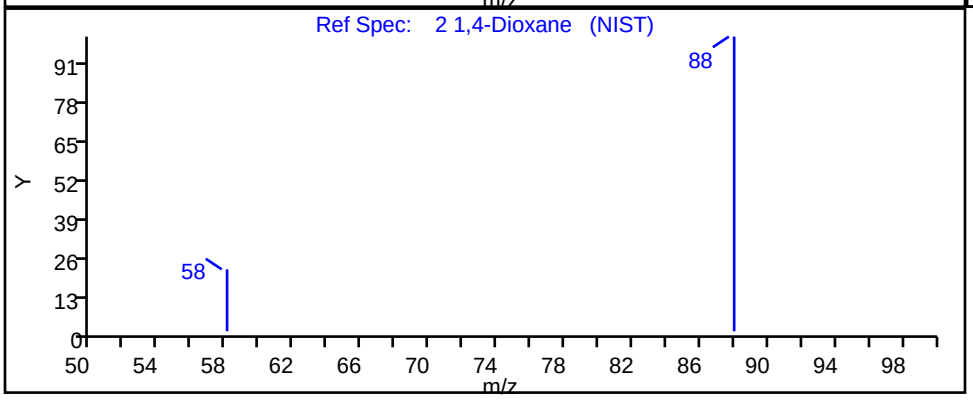
Processing Results











RT	Mass	Response	Amount
4.26	88.00	57005	0.176532
4.25	58.00	16127	

Reviewer: khlungprakhons, 01-May-2018 17:15:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101D(WG) | Lab Sample ID: 460-154925-5

Matrix: Water | Lab File ID: C28874.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 11:15

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 01:21

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28874.D
Lims ID: 460-154925-D-5-A
Client ID: GC-MW-101D (WG)
Sample Type: Client
Inject. Date: 01-May-2018 01:21:30 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-020
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:15:31

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	951165	1.54	38.5	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	424804	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

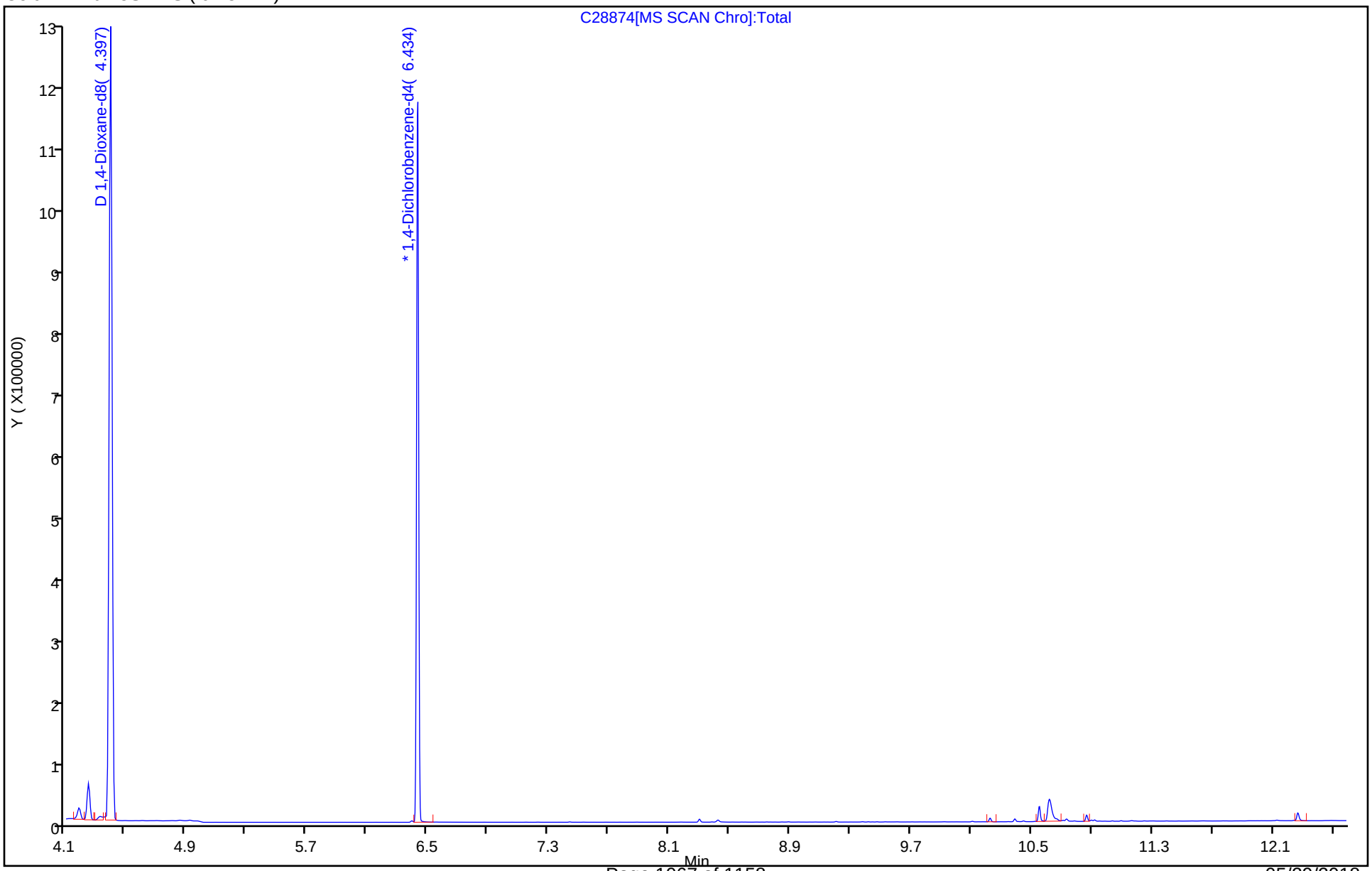
Report Date: 01-May-2018 10:26:18 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28874.D

Injection Date:	01-May-2018 01:21:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-D-5-A	Lab Sample ID:	460-154925-5	Worklist Smp#:	20
Client ID:	GC-MW-101D (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

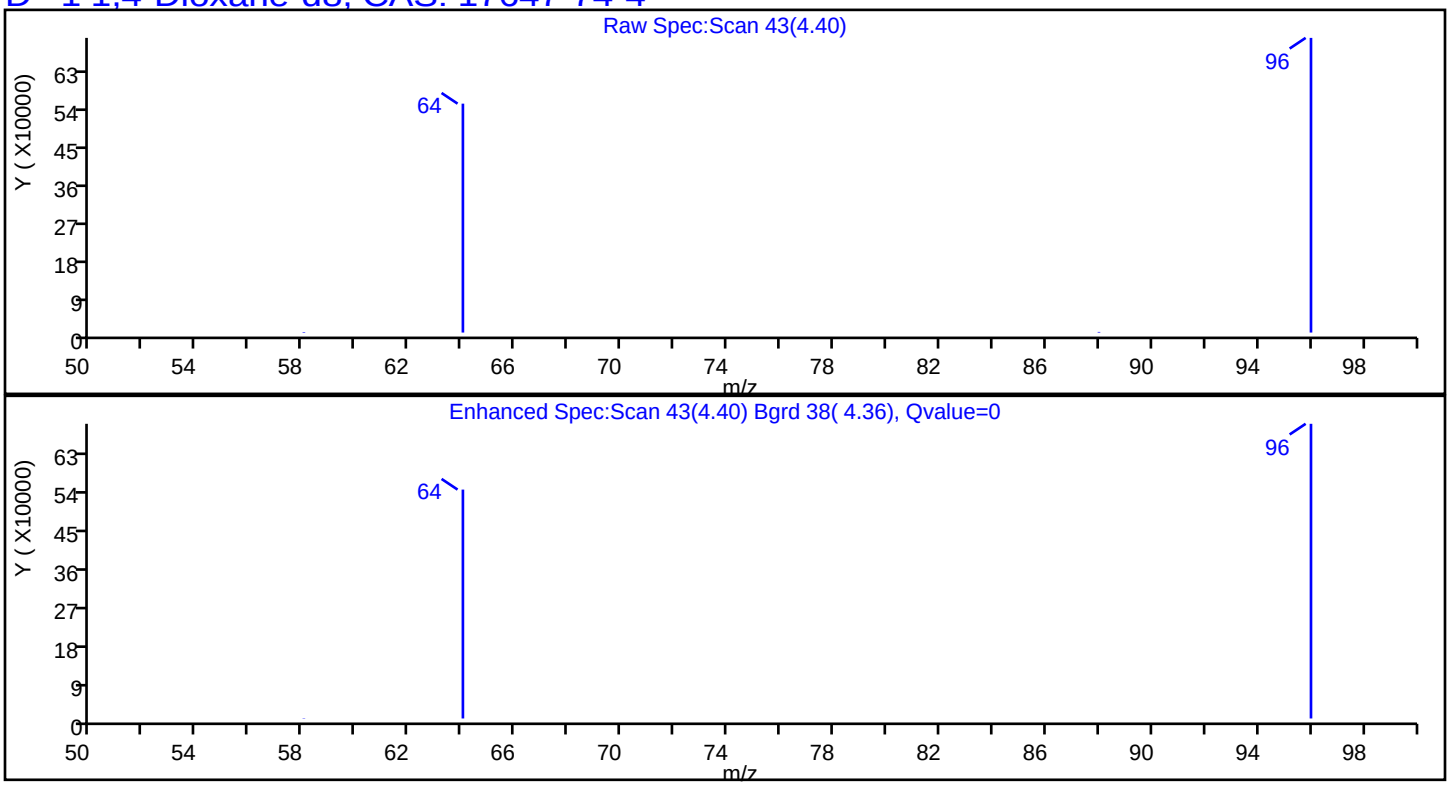
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28874.D				
Injection Date:	01-May-2018 01:21:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-D-5-A	Lab Sample ID:	460-154925-5		
Client ID:	GC-MW-101D (WG)				
Operator ID:		ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



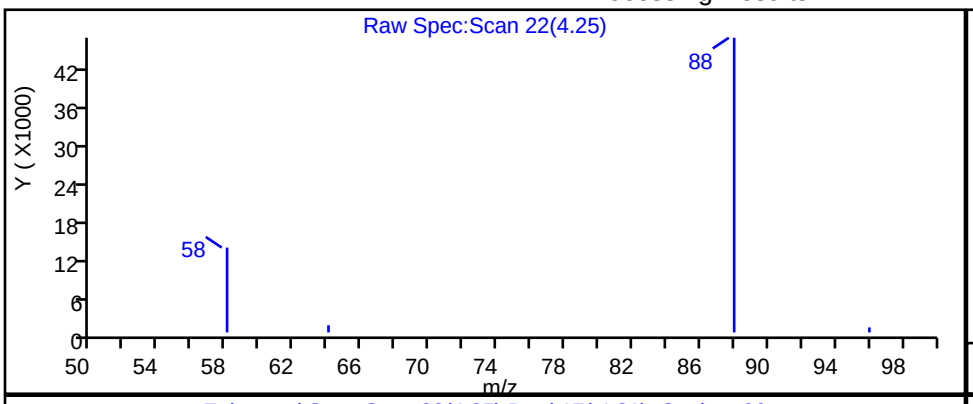
User Disabled Compound Report

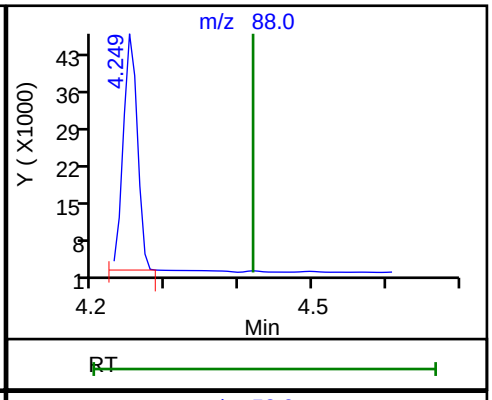
TestAmerica Edison

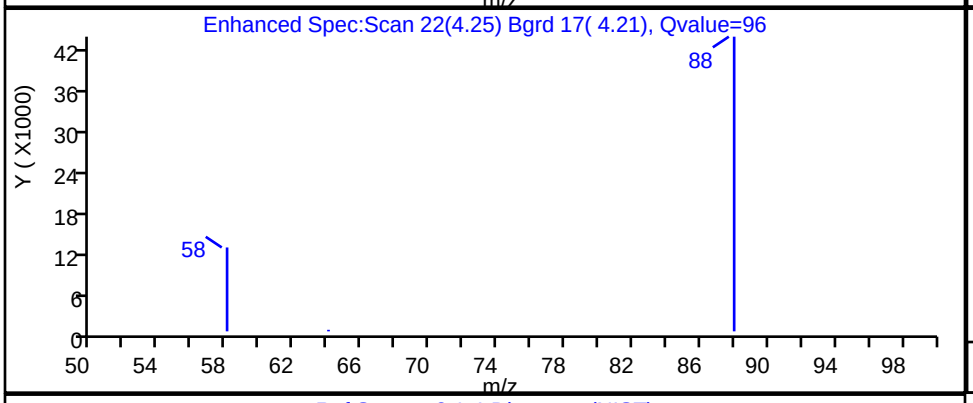
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28874.D		
Injection Date:	01-May-2018 01:21:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-D-5-A	Lab Sample ID:	460-154925-5
Client ID:	GC-MW-101D (WG)		
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 20
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

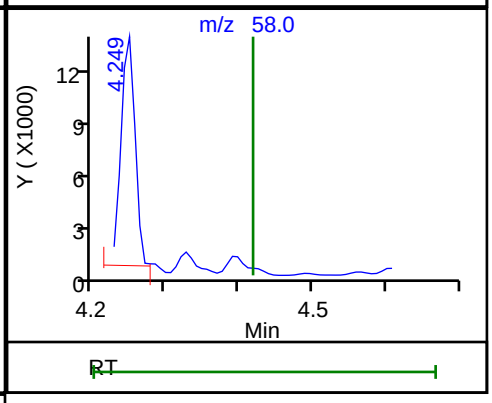
2 1,4-Dioxane, CAS: 123-91-1

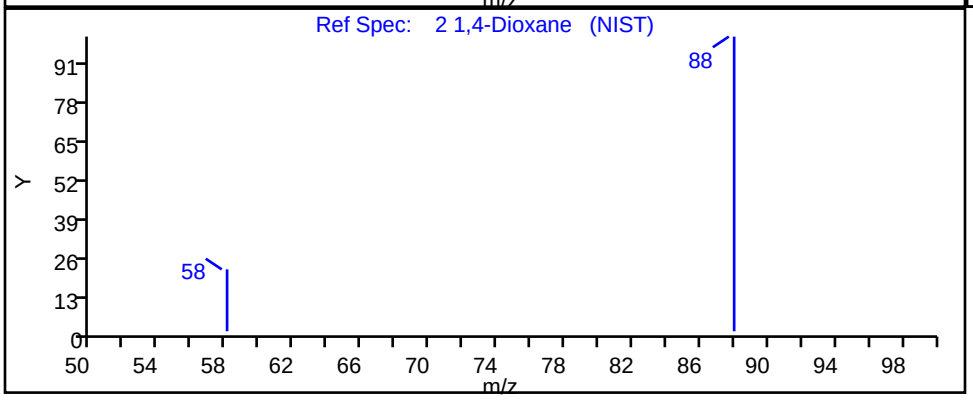
Processing Results











RT	Mass	Response	Amount
4.25	88.00	59479	0.201347
4.25	58.00	16664	

Reviewer: khlungprakhons, 01-May-2018 17:15:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-106(WG) | Lab Sample ID: 460-154925-6

Matrix: Water | Lab File ID: C28875.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 11:55

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 01:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	40		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28875.D
Lims ID: 460-154925-D-6-A
Client ID: GC-MW-106 (WG)
Sample Type: Client
Inject. Date: 01-May-2018 01:39:30 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-021
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:15:44

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1019176	1.62	40.4	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	433380	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

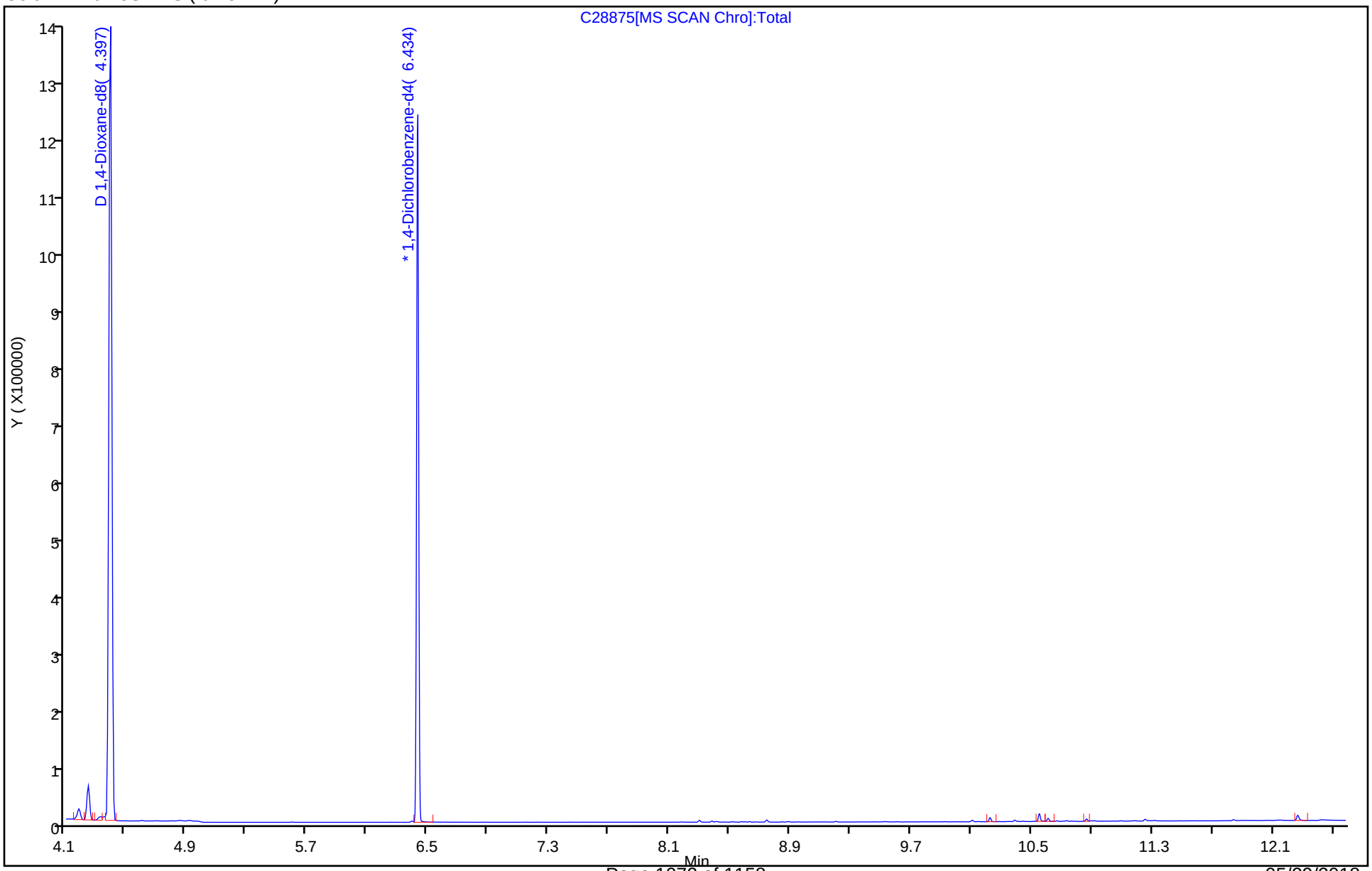
Report Date: 01-May-2018 10:26:21 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28875.D

Injection Date:	01-May-2018 01:39:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-D-6-A	Lab Sample ID:	460-154925-6	Worklist Smp#:	21
Client ID:	GC-MW-106 (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

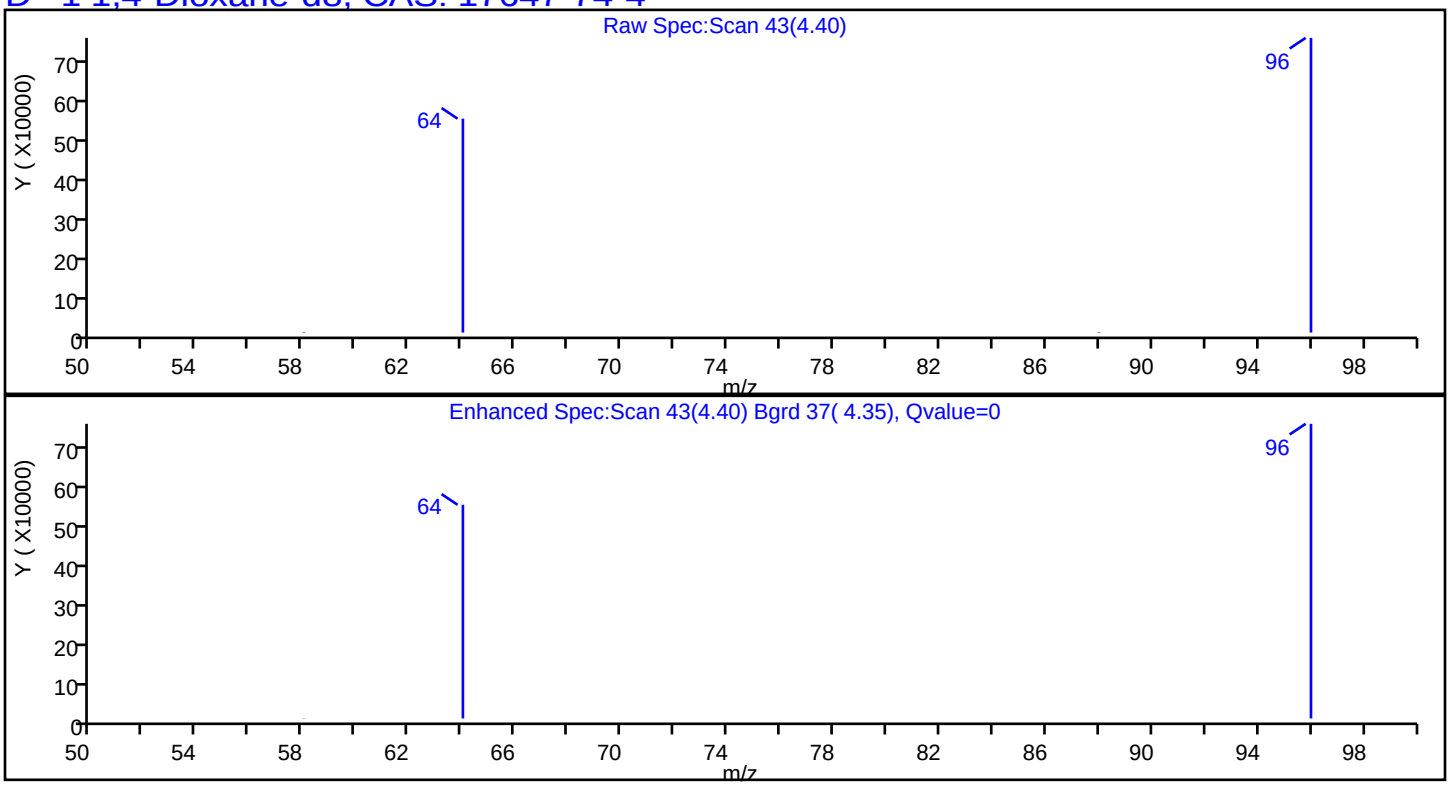
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28875.D				
Injection Date:	01-May-2018 01:39:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-D-6-A	Lab Sample ID:	460-154925-6		
Client ID:	GC-MW-106 (WG)				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



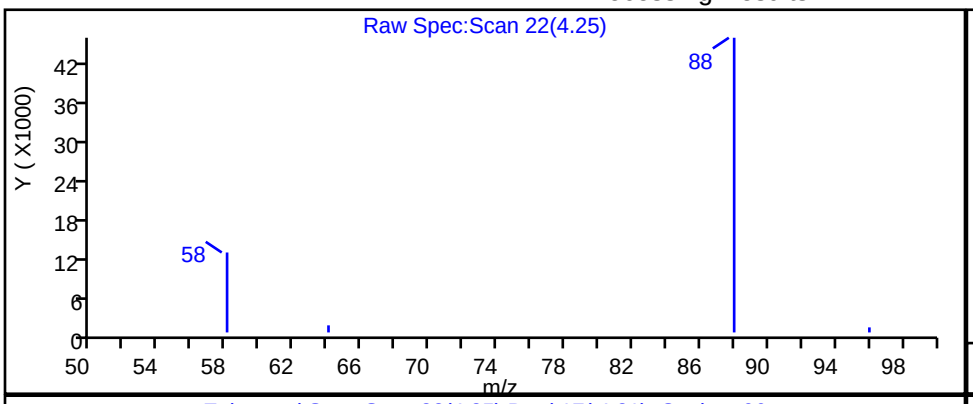
User Disabled Compound Report

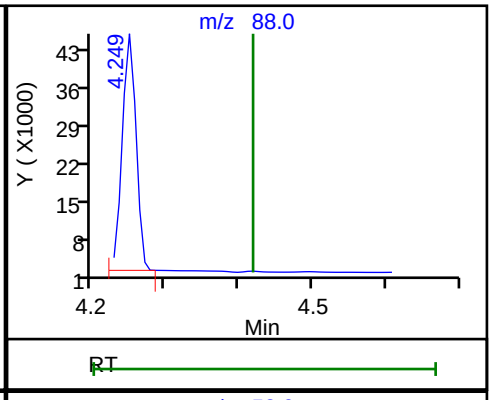
TestAmerica Edison

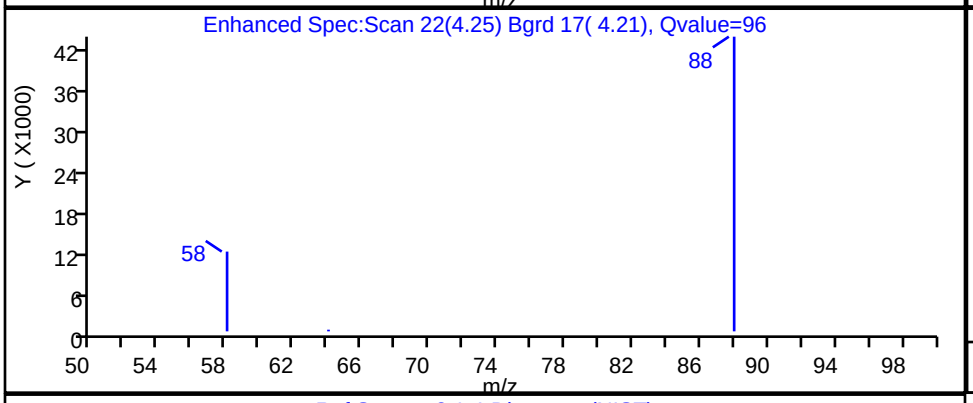
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28875.D		
Injection Date:	01-May-2018 01:39:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-D-6-A	Lab Sample ID:	460-154925-6
Client ID:	GC-MW-106 (WG)		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 21
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

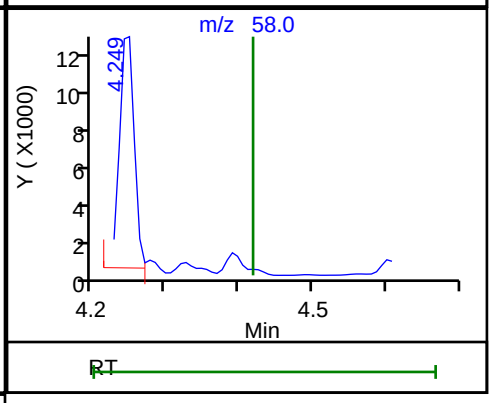
2 1,4-Dioxane, CAS: 123-91-1

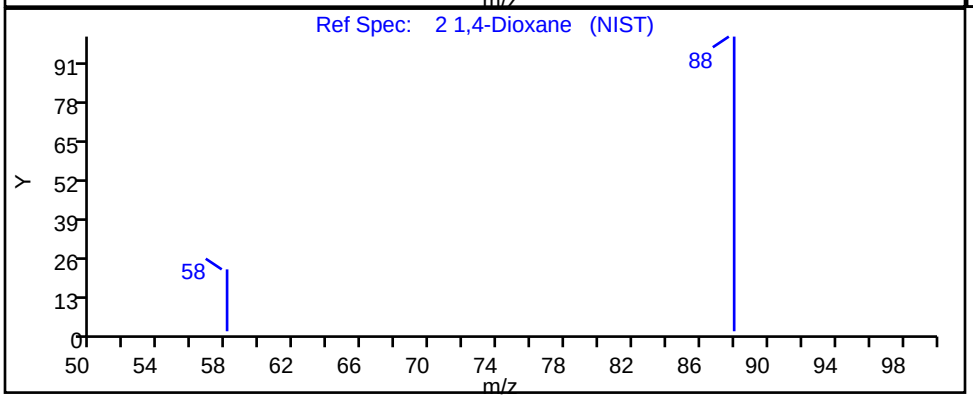
Processing Results











RT	Mass	Response	Amount
4.25	88.00	58207	0.183892
4.25	58.00	16620	

Reviewer: khlungprakhons, 01-May-2018 17:15:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-3(WG) | Lab Sample ID: 460-154925-7

Matrix: Water | Lab File ID: C28876.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 12:45

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 01:56

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	42		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28876.D
Lims ID: 460-154925-D-7-A
Client ID: GC-MW-3 (WG)
Sample Type: Client
Inject. Date: 01-May-2018 01:56:30 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-022
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:15:56

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1056660	1.66	41.5	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	437715	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

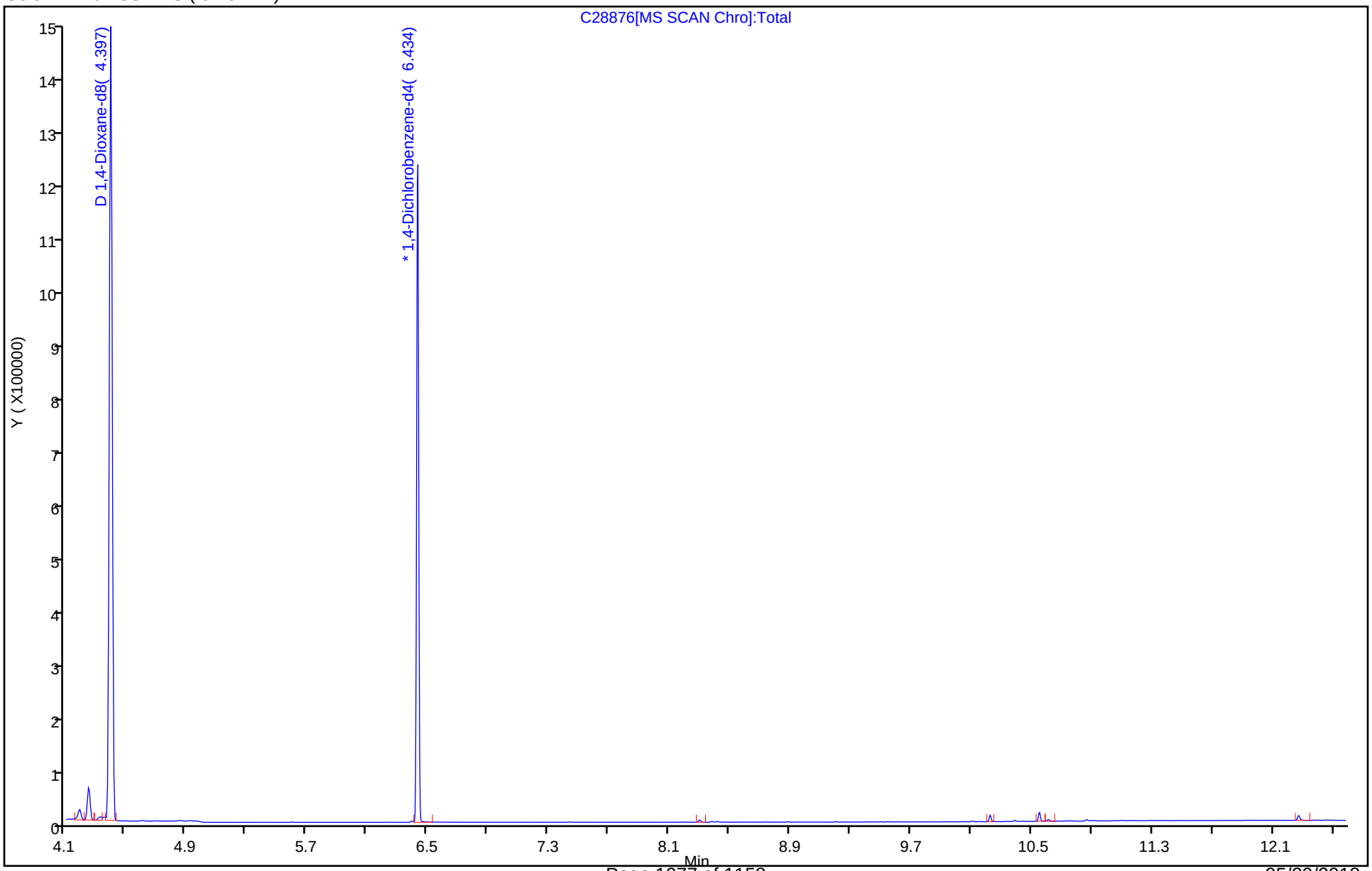
Report Date: 01-May-2018 10:26:24 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28876.D

Injection Date:	01-May-2018 01:56:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-D-7-A	Lab Sample ID:	460-154925-7	Worklist Smp#:	22
Client ID:	GC-MW-3 (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)

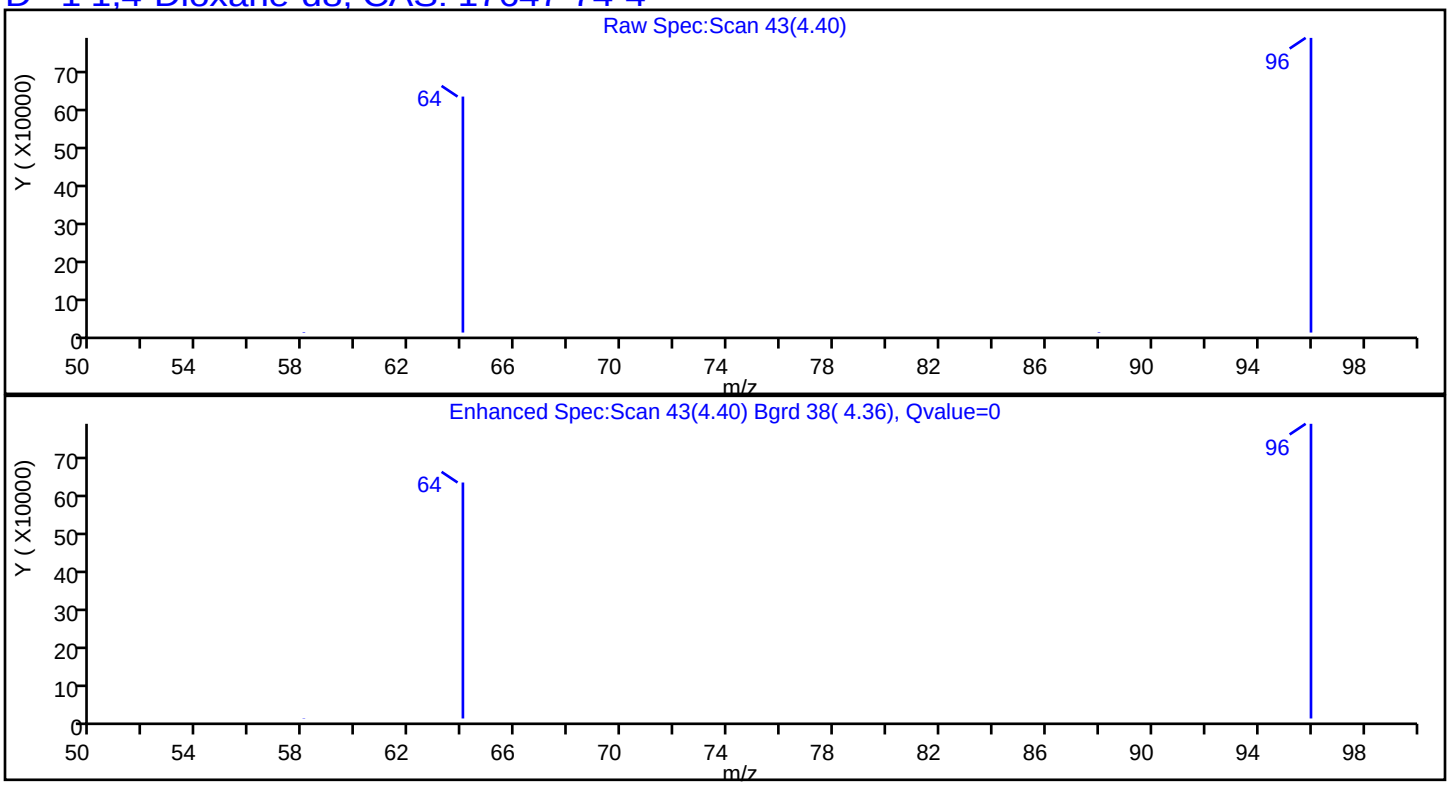


Report Date: 01-May-2018 10:26:24 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28876.D				
Injection Date:	01-May-2018 01:56:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-D-7-A	Lab Sample ID:	460-154925-7		
Client ID:	GC-MW-3 (WG)				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



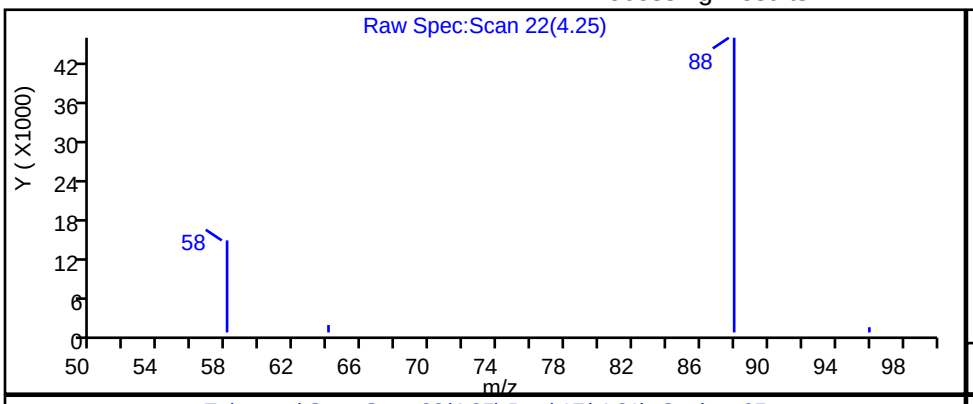
User Disabled Compound Report

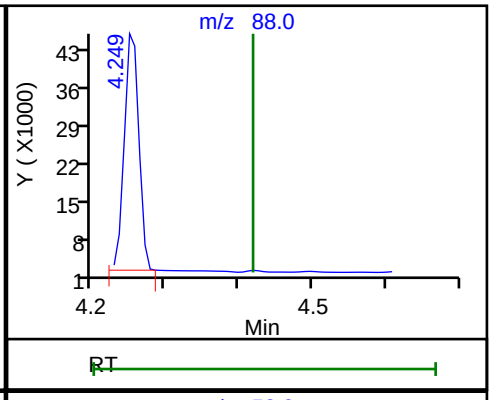
TestAmerica Edison

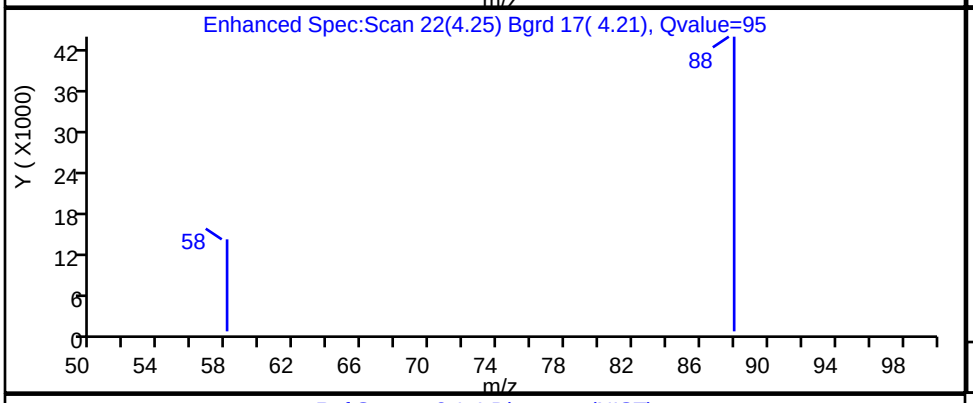
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28876.D		
Injection Date:	01-May-2018 01:56:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-D-7-A	Lab Sample ID:	460-154925-7
Client ID:	GC-MW-3 (WG)		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 22
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

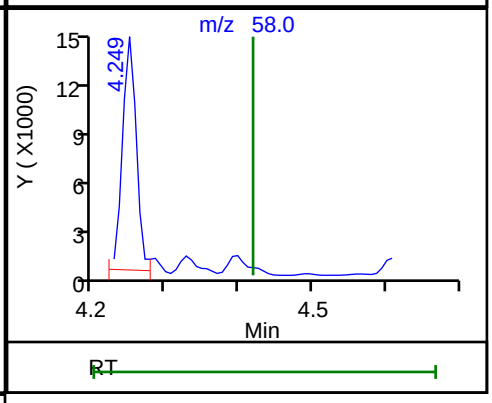
2 1,4-Dioxane, CAS: 123-91-1

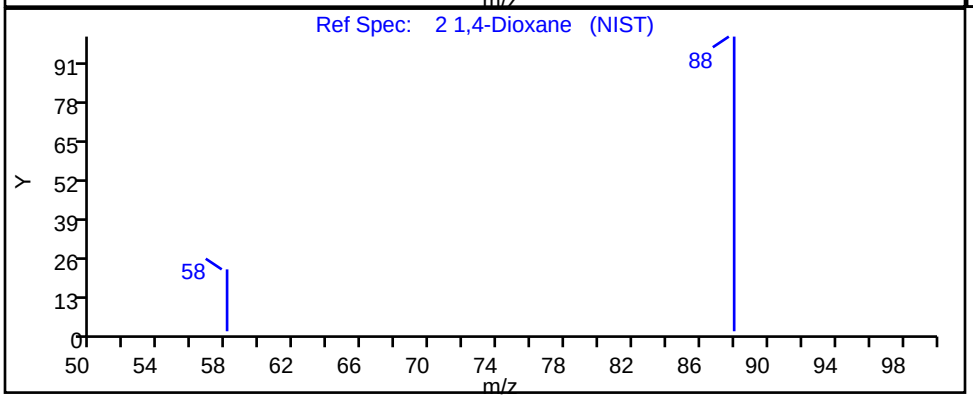
Processing Results











RT	Mass	Response	Amount
4.25	88.00	60695	0.184950
4.25	58.00	17912	

Reviewer: khlungprakhons, 01-May-2018 17:15:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 | Lab Sample ID: 460-154925-9

Matrix: Water | Lab File ID: C28877.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 09:30

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 250(mL) | Date Analyzed: 05/01/2018 02:14

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28877.D
Lims ID: 460-154925-D-9-A
Client ID: GC-Equipment Blank-2
Sample Type: Client
Inject. Date: 01-May-2018 02:14:30 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-023
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:16:10

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.404	4.397	0.007	0	944461	1.49	37.2	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	437094	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

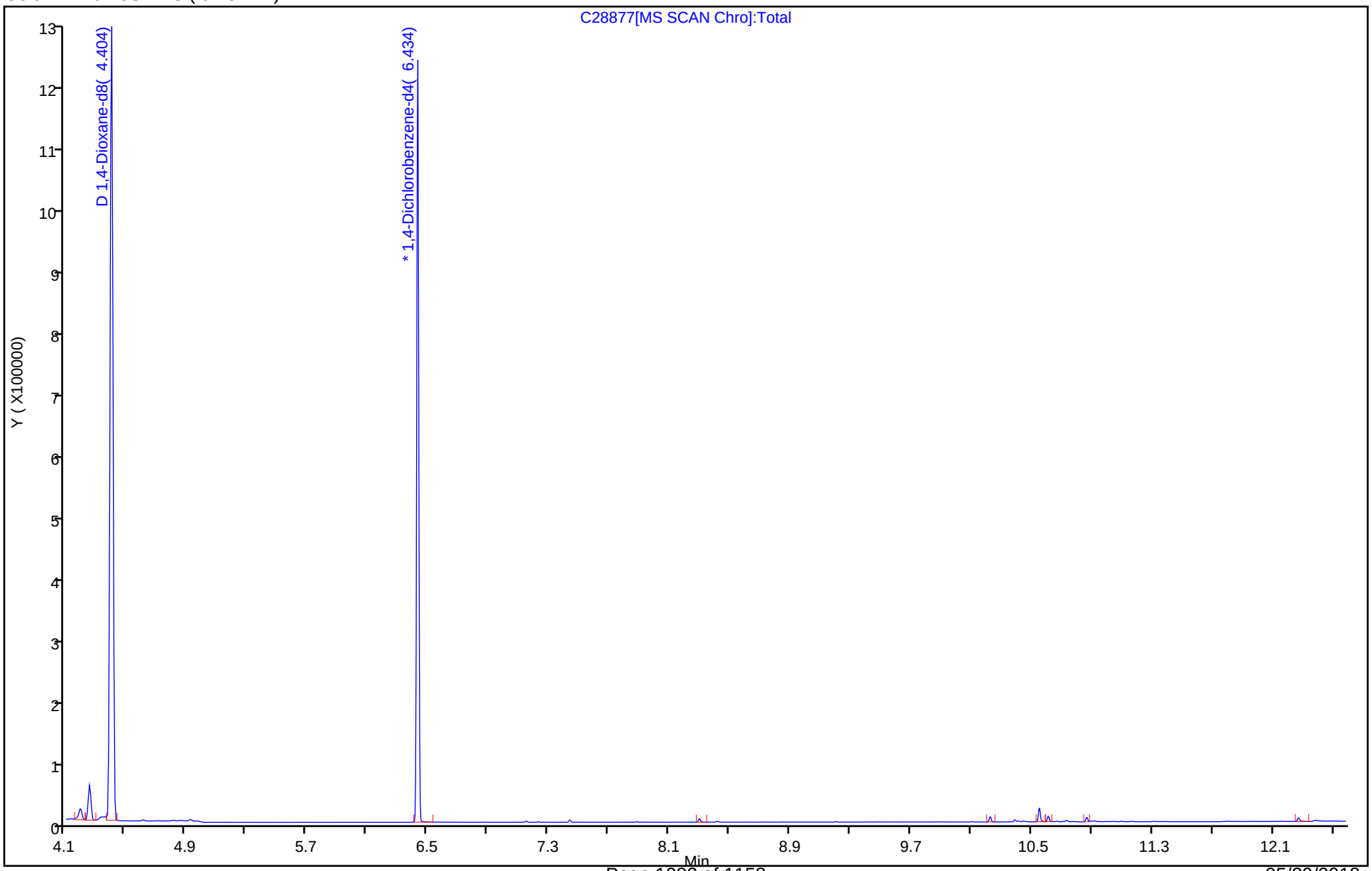
Report Date: 01-May-2018 10:26:27 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28877.D

Injection Date:	01-May-2018 02:14:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-D-9-A	Lab Sample ID:	460-154925-9	Worklist Smp#:	23
Client ID:	GC-Equipment Blank-2				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)

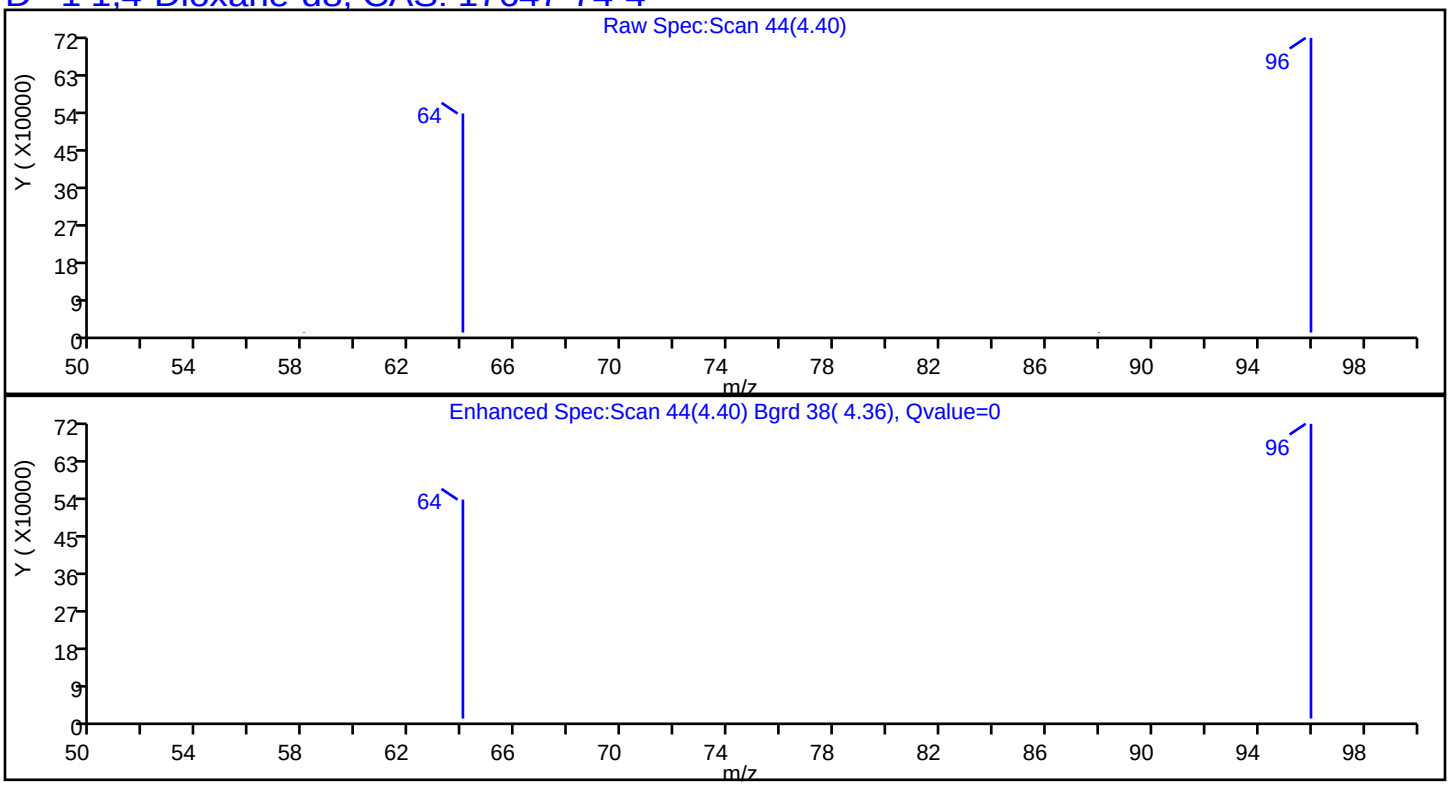


Report Date: 01-May-2018 10:26:27 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28877.D				
Injection Date:	01-May-2018 02:14:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-D-9-A	Lab Sample ID:	460-154925-9		
Client ID:	GC-Equipment Blank-2				
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



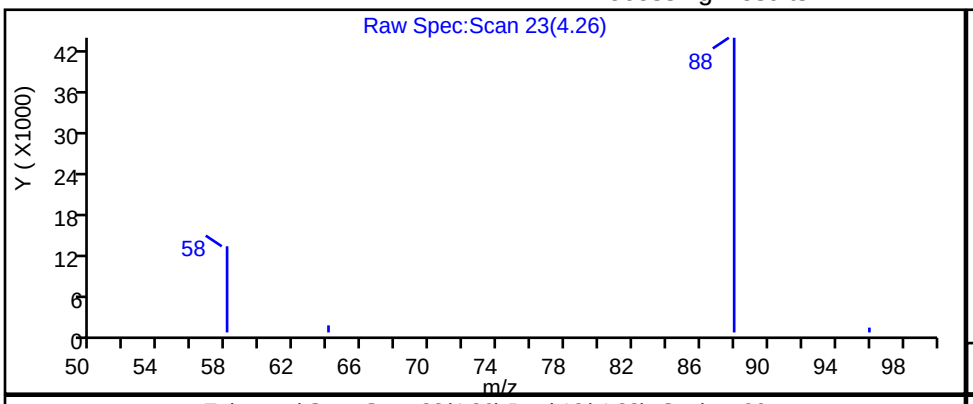
User Disabled Compound Report

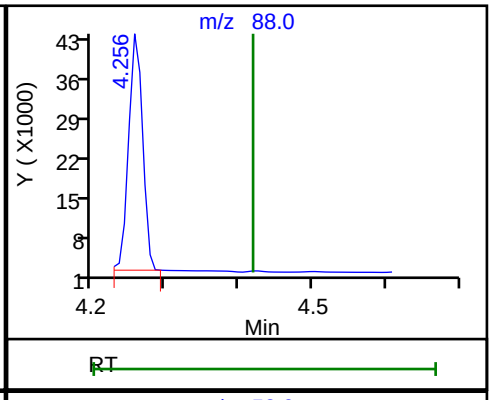
TestAmerica Edison

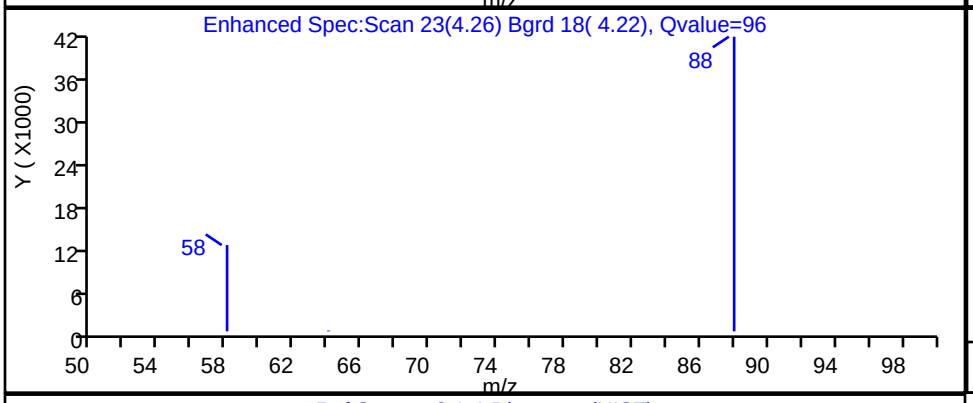
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28877.D		
Injection Date:	01-May-2018 02:14:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-D-9-A	Lab Sample ID:	460-154925-9
Client ID:	GC-Equipment Blank-2		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 23
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

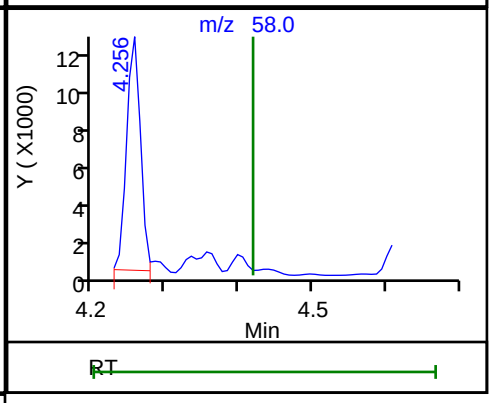
2 1,4-Dioxane, CAS: 123-91-1

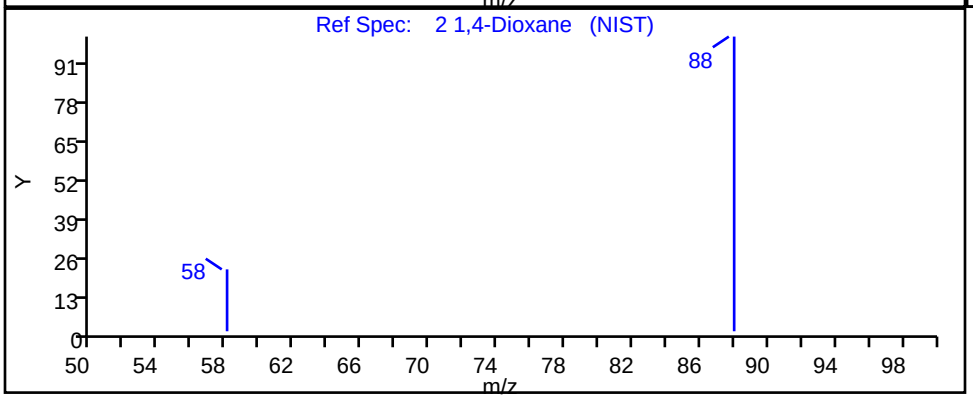
Processing Results











RT	Mass	Response	Amount
4.26	88.00	55767	0.190121
4.26	58.00	16122	

Reviewer: khlungprakhons, 01-May-2018 17:16:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110(WG) | Lab Sample ID: 460-154925-10

Matrix: Water | Lab File ID: C28878.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 13:35

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 02:32

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28878.D
Lims ID: 460-154925-D-10-A
Client ID: GC-MW-110 (WG)
Sample Type: Client
Inject. Date: 01-May-2018 02:32:30 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-024
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:16:26

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.404	4.397	0.007	0	1017776	1.64	41.0	
*	4 1,4-Dichlorobenzene-d4	152	6.433	6.434	-0.001	98	426567	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

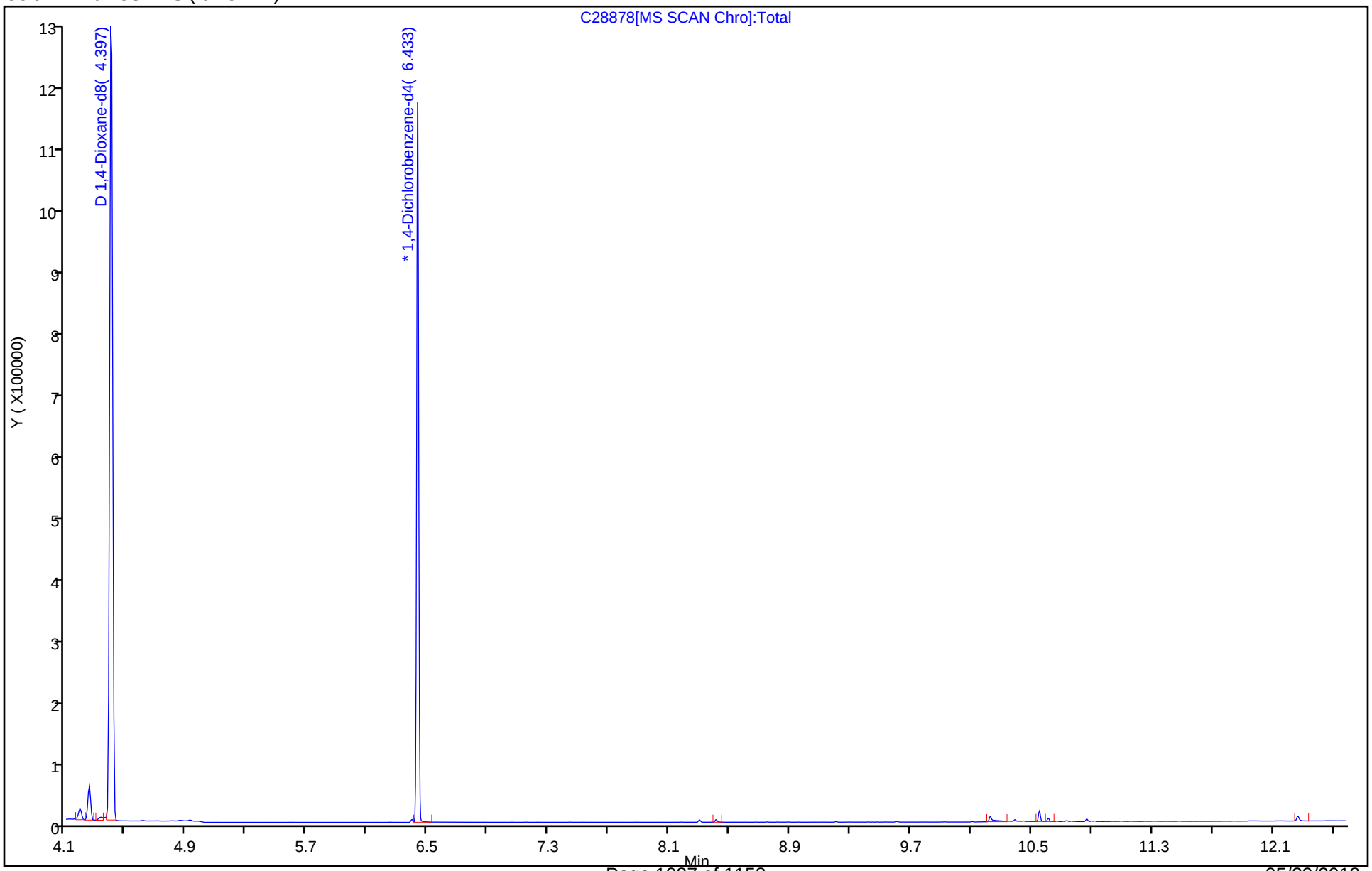
Report Date: 01-May-2018 10:26:31 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28878.D

Injection Date:	01-May-2018 02:32:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-D-10-A	Lab Sample ID:	460-154925-10	Worklist Smp#:	24
Client ID:	GC-MW-110 (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)

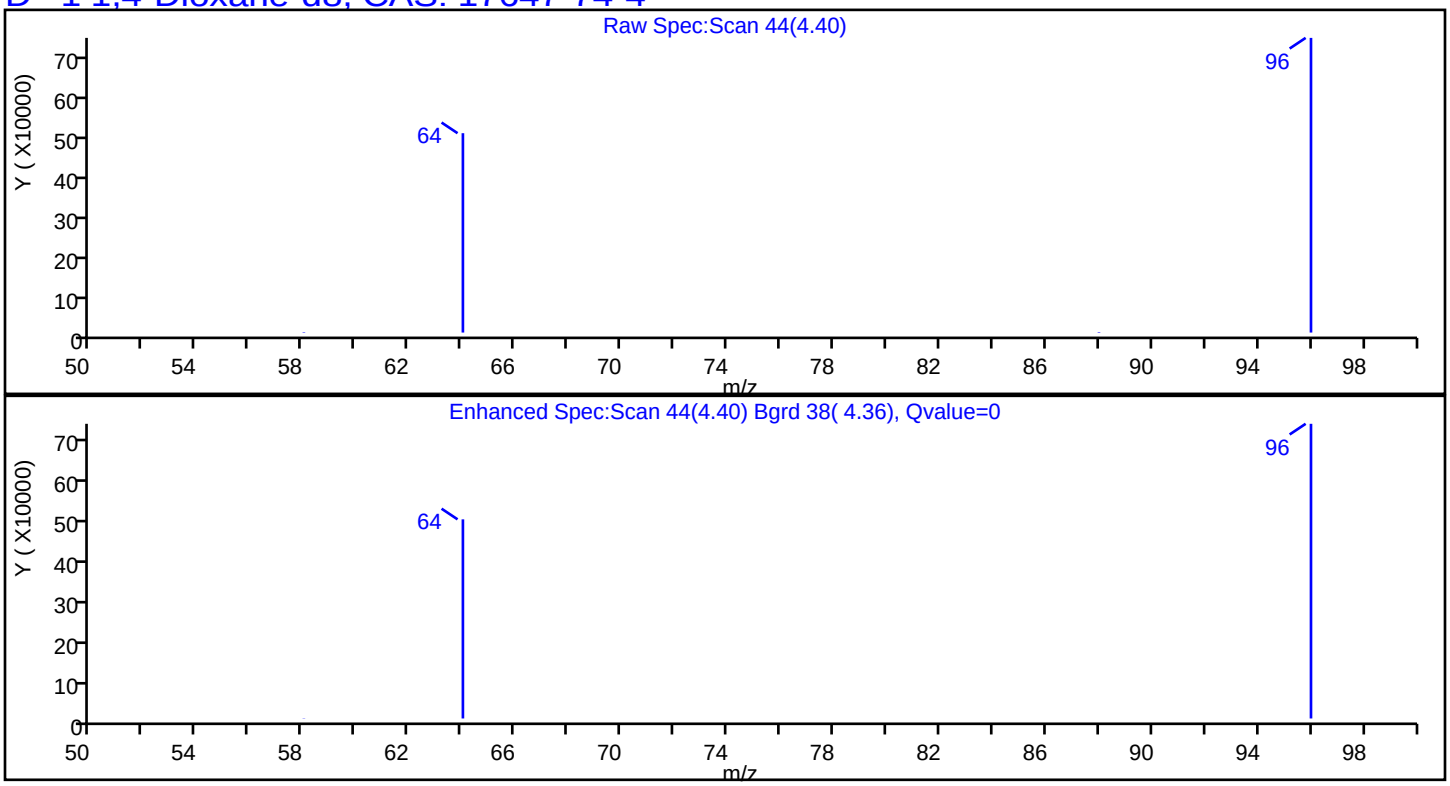


Report Date: 01-May-2018 10:26:31 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28878.D				
Injection Date:	01-May-2018 02:32:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-D-10-A	Lab Sample ID:	460-154925-10		
Client ID:	GC-MW-110 (WG)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



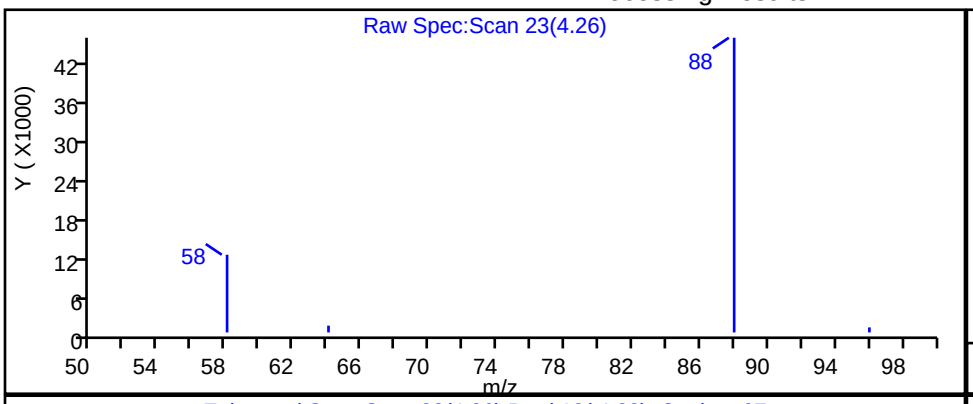
User Disabled Compound Report

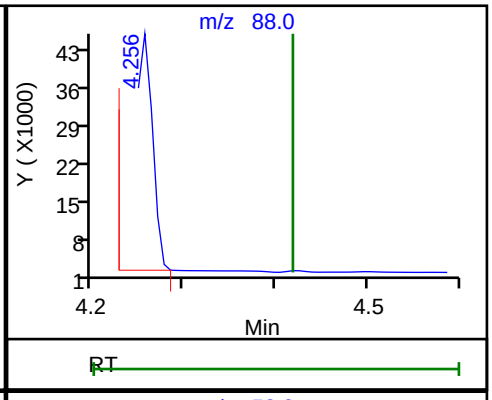
TestAmerica Edison

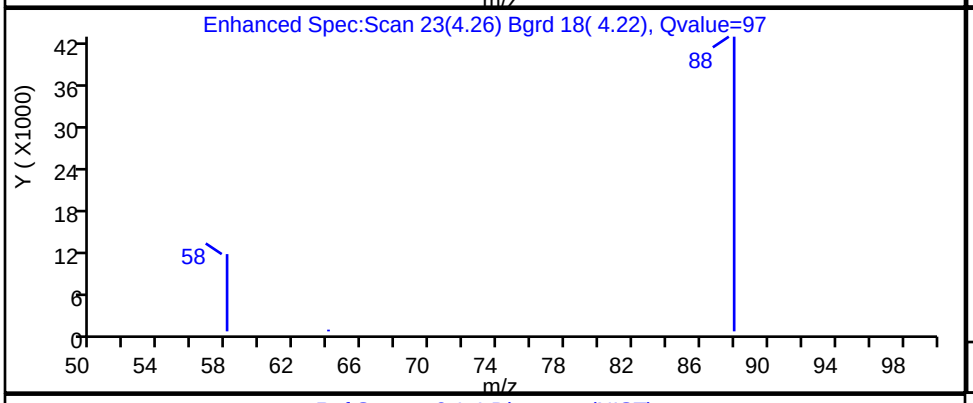
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28878.D		
Injection Date:	01-May-2018 02:32:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-D-10-A	Lab Sample ID:	460-154925-10
Client ID:	GC-MW-110 (WG)		
Operator ID:		ALS Bottle#:	24 Worklist Smp#: 24
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

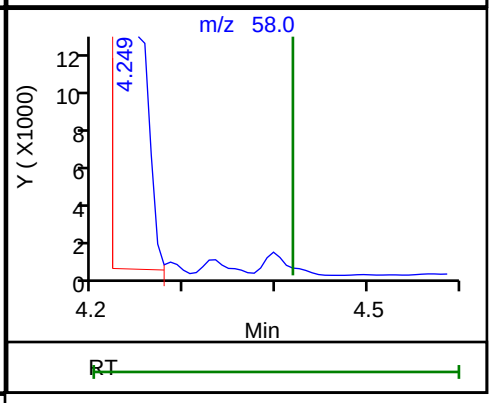
2 1,4-Dioxane, CAS: 123-91-1

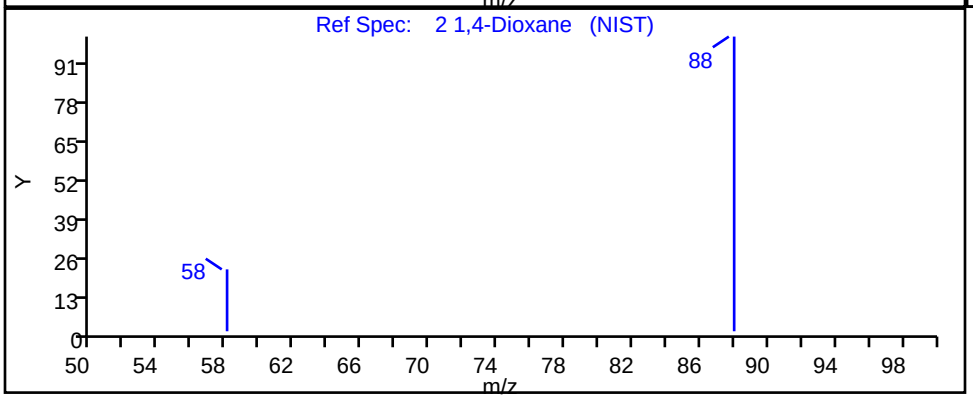
Processing Results











RT	Mass	Response	Amount
4.26	88.00	56822	0.179763
4.25	58.00	16348	

Reviewer: khlungprakhons, 01-May-2018 17:16:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110D(WG) | Lab Sample ID: 460-154925-11

Matrix: Water | Lab File ID: C28879.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 14:30

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 02:50

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	38		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28879.D
Lims ID: 460-154925-E-11-A
Client ID: GC-MW-110D (WG)
Sample Type: Client
Inject. Date: 01-May-2018 02:50:30 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-025
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:16:40

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	959070	1.54	38.5	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	428812	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

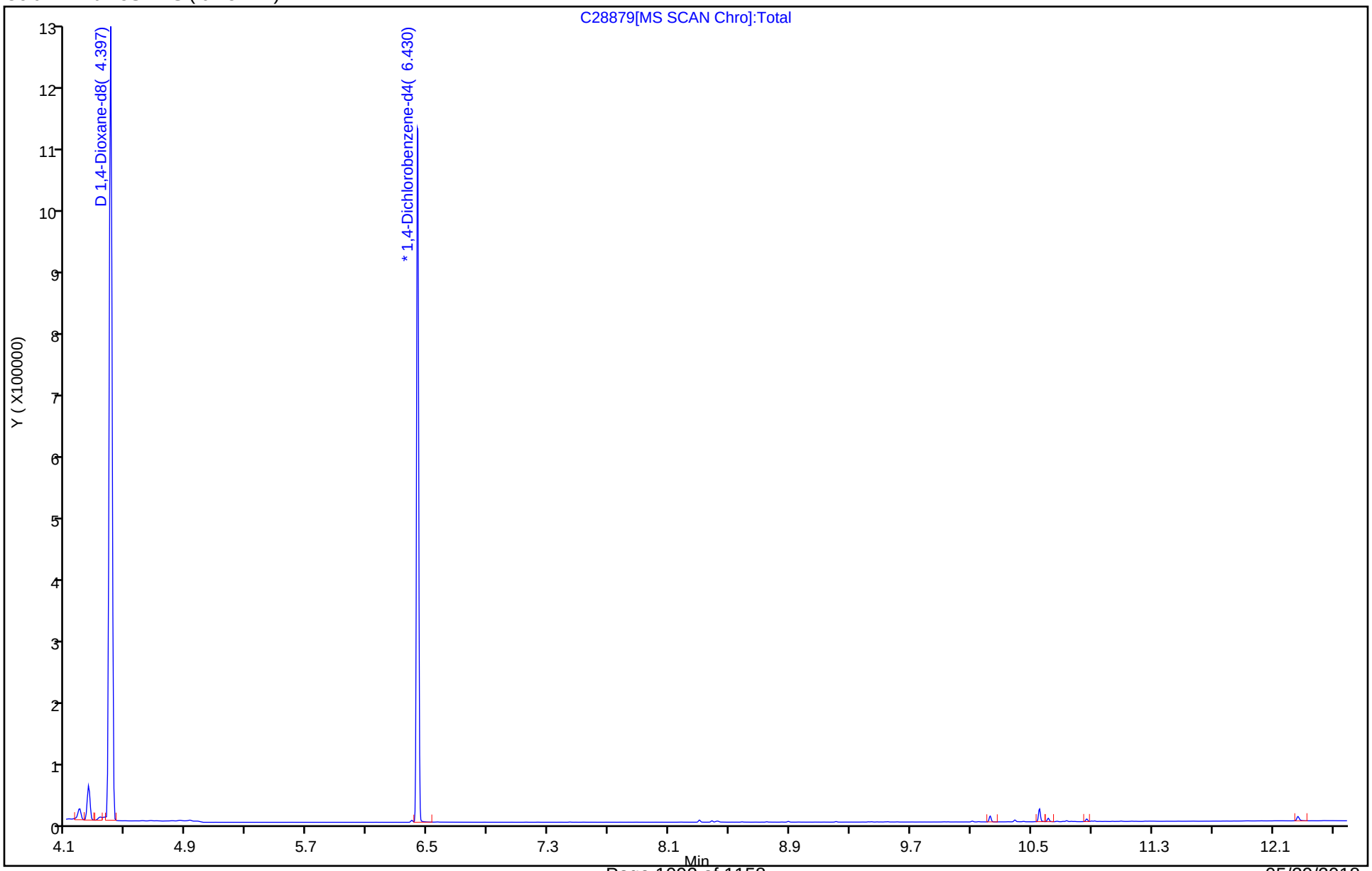
Report Date: 01-May-2018 10:26:34 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28879.D

Injection Date:	01-May-2018 02:50:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-E-11-A	Lab Sample ID:	460-154925-11	Worklist Smp#:	25
Client ID:	GC-MW-110D (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

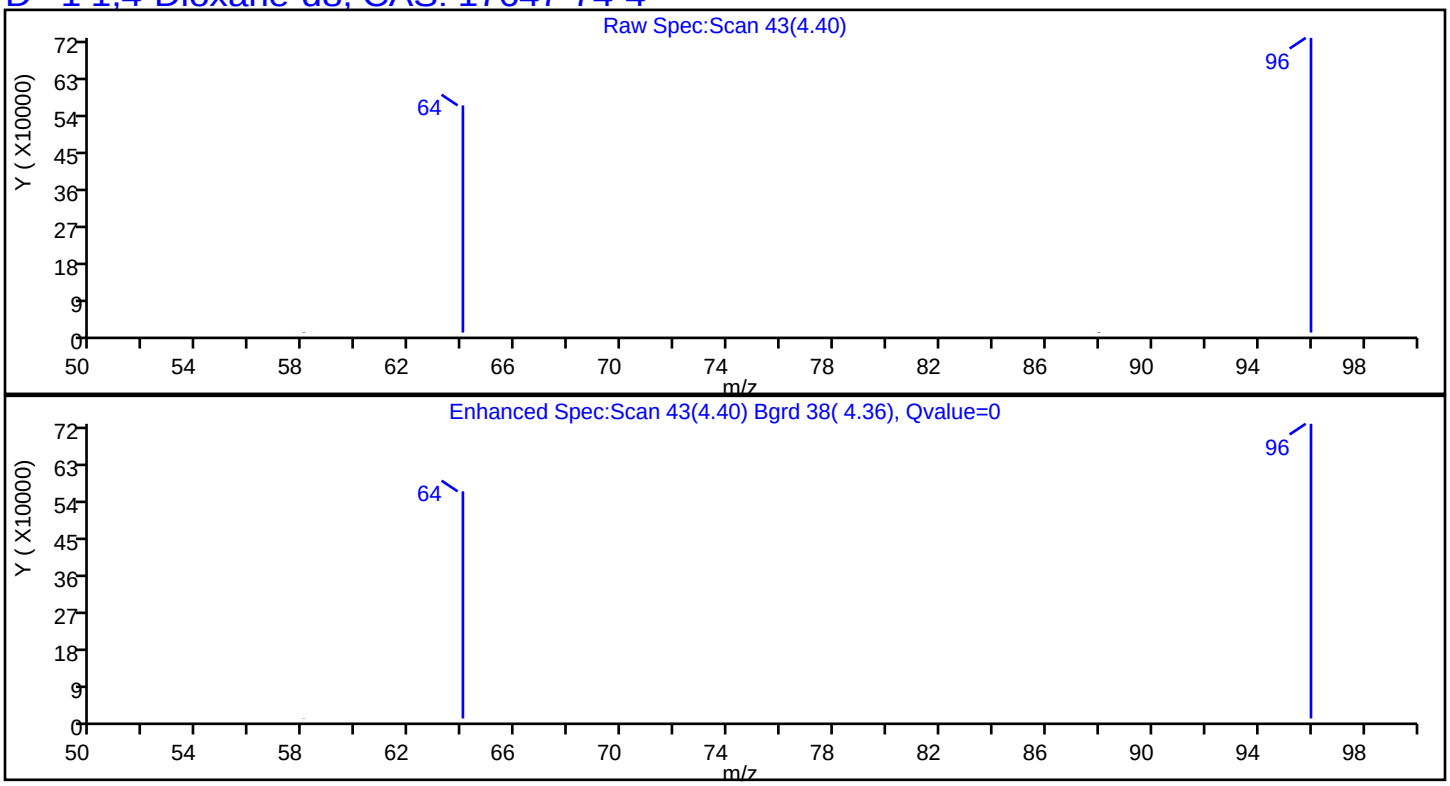
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28879.D				
Injection Date:	01-May-2018 02:50:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-E-11-A	Lab Sample ID:	460-154925-11		
Client ID:	GC-MW-110D (WG)				
Operator ID:		ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



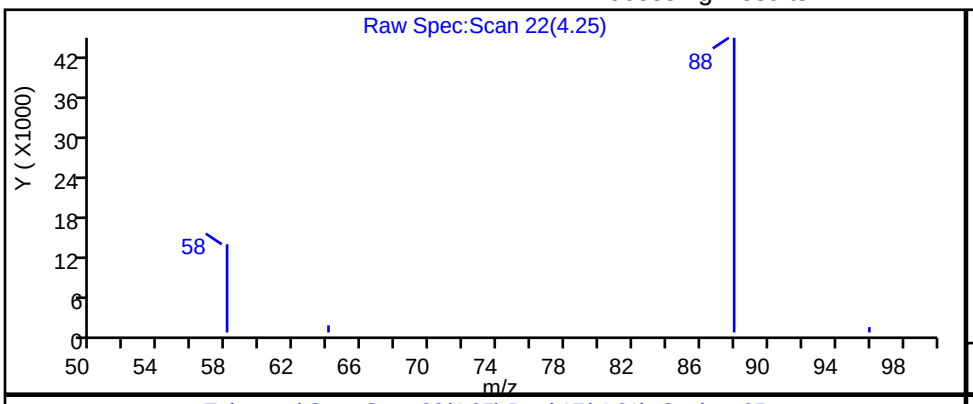
User Disabled Compound Report

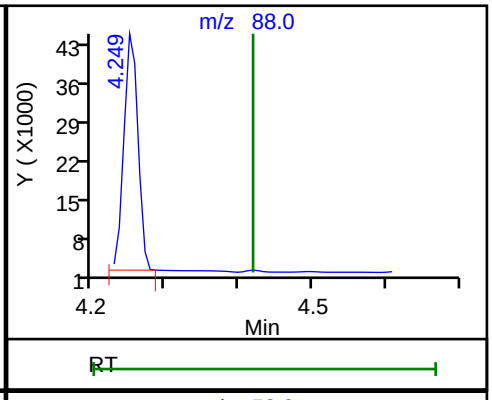
TestAmerica Edison

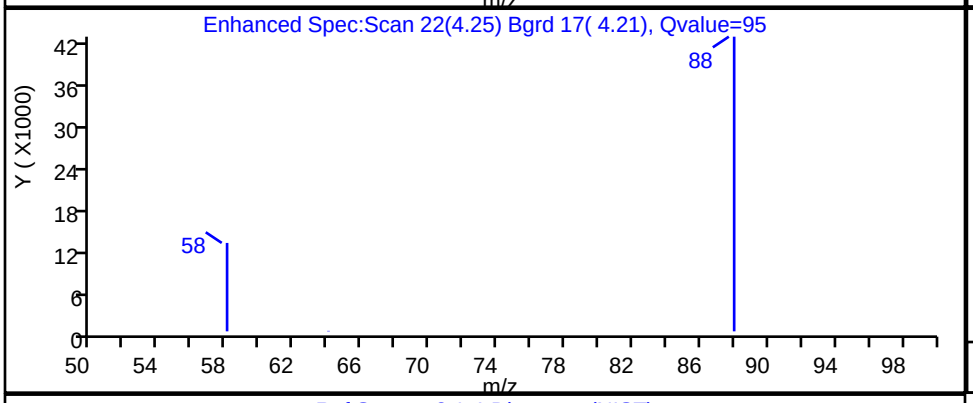
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28879.D		
Injection Date:	01-May-2018 02:50:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-E-11-A	Lab Sample ID:	460-154925-11
Client ID:	GC-MW-110D (WG)		
Operator ID:		ALS Bottle#:	25 Worklist Smp#: 25
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

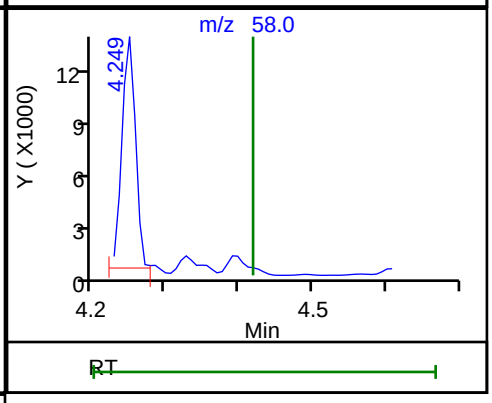
2 1,4-Dioxane, CAS: 123-91-1

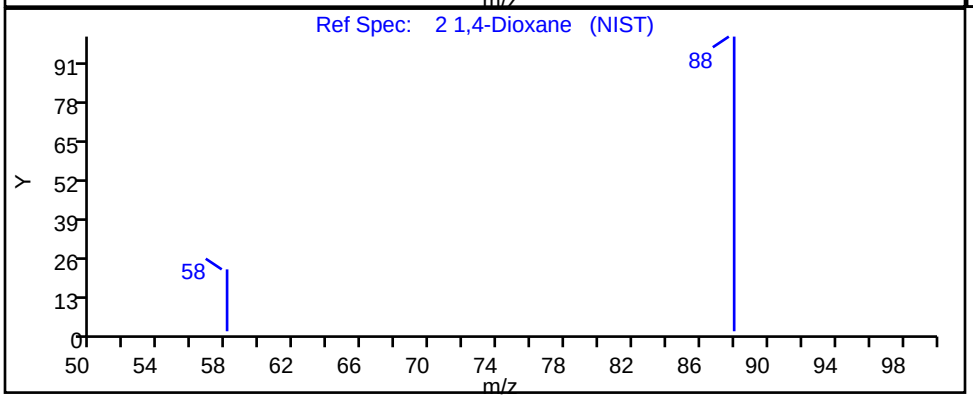
Processing Results











RT	Mass	Response	Amount
4.25	88.00	57304	0.192385
4.25	58.00	16211	

Reviewer: khlungprakhons, 01-May-2018 17:16:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-2(WG) | Lab Sample ID: 460-154925-12

Matrix: Water | Lab File ID: C28880.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 15:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 03:07

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28880.D
Lims ID: 460-154925-D-12-A
Client ID: GC-MW-2 (WG)
Sample Type: Client
Inject. Date: 01-May-2018 03:07:30 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-026
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:17:52

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	%Rec	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	900610	1.35	33.7	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	459246	0.2000		

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

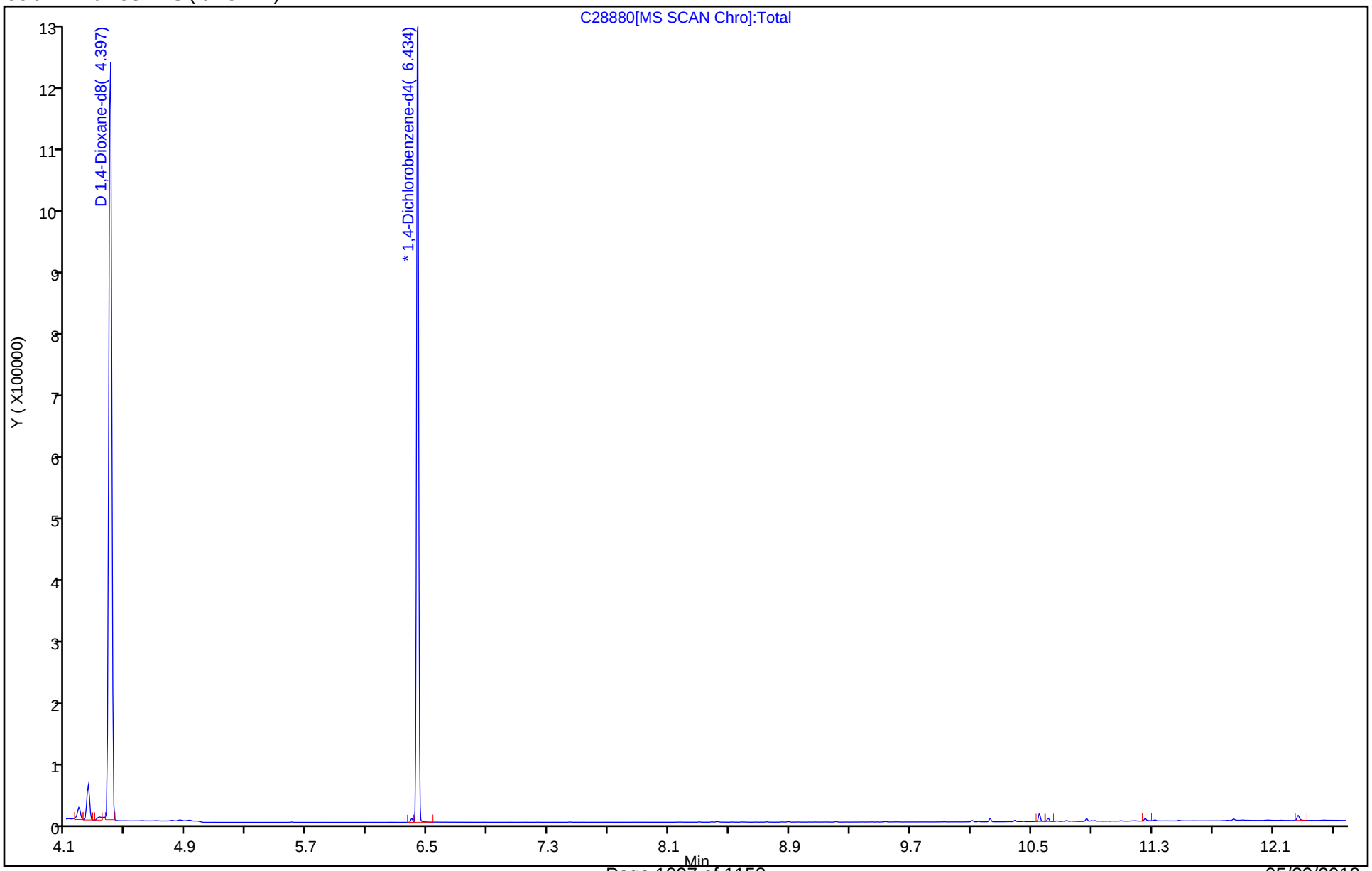
Report Date: 01-May-2018 10:26:37 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28880.D

Injection Date:	01-May-2018 03:07:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154925-D-12-A	Lab Sample ID:	460-154925-12	Worklist Smp#:	26
Client ID:	GC-MW-2 (WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

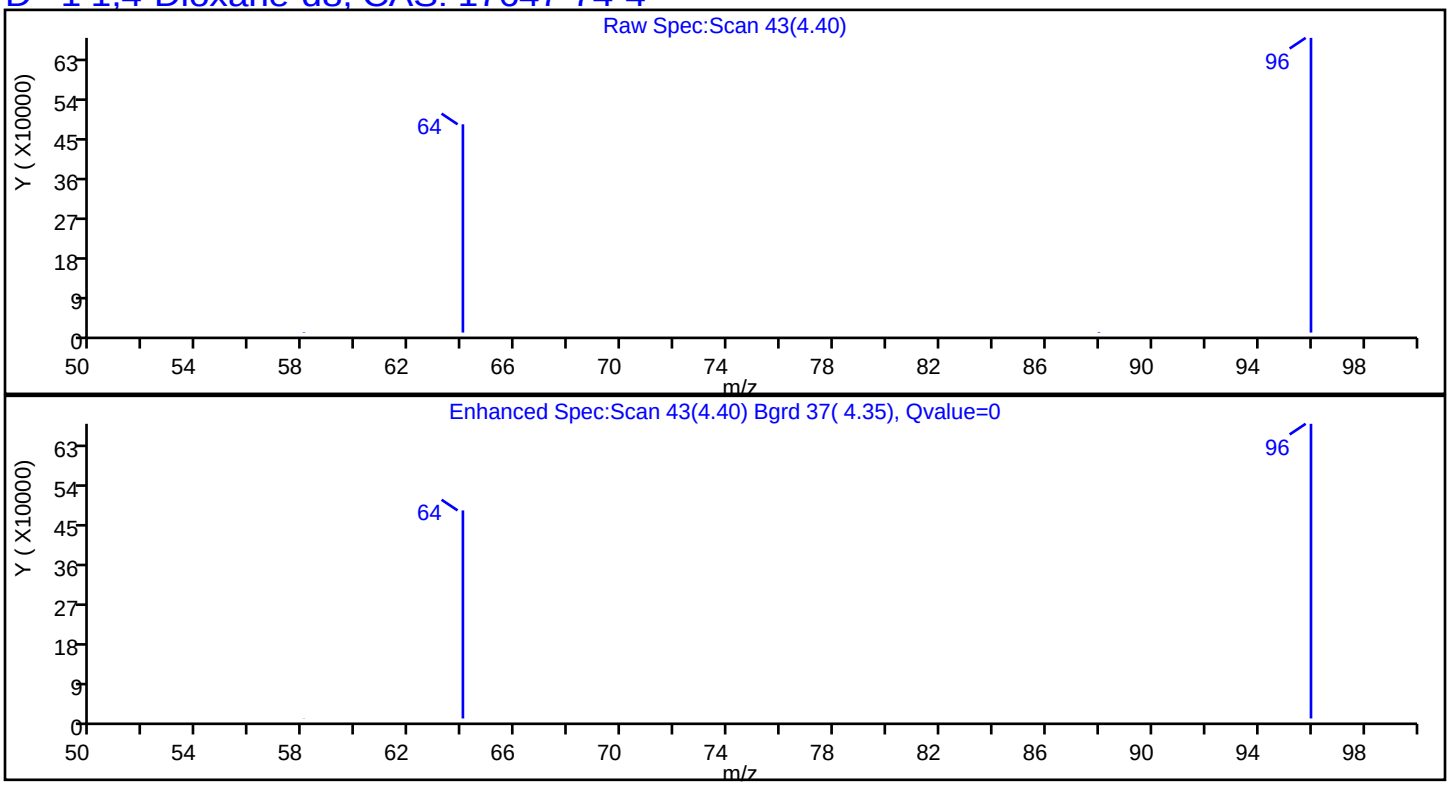
Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28880.D				
Injection Date:	01-May-2018 03:07:30	Instrument ID:	CBNAMS13		
Lims ID:	460-154925-D-12-A	Lab Sample ID:	460-154925-12		
Client ID:	GC-MW-2 (WG)				
Operator ID:		ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



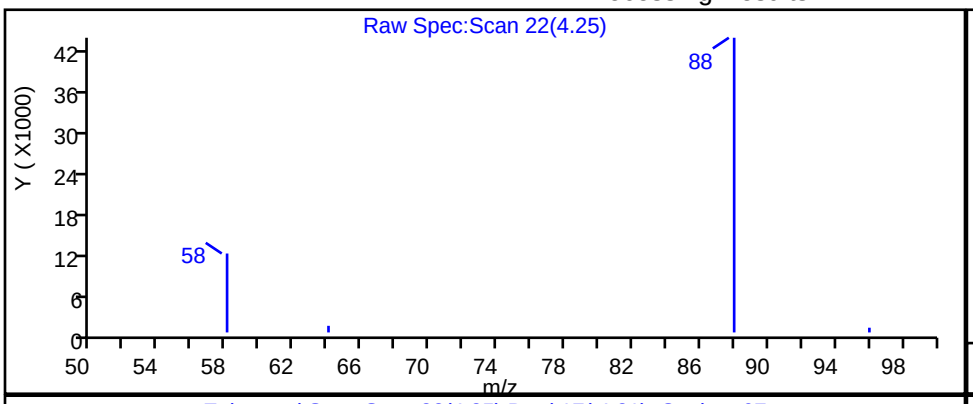
User Disabled Compound Report

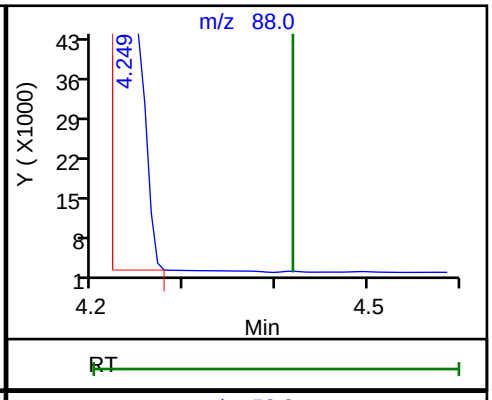
TestAmerica Edison

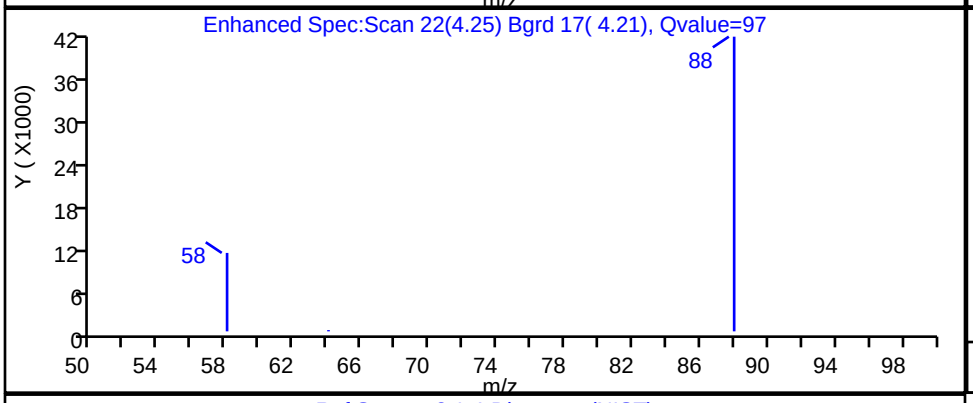
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28880.D		
Injection Date:	01-May-2018 03:07:30	Instrument ID:	CBNAMS13
Lims ID:	460-154925-D-12-A	Lab Sample ID:	460-154925-12
Client ID:	GC-MW-2 (WG)		
Operator ID:		ALS Bottle#:	26 Worklist Smp#: 26
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN

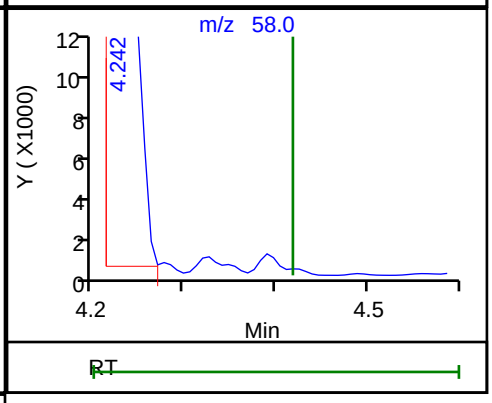
2 1,4-Dioxane, CAS: 123-91-1

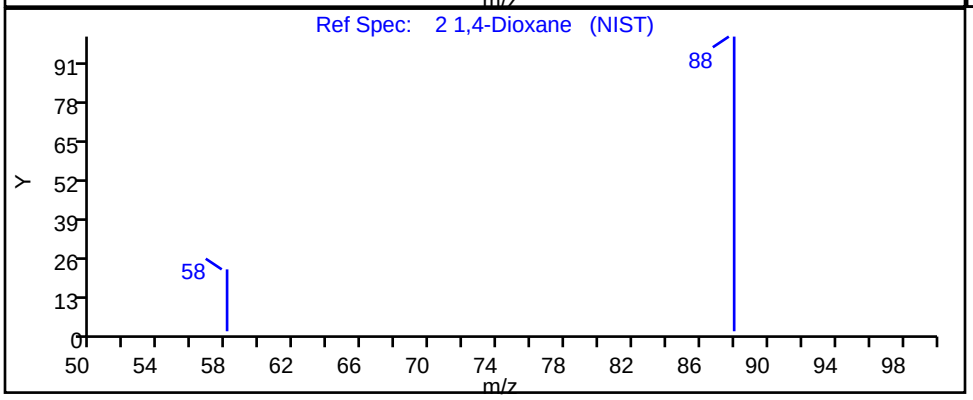
Processing Results











RT	Mass	Response	Amount
4.25	88.00	54238	0.193912
4.24	58.00	15470	

Reviewer: khlungprakhons, 01-May-2018 17:17:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 515312

SDG No.:

Instrument ID: CBNAMS13 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2018 09:40 Calibration End Date: 04/30/2018 11:50 Calibration ID: 68194

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-515312/9	C28853.D
Level 2	STD2 460-515312/8	C28852.D
Level 3	STD3 460-515312/7	C28851.D
Level 4	ICIS 460-515312/2	C28846A.D
Level 5	STD8 460-515312/3	C28847.D
Level 6	STD7 460-515312/4	C28848.D
Level 7	STD6 460-515312/5	C28849.D
Level 8	STD4 460-515312/6	C28850.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	1.3751 1.1519	1.3966 1.2015	1.3292 1.2832	1.2281	0.9726	AveID		1.2423				11.1		50.0			
1,4-Dioxane-d8	0.2756 0.2893	0.2813 0.3447	0.3007 0.2704	0.3038	0.2599	Ave		0.2907				9.1		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-154781-1 Analy Batch No.: 515312

SDG No.:

Instrument ID: CBNAMS13 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2018 09:40 Calibration End Date: 04/30/2018 11:50 Calibration ID: 68194

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-515312/9	C28853.D
Level 2	STD2 460-515312/8	C28852.D
Level 3	STD3 460-515312/7	C28851.D
Level 4	ICIS 460-515312/2	C28846A.D
Level 5	STD8 460-515312/3	C28847.D
Level 6	STD7 460-515312/4	C28848.D
Level 7	STD6 460-515312/5	C28849.D
Level 8	STD4 460-515312/6	C28850.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane		AveID	18228 1284055	34495 753797	86554 172177	339474	5344154	0.0200 2.00	0.0400 1.00	0.100 0.200	0.500	10.0
1,4-Dioxane-d8	DCBd 4	Ave	2651105 2229410	2469849 2509472	2604737 2683510	2211425	2197804	4.00 4.00	4.00 4.00	4.00 4.00	4.00	4.00

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28846A.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 30-Apr-2018 09:40:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071269-002
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 30-Apr-2018 15:56:32 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: johnstonm1 Date: 30-Apr-2018 10:00:51

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.390	4.390	0.000	0	2211425	4.00	4.18	
	2 1,4-Dioxane	88	4.411	4.411	0.000	81	339474	0.5000	0.4943	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	363968	0.2000	0.2000	

Reagents:

SM_ISOTOPL5_00001 Amount Added: 1.00 Units: mL

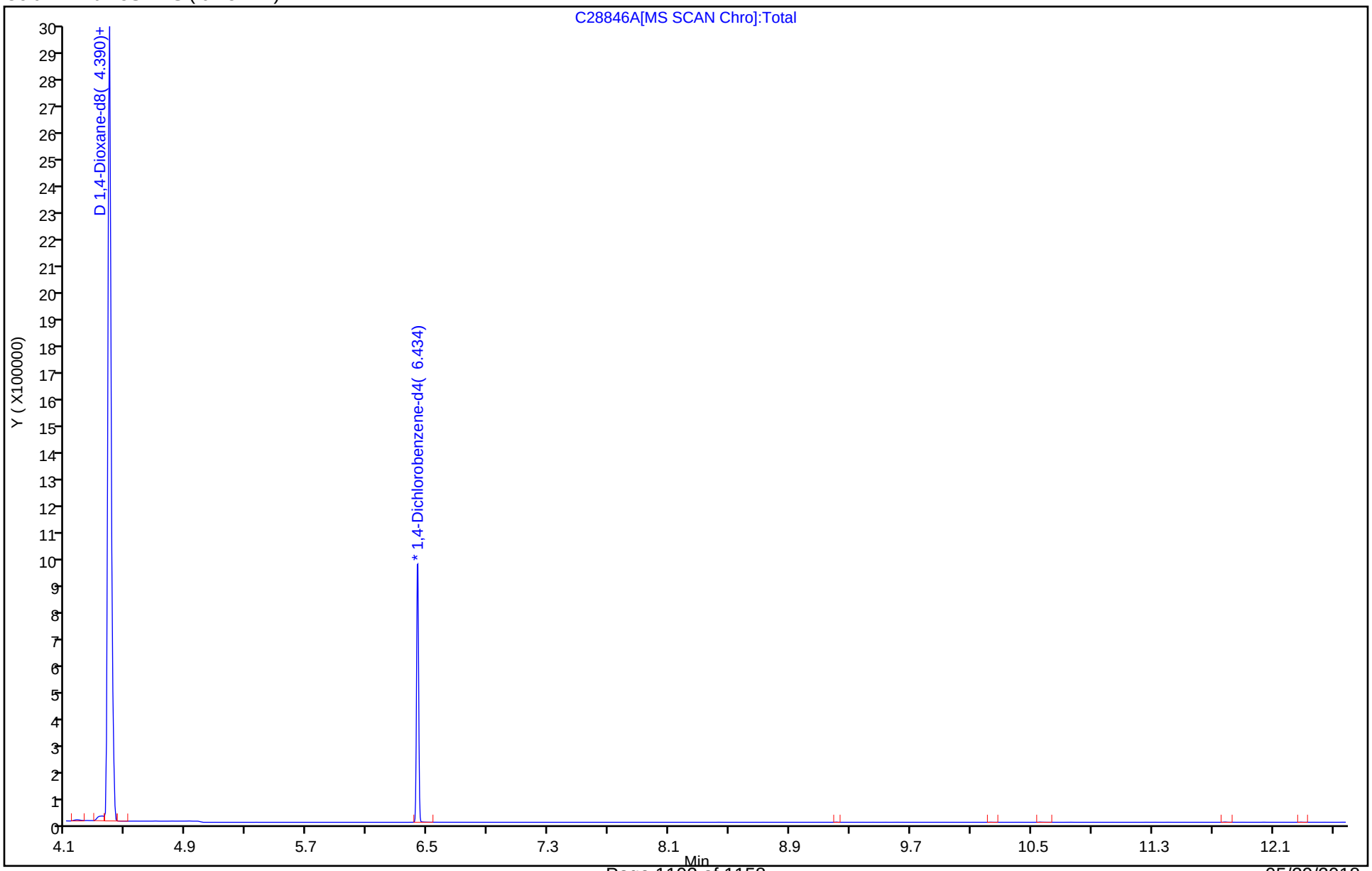
Report Date: 30-Apr-2018 15:56:32 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28846A.D

Injection Date:	30-Apr-2018 09:40:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	icis			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28847.D
Lims ID: STD8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 30-Apr-2018 10:03:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071269-003
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 30-Apr-2018 15:56:34 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: johnstonm1 Date: 30-Apr-2018 10:29:48

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.390	4.390	0.000	0	2197804	4.00	3.58	
	2 1,4-Dioxane	88	4.404	4.411	-0.007	75	5344154	10.0	7.83	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	422762	0.2000	0.2000	

Reagents:

SM_ISOTOPL8_00001 Amount Added: 1.00 Units: mL

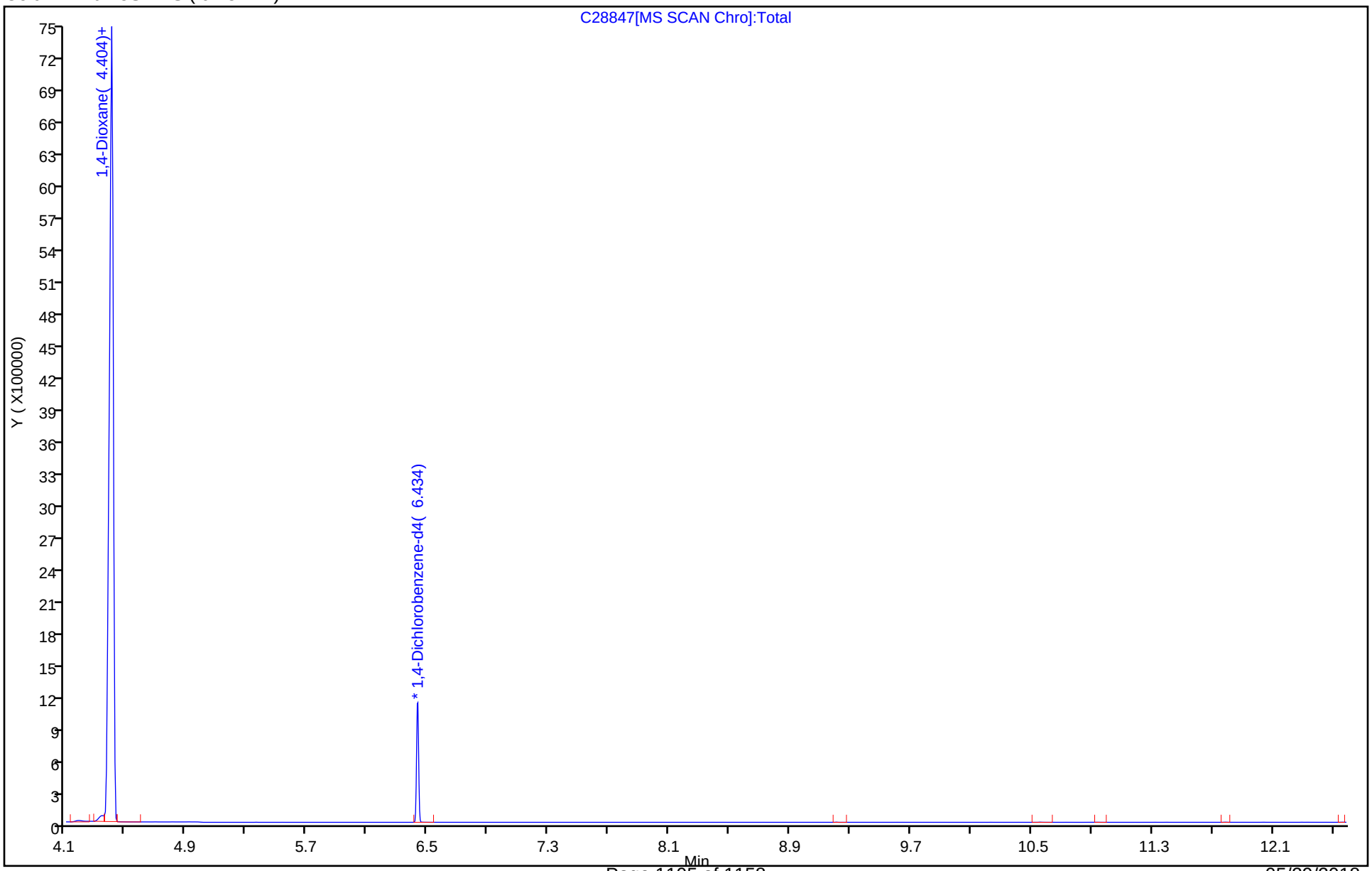
Report Date: 30-Apr-2018 15:56:34 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28847.D

Injection Date:	30-Apr-2018 10:03:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	STD8			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28848.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 30-Apr-2018 10:21:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071269-004
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 30-Apr-2018 15:56:35 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: johnstonm1 Date: 30-Apr-2018 10:49:00

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.383	4.390	-0.007	0	2229410	4.00	3.98	
	2 1,4-Dioxane	88	4.404	4.411	-0.007	79	1284055	2.00	1.85	
*	4 1,4-Dichlorobenzene-d4	152	6.430	6.434	-0.004	96	385267	0.2000	0.2000	

Reagents:

SM_ISOTOPL7_00001 Amount Added: 1.00 Units: mL

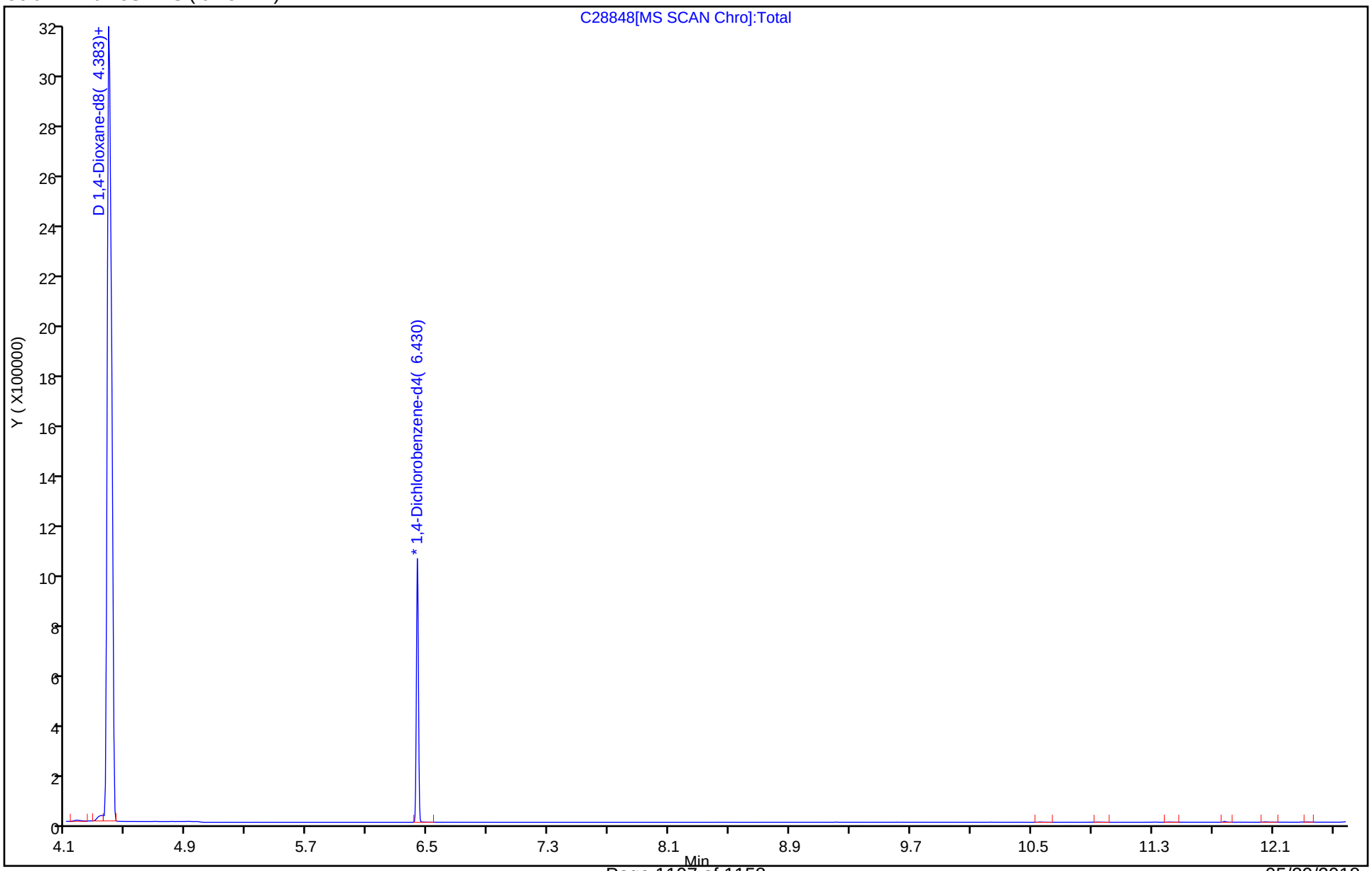
Report Date: 30-Apr-2018 15:56:36 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28848.D

Injection Date:	30-Apr-2018 10:21:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	STD7			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28849.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Apr-2018 10:38:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071269-005
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 30-Apr-2018 15:56:38 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: johnstonm1 Date: 30-Apr-2018 11:12:50

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.390	0.007	0	2509472	4.00	4.74	
	2 1,4-Dioxane	88	4.418	4.411	0.007	80	753797	1.00	0.9672	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	364022	0.2000	0.2000	

Reagents:

SM_ISOTOPL6_00001 Amount Added: 1.00 Units: mL

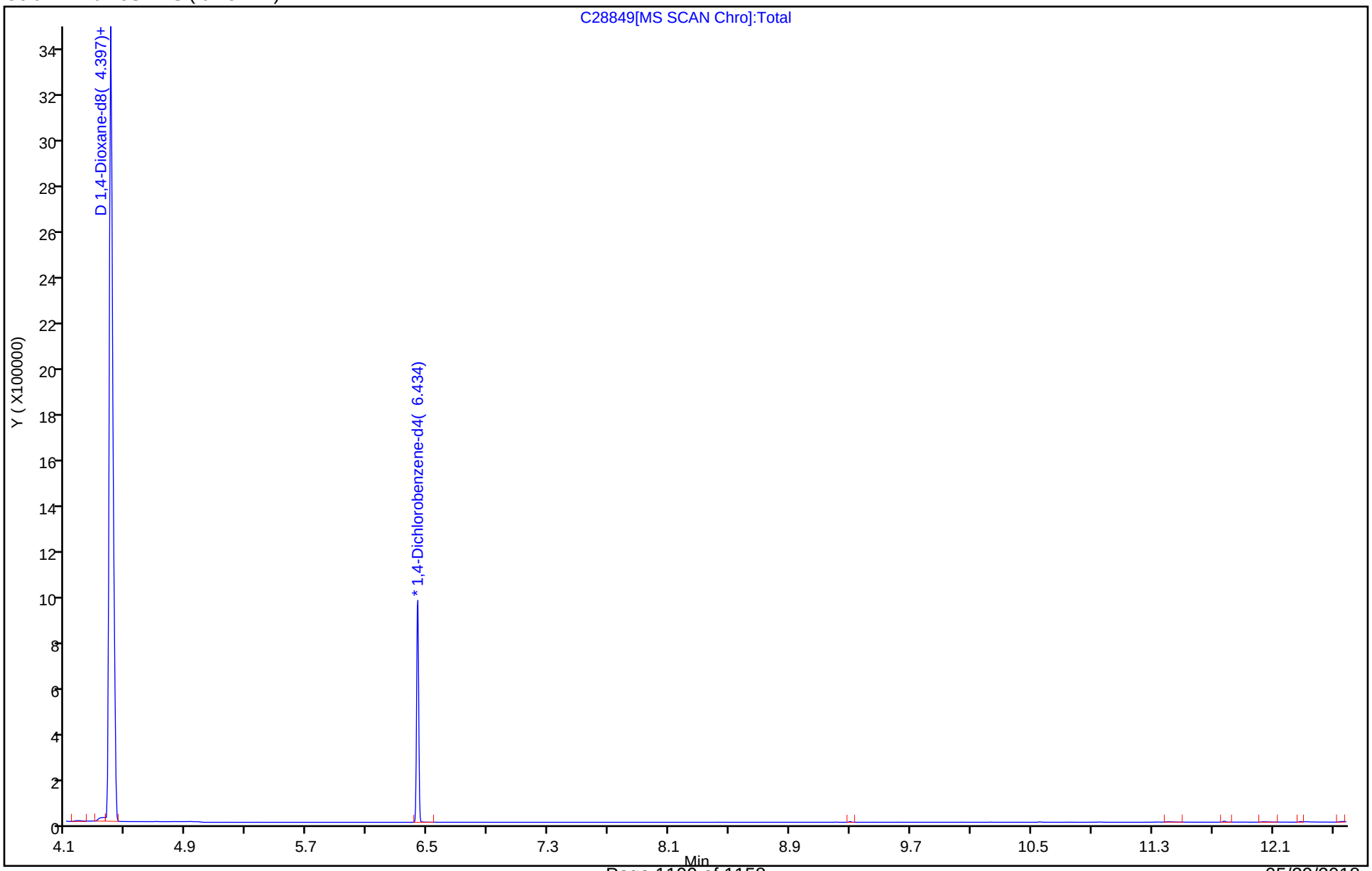
Report Date: 30-Apr-2018 15:56:38 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28849.D

Injection Date:	30-Apr-2018 10:38:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	STD6			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28850.D
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Apr-2018 10:56:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071269-006
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 30-Apr-2018 15:56:39 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: johnstonm1 Date: 30-Apr-2018 11:13:28

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.390	0.007	0	2683510	4.00	3.72	
	2 1,4-Dioxane	88	4.411	4.411	0.000	52	172177	0.2000	0.2066	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	496160	0.2000	0.2000	

Reagents:

SM_ISOTOPL4_00001 Amount Added: 1.00 Units: mL

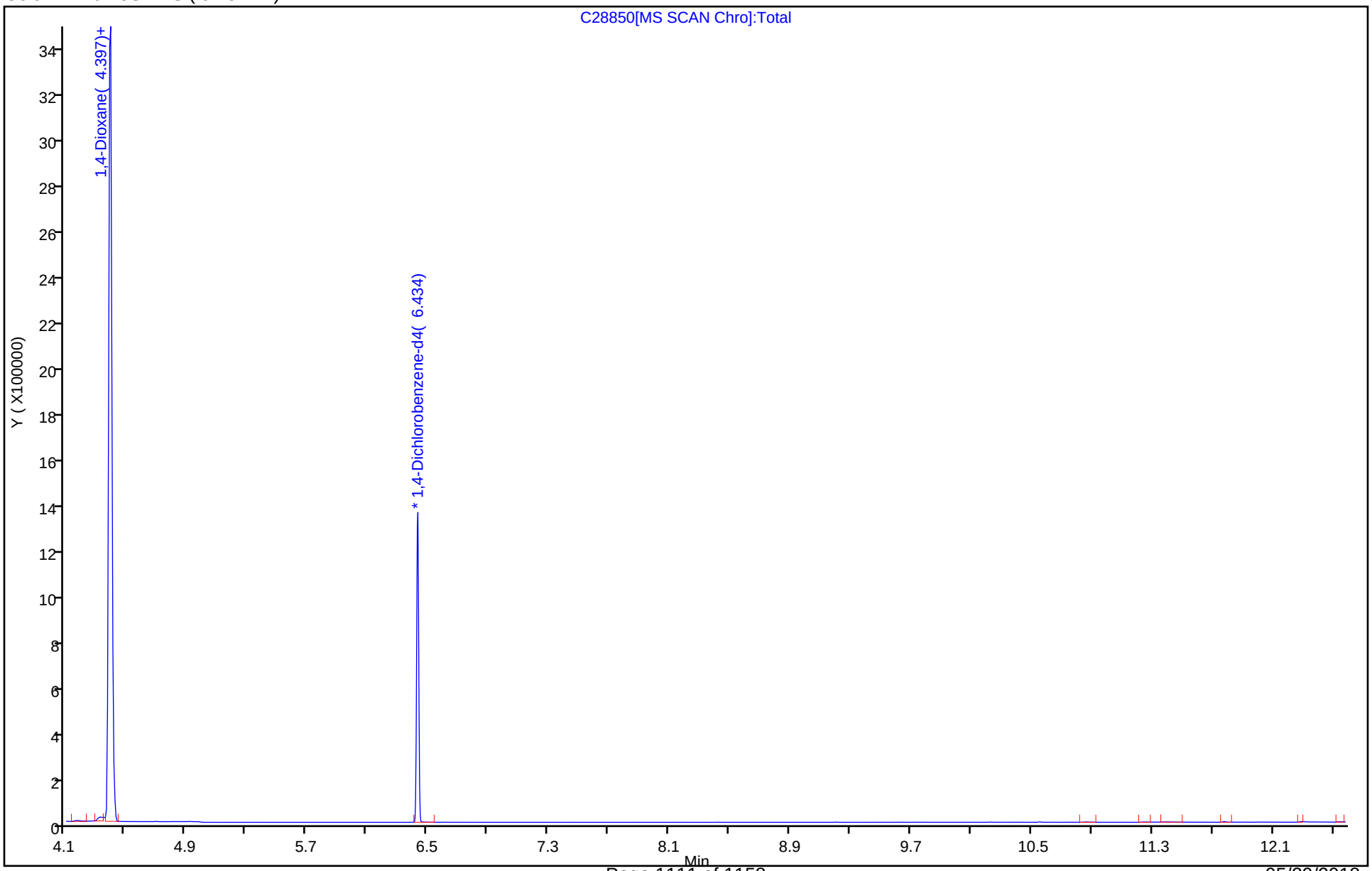
Report Date: 30-Apr-2018 15:56:40 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28850.D

Injection Date:	30-Apr-2018 10:56:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	STD4			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28851.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Apr-2018 11:14:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071269-007
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 30-Apr-2018 15:56:42 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: johnstonm1 Date: 30-Apr-2018 11:43:13

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	2604737	4.00	4.14	
	2 1,4-Dioxane	88	4.411	4.411	0.000	57	86554	0.1000	0.1070	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	433155	0.2000	0.2000	

Reagents:

SM_ISOTOPL3_00001 Amount Added: 1.00 Units: mL

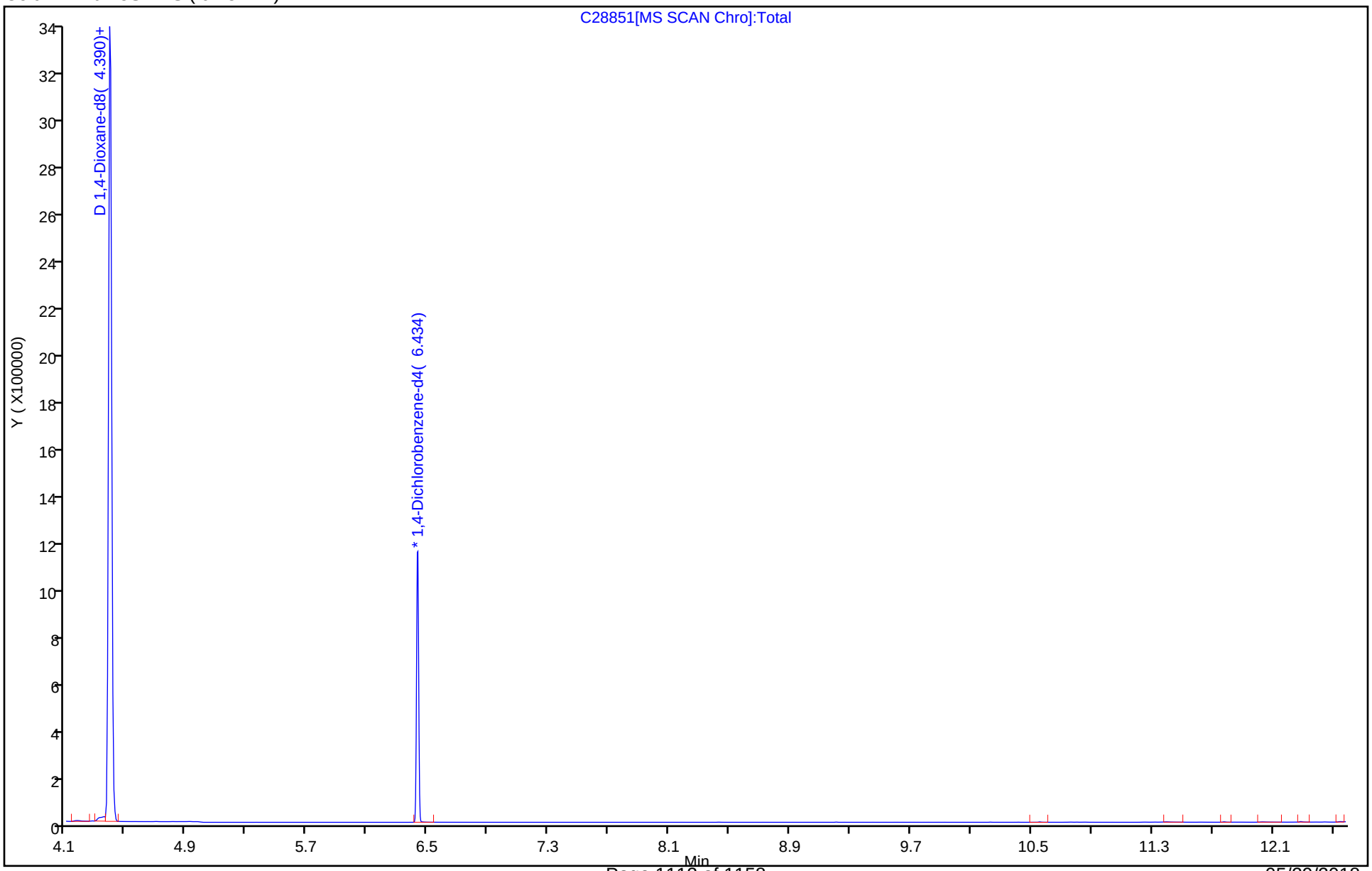
Report Date: 30-Apr-2018 15:56:42 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28851.D

Injection Date:	30-Apr-2018 11:14:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	STD3			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28852.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Apr-2018 11:32:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071269-008
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 30-Apr-2018 15:56:44 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: johnstonm1 Date: 30-Apr-2018 11:53:06

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.390	4.397	-0.007	0	2469849	4.00	3.87	
	2 1,4-Dioxane	88	4.411	4.411	0.000	82	34495	0.0400	0.0450	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	97	438940	0.2000	0.2000	

Reagents:

SM_ISOTOPL2_00001 Amount Added: 1.00 Units: mL

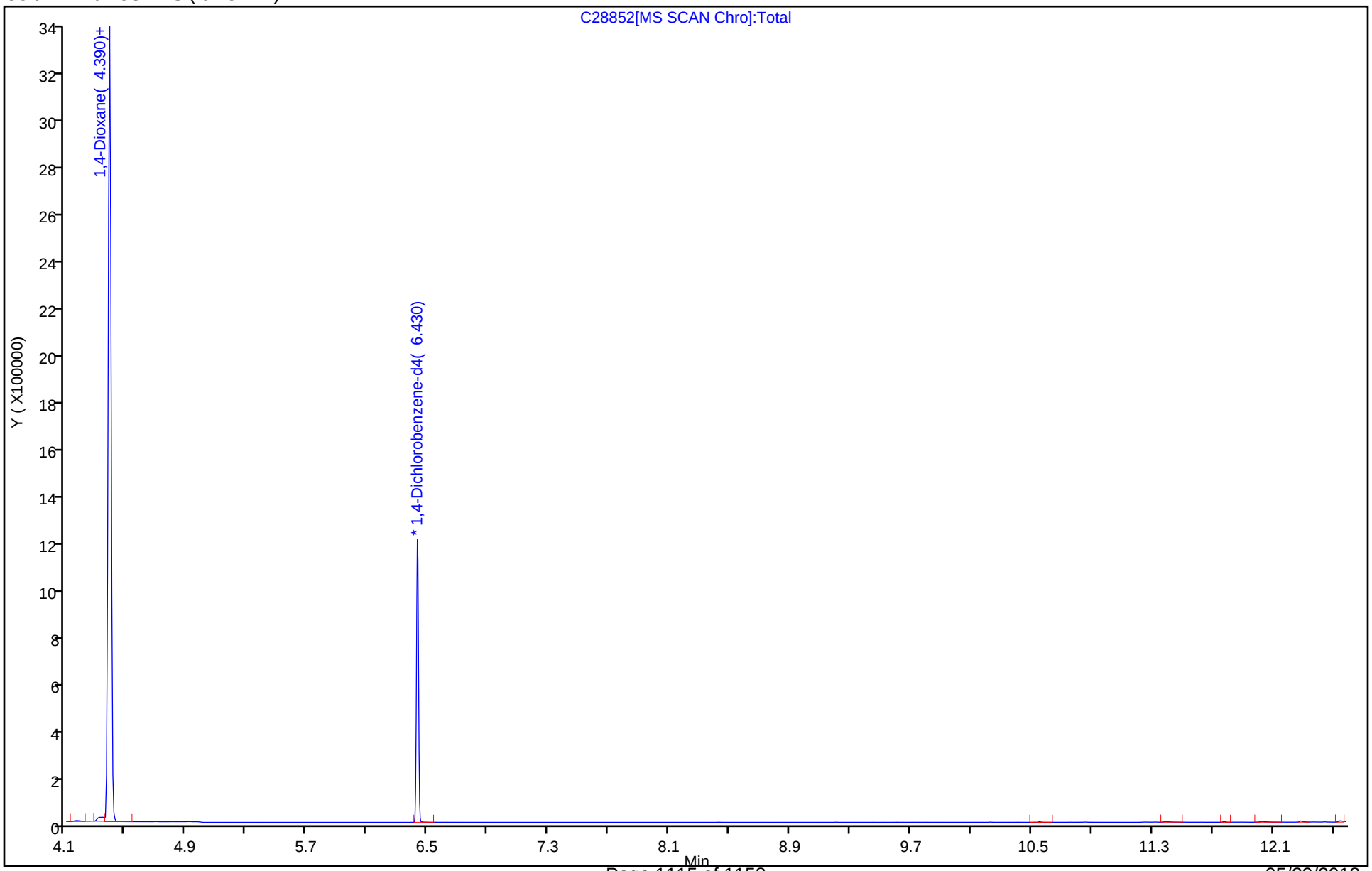
Report Date: 30-Apr-2018 15:56:44 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28852.D

Injection Date:	30-Apr-2018 11:32:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	STD2			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Apr-2018 11:50:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071269-009
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 30-Apr-2018 15:57:57 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: asfawa Date: 30-Apr-2018 15:57:01

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.390	4.397	-0.007	0	2651105	4.00	3.79	
	2 1,4-Dioxane	88	4.411	4.411	0.000	83	18228	0.0200	0.0221	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	480919	0.2000	0.2000	

Reagents:

SM_ISOTOPL1_00001 Amount Added: 1.00 Units: mL

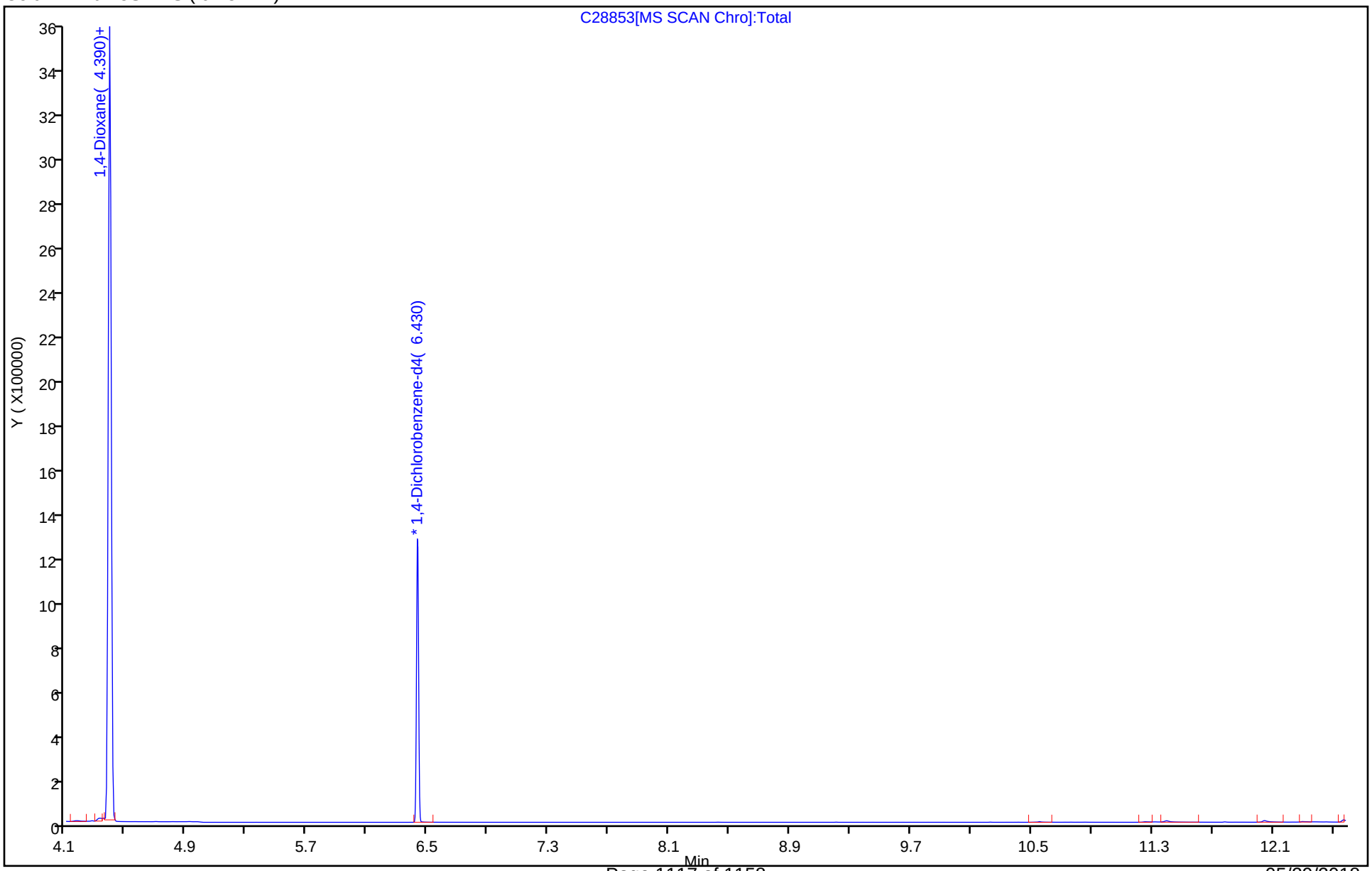
Report Date: 30-Apr-2018 15:57:58 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Injection Date:	30-Apr-2018 11:50:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	STD1			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-515424/2 Calibration Date: 04/30/2018 20:01

Instrument ID: CBNAMS13 Calib Start Date: 04/30/2018 09:40

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 04/30/2018 11:50

Lab File ID: C28856.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	AveID	1.242	1.266		510	500	1.9	
1,4-Dioxane-d8	Ave	0.2907	0.2976		4090	4000	2.4	50.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28856.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Apr-2018 20:01:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-002
Operator ID: Instrument ID: CBNAMS13
Sublist: chrom-8270_Isotope*sub1

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:09:27

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	2860643	4.00	4.09	
	2 1,4-Dioxane	88	4.418	4.418	0.000	83	452788	0.5000	0.5096	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	480682	0.2000	0.2000	

Reagents:

SM_ISOTOPL5_00001 Amount Added: 1.00 Units: mL

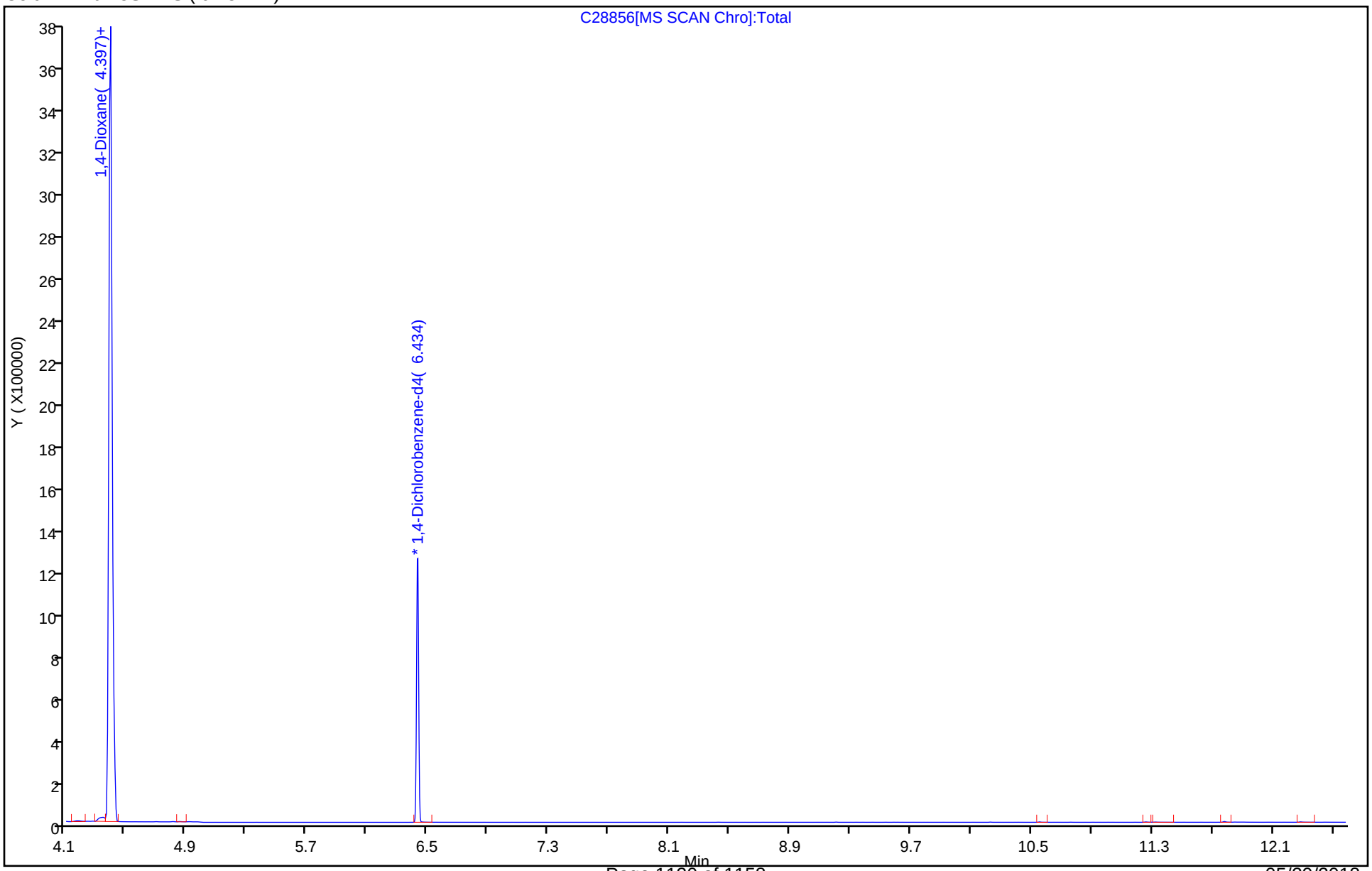
Report Date: 01-May-2018 10:25:23 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28856.D

Injection Date:	30-Apr-2018 20:01:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	ccvis			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28845.D				
Lims ID:	DFTPP				
Client ID:					
Sample Type:	DFTPP				
Inject. Date:	30-Apr-2018 09:04:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	460-0071269-001				
Misc. Info.:	DFTPP				
Operator ID:		Instrument ID:	CBNAMS13		
Method:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\8270_Isotope.m				
Limit Group:	MSS 8270 Isotope Dilution IS				
Last Update:	30-Apr-2018 15:56:20	Calib Date:	30-Apr-2018 11:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Isotopic Dilution	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D				
Column 1 :	Rtxi-5Sil MS (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK024				
First Level Reviewer: johnstonm1		Date:	30-Apr-2018 09:32:52		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags

3 DFTPP

Reagents:

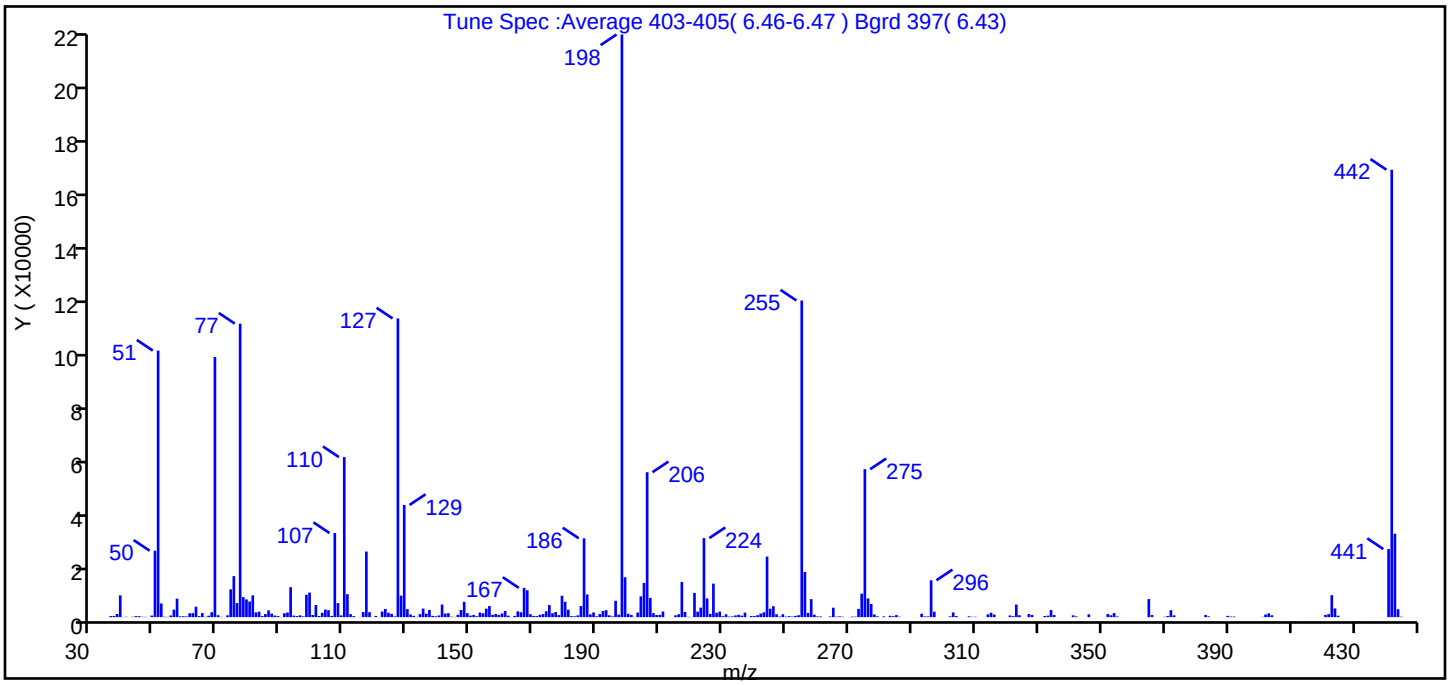
SMDFTP_CH_00024 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28845.D
Injection Date: 30-Apr-2018 09:04:30 Instrument ID: CBNAMS13
Lims ID: DFTPP
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: 8270_Isotope Limit Group: MSS 8270 Isotope Dilution IS
Tune Method: DFTPP Method 8270

3 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	45.7
68	<2% of mass 69	0.8 (1.9)
69	Present	44.7
70	<2% of mass 69	0.3 (0.7)
127	40-60% of mass 198	51.3
197	<1% of mass 198	0.4
199	5-9% of mass 198	6.9
275	10-30% of mass 198	25.4
365	>1% of mass 198	3.1
441	Present but less than mass 443	11.7 (81.7)
442	>40% of mass 198	76.8
443	17-23% of mass 442	14.3 (18.6)

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28845.D\8270_Isotope.rslt\spectra.d
Injection Date: 30-Apr-2018 09:04:30
Spectrum: Tune Spec :Average 403-405(6.46-6.47) Bgrd 397(6.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	407	113.00	392	189.00	1691	270.00	54
37.00	431	115.00	79	190.00	317	271.00	193
38.00	1133	116.00	1827	191.00	1112	272.00	180
39.00	7864	117.00	23704	192.00	2243	273.00	2994
40.00	60	118.00	1802	193.00	2533	274.00	8482
41.00	126	120.00	445	194.00	668	275.00	53488
43.00	153	121.00	37	195.00	261	276.00	6756
44.00	396	122.00	2033	196.00	5902	277.00	4746
45.00	352	123.00	2958	197.00	904	278.00	962
46.00	128	124.00	1582	198.00	210624	279.00	302
47.00	102	125.00	1183	199.00	14445	281.00	284
49.00	560	126.00	282	200.00	1224	283.00	508
50.00	24008	127.00	107976	201.00	763	284.00	347
51.00	96352	128.00	7784	202.00	84	285.00	753
52.00	4959	129.00	40552	203.00	1657	286.00	145
53.00	159	130.00	2899	204.00	7501	293.00	1222
54.00	93	131.00	965	205.00	12373	294.00	269
55.00	593	132.00	470	206.00	52392	295.00	273
56.00	2714	133.00	97	207.00	6964	296.00	13327
57.00	6688	134.00	1106	208.00	1452	297.00	1976
58.00	301	135.00	3103	209.00	767	302.00	296
59.00	314	136.00	1257	210.00	824	303.00	1717
60.00	262	137.00	2613	211.00	2052	304.00	401
61.00	1401	138.00	437	215.00	663	308.00	324
62.00	1443	139.00	304	216.00	1059	309.00	119
63.00	3779	140.00	602	217.00	12742	310.00	135
64.00	375	141.00	4555	218.00	1897	314.00	1003
65.00	1479	142.00	1312	219.00	133	315.00	1588
66.00	126	143.00	1414	220.00	82	316.00	940
67.00	506	144.00	160	221.00	8759	321.00	621
68.00	1786	145.00	82	222.00	1995	322.00	352
69.00	94048	146.00	863	223.00	3428	323.00	4554
70.00	698	147.00	2584	224.00	28568	324.00	685

Report Date: 30-Apr-2018 15:56:20 Chrom Revision: 2.2 26-Apr-2018 11:26:08
Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28845.D\8270_Isotope.rslt\spectra.d
Injection Date: 30-Apr-2018 09:04:30
Spectrum: Tune Spec :Average 403-405(6.46-6.47) Bgrd 397(6.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	127	148.00	5546	225.00	6771	327.00	1127
73.00	659	149.00	1429	226.00	1166	328.00	788
74.00	10039	150.00	543	227.00	12119	332.00	408
75.00	14837	151.00	781	228.00	1575	333.00	532
76.00	5077	152.00	350	229.00	1993	334.00	2577
77.00	106104	153.00	1670	230.00	344	335.00	743
78.00	7222	154.00	1414	231.00	1020	341.00	668
79.00	6420	155.00	3051	232.00	214	342.00	277
80.00	5661	156.00	4021	233.00	264	346.00	1020
81.00	7874	157.00	844	234.00	608	352.00	1154
82.00	1723	158.00	1126	235.00	845	353.00	684
83.00	1982	159.00	814	236.00	539	354.00	1464
84.00	393	160.00	1324	237.00	1645	355.00	244
85.00	1142	161.00	2234	239.00	411	365.00	6536
86.00	2451	162.00	535	240.00	383	366.00	775
87.00	1274	163.00	47	241.00	691	370.00	139
88.00	572	164.00	445	242.00	1303	371.00	426
89.00	395	165.00	2107	243.00	1755	372.00	2511
90.00	52	166.00	1760	244.00	21872	373.00	650
91.00	1399	167.00	10580	245.00	3043	383.00	776
92.00	1663	168.00	9723	246.00	3963	384.00	274
93.00	10832	169.00	1053	247.00	1055	390.00	472
94.00	556	170.00	442	248.00	233	391.00	211
95.00	391	171.00	382	249.00	1039	392.00	216
96.00	661	172.00	868	250.00	205	401.00	102
97.00	272	173.00	1107	251.00	361	402.00	939
98.00	8078	174.00	2151	252.00	203	403.00	1393
99.00	8887	175.00	4379	253.00	456	404.00	687
100.00	771	176.00	1413	254.00	712	421.00	820
101.00	4375	177.00	1821	255.00	114456	422.00	1078
102.00	403	178.00	742	256.00	16318	423.00	7951
103.00	1579	179.00	7730	257.00	1504	424.00	3143
104.00	2745	180.00	5528	258.00	6505	425.00	517
105.00	2519	181.00	2677	259.00	866	441.00	24624

Report Date: 30-Apr-2018 15:56:20 Chrom Revision: 2.2 26-Apr-2018 11:26:08
Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28845.D\8270_Isotope.rslt\spectra.d
Injection Date: 30-Apr-2018 09:04:30
Spectrum: Tune Spec :Average 403-405(6.46-6.47) Bgrd 397(6.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
106.00	439	182.00	368	260.00	272	442.00	161728
107.00	30408	183.00	299	261.00	242	443.00	30144
108.00	5075	184.00	638	264.00	248	444.00	2862
109.00	622	185.00	4025	265.00	3401	445.00	162
110.00	57848	186.00	28488	266.00	177		
111.00	8284	187.00	8195	267.00	290		
112.00	1087	188.00	1014	268.00	147		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28855.D				
Lims ID:	DFTPP				
Client ID:					
Sample Type:	DFTPP				
Inject. Date:	30-Apr-2018 19:42:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	460-0071290-001				
Misc. Info.:	DFTPP				
Operator ID:		Instrument ID:	CBNAMS13		
Method:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m				
Limit Group:	MSS 8270 Isotope Dilution IS				
Last Update:	01-May-2018 10:25:18	Calib Date:	30-Apr-2018 11:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Isotopic Dilution	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D				
Column 1 :	Rtxi-5Sil MS (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK014				
First Level Reviewer: khlungprakhons		Date:	01-May-2018 17:08:51		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags

3 DFTPP

Reagents:

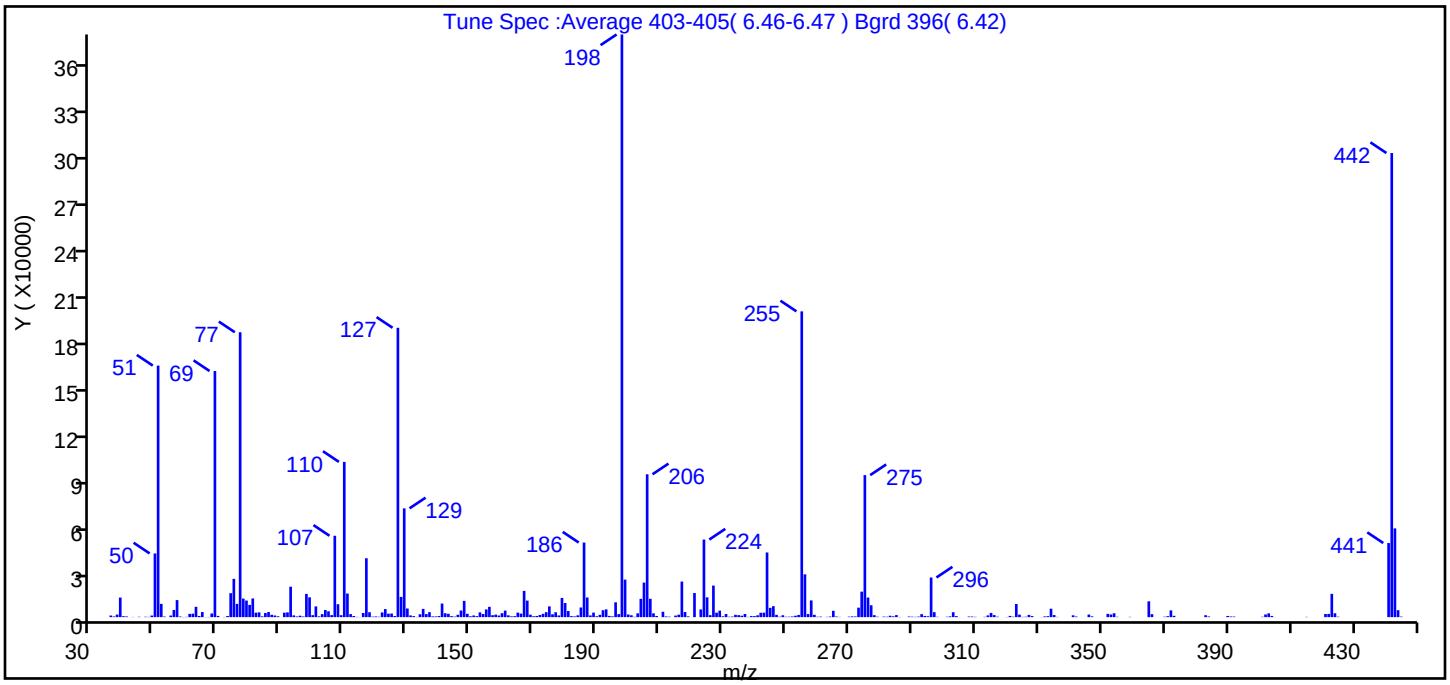
SMDFTP_CH_00024 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28855.D
Injection Date: 30-Apr-2018 19:42:30 Instrument ID: CBNAMS13
Lims ID: DFTPP
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: 8270_Isotope Limit Group: MSS 8270 Isotope Dilution IS
Tune Method: DFTPP Method 8270

3 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	43.2
68	<2% of mass 69	0.6 (1.5)
69	Present	42.2
70	<2% of mass 69	0.2 (0.5)
127	40-60% of mass 198	49.7
197	<1% of mass 198	0.5
199	5-9% of mass 198	6.4
275	10-30% of mass 198	24.4
365	>1% of mass 198	2.7
441	Present but less than mass 443	12.7 (83.5)
442	>40% of mass 198	79.7
443	17-23% of mass 442	15.2 (19.1)

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28855.D\8270_Isotope.rslt\spectra.d
Injection Date: 30-Apr-2018 19:42:30
Spectrum: Tune Spec :Average 403-405(6.46-6.47) Bgrd 396(6.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1040	120.00	452	198.00	376832	284.00	534
37.00	449	121.00	246	199.00	24264	285.00	1330
38.00	1654	122.00	3035	200.00	1725	286.00	120
39.00	12664	123.00	5210	201.00	1215	289.00	408
40.00	624	124.00	2242	202.00	229	290.00	289
41.00	465	125.00	2316	203.00	2452	291.00	193
43.00	130	126.00	717	204.00	11830	292.00	355
45.00	247	127.00	187136	205.00	22368	293.00	1924
47.00	261	128.00	13096	206.00	92400	294.00	791
48.00	157	129.00	70360	207.00	11867	295.00	559
49.00	1031	130.00	5590	208.00	2479	296.00	25640
50.00	41208	131.00	1115	209.00	755	297.00	3231
51.00	162688	132.00	675	211.00	3492	298.00	222
52.00	8585	133.00	140	212.00	457	301.00	247
53.00	390	134.00	1870	213.00	308	302.00	503
55.00	1045	135.00	5337	215.00	1001	303.00	3178
56.00	4610	136.00	1954	216.00	1578	304.00	676
57.00	11029	137.00	3215	217.00	23008	305.00	56
58.00	410	138.00	474	218.00	3292	308.00	396
59.00	99	139.00	464	219.00	496	309.00	384
60.00	180	140.00	708	221.00	15591	310.00	195
61.00	2118	141.00	8783	223.00	4986	313.00	208
62.00	2237	142.00	2503	224.00	50184	314.00	1132
63.00	6696	143.00	2153	225.00	12821	315.00	2710
64.00	769	144.00	659	226.00	1271	316.00	1331
65.00	3303	145.00	351	227.00	20416	317.00	297
66.00	95	146.00	1519	228.00	2882	320.00	109
67.00	139	147.00	4291	229.00	4191	321.00	793
68.00	2362	148.00	10521	230.00	541	322.00	295
69.00	159168	149.00	2157	231.00	2019	323.00	8503
70.00	805	150.00	581	232.00	265	324.00	1630
72.00	123	151.00	1084	233.00	380	325.00	170
73.00	735	152.00	648	234.00	1509	326.00	277

Report Date: 01-May-2018 10:25:19 Chrom Revision: 2.2 26-Apr-2018 11:26:08
Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28855.D\8270_Isotope.rslt\spectra.d
Injection Date: 30-Apr-2018 19:42:30
Spectrum: Tune Spec :Average 403-405(6.46-6.47) Bgrd 396(6.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	15491	153.00	3074	235.00	1282	327.00	1446
75.00	24768	154.00	2040	236.00	959	328.00	699
76.00	8581	155.00	4990	237.00	2047	331.00	63
77.00	184256	156.00	6674	238.00	163	332.00	466
78.00	11988	157.00	1271	239.00	703	333.00	632
79.00	10738	158.00	1629	240.00	677	334.00	5467
80.00	7918	159.00	1042	241.00	1183	335.00	1345
81.00	12085	160.00	2559	242.00	2818	336.00	149
82.00	2902	161.00	4224	243.00	2908	341.00	1193
83.00	3094	162.00	1159	244.00	41824	342.00	398
84.00	503	163.00	513	245.00	6017	346.00	1678
85.00	2660	164.00	633	246.00	7098	347.00	516
86.00	3297	165.00	2924	247.00	1481	352.00	2111
87.00	1527	166.00	2286	248.00	279	353.00	1731
88.00	1058	167.00	16984	249.00	1216	354.00	2502
89.00	570	168.00	10700	250.00	248	355.00	225
91.00	2894	169.00	1574	251.00	292	359.00	191
92.00	3095	170.00	589	252.00	442	365.00	10235
93.00	19672	171.00	769	253.00	918	366.00	1924
94.00	1137	172.00	1393	254.00	1420	370.00	267
95.00	461	173.00	2159	255.00	197760	371.00	625
96.00	918	174.00	3211	256.00	27680	372.00	4367
97.00	418	175.00	6959	257.00	1999	373.00	870
98.00	15029	176.00	1845	258.00	10824	383.00	1253
99.00	12813	177.00	3158	259.00	1505	384.00	442
100.00	1273	178.00	1098	260.00	248	390.00	766
101.00	6951	179.00	12429	261.00	333	391.00	413
102.00	496	180.00	9114	263.00	176	392.00	372
103.00	1937	181.00	3949	264.00	393	401.00	246
104.00	4596	182.00	659	265.00	4092	402.00	1747
105.00	3758	183.00	482	266.00	392	403.00	2455
106.00	1313	184.00	1163	267.00	152	404.00	777
107.00	52632	185.00	6246	270.00	325	405.00	56
108.00	8373	186.00	48240	271.00	481	415.00	184

Report Date: 01-May-2018 10:25:19 Chrom Revision: 2.2 26-Apr-2018 11:26:08
Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28855.D\8270_Isotope.rslt\spectra.d
Injection Date: 30-Apr-2018 19:42:30
Spectrum: Tune Spec :Average 403-405(6.46-6.47) Bgrd 396(6.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
109.00	1266	187.00	12728	272.00	432	421.00	2030
110.00	100408	188.00	1107	273.00	6135	422.00	2084
111.00	15265	189.00	2937	274.00	16488	423.00	15042
112.00	1974	190.00	570	275.00	91856	424.00	2510
113.00	763	191.00	1507	276.00	12679	425.00	285
114.00	164	192.00	4474	277.00	7693	441.00	47928
115.00	68	193.00	5041	278.00	1267	442.00	300160
116.00	2684	194.00	799	279.00	293	443.00	57400
117.00	38096	195.00	507	281.00	333	444.00	4490
118.00	3168	196.00	9599	282.00	275	445.00	345
119.00	319	197.00	1934	283.00	912		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-515403/1-A

Matrix: Water | Lab File ID: C28857.D

Analysis Method: 8270D SIM ID | Date Collected:

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 250(mL) | Date Analyzed: 04/30/2018 20:19

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	44		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28857.D
Lims ID: MB 460-515403/1-A
Client ID:
Sample Type: MB
Inject. Date: 30-Apr-2018 20:19:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-003
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 13:34:52 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:10:42

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	1145430	4.00	1.75	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	449883	0.2000	0.2000	

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

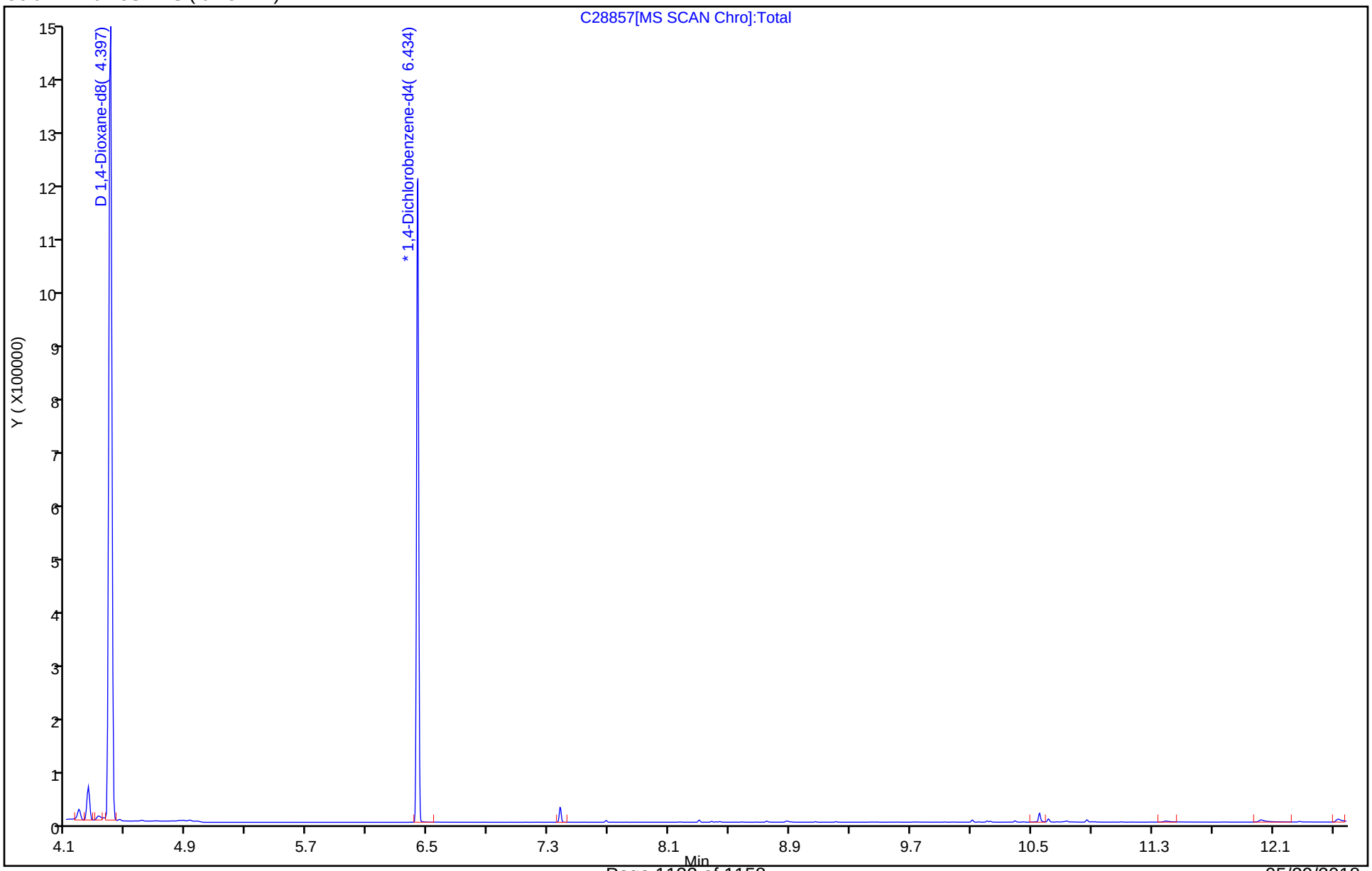
Report Date: 02-May-2018 20:32:37 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28857.D

Injection Date:	30-Apr-2018 20:19:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	MB 460-515403/1-A			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



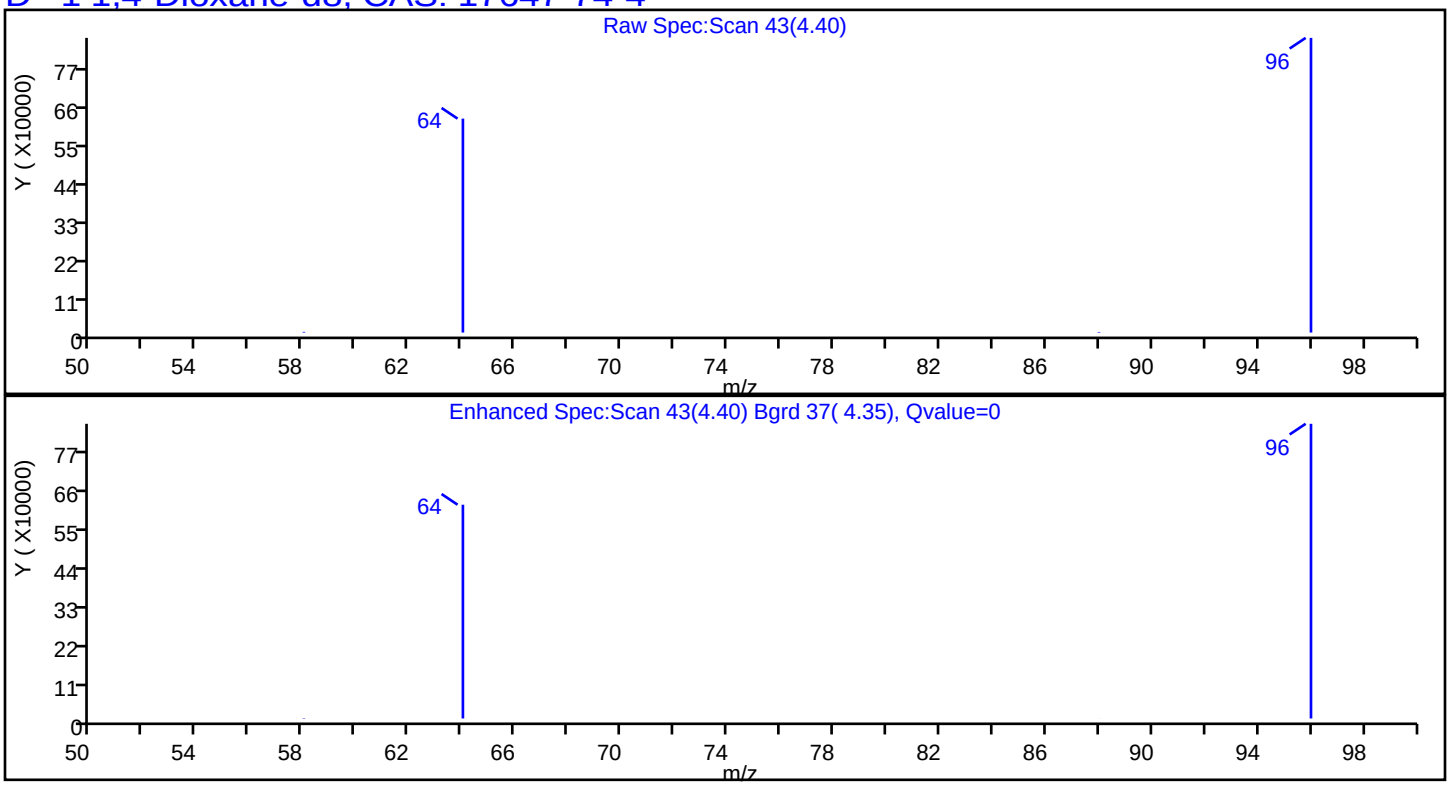
Report Date: 02-May-2018 20:32:37 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28857.D

Injection Date:	30-Apr-2018 20:19:30	Instrument ID:	CBNAMS13		
Lims ID:	MB 460-515403/1-A				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



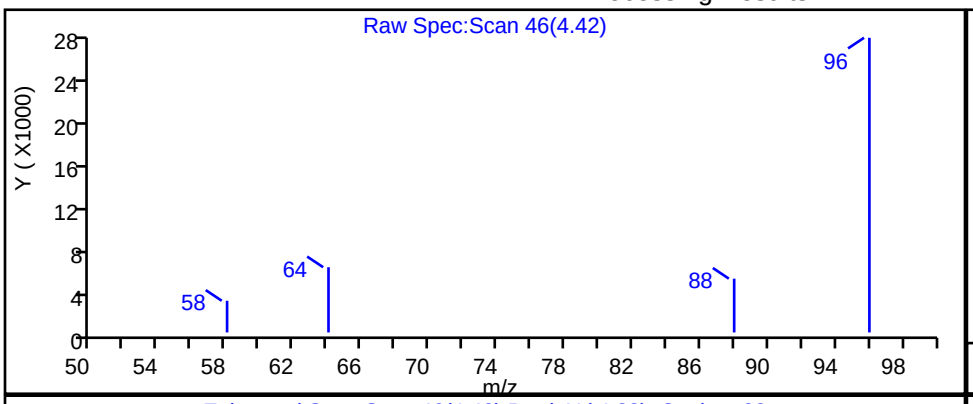
User Disabled Compound Report

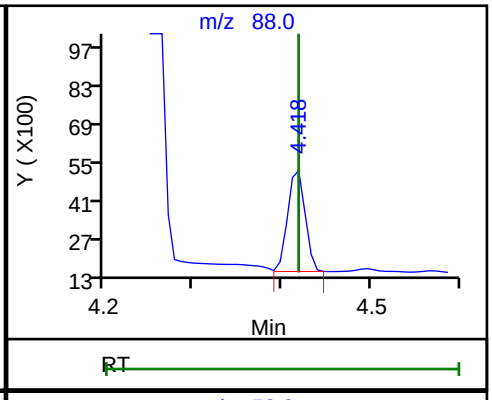
TestAmerica Edison

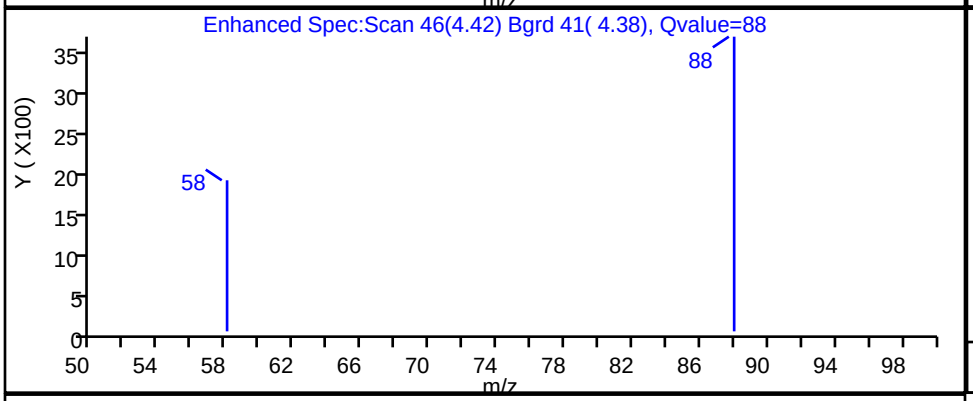
Data File:	\\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28857.D				
Injection Date:	30-Apr-2018 20:19:30	Instrument ID:	CBNAMS13		
Lims ID:	MB 460-515403/1-A				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		
Column:	Rtxi-5Sil MS (0.25 mm)	Detector	MS SCAN		

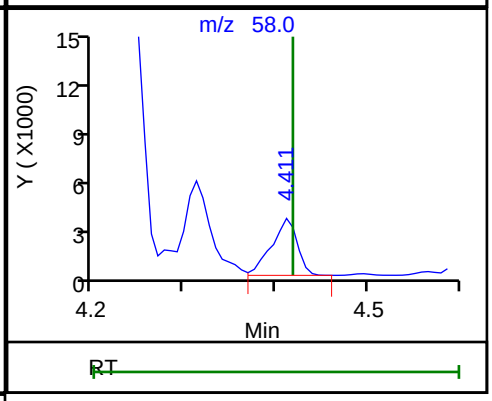
2 1,4-Dioxane, CAS: 123-91-1

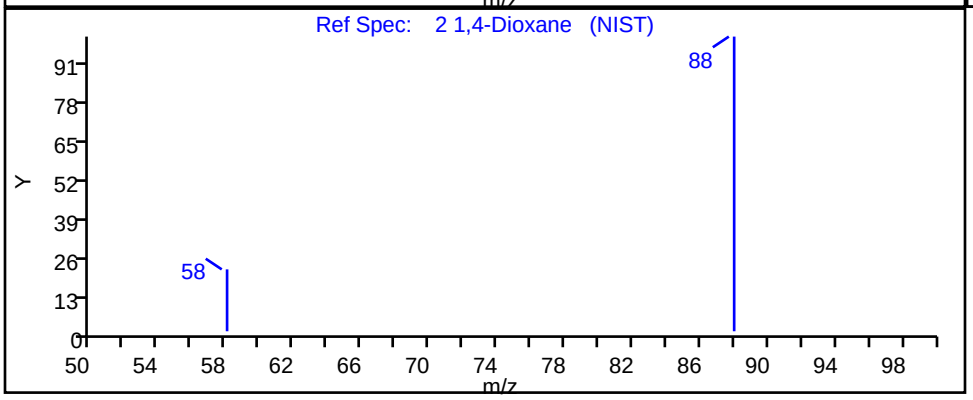
Processing Results











RT	Mass	Response	Amount
4.42	88.00	5147	0.014468
4.41	58.00	6438	

Reviewer: johnstonm1, 01-May-2018 13:23:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-515403/2-A

Matrix: Water | Lab File ID: C28858.D

Analysis Method: 8270D SIM ID | Date Collected:

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 250(mL) | Date Analyzed: 04/30/2018 20:36

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.68		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		10-200

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28858.D
Lims ID: LCS 460-515403/2-A
Client ID:
Sample Type: LCS
Inject. Date: 30-Apr-2018 20:36:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-004
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:11:14

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	956163	4.00	1.57	
	2 1,4-Dioxane	88	4.418	4.418	0.000	82	62204	0.2000	0.2095	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	98	418716	0.2000	0.2000	

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

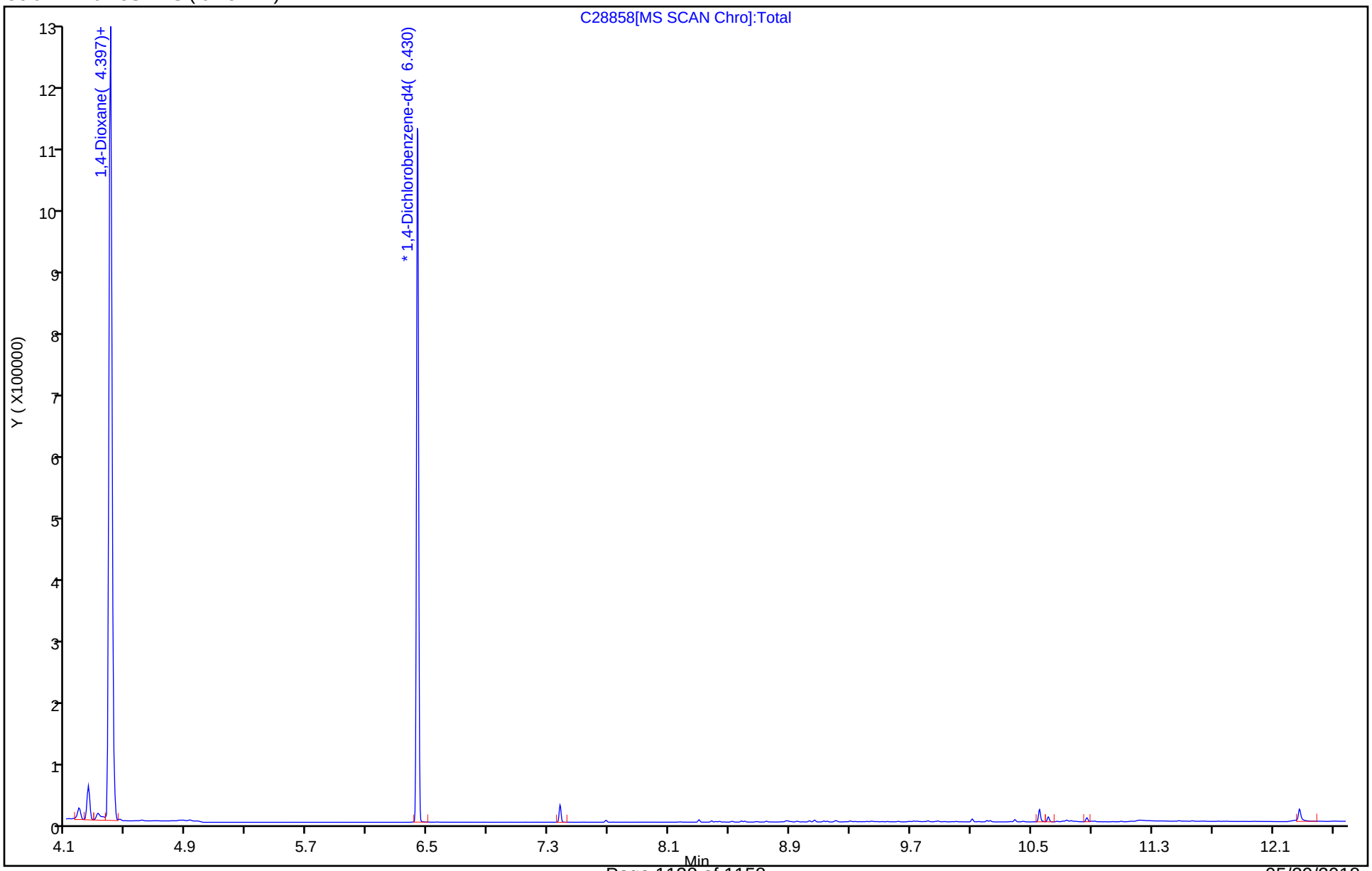
Report Date: 01-May-2018 10:25:29 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28858.D

Injection Date:	30-Apr-2018 20:36:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	LCS 460-515403/2-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MS | Lab Sample ID: 460-154781-1 MS

Matrix: Water | Lab File ID: C28860.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 10:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 04/30/2018 21:12

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.71		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28860.D
Lims ID: 460-154781-F-1-A MS
Client ID: GC-MW-107(WG)
Sample Type: MS
Inject. Date: 30-Apr-2018 21:12:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-006
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 13:20:50 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:12:09

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.404	4.397	0.007	0	948821	4.00	1.49	
	2 1,4-Dioxane	88	4.418	4.418	0.000	77	61641	0.2000	0.2092	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	437774	0.2000	0.2000	

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

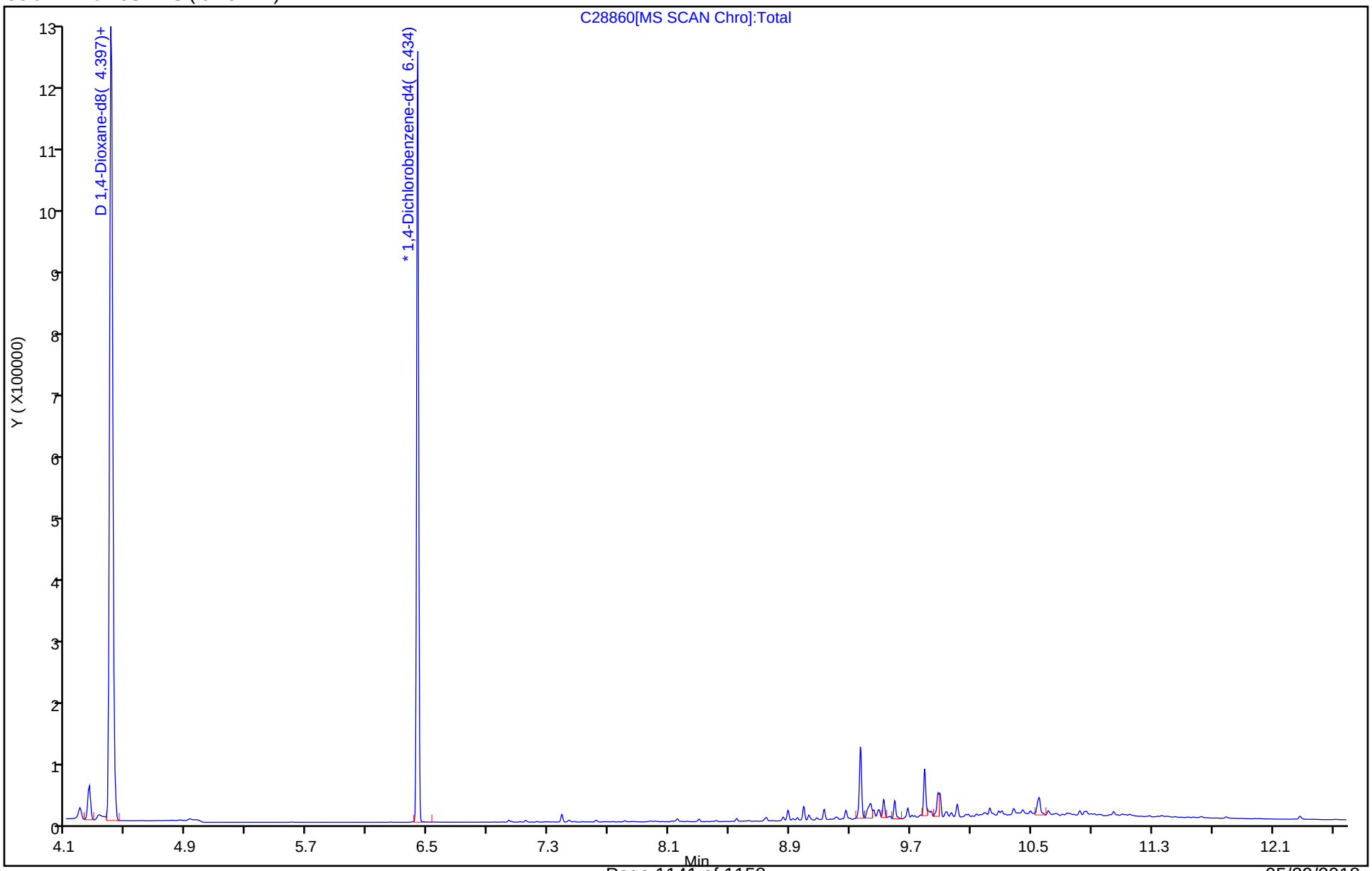
Report Date: 01-May-2018 13:22:17 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28860.D

Injection Date:	30-Apr-2018 21:12:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-F-1-A MS			Worklist Smp#:	6
Client ID:	GC-MW-107(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MSD | Lab Sample ID: 460-154781-1 MSD

Matrix: Water | Lab File ID: C28861.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 10:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 04/30/2018 21:30

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.63		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28861.D
Lims ID: 460-154781-F-1-B MSD
Client ID: GC-MW-107(WG)
Sample Type: MSD
Inject. Date: 30-Apr-2018 21:30:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 460-0071290-007
Operator ID: Instrument ID: CBNAMS13

Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\8270_Isotope.m
Limit Group: MSS 8270 Isotope Dilution IS
Last Update: 01-May-2018 10:25:22 Calib Date: 30-Apr-2018 11:50:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71269.b\C28853.D

Column 1 : Rtxi-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: khlungprakhons Date: 01-May-2018 17:12:26

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
D	1 1,4-Dioxane-d8	96	4.397	4.397	0.000	0	945534	4.00	1.49	
	2 1,4-Dioxane	88	4.418	4.418	0.000	81	58728	0.2000	0.2000	
*	4 1,4-Dichlorobenzene-d4	152	6.434	6.434	0.000	99	436446	0.2000	0.2000	

Reagents:

SM_iso_d4istd_00001 Amount Added: 20.00 Units: uL Run Reagent

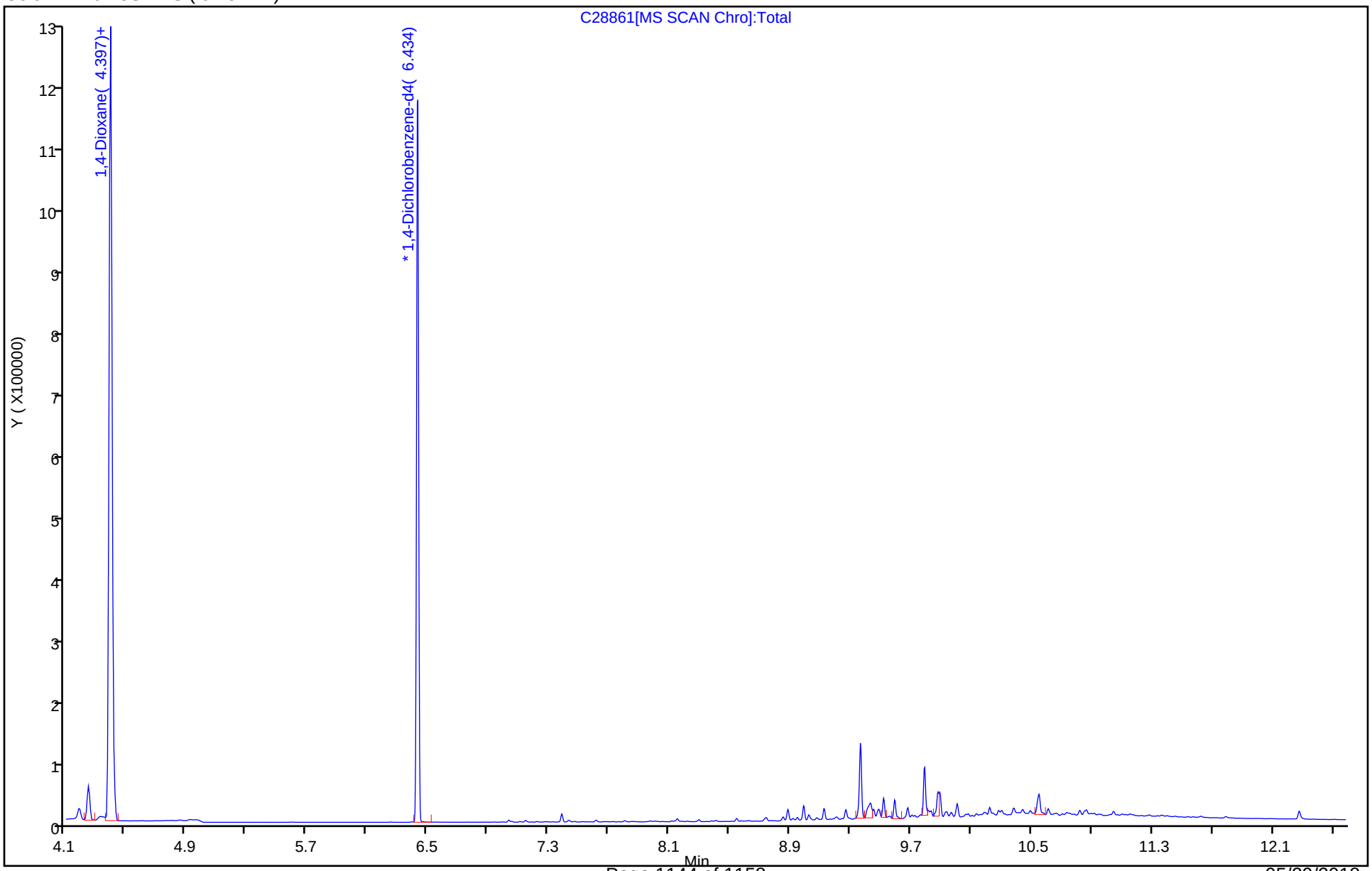
Report Date: 01-May-2018 10:25:40 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180430-71290.b\C28861.D

Injection Date:	30-Apr-2018 21:30:30	Instrument ID:	CBNAMS13	Operator ID:	
Lims ID:	460-154781-F-1-B MSD			Worklist Smp#:	7
Client ID:	GC-MW-107(WG)				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8270_Isotope	Limit Group:	MSS 8270 Isotope Dilution IS		

Column: Rtxi-5Sil MS (0.25 mm)



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CBNAMS13 Start Date: 04/30/2018 09:04

Analysis Batch Number: 515312 End Date: 04/30/2018 12:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 460-515312/1		04/30/2018 09:04	1	C28845.D	Rtxi-5Sil MS 0.25(mm)
ICIS 460-515312/2		04/30/2018 09:40	1	C28846A.D	Rtxi-5Sil MS 0.25(mm)
STD8 460-515312/3 IC		04/30/2018 10:03	1	C28847.D	Rtxi-5Sil MS 0.25(mm)
STD7 460-515312/4 IC		04/30/2018 10:21	1	C28848.D	Rtxi-5Sil MS 0.25(mm)
STD6 460-515312/5 IC		04/30/2018 10:38	1	C28849.D	Rtxi-5Sil MS 0.25(mm)
STD4 460-515312/6 IC		04/30/2018 10:56	1	C28850.D	Rtxi-5Sil MS 0.25(mm)
STD3 460-515312/7 IC		04/30/2018 11:14	1	C28851.D	Rtxi-5Sil MS 0.25(mm)
STD2 460-515312/8 IC		04/30/2018 11:32	1	C28852.D	Rtxi-5Sil MS 0.25(mm)
STD1 460-515312/9 IC		04/30/2018 11:50	1	C28853.D	Rtxi-5Sil MS 0.25(mm)
ICV 460-515312/10		04/30/2018 12:08	1		Rtxi-5Sil MS 0.25(mm)

8270D SIM ID

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Instrument ID: CBNAMS13 Start Date: 04/30/2018 19:42

Analysis Batch Number: 515424 End Date: 05/01/2018 03:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 460-515424/1		04/30/2018 19:42	1	C28855.D	Rtxi-5Sil MS 0.25(mm)
CCVIS 460-515424/2		04/30/2018 20:01	1	C28856.D	Rtxi-5Sil MS 0.25(mm)
MB 460-515403/1-A		04/30/2018 20:19	1	C28857.D	Rtxi-5Sil MS 0.25(mm)
LCS 460-515403/2-A		04/30/2018 20:36	1	C28858.D	Rtxi-5Sil MS 0.25(mm)
460-154781-1		04/30/2018 20:54	1	C28859.D	Rtxi-5Sil MS 0.25(mm)
460-154781-1 MS		04/30/2018 21:12	1	C28860.D	Rtxi-5Sil MS 0.25(mm)
460-154781-1 MSD		04/30/2018 21:30	1	C28861.D	Rtxi-5Sil MS 0.25(mm)
460-154781-2		04/30/2018 21:48	1	C28862.D	Rtxi-5Sil MS 0.25(mm)
460-154781-3		04/30/2018 22:05	1	C28863.D	Rtxi-5Sil MS 0.25(mm)
460-154781-4		04/30/2018 22:23	1	C28864.D	Rtxi-5Sil MS 0.25(mm)
460-154781-5		04/30/2018 22:41	1	C28865.D	Rtxi-5Sil MS 0.25(mm)
460-154781-6		04/30/2018 22:59	1	C28866.D	Rtxi-5Sil MS 0.25(mm)
460-154781-7		04/30/2018 23:16	1	C28867.D	Rtxi-5Sil MS 0.25(mm)
460-154781-9		04/30/2018 23:34	1	C28868.D	Rtxi-5Sil MS 0.25(mm)
460-154781-8		04/30/2018 23:52	1	C28869.D	Rtxi-5Sil MS 0.25(mm)
460-154925-1		05/01/2018 00:10	1	C28870.D	Rtxi-5Sil MS 0.25(mm)
460-154925-2		05/01/2018 00:27	1	C28871.D	Rtxi-5Sil MS 0.25(mm)
460-154925-3		05/01/2018 00:45	1	C28872.D	Rtxi-5Sil MS 0.25(mm)
460-154925-4		05/01/2018 01:03	1	C28873.D	Rtxi-5Sil MS 0.25(mm)
460-154925-5		05/01/2018 01:21	1	C28874.D	Rtxi-5Sil MS 0.25(mm)
460-154925-6		05/01/2018 01:39	1	C28875.D	Rtxi-5Sil MS 0.25(mm)
460-154925-7		05/01/2018 01:56	1	C28876.D	Rtxi-5Sil MS 0.25(mm)
460-154925-9		05/01/2018 02:14	1	C28877.D	Rtxi-5Sil MS 0.25(mm)
460-154925-10		05/01/2018 02:32	1	C28878.D	Rtxi-5Sil MS 0.25(mm)
460-154925-11		05/01/2018 02:50	1	C28879.D	Rtxi-5Sil MS 0.25(mm)
460-154925-12		05/01/2018 03:07	1	C28880.D	Rtxi-5Sil MS 0.25(mm)

8270D SIM ID

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 515403 Batch Start Date: 04/30/18 15:47 Batch Analyst: Barthelus, Guyrlande R

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	SecondAdjustpH	OP_1,4-DX_SP 00002
MB 460-515403/1		3510C, 8270D SIM ID		250 mL	2 mL	7 SU	<2 SU	>12 SU	
LCS 460-515403/2		3510C, 8270D SIM ID		250 mL	2 mL	7 SU	<2 SU	>12 SU	200 uL
460-154781-F-1 MS	GC-MW-107(WG)	3510C, 8270D SIM ID	T	245 mL	2 mL	7 SU	<2 SU	>12 SU	200 uL
460-154781-F-1 MSD	GC-MW-107(WG)	3510C, 8270D SIM ID	T	245 mL	2 mL	7 SU	<2 SU	>12 SU	200 uL
460-154781-F-1	GC-MW-107(WG)	3510C, 8270D SIM ID	T	245 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154781-E-2	GC-MW-107D(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	5 SU	<2 SU	>12 SU	
460-154781-E-3	GC-MW-108(WG)	3510C, 8270D SIM ID	T	245 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154781-E-4	GC-MW-1B(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	5 SU	<2 SU	>12 SU	
460-154781-E-5	GC-MW-103(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154781-E-6	GC-MW-104(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154781-F-7	GC-MW-105(WG)	3510C, 8270D SIM ID	T	250 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154781-F-9	GC-Equipment Blank	3510C, 8270D SIM ID	T	250 mL	2 mL	5 SU	<2 SU	>12 SU	
460-154781-E-8	GC-DRAIN(WG)	3510C, 8270D SIM ID	T	245 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154925-F-1	GC-MW-102(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154925-D-2	GC-MW-109(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154925-F-3	GC-MW-109M(WG)	3510C, 8270D SIM ID	T	245 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154925-D-4	GC-MW-101(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154925-D-5	GC-MW-101D(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	5 SU	<2 SU	>12 SU	
460-154925-D-6	GC-MW-106(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154925-D-7	GC-MW-3(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154925-D-9	GC-Equipment Blank-2	3510C, 8270D SIM ID	T	250 mL	2 mL	5 SU	<2 SU	>12 SU	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8270D SIM ID

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 515403 Batch Start Date: 04/30/18 15:47 Batch Analyst: Barthelus, Guyrlande R

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	SecondAdjustpH	OP_1,4-DX_SP 00002
460-154925-D-10	GC-MW-110(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	
460-154925-E-11	GC-MW-110D(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	5 SU	<2 SU	>12 SU	
460-154925-D-12	GC-MW-2(WG)	3510C, 8270D SIM ID	T	240 mL	2 mL	7 SU	<2 SU	>12 SU	

Lab Sample ID	Client Sample ID	Method Chain	Basis	OP_14-DX_surr 00003					
MB 460-515403/1		3510C, 8270D SIM ID		20 uL					
LCS 460-515403/2		3510C, 8270D SIM ID		20 uL					
460-154781-F-1 MS	GC-MW-107(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-F-1 MSD	GC-MW-107(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-F-1	GC-MW-107(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-E-2	GC-MW-107D(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-E-3	GC-MW-108(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-E-4	GC-MW-1B(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-E-5	GC-MW-103(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-E-6	GC-MW-104(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-F-7	GC-MW-105(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154781-F-9	GC-Equipment Blank	3510C, 8270D SIM ID	T	20 uL					
460-154781-E-8	GC-DRAIN(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-F-1	GC-MW-102(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-D-2	GC-MW-109(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-F-3	GC-MW-109M(WG)	3510C, 8270D SIM ID	T	20 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8270D SIM ID

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Batch Number: 515403 Batch Start Date: 04/30/18 15:47 Batch Analyst: Barthelus, Guyrlande R

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	OP_14-DX_surr 00003					
460-154925-D-4	GC-MW-101(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-D-5	GC-MW-101D(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-D-6	GC-MW-106(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-D-7	GC-MW-3(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-D-9	GC-Equipment Blank-2	3510C, 8270D SIM ID	T	20 uL					
460-154925-D-10	GC-MW-110(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-E-11	GC-MW-110D(WG)	3510C, 8270D SIM ID	T	20 uL					
460-154925-D-12	GC-MW-2(WG)	3510C, 8270D SIM ID	T	20 uL					

Batch Notes	
Acid Used for pH Adjustment ID	186983
Base Used to Adjust pH ID	OP2524
Batch Comment	3510C LVI 8270D_SIM_MS
Analyst ID - Extraction	GB
Method/Fraction	8270
Na2SO4 ID	176006
Pipette/Syringe/Dispenser ID	BNA
Prep Solvent ID	196933
Prep Solvent Volume Used	120 mL
Analyst ID - Spike Analyst	GB
Sufficient Volume for Batch QC	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8270D SIM ID

Shipping and Receiving Documents

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

05/29/2018

Name (for report and invoice): Lindsey O'Hara	Samplers Name (Printed): James Robinson / Emily Elliott	Site/Project Identification: Gem Cleaners
Company: TRC	P. O. #: 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program: NYSDEC DKQP: ☐
Address: 1430 Broadway	Analysis Turnaround Time: Standard ☒	
City: New York State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 212-221-7822 Fax:		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 154781

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs + 10 8260C	1,4-Dioxane 8270D	Sample Numbers
GC-MW-107(WG)	4/25/18	1000	GW	8 6	X	X	1
GC-MW-107(WG)-MS		1000		6	X	X	1
GC-MW-107(WG)-MSD		1000			X	X	1
GC-MW-107D(WG)		1115			X	X	2
GC-MW-108(WG)		1150			X	X	3
GC-MW-1B(WG)		1235			X	X	4
GC-MW-103(WG)		1310			X	X	5
GC-MW-104(WG)		1335			X	X	6
GC-MW-105(WG)		1443			X	X	7
GC-DRAIN(WG)	↓	1400	↓	8 6	X	X	8
				Soil:			
				Water:	2	1	

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

460-154781 Chain of Custody

Special Instructions Please Provide Cat B deliverable + Equis NYSDEC EDD. Please Batch all samples Water Metals Filtered (Yes/No)? NO

Relinquished by	Company	Date / Time	Received by	Company
	TRC	4/25/18 1700		
Relinquished by 2)	Company TRC	Date / Time 4/25/18 1930	Received by 2)	Company TRC 4/25/18 1930
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

0.2 / 0.2 TRH // N = CL

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TA PM: Jamal Franklin

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

05/29/2018

Name (for report and invoice) See Pg 1	Samplers Name (Printed)	Site/Project Identification: Gem Cleaners
Company	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
Address	Analysis Turnaround Time: Standard ☐	Regulatory Program: NYSDEC DKQP: ☐
City State	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 154781

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs+10 8260	1,4-Dioxane 8270D									Sample Numbers
GC - Equipment Blank	4/25/18	1500	W	6	X	X									9
GC - TB - 20180425			Trip Blank	4	X	X	← No 1,4-Dioxane								10
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH 6 = Other _____, 7 = Other _____				Soil:											
				Water:	2	1									

Special Instructions _____ Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	4/25/18 1700	1)	T-A
Relinquished by 2)	Company T. A	Date / Time 4/25/18 1630	Received by 2) Joseph Sousa	Company TA ECL 4/25/18 1930
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

TestAmerica Edison
Receipt Temperature and pH Log

Page ____ of ____

Job Number: 15478

Number of Coolers: 1 IR Gun # 1

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	0.8 °C	0.8 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 4/25/18

05/29/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

' New Durham Road
son, New Jersey 08817
one: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / 460-154925 Chain of Custody

Page 1 of 2

05/29/2018

Name (for report and invoice) Lindsay O'Hara	Samplers Name (Printed) James Robinson/Emily Eckert	Site/Project Identification Gem Cleaners
Company TRC Engineers, Inc.	P. O. # 120097	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 1430 Broadway	Analysis Turnaround Time: Standard ☒	Regulatory Program: NYSDEC DKQP: ☐
City New York State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone 203.278.5305 Fax		Job No: 164926

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs + 10 8260	1,4-Dioxane 8270D SIM	Sample Numbers
GC-MW-102(WG)	4/26	0825	GW	6	X	X	1
GC-MW-109(WG)		0957					2
GC-MW-109M(WG)		0900					3
GC-MW-101(WG)		1115					4
GC-MW-101D(WG)		1115					5
GC-MW-106(WG)		1155					6
GC-MW-3(WG)		1245					7
GC-TB-20180426		0930				X ← no 1,4-Dioxane	8
GC-Equipment Blank-2		0930					9
GC-MW-110(WG)	↓	1335	↓	↓	↓	↓	10
				Soil:			
				Water:	2	1	

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Special Instructions Please provide Cat B Delivable + EQuIS NYSDEC EDD. Please batch and close all GW samples

Water Metals Filtered (Yes/No)? N/A

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC Engineers, Inc	4/26 | 1649	1)	
Relinquished by 2)	Company	Date / Time	Received by 2)	Company TA Edi
Relinquished by 3)	Company	Date / Time |	Received by 3)	Company
Relinquished by 4)	Company	Date / Time |	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

1.4/1.4 1.7/1.7 +RA (NOE)

TestAmerica ~~Sacramento~~ Edison
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

Chain of Custody Record — this is page 2 of Chain ~~corresponds to~~ Carbon Copy Chain

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: ~~Emily Ebert~~ LINDSAY O'HARA	Phone: SEE PG 1	Franklin, Jannel O E-Mail: jannel.franklin@testamericainc.com		320-21364-4773.2 Page: Page 2 of 2

Company:	Job #:
TRC Environmental Corporation	164926

Address:	Due Date Requested:
1430 Broadway, 10th FL	
City: New York	TAT Requested (days):
State, Zip: NY, 10018-3308	
Phone: 212-221-7822(Tel)	PO #: 120097 (as of 3.14.18)
Email: ~~EEbert@trcsolutions.com~~ LOhara@trcsolutions.com	WO #: 279191 Phase 2
Project Name: GEM Cleaners (PFAs) NYSDEC - TRC/D&B	Project #: 32010918
Site:	SSOW#:

Analysis Requested

~~PFC_IDA_D8270, Standard List (21 Analytes),~~ VOCs FID 8260 1,4 Dioxane 8270D SIM ~~Total Number of containers~~

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code:					Special Instructions/Note:
GC-MW-110D(WG)	4/26	1430	G	Water			X	X		11
GC-MW-2(WG)	4/26	1500	G	Water			X	X		12
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

GND

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: See page 1

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		4/26 1649				
	Relinquished by:	Date/Time: 4/26/18 1650	Company TRC	Received by: Kelly Jo	Date/Time: 4/26/18 2020	Company TA Ed.
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

05/29/2018

Page 1155 of 1158

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 154926

Number of Coolers: 2 IR Gun #: 17

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	°C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 4/26/18

05/29/2018

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-154781-1

Login Number: 154781
List Number: 1
Creator: Fernandez, Diana X

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-154781-1

Login Number: 154925
List Number: 1
Creator: Meyers, Gary

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

ANALYTICAL REPORT

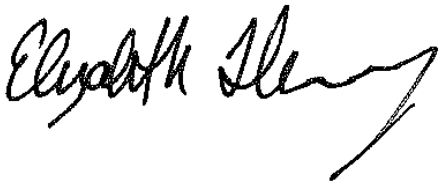
Job Number: 320-38630-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Emily Ebert



Approved for release.
Elizabeth J Flannery
Project Manager I
5/24/2018 3:58 PM

Designee for
Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
05/24/2018

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 320-38630-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 4/28/2018 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9º C.

Receipt Exceptions

For sample GC-MW-2(WG) both bottles have only partial labels, no time or date, only sample numbers.: GC-MW-2 (WG) (320-38630-10).

PFOA/PFOS

Samples GC-MW-102 (WG) (320-38630-1), GC-MW-109 (WG) (320-38630-2), GC-MW-109M (WG) (320-38630-3), GC-MW-101 (WG) (320-38630-4), GC-MW-101D (WG) (320-38630-5), GC-MW-106 (WG) (320-38630-6), GC-MW-3 (WG) (320-38630-7), GC-MW-110 (WG) (320-38630-8), GC-MW-110D (WG) (320-38630-9), GC-MW-2 (WG) (320-38630-10) and GC-Equipment Blank-2 (320-38630-11) were analyzed for PFOA/PFOS in accordance with PFOA/PFOS. The samples were prepared on 05/10/2018 and 05/12/2018 and analyzed on 05/13/2018 and 05/14/2018.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 320-222510 and analytical batch 320-223178 recovered outside control limits for the following analyte: 6:2FTS. The associated samples were re-prepared outside holding time with a LCS and LCSD in control for this analyte. Both sets of data have been reported. 6:2FTS failed the recovery criteria high for LCS 320-222510/2-A. 6:2FTS failed the recovery criteria high for LCSD 320-222510/3-A.

Internal standard (ISTD) response for for the following initial calibration blank (ICB) was outside acceptance criteria: (ICB 320-222921/9). The ISTD is not used to quantitate target analytes; therefore, there is no impact to the data. The continuous calibration blank (CCB) preceding the associated samples had an internal response within acceptance criteria, demonstrating instrument was in control prior to sample injections.

The method blank (MB) for preparation batch 320-222510 contained Perfluorooctanoic acid (PFOA) and 6:2FTS above the reporting limit (RL). The associated samples were re-extracted outside holding time with a MB that meets method criteria. Both sets of data were reported. 6:2FTS exceeded the RPD limit. Refer to the QC report for details.

6:2FTS and Perfluorooctanoic acid (PFOA) were detected in method blank MB 320-222510/1-A at levels exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Perfluorohexanesulfonic acid (PFHxS) and Perfluorooctanesulfonic acid (PFOS) were detected in method blank MB 320-222510/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated

sample reported a result above the MDL and/or RL, the result has been flagged. 6:2FTS was detected in method blank MB 320-222819/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep- Method 3535

The following samples: GC-MW-101D (WG) (320-38630-5) and GC-MW-106 (WG) (320-38630-6) was/were decanted prior to extraction, due to containing excess sediment which had the potential to clog the solid-phase column.

The following sample: GC-MW-101D (WG) (320-38630-5) in preparation batch 320-222819 was centrifuged prior to preparation due to having sediment present, which could potentially clog the solid-phase column.

The following sample: GC-MW-106 (WG) (320-38630-6) in preparation batch 320-222819 was decanted prior to preparation due to having sediment present, which could potentially clog the solid-phase column.

The following sample: GC-MW-101D (WG) (320-38630-5) in preparation batch 320-222819 was observed to be a light yellow color.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-222510.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-222819.

The following samples were re-prepared outside of preparation holding time due to Solid Phase Column (SPE) contamination GC-MW-102 (WG) (320-38630-1), GC-MW-109 (WG) (320-38630-2), GC-MW-109M (WG) (320-38630-3), GC-MW-101 (WG) (320-38630-4), GC-MW-101D (WG) (320-38630-5), GC-MW-106 (WG) (320-38630-6), GC-MW-3 (WG) (320-38630-7), GC-MW-110 (WG) (320-38630-8), GC-MW-110D (WG) (320-38630-9), GC-MW-2 (WG) (320-38630-10) and GC-Equipment Blank-2 (320-38630-11). preparation batch 320-222819.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38630-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-38630-1	GC-MW-102 (WG)	Water	04/26/18 08:25	04/28/18 09:15
320-38630-2	GC-MW-109 (WG)	Water	04/26/18 09:57	04/28/18 09:15
320-38630-3	GC-MW-109M (WG)	Water	04/26/18 09:00	04/28/18 09:15
320-38630-4	GC-MW-101 (WG)	Water	04/26/18 11:15	04/28/18 09:15
320-38630-5	GC-MW-101D (WG)	Water	04/26/18 11:15	04/28/18 09:15
320-38630-6	GC-MW-106 (WG)	Water	04/26/18 11:55	04/28/18 09:15
320-38630-7	GC-MW-3 (WG)	Water	04/26/18 12:45	04/28/18 09:15
320-38630-8	GC-MW-110 (WG)	Water	04/26/18 13:35	04/28/18 09:15
320-38630-9	GC-MW-110D (WG)	Water	04/26/18 14:30	04/28/18 09:15
320-38630-10	GC-MW-2 (WG)	Water	04/26/18 15:00	04/28/18 09:15
320-38630-11	GC-Equipment Blank-2	Water	04/26/18 09:30	04/28/18 09:15

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38630-1

Client Sample ID: GC-MW-102 (WG) — Lab Sample ID: 320-38630-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.1		2.1	0.36	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	6.8		2.1	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	6.2		2.1	0.60	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.8		2.1	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	19	B	2.1	0.88	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.8		2.1	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.7	J I	2.1	0.32	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	20		2.1	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	2.1	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.40	J	2.1	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	22	B	2.1	0.56	ng/L	1		537 (modified)	Total/NA
6:2FTS	8.5	J B *	21	2.1	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	16	H	2.0	0.85	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	4.0	J H B	20	2.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-109 (WG) — Lab Sample ID: 320-38630-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	9.0		2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	11		2.0	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	14		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	16		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	67	B	2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	7.2		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	6.5		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.4		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.0	B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.70	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	18	B	2.0	0.54	ng/L	1		537 (modified)	Total/NA
6:2FTS	6.4	J B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	64	H	2.0	0.84	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	4.1	J H B	20	2.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-109M (WG) — Lab Sample ID: 320-38630-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.8		2.0	0.36	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	12		2.0	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	12		2.0	0.59	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	8.9		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	35	B	2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.4		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	4.0		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.5		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.1	B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14	B	2.0	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	3.9		2.0	0.32	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-MW-109M (WG) (Continued) — Lab Sample ID: 320-38630-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
6:2FTS	6.7	J B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	31	H	2.0	0.83	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	2.9	J H B	20	2.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-101 (WG) — Lab Sample ID: 320-38630-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.6		2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	5.0		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.5		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.1		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	17	B	2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.1		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.2	J	2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.2		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.0	B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.29	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	12	B	2.0	0.53	ng/L	1		537 (modified)	Total/NA
6:2FTS	5.9	J B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	14	H	1.9	0.82	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	2.7	J H B	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-101D (WG) — Lab Sample ID: 320-38630-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.7		2.0	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	5.2		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.7		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.7		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	17	B	2.0	0.83	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.53	J	2.0	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.6	J	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.2	B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.31	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.4	B	2.0	0.53	ng/L	1		537 (modified)	Total/NA
6:2FTS	7.4	J B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	14	H	2.0	0.84	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	3.2	J H B	20	2.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-106 (WG) — Lab Sample ID: 320-38630-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	9.6		2.0	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	15		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	13		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	8.8		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	28	B	2.0	0.83	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.0		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.4	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-MW-106 (WG) (Continued) — Lab Sample ID: 320-38630-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	6.0		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5	B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.34	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	12	B	2.0	0.53	ng/L	1		537 (modified)	Total/NA
6:2FTS	8.3	J B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	25	H	2.0	0.85	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	2.9	J H B	20	2.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-3 (WG) — Lab Sample ID: 320-38630-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	11		2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	22		2.0	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	19		2.0	0.59	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	14		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	26	B	2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.8		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.8		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.3		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.8	B	2.0	0.55	ng/L	1		537 (modified)	Total/NA
6:2FTS	7.6	J B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	24	H	2.1	0.89	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	4.3	J H B	21	2.1	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-110 (WG) — Lab Sample ID: 320-38630-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	8.7		2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	19		2.0	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	18		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	8.0		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	29	B	2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.0		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.4		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.46	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	7.4		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.33	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.4	B	2.0	0.54	ng/L	1		537 (modified)	Total/NA
6:2FTS	6.8	J B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	29	H	1.9	0.82	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	4.4	J H B	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-110D (WG) — Lab Sample ID: 320-38630-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.3		2.1	0.37	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	6.1		2.1	0.52	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-MW-110D (WG) (Continued) — Lab Sample ID: 320-38630-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	6.8		2.1	0.62	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.8		2.1	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	24	B	2.1	0.91	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.2	J	2.1	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.39	J	2.1	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.8		2.1	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.3	B	2.1	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.47	J	2.1	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	10	B	2.1	0.58	ng/L	1		537 (modified)	Total/NA
6:2FTS	8.6	J B *	21	2.1	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	21	H	1.9	0.83	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	3.1	J H B	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-2 (WG) — Lab Sample ID: 320-38630-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	9.9		2.0	0.36	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	19		2.0	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	20		2.0	0.59	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	13		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	29	B	2.0	0.87	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.8		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.47	J	2.0	0.32	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	7.8		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.3	B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.68	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	15	B	2.0	0.55	ng/L	1		537 (modified)	Total/NA
6:2FTS	19	J B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	27	H	1.9	0.83	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	3.1	J H B	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-Equipment Blank-2 — Lab Sample ID: 320-38630-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	3.6	B	2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.25	J B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
6:2FTS	36	B *	20	2.0	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	2.7	J H B	20	2.0	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38630-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Client Sample ID: GC-MW-102 (WG)

Date Collected: 04/26/18 08:25
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**3.1**		2.1	0.36	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluoropentanoic acid (PFPeA)	**6.8**		2.1	0.51	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorohexanoic acid (PFHxA)	**6.2**		2.1	0.60	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluoroheptanoic acid (PFHpA)	**4.8**		2.1	0.26	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorooctanoic acid (PFOA)	**19**	**B**	2.1	0.88	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorononanoic acid (PFNA)	**2.8**		2.1	0.28	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorodecanoic acid (PFDA)	**1.7**	**J I**	2.1	0.32	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluoroundecanoic acid (PFUnA)	ND		2.1	1.1	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorododecanoic acid (PFDoA)	ND		2.1	0.57	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.3	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.30	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorobutanesulfonic acid (PFBS)	**20**		2.1	0.21	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorohexanesulfonic acid (PFHxS)	**1.4**	**J B**	2.1	0.18	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.40**	**J**	2.1	0.20	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorooctanesulfonic acid (PFOS)	**22**	**B**	2.1	0.56	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.33	ng/L		05/10/18 12:17	05/14/18 18:47	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.1	0.36	ng/L		05/10/18 12:17	05/14/18 18:47	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		21	3.2	ng/L		05/10/18 12:17	05/14/18 18:47	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		21	2.0	ng/L		05/10/18 12:17	05/14/18 18:47	1
6:2FTS	**8.5**	**J B ***	21	2.1	ng/L		05/10/18 12:17	05/14/18 18:47	1
8:2FTS	ND		21	2.1	ng/L		05/10/18 12:17	05/14/18 18:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*64*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C5 PFPeA	*87*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C2 PFHxA	*94*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C4-PFHpA	*101*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C4 PFOA	*103*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C5 PFNA	*102*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C2 PFDA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C2 PFUnA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C2 PFDoA	*85*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C2-PFTeDA	*101*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C3-PFBS	*89*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
18O2 PFHxS	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C4 PFOS	*90*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
13C8 FOSA	*84*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
d3-NMeFOSAA	*83*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
d5-NEtFOSAA	*87*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
M2-6:2FTS	*138*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*
M2-8:2FTS	*113*		*25 - 150*	*05/10/18 12:17*	*05/14/18 18:47*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**16**	**H**	2.0	0.85	ng/L		05/12/18 07:12	05/13/18 17:43	1
6:2FTS	**4.0**	**J H B**	20	2.0	ng/L		05/12/18 07:12	05/13/18 17:43	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	98		25 - 150	05/12/18 07:12	05/13/18 17:43	1
M2-6:2FTS	141		25 - 150	05/12/18 07:12	05/13/18 17:43	1

Client Sample ID: GC-MW-109 (WG)

Date Collected: 04/26/18 09:57
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**9.0**		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluoropentanoic acid (PFPeA)	**11**		2.0	0.49	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorohexanoic acid (PFHxA)	**14**		2.0	0.58	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluoroheptanoic acid (PFHpA)	**16**		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorooctanoic acid (PFOA)	**67**	**B**	2.0	0.86	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorononanoic acid (PFNA)	**7.2**		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorodecanoic acid (PFDA)	**6.5**		2.0	0.31	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorobutanesulfonic acid (PFBS)	**6.4**		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorohexanesulfonic acid (PFHxS)	**2.0**	**B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.70**	**J**	2.0	0.19	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorooctanesulfonic acid (PFOS)	**18**	**B**	2.0	0.54	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/10/18 12:17	05/14/18 18:54	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 18:54	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/10/18 12:17	05/14/18 18:54	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 18:54	1
6:2FTS	**6.4**	**J B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 18:54	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 18:54	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	78		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C5 PFPeA	100		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C2 PFHxA	102		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C4-PFHpA	104		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C4 PFOA	104		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C5 PFNA	103		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C2 PFDA	102		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C2 PFUnA	99		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C2 PFDoA	96		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C2-PFTeDA	103		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C3-PFBS	97		25 - 150	05/10/18 12:17	05/14/18 18:54	1
18O2 PFHxS	99		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C4 PFOS	95		25 - 150	05/10/18 12:17	05/14/18 18:54	1
13C8 FOSA	93		25 - 150	05/10/18 12:17	05/14/18 18:54	1
d3-NMeFOSAA	94		25 - 150	05/10/18 12:17	05/14/18 18:54	1
d5-NEtFOSAA	103		25 - 150	05/10/18 12:17	05/14/18 18:54	1
M2-6:2FTS	115		25 - 150	05/10/18 12:17	05/14/18 18:54	1
M2-8:2FTS	105		25 - 150	05/10/18 12:17	05/14/18 18:54	1

Client Sample ID: GC-MW-109 (WG)

Lab Sample ID: 320-38630-2

Date Collected: 04/26/18 09:57
Matrix: Water
Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**64**	**H**	2.0	0.84	ng/L		05/12/18 07:12	05/13/18 17:51	1
6:2FTS	**4.1**	**J H B**	20	2.0	ng/L		05/12/18 07:12	05/13/18 17:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*101*		*25 - 150*	*05/12/18 07:12*	*05/13/18 17:51*	*1*
M2-6:2FTS	*110*		*25 - 150*	*05/12/18 07:12*	*05/13/18 17:51*	*1*

Client Sample ID: GC-MW-109M (WG)

Lab Sample ID: 320-38630-3

Date Collected: 04/26/18 09:00
Matrix: Water
Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**7.8**		2.0	0.36	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluoropentanoic acid (PFPeA)	**12**		2.0	0.50	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorohexanoic acid (PFHxA)	**12**		2.0	0.59	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluoroheptanoic acid (PFHpA)	**8.9**		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorooctanoic acid (PFOA)	**35**	**B**	2.0	0.86	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorononanoic acid (PFNA)	**3.4**		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorodecanoic acid (PFDA)	**4.0**		2.0	0.31	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorobutanesulfonic acid (PFBS)	**5.5**		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorohexanesulfonic acid (PFHxS)	**2.1**	**B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.45**	**J**	2.0	0.19	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorooctanesulfonic acid (PFOS)	**14**	**B**	2.0	0.55	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorodecanesulfonic acid (PFDS)	**3.9**		2.0	0.32	ng/L		05/10/18 12:17	05/14/18 19:02	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36	ng/L		05/10/18 12:17	05/14/18 19:02	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/10/18 12:17	05/14/18 19:02	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 19:02	1
6:2FTS	**6.7**	**J B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 19:02	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 19:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*79*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C5 PFPeA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C2 PFHxA	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C4-PFHpA	*102*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C4 PFOA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C5 PFNA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C2 PFDA	*98*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C2 PFUnA	*95*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C2 PFDoA	*95*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C2-PFTeDA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*

Client Sample ID: GC-MW-109M (WG)

Date Collected: 04/26/18 09:00
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*95*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
18O2 PFHxS	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C4 PFOS	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
13C8 FOSA	*89*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
d3-NMeFOSAA	*85*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
d5-NEtFOSAA	*90*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
M2-6:2FTS	*118*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*
M2-8:2FTS	*103*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:02*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**31**	**H**	2.0	0.83	ng/L		05/12/18 07:12	05/13/18 17:59	1
6:2FTS	**2.9**	**J H B**	20	2.0	ng/L		05/12/18 07:12	05/13/18 17:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*100*		*25 - 150*	*05/12/18 07:12*	*05/13/18 17:59*	*1*
M2-6:2FTS	*110*		*25 - 150*	*05/12/18 07:12*	*05/13/18 17:59*	*1*

Client Sample ID: GC-MW-101 (WG)

Date Collected: 04/26/18 11:15
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-4

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.6**		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluoropentanoic acid (PFPeA)	**5.0**		2.0	0.48	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorohexanoic acid (PFHxA)	**5.5**		2.0	0.57	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluoroheptanoic acid (PFHpA)	**5.1**		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorooctanoic acid (PFOA)	**17**	**B**	2.0	0.84	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorononanoic acid (PFNA)	**2.1**		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorodecanoic acid (PFDA)	**1.2**	**J**	2.0	0.31	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorobutanesulfonic acid (PFBS)	**3.2**		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorohexanesulfonic acid (PFHxS)	**2.0**	**B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.29**	**J**	2.0	0.19	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorooctanesulfonic acid (PFOS)	**12**	**B**	2.0	0.53	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/10/18 12:17	05/14/18 19:10	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 19:10	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/10/18 12:17	05/14/18 19:10	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 19:10	1
6:2FTS	**5.9**	**J B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 19:10	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 19:10	1

Client Sample ID: GC-MW-101 (WG)

Lab Sample ID: 320-38630-4

Date Collected: 04/26/18 11:15

Matrix: Water

Date Received: 04/28/18 09:15

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	87		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C5 PFPeA	99		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C2 PFHxA	100		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C4-PFHpA	99		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C4 PFOA	104		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C5 PFNA	106		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C2 PFDA	98		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C2 PFUnA	91		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C2 PFDoA	95		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C2-PFTeDA	111		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C3-PFBS	91		25 - 150	05/10/18 12:17	05/14/18 19:10	1
18O2 PFHxS	94		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C4 PFOS	93		25 - 150	05/10/18 12:17	05/14/18 19:10	1
13C8 FOSA	79		25 - 150	05/10/18 12:17	05/14/18 19:10	1
d3-NMeFOSAA	102		25 - 150	05/10/18 12:17	05/14/18 19:10	1
d5-NEtFOSAA	102		25 - 150	05/10/18 12:17	05/14/18 19:10	1
M2-6:2FTS	118		25 - 150	05/10/18 12:17	05/14/18 19:10	1
M2-8:2FTS	98		25 - 150	05/10/18 12:17	05/14/18 19:10	1

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**14**	**H**	1.9	0.82	ng/L		05/12/18 07:12	05/13/18 18:07	1
6:2FTS	**2.7**	**J H B**	19	1.9	ng/L		05/12/18 07:12	05/13/18 18:07	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	101		25 - 150	05/12/18 07:12	05/13/18 18:07	1
M2-6:2FTS	112		25 - 150	05/12/18 07:12	05/13/18 18:07	1

Client Sample ID: GC-MW-101D (WG)

Lab Sample ID: 320-38630-5

Date Collected: 04/26/18 11:15

Matrix: Water

Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.7**		2.0	0.34	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluoropentanoic acid (PFPeA)	**5.2**		2.0	0.48	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorohexanoic acid (PFHxA)	**5.7**		2.0	0.57	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluoroheptanoic acid (PFHpA)	**4.7**		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorooctanoic acid (PFOA)	**17**	**B**	2.0	0.83	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorononanoic acid (PFNA)	**0.53**	**J**	2.0	0.26	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorobutanesulfonic acid (PFBS)	**1.6**	**J**	2.0	0.20	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorohexanesulfonic acid (PFHxS)	**4.2**	**B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.31**	**J**	2.0	0.19	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorooctanesulfonic acid (PFOS)	**5.4**	**B**	2.0	0.53	ng/L		05/10/18 12:17	05/14/18 19:18	1

Client Sample ID: GC-MW-101D (WG)

Lab Sample ID: 320-38630-5

Date Collected: 04/26/18 11:15

Matrix: Water

Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		05/10/18 12:17	05/14/18 19:18	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.34	ng/L		05/10/18 12:17	05/14/18 19:18	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.0	ng/L		05/10/18 12:17	05/14/18 19:18	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 19:18	1
6:2FTS	**7.4**	**J B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 19:18	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 19:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*81*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C5 PFPeA	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C2 PFHxA	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C4-PFHpA	*99*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C4 PFOA	*102*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C5 PFNA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C2 PFDA	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C2 PFUnA	*86*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C2 PFDoA	*92*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C2-PFTeDA	*103*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C3-PFBS	*85*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
18O2 PFHxS	*90*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C4 PFOS	*85*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
13C8 FOSA	*72*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
d3-NMeFOSAA	*99*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
d5-NEtFOSAA	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
M2-6:2FTS	*112*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*
M2-8:2FTS	*95*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:18*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**14**	**H**	2.0	0.84	ng/L		05/12/18 07:12	05/13/18 18:14	1
6:2FTS	**3.2**	**J H B**	20	2.0	ng/L		05/12/18 07:12	05/13/18 18:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*98*		*25 - 150*	*05/12/18 07:12*	*05/13/18 18:14*	*1*
M2-6:2FTS	*103*		*25 - 150*	*05/12/18 07:12*	*05/13/18 18:14*	*1*

Client Sample ID: GC-MW-106 (WG)

Lab Sample ID: 320-38630-6

Date Collected: 04/26/18 11:55

Matrix: Water

Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**9.6**		2.0	0.34	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluoropentanoic acid (PFPeA)	**15**		2.0	0.48	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorohexanoic acid (PFHxA)	**13**		2.0	0.57	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluoroheptanoic acid (PFHpA)	**8.8**		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorooctanoic acid (PFOA)	**28**	**B**	2.0	0.83	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorononanoic acid (PFNA)	**2.0**		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorodecanoic acid (PFDA)	**1.4**	**J**	2.0	0.30	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 19:34	1

Client Sample ID: GC-MW-106 (WG)

Date Collected: 04/26/18 11:55
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-6

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorobutanesulfonic acid (PFBS)	**6.0**		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorohexanesulfonic acid (PFHxS)	**2.5**	**B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.34**	**J**	2.0	0.19	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorooctanesulfonic acid (PFOS)	**12**	**B**	2.0	0.53	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		05/10/18 12:17	05/14/18 19:34	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.34	ng/L		05/10/18 12:17	05/14/18 19:34	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.0	ng/L		05/10/18 12:17	05/14/18 19:34	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 19:34	1
6:2FTS	**8.3**	**J B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 19:34	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 19:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*74*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C5 PFPeA	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C2 PFHxA	*94*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C4-PFHpA	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C4 PFOA	*99*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C5 PFNA	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C2 PFDA	*94*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C2 PFUnA	*87*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C2 PFDoA	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C2-PFTeDA	*111*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C3-PFBS	*89*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
18O2 PFHxS	*92*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C4 PFOS	*87*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
13C8 FOSA	*79*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
d3-NMeFOSAA	*95*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
d5-NEtFOSAA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
M2-6:2FTS	*114*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*
M2-8:2FTS	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:34*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**25**	**H**	2.0	0.85	ng/L		05/12/18 07:12	05/13/18 18:22	1
6:2FTS	**2.9**	**J H B**	20	2.0	ng/L		05/12/18 07:12	05/13/18 18:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*99*		*25 - 150*	*05/12/18 07:12*	*05/13/18 18:22*	*1*
M2-6:2FTS	*113*		*25 - 150*	*05/12/18 07:12*	*05/13/18 18:22*	*1*

Client Sample ID: GC-MW-3 (WG)

Date Collected: 04/26/18 12:45
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-7

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**11**		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluoropentanoic acid (PFPeA)	**22**		2.0	0.49	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorohexanoic acid (PFHxA)	**19**		2.0	0.59	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluoroheptanoic acid (PFHpA)	**14**		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorooctanoic acid (PFOA)	**26**	**B**	2.0	0.86	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorononanoic acid (PFNA)	**3.8**		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorodecanoic acid (PFDA)	**2.8**		2.0	0.31	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorobutanesulfonic acid (PFBS)	**5.3**		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorohexanesulfonic acid (PFHxS)	**1.4**	**J B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorooctanesulfonic acid (PFOS)	**9.8**	**B**	2.0	0.55	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/10/18 12:17	05/14/18 19:41	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 19:41	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/10/18 12:17	05/14/18 19:41	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 19:41	1
6:2FTS	**7.6**	**J B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 19:41	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 19:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*73*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C5 PFPeA	*92*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C2 PFHxA	*91*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C4-PFHpA	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C4 PFOA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C5 PFNA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C2 PFDA	*91*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C2 PFUnA	*87*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C2 PFDoA	*94*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C2-PFTeDA	*113*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C3-PFBS	*88*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
18O2 PFHxS	*90*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C4 PFOS	*88*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
13C8 FOSA	*75*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
d3-NMeFOSAA	*107*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
d5-NEtFOSAA	*103*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
M2-6:2FTS	*118*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*
M2-8:2FTS	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:41*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**24**	**H**	2.1	0.89	ng/L		05/12/18 07:12	05/13/18 18:30	1
6:2FTS	**4.3**	**J H B**	21	2.1	ng/L		05/12/18 07:12	05/13/18 18:30	1

Client Sample ID: GC-MW-3 (WG)

Lab Sample ID: 320-38630-7

Date Collected: 04/26/18 12:45
Matrix: Water
Date Received: 04/28/18 09:15

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	99		25 - 150	05/12/18 07:12	05/13/18 18:30	1
M2-6:2FTS	107		25 - 150	05/12/18 07:12	05/13/18 18:30	1

Client Sample ID: GC-MW-110 (WG)

Lab Sample ID: 320-38630-8

Date Collected: 04/26/18 13:35
Matrix: Water
Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**8.7**		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluoropentanoic acid (PFPeA)	**19**		2.0	0.49	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorohexanoic acid (PFHxA)	**18**		2.0	0.58	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluoroheptanoic acid (PFHpA)	**8.0**		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorooctanoic acid (PFOA)	**29**	**B**	2.0	0.84	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorononanoic acid (PFNA)	**3.0**		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorodecanoic acid (PFDA)	**2.4**		2.0	0.31	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorotetradecanoic acid (PFTeA)	**0.46**	**J**	2.0	0.29	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorobutanesulfonic acid (PFBS)	**7.4**		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorohexanesulfonic acid (PFHxS)	**1.4**	**J B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.33**	**J**	2.0	0.19	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorooctanesulfonic acid (PFOS)	**9.4**	**B**	2.0	0.54	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/10/18 12:17	05/14/18 19:49	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 19:49	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/10/18 12:17	05/14/18 19:49	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 19:49	1
6:2FTS	**6.8**	**J B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 19:49	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 19:49	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	77		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C5 PFPeA	89		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C2 PFHxA	93		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C4-PFHpA	95		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C4 PFOA	101		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C5 PFNA	94		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C2 PFDA	89		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C2 PFUnA	90		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C2 PFDoA	88		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C2-PFTeDA	106		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C3-PFBS	84		25 - 150	05/10/18 12:17	05/14/18 19:49	1
18O2 PFHxS	87		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C4 PFOS	86		25 - 150	05/10/18 12:17	05/14/18 19:49	1
13C8 FOSA	70		25 - 150	05/10/18 12:17	05/14/18 19:49	1

Client Sample ID: GC-MW-110 (WG)

Lab Sample ID: 320-38630-8

Date Collected: 04/26/18 13:35

Matrix: Water

Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d3-NMeFOSAA	*103*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:49*	*1*
d5-NEtFOSAA	*105*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:49*	*1*
M2-6:2FTS	*115*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:49*	*1*
M2-8:2FTS	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:49*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**29**	**H**	1.9	0.82	ng/L		05/12/18 07:12	05/13/18 18:46	1
6:2FTS	**4.4**	**J H B**	19	1.9	ng/L		05/12/18 07:12	05/13/18 18:46	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	*99*		*25 - 150*	*05/12/18 07:12*	*05/13/18 18:46*	*1*
M2-6:2FTS	*101*		*25 - 150*	*05/12/18 07:12*	*05/13/18 18:46*	*1*

Client Sample ID: GC-MW-110D (WG)

Lab Sample ID: 320-38630-9

Date Collected: 04/26/18 14:30

Matrix: Water

Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**5.3**		2.1	0.37	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluoropentanoic acid (PFPeA)	**6.1**		2.1	0.52	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorohexanoic acid (PFHxA)	**6.8**		2.1	0.62	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluoroheptanoic acid (PFHpA)	**5.8**		2.1	0.27	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorooctanoic acid (PFOA)	**24**	**B**	2.1	0.91	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorononanoic acid (PFNA)	**1.2**	**J**	2.1	0.29	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorodecanoic acid (PFDA)	**0.39**	**J**	2.1	0.33	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluoroundecanoic acid (PFUnA)	ND		2.1	1.2	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorododecanoic acid (PFDoA)	ND		2.1	0.59	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.4	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.31	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorobutanesulfonic acid (PFBS)	**3.8**		2.1	0.21	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorohexanesulfonic acid (PFHxS)	**4.3**	**B**	2.1	0.18	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.47**	**J**	2.1	0.20	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorooctanesulfonic acid (PFOS)	**10**	**B**	2.1	0.58	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.34	ng/L		05/10/18 12:17	05/14/18 19:57	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.1	0.37	ng/L		05/10/18 12:17	05/14/18 19:57	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		21	3.3	ng/L		05/10/18 12:17	05/14/18 19:57	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		21	2.0	ng/L		05/10/18 12:17	05/14/18 19:57	1
6:2FTS	**8.6**	**J B ***	21	2.1	ng/L		05/10/18 12:17	05/14/18 19:57	1
8:2FTS	ND		21	2.1	ng/L		05/10/18 12:17	05/14/18 19:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	*75*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C5 PFPeA	*92*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C2 PFHxA	*94*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C4-PFHpA	*100*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*

Client Sample ID: GC-MW-110D (WG)

Date Collected: 04/26/18 14:30
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-9

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*103*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C5 PFNA	*102*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C2 PFDA	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C2 PFUnA	*86*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C2 PFDoA	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C2-PFTeDA	*114*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C3-PFBS	*88*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
18O2 PFHxS	*91*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C4 PFOS	*87*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
13C8 FOSA	*72*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
d3-NMeFOSAA	*102*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
d5-NEtFOSAA	*100*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
M2-6:2FTS	*114*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*
M2-8:2FTS	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 19:57*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**21**	**H**	1.9	0.83	ng/L		05/12/18 07:12	05/13/18 18:53	1
6:2FTS	**3.1**	**J H B**	19	1.9	ng/L		05/12/18 07:12	05/13/18 18:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*99*		*25 - 150*	*05/12/18 07:12*	*05/13/18 18:53*	*1*
M2-6:2FTS	*102*		*25 - 150*	*05/12/18 07:12*	*05/13/18 18:53*	*1*

Client Sample ID: GC-MW-2 (WG)

Date Collected: 04/26/18 15:00
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-10

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**9.9**		2.0	0.36	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluoropentanoic acid (PFPeA)	**19**		2.0	0.50	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorohexanoic acid (PFHxA)	**20**		2.0	0.59	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluoroheptanoic acid (PFHpA)	**13**		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorooctanoic acid (PFOA)	**29**	**B**	2.0	0.87	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorononanoic acid (PFNA)	**2.8**		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorodecanoic acid (PFDA)	**0.47**	**J**	2.0	0.32	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.30	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorobutanesulfonic acid (PFBS)	**7.8**		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorohexanesulfonic acid (PFHxS)	**3.3**	**B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.68**	**J**	2.0	0.19	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorooctanesulfonic acid (PFOS)	**15**	**B**	2.0	0.55	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.33	ng/L		05/10/18 12:17	05/14/18 20:05	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36	ng/L		05/10/18 12:17	05/14/18 20:05	1

Client Sample ID: GC-MW-2 (WG)

Lab Sample ID: 320-38630-10

Date Collected: 04/26/18 15:00
Matrix: Water
Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.2	ng/L		05/10/18 12:17	05/14/18 20:05	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 20:05	1
6:2FTS	**19**	**J B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 20:05	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 20:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*77*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C5 PFPeA	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C2 PFHxA	*98*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C4-PFHpA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C4 PFOA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C5 PFNA	*98*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C2 PFDA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C2 PFUnA	*87*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C2 PFDoA	*91*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C2-PFTeDA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C3-PFBS	*90*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
18O2 PFHxS	*91*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C4 PFOS	*90*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
13C8 FOSA	*78*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
d3-NMeFOSAA	*108*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
d5-NEtFOSAA	*101*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
M2-6:2FTS	*117*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*
M2-8:2FTS	*109*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:05*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**27**	**H**	1.9	0.83	ng/L		05/12/18 07:12	05/13/18 19:01	1
6:2FTS	**3.1**	**J H B**	19	1.9	ng/L		05/12/18 07:12	05/13/18 19:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*101*		*25 - 150*	*05/12/18 07:12*	*05/13/18 19:01*	*1*
M2-6:2FTS	*106*		*25 - 150*	*05/12/18 07:12*	*05/13/18 19:01*	*1*

Client Sample ID: GC-Equipment Blank-2

Lab Sample ID: 320-38630-11

Date Collected: 04/26/18 09:30
Matrix: Water
Date Received: 04/28/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorooctanoic acid (PFOA)	**3.6**	**B**	2.0	0.86	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 20:13	1

Client Sample ID: GC-Equipment Blank-2

Date Collected: 04/26/18 09:30
Date Received: 04/28/18 09:15

Lab Sample ID: 320-38630-11
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorohexanesulfonic acid (PFHxS)	**0.25**	**J B**	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/10/18 12:17	05/14/18 20:13	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 20:13	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/10/18 12:17	05/14/18 20:13	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 20:13	1
6:2FTS	**36**	**B ***	20	2.0	ng/L		05/10/18 12:17	05/14/18 20:13	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 20:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C5 PFPeA	*101*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C2 PFHxA	*105*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C4-PFHpA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C4 PFOA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C5 PFNA	*110*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C2 PFDA	*101*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C2 PFUnA	*98*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C2 PFDoA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C2-PFTeDA	*116*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C3-PFBS	*91*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
18O2 PFHxS	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C4 PFOS	*93*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
13C8 FOSA	*76*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
d3-NMeFOSAA	*113*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
d5-NEtFOSAA	*113*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
M2-6:2FTS	*114*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*
M2-8:2FTS	*101*		*25 - 150*	*05/10/18 12:17*	*05/14/18 20:13*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND	H	2.0	0.85	ng/L		05/12/18 07:12	05/13/18 19:09	1
6:2FTS	**2.7**	**J H B**	20	2.0	ng/L		05/12/18 07:12	05/13/18 19:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*97*		*25 - 150*	*05/12/18 07:12*	*05/13/18 19:09*	*1*
M2-6:2FTS	*105*		*25 - 150*	*05/12/18 07:12*	*05/13/18 19:09*	*1*

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38630-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-38630-1 - RE	GC-MW-102 (WG)					98			
320-38630-1	GC-MW-102 (WG)	64	87	94	101	103	102	97	97
320-38630-2 - RE	GC-MW-109 (WG)					101			
320-38630-2	GC-MW-109 (WG)	78	100	102	104	104	103	102	99
320-38630-3 - RE	GC-MW-109M (WG)					100			
320-38630-3	GC-MW-109M (WG)	79	97	96	102	104	104	98	95
320-38630-4 - RE	GC-MW-101 (WG)					101			
320-38630-4	GC-MW-101 (WG)	87	99	100	99	104	106	98	91
320-38630-5 - RE	GC-MW-101D (WG)					98			
320-38630-5	GC-MW-101D (WG)	81	96	96	99	102	97	93	86
320-38630-6 - RE	GC-MW-106 (WG)					99			
320-38630-6	GC-MW-106 (WG)	74	93	94	96	99	96	94	87
320-38630-7 - RE	GC-MW-3 (WG)					99			
320-38630-7	GC-MW-3 (WG)	73	92	91	93	104	97	91	87
320-38630-8 - RE	GC-MW-110 (WG)					99			
320-38630-8	GC-MW-110 (WG)	77	89	93	95	101	94	89	90
320-38630-9 - RE	GC-MW-110D (WG)					99			
320-38630-9	GC-MW-110D (WG)	75	92	94	100	103	102	93	86
320-38630-10 - RE	GC-MW-2 (WG)					101			
320-38630-10	GC-MW-2 (WG)	77	93	98	97	104	98	97	87
320-38630-11 - RE	GC-Equipment Blank-2					97			
320-38630-11	GC-Equipment Blank-2	97	101	105	104	104	110	101	98
LCS 320-222510/2-A	Lab Control Sample	98	102	99	104	101	101	106	101
LCS 320-222819/2-A	Lab Control Sample					101			
LCSD 320-222510/3-A	Lab Control Sample Dup	98	102	100	102	98	103	106	103
LCSD 320-222819/3-A	Lab Control Sample Dup					101			
MB 320-222510/1-A	Method Blank	102	102	97	101	104	107	103	102
MB 320-222819/1-A	Method Blank					86			

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOSA (25-150)	-NEtFOSA (25-150)
320-38630-1 - RE	GC-MW-102 (WG)								
320-38630-1	GC-MW-102 (WG)	85	101	89	96	90	84	83	87
320-38630-2 - RE	GC-MW-109 (WG)								
320-38630-2	GC-MW-109 (WG)	96	103	97	99	95	93	94	103
320-38630-3 - RE	GC-MW-109M (WG)								
320-38630-3	GC-MW-109M (WG)	95	104	95	97	93	89	85	90
320-38630-4 - RE	GC-MW-101 (WG)								
320-38630-4	GC-MW-101 (WG)	95	111	91	94	93	79	102	102
320-38630-5 - RE	GC-MW-101D (WG)								
320-38630-5	GC-MW-101D (WG)	92	103	85	90	85	72	99	93
320-38630-6 - RE	GC-MW-106 (WG)								
320-38630-6	GC-MW-106 (WG)	93	111	89	92	87	79	95	104
320-38630-7 - RE	GC-MW-3 (WG)								
320-38630-7	GC-MW-3 (WG)	94	113	88	90	88	75	107	103
320-38630-8 - RE	GC-MW-110 (WG)								
320-38630-8	GC-MW-110 (WG)	88	106	84	87	86	70	103	105
320-38630-9 - RE	GC-MW-110D (WG)								
320-38630-9	GC-MW-110D (WG)	93	114	88	91	87	72	102	100

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOSA (25-150)	-NEtFOSA (25-150)
320-38630-10 - RE	GC-MW-2 (WG)								
320-38630-10	GC-MW-2 (WG)	91	104	90	91	90	78	108	101
320-38630-11 - RE	GC-Equipment Blank-2								
320-38630-11	GC-Equipment Blank-2	97	116	91	93	93	76	113	113
LCS 320-222510/2-A	Lab Control Sample	103	101	95	97	98	90	94	104
LCS 320-222819/2-A	Lab Control Sample								
LCSD 320-222510/3-A	Lab Control Sample Dup	105	107	95	97	100	90	93	98
LCSD 320-222819/3-A	Lab Control Sample Dup								
MB 320-222510/1-A	Method Blank	97	106	95	96	96	90	92	95
MB 320-222819/1-A	Method Blank								

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)						
320-38630-1 - RE	GC-MW-102 (WG)	141							
320-38630-1	GC-MW-102 (WG)	138	113						
320-38630-2 - RE	GC-MW-109 (WG)	110							
320-38630-2	GC-MW-109 (WG)	115	105						
320-38630-3 - RE	GC-MW-109M (WG)	110							
320-38630-3	GC-MW-109M (WG)	118	103						
320-38630-4 - RE	GC-MW-101 (WG)	112							
320-38630-4	GC-MW-101 (WG)	118	98						
320-38630-5 - RE	GC-MW-101D (WG)	103							
320-38630-5	GC-MW-101D (WG)	112	95						
320-38630-6 - RE	GC-MW-106 (WG)	113							
320-38630-6	GC-MW-106 (WG)	114	96						
320-38630-7 - RE	GC-MW-3 (WG)	107							
320-38630-7	GC-MW-3 (WG)	118	93						
320-38630-8 - RE	GC-MW-110 (WG)	101							
320-38630-8	GC-MW-110 (WG)	115	96						
320-38630-9 - RE	GC-MW-110D (WG)	102							
320-38630-9	GC-MW-110D (WG)	114	97						
320-38630-10 - RE	GC-MW-2 (WG)	106							
320-38630-10	GC-MW-2 (WG)	117	109						
320-38630-11 - RE	GC-Equipment Blank-2	105							
320-38630-11	GC-Equipment Blank-2	114	101						
LCS 320-222510/2-A	Lab Control Sample	102	110						
LCS 320-222819/2-A	Lab Control Sample	110							
LCSD 320-222510/3-A	Lab Control Sample Dup	105	108						
LCSD 320-222819/3-A	Lab Control Sample Dup	102							
MB 320-222510/1-A	Method Blank	100	110						
MB 320-222819/1-A	Method Blank	94							

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
PFHpA = 13C4-PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38630-1

PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2-PFTeDA
13C3-PFBS = 13C3-PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3-NMeFOSAA = d3-NMeFOSAA
d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2FTS
M282FTS = M2-8:2FTS

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-222510/1-A
Matrix: Water
Analysis Batch: 223178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 222510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorooctanoic acid (PFOA)	2.96		2.0	0.85	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorohexanesulfonic acid (PFHxS)	0.315	J	2.0	0.17	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorooctanesulfonic acid (PFOS)	1.27	J	2.0	0.54	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/10/18 12:17	05/14/18 17:05	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		05/10/18 12:17	05/14/18 17:05	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/10/18 12:17	05/14/18 17:05	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/10/18 12:17	05/14/18 17:05	1
6:2FTS	194		20	2.0	ng/L		05/10/18 12:17	05/14/18 17:05	1
8:2FTS	ND		20	2.0	ng/L		05/10/18 12:17	05/14/18 17:05	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C5 PFPeA	*102*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C2 PFHxA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C4-PFHpA	*101*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C4 PFOA	*104*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C5 PFNA	*107*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C2 PFDA	*103*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C2 PFUnA	*102*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C2 PFDoA	*97*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C2-PFTeDA	*106*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C3-PFBS	*95*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
18O2 PFHxS	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C4 PFOS	*96*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
13C8 FOSA	*90*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
d3-NMeFOSAA	*92*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
d5-NEtFOSAA	*95*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
M2-6:2FTS	*100*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*
M2-8:2FTS	*110*		*25 - 150*	*05/10/18 12:17*	*05/14/18 17:05*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-222510/2-A
Matrix: Water
Analysis Batch: 223178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 222510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	42.2		ng/L		106	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	38.5		ng/L		96	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	39.8		ng/L		99	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	38.6		ng/L		97	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	41.9		ng/L		105	64 - 124
Perfluorononanoic acid (PFNA)	40.0	41.1		ng/L		103	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	39.4		ng/L		98	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	36.7		ng/L		92	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	39.8		ng/L		99	71 - 131
Perfluorotridecanoic Acid (PFTriA)	40.0	39.4		ng/L		98	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	39.3		ng/L		98	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	37.5		ng/L		106	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.5		ng/L		92	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.9		ng/L		99	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	36.9		ng/L		99	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	37.2		ng/L		97	68 - 128
Perfluorooctane Sulfonamide (FOSA)	40.0	41.9		ng/L		105	70 - 130
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	42.8		ng/L		107	67 - 127
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.5		ng/L		101	65 - 125
6:2FTS	37.9	113	*	ng/L		299	66 - 126
8:2FTS	38.3	40.8		ng/L		106	67 - 127

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*98*		*25 - 150*
13C5 PFPeA	*102*		*25 - 150*
13C2 PFHxA	*99*		*25 - 150*
13C4-PFHpA	*104*		*25 - 150*
13C4 PFOA	*101*		*25 - 150*
13C5 PFNA	*101*		*25 - 150*
13C2 PFDA	*106*		*25 - 150*
13C2 PFUnA	*101*		*25 - 150*
13C2 PFDoA	*103*		*25 - 150*
13C2-PFTeDA	*101*		*25 - 150*
13C3-PFBS	*95*		*25 - 150*
18O2 PFHxS	*97*		*25 - 150*
13C4 PFOS	*98*		*25 - 150*
13C8 FOSA	*90*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-222510/2-A
Matrix: Water
Analysis Batch: 223178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 222510

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
d3-NMeFOSAA	*94*		*25 - 150*
d5-NEtFOSAA	*104*		*25 - 150*
M2-6:2FTS	*102*		*25 - 150*
M2-8:2FTS	*110*		*25 - 150*

Lab Sample ID: LCSD 320-222510/3-A
Matrix: Water
Analysis Batch: 223178

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 222510

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	41.9		ng/L		105	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)			40.0	37.2		ng/L		93	66 - 126	3	30
Perfluorohexanoic acid (PFHxA)			40.0	40.9		ng/L		102	66 - 126	3	30
Perfluoroheptanoic acid (PFHpA)			40.0	41.3		ng/L		103	66 - 126	7	30
Perfluorooctanoic acid (PFOA)			40.0	43.8		ng/L		110	64 - 124	4	30
Perfluorononanoic acid (PFNA)			40.0	39.4		ng/L		98	68 - 128	4	30
Perfluorodecanoic acid (PFDA)			40.0	38.7		ng/L		97	69 - 129	2	30
Perfluoroundecanoic acid (PFUnA)			40.0	36.9		ng/L		92	60 - 120	1	30
Perfluorododecanoic acid (PFDoA)			40.0	38.7		ng/L		97	71 - 131	3	30
Perfluorotridecanoic Acid (PFTriA)			40.0	37.2		ng/L		93	72 - 132	6	30
Perfluorotetradecanoic acid (PFTeA)			40.0	38.1		ng/L		95	68 - 128	3	30
Perfluorobutanesulfonic acid (PFBS)			35.4	36.3		ng/L		103	73 - 133	3	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	35.1		ng/L		96	63 - 123	5	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	37.8		ng/L		99	68 - 128	0	30
Perfluorooctanesulfonic acid (PFOS)			37.1	36.0		ng/L		97	67 - 127	2	30
Perfluorodecanesulfonic acid (PFDS)			38.6	36.1		ng/L		94	68 - 128	3	30
Perfluorooctane Sulfonamide (FOSA)			40.0	40.2		ng/L		101	70 - 130	4	30
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)			40.0	42.5		ng/L		106	67 - 127	1	30
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)			40.0	40.0		ng/L		100	65 - 125	1	30
6:2FTS			37.9	76.1	*	ng/L		201	66 - 126	39	30
8:2FTS			38.3	38.9		ng/L		101	67 - 127	5	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	*98*		*25 - 150*
13C5 PFPeA	*102*		*25 - 150*
13C2 PFHxA	*100*		*25 - 150*
13C4-PFHpA	*102*		*25 - 150*
13C4 PFOA	*98*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-222510/3-A
Matrix: Water
Analysis Batch: 223178

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 222510

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C5 PFNA	*103*		*25 - 150*
13C2 PFDA	*106*		*25 - 150*
13C2 PFUnA	*103*		*25 - 150*
13C2 PFDoA	*105*		*25 - 150*
13C2-PFTeDA	*107*		*25 - 150*
13C3-PFBS	*95*		*25 - 150*
18O2 PFHxS	*97*		*25 - 150*
13C4 PFOS	*100*		*25 - 150*
13C8 FOSA	*90*		*25 - 150*
d3-NMeFOSAA	*93*		*25 - 150*
d5-NEtFOSAA	*98*		*25 - 150*
M2-6:2FTS	*105*		*25 - 150*
M2-8:2FTS	*108*		*25 - 150*

Lab Sample ID: MB 320-222819/1-A
Matrix: Water
Analysis Batch: 222981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 222819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		05/12/18 07:12	05/13/18 17:20	1
6:2FTS	4.57	J	20	2.0	ng/L		05/12/18 07:12	05/13/18 17:20	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*86*		*25 - 150*	*05/12/18 07:12*	*05/13/18 17:20*	*1*
M2-6:2FTS	*94*		*25 - 150*	*05/12/18 07:12*	*05/13/18 17:20*	*1*

Lab Sample ID: LCS 320-222819/2-A
Matrix: Water
Analysis Batch: 222981

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 222819

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorooctanoic acid (PFOA)			40.0	40.8		ng/L		102	64 - 124		
6:2FTS			37.9	41.7		ng/L		110	66 - 126		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFOA	*101*		*25 - 150*
M2-6:2FTS	*110*		*25 - 150*

Lab Sample ID: LCSD 320-222819/3-A
Matrix: Water
Analysis Batch: 222981

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 222819

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA)			40.0	40.8		ng/L		102	64 - 124	0	30
6:2FTS			37.9	44.1		ng/L		116	66 - 126	6	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFOA	*101*		*25 - 150*
M2-6:2FTS	*102*		*25 - 150*

Qualifiers

LCMS

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
I	Value is EMPC (estimated maximum possible concentration).

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

LCMS

Prep Batch: 222510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38630-1	GC-MW-102 (WG)	Total/NA	Water	3535	
320-38630-2	GC-MW-109 (WG)	Total/NA	Water	3535	
320-38630-3	GC-MW-109M (WG)	Total/NA	Water	3535	
320-38630-4	GC-MW-101 (WG)	Total/NA	Water	3535	
320-38630-5	GC-MW-101D (WG)	Total/NA	Water	3535	
320-38630-6	GC-MW-106 (WG)	Total/NA	Water	3535	
320-38630-7	GC-MW-3 (WG)	Total/NA	Water	3535	
320-38630-8	GC-MW-110 (WG)	Total/NA	Water	3535	
320-38630-9	GC-MW-110D (WG)	Total/NA	Water	3535	
320-38630-10	GC-MW-2 (WG)	Total/NA	Water	3535	
320-38630-11	GC-Equipment Blank-2	Total/NA	Water	3535	
MB 320-222510/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-222510/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-222510/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 222819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38630-1 - RE	GC-MW-102 (WG)	Total/NA	Water	3535	
320-38630-2 - RE	GC-MW-109 (WG)	Total/NA	Water	3535	
320-38630-3 - RE	GC-MW-109M (WG)	Total/NA	Water	3535	
320-38630-4 - RE	GC-MW-101 (WG)	Total/NA	Water	3535	
320-38630-5 - RE	GC-MW-101D (WG)	Total/NA	Water	3535	
320-38630-6 - RE	GC-MW-106 (WG)	Total/NA	Water	3535	
320-38630-7 - RE	GC-MW-3 (WG)	Total/NA	Water	3535	
320-38630-8 - RE	GC-MW-110 (WG)	Total/NA	Water	3535	
320-38630-9 - RE	GC-MW-110D (WG)	Total/NA	Water	3535	
320-38630-10 - RE	GC-MW-2 (WG)	Total/NA	Water	3535	
320-38630-11 - RE	GC-Equipment Blank-2	Total/NA	Water	3535	
MB 320-222819/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-222819/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-222819/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 222981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38630-1 - RE	GC-MW-102 (WG)	Total/NA	Water	537 (modified)	222819
320-38630-2 - RE	GC-MW-109 (WG)	Total/NA	Water	537 (modified)	222819
320-38630-3 - RE	GC-MW-109M (WG)	Total/NA	Water	537 (modified)	222819
320-38630-4 - RE	GC-MW-101 (WG)	Total/NA	Water	537 (modified)	222819
320-38630-5 - RE	GC-MW-101D (WG)	Total/NA	Water	537 (modified)	222819
320-38630-6 - RE	GC-MW-106 (WG)	Total/NA	Water	537 (modified)	222819
320-38630-7 - RE	GC-MW-3 (WG)	Total/NA	Water	537 (modified)	222819
320-38630-8 - RE	GC-MW-110 (WG)	Total/NA	Water	537 (modified)	222819
320-38630-9 - RE	GC-MW-110D (WG)	Total/NA	Water	537 (modified)	222819
320-38630-10 - RE	GC-MW-2 (WG)	Total/NA	Water	537 (modified)	222819
320-38630-11 - RE	GC-Equipment Blank-2	Total/NA	Water	537 (modified)	222819
MB 320-222819/1-A	Method Blank	Total/NA	Water	537 (modified)	222819
LCS 320-222819/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	222819
LCSD 320-222819/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	222819

LCMS (Continued)

Analysis Batch: 223178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38630-1	GC-MW-102 (WG)	Total/NA	Water	537 (modified)	222510
320-38630-2	GC-MW-109 (WG)	Total/NA	Water	537 (modified)	222510
320-38630-3	GC-MW-109M (WG)	Total/NA	Water	537 (modified)	222510
320-38630-4	GC-MW-101 (WG)	Total/NA	Water	537 (modified)	222510
320-38630-5	GC-MW-101D (WG)	Total/NA	Water	537 (modified)	222510
320-38630-6	GC-MW-106 (WG)	Total/NA	Water	537 (modified)	222510
320-38630-7	GC-MW-3 (WG)	Total/NA	Water	537 (modified)	222510
320-38630-8	GC-MW-110 (WG)	Total/NA	Water	537 (modified)	222510
320-38630-9	GC-MW-110D (WG)	Total/NA	Water	537 (modified)	222510
320-38630-10	GC-MW-2 (WG)	Total/NA	Water	537 (modified)	222510
320-38630-11	GC-Equipment Blank-2	Total/NA	Water	537 (modified)	222510
MB 320-222510/1-A	Method Blank	Total/NA	Water	537 (modified)	222510
LCS 320-222510/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	222510
LCSD 320-222510/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	222510

Client Sample ID: GC-MW-102 (WG)

Lab Sample ID: 320-38630-1

Date Collected: 04/26/18 08:25
Matrix: Water
Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 17:43	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 18:47	CBW	TAL SAC

Client Sample ID: GC-MW-109 (WG)

Lab Sample ID: 320-38630-2

Date Collected: 04/26/18 09:57
Matrix: Water
Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 17:51	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 18:54	CBW	TAL SAC

Client Sample ID: GC-MW-109M (WG)

Lab Sample ID: 320-38630-3

Date Collected: 04/26/18 09:00
Matrix: Water
Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 17:59	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 19:02	CBW	TAL SAC

Client Sample ID: GC-MW-101 (WG)

Lab Sample ID: 320-38630-4

Date Collected: 04/26/18 11:15
Matrix: Water
Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 18:07	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 19:10	CBW	TAL SAC

Client Sample ID: GC-MW-101D (WG)

Lab Sample ID: 320-38630-5

Date Collected: 04/26/18 11:15
Matrix: Water
Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 18:14	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC

Client Sample ID: GC-MW-101D (WG)

Lab Sample ID: 320-38630-5

Date Collected: 04/26/18 11:15

Matrix: Water

Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 19:18	CBW	TAL SAC

Client Sample ID: GC-MW-106 (WG)

Lab Sample ID: 320-38630-6

Date Collected: 04/26/18 11:55

Matrix: Water

Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 18:22	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 19:34	CBW	TAL SAC

Client Sample ID: GC-MW-3 (WG)

Lab Sample ID: 320-38630-7

Date Collected: 04/26/18 12:45

Matrix: Water

Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 18:30	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 19:41	CBW	TAL SAC

Client Sample ID: GC-MW-110 (WG)

Lab Sample ID: 320-38630-8

Date Collected: 04/26/18 13:35

Matrix: Water

Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 18:46	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 19:49	CBW	TAL SAC

Client Sample ID: GC-MW-110D (WG)

Lab Sample ID: 320-38630-9

Date Collected: 04/26/18 14:30

Matrix: Water

Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 18:53	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 19:57	CBW	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38630-1

Client Sample ID: GC-MW-2 (WG)

Lab Sample ID: 320-38630-10

Date Collected: 04/26/18 15:00

Matrix: Water

Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 19:01	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 20:05	CBW	TAL SAC

Client Sample ID: GC-Equipment Blank-2

Lab Sample ID: 320-38630-11

Date Collected: 04/26/18 09:30

Matrix: Water

Date Received: 04/28/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		222819	05/12/18 07:12	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	222981	05/13/18 19:09	RBH	TAL SAC
Total/NA	Prep	3535			222510	05/10/18 12:17	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	223178	05/14/18 20:13	CBW	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38630-1

Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-18
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-18
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	10-31-18
L-A-B	DoD ELAP		L2468	01-20-21
Louisiana	NELAP	6	30612	06-30-18
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-18
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-18
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-18
USDA	Federal		P330-11-00436	01-17-21
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	PFOA #
GC-MW-102 (WG) RE	320-38630-1 RE	141	98
GC-MW-109 (WG) RE	320-38630-2 RE	110	101
GC-MW-109M (WG) RE	320-38630-3 RE	110	100
GC-MW-101 (WG) RE	320-38630-4 RE	112	101
GC-MW-101D (WG) RE	320-38630-5 RE	103	98
GC-MW-106 (WG) RE	320-38630-6 RE	113	99
GC-MW-3 (WG) RE	320-38630-7 RE	107	99
GC-MW-110 (WG) RE	320-38630-8 RE	101	99
GC-MW-110D (WG) RE	320-38630-9 RE	102	99
GC-MW-2 (WG) RE	320-38630-10 RE	106	101
GC-Equipment Blank-2 RE	320-38630-11 RE	105	97
	MB 320-222819/1-A	94	86
	LCS 320-222819/2-A	110	101
	LCSD 320-222819/3-A	102	101

	QC LIMITS
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
GC-MW-102 (WG)	320-38630-1	64	87	89	94	101	96	138	103
GC-MW-109 (WG)	320-38630-2	78	100	97	102	104	99	115	104
GC-MW-109M (WG)	320-38630-3	79	97	95	96	102	97	118	104
GC-MW-101 (WG)	320-38630-4	87	99	91	100	99	94	118	104
GC-MW-101D (WG)	320-38630-5	81	96	85	96	99	90	112	102
GC-MW-106 (WG)	320-38630-6	74	93	89	94	96	92	114	99
GC-MW-3 (WG)	320-38630-7	73	92	88	91	93	90	118	104
GC-MW-110 (WG)	320-38630-8	77	89	84	93	95	87	115	101
GC-MW-110D (WG)	320-38630-9	75	92	88	94	100	91	114	103
GC-MW-2 (WG)	320-38630-10	77	93	90	98	97	91	117	104
GC-Equipment Blank-2	320-38630-11	97	101	91	105	104	93	114	104
	MB 320-222510/1-A	102	102	95	97	101	96	100	104
	LCS 320-222510/2-A	98	102	95	99	104	97	102	101
	LCSD 320-222510/3-A	98	102	95	100	102	97	105	98

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5 PFPeA	25-150
PFBS = 13C3-PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4-PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFNA #	PFOS #	PFOSA #	M282FTS #	PFDA #	d3NMFOS #	d5NEFOS #	PFUnA #
GC-MW-102 (WG)	320-38630-1	102	90	84	113	97	83	87	97
GC-MW-109 (WG)	320-38630-2	103	95	93	105	102	94	103	99
GC-MW-109M (WG)	320-38630-3	104	93	89	103	98	85	90	95
GC-MW-101 (WG)	320-38630-4	106	93	79	98	98	102	102	91
GC-MW-101D (WG)	320-38630-5	97	85	72	95	93	99	93	86
GC-MW-106 (WG)	320-38630-6	96	87	79	96	94	95	104	87
GC-MW-3 (WG)	320-38630-7	97	88	75	93	91	107	103	87
GC-MW-110 (WG)	320-38630-8	94	86	70	96	89	103	105	90
GC-MW-110D (WG)	320-38630-9	102	87	72	97	93	102	100	86
GC-MW-2 (WG)	320-38630-10	98	90	78	109	97	108	101	87
GC-Equipment Blank-2	320-38630-11	110	93	76	101	101	113	113	98
	MB 320-222510/1-A	107	96	90	110	103	92	95	102
	LCS 320-222510/2-A	101	98	90	110	106	94	104	101
	LCSD 320-222510/3-A	103	100	90	108	106	93	98	103

	QC LIMITS
PFNA = 13C5 PFNA	25-150
PFOS = 13C4 PFOS	25-150
PFOSA = 13C8 FOSA	25-150
M282FTS = M2-8:2FTS	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFDoA #	PFTDA #
GC-MW-102 (WG)	320-38630-1	85	101
GC-MW-109 (WG)	320-38630-2	96	103
GC-MW-109M (WG)	320-38630-3	95	104
GC-MW-101 (WG)	320-38630-4	95	111
GC-MW-101D (WG)	320-38630-5	92	103
GC-MW-106 (WG)	320-38630-6	93	111
GC-MW-3 (WG)	320-38630-7	94	113
GC-MW-110 (WG)	320-38630-8	88	106
GC-MW-110D (WG)	320-38630-9	93	114
GC-MW-2 (WG)	320-38630-10	91	104
GC-Equipment Blank-2	320-38630-11	97	116
	MB 320-222510/1-A	97	106
	LCS 320-222510/2-A	103	101
	LCSD 320-222510/3-A	105	107

	QC LIMITS
PFDoA = 13C2 PFDoA	25-150
PFTDA = 13C2-PFTeDA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.14LLAxxx_044.d

Lab ID: LCS 320-222510/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	42.2	106	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	38.5	96	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	39.8	99	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	38.6	97	66-126	
Perfluorooctanoic acid (PFOA)	40.0	41.9	105	64-124	
Perfluorononanoic acid (PFNA)	40.0	41.1	103	68-128	
Perfluorodecanoic acid (PFDA)	40.0	39.4	98	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	36.7	92	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	39.8	99	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	39.4	98	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	39.3	98	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	37.5	106	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.5	92	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.9	99	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.9	99	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	37.2	97	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	41.9	105	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	42.8	107	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.5	101	65-125	
6:2FTS	37.9	113	299	66-126	*
8:2FTS	38.3	40.8	106	67-127	
13C4 PFBA	100	97.9	98	25-150	
13C5 PFPeA	100	102	102	25-150	
13C2 PFHxA	100	99.2	99	25-150	
13C4-PFHpA	100	104	104	25-150	
13C4 PFOA	100	101	101	25-150	
13C5 PFNA	100	101	101	25-150	
13C2 PFDA	100	106	106	25-150	
13C2 PFUnA	100	101	101	25-150	
13C2 PFDoA	100	103	103	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.14LLAxxx_044.d

Lab ID: LCS 320-222510/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
13C2-PFTeDA	100	101	101	25-150	
13C3-PFBS	93.0	88.2	95	25-150	
18O2 PFHxS	94.6	92.1	97	25-150	
13C4 PFOS	95.6	93.2	98	25-150	
13C8 FOSA	100	89.7	90	25-150	
d3-NMeFOSAA	100	94.1	94	25-150	
d5-NEtFOSAA	100	104	104	25-150	
M2-6:2FTS	95.0	96.7	102	25-150	
M2-8:2FTS	95.8	106	110	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.13LLB_016.d

Lab ID: LCS 320-222819/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorooctanoic acid (PFOA)	40.0	40.8	102	64-124	
6:2FTS	37.9	41.7	110	66-126	
13C4 PFOA	100	101	101	25-150	
M2-6:2FTS	95.0	104	110	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.14LLAxxx_045.d

Lab ID: LCSD 320-222510/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	41.9	105	1	30	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	37.2	93	3	30	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	40.9	102	3	30	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	41.3	103	7	30	66-126	
Perfluorooctanoic acid (PFOA)	40.0	43.8	110	4	30	64-124	
Perfluorononanoic acid (PFNA)	40.0	39.4	98	4	30	68-128	
Perfluorodecanoic acid (PFDA)	40.0	38.7	97	2	30	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	36.9	92	1	30	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	38.7	97	3	30	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	37.2	93	6	30	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	38.1	95	3	30	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	36.3	103	3	30	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.1	96	5	30	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.8	99	0	30	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.0	97	2	30	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	36.1	94	3	30	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	40.2	101	4	30	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	42.5	106	1	30	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.0	100	1	30	65-125	
6:2FTS	37.9	76.1	201	39	30	66-126	*
8:2FTS	38.3	38.9	101	5	30	67-127	
13C4 PFBA	100	97.6	98			25-150	
13C5 PFPeA	100	102	102			25-150	
13C2 PFHxA	100	100	100			25-150	
13C4-PFHpA	100	102	102			25-150	
13C4 PFOA	100	98.3	98			25-150	
13C5 PFNA	100	103	103			25-150	
13C2 PFDA	100	106	106			25-150	
13C2 PFUnA	100	103	103			25-150	
13C2 PFDoA	100	105	105			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.14LLAxxx_045.d

Lab ID: LCSD 320-222510/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
13C2-PFTeDA	100	107	107			25-150	
13C3-PFBS	93.0	88.6	95			25-150	
18O2 PFHxS	94.6	91.3	97			25-150	
13C4 PFOS	95.6	95.2	100			25-150	
13C8 FOSA	100	90.2	90			25-150	
d3-NMeFOSAA	100	93.3	93			25-150	
d5-NEtFOSAA	100	97.6	98			25-150	
M2-6:2FTS	95.0	99.8	105			25-150	
M2-8:2FTS	95.8	103	108			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.13LLB_017.d

Lab ID: LCSD 320-222819/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorooctanoic acid (PFOA)	40.0	40.8	102	0	30	64-124	
6:2FTS	37.9	44.1	116	6	30	66-126	
13C4 PFOA	100	101	101			25-150	
M2-6:2FTS	95.0	96.9	102			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab File ID: 2018.05.14LLAxxx_043.d Lab Sample ID: MB 320-222510/1-A

Matrix: Water Date Extracted: 05/10/2018 12:17

Instrument ID: A8_N Date Analyzed: 05/14/2018 17:05

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-222510/2-A	2018.05.14L LAxxx_044.d	05/14/2018 17:13
	LCSD 320-222510/3-A	2018.05.14L LAxxx_045.d	05/14/2018 17:21
GC-MW-102 (WG)	320-38630-1	2018.05.14L LAxxx_056.d	05/14/2018 18:47
GC-MW-109 (WG)	320-38630-2	2018.05.14L LAxxx_057.d	05/14/2018 18:54
GC-MW-109M (WG)	320-38630-3	2018.05.14L LAxxx_058.d	05/14/2018 19:02
GC-MW-101 (WG)	320-38630-4	2018.05.14L LAxxx_059.d	05/14/2018 19:10
GC-MW-101D (WG)	320-38630-5	2018.05.14L LAxxx_060.d	05/14/2018 19:18
GC-MW-106 (WG)	320-38630-6	2018.05.14L LAxxx_062.d	05/14/2018 19:34
GC-MW-3 (WG)	320-38630-7	2018.05.14L LAxxx_063.d	05/14/2018 19:41
GC-MW-110 (WG)	320-38630-8	2018.05.14L LAxxx_064.d	05/14/2018 19:49
GC-MW-110D (WG)	320-38630-9	2018.05.14L LAxxx_065.d	05/14/2018 19:57
GC-MW-2 (WG)	320-38630-10	2018.05.14L LAxxx_066.d	05/14/2018 20:05
GC-Equipment Blank-2	320-38630-11	2018.05.14L LAxxx_067.d	05/14/2018 20:13

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab File ID: 2018.05.13LLB_015.d Lab Sample ID: MB 320-222819/1-A

Matrix: Water Date Extracted: 05/12/2018 07:12

Instrument ID: A8_N Date Analyzed: 05/13/2018 17:20

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-222819/2-A	2018.05.13LLB_016.d	05/13/2018 17:27
	LCSD 320-222819/3-A	2018.05.13LLB_017.d	05/13/2018 17:35
GC-MW-102 (WG) RE	320-38630-1 RE	2018.05.13LLB_018.d	05/13/2018 17:43
GC-MW-109 (WG) RE	320-38630-2 RE	2018.05.13LLB_019.d	05/13/2018 17:51
GC-MW-109M (WG) RE	320-38630-3 RE	2018.05.13LLB_020.d	05/13/2018 17:59
GC-MW-101 (WG) RE	320-38630-4 RE	2018.05.13LLB_021.d	05/13/2018 18:07
GC-MW-101D (WG) RE	320-38630-5 RE	2018.05.13LLB_022.d	05/13/2018 18:14
GC-MW-106 (WG) RE	320-38630-6 RE	2018.05.13LLB_023.d	05/13/2018 18:22
GC-MW-3 (WG) RE	320-38630-7 RE	2018.05.13LLB_024.d	05/13/2018 18:30
GC-MW-110 (WG) RE	320-38630-8 RE	2018.05.13LLB_026.d	05/13/2018 18:46
GC-MW-110D (WG) RE	320-38630-9 RE	2018.05.13LLB_027.d	05/13/2018 18:53
GC-MW-2 (WG) RE	320-38630-10 RE	2018.05.13LLB_028.d	05/13/2018 19:01
GC-Equipment Blank-2 RE	320-38630-11 RE	2018.05.13LLB_029.d	05/13/2018 19:09

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Sample No.: IC 320-222921/5 Date Analyzed: 05/13/2018 14:36

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2017.05.13LLBxx_ICA Heated Purge: (Y/N) N

Calibration ID: 39152

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		3326589	2.70				
UPPER LIMIT		4989884	2.90				
LOWER LIMIT		1663295	2.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-222921/9		863844*	2.71				
ICV 320-222921/10		3126978	2.71				
CCV 320-222978/3 CCVIS		3347691	2.71				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Sample No.: CCV 320-222978/3 Date Analyzed: 05/13/2018 16:01

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.05.13LLBx_005. Heated Purge: (Y/N) N

Calibration ID: 39152

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		3347691	2.71				
UPPER LIMIT		5021537	2.91				
LOWER LIMIT		1673846	2.51				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-222978/1		3965067	2.71				
CCVL 320-222978/2		3491655	2.70				
CCV 320-222981/1		3793936	2.71				
MB 320-222819/1-A		4547999	2.70				
LCS 320-222819/2-A		3832076	2.70				
LCSD 320-222819/3-A		3870955	2.70				
320-38630-1 RE	GC-MW-102 (WG) RE	4266524	2.70				
320-38630-2 RE	GC-MW-109 (WG) RE	3634887	2.70				
320-38630-3 RE	GC-MW-109M (WG) RE	3562077	2.70				
320-38630-4 RE	GC-MW-101 (WG) RE	3476871	2.70				
320-38630-5 RE	GC-MW-101D (WG) RE	3478919	2.70				
320-38630-6 RE	GC-MW-106 (WG) RE	3501990	2.70				
320-38630-7 RE	GC-MW-3 (WG) RE	3531164	2.71				
CCV 320-222981/12		3565487	2.70				
320-38630-8 RE	GC-MW-110 (WG) RE	3392744	2.70				
320-38630-9 RE	GC-MW-110D (WG) RE	3556626	2.70				
320-38630-10 RE	GC-MW-2 (WG) RE	3584354	2.71				
320-38630-11 RE	GC-Equipment Blank-2 RE	3429445	2.70				
CCV 320-222981/19		3370771	2.70				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Sample No.: IC 320-223088/5 Date Analyzed: 05/14/2018 12:24

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2017.05.14LLC_ICAL_ Heated Purge: (Y/N) N

Calibration ID: 39179

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		3619210	2.72				
UPPER LIMIT		5428815	2.92				
LOWER LIMIT		1809605	2.52				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-223088/9		3411600	2.71				
ICV 320-223088/10		3368926	2.71				
CCV 320-223178/1		3597250	2.70				
MB 320-222510/1-A		3486980	2.71				
LCS 320-222510/2-A		3448270	2.72				
LCSD 320-222510/3-A		3585945	2.71				
CCV 320-223178/9		3700145	2.71				
320-38630-1	GC-MW-102 (WG)	3844375	2.71				
320-38630-2	GC-MW-109 (WG)	3700990	2.71				
320-38630-3	GC-MW-109M (WG)	3704261	2.71				
320-38630-4	GC-MW-101 (WG)	3732704	2.71				
320-38630-5	GC-MW-101D (WG)	4038112	2.71				
CCV 320-223178/20		3844130	2.71				
320-38630-6	GC-MW-106 (WG)	4006655	2.71				
320-38630-7	GC-MW-3 (WG)	4089437	2.70				
320-38630-8	GC-MW-110 (WG)	4151984	2.71				
320-38630-9	GC-MW-110D (WG)	4046215	2.71				
320-38630-10	GC-MW-2 (WG)	3894670	2.70				
320-38630-11	GC-Equipment Blank-2	3838167	2.70				
CCV 320-223178/27		4048988	2.70				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-102 (WG) RE | Lab Sample ID: 320-38630-1 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_018.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 08:25

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250.2(mL) | Date Analyzed: 05/13/2018 17:43

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*16*	*H*	*2.0*	*0.85*
27619-97-2	*6:2FTS*	*4.0*	*J H B*	*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	98		25-150
STL02279	M2-6:2FTS	141		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_018.d
Lims ID: 320-38630-B-1-A
Client ID: GC-MW-102 (WG)
Sample Type: Client
Inject. Date: 13-May-2018 17:43:34 ALS Bottle#: 12 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-1-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:34 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:38:33

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										M
212.90 > 169.00	1.455	1.452	0.003	1.004	78454	0.0511			13.9	M
D 1 13C4 PFBA										
217.00 > 172.00	1.450	1.458	-0.008	1.000	4101688	1.49		59.5	37305	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.726	1.729	-0.003	1.000	299165	0.1777			32.2	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.726	1.729	-0.003	0.563	3562635	2.03		81.3	19689	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.762	1.765	-0.003	1.005	1383763	0.4986			414	M
298.90 > 99.00	1.762	1.765	-0.003	1.005	553786		2.50(1.25-3.74)		576	M
D 47 13C3-PFBS										
301.90 > 83.00	1.753	1.766	-0.013	1.000	81766	2.06		88.5	173	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.011	2.014	-0.003	1.000	240336	0.1518			44.9	
313.00 > 119.00	2.011	2.014	-0.003	1.000	20309		11.83(5.03-15.10)		129	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.015	-0.004	1.000	3946825	2.14		85.6	78257	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.342	2.345	-0.003	1.000	222849	0.1313			49.8	
363.00 > 169.00	2.342	2.345	-0.003	1.000	81364		2.74(1.13-3.40)		398	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.346	-0.004	1.000	3922786	2.31		92.3	105340	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.355	2.358	-0.003	1.000	81829	0.0344			64.7	
399.00 > 99.00	2.355	2.358	-0.003	1.000	24228		3.38(1.50-4.49)		45.2	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.359	-0.004	1.000	4958632	2.23		94.5	73752	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.673	2.675	-0.002	1.000	78218	0.1008			746	
D 12 M2-6:2FTS										
429.00 > 81.00	2.673	2.683	-0.010	1.000	1112065	3.36		141	3979	
* 62 13C2-PFOA										
415.00 > 370.00	2.696	2.697	-0.001		4266524	2.50			84438	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.696	2.697	-0.001	1.000	720376	0.3973			209	
413.00 > 169.00	2.696	2.697	-0.001	1.000	396668		1.82(0.84-2.52)		1732	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.703	2.705	-0.002	1.000	20312	0.0109			45.8	
449.00 > 99.00	2.703	2.705	-0.002	1.000	6647		3.06(1.94-5.82)		41.8	M
D 14 13C4 PFOA										
417.00 > 372.00	2.696	2.706	-0.010	1.000	3920970	2.44		97.6	70195	
20 Perfluorononanoic acid										
463.00 > 419.00	3.060	3.070	-0.010	0.998	106108	0.0790			105	
463.00 > 169.00	3.067	3.070	-0.003	1.000	25837		4.11(1.90-5.69)		333	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.060	3.070	-0.010	1.000	837204	0.5375			1461	
499.00 > 99.00	3.060	3.070	-0.010	1.000	142753		5.86(2.31-6.93)		806	
D 19 13C5 PFNA										
468.00 > 423.00	3.067	3.078	-0.011	1.000	3300098	2.43		97.4	51215	
D 18 13C4 PFOS										
503.00 > 80.00	3.060	3.078	-0.018	1.000	3394761	2.13		89.2	10184	
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.414	-0.016	1.000	4687167	2.08		83.2	36662	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.426	3.421	0.005	1.003	2116	0.003734			57.6	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.426	3.430	-0.004	1.000	40703	0.0374			98.9	
513.00 > 169.00	3.426	3.430	-0.004	1.000	6062		6.71(2.36-7.09)		112	M
D 26 M2-8:2FTS										
529.00 > 81.00	3.417	3.433	-0.016	1.000	1103371	2.54		106	5134	
D 23 13C2 PFDA										
515.00 > 470.00	3.426	3.442	-0.016	1.000	2651255	2.24		89.6	56452	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.586	3.605	-0.019	1.000	1093354	2.11		84.3	18082	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.761	3.764	-0.003	1.000	8566	0.0132			21.6	
563.00 > 169.00	3.751	3.764	-0.013	0.997	2663		3.22(2.12-6.36)		74.7	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.751	3.769	-0.018	1.000	1122471	1.98		79.1	4316	
D 30 13C2 PFUnA										
565.00 > 520.00	3.761	3.780	-0.019	1.000	2058830	2.13		85.1	61014	
D 36 13C2 PFDoA										
615.00 > 570.00	4.050	4.069	-0.019	1.000	2088172	2.07		82.8	24156	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	1987774	1.81		72.4	14962	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-May-2018 10:44:59 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_018.d

Injection Date: 13-May-2018 17:43:34 Instrument ID: A8_N

Lims ID: 320-38630-B-1-A Lab Sample ID: 320-38630-1

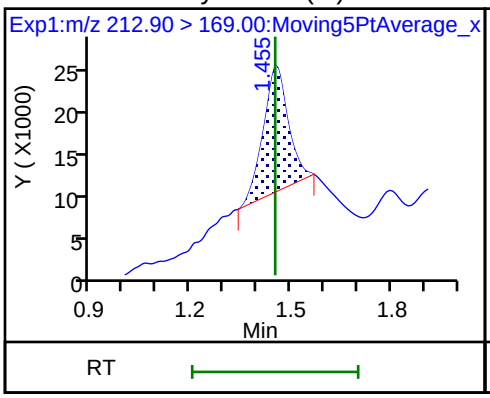
Client ID: GC-MW-102 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 5

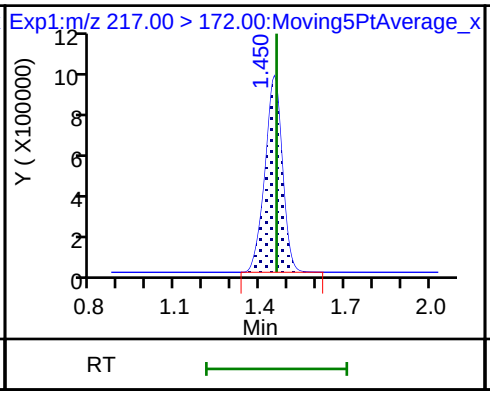
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

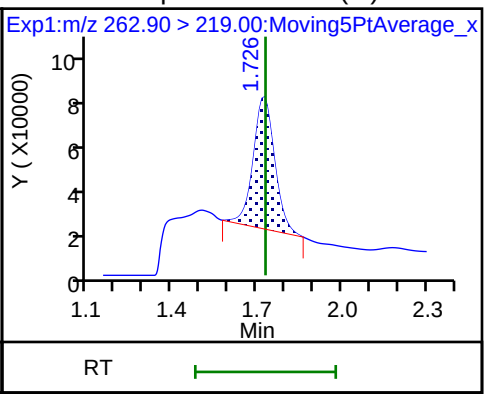
2 Perfluorobutyric acid (M)



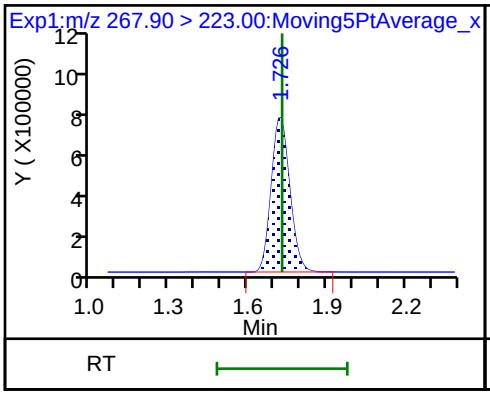
D 1 13C4 PFBA



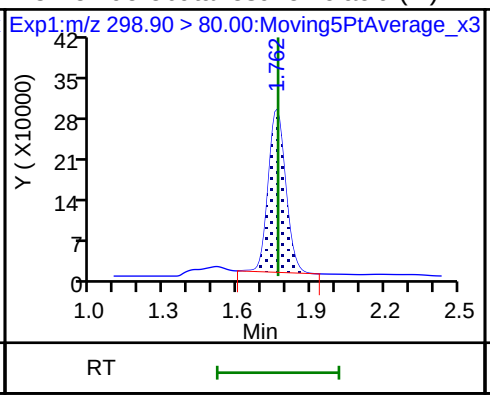
4 Perfluoropentanoic acid (M)



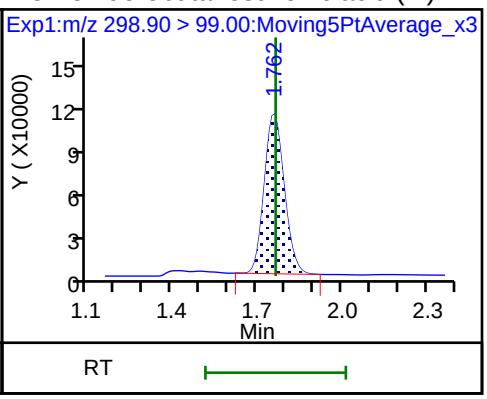
D 3 13C5-PFPeA



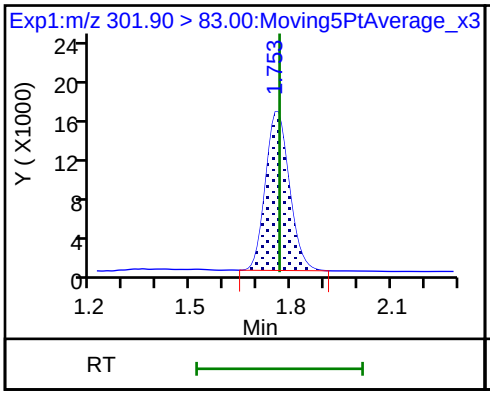
5 Perfluorobutanesulfonic acid (M)



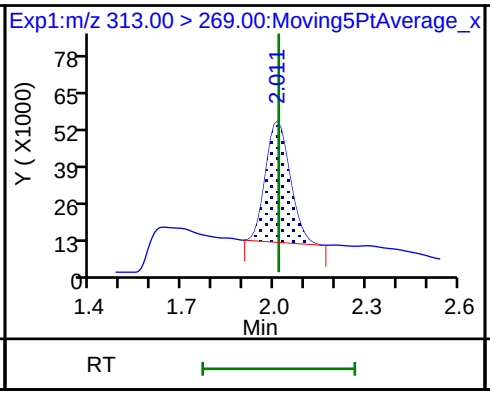
5 Perfluorobutanesulfonic acid (M)



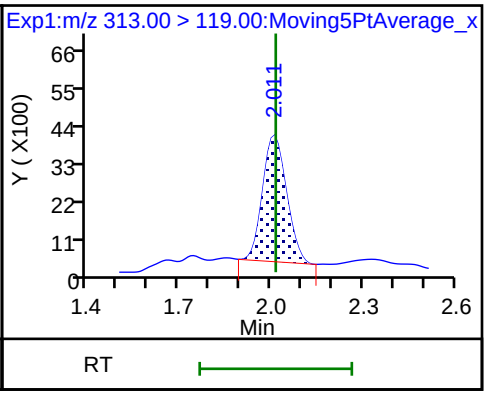
D 47 13C3-PFBS



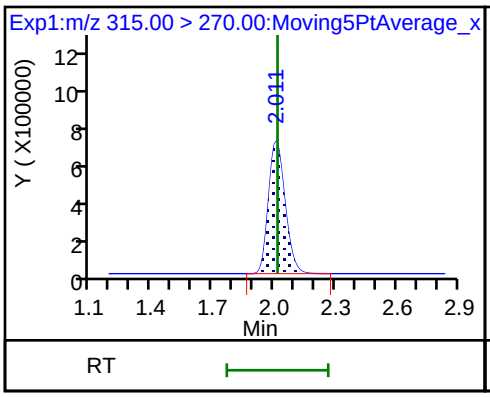
6 Perfluorohexanoic acid



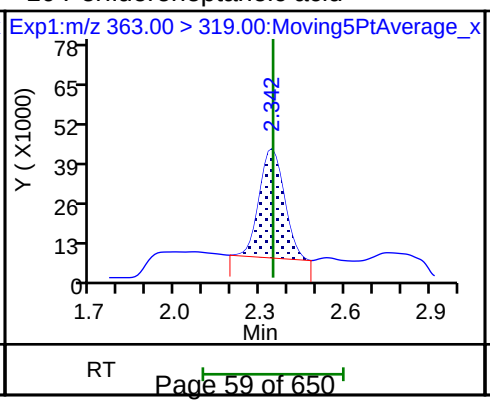
6 Perfluorohexanoic acid



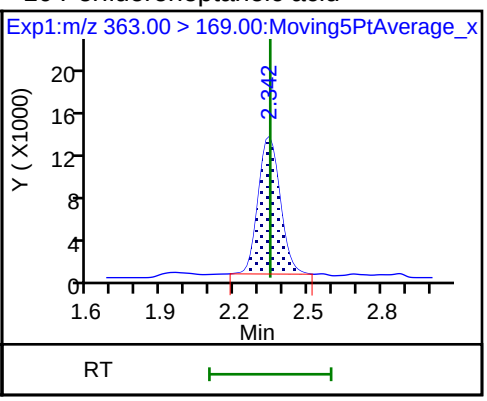
D 7 13C2 PFHxA



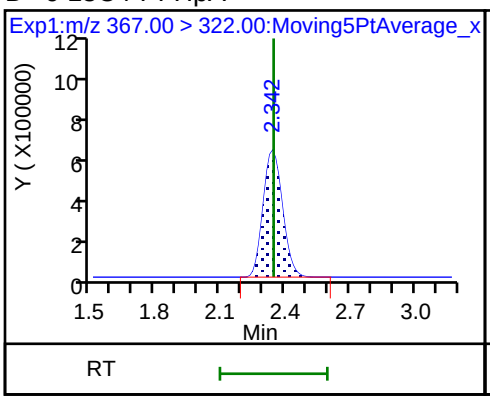
10 Perfluoroheptanoic acid



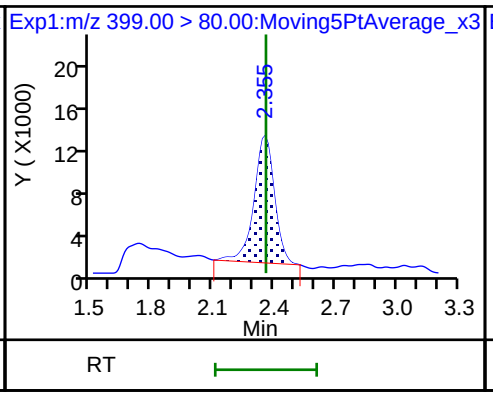
10 Perfluoroheptanoic acid



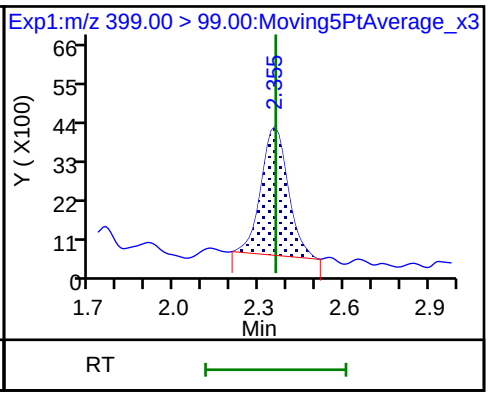
D 9 13C4-PFHpA



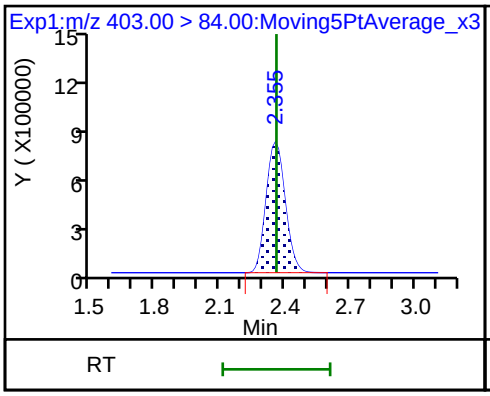
8 Perfluorohexanesulfonic acid



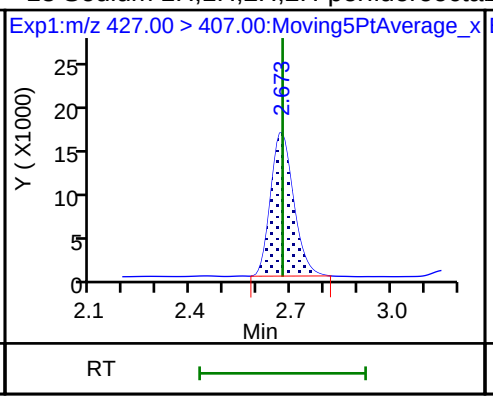
8 Perfluorohexanesulfonic acid



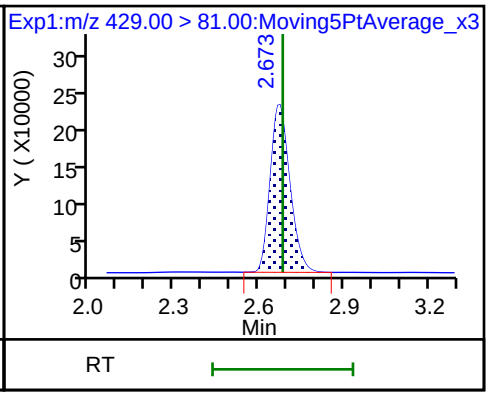
D 11 18O2 PFHxS



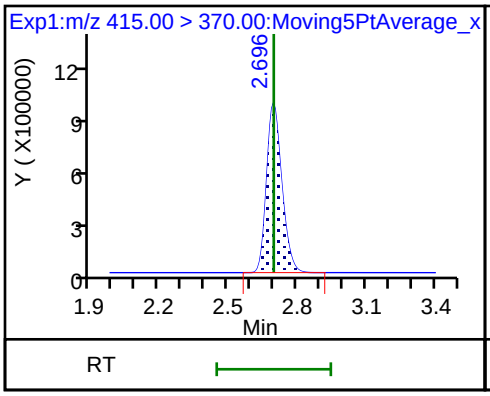
13 Sodium 1H,1H,2H,2H-perfluorooctane



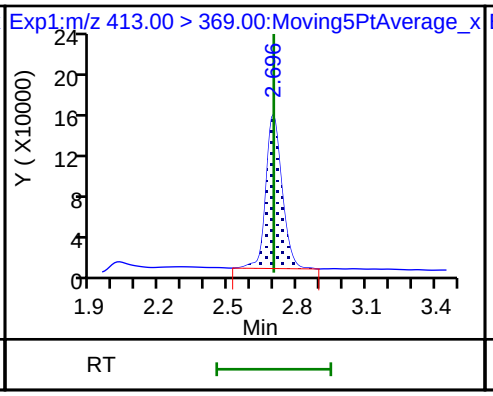
D 12 M2-6:2FTS



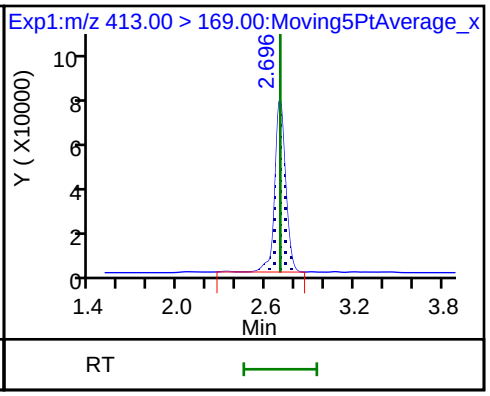
* 62 13C2-PFOA



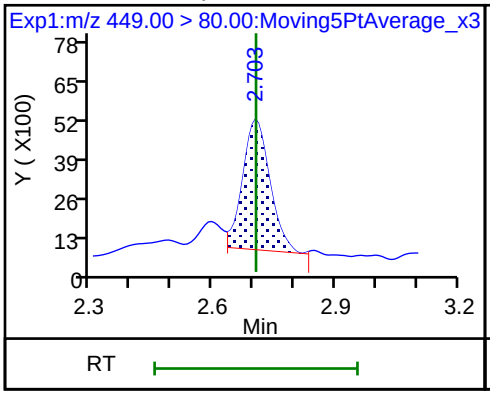
15 Perfluorooctanoic acid



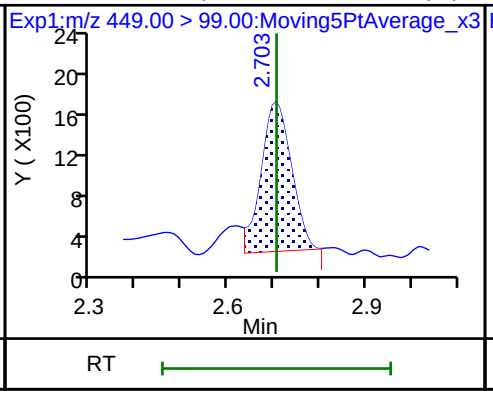
15 Perfluorooctanoic acid



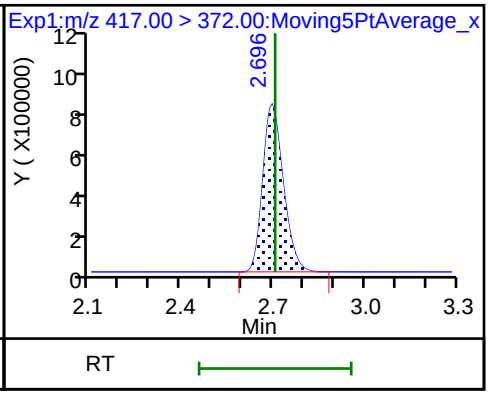
16 Perfluoroheptanesulfonic acid



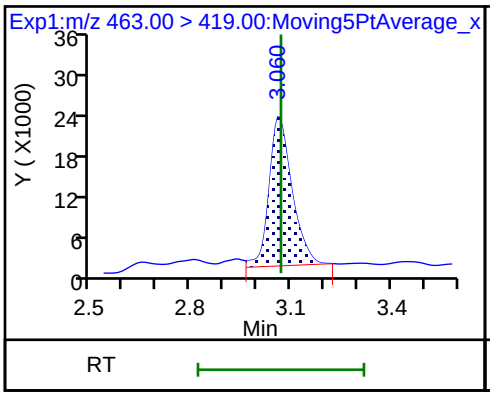
16 Perfluoroheptanesulfonic acid (M)



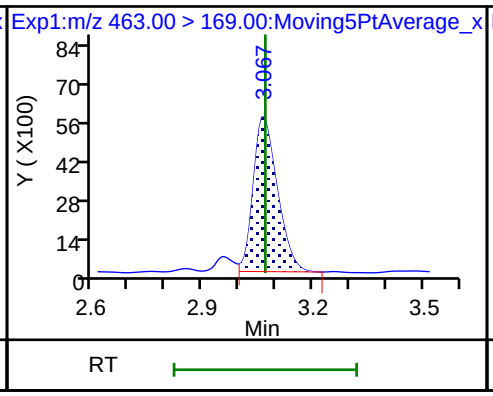
D 14 13C4 PFOA



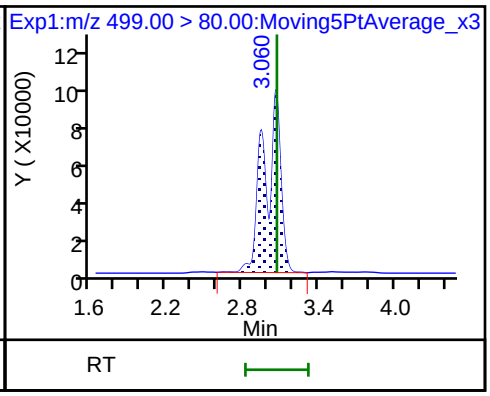
20 Perfluorononanoic acid



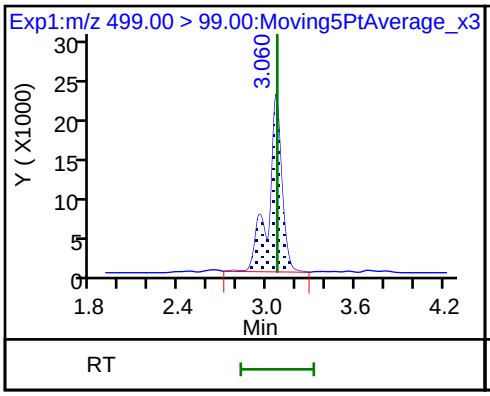
20 Perfluorononanoic acid



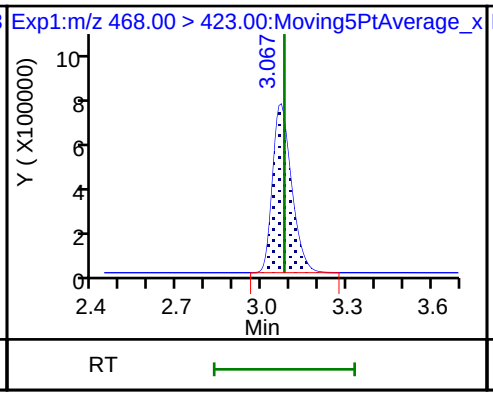
17 Perfluorooctane sulfonic acid



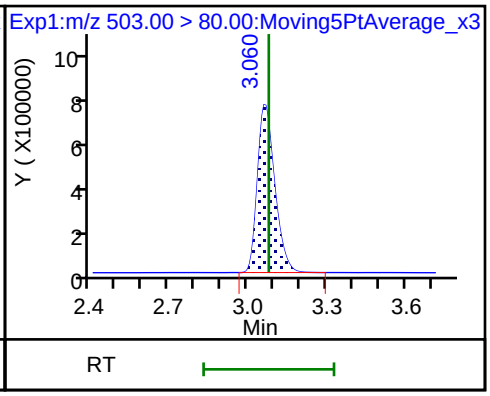
17 Perfluorooctane sulfonic acid



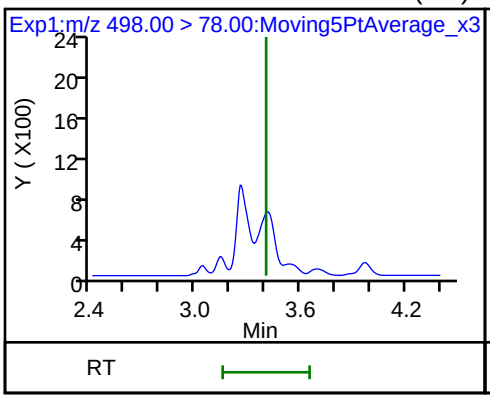
D 19 13C5 PFNA



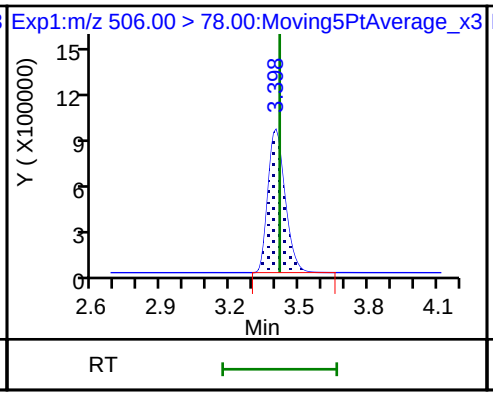
D 18 13C4 PFOS



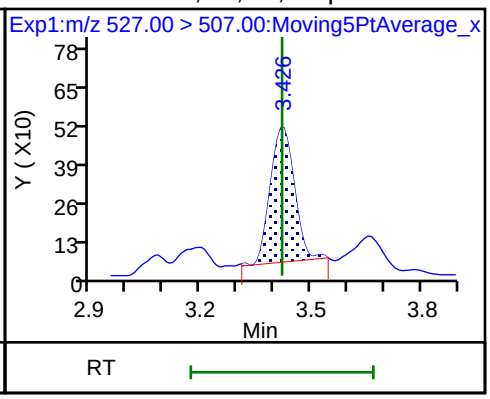
22 Perfluorooctane Sulfonamide (ND)



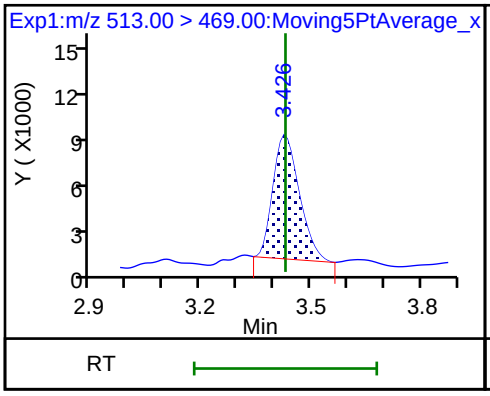
D 21 13C8 FOSA



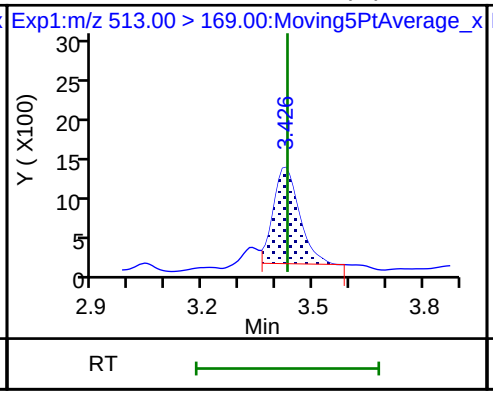
25 Sodium 1H,1H,2H,2H-perfluorodecane



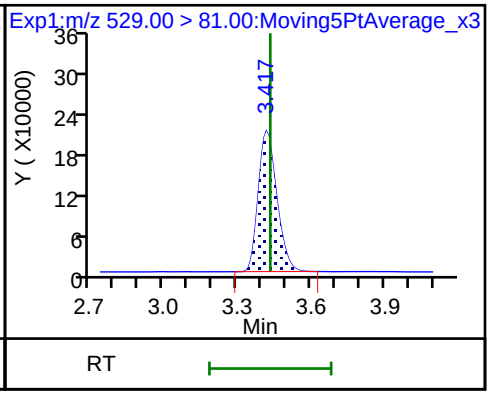
24 Perfluorodecanoic acid



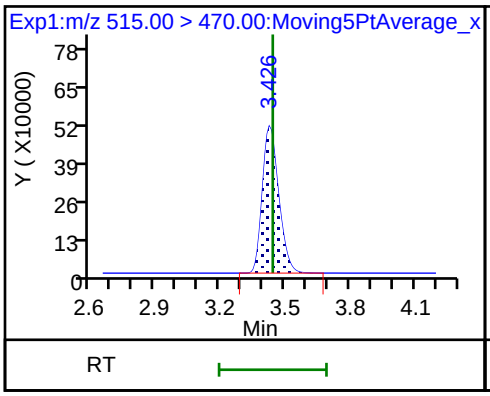
24 Perfluorodecanoic acid (M)



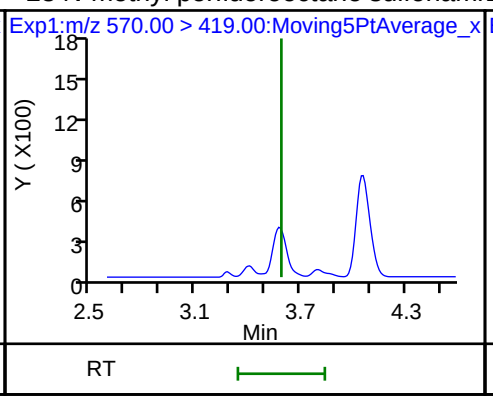
D 26 M2-8:2FTS



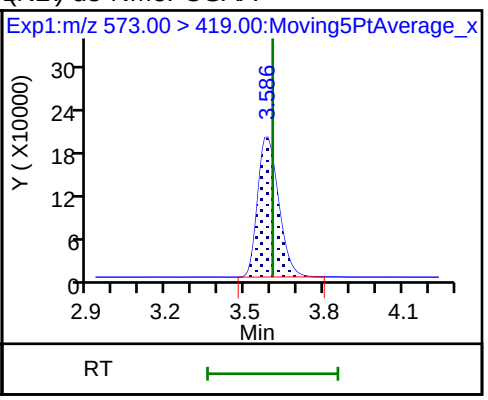
D 23 13C2 PFDA



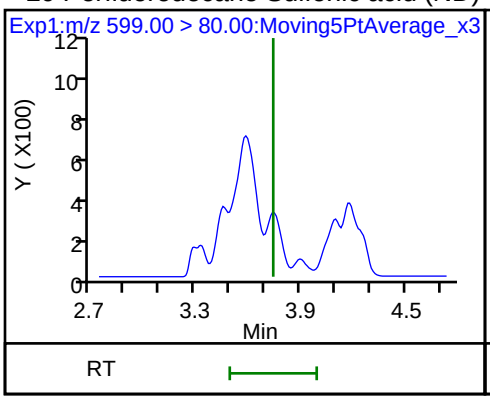
28 N-methyl perfluorooctane sulfonamid (ND)



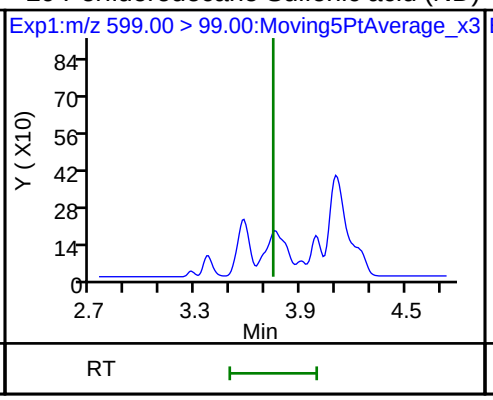
D 27 d3-NMeFOSAA



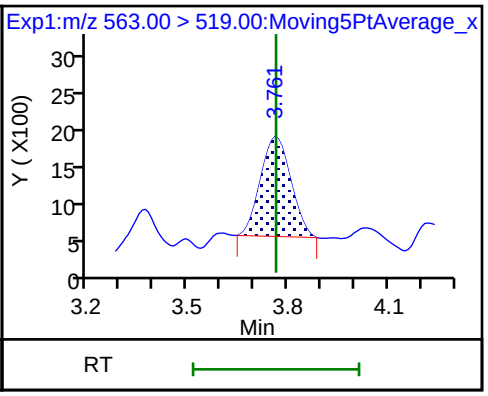
29 Perfluorodecane Sulfonic acid (ND)



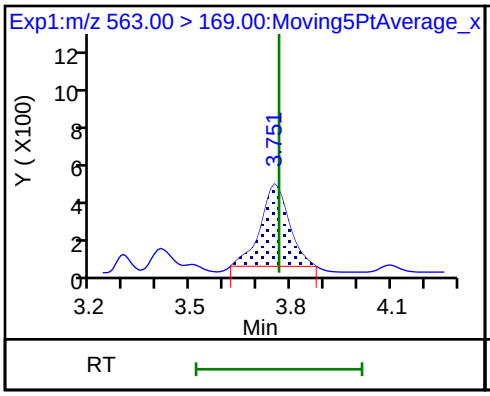
29 Perfluorodecane Sulfonic acid (ND)



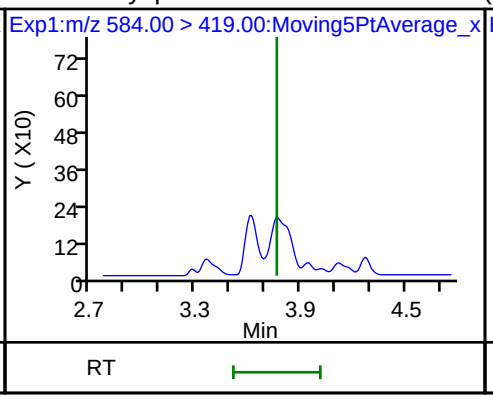
31 Perfluoroundecanoic acid



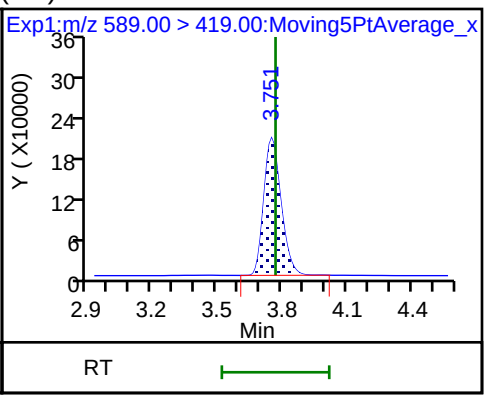
31 Perfluoroundecanoic acid



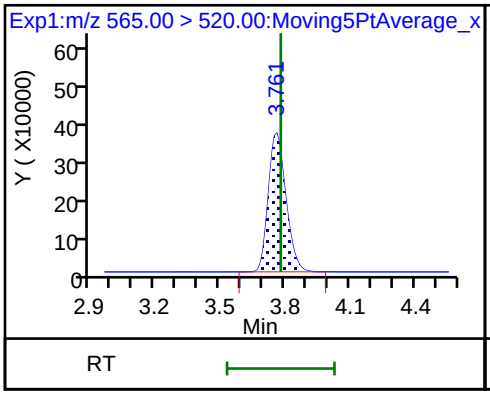
33 N-ethyl perfluorooctane sulfonamid (ND)



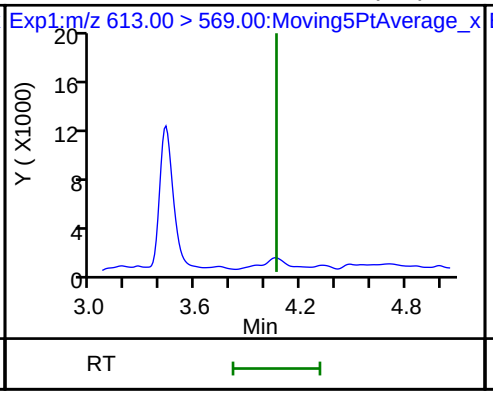
D 32 d5-NEtFOSAA



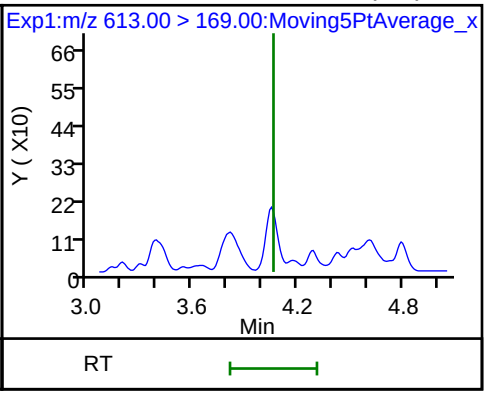
D 30 13C2 PFUnA



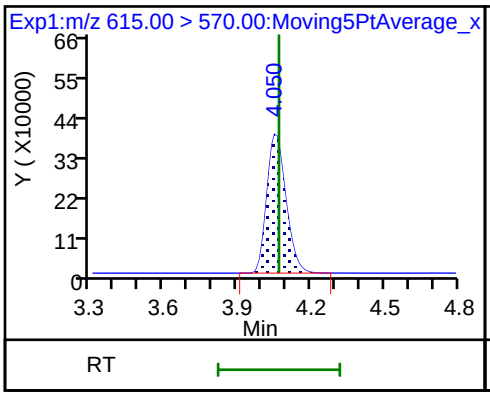
37 Perfluorododecanoic acid (ND)



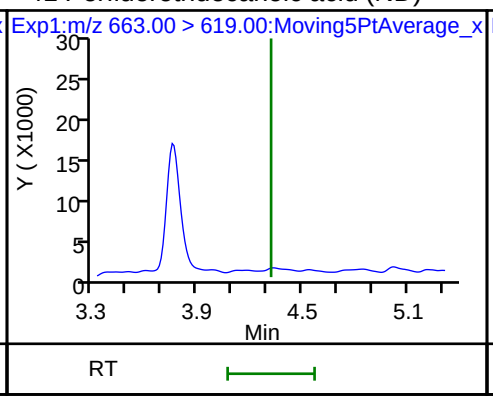
37 Perfluorododecanoic acid (ND)



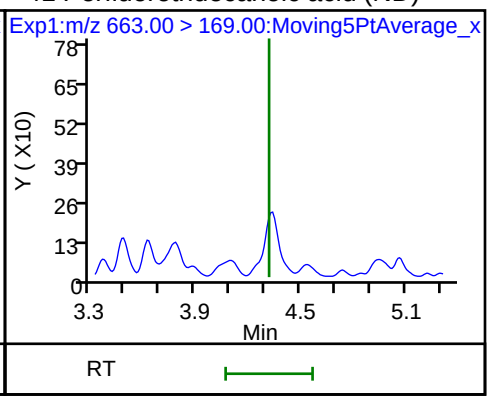
D 36 13C2 PFDoA



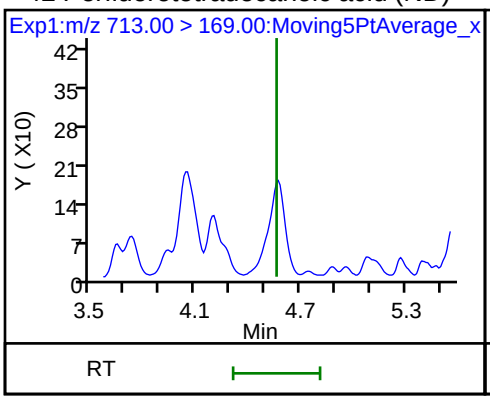
41 Perfluorotridecanoic acid (ND)



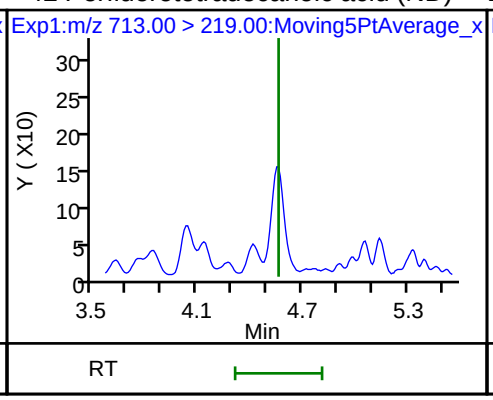
41 Perfluorotridecanoic acid (ND)



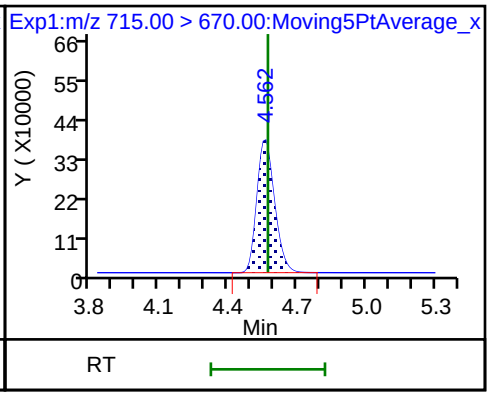
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-102 (WG) | Lab Sample ID: 320-38630-1

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_056.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 08:25

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 242.3(mL) | Date Analyzed: 05/14/2018 18:47

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.1		2.1	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	6.8		2.1	0.51
307-24-4	Perfluorohexanoic acid (PFHxA)	6.2		2.1	0.60
375-85-9	Perfluoroheptanoic acid (PFHpA)	4.8		2.1	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	19	B	2.1	0.88
375-95-1	Perfluorononanoic acid (PFNA)	2.8		2.1	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	1.7	J I	2.1	0.32
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.1	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.1	0.57
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.30
375-73-5	Perfluorobutanesulfonic acid (PFBS)	20		2.1	0.21
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	2.1	0.18
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.40	J	2.1	0.20
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	22	B	2.1	0.56
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.33
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.1	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		21	3.2
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		21	2.0
27619-97-2	6:2FTS	8.5	J B *	21	2.1
39108-34-4	8:2FTS	ND		21	2.1

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-102 (WG) | Lab Sample ID: 320-38630-1

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_056.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 08:25

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 242.3(mL) | Date Analyzed: 05/14/2018 18:47

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	64		25-150
STL01893	13C5 PFPeA	87		25-150
STL00993	13C2 PFHxA	94		25-150
STL01892	13C4-PFHpA	101		25-150
STL00990	13C4 PFOA	103		25-150
STL00995	13C5 PFNA	102		25-150
STL00996	13C2 PFDA	97		25-150
STL00997	13C2 PFUnA	97		25-150
STL00998	13C2 PFDoA	85		25-150
STL02116	13C2-PFTeDA	101		25-150
STL02337	13C3-PFBS	89		25-150
STL00994	18O2 PFHxS	96		25-150
STL00991	13C4 PFOS	90		25-150
STL01056	13C8 FOSA	84		25-150
STL02118	d3-NMeFOSAA	83		25-150
STL02117	d5-NEtFOSAA	87		25-150
STL02279	M2-6:2FTS	138		25-150
STL02280	M2-8:2FTS	113		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_056.d
Lims ID: 320-38630-A-1-A
Client ID: GC-MW-102 (WG)
Sample Type: Client
Inject. Date: 14-May-2018 18:47:10 ALS Bottle#: 39 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-1-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:33 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:02:14

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.453	1.452	0.001	1.000	3957061	1.59		63.6	36557	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.459	1.458	0.001	1.004	108813	0.0740			15.7	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.731	1.728	0.003	0.562	3338379	2.17		86.7	16359	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.731	1.729	0.002	1.000	268498	0.1653			28.6	M
D 47 13C3-PFBS										
301.90 > 83.00	1.767	1.764	0.003	1.000	74855	2.06		88.6	167	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.767	1.765	0.002	1.000	1208605	0.4865			389	M
298.90 > 99.00	1.767	1.765	0.002	1.000	520114		2.32(1.25-3.74)		500	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.014	0.002	1.000	3789792	2.35		94.1	97634	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.015	0.001	1.000	236215	0.1493			49.1	
313.00 > 119.00	2.016	2.015	0.001	1.000	22025		10.72(5.03-15.10)		126	
D 9 13C4-PFHpA										
367.00 > 322.00	2.349	2.345	0.004	1.000	3900403	2.52		101	71099	
D 11 18O2 PFHxS										
403.00 > 84.00	2.362	2.358	0.004	1.000	4655362	2.27		95.8	77959	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.349	2.359	-0.010	1.000	193021	0.1167			47.5	
363.00 > 169.00	2.349	2.359	-0.010	1.000	81878		2.36(1.13-3.40)		423	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.362	2.373	-0.011	1.000	77101	0.0348			66.0	
399.00 > 99.00	2.362	2.373	-0.011	1.000	21004		3.67(1.50-4.49)		31.2	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.682	0.001	1.000	996351	3.27		138	2992	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.000	144644	0.2048			973	
D 14 13C4 PFOA										
417.00 > 372.00	2.706	2.704	0.002	1.000	3724524	2.57		103	49731	
* 62 13C2-PFOA										
415.00 > 370.00	2.706	2.713	-0.007		3844375	2.50			74959	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.706	2.713	-0.007	1.000	808097	0.4514			240	
413.00 > 169.00	2.706	2.713	-0.007	1.000	437057		1.85(0.84-2.52)		1380	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.720	-0.007	1.000	16340	0.009624			40.3	
449.00 > 99.00	2.721	2.720	0.001	1.003	3832		4.26(1.94-5.82)		18.5	
D 18 13C4 PFOS										
503.00 > 80.00	3.079	3.073	0.006	1.000	3075144	2.15		89.8	10166	
D 19 13C5 PFNA										
468.00 > 423.00	3.079	3.081	-0.002	1.000	3094057	2.55		102	60166	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.079	3.082	-0.003	1.000	764232	0.5320			1337	
499.00 > 99.00	3.079	3.082	-0.003	1.000	139736		5.47(2.31-6.93)		640	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.079	3.082	-0.003	1.000	89284	0.0684			95.8	M
463.00 > 169.00	3.079	3.082	-0.003	1.000	23518		3.80(1.90-5.69)		403	
D 21 13C8 FOSA										
506.00 > 78.00	3.415	3.407	0.008	1.000	4380732	2.11		84.5	52547	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.396	3.418	-0.022	0.995	3888	0.002251			31.5	
D 26 M2-8:2FTS										
529.00 > 81.00	3.434	3.435	-0.001	1.000	1073658	2.70		113	4131	
D 23 13C2 PFDA										
515.00 > 470.00	3.443	3.444	-0.001	1.000	2538381	2.44		97.4	34856	
24 Perfluorodecanoic acid										RM
513.00 > 469.00	3.443	3.446	-0.003	1.000	41702	0.0401			85.0	R
513.00 > 169.00	3.434	3.446	-0.012	0.997	5653		7.38(2.36-7.09)		84.8	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.595	3.596	-0.001	1.000	975127	2.06		82.5	17727	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.770	3.771	-0.001	1.000	1097048	2.18		87.0	3300	
D 30 13C2 PFUnA										
565.00 > 520.00	3.770	3.771	-0.001	1.000	2111326	2.42		96.8	43161	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.780	3.783	-0.003	1.003	7496	0.0114			17.0	
563.00 > 169.00	3.770	3.783	-0.013	1.000	2140		3.50(2.12-6.36)		56.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.069	4.071	-0.002	1.000	1932497	2.12		84.9	20728	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.572	4.574	-0.002	1.000	2512805	2.53		101	18373	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:09:51 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_056.d

Injection Date: 14-May-2018 18:47:10 Instrument ID: A8_N

Lims ID: 320-38630-A-1-A Lab Sample ID: 320-38630-1

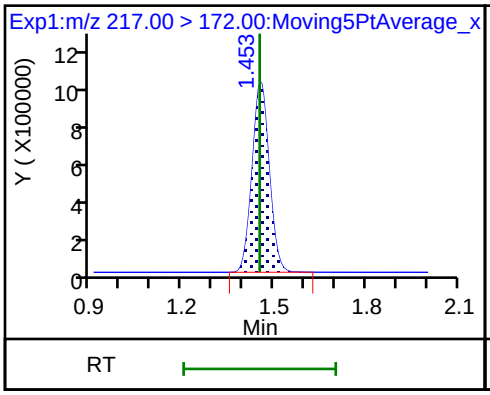
Client ID: GC-MW-102 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 39 Worklist Smp#: 15

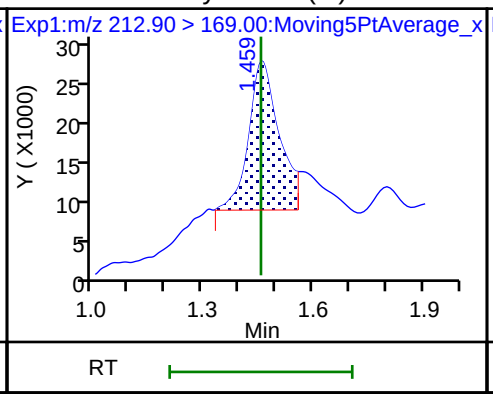
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

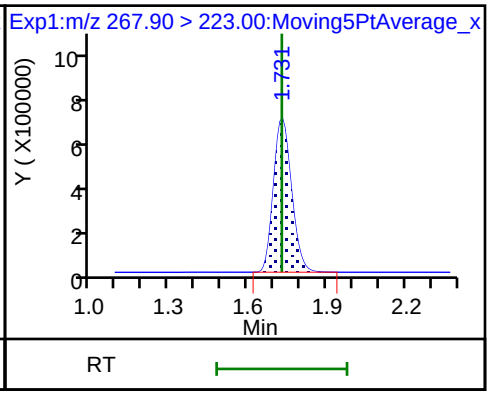
D 1 13C4 PFBA



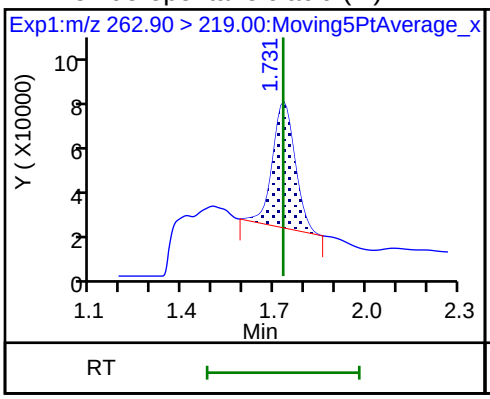
2 Perfluorobutyric acid (M)



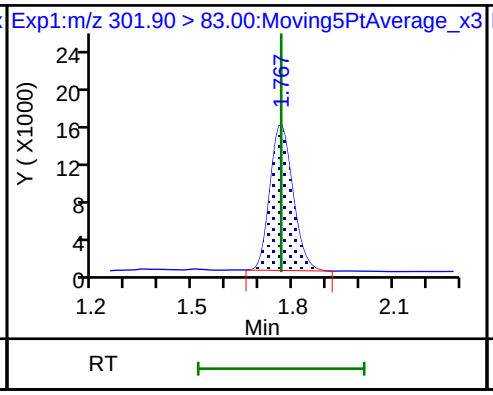
D 3 13C5-PFPeA



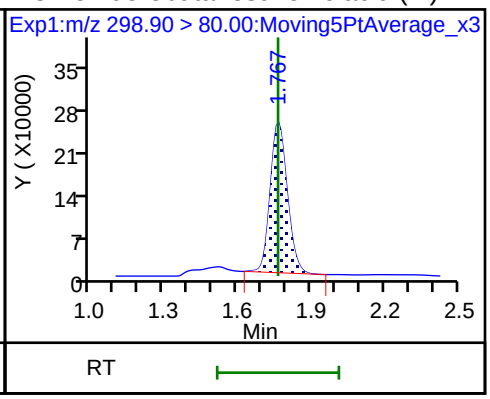
4 Perfluoropentanoic acid (M)



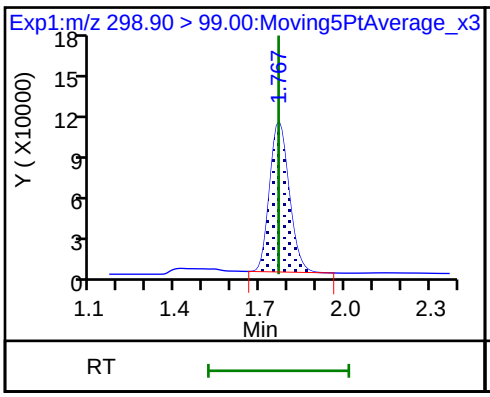
D 47 13C3-PFBS



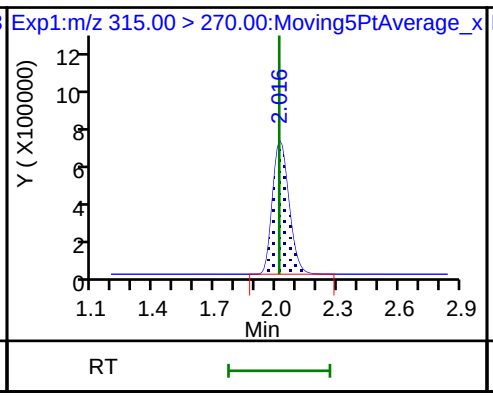
5 Perfluorobutanesulfonic acid (M)



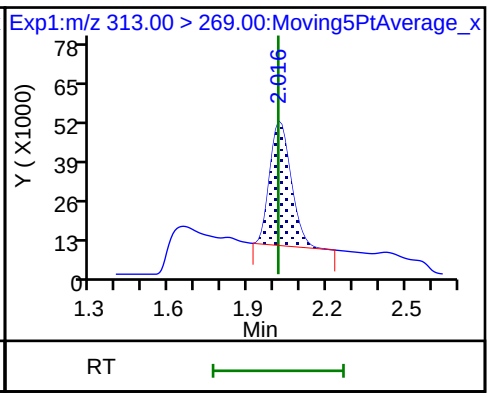
5 Perfluorobutanesulfonic acid



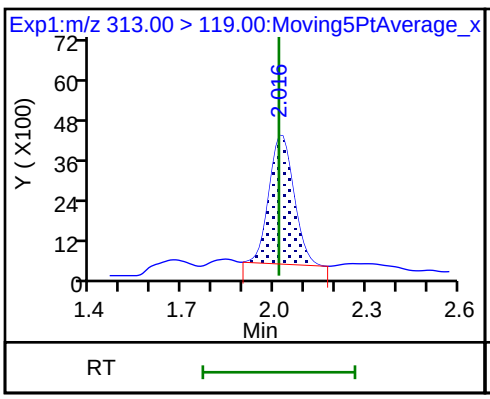
D 7 13C2 PFHxA



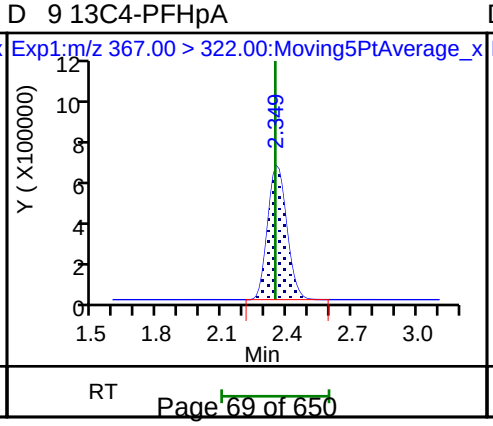
6 Perfluorohexanoic acid



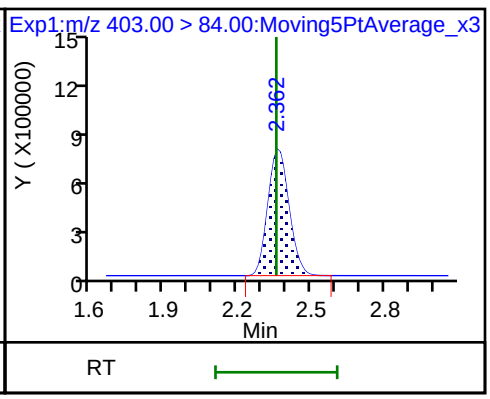
6 Perfluorohexanoic acid



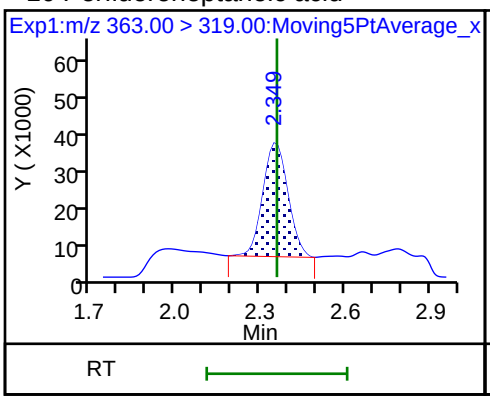
D 9 13C4-PFHpA



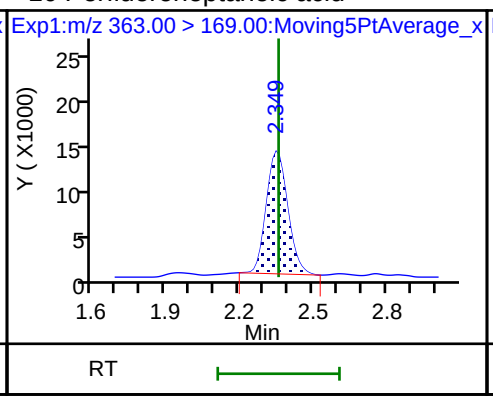
D 11 18O2 PFHxS



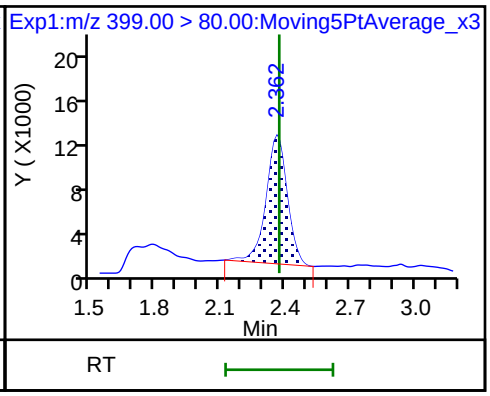
10 Perfluoroheptanoic acid



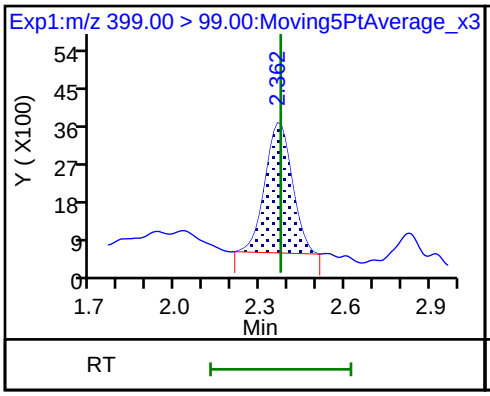
10 Perfluoroheptanoic acid



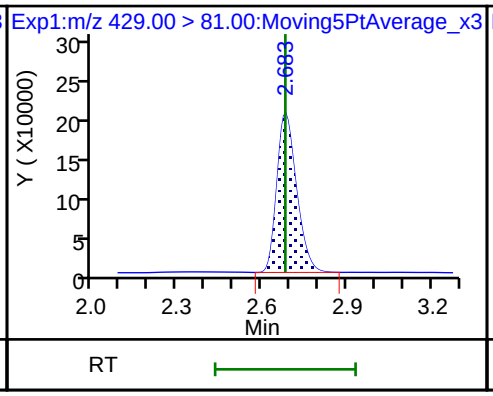
8 Perfluorohexanesulfonic acid



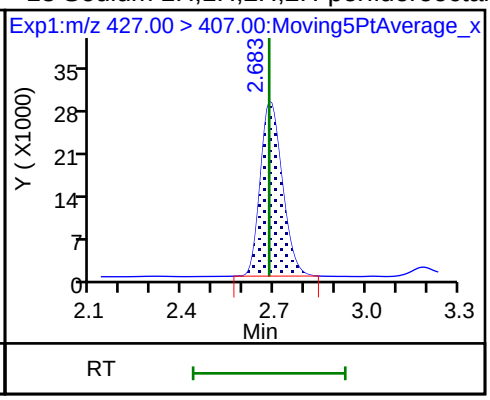
8 Perfluorohexanesulfonic acid



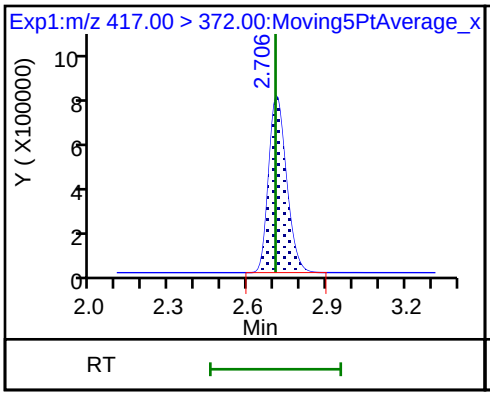
D 12 M2-6:2FTS



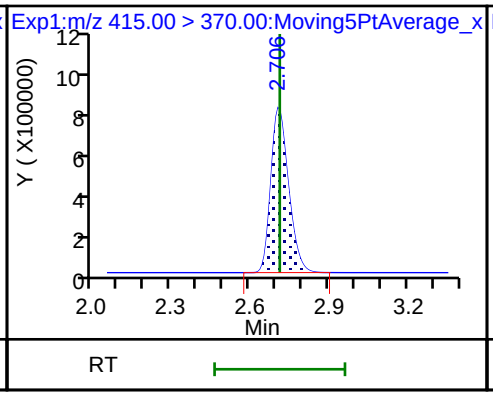
13 Sodium 1H,1H,2H,2H-perfluorooctane



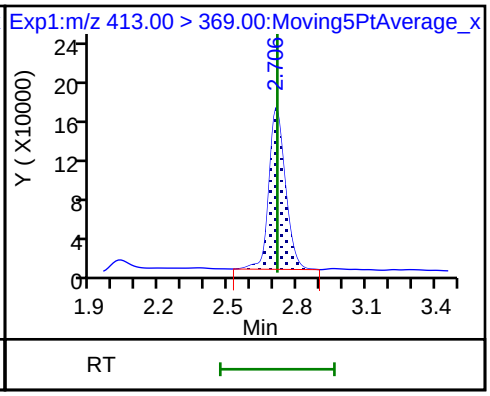
D 14 13C4 PFOA



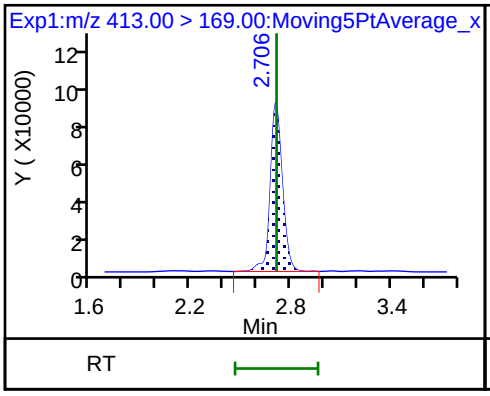
* 62 13C2-PFOA



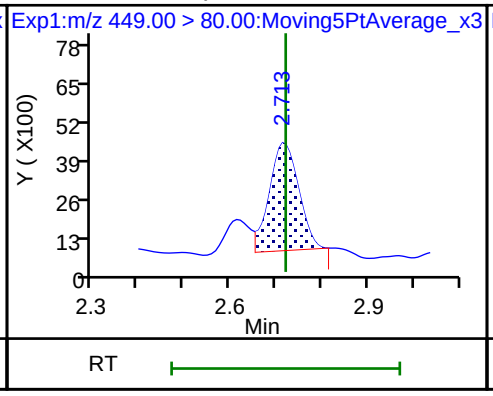
15 Perfluorooctanoic acid



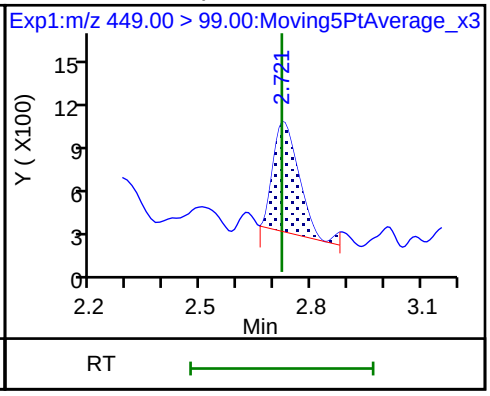
15 Perfluorooctanoic acid



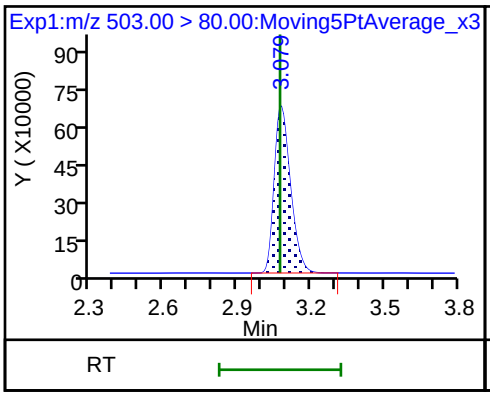
16 Perfluoroheptanesulfonic acid



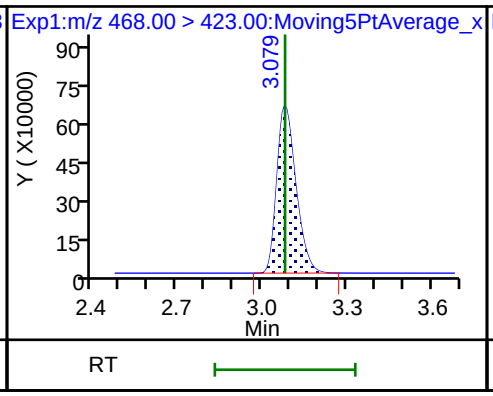
16 Perfluoroheptanesulfonic acid



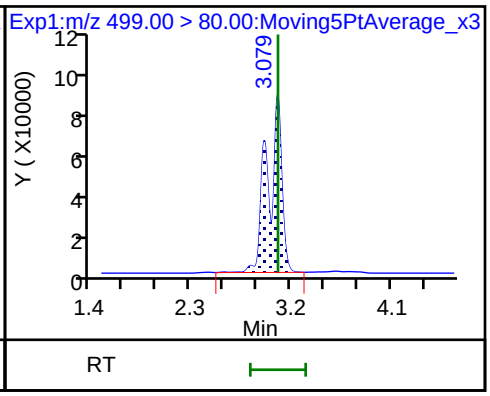
D 18 13C4 PFOS



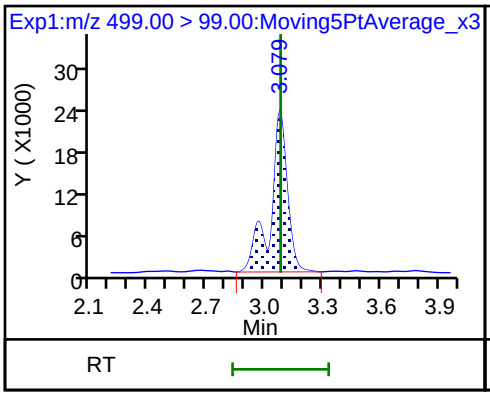
D 19 13C5 PFNA



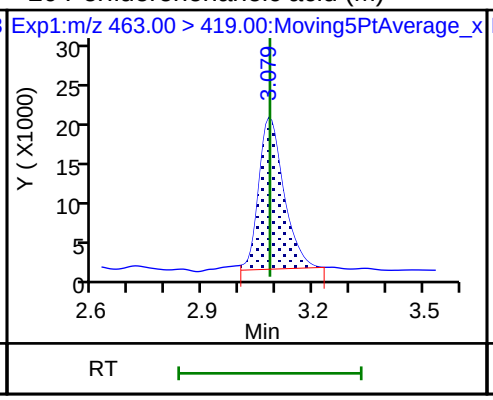
17 Perfluorooctane sulfonic acid



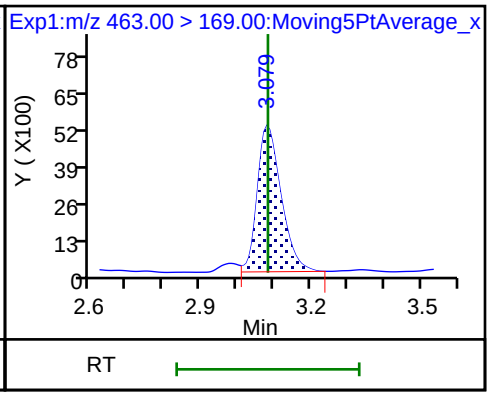
17 Perfluorooctane sulfonic acid



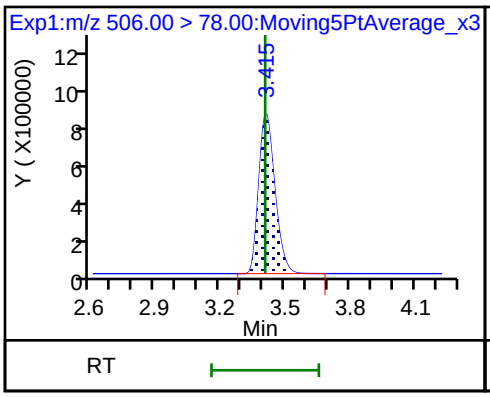
20 Perfluorononanoic acid (M)



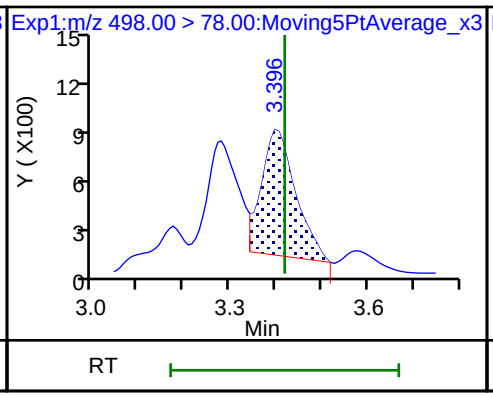
20 Perfluorononanoic acid



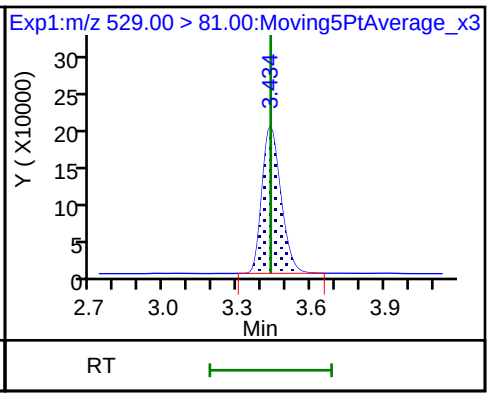
D 21 13C8 FOSA



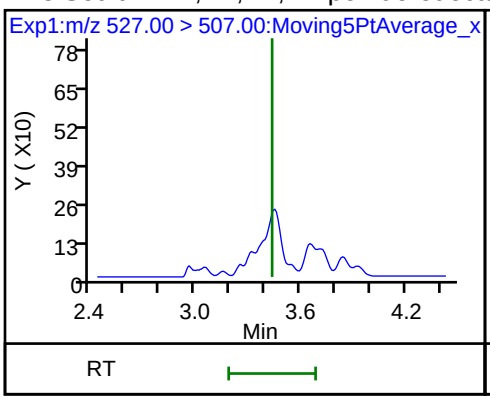
22 Perfluorooctane Sulfonamide



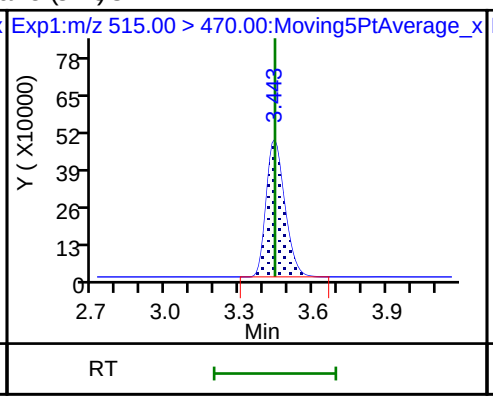
D 26 M2-8:2FTS



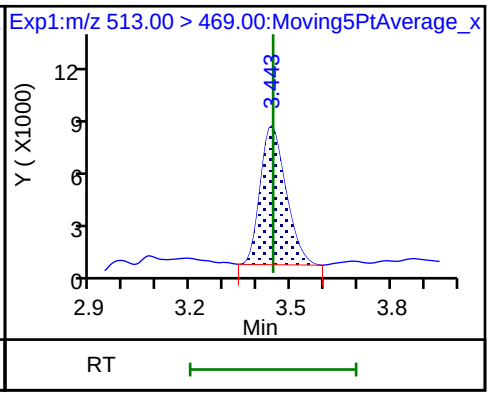
25 Sodium 1H,1H,2H,2H-perfluorodecane2(3ND)



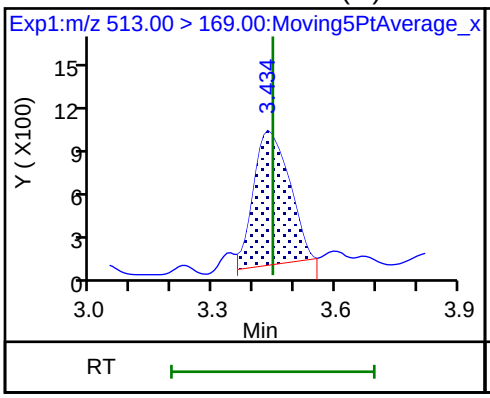
D 23 13C2 PFDA



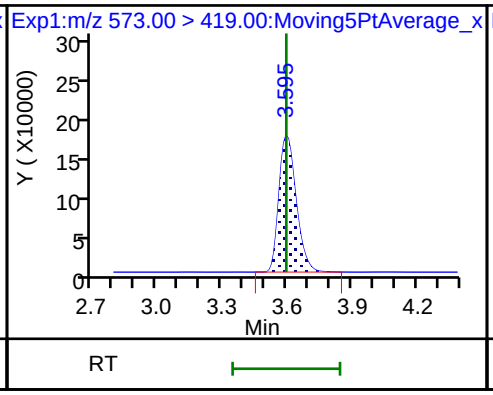
24 Perfluorodecanoic acid



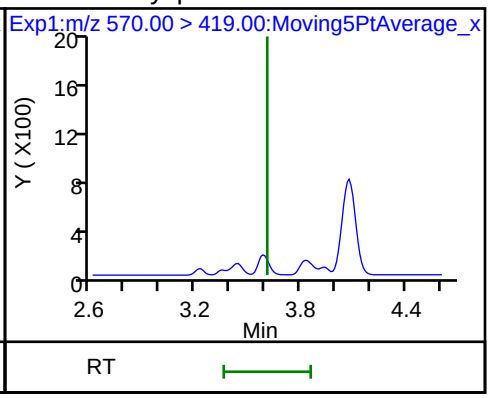
24 Perfluorodecanoic acid (M)



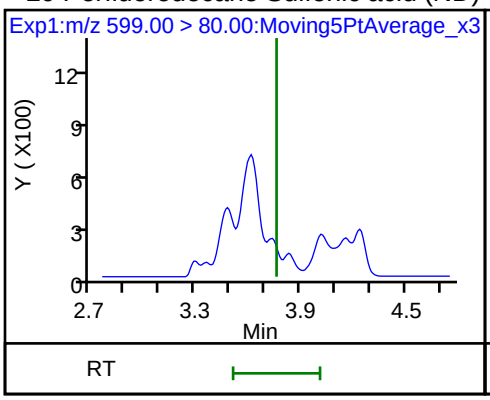
D 27 d3-NMeFOSAA



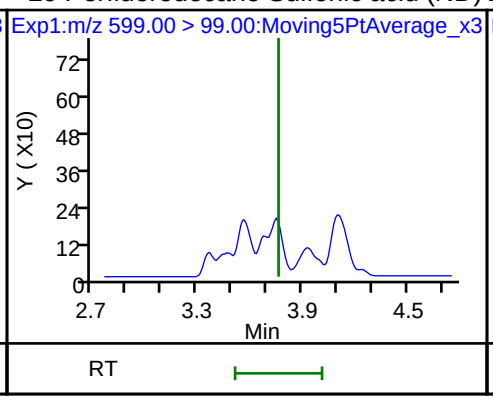
28 N-methyl perfluorooctane sulfonami (ND)



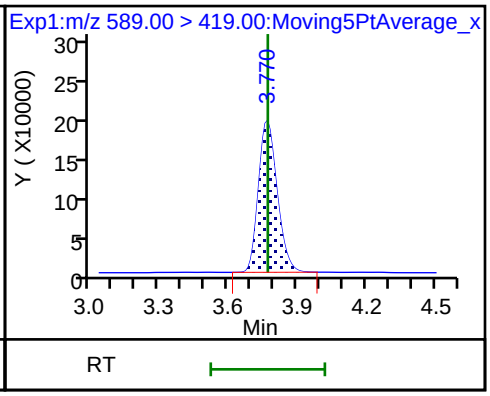
29 Perfluorodecane Sulfonic acid (ND)



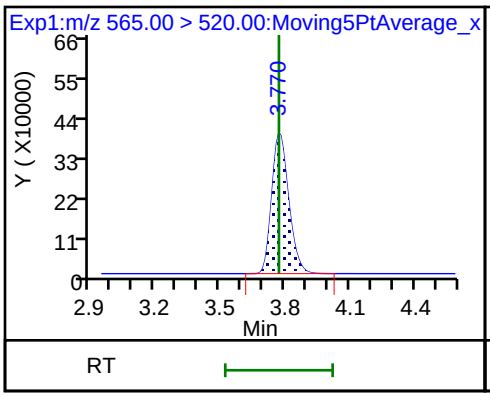
29 Perfluorodecane Sulfonic acid (ND)



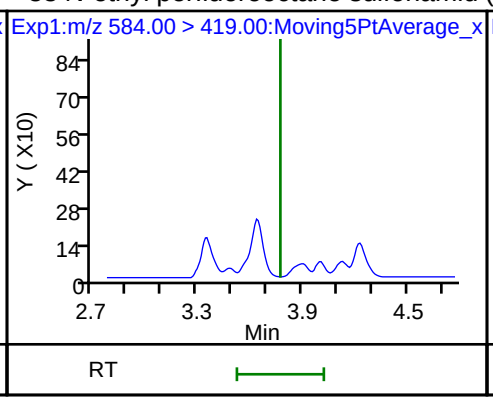
D 32 d5-NEtFOSAA



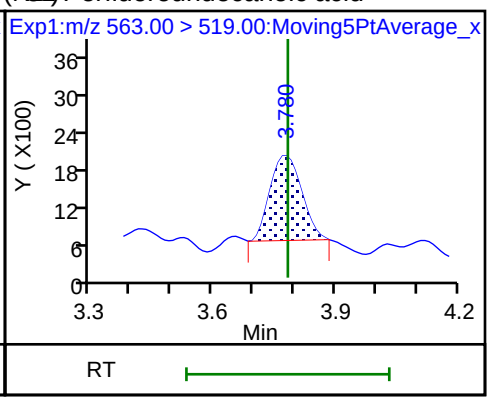
D 30 13C2 PFUnA



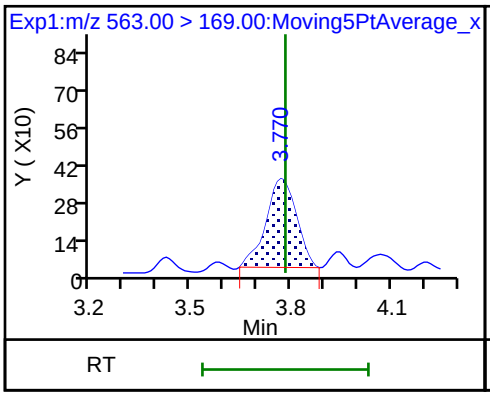
33 N-ethyl perfluorooctane sulfonamid (ND)



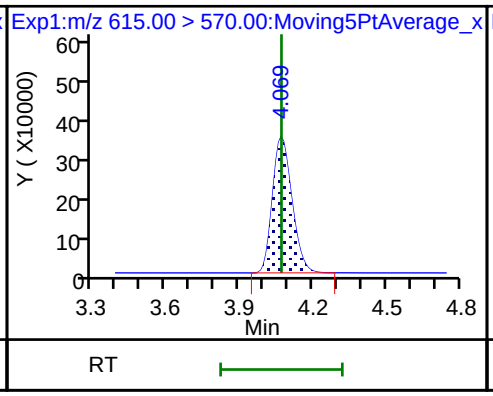
31 Perfluoroundecanoic acid



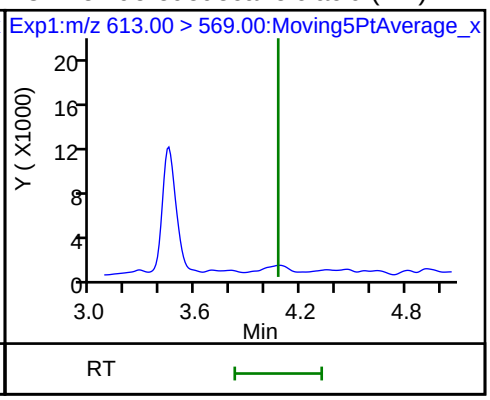
31 Perfluoroundecanoic acid



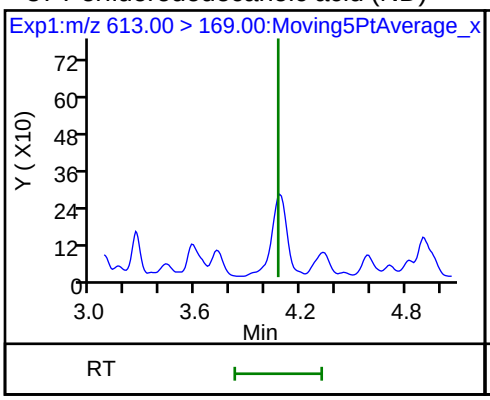
D 36 13C2 PFDoA



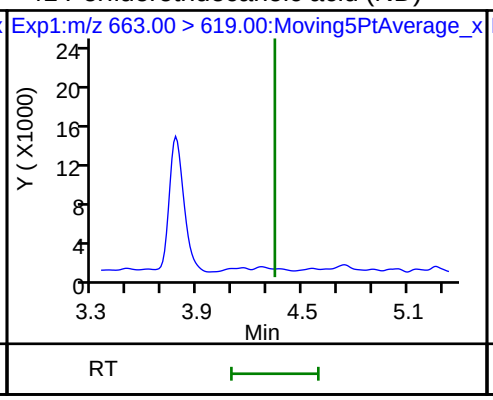
37 Perfluorododecanoic acid (ND)



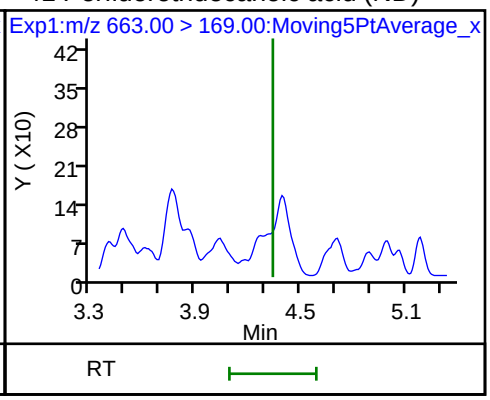
37 Perfluorododecanoic acid (ND)



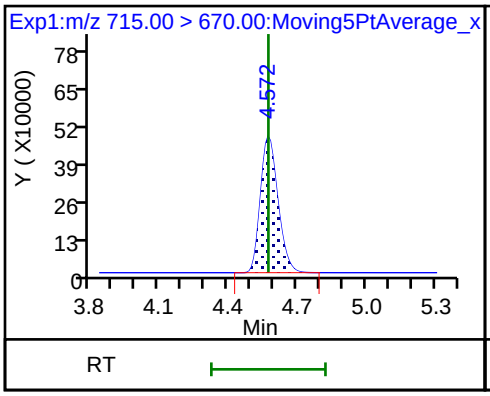
41 Perfluorotridecanoic acid (ND)



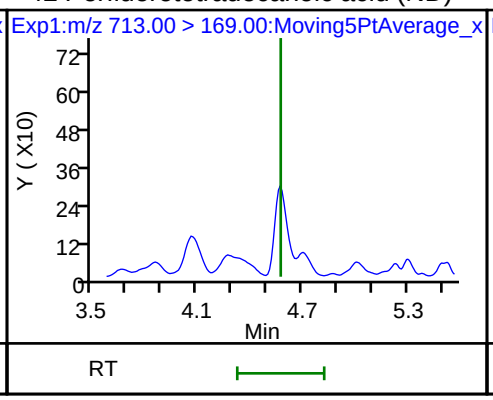
41 Perfluorotridecanoic acid (ND)



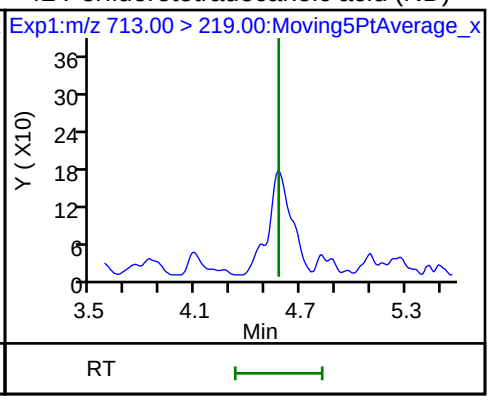
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

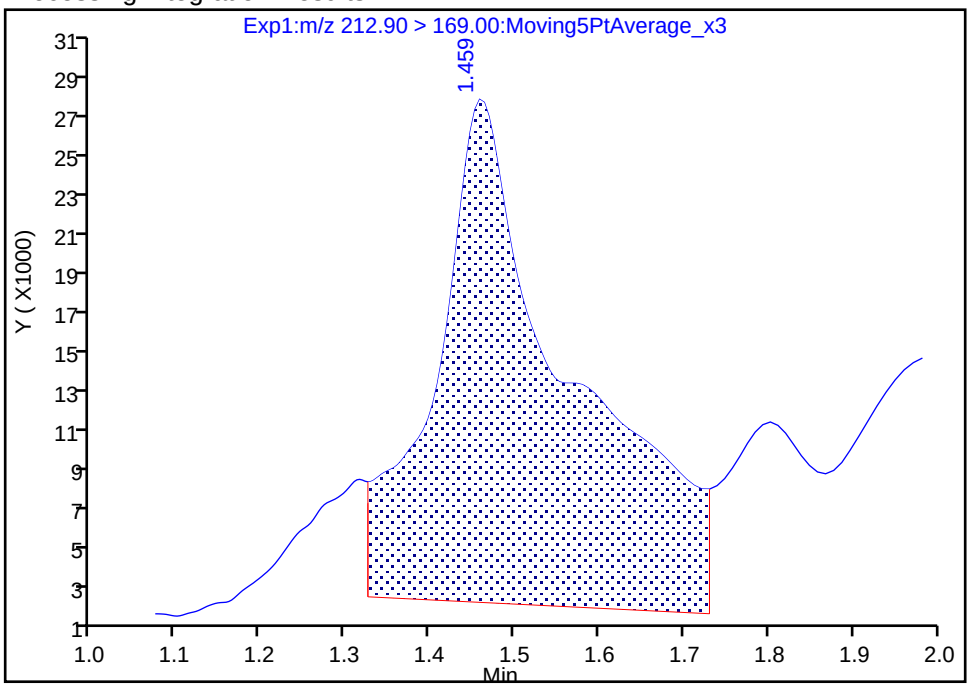
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_056.d				
Injection Date:	14-May-2018 18:47:10	Instrument ID:	A8_N		
Lims ID:	320-38630-A-1-A	Lab Sample ID:	320-38630-1		
Client ID:	GC-MW-102 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	39	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

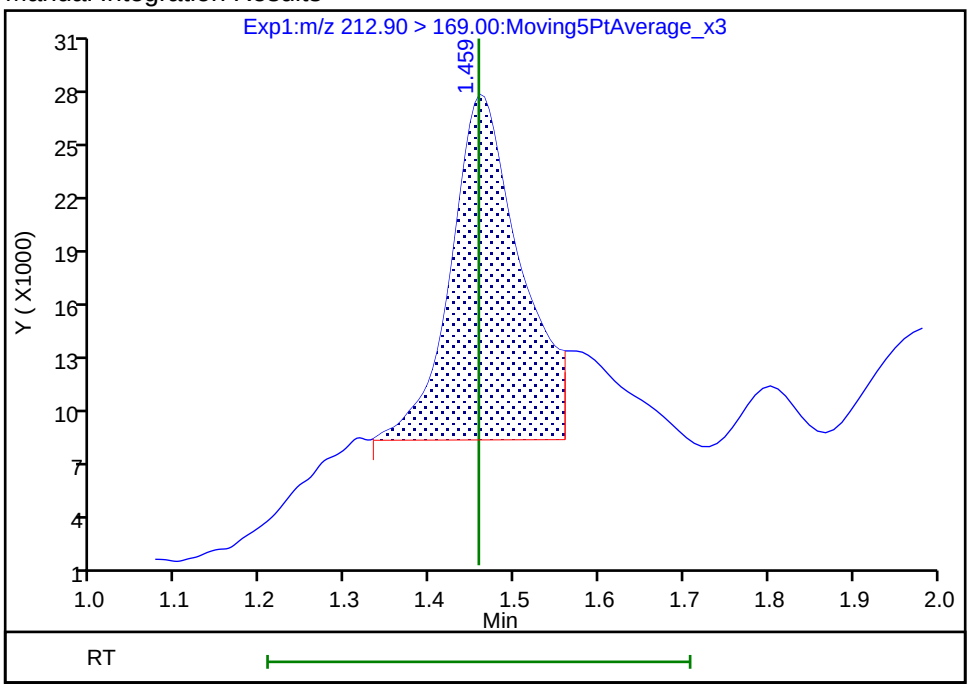
Processing Integration Results

RT: 1.46
Area: 281691
Amount: 0.191548
Amount Units: ng/ml



Manual Integration Results

RT: 1.46
Area: 108813
Amount: 0.073992
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:01:31

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

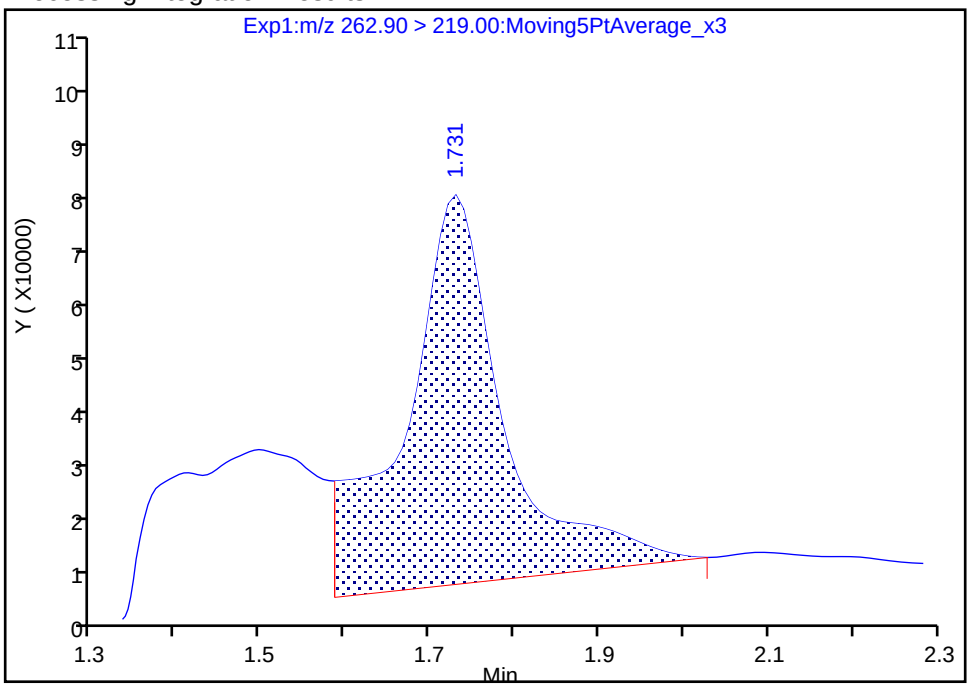
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_056.d				
Injection Date:	14-May-2018 18:47:10	Instrument ID:	A8_N		
Lims ID:	320-38630-A-1-A	Lab Sample ID:	320-38630-1		
Client ID:	GC-MW-102 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	39	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

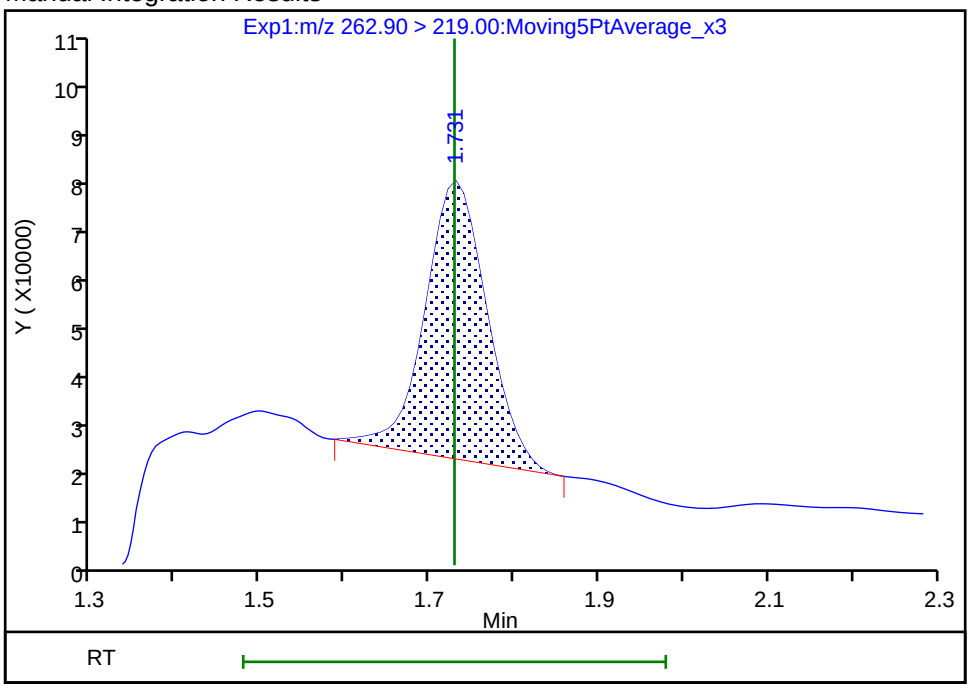
Processing Integration Results

RT: 1.73
Area: 545148
Amount: 0.335581
Amount Units: ng/ml



Manual Integration Results

RT: 1.73
Area: 268498
Amount: 0.165281
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:01:40

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

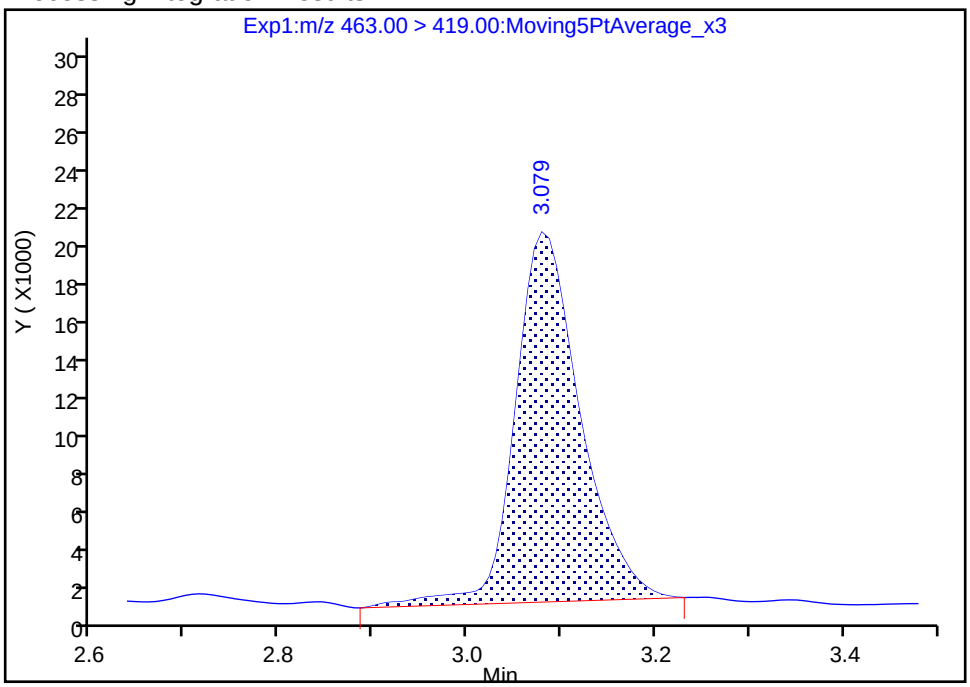
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_056.d				
Injection Date:	14-May-2018 18:47:10	Instrument ID:	A8_N		
Lims ID:	320-38630-A-1-A	Lab Sample ID:	320-38630-1		
Client ID:	GC-MW-102 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	39	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

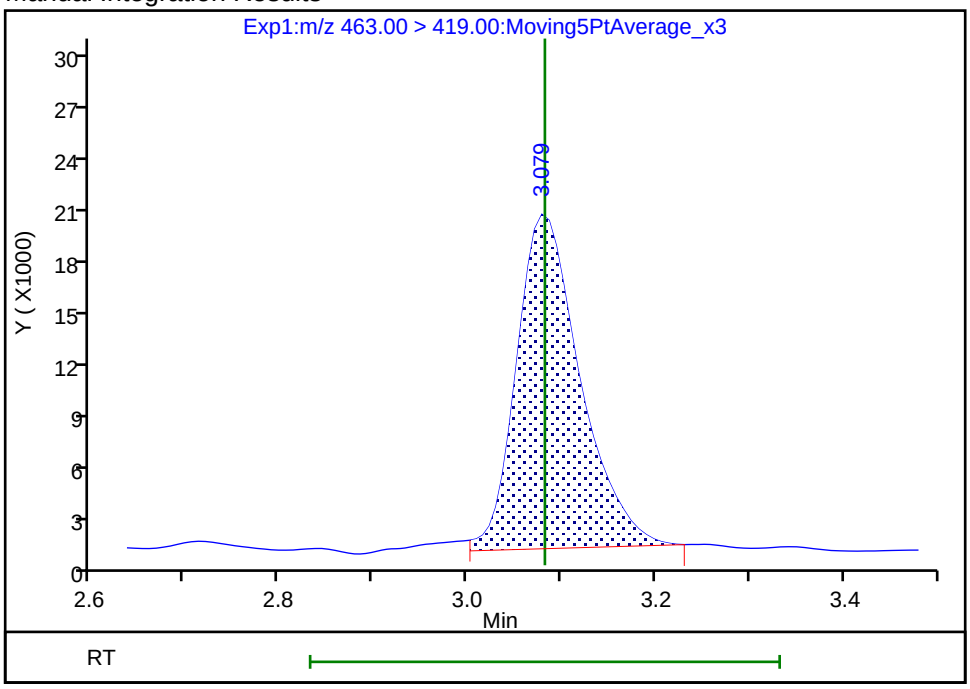
Processing Integration Results

RT: 3.08
Area: 91660
Amount: 0.070252
Amount Units: ng/ml



Manual Integration Results

RT: 3.08
Area: 89284
Amount: 0.068431
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:02:03

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

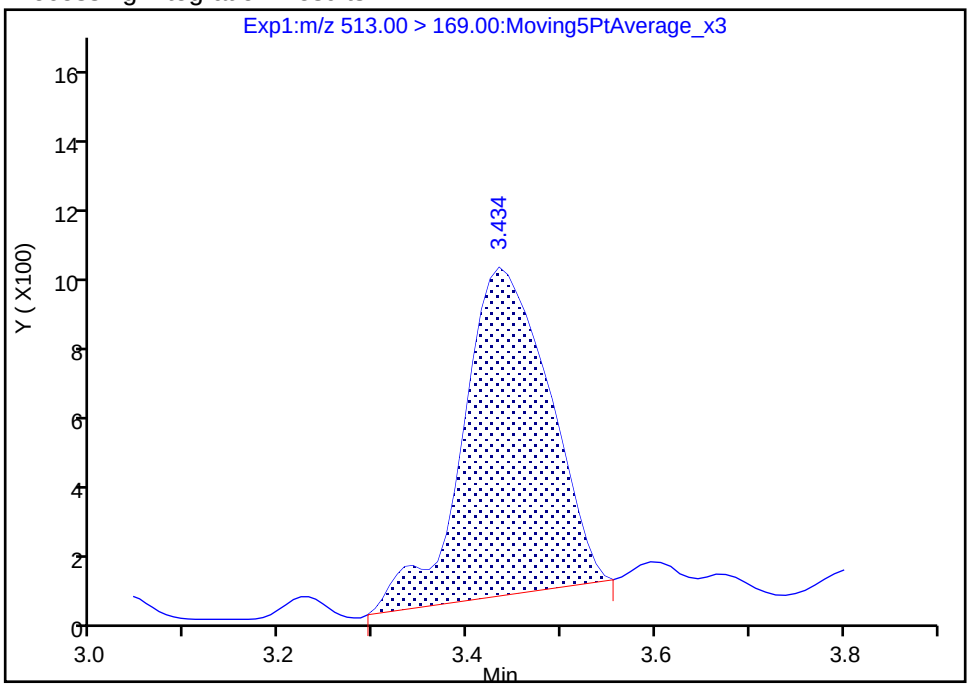
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_056.d				
Injection Date:	14-May-2018 18:47:10	Instrument ID:	A8_N		
Lims ID:	320-38630-A-1-A	Lab Sample ID:	320-38630-1		
Client ID:	GC-MW-102 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	39	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

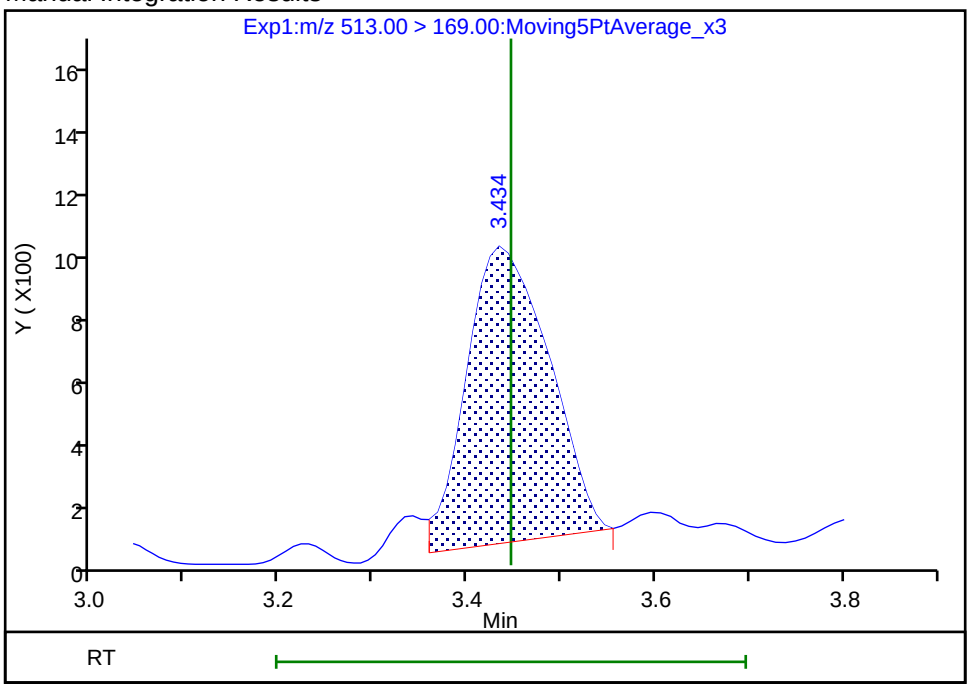
Processing Integration Results

RT: 3.43
Area: 5957
Amount: 0.040136
Amount Units: ng/ml



Manual Integration Results

RT: 3.43
Area: 5653
Amount: 0.040136
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:02:10

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

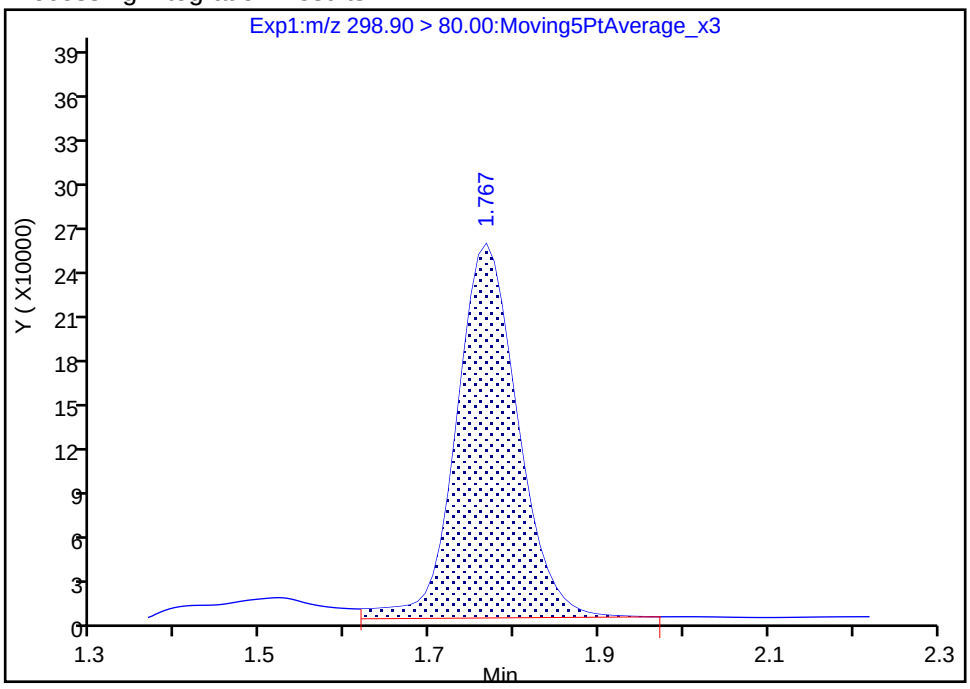
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_056.d				
Injection Date:	14-May-2018 18:47:10	Instrument ID:	A8_N		
Lims ID:	320-38630-A-1-A	Lab Sample ID:	320-38630-1		
Client ID:	GC-MW-102 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	39	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

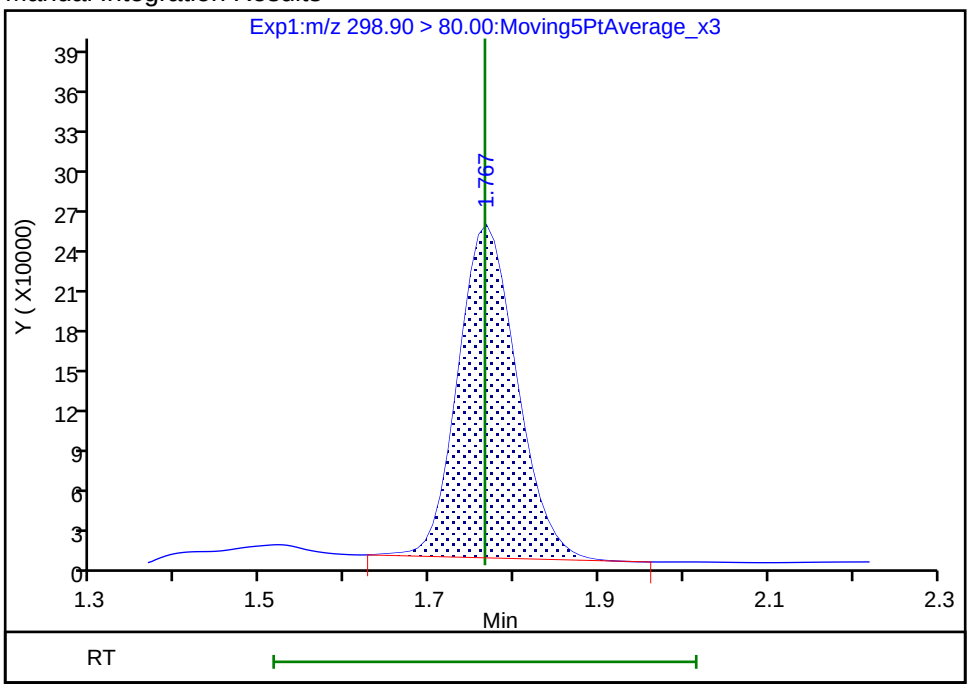
Processing Integration Results

RT: 1.77
Area: 1279799
Amount: 0.515129
Amount Units: ng/ml



Manual Integration Results

RT: 1.77
Area: 1208605
Amount: 0.486473
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:01:45

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) RE | Lab Sample ID: 320-38630-2 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_019.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:57

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 254.1(mL) | Date Analyzed: 05/13/2018 17:51

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*64*	*H*	*2.0*	*0.84*
27619-97-2	*6:2FTS*	*4.1*	*J H B*	*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	101		25-150
STL02279	M2-6:2FTS	110		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_019.d
Lims ID: 320-38630-B-2-A
Client ID: GC-MW-109 (WG)
Sample Type: Client
Inject. Date: 13-May-2018 17:51:25 ALS Bottle#: 13 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-2-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:38:59

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.450	1.458	-0.008	1.000	361349	0.2259			194	
D 1 13C4 PFBA										
217.00 > 172.00	1.450	1.458	-0.008	1.000	4271730	1.82		72.8	37524	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.726	1.729	-0.003	1.000	458440	0.2893			109	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.726	1.729	-0.003	0.563	3351995	2.24		89.8	44555	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.762	1.766	-0.004	1.000	399964	0.1576			196	M
298.90 > 99.00	1.762	1.766	-0.004	1.000	168945		2.37(1.25-3.74)		338	
D 47 13C3-PFBS										
301.90 > 83.00	1.762	1.766	-0.004	1.000	74750	2.21		94.9	282	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.011	2.015	-0.004	1.000	539938	0.3579			290	
313.00 > 119.00	2.011	2.015	-0.004	1.000	50326		10.73(5.03-15.10)		464	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.015	-0.004	1.000	3759769	2.39		95.7	75778	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.342	2.346	-0.004	1.000	576761	0.3653			483	
363.00 > 169.00	2.342	2.346	-0.004	1.000	229197		2.52(1.13-3.40)		1763	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.346	-0.004	1.000	3650076	2.52		101	85606	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.355	2.359	-0.004	1.000	103269	0.0488			124	
399.00 > 99.00	2.355	2.359	-0.004	1.000	29481		3.50(1.50-4.49)		84.0	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.359	-0.004	1.000	4404349	2.33		98.5	66668	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.673	2.683	-0.010	1.000	53568	0.1041			478	
D 12 M2-6:2FTS										
429.00 > 81.00	2.673	2.683	-0.010	1.000	737572	2.62		110	5147	
* 62 13C2-PFOA										
415.00 > 370.00	2.696	2.706	-0.010		3634887	2.50			56240	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.696	2.706	-0.010	1.000	2616308	1.63			1286	
413.00 > 169.00	2.696	2.706	-0.010	1.000	1366458		1.91(0.84-2.52)		5507	
D 14 13C4 PFOA										
417.00 > 372.00	2.696	2.706	-0.010	1.000	3472935	2.54		101	74237	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.703	2.713	-0.010	1.000	28180	0.0168			104	
449.00 > 99.00	2.703	2.713	-0.010	1.000	7802		3.61(1.94-5.82)		77.4	
20 Perfluorononanoic acid										
463.00 > 419.00	3.067	3.078	-0.011	1.000	217074	0.1828			309	
463.00 > 169.00	3.067	3.078	-0.011	1.000	52437		4.14(1.90-5.69)		746	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.067	3.078	-0.011	1.000	610395	0.4336			2471	
499.00 > 99.00	3.067	3.078	-0.011	1.000	116655		5.23(2.31-6.93)		890	
D 19 13C5 PFNA										
468.00 > 423.00	3.067	3.078	-0.011	1.000	2917782	2.53		101	45185	
D 18 13C4 PFOS										
503.00 > 80.00	3.067	3.078	-0.011	1.000	3067828	2.26		94.6	24140	
D 21 13C8 FOSA										
506.00 > 78.00	3.401	3.414	-0.013	1.000	4369004	2.28		91.0	34115	
D 26 M2-8:2FTS										
529.00 > 81.00	3.419	3.433	-0.014	1.000	974837	2.63		110	10437	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.429	3.442	-0.013	1.000	155693	0.1588			633	
513.00 > 169.00	3.429	3.442	-0.013	1.000	31621		4.92(2.36-7.09)		1004	
D 23 13C2 PFDA										
515.00 > 470.00	3.429	3.442	-0.013	1.000	2389854	2.37		94.8	42237	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.577	3.605	-0.028	1.000	955497	2.16		86.5	24794	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.753	3.769	-0.016	1.000	1141683	2.36		94.4	2867	
D 30 13C2 PFUnA										
565.00 > 520.00	3.763	3.780	-0.017	1.000	1916310	2.33		93.0	42991	
D 36 13C2 PFDoA										
615.00 > 570.00	4.061	4.069	-0.008	1.000	1995399	2.32		92.9	15933	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2244702	2.40		95.9	13567	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-May-2018 10:44:16 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_019.d

Injection Date: 13-May-2018 17:51:25 Instrument ID: A8_N

Lims ID: 320-38630-B-2-A Lab Sample ID: 320-38630-2

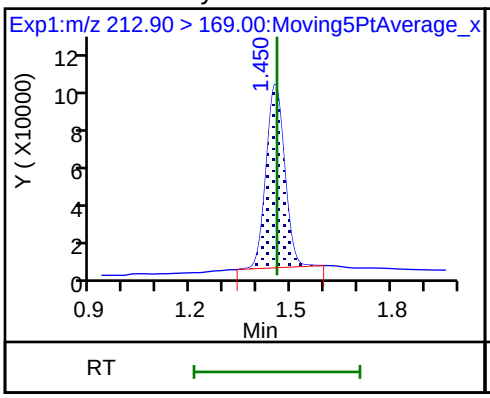
Client ID: GC-MW-109 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 6

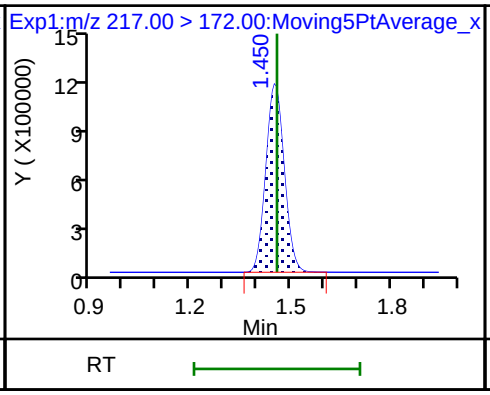
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

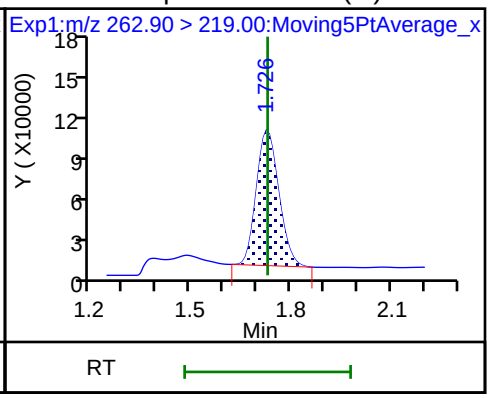
2 Perfluorobutyric acid



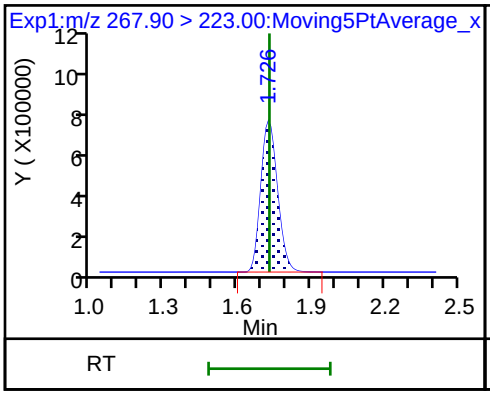
D 1 13C4 PFBA



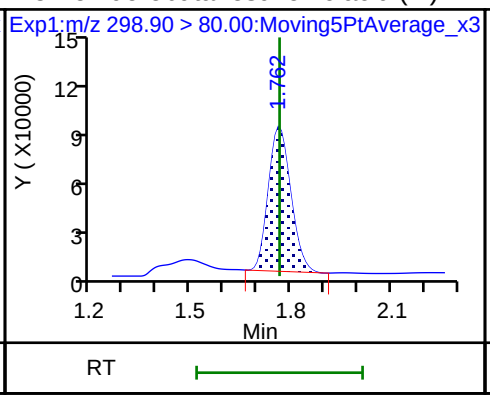
4 Perfluoropentanoic acid (M)



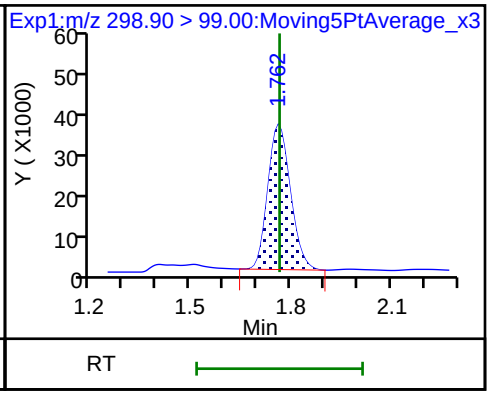
D 3 13C5-PFPeA



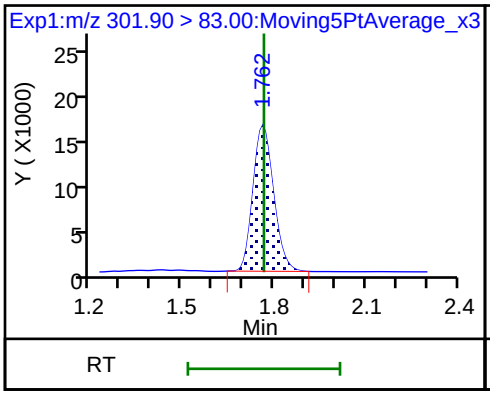
5 Perfluorobutanesulfonic acid (M)



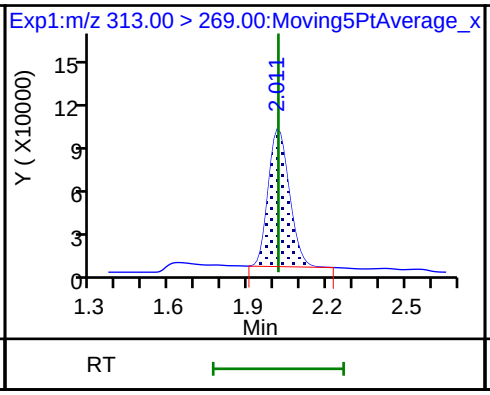
5 Perfluorobutanesulfonic acid



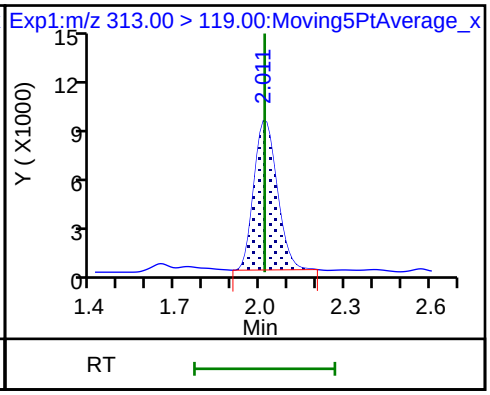
D 47 13C3-PFBS



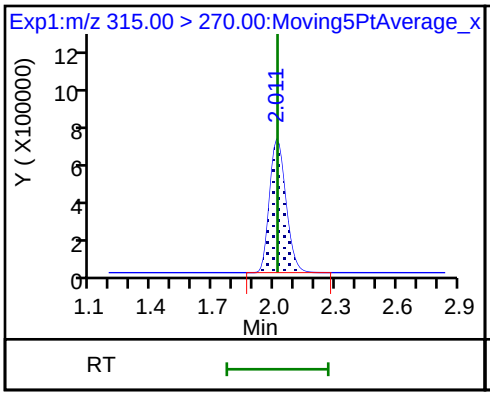
6 Perfluorohexanoic acid



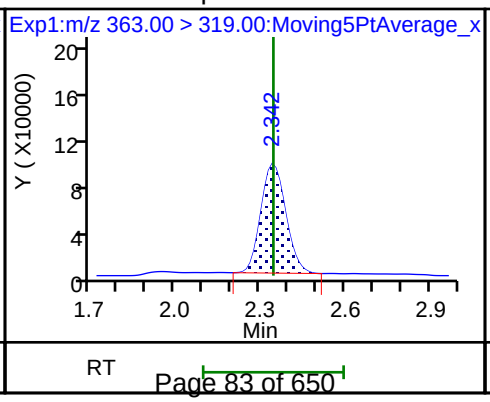
6 Perfluorohexanoic acid



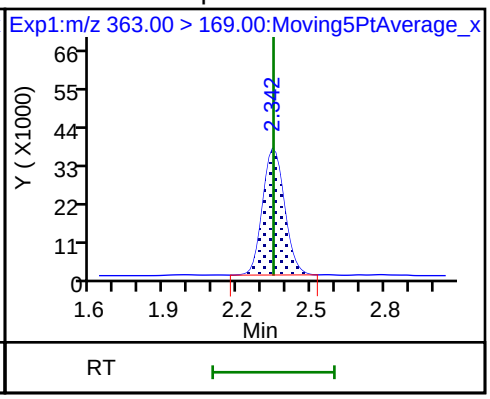
D 7 13C2 PFHxA



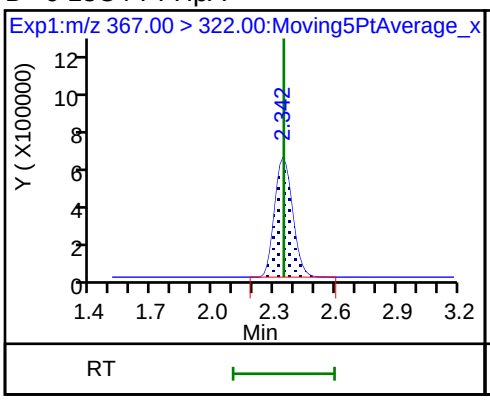
10 Perfluoroheptanoic acid



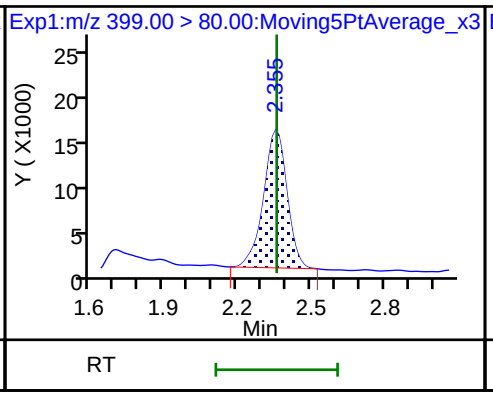
10 Perfluoroheptanoic acid



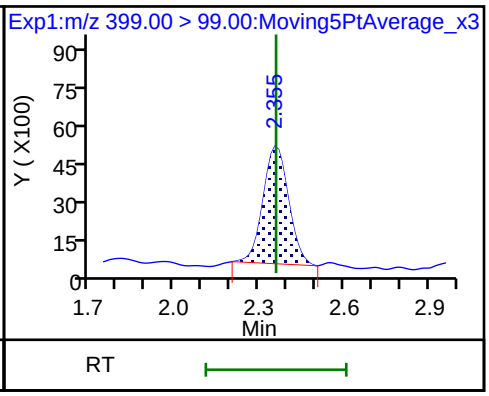
D 9 13C4-PFHpA



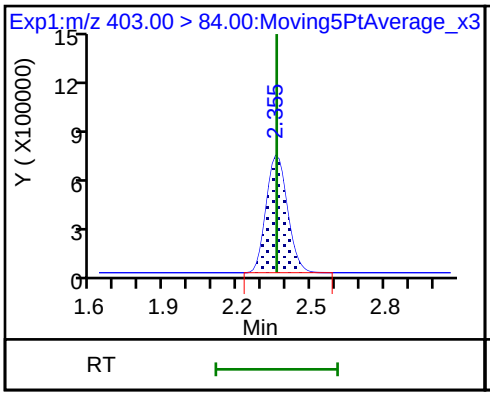
8 Perfluorohexanesulfonic acid



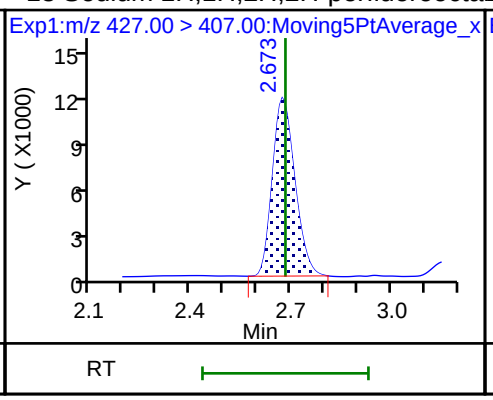
8 Perfluorohexanesulfonic acid



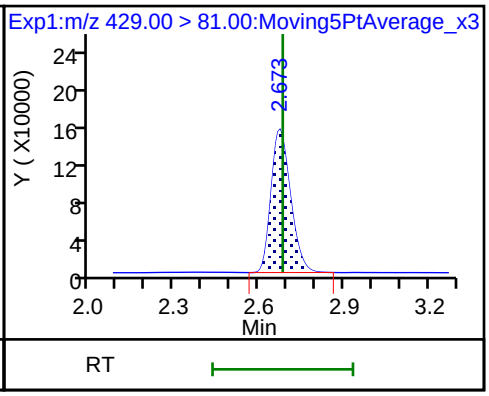
D 11 18O2 PFHxS



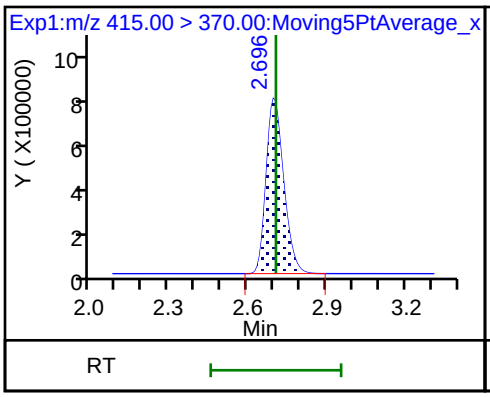
13 Sodium 1H,1H,2H,2H-perfluorooctane



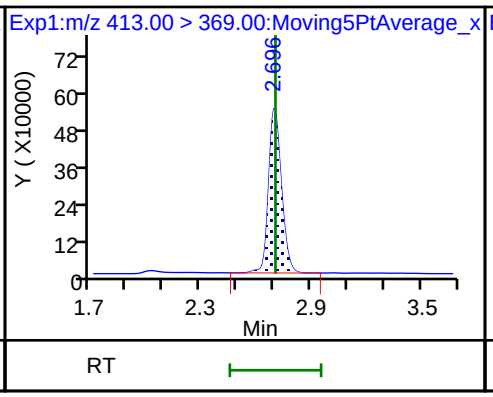
D 12 M2-6:2FTS



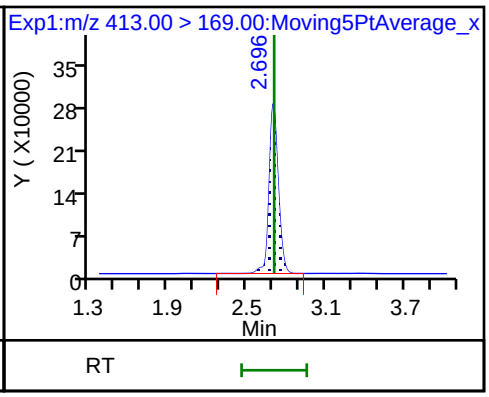
* 62 13C2-PFOA



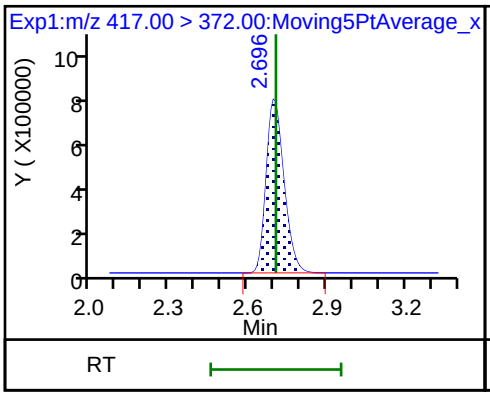
15 Perfluorooctanoic acid



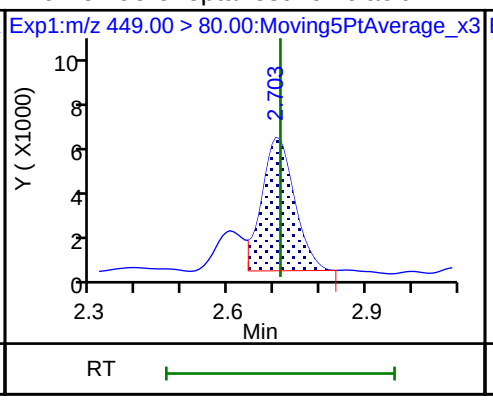
15 Perfluorooctanoic acid



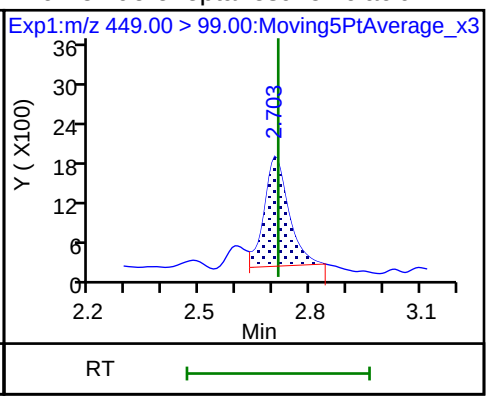
D 14 13C4 PFOA



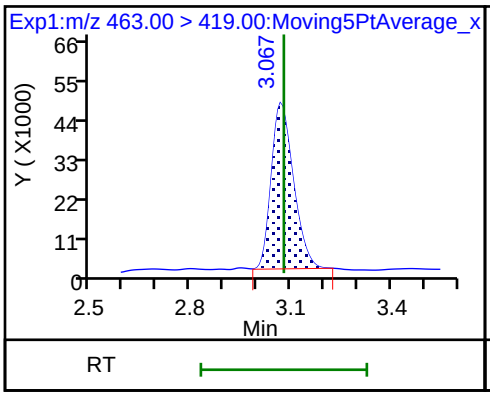
16 Perfluoroheptanesulfonic acid



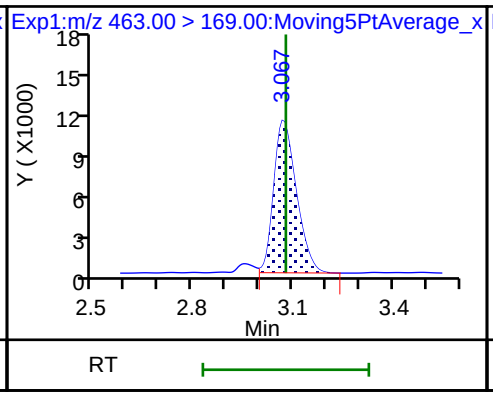
16 Perfluoroheptanesulfonic acid



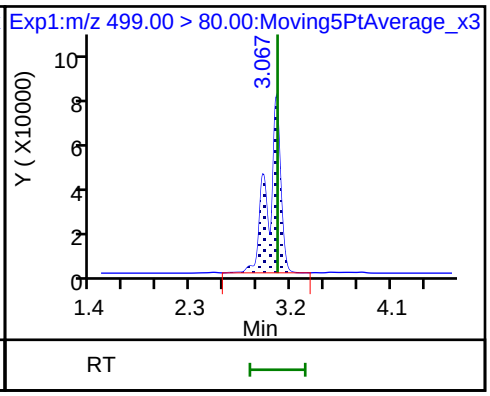
20 Perfluorononanoic acid



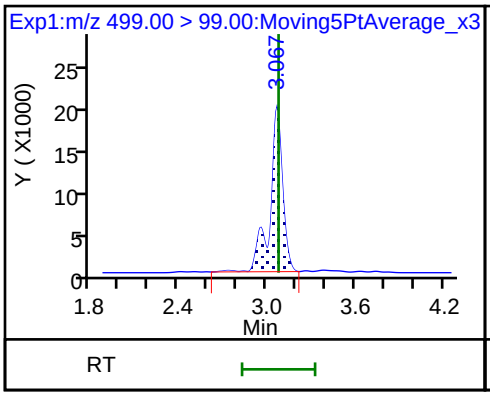
20 Perfluorononanoic acid



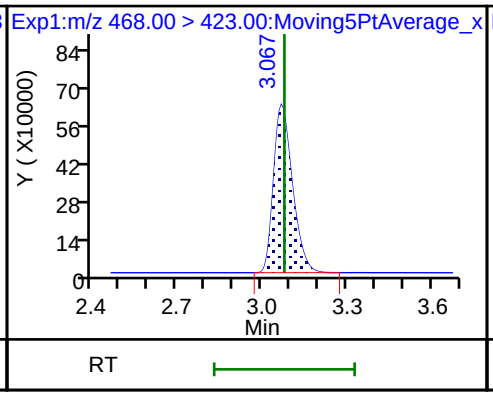
17 Perfluorooctane sulfonic acid



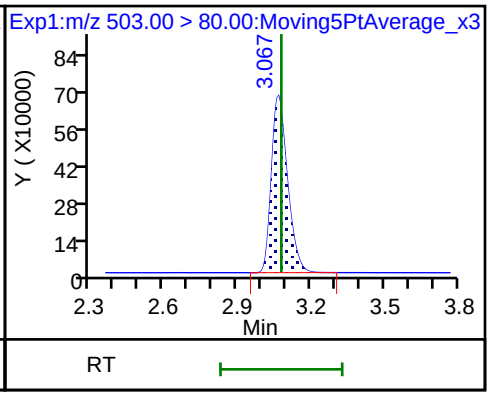
17 Perfluorooctane sulfonic acid



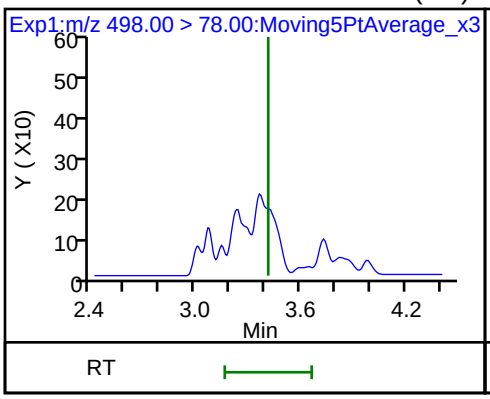
D 19 13C5 PFNA



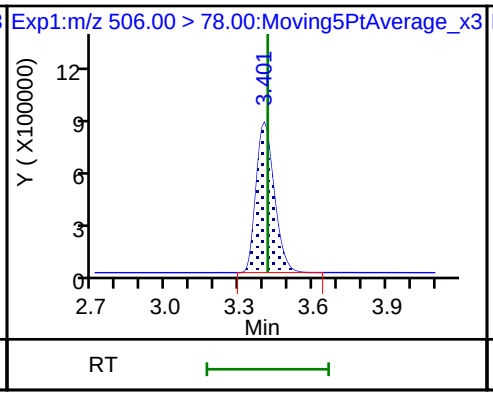
D 18 13C4 PFOS



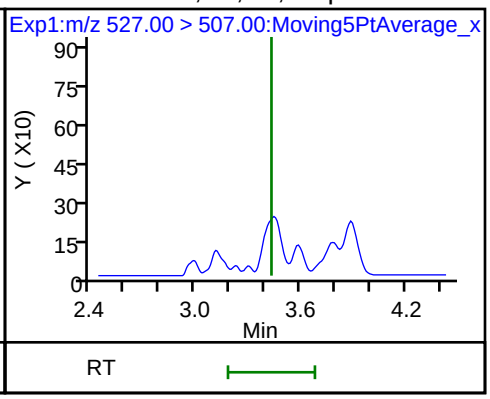
22 Perfluorooctane Sulfonamide (ND)



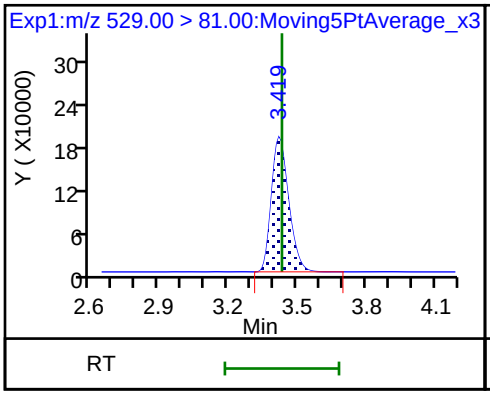
D 21 13C8 FOSA



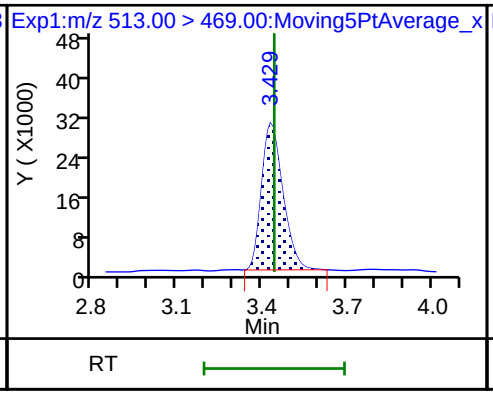
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



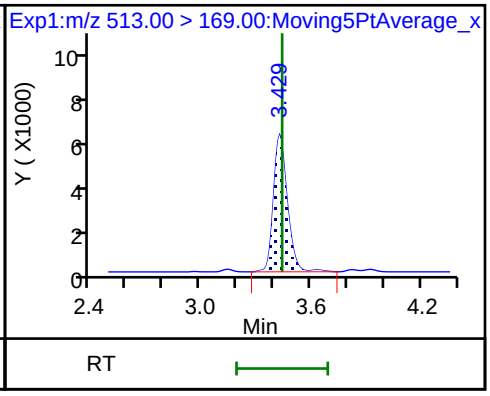
D 26 M2-8:2FTS



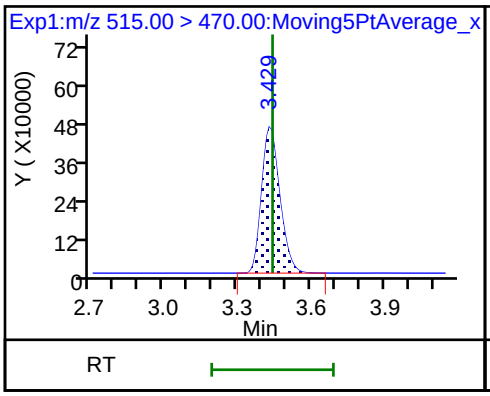
24 Perfluorodecanoic acid



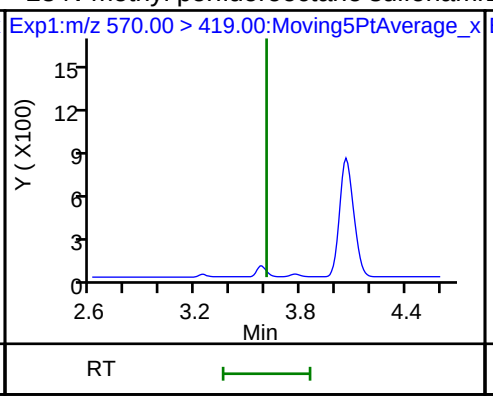
24 Perfluorodecanoic acid



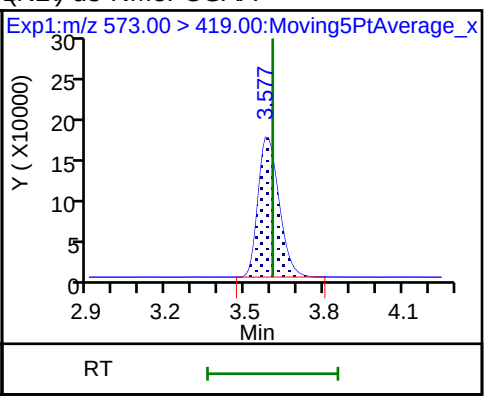
D 23 13C2 PFDA



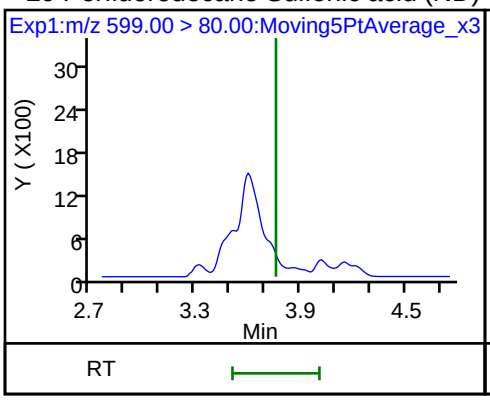
28 N-methyl perfluorooctane sulfonamid (ND)



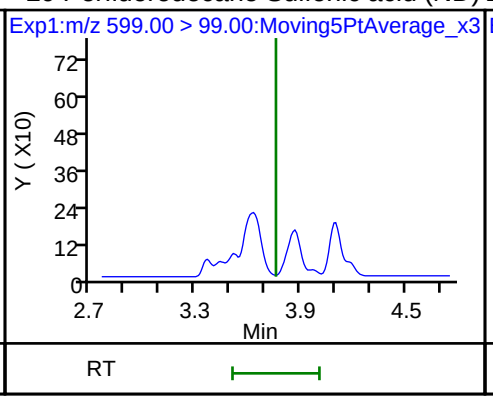
D 27 d3-NMeFOSAA



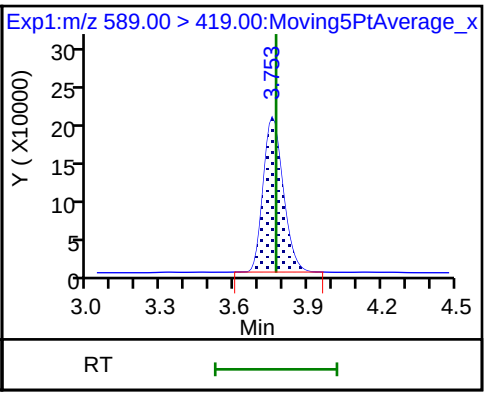
29 Perfluorodecane Sulfonic acid (ND)



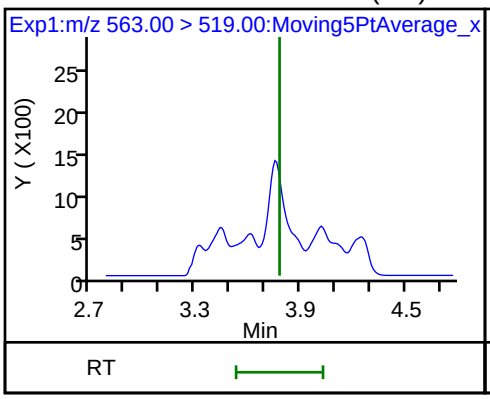
29 Perfluorodecane Sulfonic acid (ND)



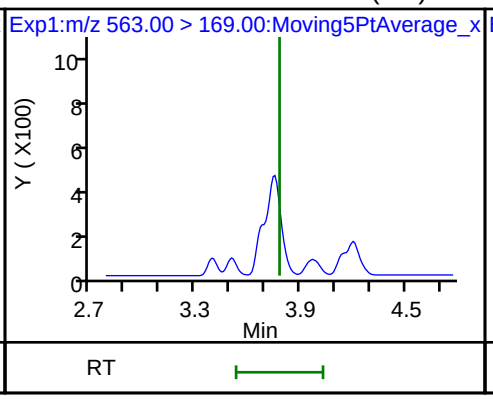
D 32 d5-NEtFOSAA



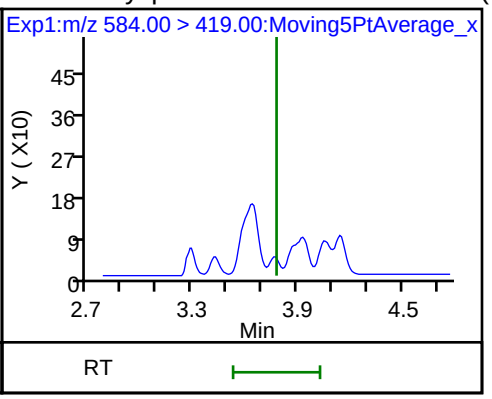
31 Perfluoroundecanoic acid (ND)



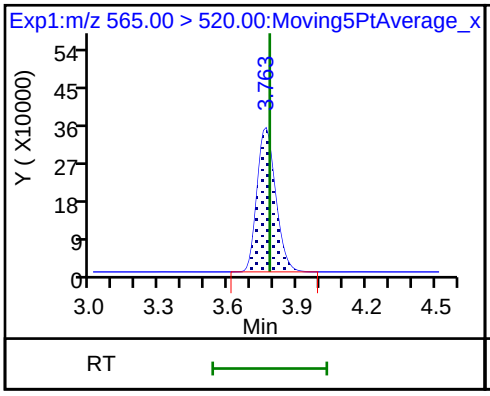
31 Perfluoroundecanoic acid (ND)



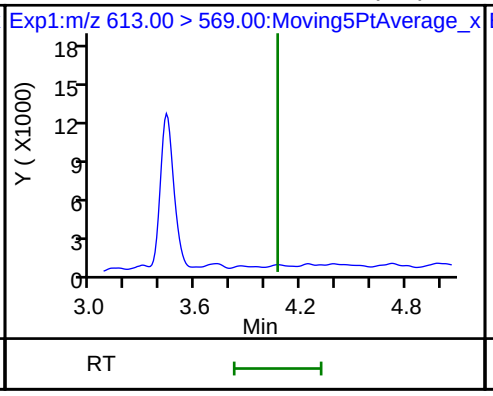
33 N-ethyl perfluorooctane sulfonamid (ND)



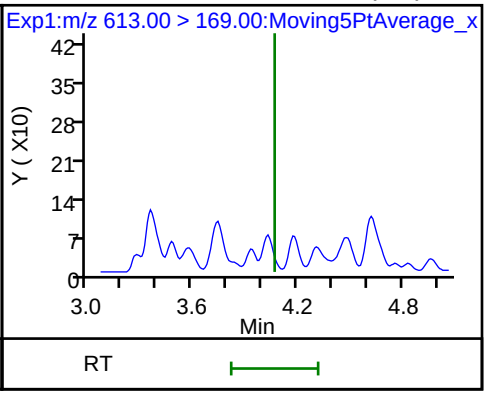
D 30 13C2 PFUnA



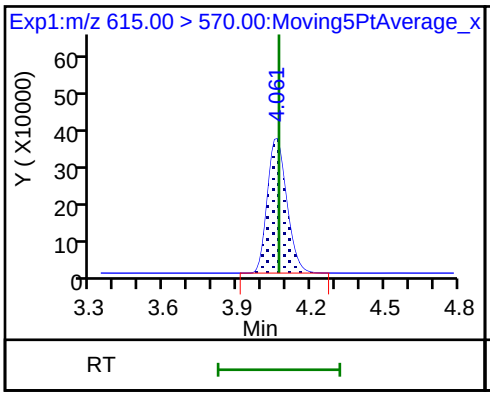
37 Perfluorododecanoic acid (ND)



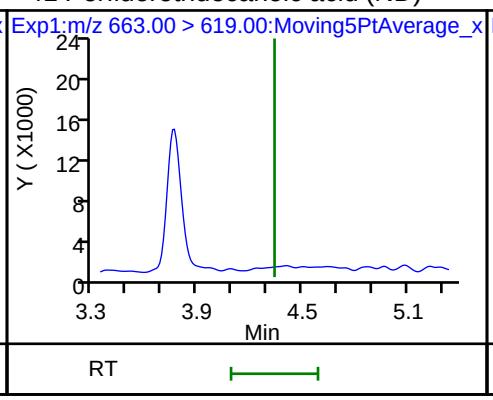
37 Perfluorododecanoic acid (ND)



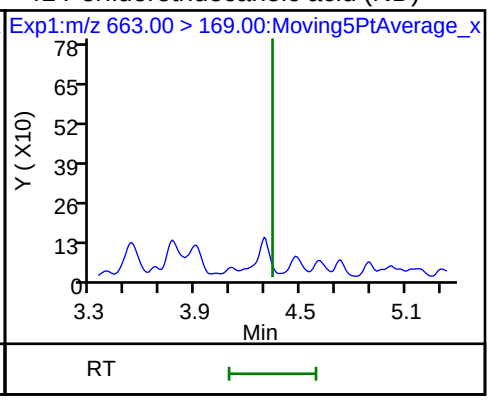
D 36 13C2 PFDoA



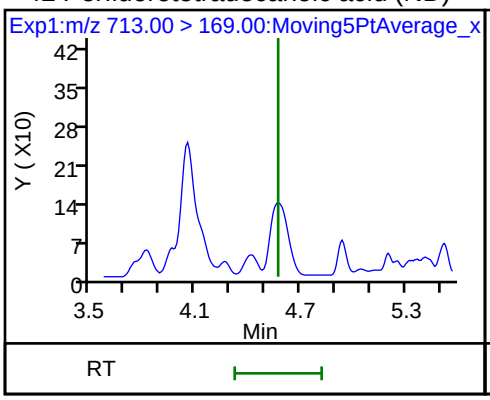
41 Perfluorotridecanoic acid (ND)



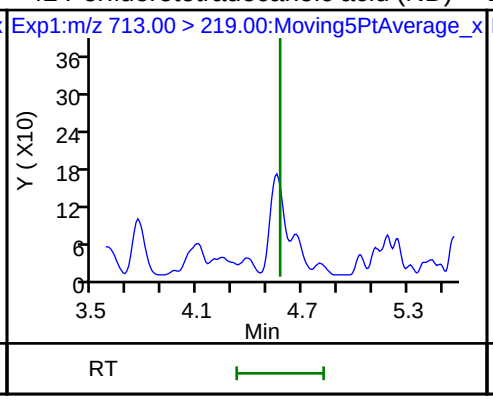
41 Perfluorotridecanoic acid (ND)



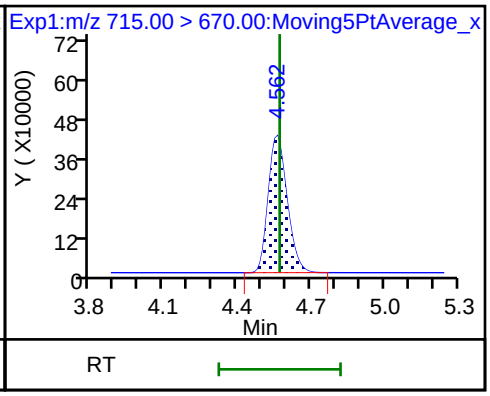
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) | Lab Sample ID: 320-38630-2

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_057.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:57

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.9(mL) | Date Analyzed: 05/14/2018 18:54

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	9.0		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	11		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	14		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	16		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	67	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	7.2		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	6.5		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.4		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.0	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.70	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	18	B	2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	6.4	J B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) | Lab Sample ID: 320-38630-2

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_057.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:57

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.9(mL) | Date Analyzed: 05/14/2018 18:54

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	78		25-150
STL01893	13C5 PFPeA	100		25-150
STL00993	13C2 PFHxA	102		25-150
STL01892	13C4-PFHpA	104		25-150
STL00990	13C4 PFOA	104		25-150
STL00995	13C5 PFNA	103		25-150
STL00996	13C2 PFDA	102		25-150
STL00997	13C2 PFUnA	99		25-150
STL00998	13C2 PFDoA	96		25-150
STL02116	13C2-PFTeDA	103		25-150
STL02337	13C3-PFBS	97		25-150
STL00994	18O2 PFHxS	99		25-150
STL00991	13C4 PFOS	95		25-150
STL01056	13C8 FOSA	93		25-150
STL02118	d3-NMeFOSAA	94		25-150
STL02117	d5-NEtFOSAA	103		25-150
STL02279	M2-6:2FTS	115		25-150
STL02280	M2-8:2FTS	105		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_057.d
Lims ID: 320-38630-A-2-A
Client ID: GC-MW-109 (WG)
Sample Type: Client
Inject. Date: 14-May-2018 18:54:59 ALS Bottle#: 40 Worklist Smp#: 16
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-2-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:33 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:02:52

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.452	0.006	1.000	4695278	1.96		78.4	38104	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.458	1.458	0.0	1.000	388443	0.2226			159	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.728	0.002	0.561	3719334	2.51		100	38469	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.739	1.729	0.010	1.005	500719	0.2767			114	M
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.764	0.002	1.000	79289	2.27		97.4	252	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.765	0.001	1.000	417304	0.1586			204	
298.90 > 99.00	1.766	1.765	0.001	1.000	176644		2.36(1.25-3.74)		365	
D 7 13C2 PFHxA										
315.00 > 270.00	2.027	2.014	0.013	1.000	3947074	2.54		102	86561	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.027	2.015	0.012	1.000	572526	0.3476			284	
313.00 > 119.00	2.016	2.015	0.001	0.994	53942		10.61(5.03-15.10)		506	
D 9 13C4-PFHpA										
367.00 > 322.00	2.360	2.345	0.015	1.000	3872449	2.60		104	70048	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.358	0.014	1.000	4649411	2.35		99.4	77426	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.360	2.359	0.001	1.000	648711	0.3949			491	
363.00 > 169.00	2.360	2.359	0.001	1.000	253002		2.56(1.13-3.40)		1331	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.372	2.373	-0.001	1.000	112098	0.0506			132	
399.00 > 99.00	2.372	2.373	-0.001	1.000	35906		3.12(1.50-4.49)		62.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.690	2.682	0.008	1.000	801120	2.73		115	5317	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.690	2.683	0.007	1.000	90637	0.1596			694	
D 14 13C4 PFOA										
417.00 > 372.00	2.713	2.704	0.009	1.000	3637339	2.61		104	59786	
* 62 13C2-PFOA										
415.00 > 370.00	2.713	2.713	0.0		3700990	2.50			60359	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.713	0.0	1.000	2886009	1.65			1278	
413.00 > 169.00	2.713	2.713	0.0	1.000	1533622		1.88(0.84-2.52)		7522	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.720	2.720	0.0	1.000	29926	0.0174			101	
449.00 > 99.00	2.713	2.720	-0.007	0.997	9985		3.00(1.94-5.82)		71.9	
D 18 13C4 PFOS										
503.00 > 80.00	3.085	3.073	0.012	1.000	3120969	2.26		94.7	20604	
D 19 13C5 PFNA										
468.00 > 423.00	3.085	3.081	0.004	1.000	2989456	2.56		103	45818	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.085	3.082	0.003	1.000	637953	0.4376			2601	
499.00 > 99.00	3.085	3.082	0.003	1.000	115442		5.53(2.31-6.93)		654	
20 Perfluorononanoic acid										
463.00 > 419.00	3.085	3.082	0.003	1.000	225975	0.1793			313	
463.00 > 169.00	3.085	3.082	0.003	1.000	48448		4.66(1.90-5.69)		691	
D 21 13C8 FOSA										
506.00 > 78.00	3.413	3.407	0.006	1.000	4661143	2.33		93.4	49891	
D 26 M2-8:2FTS										
529.00 > 81.00	3.441	3.435	0.006	1.000	963461	2.52		105	7741	
D 23 13C2 PFDA										
515.00 > 470.00	3.451	3.444	0.007	1.000	2550396	2.54		102	44665	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.451	3.446	0.005	1.000	169133	0.1620			755	
513.00 > 169.00	3.441	3.446	-0.005	0.997	29847		5.67(2.36-7.09)		703	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.604	3.596	0.008	1.000	1065054	2.34		93.7	19569	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.768	3.771	-0.003	1.000	1252133	2.58		103	3127	
D 30 13C2 PFUnA										
565.00 > 520.00	3.779	3.771	0.008	1.000	2088548	2.49		99.5	53790	
D 36 13C2 PFDoA										
615.00 > 570.00	4.078	4.071	0.007	1.000	2104042	2.40		96.0	22622	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.581	4.574	0.007	1.000	2464645	2.58		103	15456	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:09:54 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_057.d

Injection Date: 14-May-2018 18:54:59 Instrument ID: A8_N

Lims ID: 320-38630-A-2-A Lab Sample ID: 320-38630-2

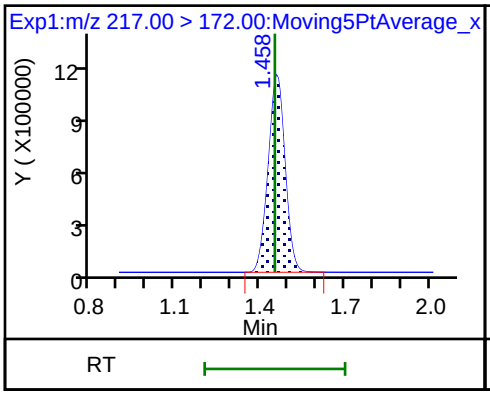
Client ID: GC-MW-109 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 40 Worklist Smp#: 16

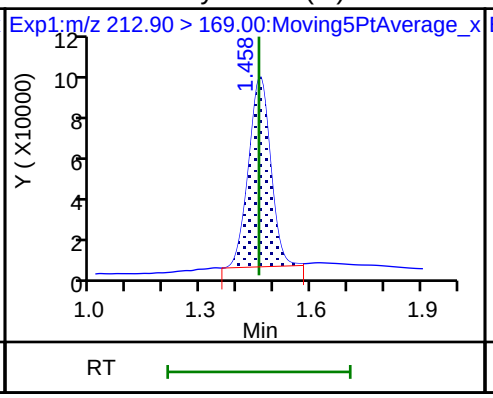
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

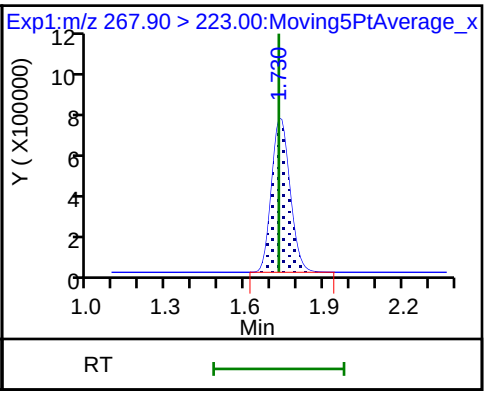
D 1 13C4 PFBA



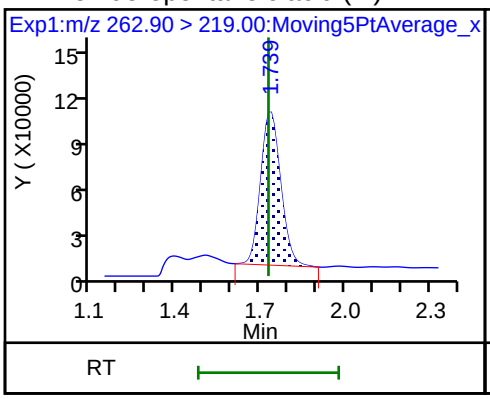
2 Perfluorobutyric acid (M)



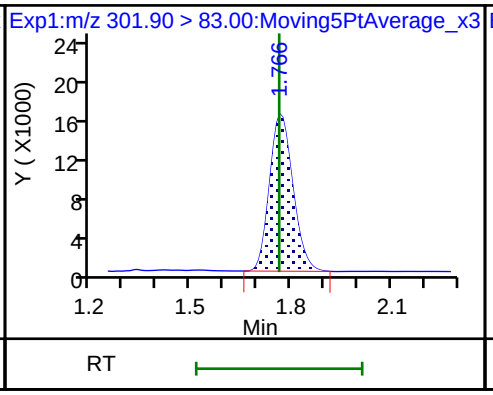
D 3 13C5-PFPeA



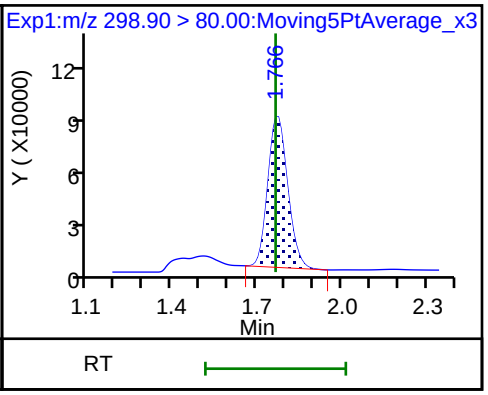
4 Perfluoropentanoic acid (M)



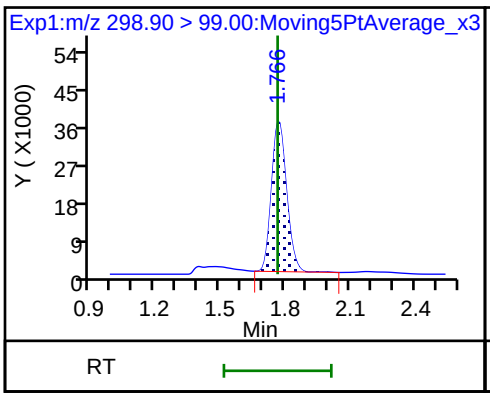
D 47 13C3-PFBS



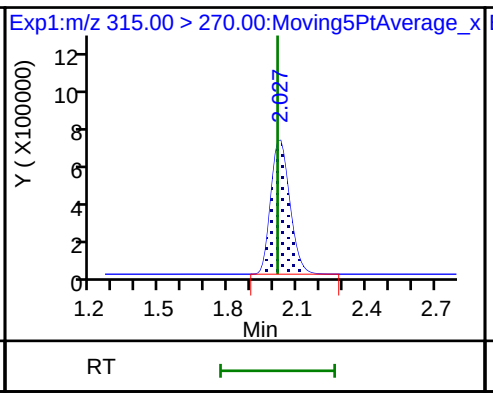
5 Perfluorobutanesulfonic acid



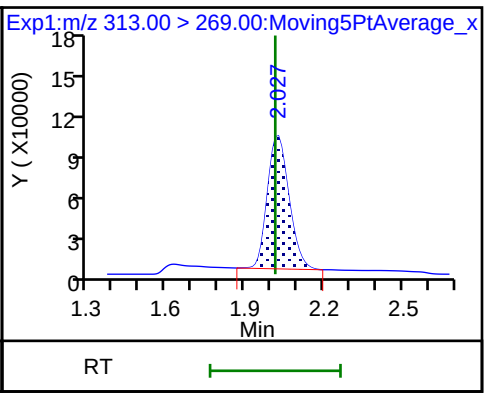
5 Perfluorobutanesulfonic acid



D 7 13C2 PFHxA



6 Perfluorohexanoic acid



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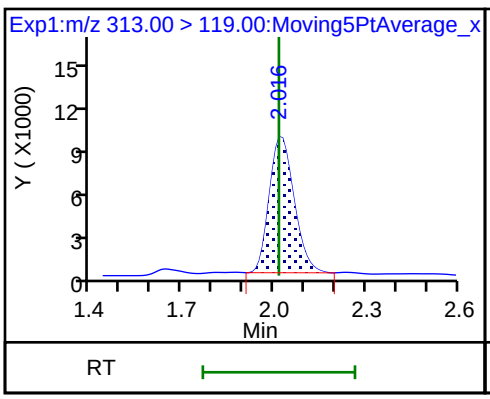
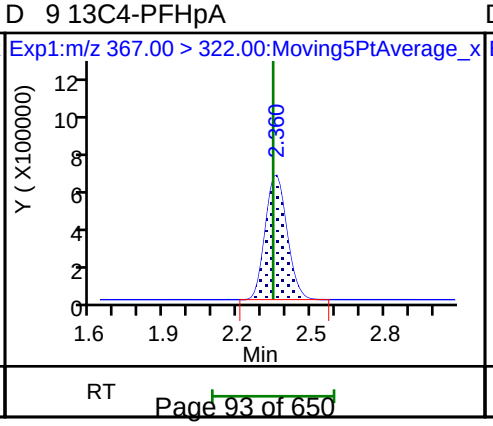
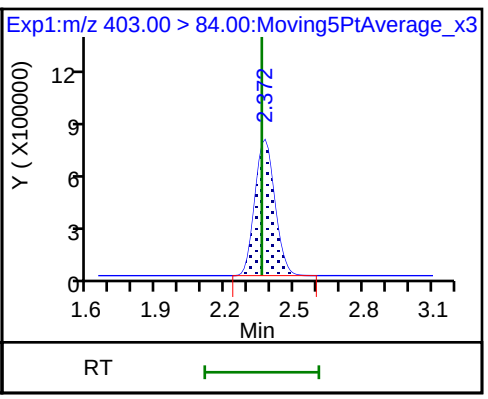


D 9 13C4-PFHpA



D 11 18O2 PFHxS



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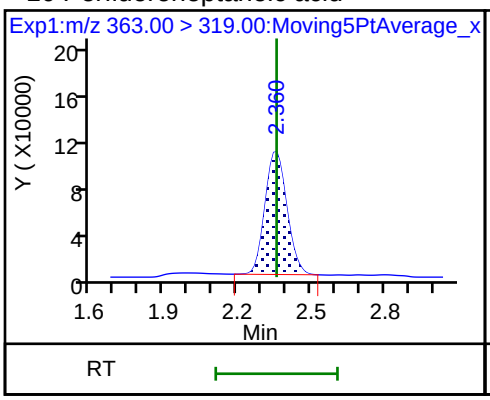

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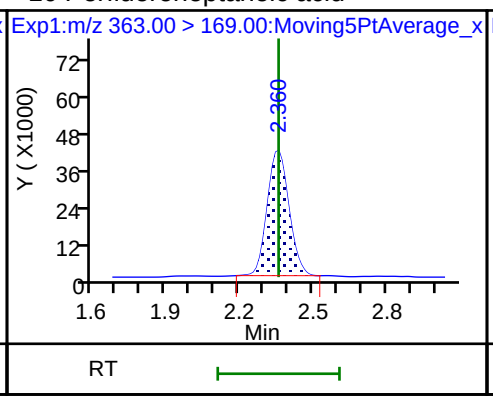
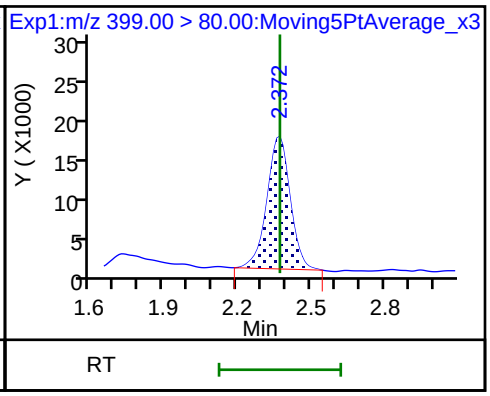


8 Perfluorohexanesulfonic acid



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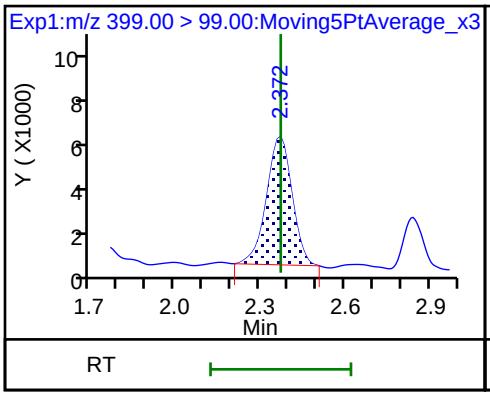
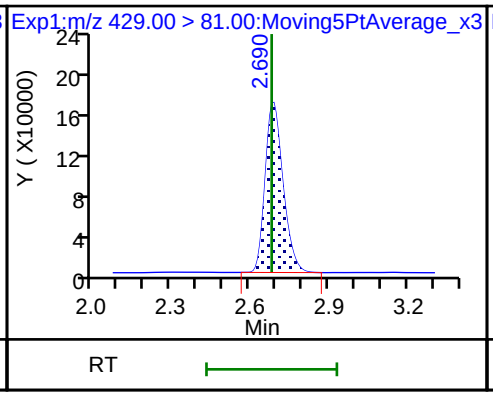
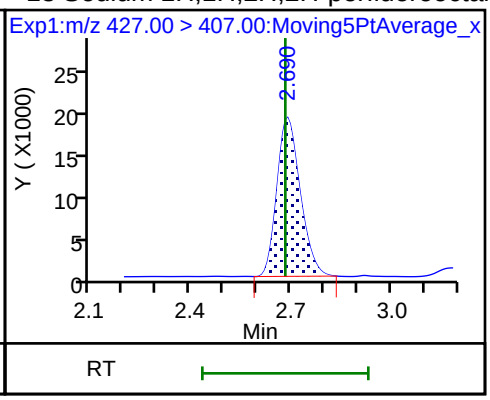


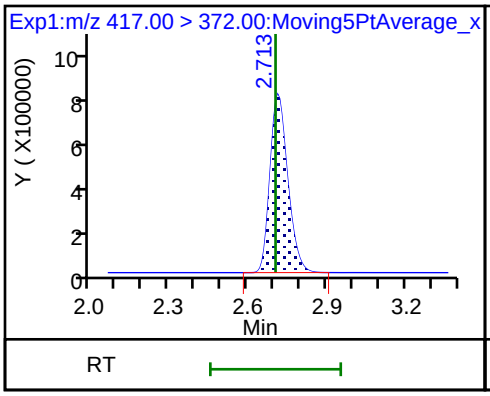
D 12 M2-6:2FTS



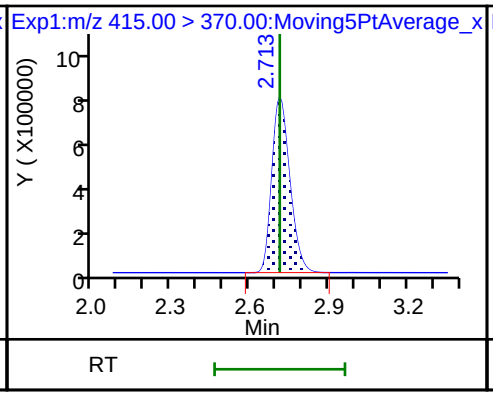
13 Sodium 1H,1H,2H,2H-perfluorooctane



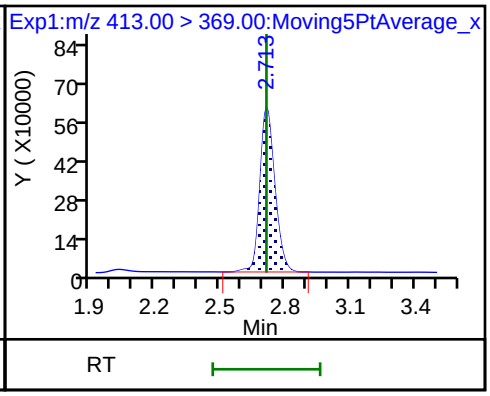
D 14 13C4 PFOA



* 62 13C2-PFOA



15 Perfluorooctanoic acid



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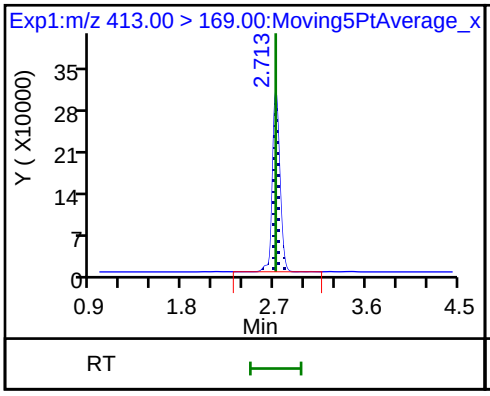
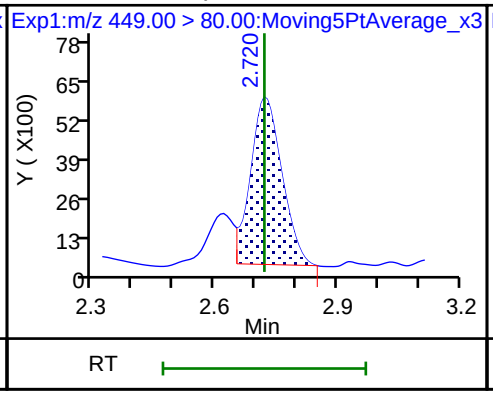
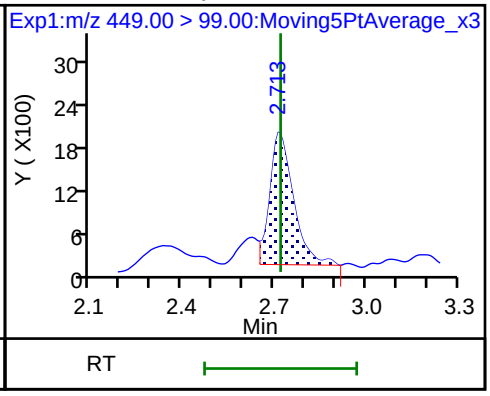


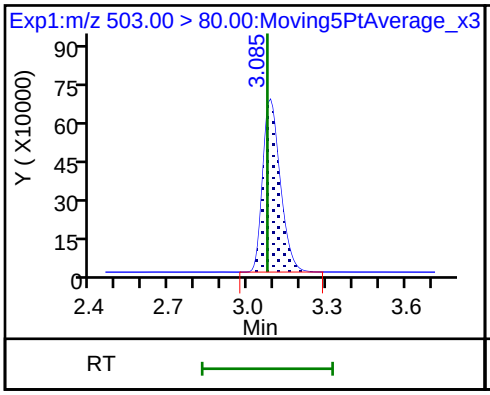
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 18 13C4 PFOS



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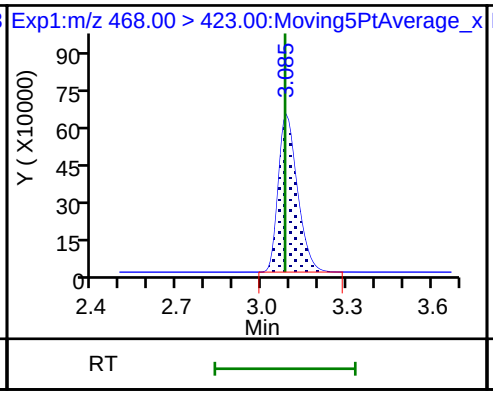
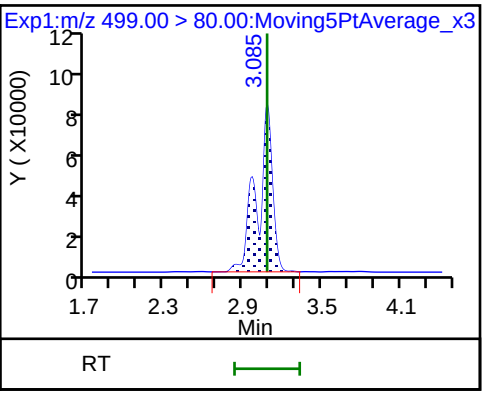


17 Perfluorooctane sulfonic acid



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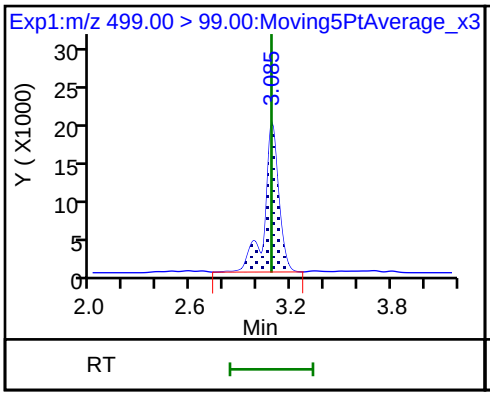
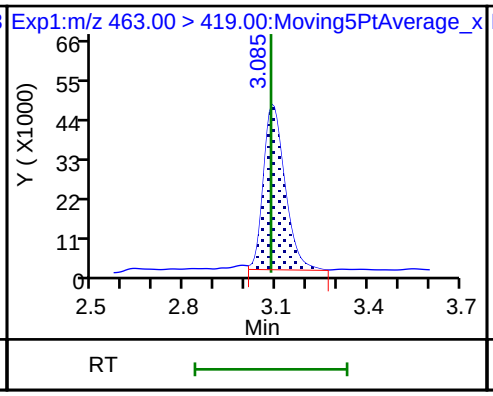


20 Perfluorononanoic acid



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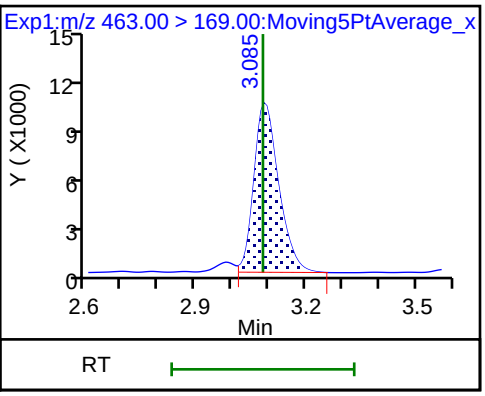
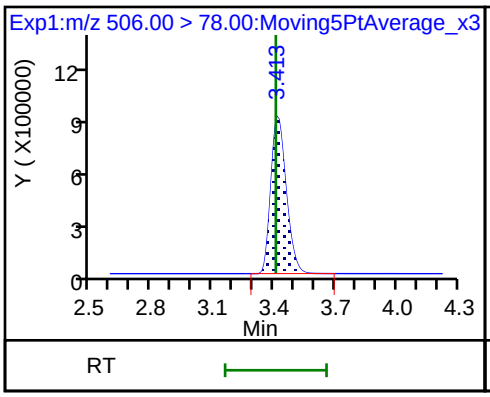
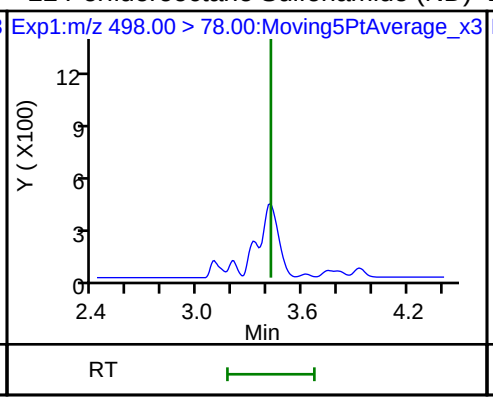


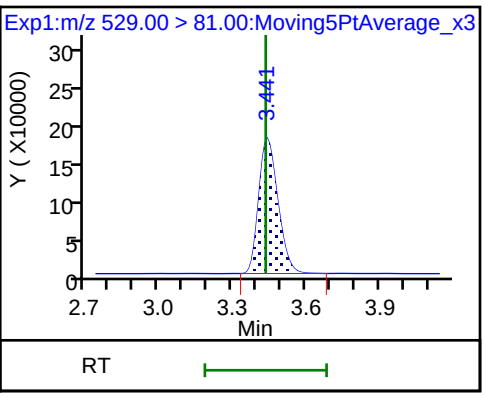
D 21 13C8 FOSA



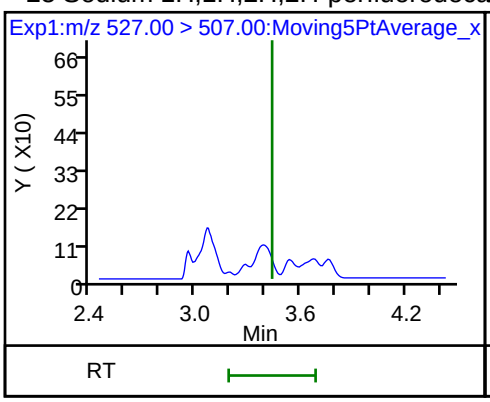
22 Perfluorooctane Sulfonamide (ND)



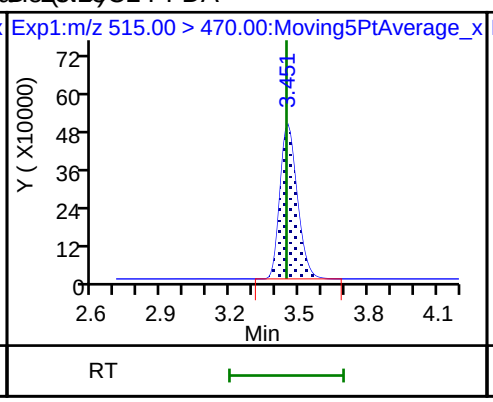
D 26 M2-8:2FTS



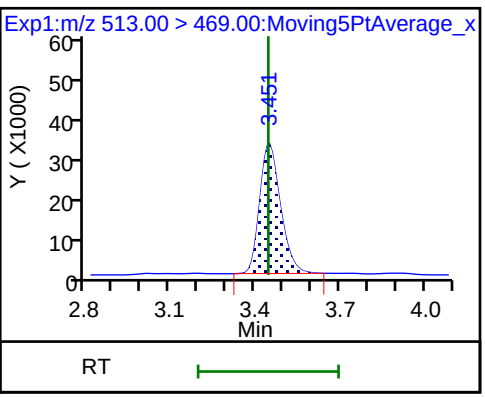
25 Sodium 1H,1H,2H,2H-perfluorodecane(ND)



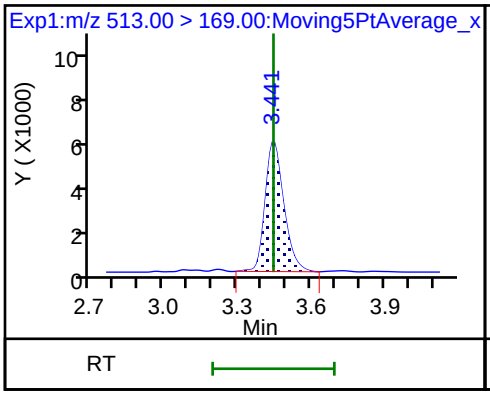
D 23 13C2 PFDA



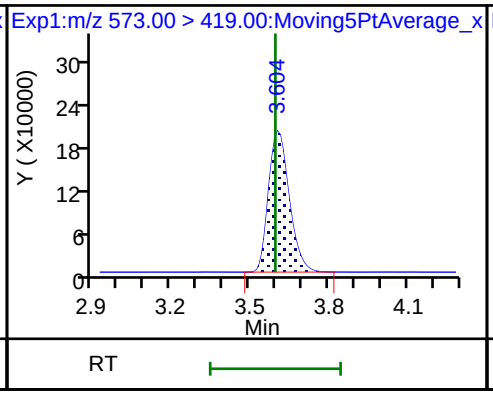
24 Perfluorodecanoic acid



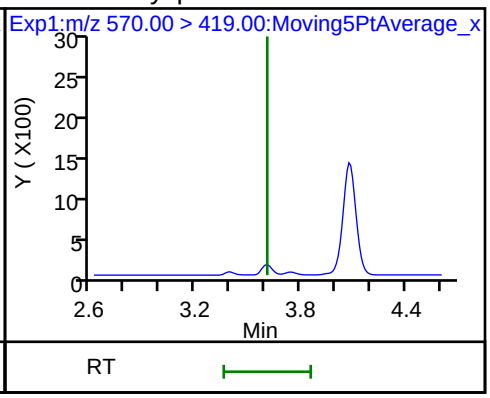
24 Perfluorodecanoic acid



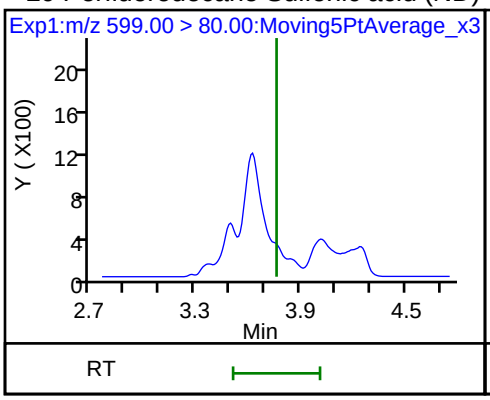
D 27 d3-NMeFOSAA



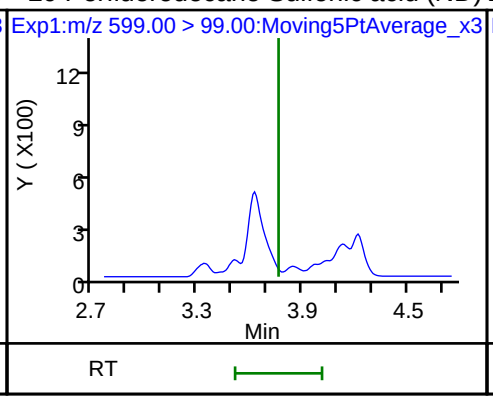
28 N-methyl perfluorooctane sulfonami (ND)



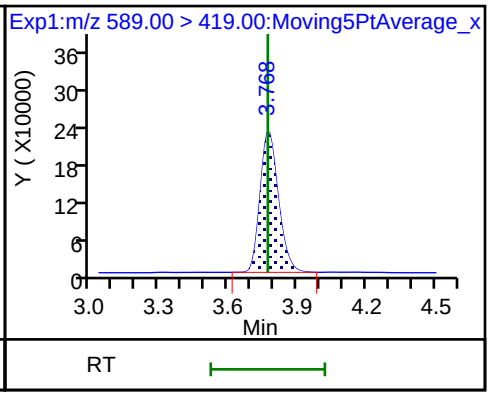
29 Perfluorodecane Sulfonic acid (ND)



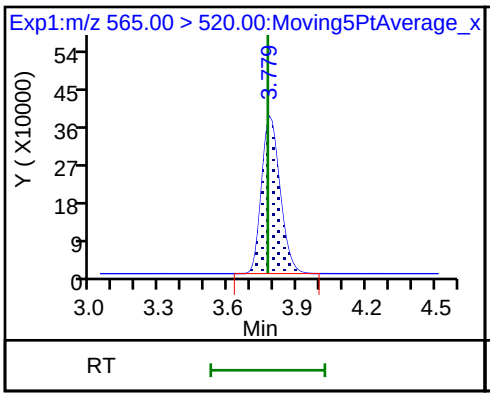
29 Perfluorodecane Sulfonic acid (ND)



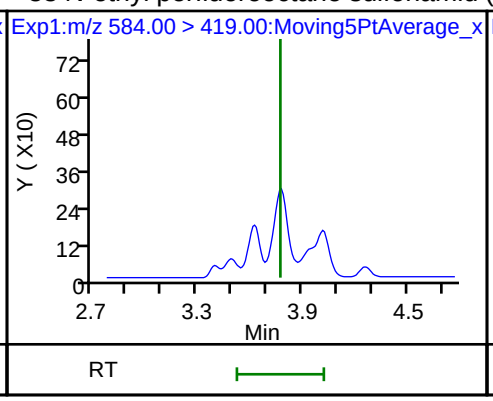
D 32 d5-NEtFOSAA



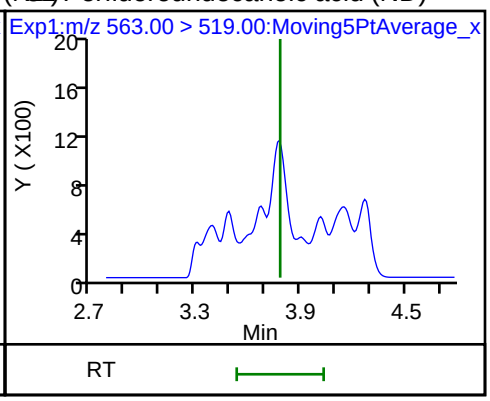
D 30 13C2 PFUnA



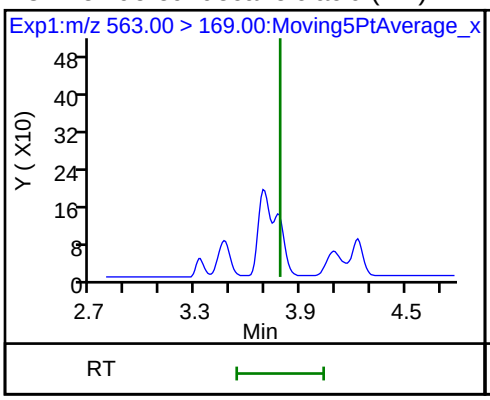
33 N-ethyl perfluorooctane sulfonamid (ND)



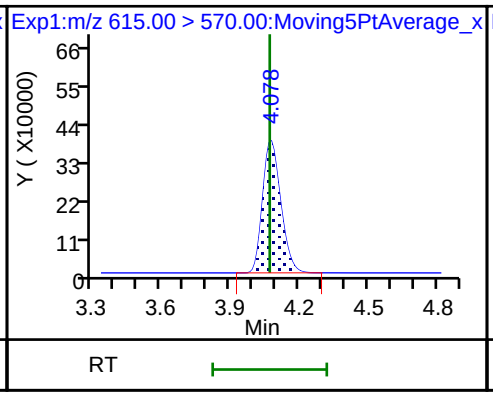
31 Perfluoroundecanoic acid (ND)



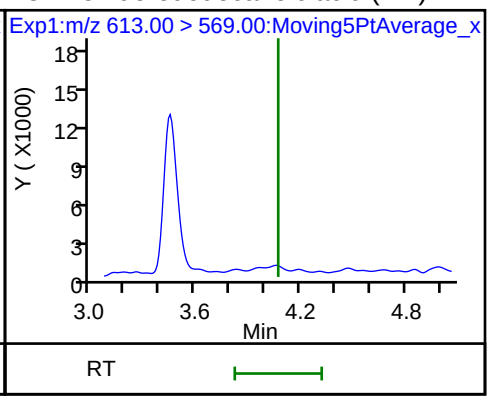
31 Perfluoroundecanoic acid (ND)



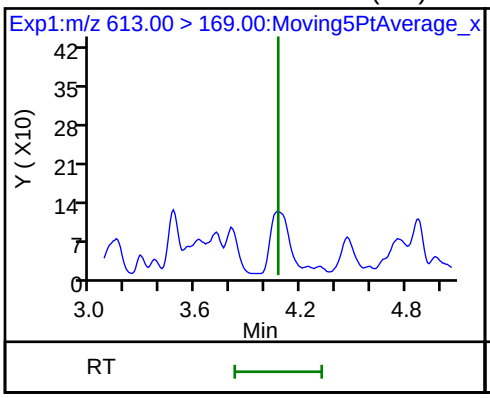
D 36 13C2 PFDoA



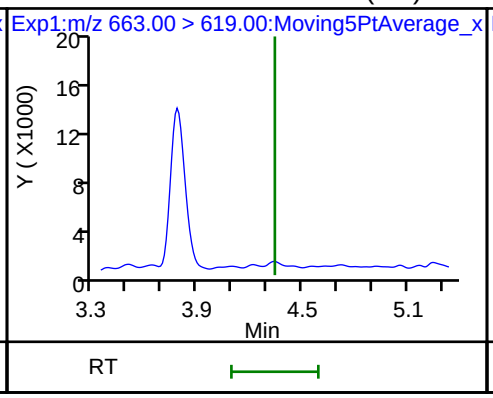
37 Perfluorododecanoic acid (ND)



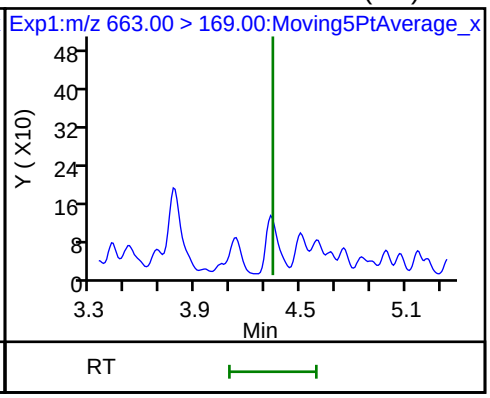
37 Perfluorododecanoic acid (ND)



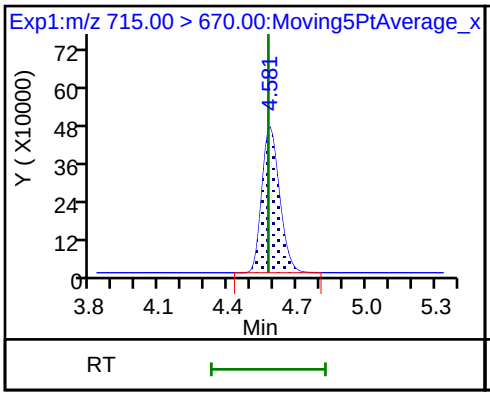
41 Perfluorotridecanoic acid (ND)



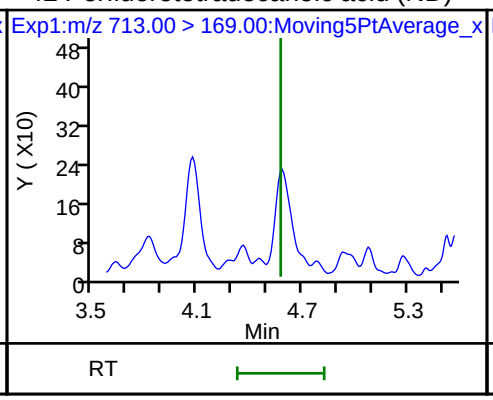
41 Perfluorotridecanoic acid (ND)



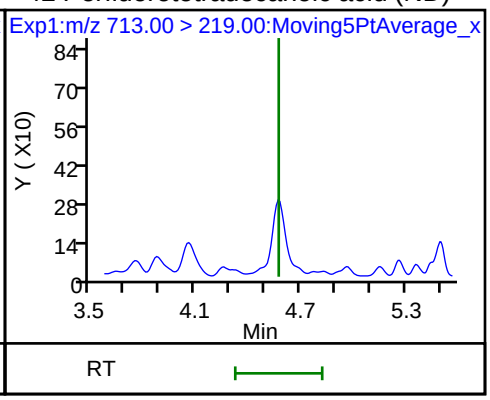
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

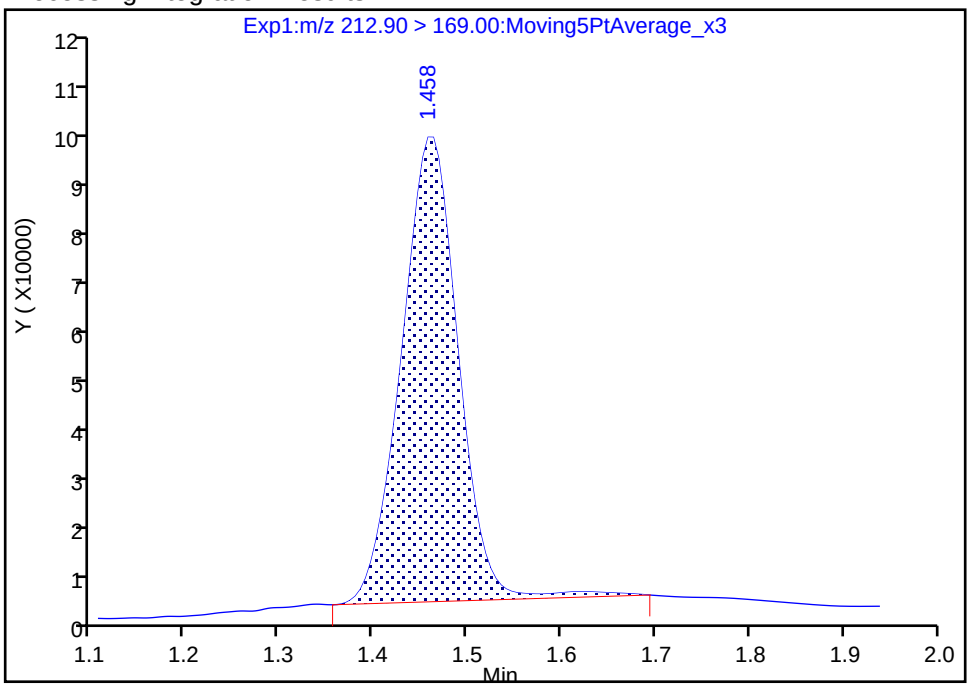
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_057.d				
Injection Date:	14-May-2018 18:54:59	Instrument ID:	A8_N		
Lims ID:	320-38630-A-2-A	Lab Sample ID:	320-38630-2		
Client ID:	GC-MW-109 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	40	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

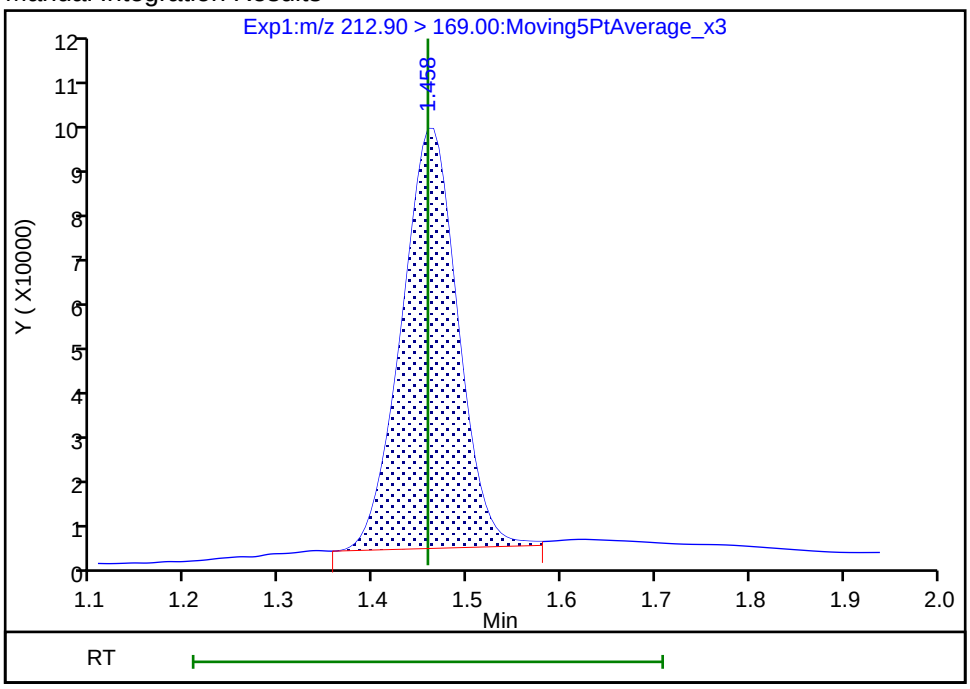
Processing Integration Results

RT: 1.46
Area: 393410
Amount: 0.225456
Amount Units: ng/ml



Manual Integration Results

RT: 1.46
Area: 388443
Amount: 0.222610
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:02:29

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Sacramento

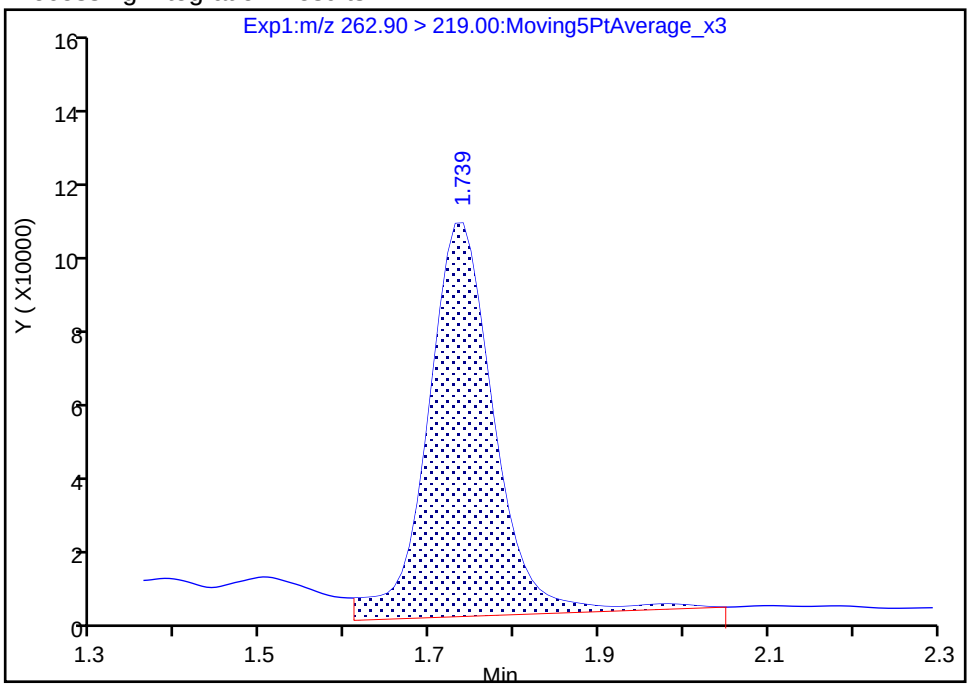
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_057.d				
Injection Date:	14-May-2018 18:54:59	Instrument ID:	A8_N		
Lims ID:	320-38630-A-2-A	Lab Sample ID:	320-38630-2		
Client ID:	GC-MW-109 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	40	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

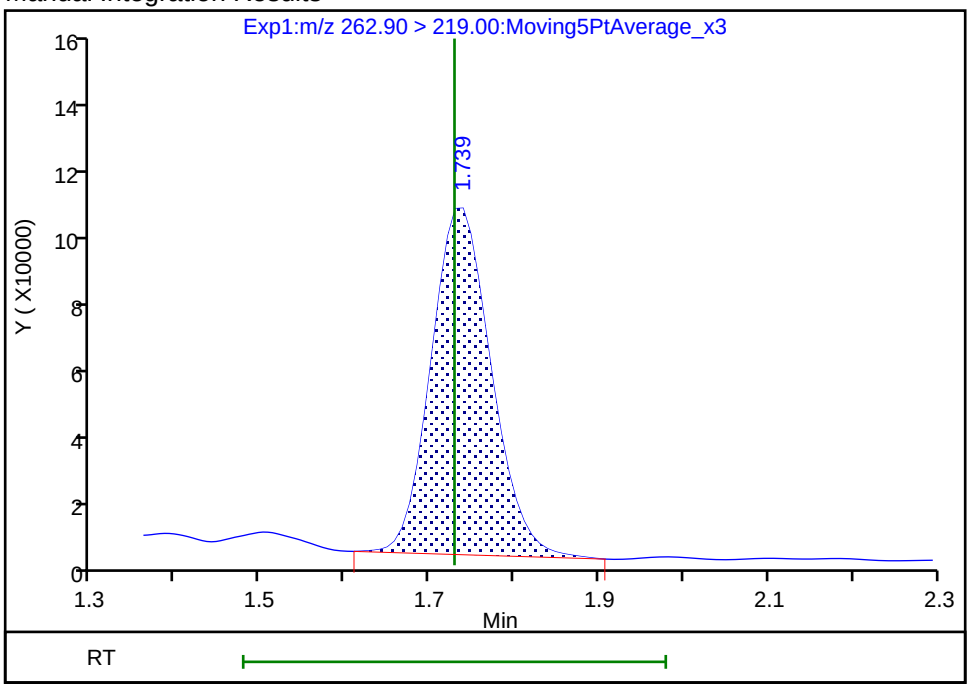
Processing Integration Results

RT: 1.74
Area: 574250
Amount: 0.317288
Amount Units: ng/ml



Manual Integration Results

RT: 1.74
Area: 500719
Amount: 0.276661
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:02:38
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) RE | Lab Sample ID: 320-38630-3 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_020.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:00

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 254.9(mL) | Date Analyzed: 05/13/2018 17:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*31*	*H*	*2.0*	*0.83*
27619-97-2	*6:2FTS*	*2.9*	*J H B*	*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	100		25-150
STL02279	M2-6:2FTS	110		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_020.d
Lims ID: 320-38630-B-3-A
Client ID: GC-MW-109M (WG)
Sample Type: Client
Inject. Date: 13-May-2018 17:59:14 ALS Bottle#: 14 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-3-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:40:05

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.453	1.458	-0.005	1.000	310861	0.1876			165	
D 1 13C4 PFBA										
217.00 > 172.00	1.453	1.458	-0.005	1.000	4425866	1.92		76.9	40710	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.730	1.729	0.001	1.000	459274	0.2802			104	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.729	0.001	0.563	3467475	2.37		94.8	52915	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.766	1.766	0.0	1.000	325263	0.1327			203	M
298.90 > 99.00	1.766	1.766	0.0	1.000	137911		2.36(1.25-3.74)		309	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.766	0.0	1.000	72190	2.17		93.5	283	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.016	2.015	0.001	1.000	449021	0.2899			288	M
313.00 > 119.00	2.016	2.015	0.001	1.000	44301		10.14(5.03-15.10)		521	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.015	0.001	1.000	3859671	2.51		100	70523	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.346	0.001	1.000	335226	0.2137			313	
363.00 > 169.00	2.347	2.346	0.001	1.000	131218		2.55(1.13-3.40)		760	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.346	0.001	1.000	3626675	2.56		102	74304	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.359	0.001	1.000	100835	0.0485			171	
399.00 > 99.00	2.360	2.359	0.001	1.000	33996		2.97(1.50-4.49)		117	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.359	0.001	1.000	4328967	2.34		98.8	64917	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.676	2.683	-0.007	1.000	36708	0.0729			308	
D 12 M2-6:2FTS										
429.00 > 81.00	2.676	2.683	-0.007	1.000	721398	2.61		110	5690	
* 62 13C2-PFOA										
415.00 > 370.00	2.699	2.706	-0.007		3562077	2.50			83922	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.699	2.706	-0.007	1.000	1232447	0.7979			567	
413.00 > 169.00	2.699	2.706	-0.007	1.000	642262		1.92(0.84-2.52)		3088	
D 14 13C4 PFOA										
417.00 > 372.00	2.699	2.706	-0.007	1.000	3340450	2.49		99.6	59386	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.706	2.713	-0.007	1.000	17308	0.0106			84.0	
449.00 > 99.00	2.699	2.713	-0.014	0.997	4855		3.56(1.94-5.82)		34.4	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.071	3.078	-0.007	1.000	99915	0.0905			168	
463.00 > 169.00	3.071	3.078	-0.007	1.000	23576		4.24(1.90-5.69)		459	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.071	3.078	-0.007	1.000	501988	0.3673			2211	
499.00 > 99.00	3.071	3.078	-0.007	1.000	92410		5.43(2.31-6.93)		772	
D 19 13C5 PFNA										
468.00 > 423.00	3.071	3.078	-0.007	1.000	2712390	2.40		95.9	53620	
D 18 13C4 PFOS										
503.00 > 80.00	3.071	3.078	-0.007	1.000	2978857	2.24		93.8	26010	
D 21 13C8 FOSA										
506.00 > 78.00	3.406	3.414	-0.008	1.000	4117798	2.19		87.5	36293	
D 26 M2-8:2FTS										
529.00 > 81.00	3.424	3.433	-0.009	1.000	958108	2.64		110	11449	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.434	3.442	-0.008	1.000	94393	0.0971			446	
513.00 > 169.00	3.434	3.442	-0.008	1.000	19914		4.74(2.36-7.09)		530	
D 23 13C2 PFDA										
515.00 > 470.00	3.434	3.442	-0.008	1.000	2370499	2.40		96.0	41886	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.584	3.605	-0.021	1.000	942004	2.17		87.0	28932	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.759	3.769	-0.010	1.000	1064762	2.25		89.8	2894	
D 30 13C2 PFUnA										
565.00 > 520.00	3.770	3.780	-0.010	1.000	1805261	2.24		89.4	46172	
D 36 13C2 PFDoA										
615.00 > 570.00	4.059	4.069	-0.010	1.000	1866252	2.22		88.6	18275	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.564	4.572	-0.008	1.000	2089243	2.28		91.1	14116	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-May-2018 10:44:17 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_020.d

Injection Date: 13-May-2018 17:59:14 Instrument ID: A8_N

Lims ID: 320-38630-B-3-A Lab Sample ID: 320-38630-3

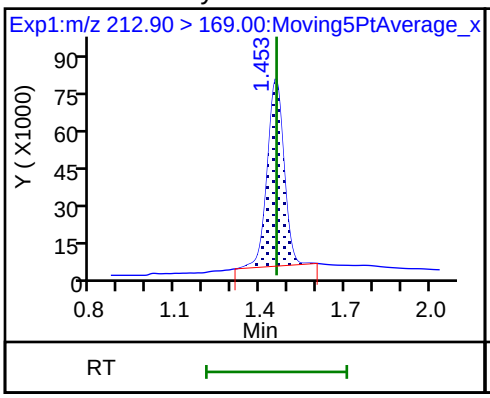
Client ID: GC-MW-109M (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 7

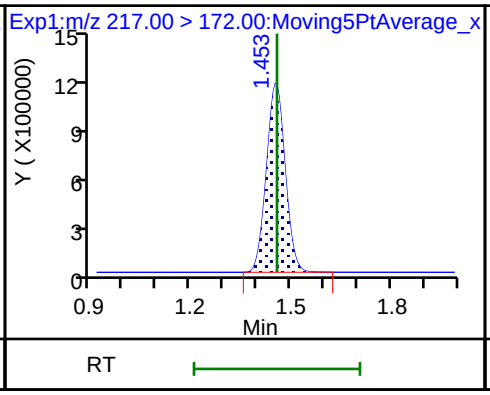
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

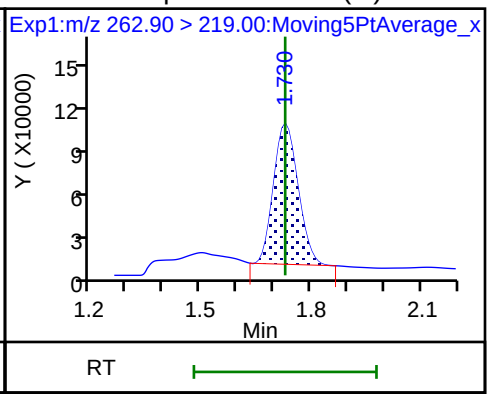
2 Perfluorobutyric acid



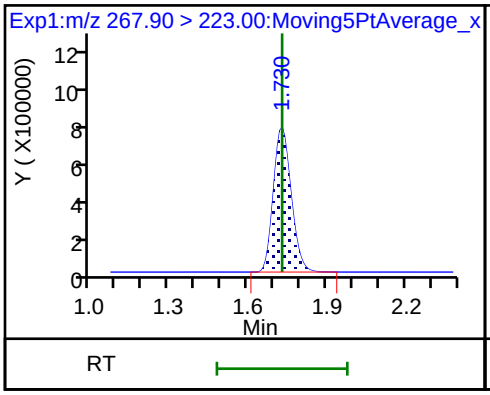
D 1 13C4 PFBA



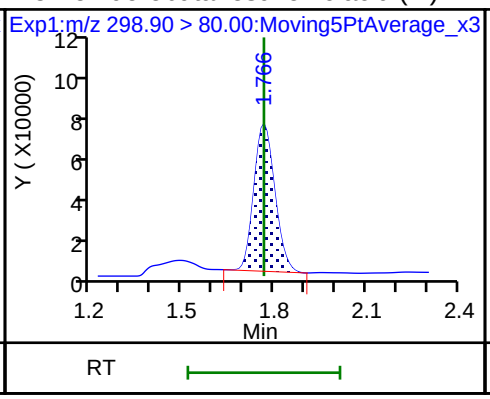
4 Perfluoropentanoic acid (M)



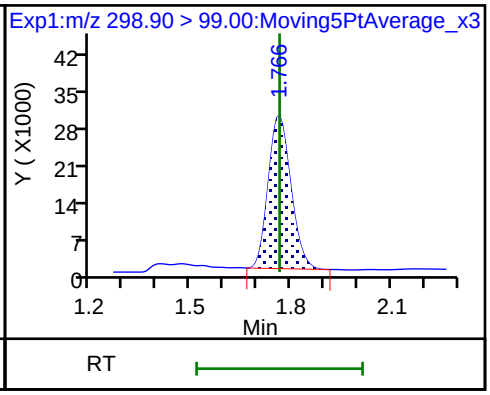
D 3 13C5-PFPeA



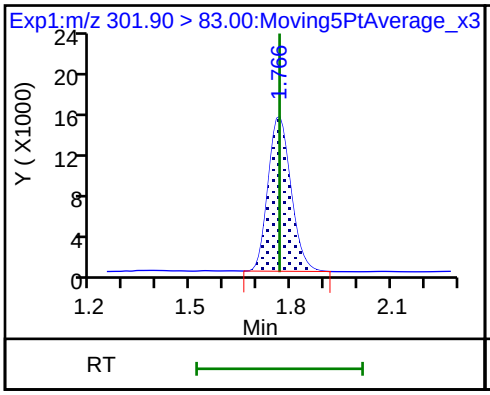
5 Perfluorobutanesulfonic acid (M)



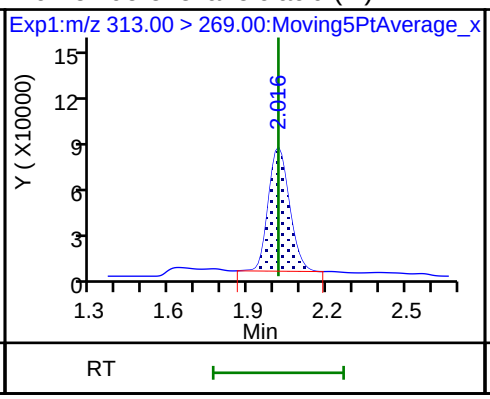
5 Perfluorobutanesulfonic acid



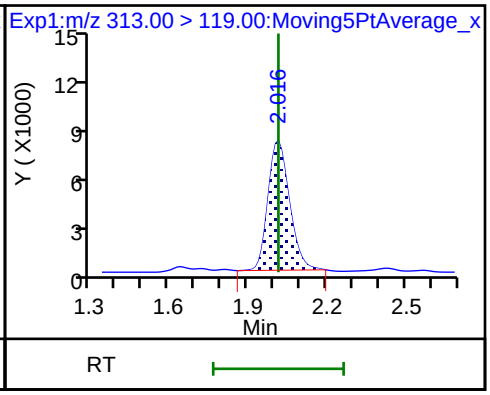
D 47 13C3-PFBS



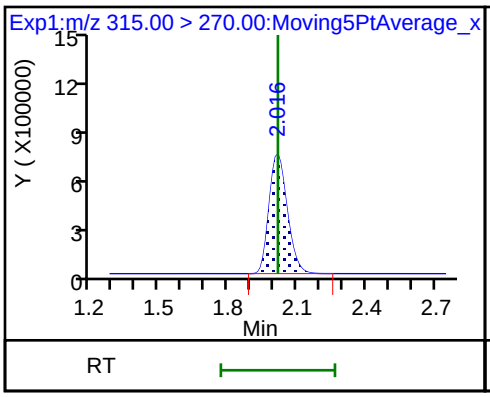
6 Perfluorohexanoic acid (M)



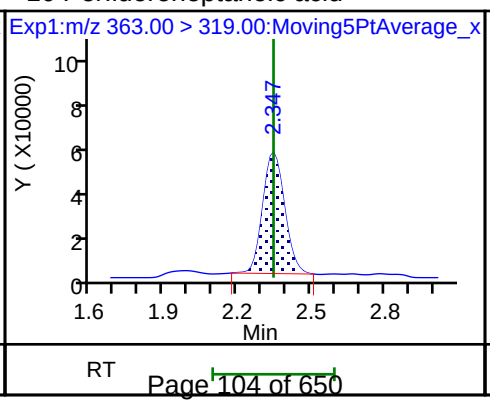
6 Perfluorohexanoic acid



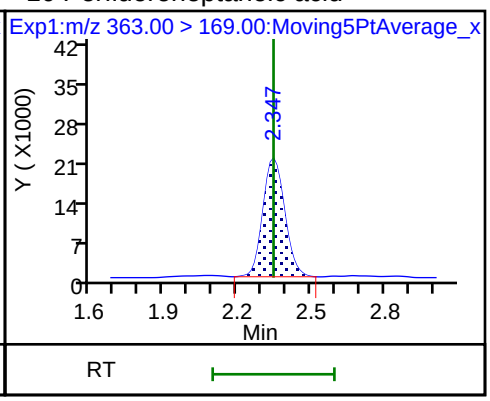
D 7 13C2 PFHxA



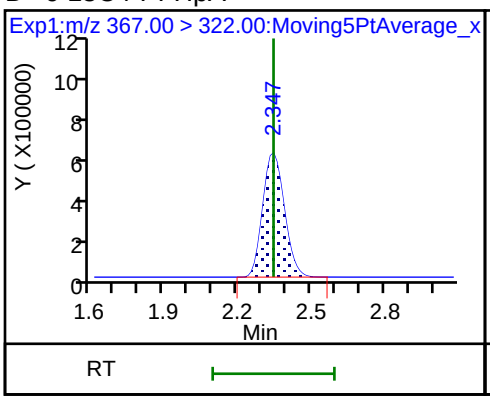
10 Perfluoroheptanoic acid



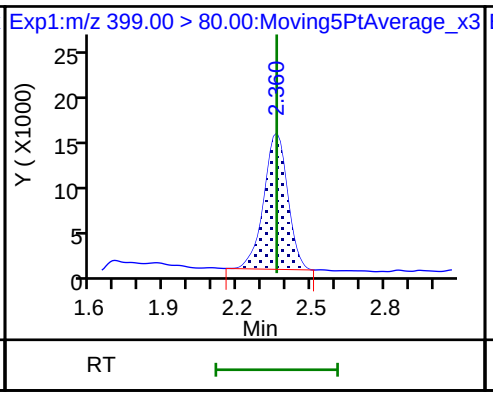
10 Perfluoroheptanoic acid



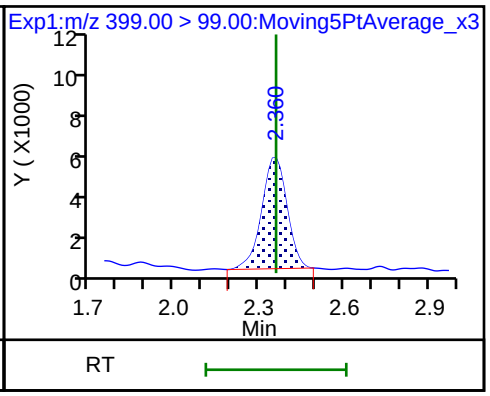
D 9 13C4-PFHpA



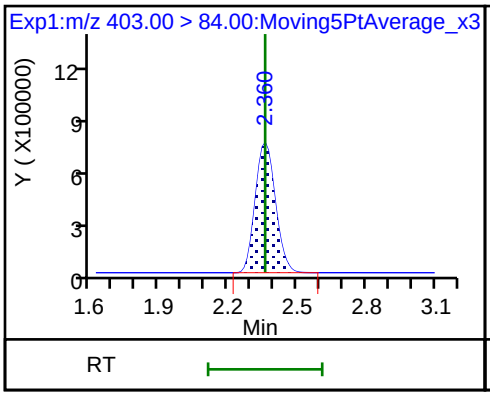
8 Perfluorohexanesulfonic acid



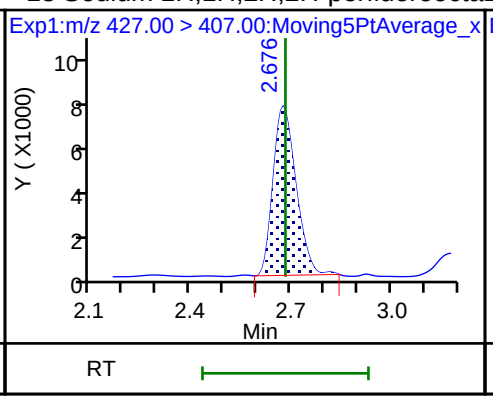
8 Perfluorohexanesulfonic acid



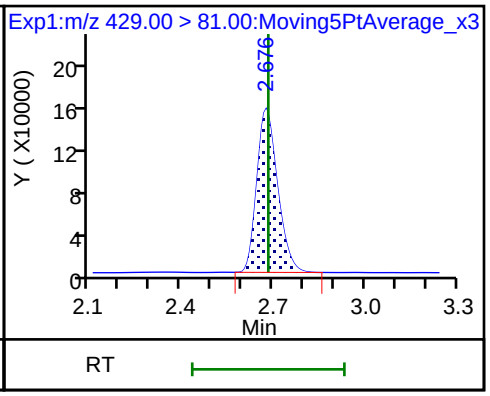
D 11 18O2 PFHxS



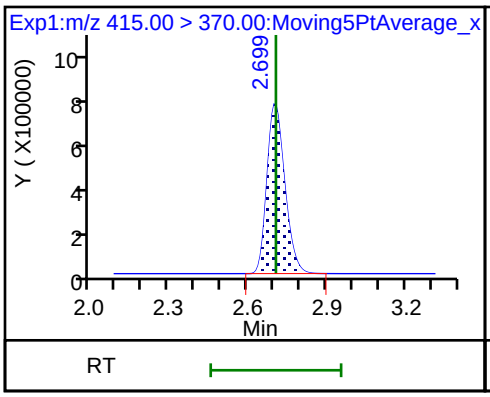
13 Sodium 1H,1H,2H,2H-perfluorooctane



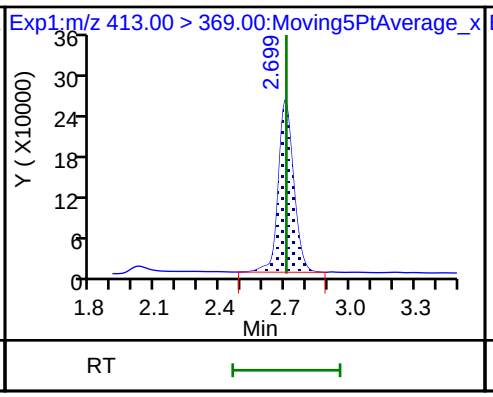
D 12 M2-6:2FTS



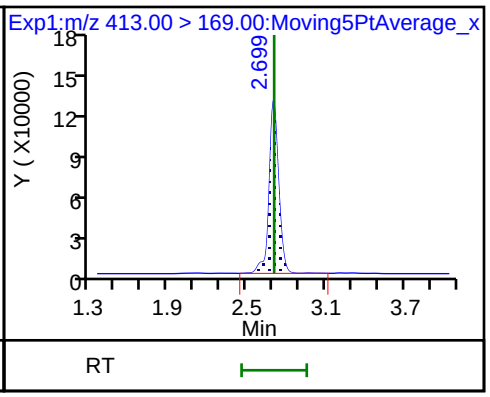
* 62 13C2-PFOA



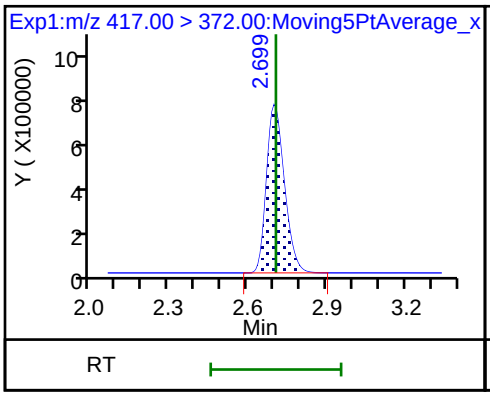
15 Perfluorooctanoic acid



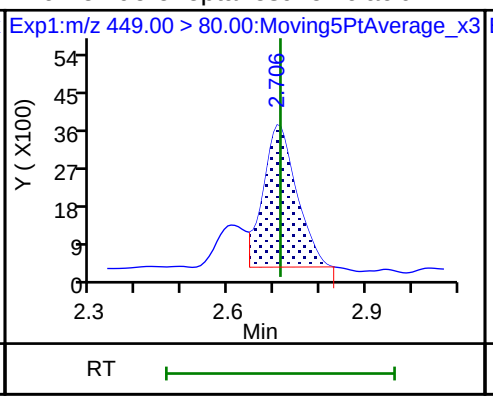
15 Perfluorooctanoic acid



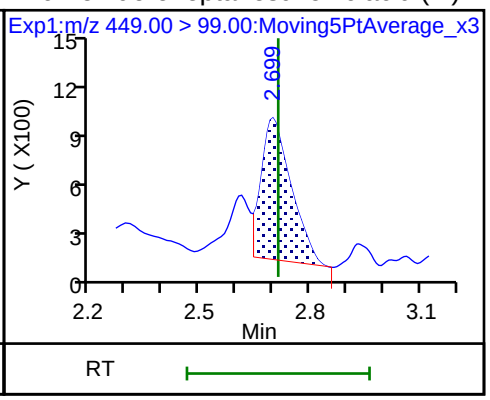
D 14 13C4 PFOA



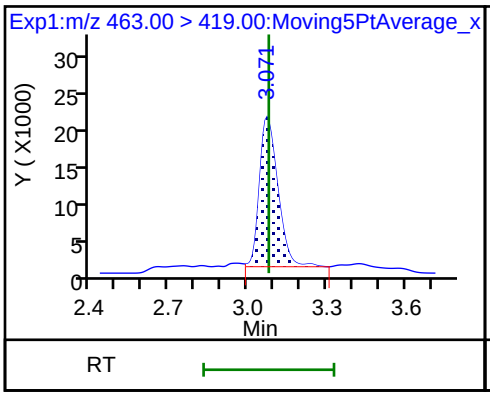
16 Perfluoroheptanesulfonic acid



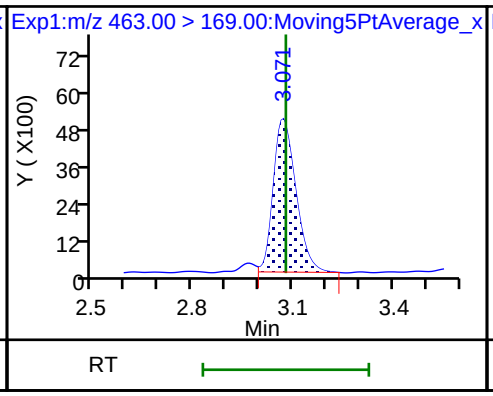
16 Perfluoroheptanesulfonic acid (M)



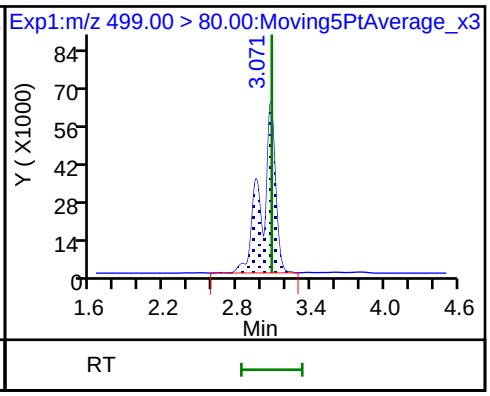
20 Perfluorononanoic acid



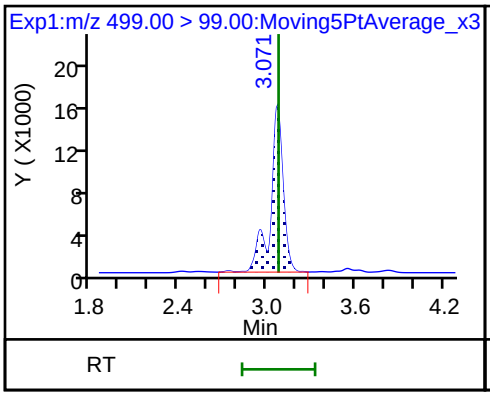
20 Perfluorononanoic acid



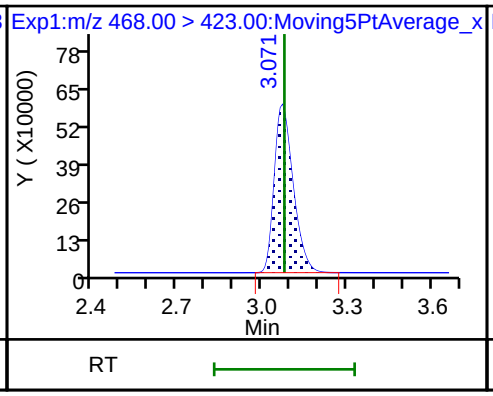
17 Perfluorooctane sulfonic acid



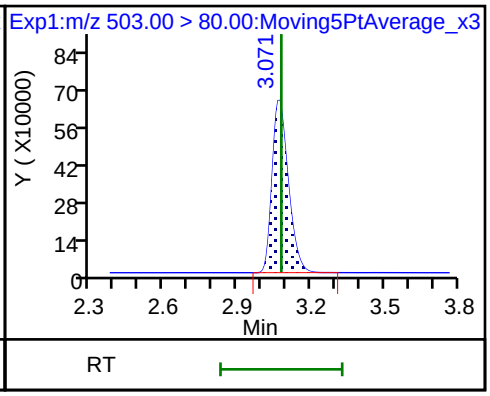
17 Perfluorooctane sulfonic acid



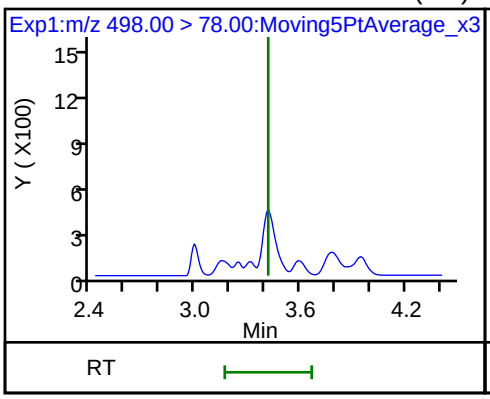
D 19 13C5 PFNA



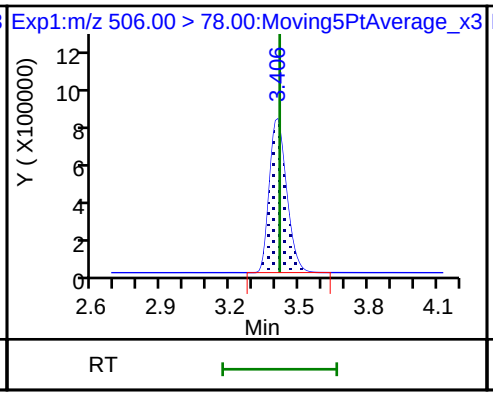
D 18 13C4 PFOS



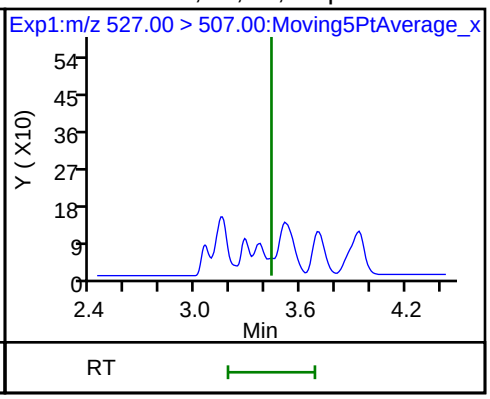
22 Perfluorooctane Sulfonamide (ND)



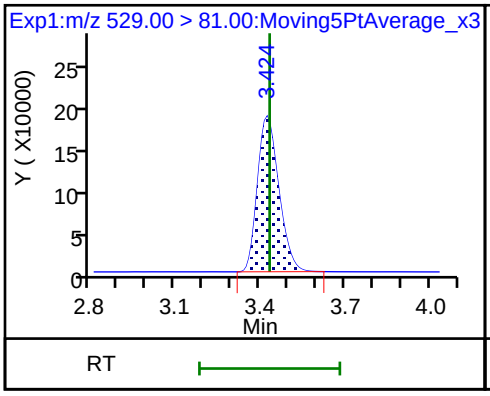
D 21 13C8 FOSA



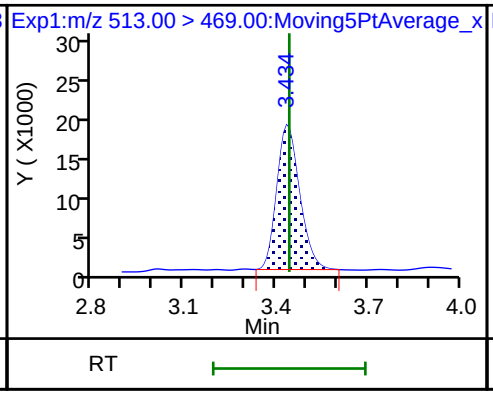
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



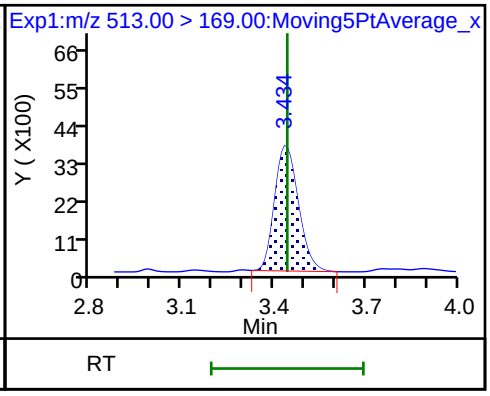
D 26 M2-8:2FTS



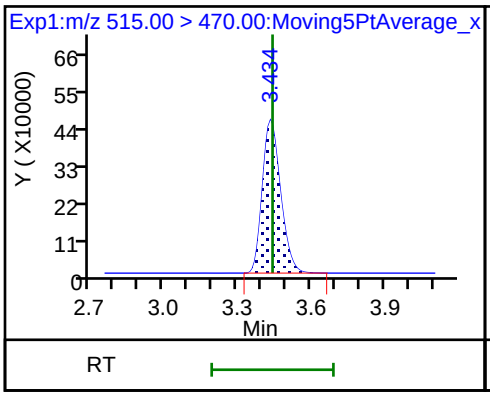
24 Perfluorodecanoic acid



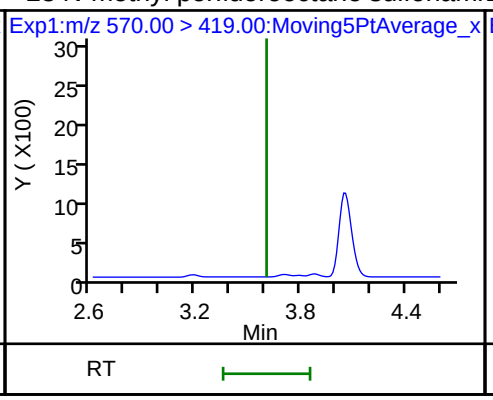
24 Perfluorodecanoic acid



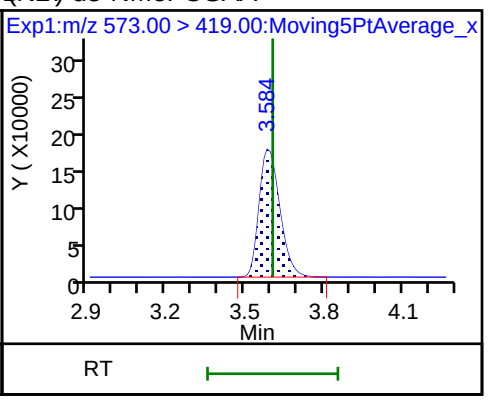
D 23 13C2 PFDA



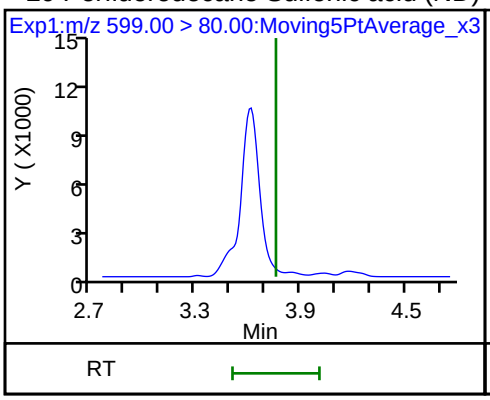
28 N-methyl perfluorooctane sulfonamid (ND)



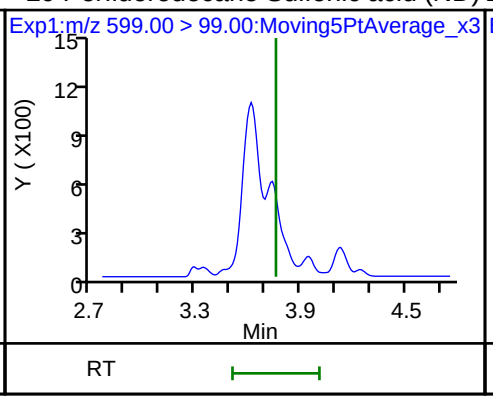
D 27 d3-NMeFOSAA



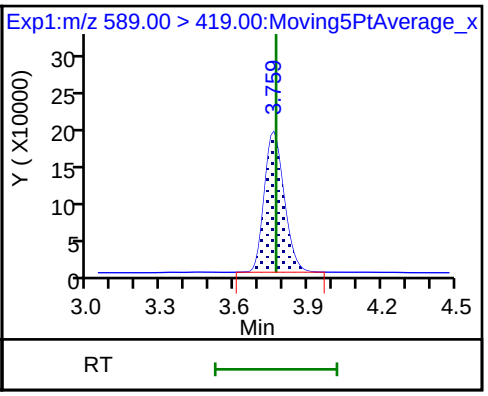
29 Perfluorodecane Sulfonic acid (ND)



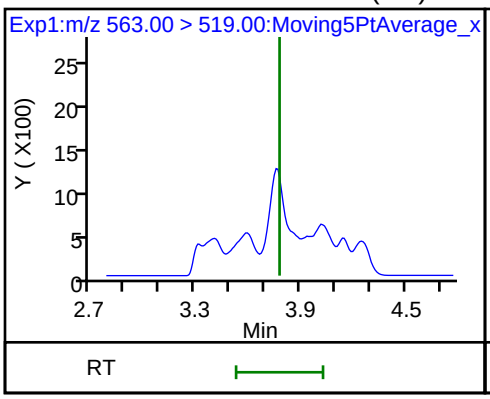
29 Perfluorodecane Sulfonic acid (ND)



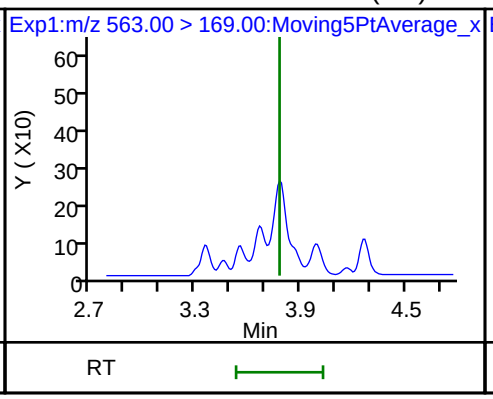
D 32 d5-NEtFOSAA



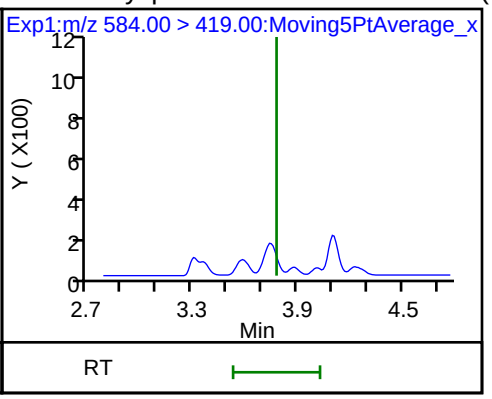
31 Perfluoroundecanoic acid (ND)



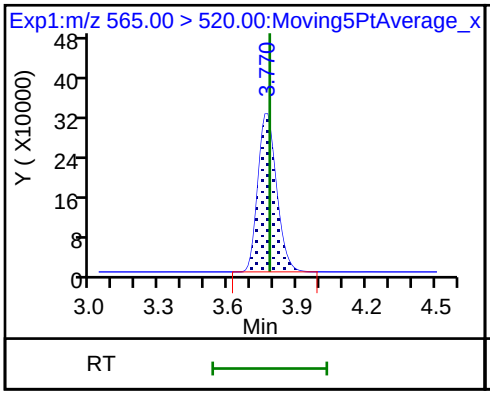
31 Perfluoroundecanoic acid (ND)



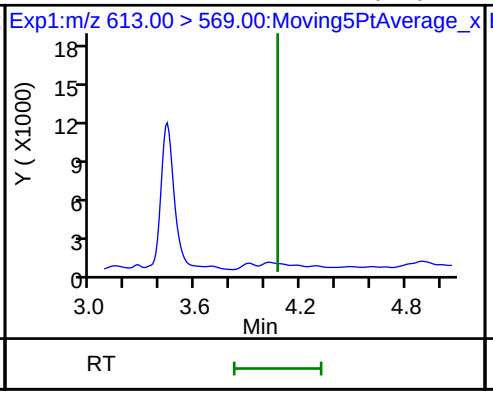
33 N-ethyl perfluorooctane sulfonamid (ND)



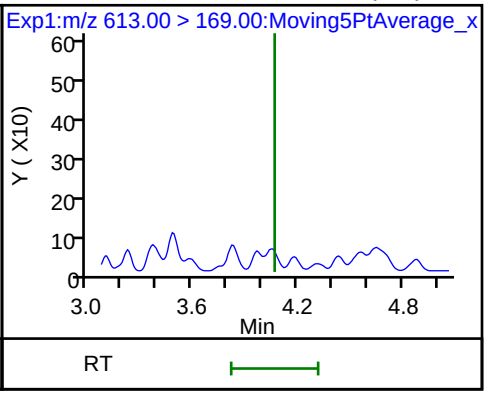
D 30 13C2 PFUnA



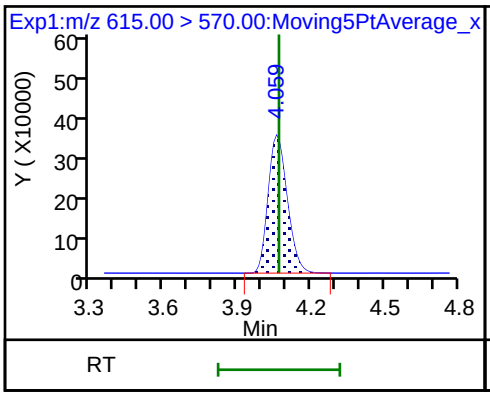
37 Perfluorododecanoic acid (ND)



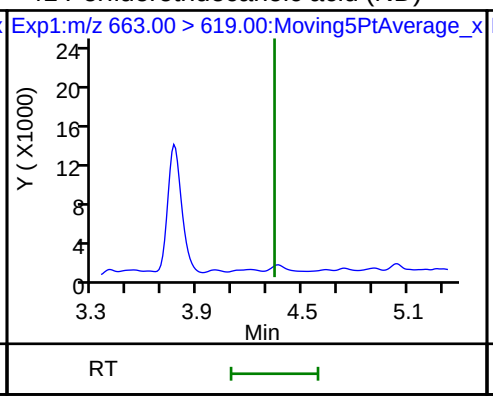
37 Perfluorododecanoic acid (ND)



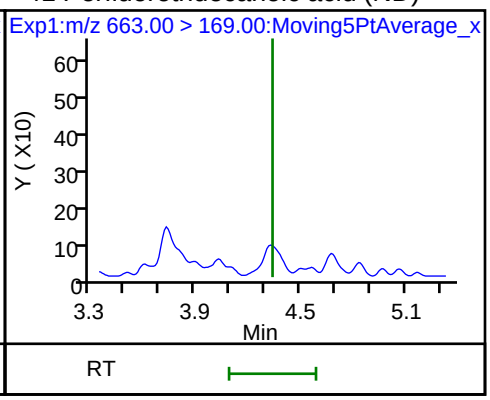
D 36 13C2 PFDoA



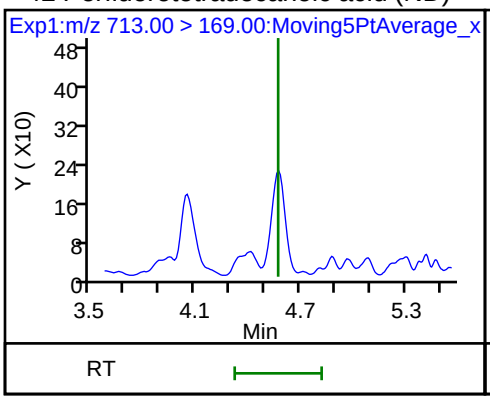
41 Perfluorotridecanoic acid (ND)



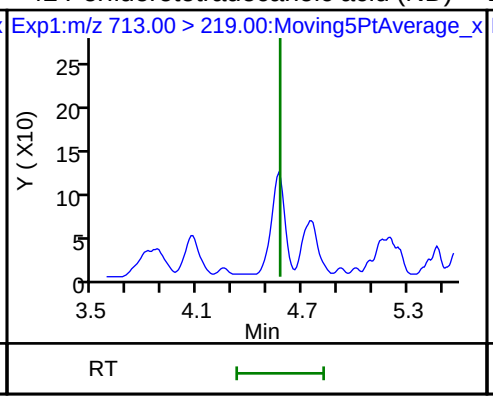
41 Perfluorotridecanoic acid (ND)



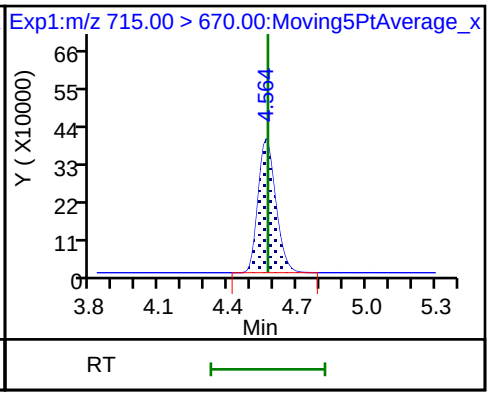
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) | Lab Sample ID: 320-38630-3

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_058.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:00

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 246.3(mL) | Date Analyzed: 05/14/2018 19:02

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.8		2.0	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	12		2.0	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	12		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.9		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	35	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	3.4		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	4.0		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.5		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.1	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14	B	2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	3.9		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	6.7	J B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) | Lab Sample ID: 320-38630-3

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_058.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:00

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 246.3(mL) | Date Analyzed: 05/14/2018 19:02

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	79		25-150
STL01893	13C5 PFPeA	97		25-150
STL00993	13C2 PFHxA	96		25-150
STL01892	13C4-PFHpA	102		25-150
STL00990	13C4 PFOA	104		25-150
STL00995	13C5 PFNA	104		25-150
STL00996	13C2 PFDA	98		25-150
STL00997	13C2 PFUnA	95		25-150
STL00998	13C2 PFDoA	95		25-150
STL02116	13C2-PFTeDA	104		25-150
STL02337	13C3-PFBS	95		25-150
STL00994	18O2 PFHxS	97		25-150
STL00991	13C4 PFOS	93		25-150
STL01056	13C8 FOSA	89		25-150
STL02118	d3-NMeFOSAA	85		25-150
STL02117	d5-NEtFOSAA	90		25-150
STL02279	M2-6:2FTS	118		25-150
STL02280	M2-8:2FTS	103		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_058.d
Lims ID: 320-38630-A-3-A
Client ID: GC-MW-109M (WG)
Sample Type: Client
Inject. Date: 14-May-2018 19:02:47 ALS Bottle#: 41 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-3-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:33 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:03:44

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.452	0.006	1.000	4706458	1.96		78.5	38145	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.458	1.458	0.0	1.000	335239	0.1917			141	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.728	0.001	0.560	3614976	2.43		97.4	39583	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.729	0.0	1.000	531242	0.3020			114	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.764	0.001	1.000	77257	2.21		94.9	282	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.765	0.0	1.000	345508	0.1347			233	
298.90 > 99.00	1.765	1.765	0.0	1.000	137768		2.51(1.25-3.74)		310	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.014	0.001	1.000	3738685	2.41		96.3	74154	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.015	0.0	1.000	478659	0.3068			300	
313.00 > 119.00	2.015	2.015	0.0	1.000	41265		11.60(5.03-15.10)		401	
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.345	0.001	1.000	3812290	2.56		102	56048	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.358	0.014	1.000	4542708	2.30		97.1	74591	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.359	2.359	0.0	1.006	354642	0.2193			294	
363.00 > 169.00	2.346	2.359	-0.013	1.000	134569		2.64(1.13-3.40)		707	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.372	2.373	-0.001	1.000	110313	0.0510			168	
399.00 > 99.00	2.359	2.373	-0.014	0.994	36269		3.04(1.50-4.49)		95.2	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.682	0.001	1.000	819950	2.80		118	6926	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.000	95744	0.1648			824	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.704	0.001	1.000	3623633	2.60		104	77085	
* 62 13C2-PFOA										
415.00 > 370.00	2.713	2.713	0.0		3704261	2.50			64981	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.713	0.0	1.003	1519732	0.8726			672	
413.00 > 169.00	2.713	2.713	0.0	1.003	770872		1.97(0.84-2.52)		2937	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.720	-0.007	1.000	18746	0.0111			109	
449.00 > 99.00	2.728	2.720	0.008	1.006	3891		4.82(1.94-5.82)		27.6	
D 18 13C4 PFOS										
503.00 > 80.00	3.077	3.073	0.004	1.000	3055238	2.21		92.6	26389	
D 19 13C5 PFNA										
468.00 > 423.00	3.085	3.081	0.004	1.000	3033547	2.60		104	64048	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.085	3.082	0.003	1.003	498869	0.3495			2178	
499.00 > 99.00	3.085	3.082	0.003	1.003	99392		5.02(2.31-6.93)		482	
20 Perfluorononanoic acid										
463.00 > 419.00	3.085	3.082	0.003	1.000	106080	0.0829			148	
463.00 > 169.00	3.085	3.082	0.003	1.000	27332		3.88(1.90-5.69)		426	
D 21 13C8 FOSA										
506.00 > 78.00	3.414	3.407	0.007	1.000	4432411	2.22		88.7	44941	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.405	3.418	-0.014	0.997	1864	0.001067			35.9	
D 26 M2-8:2FTS										
529.00 > 81.00	3.432	3.435	-0.003	1.000	947844	2.47		103	8006	
D 23 13C2 PFDA										
515.00 > 470.00	3.442	3.444	-0.002	1.000	2454122	2.44		97.8	32752	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.442	3.446	-0.004	1.000	99516	0.0991			393	
513.00 > 169.00	3.442	3.446	-0.004	1.000	16290		6.11(2.36-7.09)		337	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.605	3.596	0.009	1.000	967703	2.13		85.0	28827	
29 Perfluorodecane Sulfonic acid										RM
599.00 > 80.00	3.625	3.762	-0.137	1.000	81189	0.0960			650	R
599.00 > 99.00	3.644	3.762	-0.118	1.005	7797		10.41(1.39-4.16)		95.5	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.769	3.771	-0.002	1.000	1088872	2.24		89.6	3014	
D 30 13C2 PFUnA										
565.00 > 520.00	3.779	3.771	0.008	1.000	1992982	2.37		94.9	39683	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.769	3.783	-0.014	0.997	5478	0.008806			18.6	
563.00 > 169.00	3.758	3.783	-0.025	0.995	2192		2.50(2.12-6.36)		46.0	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 36 13C2 PFDoA										
615.00 > 570.00	4.068	4.071	-0.003	1.000	2083180	2.37		95.0	16043	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.571	4.574	-0.003	1.000	2483498	2.60		104	13772	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:09:56 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_058.d

Injection Date: 14-May-2018 19:02:47 Instrument ID: A8_N

Lims ID: 320-38630-A-3-A Lab Sample ID: 320-38630-3

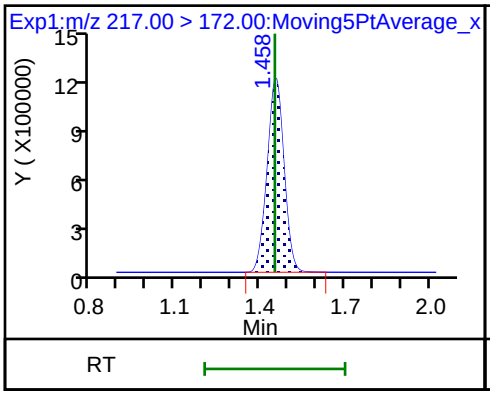
Client ID: GC-MW-109M (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 41 Worklist Smp#: 17

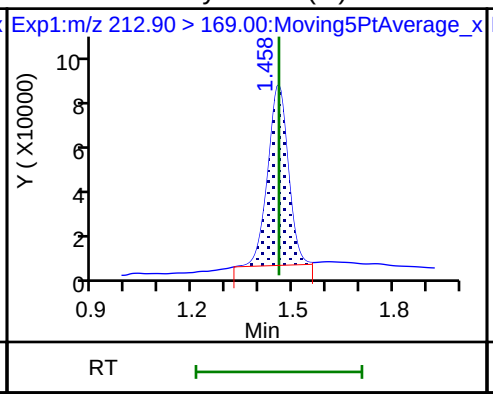
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

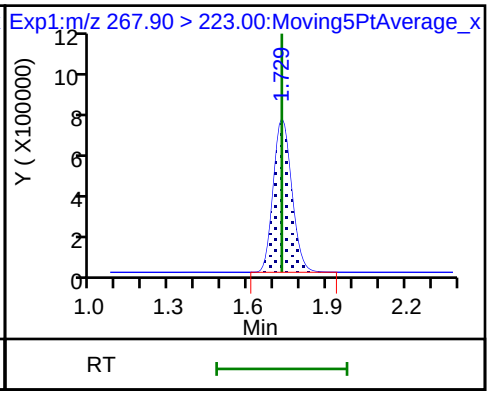
D 1 13C4 PFBA



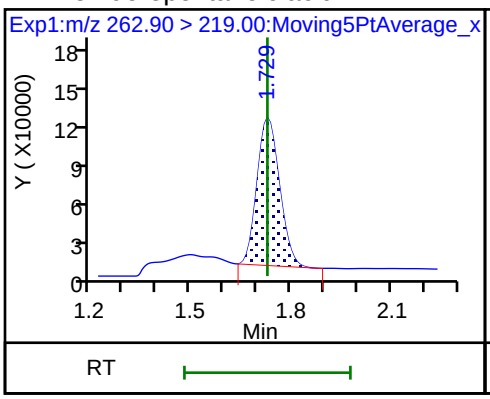
2 Perfluorobutyric acid (M)



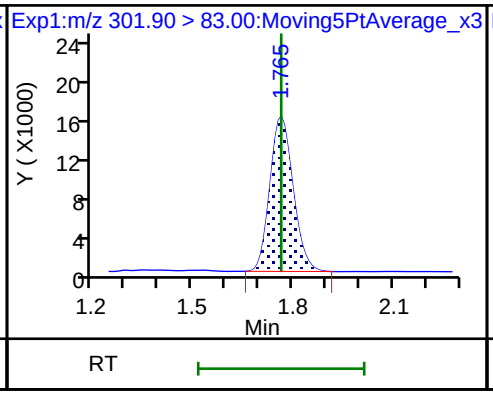
D 3 13C5-PFPeA



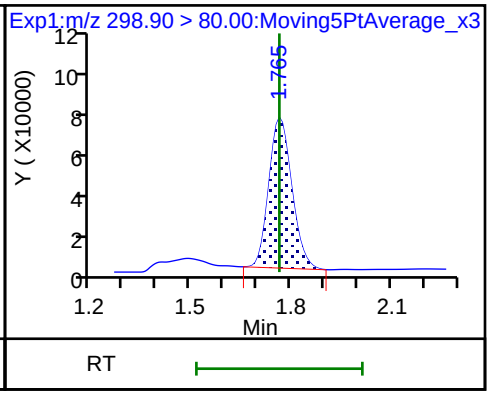
4 Perfluoropentanoic acid



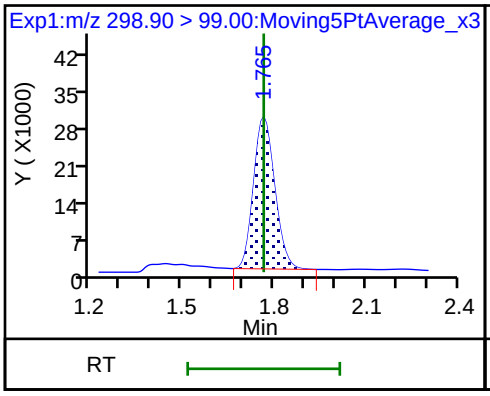
D 47 13C3-PFBS



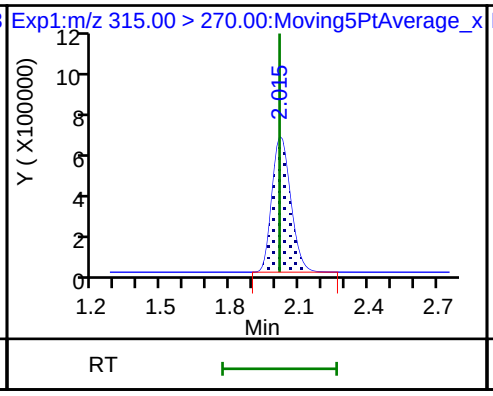
5 Perfluorobutanesulfonic acid



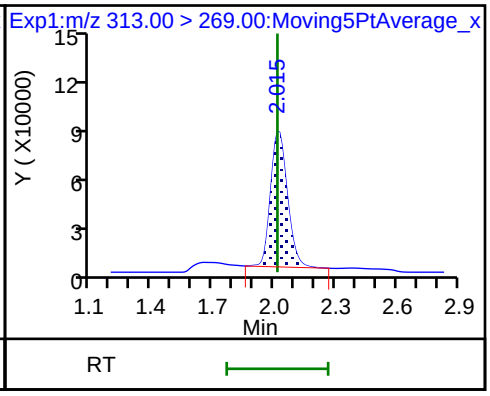
5 Perfluorobutanesulfonic acid



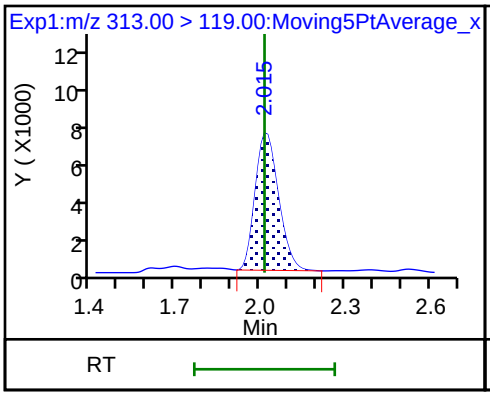
D 7 13C2 PFHxA



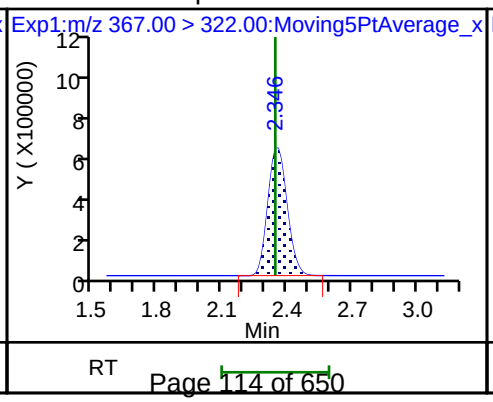
6 Perfluorohexanoic acid



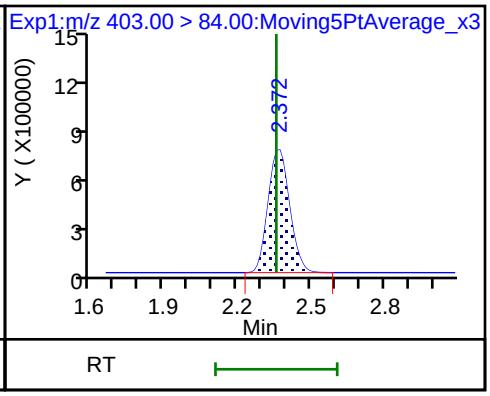
6 Perfluorohexanoic acid



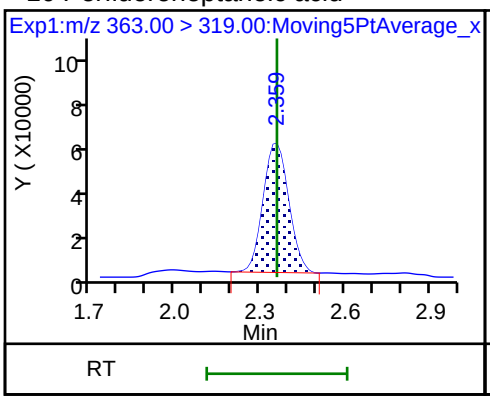
D 9 13C4-PFHpA



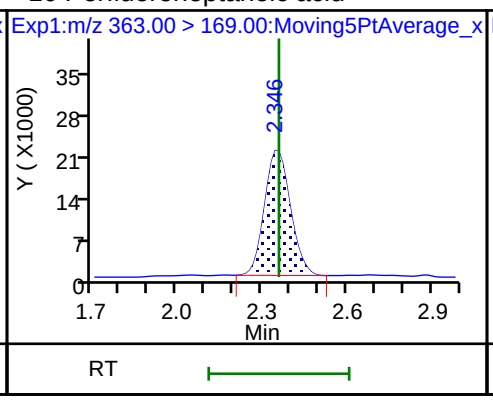
D 11 18O2 PFHxS



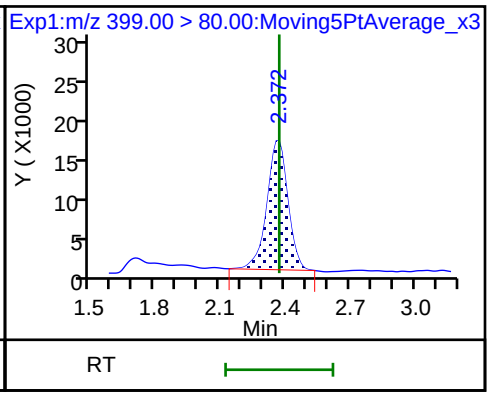
10 Perfluoroheptanoic acid



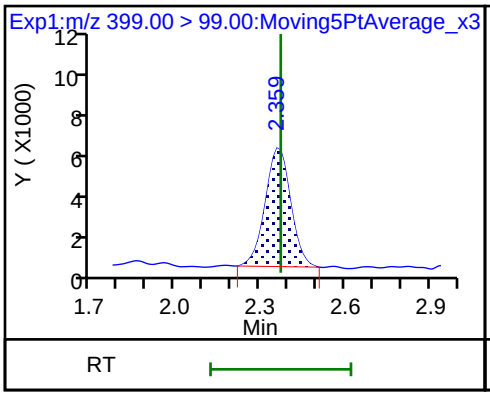
10 Perfluoroheptanoic acid



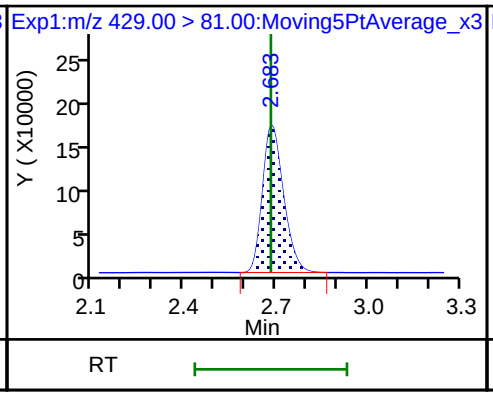
8 Perfluorohexanesulfonic acid



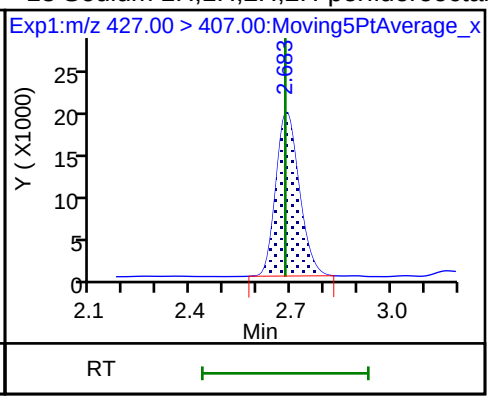
8 Perfluorohexanesulfonic acid



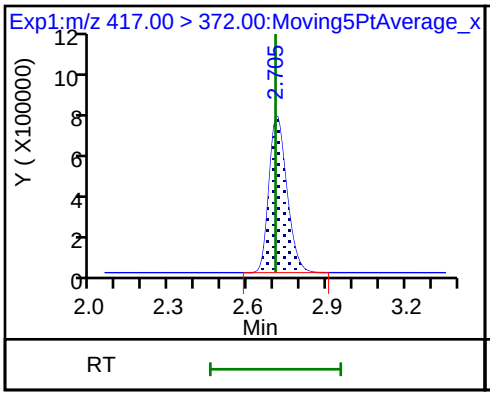
D 12 M2-6:2FTS



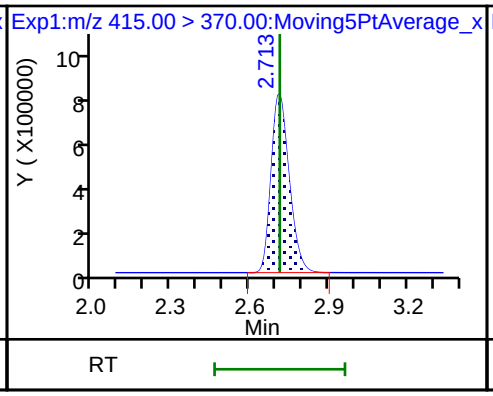
13 Sodium 1H,1H,2H,2H-perfluorooctane



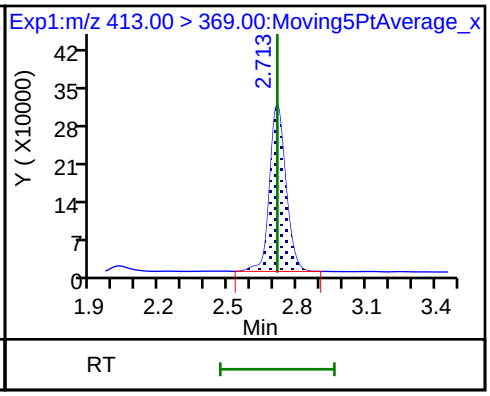
D 14 13C4 PFOA



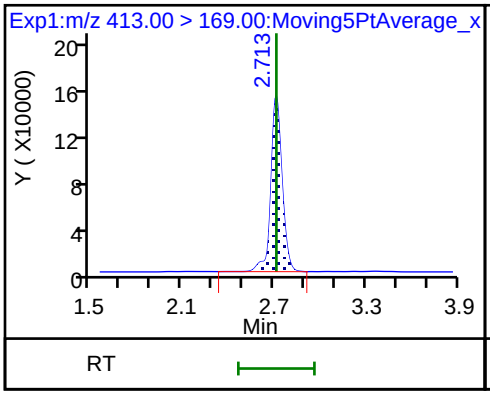
* 62 13C2-PFOA



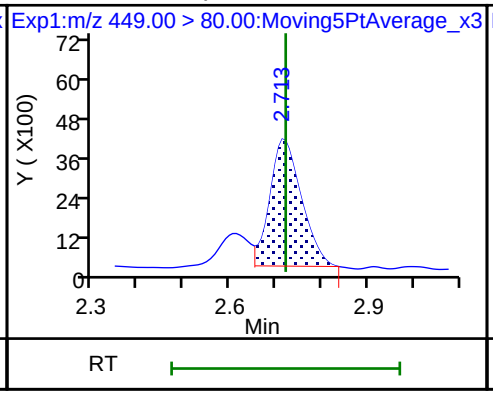
15 Perfluorooctanoic acid



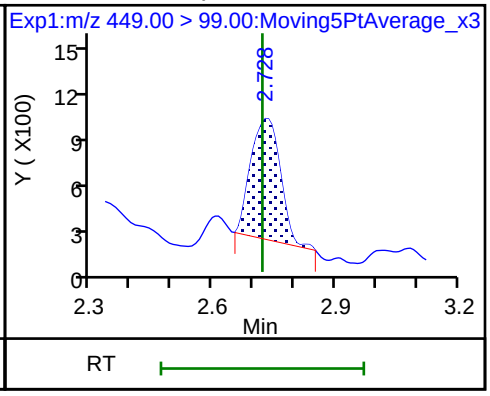
15 Perfluorooctanoic acid



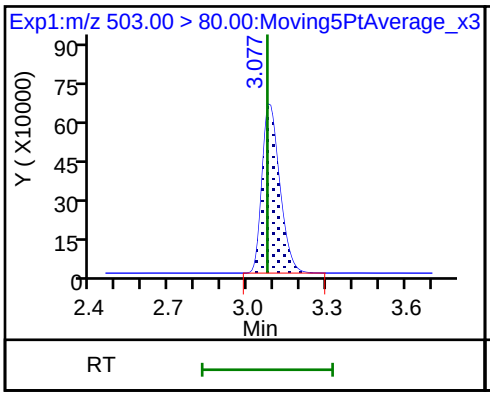
16 Perfluoroheptanesulfonic acid



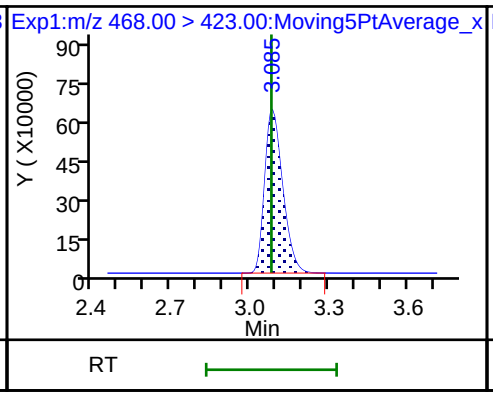
16 Perfluoroheptanesulfonic acid



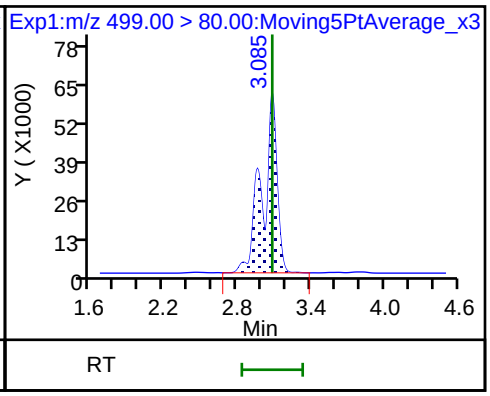
D 18 13C4 PFOS



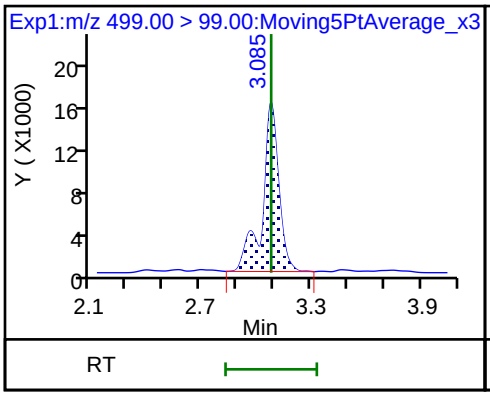
D 19 13C5 PFNA



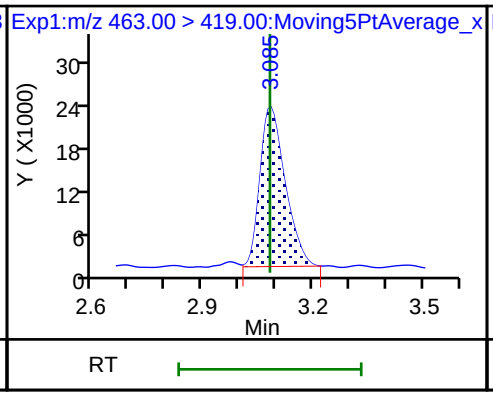
17 Perfluorooctane sulfonic acid



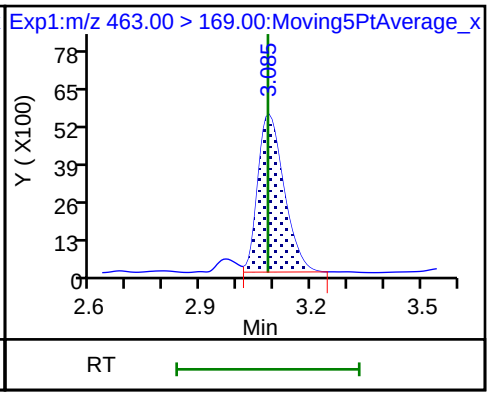
17 Perfluorooctane sulfonic acid



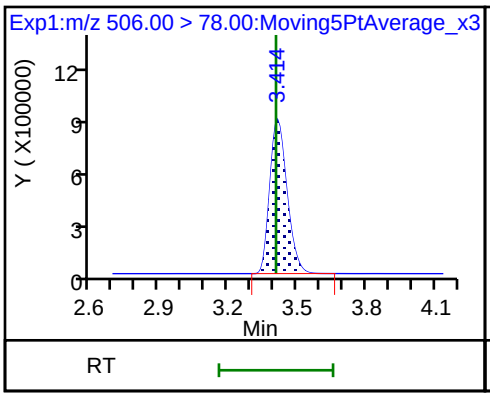
20 Perfluorononanoic acid



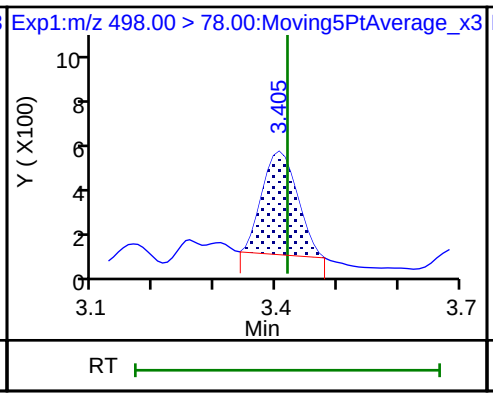
20 Perfluorononanoic acid



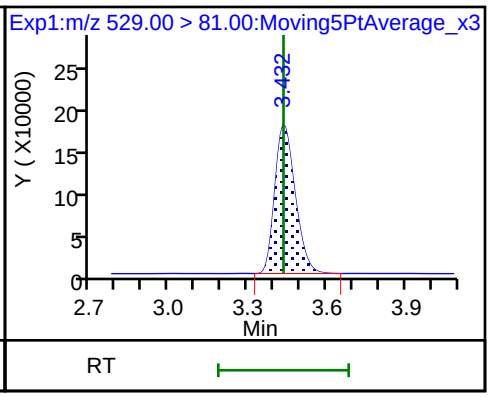
D 21 13C8 FOSA



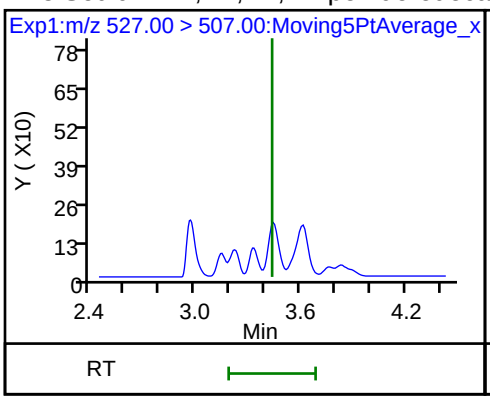
22 Perfluorooctane Sulfonamide



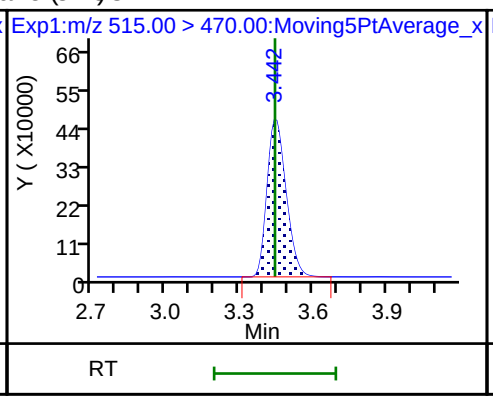
D 26 M2-8:2FTS



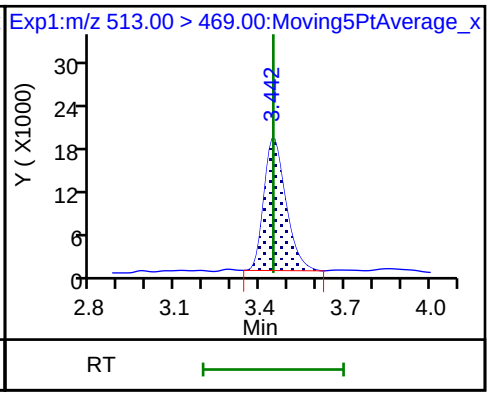
25 Sodium 1H,1H,2H,2H-perfluorodecane(3NL)



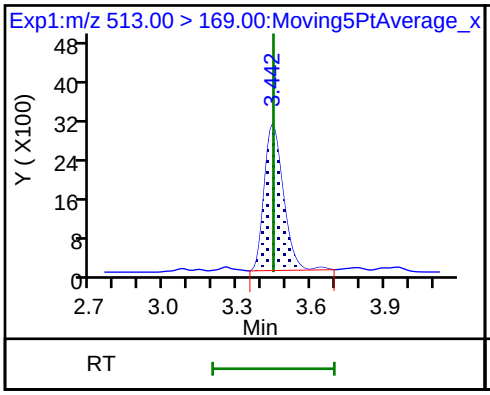
D 23 13C2 PFDA



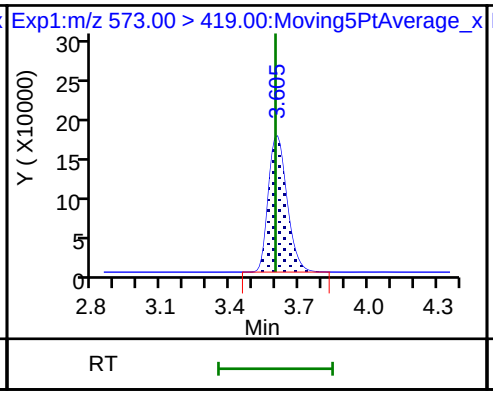
24 Perfluorodecanoic acid



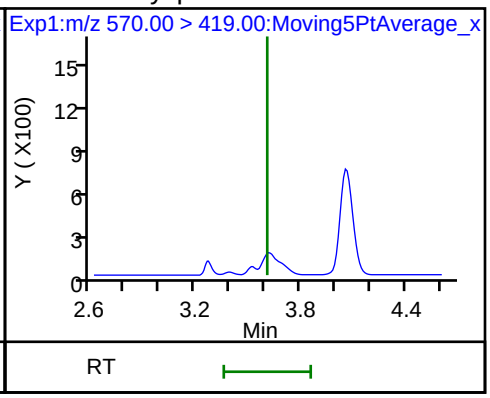
24 Perfluorodecanoic acid



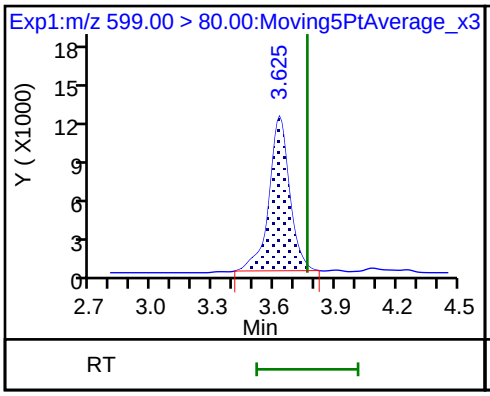
D 27 d3-NMeFOSAA



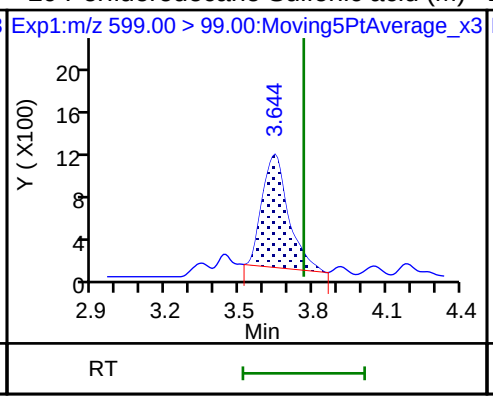
28 N-methyl perfluorooctane sulfonami (ND)



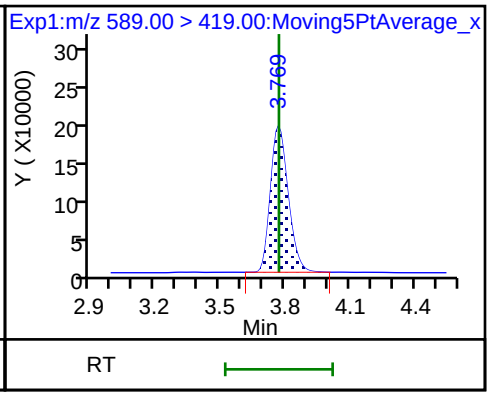
29 Perfluorodecane Sulfonic acid



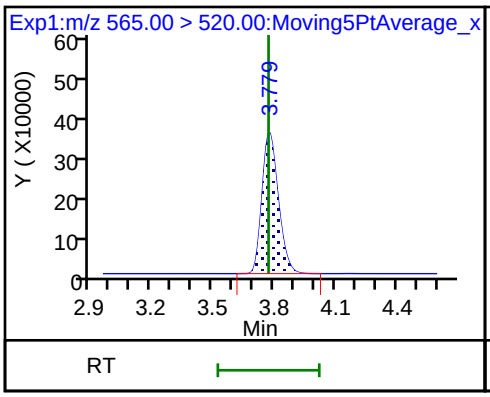
29 Perfluorodecane Sulfonic acid (M)



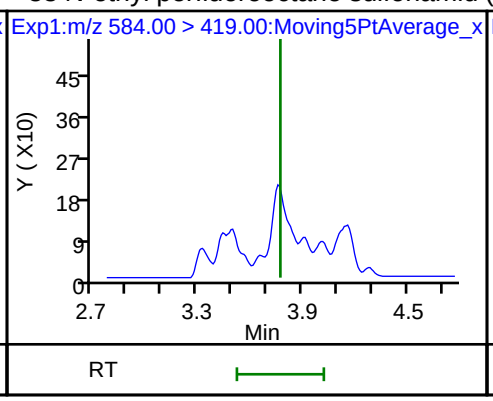
D 32 d5-NEtFOSAA



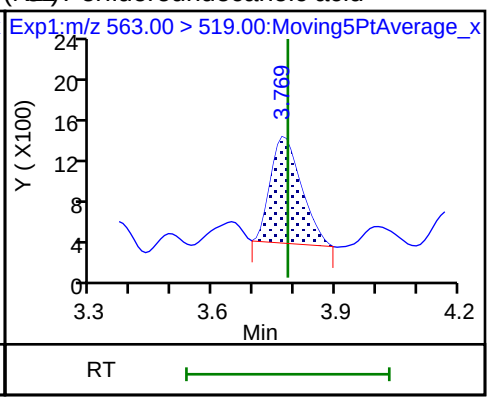
D 30 13C2 PFUnA



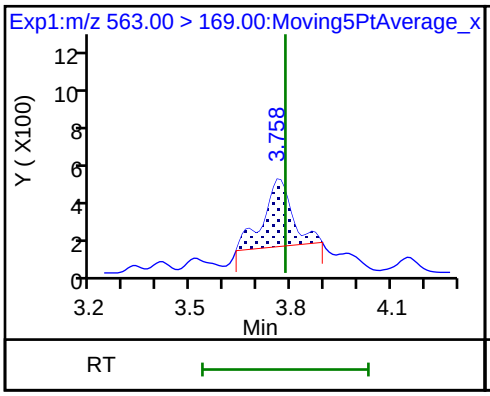
33 N-ethyl perfluorooctane sulfonamid (ND)



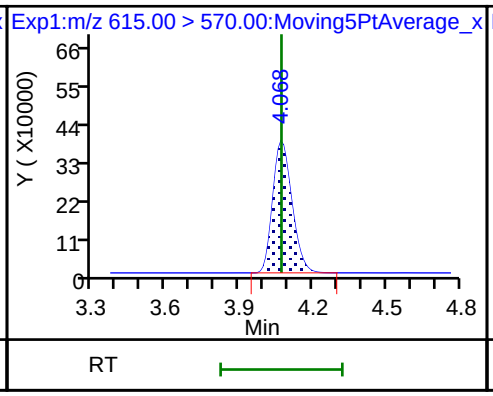
31 Perfluoroundecanoic acid



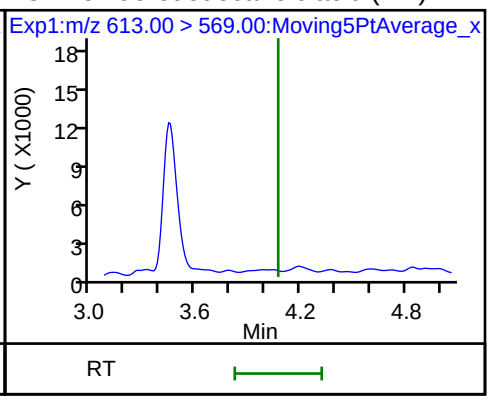
31 Perfluoroundecanoic acid



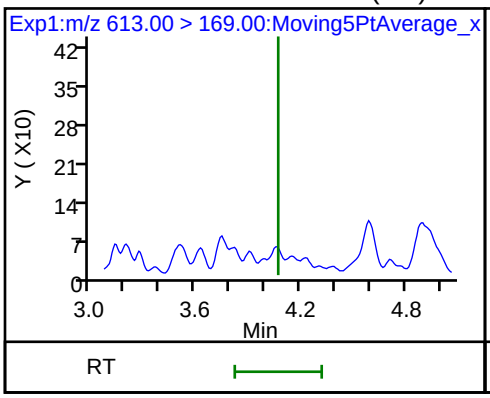
D 36 13C2 PFDoA



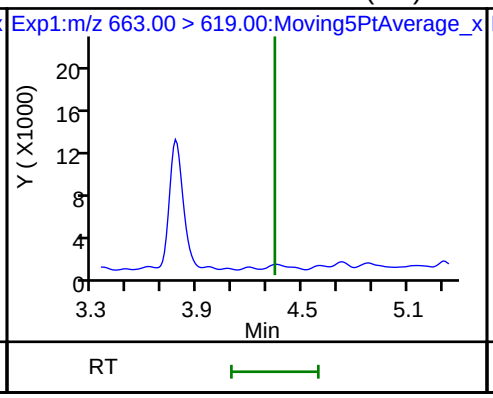
37 Perfluorododecanoic acid (ND)



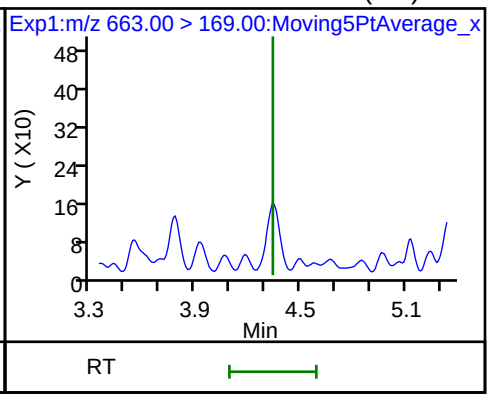
37 Perfluorododecanoic acid (ND)



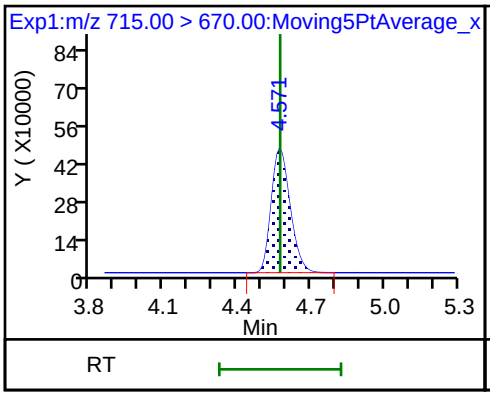
41 Perfluorotridecanoic acid (ND)



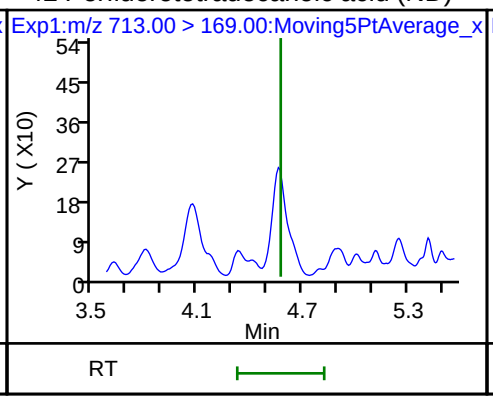
41 Perfluorotridecanoic acid (ND)



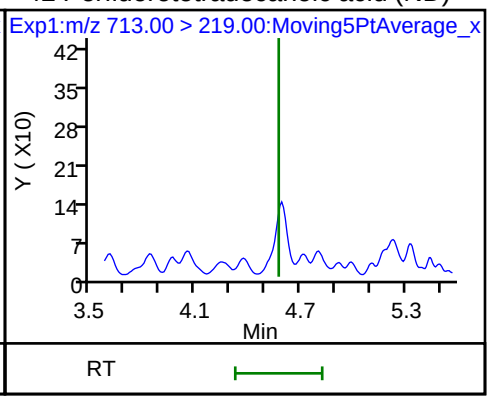
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

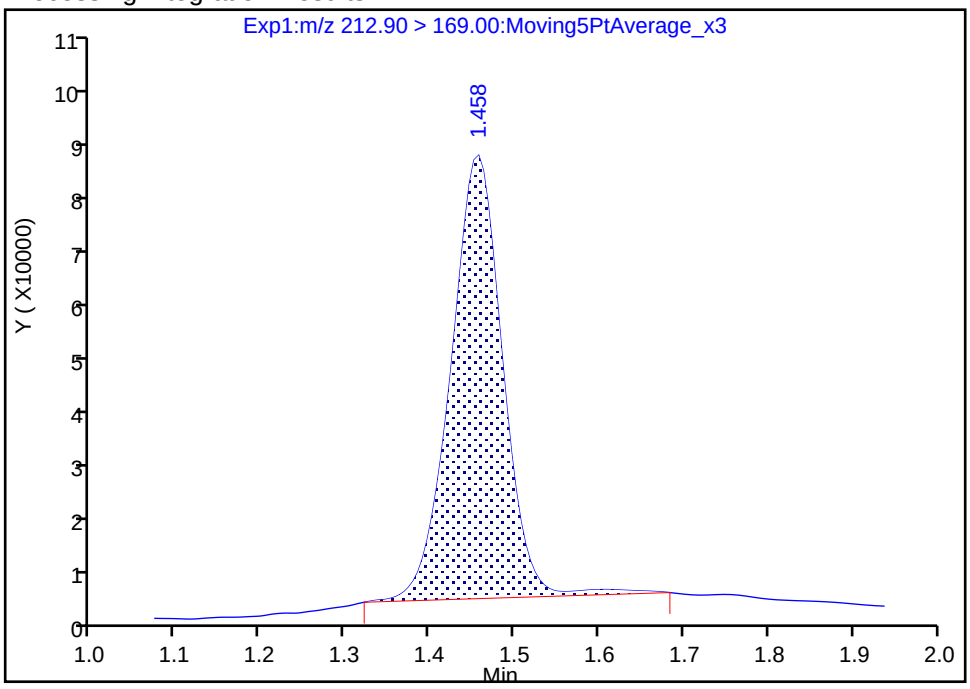
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_058.d				
Injection Date:	14-May-2018 19:02:47	Instrument ID:	A8_N		
Lims ID:	320-38630-A-3-A	Lab Sample ID:	320-38630-3		
Client ID:	GC-MW-109M (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	41	Worklist Smp#:	17
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

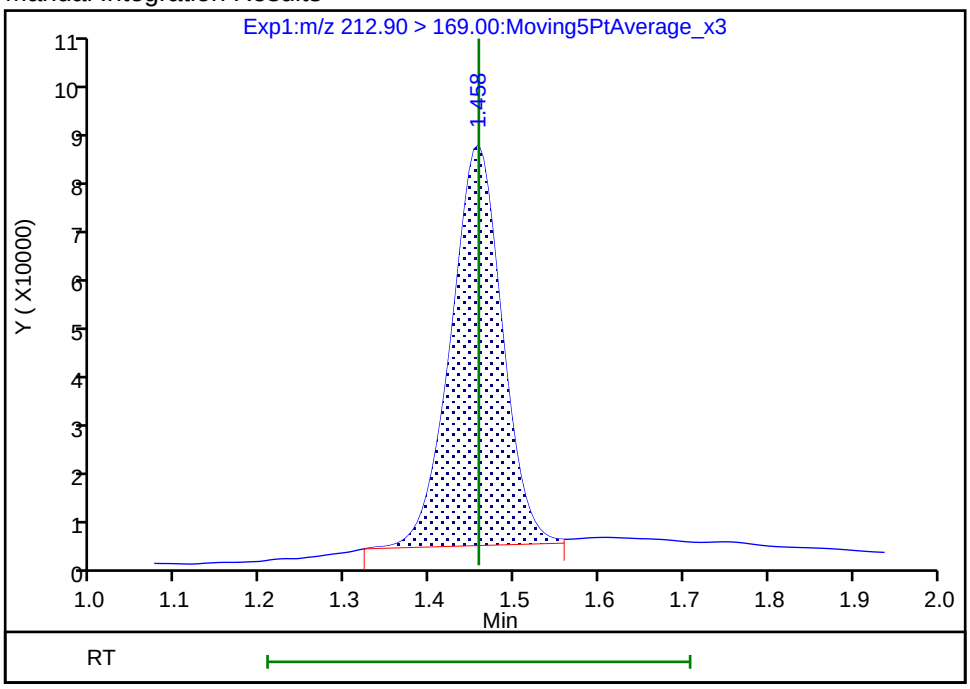
Processing Integration Results

RT: 1.46
Area: 340040
Amount: 0.194408
Amount Units: ng/ml



Manual Integration Results

RT: 1.46
Area: 335239
Amount: 0.191663
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:03:06

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

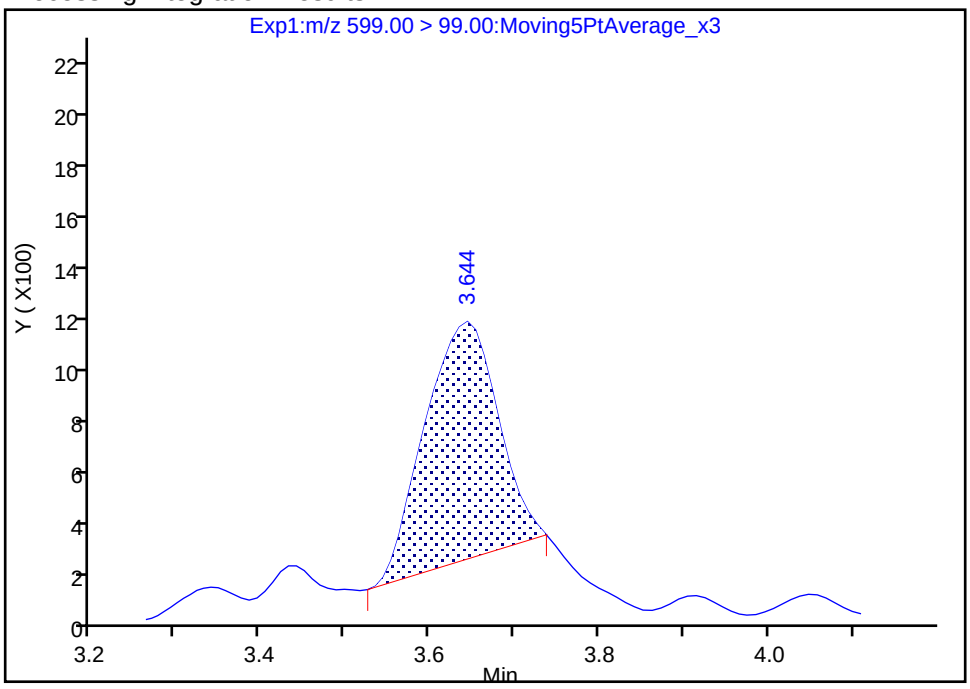
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_058.d				
Injection Date:	14-May-2018 19:02:47	Instrument ID:	A8_N		
Lims ID:	320-38630-A-3-A	Lab Sample ID:	320-38630-3		
Client ID:	GC-MW-109M (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	41	Worklist Smp#:	17
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

29 Perfluorodecane Sulfonic acid, CAS: 335-77-3

Signal: 2

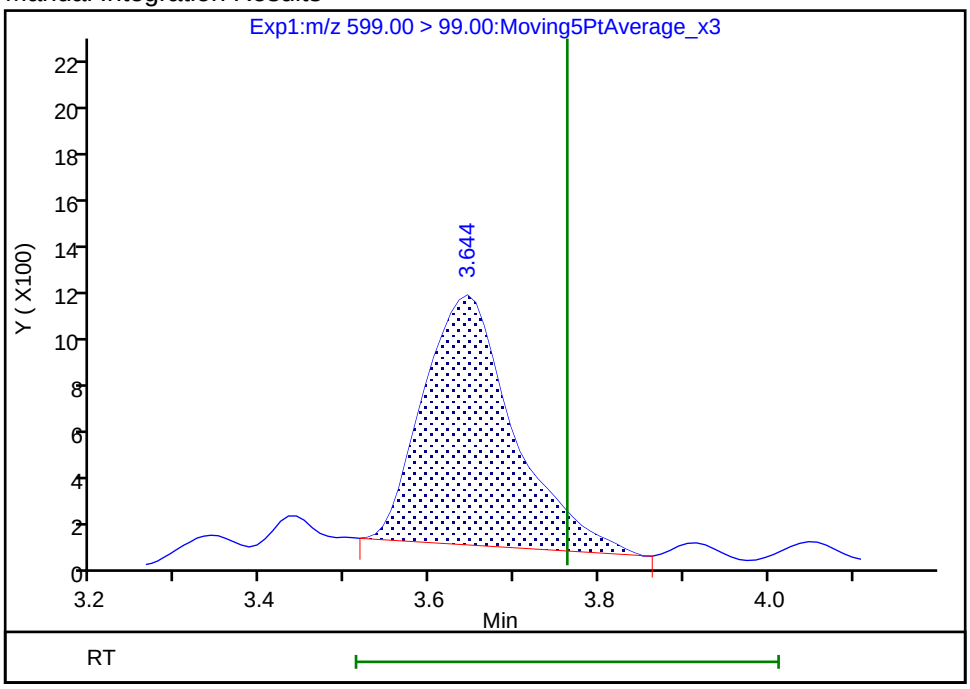
Processing Integration Results

RT: 3.64
Area: 5441
Amount: 0.096030
Amount Units: ng/ml



Manual Integration Results

RT: 3.64
Area: 7797
Amount: 0.096030
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:03:34

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) RE | Lab Sample ID: 320-38630-4 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_021.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 259.2(mL) | Date Analyzed: 05/13/2018 18:07

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*14*	*H*	*1.9*	*0.82*
27619-97-2	*6:2FTS*	*2.7*	*J H B*	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	101		25-150
STL02279	M2-6:2FTS	112		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_021.d
Lims ID: 320-38630-B-4-A
Client ID: GC-MW-101 (WG)
Sample Type: Client
Inject. Date: 13-May-2018 18:07:03 ALS Bottle#: 15 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-4-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:40:25

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.458	0.0	1.004	208501	0.1155			114	
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.458	-0.006	1.000	4821550	2.15		85.9	44282	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.729	0.001	1.000	221191	0.1382			73.3	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.729	0.001	0.563	3385580	2.37		94.8	51361	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.766	0.0	1.000	201402	0.0796			210	
298.90 > 99.00	1.766	1.766	0.0	1.000	85578		2.35(1.25-3.74)		231	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.766	0.0	1.000	74519	2.30		98.9	369	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.015	0.001	1.000	211683	0.1459			148	
313.00 > 119.00	2.016	2.015	0.001	1.000	16556		12.79(5.03-15.10)		213	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.015	0.001	1.000	3615070	2.40		96.2	65291	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.346	0.001	1.000	191903	0.1332			207	
363.00 > 169.00	2.347	2.346	0.001	1.000	69721		2.75(1.13-3.40)		516	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.346	0.001	1.000	3330353	2.41		96.2	54504	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.359	0.001	1.000	107681	0.0536			251	
399.00 > 99.00	2.360	2.359	0.001	1.000	27475		3.92(1.50-4.49)		105	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.359	0.001	1.000	4188079	2.32		97.9	49704	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.676	2.683	-0.007	1.000	34464	0.0688			280	
D 12 M2-6:2FTS										
429.00 > 81.00	2.676	2.683	-0.007	1.000	718237	2.66		112	6157	
* 62 13C2-PFOA										
415.00 > 370.00	2.698	2.706	-0.008		3476871	2.50			68914	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.698	2.706	-0.008	1.000	556017	0.3633			246	
413.00 > 169.00	2.698	2.706	-0.008	1.000	327456		1.70(0.84-2.52)		1446	
D 14 13C4 PFOA										
417.00 > 372.00	2.698	2.706	-0.008	1.000	3309656	2.53		101	51332	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.706	2.713	-0.007	1.000	13468	0.008443			70.4	
449.00 > 99.00	2.713	2.713	0.0	1.003	4713		2.86(1.94-5.82)		56.9	
20 Perfluorononanoic acid										
463.00 > 419.00	3.071	3.078	-0.007	1.000	61368	0.0548			88.2	
463.00 > 169.00	3.071	3.078	-0.007	1.000	13342		4.60(1.90-5.69)		302	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.071	3.078	-0.007	1.000	422414	0.3156			1791	
499.00 > 99.00	3.071	3.078	-0.007	1.000	85455		4.94(2.31-6.93)		773	
D 19 13C5 PFNA										
468.00 > 423.00	3.071	3.078	-0.007	1.000	2751233	2.49		99.6	74437	
D 18 13C4 PFOS										
503.00 > 80.00	3.071	3.078	-0.007	1.000	2916662	2.25		94.0	26326	
D 21 13C8 FOSA										
506.00 > 78.00	3.405	3.414	-0.009	1.000	4191641	2.28		91.3	37080	
D 26 M2-8:2FTS										
529.00 > 81.00	3.424	3.433	-0.009	1.000	943868	2.66		111	11237	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.433	3.442	-0.009	1.000	29653	0.0307			144	
513.00 > 169.00	3.443	3.442	0.001	1.003	6267		4.73(2.36-7.09)		157	
D 23 13C2 PFDA										
515.00 > 470.00	3.433	3.442	-0.009	1.000	2351415	2.44		97.6	38143	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.584	3.605	-0.021	1.000	957726	2.26		90.6	19598	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.759	3.769	-0.010	1.000	1094656	2.37		94.6	2758	
D 30 13C2 PFUnA										
565.00 > 520.00	3.759	3.780	-0.021	1.000	1875832	2.38		95.2	67983	
D 36 13C2 PFDoA										
615.00 > 570.00	4.059	4.069	-0.010	1.000	2035492	2.48		99.0	25220	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2105793	2.35		94.1	12724	

Report Date: 14-May-2018 10:44:19 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_021.d

Injection Date: 13-May-2018 18:07:03 Instrument ID: A8_N

Lims ID: 320-38630-B-4-A Lab Sample ID: 320-38630-4

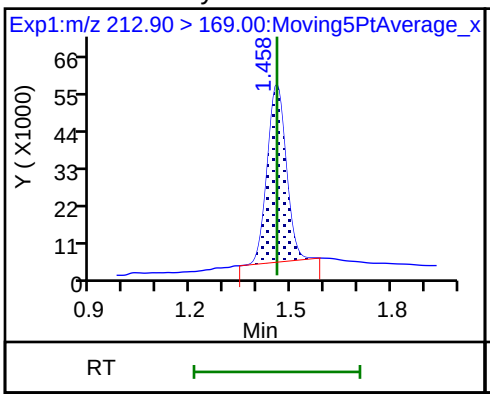
Client ID: GC-MW-101 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 15 Worklist Smp#: 8

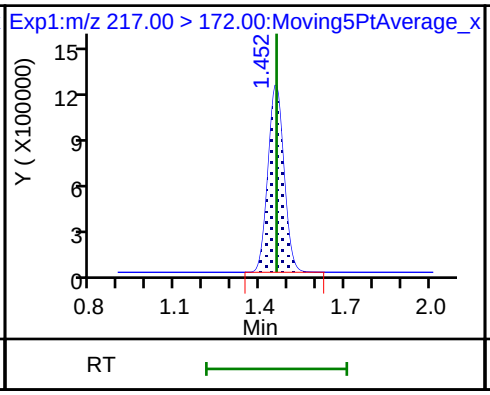
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

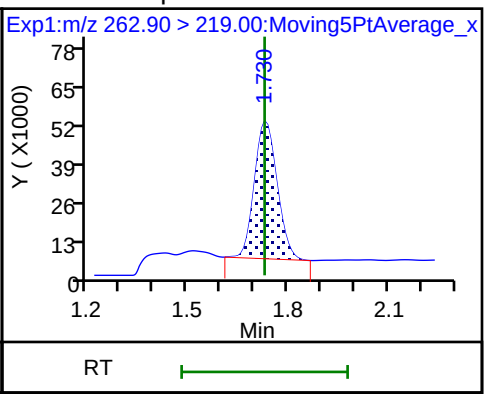
2 Perfluorobutyric acid



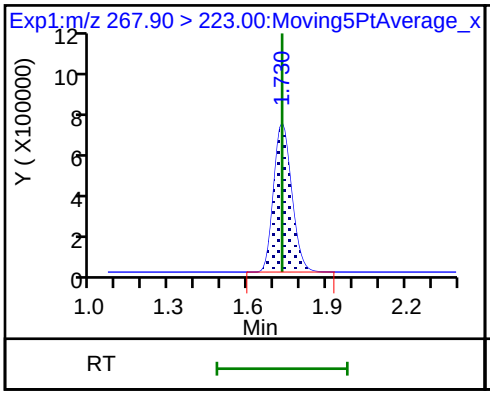
D 1 13C4 PFBA



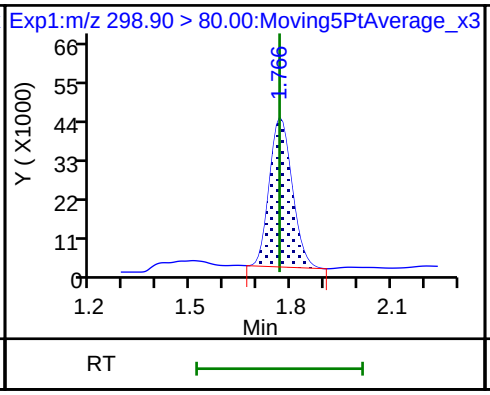
4 Perfluoropentanoic acid



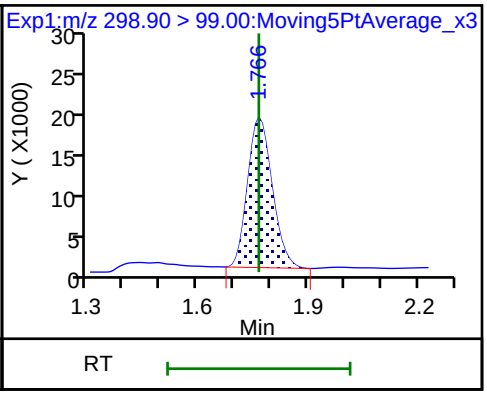
D 3 13C5-PFPeA



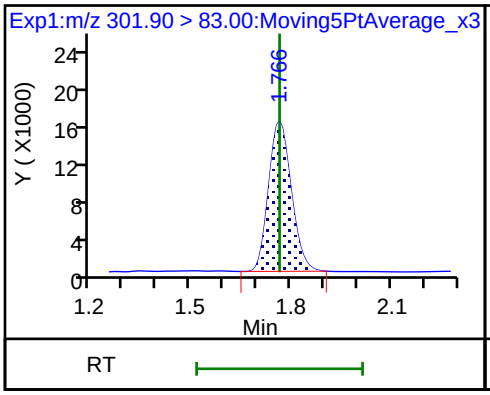
5 Perfluorobutanesulfonic acid



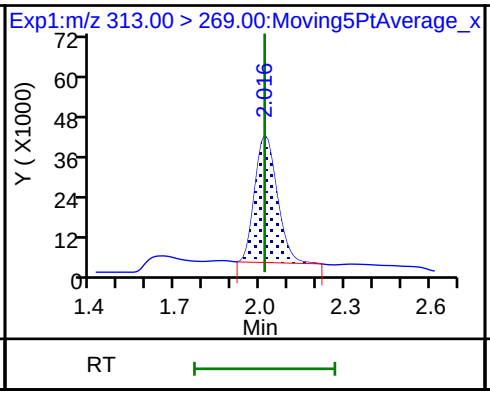
5 Perfluorobutanesulfonic acid



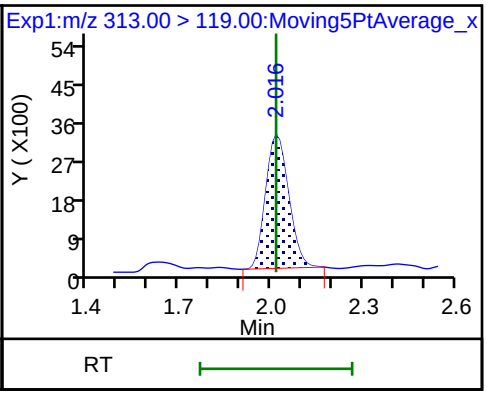
D 47 13C3-PFBS



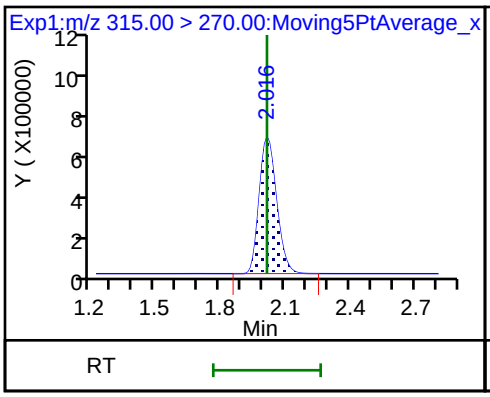
6 Perfluorohexanoic acid



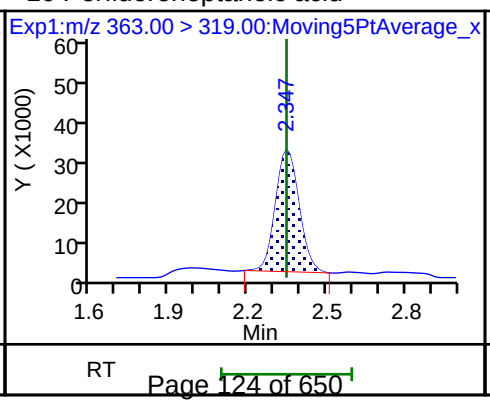
6 Perfluorohexanoic acid



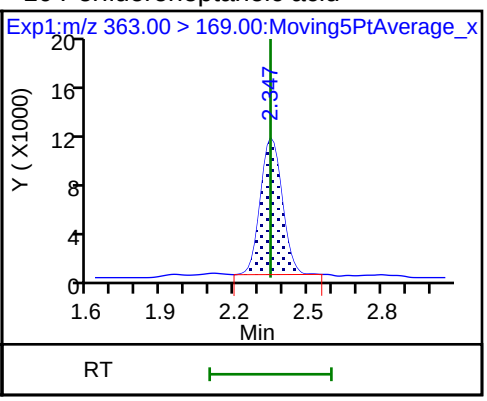
D 7 13C2 PFHxA



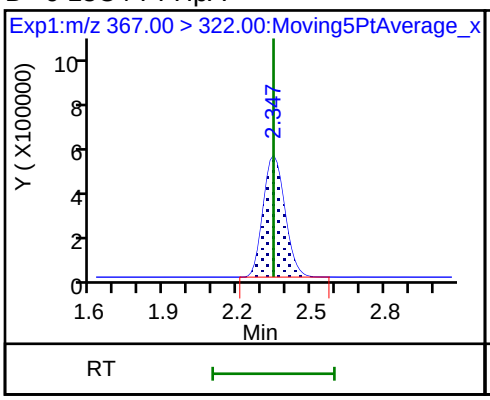
10 Perfluoroheptanoic acid



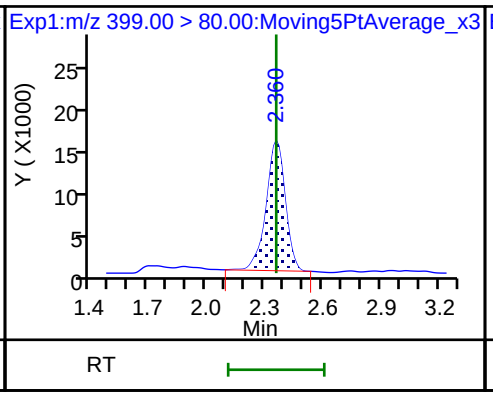
10 Perfluoroheptanoic acid



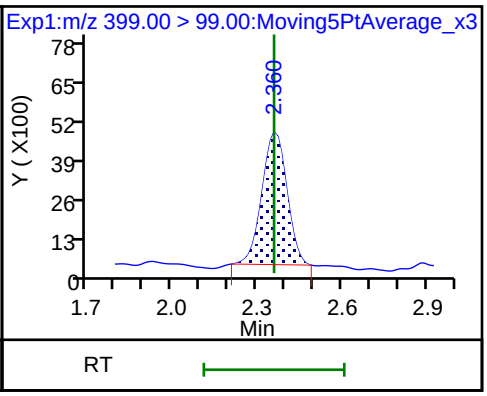
D 9 13C4-PFHpA



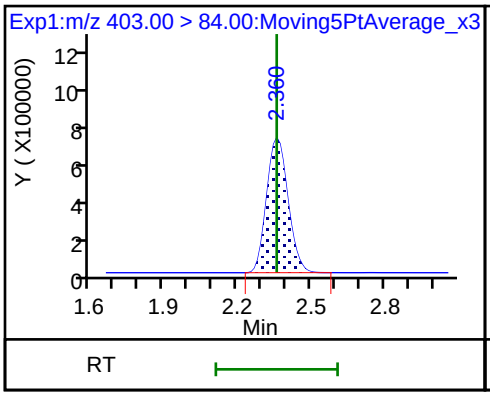
8 Perfluorohexanesulfonic acid



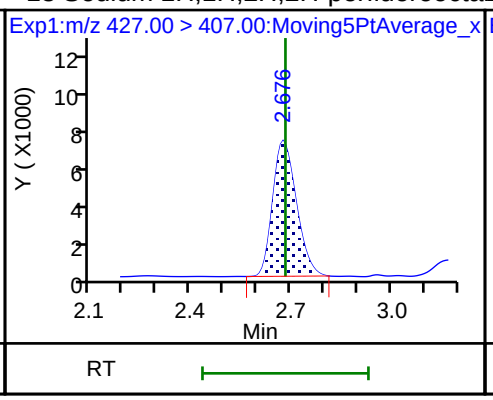
8 Perfluorohexanesulfonic acid



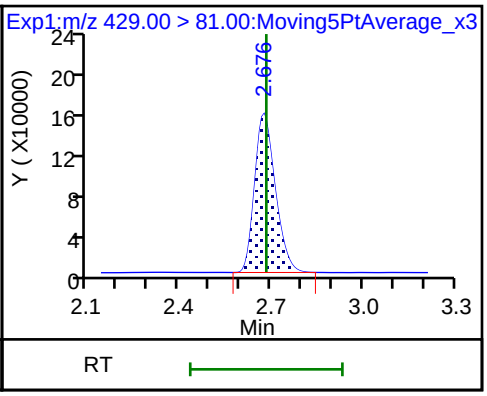
D 11 18O2 PFHxS



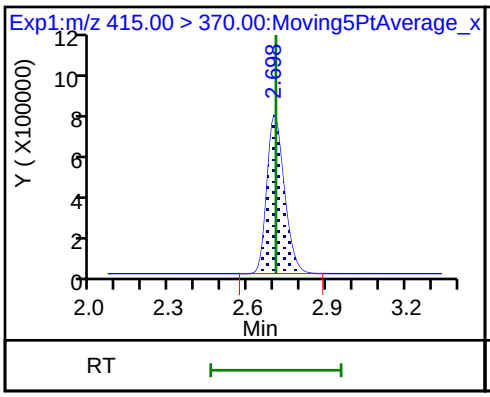
13 Sodium 1H,1H,2H,2H-perfluorooctane



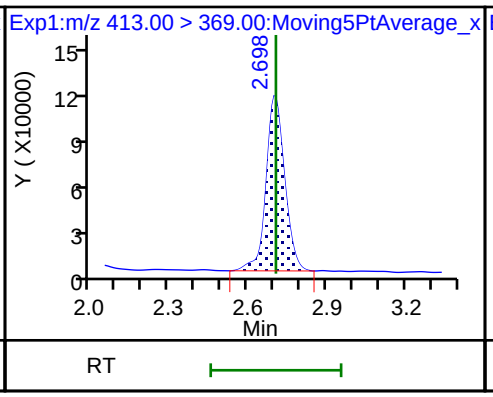
D 12 M2-6:2FTS



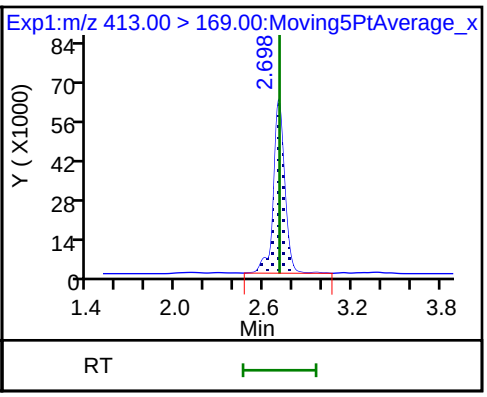
* 62 13C2-PFOA



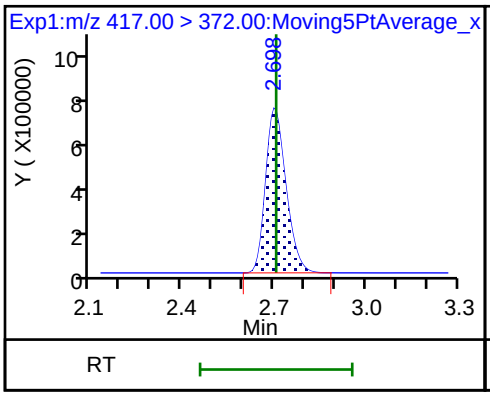
15 Perfluorooctanoic acid



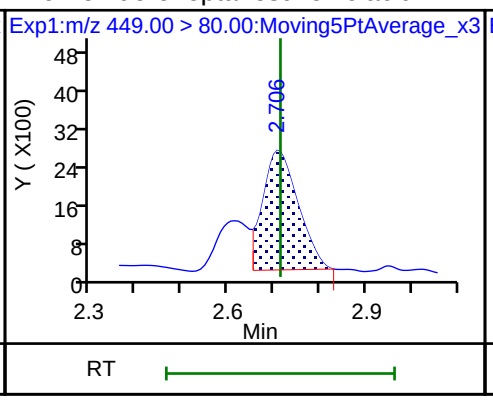
15 Perfluorooctanoic acid



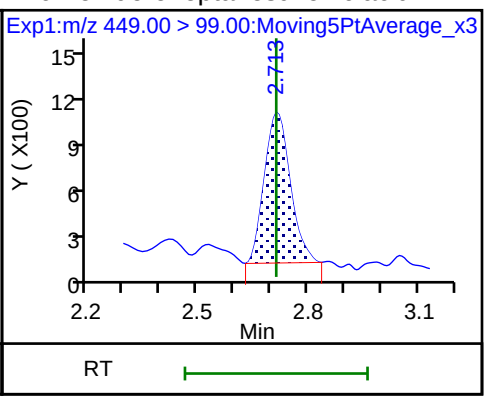
D 14 13C4 PFOA



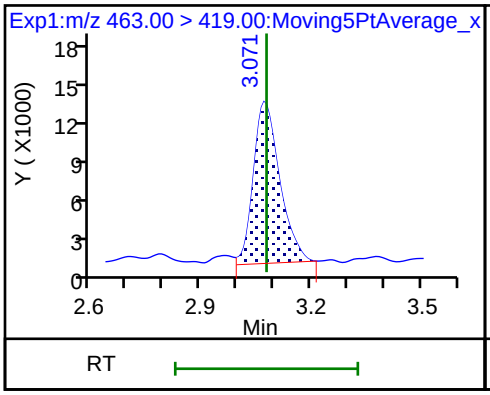
16 Perfluoroheptanesulfonic acid



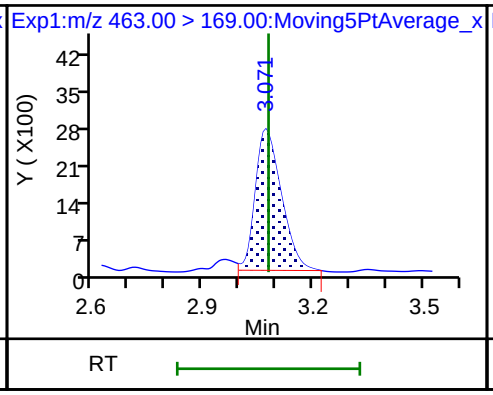
16 Perfluoroheptanesulfonic acid



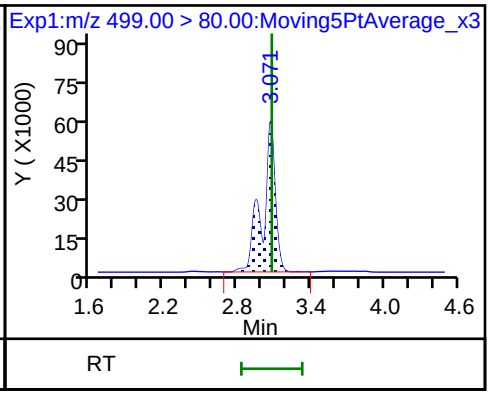
20 Perfluorononanoic acid



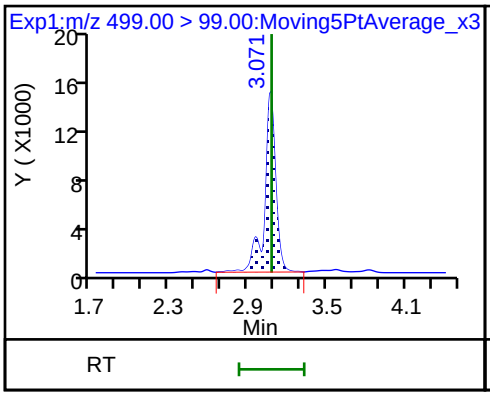
20 Perfluorononanoic acid



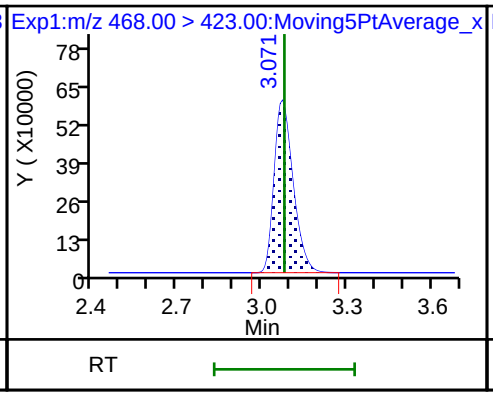
17 Perfluorooctane sulfonic acid



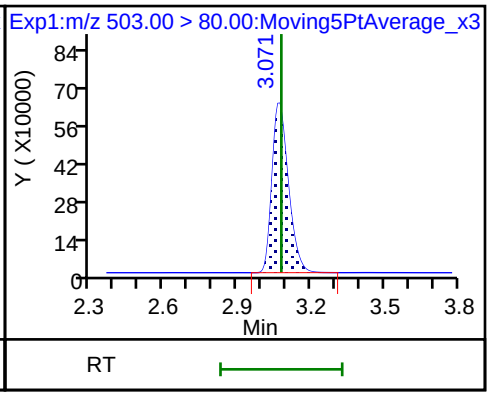
17 Perfluorooctane sulfonic acid



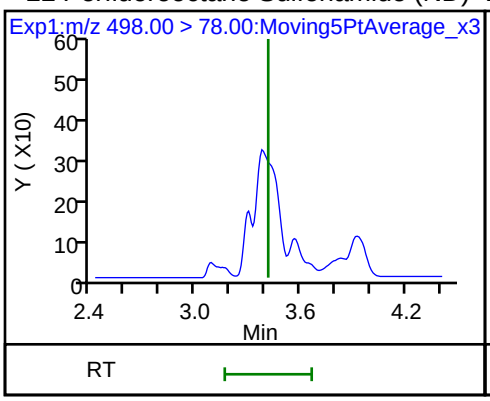
D 19 13C5 PFNA



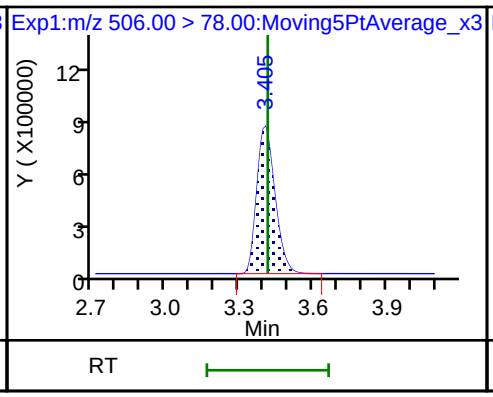
D 18 13C4 PFOS



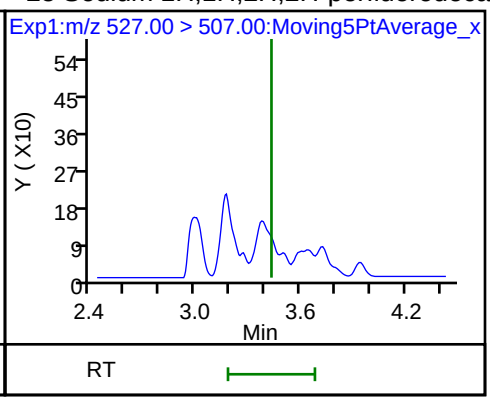
22 Perfluorooctane Sulfonamide (ND)



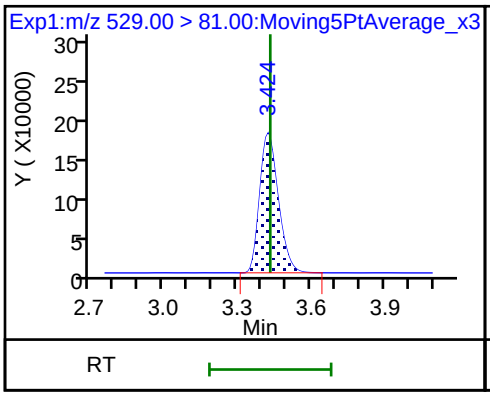
D 21 13C8 FOSA



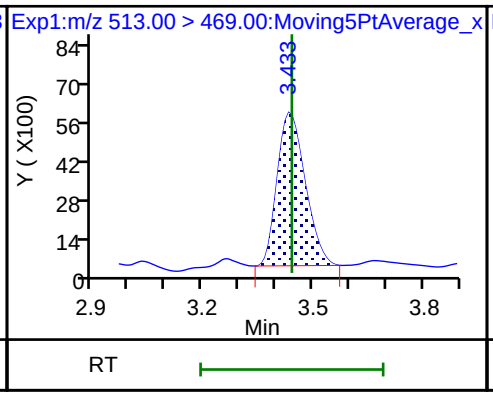
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



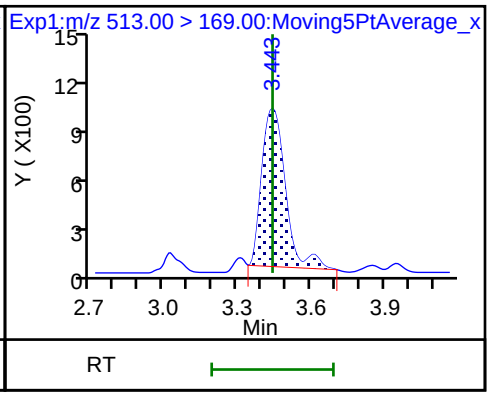
D 26 M2-8:2FTS



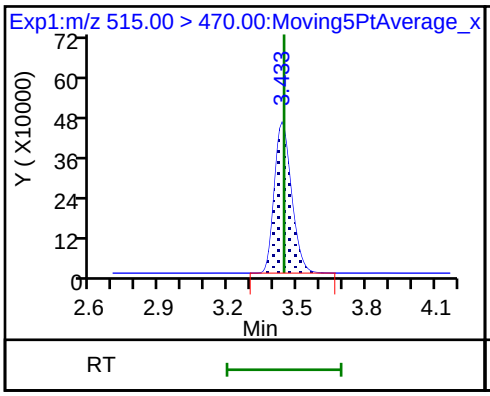
24 Perfluorodecanoic acid



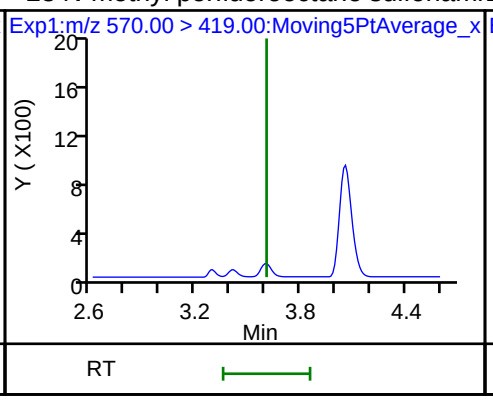
24 Perfluorodecanoic acid



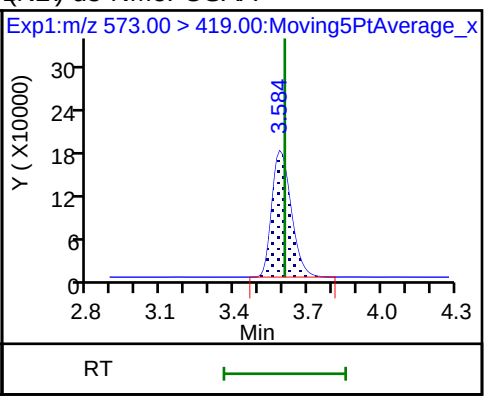
D 23 13C2 PFDA



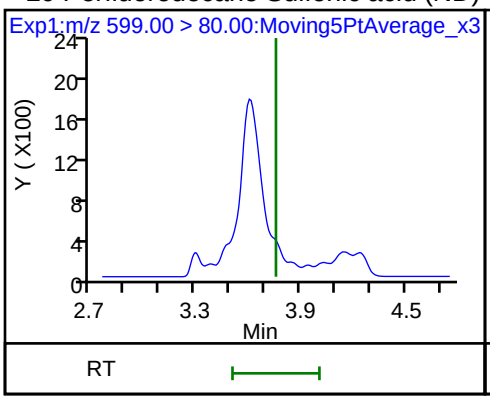
28 N-methyl perfluorooctane sulfonamid (ND)



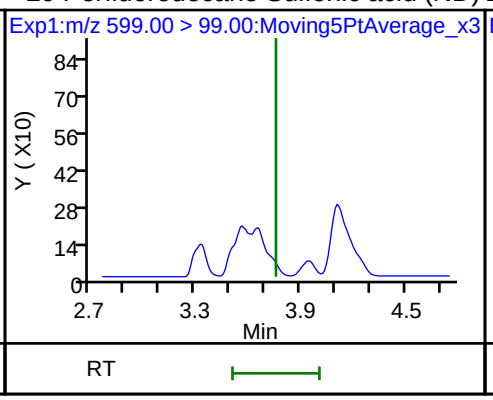
D 27 d3-NMeFOSAA



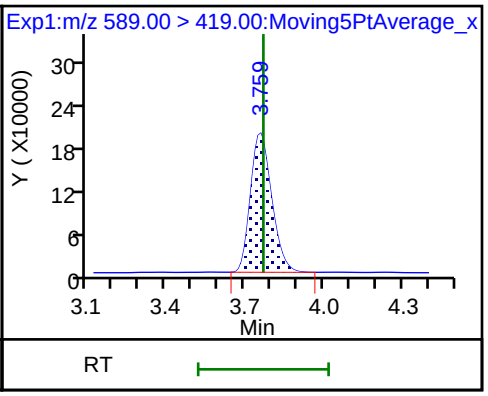
29 Perfluorodecane Sulfonic acid (ND)



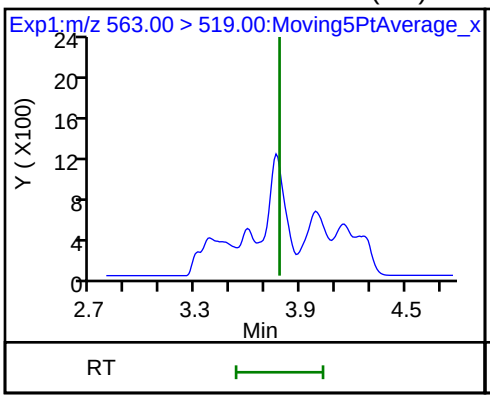
29 Perfluorodecane Sulfonic acid (ND)



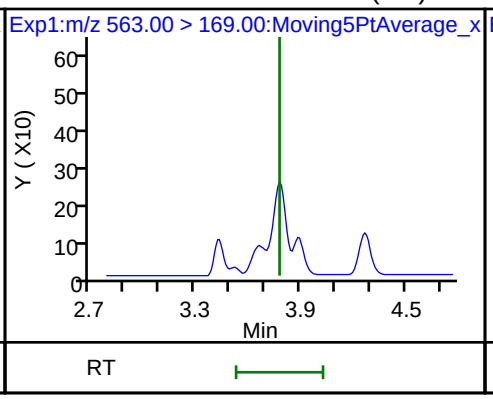
D 32 d5-NEtFOSAA



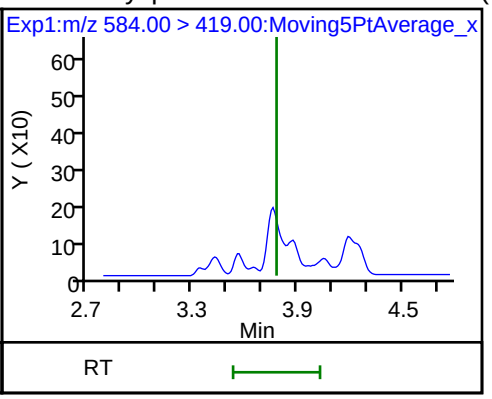
31 Perfluoroundecanoic acid (ND)



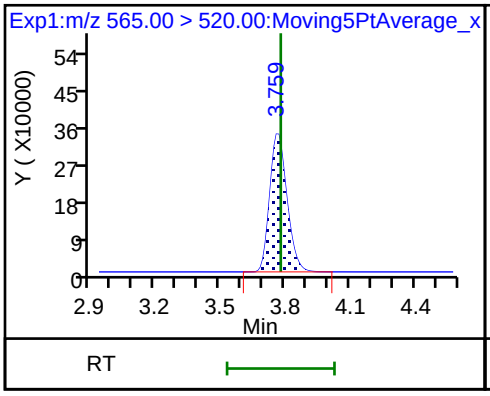
31 Perfluoroundecanoic acid (ND)



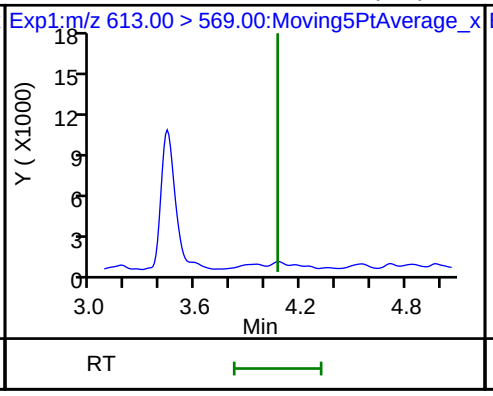
33 N-ethyl perfluorooctane sulfonamid (ND)



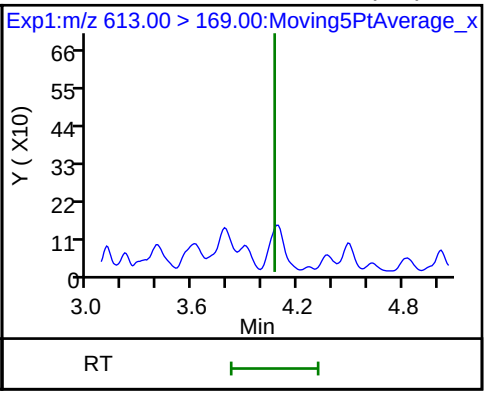
D 30 13C2 PFUnA



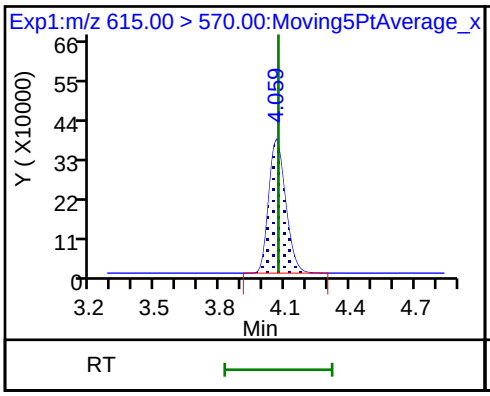
37 Perfluorododecanoic acid (ND)



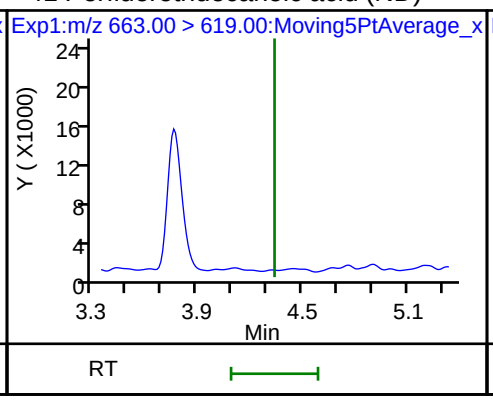
37 Perfluorododecanoic acid (ND)



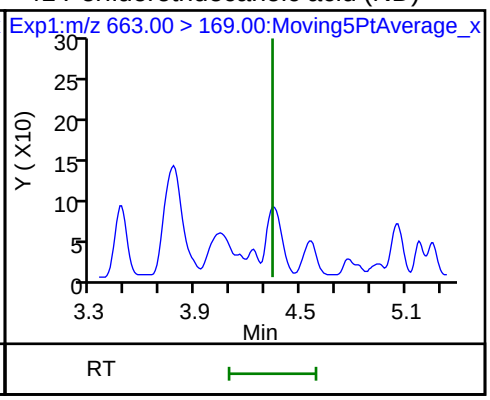
D 36 13C2 PFDoA



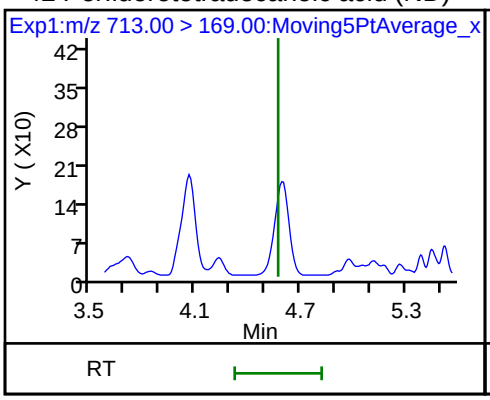
41 Perfluorotridecanoic acid (ND)



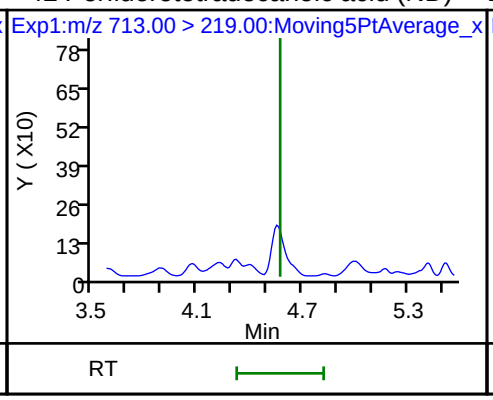
41 Perfluorotridecanoic acid (ND)



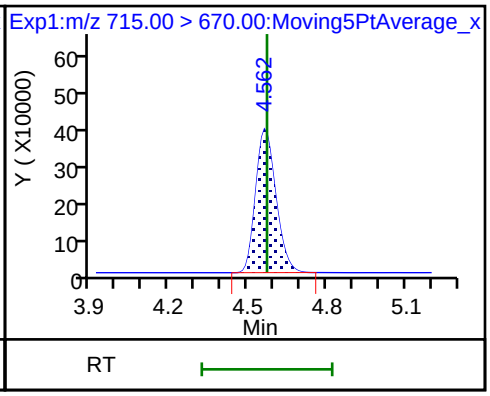
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) | Lab Sample ID: 320-38630-4

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_059.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 252.6(mL) | Date Analyzed: 05/14/2018 19:10

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	4.6		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	5.0		2.0	0.48
307-24-4	Perfluorohexanoic acid (PFHxA)	5.5		2.0	0.57
375-85-9	Perfluoroheptanoic acid (PFHpA)	5.1		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	17	B	2.0	0.84
375-95-1	Perfluorononanoic acid (PFNA)	2.1		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	1.2	J	2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.2		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.0	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.29	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	12	B	2.0	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	5.9	J B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) | Lab Sample ID: 320-38630-4

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_059.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 252.6(mL) | Date Analyzed: 05/14/2018 19:10

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	87		25-150
STL01893	13C5 PFPeA	99		25-150
STL00993	13C2 PFHxA	100		25-150
STL01892	13C4-PFHpA	99		25-150
STL00990	13C4 PFOA	104		25-150
STL00995	13C5 PFNA	106		25-150
STL00996	13C2 PFDA	98		25-150
STL00997	13C2 PFUnA	91		25-150
STL00998	13C2 PFDoA	95		25-150
STL02116	13C2-PFTeDA	111		25-150
STL02337	13C3-PFBS	91		25-150
STL00994	18O2 PFHxS	94		25-150
STL00991	13C4 PFOS	93		25-150
STL01056	13C8 FOSA	79		25-150
STL02118	d3-NMeFOSAA	102		25-150
STL02117	d5-NEtFOSAA	102		25-150
STL02279	M2-6:2FTS	118		25-150
STL02280	M2-8:2FTS	98		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_059.d
Lims ID: 320-38630-A-4-A
Client ID: GC-MW-101 (WG)
Sample Type: Client
Inject. Date: 14-May-2018 19:10:35 ALS Bottle#: 42 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-4-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:33 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:04:14

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.460	1.452	0.008	1.000	5242227	2.17		86.8	41346	
2 Perfluorobutyric acid										
212.90 > 169.00	1.460	1.458	0.002	1.000	224813	0.1154			99.8	
D 3 13C5-PFPeA										
267.90 > 223.00	1.734	1.728	0.006	0.563	3714312	2.48		99.3	48212	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.734	1.729	0.005	1.000	230002	0.1273			79.0	M
D 47 13C3-PFBS										
301.90 > 83.00	1.770	1.764	0.006	1.000	75022	2.13		91.4	368	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.770	1.765	0.005	1.000	202476	0.0813			242	
298.90 > 99.00	1.770	1.765	0.005	1.000	85981		2.35(1.25-3.74)		221	
D 7 13C2 PFHxA										
315.00 > 270.00	2.020	2.014	0.006	1.000	3930924	2.51		100	63802	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.020	2.015	0.005	1.000	228081	0.1390			154	
313.00 > 119.00	2.020	2.015	0.005	1.000	18876		12.08(5.03-15.10)		168	
D 9 13C4-PFHpA										
367.00 > 322.00	2.353	2.345	0.008	1.000	3695469	2.46		98.5	66682	
D 11 18O2 PFHxS										
403.00 > 84.00	2.367	2.358	0.009	1.000	4435352	2.22		94.0	104991	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.353	2.359	-0.006	1.000	201145	0.1283			198	
363.00 > 169.00	2.353	2.359	-0.006	1.000	86738		2.32(1.13-3.40)		491	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.367	2.373	-0.006	1.000	108876	0.0515			237	
399.00 > 99.00	2.367	2.373	-0.006	1.000	31413		3.47(1.50-4.49)		91.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.688	2.682	0.006	1.000	828661	2.80		118	8247	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.688	2.683	0.005	1.000	87089	0.1483			753	
D 14 13C4 PFOA										
417.00 > 372.00	2.711	2.704	0.007	1.000	3664992	2.60		104	77803	
* 62 13C2-PFOA										
415.00 > 370.00	2.711	2.713	-0.002		3732704	2.50			79688	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.711	2.713	-0.002	1.000	734650	0.4170			308	
413.00 > 169.00	2.711	2.713	-0.002	1.000	413929		1.77(0.84-2.52)		2408	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.718	2.720	-0.002	1.000	12347	0.007241			78.5	
449.00 > 99.00	2.703	2.720	-0.017	0.994	2186		5.65(1.94-5.82)		19.0	
D 18 13C4 PFOS										
503.00 > 80.00	3.082	3.073	0.009	1.000	3088704	2.22		92.9	25501	
D 19 13C5 PFNA										
468.00 > 423.00	3.082	3.081	0.001	1.000	3118741	2.65		106	82871	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.082	3.082	0.0	1.000	439008	0.3043			3058	
499.00 > 99.00	3.082	3.082	0.0	1.000	89011		4.93(2.31-6.93)		837	
20 Perfluorononanoic acid										
463.00 > 419.00	3.082	3.082	0.0	1.000	69176	0.0526			92.1	
463.00 > 169.00	3.074	3.082	-0.008	0.997	15258		4.53(1.90-5.69)		336	
D 21 13C8 FOSA										
506.00 > 78.00	3.408	3.407	0.001	1.000	3972019	1.97		78.9	38238	
D 26 M2-8:2FTS										
529.00 > 81.00	3.435	3.435	0.0	1.000	901382	2.34		97.5	11385	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.445	3.437	0.008	1.003	960	0.001961			18.8	
D 23 13C2 PFDA										
515.00 > 470.00	3.445	3.444	0.001	1.000	2486568	2.46		98.3	31939	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.435	3.446	-0.011	0.997	30506	0.0300			94.2	
513.00 > 169.00	3.445	3.446	-0.001	1.000	5562		5.48(2.36-7.09)		111	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.597	3.596	0.001	1.000	1175085	2.56		102	26237	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.761	3.771	-0.010	1.000	1248925	2.55		102	5672	
D 30 13C2 PFUnA										
565.00 > 520.00	3.772	3.771	0.001	1.000	1932437	2.28		91.3	31796	
D 36 13C2 PFDoA										
615.00 > 570.00	4.072	4.071	0.001	1.000	2106534	2.38		95.3	13632	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.572	4.574	-0.002	1.000	2676076	2.78		111	13158	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:09:58 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_059.d

Injection Date: 14-May-2018 19:10:35 Instrument ID: A8_N

Lims ID: 320-38630-A-4-A Lab Sample ID: 320-38630-4

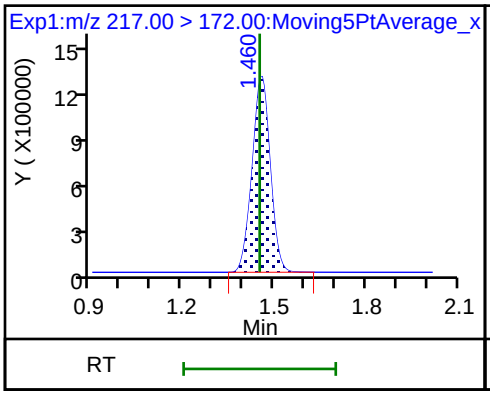
Client ID: GC-MW-101 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 42 Worklist Smp#: 18

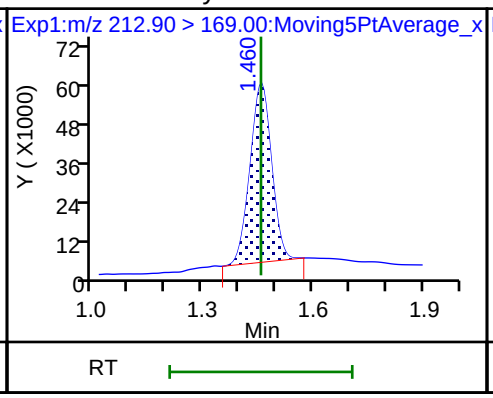
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

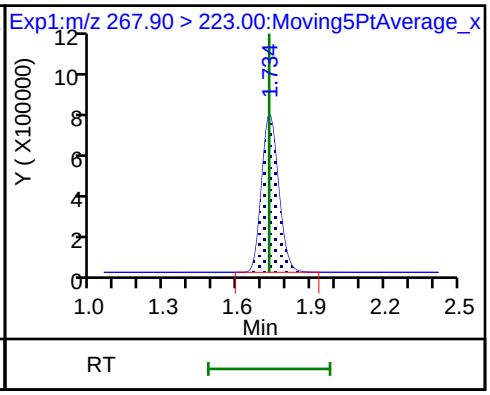
D 1 13C4 PFBA



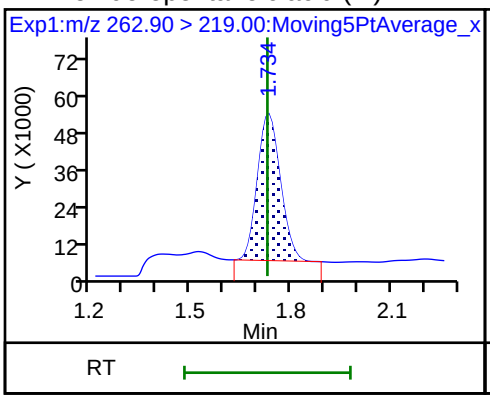
2 Perfluorobutyric acid



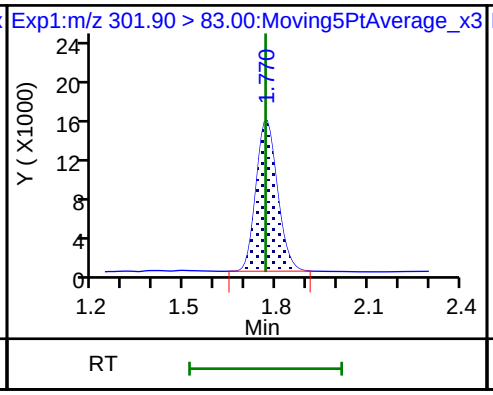
D 3 13C5-PFPeA



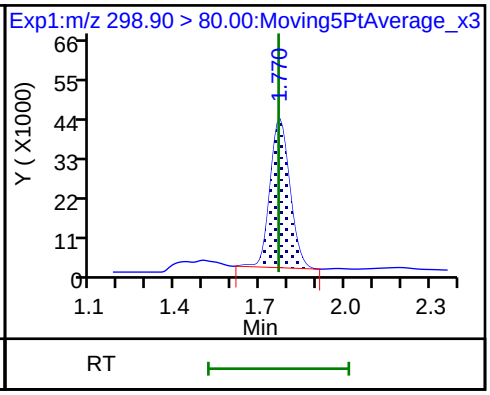
4 Perfluoropentanoic acid (M)



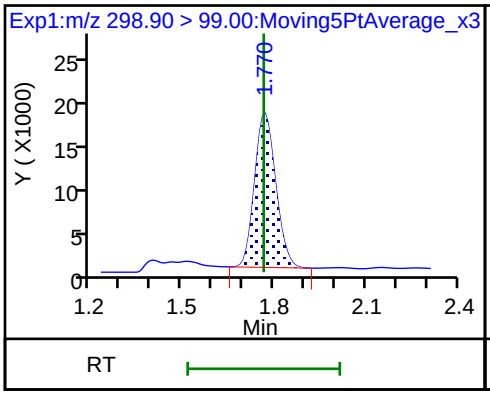
D 47 13C3-PFBS



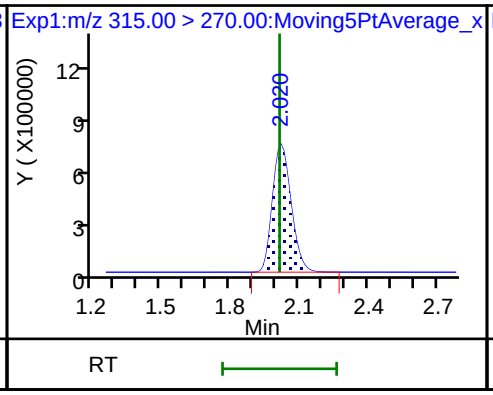
5 Perfluorobutanesulfonic acid



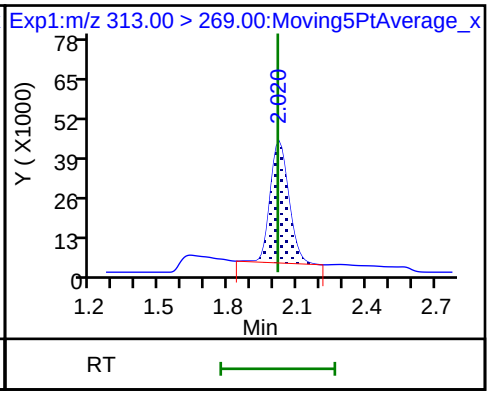
5 Perfluorobutanesulfonic acid



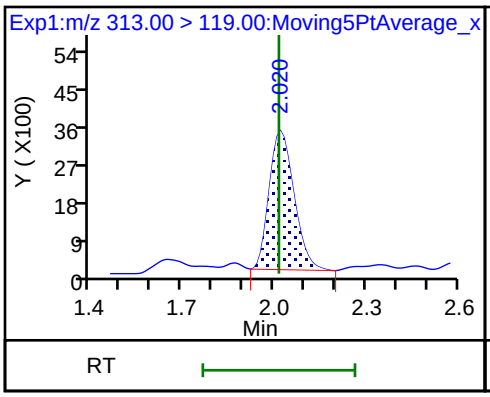
D 7 13C2 PFHxA



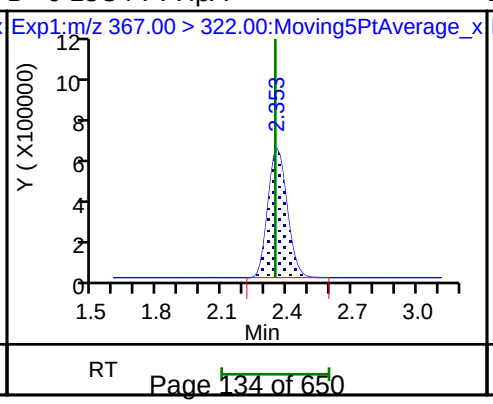
6 Perfluorohexanoic acid



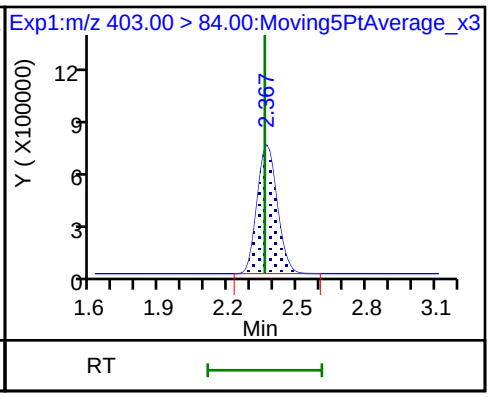
6 Perfluorohexanoic acid



D 9 13C4-PFHpA



D 11 18O2 PFHxS



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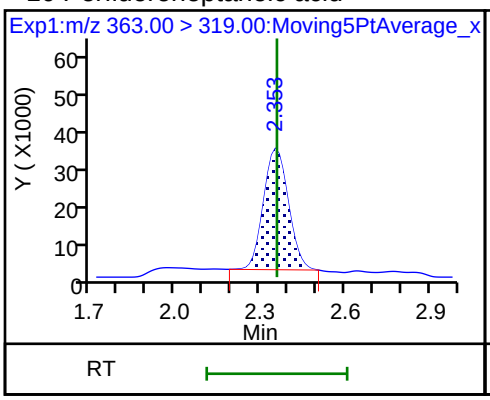

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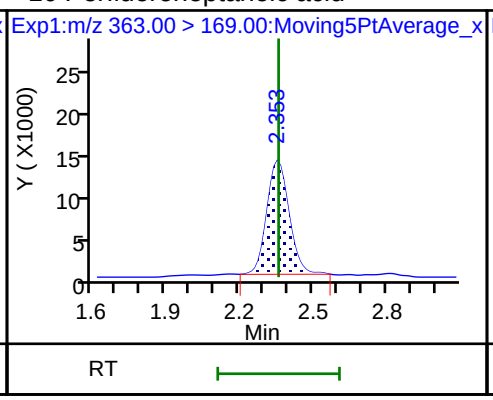
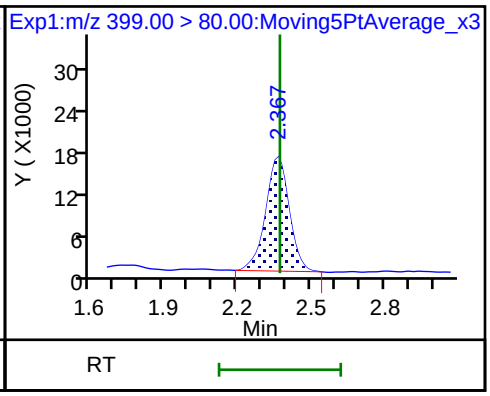
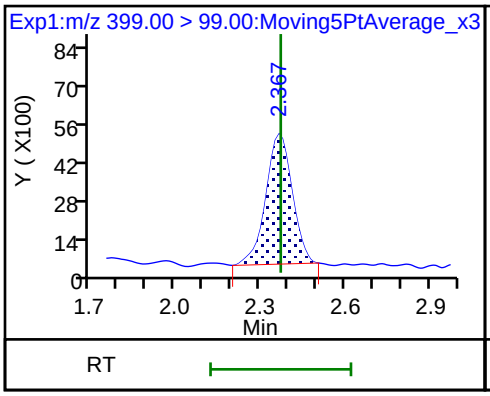


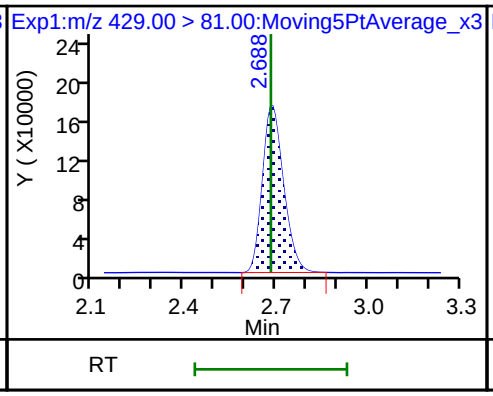
8 Perfluorohexanesulfonic acid



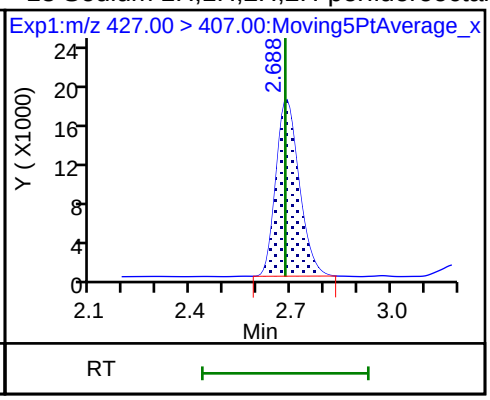
8 Perfluorohexanesulfonic acid



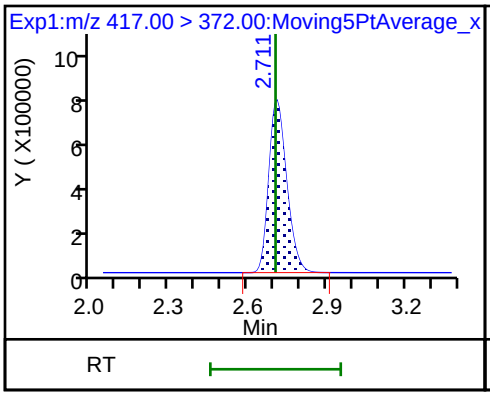
D 12 M2-6:2FTS



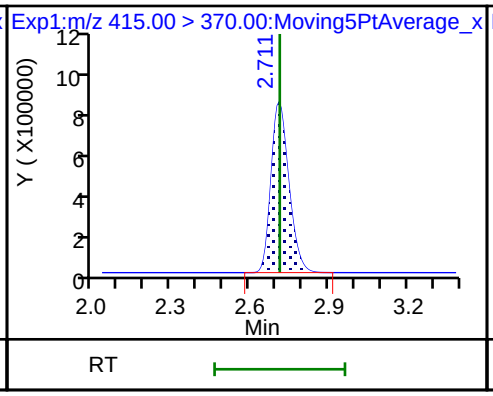
13 Sodium 1H,1H,2H,2H-perfluorooctane



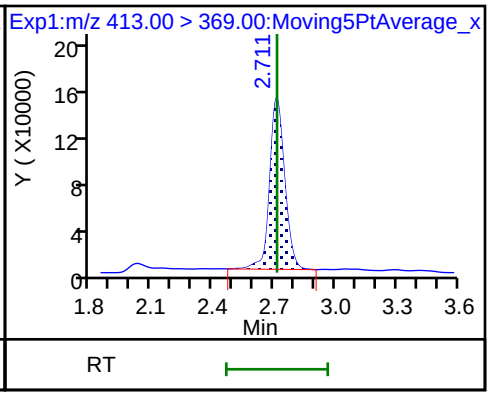
D 14 13C4 PFOA



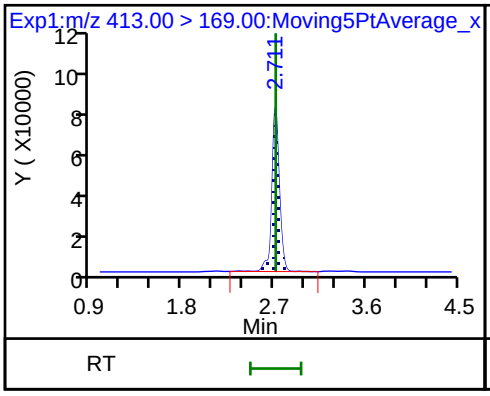
* 62 13C2-PFOA



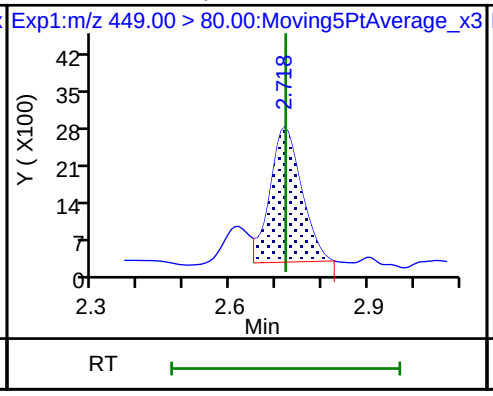
15 Perfluorooctanoic acid



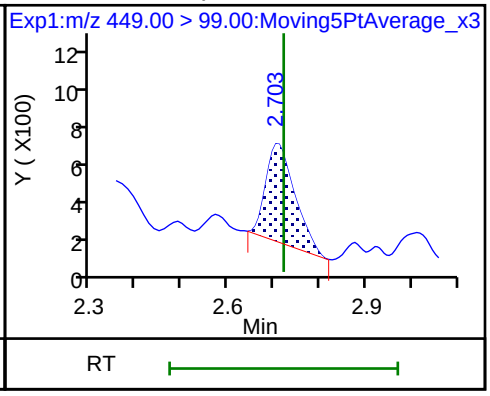
15 Perfluorooctanoic acid



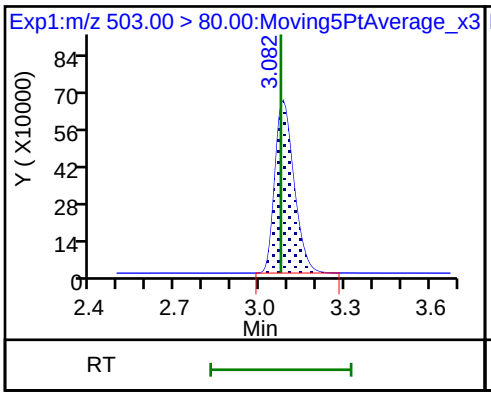
16 Perfluoroheptanesulfonic acid



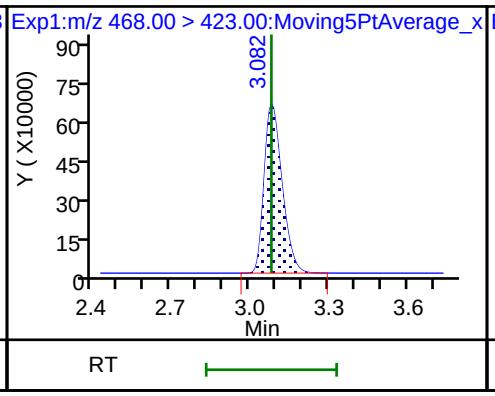
16 Perfluoroheptanesulfonic acid



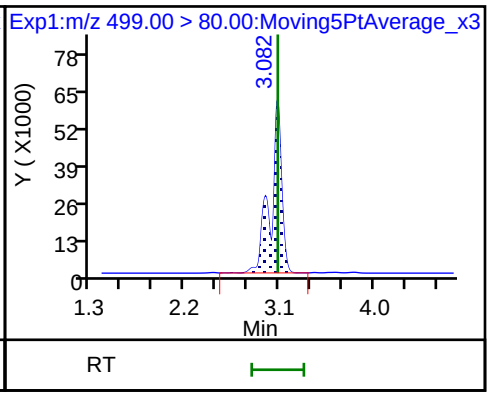
D 18 13C4 PFOS



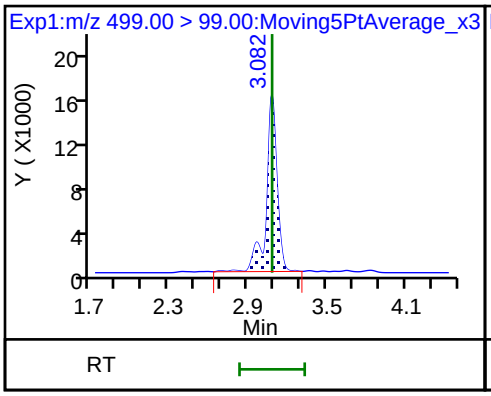
D 19 13C5 PFNA



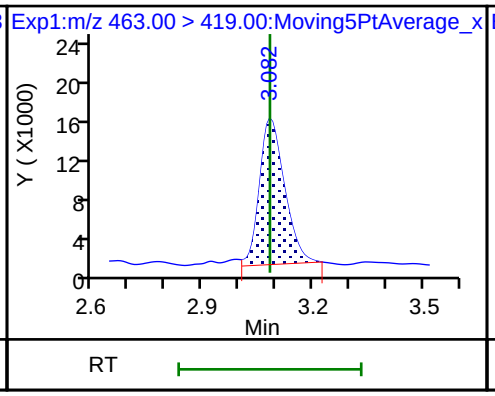
17 Perfluorooctane sulfonic acid



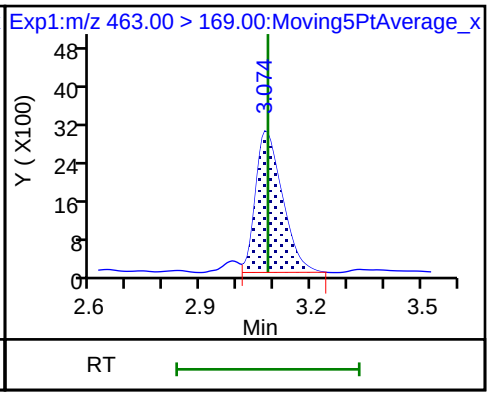
17 Perfluorooctane sulfonic acid



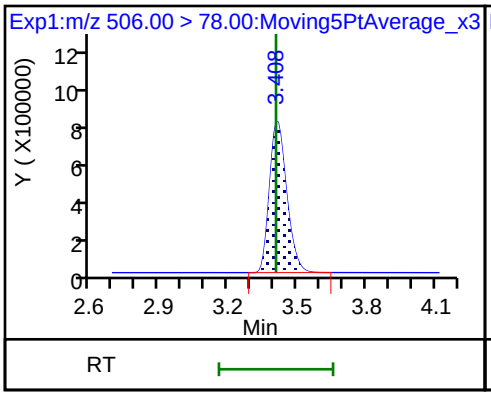
20 Perfluorononanoic acid



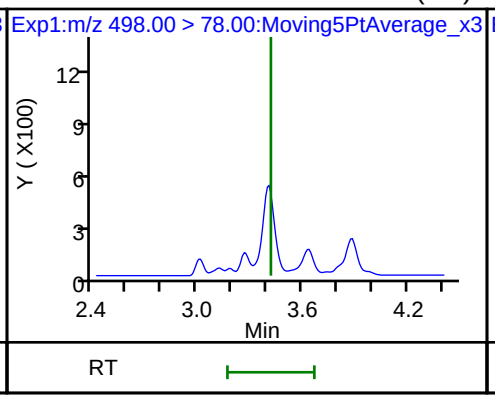
20 Perfluorononanoic acid



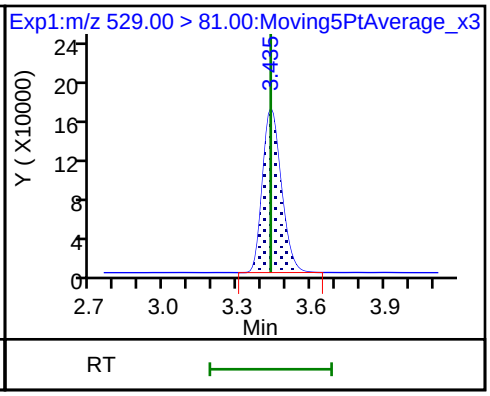
D 21 13C8 FOSA



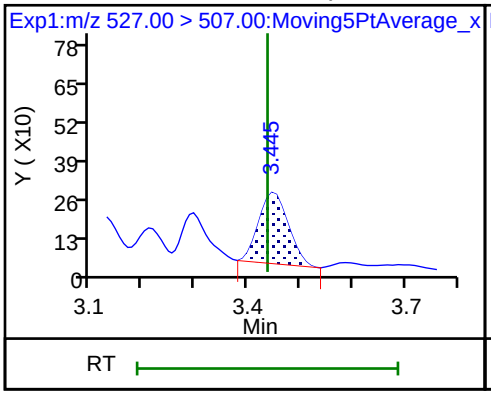
22 Perfluorooctane Sulfonamide (ND)



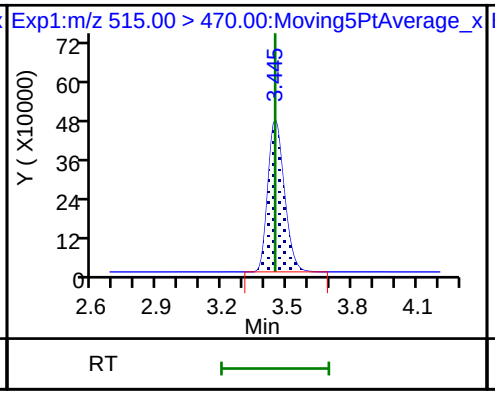
D 26 M2-8:2FTS



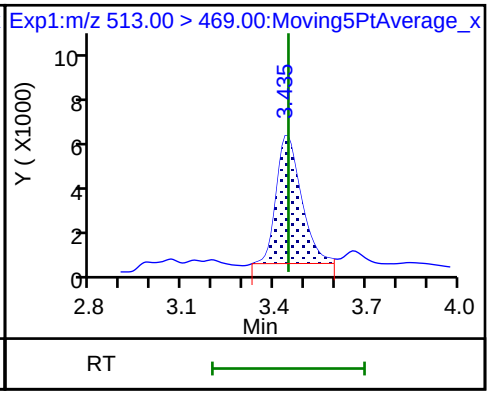
25 Sodium 1H,1H,2H,2H-perfluorodecane



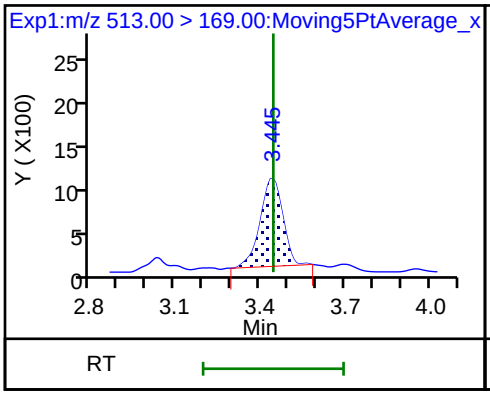
D 23 13C2 PFDA



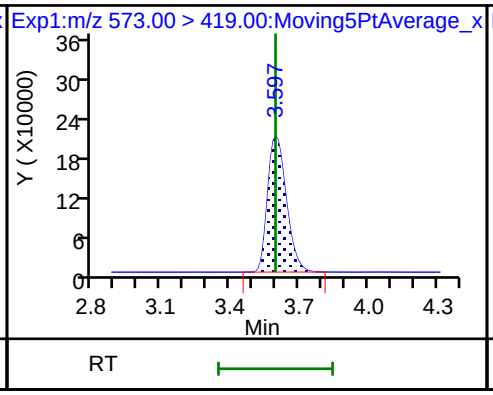
24 Perfluorodecanoic acid



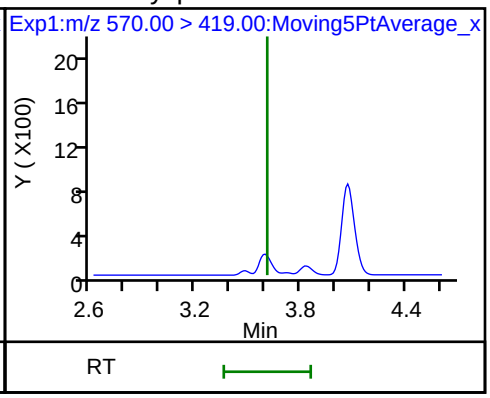
24 Perfluorodecanoic acid



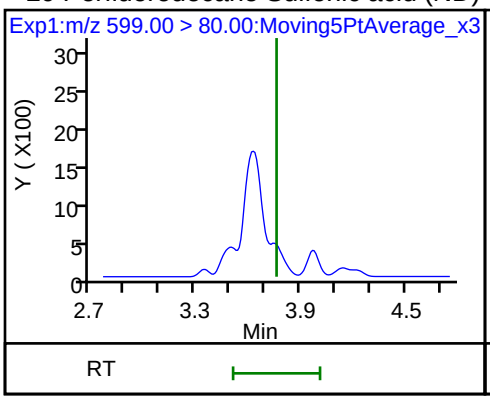
D 27 d3-NMeFOSAA



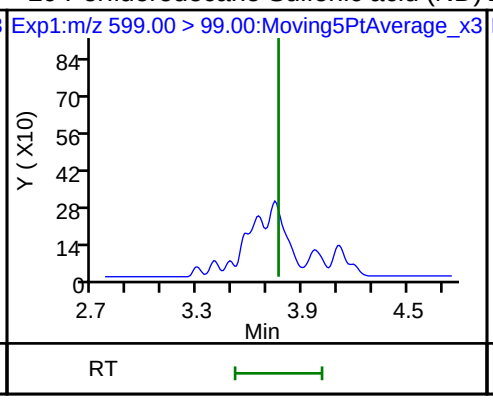
28 N-methyl perfluorooctane sulfonami (ND)



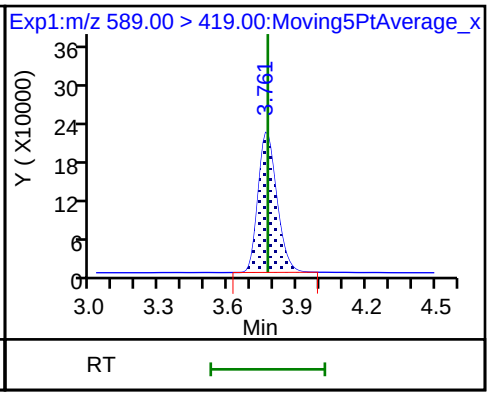
29 Perfluorodecane Sulfonic acid (ND)



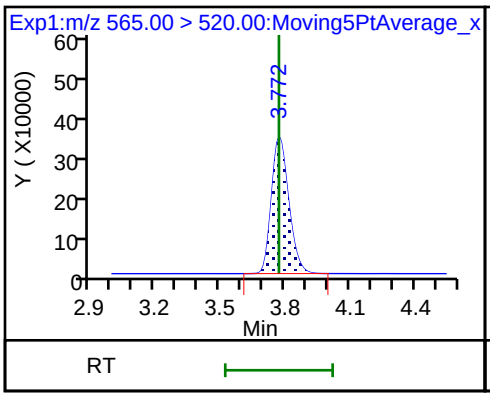
29 Perfluorodecane Sulfonic acid (ND)



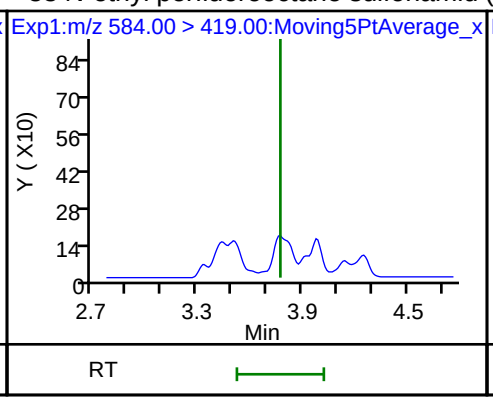
D 32 d5-NEtFOSAA



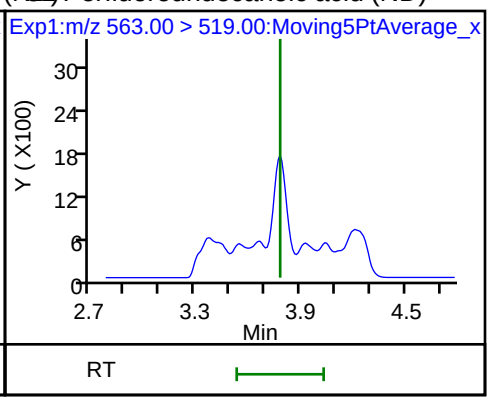
D 30 13C2 PFUnA



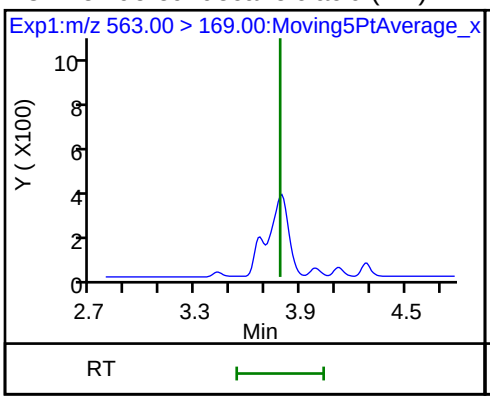
33 N-ethyl perfluorooctane sulfonamid (ND)



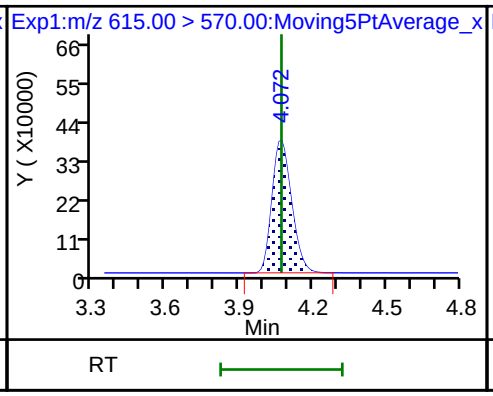
31 Perfluoroundecanoic acid (ND)



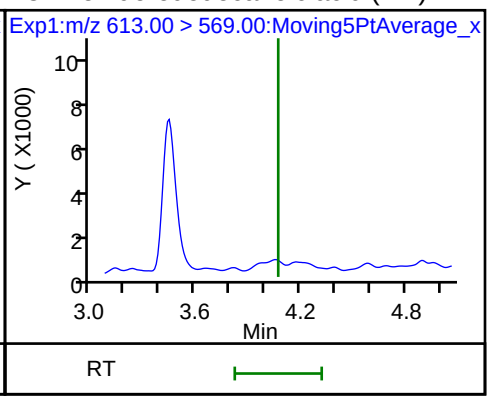
31 Perfluoroundecanoic acid (ND)



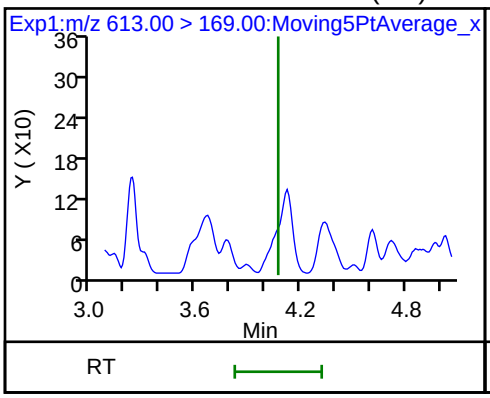
D 36 13C2 PFDoA



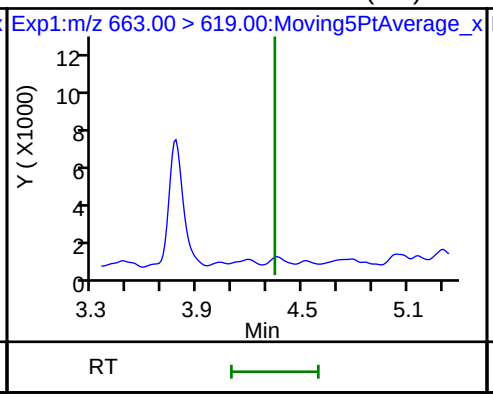
37 Perfluorododecanoic acid (ND)



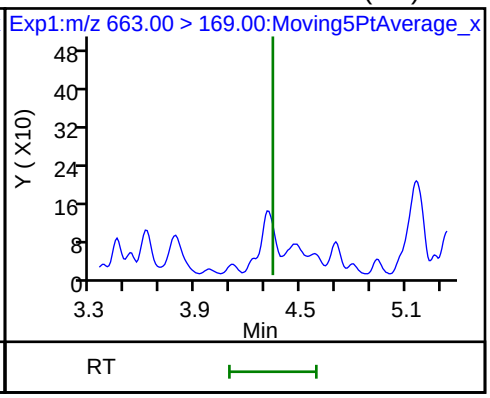
37 Perfluorododecanoic acid (ND)



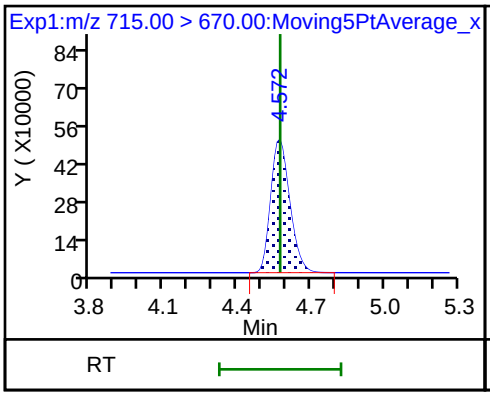
41 Perfluorotridecanoic acid (ND)



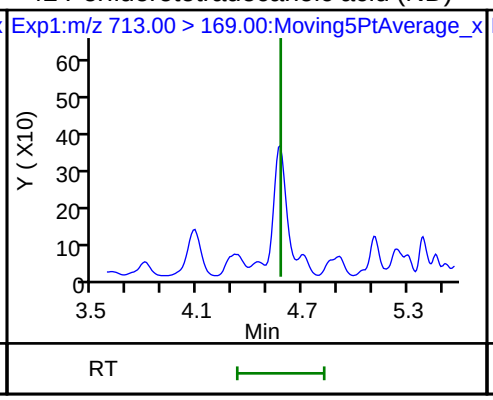
41 Perfluorotridecanoic acid (ND)



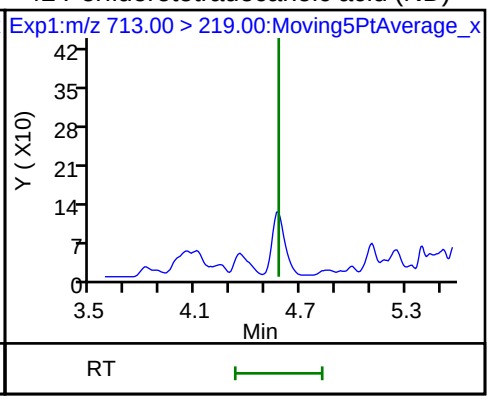
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



TestAmerica Sacramento

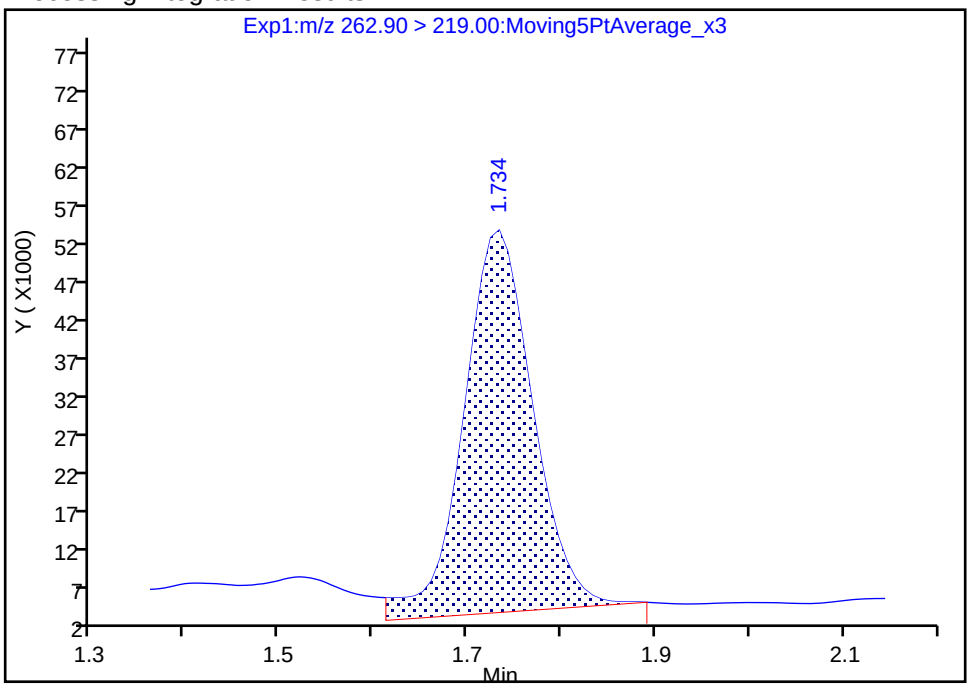
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_059.d				
Injection Date:	14-May-2018 19:10:35	Instrument ID:	A8_N		
Lims ID:	320-38630-A-4-A	Lab Sample ID:	320-38630-4		
Client ID:	GC-MW-101 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	42	Worklist Smp#:	18
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

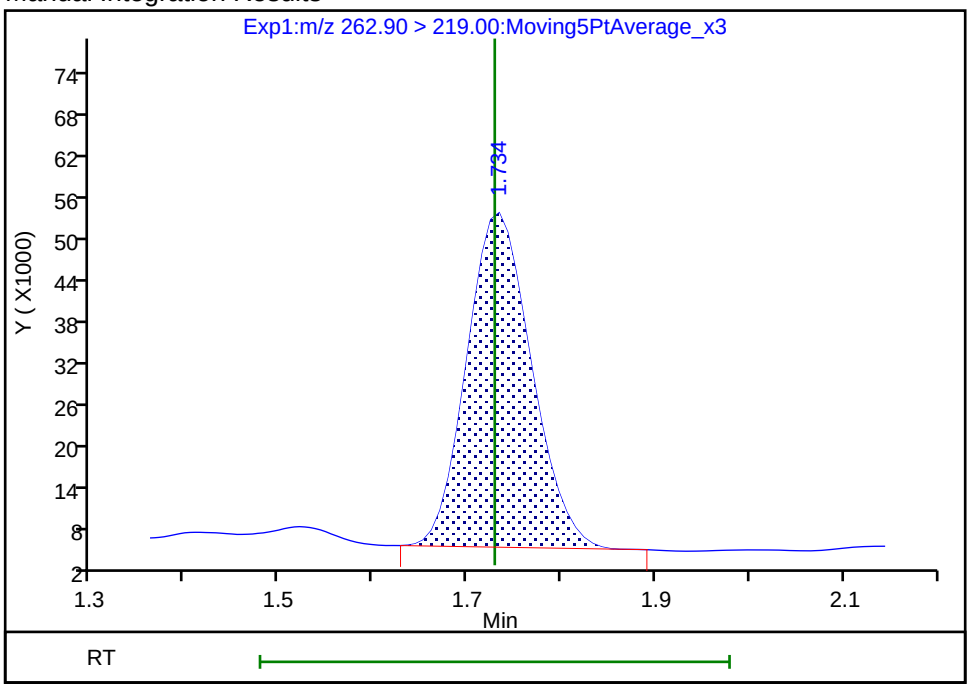
Processing Integration Results

RT: 1.73
Area: 254862
Amount: 0.141008
Amount Units: ng/ml



Manual Integration Results

RT: 1.73
Area: 230002
Amount: 0.127254
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:04:00
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101D (WG) RE | Lab Sample ID: 320-38630-5 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_022.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 254.3(mL) | Date Analyzed: 05/13/2018 18:14

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*14*	*H*	*2.0*	*0.84*
27619-97-2	*6:2FTS*	*3.2*	*J H B*	*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	98		25-150
STL02279	M2-6:2FTS	103		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_022.d
Lims ID: 320-38630-B-5-A
Client ID: GC-MW-101D (WG)
Sample Type: Client
Inject. Date: 13-May-2018 18:14:52 ALS Bottle#: 16 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-5-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:40:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										M
212.90 > 169.00	1.458	1.458	0.0	1.000	214634	0.1210			107	M
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.458	0.0	1.000	4738197	2.11		84.3	41635	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.729	0.0	1.000	216310	0.1335			60.4	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.729	0.0	0.563	3428991	2.40		96.0	56715	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.766	-0.001	1.000	91842	0.0368			74.0	
298.90 > 99.00	1.765	1.766	-0.001	1.000	38179		2.41(1.25-3.74)		97.9	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.766	-0.001	1.000	73542	2.27		97.6	327	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.015	0.0	1.000	216089	0.1518			249	
313.00 > 119.00	2.015	2.015	0.0	1.000	20137		10.73(5.03-15.10)		361	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.015	0.0	1.000	3548525	2.36		94.3	80337	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.346	2.346	0.0	1.000	180910	0.1259			240	
363.00 > 169.00	2.346	2.346	0.0	1.000	70719		2.56(1.13-3.40)		565	
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.346	0.0	1.000	3322456	2.40		95.9	67308	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.359	2.359	0.0	1.000	199721	0.0978			361	
399.00 > 99.00	2.359	2.359	0.0	1.000	62158		3.21(1.50-4.49)		240	
D 11 18O2 PFHxS										
403.00 > 84.00	2.359	2.359	0.0	1.000	4254137	2.35		99.4	70649	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.668	2.683	-0.015	0.997	37912	0.0826			328	
D 12 M2-6:2FTS										
429.00 > 81.00	2.675	2.683	-0.008	1.000	657977	2.44		103	9274	
* 62 13C2-PFOA										
415.00 > 370.00	2.698	2.706	-0.008		3478919	2.50			62192	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.698	2.706	-0.008	1.000	519848	0.3506			245	
413.00 > 169.00	2.698	2.706	-0.008	1.000	307054		1.69(0.84-2.52)		1120	
D 14 13C4 PFOA										
417.00 > 372.00	2.698	2.706	-0.008	1.000	3206569	2.45		97.9	85018	
16 Perfluoroheptanesulfonic acid										R
449.00 > 80.00	2.735	2.713	0.022	1.000	14421	0.009700			65.5	R
449.00 > 99.00	2.713	2.713	0.0	0.992	2455		5.87(1.94-5.82)		26.6	
20 Perfluorononanoic acid										
463.00 > 419.00	3.070	3.078	-0.008	1.000	11218	0.0107			20.8	
463.00 > 169.00	3.070	3.078	-0.008	1.000	2118		5.30(1.90-5.69)		52.0	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.943	3.078	-0.135	0.961	165802	0.1329			547	
499.00 > 99.00	3.063	3.078	-0.015	1.000	27682		5.99(2.31-6.93)		172	
D 19 13C5 PFNA										
468.00 > 423.00	3.070	3.078	-0.008	1.000	2576601	2.33		93.3	61309	
D 18 13C4 PFOS										
503.00 > 80.00	3.063	3.078	-0.015	1.000	2718476	2.09		87.6	26230	
D 21 13C8 FOSA										
506.00 > 78.00	3.394	3.414	-0.020	1.000	3701020	2.01		80.6	48405	
D 26 M2-8:2FTS										
529.00 > 81.00	3.422	3.433	-0.011	1.000	816314	2.30		96.1	9079	
D 23 13C2 PFDA										
515.00 > 470.00	3.432	3.442	-0.010	1.000	1987063	2.06		82.4	34913	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.582	3.605	-0.023	1.000	683040	1.61		64.6	17866	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.747	3.769	-0.022	1.000	754732	1.63		65.2	1946	
D 30 13C2 PFUnA										
565.00 > 520.00	3.758	3.780	-0.022	1.000	1472498	1.87		74.7	52906	
D 36 13C2 PFDoA										
615.00 > 570.00	4.057	4.069	-0.012	1.000	1547007	1.88		75.2	15880	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.560	4.572	-0.012	1.000	1648899	1.84		73.6	11520	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags
M - Manually Integrated

Report Date: 14-May-2018 10:44:20 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_022.d

Injection Date: 13-May-2018 18:14:52 Instrument ID: A8_N

Lims ID: 320-38630-B-5-A Lab Sample ID: 320-38630-5

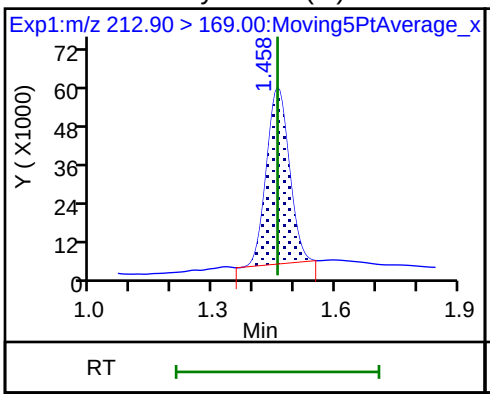
Client ID: GC-MW-101D (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 9

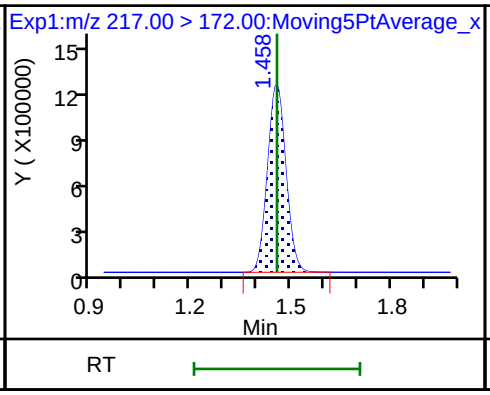
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

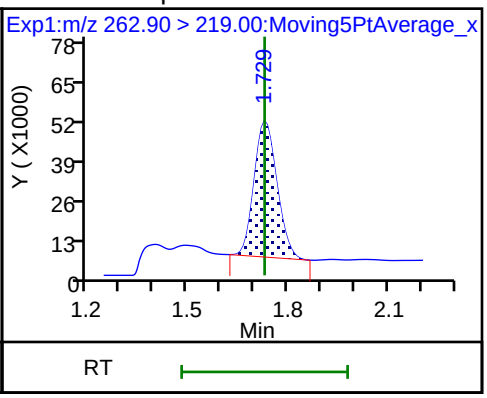
2 Perfluorobutyric acid (M)



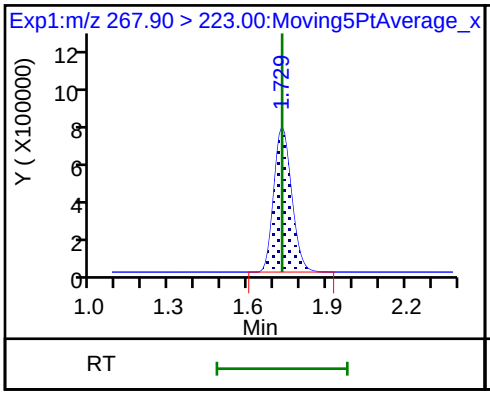
D 1 13C4 PFBA



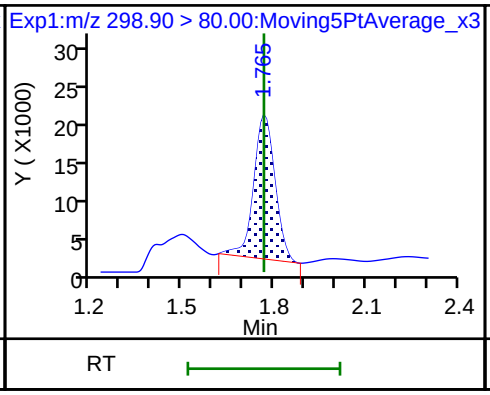
4 Perfluoropentanoic acid



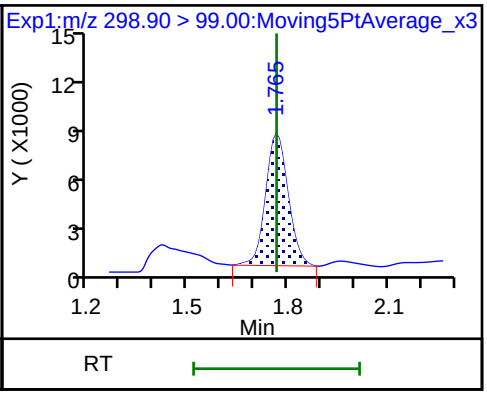
D 3 13C5-PFPeA



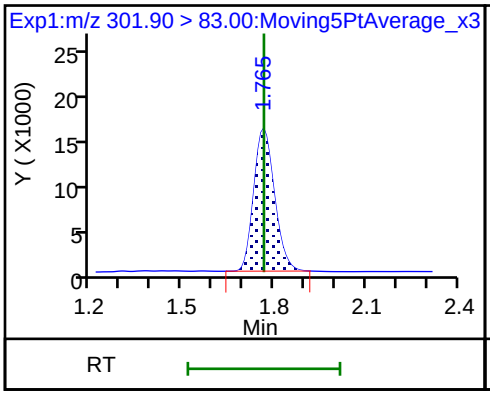
5 Perfluorobutanesulfonic acid



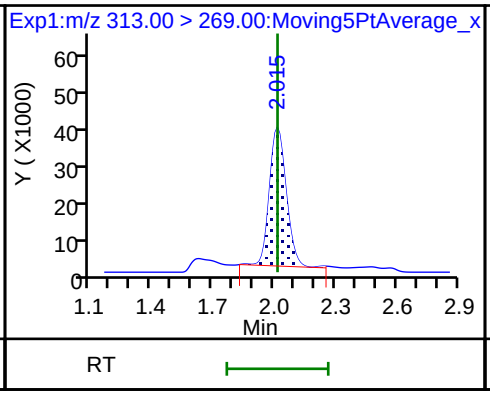
5 Perfluorobutanesulfonic acid



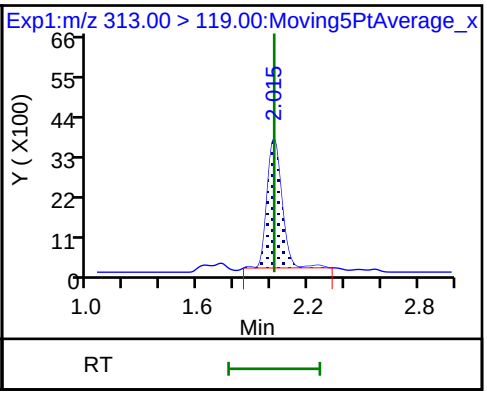
D 47 13C3-PFBS



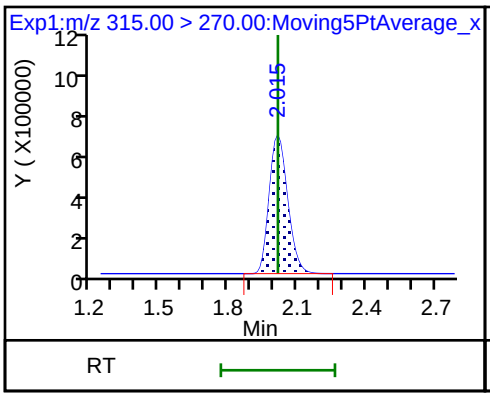
6 Perfluorohexanoic acid



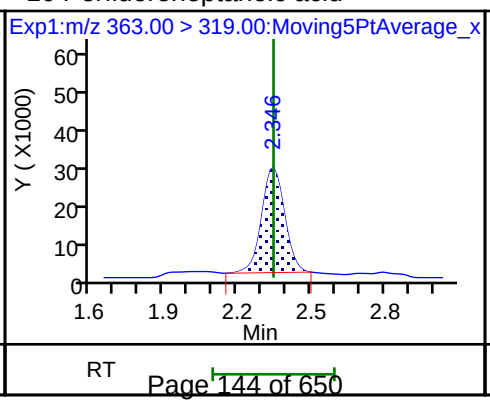
6 Perfluorohexanoic acid



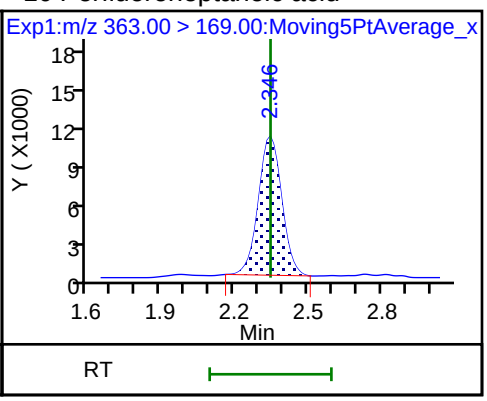
D 7 13C2 PFHxA



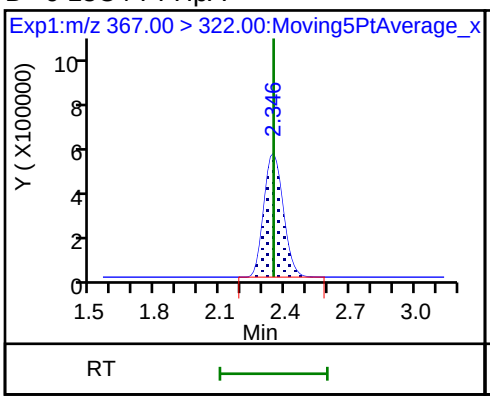
10 Perfluoroheptanoic acid



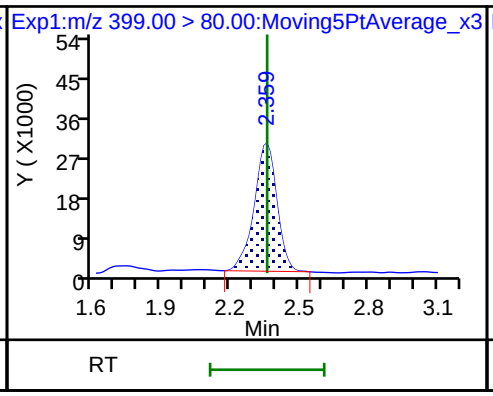
10 Perfluoroheptanoic acid



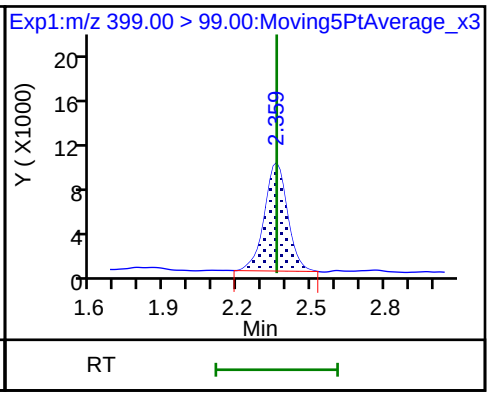
D 9 13C4-PFHpA



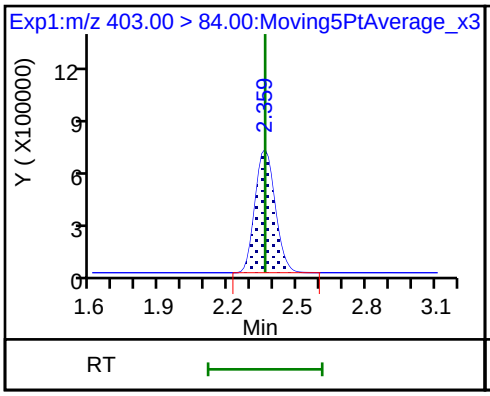
8 Perfluorohexanesulfonic acid



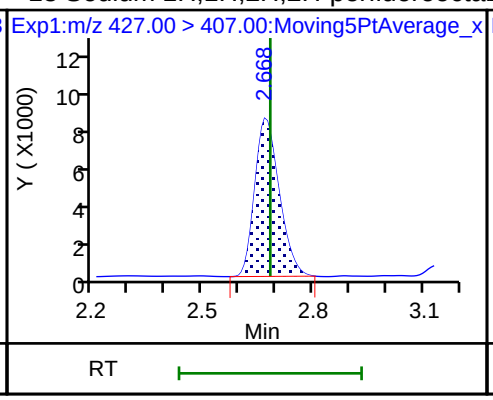
8 Perfluorohexanesulfonic acid



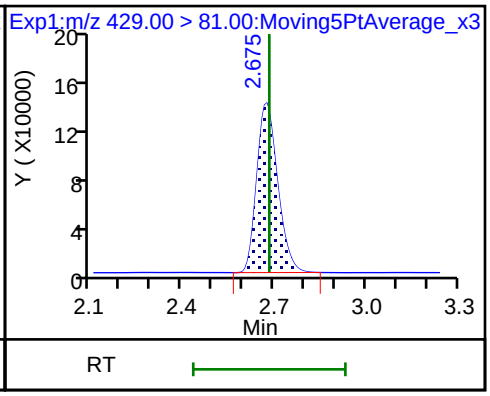
D 11 18O2 PFHxS



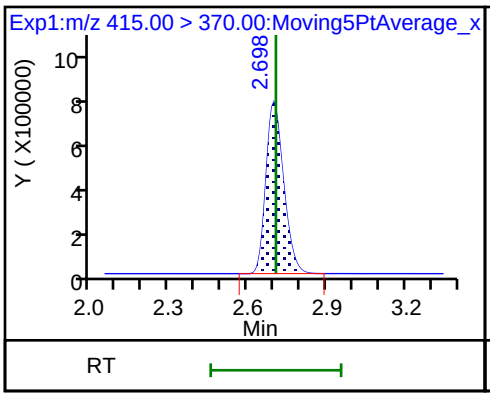
13 Sodium 1H,1H,2H,2H-perfluorooctane



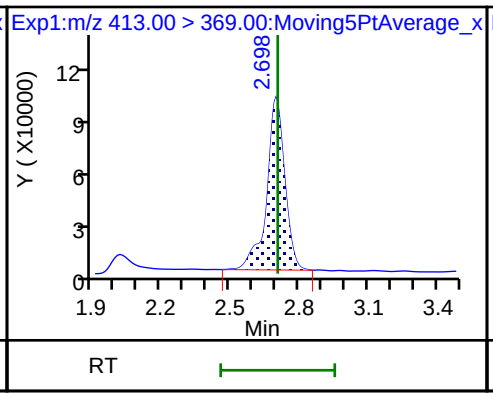
D 12 M2-6:2FTS



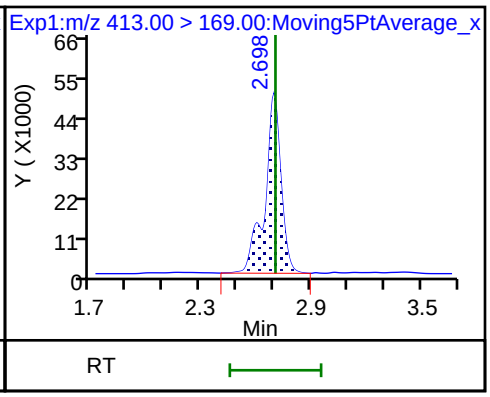
* 62 13C2-PFOA



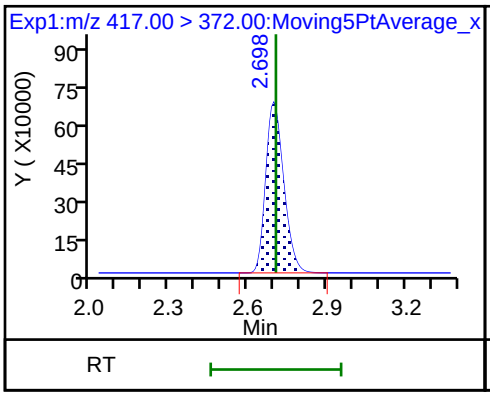
15 Perfluorooctanoic acid



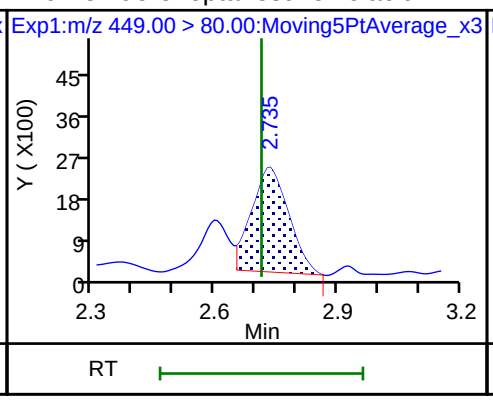
15 Perfluorooctanoic acid



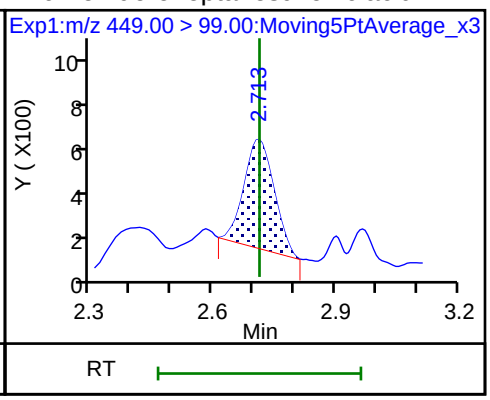
D 14 13C4 PFOA



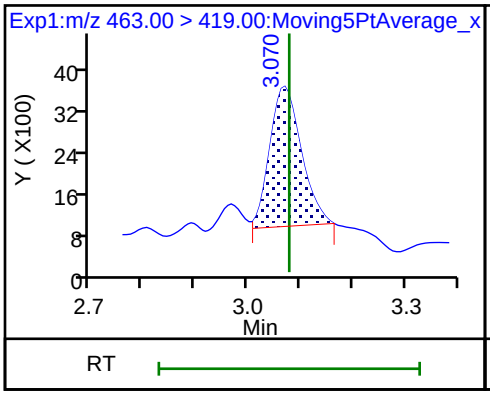
16 Perfluoroheptanesulfonic acid



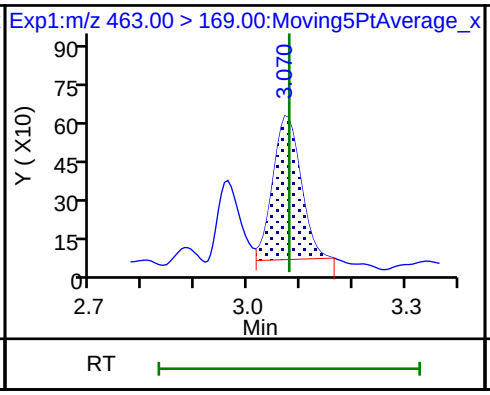
16 Perfluoroheptanesulfonic acid



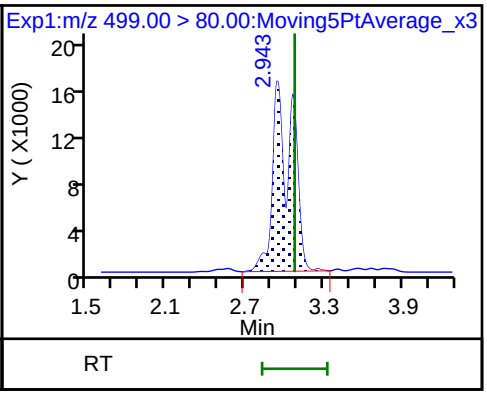
20 Perfluorononanoic acid



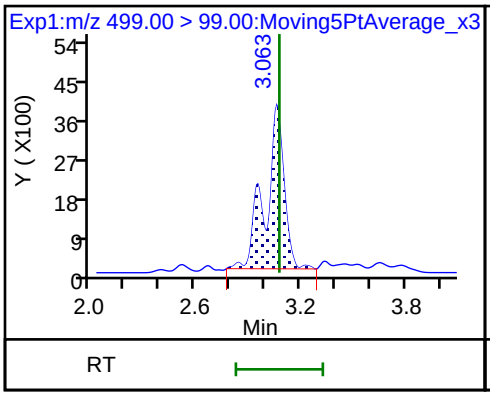
20 Perfluorononanoic acid



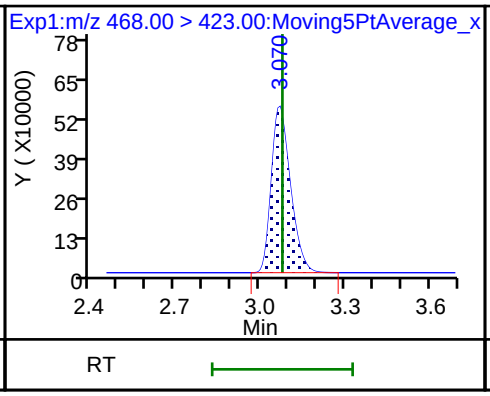
17 Perfluorooctane sulfonic acid



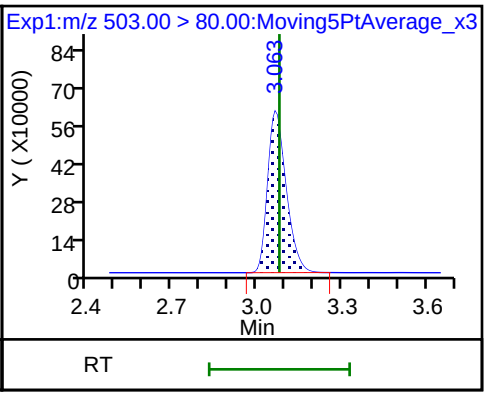
17 Perfluorooctane sulfonic acid



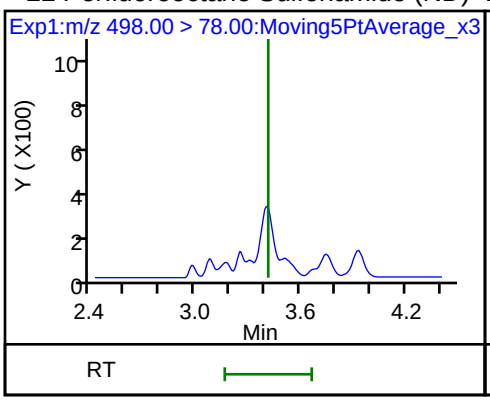
D 19 13C5 PFNA



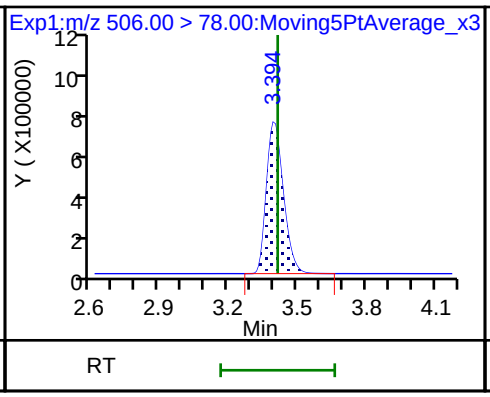
D 18 13C4 PFOS



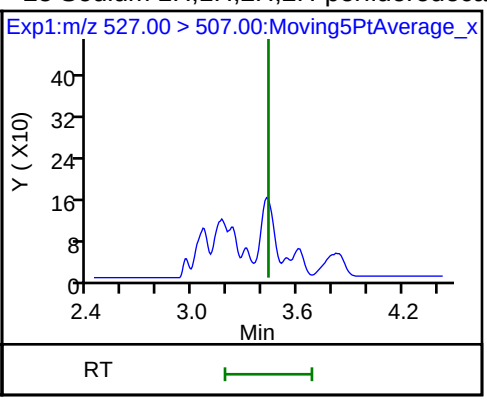
22 Perfluorooctane Sulfonamide (ND)



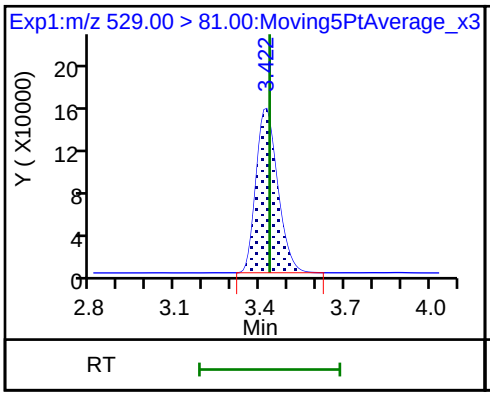
D 21 13C8 FOSA



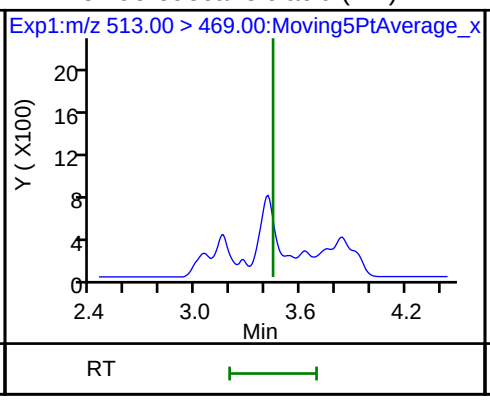
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



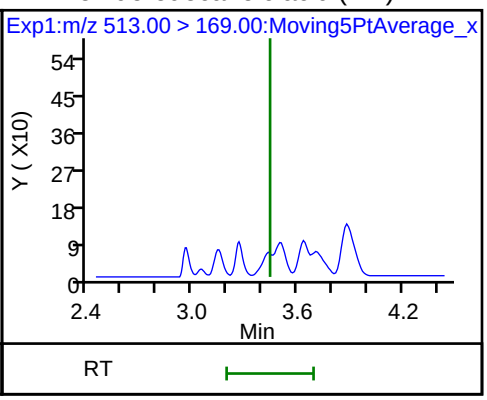
D 26 M2-8:2FTS



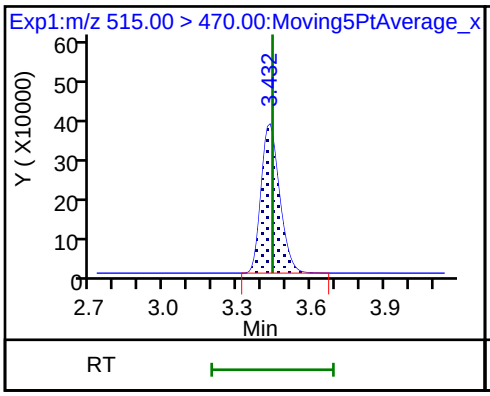
24 Perfluorodecanoic acid (ND)



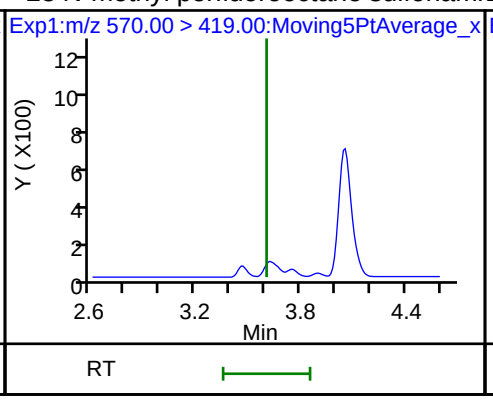
24 Perfluorodecanoic acid (ND)



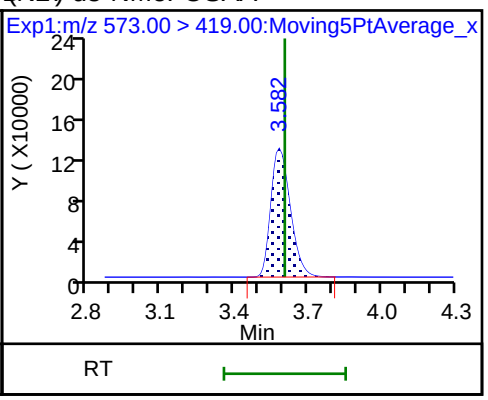
D 23 13C2 PFDA



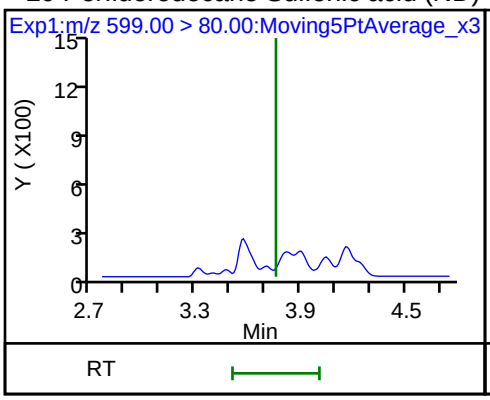
28 N-methyl perfluorooctane sulfonamid (ND)



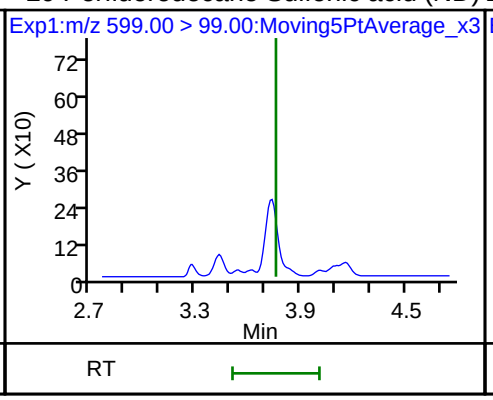
D 27 d3-NMeFOSAA



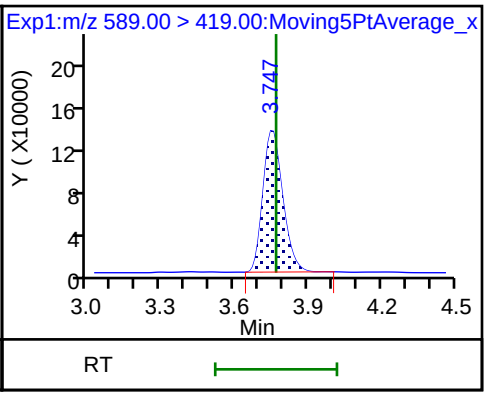
29 Perfluorodecane Sulfonic acid (ND)



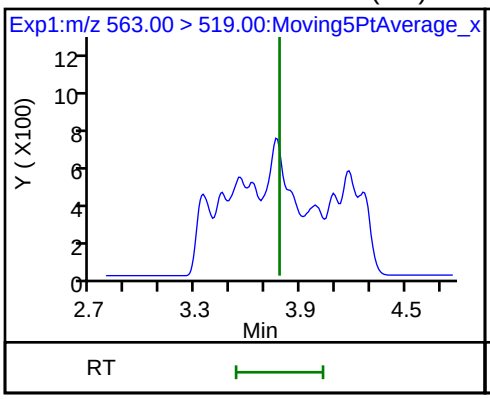
29 Perfluorodecane Sulfonic acid (ND)



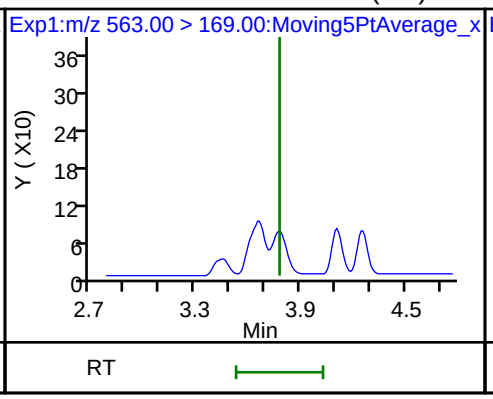
D 32 d5-NEtFOSAA



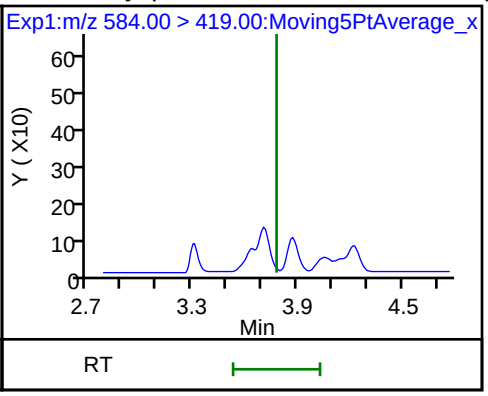
31 Perfluoroundecanoic acid (ND)



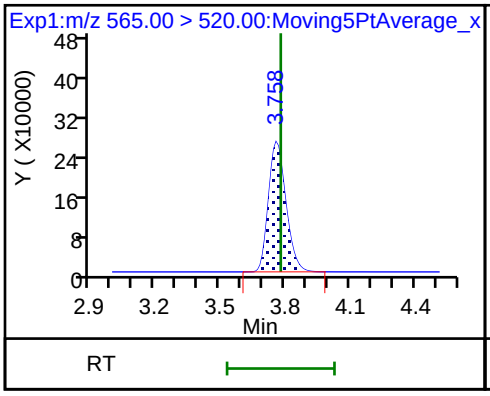
31 Perfluoroundecanoic acid (ND)



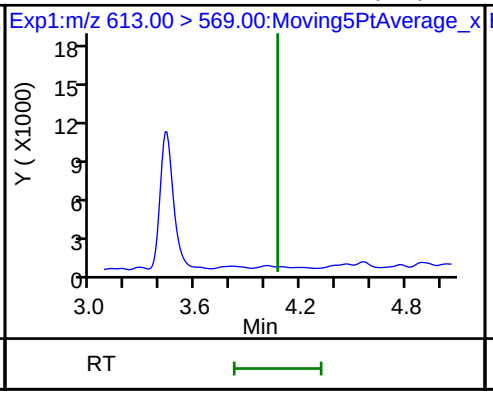
33 N-ethyl perfluorooctane sulfonamid (ND)



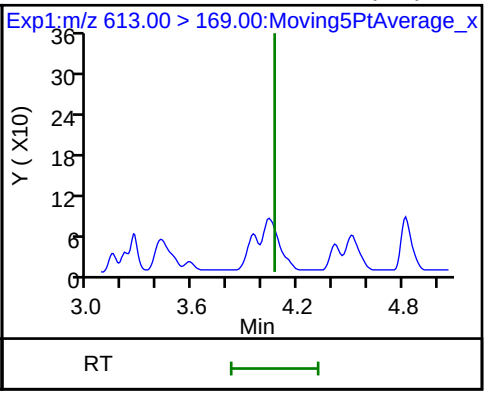
D 30 13C2 PFUnA



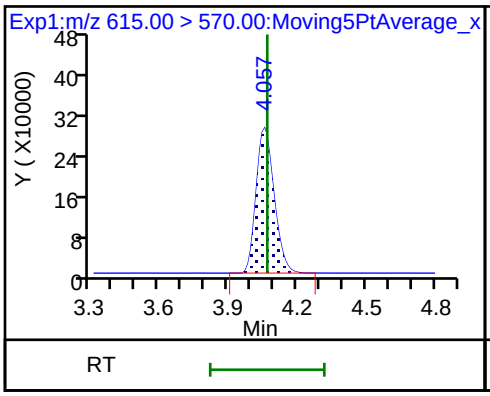
37 Perfluorododecanoic acid (ND)



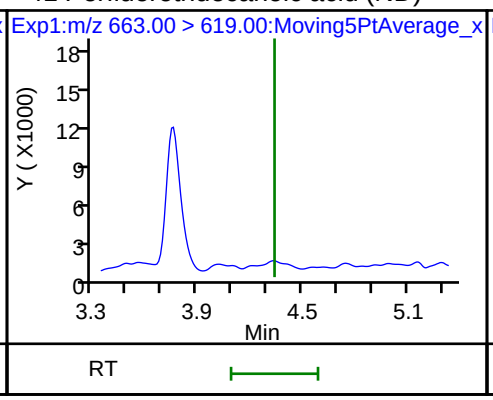
37 Perfluorododecanoic acid (ND)



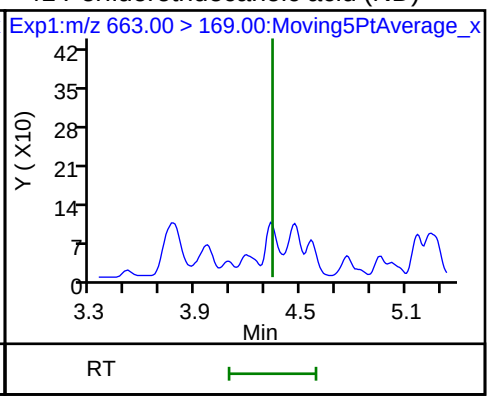
D 36 13C2 PFDoA



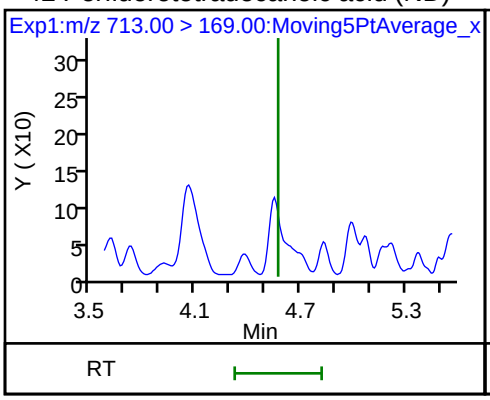
41 Perfluorotridecanoic acid (ND)



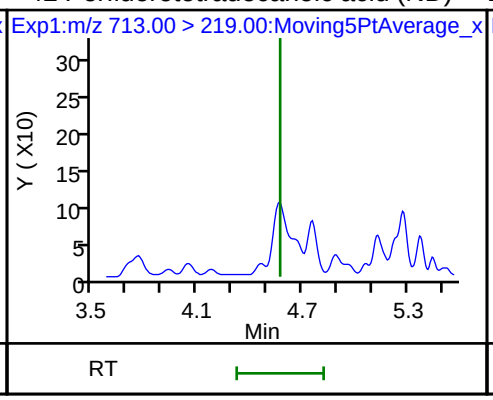
41 Perfluorotridecanoic acid (ND)



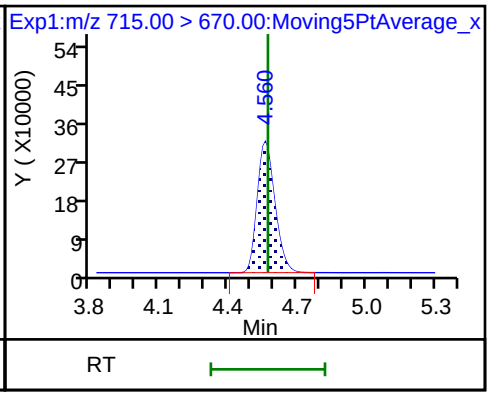
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101D (WG) | Lab Sample ID: 320-38630-5

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_060.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 254.9(mL) | Date Analyzed: 05/14/2018 19:18

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	4.7		2.0	0.34
2706-90-3	Perfluoropentanoic acid (PFPeA)	5.2		2.0	0.48
307-24-4	Perfluorohexanoic acid (PFHxA)	5.7		2.0	0.57
375-85-9	Perfluoroheptanoic acid (PFHpA)	4.7		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	17	B	2.0	0.83
375-95-1	Perfluorononanoic acid (PFNA)	0.53	J	2.0	0.26
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.6	J	2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4.2	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.31	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	5.4	B	2.0	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.34
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.0
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	7.4	J B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101D (WG) | Lab Sample ID: 320-38630-5

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_060.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 254.9(mL) | Date Analyzed: 05/14/2018 19:18

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	81		25-150
STL01893	13C5 PFPeA	96		25-150
STL00993	13C2 PFHxA	96		25-150
STL01892	13C4-PFHpA	99		25-150
STL00990	13C4 PFOA	102		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	93		25-150
STL00997	13C2 PFUnA	86		25-150
STL00998	13C2 PFDoA	92		25-150
STL02116	13C2-PFTeDA	103		25-150
STL02337	13C3-PFBS	85		25-150
STL00994	18O2 PFHxS	90		25-150
STL00991	13C4 PFOS	85		25-150
STL01056	13C8 FOSA	72		25-150
STL02118	d3-NMeFOSAA	99		25-150
STL02117	d5-NEtFOSAA	93		25-150
STL02279	M2-6:2FTS	112		25-150
STL02280	M2-8:2FTS	95		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_060.d
Lims ID: 320-38630-A-5-A
Client ID: GC-MW-101D (WG)
Sample Type: Client
Inject. Date: 14-May-2018 19:18:25 ALS Bottle#: 43 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-5-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:33 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:04:57

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.452	0.0	1.000	5274068	2.02		80.7	38110	
2 Perfluorobutyric acid										
212.90 > 169.00	1.452	1.458	-0.006	1.000	237018	0.1209			102	
D 3 13C5-PFPeA										
267.90 > 223.00	1.721	1.728	-0.007	0.559	3898072	2.41		96.3	47018	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.721	1.729	-0.008	1.000	249996	0.1318			75.4	
D 47 13C3-PFBS										
301.90 > 83.00	1.757	1.764	-0.007	1.000	75762	1.98		85.3	316	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.757	1.765	-0.008	1.000	104327	0.0415			81.1	
298.90 > 99.00	1.766	1.765	0.001	1.005	44451		2.35(1.25-3.74)		93.0	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.014	0.002	1.000	4069301	2.40		96.2	90039	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.016	2.015	0.001	1.000	246599	0.1452			202	M
313.00 > 119.00	2.016	2.015	0.001	1.000	18320		13.46(5.03-15.10)		231	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.345	0.002	1.000	4002861	2.47		98.6	92708	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.358	0.002	1.000	4574275	2.12		89.6	125863	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.359	-0.012	1.000	205294	0.1209			231	
363.00 > 169.00	2.347	2.359	-0.012	1.000	83640		2.45(1.13-3.40)		496	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.373	-0.013	1.000	233295	0.1071			418	
399.00 > 99.00	2.360	2.373	-0.013	1.000	66540		3.51(1.50-4.49)		153	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.682	2.682	0.0	1.000	851433	2.66		112	10238	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.675	2.683	-0.008	0.997	113335	0.1878			1039	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.704	0.001	1.000	3881036	2.55		102	68354	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.713	-0.008		4038112	2.50			52745	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.705	2.713	-0.008	1.000	824551	0.4420			324	M
413.00 > 169.00	2.705	2.713	-0.008	1.000	460144		1.79(0.84-2.52)		1659	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.727	2.720	0.007	1.000	13547	0.008019			66.6	
449.00 > 99.00	2.720	2.720	0.0	0.997	2709		5.00(1.94-5.82)		25.1	
D 18 13C4 PFOS										
503.00 > 80.00	3.070	3.073	-0.003	1.000	3059840	2.03		85.1	29933	
D 19 13C5 PFNA										
468.00 > 423.00	3.077	3.081	-0.004	1.000	3086188	2.43		97.0	55112	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.077	3.082	-0.005	1.002	198430	0.1388			1047	
499.00 > 99.00	3.077	3.082	-0.005	1.002	32097		6.18(2.31-6.93)		210	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.077	3.082	-0.005	1.000	17708	0.0136			23.6	M
463.00 > 169.00	3.070	3.082	-0.012	0.998	3760		4.71(1.90-5.69)		76.1	
D 21 13C8 FOSA										
506.00 > 78.00	3.404	3.407	-0.003	1.000	3931742	1.80		72.2	44383	
D 26 M2-8:2FTS										
529.00 > 81.00	3.432	3.435	-0.003	1.000	952020	2.28		95.2	11373	
D 23 13C2 PFDA										
515.00 > 470.00	3.441	3.444	-0.003	1.000	2539254	2.32		92.8	44453	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.593	3.596	-0.003	1.000	1225753	2.47		98.8	24520	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.758	3.771	-0.013	1.000	1232597	2.33		93.1	5630	
D 30 13C2 PFUnA										
565.00 > 520.00	3.768	3.771	-0.003	1.000	1967672	2.15		85.9	44213	
D 36 13C2 PFDoA										
615.00 > 570.00	4.068	4.071	-0.003	1.000	2203397	2.30		92.1	19678	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.571	4.574	-0.003	1.000	2688912	2.58		103	14388	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:10:00 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_060.d

Injection Date: 14-May-2018 19:18:25 Instrument ID: A8_N

Lims ID: 320-38630-A-5-A Lab Sample ID: 320-38630-5

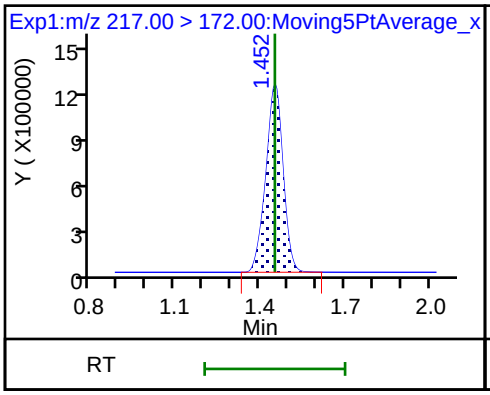
Client ID: GC-MW-101D (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 43 Worklist Smp#: 19

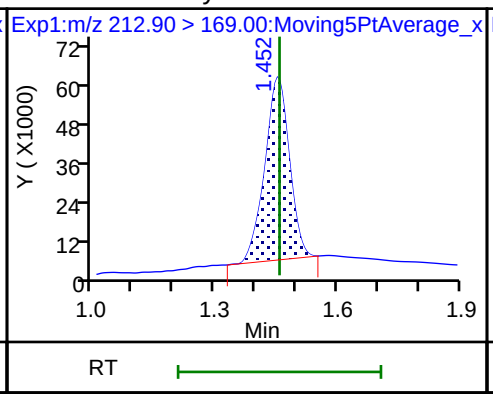
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

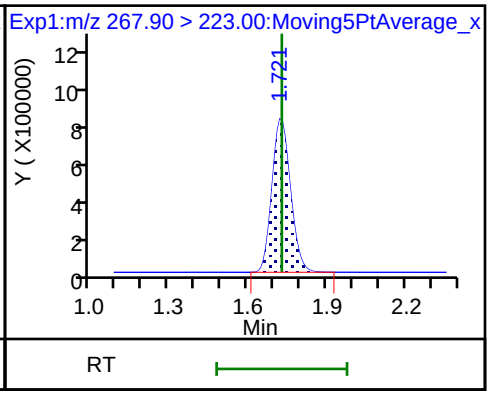
D 1 13C4 PFBA



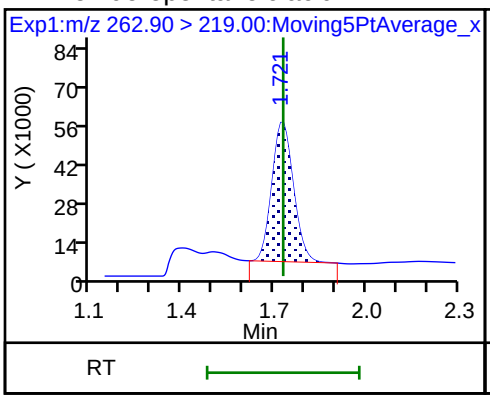
2 Perfluorobutyric acid



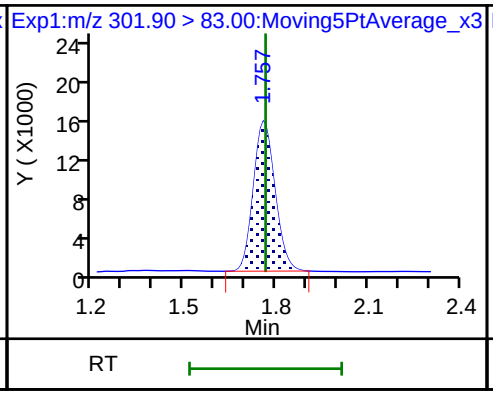
D 3 13C5-PFPeA



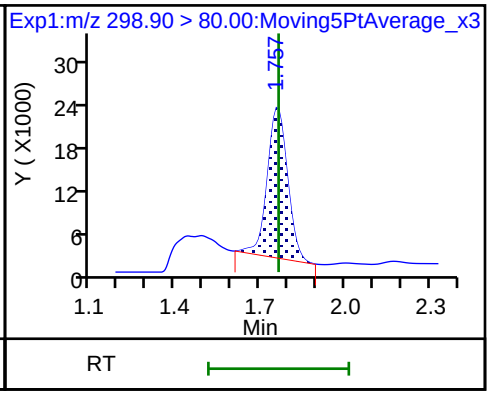
4 Perfluoropentanoic acid



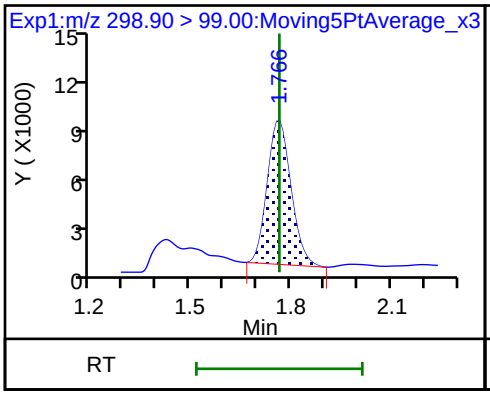
D 47 13C3-PFBS



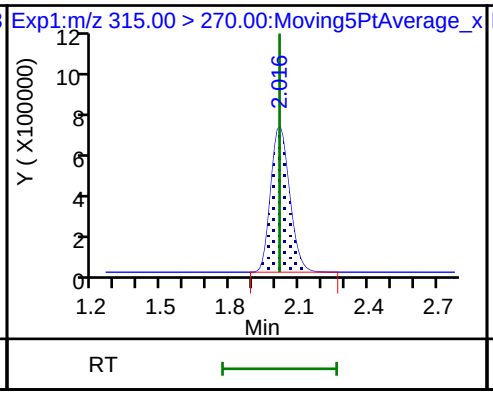
5 Perfluorobutanesulfonic acid



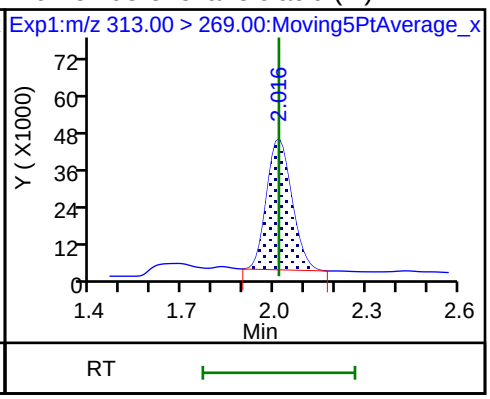
5 Perfluorobutanesulfonic acid



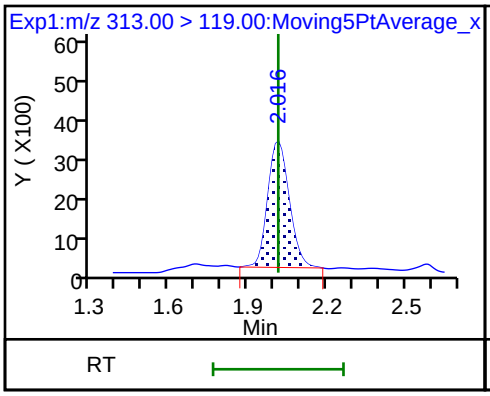
D 7 13C2 PFHxA



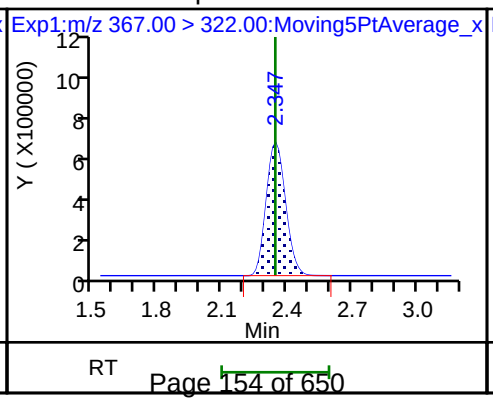
6 Perfluorohexanoic acid (M)



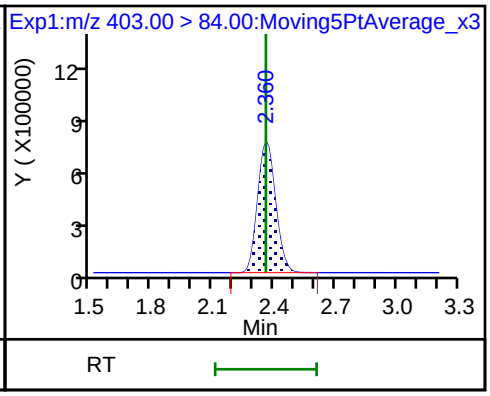
6 Perfluorohexanoic acid



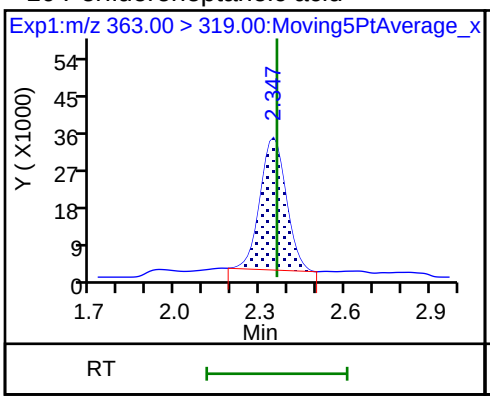
D 9 13C4-PFHpA



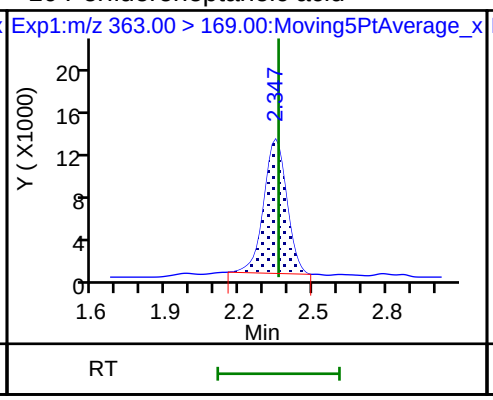
D 11 18O2 PFHxS



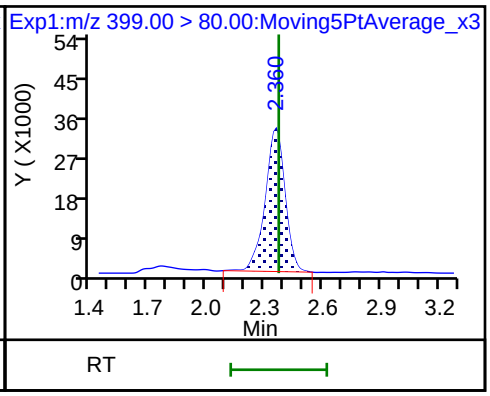
10 Perfluoroheptanoic acid



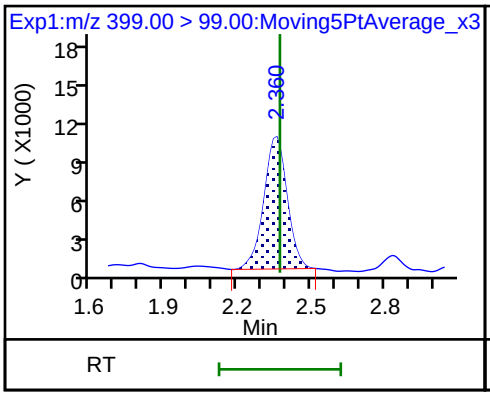
10 Perfluoroheptanoic acid



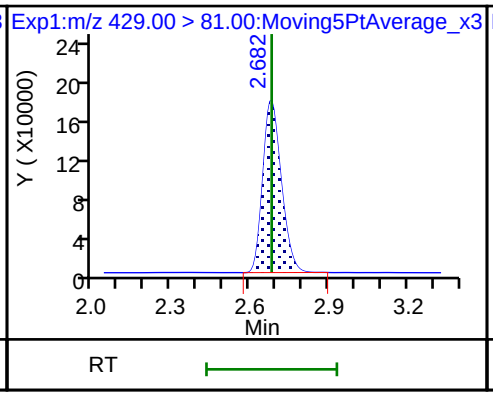
8 Perfluorohexanesulfonic acid



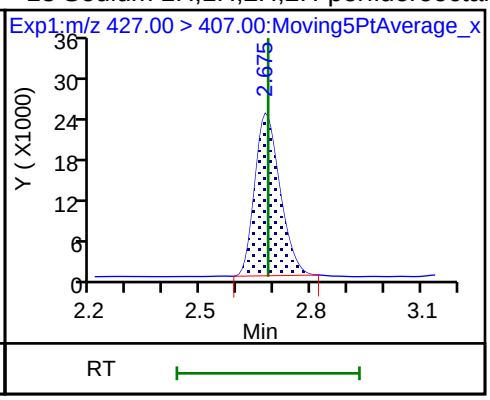
8 Perfluorohexanesulfonic acid



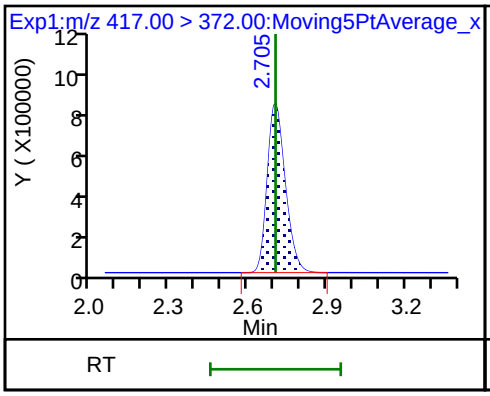
D 12 M2-6:2FTS



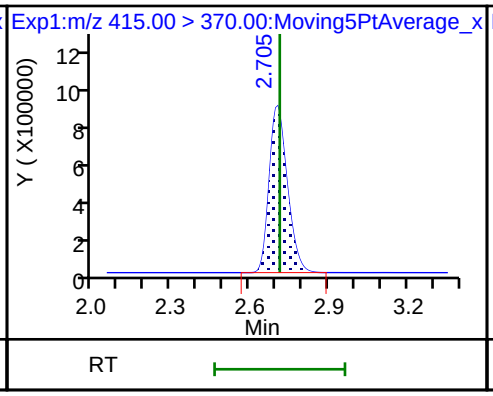
13 Sodium 1H,1H,2H,2H-perfluorooctane



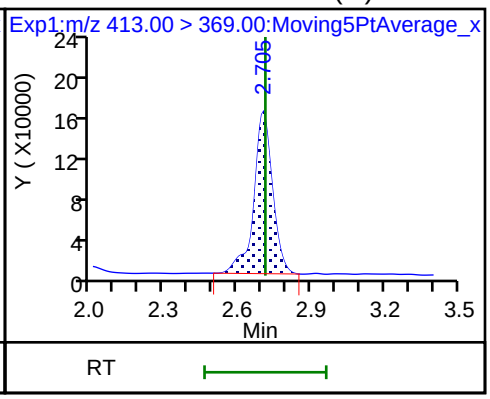
D 14 13C4 PFOA



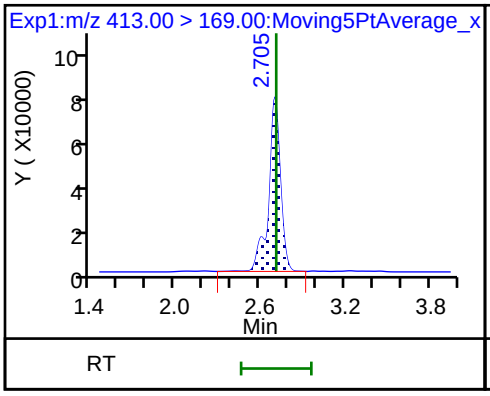
* 62 13C2-PFOA



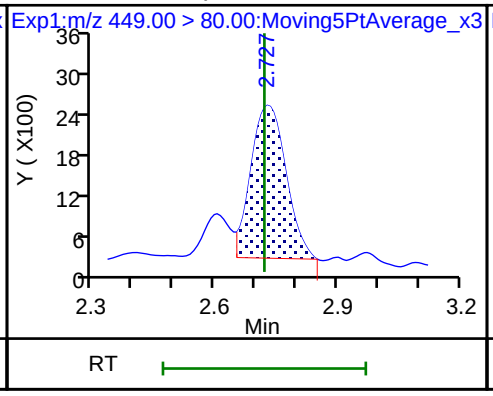
15 Perfluorooctanoic acid (M)



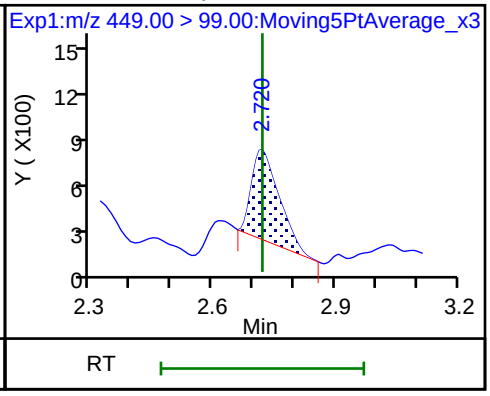
15 Perfluorooctanoic acid



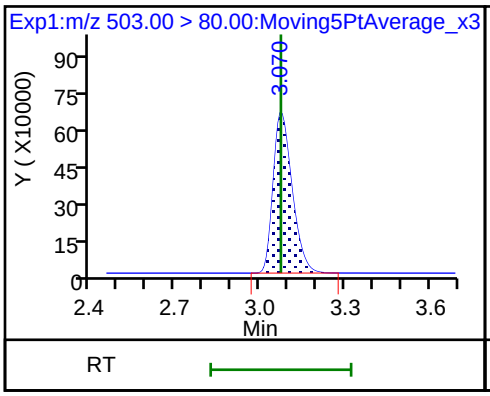
16 Perfluoroheptanesulfonic acid



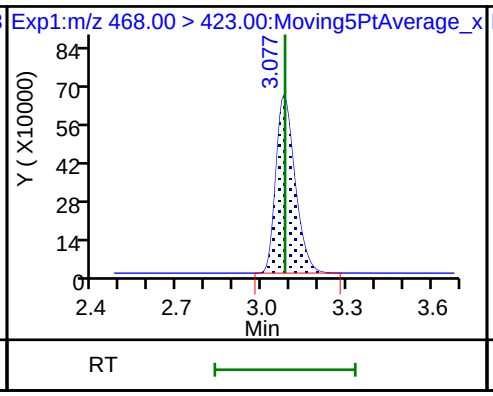
16 Perfluoroheptanesulfonic acid



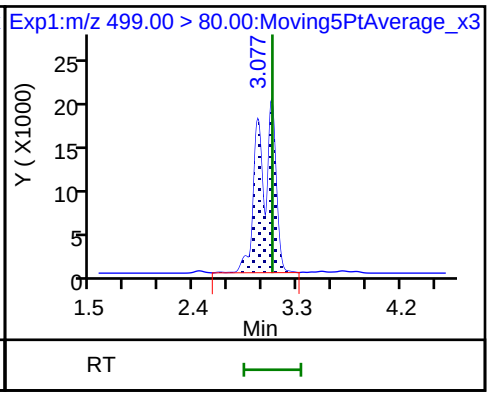
D 18 13C4 PFOS



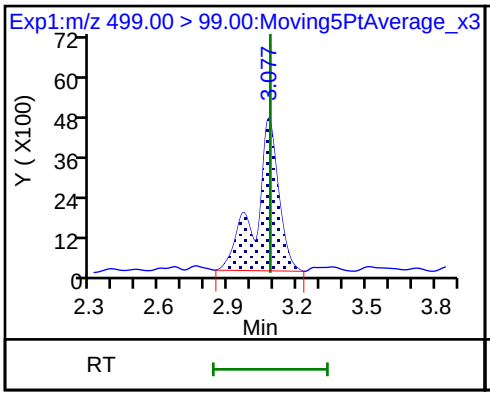
D 19 13C5 PFNA



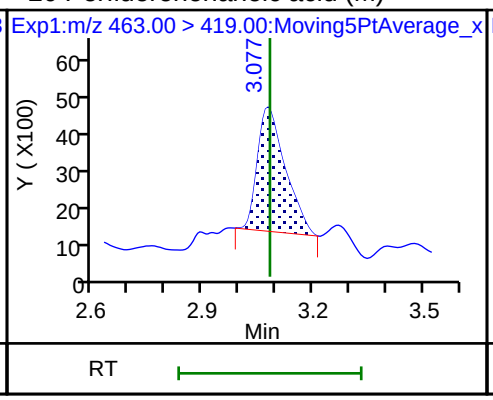
17 Perfluorooctane sulfonic acid



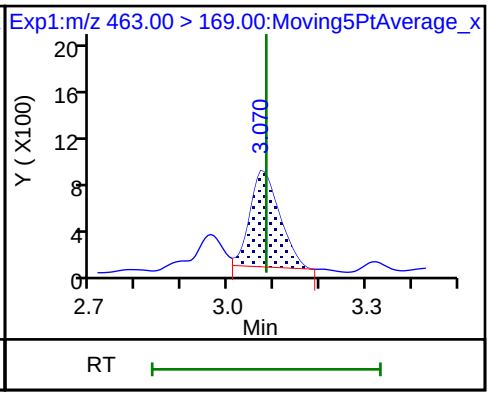
17 Perfluorooctane sulfonic acid



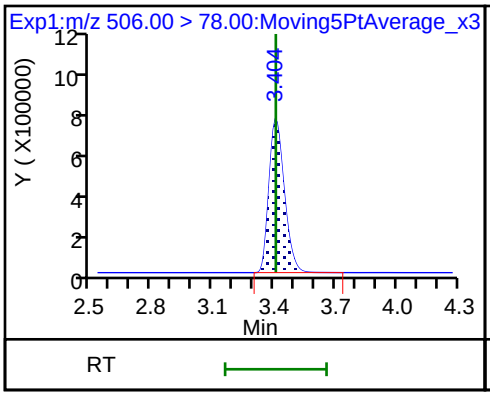
20 Perfluorononanoic acid (M)



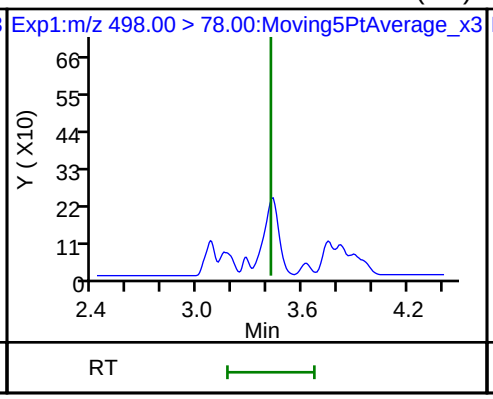
20 Perfluorononanoic acid



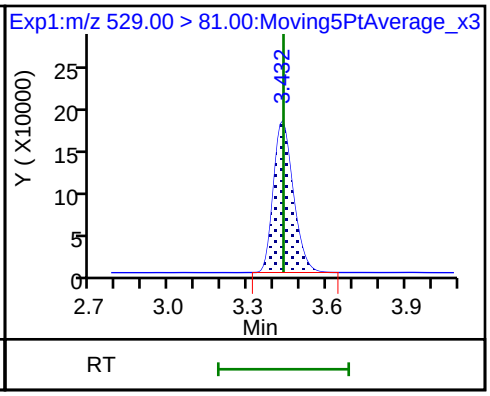
D 21 13C8 FOSA



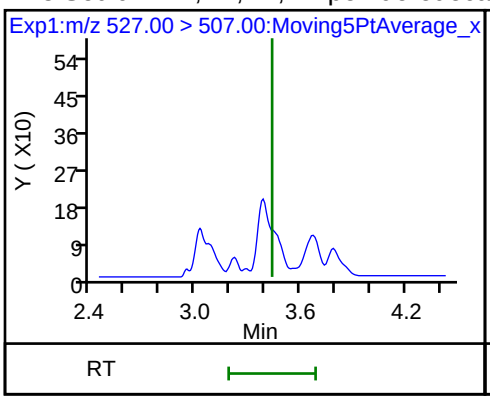
22 Perfluorooctane Sulfonamide (ND)



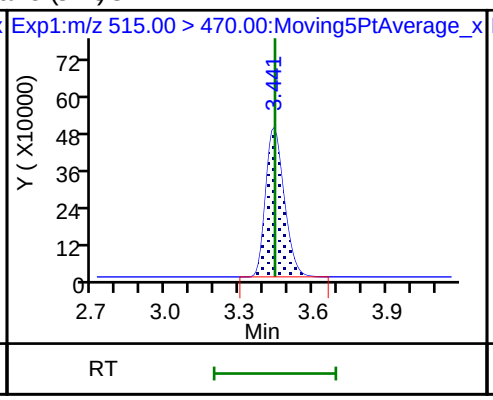
D 26 M2-8:2FTS



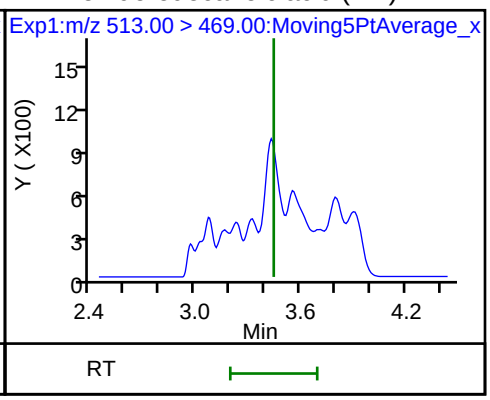
25 Sodium 1H,1H,2H,2H-perfluorodecanesulfonate (ND)



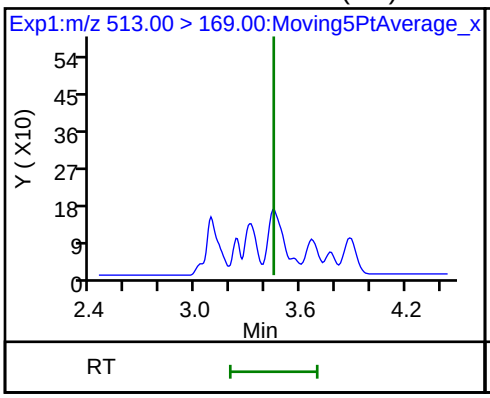
D 23 13C2 PFDA



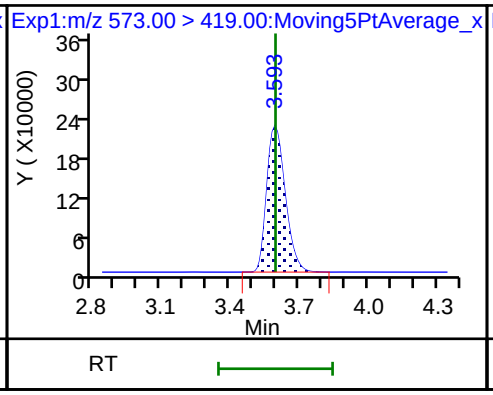
24 Perfluorodecanoic acid (ND)



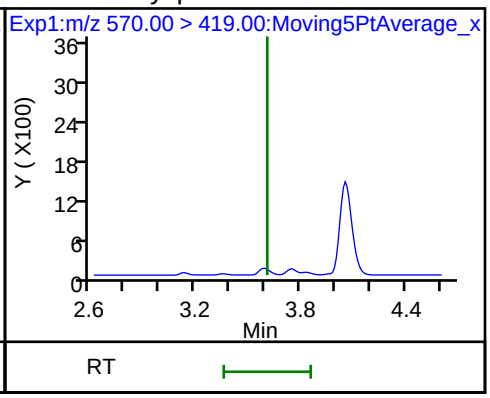
24 Perfluorodecanoic acid (ND)



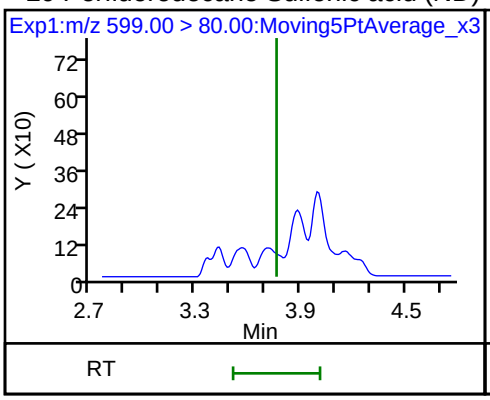
D 27 d3-NMeFOSAA



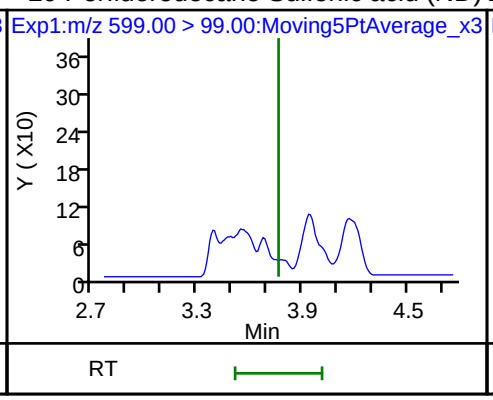
28 N-methyl perfluorooctane sulfonami (ND)



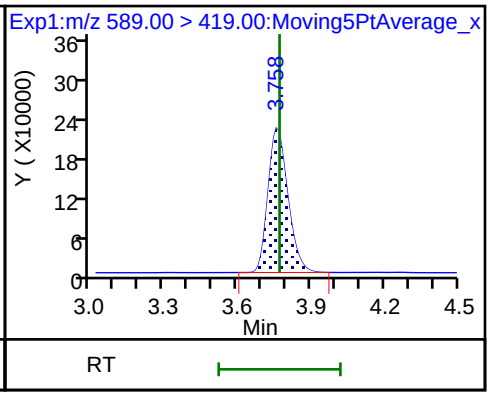
29 Perfluorodecane Sulfonic acid (ND)



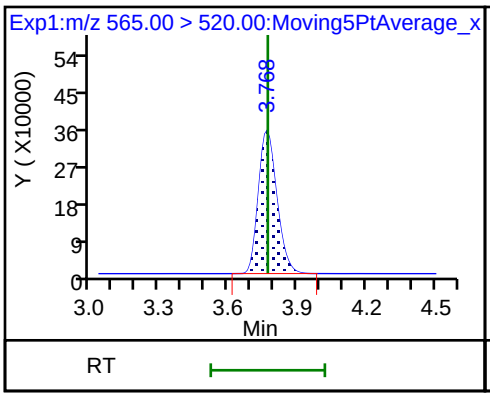
29 Perfluorodecane Sulfonic acid (ND)



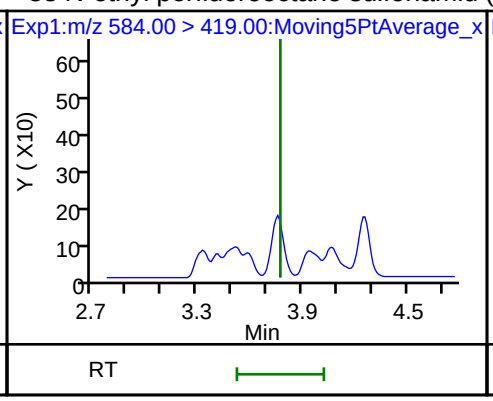
D 32 d5-NEtFOSAA



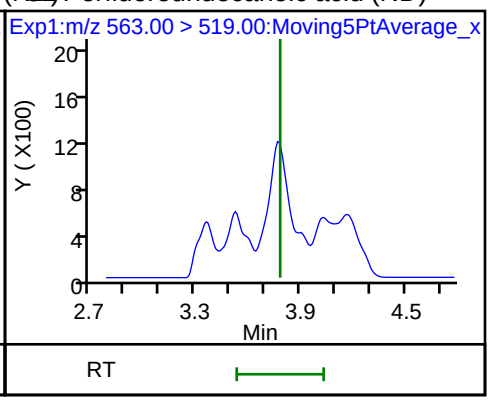
D 30 13C2 PFUnA



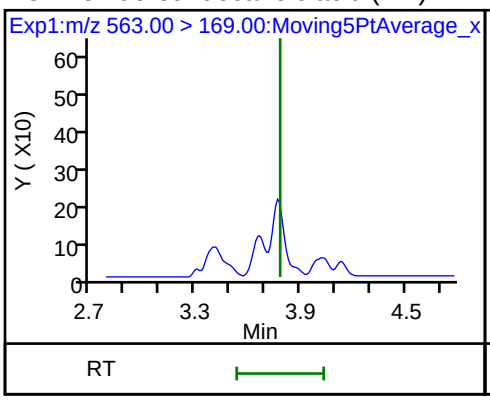
33 N-ethyl perfluorooctane sulfonamid (ND)



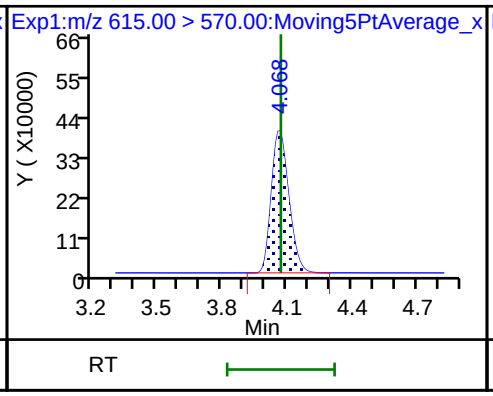
31 Perfluoroundecanoic acid (ND)



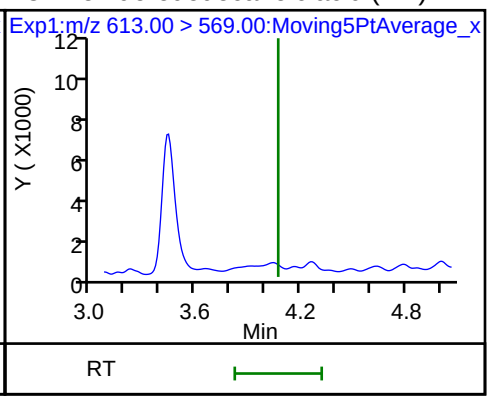
31 Perfluoroundecanoic acid (ND)



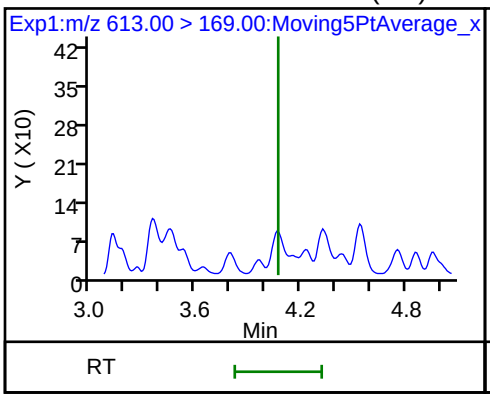
D 36 13C2 PFDoA



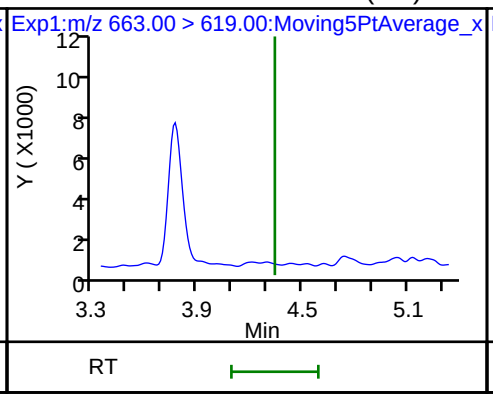
37 Perfluorododecanoic acid (ND)



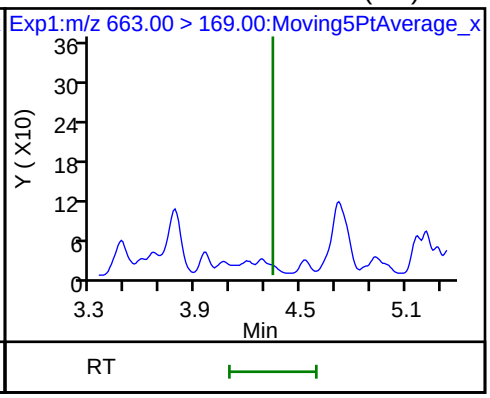
37 Perfluorododecanoic acid (ND)



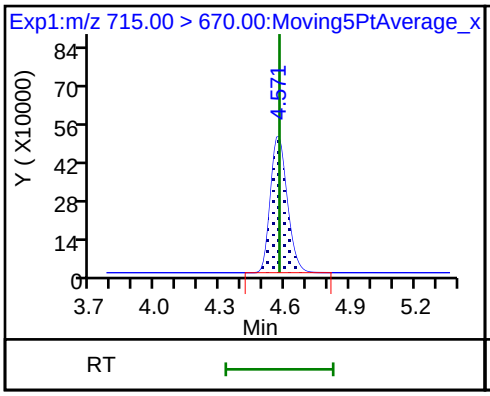
41 Perfluorotridecanoic acid (ND)



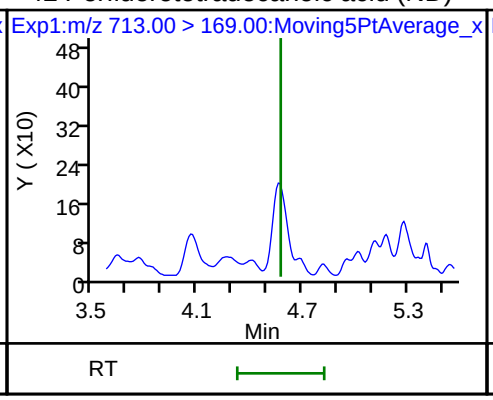
41 Perfluorotridecanoic acid (ND)



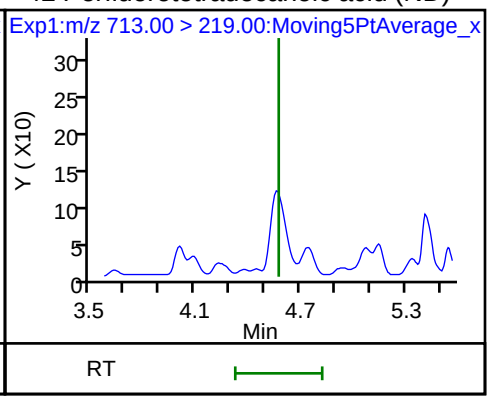
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

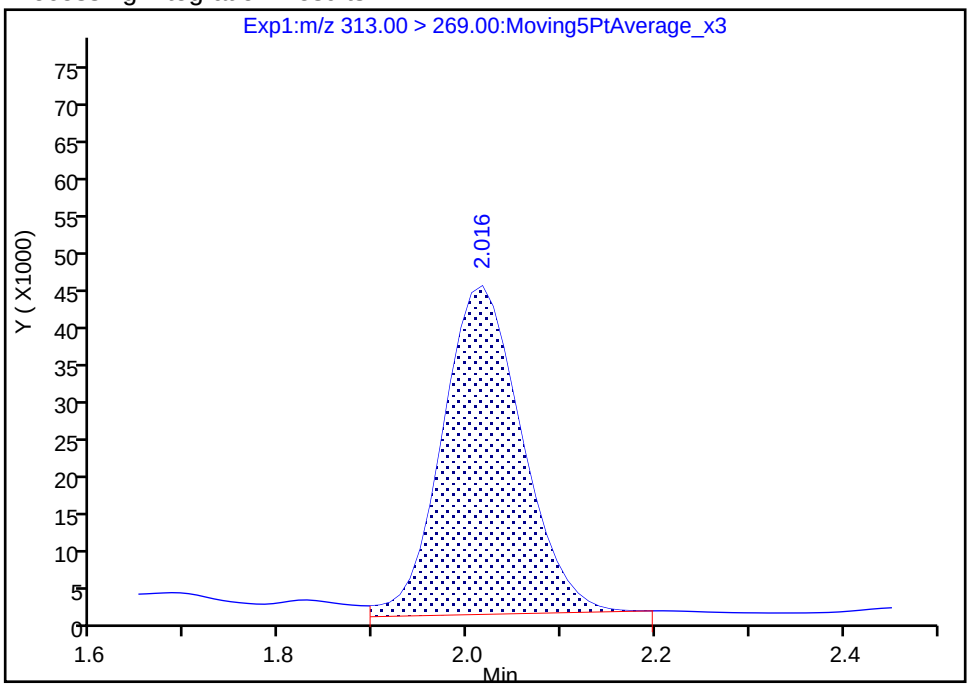
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_060.d				
Injection Date:	14-May-2018 19:18:25	Instrument ID:	A8_N		
Lims ID:	320-38630-A-5-A	Lab Sample ID:	320-38630-5		
Client ID:	GC-MW-101D (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	43	Worklist Smp#:	19
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

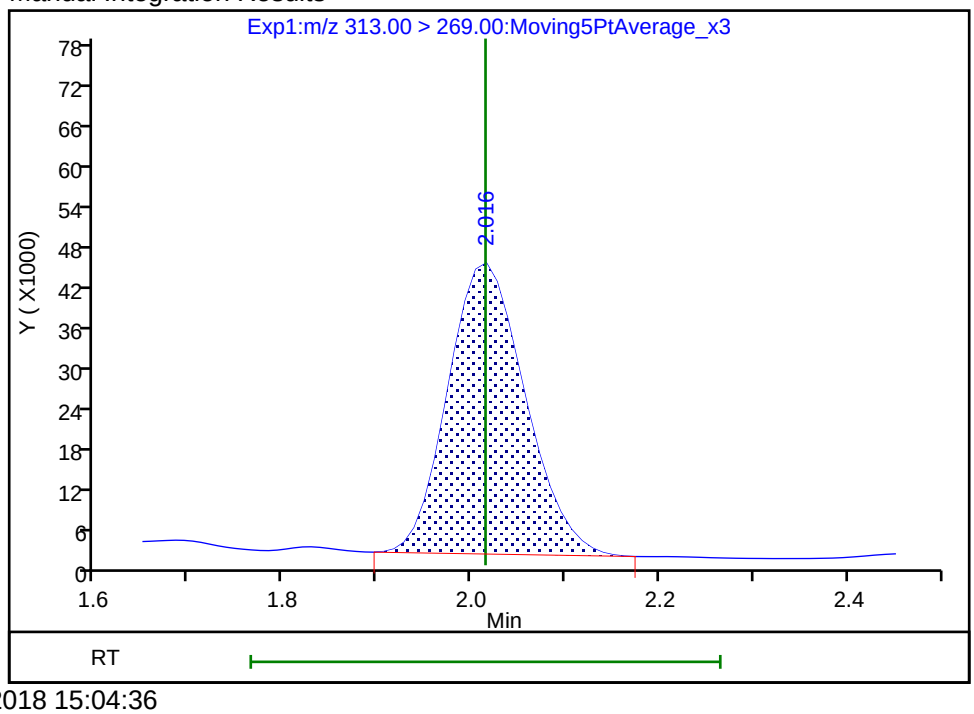
Processing Integration Results

RT: 2.02
Area: 259406
Amount: 0.152745
Amount Units: ng/ml



Manual Integration Results

RT: 2.02
Area: 246599
Amount: 0.145204
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:04:36

Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

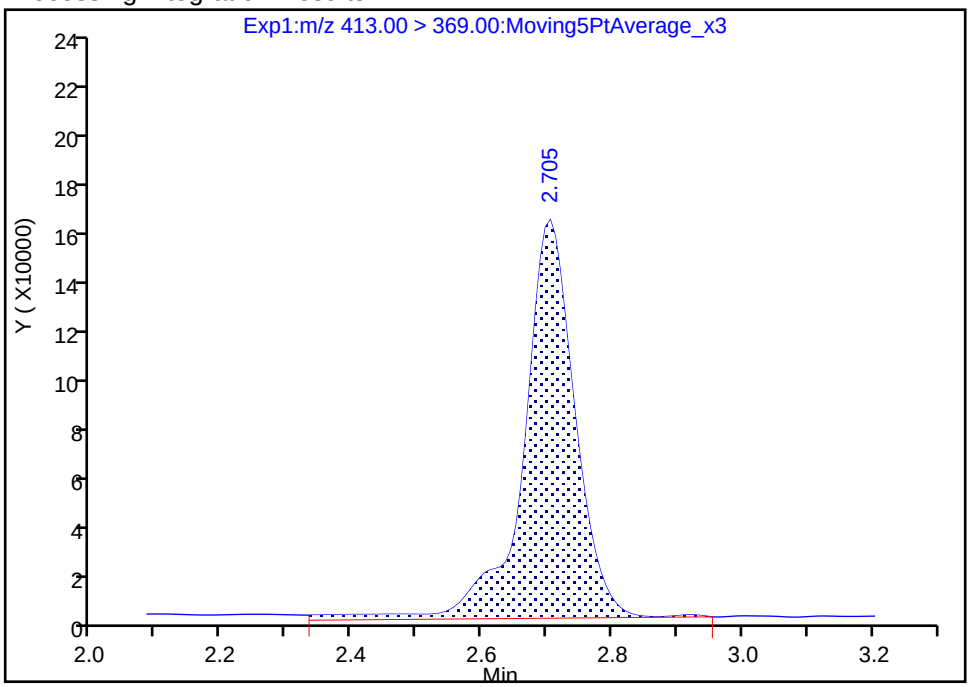
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_060.d
Injection Date: 14-May-2018 19:18:25 Instrument ID: A8_N
Lims ID: 320-38630-A-5-A Lab Sample ID: 320-38630-5
Client ID: GC-MW-101D (WG)
Operator ID: SACINSTLCMS01 ALS Bottle#: 43 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

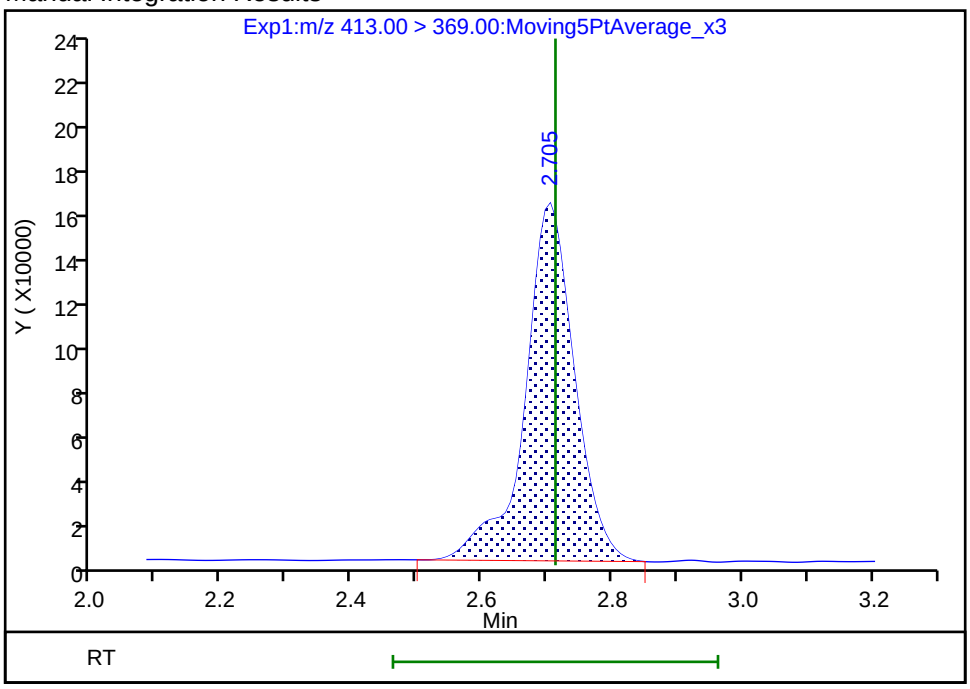
Processing Integration Results

RT: 2.70
Area: 872800
Amount: 0.467885
Amount Units: ng/ml



Manual Integration Results

RT: 2.70
Area: 824551
Amount: 0.442020
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:04:43
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

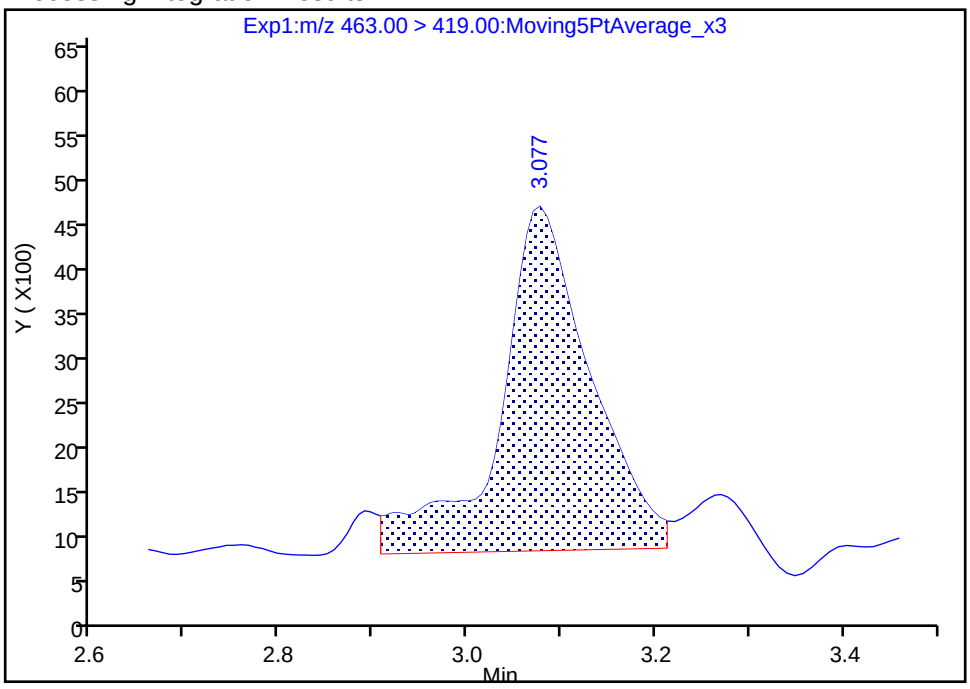
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_060.d				
Injection Date:	14-May-2018 19:18:25	Instrument ID:	A8_N		
Lims ID:	320-38630-A-5-A	Lab Sample ID:	320-38630-5		
Client ID:	GC-MW-101D (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	43	Worklist Smp#:	19
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

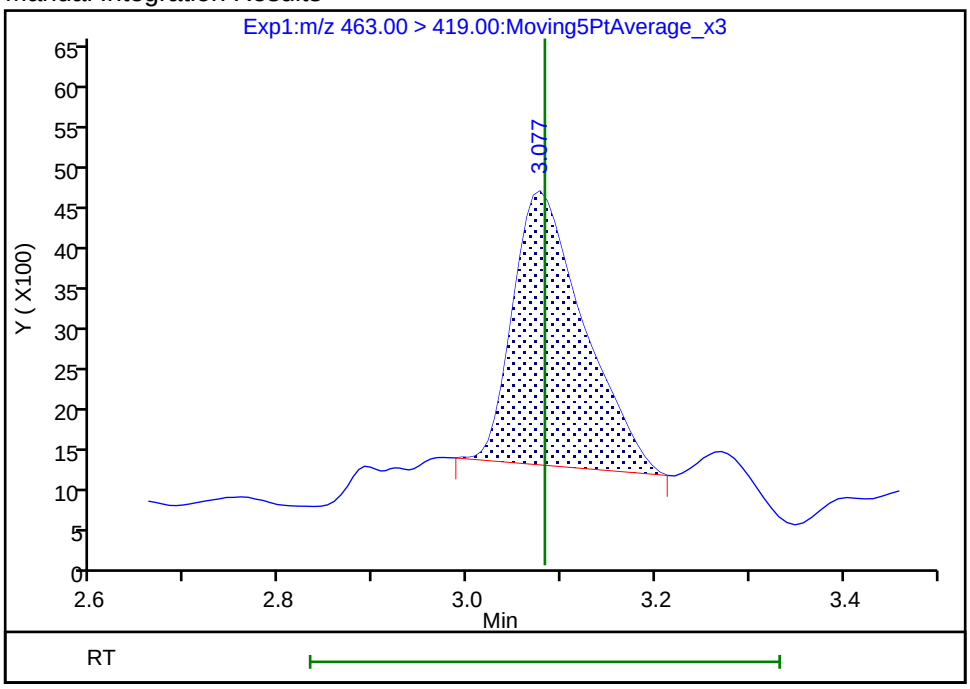
Processing Integration Results

RT: 3.08
Area: 25950
Amount: 0.019940
Amount Units: ng/ml



Manual Integration Results

RT: 3.08
Area: 17708
Amount: 0.013607
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:04:53

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-106 (WG) RE | Lab Sample ID: 320-38630-6 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_023.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:55

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250.6(mL) | Date Analyzed: 05/13/2018 18:22

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*25*	*H*	*2.0*	*0.85*
27619-97-2	*6:2FTS*	*2.9*	*J H B*	*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	113		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_023.d
Lims ID: 320-38630-B-6-A
Client ID: GC-MW-106 (WG)
Sample Type: Client
Inject. Date: 13-May-2018 18:22:41 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-6-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:41:17

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.461	1.458	0.003	1.004	371599	0.2309			175	
D 1 13C4 PFBA										
217.00 > 172.00	1.455	1.458	-0.003	1.000	4296665	1.90		76.0	38736	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.734	1.729	0.005	1.000	588877	0.3741			166	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.734	1.729	0.005	0.566	3329768	2.31		92.6	37489	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.770	1.766	0.004	1.005	364066	0.1439			243	M
298.90 > 99.00	1.770	1.766	0.004	1.005	150879		2.41(1.25-3.74)		347	
D 47 13C3-PFBS										
301.90 > 83.00	1.761	1.766	-0.005	1.000	74524	2.28		98.2	288	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.022	2.015	0.007	1.006	475273	0.3199			306	
313.00 > 119.00	2.011	2.015	-0.004	1.000	44990		10.56(5.03-15.10)		493	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.015	-0.004	1.000	3702618	2.44		97.8	73738	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.342	2.346	-0.004	1.000	283915	0.1913			237	
363.00 > 169.00	2.342	2.346	-0.004	1.000	119469		2.38(1.13-3.40)		683	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.346	-0.004	1.000	3432134	2.46		98.4	50642	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.355	2.359	-0.004	1.000	125563	0.0608			153	
399.00 > 99.00	2.368	2.359	0.009	1.006	43270		2.90(1.50-4.49)		136	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.359	-0.004	1.000	4298523	2.36		99.8	79153	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.673	2.683	-0.010	1.000	37221	0.0730			392	
D 12 M2-6:2FTS										
429.00 > 81.00	2.673	2.683	-0.010	1.000	731184	2.69		113	5069	
* 62 13C2-PFOA										
415.00 > 370.00	2.703	2.706	-0.003		3501990	2.50			82133	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.703	2.706	-0.003	1.003	932131	0.6187			444	
413.00 > 169.00	2.703	2.706	-0.003	1.003	522350		1.78(0.84-2.52)		2095	
D 14 13C4 PFOA										
417.00 > 372.00	2.696	2.706	-0.010	1.000	3258163	2.47		98.8	57515	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.711	2.713	-0.002	1.000	12185	0.007390			55.9	
449.00 > 99.00	2.696	2.713	-0.017	0.994	2609		4.67(1.94-5.82)		26.0	
20 Perfluorononanoic acid										
463.00 > 419.00	3.067	3.078	-0.011	1.000	54885	0.0498			98.5	
463.00 > 169.00	3.067	3.078	-0.011	1.000	12907		4.25(1.90-5.69)		276	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.067	3.078	-0.011	1.000	374271	0.2706			1411	
499.00 > 99.00	3.067	3.078	-0.011	1.000	70400		5.32(2.31-6.93)		455	
D 19 13C5 PFNA										
468.00 > 423.00	3.067	3.078	-0.011	1.000	2707141	2.43		97.3	58155	
D 18 13C4 PFOS										
503.00 > 80.00	3.067	3.078	-0.011	1.000	3014839	2.31		96.5	22177	
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.414	-0.016	1.000	4285057	2.32		92.7	39912	
D 26 M2-8:2FTS										
529.00 > 81.00	3.417	3.433	-0.016	1.000	941309	2.64		110	6308	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.435	3.442	-0.007	1.003	30987	0.0321			150	
513.00 > 169.00	3.435	3.442	-0.007	1.003	4581		6.76(2.36-7.09)		109	M
D 23 13C2 PFDA										
515.00 > 470.00	3.426	3.442	-0.016	1.000	2356788	2.43		97.1	41456	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.586	3.605	-0.019	1.000	969899	2.28		91.1	35236	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.750	3.769	-0.019	1.000	1066341	2.29		91.5	3127	
D 30 13C2 PFUnA										
565.00 > 520.00	3.761	3.780	-0.019	1.000	1979190	2.49		99.7	51453	
D 36 13C2 PFDoA										
615.00 > 570.00	4.060	4.069	-0.009	1.000	1941357	2.34		93.8	18598	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2254839	2.50		100	14192	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-May-2018 10:44:21 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_023.d

Injection Date: 13-May-2018 18:22:41 Instrument ID: A8_N

Lims ID: 320-38630-B-6-A Lab Sample ID: 320-38630-6

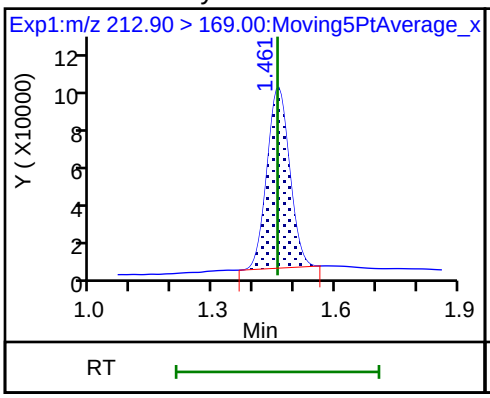
Client ID: GC-MW-106 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 10

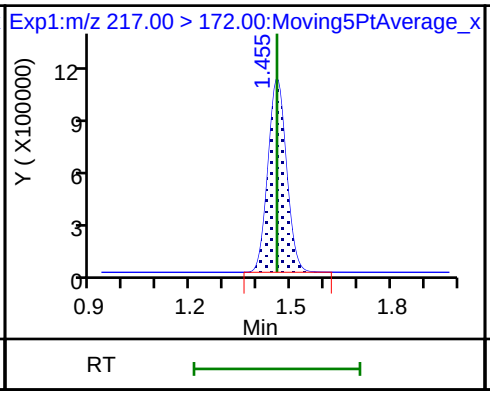
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

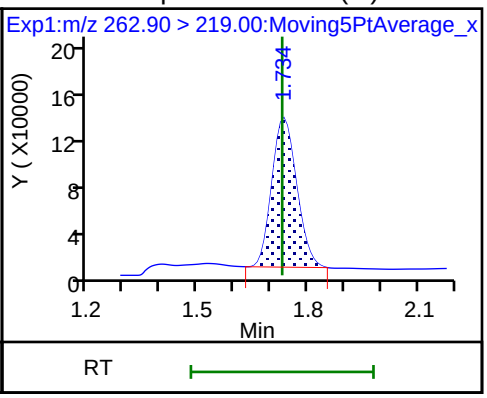
2 Perfluorobutyric acid



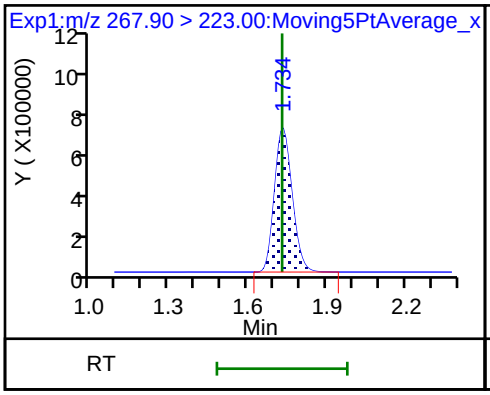
D 1 13C4 PFBA



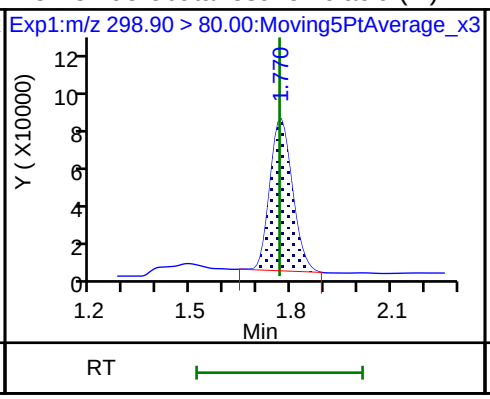
4 Perfluoropentanoic acid (M)



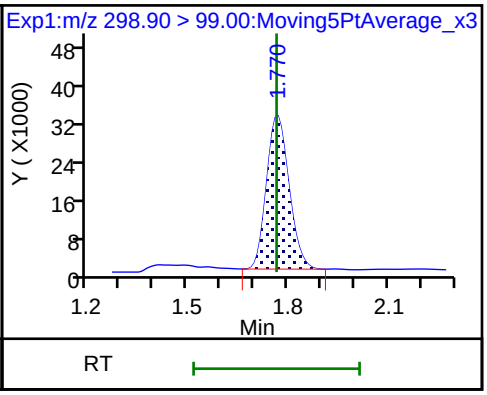
D 3 13C5-PFPeA



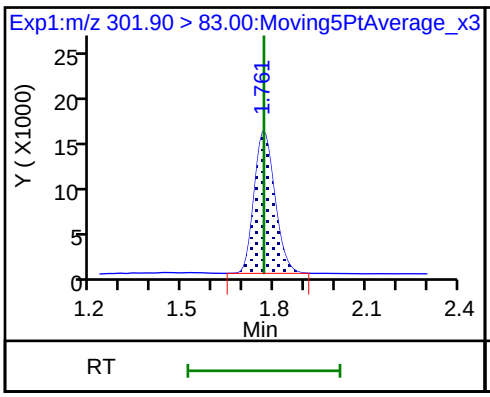
5 Perfluorobutanesulfonic acid (M)



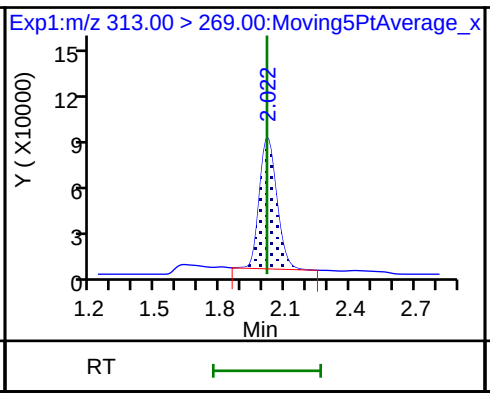
5 Perfluorobutanesulfonic acid



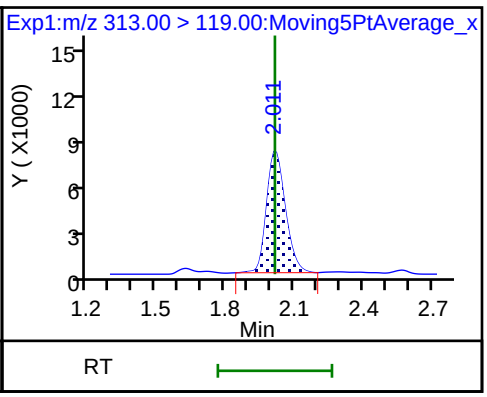
D 47 13C3-PFBS



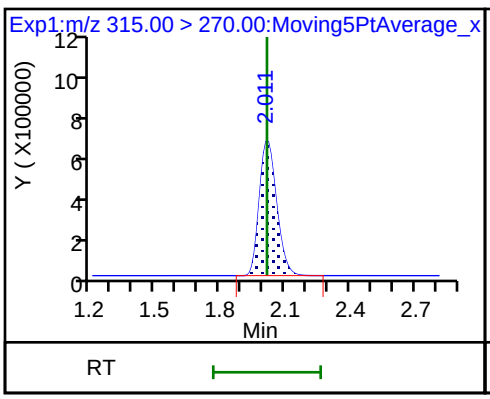
6 Perfluorohexanoic acid



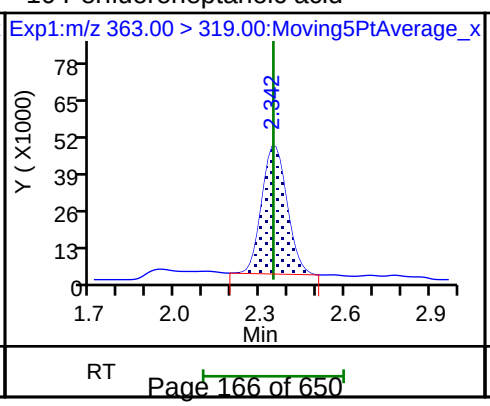
6 Perfluorohexanoic acid



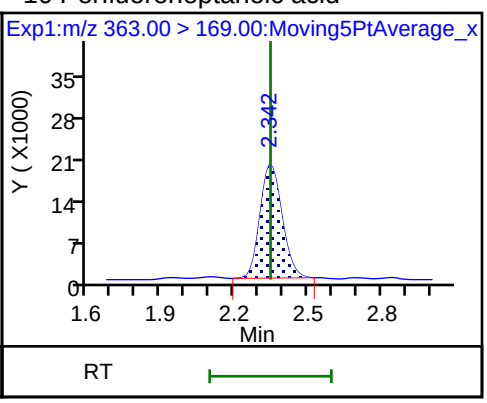
D 7 13C2 PFHxA



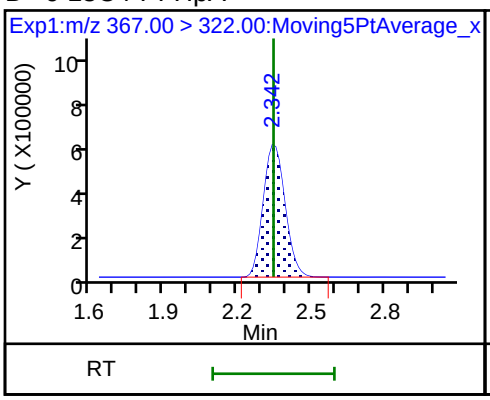
10 Perfluoroheptanoic acid



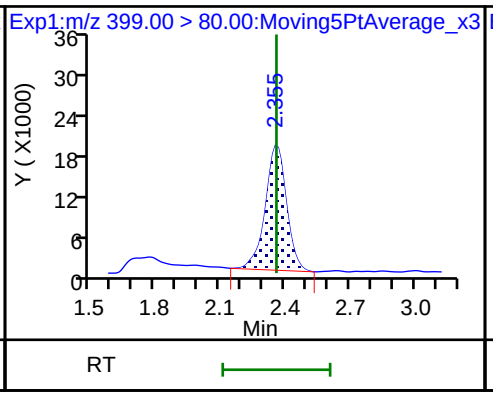
10 Perfluoroheptanoic acid



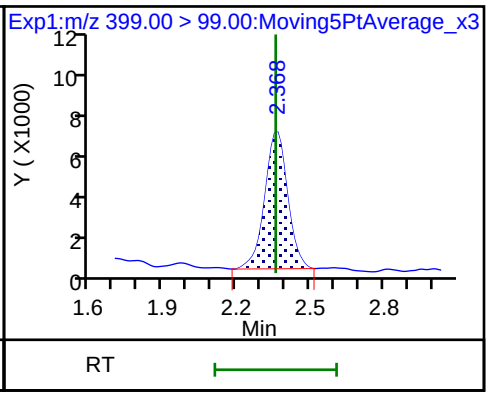
D 9 13C4-PFHpA



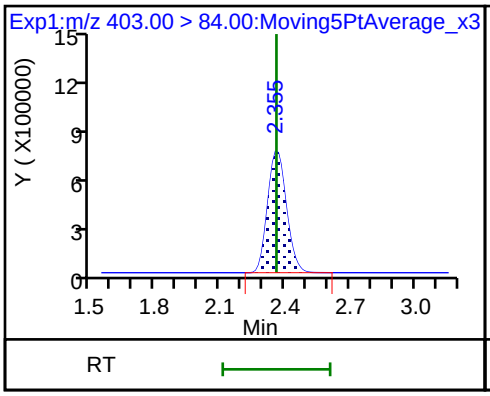
8 Perfluorohexanesulfonic acid



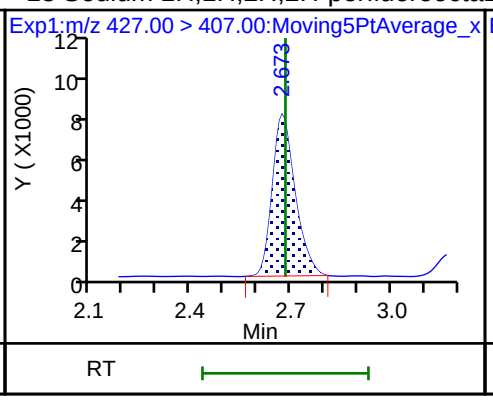
8 Perfluorohexanesulfonic acid



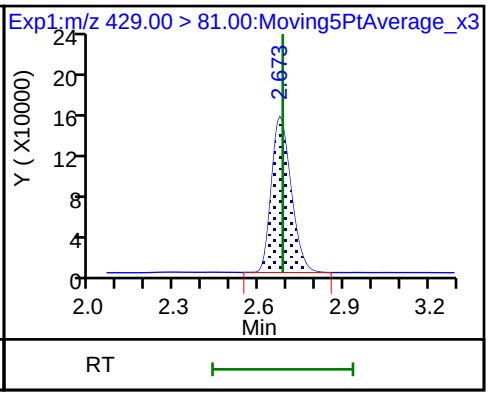
D 11 18O2 PFHxS



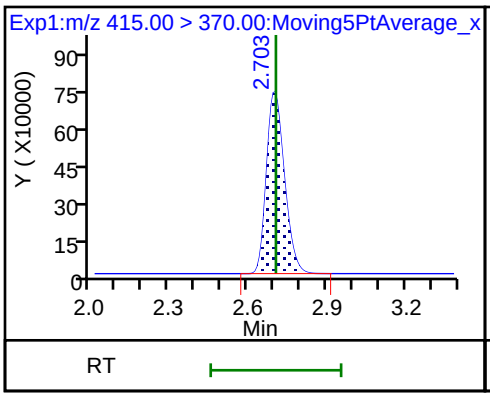
13 Sodium 1H,1H,2H,2H-perfluorooctane



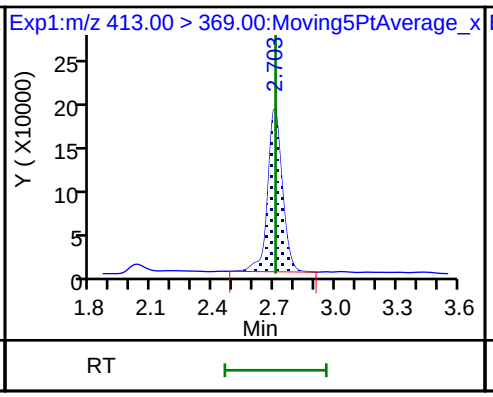
D 12 M2-6:2FTS



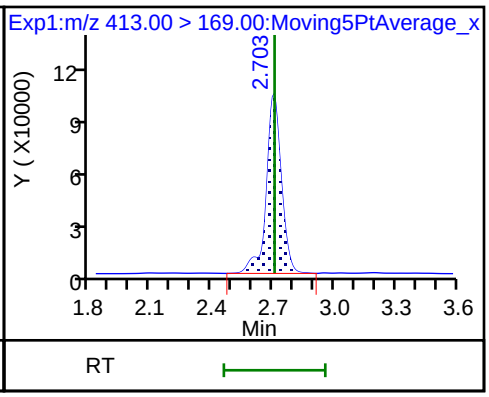
* 62 13C2-PFOA



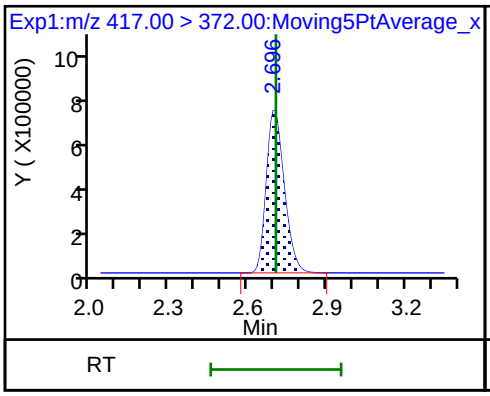
15 Perfluorooctanoic acid



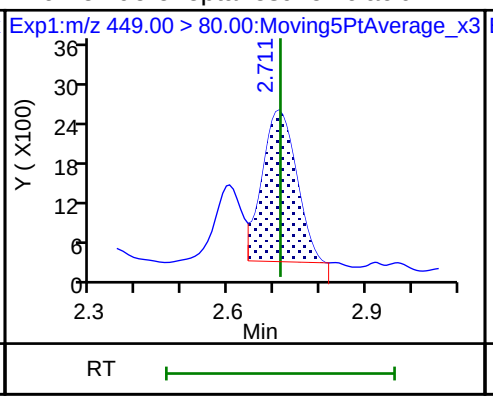
15 Perfluorooctanoic acid



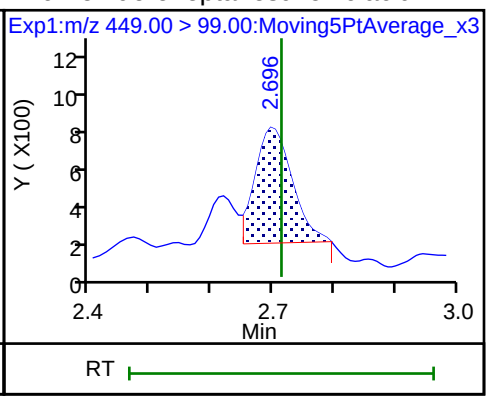
D 14 13C4 PFOA



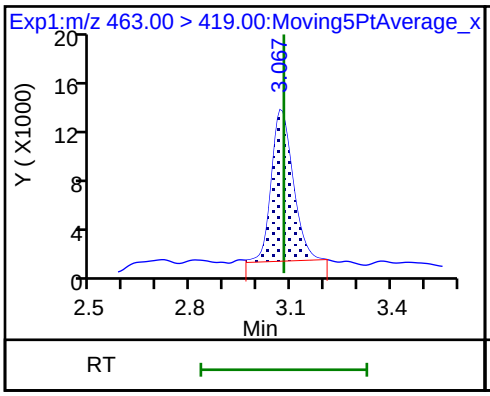
16 Perfluoroheptanesulfonic acid



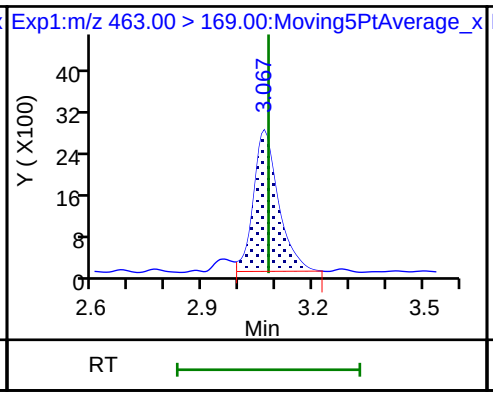
16 Perfluoroheptanesulfonic acid



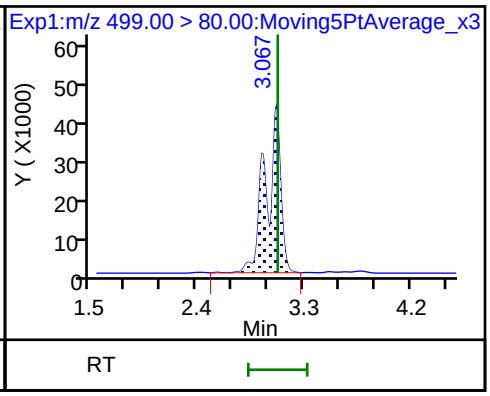
20 Perfluorononanoic acid



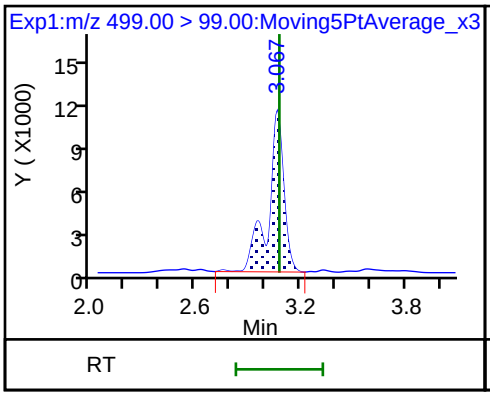
20 Perfluorononanoic acid



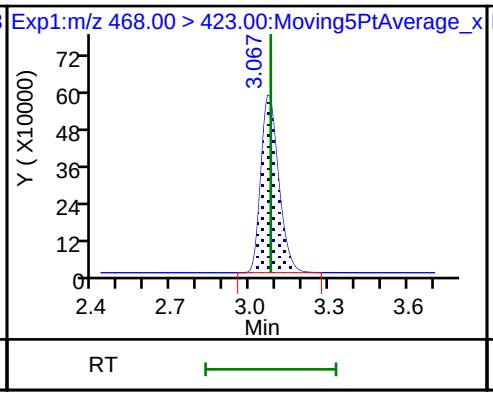
17 Perfluorooctane sulfonic acid



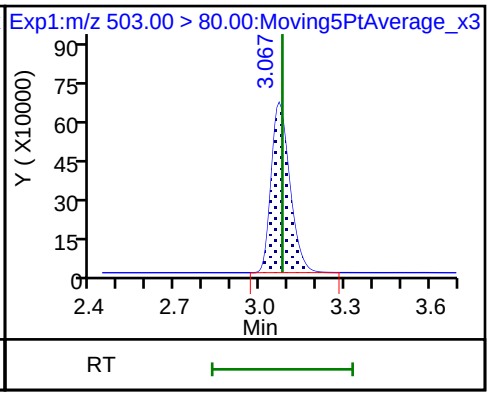
17 Perfluorooctane sulfonic acid



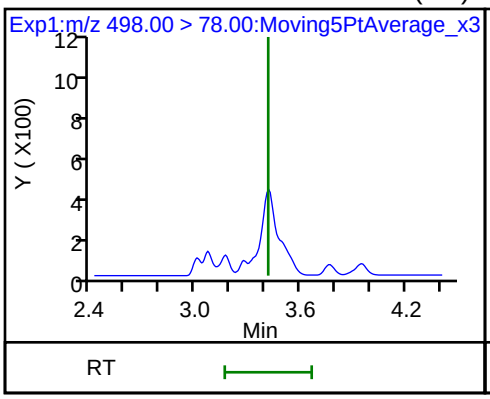
D 19 13C5 PFNA



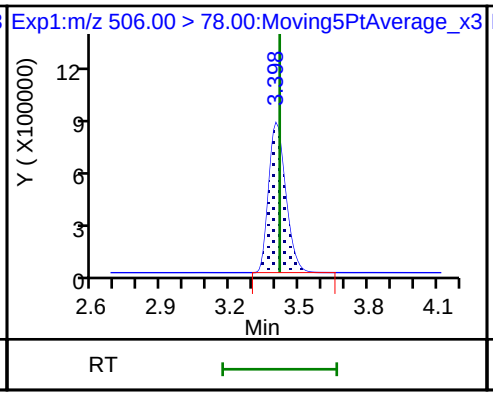
D 18 13C4 PFOS



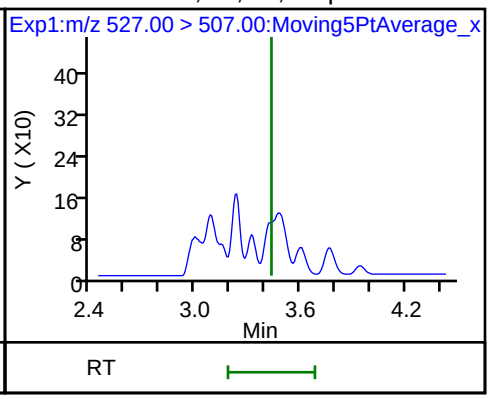
22 Perfluorooctane Sulfonamide (ND)



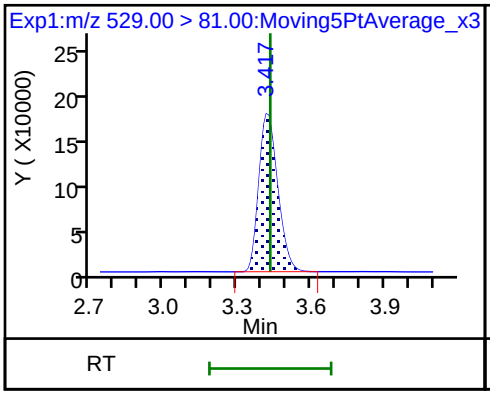
D 21 13C8 FOSA



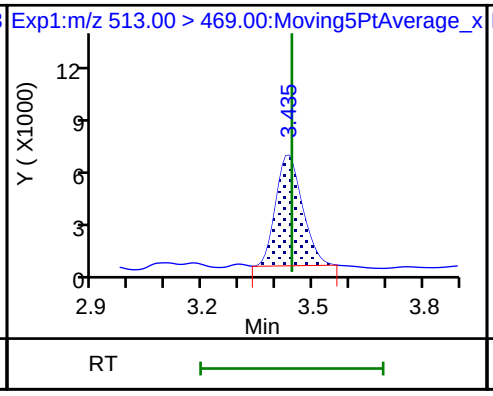
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



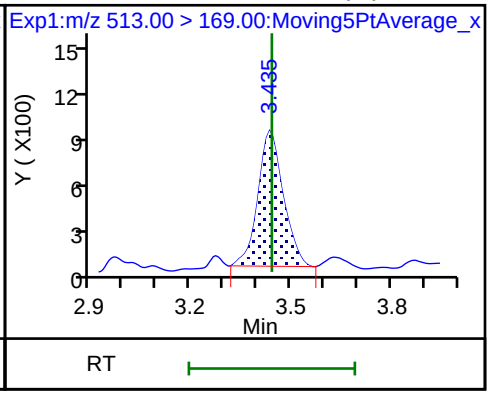
D 26 M2-8:2FTS



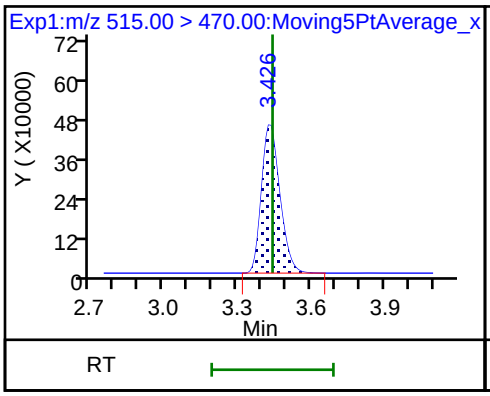
24 Perfluorodecanoic acid



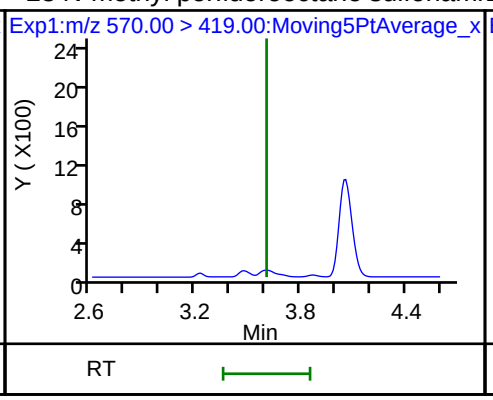
24 Perfluorodecanoic acid (M)



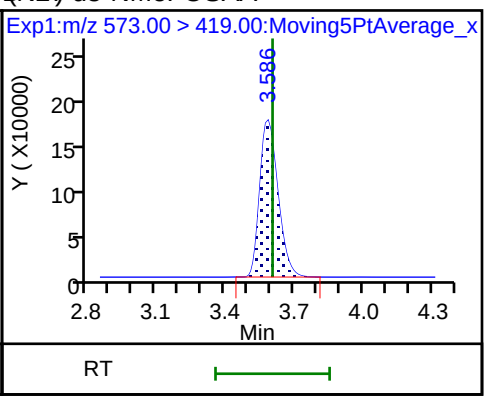
D 23 13C2 PFDA



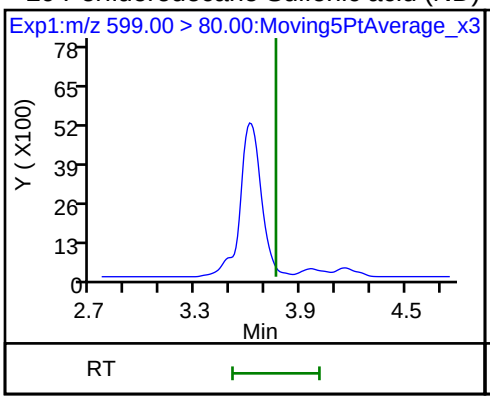
28 N-methyl perfluorooctane sulfonamid (ND)



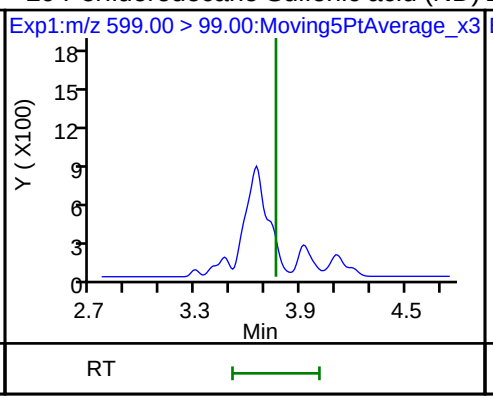
D 27 d3-NMeFOSAA



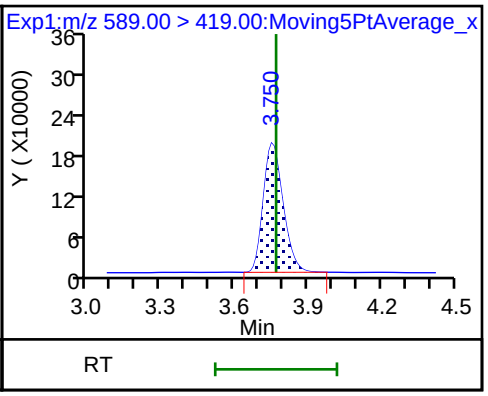
29 Perfluorodecane Sulfonic acid (ND)



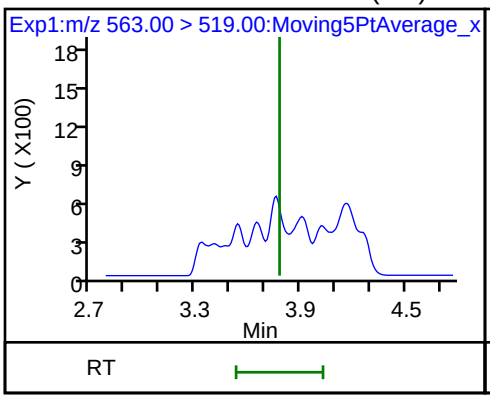
29 Perfluorodecane Sulfonic acid (ND)



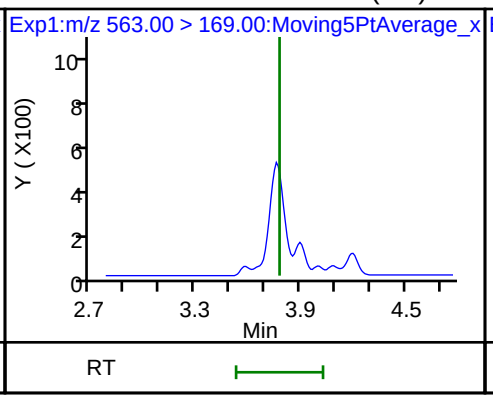
D 32 d5-NEtFOSAA



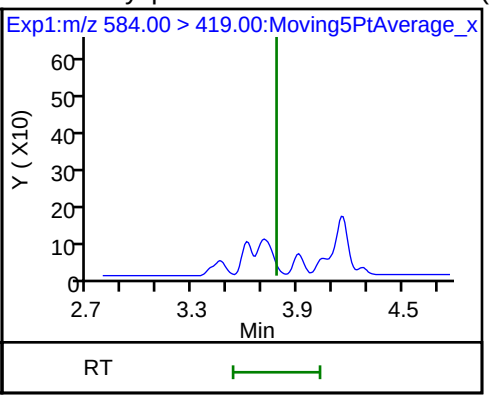
31 Perfluoroundecanoic acid (ND)



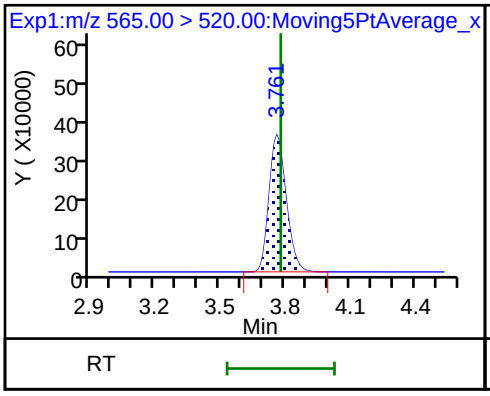
31 Perfluoroundecanoic acid (ND)



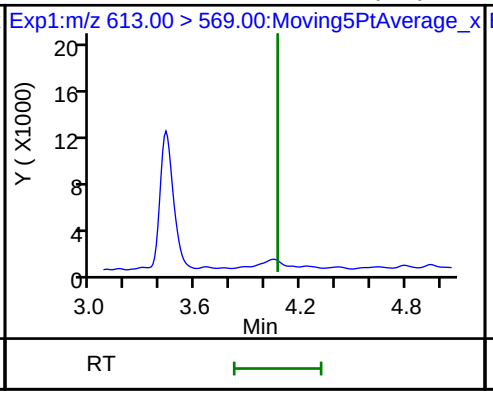
33 N-ethyl perfluorooctane sulfonamid (ND)



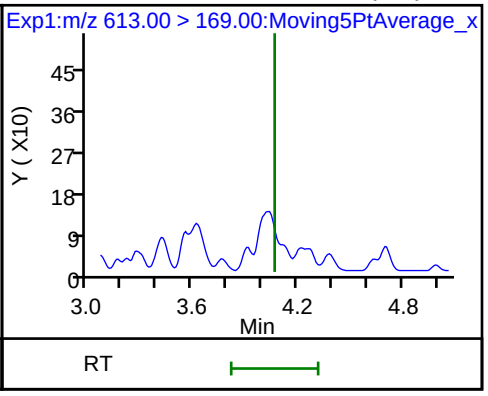
D 30 13C2 PFUnA



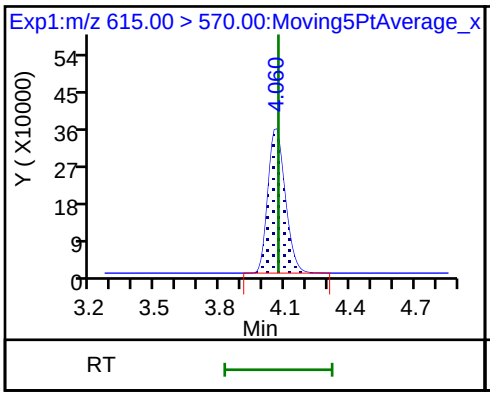
37 Perfluorododecanoic acid (ND)



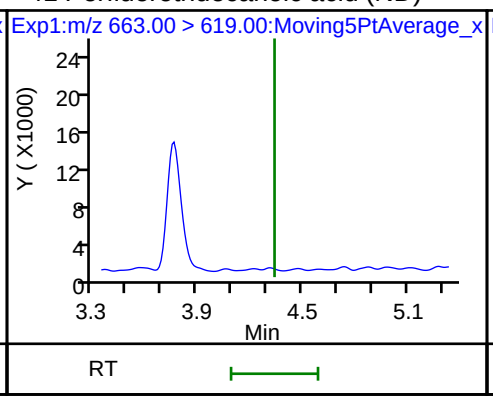
37 Perfluorododecanoic acid (ND)



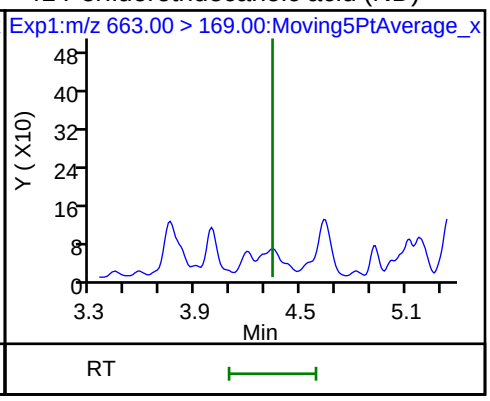
D 36 13C2 PFDoA



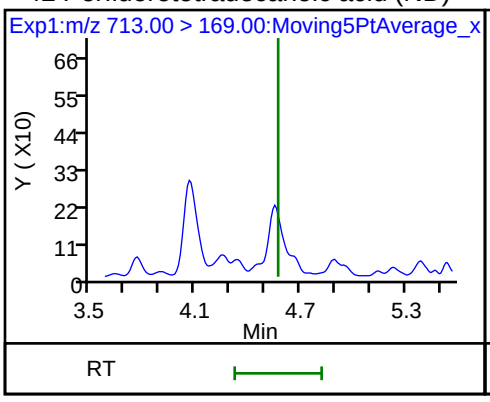
41 Perfluorotridecanoic acid (ND)



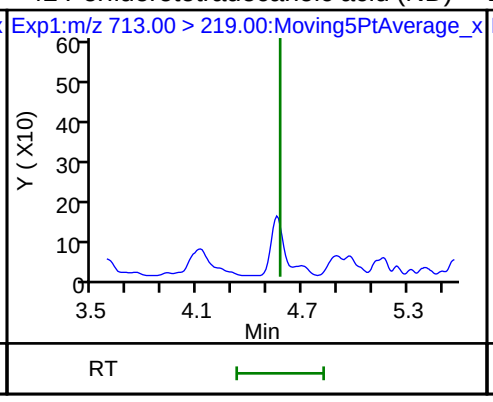
41 Perfluorotridecanoic acid (ND)



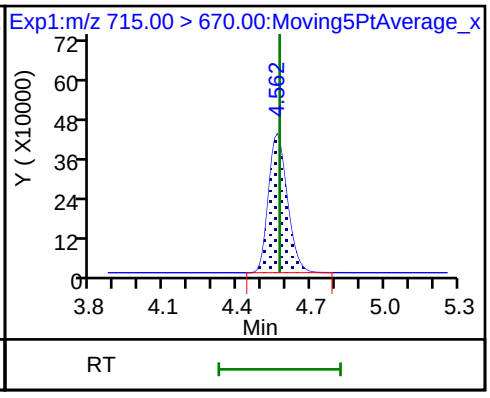
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-106 (WG) | Lab Sample ID: 320-38630-6

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_062.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:55

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 254.5(mL) | Date Analyzed: 05/14/2018 19:34

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	9.6		2.0	0.34
2706-90-3	Perfluoropentanoic acid (PFPeA)	15		2.0	0.48
307-24-4	Perfluorohexanoic acid (PFHxA)	13		2.0	0.57
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.8		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	28	B	2.0	0.83
375-95-1	Perfluorononanoic acid (PFNA)	2.0		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	1.4	J	2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.0		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.5	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.34	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	12	B	2.0	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.34
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.0
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	8.3	J B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-106 (WG) | Lab Sample ID: 320-38630-6

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_062.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:55

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 254.5(mL) | Date Analyzed: 05/14/2018 19:34

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	74		25-150
STL01893	13C5 PFPeA	93		25-150
STL00993	13C2 PFHxA	94		25-150
STL01892	13C4-PFHpA	96		25-150
STL00990	13C4 PFOA	99		25-150
STL00995	13C5 PFNA	96		25-150
STL00996	13C2 PFDA	94		25-150
STL00997	13C2 PFUnA	87		25-150
STL00998	13C2 PFDoA	93		25-150
STL02116	13C2-PFTeDA	111		25-150
STL02337	13C3-PFBS	89		25-150
STL00994	18O2 PFHxS	92		25-150
STL00991	13C4 PFOS	87		25-150
STL01056	13C8 FOSA	79		25-150
STL02118	d3-NMeFOSAA	95		25-150
STL02117	d5-NEtFOSAA	104		25-150
STL02279	M2-6:2FTS	114		25-150
STL02280	M2-8:2FTS	96		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_062.d
Lims ID: 320-38630-A-6-A
Client ID: GC-MW-106 (WG)
Sample Type: Client
Inject. Date: 14-May-2018 19:34:06 ALS Bottle#: 44 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-6-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:10:01 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:05:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.452	0.0	1.000	4804071	1.85		74.1	37417	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.458	0.0	1.004	436045	0.2442			171	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.728	0.001	0.562	3744315	2.33		93.3	40855	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.729	0.0	1.000	688867	0.3781			208	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.764	0.001	1.000	78076	2.06		88.6	284	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.765	1.765	0.0	1.000	394165	0.1521			270	M
298.90 > 99.00	1.765	1.765	0.0	1.000	174800		2.25(1.25-3.74)		406	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.014	0.001	1.000	3939015	2.35		93.8	86753	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.015	0.0	1.000	554198	0.3371			291	
313.00 > 119.00	2.015	2.015	0.0	1.000	52080		10.64(5.03-15.10)		462	
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.345	0.001	1.000	3881883	2.41		96.4	62563	
D 11 18O2 PFHxS										
403.00 > 84.00	2.359	2.358	0.001	1.000	4672626	2.18		92.3	85475	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.346	2.359	-0.013	1.000	369730	0.2245			300	
363.00 > 169.00	2.346	2.359	-0.013	1.000	138998		2.66(1.13-3.40)		754	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.359	2.373	-0.014	1.000	141609	0.0636			175	
399.00 > 99.00	2.359	2.373	-0.014	1.000	47842		2.96(1.50-4.49)		120	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.676	2.682	-0.006	1.000	862181	2.72		114	6002	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.676	2.683	-0.007	1.000	129601	0.2121			931	
D 14 13C4 PFOA										
417.00 > 372.00	2.706	2.704	0.002	1.000	3755585	2.49		99.5	71455	
* 62 13C2-PFOA										
415.00 > 370.00	2.706	2.713	-0.007		4006655	2.50			70491	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.706	2.713	-0.007	1.000	1293319	0.7165			533	
413.00 > 169.00	2.706	2.713	-0.007	1.000	721900		1.79(0.84-2.52)		2404	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.713	2.720	-0.007	1.000	14707	0.008571			78.4	
449.00 > 99.00	2.706	2.720	-0.014	0.997	6248		2.35(1.94-5.82)		43.0	M
D 18 13C4 PFOS										
503.00 > 80.00	3.078	3.073	0.005	1.000	3107877	2.08		87.1	24840	
D 19 13C5 PFNA										
468.00 > 423.00	3.078	3.081	-0.003	1.000	3025534	2.40		95.9	53941	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.071	3.082	-0.011	0.998	426272	0.2936			2592	
499.00 > 99.00	3.078	3.082	-0.004	1.000	78661		5.42(2.31-6.93)		446	
20 Perfluorononanoic acid										
463.00 > 419.00	3.078	3.082	-0.004	1.000	63619	0.0499			82.1	
463.00 > 169.00	3.078	3.082	-0.004	1.000	19144		3.32(1.90-5.69)		328	
D 21 13C8 FOSA										
506.00 > 78.00	3.405	3.407	-0.002	1.000	4261733	1.97		78.9	43657	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.396	3.418	-0.022	0.997	4373	0.002603			79.9	
D 26 M2-8:2FTS										
529.00 > 81.00	3.433	3.435	-0.002	1.000	953630	2.30		96.1	14795	
D 23 13C2 PFDA										
515.00 > 470.00	3.442	3.444	-0.002	1.000	2564618	2.36		94.4	40318	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.442	3.446	-0.004	1.000	37948	0.0361			164	
513.00 > 169.00	3.433	3.446	-0.013	0.997	7415		5.12(2.36-7.09)		130	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.594	3.596	-0.002	1.000	1174794	2.39		95.4	19262	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.759	3.771	-0.012	1.000	1362401	2.59		104	7080	
D 30 13C2 PFUnA										
565.00 > 520.00	3.769	3.771	-0.002	1.000	1985184	2.18		87.3	44536	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.769	3.773	-0.004	1.003	1181	0.002300			31.0	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.769	3.783	-0.014	1.000	6709	0.0108			26.8	
563.00 > 169.00	3.780	3.783	-0.003	1.003	1598		4.20(2.12-6.36)		62.0	
D 36 13C2 PFDoA										
615.00 > 570.00	4.059	4.071	-0.012	1.000	2209860	2.33		93.1	17638	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.574	-0.012	1.000	2880970	2.78		111	13476	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:10:05 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_062.d

Injection Date: 14-May-2018 19:34:06 Instrument ID: A8_N

Lims ID: 320-38630-A-6-A Lab Sample ID: 320-38630-6

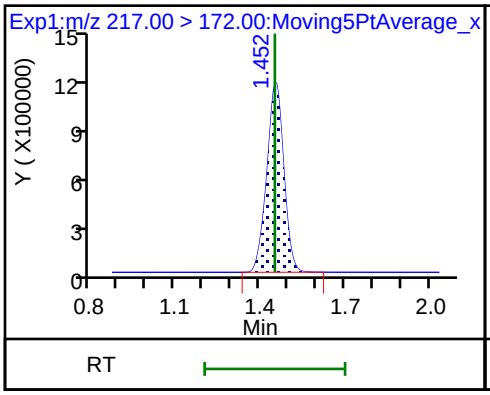
Client ID: GC-MW-106 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 44 Worklist Smp#: 21

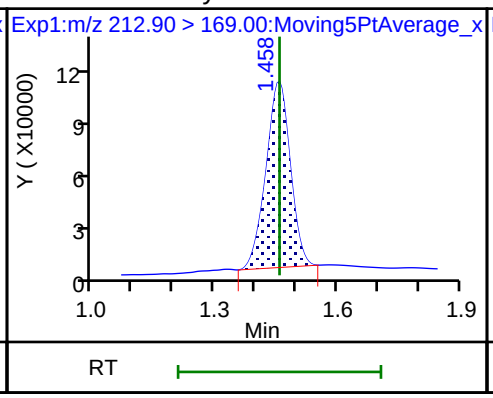
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

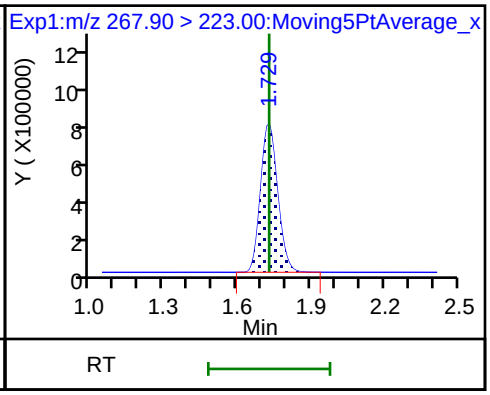
D 1 13C4 PFBA



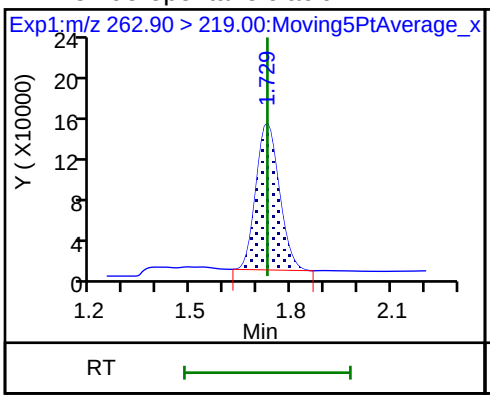
2 Perfluorobutyric acid



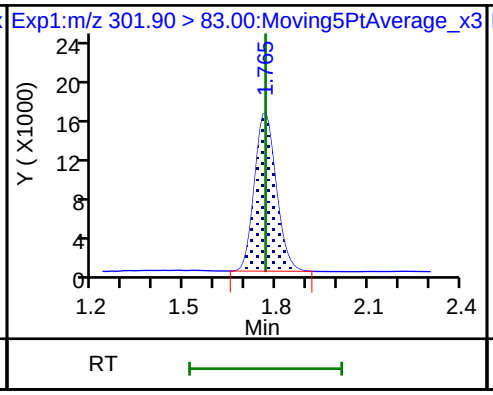
D 3 13C5-PFPeA



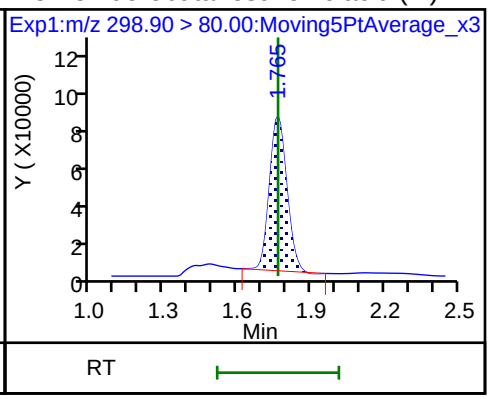
4 Perfluoropentanoic acid



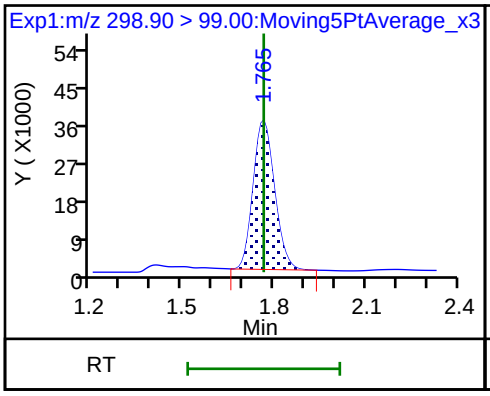
D 47 13C3-PFBS



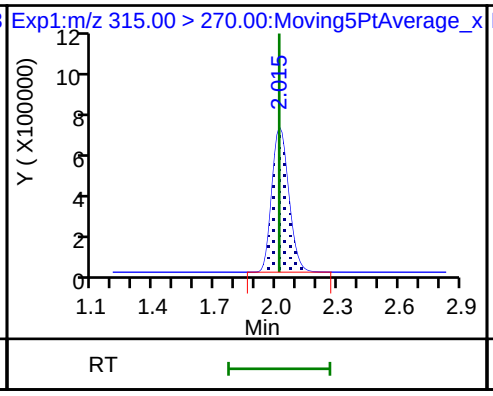
5 Perfluorobutanesulfonic acid (M)



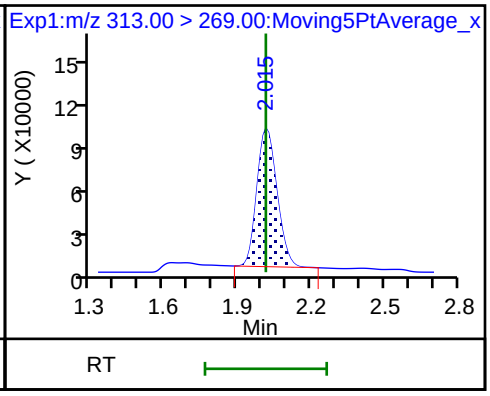
5 Perfluorobutanesulfonic acid



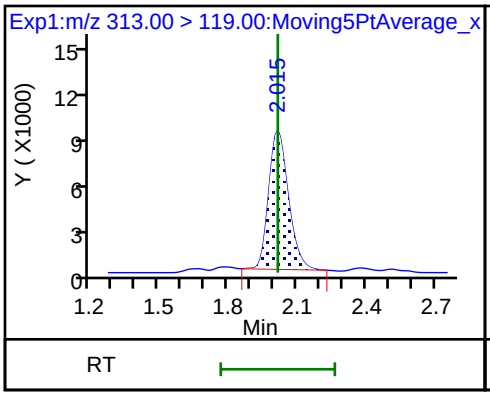
D 7 13C2 PFHxA



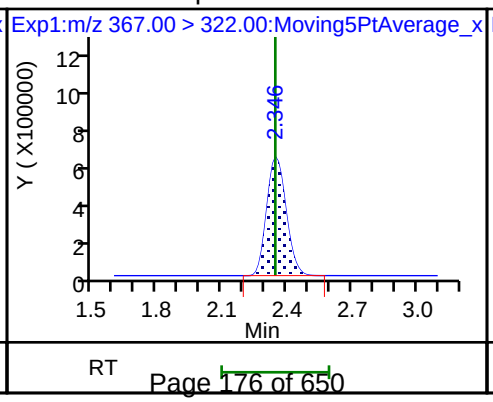
6 Perfluorohexanoic acid



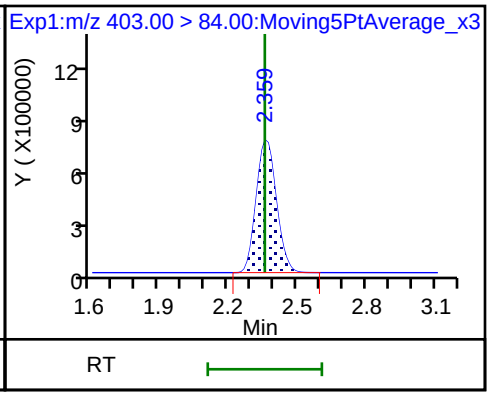
6 Perfluorohexanoic acid



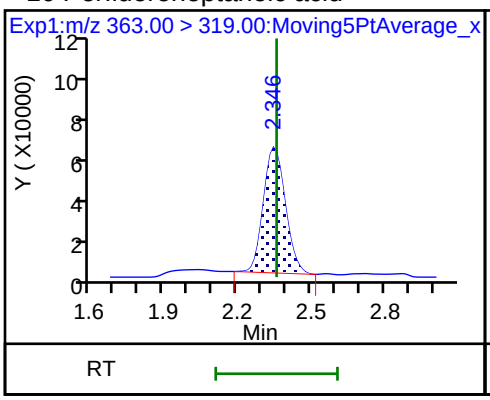
D 9 13C4-PFHpA



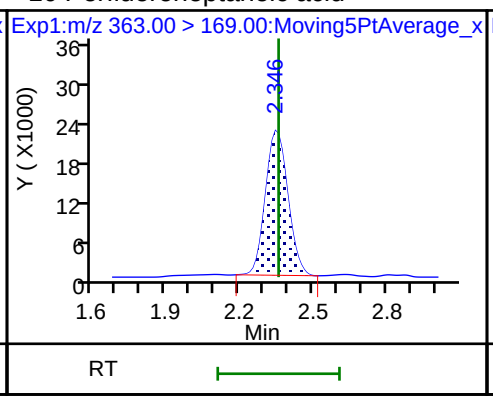
D 11 18O2 PFHxS



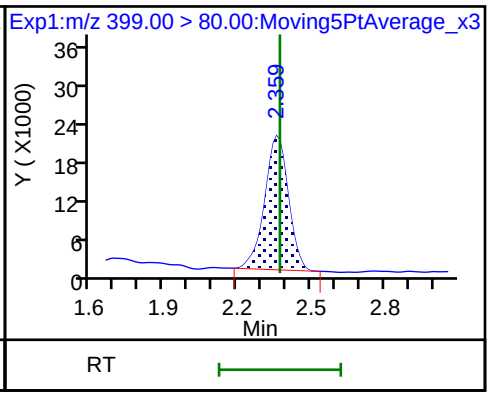
10 Perfluoroheptanoic acid



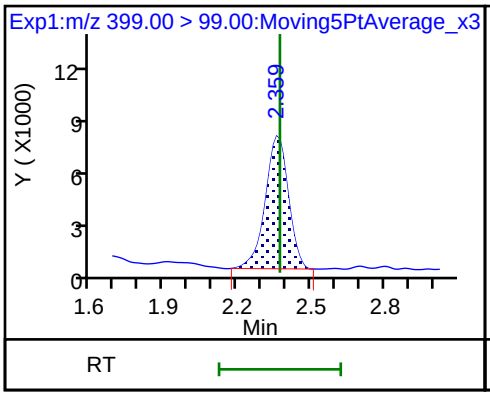
10 Perfluoroheptanoic acid



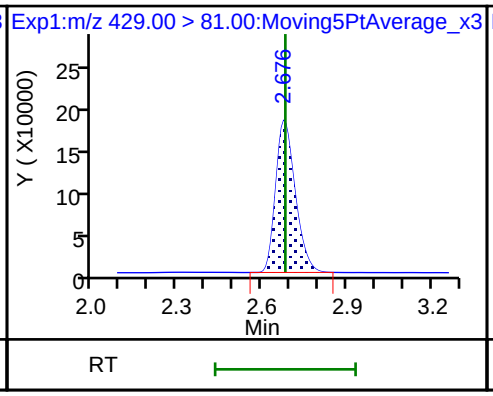
8 Perfluorohexanesulfonic acid



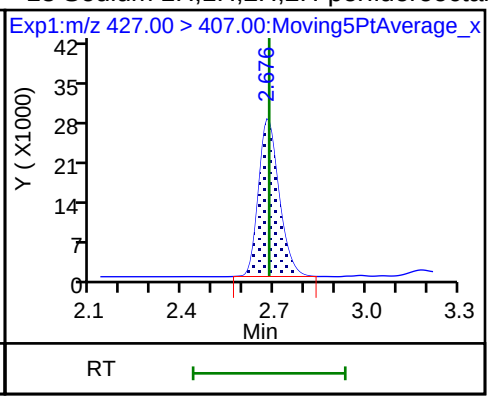
8 Perfluorohexanesulfonic acid



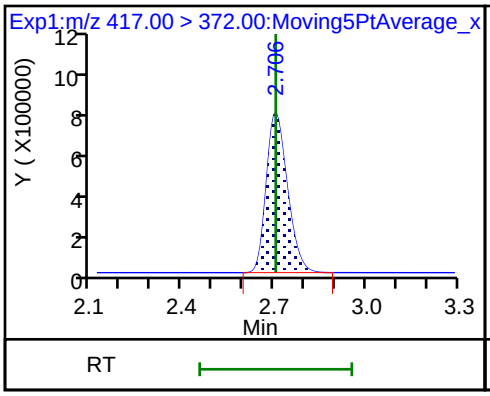
D 12 M2-6:2FTS



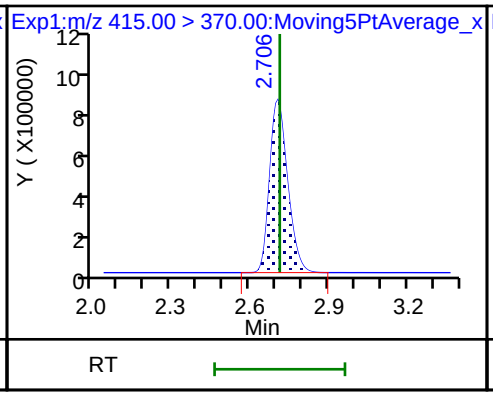
13 Sodium 1H,1H,2H,2H-perfluorooctane



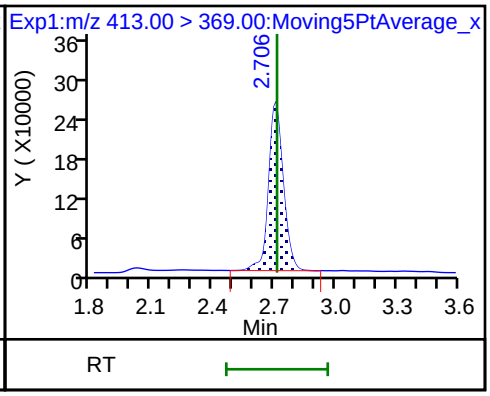
D 14 13C4 PFOA



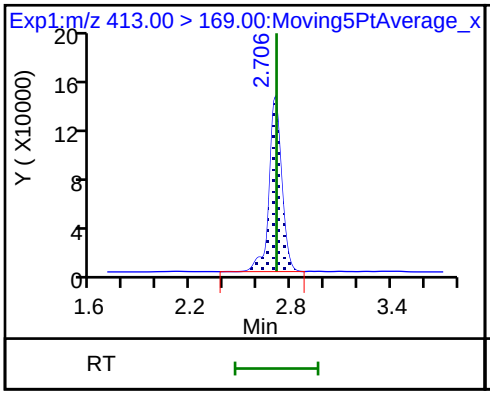
* 62 13C2-PFOA



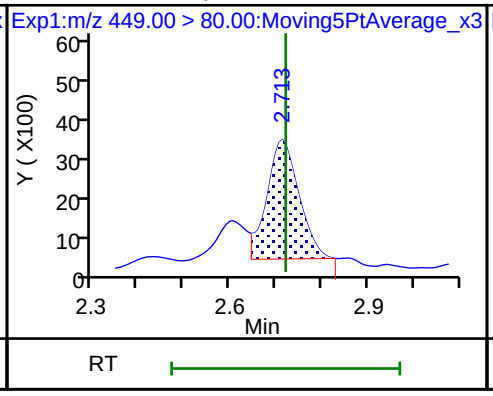
15 Perfluorooctanoic acid



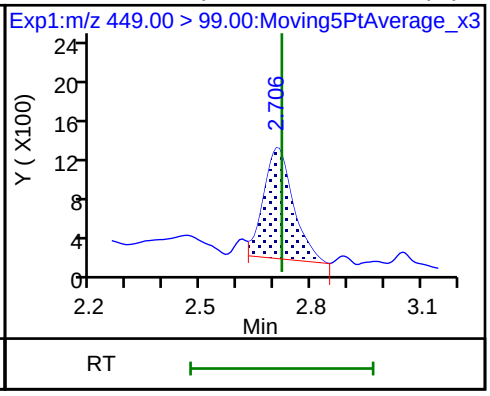
15 Perfluorooctanoic acid



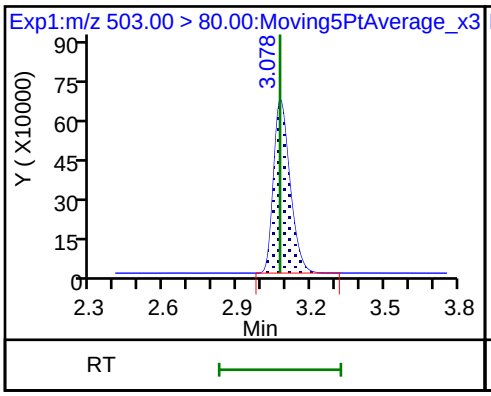
16 Perfluoroheptanesulfonic acid



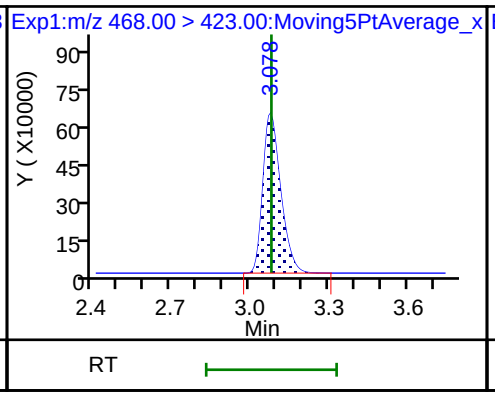
16 Perfluoroheptanesulfonic acid (M)



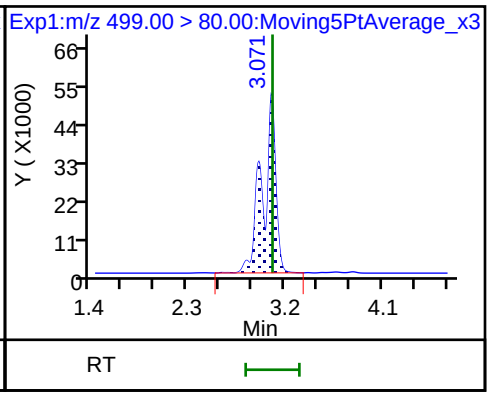
D 18 13C4 PFOS



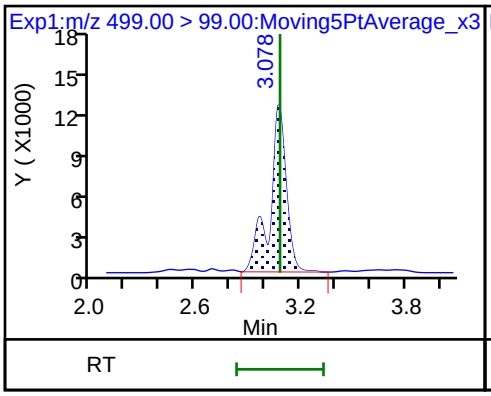
D 19 13C5 PFNA



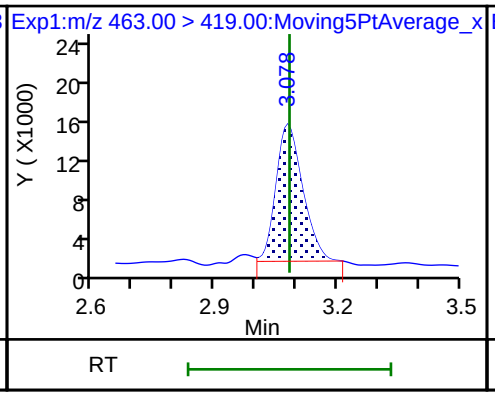
17 Perfluorooctane sulfonic acid



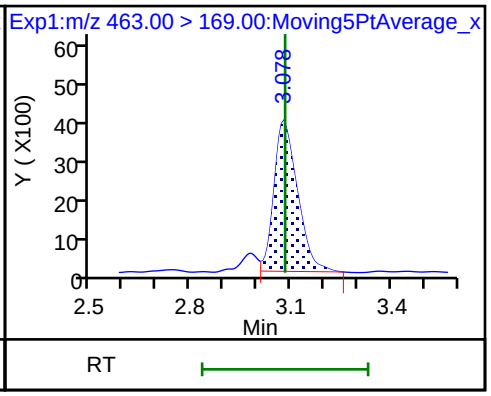
17 Perfluorooctane sulfonic acid



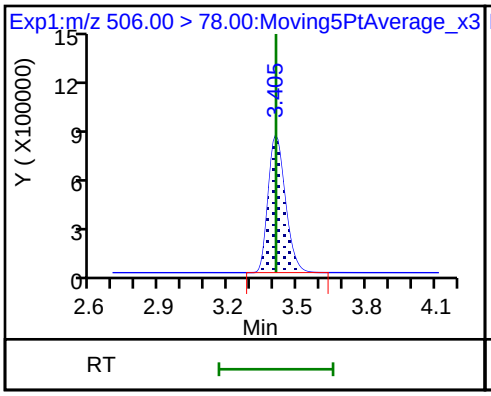
20 Perfluorononanoic acid



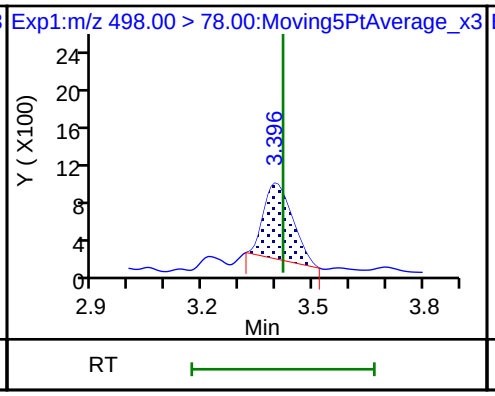
20 Perfluorononanoic acid



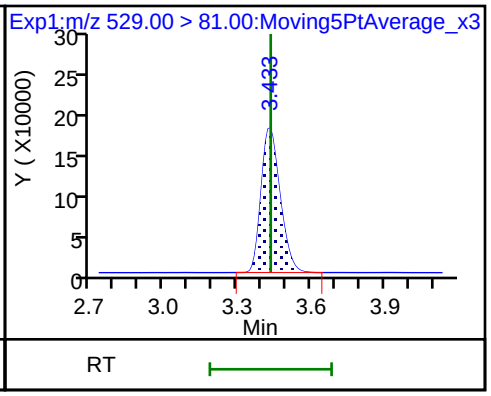
D 21 13C8 FOSA



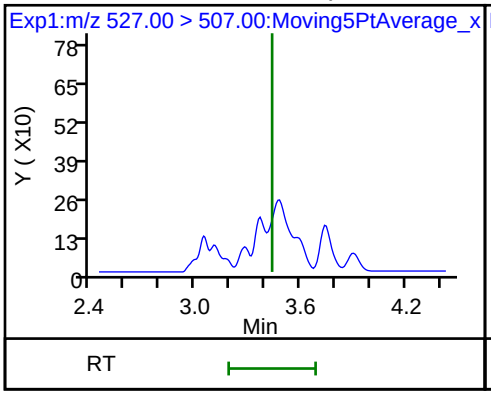
22 Perfluorooctane Sulfonamide



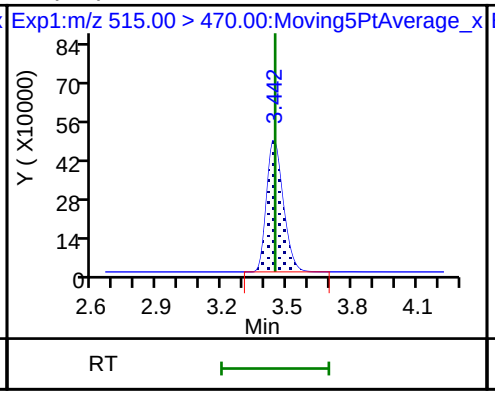
D 26 M2-8:2FTS



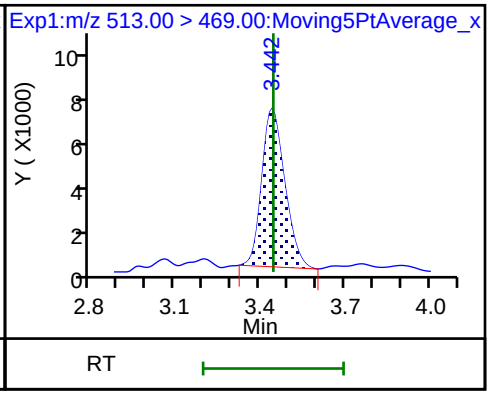
25 Sodium 1H,1H,2H,2H-perfluorodecane(3NL)



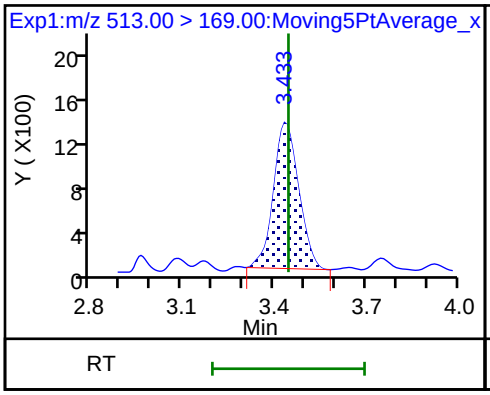
D 23 13C2 PFDA



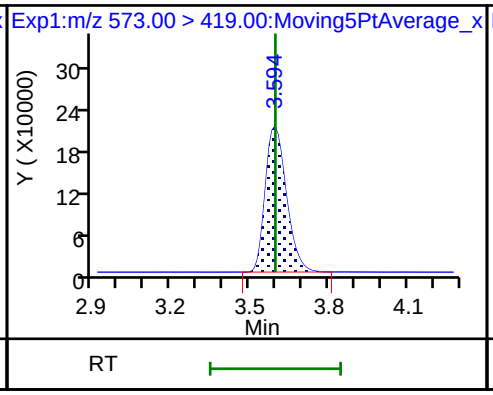
24 Perfluorodecanoic acid



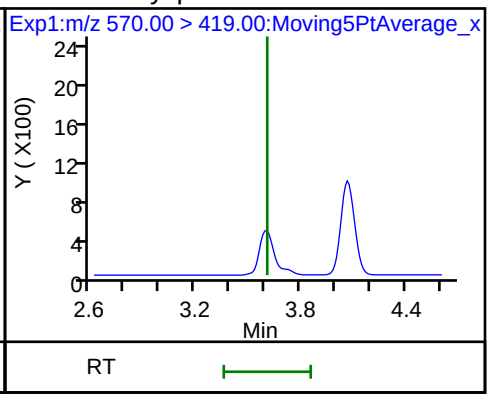
24 Perfluorodecanoic acid



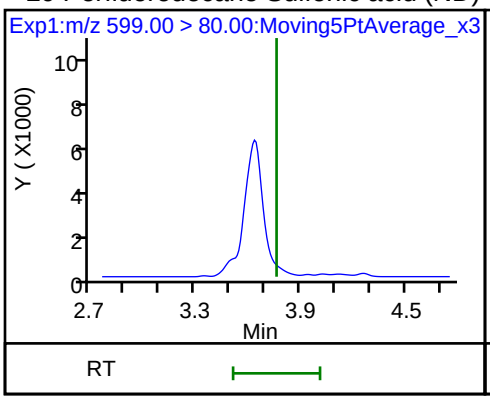
D 27 d3-NMeFOSAA



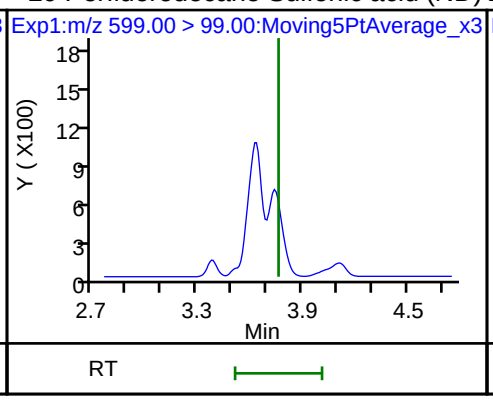
28 N-methyl perfluorooctane sulfonami (ND)



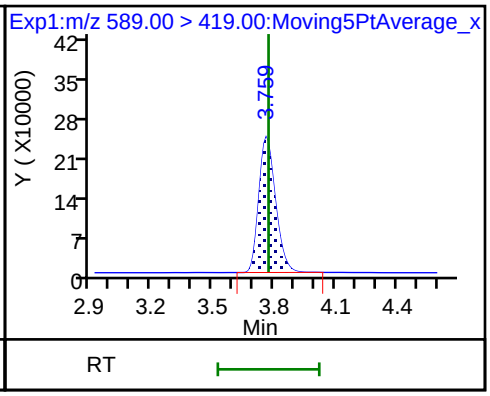
29 Perfluorodecane Sulfonic acid (ND)



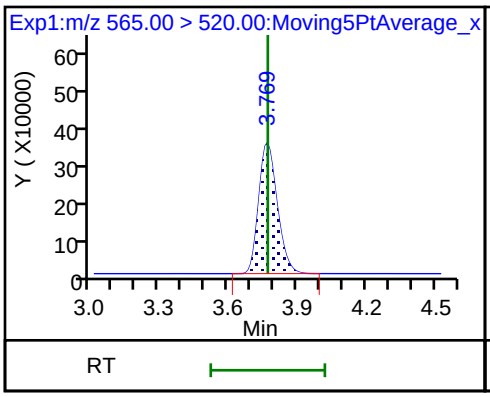
29 Perfluorodecane Sulfonic acid (ND)



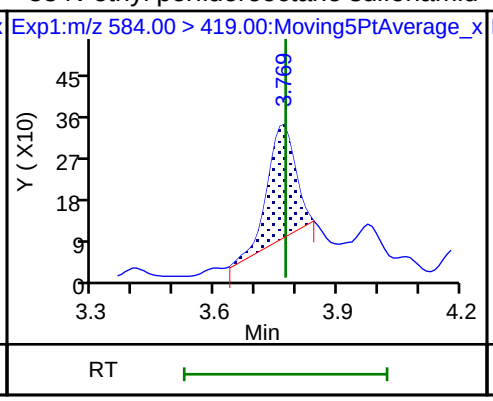
D 32 d5-NEtFOSAA



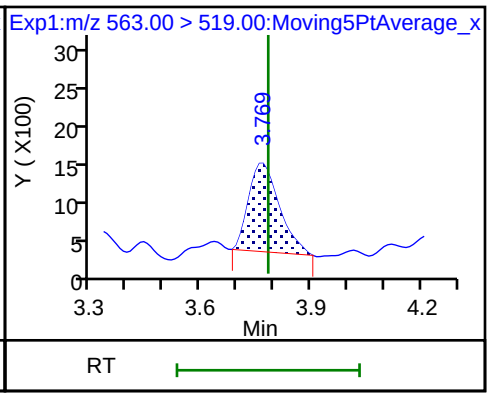
D 30 13C2 PFUnA



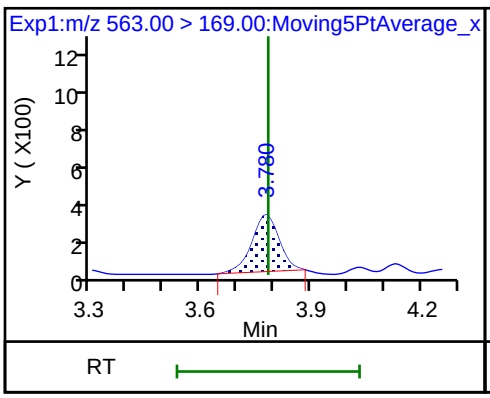
33 N-ethyl perfluorooctane sulfonamid



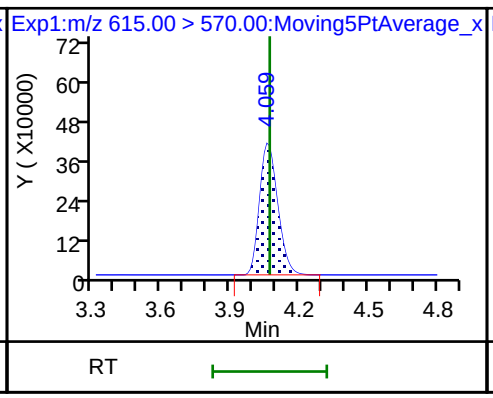
31 Perfluoroundecanoic acid



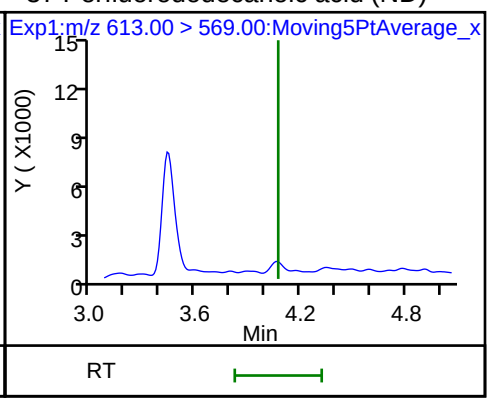
31 Perfluoroundecanoic acid



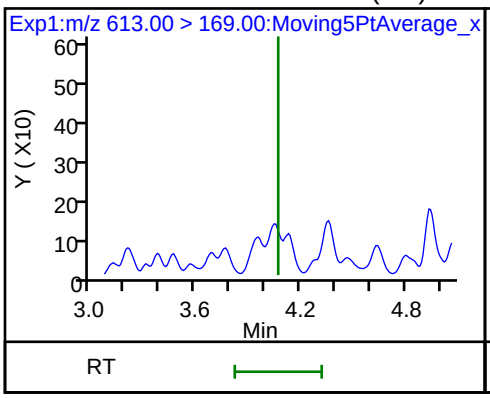
D 36 13C2 PFDoA



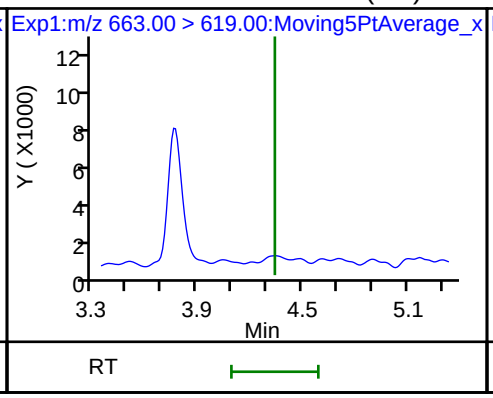
37 Perfluorododecanoic acid (ND)



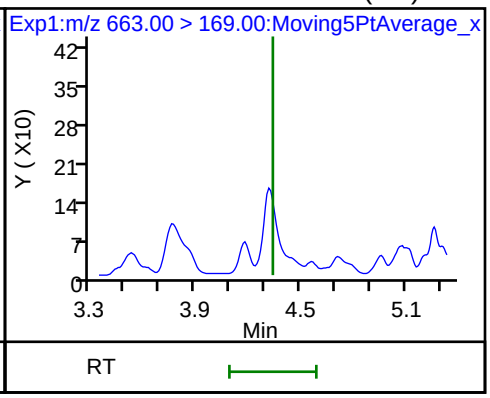
37 Perfluorododecanoic acid (ND)



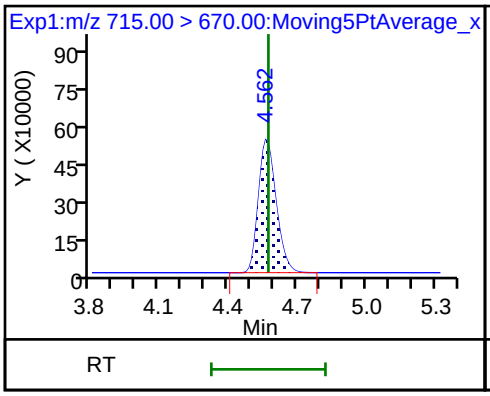
41 Perfluorotridecanoic acid (ND)



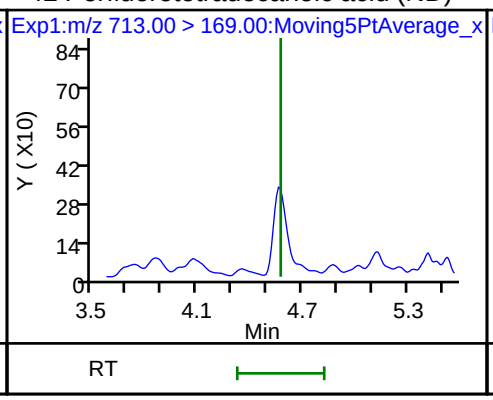
41 Perfluorotridecanoic acid (ND)



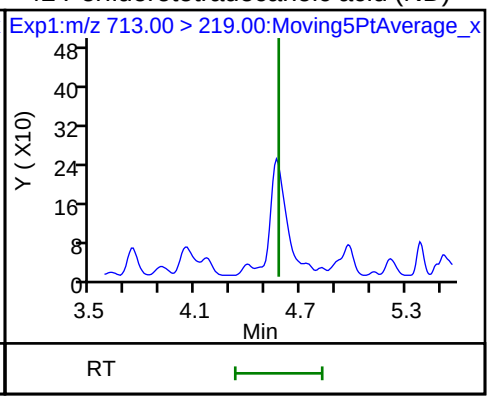
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

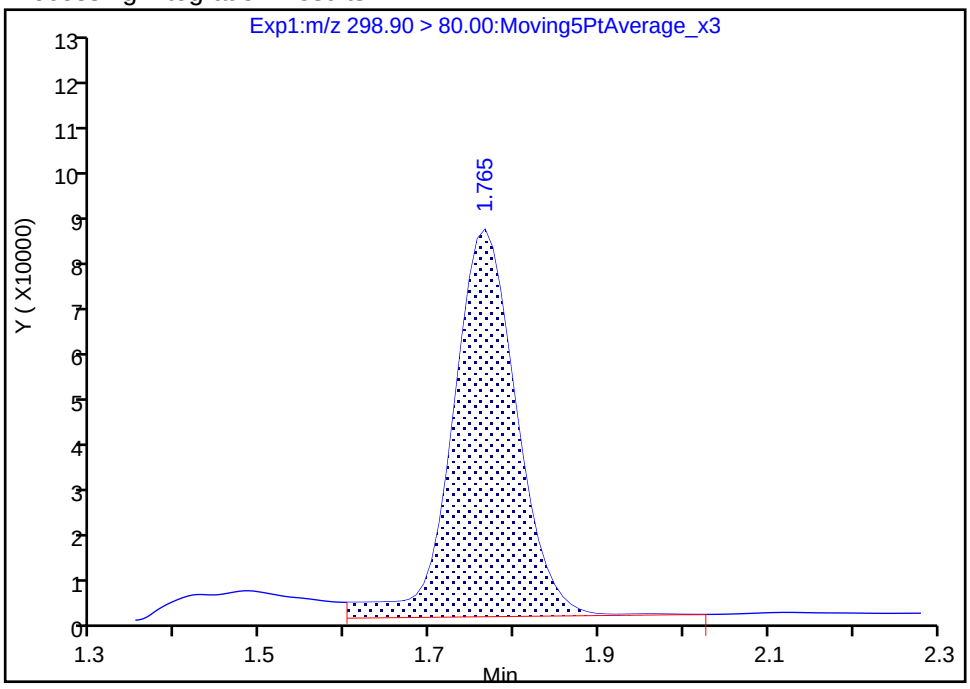
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_062.d				
Injection Date:	14-May-2018 19:34:06	Instrument ID:	A8_N		
Lims ID:	320-38630-A-6-A	Lab Sample ID:	320-38630-6		
Client ID:	GC-MW-106 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	44	Worklist Smp#:	21
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

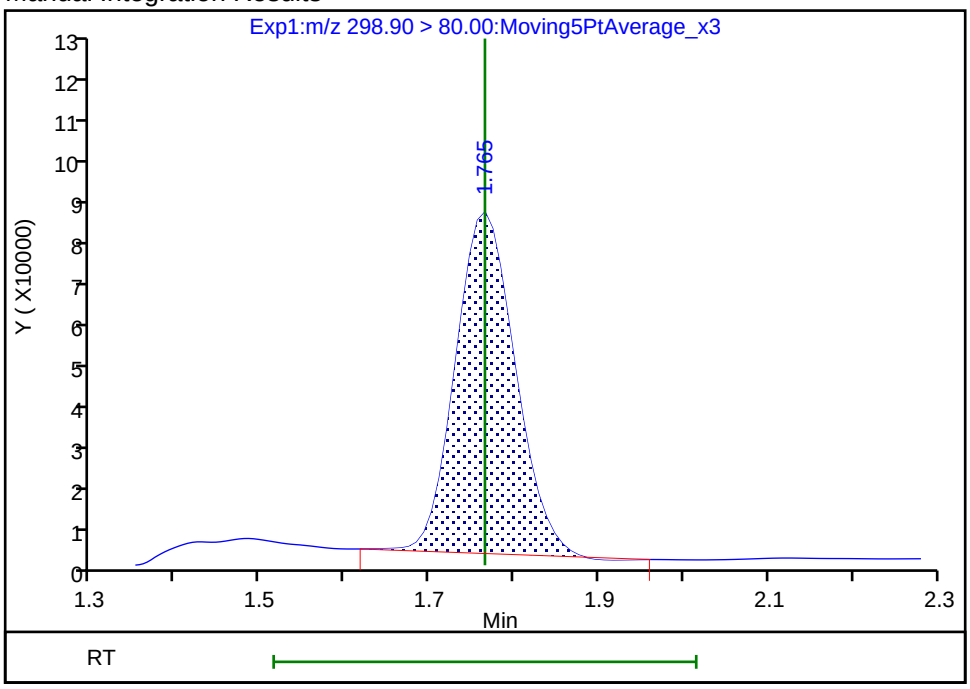
Processing Integration Results

RT: 1.77
Area: 434203
Amount: 0.167560
Amount Units: ng/ml



Manual Integration Results

RT: 1.77
Area: 394165
Amount: 0.152109
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:05:17

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

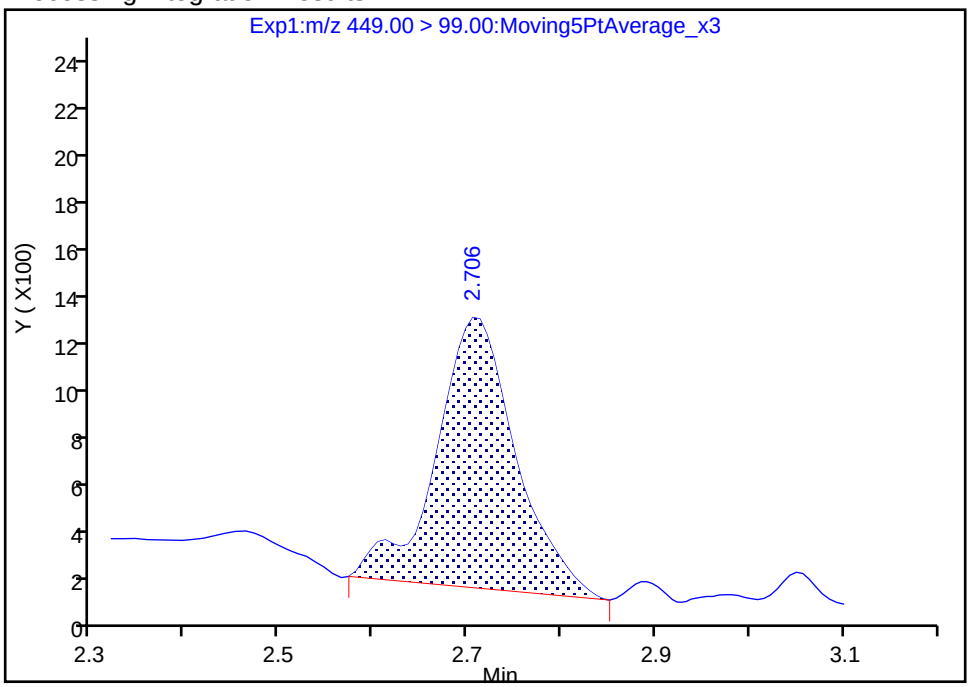
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_062.d
Injection Date: 14-May-2018 19:34:06 Instrument ID: A8_N
Lims ID: 320-38630-A-6-A Lab Sample ID: 320-38630-6
Client ID: GC-MW-106 (WG)
Operator ID: SACINSTLCMS01 ALS Bottle#: 44 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

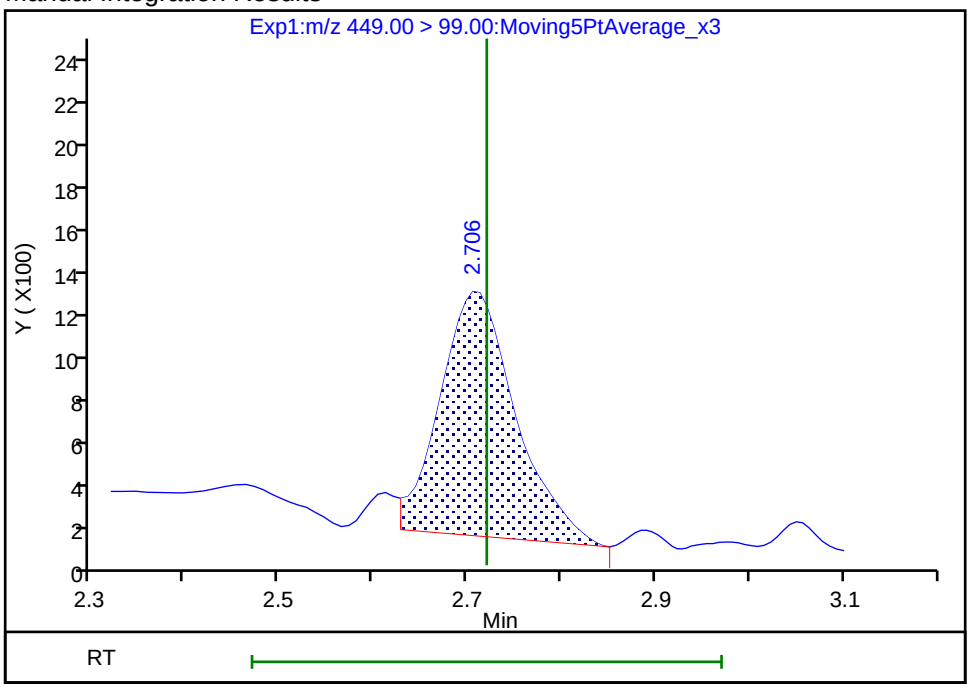
Processing Integration Results

RT: 2.71
Area: 6611
Amount: 0.008571
Amount Units: ng/ml



Manual Integration Results

RT: 2.71
Area: 6248
Amount: 0.008571
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:05:28
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-3 (WG) RE | Lab Sample ID: 320-38630-7 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_024.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 12:45

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 238.3(mL) | Date Analyzed: 05/13/2018 18:30

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*24*	*H*	*2.1*	*0.89*
27619-97-2	*6:2FTS*	*4.3*	*J H B*	*21*	*2.1*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	107		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_024.d
Lims ID: 320-38630-B-7-A
Client ID: GC-MW-3 (WG)
Sample Type: Client
Inject. Date: 13-May-2018 18:30:29 ALS Bottle#: 18 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-7-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:41:42

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.458	0.0	1.004	425935	0.2632			263	
D 1 13C4 PFBA										
217.00 > 172.00	1.453	1.458	-0.005	1.000	4321495	1.89		75.8	40377	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.729	0.001	1.000	856465	0.5267			205	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.729	0.001	0.562	3440411	2.37		94.9	32030	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.766	1.766	0.0	1.000	295336	0.1167			135	M
298.90 > 99.00	1.766	1.766	0.0	1.000	125777		2.35(1.25-3.74)		213	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.766	0.0	1.000	74575	2.27		97.5	250	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.015	0.001	1.000	681772	0.4613			367	
313.00 > 119.00	2.016	2.015	0.001	1.000	65539		10.40(5.03-15.10)		702	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.015	0.001	1.000	3682929	2.41		96.5	95527	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.346	0.001	1.000	423809	0.2842			348	
363.00 > 169.00	2.347	2.346	0.001	1.000	187639		2.26(1.13-3.40)		1340	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.346	0.001	1.000	3447863	2.45		98.1	62906	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.359	0.001	1.000	61861	0.0287			83.4	
399.00 > 99.00	2.360	2.359	0.001	1.000	24111		2.57(1.50-4.49)		84.3	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.359	0.001	1.000	4485287	2.44		103	75327	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.682	2.683	-0.001	1.000	50057	0.1031			512	
D 12 M2-6:2FTS										
429.00 > 81.00	2.682	2.683	-0.001	1.000	695569	2.54		107	4954	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.706	-0.001		3531164	2.50			74978	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.706	-0.001	1.000	871318	0.5720			365	
413.00 > 169.00	2.705	2.706	-0.001	1.000	466751		1.87(0.84-2.52)		2106	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.706	-0.001	1.000	3294135	2.48		99.0	70422	
20 Perfluorononanoic acid										
463.00 > 419.00	3.077	3.078	-0.001	1.000	100889	0.0872			160	
463.00 > 169.00	3.077	3.078	-0.001	1.000	23392		4.31(1.90-5.69)		649	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.077	3.078	-0.001	1.000	321396	0.2290			1074	M
499.00 > 99.00	3.077	3.078	-0.001	1.000	64030		5.02(2.31-6.93)		576	
D 19 13C5 PFNA										
468.00 > 423.00	3.077	3.078	-0.001	1.000	2843124	2.53		101	76274	
D 18 13C4 PFOS										
503.00 > 80.00	3.077	3.078	-0.001	1.000	3058853	2.32		97.1	22837	
D 21 13C8 FOSA										
506.00 > 78.00	3.404	3.414	-0.010	1.000	4462766	2.39		95.7	50933	
D 26 M2-8:2FTS										
529.00 > 81.00	3.432	3.433	-0.001	1.000	941510	2.61		109	6820	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.441	3.442	-0.001	1.000	57035	0.0601			252	
513.00 > 169.00	3.441	3.442	-0.001	1.000	9583		5.95(2.36-7.09)		216	
D 23 13C2 PFDA										
515.00 > 470.00	3.441	3.442	-0.001	1.000	2313071	2.36		94.5	49406	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.593	3.605	-0.012	1.000	928604	2.16		86.5	21372	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.768	3.769	-0.001	1.000	1042454	2.22		88.7	2741	
D 30 13C2 PFUnA										
565.00 > 520.00	3.768	3.780	-0.012	1.000	1920755	2.40		96.0	68980	
D 36 13C2 PFDoA										
615.00 > 570.00	4.067	4.069	-0.002	1.000	1876892	2.25		89.9	15663	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.570	4.572	-0.002	1.000	2132008	2.35		93.8	12966	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-May-2018 10:44:23 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_024.d

Injection Date: 13-May-2018 18:30:29 Instrument ID: A8_N

Lims ID: 320-38630-B-7-A Lab Sample ID: 320-38630-7

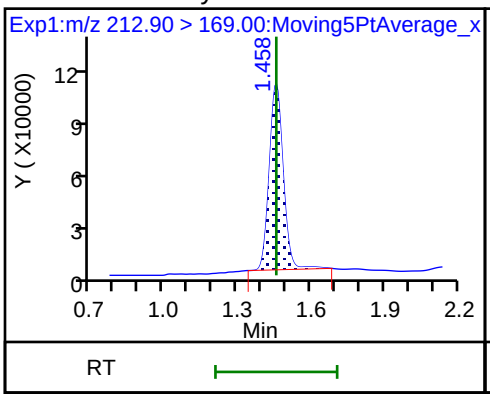
Client ID: GC-MW-3 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 11

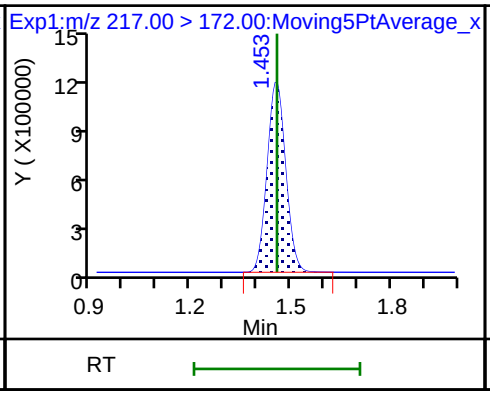
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

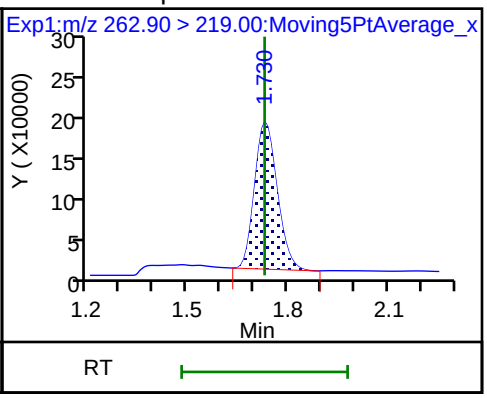
2 Perfluorobutyric acid



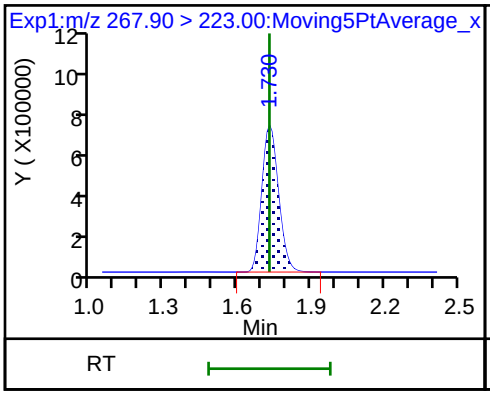
D 1 13C4 PFBA



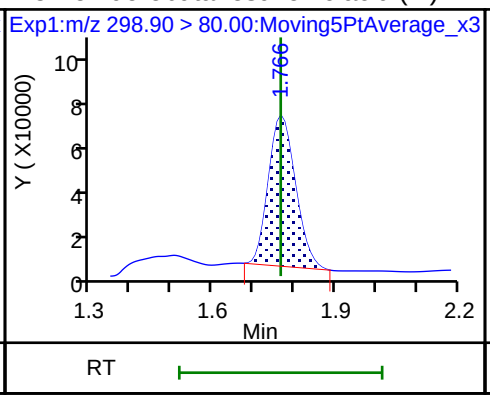
4 Perfluoropentanoic acid



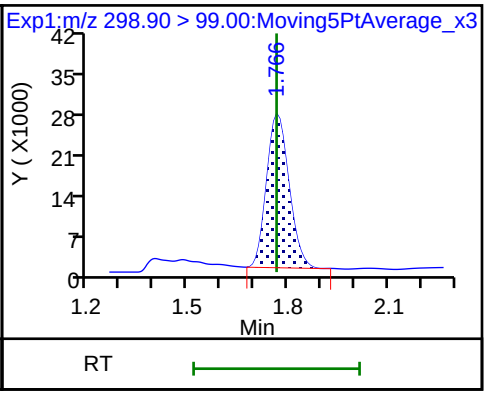
D 3 13C5-PFPeA



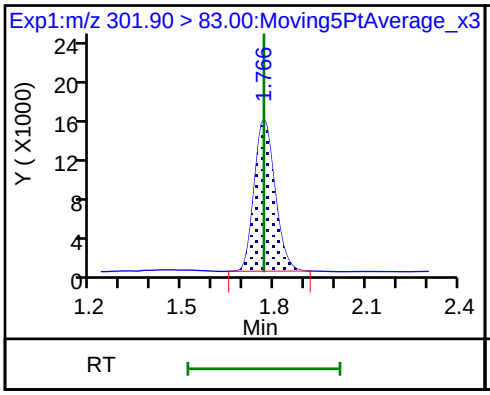
5 Perfluorobutanesulfonic acid (M)



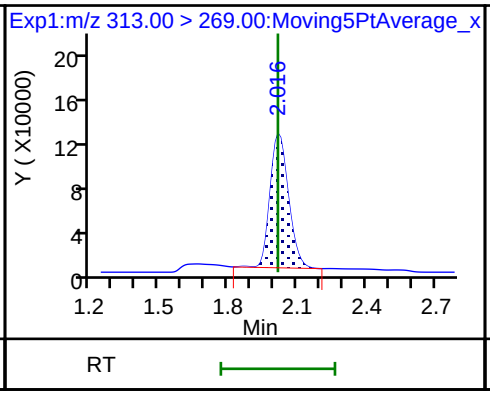
5 Perfluorobutanesulfonic acid



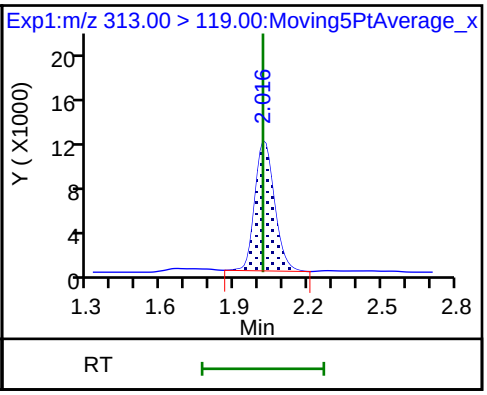
D 47 13C3-PFBS



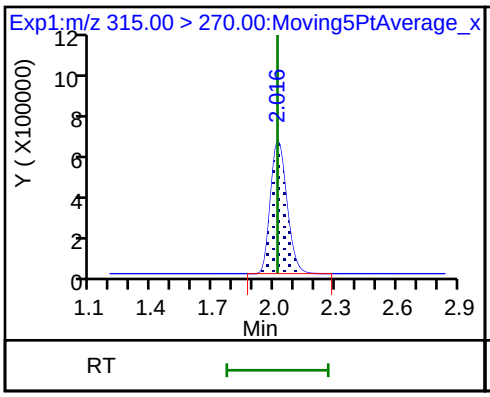
6 Perfluorohexanoic acid



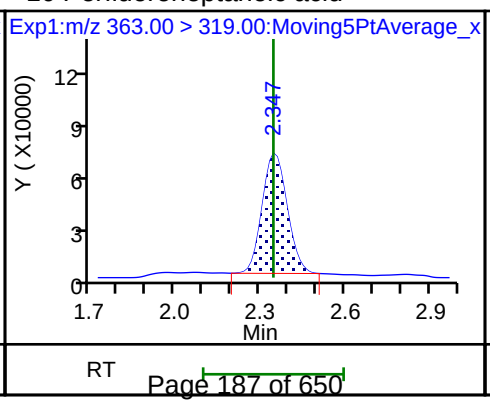
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



10 Perfluoroheptanoic acid



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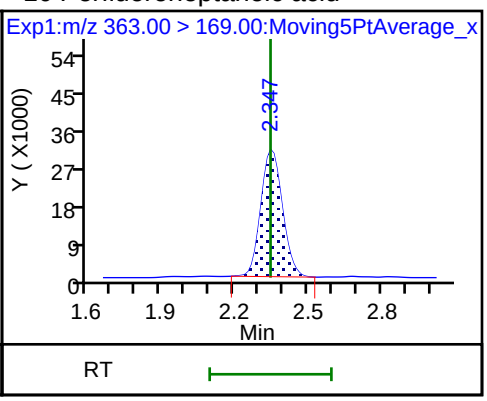
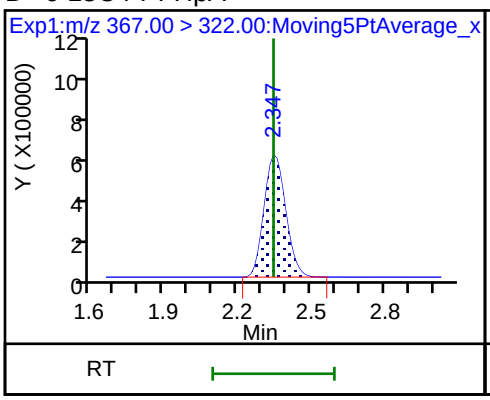
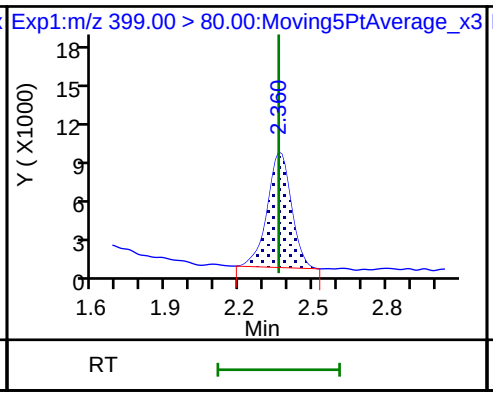


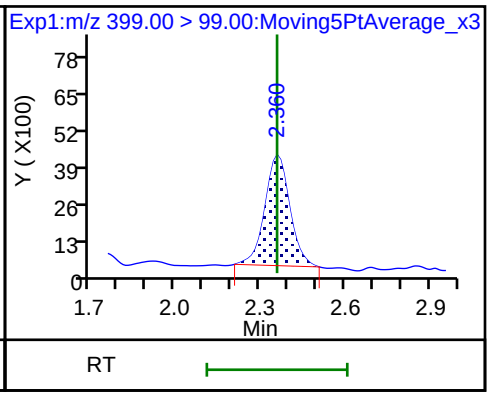
D 9 13C4-PFHpA



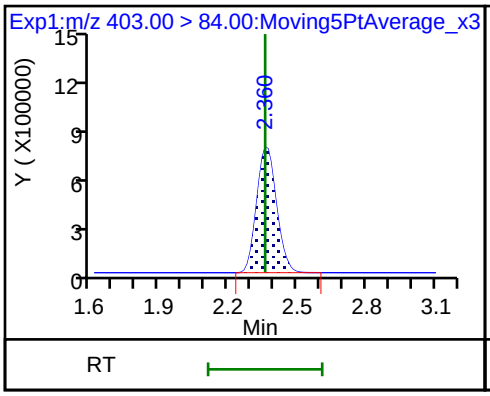
8 Perfluorohexanesulfonic acid



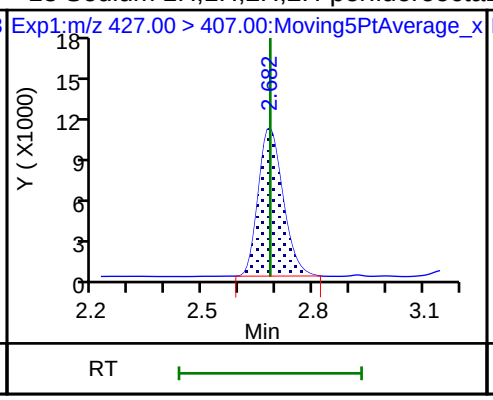
8 Perfluorohexanesulfonic acid



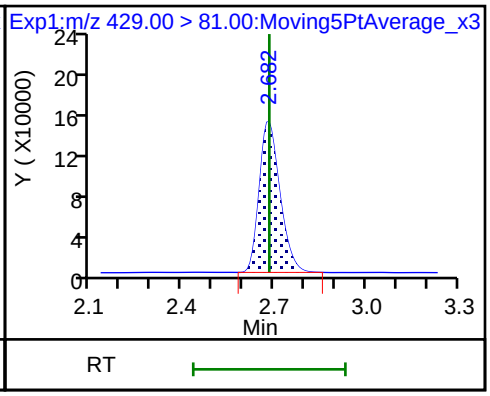
D 11 18O2 PFHxS



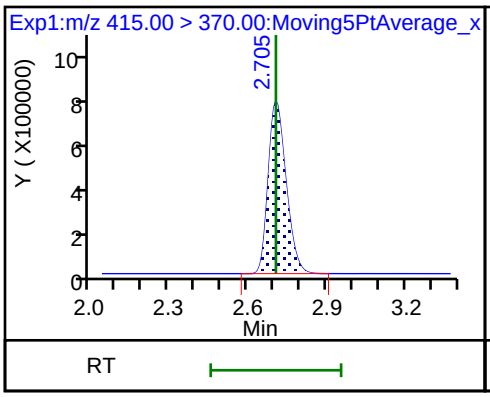
13 Sodium 1H,1H,2H,2H-perfluorooctane



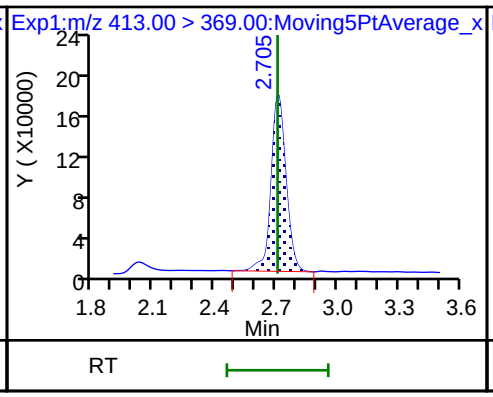
D 12 M2-6:2FTS



* 62 13C2-PFOA



15 Perfluorooctanoic acid



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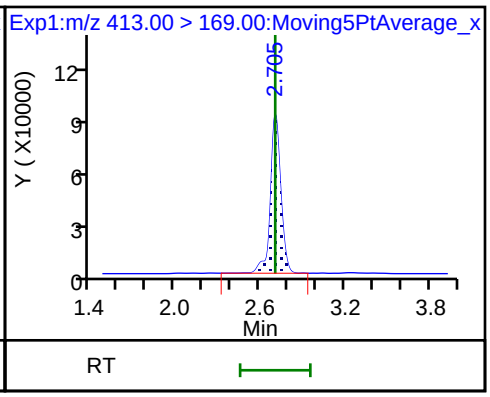
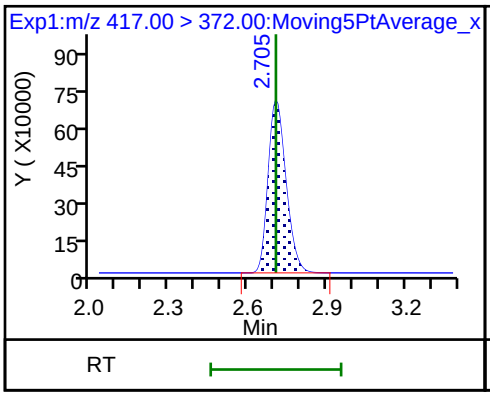
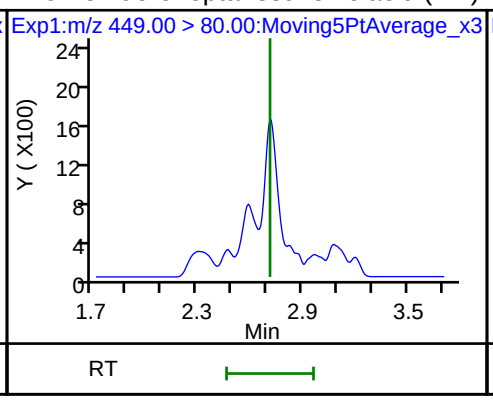


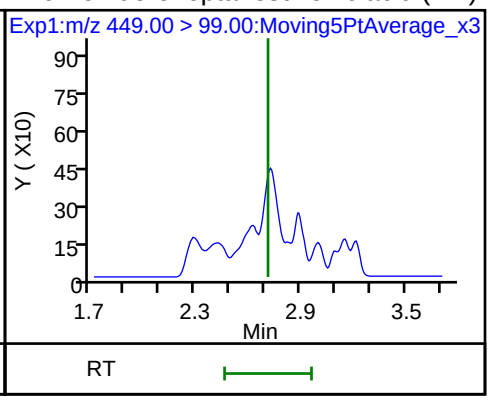
D 14 13C4 PFOA



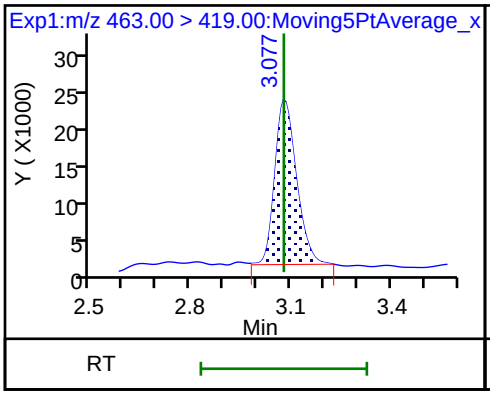
16 Perfluoroheptanesulfonic acid (ND)



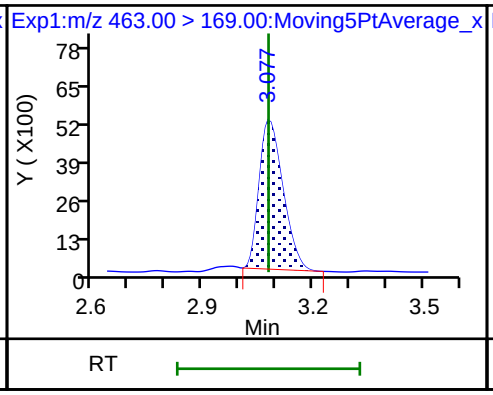
16 Perfluoroheptanesulfonic acid (ND)



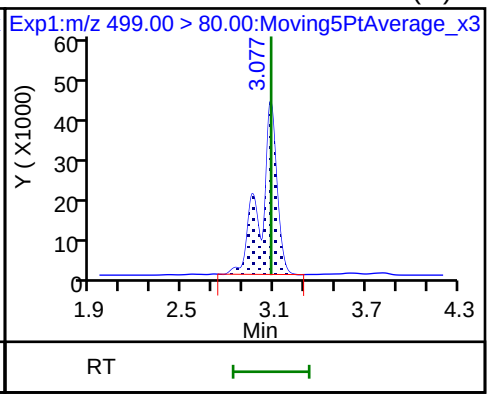
20 Perfluorononanoic acid



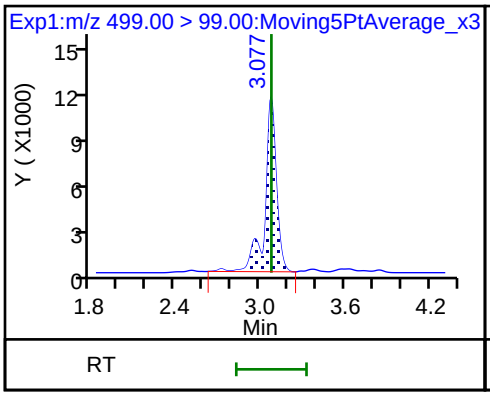
20 Perfluorononanoic acid



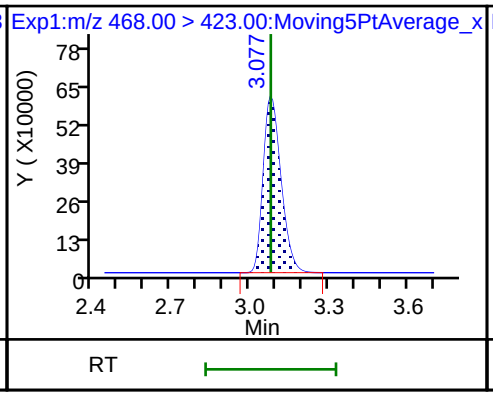
17 Perfluorooctane sulfonic acid (M)



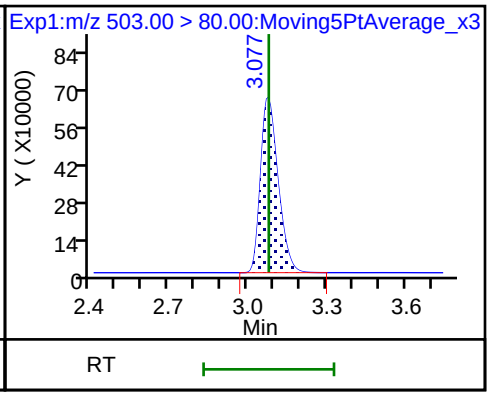
17 Perfluorooctane sulfonic acid



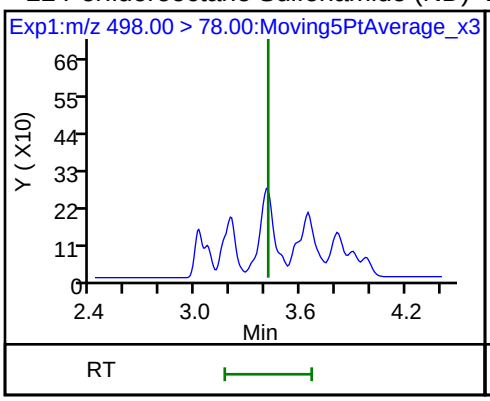
D 19 13C5 PFNA



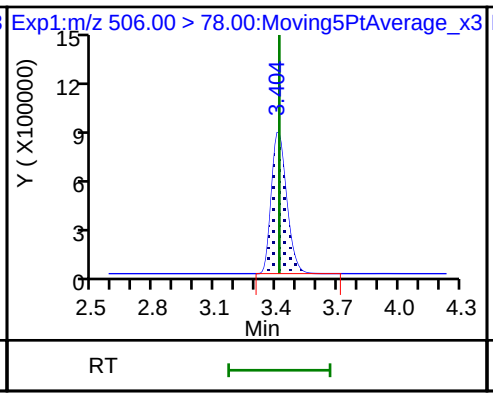
D 18 13C4 PFOS



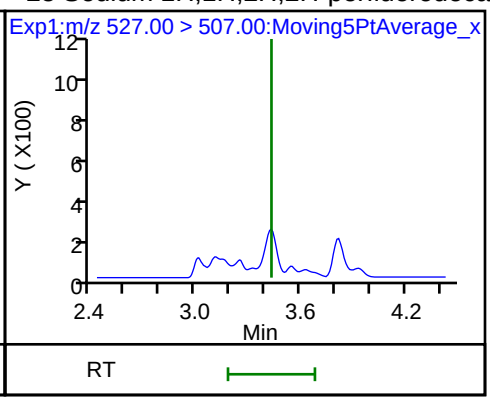
22 Perfluorooctane Sulfonamide (ND)



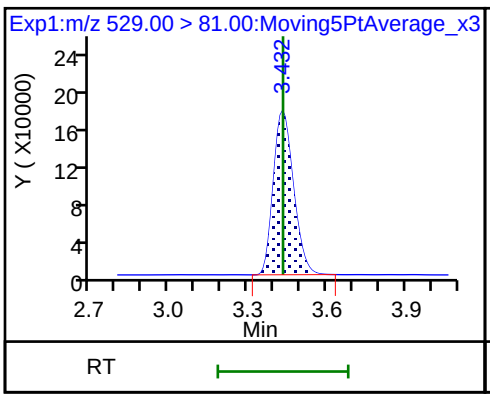
D 21 13C8 FOSA



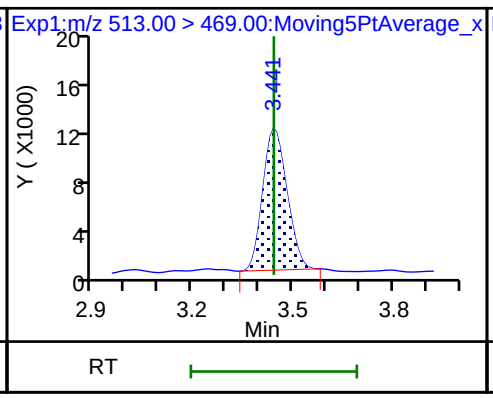
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



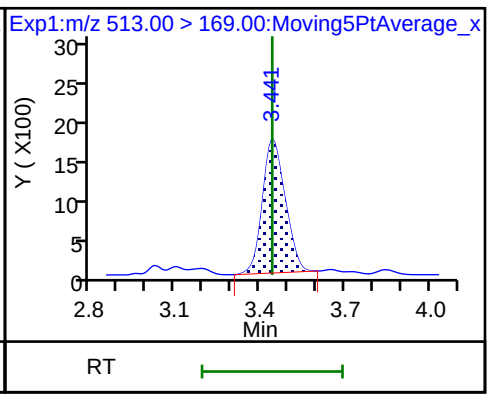
D 26 M2-8:2FTS



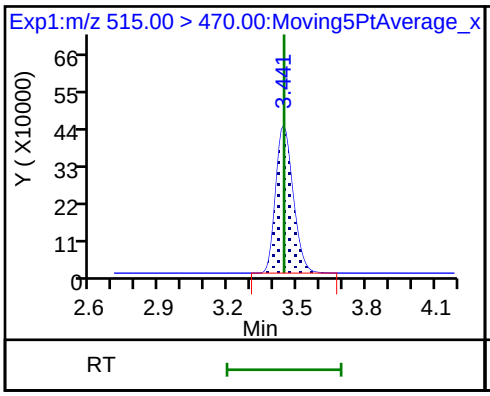
24 Perfluorodecanoic acid



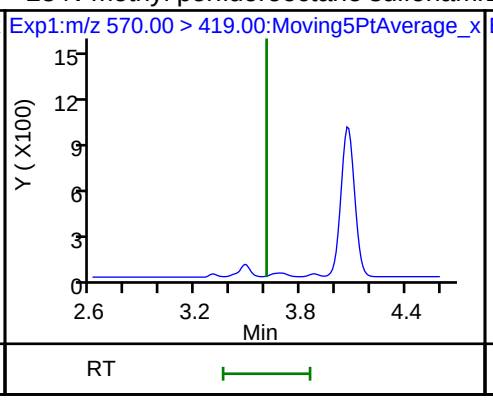
24 Perfluorodecanoic acid



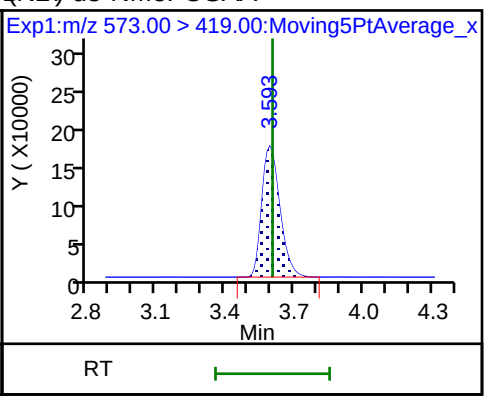
D 23 13C2 PFDA



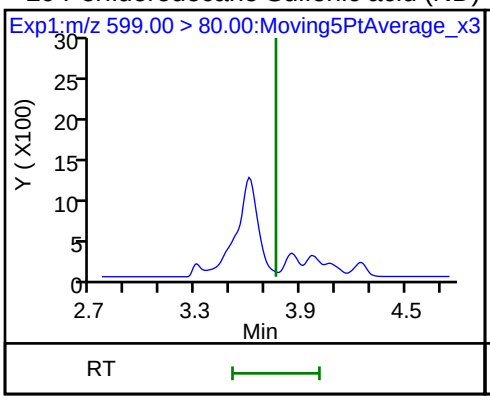
28 N-methyl perfluorooctane sulfonamid (ND)



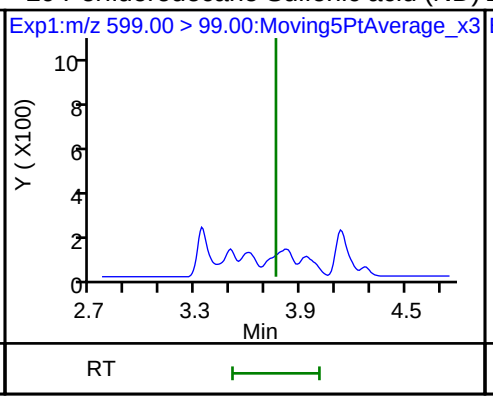
D 27 d3-NMeFOSAA



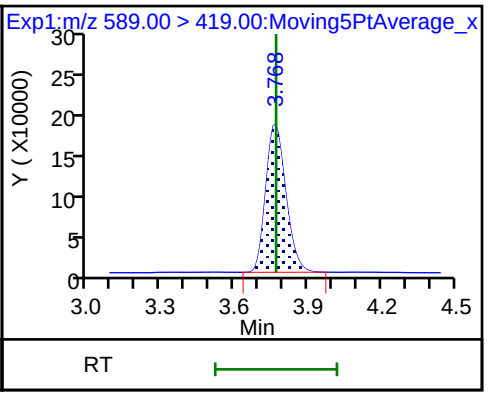
29 Perfluorodecane Sulfonic acid (ND)



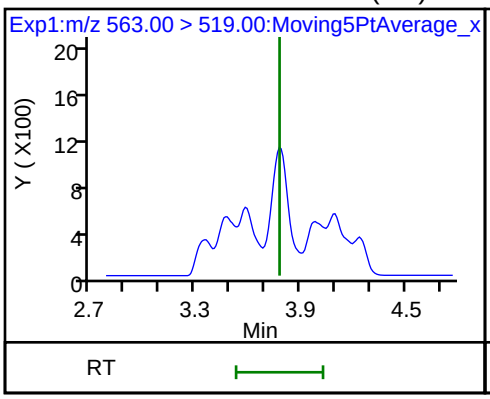
29 Perfluorodecane Sulfonic acid (ND)



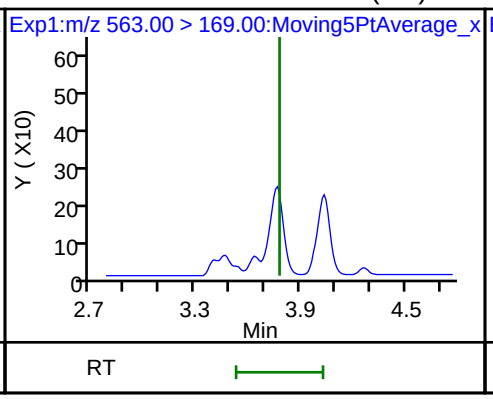
D 32 d5-NEtFOSAA



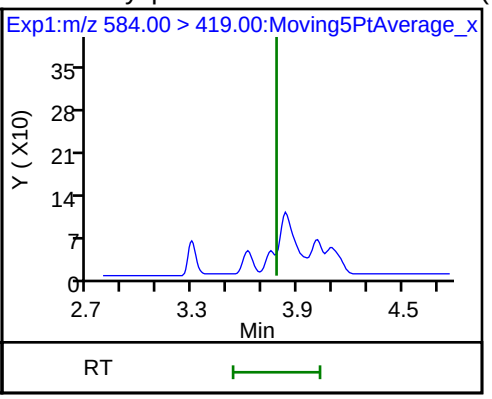
31 Perfluoroundecanoic acid (ND)



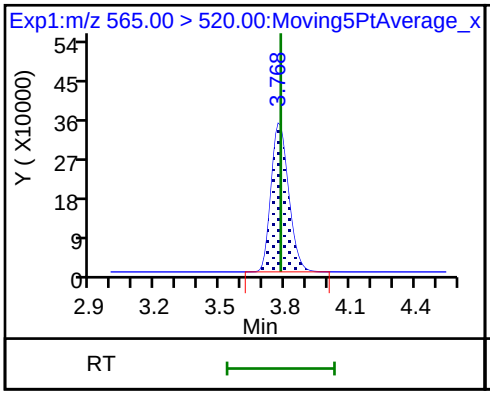
31 Perfluoroundecanoic acid (ND)



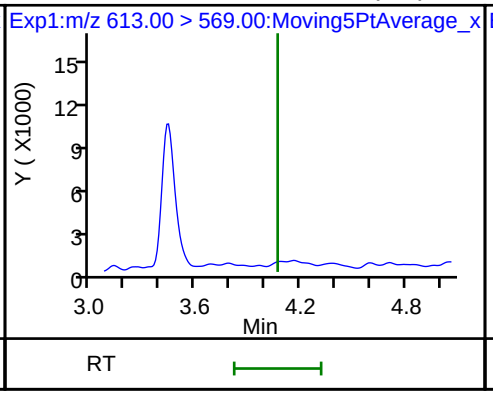
33 N-ethyl perfluorooctane sulfonamid (ND)



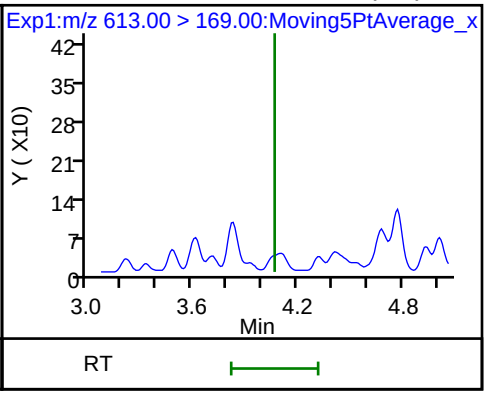
D 30 13C2 PFUnA



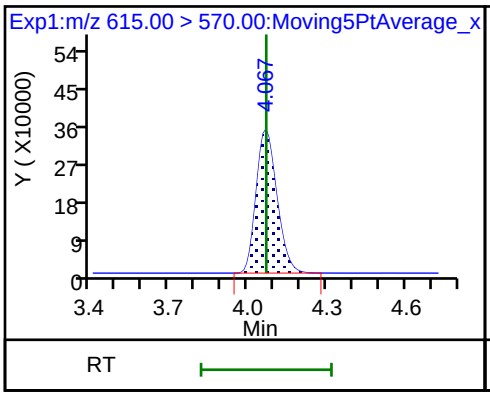
37 Perfluorododecanoic acid (ND)



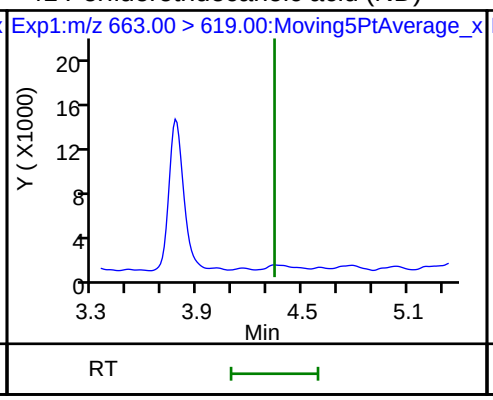
37 Perfluorododecanoic acid (ND)



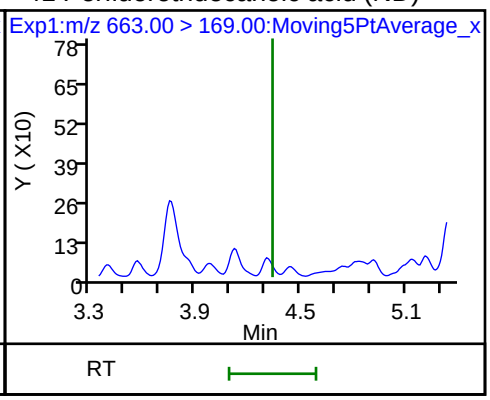
D 36 13C2 PFDoA



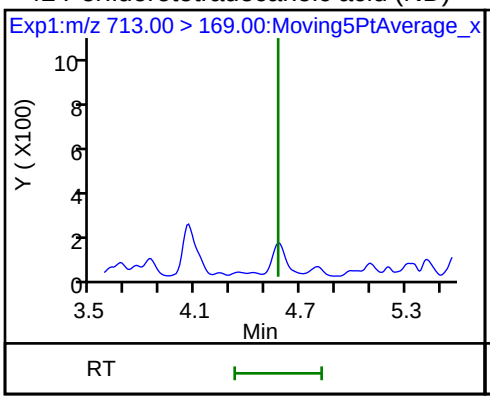
41 Perfluorotridecanoic acid (ND)



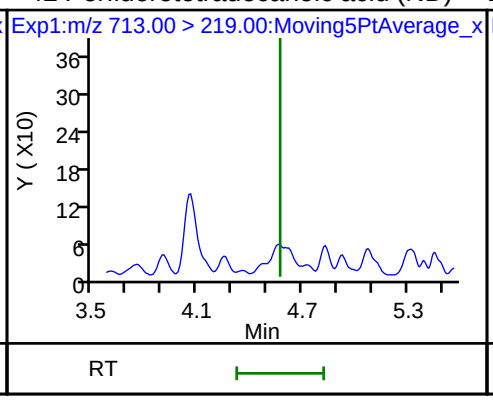
41 Perfluorotridecanoic acid (ND)



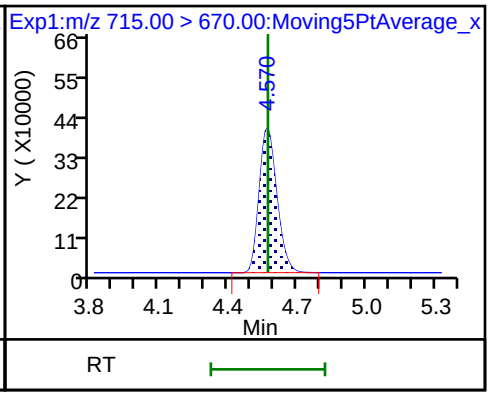
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-3 (WG) | Lab Sample ID: 320-38630-7

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_063.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 12:45

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.5(mL) | Date Analyzed: 05/14/2018 19:41

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	11		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	22		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	19		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	14		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	26	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	3.8		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	2.8		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.3		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	9.8	B	2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	7.6	J B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-3 (WG) | Lab Sample ID: 320-38630-7

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_063.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 12:45

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.5(mL) | Date Analyzed: 05/14/2018 19:41

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	73		25-150
STL01893	13C5 PFPeA	92		25-150
STL00993	13C2 PFHxA	91		25-150
STL01892	13C4-PFHpA	93		25-150
STL00990	13C4 PFOA	104		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	91		25-150
STL00997	13C2 PFUnA	87		25-150
STL00998	13C2 PFDoA	94		25-150
STL02116	13C2-PFTeDA	113		25-150
STL02337	13C3-PFBS	88		25-150
STL00994	18O2 PFHxS	90		25-150
STL00991	13C4 PFOS	88		25-150
STL01056	13C8 FOSA	75		25-150
STL02118	d3-NMeFOSAA	107		25-150
STL02117	d5-NEtFOSAA	103		25-150
STL02279	M2-6:2FTS	118		25-150
STL02280	M2-8:2FTS	93		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_063.d
Lims ID: 320-38630-A-7-A
Client ID: GC-MW-3 (WG)
Sample Type: Client
Inject. Date: 14-May-2018 19:41:57 ALS Bottle#: 45 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-7-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:10:01 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:06:29

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.456	1.452	0.004	1.000	4846753	1.83		73.2	40234	
2 Perfluorobutyric acid										
212.90 > 169.00	1.456	1.458	-0.002	1.000	496675	0.2757			210	
D 3 13C5-PFPeA										
267.90 > 223.00	1.726	1.728	-0.002	0.561	3789100	2.31		92.5	30140	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.726	1.729	-0.003	1.000	994498	0.5394			245	M
D 47 13C3-PFBS										
301.90 > 83.00	1.762	1.764	-0.002	1.000	79139	2.05		88.0	278	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.762	1.765	-0.003	1.000	343473	0.1308			147	M
298.90 > 99.00	1.762	1.765	-0.003	1.000	149719		2.29(1.25-3.74)		237	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.014	-0.003	1.000	3892062	2.27		90.8	76189	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.011	2.015	-0.004	1.000	759584	0.4676			332	M
313.00 > 119.00	2.011	2.015	-0.004	1.000	74370		10.21(5.03-15.10)		720	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.345	-0.003	1.000	3836751	2.33		93.4	77299	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.358	-0.003	1.000	4644757	2.13		89.9	76108	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.342	2.359	-0.017	1.000	567693	0.3488			420	
363.00 > 169.00	2.342	2.359	-0.017	1.000	223937		2.54(1.13-3.40)		1315	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.355	2.373	-0.018	1.000	75868	0.0343			90.2	
399.00 > 99.00	2.355	2.373	-0.018	1.000	29085		2.61(1.50-4.49)		68.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.681	2.682	-0.001	1.000	903836	2.79		118	5845	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.681	2.683	-0.002	1.000	119780	0.1870			837	
D 14 13C4 PFOA										
417.00 > 372.00	2.704	2.704	0.0	1.000	4013122	2.60		104	77742	
* 62 13C2-PFOA										
415.00 > 370.00	2.704	2.713	-0.009		4089437	2.50			86947	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.704	2.713	-0.009	1.000	1257338	0.6518			468	
413.00 > 169.00	2.704	2.713	-0.009	1.000	686419		1.83(0.84-2.52)		2906	
D 18 13C4 PFOS										
503.00 > 80.00	3.076	3.073	0.003	1.000	3194483	2.10		87.7	23293	
D 19 13C5 PFNA										
468.00 > 423.00	3.076	3.081	-0.005	1.000	3136540	2.43		97.4	82777	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.076	3.082	-0.006	1.000	361792	0.2424			1727	
499.00 > 99.00	3.076	3.082	-0.006	1.000	71728		5.04(2.31-6.93)		590	
20 Perfluorononanoic acid										
463.00 > 419.00	3.076	3.082	-0.006	1.000	123996	0.0937			150	
463.00 > 169.00	3.084	3.082	0.002	1.003	30448		4.07(1.90-5.69)		537	
D 21 13C8 FOSA										
506.00 > 78.00	3.402	3.407	-0.005	1.000	4138033	1.88		75.0	49779	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.421	3.418	0.003	1.005	2187	0.001341			67.3	
D 26 M2-8:2FTS										
529.00 > 81.00	3.430	3.435	-0.005	1.000	946007	2.24		93.4	9306	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.430	3.437	-0.007	1.000	1439	0.002800			30.0	
D 23 13C2 PFDA										
515.00 > 470.00	3.439	3.444	-0.005	1.000	2523226	2.28		91.0	40264	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.439	3.446	-0.007	1.000	71651	0.0694			277	
513.00 > 169.00	3.439	3.446	-0.007	1.000	12646		5.67(2.36-7.09)		234	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.590	3.596	-0.006	1.000	1339170	2.66		107	26900	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.764	3.771	-0.007	1.000	1386622	2.58		103	6122	
D 30 13C2 PFUnA										
565.00 > 520.00	3.764	3.771	-0.007	1.000	2021621	2.18		87.2	39795	
D 36 13C2 PFDoA										
615.00 > 570.00	4.062	4.071	-0.009	1.000	2276688	2.35		94.0	22049	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.563	4.574	-0.011	1.000	2991473	2.83		113	16875	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:10:06 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_063.d

Injection Date: 14-May-2018 19:41:57 Instrument ID: A8_N

Lims ID: 320-38630-A-7-A Lab Sample ID: 320-38630-7

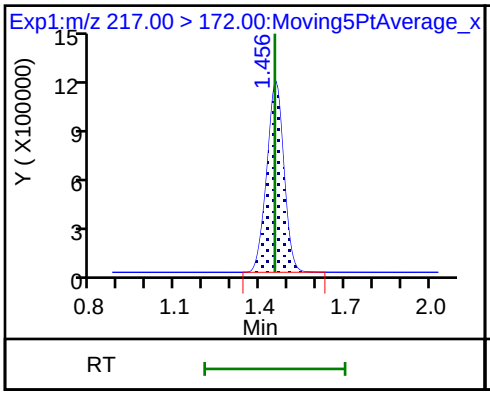
Client ID: GC-MW-3 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 45 Worklist Smp#: 22

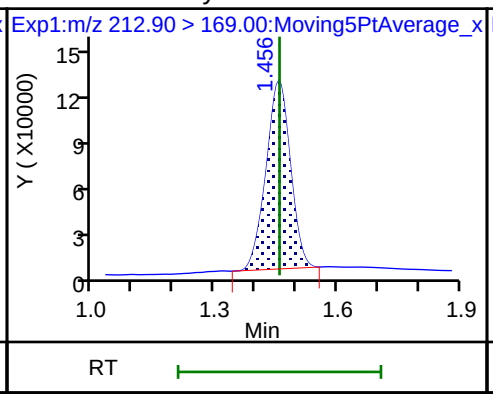
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

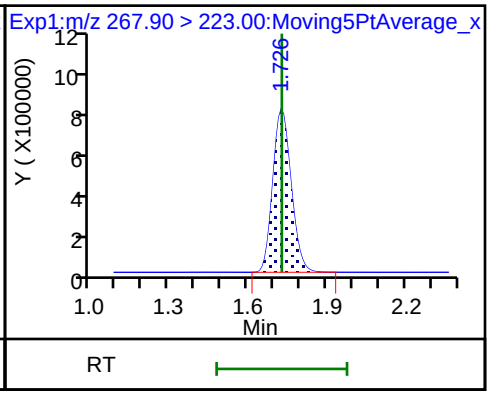
D 1 13C4 PFBA



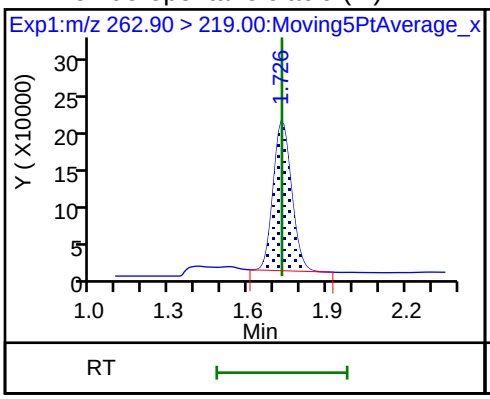
2 Perfluorobutyric acid



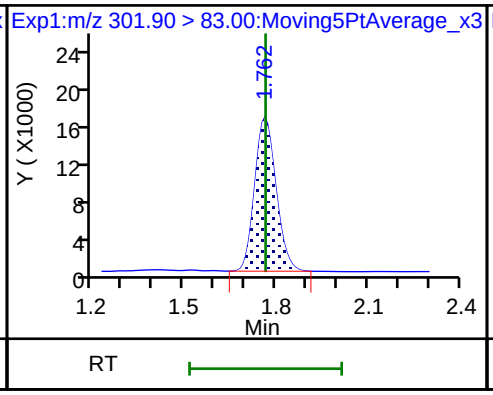
D 3 13C5-PFPeA



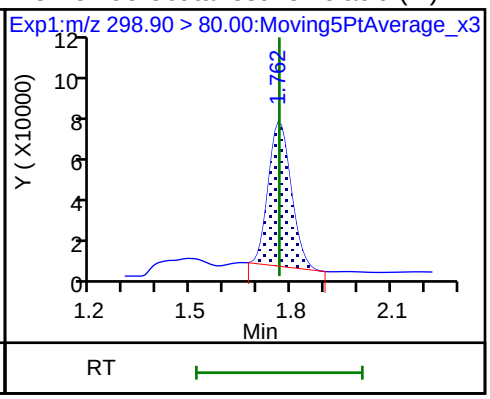
4 Perfluoropentanoic acid (M)



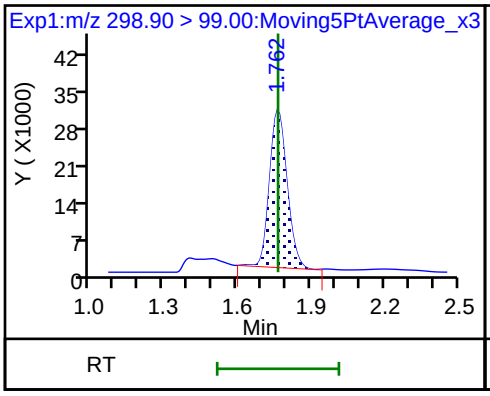
D 47 13C3-PFBS



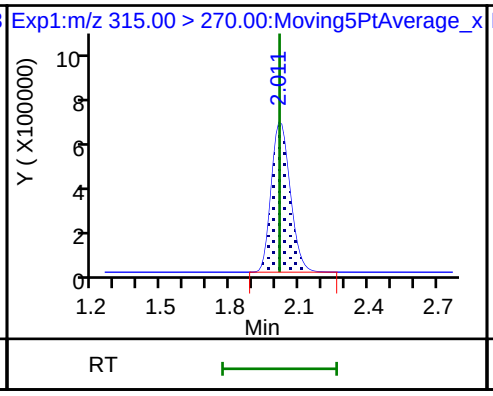
5 Perfluorobutanesulfonic acid (M)



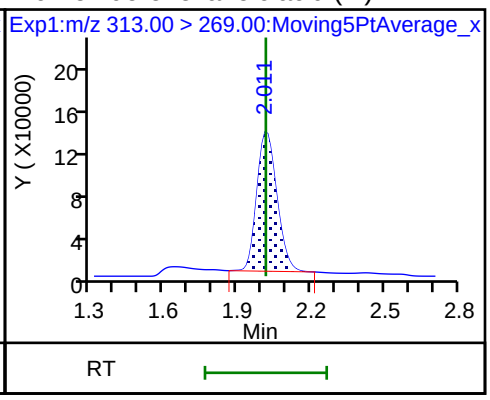
5 Perfluorobutanesulfonic acid



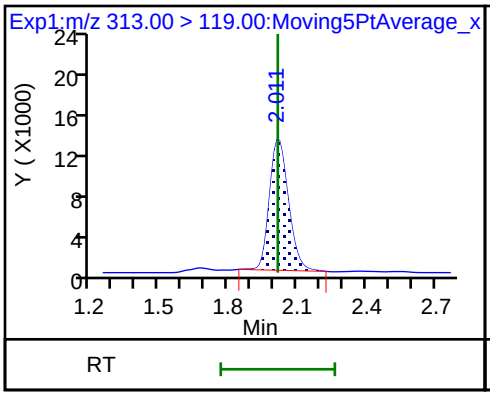
D 7 13C2 PFHxA



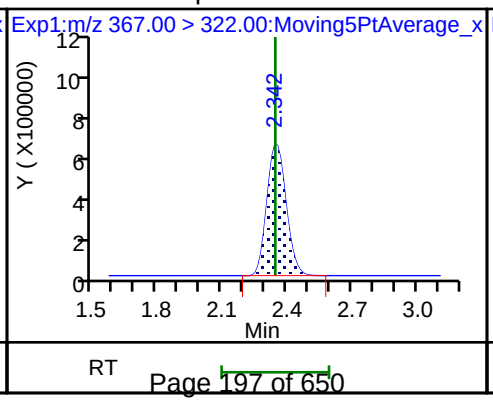
6 Perfluorohexanoic acid (M)



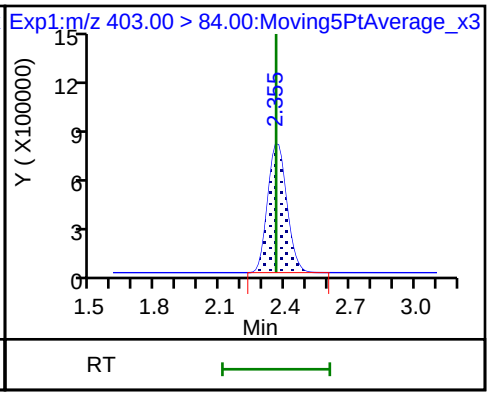
6 Perfluorohexanoic acid



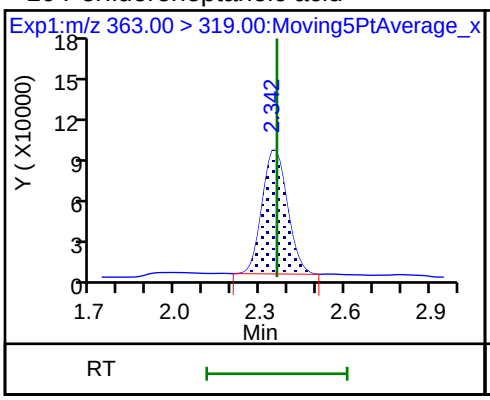
D 9 13C4-PFHpA



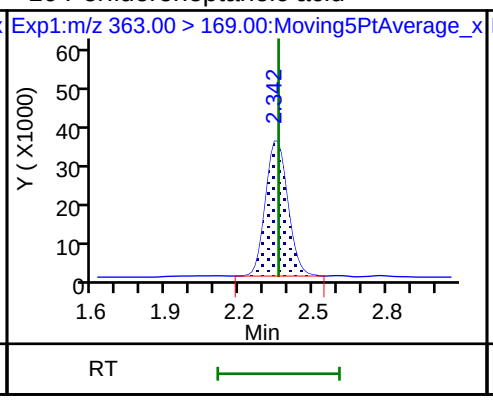
D 11 18O2 PFHxS



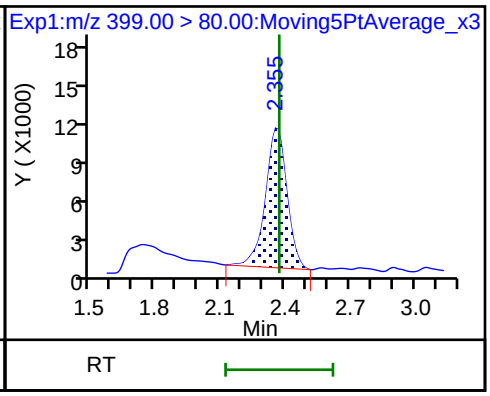
10 Perfluoroheptanoic acid



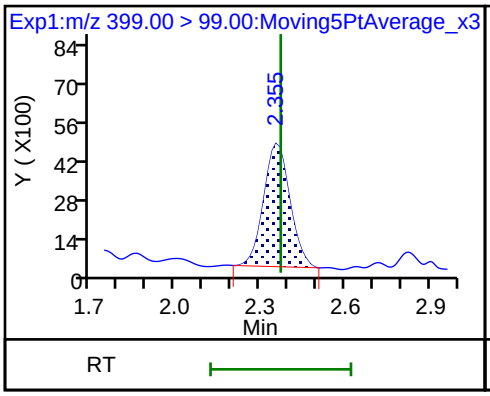
10 Perfluoroheptanoic acid



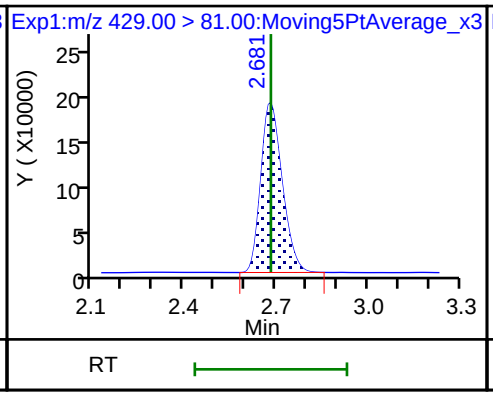
8 Perfluorohexanesulfonic acid



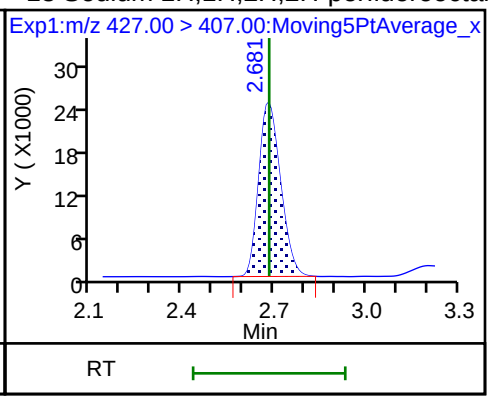
8 Perfluorohexanesulfonic acid



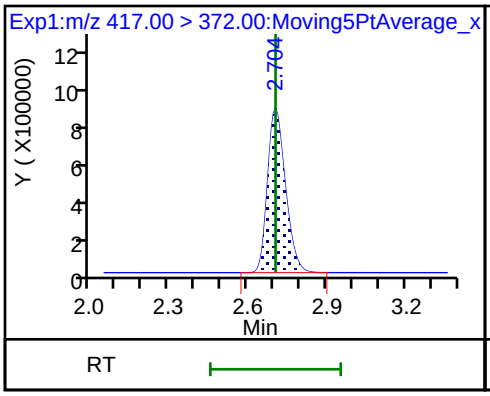
D 12 M2-6:2FTS



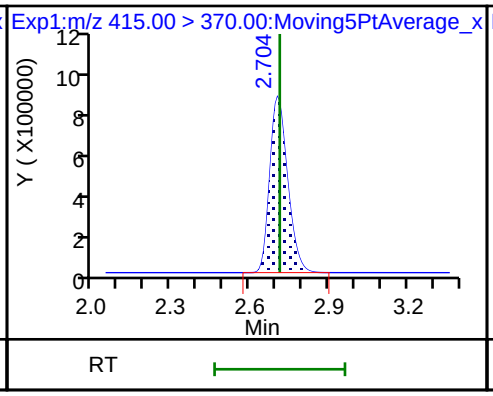
13 Sodium 1H,1H,2H,2H-perfluorooctane



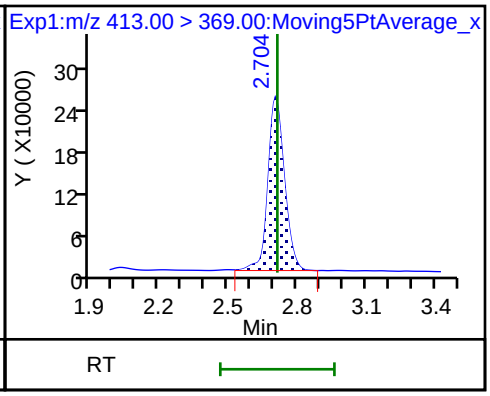
D 14 13C4 PFOA



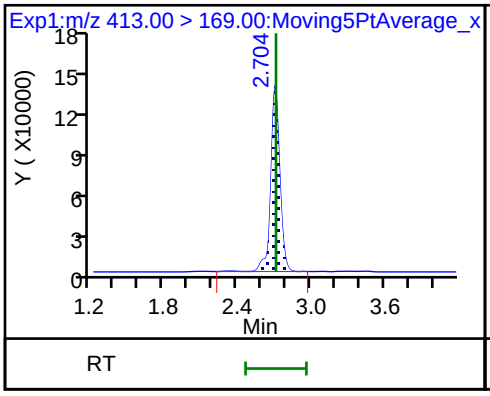
* 62 13C2-PFOA



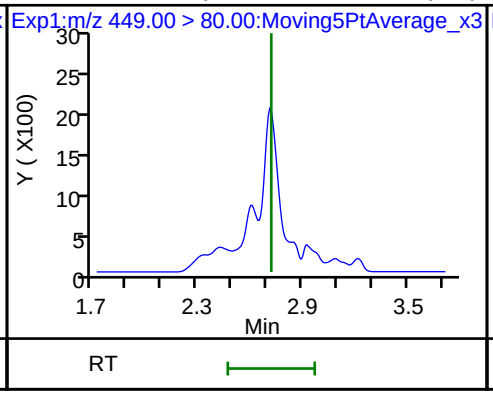
15 Perfluorooctanoic acid



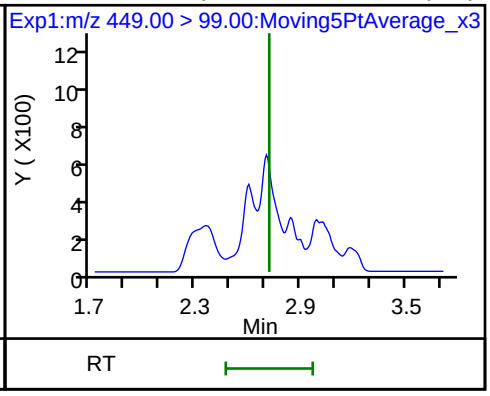
15 Perfluorooctanoic acid



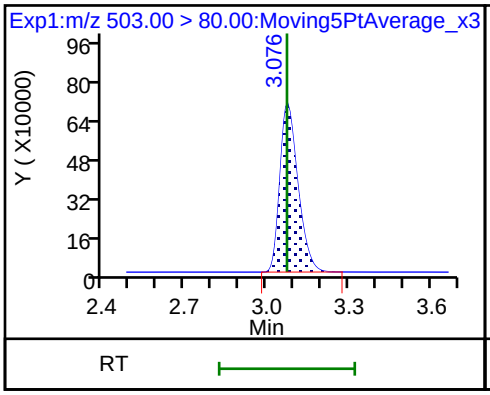
16 Perfluoroheptanesulfonic acid (ND)



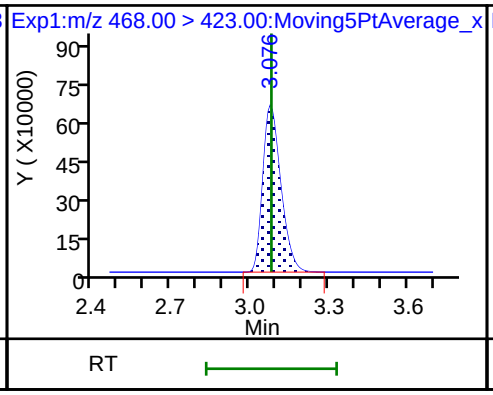
16 Perfluoroheptanesulfonic acid (ND)



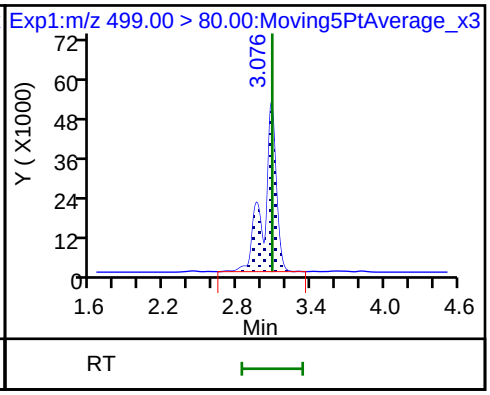
D 18 13C4 PFOS



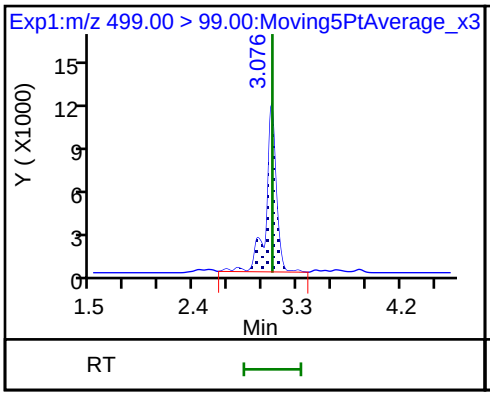
D 19 13C5 PFNA



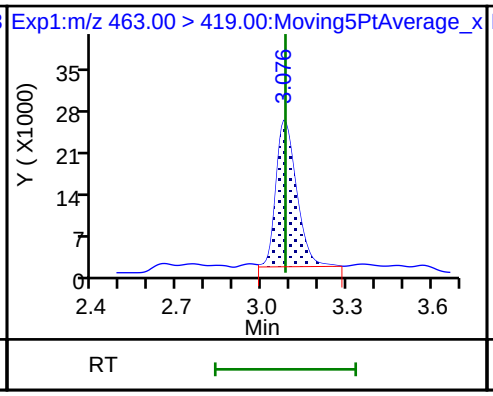
17 Perfluorooctane sulfonic acid



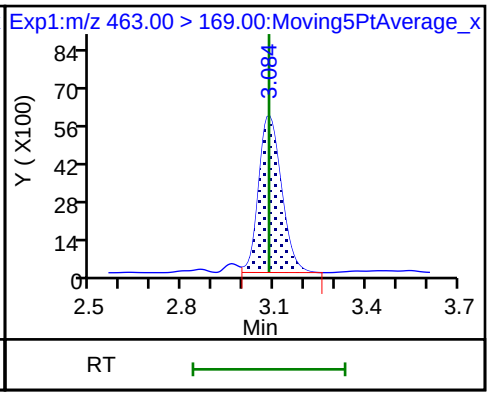
17 Perfluorooctane sulfonic acid



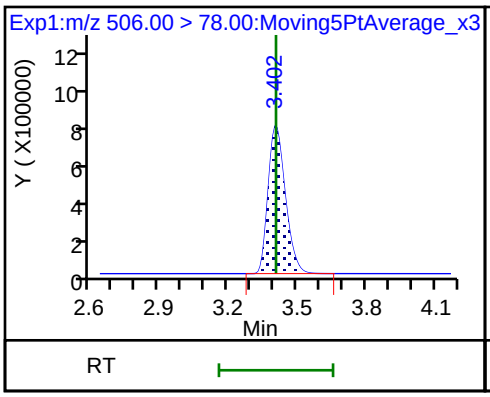
20 Perfluorononanoic acid



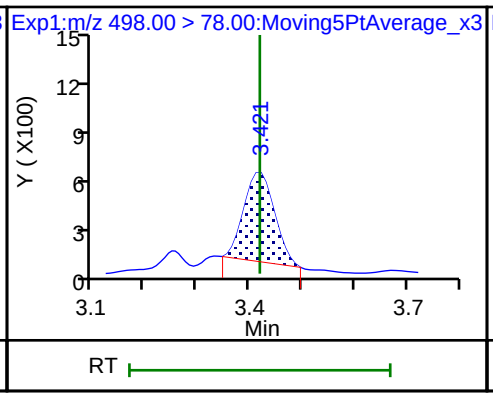
20 Perfluorononanoic acid



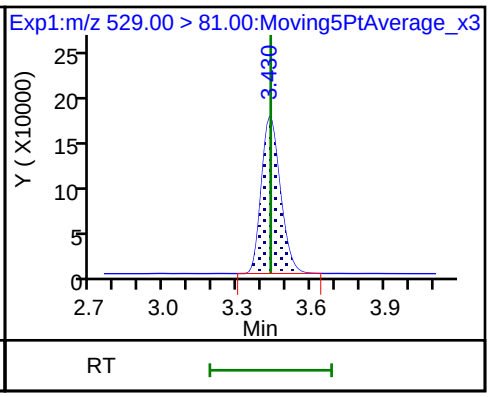
D 21 13C8 FOSA



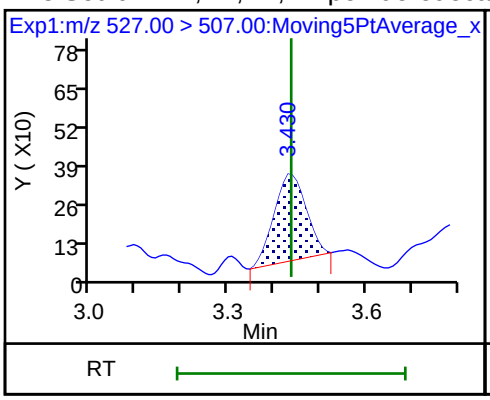
22 Perfluorooctane Sulfonamide



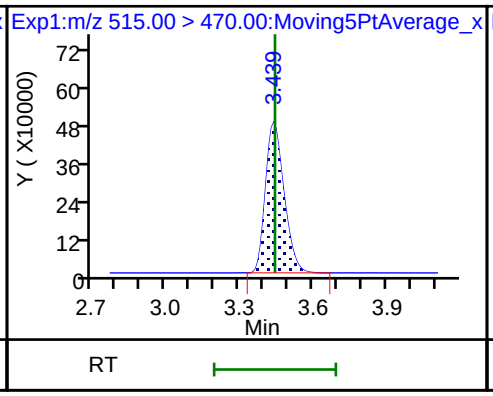
D 26 M2-8:2FTS



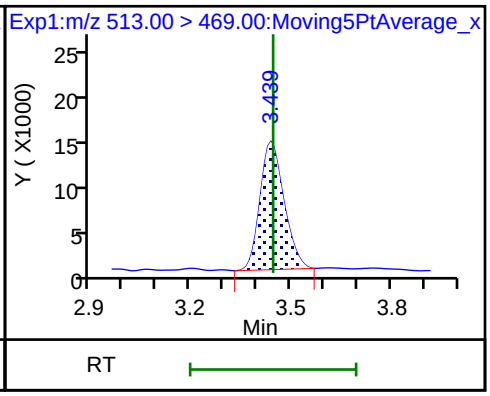
25 Sodium 1H,1H,2H,2H-perfluorodecane



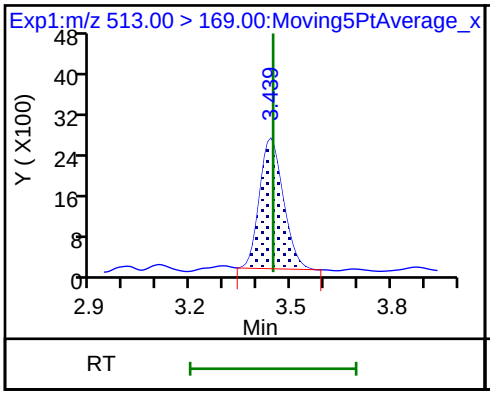
D 23 13C2 PFDA



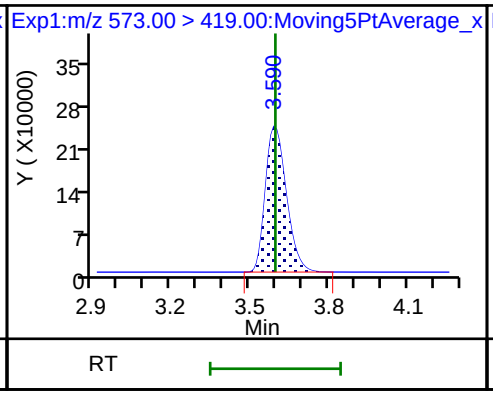
24 Perfluorodecanoic acid



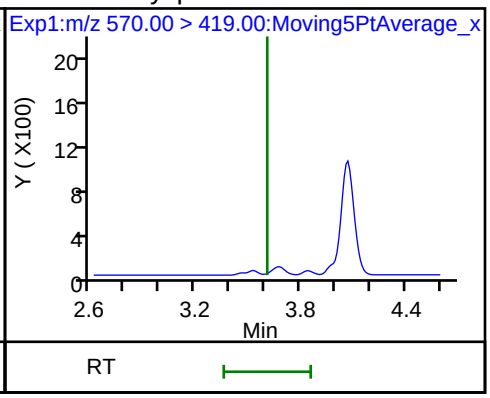
24 Perfluorodecanoic acid



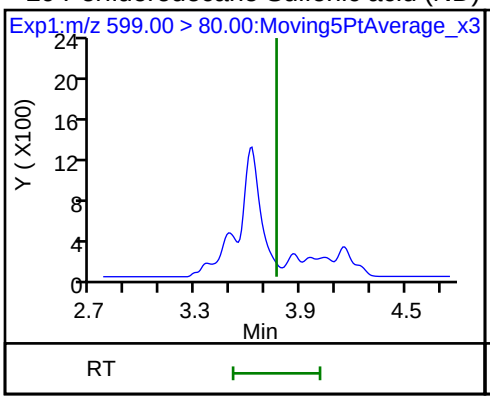
D 27 d3-NMeFOSAA



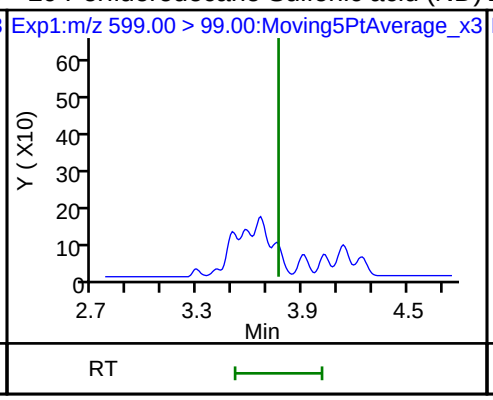
28 N-methyl perfluorooctane sulfonami (ND)



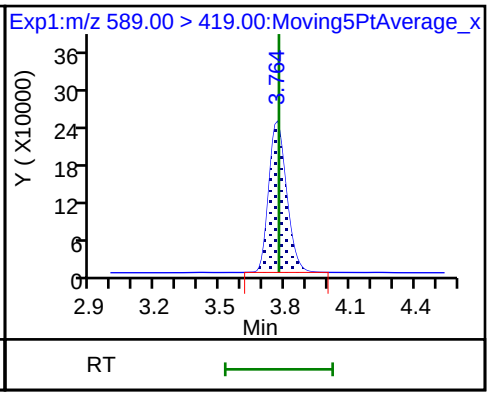
29 Perfluorodecane Sulfonic acid (ND)



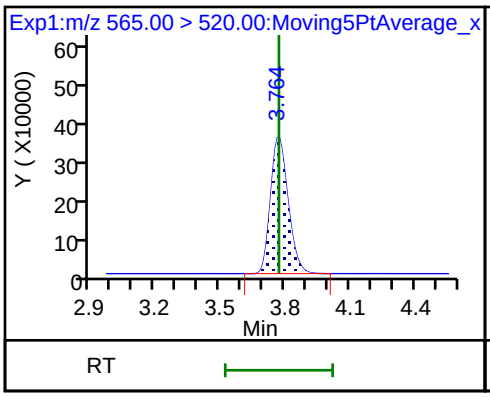
29 Perfluorodecane Sulfonic acid (ND)



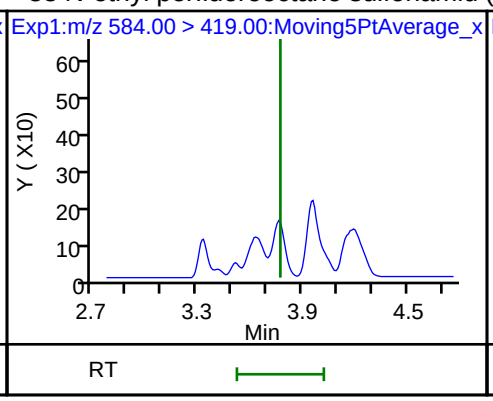
D 32 d5-NEtFOSAA



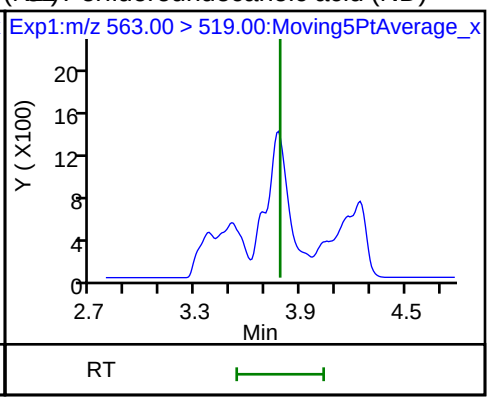
D 30 13C2 PFUnA



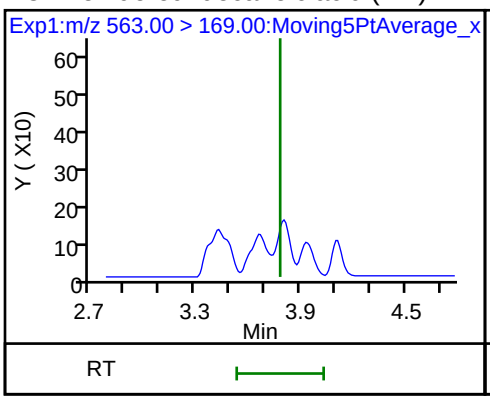
33 N-ethyl perfluorooctane sulfonamid (ND)



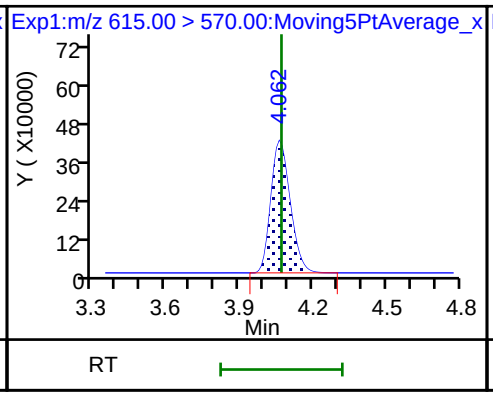
31 Perfluoroundecanoic acid (ND)



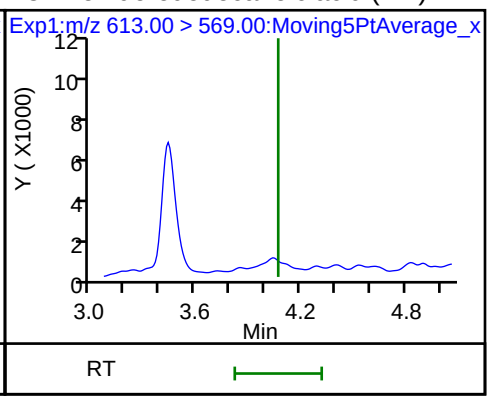
31 Perfluoroundecanoic acid (ND)



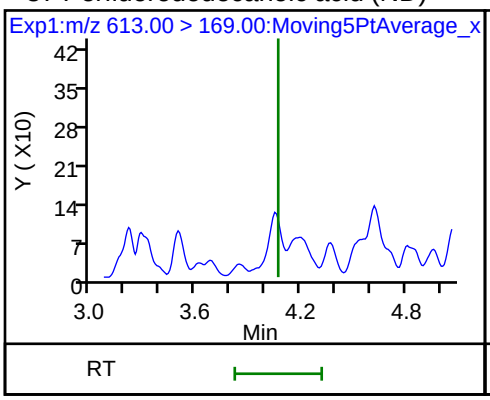
D 36 13C2 PFDoA



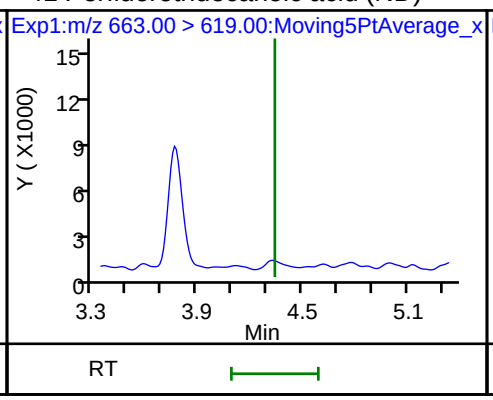
37 Perfluorododecanoic acid (ND)



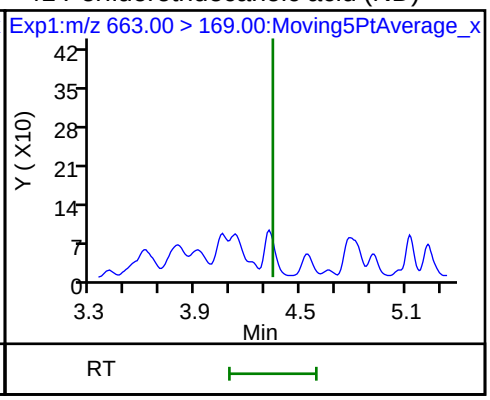
37 Perfluorododecanoic acid (ND)



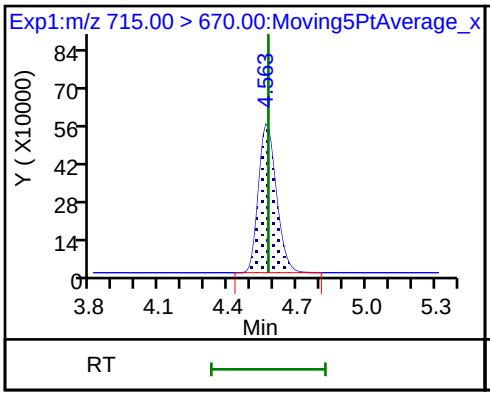
41 Perfluorotridecanoic acid (ND)



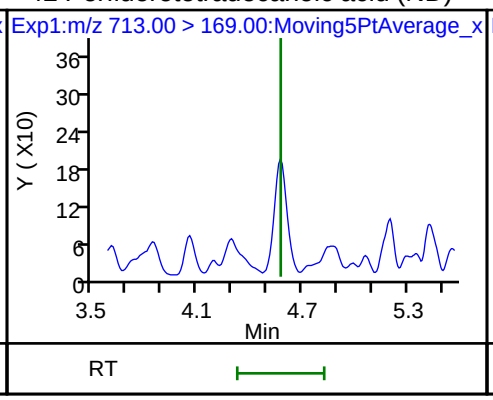
41 Perfluorotridecanoic acid (ND)



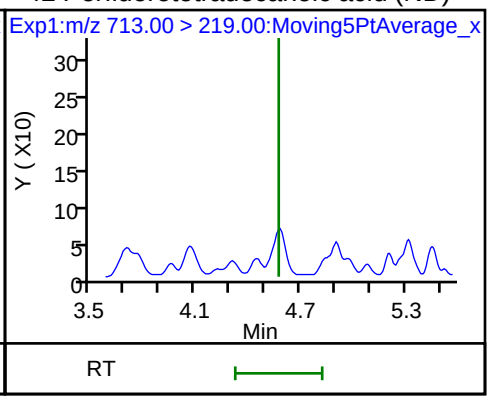
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

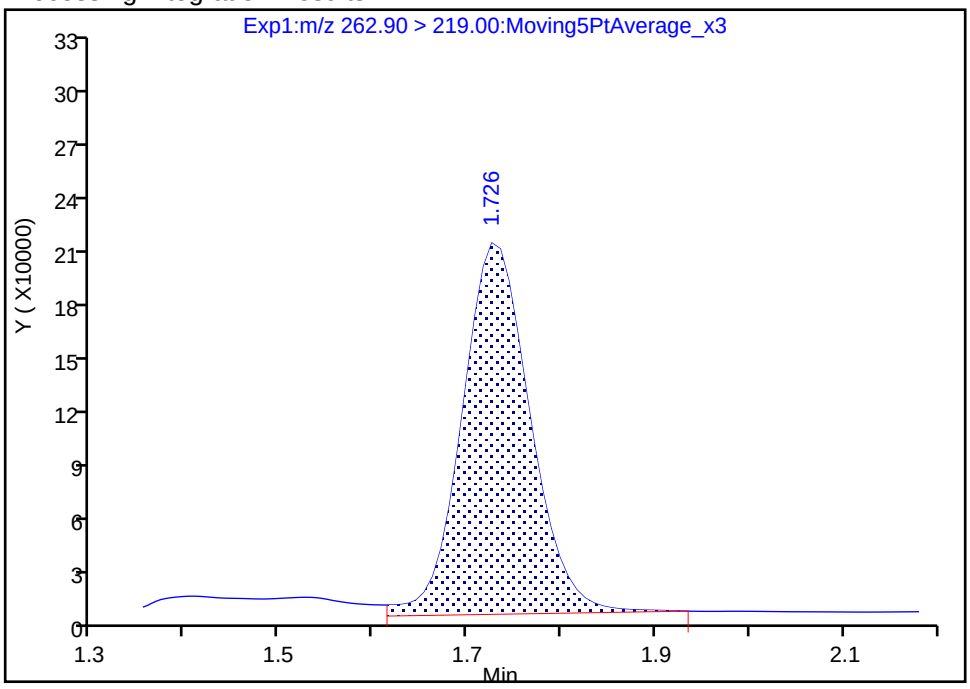
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_063.d				
Injection Date:	14-May-2018 19:41:57	Instrument ID:	A8_N		
Lims ID:	320-38630-A-7-A	Lab Sample ID:	320-38630-7		
Client ID:	GC-MW-3 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	45	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

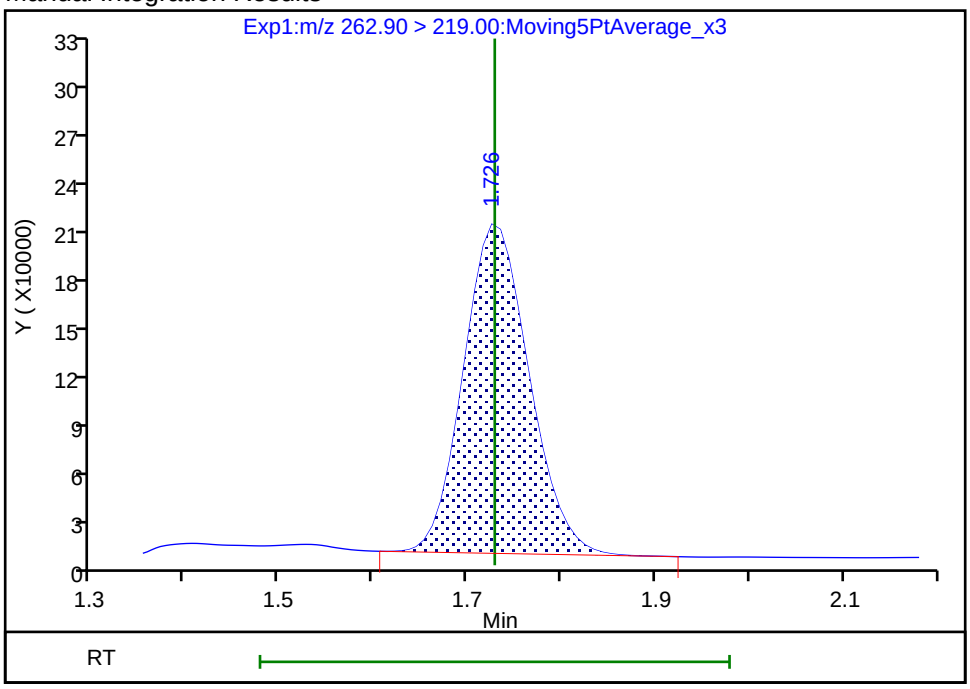
Processing Integration Results

RT: 1.73
Area: 1054321
Amount: 0.571814
Amount Units: ng/ml



Manual Integration Results

RT: 1.73
Area: 994498
Amount: 0.539369
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:06:08

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

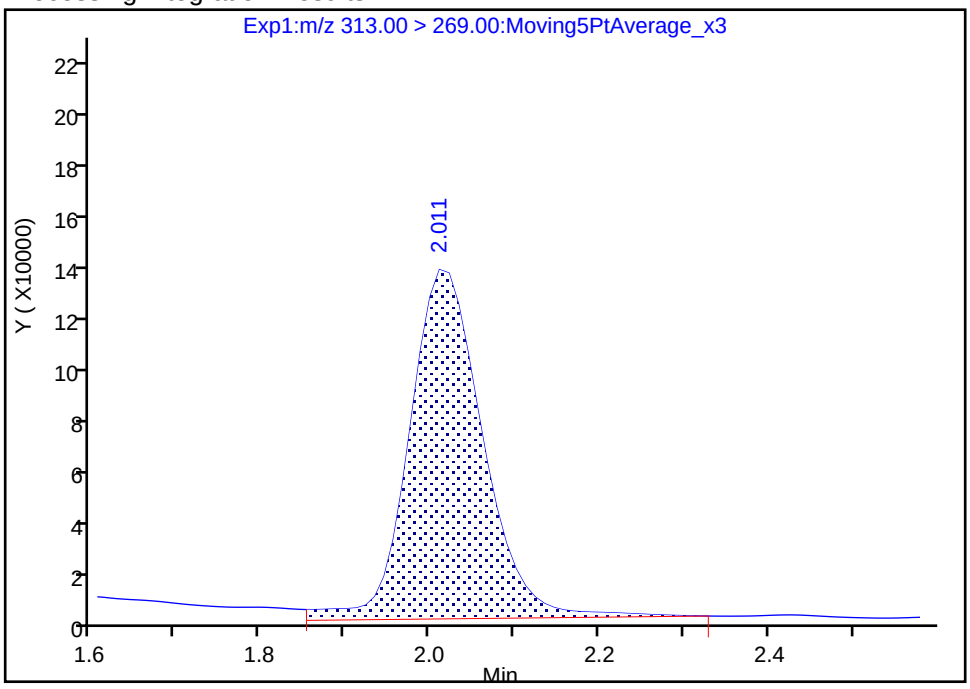
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_063.d				
Injection Date:	14-May-2018 19:41:57	Instrument ID:	A8_N		
Lims ID:	320-38630-A-7-A	Lab Sample ID:	320-38630-7		
Client ID:	GC-MW-3 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	45	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

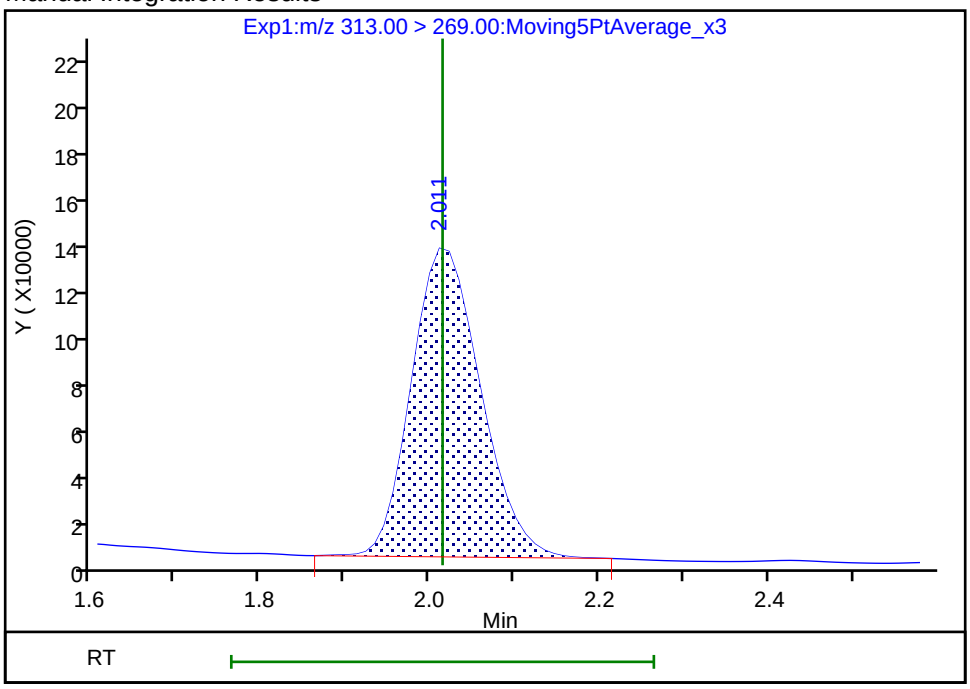
Processing Integration Results

RT: 2.01
Area: 828445
Amount: 0.510025
Amount Units: ng/ml



Manual Integration Results

RT: 2.01
Area: 759584
Amount: 0.467632
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:06:17

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

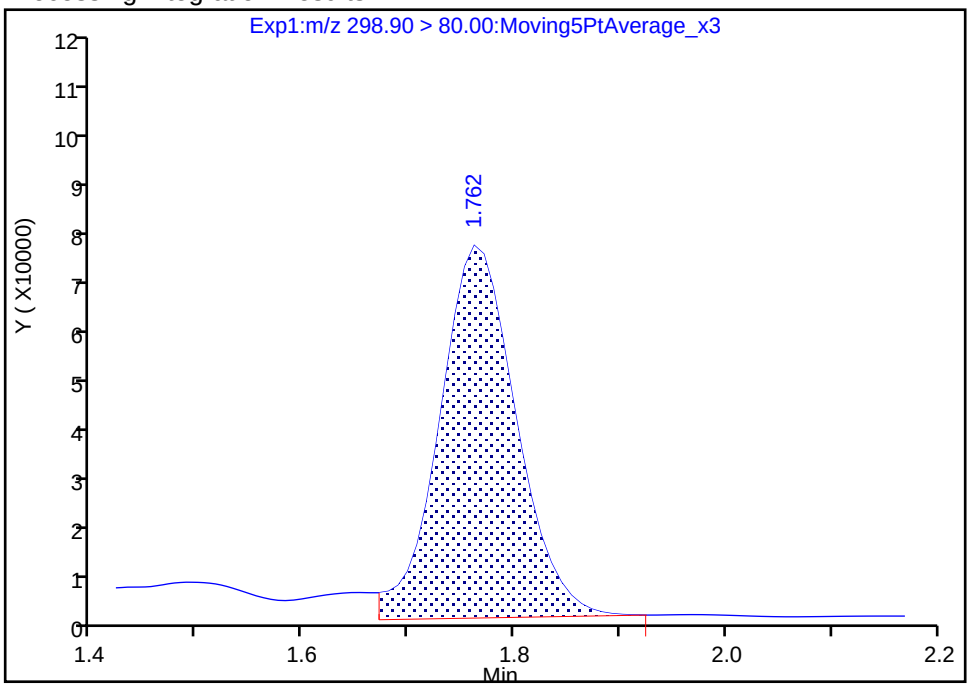
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_063.d				
Injection Date:	14-May-2018 19:41:57	Instrument ID:	A8_N		
Lims ID:	320-38630-A-7-A	Lab Sample ID:	320-38630-7		
Client ID:	GC-MW-3 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	45	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

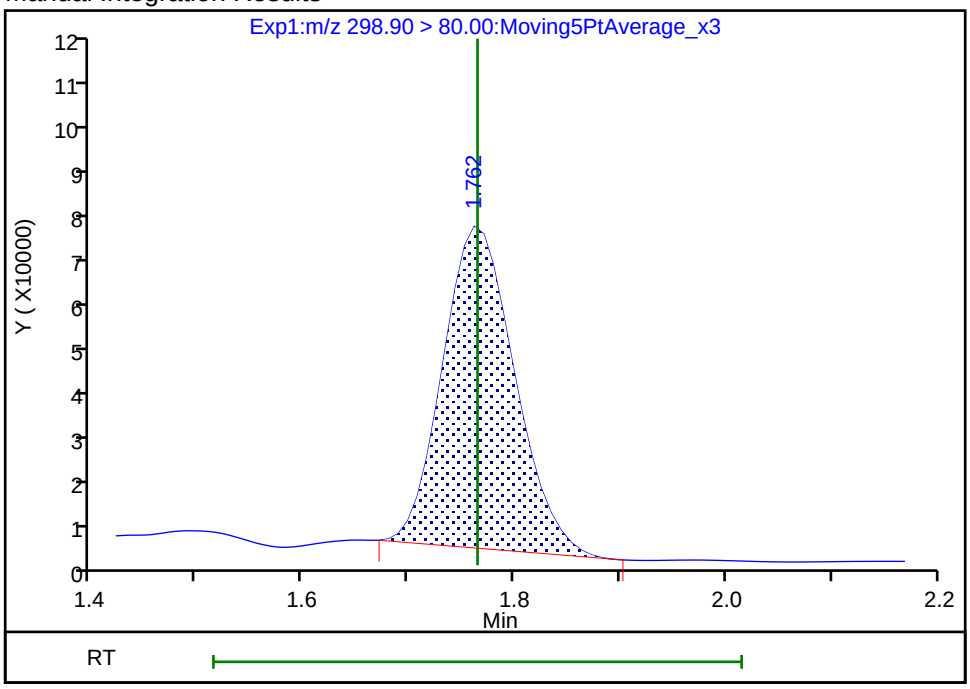
Processing Integration Results

RT: 1.76
Area: 383090
Amount: 0.145850
Amount Units: ng/ml



Manual Integration Results

RT: 1.76
Area: 343473
Amount: 0.130767
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:06:12

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110 (WG) RE | Lab Sample ID: 320-38630-8 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_026.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 260(mL) | Date Analyzed: 05/13/2018 18:46

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*29*	*H*	*1.9*	*0.82*
27619-97-2	*6:2FTS*	*4.4*	*J H B*	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	101		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_026.d
Lims ID: 320-38630-B-8-A
Client ID: GC-MW-110 (WG)
Sample Type: Client
Inject. Date: 13-May-2018 18:46:06 ALS Bottle#: 19 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-8-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:23 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:42:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										M
212.90 > 169.00	1.457	1.452	0.005	1.004	387625	0.2268			201	M
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.458	-0.006	1.000	4564056	2.08		83.3	42742	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.728	0.001	1.000	803058	0.5031			267	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.729	0.0	0.563	3377191	2.42		96.9	35998	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.765	1.765	0.001	1.000	400593	0.1742			262	M
298.90 > 99.00	1.765	1.765	0.001	1.000	171899		2.33(1.25-3.74)		446	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.766	-0.001	1.000	67745	2.14		92.2	271	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.014	0.0	1.000	682666	0.4744			525	
313.00 > 119.00	2.014	2.014	0.0	1.000	71236		9.58(5.03-15.10)		849	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	2.015	-0.001	1.000	3586433	2.44		97.8	92667	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.345	2.345	0.0	1.000	298145	0.1991			298	
363.00 > 169.00	2.345	2.345	0.0	1.000	118626		2.51(1.13-3.40)		743	
D 9 13C4-PFHpA										
367.00 > 322.00	2.345	2.346	-0.001	1.000	3462315	2.56		102	63008	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.358	2.358	0.0	1.000	78384	0.0401			145	
399.00 > 99.00	2.358	2.358	0.0	1.000	23016		3.41(1.50-4.49)		70.3	
D 11 18O2 PFHxS										
403.00 > 84.00	2.358	2.359	-0.001	1.000	4075573	2.31		97.7	67637	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.674	2.674	0.0	1.000	50583	0.1148			488	
D 12 M2-6:2FTS										
429.00 > 81.00	2.674	2.683	-0.009	1.000	631678	2.40		101	6935	
* 62 13C2-PFOA										
415.00 > 370.00	2.697	2.697	0.0		3392744	2.50			55345	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.704	2.697	0.007	1.003	1108399	0.7556			568	
413.00 > 169.00	2.697	2.697	0.0	1.000	573468		1.93(0.84-2.52)		2425	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.712	2.704	0.008	1.000	12341	0.007979			74.6	
449.00 > 99.00	2.697	2.704	-0.007	0.994	2553		4.83(1.94-5.82)		24.1	
D 14 13C4 PFOA										
417.00 > 372.00	2.697	2.706	-0.009	1.000	3172358	2.48		99.3	67545	
20 Perfluorononanoic acid										
463.00 > 419.00	3.069	3.069	0.0	1.000	87003	0.0804			140	
463.00 > 169.00	3.069	3.069	0.0	1.000	18950		4.59(1.90-5.69)		329	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.069	3.069	0.0	1.000	350969	0.2705			1210	
499.00 > 99.00	3.069	3.069	0.0	1.000	62914		5.58(2.31-6.93)		483	
D 19 13C5 PFNA										
468.00 > 423.00	3.069	3.078	-0.009	1.000	2658317	2.47		98.7	48387	
D 18 13C4 PFOS										
503.00 > 80.00	3.069	3.078	-0.009	1.000	2827965	2.23		93.4	20623	
D 21 13C8 FOSA										
506.00 > 78.00	3.402	3.414	-0.012	1.000	3965069	2.21		88.5	42660	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.430	3.430	0.0	1.000	59198	0.0619			290	
513.00 > 169.00	3.421	3.430	-0.009	0.997	8409		7.04(2.36-7.09)		227	
D 26 M2-8:2FTS										
529.00 > 81.00	3.421	3.433	-0.012	1.000	861138	2.49		104	7080	
D 23 13C2 PFDA										
515.00 > 470.00	3.430	3.442	-0.012	1.000	2330996	2.48		99.1	41287	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.590	3.605	-0.015	1.000	900308	2.18		87.3	27132	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.784	3.763	0.021	1.008	997	0.002345			18.5	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.753	3.769	-0.016	1.000	1084843	2.40		96.1	2944	
D 30 13C2 PFUnA										
565.00 > 520.00	3.764	3.780	-0.016	1.000	1816812	2.36		94.5	47396	
D 36 13C2 PFDoA										
615.00 > 570.00	4.062	4.069	-0.007	1.000	1876706	2.34		93.6	18206	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2099611	2.40		96.2	13730	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-May-2018 10:44:27 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_026.d

Injection Date: 13-May-2018 18:46:06 Instrument ID: A8_N

Lims ID: 320-38630-B-8-A Lab Sample ID: 320-38630-8

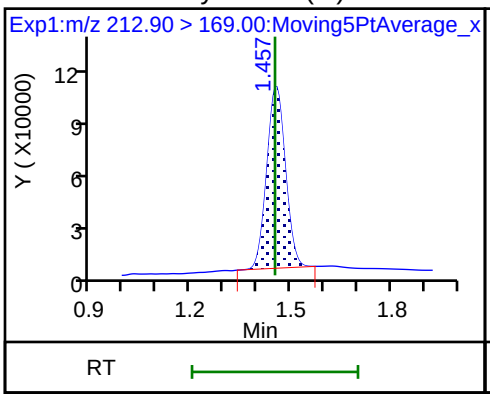
Client ID: GC-MW-110 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 19 Worklist Smp#: 13

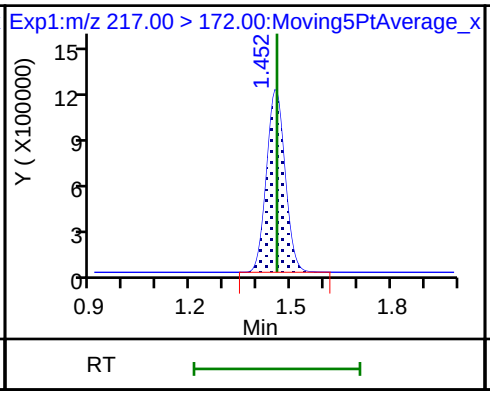
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

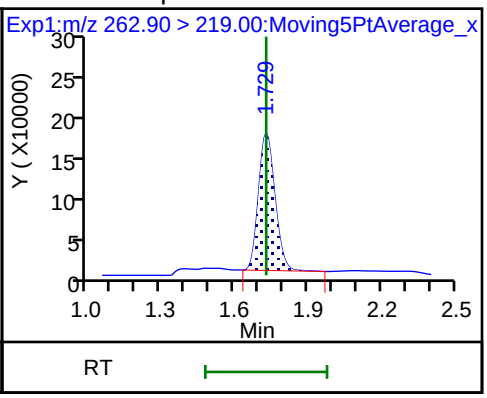
2 Perfluorobutyric acid (M)



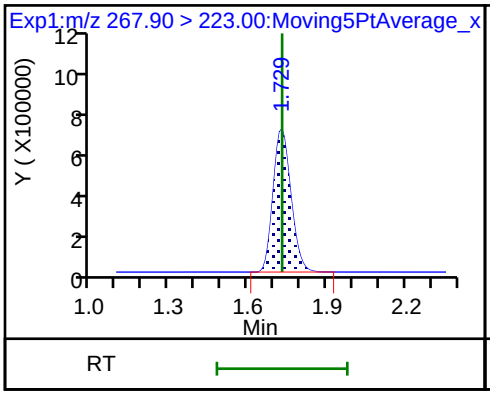
D 1 13C4 PFBA



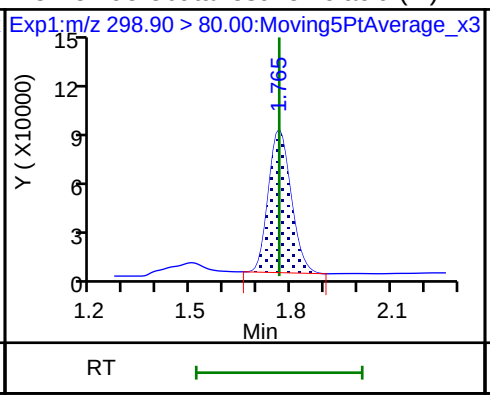
4 Perfluoropentanoic acid



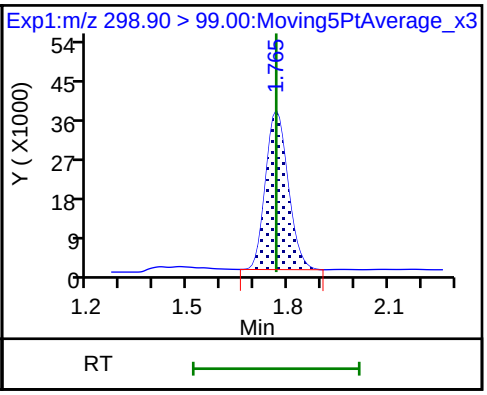
D 3 13C5-PFPeA



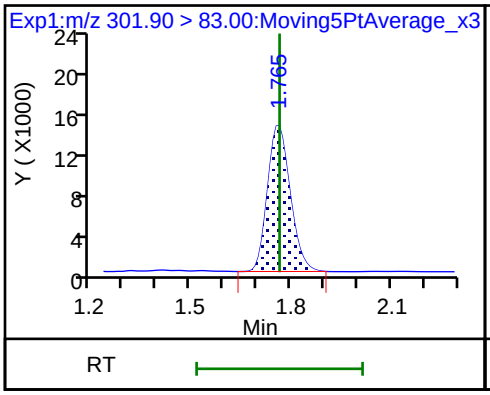
5 Perfluorobutanesulfonic acid (M)



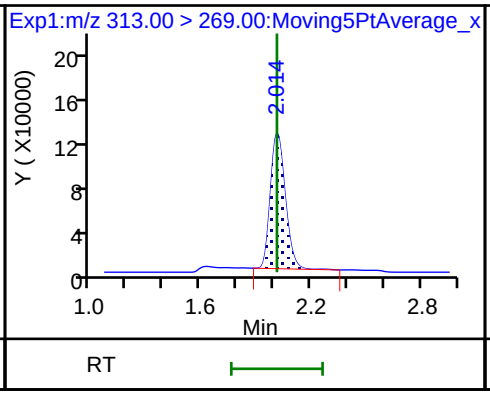
5 Perfluorobutanesulfonic acid



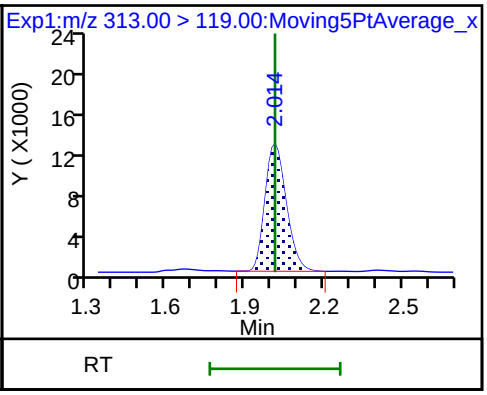
D 47 13C3-PFBS



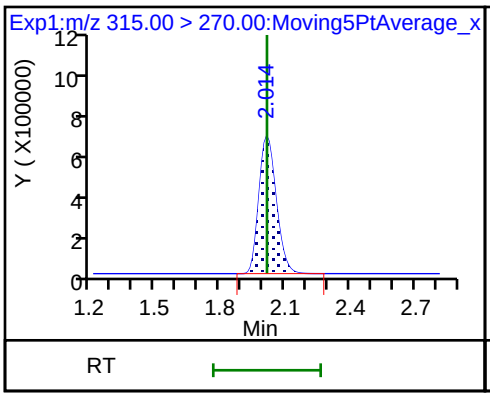
6 Perfluorohexanoic acid



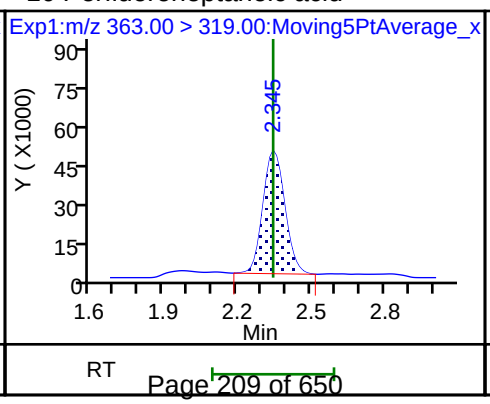
6 Perfluorohexanoic acid



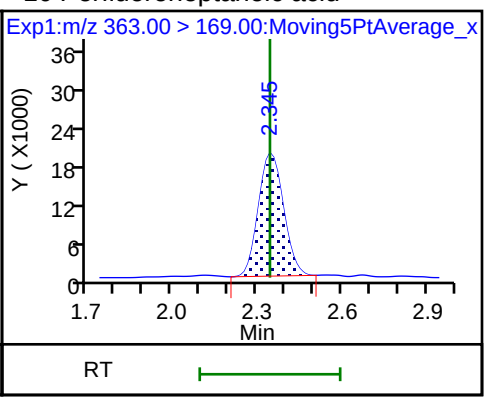
D 7 13C2 PFHxA



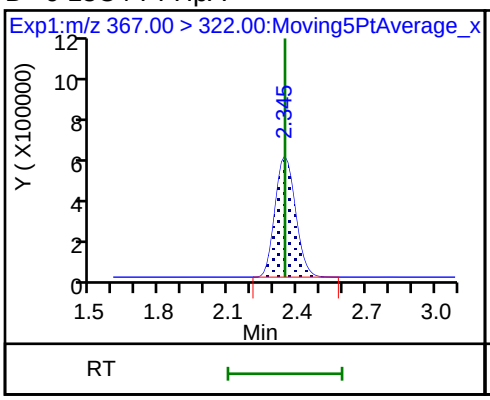
10 Perfluoroheptanoic acid



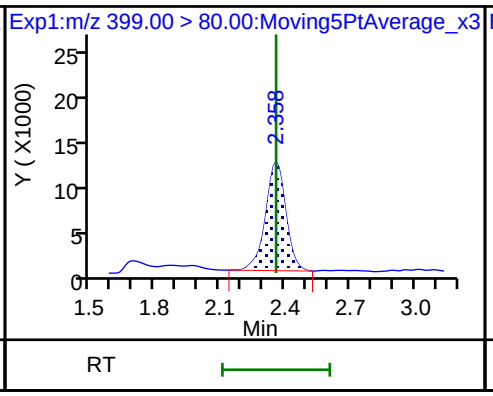
10 Perfluoroheptanoic acid



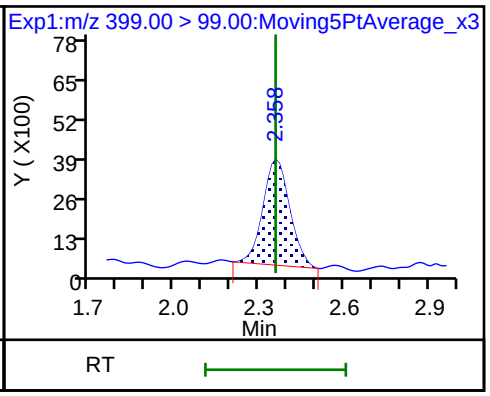
D 9 13C4-PFHpA



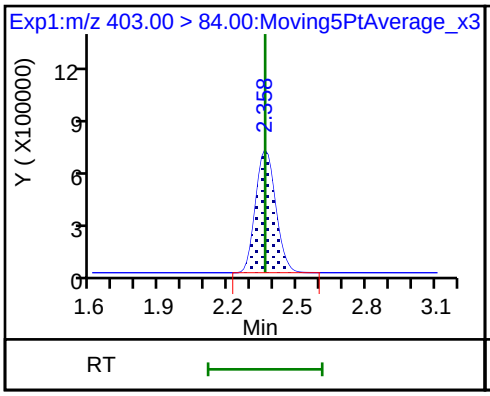
8 Perfluorohexanesulfonic acid



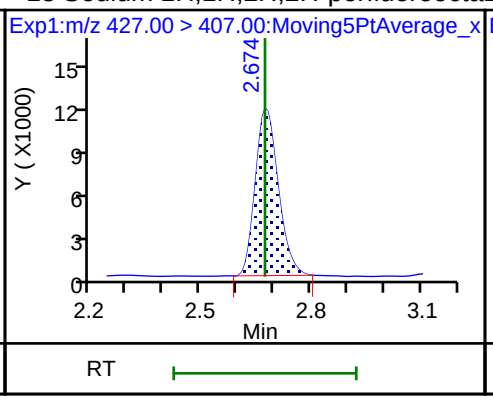
8 Perfluorohexanesulfonic acid



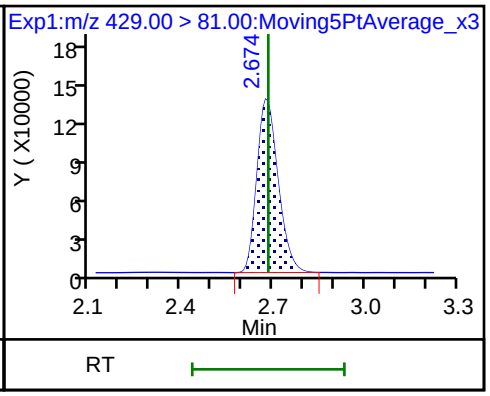
D 11 18O2 PFHxS



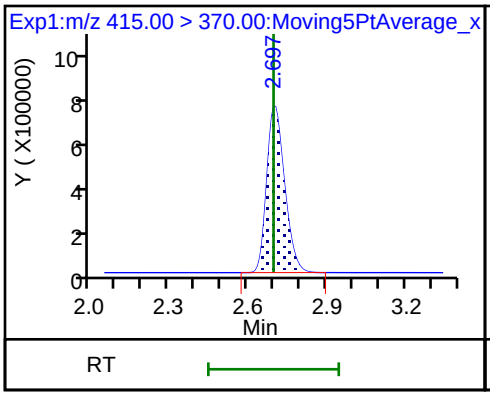
13 Sodium 1H,1H,2H,2H-perfluorooctane



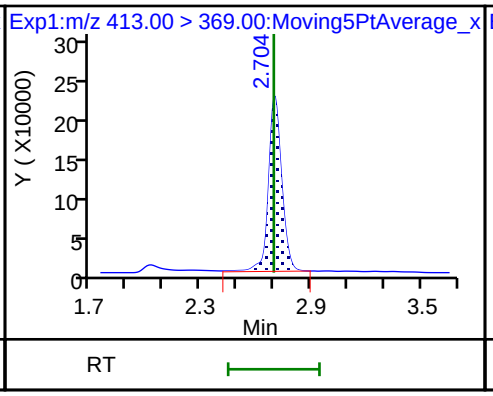
D 12 M2-6:2FTS



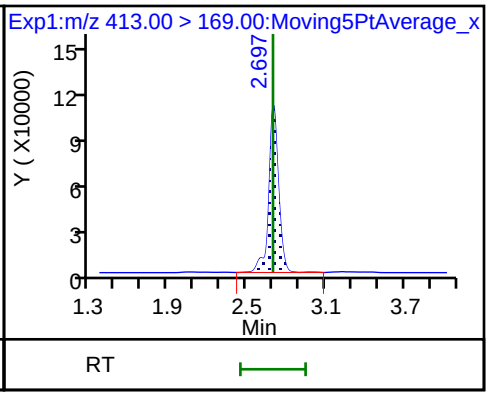
* 62 13C2-PFOA



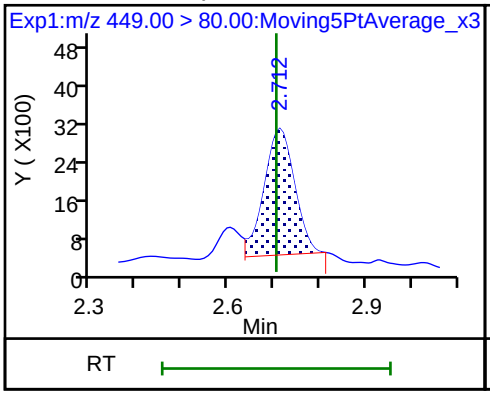
15 Perfluorooctanoic acid



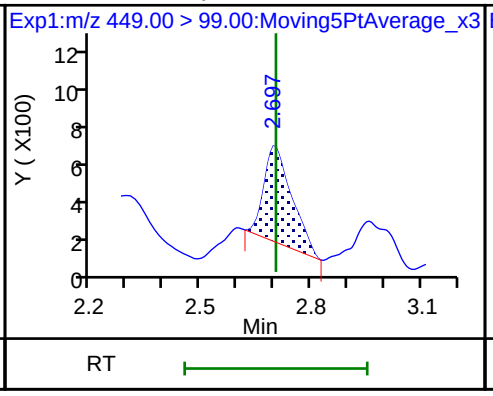
15 Perfluorooctanoic acid



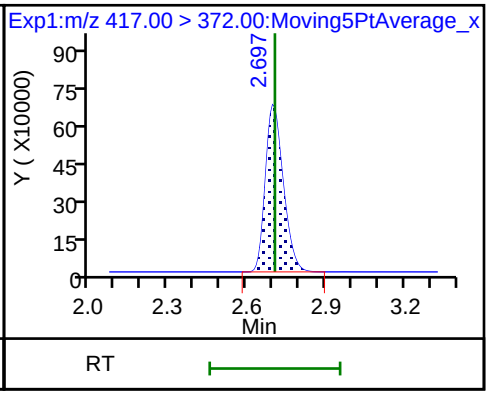
16 Perfluoroheptanesulfonic acid



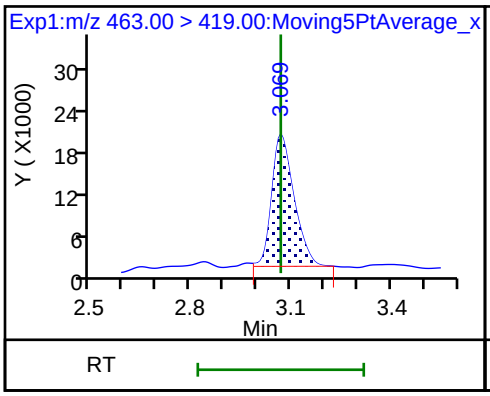
16 Perfluoroheptanesulfonic acid



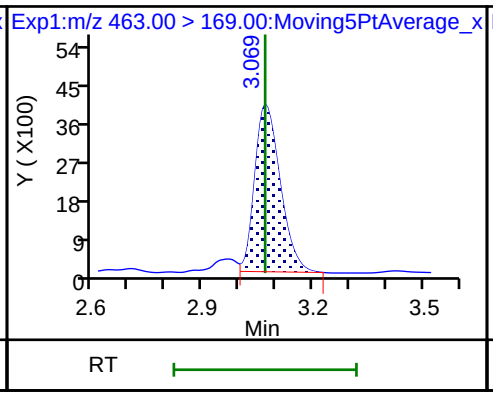
D 14 13C4 PFOA



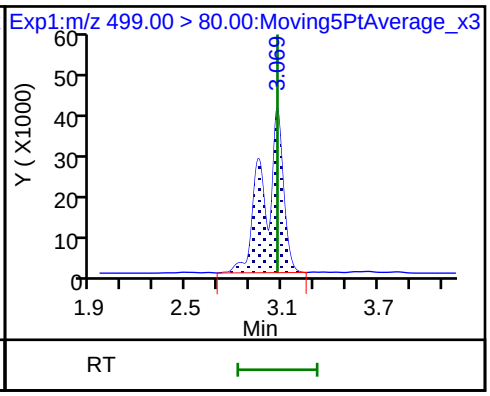
20 Perfluorononanoic acid



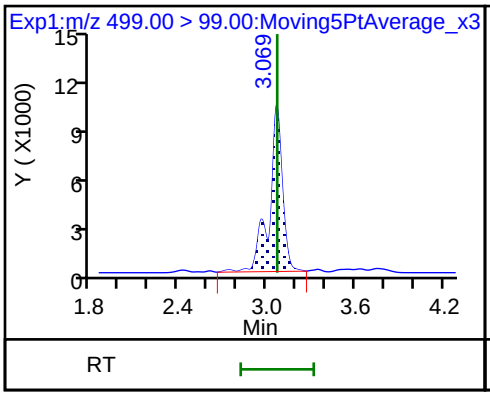
20 Perfluorononanoic acid



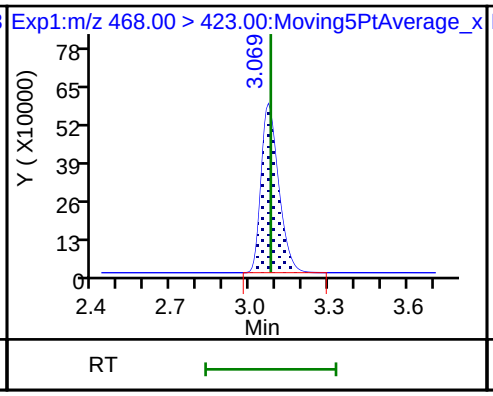
17 Perfluorooctane sulfonic acid



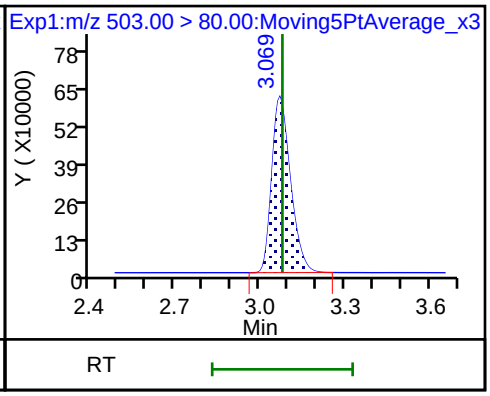
17 Perfluorooctane sulfonic acid



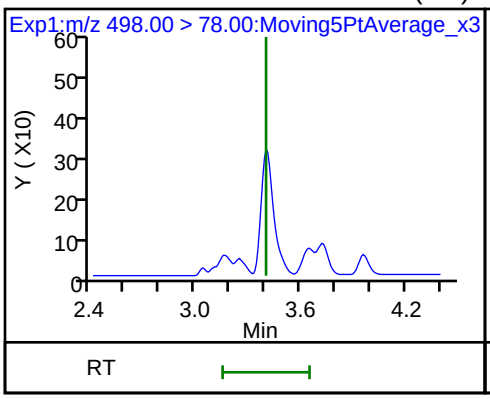
D 19 13C5 PFNA



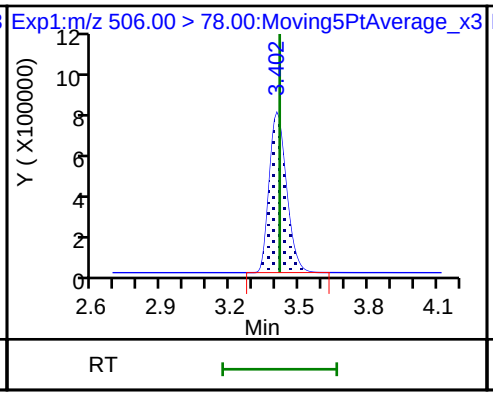
D 18 13C4 PFOS



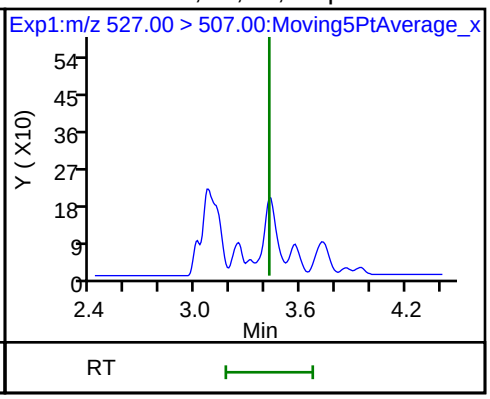
22 Perfluorooctane Sulfonamide (ND)



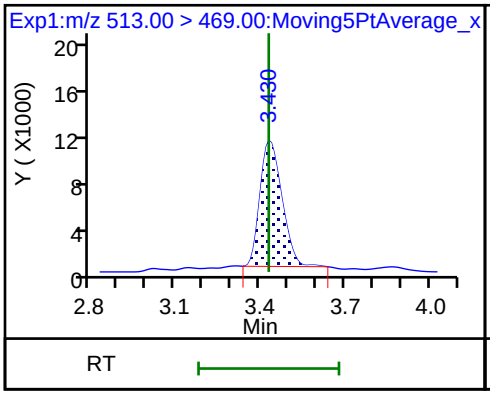
D 21 13C8 FOSA



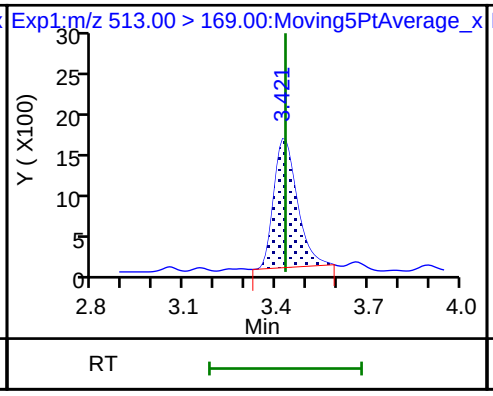
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



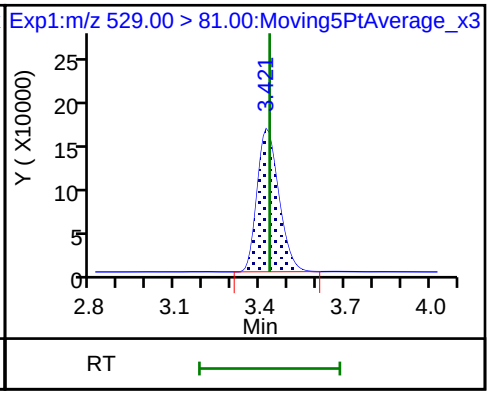
24 Perfluorodecanoic acid



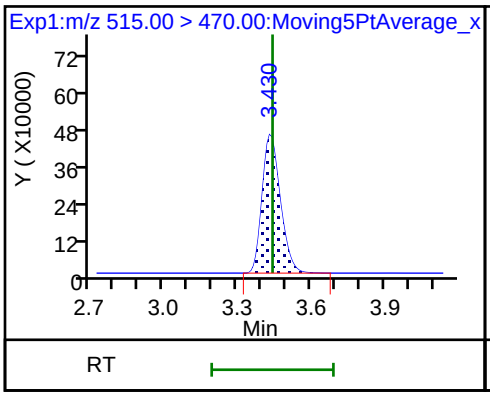
24 Perfluorodecanoic acid



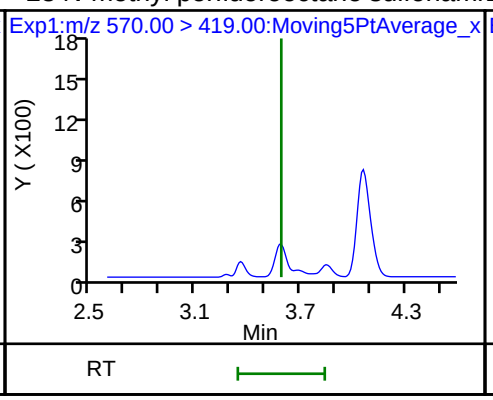
D 26 M2-8:2FTS



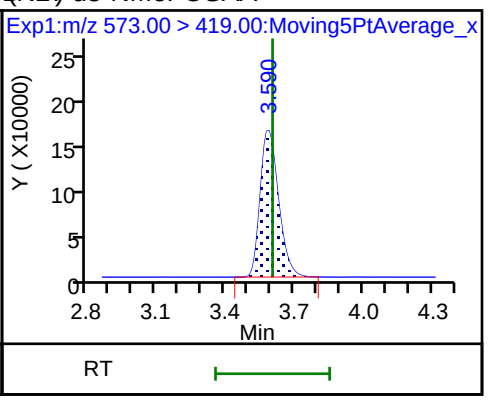
D 23 13C2 PFDA



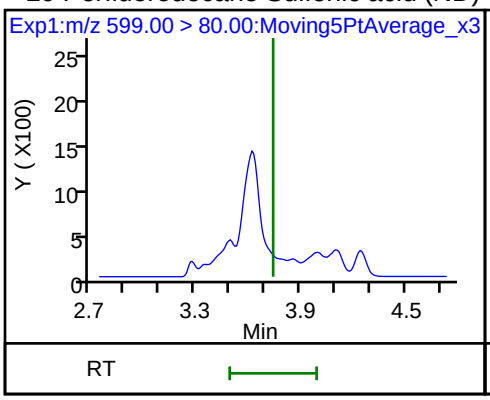
28 N-methyl perfluorooctane sulfonamid (ND)



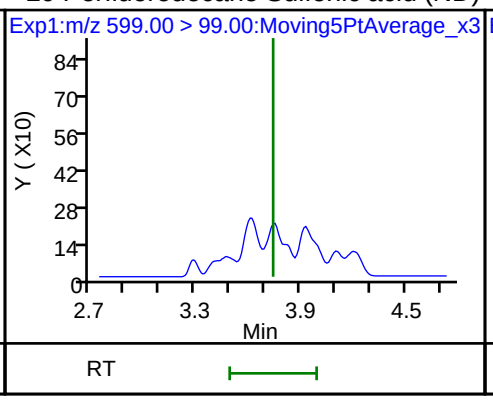
D 27 d3-NMeFOSAA



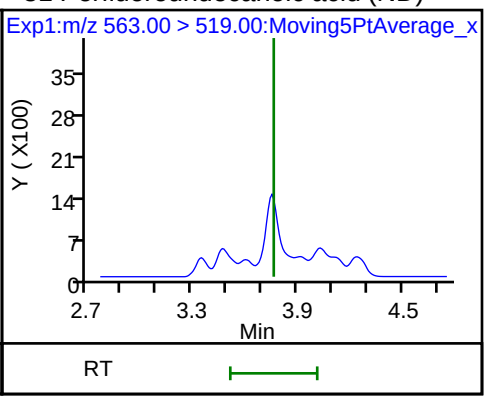
29 Perfluorodecane Sulfonic acid (ND)



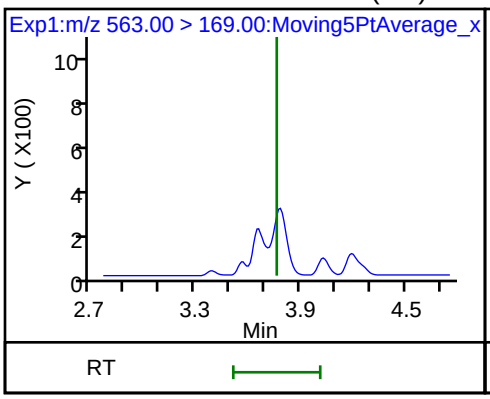
29 Perfluorodecane Sulfonic acid (ND)



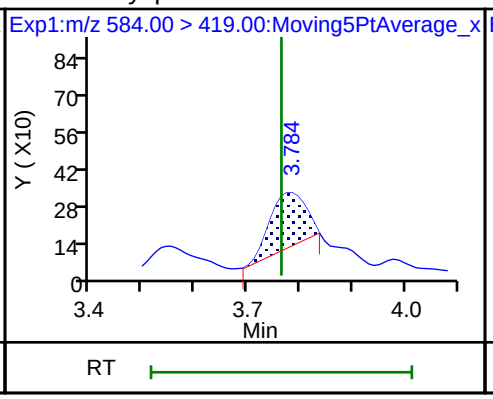
31 Perfluoroundecanoic acid (ND)



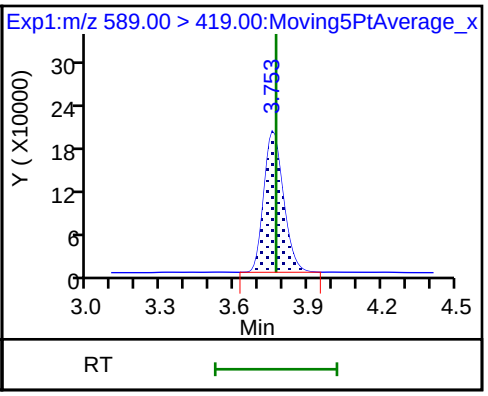
31 Perfluoroundecanoic acid (ND)



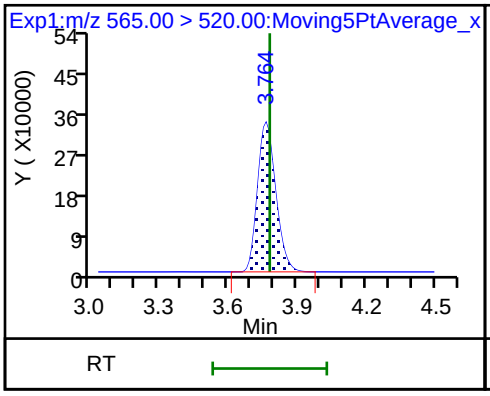
33 N-ethyl perfluorooctane sulfonamid



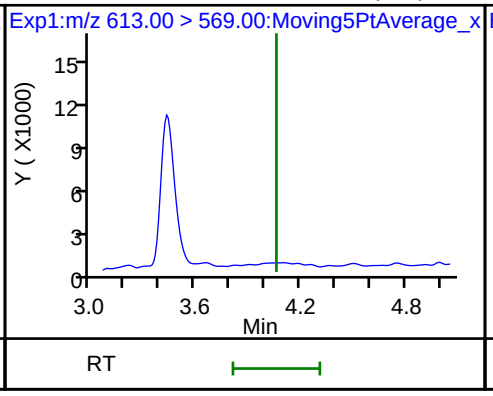
D 32 d5-NEtFOSAA



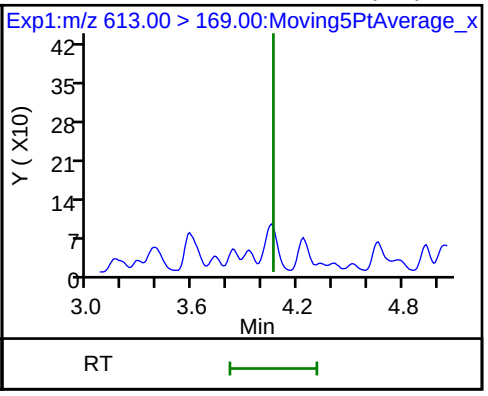
D 30 13C2 PFUnA



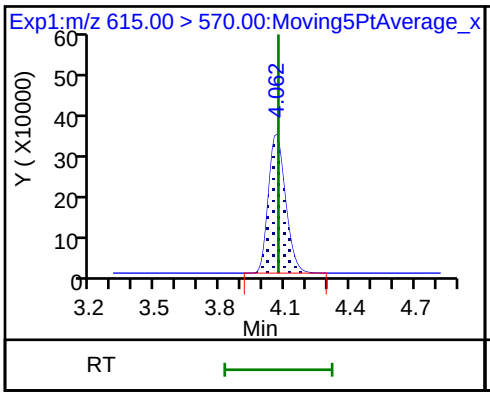
37 Perfluorododecanoic acid (ND)



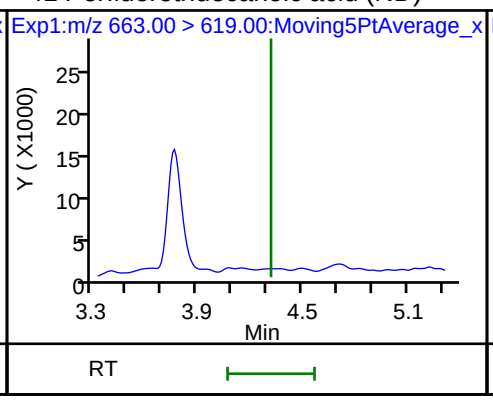
37 Perfluorododecanoic acid (ND)



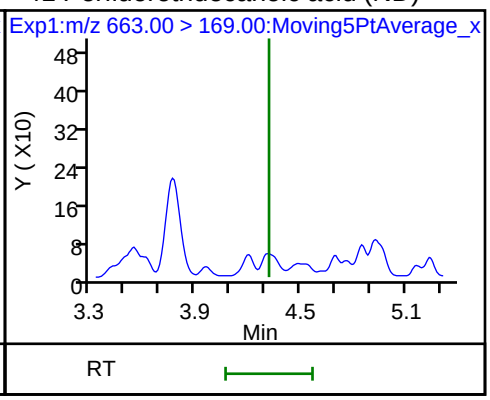
D 36 13C2 PFDoA



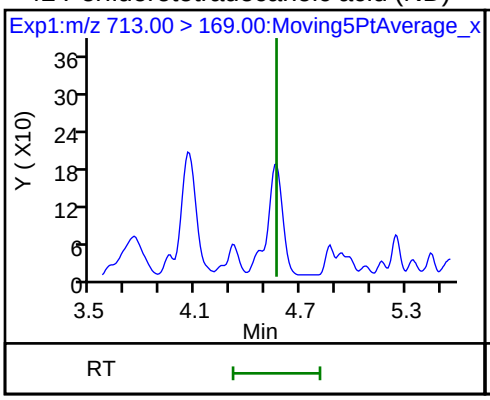
41 Perfluorotridecanoic acid (ND)



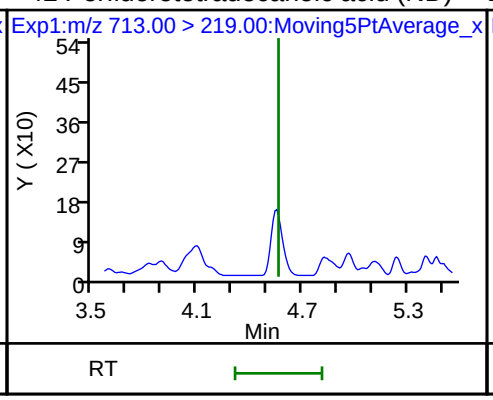
41 Perfluorotridecanoic acid (ND)



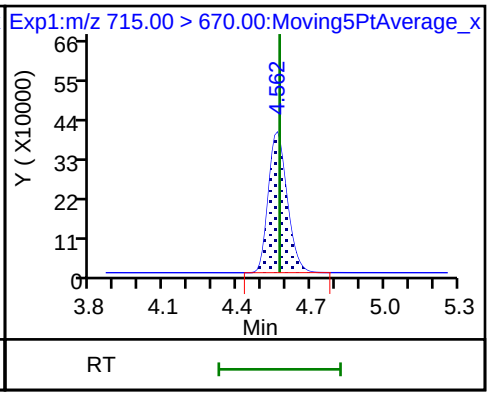
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110 (WG) | Lab Sample ID: 320-38630-8

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_064.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 252(mL) | Date Analyzed: 05/14/2018 19:49

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	8.7		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	19		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	18		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.0		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	29	B	2.0	0.84
375-95-1	Perfluorononanoic acid (PFNA)	3.0		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	2.4		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.46	J	2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.4		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.33	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	9.4	B	2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	6.8	J B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110 (WG) | Lab Sample ID: 320-38630-8

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_064.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 252(mL) | Date Analyzed: 05/14/2018 19:49

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	77		25-150
STL01893	13C5 PFPeA	89		25-150
STL00993	13C2 PFHxA	93		25-150
STL01892	13C4-PFHpA	95		25-150
STL00990	13C4 PFOA	101		25-150
STL00995	13C5 PFNA	94		25-150
STL00996	13C2 PFDA	89		25-150
STL00997	13C2 PFUnA	90		25-150
STL00998	13C2 PFDoA	88		25-150
STL02116	13C2-PFTeDA	106		25-150
STL02337	13C3-PFBS	84		25-150
STL00994	18O2 PFHxS	87		25-150
STL00991	13C4 PFOS	86		25-150
STL01056	13C8 FOSA	70		25-150
STL02118	d3-NMeFOSAA	103		25-150
STL02117	d5-NEtFOSAA	105		25-150
STL02279	M2-6:2FTS	115		25-150
STL02280	M2-8:2FTS	96		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_064.d
Lims ID: 320-38630-A-8-A
Client ID: GC-MW-110 (WG)
Sample Type: Client
Inject. Date: 14-May-2018 19:49:46 ALS Bottle#: 46 Worklist Smp#: 23
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-8-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:10:01 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:07:14

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.453	1.452	0.001	1.000	5151791	1.92		76.7	40946	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.458	0.0	1.004	419136	0.2189			185	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.728	0.002	0.562	3711625	2.23		89.2	51500	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.729	0.001	1.000	884263	0.4896			298	
D 47 13C3-PFBS										
301.90 > 83.00	1.757	1.764	-0.007	1.000	77126	1.96		84.5	317	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.766	1.765	0.001	1.005	475012	0.1856			301	M
298.90 > 99.00	1.766	1.765	0.001	1.005	196490		2.42(1.25-3.74)		417	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.014	0.002	1.000	4039657	2.32		92.8	65676	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.015	0.001	1.000	757159	0.4491			462	
313.00 > 119.00	2.016	2.015	0.001	1.000	68700		11.02(5.03-15.10)		805	
D 9 13C4-PFHpA										
367.00 > 322.00	2.349	2.345	0.004	1.000	3976340	2.38		95.3	93496	
D 11 18O2 PFHxS										
403.00 > 84.00	2.362	2.358	0.004	1.000	4581329	2.07		87.3	69114	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.349	2.359	-0.010	1.000	340788	0.2020			316	
363.00 > 169.00	2.349	2.359	-0.010	1.000	131779		2.59(1.13-3.40)		653	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.362	2.373	-0.011	1.000	77313	0.0354			122	
399.00 > 99.00	2.362	2.373	-0.011	1.000	24781		3.12(1.50-4.49)		62.8	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.676	2.682	-0.006	1.000	895587	2.72		115	8422	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.003	108468	0.1709			959	
D 14 13C4 PFOA										
417.00 > 372.00	2.706	2.704	0.002	1.000	3971202	2.54		101	71420	
* 62 13C2-PFOA										
415.00 > 370.00	2.706	2.713	-0.007		4151984	2.50			63731	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.706	2.713	-0.007	1.000	1372670	0.7191			541	
413.00 > 169.00	2.706	2.713	-0.007	1.000	729344		1.88(0.84-2.52)		2624	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.706	2.720	-0.014	1.000	14503	0.008244			76.6	M
449.00 > 99.00	2.706	2.720	-0.014	1.000	3849		3.77(1.94-5.82)		30.5	
D 18 13C4 PFOS										
503.00 > 80.00	3.071	3.073	-0.002	1.000	3186318	2.06		86.2	27539	
D 19 13C5 PFNA										
468.00 > 423.00	3.079	3.081	-0.002	1.000	3084020	2.36		94.3	80577	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.071	3.082	-0.011	1.000	350722	0.2356			1487	
499.00 > 99.00	3.071	3.082	-0.011	1.000	66739		5.26(2.31-6.93)		421	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.079	3.082	-0.003	1.000	98233	0.0755			119	M
463.00 > 169.00	3.079	3.082	-0.003	1.000	22225		4.42(1.90-5.69)		465	
D 21 13C8 FOSA										
506.00 > 78.00	3.405	3.407	-0.002	1.000	3897174	1.74		69.6	53591	
D 26 M2-8:2FTS										
529.00 > 81.00	3.424	3.435	-0.011	1.000	989038	2.30		96.2	10408	
D 23 13C2 PFDA										
515.00 > 470.00	3.443	3.444	-0.001	1.000	2501035	2.22		88.9	47706	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.433	3.446	-0.013	0.997	60917	0.0595			210	
513.00 > 169.00	3.443	3.446	-0.003	1.000	14048		4.34(2.36-7.09)		248	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.595	3.596	-0.001	1.000	1311038	2.57		103	29614	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.584	3.609	-0.025	0.997	3554	0.006484			43.5	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.759	3.771	-0.012	1.000	1426872	2.62		105	6467	
D 30 13C2 PFUnA										
565.00 > 520.00	3.770	3.771	-0.001	1.000	2123725	2.25		90.2	64077	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.770	3.773	-0.003	1.003	4055	0.007541			90.6	
31 Perfluoroundecanoic acid										R
563.00 > 519.00	3.759	3.783	-0.024	0.997	3907	0.005894			18.6	R
563.00 > 169.00	3.759	3.783	-0.024	0.997	2373		1.65(2.12-6.36)		78.2	
D 36 13C2 PFDoA										
615.00 > 570.00	4.059	4.071	-0.012	1.000	2171749	2.21		88.3	21770	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
37 Perfluorododecanoic acid										
613.00 > 569.00	4.069	4.072	-0.003	1.003	9461	0.0105			8.0	
613.00 > 169.00	4.069	4.072	-0.003	1.003	2185		4.33(2.13-6.40)		34.5	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.336	4.341	-0.005	1.000	9683	0.0103			6.1	
663.00 > 169.00	4.325	4.341	-0.016	0.997	3019		3.21(1.25-3.76)		43.0	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.568	4.574	-0.006	1.000	2845244	2.65		106	15940	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.568	4.575	-0.007	1.000	3386	0.0115			51.6	
713.00 > 219.00	4.568	4.575	-0.007	1.000	2549		1.33(0.71-2.13)		57.0	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:10:08 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_064.d

Injection Date: 14-May-2018 19:49:46 Instrument ID: A8_N

Lims ID: 320-38630-A-8-A Lab Sample ID: 320-38630-8

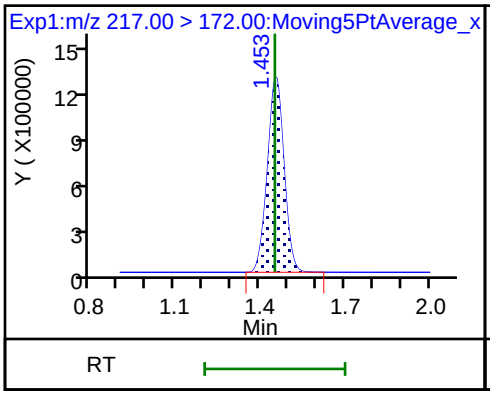
Client ID: GC-MW-110 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 46 Worklist Smp#: 23

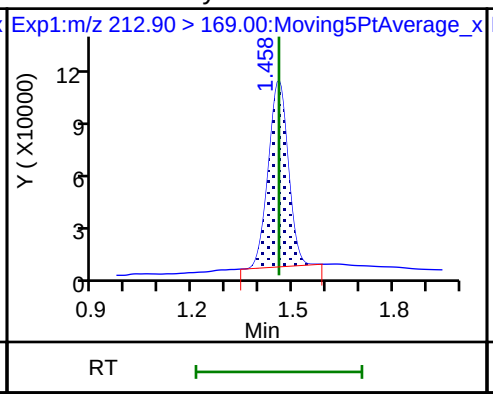
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

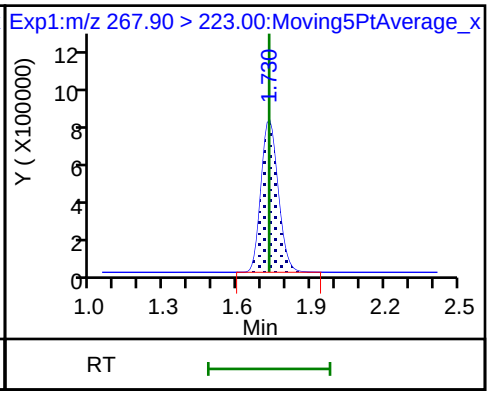
D 1 13C4 PFBA



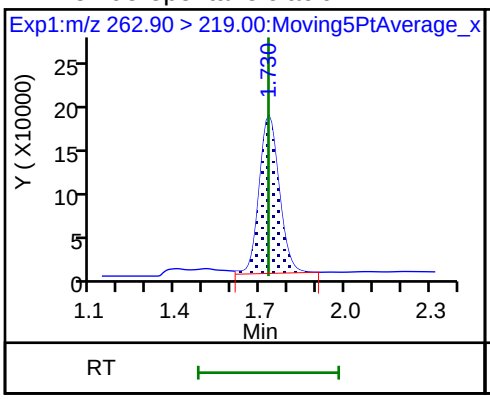
2 Perfluorobutyric acid



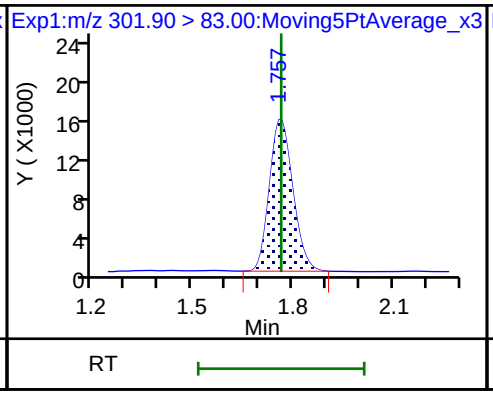
D 3 13C5-PFPeA



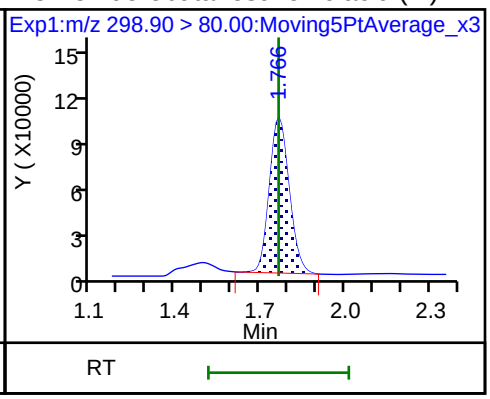
4 Perfluoropentanoic acid



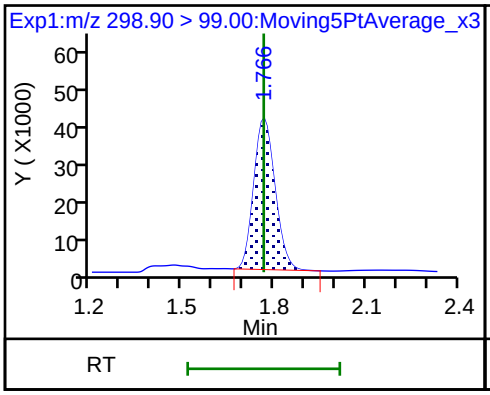
D 47 13C3-PFBS



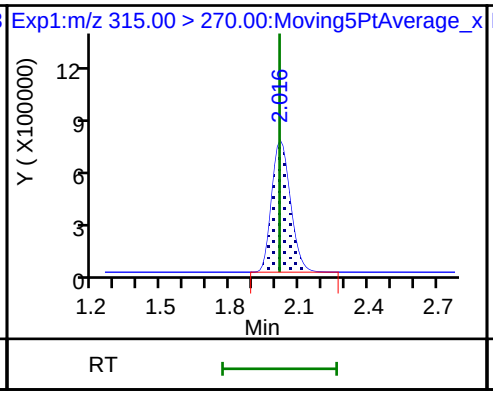
5 Perfluorobutanesulfonic acid (M)



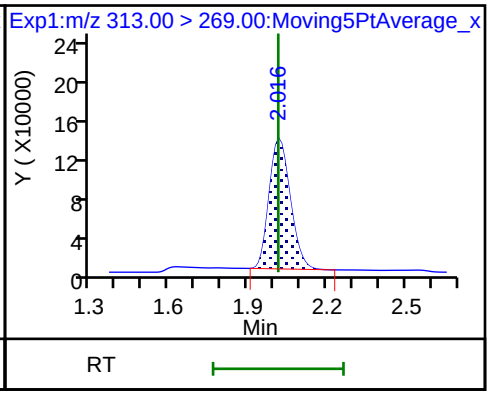
5 Perfluorobutanesulfonic acid



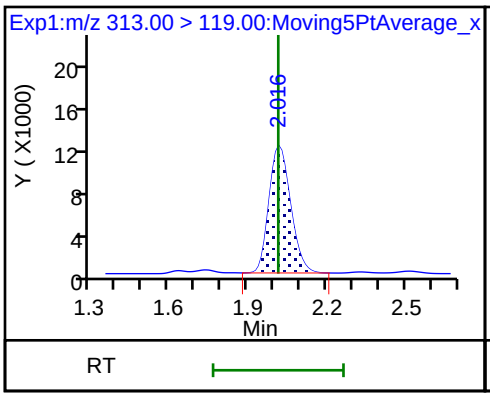
D 7 13C2 PFHxA



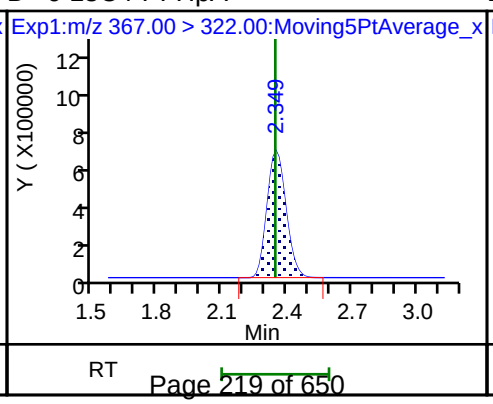
6 Perfluorohexanoic acid



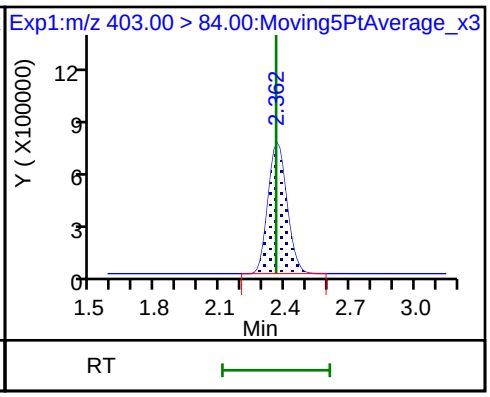
6 Perfluorohexanoic acid



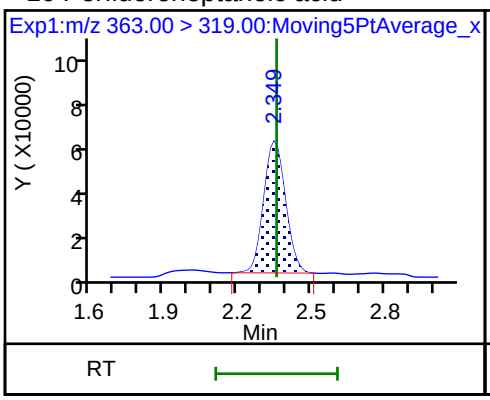
D 9 13C4-PFHpA



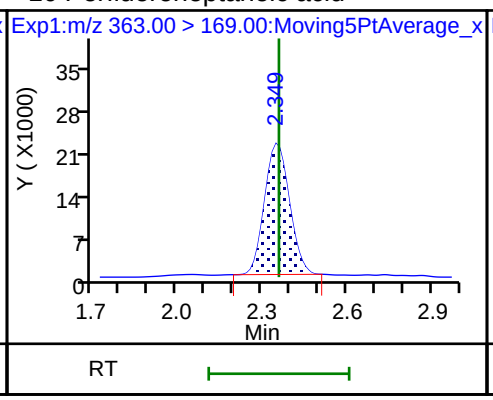
D 11 18O2 PFHxS



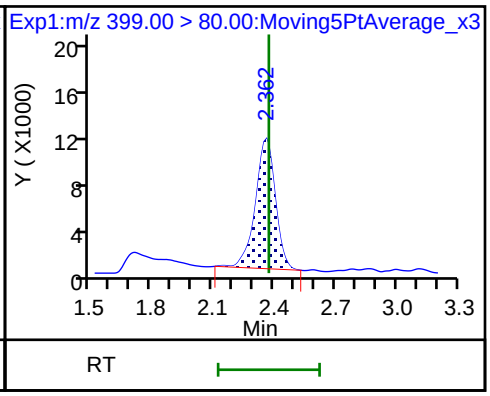
10 Perfluoroheptanoic acid



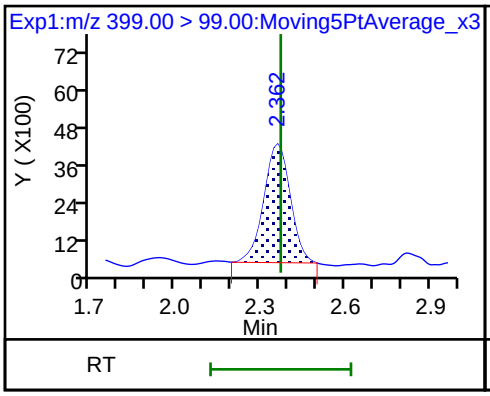
10 Perfluoroheptanoic acid



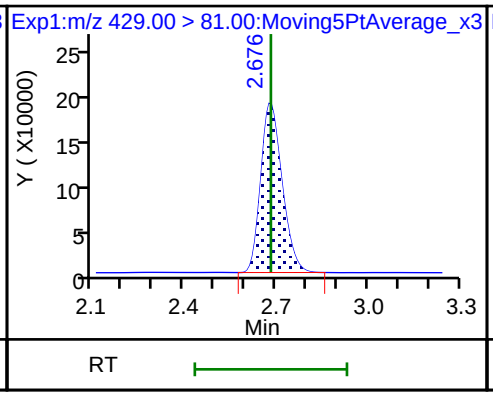
8 Perfluorohexanesulfonic acid



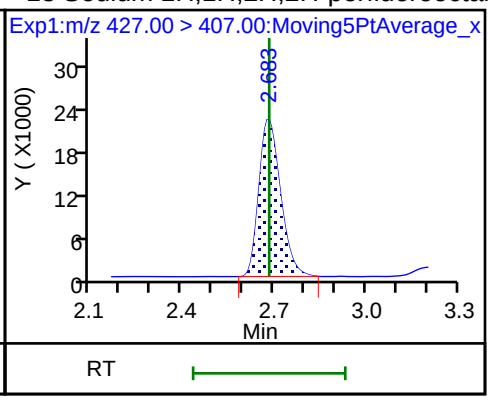
8 Perfluorohexanesulfonic acid



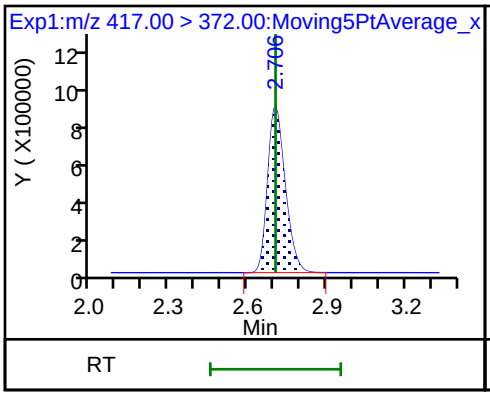
D 12 M2-6:2FTS



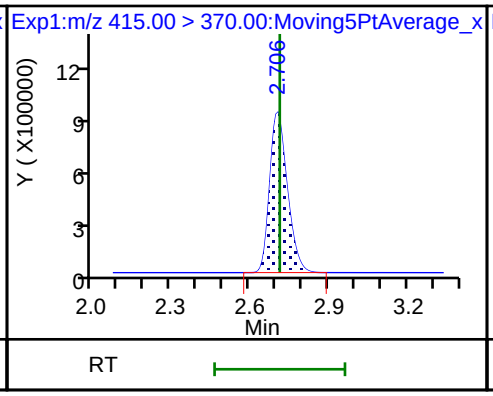
13 Sodium 1H,1H,2H,2H-perfluorooctane



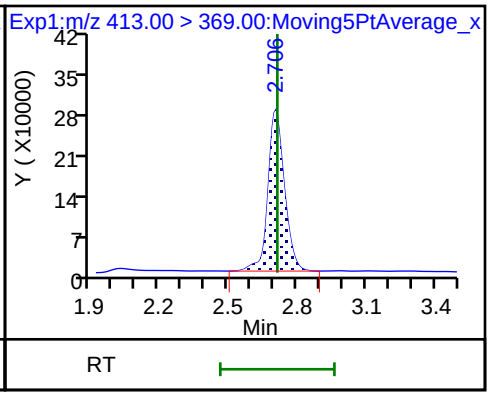
D 14 13C4 PFOA



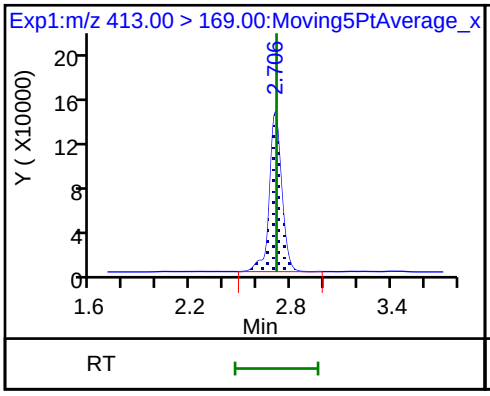
* 62 13C2-PFOA



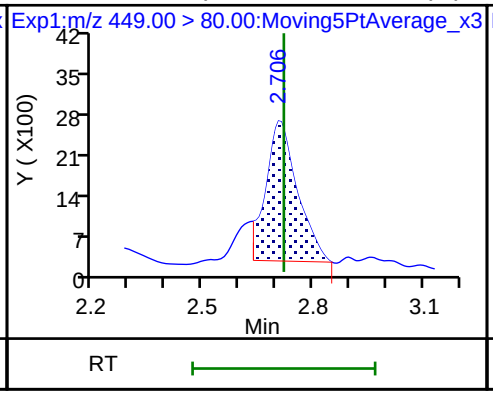
15 Perfluorooctanoic acid



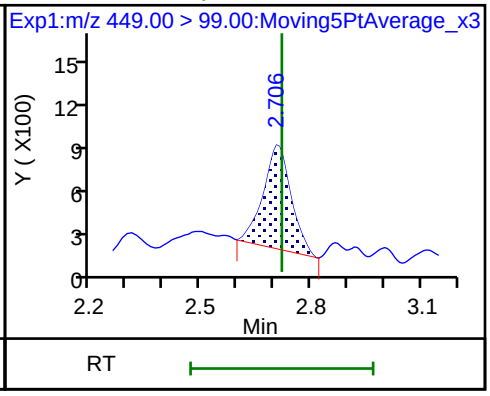
15 Perfluorooctanoic acid



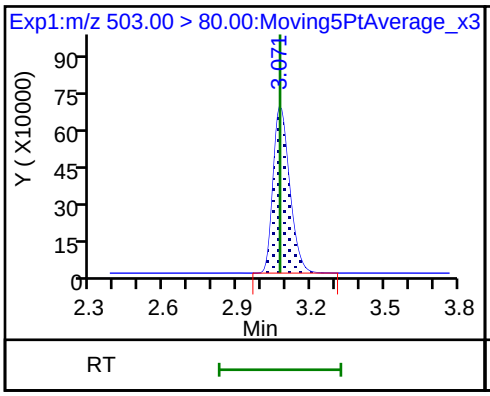
16 Perfluoroheptanesulfonic acid (M)



16 Perfluoroheptanesulfonic acid



D 18 13C4 PFOS



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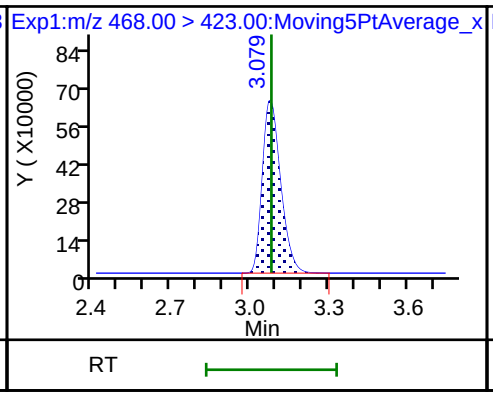
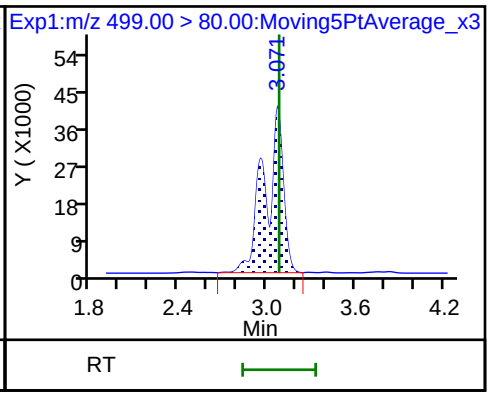
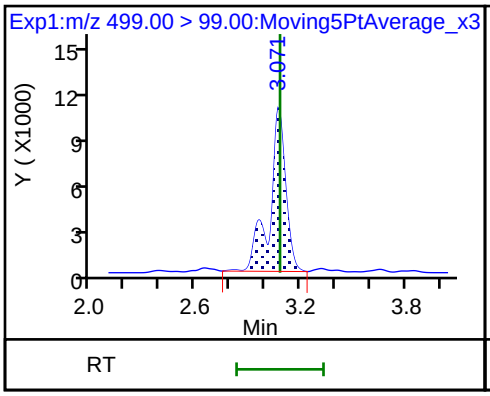


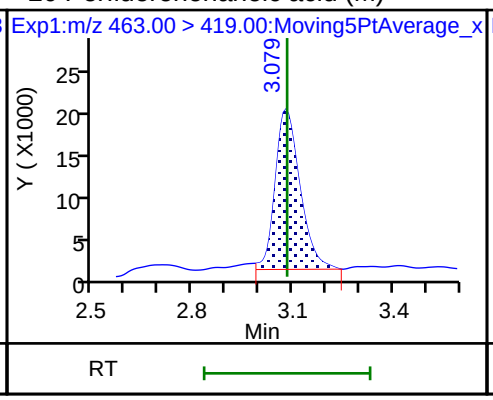
17 Perfluorooctane sulfonic acid



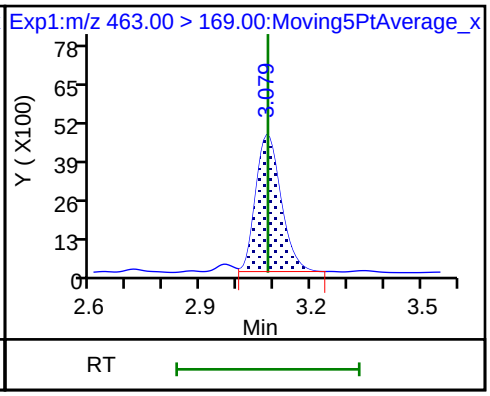
17 Perfluorooctane sulfonic acid



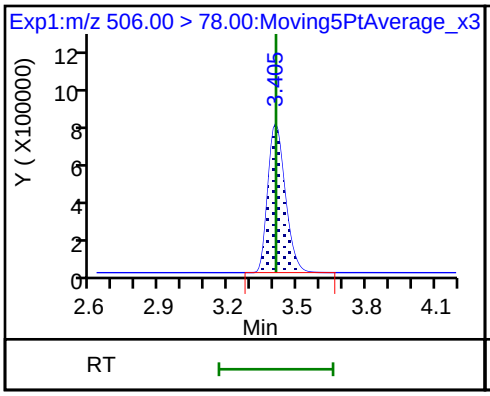
20 Perfluorononanoic acid (M)



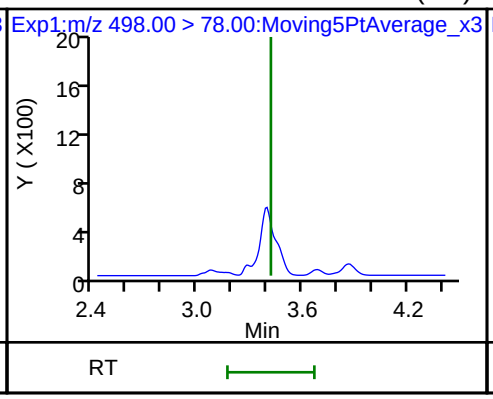
20 Perfluorononanoic acid



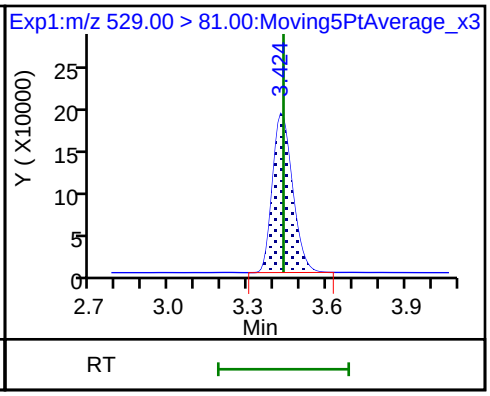
D 21 13C8 FOSA



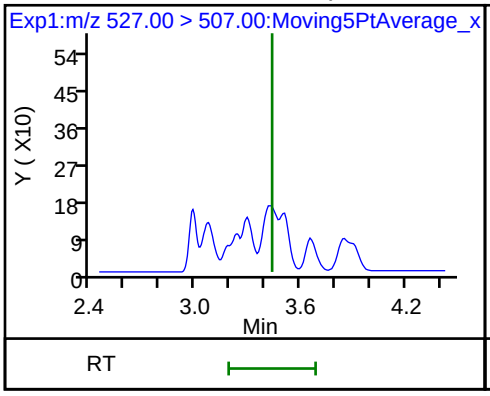
22 Perfluorooctane Sulfonamide (ND)



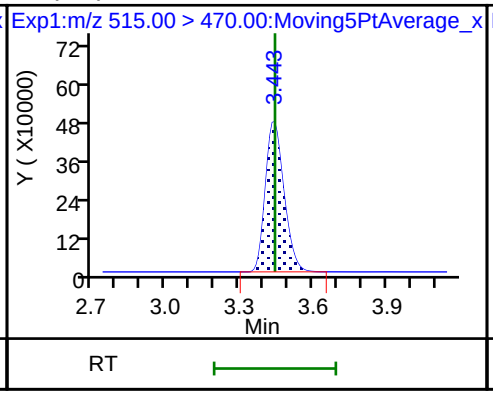
D 26 M2-8:2FTS



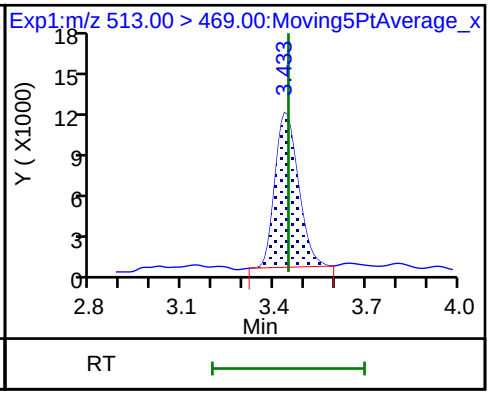
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



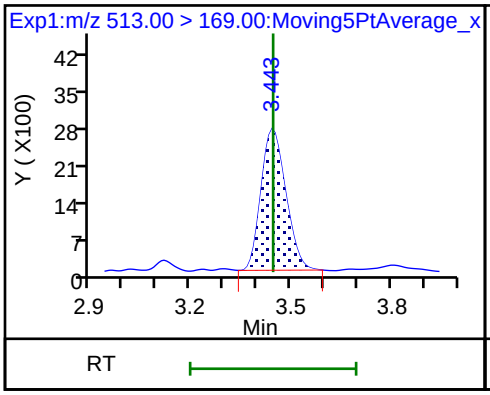
D 23 13C2 PFDA



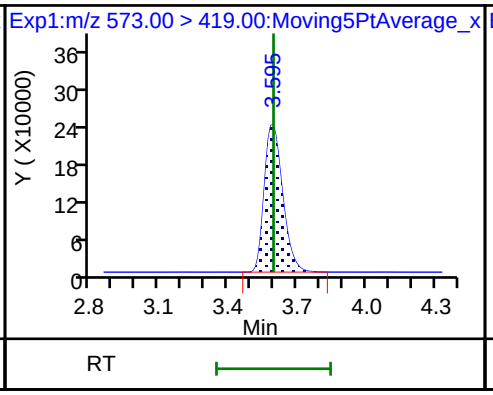
24 Perfluorodecanoic acid



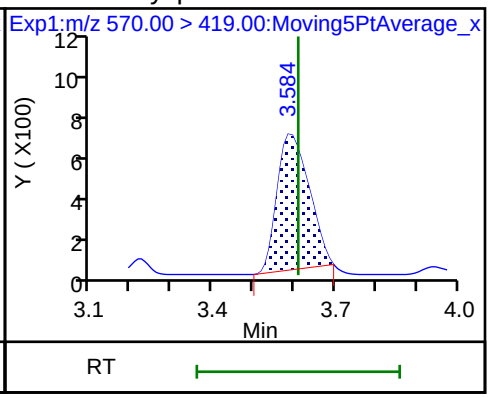
24 Perfluorodecanoic acid



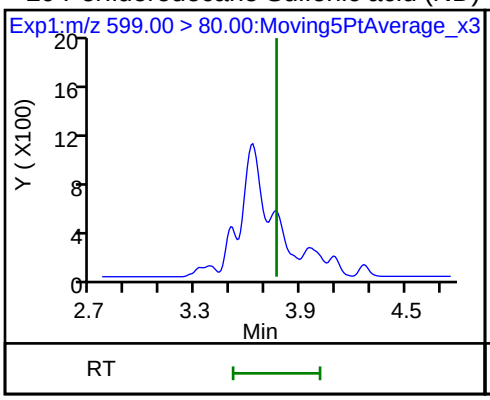
D 27 d3-NMeFOSAA



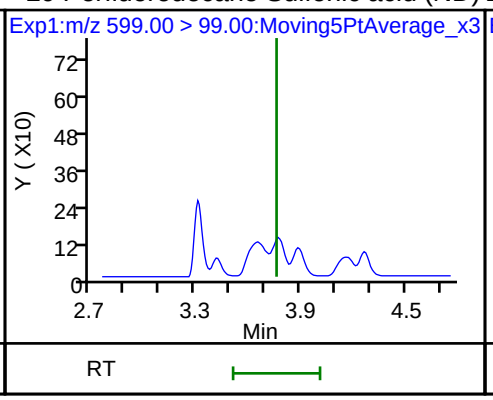
28 N-methyl perfluorooctane sulfonami



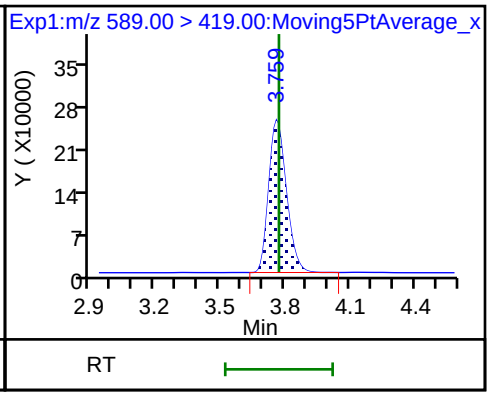
29 Perfluorodecane Sulfonic acid (ND)



29 Perfluorodecane Sulfonic acid (ND)



D 32 d5-NEtFOSAA



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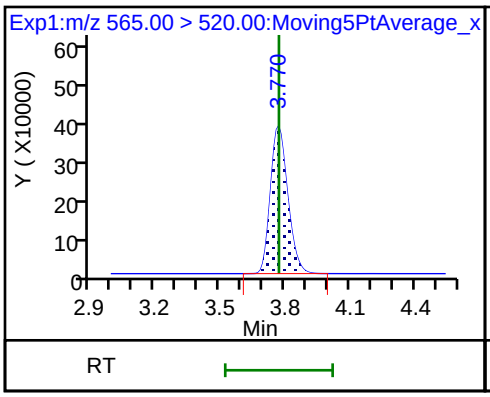
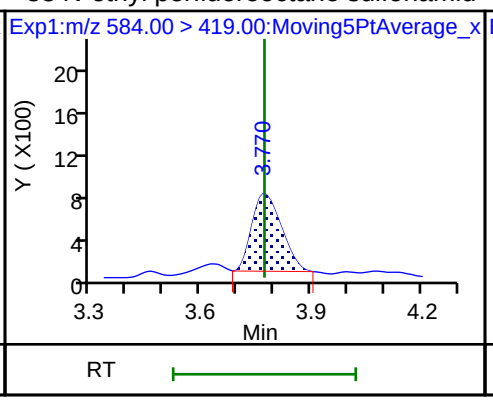
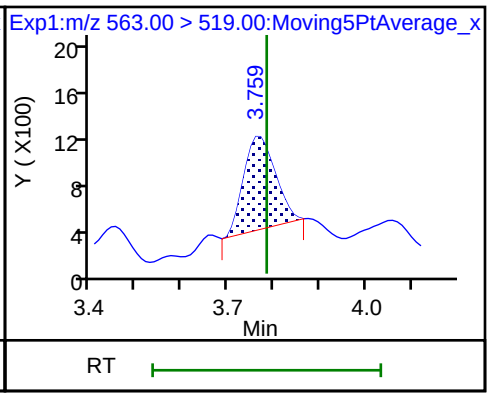


33 N-ethyl perfluorooctane sulfonamid



31 Perfluoroundecanoic acid



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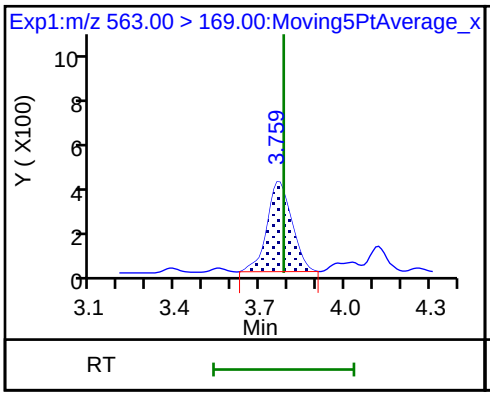
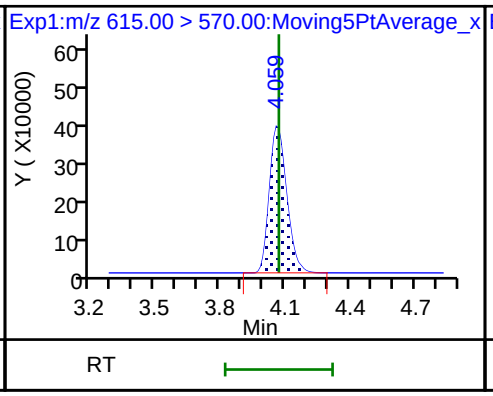
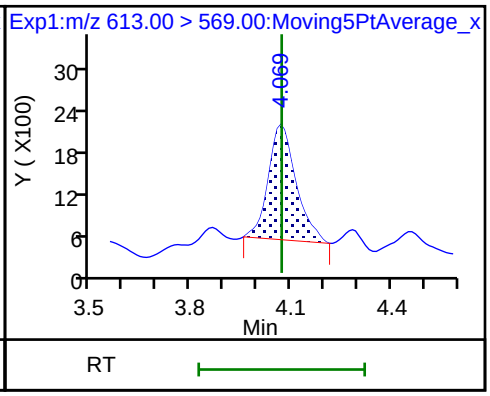


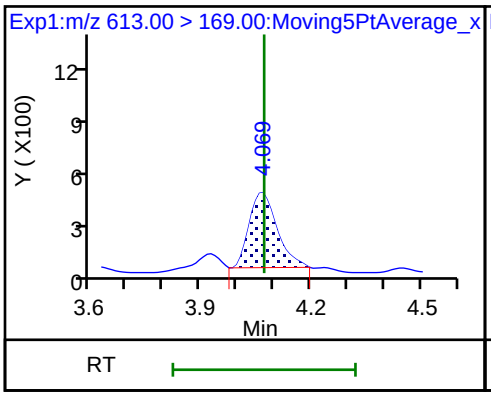
D 36 13C2 PFDoA



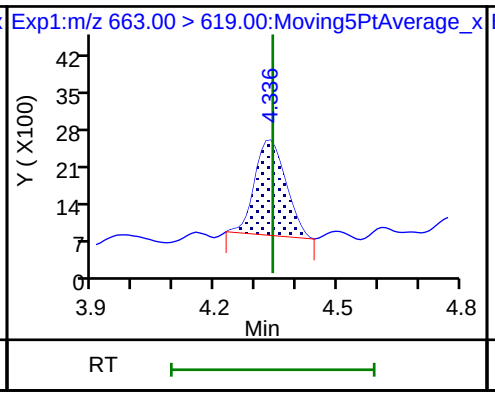
37 Perfluorododecanoic acid



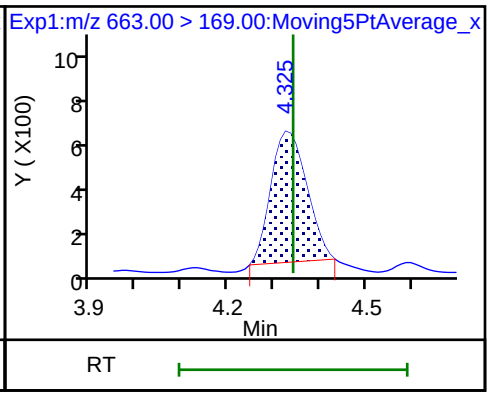
37 Perfluorododecanoic acid



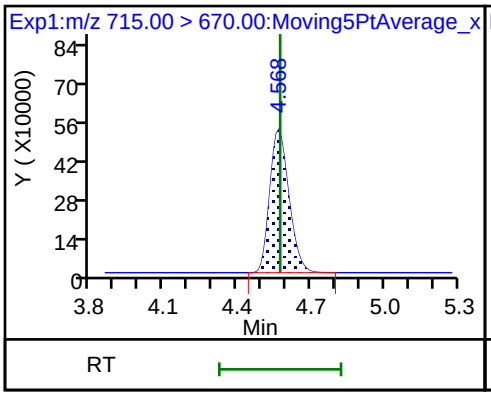
41 Perfluorotridecanoic acid



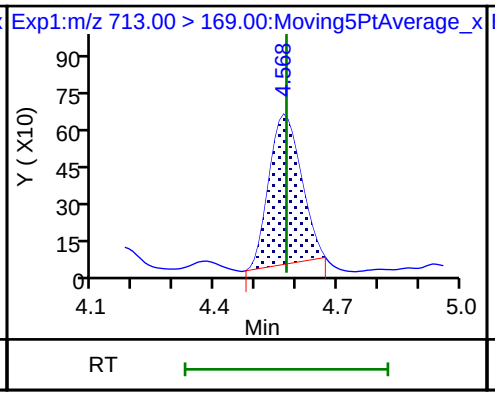
41 Perfluorotridecanoic acid



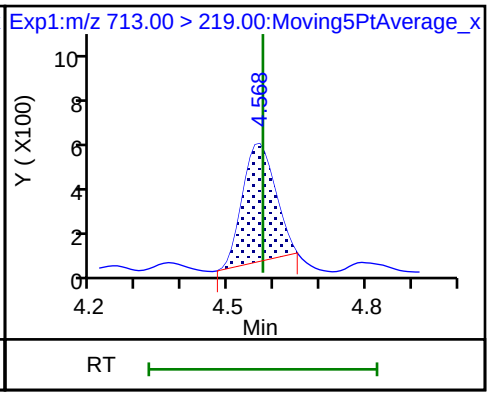
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

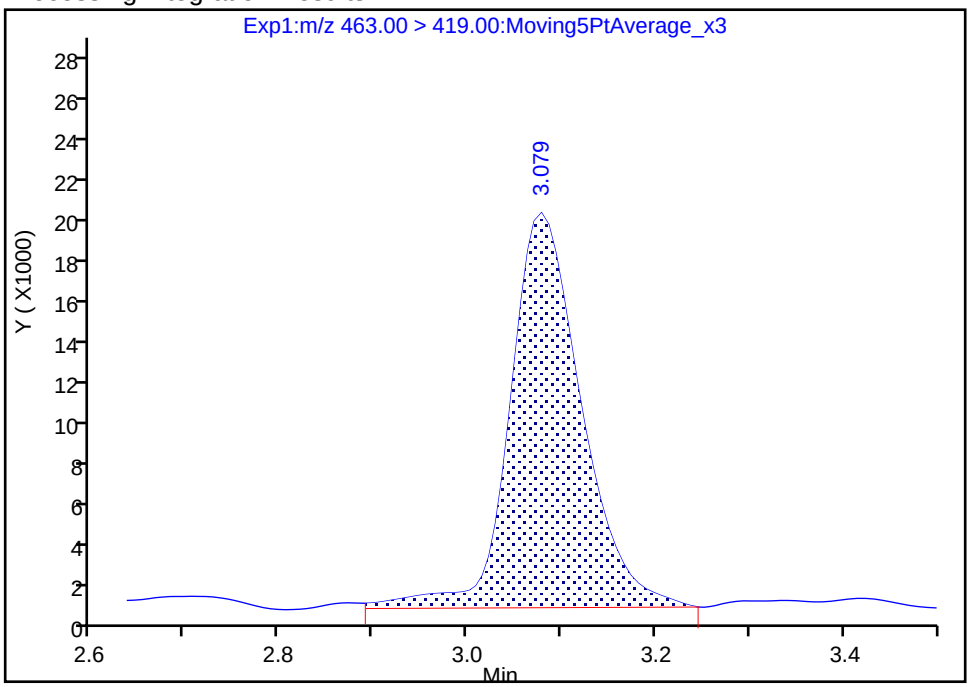
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_064.d				
Injection Date:	14-May-2018 19:49:46	Instrument ID:	A8_N		
Lims ID:	320-38630-A-8-A	Lab Sample ID:	320-38630-8		
Client ID:	GC-MW-110 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	46	Worklist Smp#:	23
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

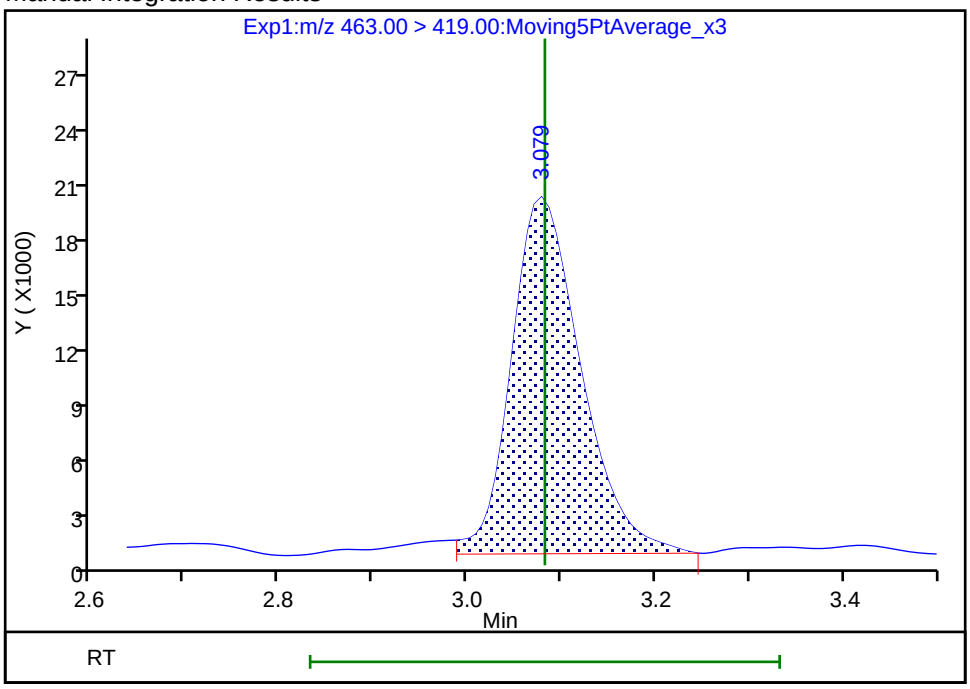
Processing Integration Results

RT: 3.08
Area: 101321
Amount: 0.077910
Amount Units: ng/ml



Manual Integration Results

RT: 3.08
Area: 98233
Amount: 0.075535
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:06:59

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Sacramento

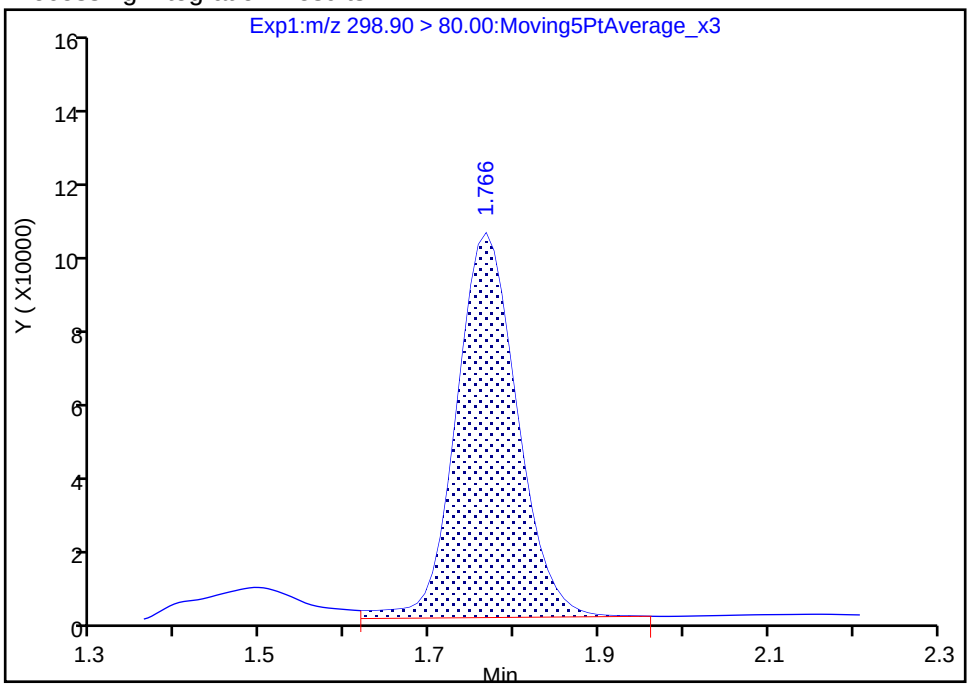
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_064.d				
Injection Date:	14-May-2018 19:49:46	Instrument ID:	A8_N		
Lims ID:	320-38630-A-8-A	Lab Sample ID:	320-38630-8		
Client ID:	GC-MW-110 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	46	Worklist Smp#:	23
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

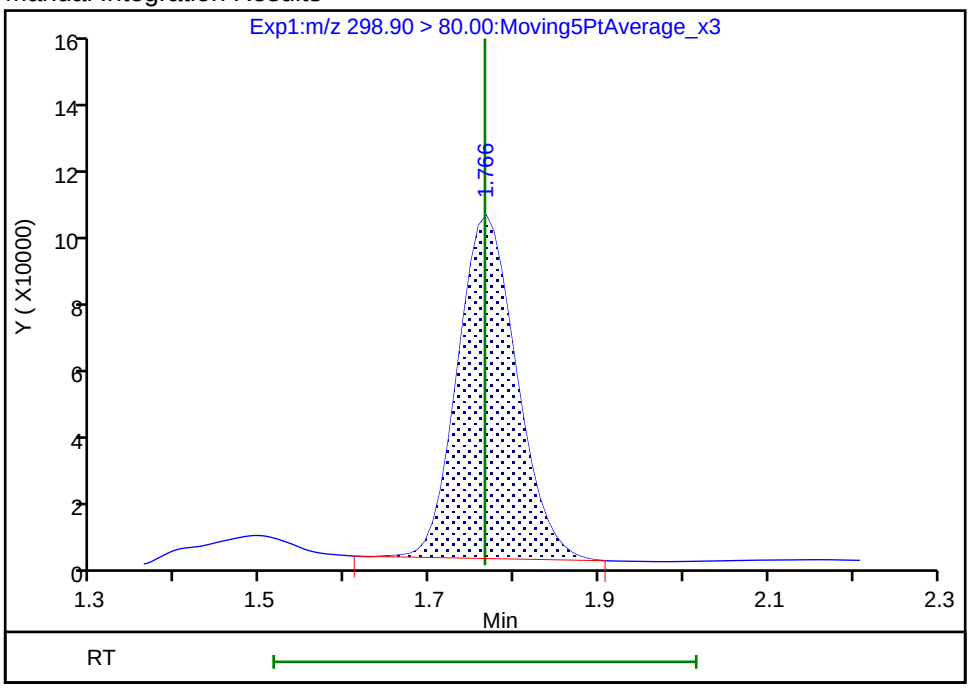
Processing Integration Results

RT: 1.77
Area: 496746
Amount: 0.194057
Amount Units: ng/ml



Manual Integration Results

RT: 1.77
Area: 475012
Amount: 0.185566
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:06:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

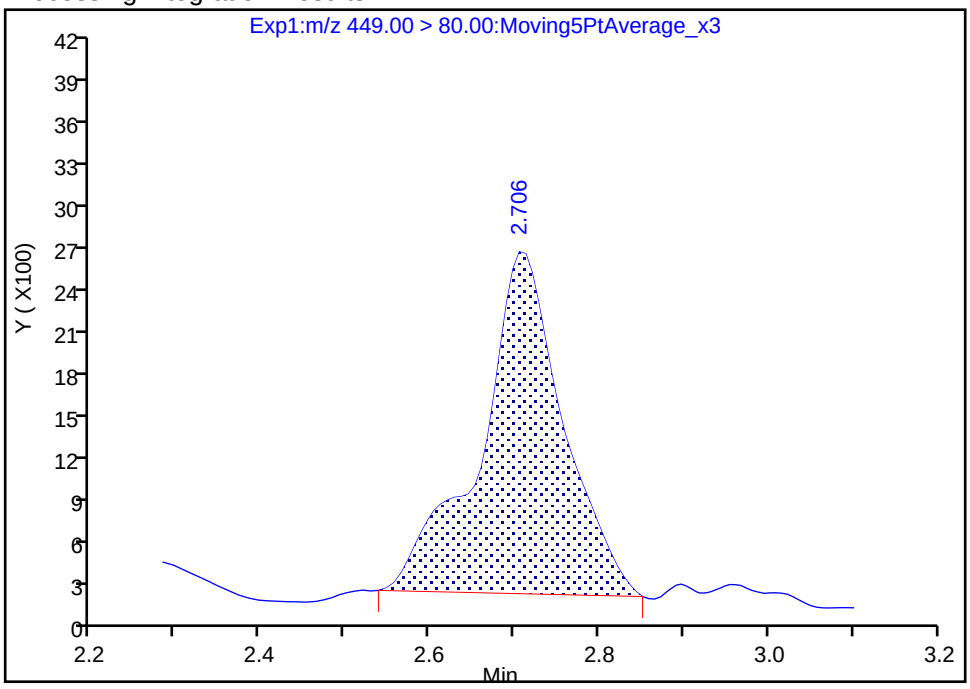
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_064.d				
Injection Date:	14-May-2018 19:49:46	Instrument ID:	A8_N		
Lims ID:	320-38630-A-8-A	Lab Sample ID:	320-38630-8		
Client ID:	GC-MW-110 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	46	Worklist Smp#:	23
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

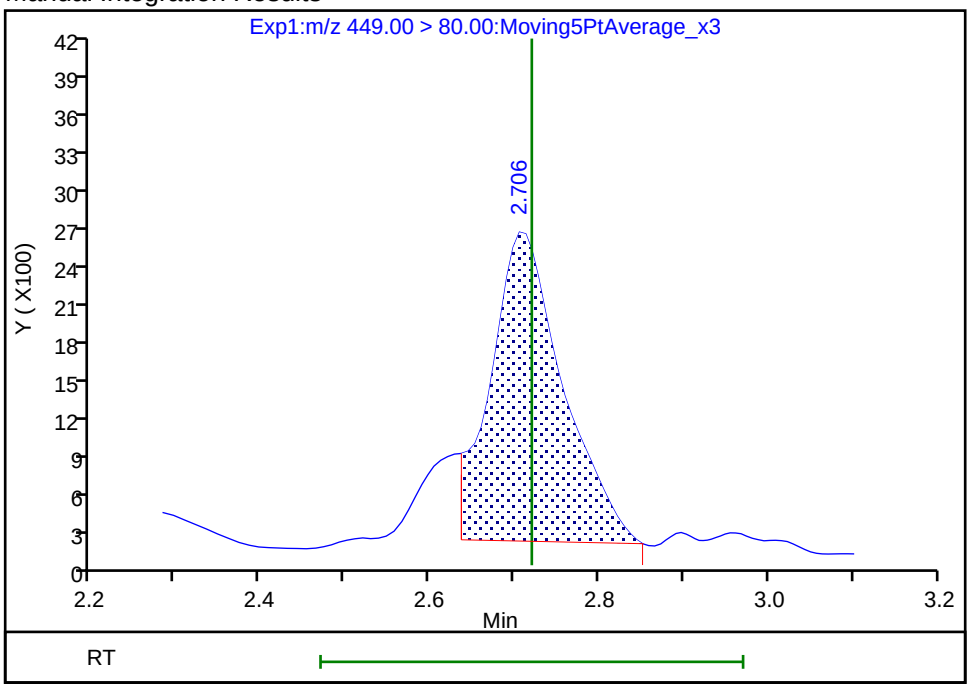
Processing Integration Results

RT: 2.71
Area: 16690
Amount: 0.009488
Amount Units: ng/ml



Manual Integration Results

RT: 2.71
Area: 14503
Amount: 0.008244
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:06:53

Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110D (WG) RE | Lab Sample ID: 320-38630-9 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_027.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 14:30

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 256.8(mL) | Date Analyzed: 05/13/2018 18:53

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*21*	*H*	*1.9*	*0.83*
27619-97-2	*6:2FTS*	*3.1*	*J H B*	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	102		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_027.d
Lims ID: 320-38630-B-9-A
Client ID: GC-MW-110D (WG)
Sample Type: Client
Inject. Date: 13-May-2018 18:53:56 ALS Bottle#: 20 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-9-
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:23 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:42:46

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.457	1.452	0.005	1.000	226945	0.1413			135	
D 1 13C4 PFBA										
217.00 > 172.00	1.457	1.458	-0.001	1.000	4289506	1.87		74.7	37621	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.735	1.728	0.007	1.000	243780	0.1607			63.3	
D 3 13C5-PFPeA										
267.90 > 223.00	1.735	1.729	0.006	0.564	3209409	2.20		87.9	38342	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.771	1.765	0.007	1.005	238209	0.0982			142	
298.90 > 99.00	1.762	1.765	-0.002	1.000	107636		2.21(1.25-3.74)		227	
D 47 13C3-PFBS										
301.90 > 83.00	1.762	1.766	-0.004	1.000	71477	2.16		92.8	294	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.011	2.014	-0.003	1.000	251897	0.1750			173	M
313.00 > 119.00	2.023	2.014	0.009	1.006	25496		9.88(5.03-15.10)		262	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.015	-0.004	1.000	3587699	2.33		93.3	72003	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.342	2.345	-0.003	1.000	234829	0.1471			250	
363.00 > 169.00	2.342	2.345	-0.003	1.000	91680		2.56(1.13-3.40)		552	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.346	-0.004	1.000	3691474	2.61		104	75881	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.355	2.358	-0.003	1.000	218136	0.1054			284	
399.00 > 99.00	2.355	2.358	-0.003	1.000	72179		3.02(1.50-4.49)		218	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.359	-0.004	1.000	4308914	2.33		98.5	64778	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.679	2.674	0.005	1.000	37416	0.0804			321	
D 12 M2-6:2FTS										
429.00 > 81.00	2.679	2.683	-0.004	1.000	667274	2.42		102	6998	
* 62 13C2-PFOA										
415.00 > 370.00	2.701	2.697	0.004		3556626	2.50			54941	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.701	2.697	0.004	1.000	831086	0.5412			407	
413.00 > 169.00	2.701	2.697	0.004	1.000	468455		1.77(0.84-2.52)		2143	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.724	2.704	0.020	1.000	21829	0.0132			70.9	
449.00 > 99.00	2.716	2.704	0.012	0.997	4427		4.93(1.94-5.82)		48.3	
D 14 13C4 PFOA										
417.00 > 372.00	2.701	2.706	-0.005	1.000	3321191	2.48		99.1	64680	
20 Perfluorononanoic acid										
463.00 > 419.00	3.067	3.069	-0.002	0.998	32206	0.0301			48.8	
463.00 > 169.00	3.074	3.069	0.005	1.000	8006		4.02(1.90-5.69)		159	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.067	3.069	-0.002	1.000	375831	0.2706			1120	
499.00 > 99.00	3.067	3.069	-0.002	1.000	71077		5.29(2.31-6.93)		638	
D 19 13C5 PFNA										
468.00 > 423.00	3.074	3.078	-0.004	1.000	2630473	2.33		93.1	51065	
D 18 13C4 PFOS										
503.00 > 80.00	3.067	3.078	-0.011	1.000	3026523	2.28		95.4	20597	
D 21 13C8 FOSA										
506.00 > 78.00	3.408	3.414	-0.006	1.000	4060166	2.16		86.4	56440	
D 26 M2-8:2FTS										
529.00 > 81.00	3.427	3.433	-0.007	1.000	942007	2.60		108	8576	
D 23 13C2 PFDA										
515.00 > 470.00	3.436	3.442	-0.006	1.000	2314672	2.35		93.9	32283	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.586	3.605	-0.019	1.000	943922	2.18		87.3	24381	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.761	3.769	-0.008	1.000	1100335	2.32		93.0	3415	
D 30 13C2 PFUnA										
565.00 > 520.00	3.761	3.780	-0.019	1.000	1927947	2.39		95.6	38281	
D 36 13C2 PFDoA										
615.00 > 570.00	4.061	4.069	-0.008	1.000	2042558	2.43		97.2	23825	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2185665	2.39		95.5	13266	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-May-2018 10:44:28 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_027.d

Injection Date: 13-May-2018 18:53:56 Instrument ID: A8_N

Lims ID: 320-38630-B-9-A Lab Sample ID: 320-38630-9

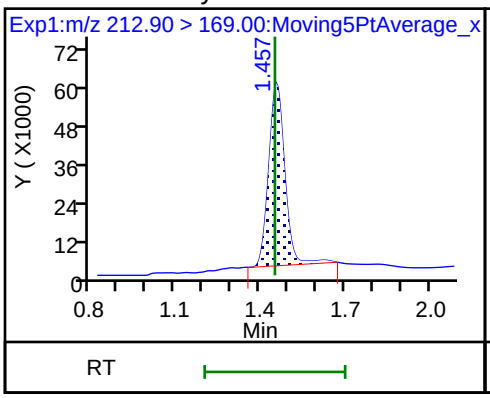
Client ID: GC-MW-110D (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 20 Worklist Smp#: 14

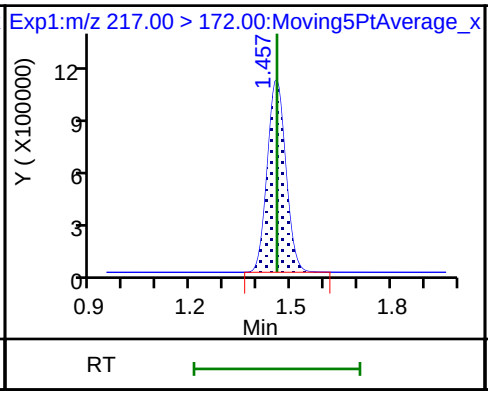
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

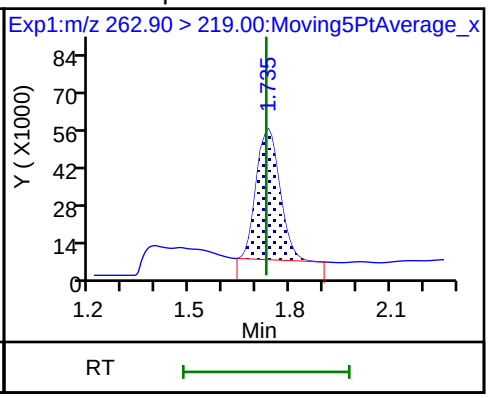
2 Perfluorobutyric acid



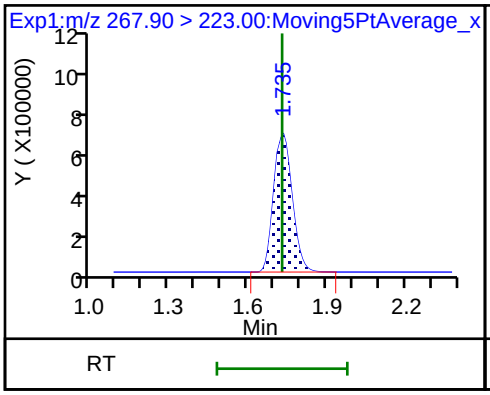
D 1 13C4 PFBA



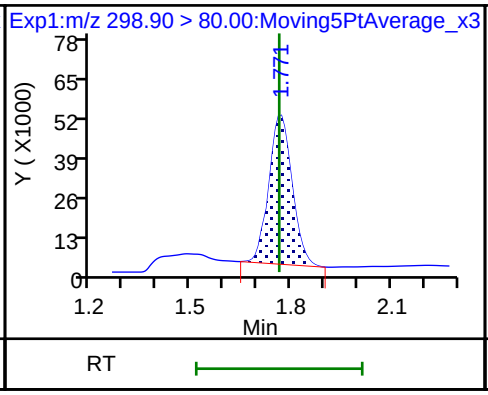
4 Perfluoropentanoic acid



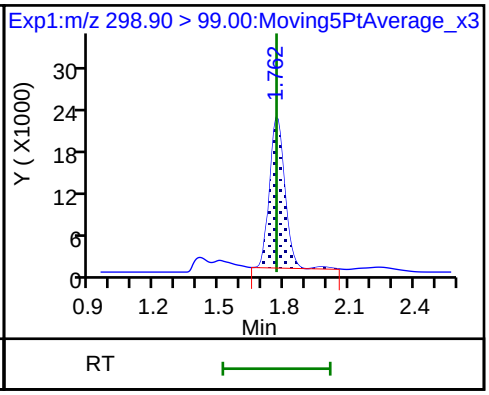
D 3 13C5-PFPeA



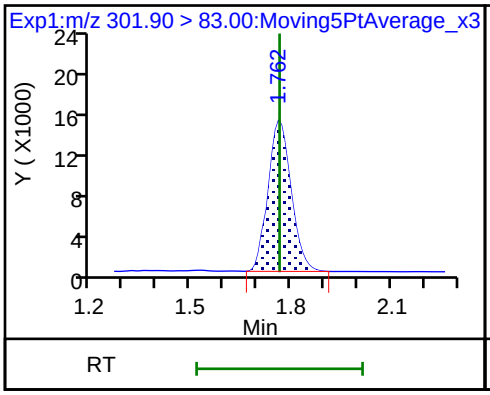
5 Perfluorobutanesulfonic acid



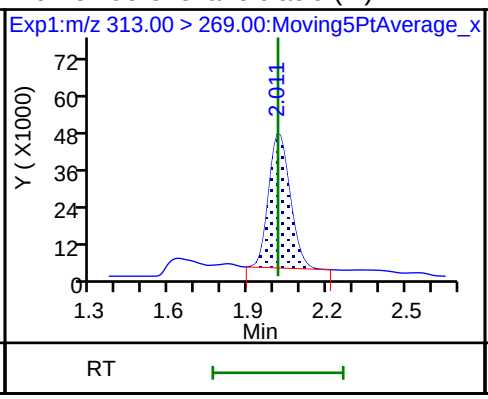
5 Perfluorobutanesulfonic acid



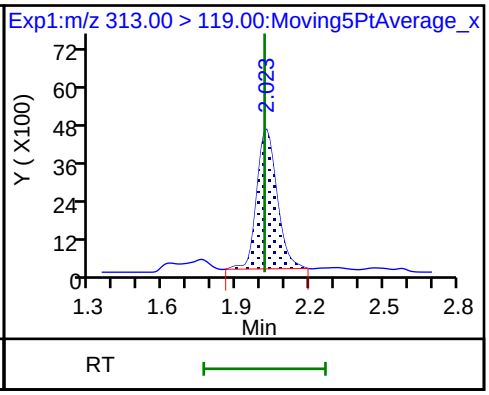
D 47 13C3-PFBS



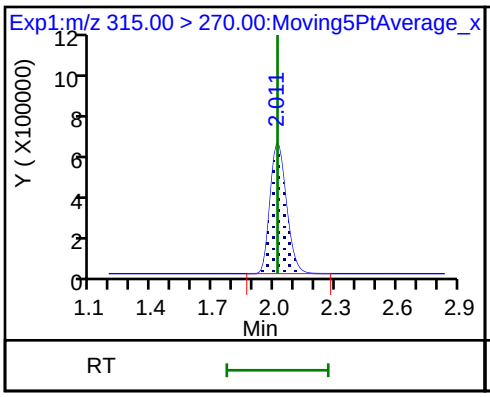
6 Perfluorohexanoic acid (M)



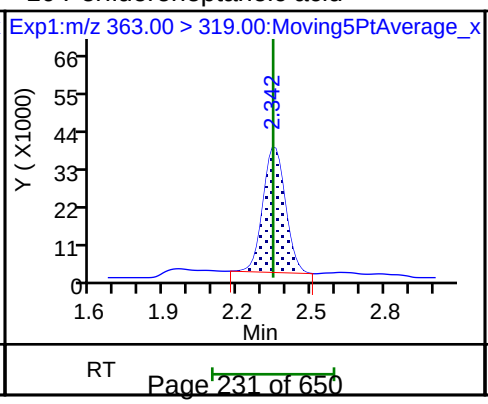
6 Perfluorohexanoic acid



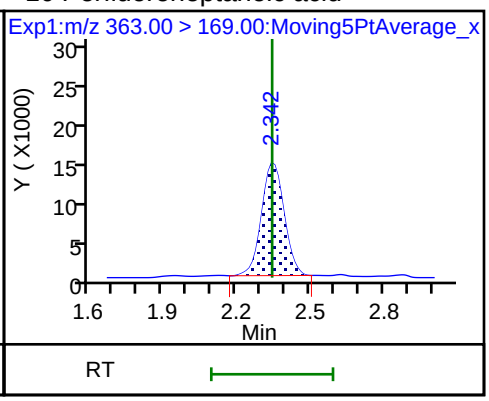
D 7 13C2 PFHxA



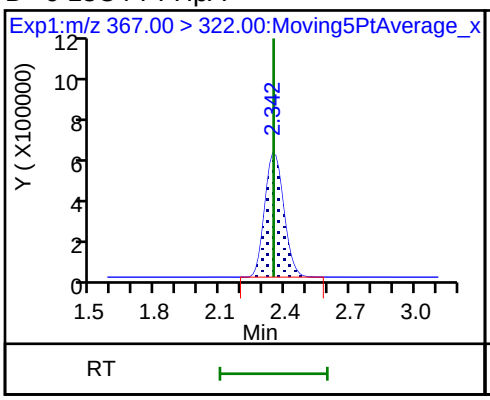
10 Perfluoroheptanoic acid



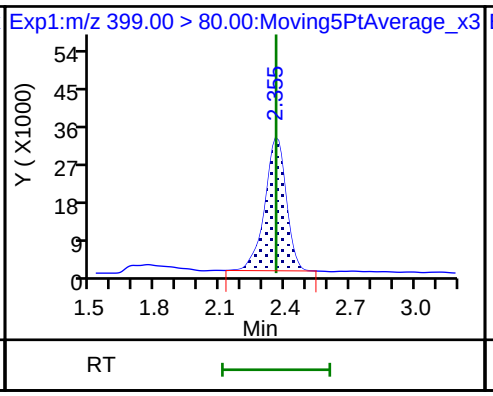
10 Perfluoroheptanoic acid



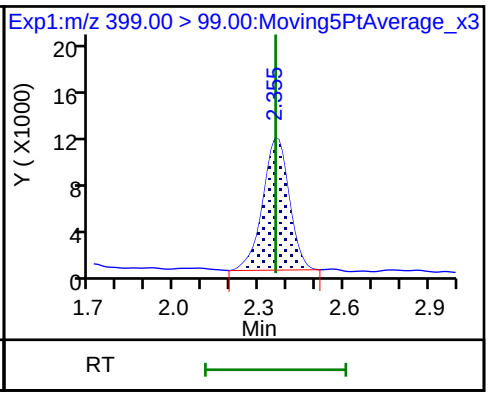
D 9 13C4-PFHpA



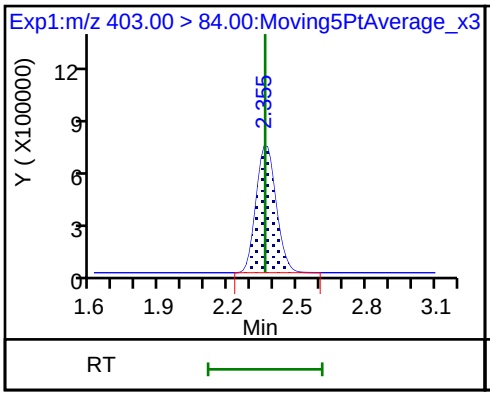
8 Perfluorohexanesulfonic acid



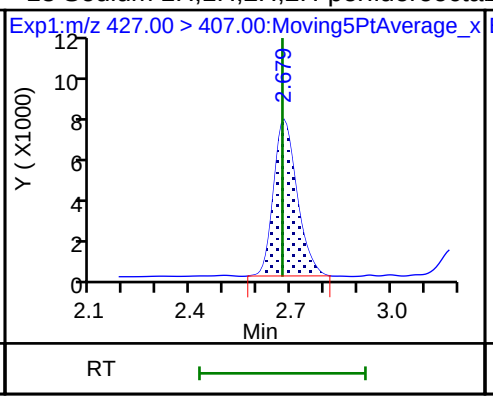
8 Perfluorohexanesulfonic acid



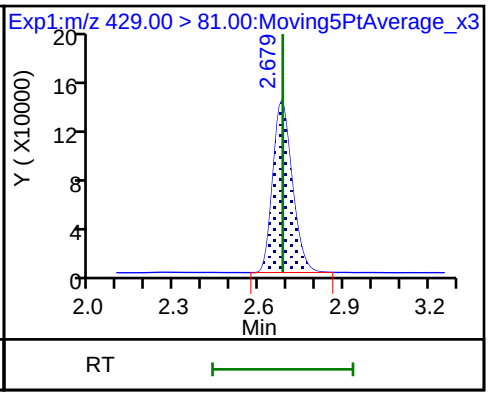
D 11 18O2 PFHxS



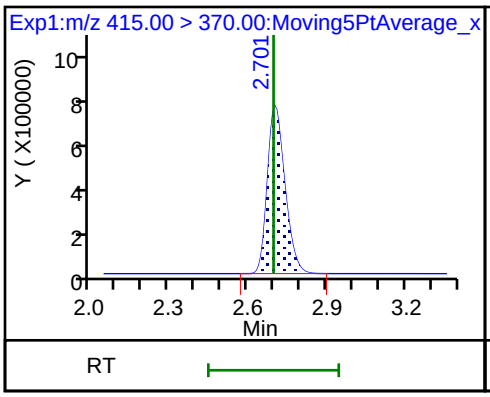
13 Sodium 1H,1H,2H,2H-perfluorooctane



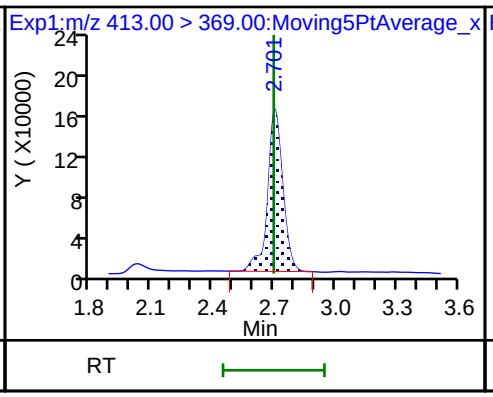
D 12 M2-6:2FTS



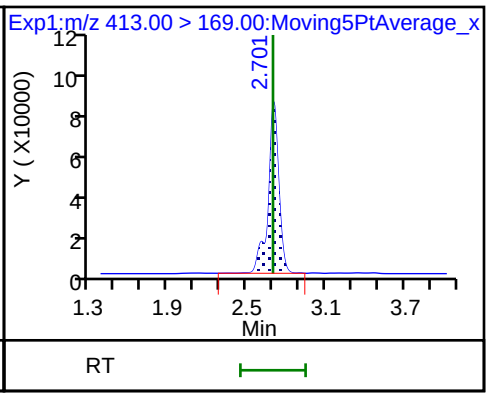
* 62 13C2-PFOA



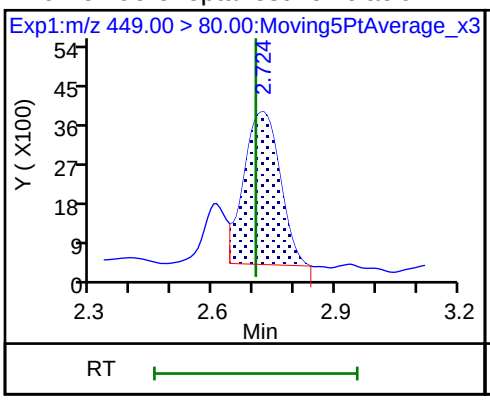
15 Perfluorooctanoic acid



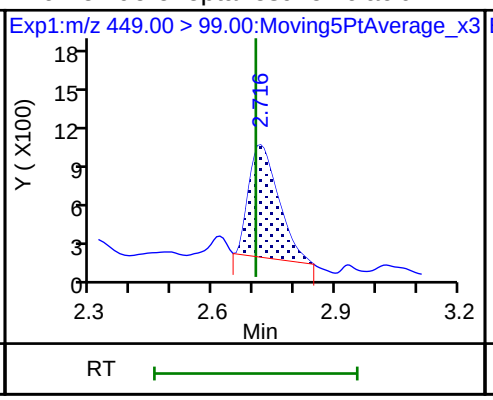
15 Perfluorooctanoic acid



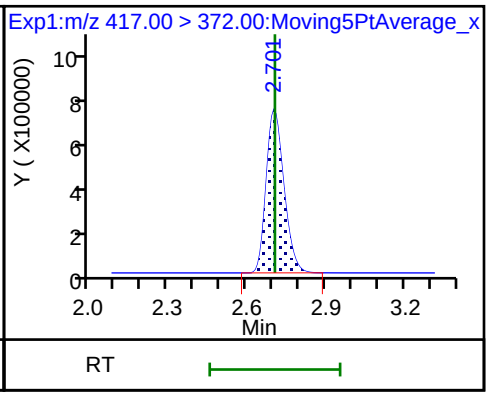
16 Perfluoroheptanesulfonic acid



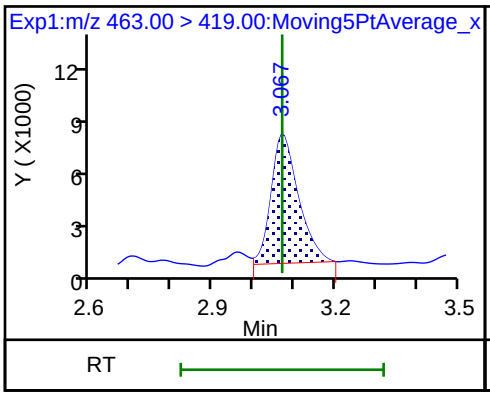
16 Perfluoroheptanesulfonic acid



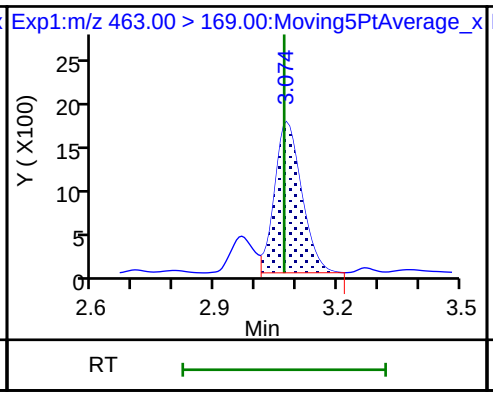
D 14 13C4 PFOA



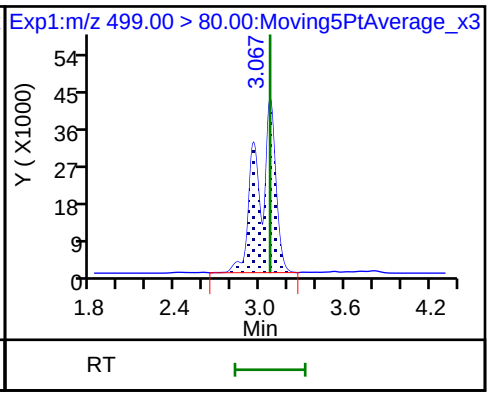
20 Perfluorononanoic acid



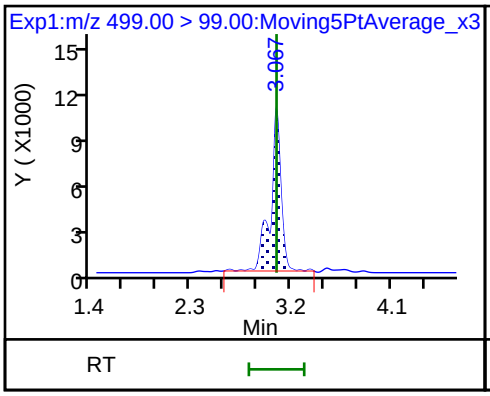
20 Perfluorononanoic acid



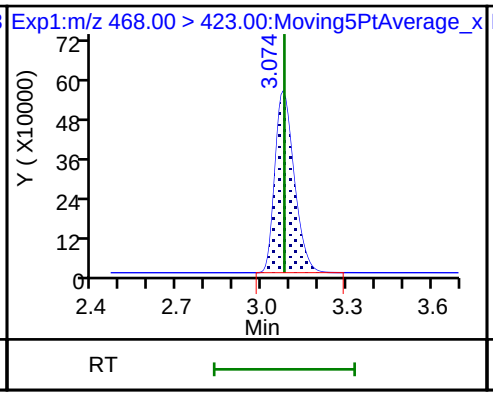
17 Perfluorooctane sulfonic acid



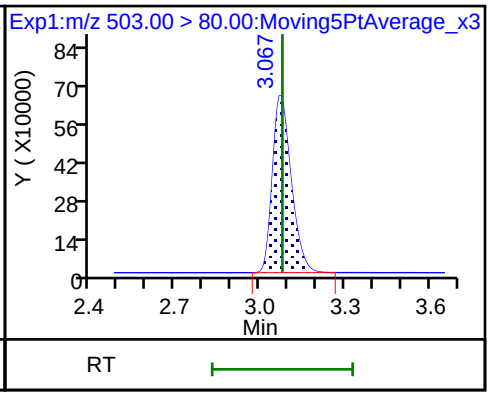
17 Perfluorooctane sulfonic acid



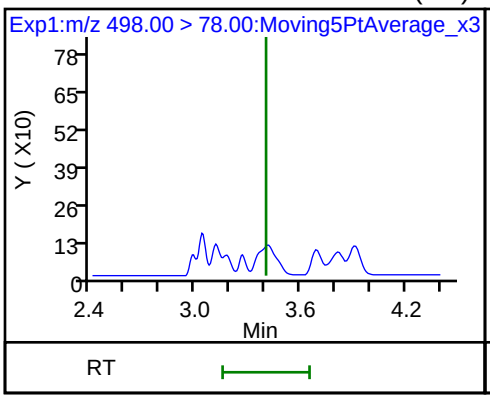
D 19 13C5 PFNA



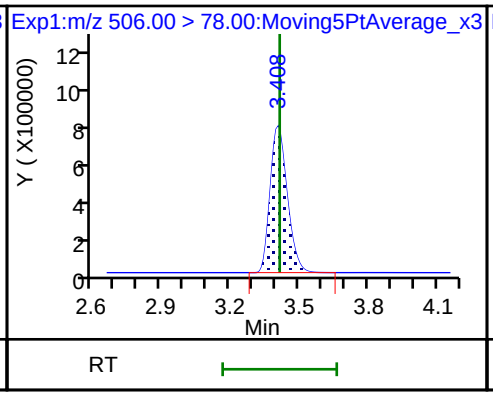
D 18 13C4 PFOS



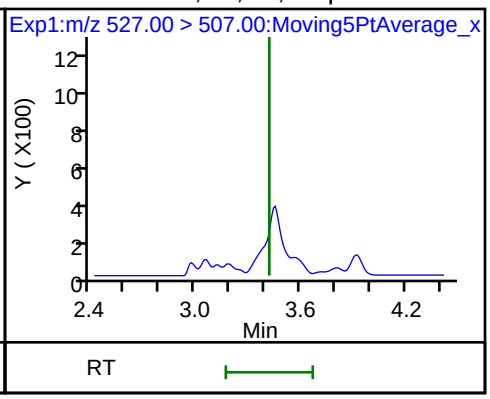
22 Perfluorooctane Sulfonamide (ND)



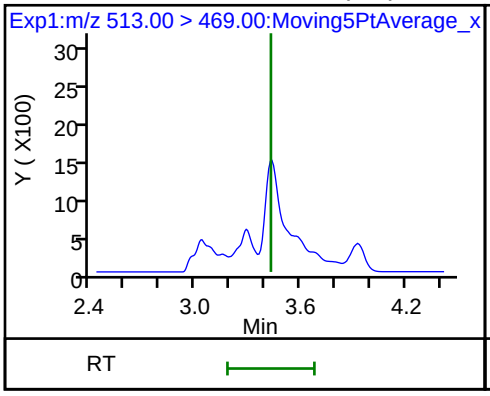
D 21 13C8 FOSA



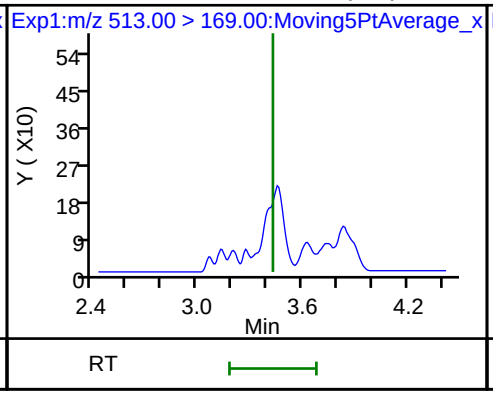
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



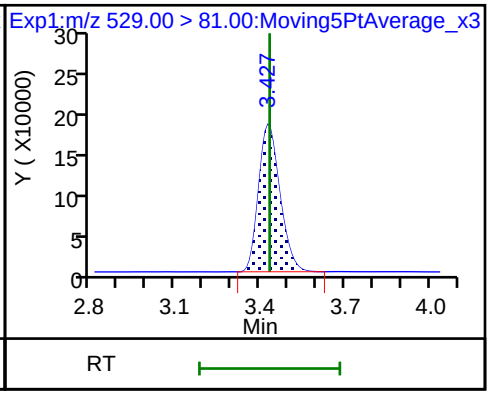
24 Perfluorodecanoic acid (ND)



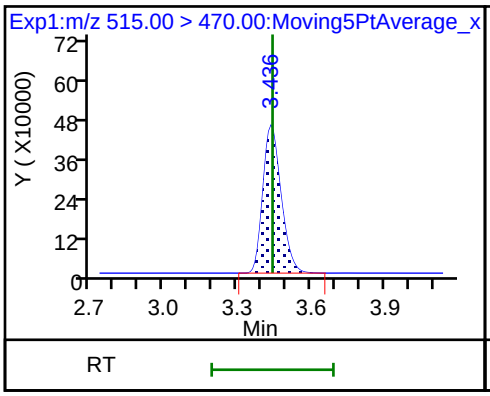
24 Perfluorodecanoic acid (ND)



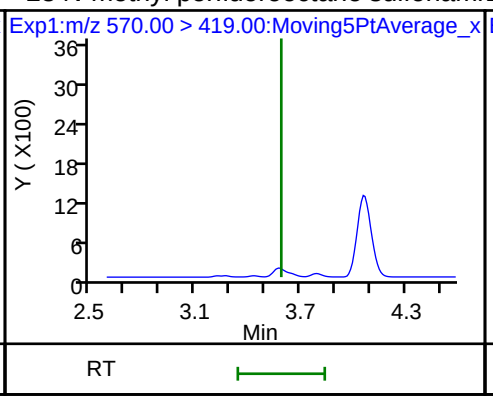
D 26 M2-8:2FTS



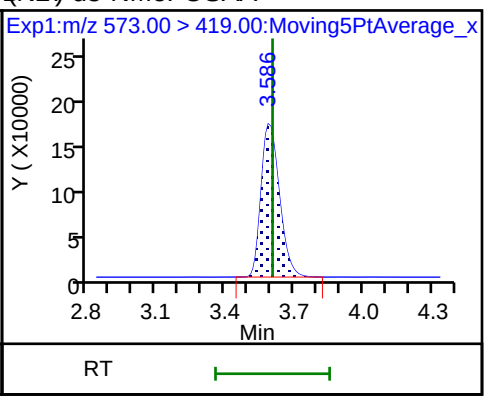
D 23 13C2 PFDA



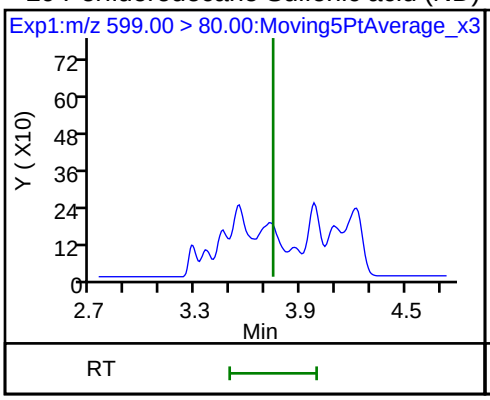
28 N-methyl perfluorooctane sulfonamid (ND)



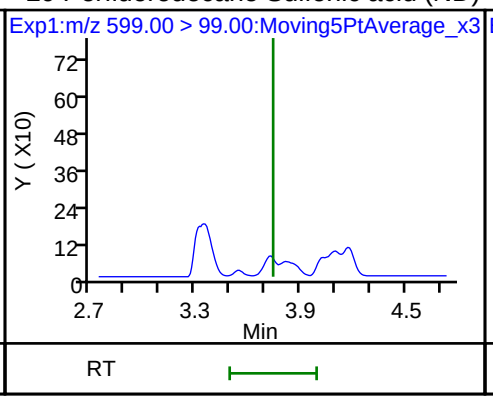
D 27 d3-NMeFOSAA



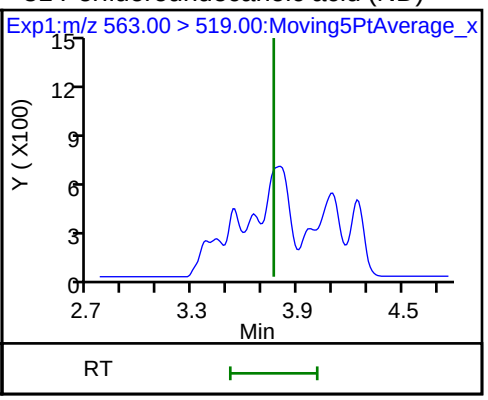
29 Perfluorodecane Sulfonic acid (ND)



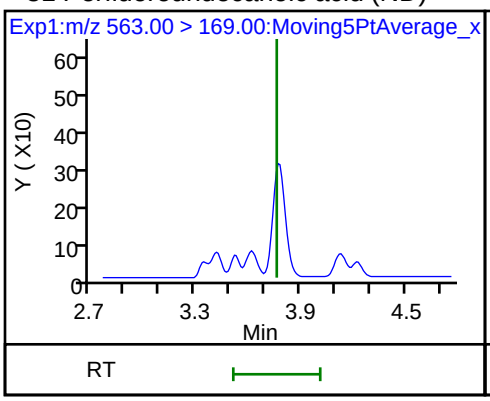
29 Perfluorodecane Sulfonic acid (ND)



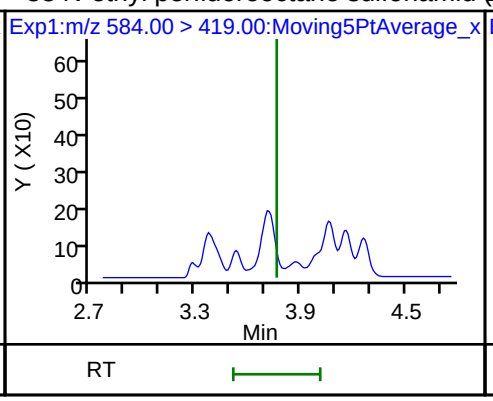
31 Perfluoroundecanoic acid (ND)



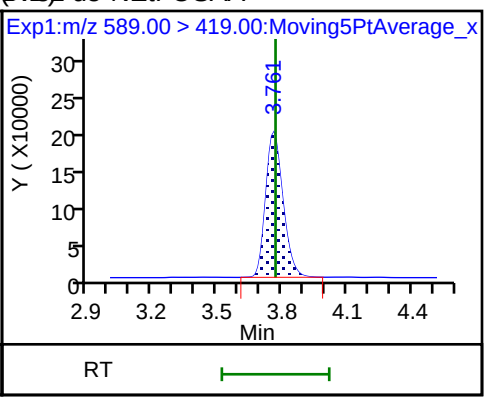
31 Perfluoroundecanoic acid (ND)



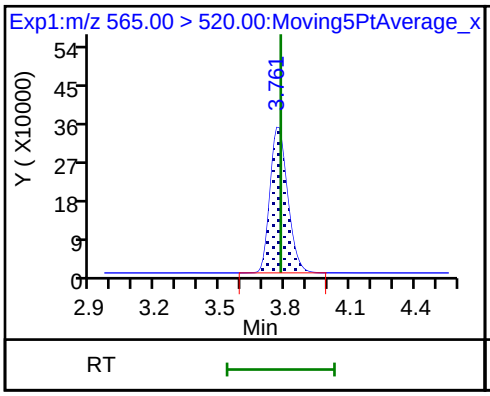
33 N-ethyl perfluorooctane sulfonamid (ND)



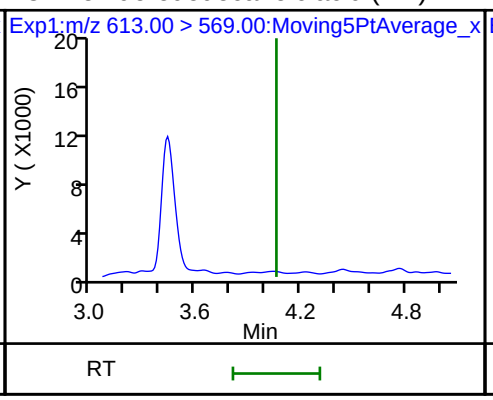
D 32 d5-NEtFOSAA



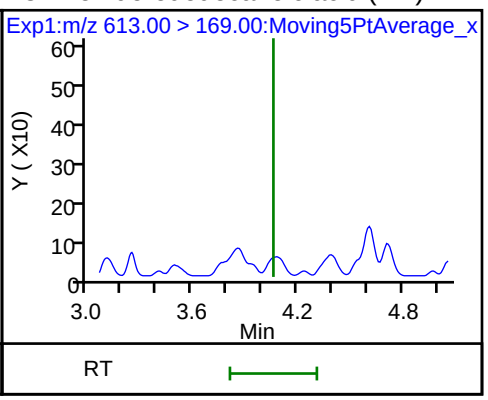
D 30 13C2 PFUnA



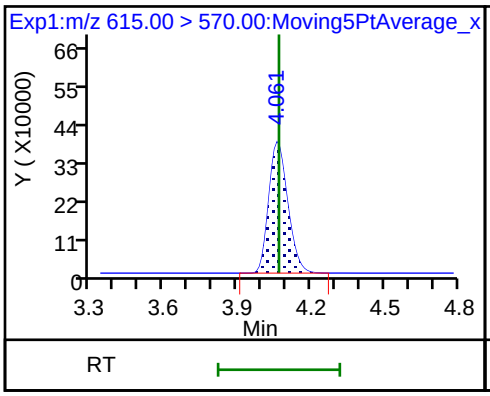
37 Perfluorododecanoic acid (ND)



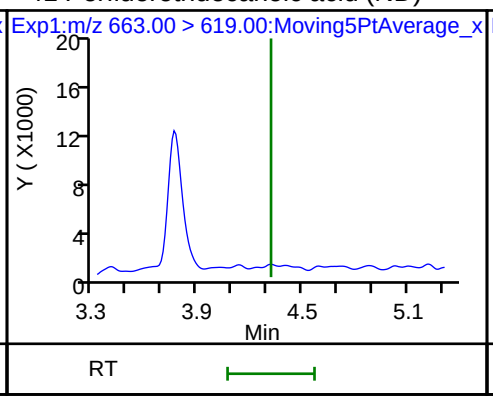
37 Perfluorododecanoic acid (ND)



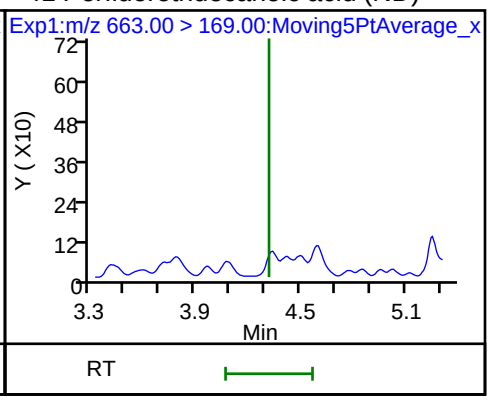
D 36 13C2 PFDoA



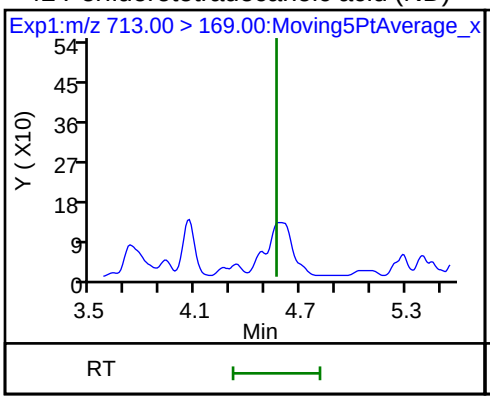
41 Perfluorotridecanoic acid (ND)



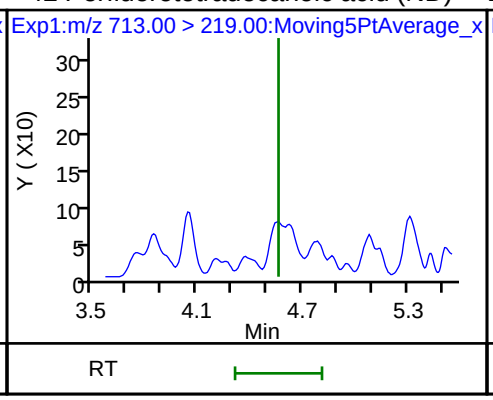
41 Perfluorotridecanoic acid (ND)



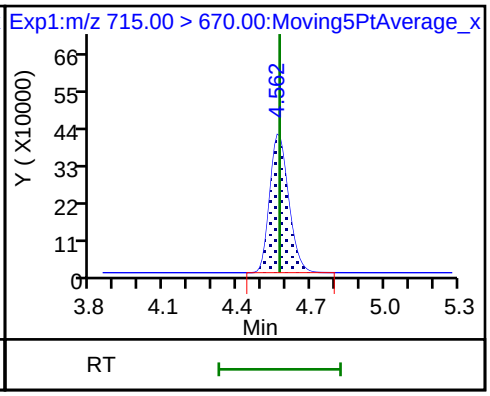
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110D (WG) | Lab Sample ID: 320-38630-9

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_065.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 14:30

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 234(mL) | Date Analyzed: 05/14/2018 19:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	5.3		2.1	0.37
2706-90-3	Perfluoropentanoic acid (PFPeA)	6.1		2.1	0.52
307-24-4	Perfluorohexanoic acid (PFHxA)	6.8		2.1	0.62
375-85-9	Perfluoroheptanoic acid (PFHpA)	5.8		2.1	0.27
335-67-1	Perfluorooctanoic acid (PFOA)	24	B	2.1	0.91
375-95-1	Perfluorononanoic acid (PFNA)	1.2	J	2.1	0.29
335-76-2	Perfluorodecanoic acid (PFDA)	0.39	J	2.1	0.33
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.1	1.2
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.1	0.59
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.4
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.31
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.8		2.1	0.21
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4.3	B	2.1	0.18
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.47	J	2.1	0.20
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	10	B	2.1	0.58
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.34
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.1	0.37
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		21	3.3
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		21	2.0
27619-97-2	6:2FTS	8.6	J B *	21	2.1
39108-34-4	8:2FTS	ND		21	2.1

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110D (WG) | Lab Sample ID: 320-38630-9

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_065.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 14:30

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 234(mL) | Date Analyzed: 05/14/2018 19:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	75		25-150
STL01893	13C5 PFPeA	92		25-150
STL00993	13C2 PFHxA	94		25-150
STL01892	13C4-PFHpA	100		25-150
STL00990	13C4 PFOA	103		25-150
STL00995	13C5 PFNA	102		25-150
STL00996	13C2 PFDA	93		25-150
STL00997	13C2 PFUnA	86		25-150
STL00998	13C2 PFDoA	93		25-150
STL02116	13C2-PFTeDA	114		25-150
STL02337	13C3-PFBS	88		25-150
STL00994	18O2 PFHxS	91		25-150
STL00991	13C4 PFOS	87		25-150
STL01056	13C8 FOSA	72		25-150
STL02118	d3-NMeFOSAA	102		25-150
STL02117	d5-NEtFOSAA	100		25-150
STL02279	M2-6:2FTS	114		25-150
STL02280	M2-8:2FTS	97		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_065.d
Lims ID: 320-38630-A-9-A
Client ID: GC-MW-110D (WG)
Sample Type: Client
Inject. Date: 14-May-2018 19:57:40 ALS Bottle#: 47 Worklist Smp#: 24
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-9-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:10:01 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:07:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.452	0.006	1.000	4936069	1.88		75.4	37765	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.458	1.458	0.0	1.000	227870	0.1242			97.8	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.728	0.002	0.562	3742986	2.31		92.3	45321	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.729	0.001	1.000	260649	0.1431			77.8	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.764	0.002	1.000	78460	2.05		88.2	255	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.765	0.001	1.000	229963	0.0883			136	
298.90 > 99.00	1.766	1.765	0.001	1.000	102254		2.25(1.25-3.74)		195	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.014	0.002	1.000	3992682	2.35		94.2	79000	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.015	0.001	1.000	265534	0.1594			165	
313.00 > 119.00	2.016	2.015	0.001	1.000	27368		9.70(5.03-15.10)		257	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.345	0.002	1.000	4085269	2.51		100	94818	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.358	0.002	1.000	4666322	2.16		91.3	96095	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.359	-0.012	1.000	234911	0.1355			227	
363.00 > 169.00	2.347	2.359	-0.012	1.000	92984		2.53(1.13-3.40)		591	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.373	-0.013	1.000	224103	0.1008			269	
399.00 > 99.00	2.360	2.373	-0.013	1.000	70137		3.20(1.50-4.49)		185	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.682	0.001	1.000	868953	2.71		114	7474	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.000	123533	0.2006			927	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.704	0.001	1.000	3927561	2.57		103	75115	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.713	-0.008		4046215	2.50			72113	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.713	-0.008	1.000	1052030	0.5573			476	
413.00 > 169.00	2.705	2.713	-0.008	1.000	577804		1.82(0.84-2.52)		1862	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.720	-0.007	1.000	18899	0.0109			71.1	
449.00 > 99.00	2.720	2.720	0.0	1.003	3888		4.86(1.94-5.82)		28.2	
D 18 13C4 PFOS										
503.00 > 80.00	3.077	3.073	0.004	1.000	3130062	2.08		86.9	21780	
D 19 13C5 PFNA										
468.00 > 423.00	3.077	3.081	-0.004	1.000	3248490	2.55		102	86892	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.077	3.082	-0.005	1.000	357771	0.2447			1097	
499.00 > 99.00	3.071	3.082	-0.011	0.998	67384		5.31(2.31-6.93)		437	
20 Perfluorononanoic acid										
463.00 > 419.00	3.077	3.082	-0.005	1.000	37256	0.0272			46.6	
463.00 > 169.00	3.071	3.082	-0.011	0.998	8801		4.23(1.90-5.69)		184	
D 21 13C8 FOSA										
506.00 > 78.00	3.405	3.407	-0.002	1.000	3932437	1.80		72.1	38254	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.405	3.418	-0.013	1.000	4151	0.002678			75.5	
D 26 M2-8:2FTS										
529.00 > 81.00	3.433	3.435	-0.002	1.000	968763	2.32		96.7	14227	
D 23 13C2 PFDA										
515.00 > 470.00	3.442	3.444	-0.002	1.000	2563553	2.34		93.5	40716	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.442	3.446	-0.004	1.000	9616	0.009164			42.6	R
513.00 > 169.00	3.423	3.446	-0.023	0.995	1348		7.13(2.36-7.09)		36.9	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.594	3.596	-0.002	1.000	1266382	2.55		102	25683	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.759	3.771	-0.012	1.000	1329822	2.51		100	6266	
D 30 13C2 PFUnA										
565.00 > 520.00	3.769	3.771	-0.002	1.000	1969051	2.14		85.8	43774	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.769	3.773	-0.004	1.003	1952	0.003895			39.9	
D 36 13C2 PFDoA										
615.00 > 570.00	4.058	4.071	-0.013	1.000	2229329	2.33		93.0	19219	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.561	4.574	-0.013	1.000	2980771	2.85		114	15535	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:10:10 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_065.d

Injection Date: 14-May-2018 19:57:40 Instrument ID: A8_N

Lims ID: 320-38630-A-9-A Lab Sample ID: 320-38630-9

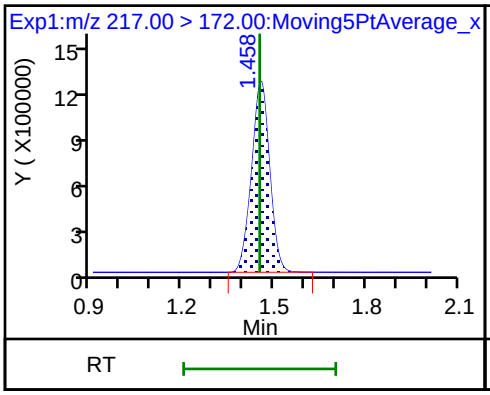
Client ID: GC-MW-110D (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 47 Worklist Smp#: 24

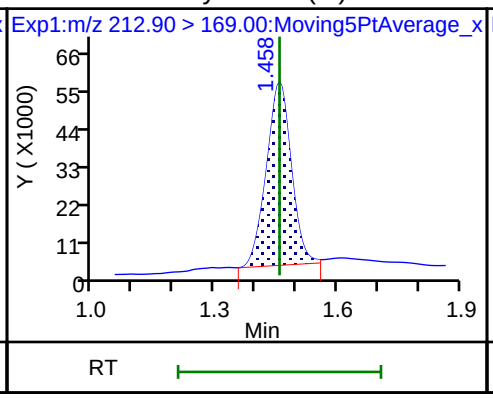
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

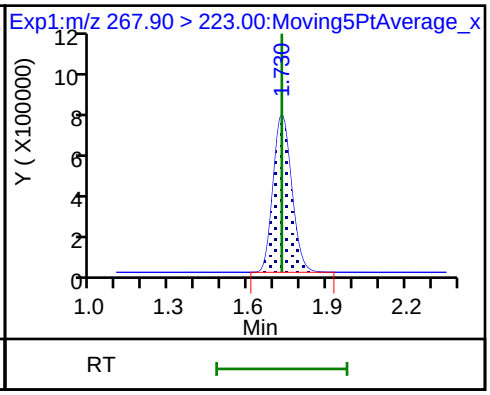
D 1 13C4 PFBA



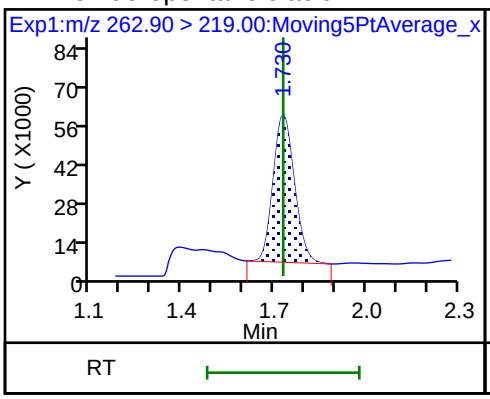
2 Perfluorobutyric acid (M)



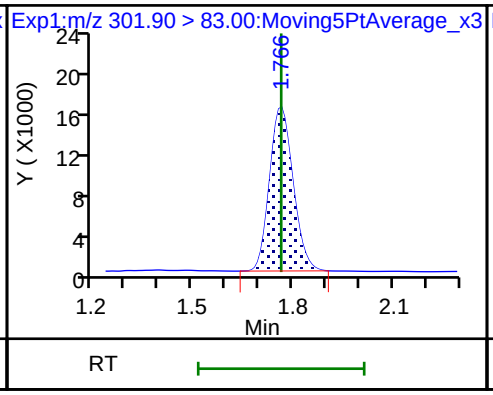
D 3 13C5-PFPeA



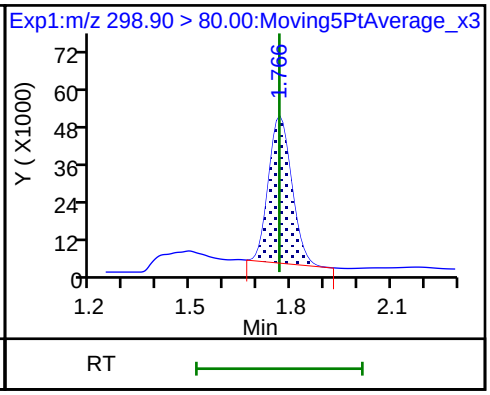
4 Perfluoropentanoic acid



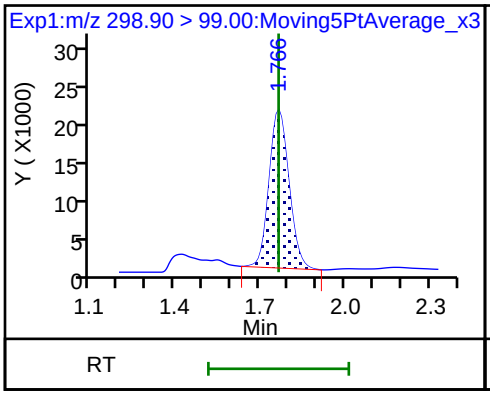
D 47 13C3-PFBS



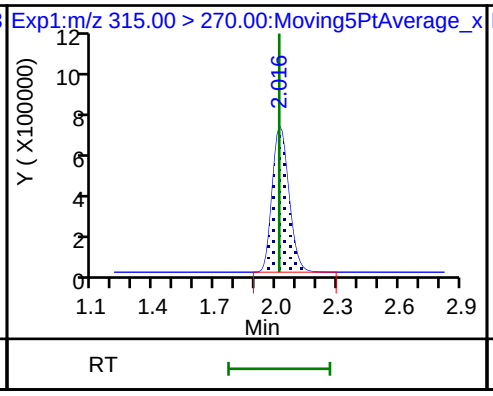
5 Perfluorobutanesulfonic acid



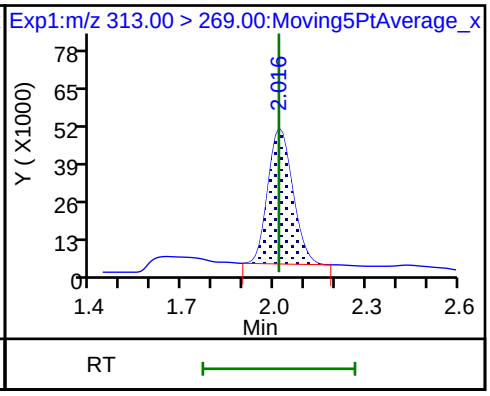
5 Perfluorobutanesulfonic acid



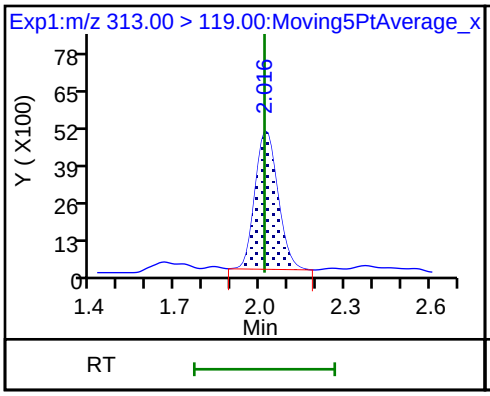
D 7 13C2 PFHxA



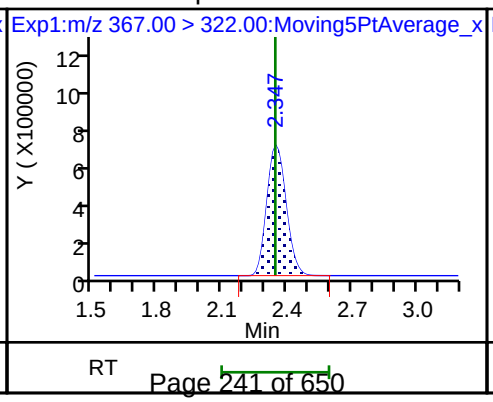
6 Perfluorohexanoic acid



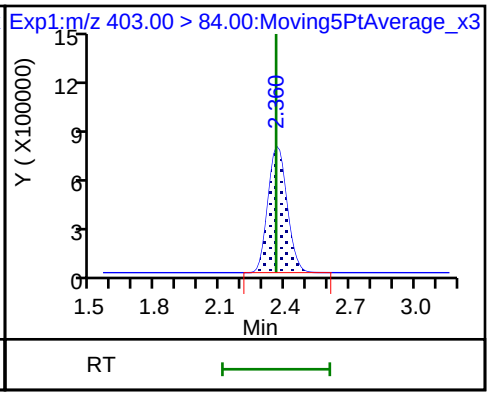
6 Perfluorohexanoic acid



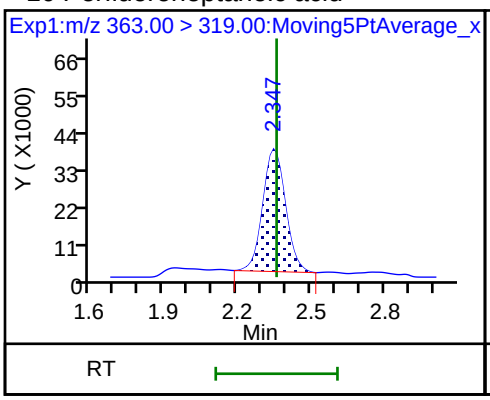
D 9 13C4-PFHpA



D 11 18O2 PFHxS



10 Perfluoroheptanoic acid



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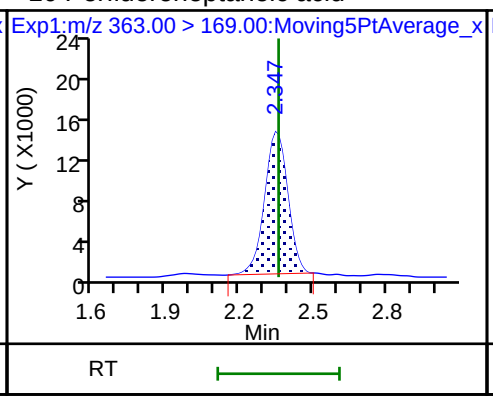
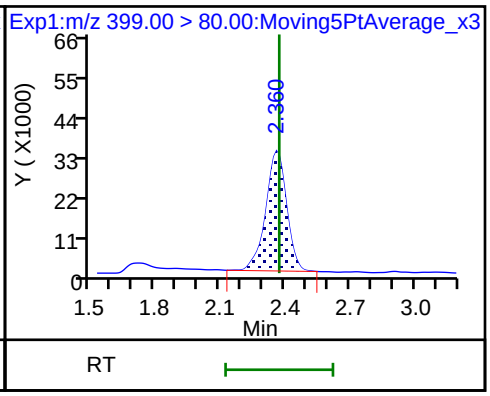
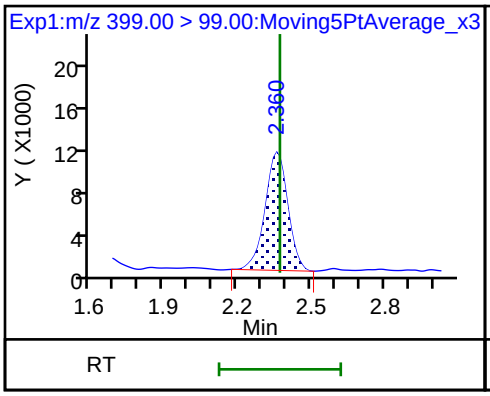


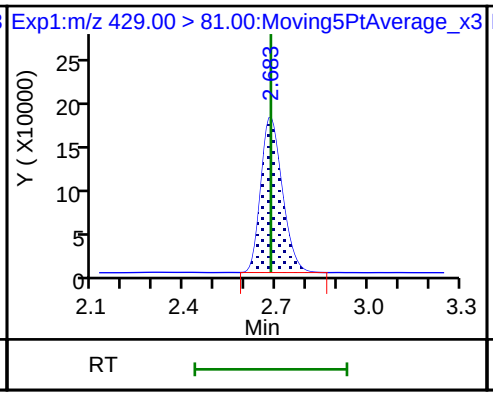
8 Perfluorohexanesulfonic acid



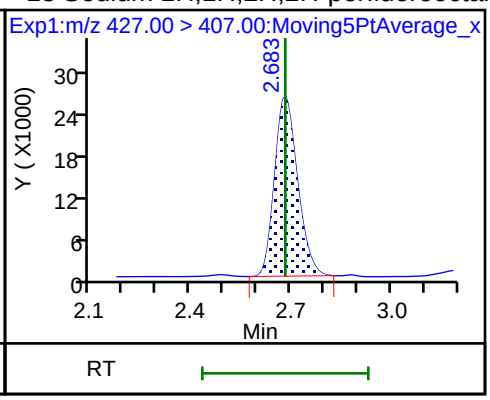
8 Perfluorohexanesulfonic acid



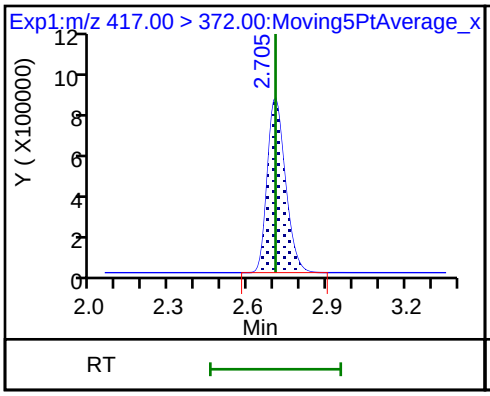
D 12 M2-6:2FTS



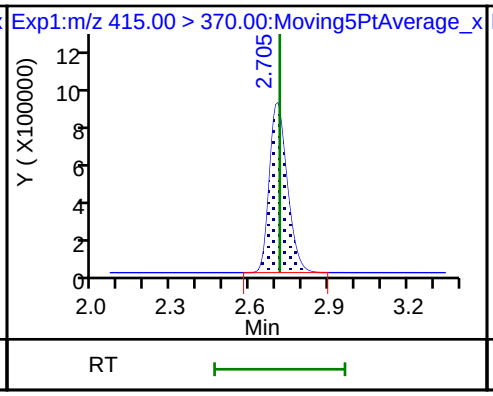
13 Sodium 1H,1H,2H,2H-perfluorooctane



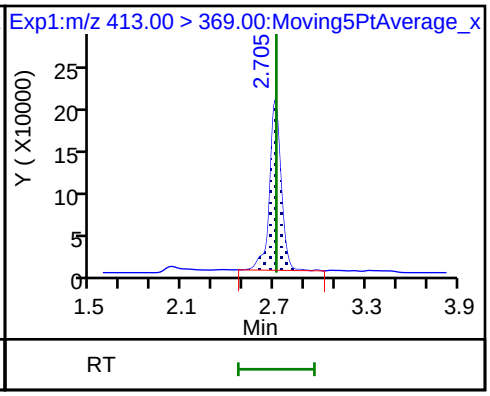
D 14 13C4 PFOA



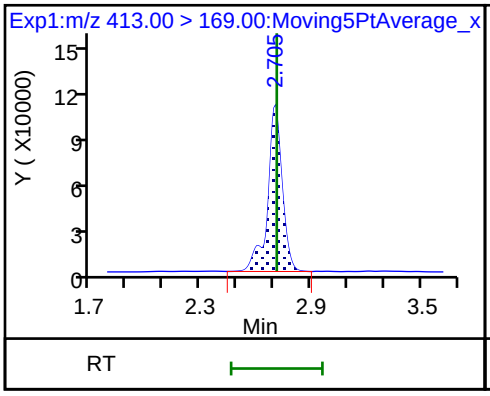
* 62 13C2-PFOA



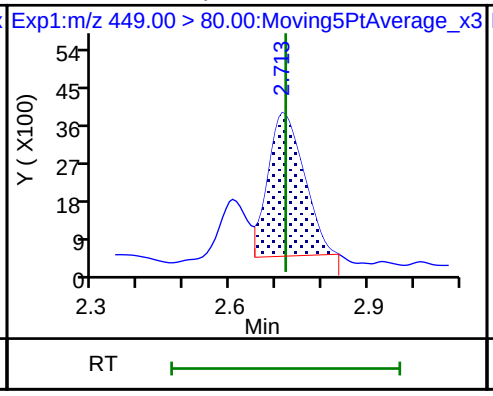
15 Perfluorooctanoic acid



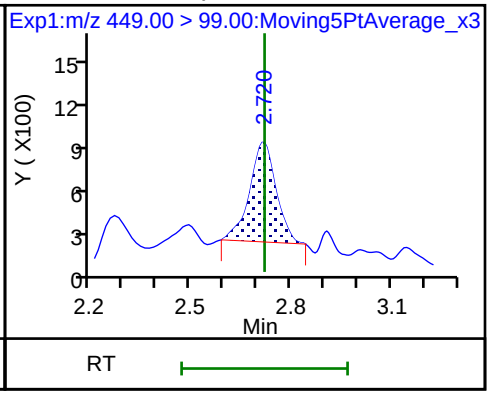
15 Perfluorooctanoic acid



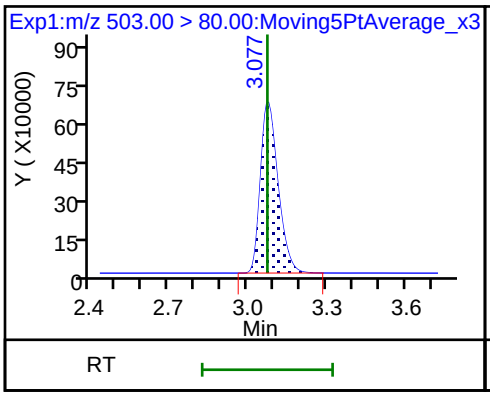
16 Perfluoroheptanesulfonic acid



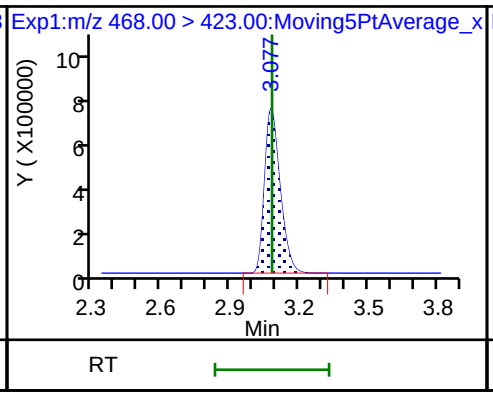
16 Perfluoroheptanesulfonic acid



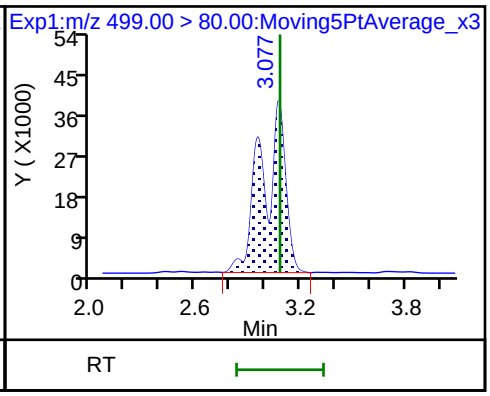
D 18 13C4 PFOS



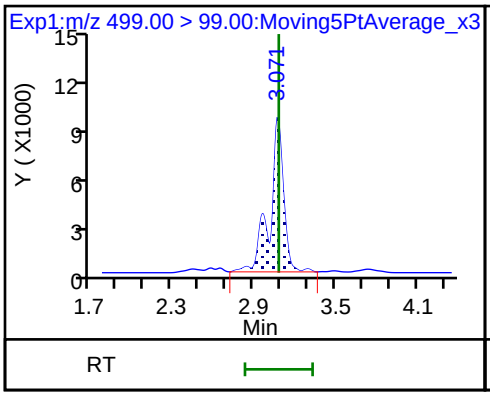
D 19 13C5 PFNA



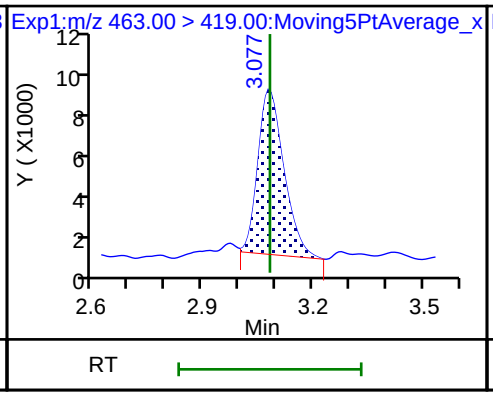
17 Perfluorooctane sulfonic acid



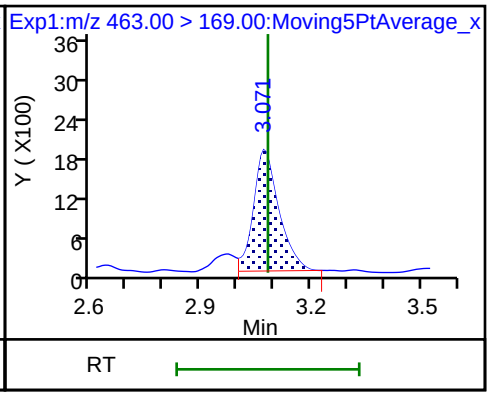
17 Perfluorooctane sulfonic acid



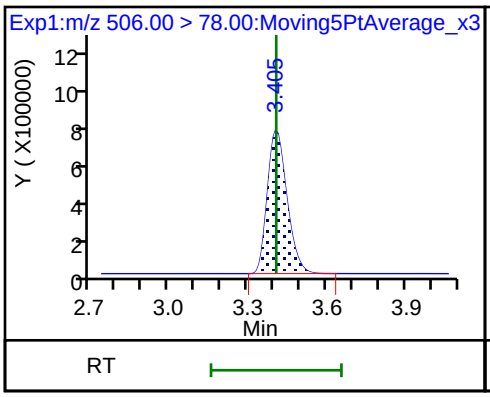
20 Perfluorononanoic acid



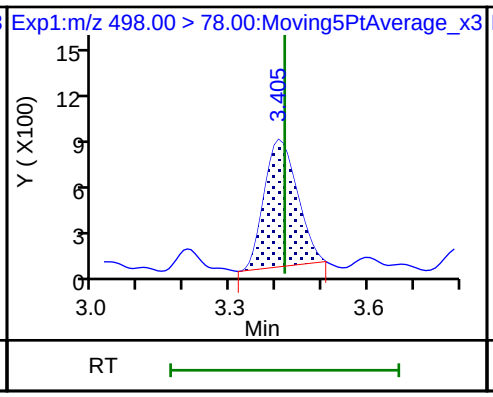
20 Perfluorononanoic acid



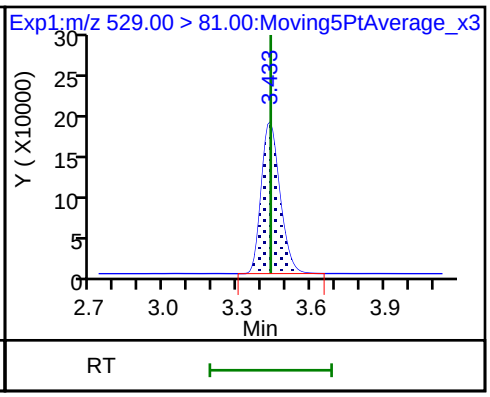
D 21 13C8 FOSA



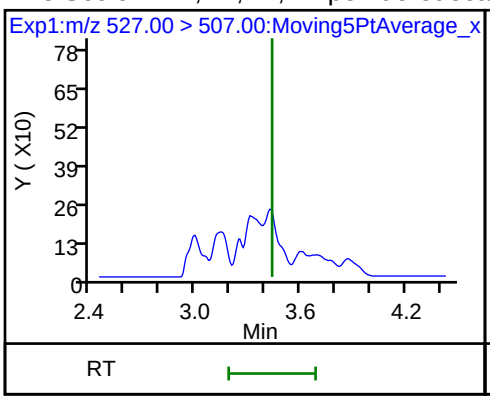
22 Perfluorooctane Sulfonamide



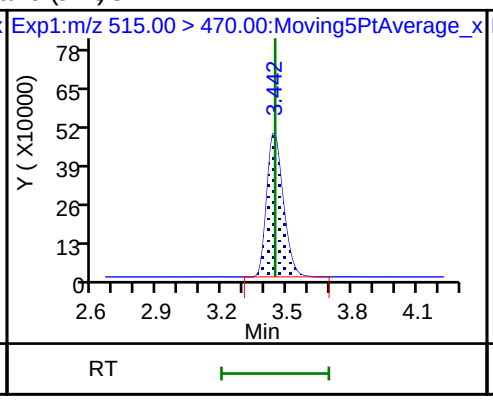
D 26 M2-8:2FTS



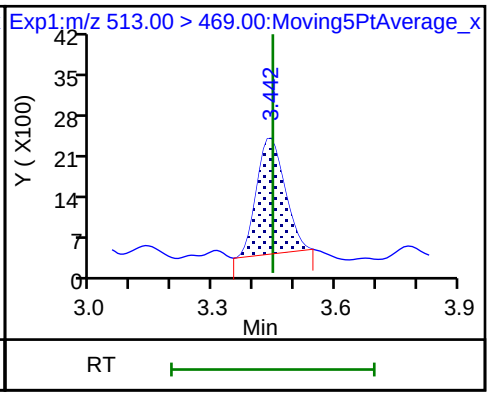
25 Sodium 1H,1H,2H,2H-perfluorodecane(3NL)



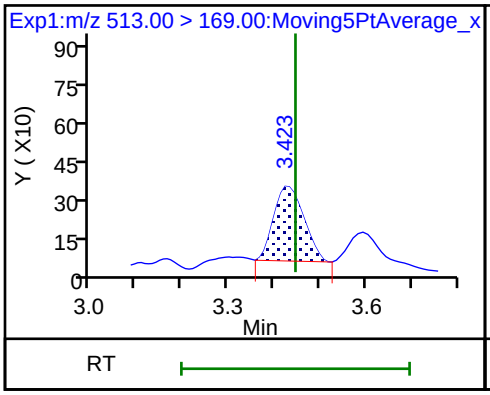
D 23 13C2 PFDA



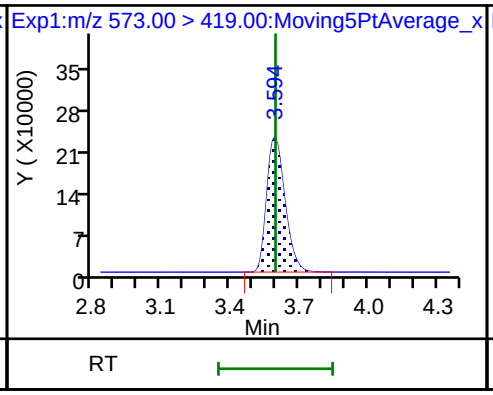
24 Perfluorodecanoic acid



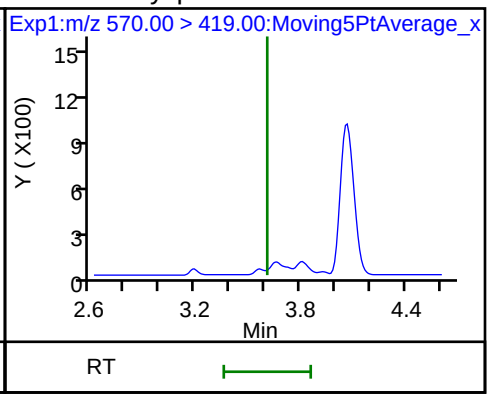
24 Perfluorodecanoic acid



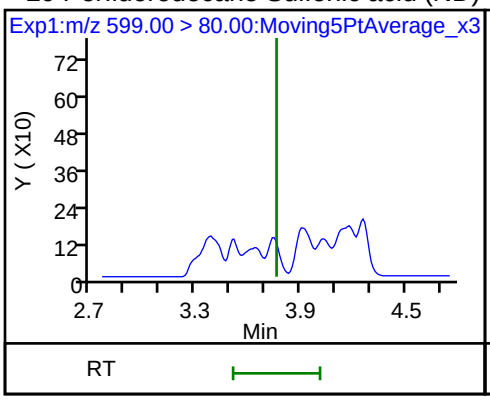
D 27 d3-NMeFOSAA



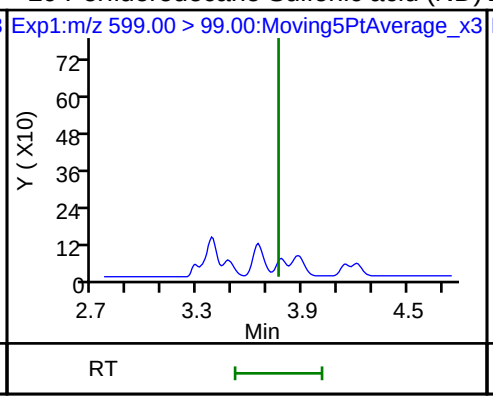
28 N-methyl perfluorooctane sulfonami (ND)



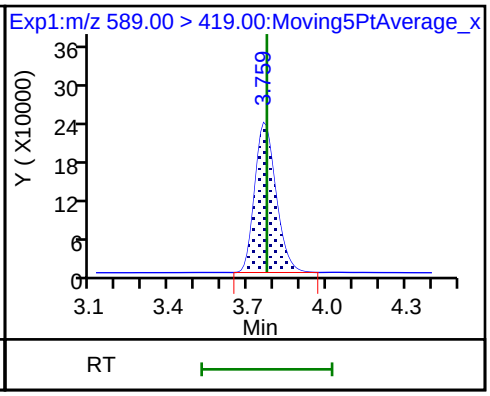
29 Perfluorodecane Sulfonic acid (ND)



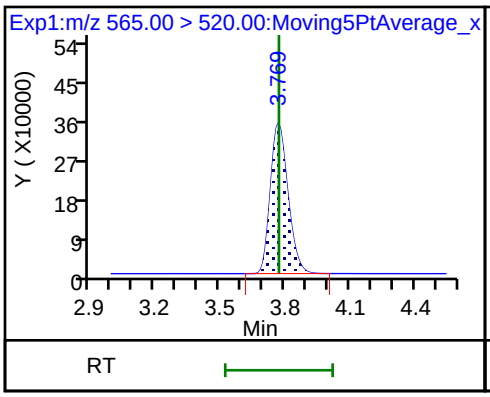
29 Perfluorodecane Sulfonic acid (ND)



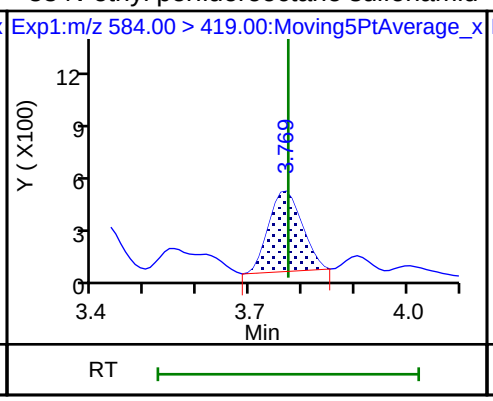
D 32 d5-NEtFOSAA



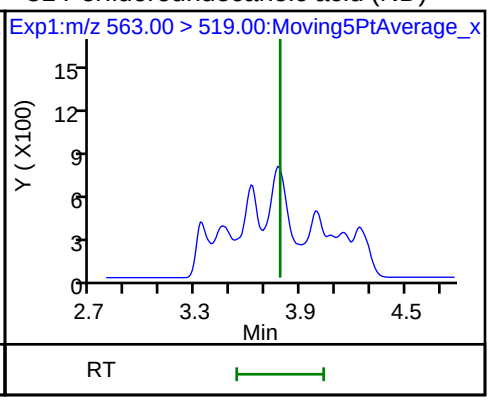
D 30 13C2 PFUnA



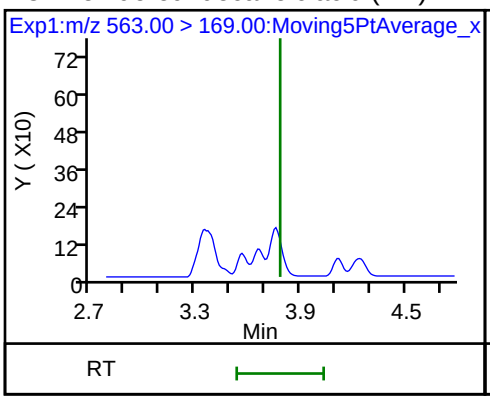
33 N-ethyl perfluorooctane sulfonamid



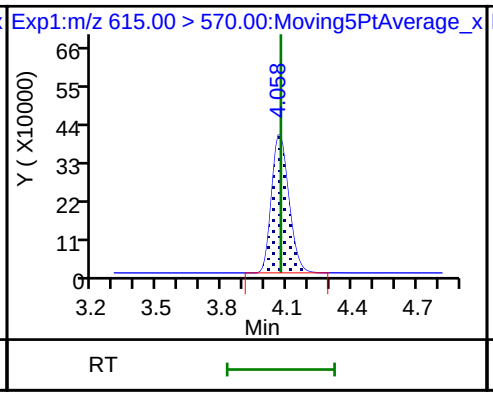
31 Perfluoroundecanoic acid (ND)



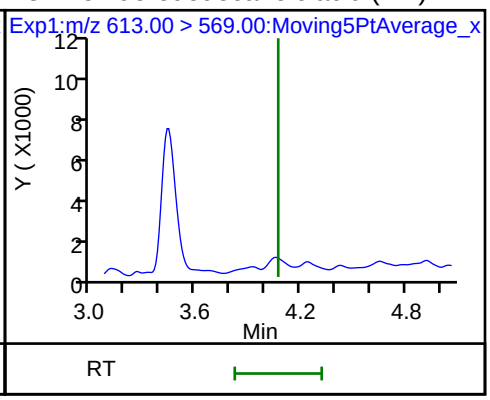
31 Perfluoroundecanoic acid (ND)



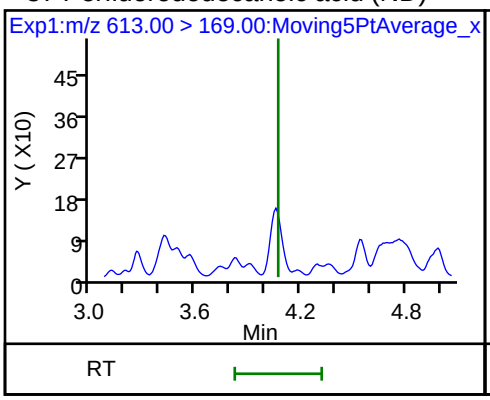
D 36 13C2 PFDoA



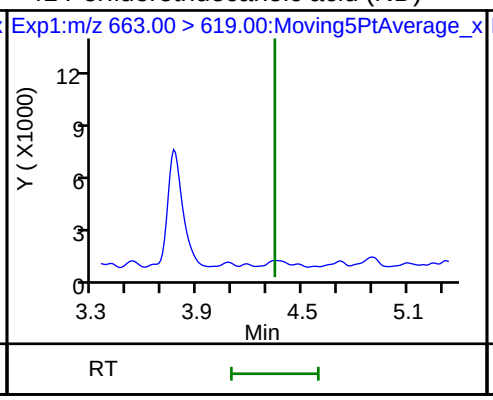
37 Perfluorododecanoic acid (ND)



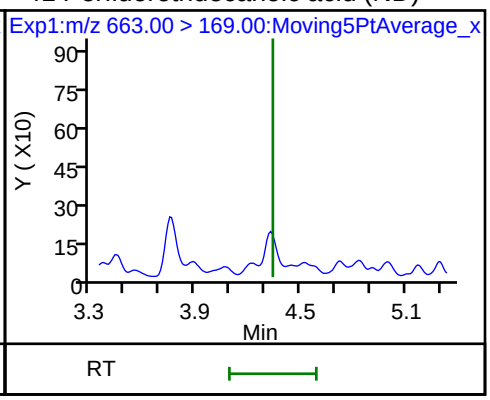
37 Perfluorododecanoic acid (ND)



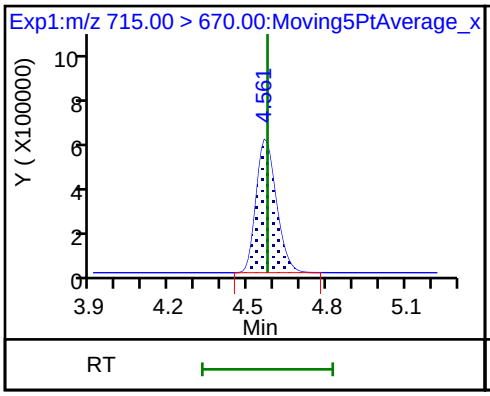
41 Perfluorotridecanoic acid (ND)



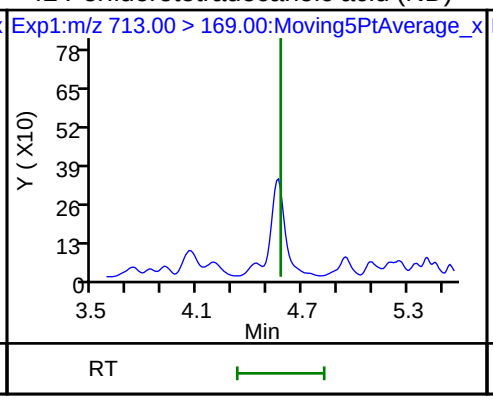
41 Perfluorotridecanoic acid (ND)



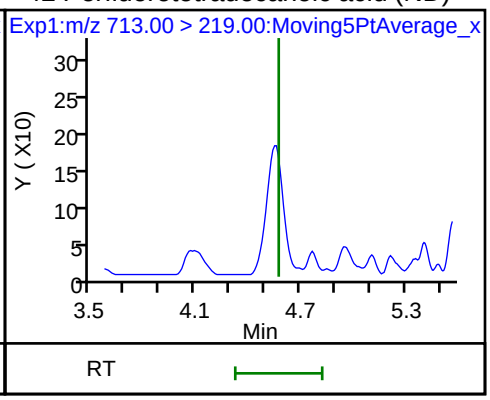
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

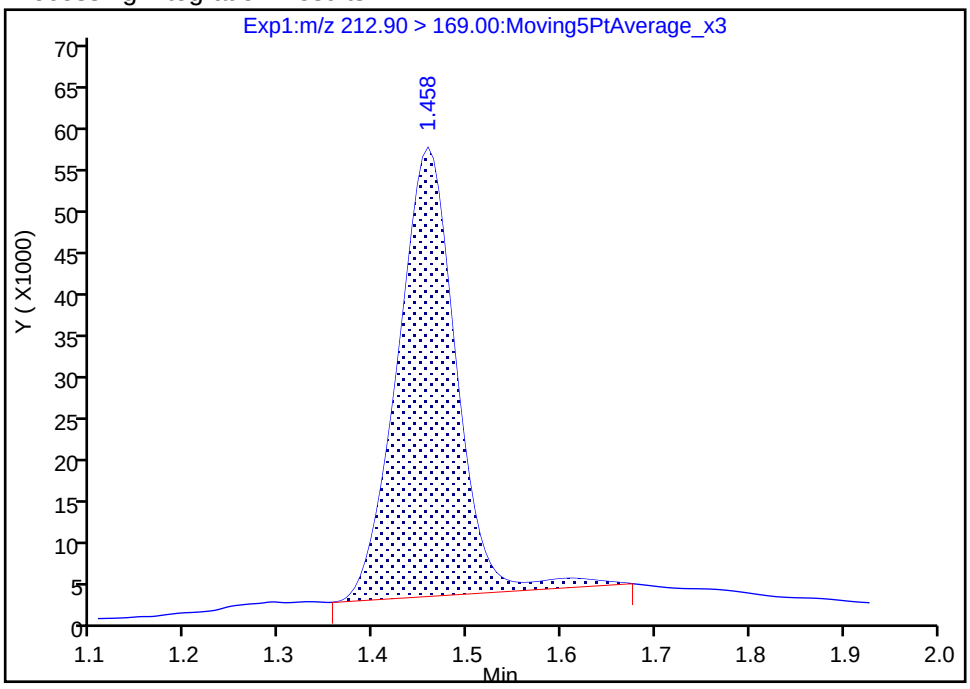
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_065.d				
Injection Date:	14-May-2018 19:57:40	Instrument ID:	A8_N		
Lims ID:	320-38630-A-9-A	Lab Sample ID:	320-38630-9		
Client ID:	GC-MW-110D (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	47	Worklist Smp#:	24
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

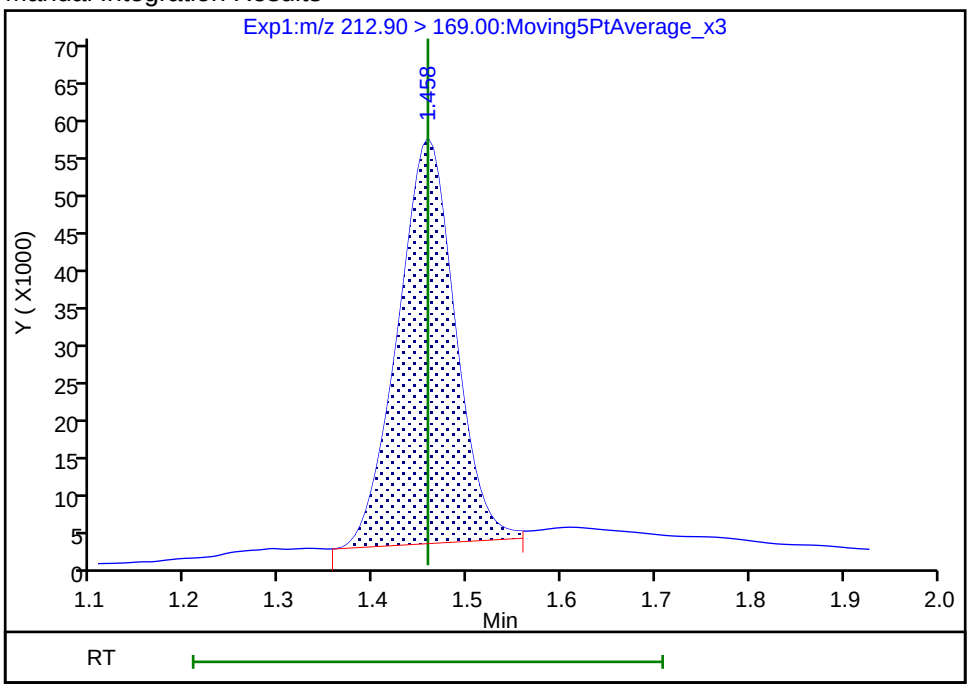
Processing Integration Results

RT: 1.46
Area: 233305
Amount: 0.127181
Amount Units: ng/ml



Manual Integration Results

RT: 1.46
Area: 227870
Amount: 0.124218
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:07:31

Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-2 (WG) RE | Lab Sample ID: 320-38630-10 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_028.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 256.8(mL) | Date Analyzed: 05/13/2018 19:01

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*27*	*H*	*1.9*	*0.83*
27619-97-2	*6:2FTS*	*3.1*	*J H B*	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	101		25-150
STL02279	M2-6:2FTS	106		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_028.d
Lims ID: 320-38630-B-10-A
Client ID: GC-MW-2 (WG)
Sample Type: Client
Inject. Date: 13-May-2018 19:01:47 ALS Bottle#: 21 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-10-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:23 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:43:02

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.452	0.006	1.000	422066	0.2656			264	
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.458	0.0	1.000	4242875	1.83		73.3	40679	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.728	0.001	1.000	798522	0.5046			232	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.729	0.0	0.562	3348005	2.27		90.9	39749	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.765	0.001	1.000	462957	0.1881			270	
298.90 > 99.00	1.765	1.765	0.001	1.000	203601		2.27(1.25-3.74)		450	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.766	-0.001	1.000	72510	2.17		93.4	293	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.014	0.001	1.000	770450	0.5427			422	
313.00 > 119.00	2.015	2.014	0.001	1.000	73308		10.51(5.03-15.10)		945	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.015	0.0	1.000	3537910	2.28		91.3	70679	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.346	2.345	0.001	1.000	490740	0.3349			376	
363.00 > 169.00	2.346	2.345	0.001	1.000	191892		2.56(1.13-3.40)		1199	
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.346	0.0	1.000	3388154	2.37		94.9	78962	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.359	2.358	0.001	1.000	174271	0.0845			203	
399.00 > 99.00	2.359	2.358	0.001	1.000	61388		2.84(1.50-4.49)		172	
D 11 18O2 PFHxS										
403.00 > 84.00	2.359	2.359	0.0	1.000	4295954	2.30		97.4	101468	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.675	2.674	0.001	1.000	39335	0.0804			366	
D 12 M2-6:2FTS										
429.00 > 81.00	2.675	2.683	-0.008	1.000	700859	2.52		106	5708	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.697	0.008		3584354	2.50			85717	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.697	0.008	1.000	1112786	0.7035			500	
413.00 > 169.00	2.705	2.697	0.008	1.000	604064		1.84(0.84-2.52)		2636	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.705	2.704	0.001	1.000	27126	0.0166			119	
449.00 > 99.00	2.713	2.704	0.009	1.003	6625		4.09(1.94-5.82)		78.3	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.706	-0.001	1.000	3420737	2.53		101	93281	
20 Perfluorononanoic acid										
463.00 > 419.00	3.075	3.069	0.006	1.000	90884	0.0822			124	
463.00 > 169.00	3.075	3.069	0.006	1.000	23624		3.85(1.90-5.69)		376	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.075	3.069	0.006	1.002	549428	0.4011			1405	
499.00 > 99.00	3.075	3.069	0.006	1.002	97800		5.62(2.31-6.93)		702	
D 19 13C5 PFNA										
468.00 > 423.00	3.075	3.078	-0.003	1.000	2715283	2.38		95.4	52961	
D 18 13C4 PFOS										
503.00 > 80.00	3.068	3.078	-0.010	1.000	2985548	2.23		93.4	18581	
D 21 13C8 FOSA										
506.00 > 78.00	3.410	3.414	-0.004	1.000	4212563	2.22		89.0	45058	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.447	3.430	0.017	1.003	9714	0.0100			36.2	
513.00 > 169.00	3.438	3.430	0.008	1.000	1548		6.28(2.36-7.09)		30.9	
D 26 M2-8:2FTS										
529.00 > 81.00	3.428	3.433	-0.005	1.000	922857	2.52		105	7997	
D 23 13C2 PFDA										
515.00 > 470.00	3.438	3.442	-0.004	1.000	2364759	2.38		95.2	42029	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.588	3.605	-0.017	1.000	942718	2.16		86.5	19258	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.763	3.769	-0.006	1.000	1064534	2.23		89.3	3200	
D 30 13C2 PFUnA										
565.00 > 520.00	3.763	3.780	-0.017	1.000	1939835	2.39		95.5	43920	
D 36 13C2 PFDoA										
615.00 > 570.00	4.061	4.069	-0.008	1.000	1920169	2.27		90.6	20963	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2093404	2.27		90.7	15718	

Report Date: 14-May-2018 10:44:29 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_028.d

Injection Date: 13-May-2018 19:01:47 Instrument ID: A8_N

Lims ID: 320-38630-B-10-A Lab Sample ID: 320-38630-10

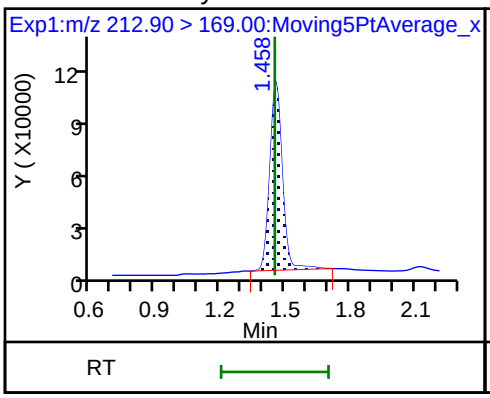
Client ID: GC-MW-2 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 21 Worklist Smp#: 15

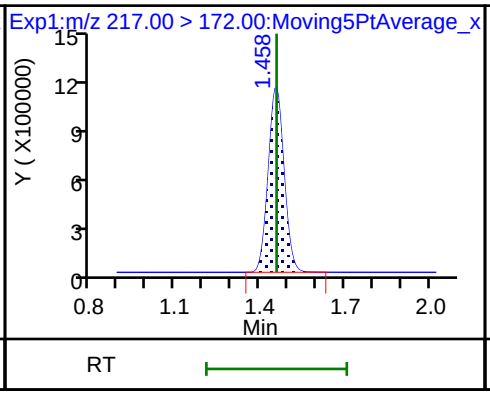
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

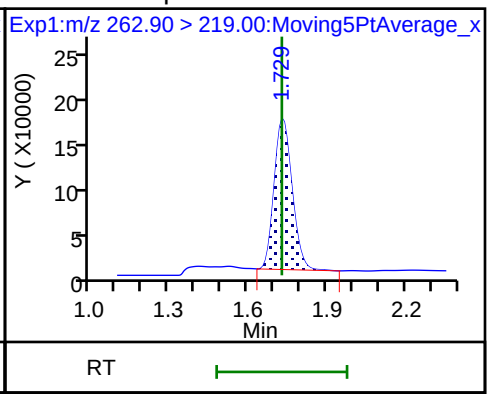
2 Perfluorobutyric acid



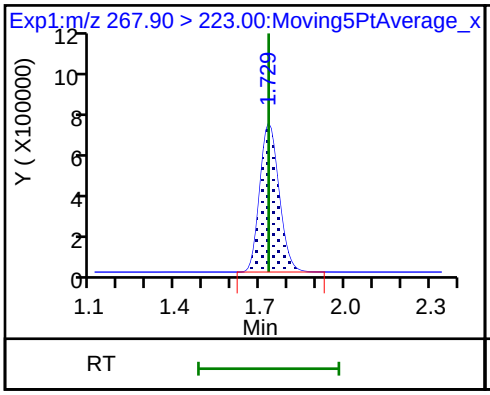
D 1 13C4 PFBA



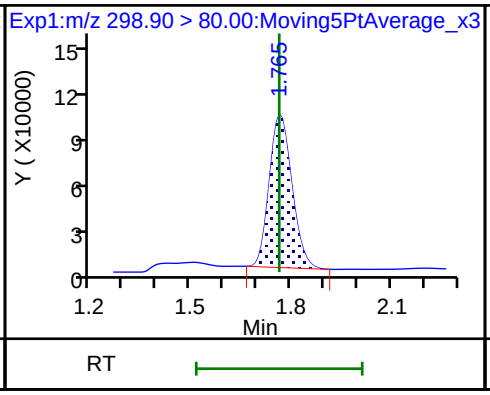
4 Perfluoropentanoic acid



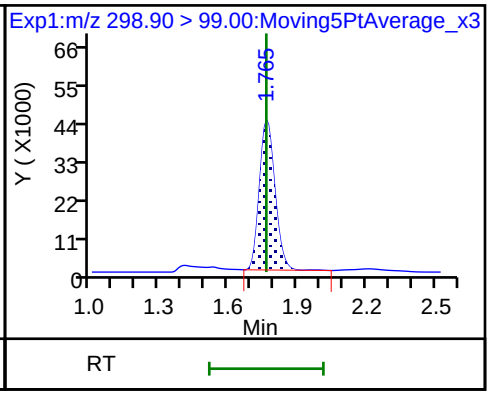
D 3 13C5-PFPeA



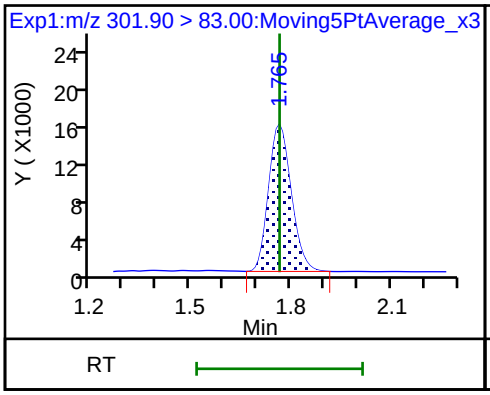
5 Perfluorobutanesulfonic acid



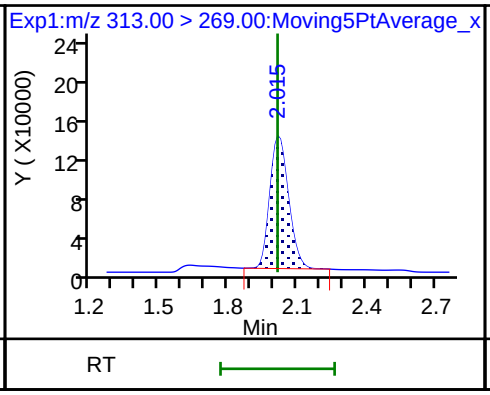
5 Perfluorobutanesulfonic acid



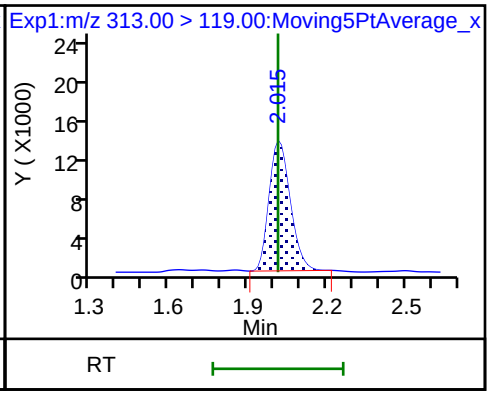
D 47 13C3-PFBS



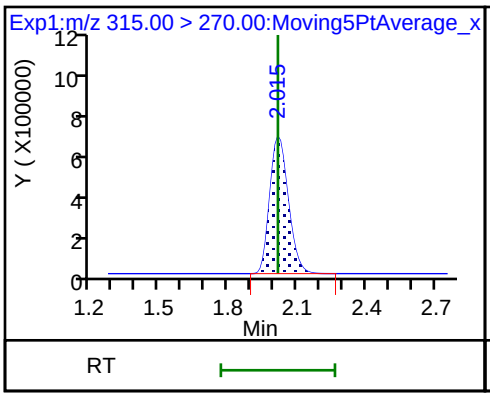
6 Perfluorohexanoic acid



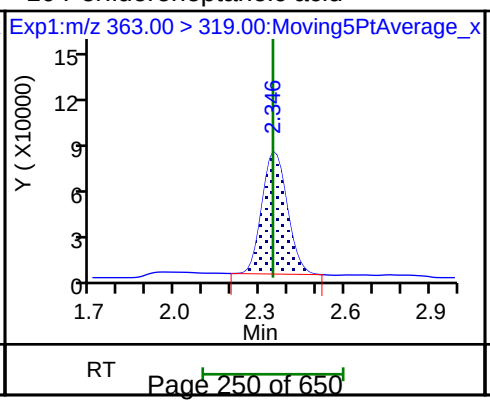
6 Perfluorohexanoic acid



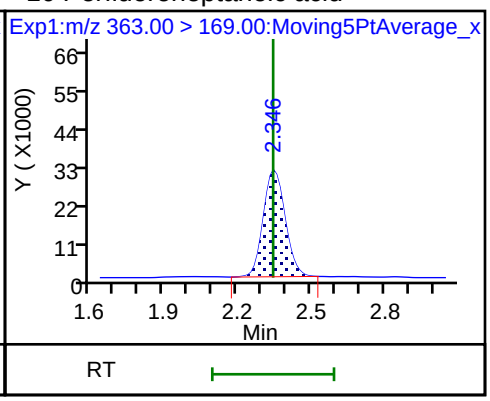
D 7 13C2 PFHxA



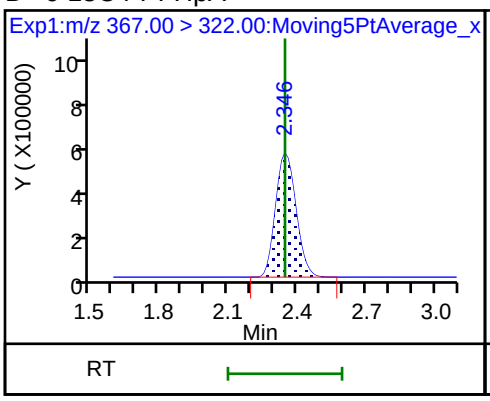
10 Perfluoroheptanoic acid



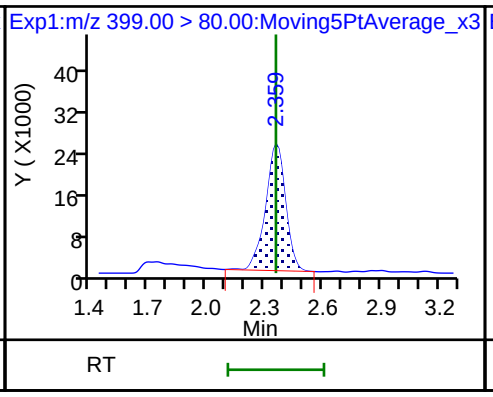
10 Perfluoroheptanoic acid



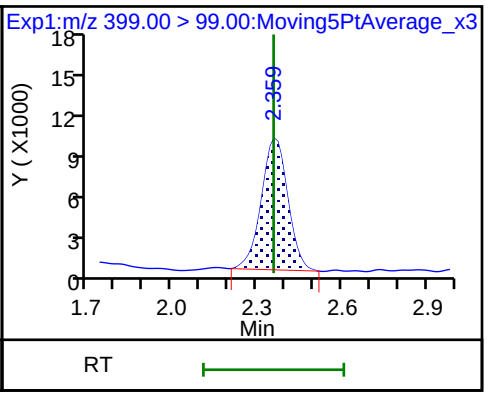
D 9 13C4-PFHpA



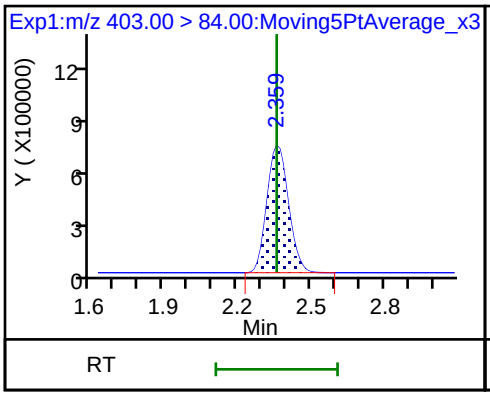
8 Perfluorohexanesulfonic acid



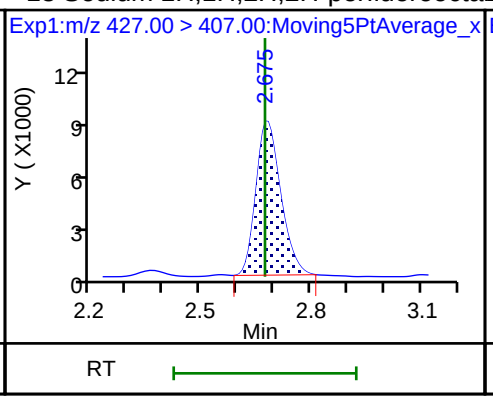
8 Perfluorohexanesulfonic acid



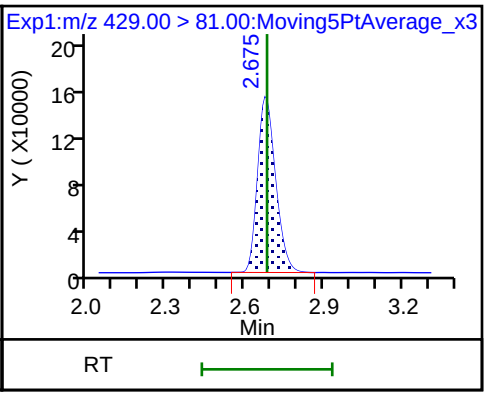
D 11 18O2 PFHxS



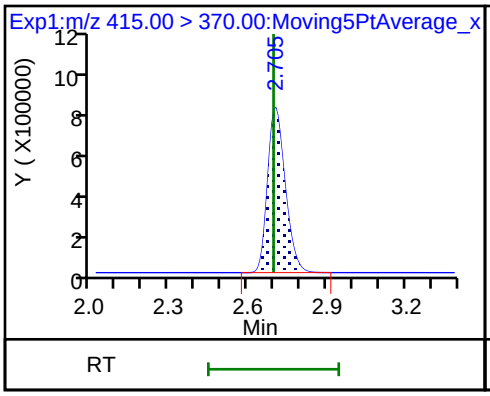
13 Sodium 1H,1H,2H,2H-perfluorooctane



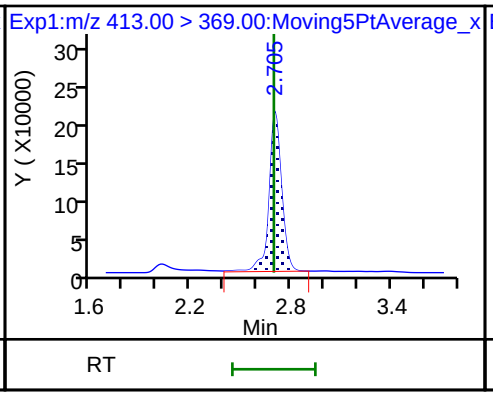
D 12 M2-6:2FTS



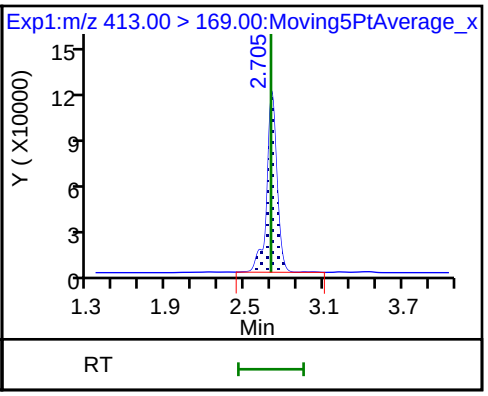
* 62 13C2-PFOA



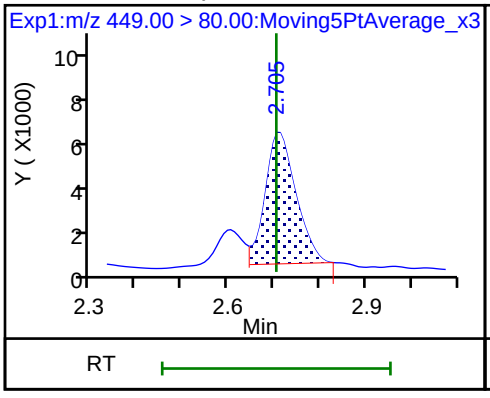
15 Perfluorooctanoic acid



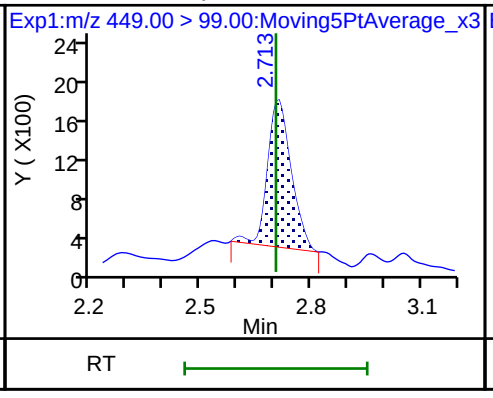
15 Perfluorooctanoic acid



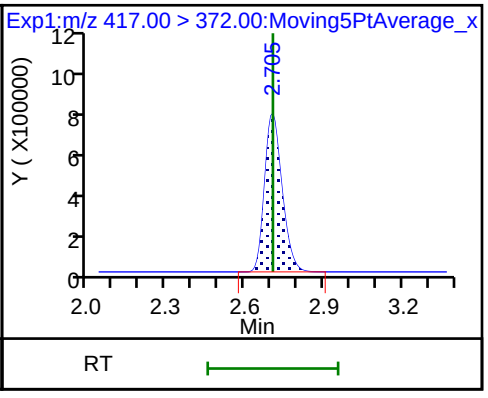
16 Perfluoroheptanesulfonic acid



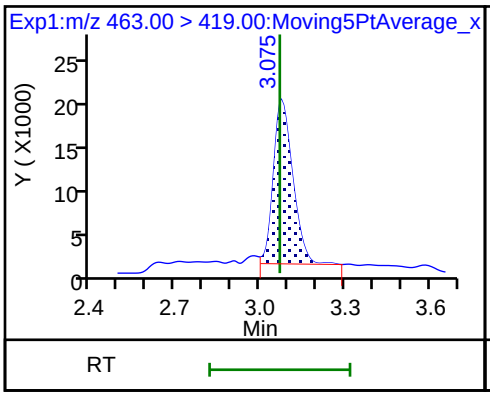
16 Perfluoroheptanesulfonic acid



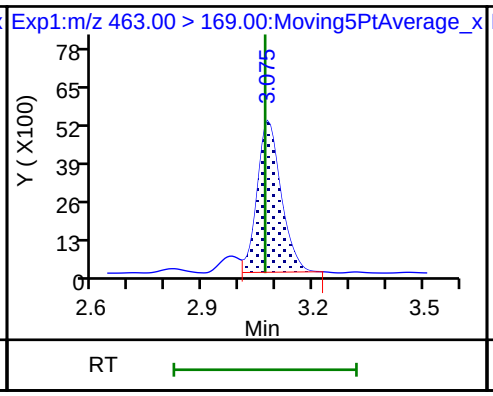
D 14 13C4 PFOA



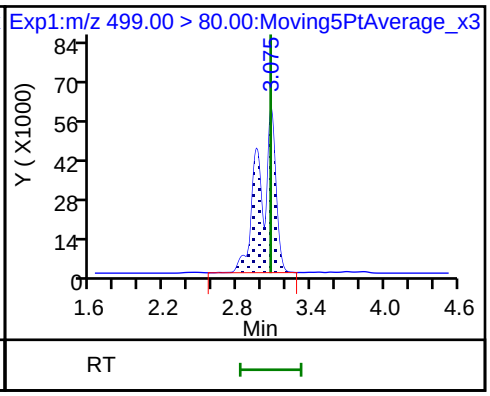
20 Perfluorononanoic acid



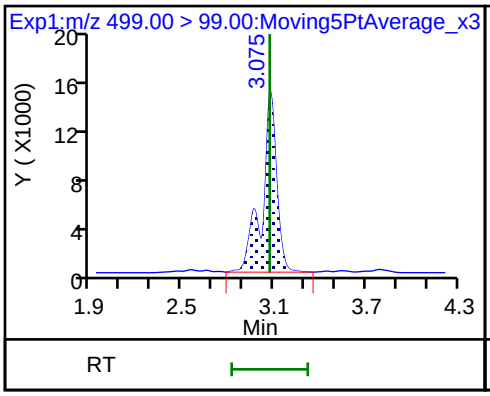
20 Perfluorononanoic acid



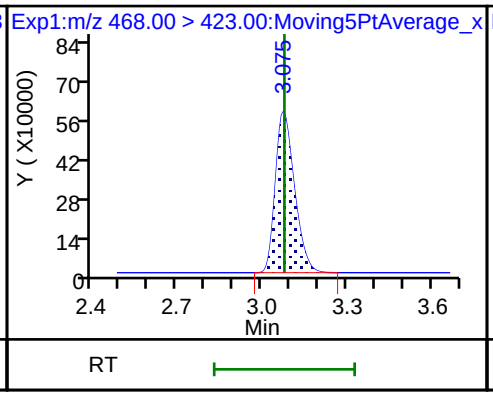
17 Perfluorooctane sulfonic acid



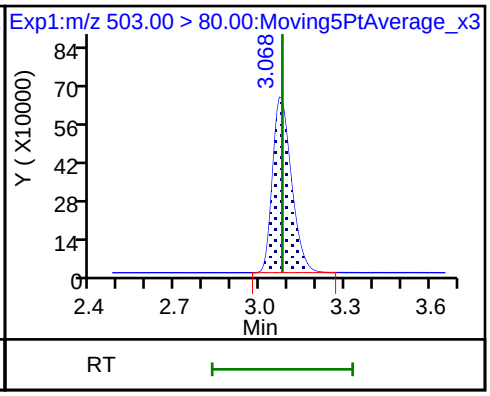
17 Perfluorooctane sulfonic acid



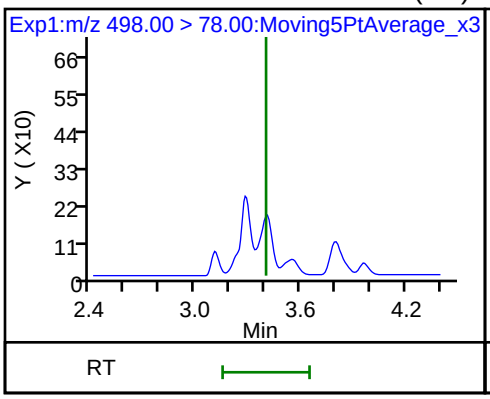
D 19 13C5 PFNA



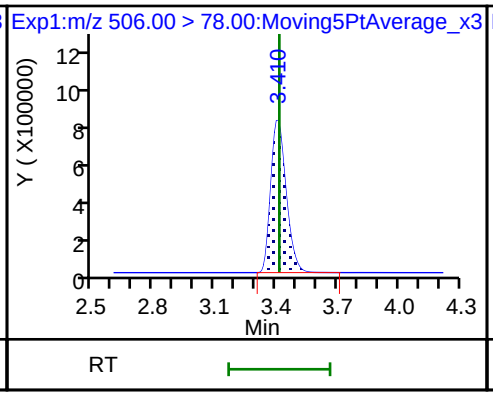
D 18 13C4 PFOS



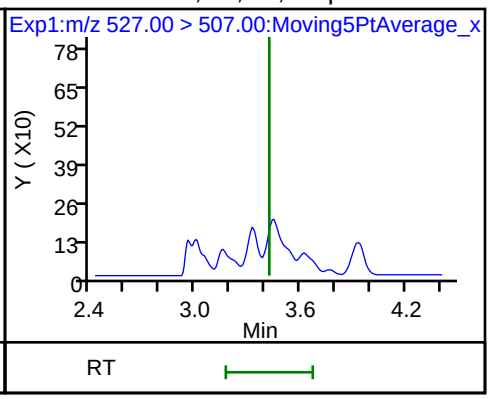
22 Perfluorooctane Sulfonamide (ND)



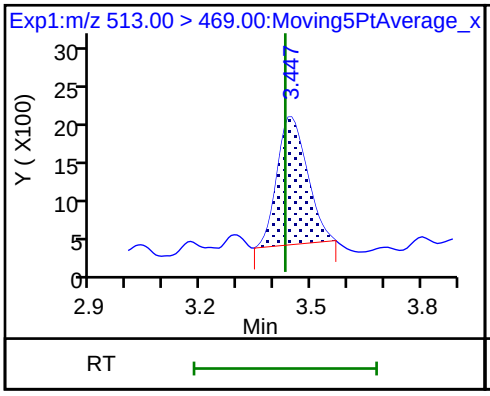
D 21 13C8 FOSA



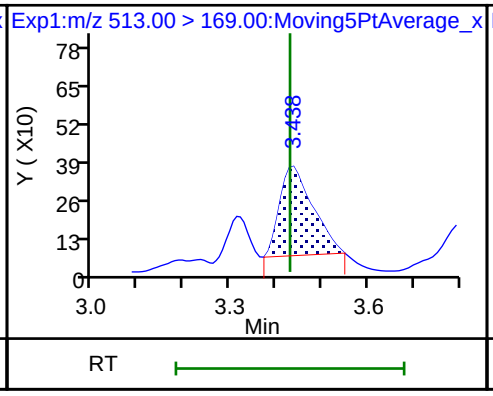
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



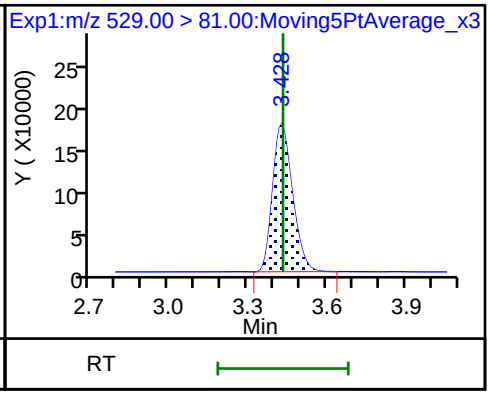
24 Perfluorodecanoic acid



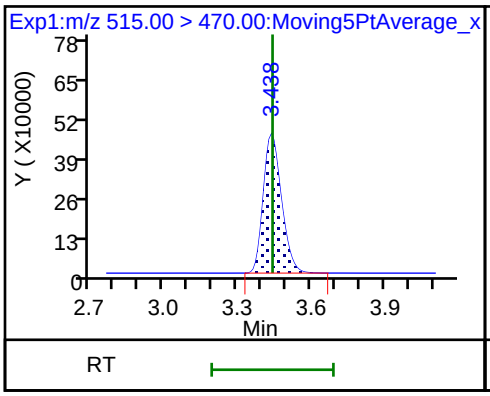
24 Perfluorodecanoic acid



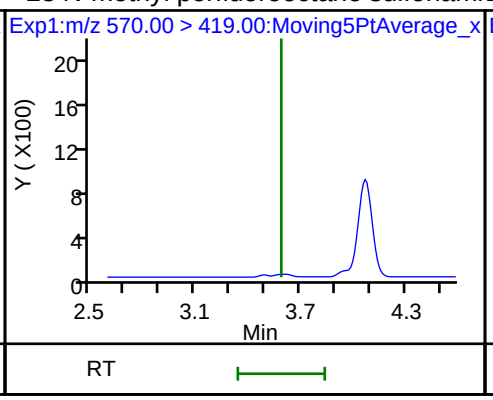
D 26 M2-8:2FTS



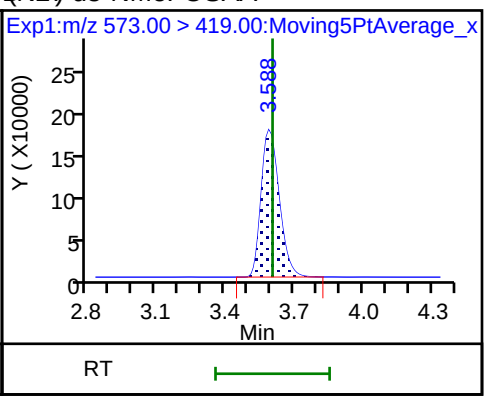
D 23 13C2 PFDA



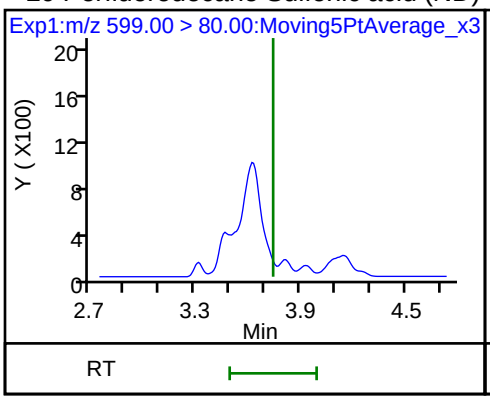
28 N-methyl perfluorooctane sulfonamid (ND)



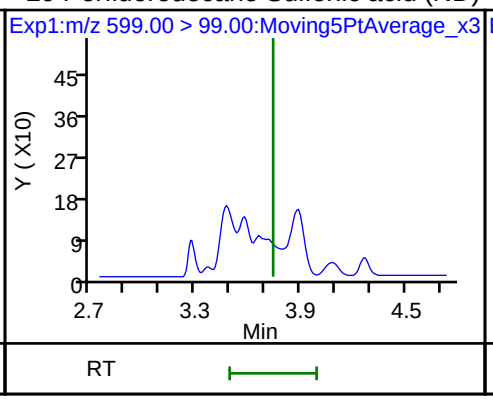
D 27 d3-NMeFOSAA



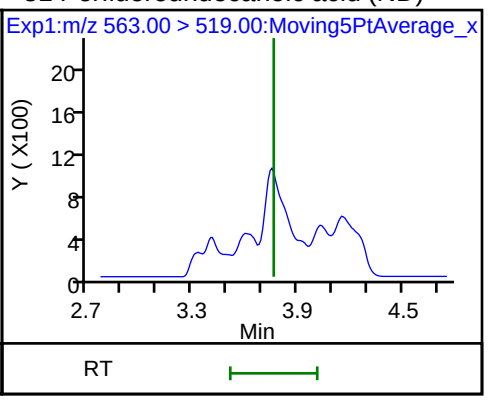
29 Perfluorodecane Sulfonic acid (ND)



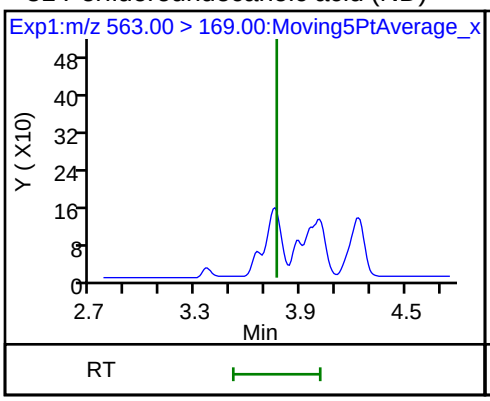
29 Perfluorodecane Sulfonic acid (ND)



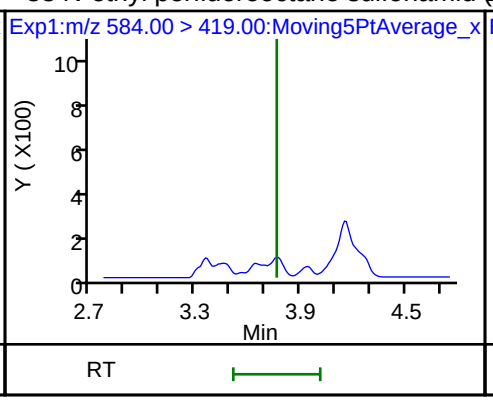
31 Perfluoroundecanoic acid (ND)



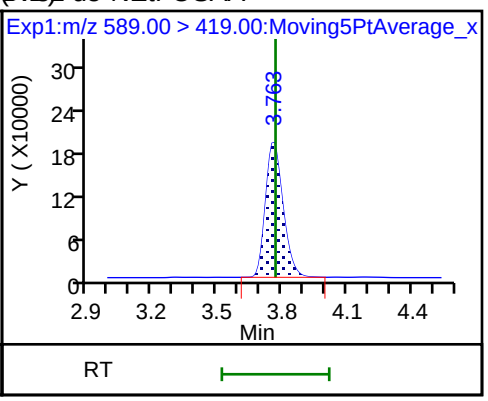
31 Perfluoroundecanoic acid (ND)



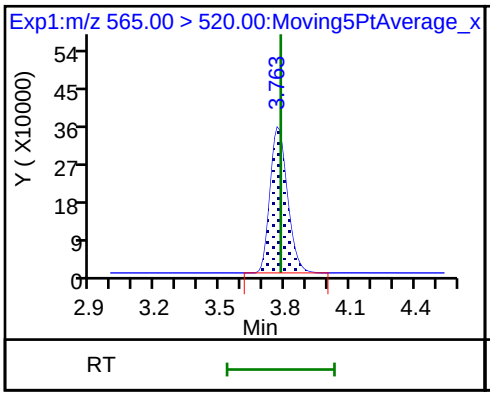
33 N-ethyl perfluorooctane sulfonamid (ND)



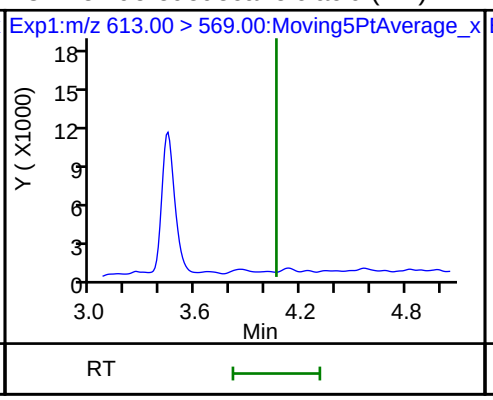
D 32 d5-NEtFOSAA



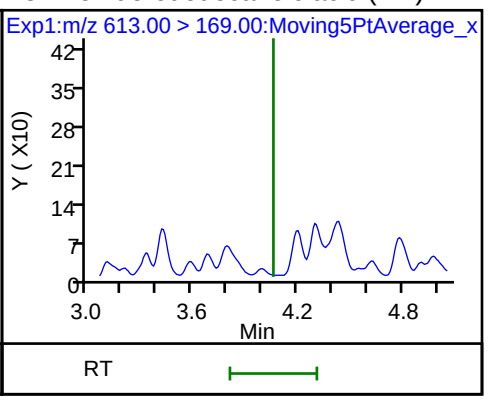
D 30 13C2 PFUnA



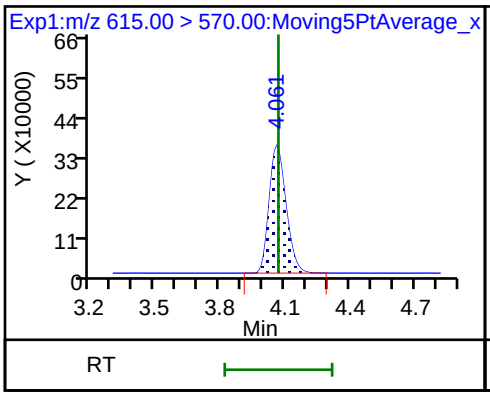
37 Perfluorododecanoic acid (ND)



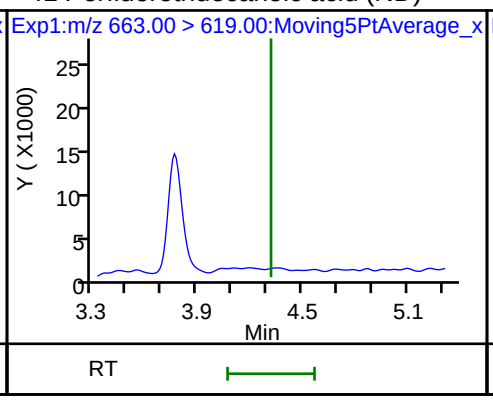
37 Perfluorododecanoic acid (ND)



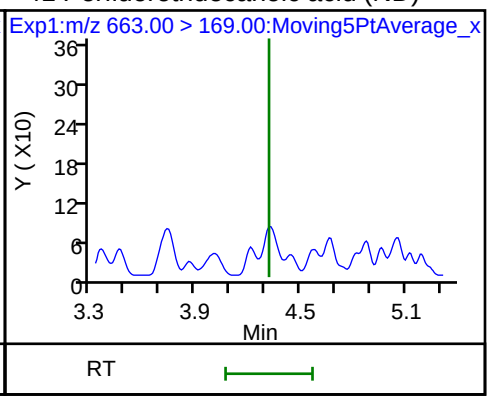
D 36 13C2 PFDoA



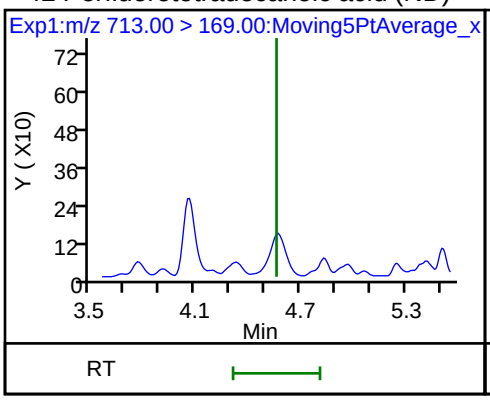
41 Perfluorotridecanoic acid (ND)



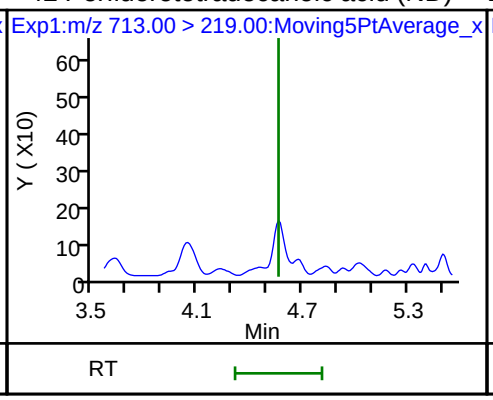
41 Perfluorotridecanoic acid (ND)



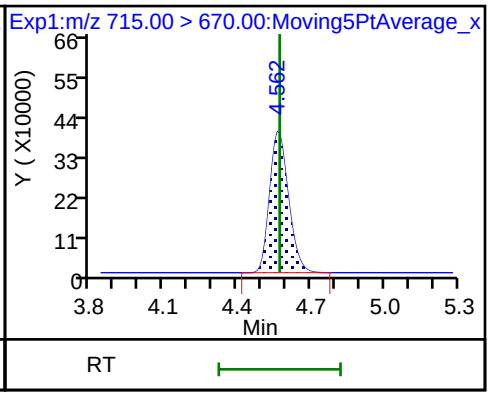
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-2 (WG) | Lab Sample ID: 320-38630-10

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_066.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 245.5(mL) | Date Analyzed: 05/14/2018 20:05

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	9.9		2.0	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	19		2.0	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	20		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	13		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	29	B	2.0	0.87
375-95-1	Perfluorononanoic acid (PFNA)	2.8		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	0.47	J	2.0	0.32
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.30
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.8		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	3.3	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.68	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	15	B	2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.33
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.2
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	19	J B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-2 (WG) | Lab Sample ID: 320-38630-10

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_066.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 245.5(mL) | Date Analyzed: 05/14/2018 20:05

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	77		25-150
STL01893	13C5 PFPeA	93		25-150
STL00993	13C2 PFHxA	98		25-150
STL01892	13C4-PFHpA	97		25-150
STL00990	13C4 PFOA	104		25-150
STL00995	13C5 PFNA	98		25-150
STL00996	13C2 PFDA	97		25-150
STL00997	13C2 PFUnA	87		25-150
STL00998	13C2 PFDoA	91		25-150
STL02116	13C2-PFTeDA	104		25-150
STL02337	13C3-PFBS	90		25-150
STL00994	18O2 PFHxS	91		25-150
STL00991	13C4 PFOS	90		25-150
STL01056	13C8 FOSA	78		25-150
STL02118	d3-NMeFOSAA	108		25-150
STL02117	d5-NEtFOSAA	101		25-150
STL02279	M2-6:2FTS	117		25-150
STL02280	M2-8:2FTS	109		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_066.d
Lims ID: 320-38630-A-10-A
Client ID: GC-MW-2 (WG)
Sample Type: Client
Inject. Date: 14-May-2018 20:05:28 ALS Bottle#: 48 Worklist Smp#: 25
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-10-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:10:01 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:08:27

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.449	1.452	-0.003	1.000	4828137	1.92		76.6	36006	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.455	1.458	-0.003	1.004	434818	0.2423			200	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.725	1.728	-0.003	0.562	3636874	2.33		93.2	39726	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.725	1.729	-0.004	1.000	827672	0.4677			264	
D 47 13C3-PFBS										
301.90 > 83.00	1.761	1.764	-0.003	1.000	77256	2.10		90.2	267	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.761	1.765	-0.004	1.000	488592	0.1906			298	
298.90 > 99.00	1.761	1.765	-0.004	1.000	209283		2.33(1.25-3.74)		441	
D 7 13C2 PFHxA										
315.00 > 270.00	2.010	2.014	-0.004	1.000	4018772	2.46		98.5	89869	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.010	2.015	-0.005	1.000	806018	0.4806			411	
313.00 > 119.00	2.010	2.015	-0.005	1.000	80705		9.99(5.03-15.10)		791	
D 9 13C4-PFHpA										
367.00 > 322.00	2.341	2.345	-0.004	1.000	3816283	2.44		97.5	61792	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.358	-0.003	1.000	4488914	2.16		91.2	73562	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.341	2.359	-0.018	1.000	532979	0.3292			409	
363.00 > 169.00	2.341	2.359	-0.018	1.000	207216		2.57(1.13-3.40)		1274	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.355	2.373	-0.018	1.000	174795	0.0818			234	
399.00 > 99.00	2.355	2.373	-0.018	1.000	51906		3.37(1.50-4.49)		124	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.666	2.682	-0.016	1.000	856398	2.78		117	7321	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.673	2.683	-0.010	1.003	283528	0.4671			2023	
D 14 13C4 PFOA										
417.00 > 372.00	2.696	2.704	-0.008	1.000	3834596	2.61		104	62891	
* 62 13C2-PFOA										
415.00 > 370.00	2.696	2.713	-0.017		3894670	2.50			59048	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.696	2.713	-0.017	1.000	1314055	0.7130			502	
413.00 > 169.00	2.696	2.713	-0.017	1.000	695206		1.89(0.84-2.52)		2602	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.703	2.720	-0.017	1.000	28796	0.0167			120	
449.00 > 99.00	2.696	2.720	-0.024	0.997	8251		3.49(1.94-5.82)		57.7	
D 18 13C4 PFOS										
503.00 > 80.00	3.060	3.073	-0.013	1.000	3126431	2.15		90.1	23374	
D 19 13C5 PFNA										
468.00 > 423.00	3.067	3.081	-0.014	1.000	3012459	2.46		98.2	45623	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.060	3.082	-0.022	1.000	533084	0.3650			2023	
499.00 > 99.00	3.060	3.082	-0.022	1.000	95713		5.57(2.31-6.93)		773	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.067	3.082	-0.015	1.000	86770	0.0683			109	M
463.00 > 169.00	3.067	3.082	-0.015	1.000	19450		4.46(1.90-5.69)		284	
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.407	-0.009	1.000	4083171	1.94		77.7	46232	
D 26 M2-8:2FTS										
529.00 > 81.00	3.417	3.435	-0.018	1.000	1050771	2.61		109	9567	
D 23 13C2 PFDA										
515.00 > 470.00	3.426	3.444	-0.018	1.000	2563080	2.43		97.1	38072	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.435	3.446	-0.011	1.003	12211	0.0116			47.8	
513.00 > 169.00	3.426	3.446	-0.020	1.000	1782		6.85(2.36-7.09)		37.0	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.575	3.596	-0.021	1.000	1288243	2.69		108	38872	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.751	3.771	-0.020	1.000	1294600	2.53		101	5795	
D 30 13C2 PFUnA										
565.00 > 520.00	3.761	3.771	-0.010	1.000	1911268	2.16		86.5	37673	
D 36 13C2 PFDoA										
615.00 > 570.00	4.050	4.071	-0.021	1.000	2098738	2.27		91.0	16601	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.552	4.574	-0.022	1.000	2613101	2.60		104	13374	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 15:10:11 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_066.d

Injection Date: 14-May-2018 20:05:28 Instrument ID: A8_N

Lims ID: 320-38630-A-10-A Lab Sample ID: 320-38630-10

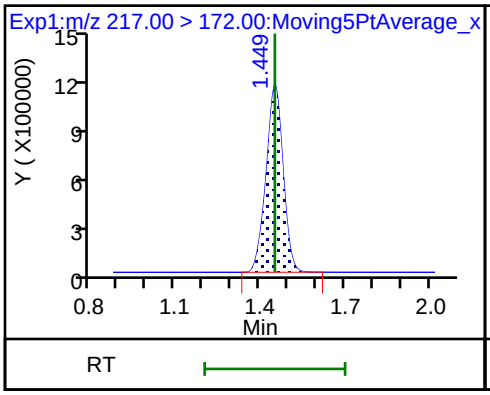
Client ID: GC-MW-2 (WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 48 Worklist Smp#: 25

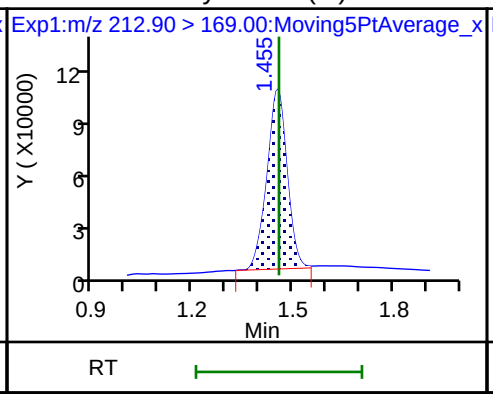
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

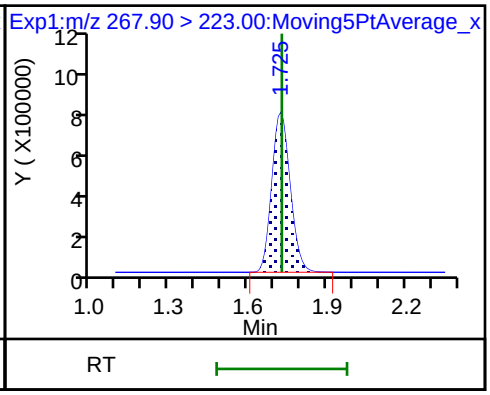
D 1 13C4 PFBA



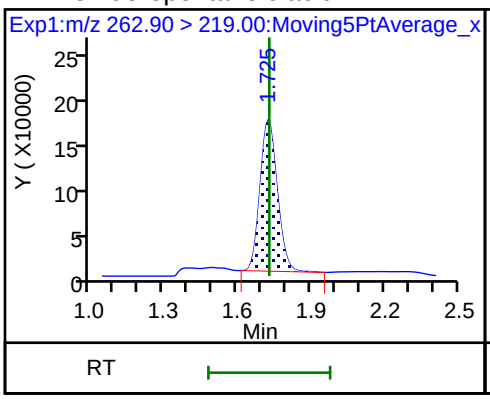
2 Perfluorobutyric acid (M)



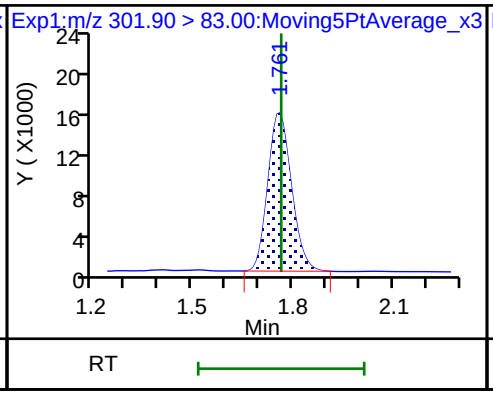
D 3 13C5-PFPeA



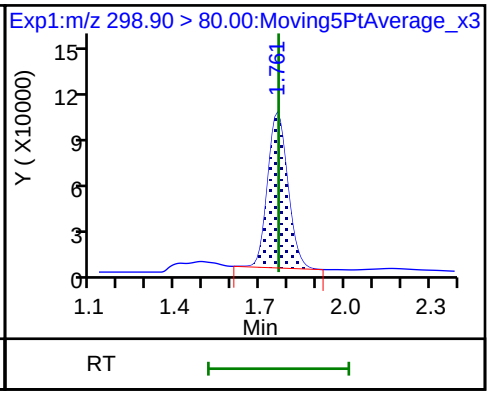
4 Perfluoropentanoic acid



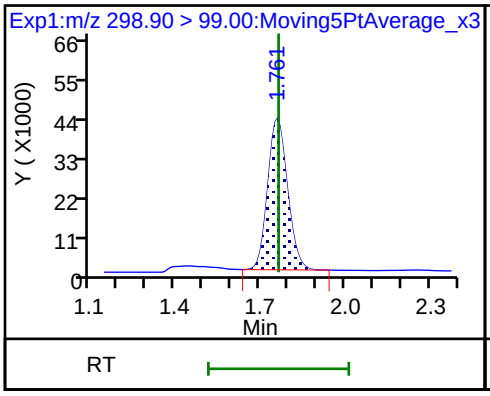
D 47 13C3-PFBS



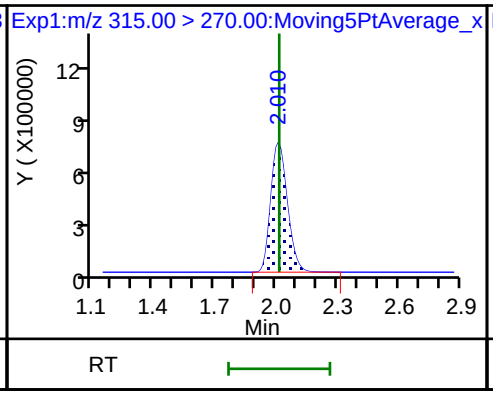
5 Perfluorobutanesulfonic acid



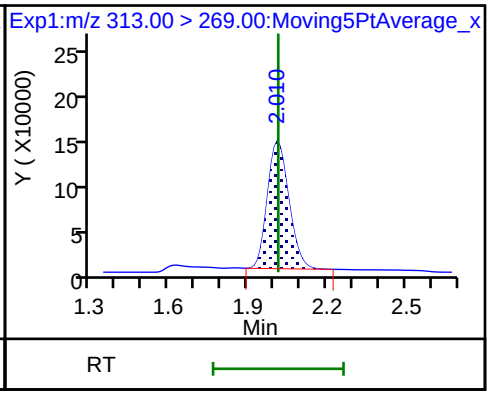
5 Perfluorobutanesulfonic acid



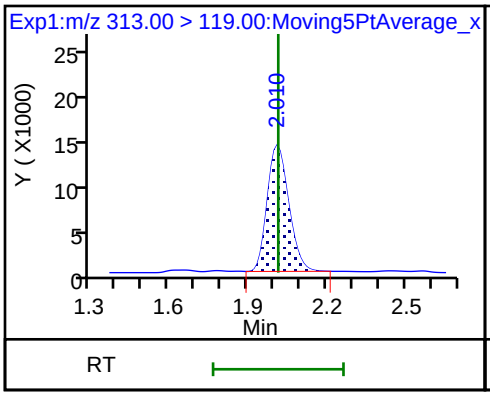
D 7 13C2 PFHxA



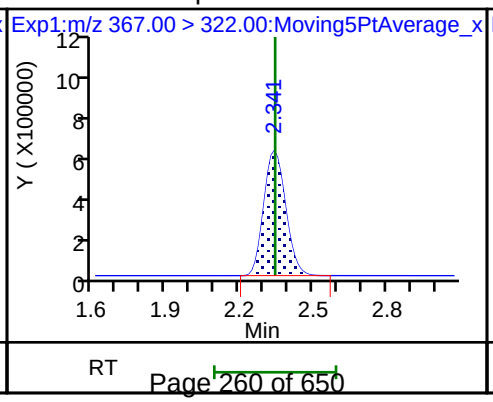
6 Perfluorohexanoic acid



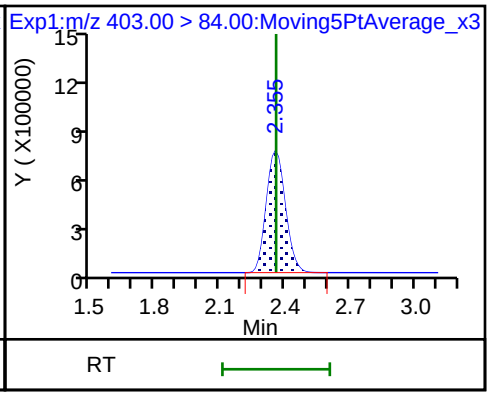
6 Perfluorohexanoic acid



D 9 13C4-PFHpA



D 11 18O2 PFHxS



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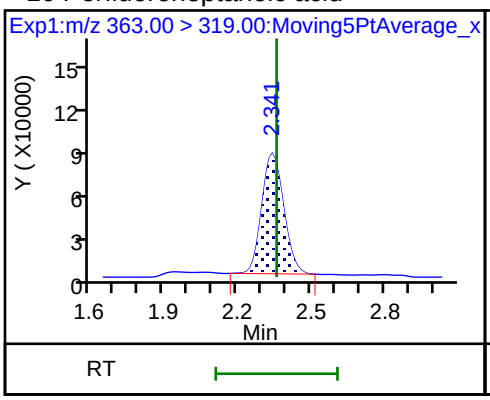

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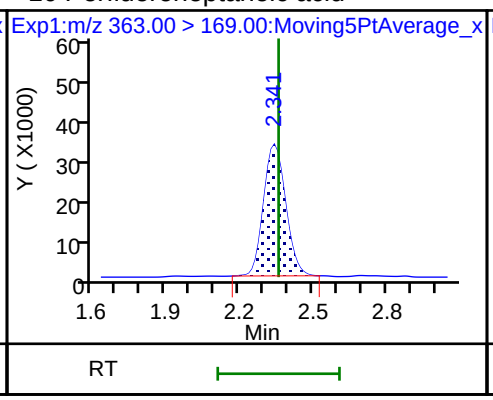
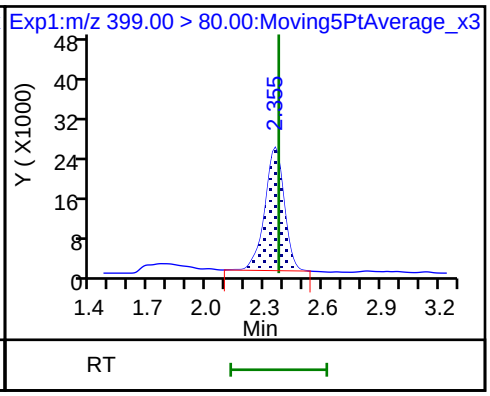


8 Perfluorohexanesulfonic acid



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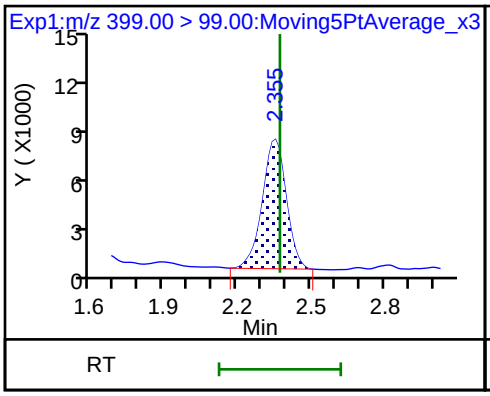
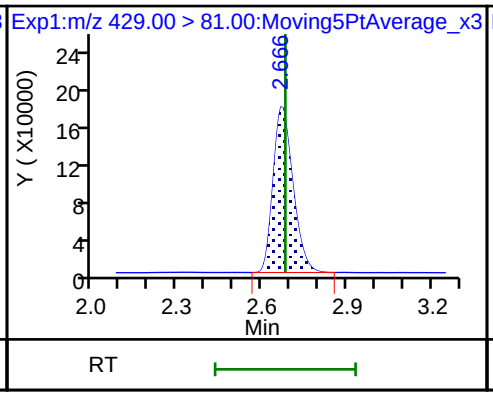
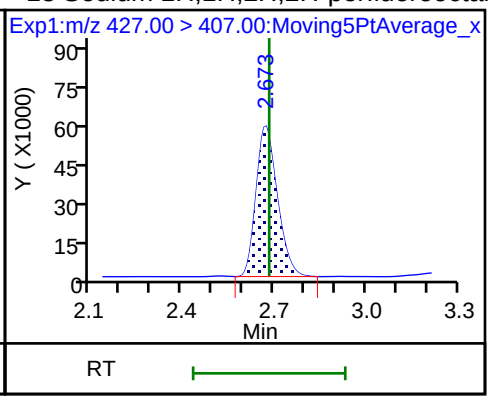


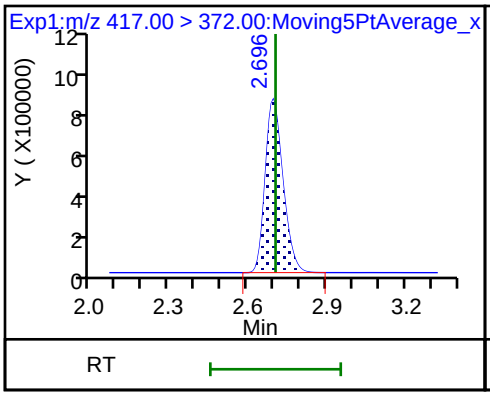
D 12 M2-6:2FTS



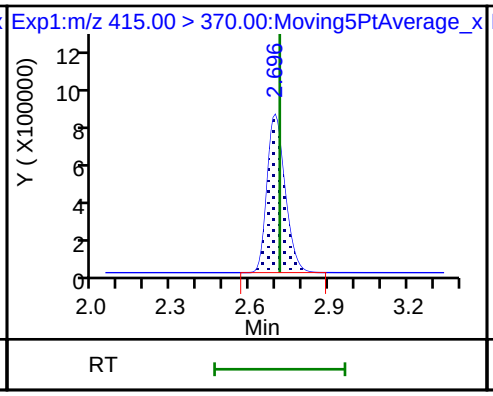
13 Sodium 1H,1H,2H,2H-perfluorooctane



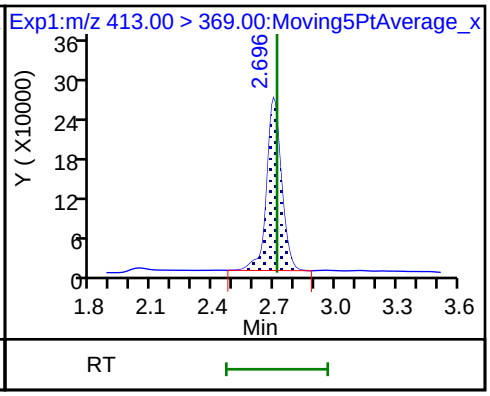
D 14 13C4 PFOA



* 62 13C2-PFOA



15 Perfluorooctanoic acid



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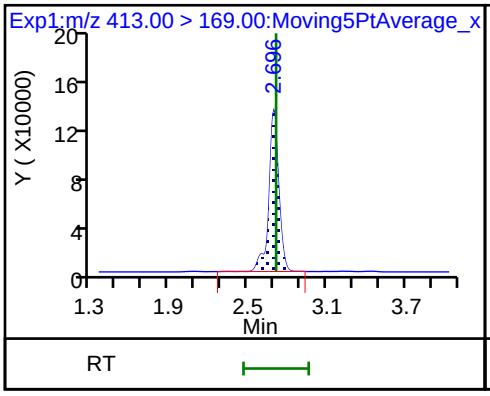
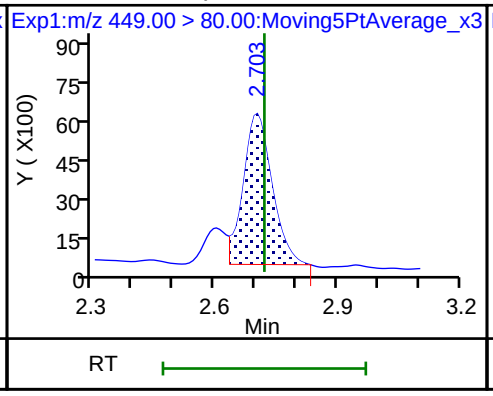
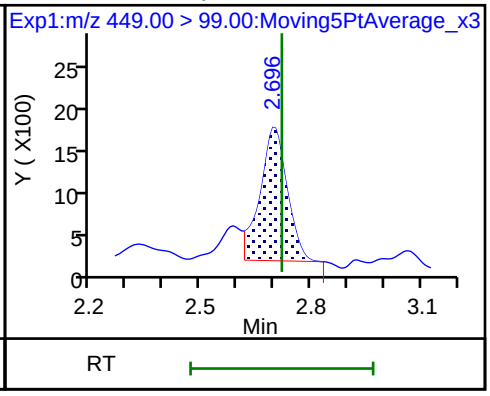


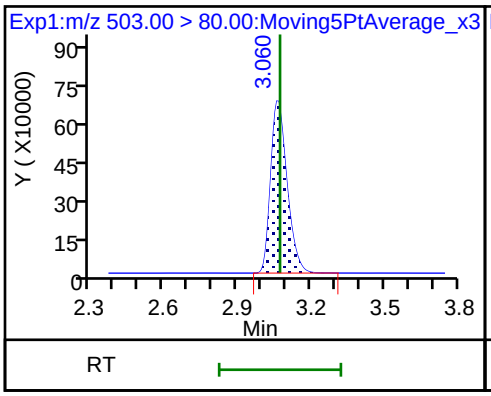
16 Perfluoroheptanesulfonic acid



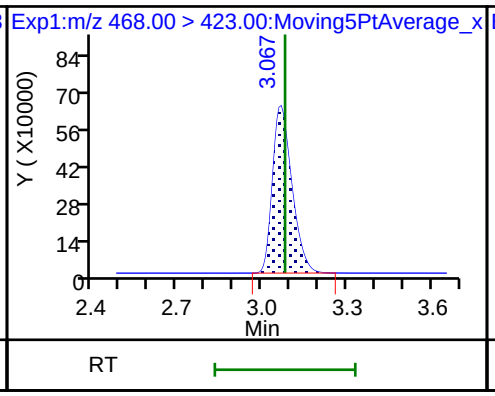
16 Perfluoroheptanesulfonic acid



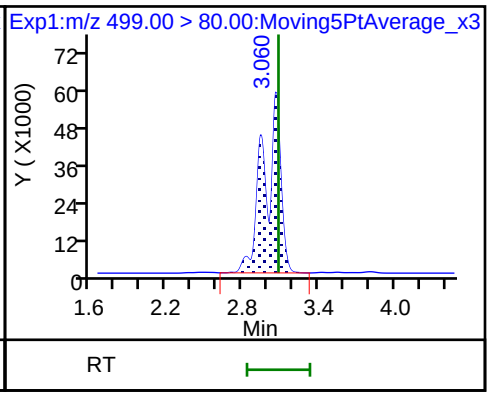
D 18 13C4 PFOS



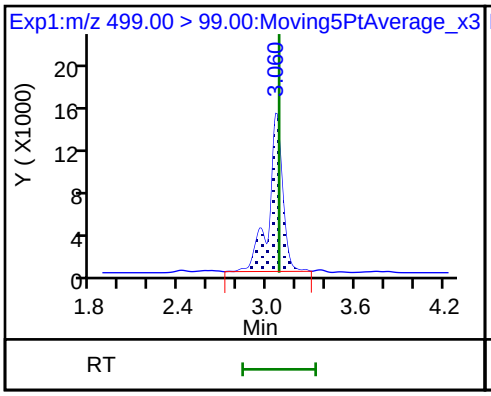
D 19 13C5 PFNA



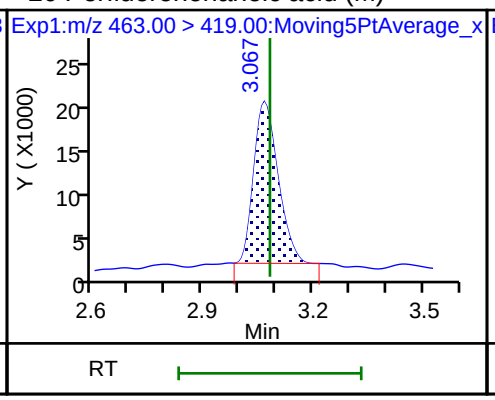
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



20 Perfluorononanoic acid (M)



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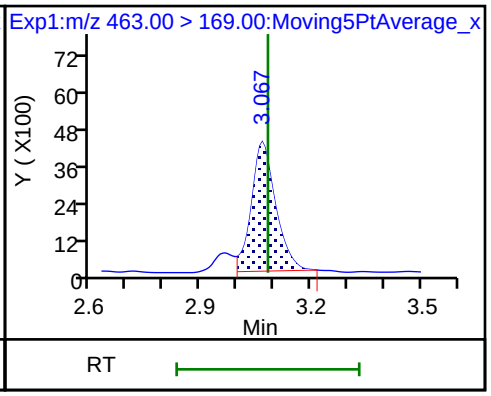
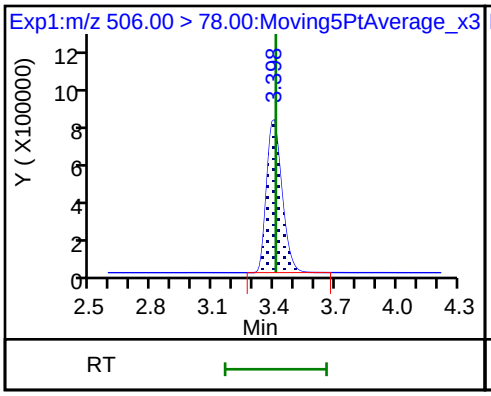
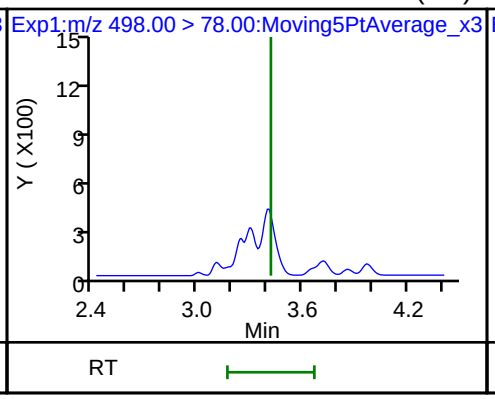


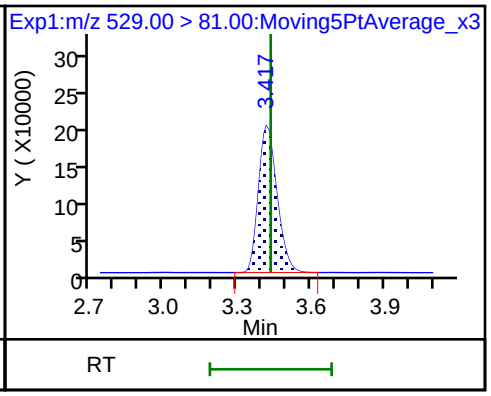
D 21 13C8 FOSA



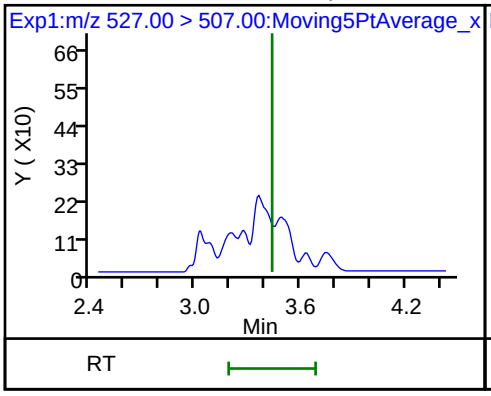
22 Perfluorooctane Sulfonamide (ND)



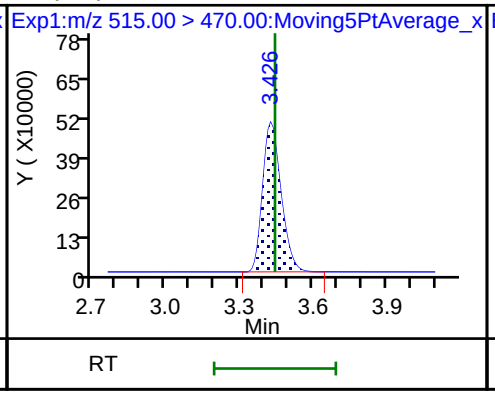
D 26 M2-8:2FTS



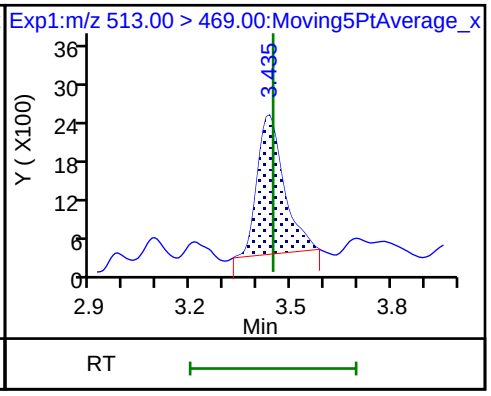
25 Sodium 1H,1H,2H,2H-perfluorodecane(ND)



D 23 13C2 PFDA



24 Perfluorodecanoic acid



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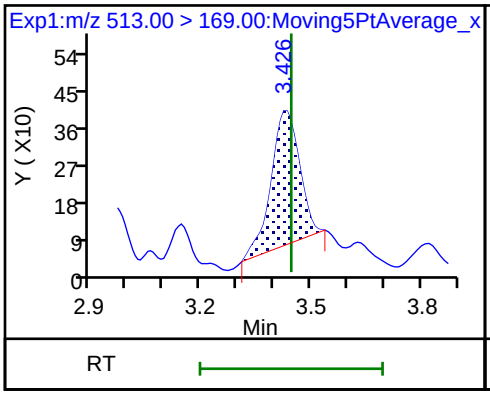
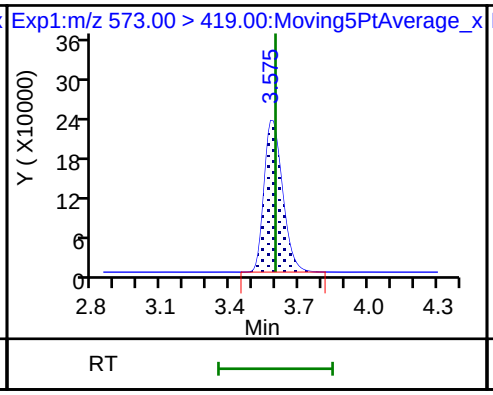
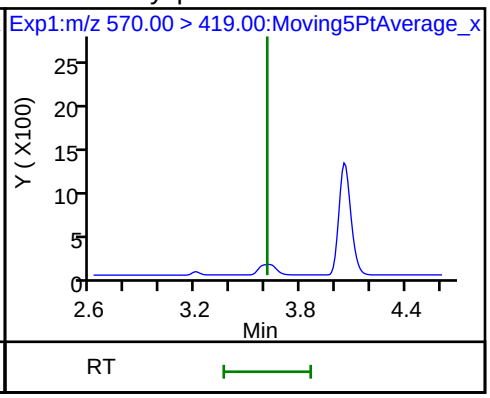


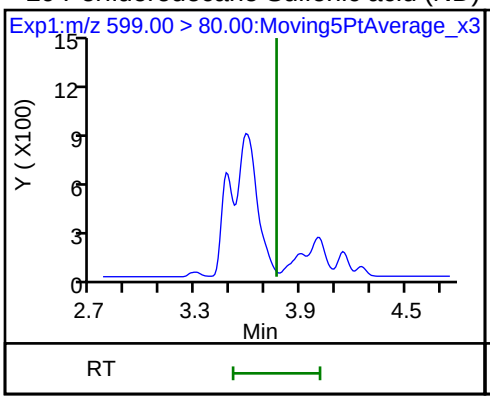
D 27 d3-NMeFOSAA



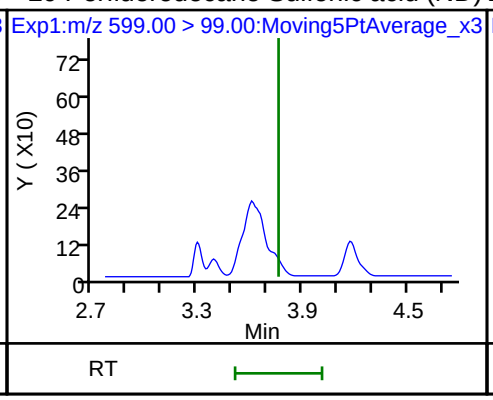
28 N-methyl perfluorooctane sulfonami (ND)



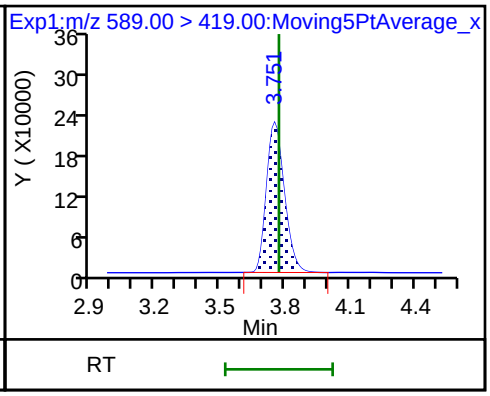
29 Perfluorodecane Sulfonic acid (ND)



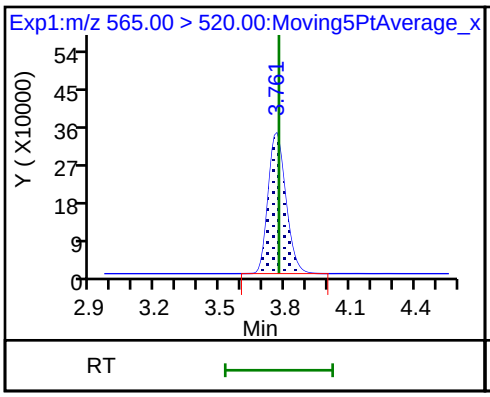
29 Perfluorodecane Sulfonic acid (ND)



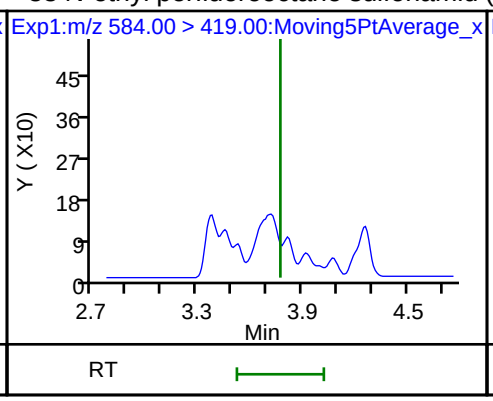
D 32 d5-NEtFOSAA



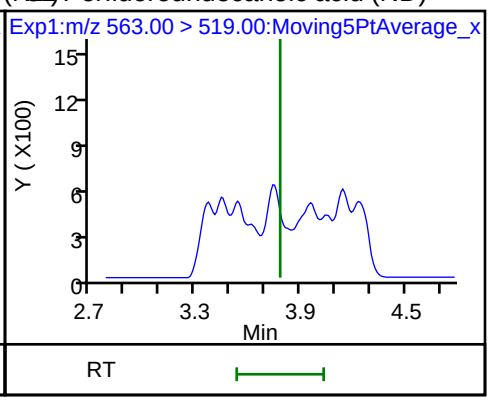
D 30 13C2 PFUnA



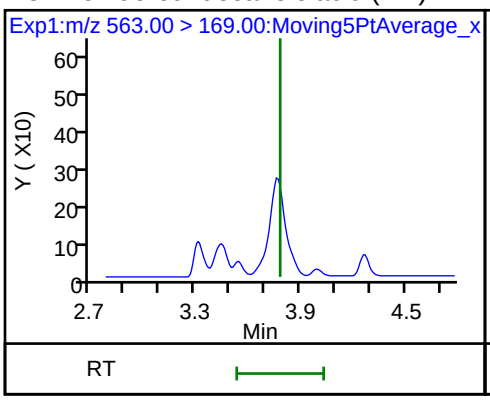
33 N-ethyl perfluorooctane sulfonamid (ND)



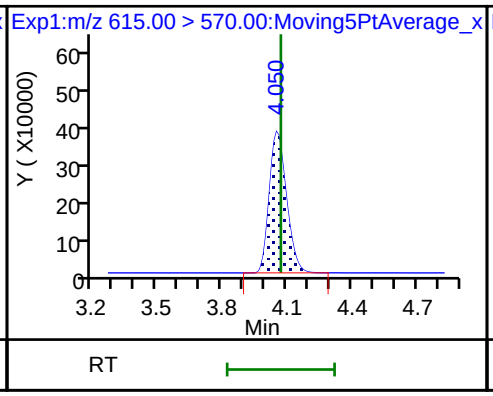
31 Perfluoroundecanoic acid (ND)



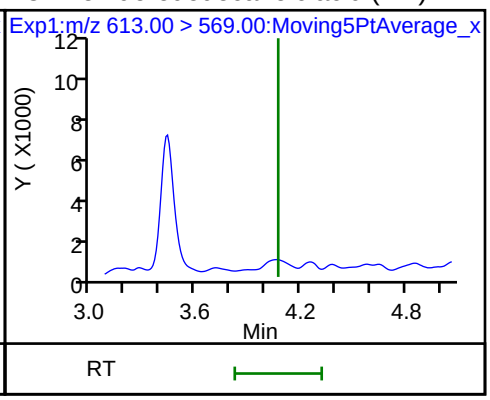
31 Perfluoroundecanoic acid (ND)



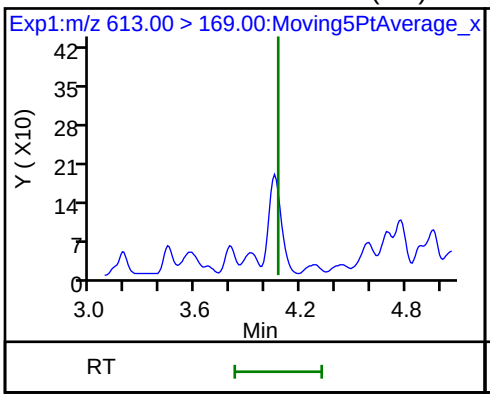
D 36 13C2 PFDoA



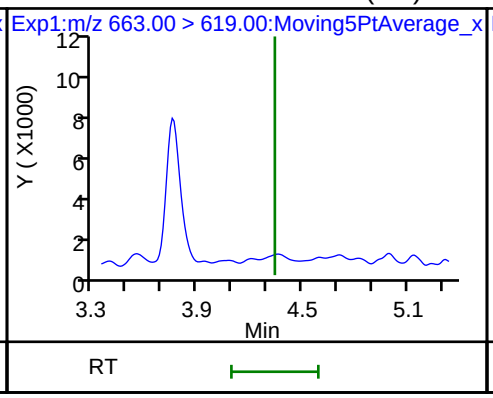
37 Perfluorododecanoic acid (ND)



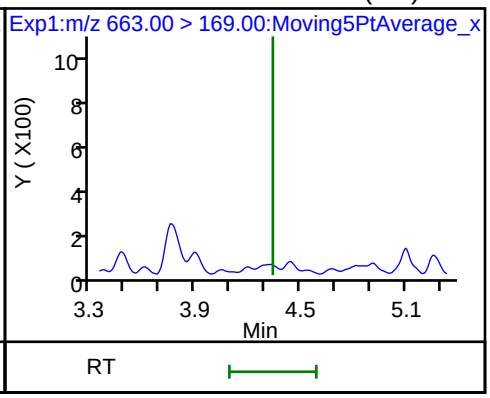
37 Perfluorododecanoic acid (ND)



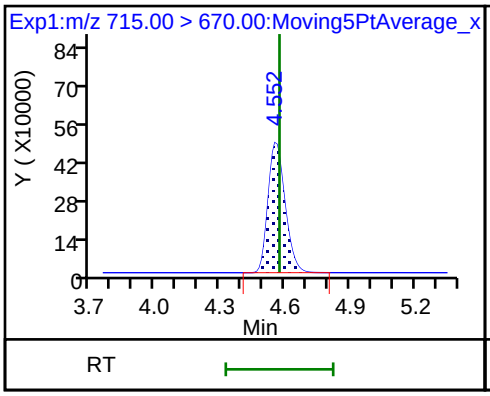
41 Perfluorotridecanoic acid (ND)



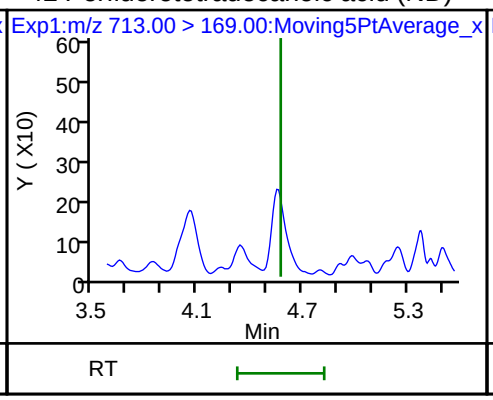
41 Perfluorotridecanoic acid (ND)



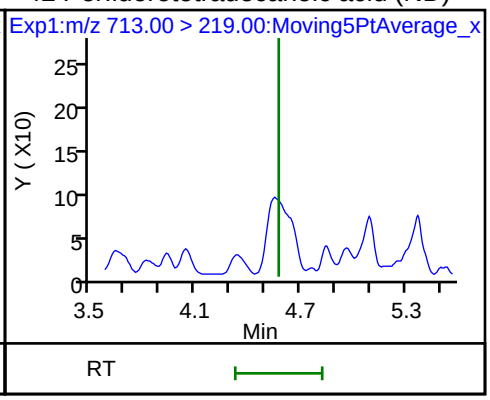
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

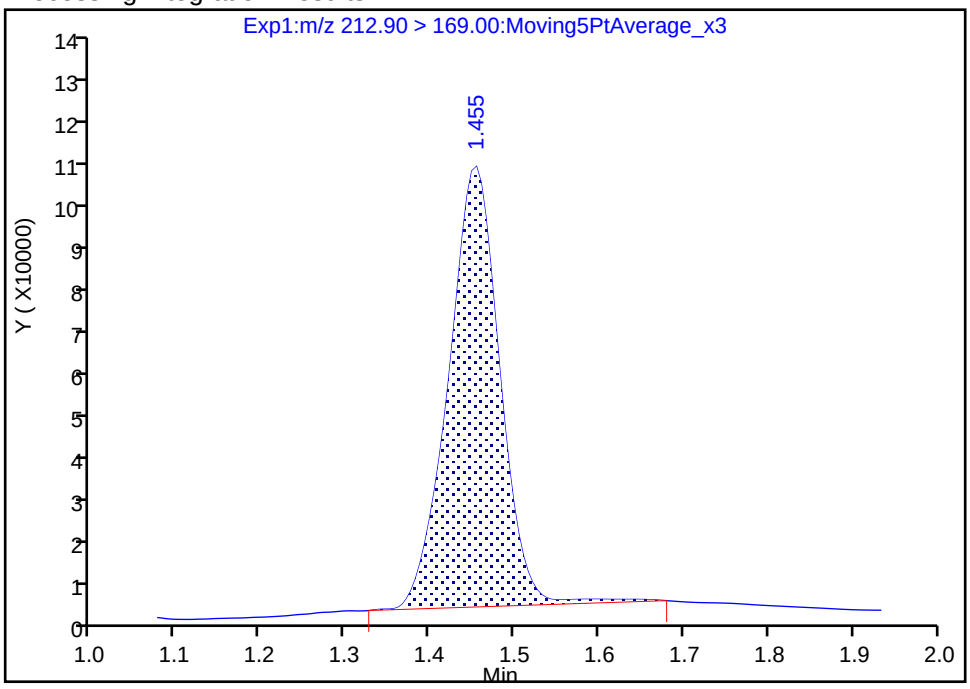
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_066.d				
Injection Date:	14-May-2018 20:05:28	Instrument ID:	A8_N		
Lims ID:	320-38630-A-10-A	Lab Sample ID:	320-38630-10		
Client ID:	GC-MW-2 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	48	Worklist Smp#:	25
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

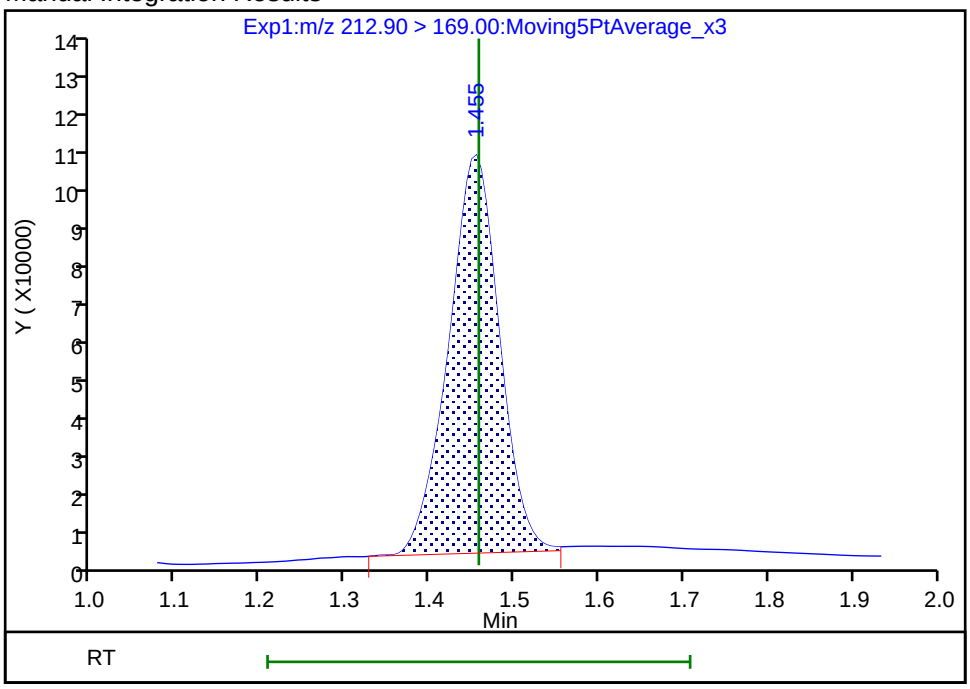
Processing Integration Results

RT: 1.45
Area: 439701
Amount: 0.245050
Amount Units: ng/ml



Manual Integration Results

RT: 1.45
Area: 434818
Amount: 0.242329
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:08:02

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

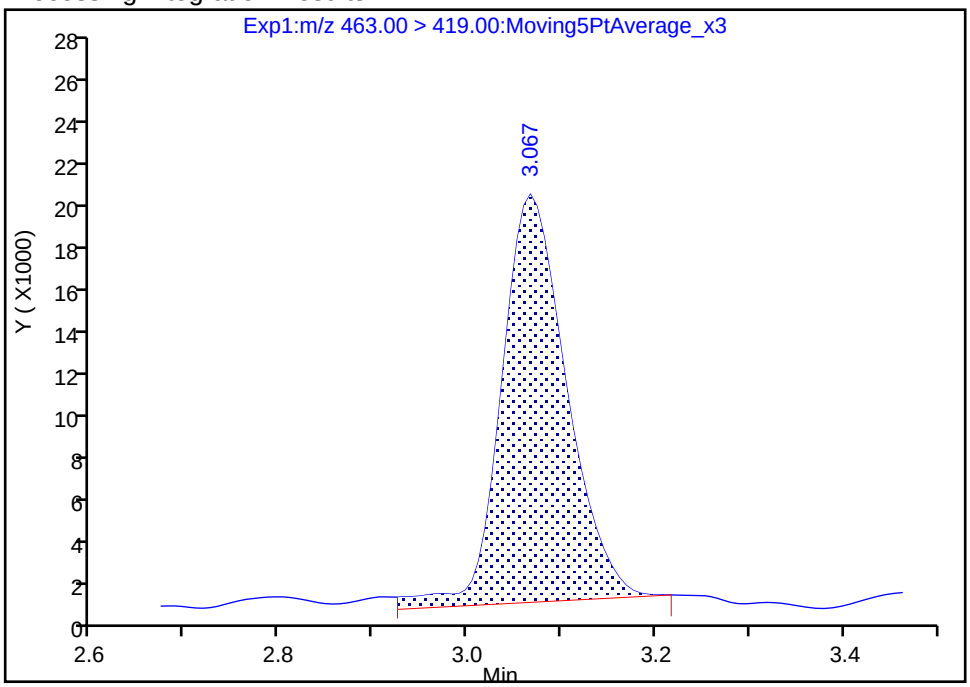
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_066.d				
Injection Date:	14-May-2018 20:05:28	Instrument ID:	A8_N		
Lims ID:	320-38630-A-10-A	Lab Sample ID:	320-38630-10		
Client ID:	GC-MW-2 (WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	48	Worklist Smp#:	25
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

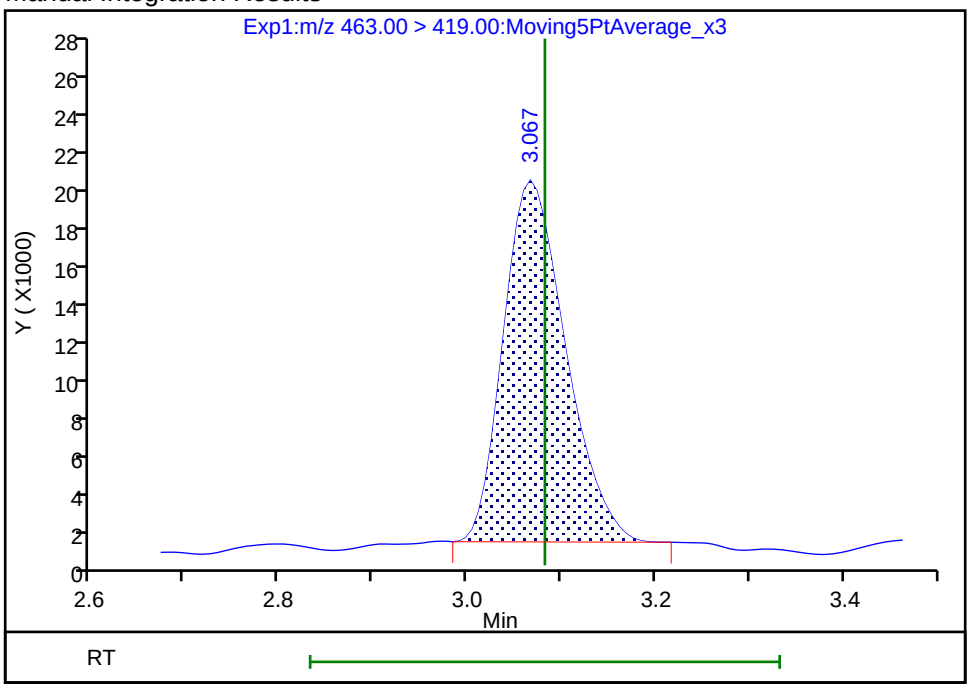
Processing Integration Results

RT: 3.07
Area: 92851
Amount: 0.073093
Amount Units: ng/ml



Manual Integration Results

RT: 3.07
Area: 86770
Amount: 0.068306
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 15:08:19

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 RE Lab Sample ID: 320-38630-11 RE

Matrix: Water Lab File ID: 2018.05.13LLB_029.d

Analysis Method: 537 (modified) Date Collected: 04/26/2018 09:30

Extraction Method: 3535 Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250.7(mL) Date Analyzed: 05/13/2018 19:09

Con. Extract Vol.: 10.00(mL) Dilution Factor: 1

Injection Volume: 2(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*ND*	*H*	*2.0*	*0.85*
27619-97-2	*6:2FTS*	*2.7*	*J H B*	*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	97		25-150
STL02279	M2-6:2FTS	105		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_029.d
Lims ID: 320-38630-B-11-A
Client ID: GC-Equipment Blank-2
Sample Type: Client
Inject. Date: 13-May-2018 19:09:36 ALS Bottle#: 22 Worklist Smp#: 16
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-b-11-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:23 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:43:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.455	1.452	0.003	1.004	16505	0.008794			5.9	
D 1 13C4 PFBA										
217.00 > 172.00	1.450	1.458	-0.008	1.000	5011976	2.26		90.5	46179	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.734	1.728	0.006	1.005	11317	0.007065			3.5	
D 3 13C5-PFPeA										
267.90 > 223.00	1.725	1.729	-0.004	0.561	3388581	2.41		96.2	60558	
D 47 13C3-PFBS										
301.90 > 83.00	1.761	1.766	-0.005	1.000	69391	2.17		93.4	508	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.015	-0.004	1.000	3507942	2.37		94.6	90415	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.346	-0.004	1.000	3252851	2.38		95.3	66362	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.368	2.358	0.010	1.006	13573	0.006871			138	
399.00 > 99.00	2.355	2.358	-0.003	1.000	4088		3.32(1.50-4.49)		20.5	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.359	-0.004	1.000	4114705	2.31		97.5	75805	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.680	2.674	0.006	1.000	31761	0.0683			352	
D 12 M2-6:2FTS										
429.00 > 81.00	2.680	2.683	-0.003	1.000	666672	2.51		105	13110	
* 62 13C2-PFOA										
415.00 > 370.00	2.703	2.697	0.006		3429445	2.50			67496	
D 14 13C4 PFOA										
417.00 > 372.00	2.703	2.706	-0.003	1.000	3136499	2.43		97.1	95933	
D 19 13C5 PFNA										
468.00 > 423.00	3.074	3.078	-0.004	1.000	2643083	2.43		97.0	62236	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 18 13C4 PFOS										
503.00 > 80.00	3.074	3.078	-0.004	1.000	2862738	2.24		93.6	31381	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.407	3.402	0.005	1.000	5048	0.003127			147	
D 21 13C8 FOSA										
506.00 > 78.00	3.407	3.414	-0.007	1.000	4065389	2.24		89.8	30342	
D 26 M2-8:2FTS										
529.00 > 81.00	3.426	3.433	-0.007	1.000	892731	2.55		107	8943	
D 23 13C2 PFDA										
515.00 > 470.00	3.435	3.442	-0.007	1.000	2199058	2.31		92.5	42004	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.585	3.605	-0.020	1.000	989034	2.37		94.9	19967	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.782	3.763	0.019	1.006	1388	0.003145			38.5	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.761	3.769	-0.008	1.000	1126142	2.47		98.7	2917	
D 30 13C2 PFUnA										
565.00 > 520.00	3.761	3.780	-0.019	1.000	1912463	2.46		98.4	57819	
D 36 13C2 PFDoA										
615.00 > 570.00	4.060	4.069	-0.009	1.000	1979200	2.44		97.6	22796	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2253091	2.55		102	13623	

Report Date: 14-May-2018 10:44:31 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_029.d

Injection Date: 13-May-2018 19:09:36 Instrument ID: A8_N

Lims ID: 320-38630-B-11-A Lab Sample ID: 320-38630-11

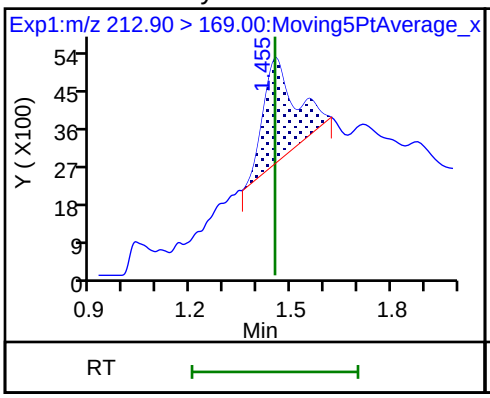
Client ID: GC-Equipment Blank-2

Operator ID: SACINSTLCMS01 ALS Bottle#: 22 Worklist Smp#: 16

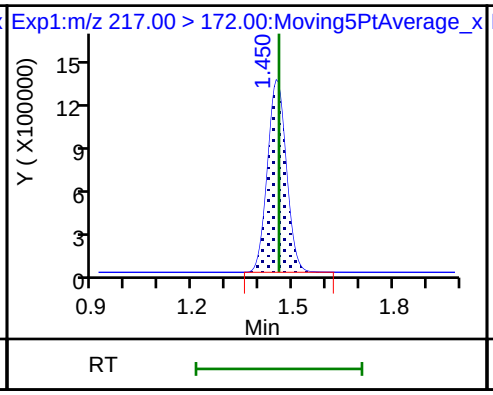
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

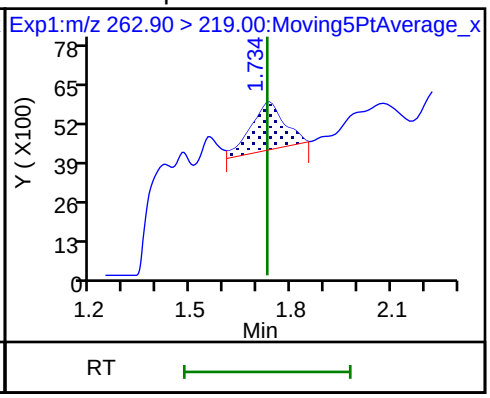
2 Perfluorobutyric acid



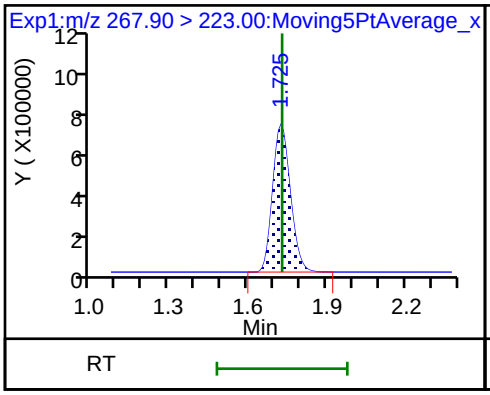
D 1 13C4 PFBA



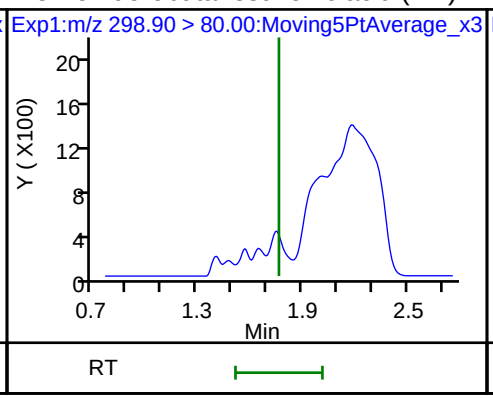
4 Perfluoropentanoic acid



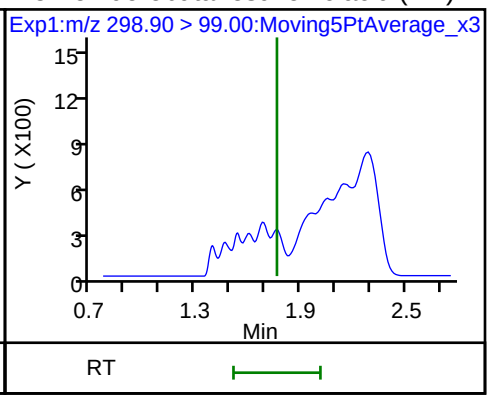
D 3 13C5-PFPeA



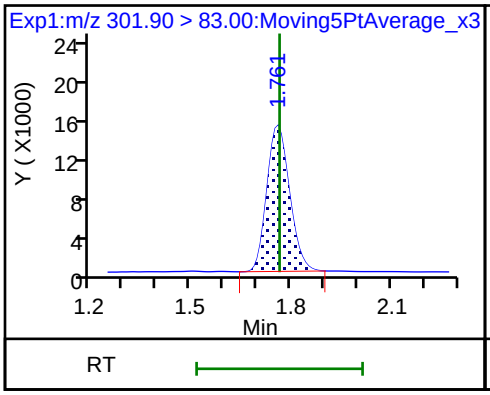
5 Perfluorobutanesulfonic acid (ND)



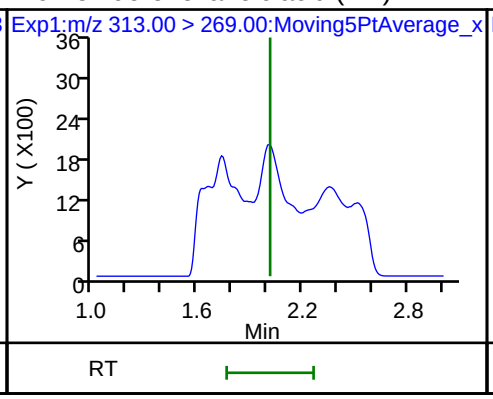
5 Perfluorobutanesulfonic acid (ND)



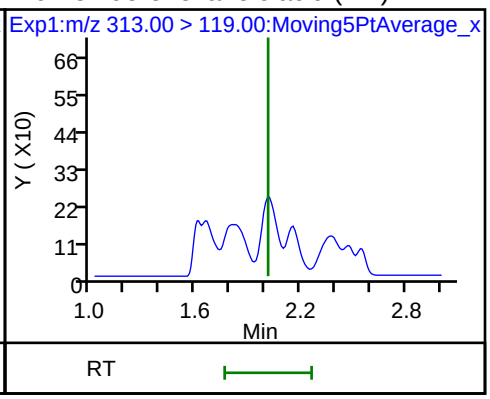
D 47 13C3-PFBS



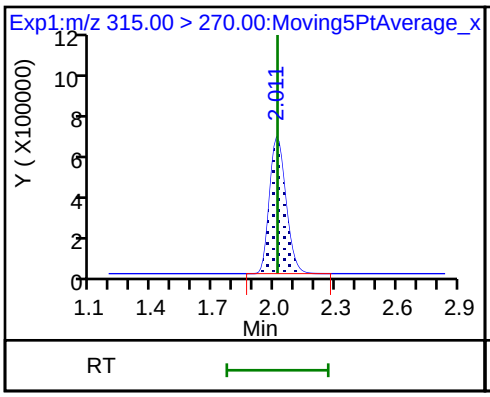
6 Perfluorohexanoic acid (ND)



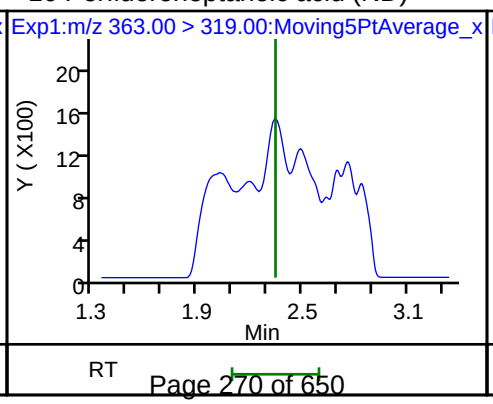
6 Perfluorohexanoic acid (ND)



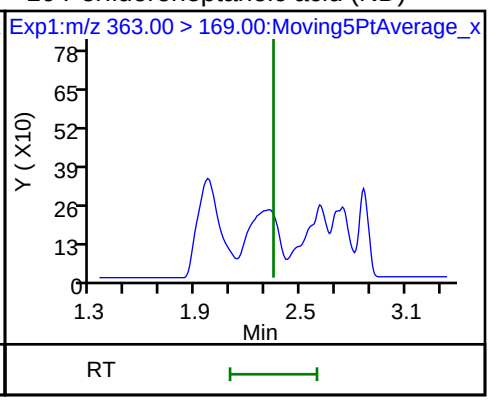
D 7 13C2 PFHxA



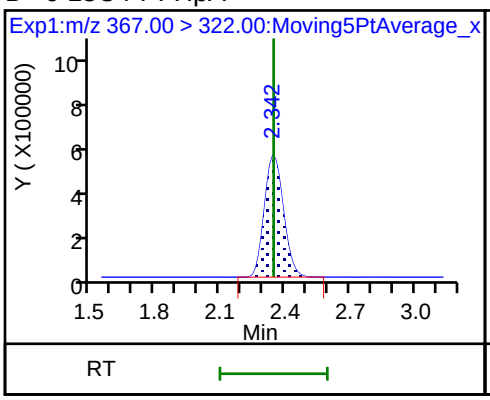
10 Perfluoroheptanoic acid (ND)



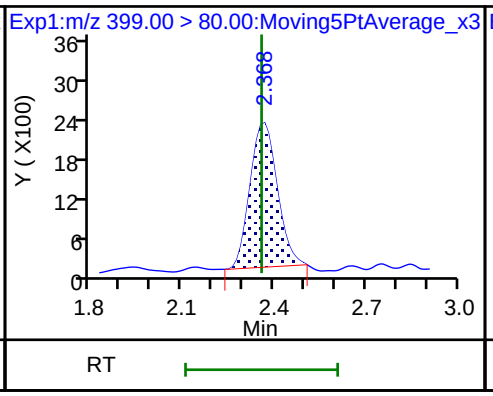
10 Perfluoroheptanoic acid (ND)



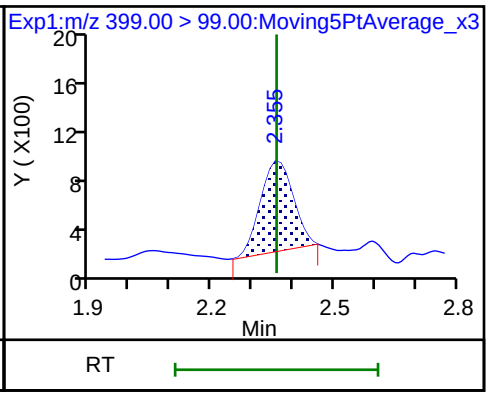
D 9 13C4-PFHpA



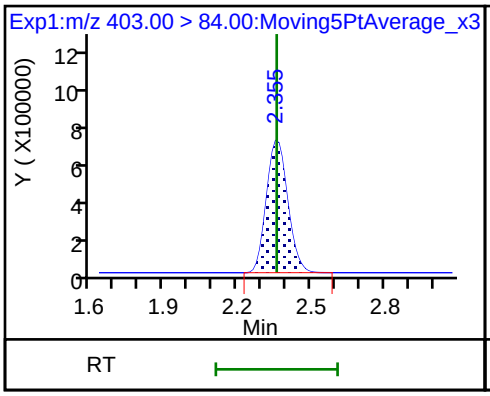
8 Perfluorohexanesulfonic acid



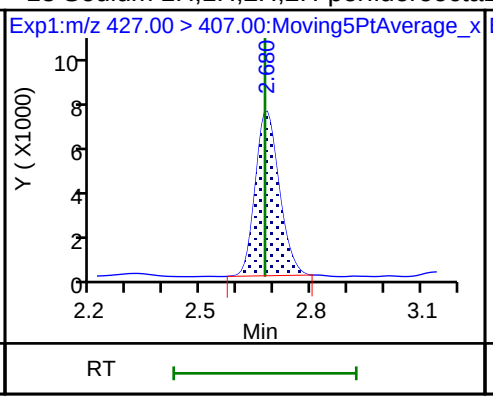
8 Perfluorohexanesulfonic acid



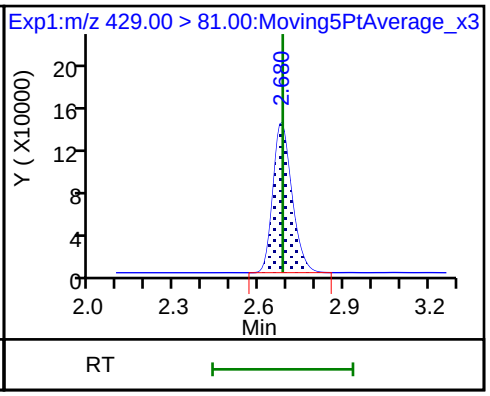
D 11 18O2 PFHxS



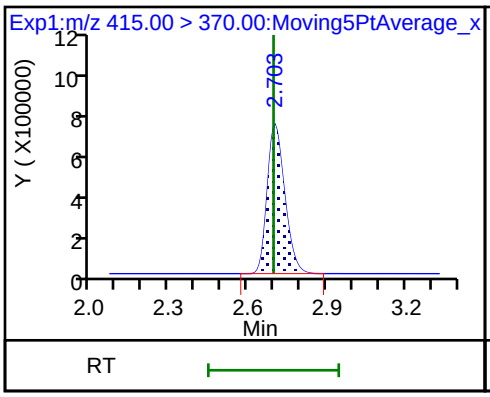
13 Sodium 1H,1H,2H,2H-perfluorooctane



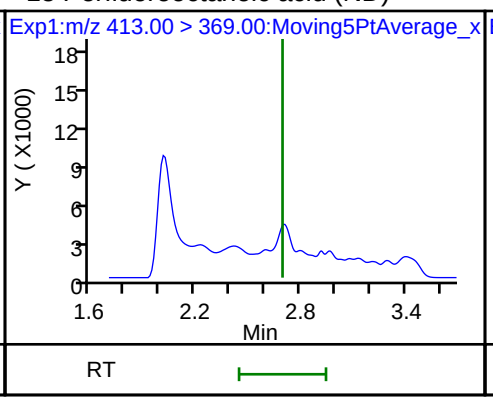
D 12 M2-6:2FTS



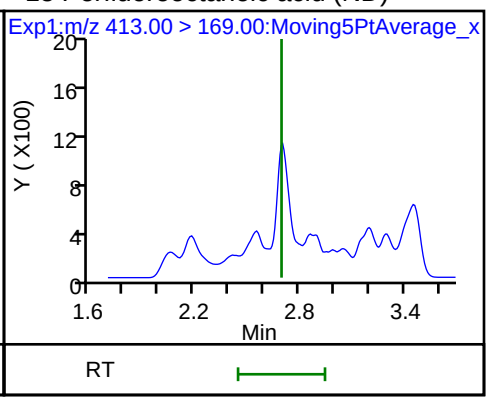
* 62 13C2-PFOA



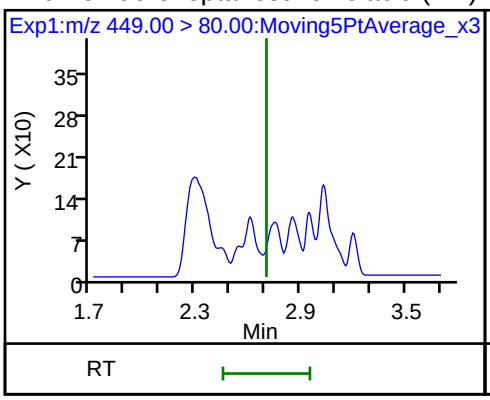
15 Perfluorooctanoic acid (ND)



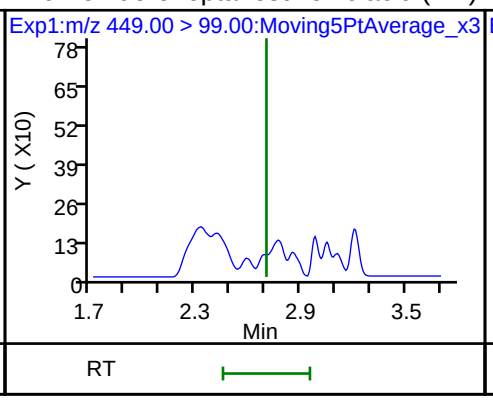
15 Perfluorooctanoic acid (ND)



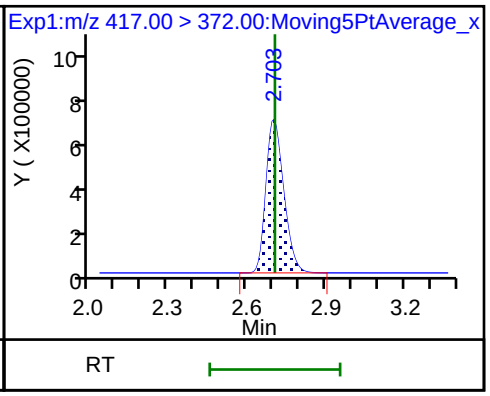
16 Perfluoroheptanesulfonic acid (ND)



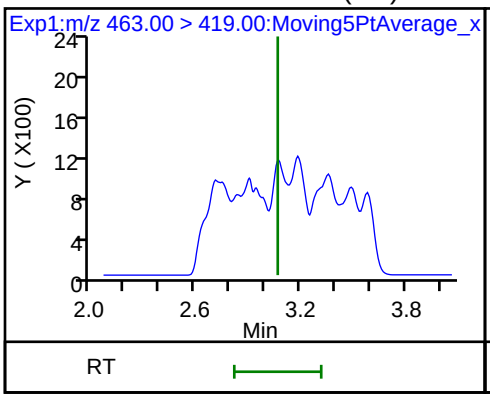
16 Perfluoroheptanesulfonic acid (ND)



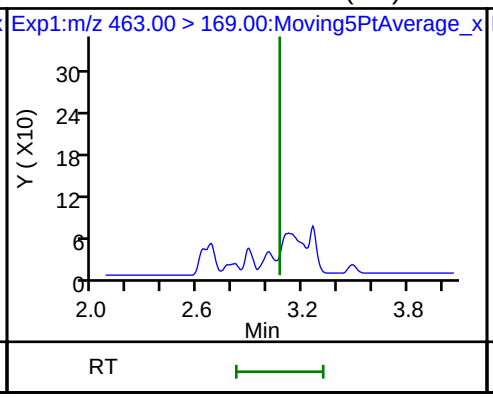
D 14 13C4 PFOA



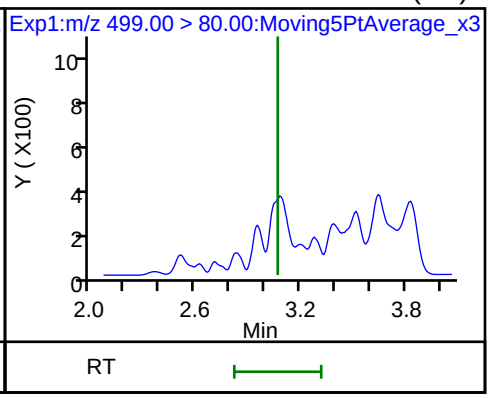
20 Perfluorononanoic acid (ND)



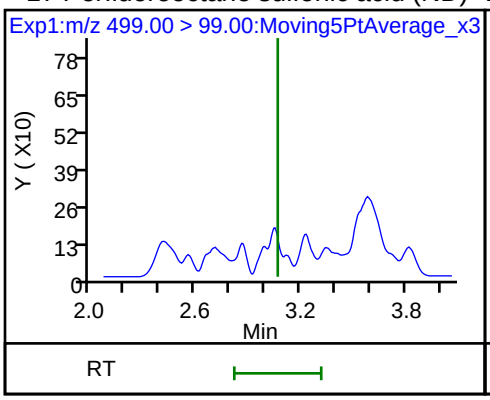
20 Perfluorononanoic acid (ND)



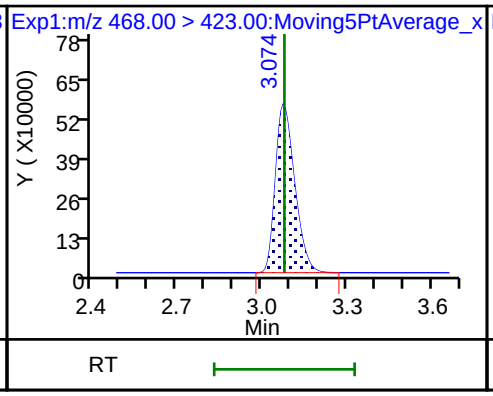
17 Perfluorooctane sulfonic acid (ND)



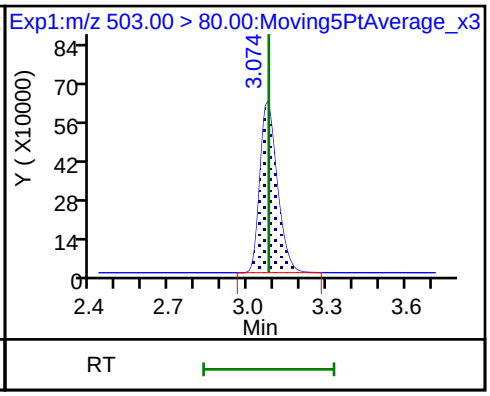
17 Perfluorooctane sulfonic acid (ND)



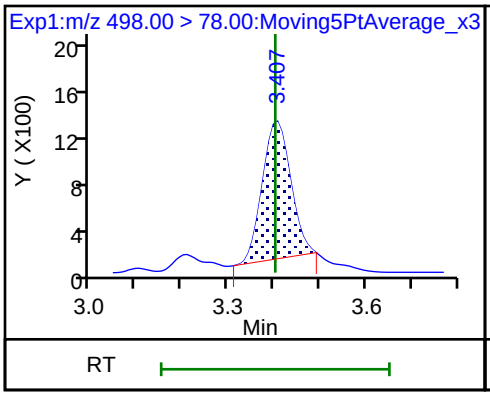
D 19 13C5 PFNA



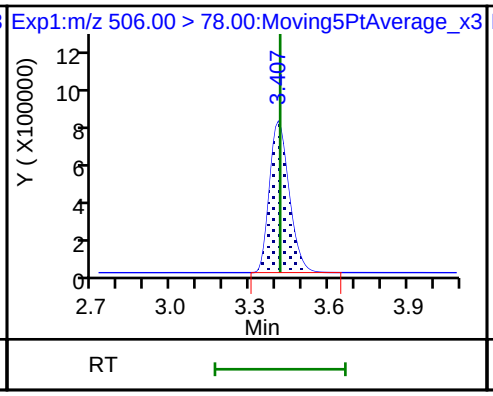
D 18 13C4 PFOS



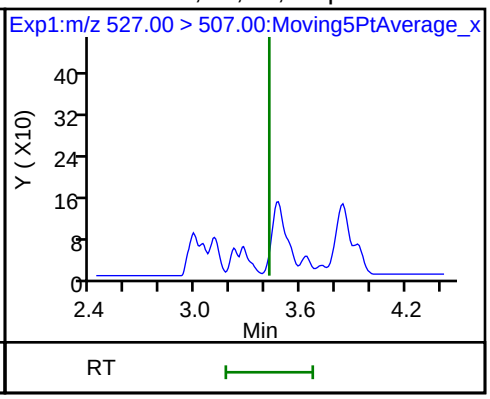
22 Perfluorooctane Sulfonamide



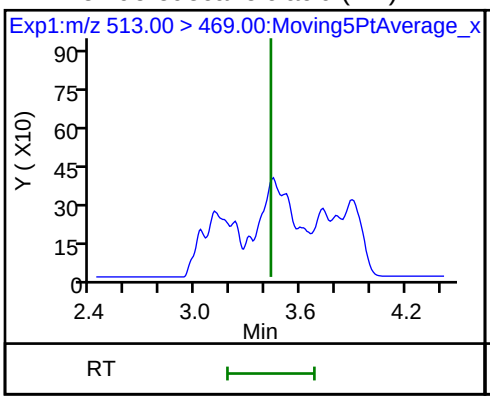
D 21 13C8 FOSA



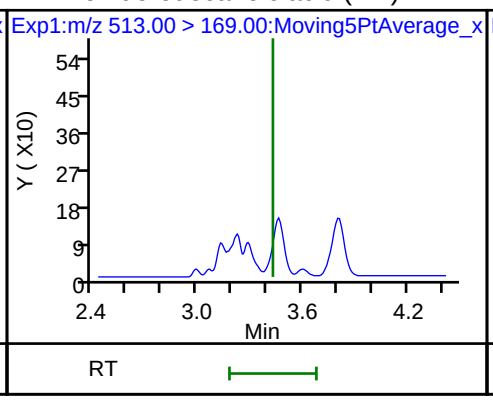
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



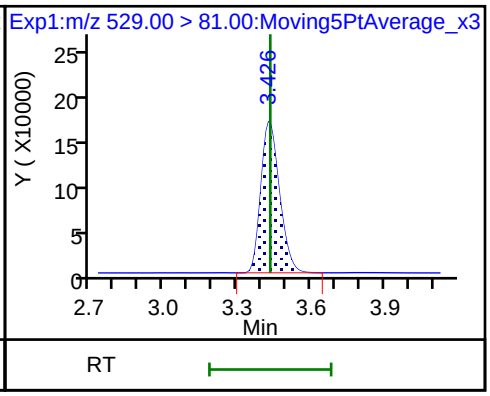
24 Perfluorodecanoic acid (ND)



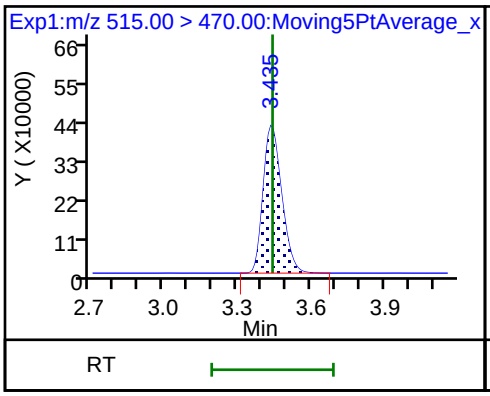
24 Perfluorodecanoic acid (ND)



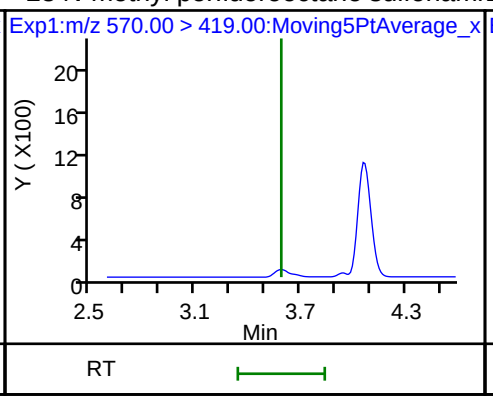
D 26 M2-8:2FTS



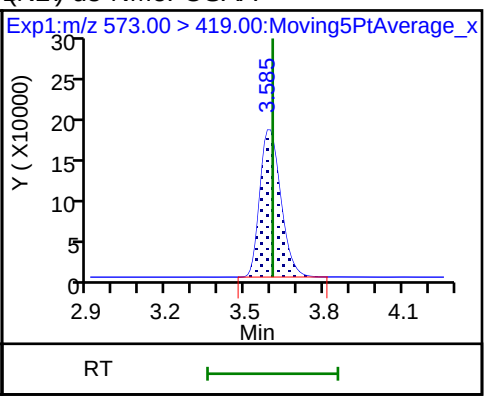
D 23 13C2 PFDA



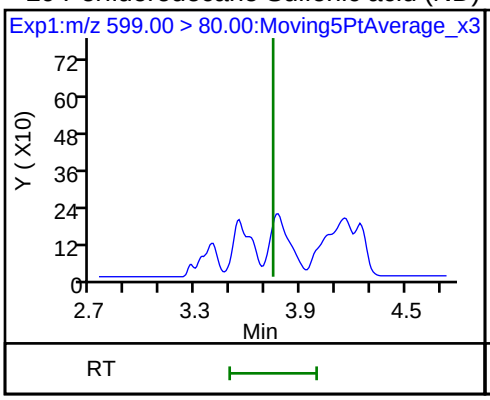
28 N-methyl perfluorooctane sulfonamid (ND)



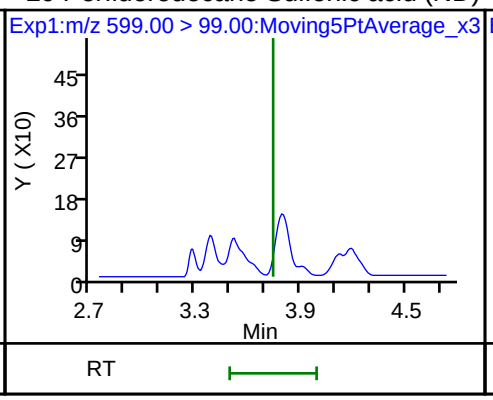
D 27 d3-NMeFOSAA



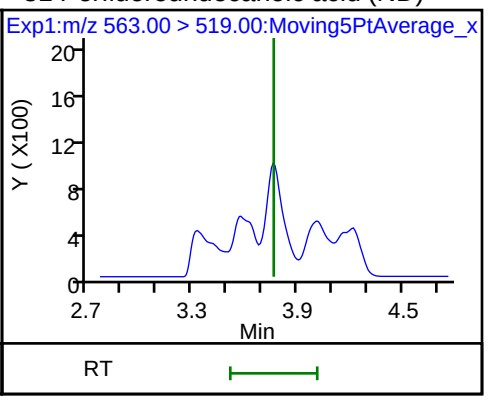
29 Perfluorodecane Sulfonic acid (ND)



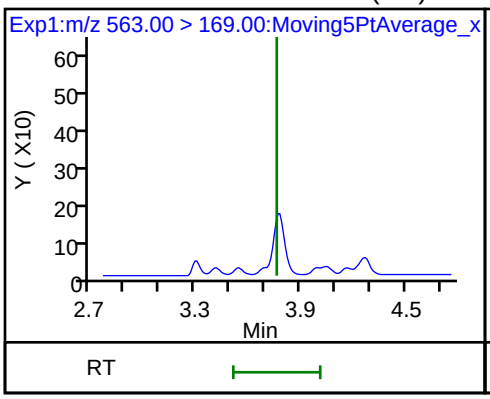
29 Perfluorodecane Sulfonic acid (ND)



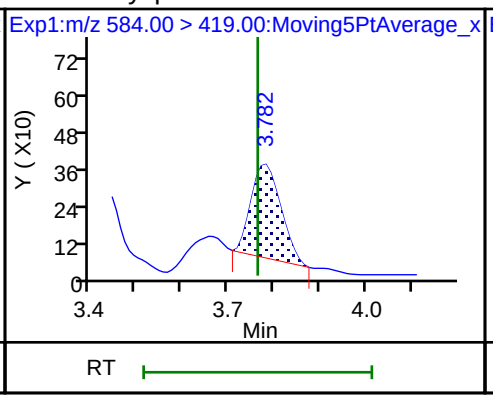
31 Perfluoroundecanoic acid (ND)



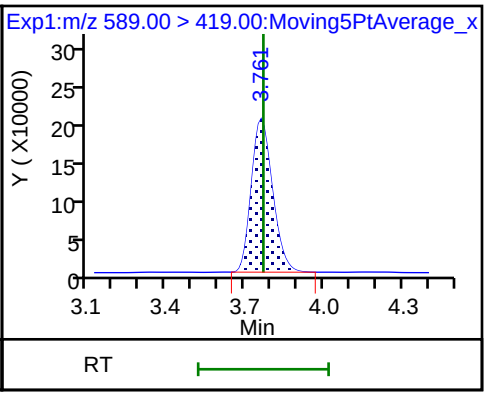
31 Perfluoroundecanoic acid (ND)



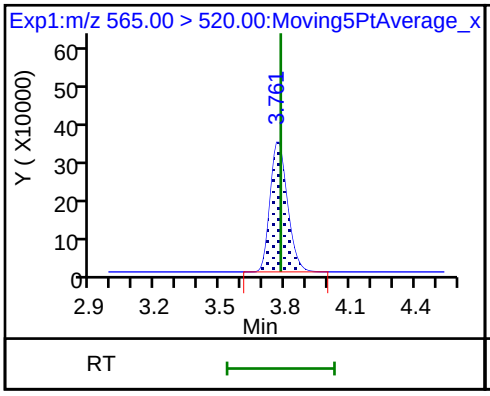
33 N-ethyl perfluorooctane sulfonamid



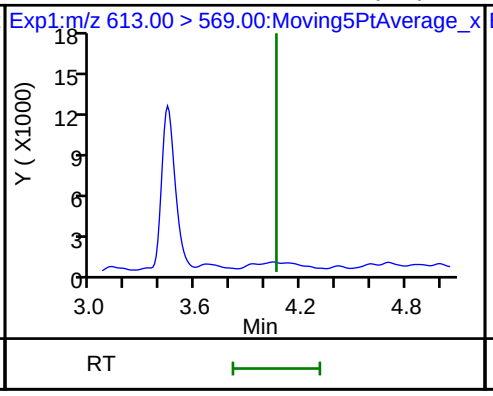
D 32 d5-NEtFOSAA



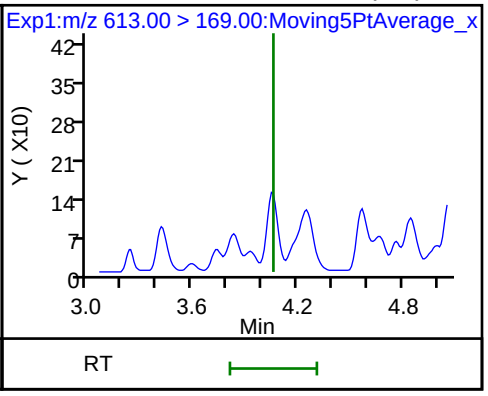
D 30 13C2 PFUnA



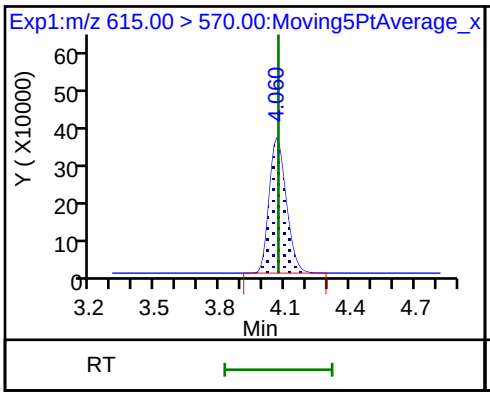
37 Perfluorododecanoic acid (ND)



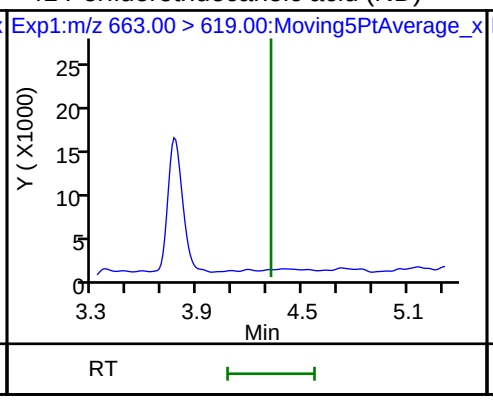
37 Perfluorododecanoic acid (ND)



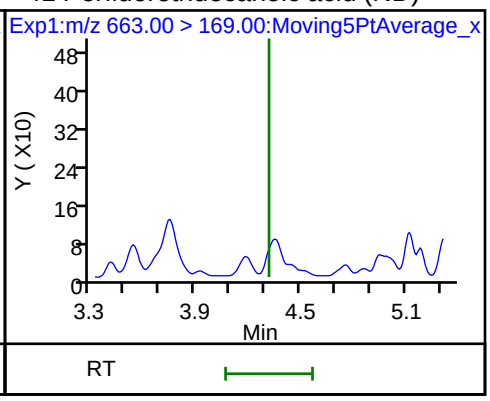
D 36 13C2 PFDoA



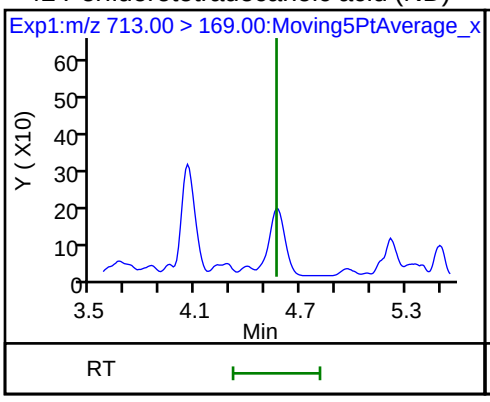
41 Perfluorotridecanoic acid (ND)



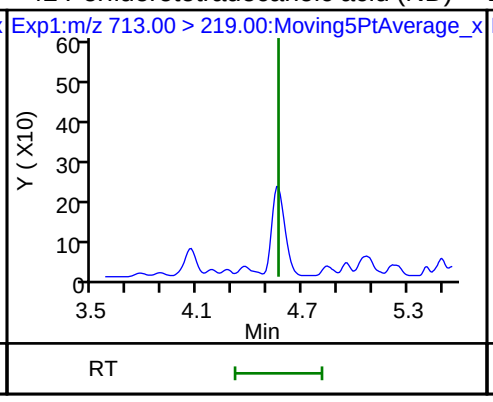
41 Perfluorotridecanoic acid (ND)



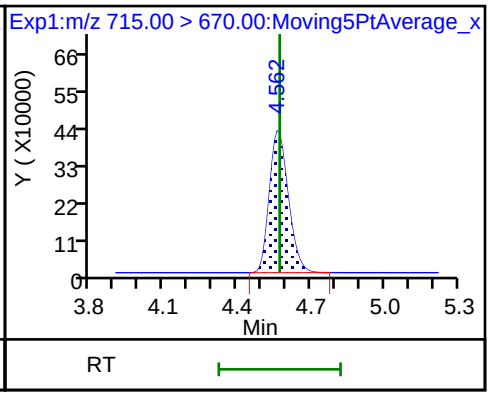
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 | Lab Sample ID: 320-38630-11

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_067.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:30

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.9(mL) | Date Analyzed: 05/14/2018 20:13

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	3.6	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.25	J B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	36	B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 | Lab Sample ID: 320-38630-11

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_067.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:30

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.9(mL) | Date Analyzed: 05/14/2018 20:13

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	97		25-150
STL01893	13C5 PFPeA	101		25-150
STL00993	13C2 PFHxA	105		25-150
STL01892	13C4-PFHpA	104		25-150
STL00990	13C4 PFOA	104		25-150
STL00995	13C5 PFNA	110		25-150
STL00996	13C2 PFDA	101		25-150
STL00997	13C2 PFUnA	98		25-150
STL00998	13C2 PFDoA	97		25-150
STL02116	13C2-PFTeDA	116		25-150
STL02337	13C3-PFBS	91		25-150
STL00994	18O2 PFHxS	93		25-150
STL00991	13C4 PFOS	93		25-150
STL01056	13C8 FOSA	76		25-150
STL02118	d3-NMeFOSAA	113		25-150
STL02117	d5-NEtFOSAA	113		25-150
STL02279	M2-6:2FTS	114		25-150
STL02280	M2-8:2FTS	101		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_067.d
Lims ID: 320-38630-A-11-A
Client ID: GC-Equipment Blank-2
Sample Type: Client
Inject. Date: 14-May-2018 20:13:16 ALS Bottle#: 49 Worklist Smp#: 26
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38630-A-11-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:10:01 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:08:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.452	0.0	1.000	5999876	2.42		96.6	46890	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.458	0.0	1.004	11658	0.005228			4.6	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.728	0.002	0.563	3872424	2.52		101	56604	
D 47 13C3-PFBS										
301.90 > 83.00	1.757	1.764	-0.007	1.000	76986	2.12		91.2	543	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.014	0.002	1.000	4211231	2.62		105	93825	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.345	0.002	1.000	4017390	2.60		104	92944	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.358	0.002	1.000	4526337	2.21		93.3	82470	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.373	-0.013	1.000	13503	0.006263			118	
399.00 > 99.00	2.360	2.373	-0.013	1.000	4617		2.92(1.50-4.49)		14.1	
D 12 M2-6:2FTS										
429.00 > 81.00	2.676	2.682	-0.006	1.000	821955	2.71		114	21107	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.676	2.683	-0.007	1.000	522084	0.8962			5447	
D 14 13C4 PFOA										
417.00 > 372.00	2.699	2.704	-0.005	1.000	3777550	2.61		104	72406	
* 62 13C2-PFOA										
415.00 > 370.00	2.699	2.713	-0.014		3838167	2.50			67253	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.706	2.713	-0.007	1.003	159935	0.0881			63.9	
413.00 > 169.00	2.699	2.713	-0.014	1.000	91652		1.75(0.84-2.52)		377	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 18 13C4 PFOS										
503.00 > 80.00	3.071	3.073	-0.002	1.000	3192782	2.23		93.4	30792	
D 19 13C5 PFNA										
468.00 > 423.00	3.071	3.081	-0.010	1.000	3324763	2.75		110	55264	
D 21 13C8 FOSA										
506.00 > 78.00	3.406	3.407	-0.001	1.000	3929129	1.90		75.9	40037	
D 26 M2-8:2FTS										
529.00 > 81.00	3.424	3.435	-0.011	1.000	955977	2.41		101	13597	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.424	3.437	-0.013	1.000	2785	0.005363			32.8	
D 23 13C2 PFDA										
515.00 > 470.00	3.433	3.444	-0.011	1.000	2624821	2.52		101	38614	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.595	3.596	-0.001	1.000	1327202	2.81		113	26723	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.759	3.771	-0.012	1.000	1427853	2.84		113	6499	
D 30 13C2 PFUnA										
565.00 > 520.00	3.770	3.771	-0.001	1.000	2136155	2.45		98.1	34968	
D 36 13C2 PFDoA										
615.00 > 570.00	4.059	4.071	-0.012	1.000	2203251	2.42		96.9	18123	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.574	-0.012	1.000	2885962	2.91		116	14661	

Report Date: 15-May-2018 15:10:13 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_067.d

Injection Date: 14-May-2018 20:13:16 Instrument ID: A8_N

Lims ID: 320-38630-A-11-A Lab Sample ID: 320-38630-11

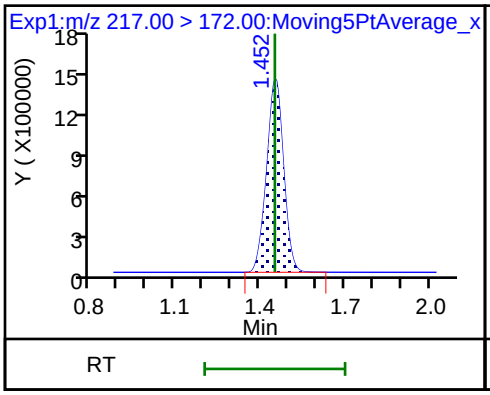
Client ID: GC-Equipment Blank-2

Operator ID: SACINSTLCMS01 ALS Bottle#: 49 Worklist Smp#: 26

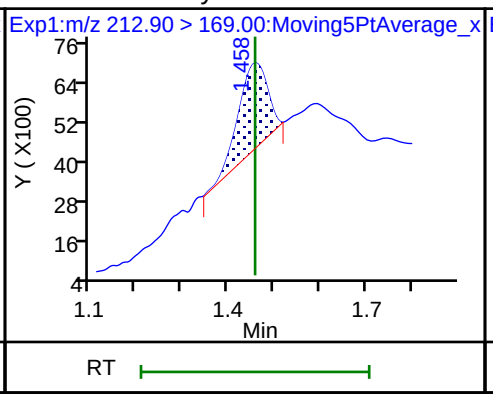
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

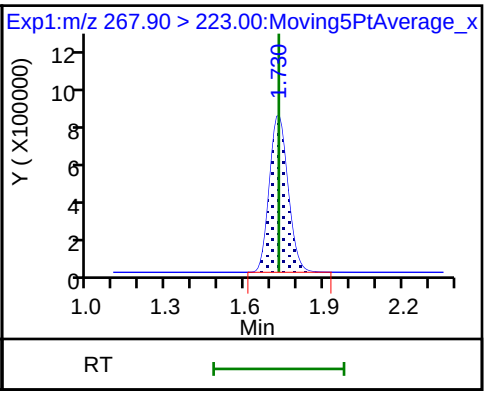
D 1 13C4 PFBA



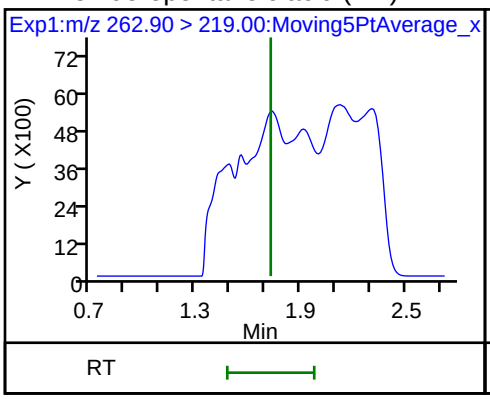
2 Perfluorobutyric acid



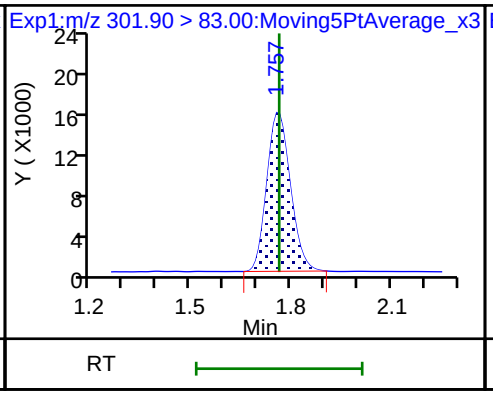
D 3 13C5-PFPeA



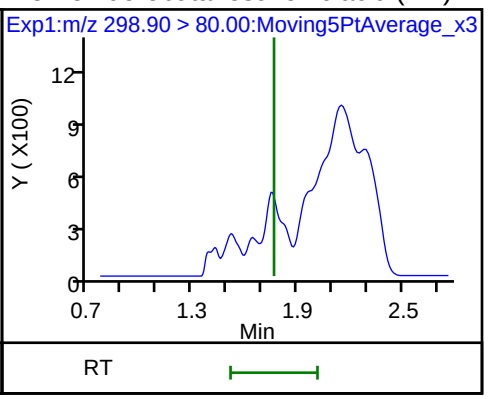
4 Perfluoropentanoic acid (ND)



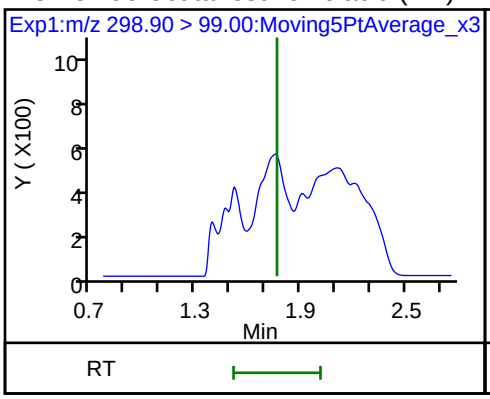
D 47 13C3-PFBS



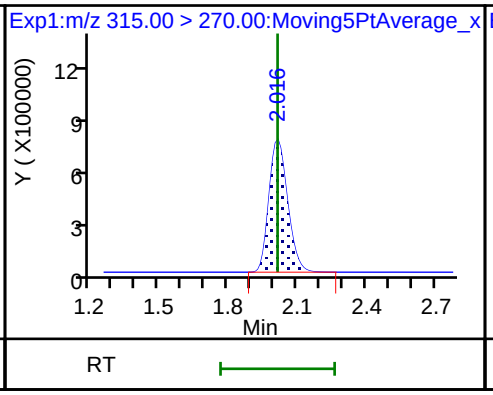
5 Perfluorobutanesulfonic acid (ND)



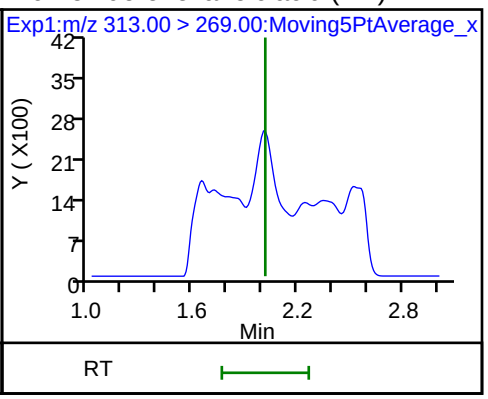
5 Perfluorobutanesulfonic acid (ND)



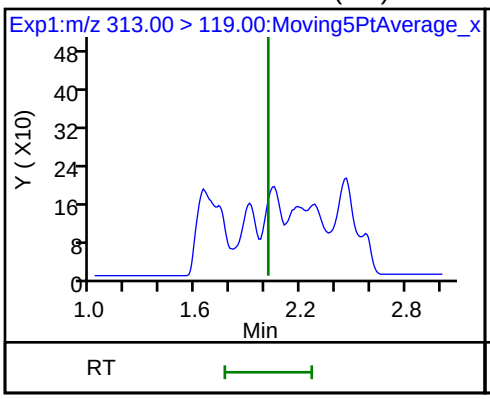
D 7 13C2 PFHxA



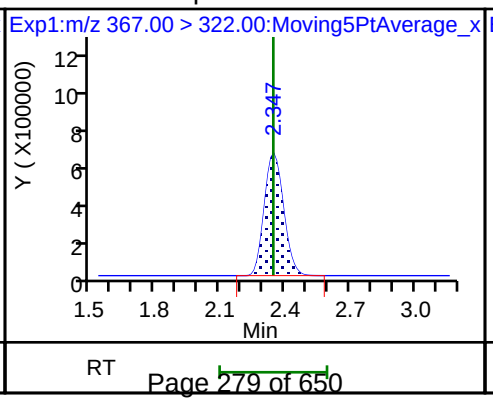
6 Perfluorohexanoic acid (ND)



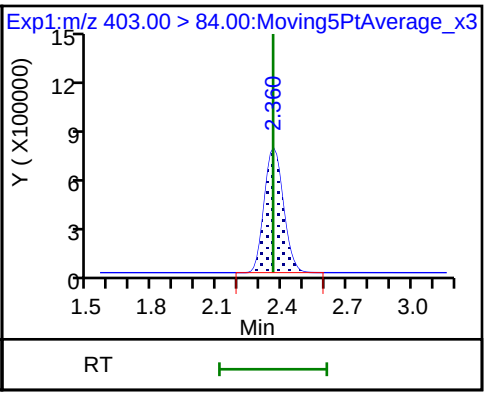
6 Perfluorohexanoic acid (ND)



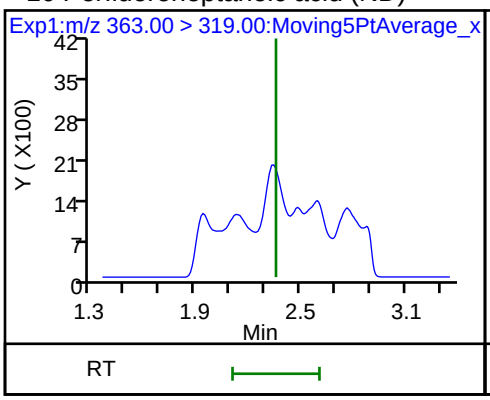
D 9 13C4-PFHpA



D 11 18O2 PFHxS



10 Perfluoroheptanoic acid (ND)



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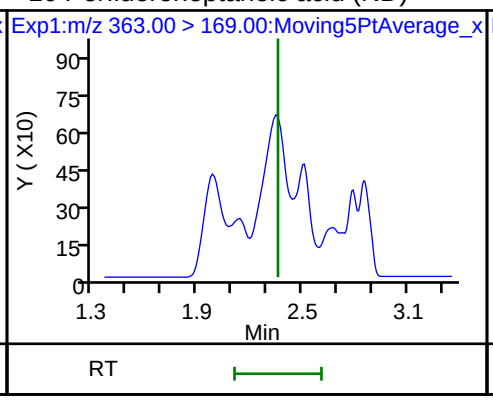
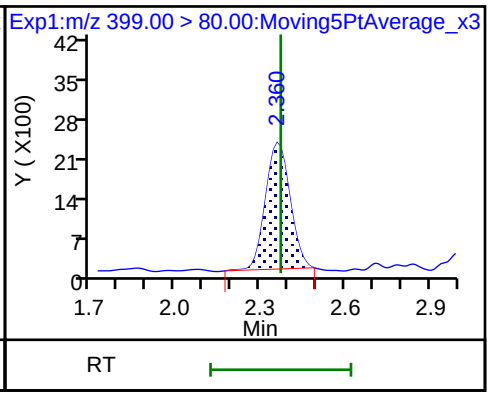
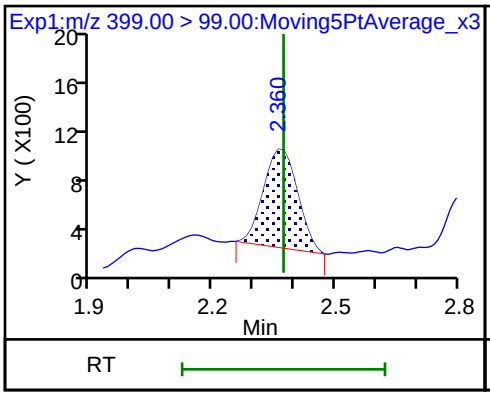


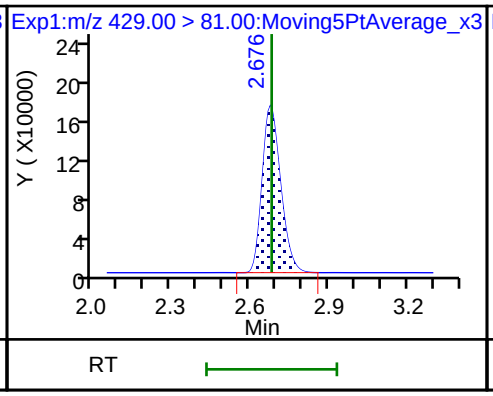
8 Perfluorohexanesulfonic acid



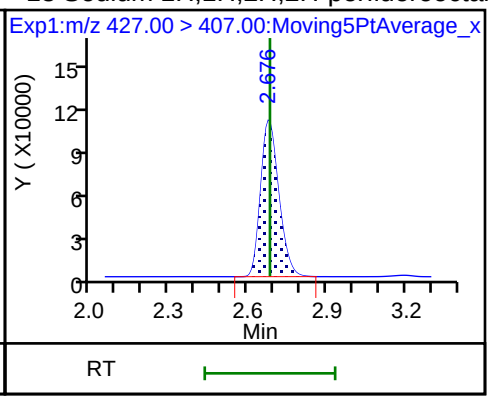
8 Perfluorohexanesulfonic acid



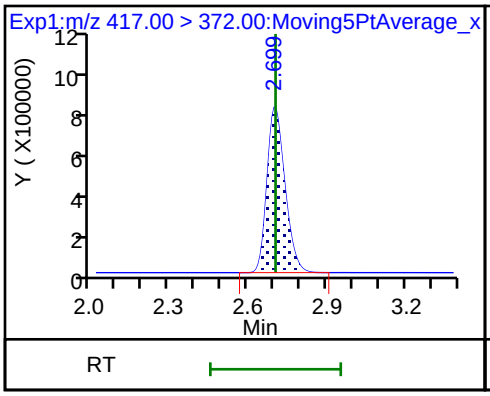
D 12 M2-6:2FTS



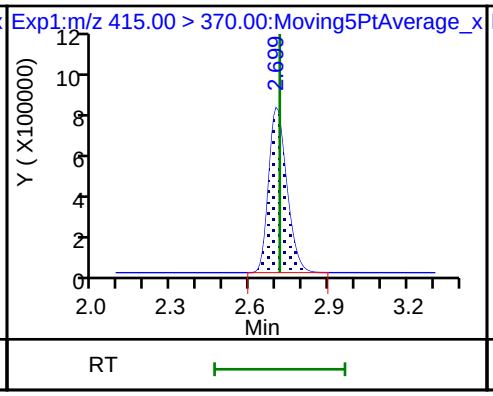
13 Sodium 1H,1H,2H,2H-perfluorooctane



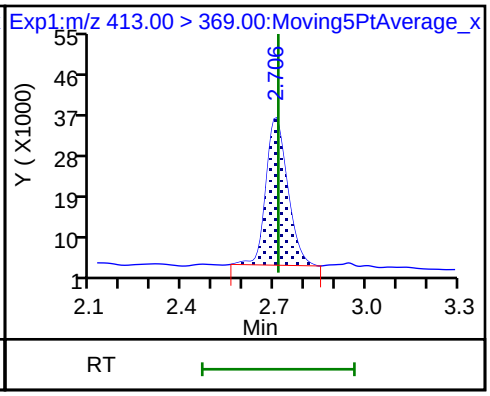
D 14 13C4 PFOA



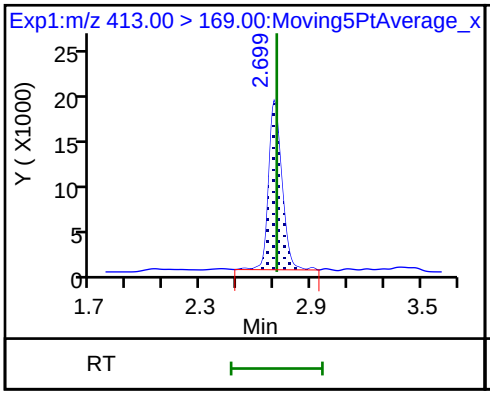
* 62 13C2-PFOA



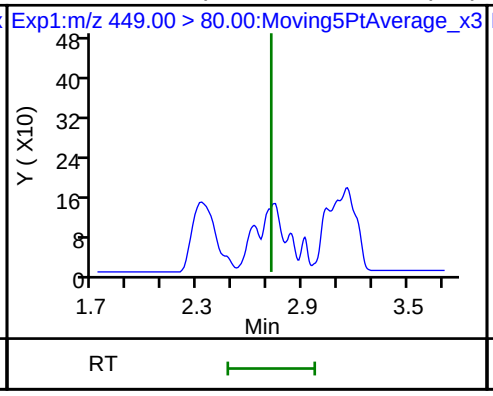
15 Perfluorooctanoic acid



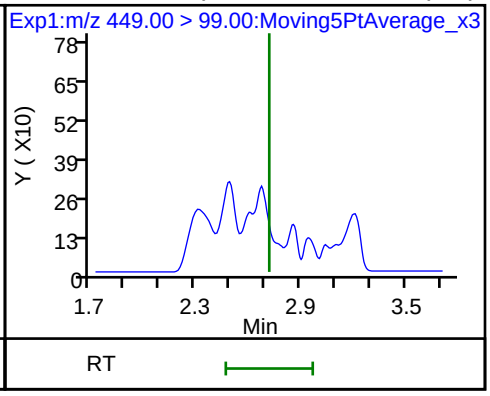
15 Perfluorooctanoic acid



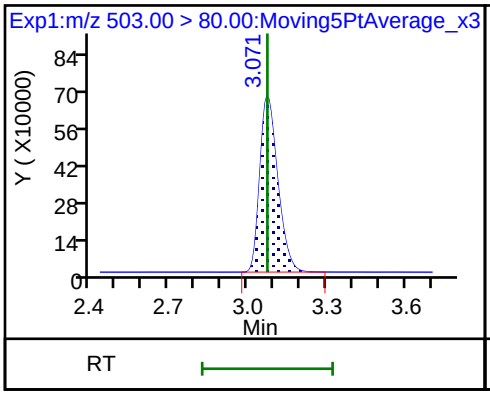
16 Perfluoroheptanesulfonic acid (ND)



16 Perfluoroheptanesulfonic acid (ND)



D 18 13C4 PFOS



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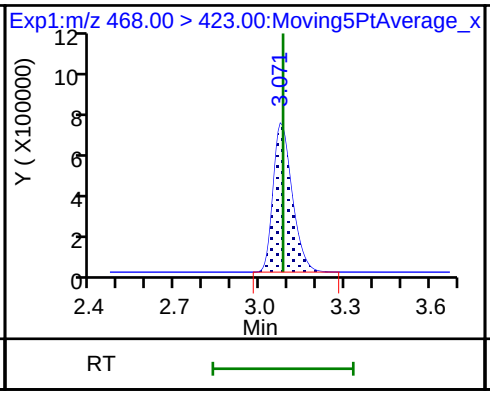
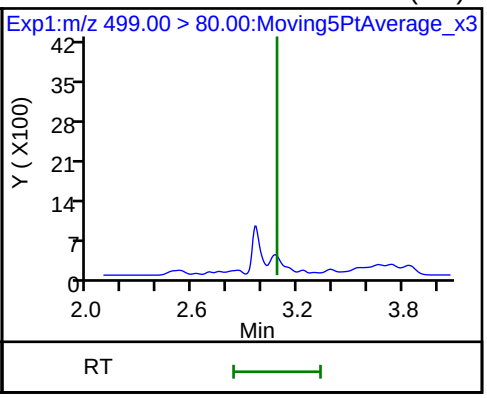


17 Perfluorooctane sulfonic acid (ND)



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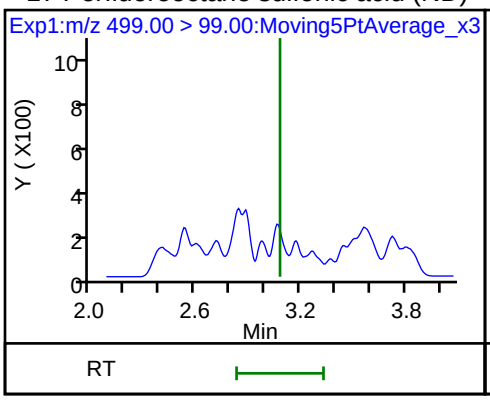
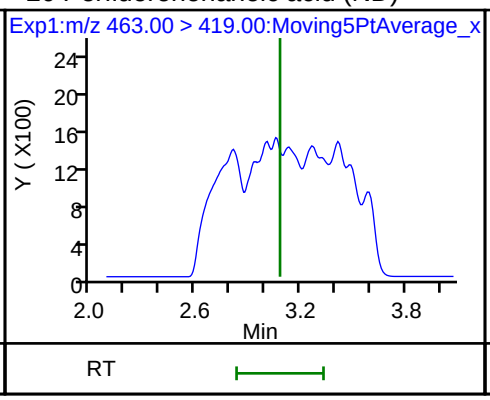
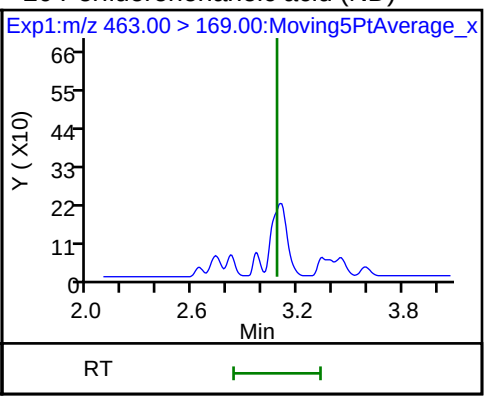


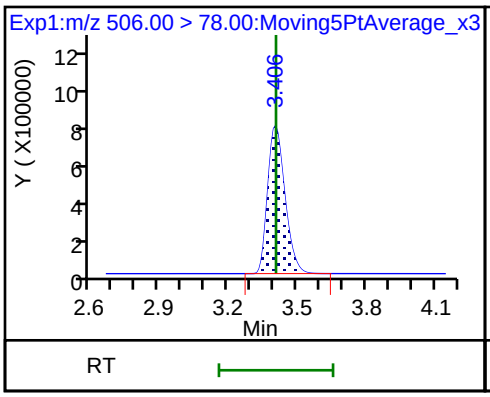
20 Perfluorononanoic acid (ND)



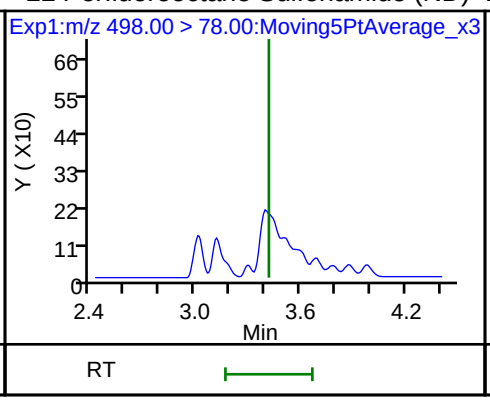
20 Perfluorononanoic acid (ND)



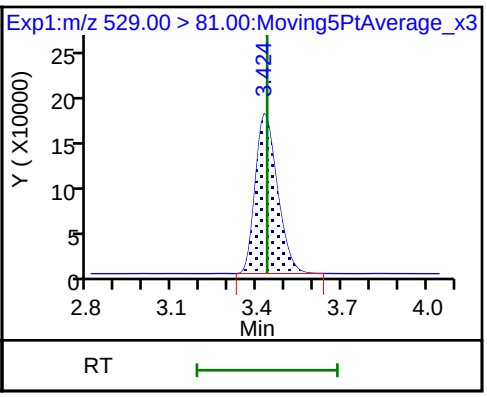
D 21 13C8 FOSA



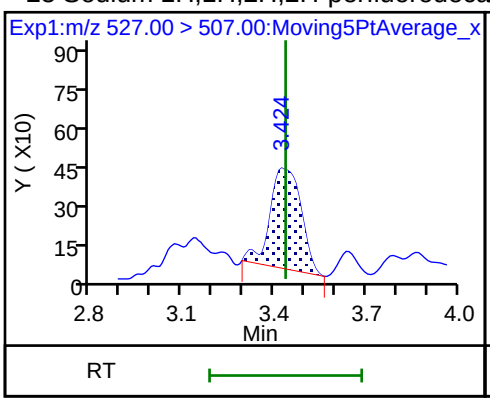
22 Perfluorooctane Sulfonamide (ND)



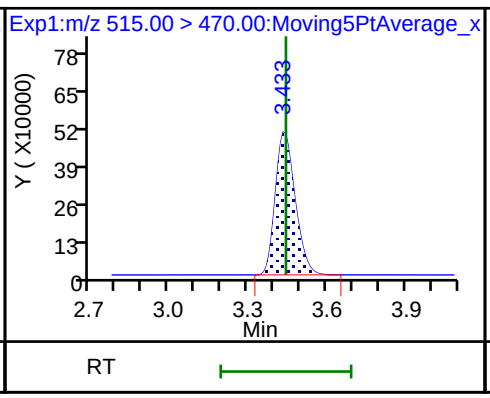
D 26 M2-8:2FTS



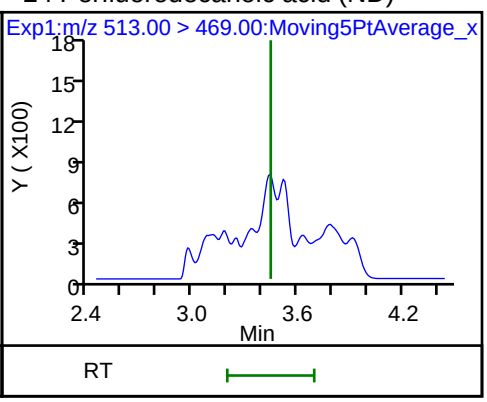
25 Sodium 1H,1H,2H,2H-perfluorodecane



D 23 13C2 PFDA



24 Perfluorodecanoic acid (ND)



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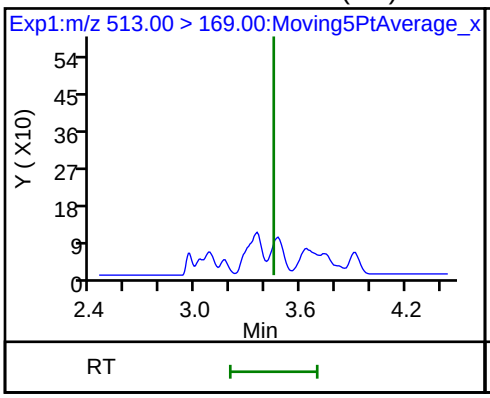
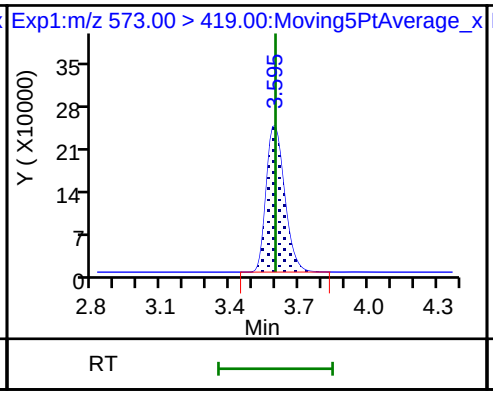
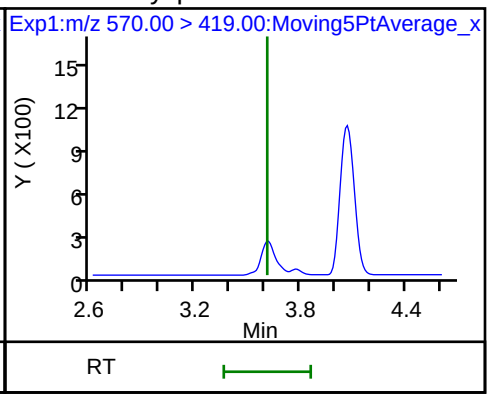


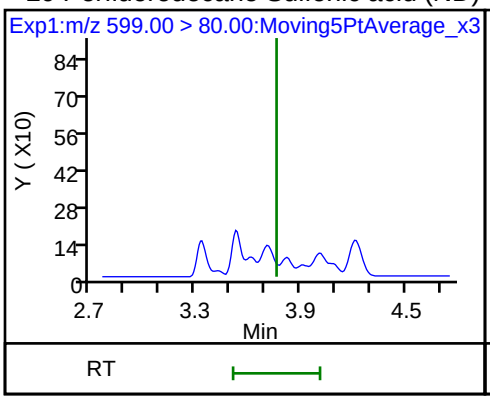
D 27 d3-NMeFOSAA



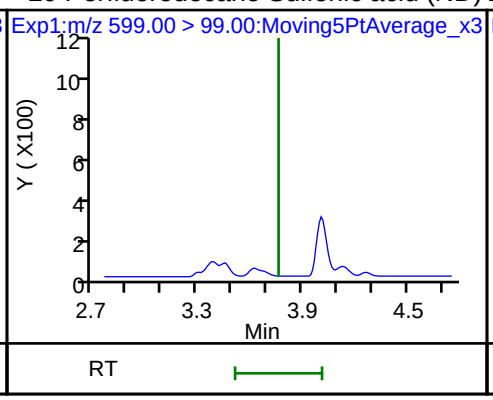
28 N-methyl perfluorooctane sulfonami (ND)



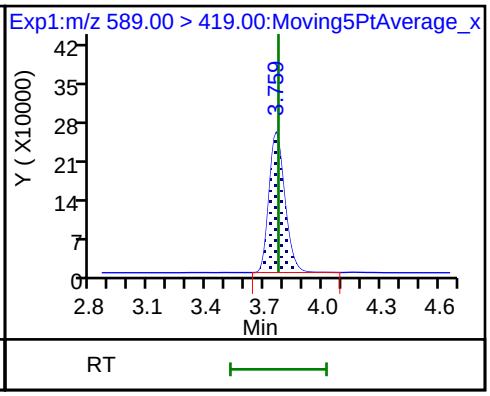
29 Perfluorodecane Sulfonic acid (ND)



29 Perfluorodecane Sulfonic acid (ND)



D 32 d5-NEtFOSAA



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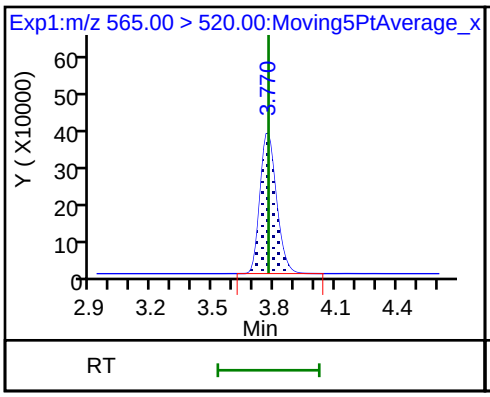
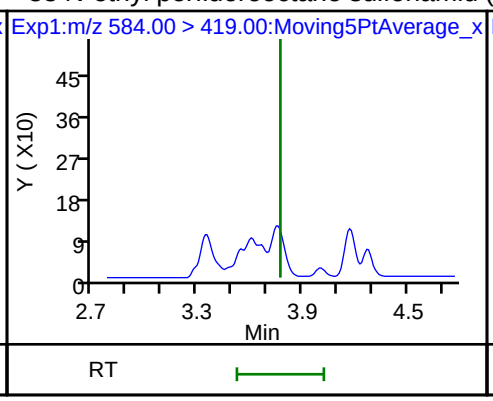
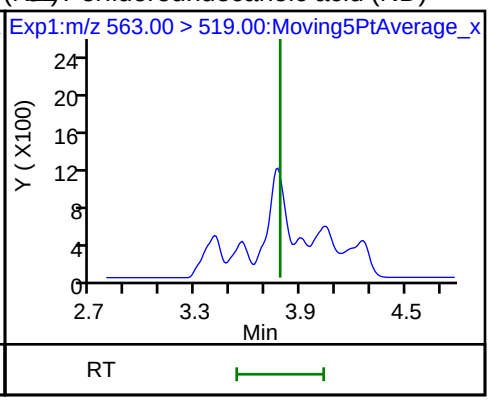


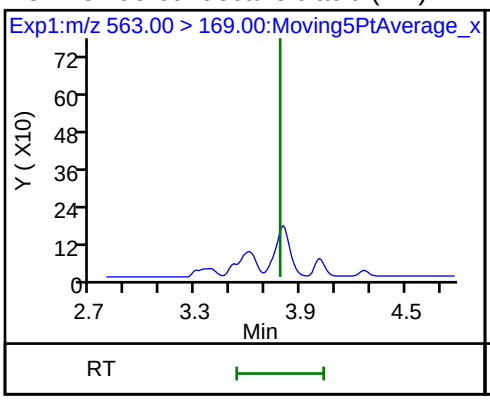
33 N-ethyl perfluorooctane sulfonamid (ND)



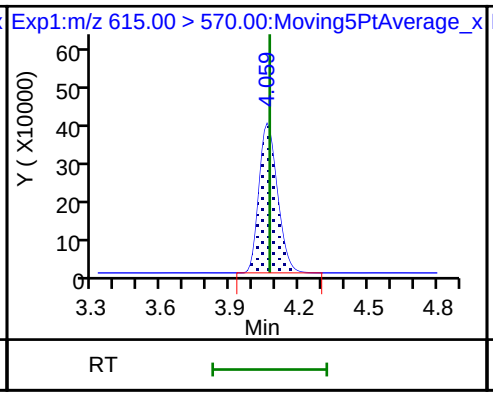
31 Perfluoroundecanoic acid (ND)



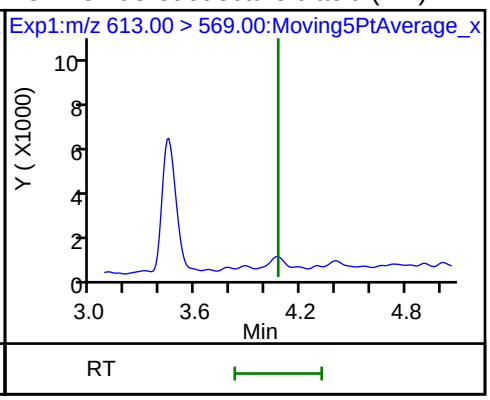
31 Perfluoroundecanoic acid (ND)



D 36 13C2 PFDoA



37 Perfluorododecanoic acid (ND)



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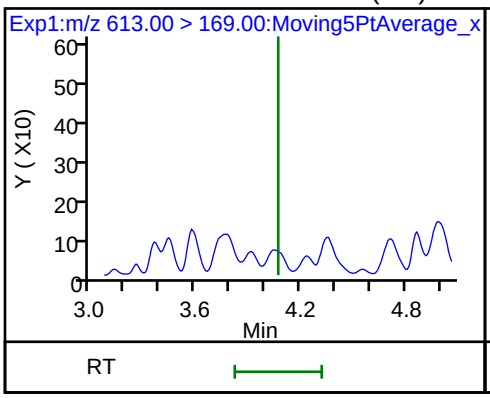
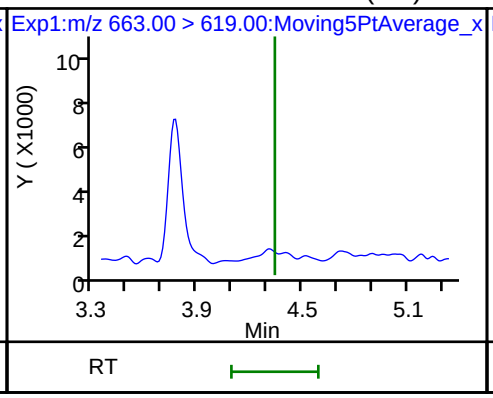
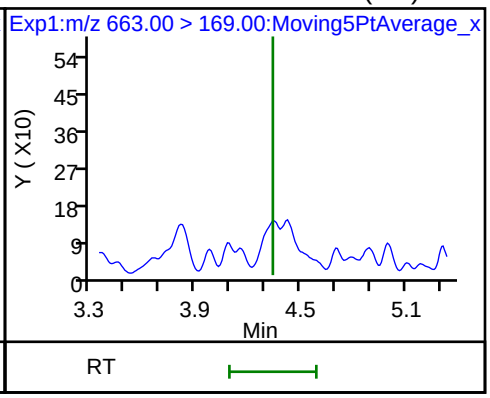


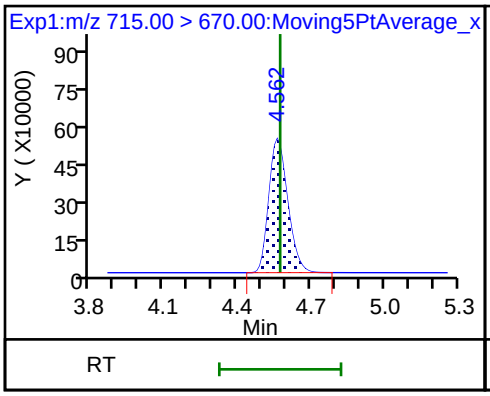
41 Perfluorotridecanoic acid (ND)



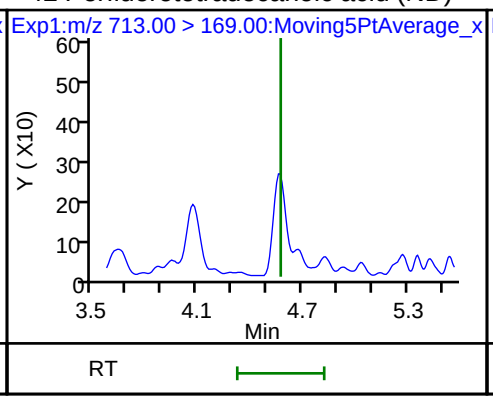
41 Perfluorotridecanoic acid (ND)



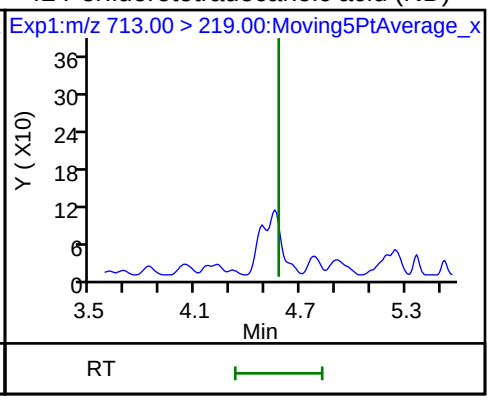
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 222921

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/13/2018 14:12 Calibration End Date: 05/13/2018 14:59 Calibration ID: 39152

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-222921/2	2017.05.13LLBxx_ICAL_002.d
Level 2	IC 320-222921/3	2017.05.13LLBxx_ICAL_003.d
Level 3	IC 320-222921/4	2017.05.13LLBxx_ICAL_004.d
Level 4	IC 320-222921/5	2017.05.13LLBxx_ICAL_005.d
Level 5	IC 320-222921/6	2017.05.13LLBxx_ICAL_006.d
Level 6	IC 320-222921/7	2017.05.13LLBxx_ICAL_007.d
Level 7	IC 320-222921/8	2017.05.13LLBxx_ICAL_008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.9594 0.9457	0.9762 0.9023	0.9268	0.9012	0.9421	AveID		0.9362				3.0		35.0			
Perfluoropentanoic acid (PFPeA)	1.1980 1.1474	1.3328 1.1578	1.1179	1.1316	1.1864	AveID		1.1817				6.1		35.0			
Perfluorobutanesulfonic acid (PFBS)	77.822 82.950	80.667 73.561	78.226	76.524	82.656	AveID		78.915				4.3		50.0			
4:2 FTS	14.436 15.768	12.200 12.824	13.106	13.776	13.839	AveID		13.707				8.5		50.0			
Perfluorohexanoic acid (PFHxA)	0.9202 1.1042	1.0406 0.9763	0.9849	0.9495	1.0467	AveID		1.0032				6.3		35.0			
Perfluoropentanesulfonic acid (PFPeS)	64.746 73.851	64.844 65.537	71.169	68.844	69.887	AveID		68.411				5.1		50.0			
HFPO-DA (GenX)	4.2989 2.6422	3.5846 +++++	2.6450	2.8155	2.9976	L2ID	0.0394	2.7332							0.9950		0.9900
Perfluoroheptanoic acid (PFHpA)	1.1842 1.0966	1.0394 1.0840	1.0571	1.0169	1.0908	AveID		1.0813				5.0		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.4751 1.0850	1.2115 1.0820	1.0147	0.9927	1.0870	AveID		1.1354				14.6		35.0			
Adona	3.3183 3.4155	3.3198 2.7968	3.2127	3.2971	3.3742	AveID		3.2478				6.4		50.0			
6:2FTS	1.5253 1.7876	1.5400 1.7130	1.6743	1.6021	1.7583	AveID		1.6572				6.3		35.0			
Perfluorooctanoic acid (PFOA)	1.1731 1.1358	1.2184 1.1436	1.1667	1.1163	1.1383	AveID		1.1560				2.9		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.3103 1.3667	1.3128 1.2860	1.2921	1.2504	1.3312	AveID		1.3071				2.8		50.0			
Perfluorooctanesulfonic acid (PFOS)	0.9751 1.1384	1.1660 1.1568	1.0810	1.0678	1.0912	AveID		1.0966				6.0		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 222921

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/13/2018 14:12 Calibration End Date: 05/13/2018 14:59 Calibration ID: 39152

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorononanoic acid (PFNA)	0.8988 1.0826	1.0699 1.0901	1.0041	0.9654	1.0116	AveID		1.0175				6.9		35.0			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	1.7524 1.8942	1.8233 1.8360	1.7657	1.7642	1.8181	AveID		1.8077				2.8		50.0			
Perfluorooctane Sulfonamide (FOSA)	0.9150 1.0768	0.9709 1.0054	0.9390	0.9544	1.0885	AveID		0.9929				6.8		35.0			
Perfluorononanesulfonic acid (PFNS)	0.6846 0.8461	0.9155 0.7747	0.7430	0.7357	0.7994	AveID		0.7856				9.8		50.0			
8:2FTS	1.0425 1.3665	1.1577 1.2553	1.2080	1.2982	1.2811	AveID		1.2299				8.6		35.0			
Perfluorodecanoic acid (PFDA)	1.1225 1.0720	1.0756 0.9910	0.9461	0.9450	1.0259	AveID		1.0255				6.7		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.9863 1.0529	1.1130 1.0491	1.0423	0.9646	1.0435	AveID		1.0360				4.7		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.6079 0.7126	0.6384 0.6981	0.6610	0.6230	0.6767	AveID		0.6597				5.9		50.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.1220 0.9410	0.9314 1.0254	0.9245	0.9569	0.9576	AveID		0.9798				7.2		35.0			
Perfluoroundecanoic acid (PFUnA)	0.9378 0.8414	0.7861 0.7335	0.6442	0.7897	0.7790	AveID		0.7874				11.5		35.0			
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	2.6949 2.6741	2.7138 2.5173	2.6386	2.6570	2.7791	AveID		2.6678				3.0		50.0			
Perfluorododecanoic acid (PFDoA)	0.8280 1.1016	1.1791 1.0790	1.0797	0.9699	1.0771	AveID		1.0449				10.9		35.0			
Perfluorotridecanoic Acid (PFTriA)	0.9077 1.1136	1.0397 1.0821	1.0599	1.0362	1.0348	AveID		1.0391				6.2		50.0			
Perfluorotetradecanoic acid (PFTeA)	0.3008 0.2602	0.2726 0.2550	0.2665	0.2485	0.2598	AveID		0.2662				6.4		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.6511 0.9590	1.3730 +++++	1.0020	0.9115	0.9419	L2ID	0.0186	0.9360							0.9980		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	1.0466 1.0373	0.8606 +++++	1.0923	1.0768	1.0378	AveID		1.0252				8.2		50.0			
13C4 PFBA	1.5288 1.6399	1.6216 1.6716	1.5921	1.6513	1.5989	Ave		1.6149				2.9		50.0			
13C5 PFPeA	0.9548 1.0603	1.0139 1.0533	1.0388	1.0594	1.0089	Ave		1.0271				3.7		50.0			
13C3-PFBS	0.0220 0.0232	0.0234 0.0247	0.0230	0.0237	0.0230	Ave		0.0233				3.5		50.0			
M2-4:2FTS	0.1299 0.1503	0.1402 0.1418	0.1408	0.1511	0.1386	Ave		0.1418				5.1		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 222921

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/13/2018 14:12 Calibration End Date: 05/13/2018 14:59 Calibration ID: 39152

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2 PFHxA	1.0439 1.0372	1.0890 1.1295	1.0711	1.1394	1.0577	Ave		1.0811				3.7		50.0			
13C3 HFPO-DA	0.0554 0.0652	0.0557 0.0536	0.0593	0.0616	0.0582	Ave		0.0584				6.8		50.0			
13C4-PFHpA	0.9371 1.0111	1.0244 0.9998	0.9728	1.0463	0.9783	Ave		0.9957				3.6		50.0			
18O2 PFHxS	1.2284 1.3099	1.3192 1.3035	1.2755	1.3719	1.2939	Ave		1.3003				3.4		50.0			
M2-6:2FTS	0.1903 0.1903	0.1893 0.1947	0.1965	0.2022	0.1946	Ave		0.1940				2.3		50.0			
13C4 PFOA	0.9190 0.9642	0.9401 0.9355	0.9464	0.9587	0.9292	Ave		0.9419				1.7		50.0			
13C4 PFOS	0.8786 0.9515	0.8809 0.9786	0.9300	0.9814	0.9304	Ave		0.9331				4.5		50.0			
13C5 PFNA	0.7801 0.7715	0.7766 0.7733	0.8078	0.8571	0.7927	Ave		0.7942				3.8		50.0			
13C8 FOSA	1.2695 1.3567	1.2230 1.3364	1.3537	1.4040	1.3009	Ave		1.3206				4.6		50.0			
M2-8:2FTS	0.2472 0.2394	0.2690 0.2526	0.2667	0.2611	0.2489	Ave		0.2550				4.3		50.0			
13C2 PFDA	0.6711 0.6781	0.6613 0.6907	0.7170	0.7533	0.6814	Ave		0.6933				4.6		50.0			
d3-NMeFOSAA	0.2767 0.3170	0.2837 0.3308	0.2943	0.3157	0.3101	Ave		0.3041				6.5		50.0			
d5-NEtFOSAA	0.3160 0.3309	0.3492 0.3116	0.3512	0.3400	0.3300	Ave		0.3327				4.6		50.0			
13C2 PFUnA	0.5223 0.5306	0.5950 0.5906	0.5982	0.5835	0.5479	Ave		0.5669				5.7		50.0			
13C2 PFDoA	0.5441 0.6079	0.5772 0.6058	0.5767	0.6216	0.6044	Ave		0.5911				4.5		50.0			
13C2-PFTeDA	0.6011 0.6700	0.5278 0.6863	0.6519	0.6949	0.6735	Ave		0.6436				9.3		50.0			
13C2-PFHxDA	1.0518 1.0758	0.7232 +++++	1.0493	1.1556	1.0955	Ave		1.0252				14.9		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 222921

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/13/2018 14:12 Calibration End Date: 05/13/2018 14:59 Calibration ID: 39152

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-222921/2	2017.05.13LLBxx_ICAL_002.d
Level 2	IC 320-222921/3	2017.05.13LLBxx_ICAL_003.d
Level 3	IC 320-222921/4	2017.05.13LLBxx_ICAL_004.d
Level 4	IC 320-222921/5	2017.05.13LLBxx_ICAL_005.d
Level 5	IC 320-222921/6	2017.05.13LLBxx_ICAL_006.d
Level 6	IC 320-222921/7	2017.05.13LLBxx_ICAL_007.d
Level 7	IC 320-222921/8	2017.05.13LLBxx_ICAL_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	58558 9515806	126475 20215971	508539	1980079	5014152	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	45673 7464976	107968 16346809	400184	1595257	3984280	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	60478 10438382	133229 21557278	549282	2130106	5600085	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	11853 2096509	21289 3970822	97234	405171	990617	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	38354 7027118	90543 14780619	363553	1439534	3685174	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	53390 9861044	113638 20379039	530257	2033391	5024150	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		L2ID	9511 1056534	15960 +++++	54062	230624	580734	0.0250 5.00	0.0500 +++++	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	44307 6803261	85080 14528027	354425	1415732	3552017	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	65834 7935883	116202 17203051	405875	1649009	4260217	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
Adona		AveID	116405 19941425	233665 36688288	1029644	4305447	10449455	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
6:2FTS		AveID	10986 1978903	22079 4237691	107465	408574	1079794	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	43043 6719883	91525 14339675	380516	1424064	3520971	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	43759 7596643	87966 16060622	394230	1554416	3924523	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorooctanesulfonic acid (PFOS)		AveID	31743 6168145	76163 14082097	321512	1293959	3135866	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32
Perfluorononanoic acid (PFNA)		AveID	27996 5125043	66392 11299204	279557	1100961	2669242	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 222921

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/13/2018 14:12 Calibration End Date: 05/13/2018 14:59 Calibration ID: 39152

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate		AveID	57293 10307049	119606 22447462	527409	2147088	5247608	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorooctane Sulfonamide (FOSA)		AveID	46376 8963728	94872 18009739	438095	1782935	4713584	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorononanesulfonic acid (PFNS)		AveID	23056 4742244	61863 9756426	228597	922314	2376456	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
8:2FTS		AveID	9858 1923084	23838 4072142	106386	432014	1016618	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorodecanoic acid (PFDA)		AveID	30076 4460306	56836 9174968	233807	947325	2326948	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	10895 2048148	25232 4652360	105708	405215	1077257	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	20559 4010505	43316 8827642	204229	784306	2020290	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	14158 1910424	25984 4283140	111908	432898	1051762	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroundecanoic acid (PFUnA)		AveID	19556 2739626	37369 5806131	132812	613151	1420688	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate		AveID	89052 14706858	179935 31107009	796596	3268382	8107295	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)		AveID	17986 4108972	54383 8761229	214612	802236	2167009	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotridecanoic Acid (PFTriA)		AveID	19717 4153872	47951 8786319	210675	857066	2082050	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	7218 1069559	11497 2345287	59877	229748	582486	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	69340 6330385	79338 +++++	362365	1401680	3434741	0.0250 5.00	0.0500 +++++	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	43952 6846952	49729 +++++	395018	1655871	3784446	0.0250 5.00	0.0500 +++++	0.250	1.00	2.50
13C4 PFBA	13PFOA	Ave	6103782 5031013	6478240 5601535	5487061	5493188	5322257	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PFOA	Ave	3812283 3252897	4050415 3529651	3579904	3524244	3358292	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3-PFBS	13PFOA	Ave	81757 66194	86877 77076	73871	73211	71277	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2FTS	13PFOA	Ave	484596 430525	522980 443936	453150	469628	431036	2.34 2.34	2.34 2.34	2.34	2.34	2.34
13C2 PFHxA	13PFOA	Ave	4167846 3181960	4350669 3785046	3691361	3790319	3520805	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PFOA	Ave	221243 199935	222618 179762	204391	204782	193735	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 222921

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/13/2018 14:12 Calibration End Date: 05/13/2018 14:59 Calibration ID: 39152

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C4-PFHpA	13PF OA	Ave	3741449 3101891	4092683 3350410	3352654	3480570	3256420	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	4639525 3801674	4985573 4132118	4158344	4317312	4074246	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2FTS	13PF OA	Ave	721792 554687	718348 619751	643213	638923	615402	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C4 PFOA	13PF OA	Ave	3669183 2958154	3755818 3134900	3261572	3189338	3093108	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFOS	13PF OA	Ave	3353635 2790780	3364404 3135213	3063924	3120972	2960590	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	3114849 2366938	3102636 2591351	2784047	2851086	2638749	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	5068629 4162209	4885732 4478411	4665415	4670420	4330176	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2FTS	13PF OA	Ave	945635 703631	1029528 810986	880702	831951	793546	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	2679351 2080360	2642006 2314484	2471188	2506036	2268262	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	1104623 972628	1133515 1108624	1014196	1050199	1032302	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	1261823 1015129	1394930 1044261	1210507	1131020	1098292	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	2085323 1627923	2376901 1979001	2061574	1941159	1823756	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	2172232 1865023	2306034 2029949	1987610	2067882	2011965	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFTeDA	13PF OA	Ave	2399838 2055402	2108440 2299691	2246581	2311725	2241873	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFHxDA	13PF OA	Ave	4199572 3300428	2889283 +++++	3616302	3844273	3646597	2.50 2.50	2.50 +++++	2.50	2.50	2.50

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_002.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 13-May-2018 14:12:43 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L1-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 08:39:41 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 13-May-2018 14:48:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.461	-0.003	1.000	6103782	2.37		94.7	59636	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.461	-0.003	1.000	58558	0.0256		102	33.1	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.730	-0.001	0.562	3812283	2.32		93.0	80083	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.729	1.731	-0.002	1.000	45673	0.0253		101	20.8	M
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.763	0.002	1.000	81757	2.20		94.5	683	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.769	-0.004	1.000	60478	0.0218		98.6	217	
298.90 > 99.00	1.765	1.769	-0.004	1.000	25412		2.38(1.25-3.74)	98.6	146	
D 60 M2-4:2FTS										
329.00 > 81.00	1.981	1.979	0.002	1.000	484596	2.14		91.6	6819	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.981	1.982	-0.001	1.000	11853	0.0246		105	700	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.019	-0.004	1.000	4167846	2.41		96.6	124942	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.021	-0.006	1.000	38354	0.0229		91.7	61.9	
313.00 > 119.00	2.015	2.021	-0.006	1.000	5511		6.96(5.03-15.10)	91.7	74.9	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.037	2.040	-0.003	1.000	53390	0.0222		94.6	966	
349.00 > 99.00	2.037	2.040	-0.003	1.000	20395		2.62(1.36-4.07)	94.6	227	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.116	2.118	-0.002	1.000	221243	2.37		94.8	4971	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.116	2.119	-0.003	1.000	9511	0.0249		99.6	83.6	
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.349	-0.003	1.000	3741449	2.35		94.1	55111	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.346	2.351	-0.005	1.000	44307	0.0274		110	86.4	
363.00 > 169.00	2.346	2.351	-0.005	1.000	14132		3.14(1.13-3.40)	110	108	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.359	2.362	-0.003	1.000	65834	0.0296		130	551	
399.00 > 99.00	2.359	2.362	-0.003	1.000	19047		3.46(1.50-4.49)	130	84.1	
D 11 18O2 PFHxS										
403.00 > 84.00	2.359	2.364	-0.005	1.000	4639525	2.23		94.5	50790	
65 Adona										
377.00 > 251.00	2.396	2.396	0.0	1.000	116405	0.0255		102	2484	
377.00 > 85.00	2.396	2.396	0.0	1.000	68374		1.70(0.84-2.53)	102	615	
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.681	0.002	1.000	721792	2.33		98.1	17294	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.681	0.002	1.000	10986	0.0218		92.0	210	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.704	0.001		3992638	2.50			78321	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.705	0.0	1.000	3669183	2.44		97.6	56285	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.708	-0.003	1.000	43043	0.0254		101	23.0	
413.00 > 169.00	2.705	2.708	-0.003	1.000	26360		1.63(0.84-2.52)	101	112	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.712	0.001	1.000	43759	0.0239		100	862	
449.00 > 99.00	2.720	2.712	0.008	1.003	10627		4.12(1.94-5.82)	100	176	
D 18 13C4 PFOS										
503.00 > 80.00	3.077	3.075	0.002	1.000	3353635	2.25		94.2	30267	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.077	3.075	0.002	1.000	31743	0.0206		88.9	171	M
499.00 > 99.00	3.077	3.075	0.002	1.000	8329		3.81(2.31-6.93)	88.9	58.7	
D 19 13C5 PFNA										
468.00 > 423.00	3.077	3.077	0.0	1.000	3114849	2.46		98.2	61519	
20 Perfluorononanoic acid										
463.00 > 419.00	3.077	3.078	-0.001	1.000	27996	0.0221		88.3	48.6	
463.00 > 169.00	3.077	3.078	-0.001	1.000	8577		3.26(1.90-5.69)	88.3	279	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.292	3.287	0.005	1.000	57293	0.0226		96.9	592	
D 21 13C8 FOSA										
506.00 > 78.00	3.404	3.403	0.001	1.000	5068629	2.40		96.1	39598	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.404	3.404	0.0	1.000	46376	0.0230		92.2	1019	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.422	3.424	-0.002	1.000	23056	0.0209		87.1	450	
549.00 > 99.00	3.413	3.424	-0.011	0.997	10466		2.20(1.33-3.97)	87.1	169	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.432	3.430	0.002	1.000	9858	0.0203		84.8	194	
D 26 M2-8:2FTS										
529.00 > 81.00	3.432	3.430	0.002	1.000	945635	2.32		97.0	13700	
D 23 13C2 PFDA										
515.00 > 470.00	3.441	3.440	0.001	1.000	2679351	2.42		96.8	51815	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.441	3.442	-0.001	1.000	30076	0.0274		109	182	R
513.00 > 169.00	3.450	3.442	0.008	1.003	4058		7.41(2.36-7.09)	109	113	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.593	3.594	-0.001	1.000	1104623	2.27		91.0	22146	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.604	3.599	0.005	1.003	10895	0.0238		95.2	117	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.747	3.753	-0.006	1.000	20559	0.0222		92.2	307	
599.00 > 99.00	3.757	3.753	0.004	1.003	7313		2.81(1.39-4.16)	92.2	180	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.768	3.766	0.002	1.000	1261823	2.37		95.0	3442	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.768	3.771	-0.003	1.000	14158	0.0286		115	321	
D 30 13C2 PFUnA										
565.00 > 520.00	3.768	3.771	-0.003	1.000	2085323	2.30		92.1	46530	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.768	3.772	-0.004	1.000	19556	0.0298		119	84.5	
563.00 > 169.00	3.757	3.772	-0.015	0.997	6634		2.95(2.12-6.36)	119	313	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.924	3.929	-0.005	1.000	89052	0.0238		101	1540	
D 36 13C2 PFDoA										
615.00 > 570.00	4.067	4.066	0.001	1.000	2172232	2.30		92.0	21020	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.067	4.068	-0.001	1.000	17986	0.0198		79.2	12.1	
613.00 > 169.00	4.067	4.068	-0.001	1.000	4251		4.23(2.13-6.40)	79.2	60.3	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.338	4.336	0.002	1.000	19717	0.0218		87.3	7.5	
663.00 > 169.00	4.327	4.336	-0.009	0.997	8280		2.38(1.25-3.76)	87.3	153	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.570	4.571	-0.001	1.000	2399838	2.33		93.4	14890	
42 Perfluorotetradecanoic acid										R
713.00 > 169.00	4.570	4.571	-0.001	1.000	7218	0.0282		113	105	R
713.00 > 219.00	4.570	4.571	-0.001	1.000	3275		2.20(0.71-2.13)	113	80.1	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.990	4.993	-0.003	1.000	4199572	2.56		103	12007	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.990	4.995	-0.005	1.000	69340	0.0242		96.8	13.8	
813.00 > 169.00	4.990	4.995	-0.005	1.000	12435		5.58(2.86-8.58)	96.8	149	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.367	5.367	0.0	1.000	43952	0.0255		102	7.9	
913.00 > 169.00	5.367	5.367	0.0	1.000	4070		10.80(3.83-11.48)	102	53.5	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00005 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 08:39:43 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_002.d

Injection Date: 13-May-2018 14:12:43 Instrument ID: A8_N

Lims ID: IC L1 Full

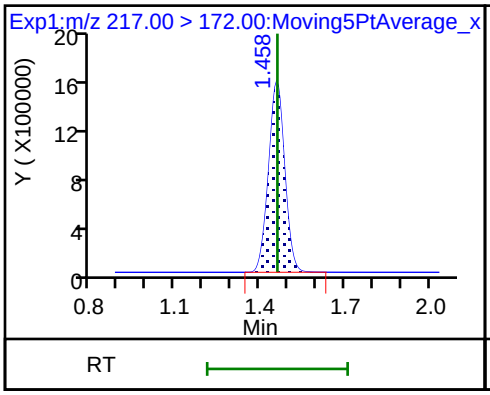
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2

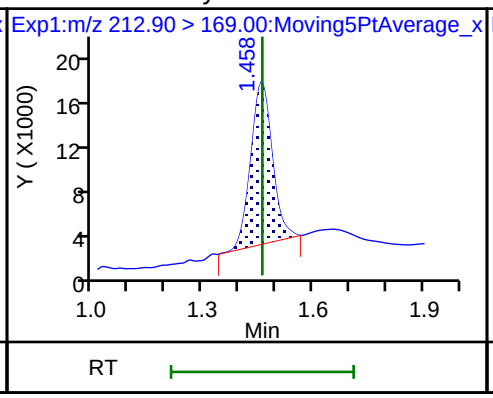
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

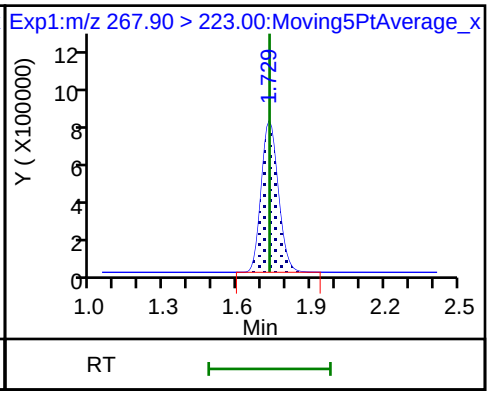
D 1 13C4 PFBA



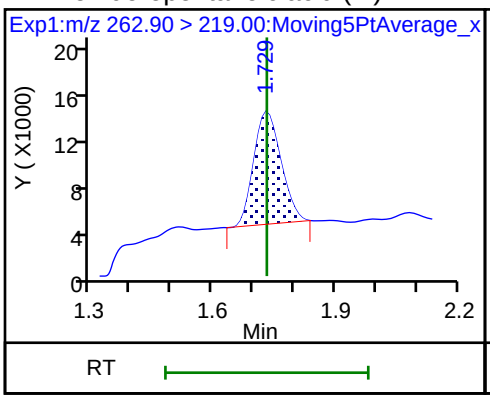
2 Perfluorobutyric acid



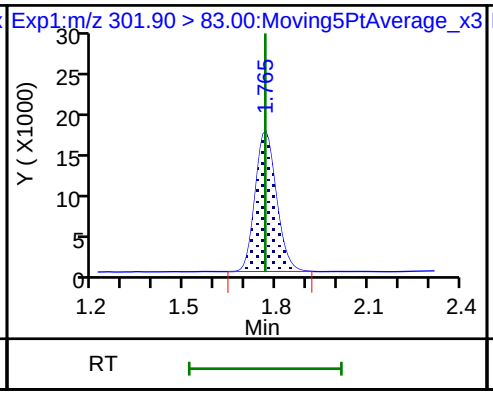
D 3 13C5-PFPeA



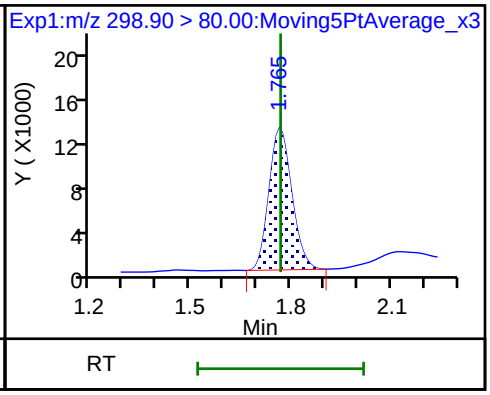
4 Perfluoropentanoic acid (M)



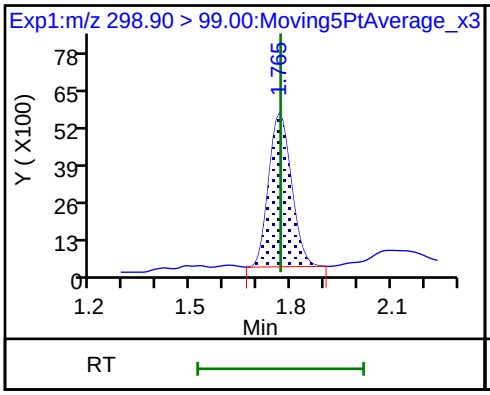
D 47 13C3-PFBS



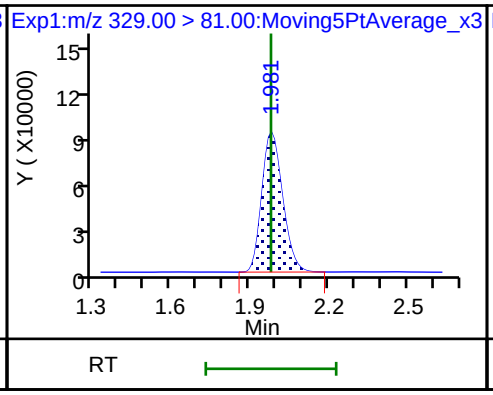
5 Perfluorobutanesulfonic acid



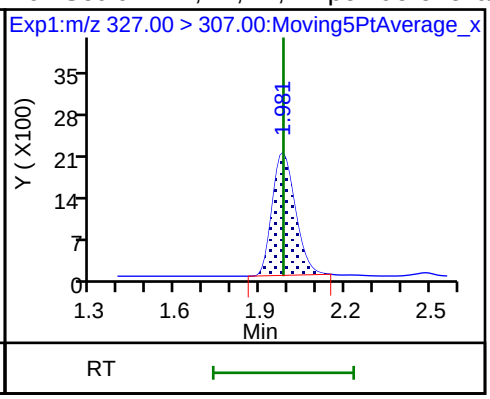
5 Perfluorobutanesulfonic acid



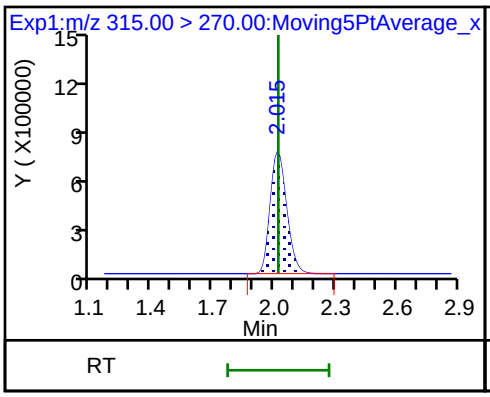
D 60 M2-4:2FTS



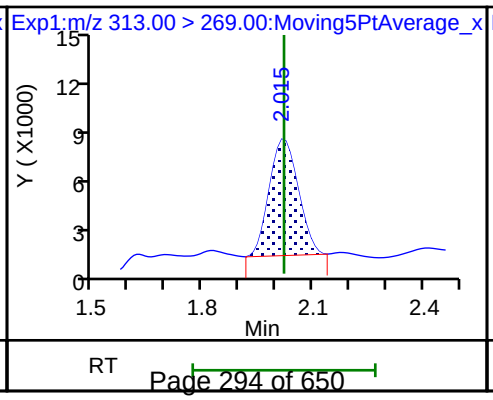
61 Sodium 1H,1H,2H,2H-perfluorohexane



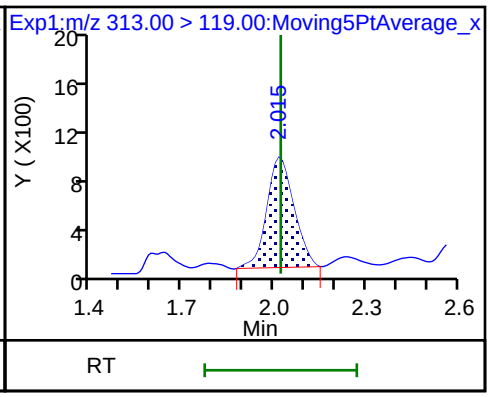
D 7 13C2 PFHxA



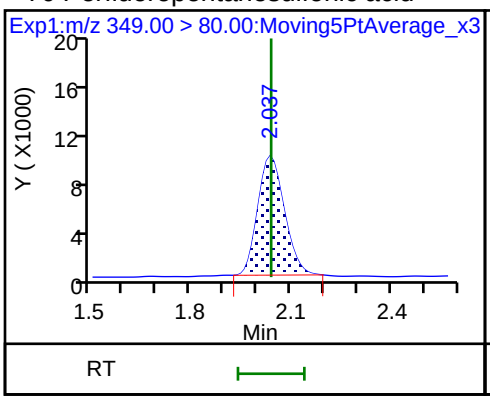
6 Perfluorohexanoic acid



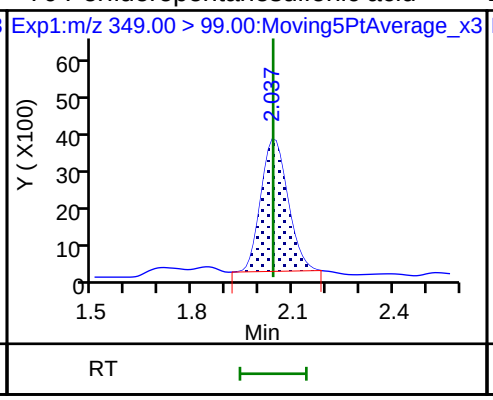
6 Perfluorohexanoic acid



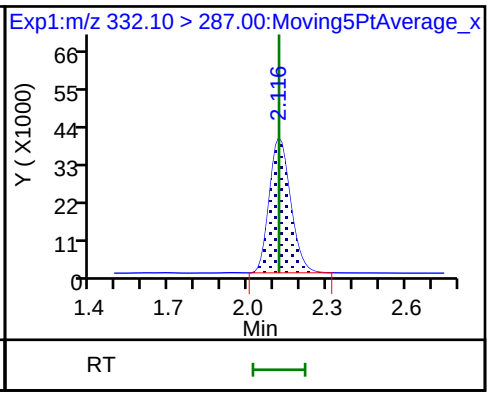
70 Perfluoropentanesulfonic acid



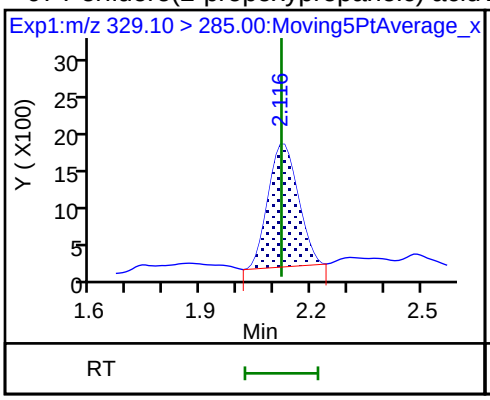
70 Perfluoropentanesulfonic acid



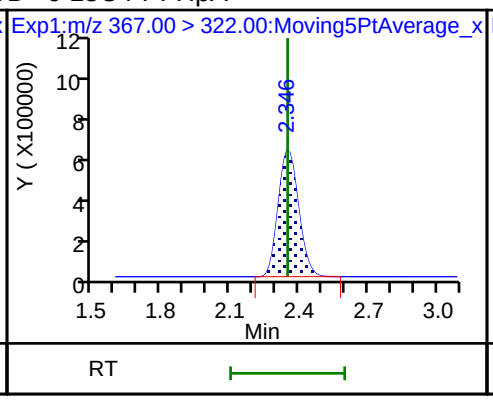
D 64 13C3 HFPO-DA



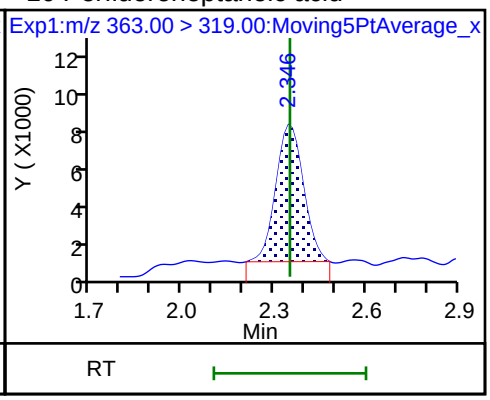
67 Perfluoro(2-propoxypropanoic) acid



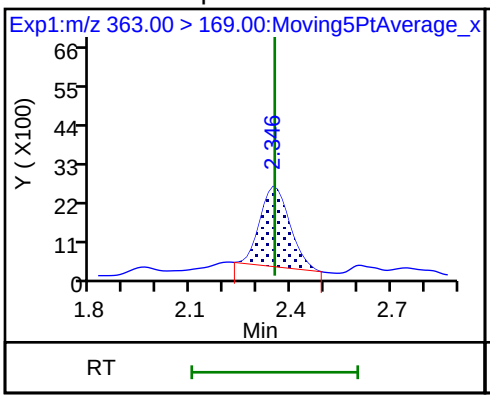
D 9 13C4-PFHpA



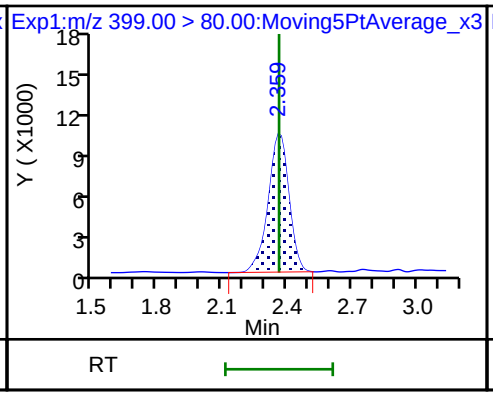
10 Perfluoroheptanoic acid



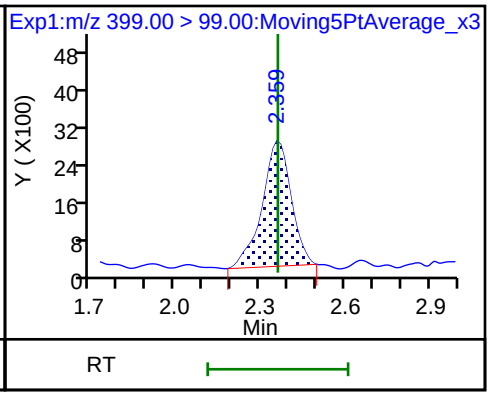
10 Perfluoroheptanoic acid



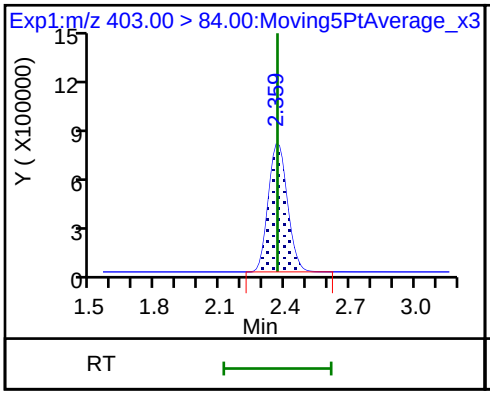
8 Perfluorohexanesulfonic acid



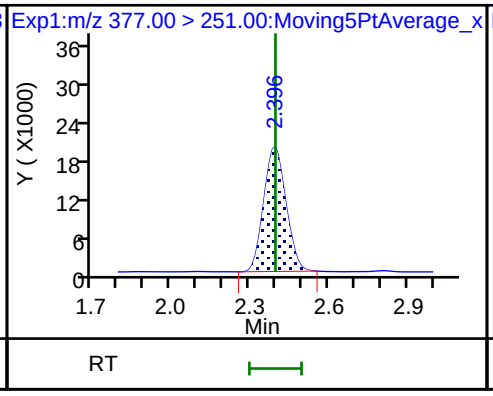
8 Perfluorohexanesulfonic acid



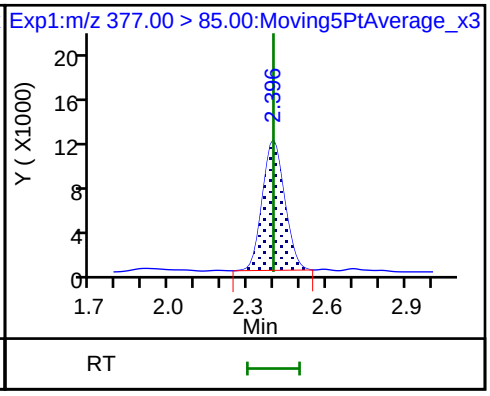
D 11 18O2 PFHxS



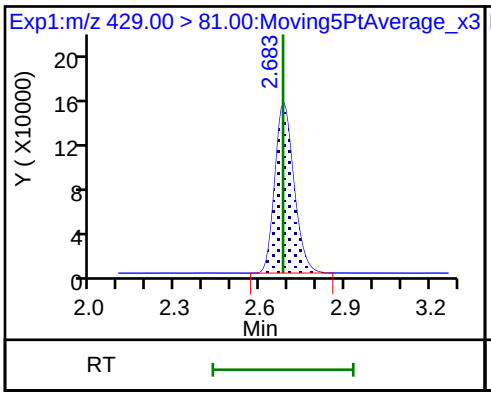
65 Adona



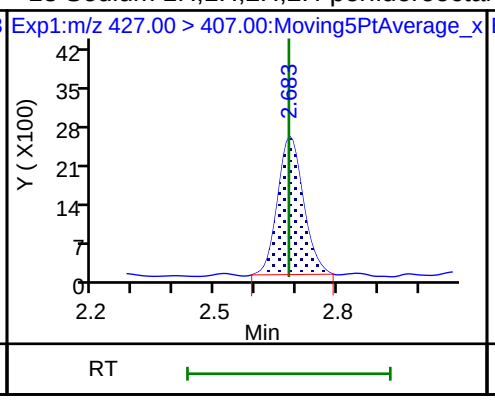
65 Adona



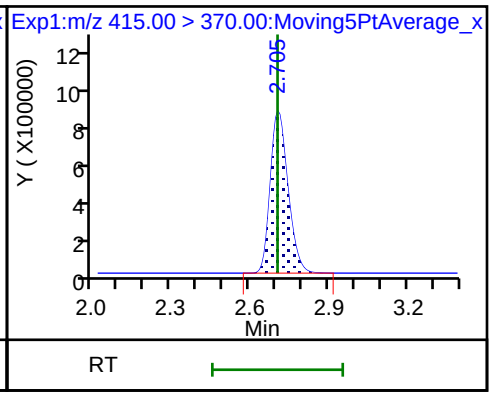
D 12 M2-6:2FTS



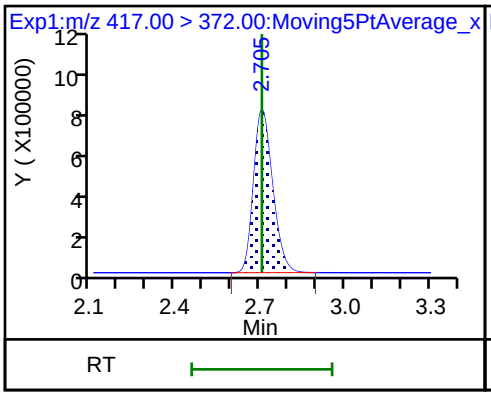
13 Sodium 1H,1H,2H,2H-perfluorooctane



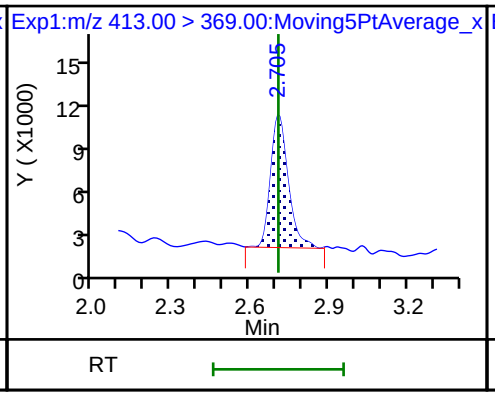
M62 13C2-PFOA



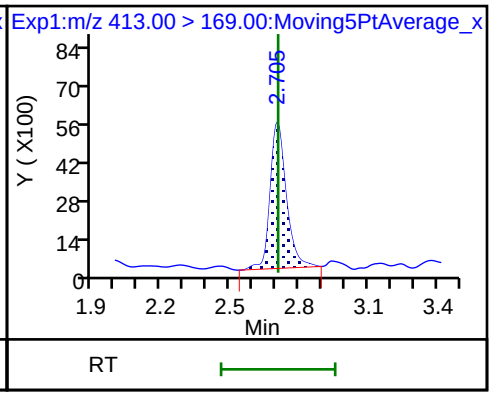
D 14 13C4 PFOA



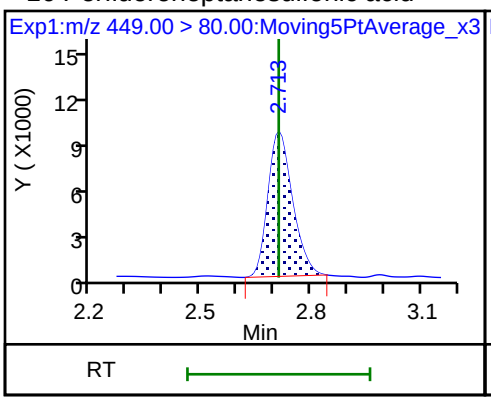
15 Perfluorooctanoic acid



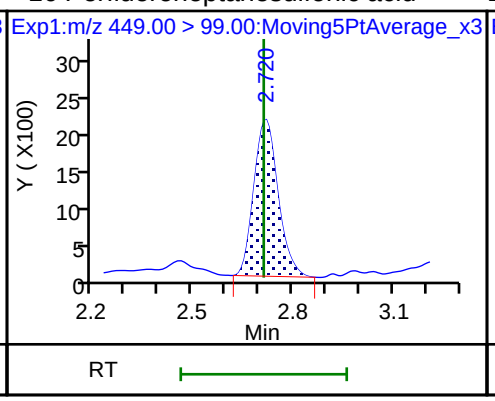
15 Perfluorooctanoic acid



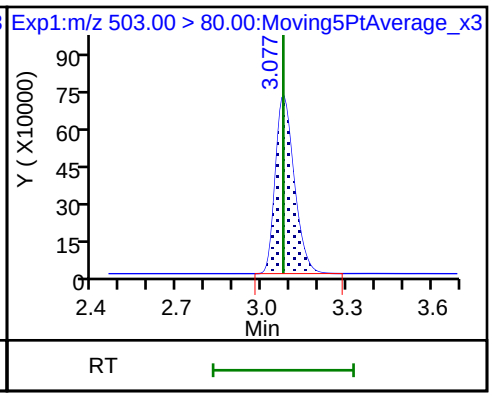
16 Perfluoroheptanesulfonic acid



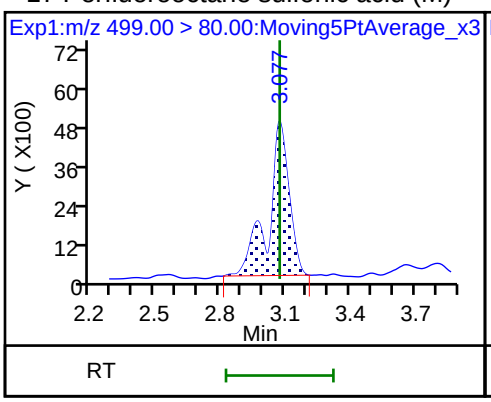
16 Perfluoroheptanesulfonic acid



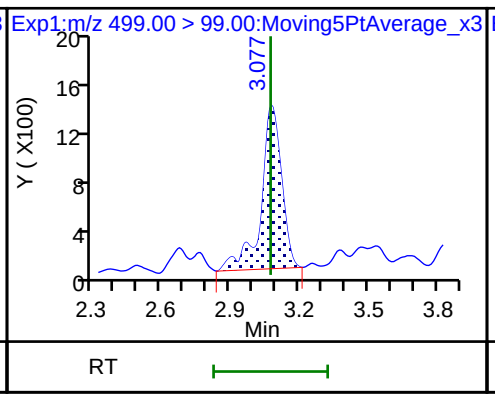
D 18 13C4 PFOS



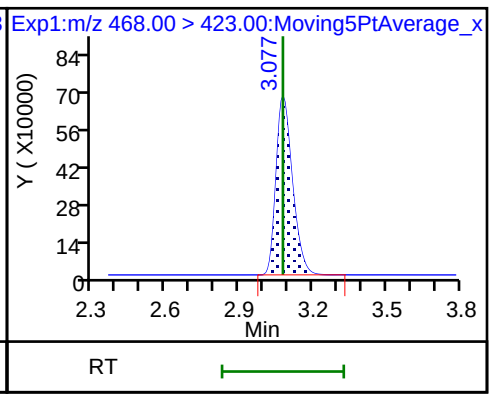
17 Perfluorooctane sulfonic acid (M)



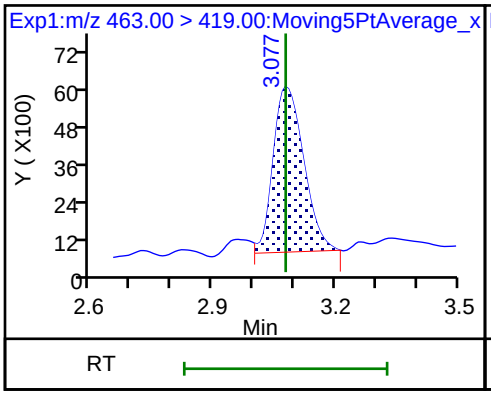
17 Perfluorooctane sulfonic acid



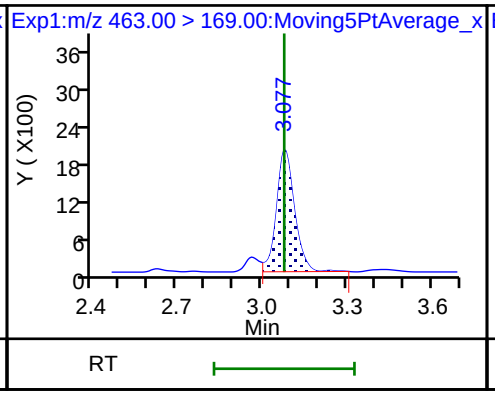
D 19 13C5 PFNA



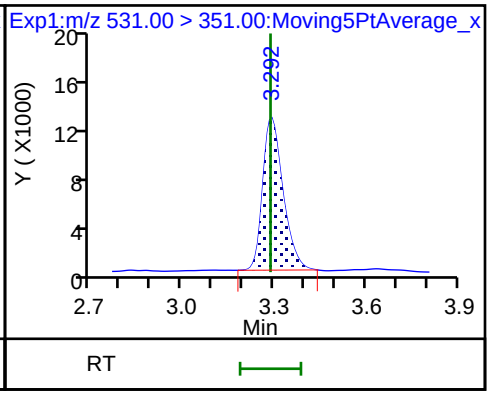
20 Perfluorononanoic acid



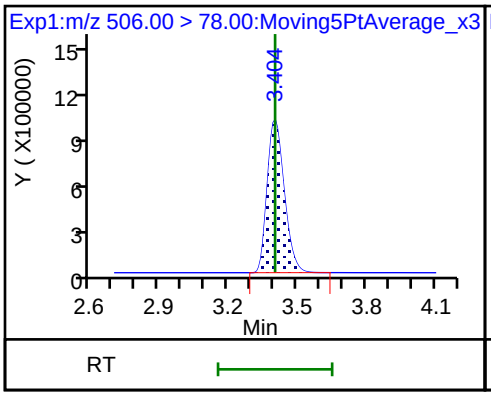
20 Perfluorononanoic acid



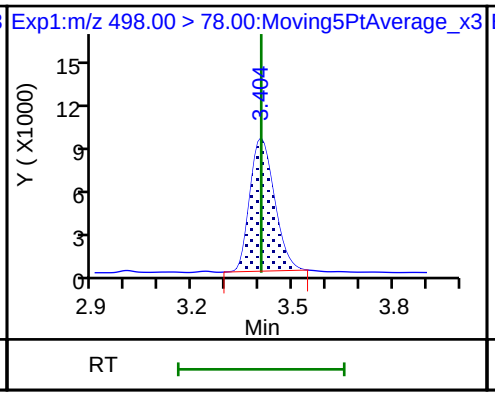
69 9-Chlorohexadecafluoro-3-oxanonane



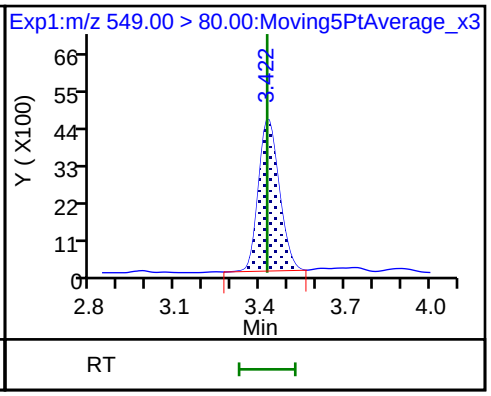
D 21 13C8 FOSA



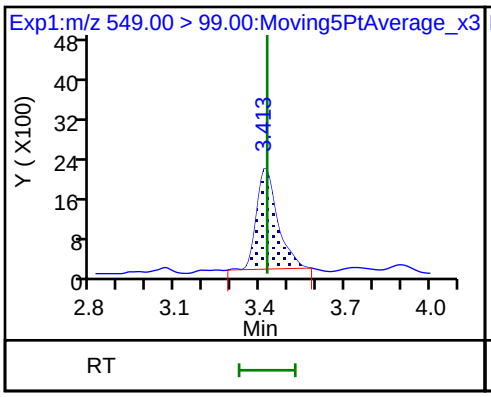
22 Perfluorooctane Sulfonamide



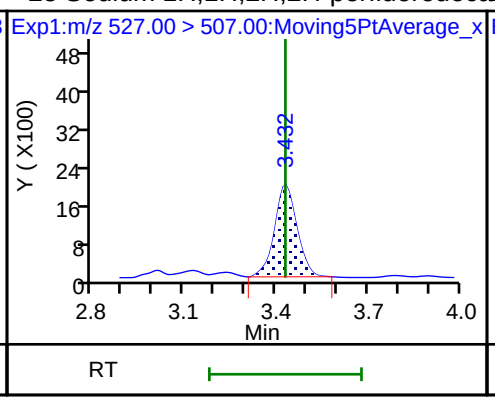
68 Perfluorononanesulfonic acid



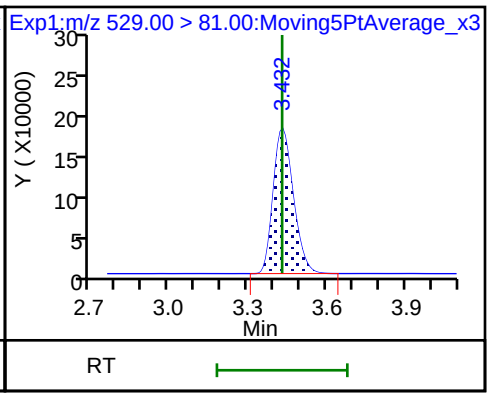
68 Perfluorononanesulfonic acid



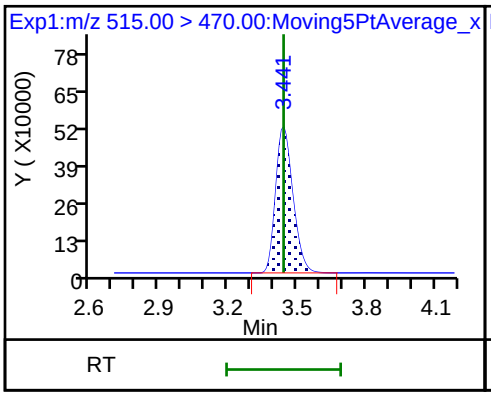
25 Sodium 1H,1H,2H,2H-perfluorodecane



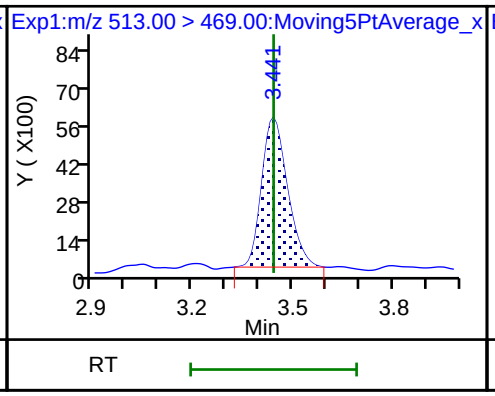
D 26 M2-8:2FTS



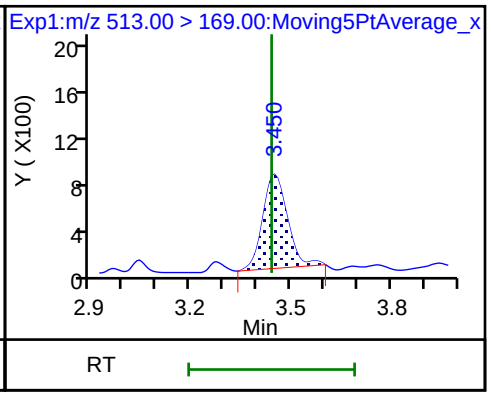
D 23 13C2 PFDA



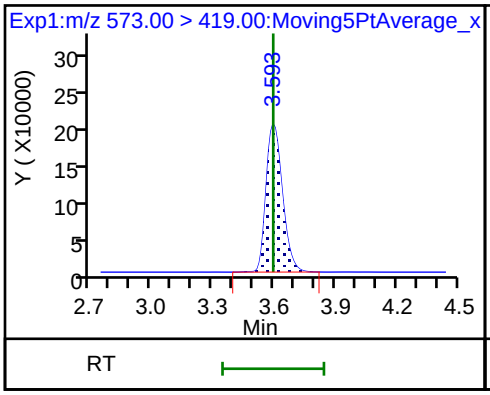
24 Perfluorodecanoic acid



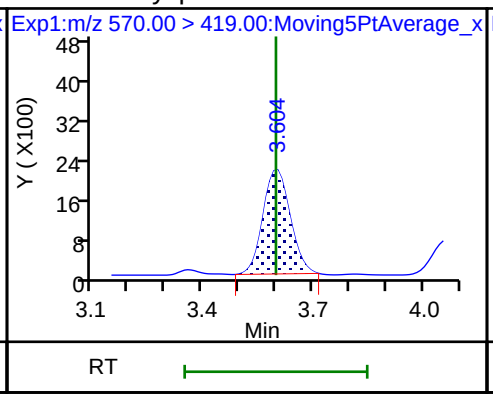
24 Perfluorodecanoic acid



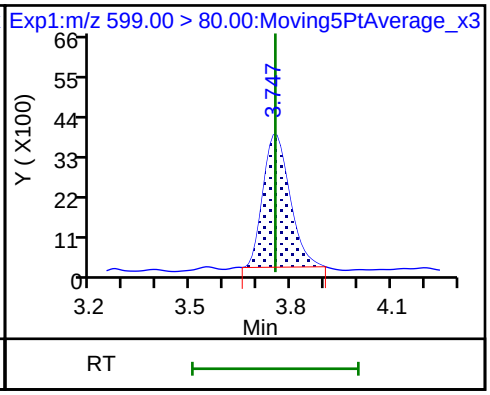
D 27 d3-NMeFOSAA



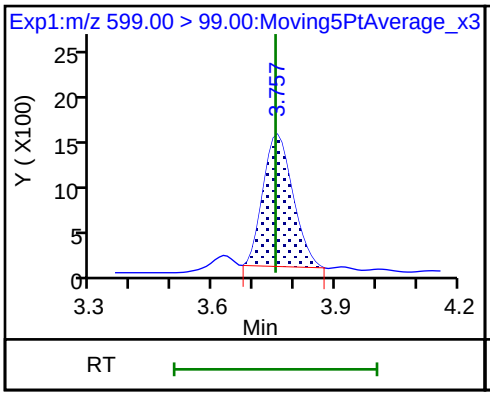
28 N-methyl perfluorooctane sulfonami



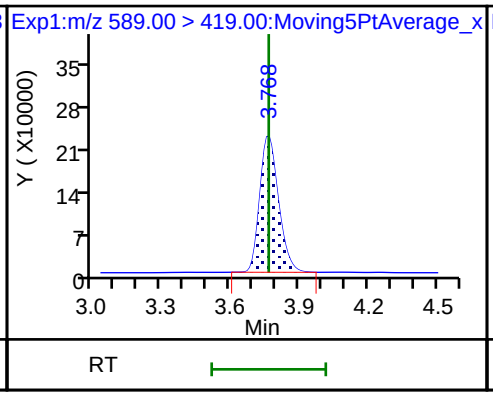
29 Perfluorodecane Sulfonic acid



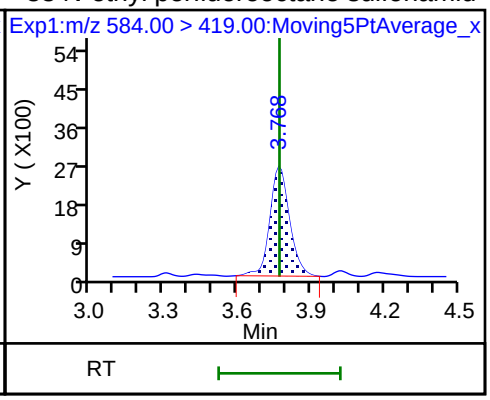
29 Perfluorodecane Sulfonic acid



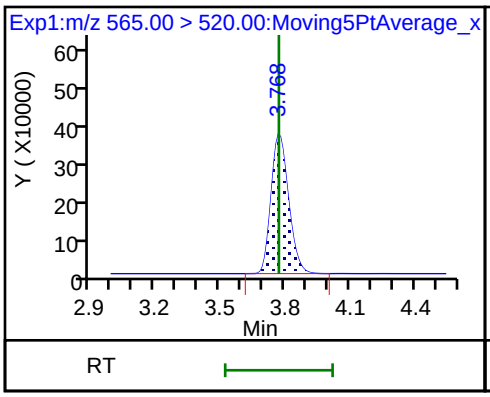
D 32 d5-NEtFOSAA



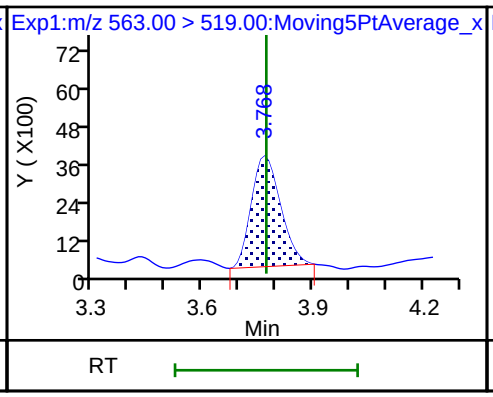
33 N-ethyl perfluorooctane sulfonamid



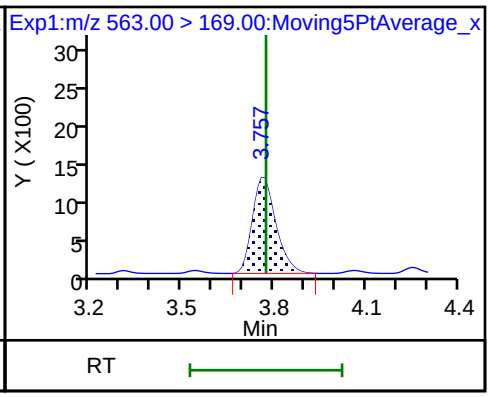
D 30 13C2 PFUnA



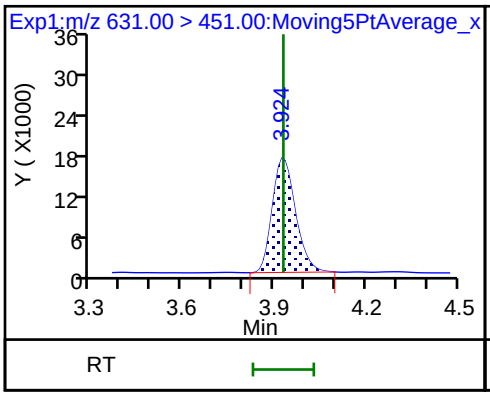
31 Perfluoroundecanoic acid



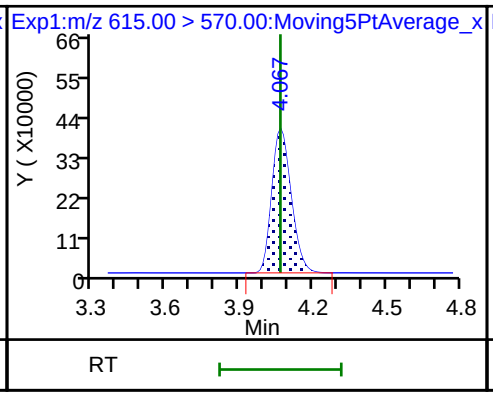
31 Perfluoroundecanoic acid



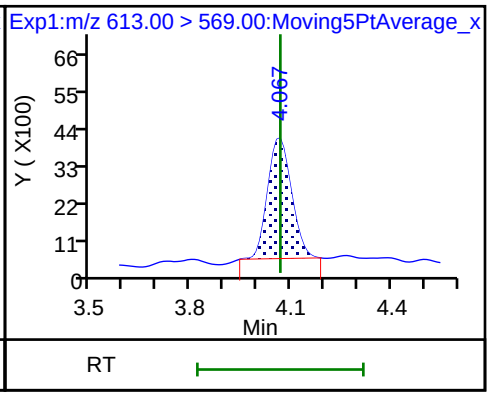
66 11-Chloroeicosafluoro-3-oxaundecan



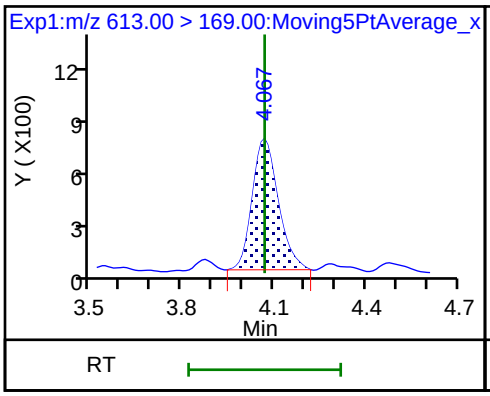
D 36 13C2 PFDoA



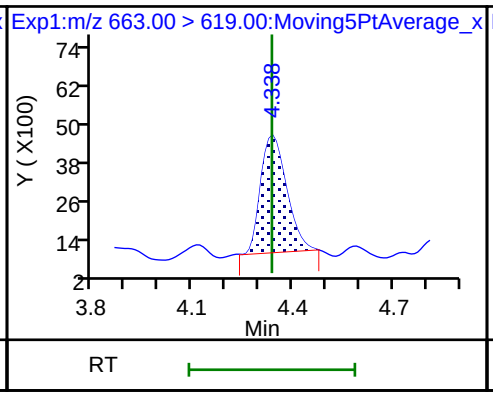
37 Perfluorododecanoic acid



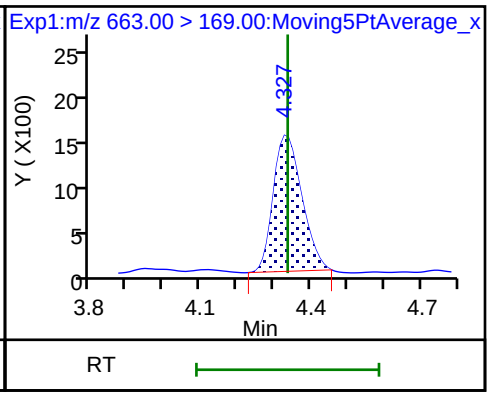
37 Perfluorododecanoic acid



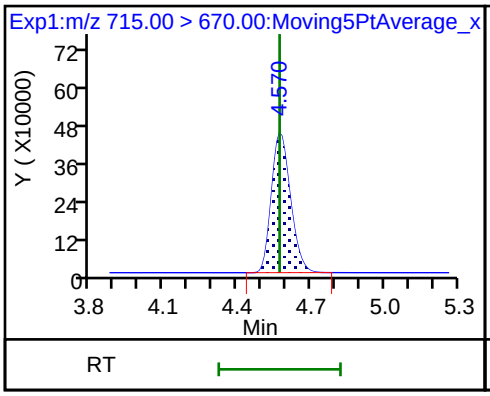
41 Perfluorotridecanoic acid



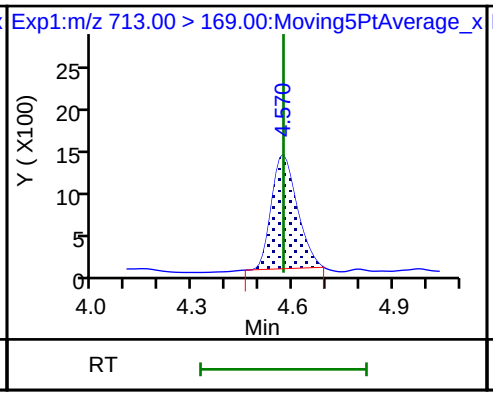
41 Perfluorotridecanoic acid



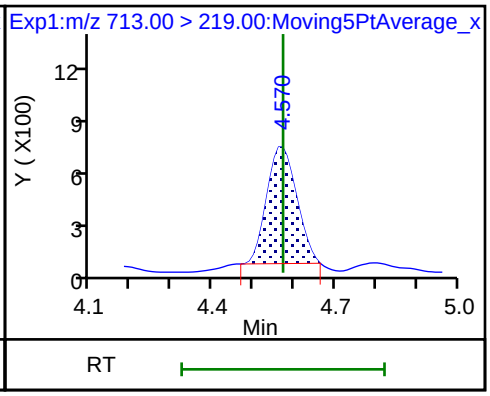
D 43 13C2-PFTeDA



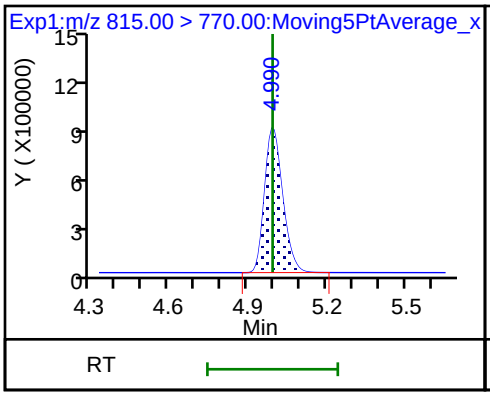
42 Perfluorotetradecanoic acid



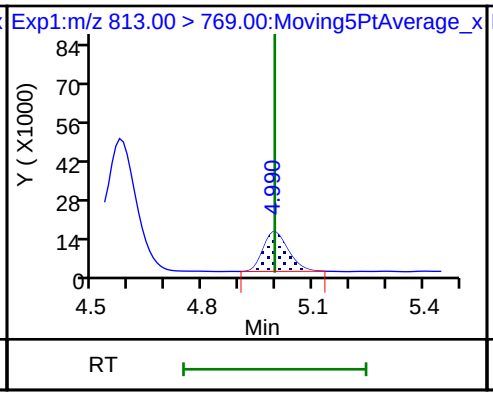
42 Perfluorotetradecanoic acid



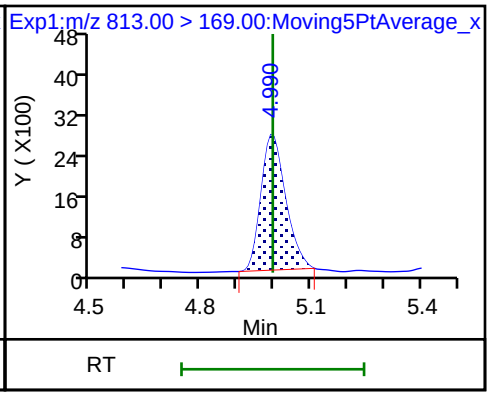
D 44 13C2-PFHxDA



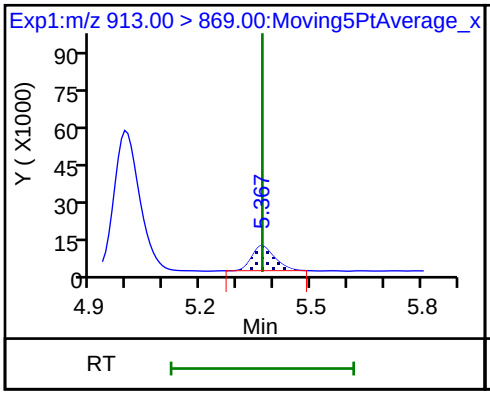
45 Perfluorohexadecanoic acid



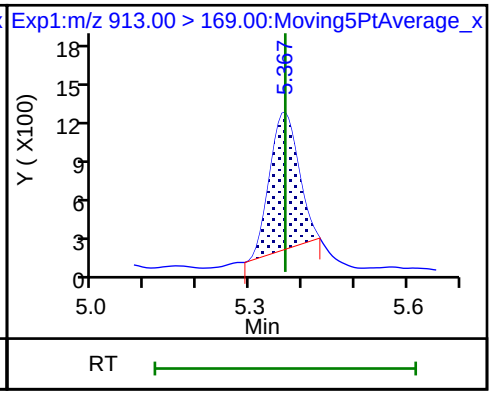
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

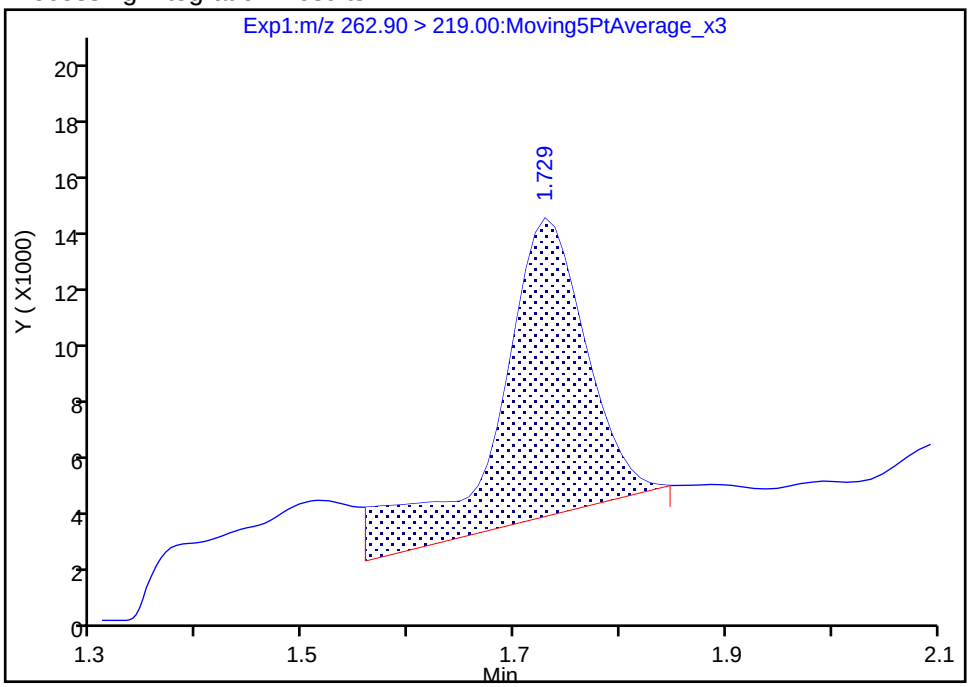
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_002.d
Injection Date: 13-May-2018 14:12:43 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

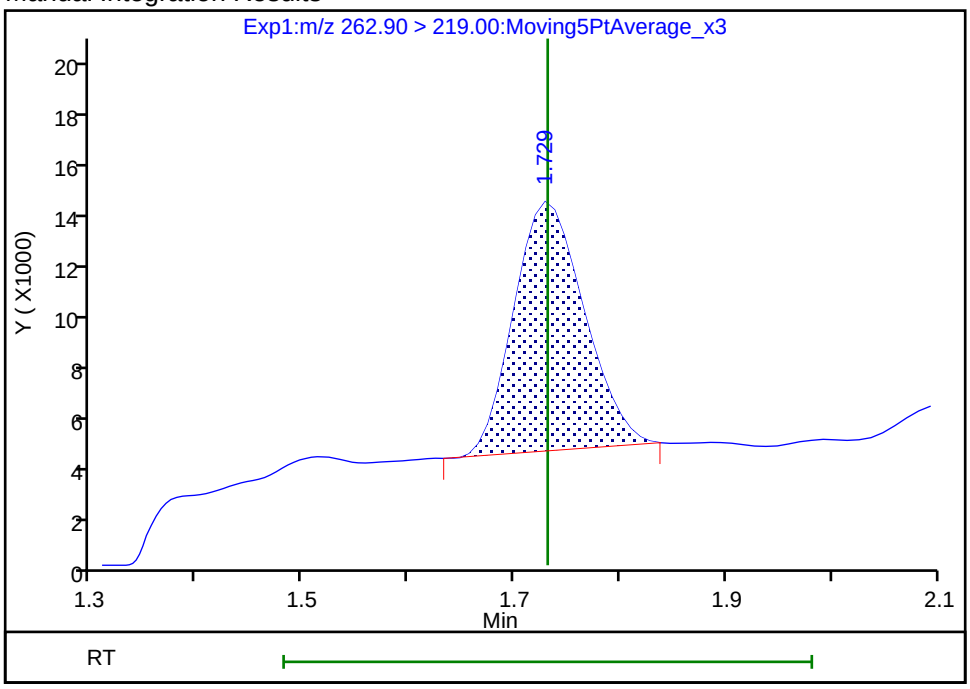
Processing Integration Results

RT: 1.73
Area: 62581
Amount: 0.032673
Amount Units: ng/ml



Manual Integration Results

RT: 1.73
Area: 45673
Amount: 0.025346
Amount Units: ng/ml



Reviewer: westendorfc, 13-May-2018 14:48:22
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

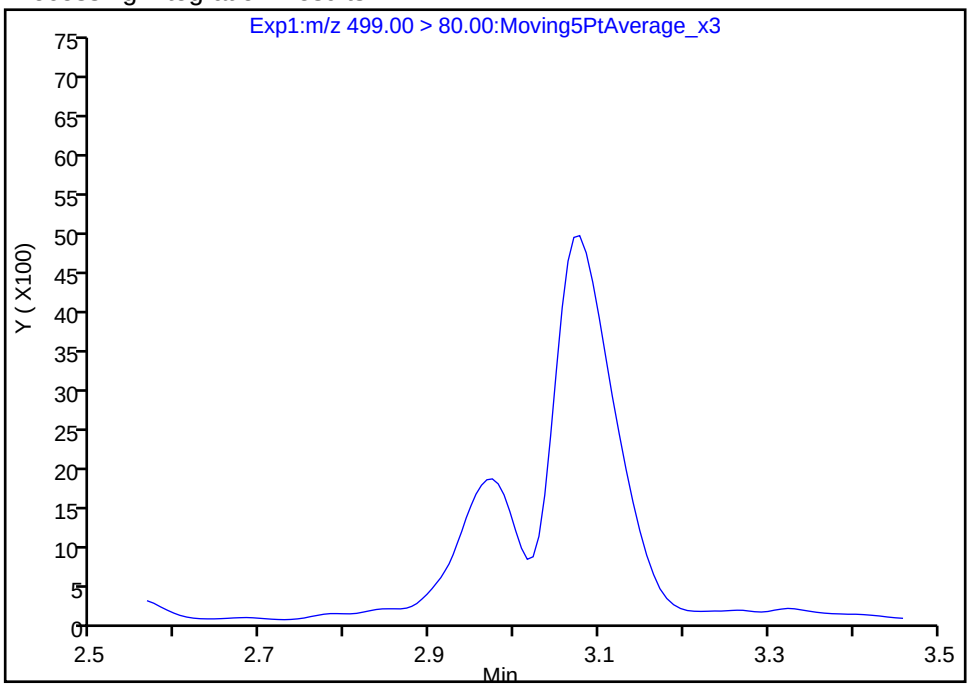
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_002.d
Injection Date: 13-May-2018 14:12:43 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

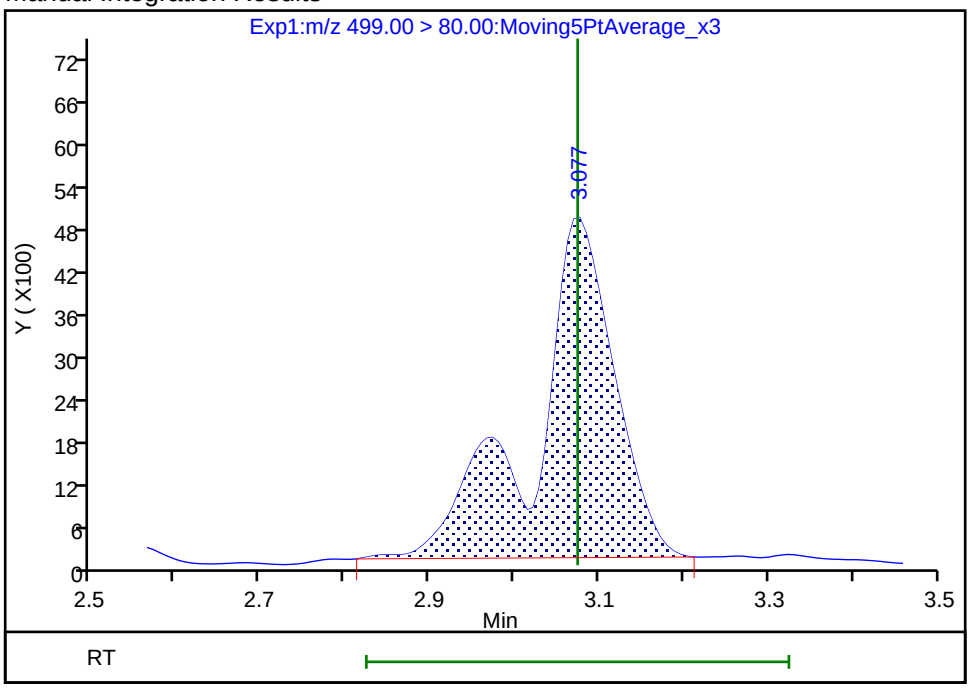
Not Detected
Expected RT: 3.07

Processing Integration Results



Manual Integration Results

RT: 3.08
Area: 31743
Amount: 0.020629
Amount Units: ng/ml



Reviewer: westendorfc, 13-May-2018 14:48:37
Audit Action: Manually Integrated Audit Reason: Assign Peak

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_003.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 13-May-2018 14:20:32 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L2-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 08:39:45 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 08:30:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.464	1.461	0.003	1.000	6478240	2.51		100	62478	
2 Perfluorobutyric acid										
212.90 > 169.00	1.464	1.461	0.003	1.000	126475	0.0521		104	74.3	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.730	0.0	0.562	4050415	2.47		98.7	70599	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.731	-0.001	1.000	107968	0.0564		113	46.9	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.763	0.003	1.000	86877	2.33		100	664	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.769	-0.003	1.000	133229	0.0452		102	506	
298.90 > 99.00	1.766	1.769	-0.003	1.000	55583		2.40(1.25-3.74)	102	304	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.979	0.003	1.000	522980	2.31		98.8	8582	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.982	0.0	1.000	21289	0.0416		89.0	1293	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.019	-0.003	1.000	4350669	2.52		101	128546	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.027	2.021	0.006	1.006	90543	0.0519		104	145	
313.00 > 119.00	2.016	2.021	-0.005	1.000	7967		11.36(5.03-15.10)	104	129	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.038	2.040	-0.002	1.000	113638	0.0445		94.8	2212	
349.00 > 99.00	2.038	2.040	-0.002	1.000	43344		2.62(1.36-4.07)	94.8	681	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.118	2.118	0.0	1.000	222618	2.38		95.4	5680	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.118	2.119	-0.001	1.000	15960	0.0512		102	125	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.349	-0.002	1.000	4092683	2.57		103	83540	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.360	2.351	0.009	1.006	85080	0.0481		96.1	162	
363.00 > 169.00	2.347	2.351	-0.004	1.000	32005		2.66(1.13-3.40)	96.1	212	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.362	-0.002	0.994	116202	0.0485		107	882	
399.00 > 99.00	2.374	2.362	0.012	1.000	35532		3.27(1.50-4.49)	107	160	
D 11 18O2 PFHxS										
403.00 > 84.00	2.374	2.364	0.010	1.000	4985573	2.40		101	51073	
65 Adona										
377.00 > 251.00	2.397	2.396	0.001	1.000	233665	0.0511		102	5657	
377.00 > 85.00	2.397	2.396	0.001	1.000	142467		1.64(0.84-2.53)	102	1164	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.681	0.002	1.000	22079	0.0440		92.9	418	
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.681	0.002	1.000	718348	2.32		97.6	13790	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.704	0.001		3995036	2.50			61032	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.705	0.0	1.000	3755818	2.50		99.8	73258	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.708	-0.003	1.000	91525	0.0527		105	49.6	
413.00 > 169.00	2.705	2.708	-0.003	1.000	45158		2.03(0.84-2.52)	105	214	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.712	0.001	1.000	87966	0.0478		100	1694	
449.00 > 99.00	2.713	2.712	0.001	1.000	24356		3.61(1.94-5.82)	100	373	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.077	3.075	0.002	1.000	76163	0.0493		106	520	
499.00 > 99.00	3.077	3.075	0.002	1.000	21942		3.47(2.31-6.93)	106	292	
D 18 13C4 PFOS										
503.00 > 80.00	3.077	3.075	0.002	1.000	3364404	2.26		94.4	27142	
D 19 13C5 PFNA										
468.00 > 423.00	3.077	3.077	0.0	1.000	3102636	2.44		97.8	61119	
20 Perfluorononanoic acid										
463.00 > 419.00	3.077	3.078	-0.001	1.000	66392	0.0526		105	128	
463.00 > 169.00	3.085	3.078	0.007	1.003	16704		3.97(1.90-5.69)	105	469	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.284	3.287	-0.003	1.000	119606	0.0470		101	1355	
D 21 13C8 FOSA										
506.00 > 78.00	3.404	3.403	0.001	1.000	4885732	2.32		92.6	43573	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.404	3.404	0.0	1.000	94872	0.0489		97.8	1874	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.423	3.424	-0.001	1.000	61863	0.0559		117	1490	
549.00 > 99.00	3.423	3.424	-0.001	1.000	19689		3.14(1.33-3.97)	117	230	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.423	3.430	-0.007	0.997	23838	0.0451		94.1	485	
D 26 M2-8:2FTS										
529.00 > 81.00	3.432	3.430	0.002	1.000	1029528	2.53		105	10975	
D 23 13C2 PFDA										
515.00 > 470.00	3.441	3.440	0.001	1.000	2642006	2.38		95.4	38625	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.441	3.442	-0.001	1.000	56836	0.0524		105	473	
513.00 > 169.00	3.441	3.442	-0.001	1.000	10189		5.58(2.36-7.09)	105	318	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.593	3.594	-0.001	1.000	1133515	2.33		93.3	22722	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.593	3.599	-0.006	1.000	25232	0.0537		107	288	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.758	3.753	0.005	1.000	43316	0.0466		96.8	741	
599.00 > 99.00	3.758	3.753	0.005	1.000	15100		2.87(1.39-4.16)	96.8	366	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.768	3.766	0.002	1.000	1394930	2.62		105	3983	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.779	3.771	0.008	1.003	25984	0.0475		95.1	742	
D 30 13C2 PFUnA										
565.00 > 520.00	3.768	3.771	-0.003	1.000	2376901	2.62		105	53978	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.768	3.772	-0.004	1.000	37369	0.0499		99.8	139	
563.00 > 169.00	3.768	3.772	-0.004	1.000	8232		4.54(2.12-6.36)	99.8	205	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.935	3.929	0.006	1.000	179935	0.0479		102	3748	
D 36 13C2 PFDoA										
615.00 > 570.00	4.068	4.066	0.002	1.000	2306034	2.44		97.7	23704	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.068	4.068	0.0	1.000	54383	0.0564		113	32.6	
613.00 > 169.00	4.068	4.068	0.0	1.000	8830		6.16(2.13-6.40)	113	183	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.339	4.336	0.003	1.000	47951	0.0500		100	18.6	
663.00 > 169.00	4.339	4.336	0.003	1.000	12819		3.74(1.25-3.76)	100	216	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.571	4.571	0.0	1.000	11497	0.0512		102	165	
713.00 > 219.00	4.571	4.571	0.0	1.000	8535		1.35(0.71-2.13)	102	190	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.571	4.571	0.0	1.000	2108440	2.05		82.0	13424	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.999	4.993	0.006	1.000	2889283	1.76		70.5	10130	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.999	4.995	0.004	1.000	79338	0.0534		107	17.9	
813.00 > 169.00	4.999	4.995	0.004	1.000	13403		5.92(2.86-8.58)	107	191	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.373	5.367	0.006	1.000	49729	0.0420		83.9	11.9	
913.00 > 169.00	5.367	5.367	0.0	0.999	5287		9.41(3.83-11.48)	83.9	66.9	

Reagents:

LCPFC_LL2_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 08:39:46 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_003.d

Injection Date: 13-May-2018 14:20:32 Instrument ID: A8_N

Lims ID: IC L2 Full

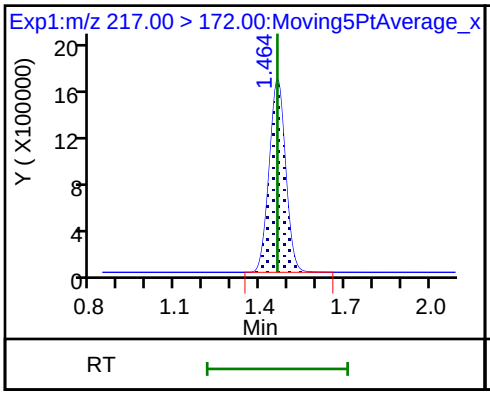
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3

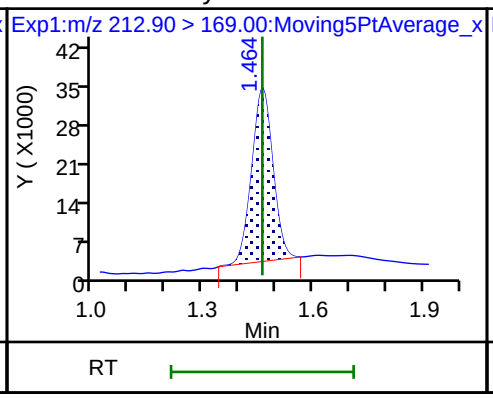
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

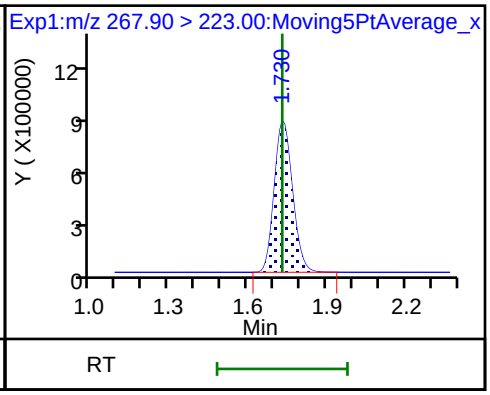
D 1 13C4 PFBA



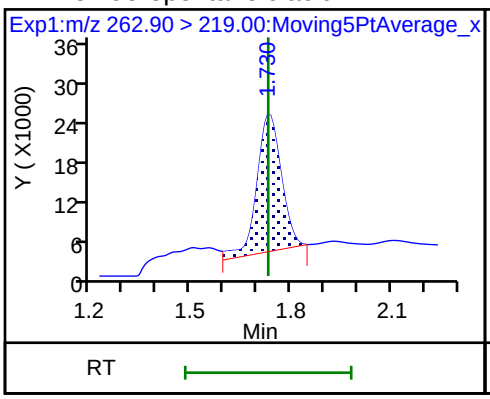
2 Perfluorobutyric acid



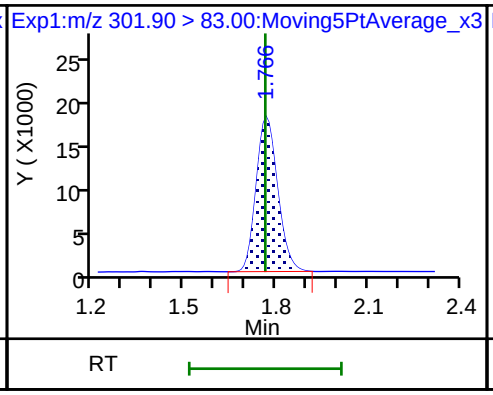
D 3 13C5-PFPeA



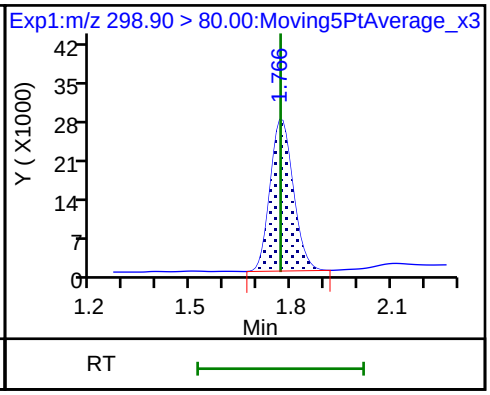
4 Perfluoropentanoic acid



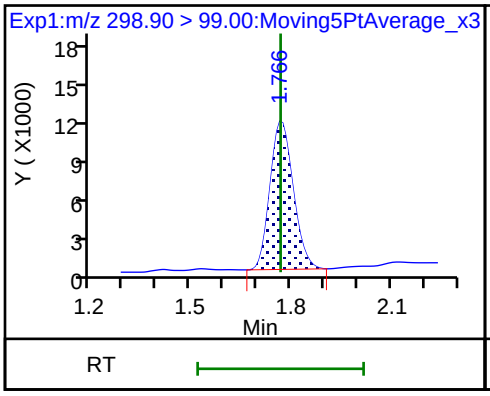
D 47 13C3-PFBS



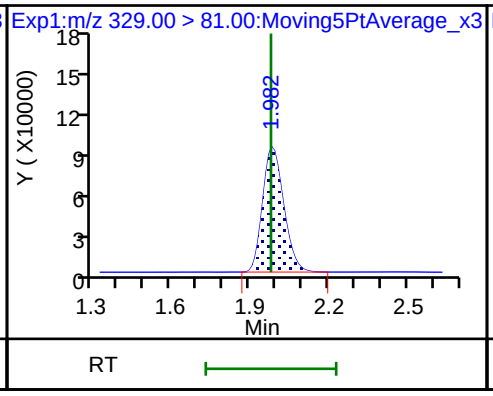
5 Perfluorobutanesulfonic acid



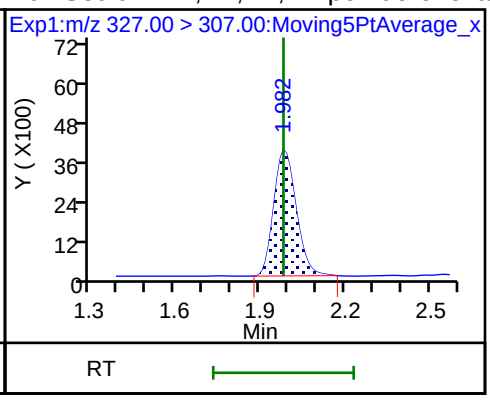
5 Perfluorobutanesulfonic acid



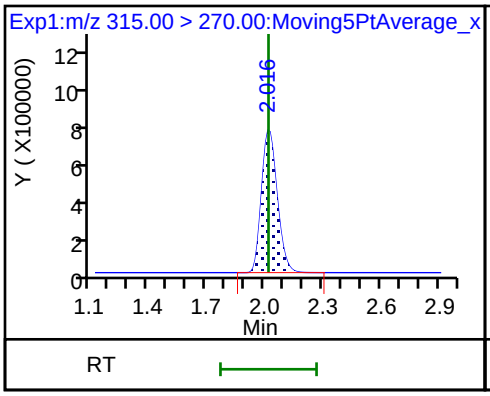
D 60 M2-4:2FTS



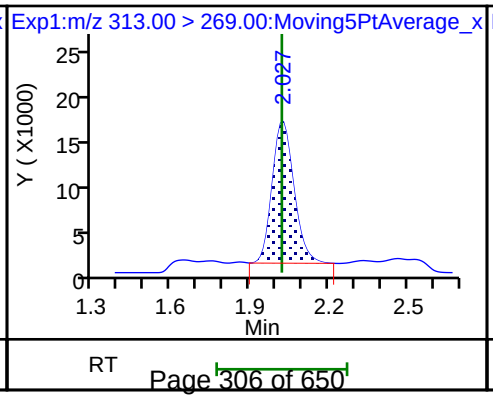
61 Sodium 1H,1H,2H,2H-perfluorohexane



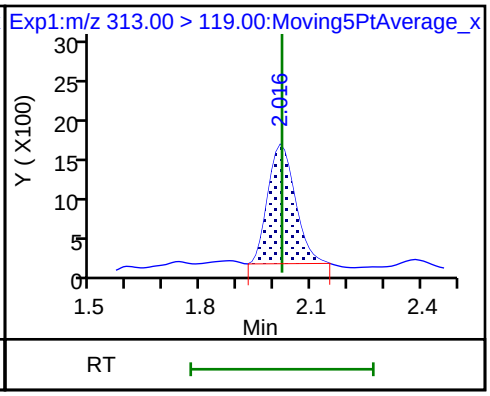
D 7 13C2 PFHxA



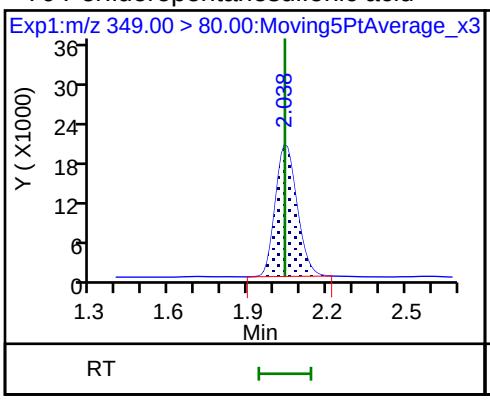
6 Perfluorohexanoic acid



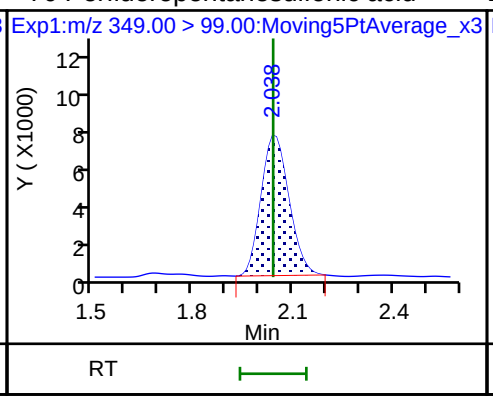
6 Perfluorohexanoic acid



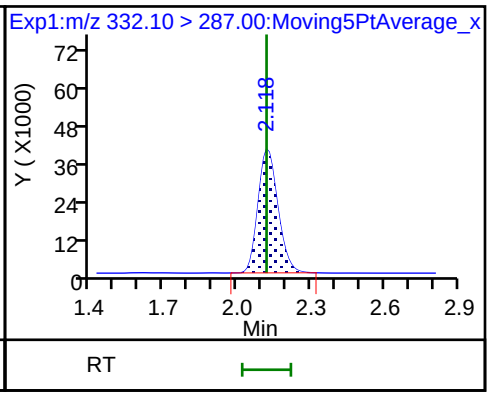
70 Perfluoropentanesulfonic acid



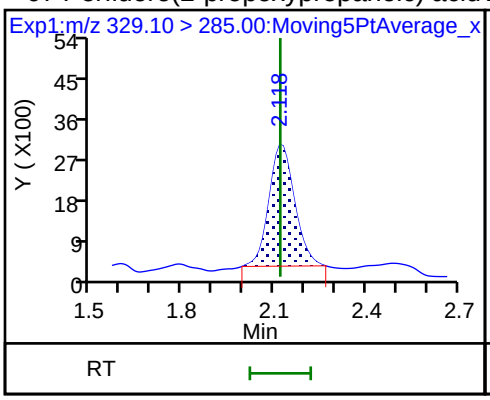
70 Perfluoropentanesulfonic acid



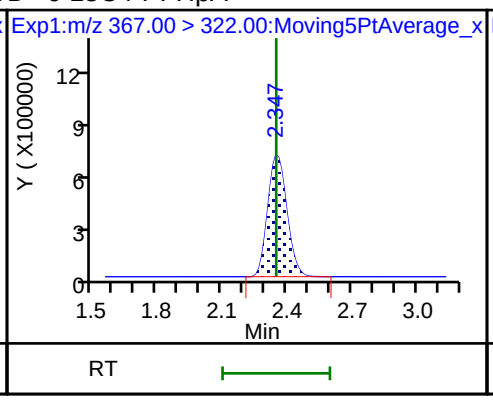
D 64 13C3 HFPO-DA



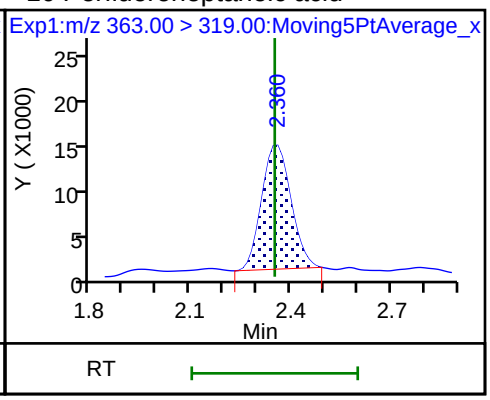
67 Perfluoro(2-propoxypropanoic) acid



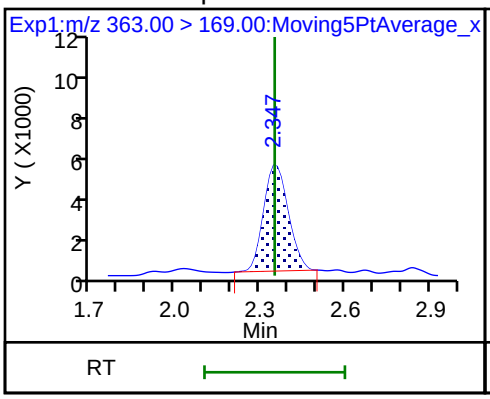
D 9 13C4-PFHpA



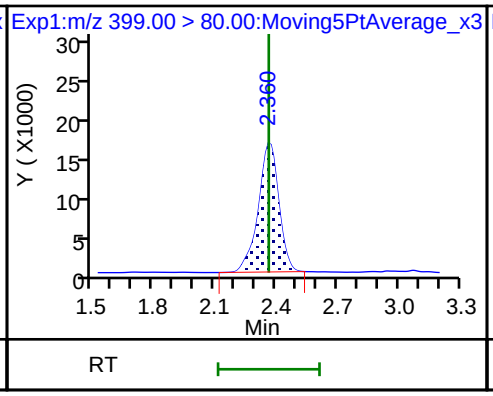
10 Perfluoroheptanoic acid



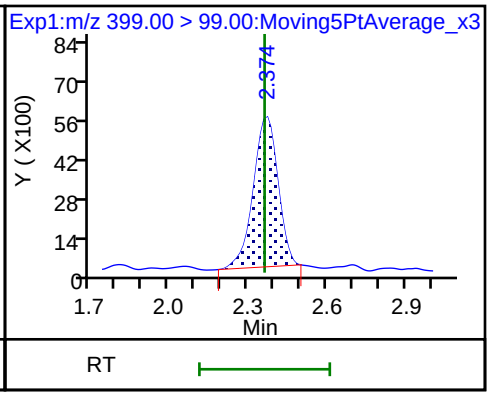
10 Perfluoroheptanoic acid



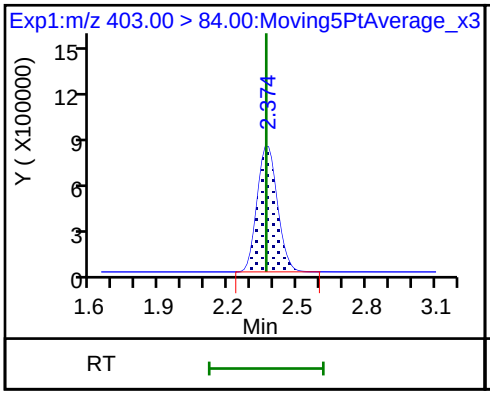
8 Perfluorohexanesulfonic acid



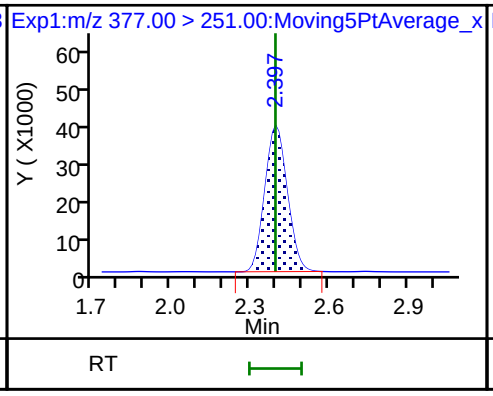
8 Perfluorohexanesulfonic acid



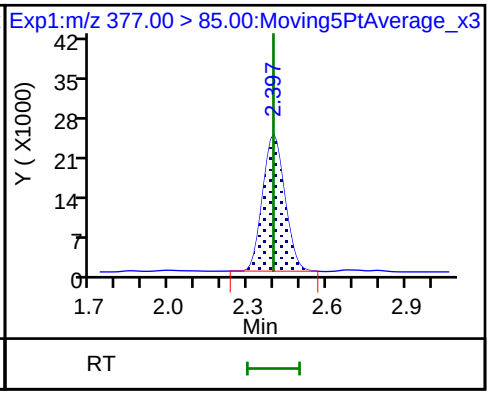
D 11 18O2 PFHxS



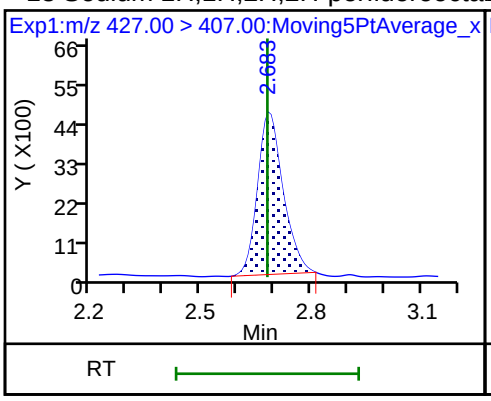
65 Adona



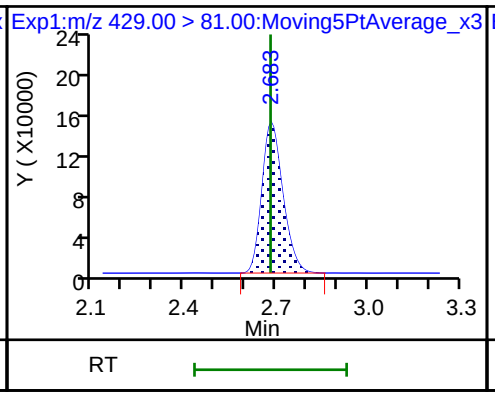
65 Adona



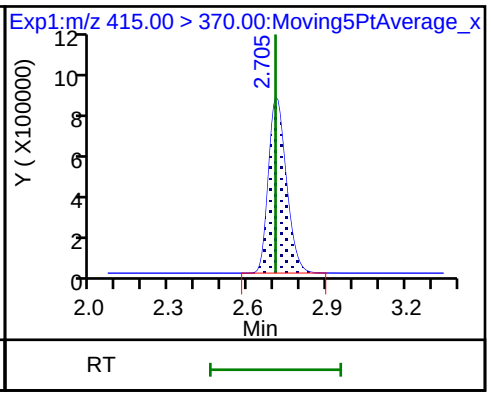
13 Sodium 1H,1H,2H,2H-perfluorooctane



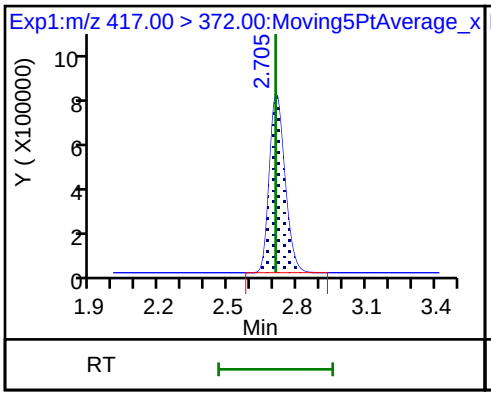
D 12 M2-6:2FTS



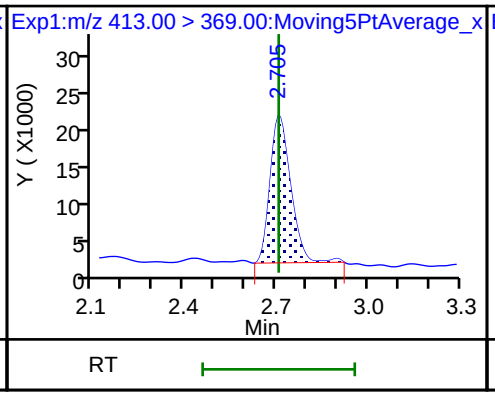
* 62 13C2-PFOA



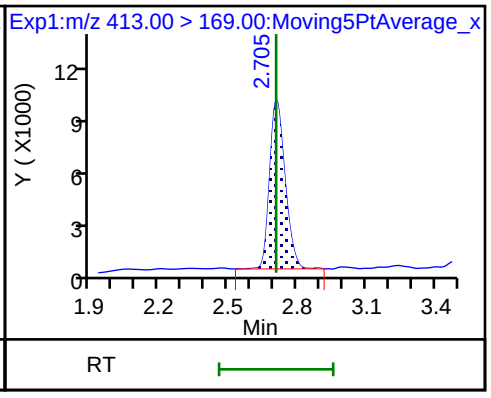
D 14 13C4 PFOA



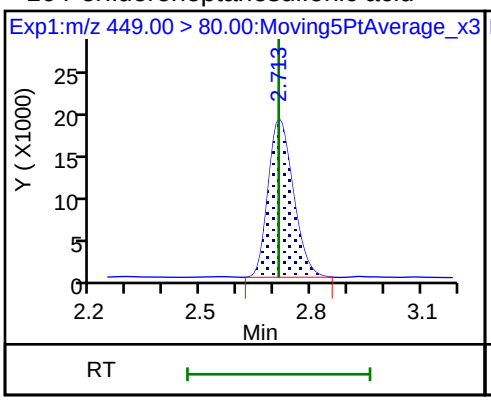
15 Perfluorooctanoic acid



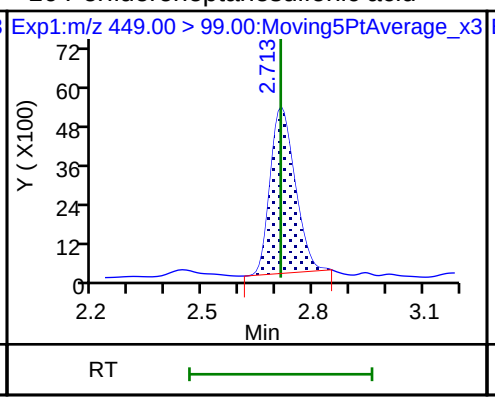
15 Perfluorooctanoic acid



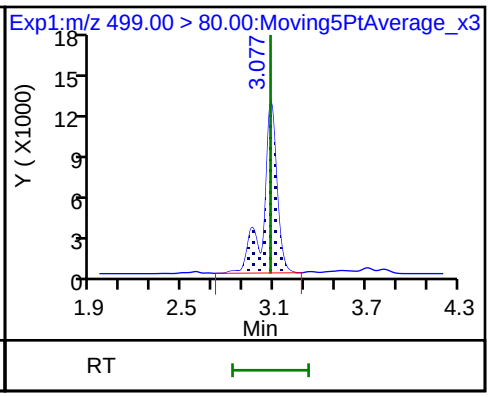
16 Perfluoroheptanesulfonic acid



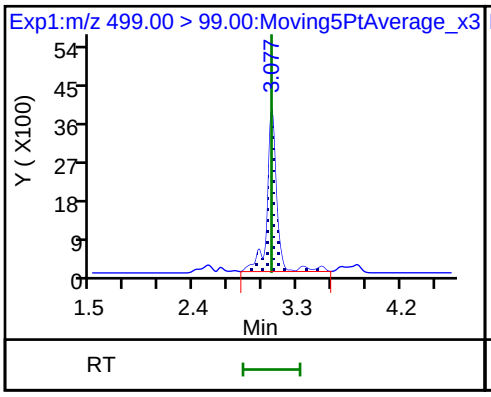
16 Perfluoroheptanesulfonic acid



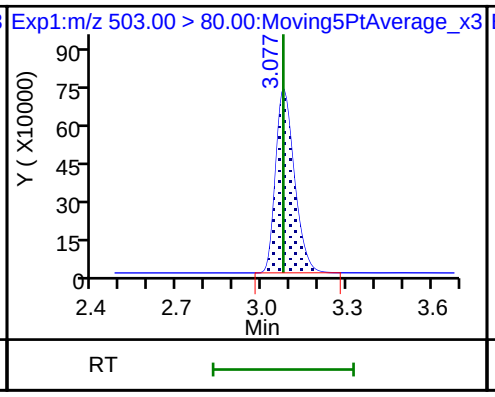
17 Perfluorooctane sulfonic acid



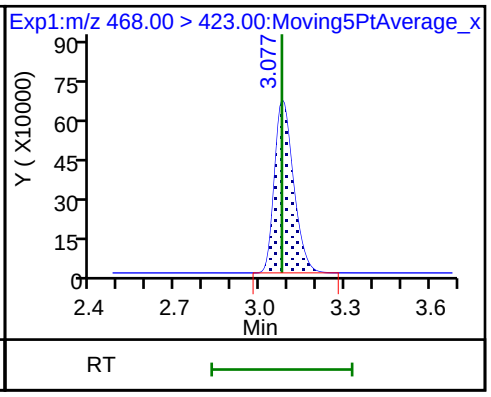
17 Perfluorooctane sulfonic acid



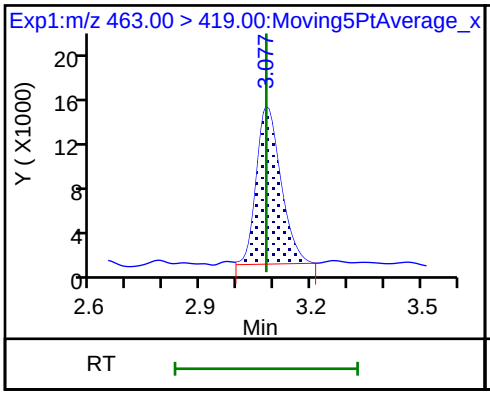
D 18 13C4 PFOS



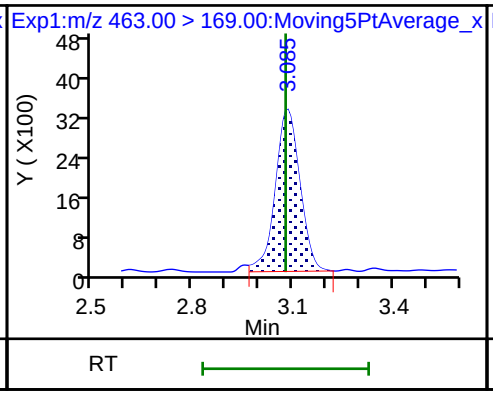
D 19 13C5 PFNA



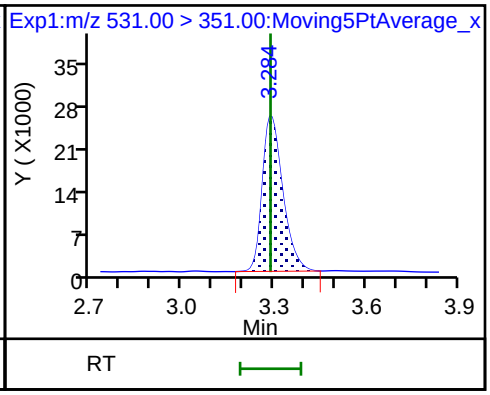
20 Perfluorononanoic acid



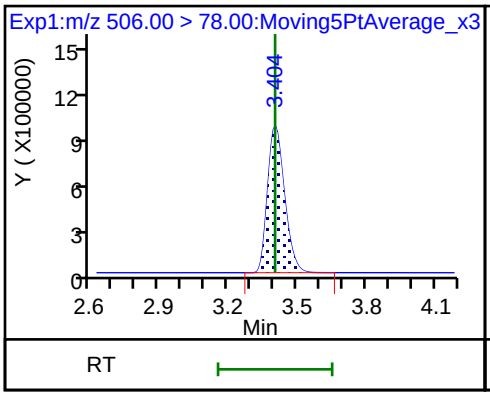
20 Perfluorononanoic acid



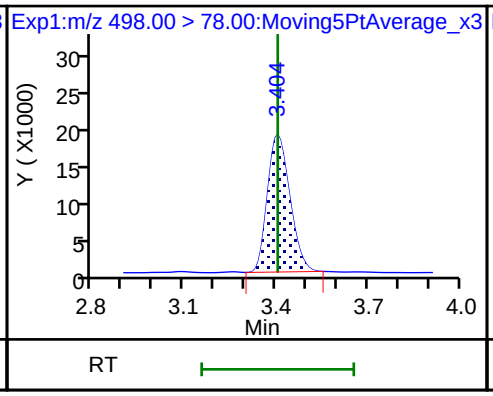
69 9-Chlorohexadecafluoro-3-oxanonane



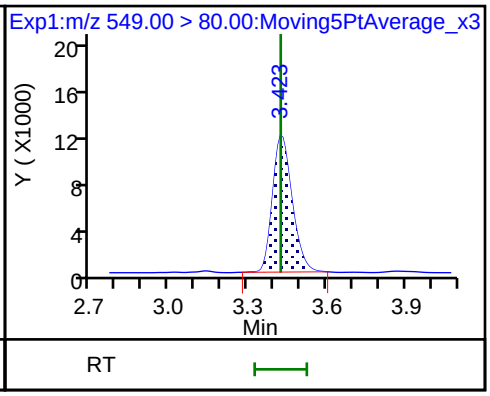
D 21 13C8 FOSA



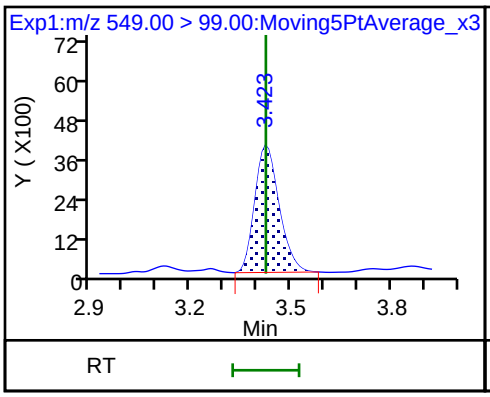
22 Perfluorooctane Sulfonamide



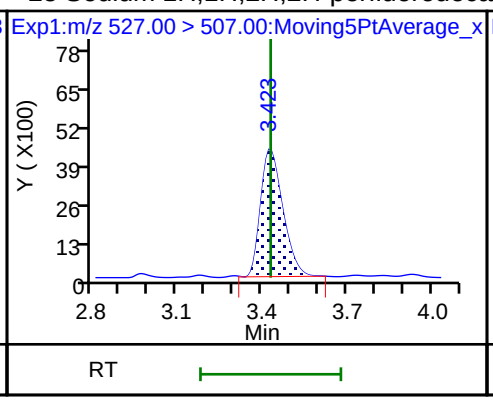
68 Perfluorononanesulfonic acid



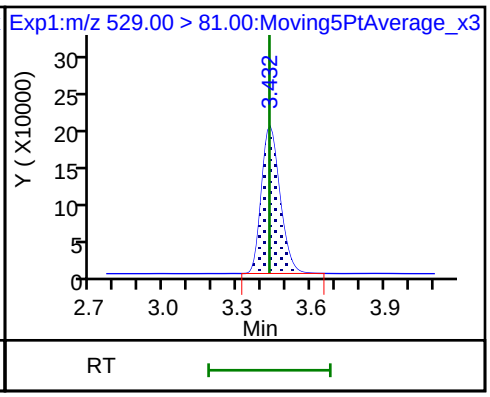
68 Perfluorononanesulfonic acid



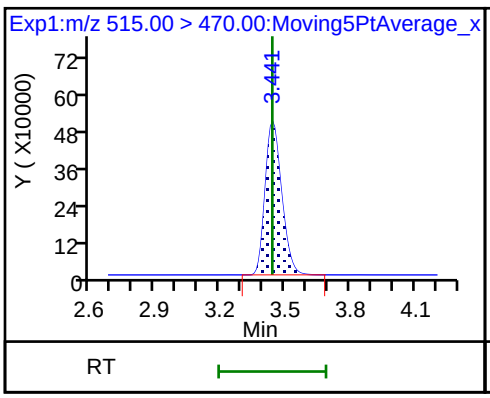
25 Sodium 1H,1H,2H,2H-perfluorodecane



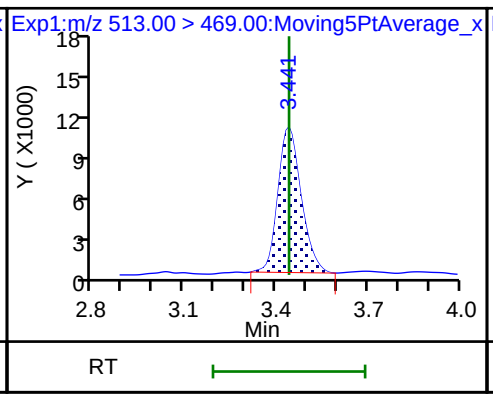
D 26 M2-8:2FTS



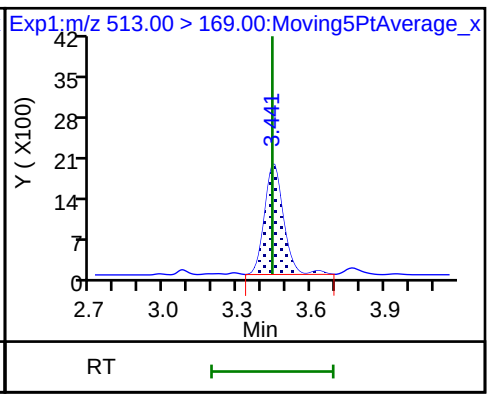
D 23 13C2 PFDA



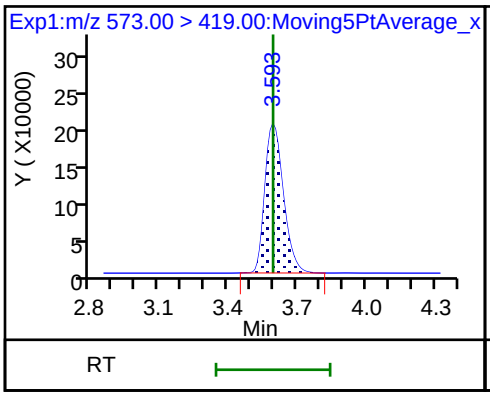
24 Perfluorodecanoic acid



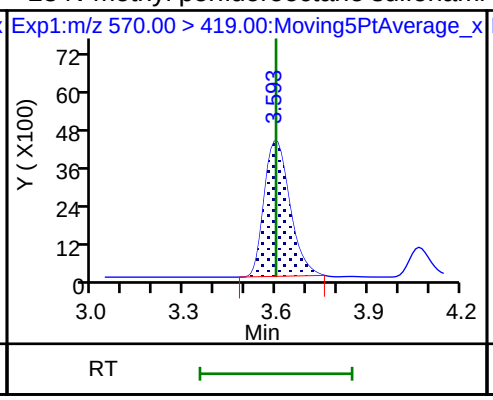
24 Perfluorodecanoic acid



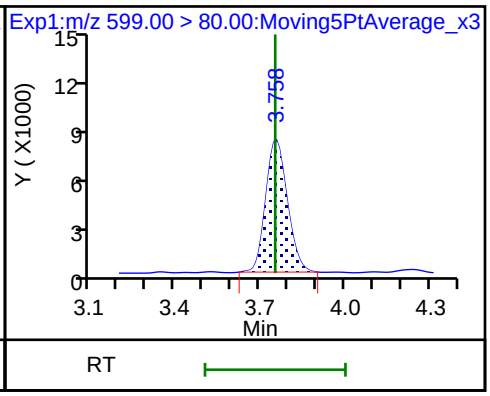
D 27 d3-NMeFOSAA



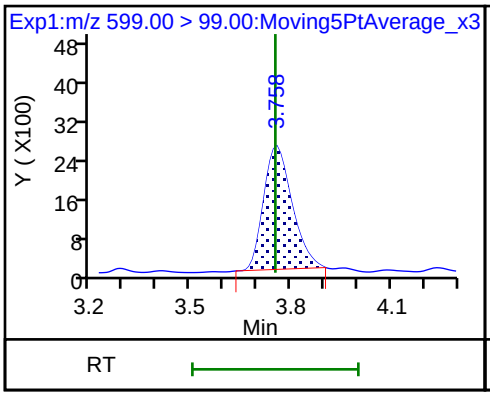
28 N-methyl perfluorooctane sulfonami



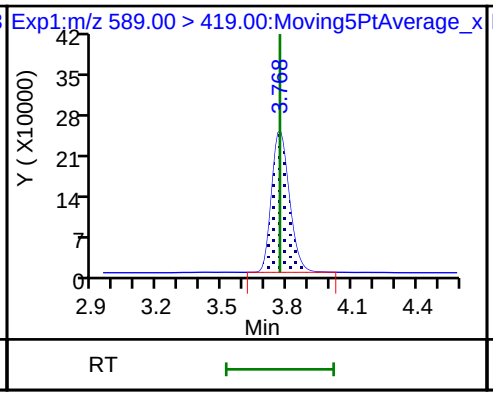
29 Perfluorodecane Sulfonic acid



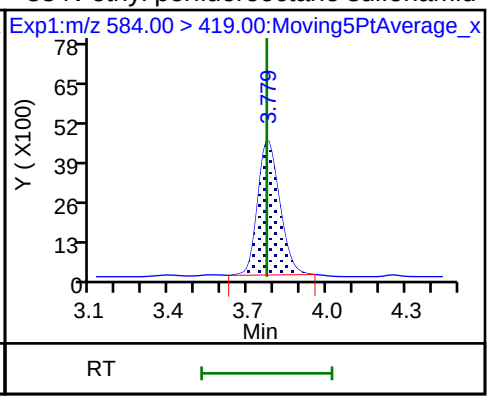
29 Perfluorodecane Sulfonic acid



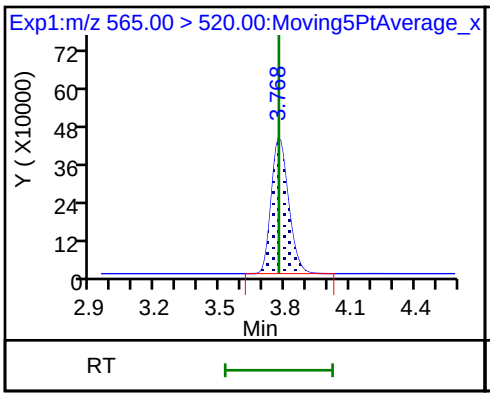
D 32 d5-NEtFOSAA



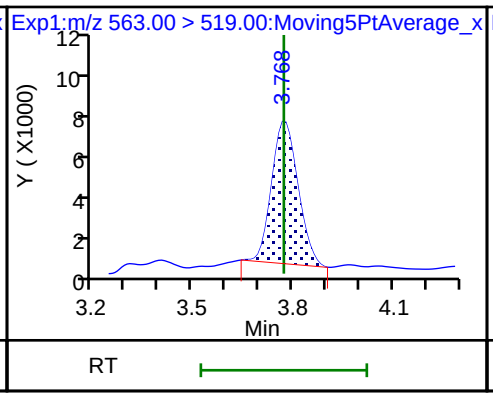
33 N-ethyl perfluorooctane sulfonamid



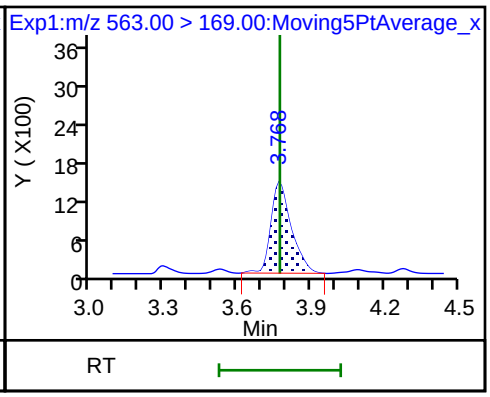
D 30 13C2 PFUnA



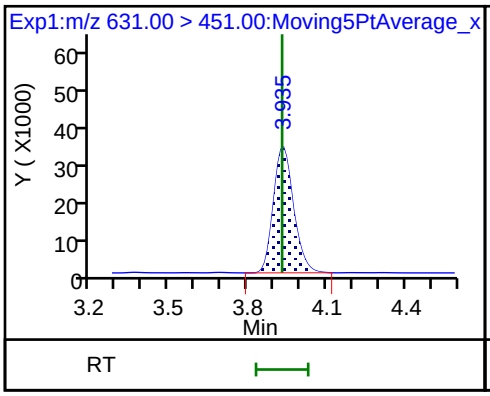
31 Perfluoroundecanoic acid



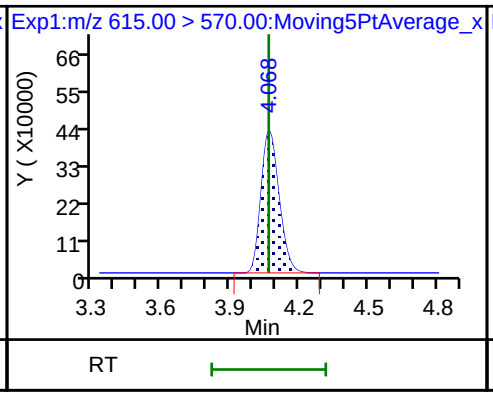
31 Perfluoroundecanoic acid



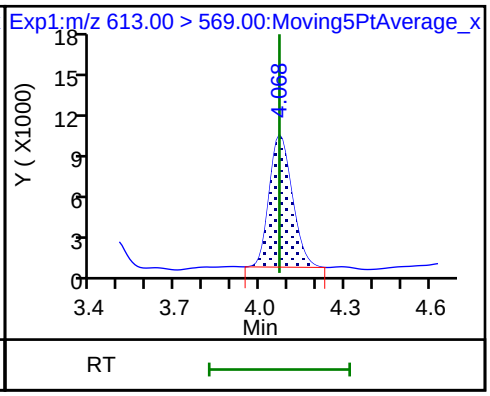
66 11-Chloroeicosafluoro-3-oxaundecan



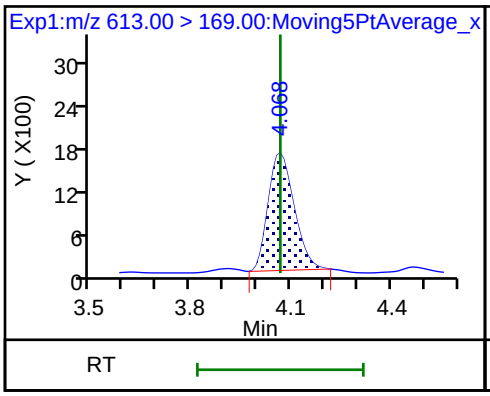
D 36 13C2 PFDoA



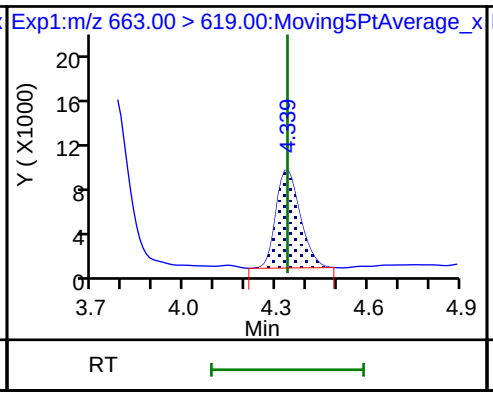
37 Perfluorododecanoic acid



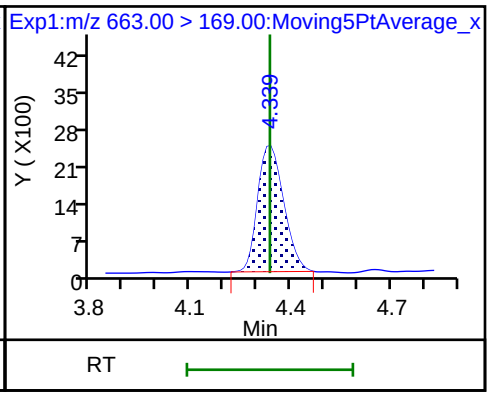
37 Perfluorododecanoic acid



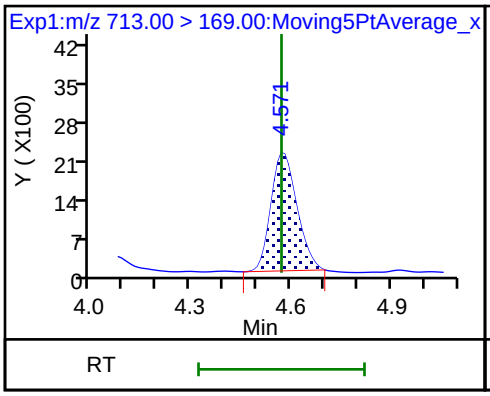
41 Perfluorotridecanoic acid



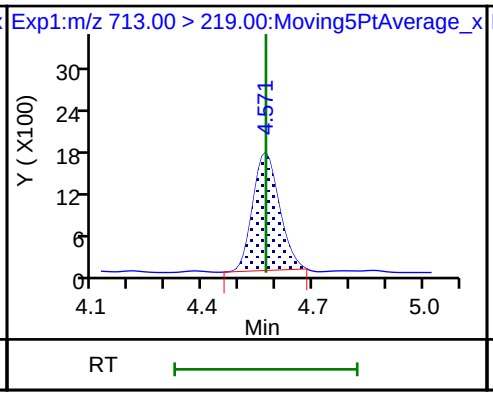
41 Perfluorotridecanoic acid



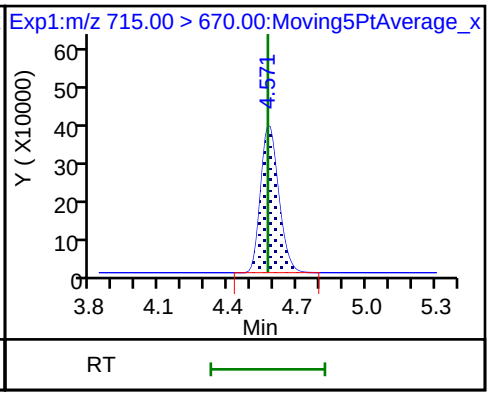
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



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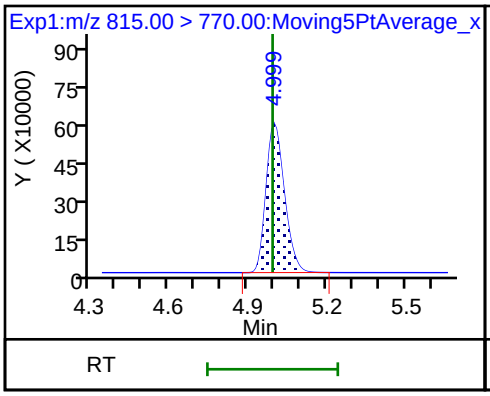
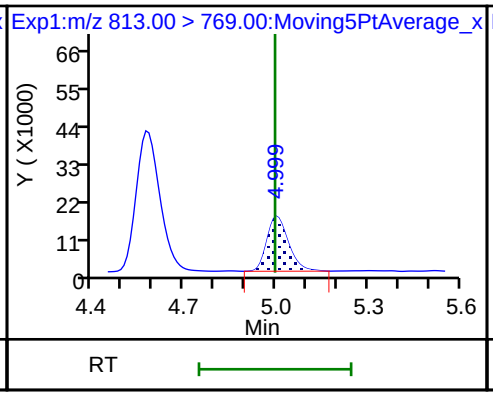
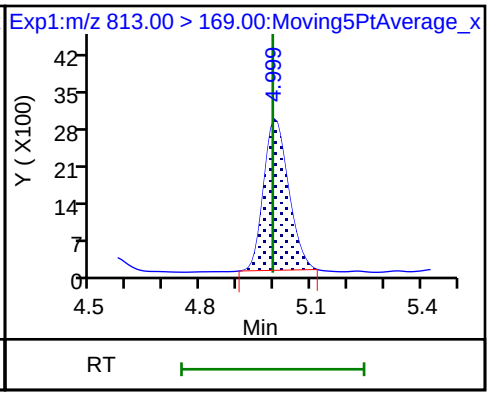


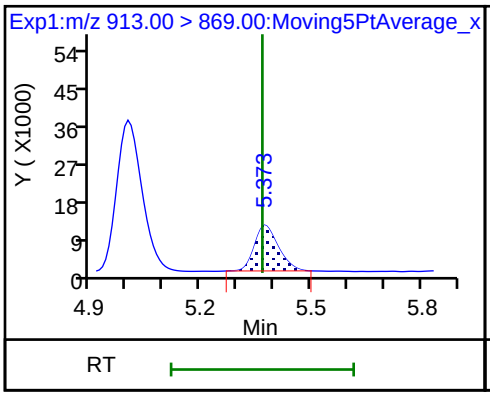
45 Perfluorohexadecanoic acid



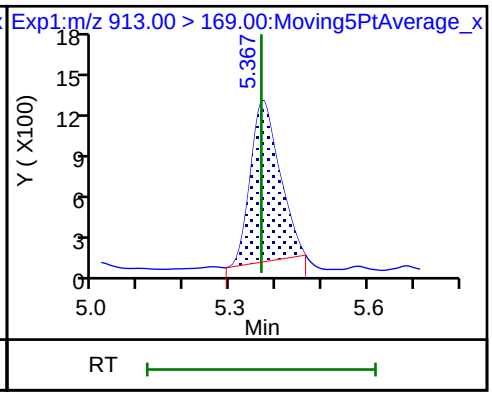
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_004.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 13-May-2018 14:28:20 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L3-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 08:39:48 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 08:35:38

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.464	1.461	0.003	1.000	5487061	2.46		98.6	54724	
2 Perfluorobutyric acid										
212.90 > 169.00	1.464	1.461	0.003	1.000	508539	0.2475		99.0	295	
D 3 13C5-PFPeA										
267.90 > 223.00	1.739	1.730	0.009	0.564	3579904	2.53		101	62137	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.739	1.731	0.008	1.000	400184	0.2365		94.6	201	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.763	0.003	1.000	73871	2.30		98.9	696	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.775	1.769	0.006	1.005	549282	0.2191		99.1	2109	
298.90 > 99.00	1.775	1.769	0.006	1.005	233519		2.35(1.25-3.74)	99.1	1238	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.979	0.003	1.000	453150	2.32		99.3	6821	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.982	0.0	1.000	97234	0.2233		95.6	5785	
D 7 13C2 PFHxA										
315.00 > 270.00	2.027	2.019	0.008	1.000	3691361	2.48		99.1	93606	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.027	2.021	0.006	1.000	363553	0.2454		98.2	671	
313.00 > 119.00	2.027	2.021	0.006	1.000	33123		10.98(5.03-15.10)	98.2	495	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.038	2.040	-0.002	1.000	530257	0.2440		104	10449	
349.00 > 99.00	2.038	2.040	-0.002	1.000	189868		2.79(1.36-4.07)	104	3048	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.117	2.118	-0.001	1.000	204391	2.54		101	3966	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.117	2.119	-0.002	1.000	54062	0.2275		91.0	486	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.349	-0.002	1.000	3352654	2.44		97.7	58447	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.351	-0.004	1.000	354425	0.2444		97.8	722	
363.00 > 169.00	2.360	2.351	0.009	1.006	133712		2.65(1.13-3.40)	97.8	848	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.362	-0.002	1.000	405875	0.2033		89.4	3496	
399.00 > 99.00	2.360	2.362	-0.002	1.000	149142		2.72(1.50-4.49)	89.4	812	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.364	-0.004	1.000	4158344	2.32		98.1	36427	
65 Adona										
377.00 > 251.00	2.403	2.396	0.007	1.000	1029644	0.2473		98.9	15521	
377.00 > 85.00	2.403	2.396	0.007	1.000	598758		1.72(0.84-2.53)	98.9	5863	
D 12 M2-6:2FTS										
429.00 > 81.00	2.688	2.681	0.007	1.000	643213	2.41		101	12227	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.688	2.681	0.007	1.000	107465	0.2394		101	2447	
* 62 13C2-PFOA										
415.00 > 370.00	2.710	2.704	0.006		3446348	2.50			67127	
D 14 13C4 PFOA										
417.00 > 372.00	2.710	2.705	0.005	1.000	3261572	2.51		100	50178	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.710	2.708	0.002	1.000	380516	0.2523		101	223	
413.00 > 169.00	2.710	2.708	0.002	1.000	200837		1.89(0.84-2.52)	101	950	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.718	2.712	0.006	1.000	394230	0.2353		98.9	6070	
449.00 > 99.00	2.718	2.712	0.006	1.000	107252		3.68(1.94-5.82)	98.9	2050	
D 18 13C4 PFOS										
503.00 > 80.00	3.075	3.075	0.0	1.000	3063924	2.38		99.7	26551	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.075	3.075	0.0	1.000	321512	0.2287		98.6	1859	
499.00 > 99.00	3.083	3.075	0.008	1.003	72883		4.41(2.31-6.93)	98.6	674	
D 19 13C5 PFNA										
468.00 > 423.00	3.083	3.077	0.006	1.000	2784047	2.54		102	53681	
20 Perfluorononanoic acid										
463.00 > 419.00	3.083	3.078	0.005	1.000	279557	0.2467		98.7	532	
463.00 > 169.00	3.083	3.078	0.005	1.000	69614		4.02(1.90-5.69)	98.7	2084	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.290	3.287	0.003	1.000	527409	0.2276		97.7	6374	
D 21 13C8 FOSA										
506.00 > 78.00	3.410	3.403	0.007	1.000	4665415	2.56		103	45288	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.410	3.404	0.006	1.000	438095	0.2364		94.6	7618	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.428	3.424	0.004	1.000	228597	0.2270		94.6	5628	
549.00 > 99.00	3.428	3.424	0.004	1.000	92378		2.47(1.33-3.97)	94.6	1122	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.438	3.430	0.008	1.003	106386	0.2352		98.2	1808	
D 26 M2-8:2FTS										
529.00 > 81.00	3.428	3.430	-0.002	1.000	880702	2.51		105	10523	
D 23 13C2 PFDA										
515.00 > 470.00	3.438	3.440	-0.002	1.000	2471188	2.59		103	52789	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.447	3.442	0.005	1.003	233807	0.2307		92.3	2038	
513.00 > 169.00	3.438	3.442	-0.004	1.000	42072		5.56(2.36-7.09)	92.3	816	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.599	3.594	0.005	1.000	1014196	2.42		96.8	30156	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.599	3.599	0.0	1.000	105708	0.2515		101	1035	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.753	3.753	0.0	1.000	204229	0.2415		100	2340	
599.00 > 99.00	3.763	3.753	0.010	1.003	61840		3.30(1.39-4.16)	100	1248	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.763	3.766	-0.003	1.000	1210507	2.64		106	3600	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.774	3.771	0.003	1.003	111908	0.2359		94.4	2898	
D 30 13C2 PFUnA										
565.00 > 520.00	3.774	3.771	0.003	1.000	2061574	2.64		106	46794	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.774	3.772	0.002	1.000	132812	0.2045		81.8	652	
563.00 > 169.00	3.774	3.772	0.002	1.000	42536		3.12(2.12-6.36)	81.8	1252	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.930	3.929	0.001	1.000	796596	0.2329		98.9	18584	
D 36 13C2 PFDoA										
615.00 > 570.00	4.072	4.066	0.006	1.000	1987610	2.44		97.6	16573	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.072	4.068	0.004	1.000	214612	0.2583		103	136	
613.00 > 169.00	4.072	4.068	0.004	1.000	55382		3.88(2.13-6.40)	103	825	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.341	4.336	0.005	1.000	210675	0.2550		102	83.6	
663.00 > 169.00	4.341	4.336	0.005	1.000	70192		3.00(1.25-3.76)	102	920	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.573	4.571	0.002	1.000	2246581	2.53		101	15663	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.573	4.571	0.002	1.000	59877	0.2503		100	873	
713.00 > 219.00	4.573	4.571	0.002	1.000	41720		1.44(0.71-2.13)	100	845	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.000	4.993	0.007	1.000	3616302	2.56		102	11062	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.000	4.995	0.005	1.000	362365	0.2477		99.1	78.1	
813.00 > 169.00	5.000	4.995	0.005	1.000	58015		6.25(2.86-8.58)	99.1	651	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.368	5.367	0.001	1.000	395018	0.2664		107	68.6	
913.00 > 169.00	5.368	5.367	0.001	1.000	50708		7.79(3.83-11.48)	107	607	

Reagents:

LCPFC_LL3_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 08:39:49 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_004.d

Injection Date: 13-May-2018 14:28:20 Instrument ID: A8_N

Lims ID: IC L3 Full

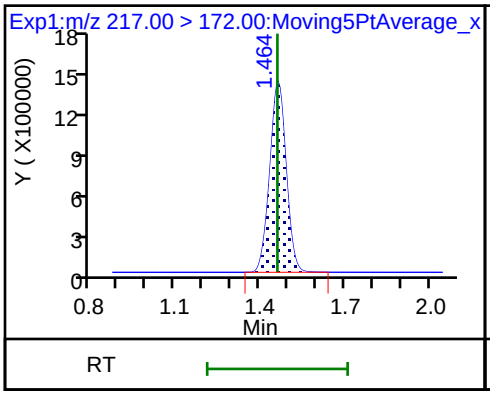
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 4

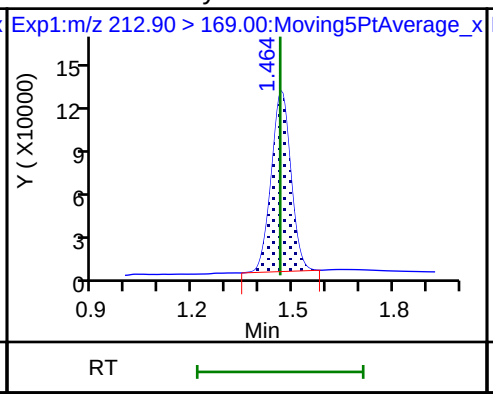
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

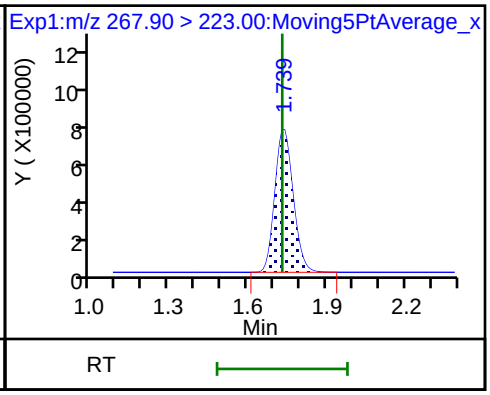
D 1 13C4 PFBA



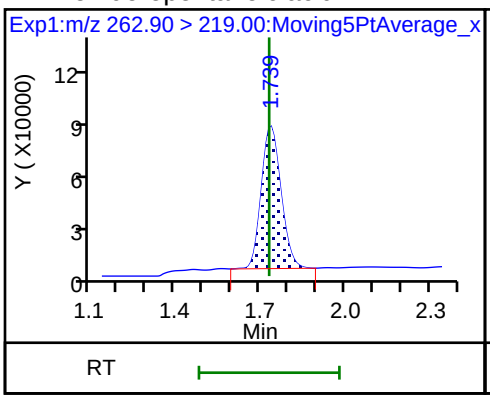
2 Perfluorobutyric acid



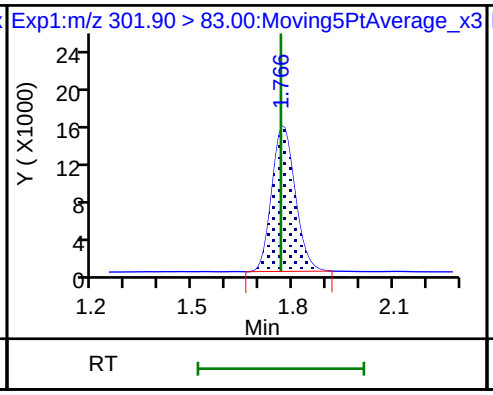
D 3 13C5-PFPeA



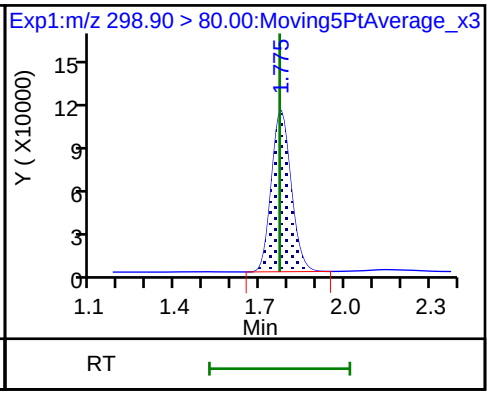
4 Perfluoropentanoic acid



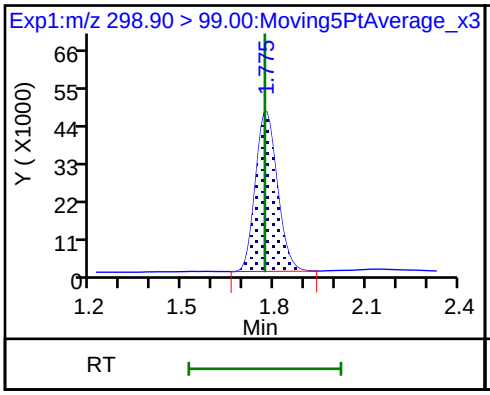
D 47 13C3-PFBS



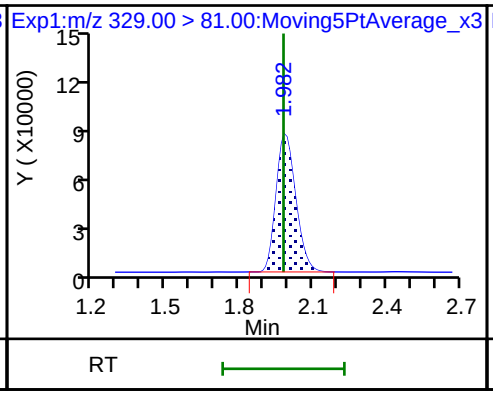
5 Perfluorobutanesulfonic acid



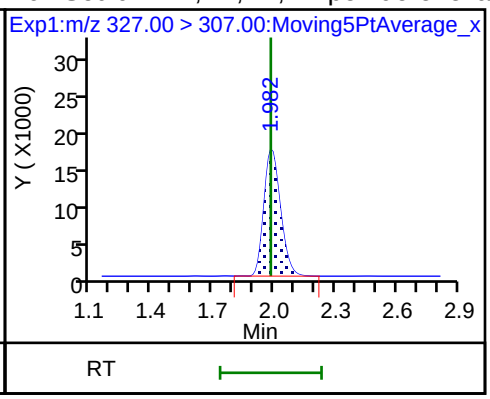
5 Perfluorobutanesulfonic acid



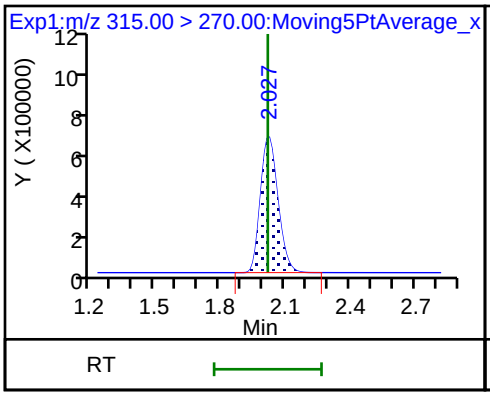
D 60 M2-4:2FTS



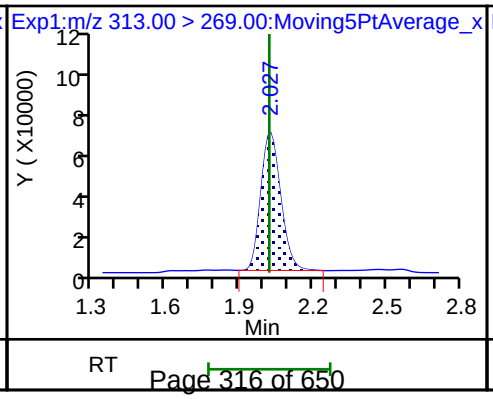
61 Sodium 1H,1H,2H,2H-perfluorohexane



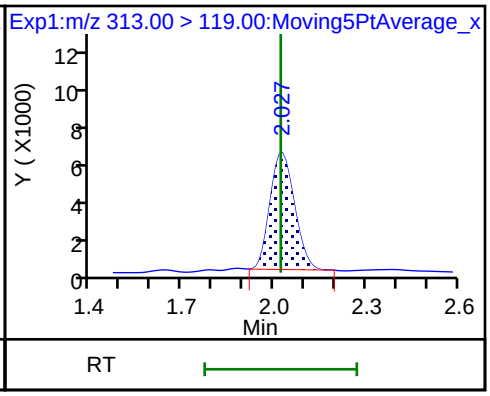
D 7 13C2 PFHxA



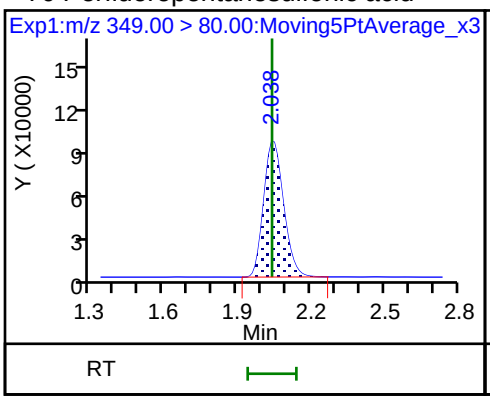
6 Perfluorohexanoic acid



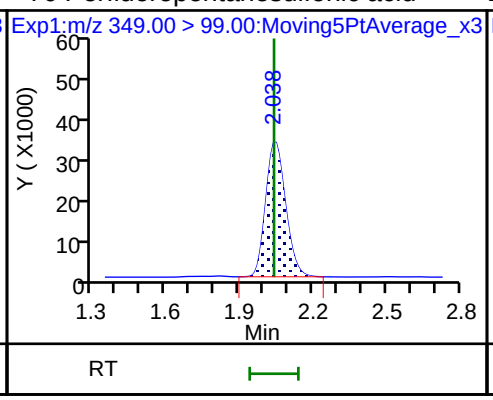
6 Perfluorohexanoic acid



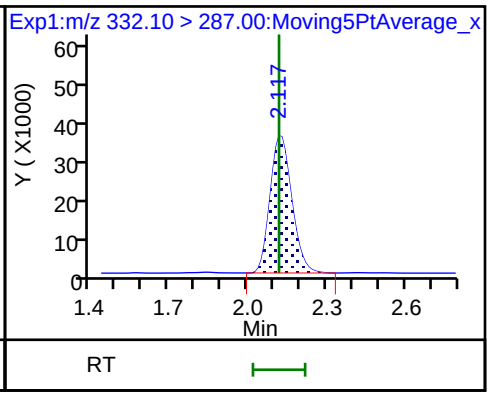
70 Perfluoropentanesulfonic acid



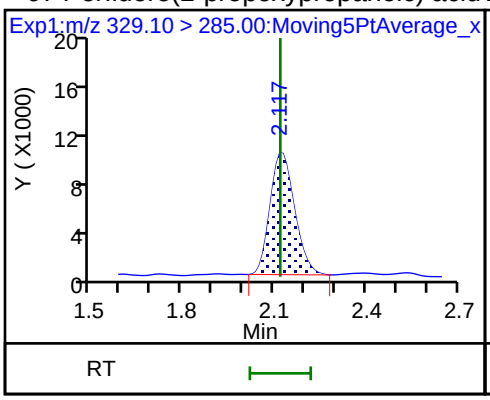
70 Perfluoropentanesulfonic acid



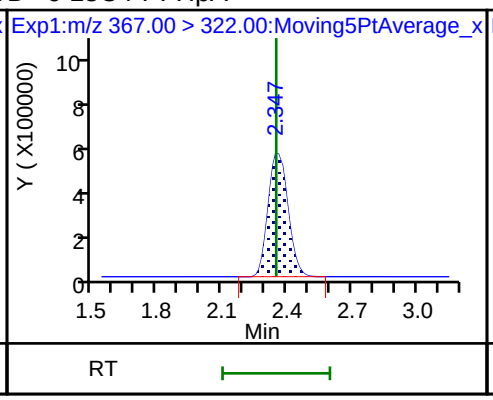
D 64 13C3 HFPO-DA



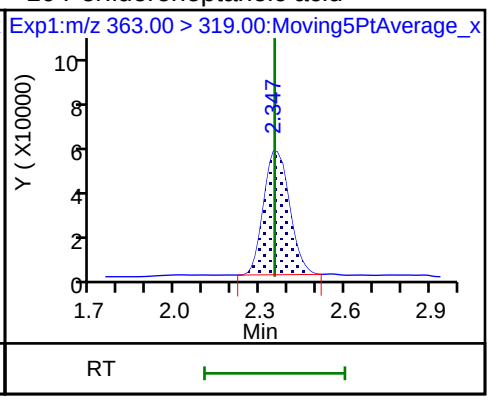
67 Perfluoro(2-propoxypropanoic) acid



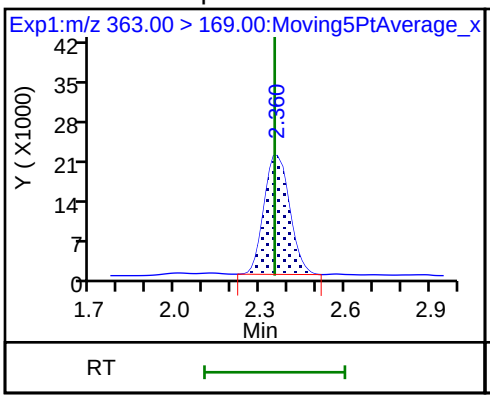
D 9 13C4-PFHpA



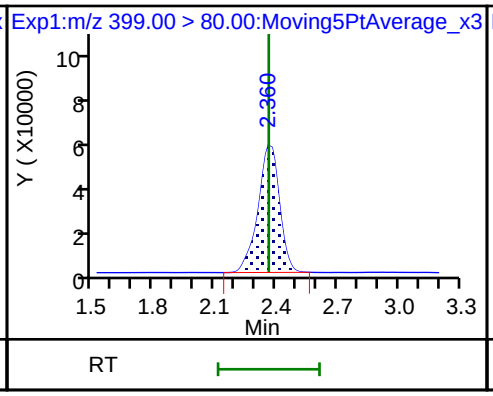
10 Perfluoroheptanoic acid



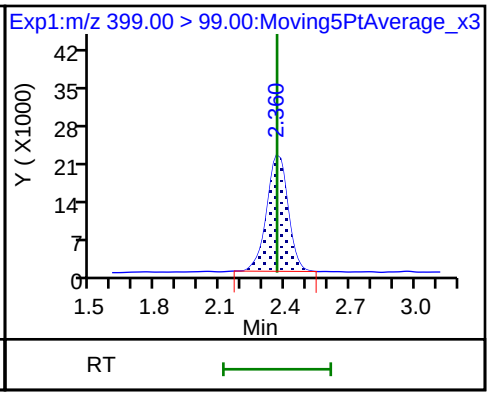
10 Perfluoroheptanoic acid



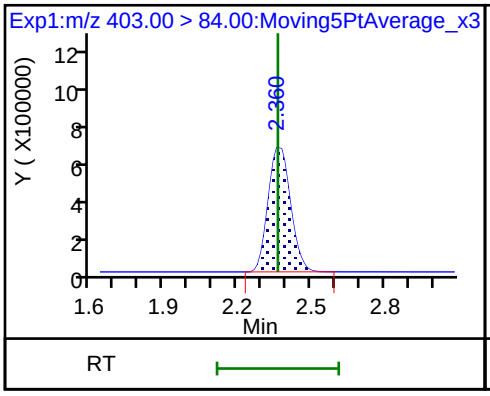
8 Perfluorohexanesulfonic acid



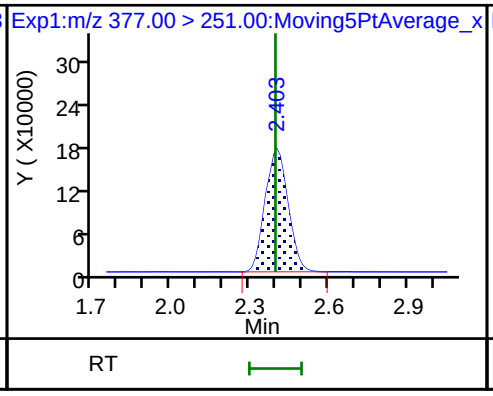
8 Perfluorohexanesulfonic acid



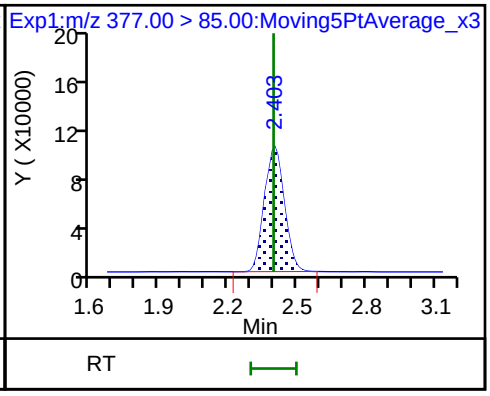
D 11 18O2 PFHxS



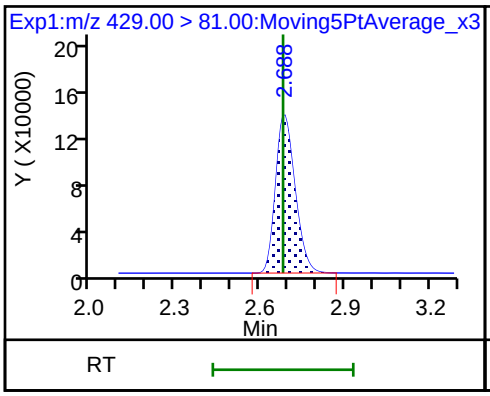
65 Adona



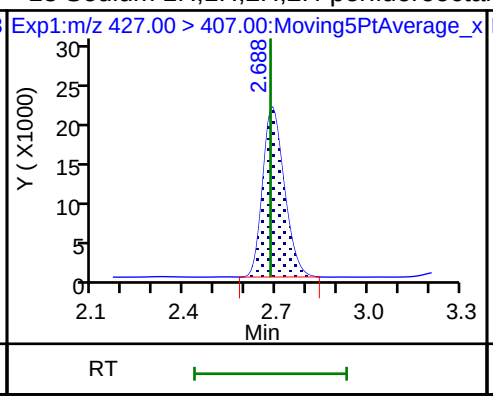
65 Adona



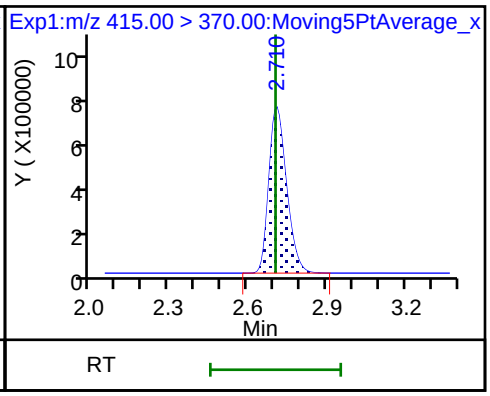
D 12 M2-6:2FTS



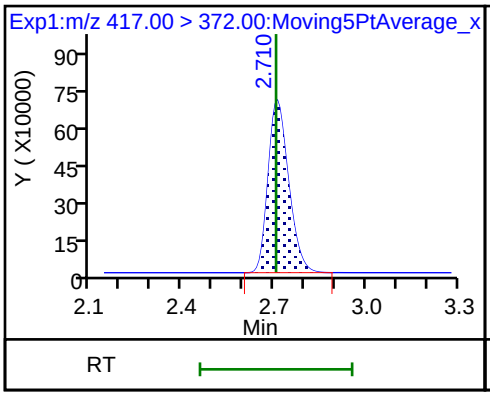
13 Sodium 1H,1H,2H,2H-perfluorooctane



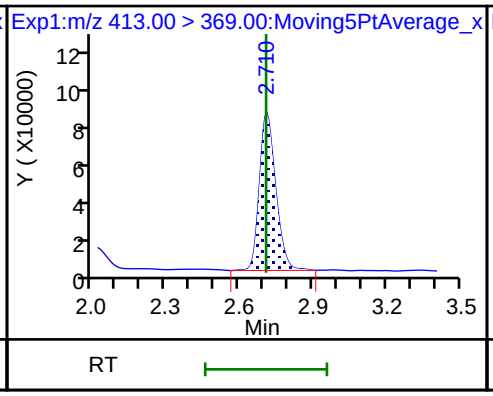
M2 13C2-PFOA



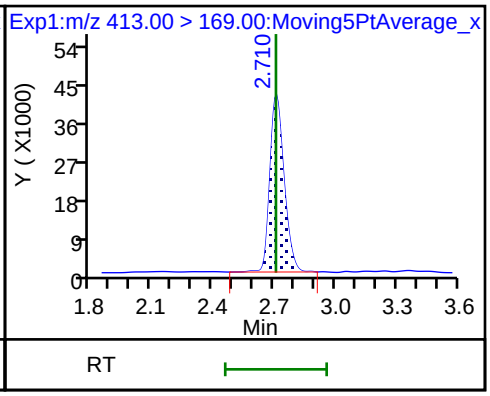
D 14 13C4 PFOA



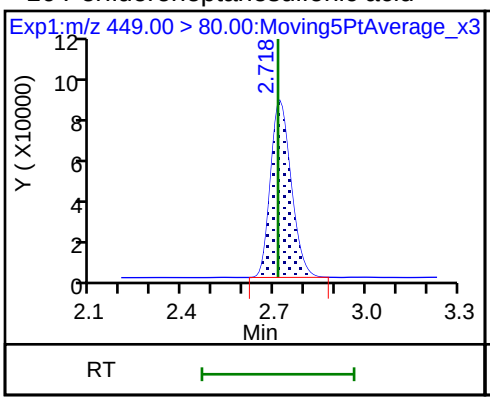
15 Perfluorooctanoic acid



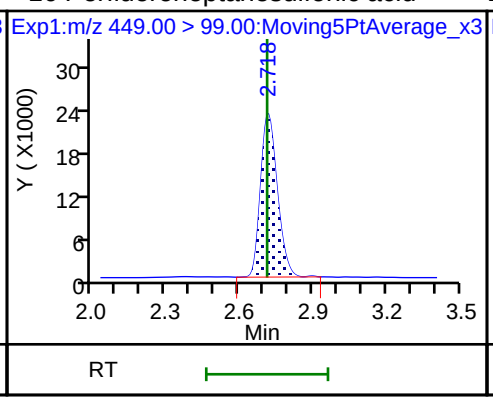
15 Perfluorooctanoic acid



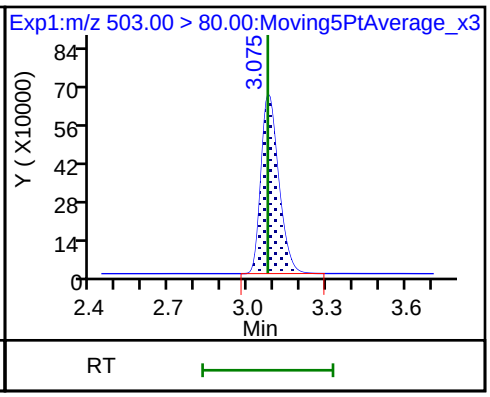
16 Perfluoroheptanesulfonic acid



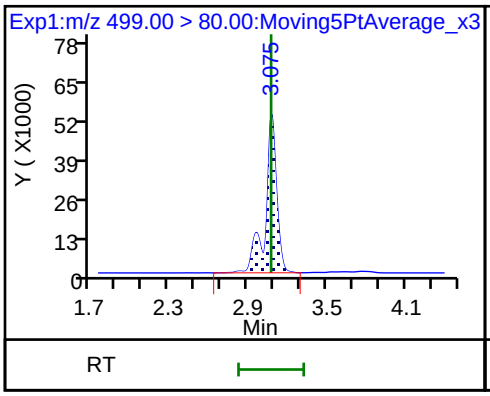
16 Perfluoroheptanesulfonic acid



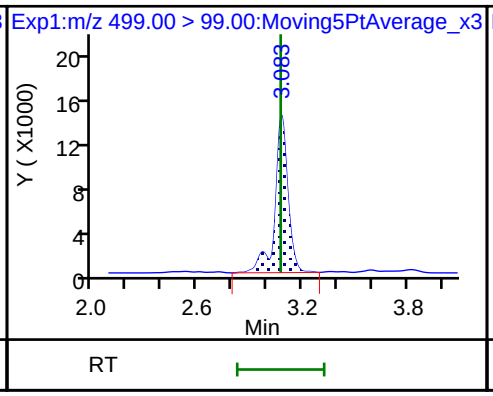
D 18 13C4 PFOS



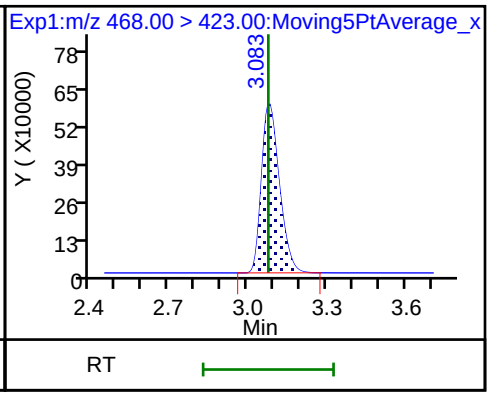
17 Perfluorooctane sulfonic acid



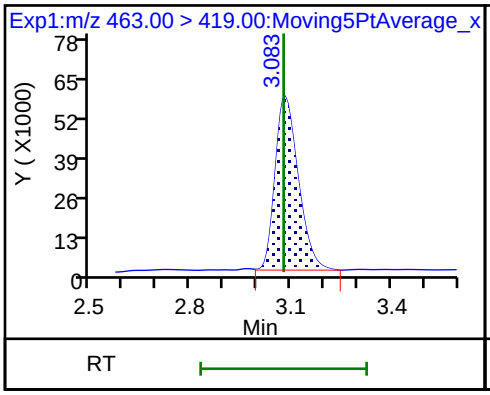
17 Perfluorooctane sulfonic acid



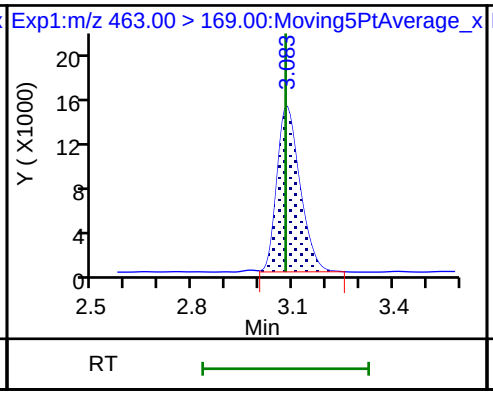
D 19 13C5 PFNA



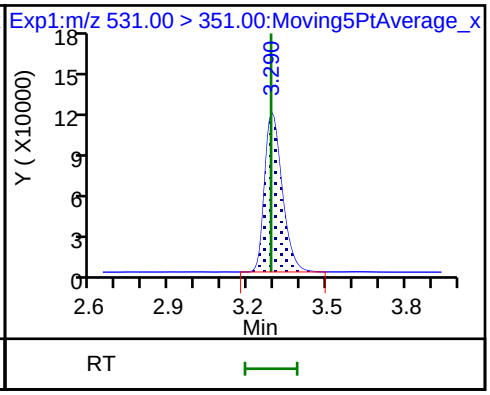
20 Perfluorononanoic acid



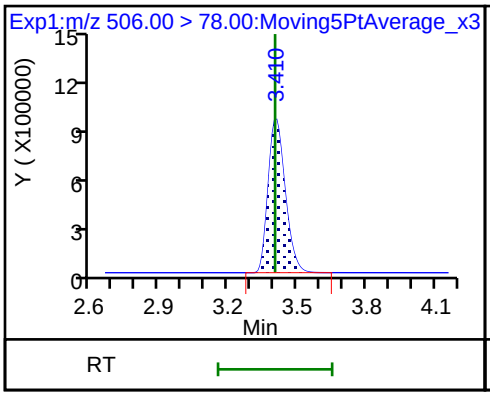
20 Perfluorononanoic acid



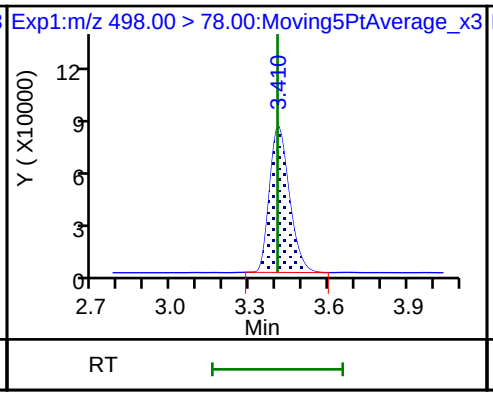
69 9-Chlorohexadecafluoro-3-oxanonane



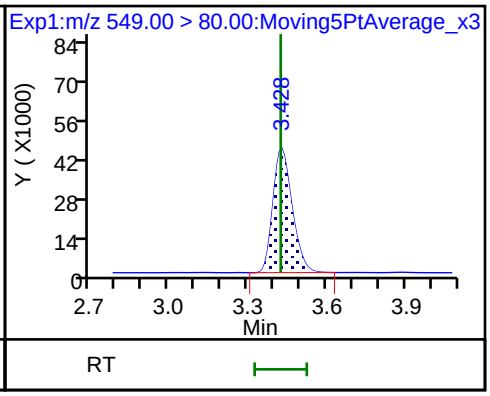
D 21 13C8 FOSA



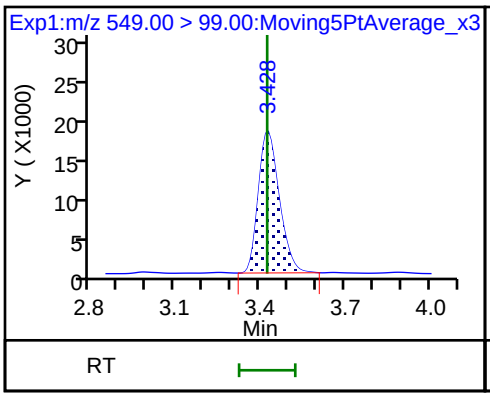
22 Perfluorooctane Sulfonamide



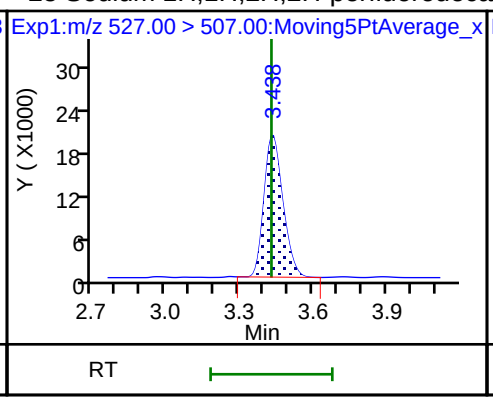
68 Perfluorononanesulfonic acid



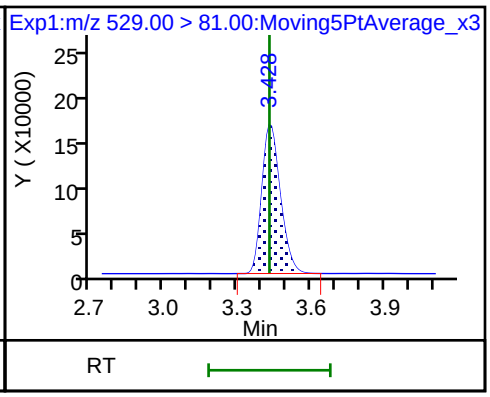
68 Perfluorononanesulfonic acid



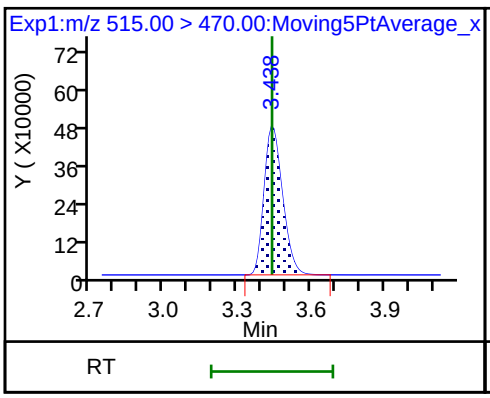
25 Sodium 1H,1H,2H,2H-perfluorodecane



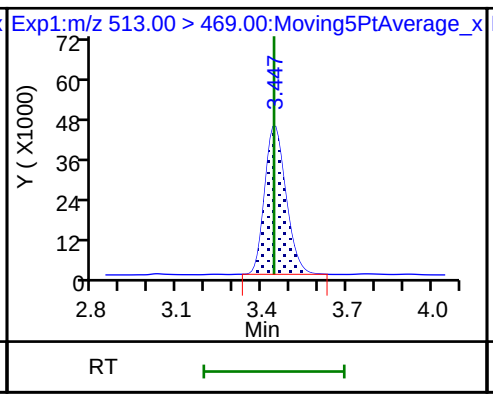
D 26 M2-8:2FTS



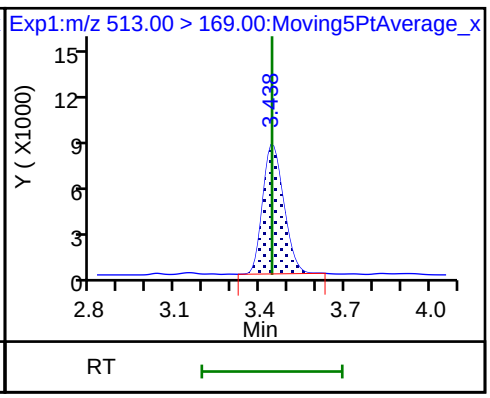
D 23 13C2 PFDA



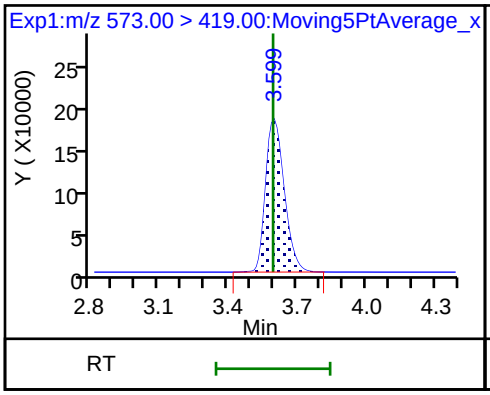
24 Perfluorodecanoic acid



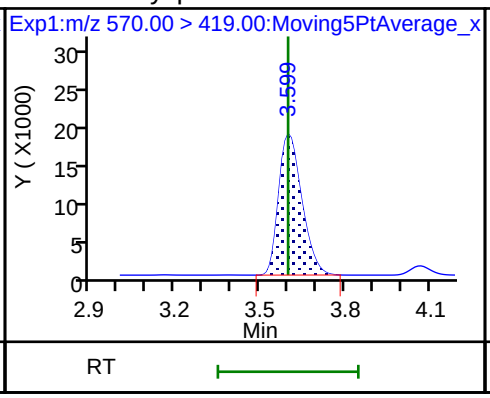
24 Perfluorodecanoic acid



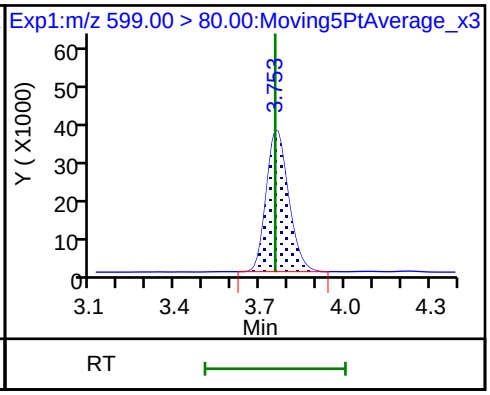
D 27 d3-NMeFOSAA



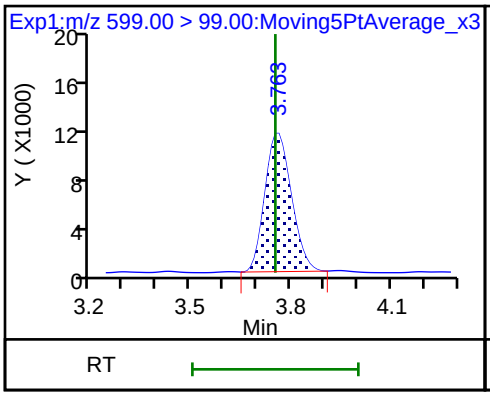
28 N-methyl perfluorooctane sulfonami



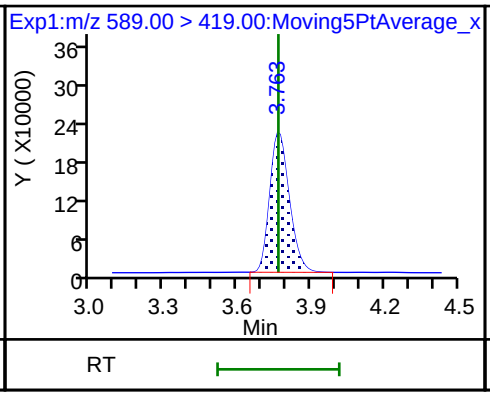
29 Perfluorodecane Sulfonic acid



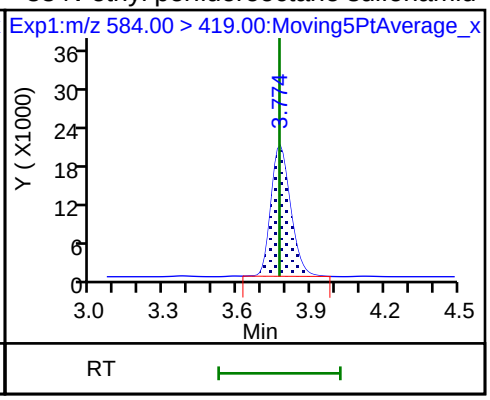
29 Perfluorodecane Sulfonic acid



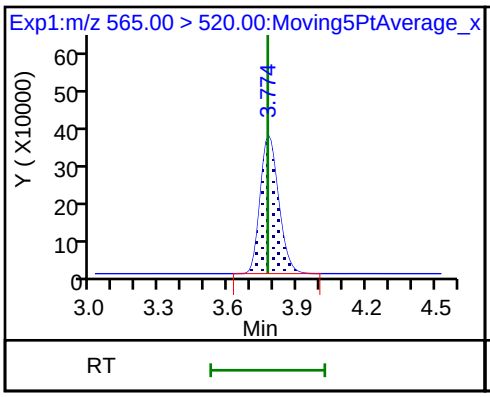
D 32 d5-NEtFOSAA



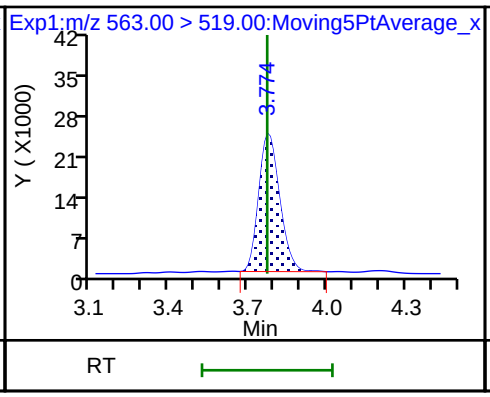
33 N-ethyl perfluorooctane sulfonamid



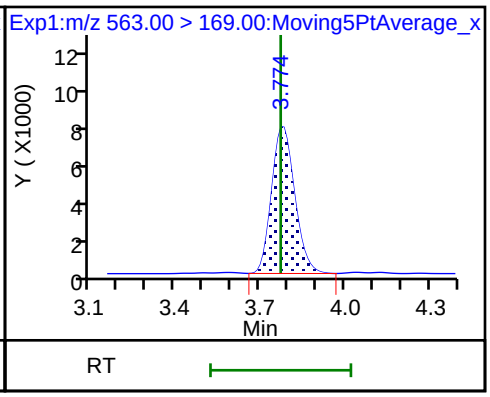
D 30 13C2 PFUnA



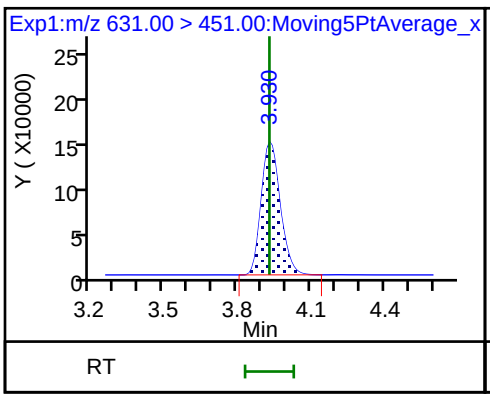
31 Perfluoroundecanoic acid



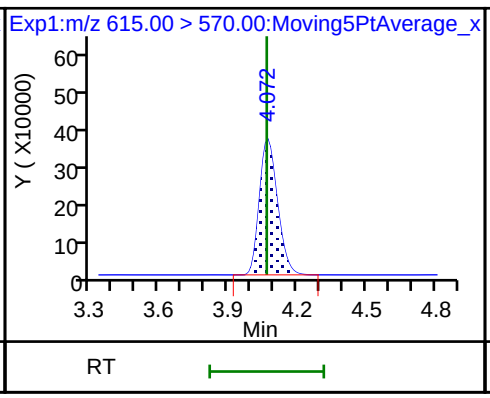
31 Perfluoroundecanoic acid



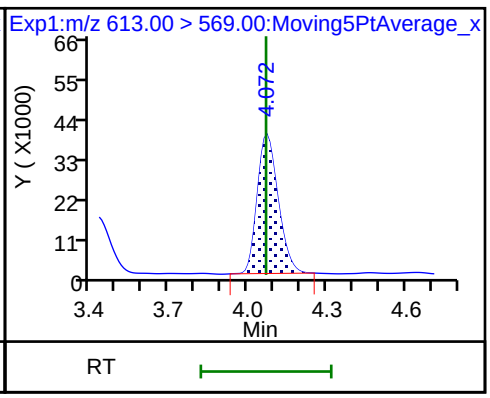
66 11-Chloroeicosafluoro-3-oxaundecan



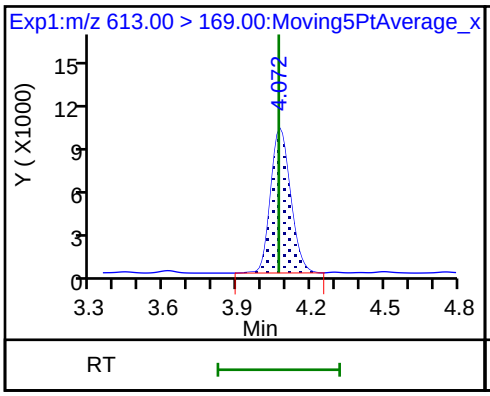
D 36 13C2 PFDoA



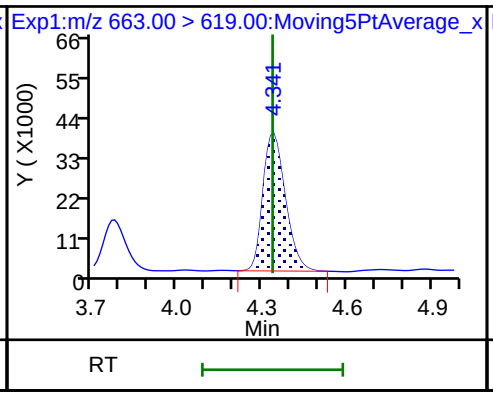
37 Perfluorododecanoic acid



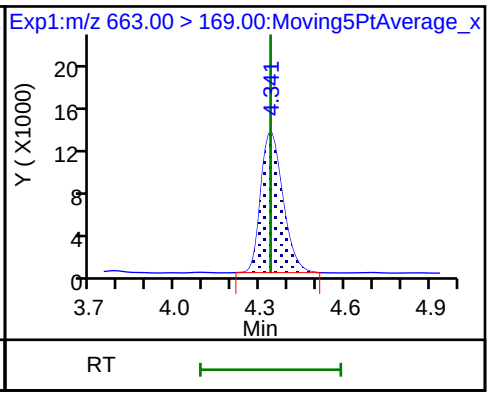
37 Perfluorododecanoic acid



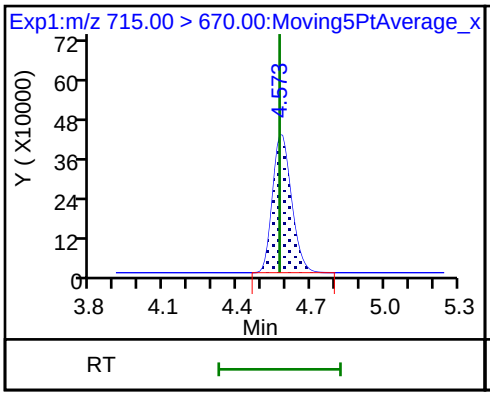
41 Perfluorotridecanoic acid



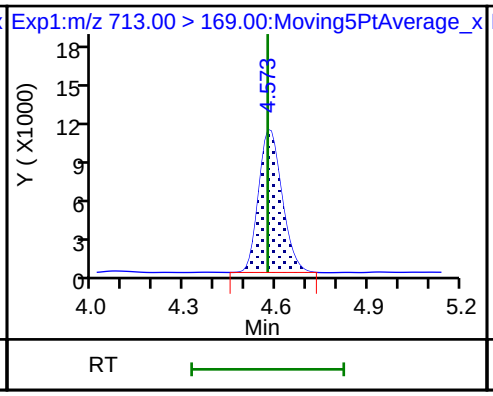
41 Perfluorotridecanoic acid



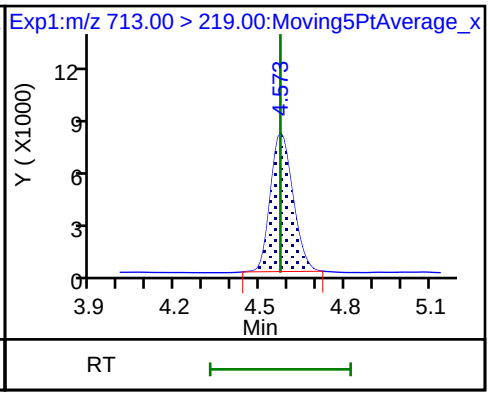
D 43 13C2-PFTeDA



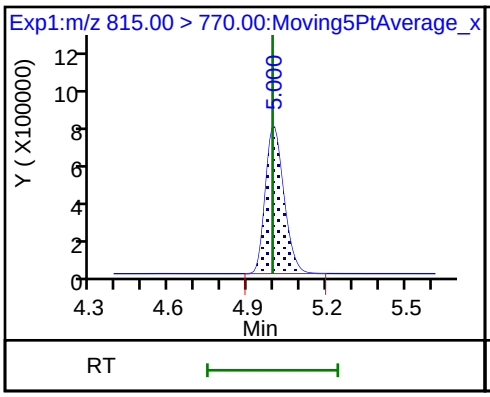
42 Perfluorotetradecanoic acid



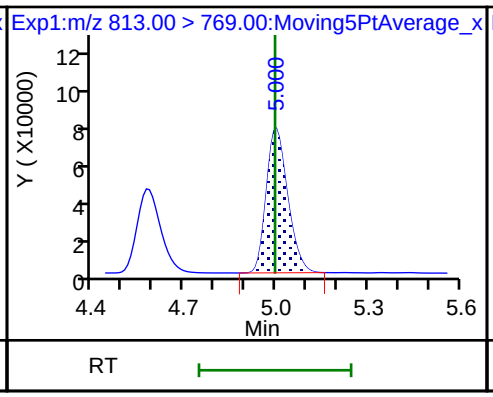
42 Perfluorotetradecanoic acid



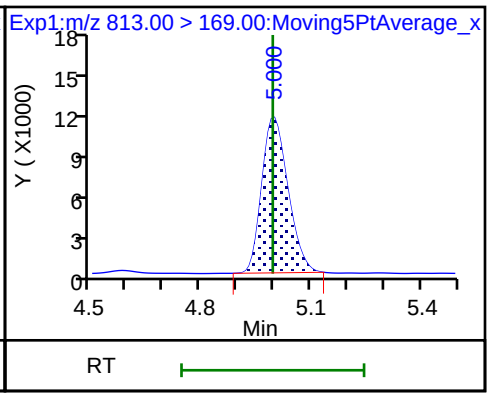
D 44 13C2-PFHxDA



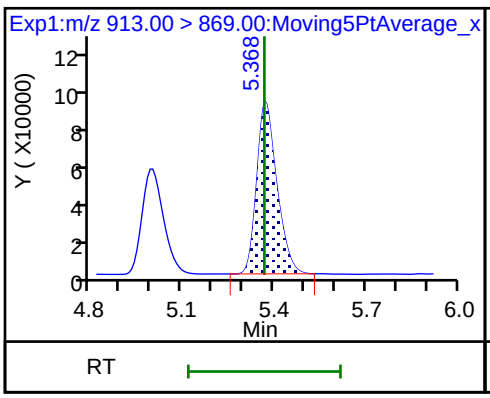
45 Perfluorohexadecanoic acid



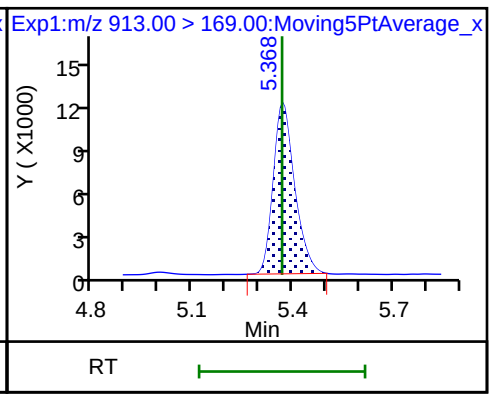
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_005.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 13-May-2018 14:36:08 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L4-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 08:39:51 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 08:39:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.461	-0.003	1.000	5493188	2.56		102	52961	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.461	-0.003	1.000	1980079	0.9625		96.3	1153	
D 3 13C5-PFPeA										
267.90 > 223.00	1.721	1.730	-0.009	0.560	3524244	2.58		103	65192	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.731	-0.001	1.005	1595257	0.9576		95.8	803	
D 47 13C3-PFBS										
301.90 > 83.00	1.757	1.763	-0.006	1.000	73211	2.36		102	599	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.769	-0.003	1.005	2130106	0.8572		97.0	7594	
298.90 > 99.00	1.766	1.769	-0.003	1.005	895707		2.38(1.25-3.74)	97.0	5027	
D 60 M2-4:2FTS										
329.00 > 81.00	1.971	1.979	-0.008	1.000	469628	2.49		107	7625	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.982	0.0	1.000	405171	0.9387		101	24588	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.019	-0.003	1.000	3790319	2.63		105	134552	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.021	-0.005	1.000	1439534	0.9465		94.6	2620	
313.00 > 119.00	2.016	2.021	-0.005	1.000	131193		10.97(5.03-15.10)	94.6	2279	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.038	2.040	-0.002	1.000	2033391	0.9439		101	29934	
349.00 > 99.00	2.038	2.040	-0.002	1.000	757960		2.68(1.36-4.07)	101	9530	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.117	2.118	-0.001	1.000	204782	2.63		105	6166	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.117	2.119	-0.002	1.000	230624	1.02		102	2360	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.349	-0.002	1.000	3480570	2.63		105	70660	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.351	-0.004	1.000	1415732	0.9404		94.0	2923	
363.00 > 169.00	2.347	2.351	-0.004	1.000	565522		2.50(1.13-3.40)	94.0	3971	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.362	-0.002	1.000	1649009	0.7956		87.4	10578	
399.00 > 99.00	2.360	2.362	-0.002	1.000	544153		3.03(1.50-4.49)	87.4	2868	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.364	-0.004	1.000	4317312	2.50		106	35410	
65 Adona										
377.00 > 251.00	2.386	2.396	-0.010	1.000	4305447	1.02		102	51234	
377.00 > 85.00	2.386	2.396	-0.010	1.000	2454266		1.75(0.84-2.53)	102	18655	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.675	2.681	-0.006	1.000	408574	0.9164		96.7	6987	
D 12 M2-6:2FTS										
429.00 > 81.00	2.675	2.681	-0.006	1.000	638923	2.48		104	14946	
* 62 13C2-PFOA										
415.00 > 370.00	2.698	2.704	-0.006		3326589	2.50			50170	
D 14 13C4 PFOA										
417.00 > 372.00	2.698	2.705	-0.007	1.000	3189338	2.54		102	48672	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.708	-0.003	1.003	1424064	0.9656		96.6	816	
413.00 > 169.00	2.705	2.708	-0.003	1.003	726867		1.96(0.84-2.52)	96.6	2840	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.705	2.712	-0.007	1.000	1554416	0.9107		95.7	18407	
449.00 > 99.00	2.705	2.712	-0.007	1.000	417668		3.72(1.94-5.82)	95.7	5194	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.066	3.075	-0.009	1.000	1293959	0.9036		97.4	8992	
499.00 > 99.00	3.066	3.075	-0.009	1.000	289455		4.47(2.31-6.93)	97.4	2884	
D 18 13C4 PFOS										
503.00 > 80.00	3.066	3.075	-0.009	1.000	3120972	2.51		105	27108	
D 19 13C5 PFNA										
468.00 > 423.00	3.073	3.077	-0.004	1.000	2851086	2.70		108	51349	
20 Perfluorononanoic acid										
463.00 > 419.00	3.073	3.078	-0.005	1.000	1100961	0.9488		94.9	2319	
463.00 > 169.00	3.073	3.078	-0.005	1.000	266898		4.13(1.90-5.69)	94.9	11209	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.280	3.287	-0.007	1.000	2147088	0.9096		97.6	18759	
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.403	-0.005	1.000	4670420	2.66		106	45685	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.398	3.404	-0.006	1.000	1782935	0.9612		96.1	17213	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.417	3.424	-0.007	1.000	922314	0.8991		93.7	14913	
549.00 > 99.00	3.417	3.424	-0.007	1.000	356582		2.59(1.33-3.97)	93.7	5384	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.426	3.430	-0.004	1.000	432014	1.01		106	7502	
D 26 M2-8:2FTS										
529.00 > 81.00	3.426	3.430	-0.004	1.000	831951	2.45		102	8265	
D 23 13C2 PFDA										
515.00 > 470.00	3.436	3.440	-0.004	1.000	2506036	2.72		109	32272	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.436	3.442	-0.006	1.000	947325	0.9216		92.2	6283	
513.00 > 169.00	3.436	3.442	-0.006	1.000	178019		5.32(2.36-7.09)	92.2	5746	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.593	3.594	-0.001	1.000	1050199	2.60		104	26625	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.593	3.599	-0.006	1.000	405215	0.9311		93.1	5197	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.748	3.753	-0.005	1.000	784306	0.9105		94.4	8930	
599.00 > 99.00	3.748	3.753	-0.005	1.000	260416		3.01(1.39-4.16)	94.4	6781	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.758	3.766	-0.008	1.000	1131020	2.55		102	3399	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.768	3.771	-0.003	1.003	432898	0.9766		97.7	19133	
D 30 13C2 PFUnA										
565.00 > 520.00	3.768	3.771	-0.003	1.000	1941159	2.57		103	38454	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.768	3.772	-0.004	1.000	613151	1.00		100	2320	
563.00 > 169.00	3.768	3.772	-0.004	1.000	144713		4.24(2.12-6.36)	100	3777	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.925	3.929	-0.004	1.000	3268382	0.9382		99.6	47199	
D 36 13C2 PFDoA										
615.00 > 570.00	4.058	4.066	-0.008	1.000	2067882	2.63		105	18039	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.058	4.068	-0.010	1.000	802236	0.9282		92.8	512	
613.00 > 169.00	4.058	4.068	-0.010	1.000	215340		3.73(2.13-6.40)	92.8	3207	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.328	4.336	-0.008	1.000	857066	1.00		99.7	386	
663.00 > 169.00	4.328	4.336	-0.008	1.000	284018		3.02(1.25-3.76)	99.7	3763	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.573	4.571	0.002	1.000	229748	0.9334		93.3	3536	
713.00 > 219.00	4.562	4.571	-0.009	0.998	155422		1.48(0.71-2.13)	93.3	3205	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.573	4.571	0.002	1.000	2311725	2.70		108	13158	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.991	4.993	-0.002	1.000	3844273	2.82		113	11180	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.991	4.995	-0.004	1.000	1401680	0.9539		95.4	268	
813.00 > 169.00	4.991	4.995	-0.004	1.000	250210		5.60(2.86-8.58)	95.4	2370	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.362	5.367	-0.005	1.000	1655871	1.05		105	271	
913.00 > 169.00	5.362	5.367	-0.005	1.000	207030		8.00(3.83-11.48)	105	2101	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 08:39:53 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_005.d

Injection Date: 13-May-2018 14:36:08 Instrument ID: A8_N

Lims ID: IC L4 Full

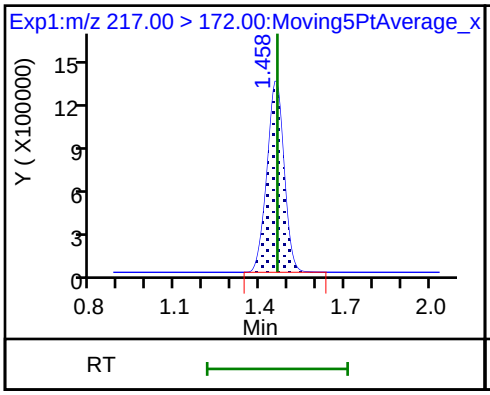
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 5

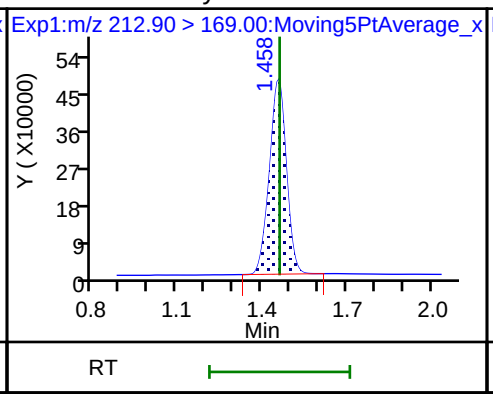
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

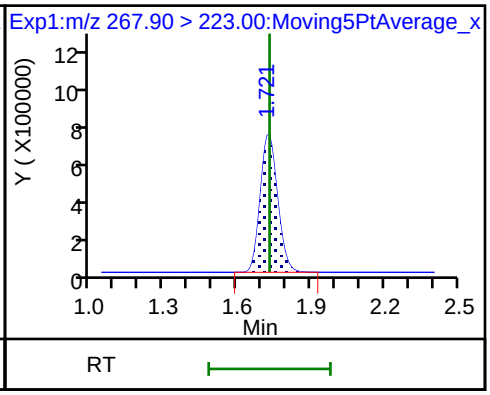
D 1 13C4 PFBA



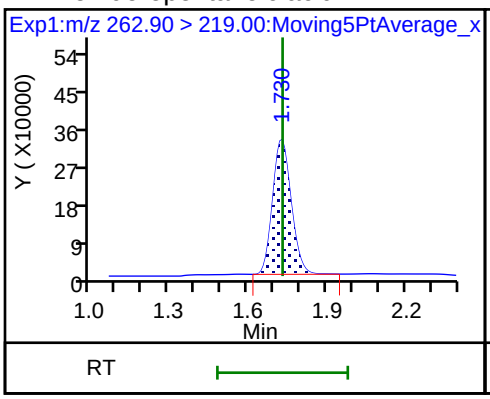
2 Perfluorobutyric acid



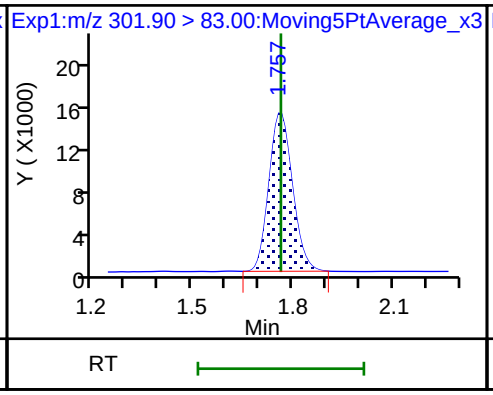
D 3 13C5-PFPeA



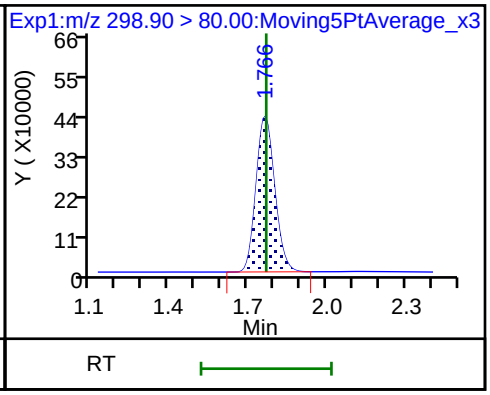
4 Perfluoropentanoic acid



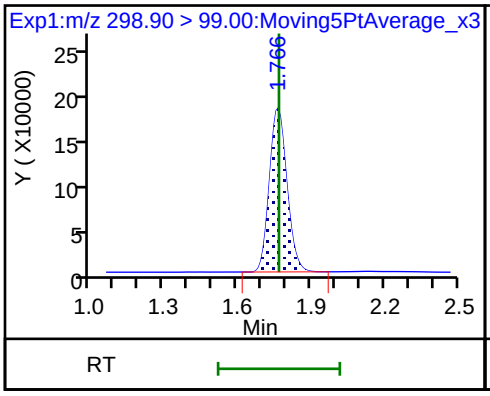
D 47 13C3-PFBS



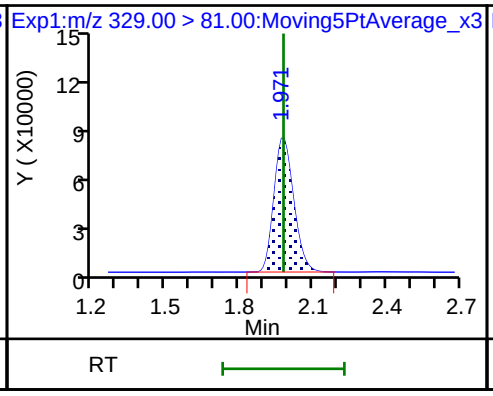
5 Perfluorobutanesulfonic acid



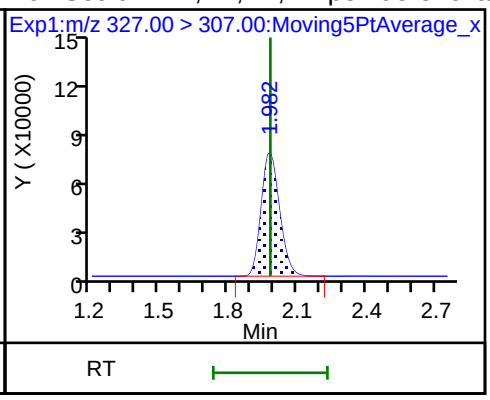
5 Perfluorobutanesulfonic acid



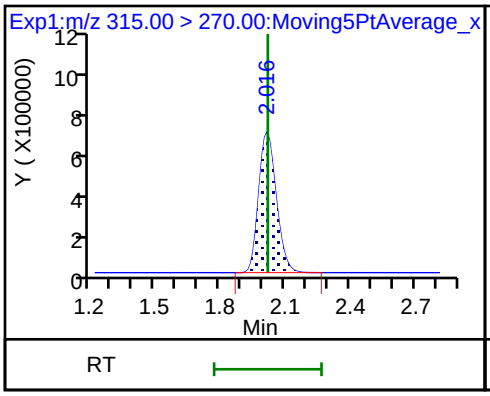
D 60 M2-4:2FTS



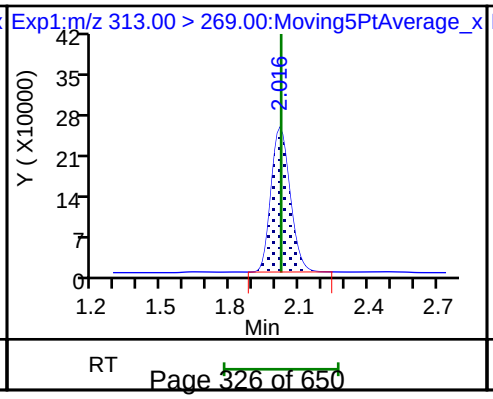
61 Sodium 1H,1H,2H,2H-perfluorohexane



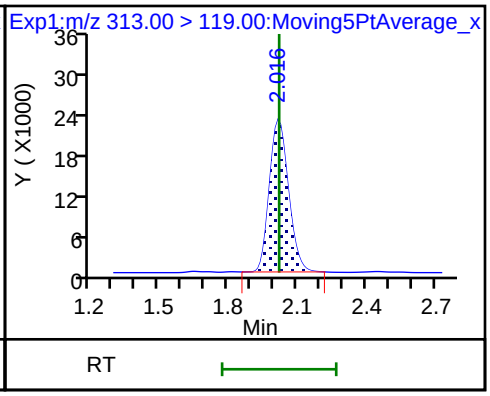
D 7 13C2 PFHxA



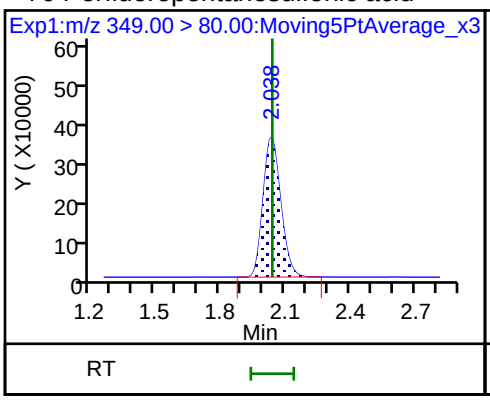
6 Perfluorohexanoic acid



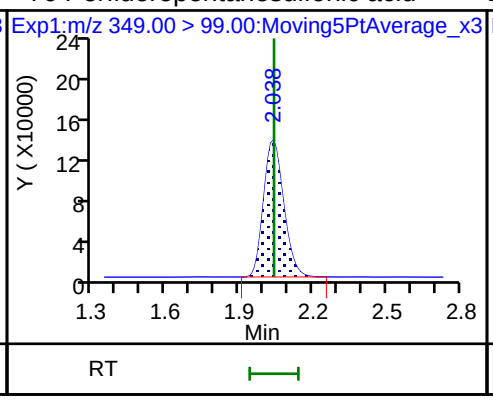
6 Perfluorohexanoic acid



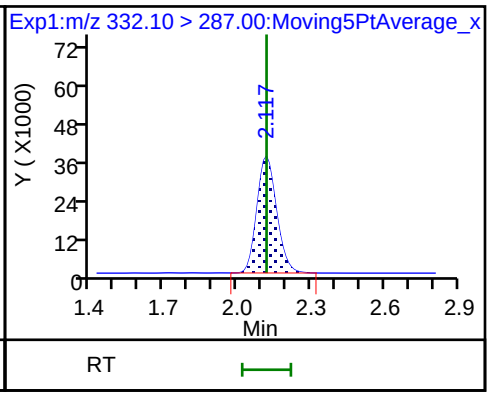
70 Perfluoropentanesulfonic acid



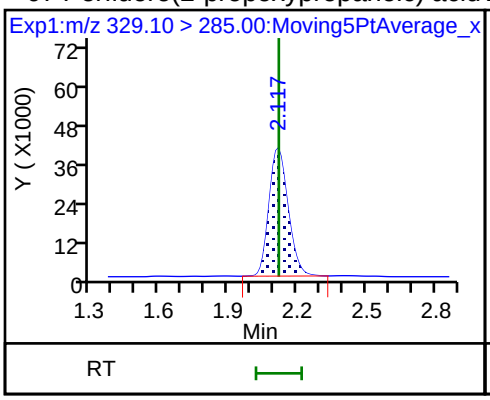
70 Perfluoropentanesulfonic acid



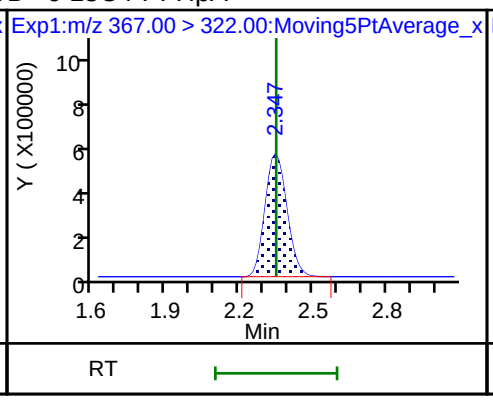
D 64 13C3 HFPO-DA



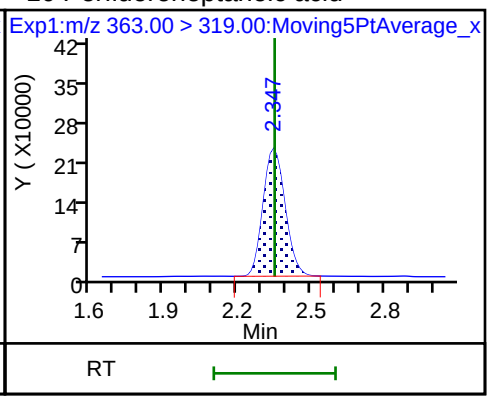
67 Perfluoro(2-propoxypropanoic) acid



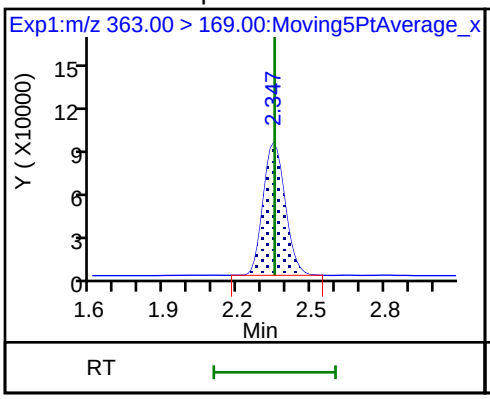
D 9 13C4-PFHpA



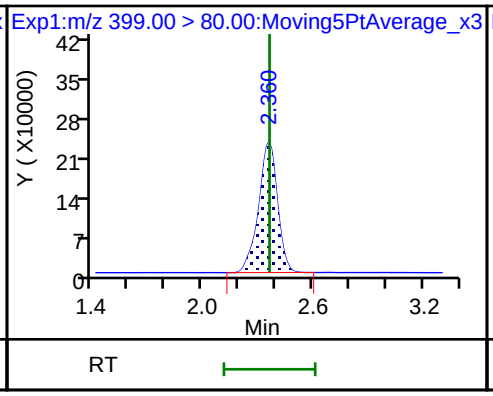
10 Perfluoroheptanoic acid



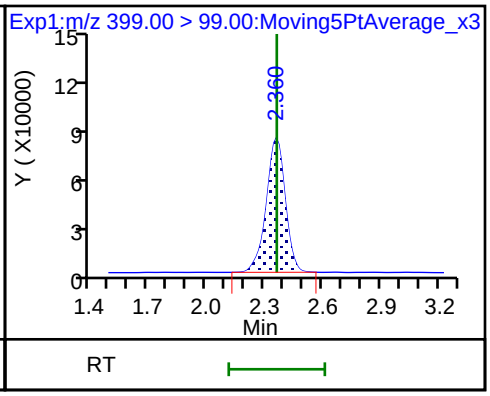
10 Perfluoroheptanoic acid



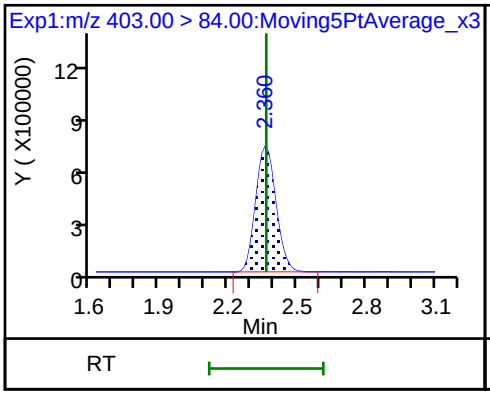
8 Perfluorohexanesulfonic acid



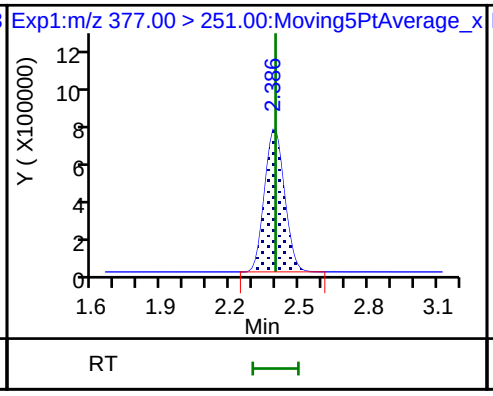
8 Perfluorohexanesulfonic acid



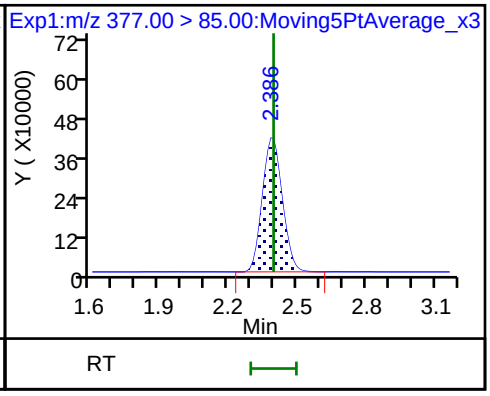
D 11 18O2 PFHxS



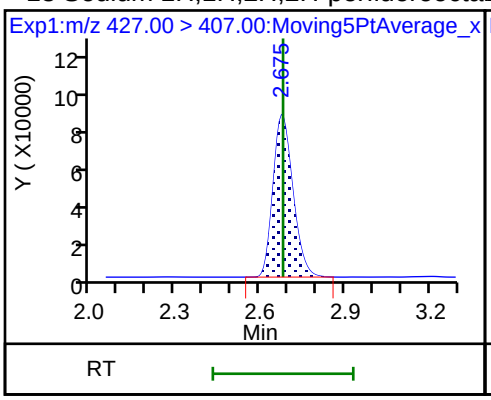
65 Adona



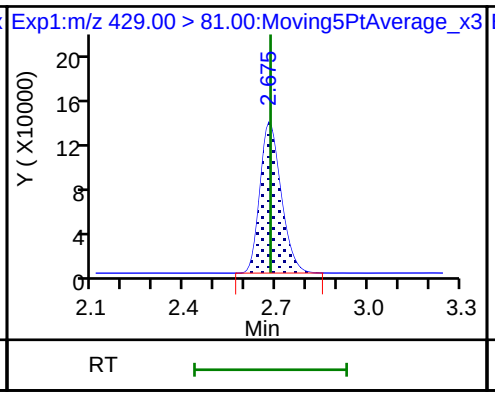
65 Adona



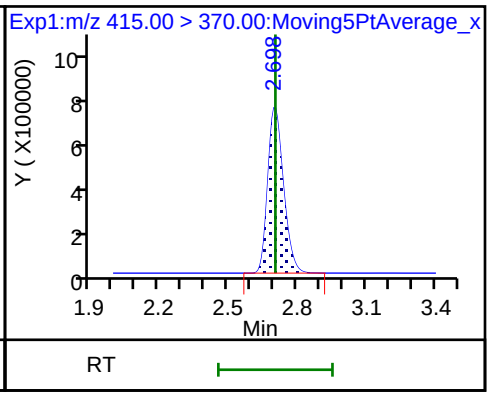
13 Sodium 1H,1H,2H,2H-perfluorooctane



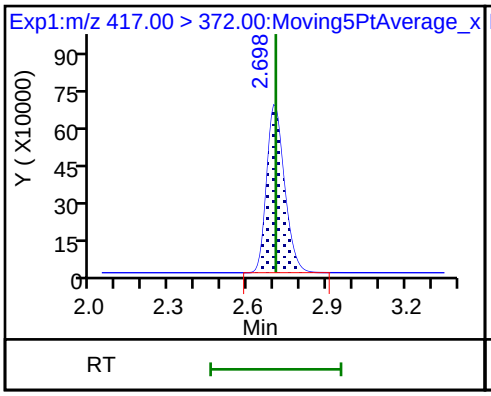
D 12 M2-6:2FTS



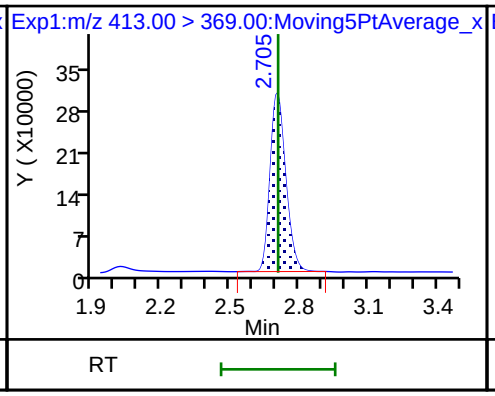
* 62 13C2-PFOA



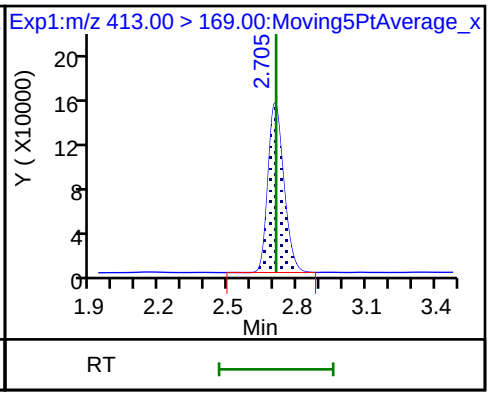
D 14 13C4 PFOA



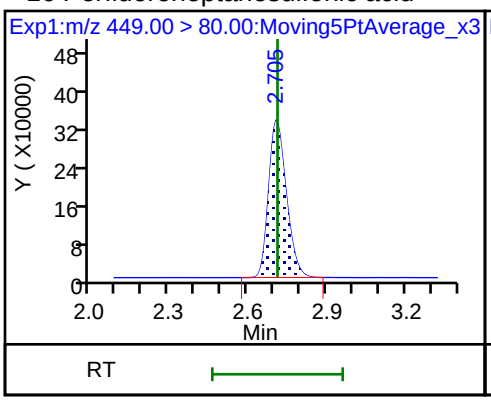
15 Perfluorooctanoic acid



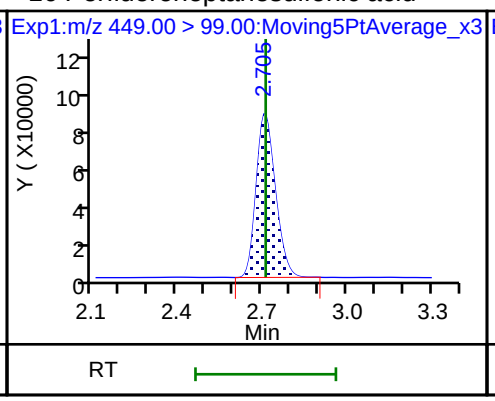
15 Perfluorooctanoic acid



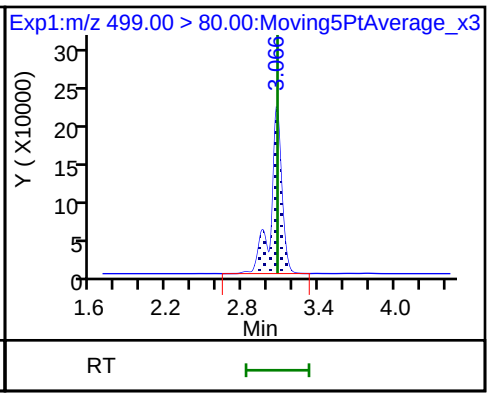
16 Perfluoroheptanesulfonic acid



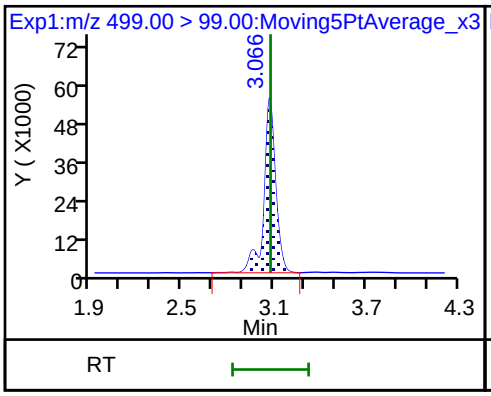
16 Perfluoroheptanesulfonic acid



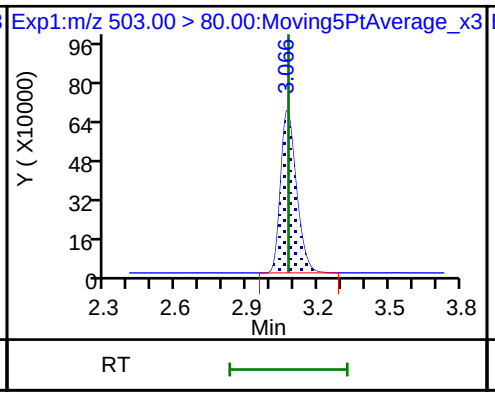
17 Perfluorooctane sulfonic acid



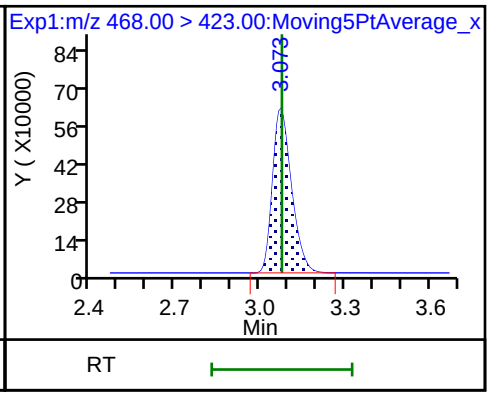
17 Perfluorooctane sulfonic acid



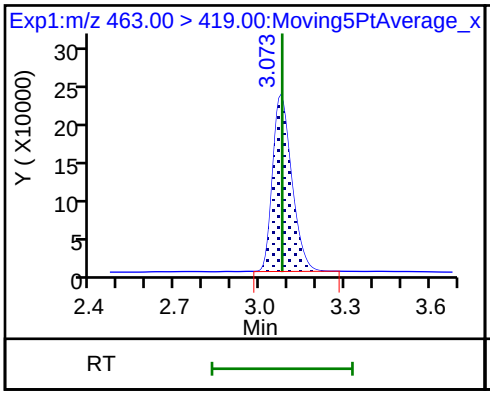
D 18 13C4 PFOS



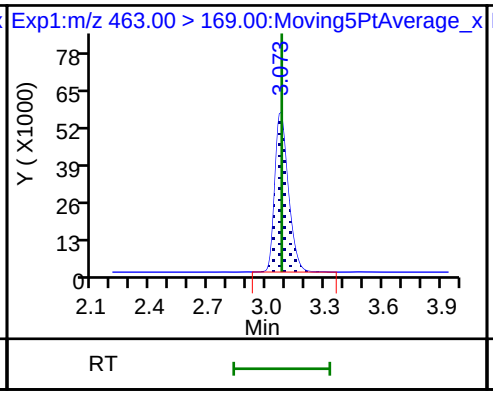
D 19 13C5 PFNA



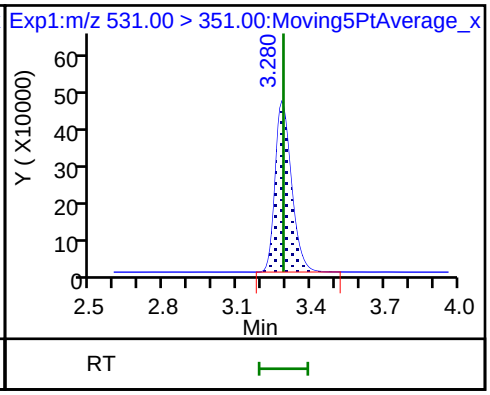
20 Perfluorononanoic acid



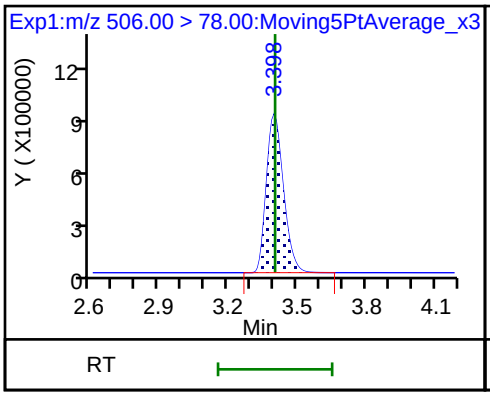
20 Perfluorononanoic acid



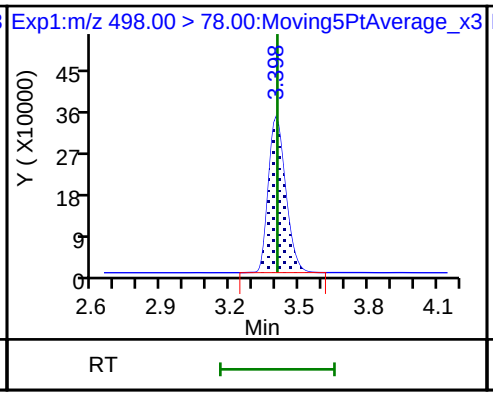
69 9-Chlorohexadecafluoro-3-oxanonane



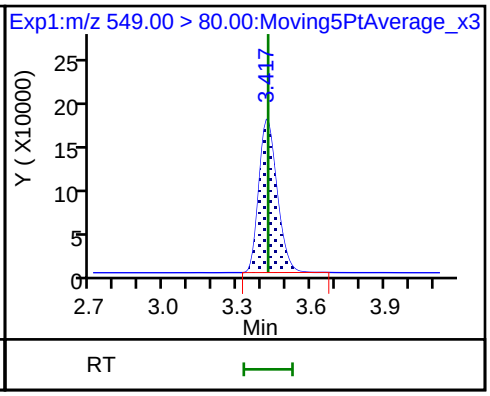
D 21 13C8 FOSA



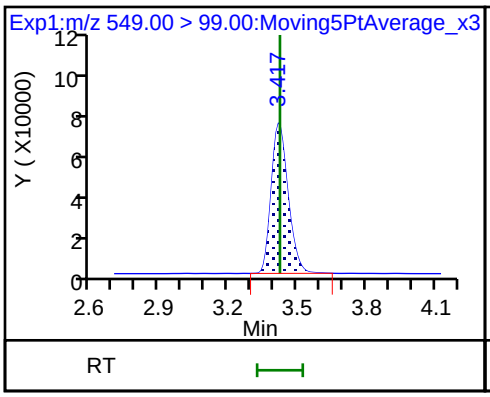
22 Perfluorooctane Sulfonamide



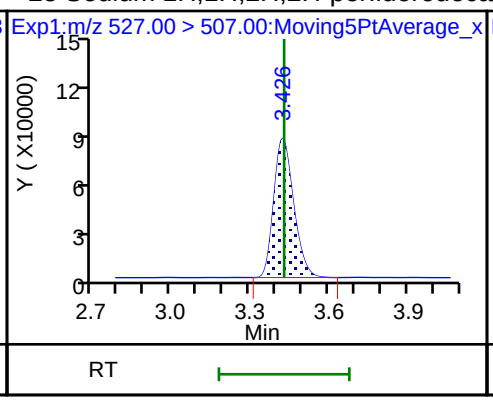
68 Perfluorononanesulfonic acid



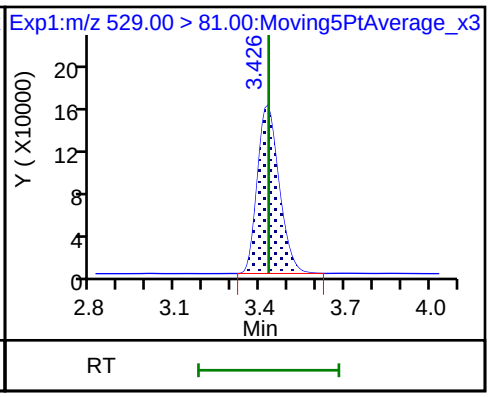
68 Perfluorononanesulfonic acid



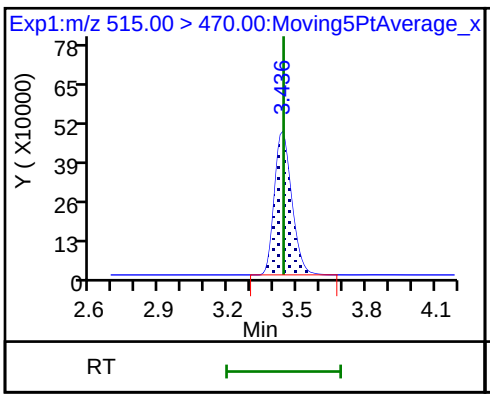
25 Sodium 1H,1H,2H,2H-perfluorodecane



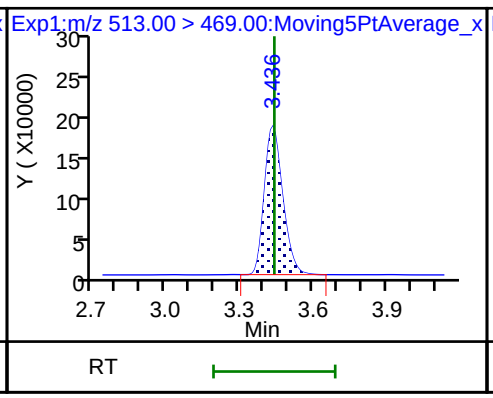
D 26 M2-8:2FTS



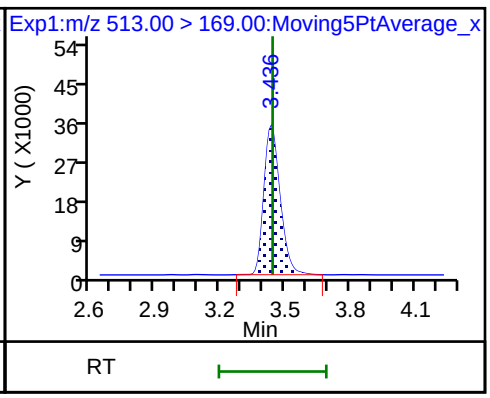
D 23 13C2 PFDA



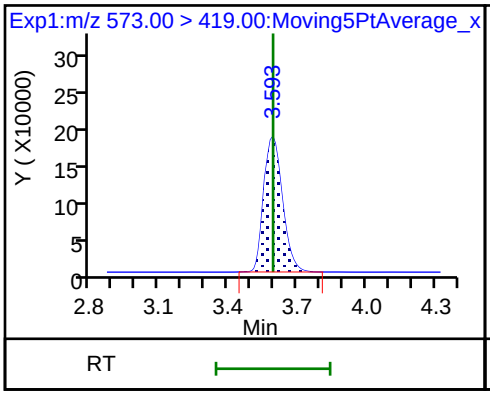
24 Perfluorodecanoic acid



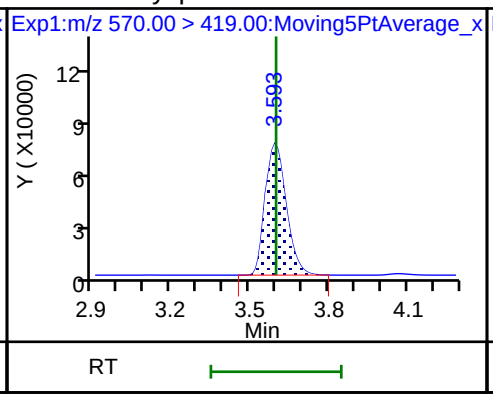
24 Perfluorodecanoic acid



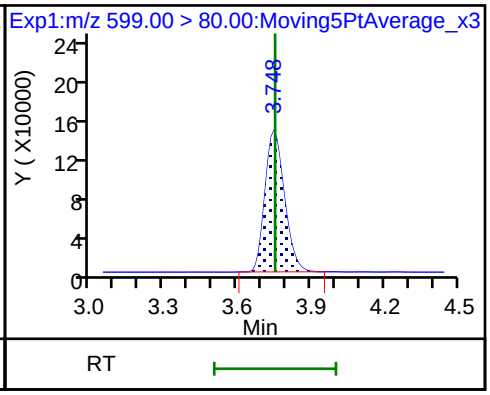
D 27 d3-NMeFOSAA



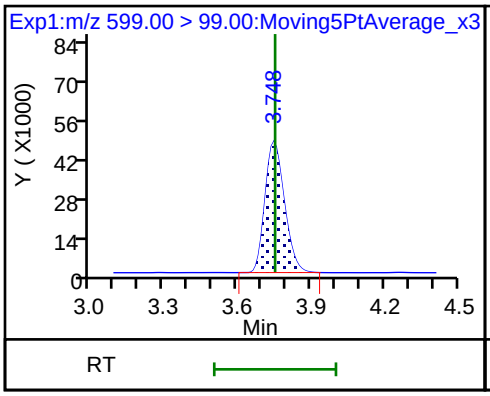
28 N-methyl perfluorooctane sulfonami



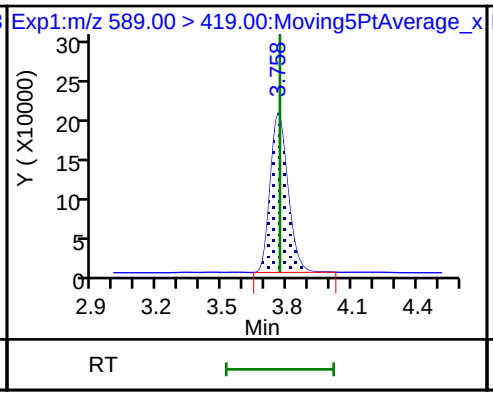
29 Perfluorodecane Sulfonic acid



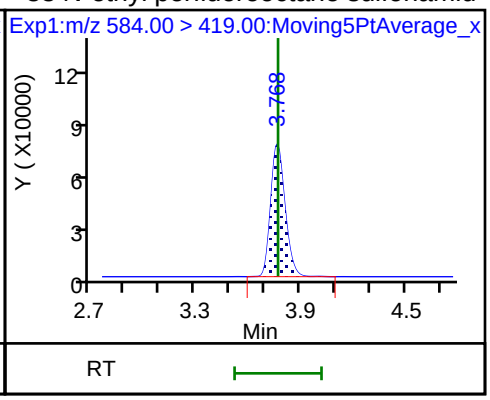
29 Perfluorodecane Sulfonic acid



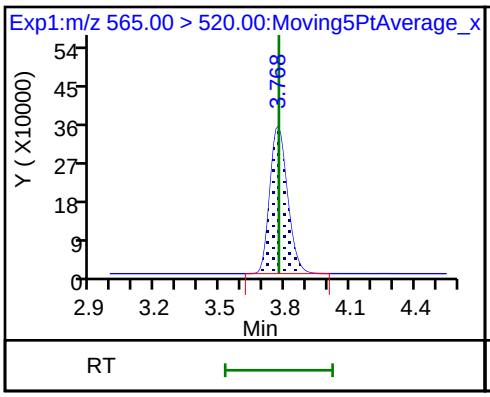
D 32 d5-NEtFOSAA



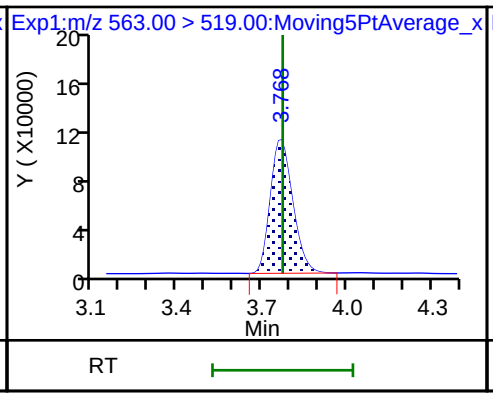
33 N-ethyl perfluorooctane sulfonamid



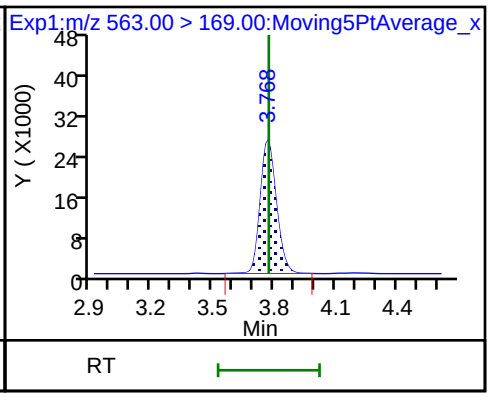
D 30 13C2 PFUnA



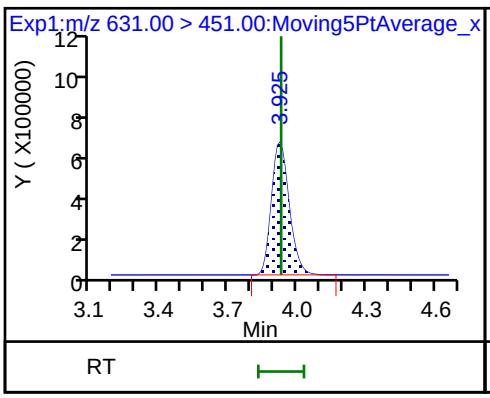
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid



66 11-Chloroeicosafluoro-3-oxaundecan



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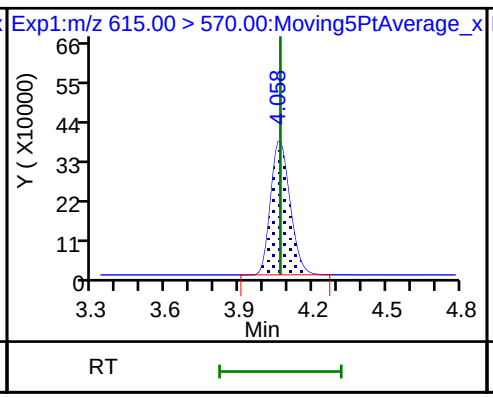
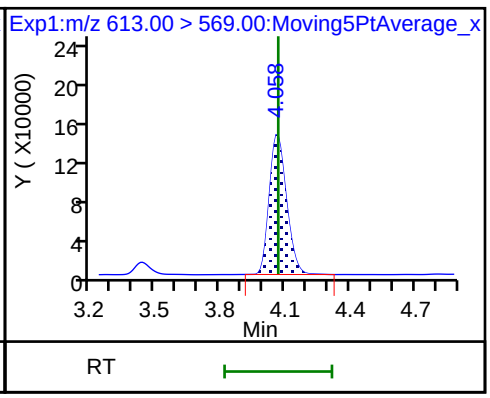
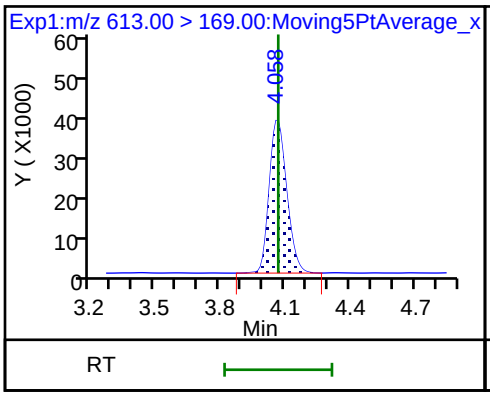


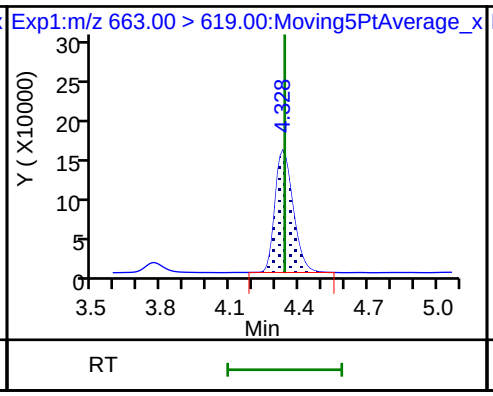
37 Perfluorododecanoic acid



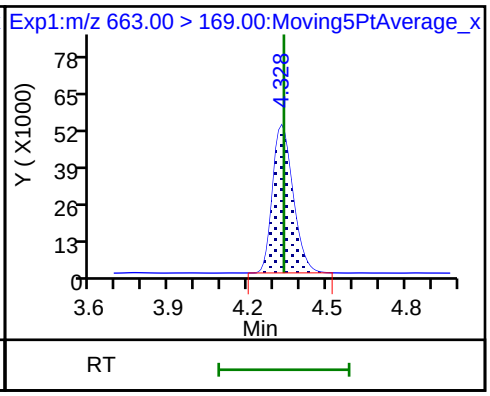
37 Perfluorododecanoic acid



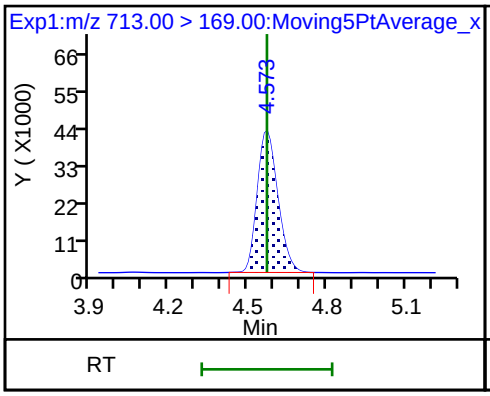
41 Perfluorotridecanoic acid



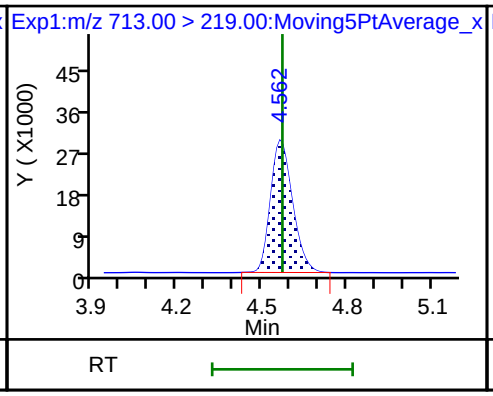
41 Perfluorotridecanoic acid



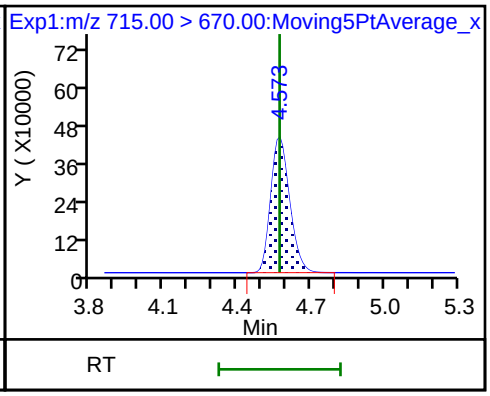
42 Perfluorotetradecanoic acid



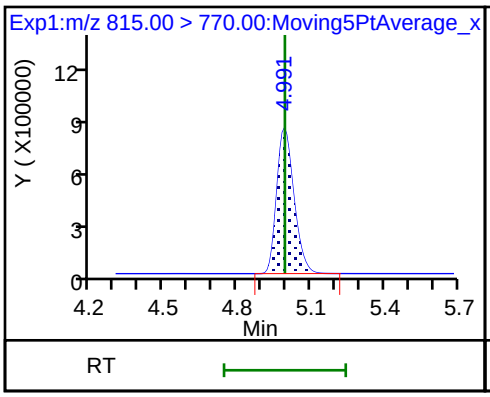
42 Perfluorotetradecanoic acid



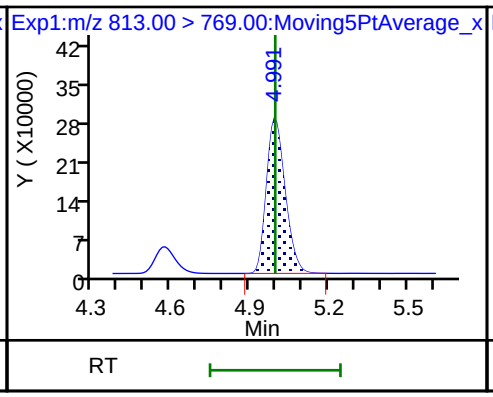
D 43 13C2-PFTeDA



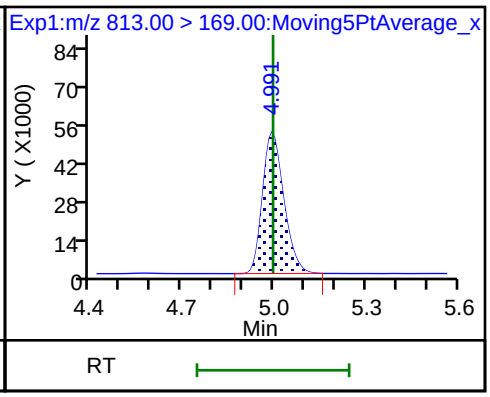
D 44 13C2-PFHxDA



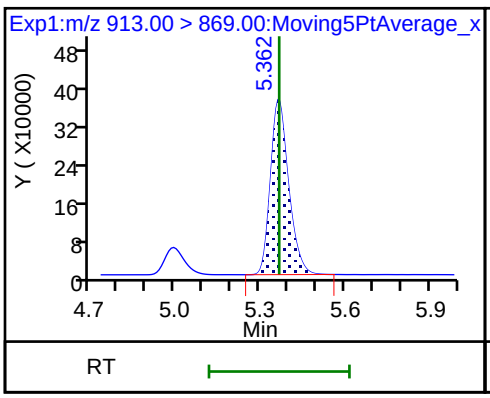
45 Perfluorohexadecanoic acid



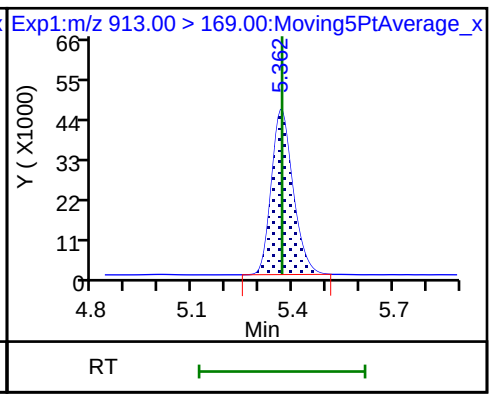
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_006.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 13-May-2018 14:43:56 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L5-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 08:39:55 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 08:37:25

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.461	1.461	0.0	1.000	5322257	2.48		99.0	48764	
2 Perfluorobutyric acid										
212.90 > 169.00	1.467	1.461	0.006	1.004	5014152	2.52		101	3143	
D 3 13C5-PFPeA										
267.90 > 223.00	1.734	1.730	0.004	0.563	3358292	2.46		98.2	68608	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.734	1.731	0.003	1.000	3984280	2.51		100	2378	
D 47 13C3-PFBS										
301.90 > 83.00	1.770	1.763	0.007	1.000	71277	2.30		98.8	513	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.770	1.769	0.001	1.000	5600085	2.31		105	17280	
298.90 > 99.00	1.770	1.769	0.001	1.000	2278056		2.46(1.25-3.74)	105	12055	
D 60 M2-4:2FTS										
329.00 > 81.00	1.988	1.979	0.009	1.000	431036	2.28		97.8	6472	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.988	1.982	0.006	1.000	990617	2.36		101	43918	
D 7 13C2 PFHxA										
315.00 > 270.00	2.022	2.019	0.003	1.000	3520805	2.45		97.8	56411	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.022	2.021	0.001	1.000	3685174	2.61		104	7468	
313.00 > 119.00	2.022	2.021	0.001	1.000	332742		11.08(5.03-15.10)	104	5308	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.045	2.040	0.005	1.000	5024150	2.40		102	48760	
349.00 > 99.00	2.045	2.040	0.005	1.000	1871618		2.68(1.36-4.07)	102	23189	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.124	2.118	0.006	1.000	193735	2.49		99.6	6916	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.124	2.119	0.005	1.000	580734	2.73		109	5625	
D 9 13C4-PFHpA										
367.00 > 322.00	2.355	2.349	0.006	1.000	3256420	2.46		98.3	47883	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.355	2.351	0.004	1.000	3552017	2.52		101	7042	
363.00 > 169.00	2.355	2.351	0.004	1.000	1329566		2.67(1.13-3.40)	101	7979	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.368	2.362	0.006	1.000	4260217	2.18		95.7	18583	
399.00 > 99.00	2.368	2.362	0.006	1.000	1427273		2.98(1.50-4.49)	95.7	5603	
D 11 18O2 PFHxS										
403.00 > 84.00	2.368	2.364	0.004	1.000	4074246	2.35		99.5	47841	
65 Adona										
377.00 > 251.00	2.403	2.396	0.007	1.000	10449455	2.60		104	103093	
377.00 > 85.00	2.392	2.396	-0.004	0.995	6251053		1.67(0.84-2.53)	104	37808	
D 12 M2-6:2FTS										
429.00 > 81.00	2.681	2.681	0.0	1.000	615402	2.38		100	10870	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.681	2.681	0.0	1.000	1079794	2.51		106	18644	
* 62 13C2-PFOA										
415.00 > 370.00	2.711	2.704	0.007		3328630	2.50			43845	
D 14 13C4 PFOA										
417.00 > 372.00	2.711	2.705	0.006	1.000	3093108	2.47		98.7	72485	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.711	2.708	0.003	1.000	3520971	2.46		98.5	1888	
413.00 > 169.00	2.711	2.708	0.003	1.000	1884349		1.87(0.84-2.52)	98.5	7298	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.718	2.712	0.006	1.000	3924523	2.42		102	24496	
449.00 > 99.00	2.711	2.712	-0.001	0.997	1057302		3.71(1.94-5.82)	102	14827	
D 18 13C4 PFOS										
503.00 > 80.00	3.079	3.075	0.004	1.000	2960590	2.38		99.7	22593	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.079	3.075	0.004	1.000	3135866	2.31		99.5	12164	
499.00 > 99.00	3.079	3.075	0.004	1.000	698785		4.49(2.31-6.93)	99.5	7359	
D 19 13C5 PFNA										
468.00 > 423.00	3.079	3.077	0.002	1.000	2638749	2.50		99.8	51086	
20 Perfluorononanoic acid										
463.00 > 419.00	3.079	3.078	0.001	1.000	2669242	2.49		99.4	5874	
463.00 > 169.00	3.079	3.078	0.001	1.000	647626		4.12(1.90-5.69)	99.4	19280	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.294	3.287	0.007	1.000	5247608	2.34		101	48850	
D 21 13C8 FOSA										
506.00 > 78.00	3.405	3.403	0.002	1.000	4330176	2.46		98.5	37892	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.405	3.404	0.001	1.000	4713584	2.74		110	53735	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.433	3.424	0.009	1.000	2376456	2.44		102	27136	
549.00 > 99.00	3.433	3.424	0.009	1.000	876259		2.71(1.33-3.97)	102	9430	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.433	3.430	0.003	1.000	1016618	2.49		104	14573	
D 26 M2-8:2FTS										
529.00 > 81.00	3.433	3.430	0.003	1.000	793546	2.34		97.6	9922	
D 23 13C2 PFDA										
515.00 > 470.00	3.442	3.440	0.002	1.000	2268262	2.46		98.3	39671	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.442	3.442	0.0	1.000	2326948	2.50		100	15415	
513.00 > 169.00	3.442	3.442	0.0	1.000	417950		5.57(2.36-7.09)	100	11326	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.594	3.594	0.0	1.000	1032302	2.55		102	20676	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.605	3.599	0.006	1.003	1077257	2.52		101	8487	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.759	3.753	0.006	1.000	2020290	2.47		103	22775	
599.00 > 99.00	3.759	3.753	0.006	1.000	691266		2.92(1.39-4.16)	103	12557	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.770	3.766	0.004	1.000	1098292	2.48		99.2	3083	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.770	3.771	-0.001	1.000	1051762	2.44		97.7	20847	
D 30 13C2 PFUnA										
565.00 > 520.00	3.781	3.771	0.010	1.000	1823756	2.42		96.7	53269	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.781	3.772	0.009	1.000	1420688	2.47		98.9	6278	
563.00 > 169.00	3.781	3.772	0.009	1.000	388456		3.66(2.12-6.36)	98.9	13606	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.938	3.929	0.009	1.000	8107295	2.45		104	100089	
D 36 13C2 PFDoA										
615.00 > 570.00	4.071	4.066	0.005	1.000	2011965	2.56		102	19683	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.071	4.068	0.003	1.000	2167009	2.58		103	1356	
613.00 > 169.00	4.071	4.068	0.003	1.000	556524		3.89(2.13-6.40)	103	9338	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.340	4.336	0.004	1.000	2082050	2.49		99.6	855	
663.00 > 169.00	4.340	4.336	0.004	1.000	658230		3.16(1.25-3.76)	99.6	9419	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.573	4.571	0.002	1.000	2241873	2.62		105	13940	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.573	4.571	0.002	1.000	582486	2.44		97.6	9149	
713.00 > 219.00	4.573	4.571	0.002	1.000	395407		1.47(0.71-2.13)	97.6	5600	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.992	4.993	-0.001	1.000	3646597	2.67		107	11828	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.001	4.995	0.006	1.002	3434741	2.50		99.8	643	
813.00 > 169.00	4.992	4.995	-0.003	1.000	588749		5.83(2.86-8.58)	99.8	4300	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.369	5.367	0.002	1.000	3784446	2.53		101	639	
913.00 > 169.00	5.369	5.367	0.002	1.000	460835		8.21(3.83-11.48)	101	3546	

Reagents:

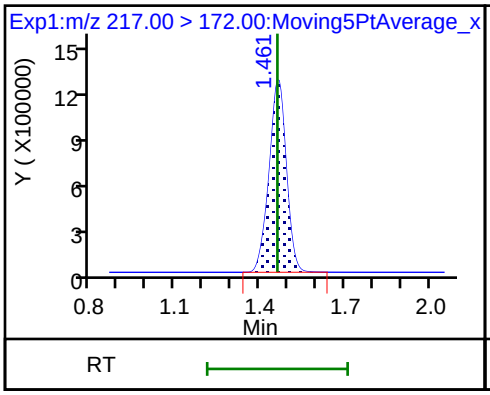
LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 08:39:56 Chrom Revision: 2.2 11-May-2018 08:54:46

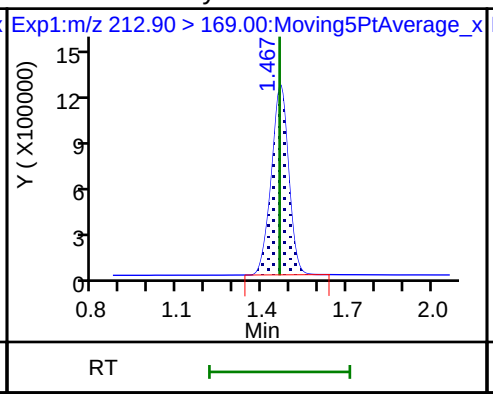
TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_006.d
Injection Date: 13-May-2018 14:43:56 Instrument ID: A8_N
Lims ID: IC L5 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL

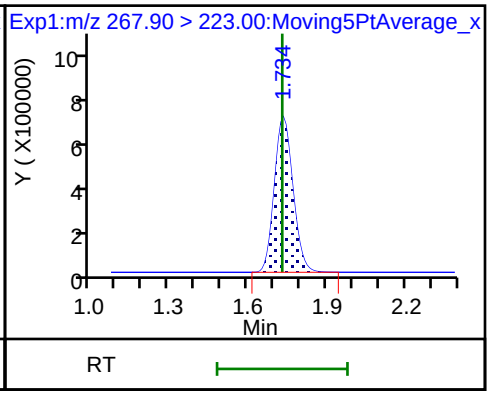
D 1 13C4 PFBA



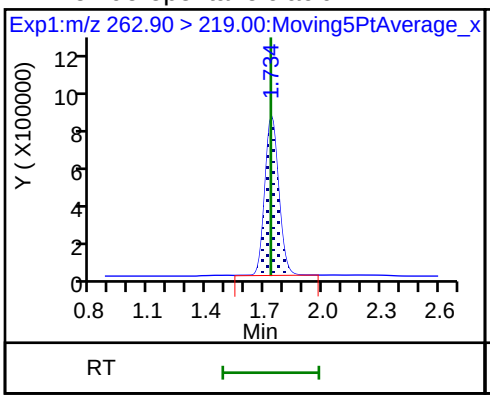
2 Perfluorobutyric acid



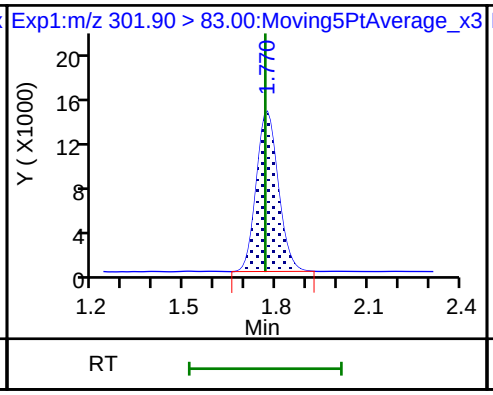
D 3 13C5-PFPeA



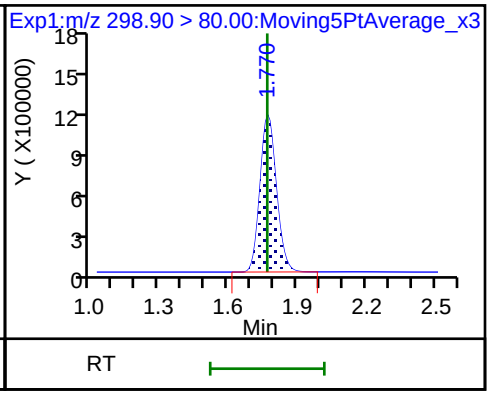
4 Perfluoropentanoic acid



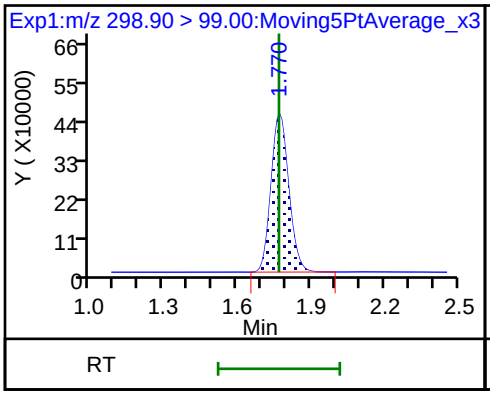
D 47 13C3-PFBS



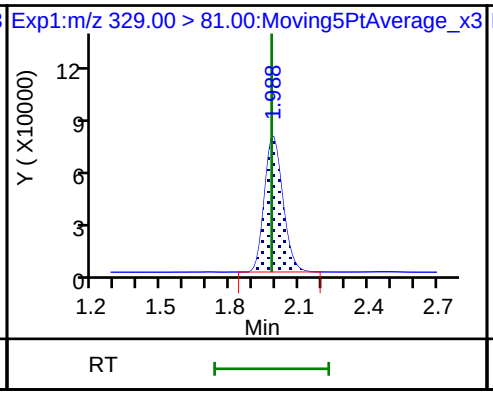
5 Perfluorobutanesulfonic acid



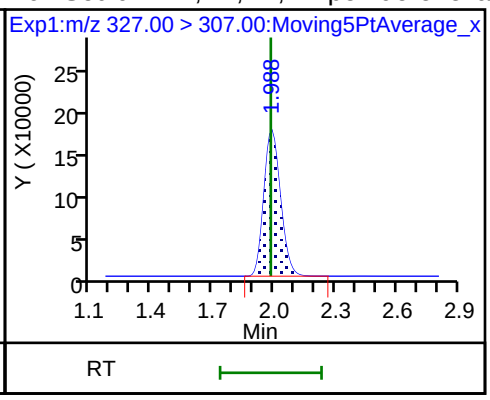
5 Perfluorobutanesulfonic acid



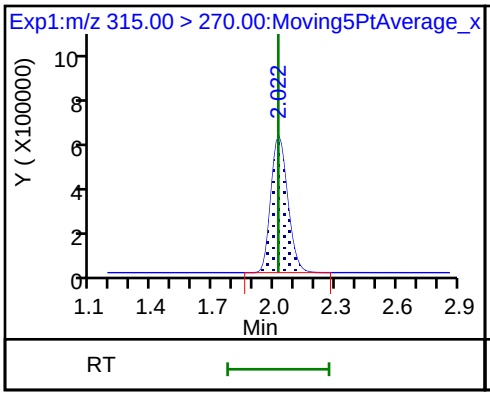
D 60 M2-4:2FTS



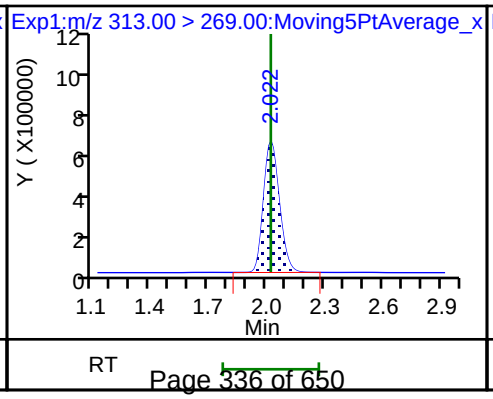
61 Sodium 1H,1H,2H,2H-perfluorohexane



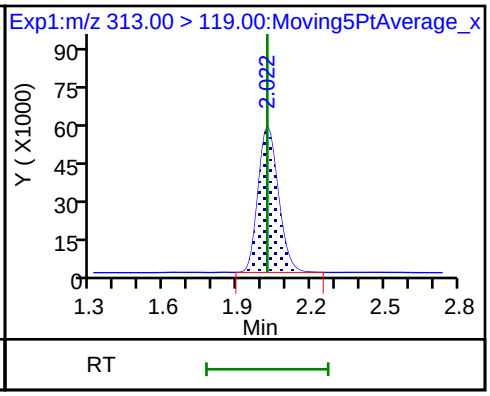
D 7 13C2 PFHxA



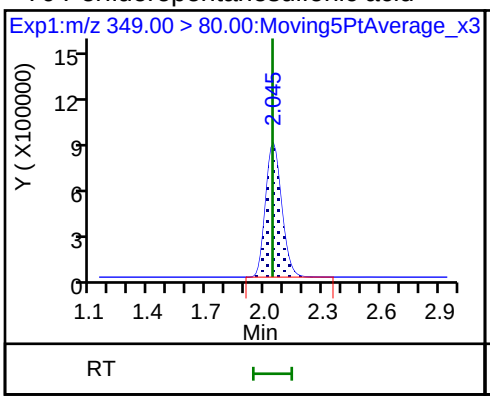
6 Perfluorohexanoic acid



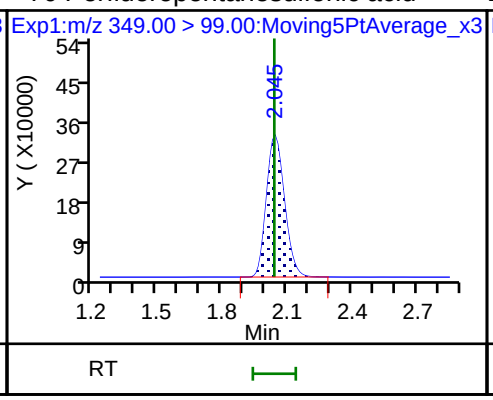
6 Perfluorohexanoic acid



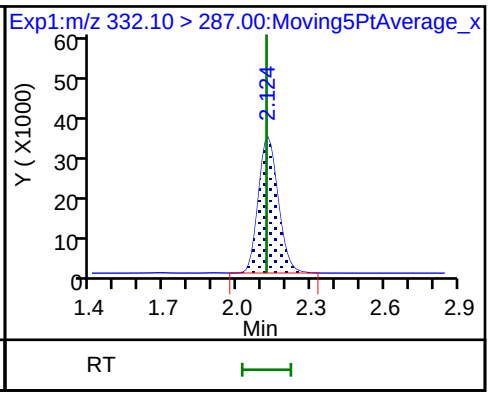
70 Perfluoropentanesulfonic acid



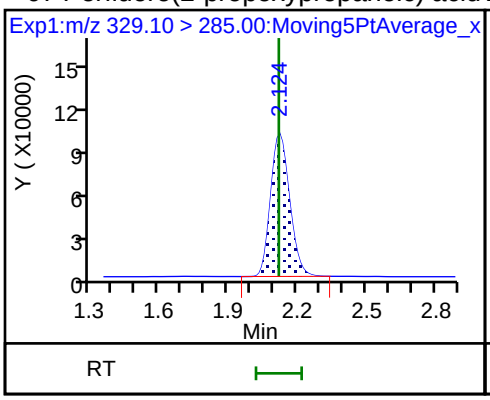
70 Perfluoropentanesulfonic acid



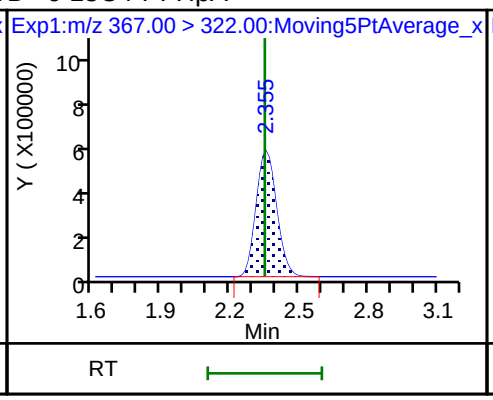
D 64 13C3 HFPO-DA



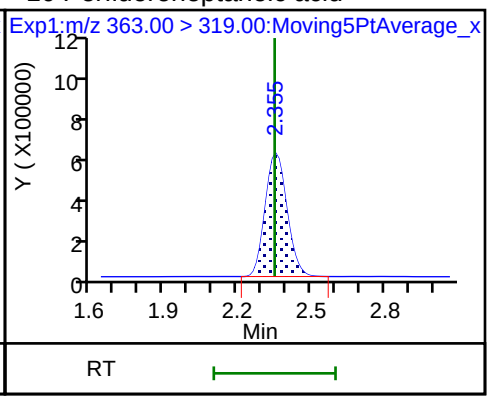
67 Perfluoro(2-propoxypropanoic) acid



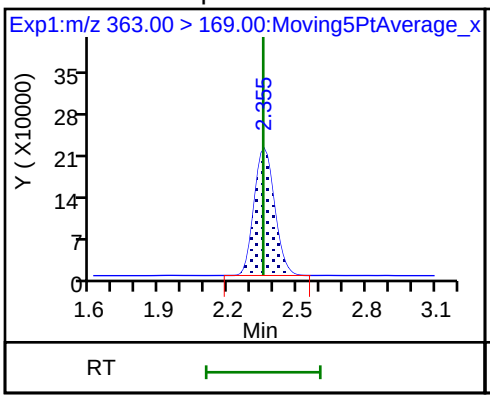
D 9 13C4-PFHpA



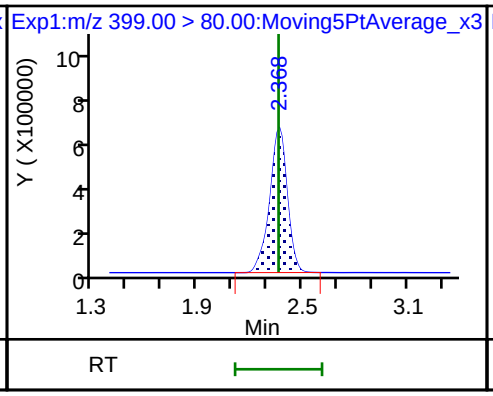
10 Perfluoroheptanoic acid



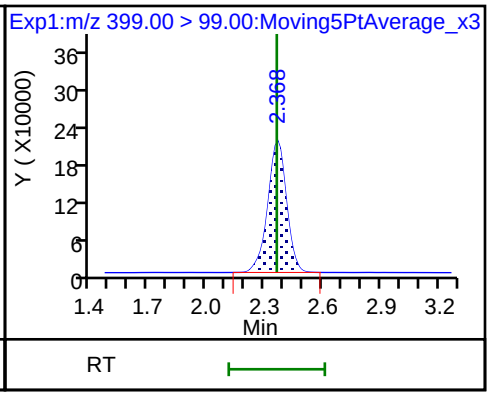
10 Perfluoroheptanoic acid



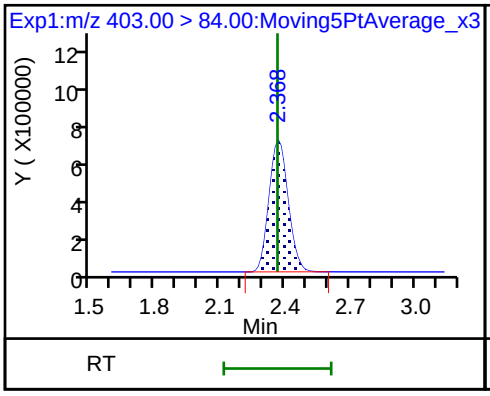
8 Perfluorohexanesulfonic acid



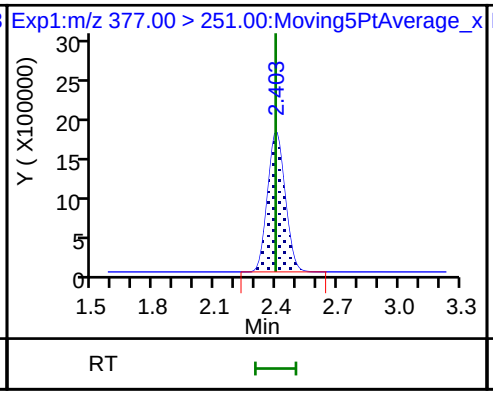
8 Perfluorohexanesulfonic acid



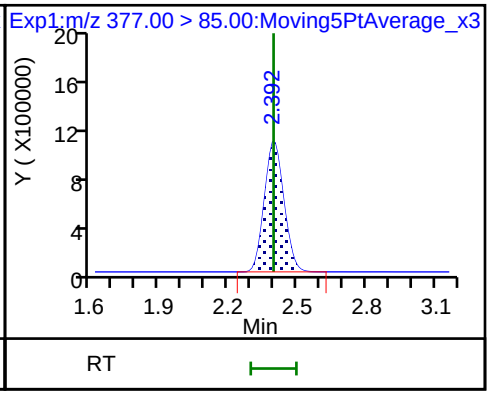
D 11 18O2 PFHxS



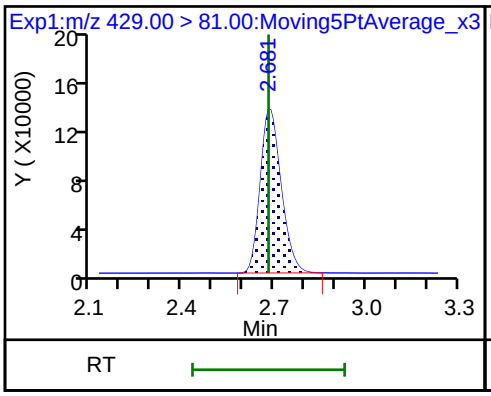
65 Adona



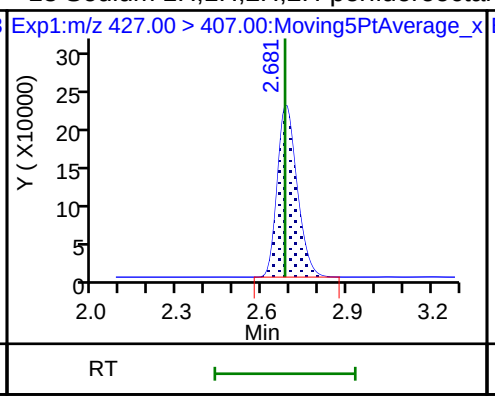
65 Adona



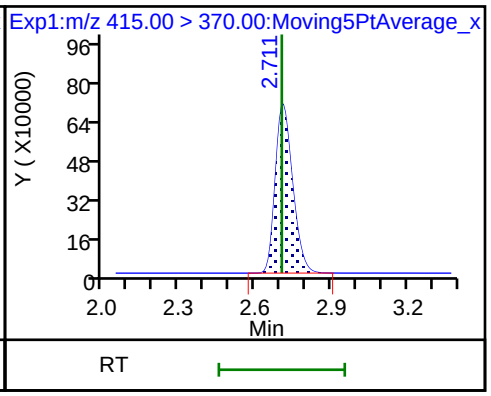
D 12 M2-6:2FTS



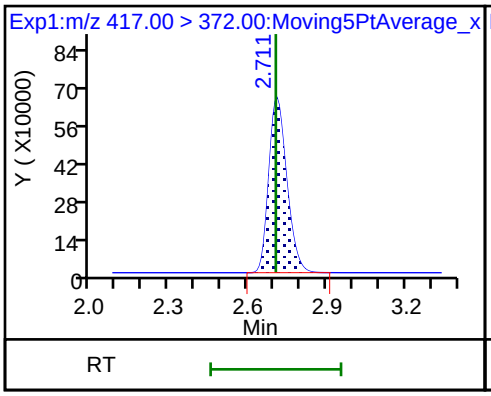
13 Sodium 1H,1H,2H,2H-perfluorooctane



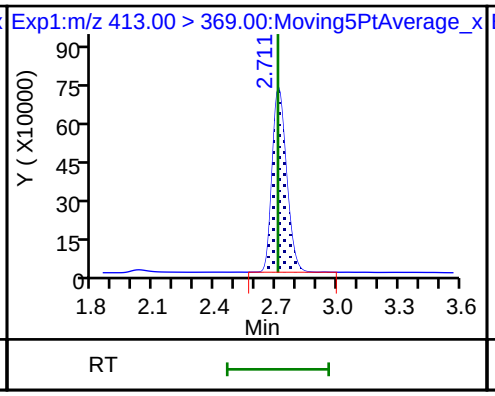
M2 13C2-PFOA



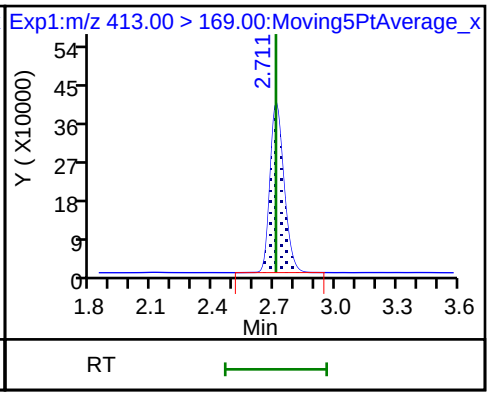
D 14 13C4 PFOA



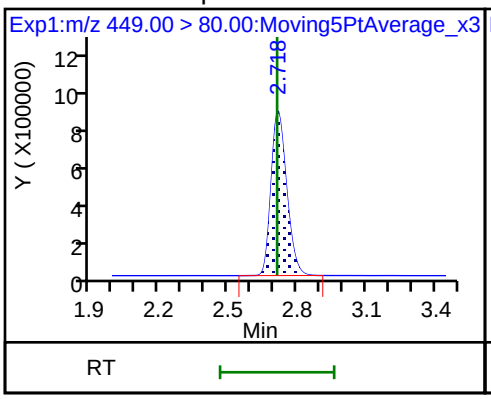
15 Perfluorooctanoic acid



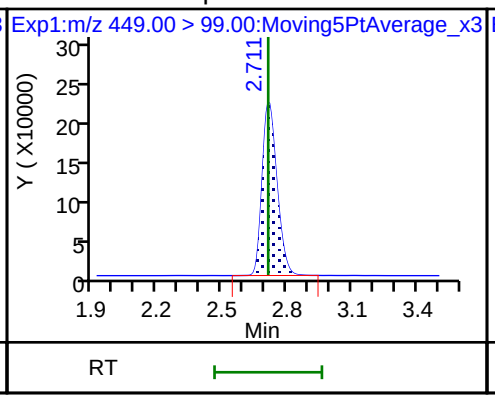
15 Perfluorooctanoic acid



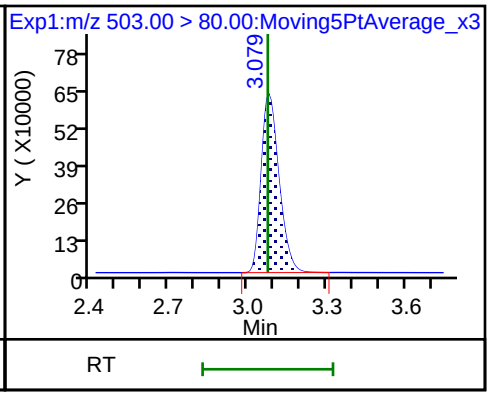
16 Perfluoroheptanesulfonic acid



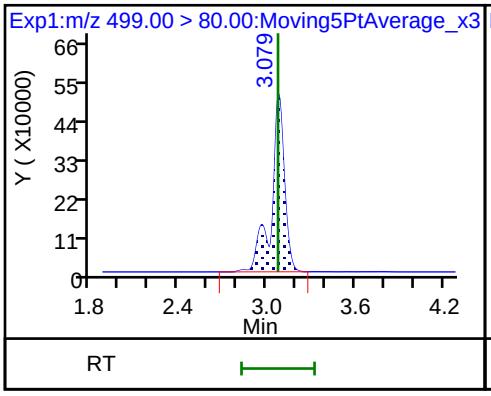
16 Perfluoroheptanesulfonic acid



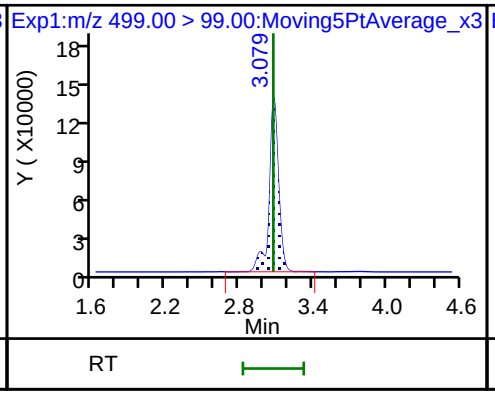
D 18 13C4 PFOS



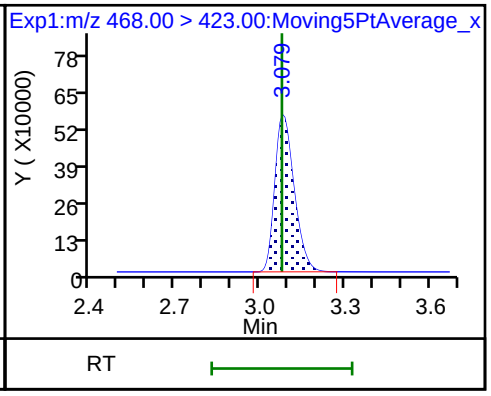
17 Perfluorooctane sulfonic acid



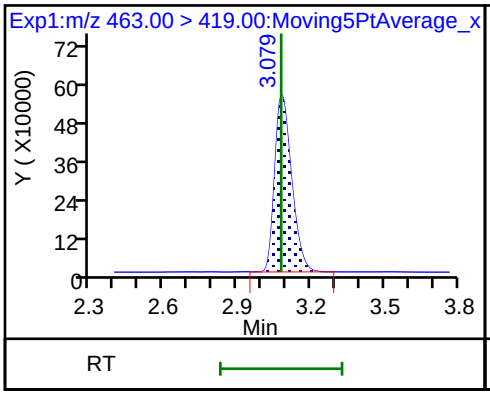
17 Perfluorooctane sulfonic acid



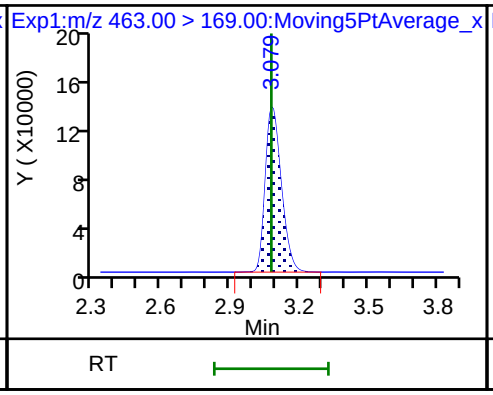
D 19 13C5 PFNA



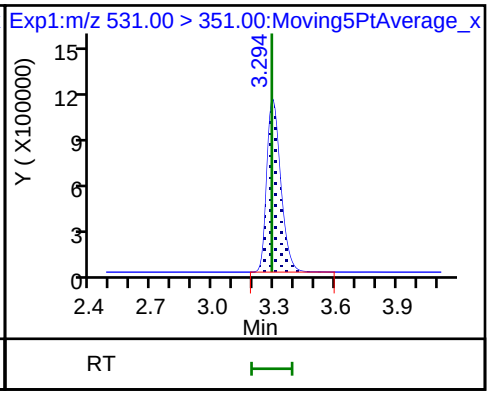
20 Perfluorononanoic acid



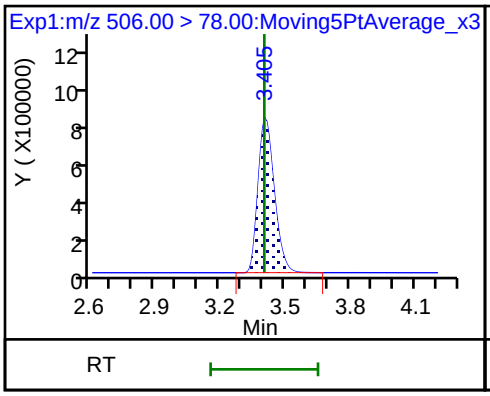
20 Perfluorononanoic acid



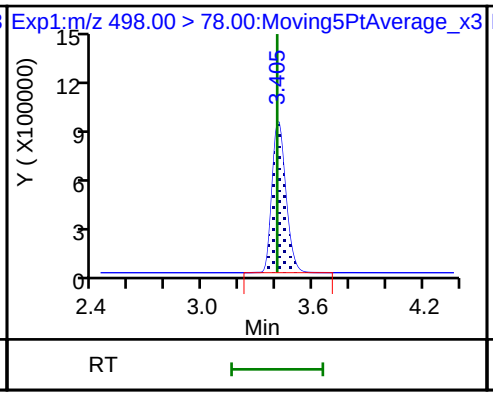
69 9-Chlorohexadecafluoro-3-oxanonane



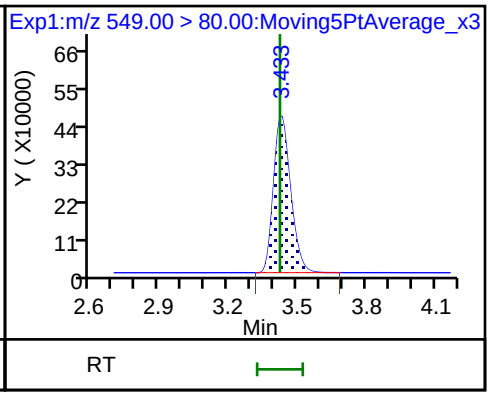
D 21 13C8 FOSA



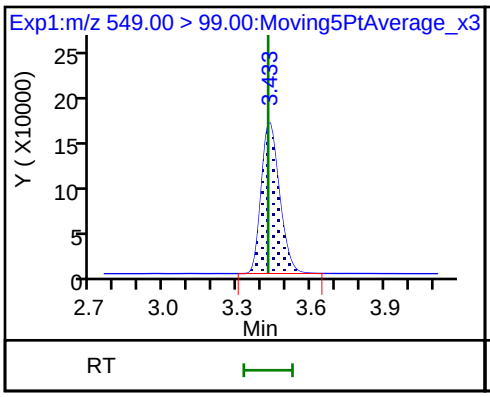
22 Perfluorooctane Sulfonamide



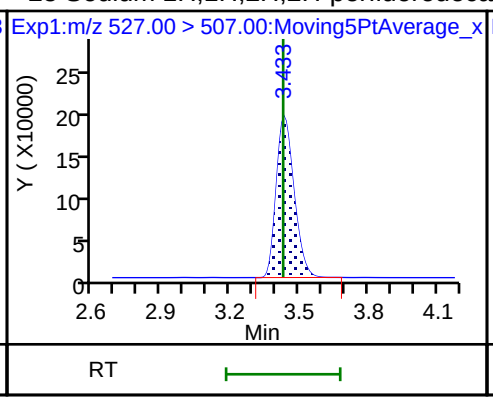
68 Perfluorononanesulfonic acid



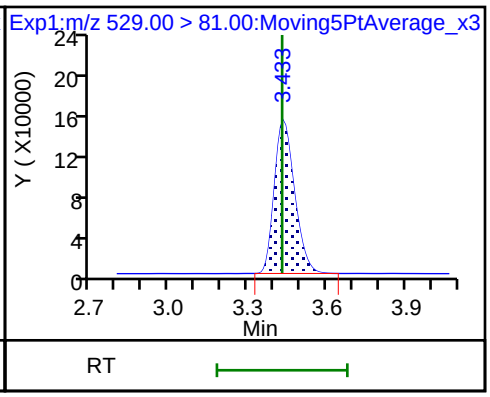
68 Perfluorononanesulfonic acid



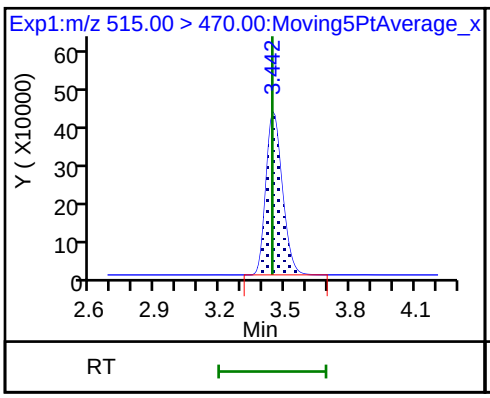
25 Sodium 1H,1H,2H,2H-perfluorodecane



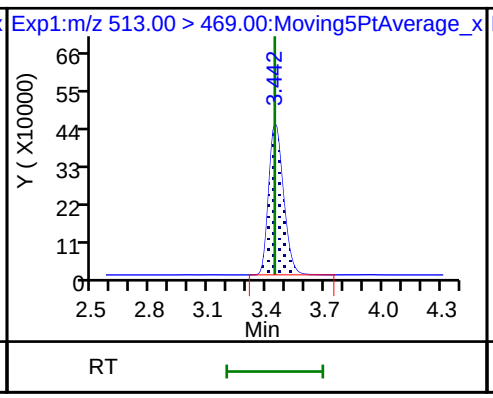
D 26 M2-8:2FTS



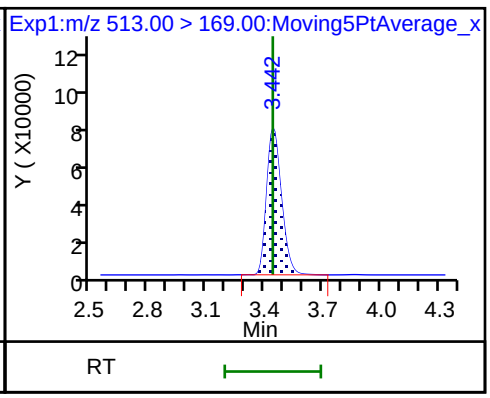
D 23 13C2 PFDA



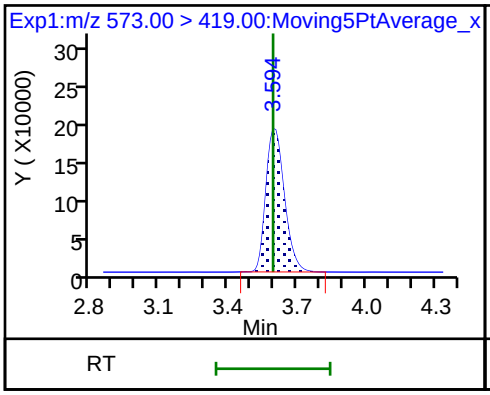
24 Perfluorodecanoic acid



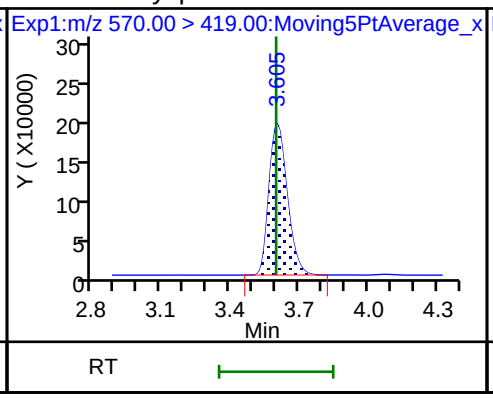
24 Perfluorodecanoic acid



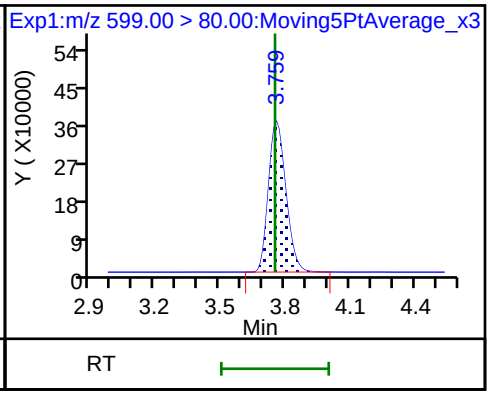
D 27 d3-NMeFOSAA



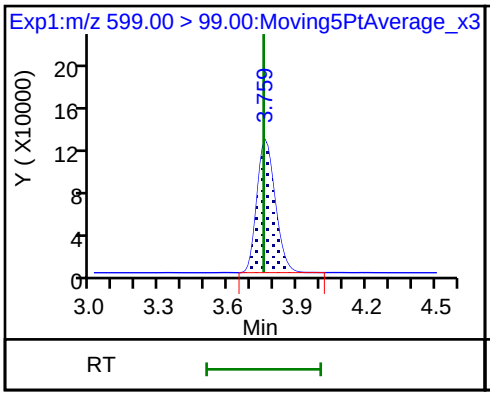
28 N-methyl perfluorooctane sulfonami



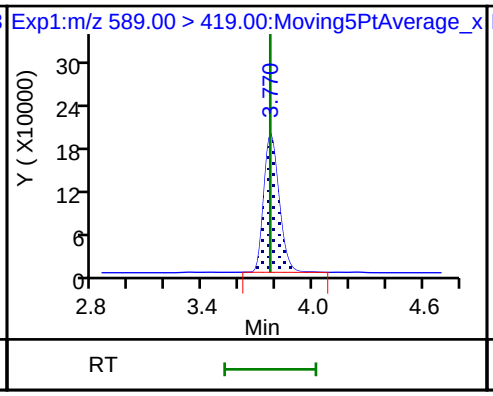
29 Perfluorodecane Sulfonic acid



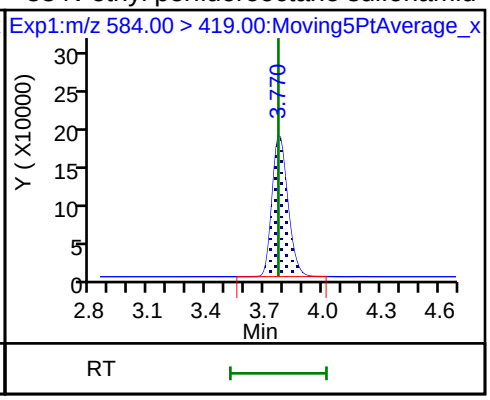
29 Perfluorodecane Sulfonic acid



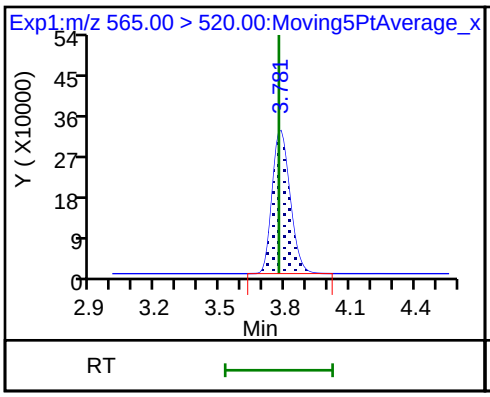
D 32 d5-NEtFOSAA



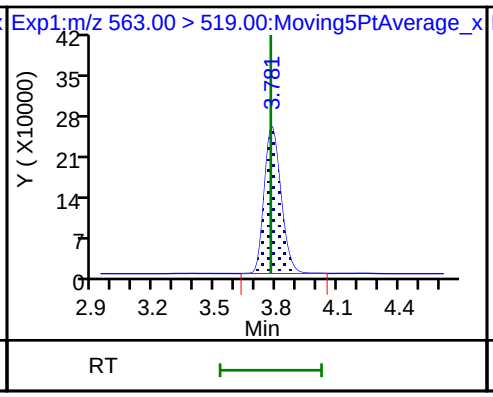
33 N-ethyl perfluorooctane sulfonamid



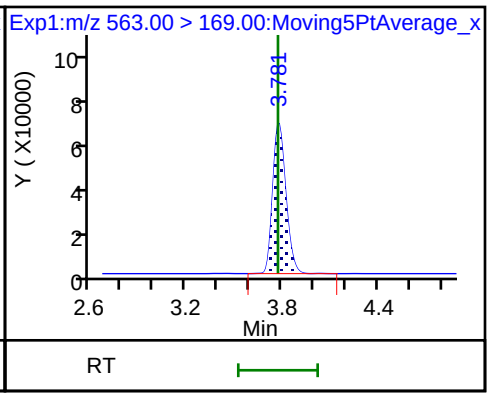
D 30 13C2 PFUnA



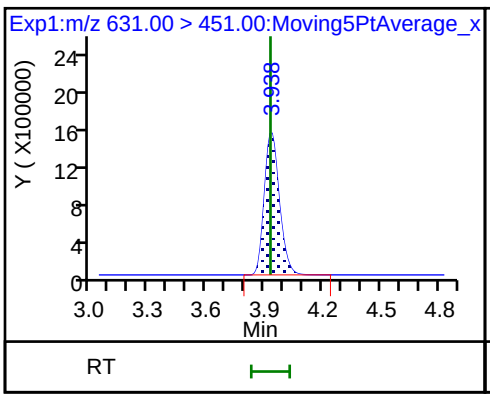
31 Perfluoroundecanoic acid



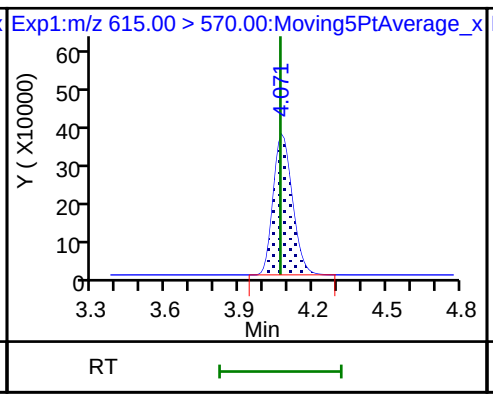
31 Perfluoroundecanoic acid



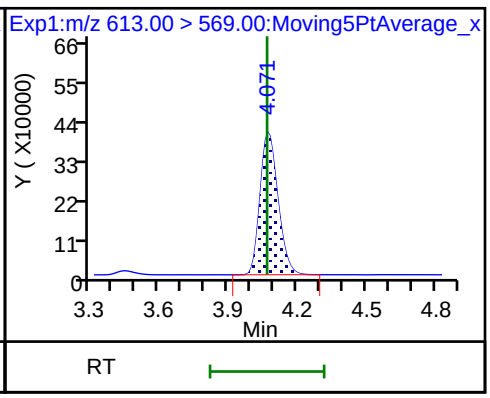
66 11-Chloroeicosafluoro-3-oxaundecan



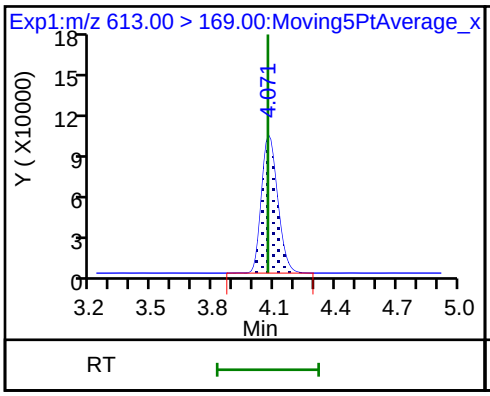
D 36 13C2 PFDoA



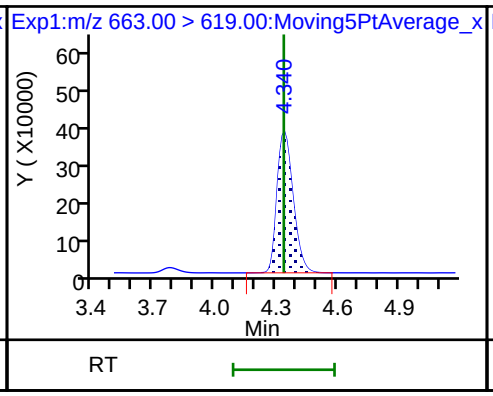
37 Perfluorododecanoic acid



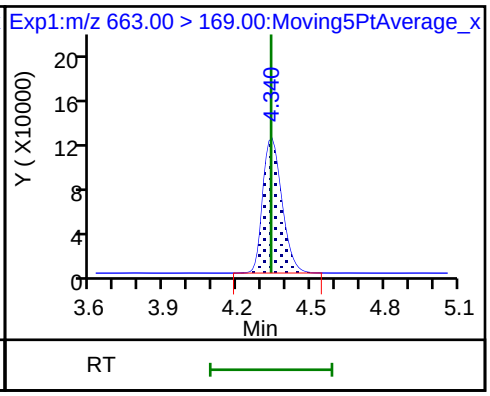
37 Perfluorododecanoic acid



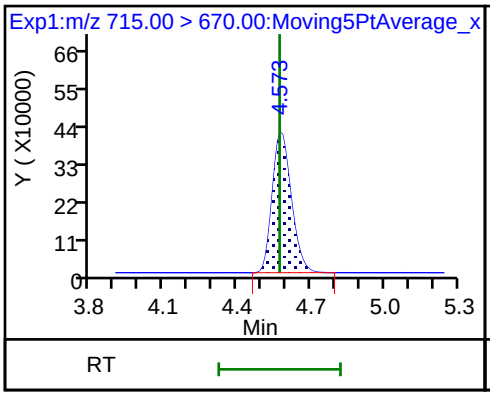
41 Perfluorotridecanoic acid



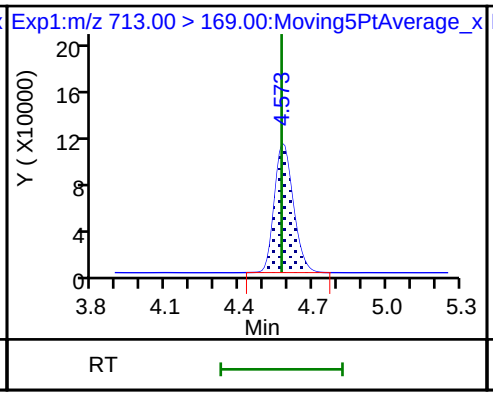
41 Perfluorotridecanoic acid



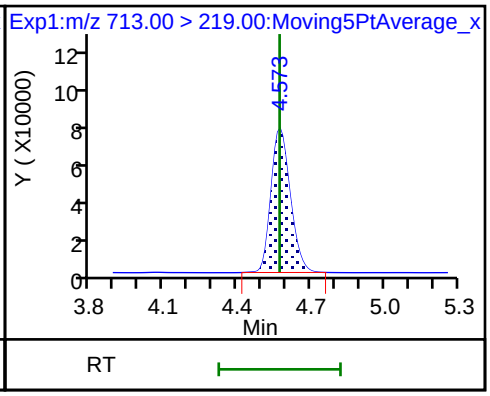
D 43 13C2-PFTeDA



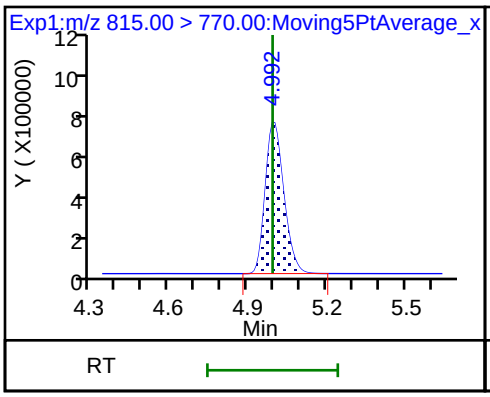
42 Perfluorotetradecanoic acid



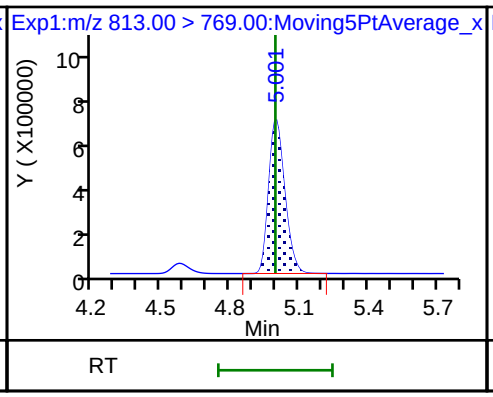
42 Perfluorotetradecanoic acid



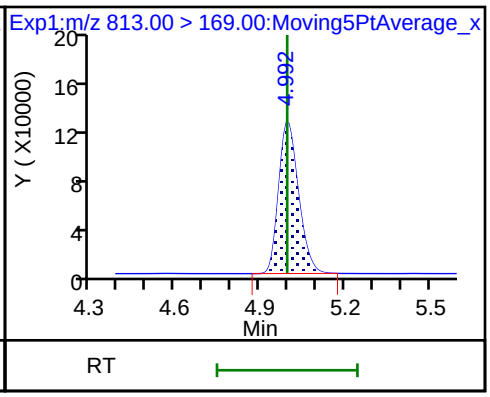
D 44 13C2-PFHxDA



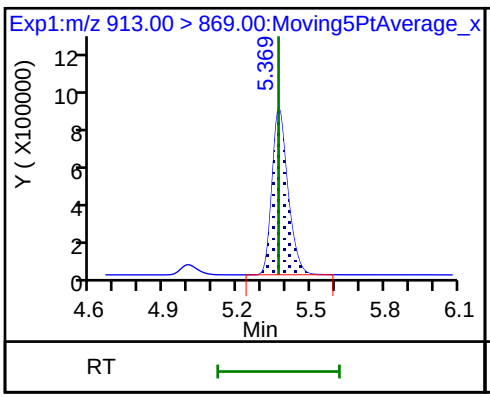
45 Perfluorohexadecanoic acid



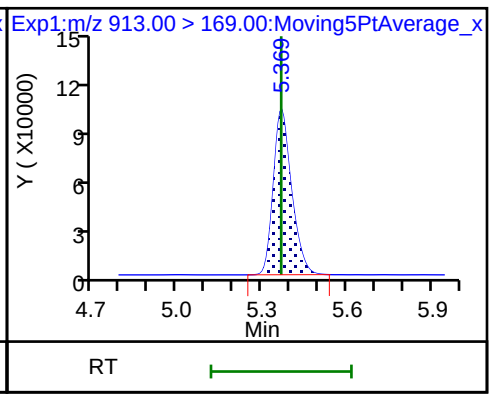
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_007.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 13-May-2018 14:51:45 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L6-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 08:39:58 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 08:23:02

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.457	1.461	-0.004	1.000	5031013	2.54		102	51256	
2 Perfluorobutyric acid										
212.90 > 169.00	1.457	1.461	-0.004	1.000	9515806	5.05		101	6983	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.730	-0.001	0.563	3252897	2.58		103	74502	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.731	-0.002	1.000	7464976	4.85		97.1	3836	
D 47 13C3-PFBS										
301.90 > 83.00	1.756	1.763	-0.007	1.000	66194	2.32		99.6	484	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.769	-0.004	1.005	10438382	4.65		105	36171	
298.90 > 99.00	1.765	1.769	-0.004	1.005	4401425		2.37(1.25-3.74)	105	23057	
D 60 M2-4:2FTS										
329.00 > 81.00	1.970	1.979	-0.009	1.000	430525	2.47		106	4898	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.981	1.982	-0.001	1.000	2096509	5.37		115	96196	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	2.019	-0.005	1.000	3181960	2.40		95.9	93520	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.021	-0.007	1.000	7027118	5.50		110	13903	
313.00 > 119.00	2.014	2.021	-0.007	1.000	617163		11.39(5.03-15.10)	110	9163	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.037	2.040	-0.003	1.000	9861044	5.06		108	91840	
349.00 > 99.00	2.037	2.040	-0.003	1.000	3725573		2.65(1.36-4.07)	108	55133	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.116	2.118	-0.002	1.000	199935	2.79		112	6026	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.116	2.119	-0.003	1.000	1056534	4.82		96.4	10664	
D 9 13C4-PFHpA										
367.00 > 322.00	2.345	2.349	-0.004	1.000	3101891	2.54		102	50294	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.345	2.351	-0.006	1.000	6803261	5.07		101	11569	
363.00 > 169.00	2.345	2.351	-0.006	1.000	2670721		2.55(1.13-3.40)	101	14082	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.358	2.362	-0.004	1.000	7935883	4.35		95.6	26714	
399.00 > 99.00	2.358	2.362	-0.004	1.000	2649840		2.99(1.50-4.49)	95.6	9783	
D 11 18O2 PFHxS										
403.00 > 84.00	2.358	2.364	-0.006	1.000	3801674	2.38		101	41740	
65 Adona										
377.00 > 251.00	2.395	2.396	-0.001	1.000	19941425	5.26		105	152143	
377.00 > 85.00	2.395	2.396	-0.001	1.000	11929463		1.67(0.84-2.53)	105	59071	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.674	2.681	-0.007	1.000	1978903	5.11		108	34712	
D 12 M2-6:2FTS										
429.00 > 81.00	2.674	2.681	-0.007	1.000	554687	2.33		98.1	11494	
* 62 13C2-PFOA										
415.00 > 370.00	2.697	2.704	-0.007		3067868	2.50			49479	
D 14 13C4 PFOA										
417.00 > 372.00	2.697	2.705	-0.008	1.000	2958154	2.56		102	69686	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.704	2.708	-0.004	1.003	6719883	4.91		98.3	3982	
413.00 > 169.00	2.704	2.708	-0.004	1.003	3562393		1.89(0.84-2.52)	98.3	11975	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.704	2.712	-0.008	1.000	7596643	4.98		105	58164	
449.00 > 99.00	2.704	2.712	-0.008	1.000	1975922		3.84(1.94-5.82)	105	25664	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.072	3.075	-0.003	1.000	6168145	4.82		104	27419	
499.00 > 99.00	3.072	3.075	-0.003	1.000	1367394		4.51(2.31-6.93)	104	15984	
D 18 13C4 PFOS										
503.00 > 80.00	3.072	3.075	-0.003	1.000	2790780	2.44		102	12511	
D 19 13C5 PFNA										
468.00 > 423.00	3.072	3.077	-0.005	1.000	2366938	2.43		97.1	32531	
20 Perfluorononanoic acid										
463.00 > 419.00	3.072	3.078	-0.006	1.000	5125043	5.32		106	11481	
463.00 > 169.00	3.072	3.078	-0.006	1.000	1247859		4.11(1.90-5.69)	106	32905	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.280	3.287	-0.007	1.000	10307049	4.88		105	46574	
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.403	-0.005	1.000	4162209	2.57		103	42768	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.398	3.404	-0.006	1.000	8963728	5.42		108	54805	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.416	3.424	-0.008	1.000	4742244	5.17		108	57544	
549.00 > 99.00	3.416	3.424	-0.008	1.000	1726975		2.75(1.33-3.97)	108	23728	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.426	3.430	-0.004	1.000	1923084	5.32		111	19833	
D 26 M2-8:2FTS										
529.00 > 81.00	3.426	3.430	-0.004	1.000	703631	2.25		93.9	8748	
D 23 13C2 PFDA										
515.00 > 470.00	3.435	3.440	-0.005	1.000	2080360	2.45		97.8	39951	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.435	3.442	-0.007	1.000	4460306	5.23		105	24909	
513.00 > 169.00	3.435	3.442	-0.007	1.000	763529		5.84(2.36-7.09)	105	24255	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.585	3.594	-0.009	1.000	972628	2.61		104	21990	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.596	3.599	-0.003	1.003	2048148	5.08		102	16146	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.750	3.753	-0.003	1.000	4010505	5.21		108	42877	
599.00 > 99.00	3.750	3.753	-0.003	1.000	1393406		2.88(1.39-4.16)	108	21040	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.761	3.766	-0.005	1.000	1015129	2.49		99.5	2585	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.761	3.771	-0.010	1.000	1910424	4.80		96.0	47681	
D 30 13C2 PFUnA										
565.00 > 520.00	3.761	3.771	-0.010	1.000	1627923	2.34		93.6	28266	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.772	3.772	0.0	1.003	2739626	5.34		107	12530	
563.00 > 169.00	3.772	3.772	0.0	1.003	673152		4.07(2.12-6.36)	107	23420	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.919	3.929	-0.010	1.000	14706858	4.72		100	113127	
D 36 13C2 PFDoA										
615.00 > 570.00	4.062	4.066	-0.004	1.000	1865023	2.57		103	15455	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.062	4.068	-0.006	1.000	4108972	5.27		105	2913	
613.00 > 169.00	4.062	4.068	-0.006	1.000	987013		4.16(2.13-6.40)	105	12821	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.330	4.336	-0.006	1.000	4153872	5.36		107	1788	
663.00 > 169.00	4.330	4.336	-0.006	1.000	1322497		3.14(1.25-3.76)	107	16215	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.565	4.571	-0.006	1.000	1069559	4.89		97.7	13108	
713.00 > 219.00	4.565	4.571	-0.006	1.000	799966		1.34(0.71-2.13)	97.7	11361	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.565	4.571	-0.006	1.000	2055402	2.60		104	12017	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.985	4.993	-0.008	1.000	3300428	2.62		105	10927	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.985	4.995	-0.010	1.000	6330385	5.10		102	1159	
813.00 > 169.00	4.985	4.995	-0.010	1.000	1068611		5.92(2.86-8.58)	102	6749	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.364	5.367	-0.003	1.000	6846952	5.06		101	1098	
913.00 > 169.00	5.358	5.367	-0.009	0.999	838656		8.16(3.83-11.48)	101	5462	

Reagents:

LCPFC_LL6_00005 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 08:40:00 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_007.d

Injection Date: 13-May-2018 14:51:45 Instrument ID: A8_N

Lims ID: IC L6 Full

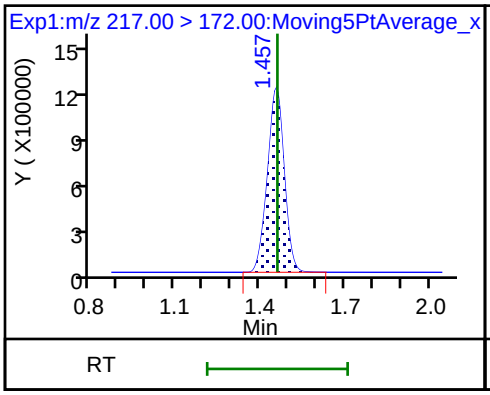
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 15 Worklist Smp#: 7

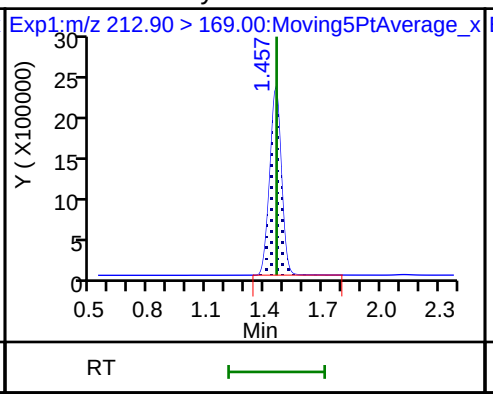
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

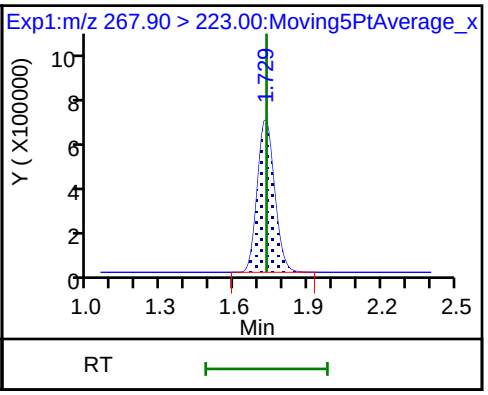
D 1 13C4 PFBA



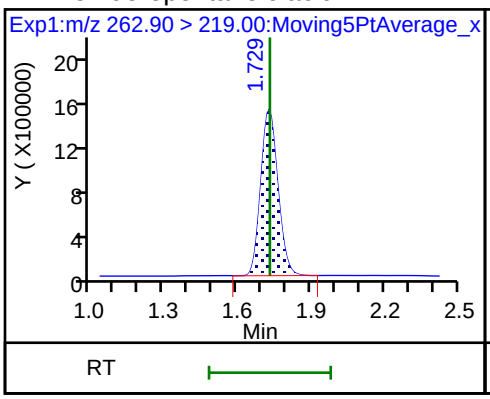
2 Perfluorobutyric acid



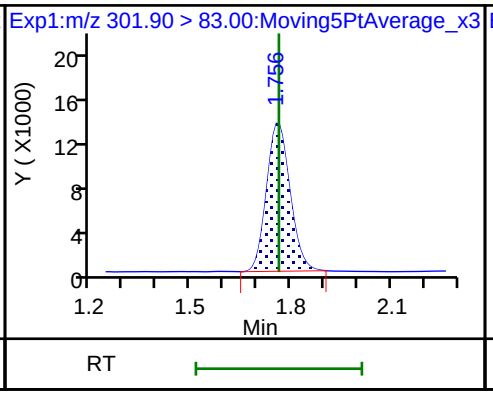
D 3 13C5-PFPeA



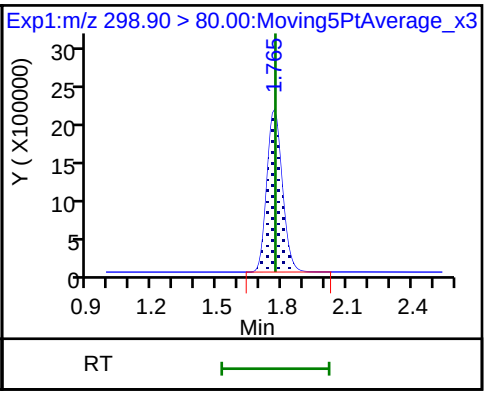
4 Perfluoropentanoic acid



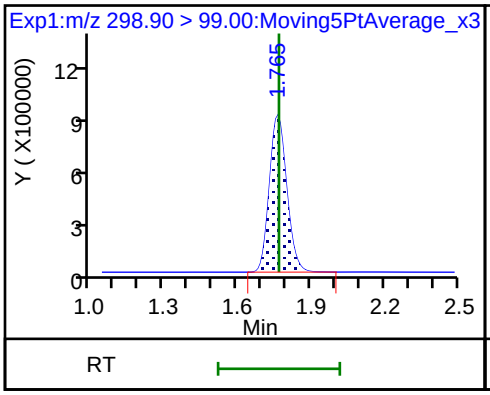
D 47 13C3-PFBS



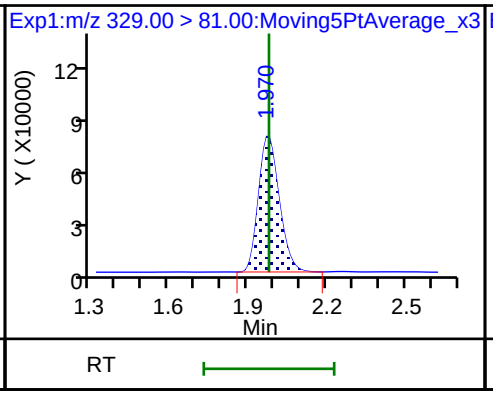
5 Perfluorobutanesulfonic acid



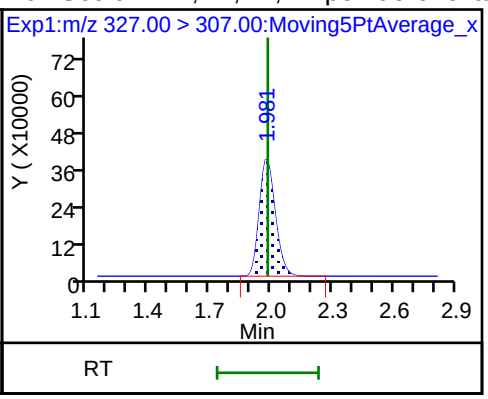
5 Perfluorobutanesulfonic acid



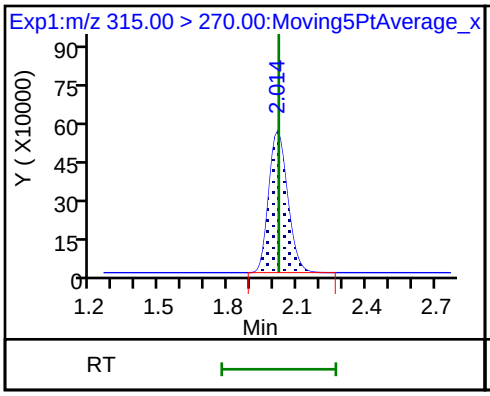
D 60 M2-4:2FTS



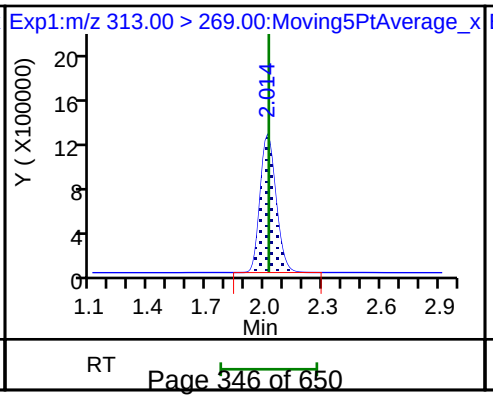
61 Sodium 1H,1H,2H,2H-perfluorohexane



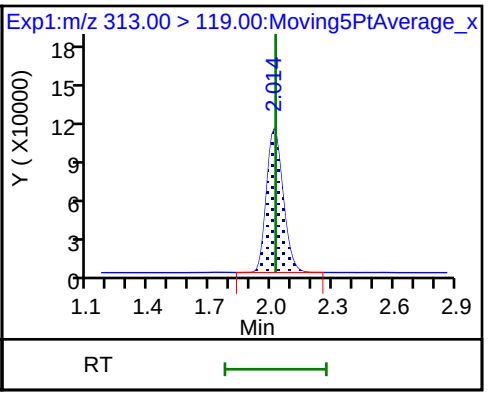
D 7 13C2 PFHxA



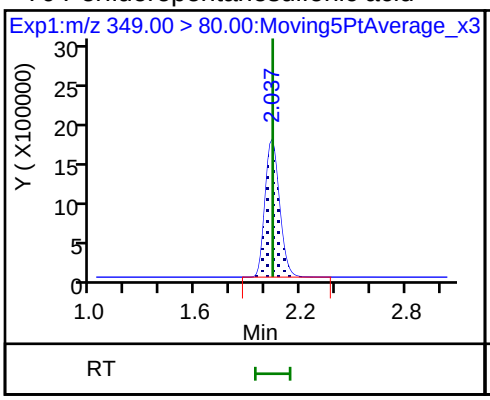
6 Perfluorohexanoic acid



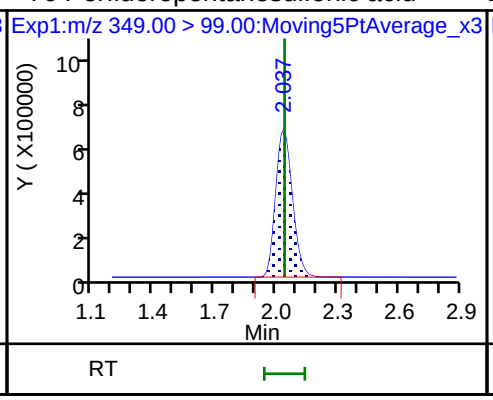
6 Perfluorohexanoic acid



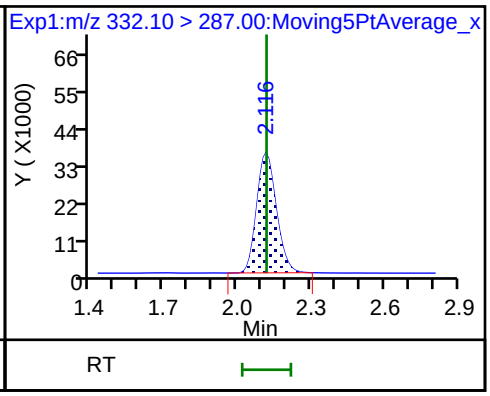
70 Perfluoropentanesulfonic acid



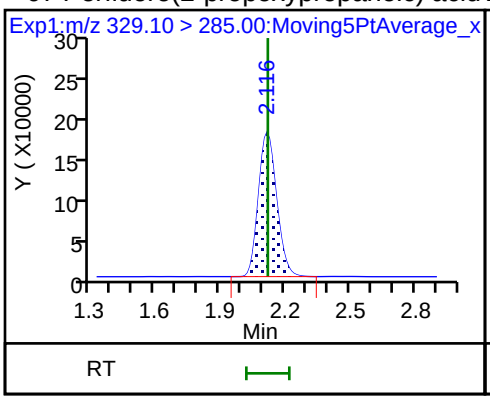
70 Perfluoropentanesulfonic acid



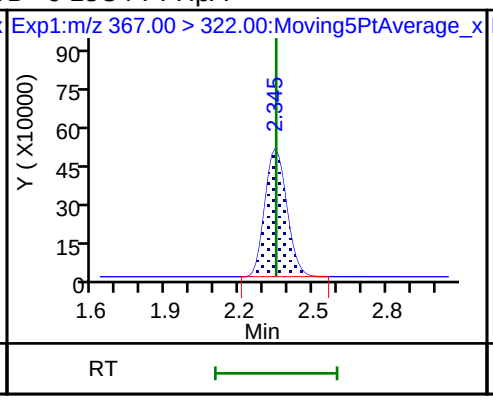
D 64 13C3 HFPO-DA



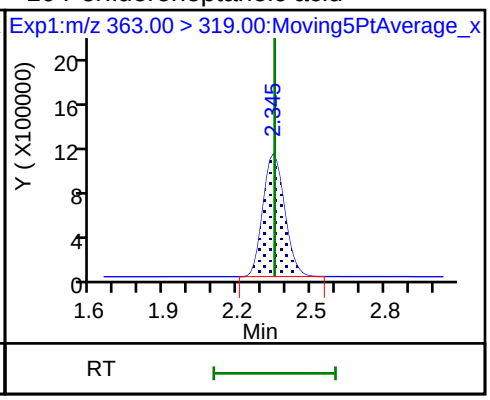
67 Perfluoro(2-propoxypropanoic) acid



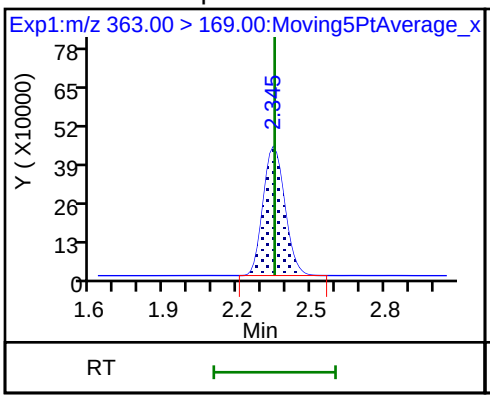
D 9 13C4-PFHpA



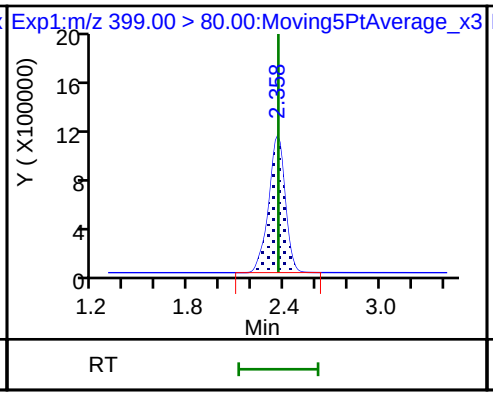
10 Perfluoroheptanoic acid



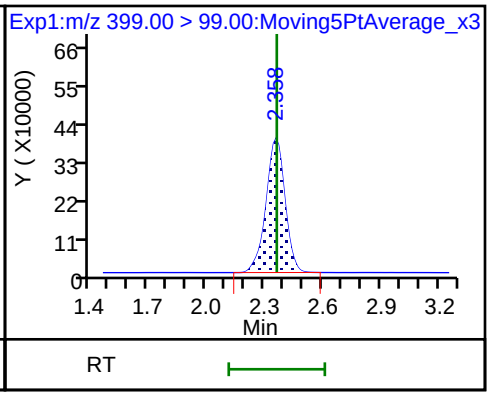
10 Perfluoroheptanoic acid



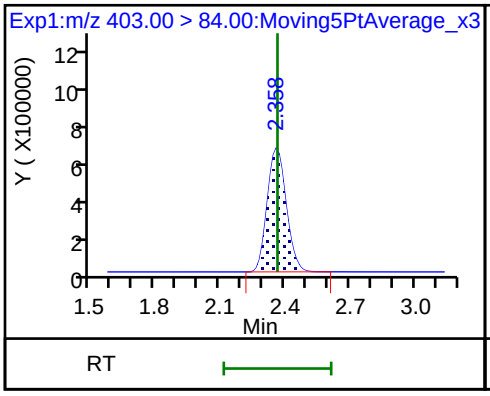
8 Perfluorohexanesulfonic acid



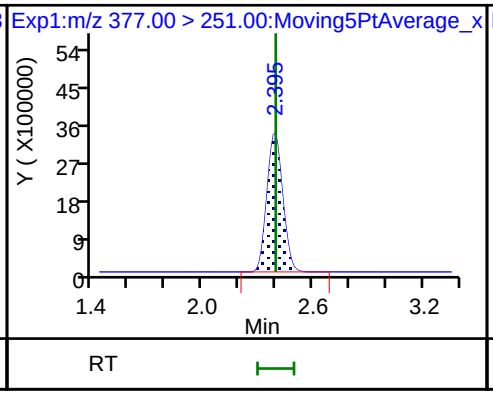
8 Perfluorohexanesulfonic acid



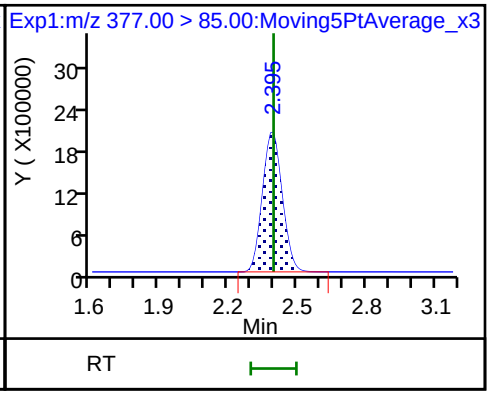
D 11 18O2 PFHxS



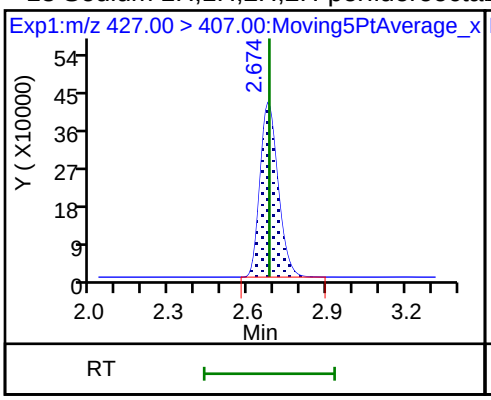
65 Adona



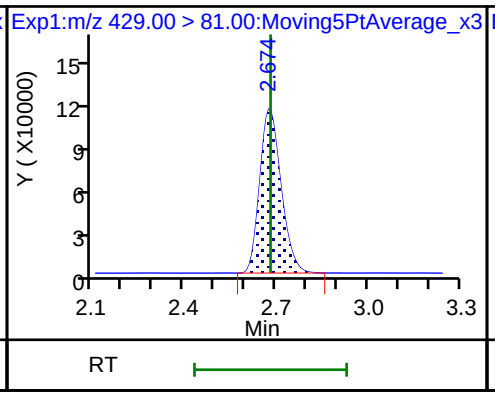
65 Adona



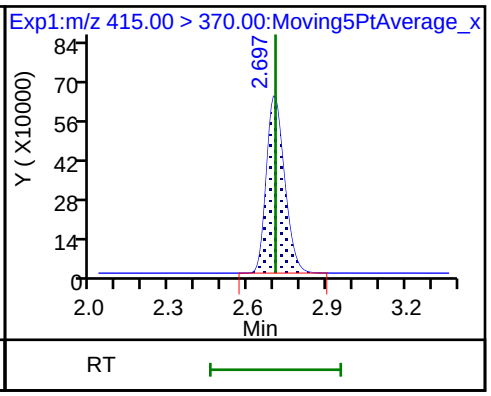
13 Sodium 1H,1H,2H,2H-perfluorooctane



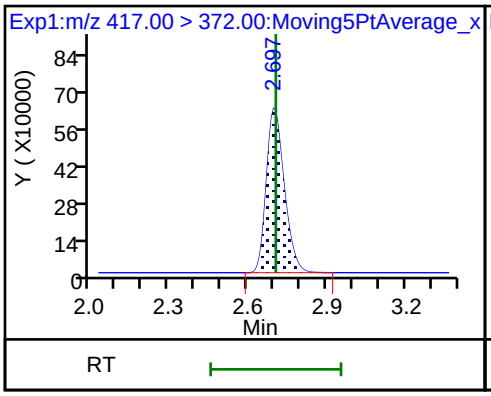
D 12 M2-6:2FTS



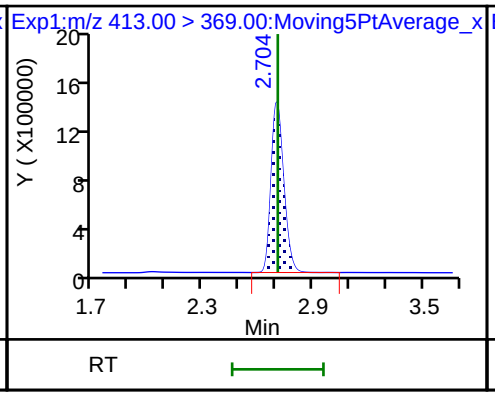
* 62 13C2-PFOA



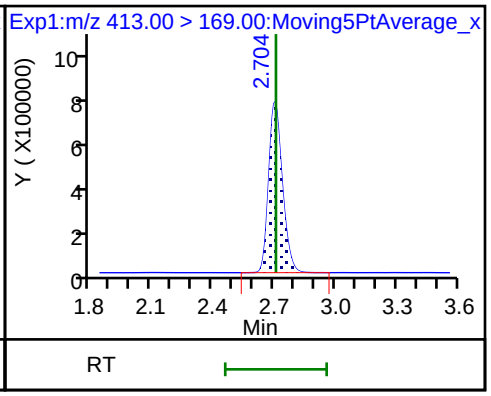
D 14 13C4 PFOA



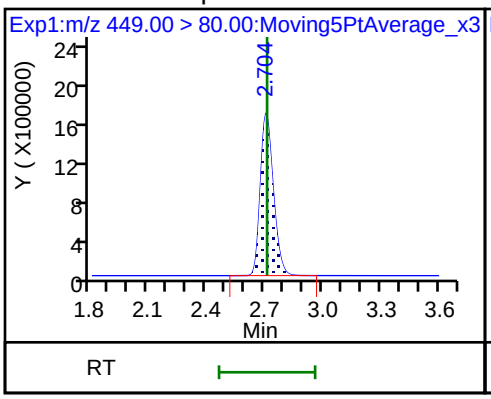
15 Perfluorooctanoic acid



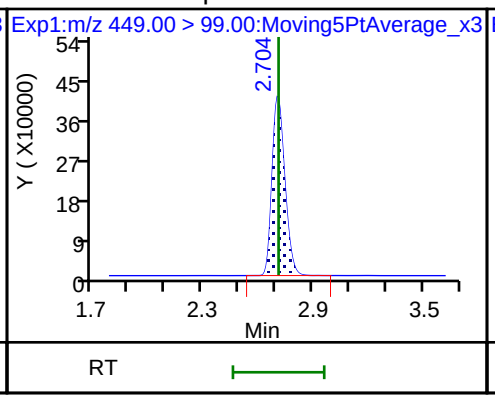
15 Perfluorooctanoic acid



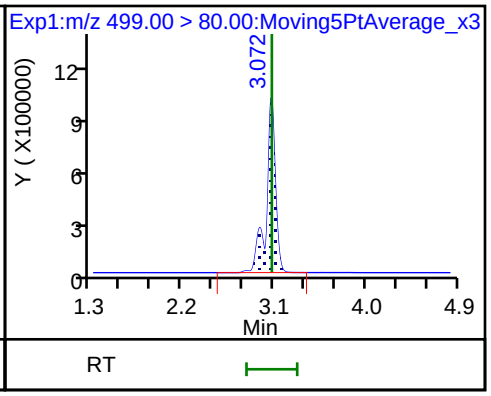
16 Perfluoroheptanesulfonic acid



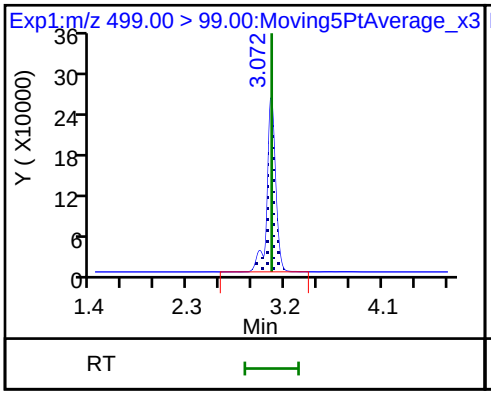
16 Perfluoroheptanesulfonic acid



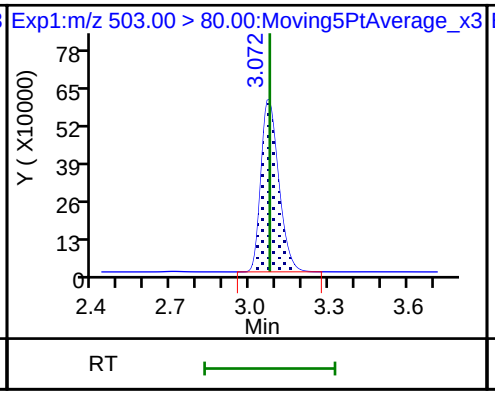
17 Perfluorooctane sulfonic acid



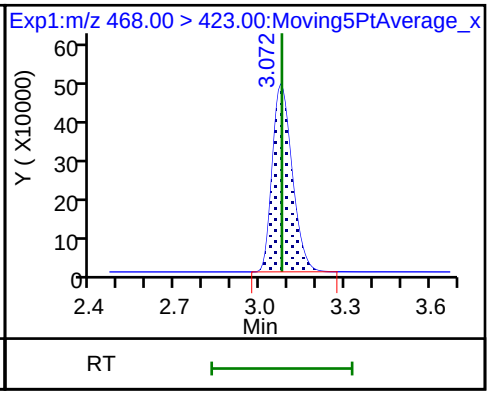
17 Perfluorooctane sulfonic acid



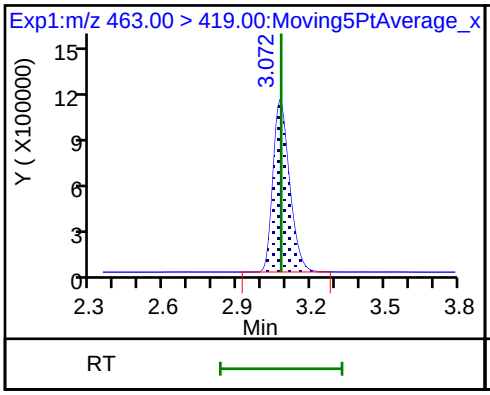
D 18 13C4 PFOS



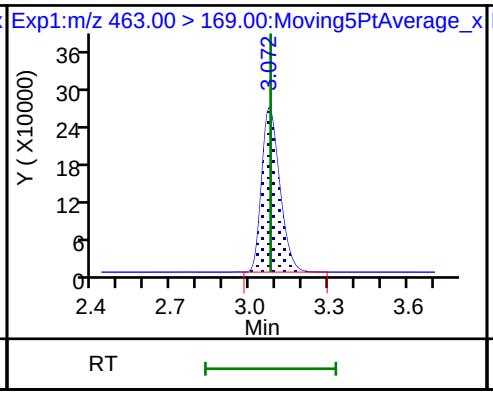
D 19 13C5 PFNA



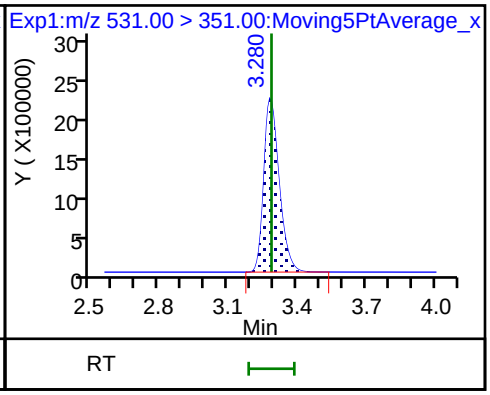
20 Perfluorononanoic acid



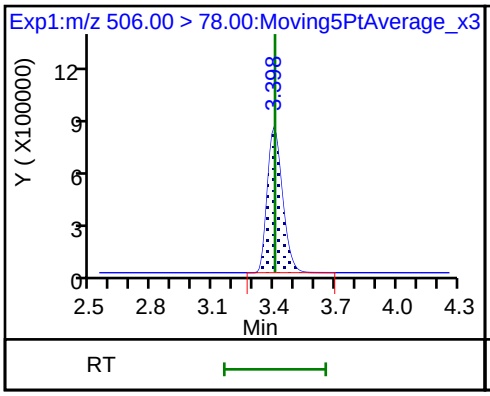
20 Perfluorononanoic acid



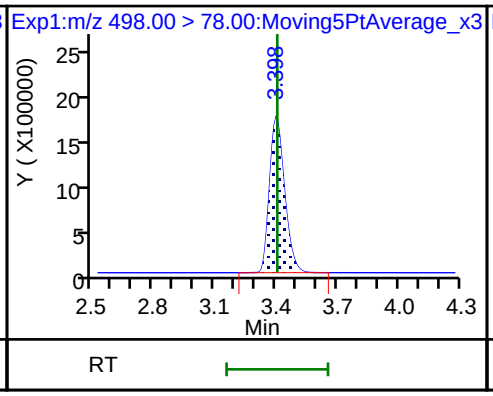
69 9-Chlorohexadecafluoro-3-oxanonane



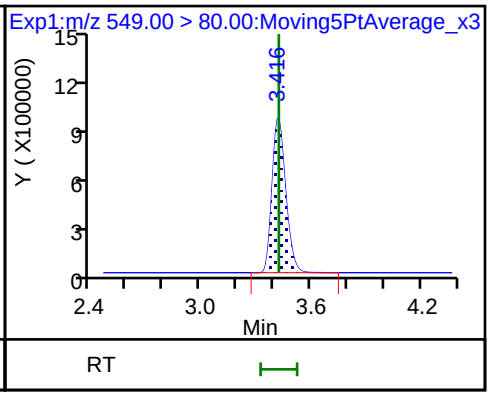
D 21 13C8 FOSA



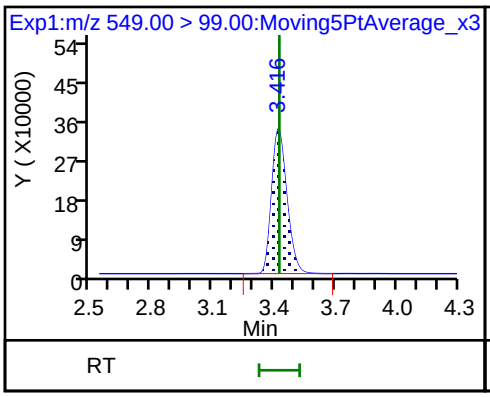
22 Perfluorooctane Sulfonamide



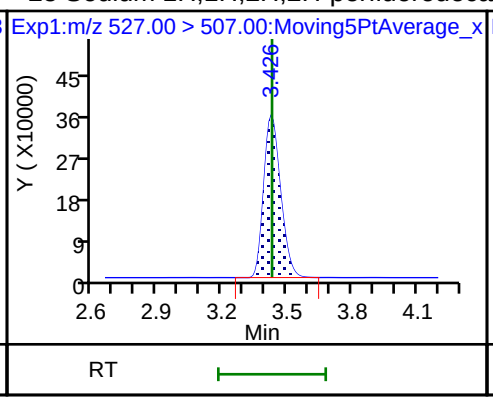
68 Perfluorononanesulfonic acid



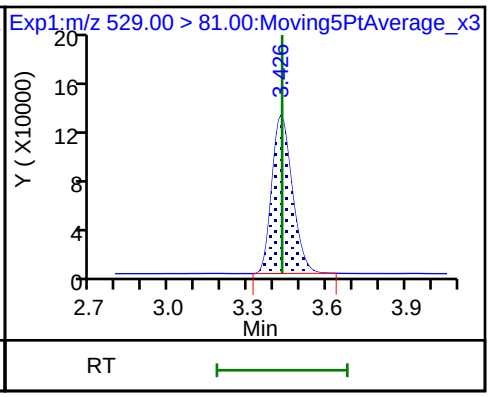
68 Perfluorononanesulfonic acid



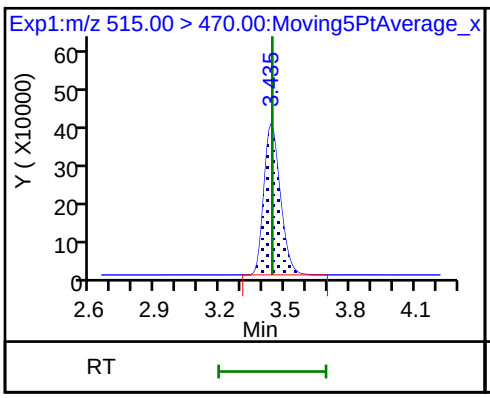
25 Sodium 1H,1H,2H,2H-perfluorodecane



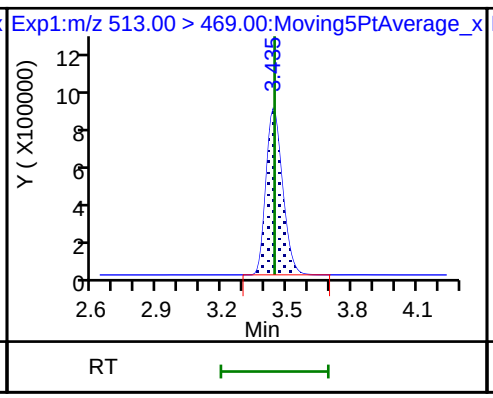
D 26 M2-8:2FTS



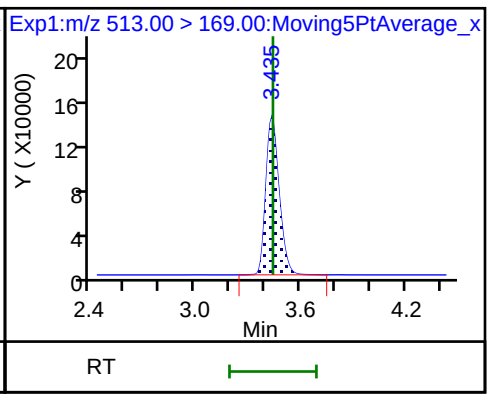
D 23 13C2 PFDA



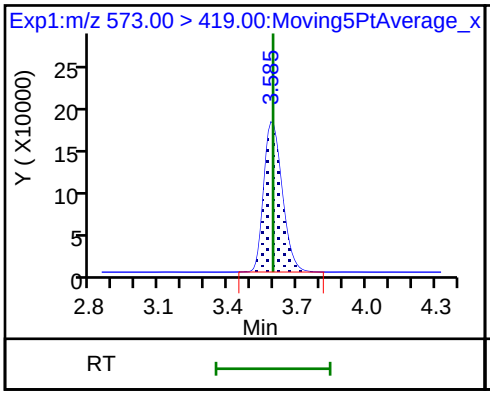
24 Perfluorodecanoic acid



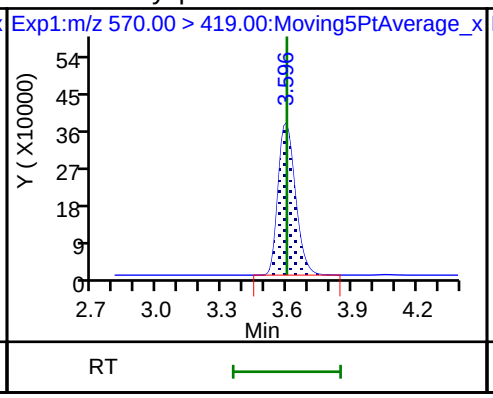
24 Perfluorodecanoic acid



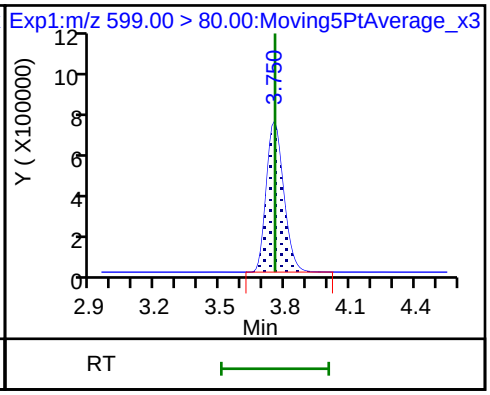
D 27 d3-NMeFOSAA



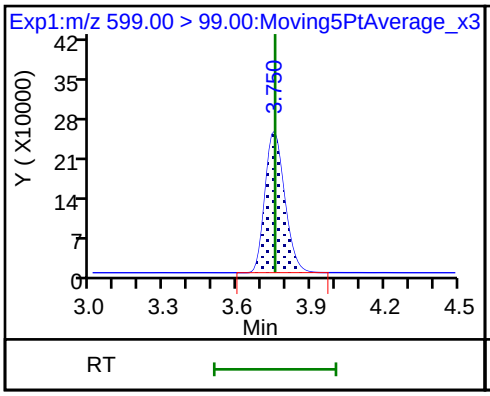
28 N-methyl perfluorooctane sulfonami



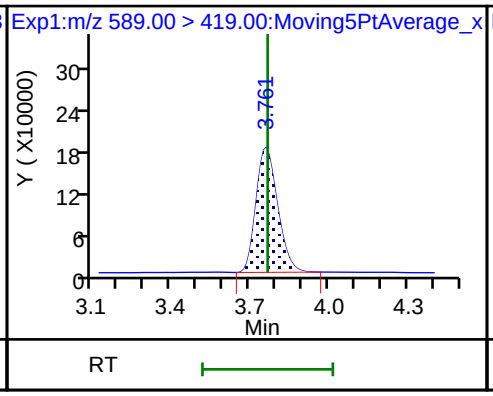
29 Perfluorodecane Sulfonic acid



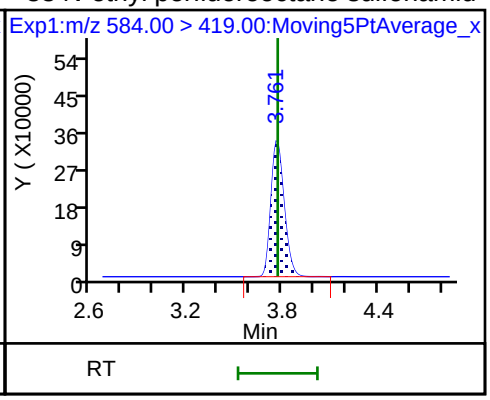
29 Perfluorodecane Sulfonic acid



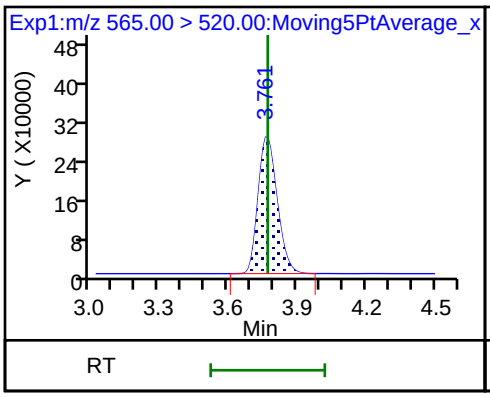
D 32 d5-NEtFOSAA



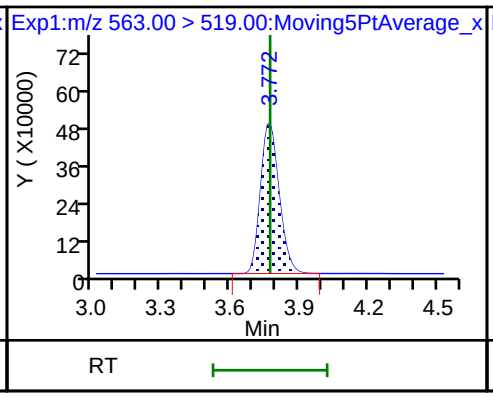
33 N-ethyl perfluorooctane sulfonamid



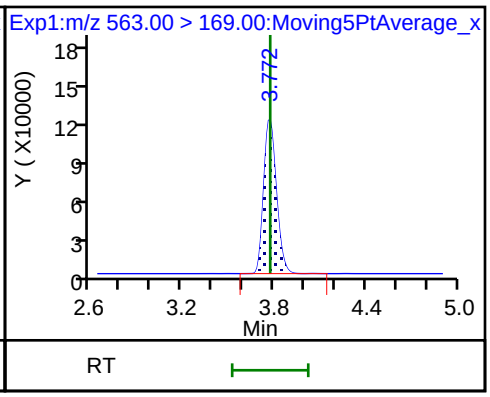
D 30 13C2 PFUnA



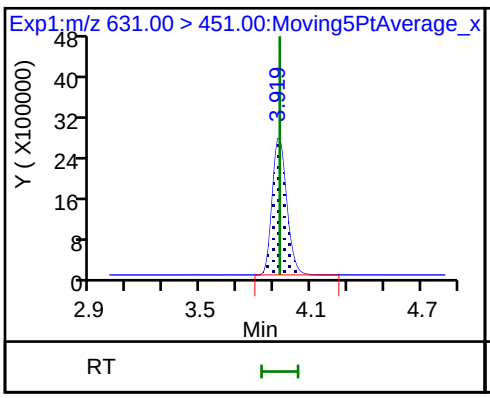
31 Perfluoroundecanoic acid



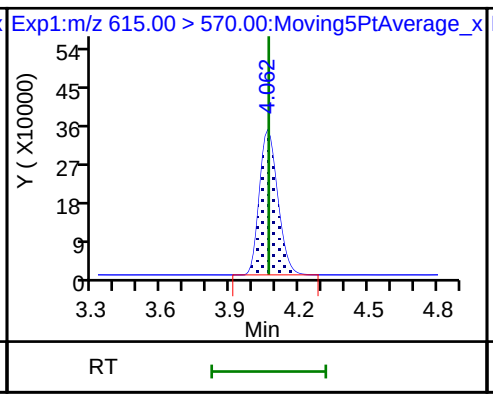
31 Perfluoroundecanoic acid



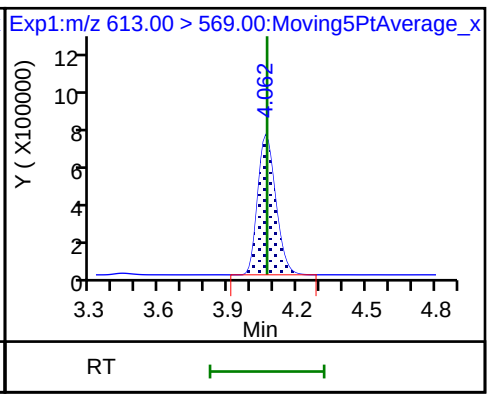
66 11-Chloroeicosafluoro-3-oxaundecan



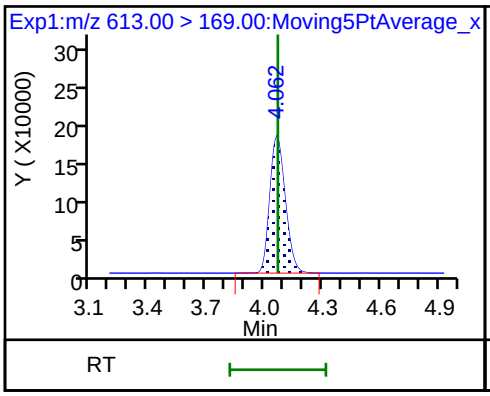
D 36 13C2 PFDoA



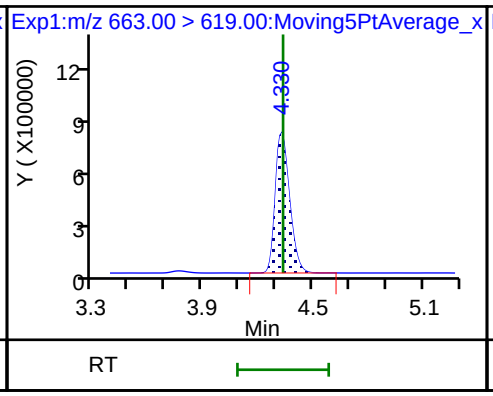
37 Perfluorododecanoic acid



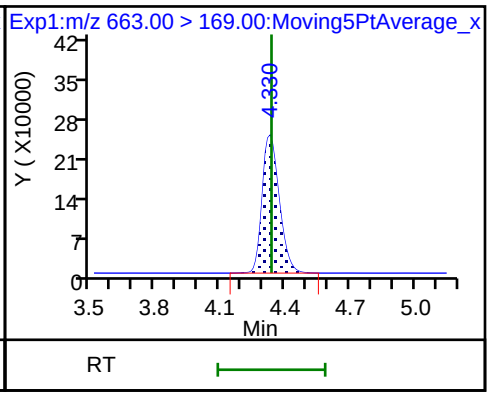
37 Perfluorododecanoic acid



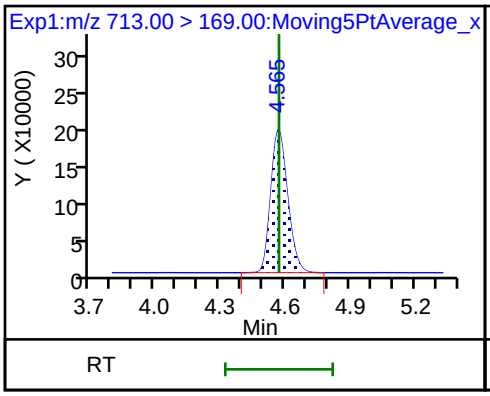
41 Perfluorotridecanoic acid



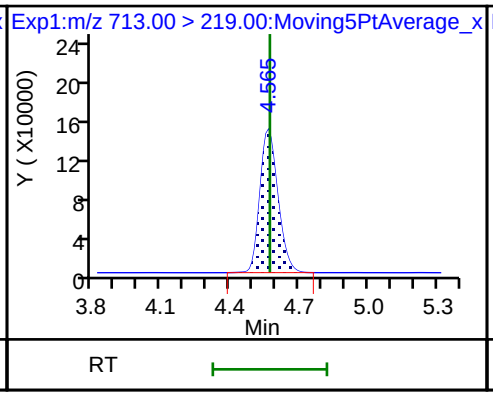
41 Perfluorotridecanoic acid



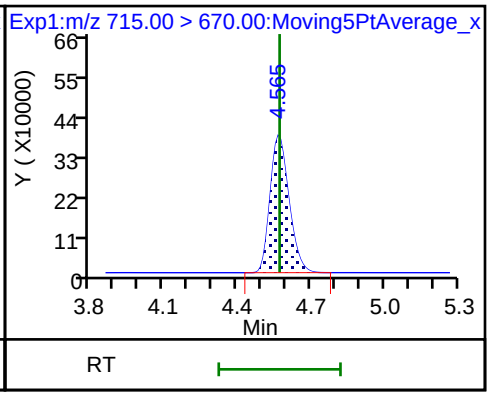
42 Perfluorotetradecanoic acid



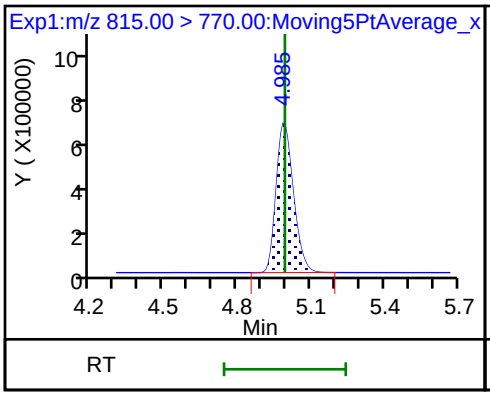
42 Perfluorotetradecanoic acid



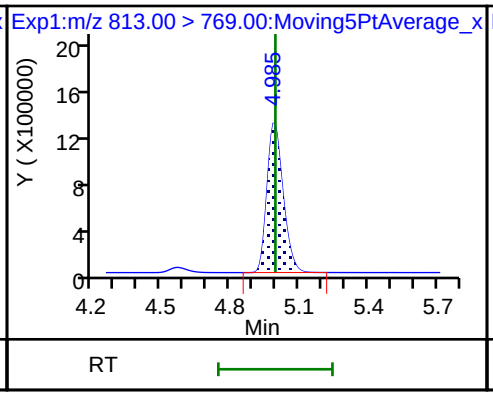
D 43 13C2-PFTeDA



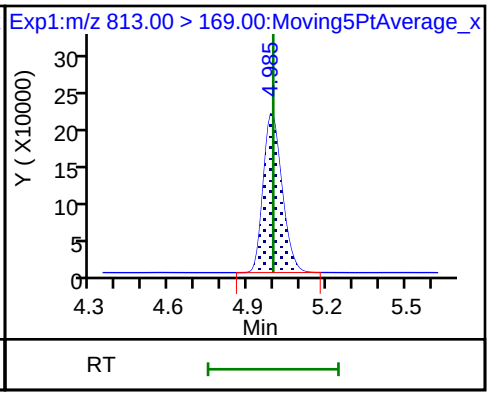
D 44 13C2-PFHxDA



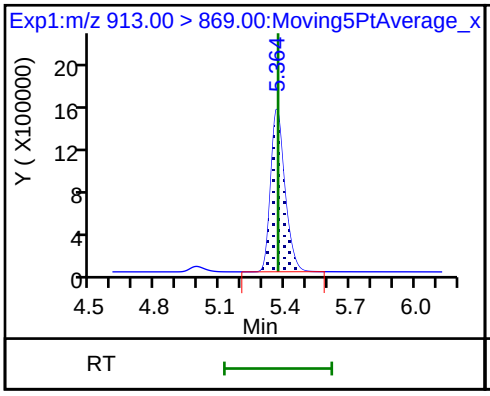
45 Perfluorohexadecanoic acid



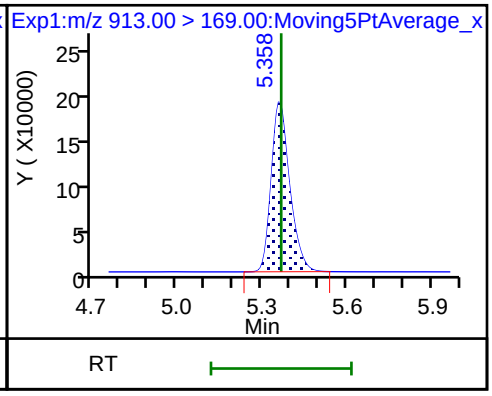
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 13-May-2018 14:59:34 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L7-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 08:40:02 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.461	0.002	1.000	5601535	2.59		104	54815	
2 Perfluorobutyric acid										
212.90 > 169.00	1.463	1.461	0.002	1.000	20215971	9.64		96.4	15131	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.730	-0.001	0.562	3529651	2.56		103	80787	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.731	-0.002	1.000	16346809	9.80		98.0	8931	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.763	0.002	1.000	77076	2.47		106	535	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.774	1.769	0.005	1.005	21557278	8.24		93.2	58393	
298.90 > 99.00	1.774	1.769	0.005	1.005	9473406		2.28(1.25-3.74)	93.2	41755	
D 60 M2-4:2FTS										
329.00 > 81.00	1.981	1.979	0.002	1.000	443936	2.34		100	7951	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.981	1.982	-0.001	1.000	3970822	8.74		93.6	142859	
D 7 13C2 PFHxA										
315.00 > 270.00	2.025	2.019	0.006	1.000	3785046	2.61		104	110839	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.025	2.021	0.004	1.000	14780619	9.73		97.3	36822	
313.00 > 119.00	2.025	2.021	0.004	1.000	1368219		10.80(5.03-15.10)	97.3	21772	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.048	2.040	0.008	1.000	20379039	8.99		95.8	154178	
349.00 > 99.00	2.048	2.040	0.008	1.000	8108799		2.51(1.36-4.07)	95.8	64655	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.116	2.118	-0.002	1.000	179762	2.30		91.8	5193	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.127	2.119	0.008	1.005	2618428	13.3		133	26928	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 9 13C4-PFHpA										
367.00 > 322.00	2.358	2.349	0.009	1.000	3350410	2.51		100	77092	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.358	2.351	0.007	1.000	14528027	10.0		100	25465	
363.00 > 169.00	2.358	2.351	0.007	1.000	5725900		2.54(1.13-3.40)	100	36964	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.372	2.362	0.010	1.000	17203051	8.67		95.3	37479	
399.00 > 99.00	2.372	2.362	0.010	1.000	5816469		2.96(1.50-4.49)	95.3	20990	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.364	0.008	1.000	4132118	2.37		100	52147	
65 Adona										
377.00 > 251.00	2.395	2.396	-0.001	1.000	36688288	8.61		86.1	231246	
377.00 > 85.00	2.395	2.396	-0.001	1.000	23023558		1.59(0.84-2.53)	86.1	83813	
D 12 M2-6:2FTS										
429.00 > 81.00	2.682	2.681	0.001	1.000	619751	2.38		100	16572	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.682	2.681	0.001	1.000	4237691	9.80		103	50680	
* 62 13C2-PFOA										
415.00 > 370.00	2.704	2.704	0.0		3351068	2.50			54289	
D 14 13C4 PFOA										
417.00 > 372.00	2.712	2.705	0.007	1.000	3134900	2.48		99.3	46843	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.712	2.708	0.004	1.000	14339675	9.89		98.9	7593	
413.00 > 169.00	2.712	2.708	0.004	1.000	7669755		1.87(0.84-2.52)	98.9	23404	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.712	2.712	0.0	1.000	16060622	9.37		98.4	57265	
449.00 > 99.00	2.712	2.712	0.0	1.000	4618716		3.48(1.94-5.82)	98.4	81685	
D 18 13C4 PFOS										
503.00 > 80.00	3.076	3.075	0.001	1.000	3135213	2.51		105	10070	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.076	3.075	0.001	1.000	14082097	9.79		105	52863	
499.00 > 99.00	3.076	3.075	0.001	1.000	2999610		4.69(2.31-6.93)	105	21381	
D 19 13C5 PFNA										
468.00 > 423.00	3.076	3.077	-0.001	1.000	2591351	2.43		97.4	66551	
20 Perfluorononanoic acid										
463.00 > 419.00	3.083	3.078	0.005	1.003	11299204	10.7		107	21402	
463.00 > 169.00	3.083	3.078	0.005	1.003	2744631		4.12(1.90-5.69)	107	63055	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.291	3.287	0.004	1.000	22447462	9.47		102	127720	
D 21 13C8 FOSA										
506.00 > 78.00	3.402	3.403	-0.001	1.000	4478411	2.53		101	47896	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.411	3.404	0.007	1.003	18009739	10.1		101	83790	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.430	3.424	0.006	1.000	9756426	9.47		98.6	50861	
549.00 > 99.00	3.430	3.424	0.006	1.000	3791841		2.57(1.33-3.97)	98.6	40511	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.430	3.430	0.0	1.000	4072142	9.78		102	74309	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.430	3.430	0.0	1.000	810986	2.37		99.1	9329	
D 23 13C2 PFDA										
515.00 > 470.00	3.448	3.440	0.008	1.000	2314484	2.49		99.6	36175	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.448	3.442	0.006	1.000	9174968	9.66		96.6	52848	
513.00 > 169.00	3.448	3.442	0.006	1.000	1622669		5.65(2.36-7.09)	96.6	27859	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.601	3.594	0.007	1.000	1108624	2.72		109	15511	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.601	3.599	0.002	1.000	4652360	10.1		101	26256	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.754	3.753	0.001	1.000	8827642	10.2		106	60673	
599.00 > 99.00	3.754	3.753	0.001	1.000	2962572		2.98(1.39-4.16)	106	40648	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.776	3.766	0.010	1.000	1044261	2.34		93.7	2227	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.776	3.771	0.005	1.000	4283140	10.5		105	50302	
D 30 13C2 PFUnA										
565.00 > 520.00	3.776	3.771	0.005	1.000	1979001	2.60		104	49810	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.776	3.772	0.004	1.000	5806131	9.32		93.2	24773	
563.00 > 169.00	3.776	3.772	0.004	1.000	1590651		3.65(2.12-6.36)	93.2	39734	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.934	3.929	0.005	1.000	31107009	8.89		94.4	176608	
D 36 13C2 PFDoA										
615.00 > 570.00	4.068	4.066	0.002	1.000	2029949	2.56		102	20518	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.079	4.068	0.011	1.003	8761229	10.3		103	5546	
613.00 > 169.00	4.068	4.068	0.0	1.000	2187050		4.01(2.13-6.40)	103	26245	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.339	4.336	0.003	1.000	8786319	10.4		104	3277	
663.00 > 169.00	4.339	4.336	0.003	1.000	2982609		2.95(1.25-3.76)	104	23509	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.574	4.571	0.003	1.000	2299691	2.67		107	9944	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.574	4.571	0.003	1.000	2345287	9.58		95.8	17243	
713.00 > 219.00	4.574	4.571	0.003	1.000	1711649		1.37(0.71-2.13)	95.8	15939	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.993	4.993	0.0	1.000	3895945	2.84		113	12292	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.002	4.995	0.007	1.002	14623104	10.0		100	2176	
813.00 > 169.00	5.002	4.995	0.007	1.002	2448650		5.97(2.86-8.58)	100	11181	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.365	5.367	-0.002	1.000	16585178	10.4		104	2100	
913.00 > 169.00	5.365	5.367	-0.002	1.000	2063512		8.04(3.83-11.48)	104	7596	

Reagents:

LCPFC_LL7_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 08:40:04 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Injection Date: 13-May-2018 14:59:34 Instrument ID: A8_N

Lims ID: IC L7 Full

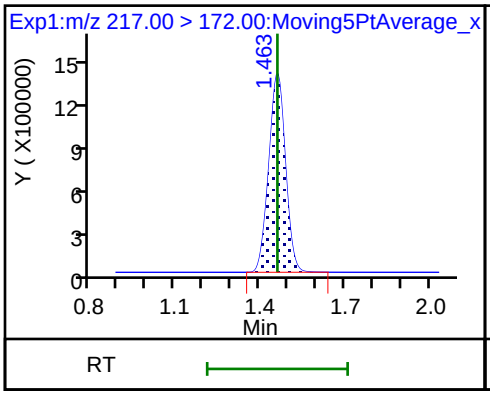
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 8

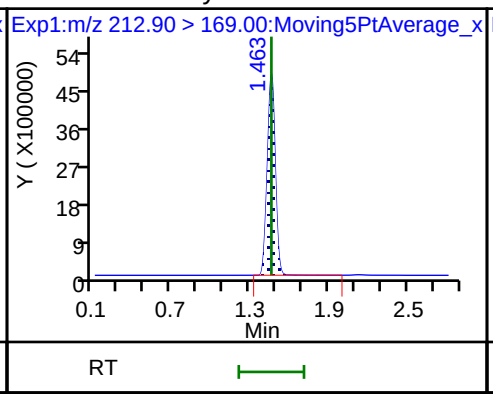
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

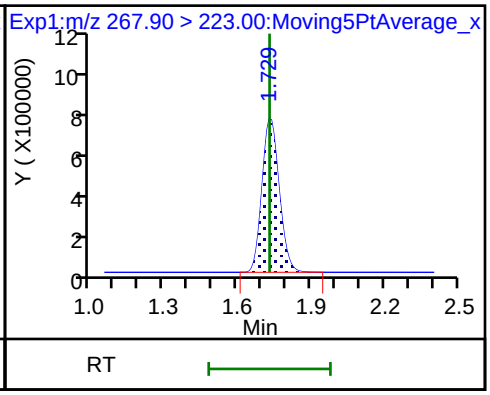
D 1 13C4 PFBA



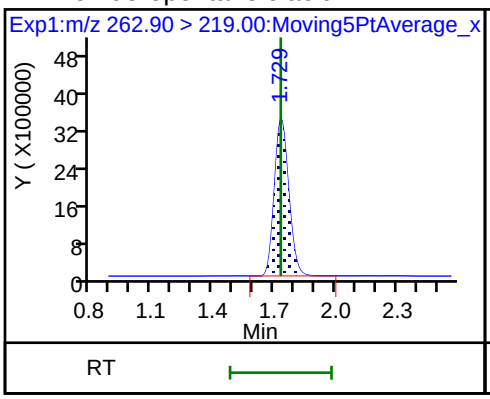
2 Perfluorobutyric acid



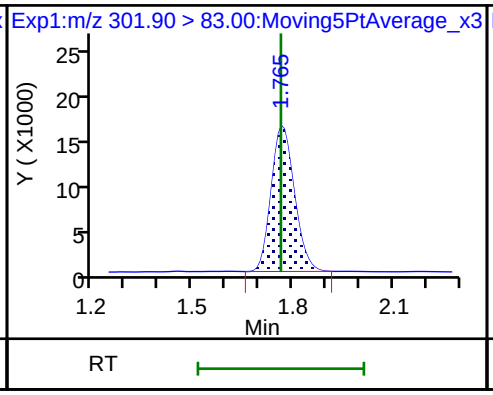
D 3 13C5-PFPeA



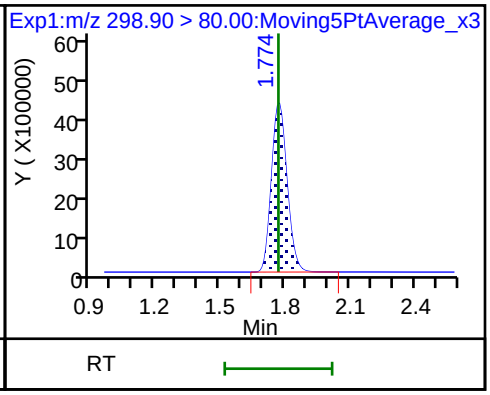
4 Perfluoropentanoic acid



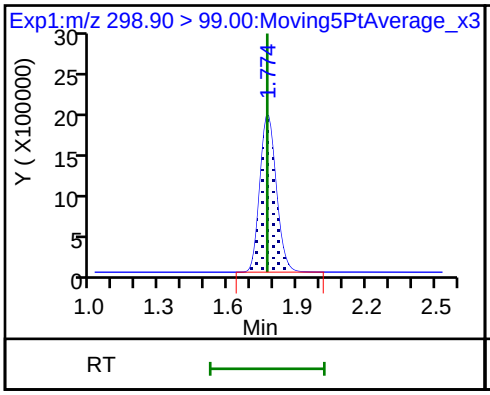
D 47 13C3-PFBS



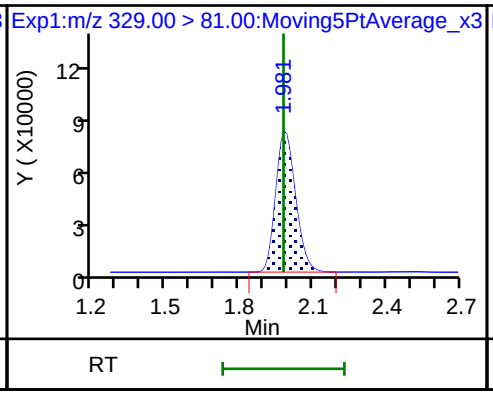
5 Perfluorobutanesulfonic acid



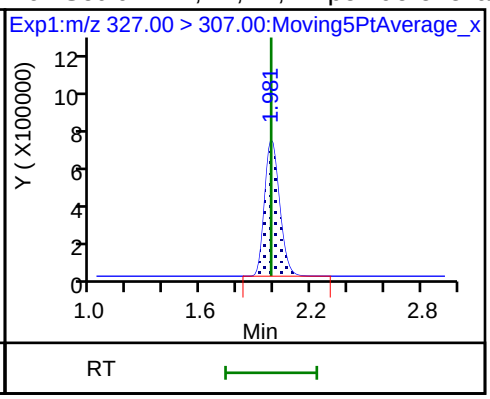
5 Perfluorobutanesulfonic acid



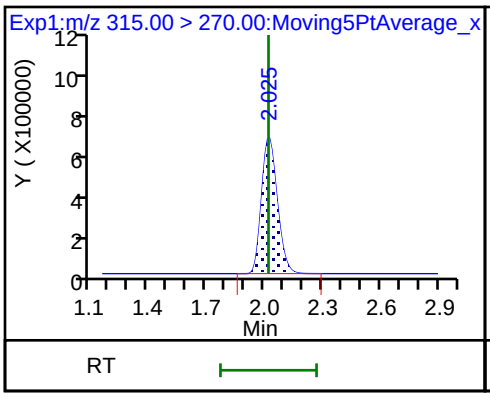
D 60 M2-4:2FTS



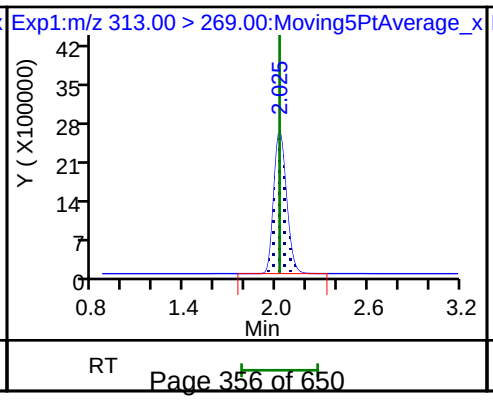
61 Sodium 1H,1H,2H,2H-perfluorohexane



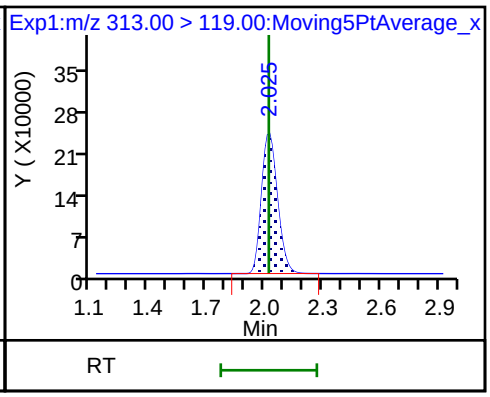
D 7 13C2 PFHxA



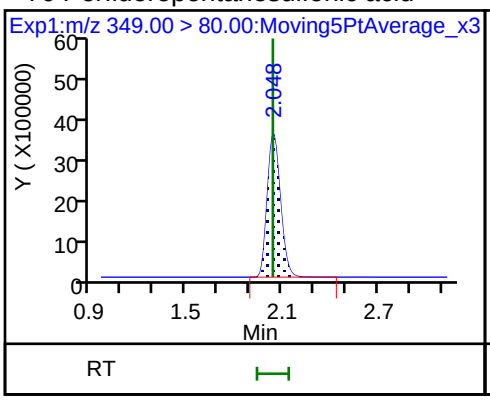
6 Perfluorohexanoic acid



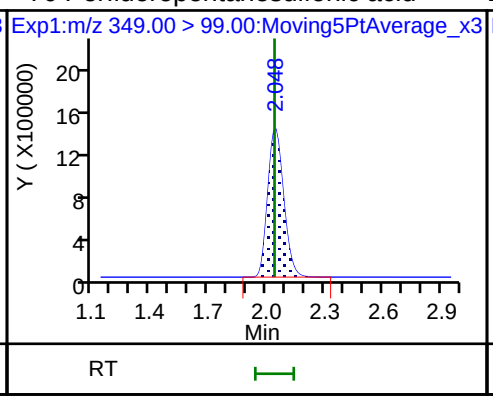
6 Perfluorohexanoic acid



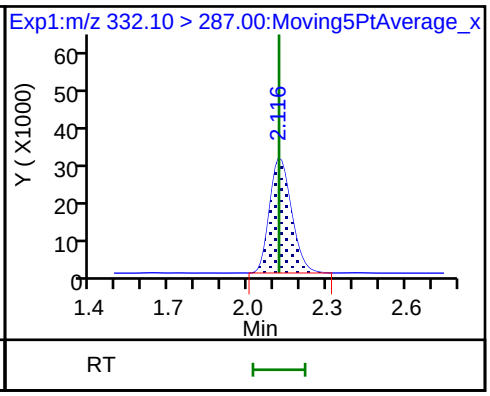
70 Perfluoropentanesulfonic acid



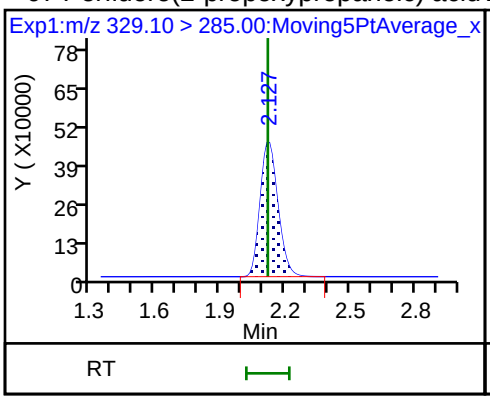
70 Perfluoropentanesulfonic acid



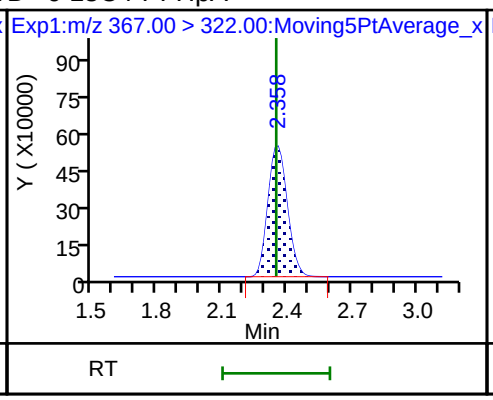
D 64 13C3 HFPO-DA



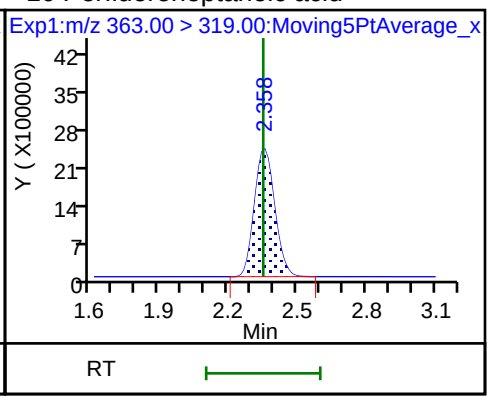
67 Perfluoro(2-propoxypropanoic) acid



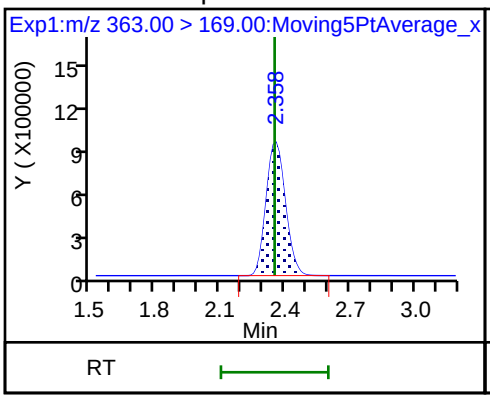
D 9 13C4-PFHpA



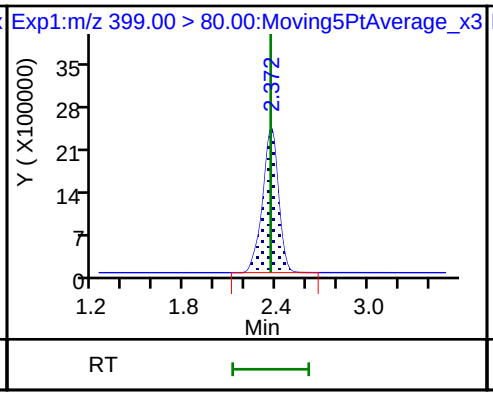
10 Perfluoroheptanoic acid



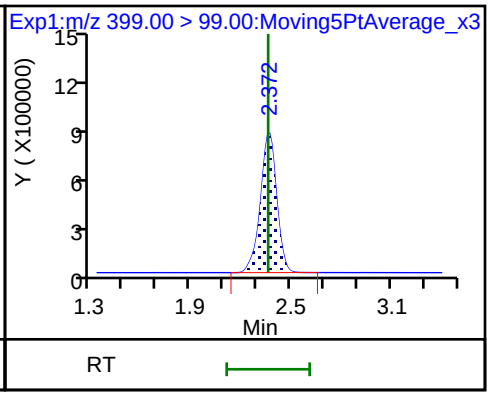
10 Perfluoroheptanoic acid



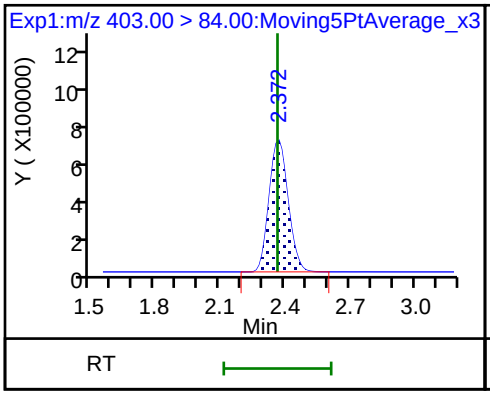
8 Perfluorohexanesulfonic acid



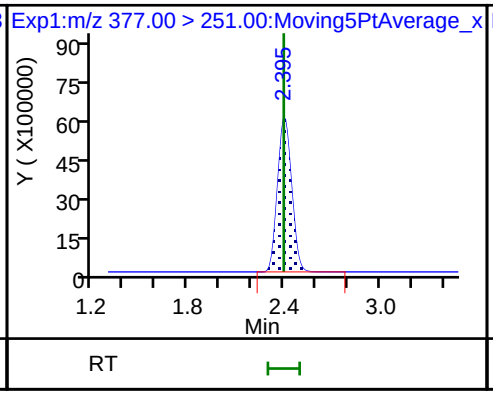
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 Adona



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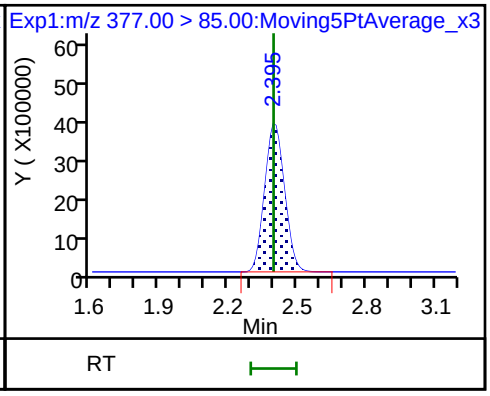
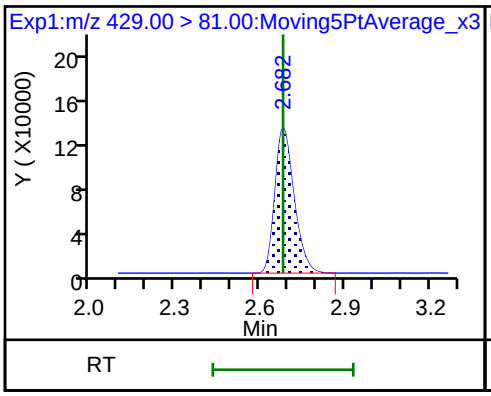
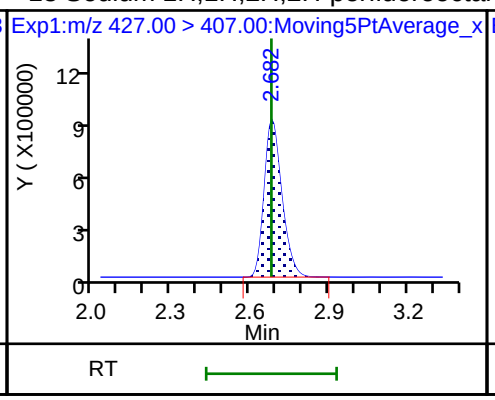


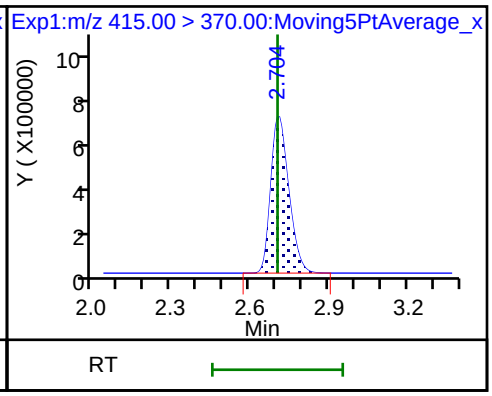
D 12 M2-6:2FTS



13 Sodium 1H,1H,2H,2H-perfluorooctane



M2 13C2-PFOA



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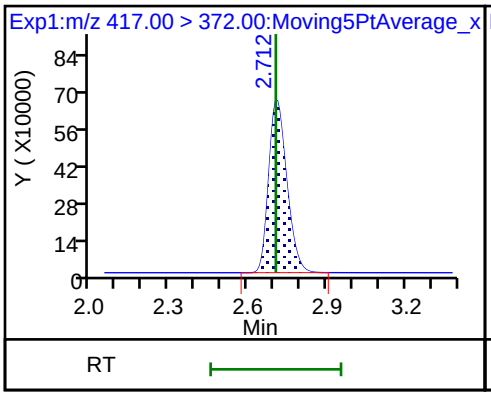
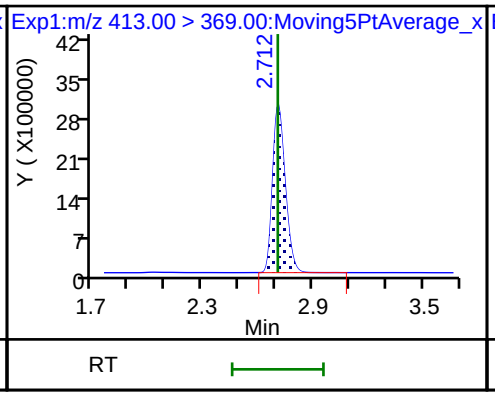
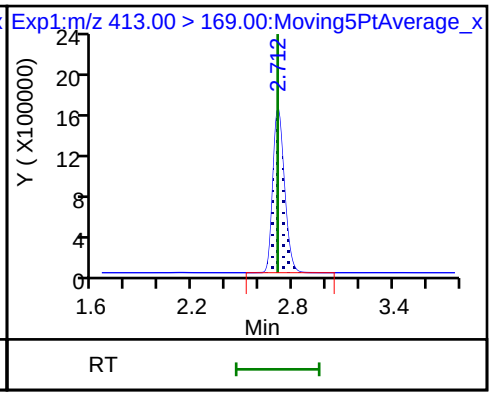


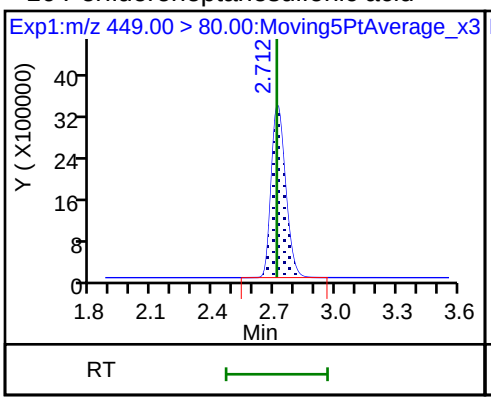
15 Perfluorooctanoic acid



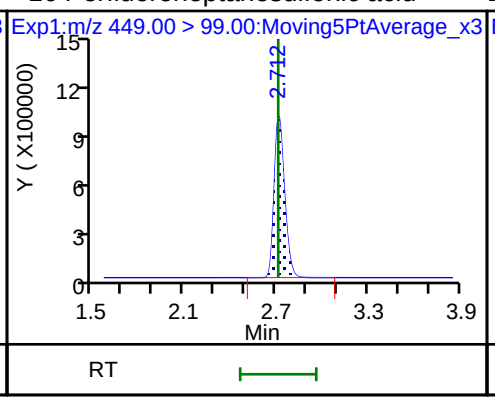
15 Perfluorooctanoic acid



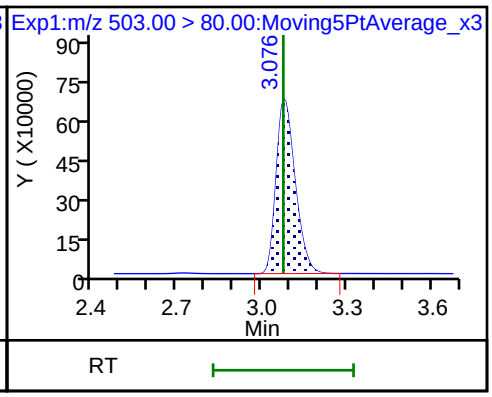
16 Perfluoroheptanesulfonic acid



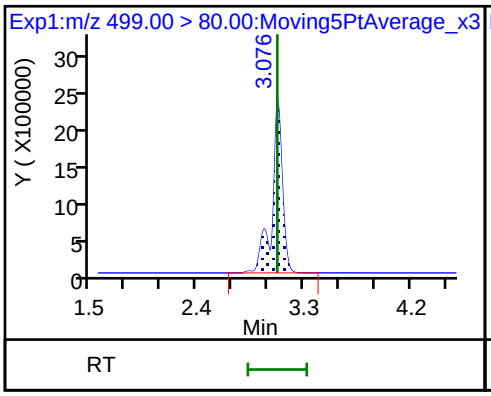
16 Perfluoroheptanesulfonic acid



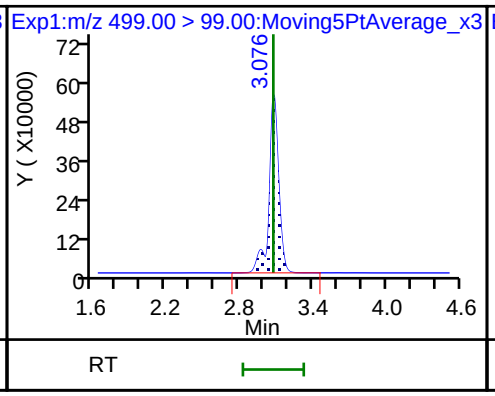
D 18 13C4 PFOS



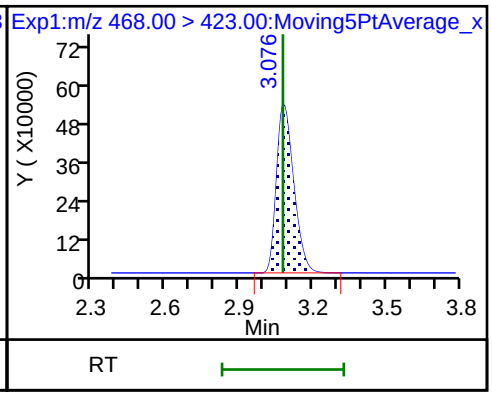
17 Perfluorooctane sulfonic acid



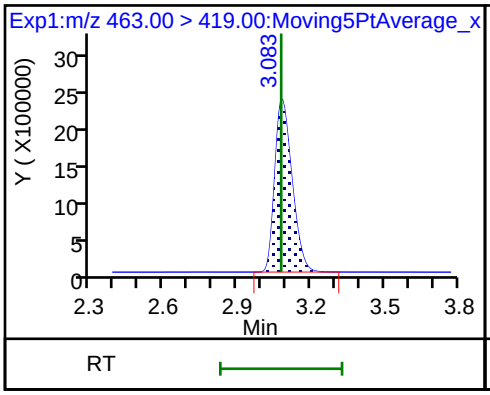
17 Perfluorooctane sulfonic acid



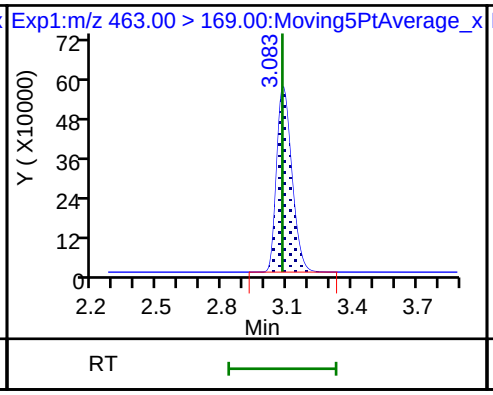
D 19 13C5 PFNA



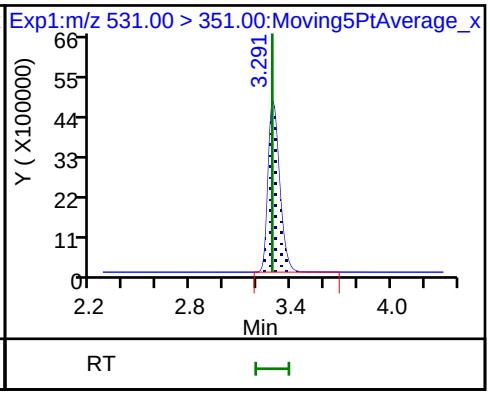
20 Perfluorononanoic acid



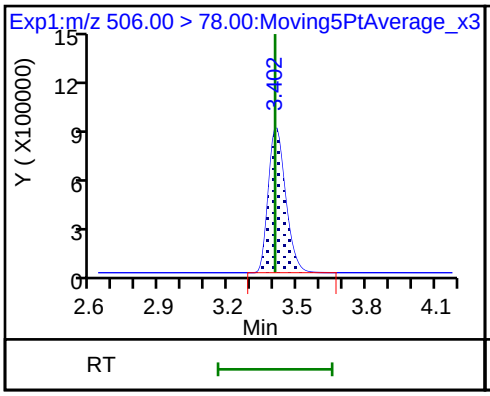
20 Perfluorononanoic acid



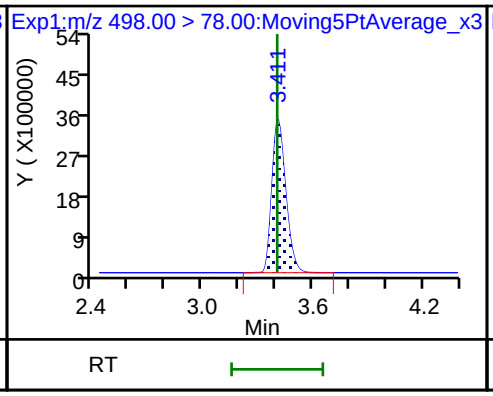
69 9-Chlorohexadecafluoro-3-oxanonane



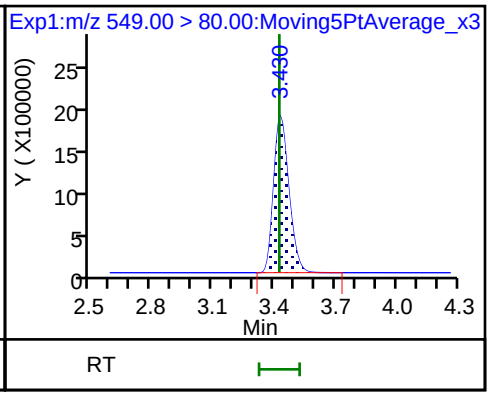
D 21 13C8 FOSA



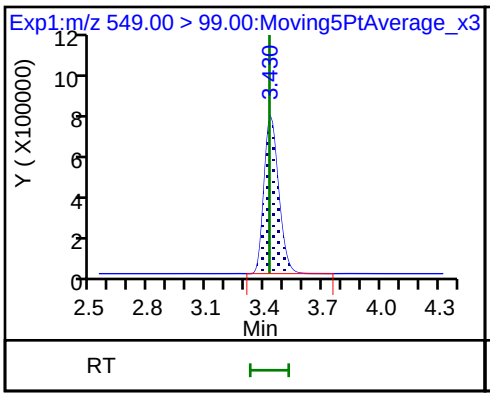
22 Perfluorooctane Sulfonamide



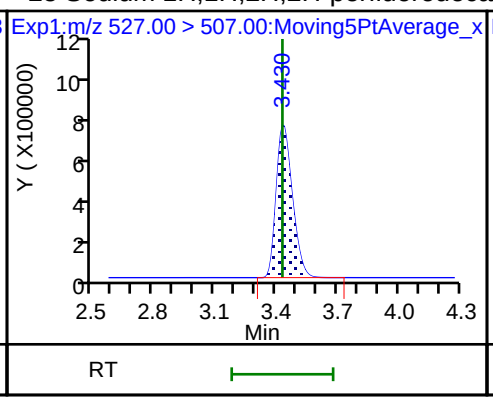
68 Perfluorononanesulfonic acid



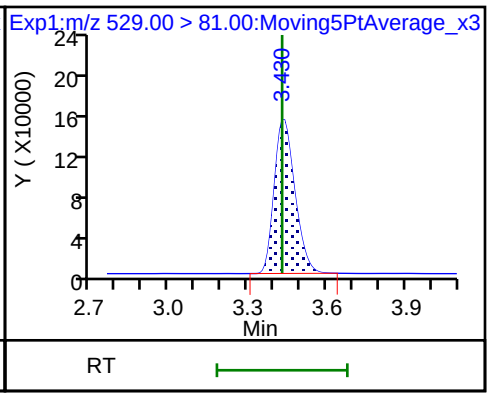
68 Perfluorononanesulfonic acid



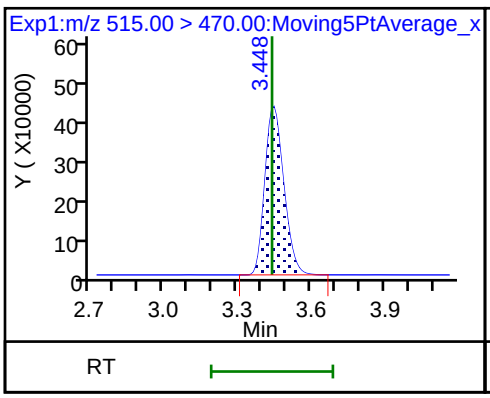
25 Sodium 1H,1H,2H,2H-perfluorodecane



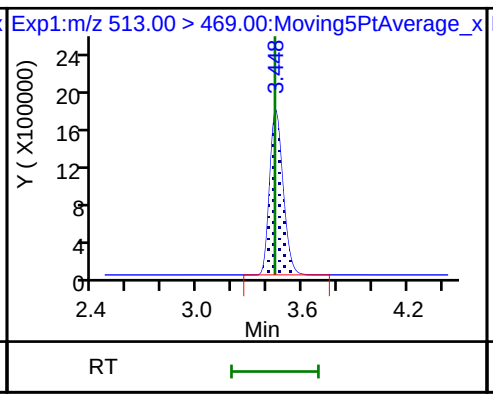
D 26 M2-8:2FTS



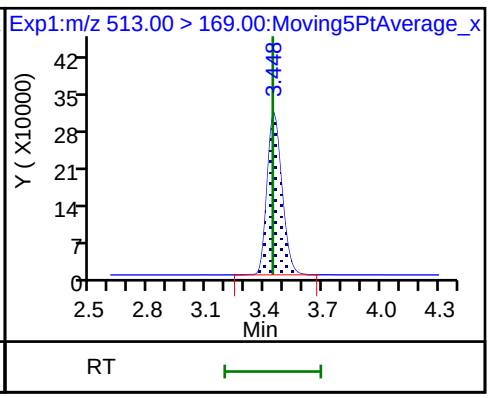
D 23 13C2 PFDA



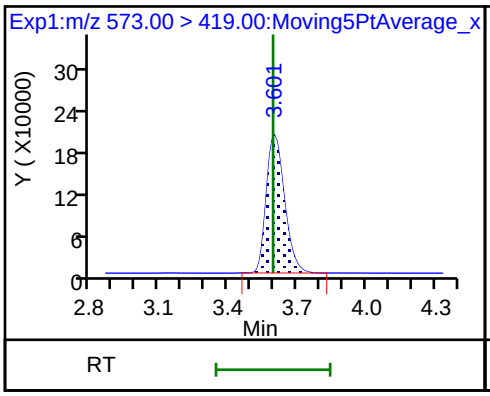
24 Perfluorodecanoic acid



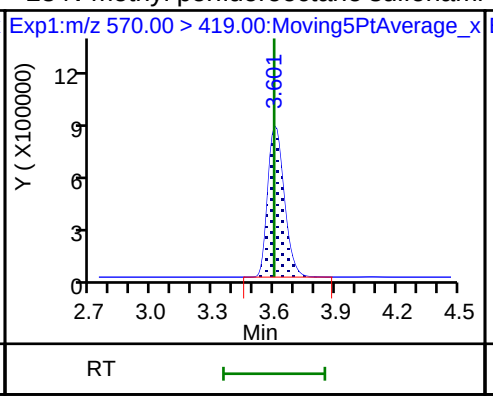
24 Perfluorodecanoic acid



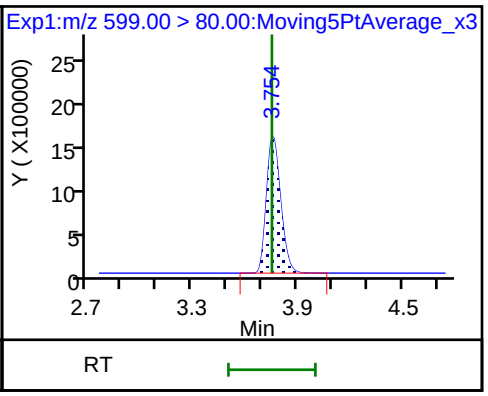
D 27 d3-NMeFOSAA



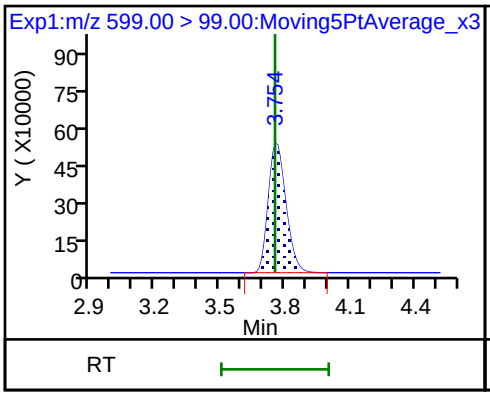
28 N-methyl perfluorooctane sulfonami



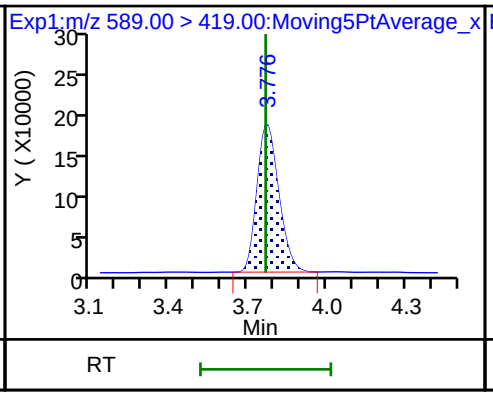
29 Perfluorodecane Sulfonic acid



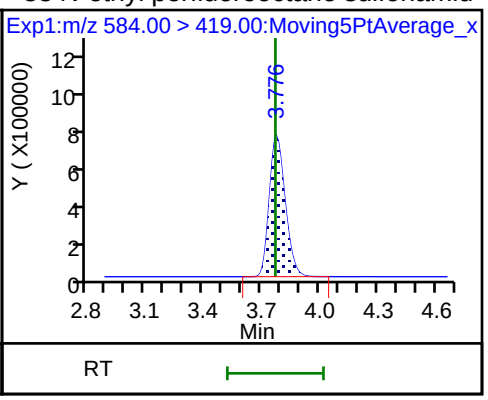
29 Perfluorodecane Sulfonic acid



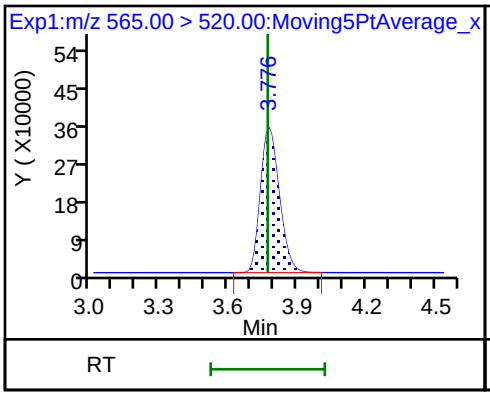
D 32 d5-NEtFOSAA



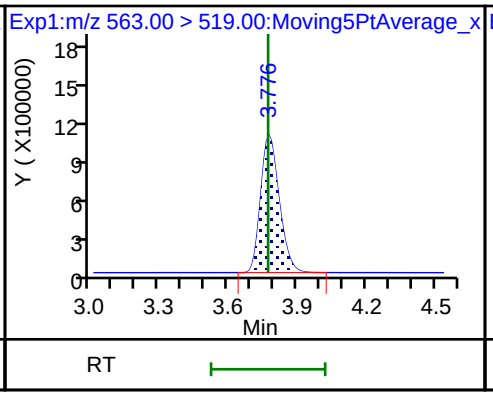
33 N-ethyl perfluorooctane sulfonamid



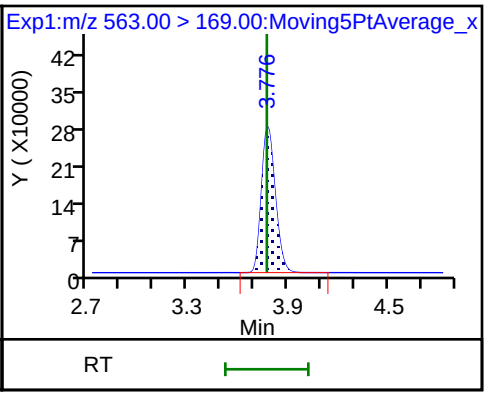
D 30 13C2 PFUnA



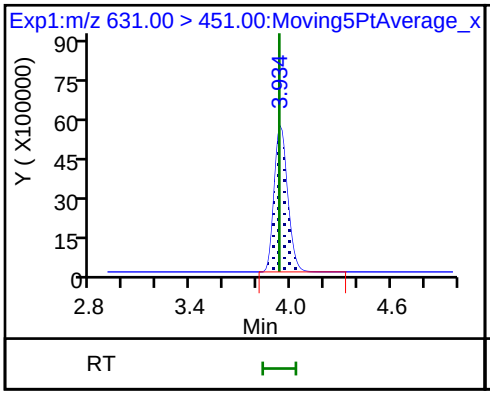
31 Perfluoroundecanoic acid



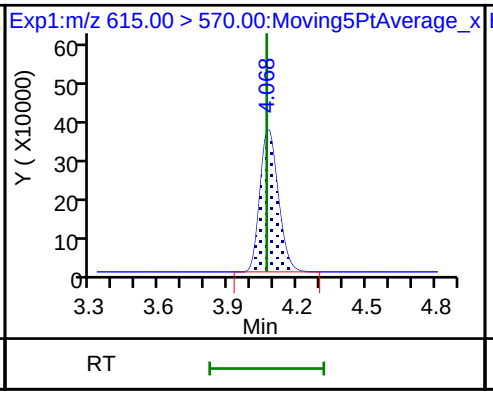
31 Perfluoroundecanoic acid



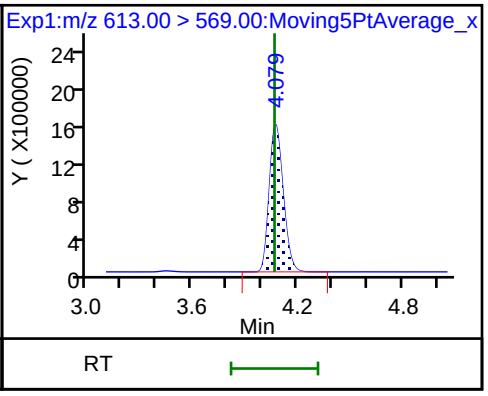
66 11-Chloroeicosafluoro-3-oxaundecan



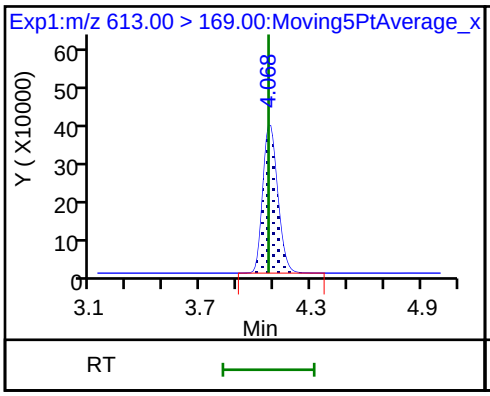
D 36 13C2 PFDoA



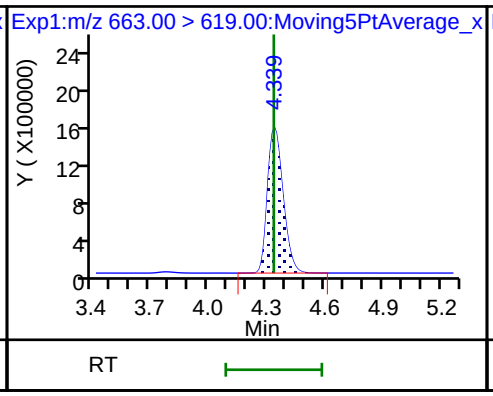
37 Perfluorododecanoic acid



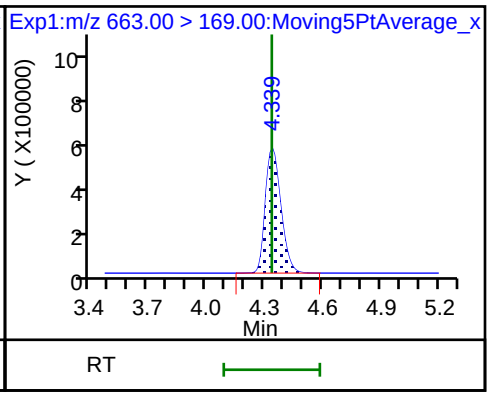
37 Perfluorododecanoic acid



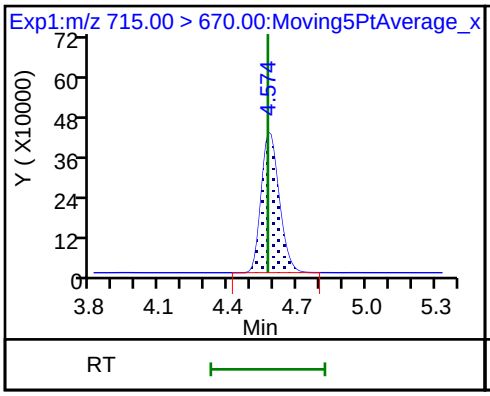
41 Perfluorotridecanoic acid



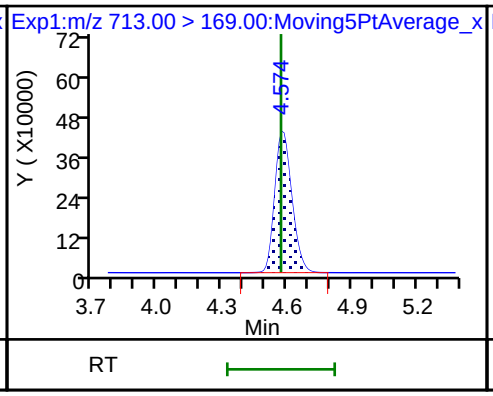
41 Perfluorotridecanoic acid



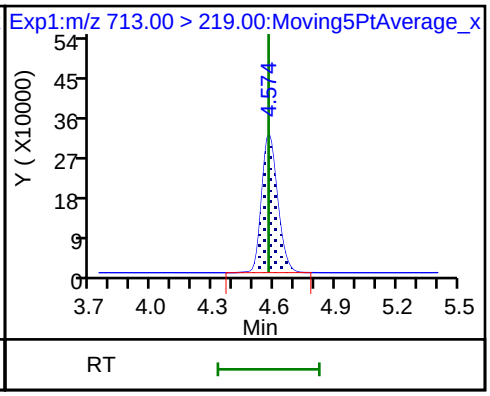
D 43 13C2-PFTeDA



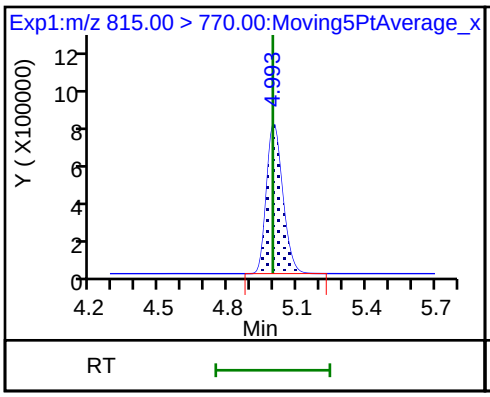
42 Perfluorotetradecanoic acid



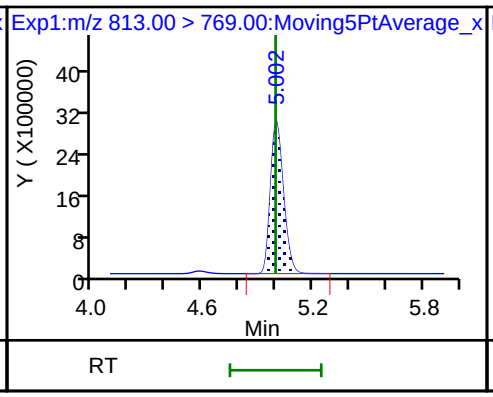
42 Perfluorotetradecanoic acid



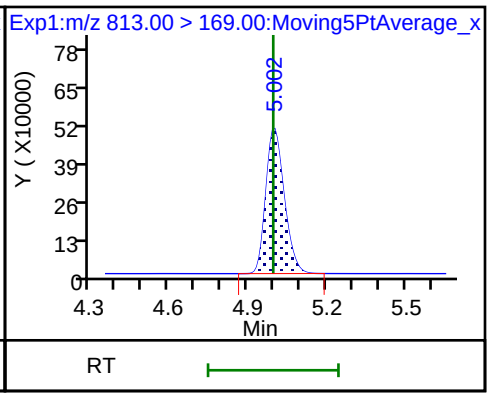
D 44 13C2-PFHxDA



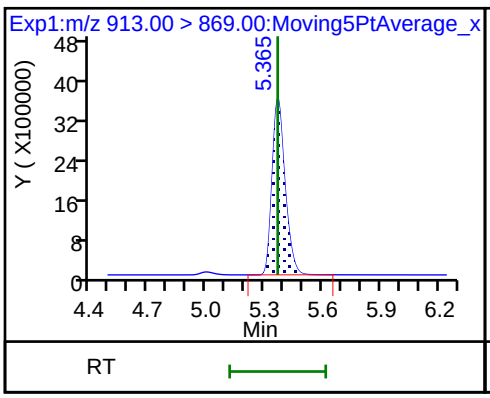
45 Perfluorohexadecanoic acid



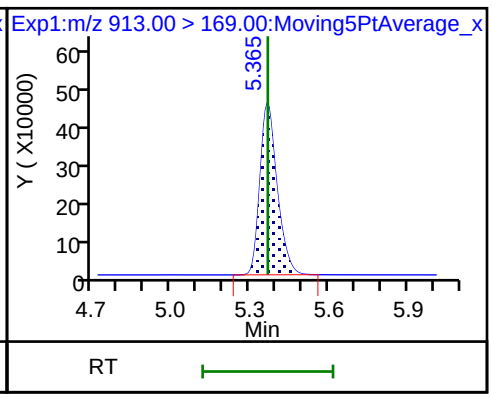
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 223088

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2018 12:00 Calibration End Date: 05/14/2018 12:47 Calibration ID: 39179

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-223088/2	2017.05.14LLC_ICAL_002.d
Level 2	IC 320-223088/3	2017.05.14LLC_ICAL_003.d
Level 3	IC 320-223088/4	2017.05.14LLC_ICAL_004.d
Level 4	IC 320-223088/5	2017.05.14LLC_ICAL_005.d
Level 5	IC 320-223088/6	2017.05.14LLC_ICAL_006.d
Level 6	IC 320-223088/7	2017.05.14LLC_ICAL_007.d
Level 7	IC 320-223088/8	2017.05.14LLC_ICAL_008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.9142 0.9685	0.9495 0.8916	0.9223	0.9064	0.9512	AveID		0.9291				3.0		35.0			
Perfluoropentanoic acid (PFPeA)	1.3321 1.2250	1.2416 1.1651	1.1616	1.1806	1.2097	AveID		1.2165				4.9		35.0			
Perfluorobutanesulfonic acid (PFBS)	75.413 79.393	77.709 72.899	76.206	76.859	81.685	AveID		77.166				3.7		50.0			
4:2 FTS	11.581 13.059	14.690 13.553	13.147	12.347	13.187	AveID		13.080				7.4		50.0			
Perfluorohexanoic acid (PFHxA)	1.0062 1.0475	1.1510 1.0553	0.9948	0.9799	1.0687	AveID		1.0434				5.6		35.0			
Perfluoropentanesulfonic acid (PFPeS)	68.948 70.178	71.090 65.564	68.927	67.183	71.075	AveID		68.995				3.0		50.0			
HFPO-DA (GenX)	3.3210 3.2875	3.4728 3.6167	3.4260	3.2719	3.2879	AveID		3.3834				3.8		35.0			
Perfluoroheptanoic acid (PFHpA)	0.9851 1.0280	1.1566 1.1186	1.0385	1.0352	1.0619	AveID		1.0606				5.5		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.2938 1.1206	1.2189 1.0967	1.0875	1.0010	1.0666	AveID		1.1264				8.8		35.0			
Adona	3.2634 3.2346	3.5088 2.6856	3.2825	3.3889	3.3911	AveID		3.2507				8.2		50.0			
6:2FTS	1.6655 1.7011	1.7416 1.7487	1.6124	1.6456	1.6678	AveID		1.6832				3.0		35.0			
Perfluorooctanoic acid (PFOA)	1.4389 1.2030	1.2111 1.1151	1.1219	1.1488	1.1726	AveID		1.2016				9.2		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.2715 1.3558	1.3471 1.2672	1.2903	1.2951	1.4095	AveID		1.3195				4.0		50.0			
Perfluorooctanesulfonic acid (PFOS)	1.2124 1.1258	1.1267 1.0951	1.0899	1.0670	1.0981	AveID		1.1164				4.2		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 223088

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2018 12:00 Calibration End Date: 05/14/2018 12:47 Calibration ID: 39179

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorononanoic acid (PFNA)	1.1085 1.0613	1.0186 1.0331	0.9931	1.0634	1.1016	AveID		1.0542				4.0		35.0			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	1.7488 1.9342	1.7020 1.7993	1.7286	1.7205	1.8595	AveID		1.7847				4.8		50.0			
Perfluorooctane Sulfonamide (FOSA)	0.9625 1.0295	0.9867 0.9806	1.0139	0.9316	0.9939	AveID		0.9855				3.3		35.0			
Perfluorononanesulfonic acid (PFNS)	0.6740 0.8224	0.7219 0.7956	0.7655	0.7714	0.8042	AveID		0.7650				6.7		50.0			
8:2FTS	1.2203 1.2902	1.4201 1.3489	1.3215	1.2873	1.2179	AveID		1.3009				5.5		35.0			
Perfluorodecanoic acid (PFDA)	0.9649 1.0034	1.1117 1.0338	1.0521	0.9858	1.0115	AveID		1.0233				4.7		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.1222 1.0515	1.0110 1.0402	1.0294	1.0107	1.0514	AveID		1.0452				3.6		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.6354 0.6974	0.6613 0.6833	0.6411	0.6426	0.6685	AveID		0.6614				3.5		50.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.9556 0.9356	0.8620 0.9956	0.9381	0.9301	0.9777	AveID		0.9421				4.5		35.0			
Perfluoroundecanoic acid (PFUnA)	0.8295 0.8086	0.7138 0.8006	0.8051	0.7141	0.7905	AveID		0.7803				6.0		35.0			
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	2.6287 2.8985	2.6470 2.6390	2.6785	2.7787	2.8368	AveID		2.7296				4.0		50.0			
Perfluorododecanoic acid (PFDoA)	0.8914 1.0598	1.0731 1.0836	1.0876	1.0437	1.0357	AveID		1.0393				6.5		35.0			
Perfluorotridecanoic Acid (PFTriA)	1.0230 1.0637	1.1697 1.1335	1.0711	1.0315	1.0645	AveID		1.0796				4.9		50.0			
Perfluorotetradecanoic acid (PFTeA)	0.2717 0.2438	0.2957 0.2601	0.2349	0.2474	0.2585	AveID		0.2589				7.8		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.8545 0.9494	1.3602 +++++	0.9514	0.9324	0.9847	L2ID	0.0229	0.9213							0.9980		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	1.0671 1.0240	0.9017 +++++	1.1015	1.0759	1.1672	AveID		1.0562				8.4		50.0			
13C4 PFBA	1.5932 1.6229	1.6609 1.6811	1.5973	1.5786	1.5924	Ave		1.6181				2.4		50.0			
13C5 PFPeA	1.0093 1.0085	1.0239 1.0107	0.9856	0.9812	0.9951	Ave		1.0020				1.5		50.0			
13C3-PFBS	0.0233 0.0238	0.0241 0.0241	0.0235	0.0232	0.0234	Ave		0.0236				1.6		50.0			
M2-4:2FTS	0.1301 0.1290	0.1267 0.1309	0.1393	0.1380	0.1311	Ave		0.1322				3.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 223088

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2018 12:00 Calibration End Date: 05/14/2018 12:47 Calibration ID: 39179

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2 PFHxA	1.0588 1.0527	1.0564 1.0507	1.0326	1.0703	1.0148	Ave		1.0480				1.8		50.0			
13C3 HFPO-DA	0.0592 0.0559	0.0499 0.0527	0.0497	0.0518	0.0546	Ave		0.0534				6.4		50.0			
13C4-PFHpA	0.9908 1.0243	1.0082 0.9857	1.0108	1.0154	1.0000	Ave		1.0050				1.4		50.0			
18O2 PFHxS	1.4102 1.3255	1.3222 1.3270	1.3152	1.3306	1.3194	Ave		1.3357				2.5		50.0			
M2-6:2FTS	0.2082 0.2000	0.2044 0.1916	0.1941	0.1877	0.1992	Ave		0.1979				3.7		50.0			
13C4 PFOA	0.9596 0.9399	0.9304 0.9421	0.9297	0.9315	0.9636	Ave		0.9424				1.5		50.0			
13C4 PFOS	0.9199 0.9461	0.9190 0.9959	0.9153	0.9113	0.9141	Ave		0.9317				3.3		50.0			
13C5 PFNA	0.8147 0.7865	0.7764 0.8108	0.7958	0.7560	0.7730	Ave		0.7876				2.7		50.0			
13C8 FOSA	1.3484 1.3634	1.2526 1.3610	1.3399	1.3831	1.3921	Ave		1.3486				3.4		50.0			
M2-8:2FTS	0.2823 0.2564	0.2615 0.2364	0.2633	0.2522	0.2573	Ave		0.2585				5.3		50.0			
13C2 PFDA	0.6893 0.6908	0.6471 0.6688	0.6529	0.6957	0.6993	Ave		0.6777				3.1		50.0			
d3-NMeFOSAA	0.3050 0.3210	0.2786 0.3337	0.2936	0.3088	0.3102	Ave		0.3073				5.8		50.0			
d5-NEtFOSAA	0.3298 0.3260	0.3271 0.3245	0.3330	0.3365	0.3188	Ave		0.3280				1.8		50.0			
13C2 PFUnA	0.5498 0.5536	0.6037 0.5420	0.5435	0.5912	0.5869	Ave		0.5672				4.5		50.0			
13C2 PFDoA	0.5707 0.6321	0.5259 0.6307	0.5952	0.5920	0.5993	Ave		0.5923				6.2		50.0			
13C2-PFTeDA	0.6525 0.6889	0.5129 0.6790	0.6610	0.6563	0.6701	Ave		0.6458				9.3		50.0			
13C2-PFHxDA	1.0798 1.1126	0.7182 +++++	1.0543	1.0664	1.1238	Ave		1.0259				14.9		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 223088

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2018 12:00 Calibration End Date: 05/14/2018 12:47 Calibration ID: 39179

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-223088/2	2017.05.14LLC_ICAL_002.d
Level 2	IC 320-223088/3	2017.05.14LLC_ICAL_003.d
Level 3	IC 320-223088/4	2017.05.14LLC_ICAL_004.d
Level 4	IC 320-223088/5	2017.05.14LLC_ICAL_005.d
Level 5	IC 320-223088/6	2017.05.14LLC_ICAL_006.d
Level 6	IC 320-223088/7	2017.05.14LLC_ICAL_007.d
Level 7	IC 320-223088/8	2017.05.14LLC_ICAL_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	58322 10414401	134564 21566220	569261	2071376	5273588	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	53840 8185544	108472 16944518	442377	1676943	4190548	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	62324 11060184	141478 22357468	612310	2281825	5879567	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	10112 1922082	28257 4391668	111606	387309	1002859	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	42661 7306347	103753 15954728	396926	1518266	3775793	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	60462 10373553	137334 21336462	587653	2116381	5428394	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	7870 1218677	14773 2741380	65756	245512	624994	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	39084 6977163	99493 15864978	405605	1521709	3697073	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	66486 8956107	125140 19055175	502899	1754740	4458316	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
Adona		AveID	120209 20276502	275135 38483503	1160920	4470970	10792257	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
6:2FTS		AveID	13164 2137273	28801 4570287	114655	423940	1096375	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	55290 7491992	96147 15116195	403005	1549227	3933620	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	44590 8091235	100557 17287326	434448	1626577	4270345	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorooctanesulfonic acid (PFOS)		AveID	41443 6549180	81988 14563066	357711	1306372	3243255	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32
Perfluorononanoic acid (PFNA)		AveID	36163 5530127	67481 12051683	305357	1163767	2964592	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 223088

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2018 12:00 Calibration End Date: 05/14/2018 12:47 Calibration ID: 39179

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate		AveID	60039 11300495	124383 24030498	569787	2115460	5515643	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorooctane Sulfonamide (FOSA)		AveID	51971 9300601	105458 19202731	524931	1865357	4816751	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorononanesulfonic acid (PFNS)		AveID	23835 4949042	54343 10944033	259892	977019	2457126	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
8:2FTS		AveID	13214 2100194	30357 4395841	128807	450292	1045308	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorodecanoic acid (PFDA)		AveID	26634 4592855	61378 9948433	265423	992920	2462678	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	13707 2236016	24033 4994588	116759	451876	1135517	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	22563 4214420	49989 9438993	218566	817249	2050890	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	12620 2021013	24060 4649233	120689	453043	1085138	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroundecanoic acid (PFUnA)		AveID	18263 2965899	36766 6243788	169069	611203	1615342	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate		AveID	91213 17115639	195522 35623175	892363	3453356	8504584	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)		AveID	20369 4438887	48153 9833284	250154	894472	2160760	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotridecanoic Acid (PFTriA)		AveID	23378 4454944	52484 10285991	246341	884077	2220848	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	7099 1113000	12942 2541387	60003	235033	603027	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	80190 6998779	83351 +++++	387570	1439481	3852629	0.0250 5.00	0.0500 +++++	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	46141 7548537	55252 +++++	448710	1661034	4566671	0.0250 5.00	0.0500 +++++	0.250	1.00	2.50
13C4 PFBA	13PFOA	Ave	6379695 5376359	7085993 6047384	6172050	5713364	5543986	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PFOA	Ave	4041611 3341128	4368149 3635861	3808182	3551180	3464250	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3-PFBS	13PFOA	Ave	86944 73279	95768 80663	84530	78083	75724	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2FTS	13PFOA	Ave	486533 399182	504821 439826	502759	466637	426248	2.34 2.34	2.34 2.34	2.34	2.34	2.34
13C2 PFHxA	13PFOA	Ave	4239745 3487538	4506960 3779518	3990009	3873685	3532915	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PFOA	Ave	236979 185352	212698 189493	191935	187593	190092	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1 Analy Batch No.: 223088

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2018 12:00 Calibration End Date: 05/14/2018 12:47 Calibration ID: 39179

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C4-PFHpA	13PF OA	Ave	3967633 3393426	4301095 3545625	3905674	3674862	3481553	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	5342210 4154188	5336299 4515708	4807399	4555738	4345424	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2FTS	13PF OA	Ave	792077 629537	828606 654764	712600	645390	658753	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C4 PFOA	13PF OA	Ave	3842544 3113827	3969543 3388900	3592269	3371392	3354656	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFOS	13PF OA	Ave	3521499 2996416	3748172 3424799	3381116	3153131	3042504	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	3262279 2605474	3312395 2916505	3074823	2735969	2691188	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	5399530 4516916	5343956 4895761	5177368	5005614	4846483	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2FTS	13PF OA	Ave	1082842 813883	1068803 814733	974706	874513	858260	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	2760338 2288551	2760570 2405855	2522810	2517968	2434658	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	1221466 1063280	1188614 1200409	1134265	1117731	1080001	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	1320679 1080097	1395625 1167426	1286529	1217760	1109882	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	2201744 1833922	2575360 1949648	2099934	2139648	2043367	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	2285134 2094139	2243539 2268618	2299967	2142652	2086265	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFTeDA	13PF OA	Ave	2613048 2282194	2188153 2442470	2554041	2375414	2332891	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFHxDA	13PF OA	Ave	4324013 3685972	3063933 +++++	4073708	3859526	3912531	2.50 2.50	2.50 +++++	2.50	2.50	2.50

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_002.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-May-2018 12:00:38 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L1-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 13:21:06 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 12:55:55

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.459	-0.001	1.000	6379695	2.46		98.5	43104	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.459	-0.001	1.000	58322	0.0246		98.4	24.3	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.730	1.732	-0.002	1.000	53840	0.0274		110	23.8	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.732	-0.002	0.561	4041611	2.52		101	59750	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.767	-0.001	1.000	86944	2.30		98.8	639	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.768	-0.002	1.000	62324	0.0216		97.7	337	
298.90 > 99.00	1.766	1.768	-0.002	1.000	27278		2.28(1.25-3.74)	97.7	146	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.985	-0.003	1.000	486533	2.30		98.4	6656	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.985	-0.003	1.000	10112	0.0207		88.5	601	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.022	-0.006	1.000	4239745	2.53		101	93768	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.027	2.023	0.004	1.006	42661	0.0241		96.4	53.2	
313.00 > 119.00	2.016	2.023	-0.007	1.000	3686		11.57(5.03-15.10)	96.4	38.5	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.039	2.043	-0.004	1.000	60462	0.0234		99.9	961	
349.00 > 99.00	2.039	2.043	-0.004	1.000	20872		2.90(1.36-4.07)	99.9	224	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.129	2.124	0.005	1.000	236979	2.77		111	8314	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.129	2.126	0.003	1.000	7870	0.0245		98.2	59.0	
D 9 13C4-PFHpA										
367.00 > 322.00	2.360	2.357	0.003	1.000	3967633	2.46		98.6	72375	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.360	2.358	0.002	1.000	39084	0.0232		92.9	55.9	
363.00 > 169.00	2.360	2.358	0.002	1.000	17249		2.27(1.13-3.40)	92.9	88.3	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.372	2.369	0.003	1.000	66486	0.0261		115	469	
399.00 > 99.00	2.372	2.369	0.003	1.000	22572		2.95(1.50-4.49)	115	87.5	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.373	-0.001	1.000	5342210	2.50		106	59910	
65 Adona										
377.00 > 251.00	2.396	2.400	-0.004	1.000	120209	0.0251		100	1892	
377.00 > 85.00	2.396	2.400	-0.004	1.000	71275		1.69(0.84-2.53)	100	511	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.689	-0.006	0.997	13164	0.0234		98.9	100	
D 12 M2-6:2FTS										
429.00 > 81.00	2.690	2.690	0.0	1.000	792077	2.50		105	20856	
D 14 13C4 PFOA										
417.00 > 372.00	2.713	2.714	-0.001	1.000	3842544	2.55		102	68647	
* 62 13C2-PFOA										
415.00 > 370.00	2.713	2.714	-0.001		4004408	2.50			49707	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.717	-0.004	1.000	55290	0.0299		120	26.7	
413.00 > 169.00	2.713	2.717	-0.004	1.000	29838		1.85(0.84-2.52)	120	102	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.720	2.722	-0.002	1.000	44590	0.0229		96.4	948	
449.00 > 99.00	2.720	2.722	-0.002	1.000	13126		3.40(1.94-5.82)	96.4	148	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.085	3.086	-0.001	1.000	41443	0.0252		109	312	
499.00 > 99.00	3.077	3.086	-0.009	0.997	8541		4.85(2.31-6.93)	109	63.1	M
D 18 13C4 PFOS										
503.00 > 80.00	3.085	3.087	-0.002	1.000	3521499	2.36		98.7	38054	
D 19 13C5 PFNA										
468.00 > 423.00	3.085	3.089	-0.004	1.000	3262279	2.59		103	53039	
20 Perfluorononanoic acid										
463.00 > 419.00	3.085	3.089	-0.004	1.000	36163	0.0263		105	68.1	
463.00 > 169.00	3.085	3.089	-0.004	1.000	7861		4.60(1.90-5.69)	105	180	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.293	3.299	-0.006	1.000	60039	0.0228		98.0	569	
D 21 13C8 FOSA										
506.00 > 78.00	3.414	3.413	0.001	1.000	5399530	2.50		100.0	47342	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.414	3.415	-0.001	1.000	51971	0.0244		97.7	847	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.433	3.438	-0.005	1.000	23835	0.0211		88.1	602	
549.00 > 99.00	3.433	3.438	-0.005	1.000	9140		2.61(1.33-3.97)	88.1	108	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.442	3.442	0.0	1.000	13214	0.0225		93.8	333	
D 26 M2-8:2FTS										
529.00 > 81.00	3.442	3.442	0.0	1.000	1082842	2.62		109	13911	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.451	3.452	-0.001	1.000	26634	0.0236		94.3	158	
513.00 > 169.00	3.442	3.452	-0.010	0.997	5036		5.29(2.36-7.09)	94.3	105	
D 23 13C2 PFDA										
515.00 > 470.00	3.451	3.453	-0.002	1.000	2760338	2.54		102	43990	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.605	3.608	-0.003	1.000	1221466	2.48		99.3	27457	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.615	3.613	0.002	1.003	13707	0.0268		107	125	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.769	3.768	0.001	1.000	22563	0.0232		96.1	306	
599.00 > 99.00	3.769	3.768	0.001	1.000	7429		3.04(1.39-4.16)	96.1	149	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.779	3.778	0.001	1.000	1320679	2.51		101	3833	
D 30 13C2 PFUnA										
565.00 > 520.00	3.779	3.785	-0.006	1.000	2201744	2.42		96.9	36324	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.779	3.785	-0.006	1.000	12620	0.0254		101	274	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.790	3.787	0.003	1.003	18263	0.0266		106	62.9	
563.00 > 169.00	3.790	3.787	0.003	1.003	7178		2.54(2.12-6.36)	106	254	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.936	3.943	-0.007	1.000	91213	0.0227		96.3	2700	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.071	4.079	-0.008	0.997	20369	0.0214		85.8	13.1	
613.00 > 169.00	4.071	4.079	-0.008	0.997	5486		3.71(2.13-6.40)	85.8	107	
D 36 13C2 PFDoA										
615.00 > 570.00	4.081	4.080	0.001	1.000	2285134	2.41		96.4	18184	
41 Perfluorotridecanoic acid										R
663.00 > 619.00	4.340	4.346	-0.006	1.000	23378	0.0237		94.8	8.8	R
663.00 > 169.00	4.340	4.346	-0.006	1.000	6198		3.77(1.25-3.76)	94.8	74.7	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.582	4.588	-0.006	1.000	7099	0.0262		105	93.4	
713.00 > 219.00	4.572	4.588	-0.016	0.998	4603		1.54(0.71-2.13)	105	110	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.582	4.588	-0.006	1.000	2613048	2.53		101	18003	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.000	5.006	-0.006	1.000	4324013	2.63		105	11969	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.009	5.008	0.001	1.002	80190	0.0254		102	15.8	
813.00 > 169.00	5.009	5.008	0.001	1.002	14714		5.45(2.86-8.58)	102	156	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.374	5.378	-0.004	1.000	46141	0.0253		101	7.9	
913.00 > 169.00	5.374	5.378	-0.004	1.000	5887		7.84(3.83-11.48)	101	83.5	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00005 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 13:21:08 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_002.d

Injection Date: 14-May-2018 12:00:38 Instrument ID: A8_N

Lims ID: IC L1 Full

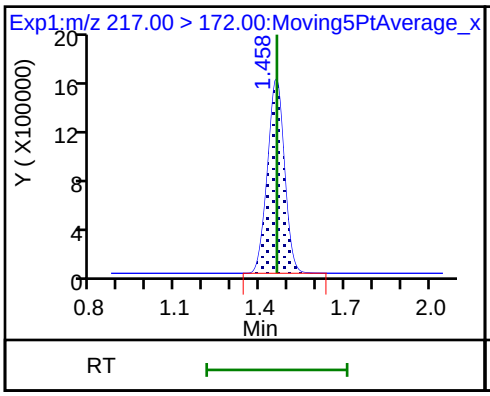
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2

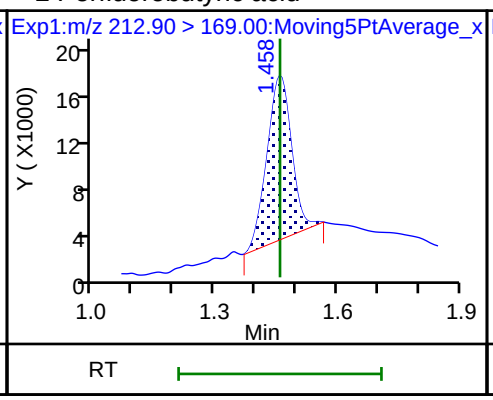
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

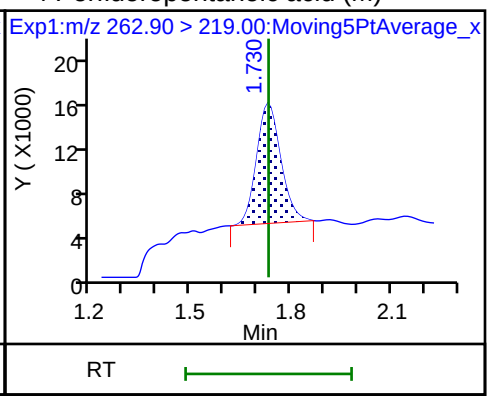
D 1 13C4 PFBA



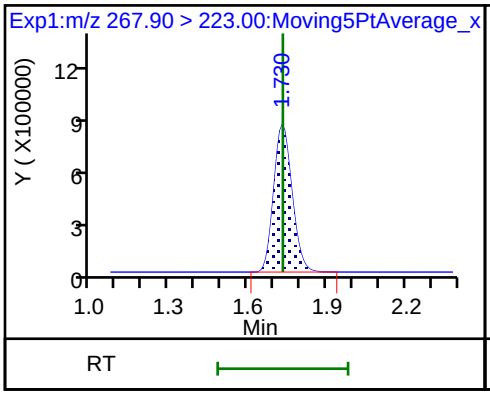
2 Perfluorobutyric acid



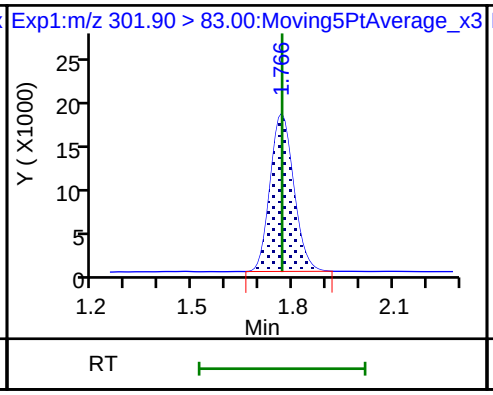
4 Perfluoropentanoic acid (M)



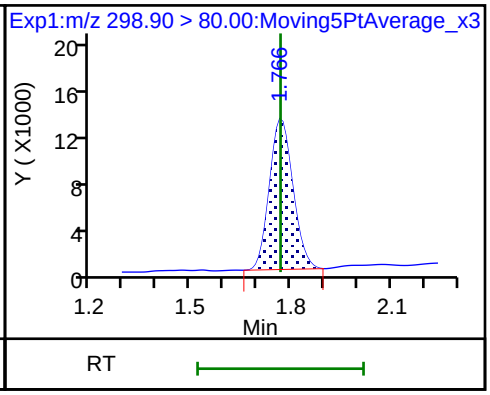
D 3 13C5-PFPeA



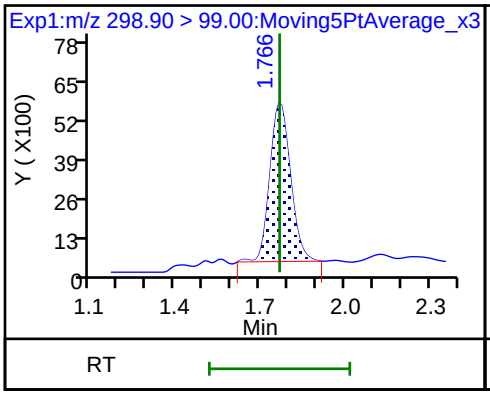
D 47 13C3-PFBS



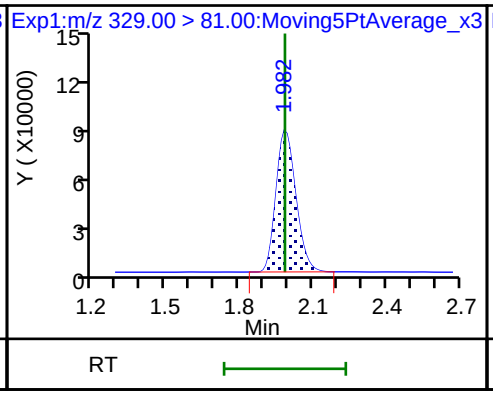
5 Perfluorobutanesulfonic acid



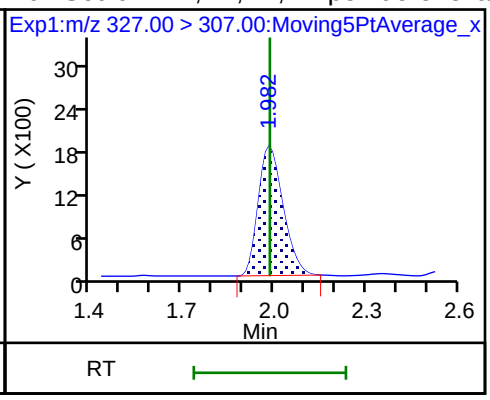
5 Perfluorobutanesulfonic acid



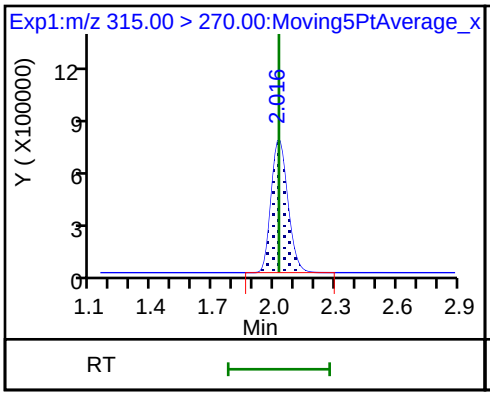
D 60 M2-4:2FTS



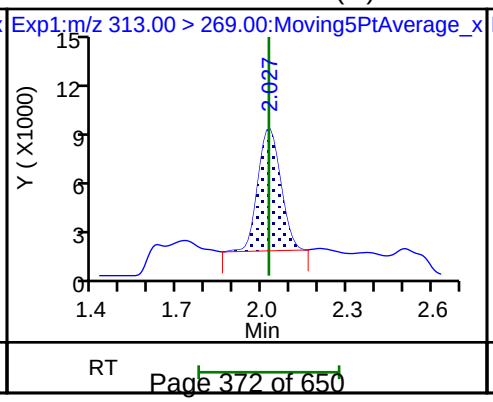
61 Sodium 1H,1H,2H,2H-perfluorohexane



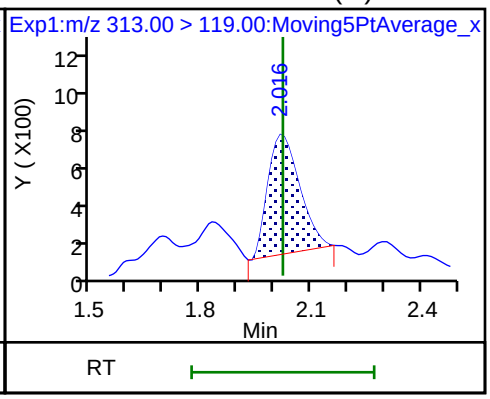
D 7 13C2 PFHxA



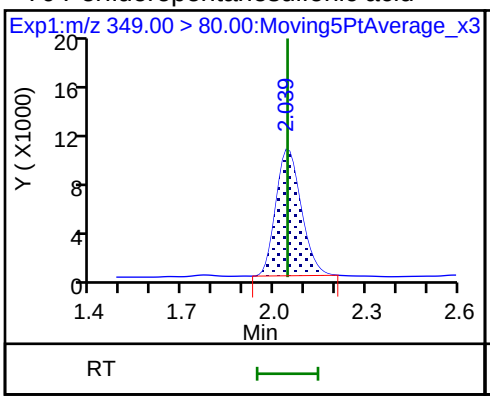
6 Perfluorohexanoic acid (M)



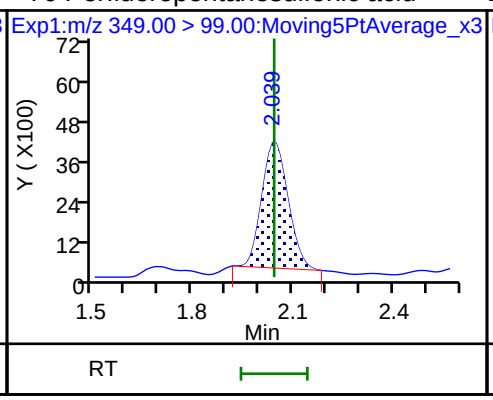
6 Perfluorohexanoic acid (M)



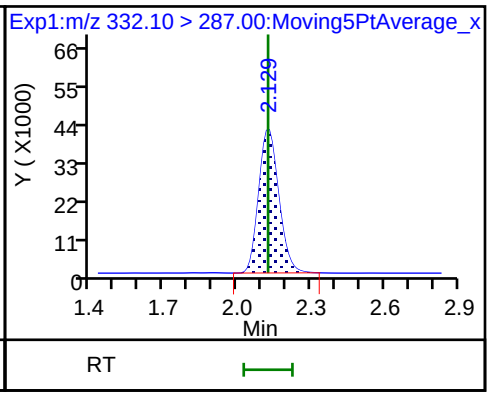
70 Perfluoropentanesulfonic acid



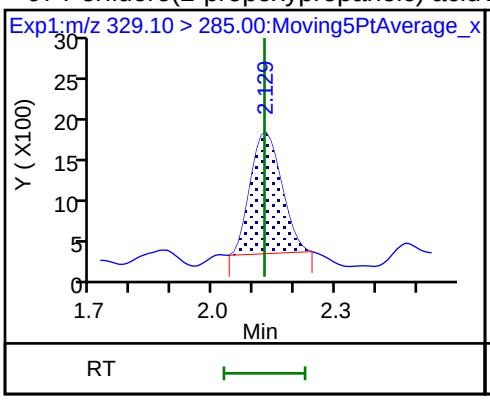
70 Perfluoropentanesulfonic acid



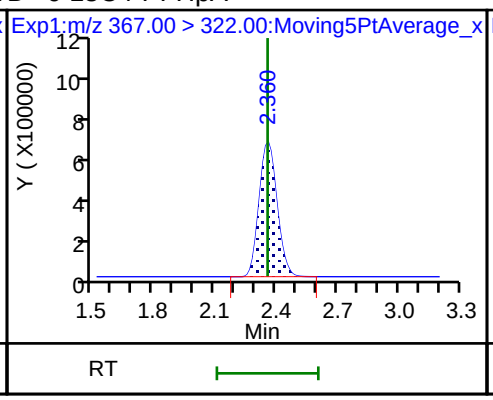
D 64 13C3 HFPO-DA



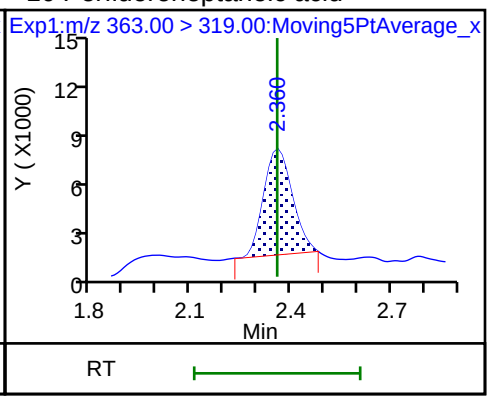
67 Perfluoro(2-propoxypropanoic) acid



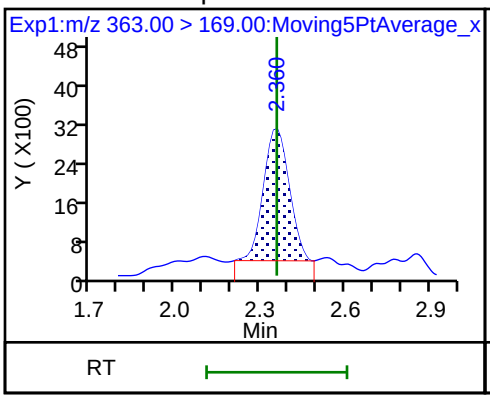
D 9 13C4-PFHpA



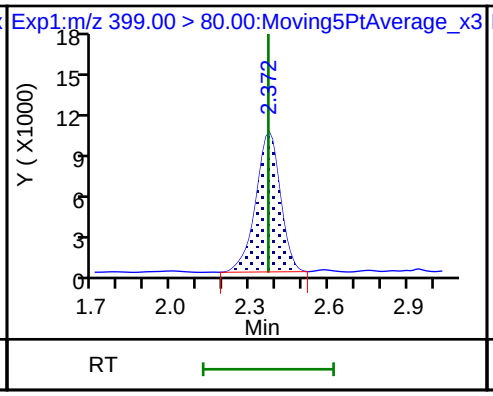
10 Perfluoroheptanoic acid



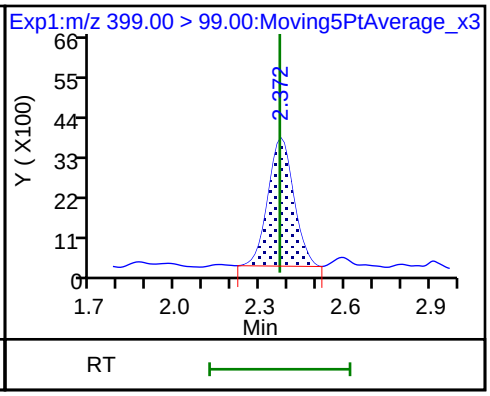
10 Perfluoroheptanoic acid



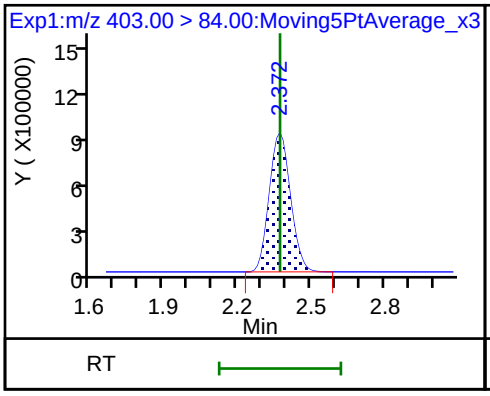
8 Perfluorohexanesulfonic acid



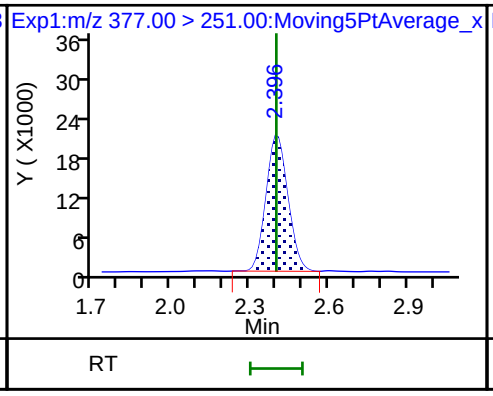
8 Perfluorohexanesulfonic acid



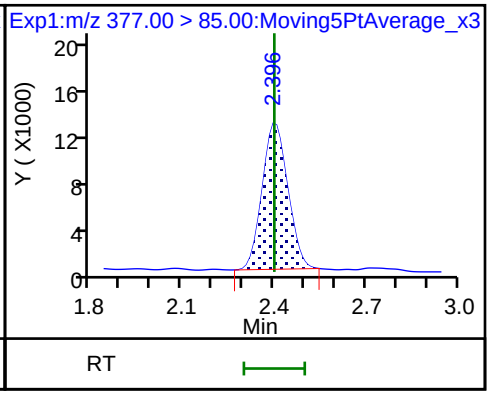
D 11 18O2 PFHxS



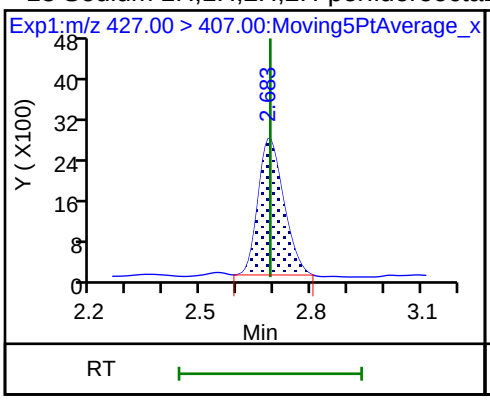
65 Adona



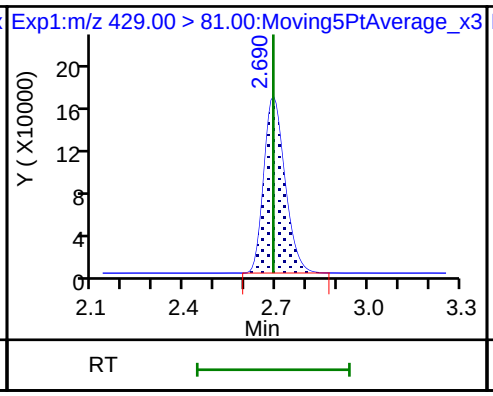
65 Adona



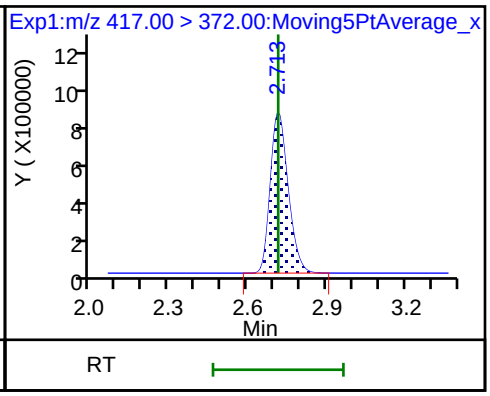
13 Sodium 1H,1H,2H,2H-perfluorooctane



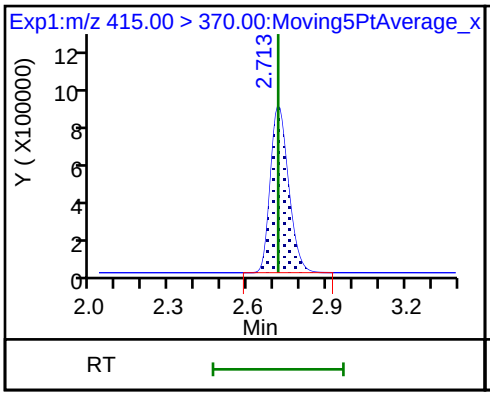
D 12 M2-6:2FTS



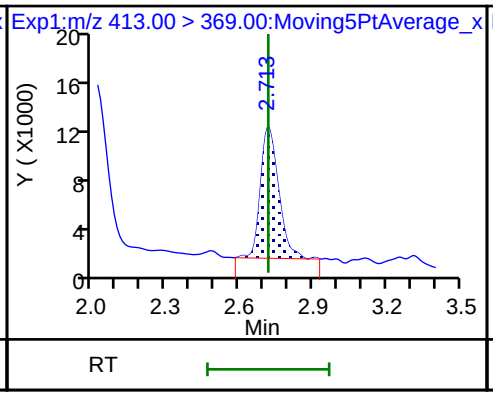
D 14 13C4 PFOA



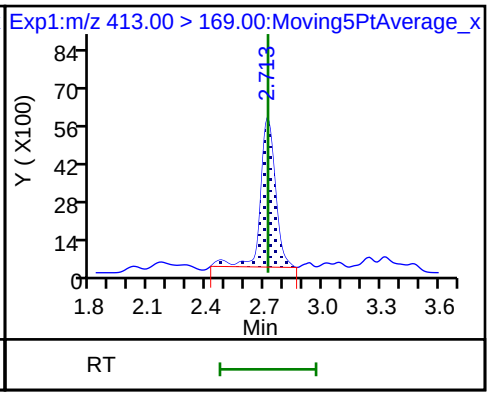
* 62 13C2-PFOA



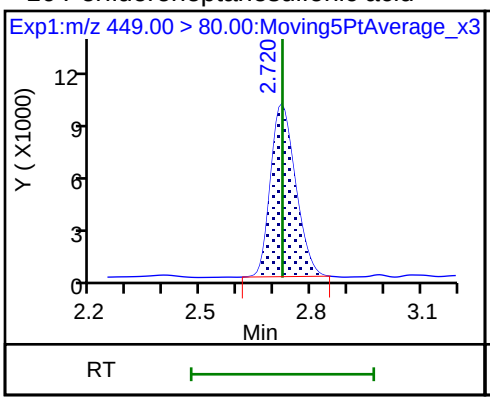
15 Perfluorooctanoic acid



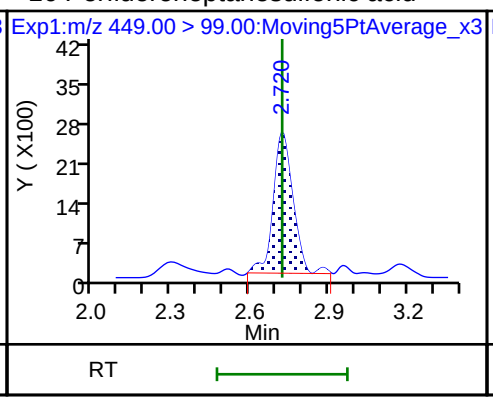
15 Perfluorooctanoic acid



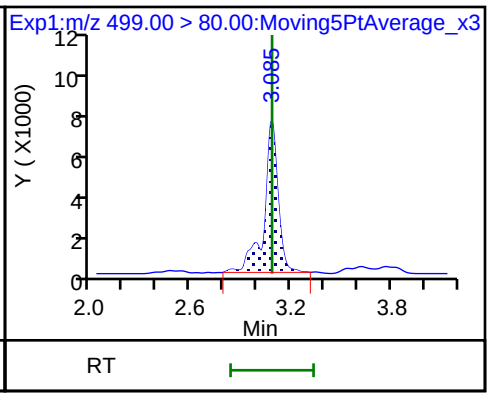
16 Perfluoroheptanesulfonic acid



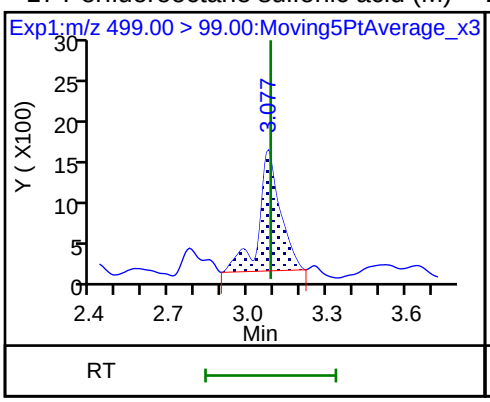
16 Perfluoroheptanesulfonic acid



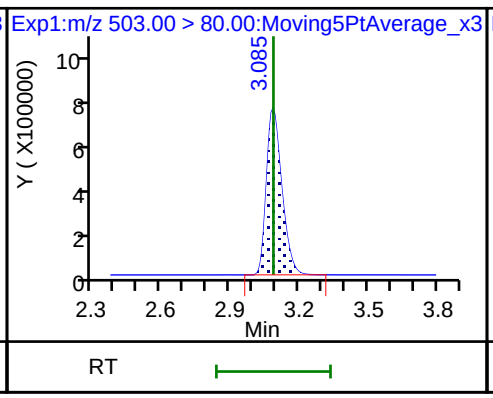
17 Perfluorooctane sulfonic acid



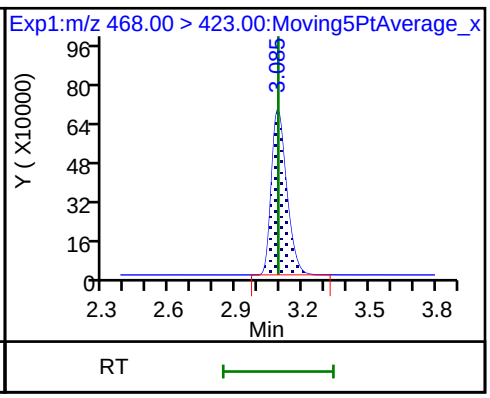
17 Perfluorooctane sulfonic acid (M)



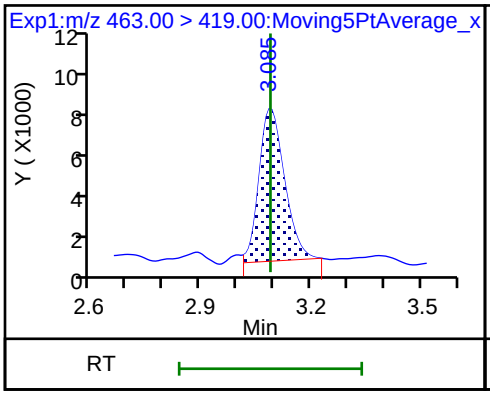
D 18 13C4 PFOS



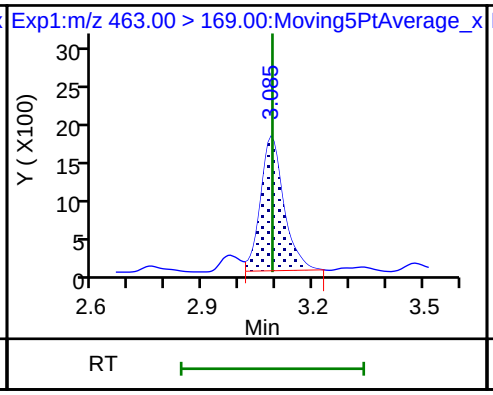
D 19 13C5 PFNA



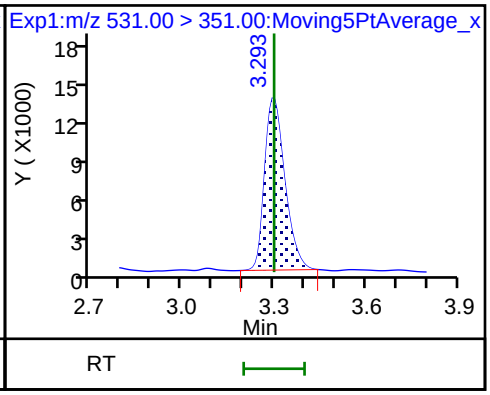
20 Perfluorononanoic acid



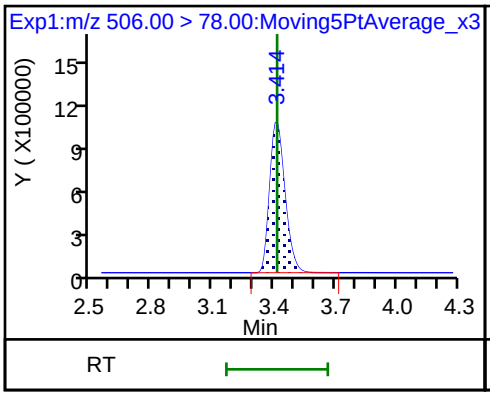
20 Perfluorononanoic acid



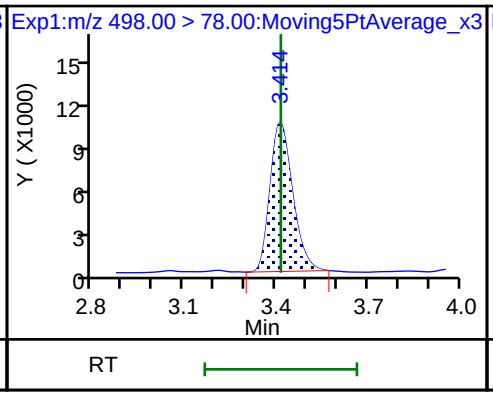
69 9-Chlorohexadecafluoro-3-oxanonane



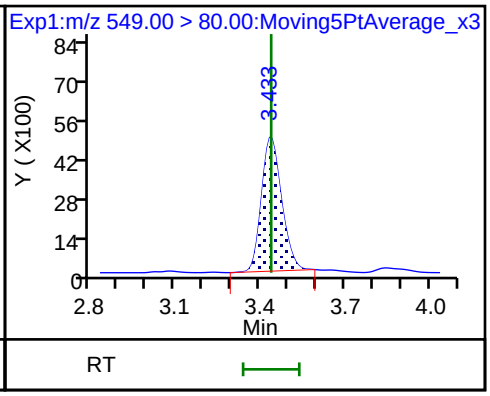
D 21 13C8 FOSA



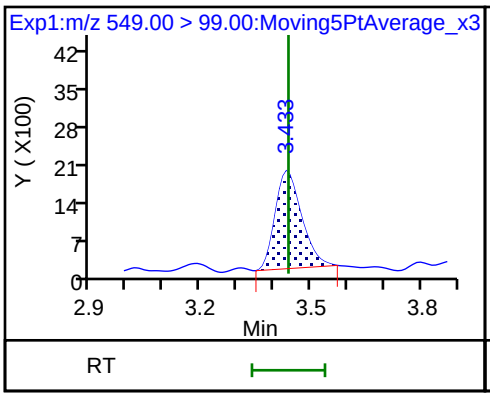
22 Perfluorooctane Sulfonamide



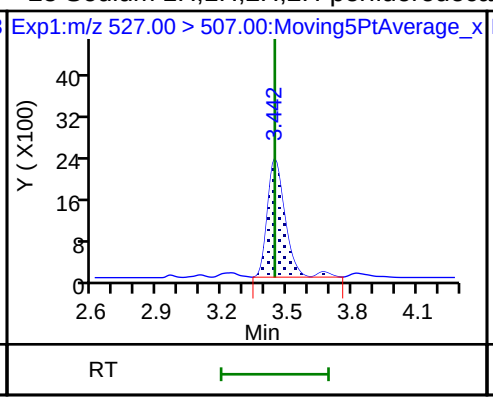
68 Perfluorononanesulfonic acid



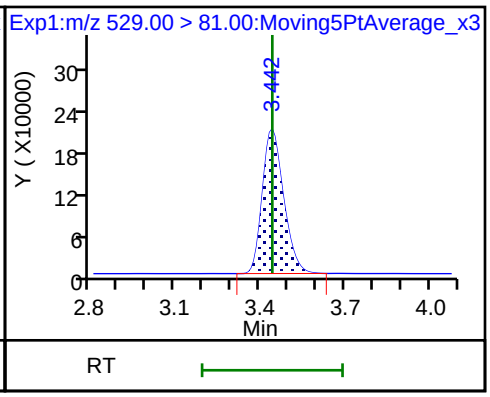
68 Perfluorononanesulfonic acid



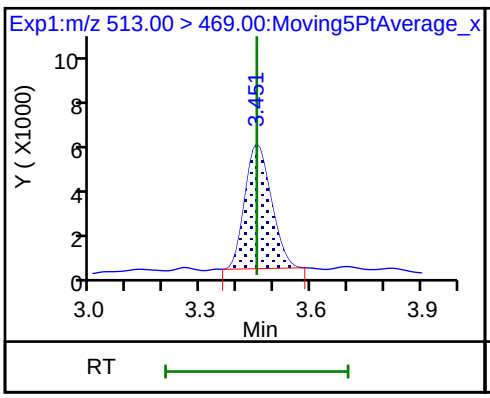
25 Sodium 1H,1H,2H,2H-perfluorodecane



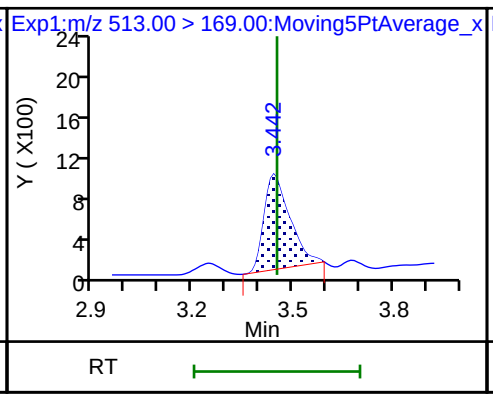
D 26 M2-8:2FTS



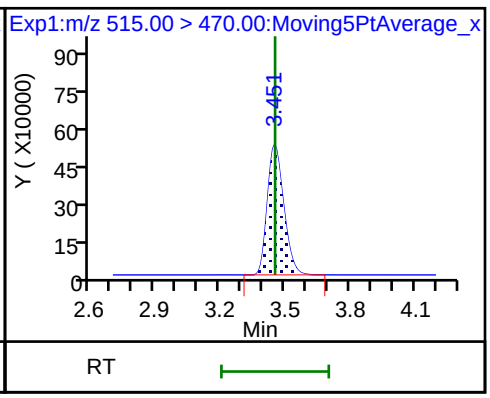
24 Perfluorodecanoic acid



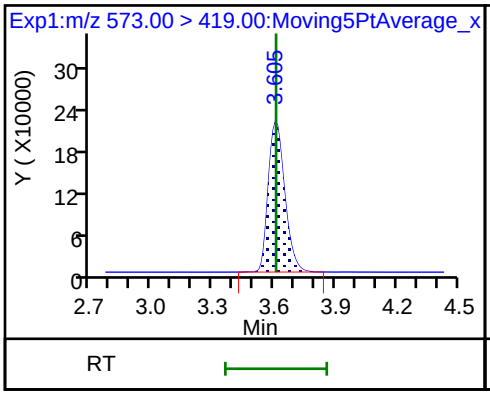
24 Perfluorodecanoic acid



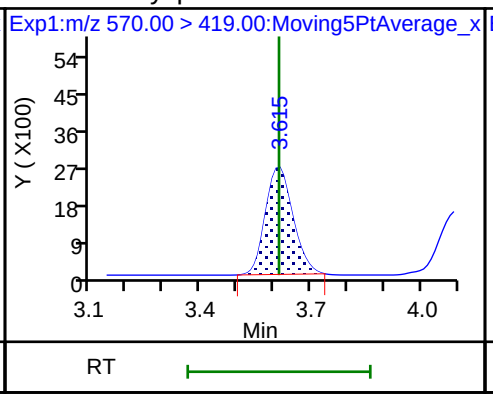
D 23 13C2 PFDA



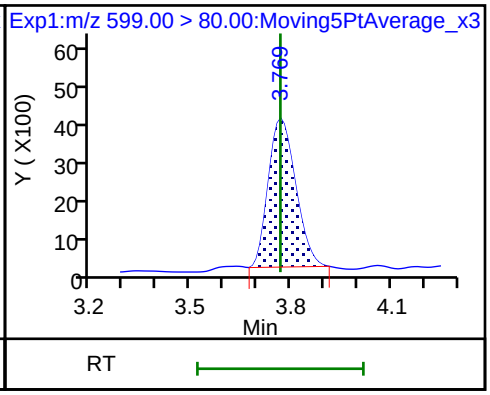
D 27 d3-NMeFOSAA



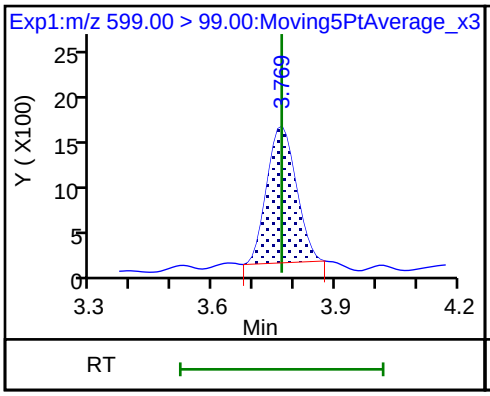
28 N-methyl perfluorooctane sulfonami



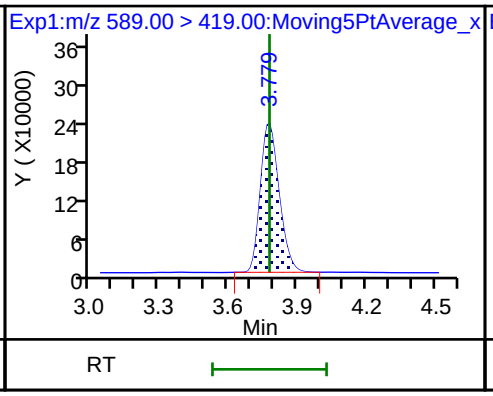
29 Perfluorodecane Sulfonic acid



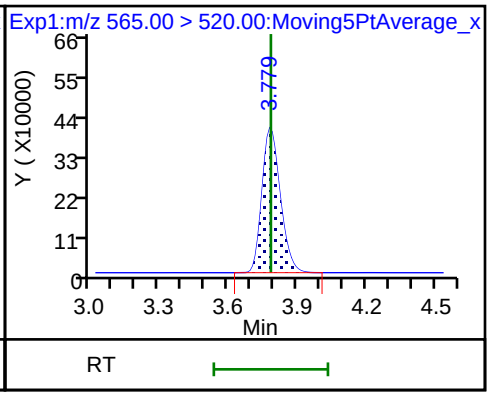
29 Perfluorodecane Sulfonic acid



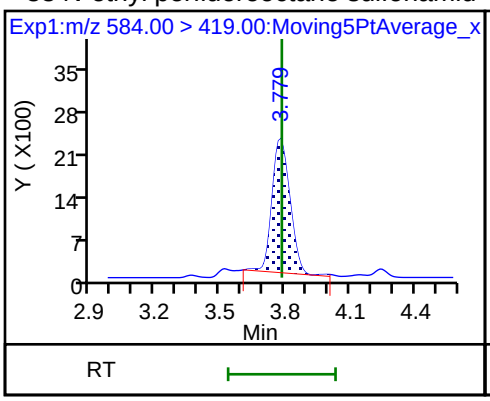
D 32 d5-NEtFOSAA



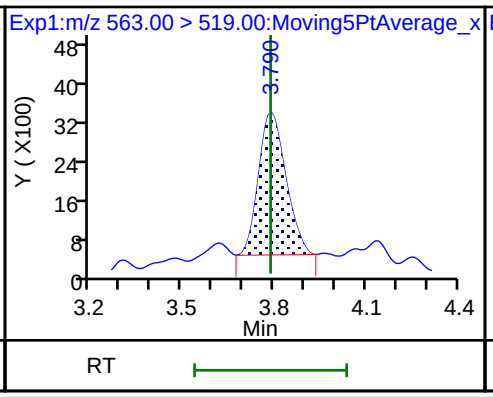
D 30 13C2 PFUnA



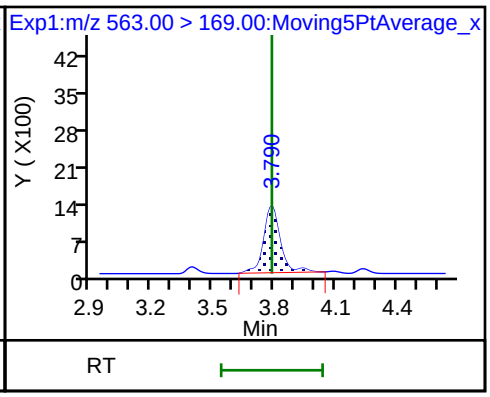
33 N-ethyl perfluorooctane sulfonamid



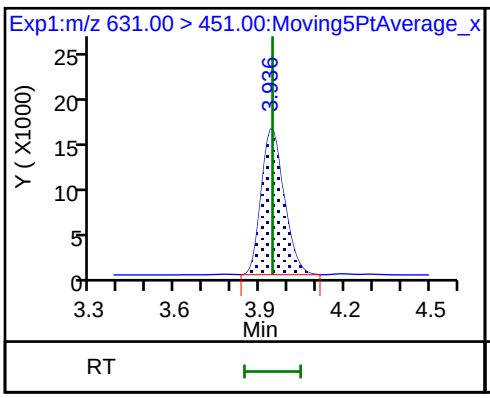
31 Perfluoroundecanoic acid



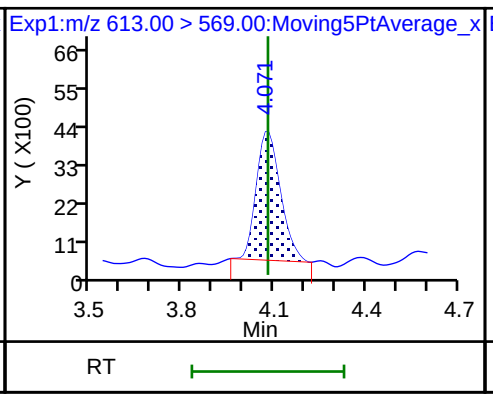
31 Perfluoroundecanoic acid



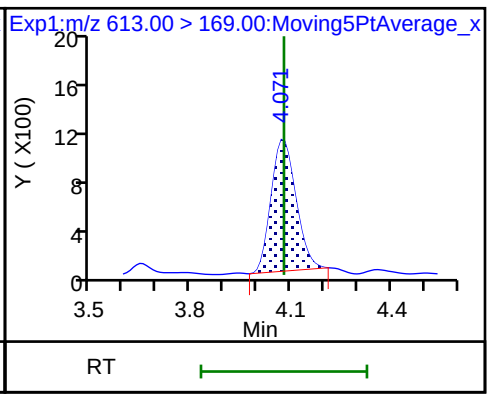
66 11-Chloroeicosafluoro-3-oxaundecan



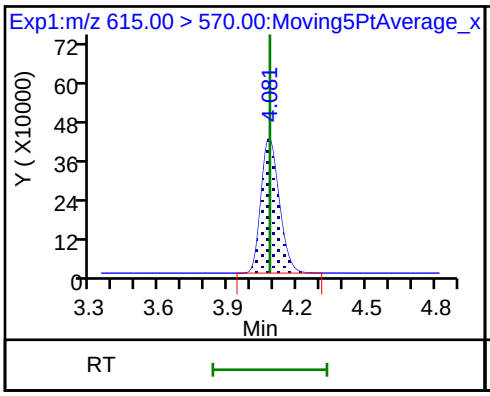
37 Perfluorododecanoic acid



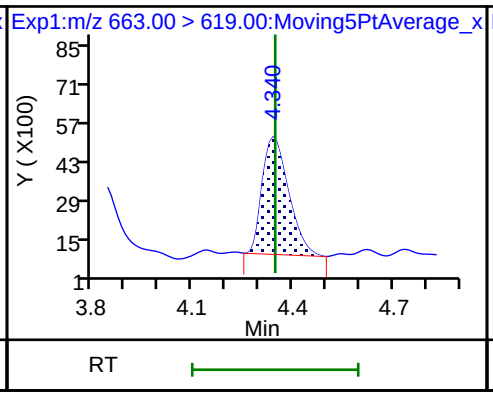
37 Perfluorododecanoic acid



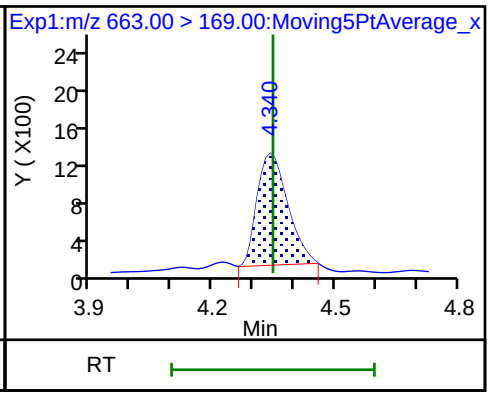
D 36 13C2 PFDoA



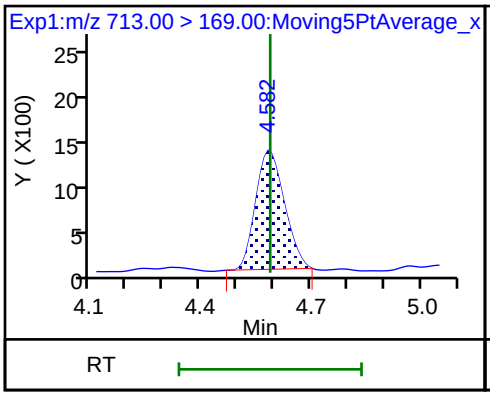
41 Perfluorotridecanoic acid



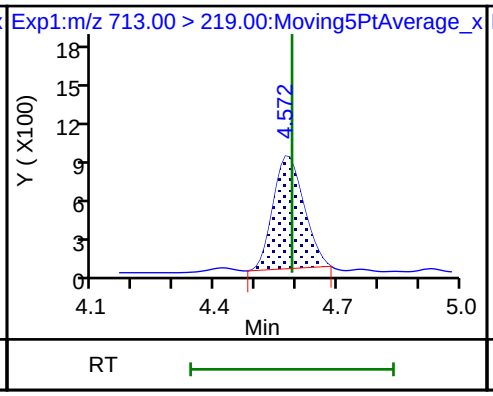
41 Perfluorotridecanoic acid



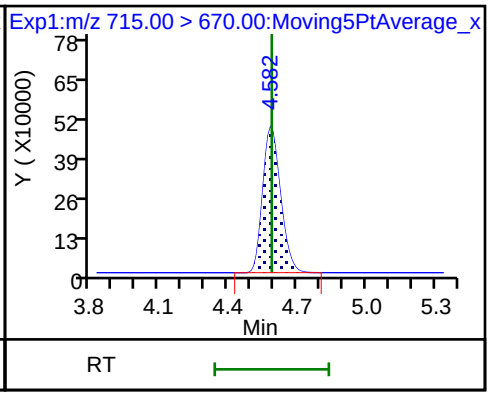
42 Perfluorotetradecanoic acid



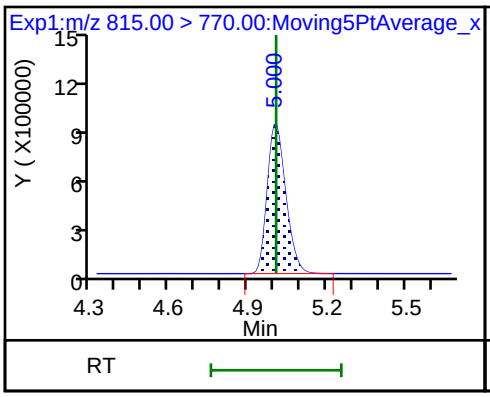
42 Perfluorotetradecanoic acid



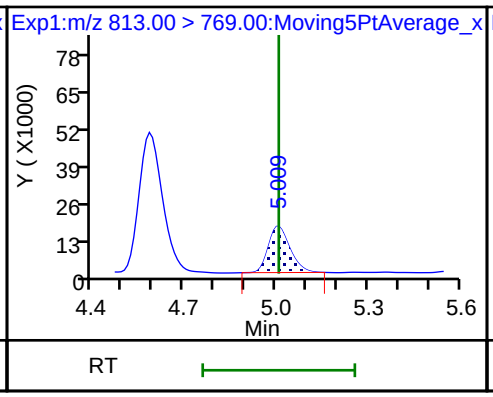
D 43 13C2-PFTeDA



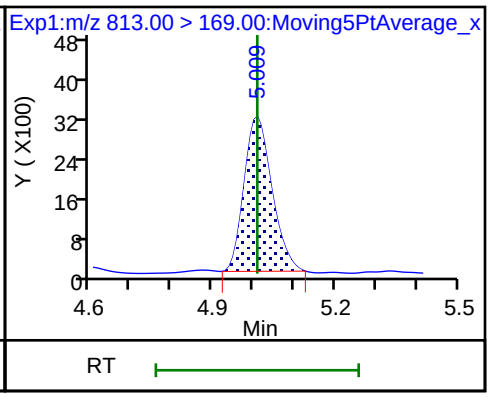
D 44 13C2-PFHxDA



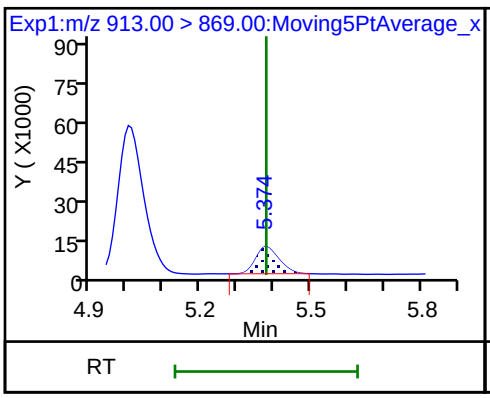
45 Perfluorohexadecanoic acid



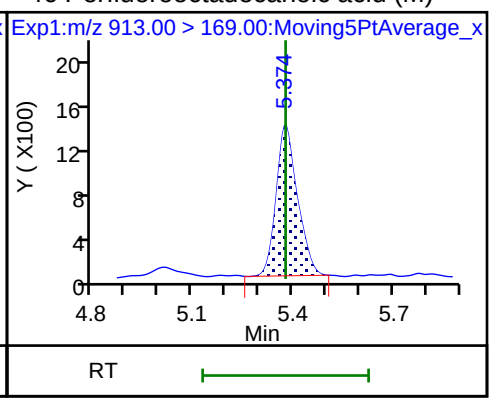
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

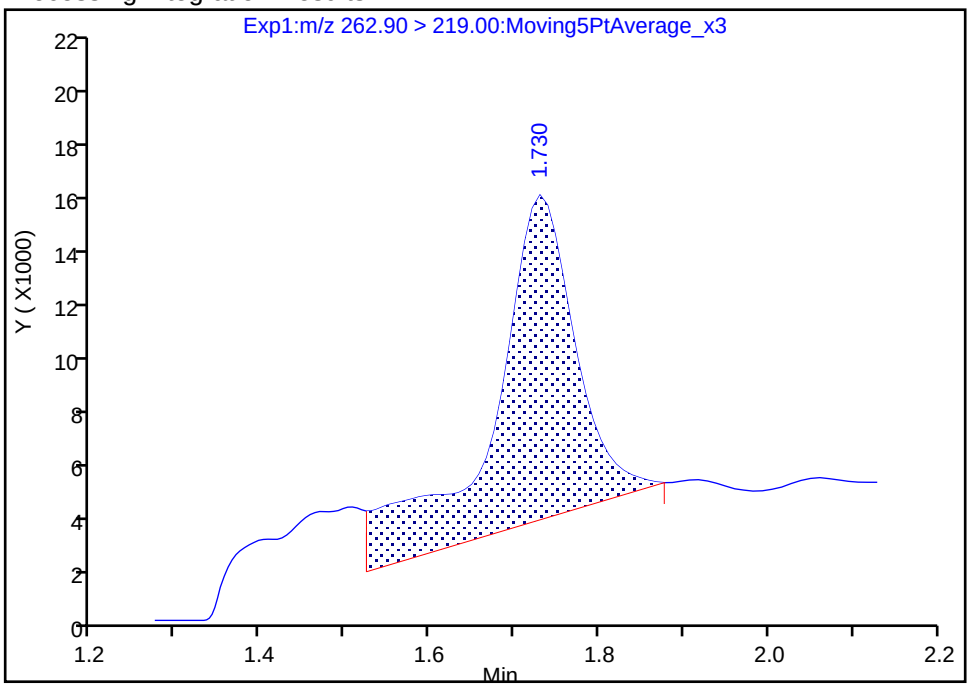
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_002.d
Injection Date: 14-May-2018 12:00:38 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

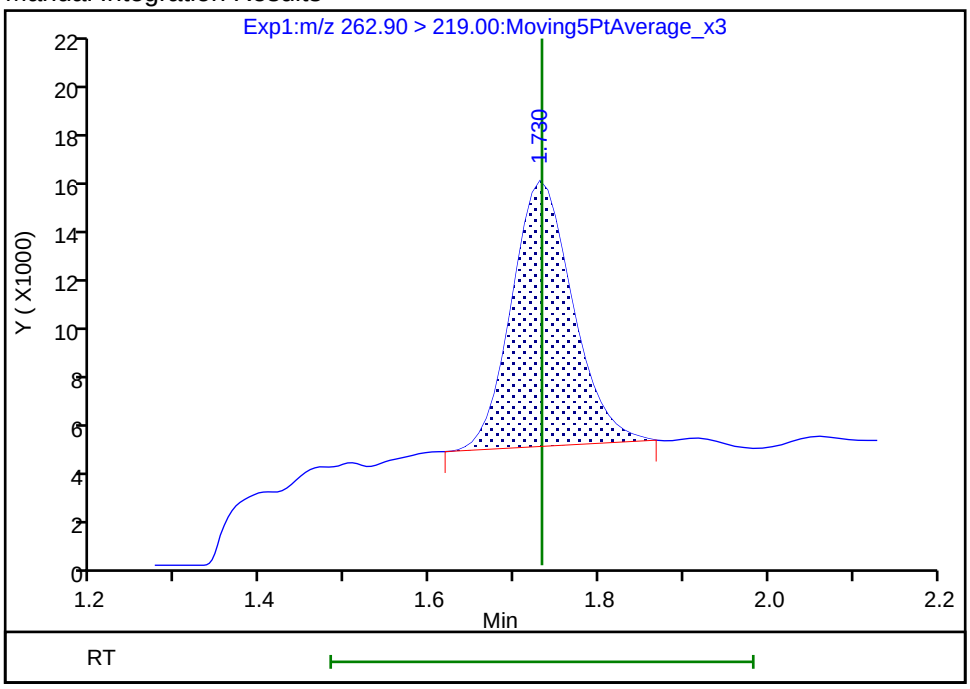
Processing Integration Results

RT: 1.73
Area: 81403
Amount: 0.036519
Amount Units: ng/ml



Manual Integration Results

RT: 1.73
Area: 53840
Amount: 0.027376
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:55:19
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

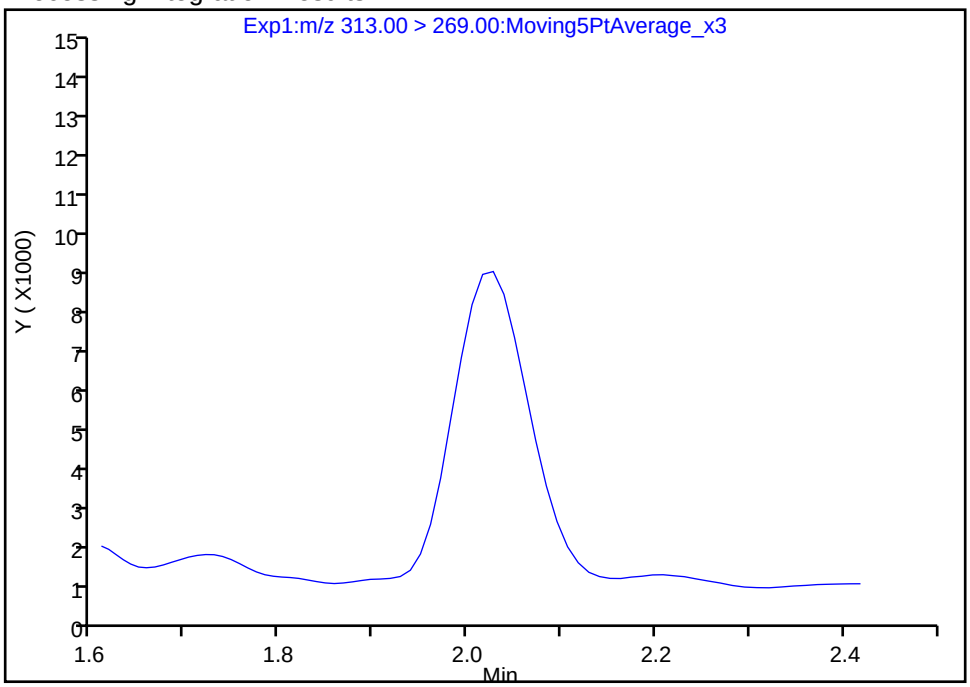
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_002.d
Injection Date: 14-May-2018 12:00:38 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

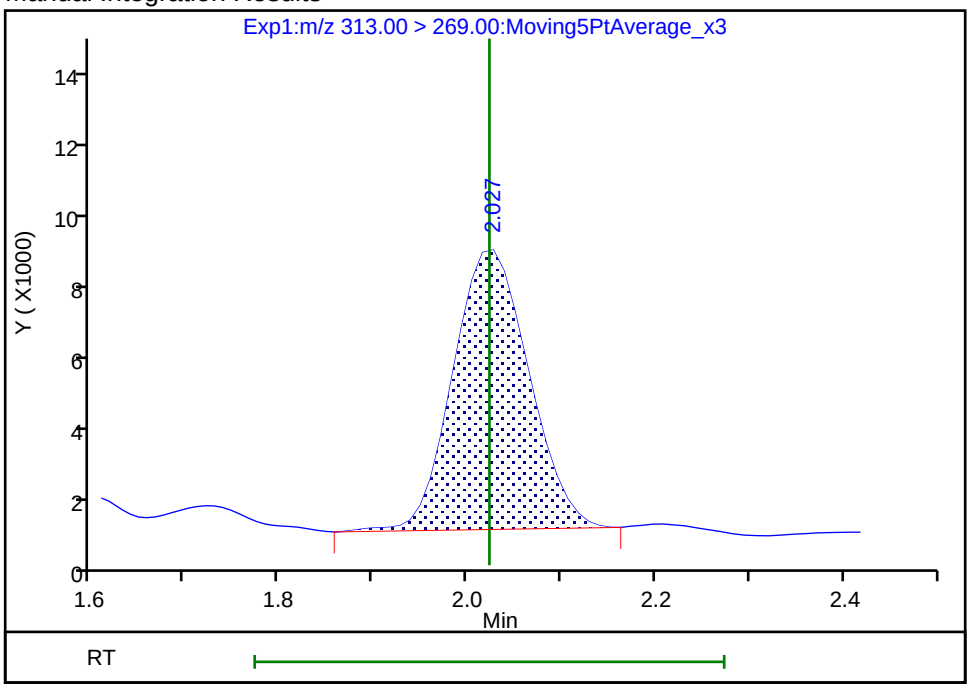
Not Detected
Expected RT: 2.02

Processing Integration Results



Manual Integration Results

RT: 2.03
Area: 42661
Amount: 0.024110
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:55:24
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

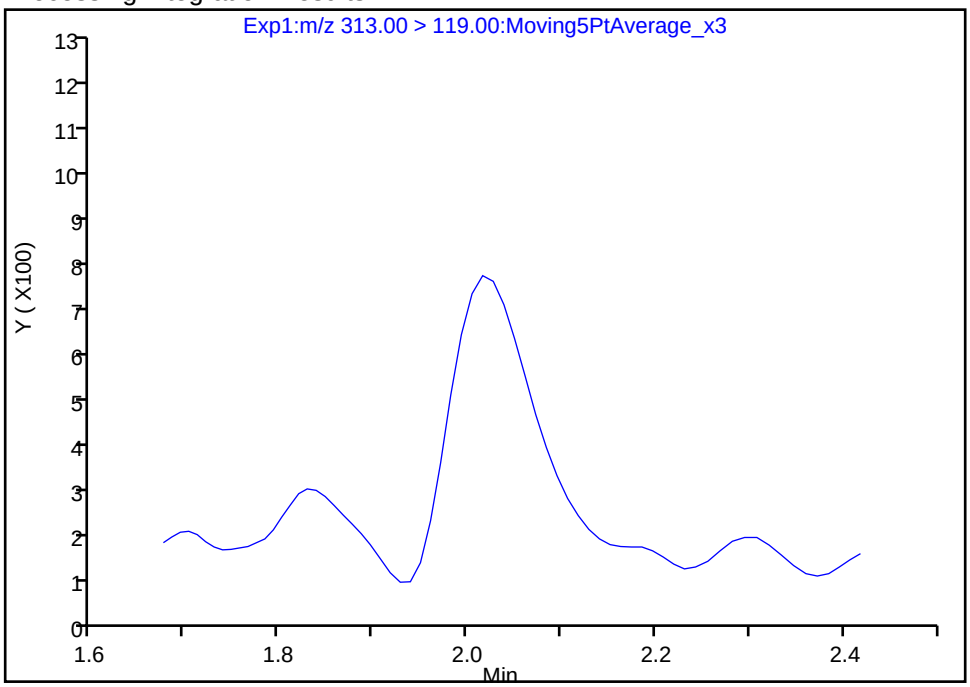
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_002.d
Injection Date: 14-May-2018 12:00:38 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

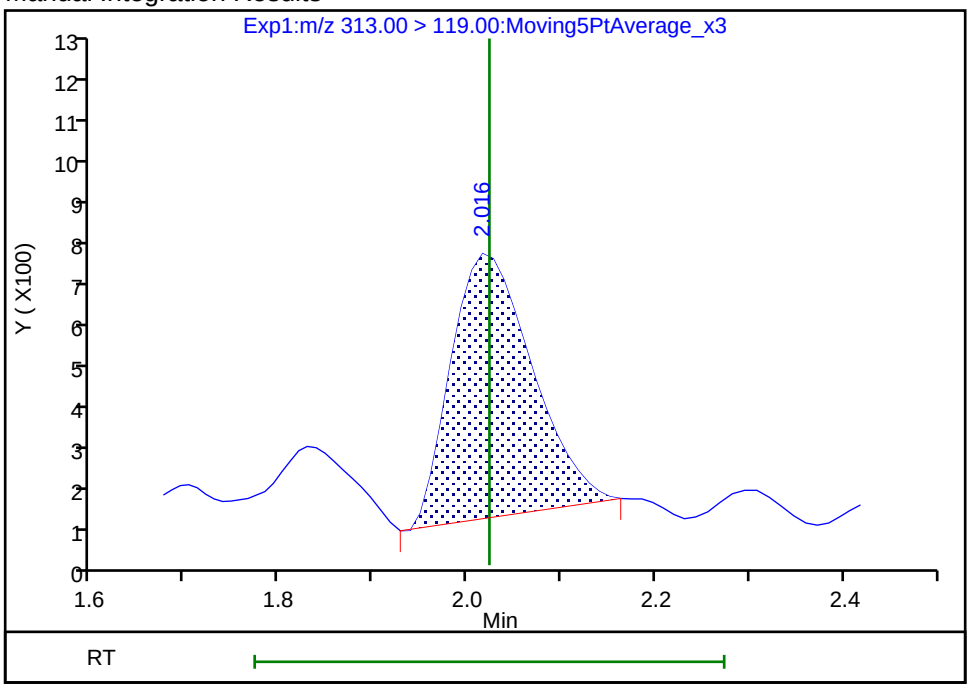
Not Detected
Expected RT: 2.02

Processing Integration Results



Manual Integration Results

RT: 2.02
Area: 3686
Amount: 0.024110
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:55:28
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

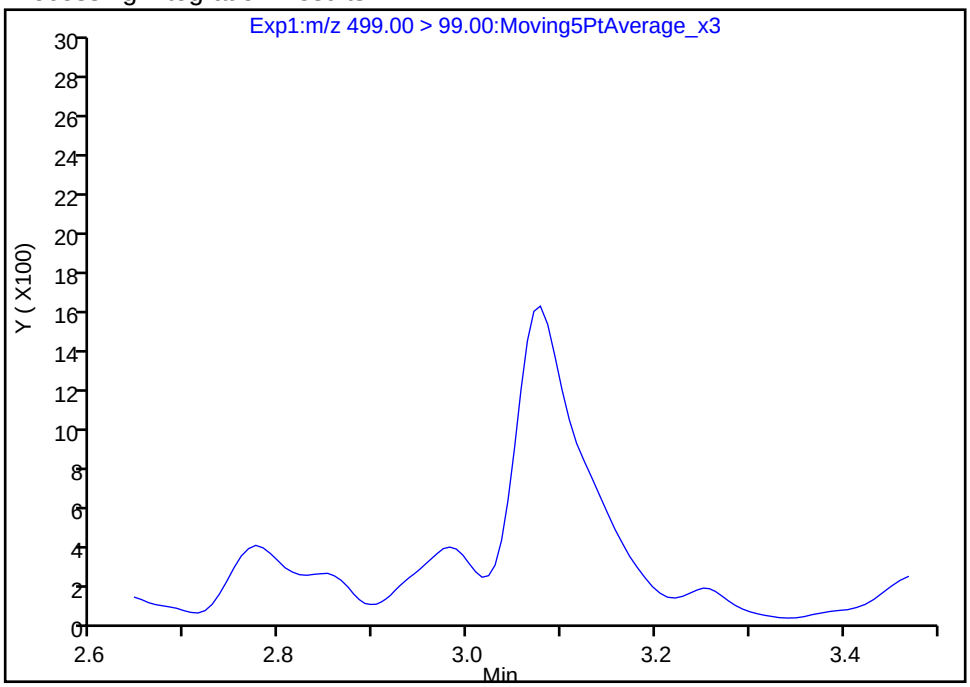
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_002.d
Injection Date: 14-May-2018 12:00:38 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

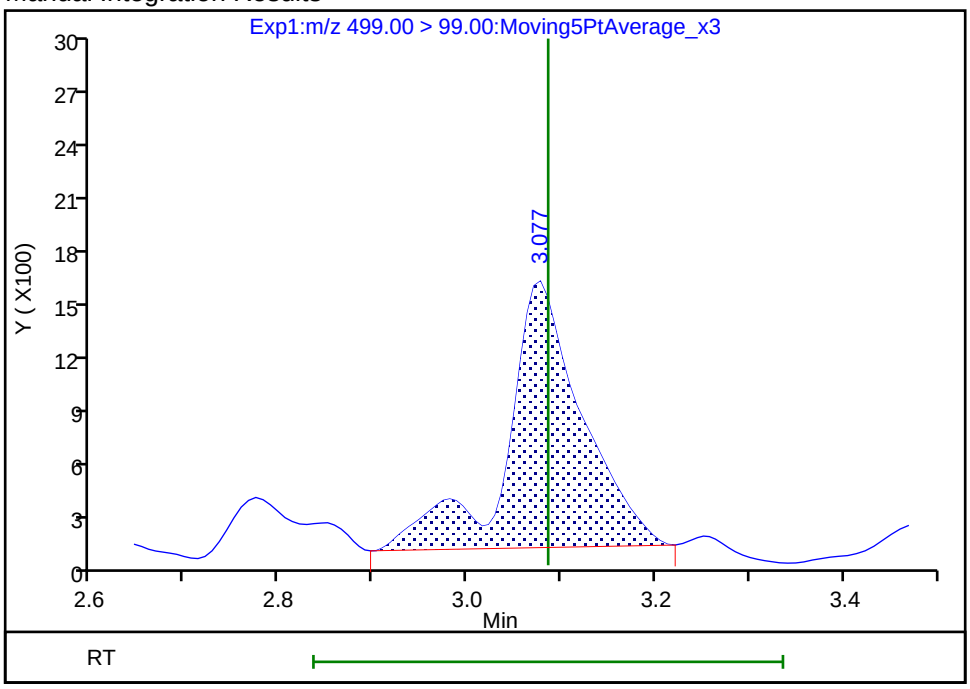
Processing Integration Results

RT: 3.08
Area: 0
Amount: 0.025114
Amount Units: ng/ml



Manual Integration Results

RT: 3.08
Area: 8541
Amount: 0.025193
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:55:42
Audit Action: Manually Integrated Audit Reason: Assign Peak

TestAmerica Sacramento

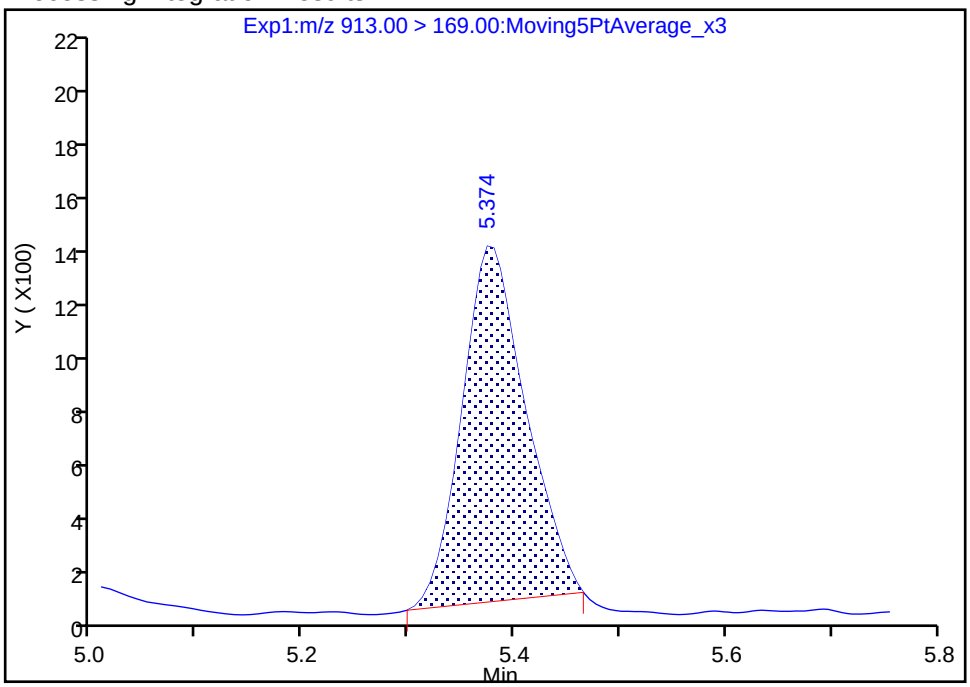
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_002.d
Injection Date: 14-May-2018 12:00:38 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

46 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

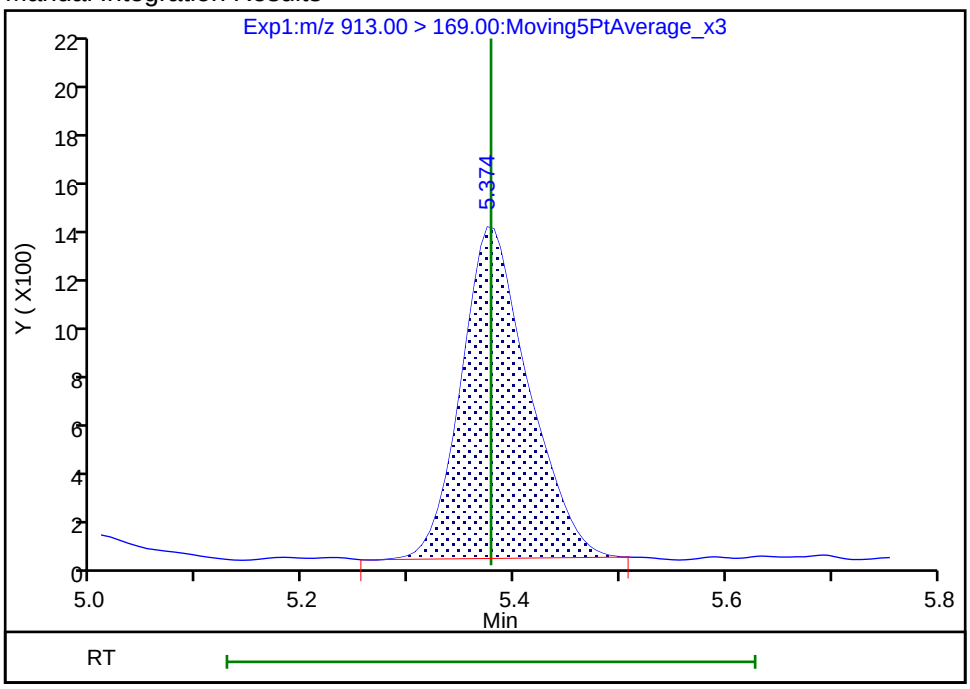
Processing Integration Results

RT: 5.37
Area: 5412
Amount: 0.025257
Amount Units: ng/ml



Manual Integration Results

RT: 5.37
Area: 5887
Amount: 0.025257
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:56:07
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_003.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-May-2018 12:08:31 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L2-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 13:21:11 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 12:56:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										M
212.90 > 169.00	1.458	1.459	-0.001	1.000	134564	0.0511		102	58.5	M
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.459	-0.001	1.000	7085993	2.57		103	42028	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.732	-0.002	0.559	4368149	2.55		102	60348	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.730	1.732	-0.002	1.000	108472	0.0510		102	46.7	M
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.767	-0.001	1.000	95768	2.37		102	703	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.768	-0.002	1.000	141478	0.0445		101	716	
298.90 > 99.00	1.766	1.768	-0.002	1.000	58533		2.42(1.25-3.74)	101	374	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.985	-0.003	1.000	28257	0.0524		112	1615	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.985	-0.003	1.000	504821	2.24		95.9	6370	
D 7 13C2 PFHxA										
315.00 > 270.00	2.027	2.022	0.005	1.000	4506960	2.52		101	66330	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.027	2.023	0.004	1.000	103753	0.0552		110	153	
313.00 > 119.00	2.027	2.023	0.004	1.000	8540		12.15(5.03-15.10)	110	99.4	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.050	2.043	0.007	1.000	137334	0.0483		103	2970	
349.00 > 99.00	2.038	2.043	-0.005	0.994	46073		2.98(1.36-4.07)	103	399	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.129	2.124	0.005	1.000	212698	2.33		93.4	6037	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.129	2.126	0.003	1.000	14773	0.0513		103	119	
D 9 13C4-PFHpA										
367.00 > 322.00	2.360	2.357	0.003	1.000	4301095	2.51		100	69922	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.360	2.358	0.002	1.000	99493	0.0545		109	149	
363.00 > 169.00	2.360	2.358	0.002	1.000	35231		2.82(1.13-3.40)	109	159	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.373	2.369	0.004	1.000	125140	0.0492		108	976	
399.00 > 99.00	2.373	2.369	0.004	1.000	44766		2.80(1.50-4.49)	108	179	
D 11 18O2 PFHxS										
403.00 > 84.00	2.373	2.373	0.0	1.000	5336299	2.34		99.0	55248	
65 Adona										
377.00 > 251.00	2.397	2.400	-0.003	1.000	275135	0.0540		108	5938	
377.00 > 85.00	2.397	2.400	-0.003	1.000	154129		1.79(0.84-2.53)	108	1187	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.691	2.689	0.002	1.000	28801	0.0490		103	288	
D 12 M2-6:2FTS										
429.00 > 81.00	2.691	2.690	0.001	1.000	828606	2.45		103	21539	
* 62 13C2-PFOA										
415.00 > 370.00	2.714	2.714	0.0		4266282	2.50			49665	
D 14 13C4 PFOA										
417.00 > 372.00	2.714	2.714	0.0	1.000	3969543	2.47		98.7	43636	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.721	2.717	0.004	1.003	96147	0.0504		101	45.2	
413.00 > 169.00	2.721	2.717	0.004	1.003	56093		1.71(0.84-2.52)	101	182	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.721	2.722	-0.001	1.000	100557	0.0486		102	2356	
449.00 > 99.00	2.721	2.722	-0.001	1.000	30787		3.27(1.94-5.82)	102	339	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.087	3.086	0.001	1.000	81988	0.0468		101	548	
499.00 > 99.00	3.087	3.086	0.001	1.000	18100		4.53(2.31-6.93)	101	123	
D 18 13C4 PFOS										
503.00 > 80.00	3.087	3.087	0.0	1.000	3748172	2.36		98.6	31876	
D 19 13C5 PFNA										
468.00 > 423.00	3.095	3.089	0.006	1.000	3312395	2.46		98.6	46214	
20 Perfluorononanoic acid										
463.00 > 419.00	3.087	3.089	-0.002	0.998	67481	0.0483		96.6	157	
463.00 > 169.00	3.095	3.089	0.006	1.000	18358		3.68(1.90-5.69)	96.6	326	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.302	3.299	0.003	1.000	124383	0.0444		95.4	1453	
D 21 13C8 FOSA										
506.00 > 78.00	3.416	3.413	0.003	1.000	5343956	2.32		92.9	45376	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.416	3.415	0.001	1.000	105458	0.0501		100	1677	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.444	3.438	0.006	1.000	54343	0.0453		94.4	929	
549.00 > 99.00	3.444	3.438	0.006	1.000	21236		2.56(1.33-3.97)	94.4	179	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.444	3.442	0.002	1.000	1068803	2.42		101	13491	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.444	3.442	0.002	1.000	30357	0.0523		109	701	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.453	3.452	0.001	1.000	61378	0.0543		109	408	
513.00 > 169.00	3.453	3.452	0.001	1.000	11424		5.37(2.36-7.09)	109	357	
D 23 13C2 PFDA										
515.00 > 470.00	3.453	3.453	0.0	1.000	2760570	2.39		95.5	37608	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.606	3.608	-0.002	1.000	1188614	2.27		90.7	26348	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.606	3.613	-0.007	1.000	24033	0.0484		96.7	346	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.771	3.768	0.003	1.000	49989	0.0482		100	967	
599.00 > 99.00	3.771	3.768	0.003	1.000	16488		3.03(1.39-4.16)	100	311	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.781	3.778	0.003	1.000	1395625	2.49		99.7	3499	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.781	3.785	-0.004	1.000	24060	0.0457		91.5	570	
D 30 13C2 PFUnA										
565.00 > 520.00	3.781	3.785	-0.004	1.000	2575360	2.66		106	51815	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.791	3.787	0.004	1.003	36766	0.0457		91.5	140	
563.00 > 169.00	3.791	3.787	0.004	1.003	12152		3.03(2.12-6.36)	91.5	315	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.948	3.943	0.005	1.000	195522	0.0457		97.0	5291	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.081	4.079	0.002	1.000	48153	0.0516		103	28.4	
613.00 > 169.00	4.081	4.079	0.002	1.000	11506		4.19(2.13-6.40)	103	214	
D 36 13C2 PFDoA										
615.00 > 570.00	4.081	4.080	0.001	1.000	2243539	2.22		88.8	16221	
41 Perfluorotridecanoic acid										R
663.00 > 619.00	4.351	4.346	0.005	1.000	52484	0.0542		108	19.8	R
663.00 > 169.00	4.362	4.346	0.016	1.002	13452		3.90(1.25-3.76)	108	168	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.593	4.588	0.005	1.000	2188153	1.99		79.4	13654	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.593	4.588	0.005	1.000	12942	0.0571		114	197	
713.00 > 219.00	4.582	4.588	-0.006	0.998	9204		1.41(0.71-2.13)	114	206	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.009	5.006	0.003	1.000	3063933	1.75		70.0	10542	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.009	5.008	0.001	1.000	83351	0.0489		97.8	19.1	
813.00 > 169.00	5.009	5.008	0.001	1.000	13493		6.18(2.86-8.58)	97.8	153	
46 Perfluorooctadecanoic acid										M
913.00 > 869.00	5.380	5.378	0.002	1.000	55252	0.0427		85.4	13.2	
913.00 > 169.00	5.380	5.378	0.002	1.000	7531		7.34(3.83-11.48)	85.4	112	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 13:21:12 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_003.d

Injection Date: 14-May-2018 12:08:31 Instrument ID: A8_N

Lims ID: IC L2 Full

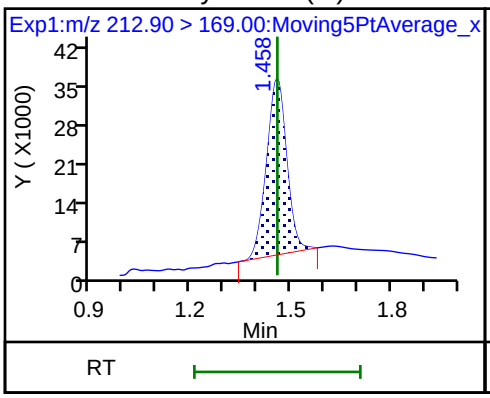
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3

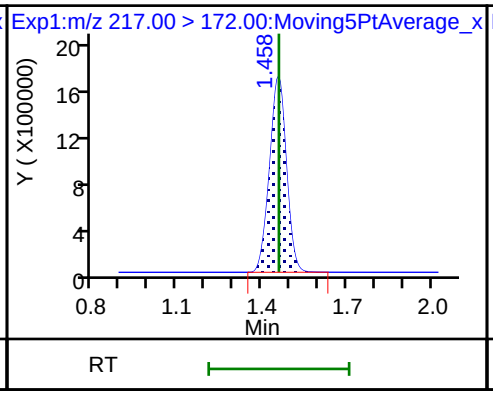
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

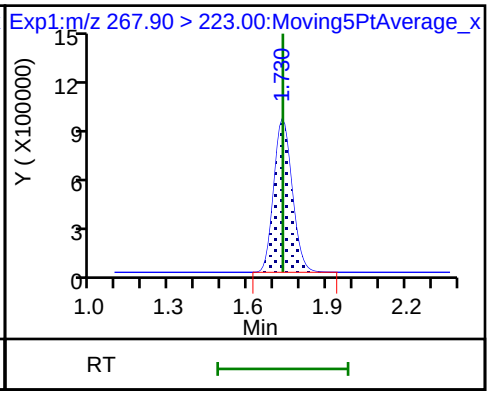
2 Perfluorobutyric acid (M)



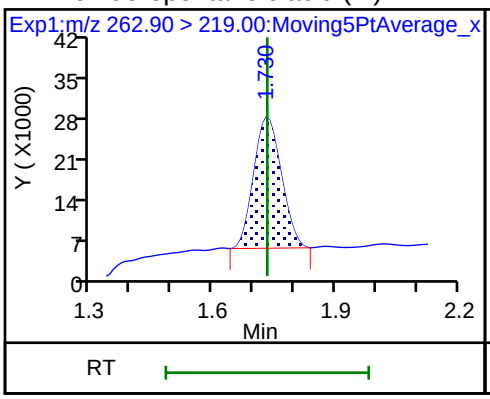
D 1 13C4 PFBA



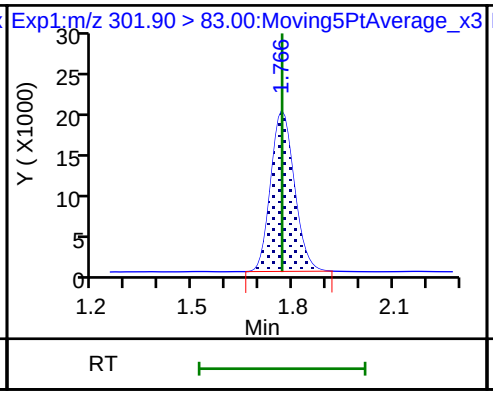
D 3 13C5-PFPeA



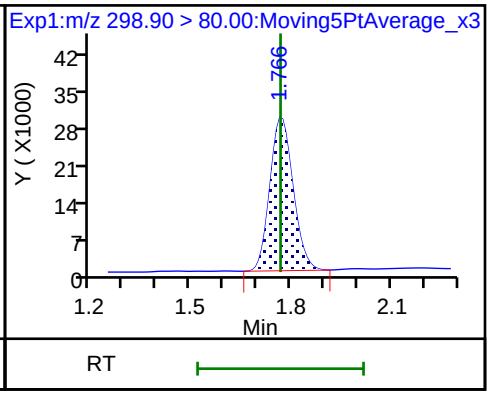
4 Perfluoropentanoic acid (M)



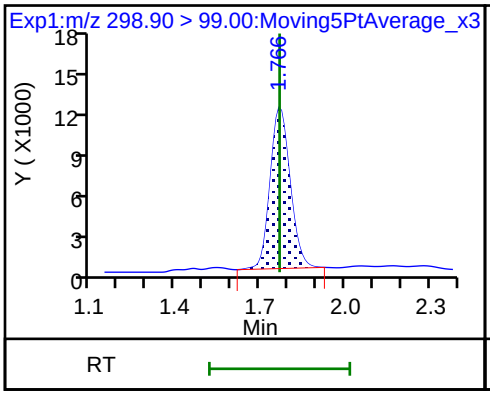
D 47 13C3-PFBS



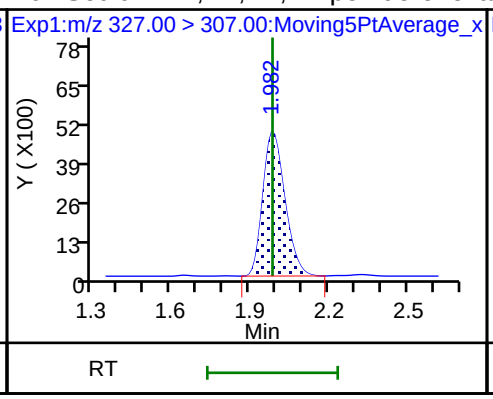
5 Perfluorobutanesulfonic acid



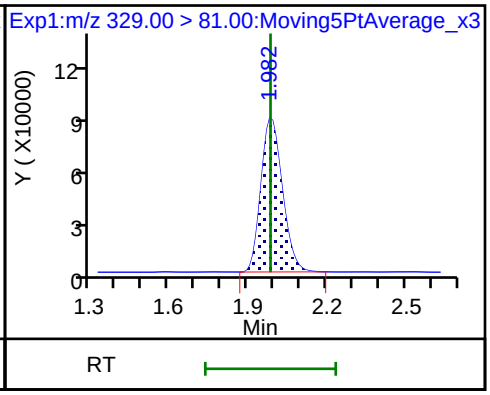
5 Perfluorobutanesulfonic acid



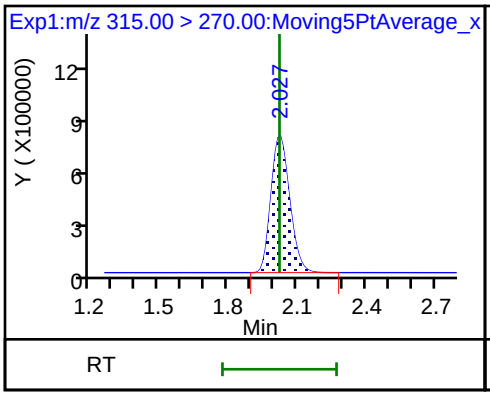
61 Sodium 1H,1H,2H,2H-perfluorohexa



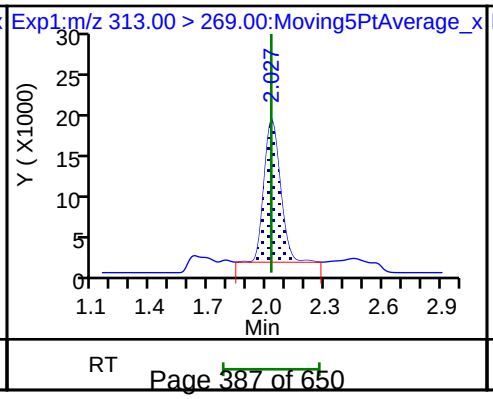
D 60 M2-4:2FTS



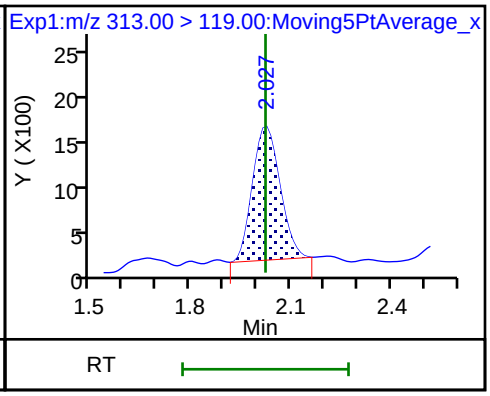
D 7 13C2 PFHxA



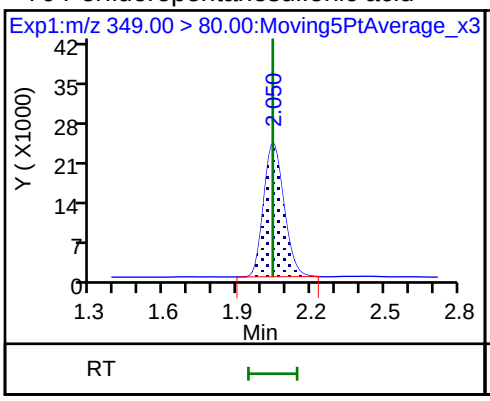
6 Perfluorohexanoic acid



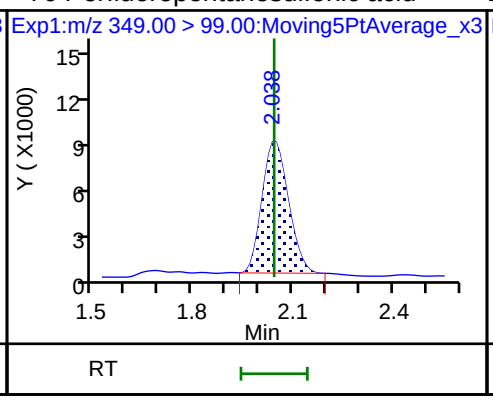
6 Perfluorohexanoic acid



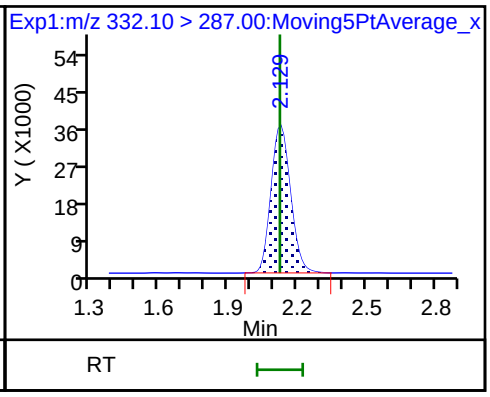
70 Perfluoropentanesulfonic acid



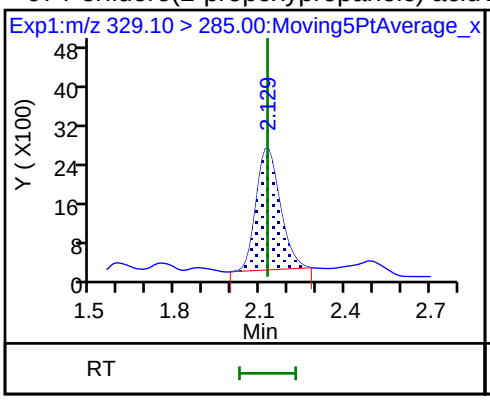
70 Perfluoropentanesulfonic acid



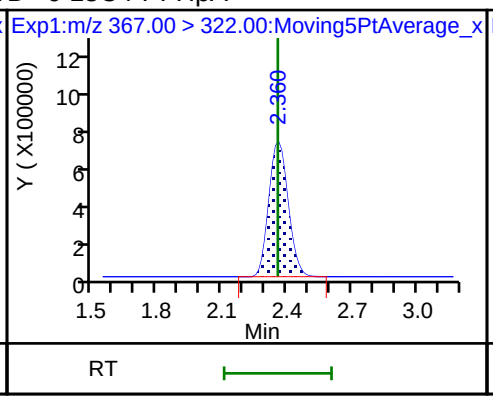
D 64 13C3 HFPO-DA



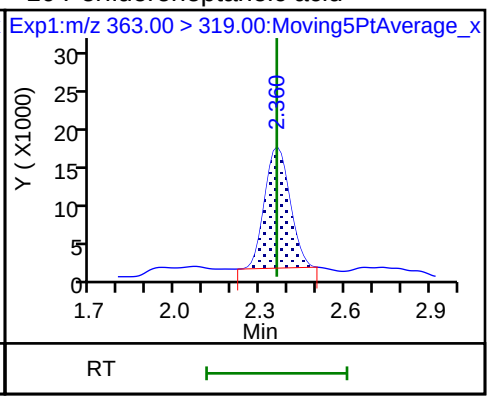
67 Perfluoro(2-propoxypropanoic) acid



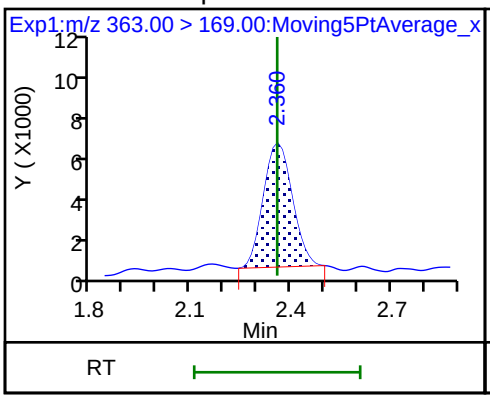
D 9 13C4-PFHpA



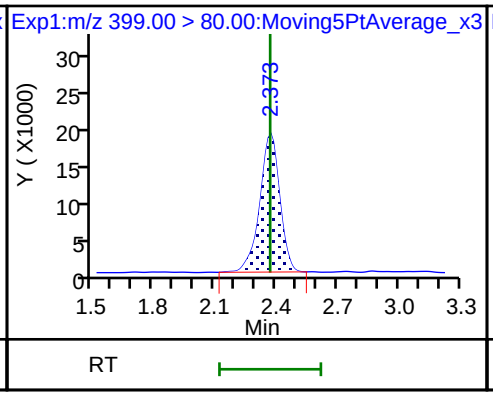
10 Perfluoroheptanoic acid



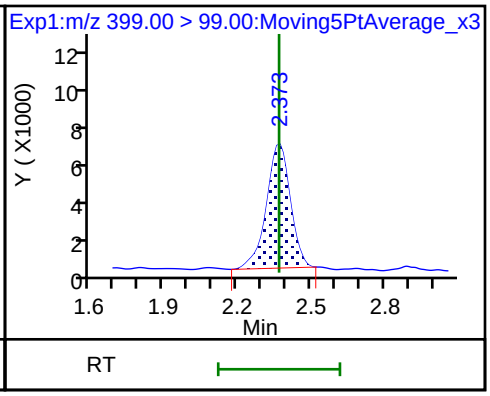
10 Perfluoroheptanoic acid



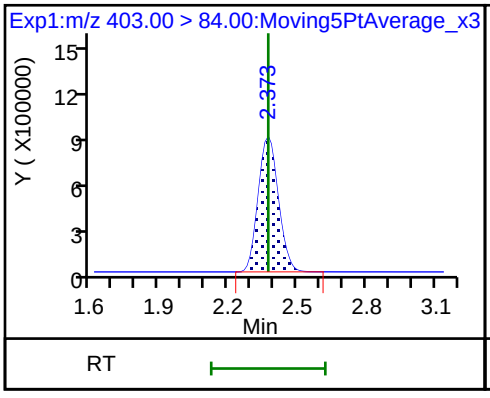
8 Perfluorohexanesulfonic acid



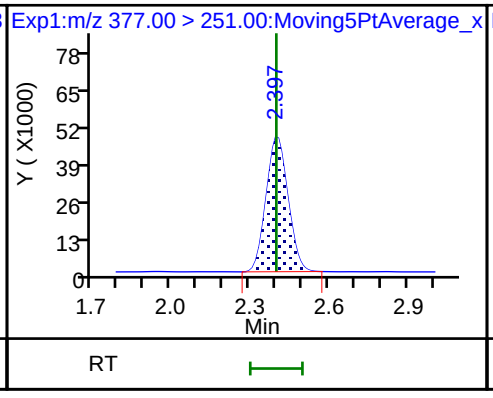
8 Perfluorohexanesulfonic acid



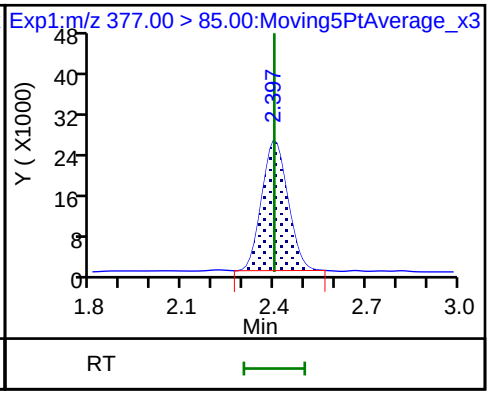
D 11 18O2 PFHxS



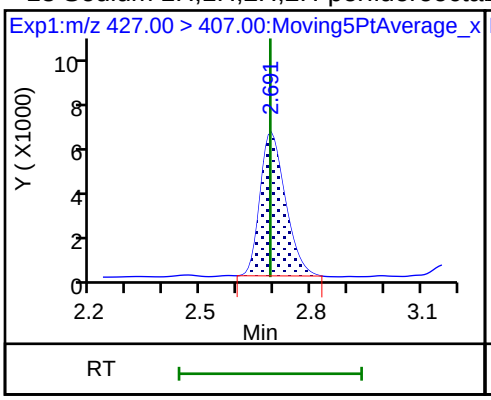
65 Adona



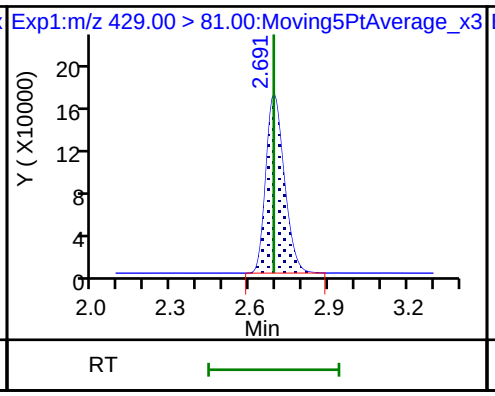
65 Adona



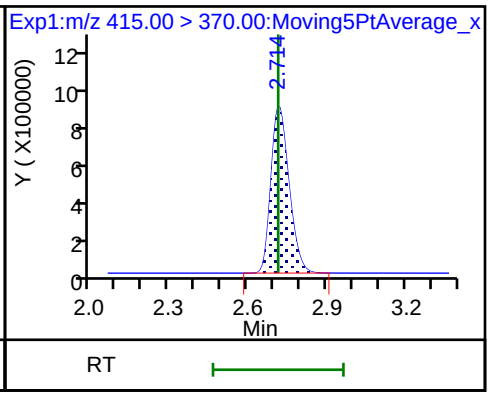
13 Sodium 1H,1H,2H,2H-perfluorooctane



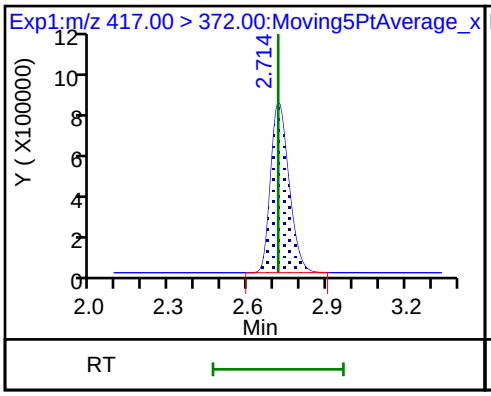
D 12 M2-6:2FTS



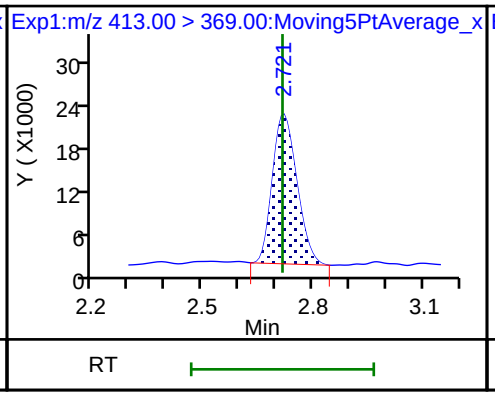
* 62 13C2-PFOA



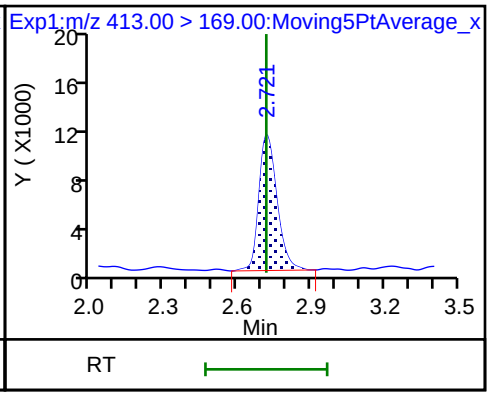
D 14 13C4 PFOA



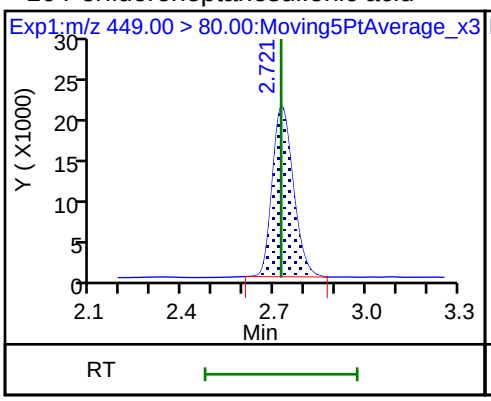
15 Perfluorooctanoic acid



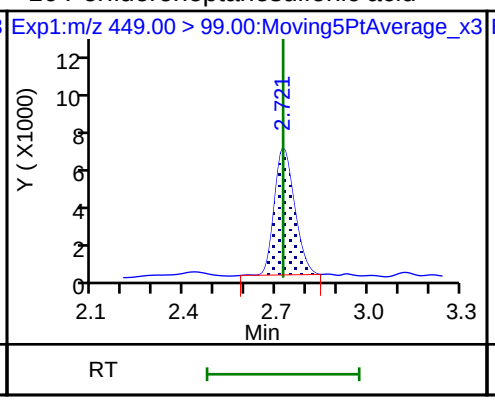
15 Perfluorooctanoic acid



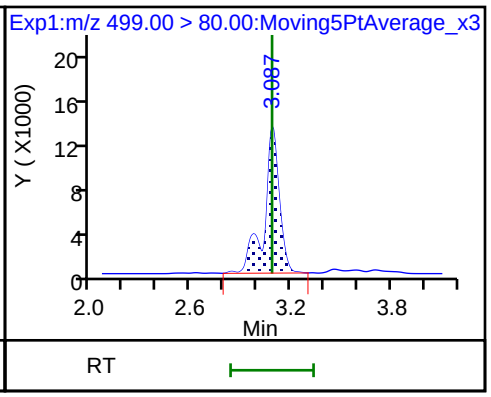
16 Perfluoroheptanesulfonic acid



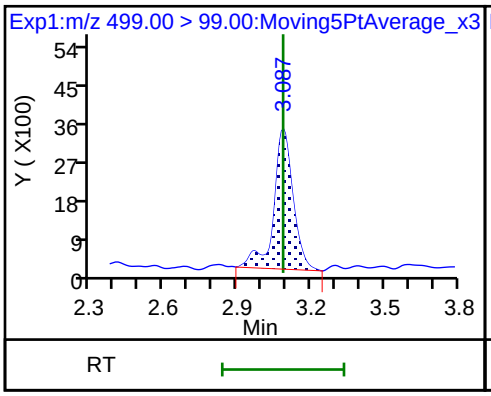
16 Perfluoroheptanesulfonic acid



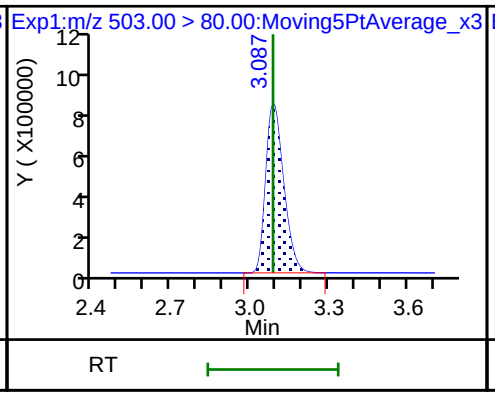
17 Perfluorooctane sulfonic acid



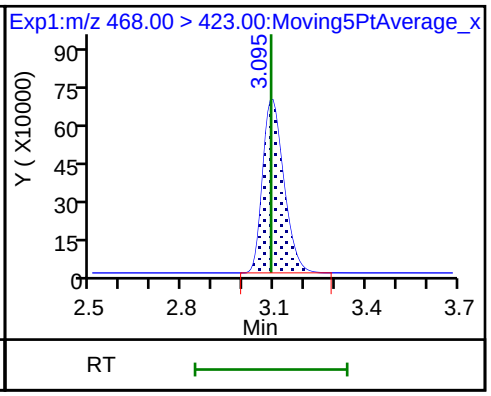
17 Perfluorooctane sulfonic acid



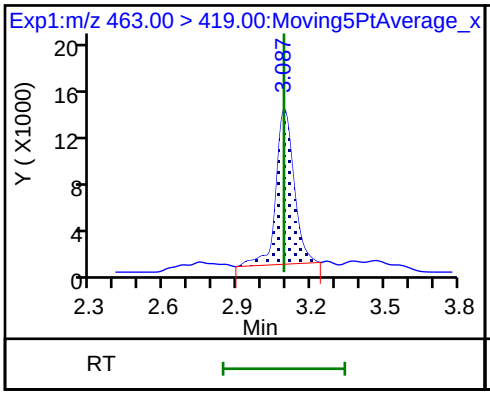
D 18 13C4 PFOS



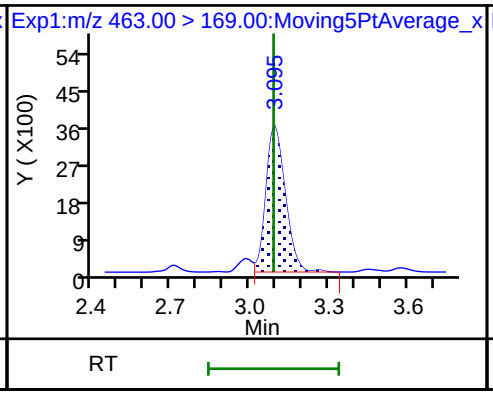
D 19 13C5 PFNA



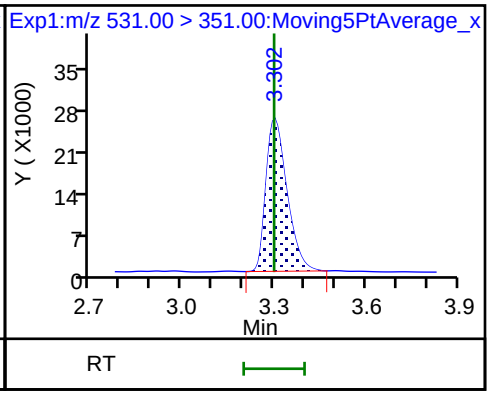
20 Perfluorononanoic acid



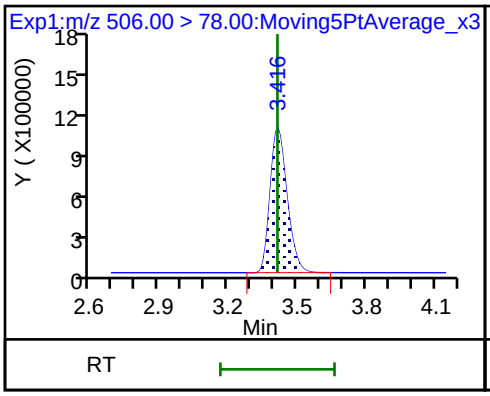
20 Perfluorononanoic acid



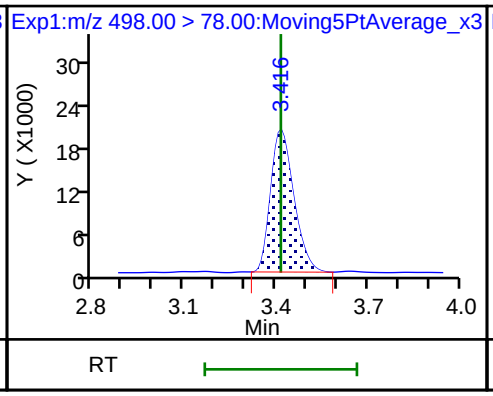
69 9-Chlorohexadecafluoro-3-oxanonane



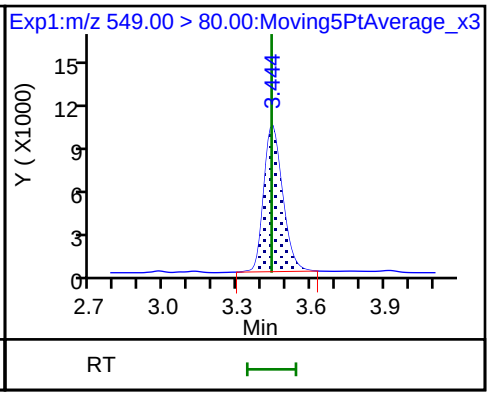
D 21 13C8 FOSA



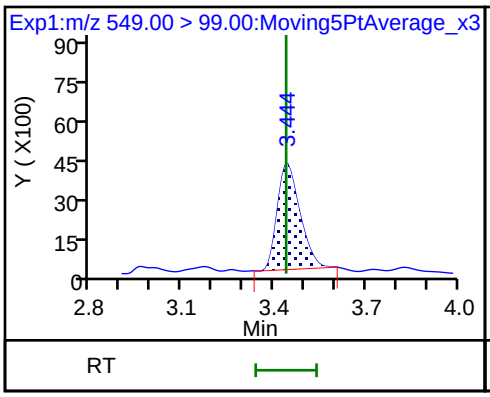
22 Perfluorooctane Sulfonamide



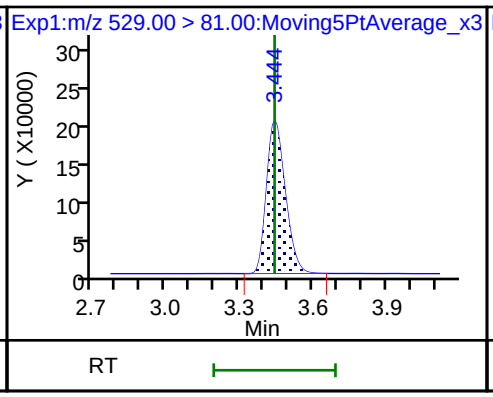
68 Perfluorononanesulfonic acid



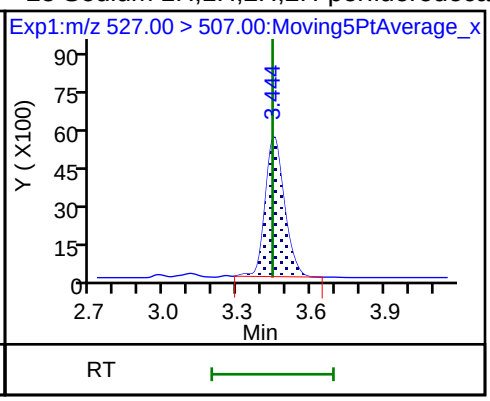
68 Perfluorononanesulfonic acid



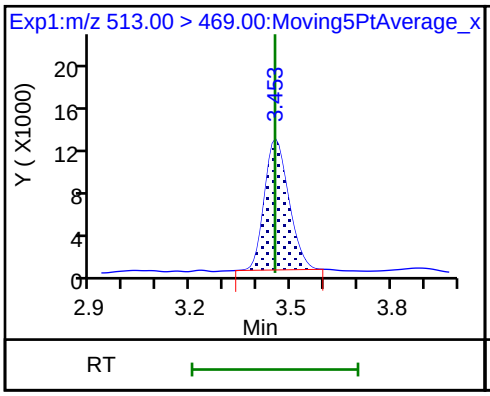
D 26 M2-8:2FTS



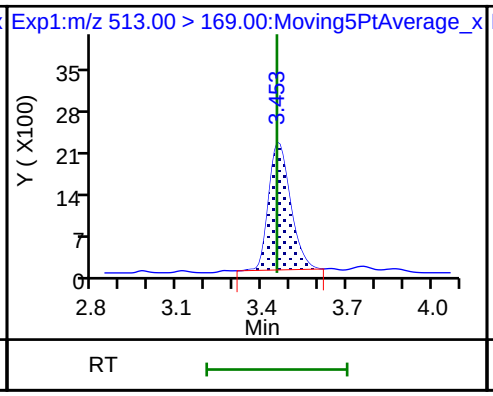
25 Sodium 1H,1H,2H,2H-perfluorodecane



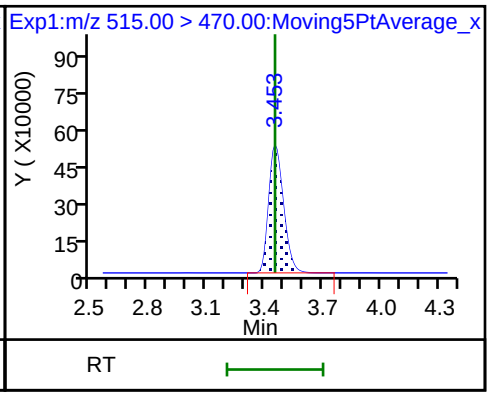
24 Perfluorodecanoic acid



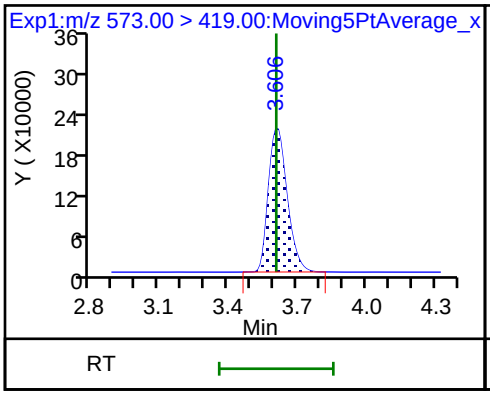
24 Perfluorodecanoic acid



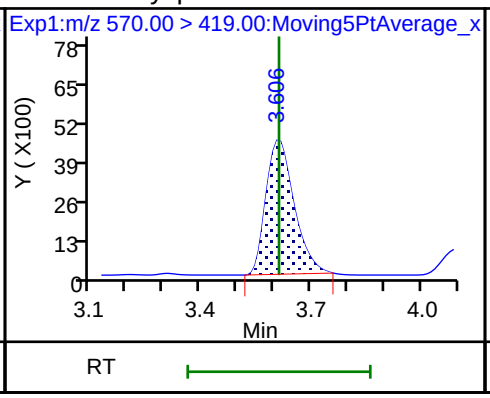
D 23 13C2 PFDA



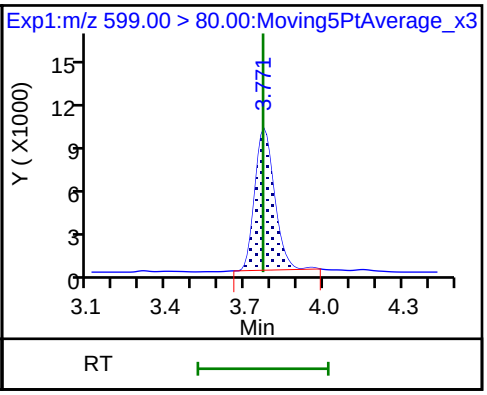
D 27 d3-NMeFOSAA



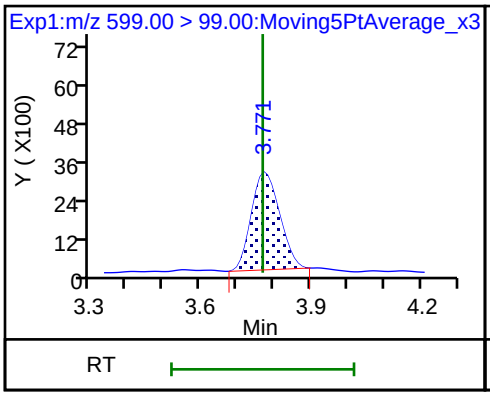
28 N-methyl perfluorooctane sulfonami



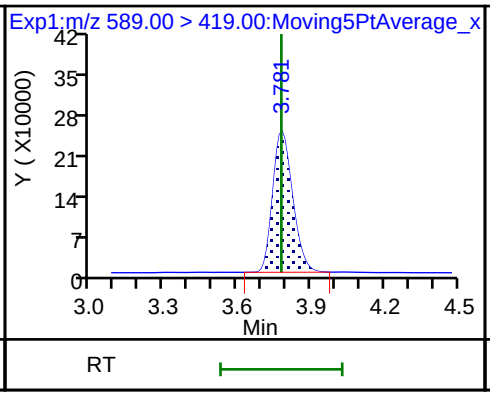
29 Perfluorodecane Sulfonic acid



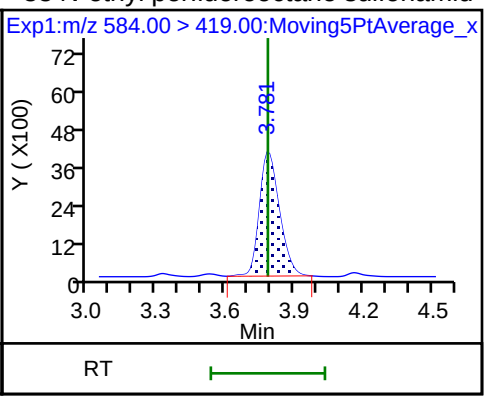
29 Perfluorodecane Sulfonic acid



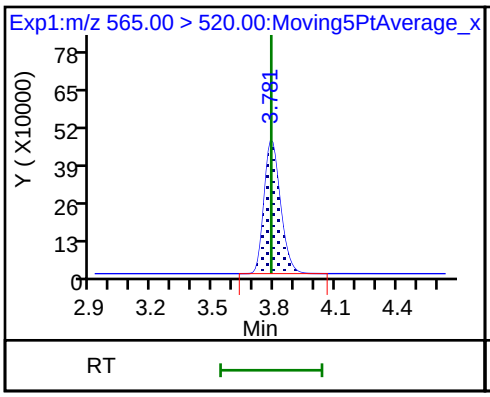
D 32 d5-NEtFOSAA



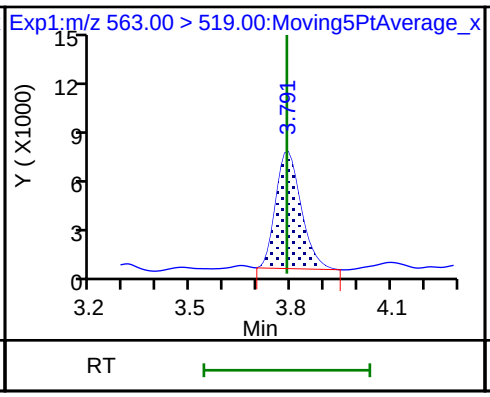
33 N-ethyl perfluorooctane sulfonamid



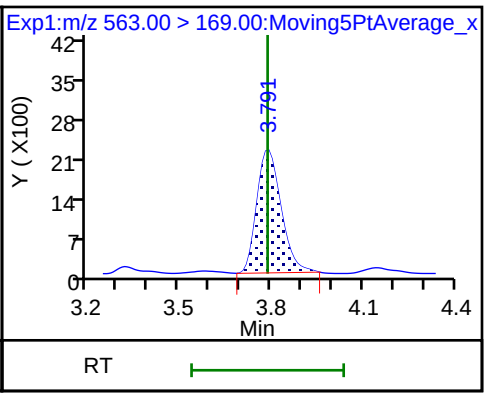
D 30 13C2 PFUnA



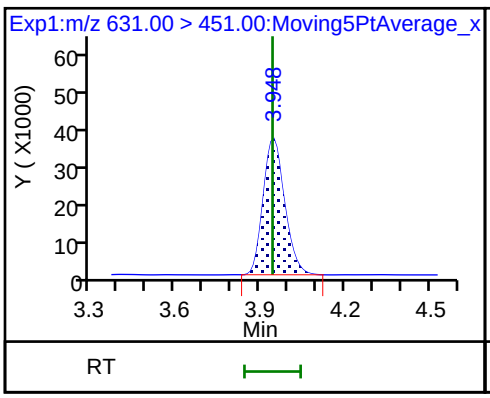
31 Perfluoroundecanoic acid



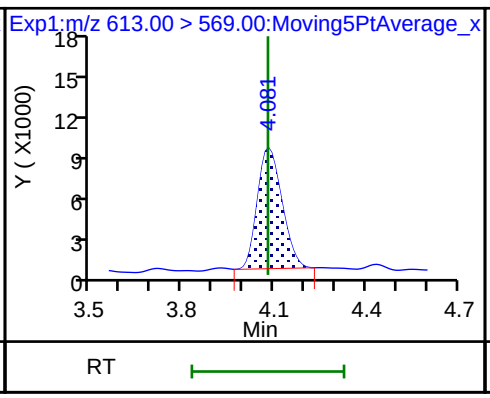
31 Perfluoroundecanoic acid



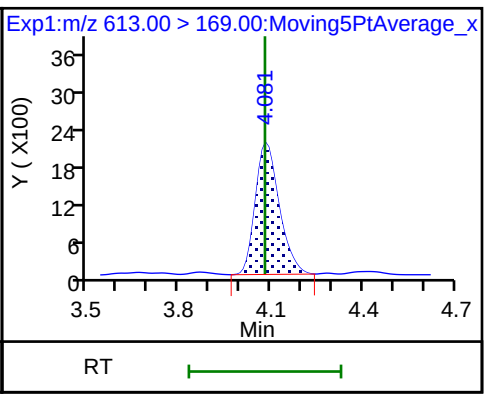
66 11-Chloroeicosafluoro-3-oxaundecan



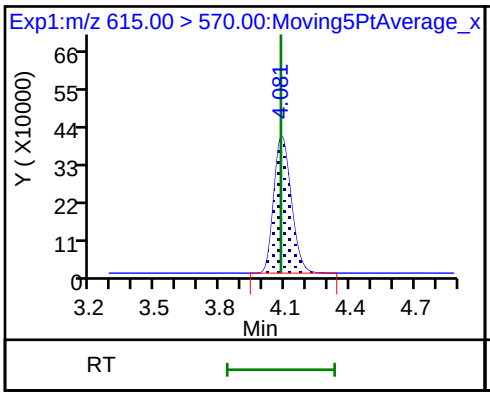
37 Perfluorododecanoic acid



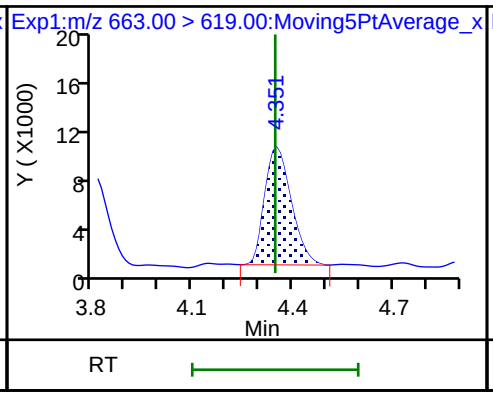
37 Perfluorododecanoic acid



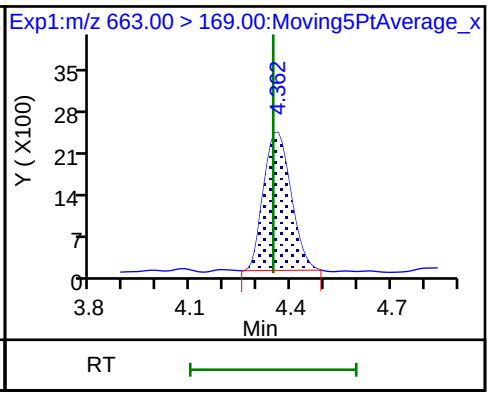
D 36 13C2 PFDoA



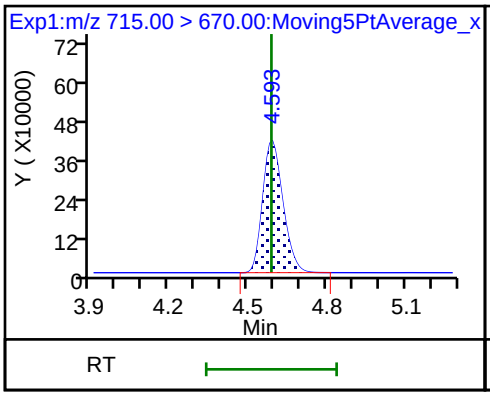
41 Perfluorotridecanoic acid



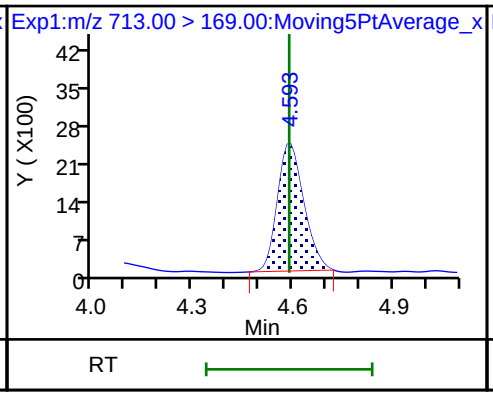
41 Perfluorotridecanoic acid



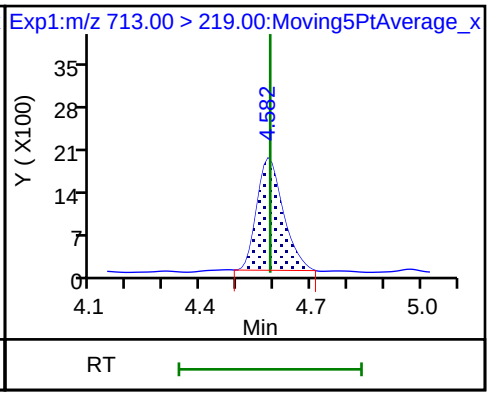
D 43 13C2-PFTeDA



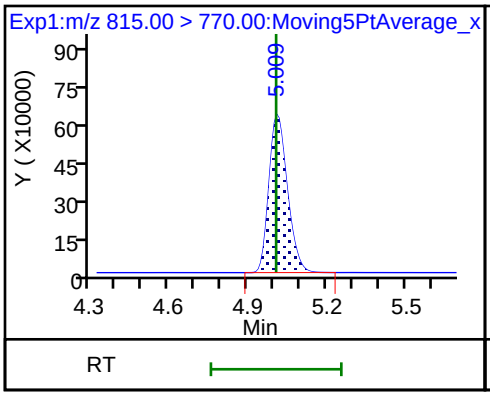
42 Perfluorotetradecanoic acid



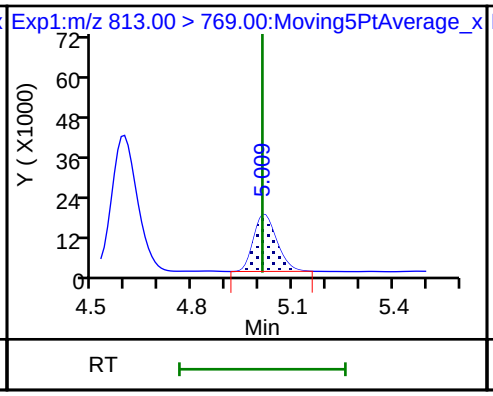
42 Perfluorotetradecanoic acid



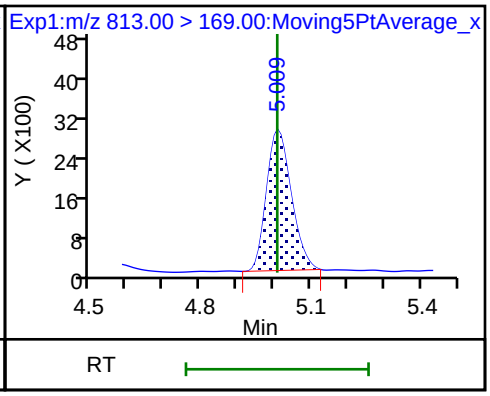
D 44 13C2-PFHxDA



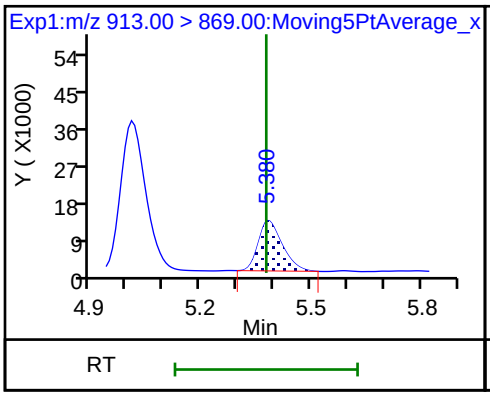
45 Perfluorohexadecanoic acid



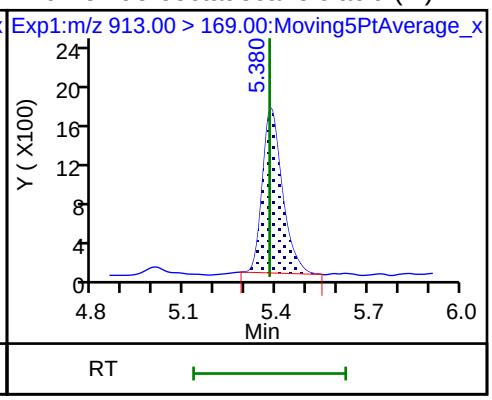
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid (M)



TestAmerica Sacramento

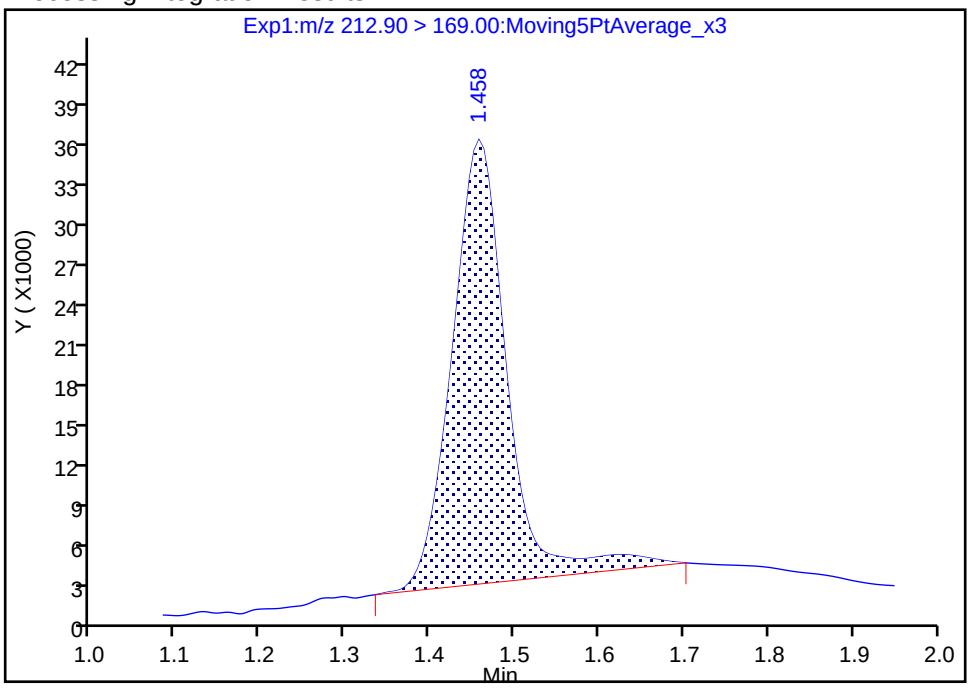
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_003.d
Injection Date: 14-May-2018 12:08:31 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

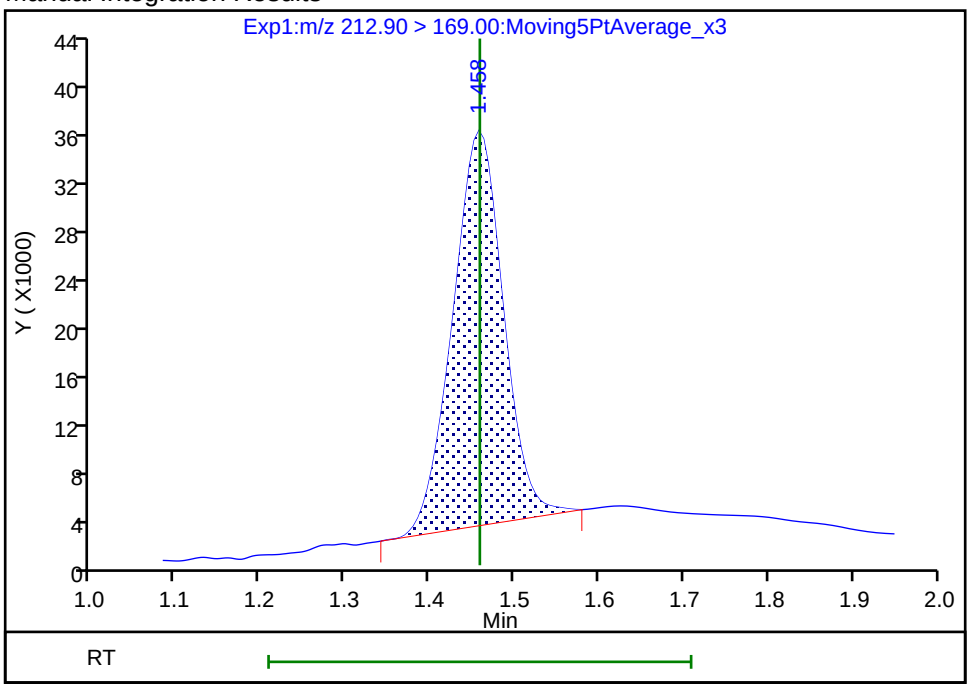
Processing Integration Results

RT: 1.46
Area: 148169
Amount: 0.054948
Amount Units: ng/ml



Manual Integration Results

RT: 1.46
Area: 134564
Amount: 0.051098
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:56:26
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

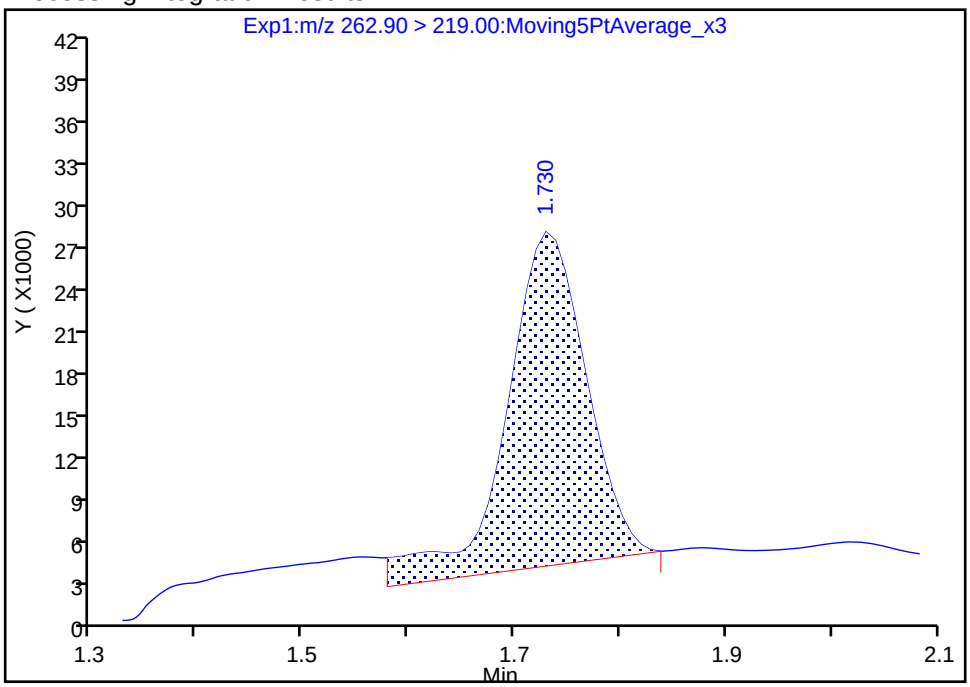
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_003.d
Injection Date: 14-May-2018 12:08:31 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

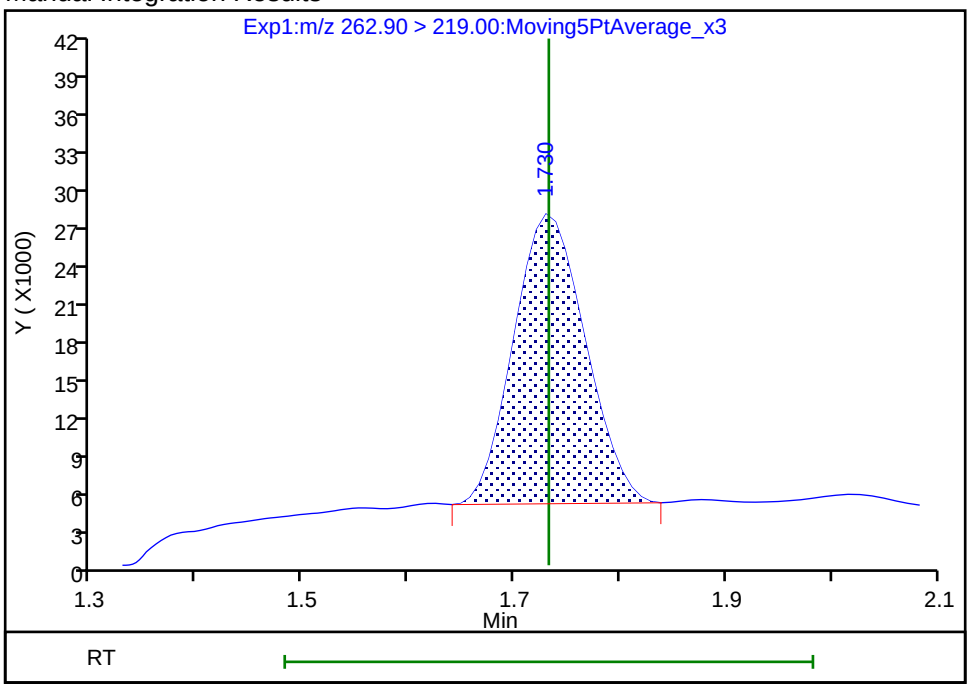
Processing Integration Results

RT: 1.73
Area: 126605
Amount: 0.057273
Amount Units: ng/ml



Manual Integration Results

RT: 1.73
Area: 108472
Amount: 0.051032
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:56:33
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

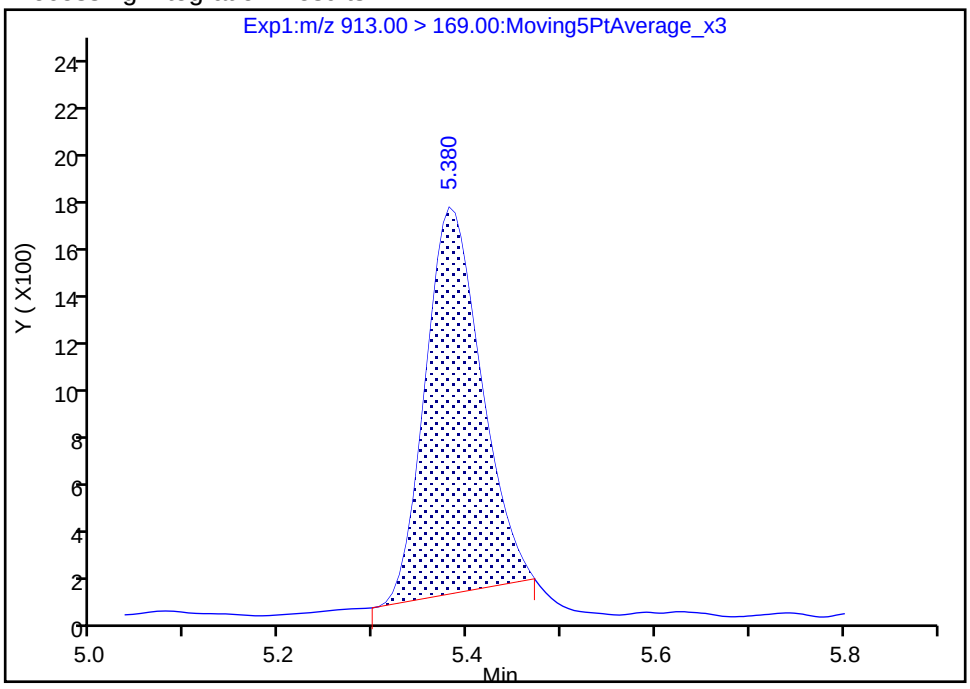
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_003.d
Injection Date: 14-May-2018 12:08:31 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

46 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

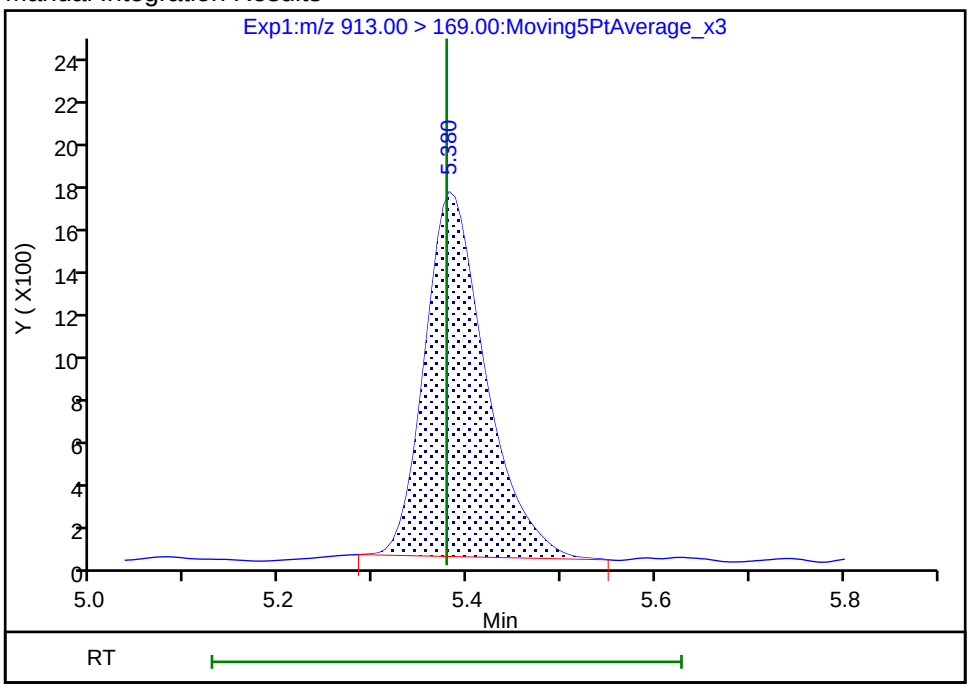
Processing Integration Results

RT: 5.38
Area: 6610
Amount: 0.042683
Amount Units: ng/ml



Manual Integration Results

RT: 5.38
Area: 7531
Amount: 0.042683
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:56:21
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_004.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-May-2018 12:16:21 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L3-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 13:21:57 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 13:21:57

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.459	-0.001	1.000	569261	0.2482		99.3	280	
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.459	-0.001	1.000	6172050	2.47		98.7	40621	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.732	-0.002	0.561	3808182	2.46		98.4	60380	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.730	1.732	-0.002	1.000	442377	0.2387		95.5	188	M
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.767	-0.001	1.000	84530	2.31		99.5	638	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.768	-0.002	1.000	612310	0.2183		98.8	3488	
298.90 > 99.00	1.766	1.768	-0.002	1.000	257116		2.38(1.25-3.74)	98.8	1744	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.985	-0.003	1.000	111606	0.2347		101	4961	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.985	-0.003	1.000	502759	2.46		105	8115	
D 7 13C2 PFHxA										
315.00 > 270.00	2.027	2.022	0.005	1.000	3990009	2.46		98.5	69839	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.027	2.024	0.003	1.000	396926	0.2384		95.3	559	
313.00 > 119.00	2.027	2.024	0.003	1.000	36020		11.02(5.03-15.10)	95.3	637	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.039	2.043	-0.004	1.000	587653	0.2343		99.9	9434	
349.00 > 99.00	2.039	2.043	-0.004	1.000	211266		2.78(1.36-4.07)	99.9	2454	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.118	2.124	-0.006	1.000	191935	2.33		93.0	5396	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.129	2.126	0.003	1.005	65756	0.2531		101	626	
D 9 13C4-PFHpA										
367.00 > 322.00	2.360	2.357	0.003	1.000	3905674	2.51		101	53099	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.360	2.358	0.002	1.000	405605	0.2448		97.9	586	
363.00 > 169.00	2.360	2.358	0.002	1.000	154003		2.63(1.13-3.40)	97.9	871	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.372	2.369	0.003	1.000	502899	0.2196		96.5	4560	
399.00 > 99.00	2.372	2.369	0.003	1.000	175777		2.86(1.50-4.49)	96.5	777	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.373	-0.001	1.000	4807399	2.33		98.5	53256	
65 Adona										
377.00 > 251.00	2.396	2.400	-0.004	1.000	1160920	0.2524		101	21992	
377.00 > 85.00	2.396	2.400	-0.004	1.000	719707		1.61(0.84-2.53)	101	5580	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.690	2.689	0.001	1.000	114655	0.2270		95.8	970	
D 12 M2-6:2FTS										
429.00 > 81.00	2.690	2.690	0.0	1.000	712600	2.33		98.1	12661	
* 62 13C2-PFOA										
415.00 > 370.00	2.713	2.714	-0.001		3863948	2.50			74054	
D 14 13C4 PFOA										
417.00 > 372.00	2.713	2.714	-0.001	1.000	3592269	2.47		98.7	53745	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.717	-0.004	1.000	403005	0.2334		93.4	192	
413.00 > 169.00	2.713	2.717	-0.004	1.000	204786		1.97(0.84-2.52)	93.4	785	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.720	2.722	-0.002	1.000	434448	0.2327		97.8	6025	
449.00 > 99.00	2.720	2.722	-0.002	1.000	120751		3.60(1.94-5.82)	97.8	1339	
D 18 13C4 PFOS										
503.00 > 80.00	3.085	3.087	-0.002	1.000	3381116	2.35		98.2	31543	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.085	3.087	-0.002	1.000	357711	0.2265		97.6	2594	
499.00 > 99.00	3.085	3.087	-0.002	1.000	82911		4.31(2.31-6.93)	97.6	658	
D 19 13C5 PFNA										
468.00 > 423.00	3.085	3.089	-0.004	1.000	3074823	2.53		101	64376	
20 Perfluorononanoic acid										
463.00 > 419.00	3.093	3.089	0.004	1.003	305357	0.2355		94.2	618	
463.00 > 169.00	3.085	3.089	-0.004	1.000	76269		4.00(1.90-5.69)	94.2	1571	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.300	3.299	0.001	1.000	569787	0.2257		96.9	5806	
D 21 13C8 FOSA										
506.00 > 78.00	3.413	3.413	0.0	1.000	5177368	2.48		99.4	49513	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.413	3.415	-0.002	1.000	524931	0.2572		103	8509	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.441	3.438	0.003	1.000	259892	0.2401		100	5472	
549.00 > 99.00	3.441	3.438	0.003	1.000	96090		2.70(1.33-3.97)	100	1418	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.441	3.442	-0.001	1.000	974706	2.44		102	12991	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.441	3.442	-0.001	1.000	128807	0.2433		102	3330	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.451	3.452	-0.001	1.000	265423	0.2570		103	1715	
513.00 > 169.00	3.451	3.452	-0.001	1.000	47995		5.53(2.36-7.09)	103	1906	
D 23 13C2 PFDA										
515.00 > 470.00	3.451	3.453	-0.002	1.000	2522810	2.41		96.3	43290	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.604	3.608	-0.004	1.000	1134265	2.39		95.5	34033	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.615	3.613	0.002	1.003	116759	0.2462		98.5	1119	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.768	3.768	0.0	1.000	218566	0.2336		96.9	4436	
599.00 > 99.00	3.768	3.768	0.0	1.000	80066		2.73(1.39-4.16)	96.9	1588	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.779	3.778	0.001	1.000	1286529	2.54		102	3334	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.789	3.785	0.004	1.003	120689	0.2489		99.6	2417	
D 30 13C2 PFUnA										
565.00 > 520.00	3.779	3.785	-0.006	1.000	2099934	2.40		95.8	34030	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.789	3.787	0.002	1.003	169069	0.2579		103	685	
563.00 > 169.00	3.789	3.787	0.002	1.003	41363		4.09(2.12-6.36)	103	1033	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.946	3.943	0.003	1.000	892363	0.2311		98.1	23803	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.078	4.079	-0.001	1.000	250154	0.2616		105	151	
613.00 > 169.00	4.078	4.079	-0.001	1.000	57248		4.37(2.13-6.40)	105	1039	
D 36 13C2 PFDoA										
615.00 > 570.00	4.078	4.080	-0.002	1.000	2299967	2.51		101	21930	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.350	4.346	0.004	1.000	246341	0.2480		99.2	96.4	
663.00 > 169.00	4.350	4.346	0.004	1.000	71819		3.43(1.25-3.76)	99.2	1094	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.592	4.588	0.004	1.000	2554041	2.56		102	12849	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.592	4.588	0.004	1.000	60003	0.2269		90.8	913	
713.00 > 219.00	4.581	4.588	-0.007	0.998	41352		1.45(0.71-2.13)	90.8	693	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.008	5.006	0.002	1.000	4073708	2.57		103	13112	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.008	5.008	0.0	1.000	387570	0.2333		93.3	79.9	
813.00 > 169.00	5.008	5.008	0.0	1.000	69084		5.61(2.86-8.58)	93.3	769	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.380	5.378	0.002	1.000	448710	0.2607		104	80.3	
913.00 > 169.00	5.380	5.378	0.002	1.000	56100		8.00(3.83-11.48)	104	766	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL3_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 13:21:59 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_004.d

Injection Date: 14-May-2018 12:16:21 Instrument ID: A8_N

Lims ID: IC L3 Full

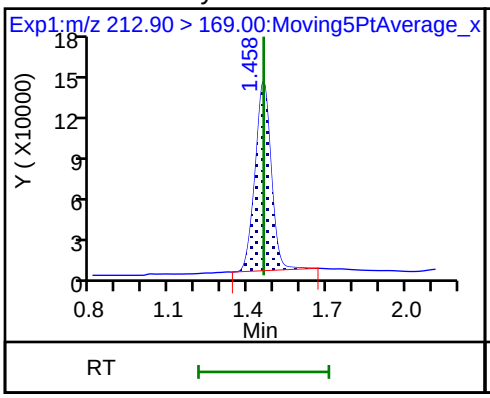
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 4

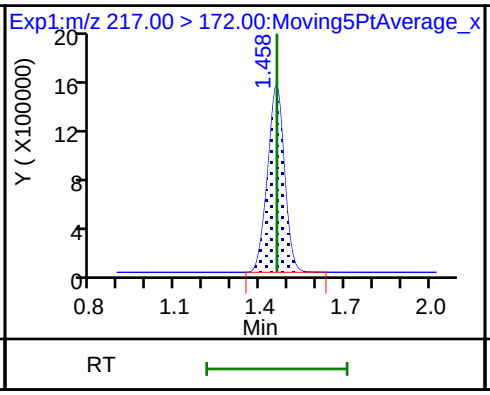
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

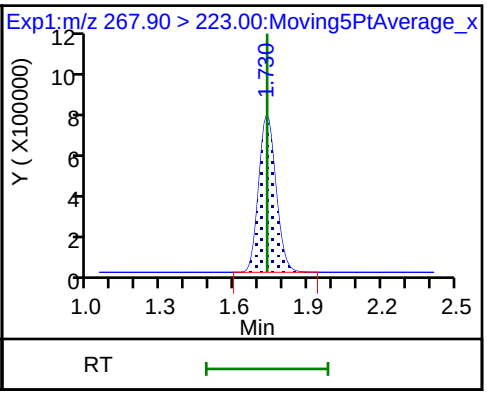
2 Perfluorobutyric acid



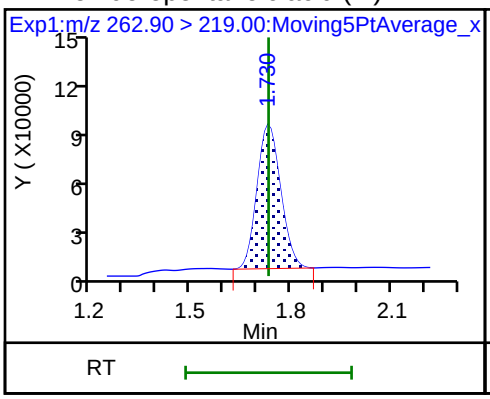
D 1 13C4 PFBA



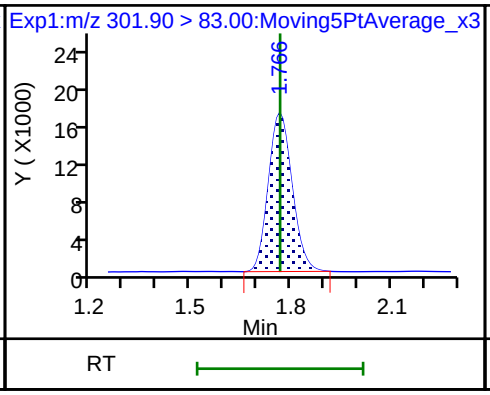
D 3 13C5-PFPeA



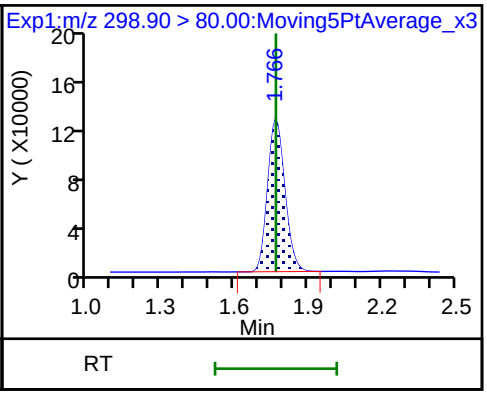
4 Perfluoropentanoic acid (M)



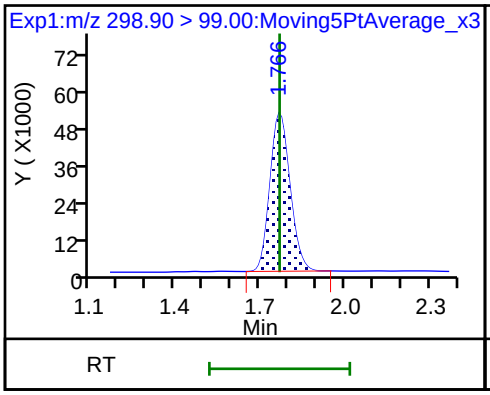
D 47 13C3-PFBS



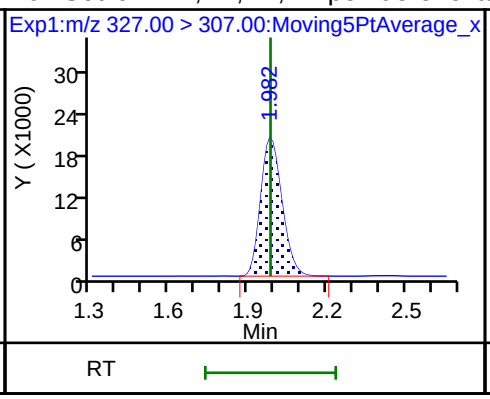
5 Perfluorobutanesulfonic acid



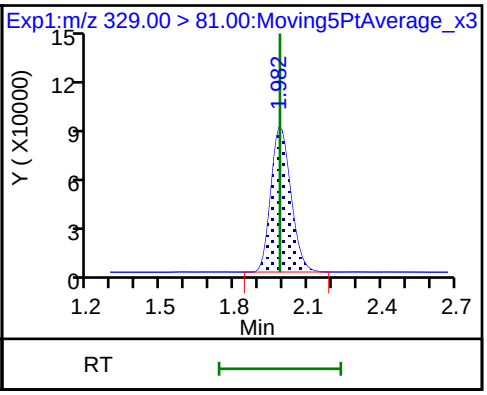
5 Perfluorobutanesulfonic acid



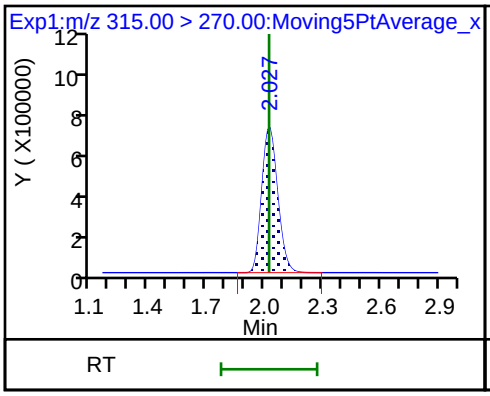
61 Sodium 1H,1H,2H,2H-perfluorohexa



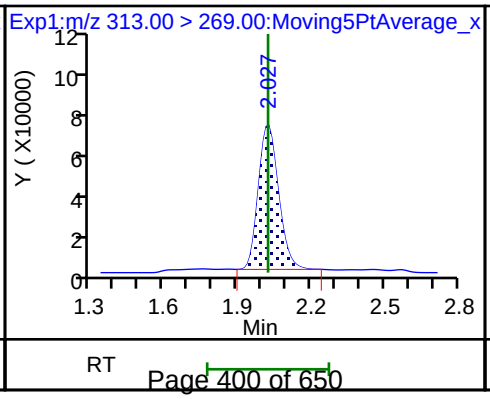
D 60 M2-4:2FTS



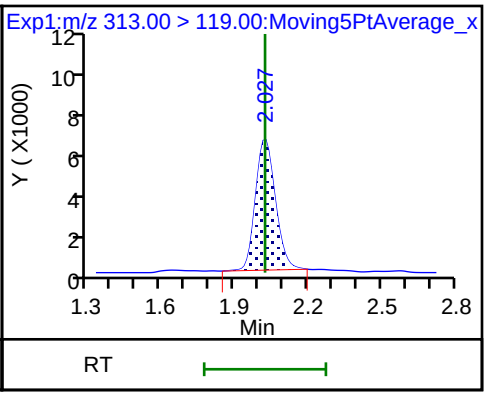
D 7 13C2 PFHxA



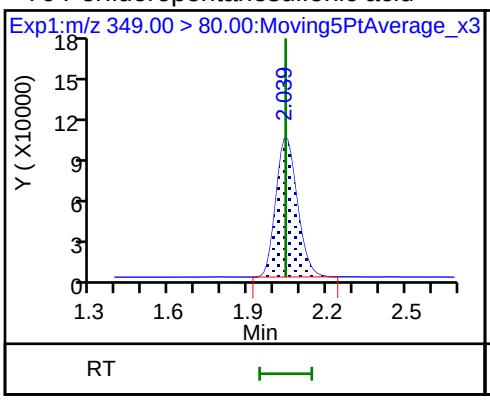
6 Perfluorohexanoic acid



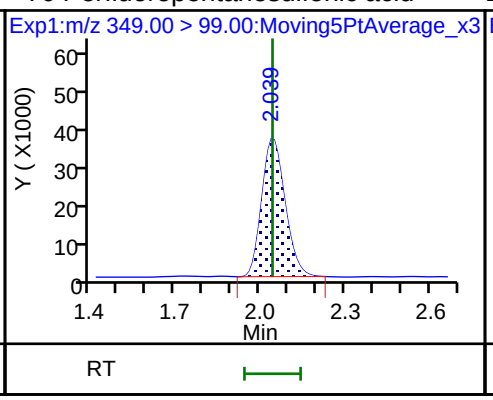
6 Perfluorohexanoic acid



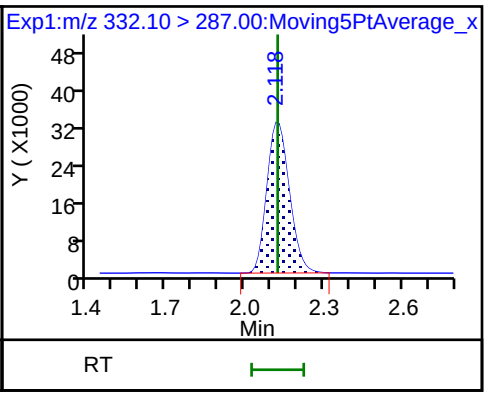
70 Perfluoropentanesulfonic acid



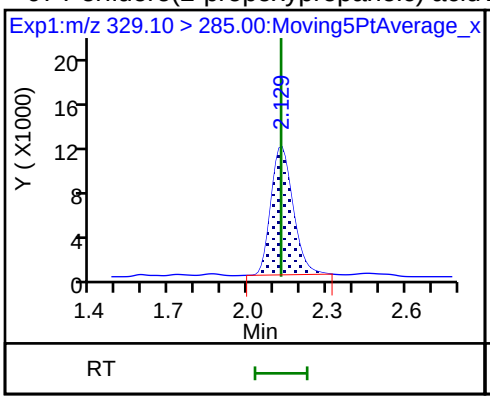
70 Perfluoropentanesulfonic acid



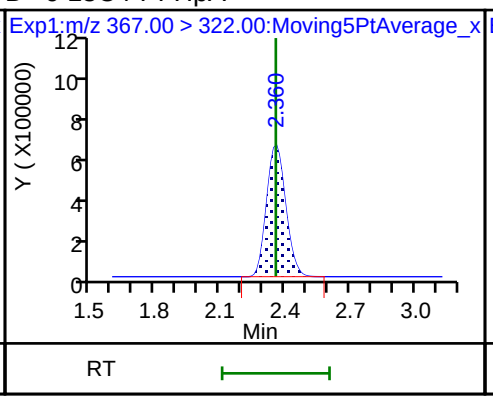
D 64 13C3 HFPO-DA



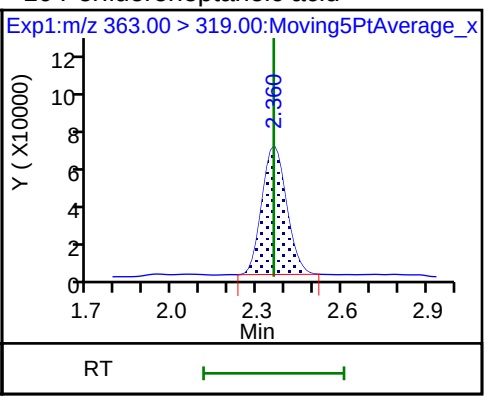
67 Perfluoro(2-propoxypropanoic) acid



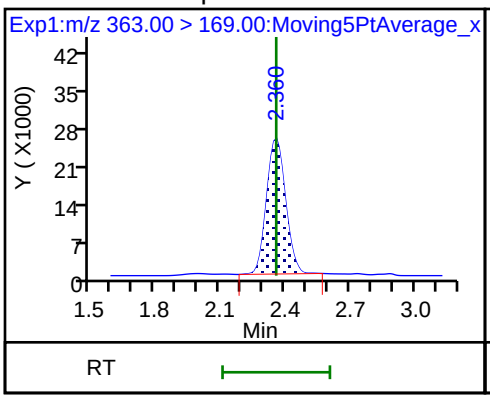
D 9 13C4-PFHpA



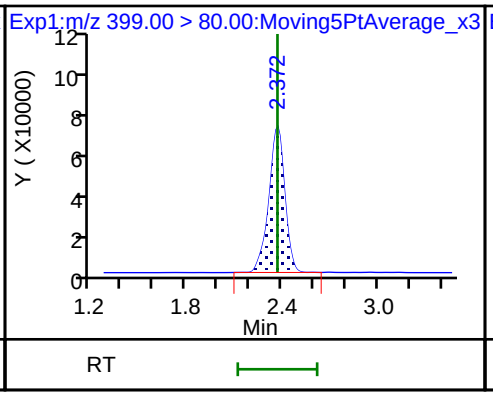
10 Perfluoroheptanoic acid



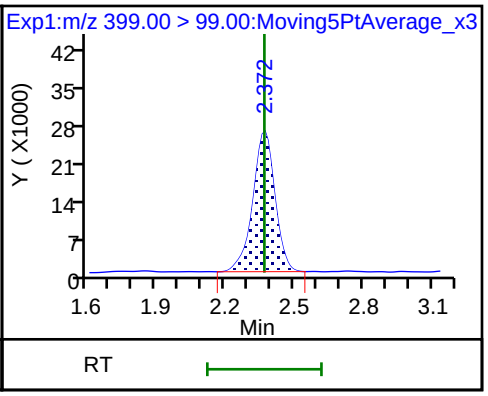
10 Perfluoroheptanoic acid



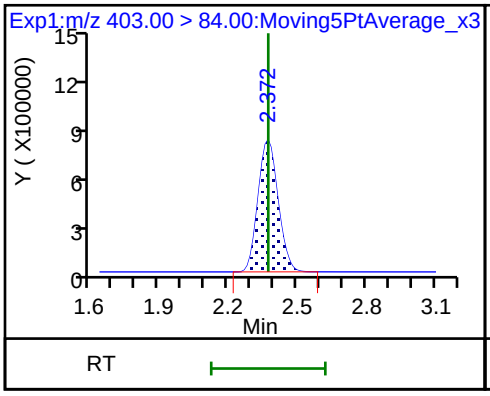
8 Perfluorohexanesulfonic acid



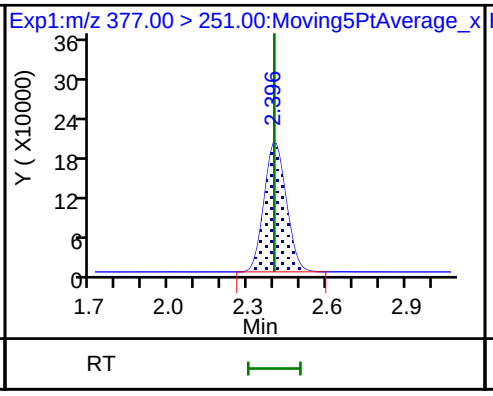
8 Perfluorohexanesulfonic acid



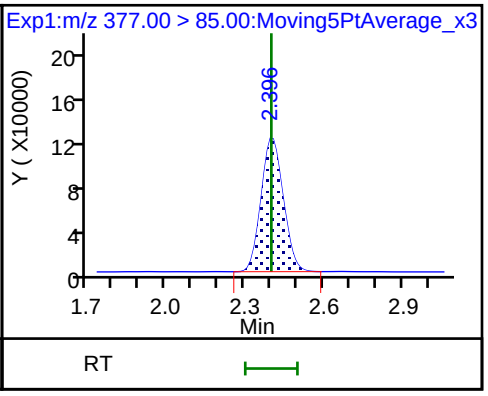
D 11 18O2 PFHxS



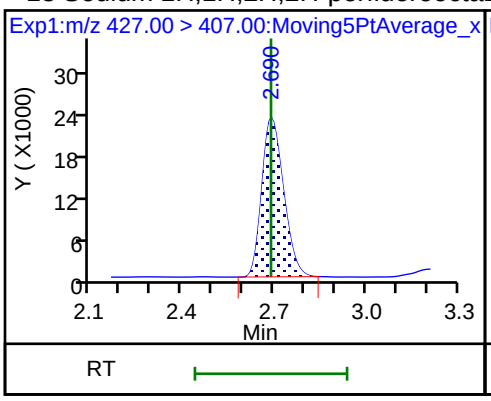
65 Adona



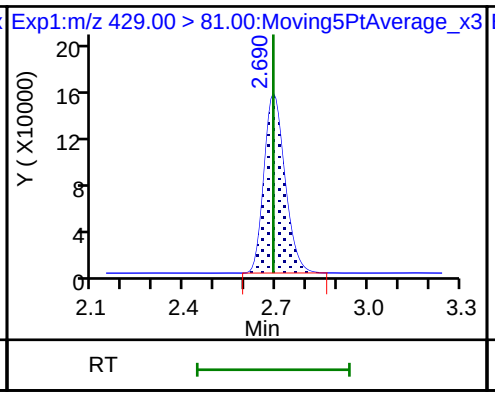
65 Adona



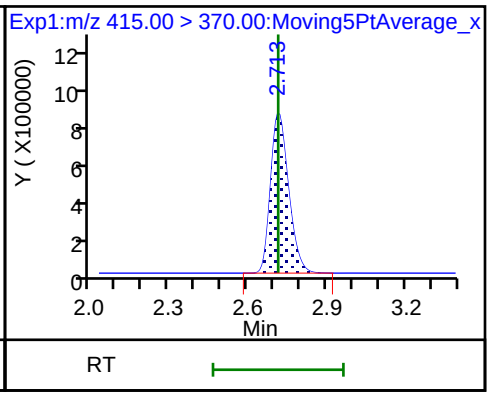
13 Sodium 1H,1H,2H,2H-perfluorooctane



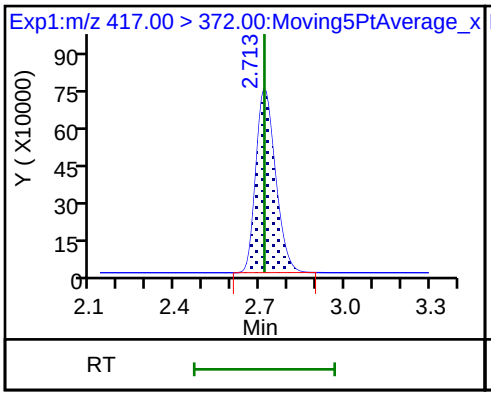
D 12 M2-6:2FTS



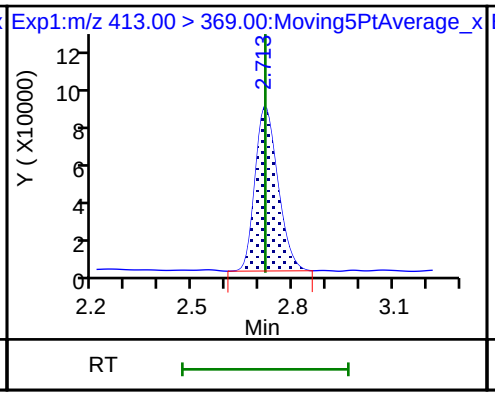
* 62 13C2-PFOA



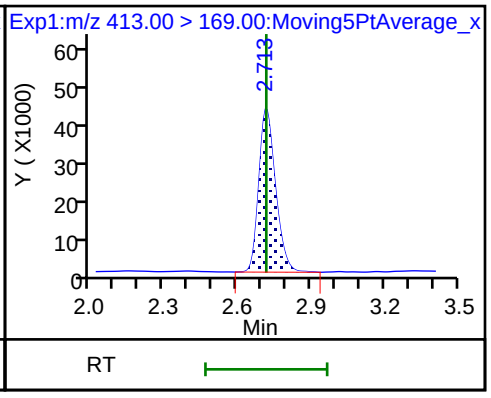
D 14 13C4 PFOA



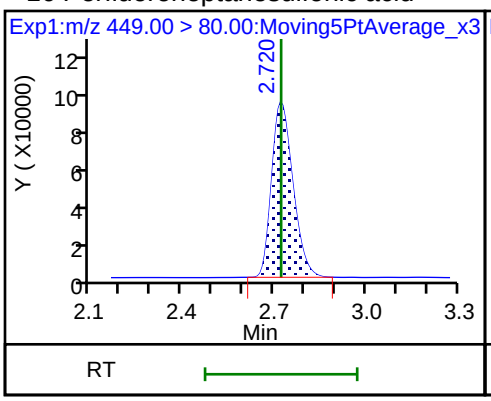
15 Perfluorooctanoic acid



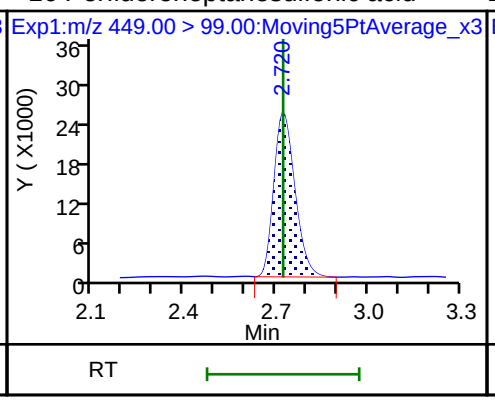
15 Perfluorooctanoic acid



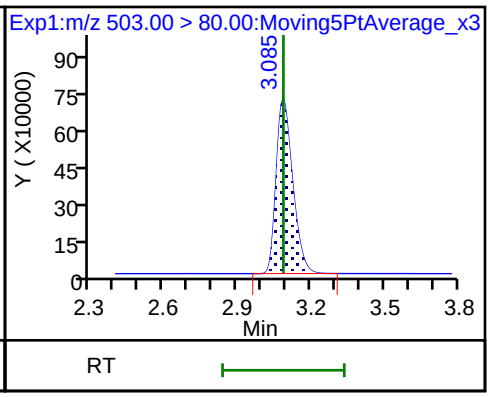
16 Perfluoroheptanesulfonic acid



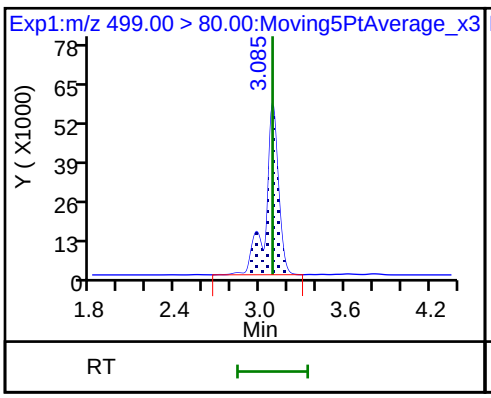
16 Perfluoroheptanesulfonic acid



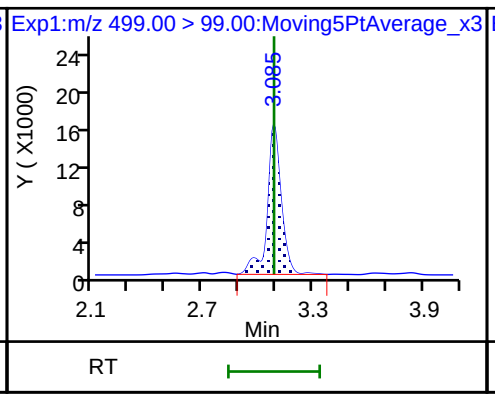
D 18 13C4 PFOS



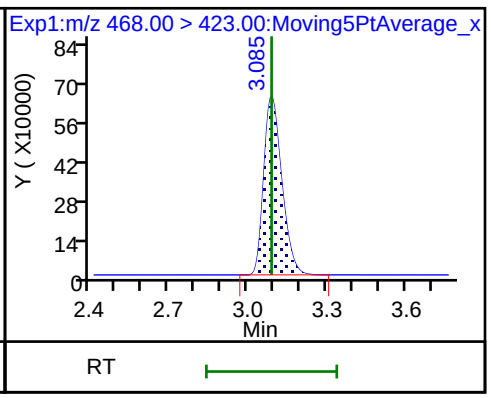
17 Perfluorooctane sulfonic acid



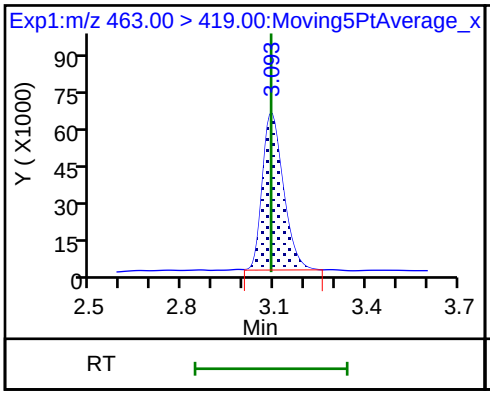
17 Perfluorooctane sulfonic acid



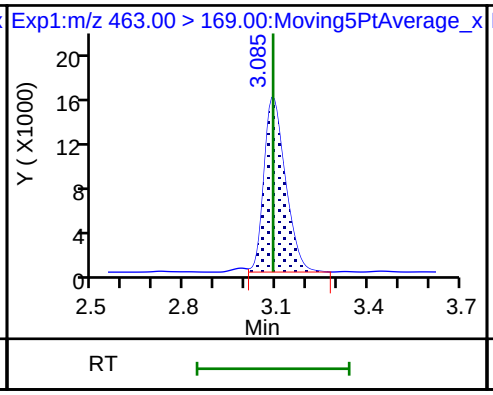
D 19 13C5 PFNA



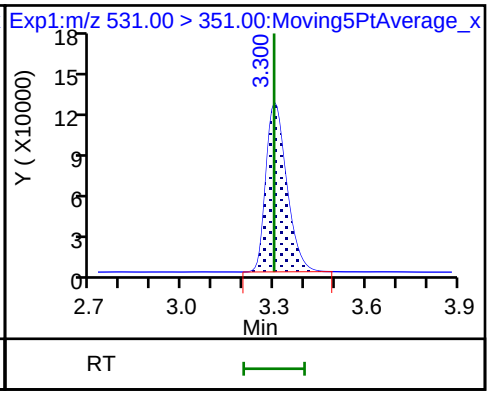
20 Perfluorononanoic acid



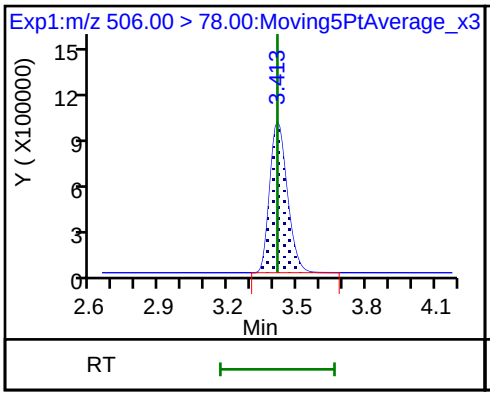
20 Perfluorononanoic acid



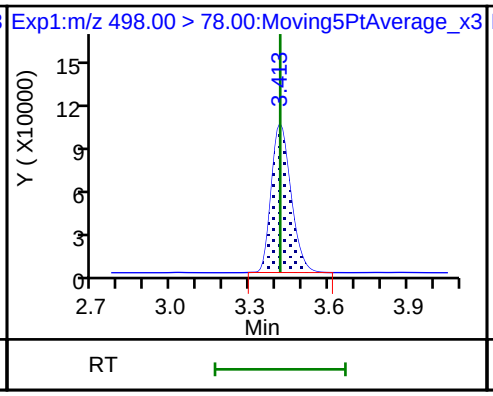
69 9-Chlorohexadecafluoro-3-oxanonane



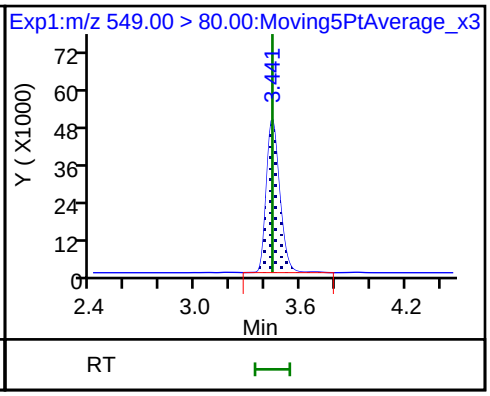
D 21 13C8 FOSA



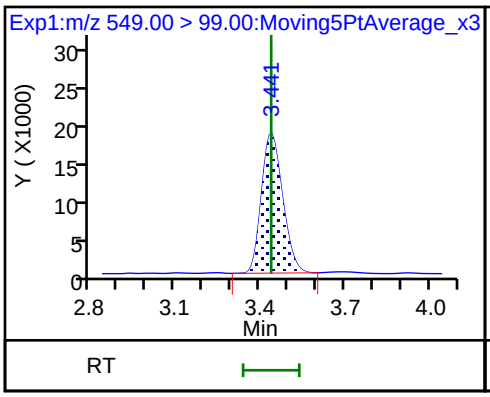
22 Perfluorooctane Sulfonamide



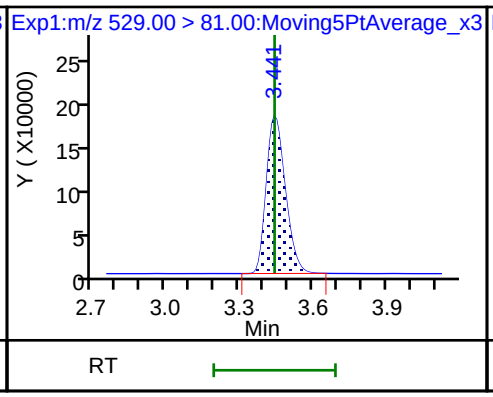
68 Perfluorononanesulfonic acid



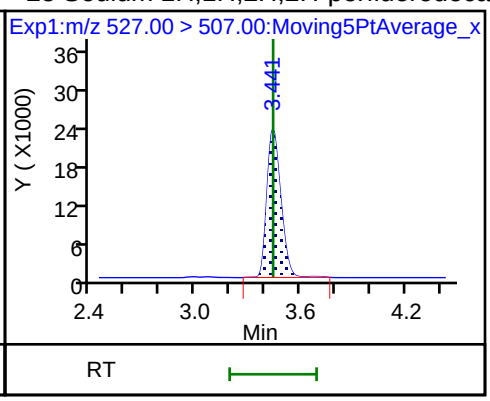
68 Perfluorononanesulfonic acid



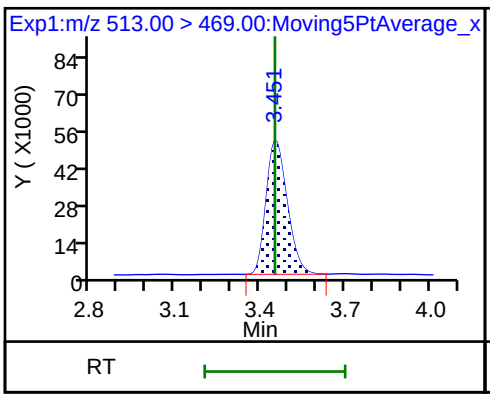
D 26 M2-8:2FTS



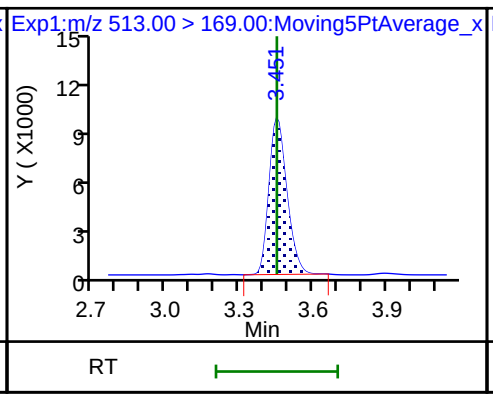
25 Sodium 1H,1H,2H,2H-perfluorodecane



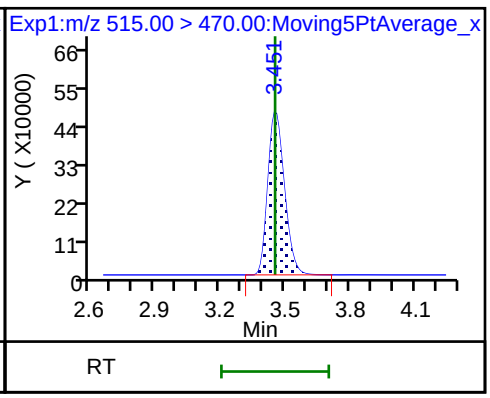
24 Perfluorodecanoic acid



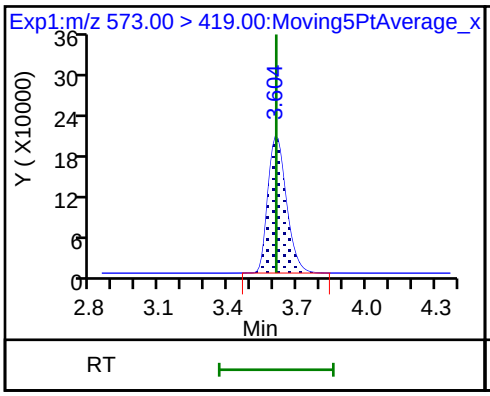
24 Perfluorodecanoic acid



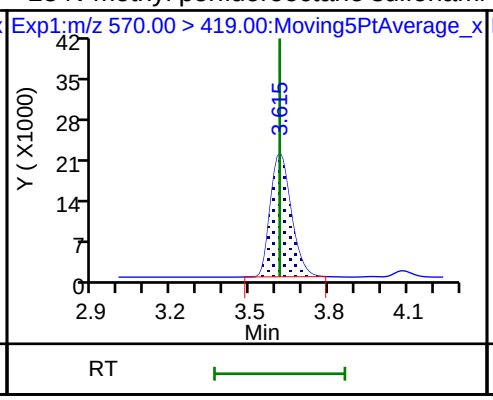
D 23 13C2 PFDA



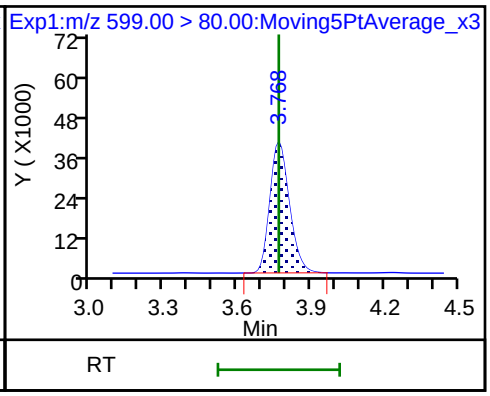
D 27 d3-NMeFOSAA



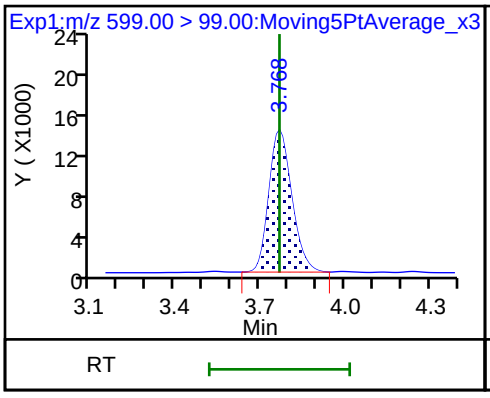
28 N-methyl perfluorooctane sulfonami



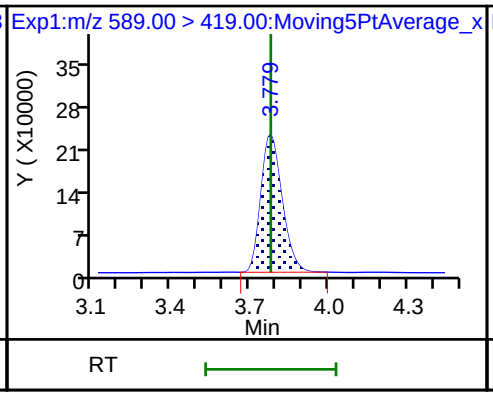
29 Perfluorodecane Sulfonic acid



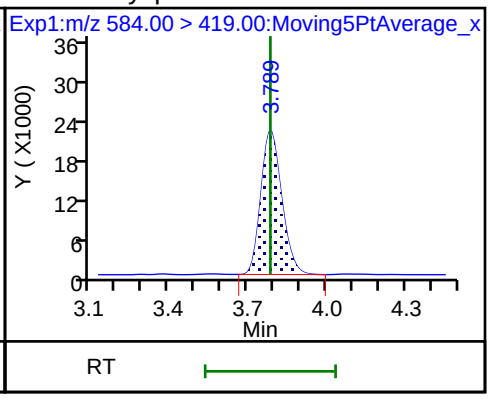
29 Perfluorodecane Sulfonic acid



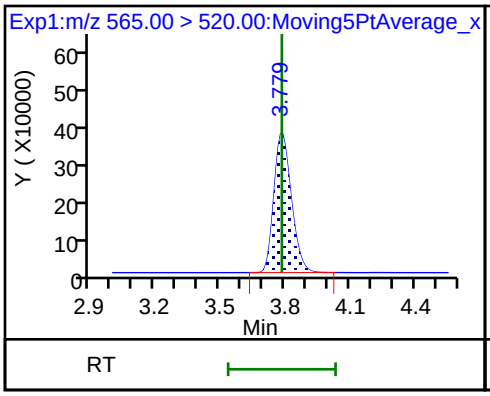
D 32 d5-NEtFOSAA



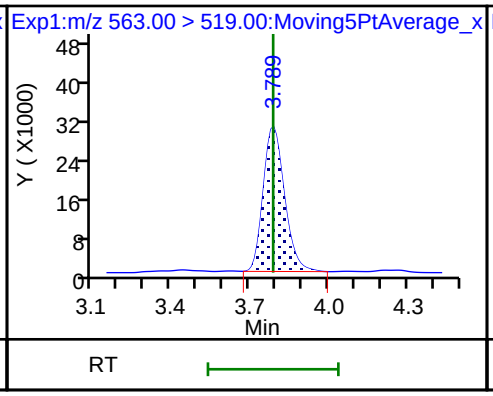
33 N-ethyl perfluorooctane sulfonamid



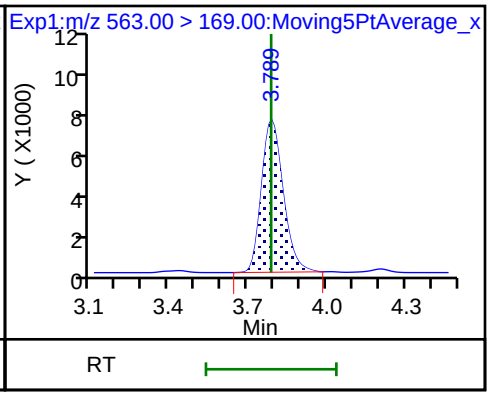
D 30 13C2 PFUnA



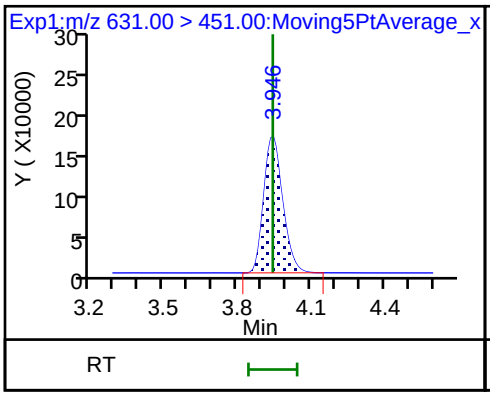
31 Perfluoroundecanoic acid



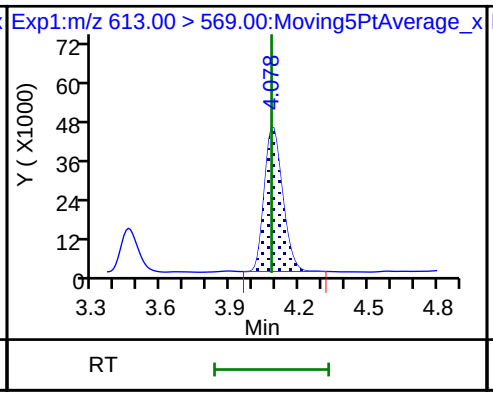
31 Perfluoroundecanoic acid



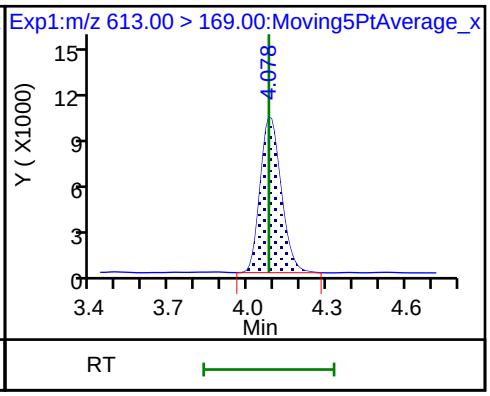
66 11-Chloroeicosafluoro-3-oxaundecan



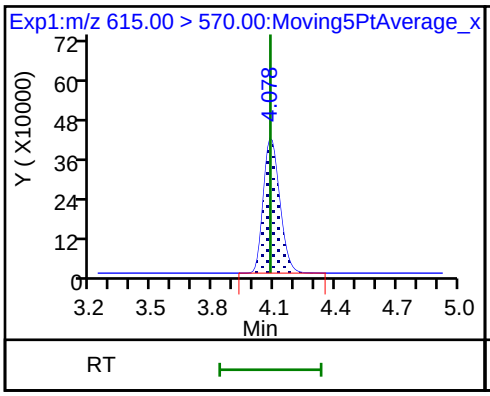
37 Perfluorododecanoic acid



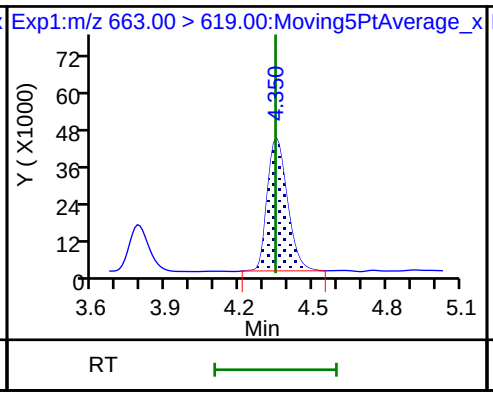
37 Perfluorododecanoic acid



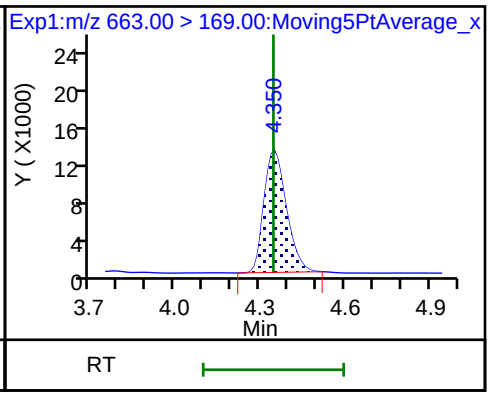
D 36 13C2 PFDoA



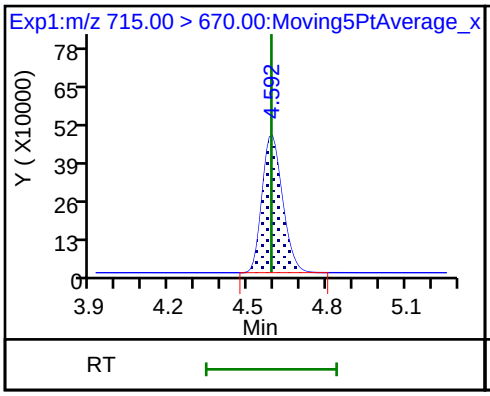
41 Perfluorotridecanoic acid



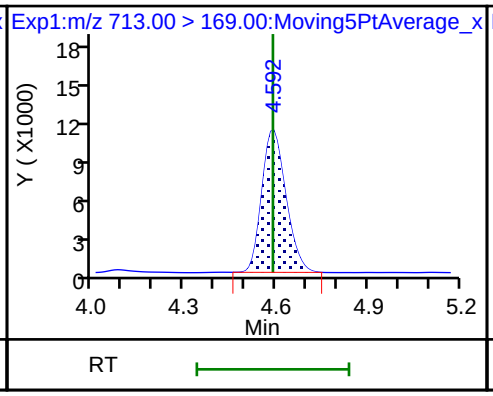
41 Perfluorotridecanoic acid



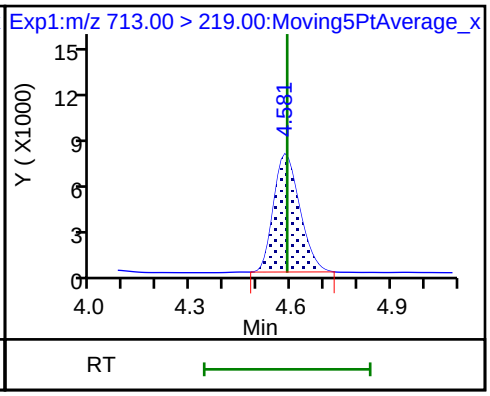
D 43 13C2-PFTeDA



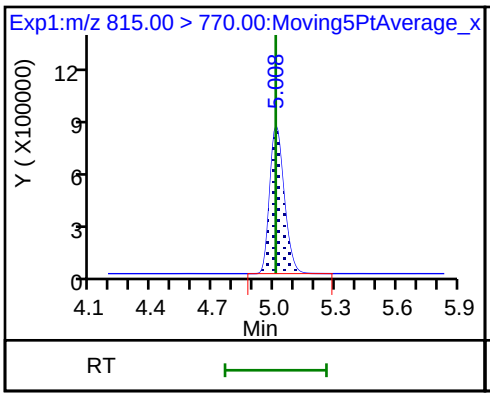
42 Perfluorotetradecanoic acid



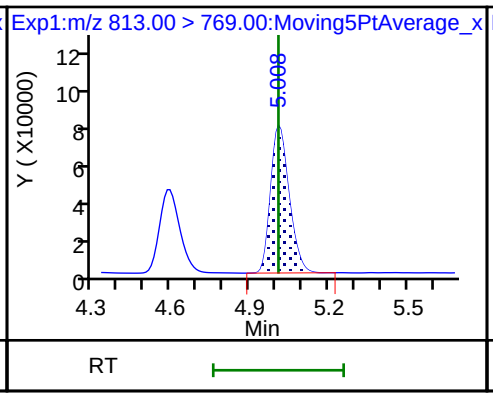
42 Perfluorotetradecanoic acid



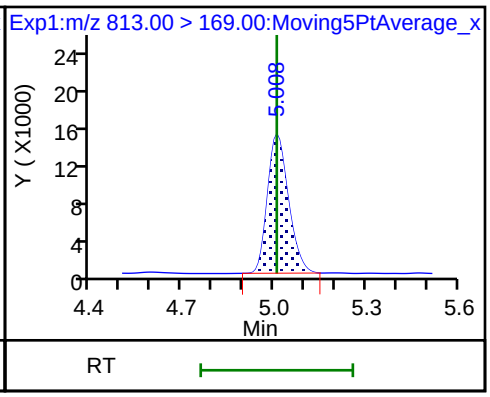
D 44 13C2-PFHxDA



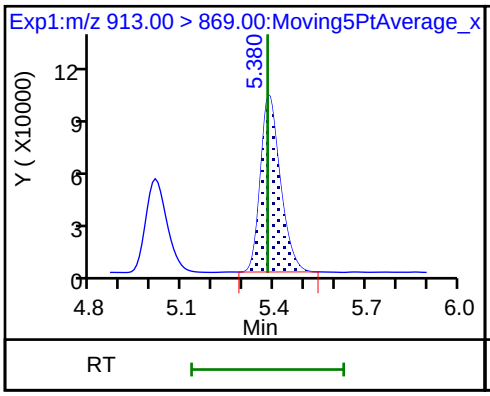
45 Perfluorohexadecanoic acid



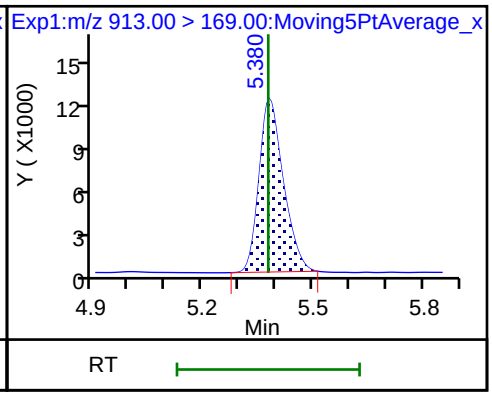
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

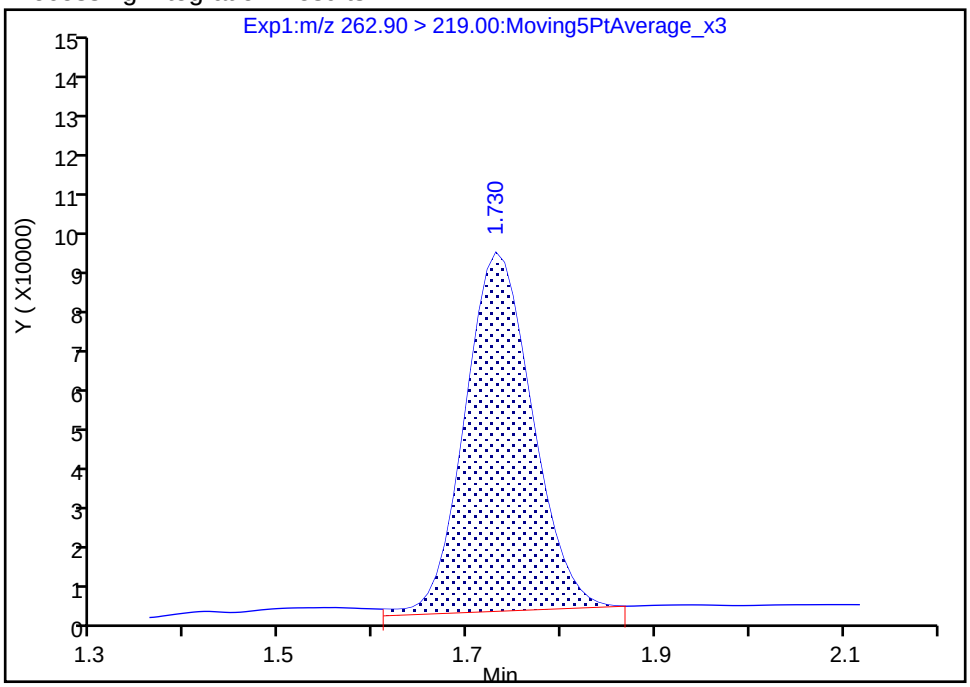
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_004.d
Injection Date: 14-May-2018 12:16:21 Instrument ID: A8_N
Lims ID: IC L3 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

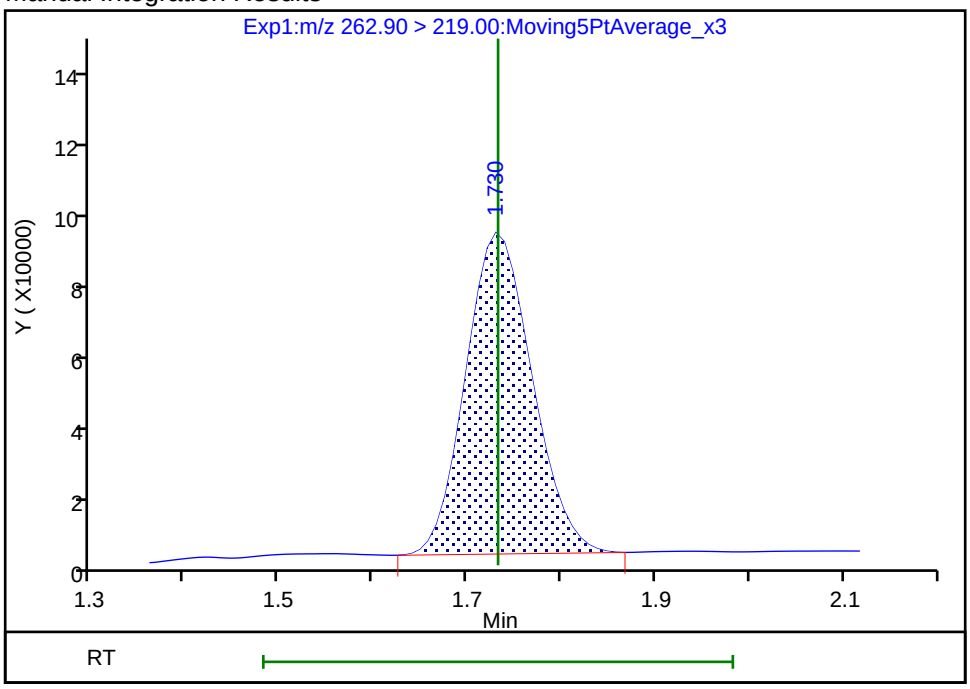
Processing Integration Results

RT: 1.73
Area: 454853
Amount: 0.242656
Amount Units: ng/ml



Manual Integration Results

RT: 1.73
Area: 442377
Amount: 0.238722
Amount Units: ng/ml



Reviewer: westendorfc, 14-May-2018 12:57:00
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_005.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 14-May-2018 12:24:12 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L4-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 13:21:19 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 12:54:55

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.464	1.459	0.005	1.000	2071376	0.9755		97.6	973	
D 1 13C4 PFBA										
217.00 > 172.00	1.464	1.459	0.005	1.000	5713364	2.44		97.6	38302	
D 3 13C5-PFPeA										
267.90 > 223.00	1.740	1.732	0.008	0.563	3551180	2.45		97.9	59815	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.740	1.732	0.008	1.000	1676943	0.9704		97.0	987	
D 47 13C3-PFBS										
301.90 > 83.00	1.776	1.767	0.009	1.000	78083	2.28		98.1	539	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.776	1.768	0.008	1.000	2281825	0.8805		99.6	12319	
298.90 > 99.00	1.776	1.768	0.008	1.000	946912		2.41(1.25-3.74)	99.6	7119	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.994	1.985	0.009	1.000	387309	0.8817		94.4	16932	
D 60 M2-4:2FTS										
329.00 > 81.00	1.994	1.985	0.009	1.000	466637	2.44		104	5858	
D 7 13C2 PFHxA										
315.00 > 270.00	2.028	2.022	0.006	1.000	3873685	2.55		102	75477	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.028	2.023	0.005	1.000	1518266	0.9391		93.9	2105	
313.00 > 119.00	2.028	2.023	0.005	1.000	140008		10.84(5.03-15.10)	93.9	2714	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.050	2.043	0.007	1.000	2116381	0.9134		97.4	28524	
349.00 > 99.00	2.050	2.043	0.007	1.000	830990		2.55(1.36-4.07)	97.4	9649	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.130	2.124	0.006	1.000	187593	2.43		97.1	5362	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.130	2.126	0.004	1.000	245512	0.9670		96.7	2239	
D 9 13C4-PFHpA										
367.00 > 322.00	2.362	2.357	0.005	1.000	3674862	2.53		101	37488	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.362	2.358	0.004	1.000	1521709	0.9761		97.6	2361	
363.00 > 169.00	2.362	2.358	0.004	1.000	568884		2.67(1.13-3.40)	97.6	3050	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.374	2.369	0.005	1.000	1754740	0.8087		88.9	11402	
399.00 > 99.00	2.374	2.369	0.005	1.000	588472		2.98(1.50-4.49)	88.9	2261	
D 11 18O2 PFHxS										
403.00 > 84.00	2.374	2.373	0.001	1.000	4555738	2.36		99.6	57888	
65 Adona										
377.00 > 251.00	2.409	2.400	0.009	1.000	4470970	1.04		104	54977	
377.00 > 85.00	2.409	2.400	0.009	1.000	2636699		1.70(0.84-2.53)	104	17412	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.698	2.689	0.009	1.000	423940	0.9268		97.8	3273	
D 12 M2-6:2FTS										
429.00 > 81.00	2.698	2.690	0.008	1.000	645390	2.25		94.9	12257	
* 62 13C2-PFOA										
415.00 > 370.00	2.721	2.714	0.007		3619210	2.50			54273	
D 14 13C4 PFOA										
417.00 > 372.00	2.721	2.714	0.007	1.000	3371392	2.47		98.8	49143	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.721	2.717	0.004	1.000	1549227	0.9560		95.6	772	
413.00 > 169.00	2.721	2.717	0.004	1.000	774656		2.00(0.84-2.52)	95.6	2102	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.729	2.722	0.007	1.000	1626577	0.9344		98.1	19033	
449.00 > 99.00	2.729	2.722	0.007	1.000	456346		3.56(1.94-5.82)	98.1	5577	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.092	3.086	0.006	1.000	1306372	0.8869		95.6	9131	
499.00 > 99.00	3.092	3.086	0.006	1.000	289063		4.52(2.31-6.93)	95.6	2056	
D 18 13C4 PFOS										
503.00 > 80.00	3.092	3.087	0.005	1.000	3153131	2.34		97.8	26822	
D 19 13C5 PFNA										
468.00 > 423.00	3.092	3.089	0.003	1.000	2735969	2.40		96.0	51751	
20 Perfluorononanoic acid										
463.00 > 419.00	3.092	3.089	0.003	1.000	1163767	1.01		101	2806	
463.00 > 169.00	3.092	3.089	0.003	1.000	275308		4.23(1.90-5.69)	101	7100	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.307	3.299	0.008	1.000	2115460	0.8984		96.4	18645	
D 21 13C8 FOSA										
506.00 > 78.00	3.421	3.413	0.008	1.000	5005614	2.56		103	50899	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.421	3.415	0.006	1.000	1865357	0.9453		94.5	29627	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.439	3.438	0.001	1.000	977019	0.9681		101	17027	
549.00 > 99.00	3.439	3.438	0.001	1.000	382241		2.56(1.33-3.97)	101	3103	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.449	3.442	0.007	1.000	874513	2.34		97.6	8171	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.449	3.442	0.007	1.000	450292	0.9480		99.0	6845	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.458	3.452	0.006	1.000	992920	0.9634		96.3	6811	
513.00 > 169.00	3.458	3.452	0.006	1.000	176534		5.62(2.36-7.09)	96.3	4845	
D 23 13C2 PFDA										
515.00 > 470.00	3.458	3.453	0.005	1.000	2517968	2.57		103	34360	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.611	3.608	0.003	1.000	1117731	2.51		101	18323	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.621	3.613	0.008	1.003	451876	0.9670		96.7	3873	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.774	3.768	0.006	1.000	817249	0.9366		97.2	9889	
599.00 > 99.00	3.774	3.768	0.006	1.000	290654		2.81(1.39-4.16)	97.2	3815	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.785	3.778	0.007	1.000	1217760	2.56		103	2827	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.785	3.785	0.0	1.000	453043	0.9872		98.7	7119	
D 30 13C2 PFUnA										
565.00 > 520.00	3.795	3.785	0.010	1.000	2139648	2.61		104	42442	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.785	3.787	-0.002	0.997	611203	0.9152		91.5	2706	
563.00 > 169.00	3.785	3.787	-0.002	0.997	177946		3.43(2.12-6.36)	91.5	6479	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.941	3.943	-0.002	1.000	3453356	0.9590		102	72065	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.083	4.079	0.004	1.000	894472	1.00		100	551	
613.00 > 169.00	4.083	4.079	0.004	1.000	205289		4.36(2.13-6.40)	100	2916	
D 36 13C2 PFDoA										
615.00 > 570.00	4.083	4.080	0.003	1.000	2142652	2.50		100.0	17742	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.352	4.346	0.006	1.000	884077	0.9555		95.5	342	
663.00 > 169.00	4.352	4.346	0.006	1.000	286776		3.08(1.25-3.76)	95.5	4777	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.596	4.588	0.008	1.000	2375414	2.54		102	13844	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.596	4.588	0.008	1.000	235033	0.9555		95.6	3372	
713.00 > 219.00	4.586	4.588	-0.002	0.998	167996		1.40(0.71-2.13)	95.6	3493	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.012	5.006	0.006	1.000	3859526	2.60		104	11107	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.012	5.008	0.004	1.000	1439481	0.9871		98.7	276	
813.00 > 169.00	5.012	5.008	0.004	1.000	245519		5.86(2.86-8.58)	98.7	2114	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.383	5.378	0.005	1.000	1661034	1.02		102	293	
913.00 > 169.00	5.383	5.378	0.005	1.000	207422		8.01(3.83-11.48)	102	2115	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 13:21:21 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_005.d

Injection Date: 14-May-2018 12:24:12 Instrument ID: A8_N

Lims ID: IC L4 Full

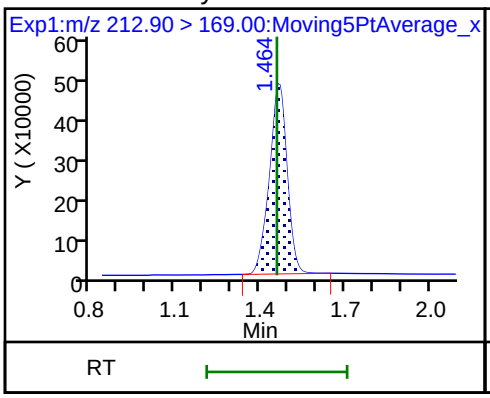
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 5

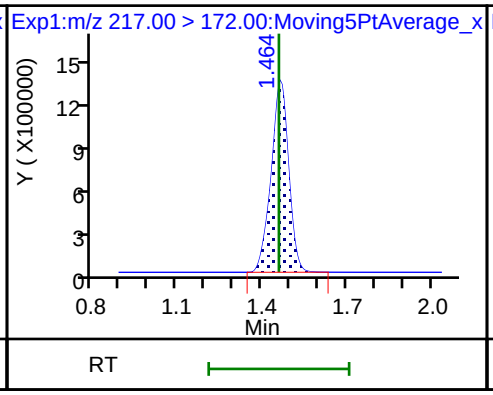
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

2 Perfluorobutyric acid



D 1 13C4 PFBA



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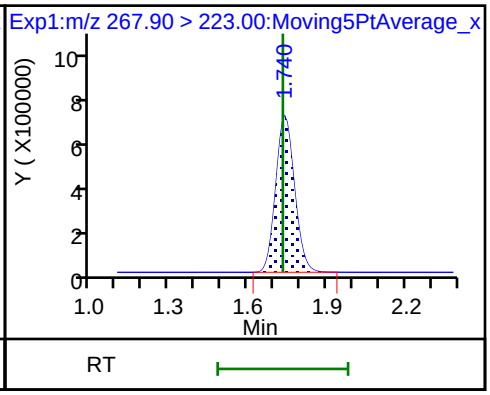
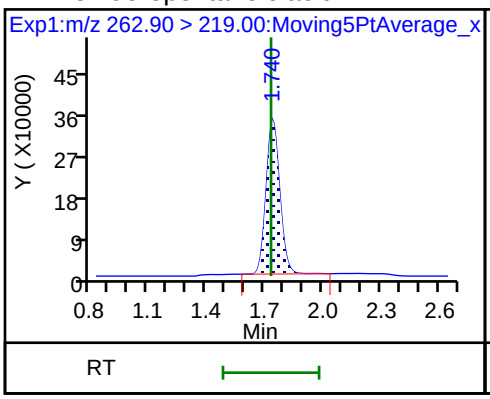
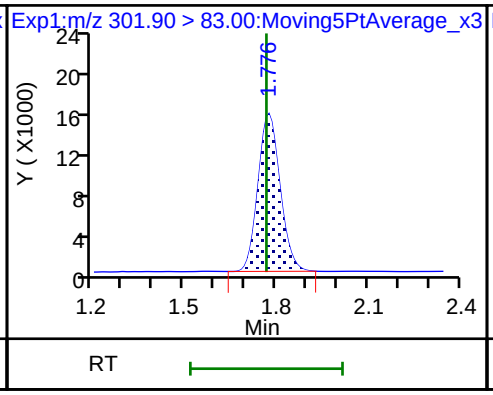


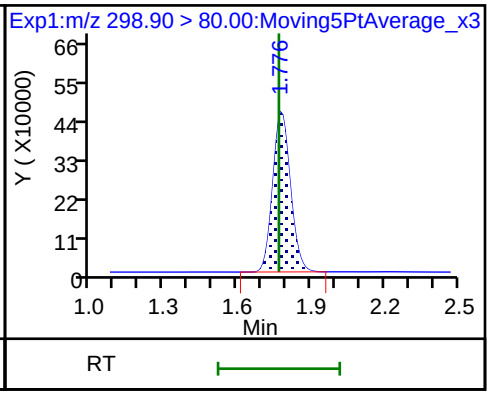
4 Perfluoropentanoic acid



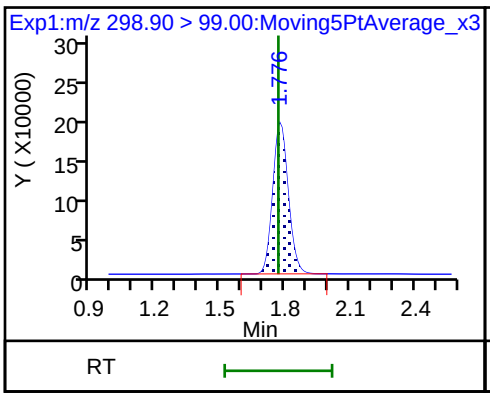
D 47 13C3-PFBS



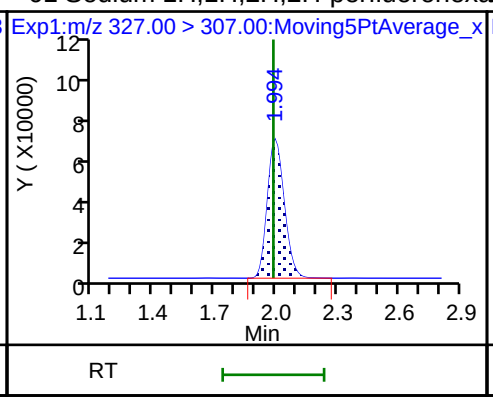
5 Perfluorobutanesulfonic acid



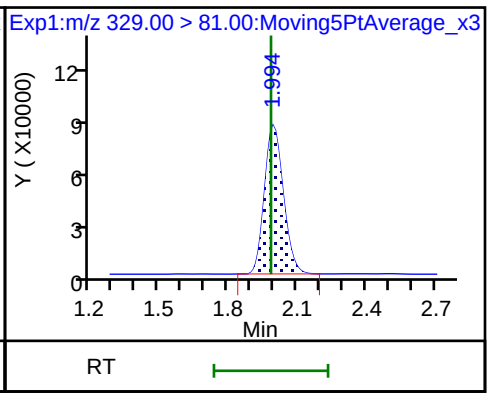
5 Perfluorobutanesulfonic acid



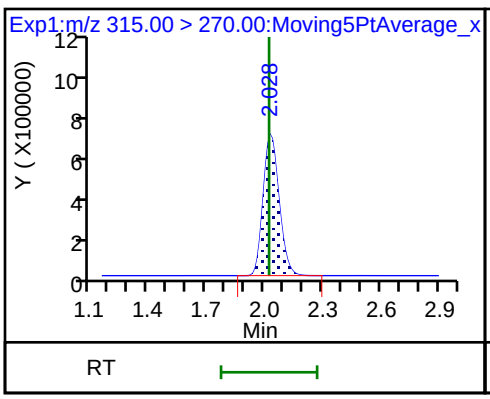
61 Sodium 1H,1H,2H,2H-perfluorohexane



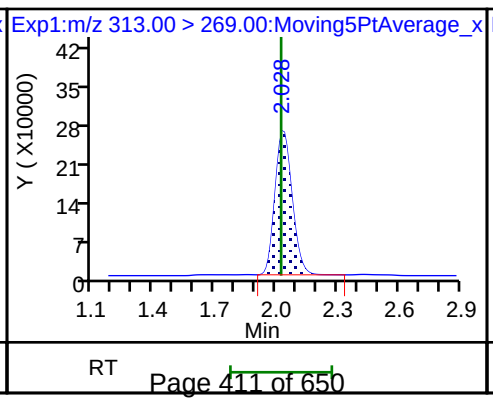
D 60 M2-4:2FTS



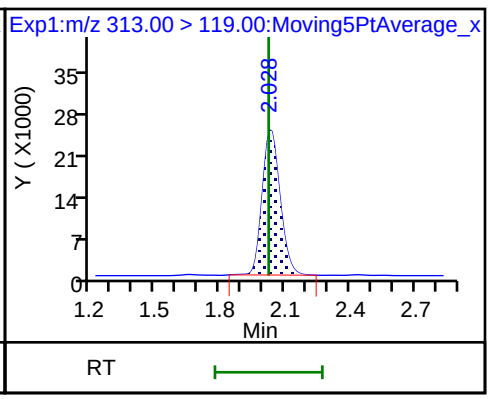
D 7 13C2 PFHxA



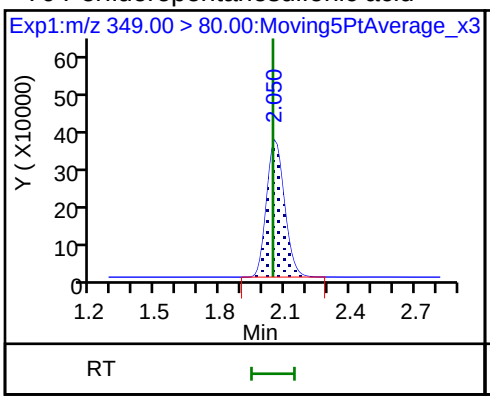
6 Perfluorohexanoic acid



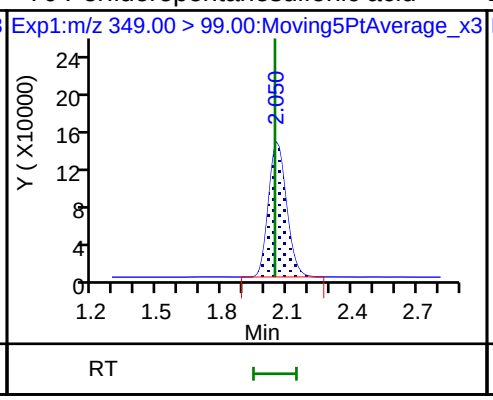
6 Perfluorohexanoic acid



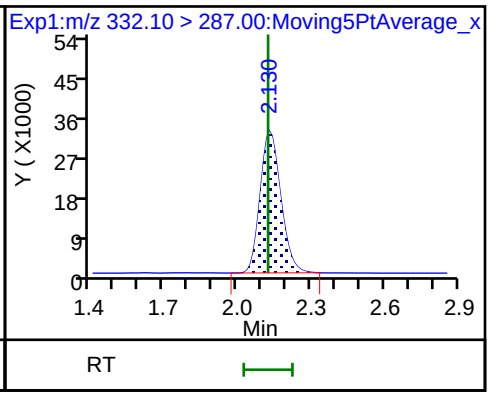
70 Perfluoropentanesulfonic acid



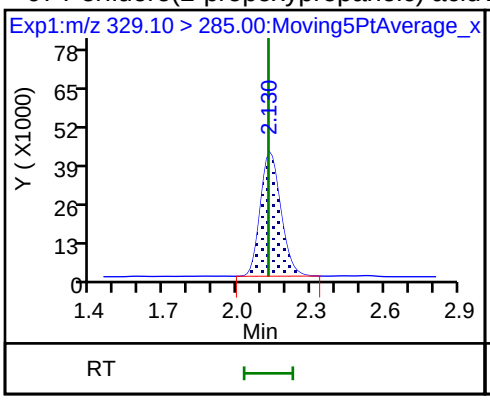
70 Perfluoropentanesulfonic acid



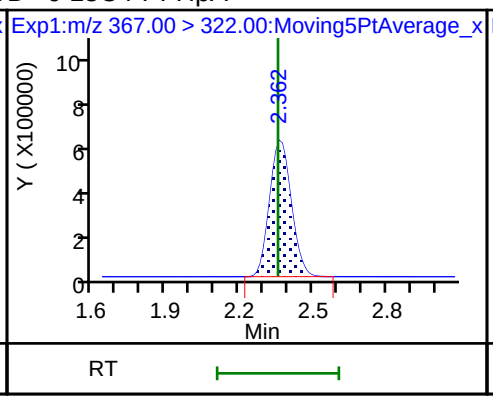
D 64 13C3 HFPO-DA



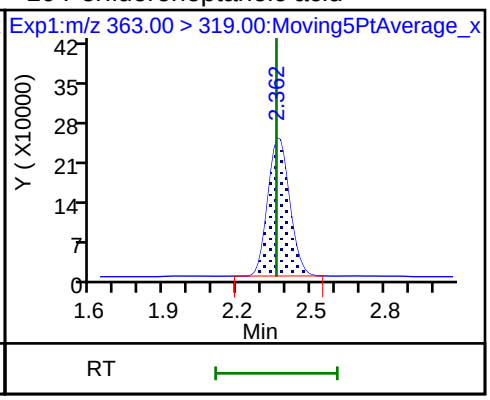
67 Perfluoro(2-propoxypropanoic) acid



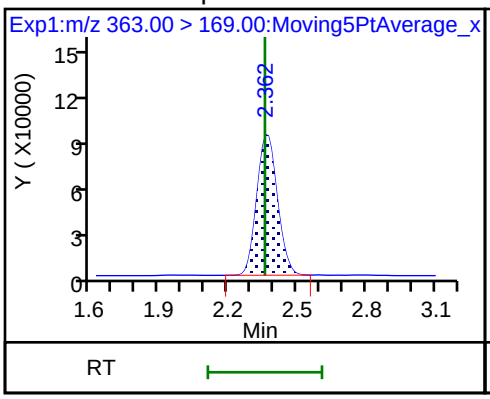
D 9 13C4-PFHpA



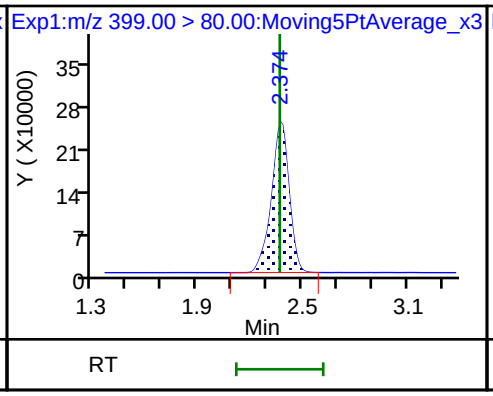
10 Perfluoroheptanoic acid



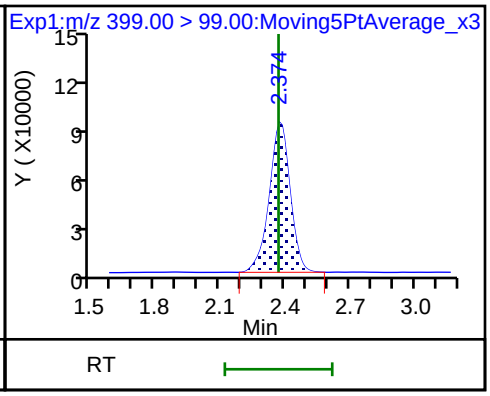
10 Perfluoroheptanoic acid



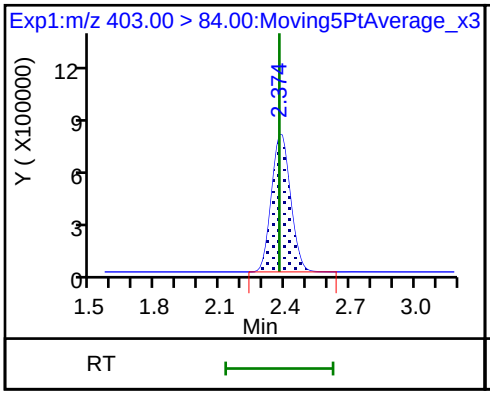
8 Perfluorohexanesulfonic acid



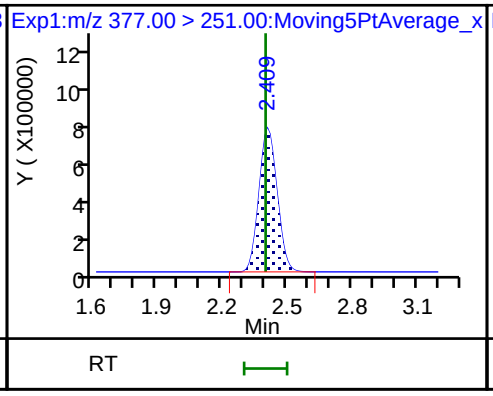
8 Perfluorohexanesulfonic acid



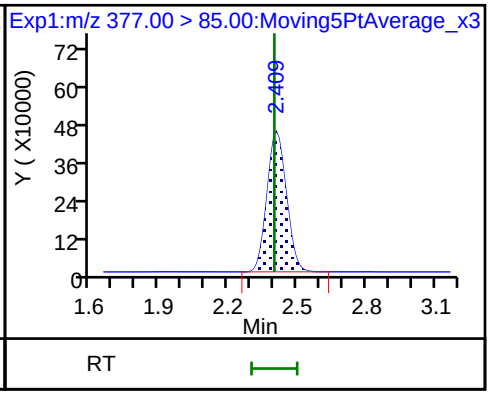
D 11 18O2 PFHxS



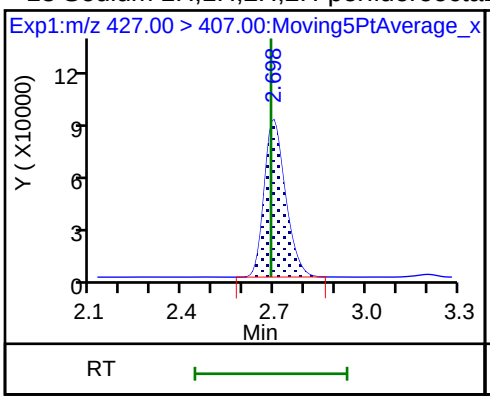
65 Adona



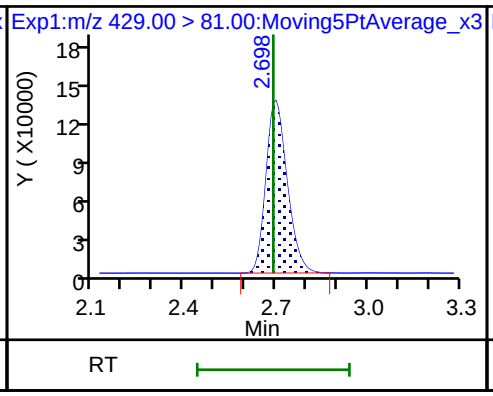
65 Adona



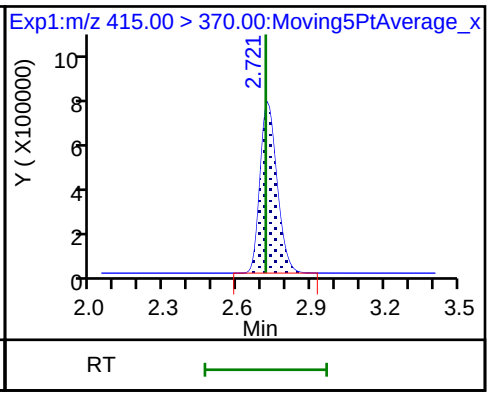
13 Sodium 1H,1H,2H,2H-perfluorooctane



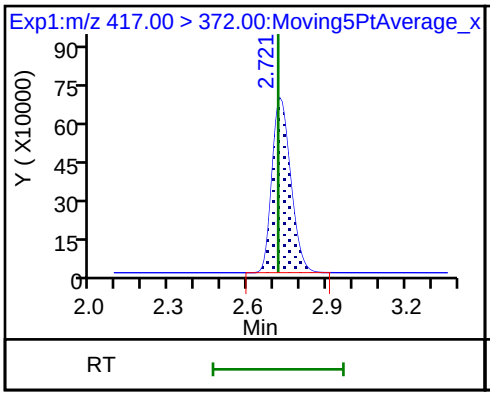
D 12 M2-6:2FTS



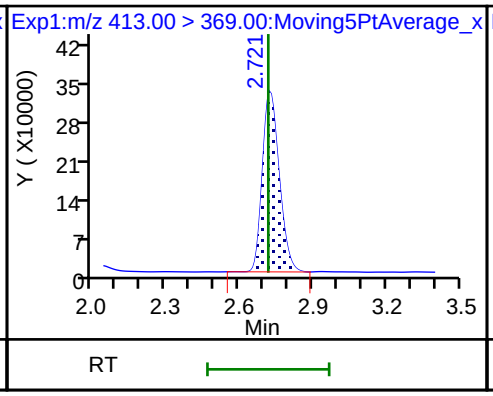
* 62 13C2-PFOA



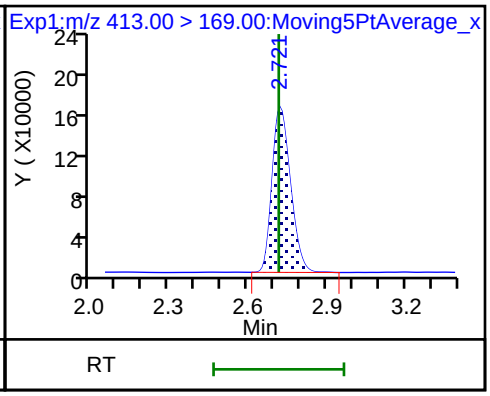
D 14 13C4 PFOA



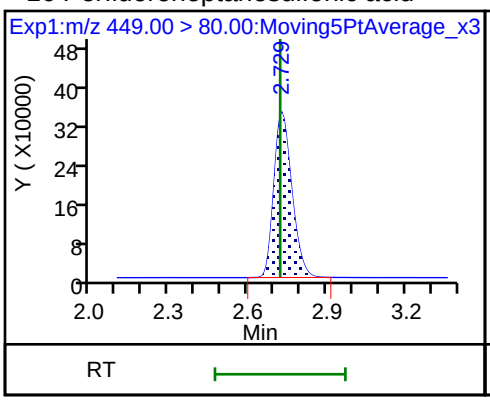
15 Perfluorooctanoic acid



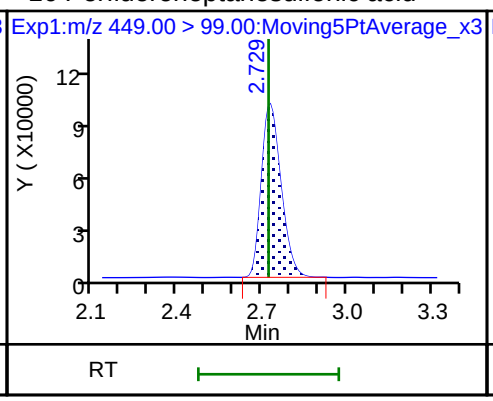
15 Perfluorooctanoic acid



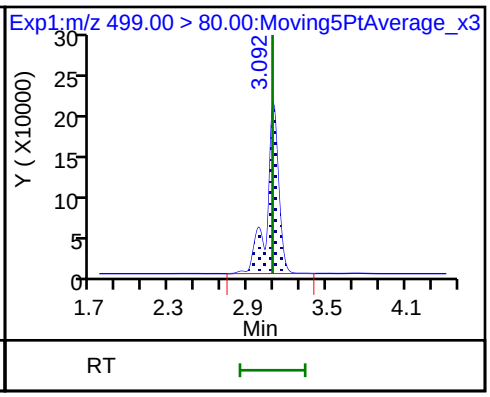
16 Perfluoroheptanesulfonic acid



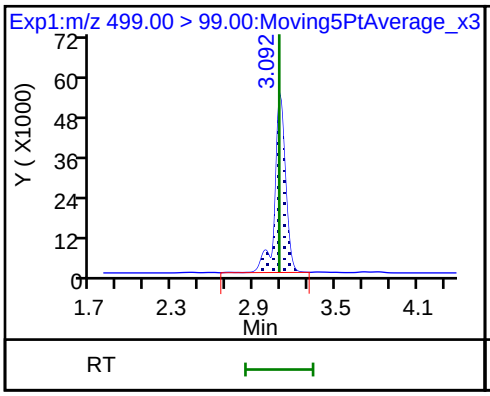
16 Perfluoroheptanesulfonic acid



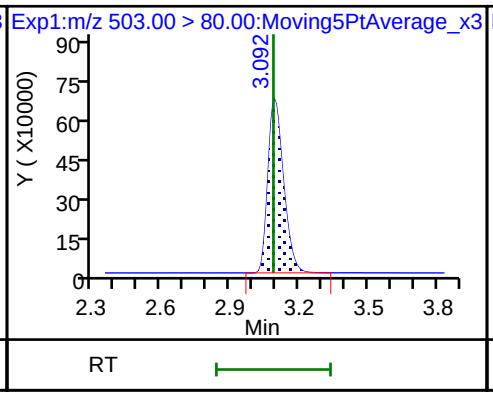
17 Perfluorooctane sulfonic acid



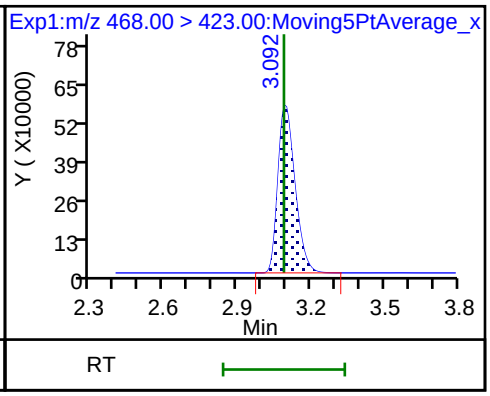
17 Perfluorooctane sulfonic acid



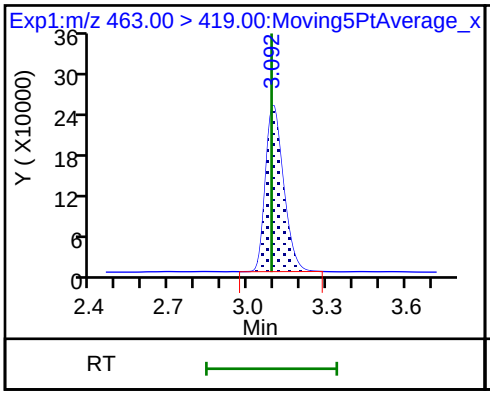
D 18 13C4 PFOS



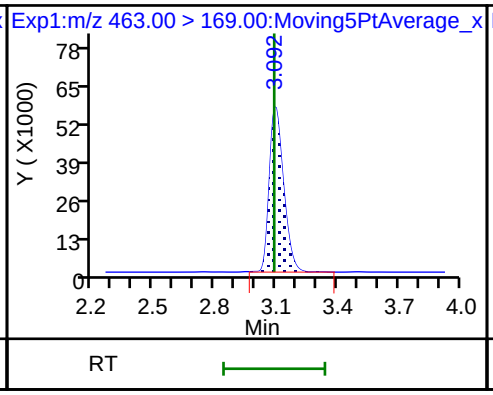
D 19 13C5 PFNA



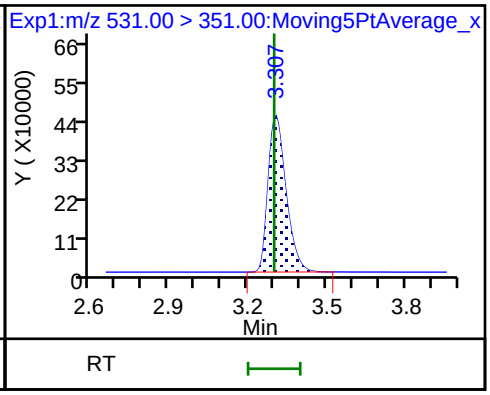
20 Perfluorononanoic acid



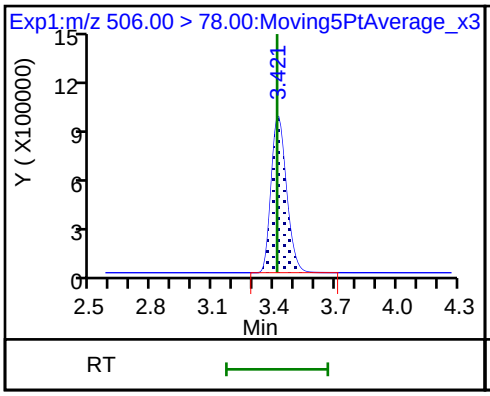
20 Perfluorononanoic acid



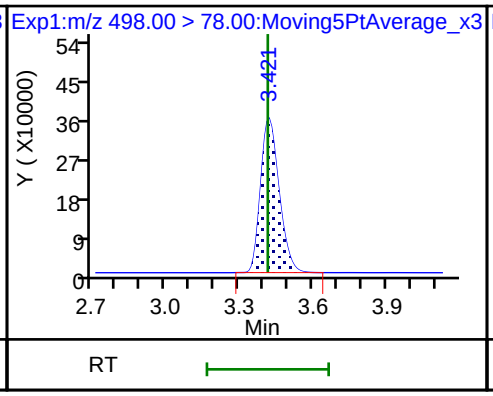
69 9-Chlorohexadecafluoro-3-oxanonane



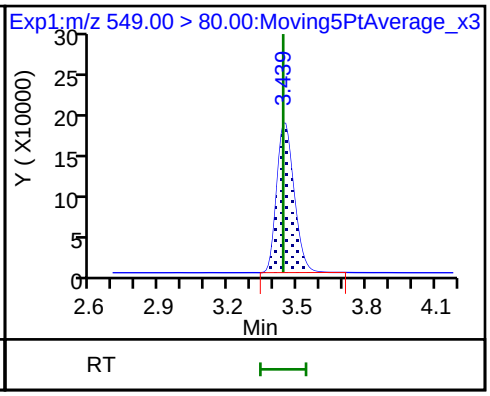
D 21 13C8 FOSA



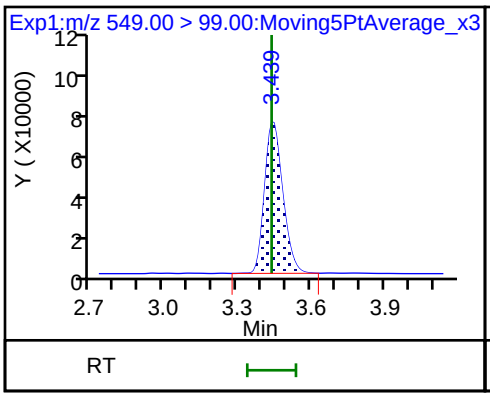
22 Perfluorooctane Sulfonamide



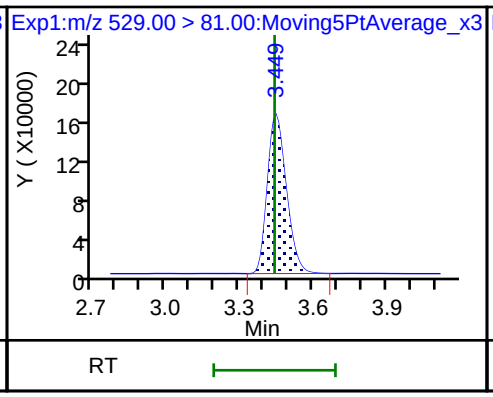
68 Perfluorononanesulfonic acid



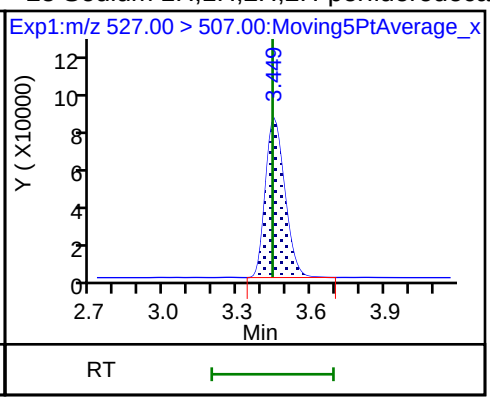
68 Perfluorononanesulfonic acid



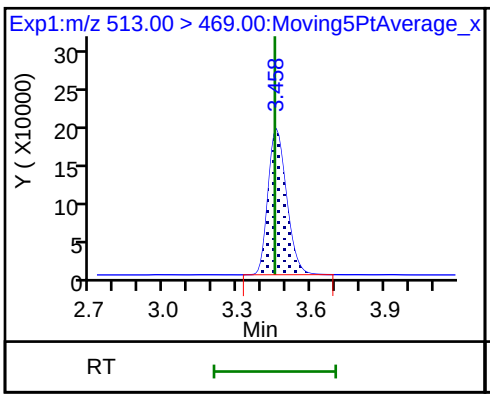
D 26 M2-8:2FTS



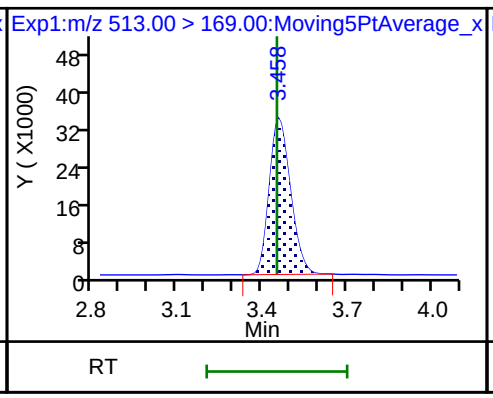
25 Sodium 1H,1H,2H,2H-perfluorodecane



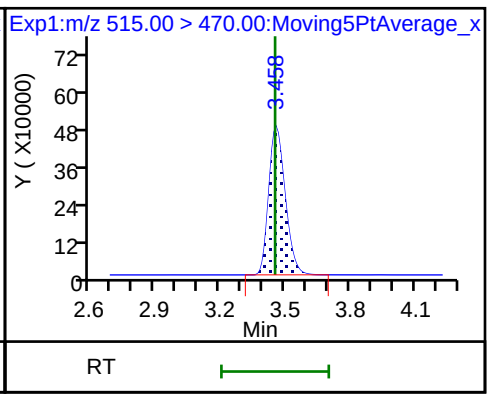
24 Perfluorodecanoic acid



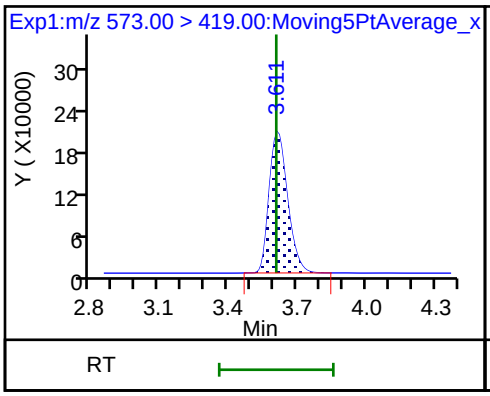
24 Perfluorodecanoic acid



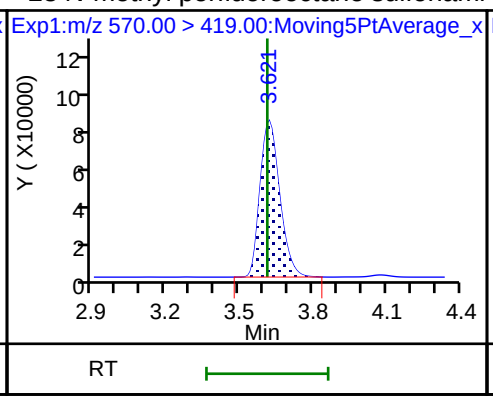
D 23 13C2 PFDA



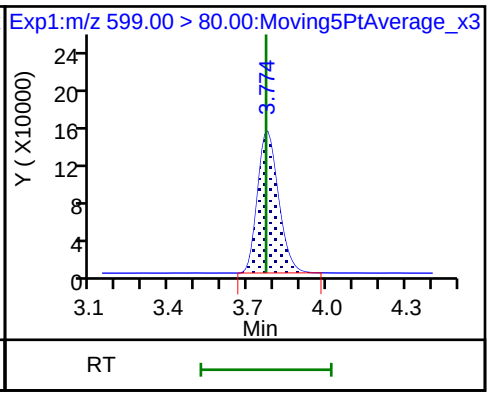
D 27 d3-NMeFOSAA



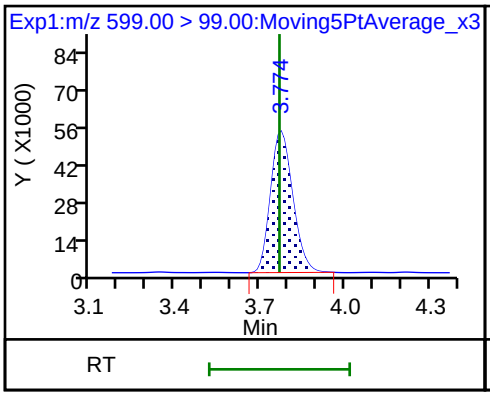
28 N-methyl perfluorooctane sulfonami



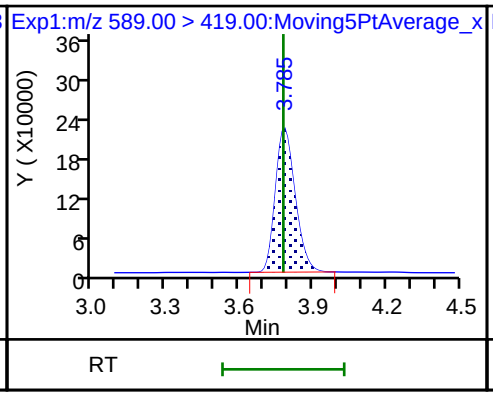
29 Perfluorodecane Sulfonic acid



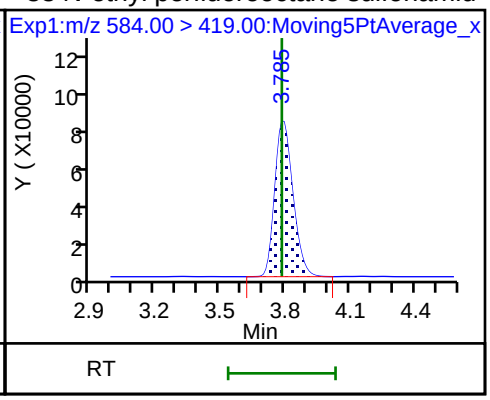
29 Perfluorodecane Sulfonic acid



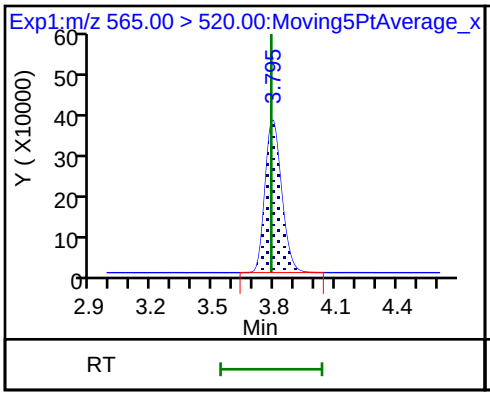
D 32 d5-NEtFOSAA



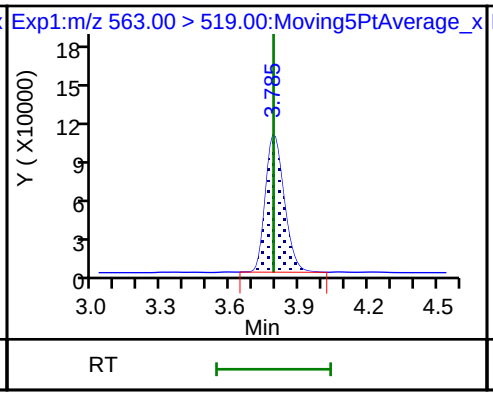
33 N-ethyl perfluorooctane sulfonamid



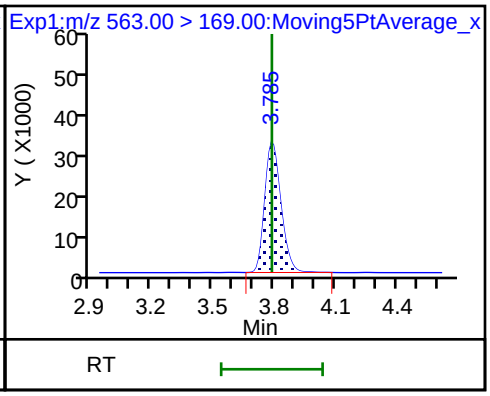
D 30 13C2 PFUnA



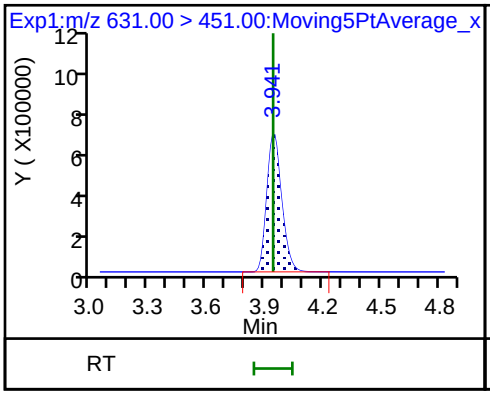
31 Perfluoroundecanoic acid



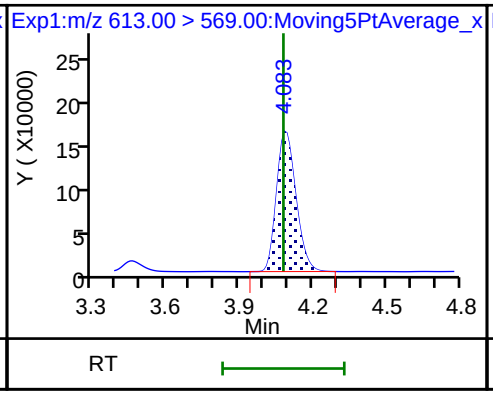
31 Perfluoroundecanoic acid



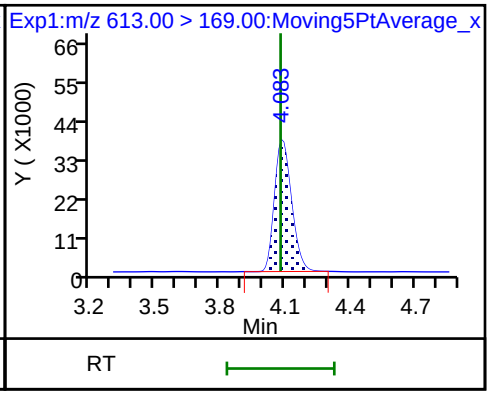
66 11-Chloroeicosafluoro-3-oxaundecan



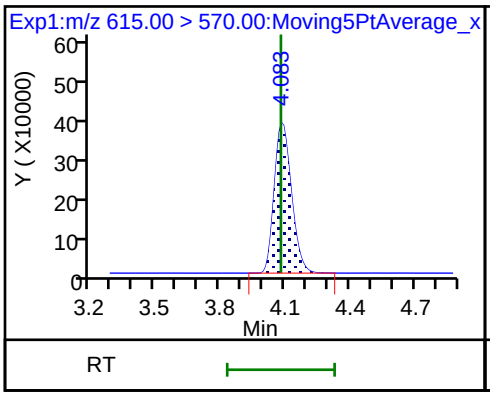
37 Perfluorododecanoic acid



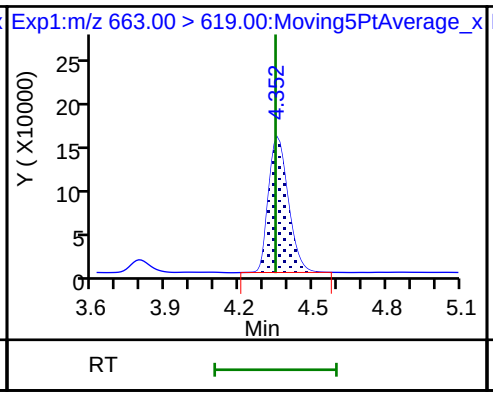
37 Perfluorododecanoic acid



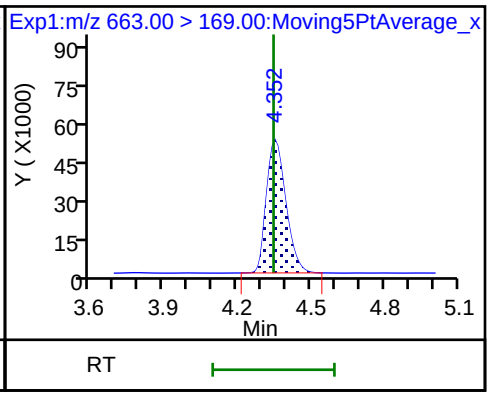
D 36 13C2 PFDoA



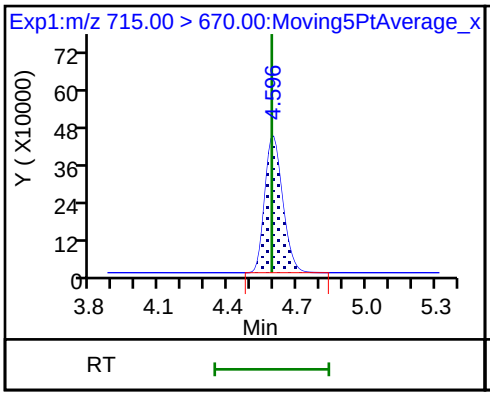
41 Perfluorotridecanoic acid



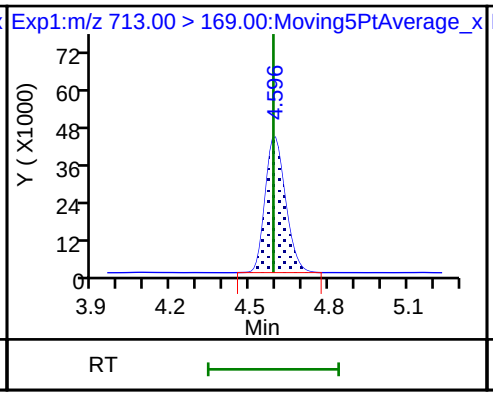
41 Perfluorotridecanoic acid



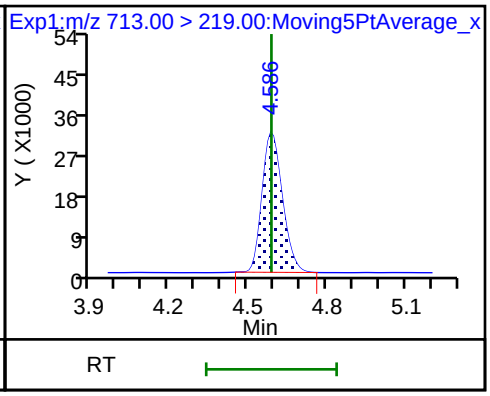
D 43 13C2-PFTeDA



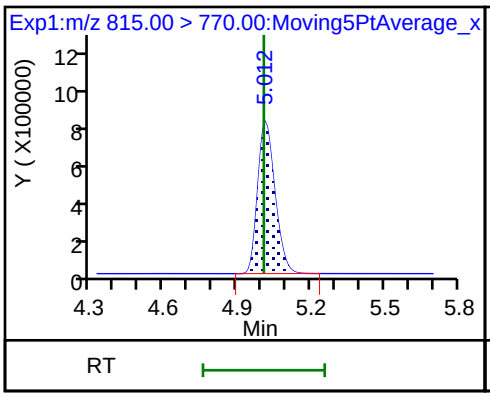
42 Perfluorotetradecanoic acid



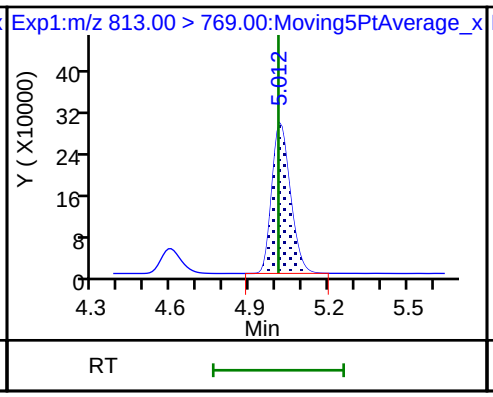
42 Perfluorotetradecanoic acid



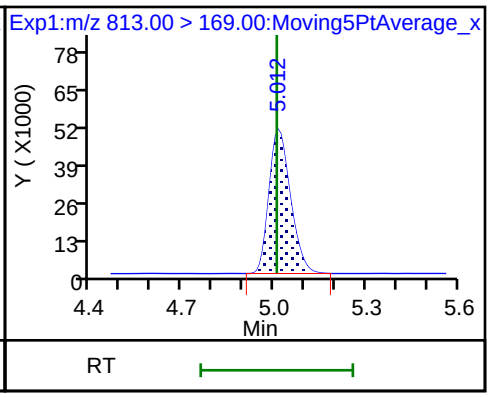
D 44 13C2-PFHxDA



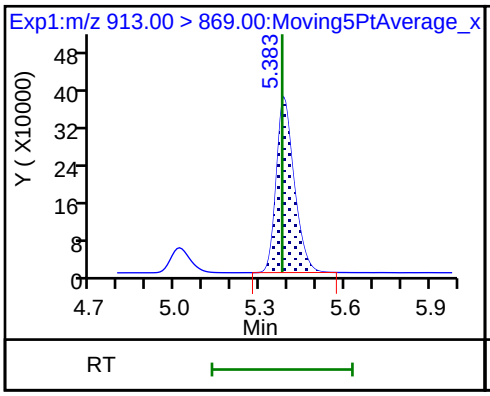
45 Perfluorohexadecanoic acid



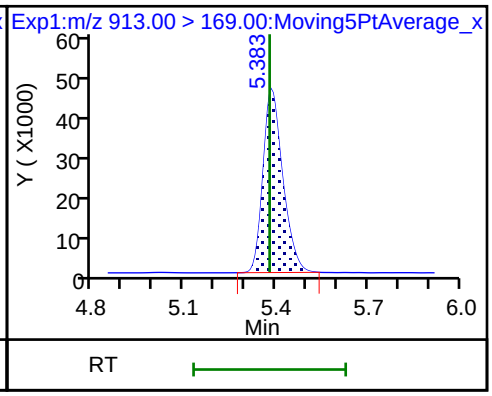
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_006.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-May-2018 12:32:02 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L5-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 13:21:23 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 13:20:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.459	-0.007	1.000	5543986	2.46		98.4	36089	
2 Perfluorobutyric acid										
212.90 > 169.00	1.452	1.459	-0.007	1.000	5273588	2.56		102	2901	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.732	-0.003	1.000	4190548	2.49		99.4	1880	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.732	-0.003	0.560	3464250	2.48		99.3	49826	
D 47 13C3-PFBS										
301.90 > 83.00	1.756	1.767	-0.011	1.000	75724	2.30		98.9	627	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.768	-0.003	1.005	5879567	2.34		106	29446	
298.90 > 99.00	1.765	1.768	-0.003	1.005	2416096		2.43(1.25-3.74)	106	14253	
D 60 M2-4:2FTS										
329.00 > 81.00	1.981	1.985	-0.004	1.000	426248	2.32		99.2	5816	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.981	1.985	-0.004	1.000	1002859	2.35		101	59054	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.022	-0.007	1.000	3532915	2.42		96.8	55921	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.023	-0.008	1.000	3775793	2.56		102	5244	
313.00 > 119.00	2.015	2.023	-0.008	1.000	335970		11.24(5.03-15.10)	102	4444	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.037	2.043	-0.006	1.000	5428394	2.42		103	67022	
349.00 > 99.00	2.037	2.043	-0.006	1.000	2060466		2.63(1.36-4.07)	103	18774	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.116	2.124	-0.008	1.000	190092	2.56		102	4067	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.116	2.126	-0.010	1.000	624994	2.43		97.2	5081	
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.357	-0.011	1.000	3481553	2.49		99.5	46136	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.359	2.358	0.001	1.006	3697073	2.50		100	6039	
363.00 > 169.00	2.359	2.358	0.001	1.006	1443502		2.56(1.13-3.40)	100	7159	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.359	2.369	-0.010	0.994	4458316	2.15		94.7	21010	
399.00 > 99.00	2.359	2.369	-0.010	0.994	1463470		3.05(1.50-4.49)	94.7	4975	
D 11 18O2 PFHxS										
403.00 > 84.00	2.373	2.373	0.0	1.000	4345424	2.34		98.8	50419	
65 Adona										
377.00 > 251.00	2.396	2.400	-0.004	1.000	10792257	2.61		104	100784	
377.00 > 85.00	2.396	2.400	-0.004	1.000	6392568		1.69(0.84-2.53)	104	33780	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.689	-0.006	1.000	1096375	2.35		99.1	8167	
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.690	-0.007	1.000	658753	2.39		101	15422	
D 14 13C4 PFOA										
417.00 > 372.00	2.713	2.714	-0.001	1.000	3354656	2.56		102	54313	
* 62 13C2-PFOA										
415.00 > 370.00	2.713	2.714	-0.001		3481447	2.50			45342	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.717	-0.004	1.000	3933620	2.44		97.6	1941	
413.00 > 169.00	2.713	2.717	-0.004	1.000	2039328		1.93(0.84-2.52)	97.6	6784	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.720	2.722	-0.002	1.000	4270345	2.54		107	36155	
449.00 > 99.00	2.720	2.722	-0.002	1.000	1123762		3.80(1.94-5.82)	107	10097	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.088	3.086	0.002	1.000	3243255	2.28		98.4	18583	
499.00 > 99.00	3.088	3.086	0.002	1.000	741667		4.37(2.31-6.93)	98.4	6502	
D 18 13C4 PFOS										
503.00 > 80.00	3.088	3.087	0.001	1.000	3042504	2.35		98.1	17801	
D 19 13C5 PFNA										
468.00 > 423.00	3.088	3.089	-0.001	1.000	2691188	2.45		98.1	34728	
20 Perfluorononanoic acid										
463.00 > 419.00	3.088	3.089	-0.001	1.000	2964592	2.61		104	6030	
463.00 > 169.00	3.088	3.089	-0.001	1.000	705146		4.20(1.90-5.69)	104	29226	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.295	3.299	-0.004	1.000	5515643	2.43		104	36596	
D 21 13C8 FOSA										
506.00 > 78.00	3.408	3.413	-0.005	1.000	4846483	2.58		103	27503	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.417	3.415	0.002	1.003	4816751	2.52		101	38542	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.436	3.438	-0.002	1.000	2457126	2.52		105	52770	
549.00 > 99.00	3.436	3.438	-0.002	1.000	923016		2.66(1.33-3.97)	105	11858	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.445	3.442	0.003	1.000	1045308	2.24		93.6	19346	
D 26 M2-8:2FTS										
529.00 > 81.00	3.445	3.442	0.003	1.000	858260	2.38		99.5	9489	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.454	3.452	0.002	1.000	2462678	2.47		98.8	17889	
513.00 > 169.00	3.454	3.452	0.002	1.000	431584		5.71(2.36-7.09)	98.8	9017	
D 23 13C2 PFDA										
515.00 > 470.00	3.454	3.453	0.001	1.000	2434658	2.58		103	33437	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.608	3.608	0.0	1.000	1080001	2.52		101	28051	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.608	3.613	-0.005	1.000	1135517	2.51		101	9416	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.762	3.768	-0.006	1.000	2050890	2.44		101	24247	
599.00 > 99.00	3.762	3.768	-0.006	1.000	710682		2.89(1.39-4.16)	101	9756	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.773	3.778	-0.005	1.000	1109882	2.43		97.2	2227	
D 30 13C2 PFUnA										
565.00 > 520.00	3.783	3.785	-0.002	1.000	2043367	2.59		103	45812	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.783	3.785	-0.002	1.003	1085138	2.59		104	17162	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.783	3.787	-0.004	1.000	1615342	2.53		101	7278	
563.00 > 169.00	3.783	3.787	-0.004	1.000	413641		3.91(2.12-6.36)	101	14609	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.941	3.943	-0.002	1.000	8504584	2.45		104	54903	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.082	4.079	0.003	1.000	2160760	2.49		99.7	1304	
613.00 > 169.00	4.082	4.079	0.003	1.000	537700		4.02(2.13-6.40)	99.7	6472	
D 36 13C2 PFDoA										
615.00 > 570.00	4.082	4.080	0.002	1.000	2086265	2.53		101	17032	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.341	4.346	-0.005	1.000	2220848	2.47		98.6	892	
663.00 > 169.00	4.341	4.346	-0.005	1.000	682365		3.25(1.25-3.76)	98.6	7234	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.586	4.588	-0.002	1.000	603027	2.50		99.8	6995	
713.00 > 219.00	4.575	4.588	-0.013	0.998	430701		1.40(0.71-2.13)	99.8	6580	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.586	4.588	-0.002	1.000	2332891	2.59		104	13203	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.003	5.006	-0.003	1.000	3912531	2.74		110	10862	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.003	5.008	-0.005	1.000	3852629	2.65		106	717	
813.00 > 169.00	5.003	5.008	-0.005	1.000	622433		6.19(2.86-8.58)	106	4289	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.377	5.378	-0.001	1.000	4566671	2.76		111	714	
913.00 > 169.00	5.377	5.378	-0.001	1.000	576975		7.91(3.83-11.48)	111	4302	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 13:21:25 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_006.d

Injection Date: 14-May-2018 12:32:02 Instrument ID: A8_N

Lims ID: IC L5 Full

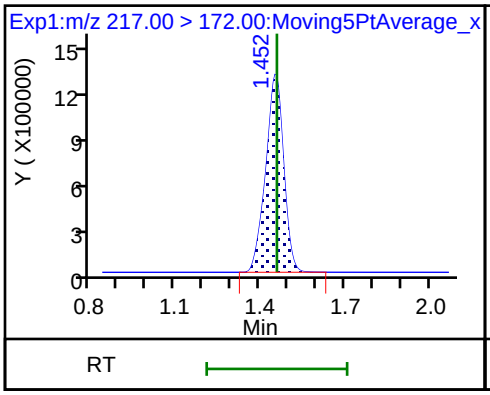
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 6

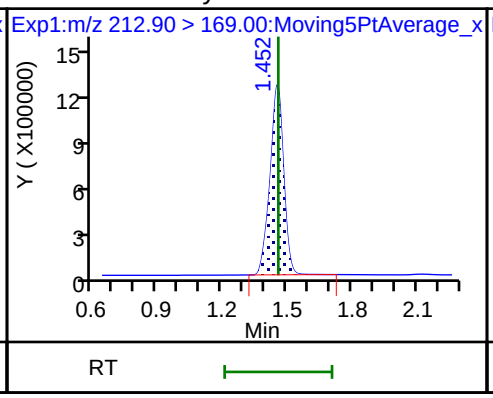
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

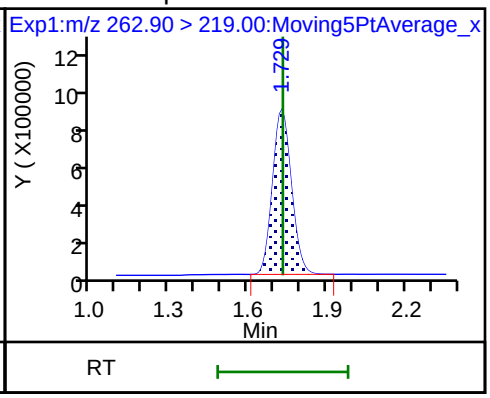
D 1 13C4 PFBA



2 Perfluorobutyric acid



4 Perfluoropentanoic acid



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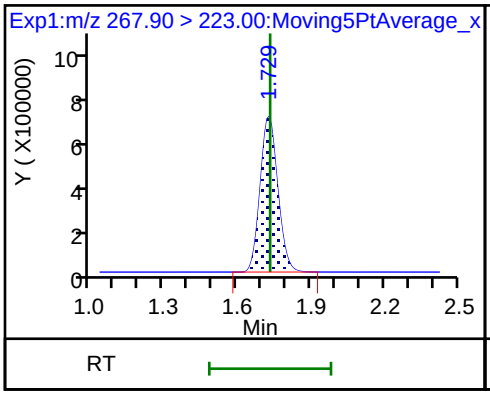
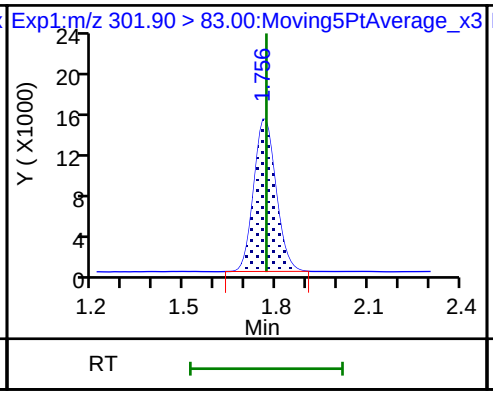
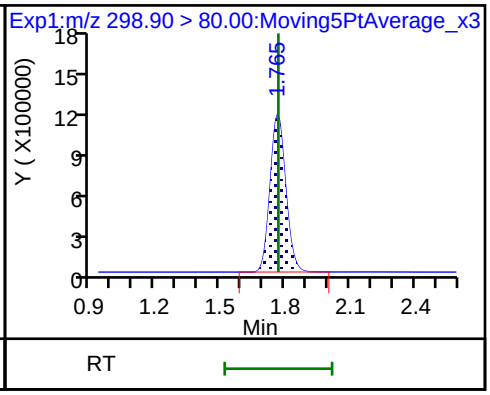


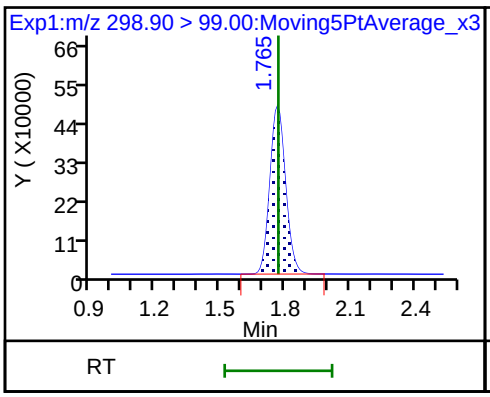
D 47 13C3-PFBS



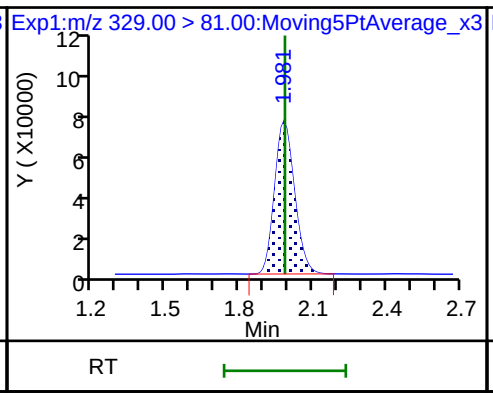
5 Perfluorobutanesulfonic acid



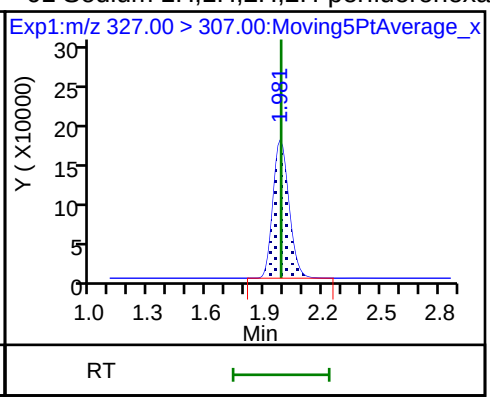
5 Perfluorobutanesulfonic acid



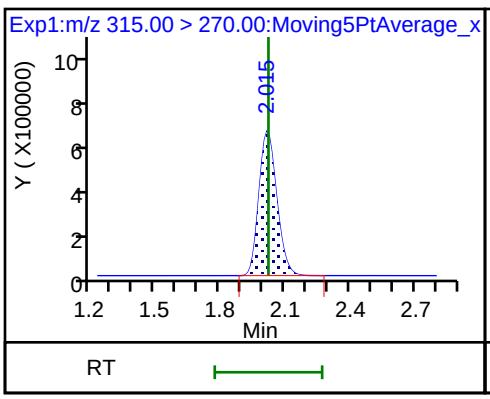
D 60 M2-4:2FTS



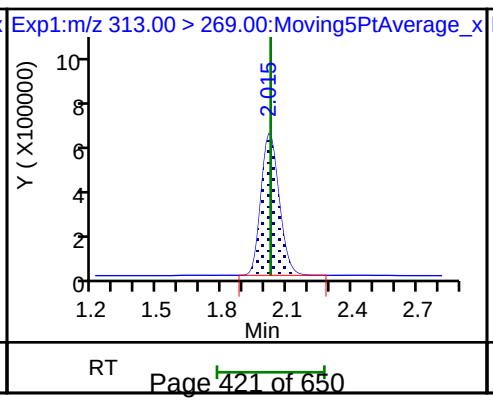
61 Sodium 1H,1H,2H,2H-perfluorohexane



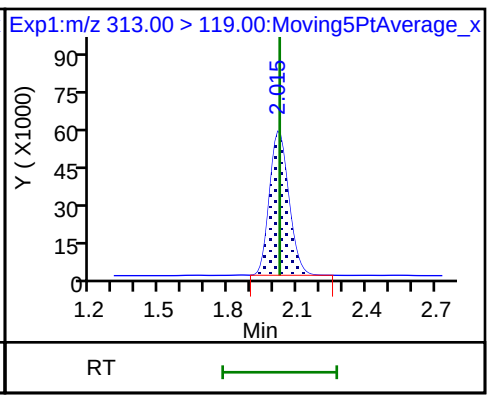
D 7 13C2 PFHxA



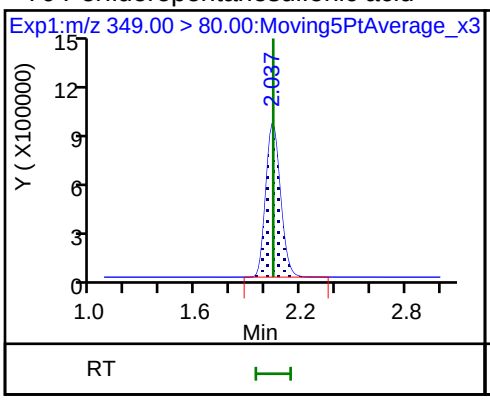
6 Perfluorohexanoic acid



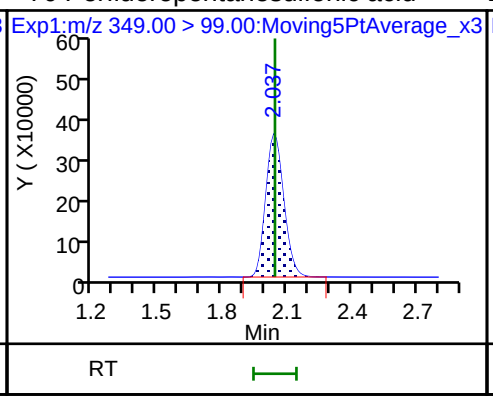
6 Perfluorohexanoic acid



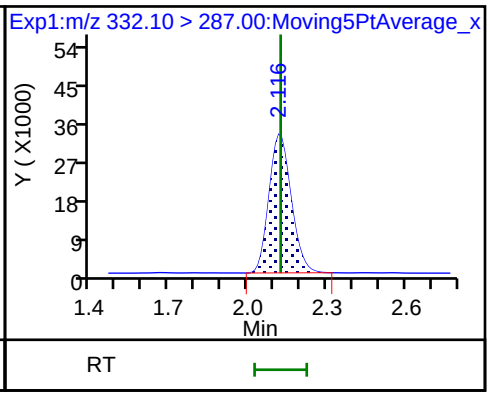
70 Perfluoropentanesulfonic acid



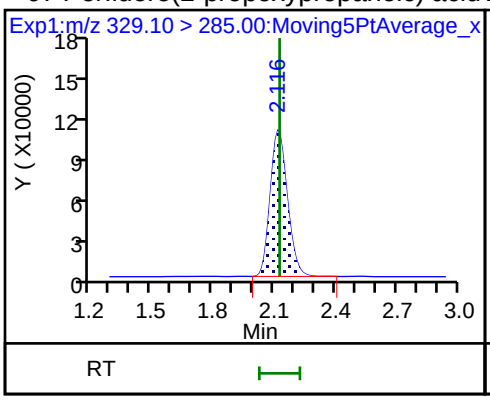
70 Perfluoropentanesulfonic acid



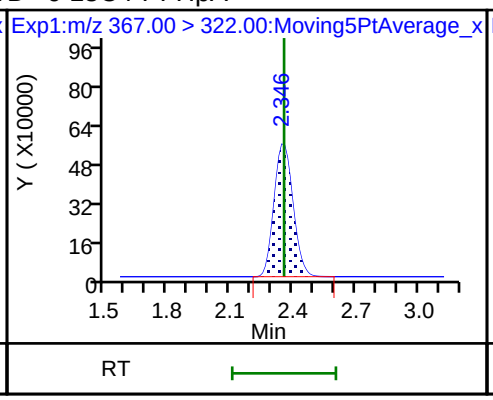
D 64 13C3 HFPO-DA



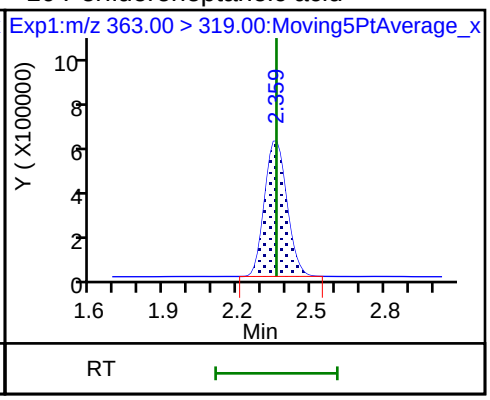
67 Perfluoro(2-propoxypropanoic) acid



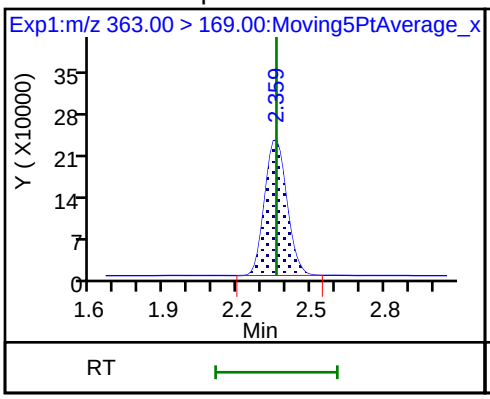
D 9 13C4-PFHpA



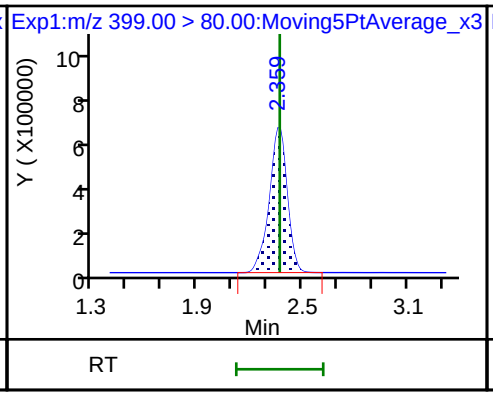
10 Perfluoroheptanoic acid



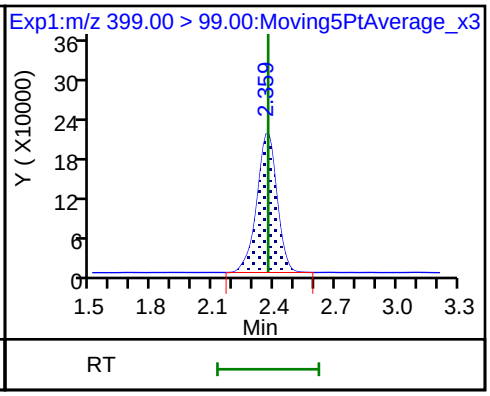
10 Perfluoroheptanoic acid



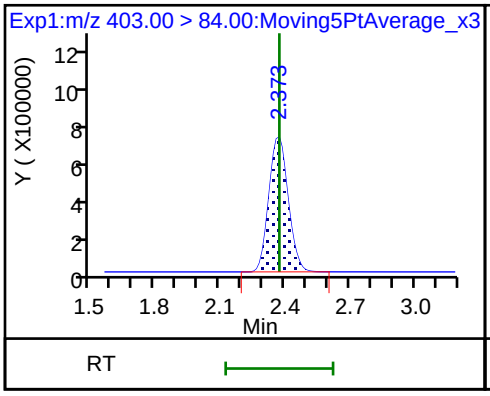
8 Perfluorohexanesulfonic acid



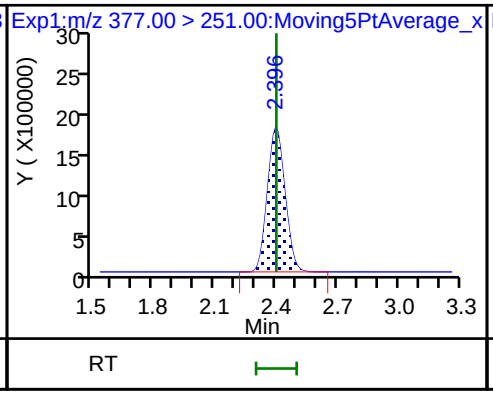
8 Perfluorohexanesulfonic acid



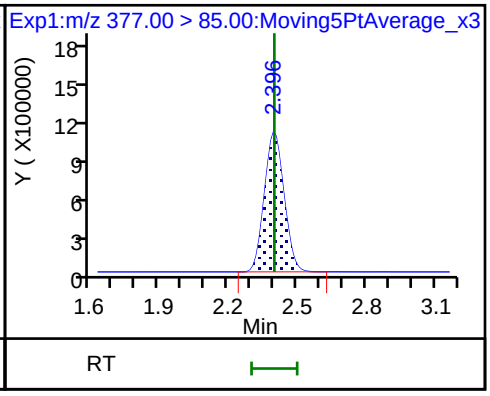
D 11 18O2 PFHxS



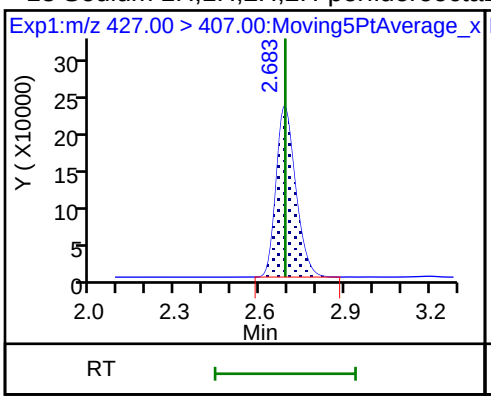
65 Adona



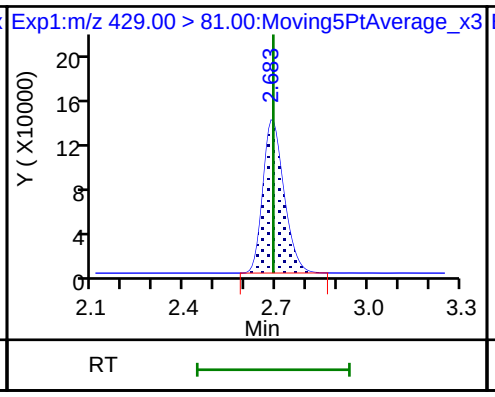
65 Adona



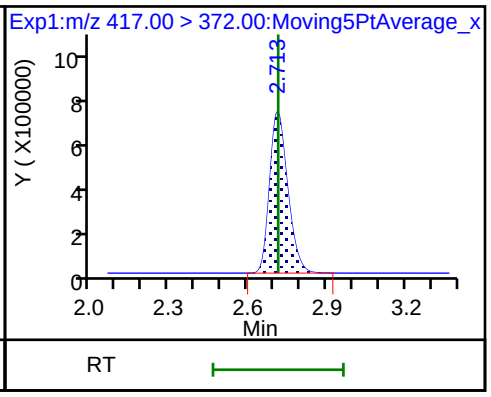
13 Sodium 1H,1H,2H,2H-perfluorooctane



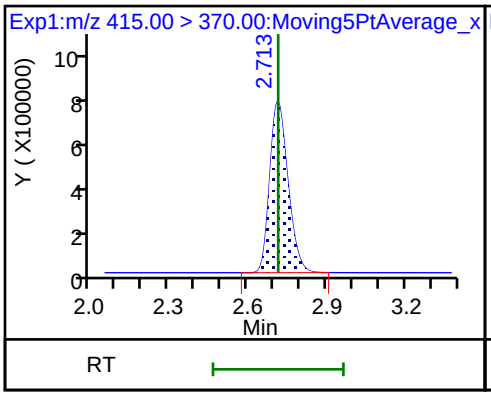
D 12 M2-6:2FTS



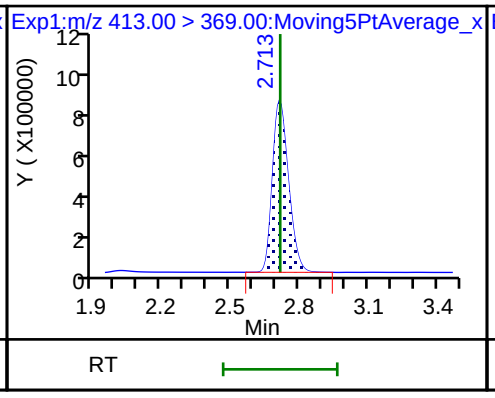
D 14 13C4 PFOA



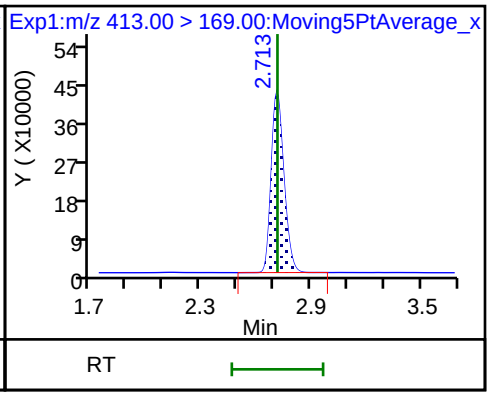
* 62 13C2-PFOA



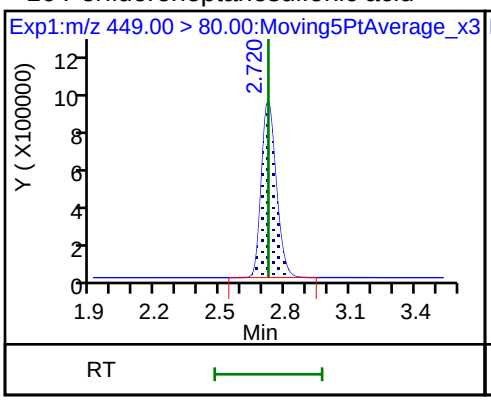
15 Perfluorooctanoic acid



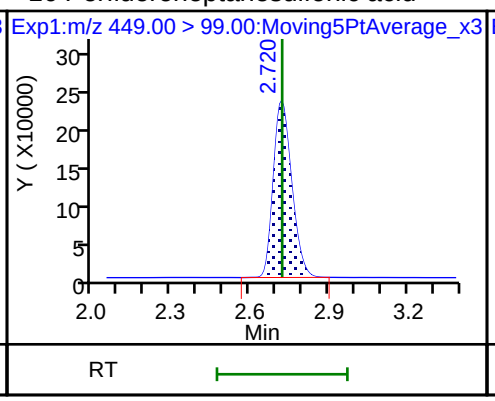
15 Perfluorooctanoic acid



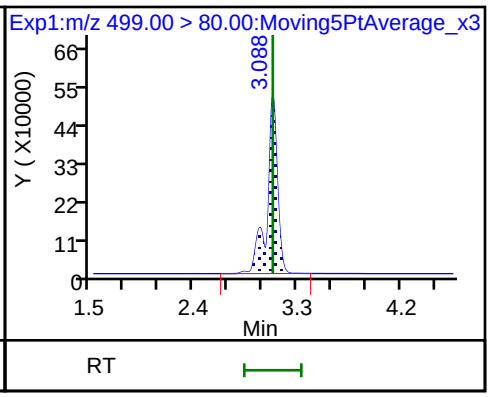
16 Perfluoroheptanesulfonic acid



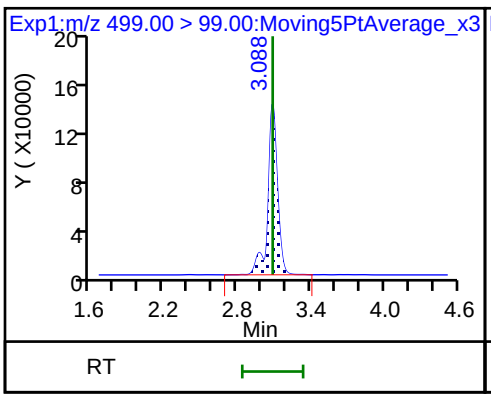
16 Perfluoroheptanesulfonic acid



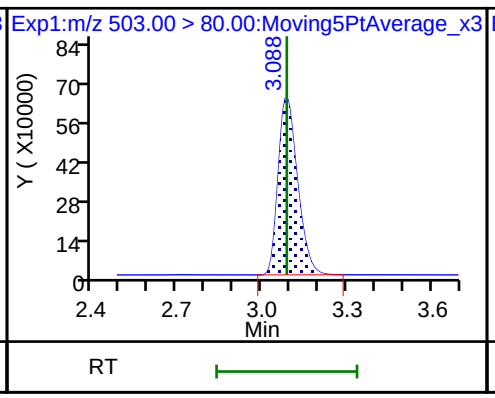
17 Perfluorooctane sulfonic acid



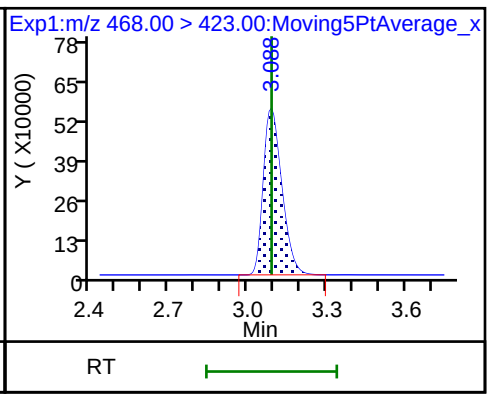
17 Perfluorooctane sulfonic acid



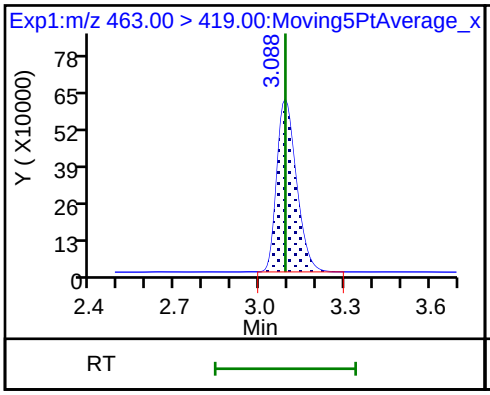
D 18 13C4 PFOS



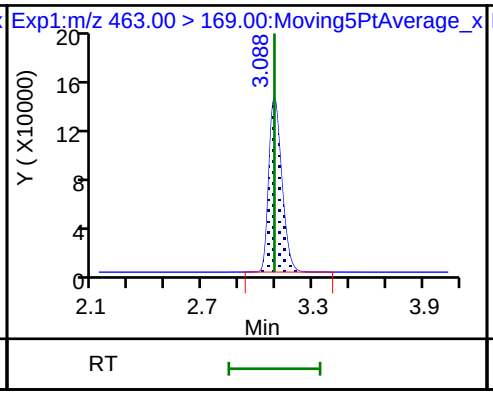
D 19 13C5 PFNA



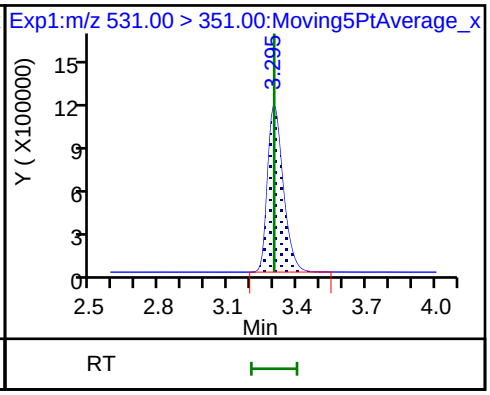
20 Perfluorononanoic acid



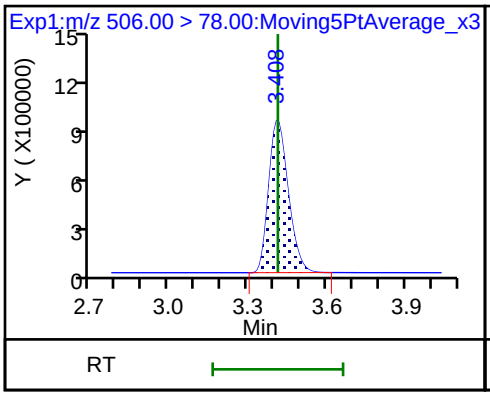
20 Perfluorononanoic acid



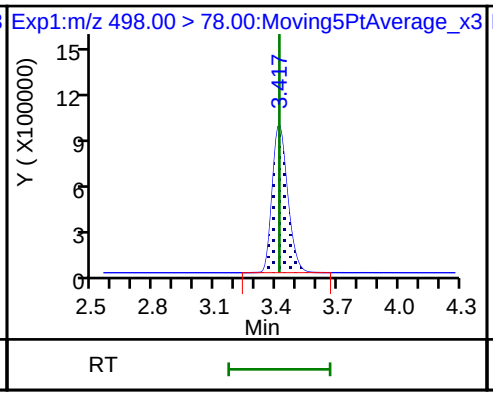
69 9-Chlorohexadecafluoro-3-oxanonane



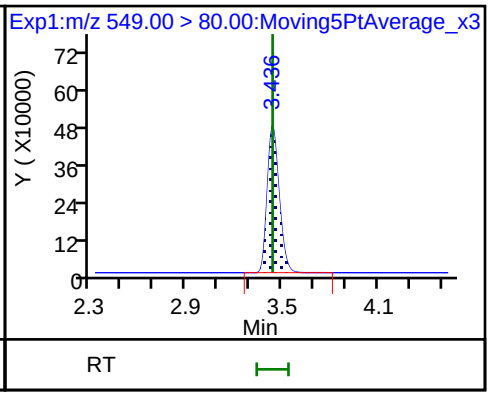
D 21 13C8 FOSA



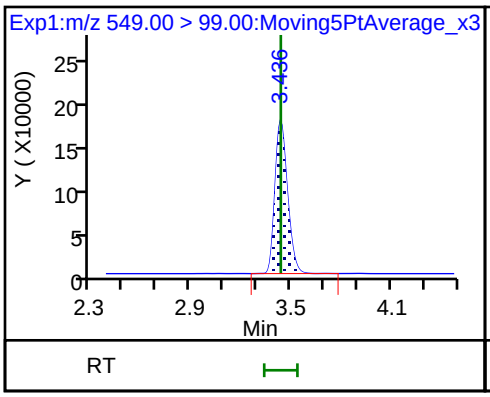
22 Perfluorooctane Sulfonamide



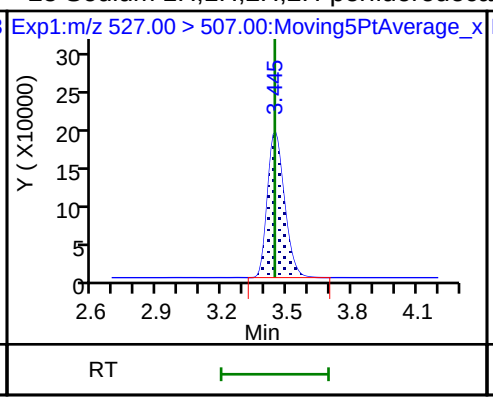
68 Perfluorononanesulfonic acid



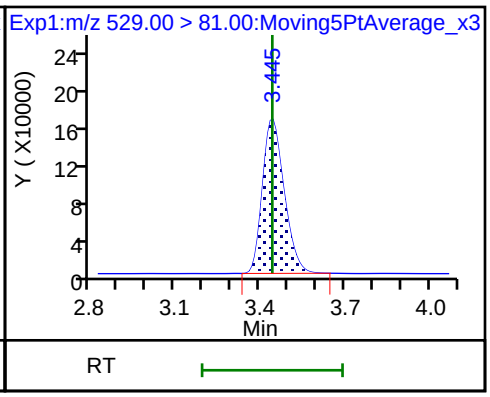
68 Perfluorononanesulfonic acid



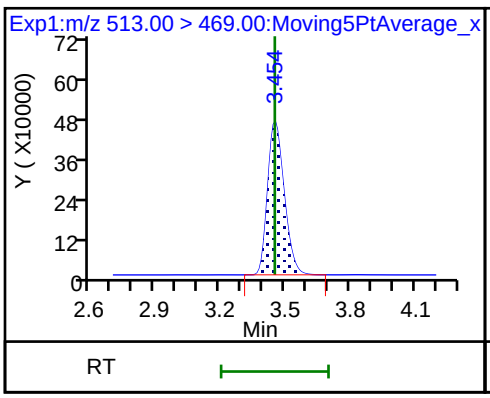
25 Sodium 1H,1H,2H,2H-perfluorodecane



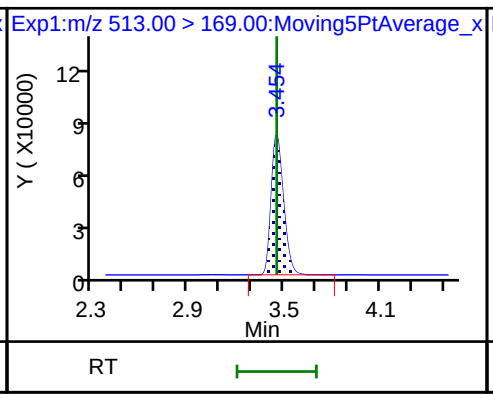
D 26 M2-8:2FTS



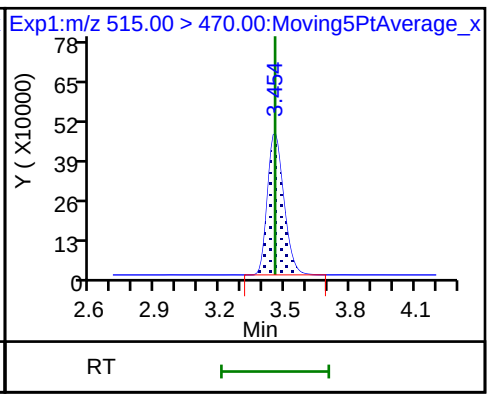
24 Perfluorodecanoic acid



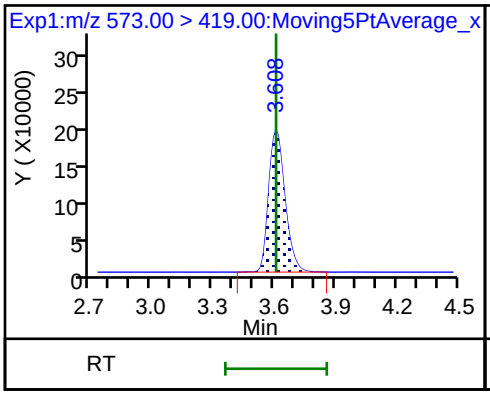
24 Perfluorodecanoic acid



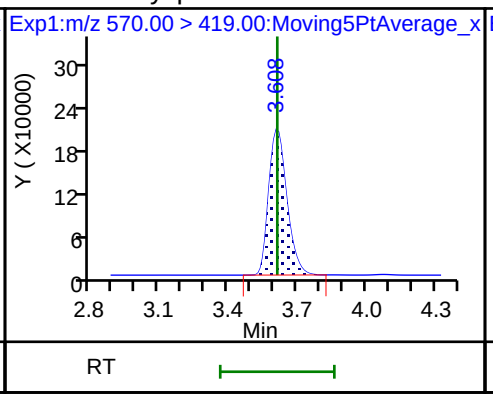
D 23 13C2 PFDA



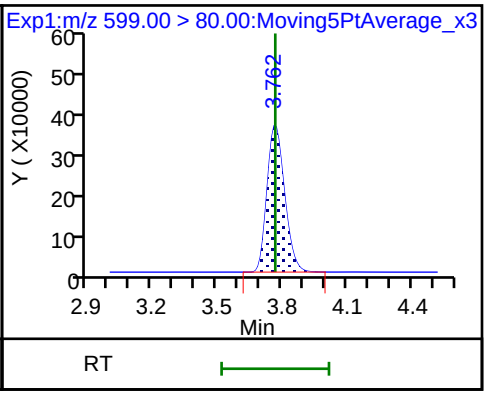
D 27 d3-NMeFOSAA



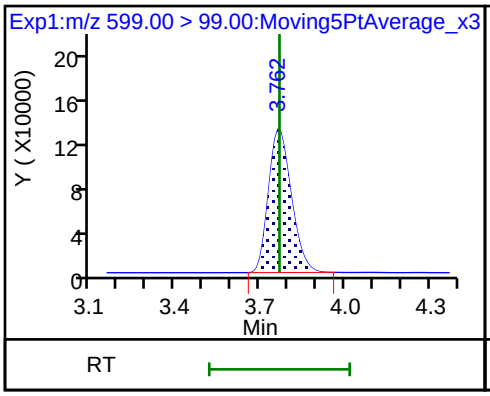
28 N-methyl perfluorooctane sulfonami



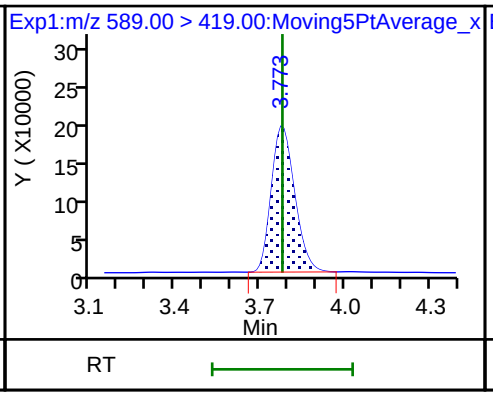
29 Perfluorodecane Sulfonic acid



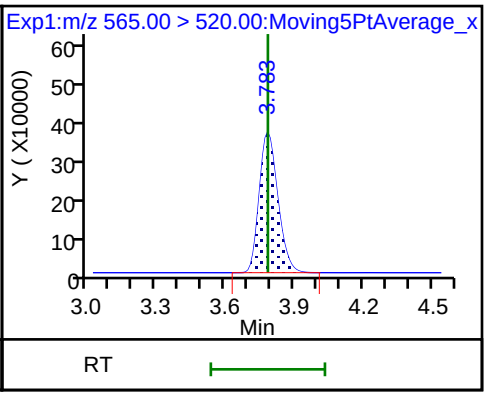
29 Perfluorodecane Sulfonic acid



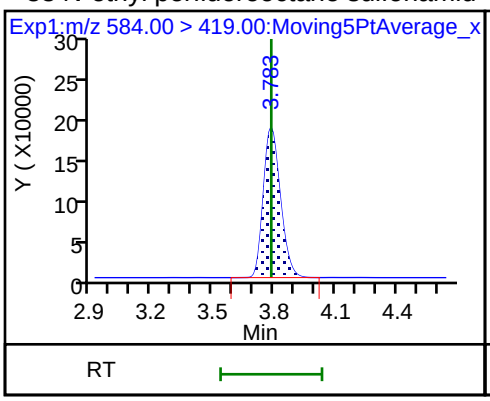
D 32 d5-NEtFOSAA



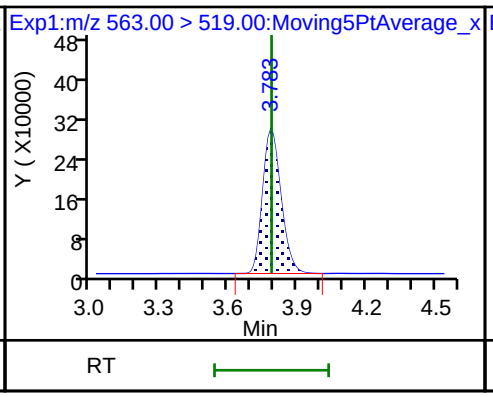
D 30 13C2 PFUnA



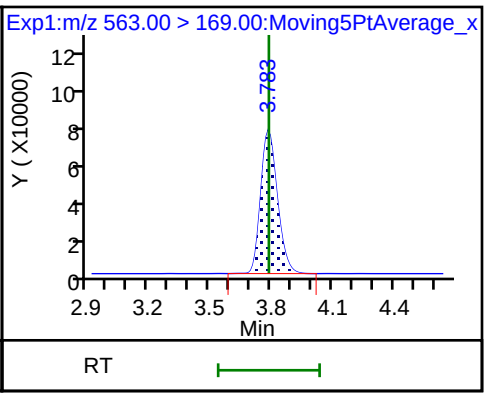
33 N-ethyl perfluorooctane sulfonamid



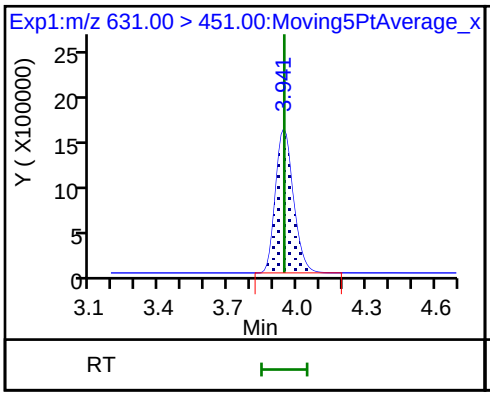
31 Perfluoroundecanoic acid



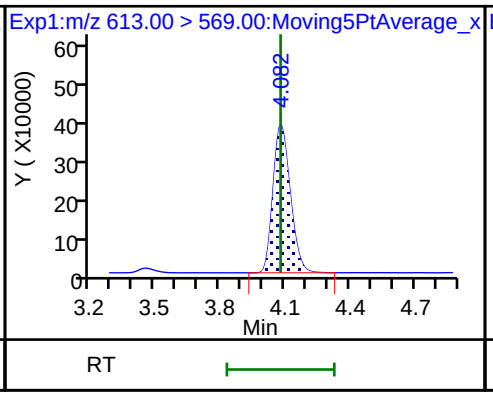
31 Perfluoroundecanoic acid



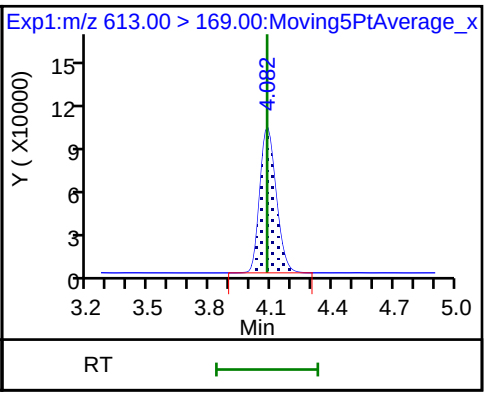
66 11-Chloroeicosafluoro-3-oxaundecan



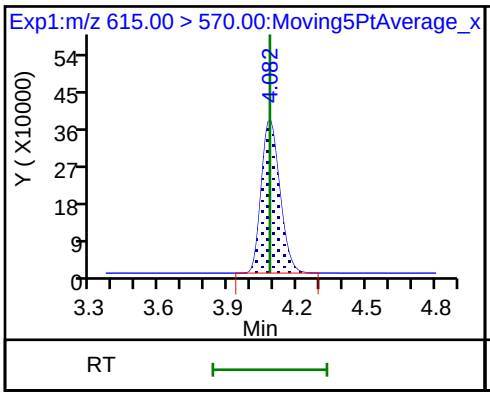
37 Perfluorododecanoic acid



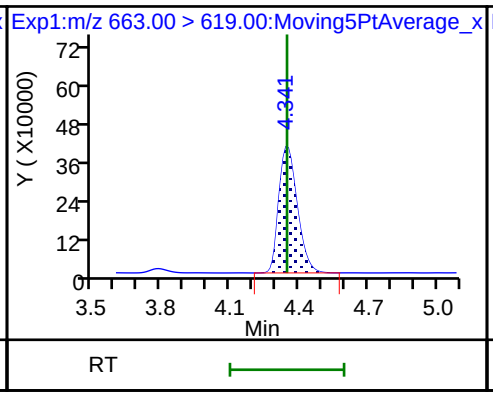
37 Perfluorododecanoic acid



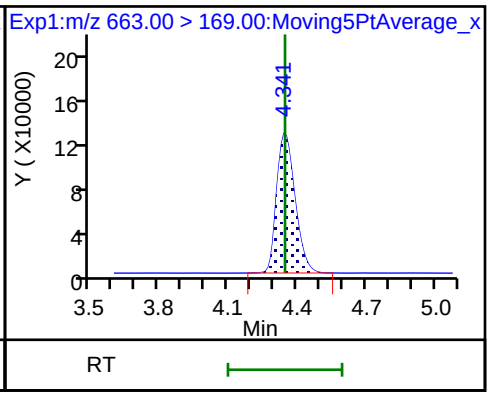
D 36 13C2 PFDoA



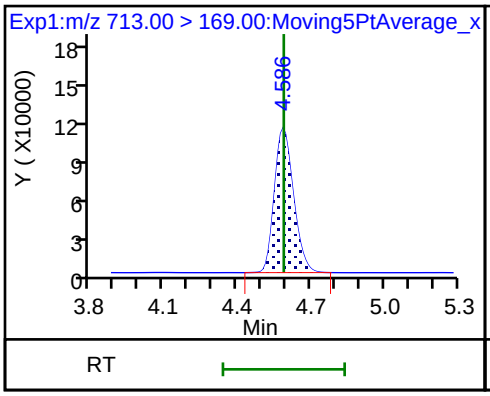
41 Perfluorotridecanoic acid



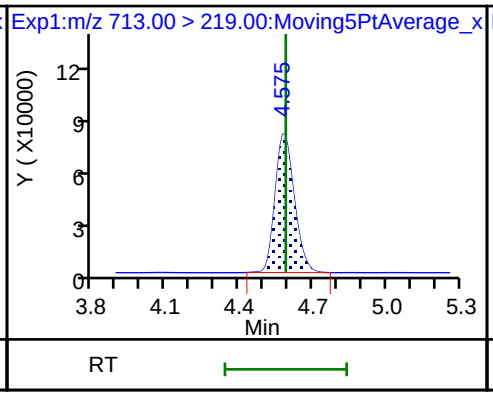
41 Perfluorotridecanoic acid



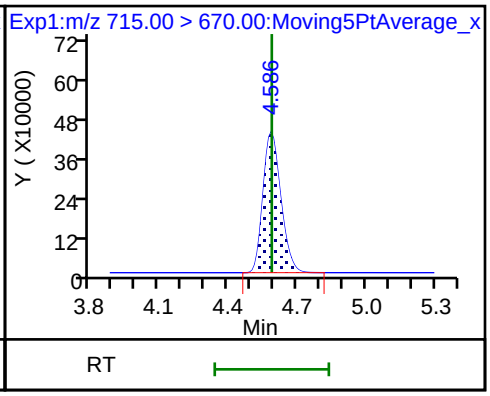
42 Perfluorotetradecanoic acid



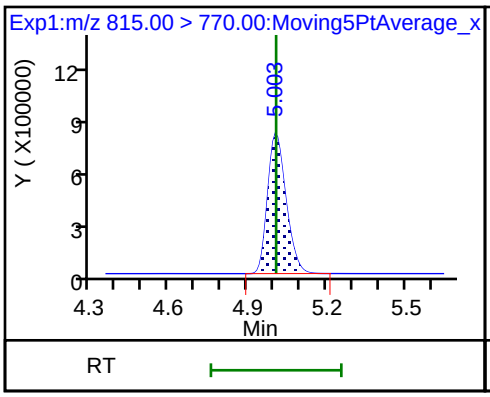
42 Perfluorotetradecanoic acid



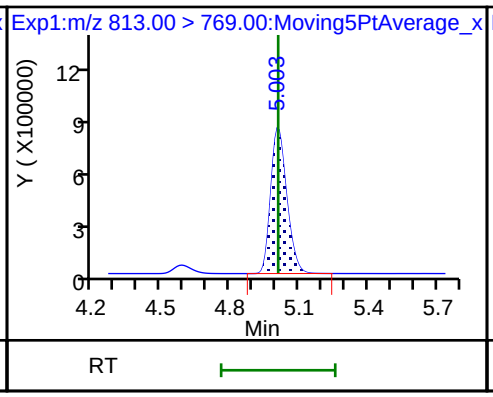
D 43 13C2-PFTeDA



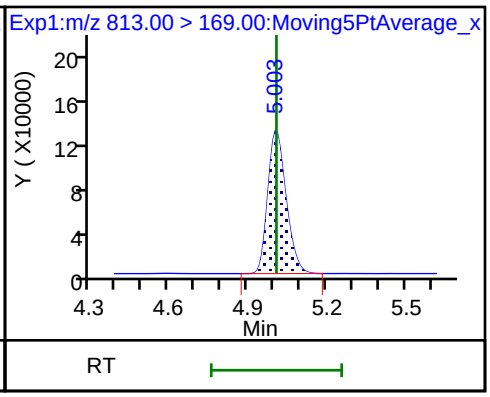
D 44 13C2-PFHxDA



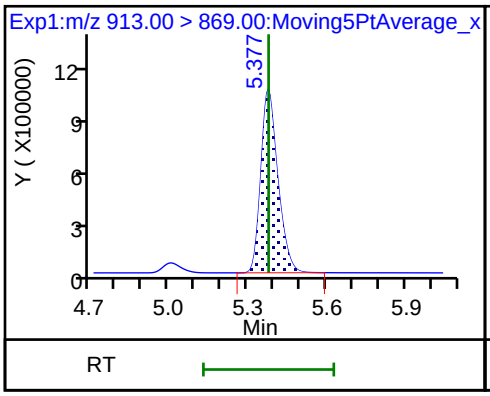
45 Perfluorohexadecanoic acid



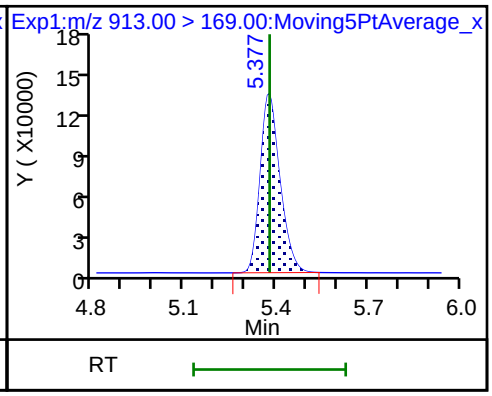
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_007.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-May-2018 12:39:51 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L6-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 13:21:27 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.464	1.459	0.005	1.000	10414401	5.21		104	5947	
D 1 13C4 PFBA										
217.00 > 172.00	1.464	1.459	0.005	1.000	5376359	2.51		100	36021	
D 3 13C5-PFPeA										
267.90 > 223.00	1.739	1.732	0.007	0.562	3341128	2.52		101	44968	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.739	1.732	0.007	1.000	8185544	5.03		101	3882	
D 47 13C3-PFBS										
301.90 > 83.00	1.775	1.767	0.008	1.000	73279	2.34		101	484	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.775	1.768	0.007	1.000	11060184	4.55		103	52935	
298.90 > 99.00	1.775	1.768	0.007	1.000	4775641		2.32(1.25-3.74)	103	30317	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.994	1.985	0.009	1.000	1922082	4.66		99.8	113145	
D 60 M2-4:2FTS										
329.00 > 81.00	1.994	1.985	0.009	1.000	399182	2.28		97.6	5912	
D 7 13C2 PFHxA										
315.00 > 270.00	2.028	2.022	0.006	1.000	3487538	2.51		100	61009	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.028	2.025	0.003	1.000	7306347	5.02		100	11209	
313.00 > 119.00	2.028	2.025	0.003	1.000	674837		10.83(5.03-15.10)	100	9048	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.050	2.043	0.007	1.000	10373553	4.77		102	95251	
349.00 > 99.00	2.050	2.043	0.007	1.000	3919748		2.65(1.36-4.07)	102	32615	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.129	2.124	0.005	1.000	185352	2.62		105	6402	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.129	2.126	0.003	1.000	1218677	4.86		97.2	10591	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 9 13C4-PFHpA										
367.00 > 322.00	2.362	2.357	0.005	1.000	3393426	2.55		102	61877	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.362	2.358	0.004	1.000	6977163	4.85		96.9	10833	
363.00 > 169.00	2.362	2.358	0.004	1.000	2851483		2.45(1.13-3.40)	96.9	13750	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.374	2.369	0.005	1.000	8956107	4.53		99.5	27865	
399.00 > 99.00	2.374	2.369	0.005	1.000	2917427		3.07(1.50-4.49)	99.5	8752	
D 11 18O2 PFHxS										
403.00 > 84.00	2.374	2.373	0.001	1.000	4154188	2.35		99.2	62965	
65 Adona										
377.00 > 251.00	2.409	2.400	0.008	1.000	20276502	4.98		99.5	170885	
377.00 > 85.00	2.409	2.400	0.008	1.000	12977769		1.56(0.84-2.53)	99.5	58104	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.693	2.689	0.004	1.000	2137273	4.79		101	15548	
D 12 M2-6:2FTS										
429.00 > 81.00	2.693	2.690	0.003	1.000	629537	2.40		101	11836	
* 62 13C2-PFOA										
415.00 > 370.00	2.723	2.714	0.009		3312862	2.50			57017	
D 14 13C4 PFOA										
417.00 > 372.00	2.723	2.714	0.009	1.000	3113827	2.49		99.7	49344	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.723	2.717	0.006	1.000	7491992	5.01		100	3933	
413.00 > 169.00	2.723	2.717	0.006	1.000	3808820		1.97(0.84-2.52)	100	10338	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.730	2.722	0.008	1.000	8091235	4.89		103	44684	
449.00 > 99.00	2.730	2.722	0.008	1.000	2247456		3.60(1.94-5.82)	103	18964	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.094	3.089	0.005	1.000	6549180	4.68		101	31556	
499.00 > 99.00	3.094	3.089	0.005	1.000	1469516		4.46(2.31-6.93)	101	13551	
D 18 13C4 PFOS										
503.00 > 80.00	3.094	3.087	0.007	1.000	2996416	2.43		102	15917	
D 19 13C5 PFNA										
468.00 > 423.00	3.094	3.089	0.005	1.000	2605474	2.50		99.9	41010	
20 Perfluorononanoic acid										
463.00 > 419.00	3.094	3.089	0.005	1.000	5530127	5.03		101	11237	
463.00 > 169.00	3.094	3.089	0.005	1.000	1330241		4.16(1.90-5.69)	101	54517	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.302	3.299	0.003	1.000	11300495	5.05		108	64337	
D 21 13C8 FOSA										
506.00 > 78.00	3.415	3.413	0.002	1.000	4516916	2.53		101	39522	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.415	3.415	0.0	1.000	9300601	5.22		104	59476	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.443	3.438	0.005	1.000	4949042	5.16		108	50351	
549.00 > 99.00	3.443	3.438	0.005	1.000	1775741		2.79(1.33-3.97)	108	16977	
D 26 M2-8:2FTS										
529.00 > 81.00	3.443	3.442	0.001	1.000	813883	2.38		99.2	7965	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.443	3.442	0.001	1.000	2100194	4.75		99.2	32174	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.452	3.452	0.0	0.997	4592855	4.90		98.1	27878	
513.00 > 169.00	3.452	3.452	0.0	0.997	826699		5.56(2.36-7.09)	98.1	12976	
D 23 13C2 PFDA										
515.00 > 470.00	3.462	3.453	0.009	1.000	2288551	2.55		102	43473	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.617	3.608	0.009	1.000	1063280	2.61		104	21298	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.617	3.613	0.004	1.000	2236016	5.03		101	18266	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.771	3.768	0.003	1.000	4214420	5.08		105	54569	
599.00 > 99.00	3.771	3.768	0.003	1.000	1392374		3.03(1.39-4.16)	105	14766	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.782	3.778	0.004	1.000	1080097	2.49		99.4	2767	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.792	3.785	0.007	1.003	2021013	4.97		99.3	22202	
D 30 13C2 PFUnA										
565.00 > 520.00	3.792	3.785	0.007	1.000	1833922	2.44		97.6	36023	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.792	3.787	0.005	1.000	2965899	5.18		104	11164	
563.00 > 169.00	3.792	3.787	0.005	1.000	794217		3.73(2.12-6.36)	104	17543	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.950	3.943	0.007	1.000	17115639	5.00		106	81191	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.083	4.079	0.004	1.000	4438887	5.10		102	2983	
613.00 > 169.00	4.083	4.079	0.004	1.000	1100348		4.03(2.13-6.40)	102	11937	
D 36 13C2 PFDoA										
615.00 > 570.00	4.083	4.080	0.003	1.000	2094139	2.67		107	13650	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.356	4.346	0.010	1.000	4454944	4.93		98.5	1817	
663.00 > 169.00	4.356	4.346	0.010	1.000	1385254		3.22(1.25-3.76)	98.5	14560	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.589	4.588	0.001	1.000	2282194	2.67		107	11853	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.589	4.588	0.001	1.000	1113000	4.71		94.2	11493	
713.00 > 219.00	4.589	4.588	0.001	1.000	811627		1.37(0.71-2.13)	94.2	12450	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.015	5.006	0.009	1.000	3685972	2.71		108	11041	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.015	5.008	0.007	1.000	6998779	5.13		103	1299	
813.00 > 169.00	5.015	5.008	0.007	1.000	1130623		6.19(2.86-8.58)	103	7502	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.380	5.378	0.002	1.000	7548537	4.85		96.9	1218	
913.00 > 169.00	5.380	5.378	0.002	1.000	942806		8.01(3.83-11.48)	96.9	5861	

Reagents:

LCPFC_LL6_00005 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 13:21:28 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_007.d

Injection Date: 14-May-2018 12:39:51 Instrument ID: A8_N

Lims ID: IC L6 Full

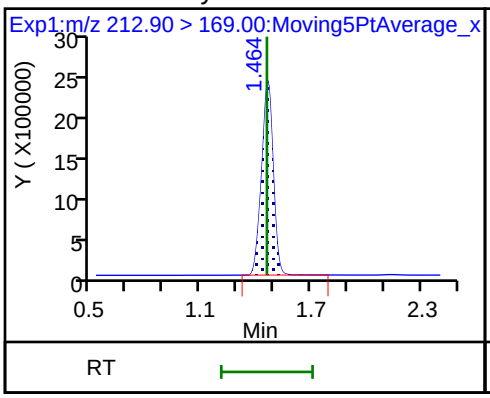
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 15 Worklist Smp#: 7

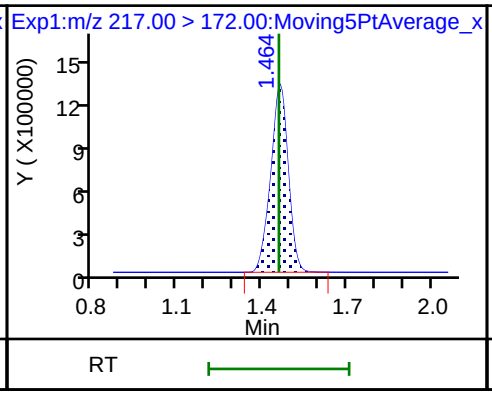
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

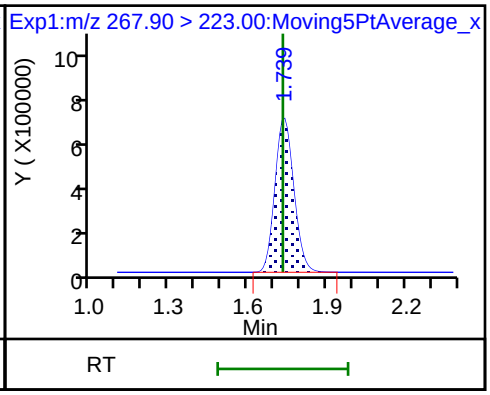
2 Perfluorobutyric acid



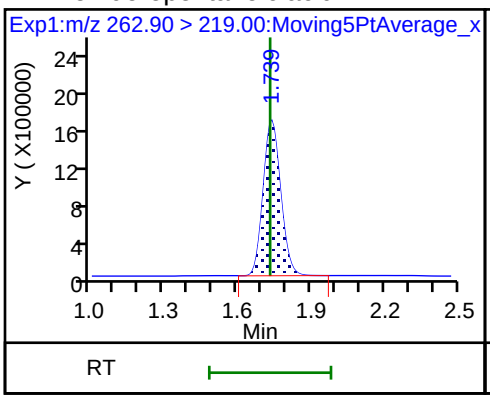
D 1 13C4 PFBA



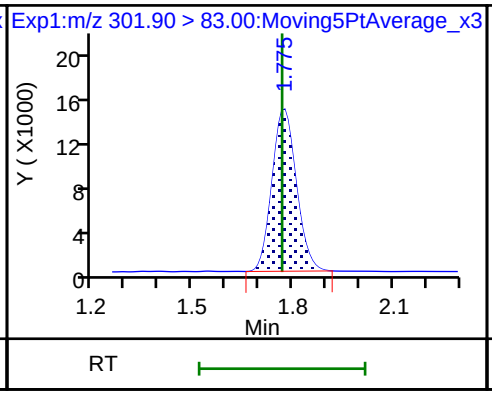
D 3 13C5-PFPeA



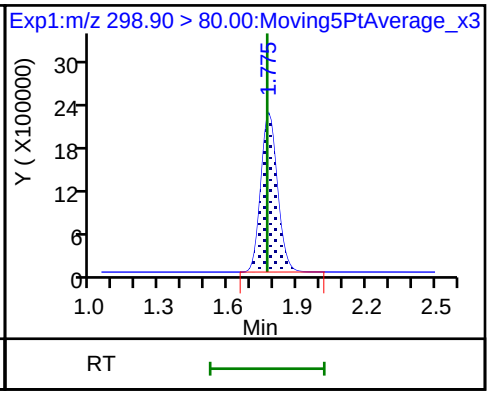
4 Perfluoropentanoic acid



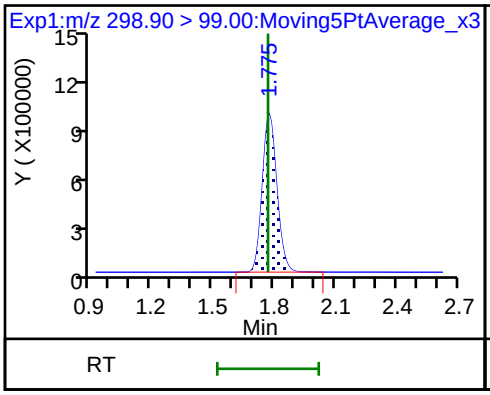
D 47 13C3-PFBS



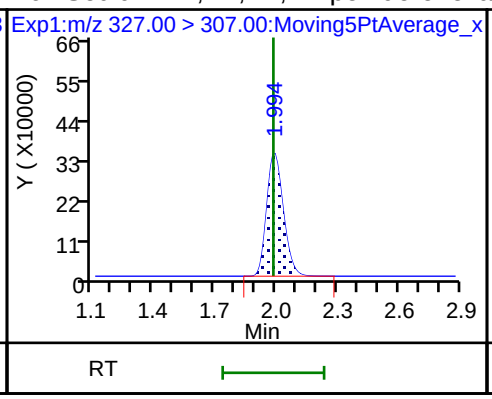
5 Perfluorobutanesulfonic acid



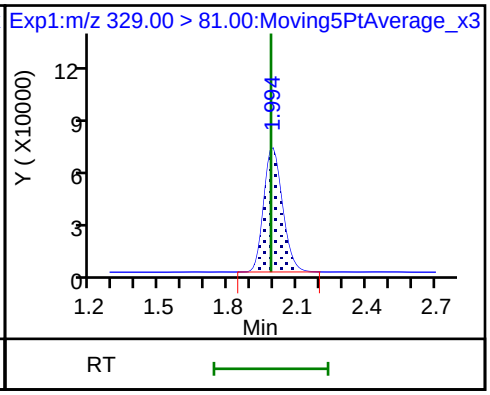
5 Perfluorobutanesulfonic acid



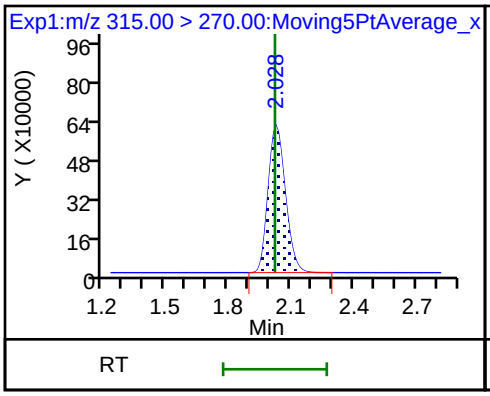
61 Sodium 1H,1H,2H,2H-perfluorohexane



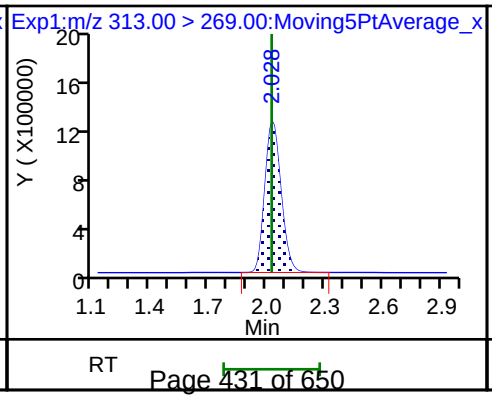
D 60 M2-4:2FTS



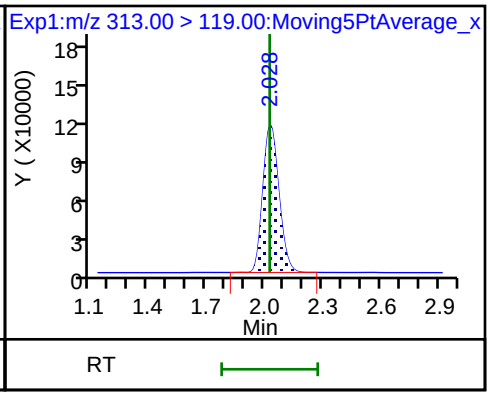
D 7 13C2 PFHxA



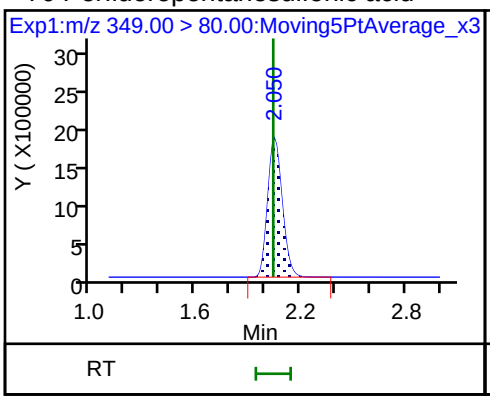
6 Perfluorohexanoic acid



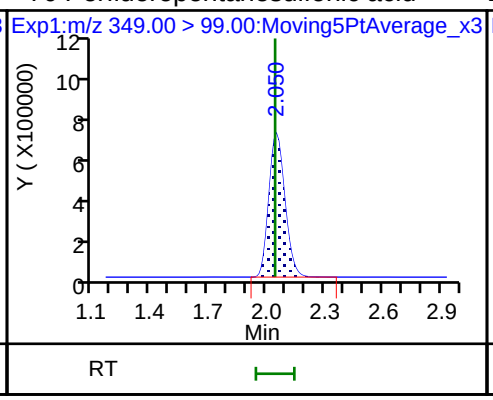
6 Perfluorohexanoic acid



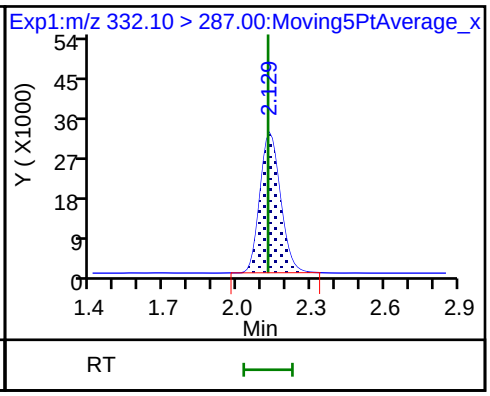
70 Perfluoropentanesulfonic acid



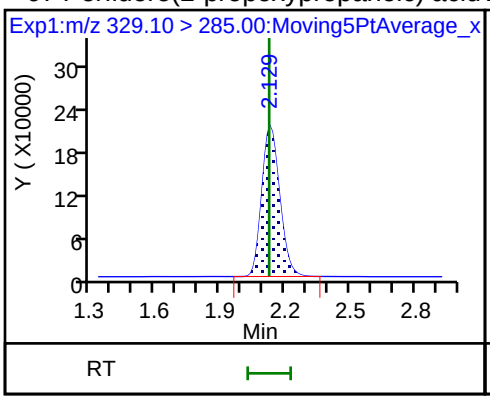
70 Perfluoropentanesulfonic acid



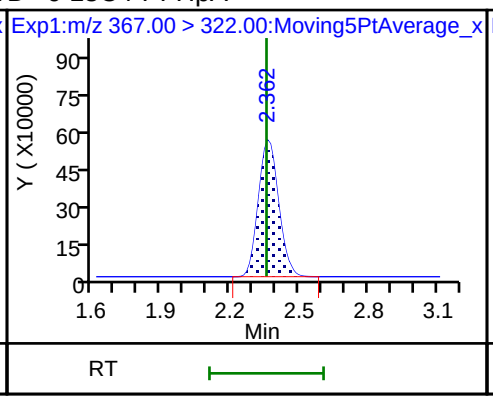
D 64 13C3 HFPO-DA



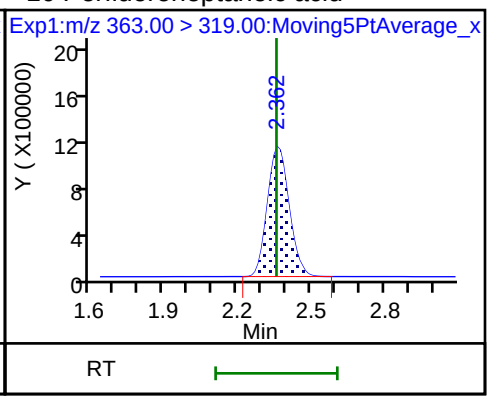
67 Perfluoro(2-propoxypropanoic) acid



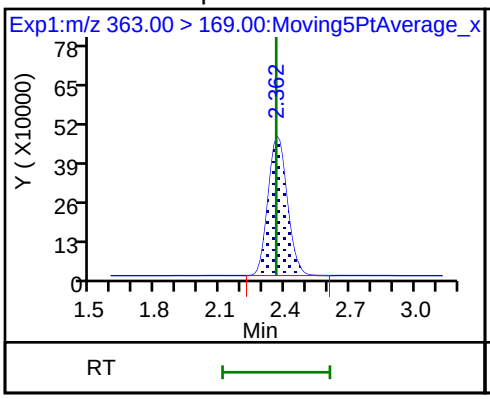
D 9 13C4-PFHpA



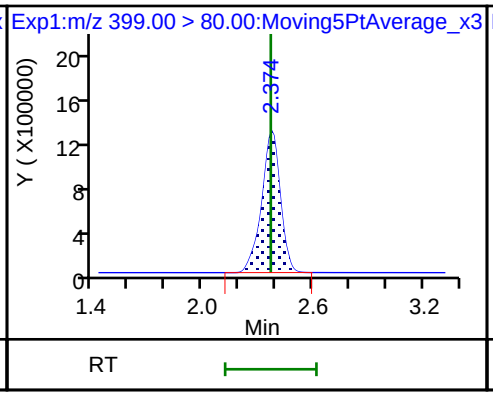
10 Perfluoroheptanoic acid



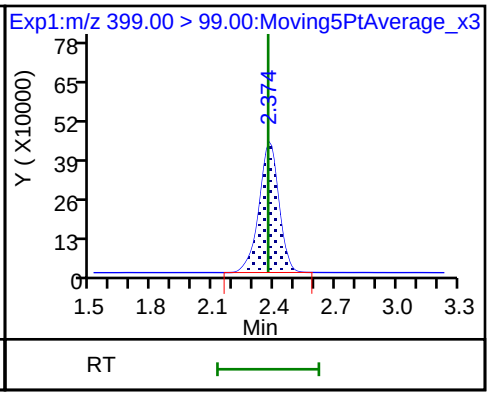
10 Perfluoroheptanoic acid



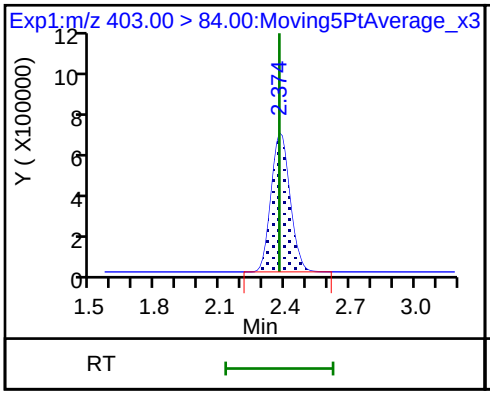
8 Perfluorohexanesulfonic acid



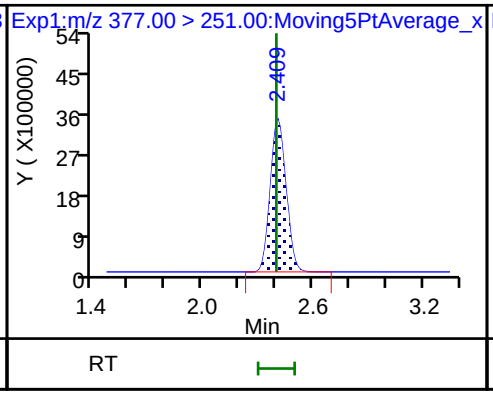
8 Perfluorohexanesulfonic acid



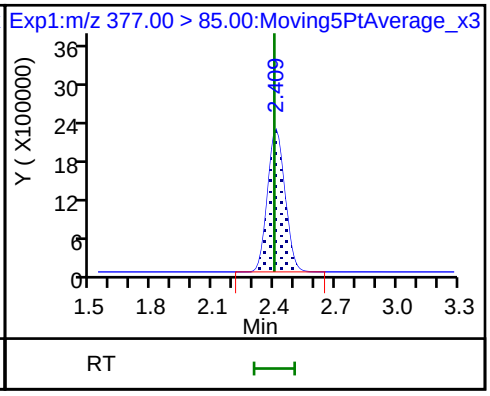
D 11 18O2 PFHxS



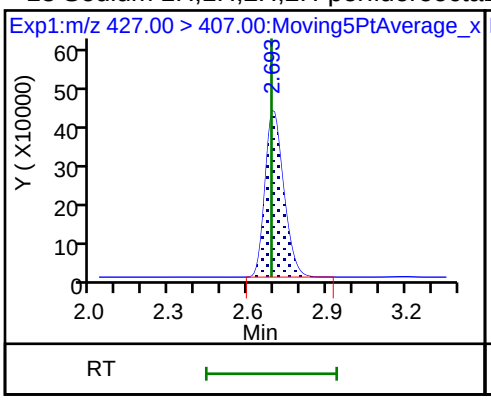
65 Adona



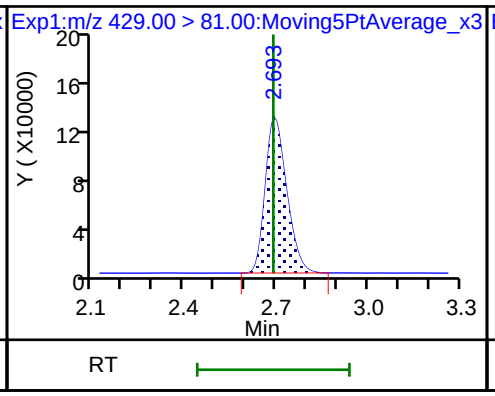
65 Adona



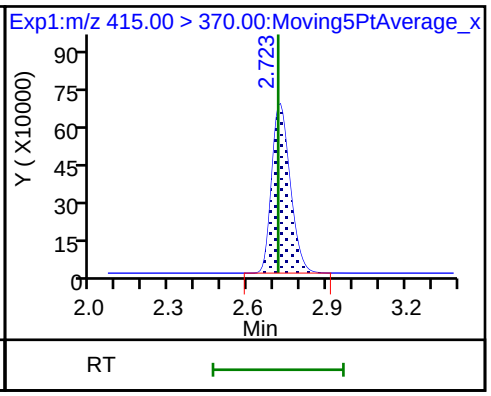
13 Sodium 1H,1H,2H,2H-perfluorooctane



D 12 M2-6:2FTS



* 62 13C2-PFOA



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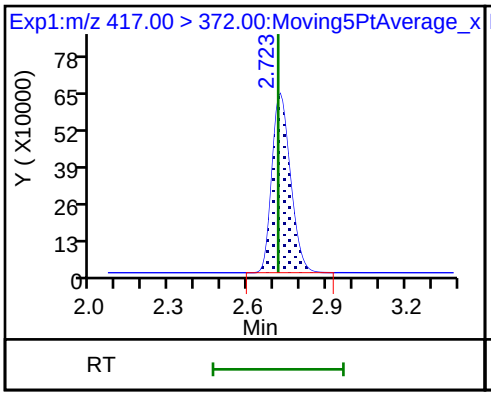
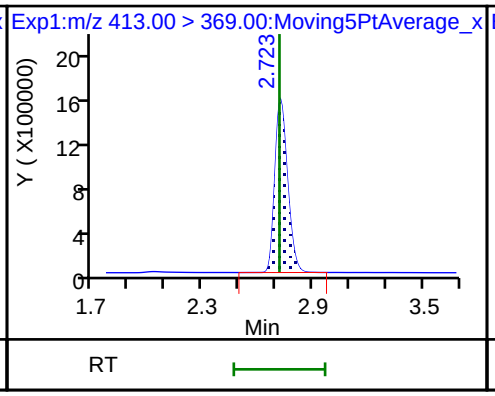
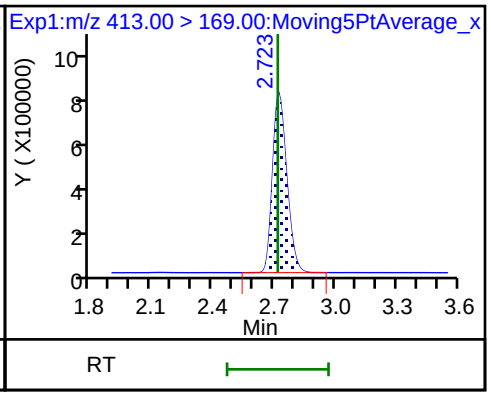


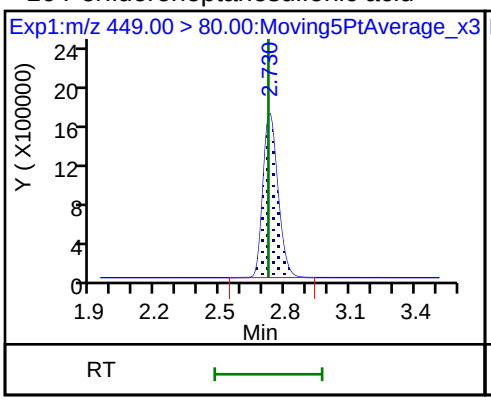
15 Perfluorooctanoic acid



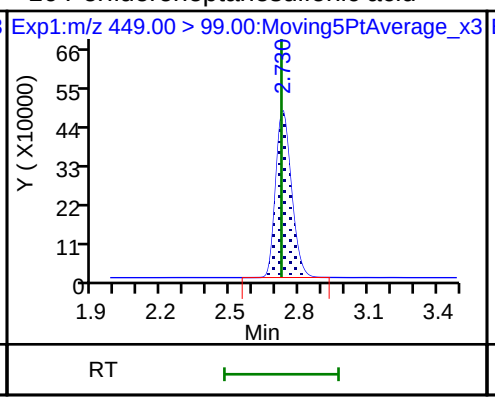
15 Perfluorooctanoic acid



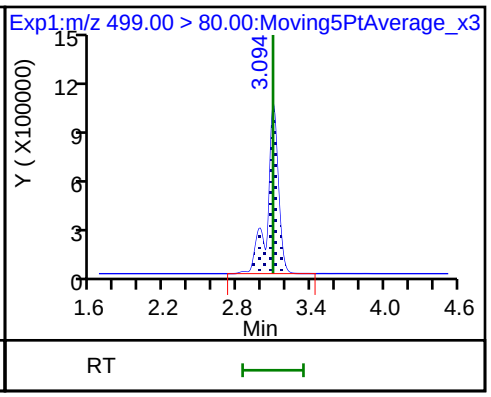
16 Perfluoroheptanesulfonic acid



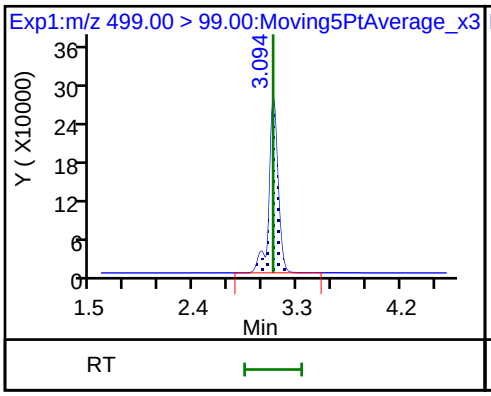
16 Perfluoroheptanesulfonic acid



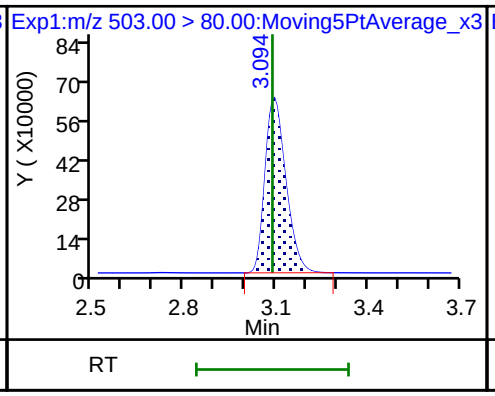
17 Perfluorooctane sulfonic acid



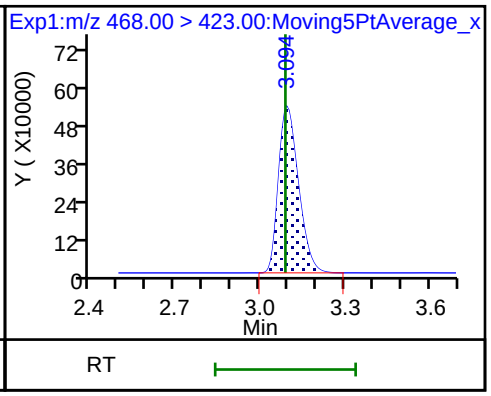
17 Perfluorooctane sulfonic acid



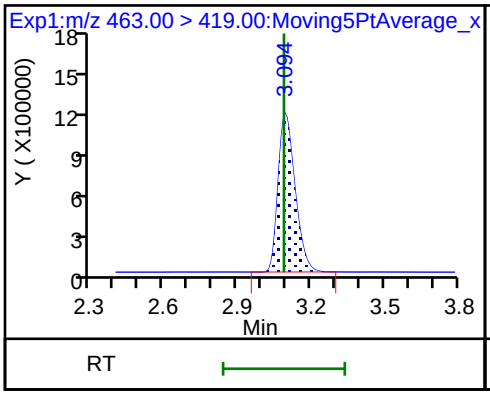
D 18 13C4 PFOS



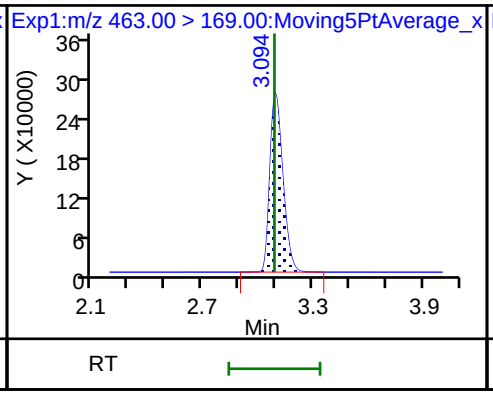
D 19 13C5 PFNA



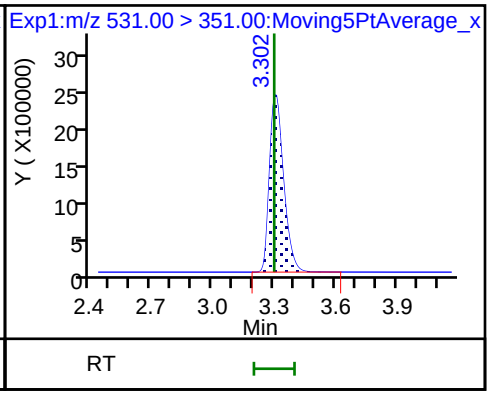
20 Perfluorononanoic acid



20 Perfluorononanoic acid



69 9-Chlorohexadecafluoro-3-oxanonane



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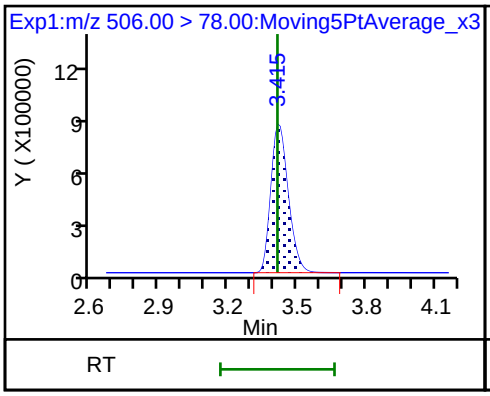
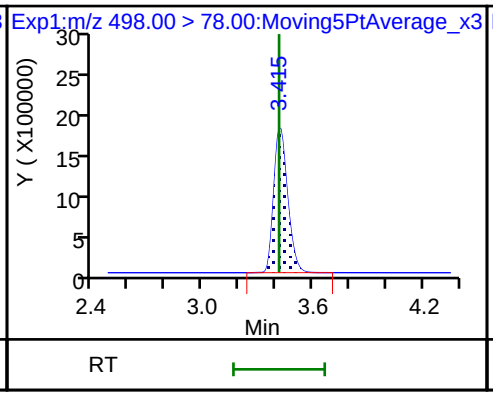
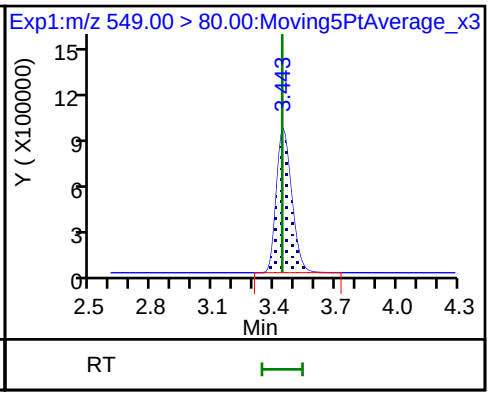


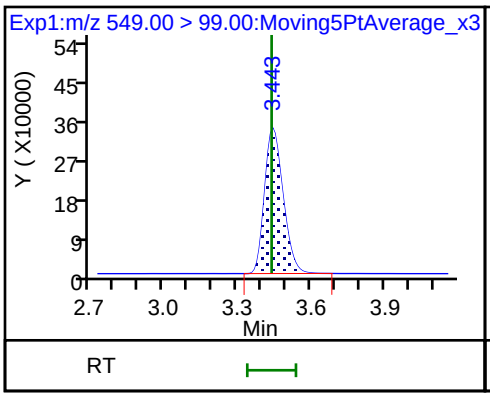
22 Perfluorooctane Sulfonamide



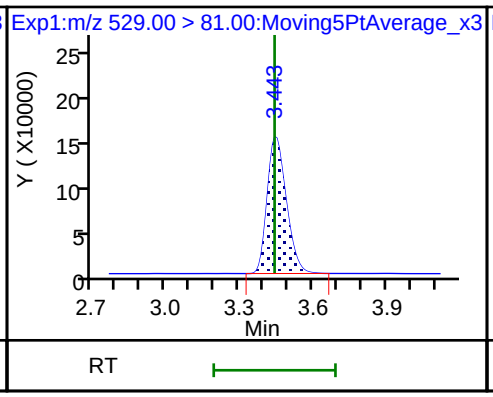
68 Perfluorononanesulfonic acid



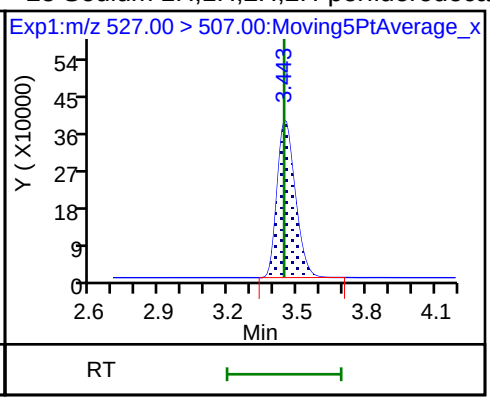
68 Perfluorononanesulfonic acid



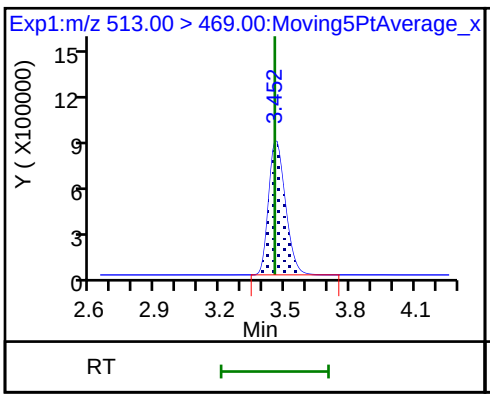
D 26 M2-8:2FTS



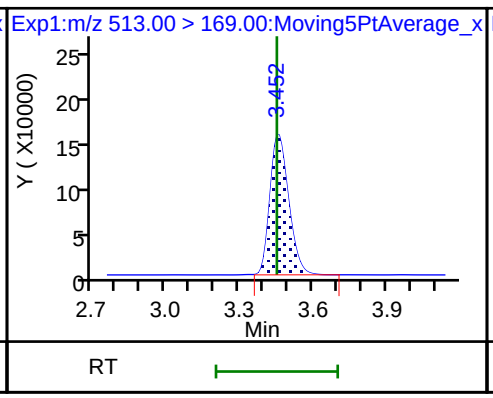
25 Sodium 1H,1H,2H,2H-perfluorodecane



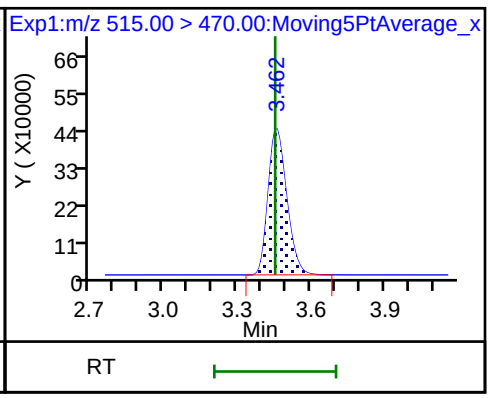
24 Perfluorodecanoic acid



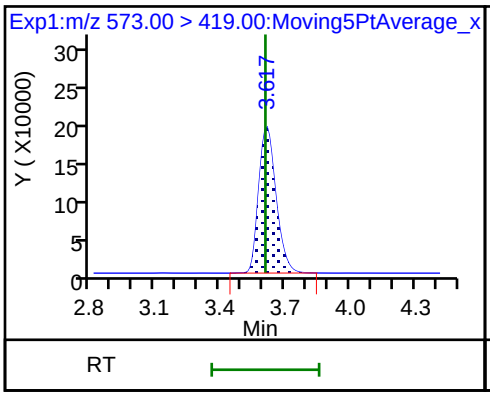
24 Perfluorodecanoic acid



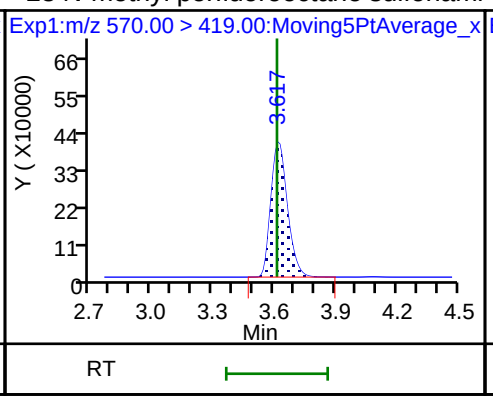
D 23 13C2 PFDA



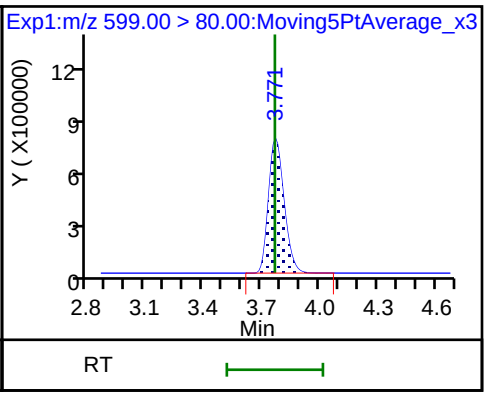
D 27 d3-NMeFOSAA



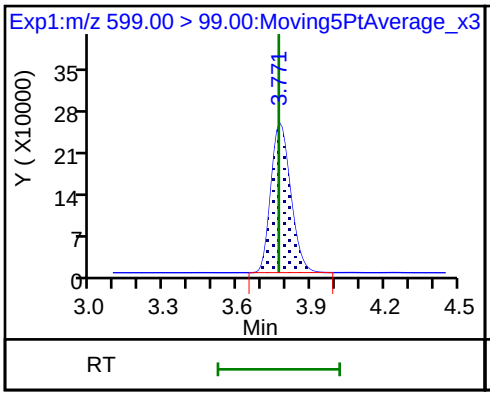
28 N-methyl perfluorooctane sulfonami



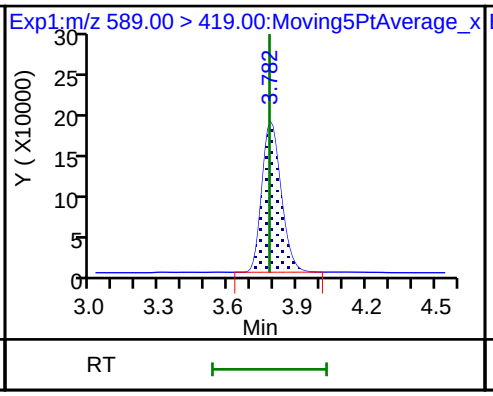
29 Perfluorodecane Sulfonic acid



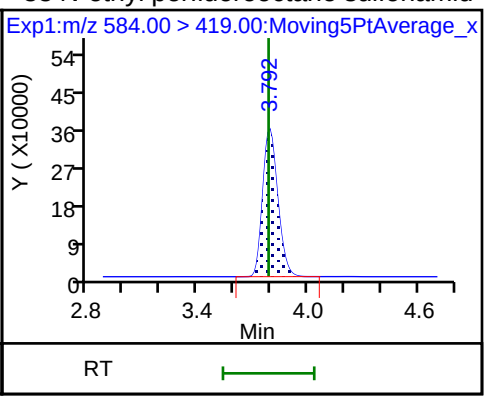
29 Perfluorodecane Sulfonic acid



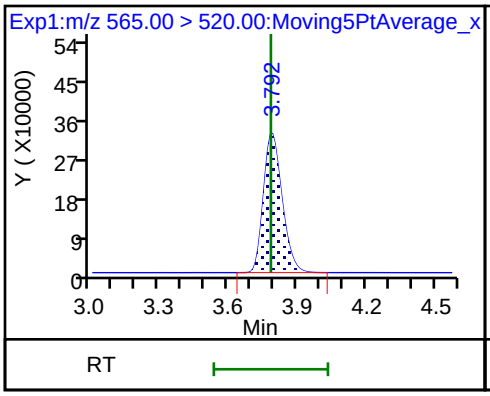
D 32 d5-NEtFOSAA



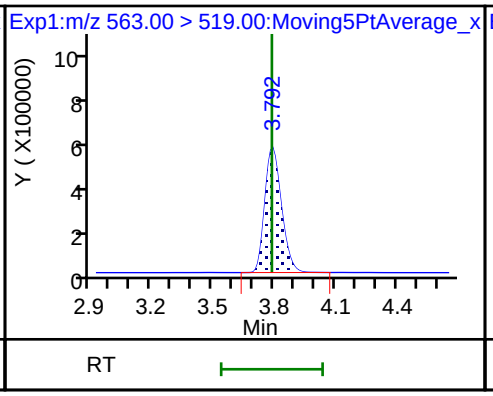
33 N-ethyl perfluorooctane sulfonamid



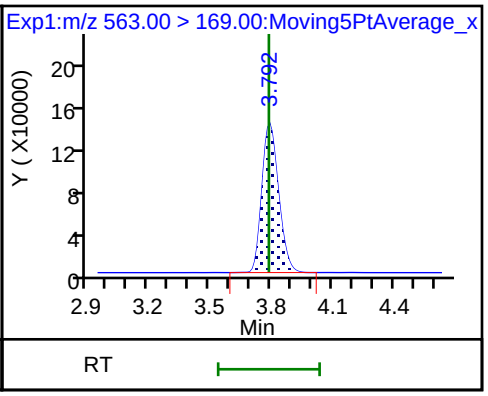
D 30 13C2 PFUnA



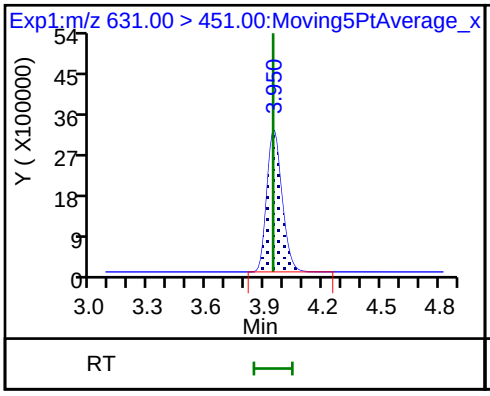
31 Perfluoroundecanoic acid



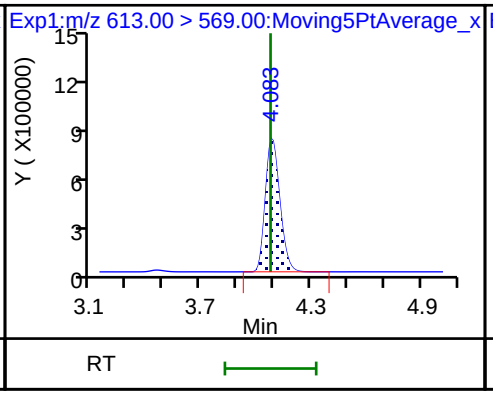
31 Perfluoroundecanoic acid



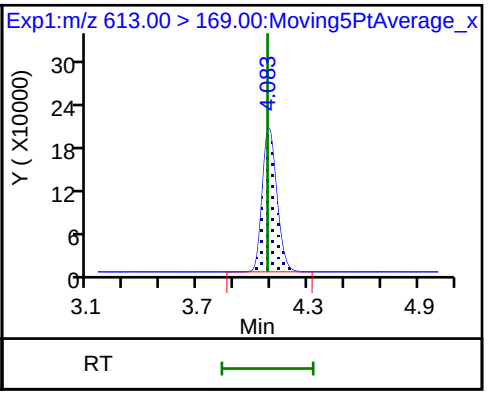
66 11-Chloroeicosafluoro-3-oxaundecan



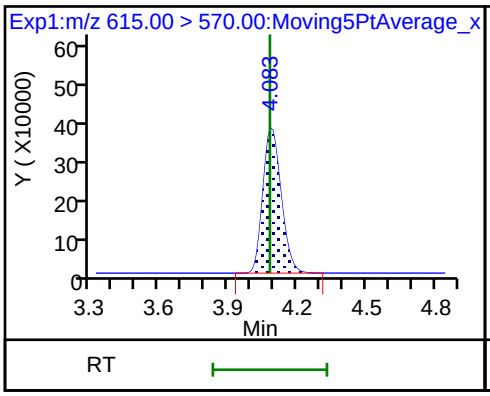
37 Perfluorododecanoic acid



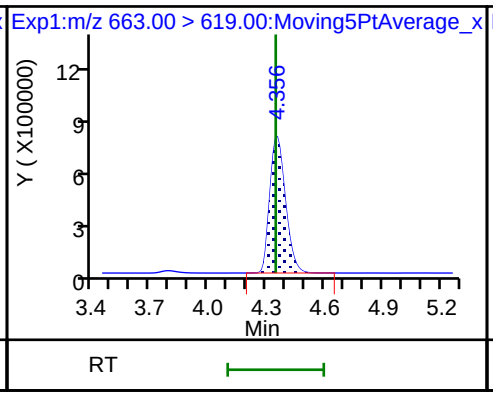
37 Perfluorododecanoic acid



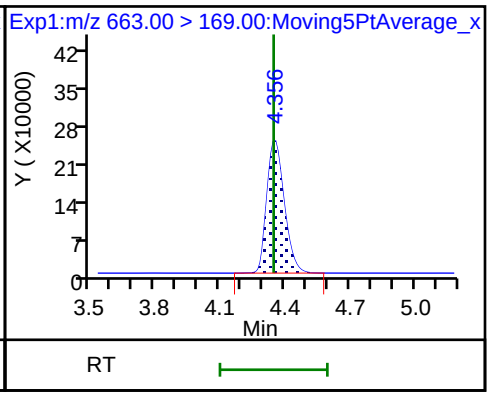
D 36 13C2 PFDoA



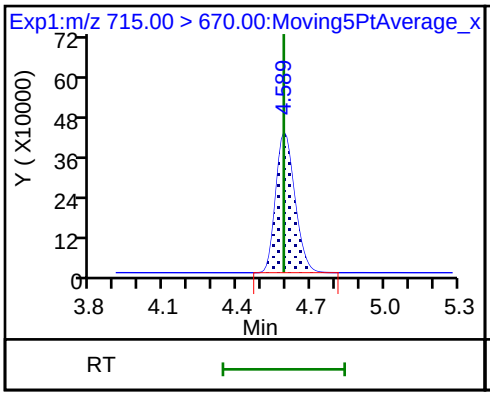
41 Perfluorotridecanoic acid



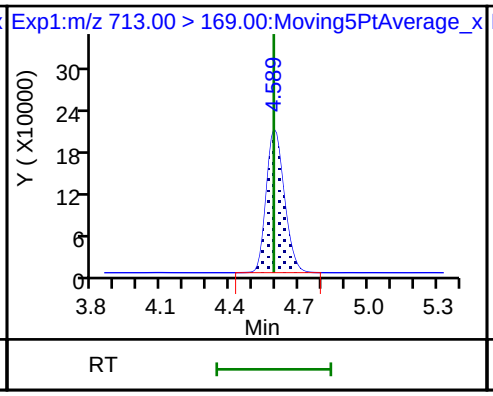
41 Perfluorotridecanoic acid



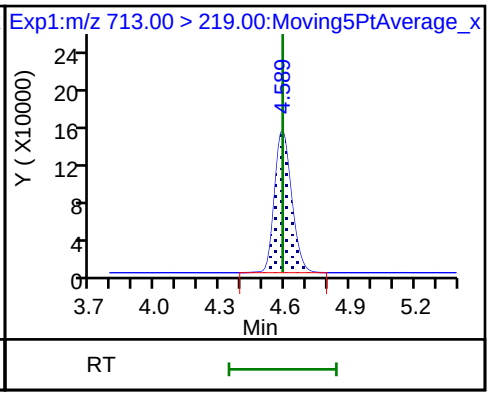
D 43 13C2-PFTeDA



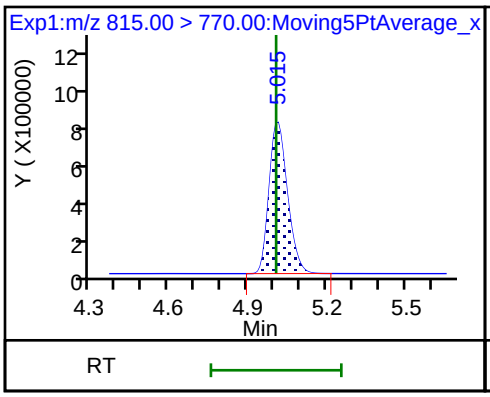
42 Perfluorotetradecanoic acid



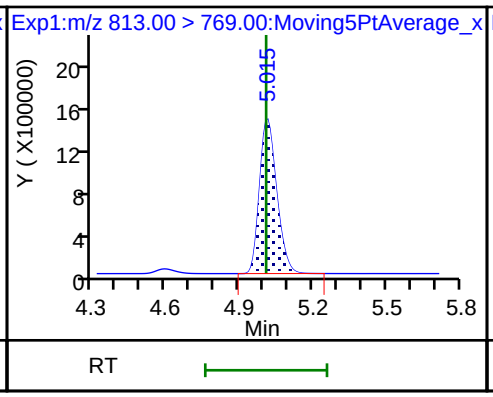
42 Perfluorotetradecanoic acid



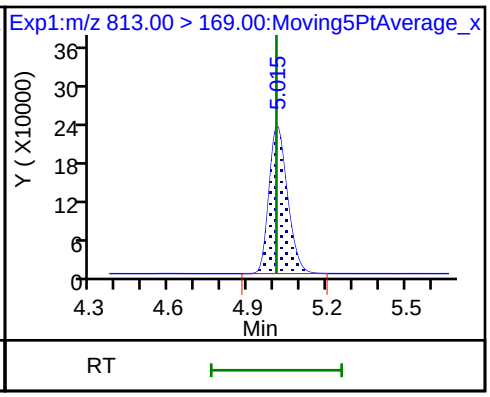
D 44 13C2-PFHxDA



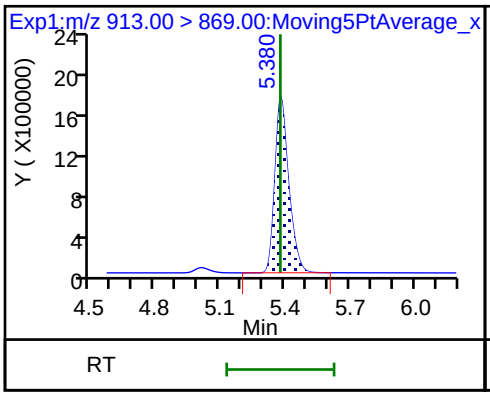
45 Perfluorohexadecanoic acid



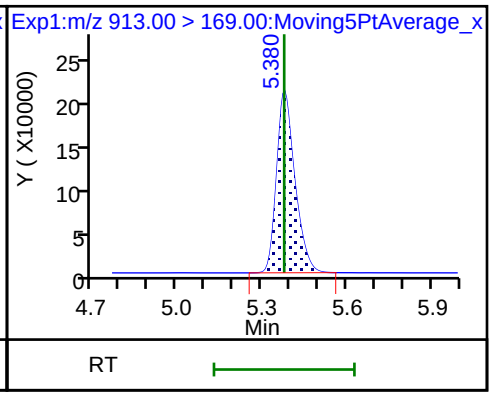
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-May-2018 12:47:40 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L7-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 13:21:31 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.459	-0.001	1.000	6047384	2.60		104	40003	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.459	-0.001	1.000	21566220	9.60		96.0	11191	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.732	-0.003	1.000	16944518	9.58		95.8	8485	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.732	-0.003	0.560	3635861	2.52		101	53147	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.767	-0.002	1.000	80663	2.37		102	546	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.768	-0.003	1.000	22357468	8.35		94.5	105365	
298.90 > 99.00	1.765	1.768	-0.003	1.000	10257393		2.18(1.25-3.74)	94.5	69239	
D 60 M2-4:2FTS										
329.00 > 81.00	1.981	1.985	-0.004	1.000	439826	2.31		99.1	6563	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.981	1.985	-0.004	1.000	4391668	9.68		104	198267	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.022	-0.007	1.000	3779518	2.51		100	82307	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.024	-0.009	1.000	15954728	10.1		101	32172	
313.00 > 119.00	2.015	2.024	-0.009	1.000	1552987		10.27(5.03-15.10)	101	19482	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.038	2.043	-0.005	1.000	21336462	8.91		95.0	131375	
349.00 > 99.00	2.038	2.043	-0.005	1.000	8639322		2.47(1.36-4.07)	95.0	75244	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.117	2.124	-0.007	1.000	189493	2.47		98.7	6450	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.117	2.126	-0.009	1.000	2741380	10.7		107	23915	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.357	-0.011	1.000	3545625	2.45		98.1	37761	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.346	2.358	-0.012	1.000	15864978	10.5		105	23476	
363.00 > 169.00	2.346	2.358	-0.012	1.000	5982834		2.65(1.13-3.40)	105	29827	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.359	2.369	-0.010	0.994	19055175	8.86		97.4	42166	
399.00 > 99.00	2.359	2.369	-0.010	0.994	6383744		2.98(1.50-4.49)	97.4	19965	
D 11 18O2 PFHxS										
403.00 > 84.00	2.373	2.373	0.0	1.000	4515708	2.35		99.3	56114	
65 Adona										
377.00 > 251.00	2.396	2.400	-0.004	1.000	38483503	8.26		82.6	171235	
377.00 > 85.00	2.396	2.400	-0.004	1.000	25352774		1.52(0.84-2.53)	82.6	82509	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.689	-0.006	1.000	4570287	9.85		104	33016	
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.690	-0.007	1.000	654764	2.30		96.8	14941	
D 14 13C4 PFOA										
417.00 > 372.00	2.706	2.714	-0.008	1.000	3388900	2.50		100.0	54097	
* 62 13C2-PFOA										
415.00 > 370.00	2.706	2.714	-0.008		3597215	2.50			52911	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.717	-0.004	1.003	15116195	9.28		92.8	7151	
413.00 > 169.00	2.706	2.717	-0.011	1.000	8240827		1.83(0.84-2.52)	92.8	19193	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.722	-0.009	1.000	17287326	9.14		96.0	52942	
449.00 > 99.00	2.713	2.722	-0.009	1.000	4755755		3.64(1.94-5.82)	96.0	32162	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.077	3.087	-0.010	1.000	14563066	9.10		98.1	59686	
499.00 > 99.00	3.077	3.087	-0.010	1.000	3275423		4.45(2.31-6.93)	98.1	27615	
D 18 13C4 PFOS										
503.00 > 80.00	3.077	3.087	-0.010	1.000	3424799	2.55		107	10991	
D 19 13C5 PFNA										
468.00 > 423.00	3.085	3.089	-0.004	1.000	2916505	2.57		103	66321	
20 Perfluorononanoic acid										
463.00 > 419.00	3.085	3.089	-0.004	1.000	12051683	9.80		98.0	21152	
463.00 > 169.00	3.085	3.089	-0.004	1.000	2962904		4.07(1.90-5.69)	98.0	75543	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.294	3.299	-0.005	1.000	24030498	9.40		101	89376	
D 21 13C8 FOSA										
506.00 > 78.00	3.406	3.413	-0.007	1.000	4895761	2.52		101	47549	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.406	3.415	-0.009	1.000	19202731	9.95		99.5	139056	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.434	3.438	-0.004	1.000	10944033	9.98		104	57839	
549.00 > 99.00	3.434	3.438	-0.004	1.000	4145745		2.64(1.33-3.97)	104	39375	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.434	3.442	-0.008	1.000	4395841	9.93		104	161494	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.434	3.442	-0.008	1.000	814733	2.19		91.5	9855	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.443	3.452	-0.009	1.000	9948433	10.1		101	51822	
513.00 > 169.00	3.443	3.452	-0.009	1.000	1748235		5.69(2.36-7.09)	101	54627	
D 23 13C2 PFDA										
515.00 > 470.00	3.443	3.453	-0.010	1.000	2405855	2.47		98.7	41050	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.606	3.608	-0.002	1.000	1200409	2.72		109	19286	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.606	3.613	-0.007	1.000	4994588	9.95		99.5	31801	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.761	3.768	-0.007	1.000	9438993	9.96		103	56334	
599.00 > 99.00	3.761	3.768	-0.007	1.000	3204397		2.95(1.39-4.16)	103	35918	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.771	3.778	-0.007	1.000	1167426	2.47		99.0	2533	
D 30 13C2 PFUnA										
565.00 > 520.00	3.782	3.785	-0.003	1.000	1949648	2.39		95.5	33837	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.782	3.785	-0.003	1.003	4649233	10.6		106	47361	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.782	3.787	-0.005	1.000	6243788	10.3		103	20903	
563.00 > 169.00	3.782	3.787	-0.005	1.000	1726138		3.62(2.12-6.36)	103	37472	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.941	3.943	-0.002	1.000	35623175	9.11		96.7	139059	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.074	4.079	-0.005	1.000	9833284	10.4		104	6216	
613.00 > 169.00	4.074	4.079	-0.005	1.000	2374463		4.14(2.13-6.40)	104	19567	
D 36 13C2 PFDoA										
615.00 > 570.00	4.074	4.080	-0.006	1.000	2268618	2.66		106	14733	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.335	4.346	-0.011	1.000	10285991	10.5		105	3667	
663.00 > 169.00	4.335	4.346	-0.011	1.000	3095426		3.32(1.25-3.76)	105	19676	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.581	4.588	-0.007	1.000	2541387	10.0		100	19538	
713.00 > 219.00	4.571	4.588	-0.017	0.998	1863767		1.36(0.71-2.13)	100	17925	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.581	4.588	-0.007	1.000	2442470	2.63		105	11451	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.999	5.006	-0.007	1.000	4075890	2.76		110	11892	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.999	5.008	-0.009	1.000	15878040	10.5		105	2409	
813.00 > 169.00	4.999	5.008	-0.009	1.000	2506880		6.33(2.86-8.58)	105	11727	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.370	5.378	-0.008	1.000	17750468	10.3		103	2235	
913.00 > 169.00	5.370	5.378	-0.008	1.000	2198598		8.07(3.83-11.48)	103	8053	

Reagents:

LCPFC_LL7_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 13:21:32 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Injection Date: 14-May-2018 12:47:40 Instrument ID: A8_N

Lims ID: IC L7 Full

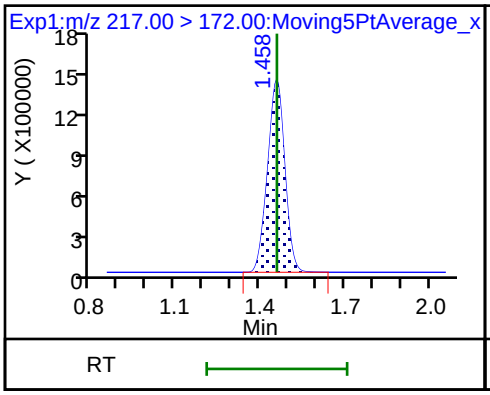
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 8

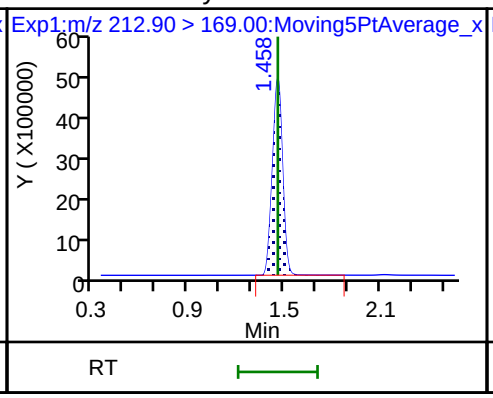
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

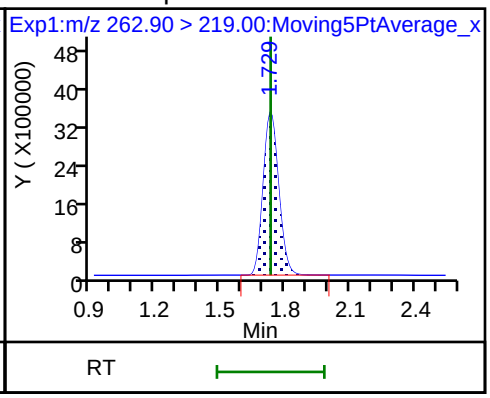
D 1 13C4 PFBA



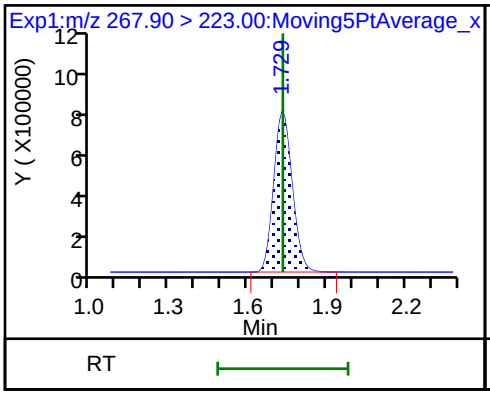
2 Perfluorobutyric acid



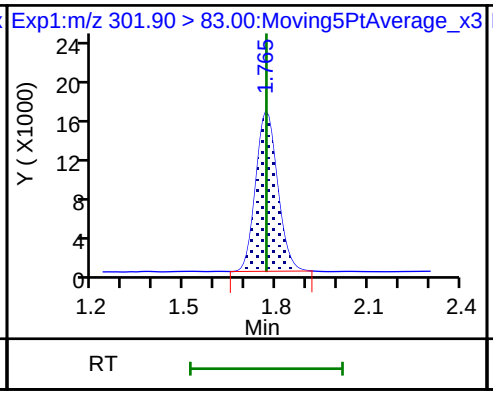
4 Perfluoropentanoic acid



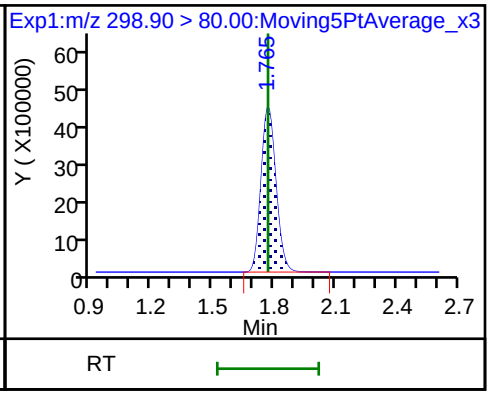
D 3 13C5-PFPeA



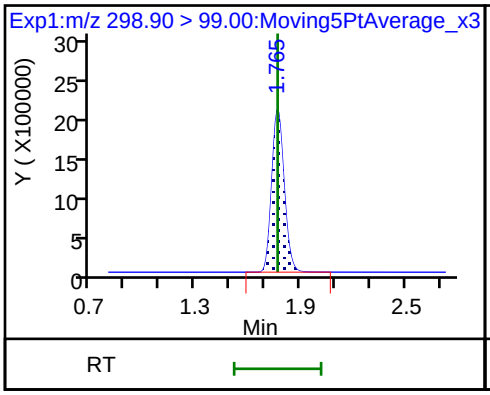
D 47 13C3-PFBS



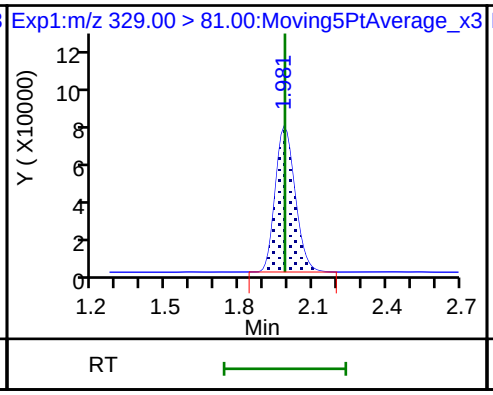
5 Perfluorobutanesulfonic acid



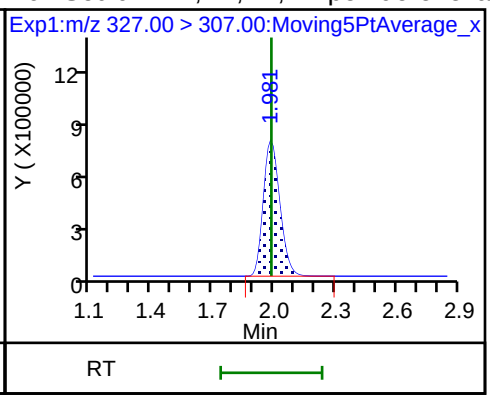
5 Perfluorobutanesulfonic acid



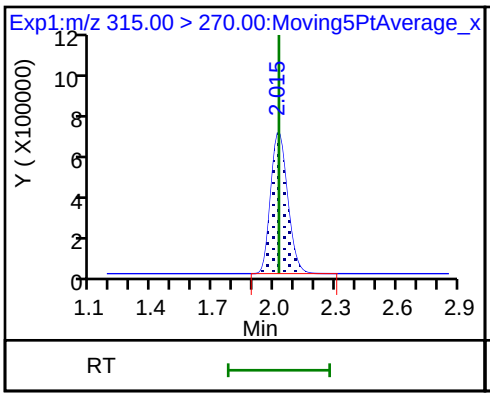
D 60 M2-4:2FTS



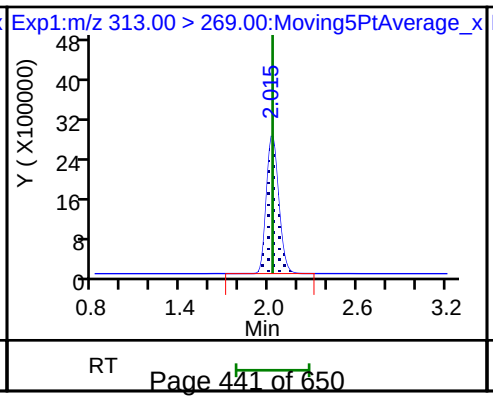
61 Sodium 1H,1H,2H,2H-perfluorohexane



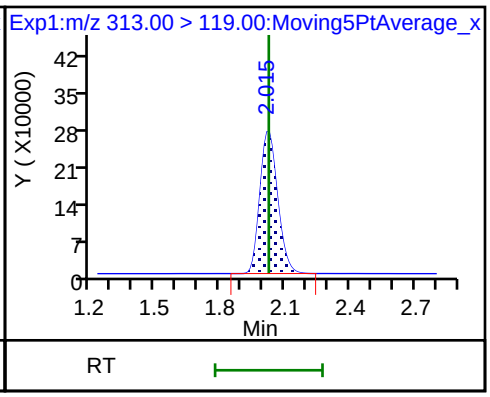
D 7 13C2 PFHxA



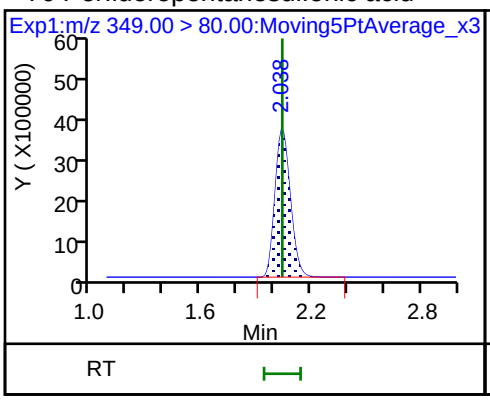
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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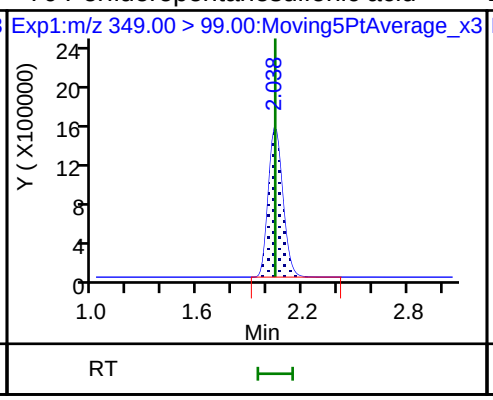
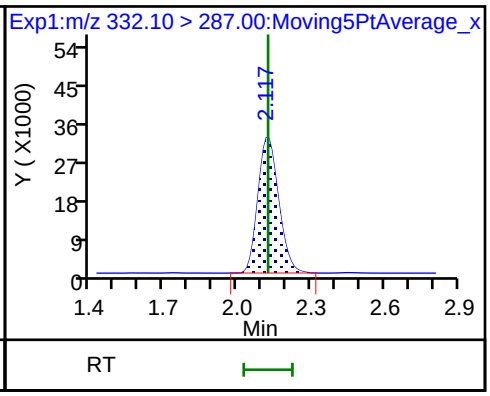
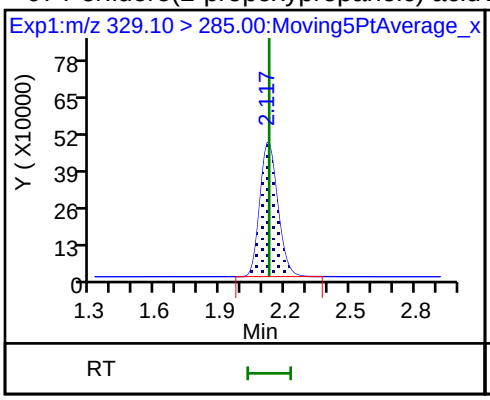


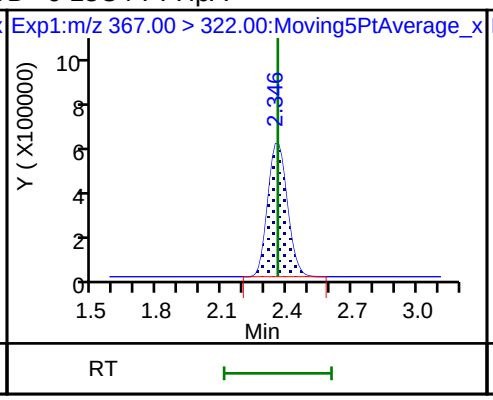
D 64 13C3 HFPO-DA



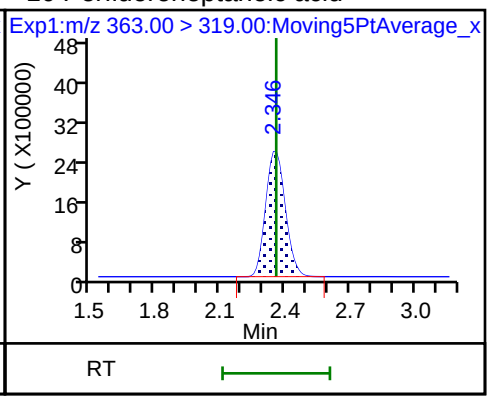
67 Perfluoro(2-propoxypropanoic) acid



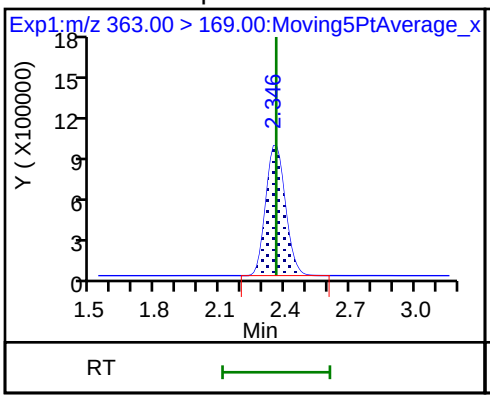
D 9 13C4-PFHpA



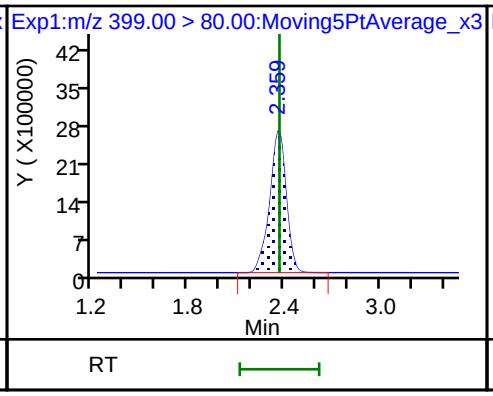
10 Perfluoroheptanoic acid



10 Perfluoroheptanoic acid



8 Perfluorohexanesulfonic acid



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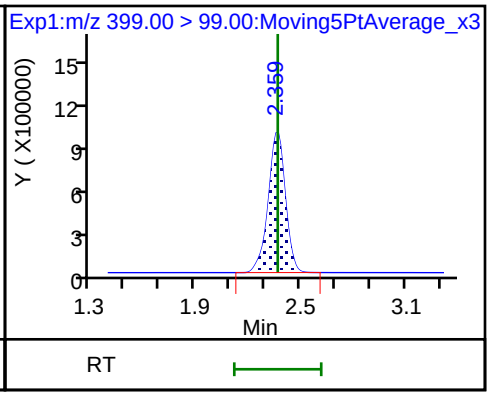
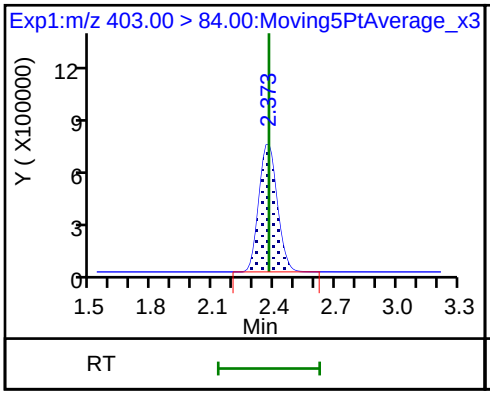
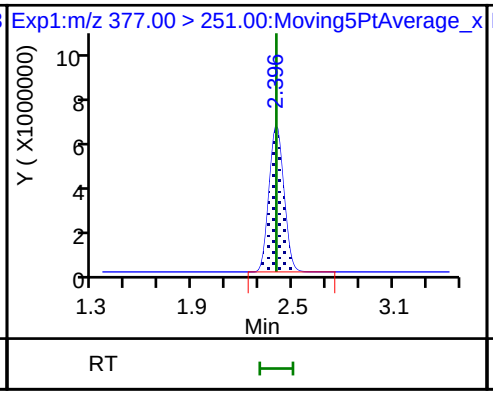


D 11 18O2 PFHxS



65 Adona



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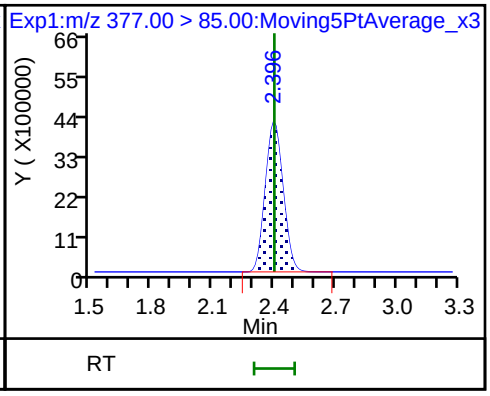
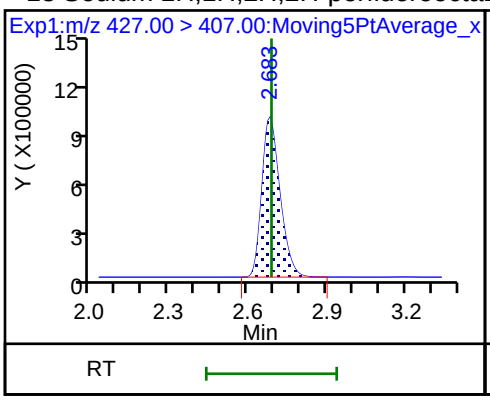
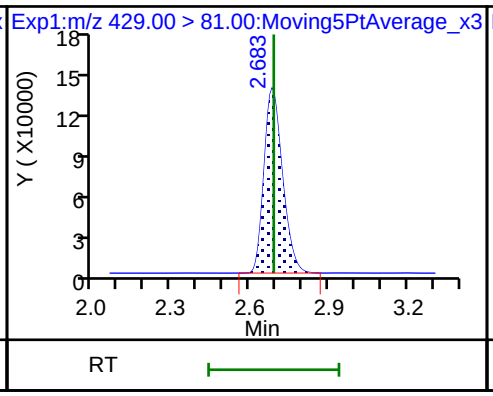


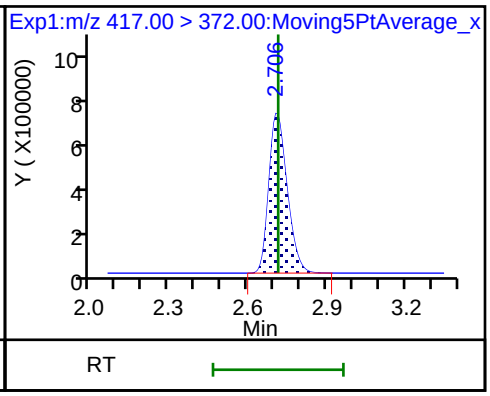
13 Sodium 1H,1H,2H,2H-perfluorooctane



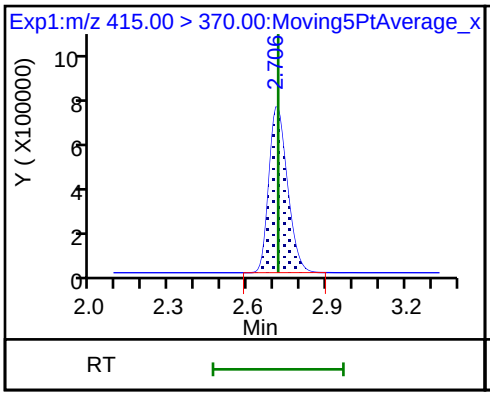
D 12 M2-6:2FTS



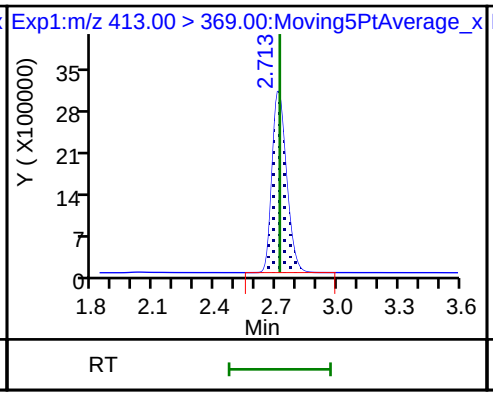
D 14 13C4 PFOA



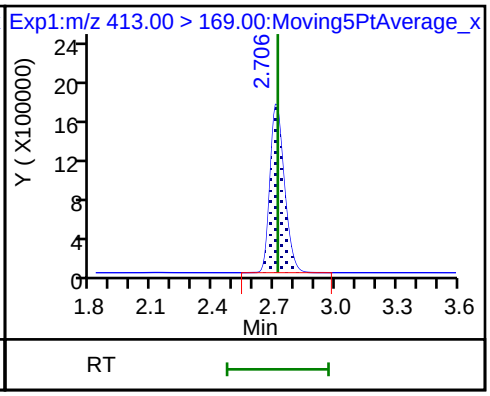
* 62 13C2-PFOA



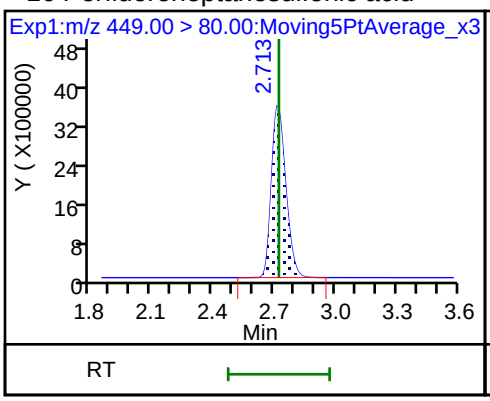
15 Perfluorooctanoic acid



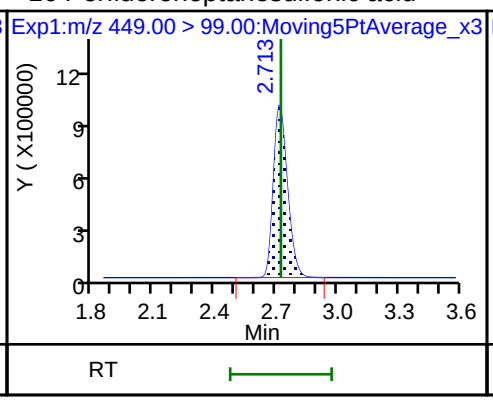
15 Perfluorooctanoic acid



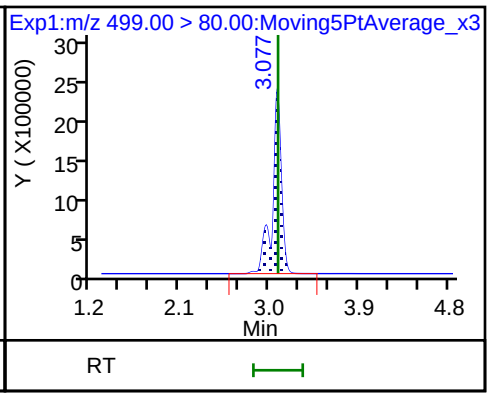
16 Perfluoroheptanesulfonic acid



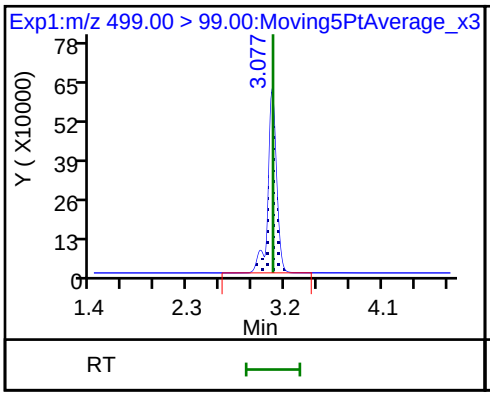
16 Perfluoroheptanesulfonic acid



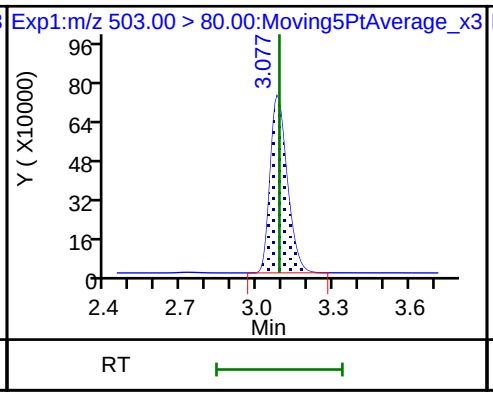
17 Perfluorooctane sulfonic acid



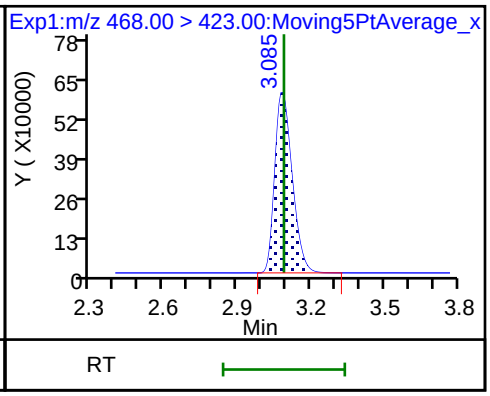
17 Perfluorooctane sulfonic acid



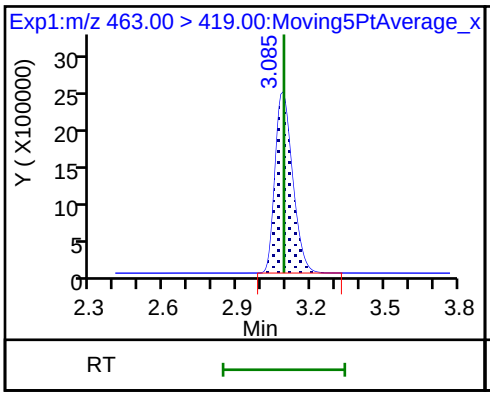
D 18 13C4 PFOS



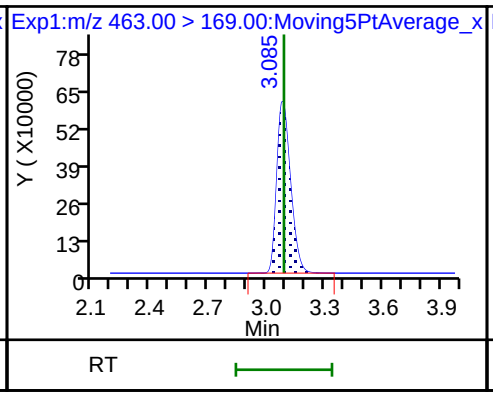
D 19 13C5 PFNA



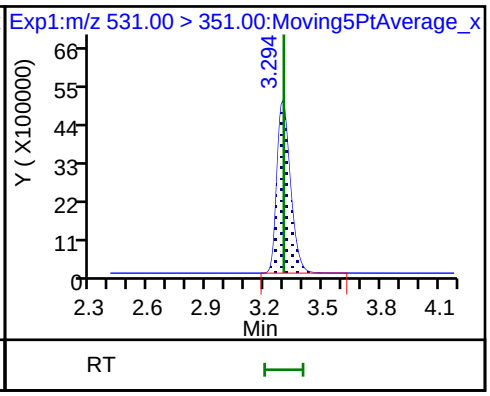
20 Perfluorononanoic acid



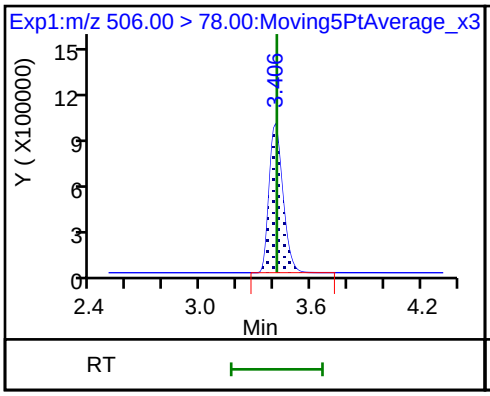
20 Perfluorononanoic acid



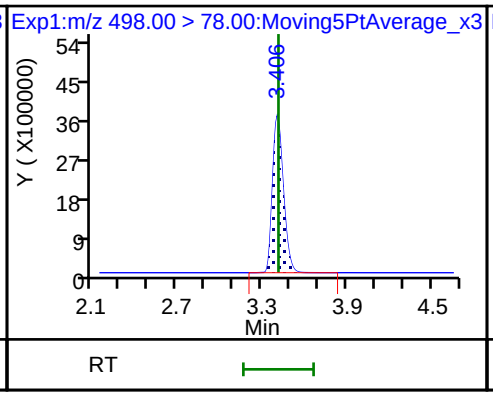
69 9-Chlorohexadecafluoro-3-oxanonane



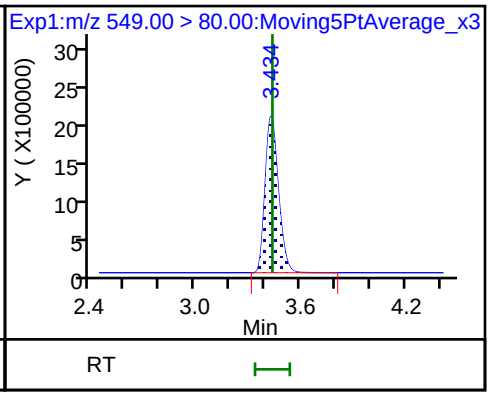
D 21 13C8 FOSA



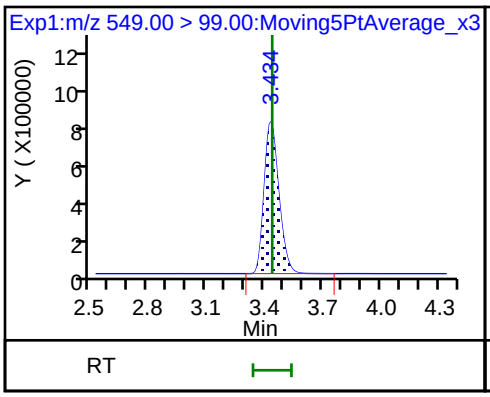
22 Perfluorooctane Sulfonamide



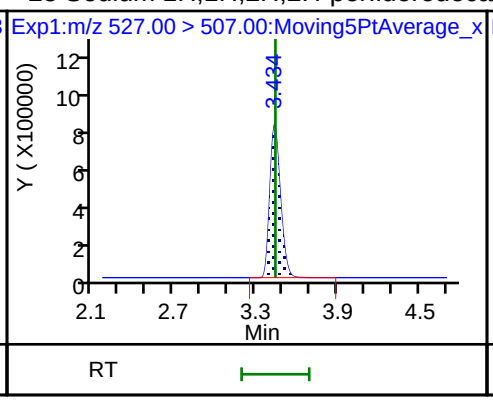
68 Perfluorononanesulfonic acid



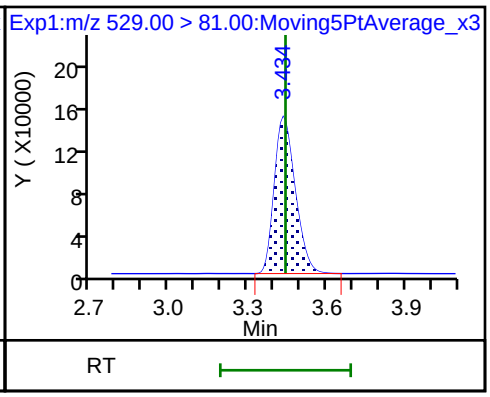
68 Perfluorononanesulfonic acid



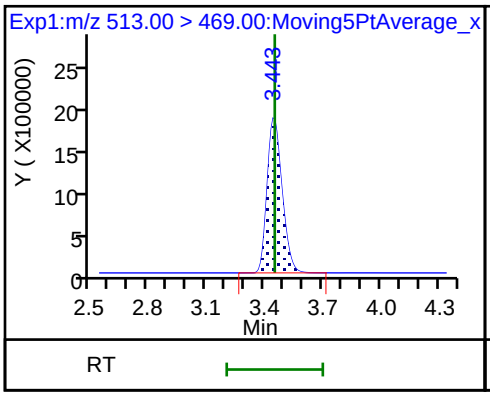
25 Sodium 1H,1H,2H,2H-perfluorodecane



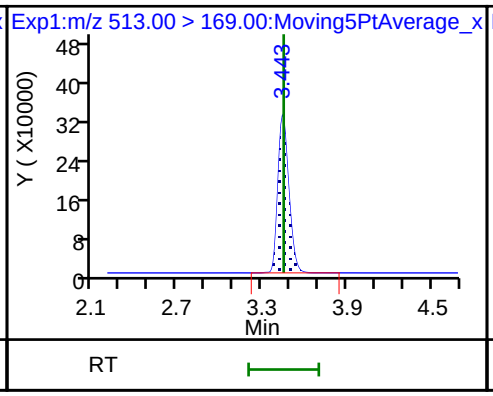
D 26 M2-8:2FTS



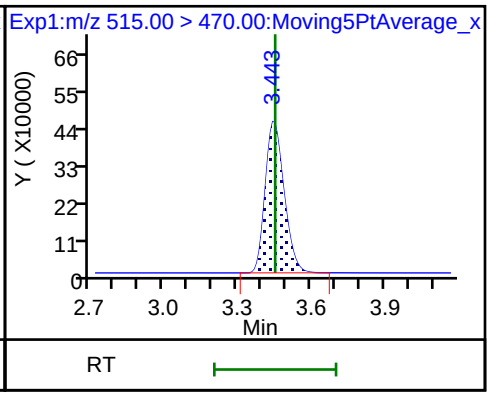
24 Perfluorodecanoic acid



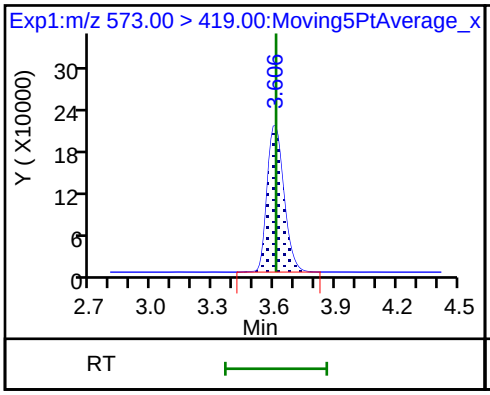
24 Perfluorodecanoic acid



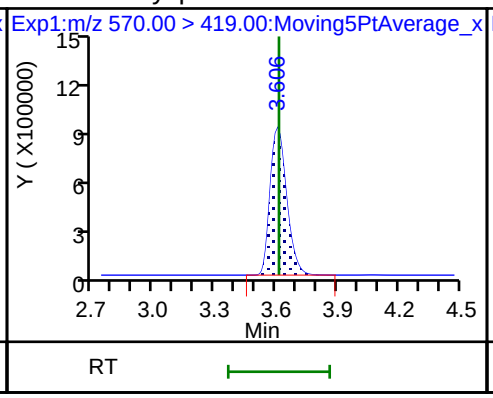
D 23 13C2 PFDA



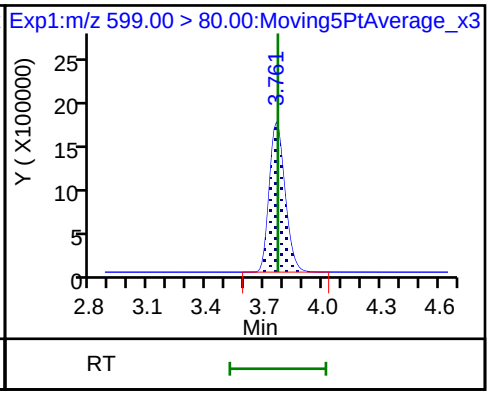
D 27 d3-NMeFOSAA



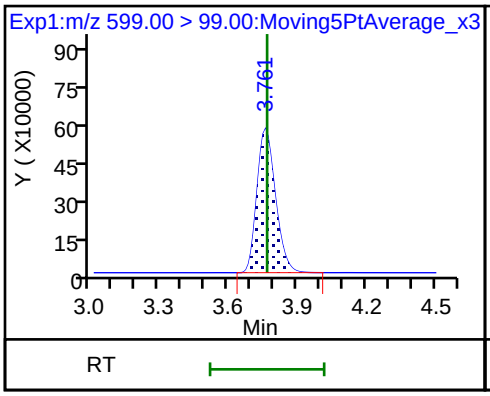
28 N-methyl perfluorooctane sulfonami



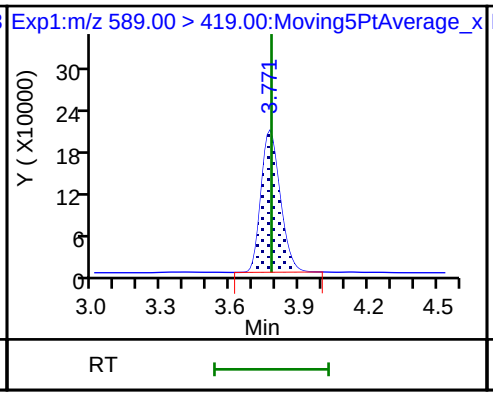
29 Perfluorodecane Sulfonic acid



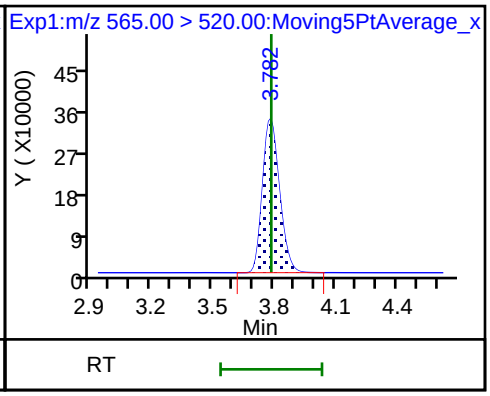
29 Perfluorodecane Sulfonic acid



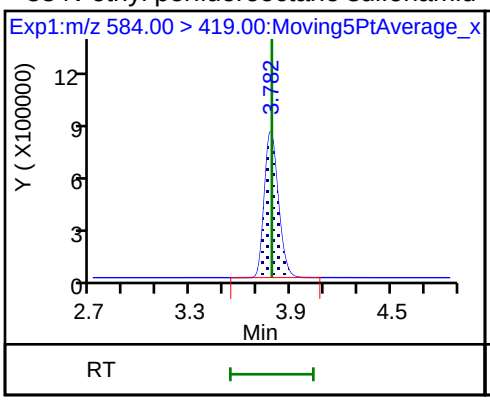
D 32 d5-NEtFOSAA



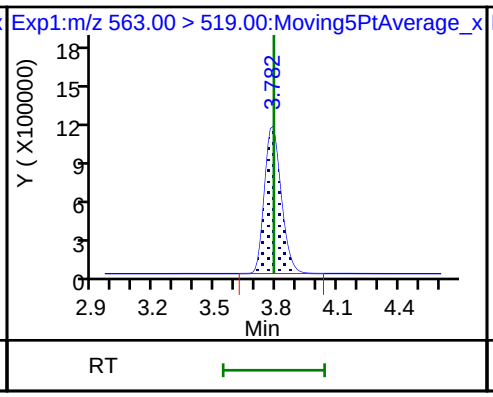
D 30 13C2 PFUnA



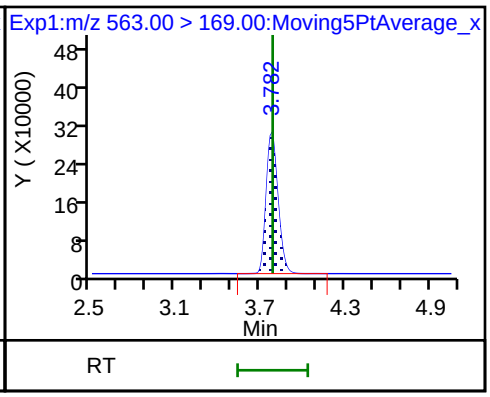
33 N-ethyl perfluorooctane sulfonamid



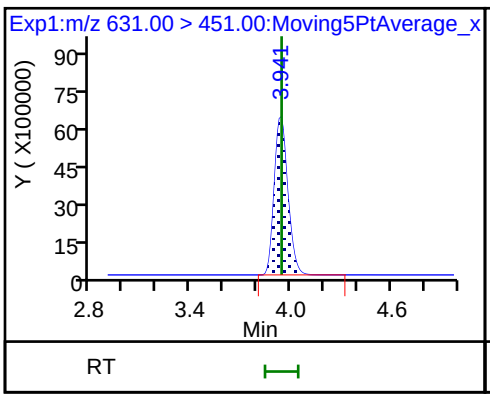
31 Perfluoroundecanoic acid



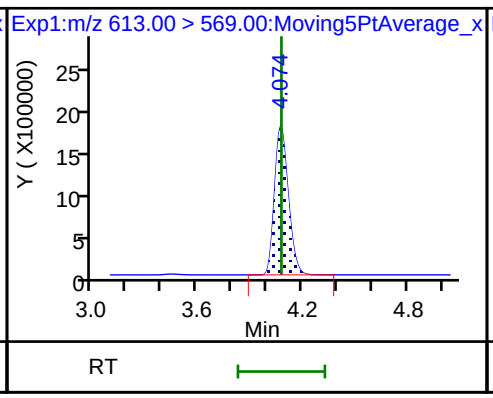
31 Perfluoroundecanoic acid



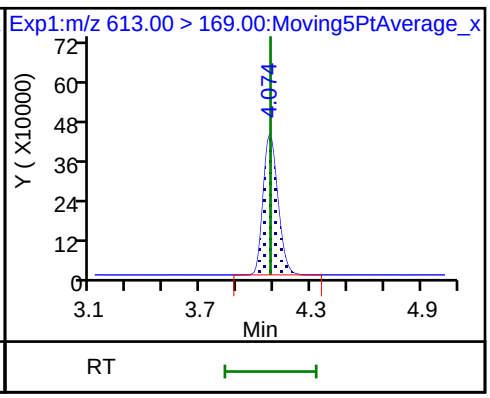
66 11-Chloroeicosafluoro-3-oxaundecan



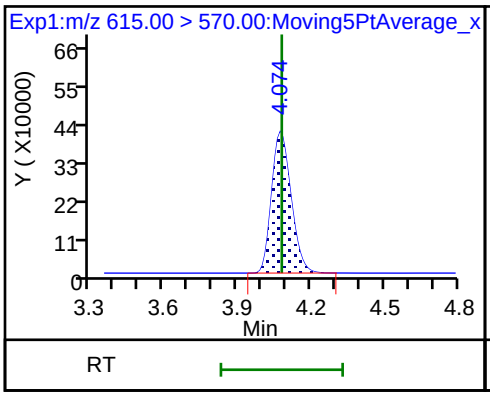
37 Perfluorododecanoic acid



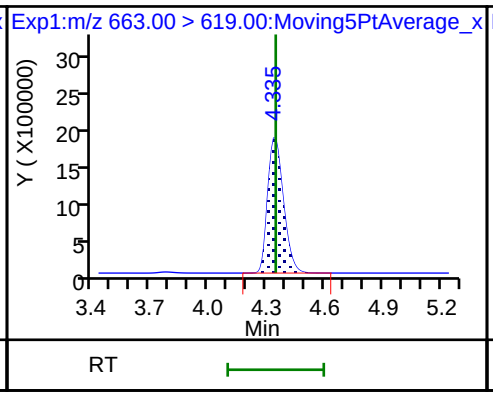
37 Perfluorododecanoic acid



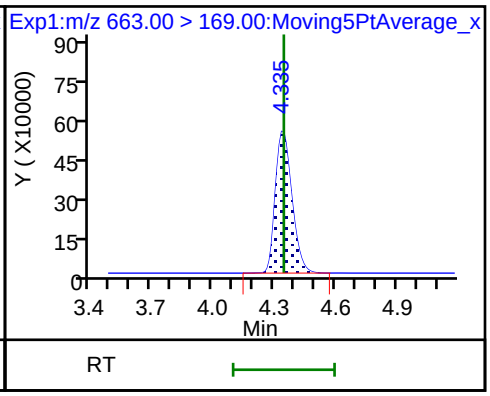
D 36 13C2 PFDoA



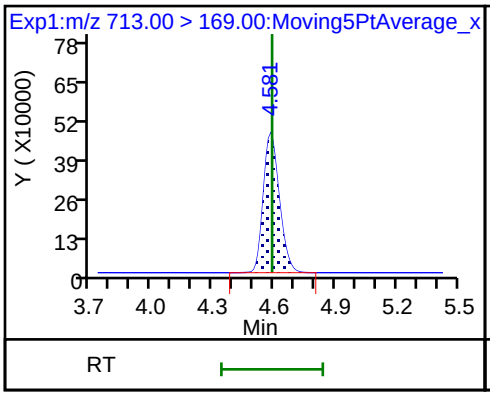
41 Perfluorotridecanoic acid



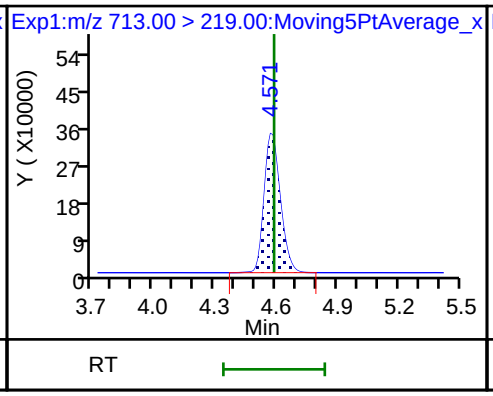
41 Perfluorotridecanoic acid



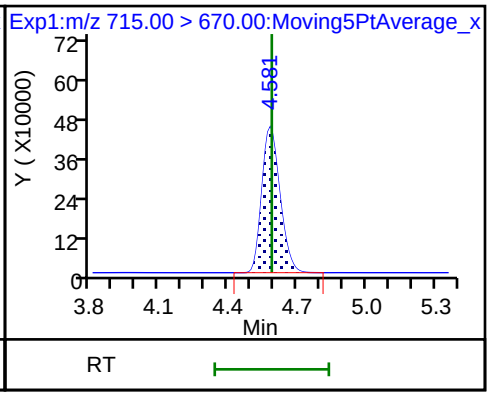
42 Perfluorotetradecanoic acid



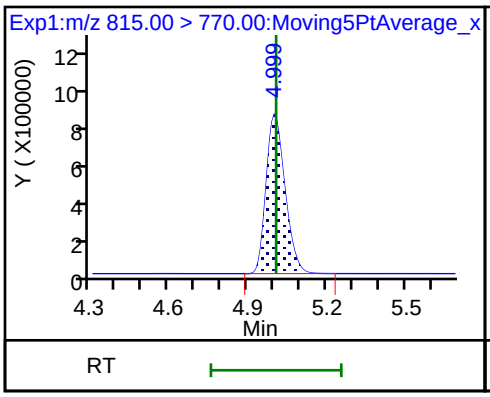
42 Perfluorotetradecanoic acid



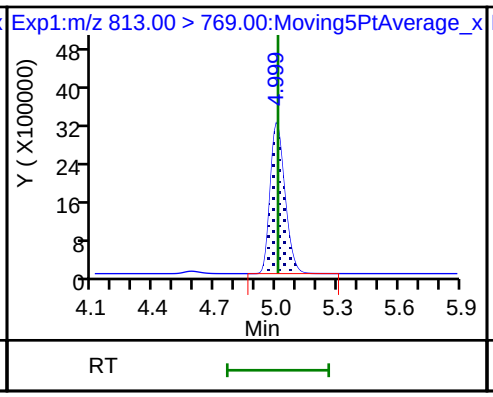
D 43 13C2-PFTeDA



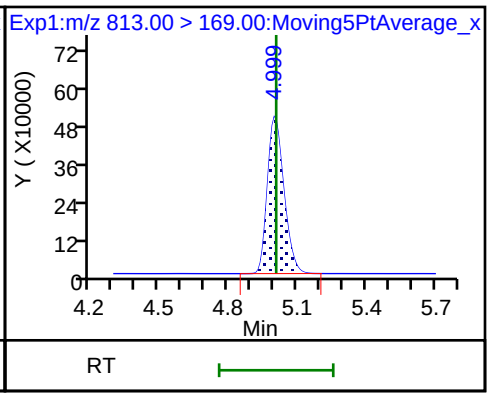
D 44 13C2-PFHxDA



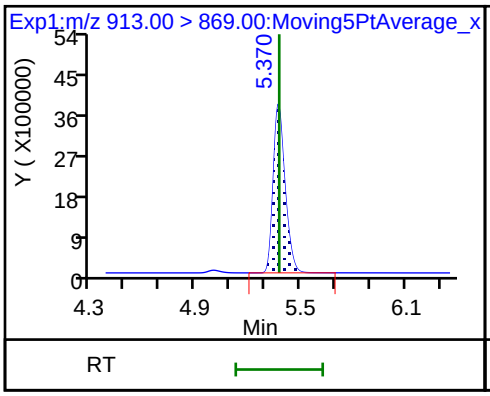
45 Perfluorohexadecanoic acid



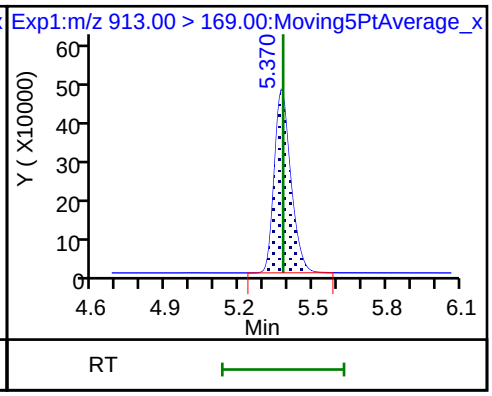
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: ICV 320-222921/10 Calibration Date: 05/13/2018 15:15

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2017.05.13LLBxx_ICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9362	0.9479		2.53	2.50	1.2	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.182	1.144		2.42	2.50	-3.2	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.92	77.84		2.18	2.21	-1.4	50.0
4:2 FTS	AveID	13.71	13.71		2.34	2.34	0.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.003	1.000		2.49	2.50	-0.4	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.41	69.22		2.38	2.35	1.2	50.0
HFPO-DA (GenX)	L2ID		2.916		2.65	2.50	6.1	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.081	1.037		2.40	2.50	-4.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	1.061		2.13	2.28	-6.5	40.0
Adona	AveID	3.248	3.136		2.41	2.50	-3.5	50.0
6:2FTS	AveID	1.657	1.706		2.44	2.38	2.9	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.120		2.42	2.50	-3.1	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.307	1.271		2.31	2.38	-2.8	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.097	1.071		2.26	2.31	-2.3	40.0
Perfluorononanoic acid (PFNA)	AveID	1.018	1.029		2.53	2.50	1.1	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.808	1.706		2.20	2.33	-5.6	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9929	1.018		2.56	2.50	2.5	40.0
8:2FTS	AveID	1.230	1.315		2.57	2.40	6.9	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7856	0.7494		2.29	2.40	-4.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.025	1.031		2.51	2.50	0.5	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.036	1.026		2.48	2.50	-1.0	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6597	0.6459		2.36	2.41	-2.1	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9798	0.9825		2.51	2.50	0.3	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7874	0.7529		2.39	2.50	-4.4	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.668	2.574		2.27	2.36	-3.5	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.045	1.044		2.50	2.50	-0.1	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.039	1.079		2.59	2.50	3.8	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2662	0.2622		2.46	2.50	-1.5	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9604		2.55	2.50	1.8	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: ICV 320-222921/10 Calibration Date: 05/13/2018 15:15

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2017.05.13LLBxx_ICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.025	0.996		2.43	2.50	-2.8	50.0
13C4 PFBA	Ave	1.615	1.583		2.45	2.50	-2.0	50.0
13C5 PFPeA	Ave	1.027	0.9894		2.41	2.50	-3.7	50.0
13C3-PFBS	Ave	0.0233	0.0231		2.30	2.33	-0.9	50.0
M2-4:2FTS	Ave	0.1418	0.1290		2.12	2.34	-9.0	50.0
13C2 PFHxA	Ave	1.081	1.050		2.43	2.50	-2.9	50.0
13C3 HFPO-DA	Ave	0.0584	0.0538		2.30	2.50	-8.0	50.0
13C4-PFHpA	Ave	0.996	0.9802		2.46	2.50	-1.6	50.0
18O2 PFHxS	Ave	1.300	1.246		2.27	2.37	-4.2	50.0
M2-6:2FTS	Ave	0.1940	0.1853		2.27	2.38	-4.5	40.0
13C4 PFOA	Ave	0.9419	0.9296		2.47	2.50	-1.3	50.0
13C4 PFOS	Ave	0.9331	0.9483		2.43	2.39	1.6	50.0
13C5 PFNA	Ave	0.7942	0.7846		2.47	2.50	-1.2	50.0
13C8 FOSA	Ave	1.321	1.325		2.51	2.50	0.4	50.0
M2-8:2FTS	Ave	0.2550	0.2580		2.42	2.40	1.2	40.0
13C2 PFDA	Ave	0.6933	0.6629		2.39	2.50	-4.4	50.0
d3-NMeFOSAA	Ave	0.3041	0.3148		2.59	2.50	3.5	50.0
d5-NEtFOSAA	Ave	0.3327	0.3218		2.42	2.50	-3.3	50.0
13C2 PFUnA	Ave	0.5669	0.5424		2.39	2.50	-4.3	50.0
13C2 PFDoA	Ave	0.5911	0.5782		2.45	2.50	-2.2	50.0
13C2-PFTeDA	Ave	0.6436	0.6448		2.50	2.50	0.2	50.0
13C2-PFHxDA	Ave	1.025	1.041		2.54	2.50	1.6	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_010.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 13-May-2018 15:15:08 ALS Bottle#: 18 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist:

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 08:41:25 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 08:31:41

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.461	-0.009	1.000	4950454	2.45		98.0	46245	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.461	-0.003	1.004	4692408	2.53			3961	
D 3 13C5-PFPeA										
267.90 > 223.00	1.721	1.730	-0.009	0.560	3093895	2.41		96.3	63453	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.731	-0.001	1.005	3539209	2.42			1951	
D 47 13C3-PFBS										
301.90 > 83.00	1.757	1.763	-0.006	1.000	67132	2.30		99.1	507	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.769	-0.003	1.005	4972429	2.18			16655	
298.90 > 99.00	1.766	1.769	-0.003	1.005	2088324		2.38(1.25-3.74)		12529	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.979	0.003	1.000	376755	2.12		91.0	4455	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.982	0.0	1.000	925642	2.34			54690	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.019	-0.003	1.000	3283202	2.43		97.1	82990	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.021	-0.005	1.000	3281846	2.49			6177	
313.00 > 119.00	2.016	2.021	-0.005	1.000	305478		10.74(5.03-15.10)		6686	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.038	2.040	-0.002	1.000	4696597	2.38			59318	
349.00 > 99.00	2.038	2.040	-0.002	1.000	1651730		2.84(1.36-4.07)		20756	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.117	2.118	-0.001	1.000	168127	2.30		92.0	6039	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.117	2.119	-0.002	1.000	490233	2.65			4763	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.349	-0.002	1.000	3065173	2.46		98.4	62000	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.351	-0.004	1.000	3177564	2.40			6731	
363.00 > 169.00	2.347	2.351	-0.004	1.000	1264783		2.51(1.13-3.40)		8883	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.362	-0.002	1.000	3772340	2.13			15751	
399.00 > 99.00	2.360	2.362	-0.002	1.000	1313013		2.87(1.50-4.49)		5425	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.364	-0.004	1.000	3686631	2.27		95.8	54828	
65 Adona										
377.00 > 251.00	2.397	2.396	0.001	1.000	9298006	2.41			104723	
377.00 > 85.00	2.397	2.396	0.001	1.000	5338439		1.74(0.84-2.53)		35812	
D 12 M2-6:2FTS										
429.00 > 81.00	2.676	2.681	-0.005	1.000	550394	2.27		95.5	11512	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.676	2.681	-0.005	1.000	938978	2.44			10937	
* 62 13C2-PFOA										
415.00 > 370.00	2.706	2.704	0.002		3126978	2.50			59827	
D 14 13C4 PFOA										
417.00 > 372.00	2.706	2.705	0.001	1.000	2906719	2.47		98.7	47531	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.706	2.708	-0.002	1.000	3255987	2.42			1914	
413.00 > 169.00	2.706	2.708	-0.002	1.000	1703691		1.91(0.84-2.52)		6219	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.714	2.712	0.002	1.000	3579423	2.31			34343	
449.00 > 99.00	2.714	2.712	0.002	1.000	980218		3.65(1.94-5.82)		16010	
D 18 13C4 PFOS										
503.00 > 80.00	3.072	3.075	-0.003	1.000	2834779	2.43		102	21458	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.072	3.075	-0.003	1.000	2940011	2.26			18024	
499.00 > 99.00	3.072	3.075	-0.003	1.000	663461		4.43(2.31-6.93)		8306	
D 19 13C5 PFNA										
468.00 > 423.00	3.072	3.077	-0.005	1.000	2453333	2.47		98.8	52625	
20 Perfluorononanoic acid										
463.00 > 419.00	3.080	3.078	0.002	1.003	2524846	2.53			5068	
463.00 > 169.00	3.072	3.078	-0.006	1.000	603721		4.18(1.90-5.69)		18413	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.287	3.287	0.0	1.000	4713600	2.20			39603	
D 21 13C8 FOSA										
506.00 > 78.00	3.407	3.403	0.004	1.000	4144377	2.51		100	40420	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.407	3.404	0.003	1.000	4217740	2.56			40927	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.425	3.424	0.001	1.000	2133174	2.29			24557	
549.00 > 99.00	3.425	3.424	0.001	1.000	816894		2.61(1.33-3.97)		8401	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.425	3.430	-0.005	1.000	1018646	2.57			23662	
D 26 M2-8:2FTS										
529.00 > 81.00	3.425	3.430	-0.005	1.000	773003	2.42		101	8649	
D 23 13C2 PFDA										
515.00 > 470.00	3.444	3.440	0.004	1.000	2072929	2.39		95.6	49456	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.444	3.442	0.002	1.000	2136448	2.51			12571	
513.00 > 169.00	3.435	3.442	-0.007	0.997	369934		5.78(2.36-7.09)		11668	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.596	3.594	0.002	1.000	984326	2.59		104	19878	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.596	3.599	-0.003	1.000	1009953	2.48			10003	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.750	3.753	-0.003	1.000	1848130	2.36			17608	
599.00 > 99.00	3.750	3.753	-0.003	1.000	623787		2.96(1.39-4.16)		10272	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.761	3.766	-0.005	1.000	1006399	2.42		96.7	2345	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.772	3.771	0.001	1.003	988749	2.51			22015	
D 30 13C2 PFUnA										
565.00 > 520.00	3.772	3.771	0.001	1.000	1696044	2.39		95.7	30280	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.772	3.772	0.0	1.000	1276908	2.39			6794	
563.00 > 169.00	3.772	3.772	0.0	1.000	339755		3.76(2.12-6.36)		19856	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.929	3.929	0.0	1.000	7190080	2.27			71054	
D 36 13C2 PFDoA										
615.00 > 570.00	4.061	4.066	-0.005	1.000	1807952	2.45		97.8	16592	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.071	4.068	0.003	1.003	1887223	2.50			1201	
613.00 > 169.00	4.071	4.068	0.003	1.003	480905		3.92(2.13-6.40)		8838	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.329	4.336	-0.007	1.000	1949952	2.59			833	
663.00 > 169.00	4.329	4.336	-0.007	1.000	618399		3.15(1.25-3.76)		7576	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.574	4.571	0.003	1.000	2016133	2.50		100	15067	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.574	4.571	0.003	1.000	528530	2.46			7502	
713.00 > 219.00	4.564	4.571	-0.007	0.998	370725		1.43(0.71-2.13)		7633	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.993	4.993	0.0	1.000	3256031	2.54		102	11600	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.993	4.995	-0.002	1.000	3127048	2.55			677	
813.00 > 169.00	4.993	4.995	-0.002	1.000	510281		6.13(2.86-8.58)		4406	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.363	5.367	-0.004	1.000	3244136	2.43			562	
913.00 > 169.00	5.363	5.367	-0.004	1.000	401757		8.07(3.83-11.48)		3333	

Reagents:

LCPFCIC_FULL_00011 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 08:41:26 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_010.d

Injection Date: 13-May-2018 15:15:08 Instrument ID: A8_N

Lims ID: ICV Full

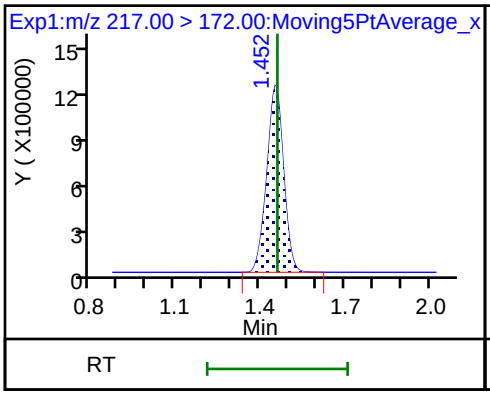
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 10

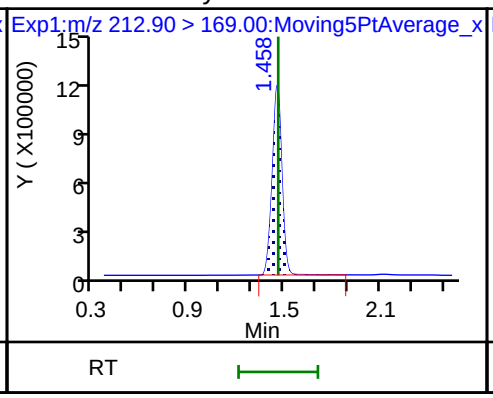
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

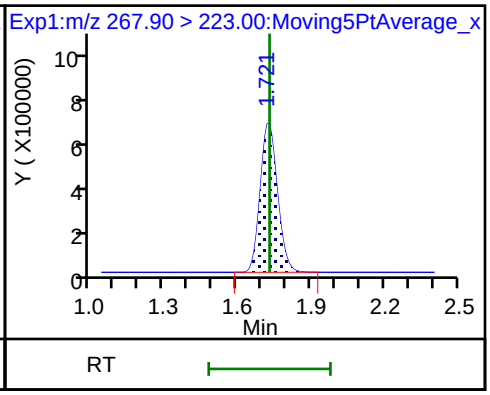
D 1 13C4 PFBA



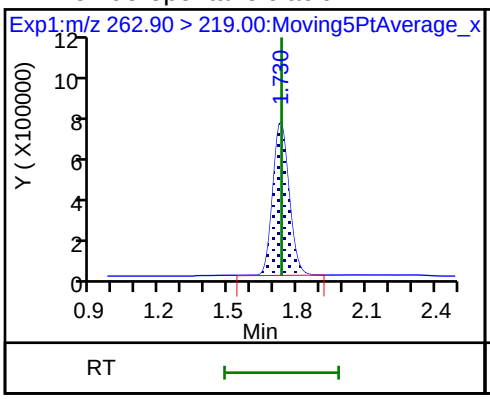
2 Perfluorobutyric acid



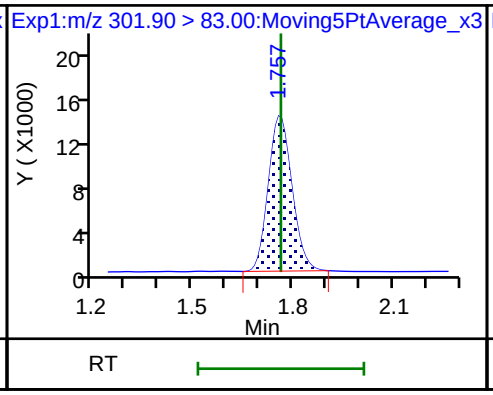
D 3 13C5-PFPeA



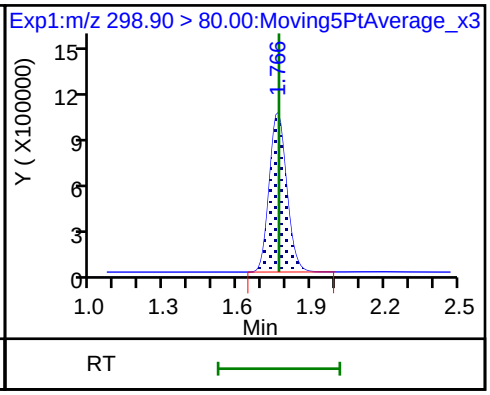
4 Perfluoropentanoic acid



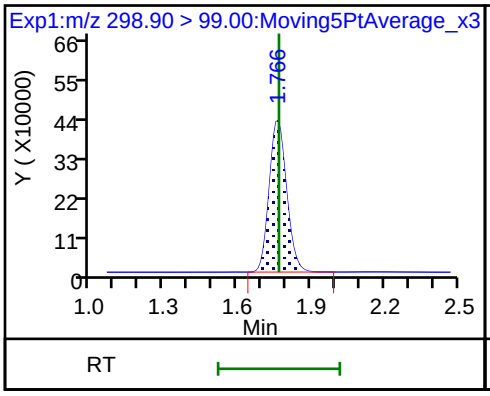
D 47 13C3-PFBS



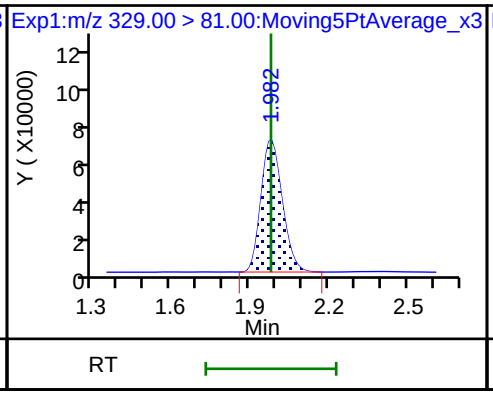
5 Perfluorobutanesulfonic acid



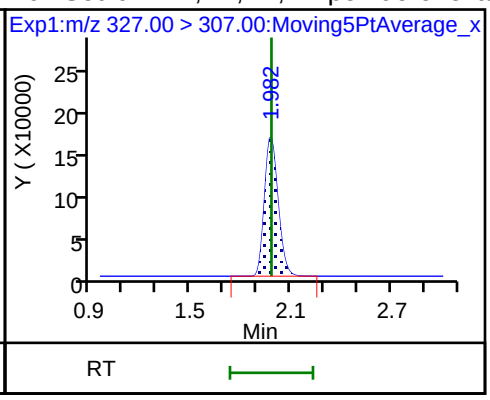
5 Perfluorobutanesulfonic acid



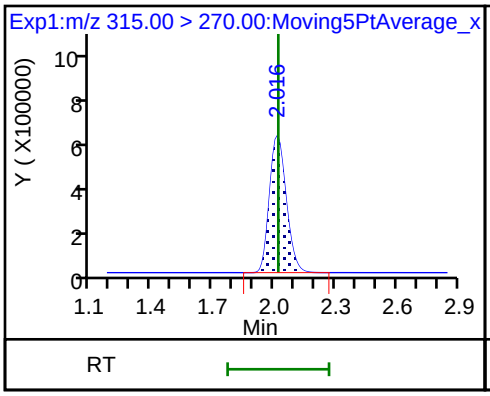
D 60 M2-4:2FTS



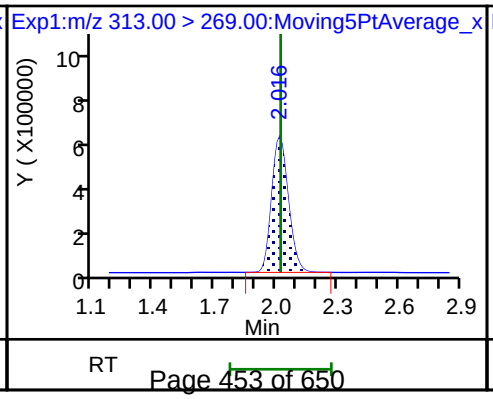
61 Sodium 1H,1H,2H,2H-perfluorohexane



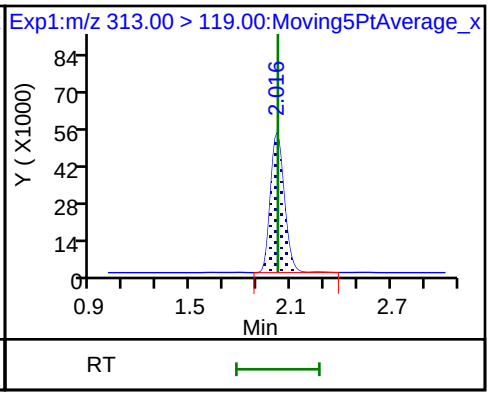
D 7 13C2 PFHxA



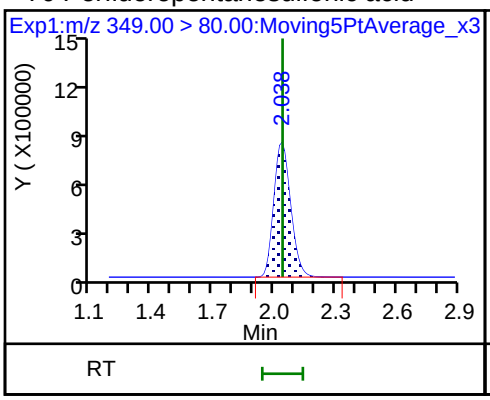
6 Perfluorohexanoic acid



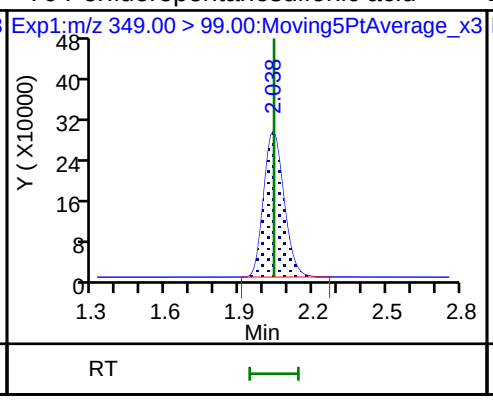
6 Perfluorohexanoic acid



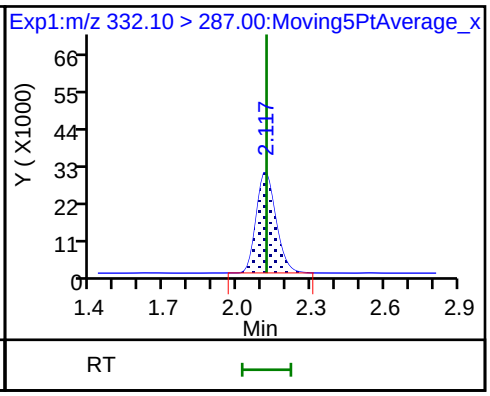
70 Perfluoropentanesulfonic acid



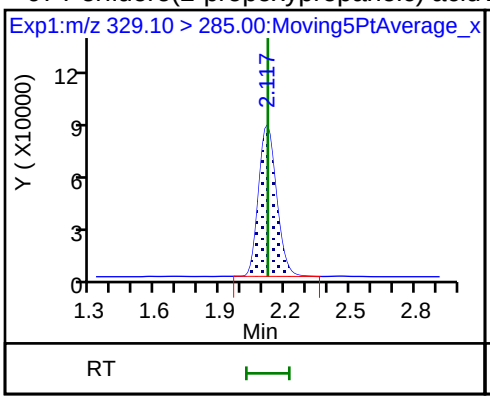
70 Perfluoropentanesulfonic acid



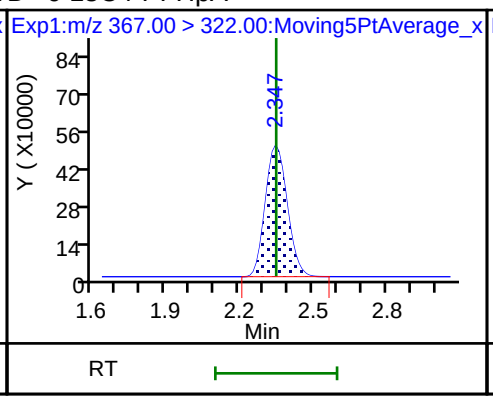
D 64 13C3 HFPO-DA



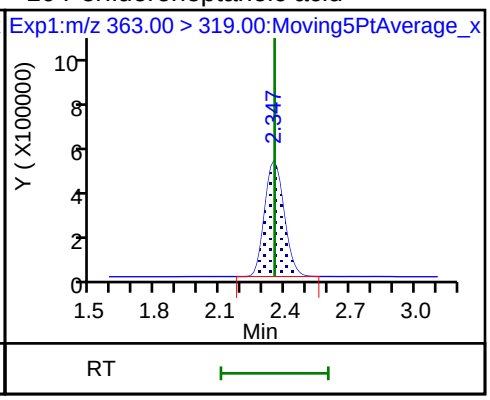
67 Perfluoro(2-propoxypropanoic) acid



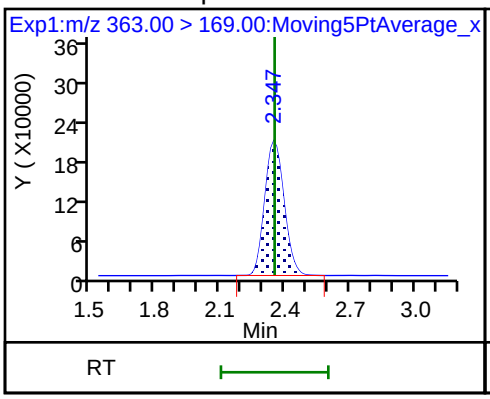
D 9 13C4-PFHpA



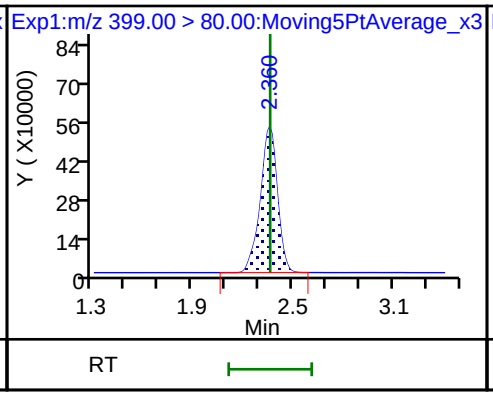
10 Perfluoroheptanoic acid



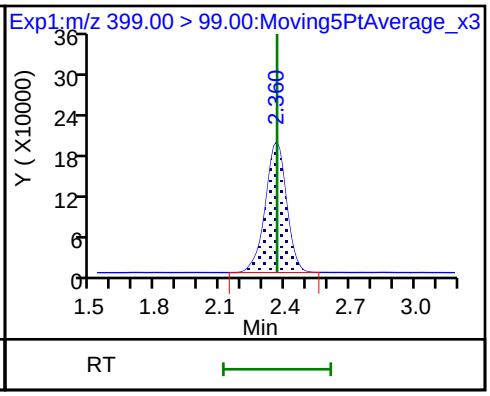
10 Perfluoroheptanoic acid



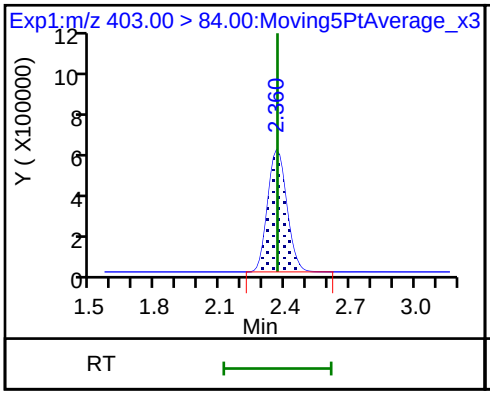
8 Perfluorohexanesulfonic acid



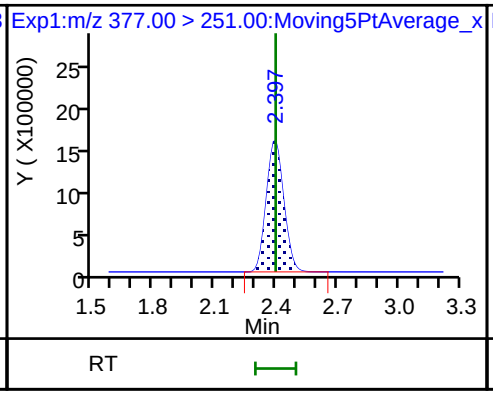
8 Perfluorohexanesulfonic acid



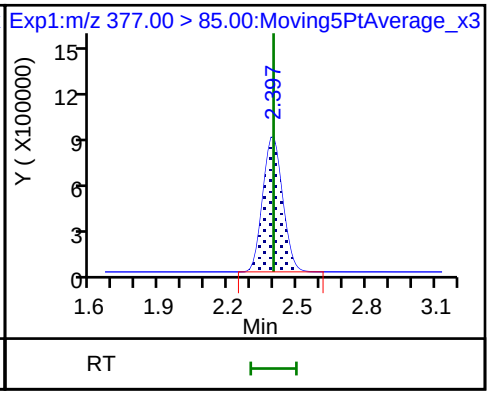
D 11 18O2 PFHxS



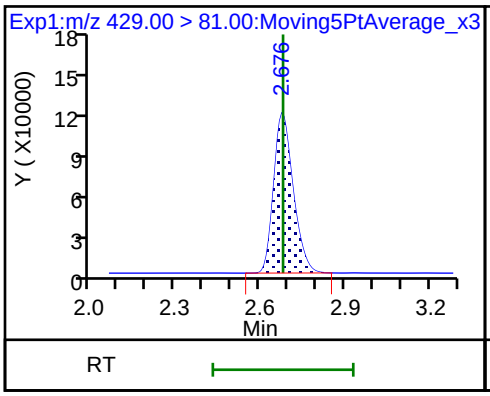
65 Adona



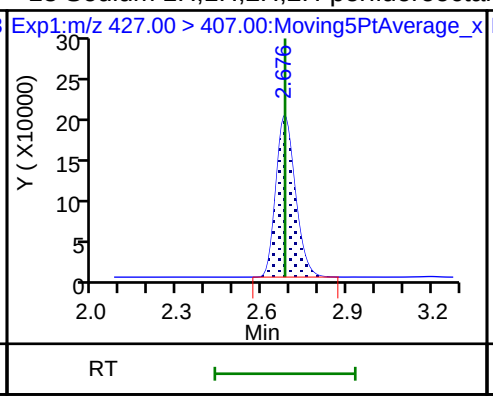
65 Adona



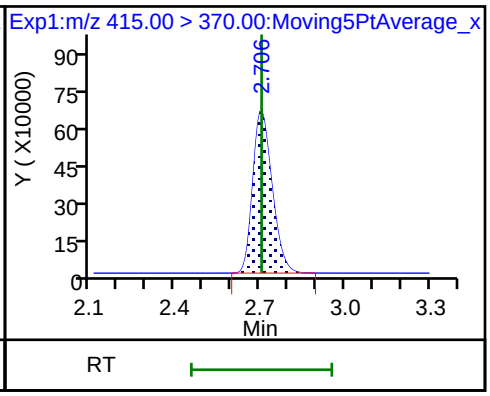
D 12 M2-6:2FTS



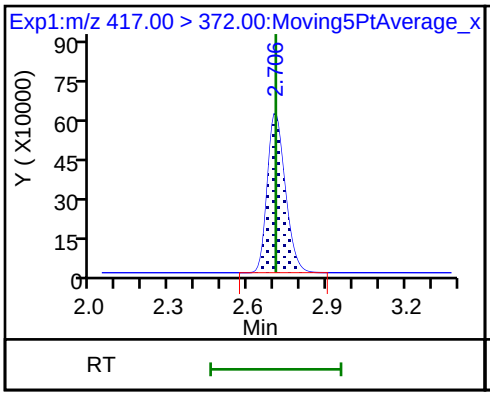
13 Sodium 1H,1H,2H,2H-perfluorooctane



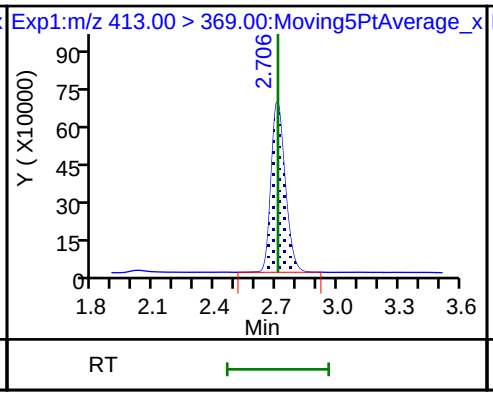
M2 13C2-PFOA



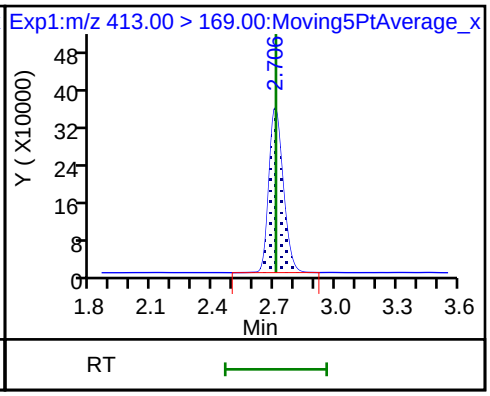
D 14 13C4 PFOA



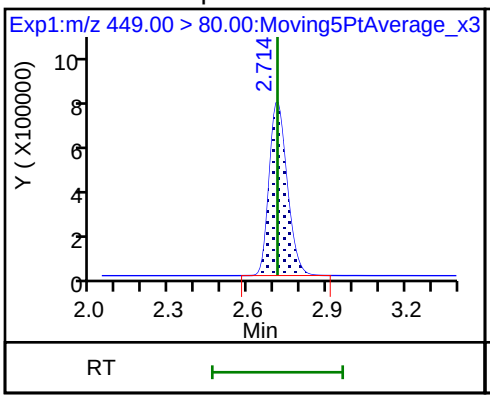
15 Perfluorooctanoic acid



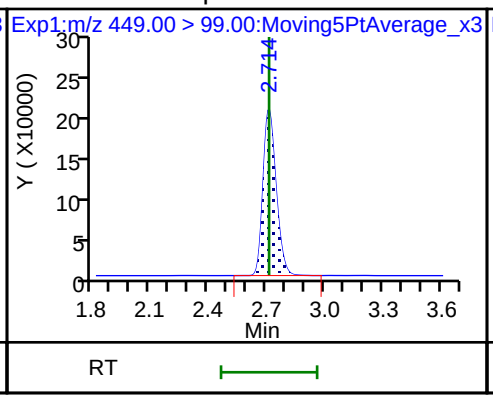
15 Perfluorooctanoic acid



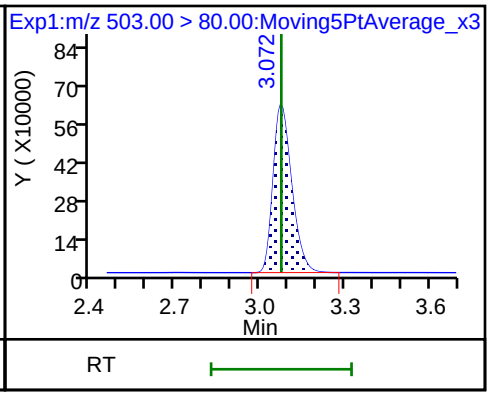
16 Perfluoroheptanesulfonic acid



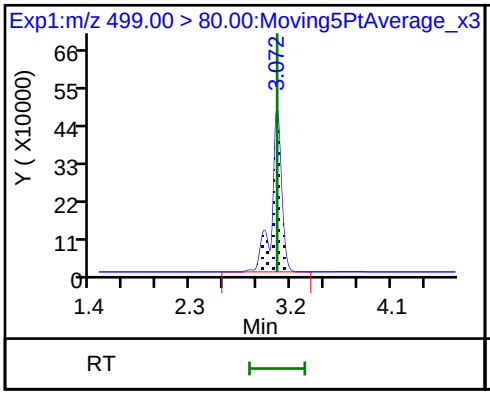
16 Perfluoroheptanesulfonic acid



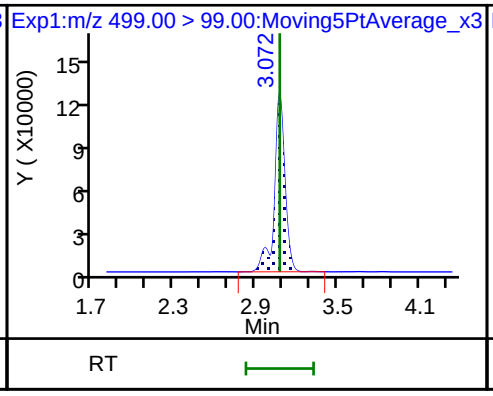
D 18 13C4 PFOS



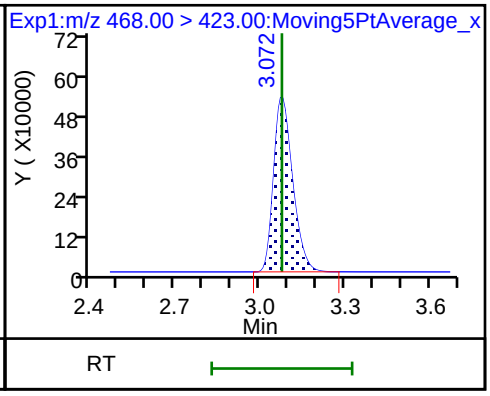
17 Perfluorooctane sulfonic acid



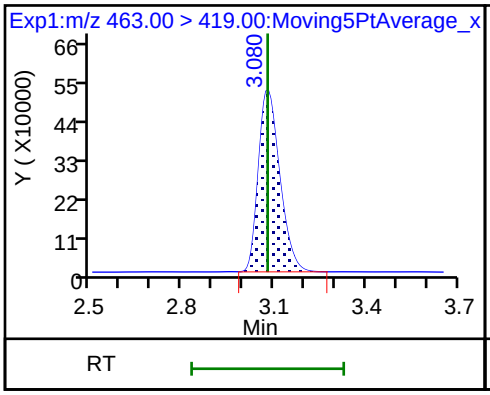
17 Perfluorooctane sulfonic acid



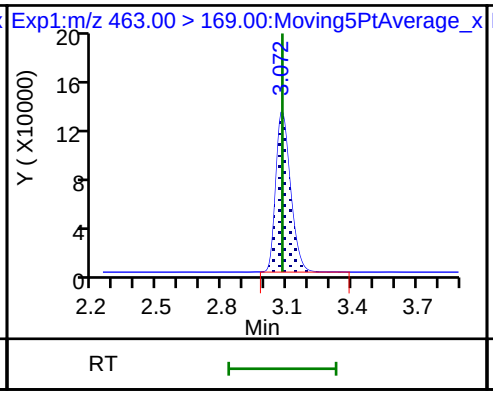
D 19 13C5 PFNA



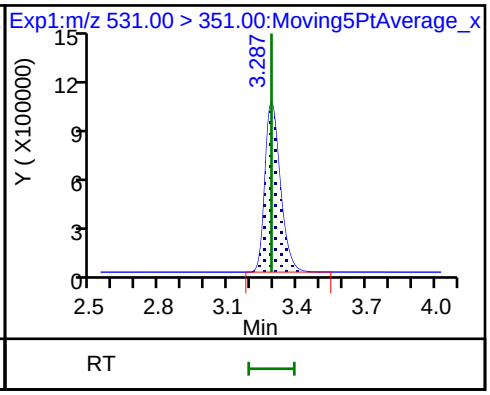
20 Perfluorononanoic acid



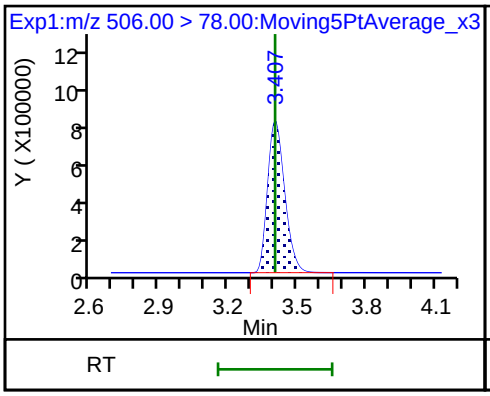
20 Perfluorononanoic acid



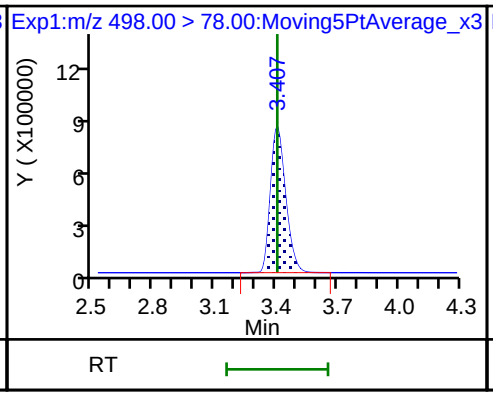
69 9-Chlorohexadecafluoro-3-oxanonane



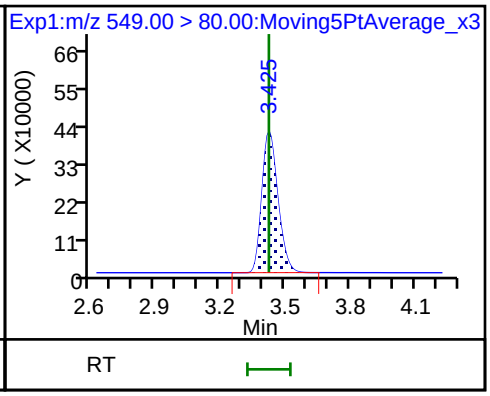
D 21 13C8 FOSA



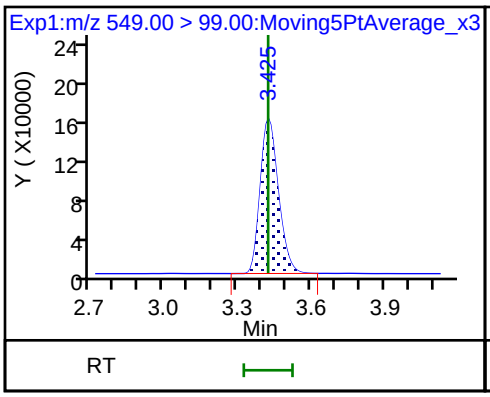
22 Perfluorooctane Sulfonamide



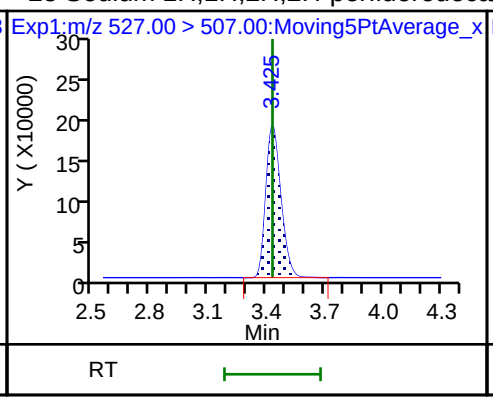
68 Perfluorononanesulfonic acid



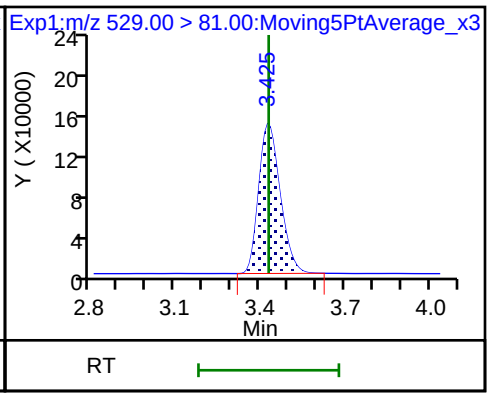
68 Perfluorononanesulfonic acid



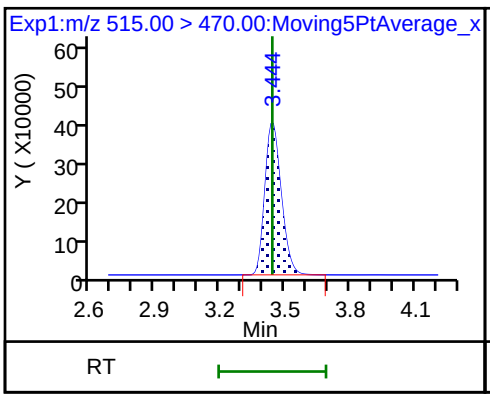
25 Sodium 1H,1H,2H,2H-perfluorodecane



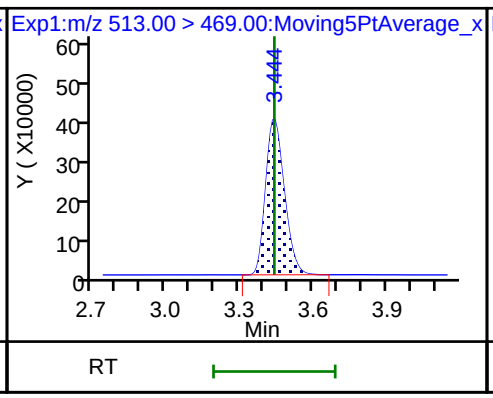
D 26 M2-8:2FTS



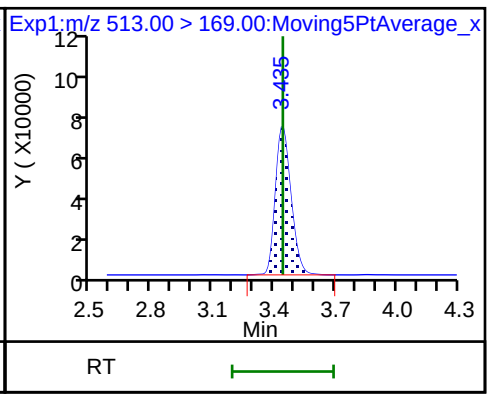
D 23 13C2 PFDA



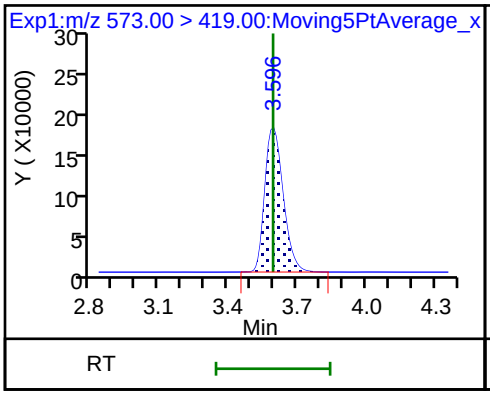
24 Perfluorodecanoic acid



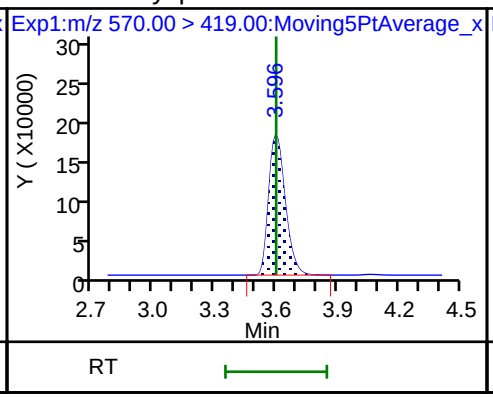
24 Perfluorodecanoic acid



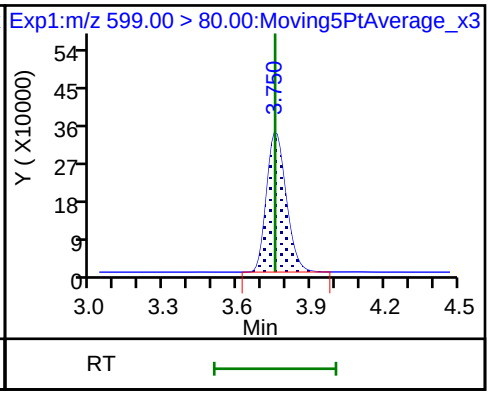
D 27 d3-NMeFOSAA



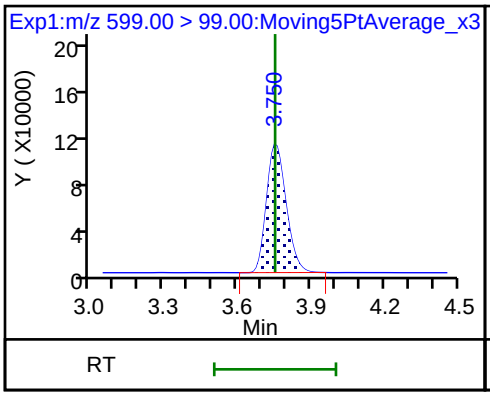
28 N-methyl perfluorooctane sulfonami



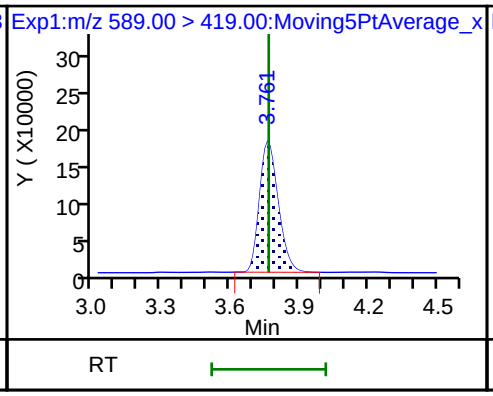
29 Perfluorodecane Sulfonic acid



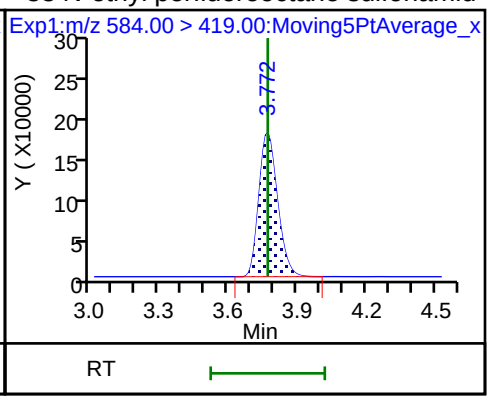
29 Perfluorodecane Sulfonic acid



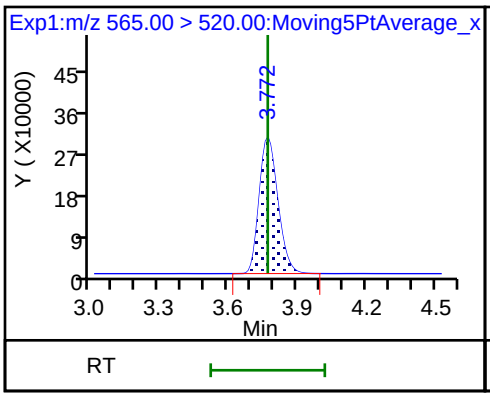
D 32 d5-NEtFOSAA



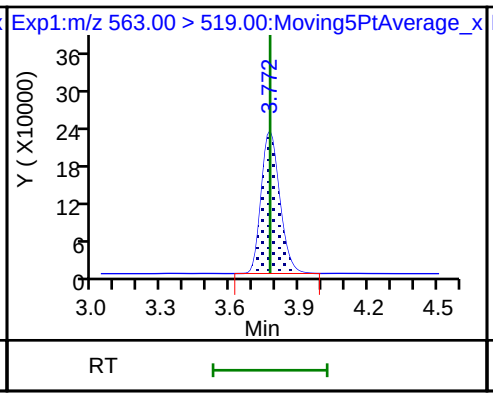
33 N-ethyl perfluorooctane sulfonamid



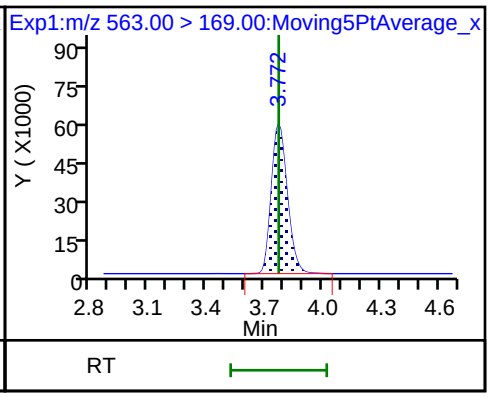
D 30 13C2 PFUnA



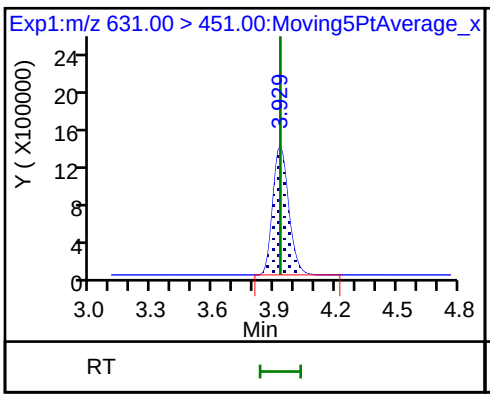
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid



66 11-Chloroeicosafluoro-3-oxaundecan



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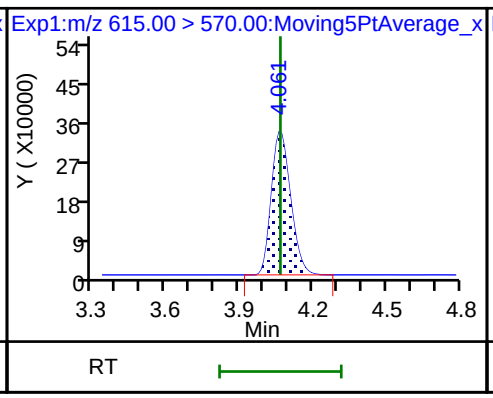
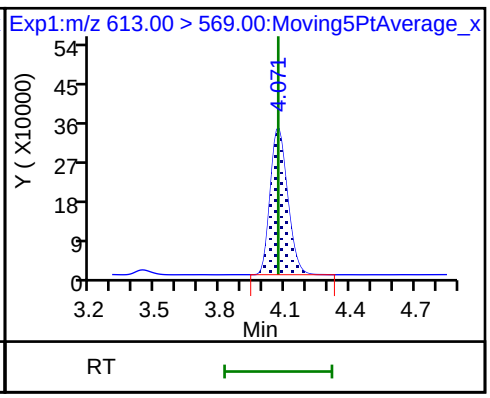
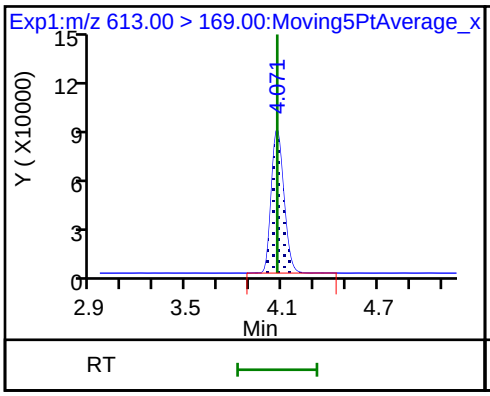


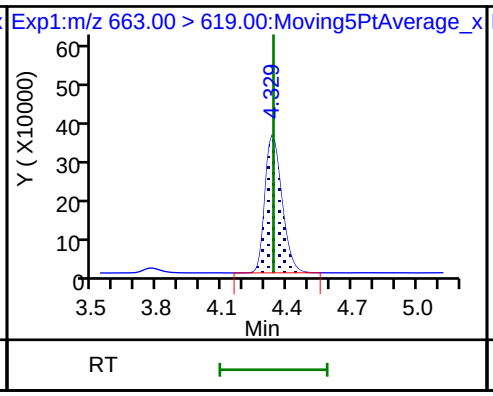
37 Perfluorododecanoic acid



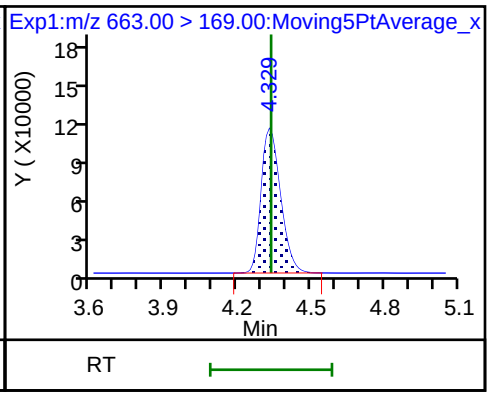
37 Perfluorododecanoic acid



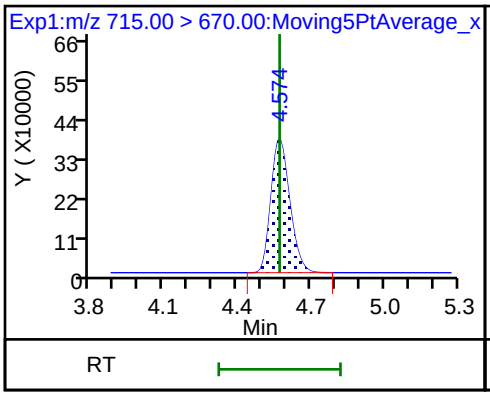
41 Perfluorotridecanoic acid



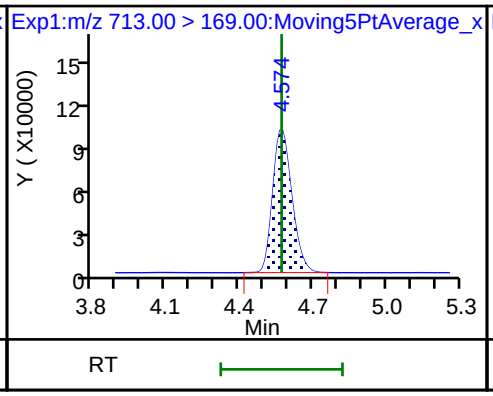
41 Perfluorotridecanoic acid



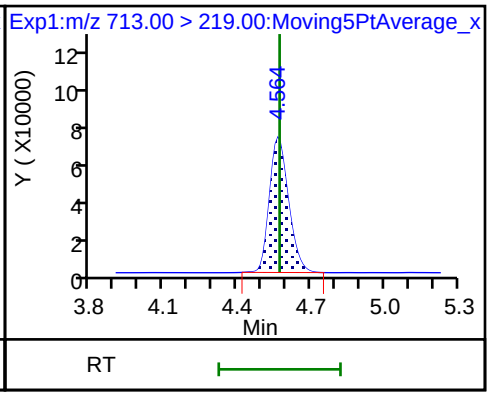
D 43 13C2-PFTeDA



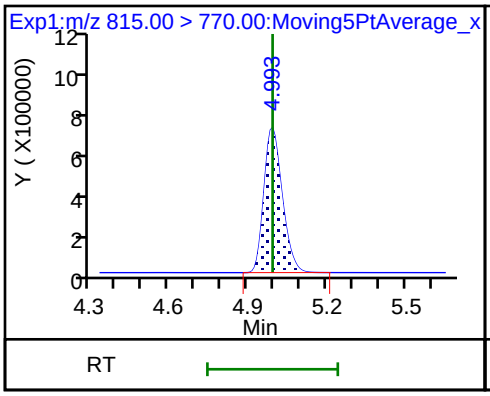
42 Perfluorotetradecanoic acid



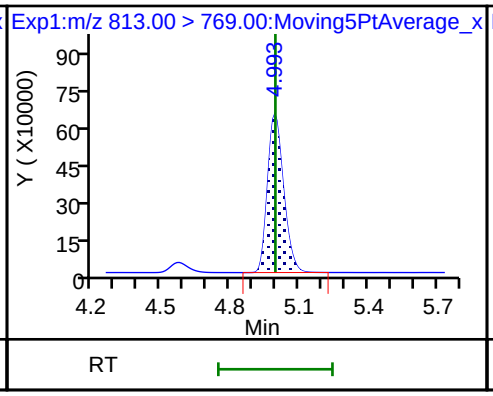
42 Perfluorotetradecanoic acid



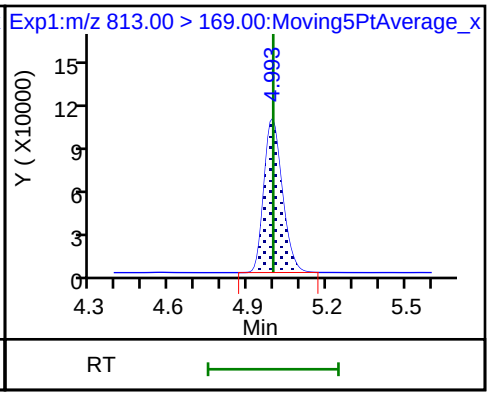
D 44 13C2-PFHxDA



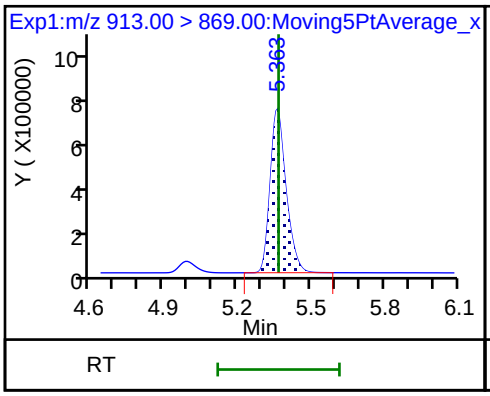
45 Perfluorohexadecanoic acid



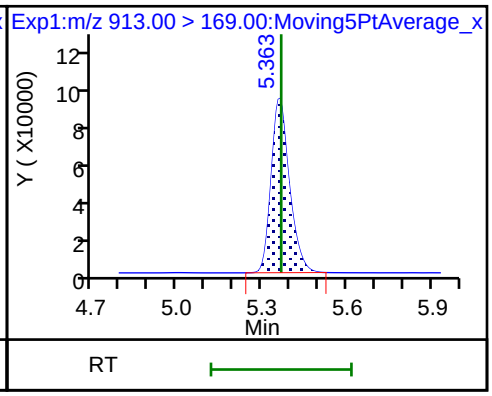
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCVL 320-222978/2 Calibration Date: 05/13/2018 15:54

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLBx_004.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9362	0.9255		0.0494	0.0500	-1.1	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.182	1.469		0.0622	0.0500	24.3	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.92	75.30		0.0422	0.0442	-4.6	50.0
4:2 FTS	AveID	13.71	14.51			0.0467	5.8	
Perfluorohexanoic acid (PFHxA)	AveID	1.003	1.132		0.0564	0.0500	12.9	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.41	71.93		0.0493	0.0469	5.1	50.0
HFPO-DA (GenX)	L2ID		4.051		0.0597	0.0500	19.4	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.081	0.9925		0.0459	0.0500	-8.2	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	1.265		0.0507	0.0455	11.4	50.0
Adona	AveID	3.248	3.365		0.0518	0.0500	3.6	50.0
6:2FTS	AveID	1.657	1.534			0.0474	-7.5	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.466		0.0634	0.0500	26.8	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.307	1.314		0.0479	0.0476	0.5	50.0
Perfluorononanoic acid (PFNA)	AveID	1.018	1.100		0.0540	0.0500	8.1	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.097	1.100		0.0466	0.0464	0.3	50.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.808	1.849		0.0477	0.0466	2.3	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9929	1.020		0.0514	0.0500	2.7	50.0
8:2FTS	AveID	1.230	1.274			0.0479	3.5	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7856	0.7745		0.0473	0.0480	-1.4	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.025	1.002		0.0489	0.0500	-2.3	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.036	0.9014			0.0500	-13.0	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6597	0.8889		0.0650	0.0482	34.8	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9798	0.9472		0.0483	0.0500	-3.3	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7874	0.8145		0.0517	0.0500	3.4	50.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.668	2.757		0.0487	0.0471	3.3	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.045	0.9383		0.0449	0.0500	-10.2	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.039	1.067		0.0513	0.0500	2.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2662	0.2147		0.0403	0.0500	-19.3	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.381		0.0539	0.0500	7.7	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCVL 320-222978/2 Calibration Date: 05/13/2018 15:54

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLBx_004.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.025	1.049		0.0512	0.0500	2.3	50.0
13C4 PFBA	Ave	1.615	1.551		2.40	2.50	-3.9	50.0
13C5 PFPeA	Ave	1.027	1.009		2.46	2.50	-1.7	50.0
13C3-PFBS	Ave	0.0233	0.0230		2.29	2.33	-1.4	50.0
M2-4:2FTS	Ave	0.1418	0.1380		2.27	2.34	-2.7	50.0
13C2 PFHxA	Ave	1.081	1.042		2.41	2.50	-3.6	50.0
13C3 HFPO-DA	Ave	0.0584	0.0456		1.95	2.50	-22.0	50.0
13C4-PFHpA	Ave	0.996	0.9820		2.47	2.50	-1.4	50.0
18O2 PFHxS	Ave	1.300	1.262		2.29	2.37	-3.0	50.0
M2-6:2FTS	Ave	0.1940	0.2082		2.55	2.38	7.4	50.0
13C4 PFOA	Ave	0.9419	0.9295		2.47	2.50	-1.3	50.0
13C4 PFOS	Ave	0.9331	0.9012		2.31	2.39	-3.4	50.0
13C5 PFNA	Ave	0.7942	0.8070		2.54	2.50	1.6	50.0
13C8 FOSA	Ave	1.321	1.333		2.52	2.50	0.9	50.0
M2-8:2FTS	Ave	0.2550	0.2608		2.45	2.40	2.3	50.0
13C2 PFDA	Ave	0.6933	0.6769		2.44	2.50	-2.4	50.0
d3-NMeFOSAA	Ave	0.3041	0.3146		2.59	2.50	3.5	50.0
d5-NEtFOSAA	Ave	0.3327	0.3376		2.54	2.50	1.5	50.0
13C2 PFUnA	Ave	0.5669	0.5931		2.62	2.50	4.6	50.0
13C2 PFDoA	Ave	0.5911	0.5856		2.48	2.50	-0.9	50.0
13C2-PFTeDA	Ave	0.6436	0.6467		2.51	2.50	0.5	50.0
13C2-PFHxDA	Ave	1.025	1.088		2.65	2.50	6.1	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58104.b\2018.05.13LLBx_004.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 13-May-2018 15:54:07 ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58104.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 09:19:10 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 09:18:44

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.455	1.453	0.002	1.000	100263	0.0494		98.9	56.3	
D 1 13C4 PFBA										
217.00 > 172.00	1.455	1.461	-0.006	1.000	5416442	2.40		96.1	51292	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.734	1.730	0.004	1.005	103550	0.0622		124	43.6	
D 3 13C5-PFPeA										
267.90 > 223.00	1.725	1.730	-0.005	0.561	3523529	2.46		98.3	65339	
D 47 13C3-PFBS										
301.90 > 83.00	1.761	1.763	-0.002	1.000	74623	2.29		98.6	525	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.761	1.766	-0.005	1.000	106818	0.0422		95.4	390	
298.90 > 99.00	1.761	1.766	-0.005	1.000	45425		2.35(1.25-3.74)		264	
D 60 M2-4:2FTS										
329.00 > 81.00	1.977	1.979	-0.002	1.000	450093	2.27		97.3	6074	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.977	1.982	-0.005	1.000	21744	0.0494		106	1319	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.022	2.016	0.006	1.006	82402	0.0564		113	134	
313.00 > 119.00	2.022	2.016	0.006	1.006	6258		13.17(5.03-15.10)		99.6	
D 7 13C2 PFHxA										
315.00 > 270.00	2.010	2.019	-0.009	1.000	3638258	2.41		96.4	70904	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.033	2.038	-0.005	1.000	108275	0.0493		105	1734	
349.00 > 99.00	2.033	2.038	-0.005	1.000	40196		2.69(1.36-4.07)		580	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.112	2.118	-0.006	1.000	159221	1.95		78.0	4710	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.112	2.119	-0.007	1.000	12901	0.0597		119	131	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.341	2.347	-0.006	1.000	68060	0.0459		91.8	126	
363.00 > 169.00	2.341	2.347	-0.006	1.000	31389		2.17(1.13-3.40)		215	
D 9 13C4-PFHpA										
367.00 > 322.00	2.341	2.349	-0.008	1.000	3428761	2.47		98.6	68859	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.354	2.360	-0.006	0.994	101448	0.0507		111	715	
399.00 > 99.00	2.368	2.360	0.008	1.000	31796		3.19(1.50-4.49)		150	
D 11 18O2 PFHxS										
403.00 > 84.00	2.368	2.364	0.004	1.000	4167457	2.29		97.0	39692	
65 Adona										
377.00 > 251.00	2.391	2.396	-0.005	1.000	211751	0.0518		104	5151	
377.00 > 85.00	2.391	2.396	-0.005	1.000	120896		1.75(0.84-2.53)		979	
D 12 M2-6:2FTS										
429.00 > 81.00	2.680	2.681	-0.001	1.000	690734	2.55		107	16766	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.673	2.683	-0.010	0.997	21142	0.0439		92.5	200	
* 62 13C2-PFOA										
415.00 > 370.00	2.703	2.705	-0.002		3491655	2.50			74765	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.703	2.705	-0.002	1.000	95141	0.0634		127	49.1	
413.00 > 169.00	2.703	2.705	-0.002	1.000	42479		2.24(0.84-2.52)		173	
D 14 13C4 PFOA										
417.00 > 372.00	2.703	2.705	-0.002	1.000	3245458	2.47		98.7	56792	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.710	2.713	-0.003	1.000	78723	0.0479		101	1383	
449.00 > 99.00	2.710	2.713	-0.003	1.000	20871		3.77(1.94-5.82)		390	
D 18 13C4 PFOS										
503.00 > 80.00	3.073	3.075	-0.002	1.000	3008109	2.31		96.6	29990	
D 19 13C5 PFNA										
468.00 > 423.00	3.073	3.077	-0.004	1.000	2817677	2.54		102	55973	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.073	3.077	-0.004	1.000	64253	0.0466		100	412	
499.00 > 99.00	3.073	3.077	-0.004	1.000	16084		3.99(2.31-6.93)		157	
20 Perfluorononanoic acid										
463.00 > 419.00	3.073	3.077	-0.004	1.000	61970	0.0540		108	123	
463.00 > 169.00	3.073	3.077	-0.004	1.000	13808		4.49(1.90-5.69)		447	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.287	3.287	0.0	1.000	108473	0.0477		102	1229	
D 21 13C8 FOSA										
506.00 > 78.00	3.407	3.403	0.004	1.000	4652975	2.52		101	38955	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.407	3.404	0.003	1.000	94898	0.0514		103	2104	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.426	3.423	0.003	1.000	46792	0.0473		98.6	1006	
549.00 > 99.00	3.426	3.423	0.003	1.000	17097		2.74(1.33-3.97)		203	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.426	3.430	-0.004	1.000	872225	2.45		102	11957	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.426	3.432	-0.006	1.000	22216	0.0496		104	385	
D 23 13C2 PFDA										
515.00 > 470.00	3.435	3.440	-0.005	1.000	2363331	2.44		97.6	37199	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.435	3.441	-0.006	1.000	47377	0.0489		97.7	283	
513.00 > 169.00	3.444	3.441	0.003	1.003	9348		5.07(2.36-7.09)		204	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.596	3.593	0.003	1.000	19805	0.0435		87.0	176	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.596	3.594	0.002	1.000	1098552	2.59		103	24761	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.750	3.758	-0.008	1.000	53928	0.0650		135	1088	
599.00 > 99.00	3.750	3.758	-0.008	1.000	14073		3.83(1.39-4.16)		336	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.761	3.766	-0.005	1.000	1178652	2.54		101	3235	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.771	3.768	0.003	1.003	22329	0.0483		96.7	489	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.771	3.768	0.003	1.000	33736	0.0517		103	164	
563.00 > 169.00	3.761	3.768	-0.007	0.997	11350		2.97(2.12-6.36)		421	
D 30 13C2 PFUnA										
565.00 > 520.00	3.771	3.771	0.0	1.000	2070948	2.62		105	53414	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.928	3.929	-0.001	1.000	163443	0.0487		103	3841	
D 36 13C2 PFDoA										
615.00 > 570.00	4.060	4.066	-0.006	1.000	2044560	2.48		99.1	18749	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.060	4.068	-0.008	1.000	38368	0.0449		89.8	25.3	
613.00 > 169.00	4.060	4.068	-0.008	1.000	11305		3.39(2.13-6.40)		183	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.329	4.328	0.001	1.000	43622	0.0513		103	17.0	
663.00 > 169.00	4.329	4.328	0.001	1.000	14602		2.99(1.25-3.76)		214	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.562	4.571	-0.009	0.998	9697	0.0403		80.7	167	
713.00 > 219.00	4.572	4.571	0.001	1.000	9103		1.07(0.71-2.13)		149	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.572	4.571	0.001	1.000	2258078	2.51		100	12413	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.991	4.990	0.001	1.002	104902	0.0539		108	21.0	
813.00 > 169.00	4.982	4.990	-0.008	1.000	18394		5.70(2.86-8.58)		244	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.982	4.993	-0.011	1.000	3797468	2.65		106	10502	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.355	5.354	0.001	1.000	79683	0.0512		102	14.2	
913.00 > 169.00	5.355	5.354	0.001	1.000	10213		7.80(3.83-11.48)		155	

Reagents:

LCPFC_LL2_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 09:19:12 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58104.b\2018.05.13LLBx_004.d

Injection Date: 13-May-2018 15:54:07 Instrument ID: A8_N

Lims ID: CCVL

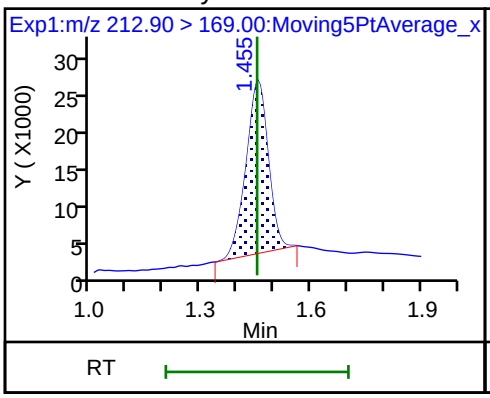
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 21 Worklist Smp#: 2

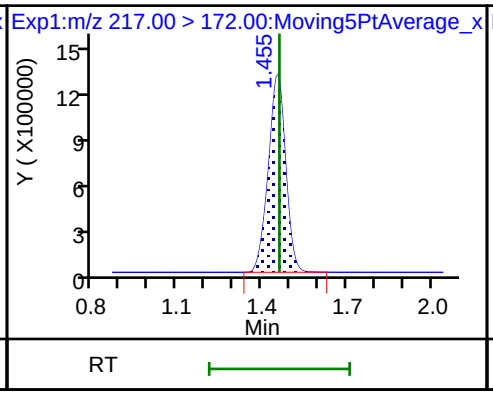
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

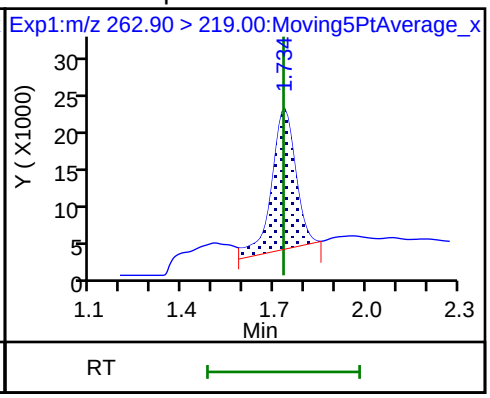
2 Perfluorobutyric acid



D 1 13C4 PFBA



4 Perfluoropentanoic acid



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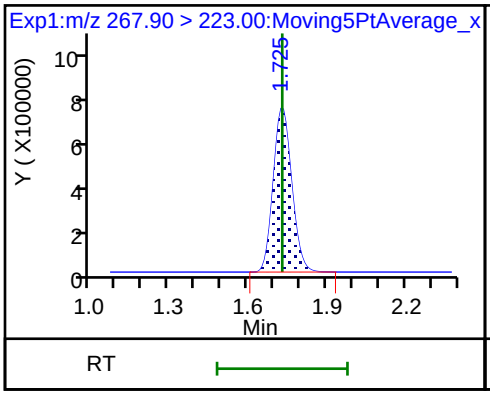
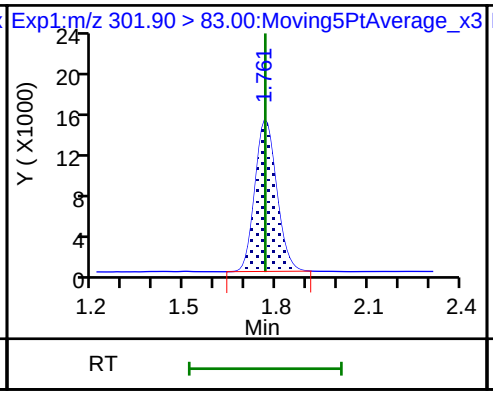
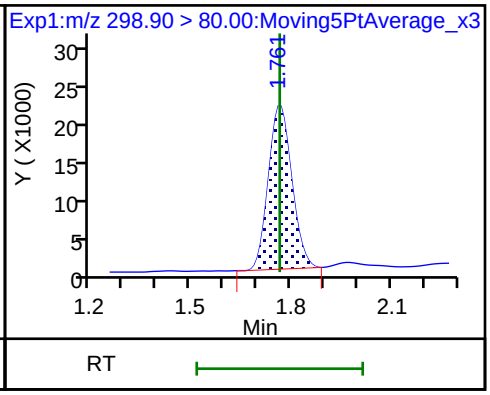


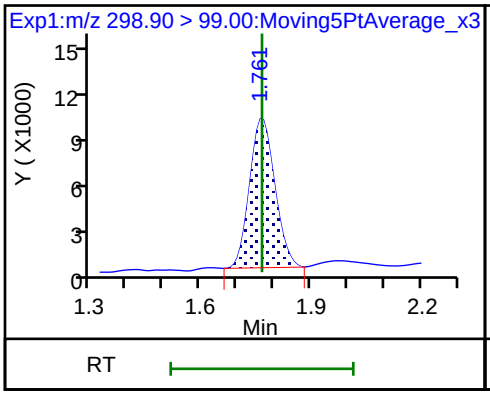
D 47 13C3-PFBS



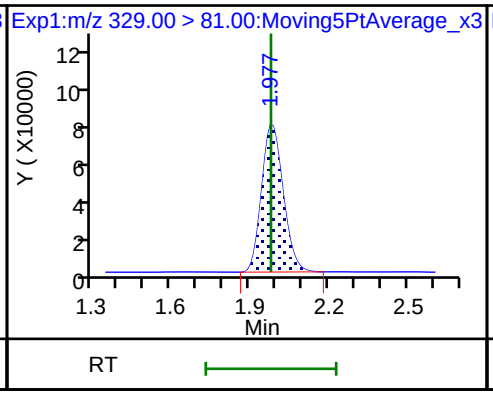
5 Perfluorobutanesulfonic acid



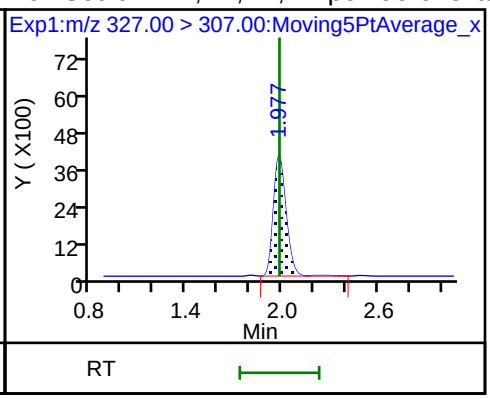
5 Perfluorobutanesulfonic acid



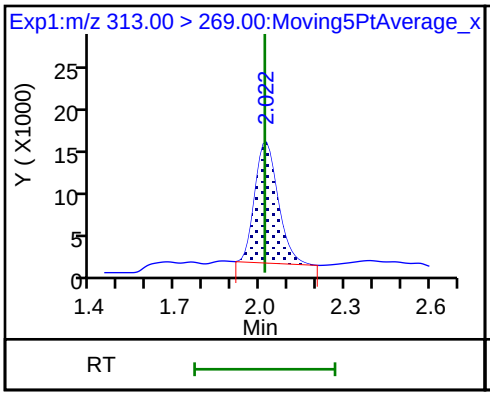
D 60 M2-4:2FTS



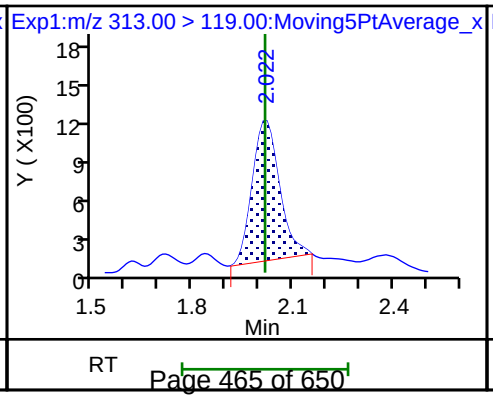
61 Sodium 1H,1H,2H,2H-perfluorohexane



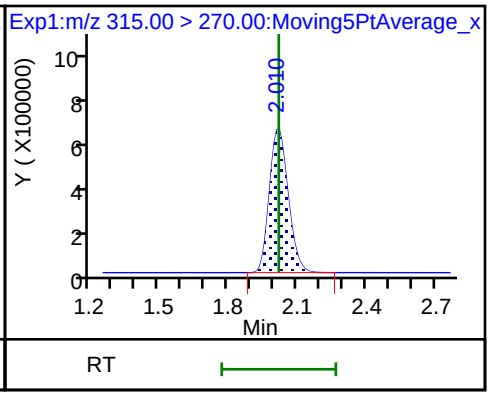
6 Perfluorohexanoic acid



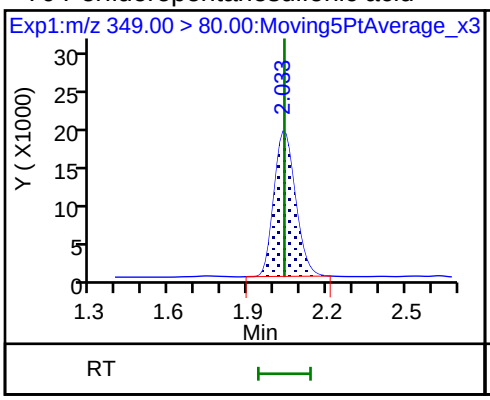
6 Perfluorohexanoic acid



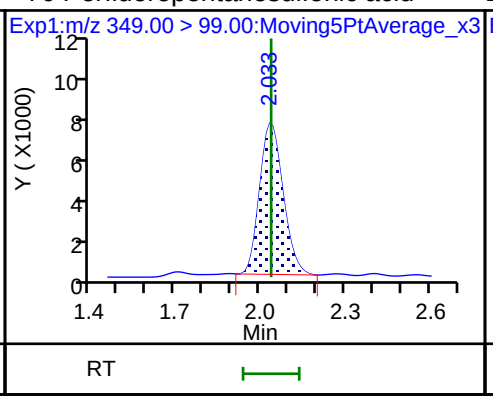
D 7 13C2 PFHxA



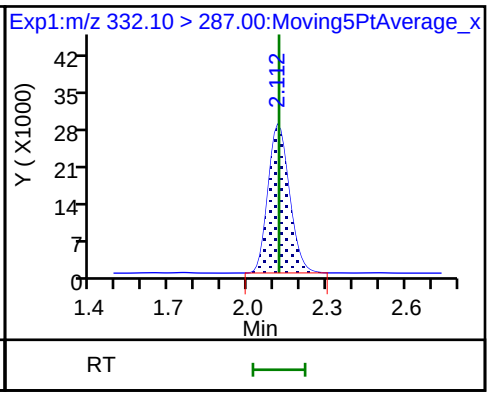
70 Perfluoropentanesulfonic acid



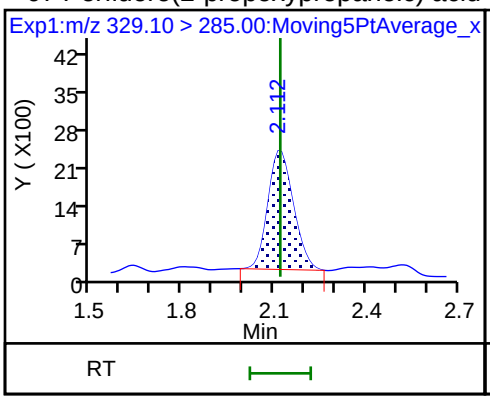
70 Perfluoropentanesulfonic acid



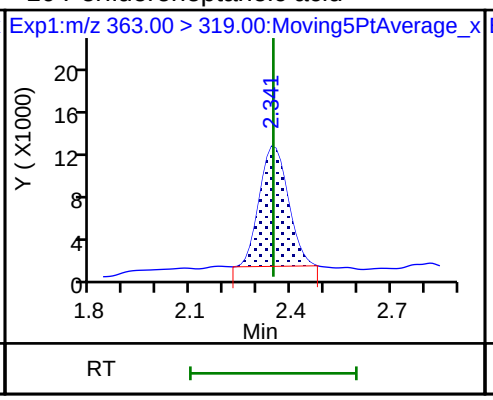
D 64 13C3 HFPO-DA



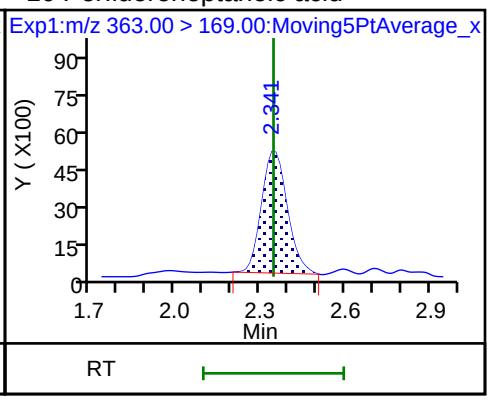
67 Perfluoro(2-propoxypropanoic) acid



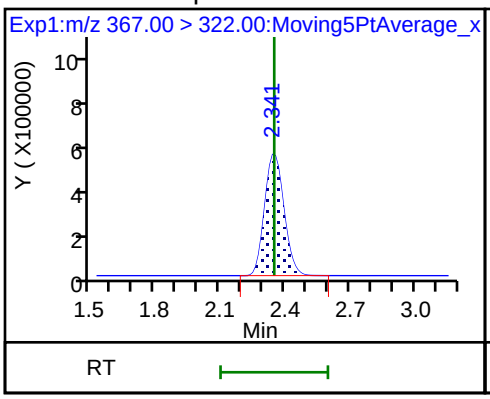
10 Perfluoroheptanoic acid



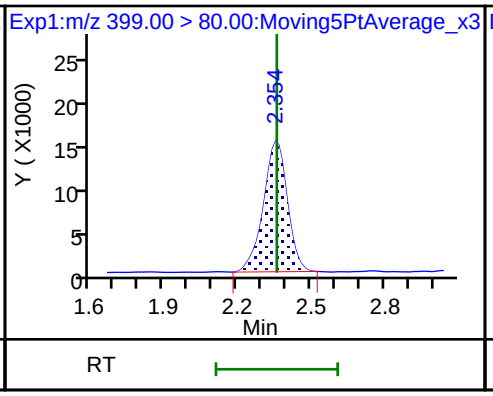
10 Perfluoroheptanoic acid



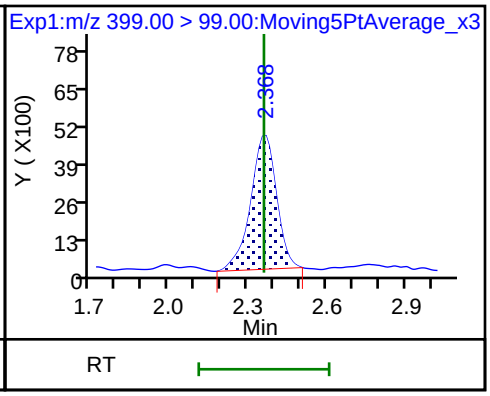
D 9 13C4-PFHpA



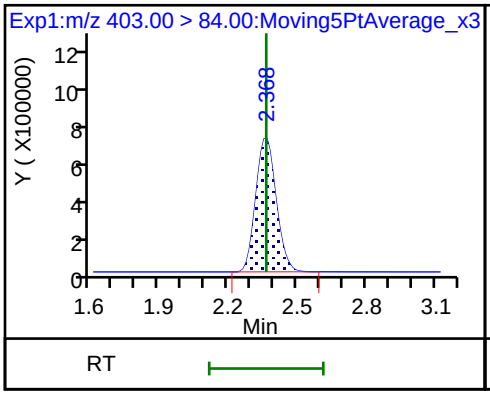
8 Perfluorohexanesulfonic acid



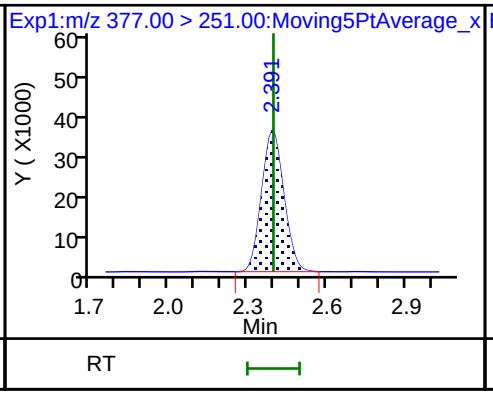
8 Perfluorohexanesulfonic acid



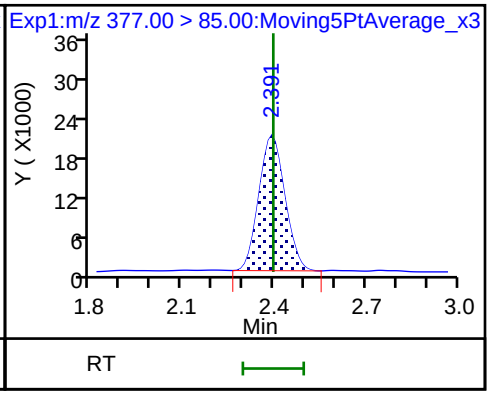
D 11 18O2 PFHxS



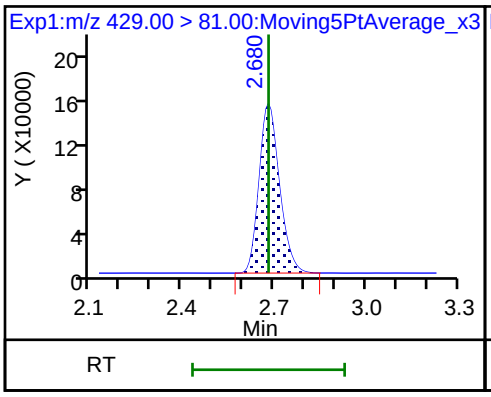
65 Adona



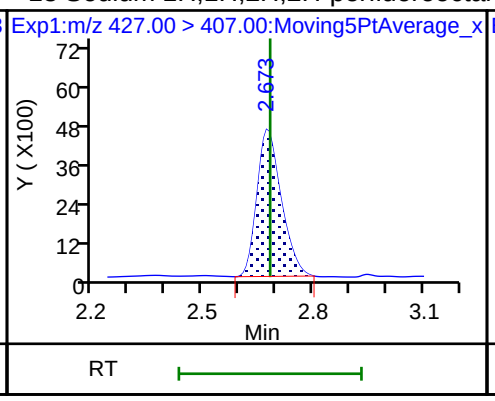
65 Adona



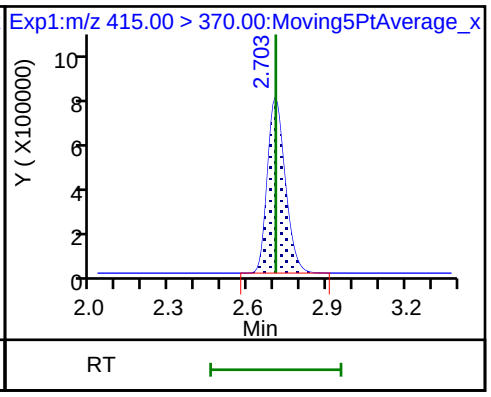
D 12 M2-6:2FTS



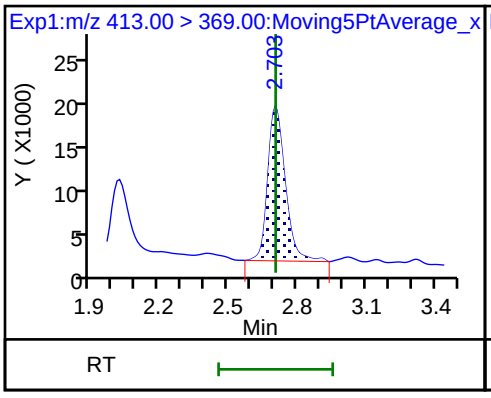
13 Sodium 1H,1H,2H,2H-perfluorooctane



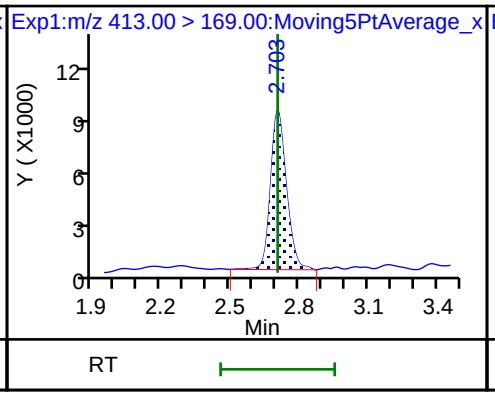
* 62 13C2-PFOA



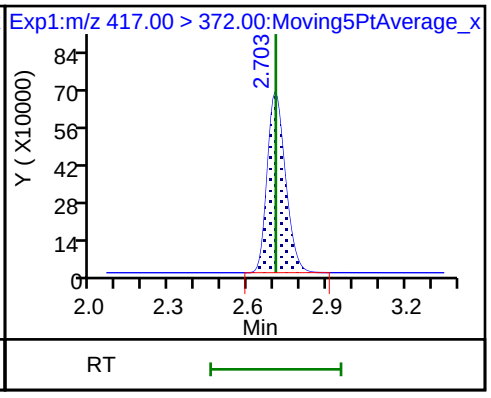
15 Perfluorooctanoic acid



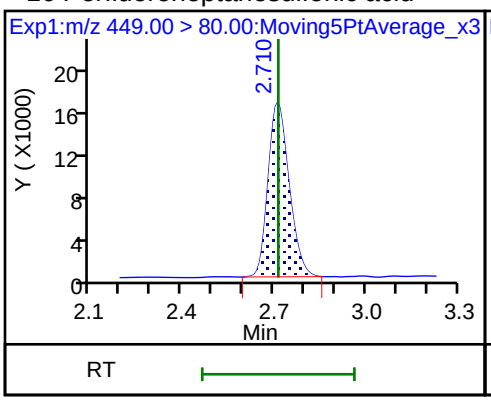
15 Perfluorooctanoic acid



D 14 13C4 PFOA



16 Perfluoroheptanesulfonic acid



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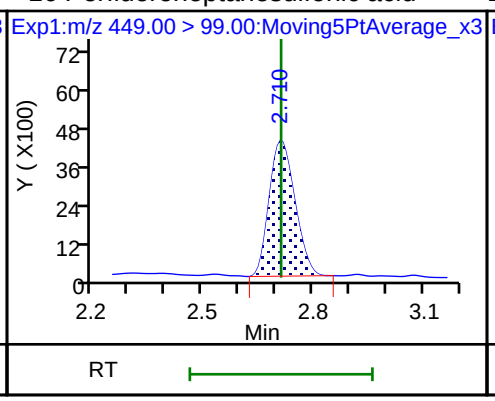
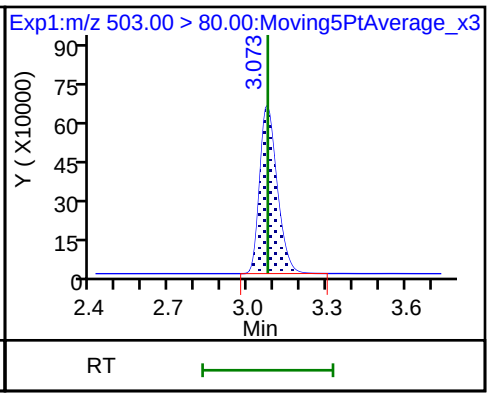
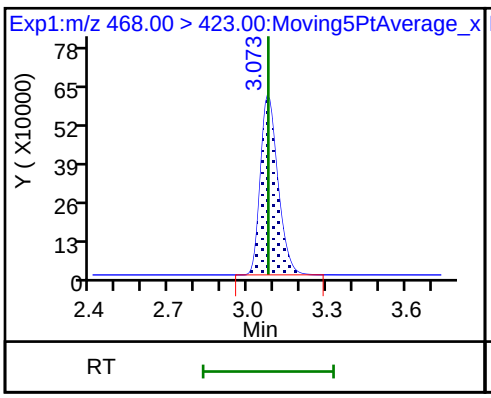


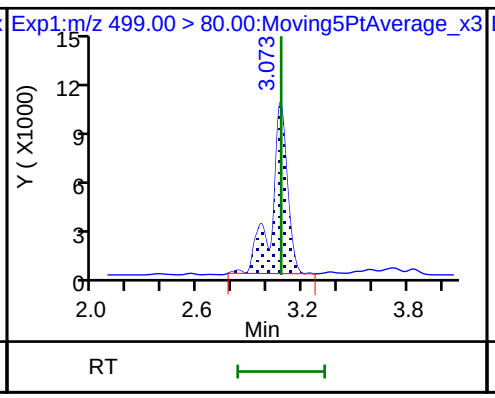
D 18 13C4 PFOS



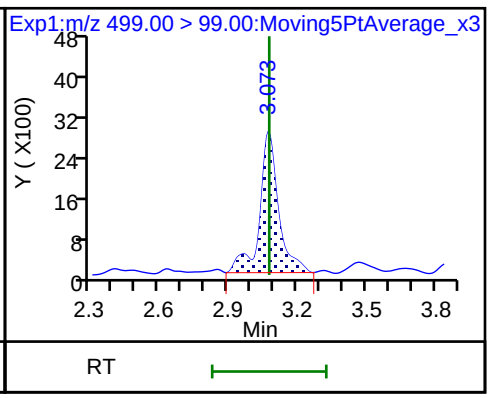
D 19 13C5 PFNA



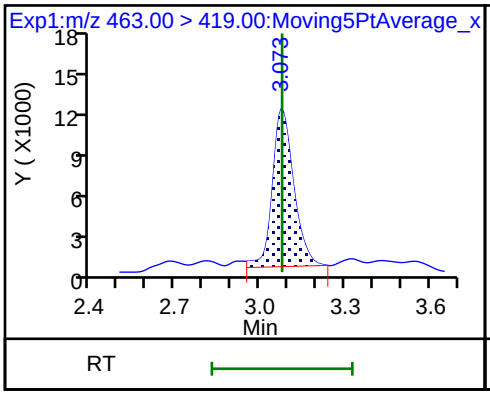
17 Perfluorooctane sulfonic acid



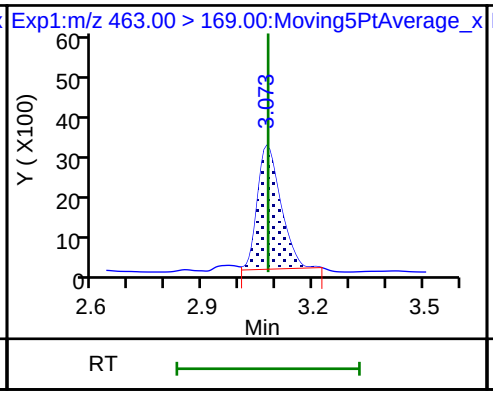
17 Perfluorooctane sulfonic acid



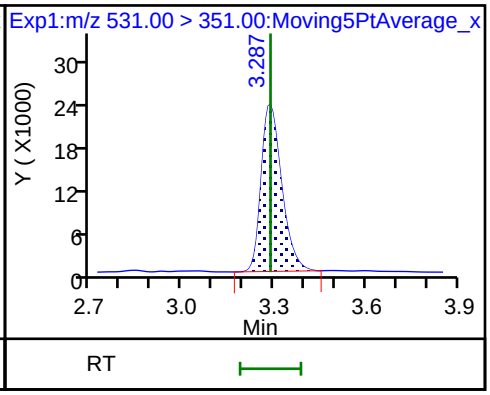
20 Perfluorononanoic acid



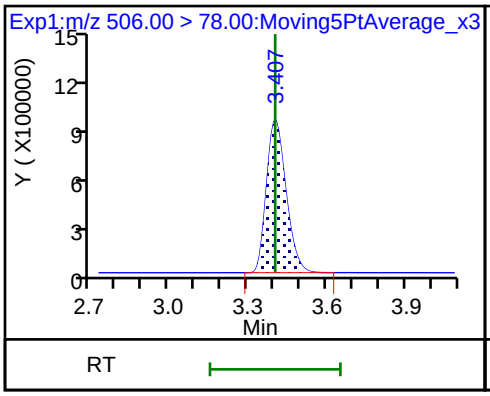
20 Perfluorononanoic acid



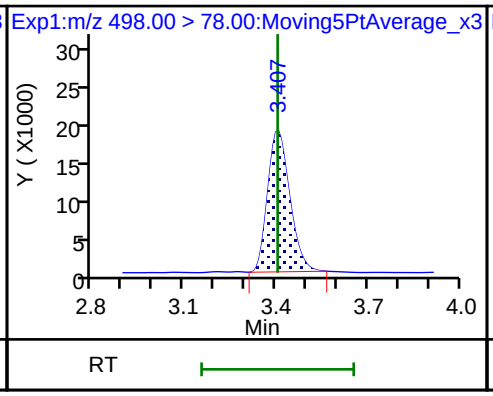
69 9-Chlorohexadecafluoro-3-oxanonane



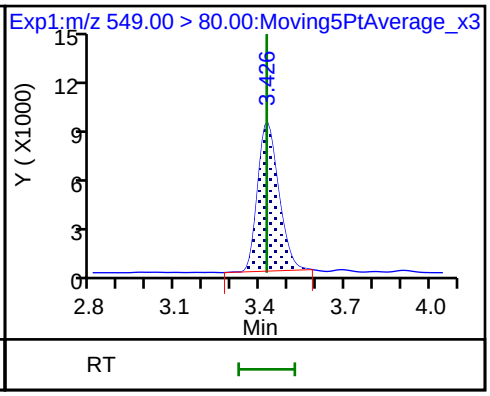
D 21 13C8 FOSA



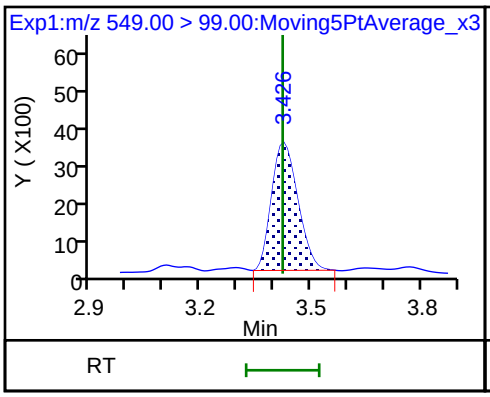
22 Perfluorooctane Sulfonamide



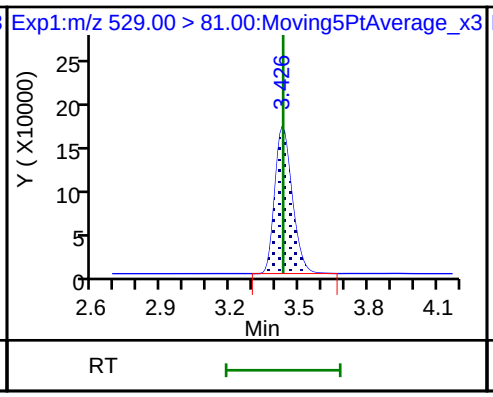
68 Perfluorononanesulfonic acid



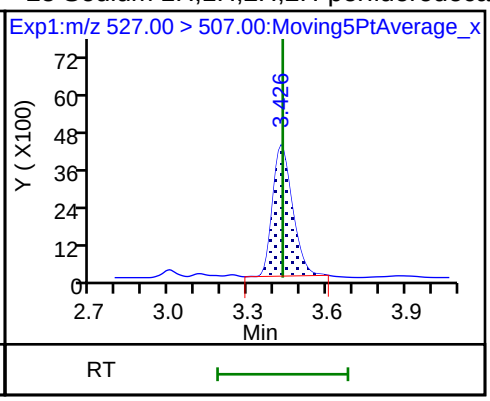
68 Perfluorononanesulfonic acid



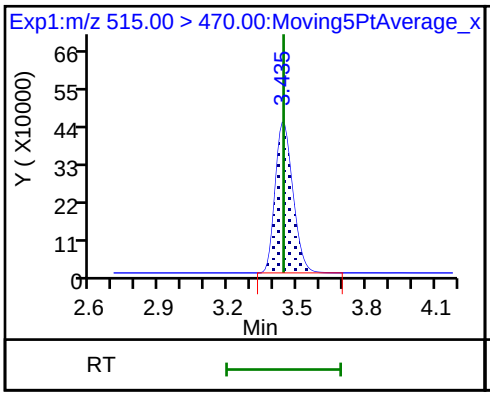
D 26 M2-8:2FTS



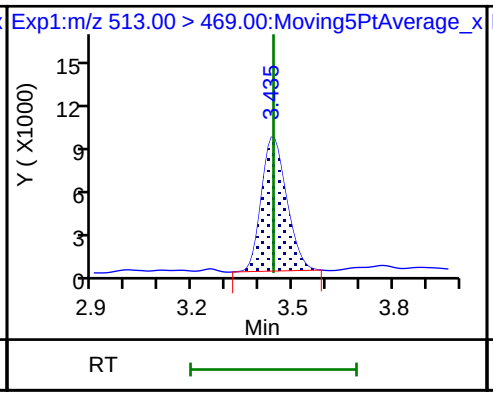
25 Sodium 1H,1H,2H,2H-perfluorodecane



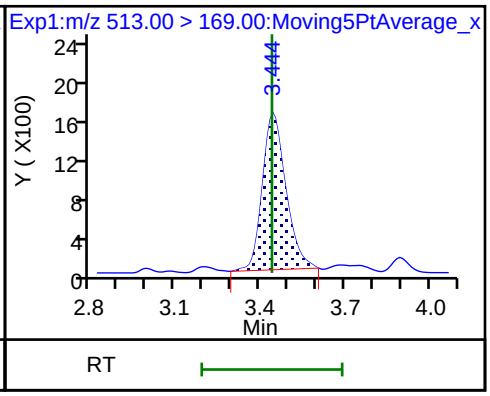
D 23 13C2 PFDA



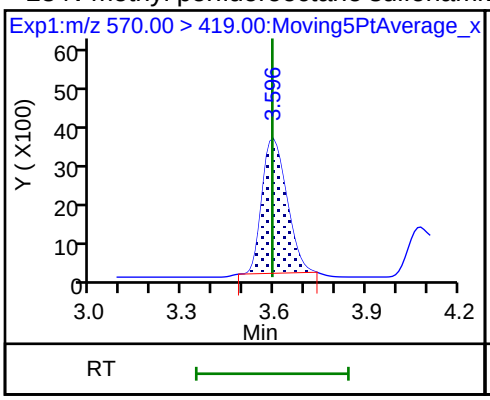
24 Perfluorodecanoic acid



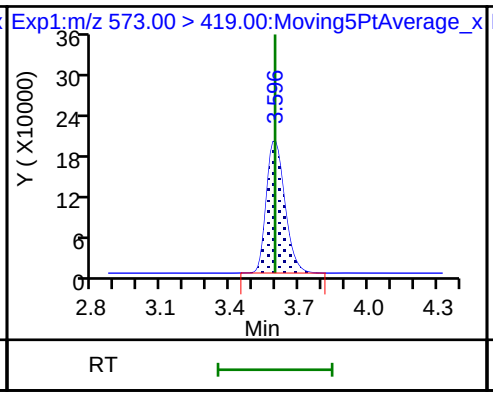
24 Perfluorodecanoic acid



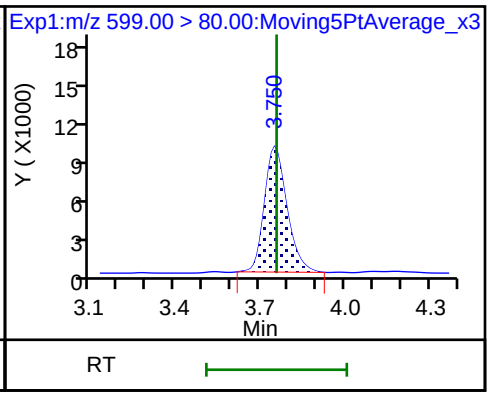
28 N-methyl perfluorooctane sulfonami



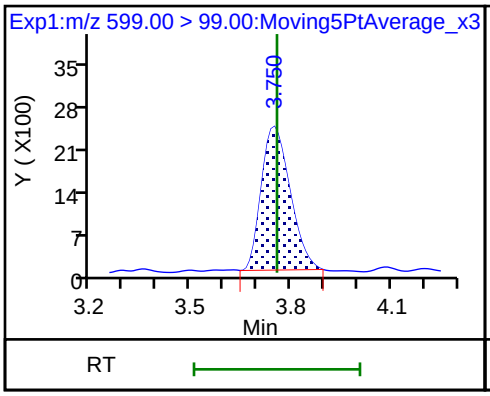
D 27 d3-NMeFOSAA



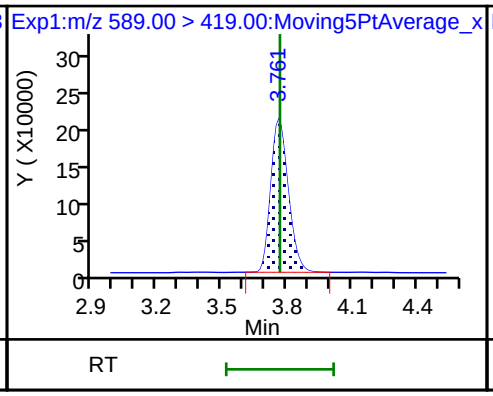
29 Perfluorodecane Sulfonic acid



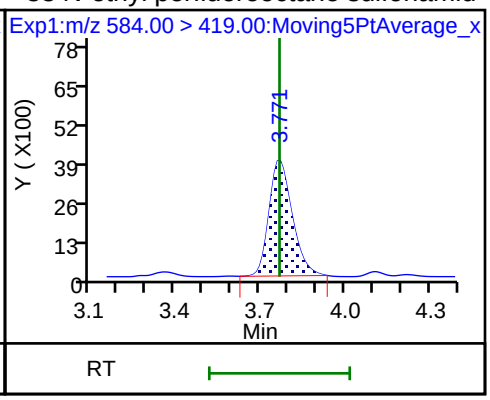
29 Perfluorodecane Sulfonic acid



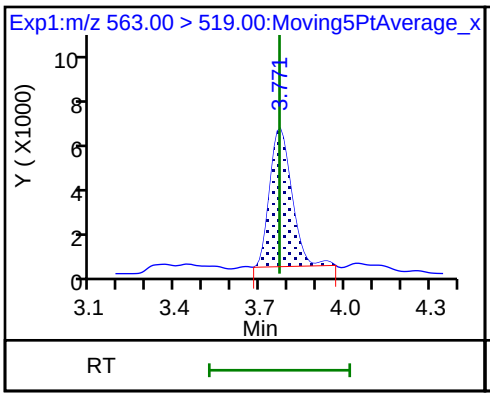
D 32 d5-NEtFOSAA



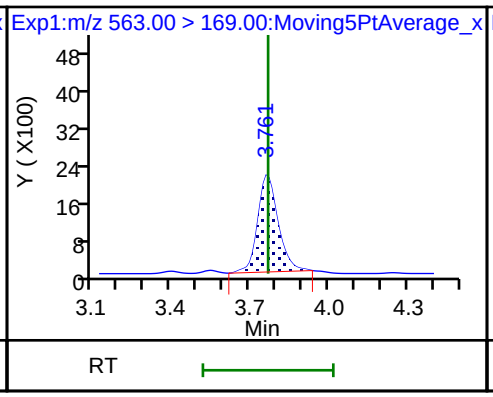
33 N-ethyl perfluorooctane sulfonamid



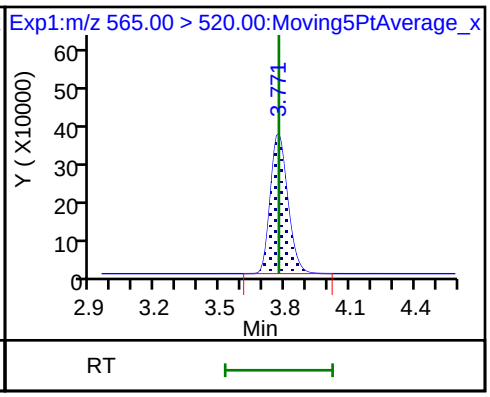
31 Perfluoroundecanoic acid



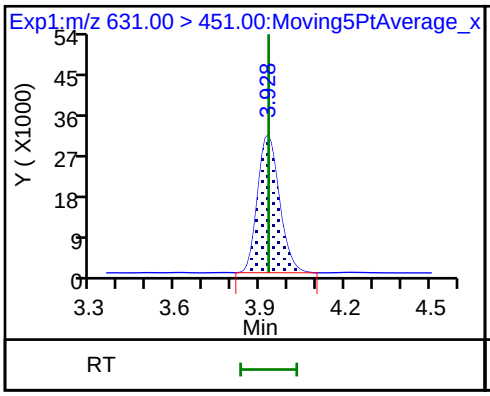
31 Perfluoroundecanoic acid



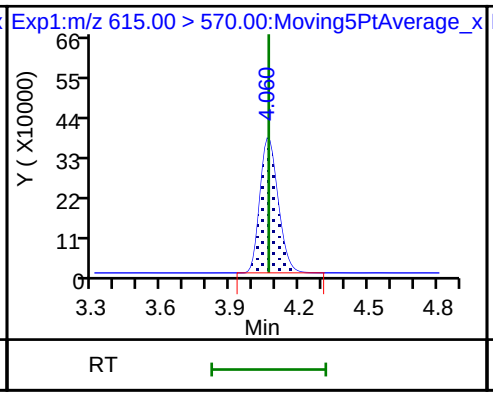
D 30 13C2 PFUnA



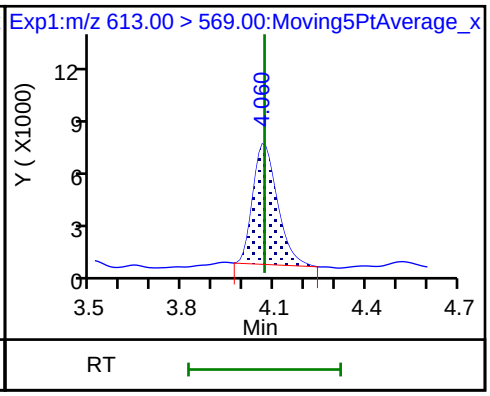
66 11-Chloroeicosafluoro-3-oxaundecan



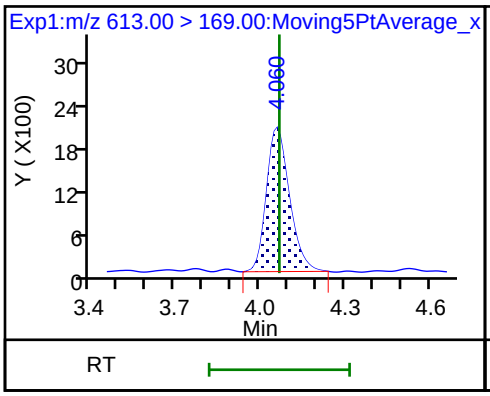
D 36 13C2 PFDoA



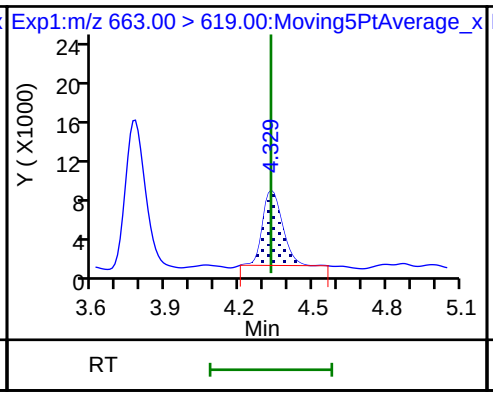
37 Perfluorododecanoic acid



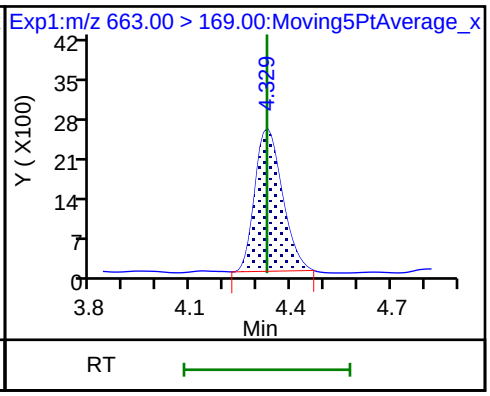
37 Perfluorododecanoic acid



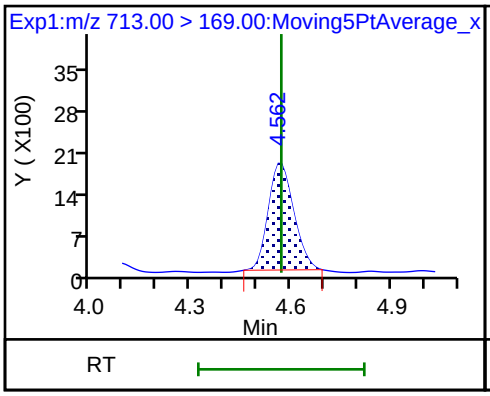
41 Perfluorotridecanoic acid



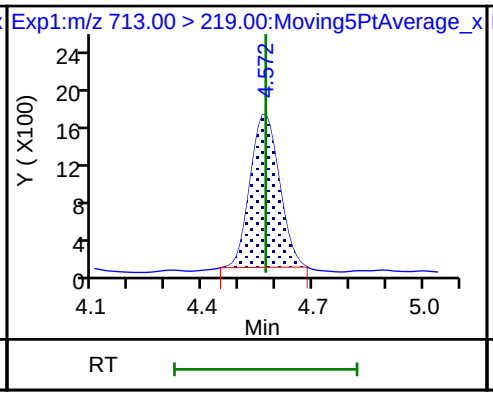
41 Perfluorotridecanoic acid



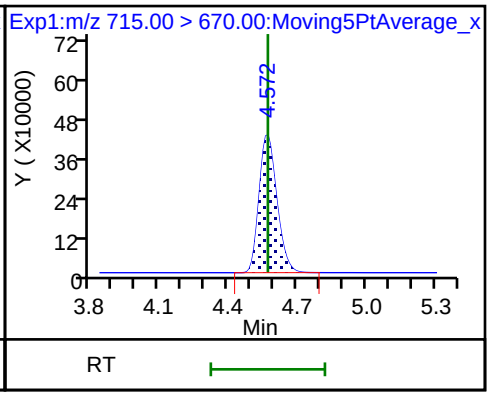
42 Perfluorotetradecanoic acid



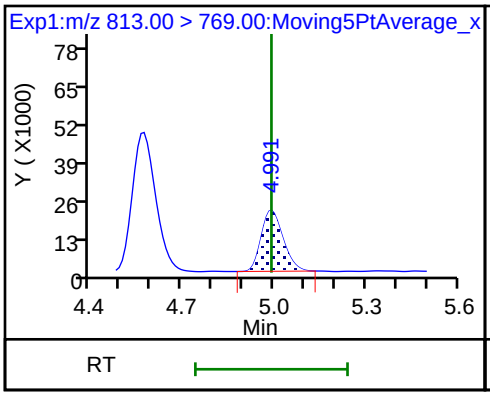
42 Perfluorotetradecanoic acid



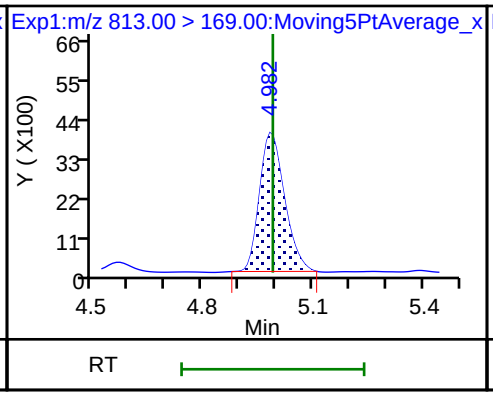
D 43 13C2-PFTeDA



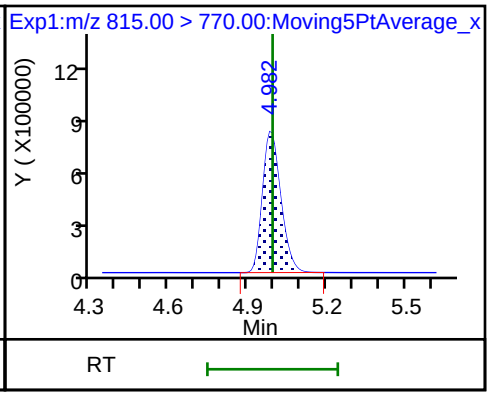
45 Perfluorohexadecanoic acid



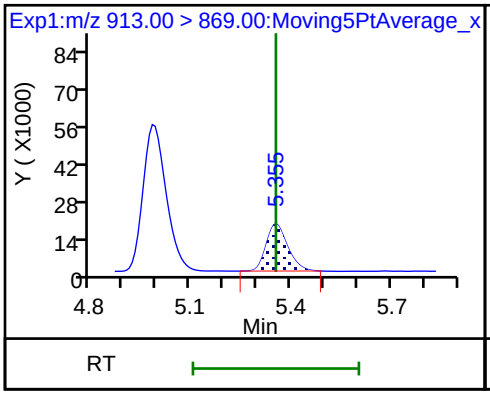
45 Perfluorohexadecanoic acid



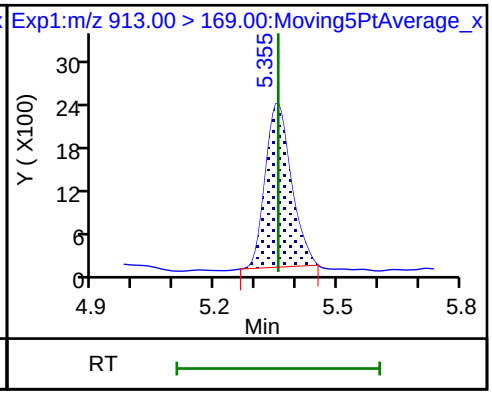
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-222978/3 Calibration Date: 05/13/2018 16:01

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLBx_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9362	0.9420		1.01	1.00	0.6	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.182	1.155		0.977	1.00	-2.3	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.92	78.20		0.876	0.884	-0.9	50.0
4:2 FTS	AveID	13.71	14.26		0.972	0.934	4.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.003	0.997		0.994	1.00	-0.6	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.41	67.47		0.925	0.938	-1.4	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.081	1.121		1.04	1.00	3.7	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	1.020		0.818	0.910	-10.1	40.0
6:2FTS	AveID	1.657	1.969		1.13	0.948	18.8	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.088		0.941	1.00	-5.9	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.307	1.240		0.903	0.952	-5.1	50.0
Perfluorononanoic acid (PFNA)	AveID	1.018	1.027		1.01	1.00	0.9	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.097	1.060		0.897	0.928	-3.4	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9929	0.9578		0.965	1.00	-3.5	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7856	0.7364		0.900	0.960	-6.3	50.0
8:2FTS	AveID	1.230	1.290		1.00	0.958	4.9	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.025	1.065		1.04	1.00	3.8	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.036	1.010		0.974	1.00	-2.6	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6597	0.6430		0.940	0.964	-2.5	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9798	0.9747		0.995	1.00	-0.5	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7874	0.7332		0.931	1.00	-6.9	40.0
Perfluorododecanoic acid (PFDoA)	AveID	1.045	1.088		1.04	1.00	4.1	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.039	1.079		1.04	1.00	3.8	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2662	0.2519		0.946	1.00	-5.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9240		0.967	1.00	-3.3	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.025	1.031		1.01	1.00	0.6	50.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	AveID	2.668				0.942		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	AveID	1.808				0.932		
Adona	AveID	3.248				1.00		

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-222978/3 Calibration Date: 05/13/2018 16:01

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLBx_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA (GenX)	L2ID					1.00	-100.0*	40.0
13C4 PFBA	Ave	1.615	1.534		2.37	2.50	-5.0	50.0
13C5 PFPeA	Ave	1.027	0.999		2.43	2.50	-2.8	50.0
13C3-PFBS	Ave	0.0233	0.0227		2.26	2.33	-2.6	50.0
M2-4:2FTS	Ave	0.1418	0.1333		2.19	2.34	-6.0	50.0
13C2 PFHxA	Ave	1.081	1.001		2.32	2.50	-7.4	50.0
13C4-PFHpA	Ave	0.996	0.9514		2.39	2.50	-4.4	50.0
18O2 PFHxS	Ave	1.300	1.261		2.29	2.37	-3.0	50.0
M2-6:2FTS	Ave	0.1940	0.1930		2.36	2.38	-0.5	40.0
13C4 PFOA	Ave	0.9419	0.9237		2.45	2.50	-1.9	50.0
13C4 PFOS	Ave	0.9331	0.9229		2.36	2.39	-1.1	50.0
13C5 PFNA	Ave	0.7942	0.7675		2.42	2.50	-3.4	50.0
13C8 FOSA	Ave	1.321	1.359		2.57	2.50	2.9	50.0
M2-8:2FTS	Ave	0.2550	0.2676		2.51	2.40	4.9	40.0
13C2 PFDA	Ave	0.6933	0.6528		2.35	2.50	-5.8	50.0
d3-NMeFOSAA	Ave	0.3041	0.3096		2.55	2.50	1.8	50.0
d5-NEtFOSAA	Ave	0.3327	0.3186		2.39	2.50	-4.2	50.0
13C2 PFUnA	Ave	0.5669	0.5705		2.52	2.50	0.6	50.0
13C2 PFDoA	Ave	0.5911	0.5404		2.29	2.50	-8.6	50.0
13C2-PFTeDA	Ave	0.6436	0.6530		2.54	2.50	1.5	50.0
13C2-PFHxDA	Ave	1.025	1.066		2.60	2.50	4.0	50.0
13C3 HFPO-DA	Ave	0.0584			0.000000	2.50	0*	25-150

FORM VII 537 (modified)

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58104.b\2018.05.13LLBx_005.d
Lims ID: CCV L4
Client ID:
Sample Type: CCVIS
Inject. Date: 13-May-2018 16:01:55 ALS Bottle#: 26 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58104.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 09:19:17 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 09:18:16

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.453	1.453	0.0	1.000	1934990	1.01		101	1537	
D 1 13C4 PFBA										
217.00 > 172.00	1.453	1.461	-0.008	1.000	5135376	2.37		95.0	44817	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.730	0.0	1.000	1544667	0.9774		97.7	1215	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.730	0.0	0.562	3343384	2.43		97.2	57518	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.763	0.003	1.000	70639	2.26		97.4	1606	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.766	0.0	1.000	2100417	0.8760		99.1	7726	
298.90 > 99.00	1.766	1.766	0.0	1.000	865411		2.43(1.25-3.74)		5926	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.979	0.003	1.000	416768	2.19		94.0	5707	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.982	0.0	1.000	404631	0.9716		104	24654	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.016	0.0	1.000	1337119	0.99		99.4	2686	
313.00 > 119.00	2.016	2.016	0.0	1.000	121633		10.99(5.03-15.10)		1645	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.019	-0.003	1.000	3352037	2.32		92.6	73935	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.038	2.038	0.0	1.000	1922717	0.9251		98.6	26271	
349.00 > 99.00	2.038	2.038	0.0	1.000	719690		2.67(1.36-4.07)		9773	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.347	0.0	1.000	1427907	1.04		104	2486	
363.00 > 169.00	2.347	2.347	0.0	1.000	565983		2.52(1.13-3.40)		3532	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.349	-0.002	1.000	3184952	2.39		95.6	57145	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.360	0.0	1.000	1567547	0.8178		89.9	10065	
399.00 > 99.00	2.360	2.360	0.0	1.000	525281		2.98(1.50-4.49)		2460	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.364	-0.004	1.000	3992474	2.29		97.0	40845	
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.681	0.002	1.000	613716	2.36		99.5	16141	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.000	482279	1.13		119	3892	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.705	0.0		3347691	2.50			63443	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.705	0.0	1.000	1346190	0.9414		94.1	779	
413.00 > 169.00	2.705	2.705	0.0	1.000	715705		1.88(0.84-2.52)		3159	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.705	0.0	1.000	3092368	2.45		98.1	58774	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.713	0.0	1.000	1458825	0.9031		94.9	15654	
449.00 > 99.00	2.713	2.713	0.0	1.000	400950		3.64(1.94-5.82)		6131	
D 18 13C4 PFOS										
503.00 > 80.00	3.070	3.075	-0.005	1.000	2953542	2.36		98.9	25623	
D 19 13C5 PFNA										
468.00 > 423.00	3.077	3.077	0.0	1.000	2569317	2.42		96.6	54971	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.077	3.077	0.0	1.002	1215293	0.8968		96.6	7995	
499.00 > 99.00	3.070	3.077	-0.007	1.000	276496		4.40(2.31-6.93)		5131	
20 Perfluorononanoic acid										
463.00 > 419.00	3.077	3.077	0.0	1.000	1055545	1.01		101	2245	
463.00 > 169.00	3.070	3.077	-0.007	0.998	273123		3.86(1.90-5.69)		8235	
D 21 13C8 FOSA										
506.00 > 78.00	3.404	3.403	0.001	1.000	4548425	2.57		103	40500	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.404	3.404	0.0	1.000	1742625	0.9647		96.5	34260	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.423	3.423	0.0	1.000	873657	0.8999		93.7	11391	
549.00 > 99.00	3.423	3.423	0.0	1.000	341384		2.56(1.33-3.97)		3723	
D 26 M2-8:2FTS										
529.00 > 81.00	3.432	3.430	0.002	1.000	858070	2.51		105	13725	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.432	3.432	0.0	1.000	442689	1.00		105	9203	
D 23 13C2 PFDA										
515.00 > 470.00	3.441	3.440	0.001	1.000	2185506	2.35		94.2	41986	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.441	3.441	0.0	1.000	930675	1.04		104	8096	
513.00 > 169.00	3.441	3.441	0.0	1.000	162702		5.72(2.36-7.09)		1485	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.593	3.593	0.0	1.000	418556	0.9745		97.4	4523	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.593	3.594	-0.001	1.000	1036513	2.55		102	26939	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.758	3.758	0.0	1.000	766020	0.9396		97.5	9267	
599.00 > 99.00	3.747	3.758	-0.011	0.997	260653		2.94(1.39-4.16)		5889	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.758	3.766	-0.008	1.000	1066598	2.39		95.8	2601	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.768	3.768	0.0	1.003	415861	0.99		99.5	6221	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.768	3.768	0.0	1.000	560083	0.9312		93.1	2646	
563.00 > 169.00	3.768	3.768	0.0	1.000	165121		3.39(2.12-6.36)		5919	
D 30 13C2 PFUnA										
565.00 > 520.00	3.768	3.771	-0.003	1.000	1909764	2.52		101	43121	
D 36 13C2 PFDoA										
615.00 > 570.00	4.068	4.066	0.002	1.000	1809230	2.29		91.4	17464	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.068	4.068	0.0	1.000	787238	1.04		104	527	
613.00 > 169.00	4.068	4.068	0.0	1.000	198413		3.97(2.13-6.40)		3340	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.328	4.328	0.0	1.000	780750	1.04		104	351	
663.00 > 169.00	4.328	4.328	0.0	1.000	255927		3.05(1.25-3.76)		3659	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.571	4.571	0.0	1.000	220231	0.9461		94.6	3811	
713.00 > 219.00	4.561	4.571	-0.010	0.998	155411		1.42(0.71-2.13)		2615	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.571	4.571	0.0	1.000	2186058	2.54		101	15761	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.990	4.990	0.0	1.000	1319459	0.9673		96.7	310	
813.00 > 169.00	4.990	4.990	0.0	1.000	232889		5.67(2.86-8.58)		2531	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.990	4.993	-0.003	1.000	3569881	2.60		104	13131	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.354	5.354	0.0	1.000	1472279	1.01		101	280	
913.00 > 169.00	5.354	5.354	0.0	1.000	184570		7.98(3.83-11.48)		1934	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 09:19:18 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58104.b\2018.05.13LLBx_005.d

Injection Date: 13-May-2018 16:01:55 Instrument ID: A8_N

Lims ID: CCV L4

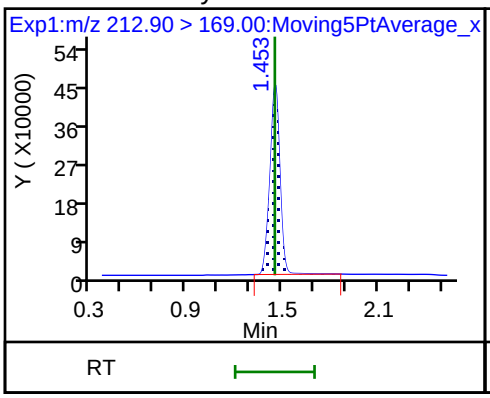
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 26 Worklist Smp#: 3

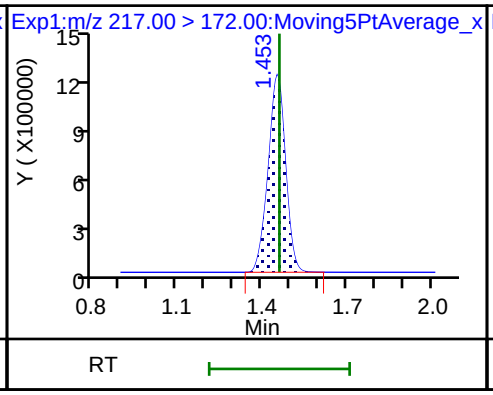
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

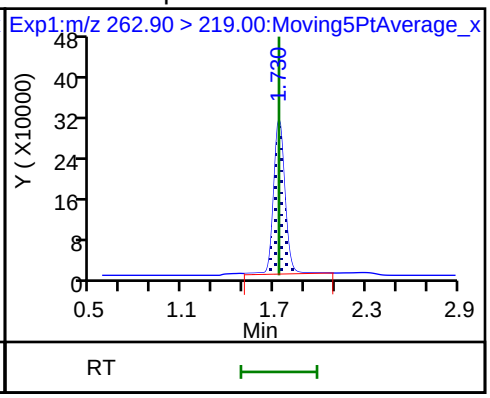
2 Perfluorobutyric acid



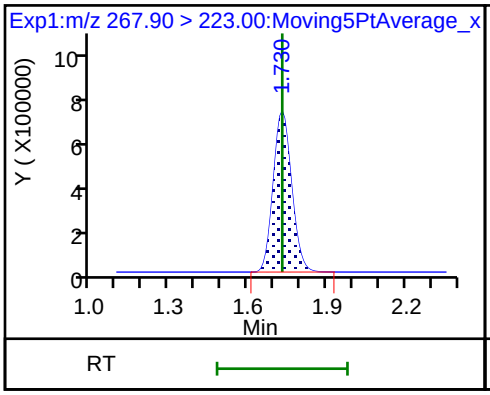
D 1 13C4 PFBA



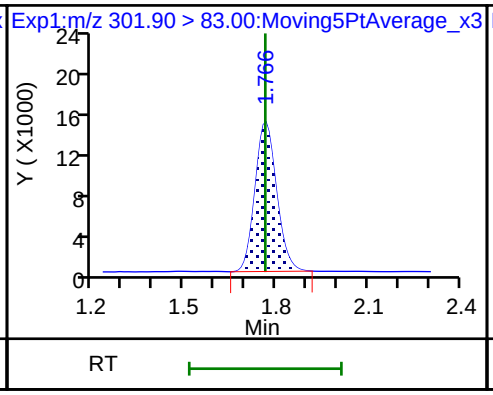
4 Perfluoropentanoic acid



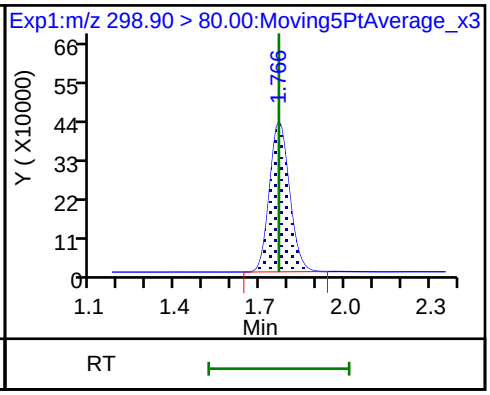
D 3 13C5-PFPeA



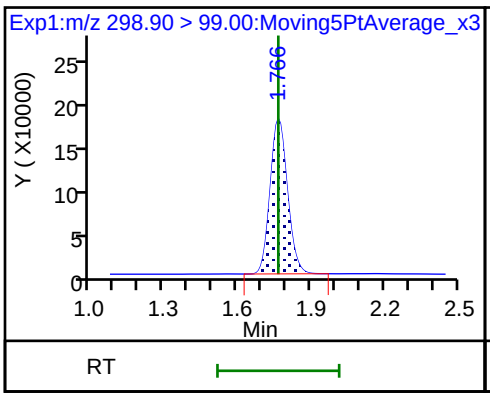
D 47 13C3-PFBS



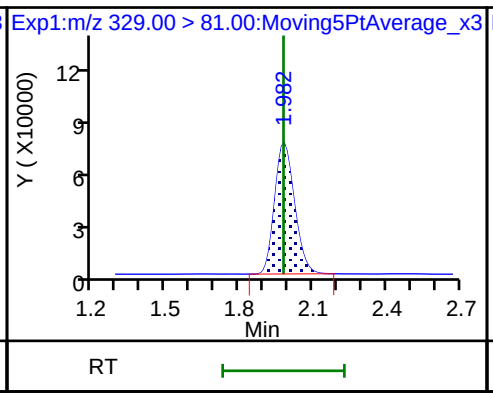
5 Perfluorobutanesulfonic acid



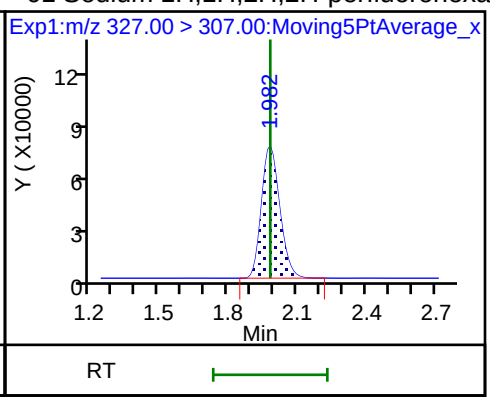
5 Perfluorobutanesulfonic acid



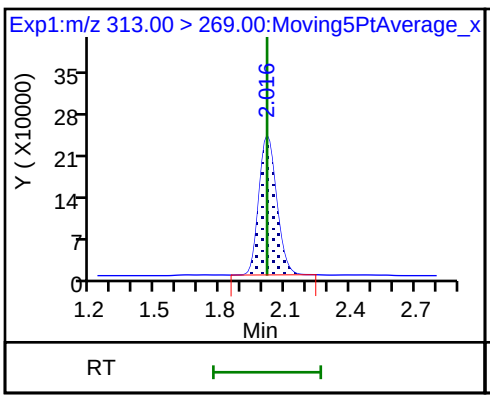
D 60 M2-4:2FTS



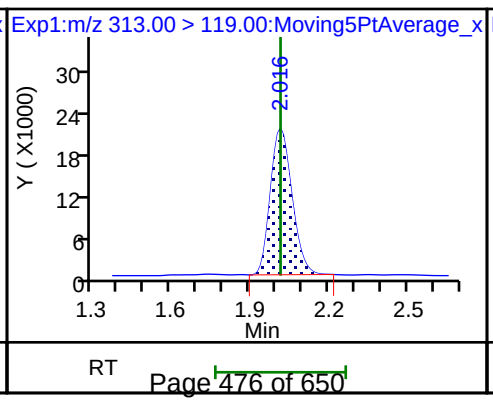
61 Sodium 1H,1H,2H,2H-perfluorohexane



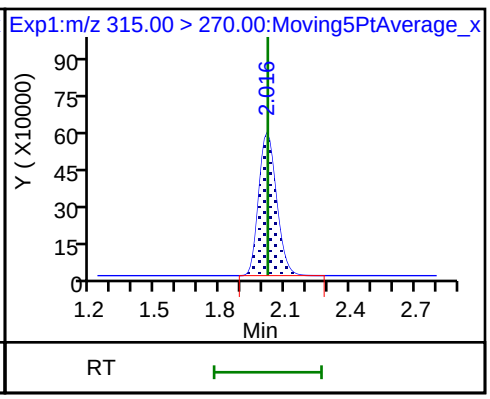
6 Perfluorohexanoic acid



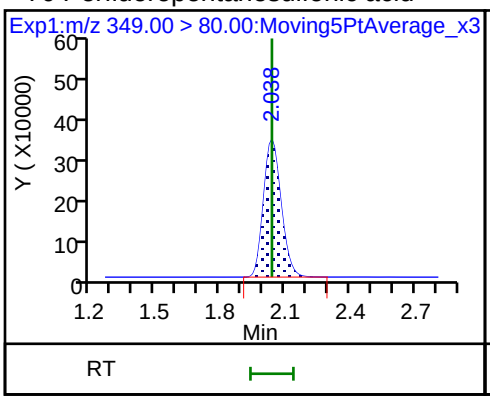
6 Perfluorohexanoic acid



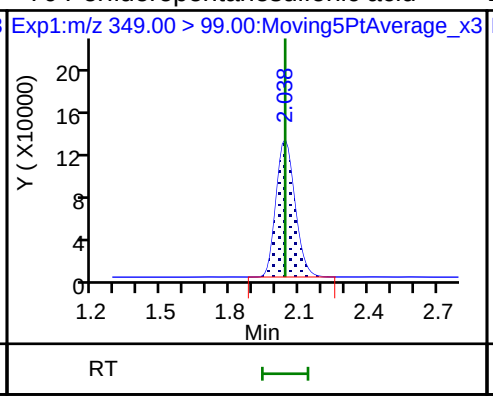
D 7 13C2 PFHxA



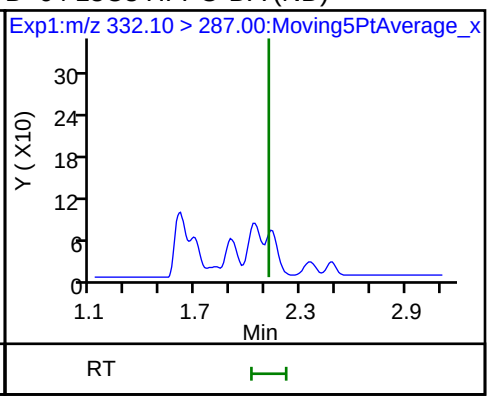
70 Perfluoropentanesulfonic acid



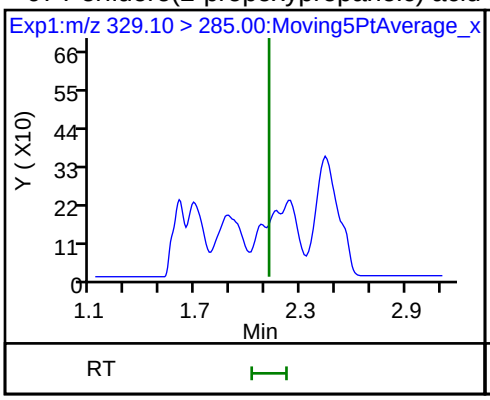
70 Perfluoropentanesulfonic acid



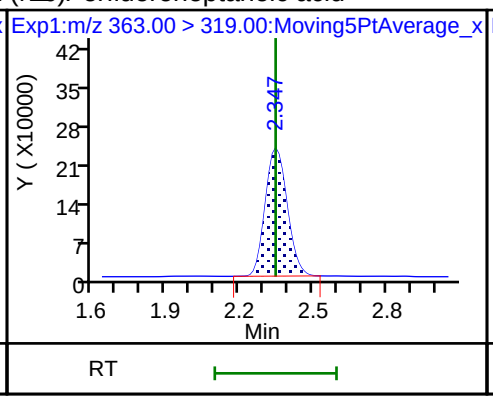
D 64 13C3 HFPO-DA (ND)



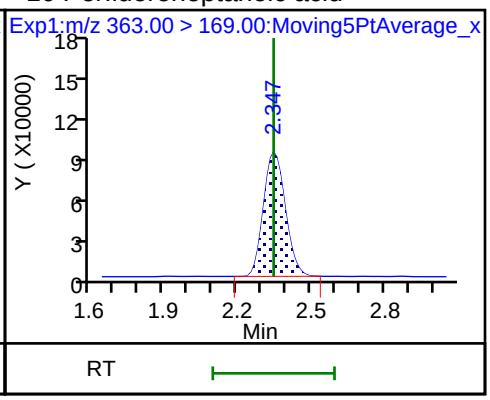
67 Perfluoro(2-propoxypropanoic) acid (ND)



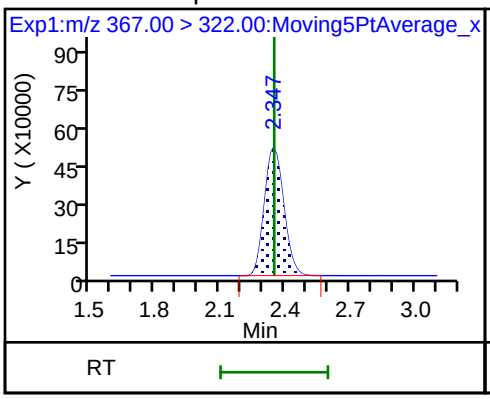
10 Perfluoroheptanoic acid



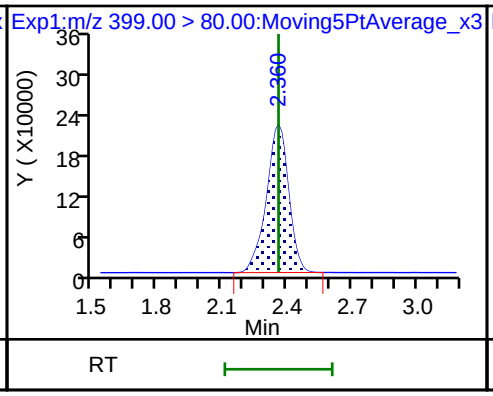
10 Perfluoroheptanoic acid



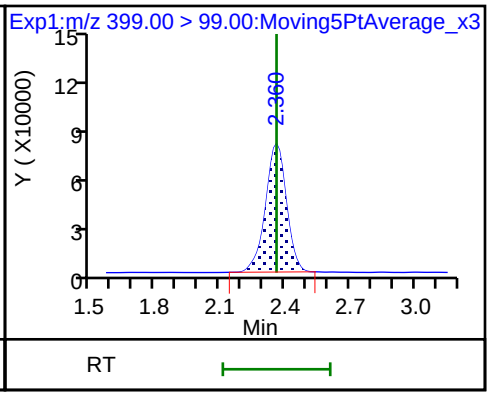
D 9 13C4-PFHpA



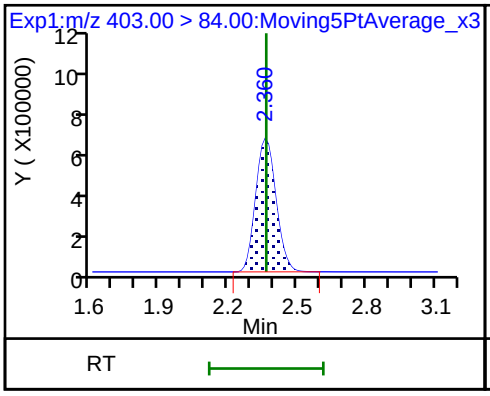
8 Perfluorohexanesulfonic acid



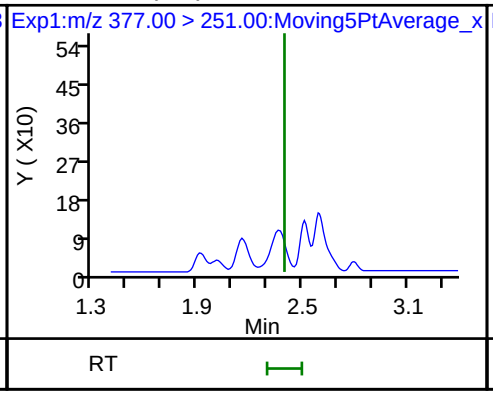
8 Perfluorohexanesulfonic acid



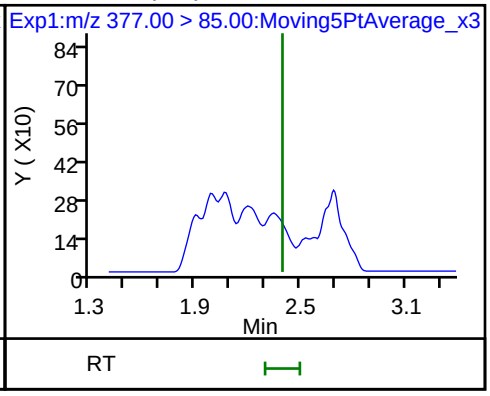
D 11 18O2 PFHxS



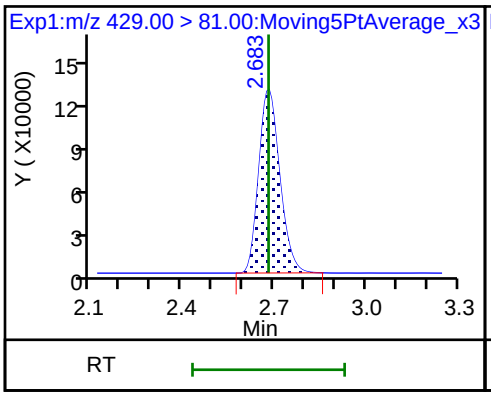
65 Adona (ND)



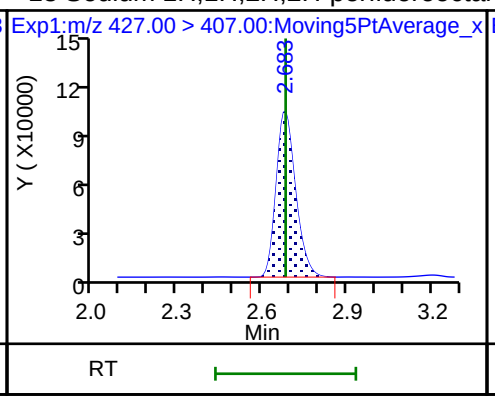
65 Adona (ND)



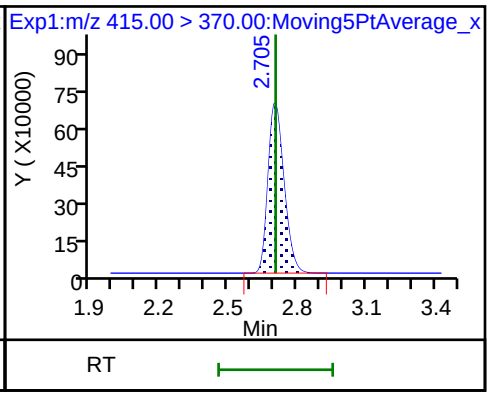
D 12 M2-6:2FTS



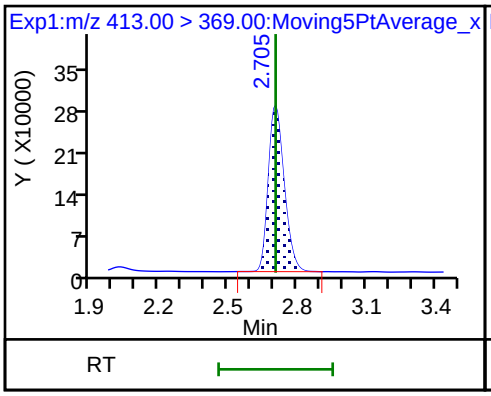
13 Sodium 1H,1H,2H,2H-perfluorooctane



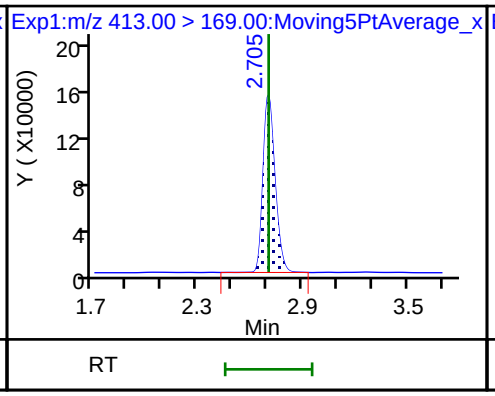
M62 13C2-PFOA



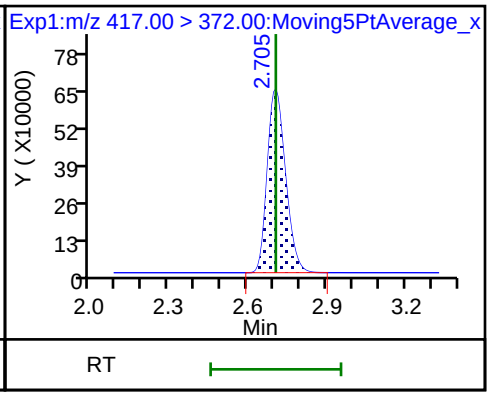
15 Perfluorooctanoic acid



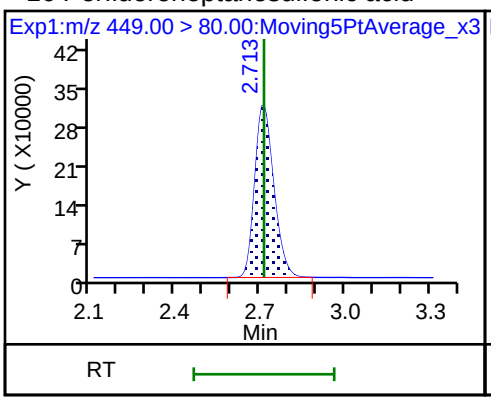
15 Perfluorooctanoic acid



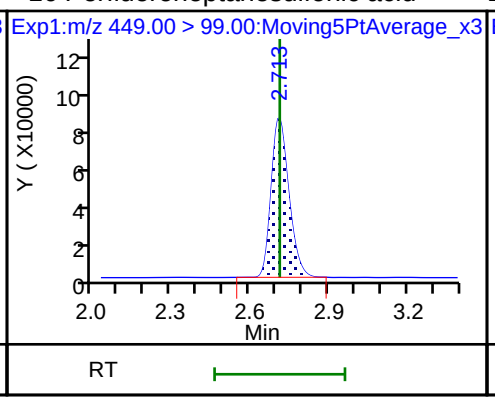
D 14 13C4 PFOA



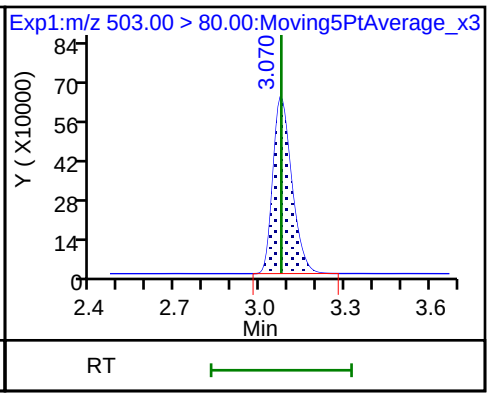
16 Perfluoroheptanesulfonic acid



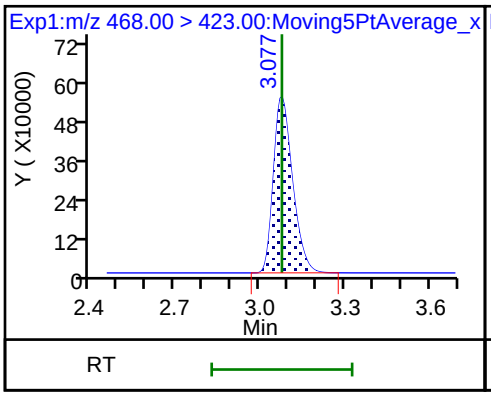
16 Perfluoroheptanesulfonic acid



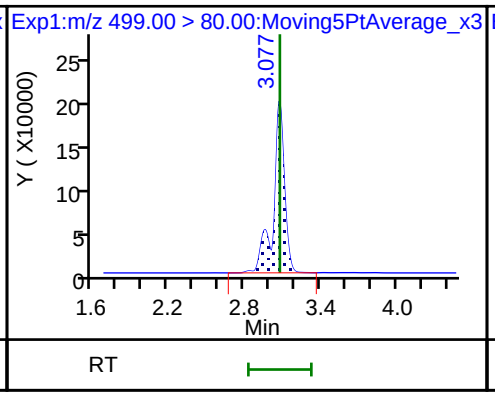
D 18 13C4 PFOS



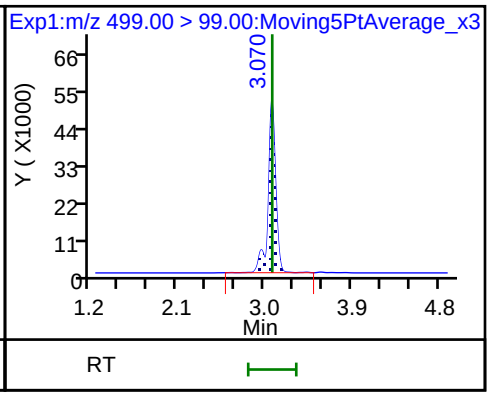
D 19 13C5 PFNA



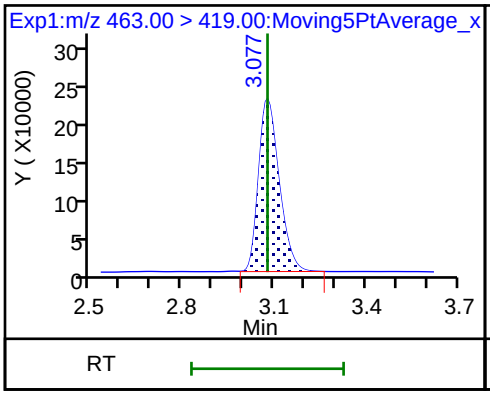
17 Perfluorooctane sulfonic acid



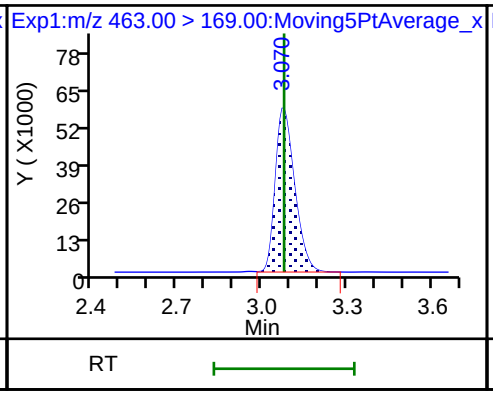
17 Perfluorooctane sulfonic acid



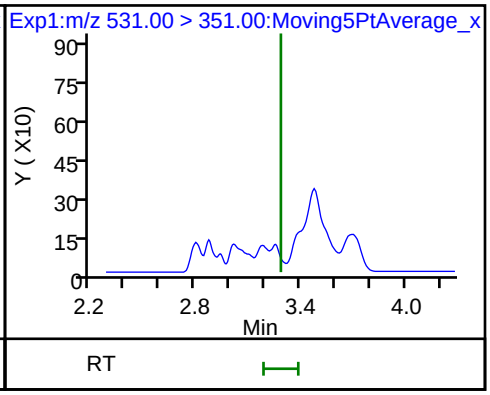
20 Perfluorononanoic acid



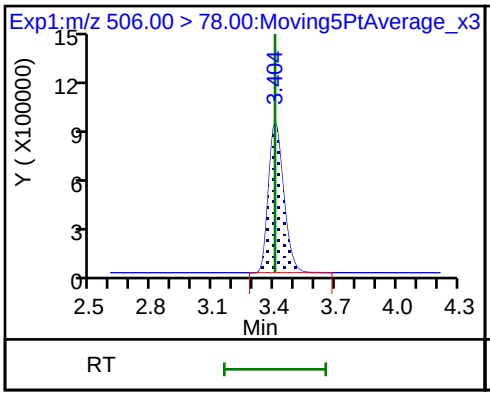
20 Perfluorononanoic acid



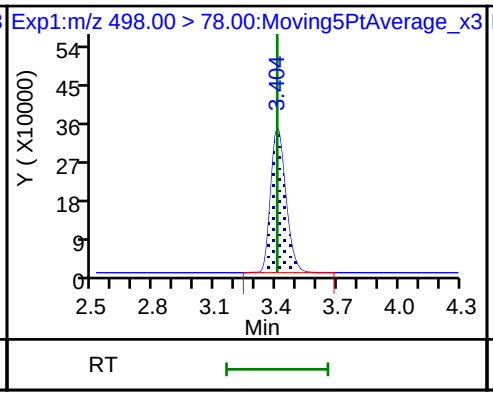
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



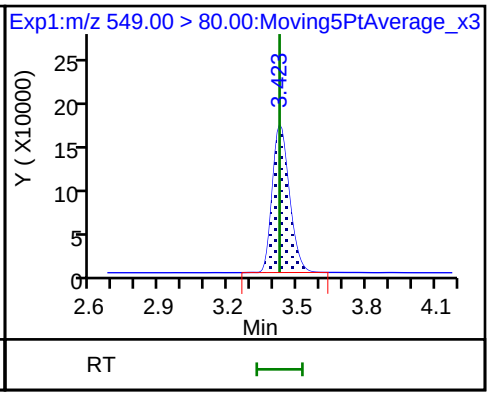
D 21 13C8 FOSA



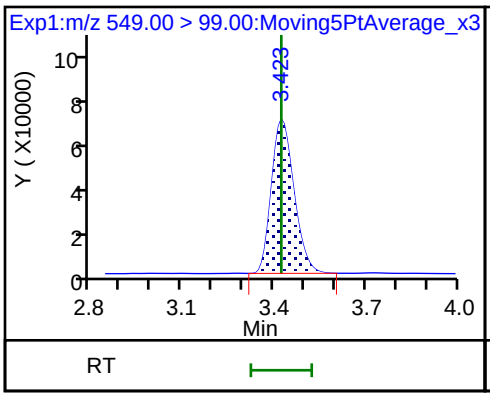
22 Perfluorooctane Sulfonamide



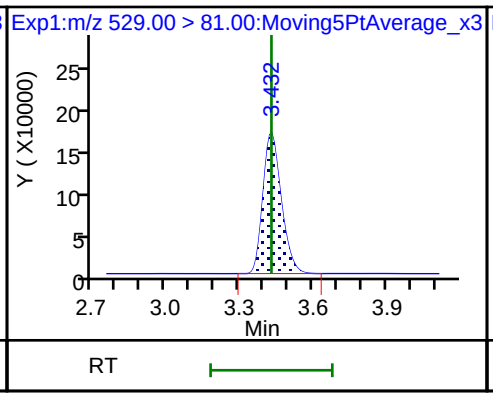
68 Perfluorononanesulfonic acid



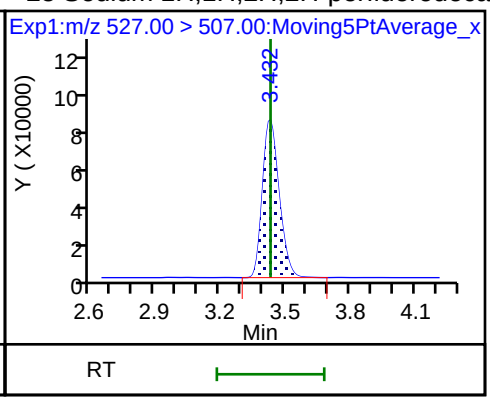
68 Perfluorononanesulfonic acid



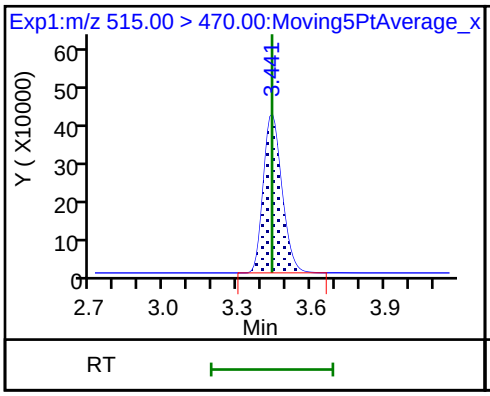
D 26 M2-8:2FTS



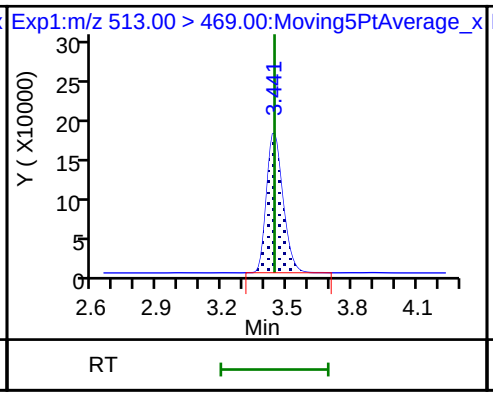
25 Sodium 1H,1H,2H,2H-perfluorodecane



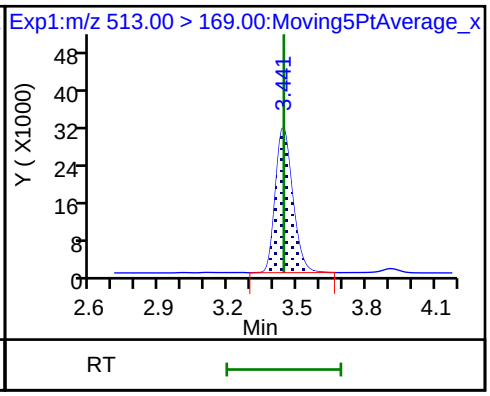
D 23 13C2 PFDA



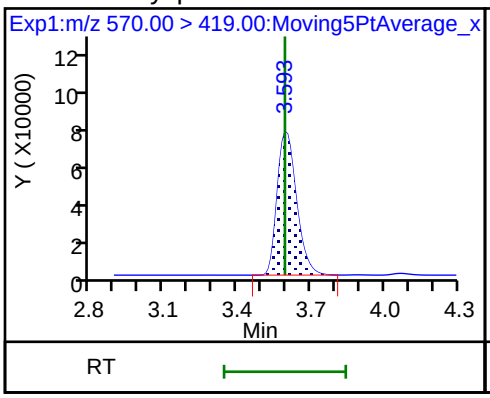
24 Perfluorodecanoic acid



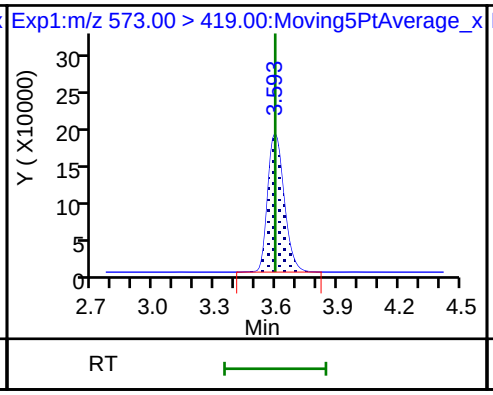
24 Perfluorodecanoic acid



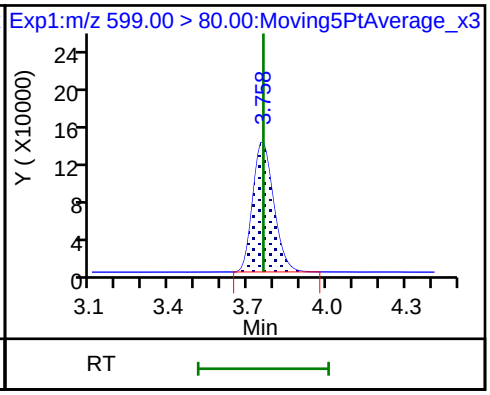
28 N-methyl perfluorooctane sulfonami



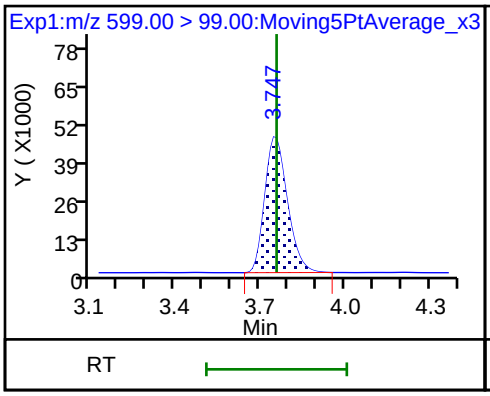
D 27 d3-NMeFOSAA



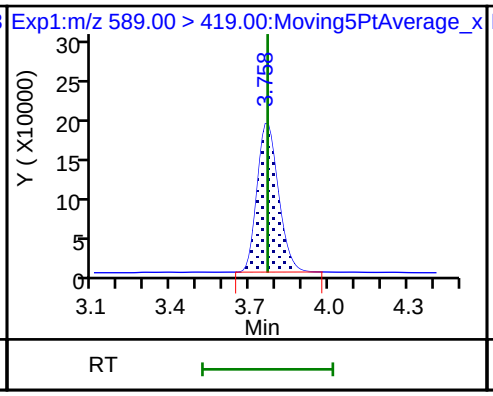
29 Perfluorodecane Sulfonic acid



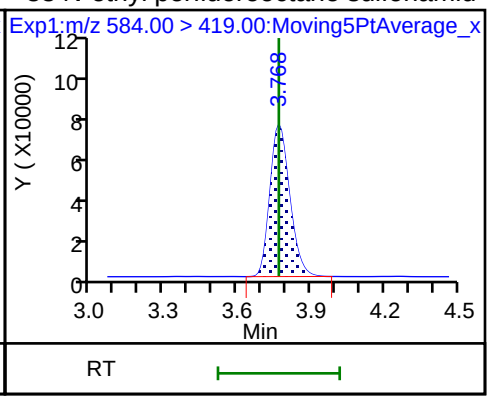
29 Perfluorodecane Sulfonic acid



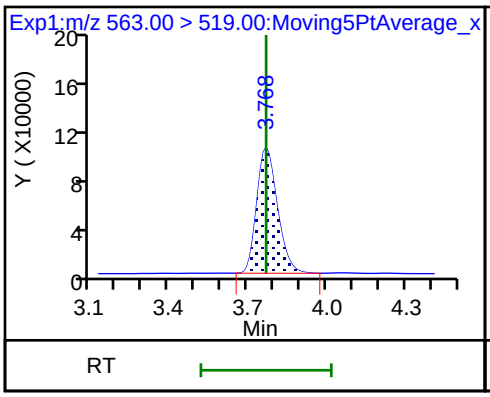
D 32 d5-NEtFOSAA



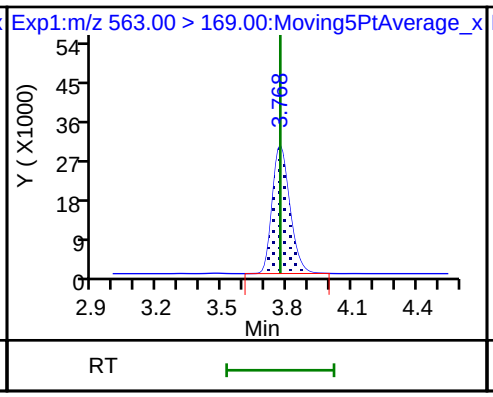
33 N-ethyl perfluorooctane sulfonamid



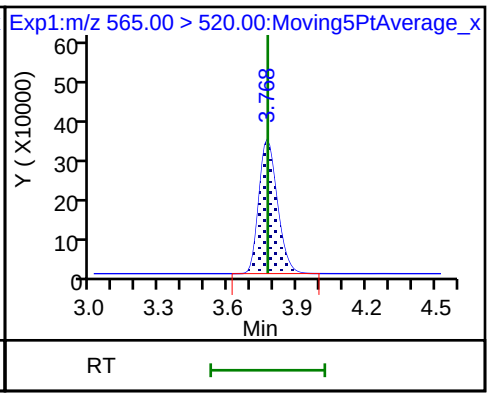
31 Perfluoroundecanoic acid



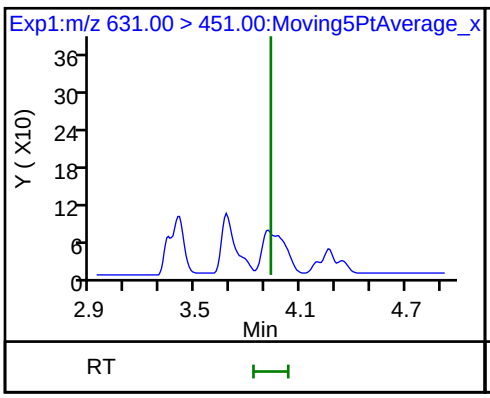
31 Perfluoroundecanoic acid



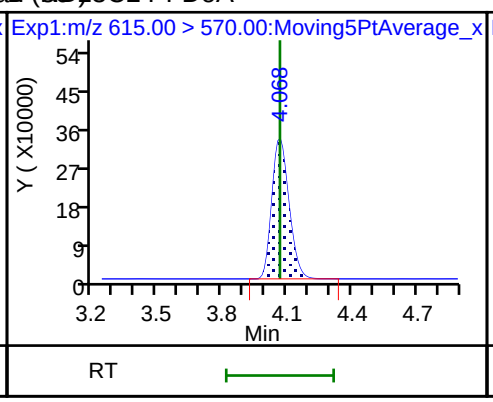
D 30 13C2 PFUnA



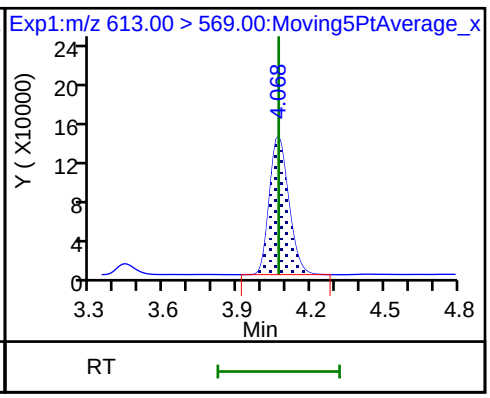
66 11-Chloroeicosafluoro-3-oxaundecan



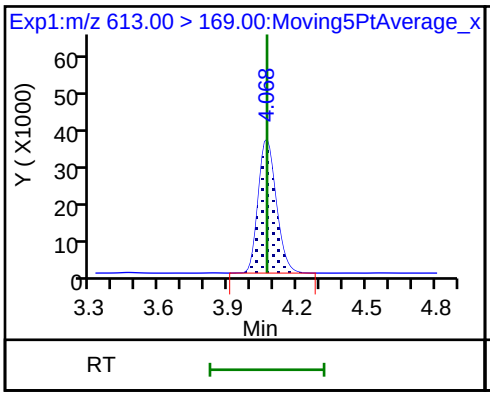
D 36) 13C2 PFDoA



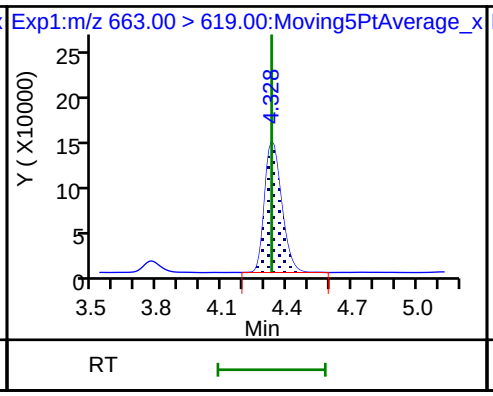
37 Perfluorododecanoic acid



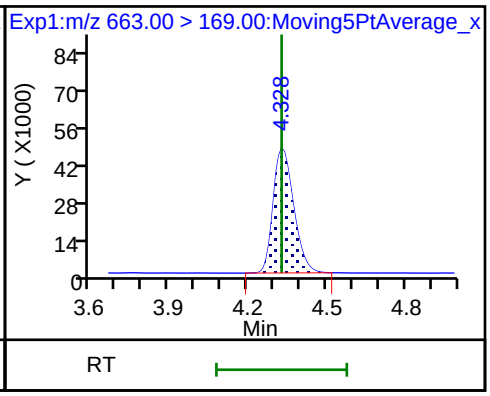
37 Perfluorododecanoic acid



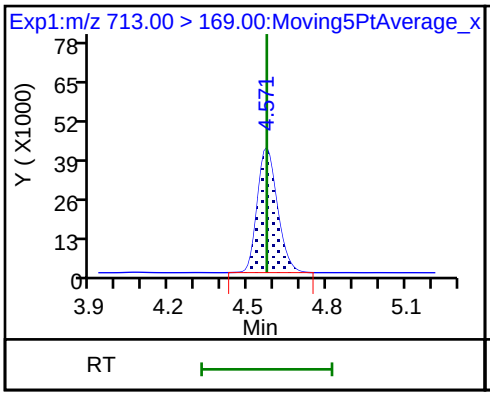
41 Perfluorotridecanoic acid



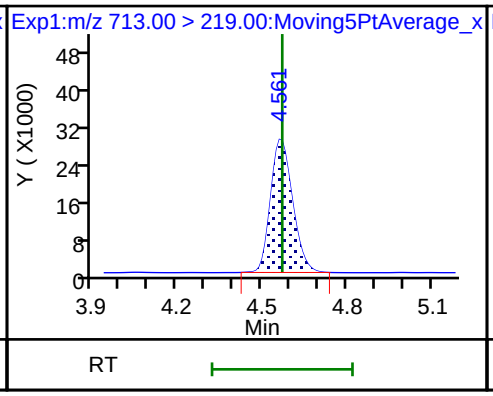
41 Perfluorotridecanoic acid



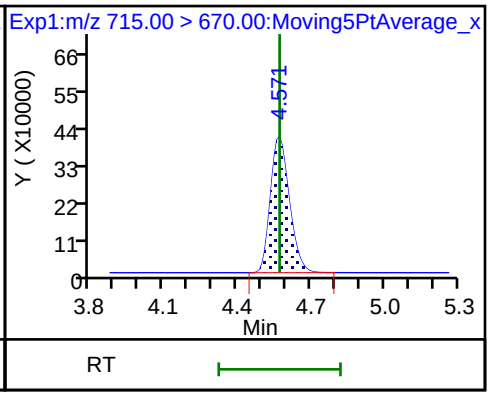
42 Perfluorotetradecanoic acid



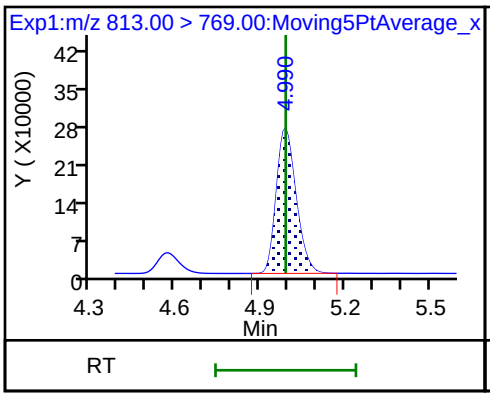
42 Perfluorotetradecanoic acid



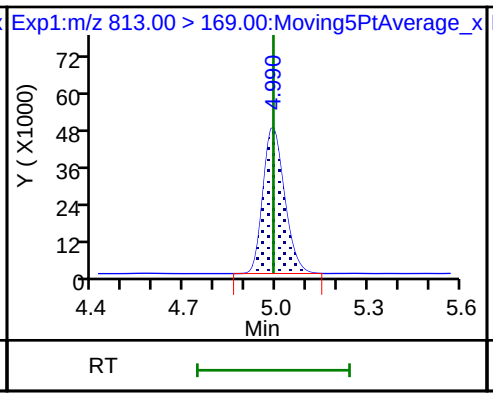
D 43 13C2-PFTeDA



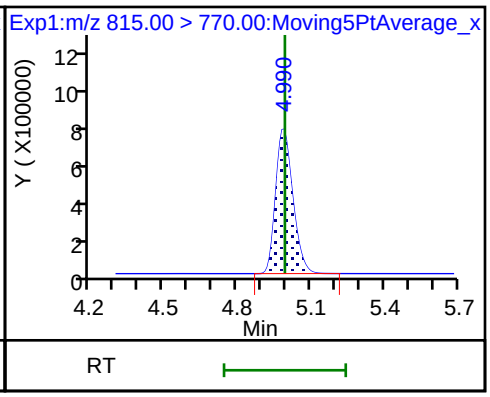
45 Perfluorohexadecanoic acid



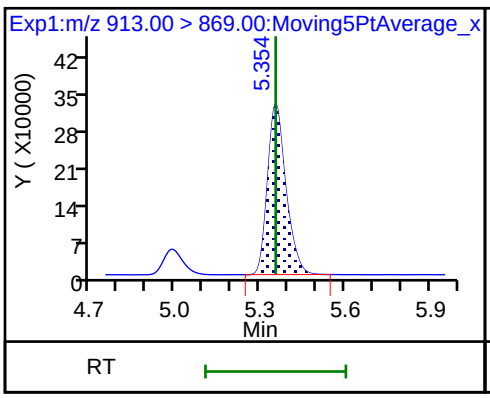
45 Perfluorohexadecanoic acid



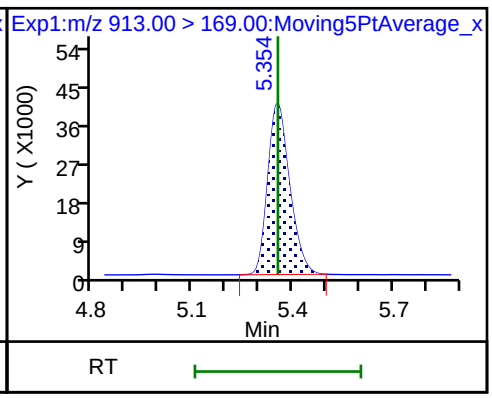
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-222981/1 Calibration Date: 05/13/2018 17:12

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLB_014.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9362	0.9397		2.51	2.50	0.4	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.182	1.137		2.40	2.50	-3.8	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.92	77.55		2.17	2.21	-1.7	50.0
4:2 FTS	AveID	13.71	13.81		2.35	2.34	0.8	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.003	0.9553		2.38	2.50	-4.8	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.41	64.73		2.22	2.35	-5.4	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.081	1.032		2.39	2.50	-4.6	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	1.098		2.20	2.28	-3.3	40.0
6:2FTS	AveID	1.657	1.801		2.58	2.37	8.7	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.124		2.43	2.50	-2.7	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.307	1.340		2.44	2.38	2.5	50.0
Perfluorononanoic acid (PFNA)	AveID	1.018	1.095		2.69	2.50	7.6	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.097	1.129		2.39	2.32	2.9	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9929	1.019		2.57	2.50	2.7	40.0
8:2FTS	AveID	1.230	1.283		2.50	2.40	4.3	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7856	0.7941		2.43	2.40	1.1	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.025	0.9851		2.40	2.50	-3.9	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.036	1.054		2.54	2.50	1.8	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6597	0.7055		2.58	2.41	6.9	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9798	0.9582		2.44	2.50	-2.2	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7874	0.7438		2.36	2.50	-5.5	40.0
Perfluorododecanoic acid (PFDoA)	AveID	1.045	1.056		2.53	2.50	1.0	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.039	1.082		2.60	2.50	4.1	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2662	0.2539		2.38	2.50	-4.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9289		2.46	2.50	-1.6	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.025	1.069		2.61	2.50	4.3	50.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	AveID	2.668				2.36		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	AveID	1.808				2.33		
Adona	AveID	3.248				2.50		

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-222981/1 Calibration Date: 05/13/2018 17:12

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLB_014.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA (GenX)	L2ID					2.50	-100.0*	40.0
13C4 PFBA	Ave	1.615	1.497		2.32	2.50	-7.3	50.0
13C5 PFPeA	Ave	1.027	0.9814		2.39	2.50	-4.4	50.0
13C3-PFBS	Ave	0.0233	0.0237		2.36	2.33	1.6	50.0
M2-4:2FTS	Ave	0.1418	0.1413		2.33	2.34	-0.4	50.0
13C2 PFHxA	Ave	1.081	1.064		2.46	2.50	-1.6	50.0
13C4-PFHpA	Ave	0.996	0.9793		2.46	2.50	-1.6	50.0
18O2 PFHxS	Ave	1.300	1.230		2.24	2.37	-5.4	50.0
M2-6:2FTS	Ave	0.1940	0.1827		2.24	2.38	-5.8	40.0
13C4 PFOA	Ave	0.9419	0.9059		2.40	2.50	-3.8	50.0
13C4 PFOS	Ave	0.9331	0.8891		2.28	2.39	-4.7	50.0
13C5 PFNA	Ave	0.7942	0.7712		2.43	2.50	-2.9	50.0
13C8 FOSA	Ave	1.321	1.310		2.48	2.50	-0.8	50.0
M2-8:2FTS	Ave	0.2550	0.2479		2.33	2.40	-2.8	40.0
13C2 PFDA	Ave	0.6933	0.6530		2.35	2.50	-5.8	50.0
d3-NMeFOSAA	Ave	0.3041	0.3036		2.50	2.50	-0.1	50.0
d5-NEtFOSAA	Ave	0.3327	0.3135		2.36	2.50	-5.8	50.0
13C2 PFUnA	Ave	0.5669	0.5493		2.42	2.50	-3.1	50.0
13C2 PFDoA	Ave	0.5911	0.5702		2.41	2.50	-3.5	50.0
13C2-PFTeDA	Ave	0.6436	0.6290		2.44	2.50	-2.3	50.0
13C2-PFHxDA	Ave	1.025	1.094		2.67	2.50	6.7	50.0
13C3 HFPO-DA	Ave	0.0584			0.000000	2.50		

FORM VII 537 (modified)

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_014.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2018 17:12:21 ALS Bottle#: 27 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 11:41:00 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 11:41:00

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.458	0.0	1.000	5336630	2.51		100	4447	
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.458	0.0	1.000	5679351	2.32		92.7	47098	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.729	0.0	1.000	4232341	2.40		96.2	2120	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.729	0.0	0.562	3723210	2.39		95.6	66006	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.766	0.0	1.000	6155282	2.17		98.3	22306	
298.90 > 99.00	1.766	1.766	0.0	1.000	2505115		2.46(1.25-3.74)		14678	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.766	0.0	1.000	83500	2.36		102	705	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.981	1.981	0.0	1.000	1158152	2.35		101	67490	
D 60 M2-4:2FTS										
329.00 > 81.00	1.981	1.981	0.0	1.000	500695	2.33		99.6	7326	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.015	0.0	1.000	3856970	2.38		95.2	6822	
313.00 > 119.00	2.015	2.015	0.0	1.000	360807		10.69(5.03-15.10)		6941	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.015	0.0	1.000	4037311	2.46		98.4	87020	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.038	2.038	0.0	1.000	5451284	2.22		94.6	57850	
349.00 > 99.00	2.038	2.038	0.0	1.000	2021279		2.70(1.36-4.07)		22963	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.346	2.346	0.0	1.000	3834162	2.39		95.4	6730	
363.00 > 169.00	2.346	2.346	0.0	1.000	1561398		2.46(1.13-3.40)		13237	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.346	0.0	1.000	3715339	2.46		98.4	85040	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.359	2.359	0.0	1.000	4660750	2.20		96.7	27348	
399.00 > 99.00	2.359	2.359	0.0	1.000	1543954		3.02(1.50-4.49)		6462	
D 11 18O2 PFHxS										
403.00 > 84.00	2.359	2.359	0.0	1.000	4413925	2.24		94.6	54153	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.000	1184041	2.58		109	7306	
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.683	0.0	1.000	658645	2.24		94.2	17047	
* 62 13C2-PFOA										
415.00 > 370.00	2.706	2.706	0.0		3793936	2.50			55840	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.706	2.706	0.0	1.000	3864014	2.43		97.3	2133	
413.00 > 169.00	2.706	2.706	0.0	1.000	2018268		1.91(0.84-2.52)		8287	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.713	0.0	1.000	4301931	2.44		102	32110	
449.00 > 99.00	2.713	2.713	0.0	1.000	1130044		3.81(1.94-5.82)		11721	
D 14 13C4 PFOA										
417.00 > 372.00	2.706	2.706	0.0	1.000	3436765	2.40		96.2	59300	
20 Perfluorononanoic acid										
463.00 > 419.00	3.078	3.078	0.0	1.000	3203850	2.69		108	7972	
463.00 > 169.00	3.086	3.078	0.008	1.003	725835		4.41(1.90-5.69)		24549	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.078	3.078	0.0	1.000	3533064	2.39		103	18468	
499.00 > 99.00	3.078	3.078	0.0	1.000	785883		4.50(2.31-6.93)		8048	
D 19 13C5 PFNA										
468.00 > 423.00	3.078	3.078	0.0	1.000	2925975	2.43		97.1	50065	
D 18 13C4 PFOS										
503.00 > 80.00	3.078	3.078	0.0	1.000	3224689	2.28		95.3	19444	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.414	3.414	0.0	1.000	5067711	2.57		103	51605	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.433	3.433	0.0	1.000	2571317	2.43		101	23569	
549.00 > 99.00	3.433	3.433	0.0	1.000	971514		2.65(1.33-3.97)		12473	
D 21 13C8 FOSA										
506.00 > 78.00	3.414	3.414	0.0	1.000	4971504	2.48		99.2	56683	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.433	3.433	0.0	1.000	1156498	2.50		104	21120	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.442	3.442	0.0	1.000	2440611	2.40		96.1	15357	
513.00 > 169.00	3.442	3.442	0.0	1.000	428753		5.69(2.36-7.09)		2033	
D 26 M2-8:2FTS										
529.00 > 81.00	3.433	3.433	0.0	1.000	901172	2.33		97.2	8804	
D 23 13C2 PFDA										
515.00 > 470.00	3.442	3.442	0.0	1.000	2477502	2.35		94.2	31463	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.605	3.605	0.0	1.000	1214393	2.54		102	10024	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.605	3.605	0.0	1.000	1151937	2.50		99.9	26070	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.759	3.759	0.0	1.000	2294083	2.58		107	20061	
599.00 > 99.00	3.759	3.759	0.0	1.000	789500		2.91(1.39-4.16)		20884	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.780	3.780	0.0	1.000	1550020	2.36		94.5	5792	
563.00 > 169.00	3.780	3.780	0.0	1.000	430622		3.60(2.12-6.36)		12584	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.780	3.780	0.0	1.003	1139666	2.44		97.8	25140	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.769	3.769	0.0	1.000	1189412	2.36		94.2	3020	
D 30 13C2 PFUnA										
565.00 > 520.00	3.780	3.780	0.0	1.000	2083984	2.42		96.9	53420	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.069	4.069	0.0	1.000	2283195	2.53		101	1450	
613.00 > 169.00	4.069	4.069	0.0	1.000	580456		3.93(2.13-6.40)		8859	
D 36 13C2 PFDoA										
615.00 > 570.00	4.069	4.069	0.0	1.000	2163111	2.41		96.5	19002	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.339	4.339	0.0	1.000	2340071	2.60		104	897	
663.00 > 169.00	4.339	4.339	0.0	1.000	749496		3.12(1.25-3.76)		8484	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.572	4.572	0.0	1.000	605924	2.38		95.4	6992	
713.00 > 219.00	4.572	4.572	0.0	1.000	424490		1.43(0.71-2.13)		7228	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.572	4.572	0.0	1.000	2386285	2.44		97.7	14730	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.990	4.990	0.0	1.000	3853787	2.46		98.4	690	
813.00 > 169.00	4.990	4.990	0.0	1.000	625143		6.16(2.86-8.58)		6098	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.990	4.990	0.0	1.000	4148735	2.67		107	11470	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.355	5.355	0.0	1.000	4435164	2.61		104	673	
913.00 > 169.00	5.355	5.355	0.0	1.000	542475		8.18(3.83-11.48)		4563	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 11:41:01 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_014.d

Injection Date: 13-May-2018 17:12:21 Instrument ID: A8_N

Lims ID: CCV L5

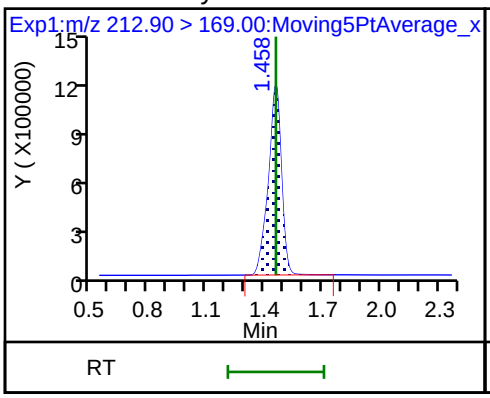
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 27 Worklist Smp#: 1

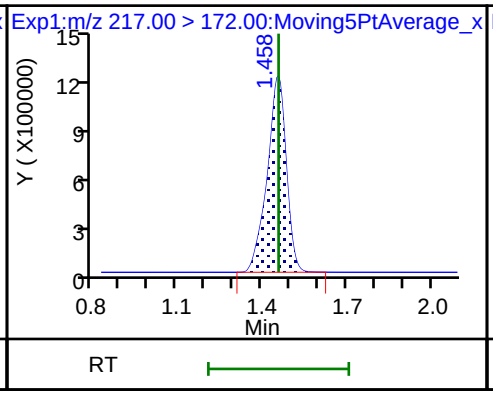
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

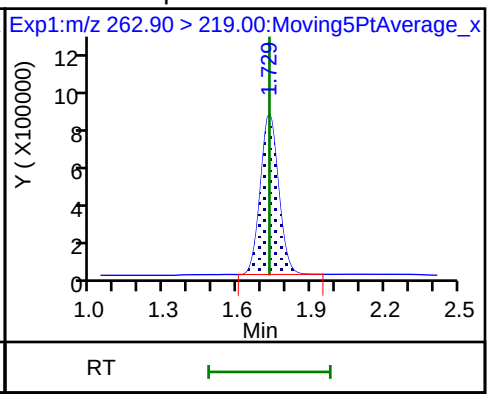
2 Perfluorobutyric acid



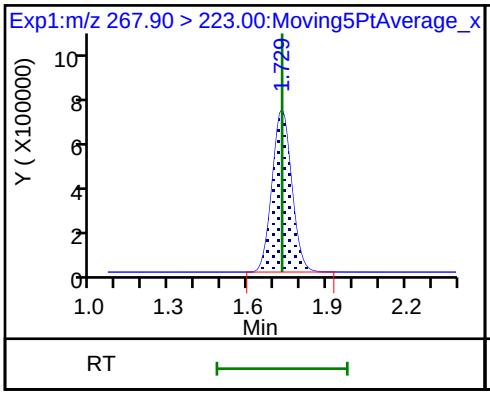
D 1 13C4 PFBA



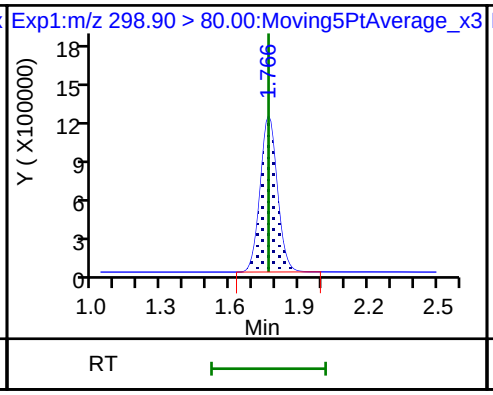
4 Perfluoropentanoic acid



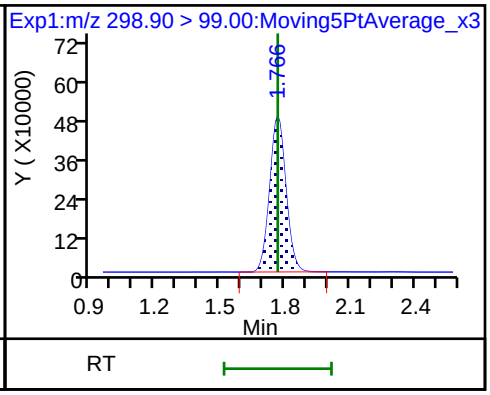
D 3 13C5-PFPeA



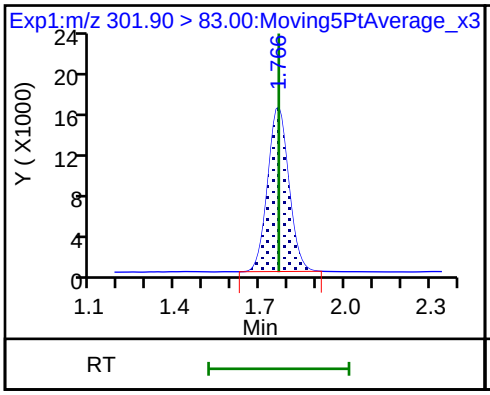
5 Perfluorobutanesulfonic acid



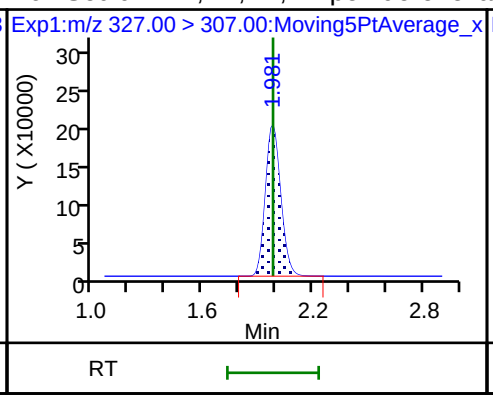
5 Perfluorobutanesulfonic acid



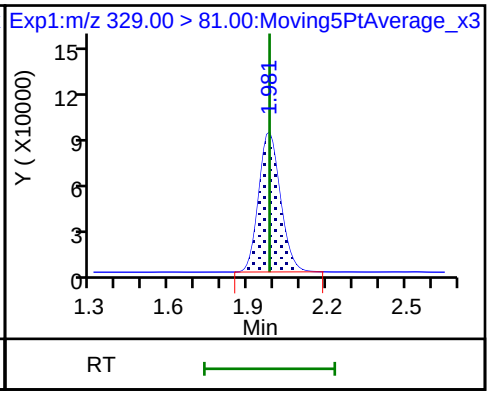
D 47 13C3-PFBS



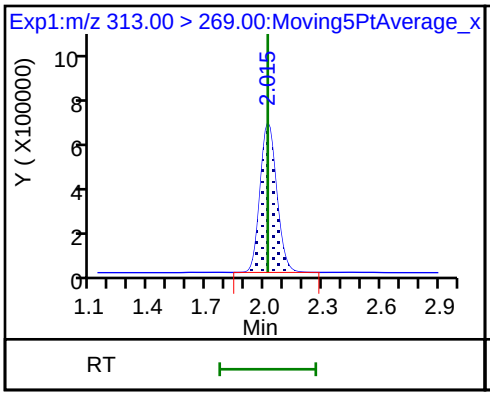
61 Sodium 1H,1H,2H,2H-perfluorohexane



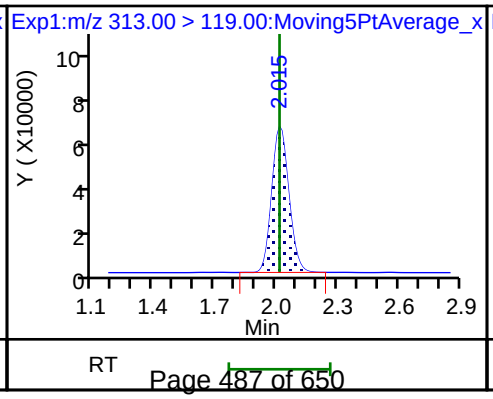
D 60 M2-4:2FTS



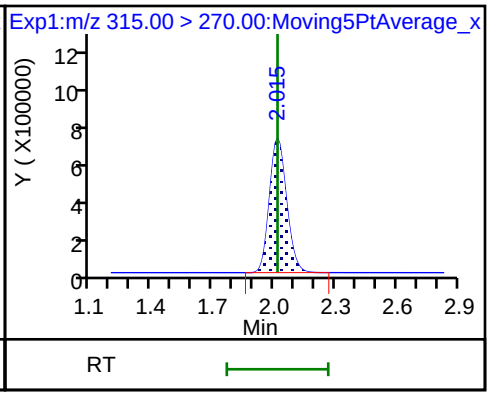
6 Perfluorohexanoic acid



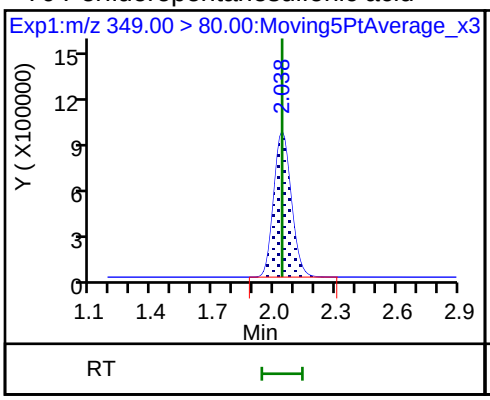
6 Perfluorohexanoic acid



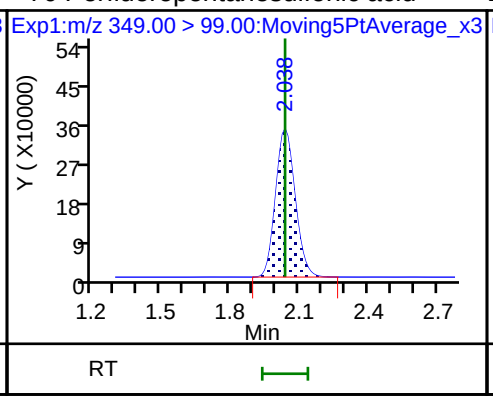
D 7 13C2 PFHxA



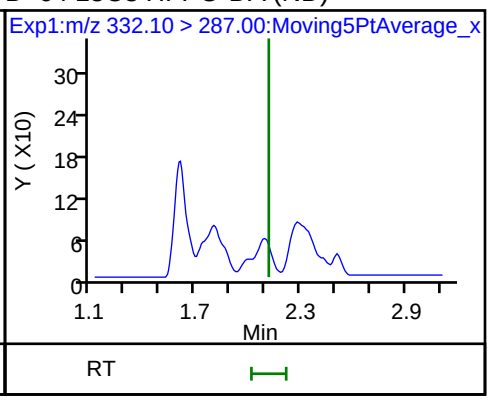
70 Perfluoropentanesulfonic acid



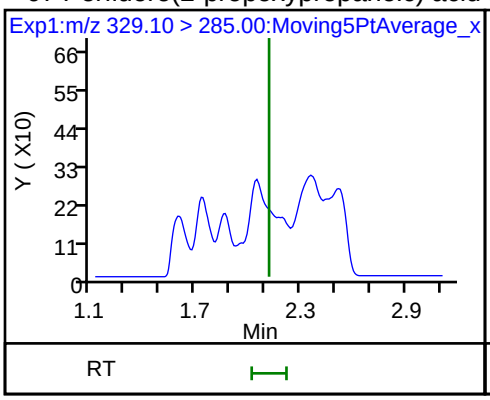
70 Perfluoropentanesulfonic acid



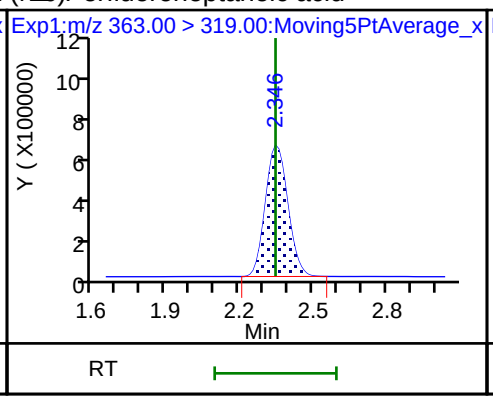
D 64 13C3 HFPO-DA (ND)



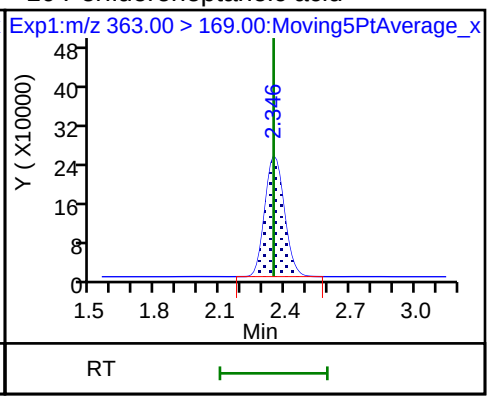
67 Perfluoro(2-propoxypropanoic) acid (ND)



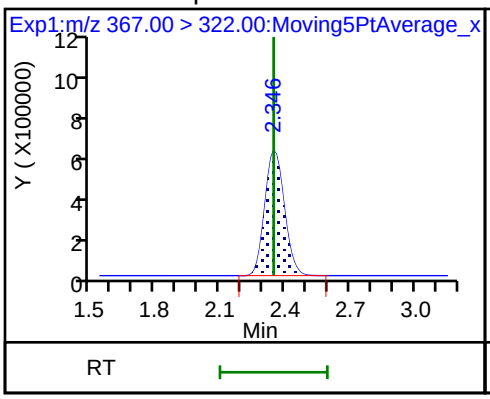
10 Perfluoroheptanoic acid



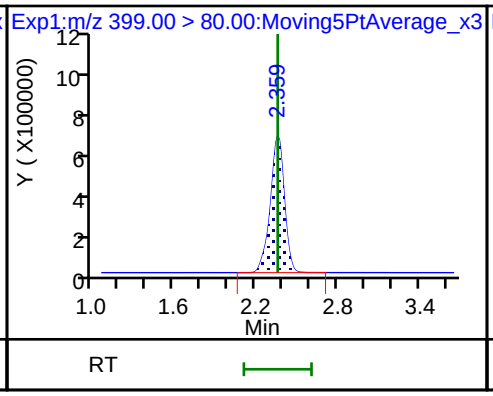
10 Perfluoroheptanoic acid



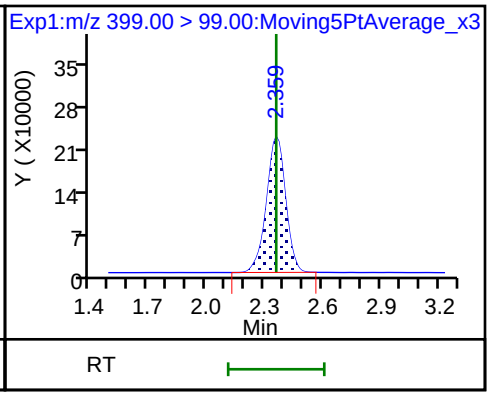
D 9 13C4-PFHpA



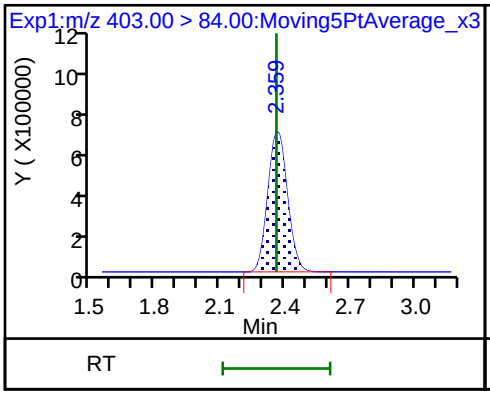
8 Perfluorohexanesulfonic acid



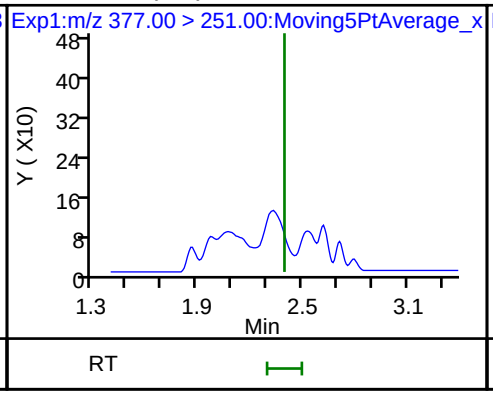
8 Perfluorohexanesulfonic acid



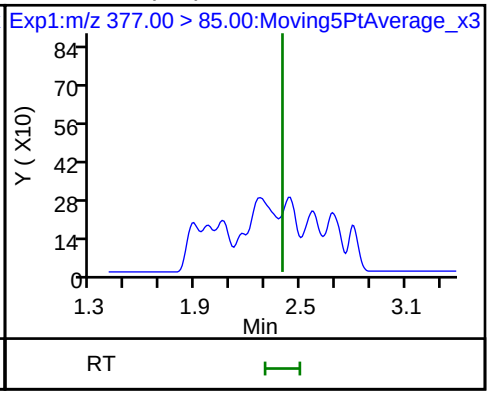
D 11 18O2 PFHxS



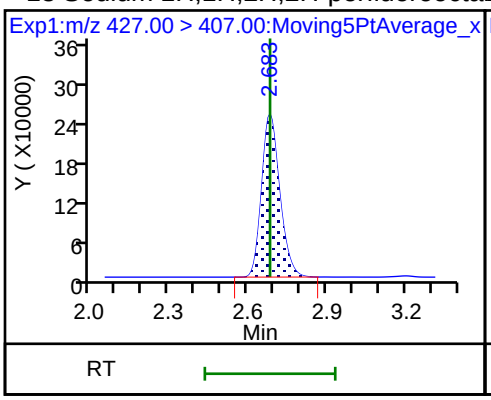
65 Adona (ND)



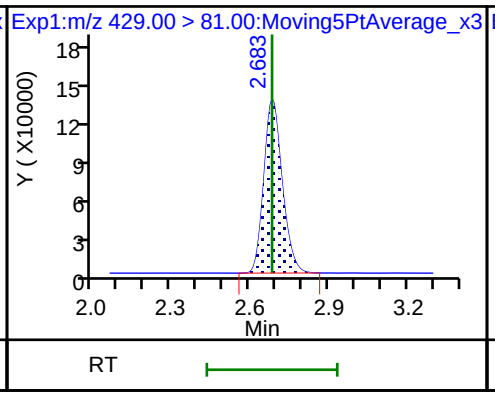
65 Adona (ND)



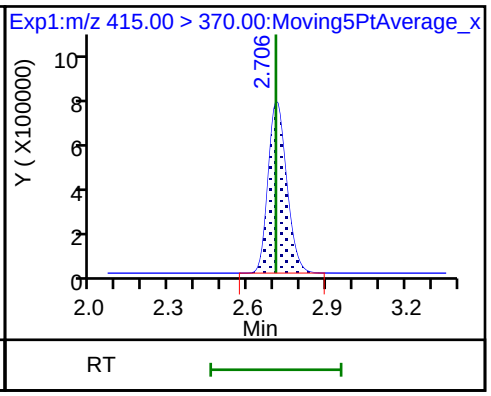
13 Sodium 1H,1H,2H,2H-perfluorooctane



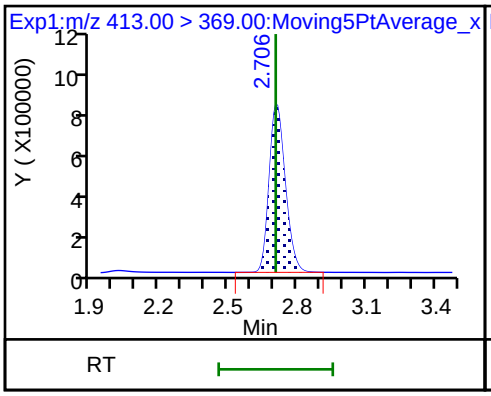
D 12 M2-6:2FTS



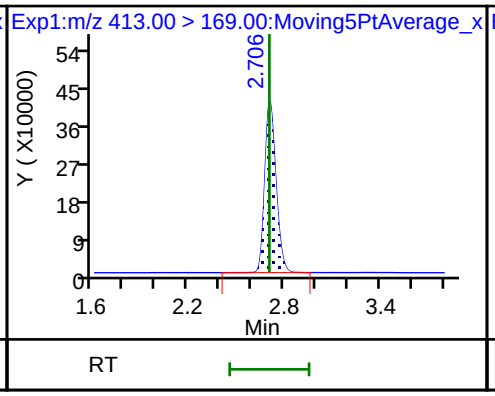
* 62 13C2-PFOA



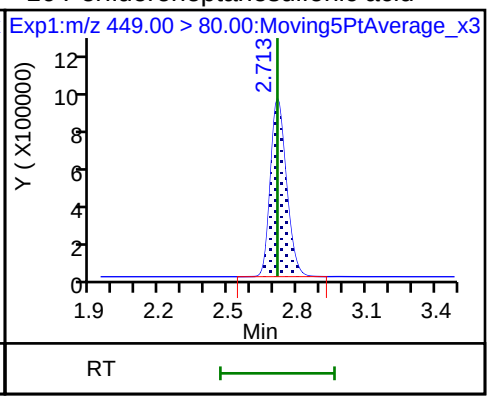
15 Perfluorooctanoic acid



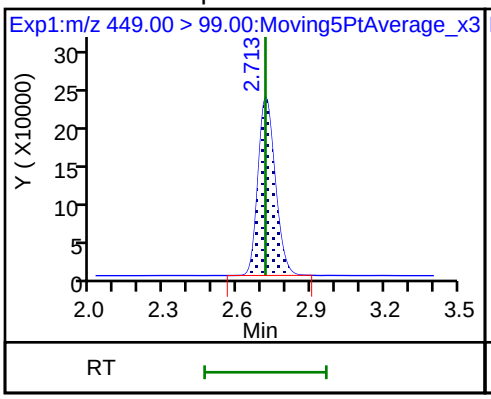
15 Perfluorooctanoic acid



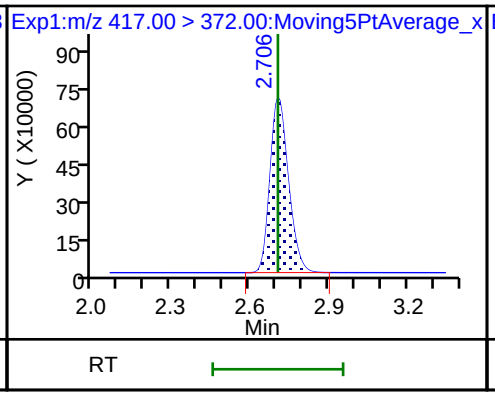
16 Perfluoroheptanesulfonic acid



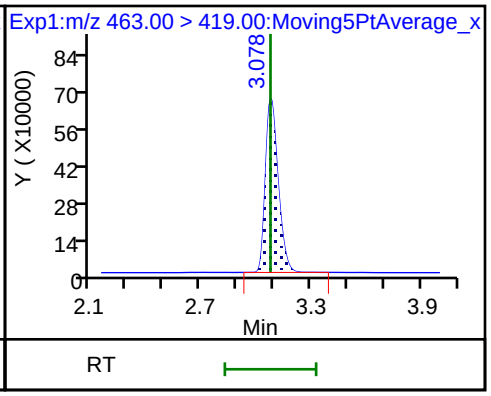
16 Perfluoroheptanesulfonic acid



D 14 13C4 PFOA



20 Perfluorononanoic acid



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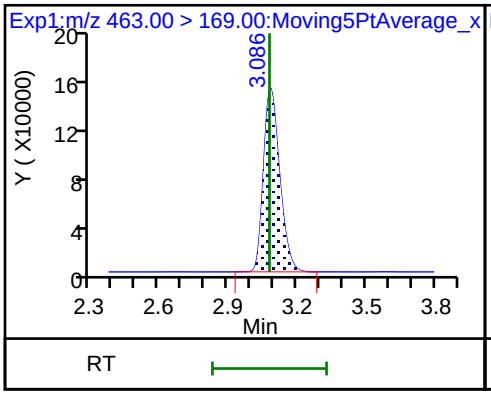
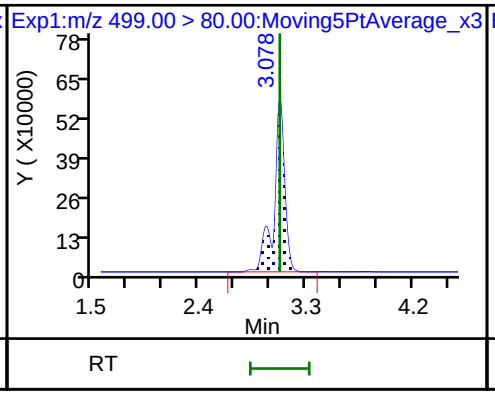
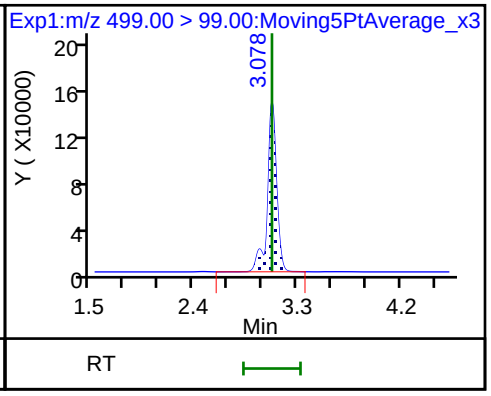


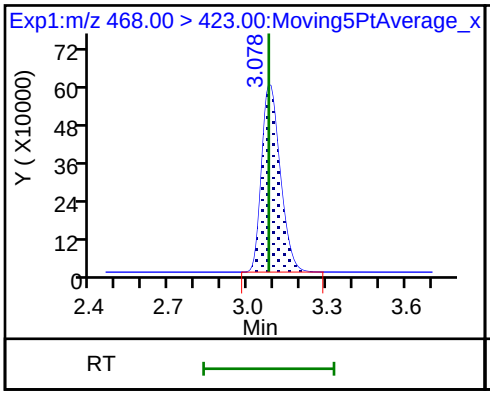
17 Perfluorooctane sulfonic acid



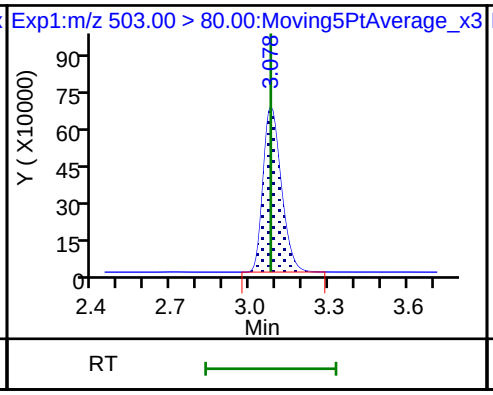
17 Perfluorooctane sulfonic acid



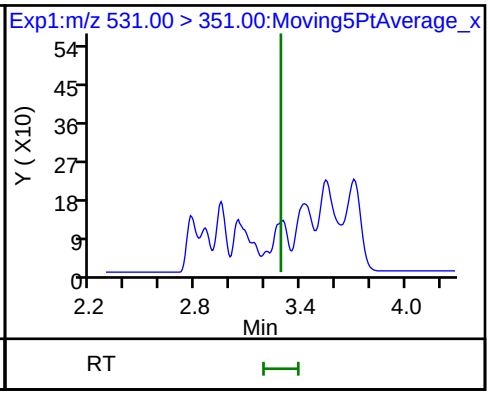
D 19 13C5 PFNA



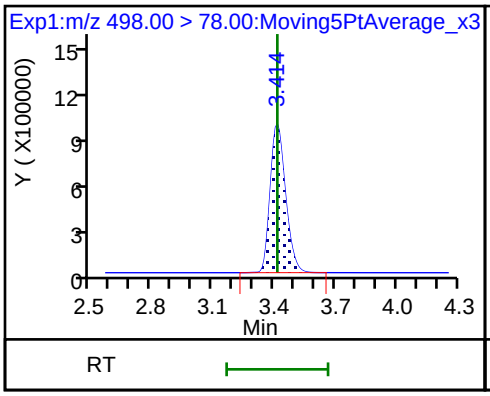
D 18 13C4 PFOS



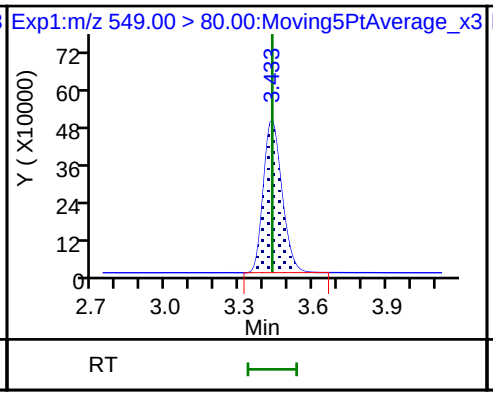
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



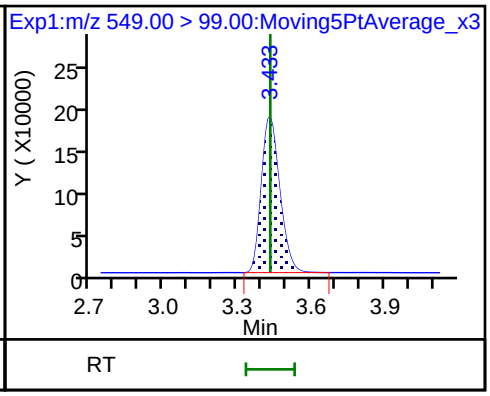
22 Perfluorooctane Sulfonamide



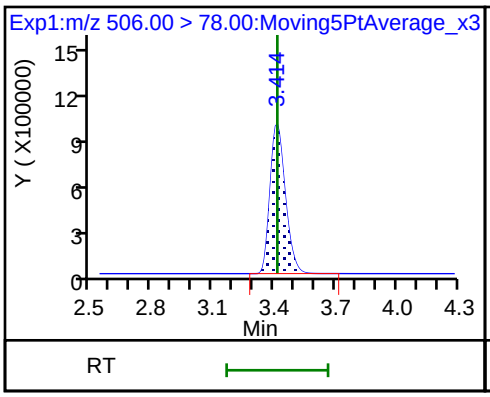
68 Perfluorononanesulfonic acid



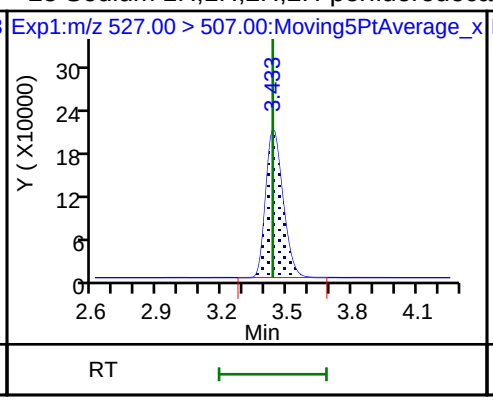
68 Perfluorononanesulfonic acid



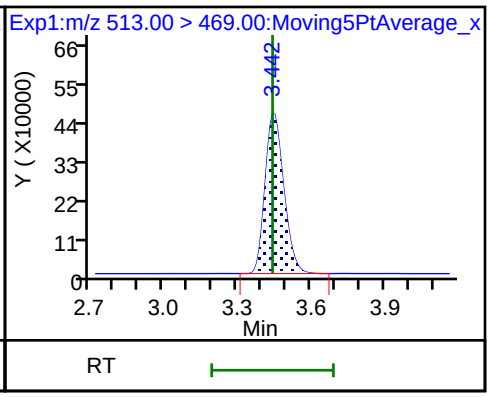
D 21 13C8 FOSA



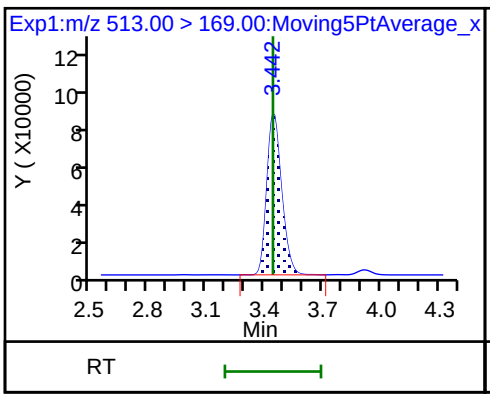
25 Sodium 1H,1H,2H,2H-perfluorodecane



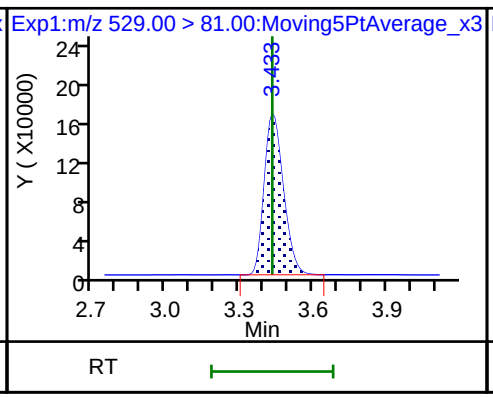
24 Perfluorodecanoic acid



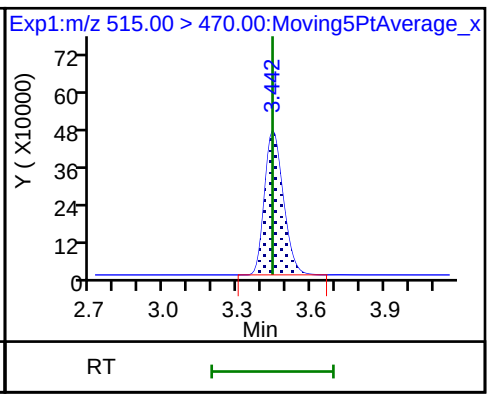
24 Perfluorodecanoic acid



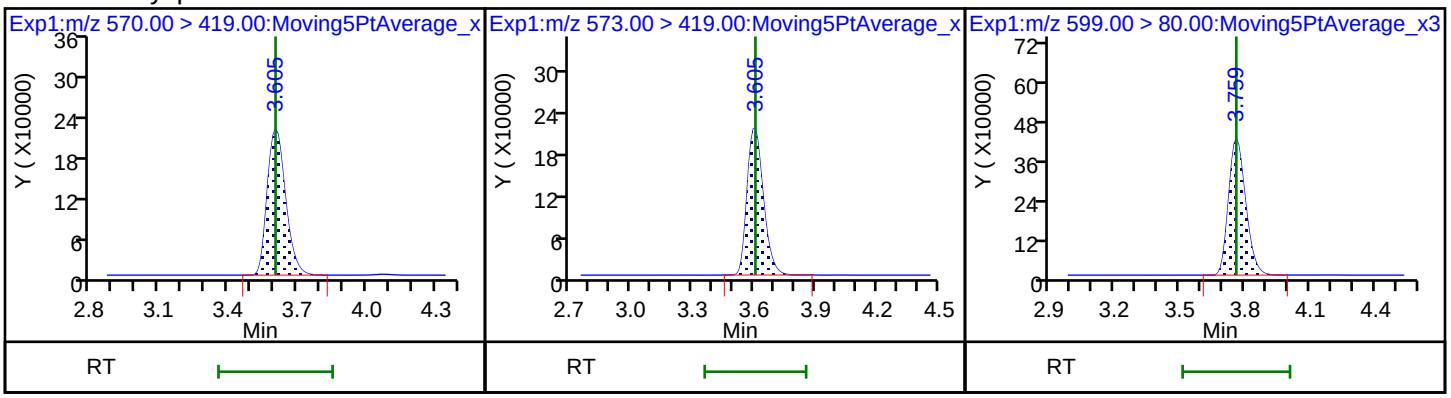
D 26 M2-8:2FTS



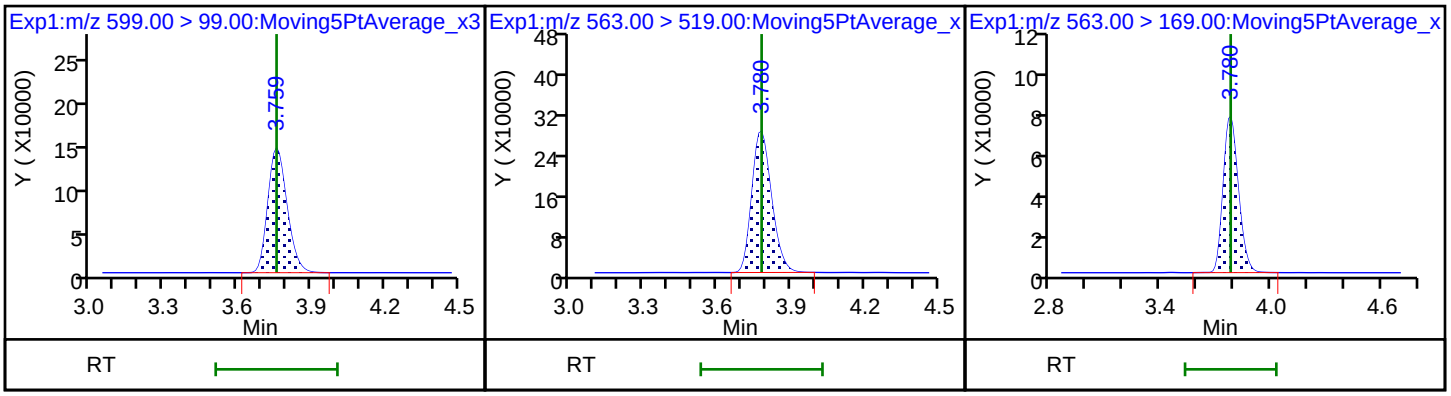
D 23 13C2 PFDA



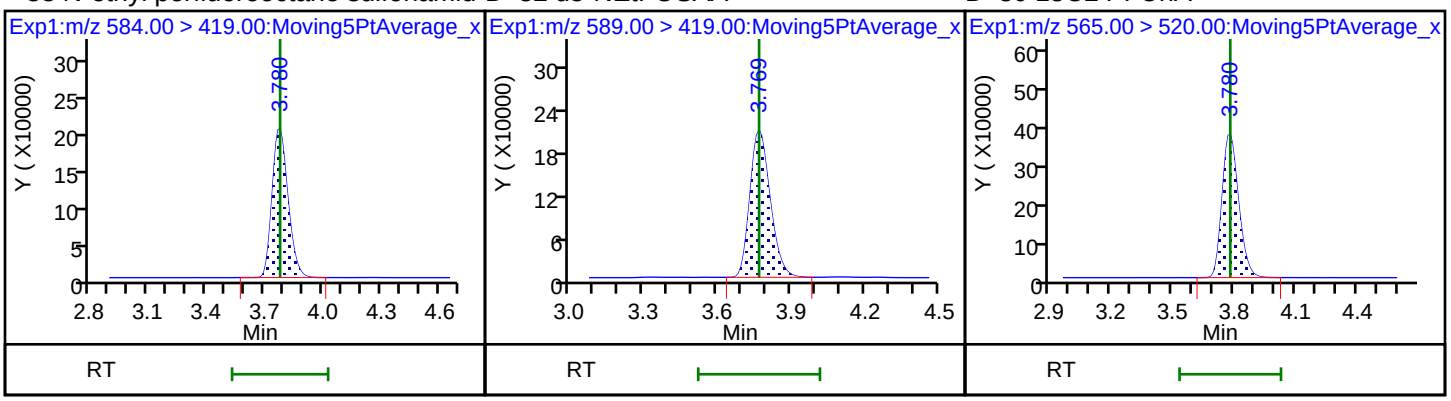
28 N-methyl perfluorooctane sulfonamiD 27 d3-NMeFOSAA 29 Perfluorodecane Sulfonic acid



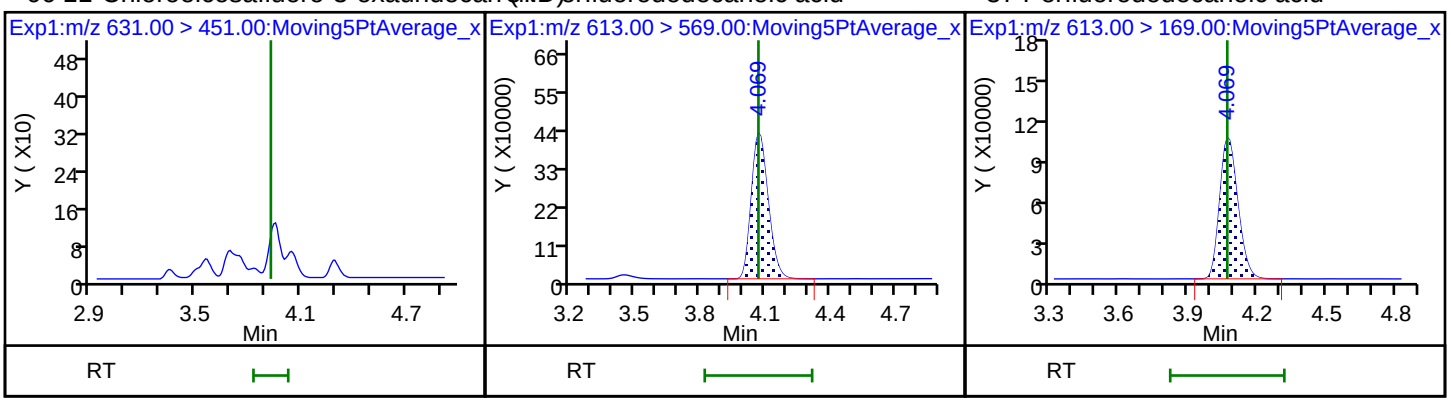
29 Perfluorodecane Sulfonic acid 31 Perfluoroundecanoic acid 31 Perfluoroundecanoic acid



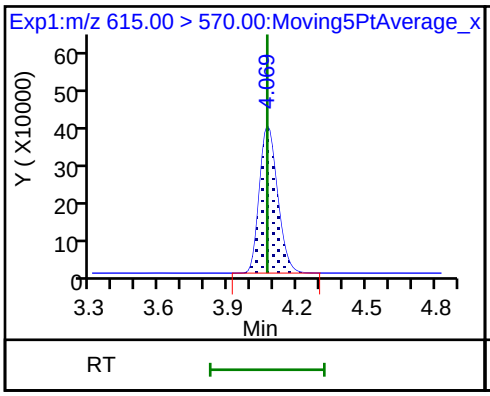
33 N-ethyl perfluorooctane sulfonamid D 32 d5-NEtFOSAA D 30 13C2 PFUnA



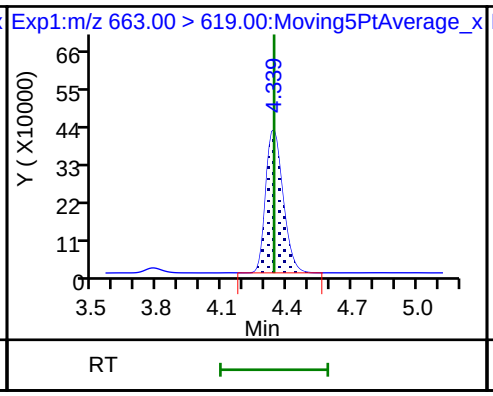
66 11-Chloroeicosafluoro-3-oxaundecan 3(ND) 37 Perfluorododecanoic acid 37 Perfluorododecanoic acid



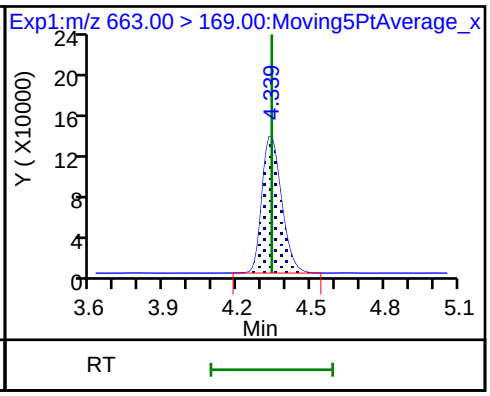
D 36 13C2 PFDoA



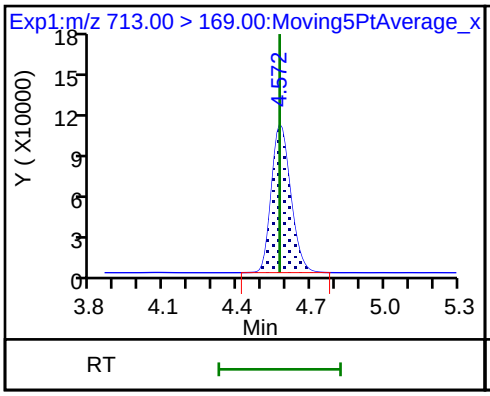
41 Perfluorotridecanoic acid



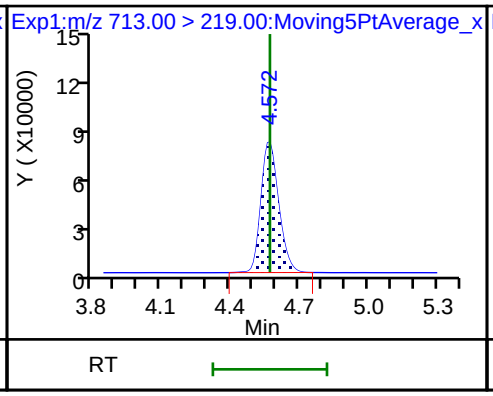
41 Perfluorotridecanoic acid



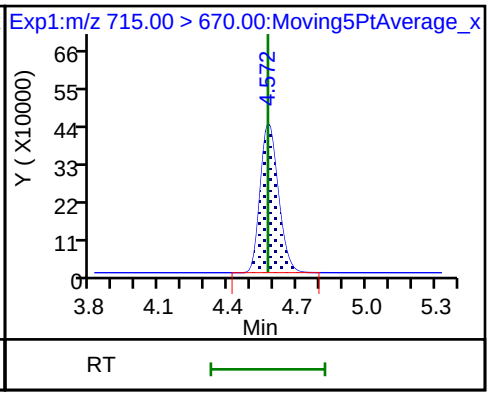
42 Perfluorotetradecanoic acid



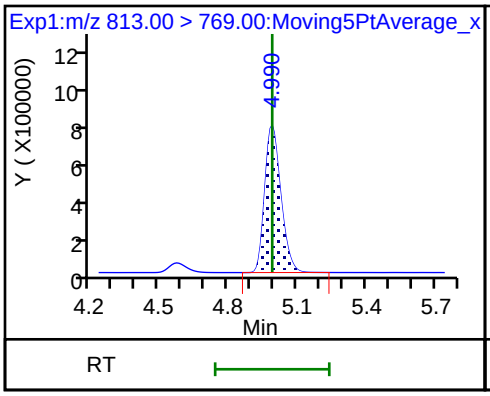
42 Perfluorotetradecanoic acid



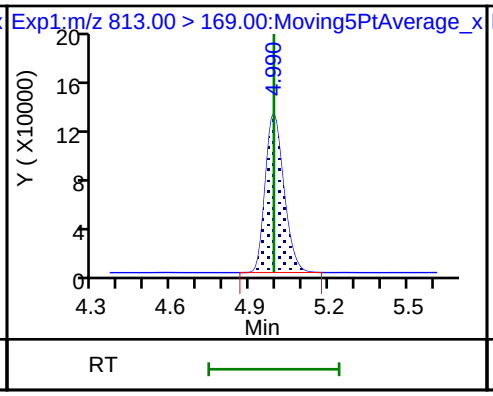
D 43 13C2-PFTeDA



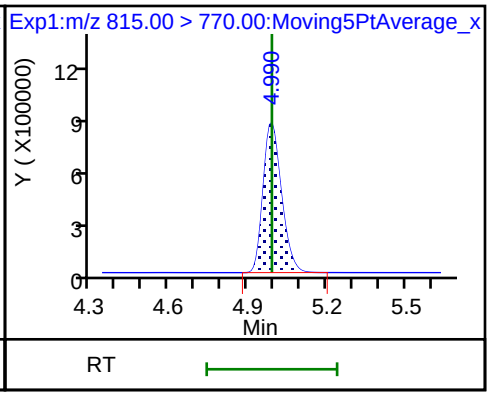
45 Perfluorohexadecanoic acid



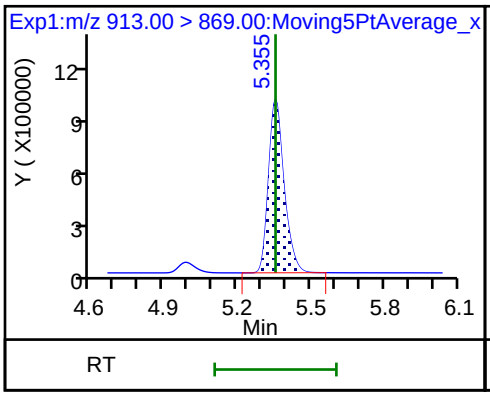
45 Perfluorohexadecanoic acid



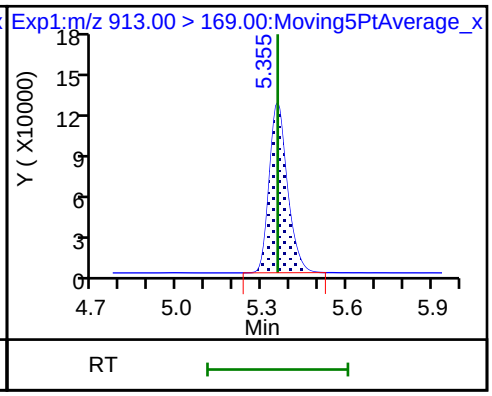
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-222981/12 Calibration Date: 05/13/2018 18:38

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLB_025.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9362	0.9178		0.980	1.00	-2.0	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.182	1.132		0.958	1.00	-4.2	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.92	75.40		0.845	0.884	-4.5	50.0
4:2 FTS	AveID	13.71	13.47		0.918	0.934	-1.7	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.003	0.9738		0.971	1.00	-2.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.41	64.01		0.878	0.938	-6.4	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.081	1.055		0.975	1.00	-2.5	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	0.9786		0.784	0.910	-13.8	40.0
6:2FTS	AveID	1.657	2.010		1.15	0.948	21.3	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.110		0.961	1.00	-3.9	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.307	1.289		0.939	0.952	-1.4	50.0
Perfluorononanoic acid (PFNA)	AveID	1.018	1.056		1.04	1.00	3.8	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.097	1.077		0.911	0.928	-1.8	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9929	0.9247		0.931	1.00	-6.9	40.0
8:2FTS	AveID	1.230	1.259		0.981	0.958	2.4	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7856	0.7475		0.913	0.960	-4.9	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.025	0.9741		0.950	1.00	-5.0	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.036	1.064		1.03	1.00	2.7	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6597	0.6361		0.930	0.964	-3.6	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9798	0.9060		0.925	1.00	-7.5	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7874	0.7122		0.904	1.00	-9.6	40.0
Perfluorododecanoic acid (PFDoA)	AveID	1.045	1.013		0.969	1.00	-3.1	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.039	1.062		1.02	1.00	2.2	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2662	0.2480		0.932	1.00	-6.8	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9355		0.980	1.00	-2.0	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.025	1.036		1.01	1.00	1.1	50.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	AveID	2.668				0.942		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	AveID	1.808				0.932		
Adona	AveID	3.248				1.00		

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-222981/12 Calibration Date: 05/13/2018 18:38

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLB_025.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA (GenX)	L2ID					1.00	-100.0*	40.0
13C4 PFBA	Ave	1.615	1.487		2.30	2.50	-7.9	50.0
13C5 PFPeA	Ave	1.027	0.9330		2.27	2.50	-9.2	50.0
13C3-PFBS	Ave	0.0233	0.0221		2.21	2.33	-4.9	50.0
M2-4:2FTS	Ave	0.1418	0.1293		2.13	2.34	-8.8	50.0
13C2 PFHxA	Ave	1.081	1.006		2.33	2.50	-7.0	50.0
13C4-PFHpA	Ave	0.996	0.9030		2.27	2.50	-9.3	50.0
18O2 PFHxS	Ave	1.300	1.225		2.23	2.37	-5.8	50.0
M2-6:2FTS	Ave	0.1940	0.1773		2.17	2.38	-8.6	40.0
13C4 PFOA	Ave	0.9419	0.8801		2.34	2.50	-6.6	50.0
13C4 PFOS	Ave	0.9331	0.8503		2.18	2.39	-8.9	50.0
13C5 PFNA	Ave	0.7942	0.7223		2.27	2.50	-9.1	50.0
13C8 FOSA	Ave	1.321	1.289		2.44	2.50	-2.4	50.0
M2-8:2FTS	Ave	0.2550	0.2501		2.35	2.40	-1.9	40.0
13C2 PFDA	Ave	0.6933	0.6452		2.33	2.50	-6.9	50.0
d3-NMeFOSAA	Ave	0.3041	0.2746		2.26	2.50	-9.7	50.0
d5-NEtFOSAA	Ave	0.3327	0.3179		2.39	2.50	-4.4	50.0
13C2 PFUnA	Ave	0.5669	0.5250		2.32	2.50	-7.4	50.0
13C2 PFDoA	Ave	0.5911	0.5585		2.36	2.50	-5.5	50.0
13C2-PFTeDA	Ave	0.6436	0.6317		2.45	2.50	-1.8	50.0
13C2-PFHxDA	Ave	1.025	1.034		2.52	2.50	0.9	50.0
13C3 HFPO-DA	Ave	0.0584			0.000000	2.50		

FORM VII 537 (modified)

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_025.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2018 18:38:18 ALS Bottle#: 26 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:23 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:41:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.452	1.452	0.0	1.000	1946888	0.9803		98.0	1320	
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.458	-0.006	1.000	5303151	2.30		92.1	46713	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.728	1.728	0.0	1.005	1506554	0.9581		95.8	774	
D 3 13C5-PFPeA										
267.90 > 223.00	1.719	1.729	-0.010	0.560	3326539	2.27		90.8	68186	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.765	0.0	1.005	2104940	0.8446		95.5	7261	
298.90 > 99.00	1.765	1.765	0.0	1.005	889556		2.37(1.25-3.74)		4609	
D 47 13C3-PFBS										
301.90 > 83.00	1.756	1.766	-0.010	1.000	73424	2.21		95.1	538	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.970	1.970	0.0	1.000	397263	0.9177		98.3	23656	
D 60 M2-4:2FTS										
329.00 > 81.00	1.970	1.981	-0.011	1.000	430647	2.13		91.2	6473	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.014	0.0	1.000	1396716	0.9707		97.1	2984	
313.00 > 119.00	2.014	2.014	0.0	1.000	130869		10.67(5.03-15.10)		1917	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	2.015	-0.001	1.000	3585900	2.33		93.0	105787	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.036	2.036	0.0	1.000	1896062	0.8776		93.6	23793	
349.00 > 99.00	2.025	2.036	-0.011	0.994	733477		2.59(1.36-4.07)		9174	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.345	2.345	0.0	1.000	1358441	0.9755		97.5	2671	
363.00 > 169.00	2.345	2.345	0.0	1.000	525943		2.58(1.13-3.40)		3523	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 9 13C4-PFHpA										
367.00 > 322.00	2.345	2.346	-0.001	1.000	3219694	2.27		90.7	57627	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.358	2.358	0.0	1.000	1556289	0.7843		86.2	9570	
399.00 > 99.00	2.358	2.358	0.0	1.000	545700		2.85(1.50-4.49)		2573	
D 11 18O2 PFHxS										
403.00 > 84.00	2.358	2.359	-0.001	1.000	4133122	2.23		94.2	56096	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.674	2.674	0.0	1.000	481867	1.15		121	3431	
D 12 M2-6:2FTS										
429.00 > 81.00	2.674	2.683	-0.009	1.000	600456	2.17		91.4	12431	
* 62 13C2-PFOA										
415.00 > 370.00	2.697	2.697	0.0		3565487	2.50			54435	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.697	2.697	0.0	1.000	1393888	0.9606		96.1	852	
413.00 > 169.00	2.697	2.697	0.0	1.000	737052		1.89(0.84-2.52)		3241	
D 14 13C4 PFOA										
417.00 > 372.00	2.697	2.706	-0.009	1.000	3138070	2.34		93.4	66337	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.704	2.704	0.0	1.000	1488372	0.9390		98.6	21276	
449.00 > 99.00	2.704	2.704	0.0	1.000	394802		3.77(1.94-5.82)		7643	
20 Perfluorononanoic acid										
463.00 > 419.00	3.069	3.069	0.0	1.000	1088009	1.04		104	2282	
463.00 > 169.00	3.069	3.069	0.0	1.000	268954		4.05(1.90-5.69)		14255	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.069	3.069	0.0	1.000	1211856	0.9113		98.2	6424	
499.00 > 99.00	3.069	3.069	0.0	1.000	279074		4.34(2.31-6.93)		2916	
D 19 13C5 PFNA										
468.00 > 423.00	3.069	3.078	-0.009	1.000	2575213	2.27		90.9	49994	
D 18 13C4 PFOS										
503.00 > 80.00	3.069	3.078	-0.009	1.000	2898220	2.18		91.1	25139	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.402	3.402	0.0	1.000	1699751	0.9314		93.1	23551	
D 21 13C8 FOSA										
506.00 > 78.00	3.402	3.414	-0.012	1.000	4595193	2.44		97.6	44731	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.421	3.421	0.0	1.000	870161	0.9134		95.1	9444	
549.00 > 99.00	3.421	3.421	0.0	1.000	319847		2.72(1.33-3.97)		3468	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.421	3.421	0.0	1.000	430246	0.9807		102	10160	
D 26 M2-8:2FTS										
529.00 > 81.00	3.421	3.433	-0.013	1.000	854354	2.35		98.1	9444	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.430	3.430	0.0	1.000	896330	0.9499		95.0	6238	
513.00 > 169.00	3.430	3.430	0.0	1.000	160960		5.57(2.36-7.09)		1640	
D 23 13C2 PFDA										
515.00 > 470.00	3.430	3.442	-0.012	1.000	2300376	2.33		93.1	37050	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.589	3.589	0.0	1.000	416738	1.03		103	4482	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.589	3.605	-0.016	1.000	979237	2.26		90.3	22234	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.743	3.743	0.0	1.000	743583	0.9295		96.4	12297	
599.00 > 99.00	3.743	3.743	0.0	1.000	259604		2.86(1.39-4.16)		4734	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.753	3.769	-0.016	1.000	1133489	2.39		95.6	3059	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.763	3.763	0.0	1.000	533221	0.9045		90.4	2776	
563.00 > 169.00	3.763	3.763	0.0	1.000	149758		3.56(2.12-6.36)		4405	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.763	3.763	0.0	1.003	410795	0.9247		92.5	9222	
D 30 13C2 PFUnA										
565.00 > 520.00	3.763	3.780	-0.017	1.000	1871824	2.32		92.6	48379	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.061	4.061	0.0	1.000	806542	0.9690		96.9	536	
613.00 > 169.00	4.061	4.061	0.0	1.000	199347		4.05(2.13-6.40)		3307	
D 36 13C2 PFDoA										
615.00 > 570.00	4.061	4.069	-0.008	1.000	1991322	2.36		94.5	13068	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.319	4.319	0.0	1.000	845780	1.02		102	361	
663.00 > 169.00	4.319	4.319	0.0	1.000	274216		3.08(1.25-3.76)		4269	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.562	4.562	0.0	1.000	223448	0.9317		93.2	3464	
713.00 > 219.00	4.552	4.562	-0.010	0.998	168502		1.33(0.71-2.13)		3548	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2252400	2.45		98.2	13191	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.983	4.983	0.0	1.002	1380081	0.9796		98.0	311	
813.00 > 169.00	4.974	4.983	-0.009	1.000	228231		6.05(2.86-8.58)		2348	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.974	4.990	-0.016	1.000	3687925	2.52		101	12289	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.342	5.342	0.0	1.000	1528705	1.01		101	274	
913.00 > 169.00	5.342	5.342	0.0	1.000	187969		8.13(3.83-11.48)		2085	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 10:44:25 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_025.d

Injection Date: 13-May-2018 18:38:18 Instrument ID: A8_N

Lims ID: CCV L4

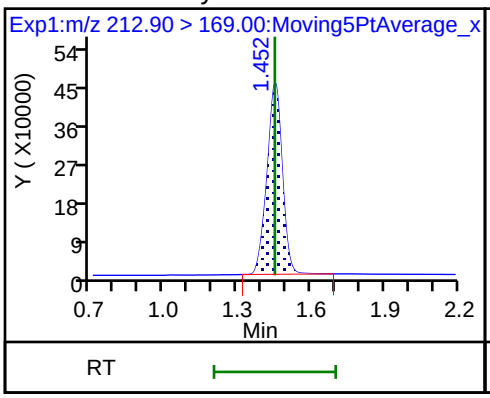
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 26 Worklist Smp#: 12

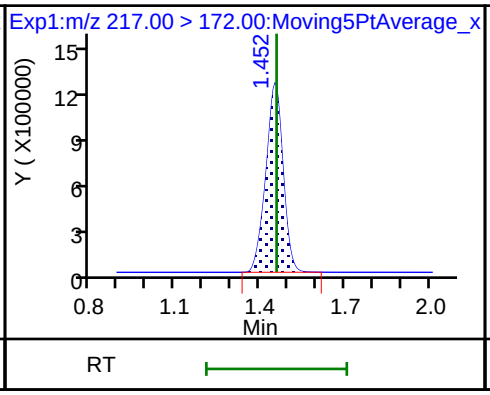
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

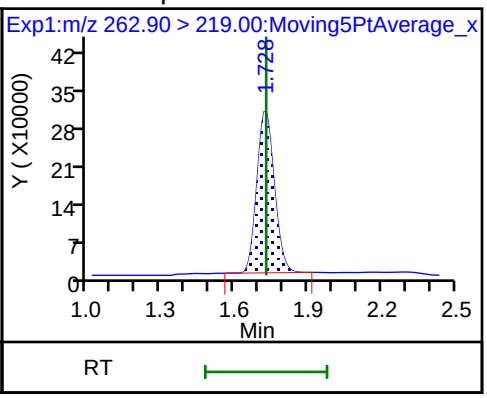
2 Perfluorobutyric acid



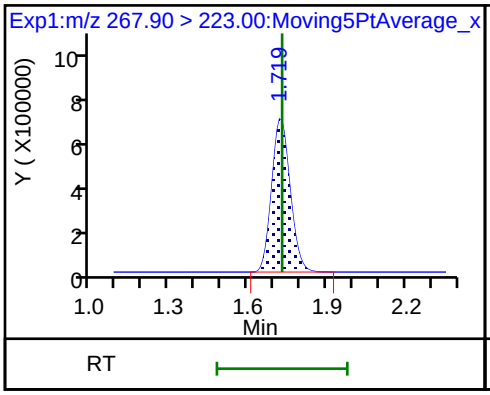
D 1 13C4 PFBA



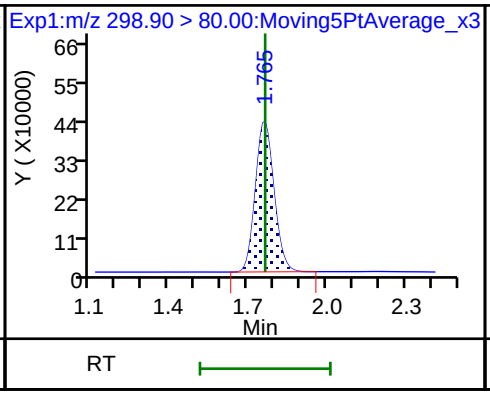
4 Perfluoropentanoic acid



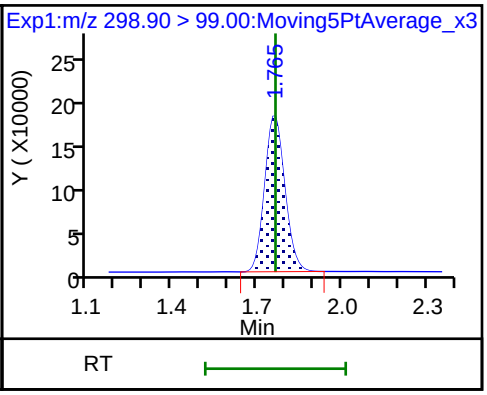
D 3 13C5-PFPeA



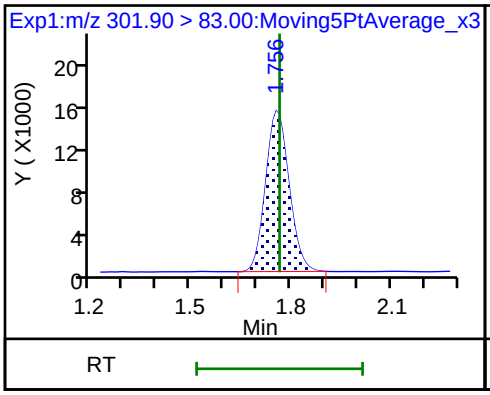
5 Perfluorobutanesulfonic acid



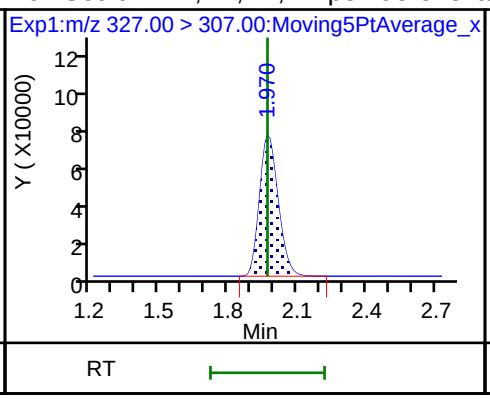
5 Perfluorobutanesulfonic acid



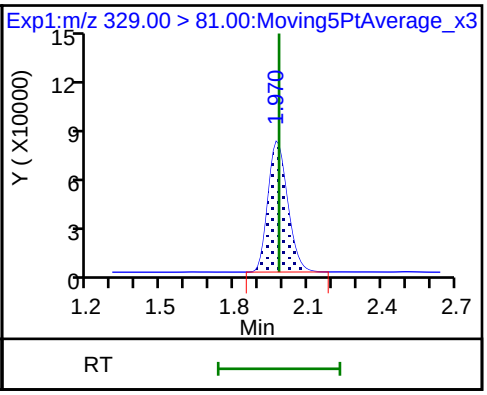
D 47 13C3-PFBS



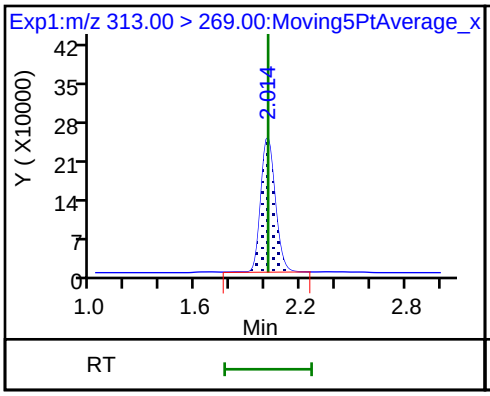
61 Sodium 1H,1H,2H,2H-perfluorohexane



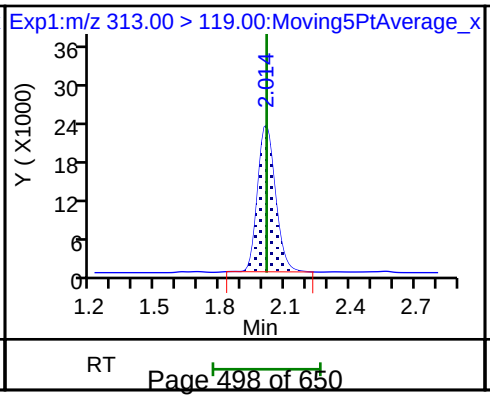
D 60 M2-4:2FTS



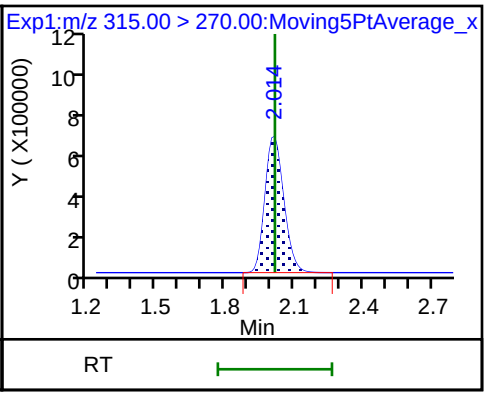
6 Perfluorohexanoic acid



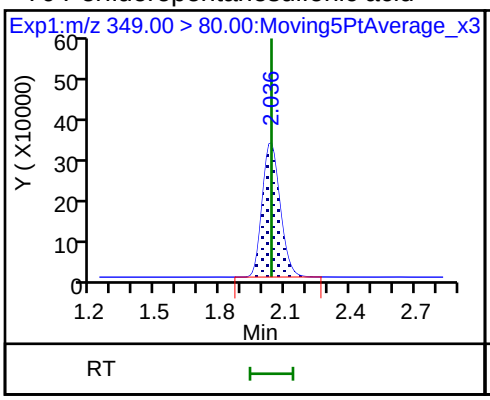
6 Perfluorohexanoic acid



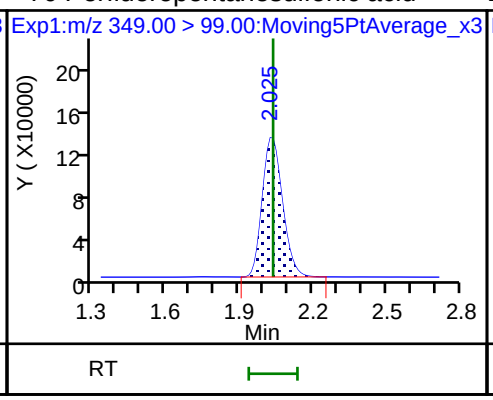
D 7 13C2 PFHxA



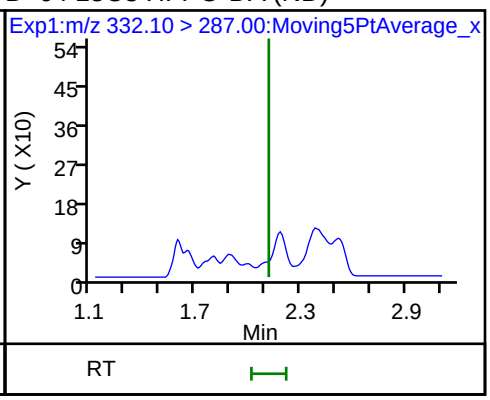
70 Perfluoropentanesulfonic acid



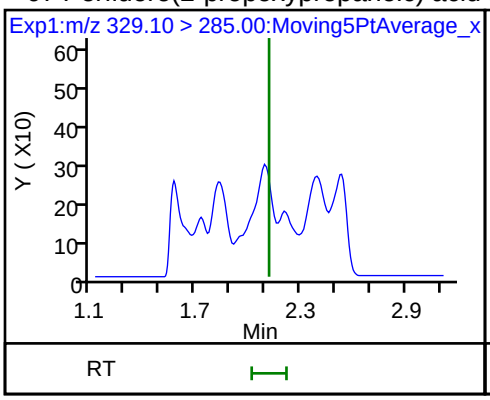
70 Perfluoropentanesulfonic acid



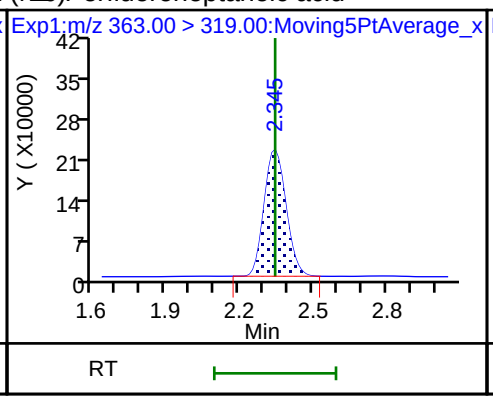
D 64 13C3 HFPO-DA (ND)



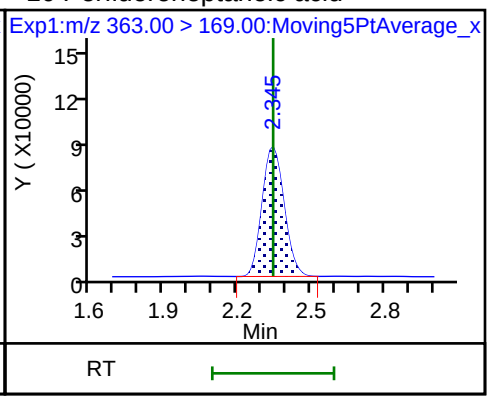
67 Perfluoro(2-propoxypropanoic) acid (ND)



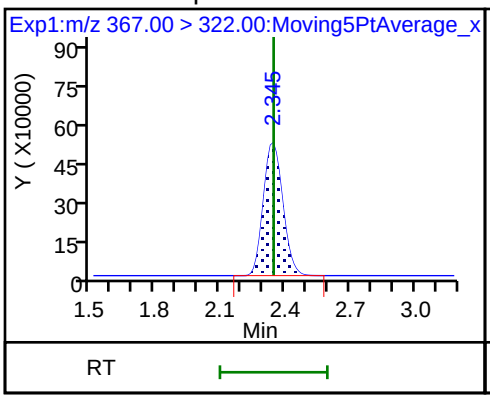
10 Perfluoroheptanoic acid



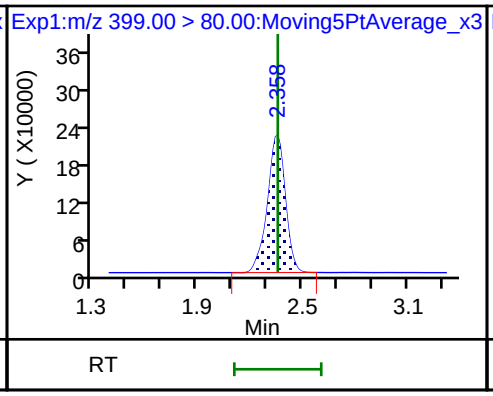
10 Perfluoroheptanoic acid



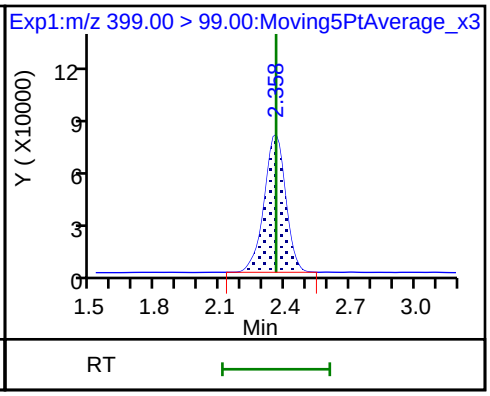
D 9 13C4-PFHpA



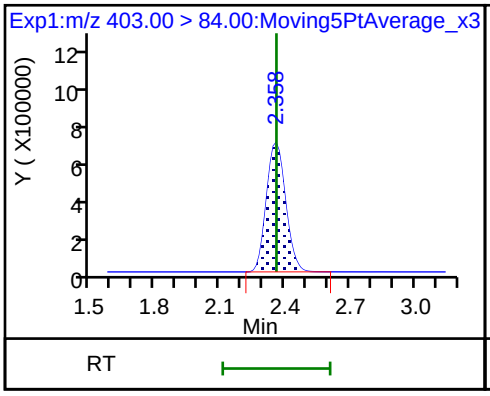
8 Perfluorohexanesulfonic acid



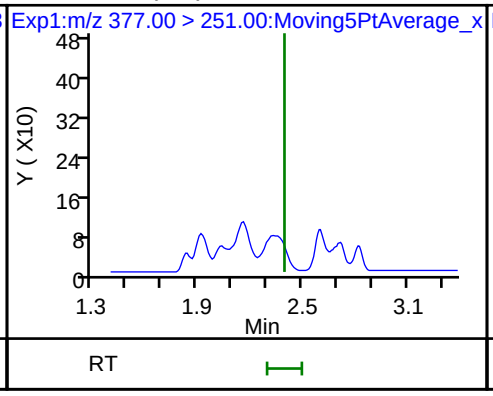
8 Perfluorohexanesulfonic acid



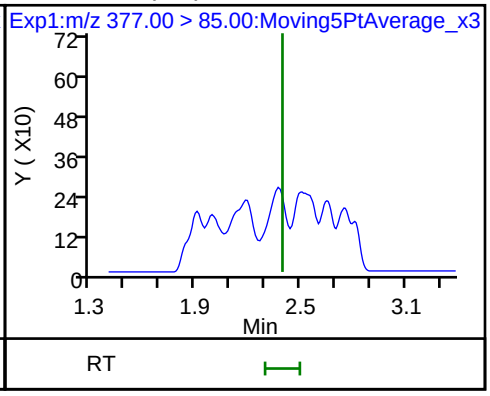
D 11 18O2 PFHxS



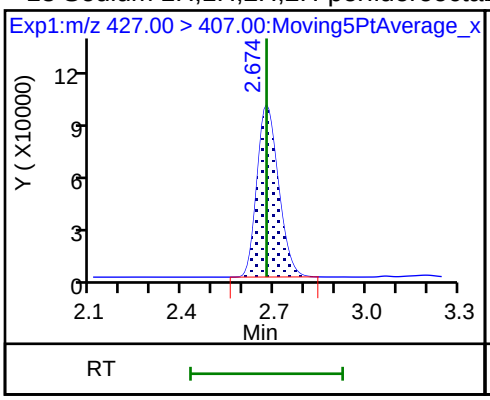
65 Adona (ND)



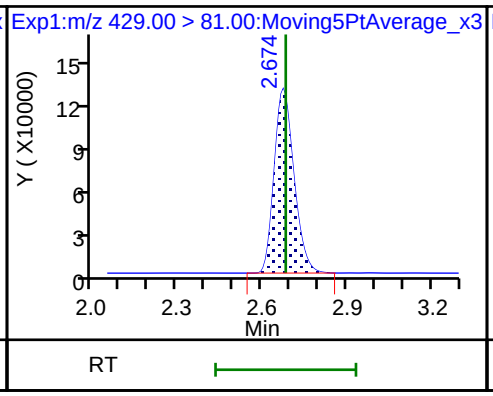
65 Adona (ND)



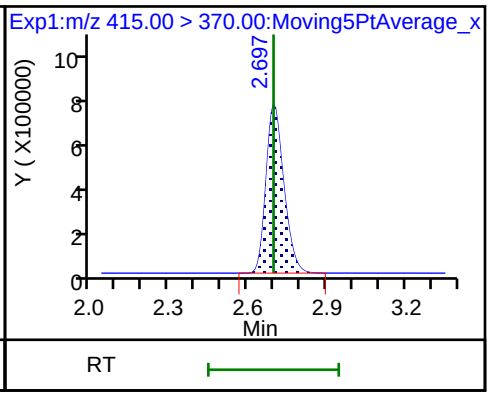
13 Sodium 1H,1H,2H,2H-perfluorooctane



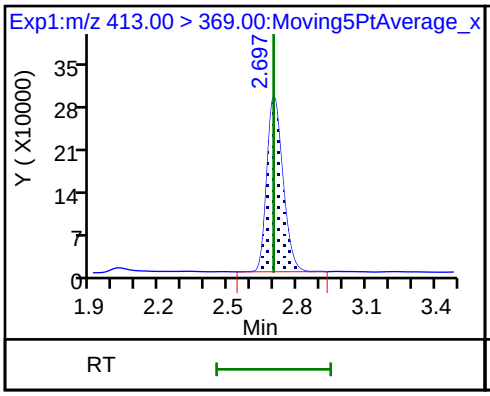
D 12 M2-6:2FTS



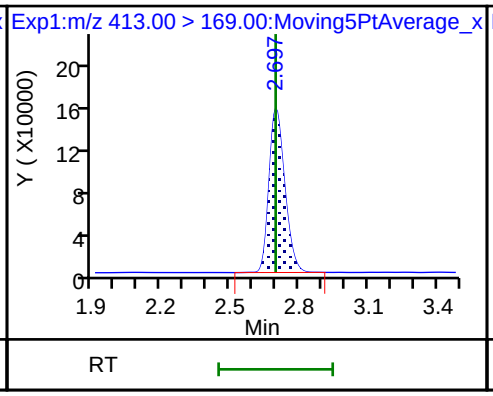
* 62 13C2-PFOA



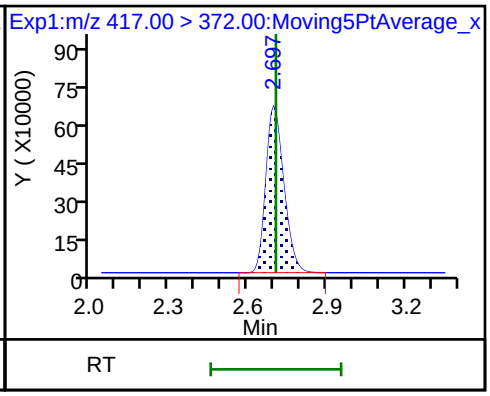
15 Perfluorooctanoic acid



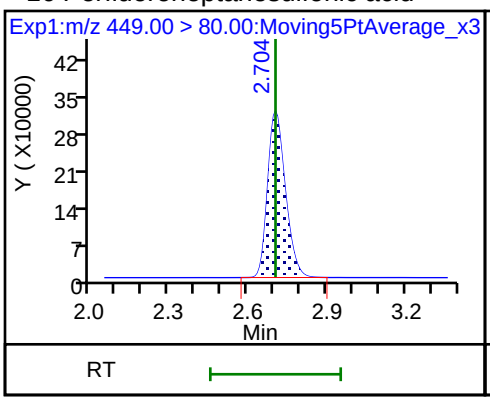
15 Perfluorooctanoic acid



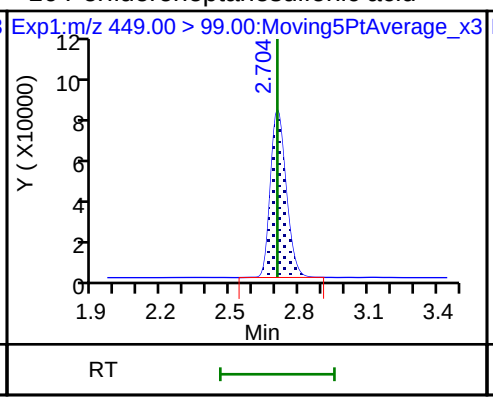
D 14 13C4 PFOA



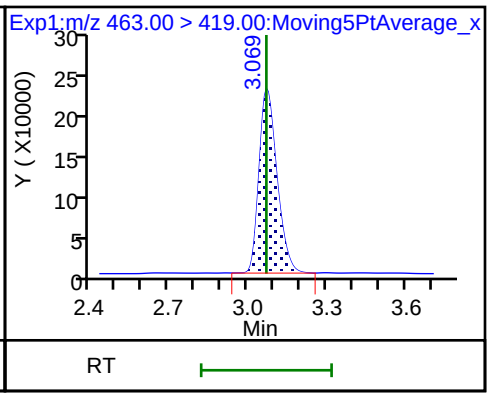
16 Perfluoroheptanesulfonic acid



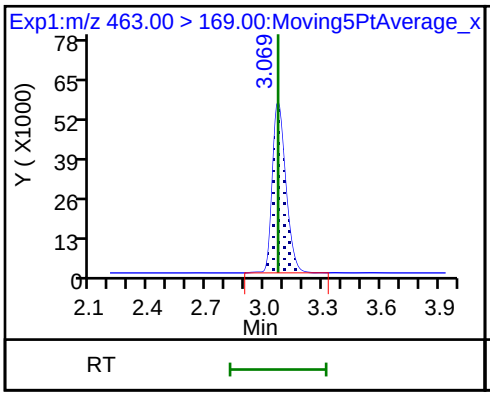
16 Perfluoroheptanesulfonic acid



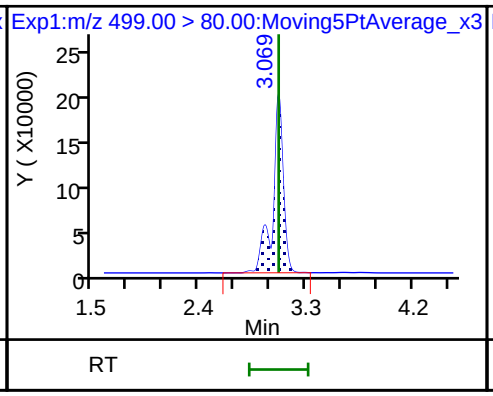
20 Perfluorononanoic acid



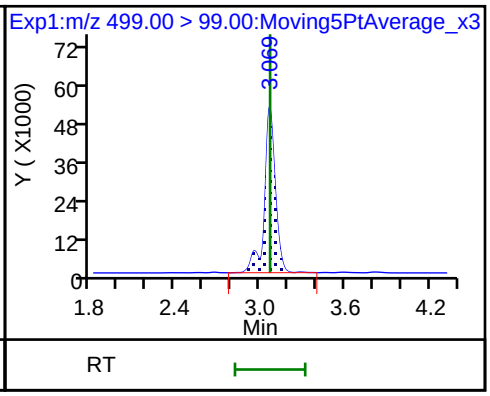
20 Perfluorononanoic acid



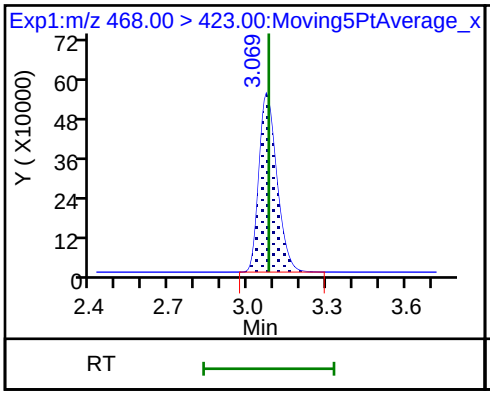
17 Perfluorooctane sulfonic acid



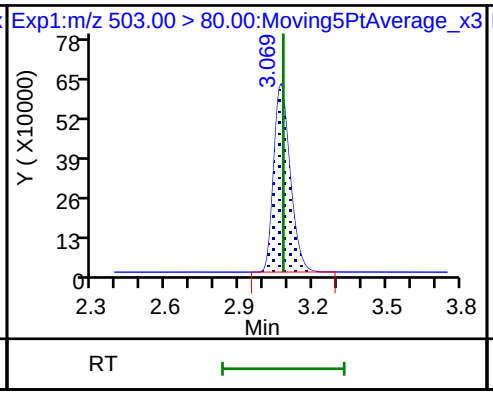
17 Perfluorooctane sulfonic acid



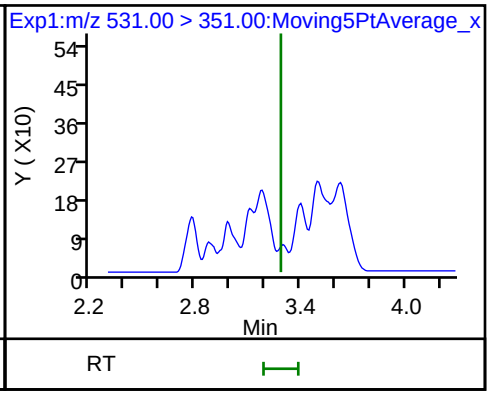
D 19 13C5 PFNA



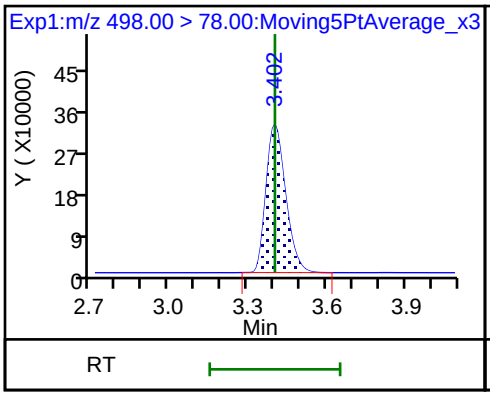
D 18 13C4 PFOS



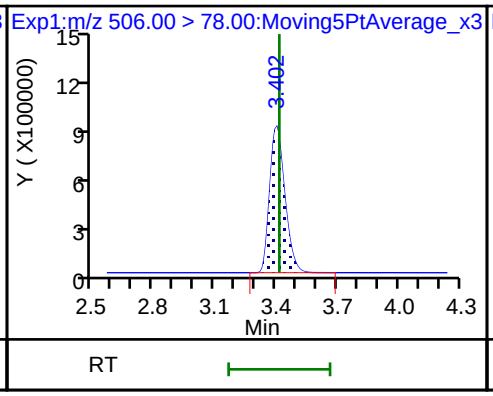
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



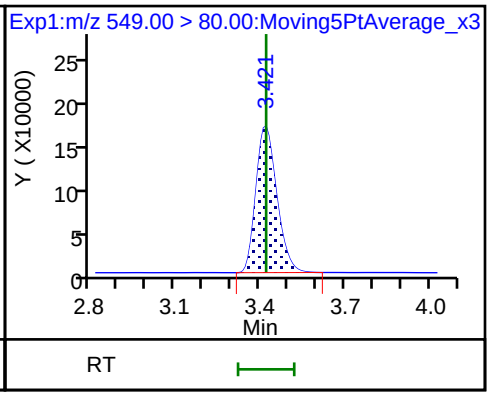
22 Perfluorooctane Sulfonamide



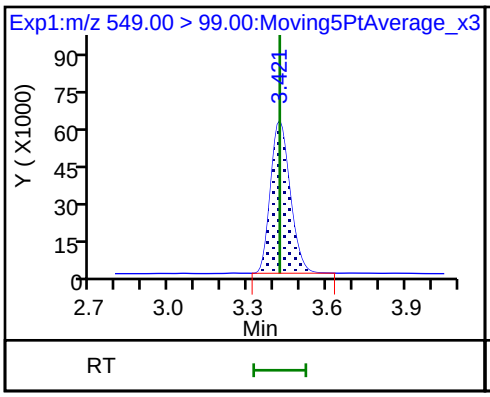
D 21 13C8 FOSA



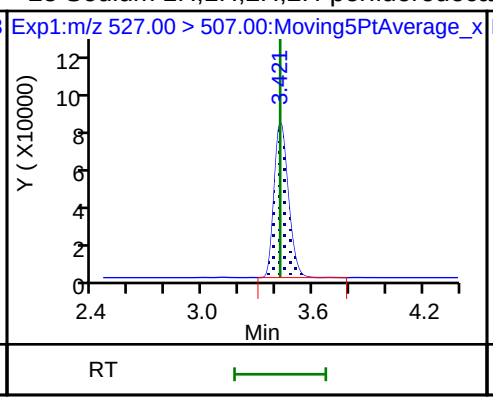
68 Perfluorononanesulfonic acid



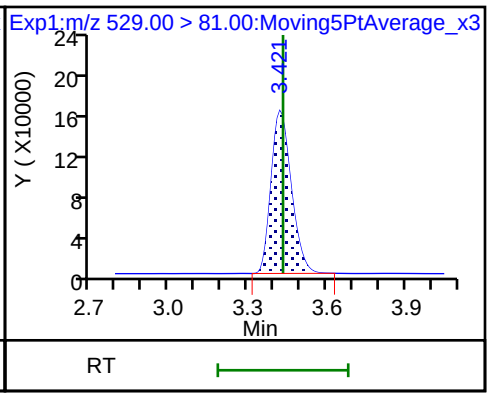
68 Perfluorononanesulfonic acid



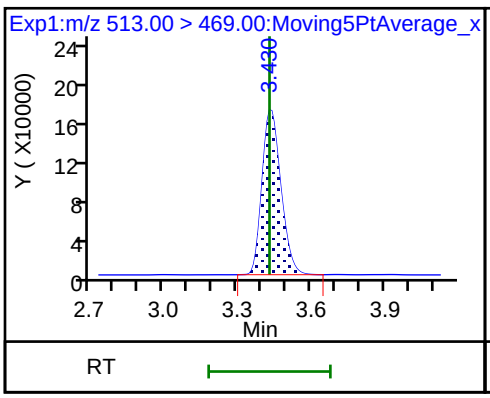
25 Sodium 1H,1H,2H,2H-perfluorodecane



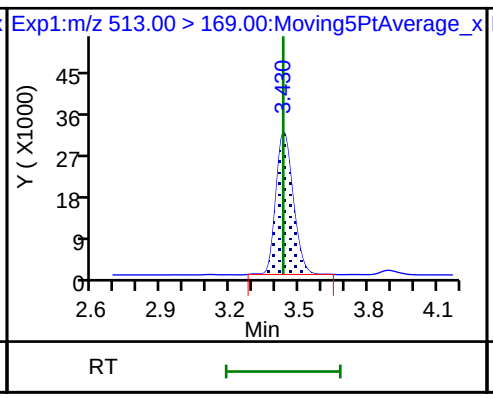
D 26 M2-8:2FTS



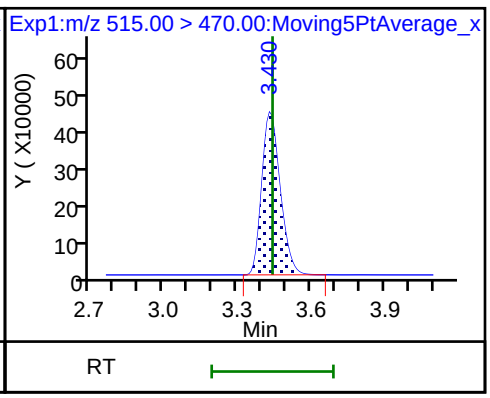
24 Perfluorodecanoic acid



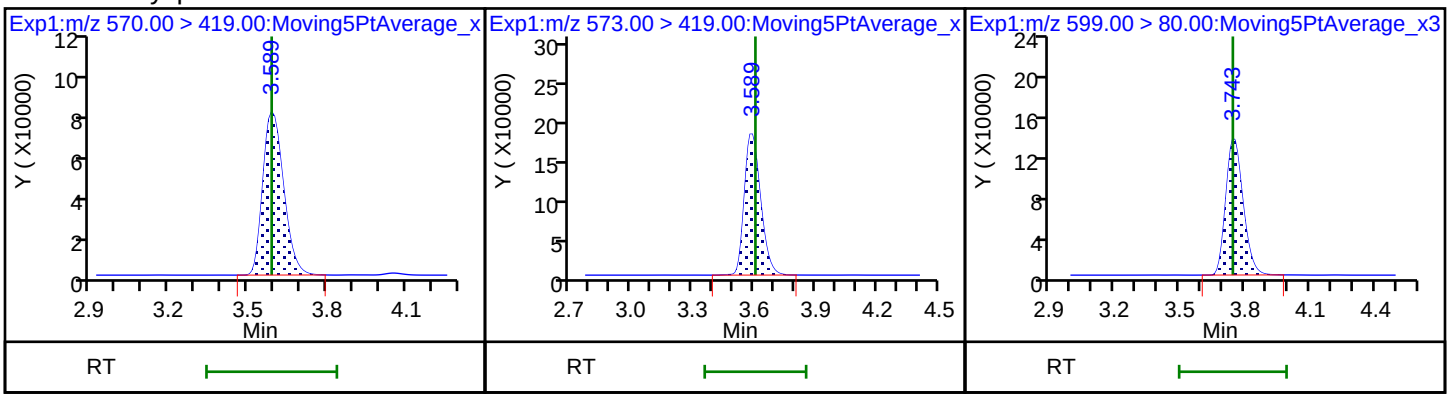
24 Perfluorodecanoic acid



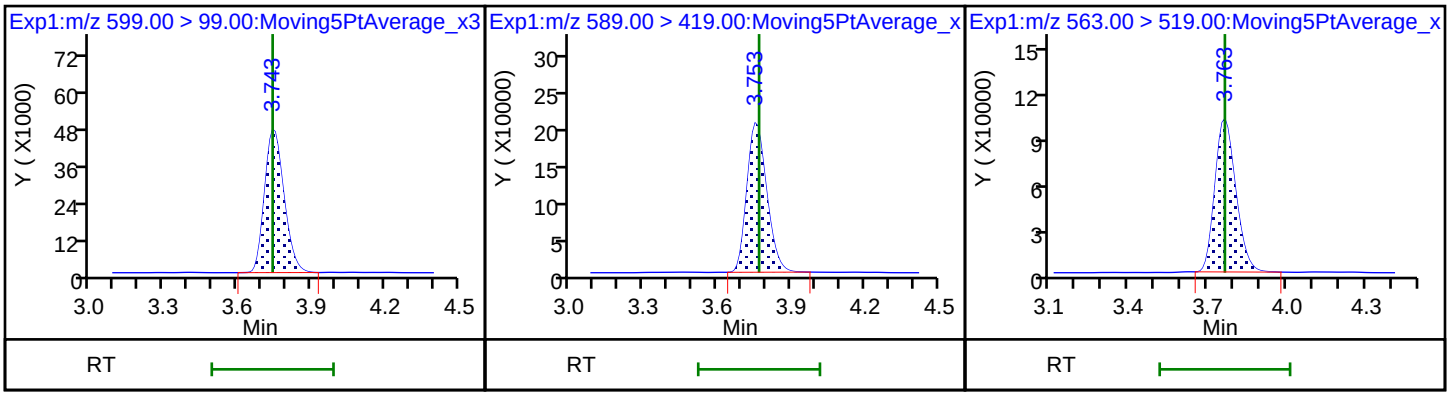
D 23 13C2 PFDA



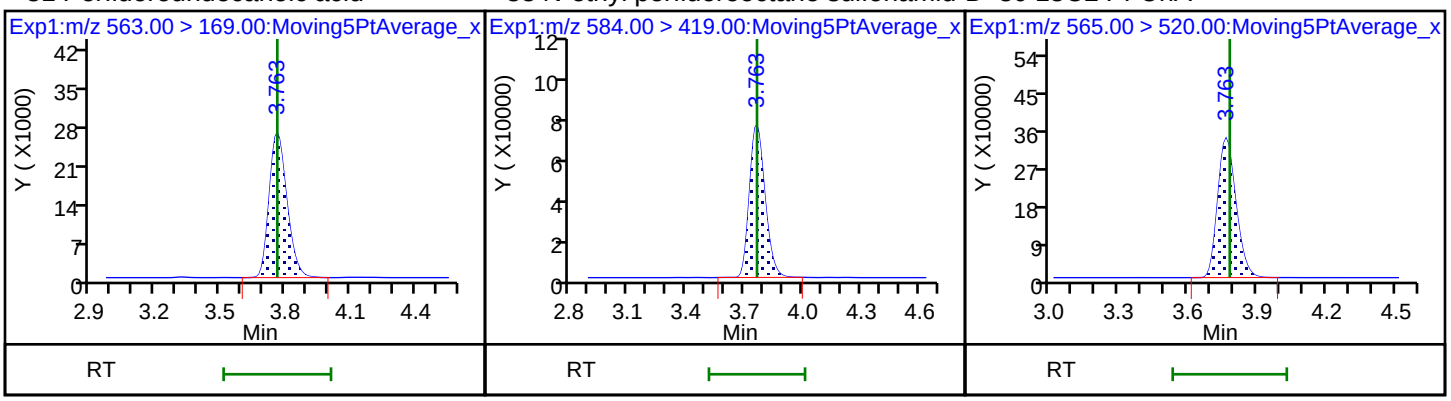
28 N-methyl perfluorooctane sulfonamiD 27 d3-NMeFOSAA 29 Perfluorodecane Sulfonic acid



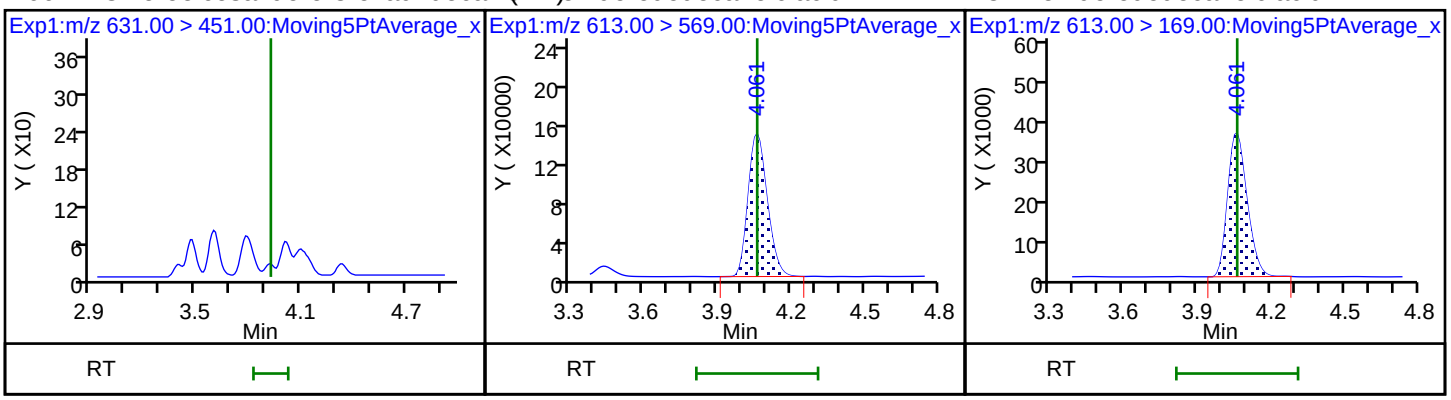
29 Perfluorodecane Sulfonic acid D 32 d5-NEtFOSAA 31 Perfluoroundecanoic acid



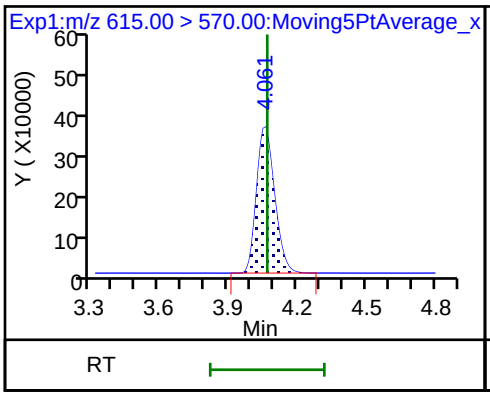
31 Perfluoroundecanoic acid 33 N-ethyl perfluorooctane sulfonamid D 30 13C2 PFUnA



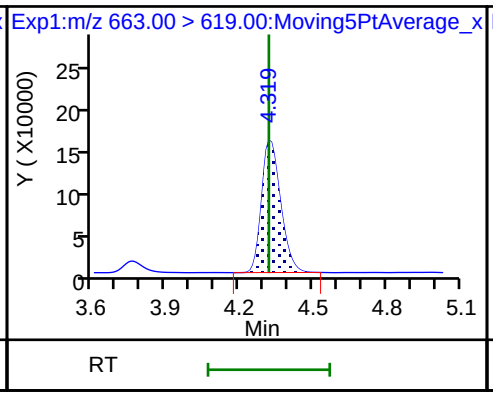
66 11-Chloroeicosafluoro-3-oxaundecan 37D Perfluorododecanoic acid 37 Perfluorododecanoic acid



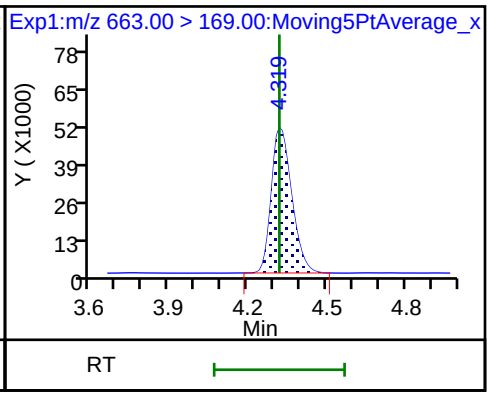
D 36 13C2 PFDoA



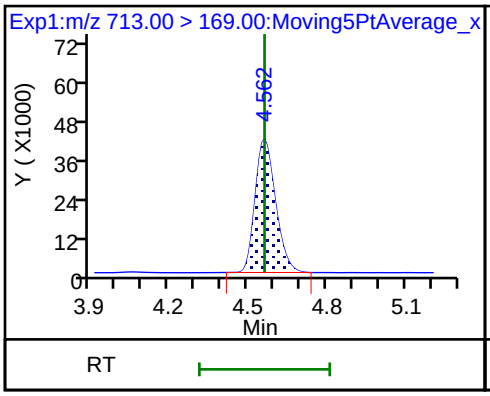
41 Perfluorotridecanoic acid



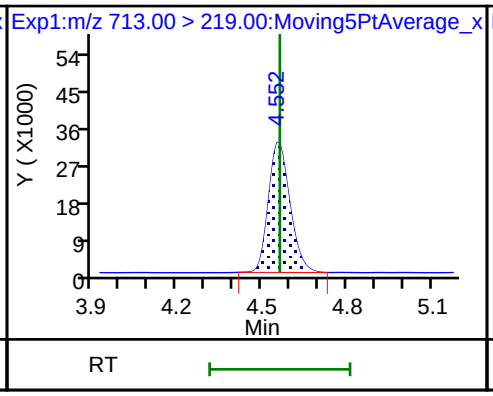
41 Perfluorotridecanoic acid



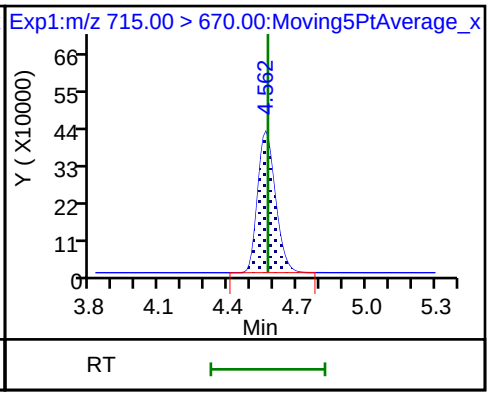
42 Perfluorotetradecanoic acid



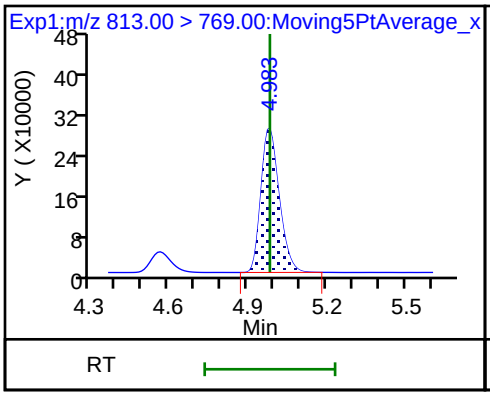
42 Perfluorotetradecanoic acid



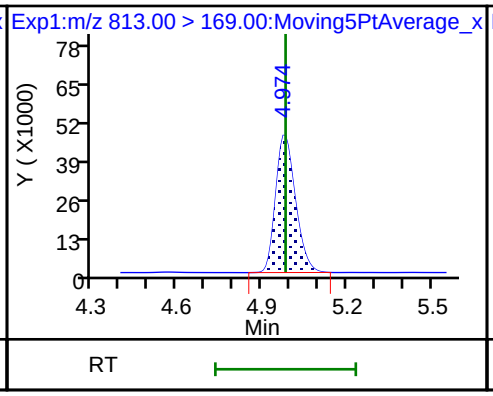
D 43 13C2-PFTeDA



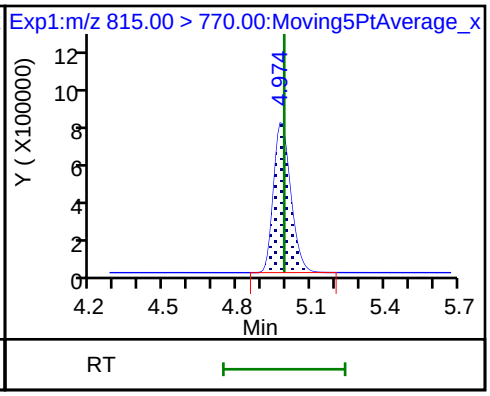
45 Perfluorohexadecanoic acid



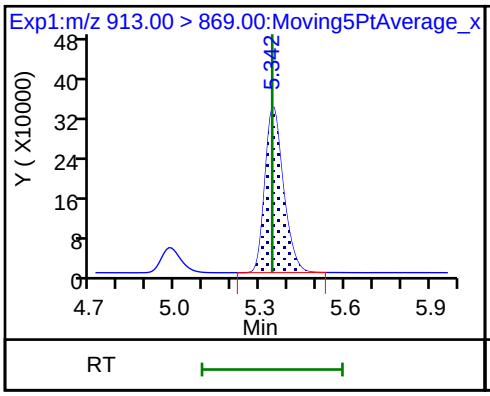
45 Perfluorohexadecanoic acid



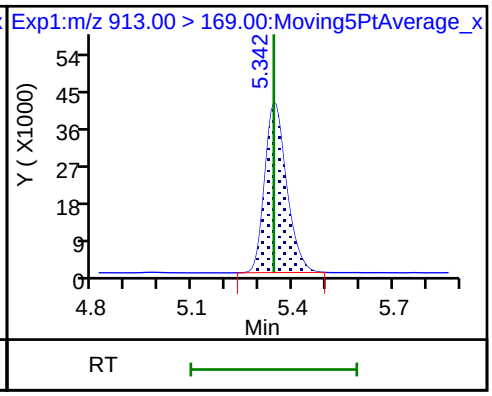
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-222981/19 Calibration Date: 05/13/2018 19:33

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLB_032.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9362	0.9481		2.53	2.50	1.3	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.182	1.180		2.50	2.50	-0.2	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.92	79.29		2.22	2.21	0.5	50.0
4:2 FTS	AveID	13.71	13.53		2.31	2.34	-1.3	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.003	1.006		2.51	2.50	0.3	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.41	68.82		2.36	2.35	0.6	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.081	1.048		2.42	2.50	-3.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.135	1.049		2.10	2.28	-7.6	40.0
6:2FTS	AveID	1.657	1.746		2.50	2.37	5.4	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.138		2.46	2.50	-1.6	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.307	1.265		2.30	2.38	-3.2	50.0
Perfluorononanoic acid (PFNA)	AveID	1.018	1.093		2.69	2.50	7.4	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.097	1.111		2.35	2.32	1.3	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9929	0.995		2.51	2.50	0.2	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7856	0.7452		2.28	2.40	-5.1	50.0
8:2FTS	AveID	1.230	1.237		2.41	2.40	0.6	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.025	1.006		2.45	2.50	-1.9	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.036	1.109		2.68	2.50	7.0	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6597	0.6466		2.36	2.41	-2.0	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9798	0.9769		2.49	2.50	-0.3	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7874	0.7511		2.38	2.50	-4.6	40.0
Perfluorododecanoic acid (PFDoA)	AveID	1.045	1.048		2.51	2.50	0.3	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.039	1.084		2.61	2.50	4.3	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2662	0.2416		2.27	2.50	-9.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9352		2.48	2.50	-0.9	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.025	1.109		2.70	2.50	8.1	50.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	AveID	2.668				2.36		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	AveID	1.808				2.33		
Adona	AveID	3.248				2.50		

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-222981/19 Calibration Date: 05/13/2018 19:33

Instrument ID: A8_N Calib Start Date: 05/13/2018 14:12

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/13/2018 14:59

Lab File ID: 2018.05.13LLB_032.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA (GenX)	L2ID					2.50	-100.0*	40.0
13C4 PFBA	Ave	1.615	1.547		2.39	2.50	-4.2	50.0
13C5 PFPeA	Ave	1.027	0.9459		2.30	2.50	-7.9	50.0
13C3-PFBS	Ave	0.0233	0.0229		2.29	2.33	-1.7	50.0
M2-4:2FTS	Ave	0.1418	0.1447		2.38	2.34	2.0	50.0
13C2 PFHxA	Ave	1.081	1.001		2.32	2.50	-7.4	50.0
13C4-PFHpA	Ave	0.996	0.9874		2.48	2.50	-0.8	50.0
18O2 PFHxS	Ave	1.300	1.278		2.32	2.37	-1.7	50.0
M2-6:2FTS	Ave	0.1940	0.1931		2.36	2.38	-0.4	40.0
13C4 PFOA	Ave	0.9419	0.9261		2.46	2.50	-1.7	50.0
13C4 PFOS	Ave	0.9331	0.9237		2.37	2.39	-1.0	50.0
13C5 PFNA	Ave	0.7942	0.7584		2.39	2.50	-4.5	50.0
13C8 FOSA	Ave	1.321	1.327		2.51	2.50	0.5	50.0
M2-8:2FTS	Ave	0.2550	0.2529		2.38	2.40	-0.8	40.0
13C2 PFDA	Ave	0.6933	0.6457		2.33	2.50	-6.9	50.0
d3-NMeFOSAA	Ave	0.3041	0.2940		2.42	2.50	-3.3	50.0
d5-NEtFOSAA	Ave	0.3327	0.3248		2.44	2.50	-2.4	50.0
13C2 PFUnA	Ave	0.5669	0.5588		2.46	2.50	-1.4	50.0
13C2 PFDoA	Ave	0.5911	0.5823		2.46	2.50	-1.5	50.0
13C2-PFTeDA	Ave	0.6436	0.6497		2.52	2.50	0.9	50.0
13C2-PFHxDA	Ave	1.025	1.055		2.57	2.50	2.9	50.0
13C3 HFPO-DA	Ave	0.0584			0.000000	2.50		

FORM VII 537 (modified)

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_032.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2018 19:33:03 ALS Bottle#: 27 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:34 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:43:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.452	1.452	0.0	1.000	4943235	2.53		101	3862	
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.458	-0.006	1.000	5213870	2.39		95.8	44483	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.729	0.0	1.005	3761583	2.50		99.8	1868	
D 3 13C5-PFPeA										
267.90 > 223.00	1.720	1.729	-0.009	0.560	3188417	2.30		92.1	58393	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.765	0.0	1.005	5409750	2.22		100	21359	
298.90 > 99.00	1.765	1.765	0.0	1.005	2268669		2.38(1.25-3.74)		13536	
D 47 13C3-PFBS										
301.90 > 83.00	1.756	1.766	-0.010	1.000	71781	2.29		98.3	485	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.970	1.970	0.0	1.000	975670	2.31		98.7	57778	
D 60 M2-4:2FTS										
329.00 > 81.00	1.981	1.981	0.0	1.000	455434	2.38		102	7428	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.014	0.0	1.000	3396520	2.51		100	6675	
313.00 > 119.00	2.014	2.014	0.0	1.000	318434		10.67(5.03-15.10)		5037	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	2.015	-0.001	1.000	3375351	2.32		92.6	74431	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.037	2.037	0.0	1.000	4982408	2.36		101	54611	
349.00 > 99.00	2.037	2.037	0.0	1.000	1784637		2.79(1.36-4.07)		25918	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.345	2.345	0.0	1.000	3488284	2.42		96.9	7099	
363.00 > 169.00	2.345	2.345	0.0	1.000	1413391		2.47(1.13-3.40)		9467	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 9 13C4-PFHpA										
367.00 > 322.00	2.345	2.346	-0.001	1.000	3328270	2.48		99.2	66818	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.358	2.358	0.0	1.000	4111456	2.10		92.4	18763	
399.00 > 99.00	2.358	2.358	0.0	1.000	1360870		3.02(1.50-4.49)		5924	
D 11 18O2 PFHxS										
403.00 > 84.00	2.358	2.359	-0.001	1.000	4075266	2.32		98.3	41583	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.675	2.675	0.0	1.000	1077691	2.50		105	9542	
D 12 M2-6:2FTS										
429.00 > 81.00	2.675	2.683	-0.008	1.000	618412	2.36		99.6	11565	
* 62 13C2-PFOA										
415.00 > 370.00	2.697	2.697	0.0		3370771	2.50			50528	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.697	2.697	0.0	1.000	3551534	2.46		98.4	2172	
413.00 > 169.00	2.697	2.697	0.0	1.000	1812632		1.96(0.84-2.52)		7613	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.705	2.705	0.0	1.000	3748685	2.30		96.8	38040	
449.00 > 99.00	2.705	2.705	0.0	1.000	1036471		3.62(1.94-5.82)		12907	
D 14 13C4 PFOA										
417.00 > 372.00	2.697	2.706	-0.009	1.000	3121733	2.46		98.3	50661	
20 Perfluorononanoic acid										
463.00 > 419.00	3.070	3.070	0.0	1.000	2794196	2.69		107	6283	
463.00 > 169.00	3.070	3.070	0.0	1.000	652778		4.28(1.90-5.69)		11429	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.070	3.070	0.0	1.002	3208777	2.35		101	21410	
499.00 > 99.00	3.063	3.070	-0.007	1.000	715418		4.49(2.31-6.93)		7145	
D 19 13C5 PFNA										
468.00 > 423.00	3.070	3.078	-0.008	1.000	2556227	2.39		95.5	38611	
D 18 13C4 PFOS										
503.00 > 80.00	3.063	3.078	-0.015	1.000	2976526	2.37		99.0	20924	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.402	3.402	0.0	1.000	4451387	2.51		100	45584	
D 21 13C8 FOSA										
506.00 > 78.00	3.402	3.414	-0.012	1.000	4473025	2.51		100	51269	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.412	3.412	0.0	1.000	2227325	2.28		94.9	30795	
549.00 > 99.00	3.412	3.412	0.0	1.000	868859		2.56(1.33-3.97)		14013	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.421	3.421	0.0	1.000	1010039	2.41		101	17655	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.430	3.430	0.0	1.000	2188951	2.45		98.1	13143	
513.00 > 169.00	3.430	3.430	0.0	1.000	382993		5.72(2.36-7.09)		1820	
D 26 M2-8:2FTS										
529.00 > 81.00	3.421	3.433	-0.012	1.000	816538	2.38		99.2	10405	
D 23 13C2 PFDA										
515.00 > 470.00	3.430	3.442	-0.012	1.000	2176322	2.33		93.1	23162	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.590	3.590	0.0	1.003	1098403	2.68		107	10117	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.579	3.605	-0.026	1.000	990890	2.42		96.7	35690	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.743	3.743	0.0	1.000	1940806	2.36		98.0	23785	
599.00 > 99.00	3.743	3.743	0.0	1.000	661172		2.94(1.39-4.16)		10996	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.764	3.764	0.0	1.000	1414587	2.38		95.4	6225	
563.00 > 169.00	3.764	3.764	0.0	1.000	396831		3.56(2.12-6.36)		14409	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.764	3.764	0.0	1.003	1069697	2.49		99.7	24081	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.754	3.769	-0.015	1.000	1094952	2.44		97.6	3305	
D 30 13C2 PFUnA										
565.00 > 520.00	3.764	3.780	-0.016	1.000	1883441	2.46		98.6	33908	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.062	4.062	0.0	1.000	2056553	2.51		100	1505	
613.00 > 169.00	4.062	4.062	0.0	1.000	493520		4.17(2.13-6.40)		10107	
D 36 13C2 PFDoA										
615.00 > 570.00	4.062	4.069	-0.007	1.000	1962812	2.46		98.5	18778	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.319	4.319	0.0	1.000	2127492	2.61		104	895	
663.00 > 169.00	4.319	4.319	0.0	1.000	662204		3.21(1.25-3.76)		11248	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.563	4.563	0.0	1.000	529155	2.27		90.8	9854	
713.00 > 219.00	4.552	4.563	-0.011	0.998	388311		1.36(0.71-2.13)		5967	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.563	4.572	-0.009	1.000	2189918	2.52		101	13659	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.974	4.974	0.0	1.000	3325716	2.48		99.1	666	
813.00 > 169.00	4.974	4.974	0.0	1.000	566319		5.87(2.86-8.58)		4852	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.974	4.990	-0.016	1.000	3556045	2.57		103	11469	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.342	5.342	0.0	1.000	3942638	2.70		108	678	
913.00 > 169.00	5.342	5.342	0.0	1.000	491165		8.03(3.83-11.48)		4547	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 10:44:35 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_032.d

Injection Date: 13-May-2018 19:33:03 Instrument ID: A8_N

Lims ID: CCV L5

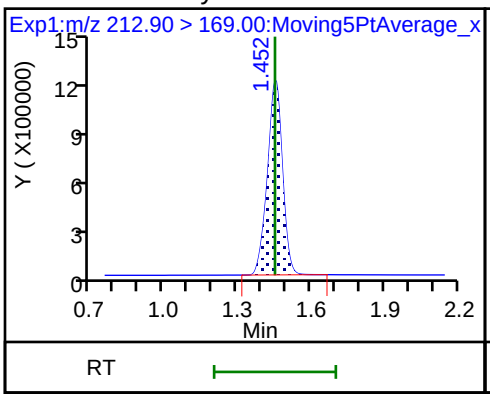
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 27 Worklist Smp#: 19

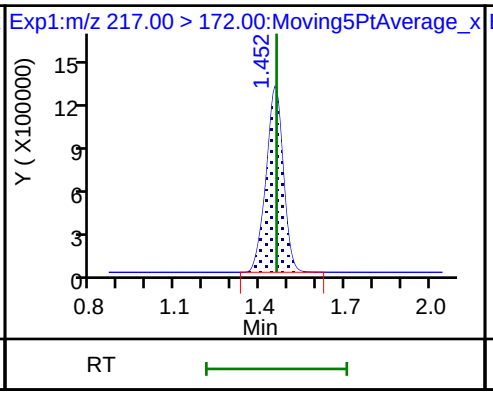
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

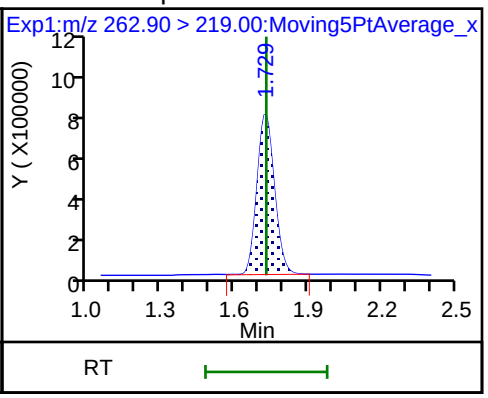
2 Perfluorobutyric acid



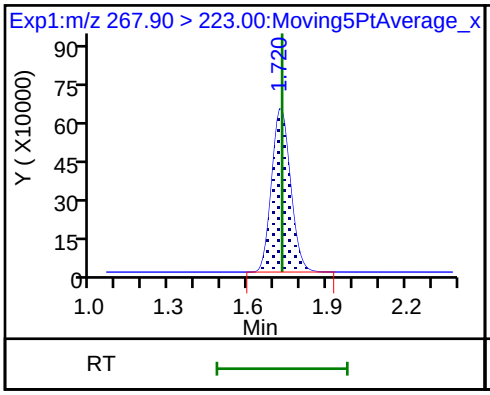
D 1 13C4 PFBA



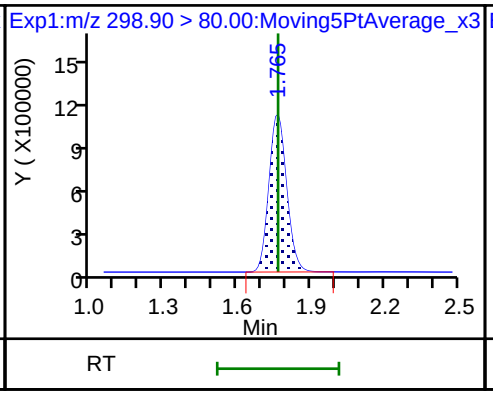
4 Perfluoropentanoic acid



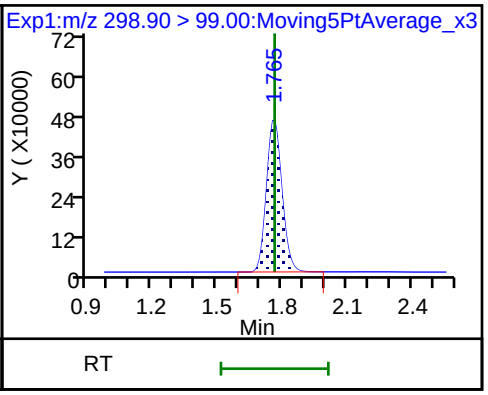
D 3 13C5-PFPeA



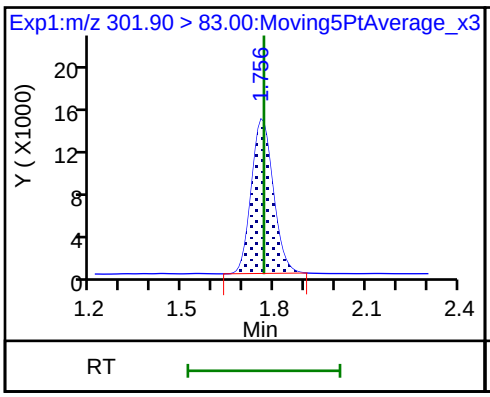
5 Perfluorobutanesulfonic acid



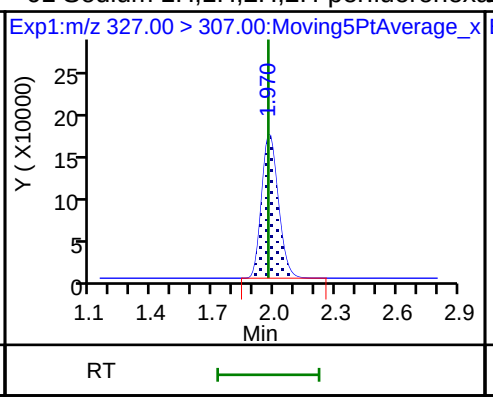
5 Perfluorobutanesulfonic acid



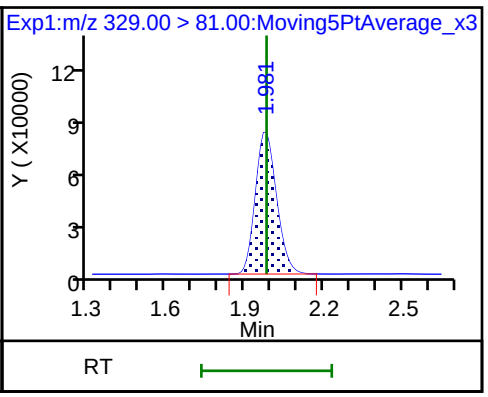
D 47 13C3-PFBS



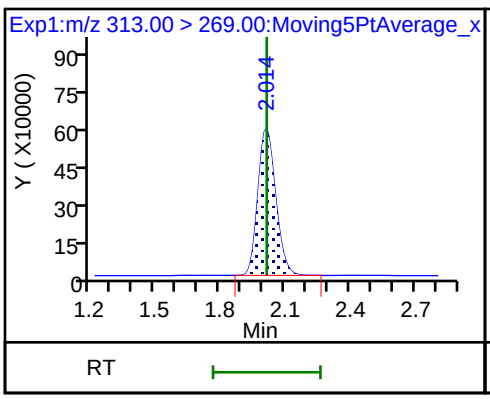
61 Sodium 1H,1H,2H,2H-perfluorohexane



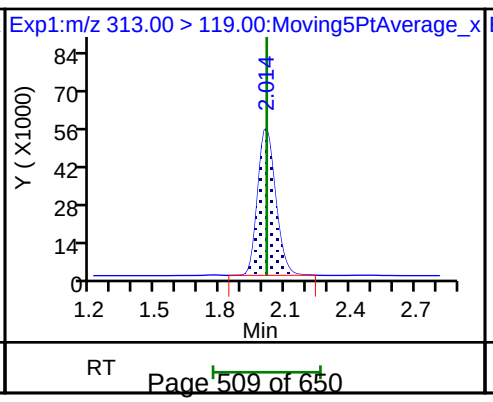
D 60 M2-4:2FTS



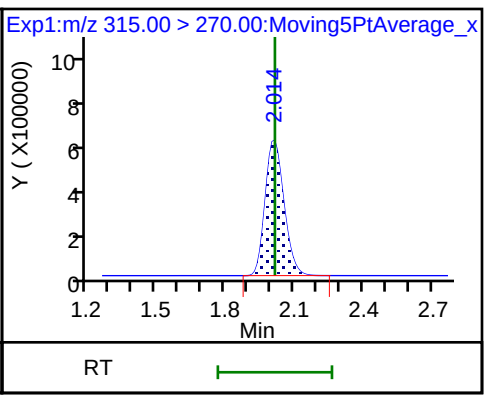
6 Perfluorohexanoic acid



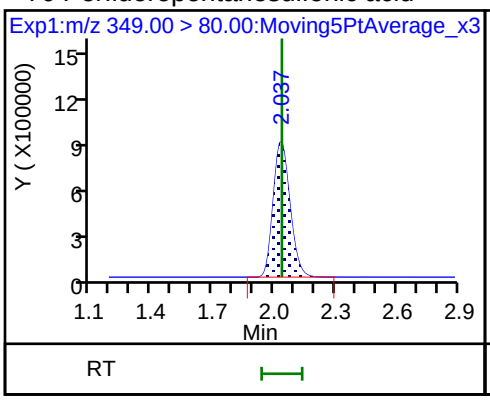
6 Perfluorohexanoic acid



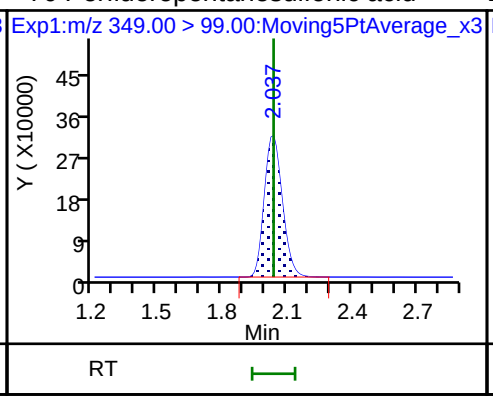
D 7 13C2 PFHxA



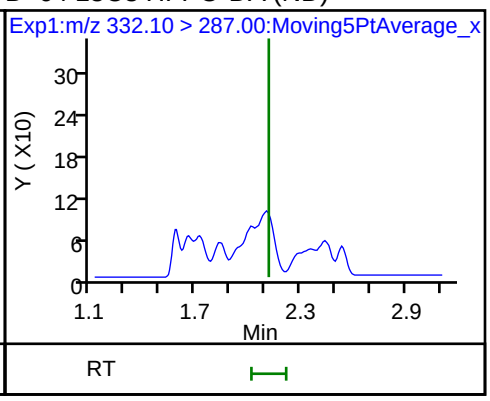
70 Perfluoropentanesulfonic acid



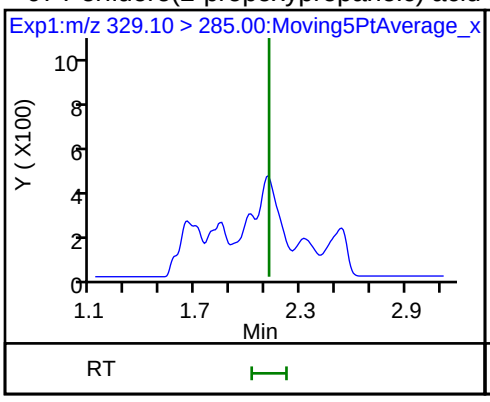
70 Perfluoropentanesulfonic acid



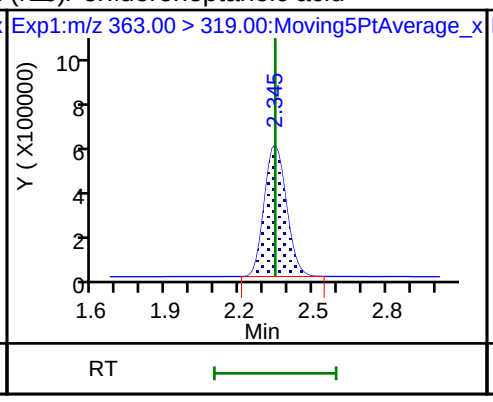
D 64 13C3 HFPO-DA (ND)



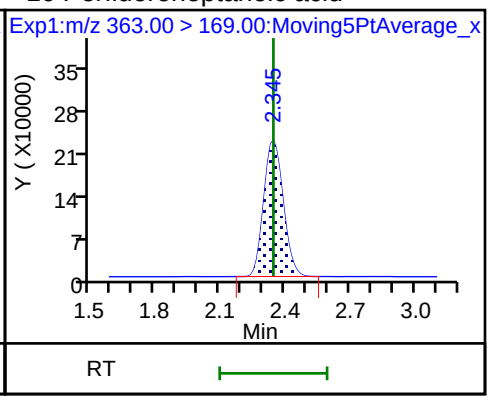
67 Perfluoro(2-propoxypropanoic) acid (ND)



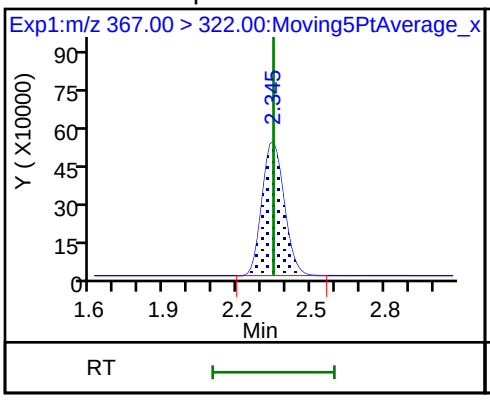
10 Perfluoroheptanoic acid



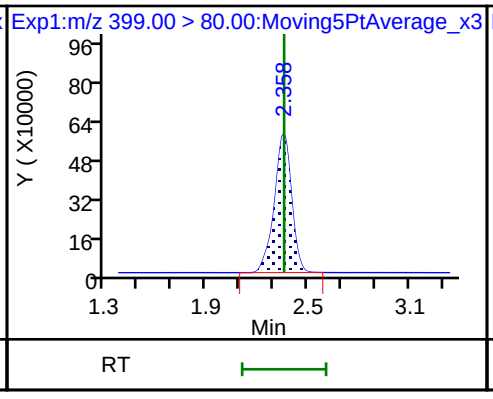
10 Perfluoroheptanoic acid



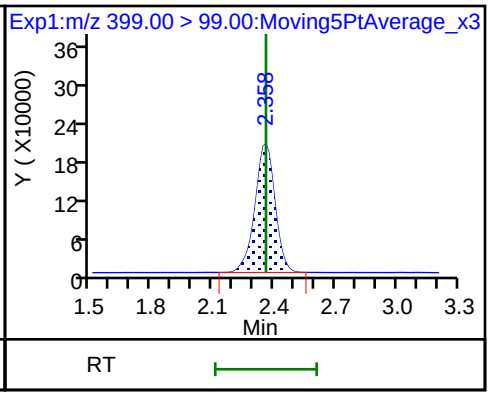
D 9 13C4-PFHpA



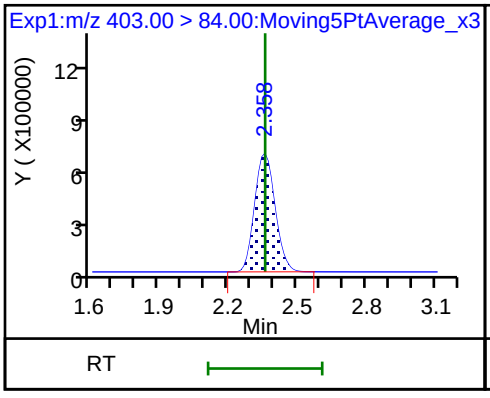
8 Perfluorohexanesulfonic acid



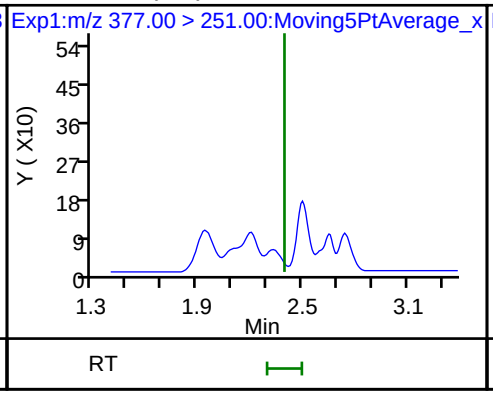
8 Perfluorohexanesulfonic acid



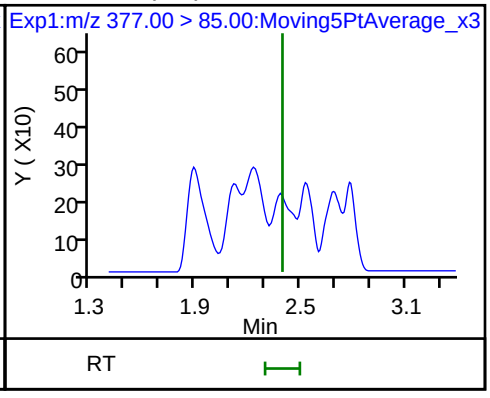
D 11 18O2 PFHxS



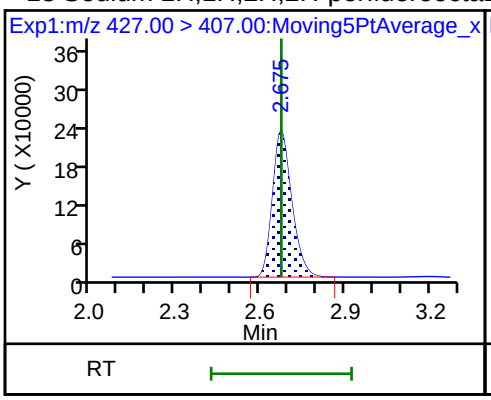
65 Adona (ND)



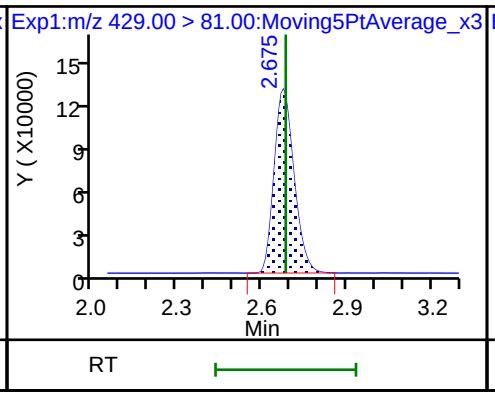
65 Adona (ND)



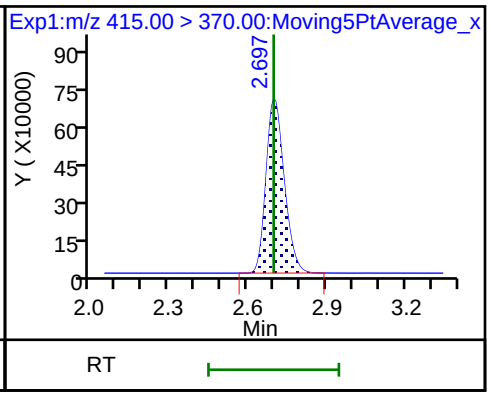
13 Sodium 1H,1H,2H,2H-perfluorooctane



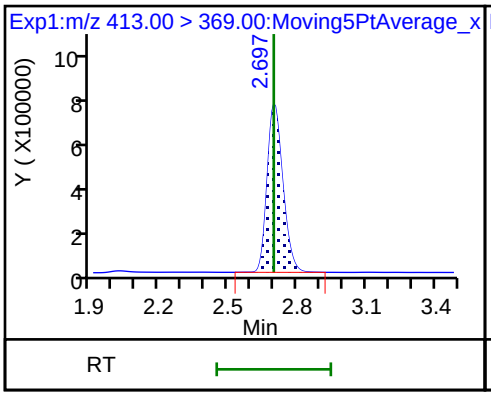
D 12 M2-6:2FTS



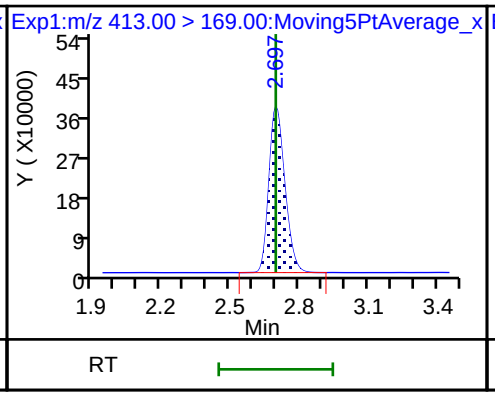
* 62 13C2-PFOA



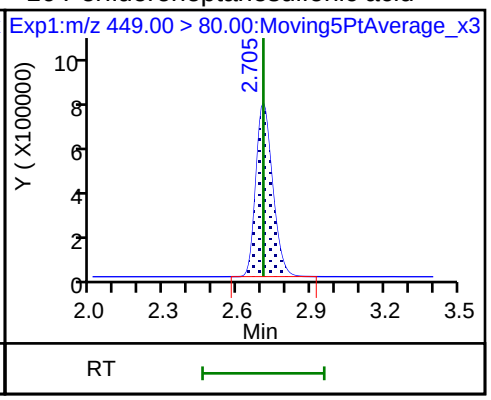
15 Perfluorooctanoic acid



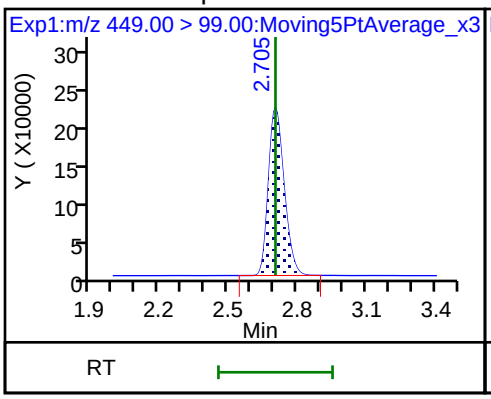
15 Perfluorooctanoic acid



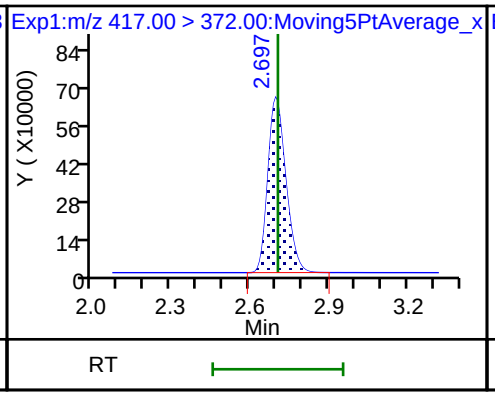
16 Perfluoroheptanesulfonic acid



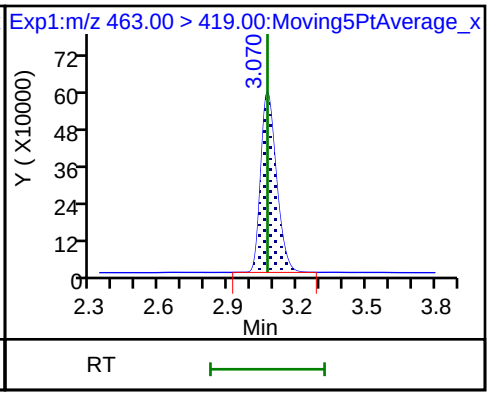
16 Perfluoroheptanesulfonic acid



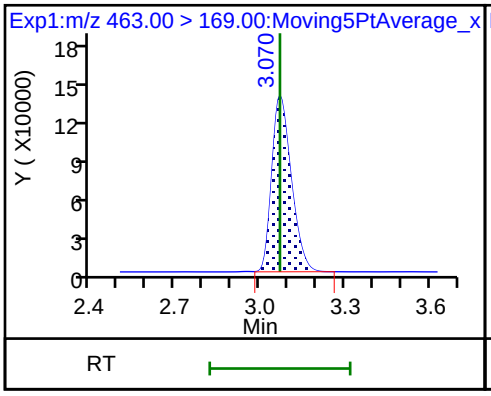
D 14 13C4 PFOA



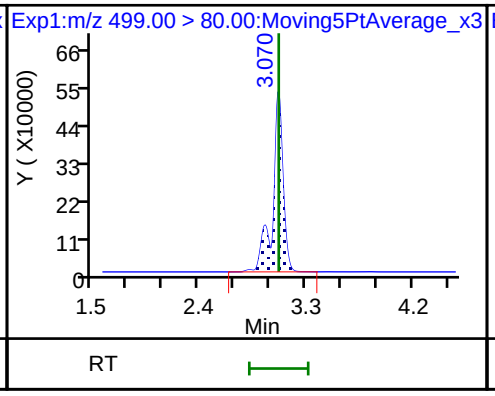
20 Perfluorononanoic acid



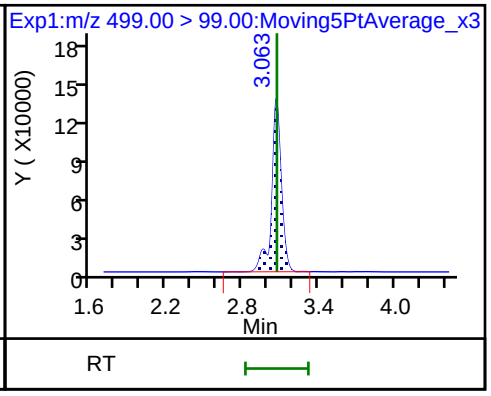
20 Perfluorononanoic acid



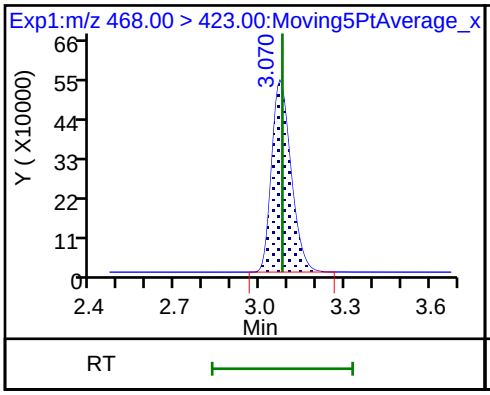
17 Perfluorooctane sulfonic acid



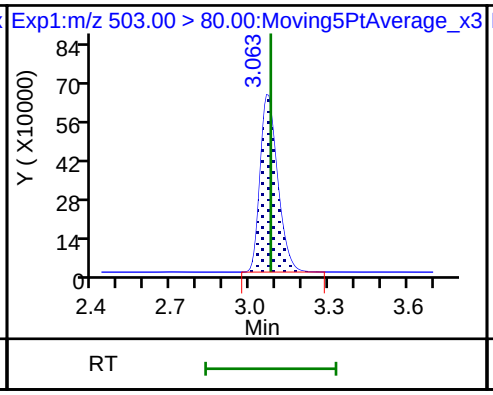
17 Perfluorooctane sulfonic acid



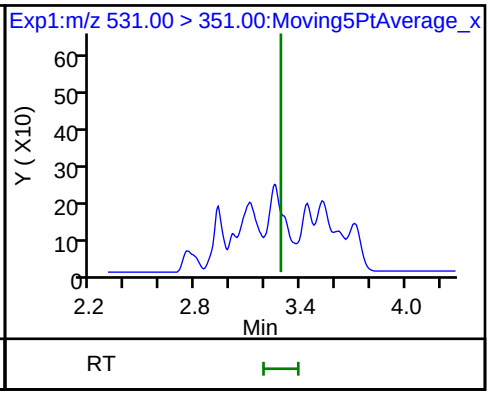
D 19 13C5 PFNA



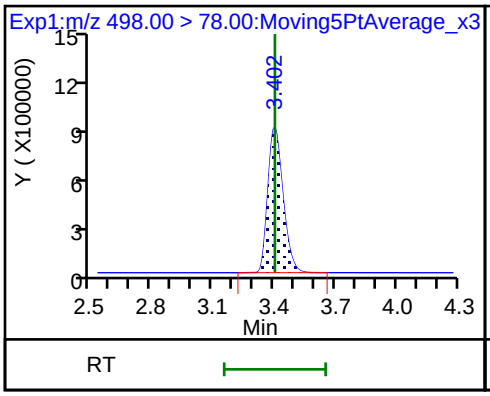
D 18 13C4 PFOS



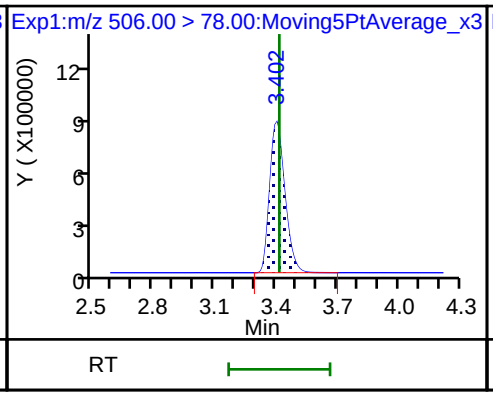
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



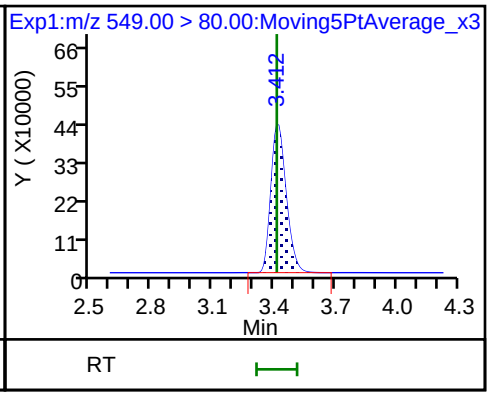
22 Perfluorooctane Sulfonamide



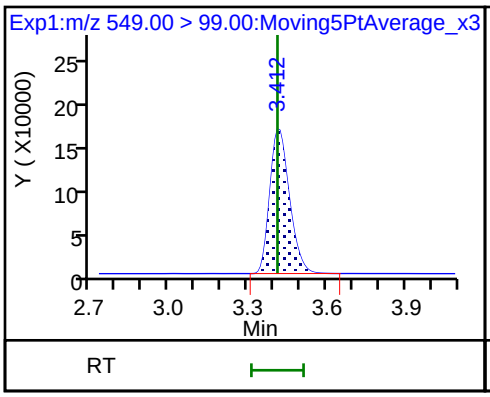
D 21 13C8 FOSA



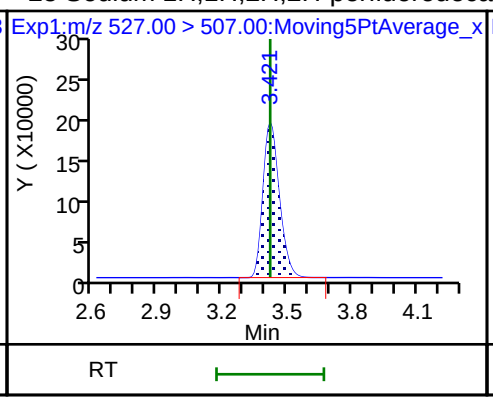
68 Perfluorononanesulfonic acid



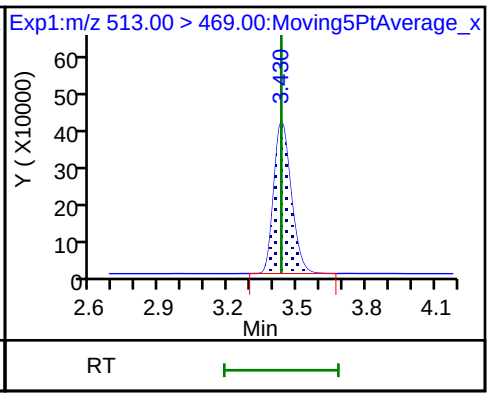
68 Perfluorononanesulfonic acid



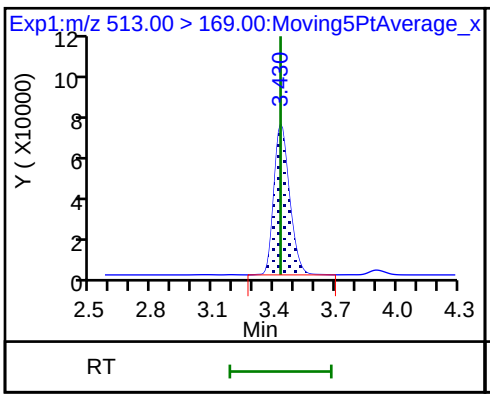
25 Sodium 1H,1H,2H,2H-perfluorodecane



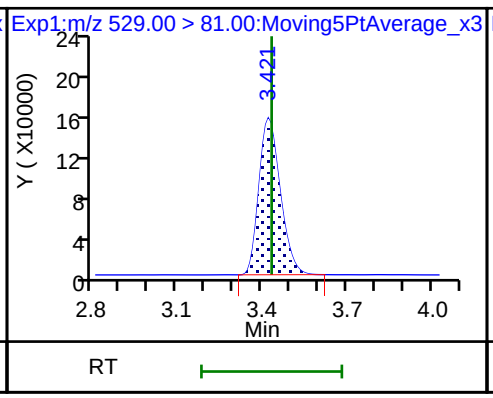
24 Perfluorodecanoic acid



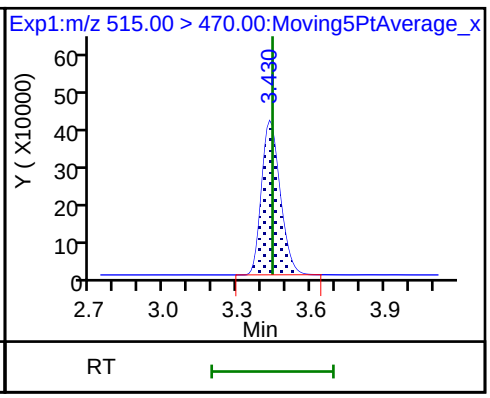
24 Perfluorodecanoic acid



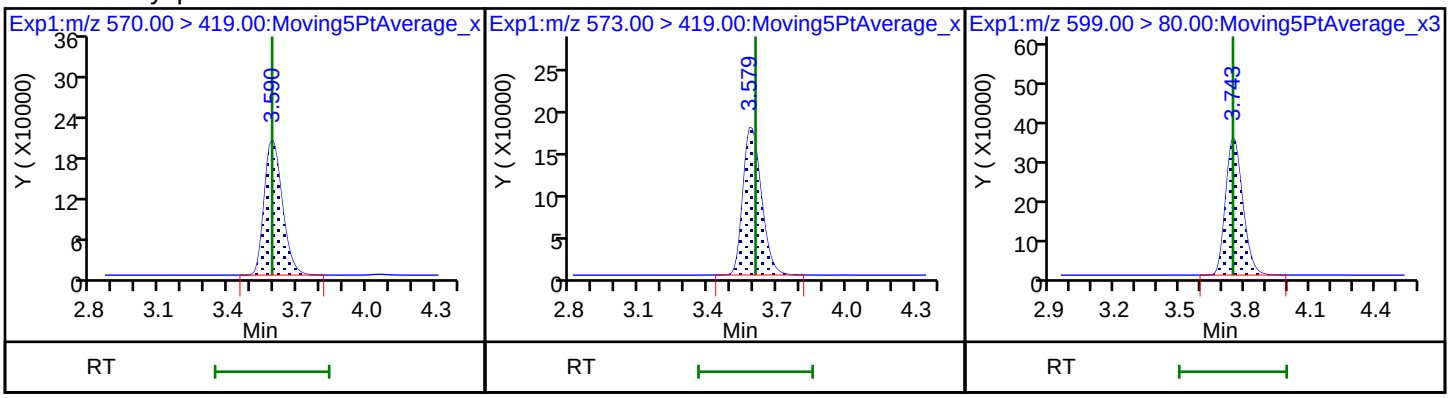
D 26 M2-8:2FTS



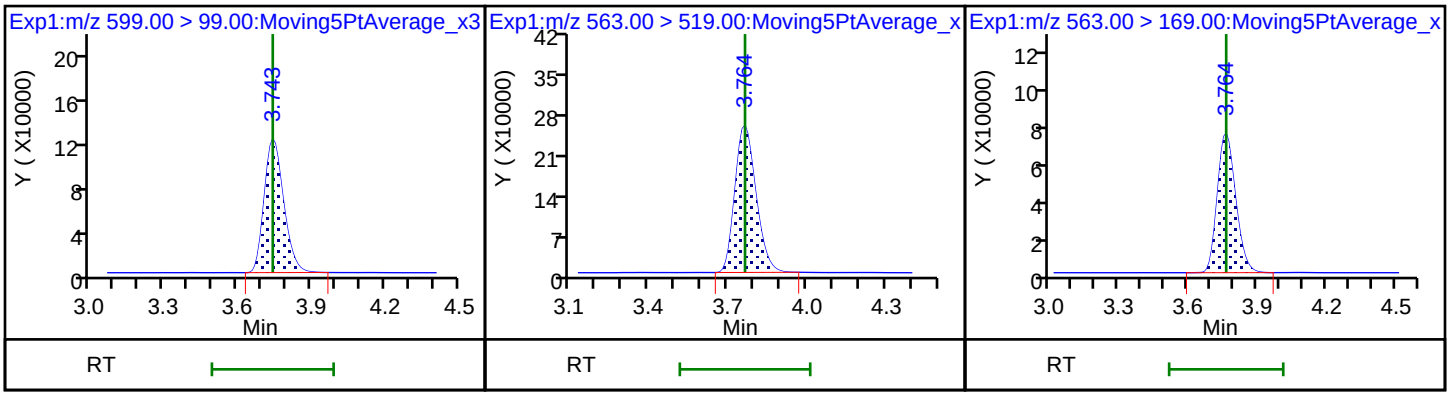
D 23 13C2 PFDA



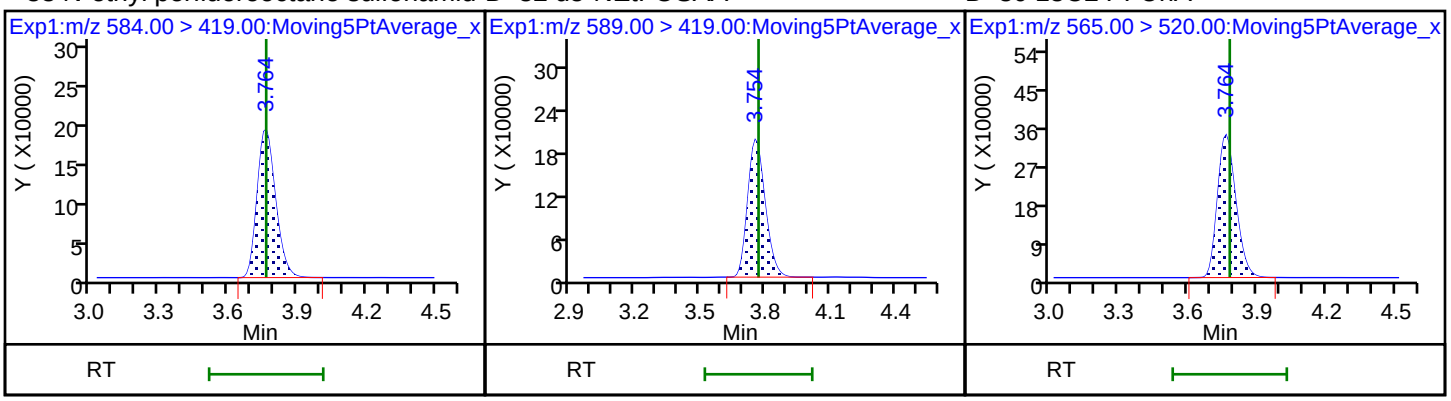
28 N-methyl perfluorooctane sulfonamiD 27 d3-NMeFOSAA 29 Perfluorodecane Sulfonic acid



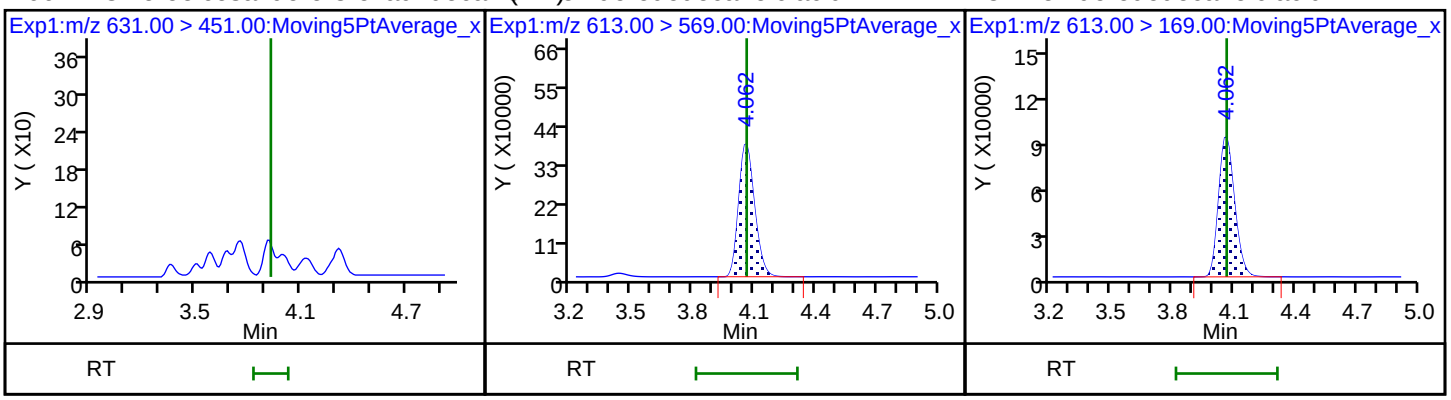
29 Perfluorodecane Sulfonic acid 31 Perfluoroundecanoic acid 31 Perfluoroundecanoic acid



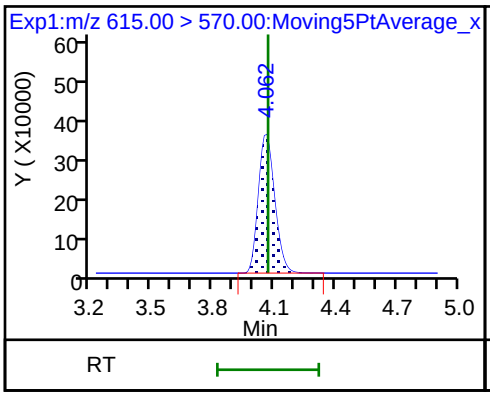
33 N-ethyl perfluorooctane sulfonamid D 32 d5-NEtFOSAA D 30 13C2 PFUnA



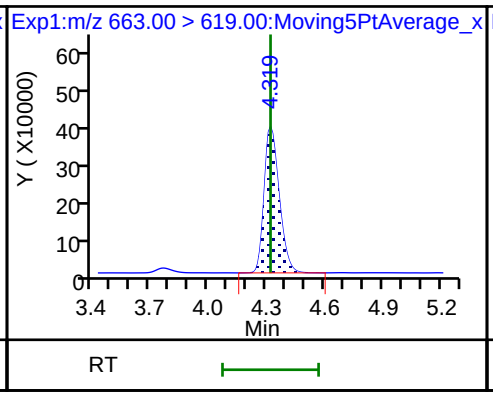
66 11-Chloroeicosafluoro-3-oxaundecan 37 Perfluorododecanoic acid 37 Perfluorododecanoic acid



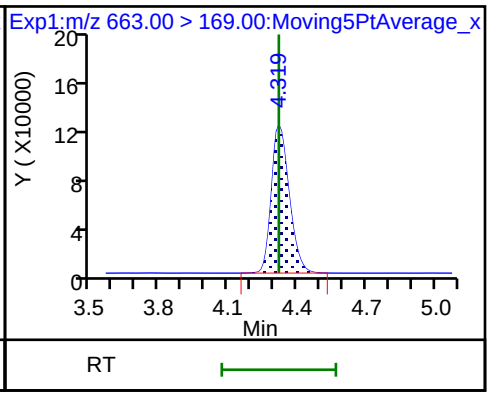
D 36 13C2 PFDoA



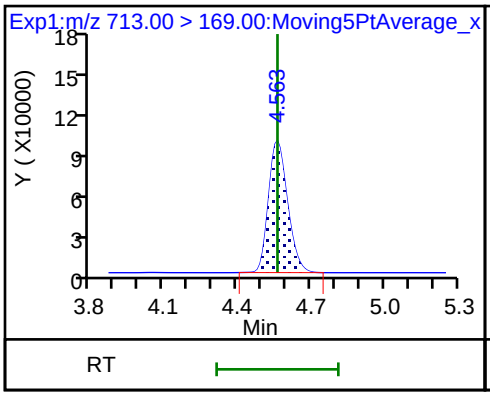
41 Perfluorotridecanoic acid



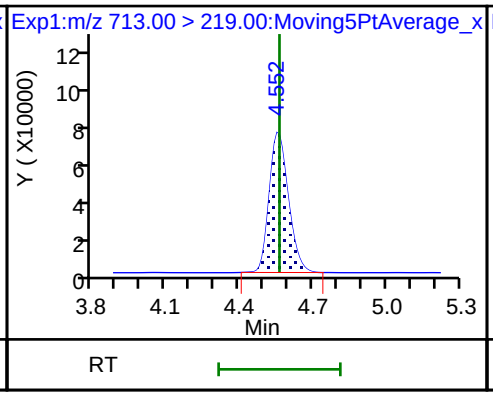
41 Perfluorotridecanoic acid



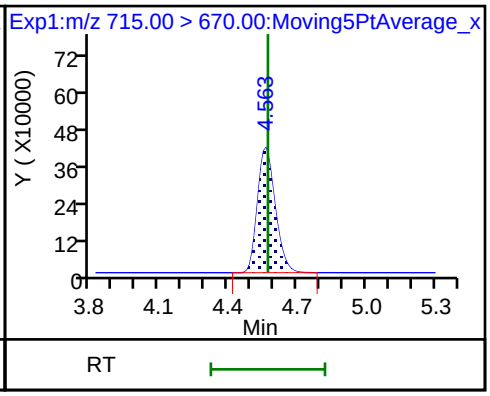
42 Perfluorotetradecanoic acid



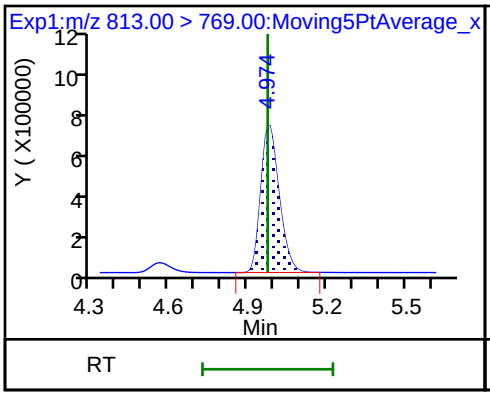
42 Perfluorotetradecanoic acid



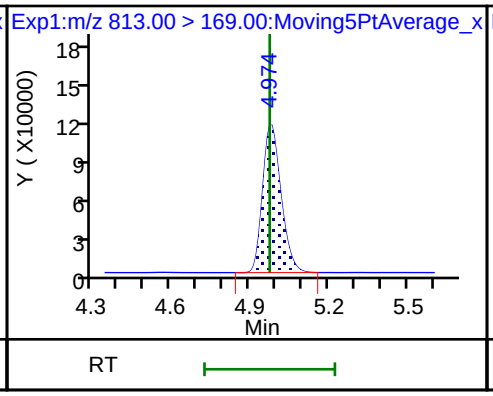
D 43 13C2-PFTeDA



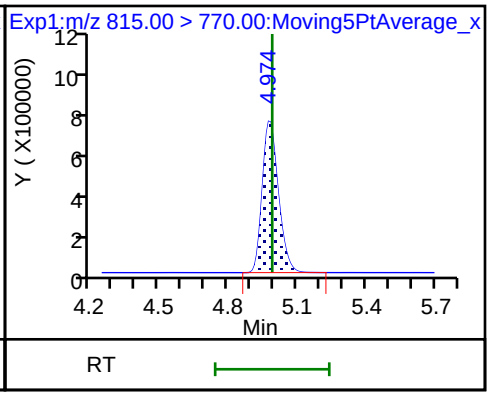
45 Perfluorohexadecanoic acid



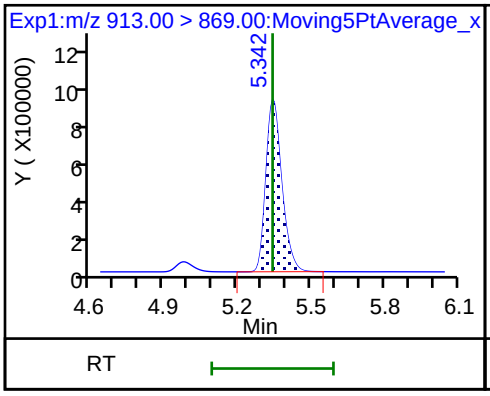
45 Perfluorohexadecanoic acid



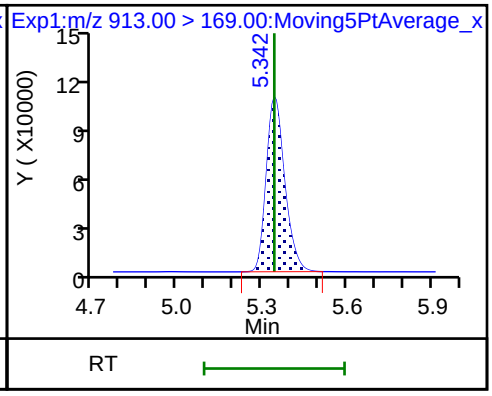
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: ICV 320-223088/10 Calibration Date: 05/14/2018 13:03

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2017.05.14LLC_ICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9291	0.9455		2.54	2.50	1.8	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.217	1.150		2.36	2.50	-5.5	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	77.17	80.27		2.30	2.21	4.0	50.0
4:2 FTS	AveID	13.08	13.20		2.36	2.34	0.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.043	0.9752		2.34	2.50	-6.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.00	69.95		2.38	2.35	1.4	50.0
HFPO-DA (GenX)	AveID	3.383	3.183		2.35	2.50	-5.9	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	1.024		2.41	2.50	-3.4	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.126	1.080		2.19	2.28	-4.1	40.0
Adona	AveID	3.251	3.046		2.34	2.50	-6.3	50.0
6:2FTS	AveID	1.683	1.771		2.50	2.38	5.2	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.202	1.150		2.39	2.50	-4.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.319	1.318		2.37	2.38	-0.1	50.0
Perfluorononanoic acid (PFNA)	AveID	1.054	1.021		2.42	2.50	-3.2	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.116	1.095		2.27	2.31	-1.9	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.785	1.735		2.26	2.33	-2.8	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9855	1.046		2.65	2.50	6.1	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7650	0.7565		2.37	2.40	-1.1	50.0
8:2FTS	AveID	1.301	1.268		2.34	2.40	-2.5	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.023	1.056		2.58	2.50	3.1	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.045	1.048		2.51	2.50	0.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6614	0.6950		2.54	2.41	5.1	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9421	0.9386		2.49	2.50	-0.4	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7803	0.7726		2.48	2.50	-1.0	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.730	2.611		2.25	2.36	-4.3	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.039	1.016		2.44	2.50	-2.2	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.080	1.047		2.42	2.50	-3.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2589	0.2449		2.37	2.50	-5.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9267		2.49	2.50	-0.4	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: ICV 320-223088/10 Calibration Date: 05/14/2018 13:03

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2017.05.14LLC_ICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.056	1.062		2.51	2.50	0.5	50.0
13C4 PFBA	Ave	1.618	1.583		2.45	2.50	-2.2	50.0
13C5 PFPeA	Ave	1.002	0.9893		2.47	2.50	-1.3	50.0
13C3-PFBS	Ave	0.0236	0.0233		2.29	2.33	-1.6	50.0
M2-4:2FTS	Ave	0.1322	0.1317		2.33	2.34	-0.3	50.0
13C2 PFHxA	Ave	1.048	1.078		2.57	2.50	2.8	50.0
13C3 HFPO-DA	Ave	0.0534	0.0530		2.48	2.50	-0.7	50.0
13C4-PFHpA	Ave	1.005	1.019		2.53	2.50	1.4	50.0
18O2 PFHxS	Ave	1.336	1.295		2.29	2.37	-3.0	50.0
M2-6:2FTS	Ave	0.1979	0.1874		2.25	2.38	-5.3	40.0
13C4 PFOA	Ave	0.9424	0.9252		2.45	2.50	-1.8	50.0
13C4 PFOS	Ave	0.9317	0.9457		2.43	2.39	1.5	50.0
13C5 PFNA	Ave	0.7876	0.8016		2.54	2.50	1.8	50.0
13C8 FOSA	Ave	1.349	1.334		2.47	2.50	-1.1	50.0
M2-8:2FTS	Ave	0.2585	0.2475		2.29	2.40	-4.2	40.0
13C2 PFDA	Ave	0.6777	0.6581		2.43	2.50	-2.9	50.0
d3-NMeFOSAA	Ave	0.3073	0.3016		2.45	2.50	-1.8	50.0
d5-NEtFOSAA	Ave	0.3280	0.3176		2.42	2.50	-3.2	50.0
13C2 PFUnA	Ave	0.5672	0.5407		2.38	2.50	-4.7	50.0
13C2 PFDoA	Ave	0.5923	0.5950		2.51	2.50	0.5	50.0
13C2-PFTeDA	Ave	0.6458	0.6735		2.61	2.50	4.3	50.0
13C2-PFHxDA	Ave	1.026	1.053		2.57	2.50	2.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_010.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 14-May-2018 13:03:16 ALS Bottle#: 18 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist:

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 13:22:14 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 13:18:37

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.459	1.459	0.0	1.000	5042232	2.54			2516	
D 1 13C4 PFBA										
217.00 > 172.00	1.459	1.459	0.0	1.000	5332697	2.45		97.8	35214	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.732	-0.002	0.560	3332906	2.47		98.7	44990	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.732	-0.002	1.000	3832493	2.36			1854	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.767	-0.001	1.000	72905	2.29		98.4	583	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.768	-0.002	1.000	5569019	2.30			28626	
298.90 > 99.00	1.766	1.768	-0.002	1.000	2292855		2.43(1.25-3.74)		14493	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.985	-0.003	1.000	967824	2.36			56567	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.985	-0.003	1.000	414508	2.33		99.7	5643	
D 7 13C2 PFHxA										
315.00 > 270.00	2.028	2.022	0.006	1.000	3630725	2.57		103	78558	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.028	2.024	0.004	1.000	3540759	2.34			5086	
313.00 > 119.00	2.028	2.024	0.004	1.000	333568		10.61(5.03-15.10)		4780	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.039	2.043	-0.004	1.000	5154479	2.38			64216	
349.00 > 99.00	2.039	2.043	-0.004	1.000	1875232		2.75(1.36-4.07)		21797	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.118	2.124	-0.006	1.000	178673	2.48		99.3	4986	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.129	2.126	0.003	1.005	568680	2.35			4821	
D 9 13C4-PFHpA										
367.00 > 322.00	2.362	2.357	0.005	1.000	3431958	2.53		101	55599	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.362	2.358	0.004	1.000	3515020	2.41			5746	
363.00 > 169.00	2.362	2.358	0.004	1.000	1425337		2.47(1.13-3.40)		7975	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.362	2.369	-0.007	0.995	4298766	2.19			20918	
399.00 > 99.00	2.374	2.369	0.005	1.000	1457858		2.95(1.50-4.49)		6009	
D 11 18O2 PFHxS										
403.00 > 84.00	2.374	2.373	0.001	1.000	4128569	2.29		97.0	61457	
65 Adona										
377.00 > 251.00	2.397	2.400	-0.003	1.000	9706393	2.34			68438	
377.00 > 85.00	2.397	2.400	-0.003	1.000	5847584		1.66(0.84-2.53)		35552	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.691	2.689	0.002	1.000	1062189	2.50			8719	
D 12 M2-6:2FTS										
429.00 > 81.00	2.691	2.690	0.001	1.000	599760	2.25		94.7	15273	
* 62 13C2-PFOA										
415.00 > 370.00	2.713	2.714	-0.001		3368926	2.50			37131	
D 14 13C4 PFOA										
417.00 > 372.00	2.713	2.714	-0.001	1.000	3117028	2.45		98.2	64672	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.717	-0.004	1.000	3585062	2.39			2032	
413.00 > 169.00	2.713	2.717	-0.004	1.000	1906374		1.88(0.84-2.52)		7474	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.721	2.722	-0.001	1.000	3989871	2.37			33735	
449.00 > 99.00	2.721	2.722	-0.001	1.000	1050537		3.80(1.94-5.82)		12111	
D 18 13C4 PFOS										
503.00 > 80.00	3.089	3.087	0.002	1.000	3045900	2.43		102	22010	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.089	3.087	0.002	1.000	3227879	2.27			16269	
499.00 > 99.00	3.081	3.087	-0.006	0.998	734728		4.39(2.31-6.93)		5409	
D 19 13C5 PFNA										
468.00 > 423.00	3.089	3.089	0.0	1.000	2700604	2.54		102	61952	
20 Perfluorononanoic acid										
463.00 > 419.00	3.089	3.089	0.0	1.000	2756772	2.42			5616	
463.00 > 169.00	3.089	3.089	0.0	1.000	659533		4.18(1.90-5.69)		11139	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.295	3.299	-0.004	1.000	5150979	2.26			26643	
D 21 13C8 FOSA										
506.00 > 78.00	3.417	3.413	0.004	1.000	4495079	2.47		98.9	42942	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.417	3.415	0.002	1.000	4701615	2.65			45445	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.435	3.438	-0.003	1.000	2313880	2.37			24718	
549.00 > 99.00	3.435	3.438	-0.003	1.000	910751		2.54(1.33-3.97)		7548	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.444	3.442	0.002	1.000	798892	2.29		95.8	7015	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.444	3.442	0.002	1.000	1015006	2.34			13330	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.454	3.452	0.002	1.000	2340260	2.58			10648	
513.00 > 169.00	3.454	3.452	0.002	1.000	423972		5.52(2.36-7.09)		11777	
D 23 13C2 PFDA										
515.00 > 470.00	3.454	3.453	0.001	1.000	2217097	2.43		97.1	24505	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.607	3.608	-0.001	1.000	1016213	2.45		98.2	23041	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.618	3.613	0.005	1.003	1065275	2.51			9631	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.772	3.768	0.004	1.000	2136788	2.54			17342	
599.00 > 99.00	3.761	3.768	-0.007	0.997	705440		3.03(1.39-4.16)		15641	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.772	3.778	-0.006	1.000	1069917	2.42		96.8	3227	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.783	3.785	-0.002	1.003	1004230	2.49			22057	
D 30 13C2 PFUnA										
565.00 > 520.00	3.783	3.785	-0.002	1.000	1821487	2.38		95.3	64353	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.783	3.787	-0.004	1.000	1407285	2.48			5044	
563.00 > 169.00	3.783	3.787	-0.004	1.000	378212		3.72(2.12-6.36)		9389	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.940	3.943	-0.003	1.000	7837836	2.25			73480	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.082	4.079	0.003	1.000	2036962	2.44			1241	
613.00 > 169.00	4.082	4.079	0.003	1.000	502256		4.06(2.13-6.40)		6546	
D 36 13C2 PFDoA										
615.00 > 570.00	4.082	4.080	0.002	1.000	2004559	2.51		100	17479	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.352	4.346	0.006	1.000	2098150	2.42			848	
663.00 > 169.00	4.352	4.346	0.006	1.000	691295		3.04(1.25-3.76)		8258	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.586	4.588	-0.002	1.000	2268982	2.61		104	14111	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.586	4.588	-0.002	1.000	555750	2.37			7402	
713.00 > 219.00	4.586	4.588	-0.002	1.000	404018		1.38(0.71-2.13)		5337	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.003	5.006	-0.003	1.000	3548878	2.57		103	10357	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.012	5.008	0.004	1.002	3288617	2.49			620	
813.00 > 169.00	5.003	5.008	-0.005	1.000	564121		5.83(2.86-8.58)		4122	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.377	5.378	-0.001	1.000	3767334	2.51			657	
913.00 > 169.00	5.377	5.378	-0.001	1.000	460143		8.19(3.83-11.48)		3427	

Reagents:

LCPFCIC_FULL_00011 Amount Added: 1.00 Units: mL

Report Date: 14-May-2018 13:22:16 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_010.d

Injection Date: 14-May-2018 13:03:16 Instrument ID: A8_N

Lims ID: ICV Full

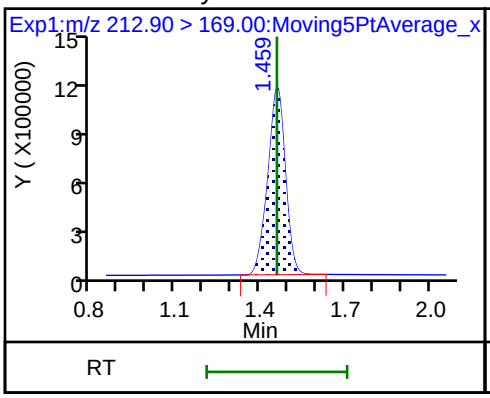
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 10

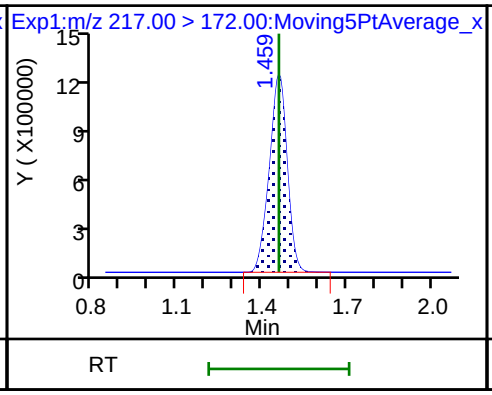
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

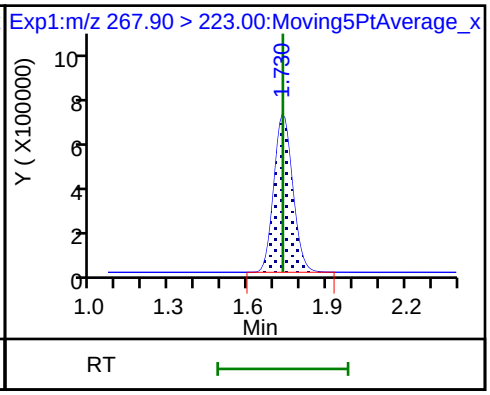
2 Perfluorobutyric acid



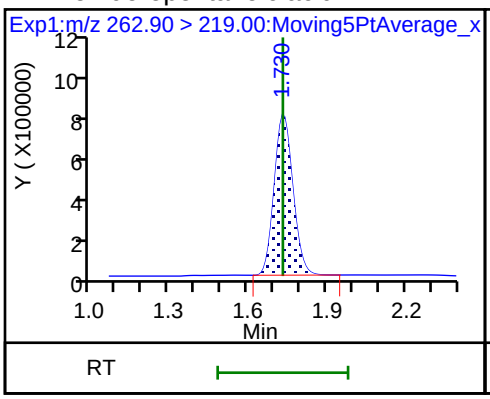
D 1 13C4 PFBA



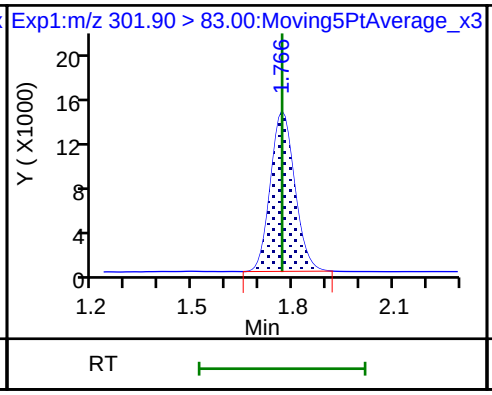
D 3 13C5-PFPeA



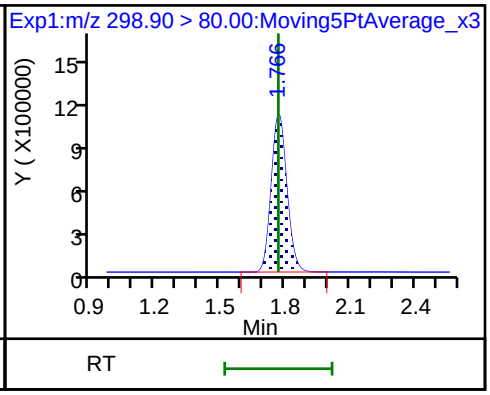
4 Perfluoropentanoic acid



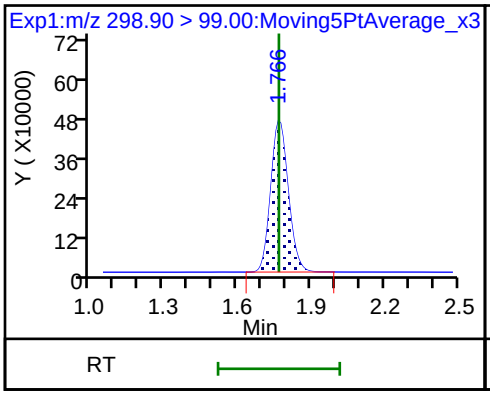
D 47 13C3-PFBS



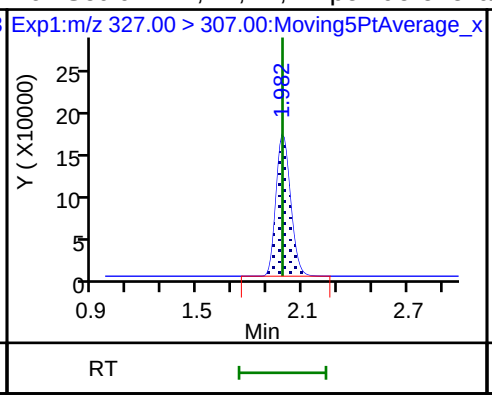
5 Perfluorobutanesulfonic acid



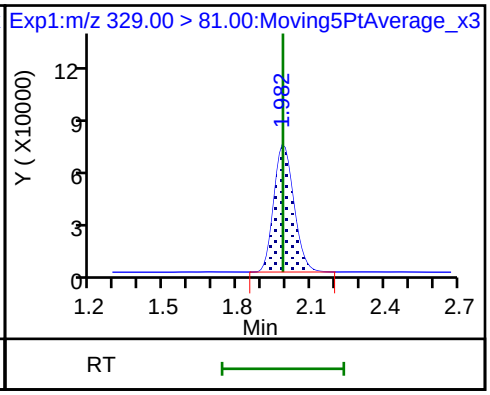
5 Perfluorobutanesulfonic acid



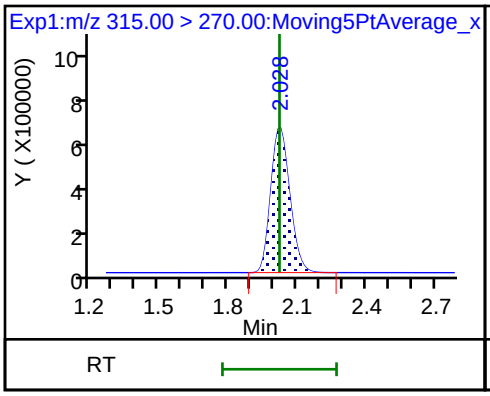
61 Sodium 1H,1H,2H,2H-perfluorohexane



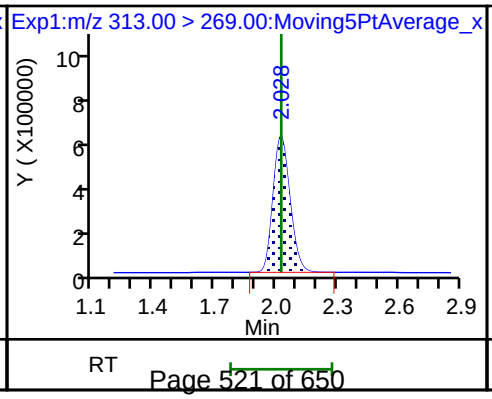
D 60 M2-4:2FTS



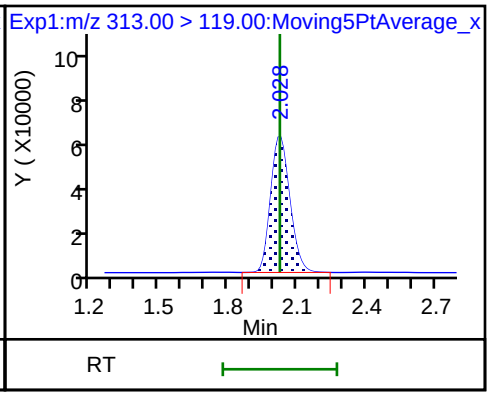
D 7 13C2 PFHxA



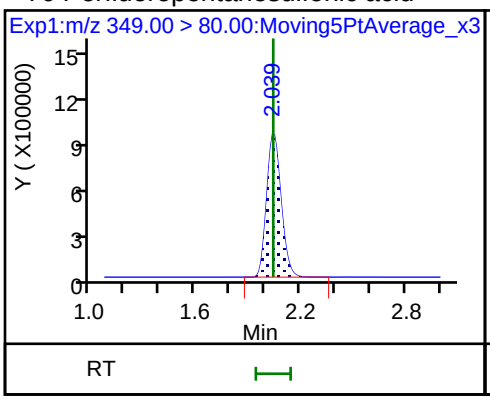
6 Perfluorohexanoic acid



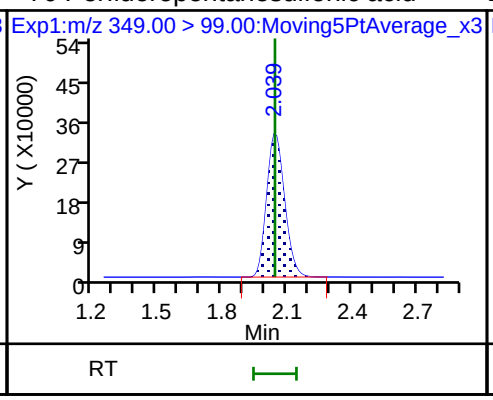
6 Perfluorohexanoic acid



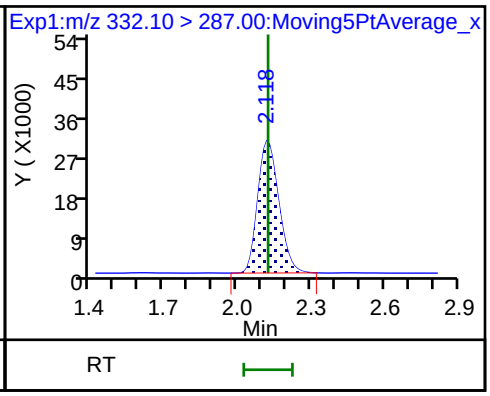
70 Perfluoropentanesulfonic acid



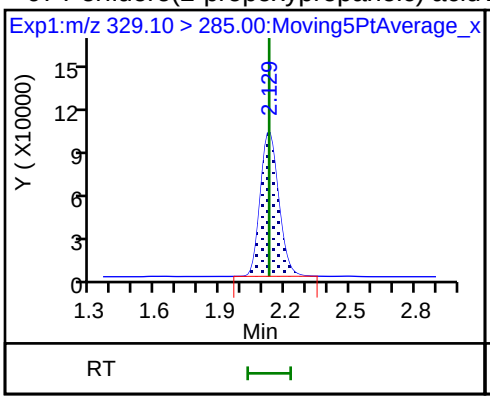
70 Perfluoropentanesulfonic acid



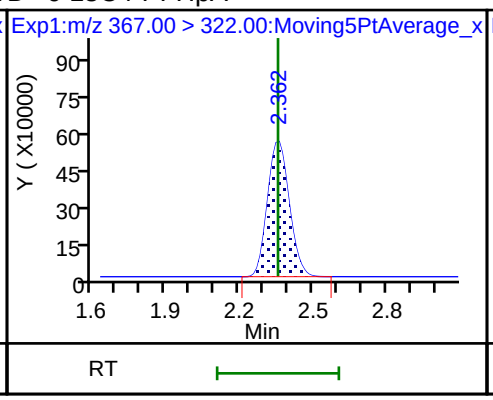
D 64 13C3 HFPO-DA



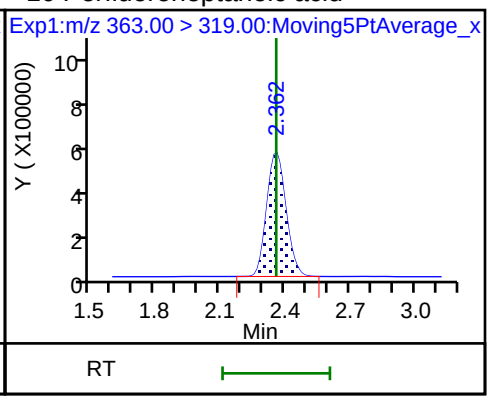
67 Perfluoro(2-propoxypropanoic) acid



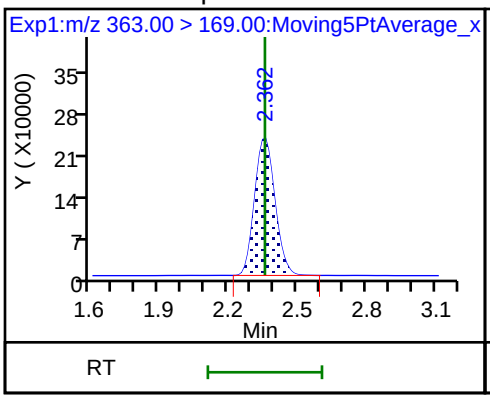
D 9 13C4-PFHpA



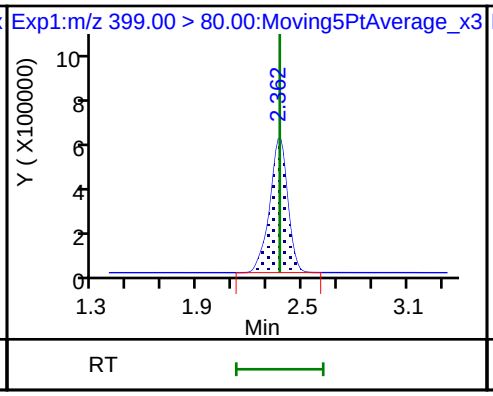
10 Perfluoroheptanoic acid



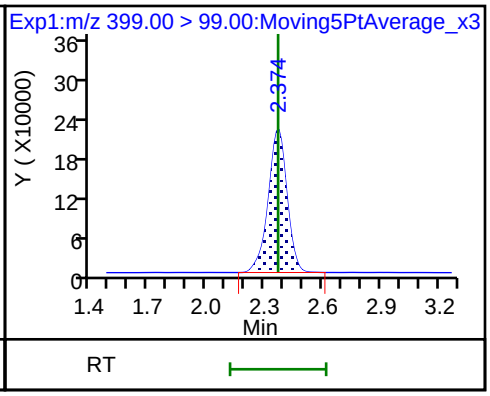
10 Perfluoroheptanoic acid



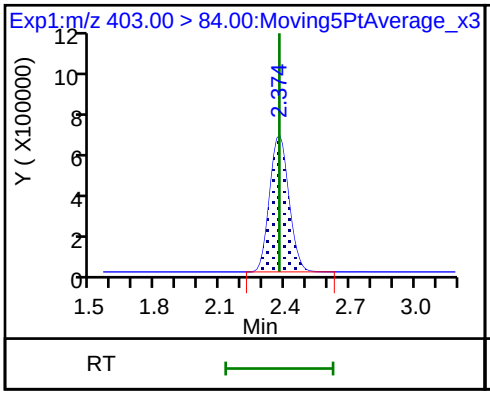
8 Perfluorohexanesulfonic acid



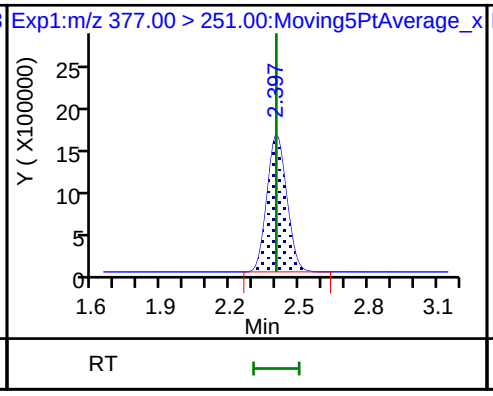
8 Perfluorohexanesulfonic acid



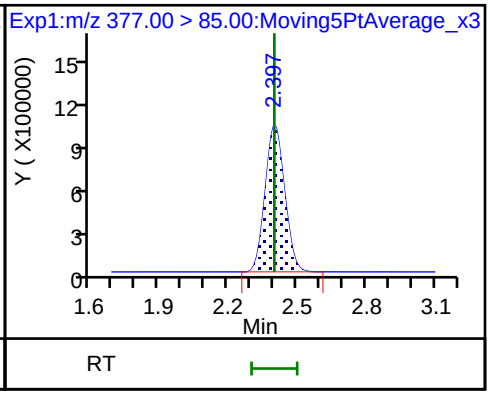
D 11 18O2 PFHxS



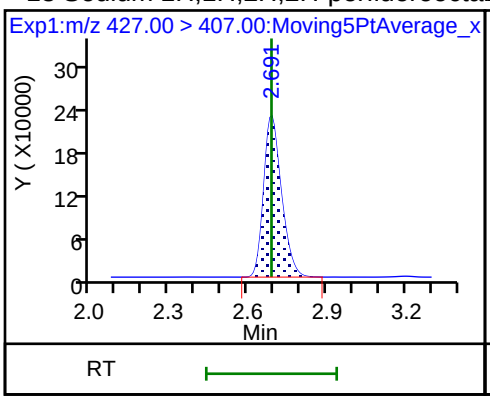
65 Adona



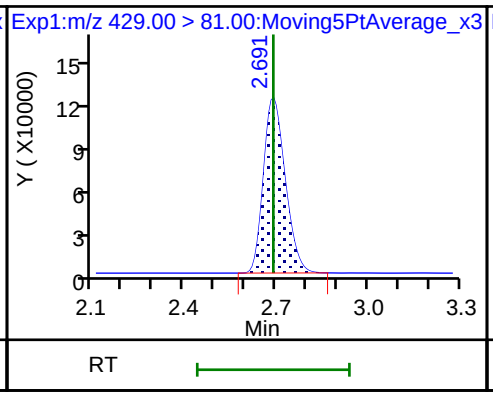
65 Adona



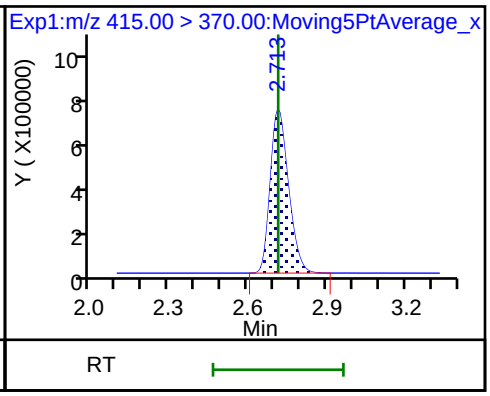
13 Sodium 1H,1H,2H,2H-perfluorooctan



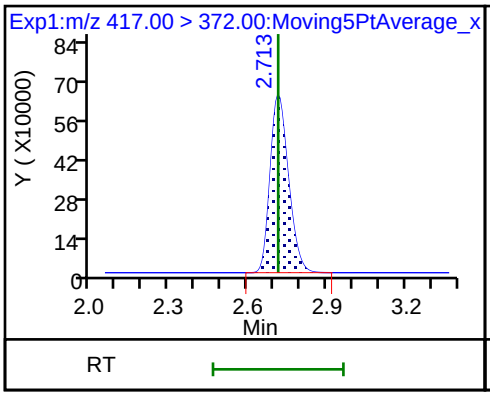
D 12 M2-6:2FTS



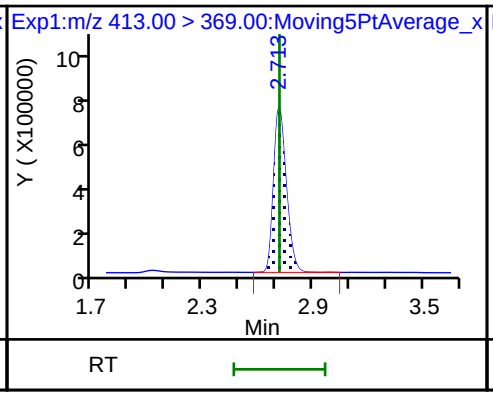
* 62 13C2-PFOA



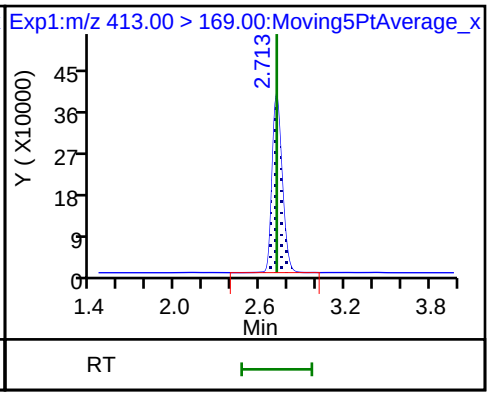
D 14 13C4 PFOA



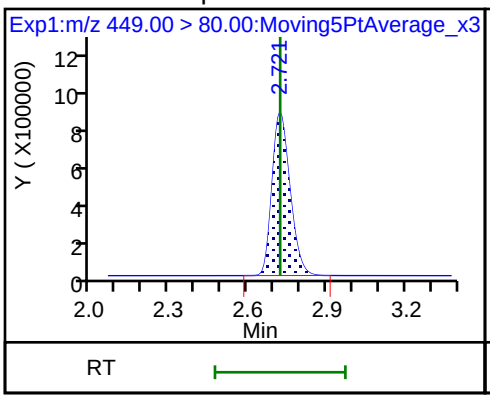
15 Perfluorooctanoic acid



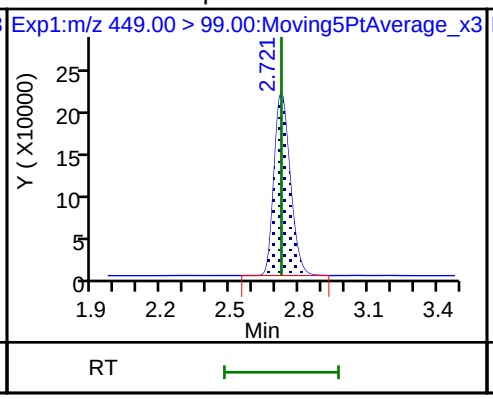
15 Perfluorooctanoic acid



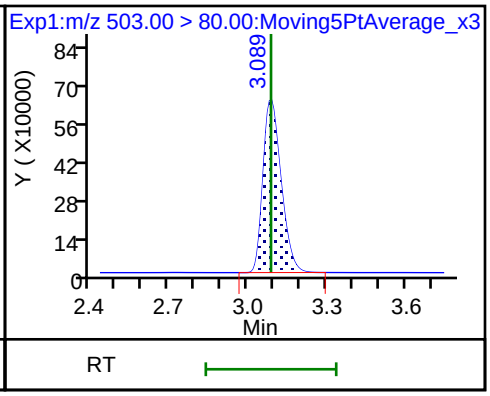
16 Perfluoroheptanesulfonic acid



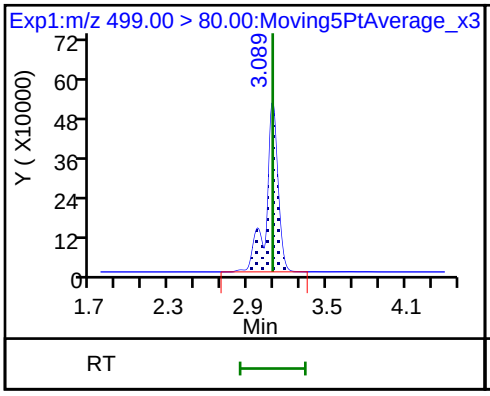
16 Perfluoroheptanesulfonic acid



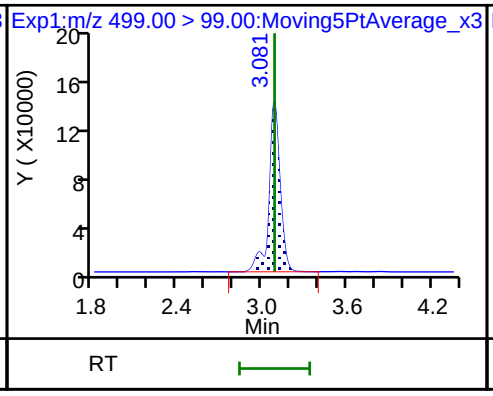
D 18 13C4 PFOS



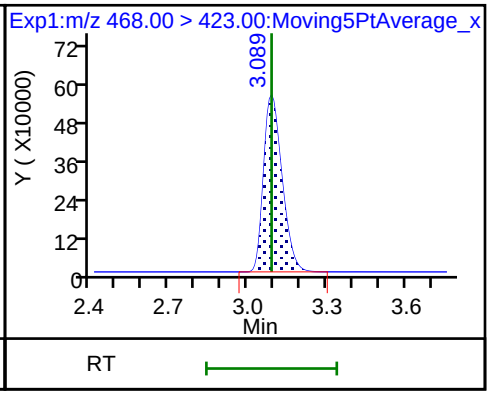
17 Perfluorooctane sulfonic acid



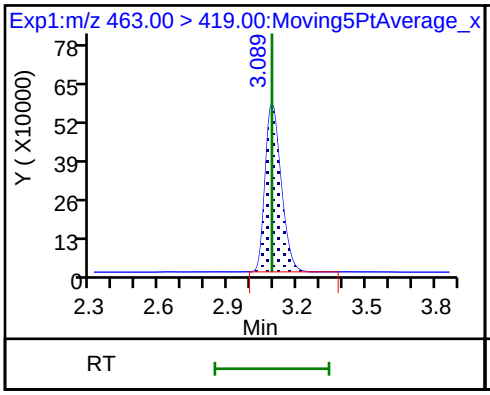
17 Perfluorooctane sulfonic acid



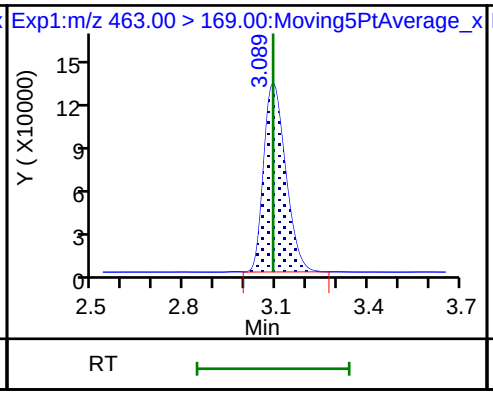
D 19 13C5 PFNA



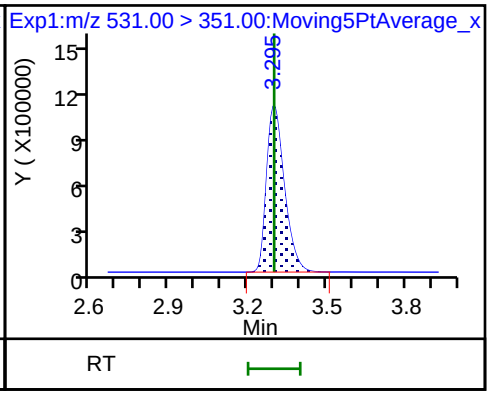
20 Perfluorononanoic acid



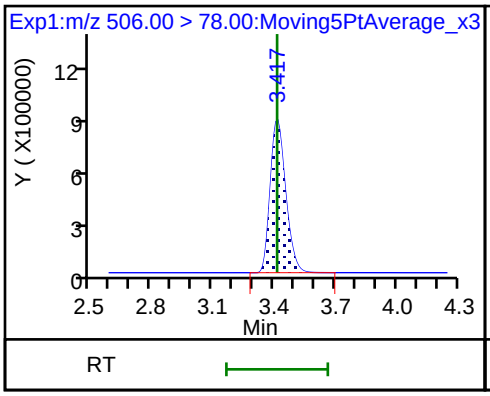
20 Perfluorononanoic acid



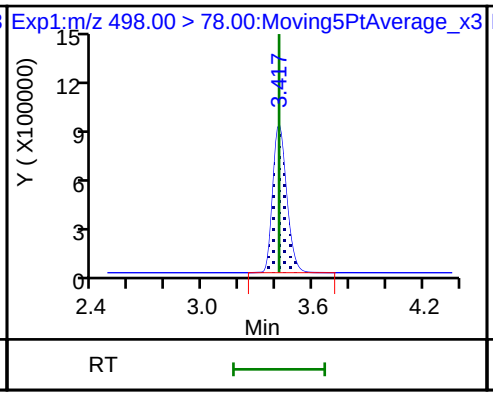
69 9-Chlorohexadecafluoro-3-oxanonane



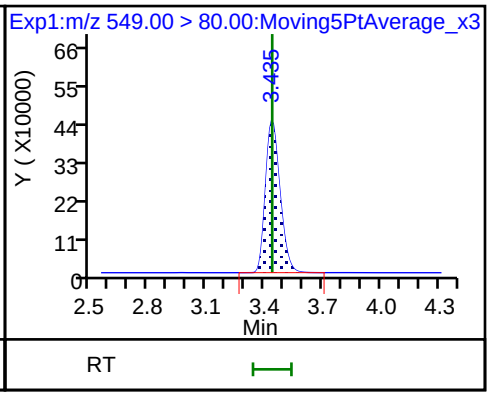
D 21 13C8 FOSA



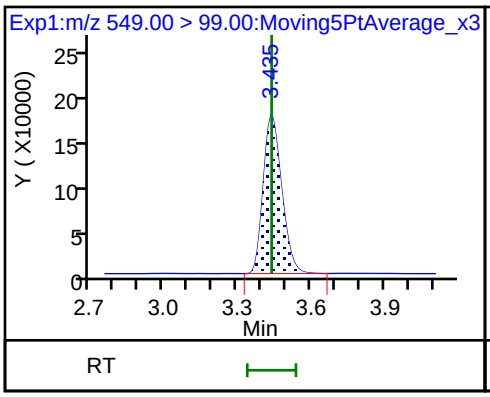
22 Perfluorooctane Sulfonamide



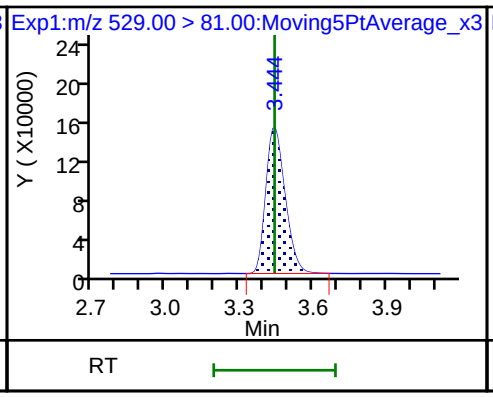
68 Perfluorononanesulfonic acid



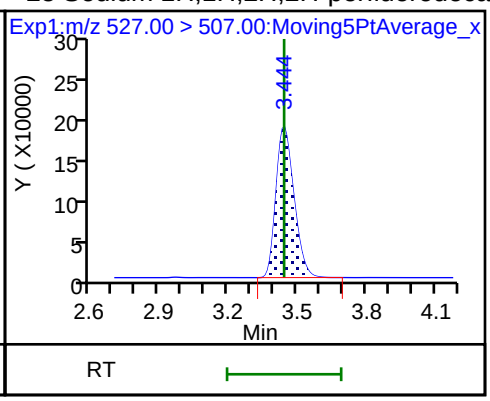
68 Perfluorononanesulfonic acid



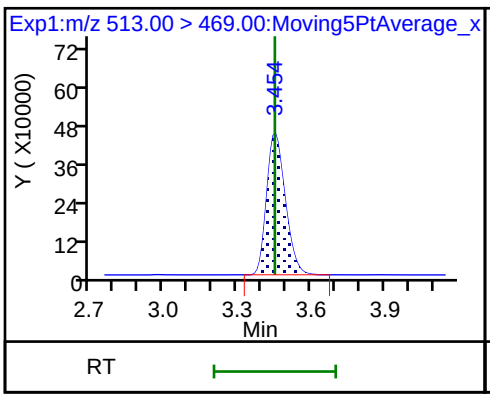
D 26 M2-8:2FTS



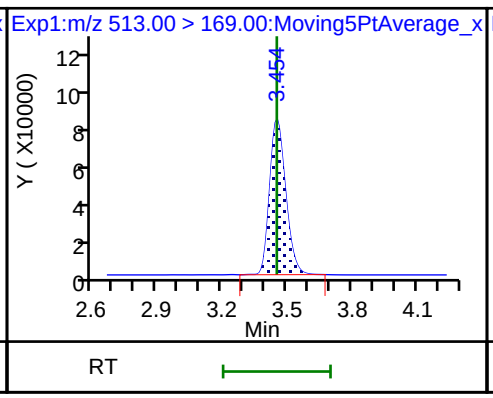
25 Sodium 1H,1H,2H,2H-perfluorodecane



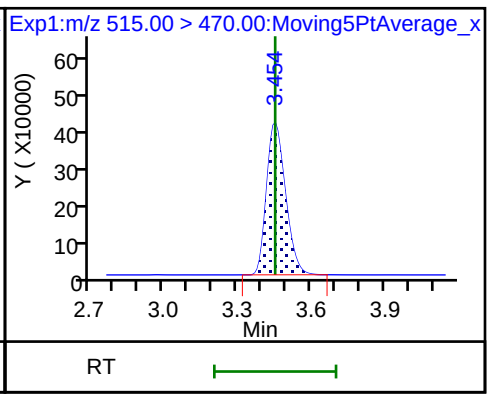
24 Perfluorodecanoic acid



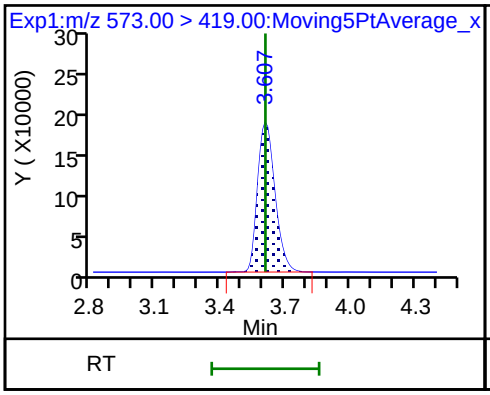
24 Perfluorodecanoic acid



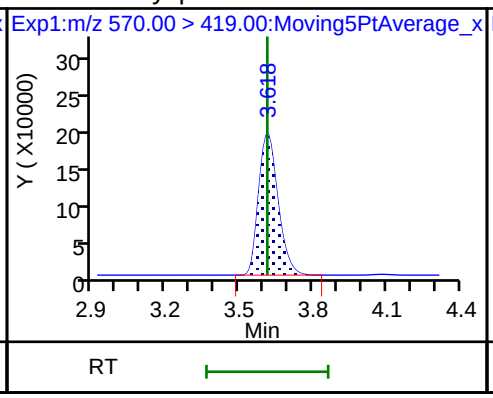
D 23 13C2 PFDA



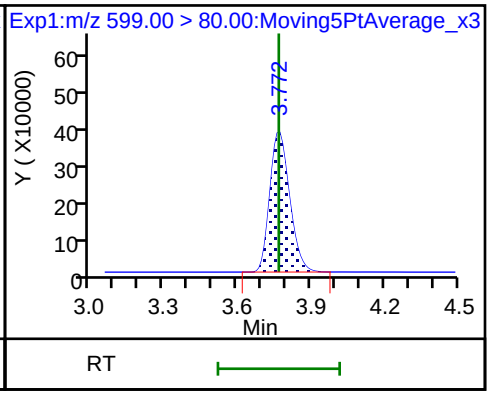
D 27 d3-NMeFOSAA



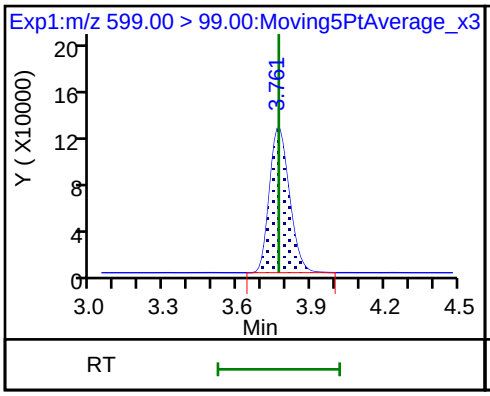
28 N-methyl perfluorooctane sulfonami



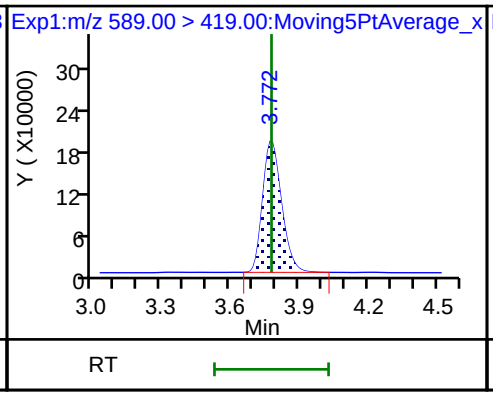
29 Perfluorodecane Sulfonic acid



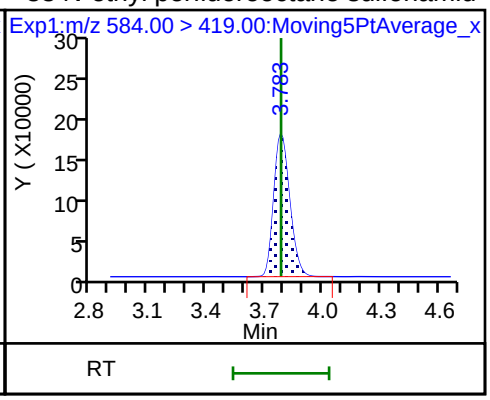
29 Perfluorodecane Sulfonic acid



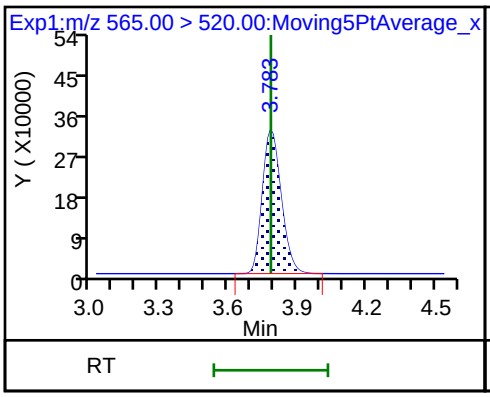
D 32 d5-NEtFOSAA



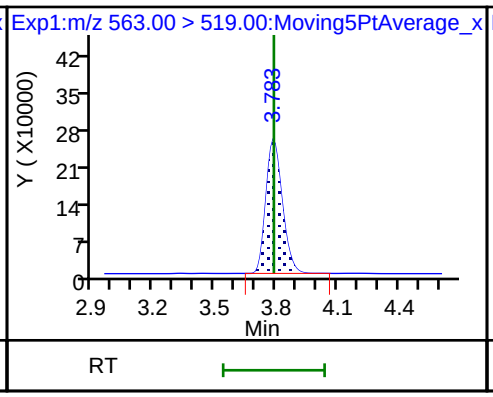
33 N-ethyl perfluorooctane sulfonamid



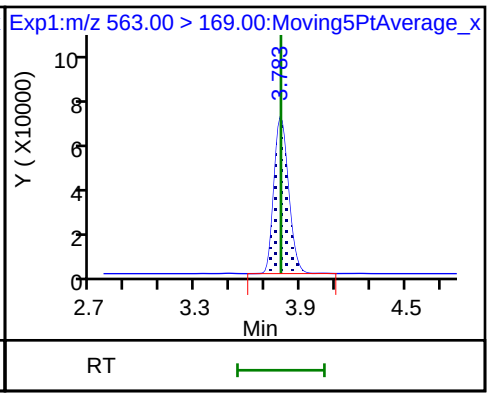
D 30 13C2 PFUnA



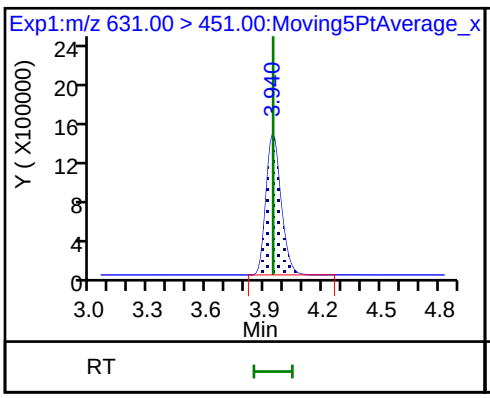
31 Perfluoroundecanoic acid



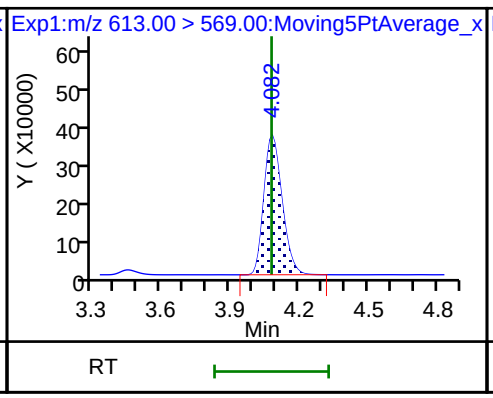
31 Perfluoroundecanoic acid



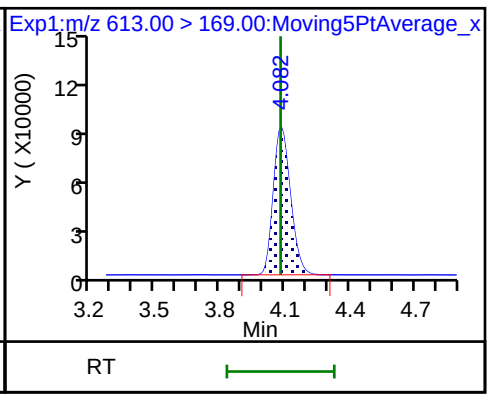
66 11-Chloroeicosafluoro-3-oxaundecan



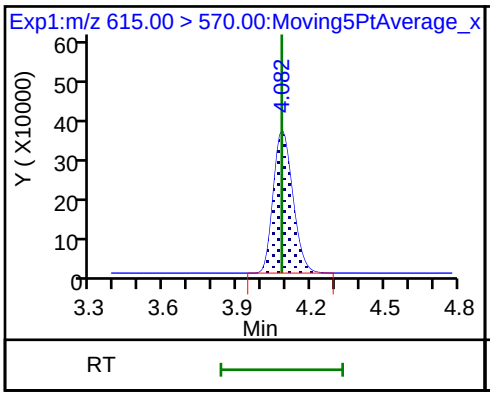
37 Perfluorododecanoic acid



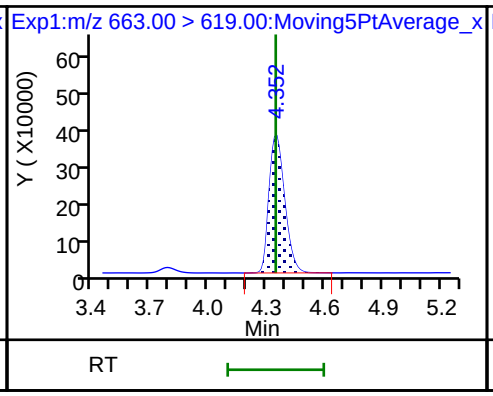
37 Perfluorododecanoic acid



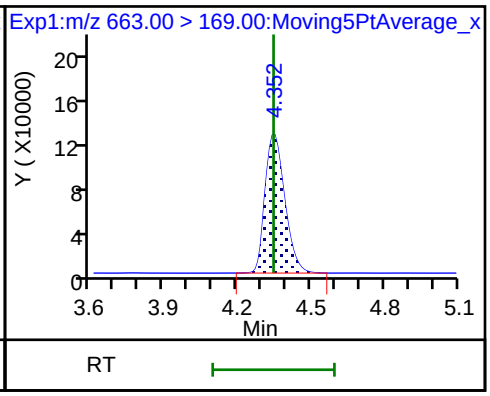
D 36 13C2 PFDoA



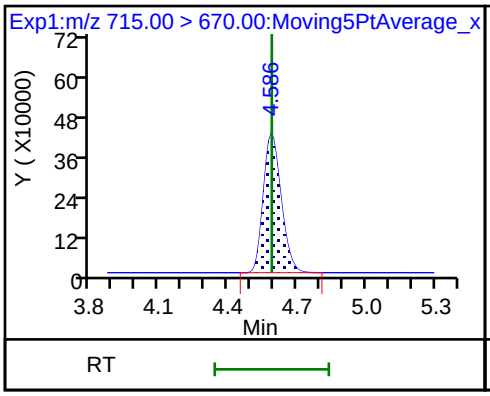
41 Perfluorotridecanoic acid



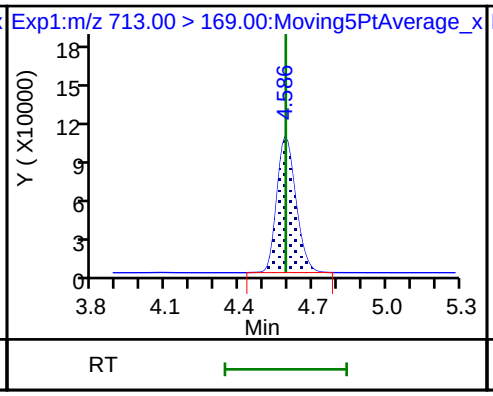
41 Perfluorotridecanoic acid



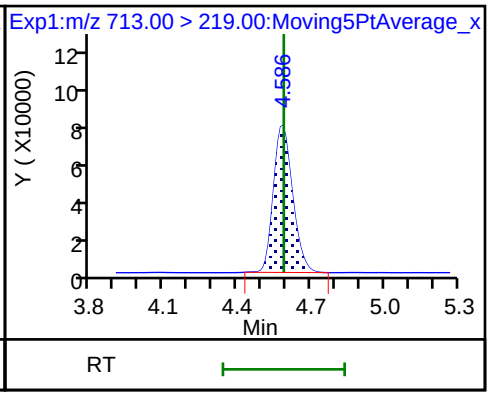
D 43 13C2-PFTeDA



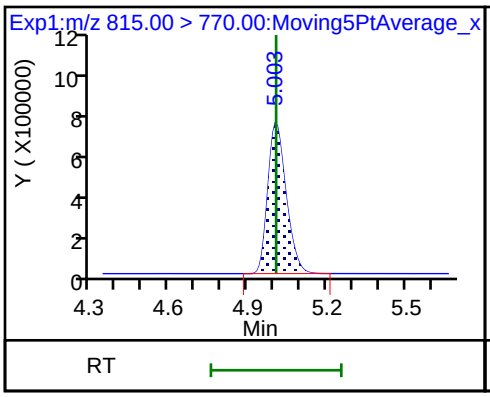
42 Perfluorotetradecanoic acid



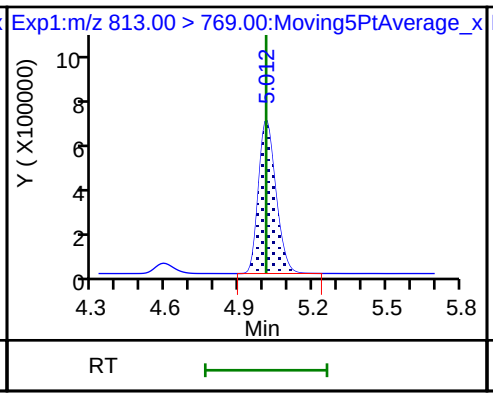
42 Perfluorotetradecanoic acid



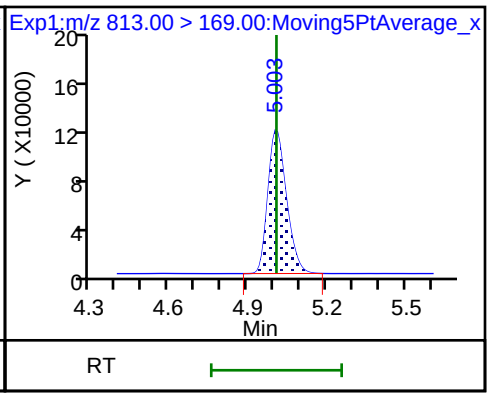
D 44 13C2-PFHxDA



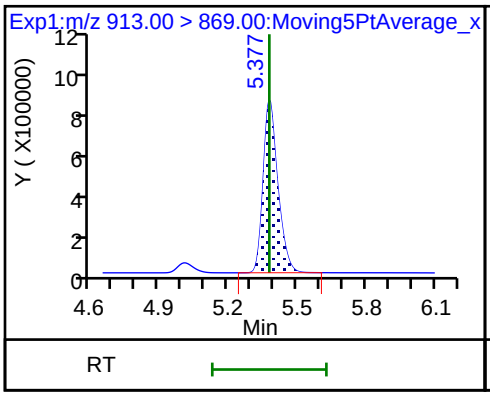
45 Perfluorohexadecanoic acid



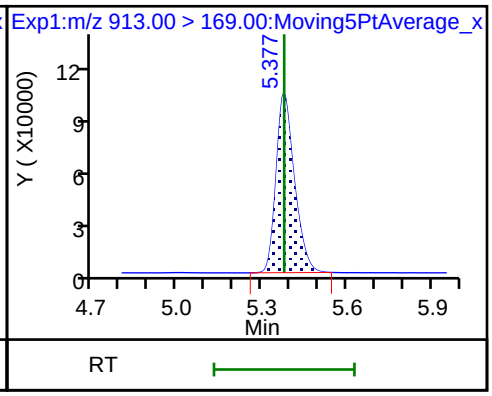
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-223178/1 Calibration Date: 05/14/2018 16:57

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2018.05.14LLAxxx_042.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9291	0.9081		0.977	1.00	-2.3	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.217	1.168		0.960	1.00	-4.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	77.17	74.56		0.854	0.884	-3.4	50.0
4:2 FTS	AveID	13.08	12.07		0.862	0.934	-7.7	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.043	0.9934		0.952	1.00	-4.8	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.00	66.35		0.902	0.938	-3.8	50.0
HFPO-DA (GenX)	AveID	3.383	3.285		0.971	1.00	-2.9	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	0.999		0.941	1.00	-5.9	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.126	1.032		0.834	0.910	-8.4	40.0
Adona	AveID	3.251	3.184		0.979	1.00	-2.1	50.0
6:2FTS	AveID	1.683	1.728		0.973	0.948	2.7	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.202	1.137		0.947	1.00	-5.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.319	1.270		0.916	0.952	-3.7	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.116	1.052		0.874	0.928	-5.8	40.0
Perfluorononanoic acid (PFNA)	AveID	1.054	0.9772		0.927	1.00	-7.3	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.785	1.799		0.940	0.932	0.8	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9855	0.9496		0.964	1.00	-3.6	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7650	0.7147		0.897	0.960	-6.6	50.0
8:2FTS	AveID	1.301	1.353		0.996	0.958	4.0	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.023	1.028		1.00	1.00	0.5	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.045	1.057		1.01	1.00	1.1	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6614	0.6464		0.942	0.964	-2.3	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9421	0.9128		0.969	1.00	-3.1	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7803	0.7223		0.926	1.00	-7.4	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.730	2.695		0.930	0.942	-1.3	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.039	1.064		1.02	1.00	2.4	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.080	1.036		0.960	1.00	-4.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2589	0.2485		0.960	1.00	-4.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9119		0.965	1.00	-3.5	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-223178/1 Calibration Date: 05/14/2018 16:57

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2018.05.14LLAxxx_042.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.056	1.032		0.977	1.00	-2.3	50.0
13C4 PFBA	Ave	1.618	1.591		2.46	2.50	-1.7	50.0
13C5 PFPeA	Ave	1.002	1.002		2.50	2.50	-0.0	50.0
13C3-PFBS	Ave	0.0236	0.0242		2.38	2.33	2.5	50.0
M2-4:2FTS	Ave	0.1322	0.1362		2.41	2.34	3.0	50.0
13C2 PFHxA	Ave	1.048	1.081		2.58	2.50	3.1	50.0
13C3 HFPO-DA	Ave	0.0534	0.0499		2.34	2.50	-6.6	50.0
13C4-PFHpA	Ave	1.005	1.027		2.56	2.50	2.2	50.0
18O2 PFHxS	Ave	1.336	1.285		2.27	2.37	-3.8	50.0
M2-6:2FTS	Ave	0.1979	0.1974		2.37	2.38	-0.2	40.0
13C4 PFOA	Ave	0.9424	0.9542		2.53	2.50	1.2	50.0
13C4 PFOS	Ave	0.9317	0.9531		2.44	2.39	2.3	50.0
13C5 PFNA	Ave	0.7876	0.8134		2.58	2.50	3.3	50.0
13C8 FOSA	Ave	1.349	1.369		2.54	2.50	1.5	50.0
M2-8:2FTS	Ave	0.2585	0.2634		2.44	2.40	1.9	40.0
13C2 PFDA	Ave	0.6777	0.6652		2.45	2.50	-1.8	50.0
d3-NMeFOSAA	Ave	0.3073	0.3042		2.47	2.50	-1.0	50.0
13C2 PFUnA	Ave	0.5672	0.6129		2.70	2.50	8.0	50.0
d5-NEtFOSAA	Ave	0.3280	0.3254		2.48	2.50	-0.8	50.0
13C2 PFDoA	Ave	0.5923	0.5902		2.49	2.50	-0.4	50.0
13C2-PFTeDA	Ave	0.6458	0.6870		2.66	2.50	6.4	50.0
13C2-PFHxDA	Ave	1.026	1.177		2.87	2.50	14.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_042.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2018 16:57:53 ALS Bottle#: 28 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:10 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 14:53:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.452	0.0	1.000	5724537	2.46		98.3	45158	
2 Perfluorobutyric acid										
212.90 > 169.00	1.457	1.457	0.0	1.004	2079279	0.9773		97.7	1046	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.728	1.728	0.0	1.000	1684261	0.9603		96.0	823	
D 3 13C5-PFPeA										
267.90 > 223.00	1.728	1.728	0.0	0.561	3604237	2.50		100	72198	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.764	1.764	0.0	1.000	2297954	0.8542		96.6	14317	
298.90 > 99.00	1.764	1.764	0.0	1.000	968031		2.37(1.25-3.74)		6165	
D 47 13C3-PFBS										
301.90 > 83.00	1.764	1.764	0.0	1.000	81059	2.38		102	531	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.980	1.980	0.0	1.000	393067	0.8619		92.3	23155	
D 60 M2-4:2FTS										
329.00 > 81.00	1.980	1.980	0.0	1.000	457546	2.41		103	5786	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.014	0.0	1.000	1545178	0.9521		95.2	2704	
313.00 > 119.00	2.014	2.014	0.0	1.000	146961		10.51(5.03-15.10)		2348	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	2.014	0.0	1.000	3888771	2.58		103	75283	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.036	2.036	0.0	1.000	2169852	0.9021		96.2	26948	
349.00 > 99.00	2.036	2.036	0.0	1.000	777731		2.79(1.36-4.07)		7930	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.116	2.116	0.0	1.000	235858	0.9710		97.1	1689	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.116	2.116	0.0	1.000	179479	2.34		93.4	6293	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.345	2.345	0.0	1.000	1476059	0.9415		94.1	2154	
363.00 > 169.00	2.345	2.345	0.0	1.000	584318		2.53(1.13-3.40)		2999	
D 9 13C4-PFHpA										
367.00 > 322.00	2.345	2.345	0.0	1.000	3695672	2.56		102	59394	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.358	2.358	0.0	1.000	1736074	0.8336		91.6	10992	
399.00 > 99.00	2.358	2.358	0.0	1.000	594235		2.92(1.50-4.49)		2054	
D 11 18O2 PFHxS										
403.00 > 84.00	2.358	2.358	0.0	1.000	4372388	2.27		96.2	46698	
65 Adona										
377.00 > 251.00	2.395	2.395	0.0	1.000	4366077	0.9794		97.9	61231	
377.00 > 85.00	2.395	2.395	0.0	1.000	2590317		1.69(0.84-2.53)		21903	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.682	2.682	0.0	1.000	465498	0.9735		103	3691	
D 12 M2-6:2FTS										
429.00 > 81.00	2.682	2.682	0.0	1.000	674706	2.37		99.8	15474	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.704	2.704	0.0	1.000	1561620	0.9466		94.7	803	
413.00 > 169.00	2.704	2.704	0.0	1.000	766495		2.04(0.84-2.52)		2779	
* 62 13C2-PFOA										
415.00 > 370.00	2.704	2.704	0.0		3597250	2.50			46790	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.712	2.712	0.0	1.000	1658425	0.9165		96.3	18215	
449.00 > 99.00	2.712	2.712	0.0	1.000	453323		3.66(1.94-5.82)		4704	
D 14 13C4 PFOA										
417.00 > 372.00	2.704	2.704	0.0	1.000	3432372	2.53		101	79532	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.073	3.073	0.0	1.000	1338342	0.8741		94.2	8673	
499.00 > 99.00	3.073	3.073	0.0	1.000	307128		4.36(2.31-6.93)		2552	
20 Perfluorononanoic acid										
463.00 > 419.00	3.081	3.081	0.0	1.000	1143619	0.9269		92.7	2349	
463.00 > 169.00	3.081	3.081	0.0	1.000	273805		4.18(1.90-5.69)		7039	
D 18 13C4 PFOS										
503.00 > 80.00	3.073	3.073	0.0	1.000	3277619	2.44		102	28002	
D 19 13C5 PFNA										
468.00 > 423.00	3.081	3.081	0.0	1.000	2925890	2.58		103	46535	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.287	3.287	0.0	1.000	2299639	0.9396		101	22376	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.407	3.407	0.0	1.000	1869888	0.9635		96.4	23797	
D 21 13C8 FOSA										
506.00 > 78.00	3.407	3.407	0.0	1.000	4922869	2.54		101	55473	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.426	3.426	0.0	1.000	940884	0.8968		93.4	11998	
549.00 > 99.00	3.426	3.426	0.0	1.000	371802		2.53(1.33-3.97)		4459	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.435	3.435	0.0	1.000	491216	1.00		104	8492	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.444	3.444	0.0	1.000	984051	1.00		100	6881	
513.00 > 169.00	3.444	3.444	0.0	1.000	184994		5.32(2.36-7.09)		5792	
D 26 M2-8:2FTS										
529.00 > 81.00	3.435	3.435	0.0	1.000	907691	2.44		102	7752	
D 23 13C2 PFDA										
515.00 > 470.00	3.444	3.444	0.0	1.000	2392883	2.45		98.2	40475	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.607	3.607	0.0	1.003	462610	1.01		101	4346	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.596	3.596	0.0	1.000	1094190	2.47		99.0	24246	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.761	3.761	0.0	1.000	854562	0.9422		97.7	9668	
599.00 > 99.00	3.761	3.761	0.0	1.000	271489		3.15(1.39-4.16)		4384	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.771	3.771	0.0	1.000	636967	0.9256		92.6	2936	
563.00 > 169.00	3.771	3.771	0.0	1.000	173853		3.66(2.12-6.36)		5187	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.771	3.771	0.0	1.000	427455	0.9689		96.9	12448	
D 30 13C2 PFUnA										
565.00 > 520.00	3.771	3.771	0.0	1.000	2204728	2.70		108	40438	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.771	3.771	0.0	1.000	1170687	2.48		99.2	3253	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.928	3.928	0.0	1.000	3481505	0.9301		98.7	58999	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.071	4.071	0.0	1.000	903559	1.02		102	522	
613.00 > 169.00	4.071	4.071	0.0	1.000	220400		4.10(2.13-6.40)		2652	
D 36 13C2 PFDoA										
615.00 > 570.00	4.071	4.071	0.0	1.000	2123048	2.49		99.6	16913	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.340	4.340	0.0	1.000	879834	0.9597		96.0	345	
663.00 > 169.00	4.340	4.340	0.0	1.000	282034		3.12(1.25-3.76)		3187	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.574	4.574	0.0	1.000	245636	0.9599		96.0	3569	
713.00 > 219.00	4.574	4.574	0.0	1.000	166809		1.47(0.71-2.13)		2808	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.574	4.574	0.0	1.000	2471158	2.66		106	14596	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.993	4.993	0.0	1.000	1544328	0.9648		96.5	299	
813.00 > 169.00	4.993	4.993	0.0	1.000	258413		5.98(2.86-8.58)		2211	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.993	4.993	0.0	1.000	4233947	2.87		115	13052	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.364	5.364	0.0	1.000	1747494	0.9769		97.7	296	
913.00 > 169.00	5.364	5.364	0.0	1.000	215891		8.09(3.83-11.48)		2201	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 15-May-2018 15:09:12 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_042.d

Injection Date: 14-May-2018 16:57:53 Instrument ID: A8_N

Lims ID: CCV L4

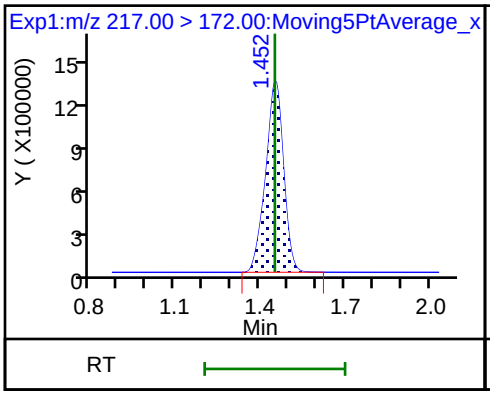
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 28 Worklist Smp#: 1

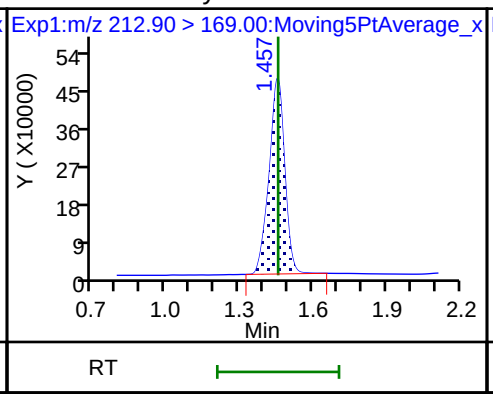
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

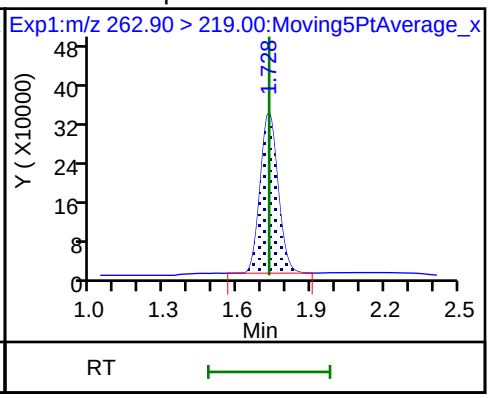
D 1 13C4 PFBA



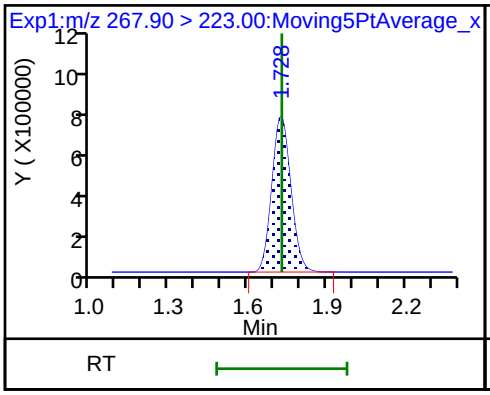
2 Perfluorobutyric acid



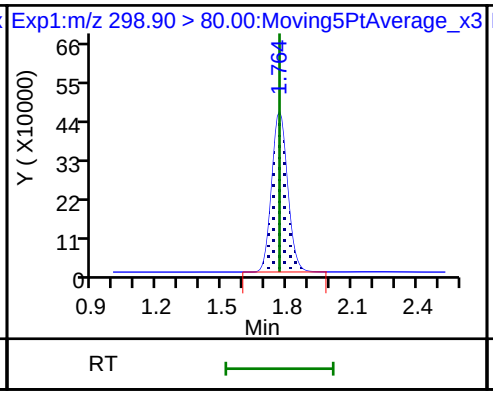
4 Perfluoropentanoic acid



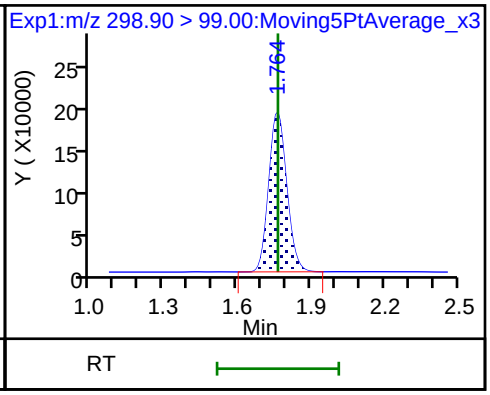
D 3 13C5-PFPeA



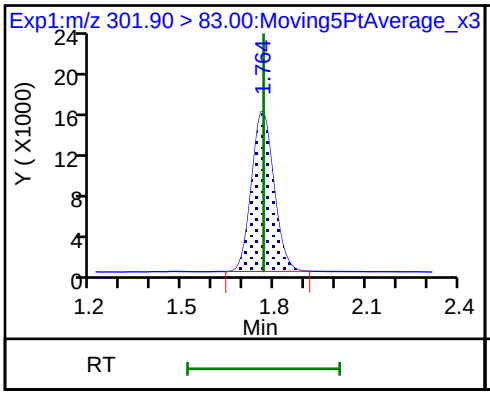
5 Perfluorobutanesulfonic acid



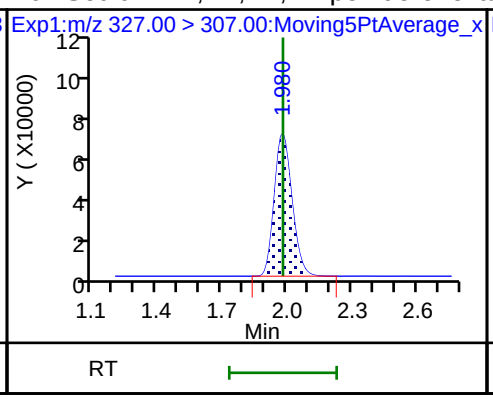
5 Perfluorobutanesulfonic acid



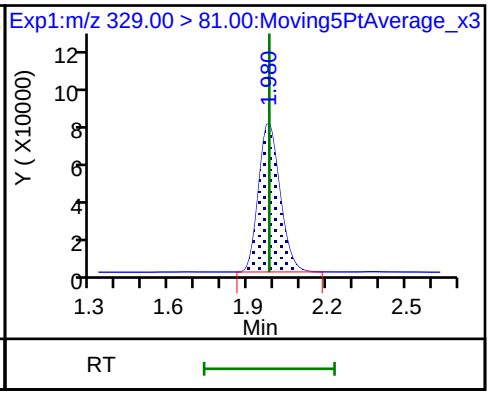
D 47 13C3-PFBS



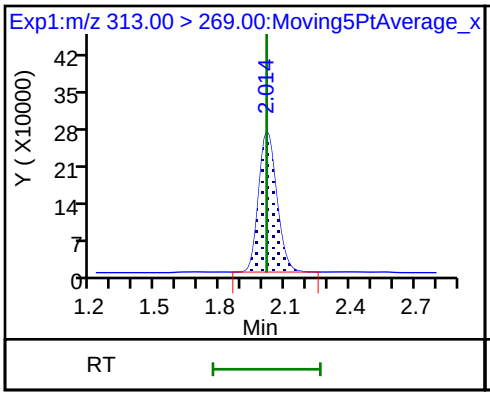
61 Sodium 1H,1H,2H,2H-perfluorohexan



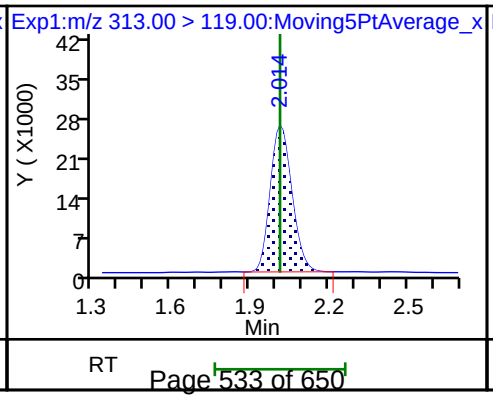
D 60 M2-4:2FTS



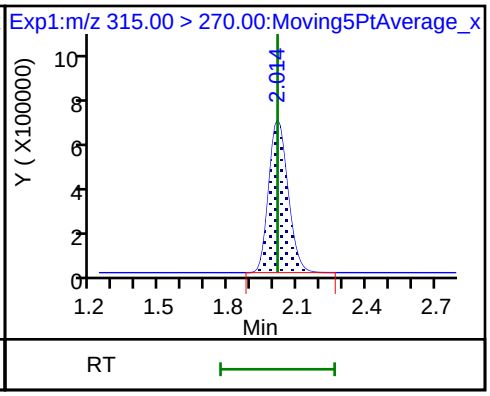
6 Perfluorohexanoic acid



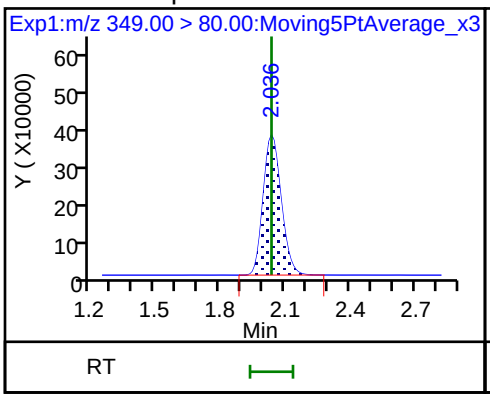
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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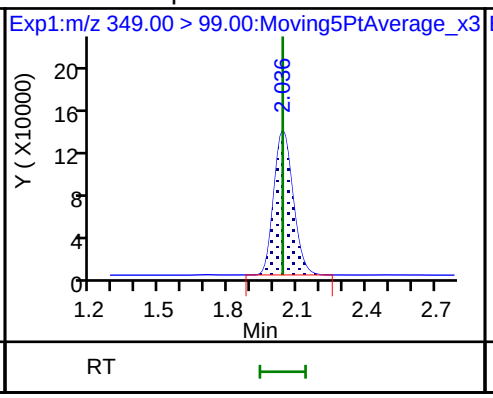
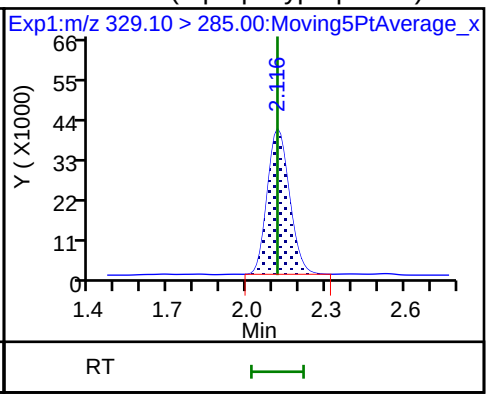
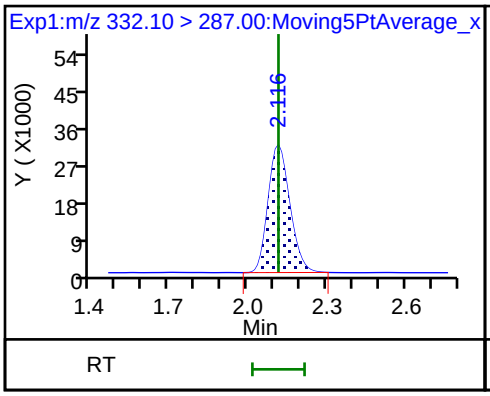


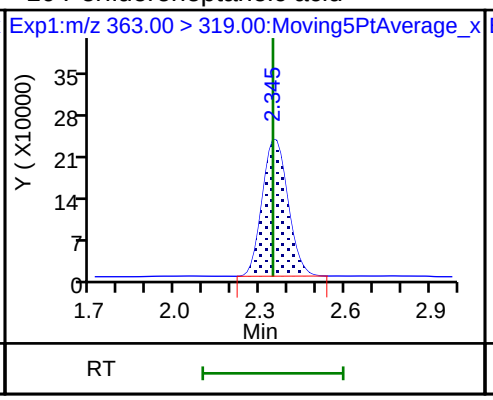
67 Perfluoro(2-propoxypropanoic) acid



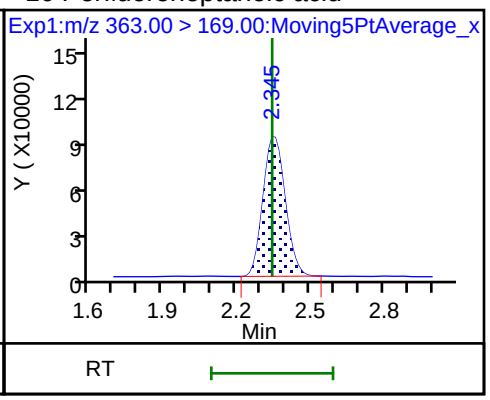
D 64 13C3 HFPO-DA



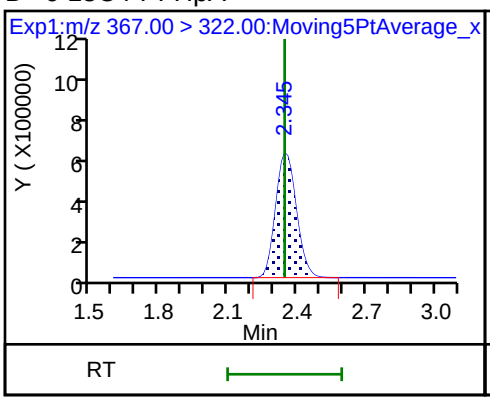
10 Perfluoroheptanoic acid



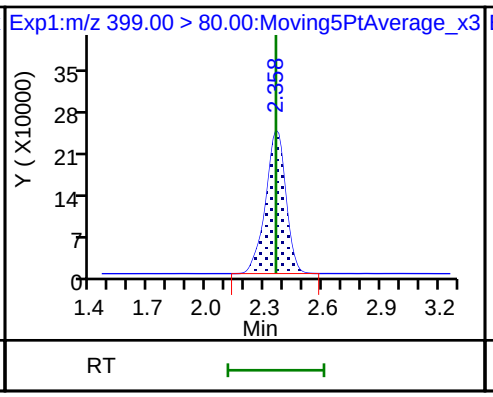
10 Perfluoroheptanoic acid



D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid



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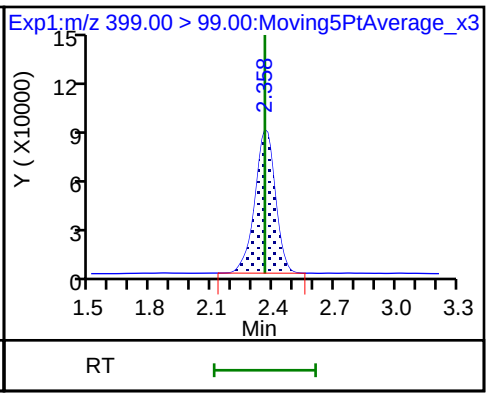
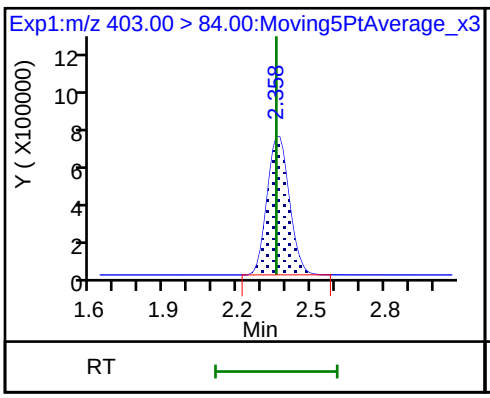
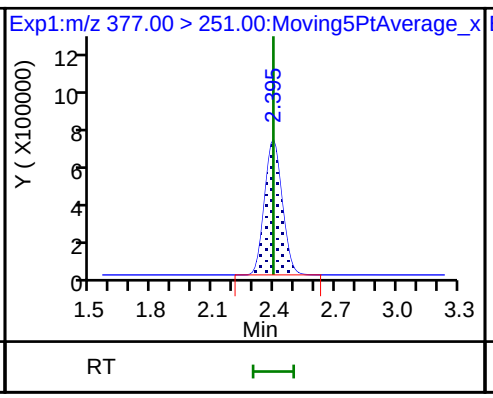


D 11 18O2 PFHxS



65 Adona



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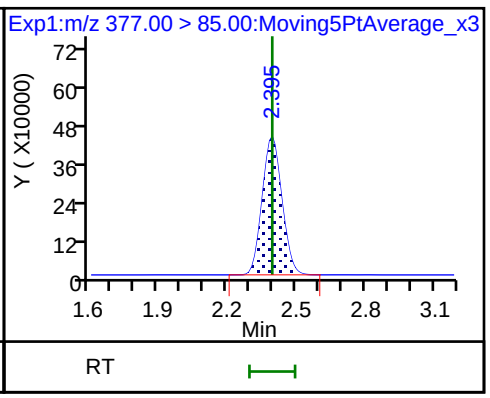
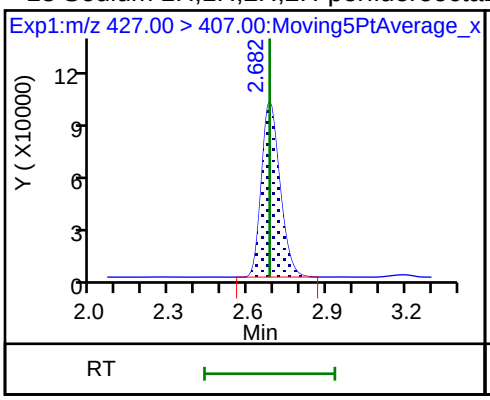
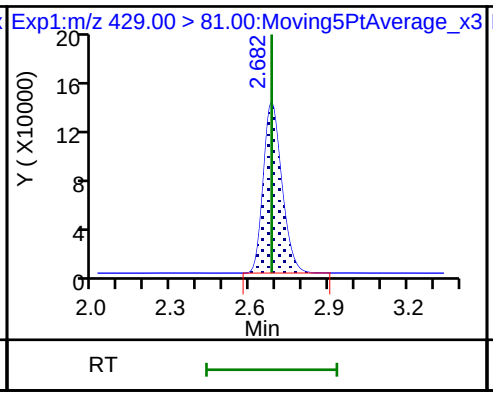


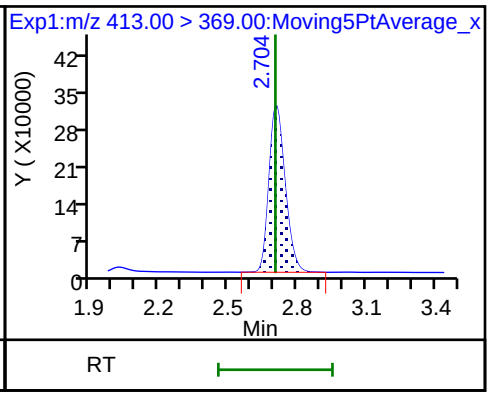
13 Sodium 1H,1H,2H,2H-perfluorooctane



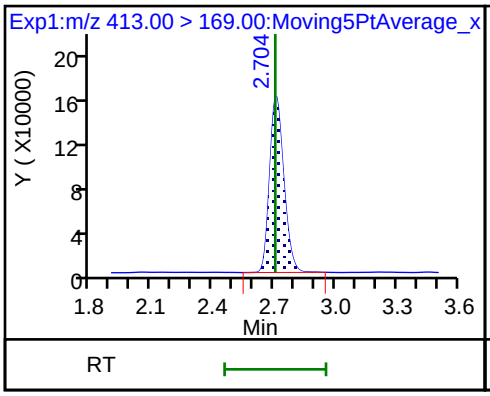
D 12 M2-6:2FTS



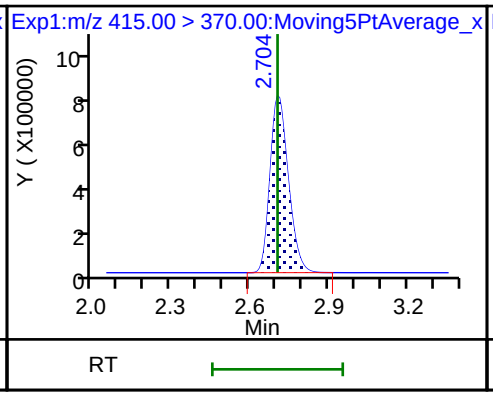
15 Perfluorooctanoic acid



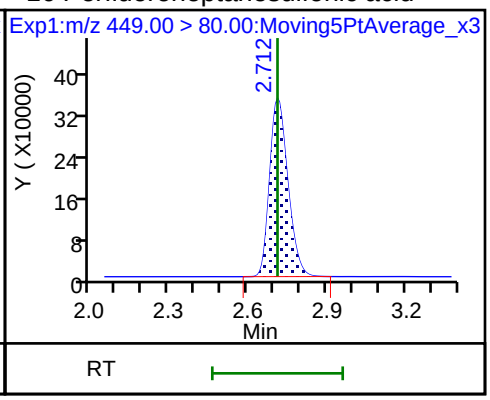
15 Perfluorooctanoic acid



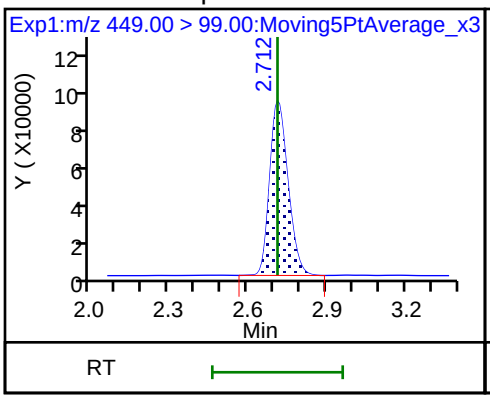
* 62 13C2-PFOA



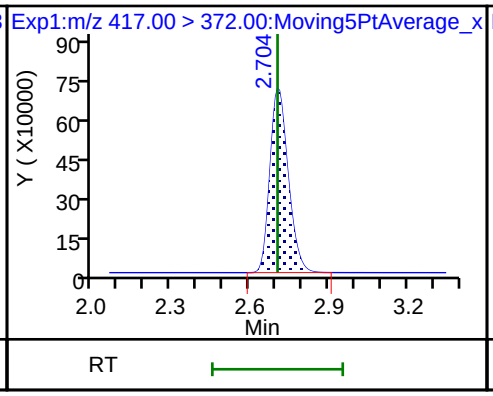
16 Perfluoroheptanesulfonic acid



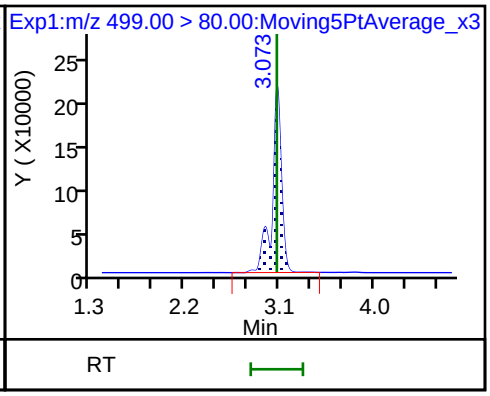
16 Perfluoroheptanesulfonic acid



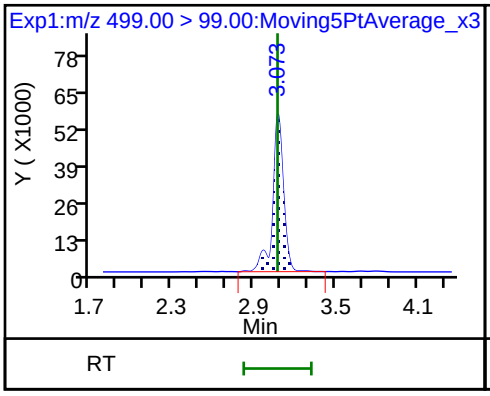
D 14 13C4 PFOA



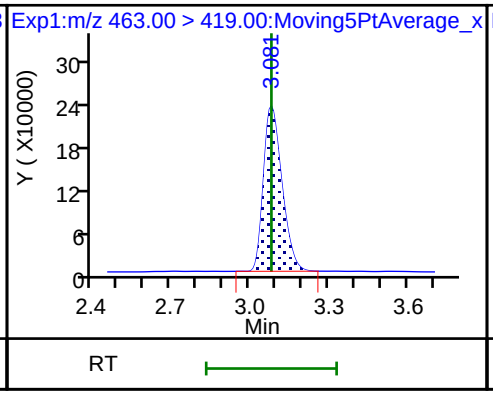
17 Perfluorooctane sulfonic acid



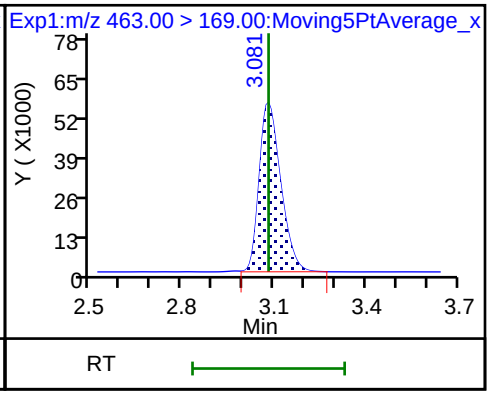
17 Perfluorooctane sulfonic acid



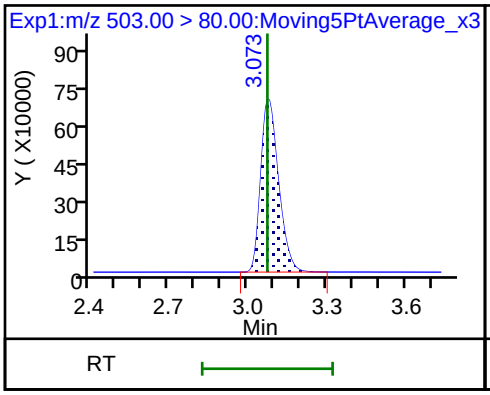
20 Perfluorononanoic acid



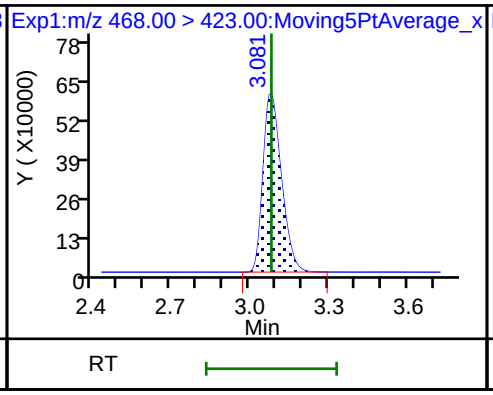
20 Perfluorononanoic acid



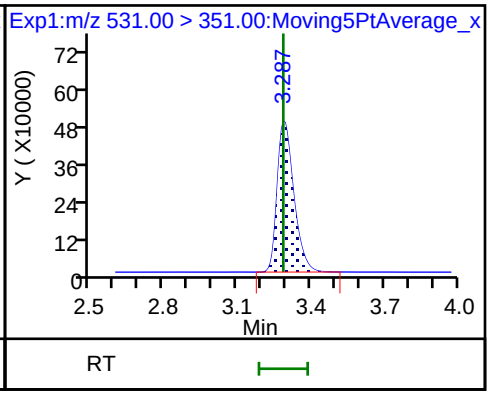
D 18 13C4 PFOS



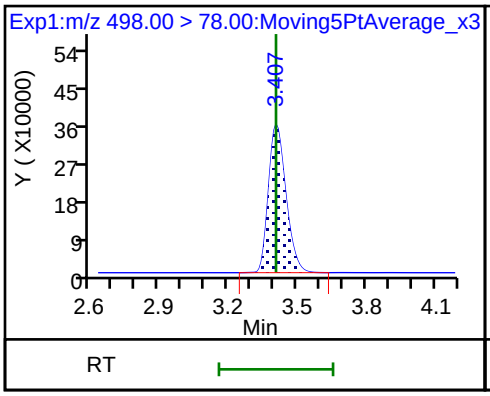
D 19 13C5 PFNA



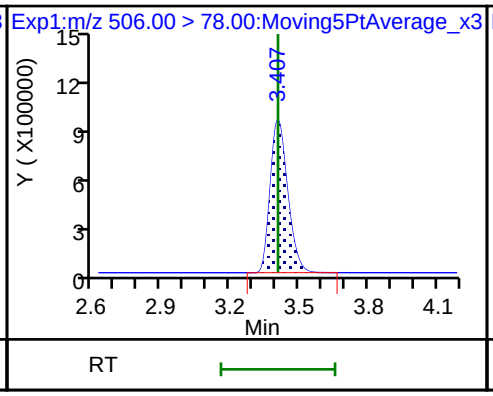
69 9-Chlorohexadecafluoro-3-oxanonane



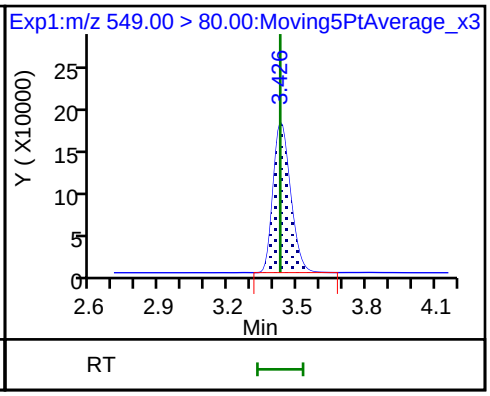
22 Perfluorooctane Sulfonamide



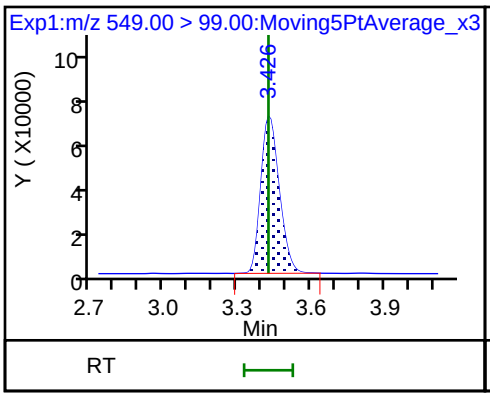
D 21 13C8 FOSA



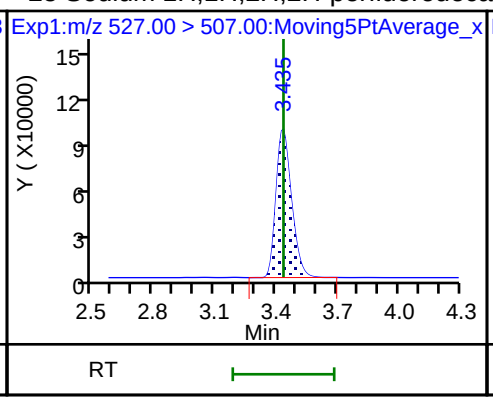
68 Perfluorononanesulfonic acid



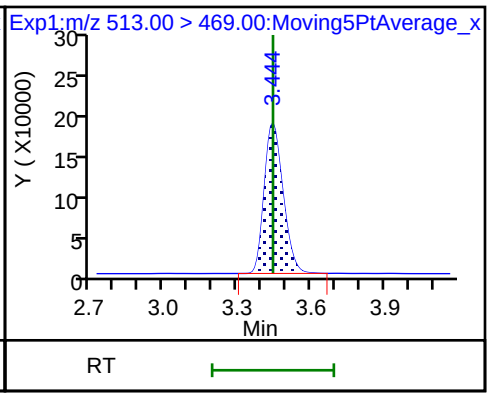
68 Perfluorononanesulfonic acid



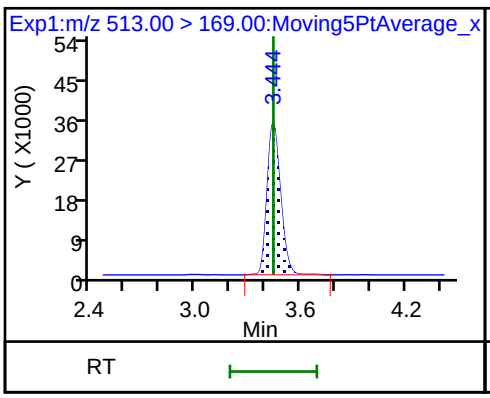
25 Sodium 1H,1H,2H,2H-perfluorodecane



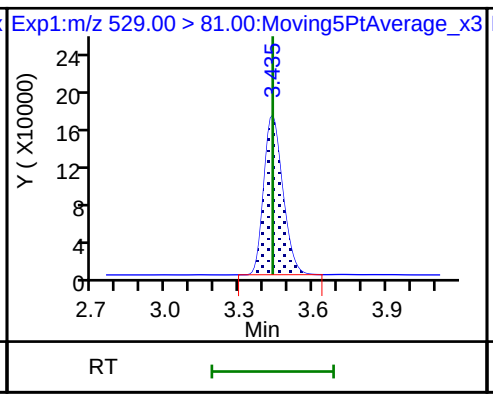
24 Perfluorodecanoic acid



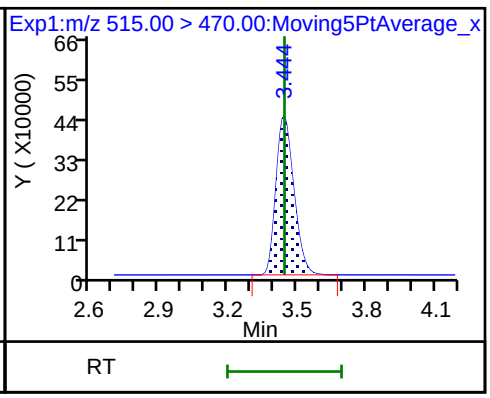
24 Perfluorodecanoic acid



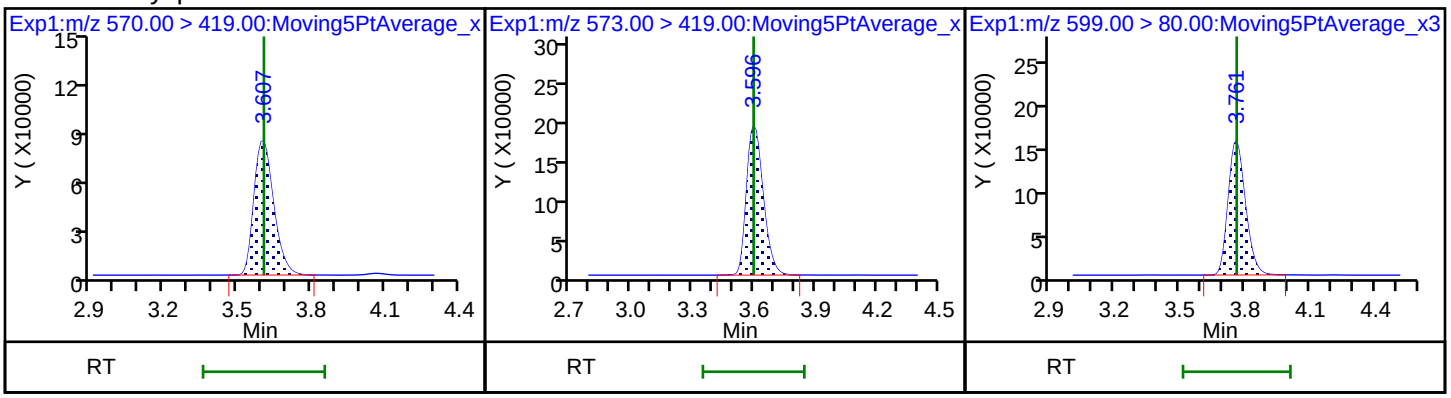
D 26 M2-8:2FTS



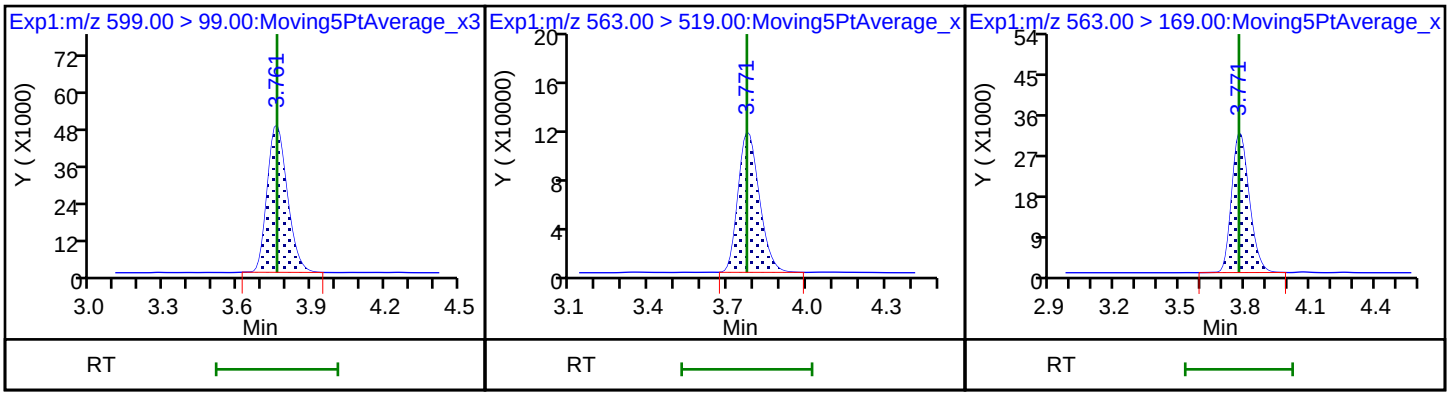
D 23 13C2 PFDA



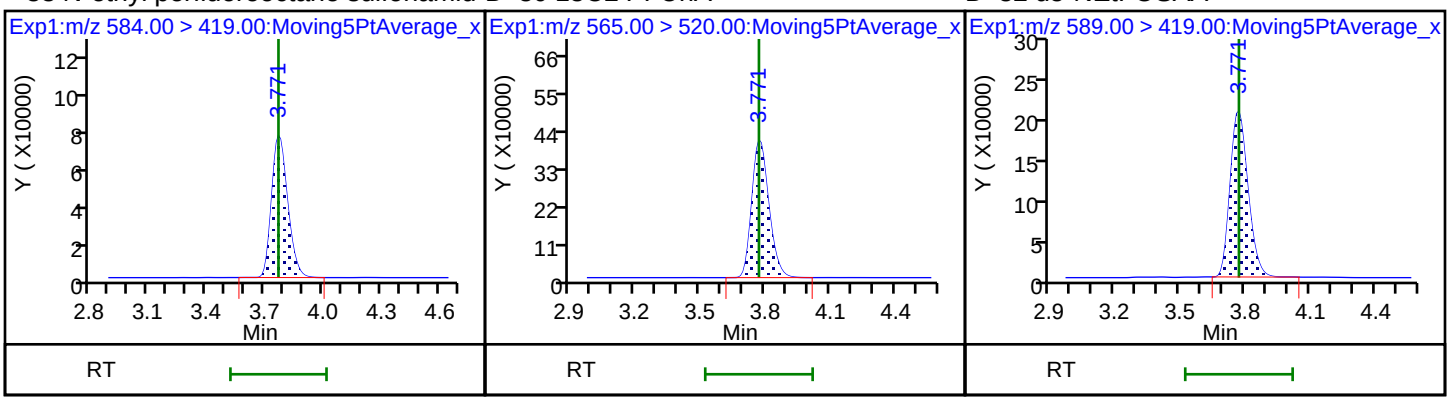
28 N-methyl perfluorooctane sulfonamiD 27 d3-NMeFOSAA 29 Perfluorodecane Sulfonic acid



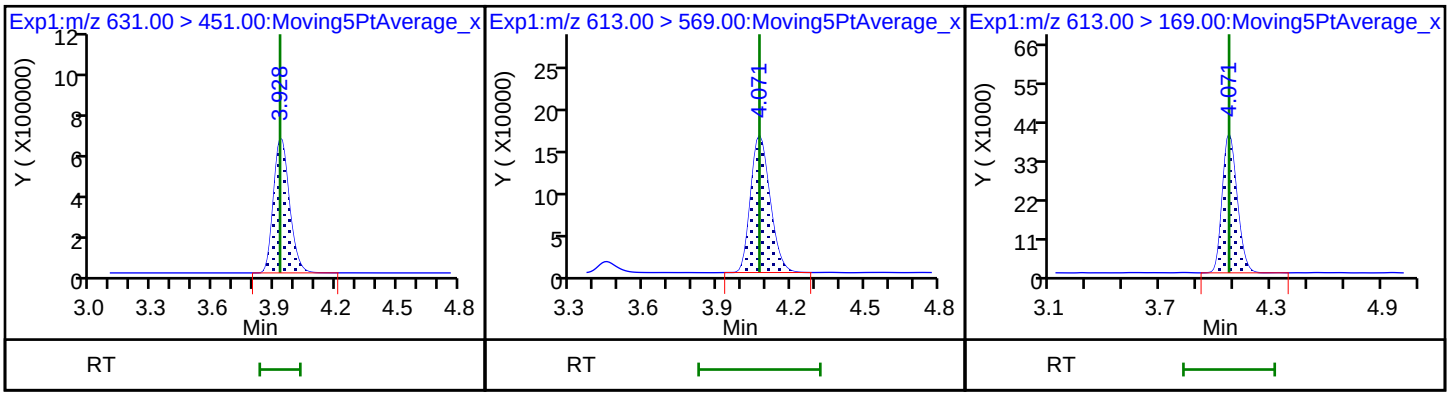
29 Perfluorodecane Sulfonic acid 31 Perfluoroundecanoic acid 31 Perfluoroundecanoic acid



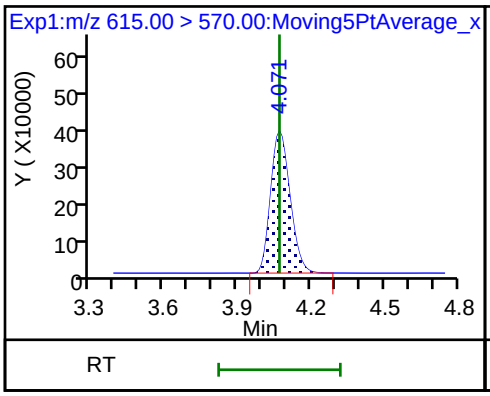
33 N-ethyl perfluorooctane sulfonamid D 30 13C2 PFUnA D 32 d5-NEtFOSAA



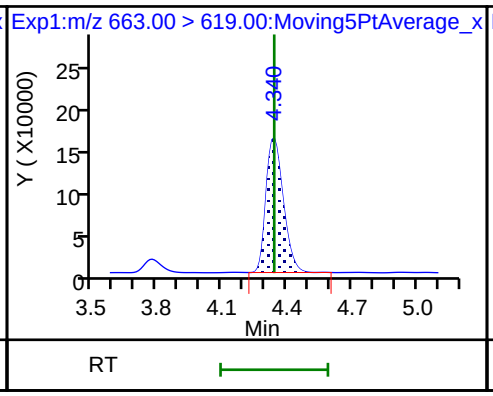
66 11-Chloroeicosafluoro-3-oxaundecan 37 Perfluorododecanoic acid 37 Perfluorododecanoic acid



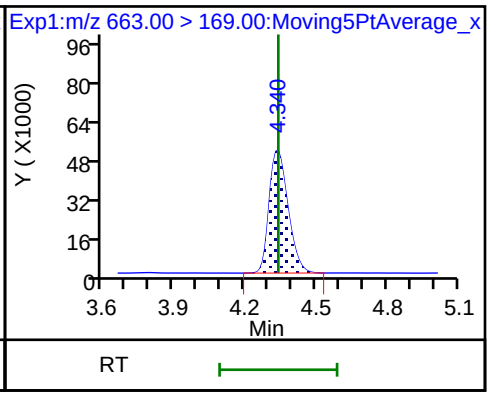
D 36 13C2 PFDoA



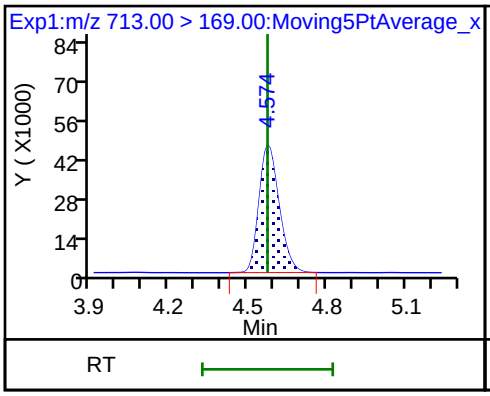
41 Perfluorotridecanoic acid



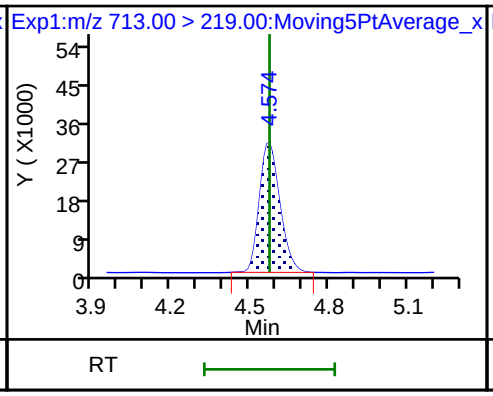
41 Perfluorotridecanoic acid



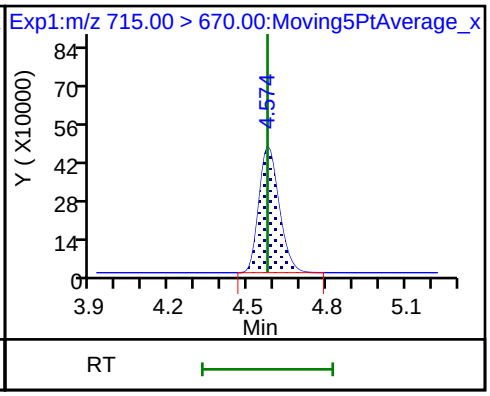
42 Perfluorotetradecanoic acid



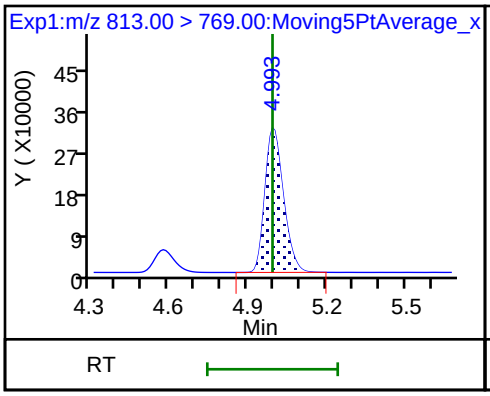
42 Perfluorotetradecanoic acid



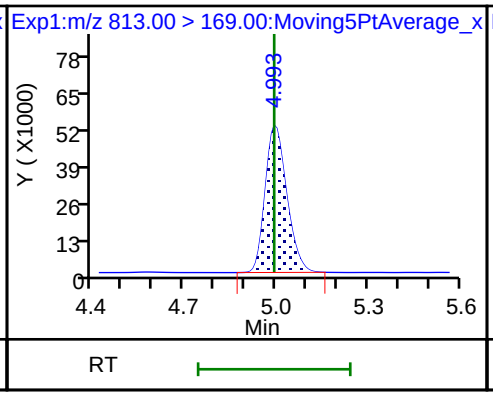
D 43 13C2-PFTeDA



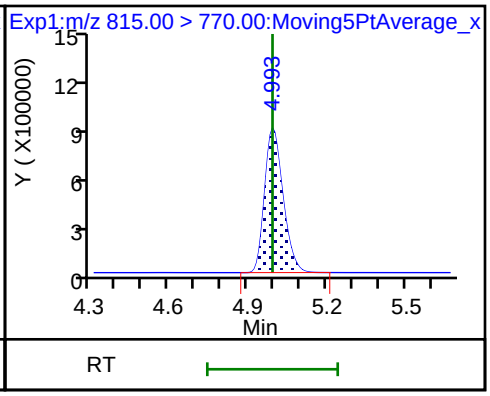
45 Perfluorohexadecanoic acid



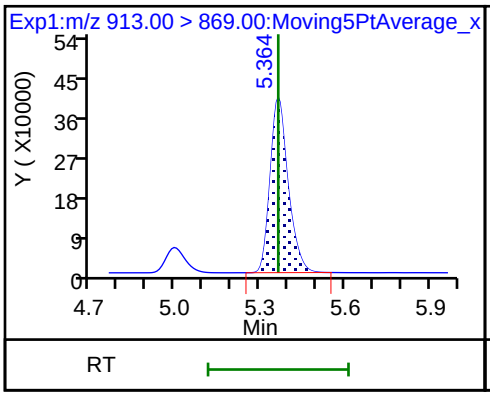
45 Perfluorohexadecanoic acid



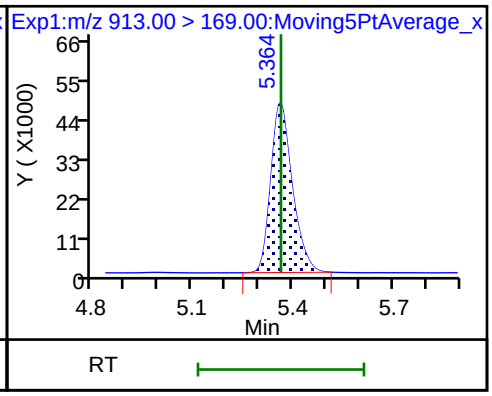
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-223178/9 Calibration Date: 05/14/2018 18:00

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2018.05.14LLAxxx_050.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9291	0.9044		0.973	1.00	-2.7	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.217	1.124		0.924	1.00	-7.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	77.17	75.72		0.867	0.884	-1.9	50.0
4:2 FTS	AveID	13.08	13.46		0.961	0.934	2.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.043	0.9192		0.881	1.00	-11.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.00	68.30		0.929	0.938	-1.0	50.0
HFPO-DA (GenX)	AveID	3.383	3.238		0.957	1.00	-4.3	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	0.9900		0.933	1.00	-6.7	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.126	1.041		0.841	0.910	-7.6	40.0
Adona	AveID	3.251	3.488		1.07	1.00	7.3	50.0
6:2FTS	AveID	1.683	1.720		0.969	0.948	2.2	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.202	1.090		0.907	1.00	-9.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.319	1.346		0.971	0.952	2.0	50.0
Perfluorononanoic acid (PFNA)	AveID	1.054	0.997		0.945	1.00	-5.5	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.116	1.069		0.888	0.928	-4.3	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.785	1.815		0.948	0.932	1.7	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9855	1.024		1.04	1.00	3.9	40.0
8:2FTS	AveID	1.301	1.259		0.927	0.958	-3.2	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7650	0.7692		0.965	0.960	0.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.023	1.010		0.987	1.00	-1.3	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.045	0.9839		0.941	1.00	-5.9	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6614	0.6510		0.949	0.964	-1.6	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9421	0.9860		1.05	1.00	4.7	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7803	0.7254		0.930	1.00	-7.0	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.730	2.724		0.940	0.942	-0.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.039	1.050		1.01	1.00	1.0	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.080	1.047		0.970	1.00	-3.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2589	0.2460		0.950	1.00	-5.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9284		0.983	1.00	-1.7	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-223178/9 Calibration Date: 05/14/2018 18:00

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2018.05.14LLAxxx_050.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.056	1.052		0.996	1.00	-0.4	50.0
13C4 PFBA	Ave	1.618	1.574		2.43	2.50	-2.7	50.0
13C5 PFPeA	Ave	1.002	1.006		2.51	2.50	0.4	50.0
13C3-PFBS	Ave	0.0236	0.0235		2.31	2.33	-0.4	50.0
M2-4:2FTS	Ave	0.1322	0.1470		2.60	2.34	11.2	50.0
13C2 PFHxA	Ave	1.048	1.083		2.58	2.50	3.3	50.0
13C3 HFPO-DA	Ave	0.0534	0.0503		2.35	2.50	-5.8	50.0
13C4-PFHpA	Ave	1.005	1.019		2.54	2.50	1.4	50.0
18O2 PFHxS	Ave	1.336	1.284		2.27	2.37	-3.9	50.0
M2-6:2FTS	Ave	0.1979	0.1957		2.35	2.38	-1.1	40.0
13C4 PFOA	Ave	0.9424	0.9466		2.51	2.50	0.4	50.0
13C4 PFOS	Ave	0.9317	0.9066		2.33	2.39	-2.7	50.0
13C5 PFNA	Ave	0.7876	0.8052		2.56	2.50	2.2	50.0
13C8 FOSA	Ave	1.349	1.320		2.45	2.50	-2.1	50.0
M2-8:2FTS	Ave	0.2585	0.2611		2.42	2.40	1.0	40.0
13C2 PFDA	Ave	0.6777	0.6725		2.48	2.50	-0.8	50.0
d3-NMeFOSAA	Ave	0.3073	0.3204		2.61	2.50	4.3	50.0
d5-NEtFOSAA	Ave	0.3280	0.3289		2.51	2.50	0.3	50.0
13C2 PFUnA	Ave	0.5672	0.5732		2.53	2.50	1.0	50.0
13C2 PFDoA	Ave	0.5923	0.5973		2.52	2.50	0.9	50.0
13C2-PFTeDA	Ave	0.6458	0.6805		2.63	2.50	5.4	50.0
13C2-PFHxDA	Ave	1.026	1.128		2.75	2.50	10.0	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_050.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2018 18:00:22 ALS Bottle#: 28 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:33 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 14:57:45

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.452	0.006	1.000	5825468	2.43		97.3	47482	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.458	0.0	1.000	2107516	0.9735		97.3	1037	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.729	0.0	1.000	1673790	0.9241		92.4	769	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.728	0.001	0.561	3722225	2.51		100	68682	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.765	0.0	1.000	2332215	0.8675		98.1	12375	
298.90 > 99.00	1.765	1.765	0.0	1.000	981037		2.38(1.25-3.74)		6695	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.764	0.001	1.000	81003	2.31		99.6	576	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.981	1.981	0.0	1.000	437993	0.9611		103	19388	
D 60 M2-4:2FTS										
329.00 > 81.00	1.981	1.980	0.001	1.000	507872	2.60		111	10026	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.015	2.015	0.0	1.000	1472764	0.8810		88.1	2559	
313.00 > 119.00	2.015	2.015	0.0	1.000	138273		10.65(5.03-15.10)		2977	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.014	0.001	1.000	4005734	2.58		103	99357	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.037	2.037	0.0	1.000	2232180	0.9286		99.0	39088	
349.00 > 99.00	2.037	2.037	0.0	1.000	810592		2.75(1.36-4.07)		8270	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.116	2.116	0.0	1.000	241035	0.9570		95.7	2357	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.116	2.116	0.0	1.000	186100	2.35		94.2	5289	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.359	2.359	0.0	1.006	1493440	0.9335		93.3	2386	
363.00 > 169.00	2.359	2.359	0.0	1.006	582351		2.56(1.13-3.40)		3215	
D 9 13C4-PFHpA										
367.00 > 322.00	2.346	2.345	0.001	1.000	3771343	2.54		101	50006	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.373	2.373	0.0	1.000	1800425	0.8410		92.4	10469	
399.00 > 99.00	2.373	2.373	0.0	1.000	595964		3.02(1.50-4.49)		2329	
D 11 18O2 PFHxS										
403.00 > 84.00	2.373	2.358	0.015	1.000	4494481	2.27		96.1	55848	
65 Adona										
377.00 > 251.00	2.396	2.396	0.0	1.000	4679672	1.07		107	66139	
377.00 > 85.00	2.396	2.396	0.0	1.000	2653356		1.76(0.84-2.53)		19463	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.000	472285	0.9686		102	3988	
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.682	0.001	1.000	687993	2.35		98.9	15769	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.713	0.0	1.000	1526790	0.9069		90.7	802	
413.00 > 169.00	2.713	2.713	0.0	1.000	797706		1.91(0.84-2.52)		2905	
* 62 13C2-PFOA										
415.00 > 370.00	2.713	2.713	0.0		3700145	2.50			59614	
D 14 13C4 PFOA										
417.00 > 372.00	2.713	2.704	0.009	1.000	3502641	2.51		100	61161	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.720	2.720	0.0	1.000	1719247	0.9711		102	18122	
449.00 > 99.00	2.720	2.720	0.0	1.000	454421		3.78(1.94-5.82)		5250	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.082	3.082	0.0	1.000	1330724	0.8883		95.7	8274	
499.00 > 99.00	3.082	3.082	0.0	1.000	301225		4.42(2.31-6.93)		2278	
D 18 13C4 PFOS										
503.00 > 80.00	3.082	3.073	0.009	1.000	3206899	2.33		97.3	25133	
20 Perfluorononanoic acid										
463.00 > 419.00	3.082	3.082	0.0	1.000	1187530	0.9452		94.5	2157	
463.00 > 169.00	3.082	3.082	0.0	1.000	290085		4.09(1.90-5.69)		8646	
D 19 13C5 PFNA										
468.00 > 423.00	3.082	3.081	0.001	1.000	2979257	2.56		102	56785	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.296	3.296	0.0	1.000	2269630	0.9478		102	19247	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.418	3.418	0.0	1.003	2001099	1.04		104	34913	
D 21 13C8 FOSA										
506.00 > 78.00	3.409	3.407	0.002	1.000	4883527	2.45		97.9	35655	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.437	3.437	0.0	1.000	990859	0.9653		101	18727	
549.00 > 99.00	3.437	3.437	0.0	1.000	364891		2.72(1.33-3.97)		4343	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.437	3.437	0.0	1.000	466087	0.9271		96.8	9420	
D 26 M2-8:2FTS										
529.00 > 81.00	3.437	3.435	0.002	1.000	925576	2.42		101	10743	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.446	3.446	0.0	1.000	1005256	0.9869		98.7	6034	
513.00 > 169.00	3.446	3.446	0.0	1.000	177273		5.67(2.36-7.09)		4181	
D 23 13C2 PFDA										
515.00 > 470.00	3.446	3.444	0.002	1.000	2488443	2.48		99.2	36151	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.598	3.596	0.002	1.000	1185677	2.61		104	23533	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.609	3.609	0.0	1.003	466610	0.9413		94.1	4934	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.762	3.762	0.0	1.000	842009	0.9488		98.4	9005	
599.00 > 99.00	3.762	3.762	0.0	1.000	285330		2.95(1.39-4.16)		7715	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.783	3.783	0.0	1.000	615373	0.9296		93.0	2634	
563.00 > 169.00	3.773	3.783	-0.010	0.997	162692		3.78(2.12-6.36)		3790	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.773	3.773	0.0	1.000	479898	1.05		105	8500	
D 30 13C2 PFUnA										
565.00 > 520.00	3.783	3.771	0.012	1.000	2120760	2.53		101	42326	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.773	3.771	0.002	1.000	1216839	2.51		100	3428	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.940	3.940	0.0	1.000	3443023	0.9401		99.8	53119	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.072	4.072	0.0	1.000	928133	1.01		101	582	
613.00 > 169.00	4.072	4.072	0.0	1.000	230803		4.02(2.13-6.40)		3859	
D 36 13C2 PFDoA										
615.00 > 570.00	4.072	4.071	0.001	1.000	2210169	2.52		101	18346	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.341	4.341	0.0	1.000	926034	0.9703		97.0	343	
663.00 > 169.00	4.341	4.341	0.0	1.000	301010		3.08(1.25-3.76)		3957	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.575	4.575	0.0	1.000	247751	0.9503		95.0	3031	
713.00 > 219.00	4.575	4.575	0.0	1.000	177277		1.40(0.71-2.13)		2714	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.575	4.574	0.001	1.000	2517769	2.63		105	12611	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.002	5.002	0.0	1.002	1550427	0.9828		98.3	294	
813.00 > 169.00	4.994	5.002	-0.008	1.000	261564		5.93(2.86-8.58)		2217	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.994	4.993	0.001	1.000	4174932	2.75		110	11810	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.364	5.364	0.0	1.000	1756015	1.00		99.6	286	
913.00 > 169.00	5.364	5.364	0.0	1.000	228263		7.69(3.83-11.48)		2265	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 15-May-2018 15:09:34 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_050.d

Injection Date: 14-May-2018 18:00:22 Instrument ID: A8_N

Lims ID: CCV L4

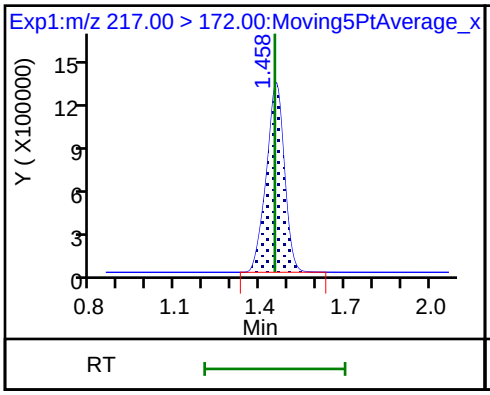
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 28 Worklist Smp#: 9

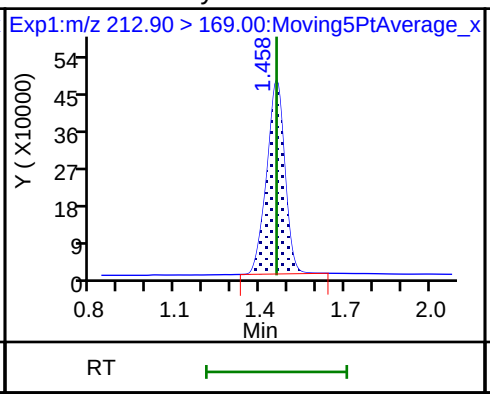
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

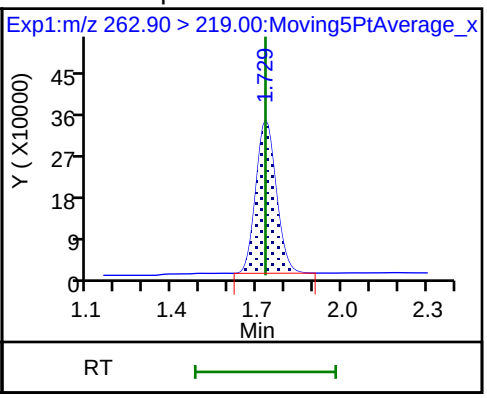
D 1 13C4 PFBA



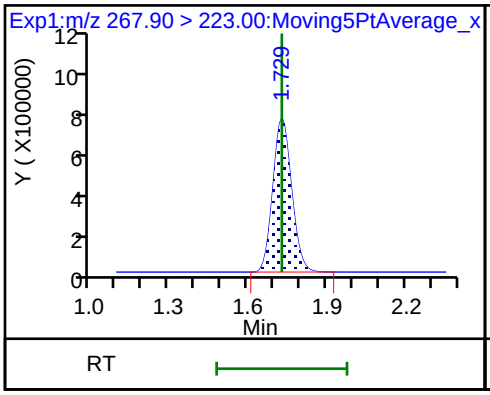
2 Perfluorobutyric acid



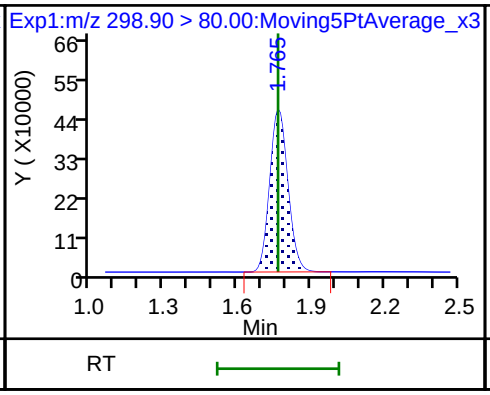
4 Perfluoropentanoic acid



D 3 13C5-PFPeA



5 Perfluorobutanesulfonic acid



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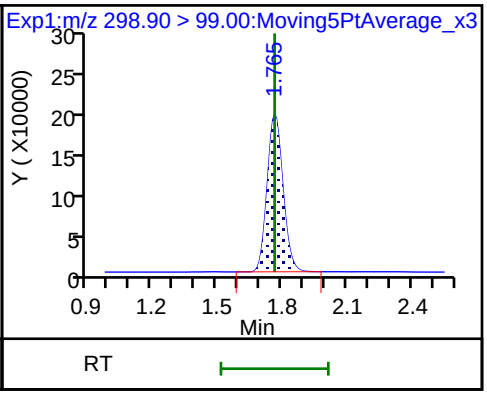
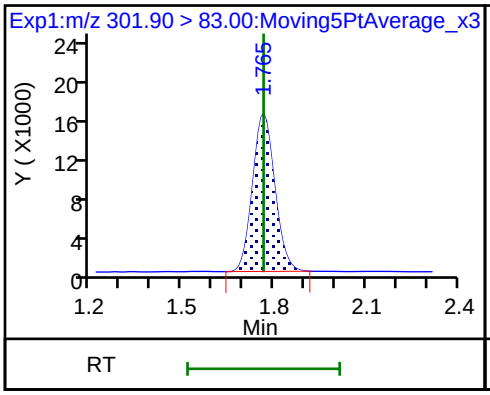
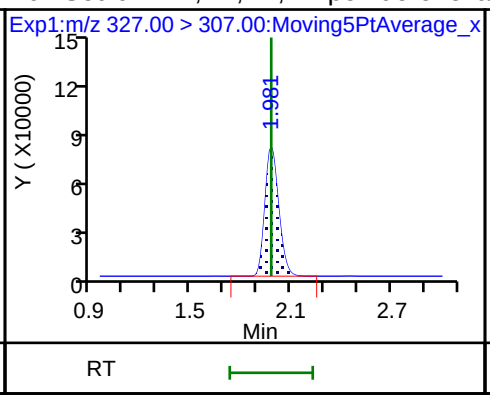


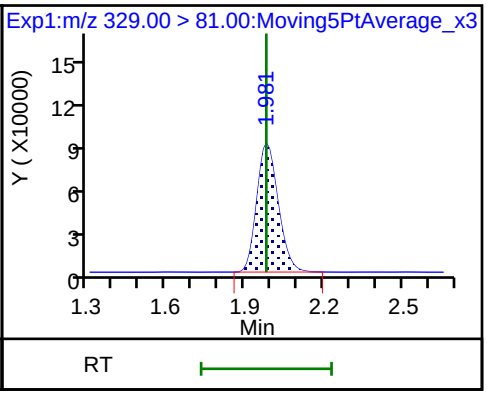
D 47 13C3-PFBS



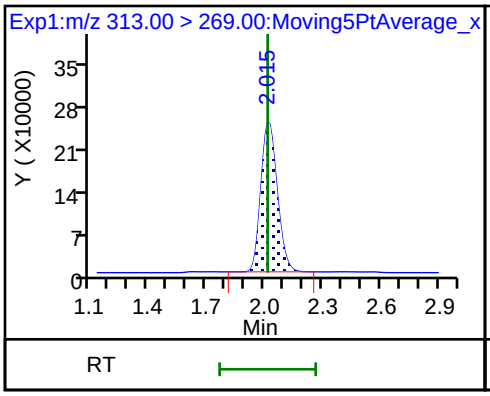
61 Sodium 1H,1H,2H,2H-perfluorohexane



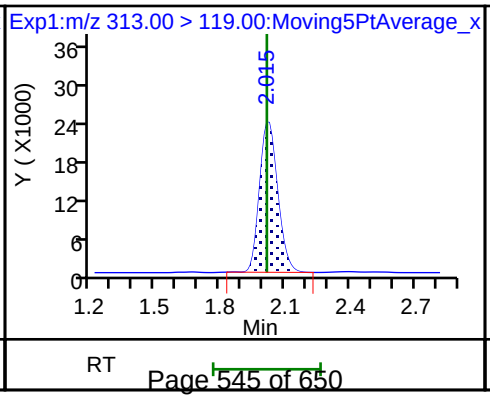
D 60 M2-4:2FTS



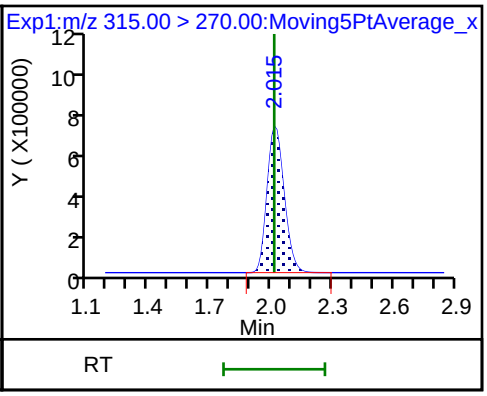
6 Perfluorohexanoic acid



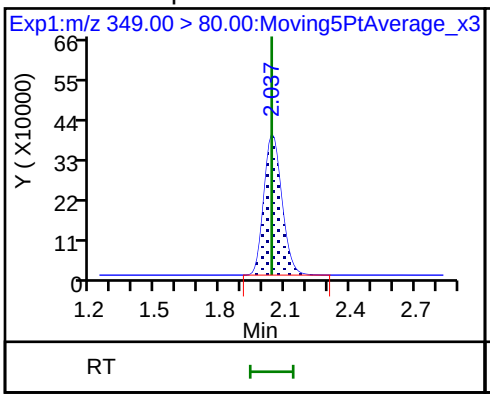
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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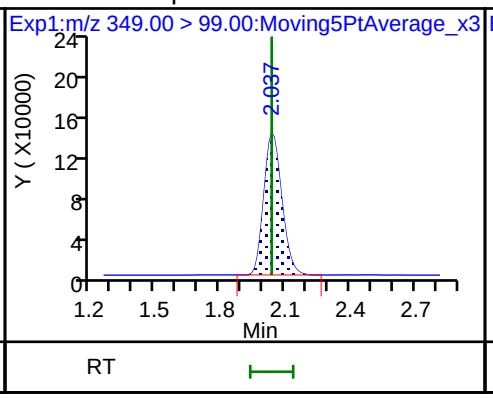
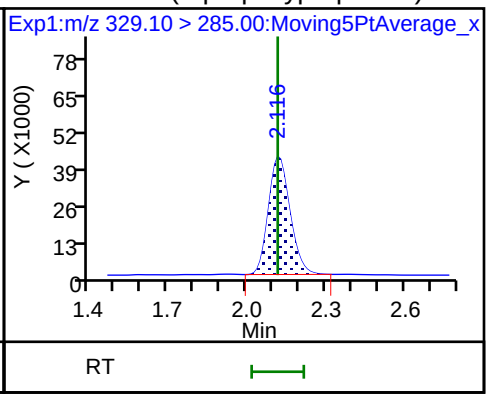
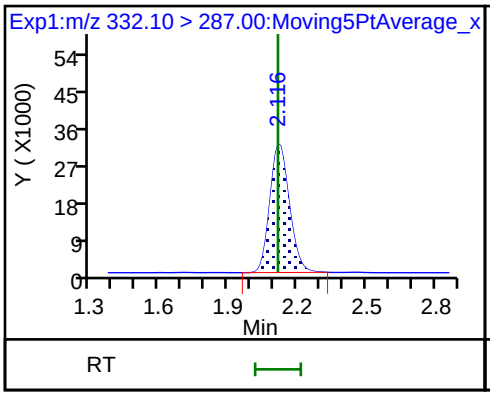


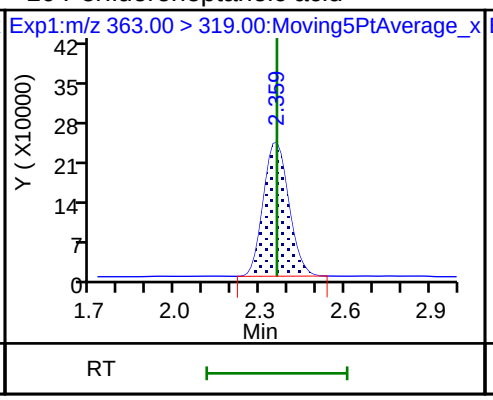
67 Perfluoro(2-propoxypropanoic) acid



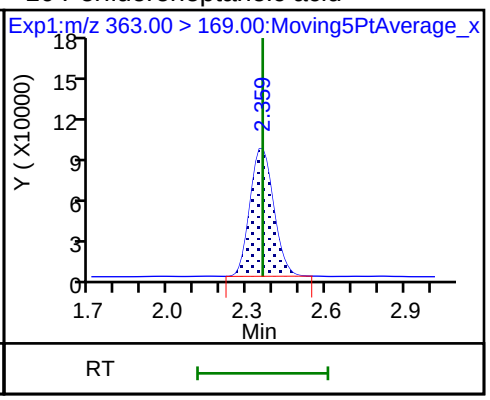
D 64 13C3 HFPO-DA



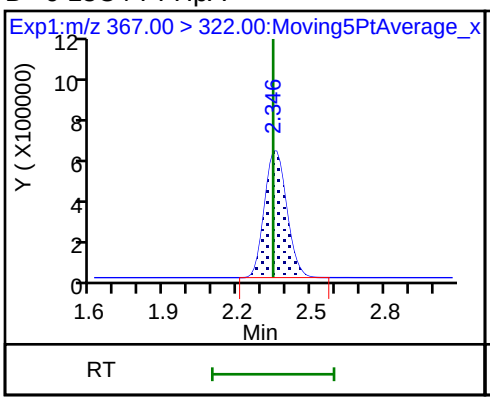
10 Perfluoroheptanoic acid



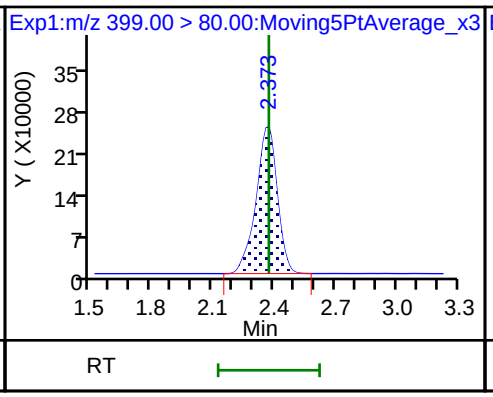
10 Perfluoroheptanoic acid



D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid



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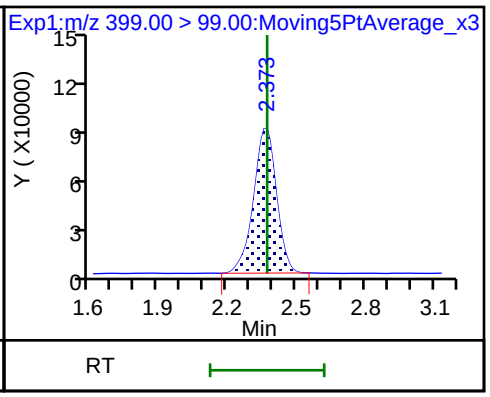
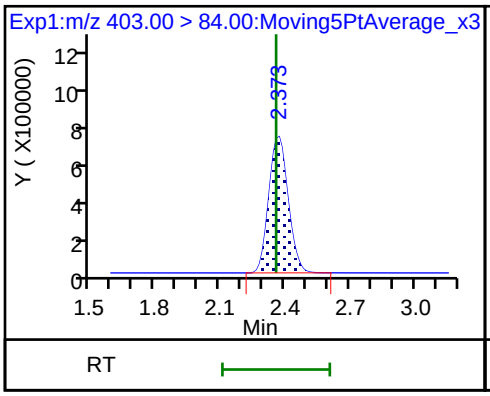
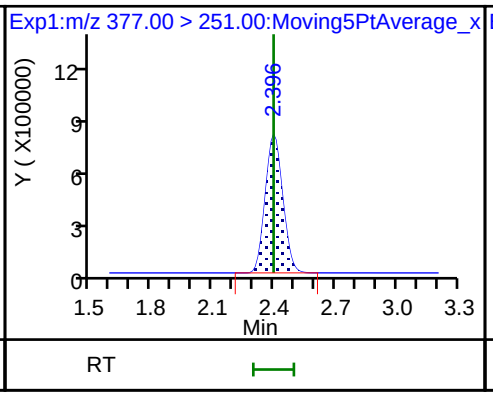


D 11 18O2 PFHxS



65 Adona



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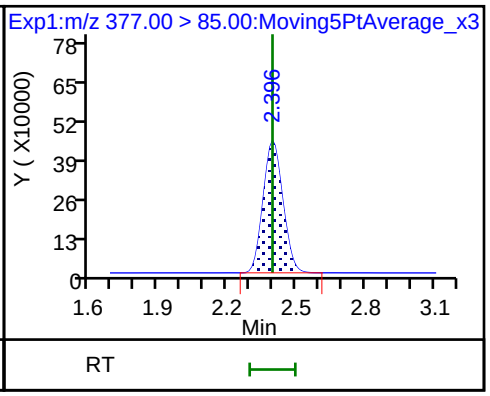
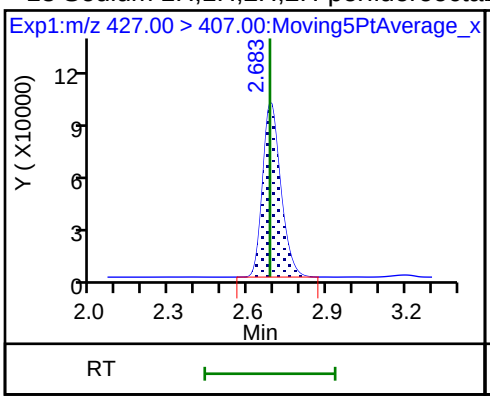
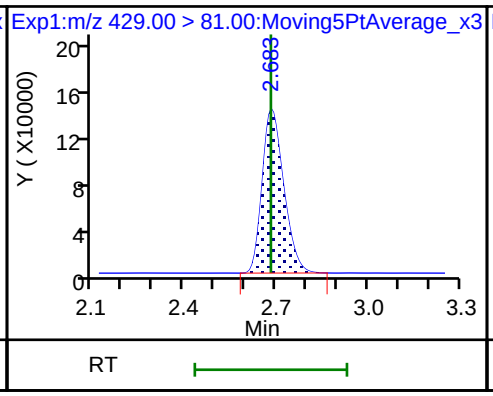


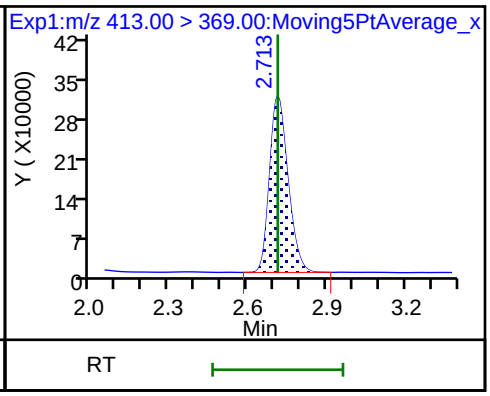
13 Sodium 1H,1H,2H,2H-perfluorooctane



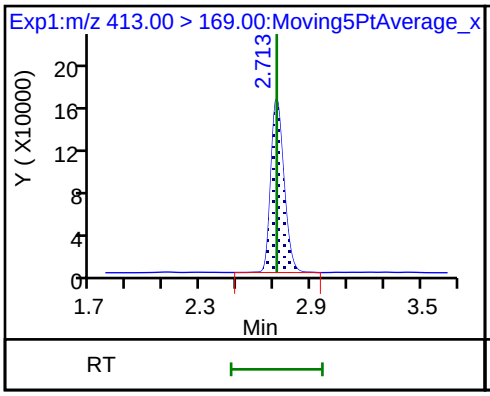
D 12 M2-6:2FTS



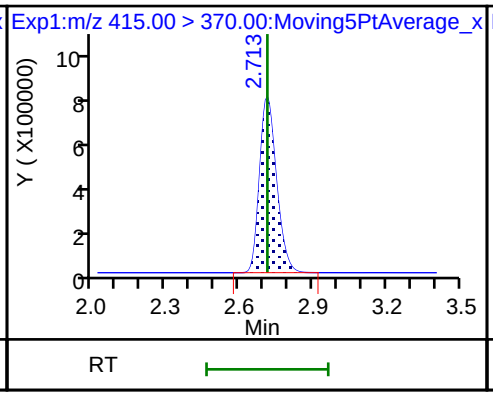
15 Perfluorooctanoic acid



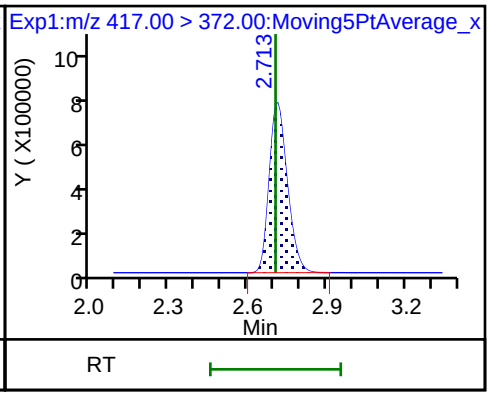
15 Perfluorooctanoic acid



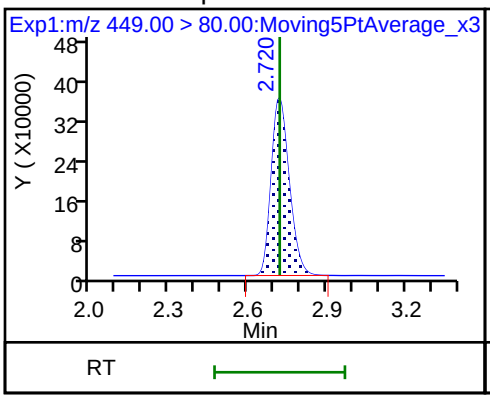
* 62 13C2-PFOA



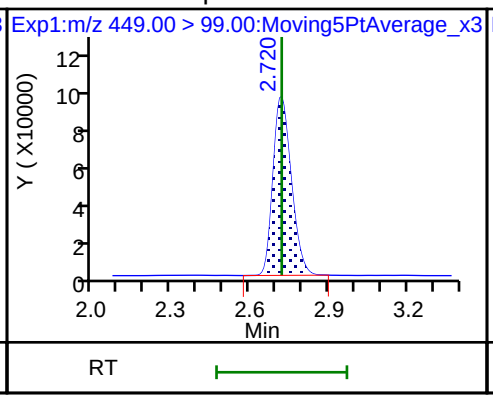
D 14 13C4 PFOA



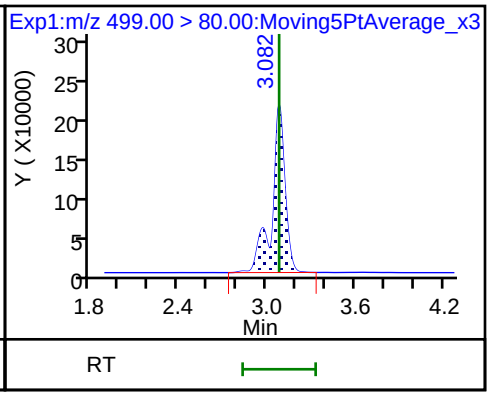
16 Perfluoroheptanesulfonic acid



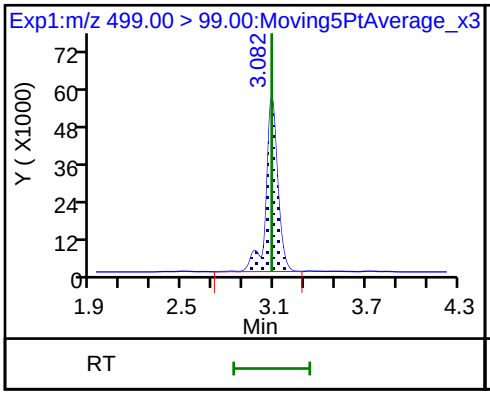
16 Perfluoroheptanesulfonic acid



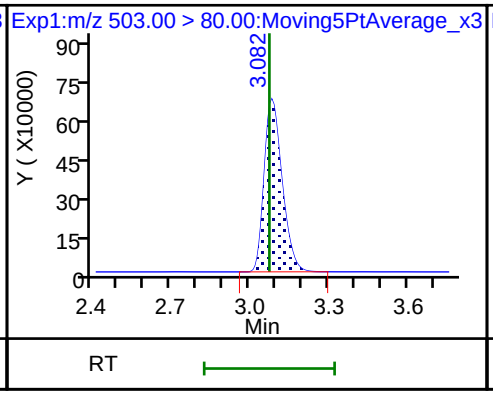
17 Perfluorooctane sulfonic acid



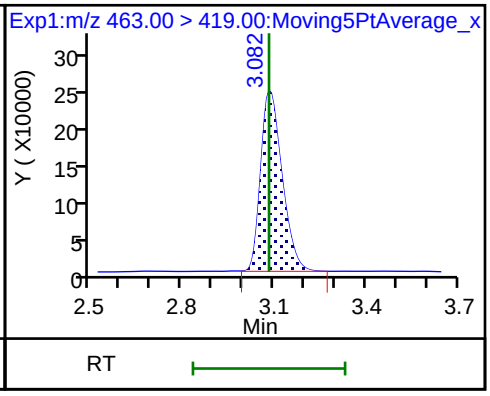
17 Perfluorooctane sulfonic acid



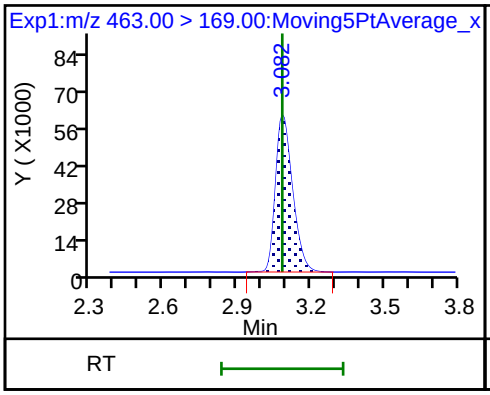
D 18 13C4 PFOS



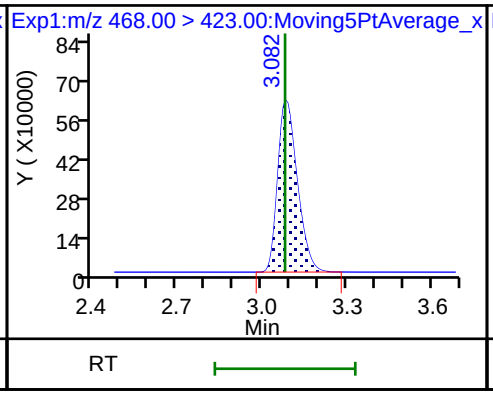
20 Perfluorononanoic acid



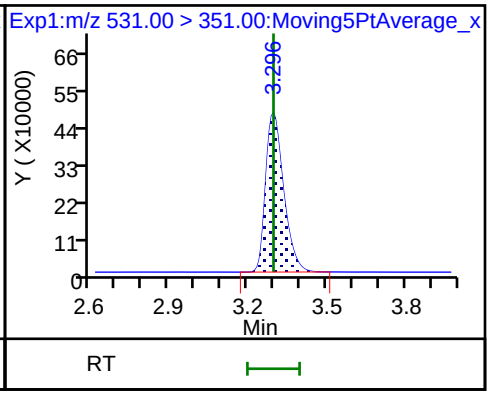
20 Perfluorononanoic acid



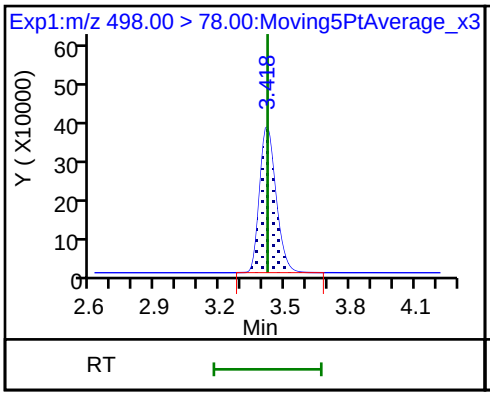
D 19 13C5 PFNA



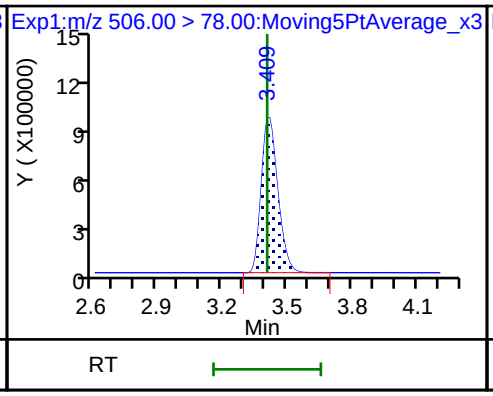
69 9-Chlorohexadecafluoro-3-oxanonane



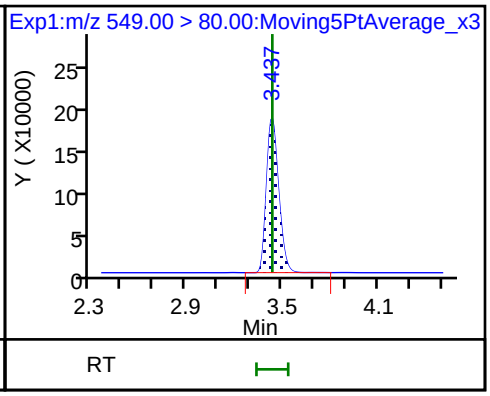
22 Perfluorooctane Sulfonamide



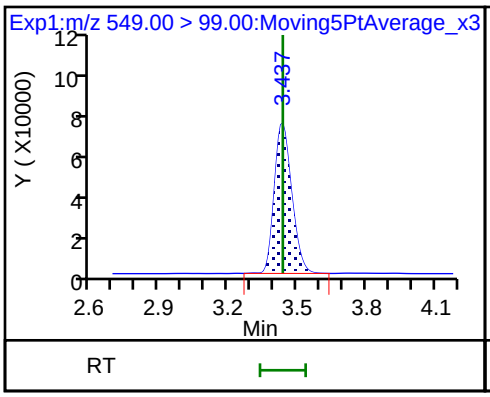
D 21 13C8 FOSA



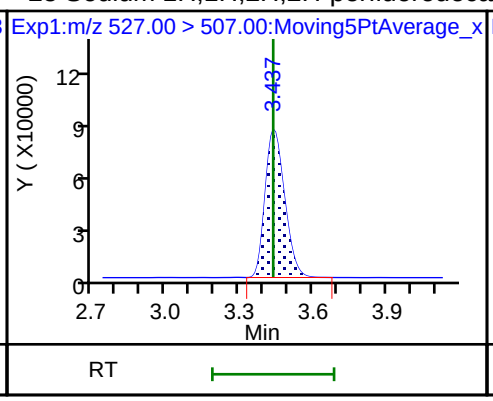
68 Perfluorononanesulfonic acid



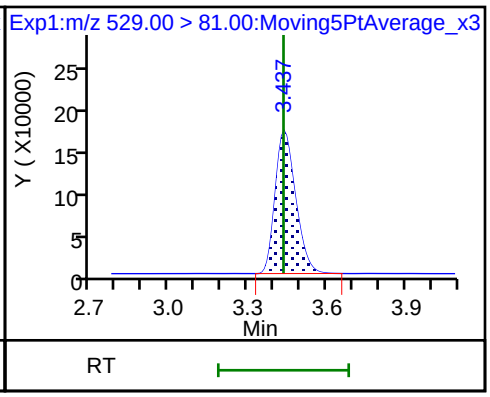
68 Perfluorononanesulfonic acid



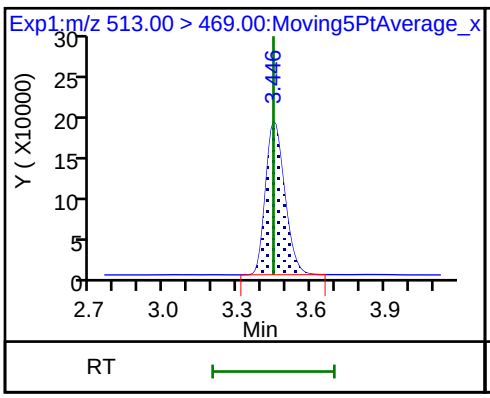
25 Sodium 1H,1H,2H,2H-perfluorodecane



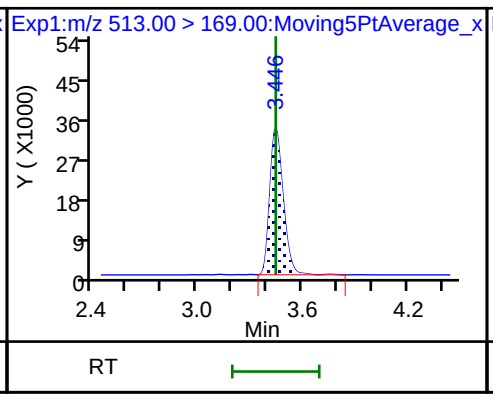
D 26 M2-8:2FTS



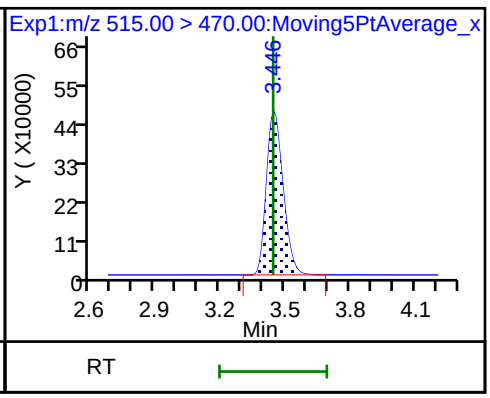
24 Perfluorodecanoic acid



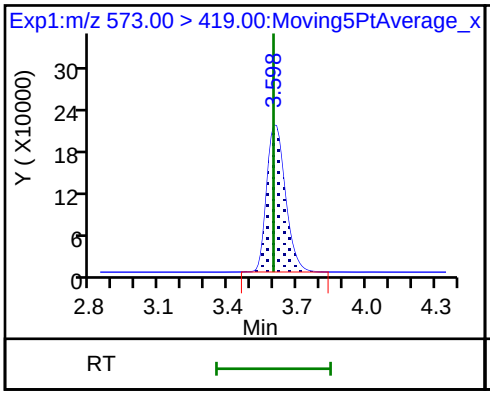
24 Perfluorodecanoic acid



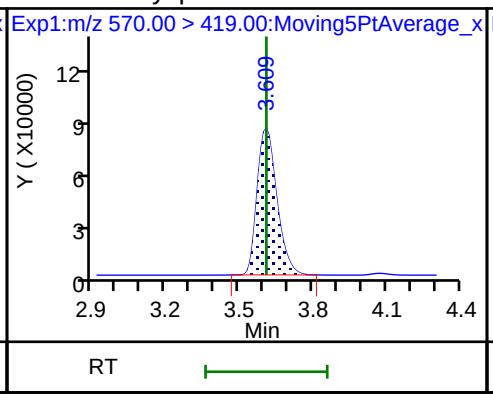
D 23 13C2 PFDA



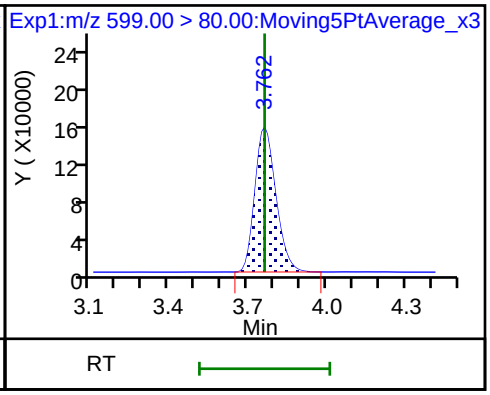
D 27 d3-NMeFOSAA



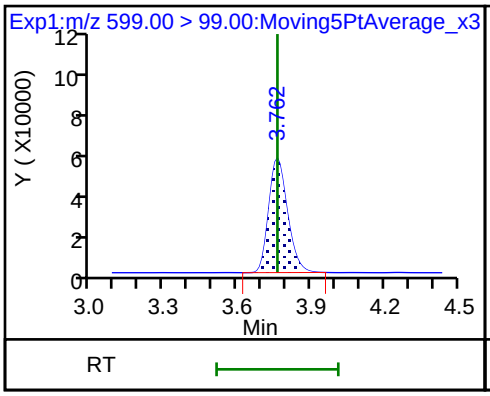
28 N-methyl perfluorooctane sulfonami



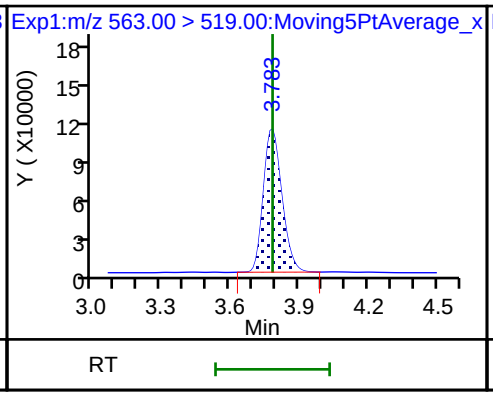
29 Perfluorodecane Sulfonic acid



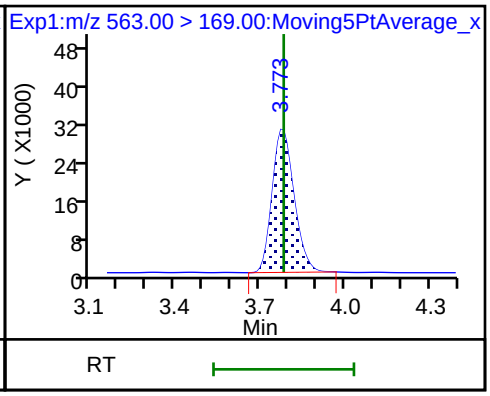
29 Perfluorodecane Sulfonic acid



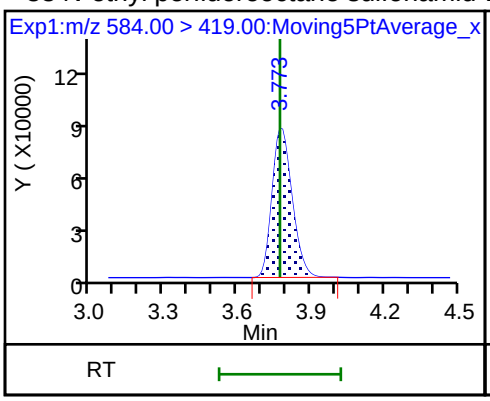
31 Perfluoroundecanoic acid



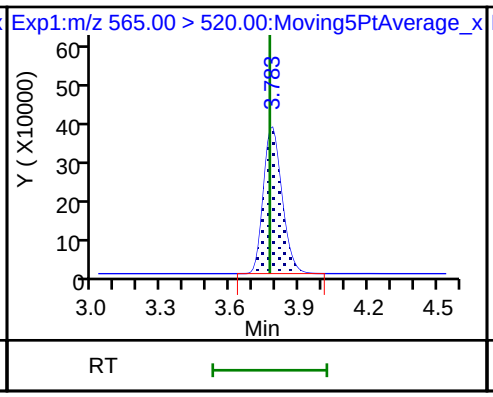
31 Perfluoroundecanoic acid



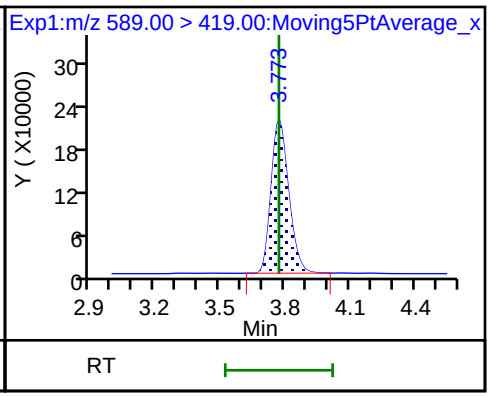
33 N-ethyl perfluorooctane sulfonamid



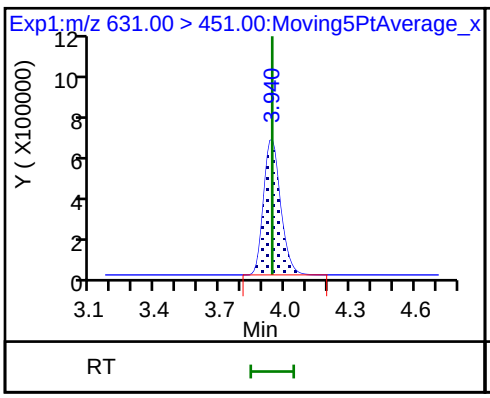
D 30 13C2 PFUnA



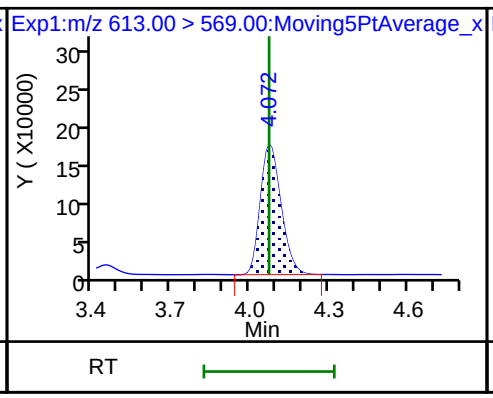
D 32 d5-NEtFOSAA



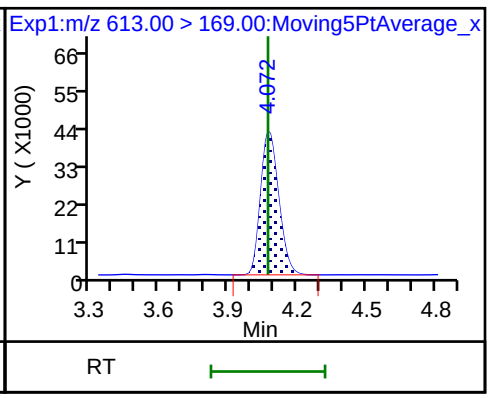
66 11-Chloroeicosafluoro-3-oxaundecan



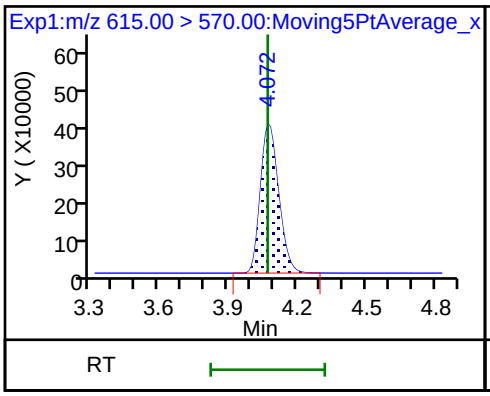
37 Perfluorododecanoic acid



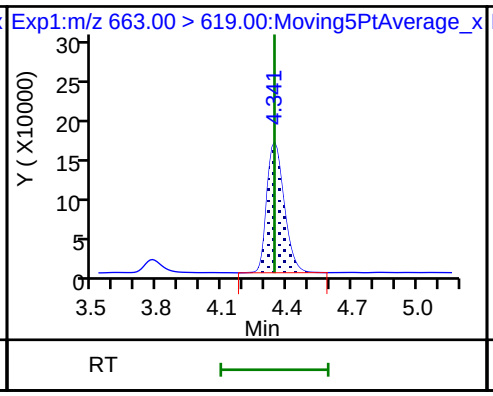
37 Perfluorododecanoic acid



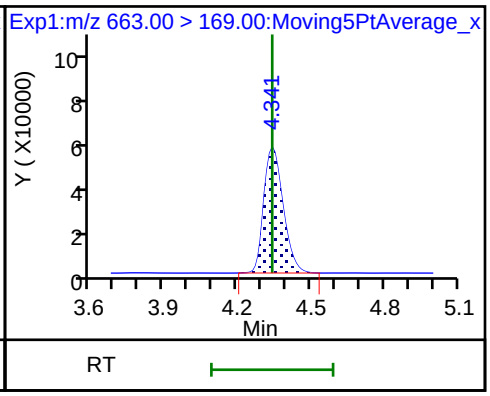
D 36 13C2 PFDoA



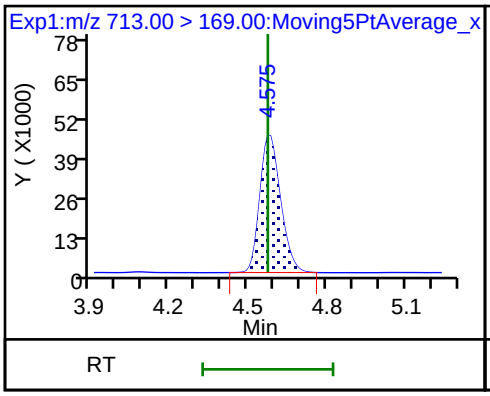
41 Perfluorotridecanoic acid



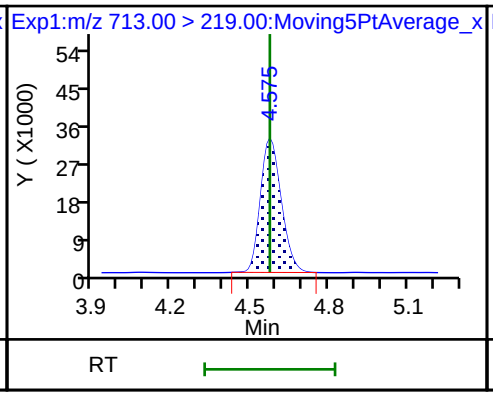
41 Perfluorotridecanoic acid



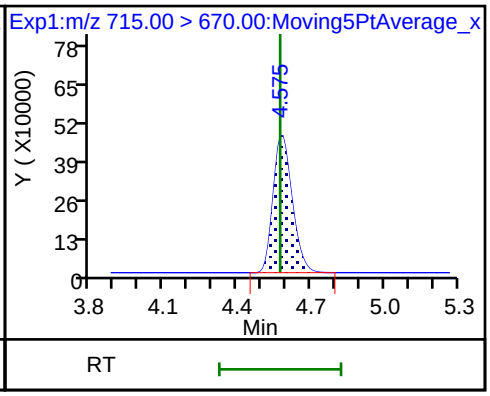
42 Perfluorotetradecanoic acid



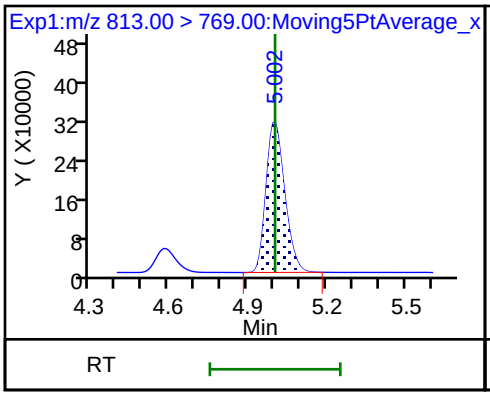
42 Perfluorotetradecanoic acid



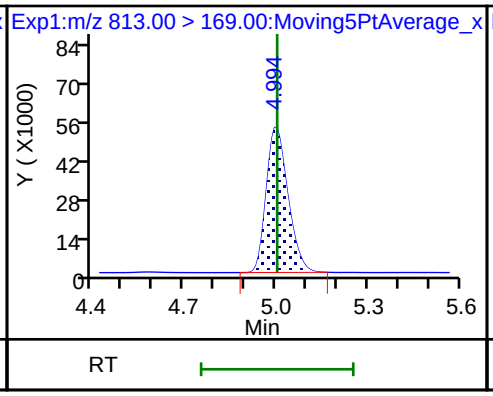
D 43 13C2-PFTeDA



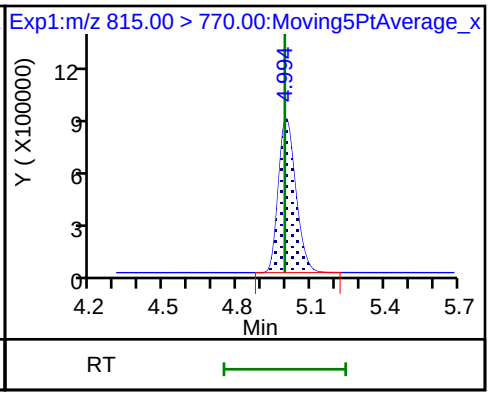
45 Perfluorohexadecanoic acid



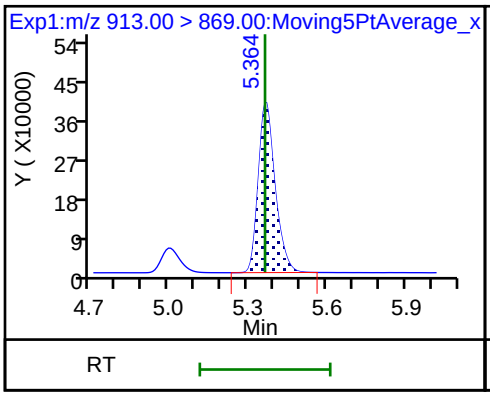
45 Perfluorohexadecanoic acid



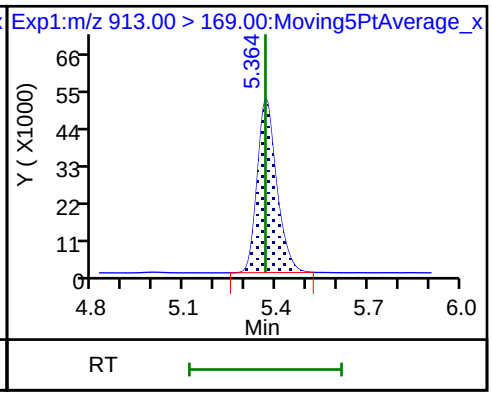
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-223178/20 Calibration Date: 05/14/2018 19:26

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2018.05.14LLAxxx_061.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9291	0.9517		2.56	2.50	2.4	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.217	1.189		2.44	2.50	-2.2	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	77.17	82.21		2.35	2.21	6.5	50.0
4:2 FTS	AveID	13.08	16.02		2.86	2.34	22.5	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.043	1.068		2.56	2.50	2.3	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.00	72.34		2.46	2.35	4.9	50.0
HFPO-DA (GenX)	AveID	3.383	3.310		2.45	2.50	-2.2	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	1.037		2.45	2.50	-2.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.126	1.038		2.10	2.28	-7.9	40.0
Adona	AveID	3.251	3.755		2.89	2.50	15.5	50.0
6:2FTS	AveID	1.683	1.618		2.28	2.37	-3.9	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.319	1.370		2.47	2.38	3.8	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.202	1.139		2.37	2.50	-5.2	40.0
Perfluorononanoic acid (PFNA)	AveID	1.054	1.042		2.47	2.50	-1.1	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.116	1.127		2.34	2.32	1.0	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.785	1.887		2.46	2.33	5.7	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9855	1.059		2.69	2.50	7.4	40.0
8:2FTS	AveID	1.301	1.296		2.39	2.40	-0.4	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7650	0.7807		2.45	2.40	2.0	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.023	1.065		2.60	2.50	4.1	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.045	1.045		2.50	2.50	-0.0	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6614	0.6668		2.43	2.41	0.8	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9421	0.9593		2.55	2.50	1.8	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7803	0.7965		2.55	2.50	2.1	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.730	2.891		2.49	2.36	5.9	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.039	1.067		2.57	2.50	2.7	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.080	1.186		2.75	2.50	9.8	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2589	0.2685		2.59	2.50	3.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.8875		2.38	2.50	-4.7	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-223178/20 Calibration Date: 05/14/2018 19:26

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2018.05.14LLAxxx_061.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.056	1.111		2.63	2.50	5.2	50.0
13C4 PFBA	Ave	1.618	1.516		2.34	2.50	-6.3	50.0
13C5 PFPeA	Ave	1.002	0.9837		2.45	2.50	-1.8	50.0
13C3-PFBS	Ave	0.0236	0.0216		2.13	2.33	-8.5	50.0
M2-4:2FTS	Ave	0.1322	0.1541		2.72	2.34	16.6	50.0
13C2 PFHxA	Ave	1.048	1.045		2.49	2.50	-0.3	50.0
13C3 HFPO-DA	Ave	0.0534	0.0496		2.32	2.50	-7.1	50.0
13C4-PFHpA	Ave	1.005	0.999		2.49	2.50	-0.6	50.0
18O2 PFHxS	Ave	1.336	1.262		2.23	2.37	-5.5	50.0
M2-6:2FTS	Ave	0.1979	0.2204		2.64	2.38	11.4	40.0
13C4 PFOA	Ave	0.9424	0.9516		2.52	2.50	1.0	50.0
13C4 PFOS	Ave	0.9317	0.8333		2.14	2.39	-10.6	50.0
13C5 PFNA	Ave	0.7876	0.7742		2.46	2.50	-1.7	50.0
13C8 FOSA	Ave	1.349	1.122		2.08	2.50	-16.8	50.0
M2-8:2FTS	Ave	0.2585	0.2337		2.16	2.40	-9.6	40.0
13C2 PFDA	Ave	0.6777	0.6140		2.27	2.50	-9.4	50.0
d3-NMeFOSAA	Ave	0.3073	0.3461		2.82	2.50	12.6	50.0
13C2 PFUnA	Ave	0.5672	0.5415		2.39	2.50	-4.5	50.0
d5-NEtFOSAA	Ave	0.3280	0.3510		2.68	2.50	7.0	50.0
13C2 PFDoA	Ave	0.5923	0.5815		2.45	2.50	-1.8	50.0
13C2-PFTeDA	Ave	0.6458	0.7204		2.79	2.50	11.5	50.0
13C2-PFHxDA	Ave	1.026	1.322		3.22	2.50	28.9	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_061.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2018 19:26:14 ALS Bottle#: 31 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:10:01 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:05:05

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.452	0.0	1.000	5826777	2.34		93.7	45092	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.458	0.0	1.004	5545091	2.56		102	3028	
D 3 13C5-PFPeA										
267.90 > 223.00	1.721	1.728	-0.007	0.560	3781508	2.45		98.2	49634	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.721	1.729	-0.008	1.000	4496803	2.44		97.8	2414	
D 47 13C3-PFBS										
301.90 > 83.00	1.757	1.764	-0.007	1.000	77351	2.13		91.5	495	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.765	0.001	1.005	6044446	2.35		107	29675	
298.90 > 99.00	1.757	1.765	-0.008	1.000	2514127		2.40(1.25-3.74)		15515	
D 60 M2-4:2FTS										
329.00 > 81.00	1.971	1.980	-0.009	1.000	553140	2.72		117	8038	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.971	1.981	-0.010	1.000	1244455	2.86		122	72287	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.014	0.002	1.000	4016095	2.49		99.7	98383	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.015	0.001	1.000	4287421	2.56		102	8362	
313.00 > 119.00	2.016	2.015	0.001	1.000	388127		11.05(5.03-15.10)		7358	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.039	2.037	0.002	1.000	5643874	2.46		105	64723	
349.00 > 99.00	2.039	2.037	0.002	1.000	2029295		2.78(1.36-4.07)		21658	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.118	2.116	0.002	1.000	190780	2.32		92.9	4184	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.118	2.116	0.002	1.000	631535	2.45		97.8	5384	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.345	0.002	1.000	3841374	2.49		99.4	61468	
D 11 18O2 PFHxS										
403.00 > 84.00	2.360	2.358	0.002	1.000	4589533	2.23		94.5	46983	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.359	-0.012	1.000	3985204	2.45		97.8	5878	
363.00 > 169.00	2.347	2.359	-0.012	1.000	1534914		2.60(1.13-3.40)		8374	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.373	-0.013	1.000	4580720	2.10		92.1	20134	
399.00 > 99.00	2.360	2.373	-0.013	1.000	1527297		3.00(1.50-4.49)		5735	
65 Adona										
377.00 > 251.00	2.384	2.396	-0.012	1.000	12029789	2.89		116	125491	
377.00 > 85.00	2.384	2.396	-0.012	1.000	7164855		1.68(0.84-2.53)		54184	
D 12 M2-6:2FTS										
429.00 > 81.00	2.675	2.682	-0.007	1.000	804835	2.64		111	15148	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.675	2.683	-0.008	1.000	1299138	2.28		96.1	10646	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.704	0.001	1.000	3657894	2.52		101	58427	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.713	-0.008		3844130	2.50			56491	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.713	-0.008	1.000	4164973	2.37		94.8	1868	
413.00 > 169.00	2.705	2.713	-0.008	1.000	2137251		1.95(0.84-2.52)		6781	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.705	2.720	-0.015	1.000	4177755	2.47		104	36197	
449.00 > 99.00	2.705	2.720	-0.015	1.000	1143342		3.65(1.94-5.82)		17012	
D 18 13C4 PFOS										
503.00 > 80.00	3.071	3.073	-0.002	1.000	3062377	2.14		89.4	16632	
D 19 13C5 PFNA										
468.00 > 423.00	3.071	3.081	-0.010	1.000	2976141	2.46		98.3	62969	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.071	3.082	-0.011	1.000	3350460	2.34		101	30035	
499.00 > 99.00	3.071	3.082	-0.011	1.000	721743		4.64(2.31-6.93)		10173	
20 Perfluorononanoic acid										
463.00 > 419.00	3.071	3.082	-0.011	1.000	3102133	2.47		98.9	4465	
463.00 > 169.00	3.071	3.082	-0.011	1.000	729284		4.25(1.90-5.69)		21729	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.286	3.296	-0.010	1.000	5633418	2.46		106	47801	
D 21 13C8 FOSA										
506.00 > 78.00	3.397	3.407	-0.010	1.000	4312795	2.08		83.2	43202	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.407	3.418	-0.011	1.003	4566156	2.69		107	46296	
D 26 M2-8:2FTS										
529.00 > 81.00	3.425	3.435	-0.010	1.000	860495	2.16		90.4	16003	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.425	3.437	-0.012	1.000	1115298	2.39		99.6	20484	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.425	3.437	-0.012	1.000	2400734	2.45		102	35099	
549.00 > 99.00	3.425	3.437	-0.012	1.000	922918		2.60(1.33-3.97)		16148	
D 23 13C2 PFDA										
515.00 > 470.00	3.434	3.444	-0.010	1.000	2360406	2.27		90.6	29389	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.434	3.446	-0.012	1.000	2514123	2.60		104	13477	
513.00 > 169.00	3.434	3.446	-0.012	1.000	441715		5.69(2.36-7.09)		9167	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.585	3.596	-0.011	1.000	1330442	2.82		113	18051	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.596	3.609	-0.013	1.003	1390039	2.50		100.0	8602	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.750	3.762	-0.012	1.000	2059132	2.43		101	40987	
599.00 > 99.00	3.750	3.762	-0.012	1.000	716934		2.87(1.39-4.16)		18356	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.761	3.771	-0.010	1.000	1349341	2.68		107	5046	
D 30 13C2 PFUnA										
565.00 > 520.00	3.761	3.771	-0.010	1.000	2081596	2.39		95.5	52917	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.771	3.773	-0.002	1.003	1294390	2.55		102	22203	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.771	3.783	-0.012	1.003	1657984	2.55		102	5823	
563.00 > 169.00	3.761	3.783	-0.022	1.000	436399		3.80(2.12-6.36)		15293	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.918	3.940	-0.022	1.000	8723915	2.49		106	49645	
D 36 13C2 PFDoA										
615.00 > 570.00	4.061	4.071	-0.010	1.000	2235444	2.45		98.2	18573	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.061	4.072	-0.011	1.000	2385453	2.57		103	2188	
613.00 > 169.00	4.061	4.072	-0.011	1.000	613626		3.89(2.13-6.40)		7447	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.330	4.341	-0.011	1.000	2650283	2.75		110	1651	
663.00 > 169.00	4.330	4.341	-0.011	1.000	829983		3.19(1.25-3.76)		8402	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.564	4.574	-0.010	1.000	2769283	2.79		112	12719	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.564	4.575	-0.011	1.000	743544	2.59		104	8644	
713.00 > 219.00	4.564	4.575	-0.011	1.000	502295		1.48(0.71-2.13)		7690	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.985	4.993	-0.008	1.000	5081993	3.22		129	12368	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.985	5.002	-0.017	1.000	4510400	2.38		95.3	1175	
813.00 > 169.00	4.985	5.002	-0.017	1.000	801689		5.63(2.86-8.58)		5637	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.351	5.364	-0.013	1.000	5645872	2.63		105	998	
913.00 > 169.00	5.351	5.364	-0.013	1.000	681810		8.28(3.83-11.48)		4494	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 15-May-2018 15:10:02 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_061.d

Injection Date: 14-May-2018 19:26:14 Instrument ID: A8_N

Lims ID: CCV L5

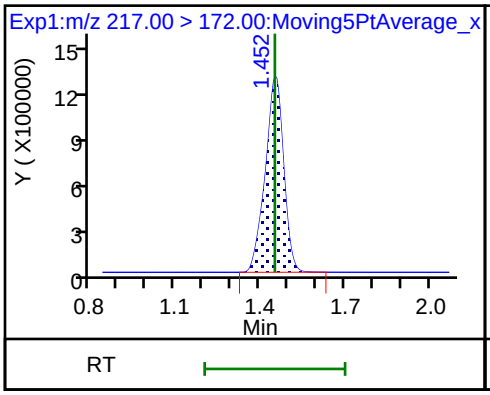
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 31 Worklist Smp#: 20

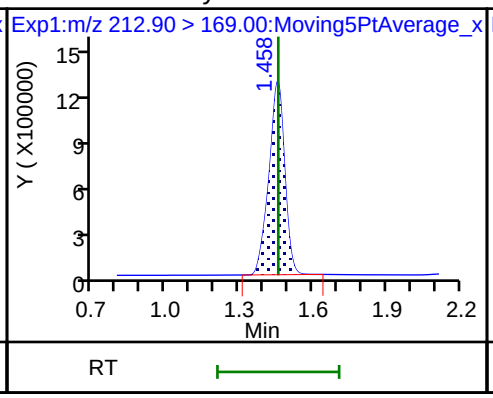
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

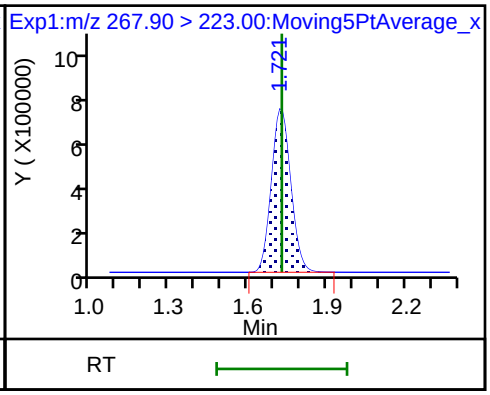
D 1 13C4 PFBA



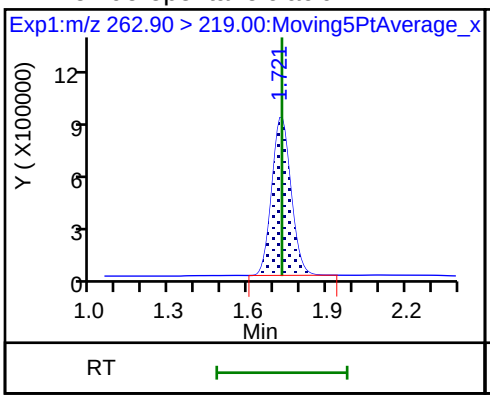
2 Perfluorobutyric acid



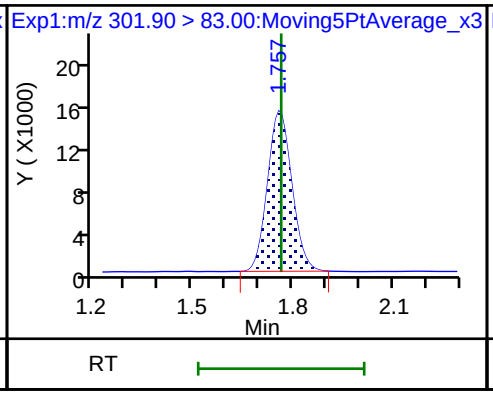
D 3 13C5-PFPeA



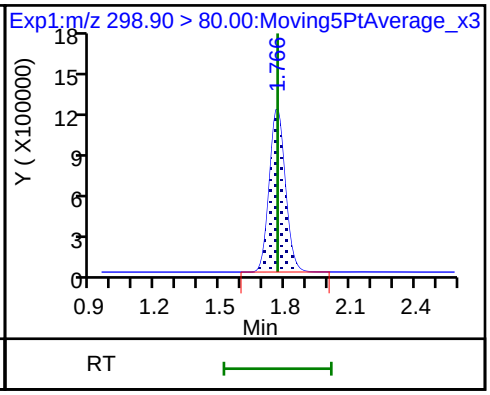
4 Perfluoropentanoic acid



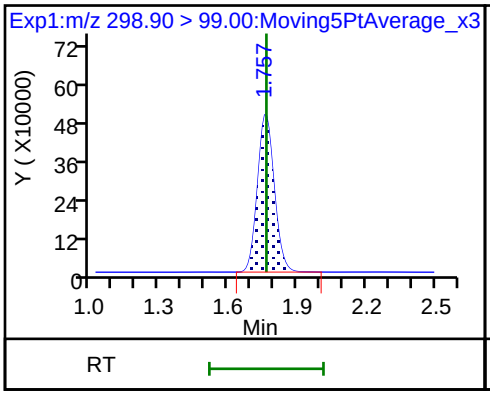
D 47 13C3-PFBS



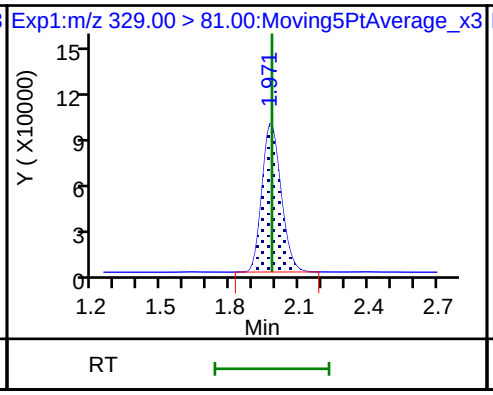
5 Perfluorobutanesulfonic acid



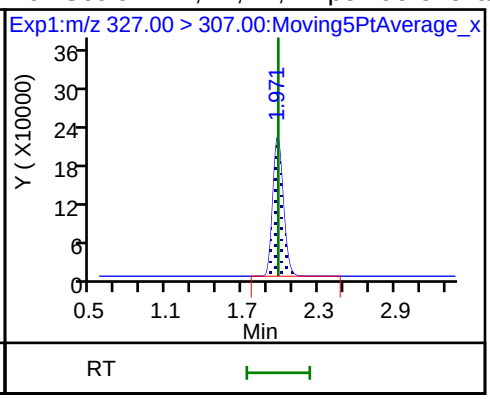
5 Perfluorobutanesulfonic acid



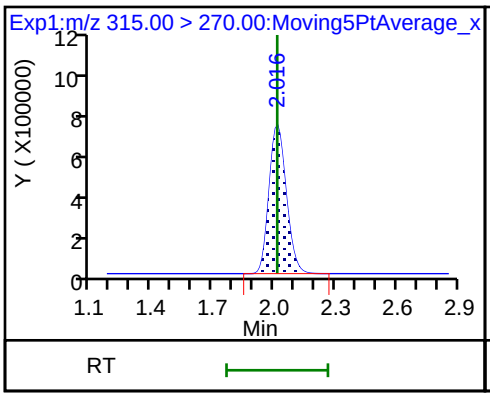
D 60 M2-4:2FTS



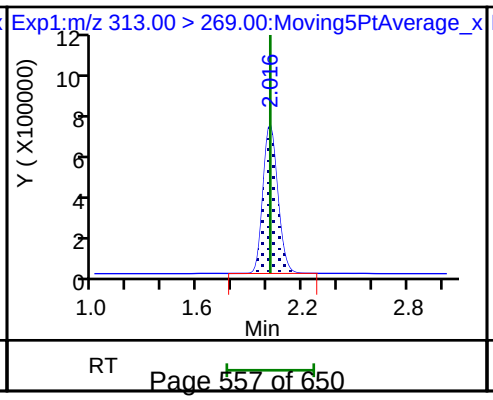
61 Sodium 1H,1H,2H,2H-perfluorohexane



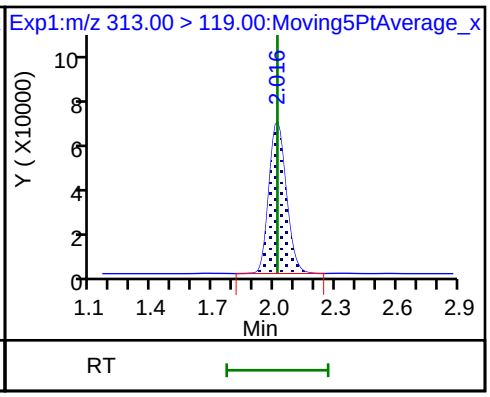
D 7 13C2 PFHxA



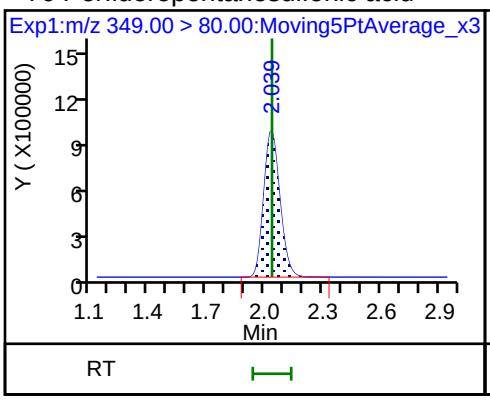
6 Perfluorohexanoic acid



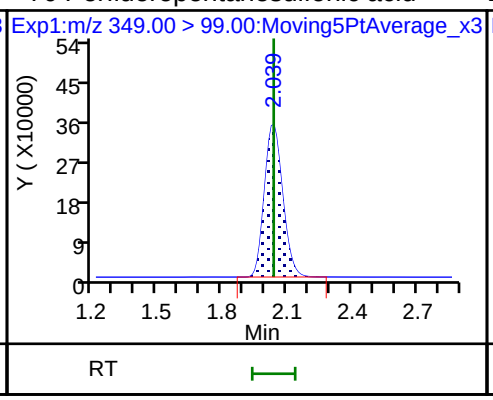
6 Perfluorohexanoic acid



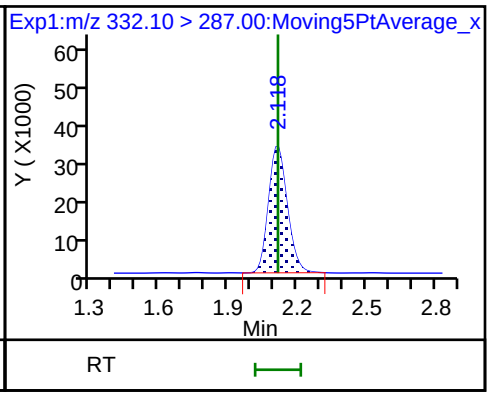
70 Perfluoropentanesulfonic acid



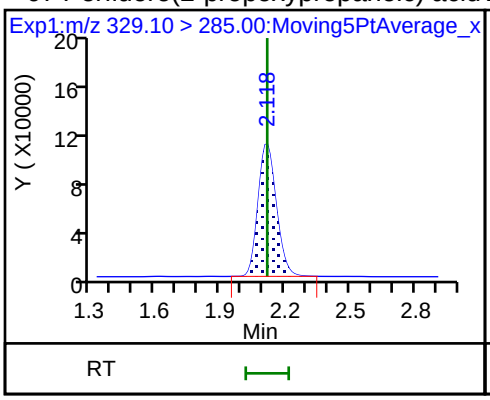
70 Perfluoropentanesulfonic acid



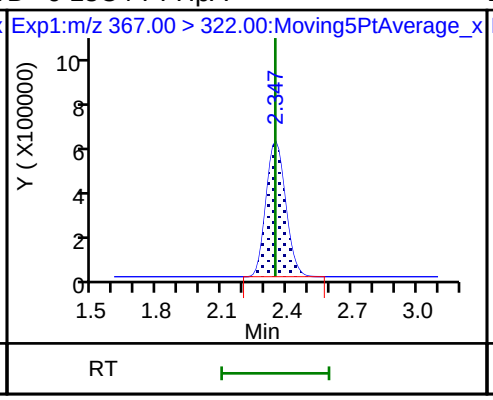
D 64 13C3 HFPO-DA



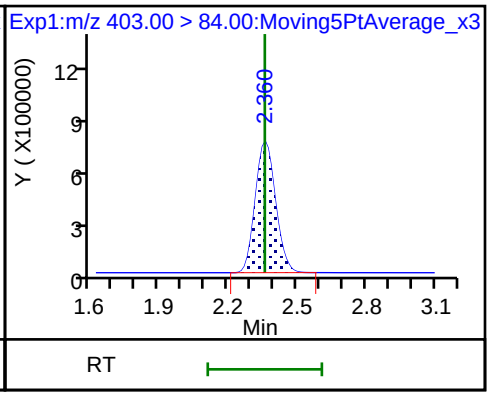
67 Perfluoro(2-propoxypropanoic) acid



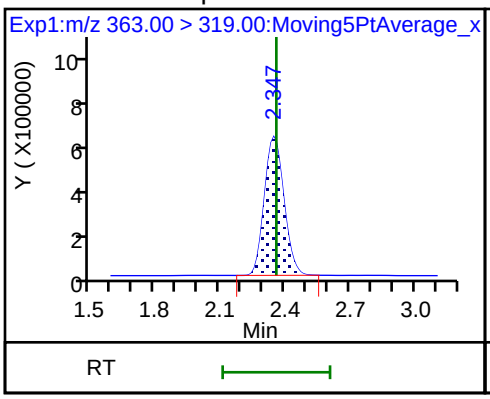
D 9 13C4-PFHpA



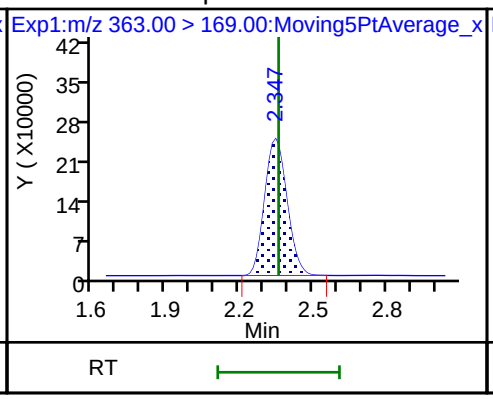
D 11 18O2 PFHxS



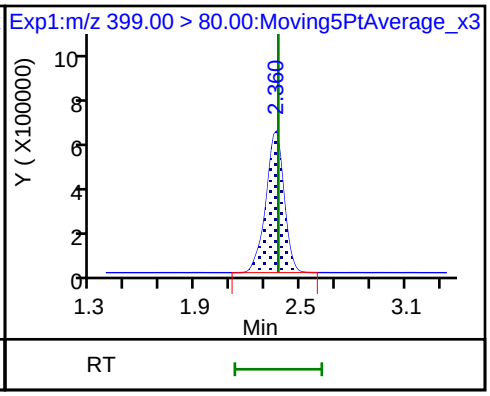
10 Perfluoroheptanoic acid



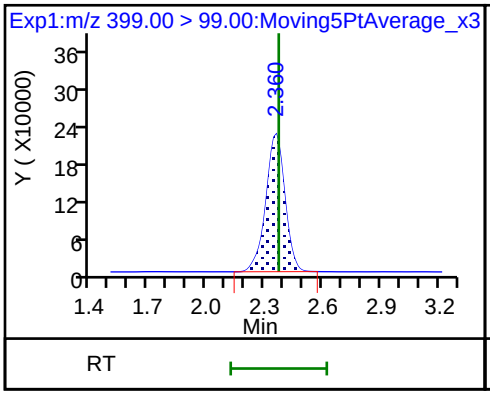
10 Perfluoroheptanoic acid



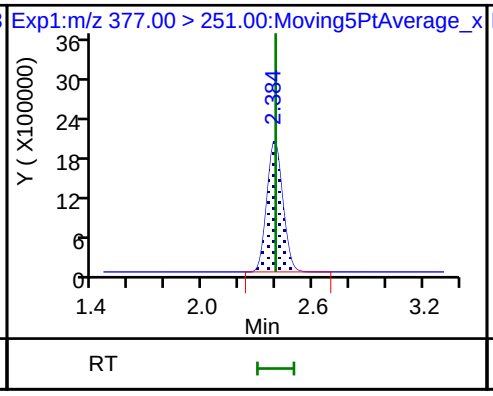
8 Perfluorohexanesulfonic acid



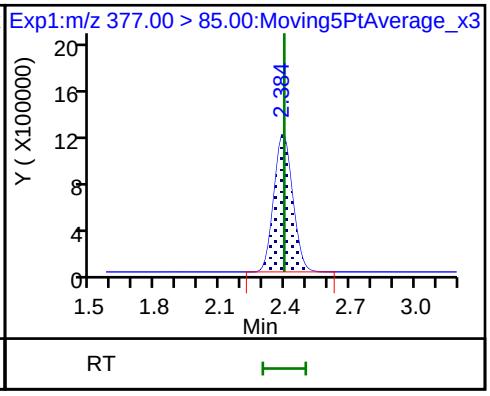
8 Perfluorohexanesulfonic acid



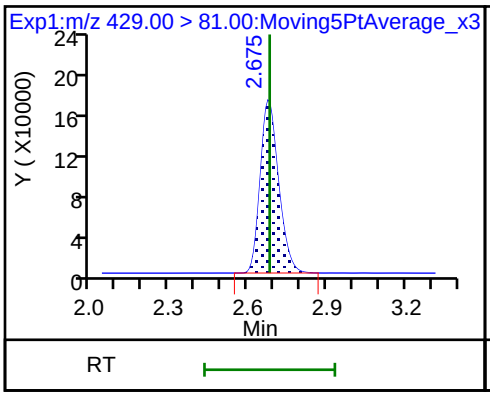
65 Adona



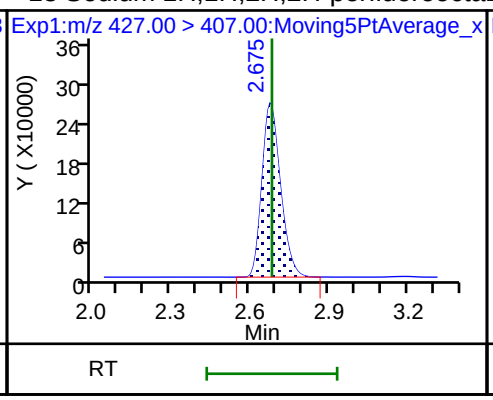
65 Adona



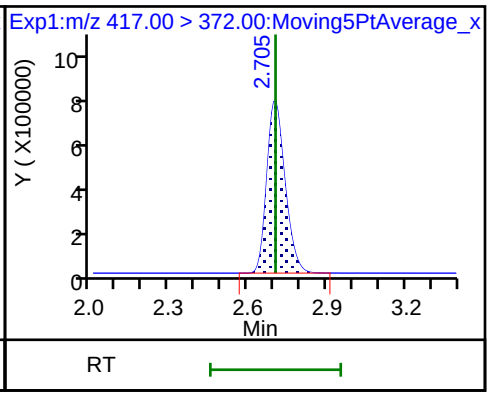
D 12 M2-6:2FTS



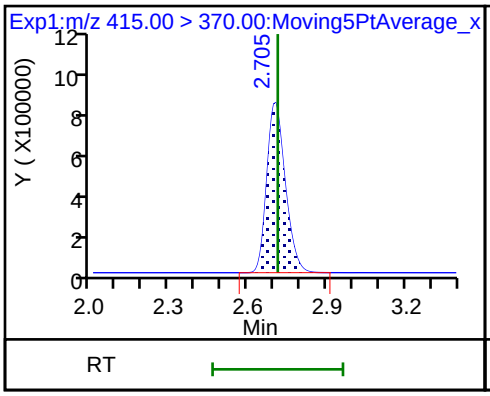
13 Sodium 1H,1H,2H,2H-perfluorooctane



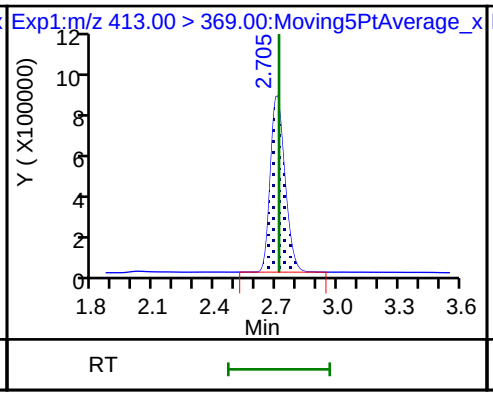
D 14 13C4 PFOA



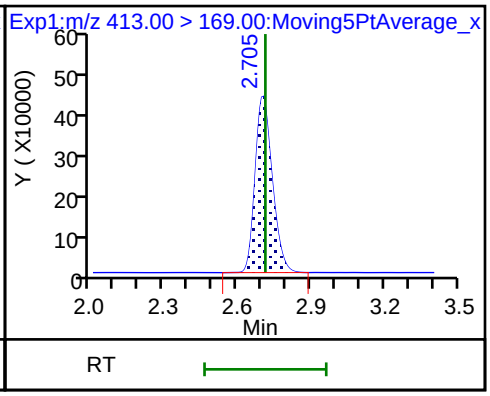
* 62 13C2-PFOA



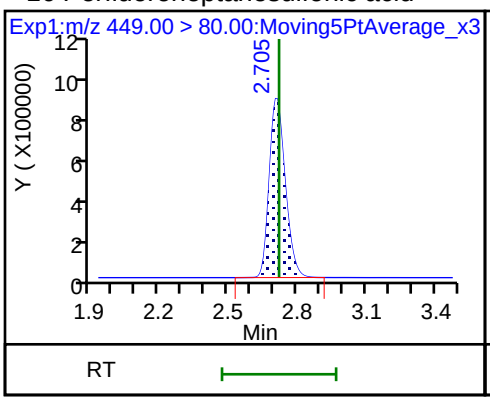
15 Perfluorooctanoic acid



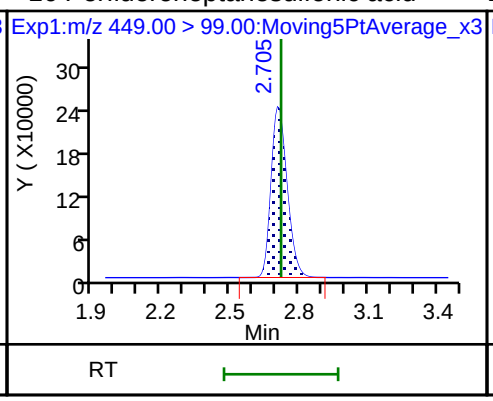
15 Perfluorooctanoic acid



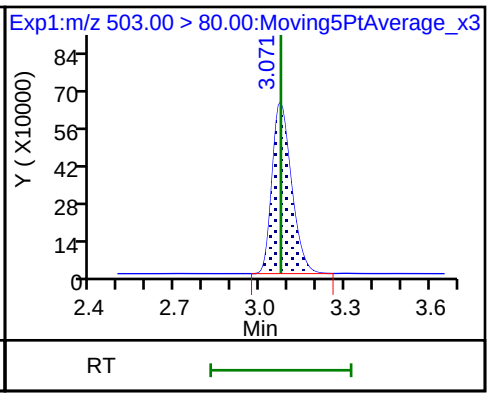
16 Perfluoroheptanesulfonic acid



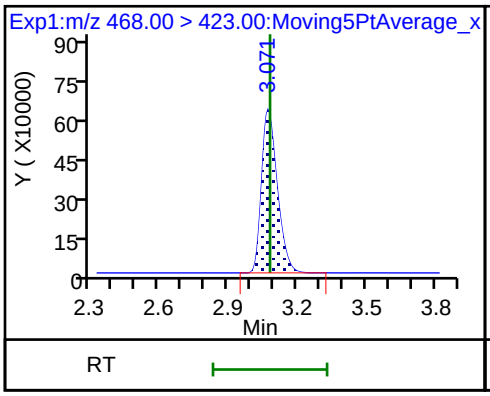
16 Perfluoroheptanesulfonic acid



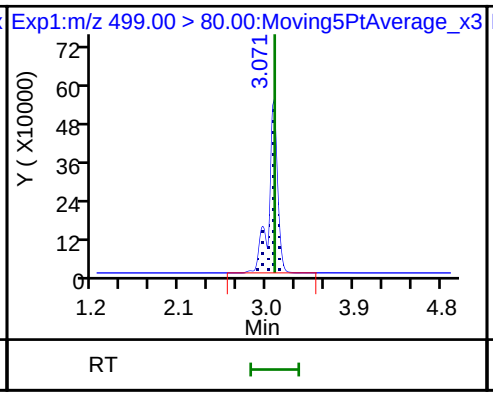
D 18 13C4 PFOS



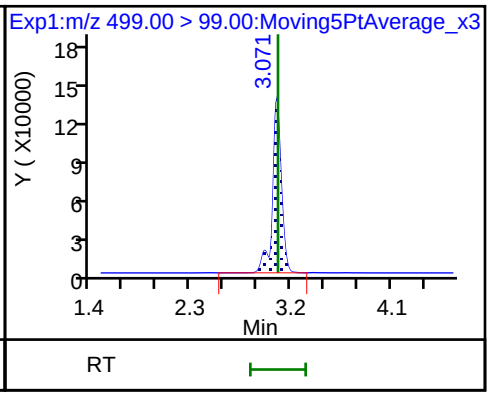
D 19 13C5 PFNA



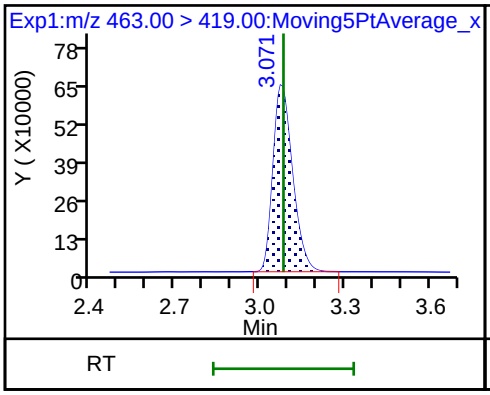
17 Perfluorooctane sulfonic acid



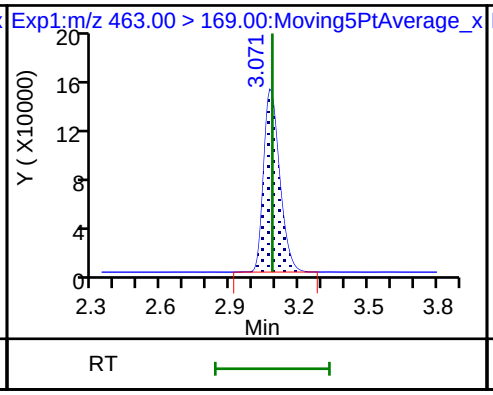
17 Perfluorooctane sulfonic acid



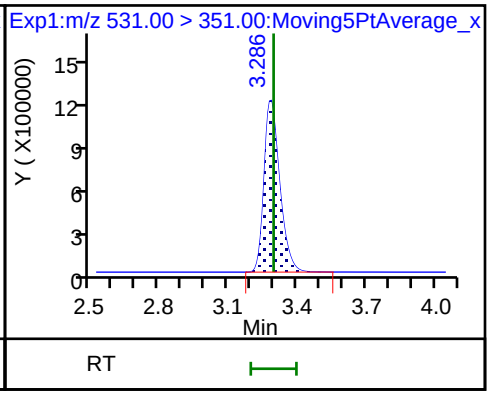
20 Perfluorononanoic acid



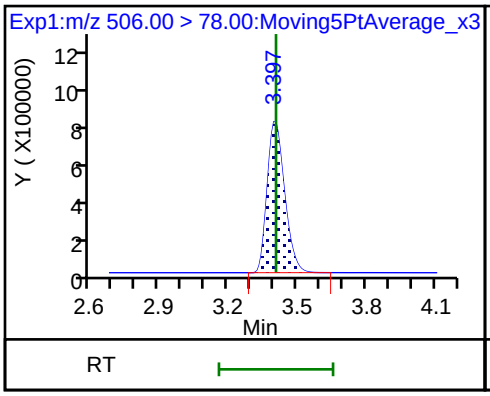
20 Perfluorononanoic acid



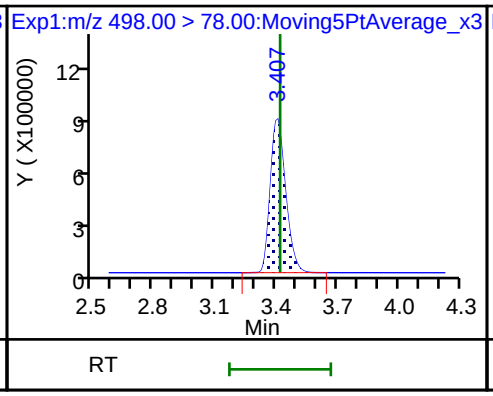
69 9-Chlorohexadecafluoro-3-oxanonane



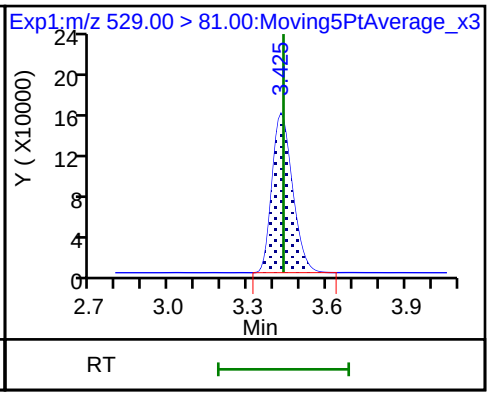
D 21 13C8 FOSA



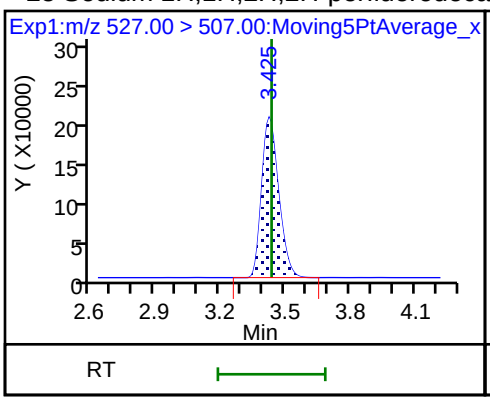
22 Perfluorooctane Sulfonamide



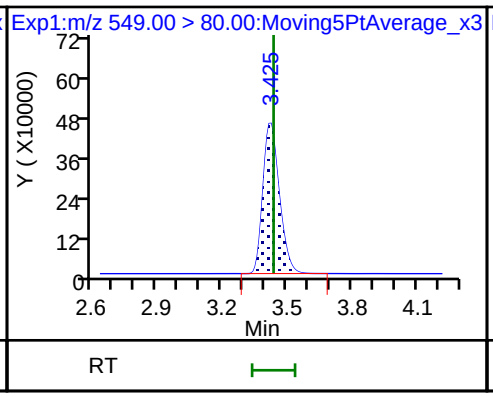
D 26 M2-8:2FTS



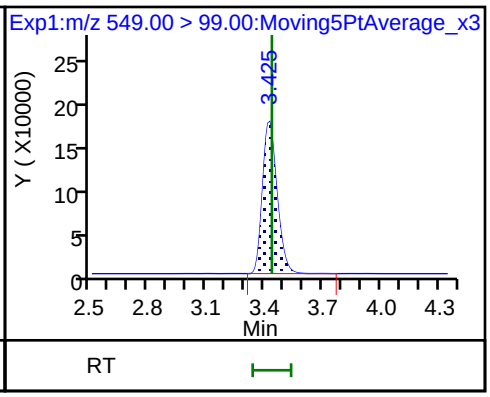
25 Sodium 1H,1H,2H,2H-perfluorodecane



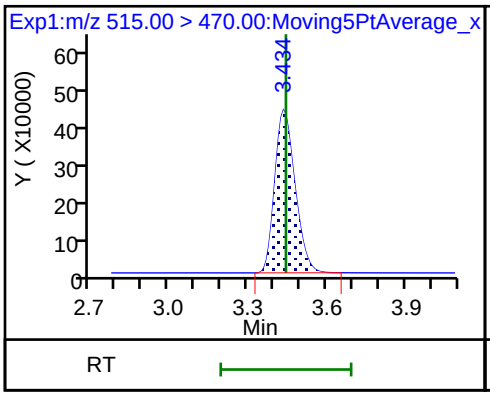
68 Perfluorononanesulfonic acid



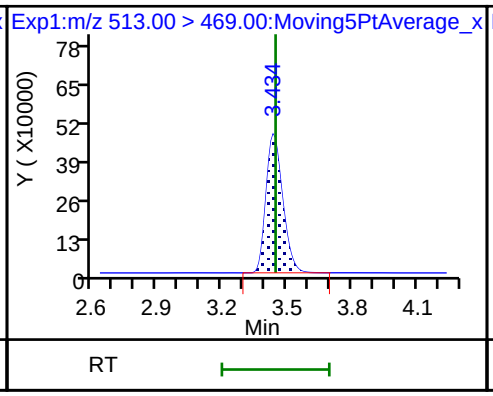
68 Perfluorononanesulfonic acid



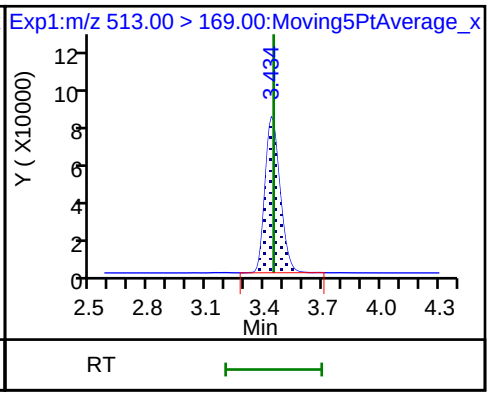
D 23 13C2 PFDA



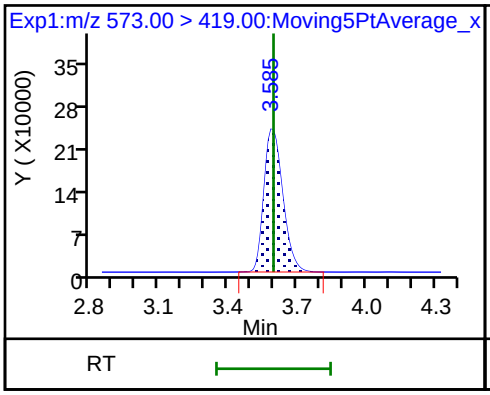
24 Perfluorodecanoic acid



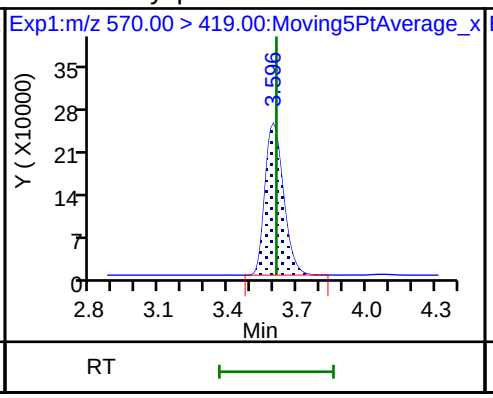
24 Perfluorodecanoic acid



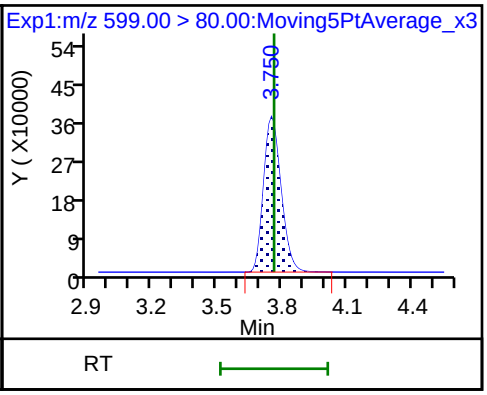
D 27 d3-NMeFOSAA



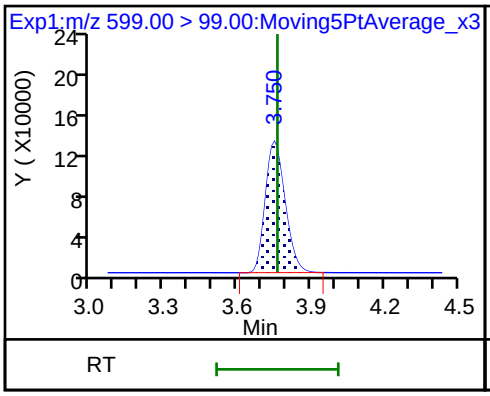
28 N-methyl perfluorooctane sulfonami



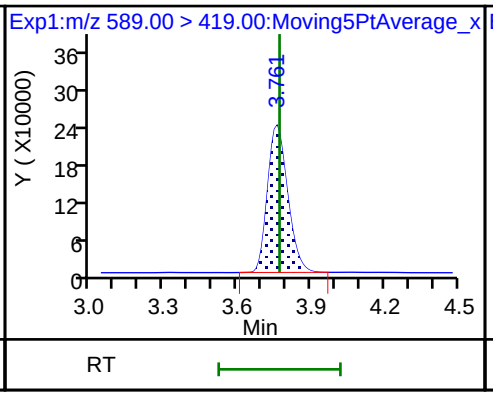
29 Perfluorodecane Sulfonic acid



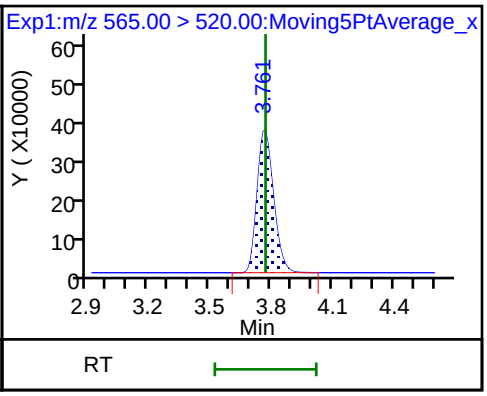
29 Perfluorodecane Sulfonic acid



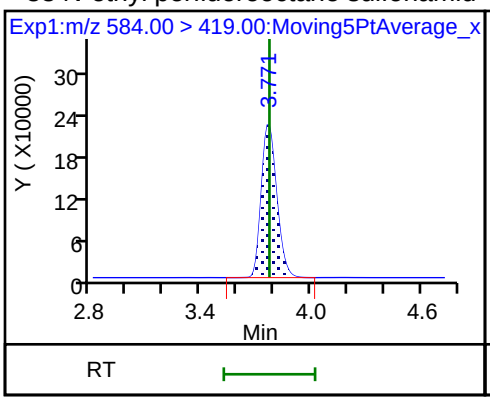
D 32 d5-NEtFOSAA



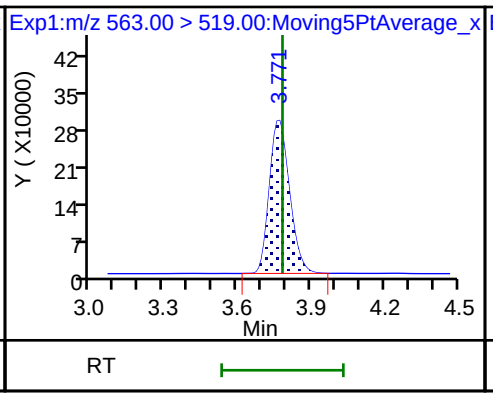
D 30 13C2 PFUnA



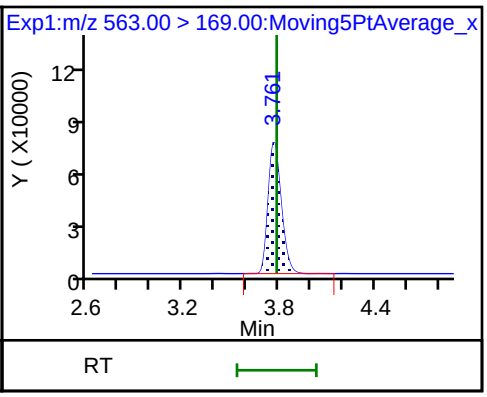
33 N-ethyl perfluorooctane sulfonamid



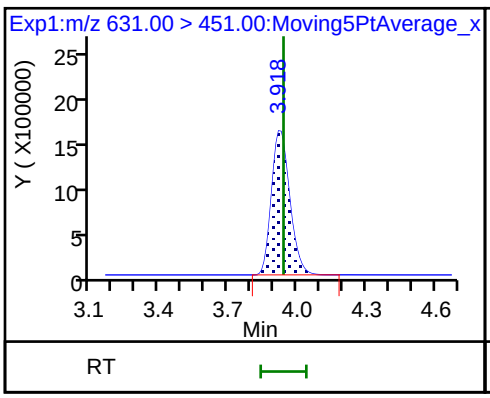
31 Perfluoroundecanoic acid



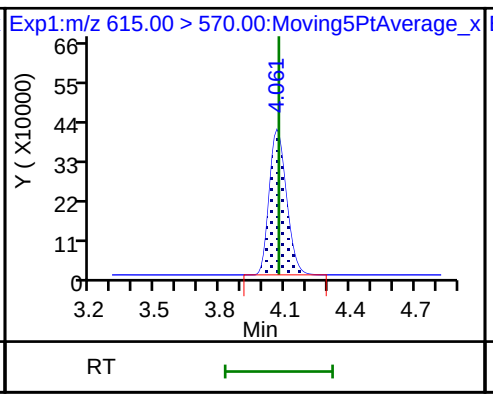
31 Perfluoroundecanoic acid



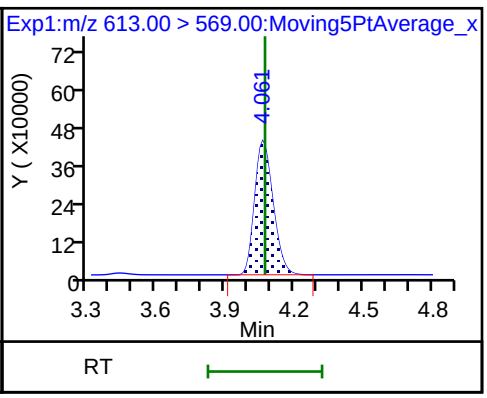
66 11-Chloroeicosafluoro-3-oxaundecan



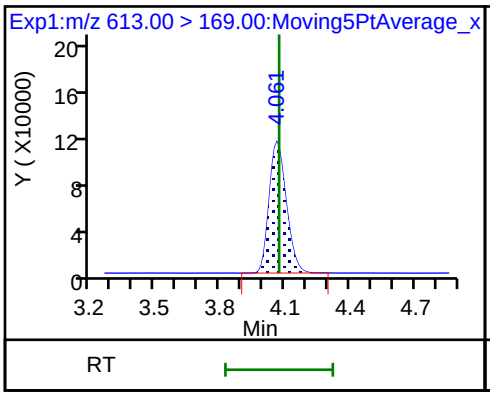
D 36 13C2 PFDoA



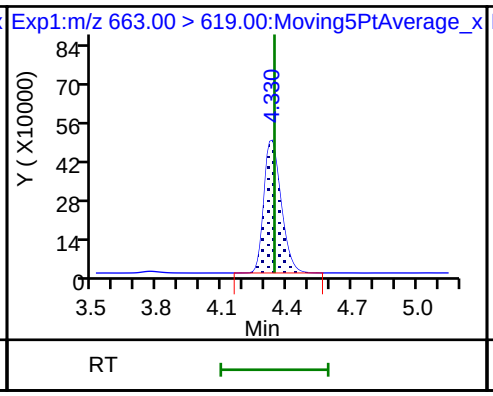
37 Perfluorododecanoic acid



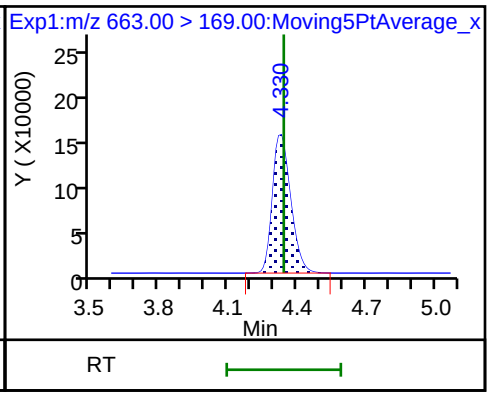
37 Perfluorododecanoic acid



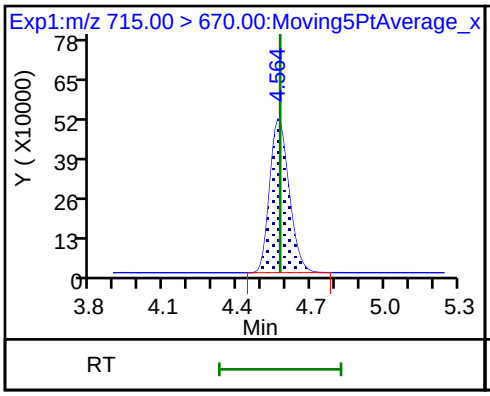
41 Perfluorotridecanoic acid



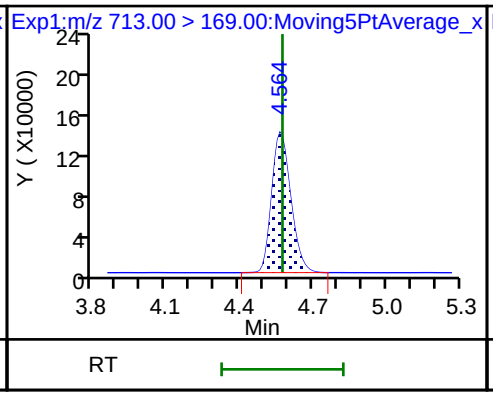
41 Perfluorotridecanoic acid



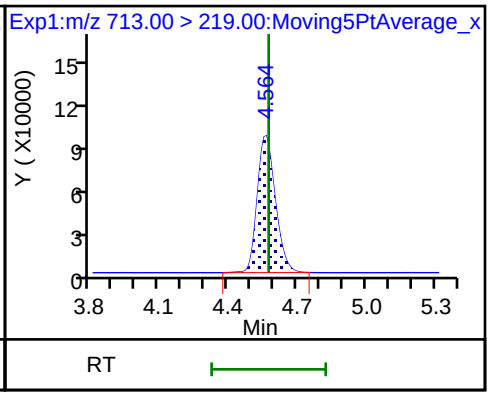
D 43 13C2-PFTeDA



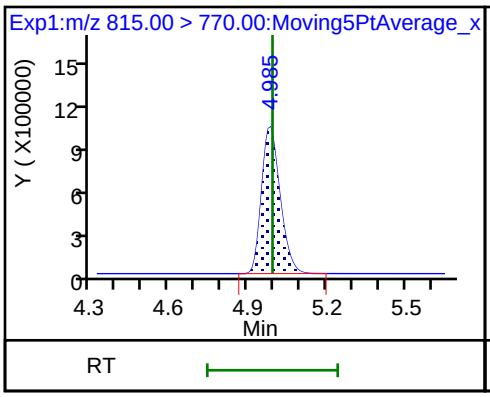
42 Perfluorotetradecanoic acid



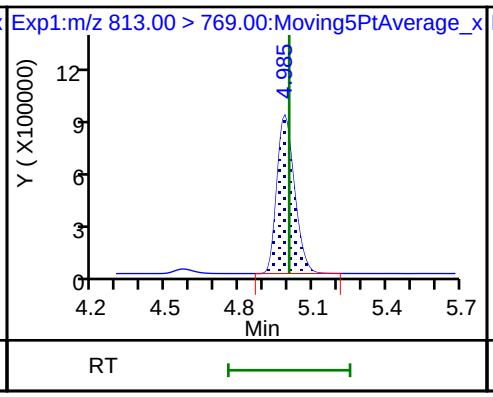
42 Perfluorotetradecanoic acid



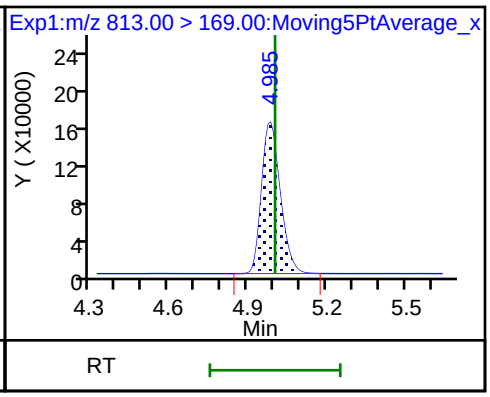
D 44 13C2-PFHxDA



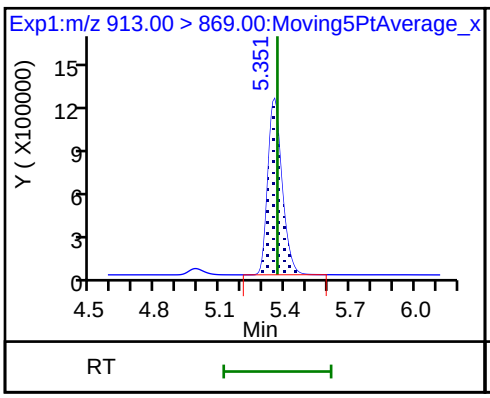
45 Perfluorohexadecanoic acid



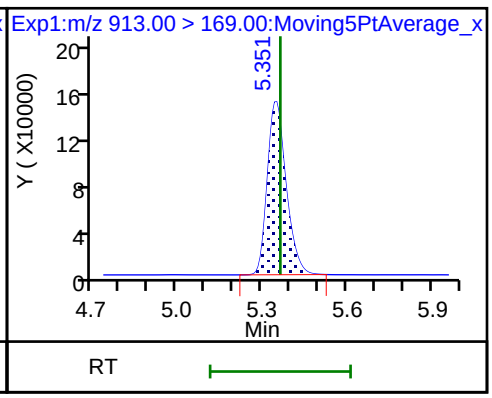
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-223178/27 Calibration Date: 05/14/2018 20:21

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2018.05.14LLAxxx_068.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9291	0.9092		0.979	1.00	-2.1	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.217	1.135		0.933	1.00	-6.7	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	77.17	77.31		0.886	0.884	0.2	50.0
4:2 FTS	AveID	13.08	16.82		1.20	0.934	28.6	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.043	1.021		0.978	1.00	-2.2	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.00	71.39		0.971	0.938	3.5	50.0
HFPO-DA (GenX)	AveID	3.383	2.599		0.768	1.00	-23.2	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	0.9793		0.923	1.00	-7.7	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.126	0.9832		0.794	0.910	-12.7	40.0
Adona	AveID	3.251	3.651		1.12	1.00	12.3	50.0
6:2FTS	AveID	1.683	1.534		0.864	0.948	-8.8	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.202	1.122		0.934	1.00	-6.6	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.319	1.282		0.925	0.952	-2.9	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.116	1.058		0.880	0.928	-5.2	40.0
Perfluorononanoic acid (PFNA)	AveID	1.054	1.008		0.956	1.00	-4.4	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.785	1.739		0.908	0.932	-2.6	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9855	0.9795		0.994	1.00	-0.6	40.0
8:2FTS	AveID	1.301	1.300		0.958	0.958	-0.0	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7650	0.7635		0.958	0.960	-0.2	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.023	1.033		1.01	1.00	0.9	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.045	0.9424		0.902	1.00	-9.8	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6614	0.6573		0.958	0.964	-0.6	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9421	0.9036		0.959	1.00	-4.1	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7803	0.7329		0.939	1.00	-6.1	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.730	2.726		0.941	0.942	-0.1	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.039	1.045		1.01	1.00	0.5	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.080	1.230		1.14	1.00	13.9	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2589	0.2522		0.974	1.00	-2.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9134		0.966	1.00	-3.4	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Lab Sample ID: CCV 320-223178/27 Calibration Date: 05/14/2018 20:21

Instrument ID: A8_N Calib Start Date: 05/14/2018 12:00

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/14/2018 12:47

Lab File ID: 2018.05.14LLAxxx_068.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.056	1.015		0.961	1.00	-3.9	50.0
13C4 PFBA	Ave	1.618	1.470		2.27	2.50	-9.1	50.0
13C5 PFPeA	Ave	1.002	0.9380		2.34	2.50	-6.4	50.0
13C3-PFBS	Ave	0.0236	0.0207		2.04	2.33	-12.4	50.0
M2-4:2FTS	Ave	0.1322	0.1532		2.71	2.34	15.9	50.0
13C2 PFHxA	Ave	1.048	1.020		2.43	2.50	-2.7	50.0
13C3 HFPO-DA	Ave	0.0534	0.0617		2.89	2.50	15.5	50.0
13C4-PFHpA	Ave	1.005	1.010		2.51	2.50	0.5	50.0
18O2 PFHxS	Ave	1.336	1.250		2.21	2.37	-6.5	50.0
M2-6:2FTS	Ave	0.1979	0.2187		2.62	2.38	10.5	40.0
13C4 PFOA	Ave	0.9424	0.9246		2.45	2.50	-1.9	50.0
13C4 PFOS	Ave	0.9317	0.8397		2.15	2.39	-9.9	50.0
13C5 PFNA	Ave	0.7876	0.7569		2.40	2.50	-3.9	50.0
13C8 FOSA	Ave	1.349	1.073		1.99	2.50	-20.4	50.0
M2-8:2FTS	Ave	0.2585	0.2309		2.14	2.40	-10.7	40.0
13C2 PFDA	Ave	0.6777	0.6335		2.34	2.50	-6.5	50.0
d3-NMeFOSAA	Ave	0.3073	0.3501		2.85	2.50	13.9	50.0
13C2 PFUnA	Ave	0.5672	0.5260		2.32	2.50	-7.3	50.0
d5-NEtFOSAA	Ave	0.3280	0.3543		2.70	2.50	8.0	50.0
13C2 PFDoA	Ave	0.5923	0.5425		2.29	2.50	-8.4	50.0
13C2-PFTeDA	Ave	0.6458	0.7105		2.75	2.50	10.0	50.0
13C2-PFHxDA	Ave	1.026	1.295		3.16	2.50	26.2	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_068.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2018 20:21:05 ALS Bottle#: 28 Worklist Smp#: 27
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:10:15 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 15:08:59

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.456	1.452	0.004	1.000	5953547	2.27		90.9	47973	
2 Perfluorobutyric acid										
212.90 > 169.00	1.456	1.456	0.0	1.000	2165100	0.9785		97.9	1127	
D 3 13C5-PFPeA										
267.90 > 223.00	1.726	1.728	-0.002	0.562	3798042	2.34		93.6	62749	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.726	1.726	0.0	1.000	1724451	0.9331		93.3	1099	
D 47 13C3-PFBS										
301.90 > 83.00	1.762	1.764	-0.002	1.000	78027	2.04		87.6	467	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.762	1.762	0.0	1.000	2293671	0.8857		100	11078	
298.90 > 99.00	1.762	1.762	0.0	1.000	987001		2.32(1.25-3.74)		6333	
D 60 M2-4:2FTS										
329.00 > 81.00	1.978	1.980	-0.002	1.000	579254	2.71		116	7770	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.978	1.978	0.0	1.000	527243	1.20		129	30871	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.014	-0.003	1.000	4129901	2.43		97.3	90187	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.011	2.011	0.0	1.000	1686035	0.9782		97.8	3116	
313.00 > 119.00	2.011	2.011	0.0	1.000	157240		10.72(5.03-15.10)		2243	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.034	2.034	0.0	1.000	2247323	0.9706		103	30242	
349.00 > 99.00	2.034	2.034	0.0	1.000	823879		2.73(1.36-4.07)		8996	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.113	2.116	-0.003	1.000	249774	2.89		116	5406	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.113	2.113	0.0	1.000	259654	0.7681		76.8	2034	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.345	-0.003	1.000	4091477	2.51		101	65599	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.358	-0.003	1.000	4786139	2.21		93.5	48404	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.342	2.342	0.0	1.000	1602670	0.9233		92.3	2515	
363.00 > 169.00	2.342	2.342	0.0	1.000	650984		2.46(1.13-3.40)		3883	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.355	2.355	0.0	1.000	1810733	0.7943		87.3	10668	
399.00 > 99.00	2.355	2.355	0.0	1.000	616119		2.94(1.50-4.49)		2446	
65 Adona										
377.00 > 251.00	2.381	2.381	0.0	1.000	4965503	1.12		112	68672	
377.00 > 85.00	2.381	2.381	0.0	1.000	2824605		1.76(0.84-2.53)		24520	
D 12 M2-6:2FTS										
429.00 > 81.00	2.674	2.682	-0.008	1.000	841294	2.62		111	19534	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.674	2.674	0.0	1.000	515283	0.8642		91.2	5086	
D 14 13C4 PFOA										
417.00 > 372.00	2.696	2.704	-0.008	1.000	3743535	2.45		98.1	78047	
* 62 13C2-PFOA										
415.00 > 370.00	2.696	2.696	0.0		4048988	2.50			60233	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.696	2.696	0.0	1.000	1680035	0.9337		93.4	686	
413.00 > 169.00	2.696	2.696	0.0	1.000	859603		1.95(0.84-2.52)		3623	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.704	2.704	0.0	1.000	1659451	0.9248		97.1	17271	
449.00 > 99.00	2.704	2.704	0.0	1.000	471781		3.52(1.94-5.82)		5447	
D 18 13C4 PFOS										
503.00 > 80.00	3.065	3.073	-0.008	1.000	3250241	2.15		90.1	31359	
D 19 13C5 PFNA										
468.00 > 423.00	3.072	3.081	-0.009	1.000	3064831	2.40		96.1	53086	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.065	3.065	0.0	1.000	1335651	0.8797		94.8	10769	
499.00 > 99.00	3.065	3.065	0.0	1.000	298242		4.48(2.31-6.93)		3642	
20 Perfluorononanoic acid										
463.00 > 419.00	3.072	3.072	0.0	1.000	1236035	0.9564		95.6	1653	
463.00 > 169.00	3.072	3.072	0.0	1.000	308153		4.01(1.90-5.69)		13142	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.279	3.279	0.0	1.000	2203792	0.9080		97.4	29784	
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.407	-0.009	1.000	4346431	1.99		79.6	41807	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.398	3.398	0.0	1.000	1702880	0.99		99.4	17253	
D 26 M2-8:2FTS										
529.00 > 81.00	3.425	3.435	-0.010	1.000	895497	2.14		89.3	13131	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.416	3.416	0.0	0.997	465751	0.9575		100.0	6563	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.416	3.416	0.0	1.000	996720	0.9581		99.8	13596	
549.00 > 99.00	3.416	3.416	0.0	1.000	384276		2.59(1.33-3.97)		6106	
D 23 13C2 PFDA										
515.00 > 470.00	3.435	3.444	-0.009	1.000	2564841	2.34		93.5	40153	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.435	3.435	0.0	1.000	1059285	1.01		101	5520	
513.00 > 169.00	3.435	3.435	0.0	1.000	176546		6.00(2.36-7.09)		3035	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.584	3.596	-0.012	1.000	1417528	2.85		114	25198	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.584	3.584	0.0	1.000	534341	0.9016		90.2	3962	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.749	3.749	0.0	1.000	861756	0.9581		99.4	17044	
599.00 > 99.00	3.739	3.749	-0.010	0.997	278123		3.10(1.39-4.16)		6367	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.760	3.771	-0.011	1.000	1434392	2.70		108	5969	
D 30 13C2 PFUnA										
565.00 > 520.00	3.760	3.771	-0.011	1.000	2129676	2.32		92.7	29491	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.760	3.760	0.0	1.000	518436	0.9591		95.9	10098	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.760	3.760	0.0	1.000	624352	0.9392		93.9	2333	
563.00 > 169.00	3.760	3.760	0.0	1.000	177117		3.53(2.12-6.36)		7943	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.916	3.916	0.0	1.000	3491745	0.9406		99.9	49513	
D 36 13C2 PFDoA										
615.00 > 570.00	4.059	4.071	-0.012	1.000	2196514	2.29		91.6	13364	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.059	4.059	0.0	1.000	917744	1.01		101	850	
613.00 > 169.00	4.059	4.059	0.0	1.000	222552		4.12(2.13-6.40)		4544	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.318	4.318	0.0	1.000	1080631	1.14		114	593	
663.00 > 169.00	4.318	4.318	0.0	1.000	342022		3.16(1.25-3.76)		4900	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.563	4.574	-0.011	1.000	2876674	2.75		110	14071	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.563	4.563	0.0	1.000	290177	0.9741		97.4	3548	
713.00 > 219.00	4.553	4.563	-0.010	0.998	200760		1.45(0.71-2.13)		4124	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.975	4.993	-0.018	1.000	5242312	3.16		126	12616	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.984	4.984	0.0	1.002	1915246	0.9665		96.6	521	
813.00 > 169.00	4.984	4.984	0.0	1.002	317157		6.04(2.86-8.58)		2612	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.343	5.343	0.0	1.000	2128101	0.9609		96.1	414	
913.00 > 169.00	5.343	5.343	0.0	1.000	271436		7.84(3.83-11.48)		2537	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 15-May-2018 15:10:16 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_068.d

Injection Date: 14-May-2018 20:21:05 Instrument ID: A8_N

Lims ID: CCV L4

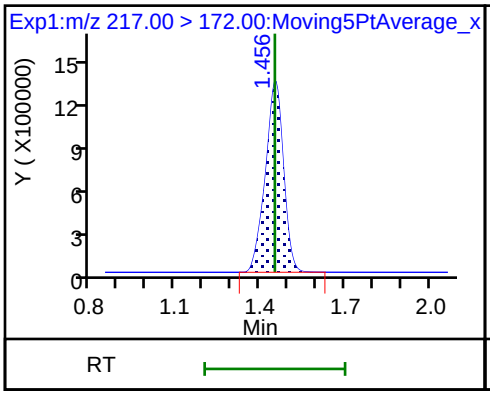
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 28 Worklist Smp#: 27

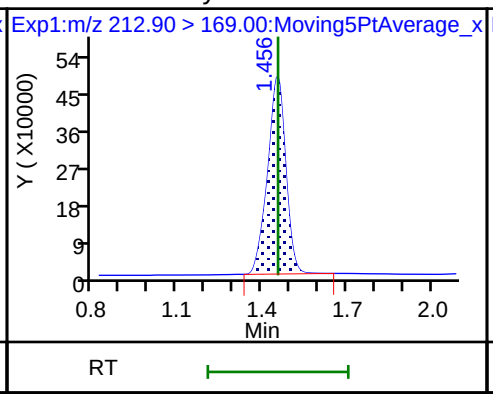
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

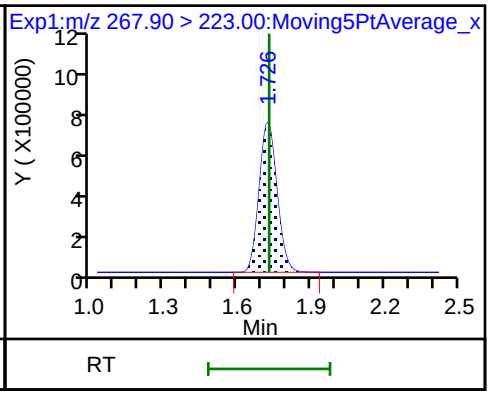
D 1 13C4 PFBA



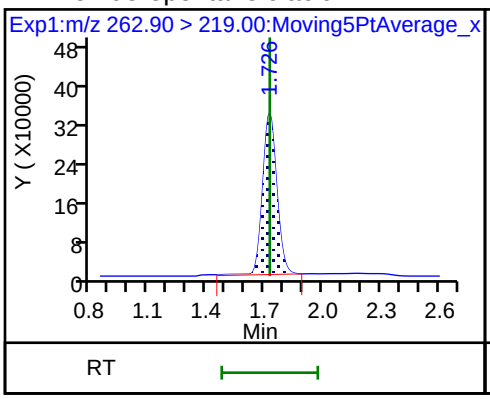
2 Perfluorobutyric acid



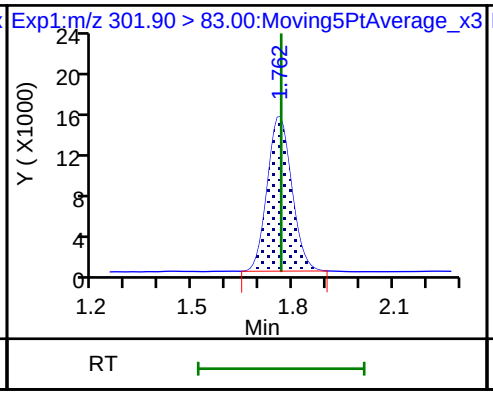
D 3 13C5-PFPeA



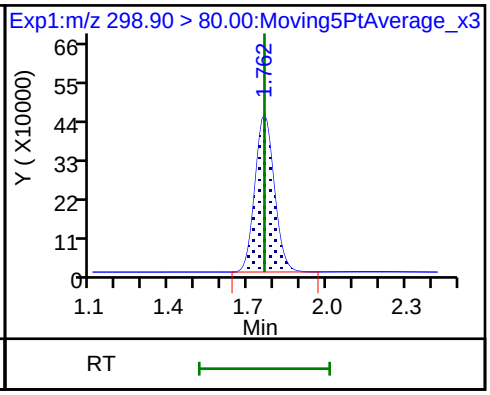
4 Perfluoropentanoic acid



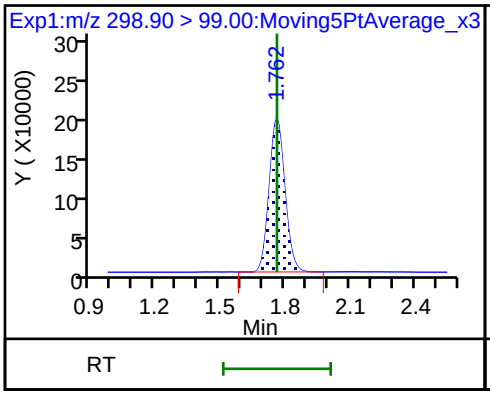
D 47 13C3-PFBS



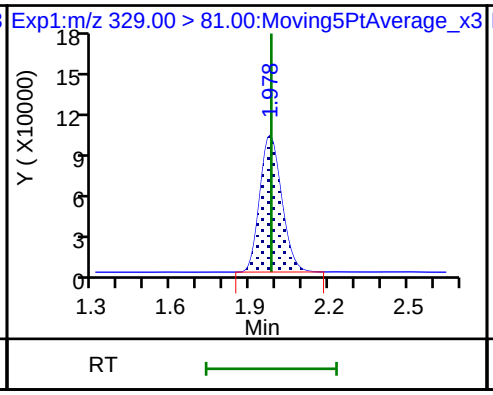
5 Perfluorobutanesulfonic acid



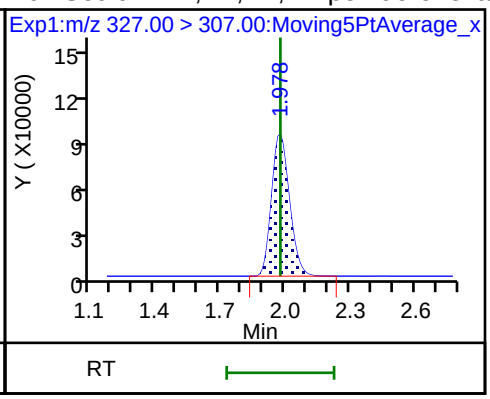
5 Perfluorobutanesulfonic acid



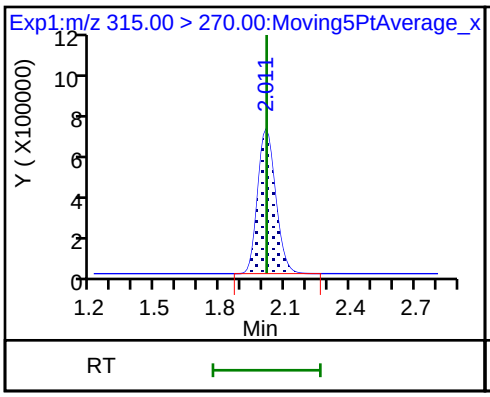
D 60 M2-4:2FTS



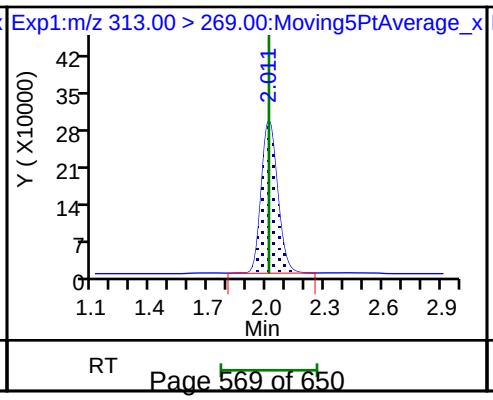
61 Sodium 1H,1H,2H,2H-perfluorohexane



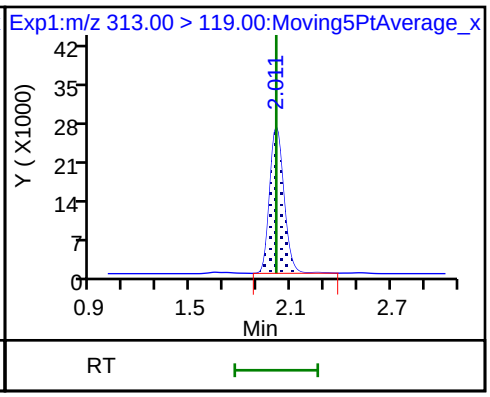
D 7 13C2 PFHxA



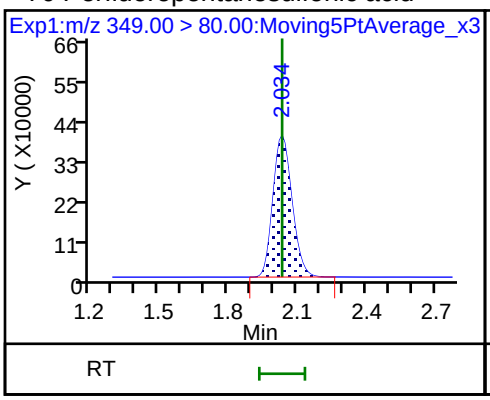
6 Perfluorohexanoic acid



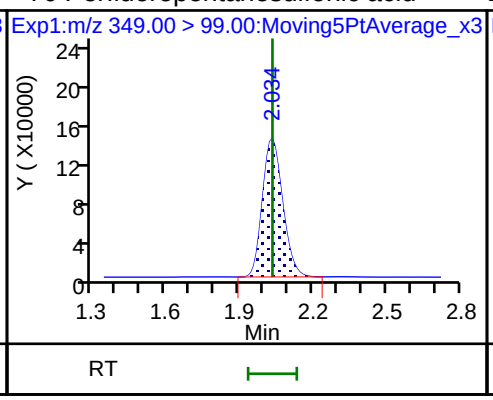
6 Perfluorohexanoic acid



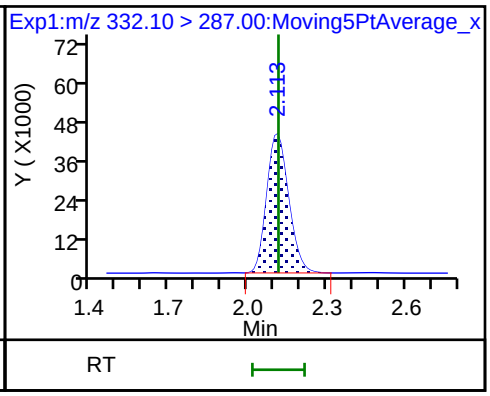
70 Perfluoropentanesulfonic acid



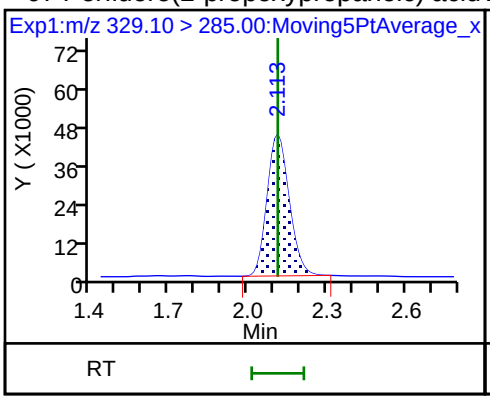
70 Perfluoropentanesulfonic acid



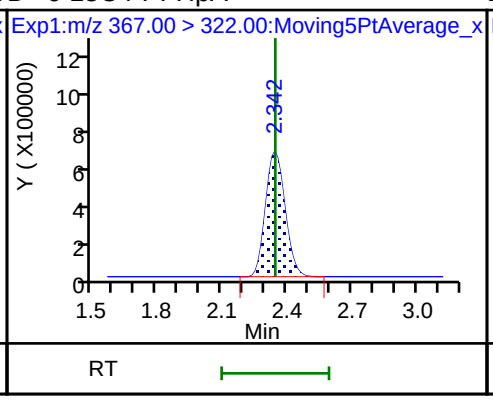
D 64 13C3 HFPO-DA



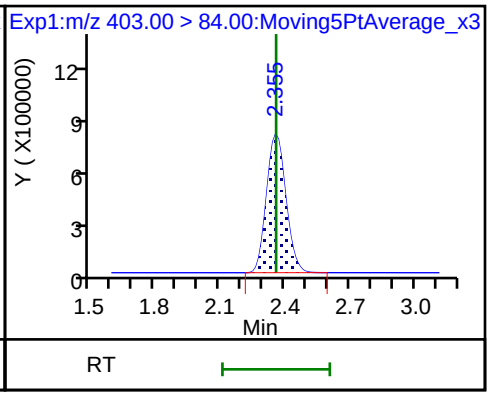
67 Perfluoro(2-propoxypropanoic) acid



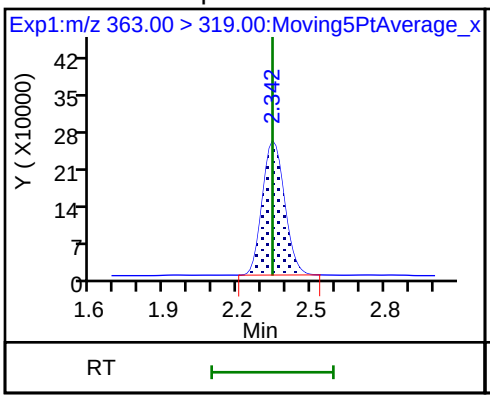
D 9 13C4-PFHpA



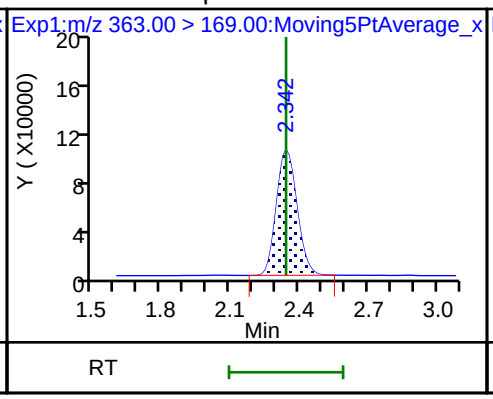
D 11 18O2 PFHxS



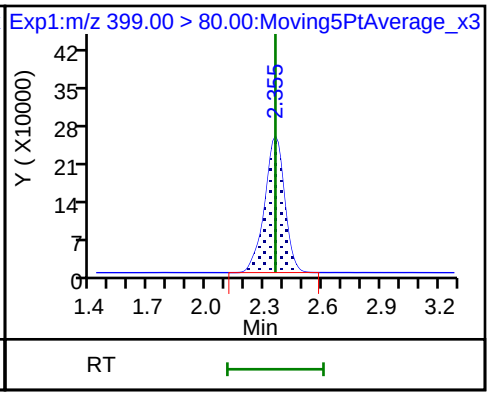
10 Perfluoroheptanoic acid



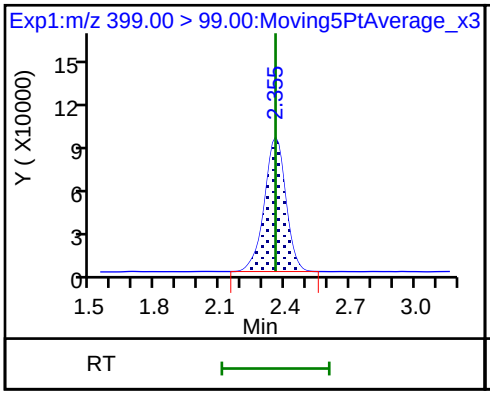
10 Perfluoroheptanoic acid



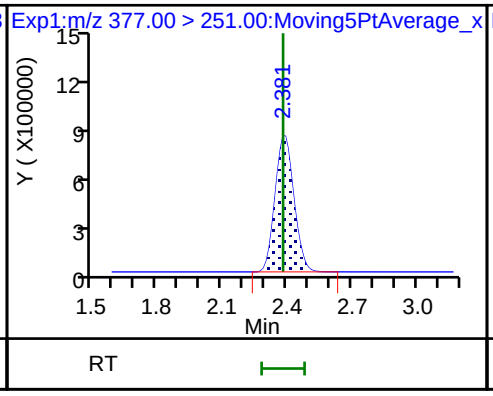
8 Perfluorohexanesulfonic acid



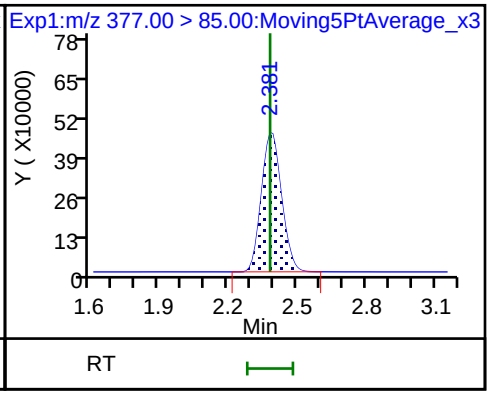
8 Perfluorohexanesulfonic acid



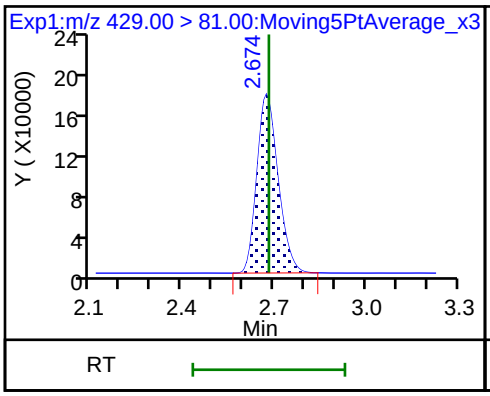
65 Adona



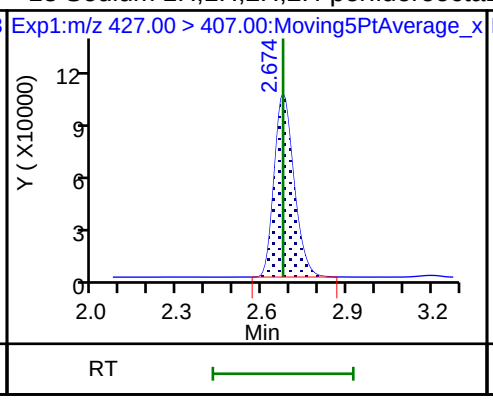
65 Adona



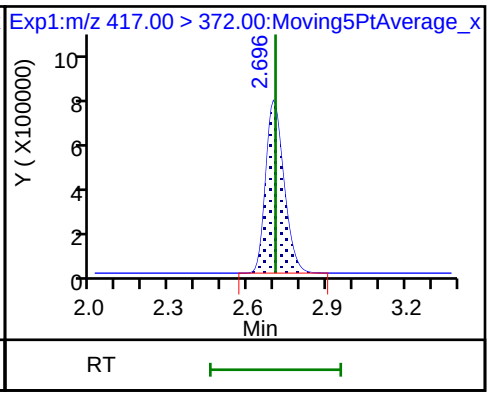
D 12 M2-6:2FTS



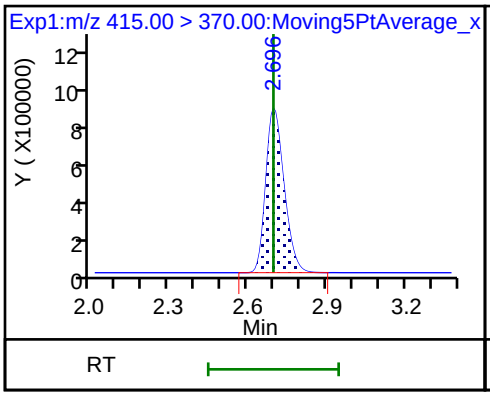
13 Sodium 1H,1H,2H,2H-perfluorooctane



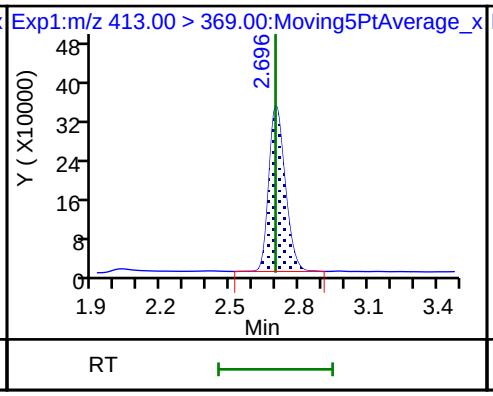
D 14 13C4 PFOA



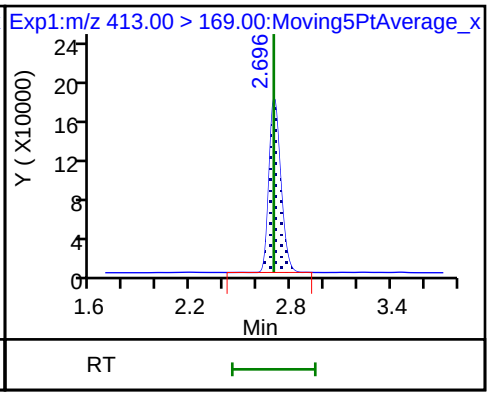
* 62 13C2-PFOA



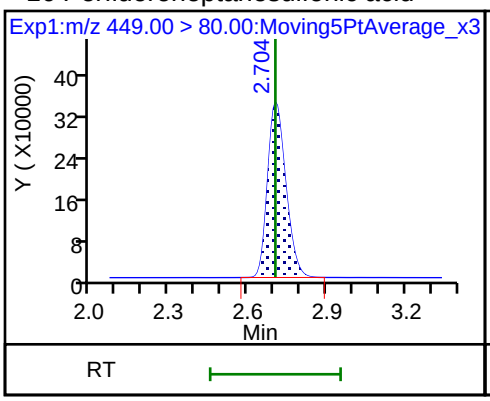
15 Perfluorooctanoic acid



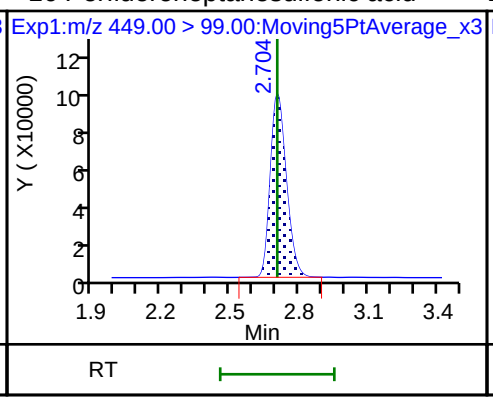
15 Perfluorooctanoic acid



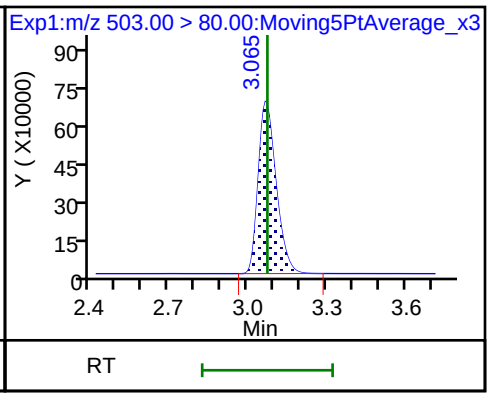
16 Perfluoroheptanesulfonic acid



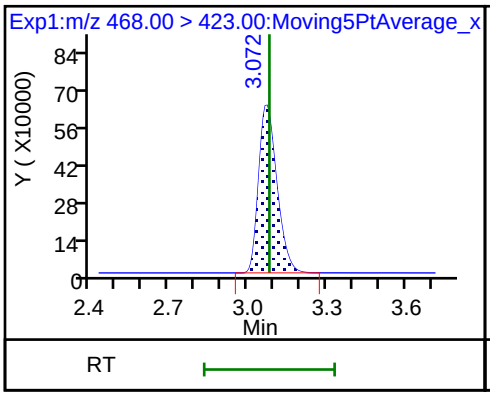
16 Perfluoroheptanesulfonic acid



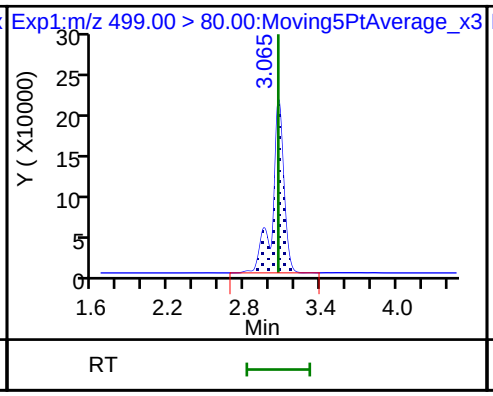
D 18 13C4 PFOS



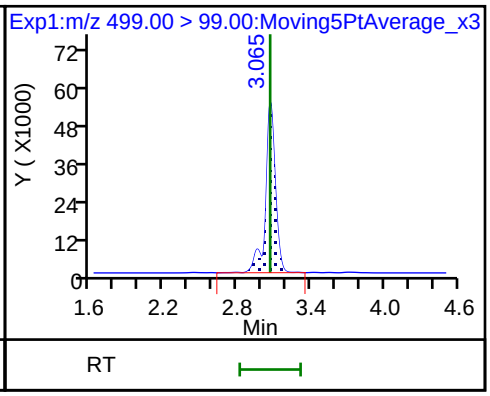
D 19 13C5 PFNA



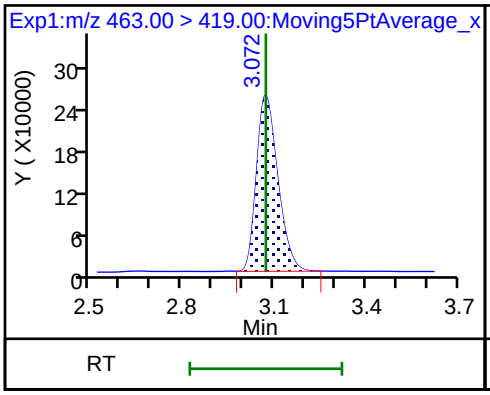
17 Perfluorooctane sulfonic acid



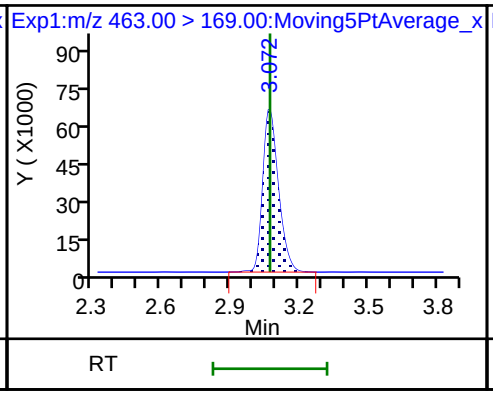
17 Perfluorooctane sulfonic acid



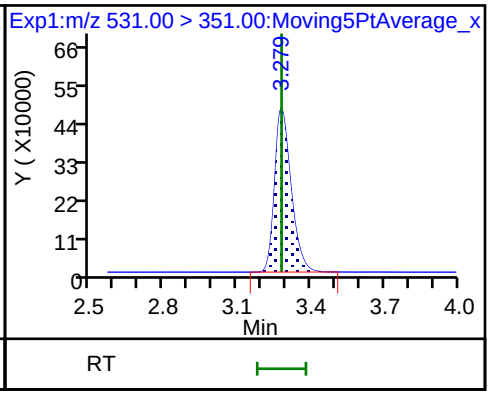
20 Perfluorononanoic acid



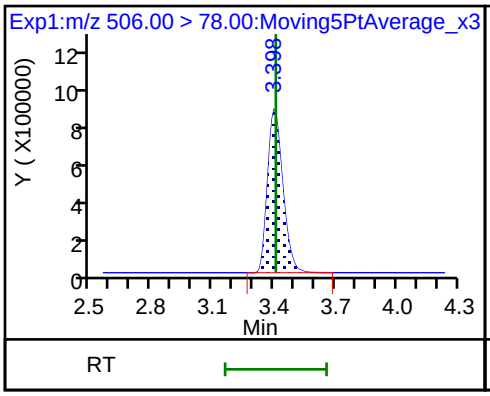
20 Perfluorononanoic acid



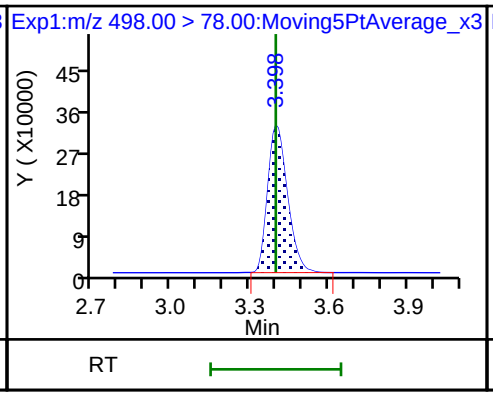
69 9-Chlorohexadecafluoro-3-oxanonane



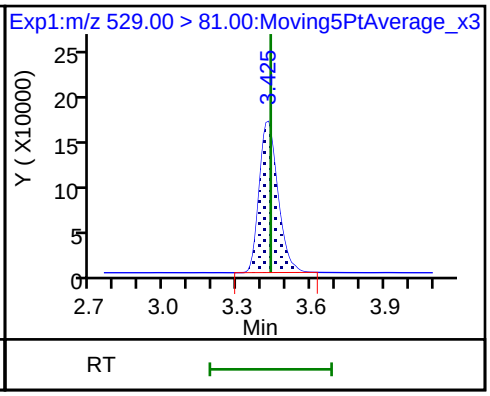
D 21 13C8 FOSA



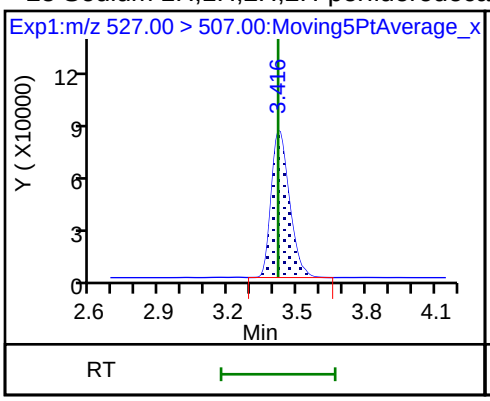
22 Perfluorooctane Sulfonamide



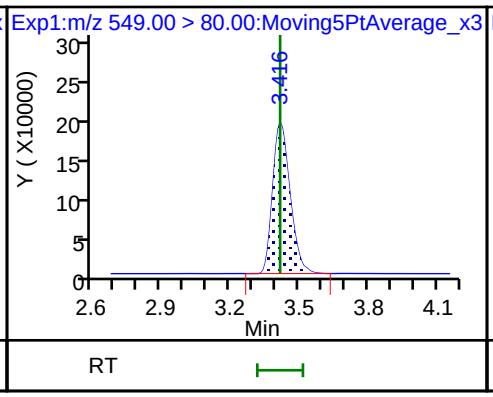
D 26 M2-8:2FTS



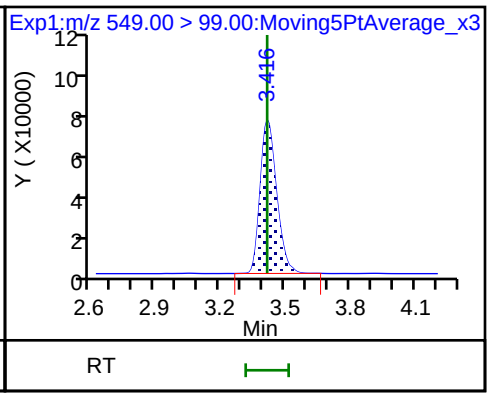
25 Sodium 1H,1H,2H,2H-perfluorodecan



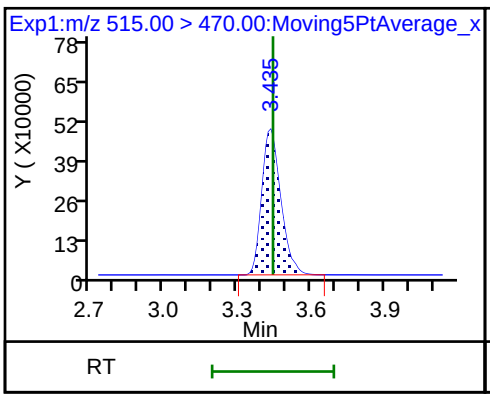
68 Perfluorononanesulfonic acid



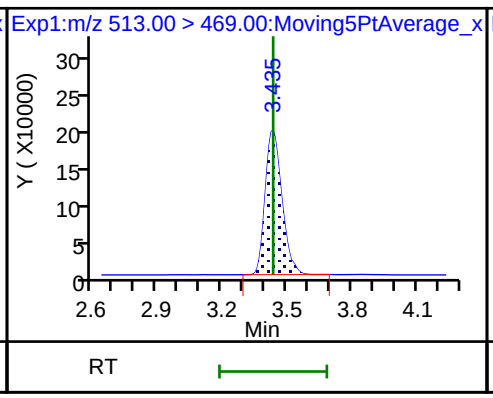
68 Perfluorononanesulfonic acid



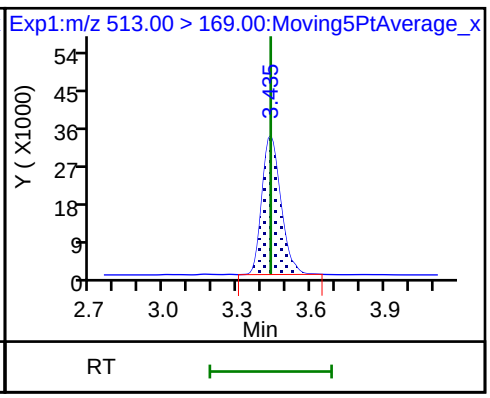
D 23 13C2 PFDA



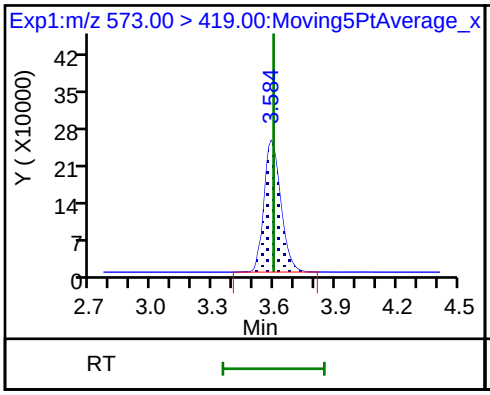
24 Perfluorodecanoic acid



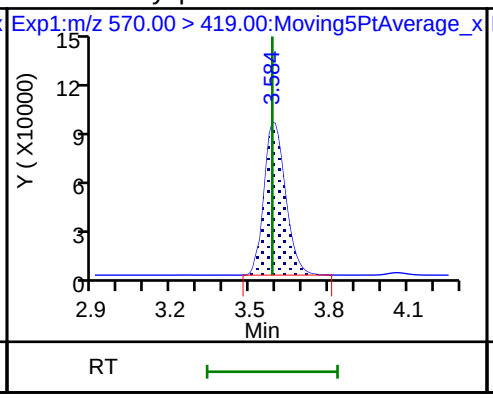
24 Perfluorodecanoic acid



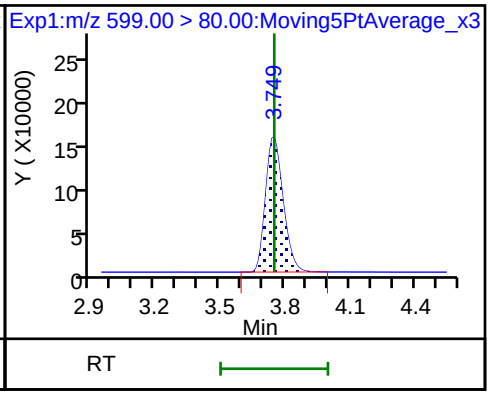
D 27 d3-NMeFOSAA



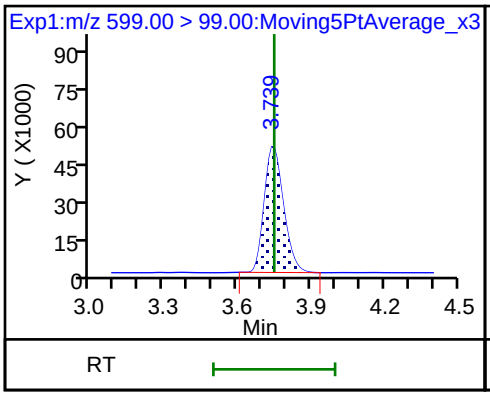
28 N-methyl perfluorooctane sulfonami



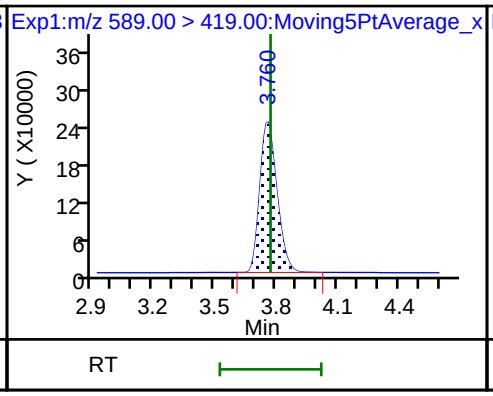
29 Perfluorodecane Sulfonic acid



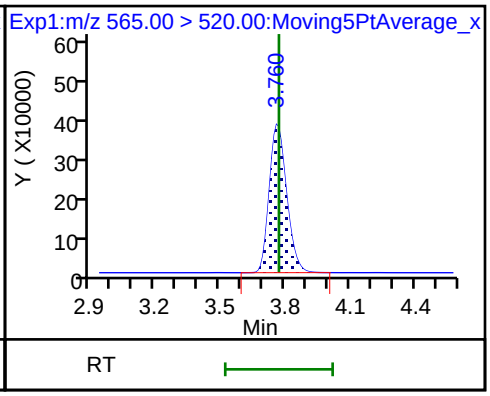
29 Perfluorodecane Sulfonic acid



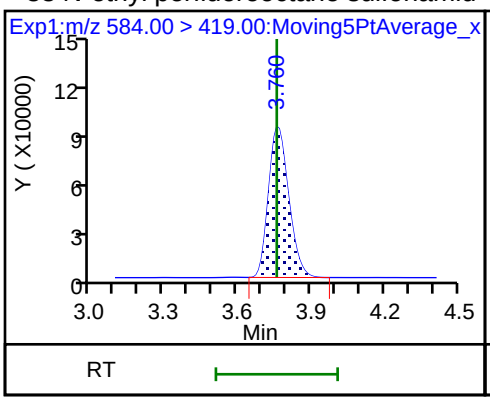
D 32 d5-NEtFOSAA



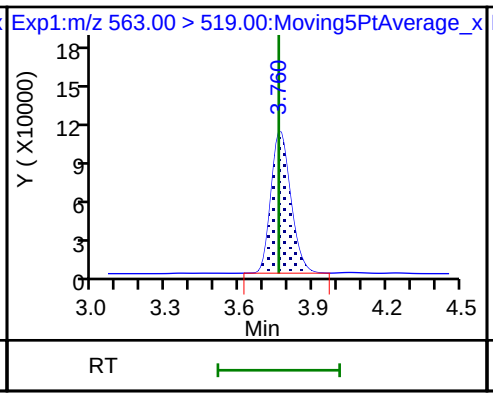
D 30 13C2 PFUnA



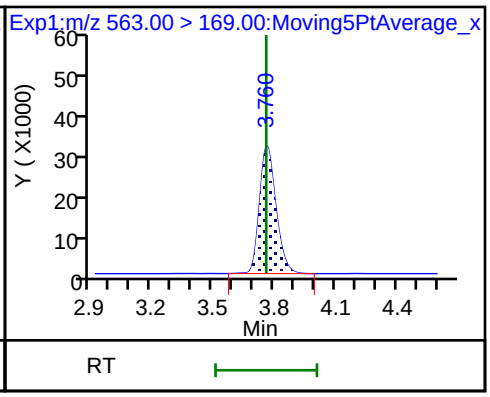
33 N-ethyl perfluorooctane sulfonamid



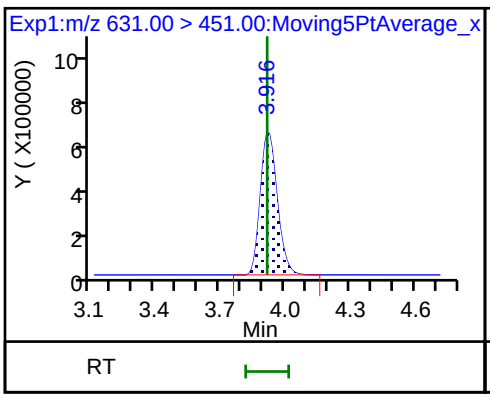
31 Perfluoroundecanoic acid



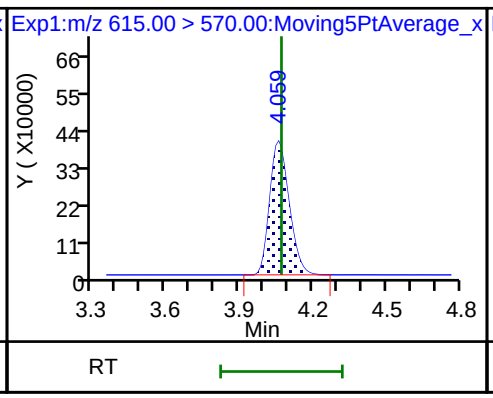
31 Perfluoroundecanoic acid



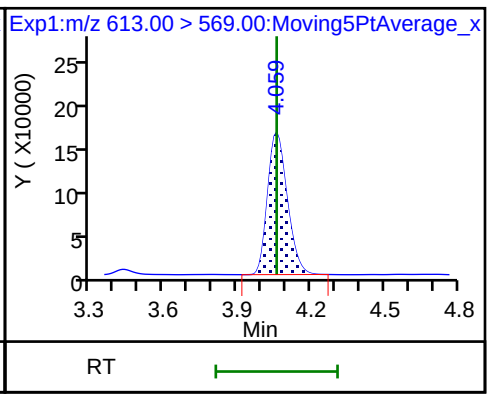
66 11-Chloroeicosafluoro-3-oxaundecan



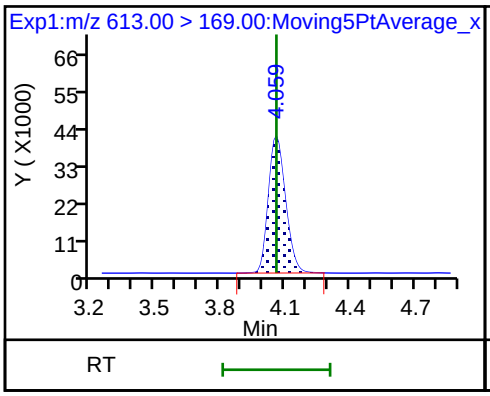
D 36 13C2 PFDoA



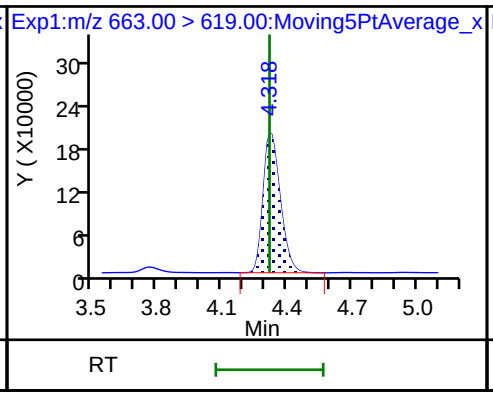
37 Perfluorododecanoic acid



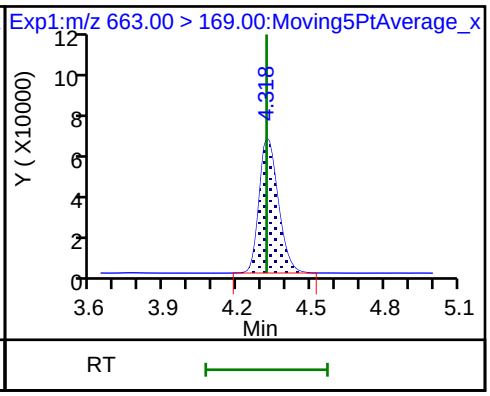
37 Perfluorododecanoic acid



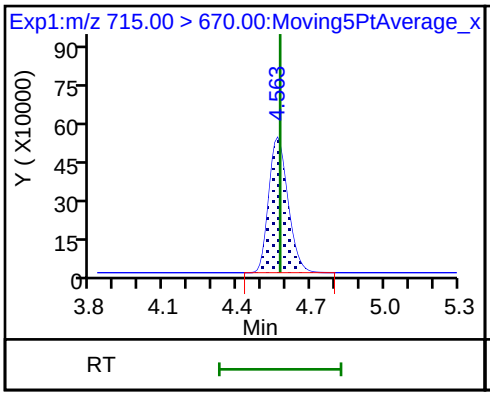
41 Perfluorotridecanoic acid



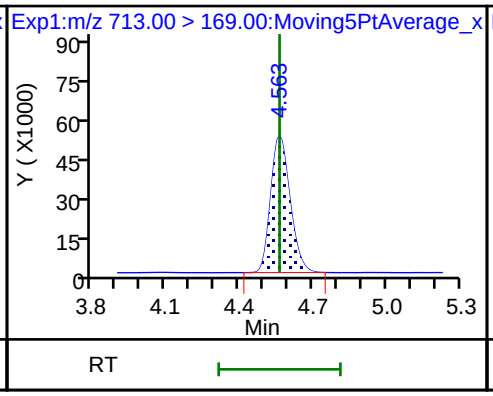
41 Perfluorotridecanoic acid



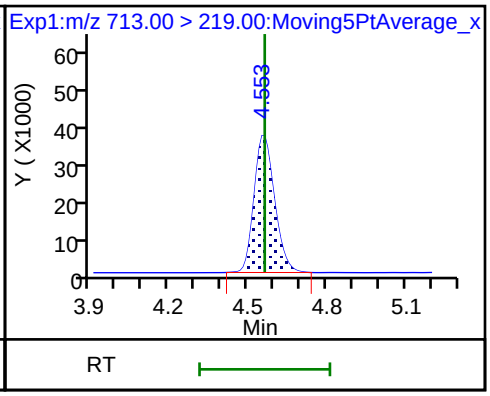
D 43 13C2-PFTeDA



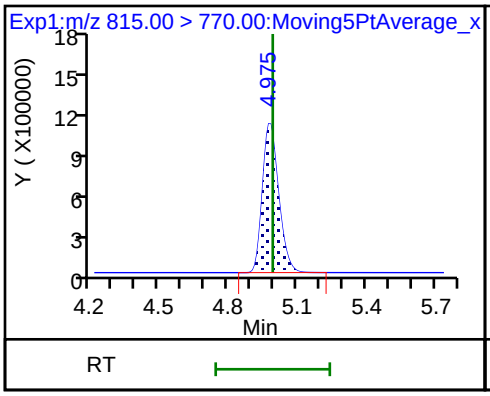
42 Perfluorotetradecanoic acid



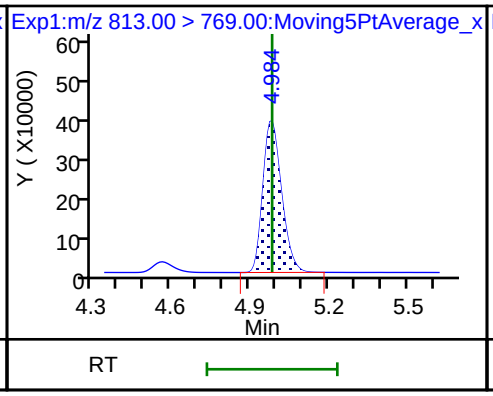
42 Perfluorotetradecanoic acid



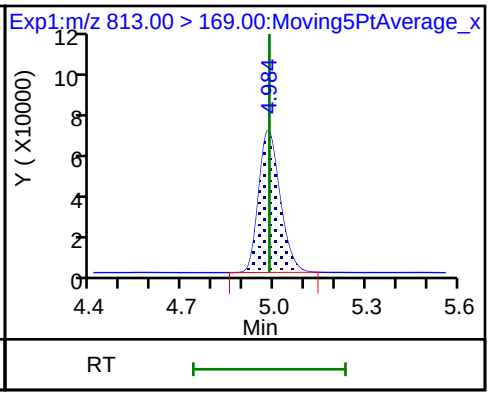
D 44 13C2-PFHxDA



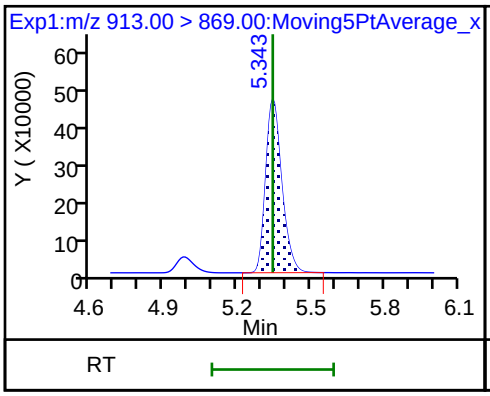
45 Perfluorohexadecanoic acid



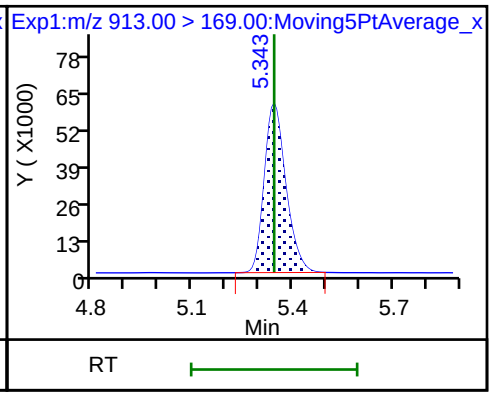
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-222510/1-A

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_043.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 250.0(mL) | Date Analyzed: 05/14/2018 17:05

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	2.96		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.315	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.27	J	2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	194		20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-222510/1-A

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_043.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 250.0(mL) | Date Analyzed: 05/14/2018 17:05

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		25-150
STL01893	13C5 PFPeA	102		25-150
STL00993	13C2 PFHxA	97		25-150
STL01892	13C4-PFHpA	101		25-150
STL00990	13C4 PFOA	104		25-150
STL00995	13C5 PFNA	107		25-150
STL00996	13C2 PFDA	103		25-150
STL00997	13C2 PFUnA	102		25-150
STL00998	13C2 PFDoA	97		25-150
STL02116	13C2-PFTeDA	106		25-150
STL02337	13C3-PFBS	95		25-150
STL00994	18O2 PFHxS	96		25-150
STL00991	13C4 PFOS	96		25-150
STL01056	13C8 FOSA	90		25-150
STL02118	d3-NMeFOSAA	92		25-150
STL02117	d5-NEtFOSAA	95		25-150
STL02279	M2-6:2FTS	100		25-150
STL02280	M2-8:2FTS	110		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_043.d
Lims ID: MB 320-222510/1-A
Client ID:
Sample Type: MB
Inject. Date: 14-May-2018 17:05:42 ALS Bottle#: 27 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: MB 320-222510/1-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:10 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 14:53:59

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.452	0.0	1.000	5779810	2.56		102	51787	
2 Perfluorobutyric acid										
212.90 > 169.00	1.452	1.457	-0.005	1.000	17626	0.008206			5.6	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.728	0.001	1.000	8430	0.004875			3.4	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.728	0.001	0.560	3553749	2.54		102	66725	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.764	0.001	1.000	72716	2.21		94.8	551	
D 7 13C2 PFHxA										
315.00 > 270.00	2.015	2.014	0.001	1.000	3560491	2.44		97.4	89474	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.116	2.116	0.0	1.000	187079	2.51		100	5450	
D 9 13C4-PFHpA										
367.00 > 322.00	2.359	2.345	0.014	1.000	3533141	2.52		101	94365	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.359	2.358	0.001	0.994	15826	0.007876			115	
399.00 > 99.00	2.359	2.358	0.001	0.994	5058		3.13(1.50-4.49)		17.3	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.358	0.014	1.000	4218823	2.26		95.7	98404	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.682	0.001	1.000	2263087	4.86			14327	
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.682	0.001	1.000	657688	2.38		100	13687	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.713	2.704	0.009	1.000	121560	0.0741			57.6	
413.00 > 169.00	2.713	2.704	0.009	1.000	67609		1.80(0.84-2.52)		240	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 62 13C2-PFOA										
415.00 > 370.00	2.713	2.704	0.009		3486980	2.50			66684	
D 14 13C4 PFOA										
417.00 > 372.00	2.713	2.704	0.009	1.000	3411972	2.60		104	72289	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.077	3.073	0.004	0.997	44091	0.0317			255	
499.00 > 99.00	3.085	3.073	0.012	1.000	11929		3.70(2.31-6.93)		77.2	
D 18 13C4 PFOS										
503.00 > 80.00	3.085	3.073	0.012	1.000	2975916	2.29		95.8	33272	
20 Perfluorononanoic acid										
463.00 > 419.00	3.085	3.081	0.004	1.000	1741	0.001404			3.8	
463.00 > 169.00	3.085	3.081	0.004	1.000	467		3.73(1.90-5.69)		17.2	
D 19 13C5 PFNA										
468.00 > 423.00	3.085	3.081	0.004	1.000	2941128	2.68		107	47994	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.292	3.287	0.005	1.000	7316	0.003292			86.0	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.413	3.407	0.006	1.000	9564	0.005756			148	
D 21 13C8 FOSA										
506.00 > 78.00	3.413	3.407	0.006	1.000	4215196	2.24		89.6	54414	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.432	3.435	-0.003	0.997	9222	0.0179			153	
D 26 M2-8:2FTS										
529.00 > 81.00	3.441	3.435	0.006	1.000	949847	2.63		110	10347	
D 23 13C2 PFDA										
515.00 > 470.00	3.451	3.444	0.007	1.000	2423613	2.56		103	38377	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.604	3.596	0.008	1.000	990944	2.31		92.5	45081	
31 Perfluoroundecanoic acid										R
563.00 > 519.00	3.789	3.771	0.018	1.003	9823	0.0155			46.2	R
563.00 > 169.00	3.779	3.771	0.008	1.000	1371		7.16(2.12-6.36)		47.5	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.779	3.771	0.008	1.003	2872	0.007035			75.4	
D 30 13C2 PFUnA										
565.00 > 520.00	3.779	3.771	0.008	1.000	2027164	2.56		102	90783	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.768	3.771	-0.003	1.000	1083390	2.37		94.7	3438	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.936	3.928	0.008	1.000	15906	0.004680			352	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.079	4.071	0.008	1.003	10291	0.0123			6.2	
613.00 > 169.00	4.079	4.071	0.008	1.003	1664		6.18(2.13-6.40)		22.9	
D 36 13C2 PFDoA										
615.00 > 570.00	4.068	4.071	-0.003	1.000	2013453	2.44		97.5	19215	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.571	4.574	-0.003	1.000	2394881	2.66		106	15372	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.000	4.993	0.007	1.002	37792	0.002317			9.3	
813.00 > 169.00	5.000	4.993	0.007	1.002	6363		5.94(2.86-8.58)		73.2	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.991	4.993	-0.002	1.000	3768521	2.63		105	11702	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Report Date: 15-May-2018 15:09:16 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_043.d

Injection Date: 14-May-2018 17:05:42 Instrument ID: A8_N

Lims ID: MB 320-222510/1-A

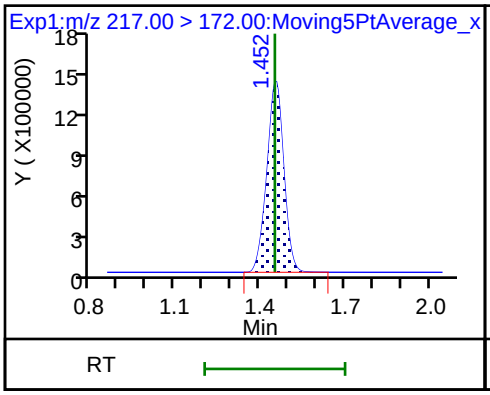
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 27 Worklist Smp#: 2

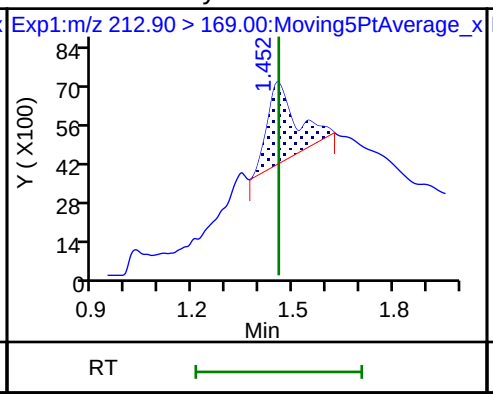
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

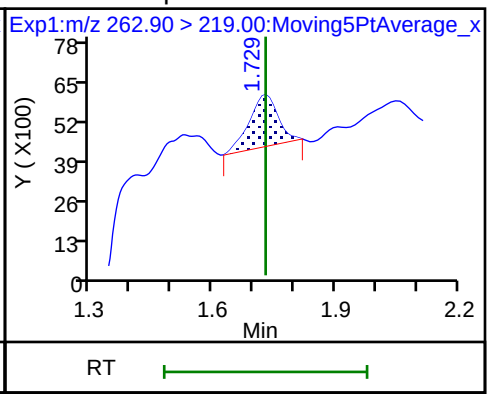
D 1 13C4 PFBA



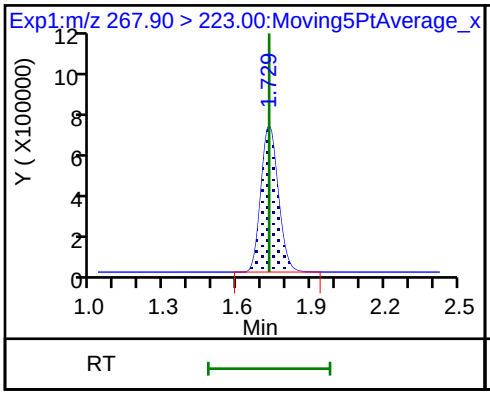
2 Perfluorobutyric acid



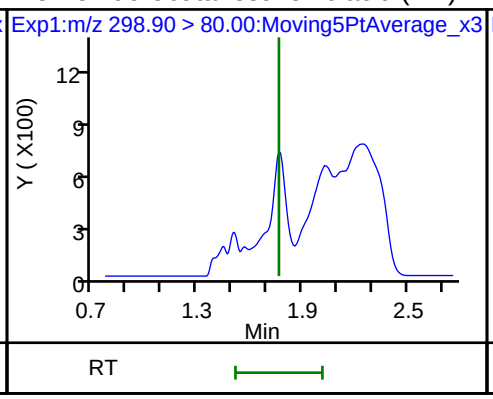
4 Perfluoropentanoic acid



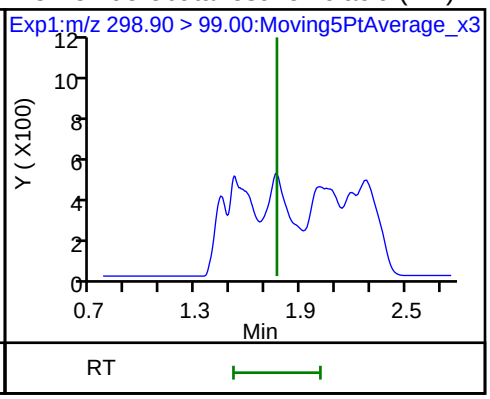
D 3 13C5-PFPeA



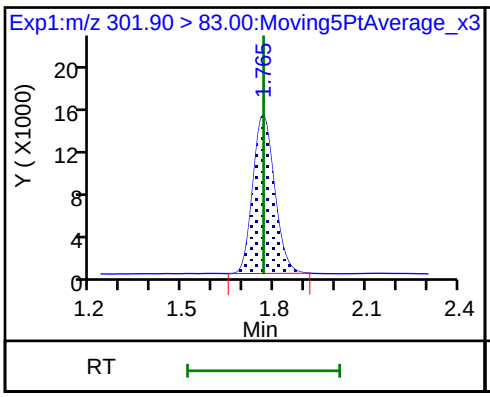
5 Perfluorobutanesulfonic acid (ND)



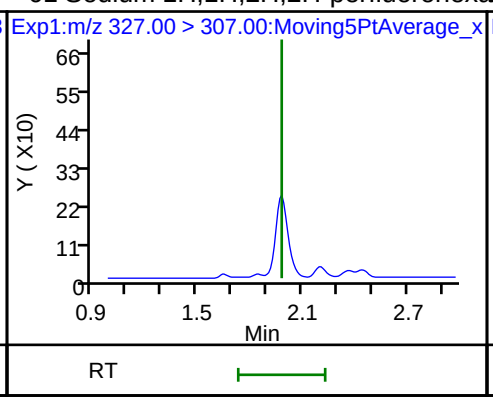
5 Perfluorobutanesulfonic acid (ND)



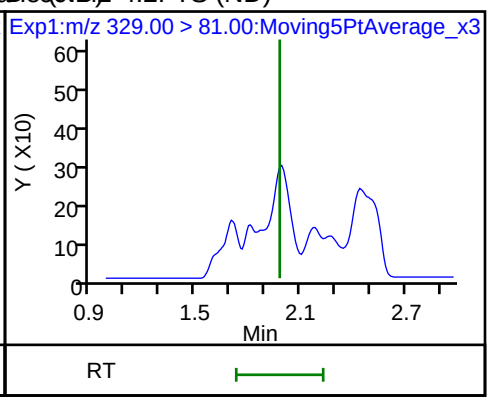
D 47 13C3-PFBS



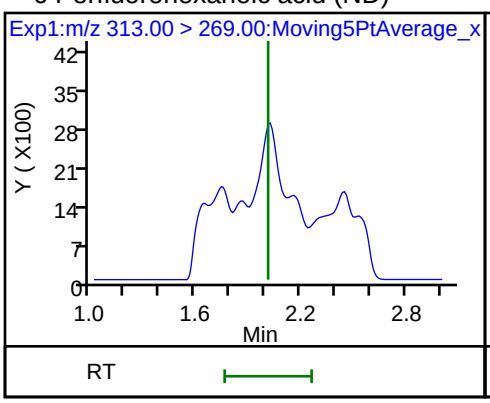
61 Sodium 1H,1H,2H,2H-perfluorohexane (ND)



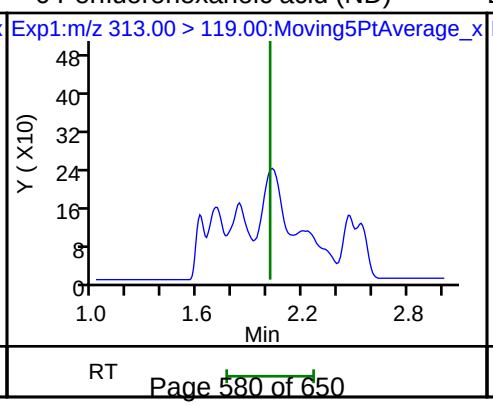
D 60 (ND) 4:2FTS (ND)



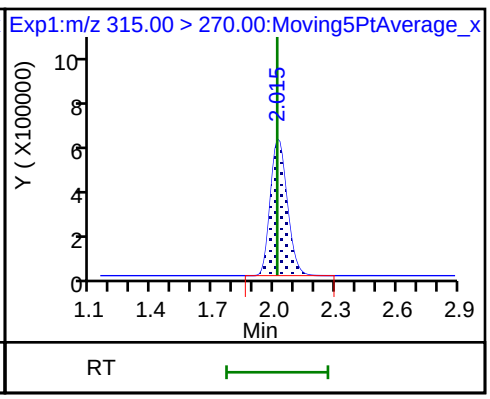
6 Perfluorohexanoic acid (ND)



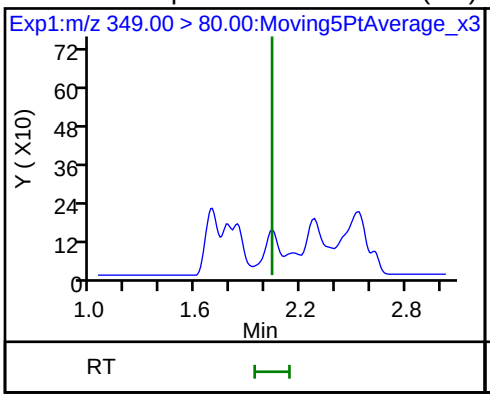
6 Perfluorohexanoic acid (ND)



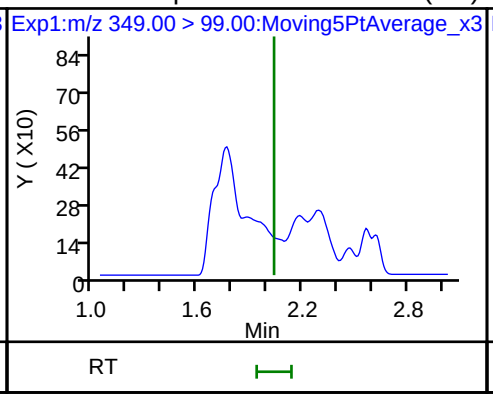
D 7 13C2 PFHxA



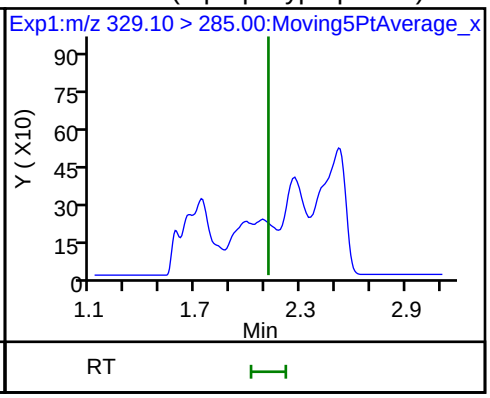
70 Perfluoropentanesulfonic acid (ND)



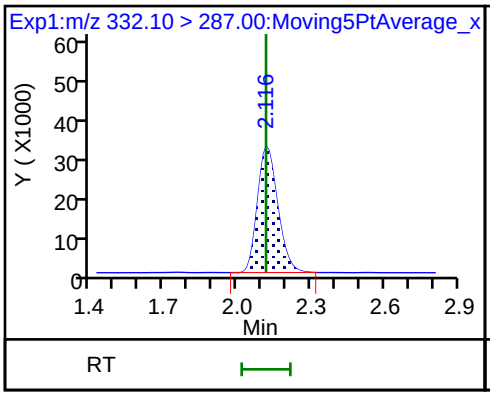
70 Perfluoropentanesulfonic acid (ND)



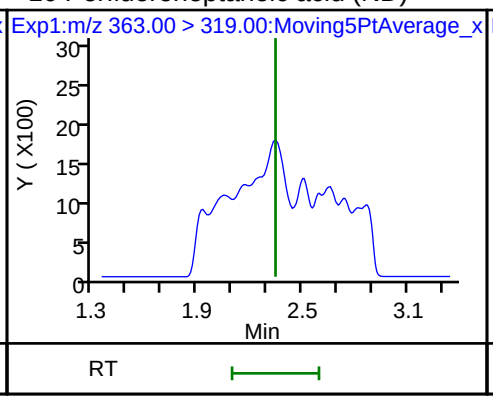
67 Perfluoro(2-propoxypropanoic) acid (ND)



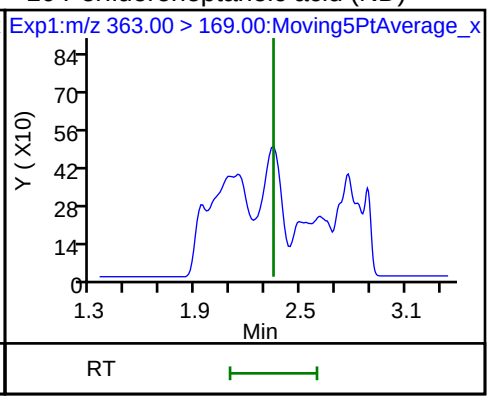
D 64 13C3 HFPO-DA



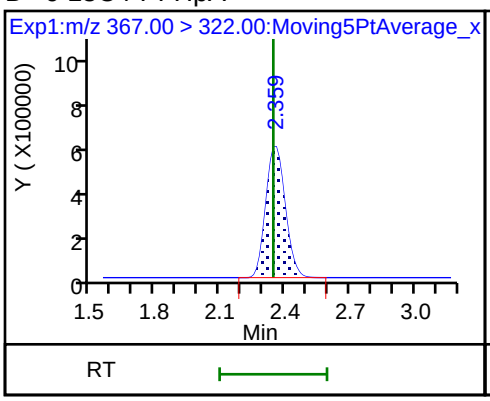
10 Perfluoroheptanoic acid (ND)



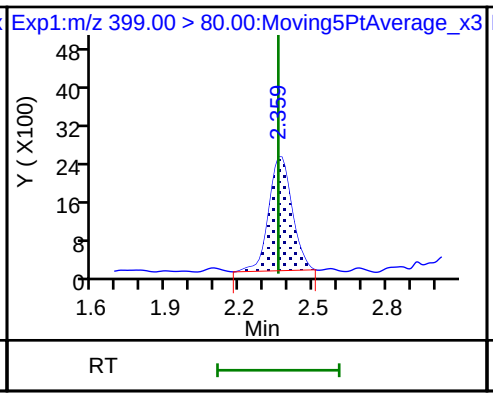
10 Perfluoroheptanoic acid (ND)



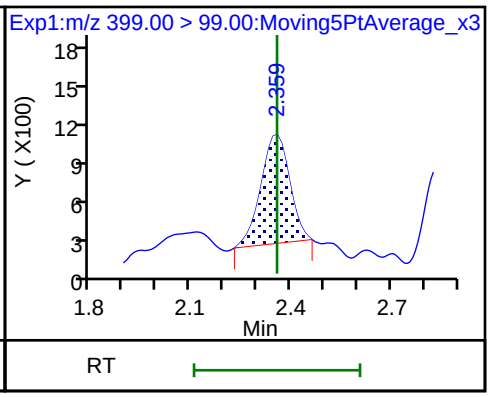
D 9 13C4-PFHpA



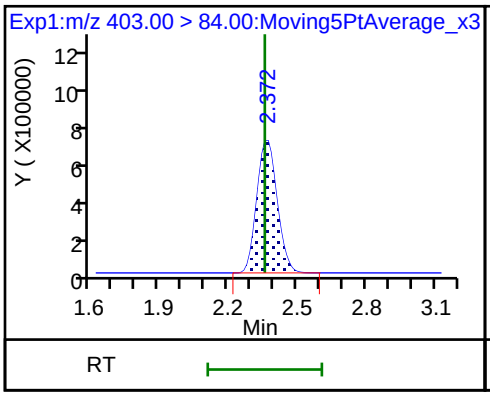
8 Perfluorohexanesulfonic acid



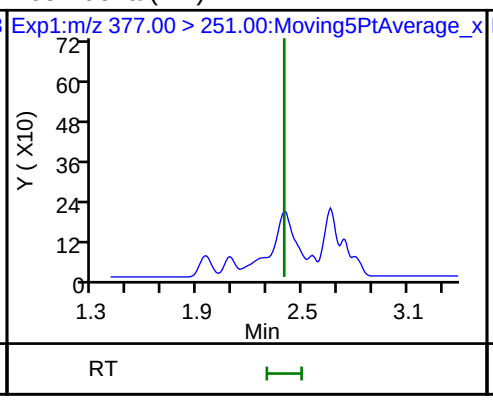
8 Perfluorohexanesulfonic acid



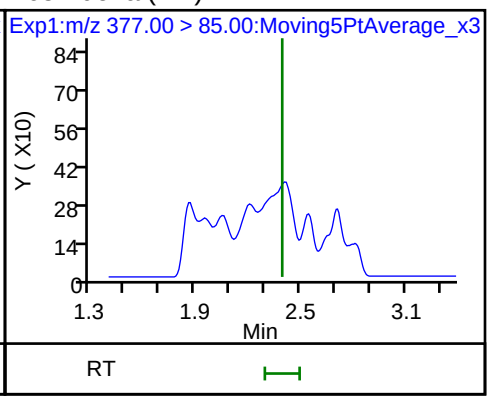
D 11 18O2 PFHxS



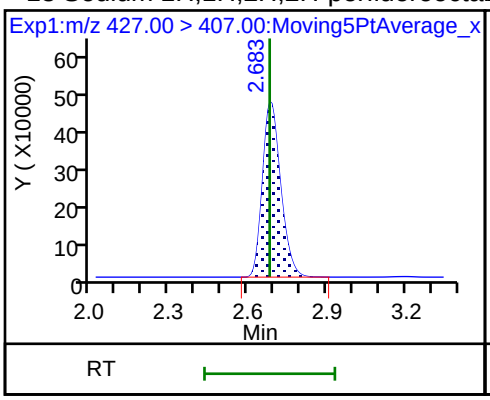
65 Adona (ND)



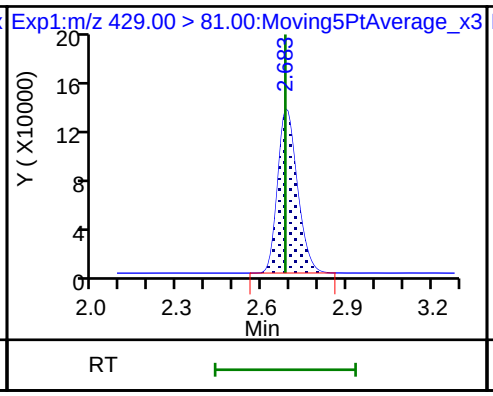
65 Adona (ND)



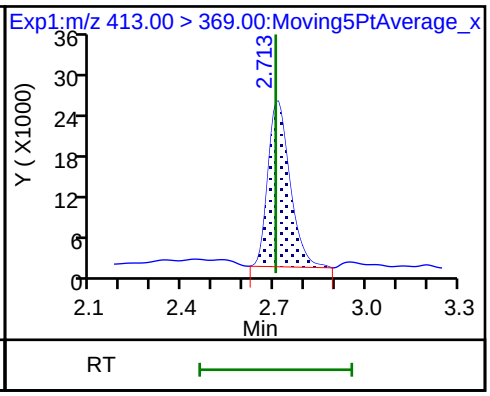
13 Sodium 1H,1H,2H,2H-perfluorooctane



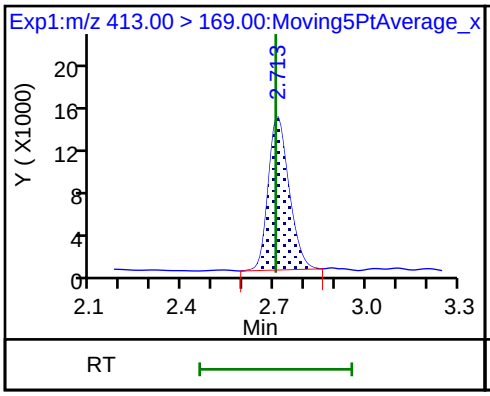
D 12 M2-6:2FTS



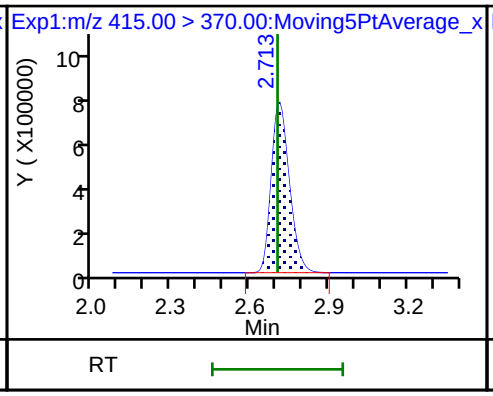
15 Perfluorooctanoic acid



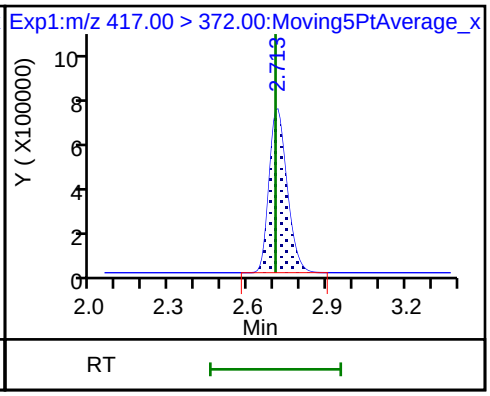
15 Perfluorooctanoic acid



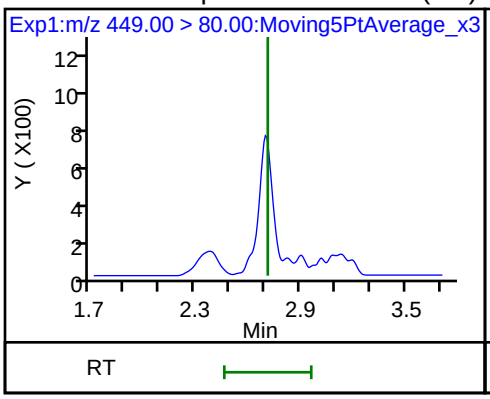
* 62 13C2-PFOA



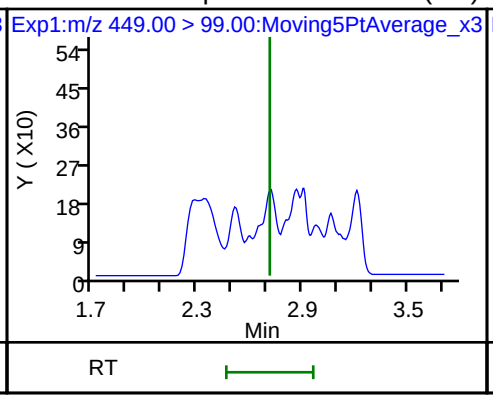
D 14 13C4 PFOA



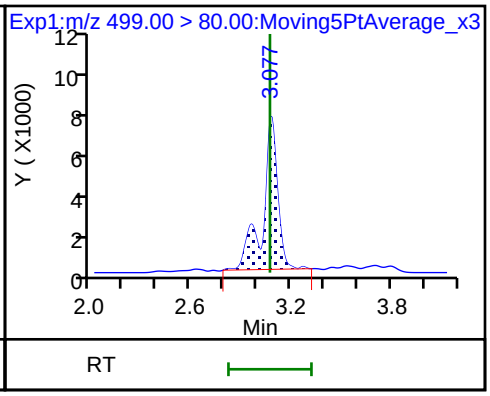
16 Perfluoroheptanesulfonic acid (ND)



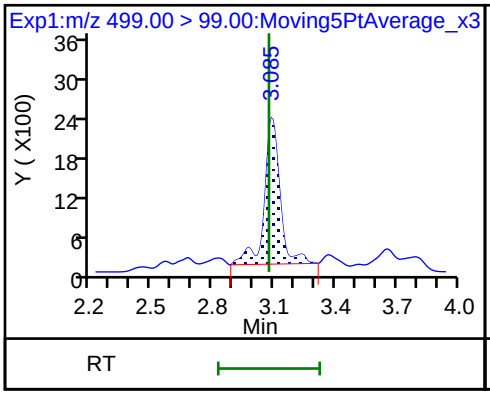
16 Perfluoroheptanesulfonic acid (ND)



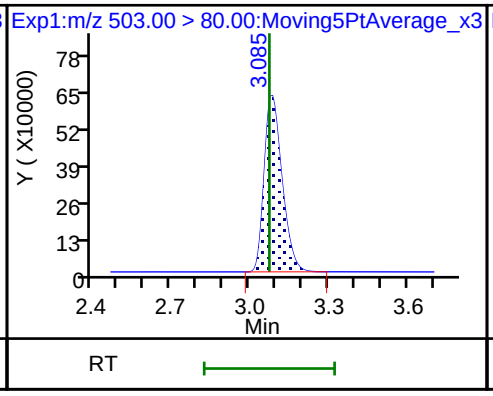
17 Perfluorooctane sulfonic acid



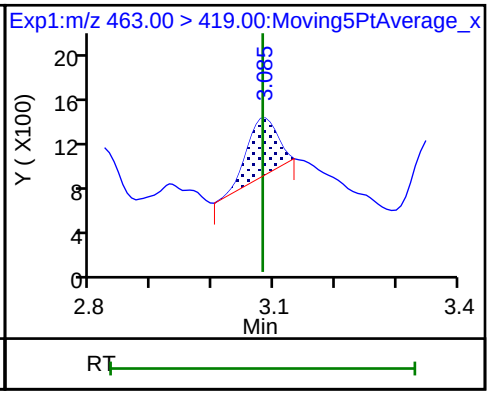
17 Perfluorooctane sulfonic acid



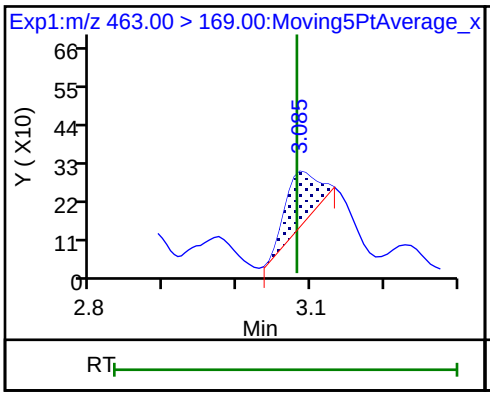
D 18 13C4 PFOS



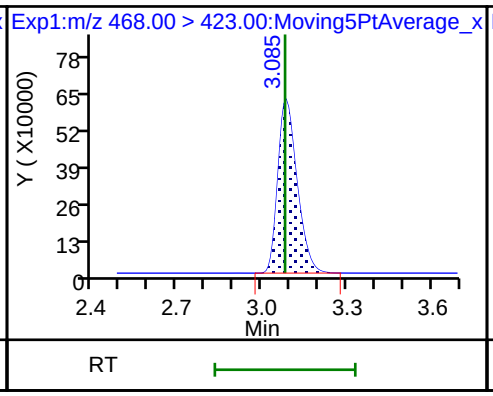
20 Perfluorononanoic acid



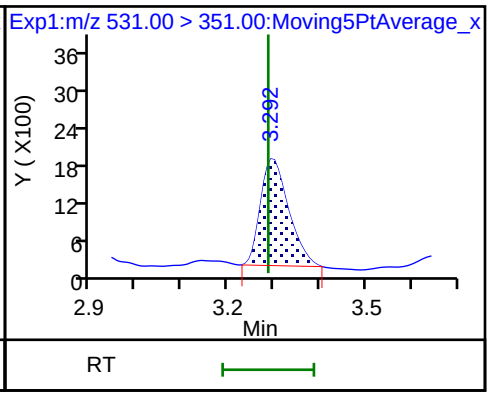
20 Perfluorononanoic acid



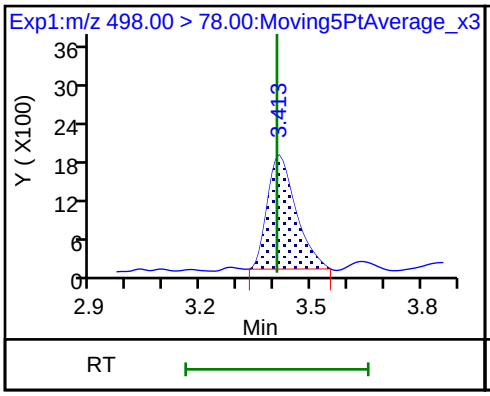
D 19 13C5 PFNA



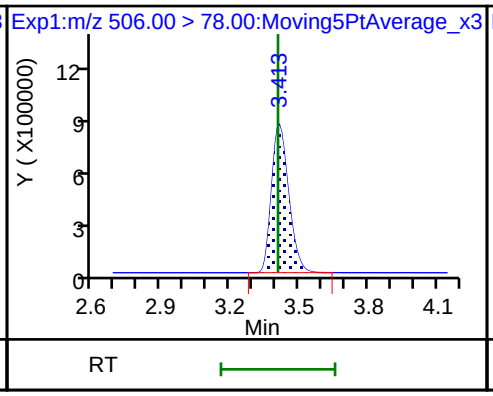
69 9-Chlorohexadecafluoro-3-oxanonane



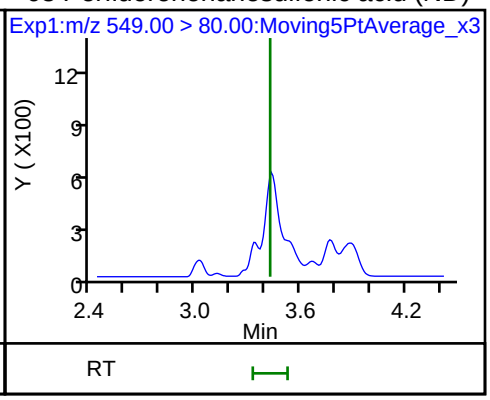
22 Perfluorooctane Sulfonamide



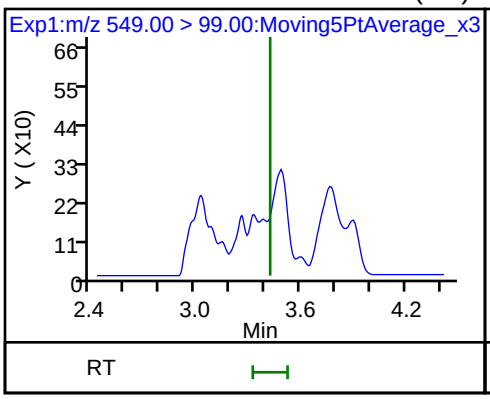
D 21 13C8 FOSA



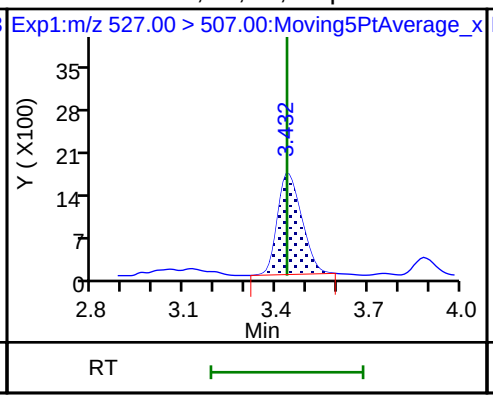
68 Perfluorononanesulfonic acid (ND)



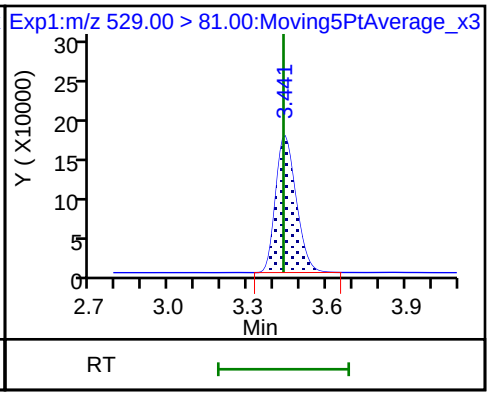
68 Perfluorononanesulfonic acid (ND)



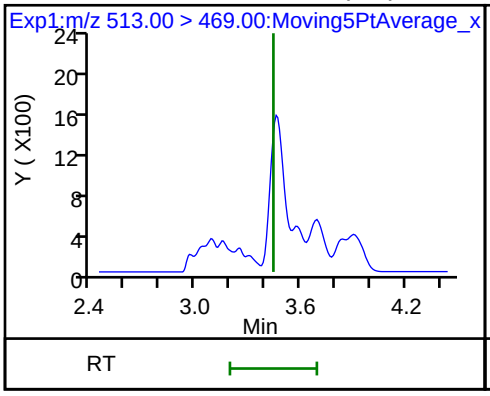
25 Sodium 1H,1H,2H,2H-perfluorodecane



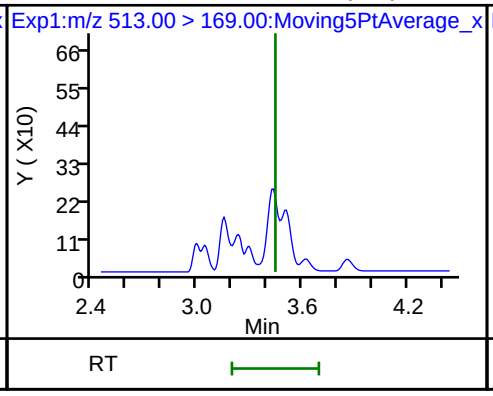
D 26 M2-8:2FTS



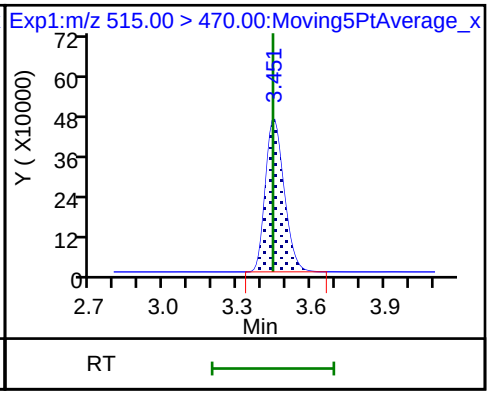
24 Perfluorodecanoic acid (ND)



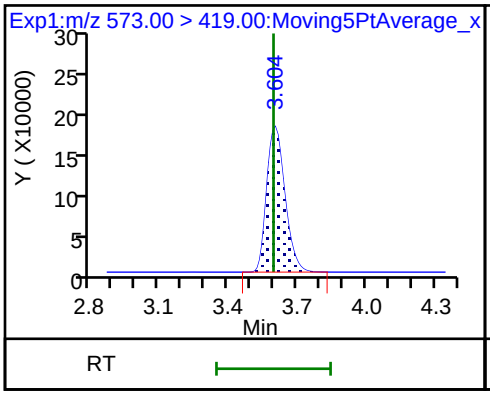
24 Perfluorodecanoic acid (ND)



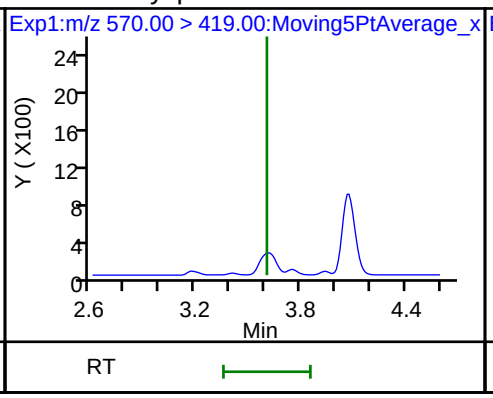
D 23 13C2 PFDA



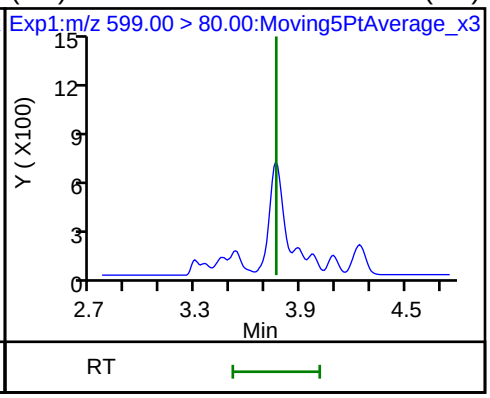
D 27 d3-NMeFOSAA



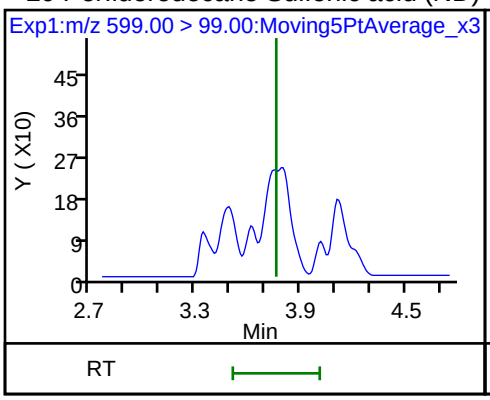
28 N-methyl perfluorooctane sulfonami (ND)



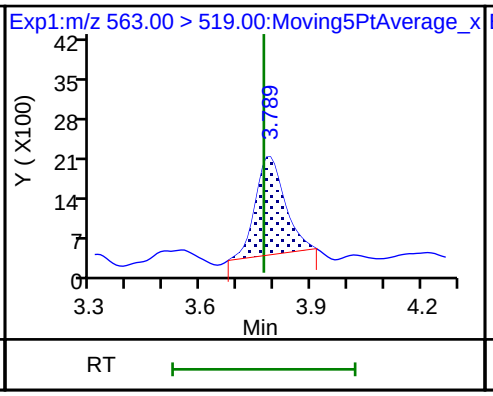
29 Perfluorodecane Sulfonic acid (ND)



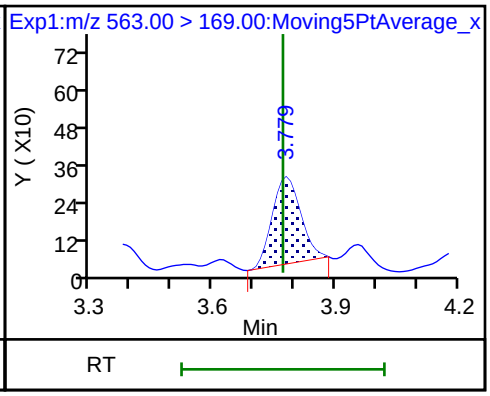
29 Perfluorodecane Sulfonic acid (ND)



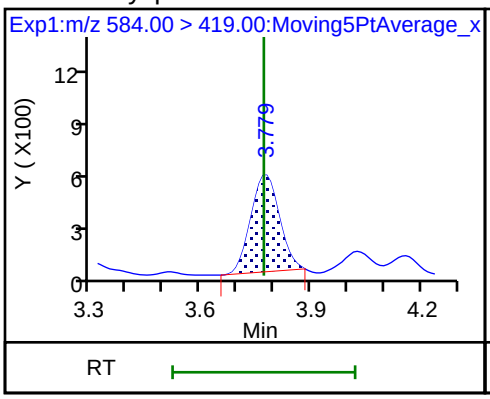
31 Perfluoroundecanoic acid



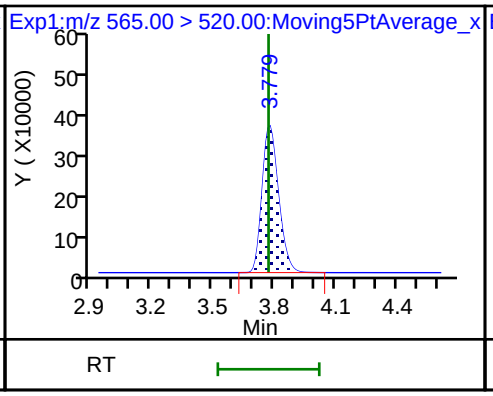
31 Perfluoroundecanoic acid



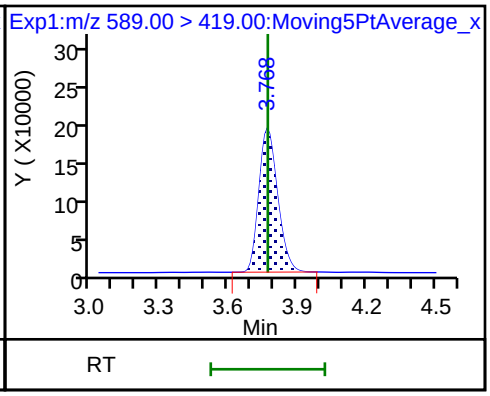
33 N-ethyl perfluorooctane sulfonamid



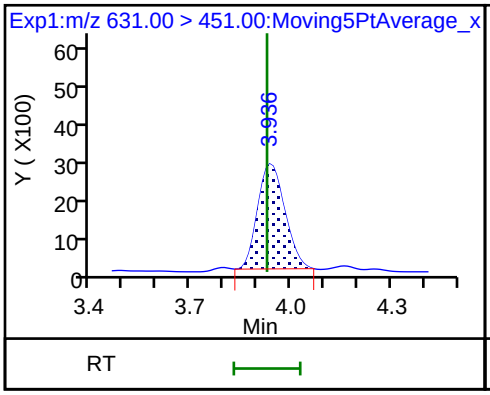
D 30 13C2 PFUnA



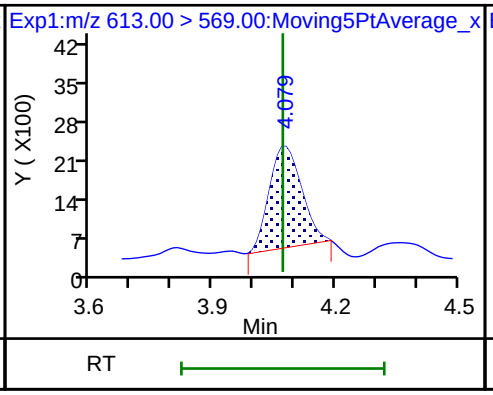
D 32 d5-NEtFOSAA



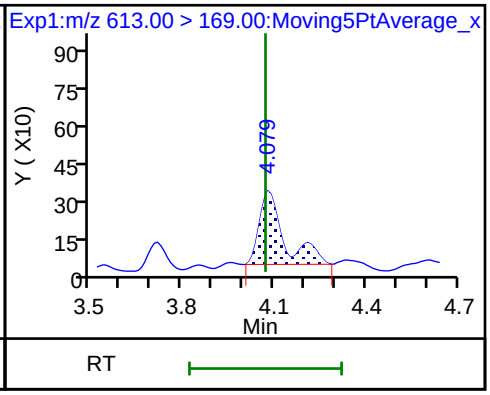
66 11-Chloroeicosafluoro-3-oxaundecan



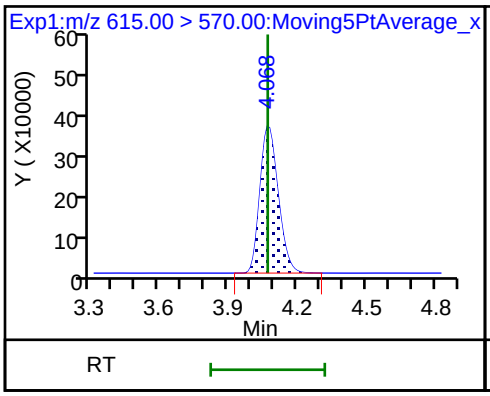
37 Perfluorododecanoic acid



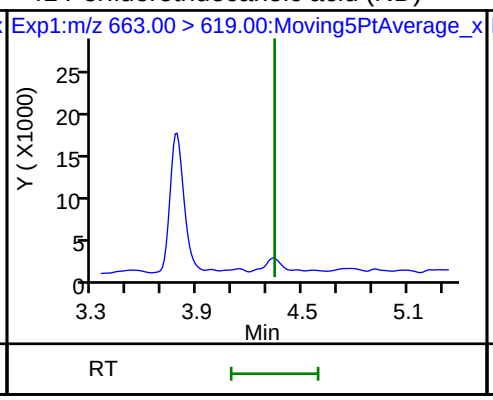
37 Perfluorododecanoic acid



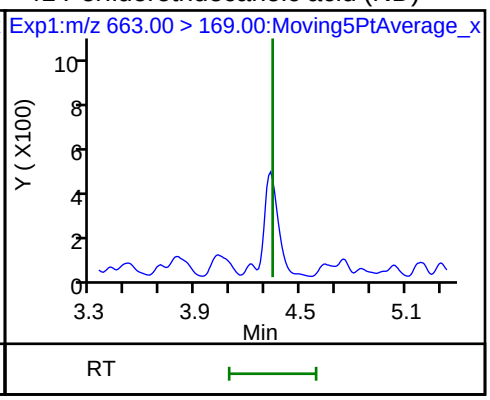
D 36 13C2 PFDoA



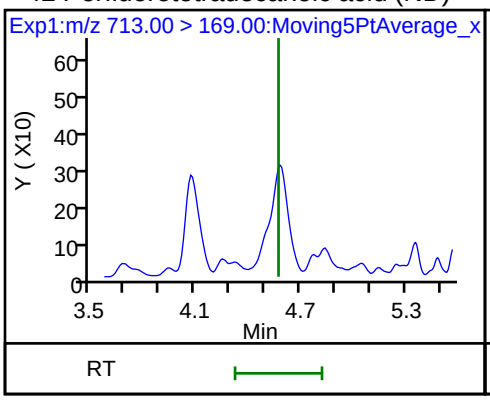
41 Perfluorotridecanoic acid (ND)



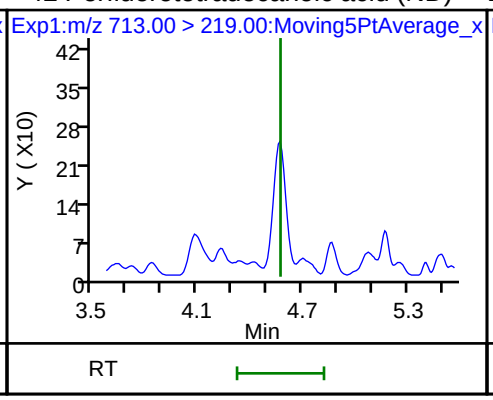
41 Perfluorotridecanoic acid (ND)



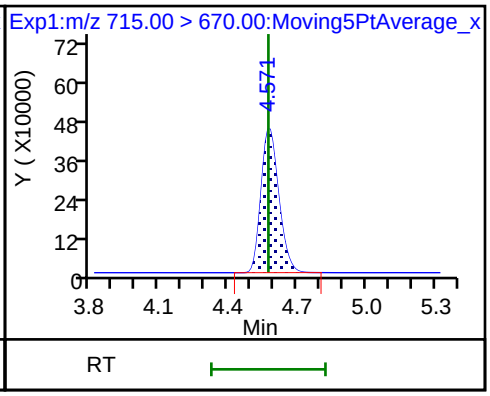
42 Perfluorotetradecanoic acid (ND)



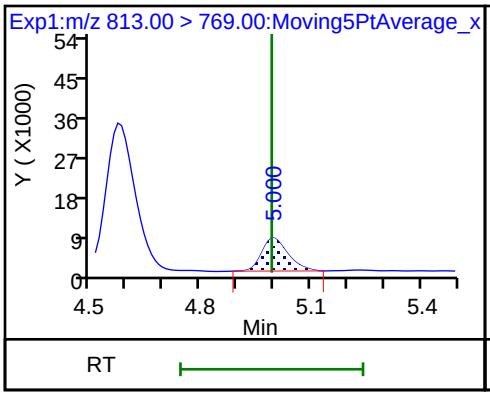
42 Perfluorotetradecanoic acid (ND)



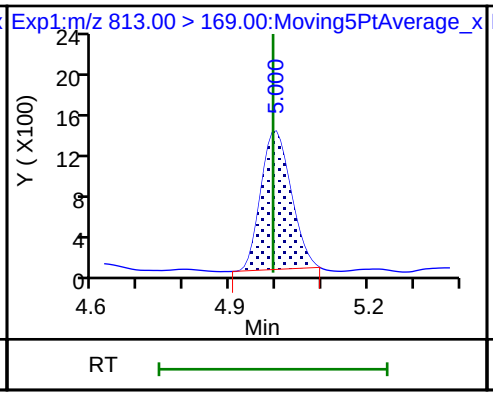
D 43 13C2-PFTeDA



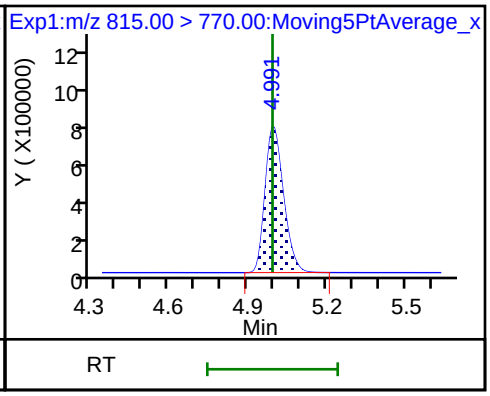
45 Perfluorohexadecanoic acid



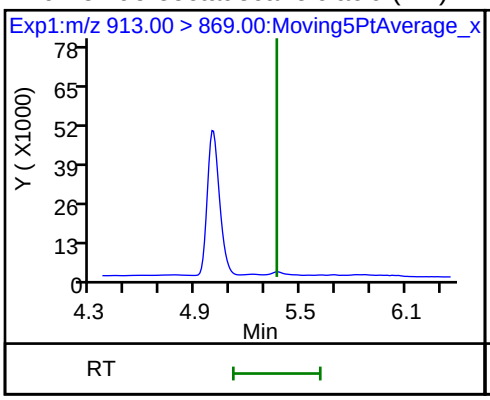
45 Perfluorohexadecanoic acid



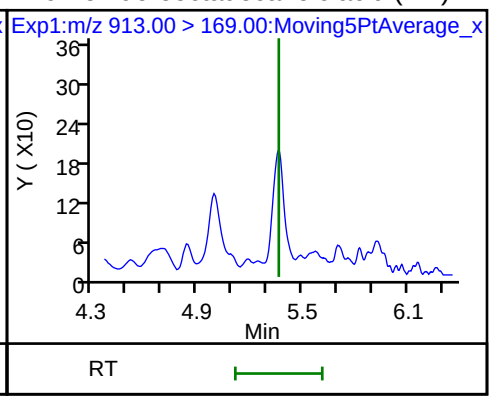
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-222819/1-A

Matrix: Water | Lab File ID: 2018.05.13LLB_015.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250(mL) | Date Analyzed: 05/13/2018 17:20

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.85
27619-97-2	6:2FTS	4.57	J	20	2.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	86		25-150
STL02279	M2-6:2FTS	94		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_015.d
Lims ID: MB 320-222819/1-A
Client ID:
Sample Type: MB
Inject. Date: 13-May-2018 17:20:08 ALS Bottle#: 9 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-222819/1-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:37:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.455	1.458	-0.003	1.000	9379	0.004442			4.2	
D 1 13C4 PFBA										
217.00 > 172.00	1.455	1.458	-0.003	1.000	5637882	1.92		76.8	51464	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.734	1.729	0.005	1.005	9182	0.005016			3.5	
D 3 13C5-PFPeA										
267.90 > 223.00	1.725	1.729	-0.004	0.561	3872581	2.07		82.9	79127	
D 47 13C3-PFBS										
301.90 > 83.00	1.761	1.766	-0.005	1.000	79953	1.89		81.1	562	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.015	-0.004	1.000	4032818	2.05		82.0	79098	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.112	2.118	-0.006	1.000	209910	1.97		79.0	5353	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.346	-0.004	1.000	3764025	2.08		83.1	76264	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.368	2.359	0.009	1.006	15932	0.006681			123	
399.00 > 99.00	2.355	2.359	-0.004	1.000	5780		2.76(1.50-4.49)		29.9	
D 11 18O2 PFHxS										
403.00 > 84.00	2.355	2.359	-0.004	1.000	4967440	2.10		88.8	90811	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.673	2.683	-0.010	1.000	62645	0.1143			515	
D 12 M2-6:2FTS										
429.00 > 81.00	2.673	2.683	-0.010	1.000	785267	2.23		93.7	18188	
* 62 13C2-PFOA										
415.00 > 370.00	2.703	2.706	-0.003		4547999	2.50			73128	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										
413.00 > 369.00	2.696	2.706	-0.010	1.000	16669	0.009760			6.9	
413.00 > 169.00	2.696	2.706	-0.010	1.000	6793		2.45(0.84-2.52)		24.1	
D 14 13C4 PFOA										
417.00 > 372.00	2.696	2.706	-0.010	1.000	3693628	2.16		86.2	87696	
20 Perfluorononanoic acid										
463.00 > 419.00	3.053	3.078	-0.025	0.993	4241	0.003389			5.7	
463.00 > 169.00	3.067	3.078	-0.011	0.998	894		4.74(1.90-5.69)		26.3	
D 19 13C5 PFNA										
468.00 > 423.00	3.074	3.078	-0.004	1.000	3074512	2.13		85.1	59999	
D 18 13C4 PFOS										
503.00 > 80.00	3.067	3.078	-0.011	1.000	3393747	2.00		83.7	36729	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.407	3.414	-0.007	1.003	6666	0.003522			91.6	
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.414	-0.016	1.000	4765936	1.98		79.4	36657	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.416	3.433	-0.017	0.997	2671	0.004919			42.7	
D 26 M2-8:2FTS										
529.00 > 81.00	3.426	3.433	-0.007	1.000	1057344	2.28		95.2	13445	
D 23 13C2 PFDA										
515.00 > 470.00	3.435	3.442	-0.007	1.000	2611575	2.07		82.8	61147	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.596	3.605	-0.009	1.003	3636	0.007739			51.9	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.585	3.605	-0.020	1.000	1133769	2.05		82.0	29774	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.750	3.769	-0.019	1.000	1196161	1.98		79.1	2832	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.782	3.780	0.002	1.006	6536	0.009584			27.9	
563.00 > 169.00	3.782	3.780	0.002	1.006	1643		3.98(2.12-6.36)		64.8	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.761	3.780	-0.019	1.003	7415	0.0158			243	
D 30 13C2 PFUnA										
565.00 > 520.00	3.761	3.780	-0.019	1.000	2165249	2.10		84.0	39215	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.928	3.929	-0.001	1.000	4096	0.001081			133	
D 36 13C2 PFDoA										
615.00 > 570.00	4.060	4.069	-0.009	1.000	2091509	1.94		77.8	21246	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.562	4.572	-0.010	1.000	2459156	2.10		84.0	12833	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.982	4.990	-0.008	1.000	40820	0.008309			9.9	
813.00 > 169.00	4.982	4.990	-0.008	1.000	7247		5.63(2.86-8.58)		96.6	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.982	4.990	-0.008	1.000	3863778	2.07		82.9	12236	

Report Date: 14-May-2018 10:44:11 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_015.d

Injection Date: 13-May-2018 17:20:08 Instrument ID: A8_N

Lims ID: MB 320-222819/1-A

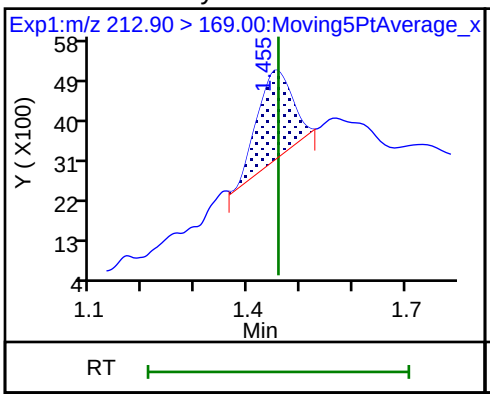
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 9 Worklist Smp#: 2

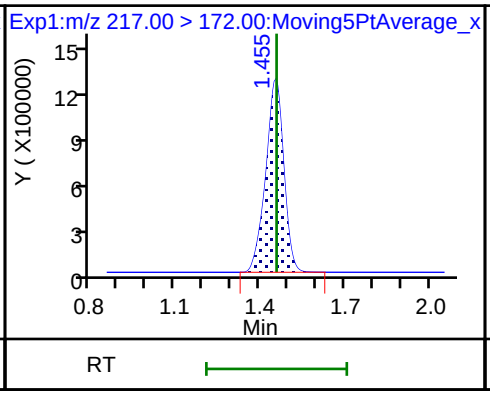
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

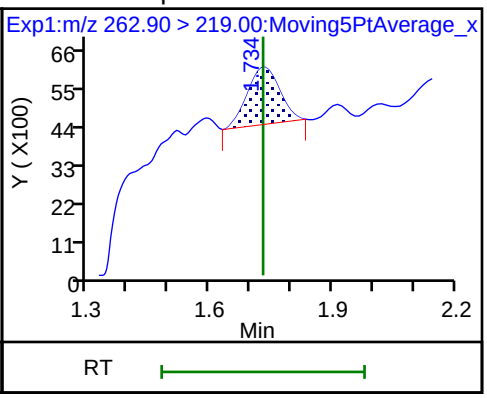
2 Perfluorobutyric acid



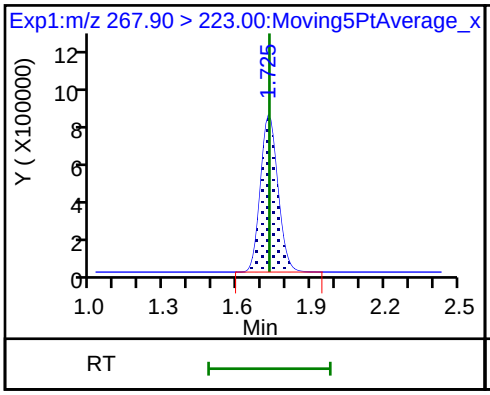
D 1 13C4 PFBA



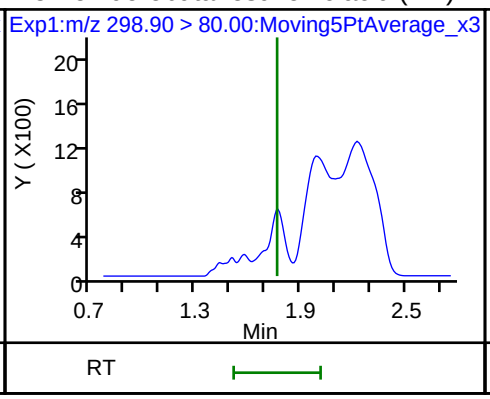
4 Perfluoropentanoic acid



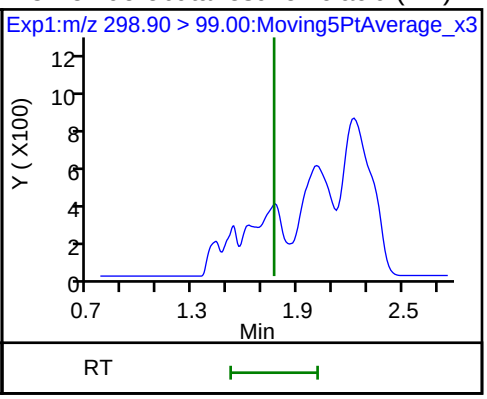
D 3 13C5-PFPeA



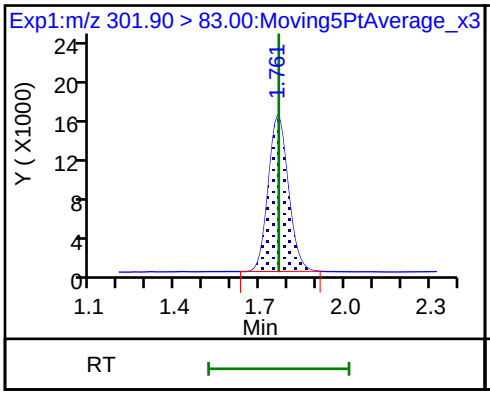
5 Perfluorobutanesulfonic acid (ND)



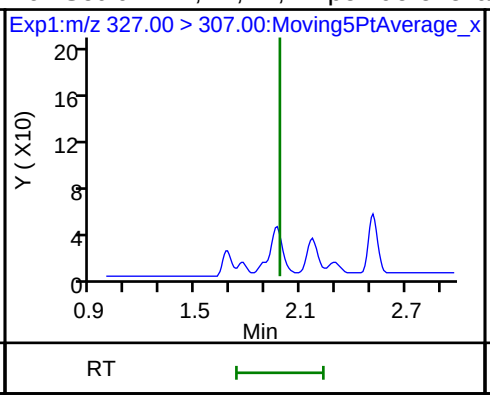
5 Perfluorobutanesulfonic acid (ND)



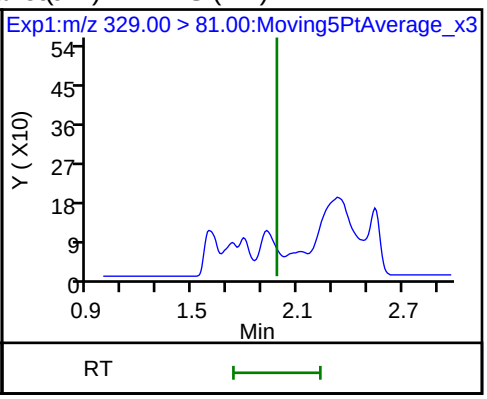
D 47 13C3-PFBS



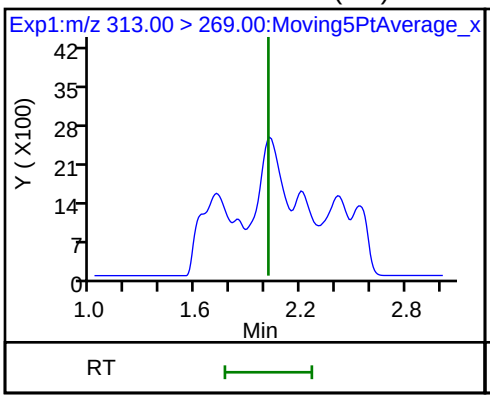
61 Sodium 1H,1H,2H,2H-perfluorohexane (ND)



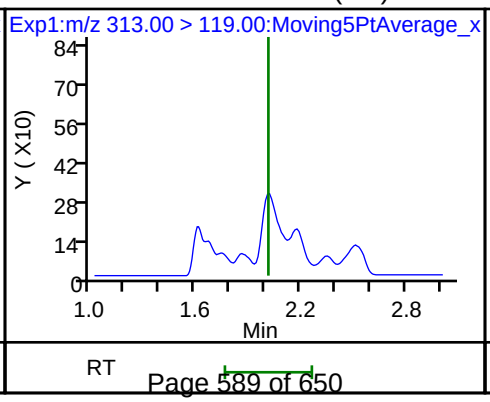
D 60 M2-4:2FTS (ND)



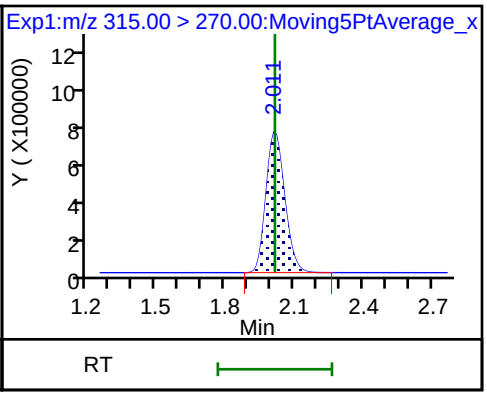
6 Perfluorohexanoic acid (ND)



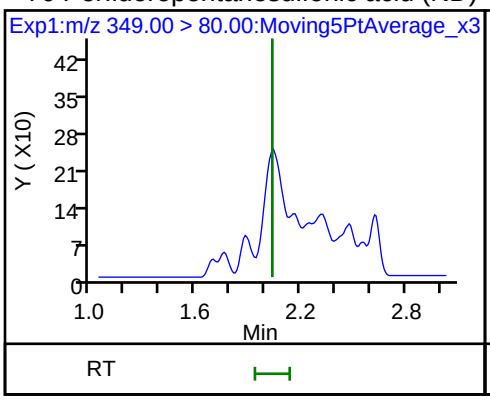
6 Perfluorohexanoic acid (ND)



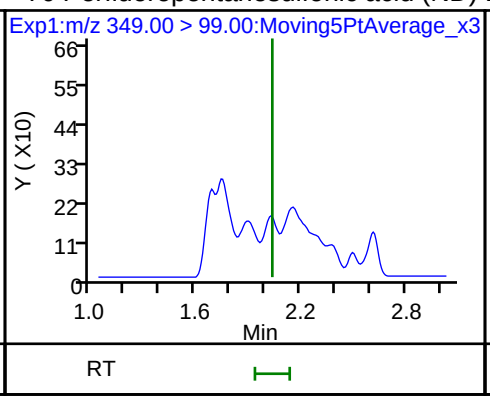
D 7 13C2 PFHxA



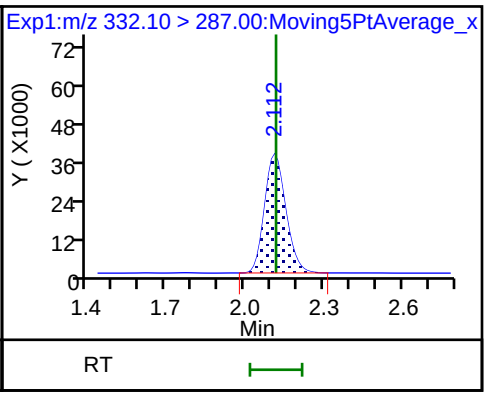
70 Perfluoropentanesulfonic acid (ND)



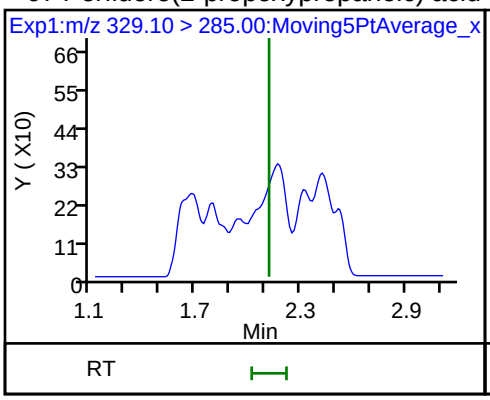
70 Perfluoropentanesulfonic acid (ND)



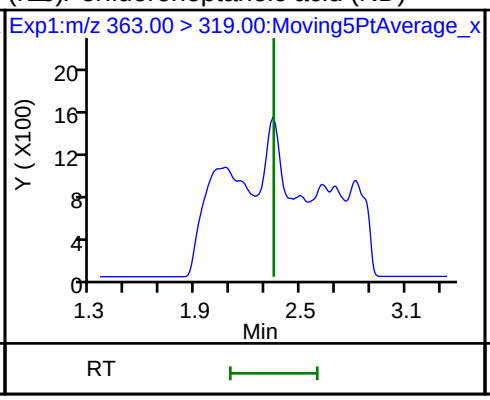
D 64 13C3 HFPO-DA



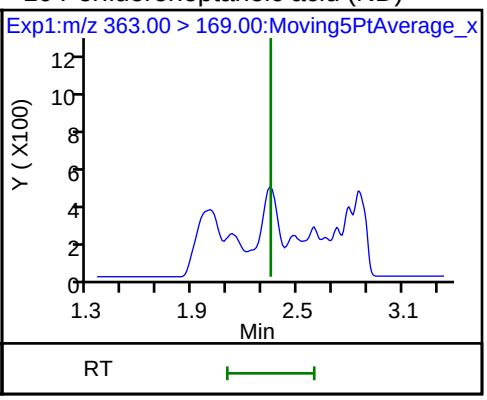
67 Perfluoro(2-propoxypropanoic) acid (ND)



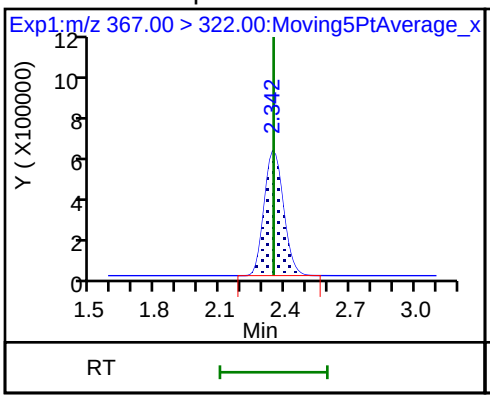
10 Perfluoroheptanoic acid (ND)



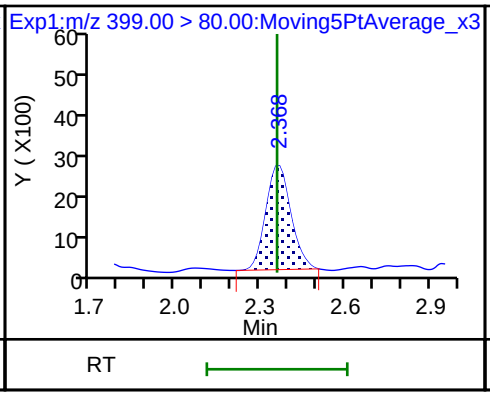
10 Perfluoroheptanoic acid (ND)



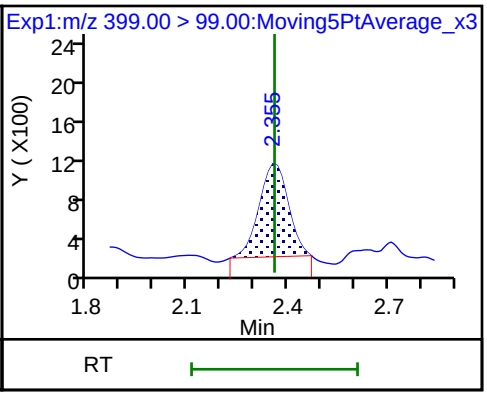
D 9 13C4-PFHpA



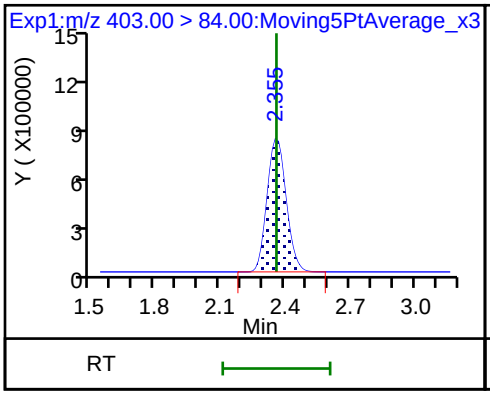
8 Perfluorohexanesulfonic acid



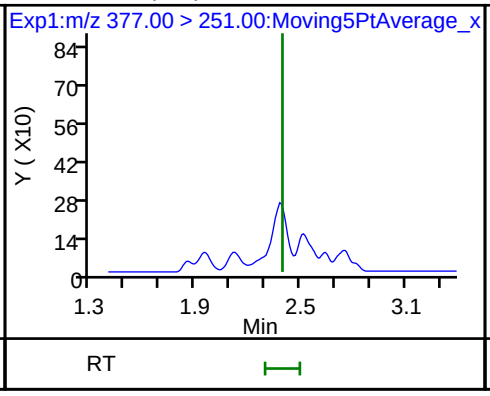
8 Perfluorohexanesulfonic acid



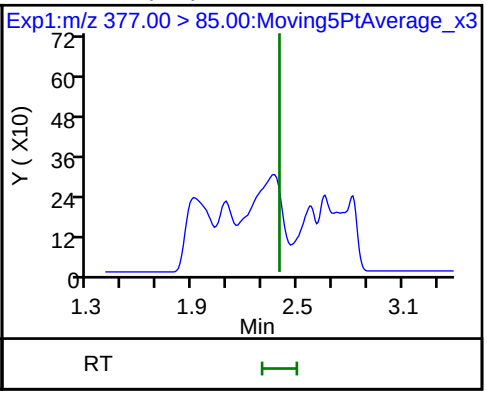
D 11 18O2 PFHxS



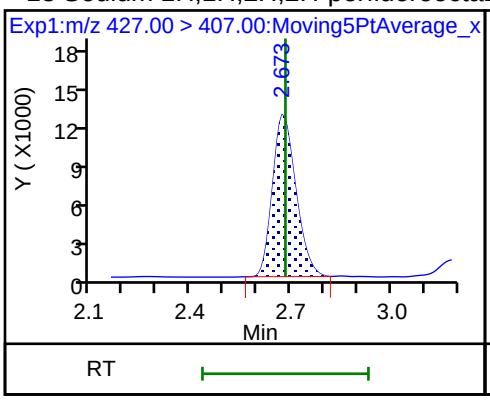
65 Adona (ND)



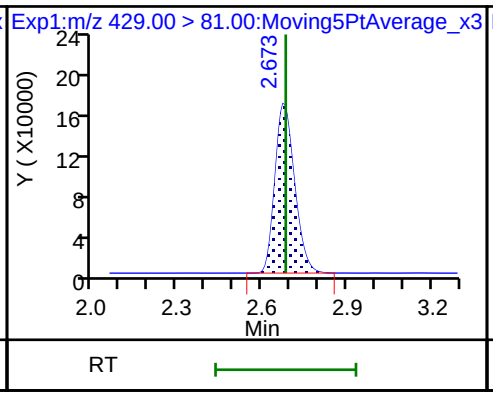
65 Adona (ND)



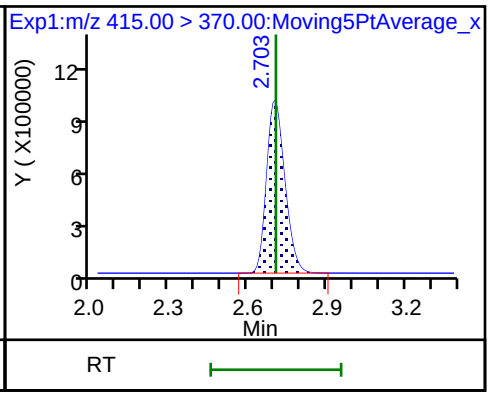
13 Sodium 1H,1H,2H,2H-perfluorooctane



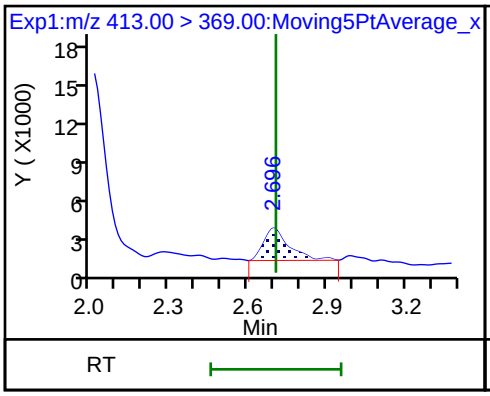
D 12 M2-6:2FTS



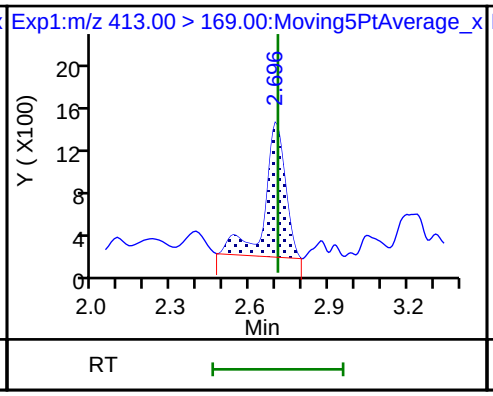
* 62 13C2-PFOA



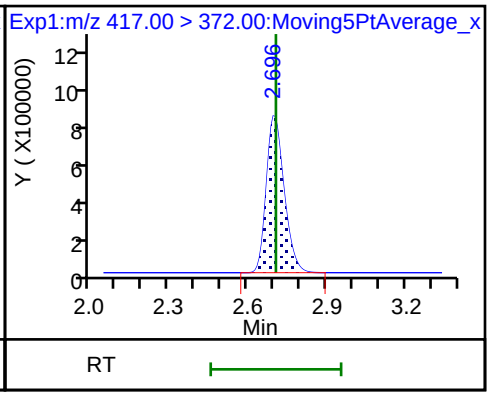
15 Perfluorooctanoic acid



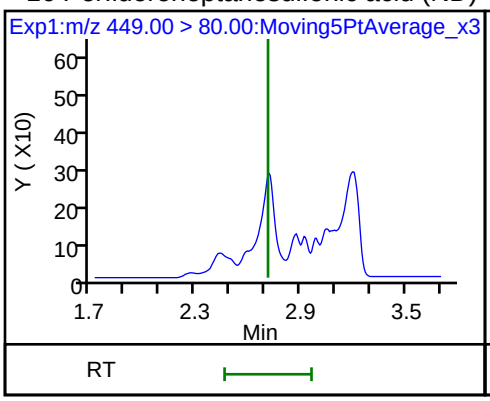
15 Perfluorooctanoic acid



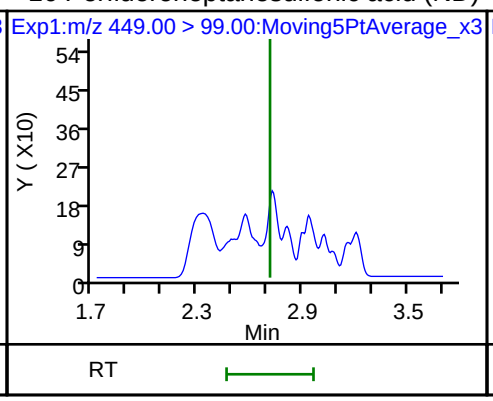
D 14 13C4 PFOA



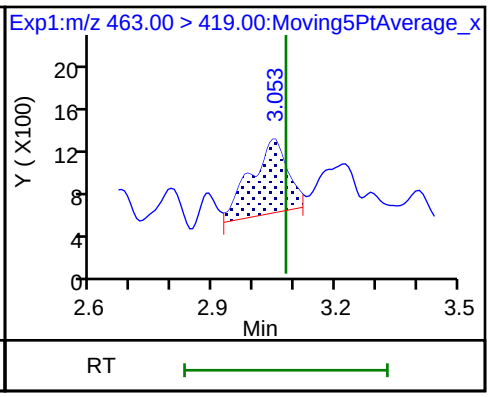
16 Perfluoroheptanesulfonic acid (ND)



16 Perfluoroheptanesulfonic acid (ND)



20 Perfluorononanoic acid



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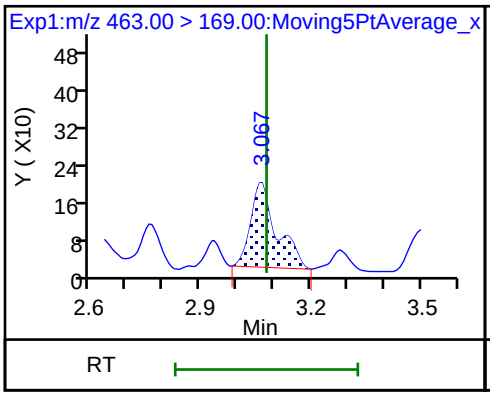
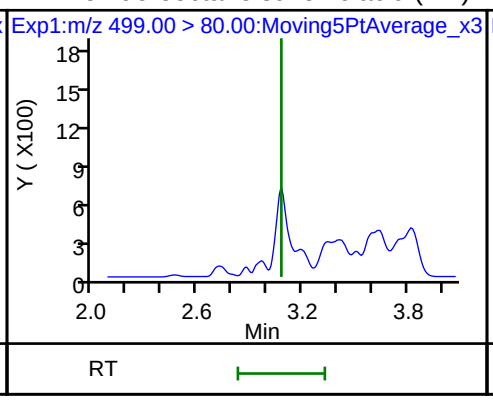
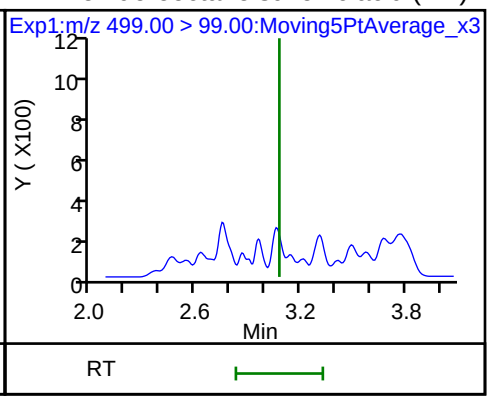


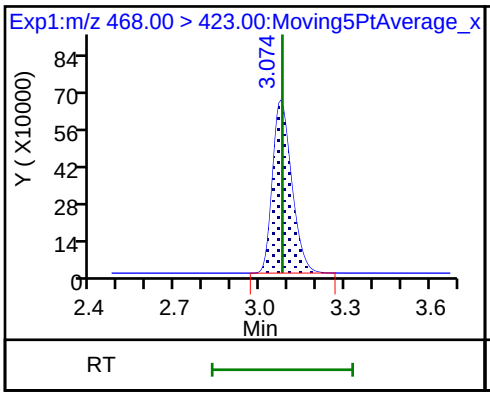
17 Perfluorooctane sulfonic acid (ND)



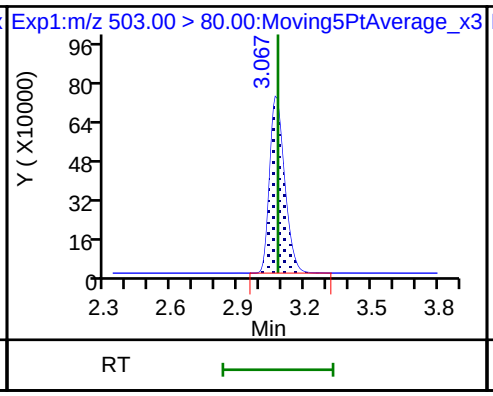
17 Perfluorooctane sulfonic acid (ND)



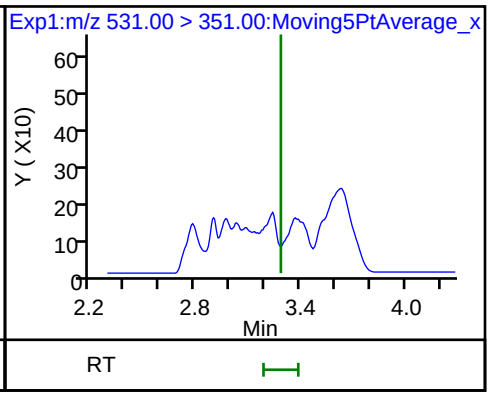
D 19 13C5 PFNA



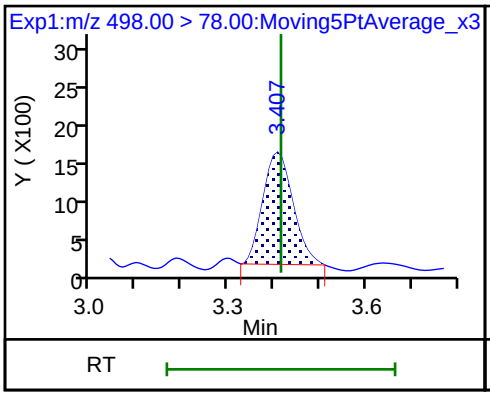
D 18 13C4 PFOS



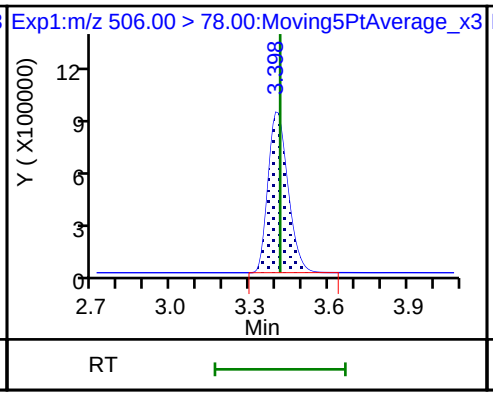
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



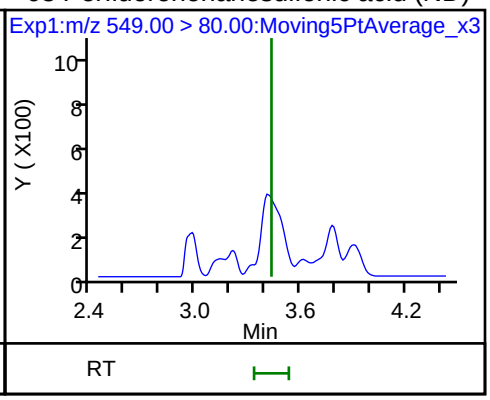
22 Perfluorooctane Sulfonamide



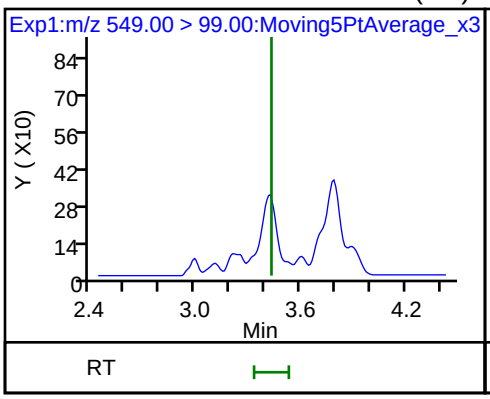
D 21 13C8 FOSA



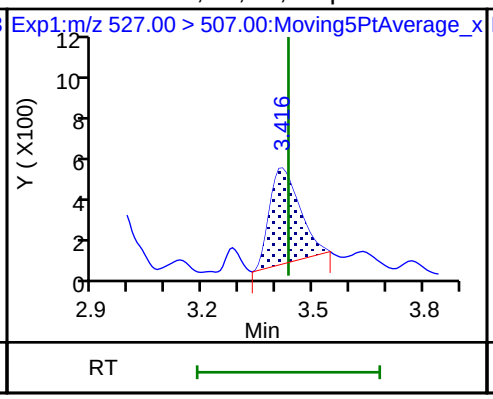
68 Perfluorononanesulfonic acid (ND)



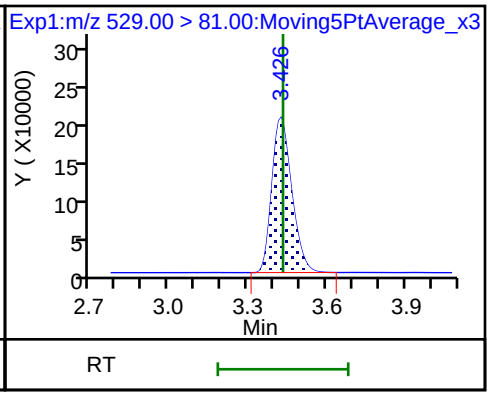
68 Perfluorononanesulfonic acid (ND)



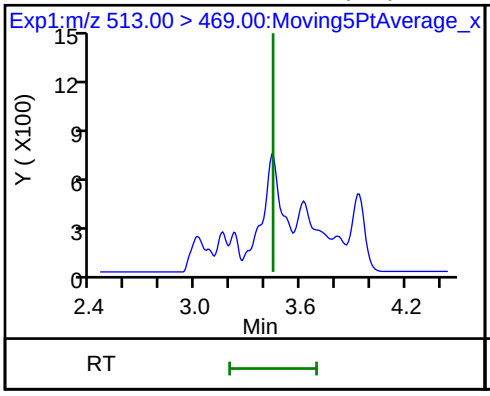
25 Sodium 1H,1H,2H,2H-perfluorodecane



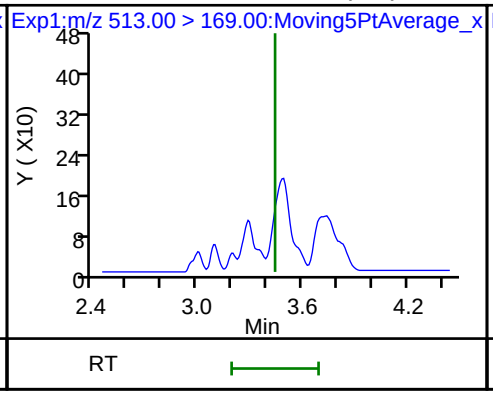
D 26 M2-8:2FTS



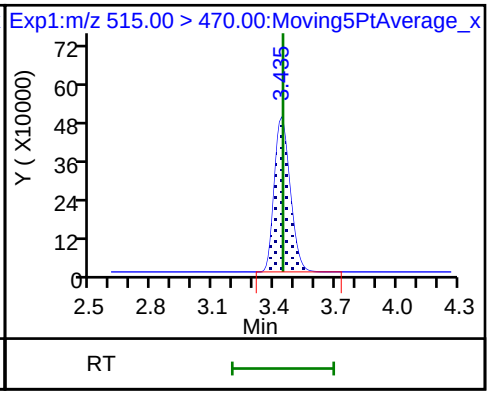
24 Perfluorodecanoic acid (ND)



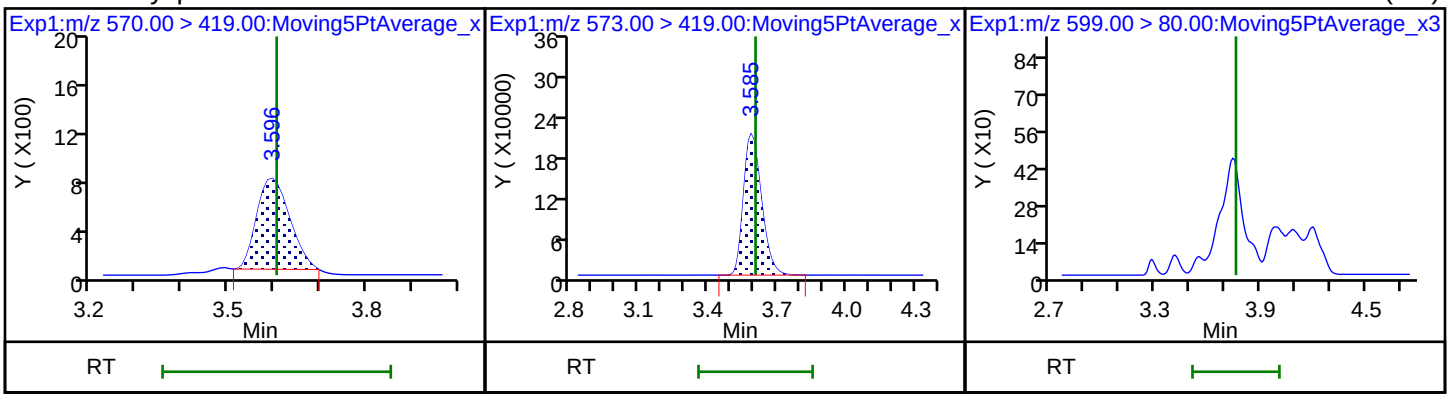
24 Perfluorodecanoic acid (ND)



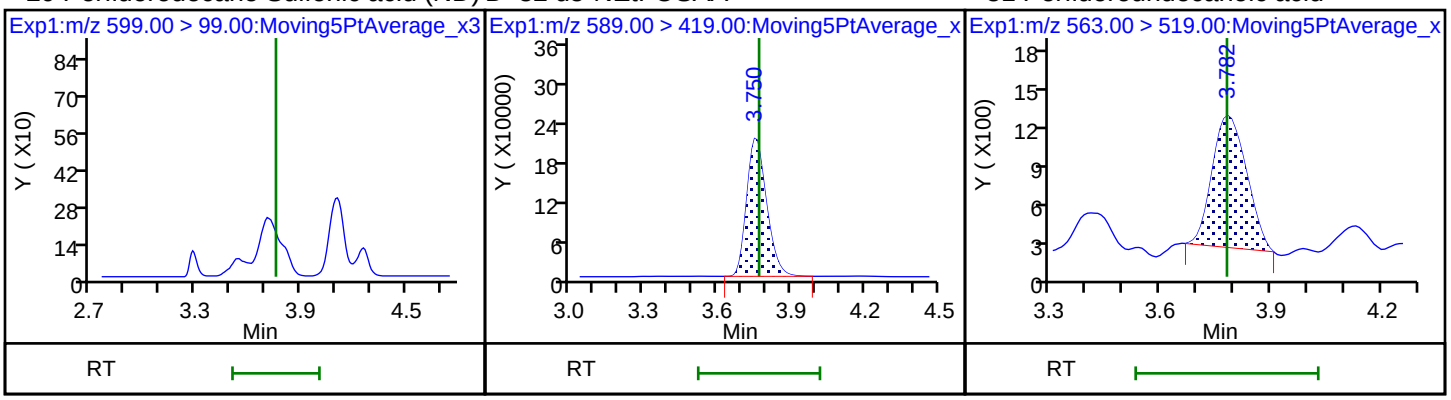
D 23 13C2 PFDA



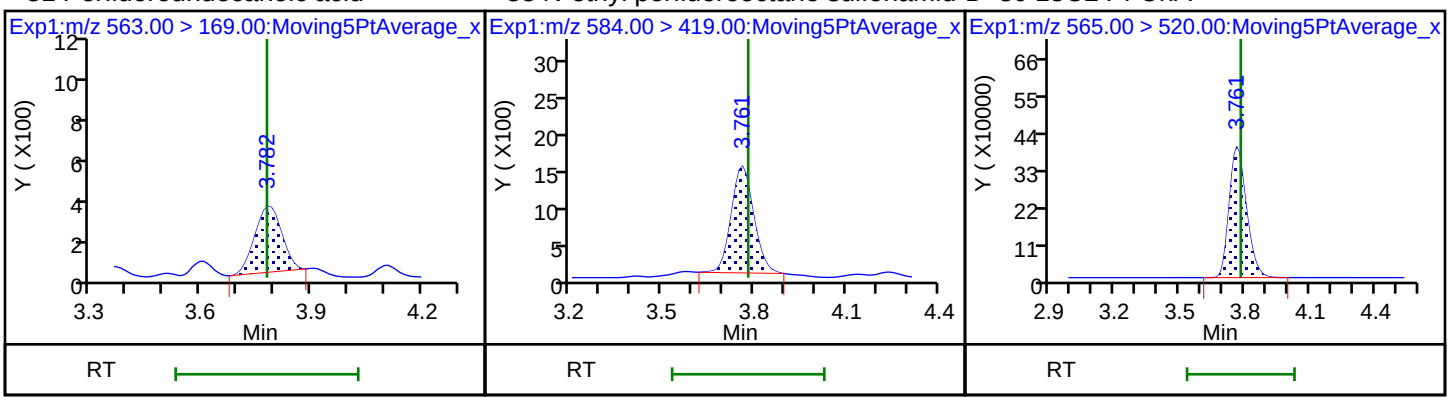
28 N-methyl perfluorooctane sulfonamiD 27 d3-NMeFOSAA 29 Perfluorodecane Sulfonic acid (ND)



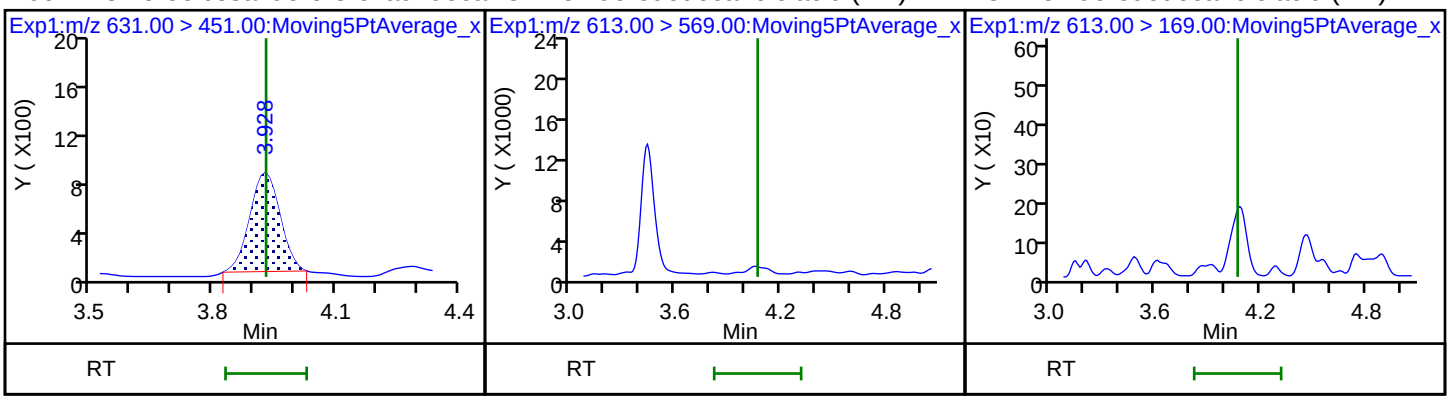
29 Perfluorodecane Sulfonic acid (ND) D 32 d5-NEtFOSAA 31 Perfluoroundecanoic acid



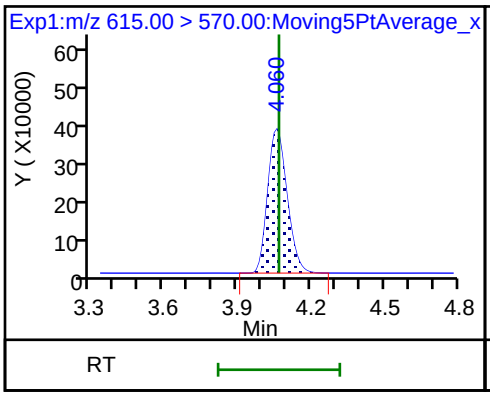
31 Perfluoroundecanoic acid 33 N-ethyl perfluorooctane sulfonamid D 30 13C2 PFUnA



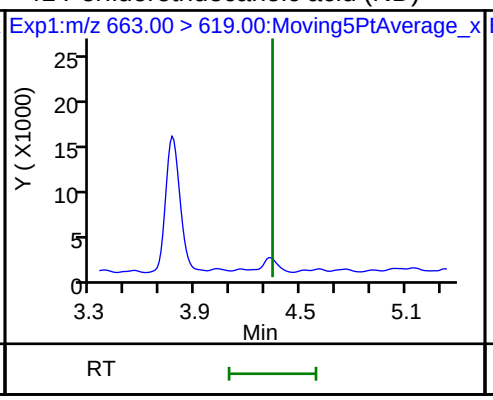
66 11-Chloroeicosafluoro-3-oxaundecan 37 Perfluorododecanoic acid (ND) 37 Perfluorododecanoic acid (ND)



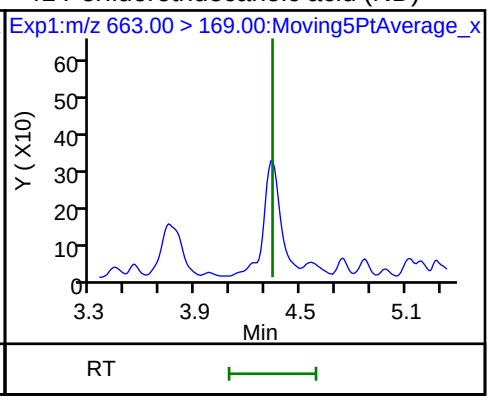
D 36 13C2 PFDoA



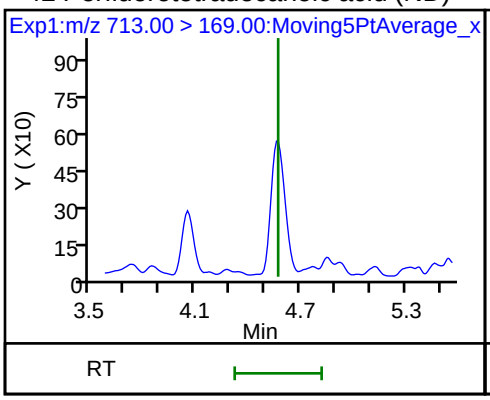
41 Perfluorotridecanoic acid (ND)



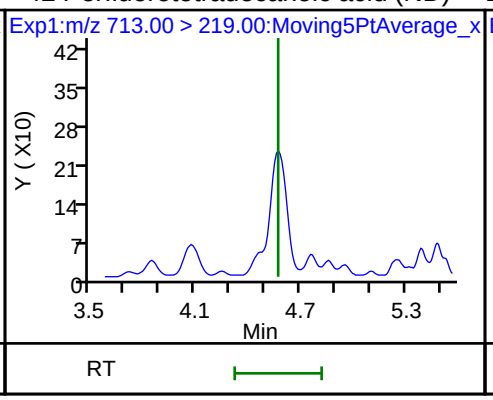
41 Perfluorotridecanoic acid (ND)



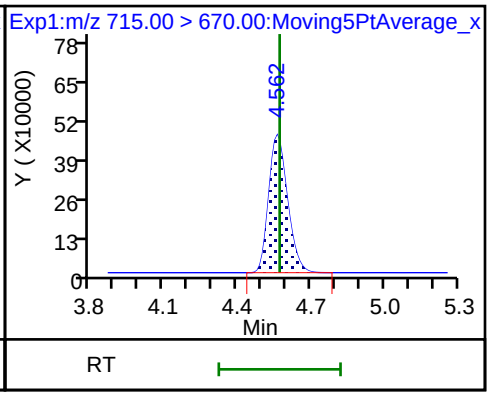
42 Perfluorotetradecanoic acid (ND)



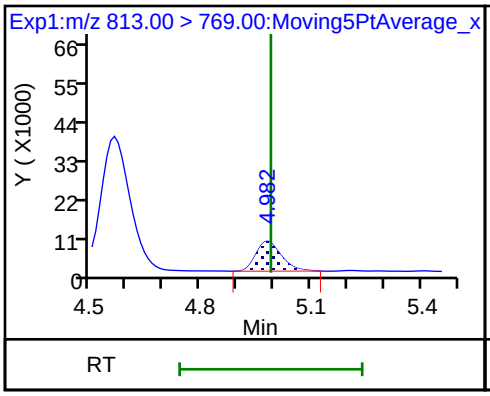
42 Perfluorotetradecanoic acid (ND)



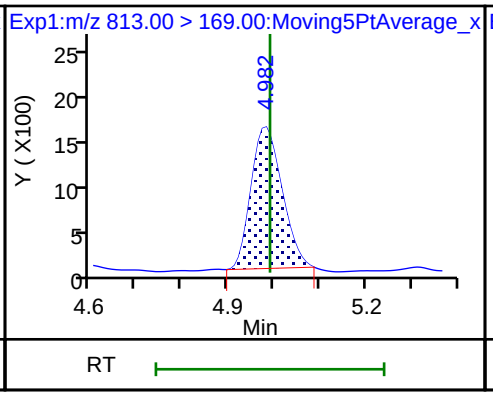
D 43 13C2-PFTeDA



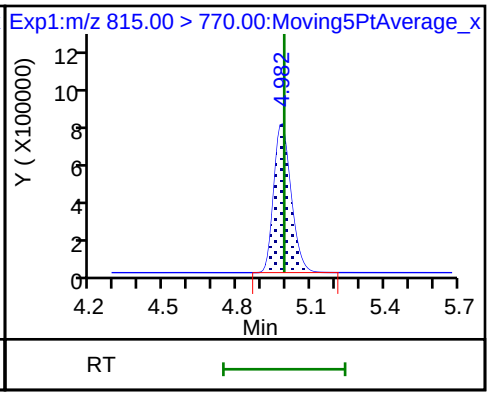
45 Perfluorohexadecanoic acid



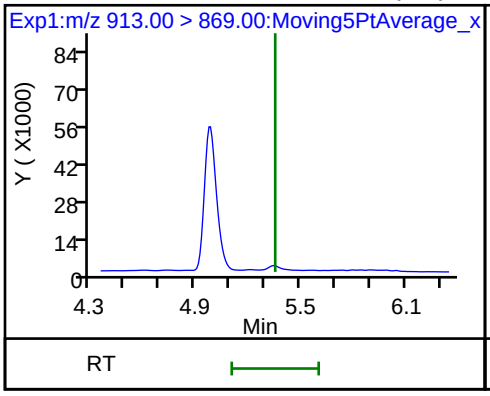
45 Perfluorohexadecanoic acid



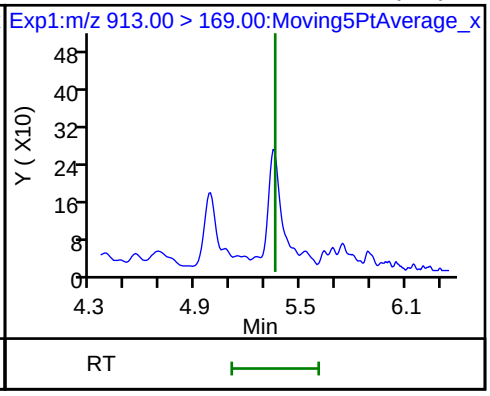
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-222510/2-A

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_044.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 250.0(mL) | Date Analyzed: 05/14/2018 17:13

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	42.2		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	38.5		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	39.8		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	38.6		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	41.9		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	41.1		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	39.4		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	36.7		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	39.8		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	39.4		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	39.3		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	37.5		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	33.5		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	37.9		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	36.9		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	37.2		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	41.9		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	42.8		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.5		20	1.9
27619-97-2	6:2FTS	113		20	2.0
39108-34-4	8:2FTS	40.8		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-222510/2-A

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_044.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 250.0(mL) | Date Analyzed: 05/14/2018 17:13

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		25-150
STL01893	13C5 PFPeA	102		25-150
STL00993	13C2 PFHxA	99		25-150
STL01892	13C4-PFHpA	104		25-150
STL00990	13C4 PFOA	101		25-150
STL00995	13C5 PFNA	101		25-150
STL00996	13C2 PFDA	106		25-150
STL00997	13C2 PFUnA	101		25-150
STL00998	13C2 PFDoA	103		25-150
STL02116	13C2-PFTeDA	101		25-150
STL02337	13C3-PFBS	95		25-150
STL00994	18O2 PFHxS	97		25-150
STL00991	13C4 PFOS	98		25-150
STL01056	13C8 FOSA	90		25-150
STL02118	d3-NMeFOSAA	94		25-150
STL02117	d5-NEtFOSAA	104		25-150
STL02279	M2-6:2FTS	102		25-150
STL02280	M2-8:2FTS	110		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_044.d
Lims ID: LCS 320-222510/2-A
Client ID:
Sample Type: LCS
Inject. Date: 14-May-2018 17:13:30 ALS Bottle#: 28 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: LCS 320-222510/2-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:10 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 14:54:06

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.452	0.011	1.000	5462163	2.45		97.9	45230	
2 Perfluorobutyric acid										
212.90 > 169.00	1.463	1.457	0.006	1.000	2143686	1.06		106	1183	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.738	1.728	0.010	1.000	1653796	0.9614		96.1	815	
D 3 13C5-PFPeA										
267.90 > 223.00	1.738	1.728	0.010	0.563	3535077	2.56		102	66599	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.774	1.764	0.010	1.000	2239810	0.9381		106	12548	
298.90 > 99.00	1.774	1.764	0.010	1.000	904461		2.48(1.25-3.74)		5639	
D 47 13C3-PFBS										
301.90 > 83.00	1.774	1.764	0.010	1.000	71934	2.21		94.9	476	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.991	1.980	0.011	1.000	424903	1.05		112	25341	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.025	2.014	0.011	1.000	1488981	0.99		99.5	2319	
313.00 > 119.00	2.025	2.014	0.011	1.000	138249		10.77(5.03-15.10)		1625	
D 7 13C2 PFHxA										
315.00 > 270.00	2.025	2.014	0.011	1.000	3586086	2.48		99.2	106307	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.048	2.036	0.012	1.000	2007861	0.9406		100	39698	
349.00 > 99.00	2.048	2.036	0.012	1.000	734271		2.73(1.36-4.07)		9288	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.127	2.116	0.011	1.000	227814	0.9499		95.0	2128	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.127	2.116	0.011	1.000	177207	2.41		96.2	4403	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.358	2.345	0.013	1.000	1472676	0.9658		96.6	2273	
363.00 > 169.00	2.358	2.345	0.013	1.000	591311		2.49(1.13-3.40)		4188	
D 9 13C4-PFHpA										
367.00 > 322.00	2.358	2.345	0.013	1.000	3594474	2.59		104	65425	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.372	2.358	0.014	1.000	1690261	0.8366		91.9	11576	
399.00 > 99.00	2.372	2.358	0.014	1.000	581001		2.91(1.50-4.49)		1763	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.358	0.014	1.000	4241877	2.30		97.4	100463	
65 Adona										
377.00 > 251.00	2.407	2.395	0.012	1.000	4310279	1.06		106	61105	
377.00 > 85.00	2.407	2.395	0.012	1.000	2557648		1.69(0.84-2.53)		20779	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.690	2.682	0.008	1.000	1324705	2.83		299	11925	
D 12 M2-6:2FTS										
429.00 > 81.00	2.690	2.682	0.008	1.000	659982	2.42		102	13352	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.720	2.704	0.016	1.000	1659263	1.05		105	900	
413.00 > 169.00	2.720	2.704	0.016	1.000	893250		1.86(0.84-2.52)		3831	
* 62 13C2-PFOA										
415.00 > 370.00	2.720	2.704	0.016		3448270	2.50			65569	
D 14 13C4 PFOA										
417.00 > 372.00	2.720	2.704	0.016	1.000	3295445	2.54		101	53548	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.720	2.712	0.008	1.000	1566452	0.9472		99.5	22200	
449.00 > 99.00	2.720	2.712	0.008	1.000	411648		3.81(1.94-5.82)		5764	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.089	3.073	0.016	1.000	1290356	0.9222		99.4	7428	
499.00 > 99.00	3.089	3.073	0.016	1.000	288652		4.47(2.31-6.93)		3572	
D 18 13C4 PFOS										
503.00 > 80.00	3.089	3.073	0.016	1.000	2995365	2.33		97.5	30399	
20 Perfluorononanoic acid										
463.00 > 419.00	3.089	3.081	0.008	1.000	1194910	1.03		103	2224	
463.00 > 169.00	3.089	3.081	0.008	1.000	289788		4.12(1.90-5.69)		9890	
D 19 13C5 PFNA										
468.00 > 423.00	3.089	3.081	0.008	1.000	2756228	2.54		101	40805	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.302	3.287	0.015	1.000	2177214	0.9734		104	20349	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.416	3.407	0.009	1.000	1723895	1.05		105	20711	
D 21 13C8 FOSA										
506.00 > 78.00	3.416	3.407	0.009	1.000	4173560	2.24		89.7	42234	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.435	3.426	0.009	1.000	984666	1.03		107	11756	
549.00 > 99.00	3.435	3.426	0.009	1.000	363231		2.71(1.33-3.97)		4102	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.444	3.435	0.009	1.000	520808	1.02		106	8958	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.444	3.435	0.009	1.000	941167	2.64		110	10491	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.454	3.444	0.010	1.000	998312	0.9838		98.4	7158	
513.00 > 169.00	3.454	3.444	0.010	1.000	187683		5.32(2.36-7.09)		5016	
D 23 13C2 PFDA										
515.00 > 470.00	3.454	3.444	0.010	1.000	2478985	2.65		106	39114	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.607	3.596	0.011	1.000	996588	2.35		94.1	25900	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.618	3.607	0.011	1.003	445477	1.07		107	3234	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.771	3.761	0.010	1.000	771503	0.9308		96.6	9252	
599.00 > 99.00	3.761	3.761	0.0	0.997	279795		2.76(1.39-4.16)		4249	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.782	3.771	0.011	1.000	566149	0.9174		91.7	2506	
563.00 > 169.00	3.782	3.771	0.011	1.000	162571		3.48(2.12-6.36)		3597	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.782	3.771	0.011	1.003	448657	1.01		101	8954	
D 30 13C2 PFUnA										
565.00 > 520.00	3.782	3.771	0.011	1.000	1977121	2.53		101	39745	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.771	3.771	0.0	1.000	1174638	2.60		104	3575	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.938	3.928	0.010	1.000	3159947	0.9237		98.1	39479	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.081	4.071	0.010	1.000	865773	0.99		99.4	561	
613.00 > 169.00	4.081	4.071	0.010	1.000	224380		3.86(2.13-6.40)		3137	
D 36 13C2 PFDoA										
615.00 > 570.00	4.081	4.071	0.010	1.000	2094964	2.56		103	21378	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.340	4.340	0.0	1.000	890435	0.9843		98.4	360	
663.00 > 169.00	4.340	4.340	0.0	1.000	273268		3.26(1.25-3.76)		2781	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.584	4.574	0.010	1.000	228958	0.9815		98.1	2903	
713.00 > 219.00	4.574	4.574	0.0	0.998	158253		1.45(0.71-2.13)		3665	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.584	4.574	0.010	1.000	2252839	2.53		101	13208	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.001	4.993	0.008	1.000	1396137	1.03		103	333	
813.00 > 169.00	5.001	4.993	0.008	1.000	235956		5.92(2.86-8.58)		2445	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.001	4.993	0.008	1.000	3579943	2.53		101	10689	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.370	5.364	0.006	1.000	1618155	1.07		107	299	
913.00 > 169.00	5.370	5.364	0.006	1.000	193947		8.34(3.83-11.48)		1970	

Report Date: 15-May-2018 15:09:18 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_044.d

Injection Date: 14-May-2018 17:13:30 Instrument ID: A8_N

Lims ID: LCS 320-222510/2-A

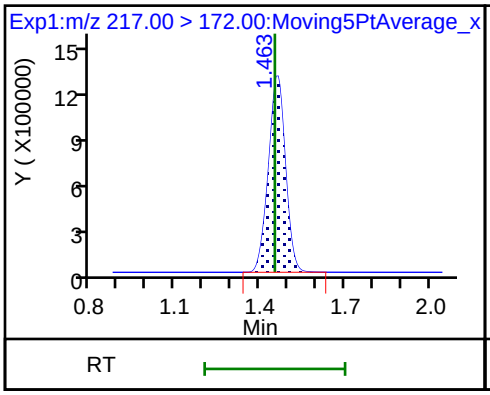
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 28 Worklist Smp#: 3

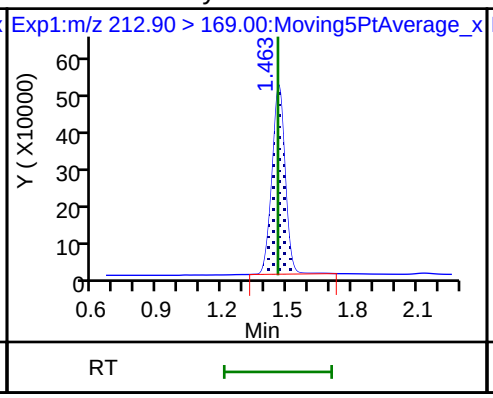
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

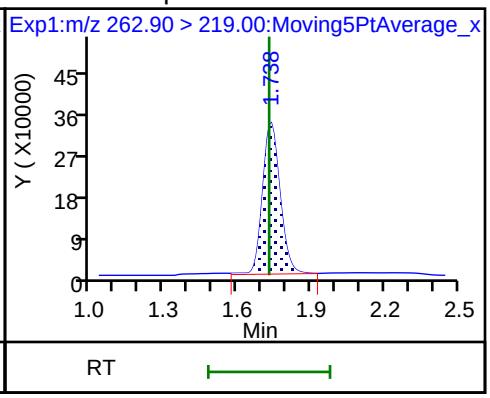
D 1 13C4 PFBA



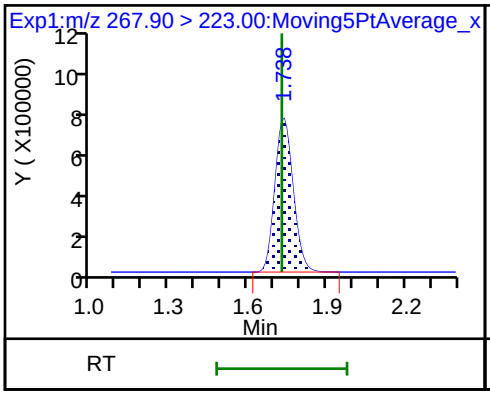
2 Perfluorobutyric acid



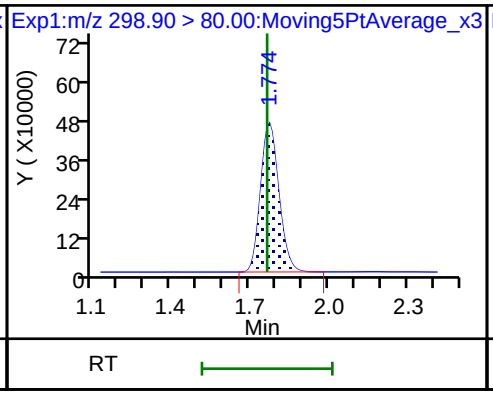
4 Perfluoropentanoic acid



D 3 13C5-PFPeA



5 Perfluorobutanesulfonic acid



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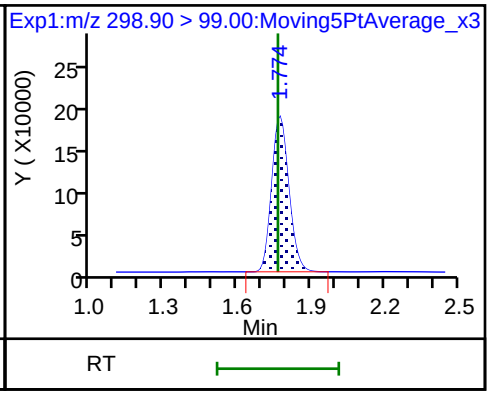
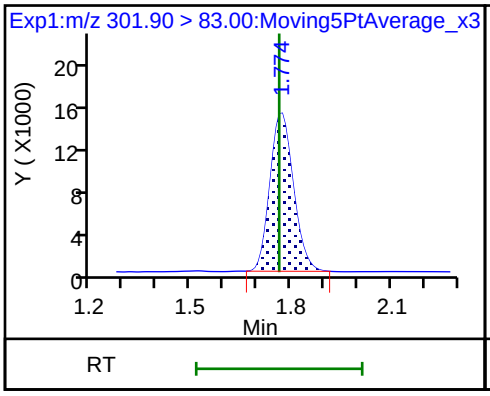
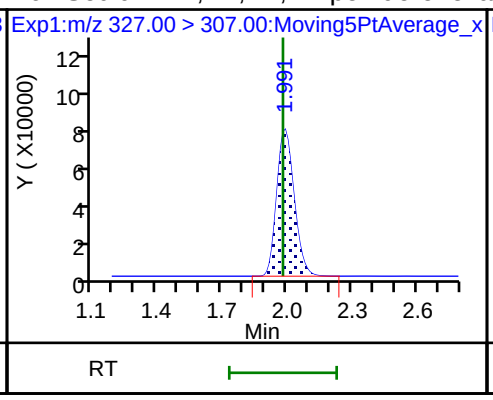


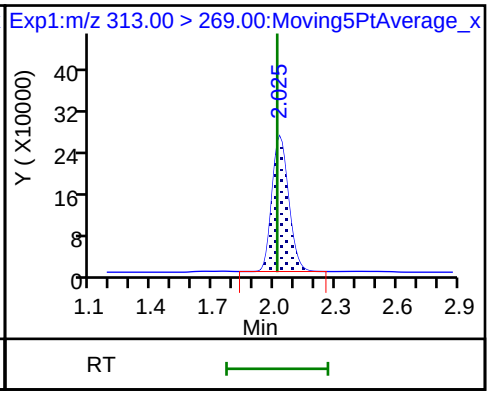
D 47 13C3-PFBS



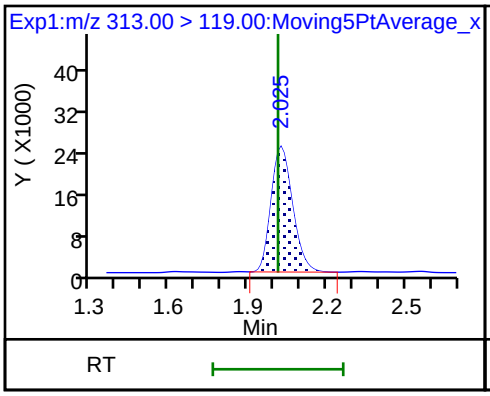
61 Sodium 1H,1H,2H,2H-perfluorohexane



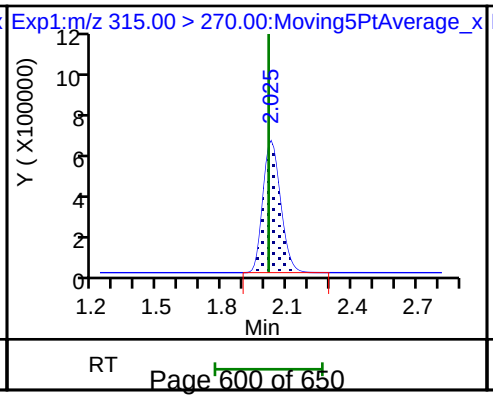
6 Perfluorohexanoic acid



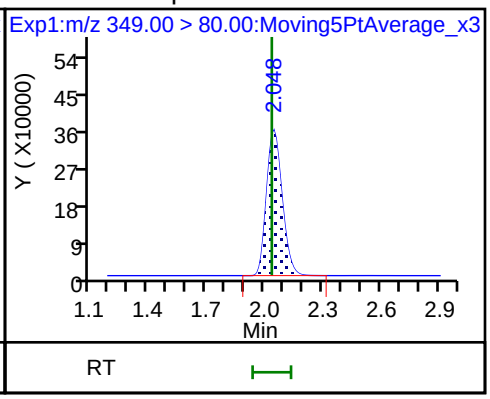
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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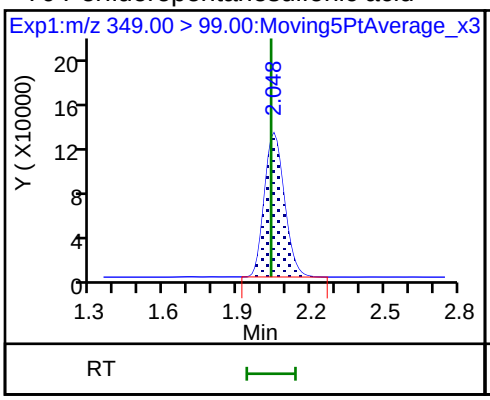
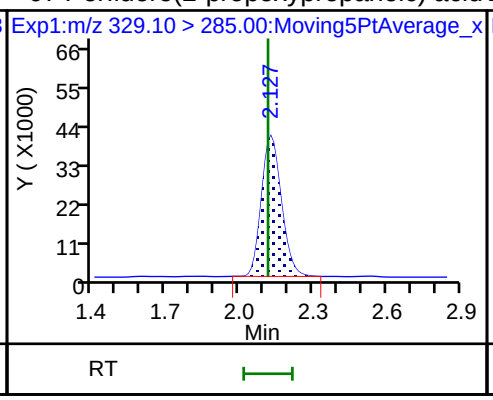
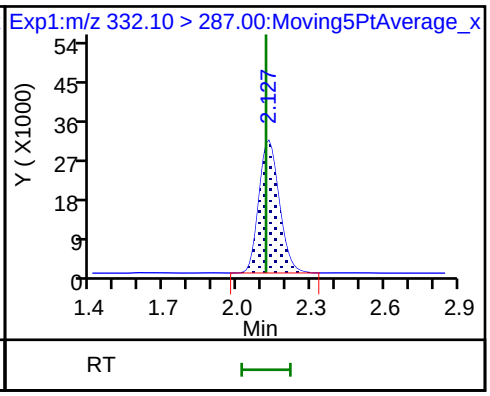


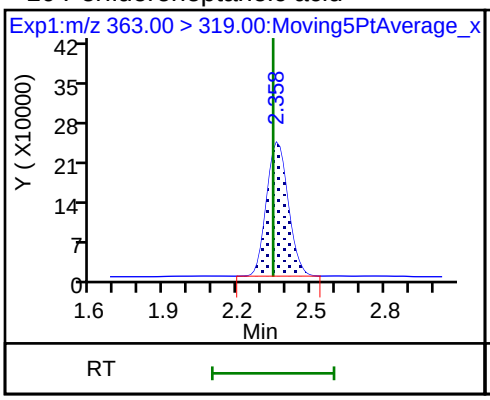
67 Perfluoro(2-propoxypropanoic) acid



D 64 13C3 HFPO-DA



10 Perfluoroheptanoic acid



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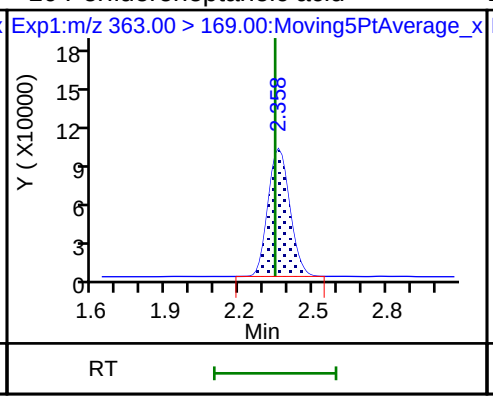
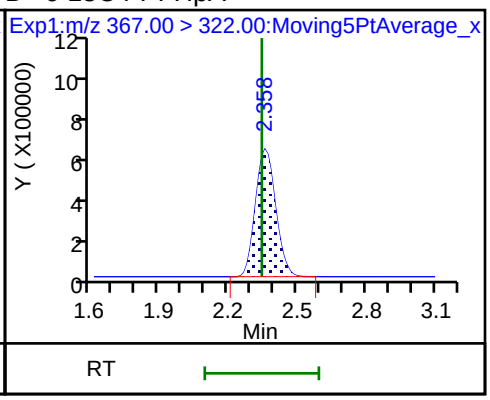
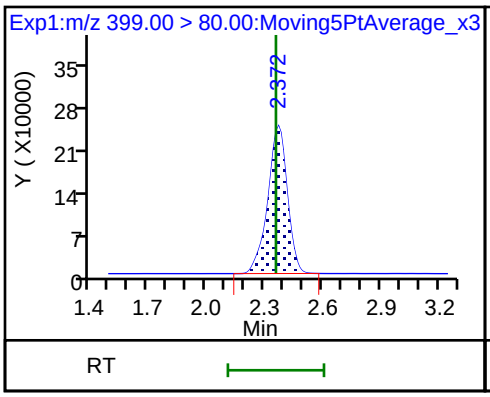


D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid



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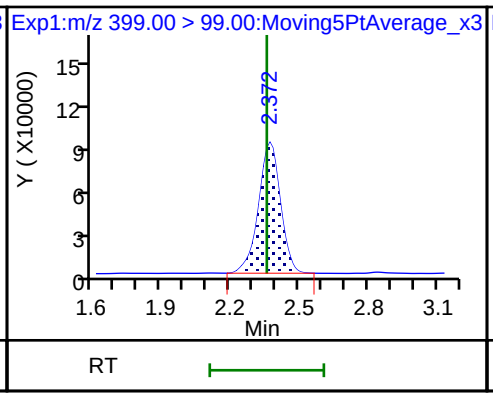
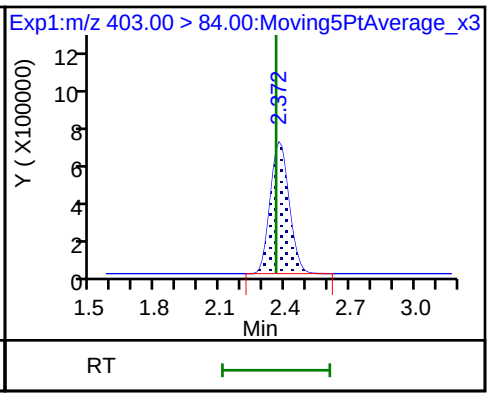
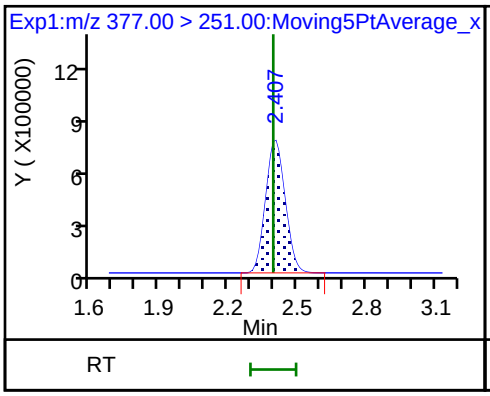


D 11 18O2 PFHxS



65 Adona



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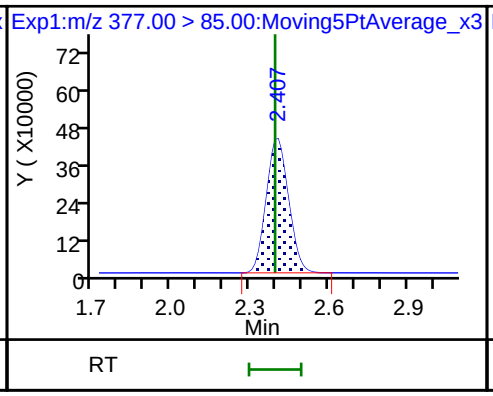
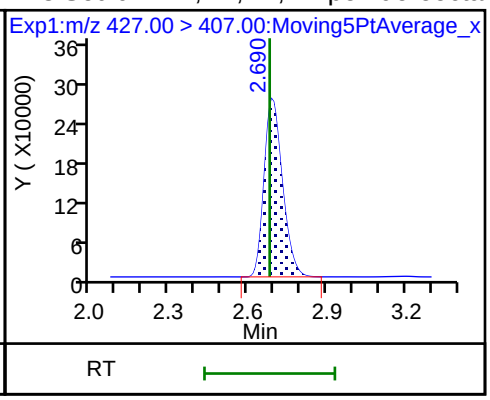
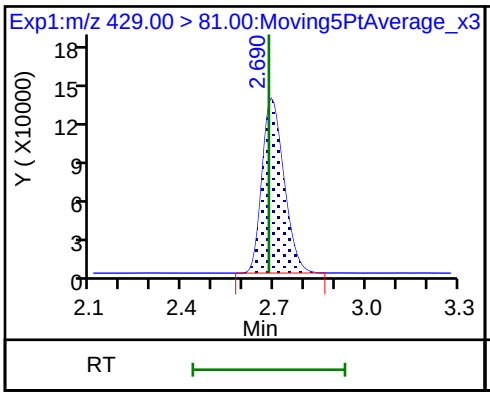


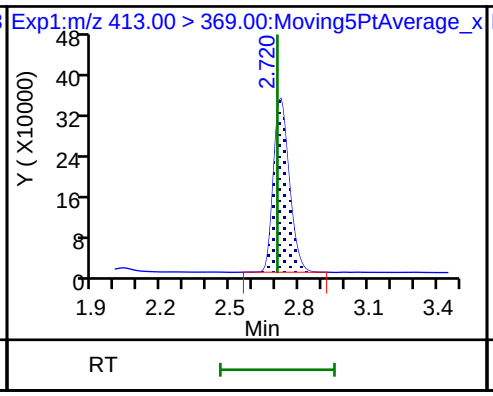
13 Sodium 1H,1H,2H,2H-perfluorooctane



D 12 M2-6:2FTS



15 Perfluorooctanoic acid



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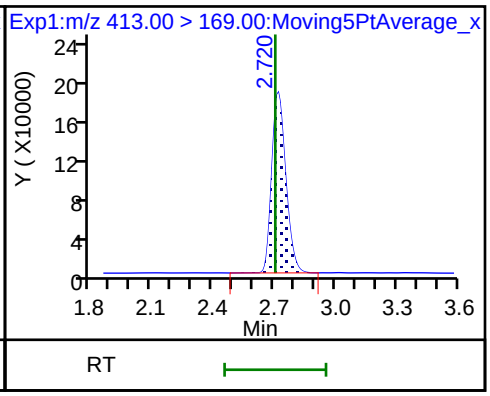
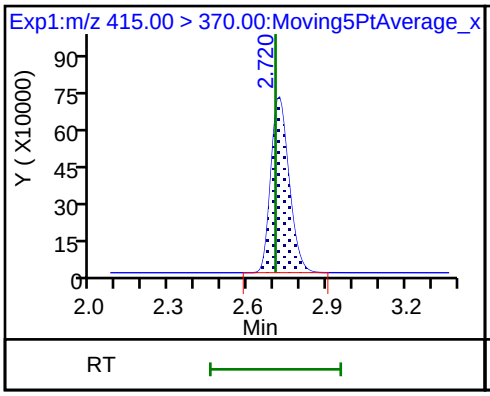
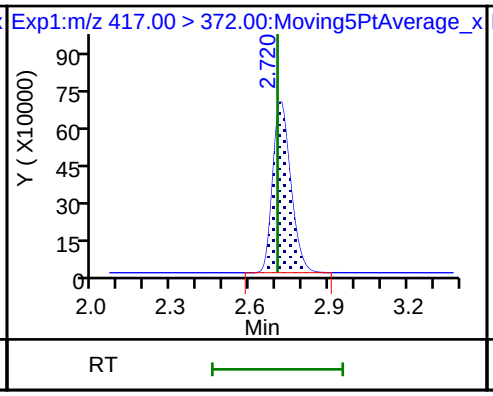


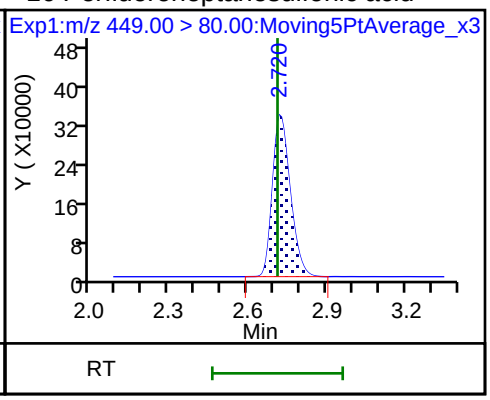
* 62 13C2-PFOA



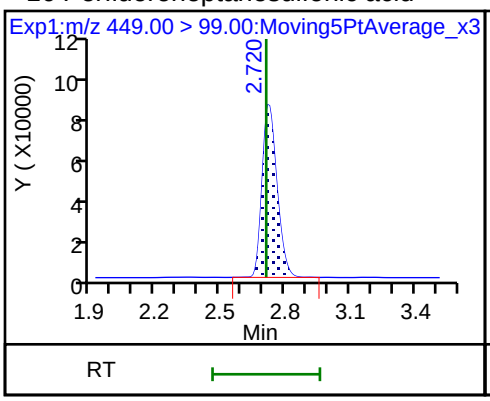
D 14 13C4 PFOA



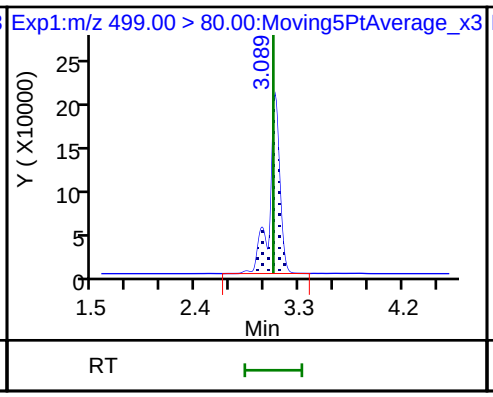
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



17 Perfluorooctane sulfonic acid



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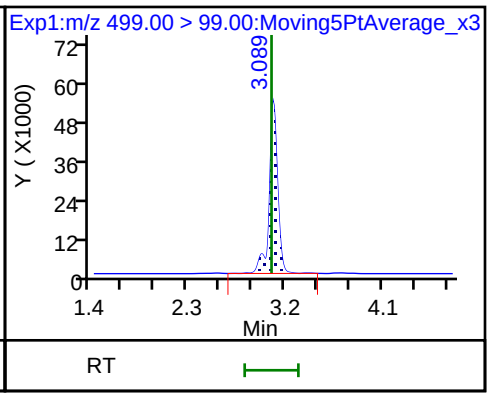
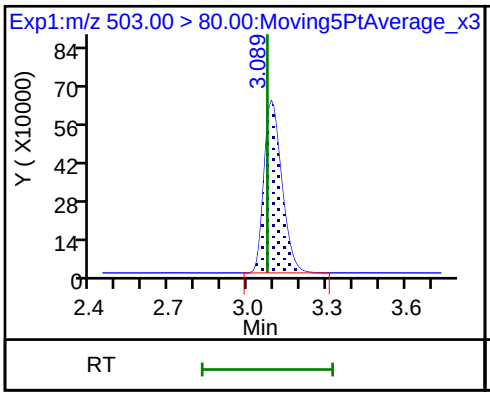
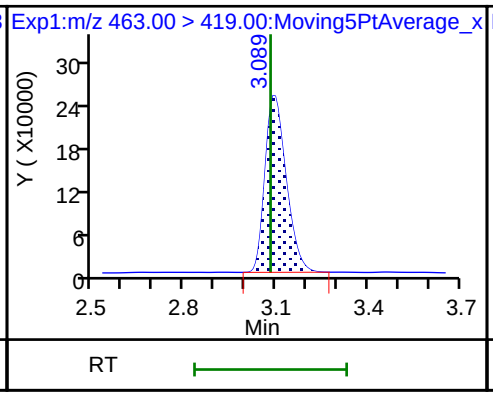


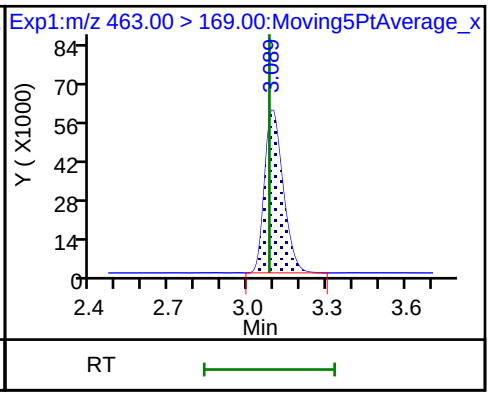
D 18 13C4 PFOS



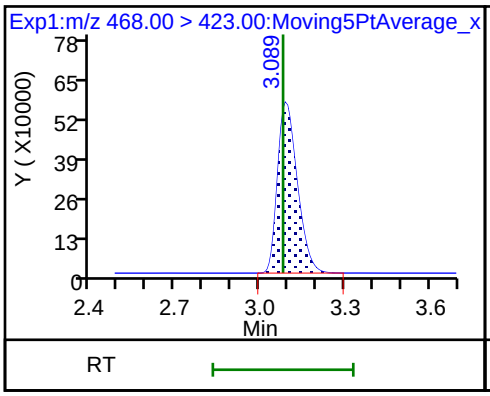
20 Perfluorononanoic acid



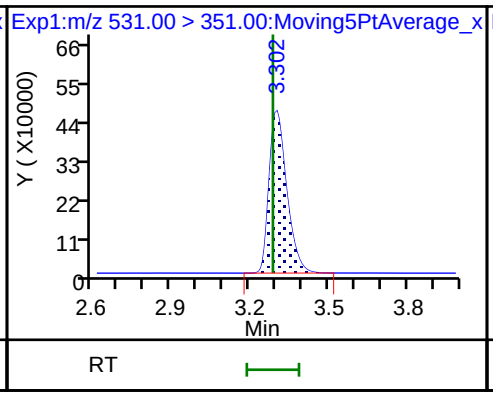
20 Perfluorononanoic acid



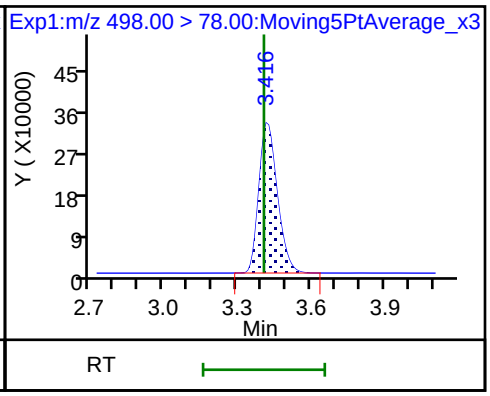
D 19 13C5 PFNA



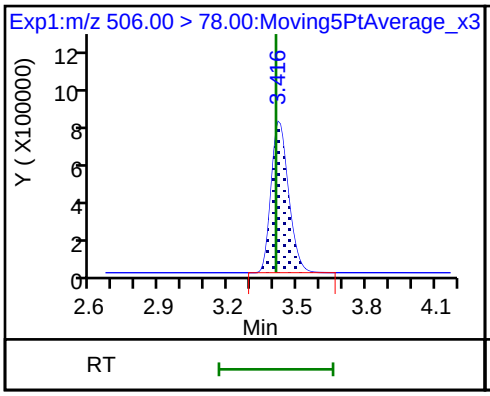
69 9-Chlorohexadecafluoro-3-oxanonane



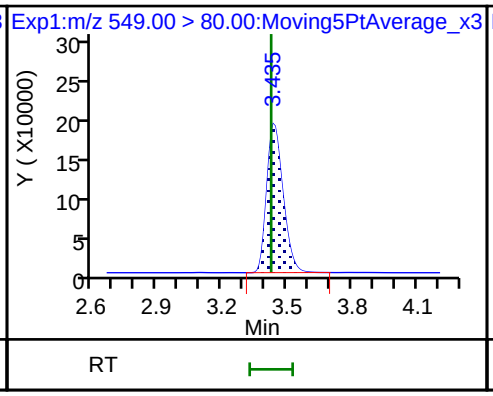
22 Perfluorooctane Sulfonamide



D 21 13C8 FOSA



68 Perfluorononanesulfonic acid



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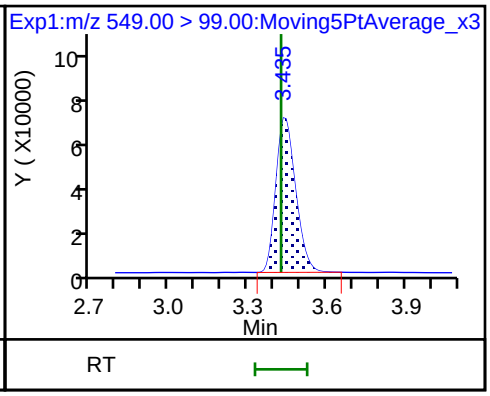
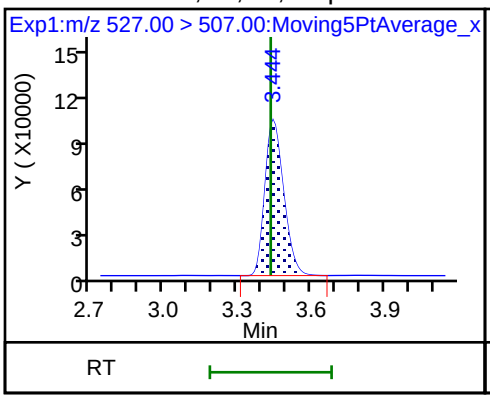
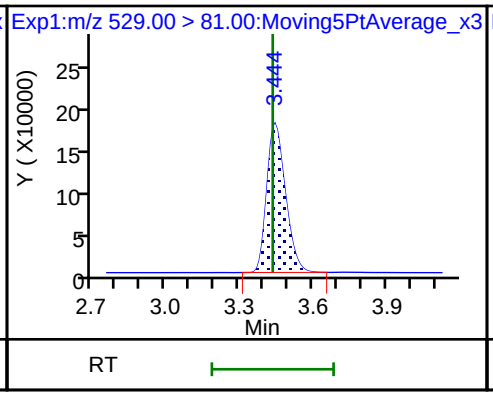


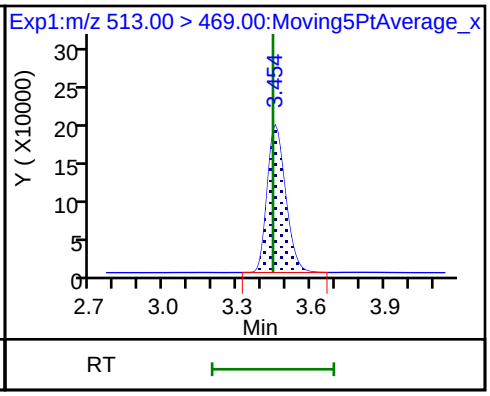
25 Sodium 1H,1H,2H,2H-perfluorodecane



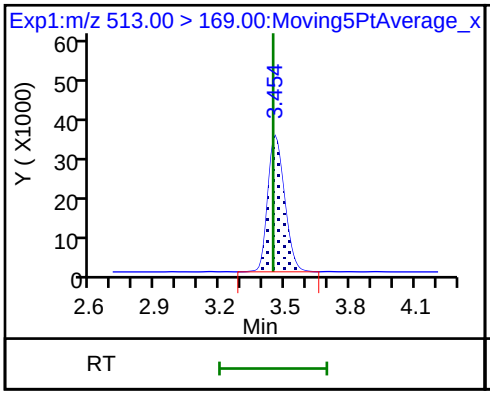
D 26 M2-8:2FTS



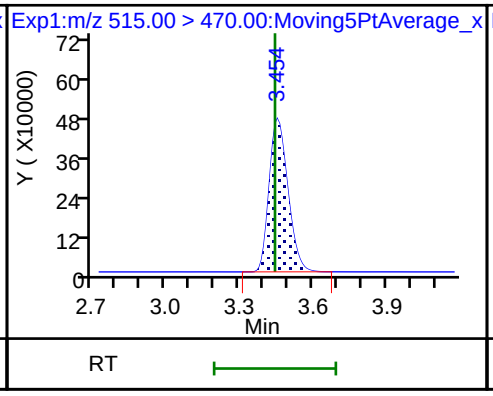
24 Perfluorodecanoic acid



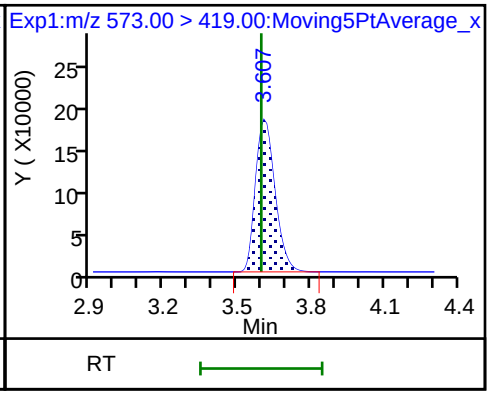
24 Perfluorodecanoic acid



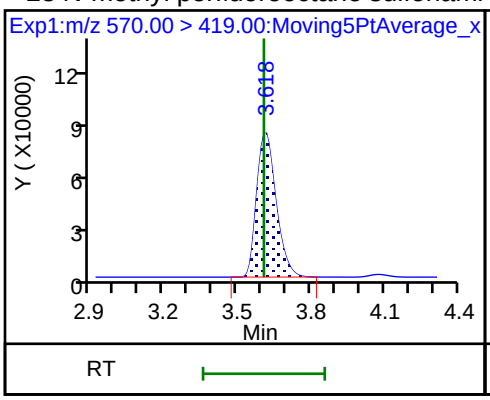
D 23 13C2 PFDA



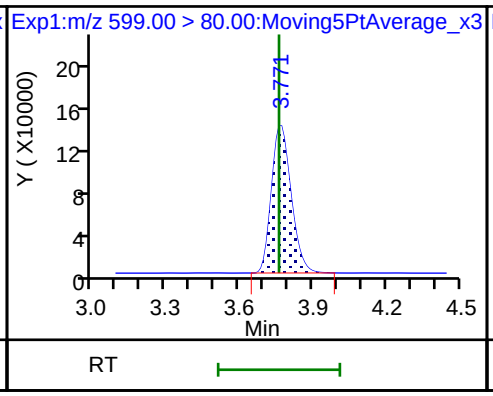
D 27 d3-NMeFOSAA



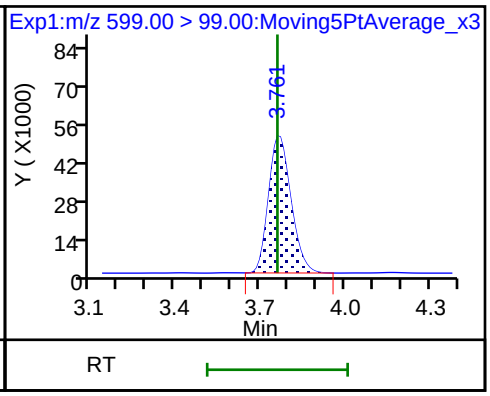
28 N-methyl perfluorooctane sulfonami



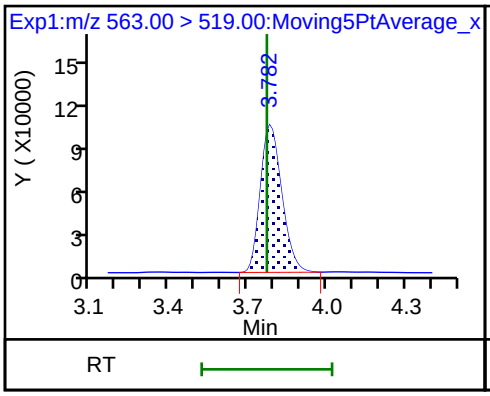
29 Perfluorodecane Sulfonic acid



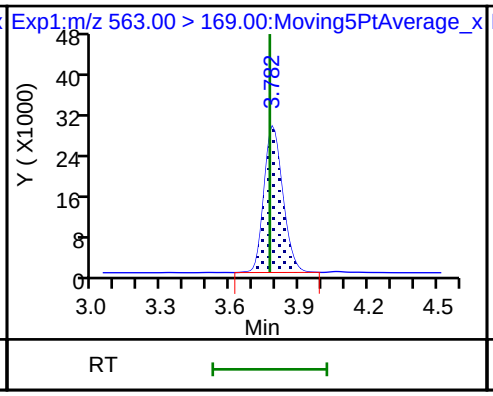
29 Perfluorodecane Sulfonic acid



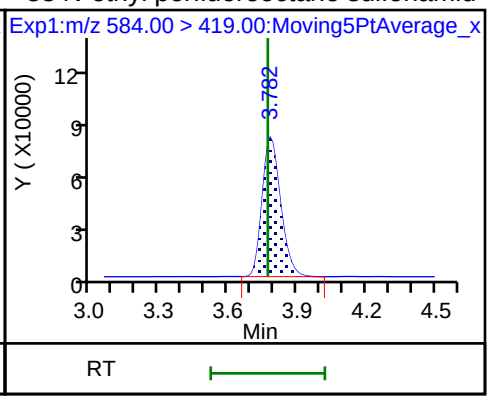
31 Perfluoroundecanoic acid



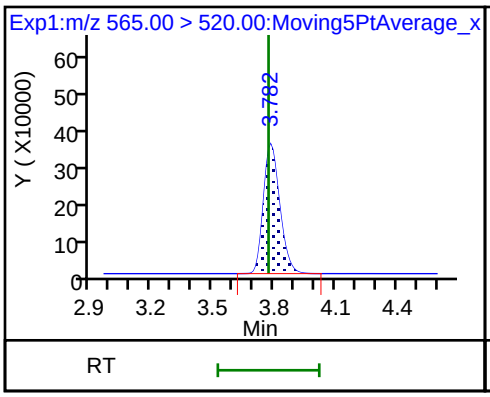
31 Perfluoroundecanoic acid



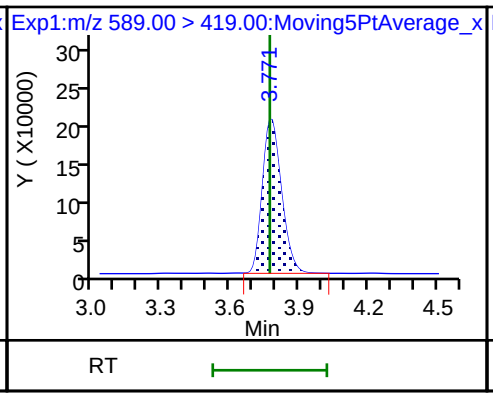
33 N-ethyl perfluorooctane sulfonamid



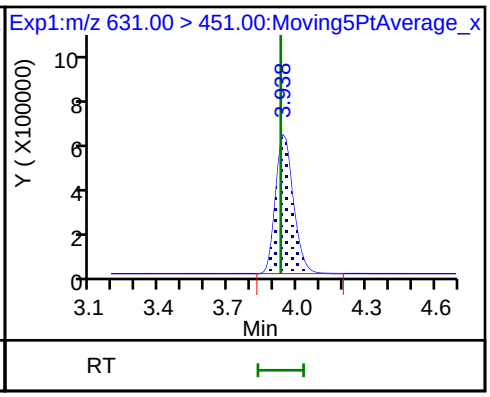
D 30 13C2 PFUnA



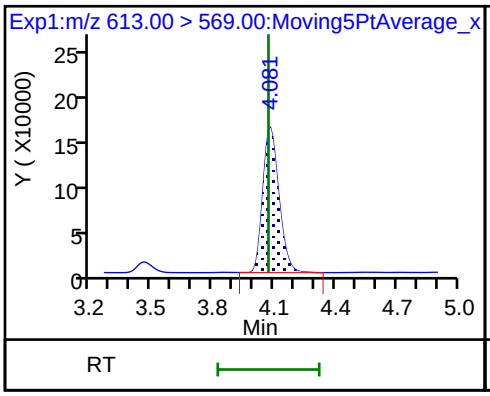
D 32 d5-NEtFOSAA



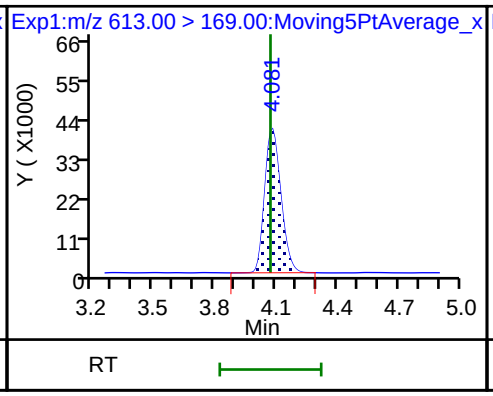
66 11-Chloroeicosafluoro-3-oxaundecan



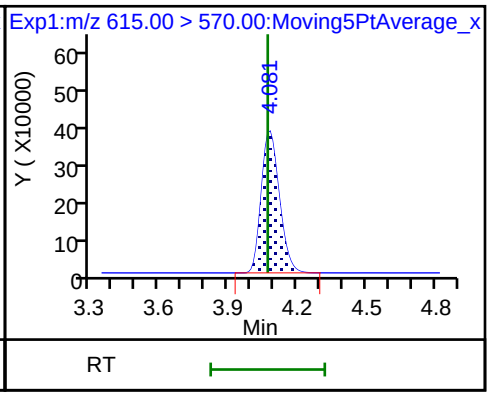
37 Perfluorododecanoic acid



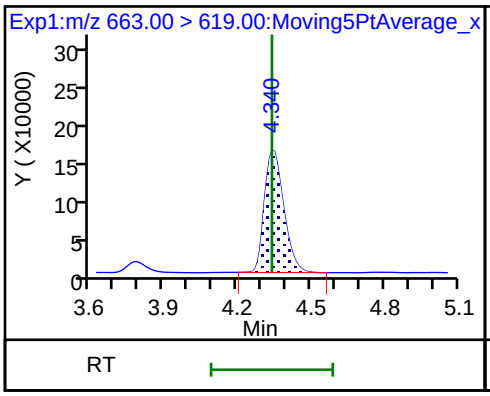
37 Perfluorododecanoic acid



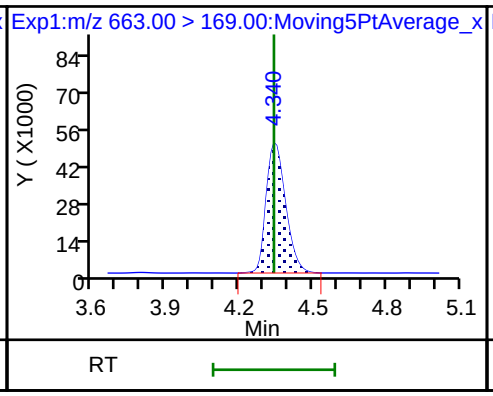
D 36 13C2 PFDoA



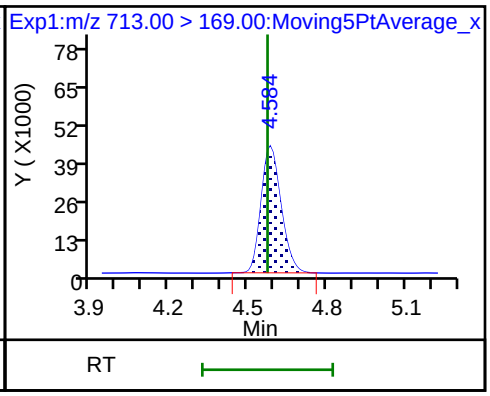
41 Perfluorotridecanoic acid



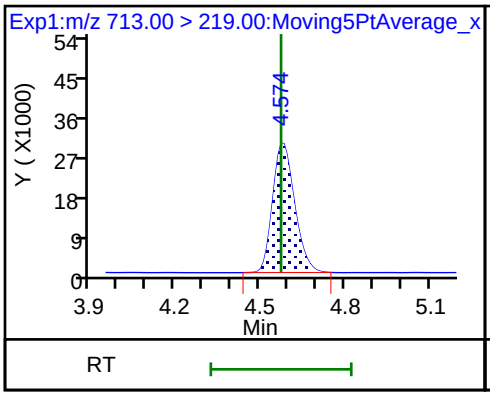
41 Perfluorotridecanoic acid



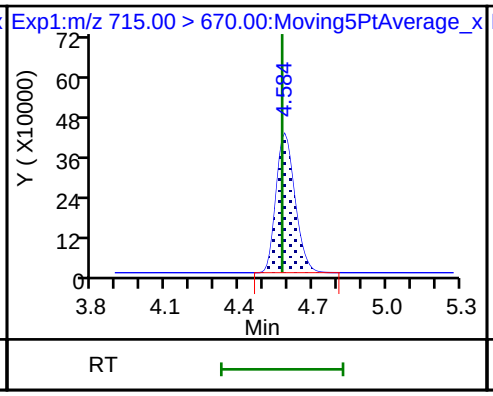
42 Perfluorotetradecanoic acid



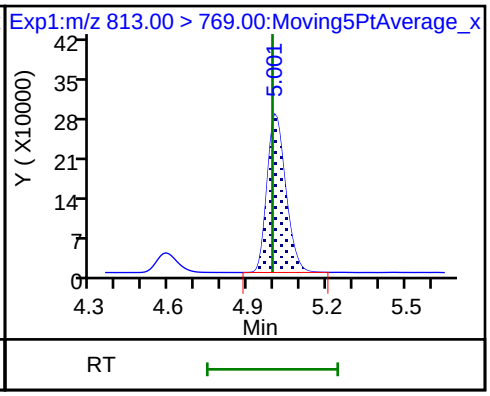
42 Perfluorotetradecanoic acid



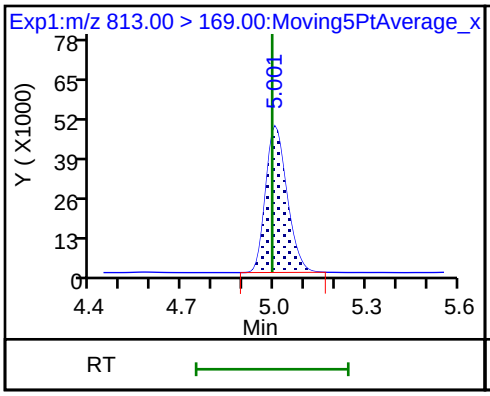
D 43 13C2-PFTeDA



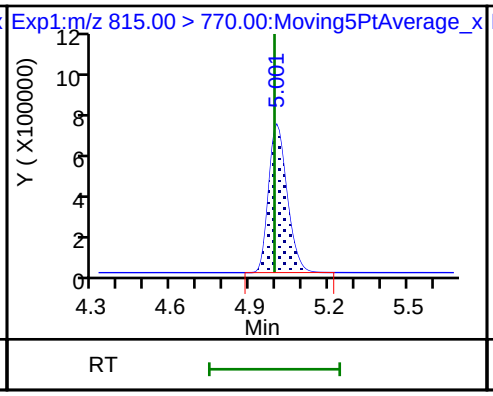
45 Perfluorohexadecanoic acid



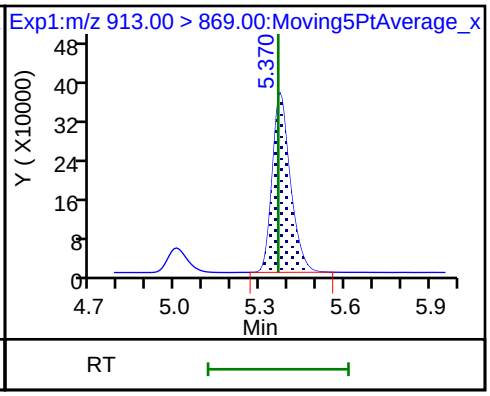
45 Perfluorohexadecanoic acid



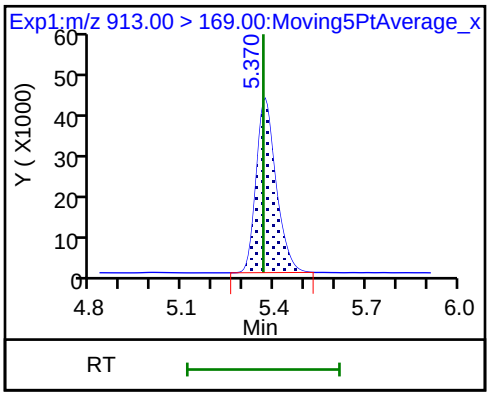
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-222819/2-A

Matrix: Water | Lab File ID: 2018.05.13LLB_016.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250(mL) | Date Analyzed: 05/13/2018 17:27

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	Perfluorooctanoic acid (PFOA)	40.8		2.0	0.85
27619-97-2	6:2FTS	41.7		20	2.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	101		25-150
STL02279	M2-6:2FTS	110		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_016.d
Lims ID: LCS 320-222819/2-A
Client ID:
Sample Type: LCS
Inject. Date: 13-May-2018 17:27:56 ALS Bottle#: 10 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-222819/2-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:37:25

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.457	1.458	-0.001	1.000	2299087	1.05		105	1457	
D 1 13C4 PFBA										
217.00 > 172.00	1.457	1.458	-0.001	1.000	5857633	2.37		94.7	55470	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.728	1.729	-0.001	1.000	1775354	0.9586		95.9	946	
D 3 13C5-PFPeA										
267.90 > 223.00	1.728	1.729	-0.001	0.563	3917954	2.49		99.5	73673	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.764	1.766	-0.002	1.000	2401582	0.8780		99.3	9433	
298.90 > 99.00	1.764	1.766	-0.002	1.000	1036879		2.32(1.25-3.74)		6684	
D 47 13C3-PFBS										
301.90 > 83.00	1.764	1.766	-0.002	1.000	80585	2.26		97.1	570	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.980	1.981	-0.001	1.000	480476	1.01		108	29238	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.015	-0.001	1.000	1679185	1.04		104	3845	
313.00 > 119.00	2.014	2.015	-0.001	1.000	153495		10.94(5.03-15.10)		2265	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	2.015	-0.001	1.000	4041455	2.44		97.6	89660	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.036	2.038	-0.002	1.000	2284765	0.9636		103	29172	
349.00 > 99.00	2.036	2.038	-0.002	1.000	855272		2.67(1.36-4.07)		12751	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.115	2.118	-0.003	1.000	196144	2.19		87.6	4193	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.115	2.119	-0.004	1.000	262144	1.21		121	2719	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.345	2.346	-0.001	1.000	1698546	1.01		101	3295	
363.00 > 169.00	2.345	2.346	-0.001	1.000	636035		2.67(1.13-3.40)		4700	
D 9 13C4-PFHpA										
367.00 > 322.00	2.345	2.346	-0.001	1.000	3877449	2.54		102	70214	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.358	2.359	-0.001	1.000	1967080	0.8425		92.6	11661	
399.00 > 99.00	2.358	2.359	-0.001	1.000	667633		2.95(1.50-4.49)		3332	
D 11 18O2 PFHxS										
403.00 > 84.00	2.358	2.359	-0.001	1.000	4863174	2.44		103	79718	
65 Adona										
377.00 > 251.00	2.395	2.396	-0.001	1.000	5016424	1.06		106	71145	
377.00 > 85.00	2.395	2.396	-0.001	1.000	2948532		1.70(0.84-2.53)		29338	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.674	2.683	-0.009	1.000	563187	1.04		110	4478	
D 12 M2-6:2FTS										
429.00 > 81.00	2.674	2.683	-0.009	1.000	774956	2.61		110	19984	
* 62 13C2-PFOA										
415.00 > 370.00	2.704	2.706	-0.002		3832076	2.50			80793	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.704	2.706	-0.002	1.000	1718302	1.02		102	1072	
413.00 > 169.00	2.704	2.706	-0.002	1.000	889875		1.93(0.84-2.52)		4176	
D 14 13C4 PFOA										
417.00 > 372.00	2.704	2.706	-0.002	1.000	3643977	2.52		101	69949	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.712	2.713	-0.001	1.000	1870515	0.9848		103	23895	
449.00 > 99.00	2.712	2.713	-0.001	1.000	490963		3.81(1.94-5.82)		7425	
20 Perfluorononanoic acid										
463.00 > 419.00	3.072	3.078	-0.006	1.000	1300789	1.00		100	2875	
463.00 > 169.00	3.072	3.078	-0.006	1.000	322418		4.03(1.90-5.69)		13904	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.072	3.078	-0.006	1.000	1485847	0.9324		100	12311	
499.00 > 99.00	3.072	3.078	-0.006	1.000	330376		4.50(2.31-6.93)		3419	
D 19 13C5 PFNA										
468.00 > 423.00	3.072	3.078	-0.006	1.000	3194686	2.62		105	68945	
D 18 13C4 PFOS										
503.00 > 80.00	3.072	3.078	-0.006	1.000	3473173	2.43		102	44498	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.287	3.287	0.0	1.000	2438979	0.9284		99.6	30627	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.408	3.414	-0.006	1.000	1978465	1.03		103	34797	
D 21 13C8 FOSA										
506.00 > 78.00	3.408	3.414	-0.006	1.000	4852084	2.40		95.9	47554	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.426	3.433	-0.007	1.000	1123997	0.9846		103	13703	
549.00 > 99.00	3.426	3.433	-0.007	1.000	422644		2.66(1.33-3.97)		6183	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.426	3.433	-0.007	1.000	521523	0.9845		103	8122	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.426	3.433	-0.007	1.000	1031606	2.64		110	13049	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.436	3.442	-0.006	1.000	1066186	0.9555		95.5	6285	
513.00 > 169.00	3.436	3.442	-0.006	1.000	200998		5.30(2.36-7.09)		5331	
D 23 13C2 PFDA										
515.00 > 470.00	3.436	3.442	-0.006	1.000	2720348	2.56		102	35154	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.597	3.605	-0.008	1.003	511281	1.07		107	4077	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.586	3.605	-0.019	1.000	1154400	2.48		99.1	26240	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.751	3.759	-0.008	1.000	888545	0.9269		96.1	7824	
599.00 > 99.00	3.751	3.759	-0.008	1.000	314775		2.82(1.39-4.16)		3919	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.761	3.769	-0.008	1.000	1274054	2.50		99.9	3457	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.772	3.780	-0.008	1.000	662853	0.9253		92.5	3340	
563.00 > 169.00	3.772	3.780	-0.008	1.000	192327		3.45(2.12-6.36)		8575	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.772	3.780	-0.008	1.003	474832	0.9509		95.1	12049	
D 30 13C2 PFUnA										
565.00 > 520.00	3.772	3.780	-0.008	1.000	2274536	2.62		105	68708	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.928	3.929	-0.001	1.000	3578205	0.9230		98.0	74432	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.061	4.069	-0.008	1.000	939788	0.9799		98.0	572	
613.00 > 169.00	4.061	4.069	-0.008	1.000	236401		3.98(2.13-6.40)		3958	
D 36 13C2 PFDoA										
615.00 > 570.00	4.061	4.069	-0.008	1.000	2294710	2.53		101	18254	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.329	4.339	-0.010	1.000	936473	0.9818		98.2	383	
663.00 > 169.00	4.329	4.339	-0.010	1.000	289320		3.24(1.25-3.76)		3165	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.563	4.572	-0.009	1.000	247552	0.9383		93.8	3310	
713.00 > 219.00	4.563	4.572	-0.009	1.000	183215		1.35(0.71-2.13)		3404	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.563	4.572	-0.009	1.000	2477792	2.51		100	15359	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.984	4.990	-0.006	1.000	1566427	1.04		104	371	
813.00 > 169.00	4.984	4.990	-0.006	1.000	258505		6.06(2.86-8.58)		2546	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.984	4.990	-0.006	1.000	3937761	2.51		100	12783	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.350	5.355	-0.005	1.000	1676435	1.04		104	274	
913.00 > 169.00	5.350	5.355	-0.005	1.000	209136		8.02(3.83-11.48)		2120	

Report Date: 14-May-2018 10:44:13 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_016.d

Injection Date: 13-May-2018 17:27:56 Instrument ID: A8_N

Lims ID: LCS 320-222819/2-A

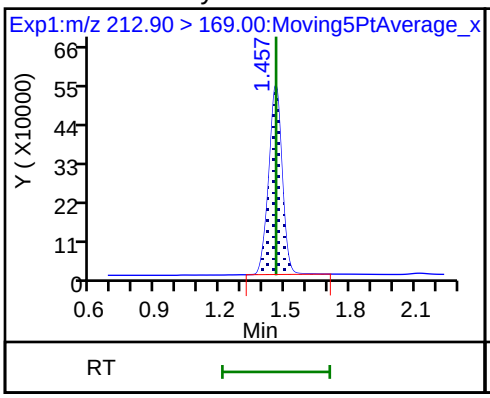
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 3

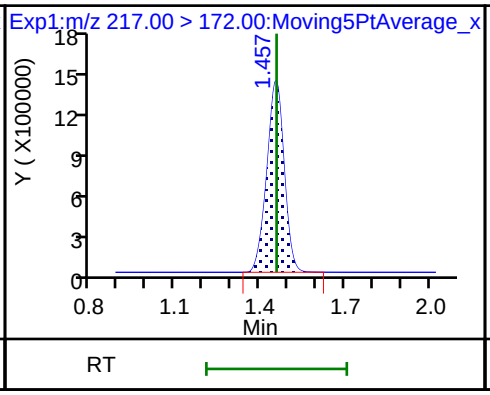
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

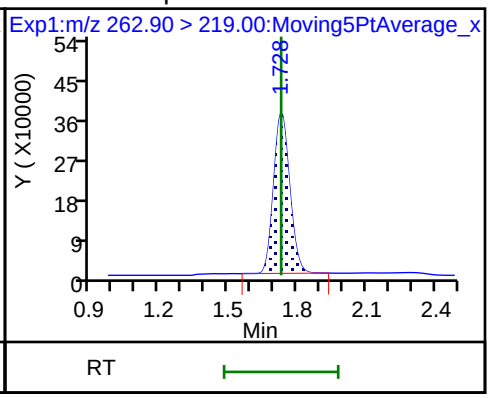
2 Perfluorobutyric acid



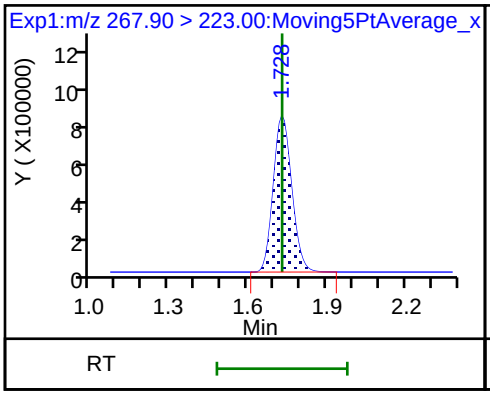
D 1 13C4 PFBA



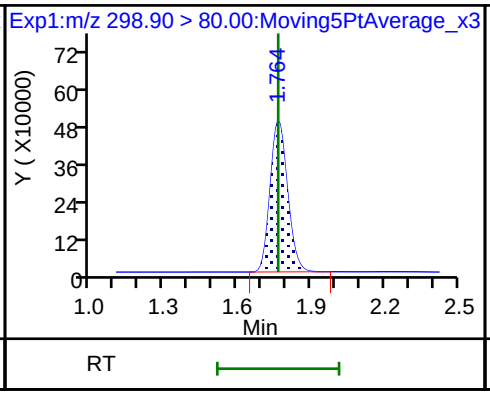
4 Perfluoropentanoic acid



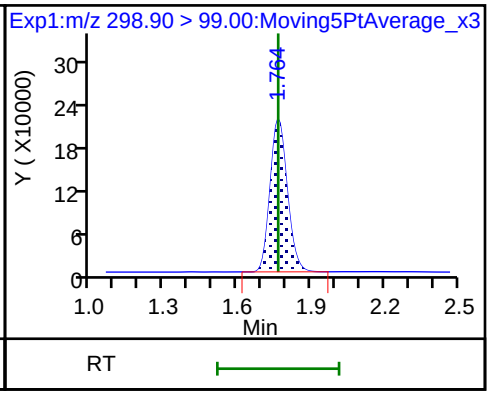
D 3 13C5-PFPeA



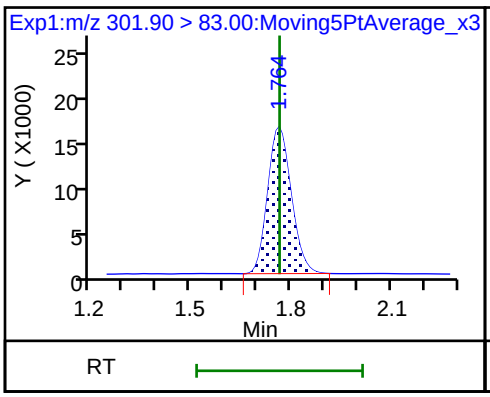
5 Perfluorobutanesulfonic acid



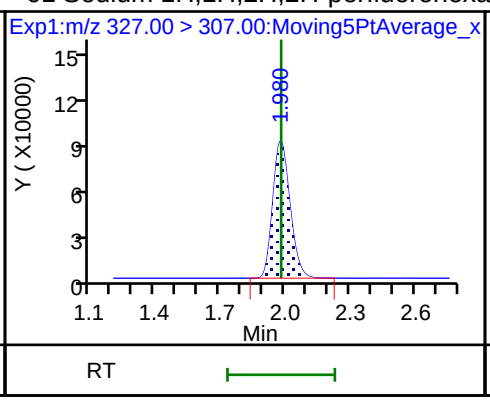
5 Perfluorobutanesulfonic acid



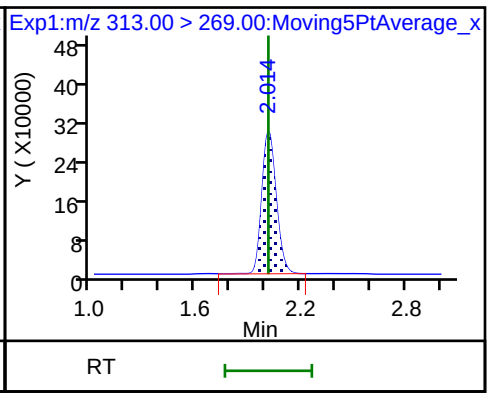
D 47 13C3-PFBS



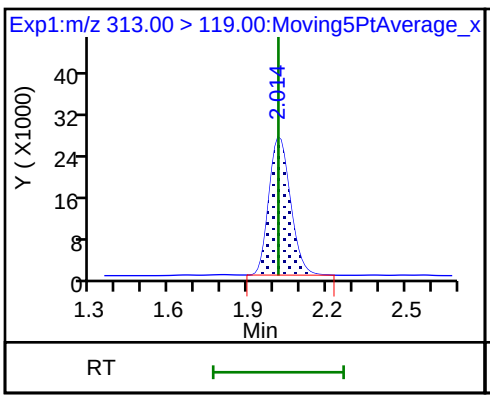
61 Sodium 1H,1H,2H,2H-perfluorohexane



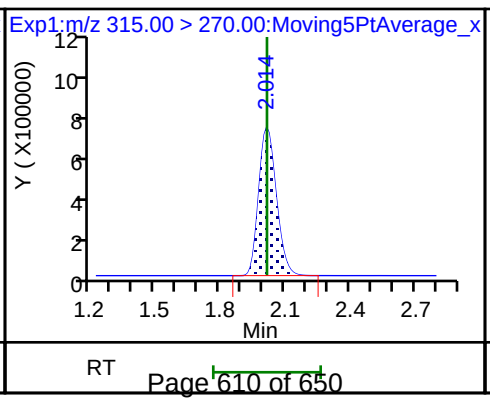
6 Perfluorohexanoic acid



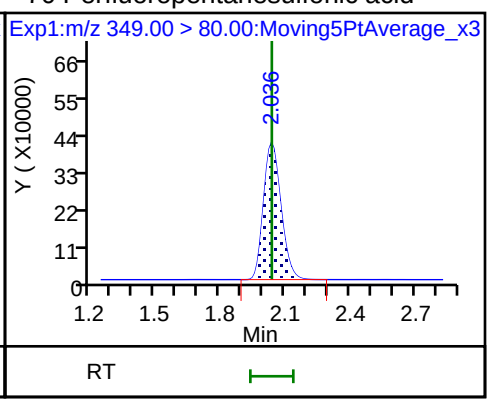
6 Perfluorohexanoic acid



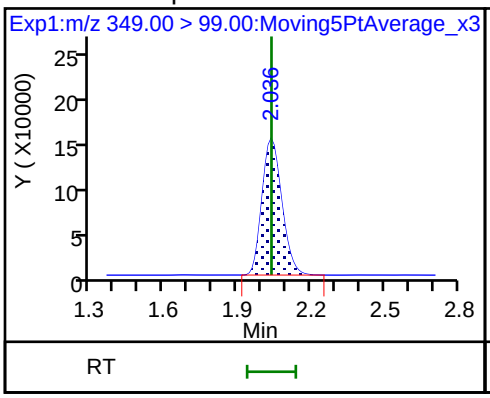
D 7 13C2 PFHxA



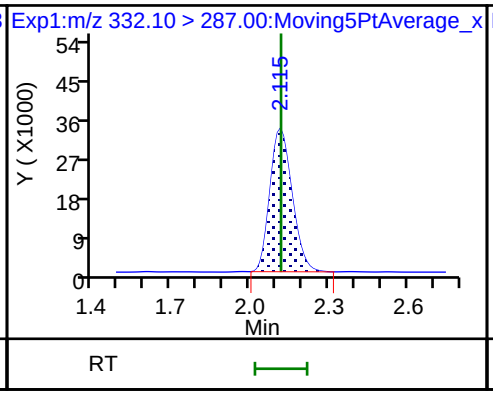
70 Perfluoropentanesulfonic acid



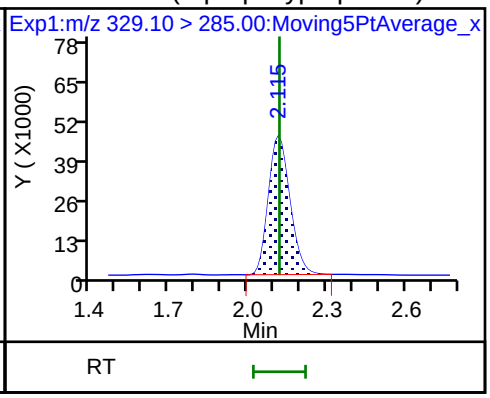
70 Perfluoropentanesulfonic acid



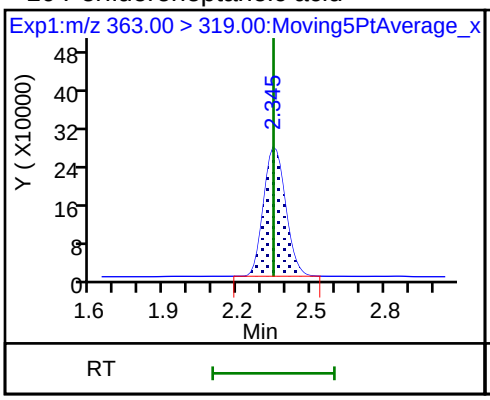
D 64 13C3 HFPO-DA



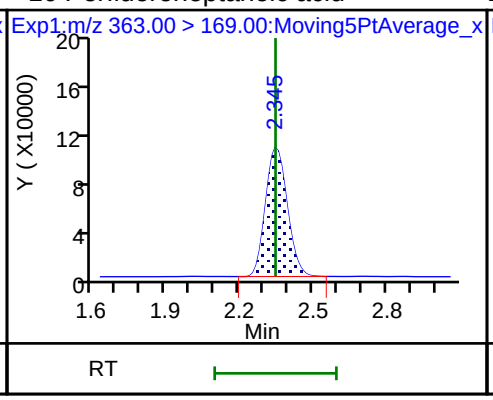
67 Perfluoro(2-propoxypropanoic) acid



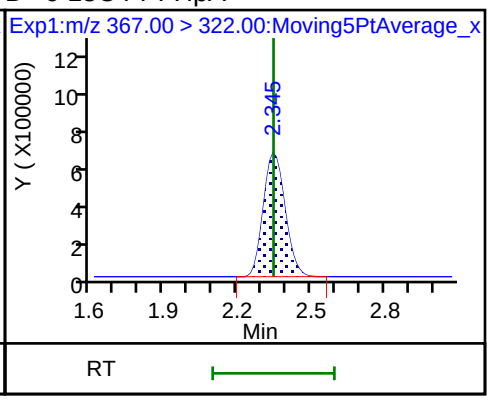
10 Perfluoroheptanoic acid



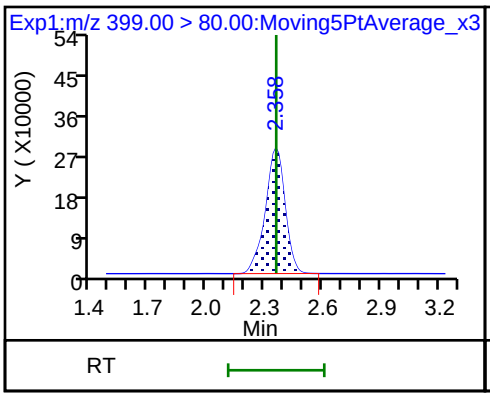
10 Perfluoroheptanoic acid



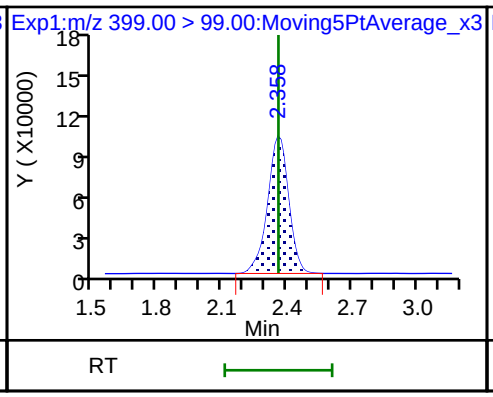
D 9 13C4-PFHpA



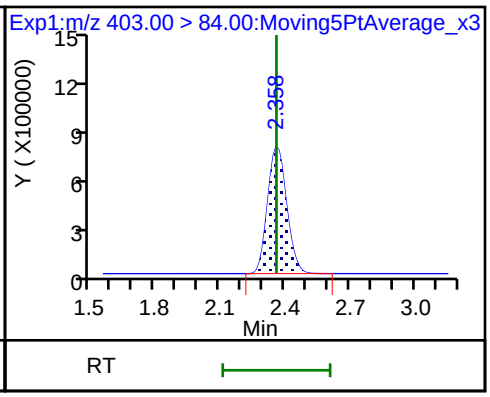
8 Perfluorohexanesulfonic acid



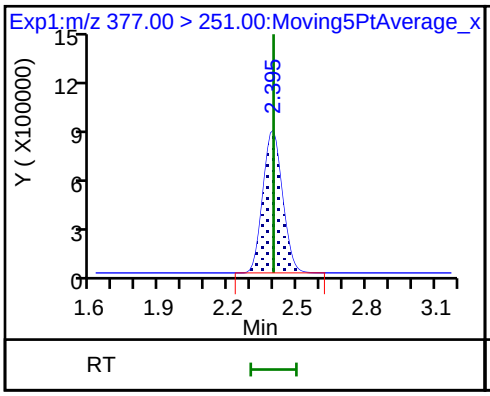
8 Perfluorohexanesulfonic acid



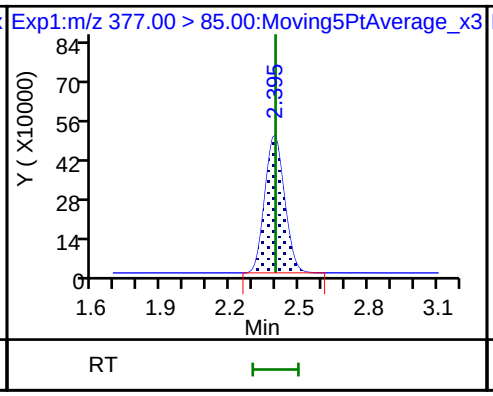
D 11 18O2 PFHxS



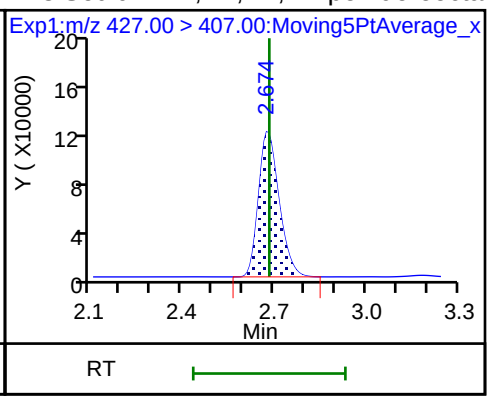
65 Adona



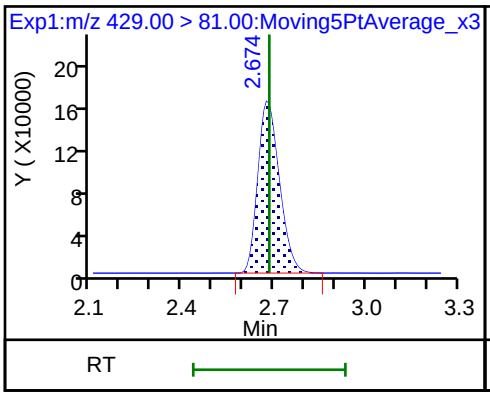
65 Adona



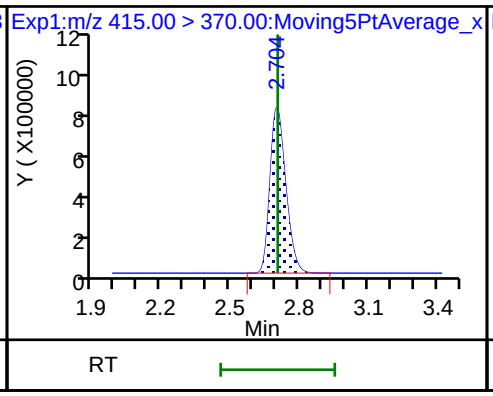
13 Sodium 1H,1H,2H,2H-perfluorooctane



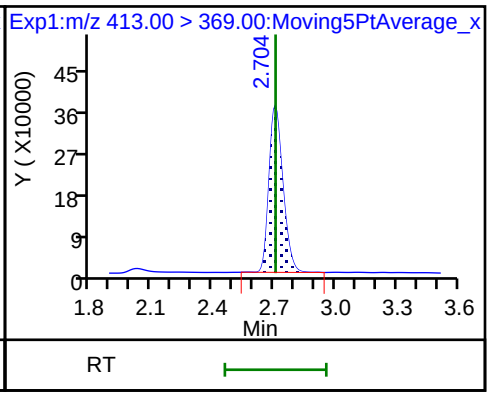
D 12 M2-6:2FTS



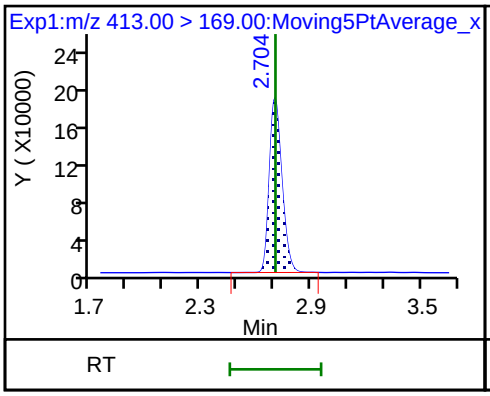
* 62 13C2-PFOA



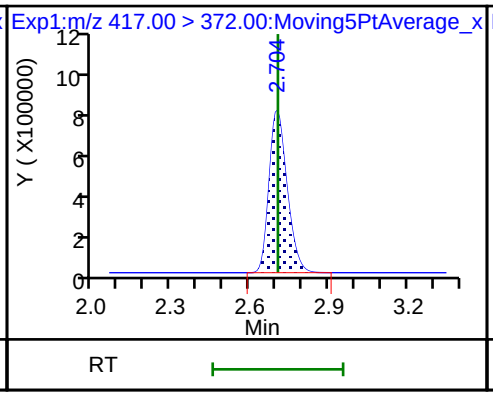
15 Perfluorooctanoic acid



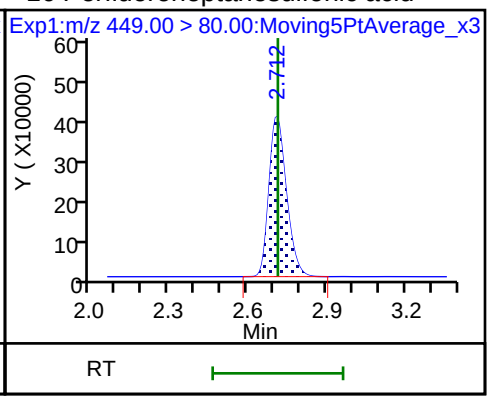
15 Perfluorooctanoic acid



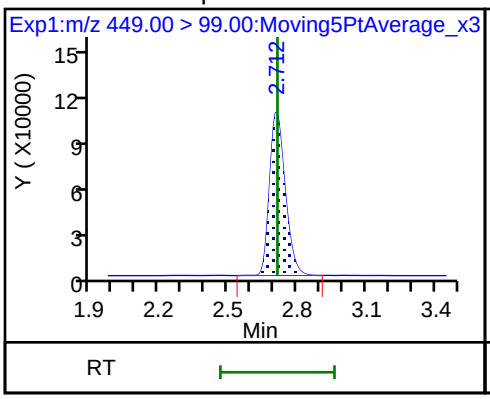
D 14 13C4 PFOA



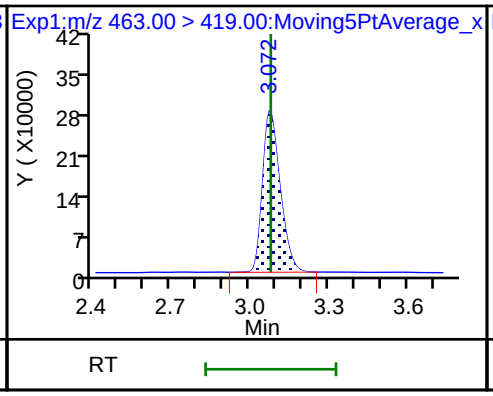
16 Perfluoroheptanesulfonic acid



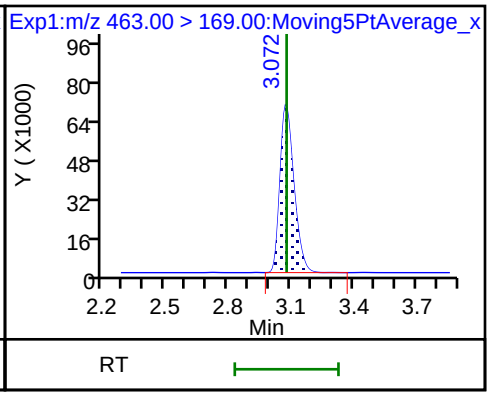
16 Perfluoroheptanesulfonic acid



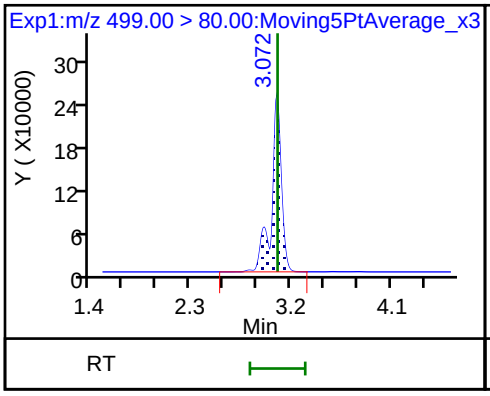
20 Perfluorononanoic acid



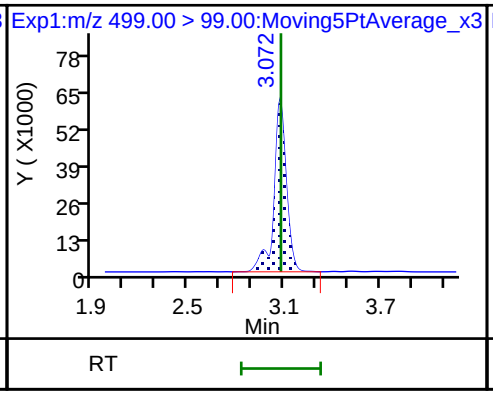
20 Perfluorononanoic acid



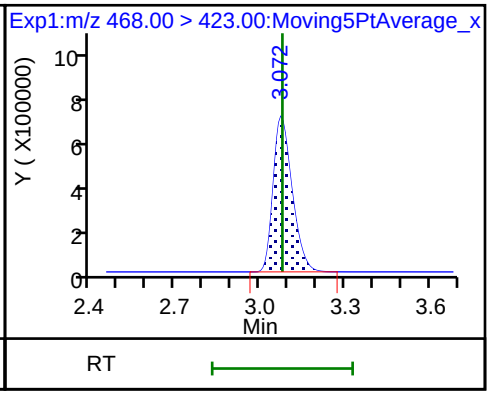
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



D 19 13C5 PFNA



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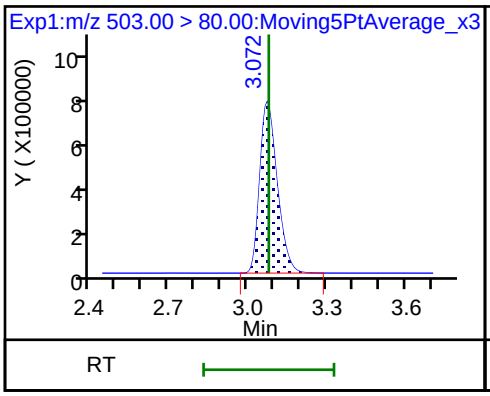
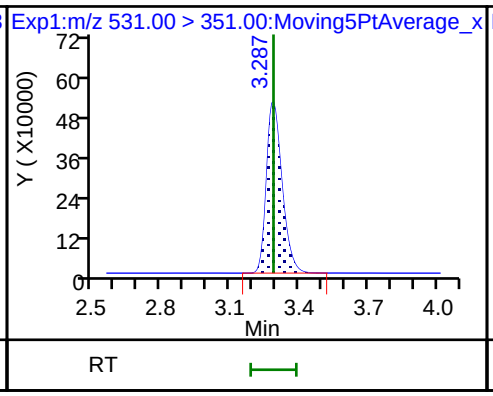
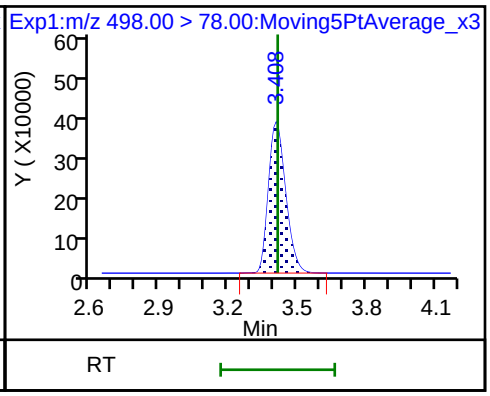


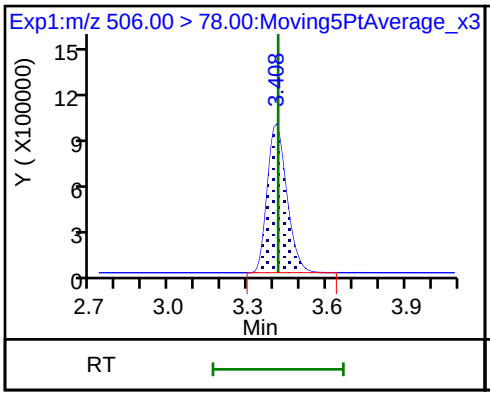
69 9-Chlorohexadecafluoro-3-oxanonane



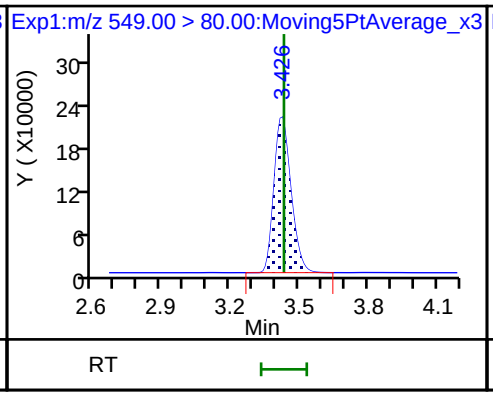
22 Perfluorooctane Sulfonamide



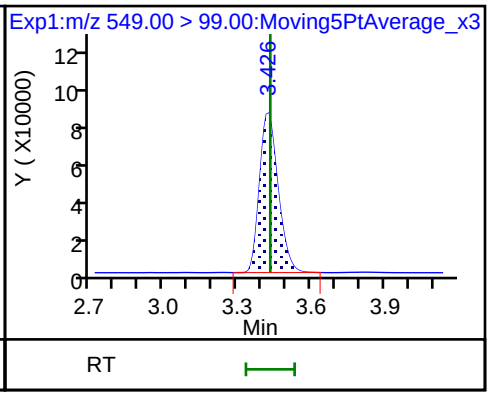
D 21 13C8 FOSA



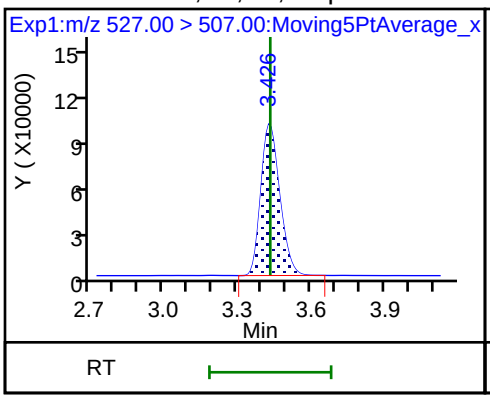
68 Perfluorononanesulfonic acid



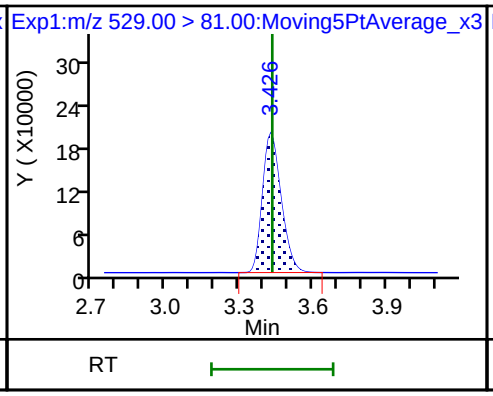
68 Perfluorononanesulfonic acid



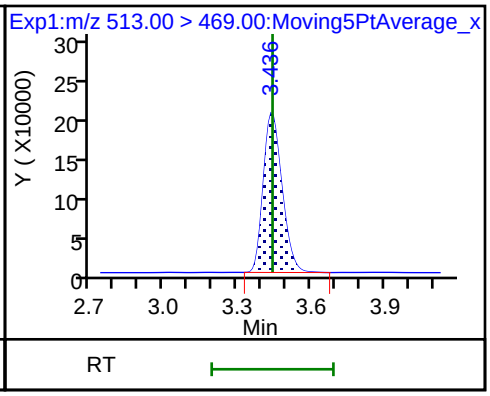
25 Sodium 1H,1H,2H,2H-perfluorodecane



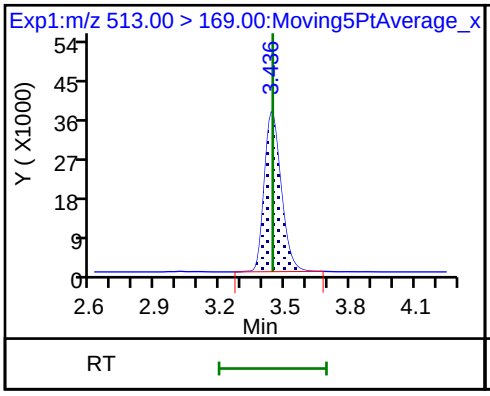
D 26 M2-8:2FTS



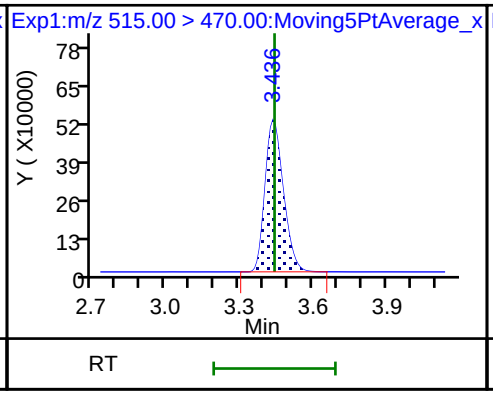
24 Perfluorodecanoic acid



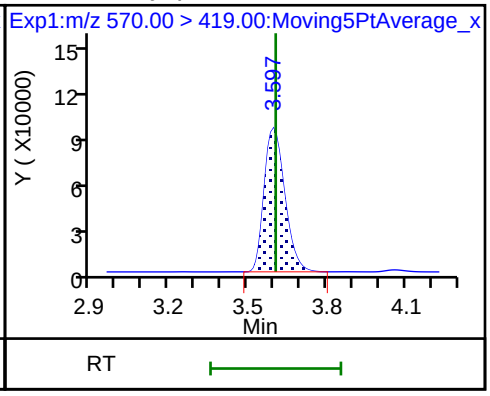
24 Perfluorodecanoic acid



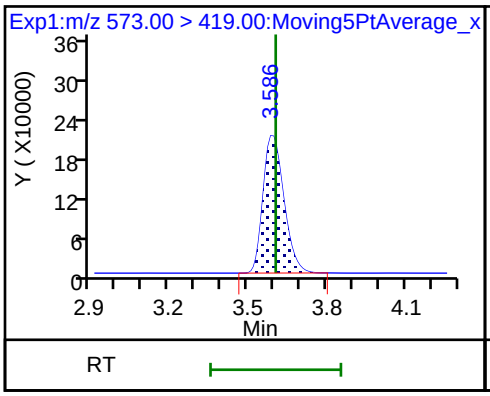
D 23 13C2 PFDA



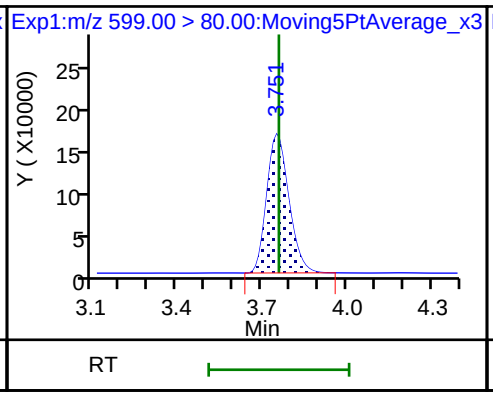
28 N-methyl perfluorooctane sulfonami



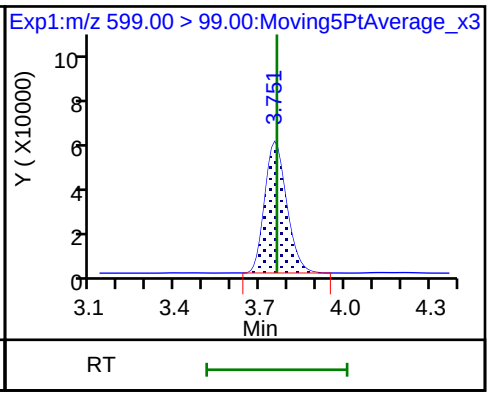
D 27 d3-NMeFOSAA



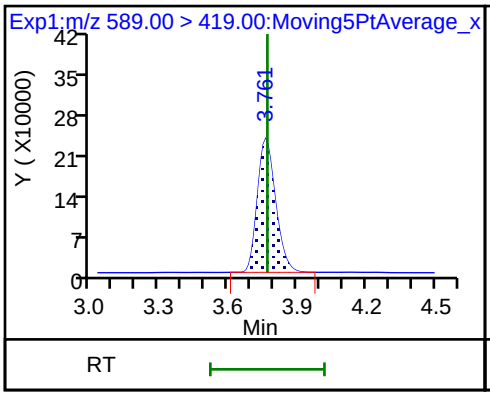
29 Perfluorodecane Sulfonic acid



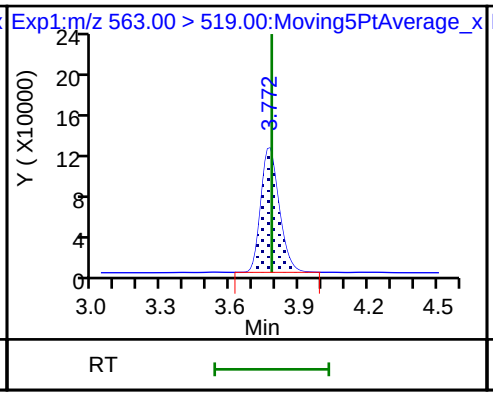
29 Perfluorodecane Sulfonic acid



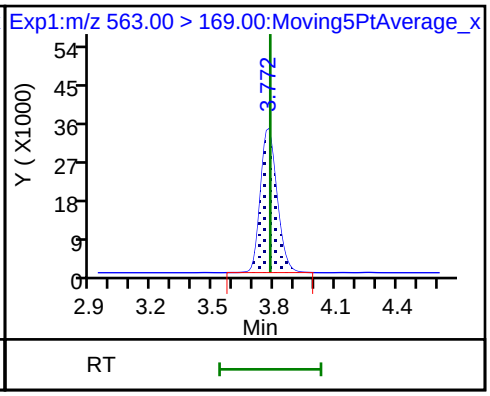
D 32 d5-NEtFOSAA



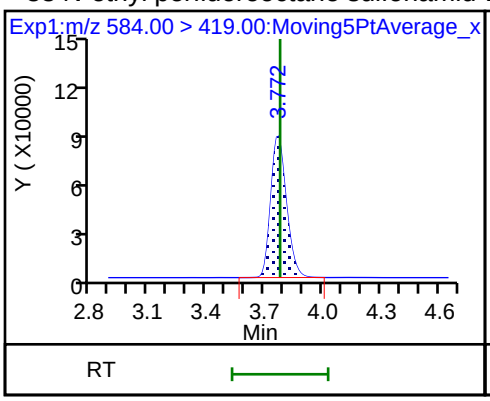
31 Perfluoroundecanoic acid



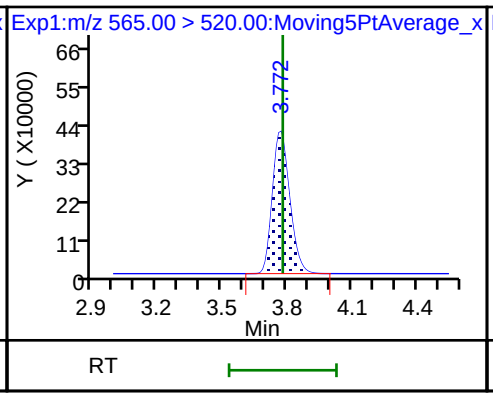
31 Perfluoroundecanoic acid



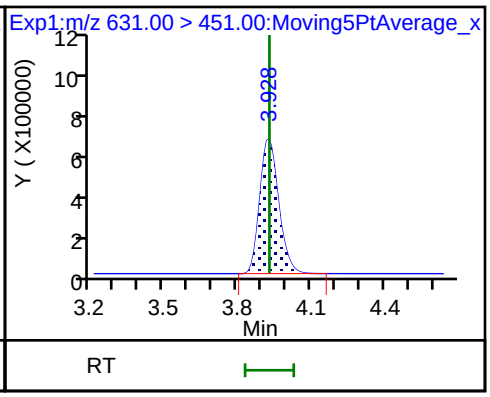
33 N-ethyl perfluorooctane sulfonamid



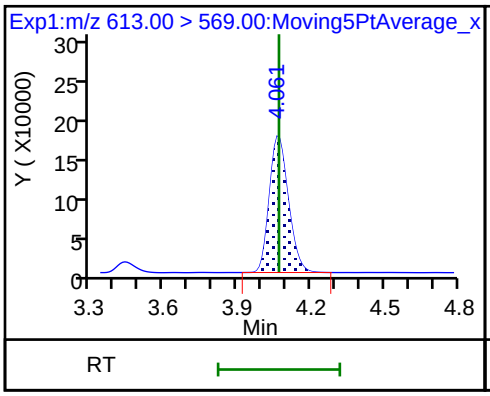
D 30 13C2 PFUnA



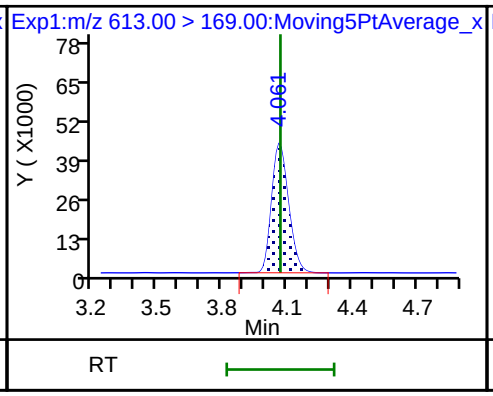
66 11-Chloroeicosafluoro-3-oxaundecan



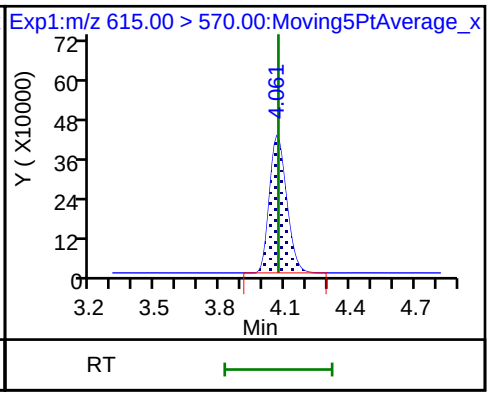
37 Perfluorododecanoic acid



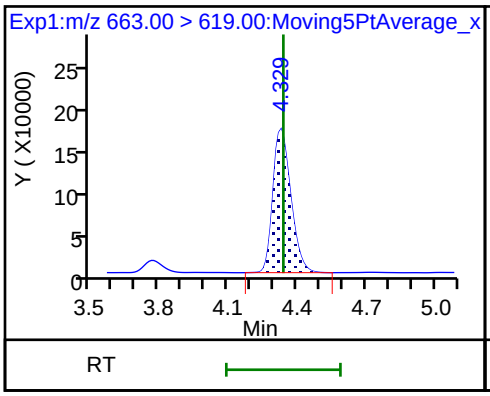
37 Perfluorododecanoic acid



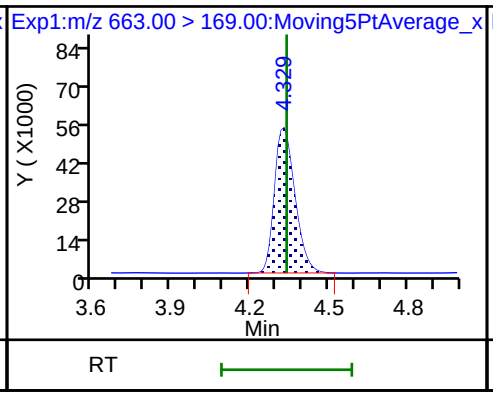
D 36 13C2 PFDoA



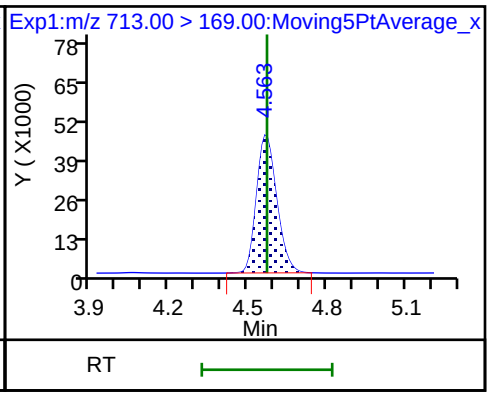
41 Perfluorotridecanoic acid



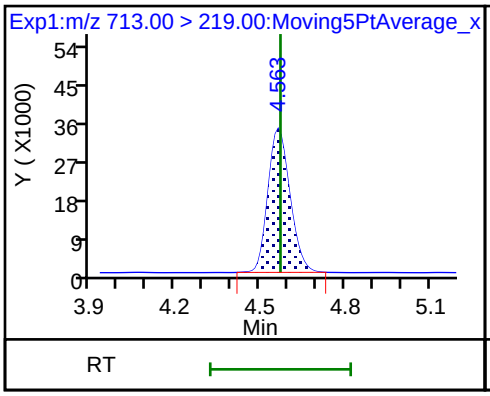
41 Perfluorotridecanoic acid



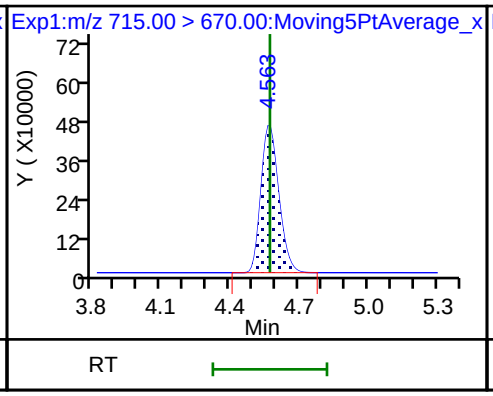
42 Perfluorotetradecanoic acid



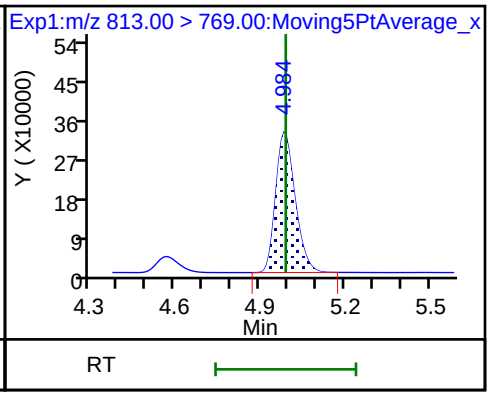
42 Perfluorotetradecanoic acid



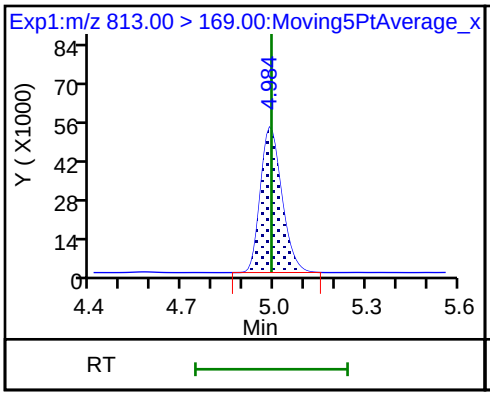
D 43 13C2-PFTeDA



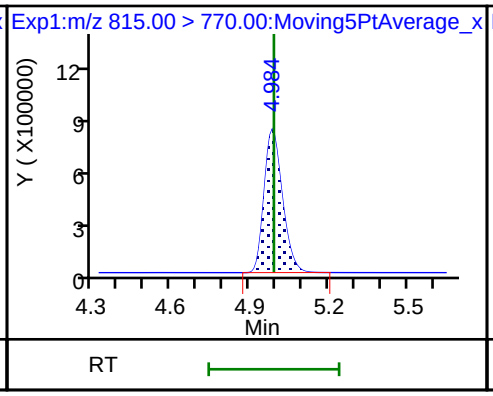
45 Perfluorohexadecanoic acid



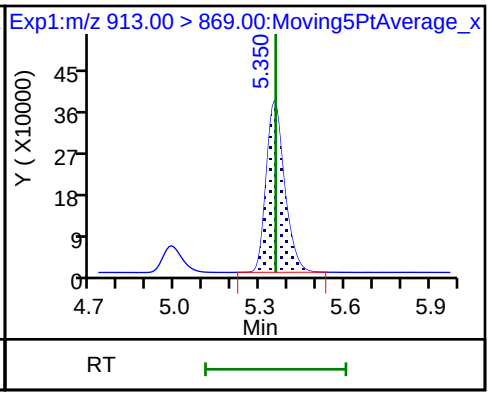
45 Perfluorohexadecanoic acid



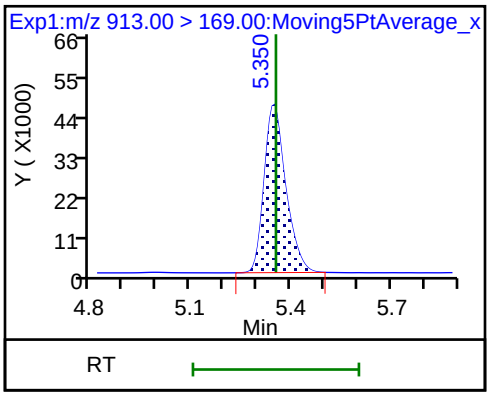
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-222510/3-A

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_045.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 250.0(mL) | Date Analyzed: 05/14/2018 17:21

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	41.9		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	37.2		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	40.9		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	41.3		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	43.8		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	39.4		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	38.7		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	36.9		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	38.7		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	37.2		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	38.1		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	36.3		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	35.1		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	37.8		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	36.0		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	36.1		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	40.2		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	42.5		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0		20	1.9
27619-97-2	6:2FTS	76.1		20	2.0
39108-34-4	8:2FTS	38.9		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-222510/3-A

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_045.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 250.0(mL) | Date Analyzed: 05/14/2018 17:21

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		25-150
STL01893	13C5 PFPeA	102		25-150
STL00993	13C2 PFHxA	100		25-150
STL01892	13C4-PFHpA	102		25-150
STL00990	13C4 PFOA	98		25-150
STL00995	13C5 PFNA	103		25-150
STL00996	13C2 PFDA	106		25-150
STL00997	13C2 PFUnA	103		25-150
STL00998	13C2 PFDoA	105		25-150
STL02116	13C2-PFTeDA	107		25-150
STL02337	13C3-PFBS	95		25-150
STL00994	18O2 PFHxS	97		25-150
STL00991	13C4 PFOS	100		25-150
STL01056	13C8 FOSA	90		25-150
STL02118	d3-NMeFOSAA	93		25-150
STL02117	d5-NEtFOSAA	98		25-150
STL02279	M2-6:2FTS	105		25-150
STL02280	M2-8:2FTS	108		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_045.d
Lims ID: LCSD 320-222510/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 14-May-2018 17:21:19 ALS Bottle#: 29 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 320-222510/3-A
Misc. Info.: Plate: 1 Rack: 2
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 15:09:10 Calib Date: 14-May-2018 12:47:40
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180514-58132.b\2017.05.14LLC_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK005

First Level Reviewer: westendorfc Date: 15-May-2018 14:54:13

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.452	0.0	1.000	5662727	2.44		97.6	48060	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.457	0.001	1.004	2206865	1.05		105	1293	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.730	1.728	0.002	1.000	1661876	0.9291		92.9	808	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.728	0.002	0.561	3675966	2.56		102	58870	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.766	1.764	0.002	1.000	2261935	0.9077		103	12019	
298.90 > 99.00	1.766	1.764	0.002	1.000	953366		2.37(1.25-3.74)		5993	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.764	0.002	1.000	75081	2.21		95.2	503	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.982	1.980	0.002	1.000	434330	1.03		110	19639	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.016	2.014	0.002	1.000	1609837	1.02		102	2988	
313.00 > 119.00	2.016	2.014	0.002	1.000	138070		11.66(5.03-15.10)		1910	
D 7 13C2 PFHxA										
315.00 > 270.00	2.016	2.014	0.002	1.000	3768805	2.51		100	82925	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.038	2.036	0.002	1.000	2164544	0.9715		104	32120	
349.00 > 99.00	2.038	2.036	0.002	1.000	787756		2.75(1.36-4.07)		9333	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.117	2.116	0.001	1.000	257662	0.9232		92.3	2168	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.117	2.116	0.001	1.000	206222	2.69		108	6053	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.347	2.345	0.002	1.000	1608667	1.03		103	2589	
363.00 > 169.00	2.347	2.345	0.002	1.000	615564		2.61(1.13-3.40)		4303	
D 9 13C4-PFHpA										
367.00 > 322.00	2.347	2.345	0.002	1.000	3669273	2.55		102	85418	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.360	2.358	0.002	0.995	1827777	0.8773		96.4	12003	
399.00 > 99.00	2.360	2.358	0.002	0.995	602953		3.03(1.50-4.49)		1866	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.358	0.014	1.000	4374156	2.28		96.5	90053	
65 Adona										
377.00 > 251.00	2.395	2.395	0.0	1.000	4621698	1.07		107	66430	
377.00 > 85.00	2.395	2.395	0.0	1.000	2659733		1.74(0.84-2.53)		18949	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.682	2.682	0.0	1.000	954833	1.90		201	8523	
D 12 M2-6:2FTS										
429.00 > 81.00	2.682	2.682	0.0	1.000	707964	2.49		105	13584	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.712	2.704	0.008	1.000	1749633	1.10		110	936	
413.00 > 169.00	2.712	2.704	0.008	1.000	913529		1.92(0.84-2.52)		3418	
* 62 13C2-PFOA										
415.00 > 370.00	2.712	2.704	0.008		3585945	2.50			63517	
D 14 13C4 PFOA										
417.00 > 372.00	2.712	2.704	0.008	1.000	3322469	2.46		98.3	50484	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.720	2.712	0.008	1.000	1657570	0.9438		99.1	24953	
449.00 > 99.00	2.712	2.712	0.0	0.997	438457		3.78(1.94-5.82)		5122	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.081	3.073	0.008	1.000	1337773	0.9002		97.0	10562	
499.00 > 99.00	3.081	3.073	0.008	1.000	302814		4.42(2.31-6.93)		2608	
D 18 13C4 PFOS										
503.00 > 80.00	3.081	3.073	0.008	1.000	3181161	2.38		99.6	32409	
20 Perfluorononanoic acid										
463.00 > 419.00	3.081	3.081	0.0	1.000	1208308	0.9848		98.5	2640	
463.00 > 169.00	3.089	3.081	0.008	1.003	285668		4.23(1.90-5.69)		10012	
D 19 13C5 PFNA										
468.00 > 423.00	3.081	3.081	0.0	1.000	2909569	2.58		103	50724	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.295	3.287	0.008	1.000	2314178	0.9742		105	25210	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.416	3.407	0.009	1.000	1728546	1.01		101	22067	
D 21 13C8 FOSA										
506.00 > 78.00	3.416	3.407	0.009	1.000	4362712	2.26		90.2	43990	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.435	3.426	0.009	1.000	1009864	0.99		103	17507	
549.00 > 99.00	3.435	3.426	0.009	1.000	366894		2.75(1.33-3.97)		3194	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.435	3.435	0.0	1.000	505416	0.9723		101	10612	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.435	3.435	0.0	1.000	957002	2.58		108	12974	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.444	3.444	0.0	1.000	1016328	0.9680		96.8	6428	
513.00 > 169.00	3.444	3.444	0.0	1.000	177874		5.71(2.36-7.09)		3761	
D 23 13C2 PFDA										
515.00 > 470.00	3.444	3.444	0.0	1.000	2564908	2.64		106	44094	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.607	3.596	0.011	1.000	1027612	2.33		93.3	30225	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.607	3.607	0.0	1.000	456222	1.06		106	3776	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.761	3.761	0.0	1.000	794681	0.9027		93.6	10235	
599.00 > 99.00	3.761	3.761	0.0	1.000	275408		2.89(1.39-4.16)		5469	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.771	3.771	0.0	1.000	601681	0.9233		92.3	2425	
563.00 > 169.00	3.771	3.771	0.0	1.000	166120		3.62(2.12-6.36)		5001	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.771	3.771	0.0	1.000	433029	1.00		100	9747	
D 30 13C2 PFUnA										
565.00 > 520.00	3.771	3.771	0.0	1.000	2087862	2.57		103	75421	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.771	3.771	0.0	1.000	1148411	2.44		97.6	2980	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.938	3.928	0.010	1.000	3273949	0.9011		95.7	75254	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.071	4.071	0.0	1.000	897272	0.9685		96.9	556	
613.00 > 169.00	4.071	4.071	0.0	1.000	230615		3.89(2.13-6.40)		3231	
D 36 13C2 PFDoA										
615.00 > 570.00	4.071	4.071	0.0	1.000	2228584	2.62		105	19562	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.340	4.340	0.0	1.000	895692	0.9307		93.1	362	
663.00 > 169.00	4.340	4.340	0.0	1.000	287738		3.11(1.25-3.76)		3488	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.572	4.574	-0.002	1.000	243476	0.9517		95.2	2847	
713.00 > 219.00	4.572	4.574	-0.002	1.000	177087		1.37(0.71-2.13)		2381	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.572	4.574	-0.002	1.000	2470525	2.67		107	16001	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.000	4.993	0.007	1.002	1475884	1.05		105	342	
813.00 > 169.00	4.991	4.993	-0.002	1.000	251379		5.87(2.86-8.58)		1970	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.991	4.993	-0.002	1.000	3739506	2.54		102	11018	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.362	5.364	-0.002	1.000	1712892	1.08		108	303	
913.00 > 169.00	5.362	5.364	-0.002	1.000	216765		7.90(3.83-11.48)		2042	

Report Date: 15-May-2018 15:09:20 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58152.b\2018.05.14LLAxxx_045.d

Injection Date: 14-May-2018 17:21:19 Instrument ID: A8_N

Lims ID: LCSD 320-222510/3-A

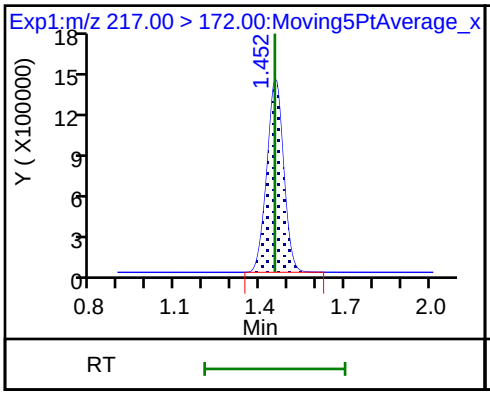
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 4

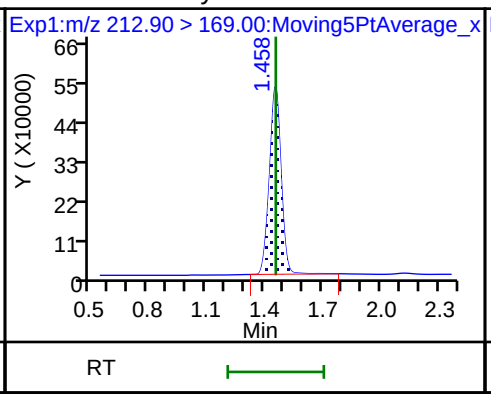
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

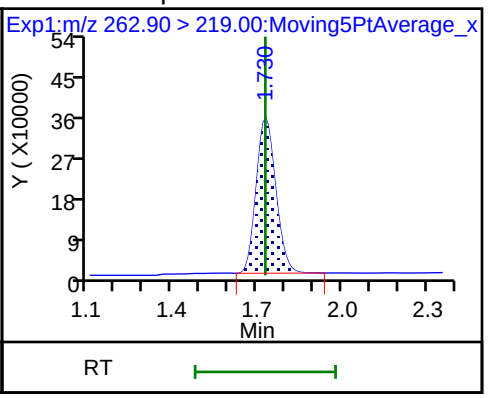
D 1 13C4 PFBA



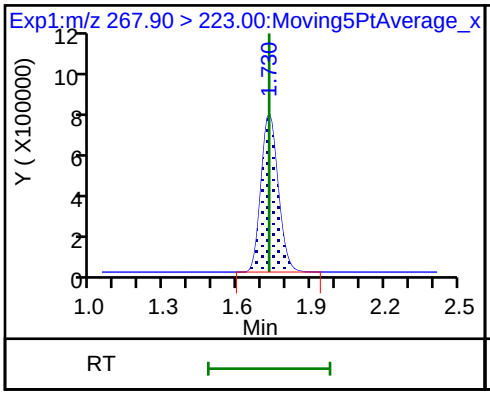
2 Perfluorobutyric acid



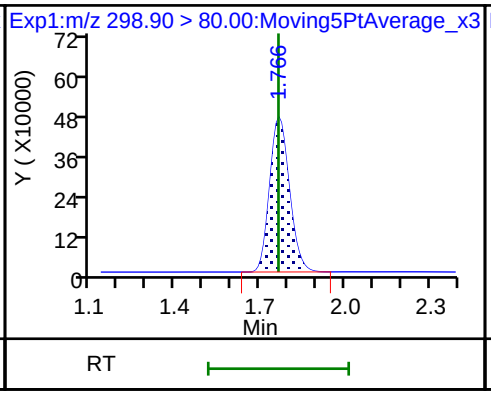
4 Perfluoropentanoic acid



D 3 13C5-PFPeA



5 Perfluorobutanesulfonic acid



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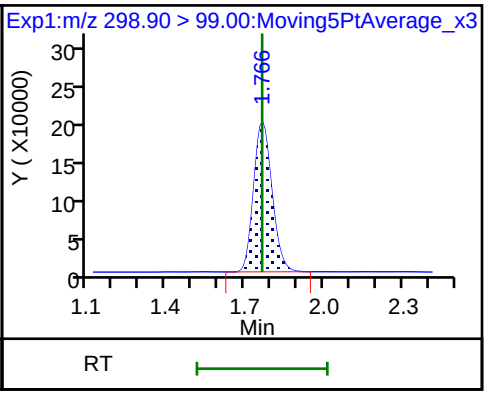
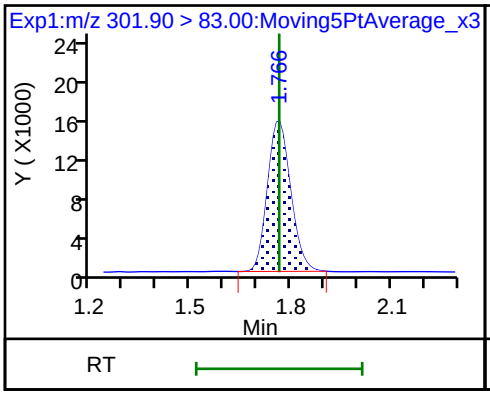
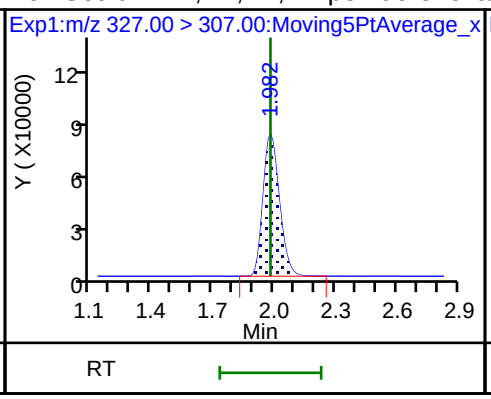


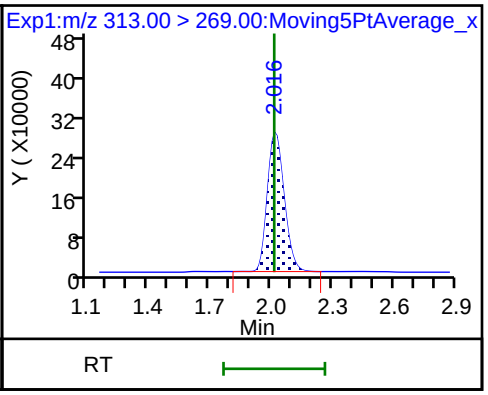
D 47 13C3-PFBS



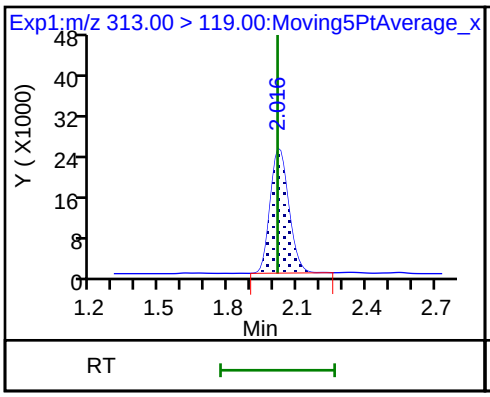
61 Sodium 1H,1H,2H,2H-perfluorohexane



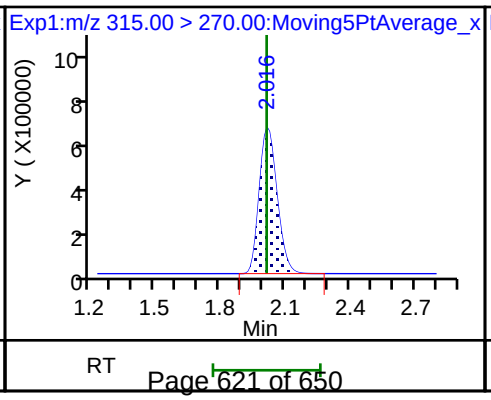
6 Perfluorohexanoic acid



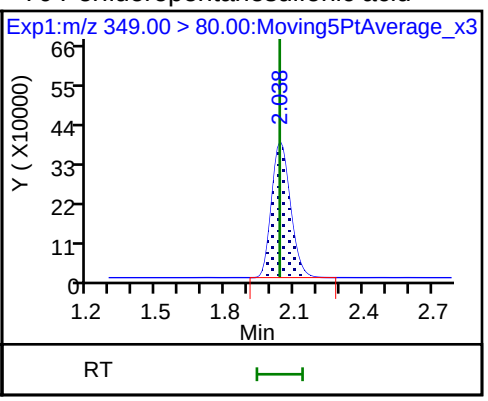
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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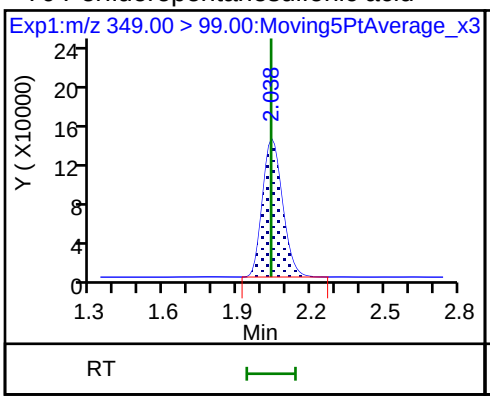
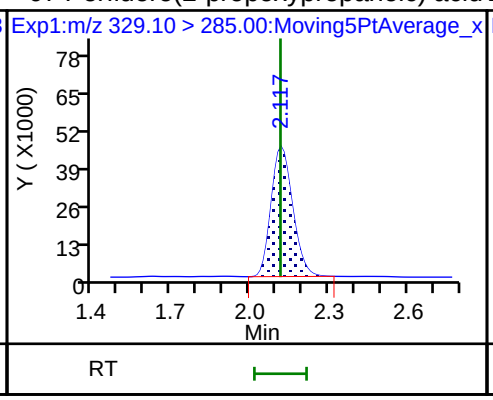
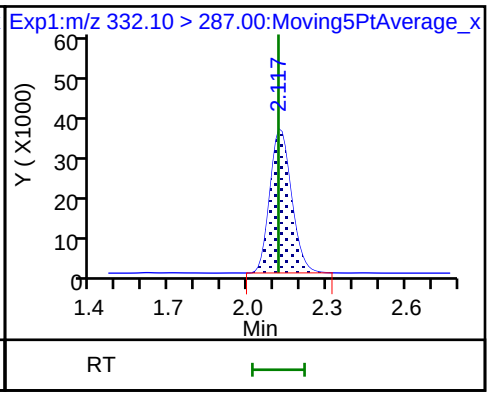


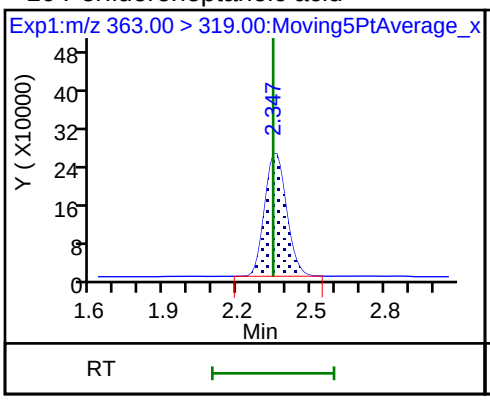
67 Perfluoro(2-propoxypropanoic) acid



D 64 13C3 HFPO-DA



10 Perfluoroheptanoic acid



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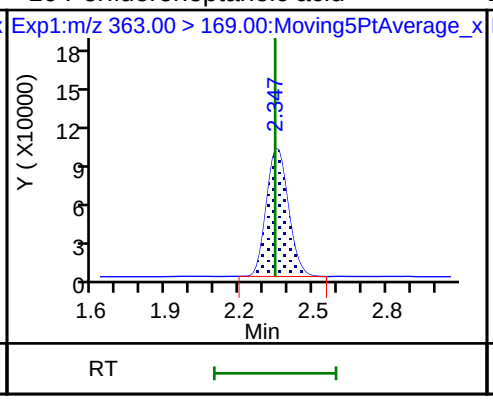
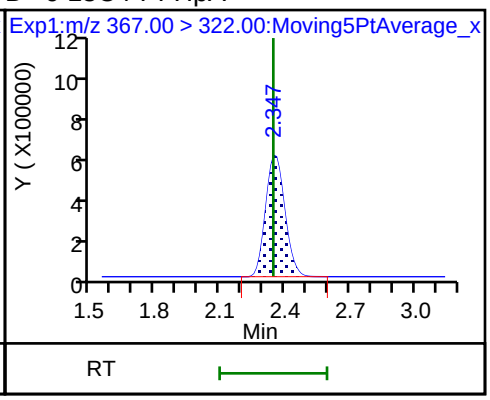
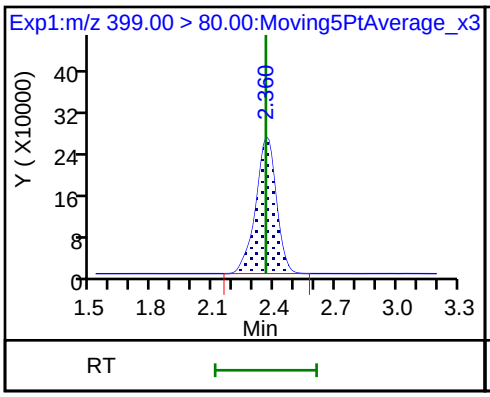


D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid



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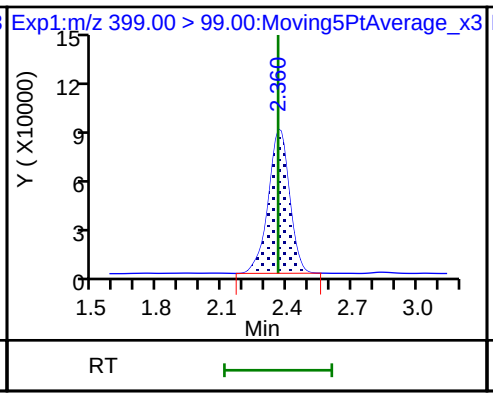
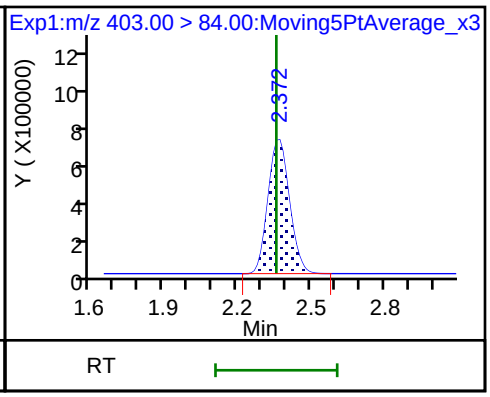
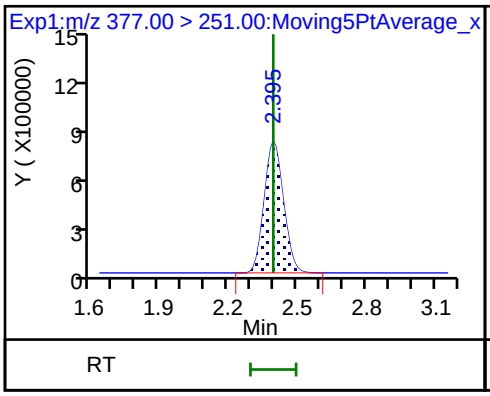


D 11 18O2 PFHxS



65 Adona



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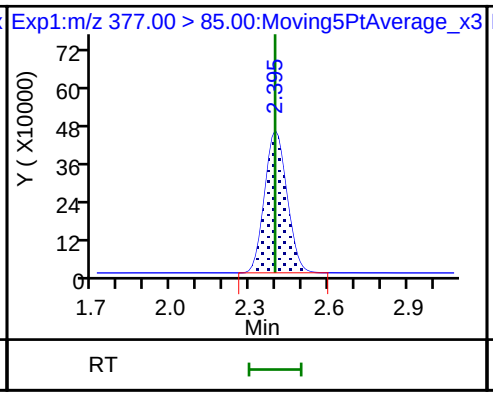
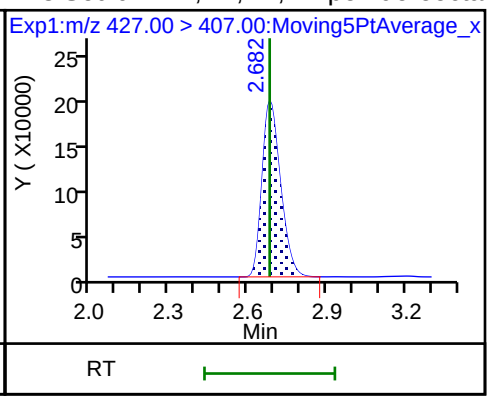
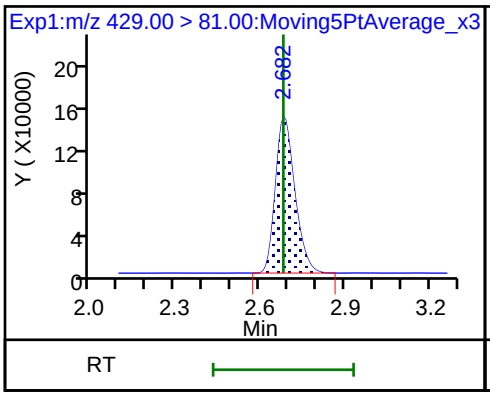


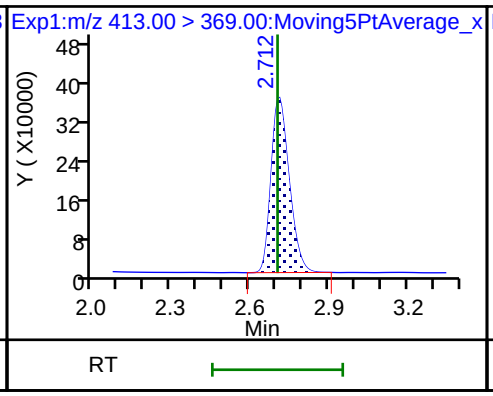
13 Sodium 1H,1H,2H,2H-perfluorooctane



D 12 M2-6:2FTS



15 Perfluorooctanoic acid



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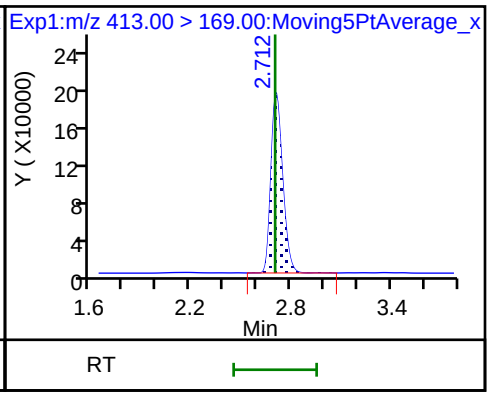
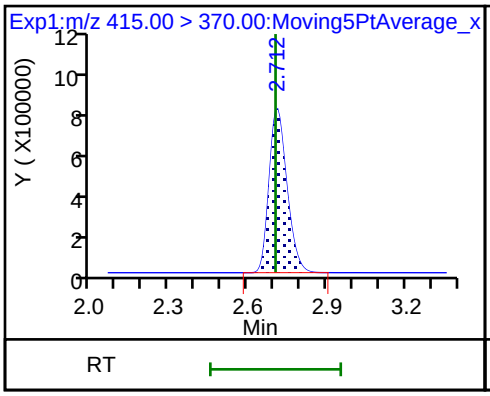
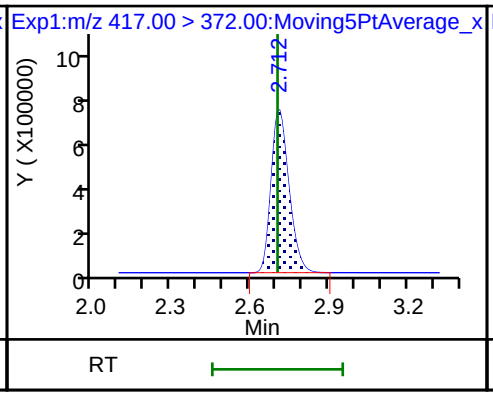


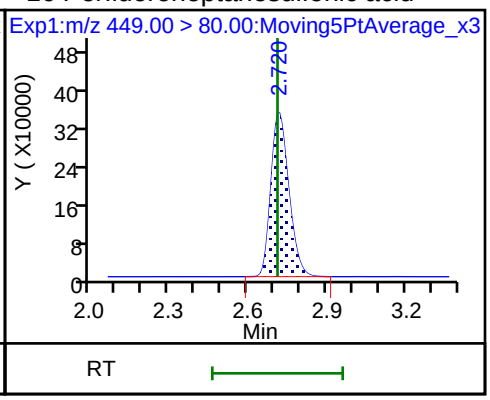
* 62 13C2-PFOA



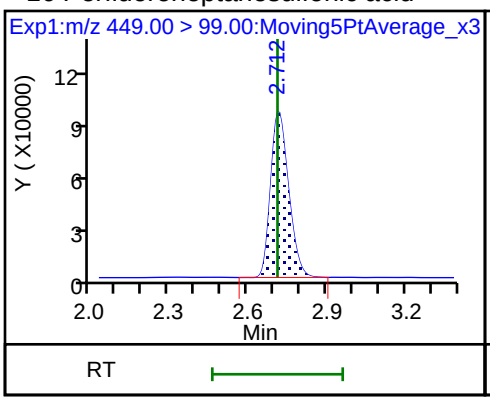
D 14 13C4 PFOA



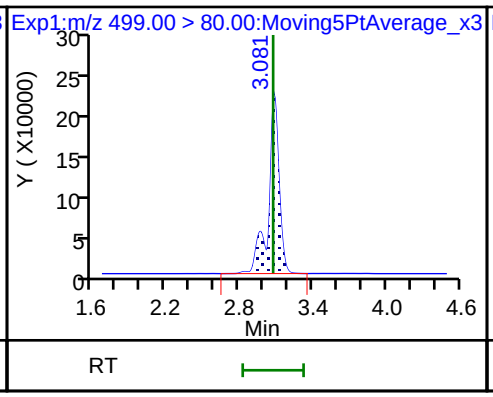
16 Perfluoroheptanesulfonic acid



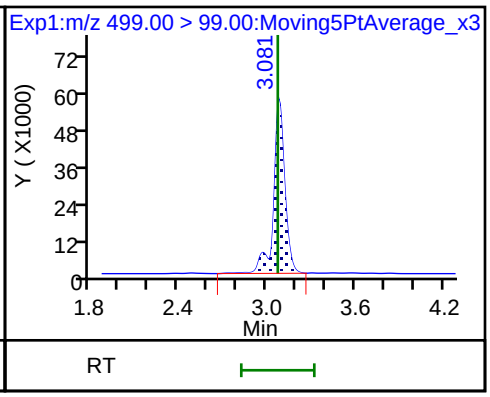
16 Perfluoroheptanesulfonic acid



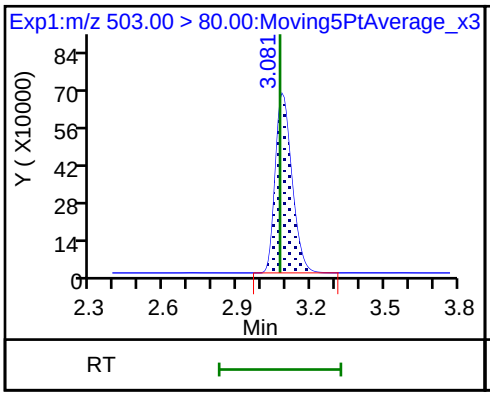
17 Perfluorooctane sulfonic acid



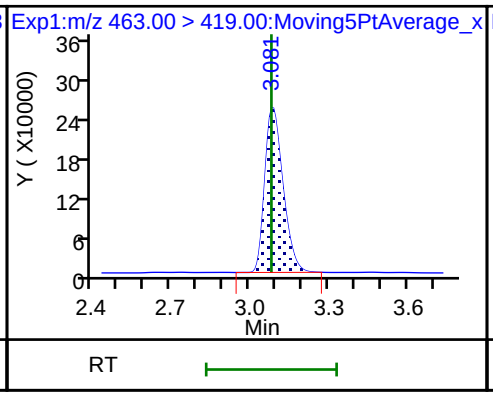
17 Perfluorooctane sulfonic acid



D 18 13C4 PFOS



20 Perfluorononanoic acid



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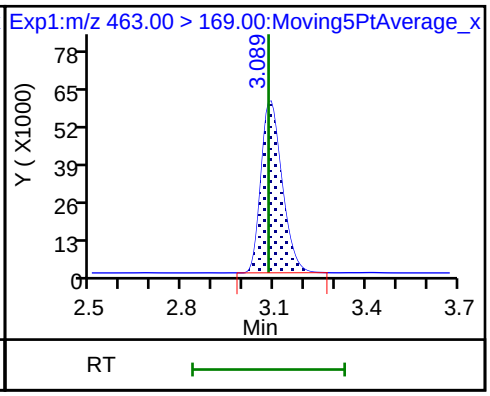
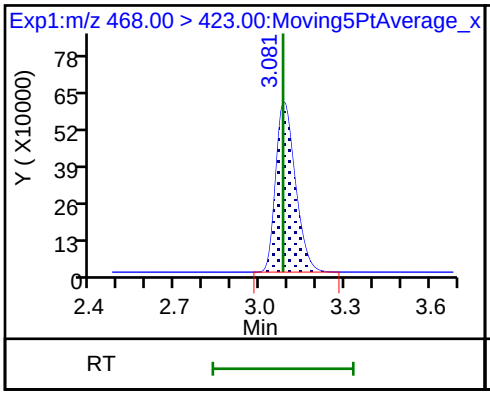
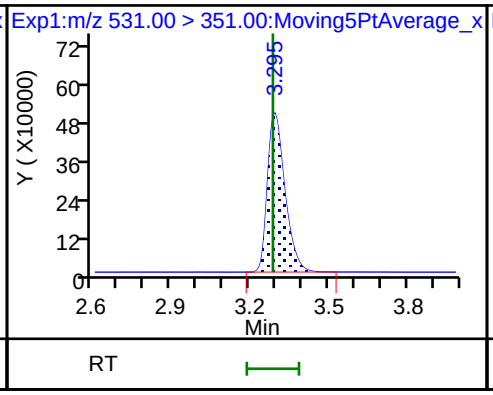


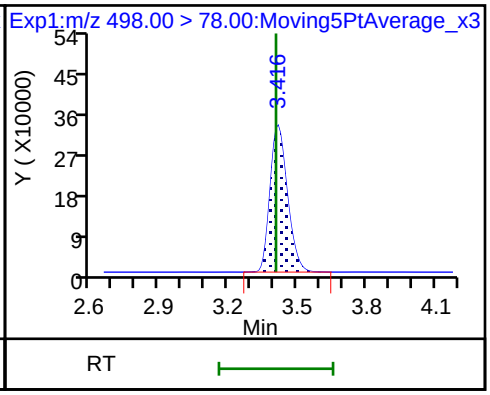
D 19 13C5 PFNA



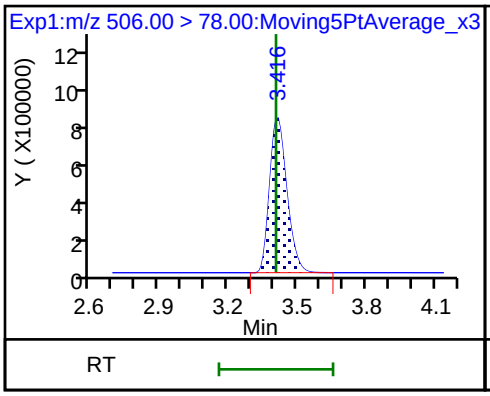
69 9-Chlorohexadecafluoro-3-oxanonane-1



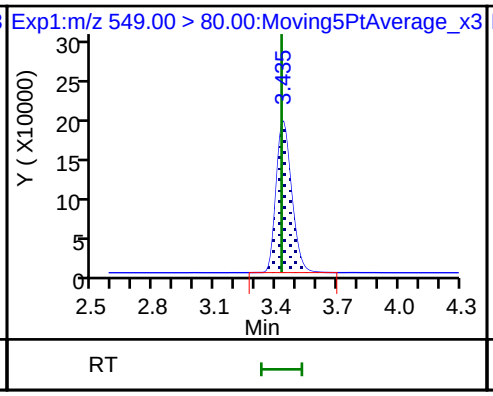
22 Perfluorooctane Sulfonamide



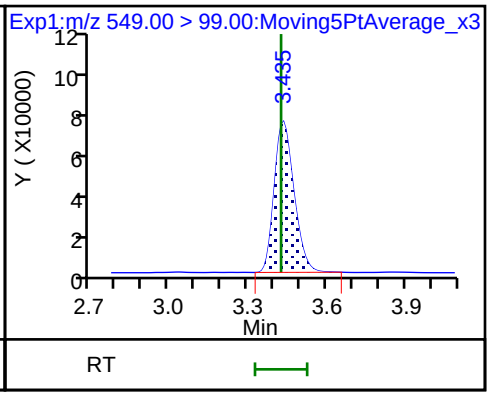
D 21 13C8 FOSA



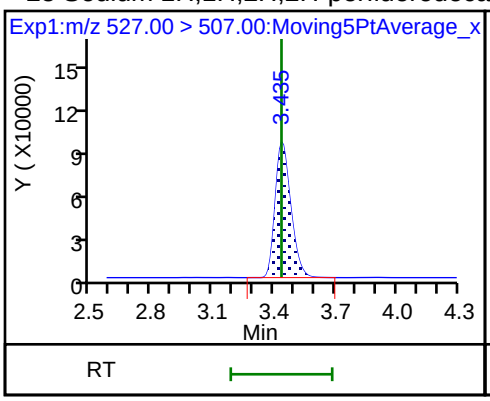
68 Perfluorononanesulfonic acid



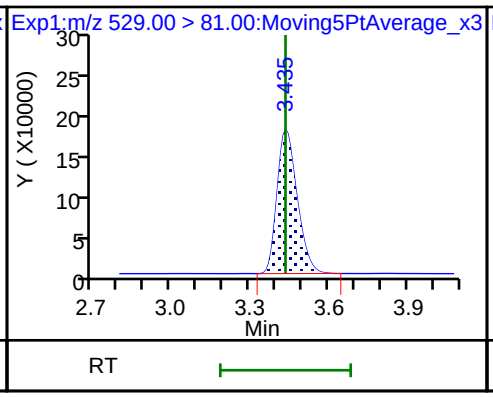
68 Perfluorononanesulfonic acid



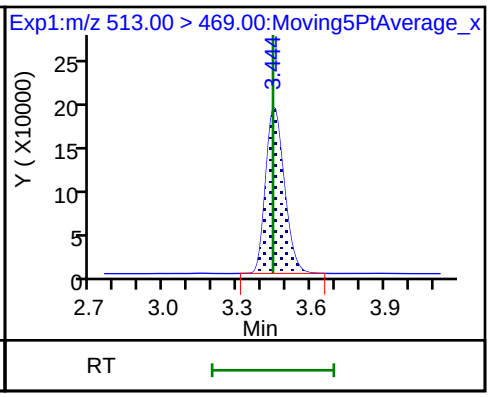
25 Sodium 1H,1H,2H,2H-perfluorodecane



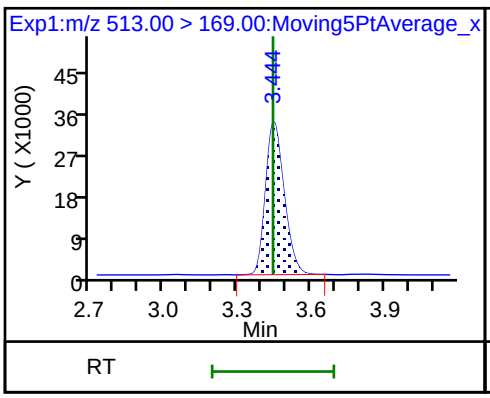
D 26 M2-8:2FTS



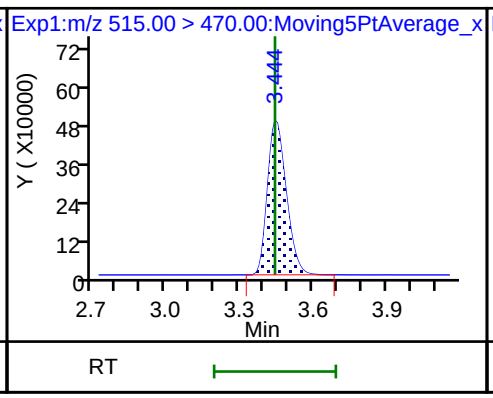
24 Perfluorodecanoic acid



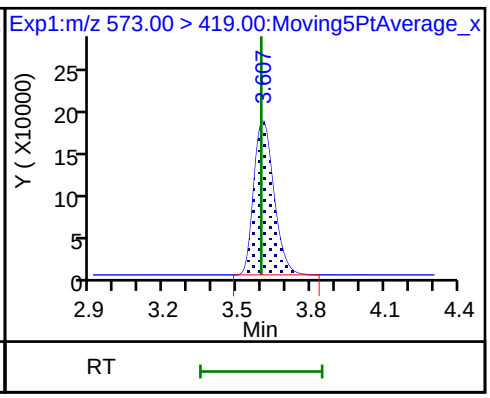
24 Perfluorodecanoic acid



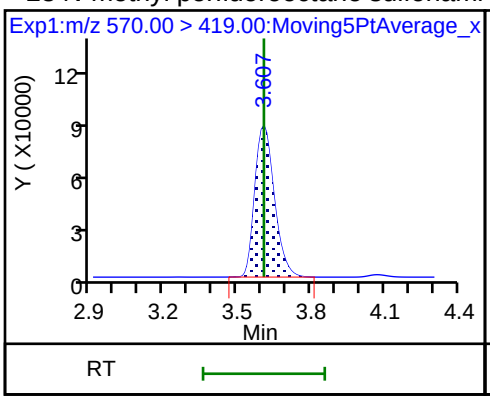
D 23 13C2 PFDA



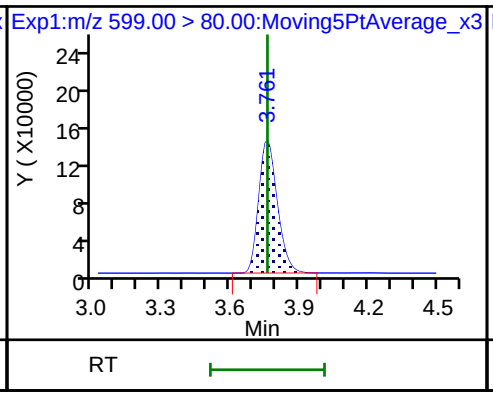
D 27 d3-NMeFOSAA



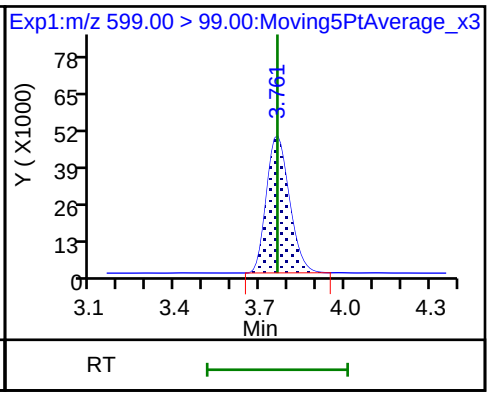
28 N-methyl perfluorooctane sulfonami



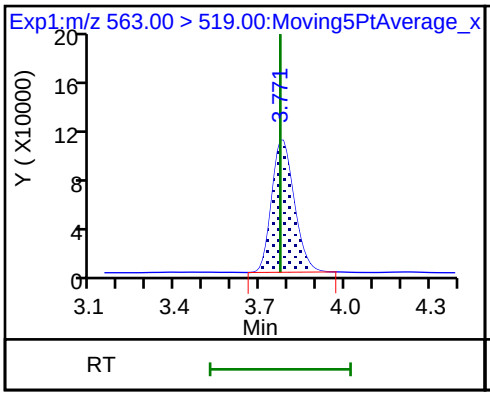
29 Perfluorodecane Sulfonic acid



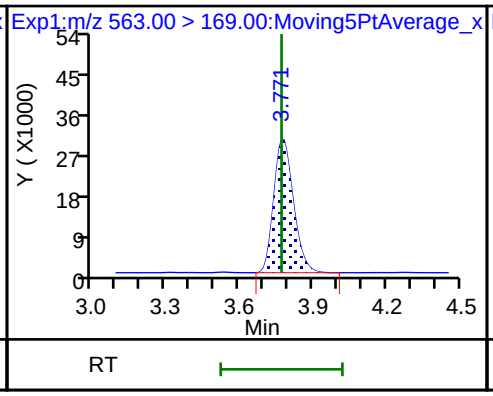
29 Perfluorodecane Sulfonic acid



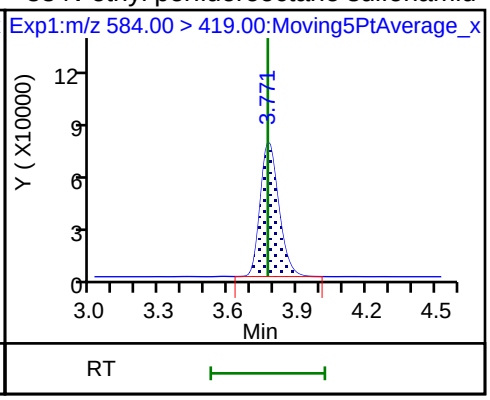
31 Perfluoroundecanoic acid



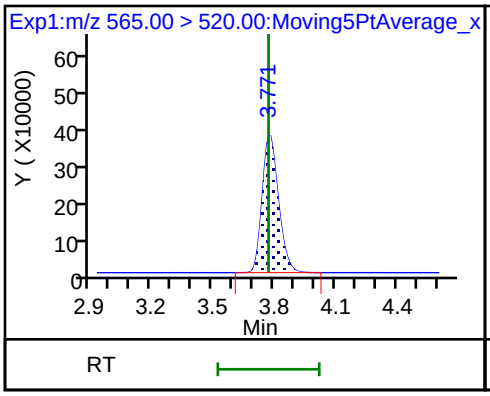
31 Perfluoroundecanoic acid



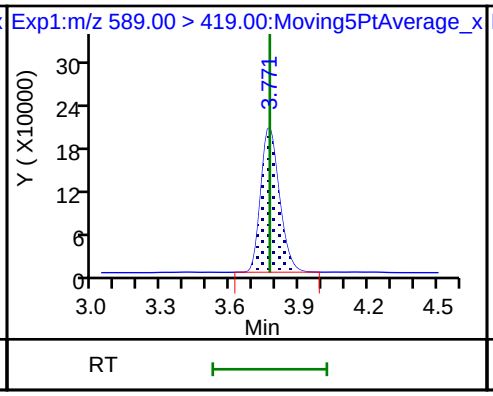
33 N-ethyl perfluorooctane sulfonamid



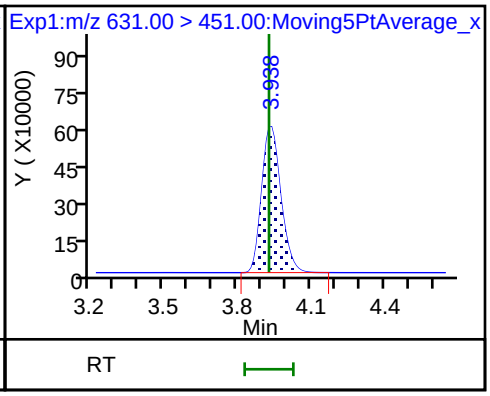
D 30 13C2 PFUnA



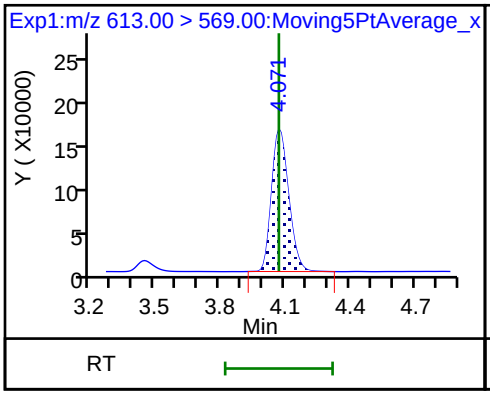
D 32 d5-NEtFOSAA



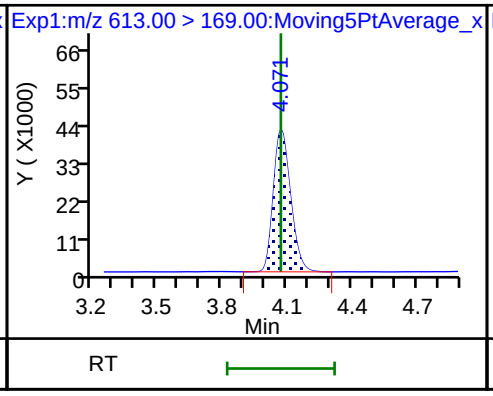
66 11-Chloroeicosafluoro-3-oxaundecan



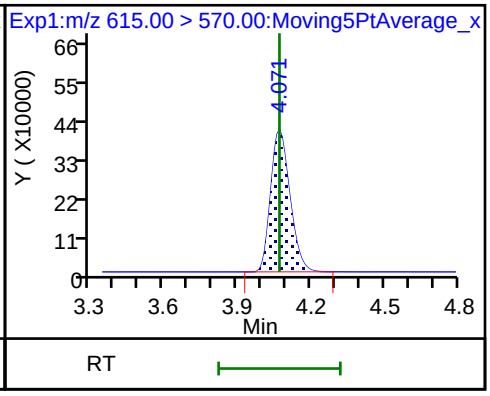
37 Perfluorododecanoic acid



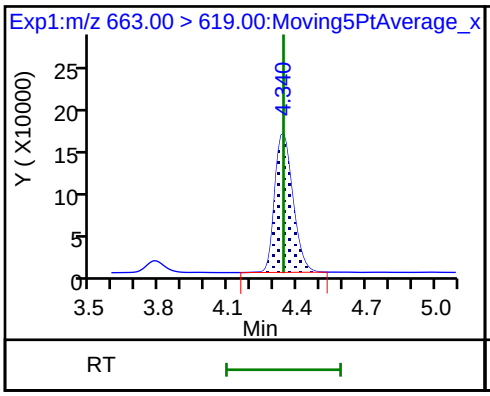
37 Perfluorododecanoic acid



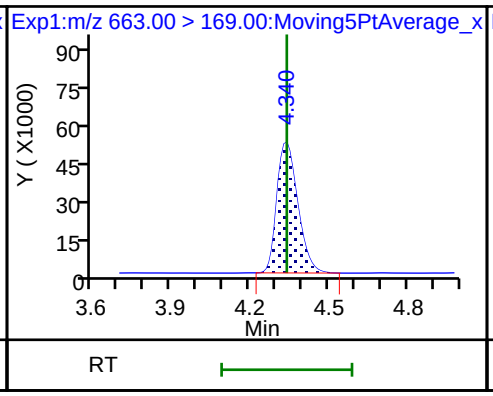
D 36 13C2 PFDoA



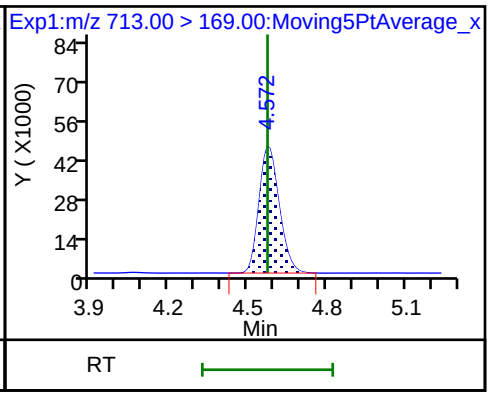
41 Perfluorotridecanoic acid



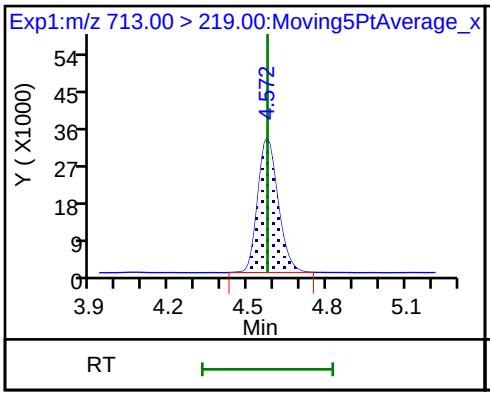
41 Perfluorotridecanoic acid



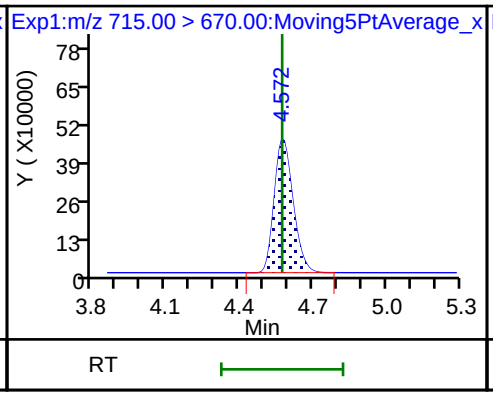
42 Perfluorotetradecanoic acid



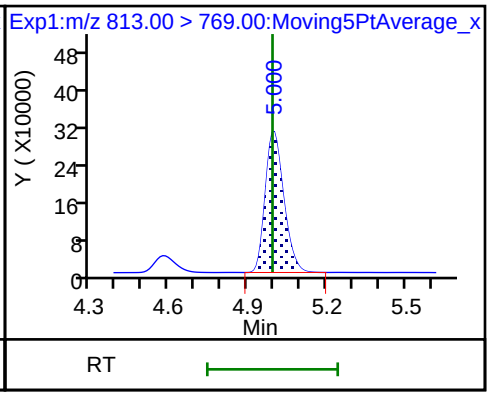
42 Perfluorotetradecanoic acid



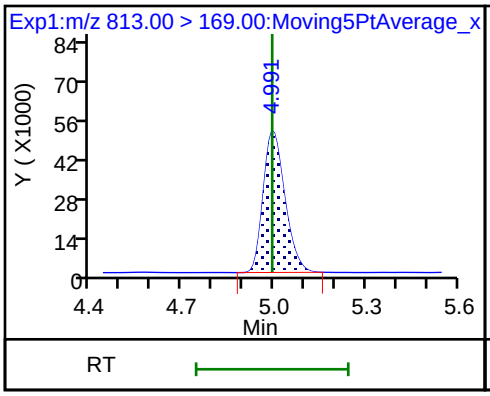
D 43 13C2-PFTeDA



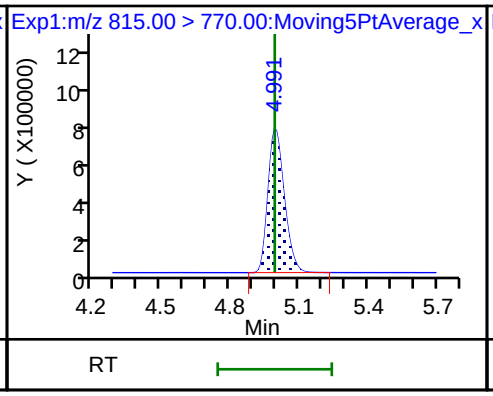
45 Perfluorohexadecanoic acid



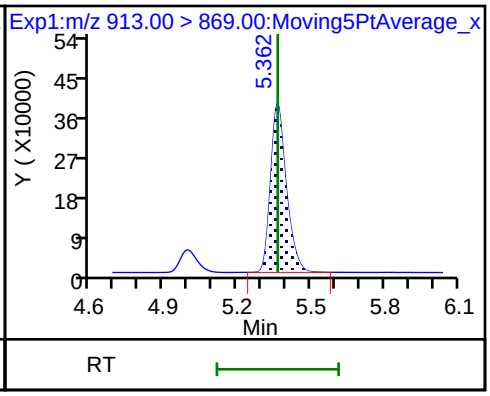
45 Perfluorohexadecanoic acid



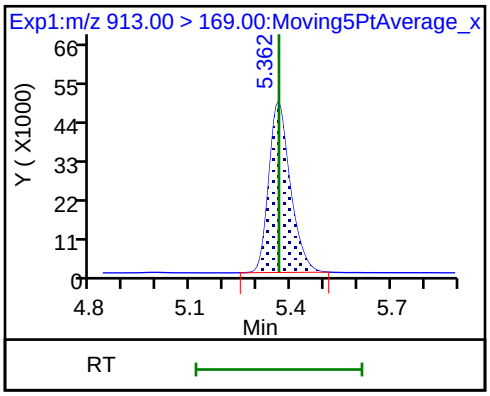
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-222819/3-A

Matrix: Water | Lab File ID: 2018.05.13LLB_017.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250(mL) | Date Analyzed: 05/13/2018 17:35

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	Perfluorooctanoic acid (PFOA)	40.8		2.0	0.85
27619-97-2	6:2FTS	44.1		20	2.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	101		25-150
STL02279	M2-6:2FTS	102		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_017.d
Lims ID: LCSD 320-222819/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-May-2018 17:35:44 ALS Bottle#: 11 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcsd 320-222819/3
Misc. Info.: Plate: 1 Rack: 6
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-May-2018 10:44:09 Calib Date: 13-May-2018 14:59:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180513-58095.b\2017.05.13LLBxx_ICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK013

First Level Reviewer: westendorfc Date: 14-May-2018 10:37:35

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.456	1.458	-0.002	1.000	2290318	1.04		104	1462	
D 1 13C4 PFBA										
217.00 > 172.00	1.456	1.458	-0.002	1.000	5900278	2.36		94.4	54827	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.726	1.729	-0.003	1.000	1807085	0.9783		97.8	879	
D 3 13C5-PFPeA										
267.90 > 223.00	1.726	1.729	-0.003	0.562	3907936	2.46		98.3	74452	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.771	1.766	0.005	1.005	2504545	0.8934		101	13597	
298.90 > 99.00	1.762	1.766	-0.004	1.000	1052315		2.38(1.25-3.74)		9430	
D 47 13C3-PFBS										
301.90 > 83.00	1.762	1.766	-0.004	1.000	82590	2.29		98.5	594	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.978	1.981	-0.003	1.000	491277	1.01		108	29809	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.011	2.015	-0.004	1.000	1699315	1.00		99.8	2803	
313.00 > 119.00	2.011	2.015	-0.004	1.000	157315		10.80(5.03-15.10)		2287	
D 7 13C2 PFHxA										
315.00 > 270.00	2.011	2.015	-0.004	1.000	4245333	2.54		101	94833	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.034	2.038	-0.004	1.000	2261384	0.9306		99.2	36432	
349.00 > 99.00	2.034	2.038	-0.004	1.000	833580		2.71(1.36-4.07)		11367	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.113	2.118	-0.005	1.000	223003	2.46		98.6	5686	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.113	2.119	-0.006	1.000	271012	1.10		110	3453	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.342	2.346	-0.004	1.000	1684040	0.9734		97.3	3115	
363.00 > 169.00	2.342	2.346	-0.004	1.000	674520		2.50(1.13-3.40)		4153	
D 9 13C4-PFHpA										
367.00 > 322.00	2.342	2.346	-0.004	1.000	3999782	2.59		104	81185	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.355	2.359	-0.004	0.994	1894104	0.8001		87.9	11546	
399.00 > 99.00	2.355	2.359	-0.004	0.994	669524		2.83(1.50-4.49)		3008	
D 11 18O2 PFHxS										
403.00 > 84.00	2.369	2.359	0.010	1.000	4930776	2.45		104	67634	
65 Adona										
377.00 > 251.00	2.392	2.396	-0.004	1.000	5131582	1.09		109	73077	
377.00 > 85.00	2.392	2.396	-0.004	1.000	2981267		1.72(0.84-2.53)		28320	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.681	2.683	-0.002	1.000	560545	1.10		116	4836	
D 12 M2-6:2FTS										
429.00 > 81.00	2.681	2.683	-0.002	1.000	727839	2.42		102	21979	
* 62 13C2-PFOA										
415.00 > 370.00	2.703	2.706	-0.003		3870955	2.50			91902	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.703	2.706	-0.003	1.000	1734645	1.02		102	901	
413.00 > 169.00	2.703	2.706	-0.003	1.000	882777		1.96(0.84-2.52)		3809	
D 14 13C4 PFOA										
417.00 > 372.00	2.703	2.706	-0.003	1.000	3674472	2.52		101	64511	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.711	2.713	-0.002	1.000	1755273	0.9274		97.4	28946	
449.00 > 99.00	2.711	2.713	-0.002	1.000	495030		3.55(1.94-5.82)		9675	
20 Perfluorononanoic acid										
463.00 > 419.00	3.079	3.078	0.001	1.003	1322067	1.06		106	2788	
463.00 > 169.00	3.071	3.078	-0.007	1.000	317215		4.17(1.90-5.69)		13512	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.071	3.078	-0.007	1.000	1519852	0.9571		103	9067	
499.00 > 99.00	3.071	3.078	-0.007	1.000	337083		4.51(2.31-6.93)		3318	
D 19 13C5 PFNA										
468.00 > 423.00	3.071	3.078	-0.007	1.000	3058117	2.49		99.5	71964	
D 18 13C4 PFOS										
503.00 > 80.00	3.071	3.078	-0.007	1.000	3460947	2.40		100	32855	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.286	3.287	-0.001	1.000	2407800	0.9198		98.7	23658	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.406	3.414	-0.008	1.000	1980719	1.02		102	25596	
D 21 13C8 FOSA										
506.00 > 78.00	3.406	3.414	-0.008	1.000	4876451	2.38		95.4	36663	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.424	3.433	-0.009	1.000	1083779	0.9527		99.2	16226	
549.00 > 99.00	3.424	3.433	-0.009	1.000	420529		2.58(1.33-3.97)		4907	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.424	3.433	-0.009	1.000	534343	0.9493		99.1	11473	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.424	3.433	-0.009	1.000	1096127	2.78		116	9943	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.433	3.442	-0.009	1.000	1076519	0.9594		95.9	6206	
513.00 > 169.00	3.433	3.442	-0.009	1.000	195462		5.51(2.36-7.09)		7506	
D 23 13C2 PFDA										
515.00 > 470.00	3.433	3.442	-0.009	1.000	2735582	2.55		102	43779	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.595	3.605	-0.010	1.000	519997	1.11		111	4759	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.595	3.605	-0.010	1.000	1126722	2.39		95.7	25345	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.749	3.759	-0.010	1.000	877102	0.9182		95.2	11398	
599.00 > 99.00	3.749	3.759	-0.010	1.000	304696		2.88(1.39-4.16)		3981	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.759	3.769	-0.010	1.000	1205255	2.34		93.6	3028	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.770	3.780	-0.010	1.000	639643	0.9102		91.0	2667	
563.00 > 169.00	3.770	3.780	-0.010	1.000	174539		3.66(2.12-6.36)		5369	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.770	3.780	-0.010	1.003	468224	0.99		99.1	14031	
D 30 13C2 PFUnA										
565.00 > 520.00	3.770	3.780	-0.010	1.000	2231260	2.54		102	57761	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.926	3.929	-0.003	1.000	3561597	0.9219		97.9	51381	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.059	4.069	-0.010	1.000	955768	1.02		102	551	
613.00 > 169.00	4.059	4.069	-0.010	1.000	226327		4.22(2.13-6.40)		4074	
D 36 13C2 PFDoA										
615.00 > 570.00	4.059	4.069	-0.010	1.000	2247423	2.46		98.2	18140	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.329	4.339	-0.010	1.000	891124	0.9539		95.4	340	
663.00 > 169.00	4.329	4.339	-0.010	1.000	283621		3.14(1.25-3.76)		5184	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.563	4.572	-0.009	1.000	236908	0.9561		95.6	2936	
713.00 > 219.00	4.563	4.572	-0.009	1.000	166485		1.42(0.71-2.13)		3870	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.563	4.572	-0.009	1.000	2327207	2.34		93.4	16804	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.983	4.990	-0.007	1.000	1462134	1.05		105	330	
813.00 > 169.00	4.983	4.990	-0.007	1.000	242478		6.03(2.86-8.58)		2286	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.983	4.990	-0.007	1.000	3650139	2.30		92.0	11997	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.349	5.355	-0.006	1.000	1634454	1.09		109	277	
913.00 > 169.00	5.349	5.355	-0.006	1.000	204463		7.99(3.83-11.48)		2278	

Report Date: 14-May-2018 10:44:14 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180514-58105.b\2018.05.13LLB_017.d

Injection Date: 13-May-2018 17:35:44 Instrument ID: A8_N

Lims ID: LCSD 320-222819/3-A

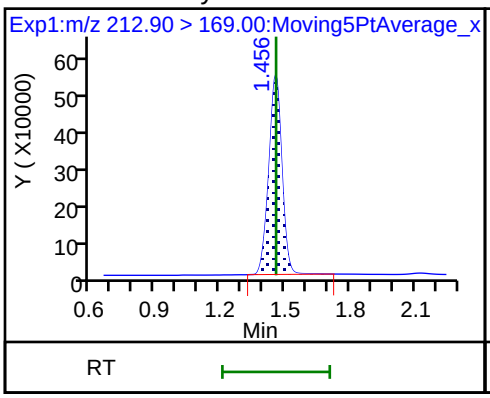
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 4

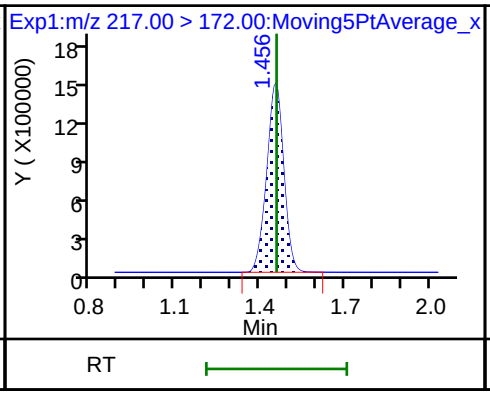
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

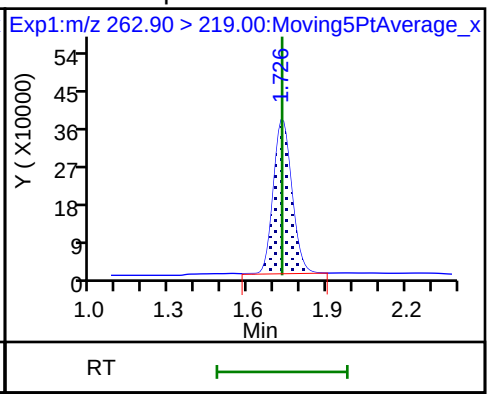
2 Perfluorobutyric acid



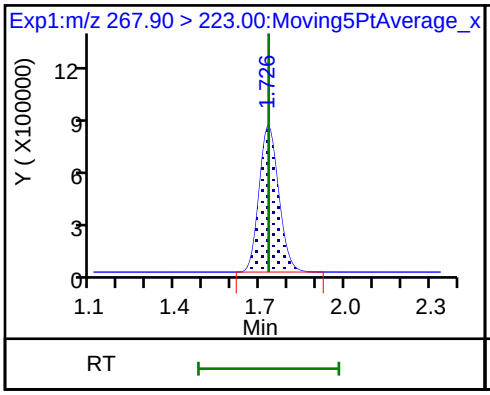
D 1 13C4 PFBA



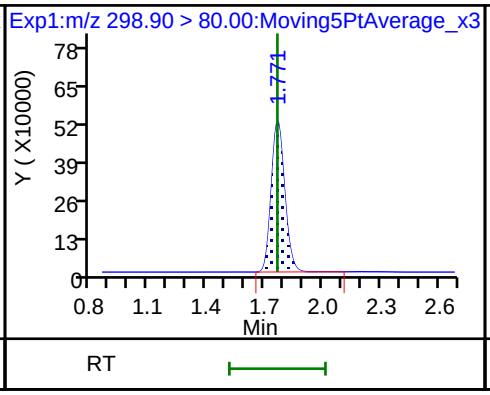
4 Perfluoropentanoic acid



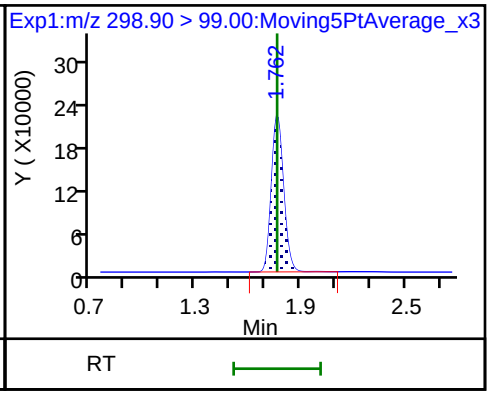
D 3 13C5-PFPeA



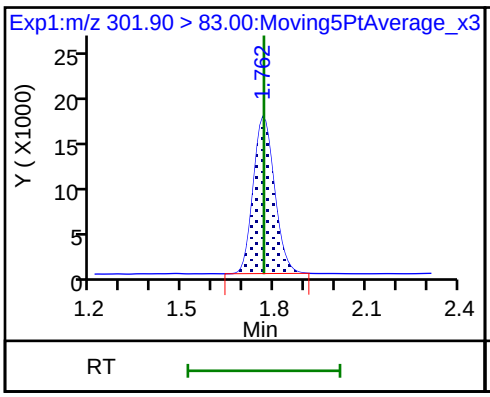
5 Perfluorobutanesulfonic acid



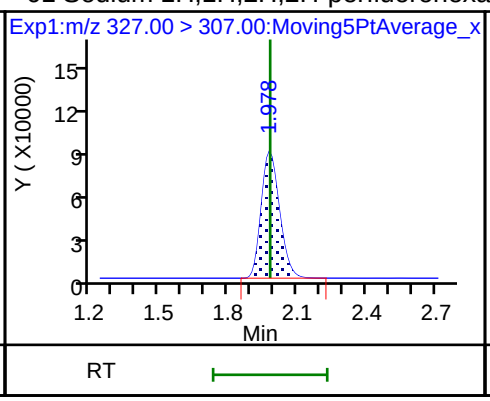
5 Perfluorobutanesulfonic acid



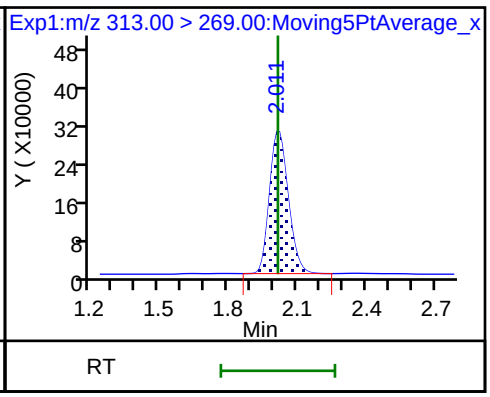
D 47 13C3-PFBS



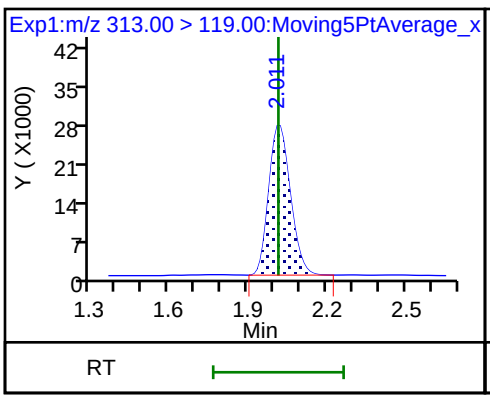
61 Sodium 1H,1H,2H,2H-perfluorohexane



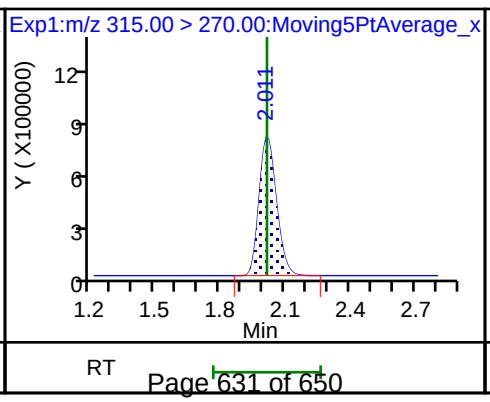
6 Perfluorohexanoic acid



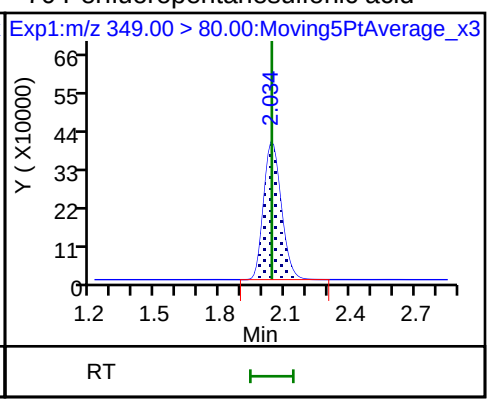
6 Perfluorohexanoic acid



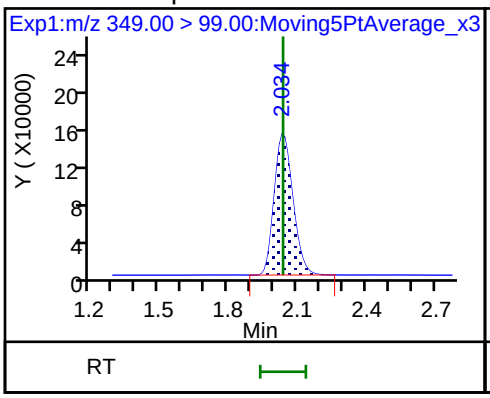
D 7 13C2 PFHxA



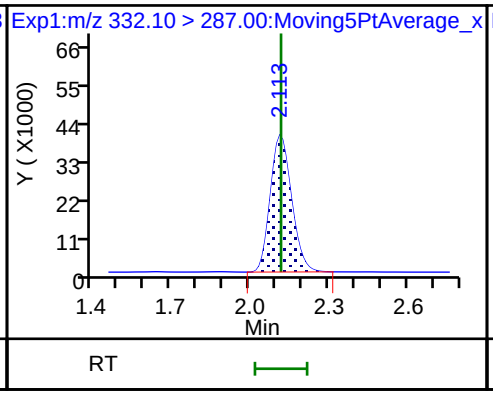
70 Perfluoropentanesulfonic acid



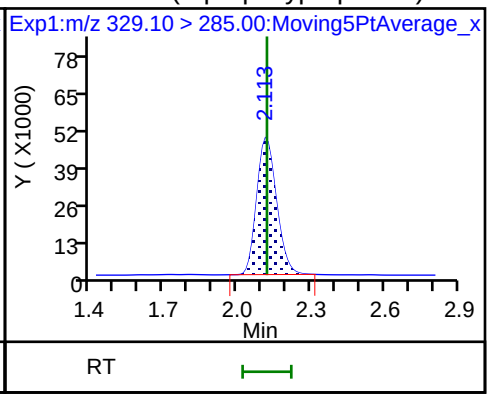
70 Perfluoropentanesulfonic acid



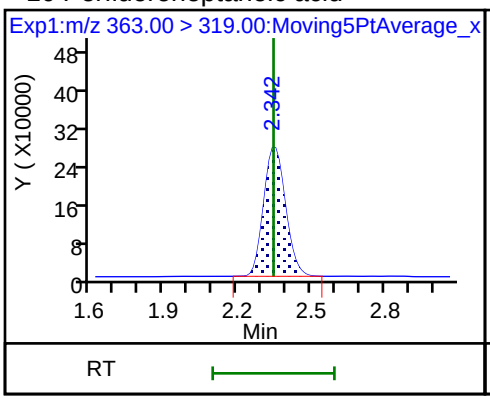
D 64 13C3 HFPO-DA



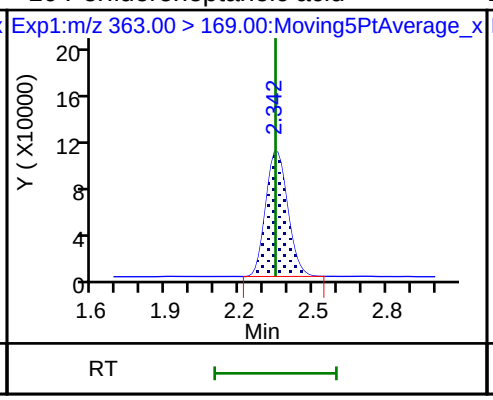
67 Perfluoro(2-propoxypropanoic) acid



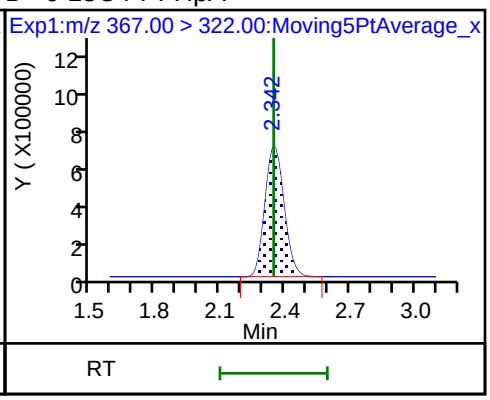
10 Perfluoroheptanoic acid



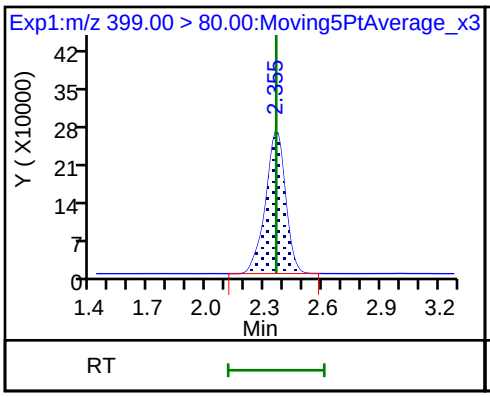
10 Perfluoroheptanoic acid



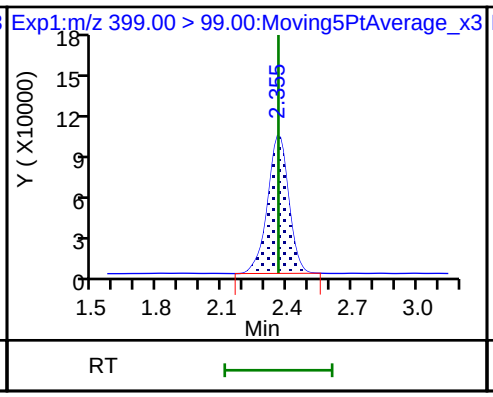
D 9 13C4-PFHpA



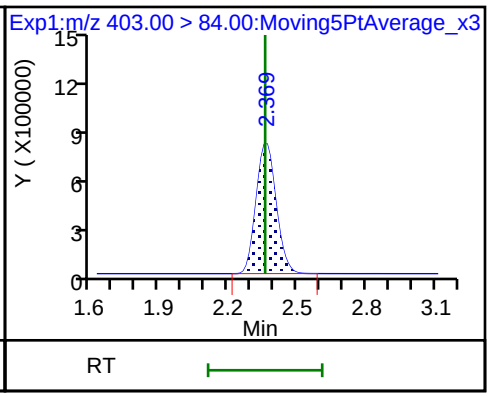
8 Perfluorohexanesulfonic acid



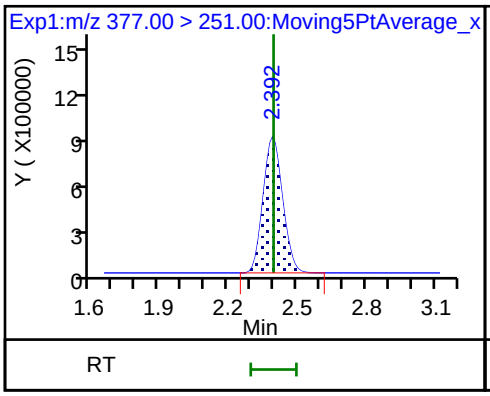
8 Perfluorohexanesulfonic acid



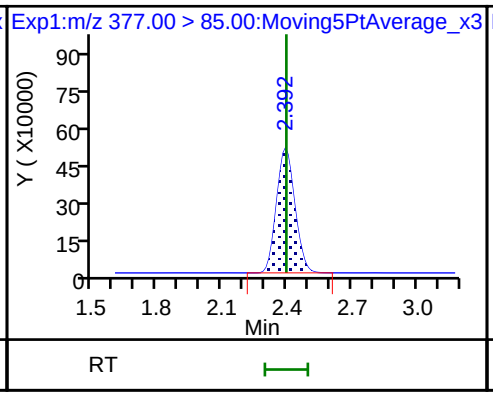
D 11 18O2 PFHxS



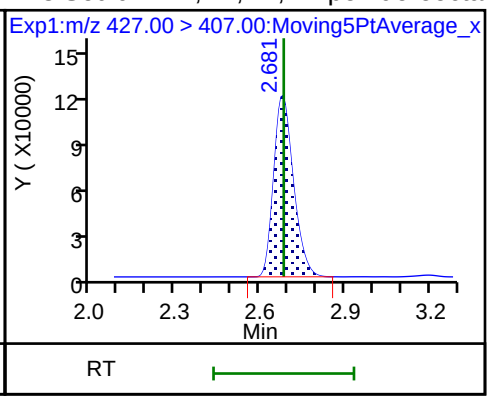
65 Adona



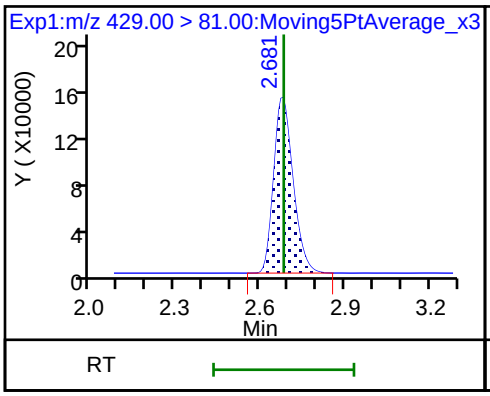
65 Adona



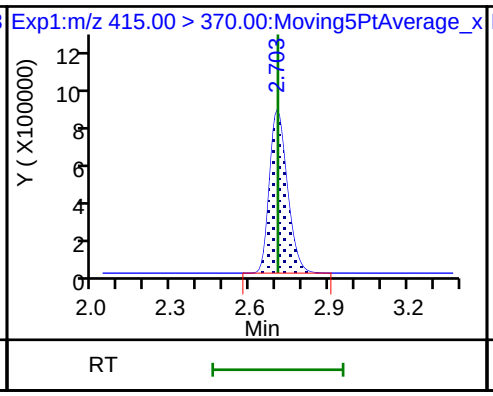
13 Sodium 1H,1H,2H,2H-perfluorooctane



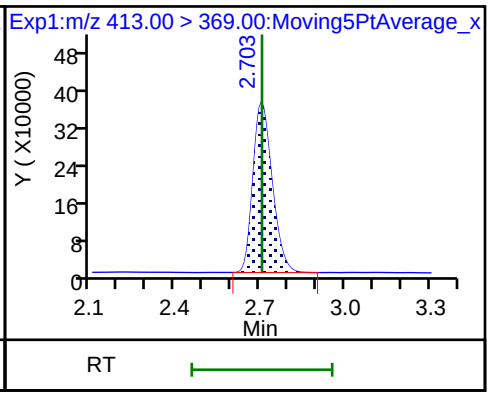
D 12 M2-6:2FTS



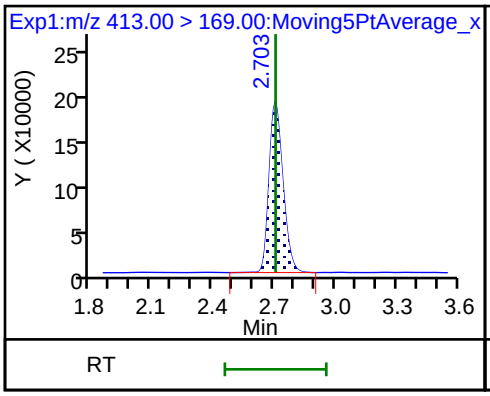
* 62 13C2-PFOA



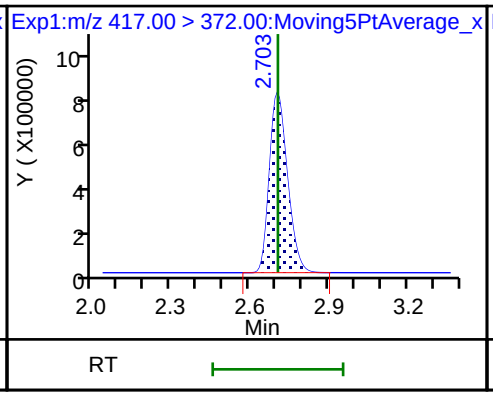
15 Perfluorooctanoic acid



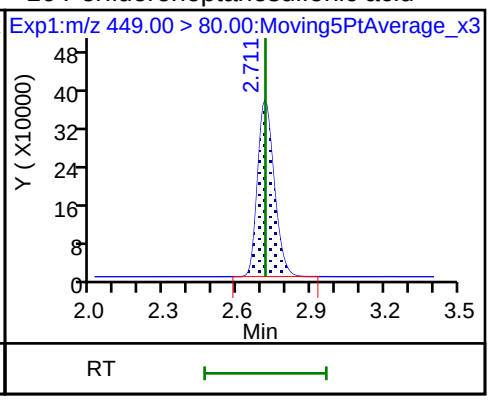
15 Perfluorooctanoic acid



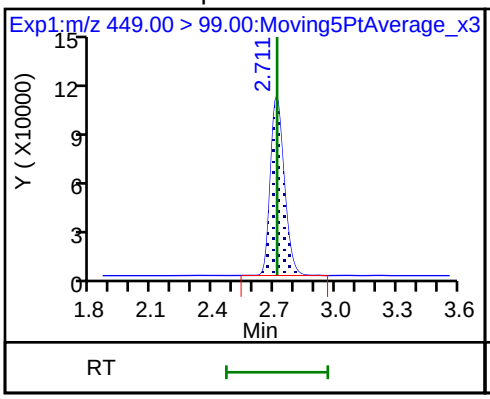
D 14 13C4 PFOA



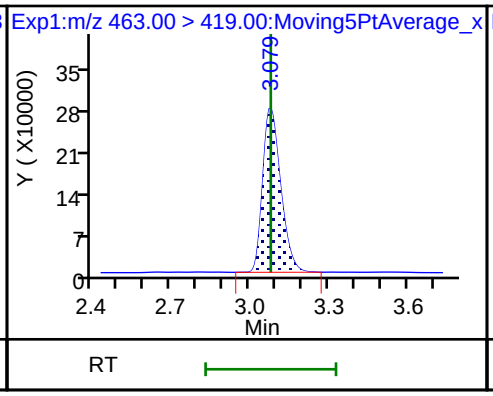
16 Perfluoroheptanesulfonic acid



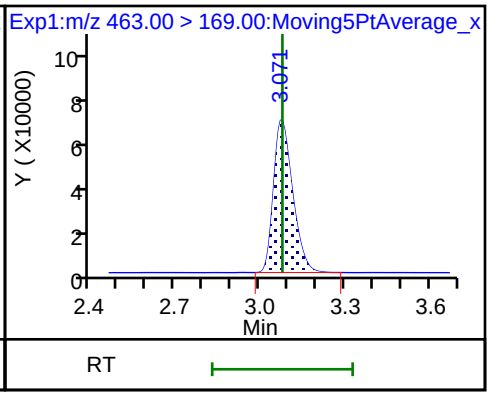
16 Perfluoroheptanesulfonic acid



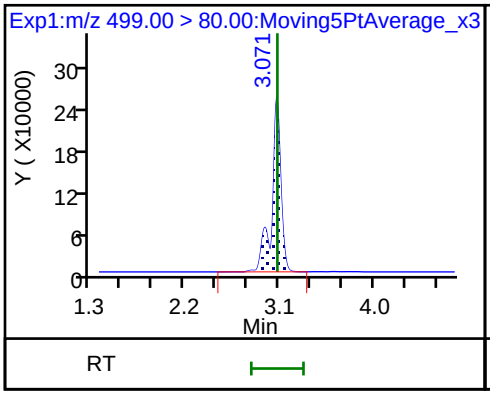
20 Perfluorononanoic acid



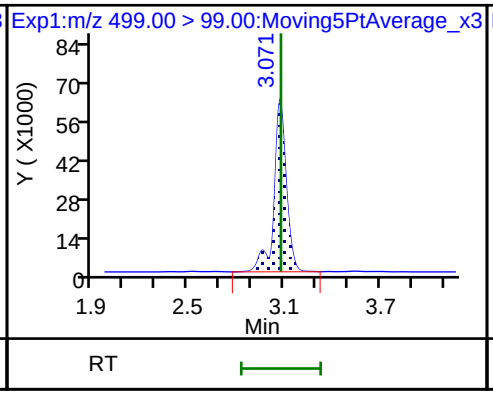
20 Perfluorononanoic acid



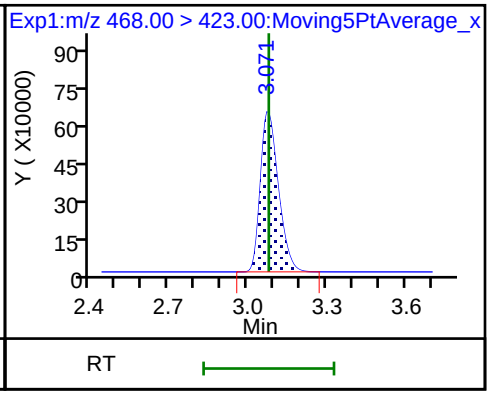
17 Perfluorooctane sulfonic acid



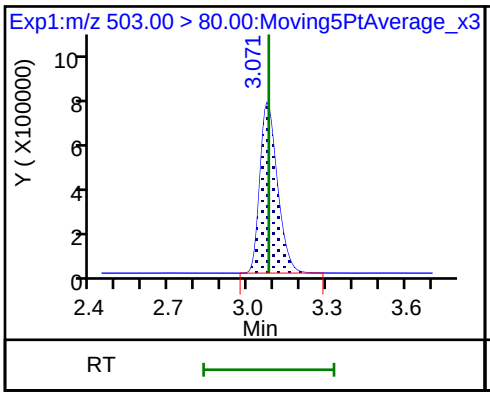
17 Perfluorooctane sulfonic acid



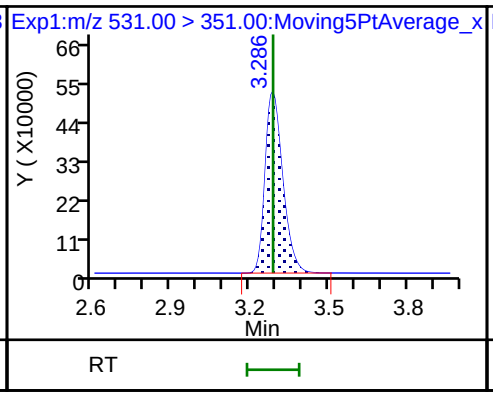
D 19 13C5 PFNA



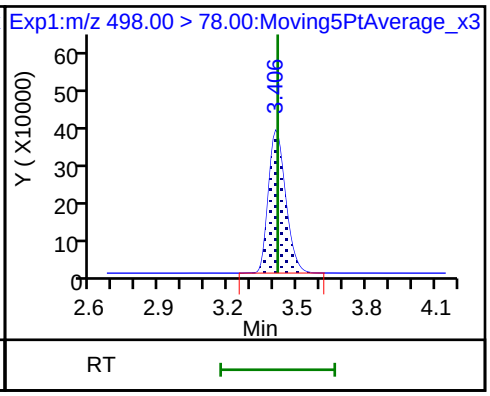
D 18 13C4 PFOS



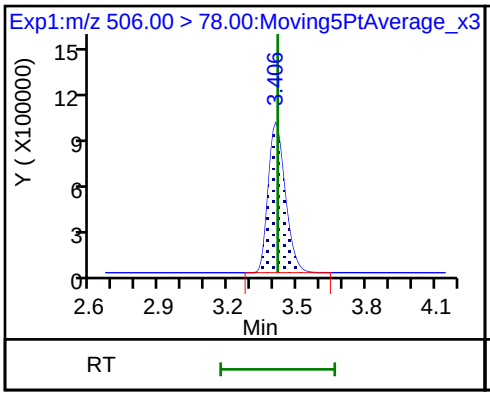
69 9-Chlorohexadecafluoro-3-oxanonane



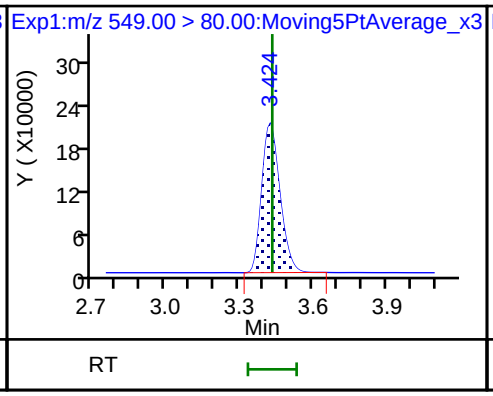
22 Perfluorooctane Sulfonamide



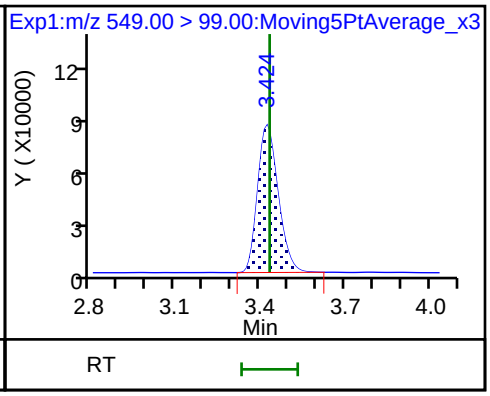
D 21 13C8 FOSA



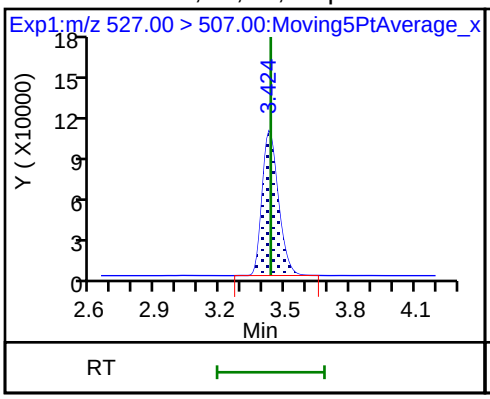
68 Perfluorononanesulfonic acid



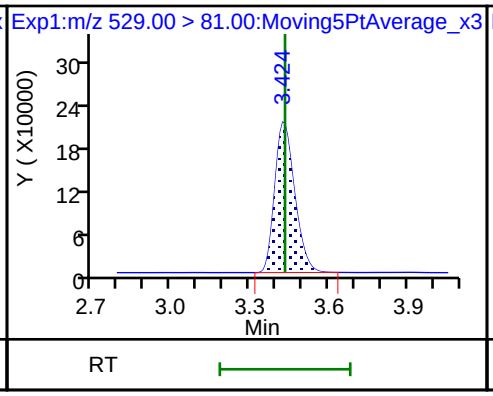
68 Perfluorononanesulfonic acid



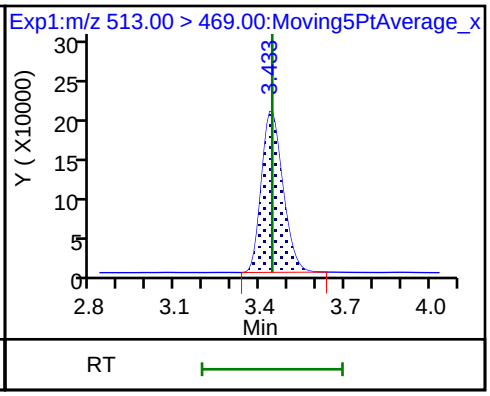
25 Sodium 1H,1H,2H,2H-perfluorodecane



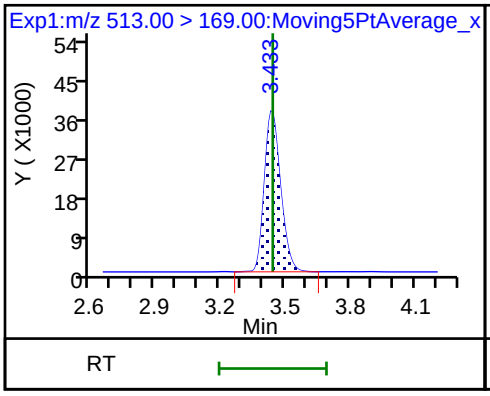
D 26 M2-8:2FTS



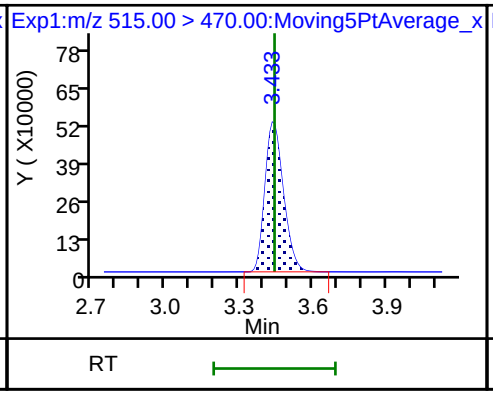
24 Perfluorodecanoic acid



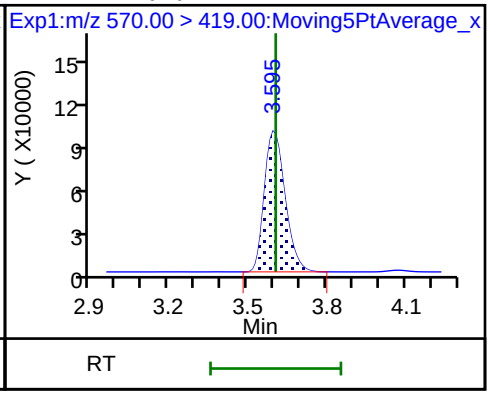
24 Perfluorodecanoic acid



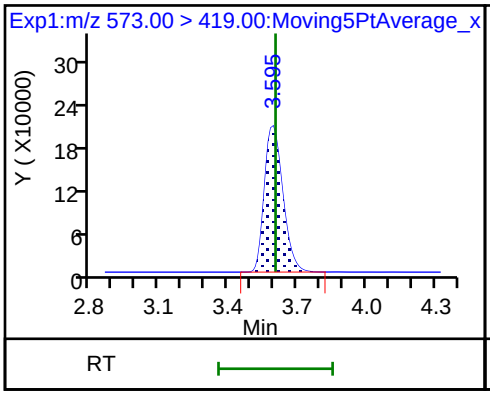
D 23 13C2 PFDA



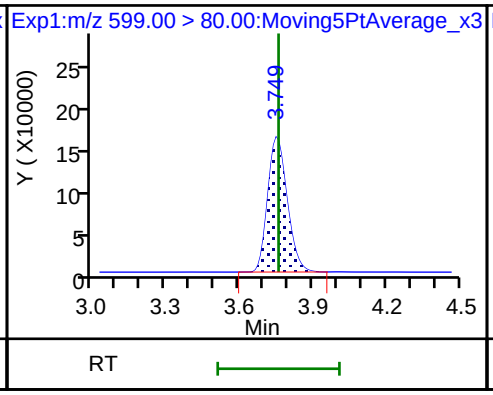
28 N-methyl perfluorooctane sulfonami



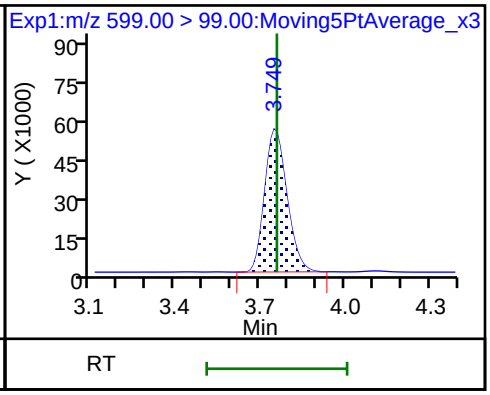
D 27 d3-NMeFOSAA



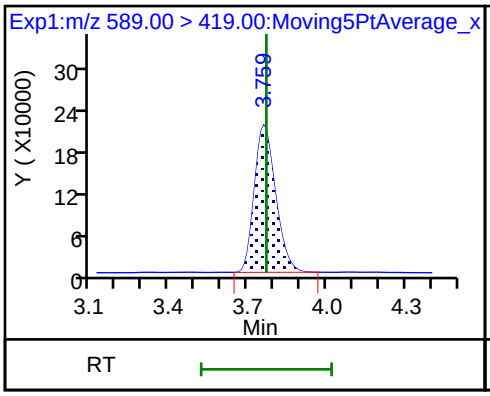
29 Perfluorodecane Sulfonic acid



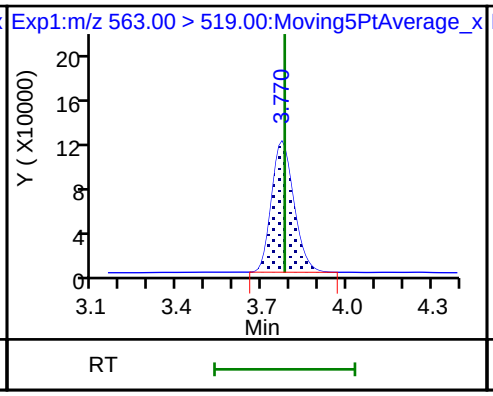
29 Perfluorodecane Sulfonic acid



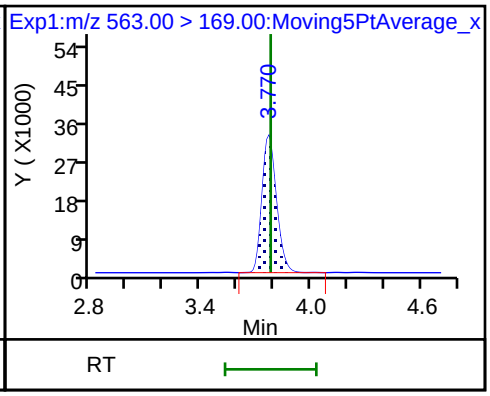
D 32 d5-NEtFOSAA



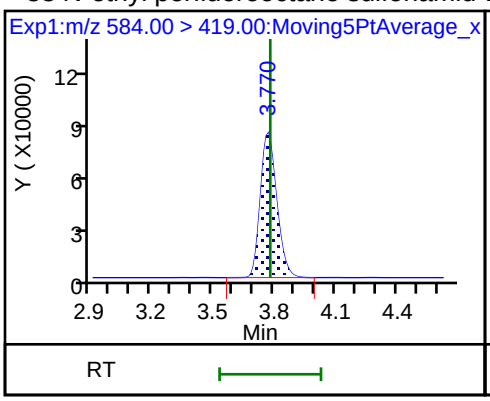
31 Perfluoroundecanoic acid



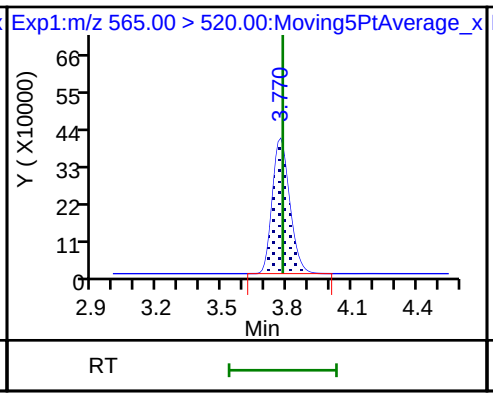
31 Perfluoroundecanoic acid



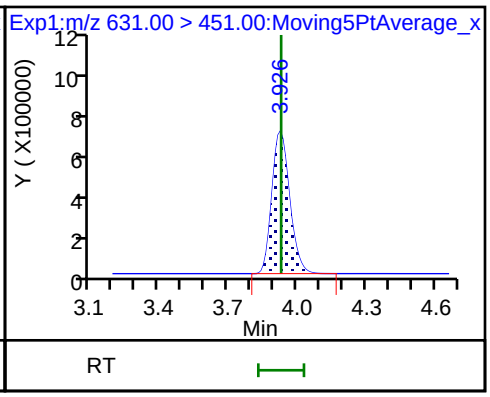
33 N-ethyl perfluorooctane sulfonamid



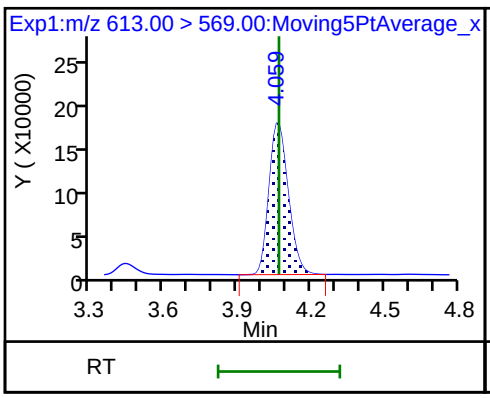
D 30 13C2 PFUnA



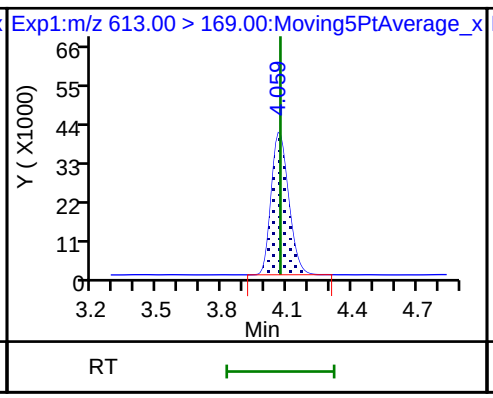
66 11-Chloroeicosafluoro-3-oxaundecan



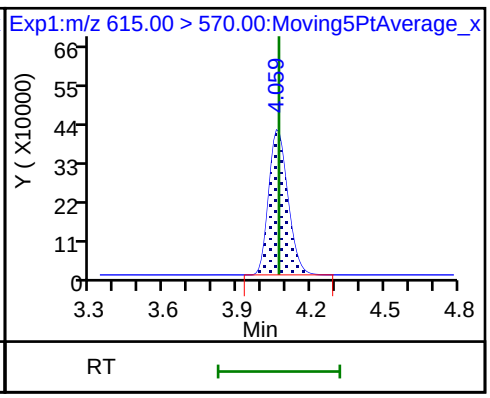
37 Perfluorododecanoic acid



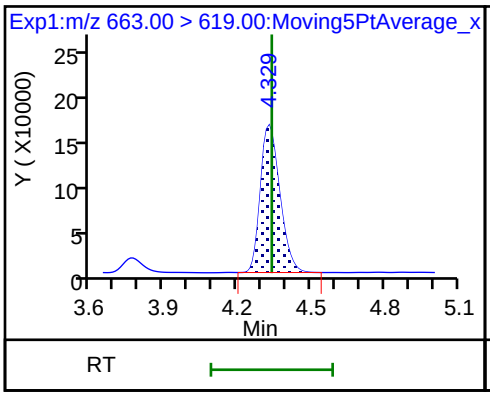
37 Perfluorododecanoic acid



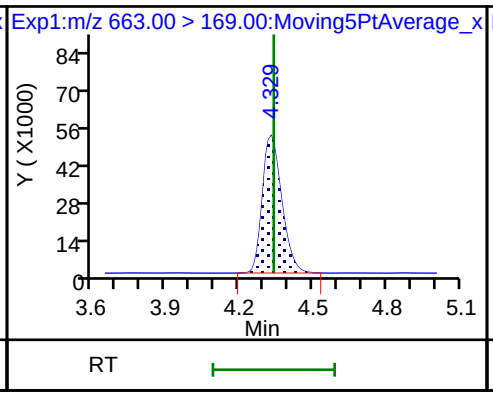
D 36 13C2 PFDoA



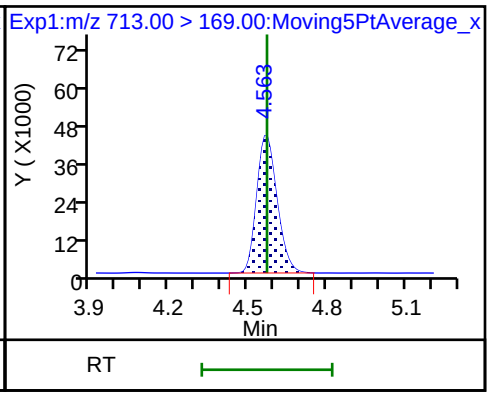
41 Perfluorotridecanoic acid



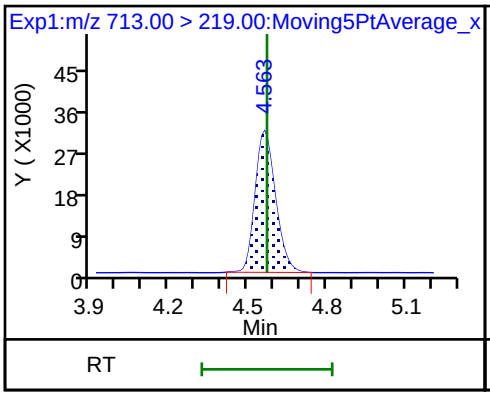
41 Perfluorotridecanoic acid



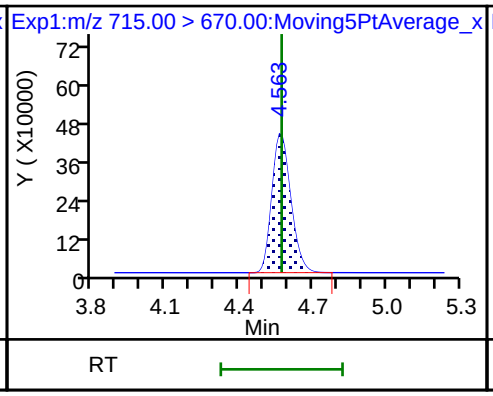
42 Perfluorotetradecanoic acid



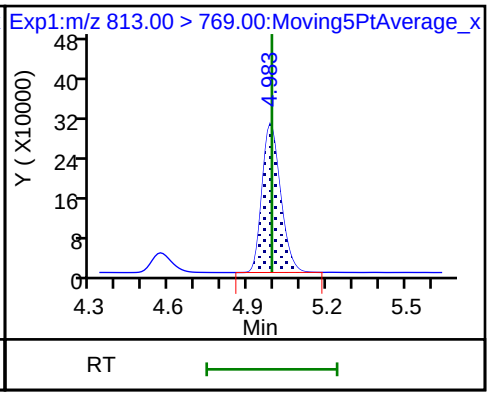
42 Perfluorotetradecanoic acid



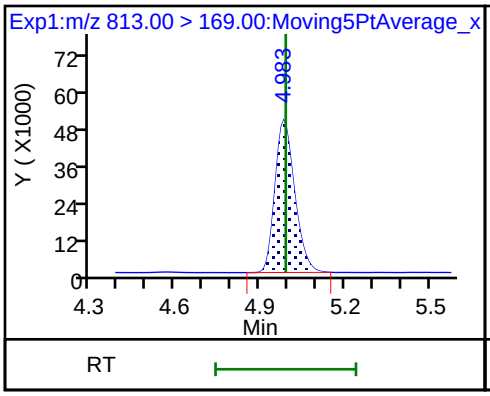
D 43 13C2-PFTeDA



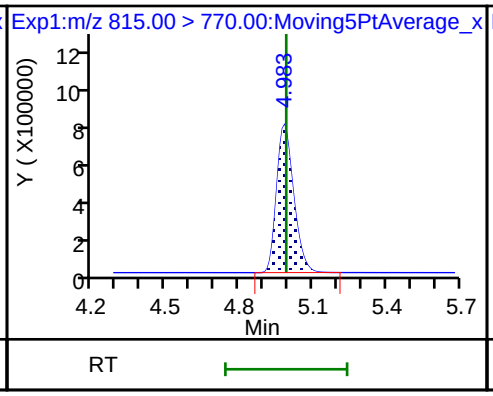
45 Perfluorohexadecanoic acid



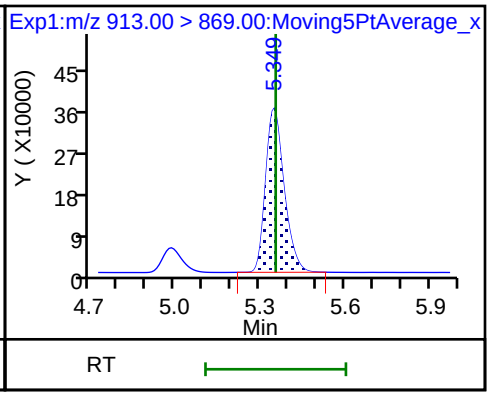
45 Perfluorohexadecanoic acid



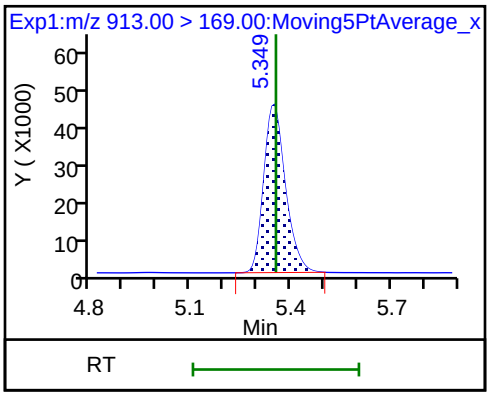
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Instrument ID: A8_N Start Date: 05/13/2018 14:12

Analysis Batch Number: 222921 End Date: 05/13/2018 15:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-222921/2		05/13/2018 14:12	1	2017.05.13LLBxx ICAL 002.d	GeminiC18 3x100 3(mm)
IC 320-222921/3		05/13/2018 14:20	1	2017.05.13LLBxx ICAL 003.d	GeminiC18 3x100 3(mm)
IC 320-222921/4		05/13/2018 14:28	1	2017.05.13LLBxx ICAL 004.d	GeminiC18 3x100 3(mm)
IC 320-222921/5 ICIS		05/13/2018 14:36	1	2017.05.13LLBxx ICAL 005.d	GeminiC18 3x100 3(mm)
IC 320-222921/6		05/13/2018 14:43	1	2017.05.13LLBxx ICAL 006.d	GeminiC18 3x100 3(mm)
IC 320-222921/7		05/13/2018 14:51	1	2017.05.13LLBxx ICAL 007.d	GeminiC18 3x100 3(mm)
IC 320-222921/8		05/13/2018 14:59	1	2017.05.13LLBxx ICAL 008.d	GeminiC18 3x100 3(mm)
ICB 320-222921/9		05/13/2018 15:07	1	2017.05.13LLBxx ICAL 009.d	GeminiC18 3x100 3(mm)
ICV 320-222921/10		05/13/2018 15:15	1	2017.05.13LLBxx ICAL 010.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Instrument ID: A8_N Start Date: 05/13/2018 15:22

Analysis Batch Number: 222978 End Date: 05/13/2018 17:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-222978/1		05/13/2018 15:22	1	2017.05.13LLBxx ICAL 011.d	GeminiC18 3x100 3(mm)
CCVL 320-222978/2		05/13/2018 15:54	1	2018.05.13LLBx_ 004.d	GeminiC18 3x100 3(mm)
CCV 320-222978/3 CCVIS		05/13/2018 16:01	1	2018.05.13LLBx_ 005.d	GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 16:09	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 16:17	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 16:25	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 16:33	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 16:41	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 16:48	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 16:56	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 17:04	1		GeminiC18 3x100 3(mm)
CCV 320-222978/12		05/13/2018 17:12	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Instrument ID: A8_N Start Date: 05/13/2018 17:12

Analysis Batch Number: 222981 End Date: 05/13/2018 19:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-222981/1		05/13/2018 17:12	1	2018.05.13LLB_014.d	GeminiC18 3x100 3(mm)
MB 320-222819/1-A		05/13/2018 17:20	1	2018.05.13LLB_015.d	GeminiC18 3x100 3(mm)
LCS 320-222819/2-A		05/13/2018 17:27	1	2018.05.13LLB_016.d	GeminiC18 3x100 3(mm)
LCSD 320-222819/3-A		05/13/2018 17:35	1	2018.05.13LLB_017.d	GeminiC18 3x100 3(mm)
320-38630-1 RE		05/13/2018 17:43	1	2018.05.13LLB_018.d	GeminiC18 3x100 3(mm)
320-38630-2 RE		05/13/2018 17:51	1	2018.05.13LLB_019.d	GeminiC18 3x100 3(mm)
320-38630-3 RE		05/13/2018 17:59	1	2018.05.13LLB_020.d	GeminiC18 3x100 3(mm)
320-38630-4 RE		05/13/2018 18:07	1	2018.05.13LLB_021.d	GeminiC18 3x100 3(mm)
320-38630-5 RE		05/13/2018 18:14	1	2018.05.13LLB_022.d	GeminiC18 3x100 3(mm)
320-38630-6 RE		05/13/2018 18:22	1	2018.05.13LLB_023.d	GeminiC18 3x100 3(mm)
320-38630-7 RE		05/13/2018 18:30	1	2018.05.13LLB_024.d	GeminiC18 3x100 3(mm)
CCV 320-222981/12		05/13/2018 18:38	1	2018.05.13LLB_025.d	GeminiC18 3x100 3(mm)
320-38630-8 RE		05/13/2018 18:46	1	2018.05.13LLB_026.d	GeminiC18 3x100 3(mm)
320-38630-9 RE		05/13/2018 18:53	1	2018.05.13LLB_027.d	GeminiC18 3x100 3(mm)
320-38630-10 RE		05/13/2018 19:01	1	2018.05.13LLB_028.d	GeminiC18 3x100 3(mm)
320-38630-11 RE		05/13/2018 19:09	1	2018.05.13LLB_029.d	GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 19:17	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/13/2018 19:25	1		GeminiC18 3x100 3(mm)
CCV 320-222981/19		05/13/2018 19:33	1	2018.05.13LLB_032.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Instrument ID: A8_N Start Date: 05/14/2018 12:00

Analysis Batch Number: 223088 End Date: 05/14/2018 13:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-223088/2		05/14/2018 12:00	1	2017.05.14LLC_ICAL 002.d	GeminiC18 3x100 3(mm)
IC 320-223088/3		05/14/2018 12:08	1	2017.05.14LLC_ICAL 003.d	GeminiC18 3x100 3(mm)
IC 320-223088/4		05/14/2018 12:16	1	2017.05.14LLC_ICAL 004.d	GeminiC18 3x100 3(mm)
IC 320-223088/5 ICIS		05/14/2018 12:24	1	2017.05.14LLC_ICAL 005.d	GeminiC18 3x100 3(mm)
IC 320-223088/6		05/14/2018 12:32	1	2017.05.14LLC_ICAL 006.d	GeminiC18 3x100 3(mm)
IC 320-223088/7		05/14/2018 12:39	1	2017.05.14LLC_ICAL 007.d	GeminiC18 3x100 3(mm)
IC 320-223088/8		05/14/2018 12:47	1	2017.05.14LLC_ICAL 008.d	GeminiC18 3x100 3(mm)
ICB 320-223088/9		05/14/2018 12:55	1	2017.05.14LLC_ICAL 009.d	GeminiC18 3x100 3(mm)
ICV 320-223088/10		05/14/2018 13:03	1	2017.05.14LLC_ICAL 010.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Instrument ID: A8_N Start Date: 05/14/2018 16:57

Analysis Batch Number: 223178 End Date: 05/14/2018 20:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-223178/1		05/14/2018 16:57	1	2018.05.14LLAxx x 042.d	GeminiC18 3x100 3(mm)
MB 320-222510/1-A		05/14/2018 17:05	1	2018.05.14LLAxx x 043.d	GeminiC18 3x100 3(mm)
LCS 320-222510/2-A		05/14/2018 17:13	1	2018.05.14LLAxx x 044.d	GeminiC18 3x100 3(mm)
LCSD 320-222510/3-A		05/14/2018 17:21	1	2018.05.14LLAxx x 045.d	GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 17:29	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 17:36	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 17:44	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 17:52	1		GeminiC18 3x100 3(mm)
CCV 320-223178/9		05/14/2018 18:00	1	2018.05.14LLAxx x 050.d	GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 18:08	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 18:15	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 18:23	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 18:31	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/14/2018 18:39	1		GeminiC18 3x100 3(mm)
320-38630-1		05/14/2018 18:47	1	2018.05.14LLAxx x 056.d	GeminiC18 3x100 3(mm)
320-38630-2		05/14/2018 18:54	1	2018.05.14LLAxx x 057.d	GeminiC18 3x100 3(mm)
320-38630-3		05/14/2018 19:02	1	2018.05.14LLAxx x 058.d	GeminiC18 3x100 3(mm)
320-38630-4		05/14/2018 19:10	1	2018.05.14LLAxx x 059.d	GeminiC18 3x100 3(mm)
320-38630-5		05/14/2018 19:18	1	2018.05.14LLAxx x 060.d	GeminiC18 3x100 3(mm)
CCV 320-223178/20		05/14/2018 19:26	1	2018.05.14LLAxx x 061.d	GeminiC18 3x100 3(mm)
320-38630-6		05/14/2018 19:34	1	2018.05.14LLAxx x 062.d	GeminiC18 3x100 3(mm)
320-38630-7		05/14/2018 19:41	1	2018.05.14LLAxx x 063.d	GeminiC18 3x100 3(mm)
320-38630-8		05/14/2018 19:49	1	2018.05.14LLAxx x 064.d	GeminiC18 3x100 3(mm)
320-38630-9		05/14/2018 19:57	1	2018.05.14LLAxx x 065.d	GeminiC18 3x100 3(mm)
320-38630-10		05/14/2018 20:05	1	2018.05.14LLAxx x 066.d	GeminiC18 3x100 3(mm)
320-38630-11		05/14/2018 20:13	1	2018.05.14LLAxx x 067.d	GeminiC18 3x100 3(mm)
CCV 320-223178/27		05/14/2018 20:21	1	2018.05.14LLAxx x 068.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Batch Number: 222510 Batch Start Date: 05/10/18 12:16 Batch Analyst: Kolstad, Kate M

Batch Method: 3535 Batch End Date: 05/11/18 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC_ALL_SU 00061	LCPFC-IS 00044
MB 320-222510/1		3535, 537 (modified)				250.0 mL	10.0 mL	500 uL	500 uL
LCS 320-222510/2		3535, 537 (modified)				250.0 mL	10.0 mL	500 uL	500 uL
LCSD 320-222510/3		3535, 537 (modified)				250.0 mL	10.0 mL	500 uL	500 uL
320-38630-A-1	GC-MW-102 (WG)	3535, 537 (modified)	T	270.13 g	27.88 g	242.3 mL	10.0 mL	500 uL	500 uL
320-38630-A-2	GC-MW-109 (WG)	3535, 537 (modified)	T	275.82 g	27.92 g	247.9 mL	10.0 mL	500 uL	500 uL
320-38630-A-3	GC-MW-109M (WG)	3535, 537 (modified)	T	274.06 g	27.72 g	246.3 mL	10.0 mL	500 uL	500 uL
320-38630-A-4	GC-MW-101 (WG)	3535, 537 (modified)	T	279.90 g	27.28 g	252.6 mL	10.0 mL	500 uL	500 uL
320-38630-A-5	GC-MW-101D (WG)	3535, 537 (modified)	T	281.41 g	26.50 g	254.9 mL	10.0 mL	500 uL	500 uL
320-38630-A-6	GC-MW-106 (WG)	3535, 537 (modified)	T	281.03 g	26.57 g	254.5 mL	10.0 mL	500 uL	500 uL
320-38630-A-7	GC-MW-3 (WG)	3535, 537 (modified)	T	274.84 g	27.35 g	247.5 mL	10.0 mL	500 uL	500 uL
320-38630-A-8	GC-MW-110 (WG)	3535, 537 (modified)	T	279.58 g	27.54 g	252 mL	10.0 mL	500 uL	500 uL
320-38630-A-9	GC-MW-110D (WG)	3535, 537 (modified)	T	261.98 g	27.96 g	234 mL	10.0 mL	500 uL	500 uL
320-38630-A-10	GC-MW-2 (WG)	3535, 537 (modified)	T	272.59 g	27.09 g	245.5 mL	10.0 mL	500 uL	500 uL
320-38630-A-11	GC-Equipment Blank-2	3535, 537 (modified)	T	275.12 g	27.22 g	247.9 mL	10.0 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00138					
MB 320-222510/1		3535, 537 (modified)							
LCS 320-222510/2		3535, 537 (modified)		500 uL					
LCSD 320-222510/3		3535, 537 (modified)		500 uL					
320-38630-A-1	GC-MW-102 (WG)	3535, 537 (modified)	T						
320-38630-A-2	GC-MW-109 (WG)	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Batch Number: 222510 Batch Start Date: 05/10/18 12:16 Batch Analyst: Kolstad, Kate M

Batch Method: 3535 Batch End Date: 05/11/18 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00138					
320-38630-A-3	GC-MW-109M (WG)	3535, 537 (modified)	T						
320-38630-A-4	GC-MW-101 (WG)	3535, 537 (modified)	T						
320-38630-A-5	GC-MW-101D (WG)	3535, 537 (modified)	T						
320-38630-A-6	GC-MW-106 (WG)	3535, 537 (modified)	T						
320-38630-A-7	GC-MW-3 (WG)	3535, 537 (modified)	T						
320-38630-A-8	GC-MW-110 (WG)	3535, 537 (modified)	T						
320-38630-A-9	GC-MW-110D (WG)	3535, 537 (modified)	T						
320-38630-A-10	GC-MW-2 (WG)	3535, 537 (modified)	T						
320-38630-A-11	GC-Equipment Blank-2	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Batch Number: 222510 Batch Start Date: 05/10/18 12:16 Batch Analyst: Kolstad, Kate M

Batch Method: 3535 Batch End Date: 05/11/18 14:00

Batch Notes	
Analyst ID - Aliquot Step	SKD
Balance ID	QA-078
Batch Comment	Client labels match TA labels, 05/10/18
Analyst ID - Final Volume Step	SKD
H2O ID	5-10-18
Hexane ID	1214432
Internal Standard ID#	1231842
Manifold ID	2, 15
Methanol ID	1236570
Sodium Hydroxide ID	1219659
Pipette ID	I46360G
Analyst ID - Reagent Drop	KMK
Analyst ID - IS Reagent Drop	KMK
Analyst ID - IS Reagent Drop Witness	JER
Analyst ID - SU Reagent Drop	KMK
Analyst ID - SU Reagent Drop Witness	ABH
Solvent Lot #	1237546
Solvent Name	0.3% NH4OH in meOH
SOP Number	WS-LC-0025
SPE Cartridge Type	Oasis WAX 500mg
Solid Phase Extraction Disk ID	003537220A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Batch Number: 222819 Batch Start Date: 05/12/18 07:10 Batch Analyst: Kouchari, Shamiran

Batch Method: 3535 Batch End Date: 05/12/18 12:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC_ALL_SU 00061	LCPFC-IS 00044
MB 320-222819/1		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
LCS 320-222819/2		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
LCSD 320-222819/3		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
320-38630-B-1	GC-MW-102 (WG)	3535, 537 (modified)	T	279.52 g	29.31 g	250.2 mL	10.00 mL	500 uL	500 uL
320-38630-B-2	GC-MW-109 (WG)	3535, 537 (modified)	T	282.28 g	28.21 g	254.1 mL	10.00 mL	500 uL	500 uL
320-38630-B-3	GC-MW-109M (WG)	3535, 537 (modified)	T	282.60 g	27.66 g	254.9 mL	10.00 mL	500 uL	500 uL
320-38630-B-4	GC-MW-101 (WG)	3535, 537 (modified)	T	288.08 g	28.89 g	259.2 mL	10.00 mL	500 uL	500 uL
320-38630-B-5	GC-MW-101D (WG)	3535, 537 (modified)	T	283.39 g	29.07 g	254.3 mL	10.00 mL	500 uL	500 uL
320-38630-B-6	GC-MW-106 (WG)	3535, 537 (modified)	T	278.27 g	27.72 g	250.6 mL	10.00 mL	500 uL	500 uL
320-38630-B-7	GC-MW-3 (WG)	3535, 537 (modified)	T	266.57 g	28.26 g	238.3 mL	10.00 mL	500 uL	500 uL
320-38630-B-8	GC-MW-110 (WG)	3535, 537 (modified)	T	287.88 g	27.90 g	260 mL	10.00 mL	500 uL	500 uL
320-38630-B-9	GC-MW-110D (WG)	3535, 537 (modified)	T	284.08 g	27.25 g	256.8 mL	10.00 mL	500 uL	500 uL
320-38630-B-10	GC-MW-2 (WG)	3535, 537 (modified)	T	283.98 g	27.19 g	256.8 mL	10.00 mL	500 uL	500 uL
320-38630-B-11	GC-Equipment Blank-2	3535, 537 (modified)	T	278.81 g	28.16 g	250.7 mL	10.00 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00138					
MB 320-222819/1		3535, 537 (modified)							
LCS 320-222819/2		3535, 537 (modified)		500 uL					
LCSD 320-222819/3		3535, 537 (modified)		500 uL					
320-38630-B-1	GC-MW-102 (WG)	3535, 537 (modified)	T						
320-38630-B-2	GC-MW-109 (WG)	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Batch Number: 222819 Batch Start Date: 05/12/18 07:10 Batch Analyst: Kouchari, Shamiran

Batch Method: 3535 Batch End Date: 05/12/18 12:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00138					
320-38630-B-3	GC-MW-109M (WG)	3535, 537 (modified)	T						
320-38630-B-4	GC-MW-101 (WG)	3535, 537 (modified)	T						
320-38630-B-5	GC-MW-101D (WG)	3535, 537 (modified)	T						
320-38630-B-6	GC-MW-106 (WG)	3535, 537 (modified)	T						
320-38630-B-7	GC-MW-3 (WG)	3535, 537 (modified)	T						
320-38630-B-8	GC-MW-110 (WG)	3535, 537 (modified)	T						
320-38630-B-9	GC-MW-110D (WG)	3535, 537 (modified)	T						
320-38630-B-10	GC-MW-2 (WG)	3535, 537 (modified)	T						
320-38630-B-11	GC-Equipment Blank-2	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Batch Number: 222819 Batch Start Date: 05/12/18 07:10 Batch Analyst: Kouchari, Shamiran

Batch Method: 3535 Batch End Date: 05/12/18 12:50

Batch Notes	
Analyst ID - Aliquot Step	SKD
Balance ID	QA-070
Batch Comment	Client labels match TA labels, SKD 05/12/18
Analyst ID - Final Volume Step	SKD
H2O ID	5-10-18
Hexane ID	1214432
Internal Standard ID#	1231847
Manifold ID	16, 21
Methanol ID	1237544
Sodium Hydroxide ID	1219662
Pipette ID	I46360G
Analyst ID - Reagent Drop	VPM
Analyst ID - IS Reagent Drop	VPM
Analyst ID - IS Reagent Drop Witness	SKD
Analyst ID - SU Reagent Drop	VPM
Analyst ID - SU Reagent Drop Witness	SKD
Solvent Lot #	1237545
Solvent Name	0.3% NH4OH in meOH
SOP Number	WS-LC-0025
SPE Cartridge Type	Oasis WAX 500mg
Solid Phase Extraction Disk ID	003337172A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Robinson & Emily Ebert	Lab PM: Franklin, Jannel O	Carrier Tracking No(s):	COC No: 320-21364-4773.2
Client Contact: Emily Ebert	Phone: 651-263-4479	E-Mail: jannel.franklin@testamericainc.com		Page: Page 2 of 2
Company: TRC Environmental Corporation				Job #:
Address: 1430 Broadway, 10th FL	Due Date Requested:			
City: New York	TAT Requested (days): Standard			
State, Zip: NY, 10018-3308				
Phone: 212-221-7822(Tel)	PO #: 120097 (as of 3.14.18)			
Email: EEbert@trcsolutions.com	WO #: 279191 Phase 2			
Project Name: GEM Cleaners (PFAs) NYSDEC - TRC/D&B	Project #: 32010918			
Site: GEM Cleaners	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA - PFAS, Standard List (21 Analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
GC-MW-102(WG)	4/26/18	0825	G	Water	N	N	X		
GC-MW-109(WG)		0957		Water					
GC-MW-109M(WG)		0900		Water					
GC-MW-101(WG)		1115		Water					
GC-MW-101D(WG)		1115		Water					
GC-MW-106(WG)		1155		Water					
GC-MW-3(WG)		1245		Water					
GC-MW-110(WG)		1335		Water					
GC-MW-110D(WG)		1430		Water					
* GC-MW-2(WG)		1500		Water					
GC-~~MW-~~ Equipment Blank-2		0930		Water					

320-38630 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:
Please provide Cat B deliverable + NYSDEC EDD. Batch B close GW samples.

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/26 1649			4/27/18 1720	
Relinquished by:	Date/Time: 4/26/18 20:10	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time: 4-27-18	Company	Received by: FedEx	Date/Time: 1800	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: TAT IR 3.9°C

* both samples have partial labels; no times or date 30 Apr 18

rec'd by: Ali.Z 4/28/18 09:15

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 320-38630-1

Login Number: 38630
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	Refer to Job Narrative for details.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

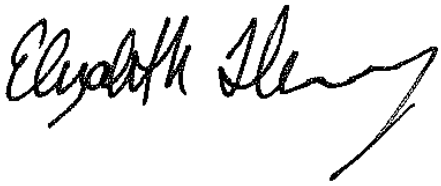
Job Number: 320-38611-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Emily Ebert



Approved for release.
Elizabeth J Flannery
Project Manager I
5/24/2018 3:32 PM

Designee for
Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
05/24/2018

cc: James M. Robinson

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 320-38611-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 4/27/2018 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

Receipt Exceptions

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): GC-MW-DUP01 (WG) (320-38611-10) Sample GC-MW-DUP01 (WG) was not listed on coc. Dated 4-25-18, with time listed @ 10:00.

The following sample was canceled for PFCs by the client on 5/6/18: GC-MW-DUP01 (WG) (320-38611-10).

PFOA/PFOS

Samples GC-MW-107(WG) (320-38611-1), GC-MW-107D(WG) (320-38611-2), GC-MW-108(WG) (320-38611-3), GC-MW-1B(WG) (320-38611-4), GC-MW-103(WG) (320-38611-5), GC-MW-104(WG) (320-38611-6), GC-MW-105(WG) (320-38611-7), GC-MW-DRAIN(WG) (320-38611-8) and GC-EQUIPMENT BLANK (320-38611-9) were analyzed for PFOA/PFOS in accordance with PFOA/PFOS. The samples were prepared on 05/08/2018 and 05/15/2018 and analyzed on 05/10/2018 and 05/17/2018.

The laboratory control sample (LCS) for preparation batch 320-222044 and analytical batch 320-222476 recovered outside control limits for the following analyte: 6:2FTS. The associated samples were re-extracted outside of holding time and both sets of data have been reported.

The laboratory control sample (LCS) for preparation batch 320-222044 and analytical batch 320-222655 recovered outside control limits for the following analyte: M2-6:2FTS. The associated samples were re-prepared outside holding time. Both sets of data have been reported. 6:2FTS failed the recovery criteria high for LCS 320-222044/2-A.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-6:2FTS in the following samples: GC-MW-108(WG) (320-38611-3), GC-MW-103(WG) (320-38611-5) and GC-MW-DRAIN(WG) (320-38611-8). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-6:2FTS in the following samples: GC-MW-108(WG) (320-38611-3) and GC-MW-103(WG) (320-38611-5). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Isotope Dilution Analyte (IDA) recoveries are above the method recommended limit for M2-6:2FTS and M2-8:2FTS in the following sample: GC-MW-DRAIN(WG) (320-38611-8). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

The method blank for preparation batch 320-222044 contained Perfluorooctanoic acid (PFOA) and 6:2FTS above the reporting limit (RL). The following samples had detections above the reporting limit: GC-MW-107(WG) (320-38611-1) and (MB 320-222044/1-A). These samples were re-extracted outside of holding time and both sets of data have been reported.

The method blank for preparation batch 320-222044 contained Perfluorooctanoic acid (PFOA) and 6:2FTS above the reporting limit (RL). These samples were re-extracted outside of holding time and both sets of data have been reported.

The following sample has chromatographic interferences that could adversely impact the identification and quantitation of Perfluorobutanesulfonic acid (PFBS): GC-MW-DRAIN(WG) (320-38611-8) These interferences could cause false positive results.

6:2FTS and Perfluorooctanoic acid (PFOA) were detected in method blank MB 320-222044/1-A at levels exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Perfluorobutanoic acid (PFBA) and Perfluorohexanesulfonic acid (PFHxS) were detected in method blank MB 320-222044/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep - Method 3535

The following samples: GC-MW-107D(WG) (320-38611-2) and GC-MW-DRAIN(WG) (320-38611-8) were decanted prior to preparation due to having sediment being present, which can potentially clog the Solid Phase Column (SPE). Prep Batch: 320-222044 - Method Code: 3535_PFC.

The following sample: GC-MW-DRAIN(WG) (320-38611-8) was observed to be green in color before the eluting process. Prep Batch: 320-222044 - Method Code: 3535_PFC.

The following samples GC-MW-107(WG) (320-38611-1), GC-MW-107(WG) (320-38611-1[MS]), GC-MW-107(WG) (320-38611-1[MSD]), GC-MW-107D(WG) (320-38611-2), GC-MW-108(WG) (320-38611-3), GC-MW-1B(WG) (320-38611-4), GC-MW-103(WG) (320-38611-5), GC-MW-104(WG) (320-38611-6), GC-MW-105(WG) (320-38611-7), GC-MW-DRAIN(WG) (320-38611-8) and GC-EQUIPMENT BLANK (320-38611-9) in preparation batch 320-223391 were re-prepared outside of preparation holding time due to PFOA and 6:2FTS contamination of the method blank. 3535_PFC - Aqueous.

The following samples: GC-MW-DRAIN(WG) (320-38611-8) were decanted prior to preparation due to excessive amount of sediment which can potentially clog the Solid Phase Column (SPE). preparation batch 320-223391 - 3535_PFC - Aqueous.

The following sample GC-MW-DRAIN(WG) (320-38611-8) in preparation batch 320-223391 was observed to be green in color, yet not turbid. The sample was decanted prior to extraction due to floating particulates in the sample. The sample extract was observed to be a fluorescent yellow: 3535_PFC - Aqueous.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38611-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-38611-1	GC-MW-107(WG)	Water	04/25/18 10:00	04/27/18 08:45
320-38611-2	GC-MW-107D(WG)	Water	04/25/18 11:15	04/27/18 08:45
320-38611-3	GC-MW-108(WG)	Water	04/25/18 11:50	04/27/18 08:45
320-38611-4	GC-MW-1B(WG)	Water	04/25/18 12:35	04/27/18 08:45
320-38611-5	GC-MW-103(WG)	Water	04/25/18 13:10	04/27/18 08:45
320-38611-6	GC-MW-104(WG)	Water	04/25/18 13:35	04/27/18 08:45
320-38611-7	GC-MW-105(WG)	Water	04/25/18 14:43	04/27/18 08:45
320-38611-8	GC-MW-DRAIN(WG)	Water	04/25/18 14:00	04/27/18 08:45
320-38611-9	GC-EQUIPMENT BLANK	Water	04/25/18 15:00	04/27/18 08:45

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38611-1

Client Sample ID: GC-MW-107(WG) — Lab Sample ID: 320-38611-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	10	B	1.9	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	12		1.9	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	15		1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	11		1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	35	B	1.9	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	5.0		1.9	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.8		1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	8.0		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5	B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.39	J	1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	15		1.9	0.50	ng/L	1		537 (modified)	Total/NA
6:2FTS	31	B *	19	1.9	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	28	H	1.8	0.77	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	4.2	J H	18	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-107D(WG) — Lab Sample ID: 320-38611-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.3	B	2.0	0.36	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	7.5		2.0	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	8.3		2.0	0.59	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	6.5		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	20	B	2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.61	J	2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.60	J	2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.4	J	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.2	B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.43	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.4		2.0	0.55	ng/L	1		537 (modified)	Total/NA
6:2FTS	28	B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	14	H	1.9	0.79	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-108(WG) — Lab Sample ID: 320-38611-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.6	B	1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	17		1.7	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	16		1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	9.7		1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	32	B	1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.7		1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.9		1.7	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.5		1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.0	B	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.35	J	1.7	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	15		1.7	0.46	ng/L	1		537 (modified)	Total/NA
6:2FTS	27	B *	17	1.7	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	27	H	1.8	0.76	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-MW-108(WG) (Continued) — Lab Sample ID: 320-38611-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
6:2FTS - RE	2.0	J H	18	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-1B(WG) — Lab Sample ID: 320-38611-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.8	B	1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	6.2		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	7.0		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	7.3		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	29	B	1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.2	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.3		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.3	B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.9		1.8	0.48	ng/L	1		537 (modified)	Total/NA
6:2FTS	26	B *	18	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	21	H	1.8	0.76	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-103(WG) — Lab Sample ID: 320-38611-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.0	B	1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	10		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	8.2		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	6.6		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	23	B	1.8	0.76	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.8		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.6	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	30		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3	B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.29	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	18		1.8	0.48	ng/L	1		537 (modified)	Total/NA
6:2FTS	25	B *	18	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	15	H	1.9	0.79	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-104(WG) — Lab Sample ID: 320-38611-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	12	B	1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	22		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	24		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	19		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	37	B	1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.9		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.6	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	11		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.5	B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.47	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-MW-104(WG) (Continued) — Lab Sample ID: 320-38611-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	16		1.8	0.49	ng/L	1		537 (modified)	Total/NA
6:2FTS	23	B *	18	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	28	H	1.8	0.75	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-105(WG) — Lab Sample ID: 320-38611-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	8.8	B	1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	15		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	14		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	14		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	38	B	1.8	0.76	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.4		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.5	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.9		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.1	B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	16		1.8	0.48	ng/L	1		537 (modified)	Total/NA
6:2FTS	26	B *	18	1.8	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	31	H	1.8	0.77	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-DRAIN(WG) — Lab Sample ID: 320-38611-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	120	B	2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	9.3		2.0	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	22		2.0	0.59	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	26		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	110	B	2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	14		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	20		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	3.6		2.0	1.1	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	2.2		2.0	0.56	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.75	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.6	CI	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.4	B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.3	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	130		2.0	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	21		2.0	0.35	ng/L	1		537 (modified)	Total/NA
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	27		20	3.1	ng/L	1		537 (modified)	Total/NA
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	13	J	20	1.9	ng/L	1		537 (modified)	Total/NA
6:2FTS	32	B *	20	2.0	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - RE	100	H	1.8	0.77	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	2.6	J H	18	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-EQUIPMENT BLANK — Lab Sample ID: 320-38611-9

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-EQUIPMENT BLANK (Continued)

Lab Sample ID: 320-38611-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	4.7	B	1.7	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.26	J B	1.7	0.14	ng/L	1		537 (modified)	Total/NA
6:2FTS	24	B *	17	1.7	ng/L	1		537 (modified)	Total/NA
6:2FTS - RE	2.3	J H	18	1.8	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38611-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Client Sample ID: GC-MW-107(WG)

Date Collected: 04/25/18 10:00
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**10**	**B**	1.9	0.32	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluoropentanoic acid (PFPeA)	**12**		1.9	0.45	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorohexanoic acid (PFHxA)	**15**		1.9	0.54	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluoroheptanoic acid (PFHpA)	**11**		1.9	0.23	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorooctanoic acid (PFOA)	**35**	**B**	1.9	0.79	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorononanoic acid (PFNA)	**5.0**		1.9	0.25	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorodecanoic acid (PFDA)	**2.8**		1.9	0.29	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.27	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorobutanesulfonic acid (PFBS)	**8.0**		1.9	0.19	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorohexanesulfonic acid (PFHxS)	**2.5**	**B**	1.9	0.16	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.39**	**J**	1.9	0.18	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorooctanesulfonic acid (PFOS)	**15**		1.9	0.50	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		05/08/18 10:19	05/10/18 09:53	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.32	ng/L		05/08/18 10:19	05/10/18 09:53	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		19	2.9	ng/L		05/08/18 10:19	05/10/18 09:53	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8	ng/L		05/08/18 10:19	05/10/18 09:53	1
6:2FTS	**31**	**B ***	19	1.9	ng/L		05/08/18 10:19	05/10/18 09:53	1
8:2FTS	ND		19	1.9	ng/L		05/08/18 10:19	05/10/18 09:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*77*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C5 PFPeA	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C2 PFHxA	*92*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C4-PFHpA	*99*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C4 PFOA	*98*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C5 PFNA	*96*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C2 PFDA	*91*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C2 PFUnA	*83*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C2 PFDoA	*81*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C2-PFTeDA	*84*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C3-PFBS	*92*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
18O2 PFHxS	*95*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C4 PFOS	*92*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
13C8 FOSA	*91*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
d3-NMeFOSAA	*107*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
d5-NEtFOSAA	*99*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
M2-6:2FTS	*124*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*
M2-8:2FTS	*108*		*25 - 150*	*05/08/18 10:19*	*05/10/18 09:53*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**28**	**H**	1.8	0.77	ng/L		05/15/18 14:35	05/17/18 01:14	1
6:2FTS	**4.2**	**J H**	18	1.8	ng/L		05/15/18 14:35	05/17/18 01:14	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	110		25 - 150	05/15/18 14:35	05/17/18 01:14	1
M2-6:2FTS	125		25 - 150	05/15/18 14:35	05/17/18 01:14	1

Client Sample ID: GC-MW-107D(WG)

Lab Sample ID: 320-38611-2

Date Collected: 04/25/18 11:15

Matrix: Water

Date Received: 04/27/18 08:45

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**5.3**	**B**	2.0	0.36	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluoropentanoic acid (PFPeA)	**7.5**		2.0	0.50	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorohexanoic acid (PFHxA)	**8.3**		2.0	0.59	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluoroheptanoic acid (PFHpA)	**6.5**		2.0	0.25	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorooctanoic acid (PFOA)	**20**	**B**	2.0	0.86	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorononanoic acid (PFNA)	**0.61**	**J**	2.0	0.27	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorodecanoic acid (PFDA)	**0.60**	**J**	2.0	0.31	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorobutanesulfonic acid (PFBS)	**1.4**	**J**	2.0	0.20	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorohexanesulfonic acid (PFHxS)	**5.2**	**B**	2.0	0.17	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.43**	**J**	2.0	0.19	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorooctanesulfonic acid (PFOS)	**5.4**		2.0	0.55	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/08/18 10:19	05/10/18 20:07	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36	ng/L		05/08/18 10:19	05/10/18 20:07	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/08/18 10:19	05/10/18 20:07	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/08/18 10:19	05/10/18 20:07	1
6:2FTS	**28**	**B ***	20	2.0	ng/L		05/08/18 10:19	05/10/18 20:07	1
8:2FTS	ND		20	2.0	ng/L		05/08/18 10:19	05/10/18 20:07	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	90		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C5 PFPeA	106		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C2 PFHxA	106		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C4-PFHpA	104		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C4 PFOA	103		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C5 PFNA	102		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C2 PFDA	99		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C2 PFUnA	90		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C2 PFDoA	91		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C2-PFTeDA	89		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C3-PFBS	107		25 - 150	05/08/18 10:19	05/10/18 20:07	1
18O2 PFHxS	105		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C4 PFOS	103		25 - 150	05/08/18 10:19	05/10/18 20:07	1
13C8 FOSA	91		25 - 150	05/08/18 10:19	05/10/18 20:07	1
d3-NMeFOSAA	90		25 - 150	05/08/18 10:19	05/10/18 20:07	1
d5-NEtFOSAA	89		25 - 150	05/08/18 10:19	05/10/18 20:07	1
M2-6:2FTS	115		25 - 150	05/08/18 10:19	05/10/18 20:07	1
M2-8:2FTS	116		25 - 150	05/08/18 10:19	05/10/18 20:07	1

Client Sample ID: GC-MW-107D(WG)

Date Collected: 04/25/18 11:15
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**14**	**H**	1.9	0.79	ng/L		05/15/18 14:35	05/17/18 01:46	1
6:2FTS	ND	H	19	1.9	ng/L		05/15/18 14:35	05/17/18 01:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*99*		*25 - 150*	*05/15/18 14:35*	*05/17/18 01:46*	*1*
M2-6:2FTS	*107*		*25 - 150*	*05/15/18 14:35*	*05/17/18 01:46*	*1*

Client Sample ID: GC-MW-108(WG)

Date Collected: 04/25/18 11:50
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**7.6**	**B**	1.7	0.30	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluoropentanoic acid (PFPeA)	**17**		1.7	0.42	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorohexanoic acid (PFHxA)	**16**		1.7	0.50	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluoroheptanoic acid (PFHpA)	**9.7**		1.7	0.21	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorooctanoic acid (PFOA)	**32**	**B**	1.7	0.73	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorononanoic acid (PFNA)	**2.7**		1.7	0.23	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorodecanoic acid (PFDA)	**1.9**		1.7	0.27	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.95	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorobutanesulfonic acid (PFBS)	**5.5**		1.7	0.17	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorohexanesulfonic acid (PFHxS)	**2.0**	**B**	1.7	0.15	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.35**	**J**	1.7	0.16	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorooctanesulfonic acid (PFOS)	**15**		1.7	0.46	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.28	ng/L		05/08/18 10:19	05/10/18 20:15	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.30	ng/L		05/08/18 10:19	05/10/18 20:15	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7	ng/L		05/08/18 10:19	05/10/18 20:15	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		05/08/18 10:19	05/10/18 20:15	1
6:2FTS	**27**	**B ***	17	1.7	ng/L		05/08/18 10:19	05/10/18 20:15	1
8:2FTS	ND		17	1.7	ng/L		05/08/18 10:19	05/10/18 20:15	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*65*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C5 PFPeA	*95*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C2 PFHxA	*96*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C4-PFHpA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C4 PFOA	*103*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C5 PFNA	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C2 PFDA	*96*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C2 PFUnA	*89*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C2 PFDoA	*79*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C2-PFTeDA	*76*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C3-PFBS	*94*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*

Client Sample ID: GC-MW-108(WG)

Date Collected: 04/25/18 11:50
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C4 PFOS	*95*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
13C8 FOSA	*87*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
d3-NMeFOSAA	*102*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
d5-NEtFOSAA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
M2-6:2FTS	*258*	*	*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*
M2-8:2FTS	*130*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:15*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**27**	**H**	1.8	0.76	ng/L		05/15/18 14:35	05/17/18 01:53	1
6:2FTS	**2.0**	**J H**	18	1.8	ng/L		05/15/18 14:35	05/17/18 01:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*100*		*25 - 150*	*05/15/18 14:35*	*05/17/18 01:53*	*1*
M2-6:2FTS	*298*	*	*25 - 150*	*05/15/18 14:35*	*05/17/18 01:53*	*1*

Client Sample ID: GC-MW-1B(WG)

Date Collected: 04/25/18 12:35
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-4

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**5.8**	**B**	1.8	0.31	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluoropentanoic acid (PFPeA)	**6.2**		1.8	0.43	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorohexanoic acid (PFHxA)	**7.0**		1.8	0.51	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluoroheptanoic acid (PFHpA)	**7.3**		1.8	0.22	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorooctanoic acid (PFOA)	**29**	**B**	1.8	0.75	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorononanoic acid (PFNA)	**1.2**	**J**	1.8	0.24	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.1	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorobutanesulfonic acid (PFBS)	**4.3**		1.8	0.18	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorohexanesulfonic acid (PFHxS)	**3.3**	**B**	1.8	0.15	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.45**	**J**	1.8	0.17	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorooctanesulfonic acid (PFOS)	**7.9**		1.8	0.48	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		05/08/18 10:19	05/10/18 20:22	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31	ng/L		05/08/18 10:19	05/10/18 20:22	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7	ng/L		05/08/18 10:19	05/10/18 20:22	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		05/08/18 10:19	05/10/18 20:22	1
6:2FTS	**26**	**B ***	18	1.8	ng/L		05/08/18 10:19	05/10/18 20:22	1
8:2FTS	ND		18	1.8	ng/L		05/08/18 10:19	05/10/18 20:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*86*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*

Client Sample ID: GC-MW-1B(WG)

Date Collected: 04/25/18 12:35
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-4

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFPeA	*99*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C2 PFHxA	*100*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C4-PFHpA	*105*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C4 PFOA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C5 PFNA	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C2 PFDA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C2 PFUnA	*91*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C2 PFDoA	*87*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C2-PFTeDA	*89*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C3-PFBS	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
18O2 PFHxS	*104*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C4 PFOS	*96*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
13C8 FOSA	*88*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
d3-NMeFOSAA	*90*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
d5-NEtFOSAA	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
M2-6:2FTS	*116*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*
M2-8:2FTS	*109*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:22*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**21**	**H**	1.8	0.76	ng/L		05/15/18 14:35	05/17/18 02:01	1
6:2FTS	ND	H	18	1.8	ng/L		05/15/18 14:35	05/17/18 02:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*104*		*25 - 150*	*05/15/18 14:35*	*05/17/18 02:01*	*1*
M2-6:2FTS	*104*		*25 - 150*	*05/15/18 14:35*	*05/17/18 02:01*	*1*

Client Sample ID: GC-MW-103(WG)

Date Collected: 04/25/18 13:10
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-5

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.0**	**B**	1.8	0.31	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluoropentanoic acid (PFPeA)	**10**		1.8	0.44	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorohexanoic acid (PFHxA)	**8.2**		1.8	0.52	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluoroheptanoic acid (PFHpA)	**6.6**		1.8	0.22	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorooctanoic acid (PFOA)	**23**	**B**	1.8	0.76	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorononanoic acid (PFNA)	**1.8**		1.8	0.24	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorodecanoic acid (PFDA)	**1.6**	**J**	1.8	0.28	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorobutanesulfonic acid (PFBS)	**30**		1.8	0.18	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorohexanesulfonic acid (PFHxS)	**2.3**	**B**	1.8	0.15	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.29**	**J**	1.8	0.17	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorooctanesulfonic acid (PFOS)	**18**		1.8	0.48	ng/L		05/08/18 10:19	05/10/18 20:30	1

Client Sample ID: GC-MW-103(WG)

Date Collected: 04/25/18 13:10
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-5

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/08/18 10:19	05/10/18 20:30	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31	ng/L		05/08/18 10:19	05/10/18 20:30	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		05/08/18 10:19	05/10/18 20:30	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		05/08/18 10:19	05/10/18 20:30	1
6:2FTS	**25**	**B ***	18	1.8	ng/L		05/08/18 10:19	05/10/18 20:30	1
8:2FTS	ND		18	1.8	ng/L		05/08/18 10:19	05/10/18 20:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*67*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C5 PFPeA	*90*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C2 PFHxA	*95*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C4-PFHpA	*106*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C4 PFOA	*102*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C5 PFNA	*99*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C2 PFDA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C2 PFUnA	*90*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C2 PFDoA	*83*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C2-PFTeDA	*75*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C3-PFBS	*98*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
18O2 PFHxS	*105*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C4 PFOS	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
13C8 FOSA	*92*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
d3-NMeFOSAA	*91*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
d5-NEtFOSAA	*102*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
M2-6:2FTS	*179*	*	*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*
M2-8:2FTS	*134*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:30*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**15**	**H**	1.9	0.79	ng/L		05/15/18 14:35	05/17/18 02:09	1
6:2FTS	ND	H	19	1.9	ng/L		05/15/18 14:35	05/17/18 02:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*109*		*25 - 150*	*05/15/18 14:35*	*05/17/18 02:09*	*1*
M2-6:2FTS	*174*	*	*25 - 150*	*05/15/18 14:35*	*05/17/18 02:09*	*1*

Client Sample ID: GC-MW-104(WG)

Date Collected: 04/25/18 13:35
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-6

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**12**	**B**	1.8	0.32	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluoropentanoic acid (PFPeA)	**22**		1.8	0.44	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorohexanoic acid (PFHxA)	**24**		1.8	0.53	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluoroheptanoic acid (PFHpA)	**19**		1.8	0.23	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorooctanoic acid (PFOA)	**37**	**B**	1.8	0.77	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorononanoic acid (PFNA)	**1.9**		1.8	0.24	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorodecanoic acid (PFDA)	**1.6**	**J**	1.8	0.28	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		05/08/18 10:19	05/10/18 20:38	1

Client Sample ID: GC-MW-104(WG)

Date Collected: 04/25/18 13:35
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-6

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorobutanesulfonic acid (PFBS)	**11**		1.8	0.18	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorohexanesulfonic acid (PFHxS)	**6.5**	**B**	1.8	0.15	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.47**	**J**	1.8	0.17	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorooctanesulfonic acid (PFOS)	**16**		1.8	0.49	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/08/18 10:19	05/10/18 20:38	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.32	ng/L		05/08/18 10:19	05/10/18 20:38	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		05/08/18 10:19	05/10/18 20:38	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		05/08/18 10:19	05/10/18 20:38	1
6:2FTS	**23**	**B ***	18	1.8	ng/L		05/08/18 10:19	05/10/18 20:38	1
8:2FTS	ND		18	1.8	ng/L		05/08/18 10:19	05/10/18 20:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*85*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C5 PFPeA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C2 PFHxA	*100*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C4-PFHpA	*105*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C4 PFOA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C5 PFNA	*98*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C2 PFDA	*94*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C2 PFUnA	*93*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C2 PFDoA	*84*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C2-PFTeDA	*83*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C3-PFBS	*100*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
18O2 PFHxS	*106*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C4 PFOS	*96*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
13C8 FOSA	*95*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
d3-NMeFOSAA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
d5-NEtFOSAA	*100*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
M2-6:2FTS	*133*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*
M2-8:2FTS	*115*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:38*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**28**	**H**	1.8	0.75	ng/L		05/15/18 14:35	05/17/18 02:17	1
6:2FTS	ND	H	18	1.8	ng/L		05/15/18 14:35	05/17/18 02:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*108*		*25 - 150*	*05/15/18 14:35*	*05/17/18 02:17*	*1*
M2-6:2FTS	*126*		*25 - 150*	*05/15/18 14:35*	*05/17/18 02:17*	*1*

Client Sample ID: GC-MW-105(WG)

Date Collected: 04/25/18 14:43
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-7

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**8.8**	**B**	1.8	0.31	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluoropentanoic acid (PFPeA)	**15**		1.8	0.44	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorohexanoic acid (PFHxA)	**14**		1.8	0.52	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluoroheptanoic acid (PFHpA)	**14**		1.8	0.22	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorooctanoic acid (PFOA)	**38**	**B**	1.8	0.76	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorononanoic acid (PFNA)	**2.4**		1.8	0.24	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorodecanoic acid (PFDA)	**1.5**	**J**	1.8	0.28	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorobutanesulfonic acid (PFBS)	**6.9**		1.8	0.18	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorohexanesulfonic acid (PFHxS)	**5.1**	**B**	1.8	0.15	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.45**	**J**	1.8	0.17	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorooctanesulfonic acid (PFOS)	**16**		1.8	0.48	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/08/18 10:19	05/10/18 20:46	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31	ng/L		05/08/18 10:19	05/10/18 20:46	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		05/08/18 10:19	05/10/18 20:46	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		05/08/18 10:19	05/10/18 20:46	1
6:2FTS	**26**	**B ***	18	1.8	ng/L		05/08/18 10:19	05/10/18 20:46	1
8:2FTS	ND		18	1.8	ng/L		05/08/18 10:19	05/10/18 20:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*84*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C5 PFPeA	*99*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C2 PFHxA	*103*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C4-PFHpA	*107*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C4 PFOA	*103*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C5 PFNA	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C2 PFDA	*98*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C2 PFUnA	*83*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C2 PFDoA	*79*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C2-PFTeDA	*87*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C3-PFBS	*98*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
18O2 PFHxS	*105*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C4 PFOS	*94*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
13C8 FOSA	*90*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
d3-NMeFOSAA	*91*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
d5-NEtFOSAA	*94*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
M2-6:2FTS	*129*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*
M2-8:2FTS	*106*		*25 - 150*	*05/08/18 10:19*	*05/10/18 20:46*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**31**	**H**	1.8	0.77	ng/L		05/15/18 14:35	05/17/18 02:25	1
6:2FTS	ND	H	18	1.8	ng/L		05/15/18 14:35	05/17/18 02:25	1

Client Sample ID: GC-MW-105(WG)

Lab Sample ID: 320-38611-7

Date Collected: 04/25/18 14:43

Matrix: Water

Date Received: 04/27/18 08:45

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	102		25 - 150	05/15/18 14:35	05/17/18 02:25	1
M2-6:2FTS	116		25 - 150	05/15/18 14:35	05/17/18 02:25	1

Client Sample ID: GC-MW-DRAIN(WG)

Lab Sample ID: 320-38611-8

Date Collected: 04/25/18 14:00

Matrix: Water

Date Received: 04/27/18 08:45

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**120**	**B**	2.0	0.35	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluoropentanoic acid (PFPeA)	**9.3**		2.0	0.50	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorohexanoic acid (PFHxA)	**22**		2.0	0.59	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluoroheptanoic acid (PFHpA)	**26**		2.0	0.25	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorooctanoic acid (PFOA)	**110**	**B**	2.0	0.86	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorononanoic acid (PFNA)	**14**		2.0	0.27	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorodecanoic acid (PFDA)	**20**		2.0	0.31	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluoroundecanoic acid (PFUnA)	**3.6**		2.0	1.1	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorododecanoic acid (PFDoA)	**2.2**		2.0	0.56	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorotetradecanoic acid (PFTeA)	**0.75**	**J**	2.0	0.29	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorobutanesulfonic acid (PFBS)	**3.6**	**CI**	2.0	0.20	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorohexanesulfonic acid (PFHxS)	**5.4**	**B**	2.0	0.17	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluoroheptanesulfonic Acid (PFHpS)	**1.3**	**J**	2.0	0.19	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorooctanesulfonic acid (PFOS)	**130**		2.0	0.55	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/08/18 10:19	05/10/18 20:54	1
Perfluorooctane Sulfonamide (FOSA)	**21**		2.0	0.35	ng/L		05/08/18 10:19	05/10/18 20:54	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	**27**		20	3.1	ng/L		05/08/18 10:19	05/10/18 20:54	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	**13**	**J**	20	1.9	ng/L		05/08/18 10:19	05/10/18 20:54	1
6:2FTS	**32**	**B ***	20	2.0	ng/L		05/08/18 10:19	05/10/18 20:54	1
8:2FTS	ND		20	2.0	ng/L		05/08/18 10:19	05/10/18 20:54	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	31		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C5 PFPeA	59		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C2 PFHxA	75		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C4-PFHpA	86		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C4 PFOA	99		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C5 PFNA	106		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C2 PFDA	128		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C2 PFUnA	129		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C2 PFDoA	116		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C2-PFTeDA	83		25 - 150	05/08/18 10:19	05/10/18 20:54	1

Client Sample ID: GC-MW-DRAIN(WG)

Lab Sample ID: 320-38611-8

Date Collected: 04/25/18 14:00

Matrix: Water

Date Received: 04/27/18 08:45

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	93		25 - 150	05/08/18 10:19	05/10/18 20:54	1
18O2 PFHxS	126		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C4 PFOS	135		25 - 150	05/08/18 10:19	05/10/18 20:54	1
13C8 FOSA	96		25 - 150	05/08/18 10:19	05/10/18 20:54	1
d3-NMeFOSAA	103		25 - 150	05/08/18 10:19	05/10/18 20:54	1
d5-NEtFOSAA	120		25 - 150	05/08/18 10:19	05/10/18 20:54	1
M2-6:2FTS	229	*	25 - 150	05/08/18 10:19	05/10/18 20:54	1
M2-8:2FTS	283	*	25 - 150	05/08/18 10:19	05/10/18 20:54	1

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**100**	**H**	1.8	0.77	ng/L		05/15/18 14:35	05/17/18 02:33	1
6:2FTS	**2.6**	**J H**	18	1.8	ng/L		05/15/18 14:35	05/17/18 02:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	104		25 - 150	05/15/18 14:35	05/17/18 02:33	1
M2-6:2FTS	218	*	25 - 150	05/15/18 14:35	05/17/18 02:33	1

Client Sample ID: GC-EQUIPMENT BLANK

Lab Sample ID: 320-38611-9

Date Collected: 04/25/18 15:00

Matrix: Water

Date Received: 04/27/18 08:45

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	0.30	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.42	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.49	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorooctanoic acid (PFOA)	**4.7**	**B**	1.7	0.72	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorohexanesulfonic acid (PFHxS)	**0.26**	**J B**	1.7	0.14	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.46	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		05/08/18 10:19	05/10/18 21:17	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.30	ng/L		05/08/18 10:19	05/10/18 21:17	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		05/08/18 10:19	05/10/18 21:17	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		05/08/18 10:19	05/10/18 21:17	1
6:2FTS	**24**	**B ***	17	1.7	ng/L		05/08/18 10:19	05/10/18 21:17	1
8:2FTS	ND		17	1.7	ng/L		05/08/18 10:19	05/10/18 21:17	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	106		25 - 150	05/08/18 10:19	05/10/18 21:17	1

Client Sample ID: GC-EQUIPMENT BLANK

Date Collected: 04/25/18 15:00
Date Received: 04/27/18 08:45

Lab Sample ID: 320-38611-9

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFPeA	110		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C2 PFHxA	105		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C4-PFHpA	106		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C4 PFOA	101		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C5 PFNA	96		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C2 PFDA	96		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C2 PFUnA	93		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C2 PFDoA	89		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C2-PFTeDA	90		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C3-PFBS	102		25 - 150	05/08/18 10:19	05/10/18 21:17	1
18O2 PFHxS	102		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C4 PFOS	94		25 - 150	05/08/18 10:19	05/10/18 21:17	1
13C8 FOSA	88		25 - 150	05/08/18 10:19	05/10/18 21:17	1
d3-NMeFOSAA	95		25 - 150	05/08/18 10:19	05/10/18 21:17	1
d5-NEtFOSAA	98		25 - 150	05/08/18 10:19	05/10/18 21:17	1
M2-6:2FTS	119		25 - 150	05/08/18 10:19	05/10/18 21:17	1
M2-8:2FTS	112		25 - 150	05/08/18 10:19	05/10/18 21:17	1

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND	H	1.8	0.78	ng/L		05/15/18 14:35	05/17/18 02:41	1
6:2FTS	**2.3**	**J H**	18	1.8	ng/L		05/15/18 14:35	05/17/18 02:41	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	106		25 - 150	05/15/18 14:35	05/17/18 02:41	1
M2-6:2FTS	112		25 - 150	05/15/18 14:35	05/17/18 02:41	1

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38611-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-38611-1	GC-MW-107(WG)	77	97	92	99	98	96	91	83
320-38611-1 - RE	GC-MW-107(WG)					110			
320-38611-1 MS	GC-MW-107(WG)	87	107	102	108	103	98	98	92
320-38611-1 MS - RE	GC-MW-107(WG)					111			
320-38611-1 MSD	GC-MW-107(WG)	85	100	102	108	101	93	97	88
320-38611-1 MSD - RE	GC-MW-107(WG)					108			
320-38611-2	GC-MW-107D(WG)	90	106	106	104	103	102	99	90
320-38611-2 - RE	GC-MW-107D(WG)					99			
320-38611-3	GC-MW-108(WG)	65	95	96	101	103	97	96	89
320-38611-3 - RE	GC-MW-108(WG)					100			
320-38611-4	GC-MW-1B(WG)	86	99	100	105	101	97	101	91
320-38611-4 - RE	GC-MW-1B(WG)					104			
320-38611-5	GC-MW-103(WG)	67	90	95	106	102	99	101	90
320-38611-5 - RE	GC-MW-103(WG)					109			
320-38611-6	GC-MW-104(WG)	85	101	100	105	101	98	94	93
320-38611-6 - RE	GC-MW-104(WG)					108			
320-38611-7	GC-MW-105(WG)	84	99	103	107	103	97	98	83
320-38611-7 - RE	GC-MW-105(WG)					102			
320-38611-8	GC-MW-DRAIN(WG)	31	59	75	86	99	106	128	129
320-38611-8 - RE	GC-MW-DRAIN(WG)					104			
320-38611-9	GC-EQUIPMENT BLANK	106	110	105	106	101	96	96	93
320-38611-9 - RE	GC-EQUIPMENT BLANK					106			
LCS 320-222044/2-A	Lab Control Sample	105	108	104	107	108	99	102	89
LCS 320-223391/2-A	Lab Control Sample					106			
MB 320-222044/1-A	Method Blank	102	107	103	108	103	99	101	94
MB 320-223391/1-A	Method Blank					104			

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOSA (25-150)	-NEtFOSA (25-150)
320-38611-1	GC-MW-107(WG)	81	84	92	95	92	91	107	99
320-38611-1 - RE	GC-MW-107(WG)								
320-38611-1 MS	GC-MW-107(WG)	91	88	101	108	99	93	105	102
320-38611-1 MS - RE	GC-MW-107(WG)								
320-38611-1 MSD	GC-MW-107(WG)	83	88	101	104	99	92	102	100
320-38611-1 MSD - RE	GC-MW-107(WG)								
320-38611-2	GC-MW-107D(WG)	91	89	107	105	103	91	90	89
320-38611-2 - RE	GC-MW-107D(WG)								
320-38611-3	GC-MW-108(WG)	79	76	94	97	95	87	102	101
320-38611-3 - RE	GC-MW-108(WG)								
320-38611-4	GC-MW-1B(WG)	87	89	97	104	96	88	90	97
320-38611-4 - RE	GC-MW-1B(WG)								
320-38611-5	GC-MW-103(WG)	83	75	98	105	97	92	91	102
320-38611-5 - RE	GC-MW-103(WG)								
320-38611-6	GC-MW-104(WG)	84	83	100	106	96	95	101	100
320-38611-6 - RE	GC-MW-104(WG)								
320-38611-7	GC-MW-105(WG)	79	87	98	105	94	90	91	94
320-38611-7 - RE	GC-MW-105(WG)								
320-38611-8	GC-MW-DRAIN(WG)	116	83	93	126	135	96	103	120
320-38611-8 - RE	GC-MW-DRAIN(WG)								

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOSA (25-150)	-NEtFOSA (25-150)
320-38611-9	GC-EQUIPMENT BLANK	89	90	102	102	94	88	95	98
320-38611-9 - RE	GC-EQUIPMENT BLANK								
LCS 320-222044/2-A	Lab Control Sample	91	93	102	103	99	87	99	107
LCS 320-223391/2-A	Lab Control Sample								
MB 320-222044/1-A	Method Blank	97	93	103	108	102	94	106	110
MB 320-223391/1-A	Method Blank								

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)						
320-38611-1	GC-MW-107(WG)	124	108						
320-38611-1 - RE	GC-MW-107(WG)	125							
320-38611-1 MS	GC-MW-107(WG)	130	113						
320-38611-1 MS - RE	GC-MW-107(WG)	126							
320-38611-1 MSD	GC-MW-107(WG)	125	114						
320-38611-1 MSD - RE	GC-MW-107(WG)	117							
320-38611-2	GC-MW-107D(WG)	115	116						
320-38611-2 - RE	GC-MW-107D(WG)	107							
320-38611-3	GC-MW-108(WG)	258 *	130						
320-38611-3 - RE	GC-MW-108(WG)	298 *							
320-38611-4	GC-MW-1B(WG)	116	109						
320-38611-4 - RE	GC-MW-1B(WG)	104							
320-38611-5	GC-MW-103(WG)	179 *	134						
320-38611-5 - RE	GC-MW-103(WG)	174 *							
320-38611-6	GC-MW-104(WG)	133	115						
320-38611-6 - RE	GC-MW-104(WG)	126							
320-38611-7	GC-MW-105(WG)	129	106						
320-38611-7 - RE	GC-MW-105(WG)	116							
320-38611-8	GC-MW-DRAIN(WG)	229 *	283 *						
320-38611-8 - RE	GC-MW-DRAIN(WG)	218 *							
320-38611-9	GC-EQUIPMENT BLANK	119	112						
320-38611-9 - RE	GC-EQUIPMENT BLANK	112							
LCS 320-222044/2-A	Lab Control Sample	120	108						
LCS 320-223391/2-A	Lab Control Sample	111							
MB 320-222044/1-A	Method Blank	127	119						
MB 320-223391/1-A	Method Blank	116							

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
PFHpA = 13C4-PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2-PFTeDA
13C3-PFBS = 13C3-PFBS
PFHxS = 18O2 PFHxS

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38611-1

PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3-NMeFOSAA = d3-NMeFOSAA
d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2FTS
M282FTS = M2-8:2FTS

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-222044/1-A
Matrix: Water
Analysis Batch: 222476

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 222044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.453	J	2.0	0.35	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorooctanoic acid (PFOA)	4.21		2.0	0.85	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorohexanesulfonic acid (PFHxS)	0.267	J	2.0	0.17	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/08/18 10:19	05/10/18 08:59	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		05/08/18 10:19	05/10/18 08:59	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		05/08/18 10:19	05/10/18 08:59	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		05/08/18 10:19	05/10/18 08:59	1
6:2FTS	26.9		20	2.0	ng/L		05/08/18 10:19	05/10/18 08:59	1
8:2FTS	ND		20	2.0	ng/L		05/08/18 10:19	05/10/18 08:59	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C5 PFPeA	*107*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C2 PFHxA	*103*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C4-PFHpA	*108*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C4 PFOA	*103*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C5 PFNA	*99*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C2 PFDA	*101*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C2 PFUnA	*94*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C2 PFDoA	*97*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C2-PFTeDA	*93*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C3-PFBS	*103*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
18O2 PFHxS	*108*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C4 PFOS	*102*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
13C8 FOSA	*94*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
d3-NMeFOSAA	*106*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
d5-NEtFOSAA	*110*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
M2-6:2FTS	*127*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*
M2-8:2FTS	*119*		*25 - 150*	*05/08/18 10:19*	*05/10/18 08:59*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-222044/2-A
Matrix: Water
Analysis Batch: 222476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 222044

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	42.0		ng/L		105	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	37.4		ng/L		93	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	40.8		ng/L		102	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	40.7		ng/L		102	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	41.1		ng/L		103	64 - 124
Perfluorononanoic acid (PFNA)	40.0	40.9		ng/L		102	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	38.0		ng/L		95	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	38.8		ng/L		97	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	40.6		ng/L		101	71 - 131
Perfluorotridecanoic Acid (PFTriA)	40.0	37.1		ng/L		93	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	39.6		ng/L		99	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	34.6		ng/L		98	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.8		ng/L		90	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.1		ng/L		100	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	36.4		ng/L		98	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	38.1		ng/L		99	68 - 128
Perfluorooctane Sulfonamide (FOSA)	40.0	40.2		ng/L		100	70 - 130
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	43.3		ng/L		108	67 - 127
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.3		ng/L		101	65 - 125
6:2FTS	37.9	65.0	*	ng/L		171	66 - 126
8:2FTS	38.3	40.9		ng/L		107	67 - 127

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*105*		*25 - 150*
13C5 PFPeA	*108*		*25 - 150*
13C2 PFHxA	*104*		*25 - 150*
13C4-PFHpA	*107*		*25 - 150*
13C4 PFOA	*108*		*25 - 150*
13C5 PFNA	*99*		*25 - 150*
13C2 PFDA	*102*		*25 - 150*
13C2 PFUnA	*89*		*25 - 150*
13C2 PFDoA	*91*		*25 - 150*
13C2-PFTeDA	*93*		*25 - 150*
13C3-PFBS	*102*		*25 - 150*
18O2 PFHxS	*103*		*25 - 150*
13C4 PFOS	*99*		*25 - 150*
13C8 FOSA	*87*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-222044/2-A
Matrix: Water
Analysis Batch: 222476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 222044

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
d3-NMeFOSAA	99		25 - 150
d5-NEtFOSAA	107		25 - 150
M2-6:2FTS	120		25 - 150
M2-8:2FTS	108		25 - 150

Lab Sample ID: 320-38611-1 MS
Matrix: Water
Analysis Batch: 222655

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA
Prep Batch: 222044

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	10	B	37.2	48.4		ng/L		103	70 - 130
Perfluoropentanoic acid (PFPeA)	12		37.2	48.6		ng/L		99	66 - 126
Perfluorohexanoic acid (PFHxA)	15		37.2	54.2		ng/L		106	66 - 126
Perfluoroheptanoic acid (PFHpA)	11		37.2	52.1		ng/L		111	66 - 126
Perfluorooctanoic acid (PFOA)	35	B	37.2	71.8		ng/L		99	64 - 124
Perfluorononanoic acid (PFNA)	5.0		37.2	43.0		ng/L		102	68 - 128
Perfluorodecanoic acid (PFDA)	2.8		37.2	38.6		ng/L		96	69 - 129
Perfluoroundecanoic acid (PFUnA)	ND		37.2	34.2		ng/L		92	60 - 120
Perfluorododecanoic acid (PFDoA)	ND		37.2	37.0		ng/L		99	71 - 131
Perfluorotridecanoic Acid (PFTriA)	ND		37.2	33.6		ng/L		90	72 - 132
Perfluorotetradecanoic acid (PFTeA)	ND		37.2	38.0		ng/L		102	68 - 128
Perfluorobutanesulfonic acid (PFBS)	8.0		32.9	40.6		ng/L		99	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	2.5	B	33.9	34.2		ng/L		94	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	0.39	J	35.4	36.7		ng/L		102	68 - 128
Perfluorooctanesulfonic acid (PFOS)	15		34.5	51.5		ng/L		105	67 - 127
Perfluorodecanesulfonic acid (PFDS)	ND		35.9	33.5		ng/L		93	68 - 128
Perfluorooctane Sulfonamide (FOSA)	ND		37.2	39.1		ng/L		105	70 - 130
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		37.2	41.4		ng/L		111	67 - 127
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		37.2	38.8		ng/L		104	65 - 125
6:2FTS	31	B *	35.3	66.8		ng/L		102	66 - 126
8:2FTS	ND		35.7	39.3		ng/L		110	67 - 127

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	87		25 - 150
13C5 PFPeA	107		25 - 150
13C2 PFHxA	102		25 - 150
13C4-PFHpA	108		25 - 150
13C4 PFOA	103		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 320-38611-1 MS
Matrix: Water
Analysis Batch: 222655

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA
Prep Batch: 222044

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C5 PFNA	*98*		*25 - 150*
13C2 PFDA	*98*		*25 - 150*
13C2 PFUnA	*92*		*25 - 150*
13C2 PFDoA	*91*		*25 - 150*
13C2-PFTeDA	*88*		*25 - 150*
13C3-PFBS	*101*		*25 - 150*
18O2 PFHxS	*108*		*25 - 150*
13C4 PFOS	*99*		*25 - 150*
13C8 FOSA	*93*		*25 - 150*
d3-NMeFOSAA	*105*		*25 - 150*
d5-NEtFOSAA	*102*		*25 - 150*
M2-6:2FTS	*130*		*25 - 150*
M2-8:2FTS	*113*		*25 - 150*

Lab Sample ID: 320-38611-1 MSD
Matrix: Water
Analysis Batch: 222655

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA
Prep Batch: 222044

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	10	B	36.7	48.2		ng/L		104	70 - 130	0	30
Perfluoropentanoic acid (PFPeA)	12		36.7	49.1		ng/L		102	66 - 126	1	30
Perfluorohexanoic acid (PFHxA)	15		36.7	50.1		ng/L		96	66 - 126	8	30
Perfluoroheptanoic acid (PFHpA)	11		36.7	51.9		ng/L		112	66 - 126	0	30
Perfluorooctanoic acid (PFOA)	35	B	36.7	74.4		ng/L		108	64 - 124	4	30
Perfluorononanoic acid (PFNA)	5.0		36.7	43.3		ng/L		104	68 - 128	1	30
Perfluorodecanoic acid (PFDA)	2.8		36.7	38.2		ng/L		97	69 - 129	1	30
Perfluoroundecanoic acid (PFUnA)	ND		36.7	34.6		ng/L		94	60 - 120	1	30
Perfluorododecanoic acid (PFDoA)	ND		36.7	38.2		ng/L		104	71 - 131	3	30
Perfluorotridecanoic Acid (PFTriA)	ND		36.7	34.0		ng/L		93	72 - 132	1	30
Perfluorotetradecanoic acid (PFTeA)	ND		36.7	35.3		ng/L		96	68 - 128	7	30
Perfluorobutanesulfonic acid (PFBS)	8.0		32.4	39.9		ng/L		99	73 - 133	2	30
Perfluorohexanesulfonic acid (PFHxS)	2.5	B	33.4	34.3		ng/L		95	63 - 123	0	30
Perfluoroheptanesulfonic Acid (PFHpS)	0.39	J	34.9	37.0		ng/L		105	68 - 128	1	30
Perfluorooctanesulfonic acid (PFOS)	15		34.1	49.8		ng/L		101	67 - 127	3	30
Perfluorodecanesulfonic acid (PFDS)	ND		35.4	32.0		ng/L		90	68 - 128	5	30
Perfluorooctane Sulfonamide (FOSA)	ND		36.7	35.8		ng/L		97	70 - 130	9	30
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		36.7	40.5		ng/L		110	67 - 127	2	30
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		36.7	37.8		ng/L		103	65 - 125	3	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 320-38611-1 MSD
Matrix: Water
Analysis Batch: 222655

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA
Prep Batch: 222044

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
6:2FTS	31	B *	34.8	65.7		ng/L		100	66 - 126	2	30
8:2FTS	ND		35.2	37.9		ng/L		108	67 - 127	4	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*85*		*25 - 150*
13C5 PFPeA	*100*		*25 - 150*
13C2 PFHxA	*102*		*25 - 150*
13C4-PFHpA	*108*		*25 - 150*
13C4 PFOA	*101*		*25 - 150*
13C5 PFNA	*93*		*25 - 150*
13C2 PFDA	*97*		*25 - 150*
13C2 PFUnA	*88*		*25 - 150*
13C2 PFDoA	*83*		*25 - 150*
13C2-PFTeDA	*88*		*25 - 150*
13C3-PFBS	*101*		*25 - 150*
18O2 PFHxS	*104*		*25 - 150*
13C4 PFOS	*99*		*25 - 150*
13C8 FOSA	*92*		*25 - 150*
d3-NMeFOSAA	*102*		*25 - 150*
d5-NEtFOSAA	*100*		*25 - 150*
M2-6:2FTS	*125*		*25 - 150*
M2-8:2FTS	*114*		*25 - 150*

Lab Sample ID: MB 320-223391/1-A
Matrix: Water
Analysis Batch: 223714

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 223391

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		05/15/18 14:35	05/17/18 00:12	1
6:2FTS	ND		20	2.0	ng/L		05/15/18 14:35	05/17/18 00:12	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*104*		*25 - 150*	*05/15/18 14:35*	*05/17/18 00:12*	*1*
M2-6:2FTS	*116*		*25 - 150*	*05/15/18 14:35*	*05/17/18 00:12*	*1*

Lab Sample ID: LCS 320-223391/2-A
Matrix: Water
Analysis Batch: 223714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 223391

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorooctanoic acid (PFOA)			40.0	39.3		ng/L		98	64 - 124		
6:2FTS			37.9	36.6		ng/L		97	66 - 126		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFOA	*106*		*25 - 150*
M2-6:2FTS	*111*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Lab Sample ID: 320-38611-1 MS
Matrix: Water
Analysis Batch: 223714

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA
Prep Batch: 223391

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorooctanoic acid (PFOA) - RE	28	H	35.8	59.6	H	ng/L		89	64 - 124		
6:2FTS - RE	4.2	J H	34.0	37.6	H	ng/L		98	66 - 126		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFOA - RE	*111*		*25 - 150*
M2-6:2FTS - RE	*126*		*25 - 150*

Lab Sample ID: 320-38611-1 MSD
Matrix: Water
Analysis Batch: 223714

Client Sample ID: GC-MW-107(WG)
Prep Type: Total/NA
Prep Batch: 223391

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA) - RE	28	H	35.8	61.4	H	ng/L		94	64 - 124	3	30
6:2FTS - RE	4.2	J H	33.9	36.8	H	ng/L		96	66 - 126	2	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFOA - RE	*108*		*25 - 150*
M2-6:2FTS - RE	*117*		*25 - 150*

Qualifiers

LCMS

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time
*	Isotope Dilution analyte is outside acceptance limits.
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

LCMS

Prep Batch: 222044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38611-1	GC-MW-107(WG)	Total/NA	Water	3535	
320-38611-2	GC-MW-107D(WG)	Total/NA	Water	3535	
320-38611-3	GC-MW-108(WG)	Total/NA	Water	3535	
320-38611-4	GC-MW-1B(WG)	Total/NA	Water	3535	
320-38611-5	GC-MW-103(WG)	Total/NA	Water	3535	
320-38611-6	GC-MW-104(WG)	Total/NA	Water	3535	
320-38611-7	GC-MW-105(WG)	Total/NA	Water	3535	
320-38611-8	GC-MW-DRAIN(WG)	Total/NA	Water	3535	
320-38611-9	GC-EQUIPMENT BLANK	Total/NA	Water	3535	
MB 320-222044/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-222044/2-A	Lab Control Sample	Total/NA	Water	3535	
320-38611-1 MS	GC-MW-107(WG)	Total/NA	Water	3535	
320-38611-1 MSD	GC-MW-107(WG)	Total/NA	Water	3535	

Analysis Batch: 222476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38611-1	GC-MW-107(WG)	Total/NA	Water	537 (modified)	222044
MB 320-222044/1-A	Method Blank	Total/NA	Water	537 (modified)	222044
LCS 320-222044/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	222044

Analysis Batch: 222655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38611-2	GC-MW-107D(WG)	Total/NA	Water	537 (modified)	222044
320-38611-3	GC-MW-108(WG)	Total/NA	Water	537 (modified)	222044
320-38611-4	GC-MW-1B(WG)	Total/NA	Water	537 (modified)	222044
320-38611-5	GC-MW-103(WG)	Total/NA	Water	537 (modified)	222044
320-38611-6	GC-MW-104(WG)	Total/NA	Water	537 (modified)	222044
320-38611-7	GC-MW-105(WG)	Total/NA	Water	537 (modified)	222044
320-38611-8	GC-MW-DRAIN(WG)	Total/NA	Water	537 (modified)	222044
320-38611-9	GC-EQUIPMENT BLANK	Total/NA	Water	537 (modified)	222044
320-38611-1 MS	GC-MW-107(WG)	Total/NA	Water	537 (modified)	222044
320-38611-1 MSD	GC-MW-107(WG)	Total/NA	Water	537 (modified)	222044

Prep Batch: 223391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38611-1 - RE	GC-MW-107(WG)	Total/NA	Water	3535	
320-38611-2 - RE	GC-MW-107D(WG)	Total/NA	Water	3535	
320-38611-3 - RE	GC-MW-108(WG)	Total/NA	Water	3535	
320-38611-4 - RE	GC-MW-1B(WG)	Total/NA	Water	3535	
320-38611-5 - RE	GC-MW-103(WG)	Total/NA	Water	3535	
320-38611-6 - RE	GC-MW-104(WG)	Total/NA	Water	3535	
320-38611-7 - RE	GC-MW-105(WG)	Total/NA	Water	3535	
320-38611-8 - RE	GC-MW-DRAIN(WG)	Total/NA	Water	3535	
320-38611-9 - RE	GC-EQUIPMENT BLANK	Total/NA	Water	3535	
MB 320-223391/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-223391/2-A	Lab Control Sample	Total/NA	Water	3535	
320-38611-1 MS - RE	GC-MW-107(WG)	Total/NA	Water	3535	
320-38611-1 MSD - RE	GC-MW-107(WG)	Total/NA	Water	3535	

LCMS (Continued)

Analysis Batch: 223714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-38611-1 - RE	GC-MW-107(WG)	Total/NA	Water	537 (modified)	223391
320-38611-2 - RE	GC-MW-107D(WG)	Total/NA	Water	537 (modified)	223391
320-38611-3 - RE	GC-MW-108(WG)	Total/NA	Water	537 (modified)	223391
320-38611-4 - RE	GC-MW-1B(WG)	Total/NA	Water	537 (modified)	223391
320-38611-5 - RE	GC-MW-103(WG)	Total/NA	Water	537 (modified)	223391
320-38611-6 - RE	GC-MW-104(WG)	Total/NA	Water	537 (modified)	223391
320-38611-7 - RE	GC-MW-105(WG)	Total/NA	Water	537 (modified)	223391
320-38611-8 - RE	GC-MW-DRAIN(WG)	Total/NA	Water	537 (modified)	223391
320-38611-9 - RE	GC-EQUIPMENT BLANK	Total/NA	Water	537 (modified)	223391
MB 320-223391/1-A	Method Blank	Total/NA	Water	537 (modified)	223391
LCS 320-223391/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	223391
320-38611-1 MS - RE	GC-MW-107(WG)	Total/NA	Water	537 (modified)	223391
320-38611-1 MSD - RE	GC-MW-107(WG)	Total/NA	Water	537 (modified)	223391

Client Sample ID: GC-MW-107(WG)

Lab Sample ID: 320-38611-1
Date Collected: 04/25/18 10:00
Matrix: Water
Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222476	05/10/18 09:53	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 01:14	D1R	TAL SAC

Client Sample ID: GC-MW-107D(WG)

Lab Sample ID: 320-38611-2
Date Collected: 04/25/18 11:15
Matrix: Water
Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222655	05/10/18 20:07	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 01:46	D1R	TAL SAC

Client Sample ID: GC-MW-108(WG)

Lab Sample ID: 320-38611-3
Date Collected: 04/25/18 11:50
Matrix: Water
Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222655	05/10/18 20:15	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 01:53	D1R	TAL SAC

Client Sample ID: GC-MW-1B(WG)

Lab Sample ID: 320-38611-4
Date Collected: 04/25/18 12:35
Matrix: Water
Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222655	05/10/18 20:22	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 02:01	D1R	TAL SAC

Client Sample ID: GC-MW-103(WG)

Lab Sample ID: 320-38611-5
Date Collected: 04/25/18 13:10
Matrix: Water
Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222655	05/10/18 20:30	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38611-1

Client Sample ID: GC-MW-103(WG)

Lab Sample ID: 320-38611-5

Date Collected: 04/25/18 13:10

Matrix: Water

Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 02:09	D1R	TAL SAC

Client Sample ID: GC-MW-104(WG)

Lab Sample ID: 320-38611-6

Date Collected: 04/25/18 13:35

Matrix: Water

Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222655	05/10/18 20:38	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 02:17	D1R	TAL SAC

Client Sample ID: GC-MW-105(WG)

Lab Sample ID: 320-38611-7

Date Collected: 04/25/18 14:43

Matrix: Water

Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222655	05/10/18 20:46	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 02:25	D1R	TAL SAC

Client Sample ID: GC-MW-DRAIN(WG)

Lab Sample ID: 320-38611-8

Date Collected: 04/25/18 14:00

Matrix: Water

Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222655	05/10/18 20:54	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 02:33	D1R	TAL SAC

Client Sample ID: GC-EQUIPMENT BLANK

Lab Sample ID: 320-38611-9

Date Collected: 04/25/18 15:00

Matrix: Water

Date Received: 04/27/18 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			222044	05/08/18 10:19	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	222655	05/10/18 21:17	ABH	TAL SAC
Total/NA	Prep	3535	RE		223391	05/15/18 14:35	AME	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	223714	05/17/18 02:41	D1R	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38611-1

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-38611-1

Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-18
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-18
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	10-31-18
L-A-B	DoD ELAP		L2468	01-20-21
Louisiana	NELAP	6	30612	06-30-18
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-18
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-18
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-18
USDA	Federal		P330-11-00436	01-17-21
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	M262FTS	#	PFOA	#
GC-MW-107(WG) RE	320-38611-1 RE	125		110	
GC-MW-107D(WG) RE	320-38611-2 RE	107		99	
GC-MW-108(WG) RE	320-38611-3 RE	298	*	100	
GC-MW-1B(WG) RE	320-38611-4 RE	104		104	
GC-MW-103(WG) RE	320-38611-5 RE	174	*	109	
GC-MW-104(WG) RE	320-38611-6 RE	126		108	
GC-MW-105(WG) RE	320-38611-7 RE	116		102	
GC-MW-DRAIN(WG) RE	320-38611-8 RE	218	*	104	
GC-EQUIPMENT BLANK RE	320-38611-9 RE	112		106	
	MB 320-223391/1-A	116		104	
	LCS 320-223391/2-A	111		106	
GC-MW-107(WG) MS RE	320-38611-1 MS RE	126		111	
GC-MW-107(WG) MSD RE	320-38611-1 MSD RE	117		108	

	QC LIMITS
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
GC-MW-107(WG)	320-38611-1	77	97	92	92	99	95	124	98
GC-MW-107D(WG)	320-38611-2	90	106	107	106	104	105	115	103
GC-MW-108(WG)	320-38611-3	65	95	94	96	101	97	258 *	103
GC-MW-1B(WG)	320-38611-4	86	99	97	100	105	104	116	101
GC-MW-103(WG)	320-38611-5	67	90	98	95	106	105	179 *	102
GC-MW-104(WG)	320-38611-6	85	101	100	100	105	106	133	101
GC-MW-105(WG)	320-38611-7	84	99	98	103	107	105	129	103
GC-MW-DRAIN(WG)	320-38611-8	31	59	93	75	86	126	229 *	99
GC-EQUIPMENT BLANK	320-38611-9	106	110	102	105	106	102	119	101
	MB 320-222044/1-A	102	107	103	103	108	108	127	103
	LCS 320-222044/2-A	105	108	102	104	107	103	120	108
GC-MW-107(WG) MS	320-38611-1 MS	87	107	101	102	108	108	130	103
GC-MW-107(WG) MSD	320-38611-1 MSD	85	100	101	102	108	104	125	101

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5 PFPeA	25-150
PFBS = 13C3-PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4-PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFNA #	PFOS #	PFOSA #	M282FTS #	PFDA #	d3NMFOS #	d5NEFOS #	PFUnA #
GC-MW-107(WG)	320-38611-1	96	92	91	108	91	107	99	83
GC-MW-107D(WG)	320-38611-2	102	103	91	116	99	90	89	90
GC-MW-108(WG)	320-38611-3	97	95	87	130	96	102	101	89
GC-MW-1B(WG)	320-38611-4	97	96	88	109	101	90	97	91
GC-MW-103(WG)	320-38611-5	99	97	92	134	101	91	102	90
GC-MW-104(WG)	320-38611-6	98	96	95	115	94	101	100	93
GC-MW-105(WG)	320-38611-7	97	94	90	106	98	91	94	83
GC-MW-DRAIN(WG)	320-38611-8	106	135	96	283 *	128	103	120	129
GC-EQUIPMENT BLANK	320-38611-9	96	94	88	112	96	95	98	93
	MB 320-222044/1-A	99	102	94	119	101	106	110	94
	LCS 320-222044/2-A	99	99	87	108	102	99	107	89
GC-MW-107(WG) MS	320-38611-1 MS	98	99	93	113	98	105	102	92
GC-MW-107(WG) MSD	320-38611-1 MSD	93	99	92	114	97	102	100	88

	QC LIMITS
PFNA = 13C5 PFNA	25-150
PFOS = 13C4 PFOS	25-150
PFOSA = 13C8 FOSA	25-150
M282FTS = M2-8:2FTS	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFDoA #	PFTDA #
GC-MW-107(WG)	320-38611-1	81	84
GC-MW-107D(WG)	320-38611-2	91	89
GC-MW-108(WG)	320-38611-3	79	76
GC-MW-1B(WG)	320-38611-4	87	89
GC-MW-103(WG)	320-38611-5	83	75
GC-MW-104(WG)	320-38611-6	84	83
GC-MW-105(WG)	320-38611-7	79	87
GC-MW-DRAIN(WG)	320-38611-8	116	83
GC-EQUIPMENT BLANK	320-38611-9	89	90
	MB 320-222044/1-A	97	93
	LCS 320-222044/2-A	91	93
GC-MW-107(WG) MS	320-38611-1 MS	91	88
GC-MW-107(WG) MSD	320-38611-1 MSD	83	88

	QC LIMITS
PFDoA = 13C2 PFDoA	25-150
PFTDA = 13C2-PFTeDA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.09LLC_021.d

Lab ID: LCS 320-222044/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	42.0	105	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	37.4	93	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	40.8	102	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	40.7	102	66-126	
Perfluorooctanoic acid (PFOA)	40.0	41.1	103	64-124	
Perfluorononanoic acid (PFNA)	40.0	40.9	102	68-128	
Perfluorodecanoic acid (PFDA)	40.0	38.0	95	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	38.8	97	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	40.6	101	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	37.1	93	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	39.6	99	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	34.6	98	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.8	90	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.1	100	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.4	98	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	38.1	99	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	40.2	100	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	43.3	108	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.3	101	65-125	
6:2FTS	37.9	65.0	171	66-126	*
8:2FTS	38.3	40.9	107	67-127	
13C4 PFBA	100	105	105	25-150	
13C5 PFPeA	100	108	108	25-150	
13C2 PFHxA	100	104	104	25-150	
13C4-PFHpA	100	107	107	25-150	
13C4 PFOA	100	108	108	25-150	
13C5 PFNA	100	98.9	99	25-150	
13C2 PFDA	100	102	102	25-150	
13C2 PFUnA	100	88.9	89	25-150	
13C2 PFDoA	100	91.0	91	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.09LLC_021.d

Lab ID: LCS 320-222044/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
13C2-PFTeDA	100	92.5	93	25-150	
13C3-PFBS	93.0	95.2	102	25-150	
18O2 PFHxS	94.6	97.6	103	25-150	
13C4 PFOS	95.6	94.5	99	25-150	
13C8 FOSA	100	86.5	87	25-150	
d3-NMeFOSAA	100	99.1	99	25-150	
d5-NEtFOSAA	100	107	107	25-150	
M2-6:2FTS	95.0	114	120	25-150	
M2-8:2FTS	95.8	103	108	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.16LLD_011.d

Lab ID: LCS 320-223391/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorooctanoic acid (PFOA)	40.0	39.3	98	64-124	
6:2FTS	37.9	36.6	97	66-126	
13C4 PFOA	100	106	106	25-150	
M2-6:2FTS	95.0	105	111	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.10LLB_002.d

Lab ID: 320-38611-1 MS Client ID: GC-MW-107(WG) MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	37.2	10	48.4	103	70-130	
Perfluoropentanoic acid (PFPeA)	37.2	12	48.6	99	66-126	
Perfluorohexanoic acid (PFHxA)	37.2	15	54.2	106	66-126	
Perfluoroheptanoic acid (PFHpA)	37.2	11	52.1	111	66-126	
Perfluorooctanoic acid (PFOA)	37.2	35	71.8	99	64-124	
Perfluorononanoic acid (PFNA)	37.2	5.0	43.0	102	68-128	
Perfluorodecanoic acid (PFDA)	37.2	2.8	38.6	96	69-129	
Perfluoroundecanoic acid (PFUnA)	37.2	ND	34.2	92	60-120	
Perfluorododecanoic acid (PFDoA)	37.2	ND	37.0	99	71-131	
Perfluorotridecanoic Acid (PFTriA)	37.2	ND	33.6	90	72-132	
Perfluorotetradecanoic acid (PFTeA)	37.2	ND	38.0	102	68-128	
Perfluorobutanesulfonic acid (PFBS)	32.9	8.0	40.6	99	73-133	
Perfluorohexanesulfonic acid (PFHxS)	33.9	2.5	34.2	94	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	35.4	0.39 J	36.7	102	68-128	
Perfluorooctanesulfonic acid (PFOS)	34.5	15	51.5	105	67-127	
Perfluorodecanesulfonic acid (PFDS)	35.9	ND	33.5	93	68-128	
Perfluorooctane Sulfonamide (FOSA)	37.2	ND	39.1	105	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	37.2	ND	41.4	111	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	37.2	ND	38.8	104	65-125	
6:2FTS	35.3	31	66.8	102	66-126	
8:2FTS	35.7	ND	39.3	110	67-127	
13C4 PFBA	93.0	71	80.8	87	25-150	
13C5 PFPeA	93.0	90	99.8	107	25-150	
13C2 PFHxA	93.0	85	95.0	102	25-150	
13C4-PFHpA	93.0	92	101	108	25-150	
13C4 PFOA	93.0	91	95.6	103	25-150	
13C5 PFNA	93.0	89	90.9	98	25-150	
13C2 PFDA	93.0	84	90.8	98	25-150	
13C2 PFUnA	93.0	77	85.3	92	25-150	
13C2 PFDoA	93.0	76	84.6	91	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.10LLB_002.d

Lab ID: 320-38611-1 MS Client ID: GC-MW-107(WG) MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
13C2-PFTeDA	93.0	78	82.1	88	25-150	
13C3-PFBS	86.5	79	87.0	101	25-150	
18O2 PFHxS	88.0	83	94.9	108	25-150	
13C4 PFOS	88.9	81	87.9	99	25-150	
13C8 FOSA	93.0	84	86.8	93	25-150	
d3-NMeFOSAA	93.0	99	97.6	105	25-150	
d5-NEtFOSAA	93.0	92	95.2	102	25-150	
M2-6:2FTS	88.4	110	115	130	25-150	
M2-8:2FTS	89.1	96	100	113	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.16LLD_019.d

Lab ID: 320-38611-1 MS RE Client ID: GC-MW-107(WG) MS RE

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorooctanoic acid (PFOA)	35.8	28	59.6	89	64-124	H
6:2FTS	34.0	4.2 J	37.6	98	66-126	H
13C4 PFOA	89.6	99	99.2	111	25-150	
M2-6:2FTS	85.1	110	107	126	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.10LLB_003.d

Lab ID: 320-38611-1 MSD Client ID: GC-MW-107(WG) MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	36.7	48.2	104	0	30	70-130	
Perfluoropentanoic acid (PFPeA)	36.7	49.1	102	1	30	66-126	
Perfluorohexanoic acid (PFHxA)	36.7	50.1	96	8	30	66-126	
Perfluoroheptanoic acid (PFHpA)	36.7	51.9	112	0	30	66-126	
Perfluorooctanoic acid (PFOA)	36.7	74.4	108	4	30	64-124	
Perfluorononanoic acid (PFNA)	36.7	43.3	104	1	30	68-128	
Perfluorodecanoic acid (PFDA)	36.7	38.2	97	1	30	69-129	
Perfluoroundecanoic acid (PFUnA)	36.7	34.6	94	1	30	60-120	
Perfluorododecanoic acid (PFDoA)	36.7	38.2	104	3	30	71-131	
Perfluorotridecanoic Acid (PFTriA)	36.7	34.0	93	1	30	72-132	
Perfluorotetradecanoic acid (PFTeA)	36.7	35.3	96	7	30	68-128	
Perfluorobutanesulfonic acid (PFBS)	32.4	39.9	99	2	30	73-133	
Perfluorohexanesulfonic acid (PFHxS)	33.4	34.3	95	0	30	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	34.9	37.0	105	1	30	68-128	
Perfluorooctanesulfonic acid (PFOS)	34.1	49.8	101	3	30	67-127	
Perfluorodecanesulfonic acid (PFDS)	35.4	32.0	90	5	30	68-128	
Perfluorooctane Sulfonamide (FOSA)	36.7	35.8	97	9	30	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	36.7	40.5	110	2	30	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	36.7	37.8	103	3	30	65-125	
6:2FTS	34.8	65.7	100	2	30	66-126	
8:2FTS	35.2	37.9	108	4	30	67-127	
13C4 PFBA	91.7	77.8	85			25-150	
13C5 PFPeA	91.7	91.7	100			25-150	
13C2 PFHxA	91.7	93.9	102			25-150	
13C4-PFHpA	91.7	98.8	108			25-150	
13C4 PFOA	91.7	92.5	101			25-150	
13C5 PFNA	91.7	85.1	93			25-150	
13C2 PFDA	91.7	88.7	97			25-150	
13C2 PFUnA	91.7	80.4	88			25-150	
13C2 PFDoA	91.7	76.3	83			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.10LLB_003.d

Lab ID: 320-38611-1 MSD Client ID: GC-MW-107(WG) MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
13C2-PFTeDA	91.7	81.0	88			25-150	
13C3-PFBS	85.3	86.5	101			25-150	
18O2 PFHxS	86.8	90.4	104			25-150	
13C4 PFOS	87.7	86.8	99			25-150	
13C8 FOSA	91.7	84.7	92			25-150	
d3-NMeFOSAA	91.7	93.6	102			25-150	
d5-NEtFOSAA	91.7	91.5	100			25-150	
M2-6:2FTS	87.2	109	125			25-150	
M2-8:2FTS	87.9	100	114			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.16LLD_021.d

Lab ID: 320-38611-1 MSD RE Client ID: GC-MW-107(WG) MSD RE

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorooctanoic acid (PFOA)	35.8	61.4	94	3	30	64-124	H
6:2FTS	33.9	36.8	96	2	30	66-126	H
13C4 PFOA	89.5	96.7	108			25-150	
M2-6:2FTS	85.0	99.5	117			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab File ID: 2018.05.09LLC_020.d Lab Sample ID: MB 320-222044/1-A

Matrix: Water Date Extracted: 05/08/2018 10:19

Instrument ID: A8_N Date Analyzed: 05/10/2018 08:59

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-222044/2-A	2018.05.09LLC_021.d	05/10/2018 09:06
GC-MW-107(WG)	320-38611-1	2018.05.09LLC_027.d	05/10/2018 09:53
GC-MW-107(WG) MS	320-38611-1 MS	2018.05.10LLB_002.d	05/10/2018 19:51
GC-MW-107(WG) MSD	320-38611-1 MSD	2018.05.10LLB_003.d	05/10/2018 19:59
GC-MW-107D(WG)	320-38611-2	2018.05.10LLB_004.d	05/10/2018 20:07
GC-MW-108(WG)	320-38611-3	2018.05.10LLB_005.d	05/10/2018 20:15
GC-MW-1B(WG)	320-38611-4	2018.05.10LLB_006.d	05/10/2018 20:22
GC-MW-103(WG)	320-38611-5	2018.05.10LLB_007.d	05/10/2018 20:30
GC-MW-104(WG)	320-38611-6	2018.05.10LLB_008.d	05/10/2018 20:38
GC-MW-105(WG)	320-38611-7	2018.05.10LLB_009.d	05/10/2018 20:46
GC-MW-DRAIN(WG)	320-38611-8	2018.05.10LLB_010.d	05/10/2018 20:54
GC-EQUIPMENT BLANK	320-38611-9	2018.05.10LLB_013.d	05/10/2018 21:17

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab File ID: 2018.05.16LLD_010.d Lab Sample ID: MB 320-223391/1-A

Matrix: Water Date Extracted: 05/15/2018 14:35

Instrument ID: A8_N Date Analyzed: 05/17/2018 00:12

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-223391/2-A	2018.05.16LLD_011.d	05/17/2018 00:19
GC-MW-107(WG) RE	320-38611-1 RE	2018.05.16LLD_018.d	05/17/2018 01:14
GC-MW-107(WG) MS RE	320-38611-1 MS RE	2018.05.16LLD_019.d	05/17/2018 01:22
GC-MW-107(WG) MSD RE	320-38611-1 MSD RE	2018.05.16LLD_021.d	05/17/2018 01:38
GC-MW-107D(WG) RE	320-38611-2 RE	2018.05.16LLD_022.d	05/17/2018 01:46
GC-MW-108(WG) RE	320-38611-3 RE	2018.05.16LLD_023.d	05/17/2018 01:53
GC-MW-1B(WG) RE	320-38611-4 RE	2018.05.16LLD_024.d	05/17/2018 02:01
GC-MW-103(WG) RE	320-38611-5 RE	2018.05.16LLD_025.d	05/17/2018 02:09
GC-MW-104(WG) RE	320-38611-6 RE	2018.05.16LLD_026.d	05/17/2018 02:17
GC-MW-105(WG) RE	320-38611-7 RE	2018.05.16LLD_027.d	05/17/2018 02:25
GC-MW-DRAIN(WG) RE	320-38611-8 RE	2018.05.16LLD_028.d	05/17/2018 02:33
GC-EQUIPMENT BLANK RE	320-38611-9 RE	2018.05.16LLD_029.d	05/17/2018 02:41

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Sample No.: IC 320-217359/5 Date Analyzed: 04/10/2018 19:03

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.04.10LLICAL_00 Heated Purge: (Y/N) N

Calibration ID: 38527

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		4623888	2.67				
UPPER LIMIT		6935832	2.87				
LOWER LIMIT		2311944	2.47				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-217359/9		4390532	2.67				
ICV 320-217359/10		4377627	2.68				
CCV 320-222474/3 CCVIS		3905411	2.73				
CCV 320-222655/3 CCVIS		3792763	2.75				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Sample No.: CCV 320-222474/3 Date Analyzed: 05/10/2018 07:09

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.05.09LLC_006.d Heated Purge: (Y/N) N

Calibration ID: 38527

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		3905411	2.73				
UPPER LIMIT		5858117	2.93				
LOWER LIMIT		1952706	2.53				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-222474/1		3930406	2.72				
CCVL 320-222474/2		3614482	2.72				
CCV 320-222476/1		3812492	2.73				
MB 320-222044/1-A		3814715	2.73				
LCS 320-222044/2-A		3812196	2.74				
320-38611-1	GC-MW-107(WG)	4270995	2.74				
CCV 320-222476/10		3709230	2.74				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Sample No.: CCV 320-222655/3 Date Analyzed: 05/10/2018 19:43

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.05.10LLB_001.d Heated Purge: (Y/N) N

Calibration ID: 38527

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		3792763	2.75				
UPPER LIMIT		5689145	2.95				
LOWER LIMIT		1896382	2.55				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-222655/1		3844517	2.74				
CCVL 320-222655/2		3605624	2.75				
320-38611-1 MS	GC-MW-107(WG) MS	3638357	2.74				
320-38611-1 MSD	GC-MW-107(WG) MSD	3617380	2.75				
320-38611-2	GC-MW-107D(WG)	3570951	2.74				
320-38611-3	GC-MW-108(WG)	4034971	2.74				
320-38611-4	GC-MW-1B(WG)	3848661	2.74				
320-38611-5	GC-MW-103(WG)	3890968	2.75				
320-38611-6	GC-MW-104(WG)	3824900	2.74				
320-38611-7	GC-MW-105(WG)	3871677	2.74				
320-38611-8	GC-MW-DRAIN(WG)	2354420	2.74				
CCV 320-222655/14		3567361	2.74				
320-38611-9	GC-EQUIPMENT BLANK	3636601	2.75				
CCV 320-222655/16		3809239	2.74				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Sample No.: IC 320-223412/5 Date Analyzed: 05/15/2018 15:36

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2017.05.15LLB_ICAL_ Heated Purge: (Y/N) N

Calibration ID: 39197

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		4762237	2.73				
UPPER LIMIT		7143356	2.93				
LOWER LIMIT		2381119	2.53				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-223412/12		4812155	2.73				
ICV 320-223412/13		4485749	2.72				
CCV 320-223710/3 CCVIS		4908443	2.67				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Sample No.: CCV 320-223710/3 Date Analyzed: 05/16/2018 23:40

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.05.16LLD_006.d Heated Purge: (Y/N) N

Calibration ID: 39197

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		4908443	2.67				
UPPER LIMIT		7362665	2.87				
LOWER LIMIT		2454222	2.47				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-223710/1		4633709	2.67				
CCVL 320-223710/2		4931005	2.67				
CCV 320-223714/1		4638638	2.68				
MB 320-223391/1-A		4616306	2.67				
LCS 320-223391/2-A		4440398	2.68				
320-38611-1 RE	GC-MW-107(WG) RE	4703705	2.68				
320-38611-1 MS RE	GC-MW-107(WG) MS RE	4526424	2.69				
CCV 320-223714/12		4780723	2.69				
320-38611-1 MSD RE	GC-MW-107(WG) MSD RE	4762966	2.69				
320-38611-2 RE	GC-MW-107D(WG) RE	4775868	2.68				
320-38611-3 RE	GC-MW-108(WG) RE	5252680	2.69				
320-38611-4 RE	GC-MW-1B(WG) RE	4767790	2.69				
320-38611-5 RE	GC-MW-103(WG) RE	4842434	2.69				
320-38611-6 RE	GC-MW-104(WG) RE	4614064	2.69				
320-38611-7 RE	GC-MW-105(WG) RE	4914396	2.68				
320-38611-8 RE	GC-MW-DRAIN(WG) RE	2601866	2.68				
320-38611-9 RE	GC-EQUIPMENT BLANK RE	4556823	2.69				
CCV 320-223714/23		4746073	2.69				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) | Lab Sample ID: 320-38611-1

Matrix: Water | Lab File ID: 2018.05.09LLC_027.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 269.5(mL) | Date Analyzed: 05/10/2018 09:53

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222476 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	10	B	1.9	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	12		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	15		1.9	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	11		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	35	B	1.9	0.79
375-95-1	Perfluorononanoic acid (PFNA)	5.0		1.9	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	2.8		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	8.0		1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.5	B	1.9	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.39	J	1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	15		1.9	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		19	2.9
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8
27619-97-2	6:2FTS	31	B *	19	1.9
39108-34-4	8:2FTS	ND		19	1.9

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) | Lab Sample ID: 320-38611-1

Matrix: Water | Lab File ID: 2018.05.09LLC_027.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 269.5(mL) | Date Analyzed: 05/10/2018 09:53

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222476 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	77		25-150
STL01893	13C5 PFPeA	97		25-150
STL00993	13C2 PFHxA	92		25-150
STL01892	13C4-PFHpA	99		25-150
STL00990	13C4 PFOA	98		25-150
STL00995	13C5 PFNA	96		25-150
STL00996	13C2 PFDA	91		25-150
STL00997	13C2 PFUnA	83		25-150
STL00998	13C2 PFDoA	81		25-150
STL02116	13C2-PFTeDA	84		25-150
STL02337	13C3-PFBS	92		25-150
STL00994	18O2 PFHxS	95		25-150
STL00991	13C4 PFOS	92		25-150
STL01056	13C8 FOSA	91		25-150
STL02118	d3-NMeFOSAA	107		25-150
STL02117	d5-NEtFOSAA	99		25-150
STL02279	M2-6:2FTS	124		25-150
STL02280	M2-8:2FTS	108		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_027.d
Lims ID: 320-38611-A-1-A
Client ID: GC-MW-107(WG)
Sample Type: Client
Inject. Date: 10-May-2018 09:53:50 ALS Bottle#: 18 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-1-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 17:00:46 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 15-May-2018 17:00:08

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.463	0.0	1.000	4412184	1.92		76.8	30015	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.463	1.468	-0.005	1.000	448640	0.2738			92.4	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.747	1.738	0.009	0.561	3600492	2.43		97.2	31803	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.747	1.747	0.0	1.000	547486	0.3190			115	M
D 47 13C3-PFBS										
301.90 > 83.00	1.783	1.774	0.009	1.000	72680	2.14		92.0	262	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.783	1.783	0.0	1.000	525064	0.2146			189	
298.90 > 99.00	1.783	1.783	0.0	1.000	197667		2.66(1.25-3.74)		238	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.037	2.036	0.001	1.000	616761	0.4031			255	
313.00 > 119.00	2.037	2.036	0.001	1.000	54002		11.42(5.03-15.10)		451	
D 7 13C2 PFHxA										
315.00 > 270.00	2.037	2.037	0.0	1.000	3764292	2.30		91.9	69944	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.059	2.059	0.0	1.000	20561	0.009198			29.0	
349.00 > 99.00	2.059	2.059	0.0	1.000	7013		2.93(1.36-4.07)		28.2	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.138	2.138	0.0	1.000	219344	2.16		86.6	3714	
D 9 13C4-PFHpA										
367.00 > 322.00	2.384	2.372	0.012	1.000	3937351	2.47		98.8	68548	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.384	2.384	0.0	1.000	464511	0.2947			330	
363.00 > 169.00	2.384	2.384	0.0	1.000	178735		2.60(1.13-3.40)		1380	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.395	2.384	0.011	1.000	142599	0.0675			142	
399.00 > 99.00	2.384	2.384	0.0	0.995	44388		3.21(1.50-4.49)		132	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.395	0.0	1.000	4411437	2.24		94.8	65706	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.712	2.712	0.0	1.000	597222	0.8312			12295	
D 12 M2-6:2FTS										
429.00 > 81.00	2.712	2.712	0.0	1.000	1009429	2.95		124	5603	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.735	2.734	0.001	1.000	1689262	0.9399			748	
413.00 > 169.00	2.735	2.734	0.001	1.000	937314		1.80(0.84-2.52)		3591	
* 62 13C2-PFOA										
415.00 > 370.00	2.735	2.734	0.001		4270995	2.50			57390	
D 14 13C4 PFOA										
417.00 > 372.00	2.735	2.735	0.0	1.000	3888924	2.45		98.2	68286	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.743	2.742	0.001	1.000	17631	0.0105			59.9	
449.00 > 99.00	2.743	2.742	0.001	1.000	5824		3.03(1.94-5.82)		80.2	
D 18 13C4 PFOS										
503.00 > 80.00	3.115	3.106	0.009	1.000	3015537	2.19		91.6	16882	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.115	3.113	0.002	1.000	567381	0.4134			1357	
499.00 > 99.00	3.107	3.113	-0.006	0.998	110019		5.16(2.31-6.93)		950	
20 Perfluorononanoic acid										
463.00 > 419.00	3.115	3.113	0.002	1.000	185356	0.1355			330	
463.00 > 169.00	3.115	3.113	0.002	1.000	44471		4.17(1.90-5.69)		678	
D 19 13C5 PFNA										
468.00 > 423.00	3.115	3.114	0.001	1.000	3279328	2.41		96.3	60706	
D 21 13C8 FOSA										
506.00 > 78.00	3.441	3.447	-0.006	1.000	3896094	2.26		90.6	46050	
D 26 M2-8:2FTS										
529.00 > 81.00	3.469	3.466	0.003	1.000	1064351	2.59		108	8412	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.478	3.466	0.012	1.003	1832	0.003258			53.7	
D 23 13C2 PFDA										
515.00 > 470.00	3.478	3.475	0.003	1.000	2606265	2.28		91.1	47253	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.478	3.476	0.002	1.000	80187	0.0746			331	
513.00 > 169.00	3.478	3.476	0.002	1.000	12438		6.45(2.36-7.09)		300	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.634	3.630	0.004	1.000	1734547	2.67		107	30028	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.799	3.796	0.003	1.000	1590692	2.48		99.3	22612	
D 30 13C2 PFUnA										
565.00 > 520.00	3.799	3.806	-0.007	1.000	2061155	2.09		83.5	64085	
D 36 13C2 PFDoA										
615.00 > 570.00	4.099	4.097	0.002	1.000	2171572	2.04		81.5	20875	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.602	4.592	0.010	1.000	2832641	2.09		83.8	19018	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.017	5.008	0.009	1.000	4947118	2.25		89.9	13843	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.017	5.017	0.0	1.000	44334	0.001377			21.3	
813.00 > 169.00	5.017	5.017	0.0	1.000	6192		7.16(2.86-8.58)		56.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 17:01:02 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_027.d

Injection Date: 10-May-2018 09:53:50 Instrument ID: A8_N

Lims ID: 320-38611-A-1-A Lab Sample ID: 320-38611-1

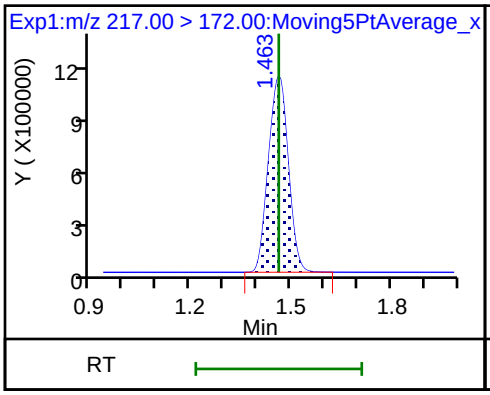
Client ID: GC-MW-107(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 9

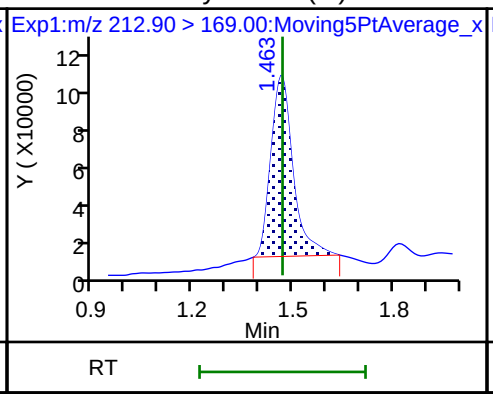
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

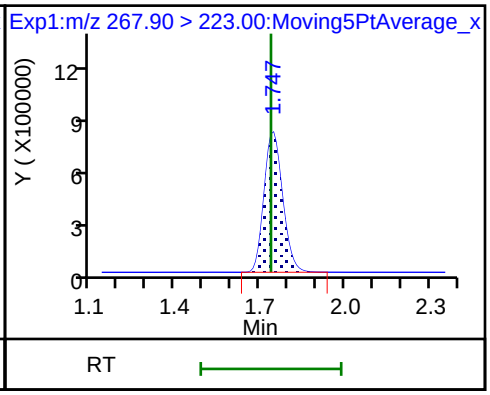
D 1 13C4 PFBA



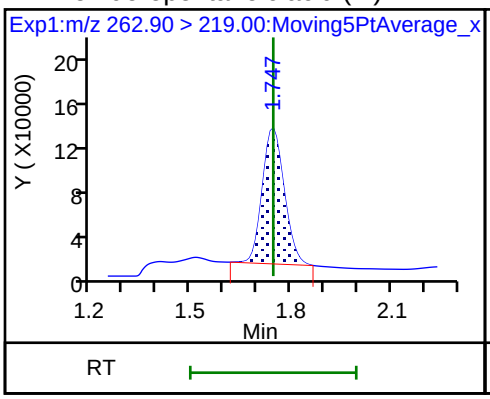
2 Perfluorobutyric acid (M)



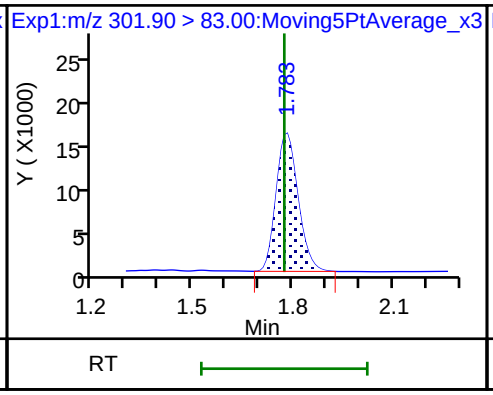
D 3 13C5-PFPeA



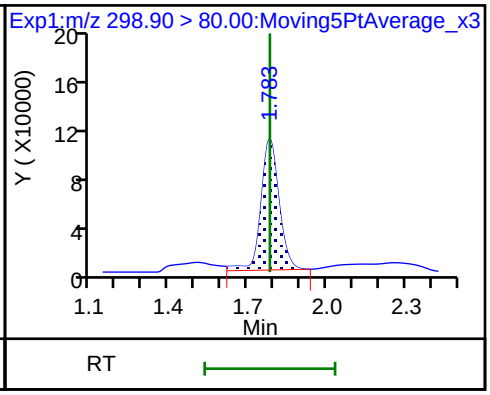
4 Perfluoropentanoic acid (M)



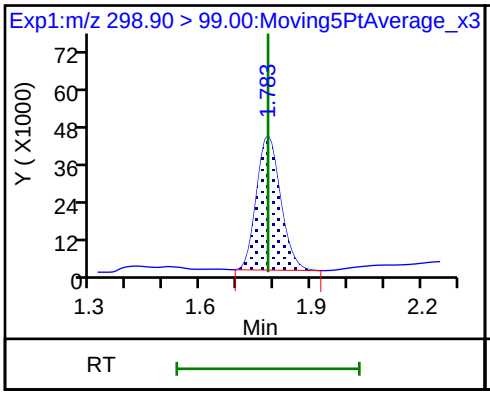
D 47 13C3-PFBS



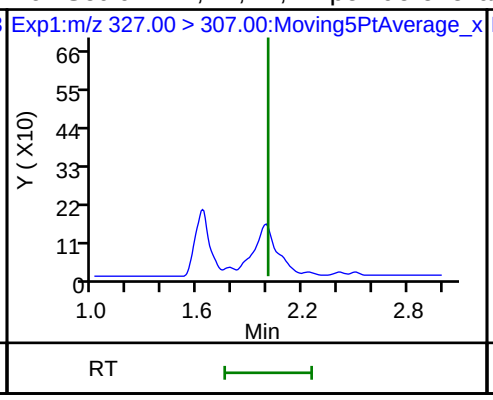
5 Perfluorobutanesulfonic acid



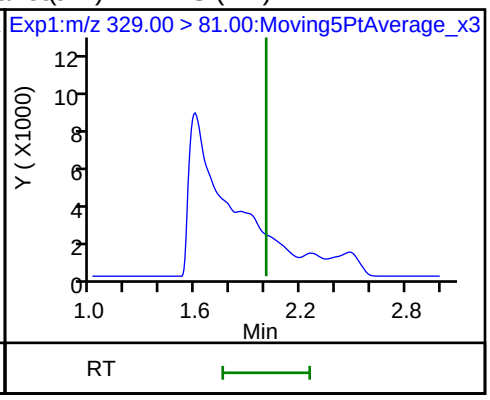
5 Perfluorobutanesulfonic acid



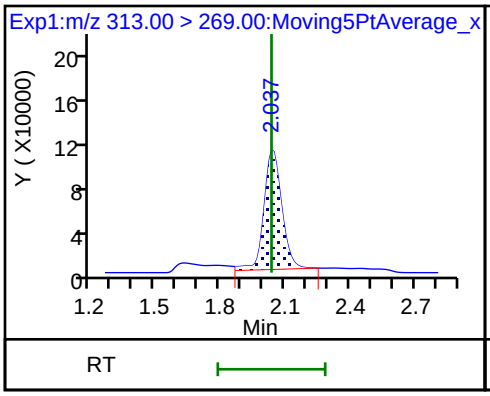
61 Sodium 1H,1H,2H,2H-perfluorohexanesulfonate (M2)



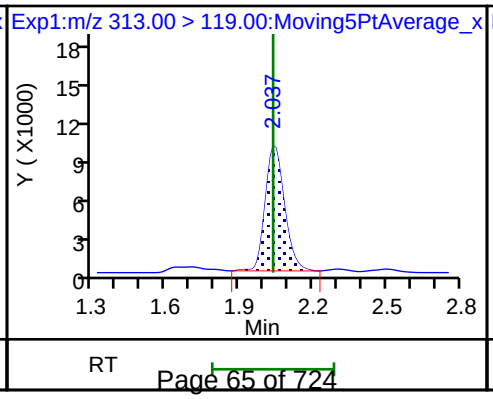
D 6 (ND) 4:2FTS (ND)



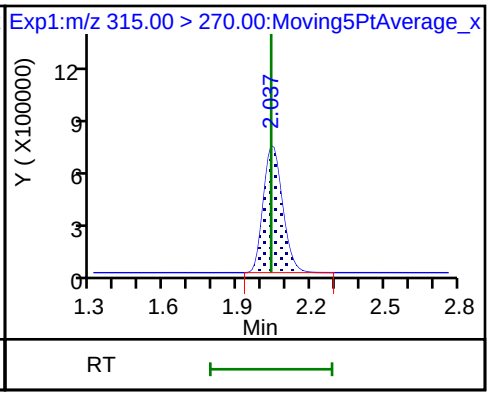
6 Perfluorohexanoic acid



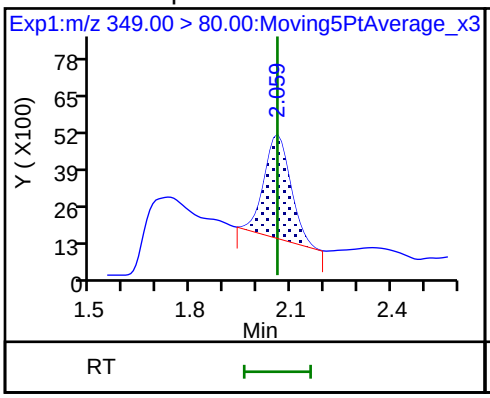
6 Perfluorohexanoic acid



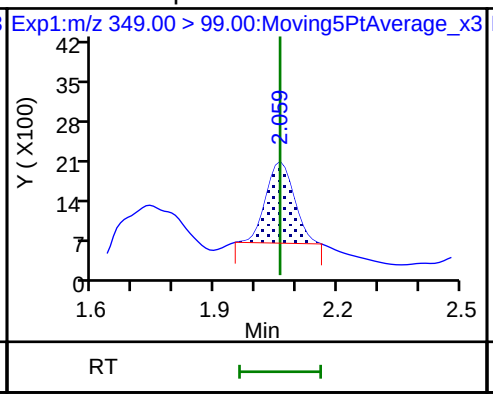
D 7 13C2 PFHxA



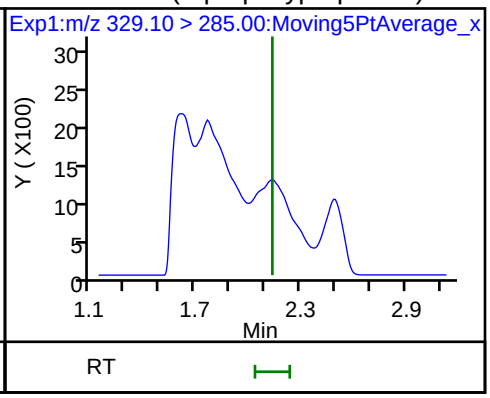
70 Perfluoropentanesulfonic acid



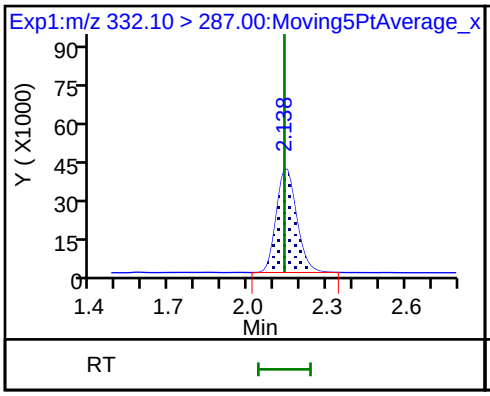
70 Perfluoropentanesulfonic acid



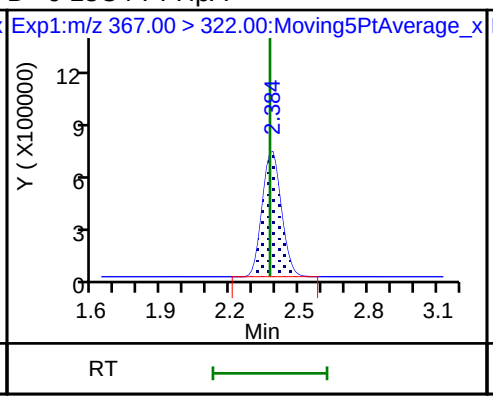
67 Perfluoro(2-propoxypropanoic) acid (ND)



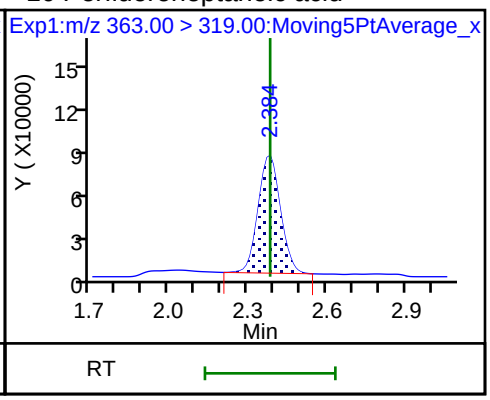
D 64 13C3 HFPO-DA



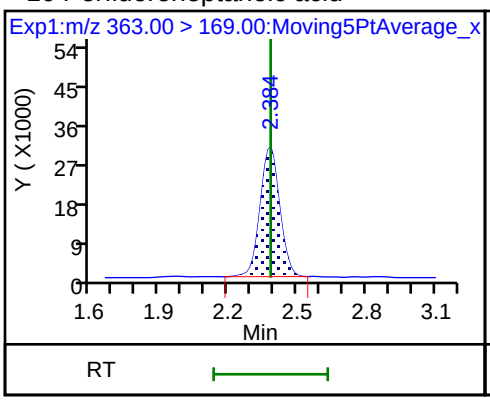
D 9 13C4-PFHpA



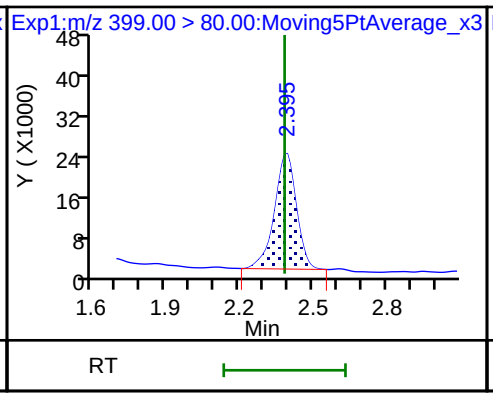
10 Perfluoroheptanoic acid



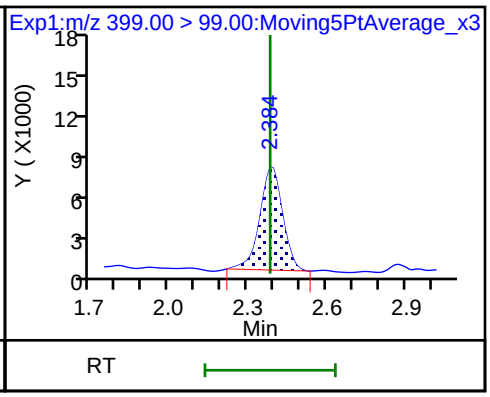
10 Perfluoroheptanoic acid



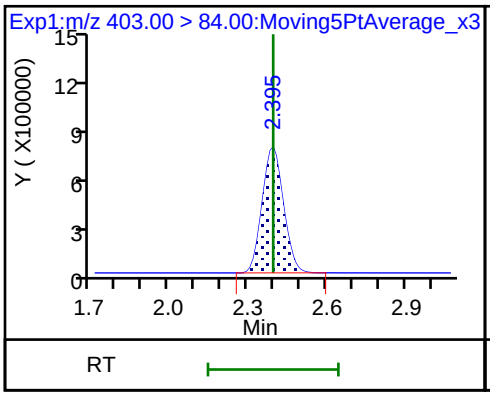
8 Perfluorohexanesulfonic acid



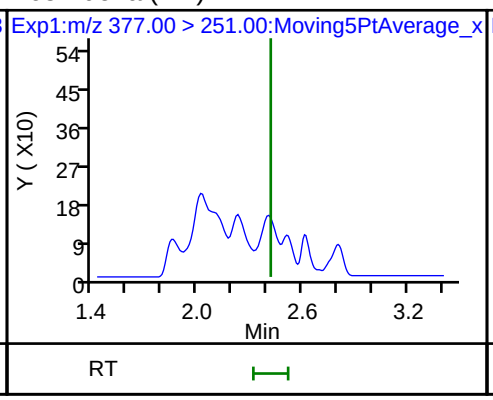
8 Perfluorohexanesulfonic acid



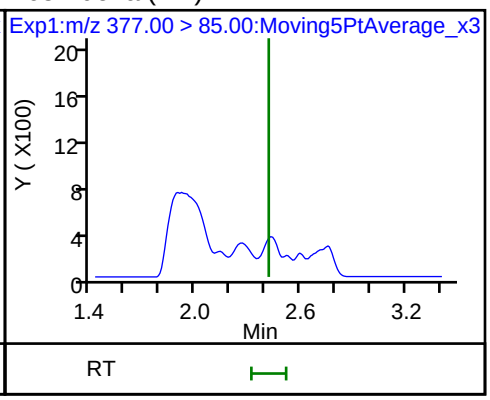
D 11 18O2 PFHxS



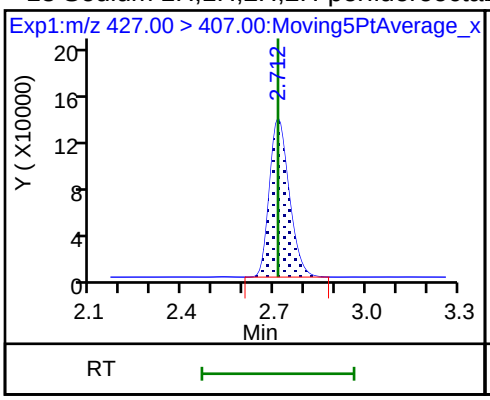
65 Adona (ND)



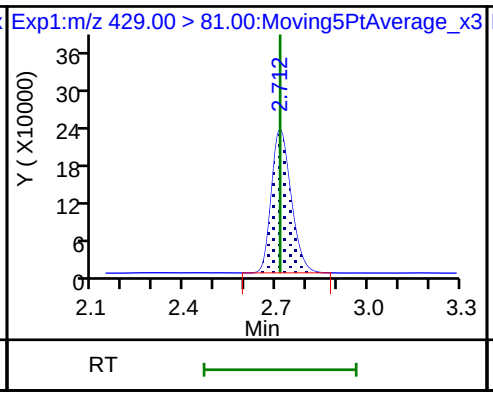
65 Adona (ND)



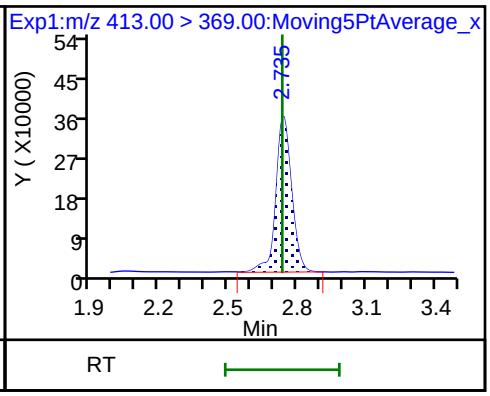
13 Sodium 1H,1H,2H,2H-perfluorooctane



D 12 M2-6:2FTS



15 Perfluorooctanoic acid



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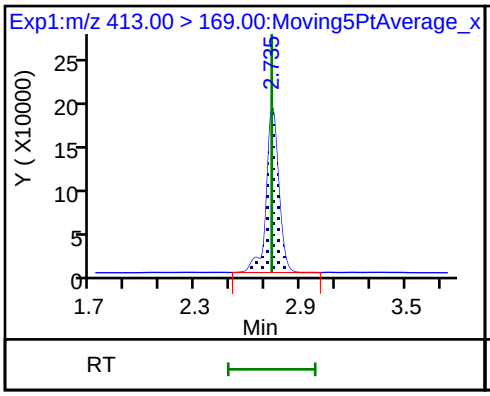
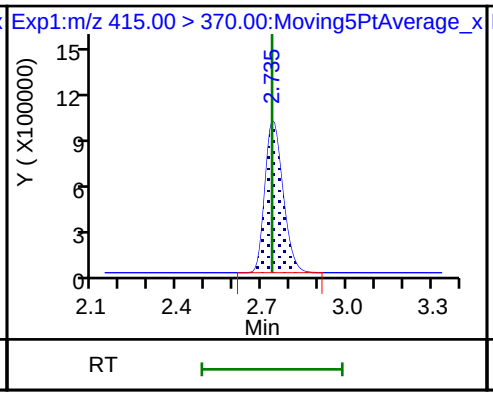
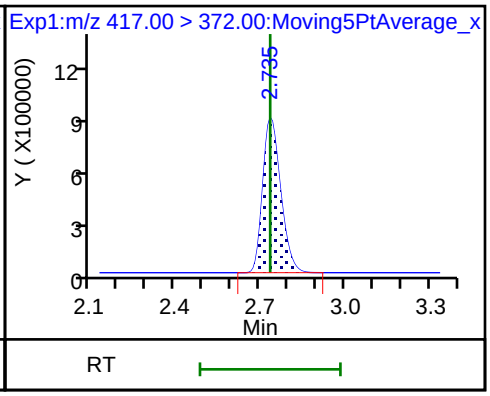


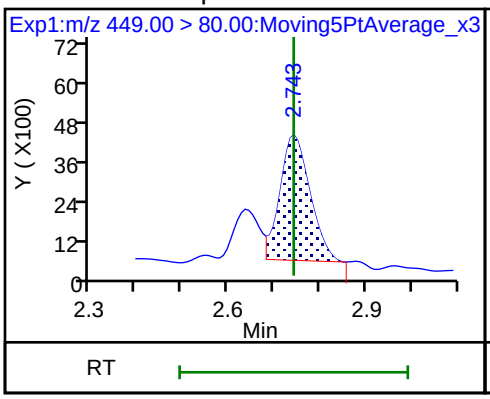
* 62 13C2-PFOA



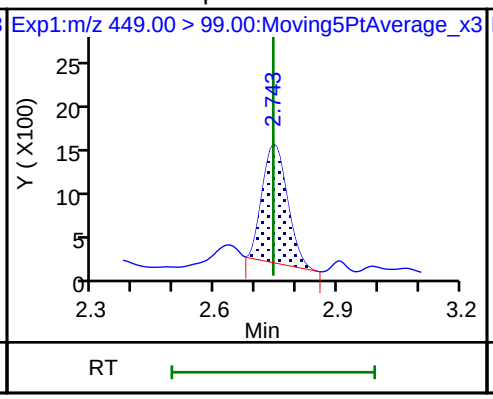
D 14 13C4 PFOA



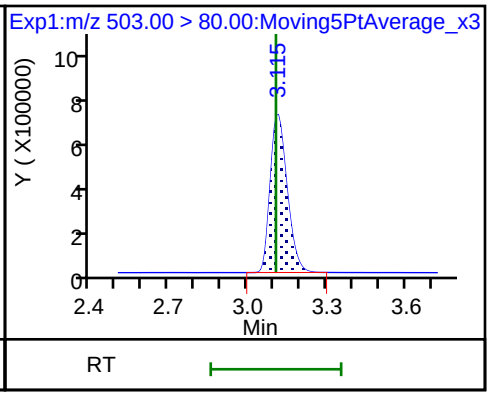
16 Perfluoroheptanesulfonic acid



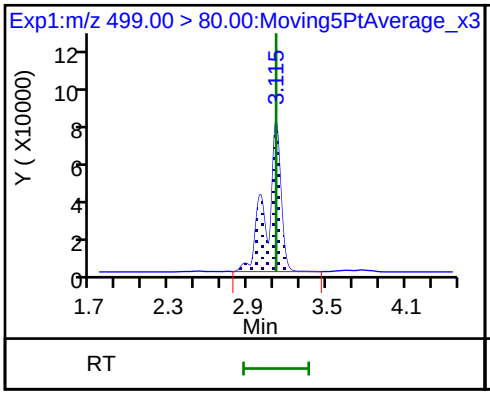
16 Perfluoroheptanesulfonic acid



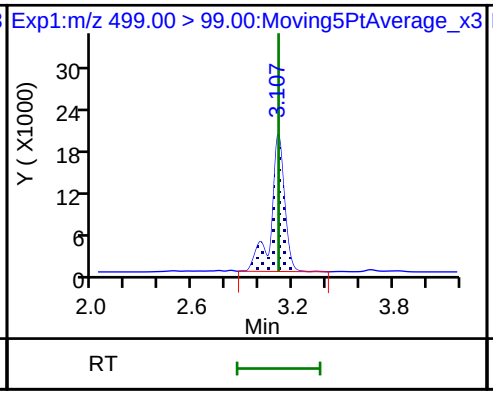
D 18 13C4 PFOS



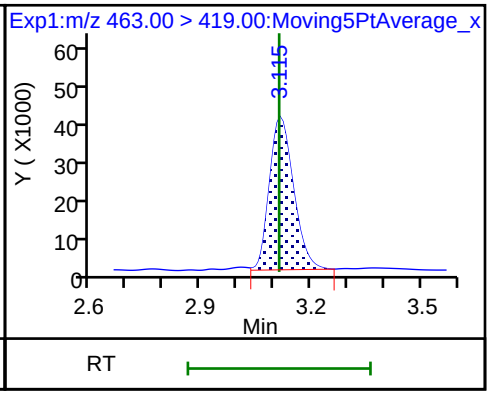
17 Perfluorooctane sulfonic acid



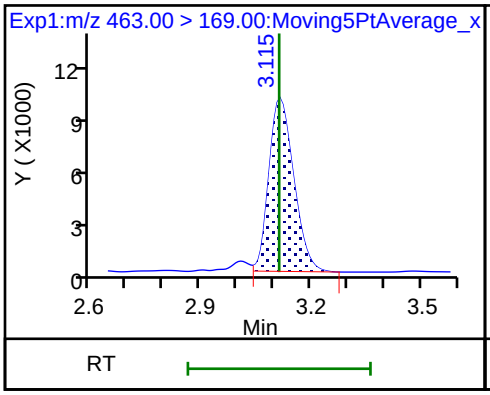
17 Perfluorooctane sulfonic acid



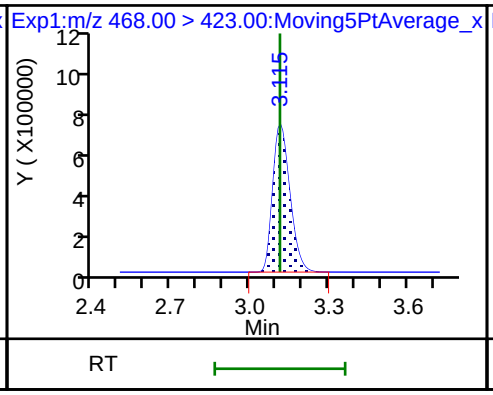
20 Perfluorononanoic acid



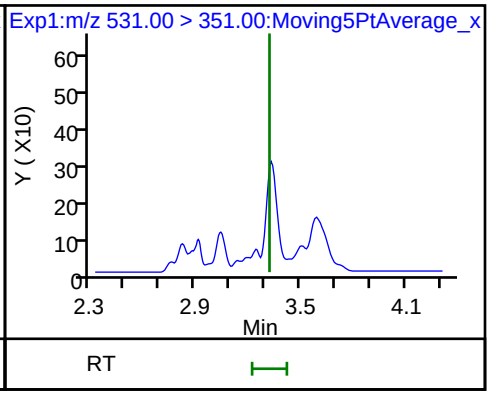
20 Perfluorononanoic acid



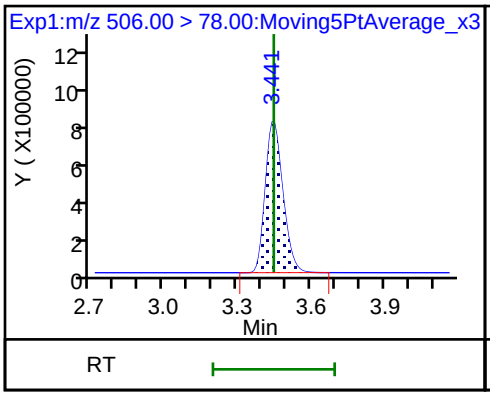
D 19 13C5 PFNA



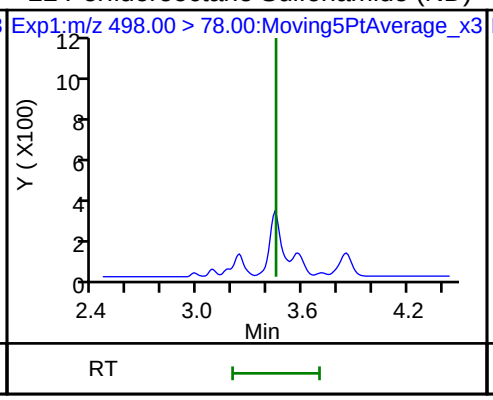
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



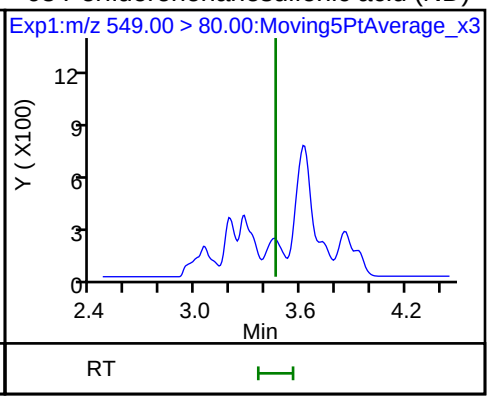
D 21 13C8 FOSA



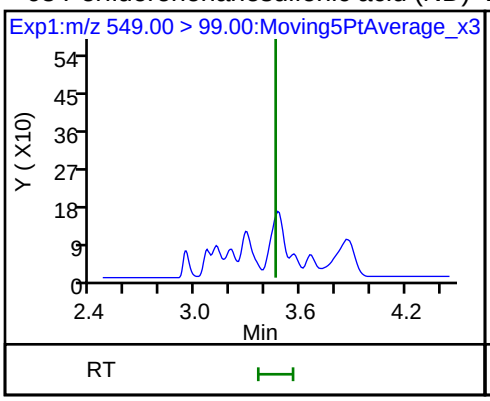
22 Perfluorooctane Sulfonamide (ND)



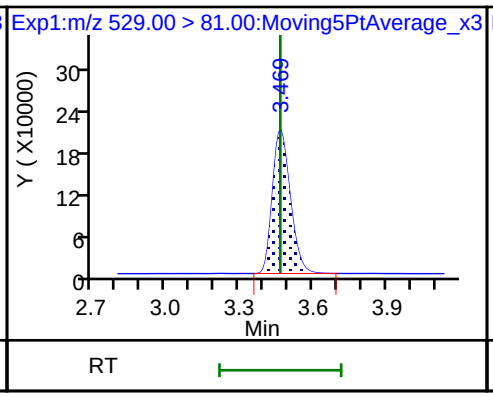
68 Perfluorononanesulfonic acid (ND)



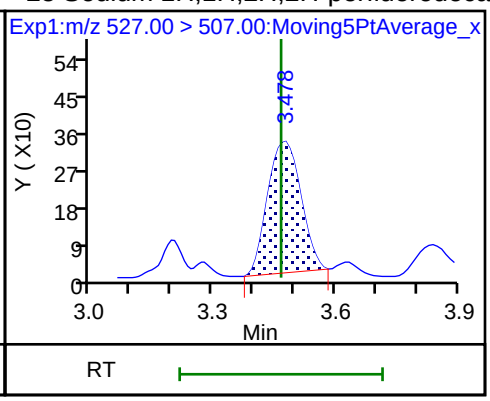
68 Perfluorononanesulfonic acid (ND)



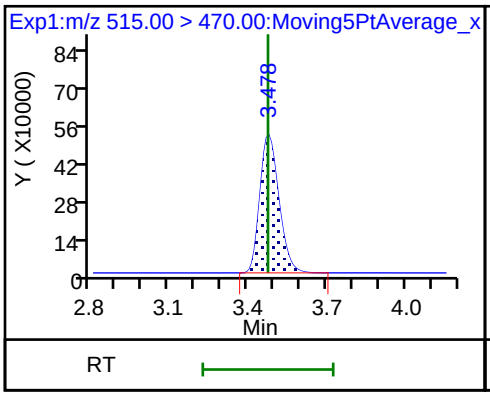
D 26 M2-8:2FTS



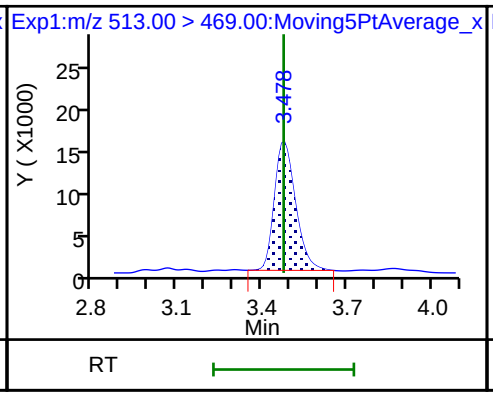
25 Sodium 1H,1H,2H,2H-perfluorodecane



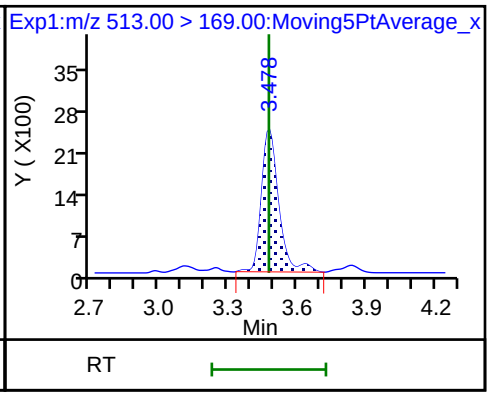
D 23 13C2 PFDA



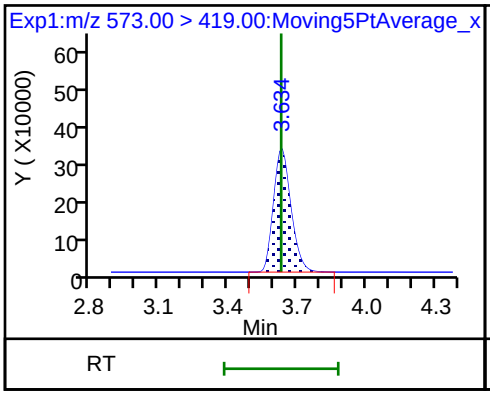
24 Perfluorodecanoic acid



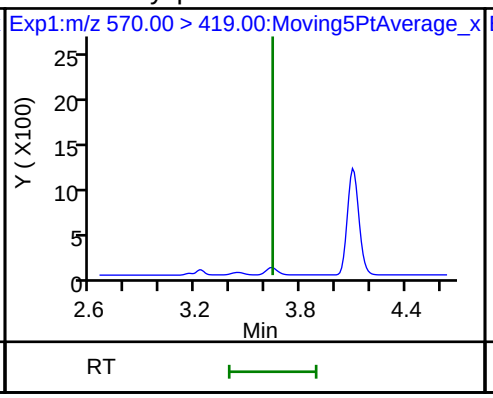
24 Perfluorodecanoic acid



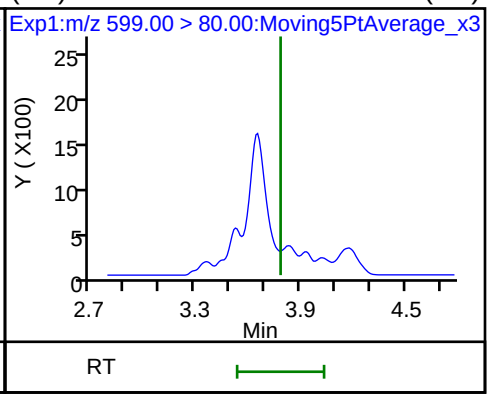
D 27 d3-NMeFOSAA



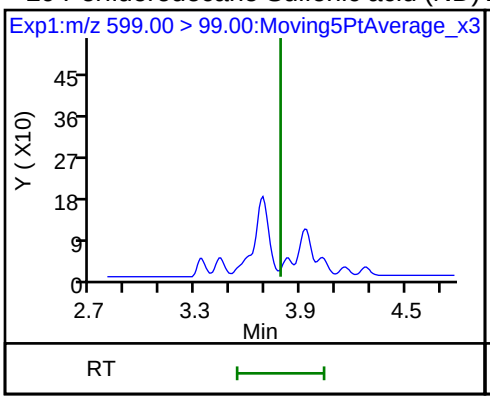
28 N-methyl perfluorooctane sulfonami (ND)



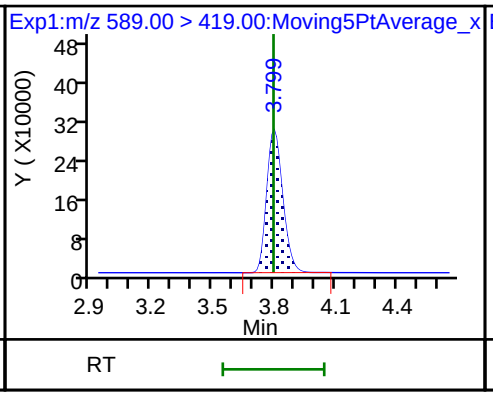
29 Perfluorodecane Sulfonic acid (ND)



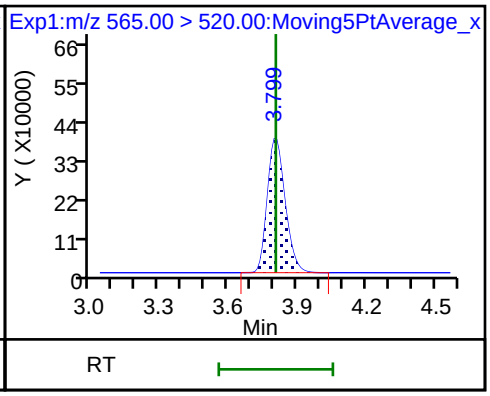
29 Perfluorodecane Sulfonic acid (ND)



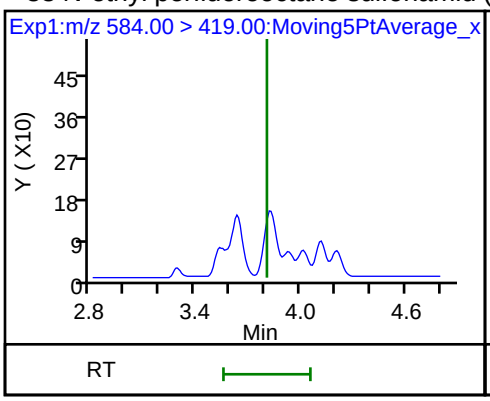
D 32 d5-NEtFOSAA



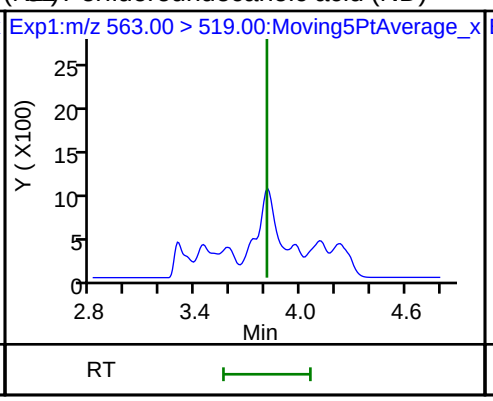
D 30 13C2 PFUnA



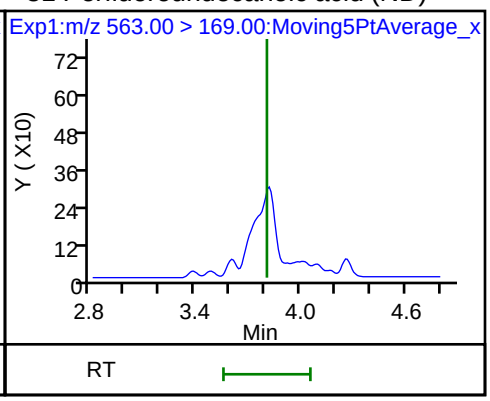
33 N-ethyl perfluorooctane sulfonamid (ND)



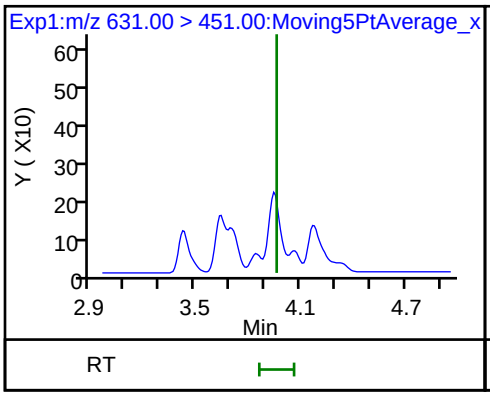
31 Perfluoroundecanoic acid (ND)



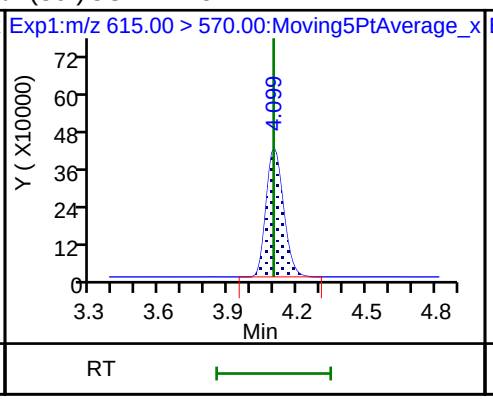
31 Perfluoroundecanoic acid (ND)



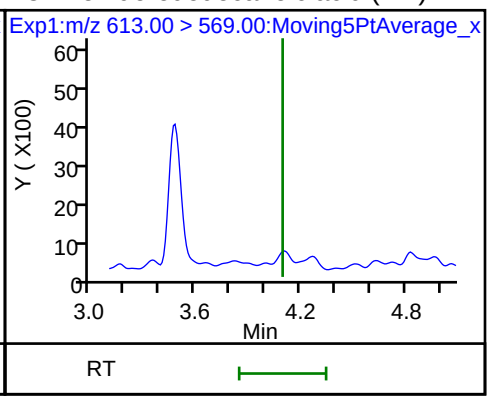
66 11-Chloroeicosafluoro-3-oxaundecan (ND)



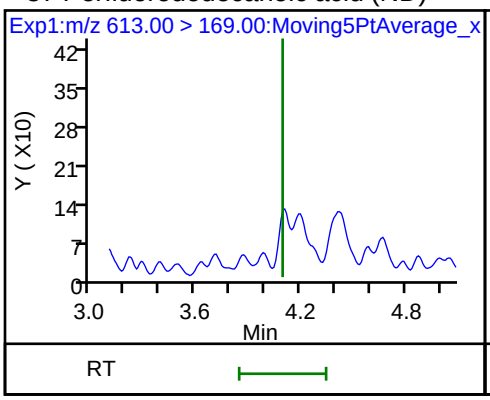
D 36 13C2 PFDoA



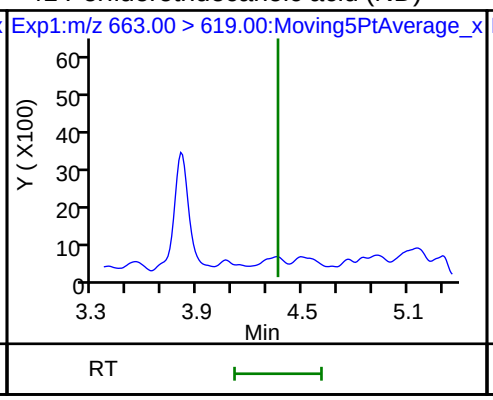
37 Perfluorododecanoic acid (ND)



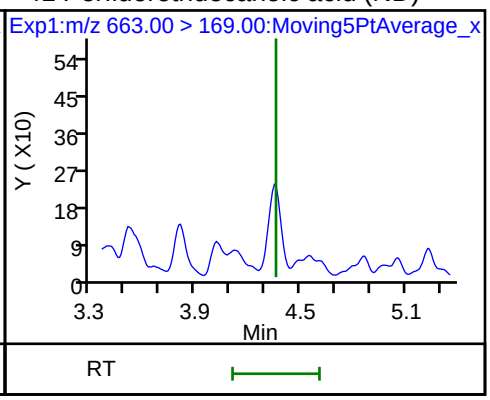
37 Perfluorododecanoic acid (ND)



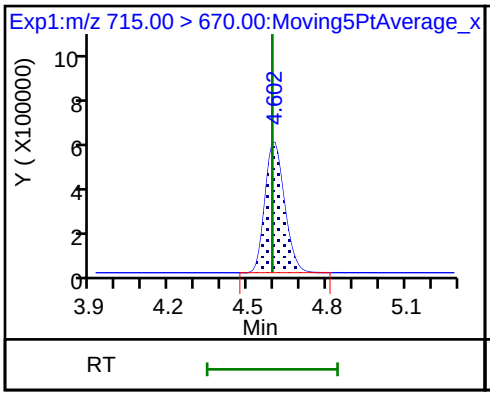
41 Perfluorotridecanoic acid (ND)



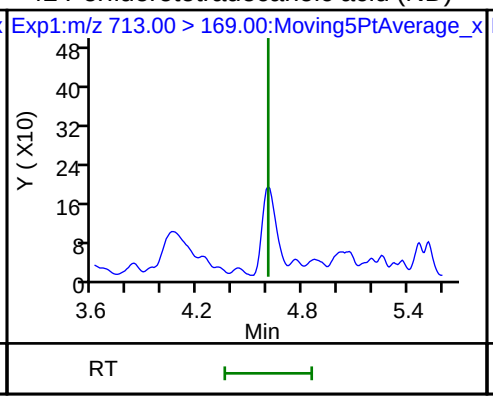
41 Perfluorotridecanoic acid (ND)



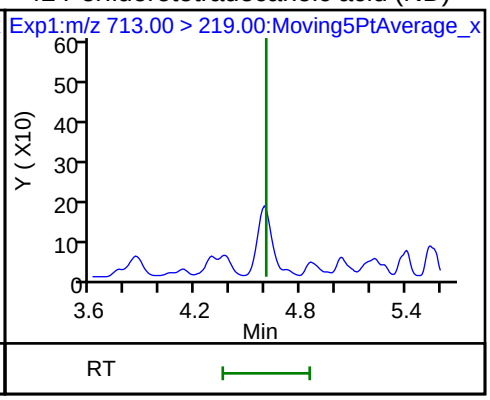
D 43 13C2-PFTeDA



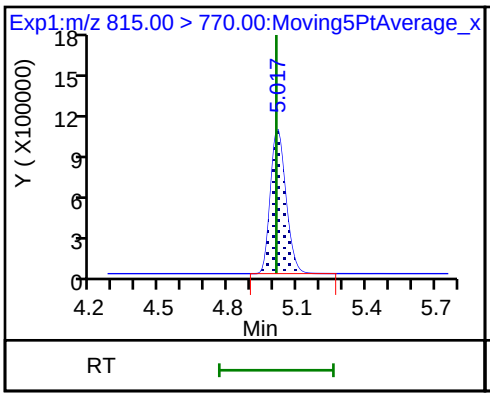
42 Perfluorotetradecanoic acid (ND)



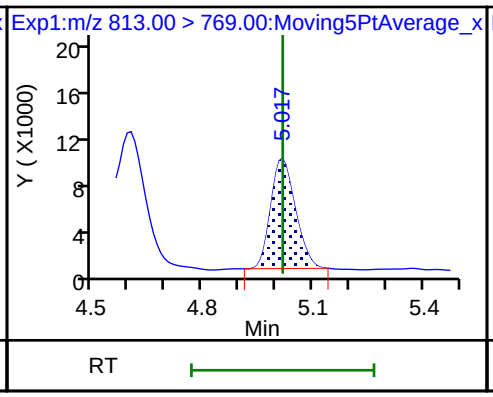
42 Perfluorotetradecanoic acid (ND)



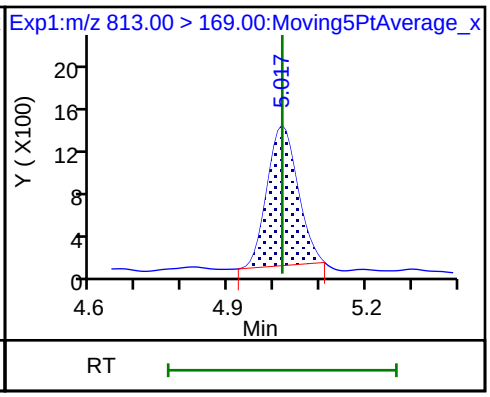
D 44 13C2-PFHxDA



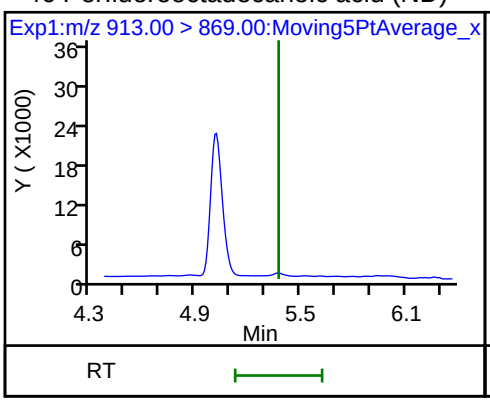
45 Perfluorohexadecanoic acid



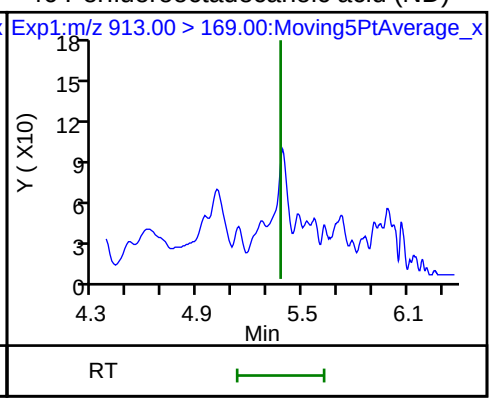
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

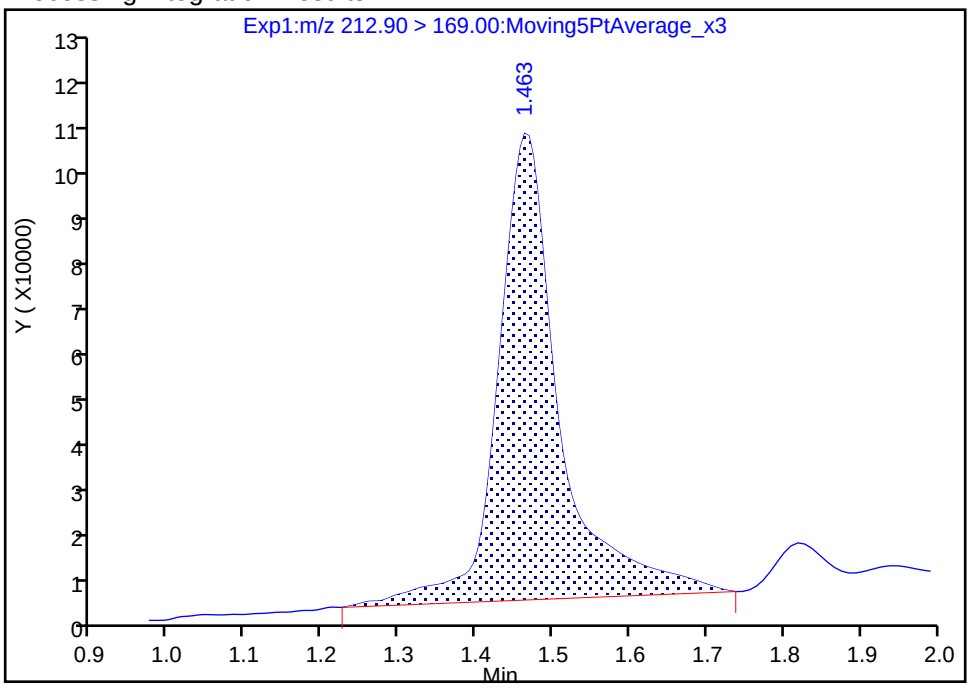
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_027.d				
Injection Date:	10-May-2018 09:53:50	Instrument ID:	A8_N		
Lims ID:	320-38611-A-1-A	Lab Sample ID:	320-38611-1		
Client ID:	GC-MW-107(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	18	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

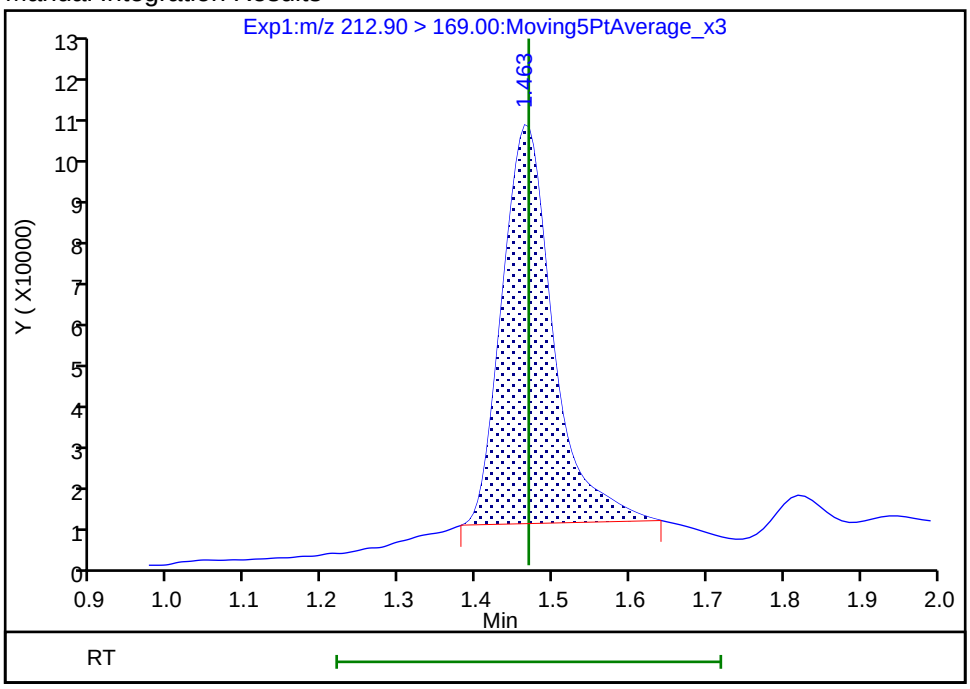
Processing Integration Results

RT: 1.46
Area: 574119
Amount: 0.350331
Amount Units: ng/ml



Manual Integration Results

RT: 1.46
Area: 448640
Amount: 0.273763
Amount Units: ng/ml



Reviewer: hannigana, 15-May-2018 16:59:12

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

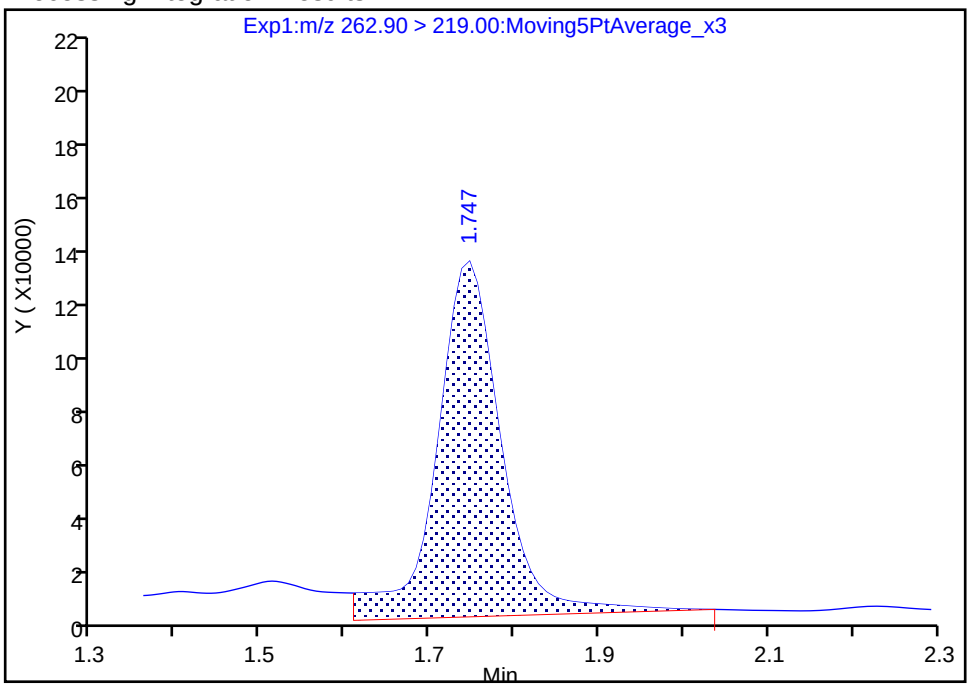
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_027.d				
Injection Date:	10-May-2018 09:53:50	Instrument ID:	A8_N		
Lims ID:	320-38611-A-1-A	Lab Sample ID:	320-38611-1		
Client ID:	GC-MW-107(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	18	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

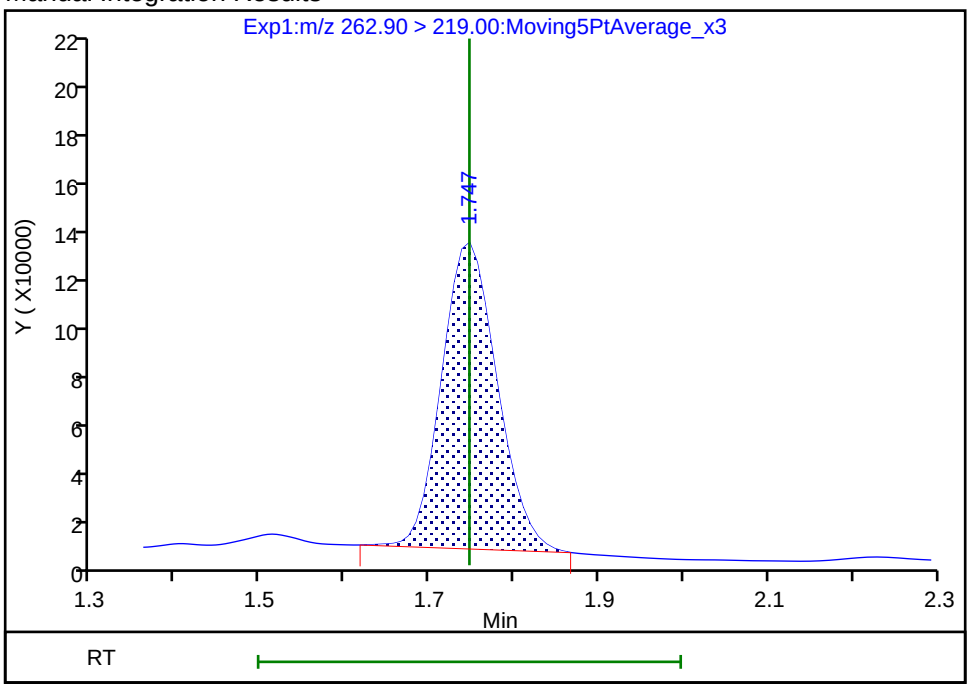
Processing Integration Results

RT: 1.75
Area: 675611
Amount: 0.393625
Amount Units: ng/ml



Manual Integration Results

RT: 1.75
Area: 547486
Amount: 0.318976
Amount Units: ng/ml



Reviewer: hannigana, 15-May-2018 16:59:30

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) RE | Lab Sample ID: 320-38611-1 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_018.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 277.3(mL) | Date Analyzed: 05/17/2018 01:14

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*28*	*H*	*1.8*	*0.77*
27619-97-2	*6:2FTS*	*4.2*	*J H*	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	110		25-150
STL02279	M2-6:2FTS	125		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_018.d
Lims ID: 320-38611-B-1-C
Client ID: GC-MW-107(WG)
Sample Type: Client
Inject. Date: 17-May-2018 01:14:48 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-1-c
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:47:23 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:47:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.453	1.447	0.006	1.000	5874695	2.04		81.7	37258	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.453	1.452	0.001	1.000	599714	0.2745			97.1	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.721	1.712	0.009	1.000	732501	0.3606			120	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.721	1.712	0.009	0.564	4301775	2.33		93.3	32128	
D 47 13C3-PFBS										
301.90 > 83.00	1.757	1.748	0.009	1.000	91054	2.19		94.0	245	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.757	1.757	0.0	1.000	592129	0.1936			226	M
298.90 > 99.00	1.757	1.757	0.0	1.000	247729		2.39(1.25-3.74)		366	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.005	1.993	0.012	1.000	684004	0.3324			252	M
313.00 > 119.00	2.005	1.993	0.012	1.000	64552		10.60(5.03-15.10)		522	
D 7 13C2 PFHxA										
315.00 > 270.00	2.005	1.994	0.011	1.000	5004024	2.55		102	79384	
70 Perfluoropentanesulfonic acid										M
349.00 > 80.00	2.016	2.016	0.0	1.000	27327	0.0100			36.5	
349.00 > 99.00	2.027	2.016	0.011	1.006	9541		2.86(1.36-4.07)		24.9	M
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.095	2.095	0.0	1.000	262971	2.70		108	3785	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.334	2.321	0.013	1.000	528066	0.2642			298	M
363.00 > 169.00	2.334	2.321	0.013	1.000	220081		2.40(1.13-3.40)		1006	
D 9 13C4-PFHpA										
367.00 > 322.00	2.334	2.321	0.013	1.000	4729704	2.51		100	68214	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.347	2.334	0.013	1.000	192363	0.0733			191	
399.00 > 99.00	2.347	2.334	0.013	1.000	59574		3.23(1.50-4.49)		150	
D 11 18O2 PFHxS										
403.00 > 84.00	2.347	2.334	0.013	1.000	5508422	2.37		100	110585	
D 12 M2-6:2FTS										
429.00 > 81.00	2.660	2.645	0.015	1.000	1237006	2.98		125	8096	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.660	2.654	0.006	1.000	116710	0.1174			858	
D 14 13C4 PFOA										
417.00 > 372.00	2.683	2.668	0.015	1.000	4891745	2.75		110	73298	
* 62 13C2-PFOA										
415.00 > 370.00	2.683	2.676	0.007		4703705	2.50			75637	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.683	2.676	0.007	1.000	1764891	0.7663			722	
413.00 > 169.00	2.683	2.676	0.007	1.000	937811		1.88(0.84-2.52)		2837	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.690	2.684	0.006	1.000	23847	0.0109			75.2	
449.00 > 99.00	2.690	2.684	0.006	1.000	6558		3.64(1.94-5.82)		47.9	M
D 18 13C4 PFOS										
503.00 > 80.00	3.050	3.029	0.021	1.000	3908991	2.44		102	23077	
D 19 13C5 PFNA										
468.00 > 423.00	3.050	3.036	0.014	1.000	4059207	2.79		111	59083	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.050	3.036	0.014	1.000	697630	0.3628			3544	
499.00 > 99.00	3.043	3.036	0.007	0.998	127140		5.49(2.31-6.93)		1010	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.050	3.043	0.007	1.000	214837	0.1249			312	M
463.00 > 169.00	3.050	3.043	0.007	1.000	51692		4.16(1.90-5.69)		694	M
D 26 M2-8:2FTS										
529.00 > 81.00	3.395	3.376	0.019	1.000	1239994	2.62		109	13200	
D 21 13C8 FOSA										
506.00 > 78.00	3.385	3.376	0.009	1.000	4965176	2.37		94.9	53929	
D 23 13C2 PFDA										
515.00 > 470.00	3.404	3.385	0.019	1.000	3249128	2.62		105	56733	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.395	3.387	0.008	1.003	7805	0.004036			161	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.413	3.396	0.017	1.003	93290	0.0738			292	
513.00 > 169.00	3.413	3.396	0.017	1.003	16300		5.72(2.36-7.09)		456	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.557	3.544	0.013	1.000	2043089	2.99		120	32013	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.567	3.554	0.013	1.003	3241	0.003908			29.2	M
D 30 13C2 PFUnA										
565.00 > 520.00	3.730	3.716	0.014	1.000	2530683	2.58		103	57548	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.730	3.716	0.014	1.000	1884412	2.69		107	16173	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.730	3.728	0.002	1.000	3514	0.004959			77.4	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.887	3.885	0.002	1.000	3959	0.000890			42.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.030	4.006	0.024	1.000	2733416	2.59		104	18870	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.532	4.511	0.021	1.000	3488304	2.69		108	18216	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.939	4.922	0.017	1.000	5906767	2.75		110	13265	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.939	4.931	0.008	1.000	55586	-0.000194			18.1	
813.00 > 169.00	4.939	4.931	0.008	1.000	10084		5.51(2.86-8.58)		117	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 13:47:23 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_018.d

Injection Date: 17-May-2018 01:14:48 Instrument ID: A8_N

Lims ID: 320-38611-B-1-C Lab Sample ID: 320-38611-1

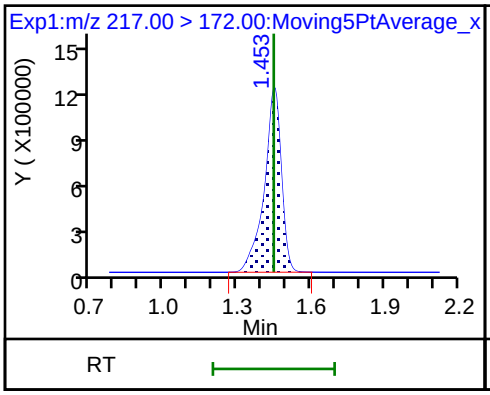
Client ID: GC-MW-107(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 10

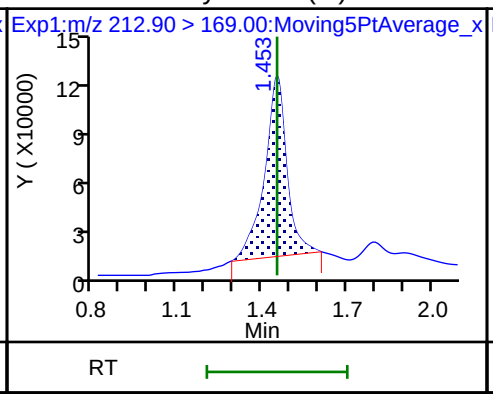
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

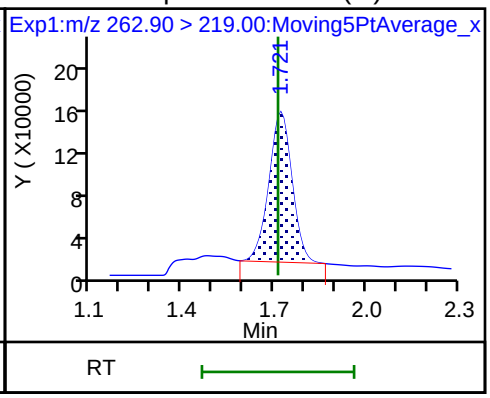
D 1 13C4 PFBA



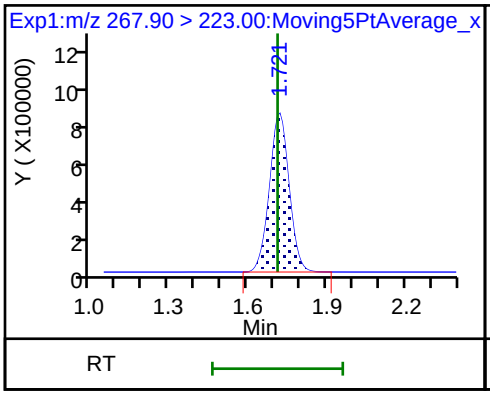
2 Perfluorobutyric acid (M)



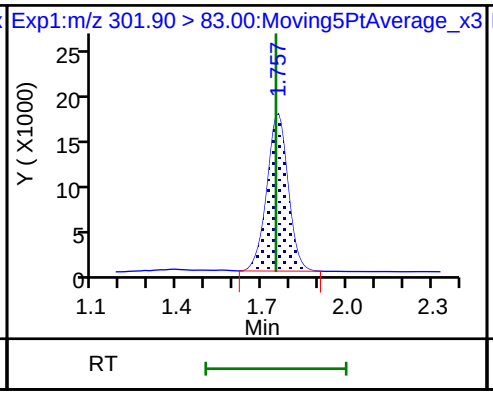
4 Perfluoropentanoic acid (M)



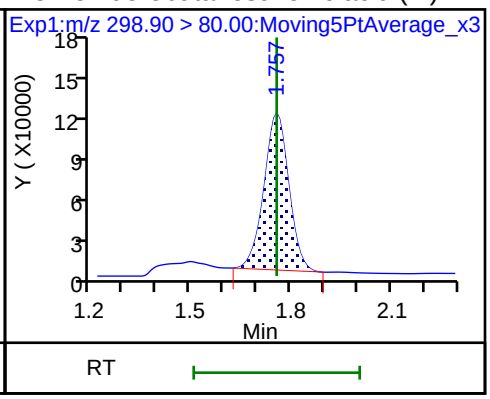
D 3 13C5-PFPeA



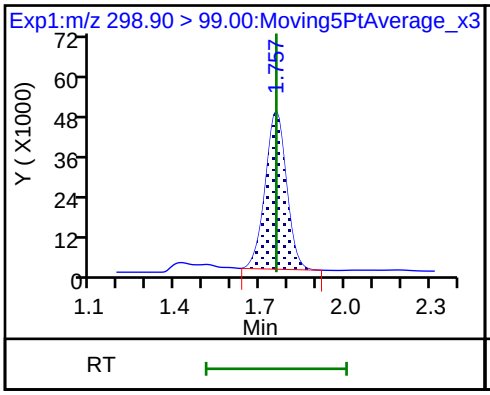
D 47 13C3-PFBS



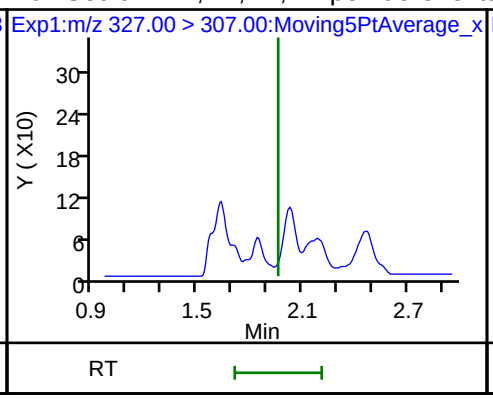
5 Perfluorobutanesulfonic acid (M)



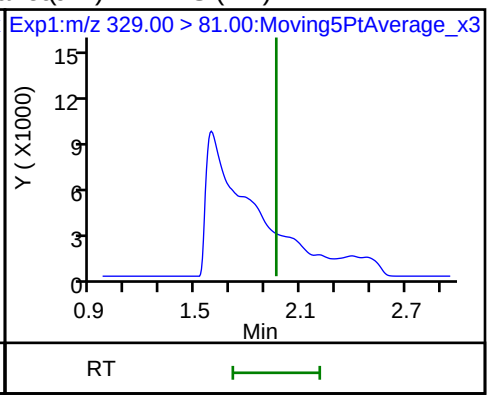
5 Perfluorobutanesulfonic acid



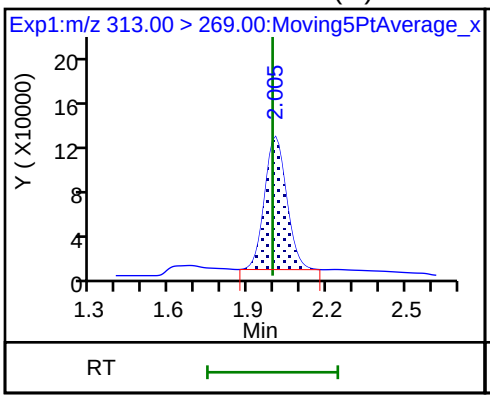
61 Sodium 1H,1H,2H,2H-perfluorohexanesulfonate (M2)



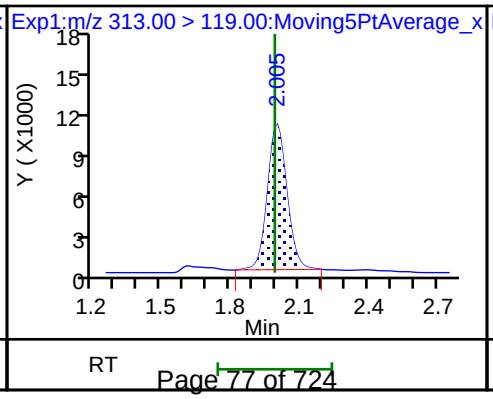
D 60 M2-4:2FTS (ND)



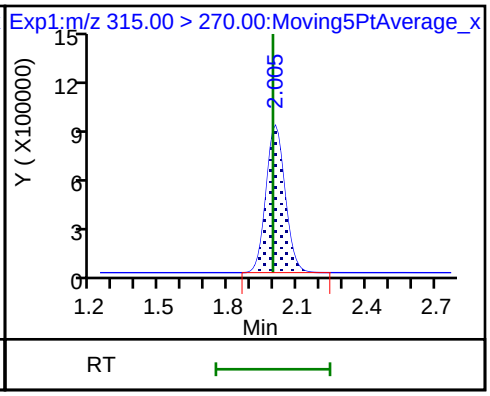
6 Perfluorohexanoic acid (M)



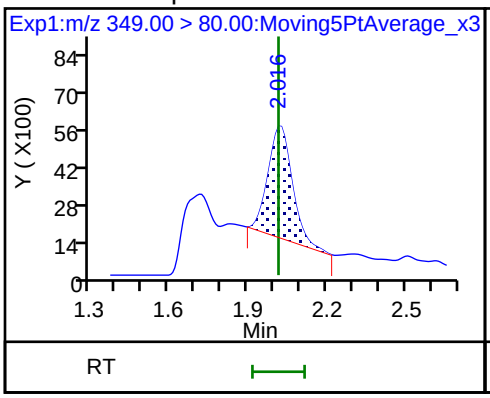
6 Perfluorohexanoic acid



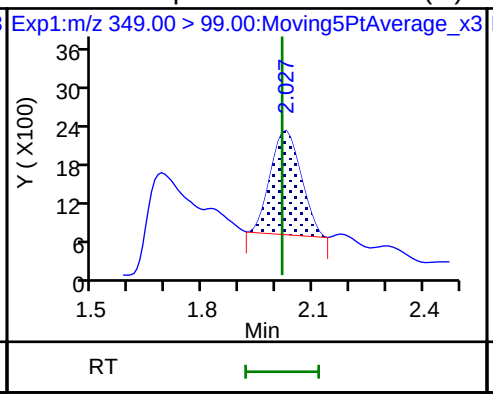
D 7 13C2 PFHxA



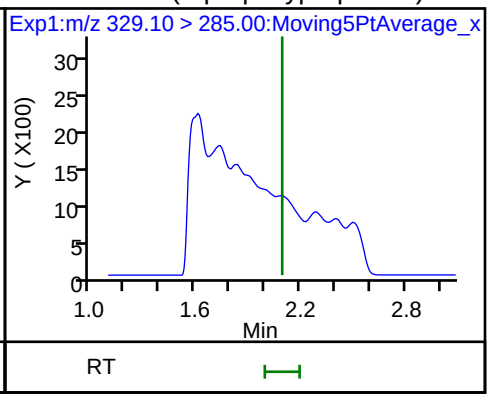
70 Perfluoropentanesulfonic acid



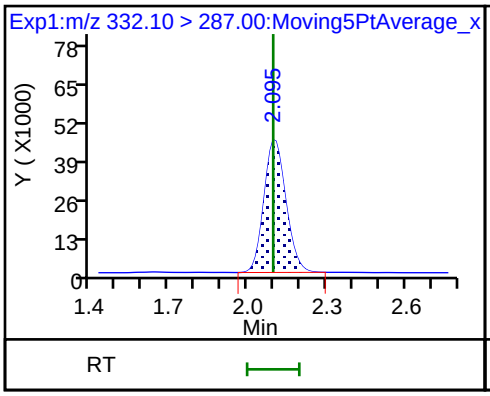
70 Perfluoropentanesulfonic acid (M)



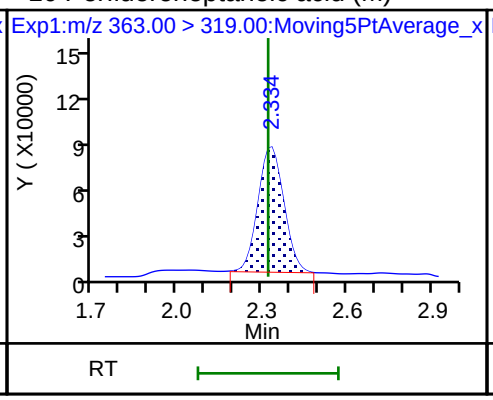
67 Perfluoro(2-propoxypropanoic) acid (ND)



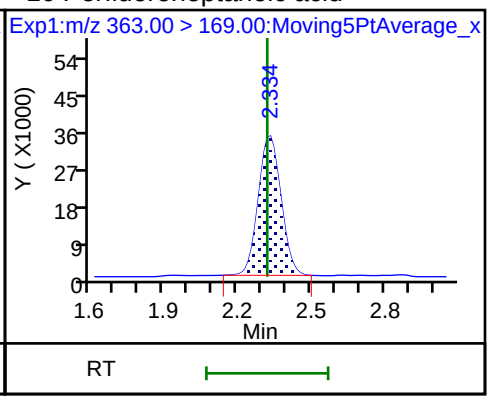
D 64 13C3 HFPO-DA



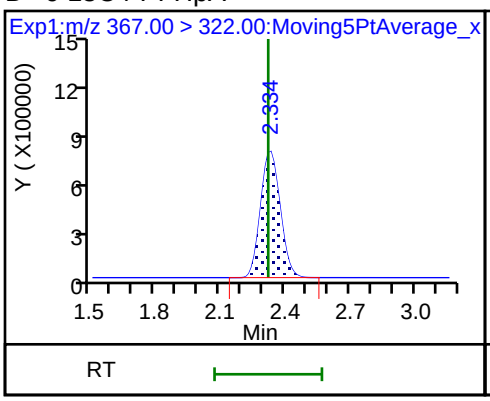
10 Perfluoroheptanoic acid (M)



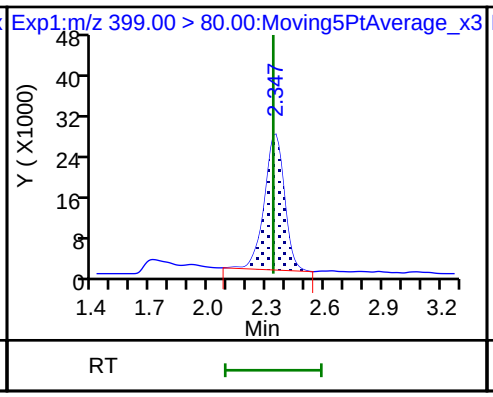
10 Perfluoroheptanoic acid



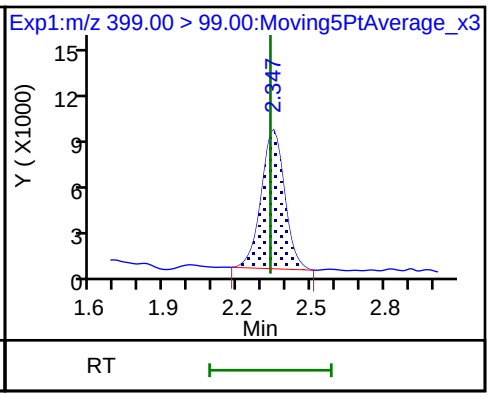
D 9 13C4-PFHpA



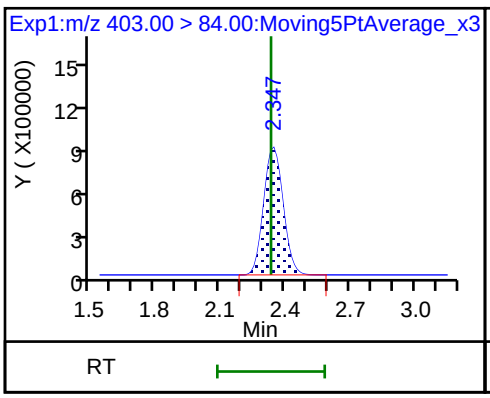
8 Perfluorohexanesulfonic acid



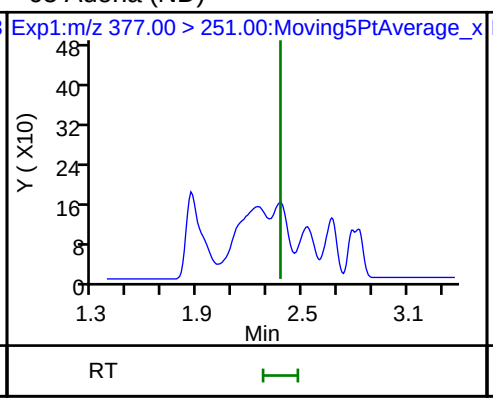
8 Perfluorohexanesulfonic acid



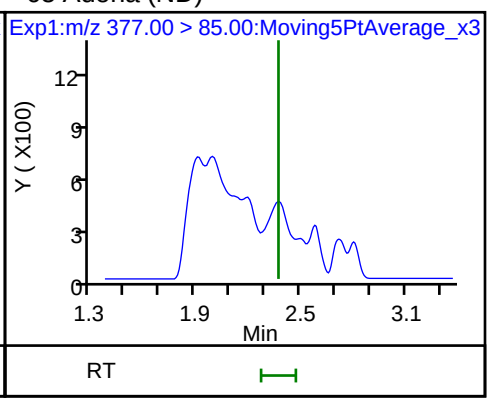
D 11 18O2 PFHxS



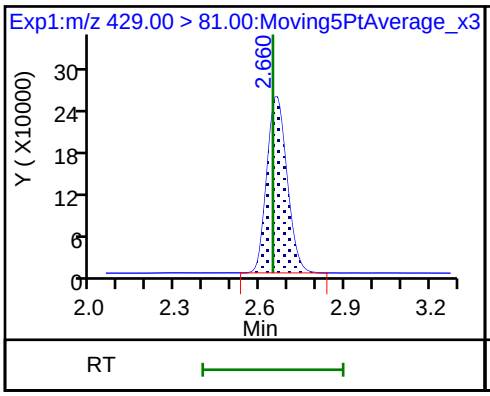
65 Adona (ND)



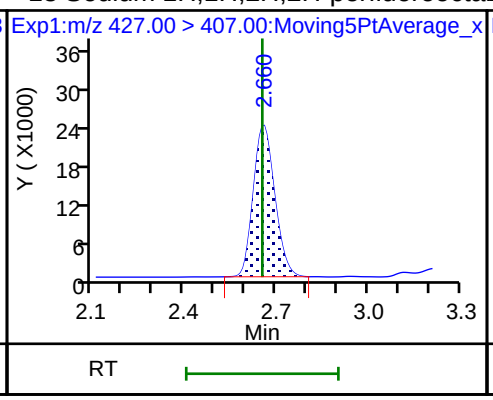
65 Adona (ND)



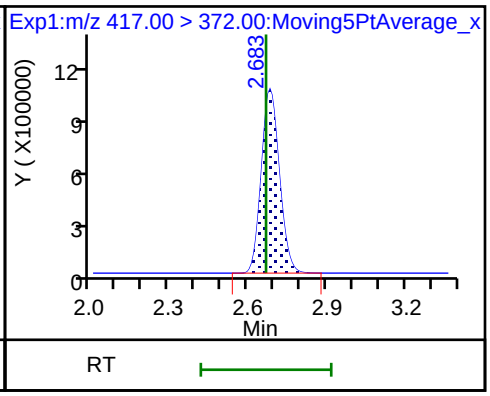
D 12 M2-6:2FTS



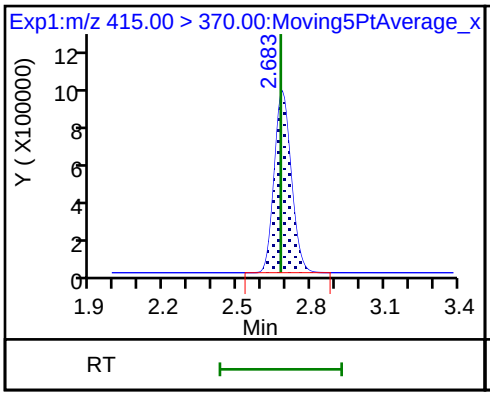
13 Sodium 1H,1H,2H,2H-perfluorooctane



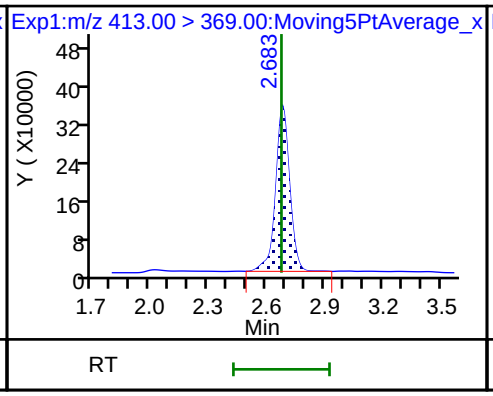
D 14 13C4 PFOA



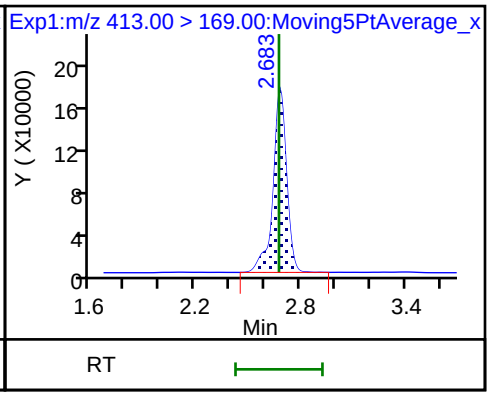
* 62 13C2-PFOA



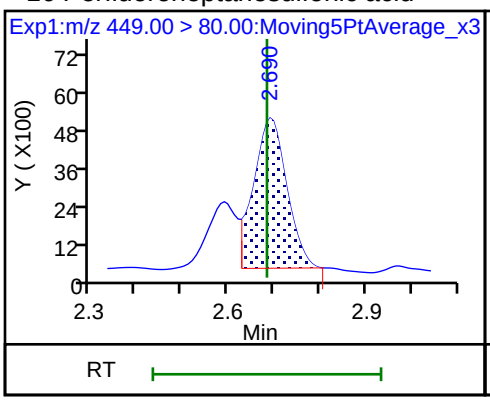
15 Perfluorooctanoic acid



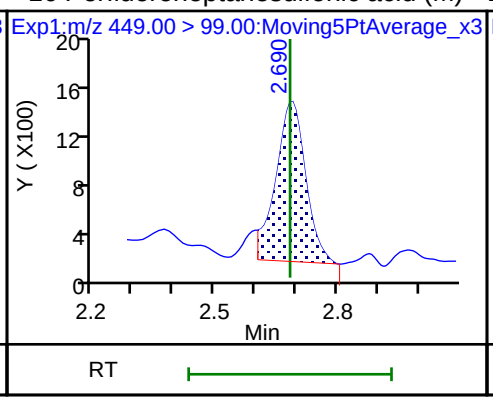
15 Perfluorooctanoic acid



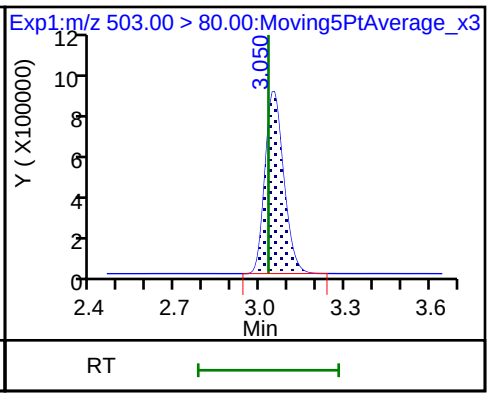
16 Perfluoroheptanesulfonic acid



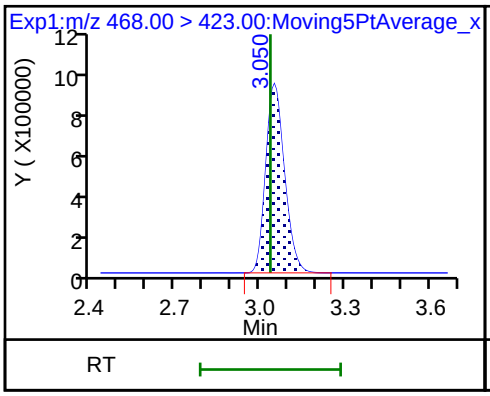
16 Perfluoroheptanesulfonic acid (M)



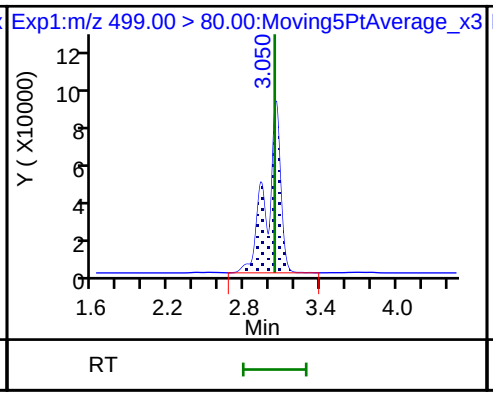
D 18 13C4 PFOS



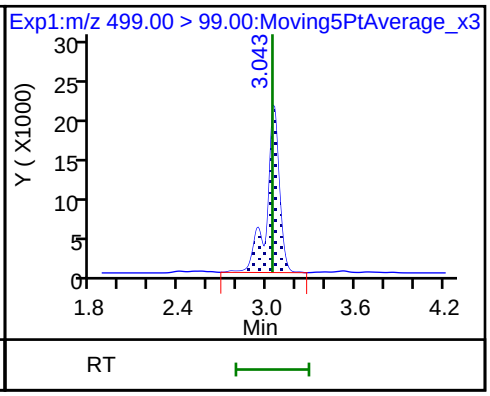
D 19 13C5 PFNA



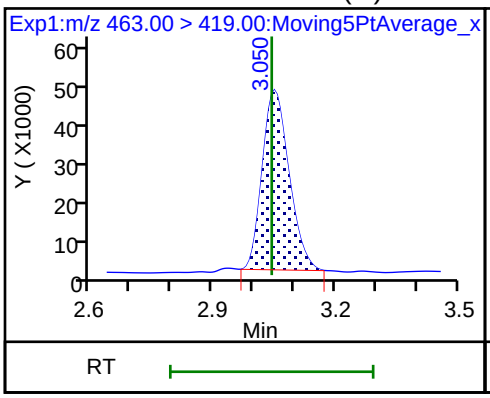
17 Perfluorooctane sulfonic acid



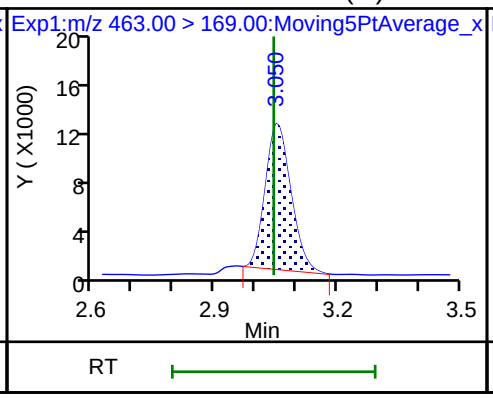
17 Perfluorooctane sulfonic acid



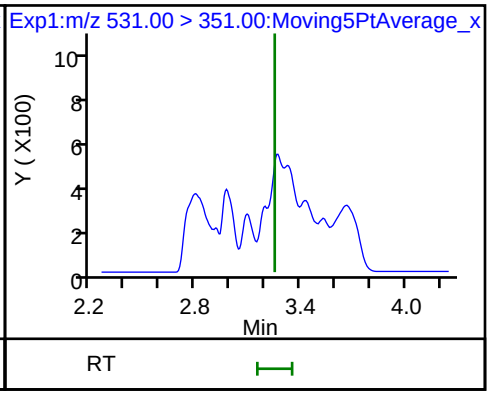
20 Perfluorononanoic acid (M)



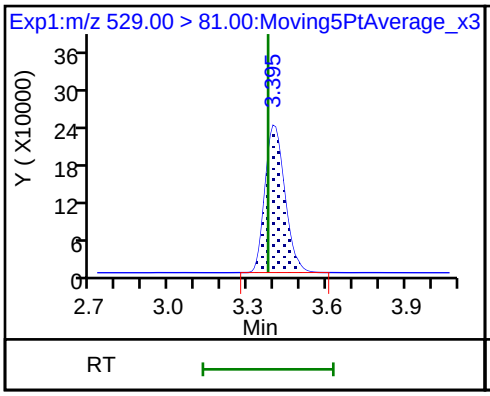
20 Perfluorononanoic acid (M)



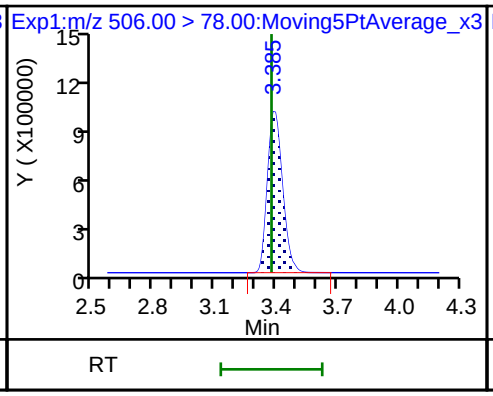
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



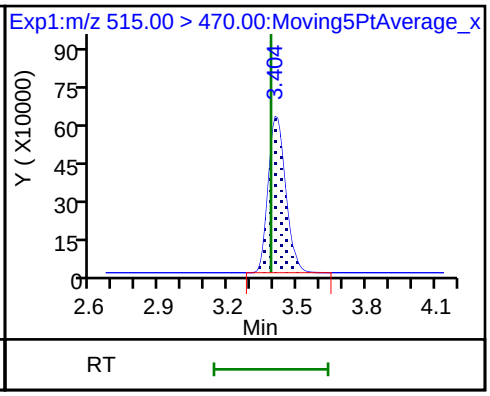
D 26 M2-8:2FTS



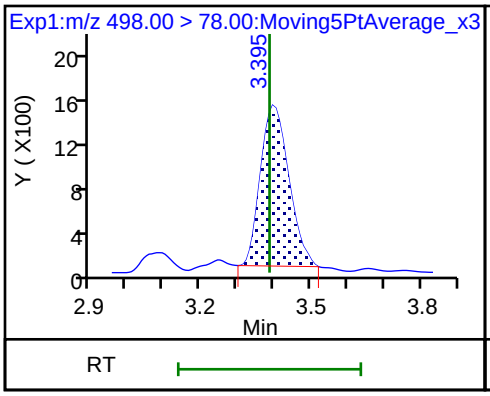
D 21 13C8 FOSA



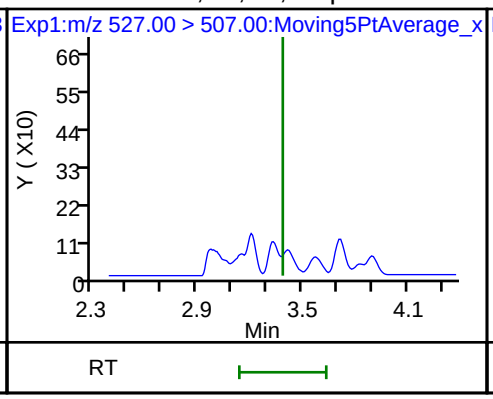
D 23 13C2 PFDA



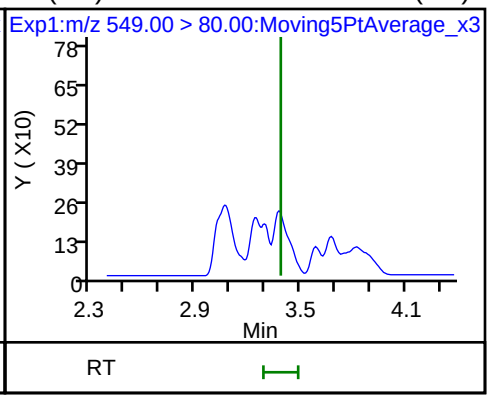
22 Perfluorooctane Sulfonamide



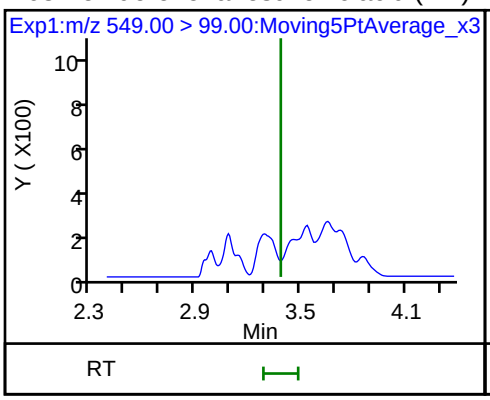
25 Sodium 1H,1H,2H,2H-perfluorodecanesulfonate



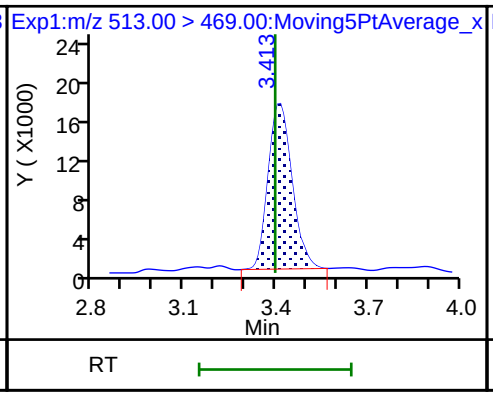
68 Perfluorononanesulfonic acid (ND)



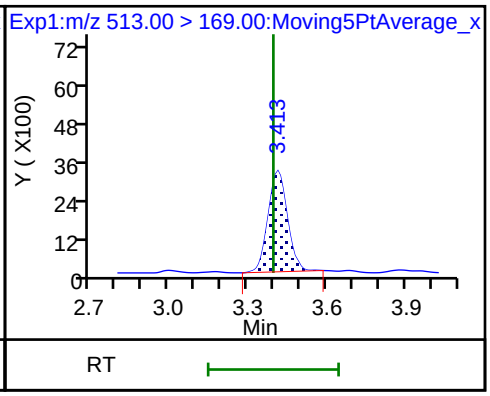
68 Perfluorononanesulfonic acid (ND)



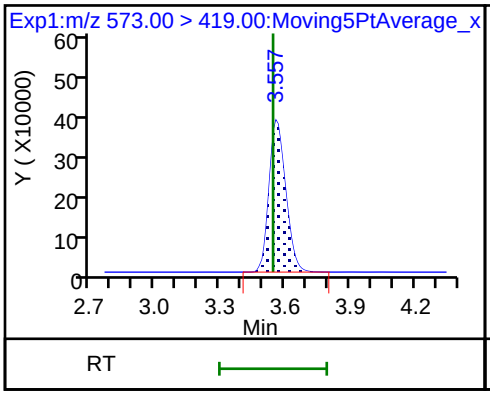
24 Perfluorodecanoic acid



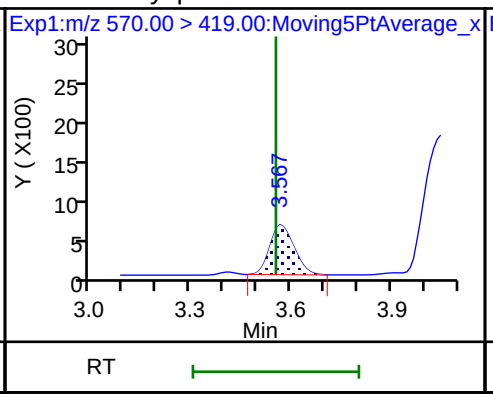
24 Perfluorodecanoic acid



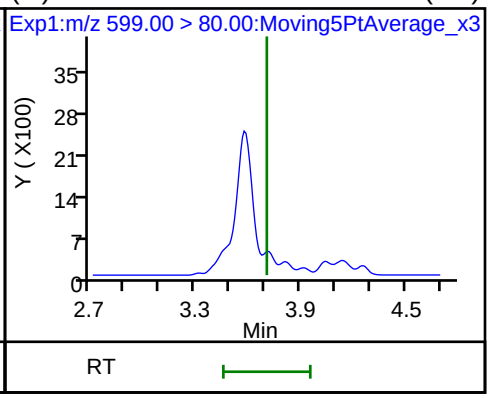
D 27 d3-NMeFOSAA



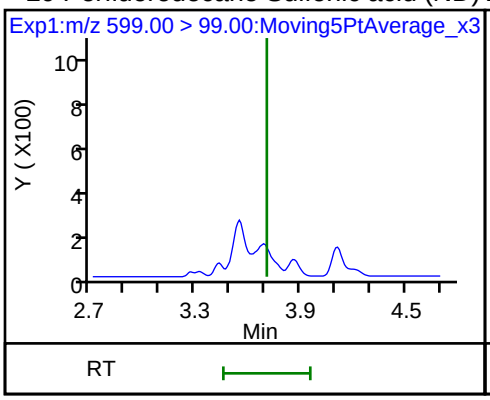
28 N-methyl perfluorooctane sulfonami (M)



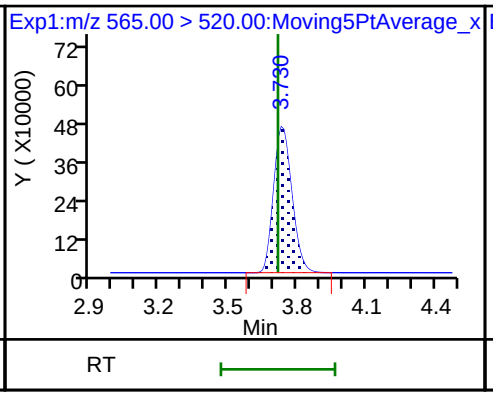
29 Perfluorodecane Sulfonic acid (ND)



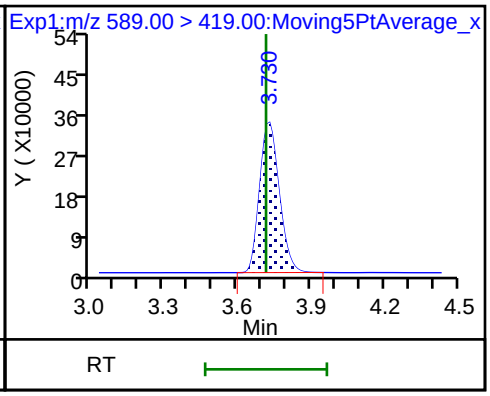
29 Perfluorodecane Sulfonic acid (ND)



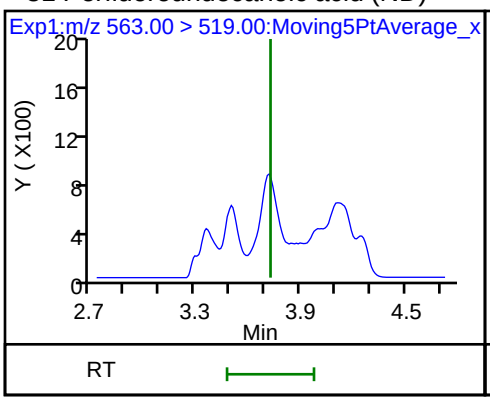
D 30 13C2 PFUnA



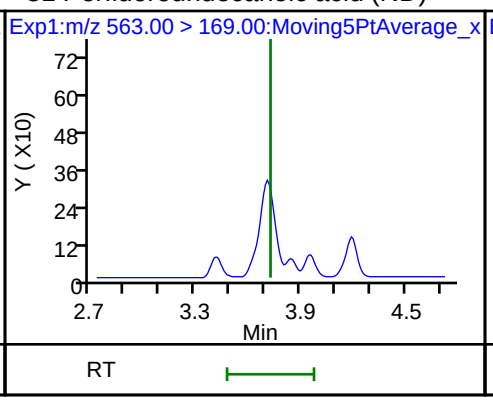
D 32 d5-NEtFOSAA



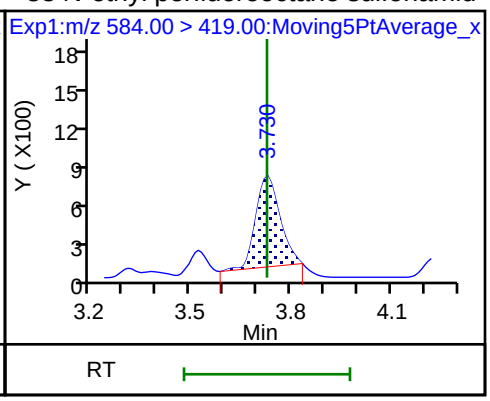
31 Perfluoroundecanoic acid (ND)



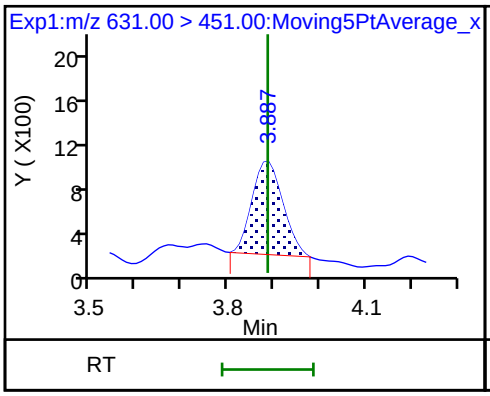
31 Perfluoroundecanoic acid (ND)



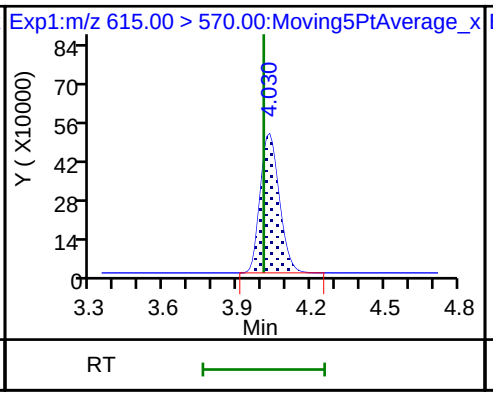
33 N-ethyl perfluorooctane sulfonamid



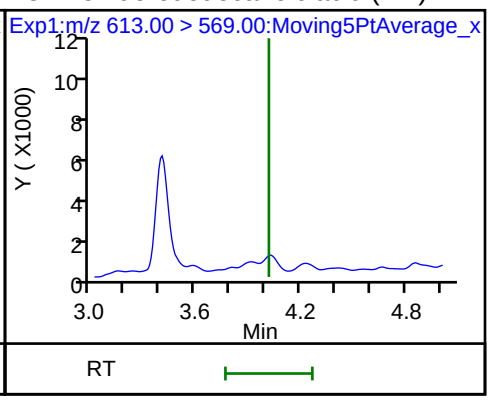
66 11-Chloroeicosafluoro-3-oxaundecan



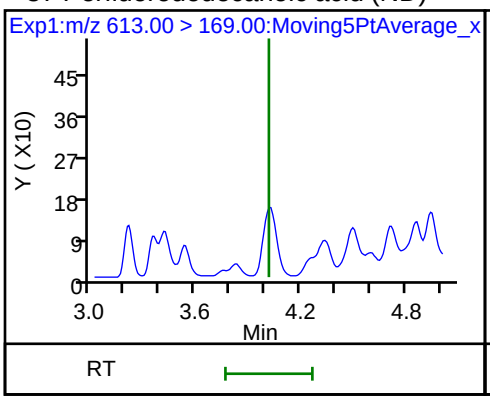
D 36 13C2 PFDoA



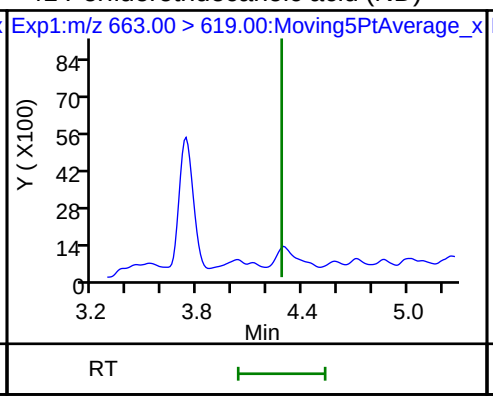
37 Perfluorododecanoic acid (ND)



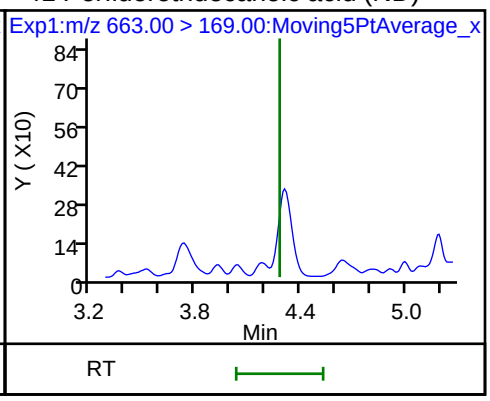
37 Perfluorododecanoic acid (ND)



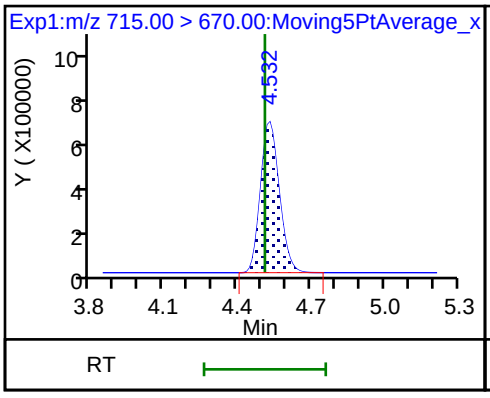
41 Perfluorotridecanoic acid (ND)



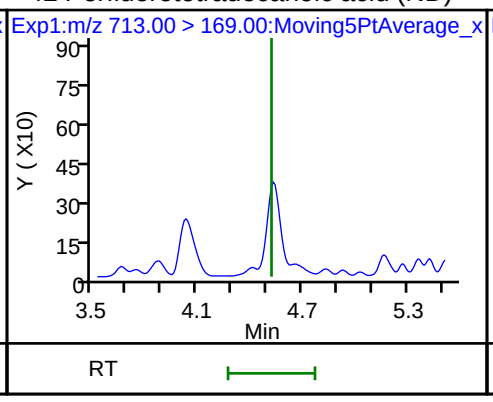
41 Perfluorotridecanoic acid (ND)



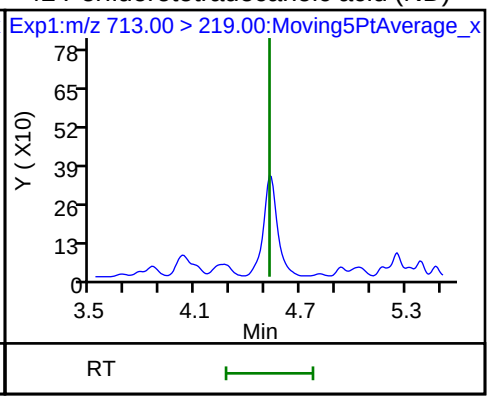
D 43 13C2-PFTeDA



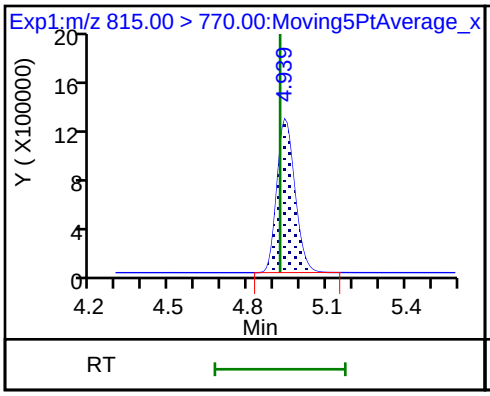
42 Perfluorotetradecanoic acid (ND)



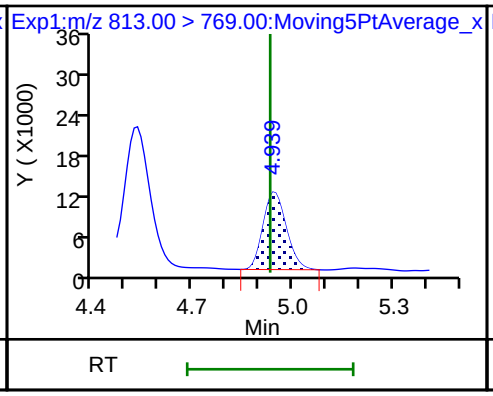
42 Perfluorotetradecanoic acid (ND)



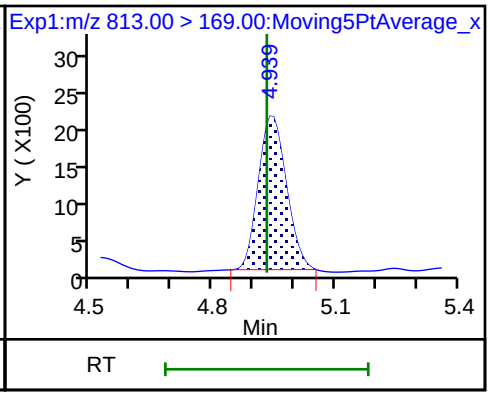
D 44 13C2-PFHxDA



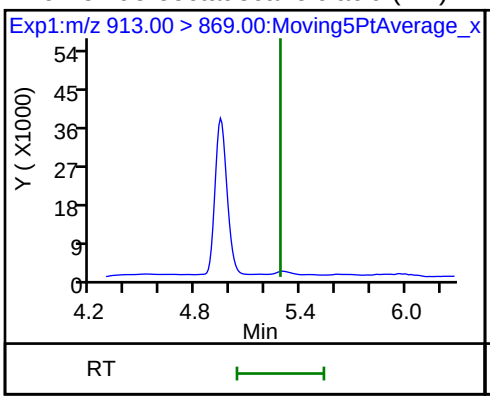
45 Perfluorohexadecanoic acid



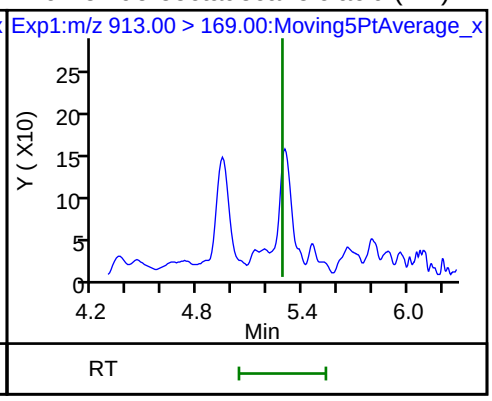
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 320-38611-2

Matrix: Water | Lab File ID: 2018.05.10LLB_004.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 246.2(mL) | Date Analyzed: 05/10/2018 20:07

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	5.3	B	2.0	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	7.5		2.0	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	8.3		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	6.5		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	20	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	0.61	J	2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	0.60	J	2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.4	J	2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.2	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.43	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	5.4		2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	28	B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 320-38611-2

Matrix: Water | Lab File ID: 2018.05.10LLB_004.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 246.2(mL) | Date Analyzed: 05/10/2018 20:07

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	90		25-150
STL01893	13C5 PFPeA	106		25-150
STL00993	13C2 PFHxA	106		25-150
STL01892	13C4-PFHpA	104		25-150
STL00990	13C4 PFOA	103		25-150
STL00995	13C5 PFNA	102		25-150
STL00996	13C2 PFDA	99		25-150
STL00997	13C2 PFUnA	90		25-150
STL00998	13C2 PFDoA	91		25-150
STL02116	13C2-PFTeDA	89		25-150
STL02337	13C3-PFBS	107		25-150
STL00994	18O2 PFHxS	105		25-150
STL00991	13C4 PFOS	103		25-150
STL01056	13C8 FOSA	91		25-150
STL02118	d3-NMeFOSAA	90		25-150
STL02117	d5-NEtFOSAA	89		25-150
STL02279	M2-6:2FTS	115		25-150
STL02280	M2-8:2FTS	116		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_004.d
Lims ID: 320-38611-A-2-A
Client ID: GC-MW-107D(WG)
Sample Type: Client
Inject. Date: 10-May-2018 20:07:18 ALS Bottle#: 21 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-2-
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:14:22

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.468	1.469	-0.001	1.000	4347212	2.26		90.5	33821	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.474	1.478	-0.004	1.004	208740	0.1293			105	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.747	0.008	0.565	3276687	2.65		106	45593	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.755	1.753	0.002	1.000	289822	0.1855			110	
D 47 13C3-PFBS										
301.90 > 83.00	1.782	1.783	-0.001	1.000	70673	2.49		107	351	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.791	1.798	-0.007	1.005	84717	0.0356			46.0	M
298.90 > 99.00	1.791	1.798	-0.007	1.005	36976		2.29(1.25-3.74)		71.9	
D 7 13C2 PFHxA										
315.00 > 270.00	2.048	2.048	0.0	1.000	3642193	2.66		106	86166	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.048	2.056	-0.008	1.000	301062	0.2034			280	
313.00 > 119.00	2.048	2.056	-0.008	1.000	26547		11.34(5.03-15.10)		294	
D 9 13C4-PFHpA										
367.00 > 322.00	2.383	2.384	-0.001	1.000	3476609	2.61		104	87104	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.383	2.392	-0.009	1.000	223659	0.1607			246	
363.00 > 169.00	2.383	2.392	-0.009	1.000	85253		2.62(1.13-3.40)		406	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.395	0.0	1.000	4101776	2.49		105	73962	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.395	2.403	-0.008	1.000	251893	0.1283			244	
399.00 > 99.00	2.395	2.403	-0.008	1.000	84538		2.98(1.50-4.49)		361	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.711	2.712	-0.001	1.000	778106	2.72		115	7682	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.711	2.718	-0.007	1.000	377401	0.6814			7796	
* 62 13C2-PFOA										
415.00 > 370.00	2.742	2.741	0.001		3570951	2.50			50379	
D 14 13C4 PFOA										
417.00 > 372.00	2.734	2.742	-0.008	1.000	3419102	2.58		103	59945	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.734	2.749	-0.015	1.000	768979	0.4866			371	
413.00 > 169.00	2.742	2.749	-0.007	1.003	431310		1.78(0.84-2.52)		1819	
16 Perfluoroheptanesulfonic acid										RM
449.00 > 80.00	2.765	2.749	0.016	1.000	16472	0.0105			45.5	R
449.00 > 99.00	2.758	2.749	0.009	0.997	1504		10.95(1.94-5.82)		24.1	M
D 18 13C4 PFOS										
503.00 > 80.00	3.107	3.106	0.001	1.000	2832607	2.46		103	15448	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.993	3.114	-0.121	0.963	171485	0.1330			364	
499.00 > 99.00	3.107	3.114	-0.007	1.000	25610		6.70(2.31-6.93)		243	
D 19 13C5 PFNA										
468.00 > 423.00	3.107	3.114	-0.007	1.000	2904306	2.55		102	64327	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.107	3.122	-0.015	1.000	18048	0.0149			38.2	M
463.00 > 169.00	3.114	3.122	-0.008	1.002	3560		5.07(1.90-5.69)		82.8	M
D 21 13C8 FOSA										
506.00 > 78.00	3.438	3.431	0.007	1.000	3264875	2.27		90.8	47057	
D 26 M2-8:2FTS										
529.00 > 81.00	3.457	3.459	-0.002	1.000	959903	2.79		116	8508	
D 23 13C2 PFDA										
515.00 > 470.00	3.476	3.468	0.008	1.000	2358708	2.46		98.6	58768	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.457	3.469	-0.012	1.000	1993	0.003930			86.3	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.476	3.478	-0.002	1.000	14482	0.0149			52.0	R
513.00 > 169.00	3.476	3.478	-0.002	1.000	1678		8.63(2.36-7.09)		46.3	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.630	3.624	0.006	1.000	1221167	2.25		90.0	17819	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.794	3.790	0.004	1.000	1190886	2.22		89.0	10992	
D 30 13C2 PFUnA										
565.00 > 520.00	3.804	3.800	0.004	1.000	1856838	2.25		90.0	86459	
D 36 13C2 PFDoA										
615.00 > 570.00	4.092	4.091	0.001	1.000	2022991	2.27		90.8	26010	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.593	4.595	-0.002	1.000	2512794	2.22		88.9	19544	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:41 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_004.d

Injection Date: 10-May-2018 20:07:18 Instrument ID: A8_N

Lims ID: 320-38611-A-2-A Lab Sample ID: 320-38611-2

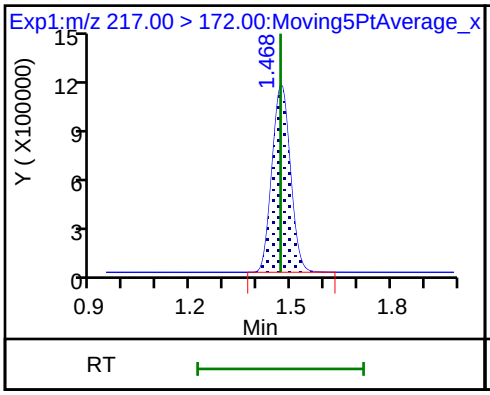
Client ID: GC-MW-107D(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 21 Worklist Smp#: 6

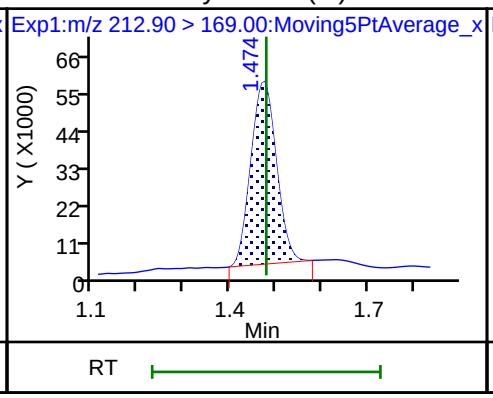
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

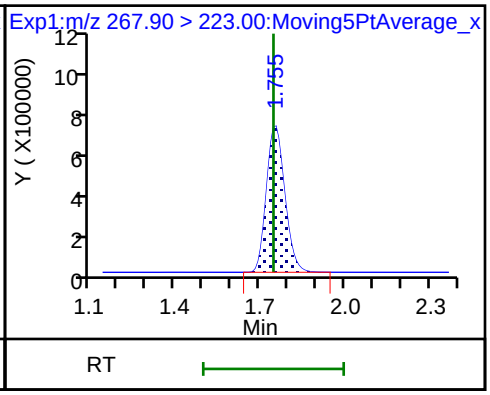
D 1 13C4 PFBA



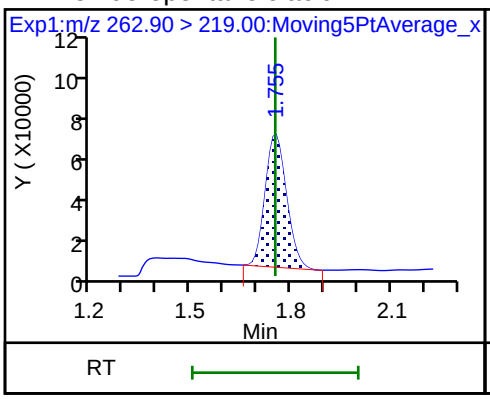
2 Perfluorobutyric acid (M)



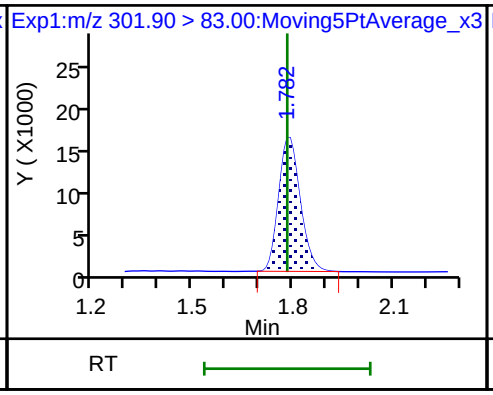
D 3 13C5-PFPeA



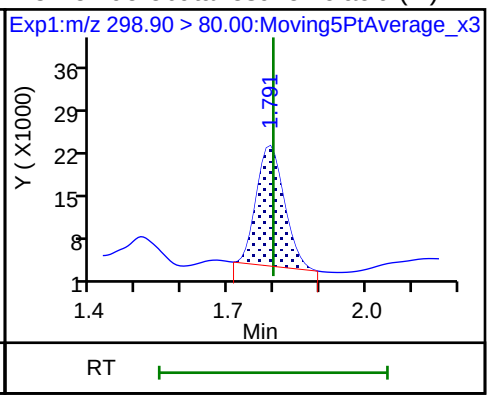
4 Perfluoropentanoic acid



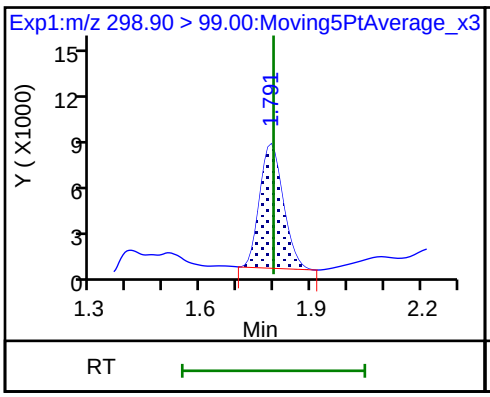
D 47 13C3-PFBS



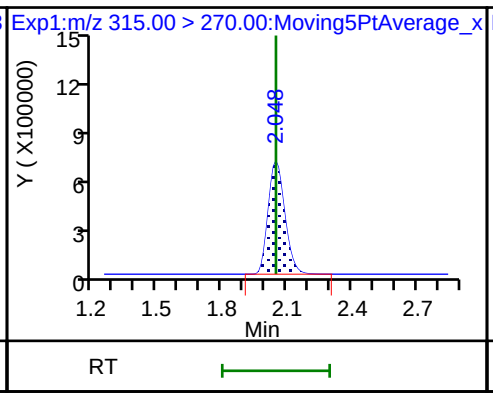
5 Perfluorobutanesulfonic acid (M)



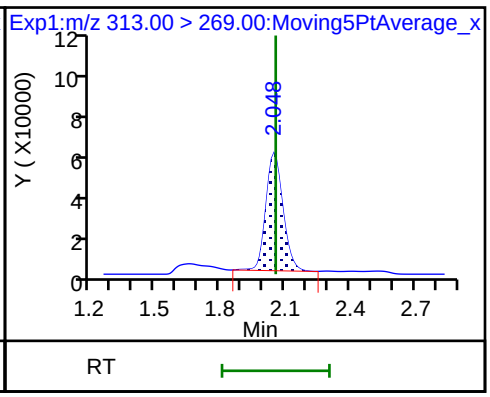
5 Perfluorobutanesulfonic acid



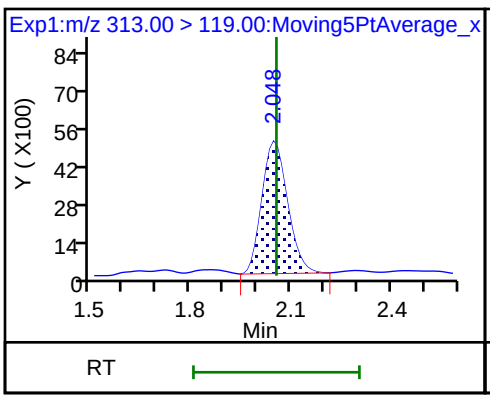
D 7 13C2 PFHxA



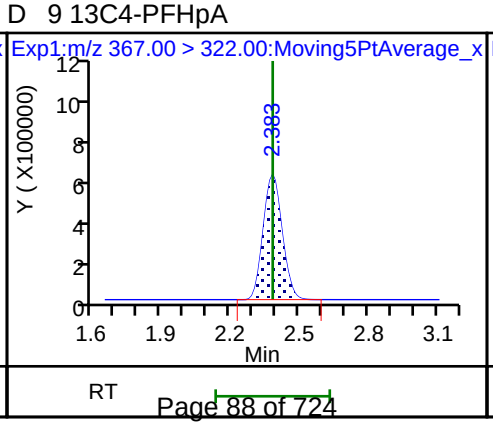
6 Perfluorohexanoic acid



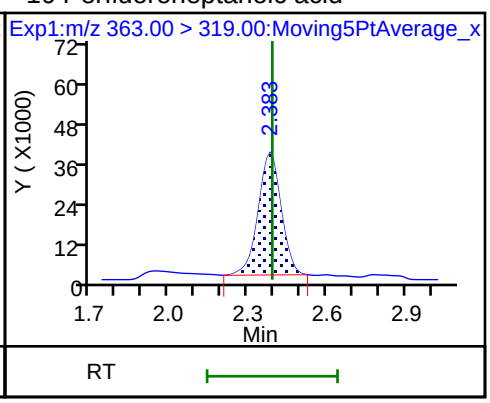
6 Perfluorohexanoic acid



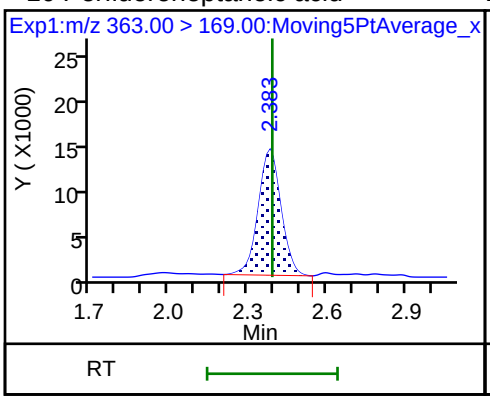
D 9 13C4-PFHpA



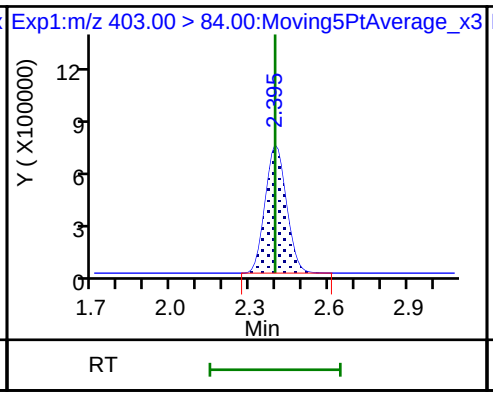
10 Perfluoroheptanoic acid



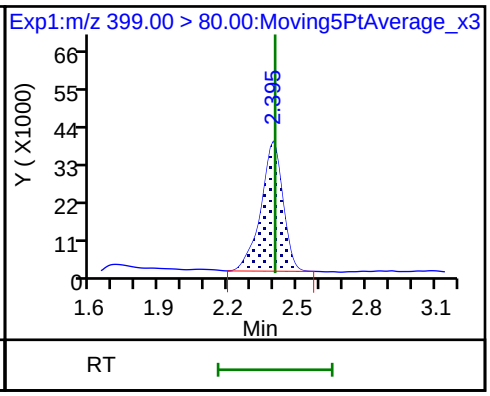
10 Perfluoroheptanoic acid



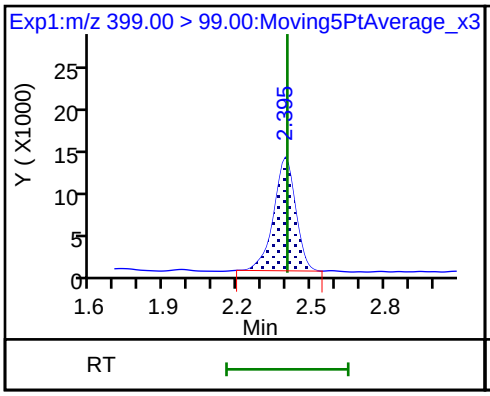
D 11 18O2 PFHxS



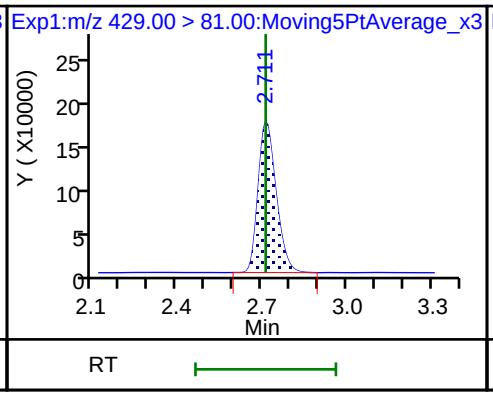
8 Perfluorohexanesulfonic acid



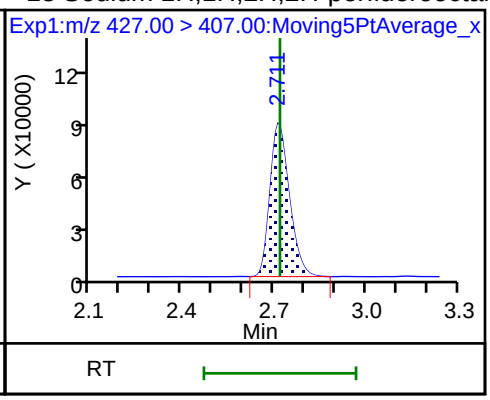
8 Perfluorohexanesulfonic acid



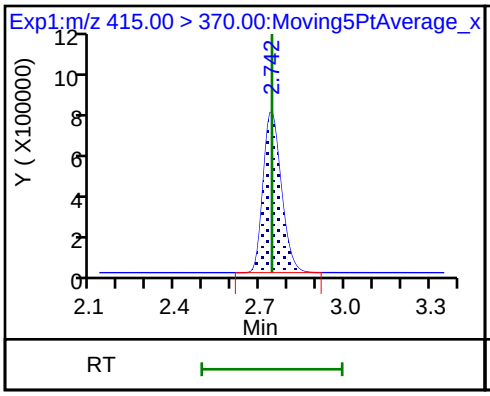
D 12 M2-6:2FTS



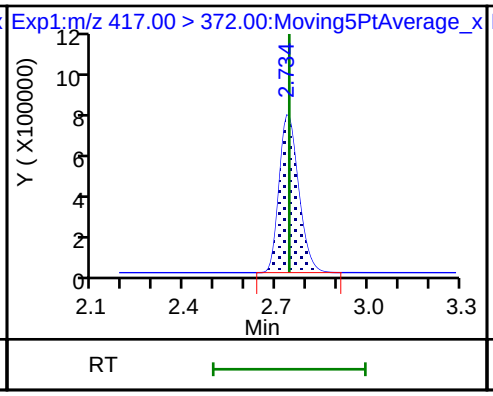
13 Sodium 1H,1H,2H,2H-perfluorooctane



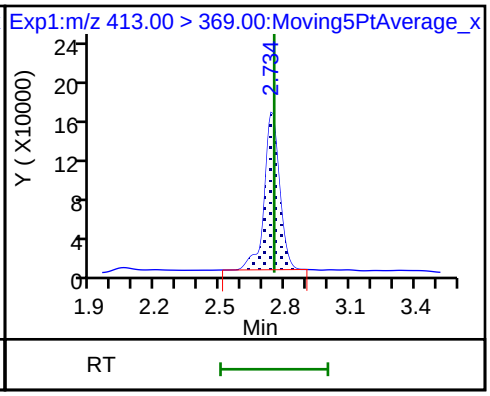
* 62 13C2-PFOA



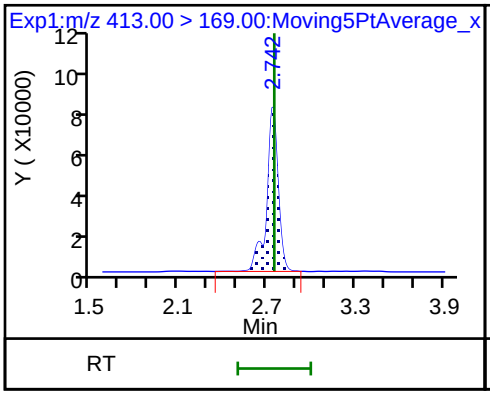
D 14 13C4 PFOA



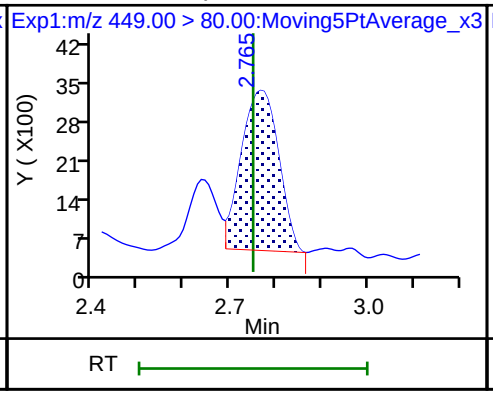
15 Perfluorooctanoic acid



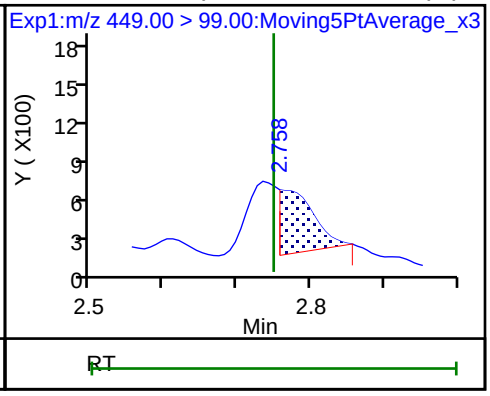
15 Perfluorooctanoic acid



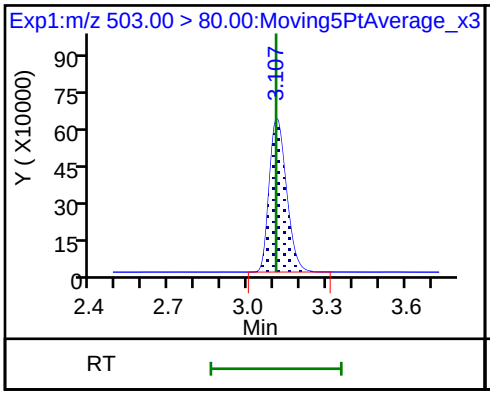
16 Perfluoroheptanesulfonic acid



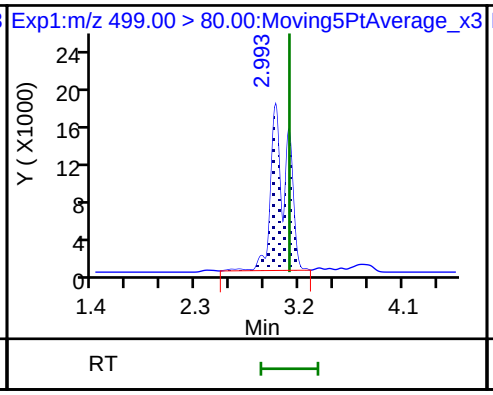
16 Perfluoroheptanesulfonic acid (M)



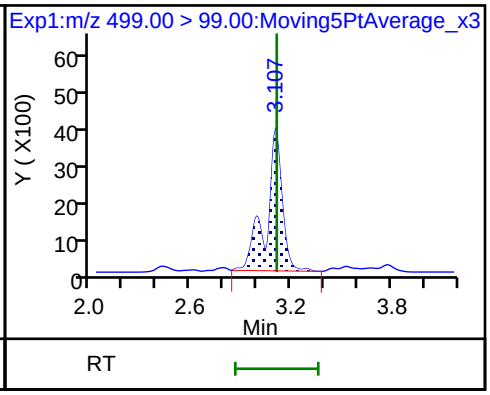
D 18 13C4 PFOS



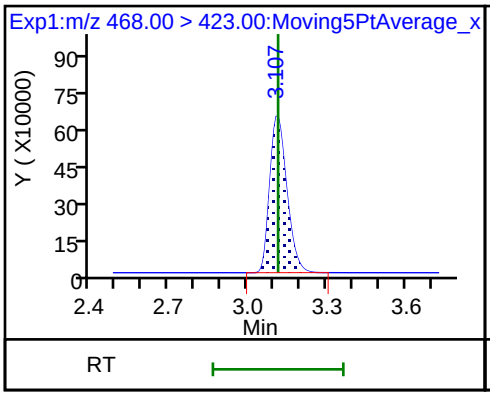
17 Perfluorooctane sulfonic acid



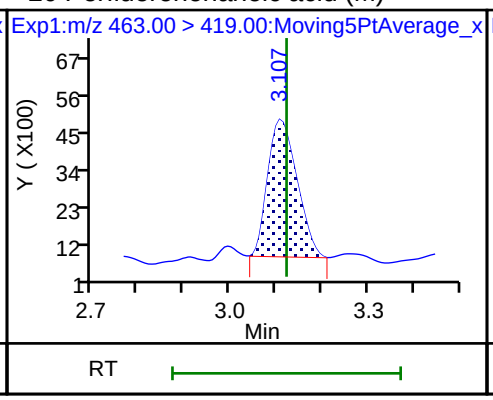
17 Perfluorooctane sulfonic acid



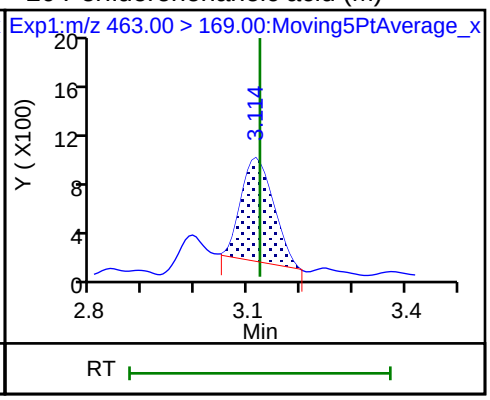
D 19 13C5 PFNA



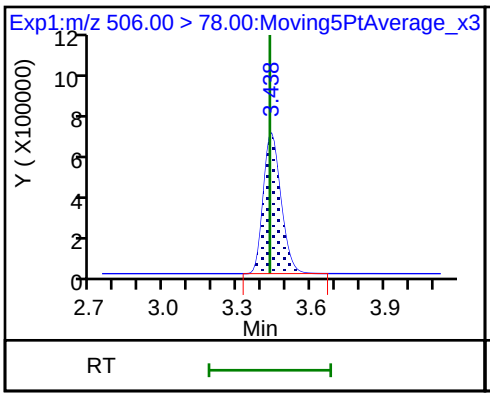
20 Perfluorononanoic acid (M)



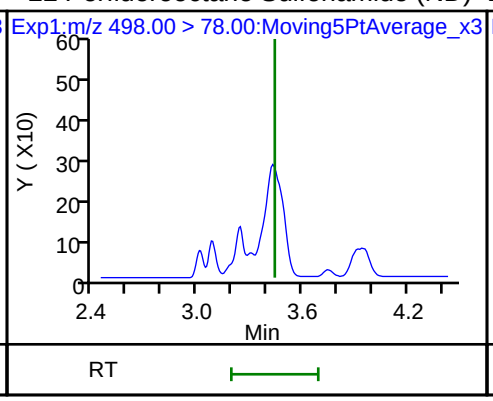
20 Perfluorononanoic acid (M)



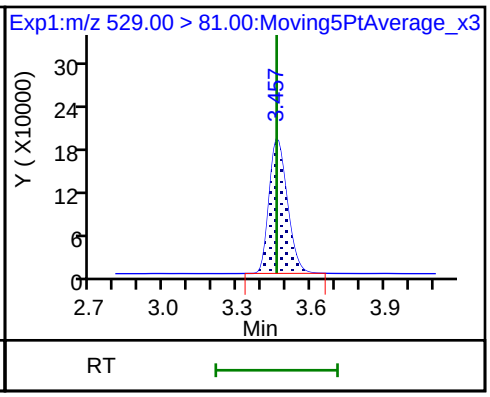
D 21 13C8 FOSA



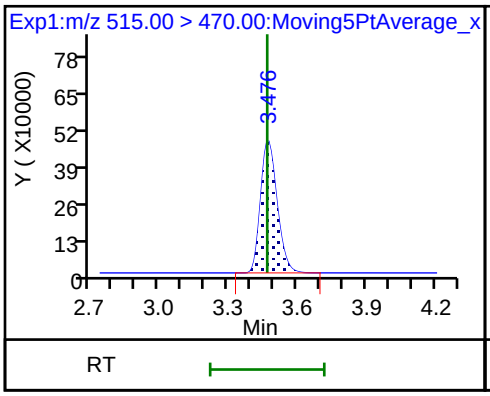
22 Perfluorooctane Sulfonamide (ND)



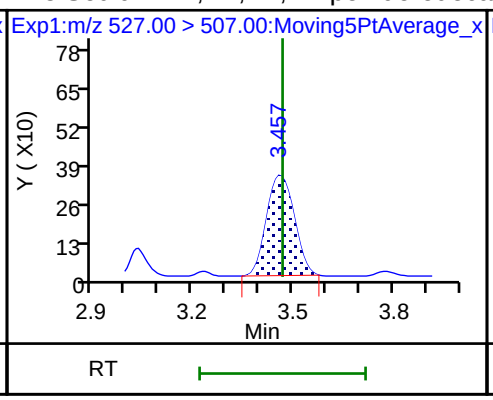
D 26 M2-8:2FTS



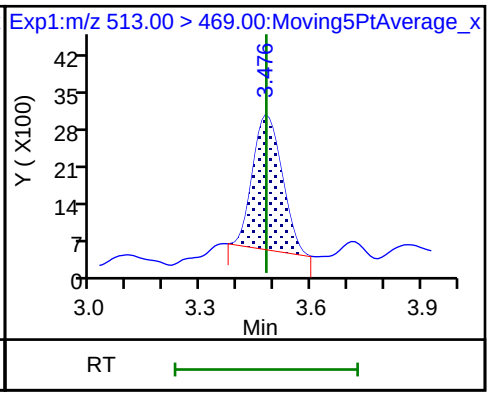
D 23 13C2 PFDA



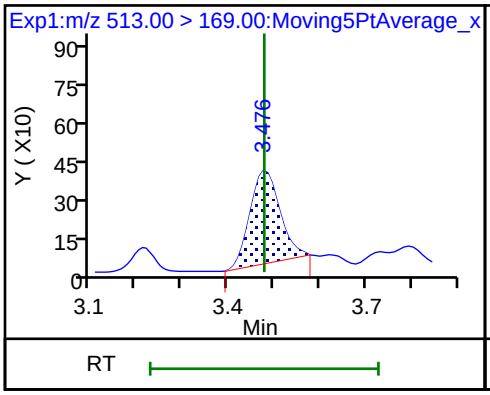
25 Sodium 1H,1H,2H,2H-perfluorodecan



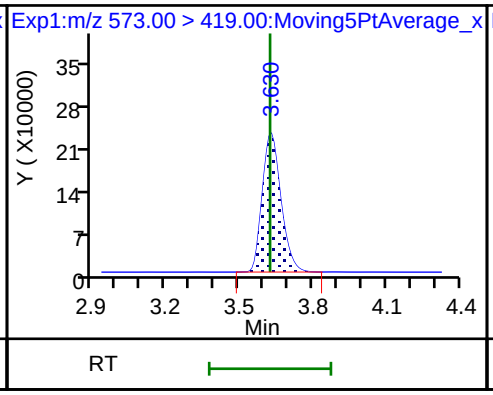
24 Perfluorodecanoic acid



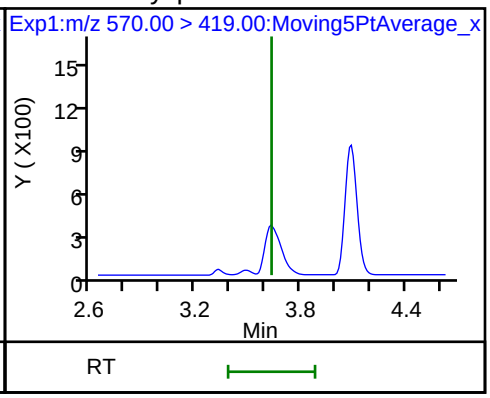
24 Perfluorodecanoic acid



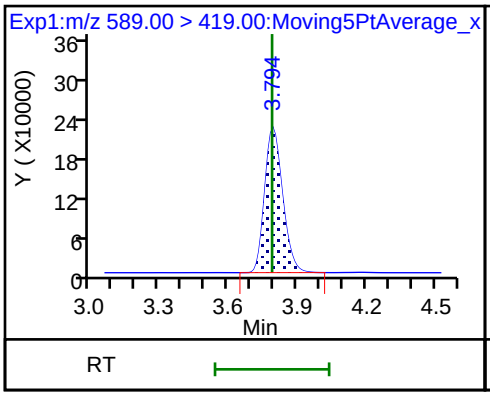
D 27 d3-NMeFOSAA



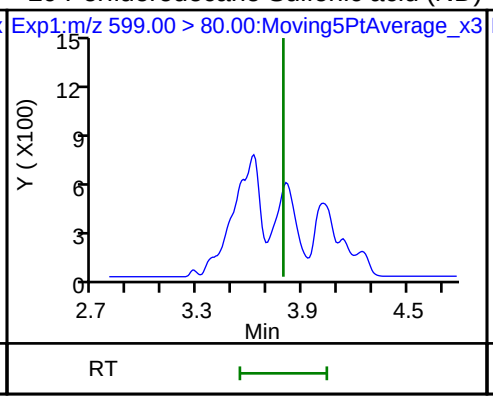
28 N-methyl perfluorooctane sulfonami (ND)



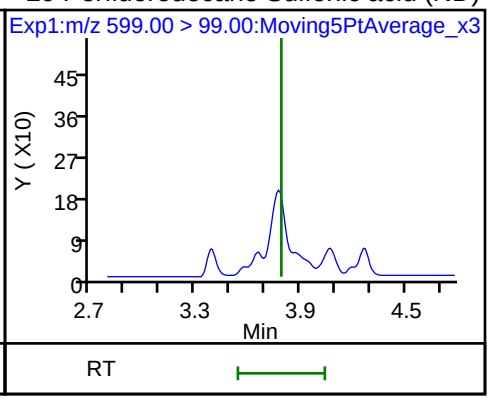
D 32 d5-NEtFOSAA



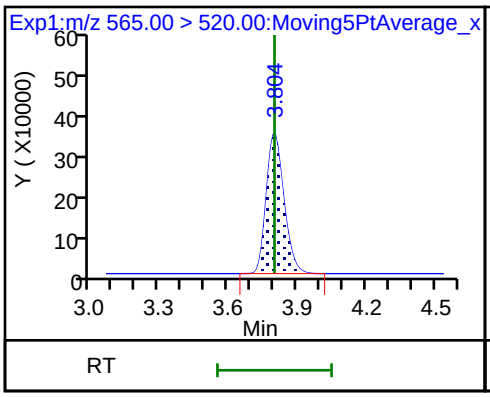
29 Perfluorodecane Sulfonic acid (ND)



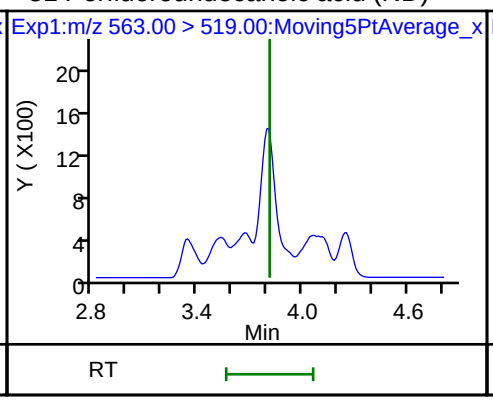
29 Perfluorodecane Sulfonic acid (ND)



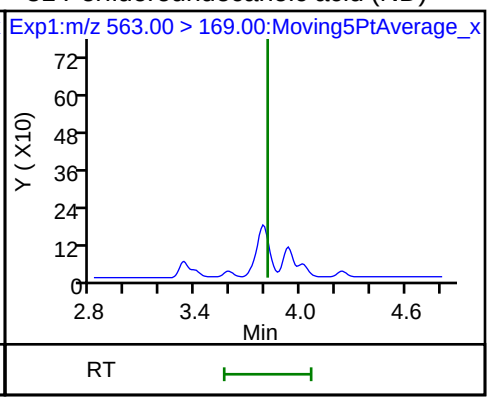
D 30 13C2 PFUnA



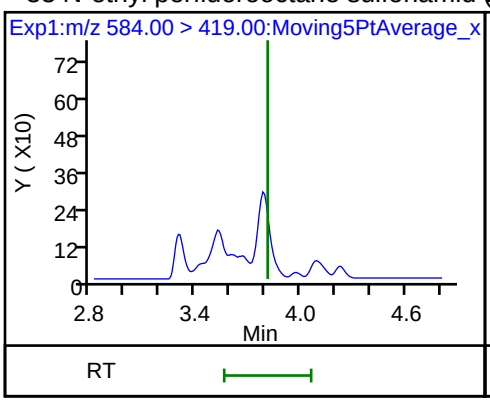
31 Perfluoroundecanoic acid (ND)



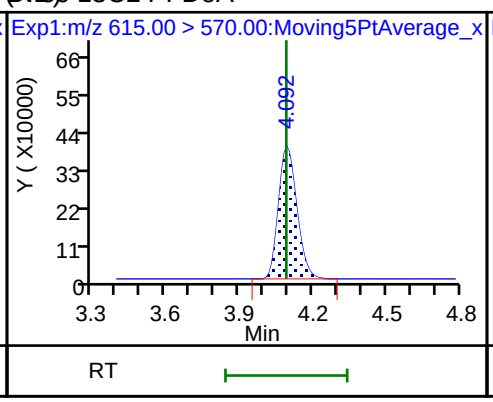
31 Perfluoroundecanoic acid (ND)



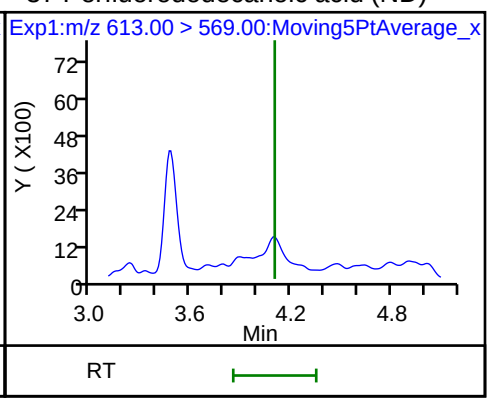
33 N-ethyl perfluorooctane sulfonamid (ND)



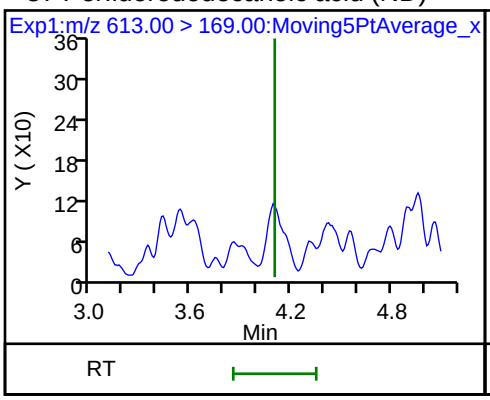
D 36 13C2 PFDoA



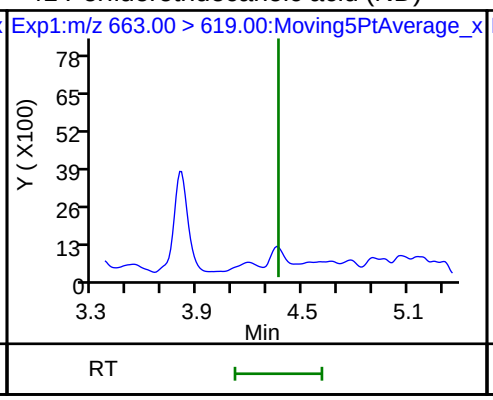
37 Perfluorododecanoic acid (ND)



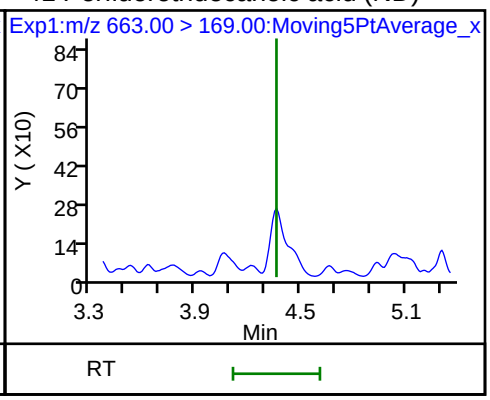
37 Perfluorododecanoic acid (ND)



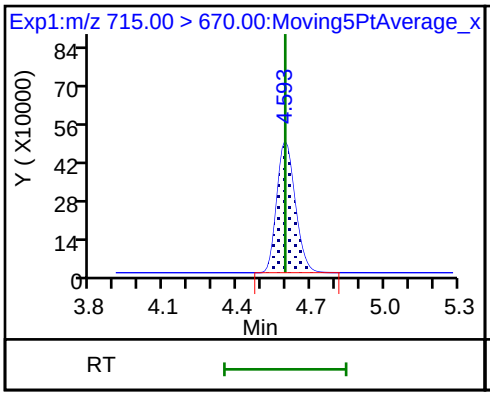
41 Perfluorotridecanoic acid (ND)



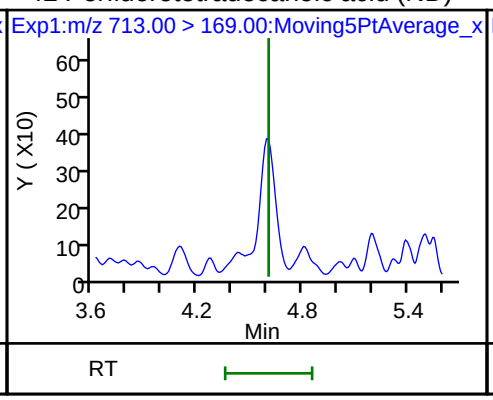
41 Perfluorotridecanoic acid (ND)



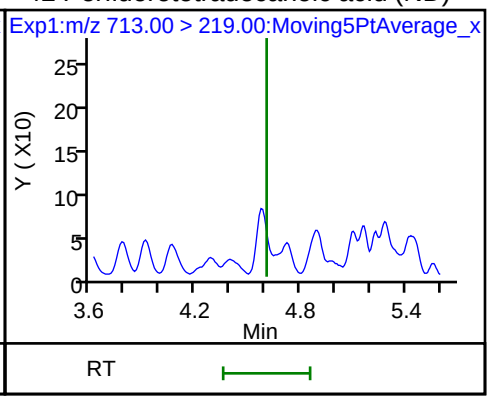
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

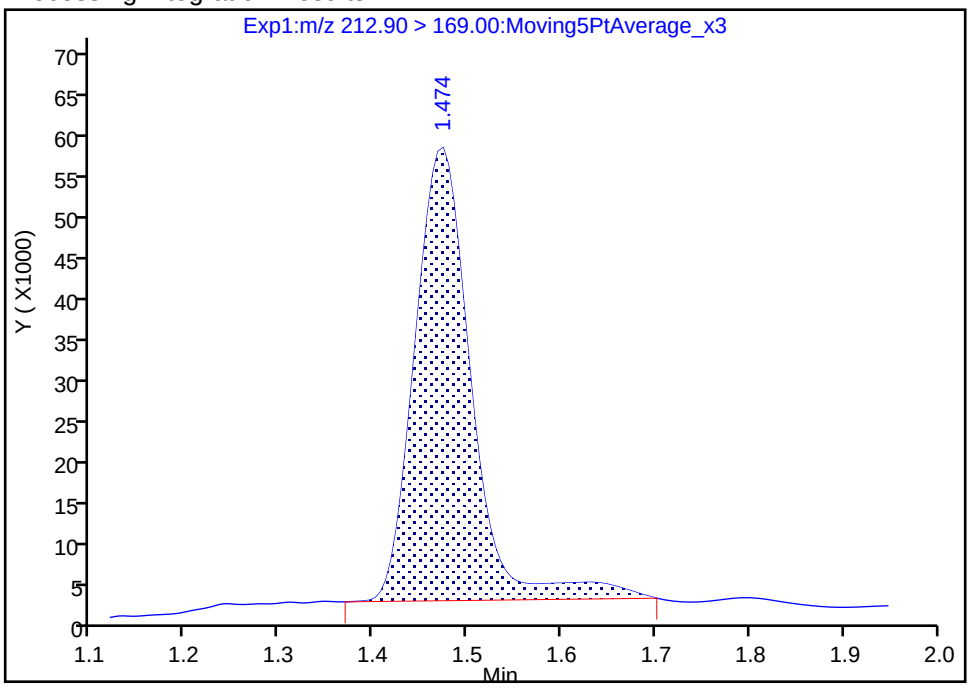
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_004.d				
Injection Date:	10-May-2018 20:07:18	Instrument ID:	A8_N		
Lims ID:	320-38611-A-2-A	Lab Sample ID:	320-38611-2		
Client ID:	GC-MW-107D(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	21	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

Processing Integration Results

RT: 1.47
Area: 231473
Amount: 0.143357
Amount Units: ng/ml



Manual Integration Results

RT: 1.47
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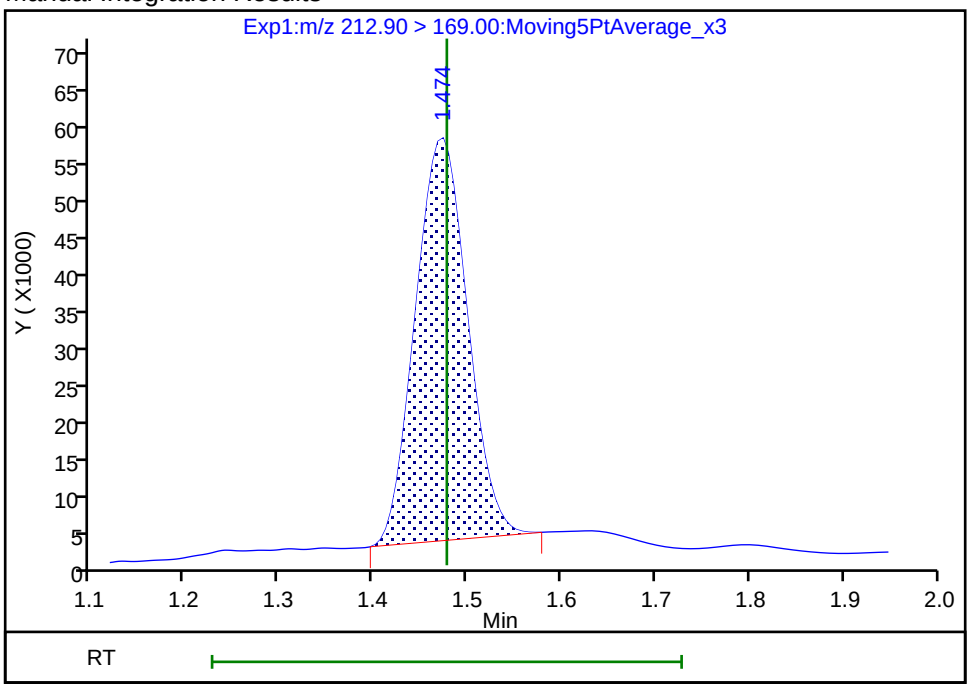
Amount: 0.129278
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:13:08

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

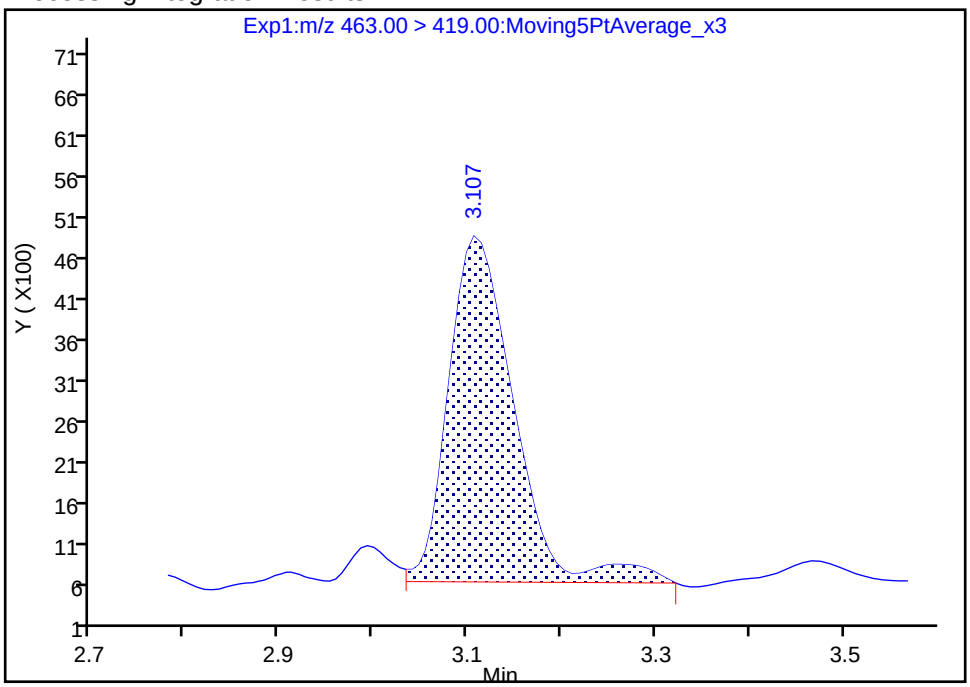
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_004.d				
Injection Date:	10-May-2018 20:07:18	Instrument ID:	A8_N		
Lims ID:	320-38611-A-2-A	Lab Sample ID:	320-38611-2		
Client ID:	GC-MW-107D(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	21	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

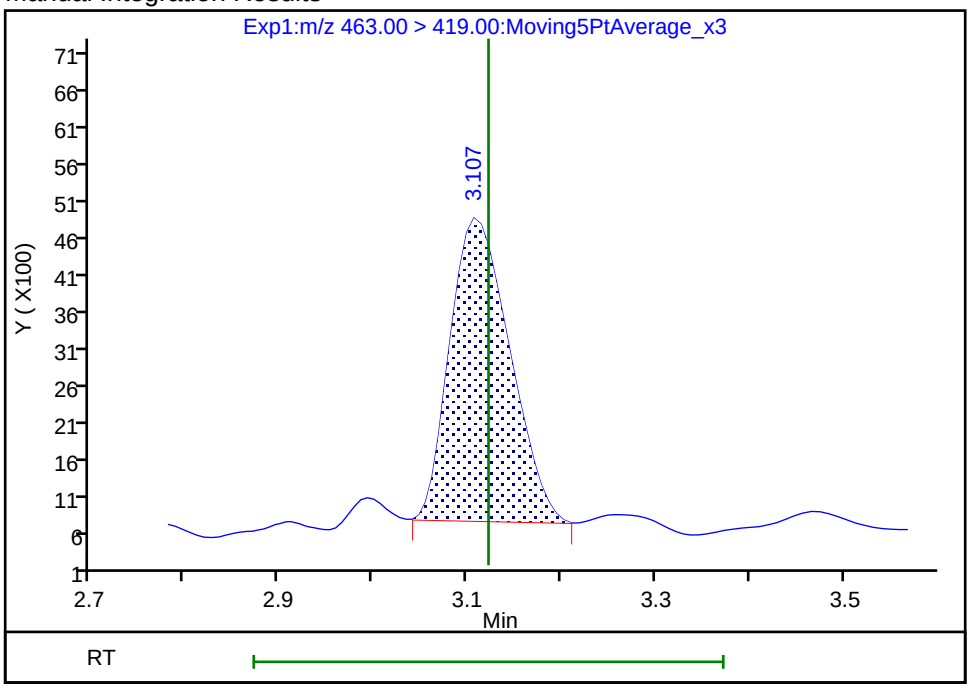
Processing Integration Results

RT: 3.11
Area: 20358
Amount: 0.016806
Amount Units: ng/ml



Manual Integration Results

RT: 3.11
Area: 18048
Amount: 0.014899
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:14:12

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

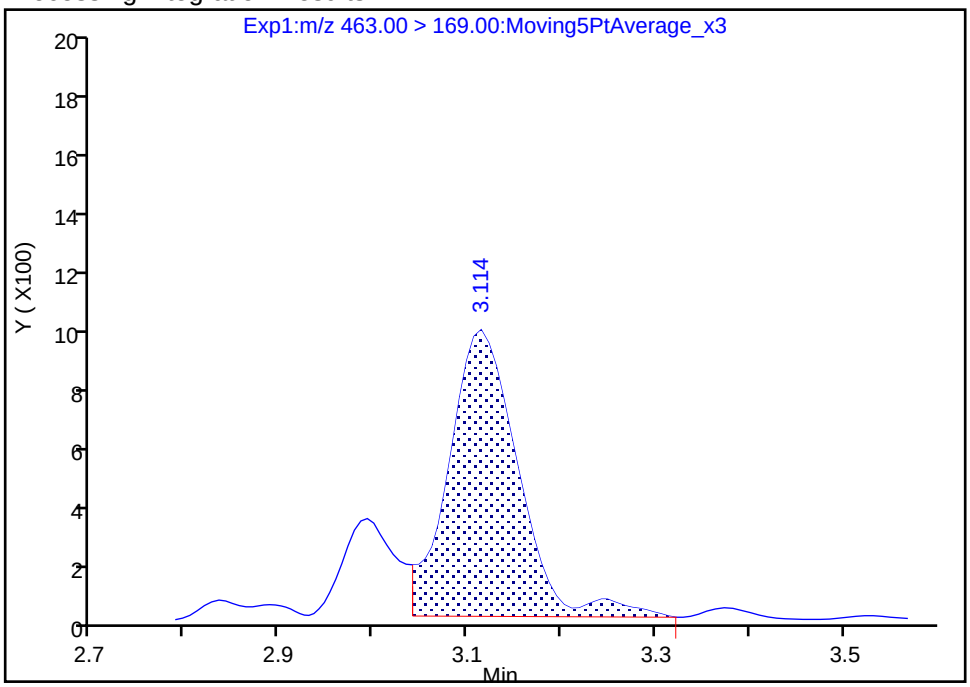
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_004.d				
Injection Date:	10-May-2018 20:07:18	Instrument ID:	A8_N		
Lims ID:	320-38611-A-2-A	Lab Sample ID:	320-38611-2		
Client ID:	GC-MW-107D(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	21	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

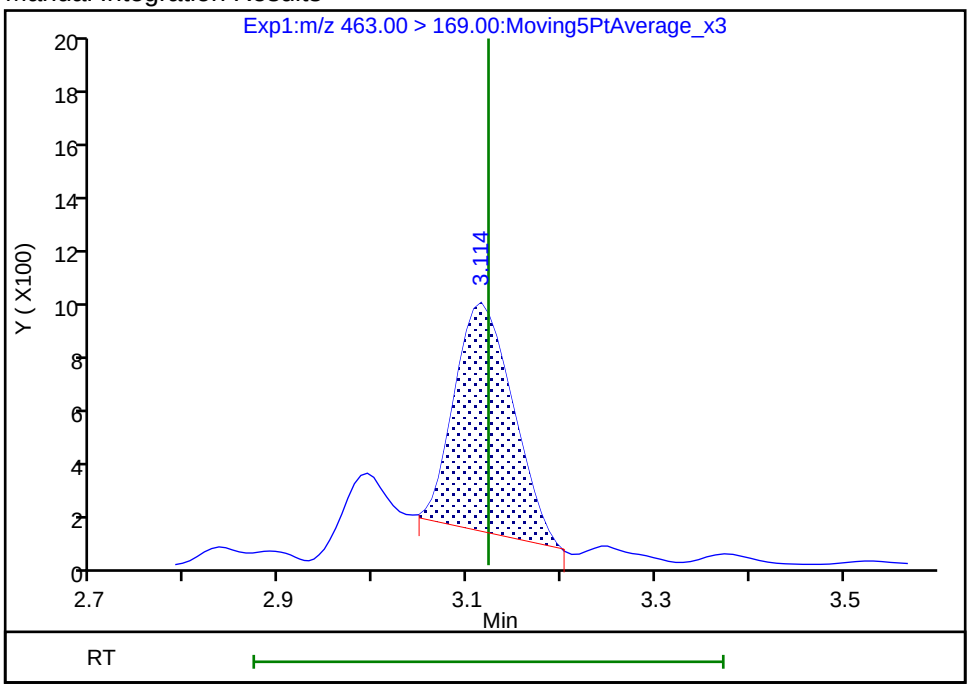
Processing Integration Results

RT: 3.11
Area: 4799
Amount: 0.016806
Amount Units: ng/ml



Manual Integration Results

RT: 3.11
Area: 3560
Amount: 0.014899
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:14:16

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

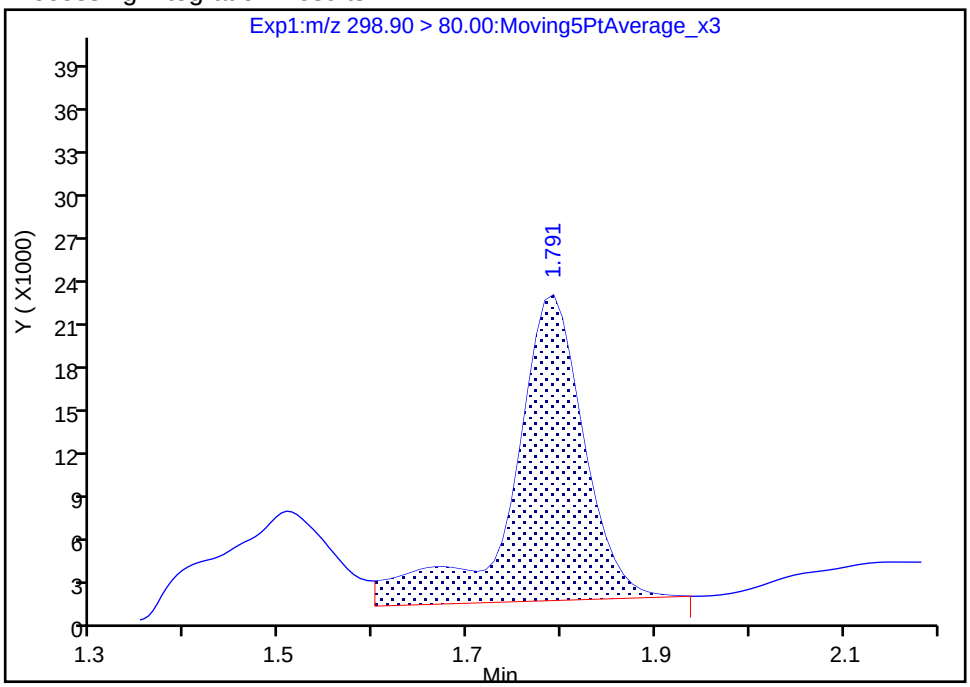
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_004.d				
Injection Date:	10-May-2018 20:07:18	Instrument ID:	A8_N		
Lims ID:	320-38611-A-2-A	Lab Sample ID:	320-38611-2		
Client ID:	GC-MW-107D(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	21	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

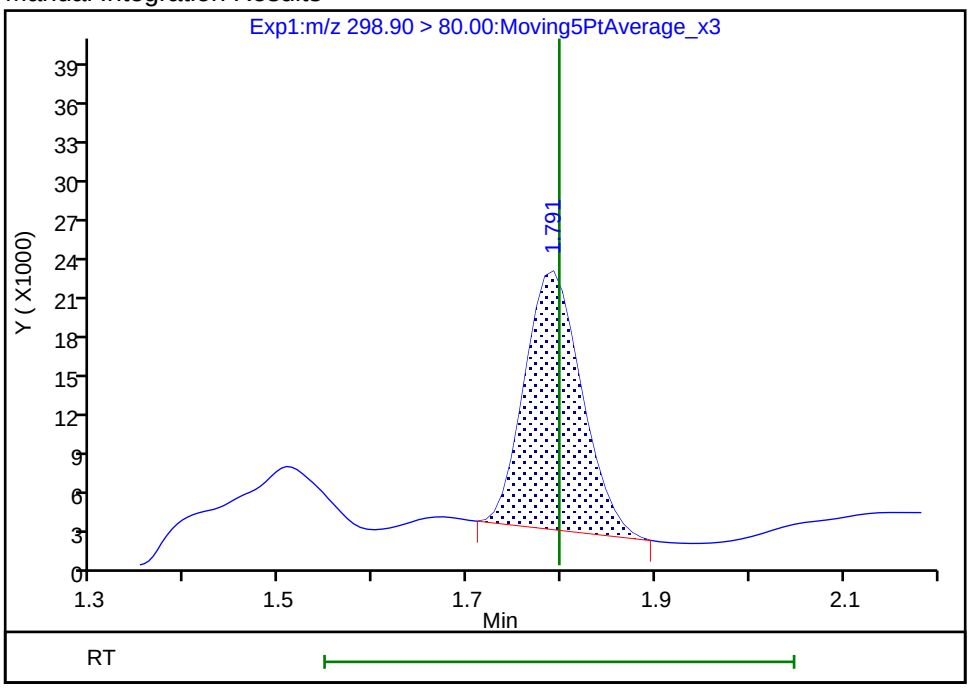
Processing Integration Results

RT: 1.79
Area: 113782
Amount: 0.047814
Amount Units: ng/ml



Manual Integration Results

RT: 1.79
Area: 84717
Amount: 0.035600
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:13:22

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

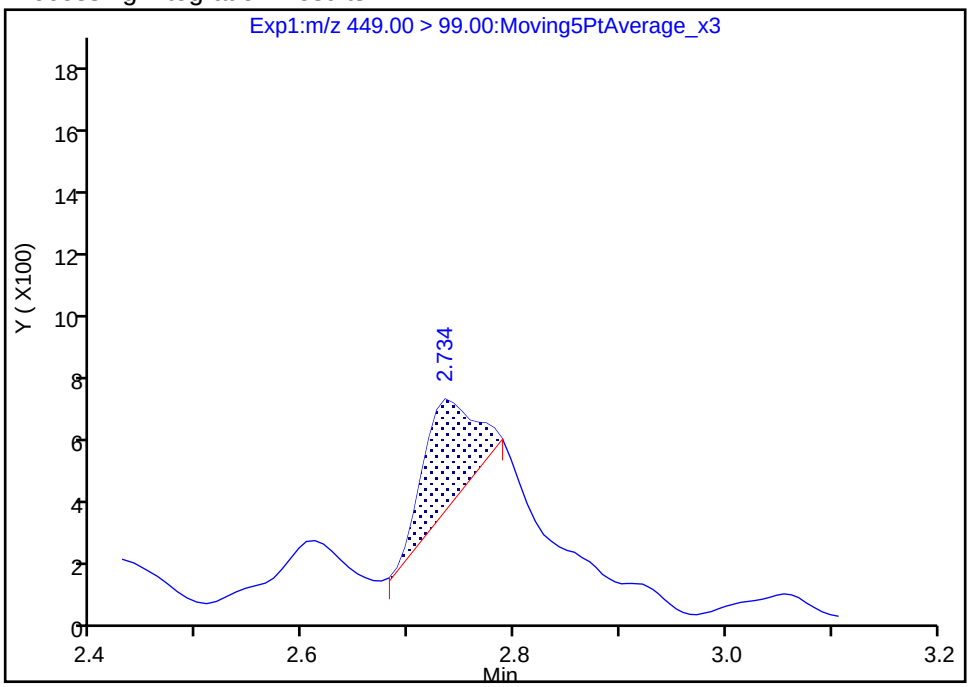
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_004.d				
Injection Date:	10-May-2018 20:07:18	Instrument ID:	A8_N		
Lims ID:	320-38611-A-2-A	Lab Sample ID:	320-38611-2		
Client ID:	GC-MW-107D(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	21	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

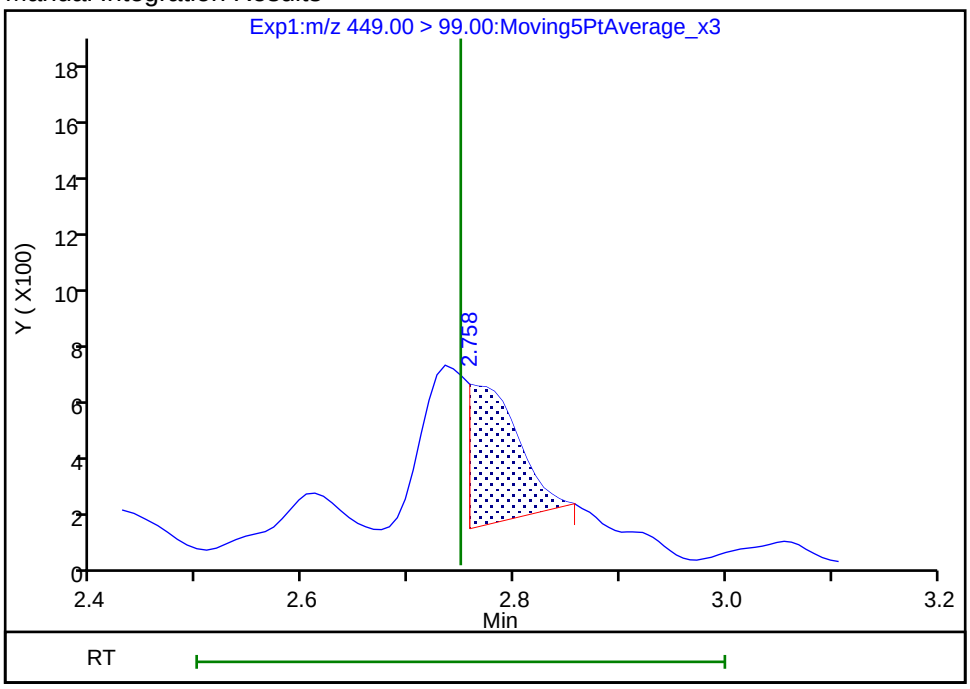
Processing Integration Results

RT: 2.73
Area: 1139
Amount: 0.010468
Amount Units: ng/ml



Manual Integration Results

RT: 2.76
Area: 1504
Amount: 0.010468
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:13:56

Audit Action: Manually Integrated Audit Reason: Wrong peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) RE | Lab Sample ID: 320-38611-2 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_022.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 268.5(mL) | Date Analyzed: 05/17/2018 01:46

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*14*	*H*	*1.9*	*0.79*
27619-97-2	*6:2FTS*	*ND*	*H*	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	107		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_022.d
Lims ID: 320-38611-B-2-B
Client ID: GC-MW-107D(WG)
Sample Type: Client
Inject. Date: 17-May-2018 01:46:05 ALS Bottle#: 13 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-2-b
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:54:54 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:54:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.450	1.447	0.003	1.000	6102537	2.09		83.6	43573	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.450	1.457	-0.007	1.000	312344	0.1376			115	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.717	1.712	0.005	0.563	4299861	2.30		91.9	45111	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.717	1.729	-0.012	1.000	406870	0.2004			113	
D 47 13C3-PFBS										
301.90 > 83.00	1.753	1.748	0.005	1.000	87568	2.07		89.0	308	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.753	1.765	-0.012	1.000	109573	0.0373			50.3	M
298.90 > 99.00	1.753	1.765	-0.012	1.000	49447		2.22(1.25-3.74)		96.8	
D 7 13C2 PFHxA										
315.00 > 270.00	2.000	1.994	0.006	1.000	4802132	2.41		96.2	78683	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.000	2.014	-0.014	1.000	426755	0.2161			286	M
313.00 > 119.00	2.000	2.014	-0.014	1.000	41926		10.18(5.03-15.10)		417	
D 9 13C4-PFHpA										
367.00 > 322.00	2.329	2.321	0.008	1.000	4609358	2.41		96.4	58354	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.329	2.332	-0.003	1.000	272075	0.1397			238	
363.00 > 169.00	2.329	2.332	-0.003	1.000	113402		2.40(1.13-3.40)		624	
D 11 18O2 PFHxS										
403.00 > 84.00	2.342	2.334	0.008	1.000	5143043	2.18		92.0	94885	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.342	2.345	-0.003	1.000	338801	0.1383			326	
399.00 > 99.00	2.342	2.345	-0.003	1.000	112174		3.02(1.50-4.49)		314	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.658	2.645	0.013	1.000	1074000	2.54		107	8885	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.658	2.667	-0.009	1.000	14030	0.007440			152	
D 14 13C4 PFOA										
417.00 > 372.00	2.681	2.668	0.013	1.000	4489778	2.48		99.3	69461	
* 62 13C2-PFOA										
415.00 > 370.00	2.681	2.689	-0.008		4775868	2.50			68986	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.681	2.689	-0.008	1.000	797873	0.3775			313	
413.00 > 169.00	2.681	2.689	-0.008	1.000	469648		1.70(0.84-2.52)		1343	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.703	2.697	0.006	1.000	21026	0.0104			70.5	
449.00 > 99.00	2.688	2.697	-0.009	0.994	3751		5.61(1.94-5.82)		27.1	M
D 18 13C4 PFOS										
503.00 > 80.00	3.047	3.029	0.018	1.000	3630228	2.23		93.5	21082	
D 19 13C5 PFNA										
468.00 > 423.00	3.047	3.036	0.011	1.000	3886332	2.63		105	57399	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.930	3.051	-0.121	0.962	235967	0.1321			607	
499.00 > 99.00	3.047	3.051	-0.004	1.000	36766		6.42(2.31-6.93)		334	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.047	3.051	-0.004	1.000	20246	0.0123			31.8	M
463.00 > 169.00	3.040	3.051	-0.011	0.998	4628		4.37(1.90-5.69)		86.1	M
D 26 M2-8:2FTS										
529.00 > 81.00	3.399	3.376	0.023	1.000	1205453	2.51		105	14673	
D 21 13C8 FOSA										
506.00 > 78.00	3.389	3.376	0.013	1.000	4284174	2.02		80.6	35764	
D 23 13C2 PFDA										
515.00 > 470.00	3.408	3.385	0.023	1.000	3165445	2.52		101	77531	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.408	3.407	0.001	1.000	13171	0.0107			53.5	
513.00 > 169.00	3.408	3.407	0.001	1.000	3763		3.50(2.36-7.09)		64.2	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.557	3.544	0.013	1.000	1802743	2.60		104	22789	
D 30 13C2 PFUnA										
565.00 > 520.00	3.730	3.716	0.014	1.000	2388454	2.40		95.9	48831	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.730	3.716	0.014	1.000	1607501	2.26		90.3	19303	
D 36 13C2 PFDoA										
615.00 > 570.00	4.030	4.006	0.024	1.000	2427958	2.26		90.6	17986	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.531	4.511	0.020	1.000	3170594	2.41		96.3	18593	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 13:54:54 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_022.d

Injection Date: 17-May-2018 01:46:05 Instrument ID: A8_N

Lims ID: 320-38611-B-2-B Lab Sample ID: 320-38611-2

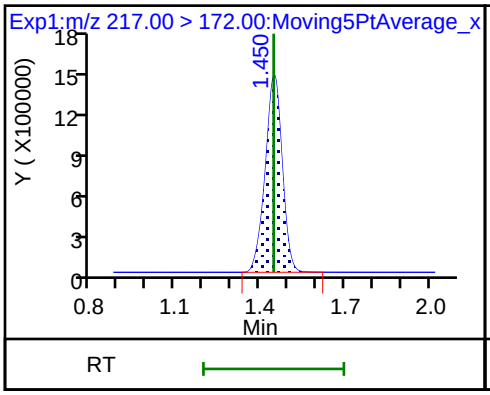
Client ID: GC-MW-107D(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 14

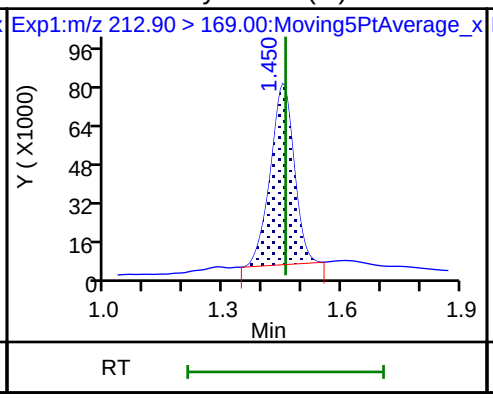
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

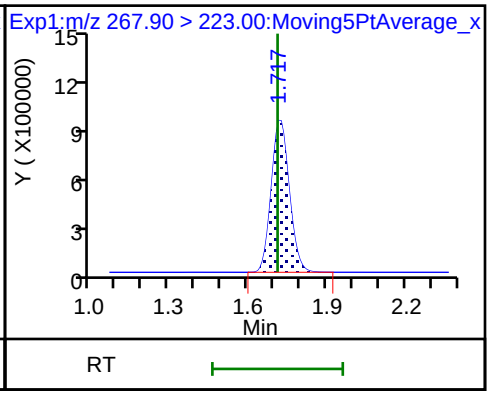
D 1 13C4 PFBA



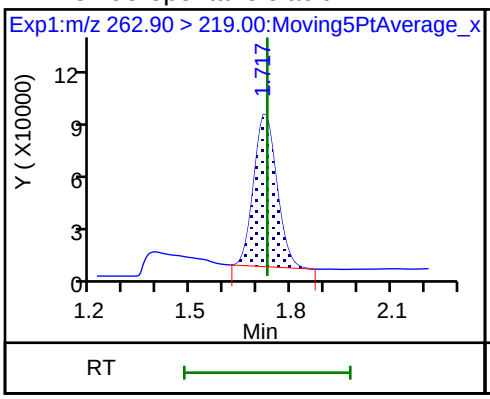
2 Perfluorobutyric acid (M)



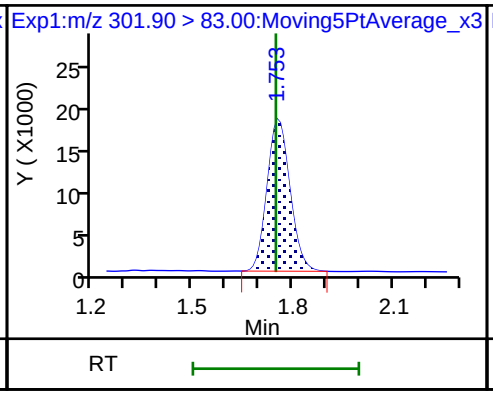
D 3 13C5-PFPeA



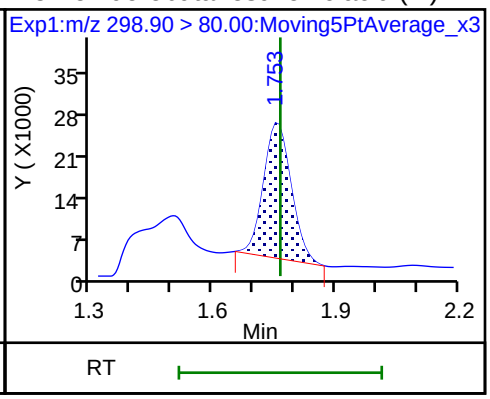
4 Perfluoropentanoic acid



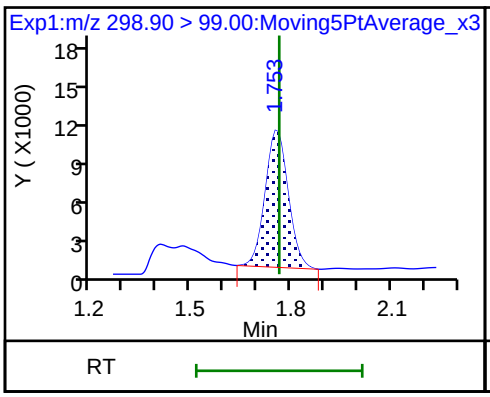
D 47 13C3-PFBS



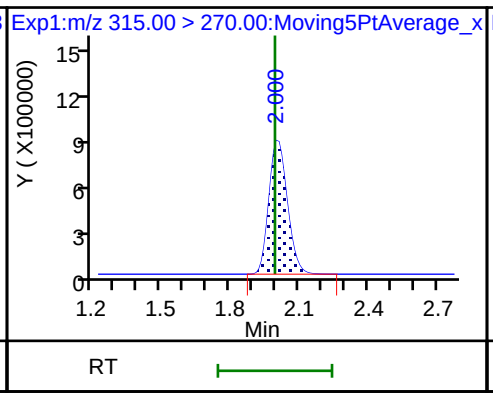
5 Perfluorobutanesulfonic acid (M)



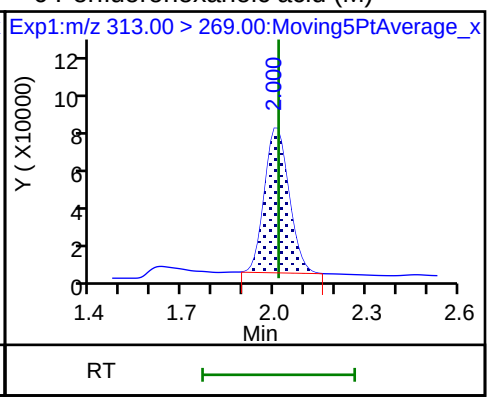
5 Perfluorobutanesulfonic acid



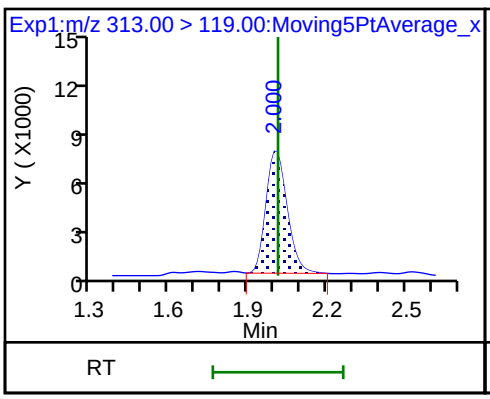
D 7 13C2 PFHxA



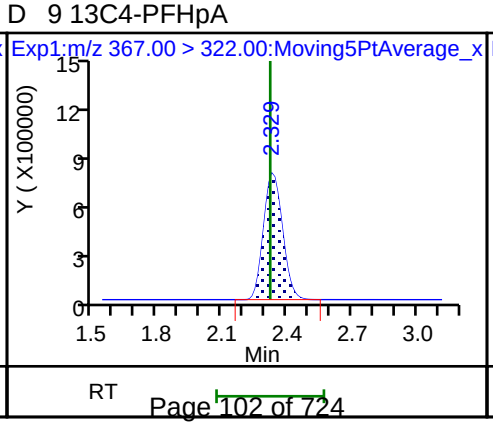
6 Perfluorohexanoic acid (M)



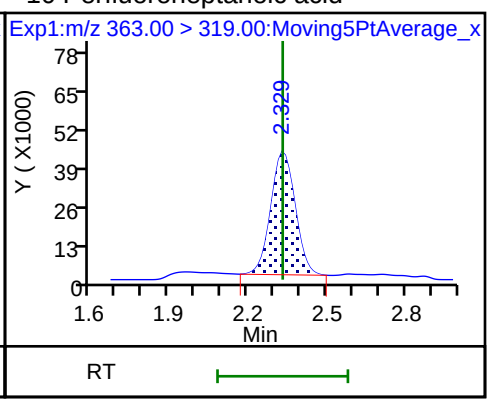
6 Perfluorohexanoic acid



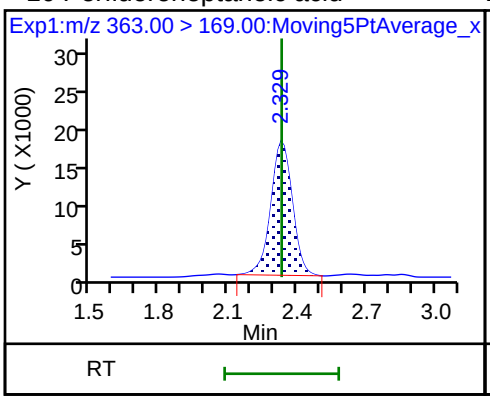
D 9 13C4-PFHpA



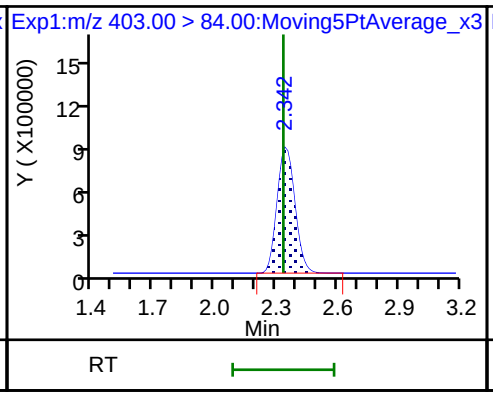
10 Perfluoroheptanoic acid



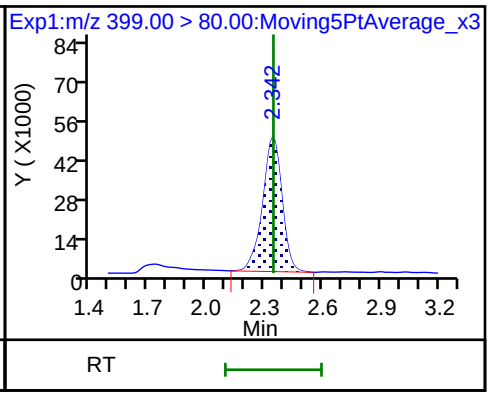
10 Perfluoroheptanoic acid



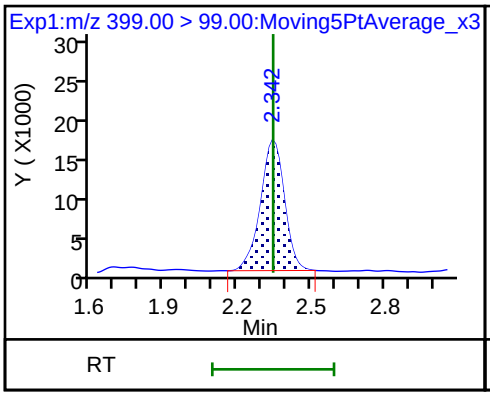
D 11 18O2 PFHxS



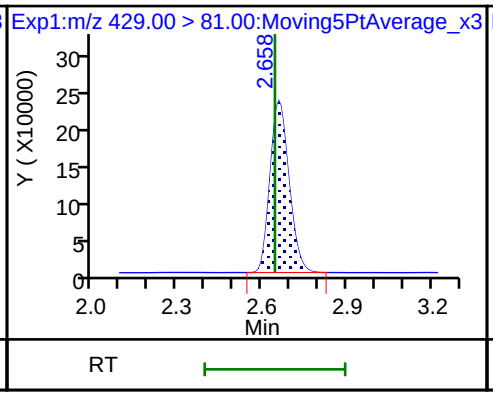
8 Perfluorohexanesulfonic acid



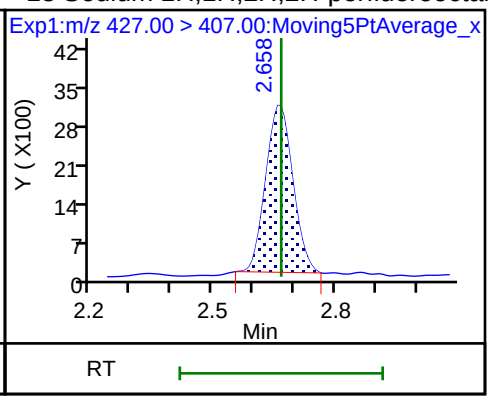
8 Perfluorohexanesulfonic acid



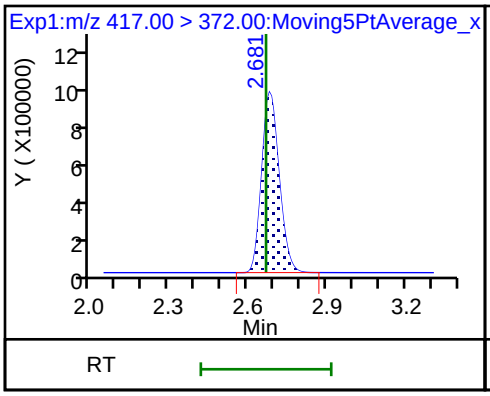
D 12 M2-6:2FTS



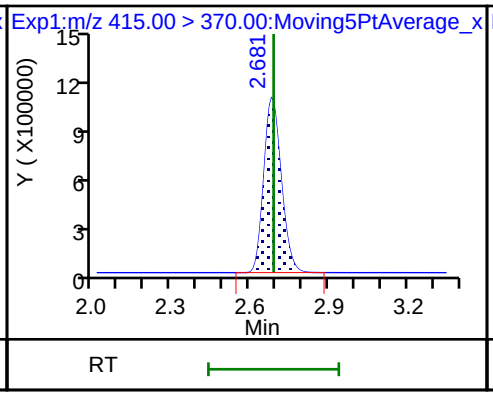
13 Sodium 1H,1H,2H,2H-perfluorooctane



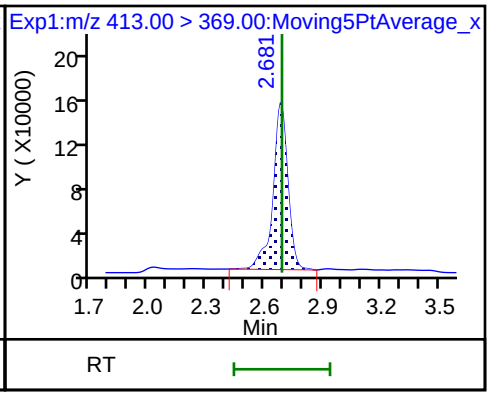
D 14 13C4 PFOA



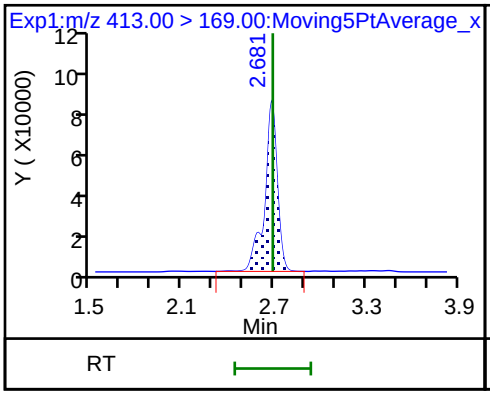
* 62 13C2-PFOA



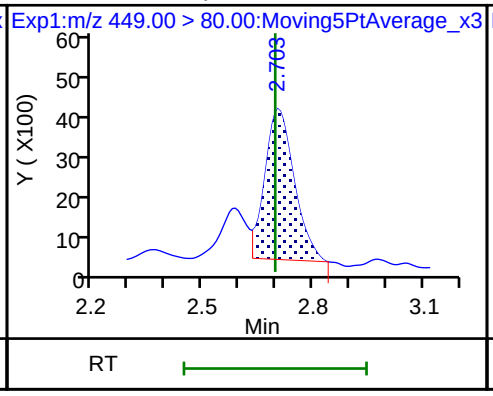
15 Perfluorooctanoic acid



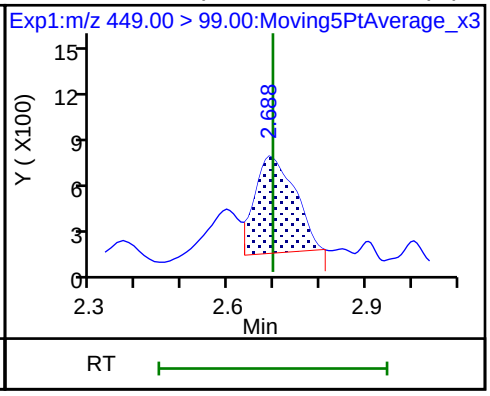
15 Perfluorooctanoic acid



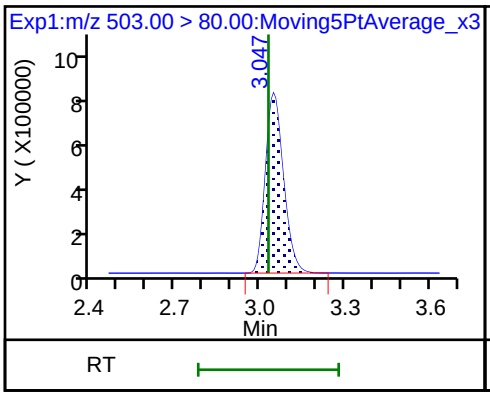
16 Perfluoroheptanesulfonic acid



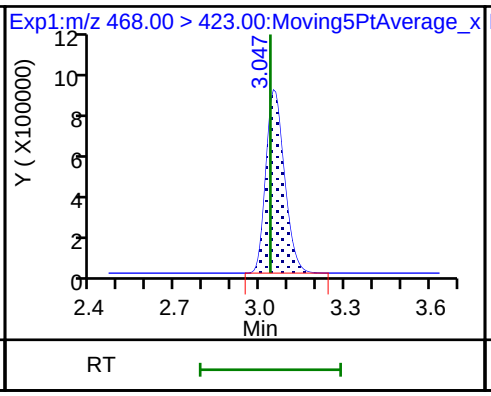
16 Perfluoroheptanesulfonic acid (M)



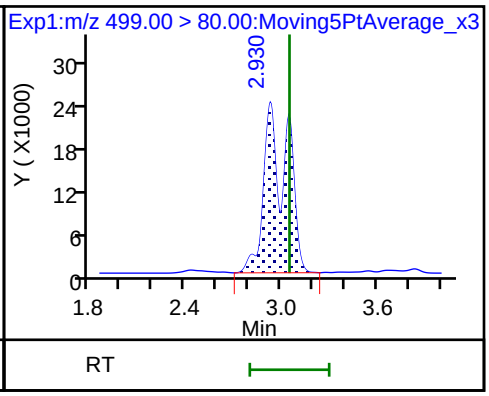
D 18 13C4 PFOS



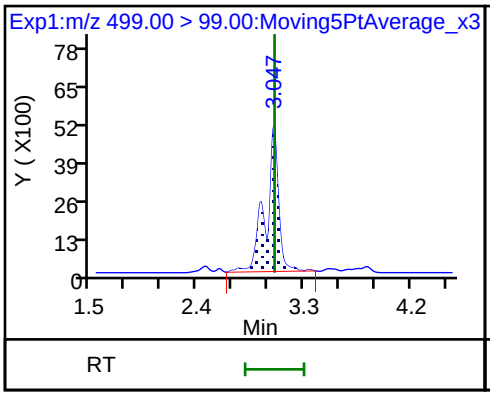
D 19 13C5 PFNA



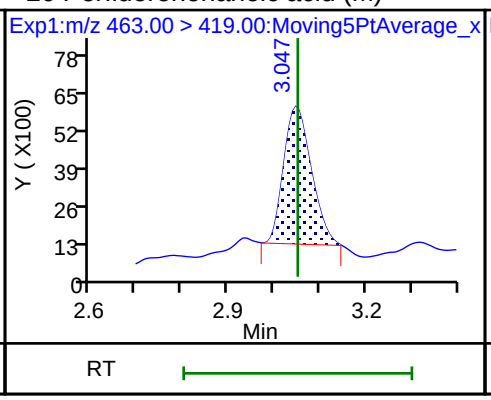
17 Perfluorooctane sulfonic acid



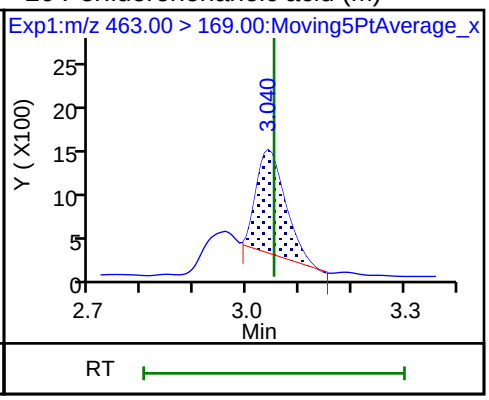
17 Perfluorooctane sulfonic acid



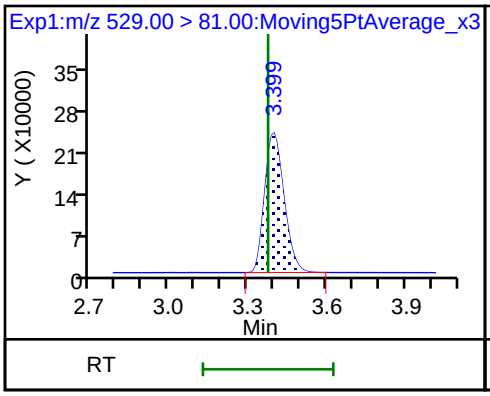
20 Perfluorononanoic acid (M)



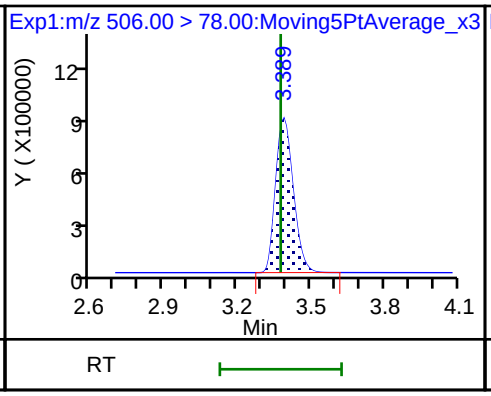
20 Perfluorononanoic acid (M)



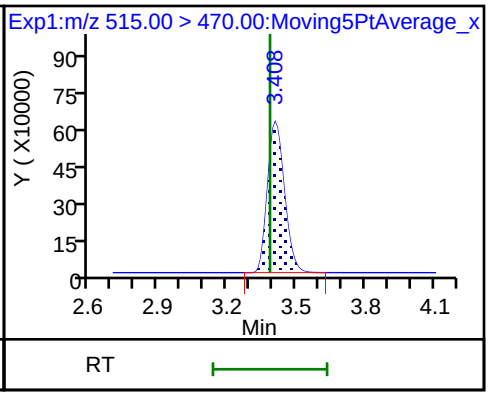
D 26 M2-8:2FTS



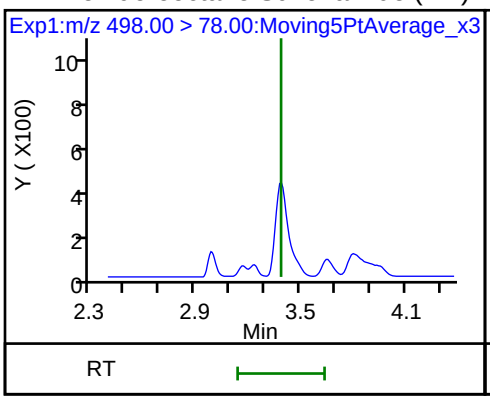
D 21 13C8 FOSA



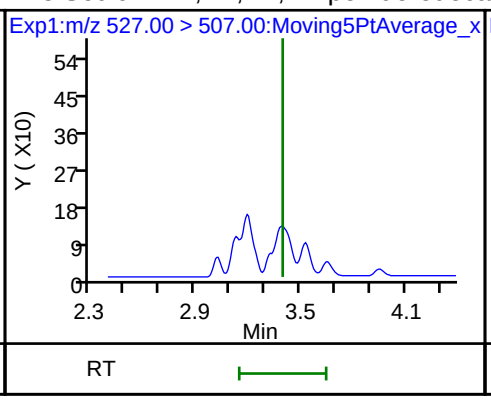
D 23 13C2 PFDA



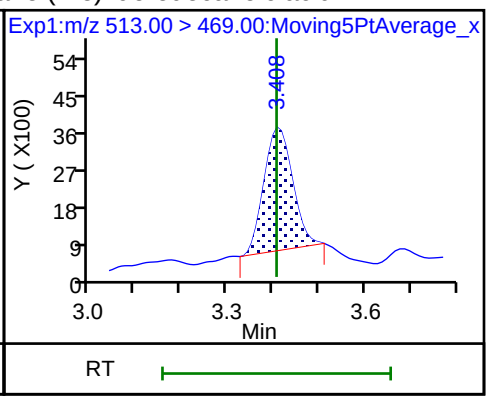
22 Perfluorooctane Sulfonamide (ND)



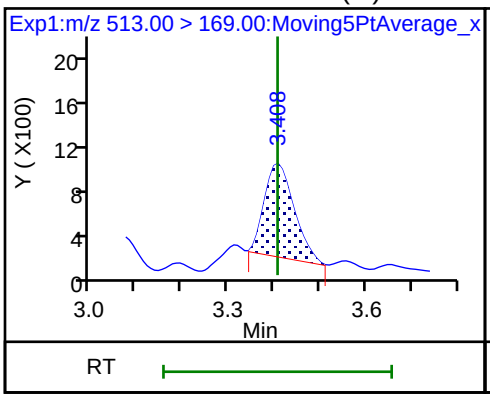
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



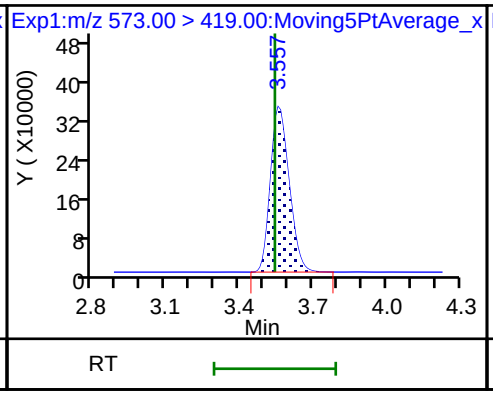
24 Perfluorodecanoic acid



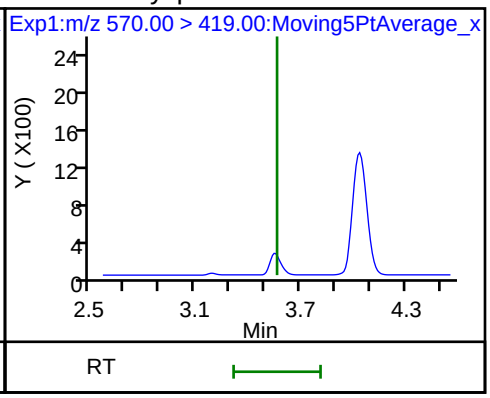
24 Perfluorodecanoic acid (M)



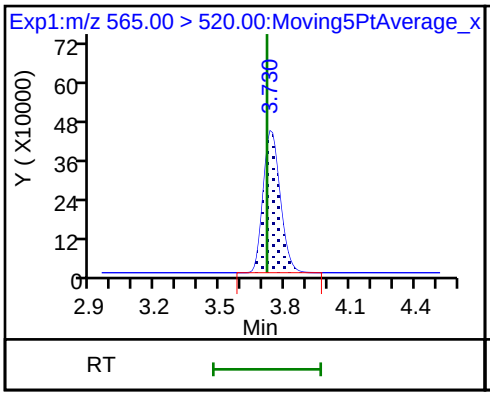
D 27 d3-NMeFOSAA



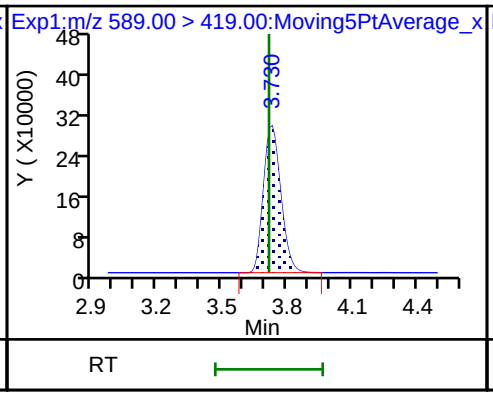
28 N-methyl perfluorooctane sulfonami (ND)



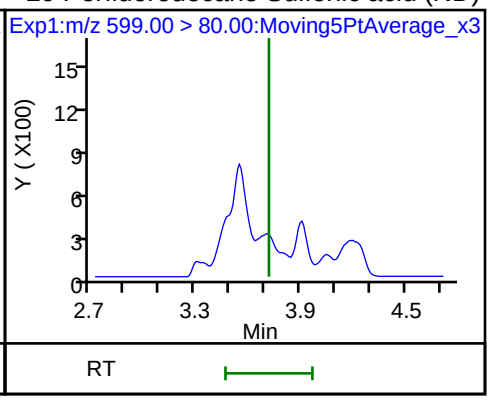
D 30 13C2 PFUnA



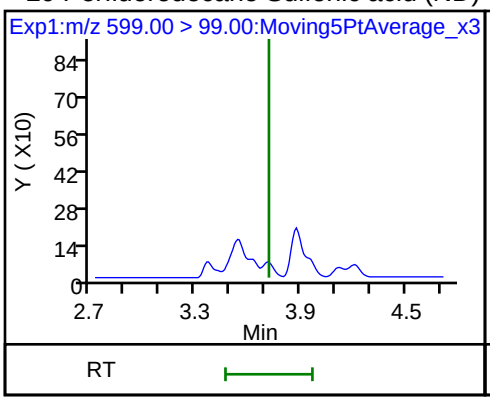
D 32 d5-NEtFOSAA



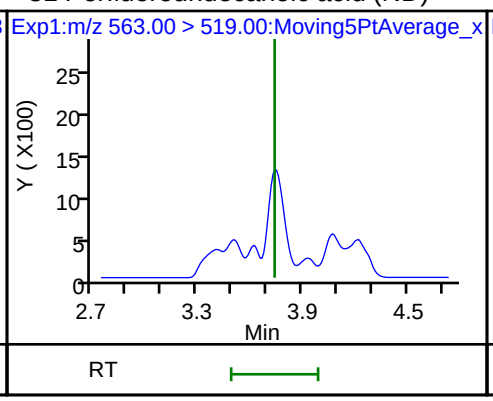
29 Perfluorodecane Sulfonic acid (ND)



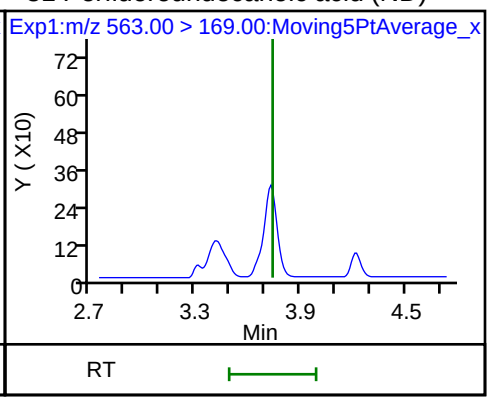
29 Perfluorodecane Sulfonic acid (ND)



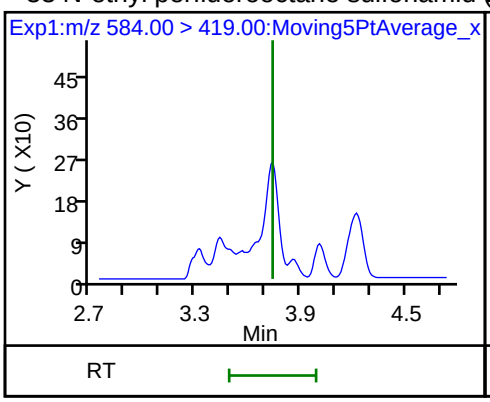
31 Perfluoroundecanoic acid (ND)



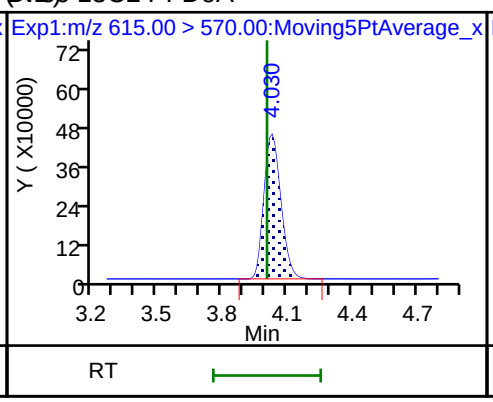
31 Perfluoroundecanoic acid (ND)



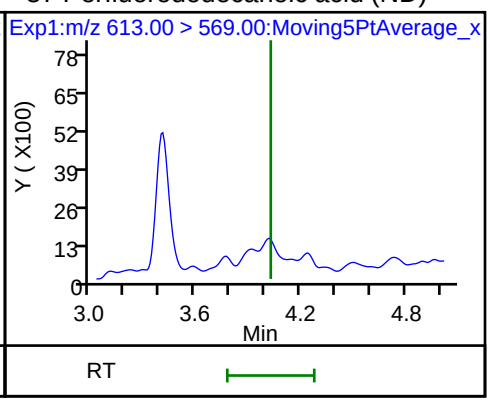
33 N-ethyl perfluorooctane sulfonamid (ND)



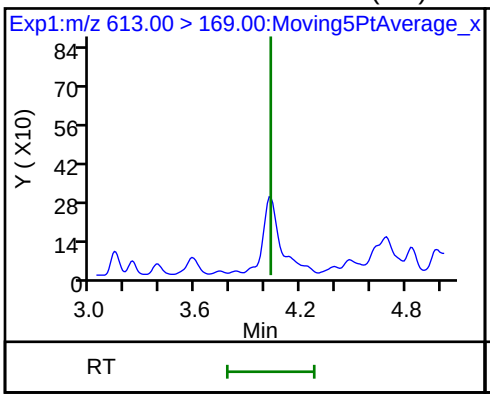
D 36 13C2 PFDoA



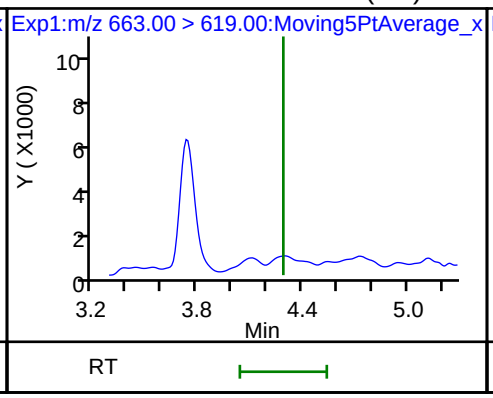
37 Perfluorododecanoic acid (ND)



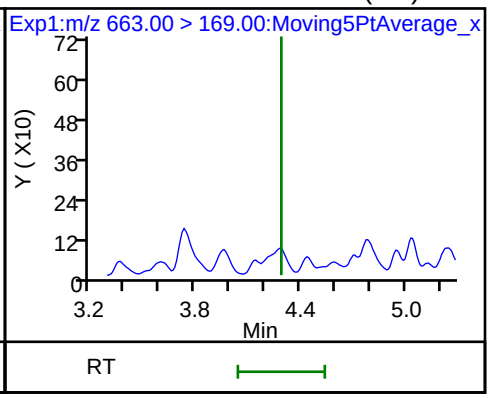
37 Perfluorododecanoic acid (ND)



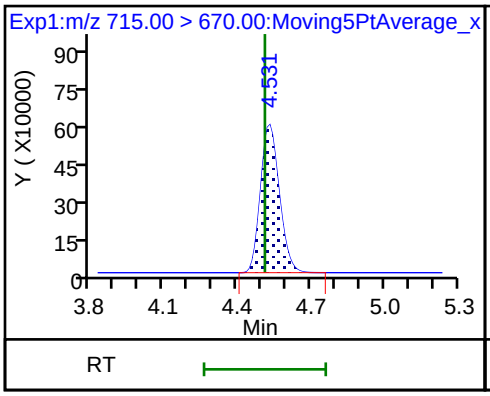
41 Perfluorotridecanoic acid (ND)



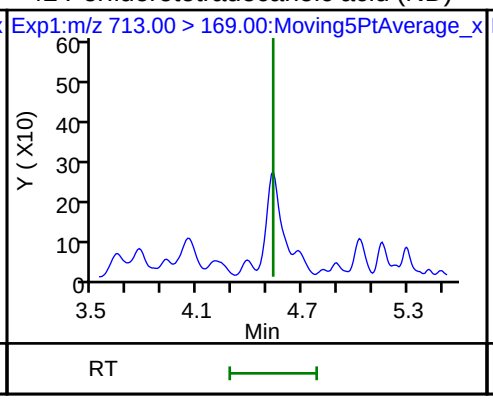
41 Perfluorotridecanoic acid (ND)



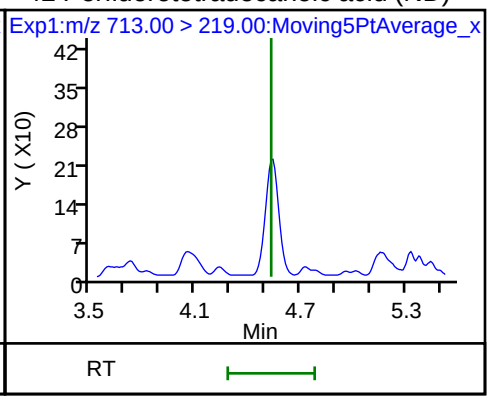
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 320-38611-3

Matrix: Water | Lab File ID: 2018.05.10LLB_005.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:50

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 290.8(mL) | Date Analyzed: 05/10/2018 20:15

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.6	B	1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	17		1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	16		1.7	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	9.7		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	32	B	1.7	0.73
375-95-1	Perfluorononanoic acid (PFNA)	2.7		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	1.9		1.7	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.95
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.5		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.0	B	1.7	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.35	J	1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	15		1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.28
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.30
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2FTS	27	B *	17	1.7
39108-34-4	8:2FTS	ND		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 320-38611-3

Matrix: Water | Lab File ID: 2018.05.10LLB_005.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:50

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 290.8(mL) | Date Analyzed: 05/10/2018 20:15

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	65		25-150
STL01893	13C5 PFPeA	95		25-150
STL00993	13C2 PFHxA	96		25-150
STL01892	13C4-PFHpA	101		25-150
STL00990	13C4 PFOA	103		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	96		25-150
STL00997	13C2 PFUnA	89		25-150
STL00998	13C2 PFDoA	79		25-150
STL02116	13C2-PFTeDA	76		25-150
STL02337	13C3-PFBS	94		25-150
STL00994	18O2 PFHxS	97		25-150
STL00991	13C4 PFOS	95		25-150
STL01056	13C8 FOSA	87		25-150
STL02118	d3-NMeFOSAA	102		25-150
STL02117	d5-NEtFOSAA	101		25-150
STL02279	M2-6:2FTS	258	*	25-150
STL02280	M2-8:2FTS	130		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_005.d
Lims ID: 320-38611-A-3-A
Client ID: GC-MW-108(WG)
Sample Type: Client
Inject. Date: 10-May-2018 20:15:06 ALS Bottle#: 22 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-3-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:15:17

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.468	1.469	-0.001	1.000	3551197	1.64		65.4	27890	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.468	1.478	-0.010	1.000	291314	0.2209			95.2	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.756	1.747	0.009	0.564	3327374	2.38		95.1	34088	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.756	1.753	0.003	1.000	768385	0.4844			104	M
D 47 13C3-PFBS										
301.90 > 83.00	1.792	1.783	0.009	1.000	69992	2.18		93.7	218	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.792	1.798	-0.006	1.000	377186	0.1600			58.1	
298.90 > 99.00	1.792	1.798	-0.006	1.000	155989		2.42(1.25-3.74)		256	
D 7 13C2 PFHxA										
315.00 > 270.00	2.048	2.048	0.0	1.000	3730843	2.41		96.4	77919	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.048	2.056	-0.008	1.000	695240	0.4585			330	
313.00 > 119.00	2.048	2.056	-0.008	1.000	60473		11.50(5.03-15.10)		473	
D 9 13C4-PFHpA										
367.00 > 322.00	2.384	2.384	0.0	1.000	3788528	2.52		101	83140	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.384	2.392	-0.008	1.000	427754	0.2820			328	
363.00 > 169.00	2.384	2.392	-0.008	1.000	153693		2.78(1.13-3.40)		890	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.395	0.0	1.000	4284341	2.30		97.4	70432	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.406	2.403	0.003	1.005	119258	0.0582			99.0	
399.00 > 99.00	2.395	2.403	-0.008	1.000	37025		3.22(1.50-4.49)		82.8	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.719	2.712	0.007	1.000	1976665	6.12		258	9618	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.719	2.718	0.001	1.000	1087535	0.7730			20811	
* 62 13C2-PFOA										
415.00 > 370.00	2.742	2.741	0.001		4034971	2.50			69957	
D 14 13C4 PFOA										
417.00 > 372.00	2.742	2.742	0.0	1.000	3870824	2.59		103	86884	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.742	2.749	-0.007	1.000	1644370	0.9192			962	
413.00 > 169.00	2.742	2.749	-0.007	1.000	901920		1.82(0.84-2.52)		4275	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.750	2.749	0.001	1.000	16510	0.0101			34.9	
449.00 > 99.00	2.750	2.749	0.001	1.000	4556		3.62(1.94-5.82)		50.5	
D 18 13C4 PFOS										
503.00 > 80.00	3.115	3.106	0.009	1.000	2952782	2.27		94.9	12574	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.115	3.114	0.001	1.000	573449	0.4267			1056	
499.00 > 99.00	3.115	3.114	0.001	1.000	105572		5.43(2.31-6.93)		780	
D 19 13C5 PFNA										
468.00 > 423.00	3.115	3.114	0.001	1.000	3120910	2.43		97.0	62055	
20 Perfluorononanoic acid										
463.00 > 419.00	3.123	3.122	0.001	1.003	103906	0.0798			223	
463.00 > 169.00	3.115	3.122	-0.007	1.000	25414		4.09(1.90-5.69)		363	
D 21 13C8 FOSA										
506.00 > 78.00	3.441	3.431	0.010	1.000	3539850	2.18		87.1	47716	
D 26 M2-8:2FTS										
529.00 > 81.00	3.469	3.459	0.010	1.000	1209697	3.11		130	7297	
D 23 13C2 PFDA										
515.00 > 470.00	3.478	3.468	0.010	1.000	2598856	2.40		96.1	74574	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.469	3.469	0.0	1.000	2252	0.003524			87.8	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.478	3.478	0.0	1.000	60239	0.0562			207	
513.00 > 169.00	3.478	3.478	0.0	1.000	13956		4.32(2.36-7.09)		282	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.634	3.624	0.010	1.000	1567057	2.56		102	24674	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.800	3.790	0.010	1.000	1533582	2.53		101	20362	
D 30 13C2 PFUnA										
565.00 > 520.00	3.800	3.800	0.0	1.000	2078600	2.23		89.1	56378	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.789	3.811	-0.022	0.997	8851	0.0126			32.1	
563.00 > 169.00	3.800	3.811	-0.011	1.000	3319		2.67(2.12-6.36)		59.3	
D 36 13C2 PFDoA										
615.00 > 570.00	4.099	4.091	0.008	1.000	1984797	1.97		78.8	18072	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.592	4.595	-0.003	1.000	2420730	1.89		75.8	20477	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:42 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_005.d

Injection Date: 10-May-2018 20:15:06 Instrument ID: A8_N

Lims ID: 320-38611-A-3-A Lab Sample ID: 320-38611-3

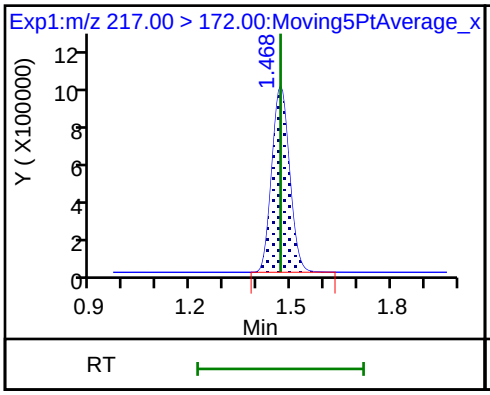
Client ID: GC-MW-108(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 22 Worklist Smp#: 7

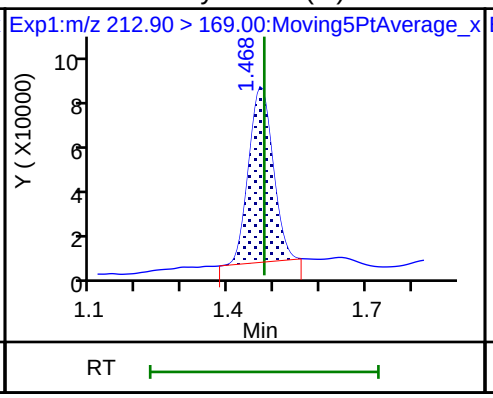
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

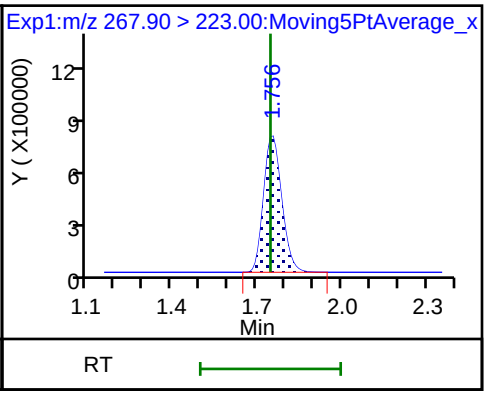
D 1 13C4 PFBA



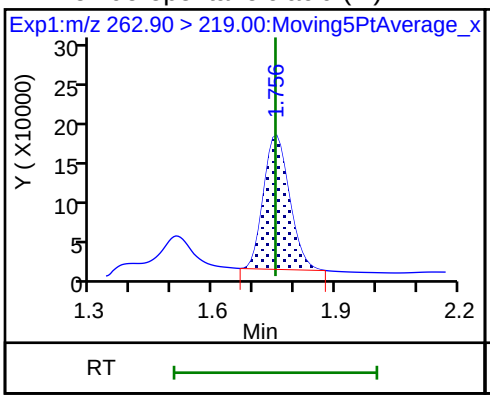
2 Perfluorobutyric acid (M)



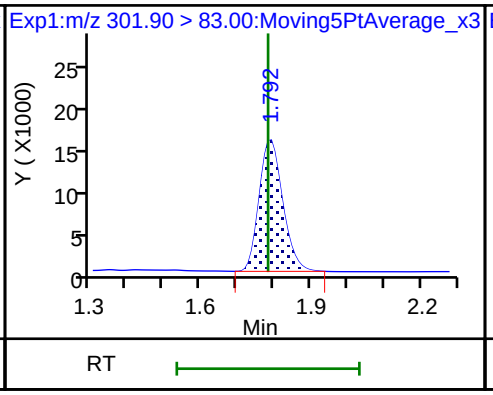
D 3 13C5-PFPeA



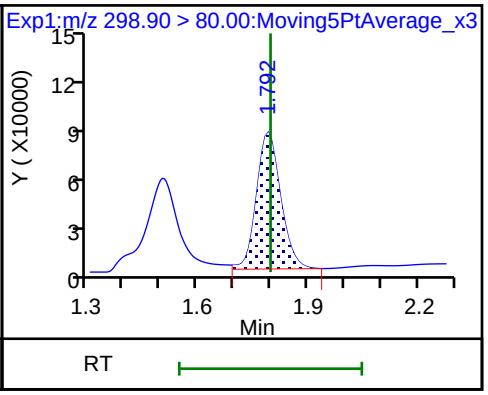
4 Perfluoropentanoic acid (M)



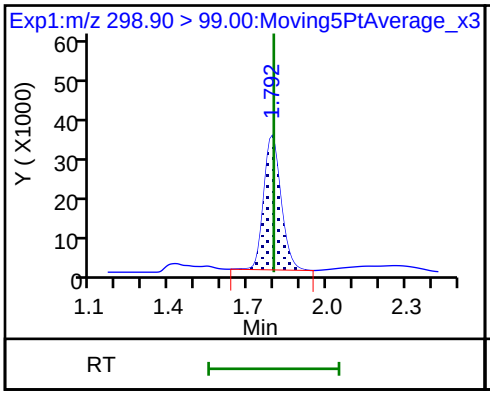
D 47 13C3-PFBS



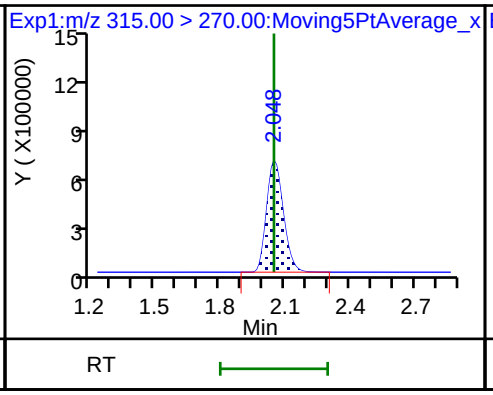
5 Perfluorobutanesulfonic acid



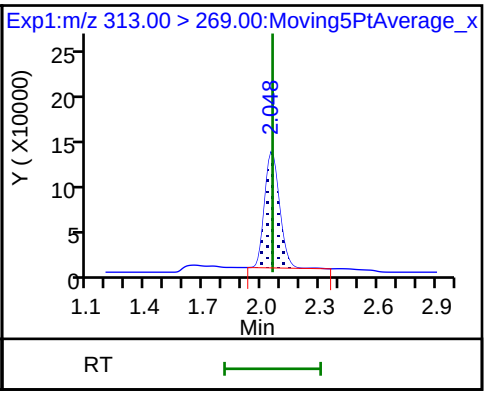
5 Perfluorobutanesulfonic acid



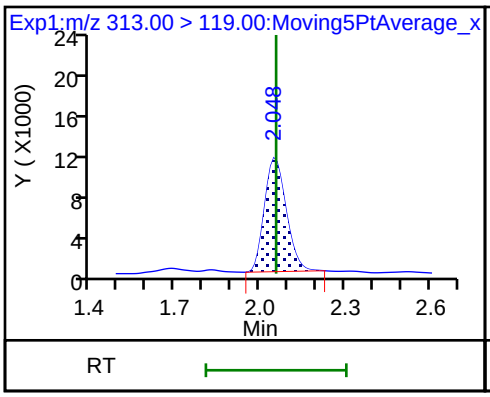
D 7 13C2 PFHxA



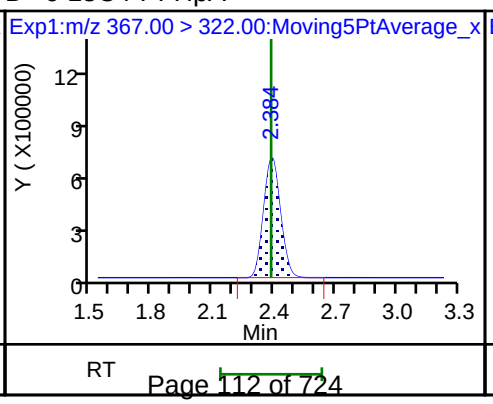
6 Perfluorohexanoic acid



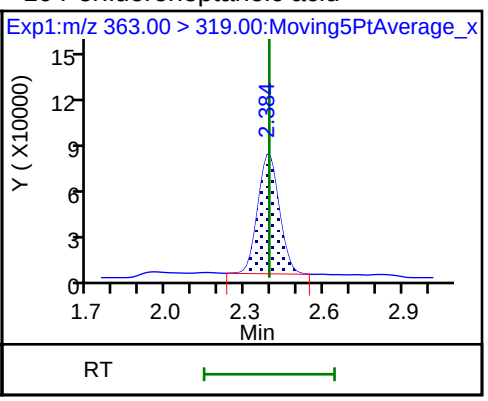
6 Perfluorohexanoic acid



D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



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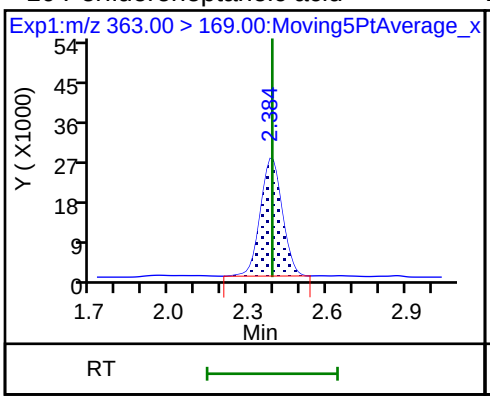
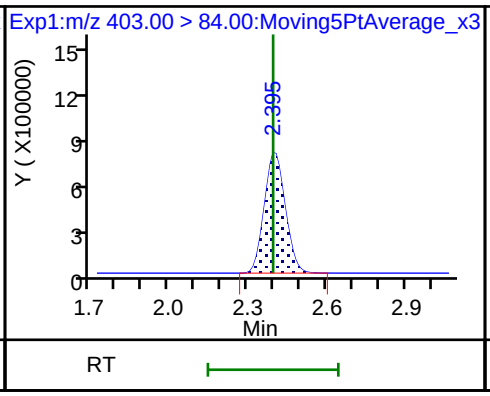
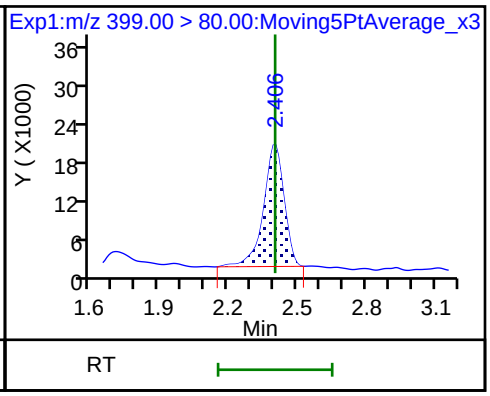


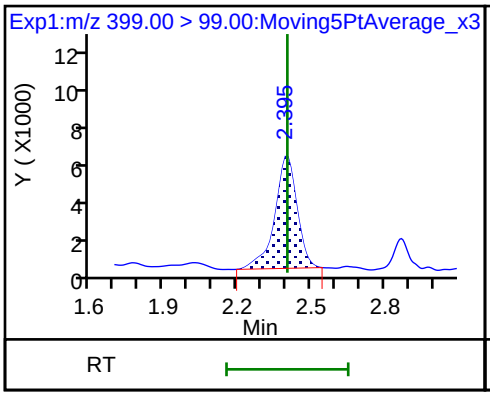
D 11 18O2 PFHxS



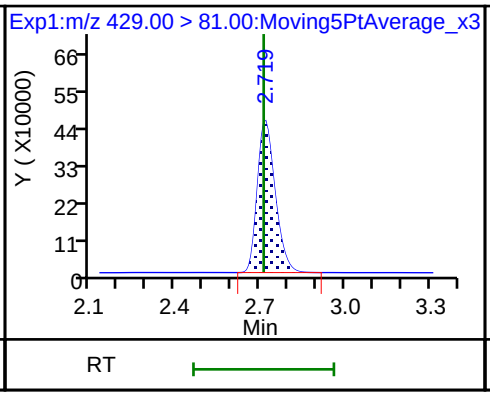
8 Perfluorohexanesulfonic acid



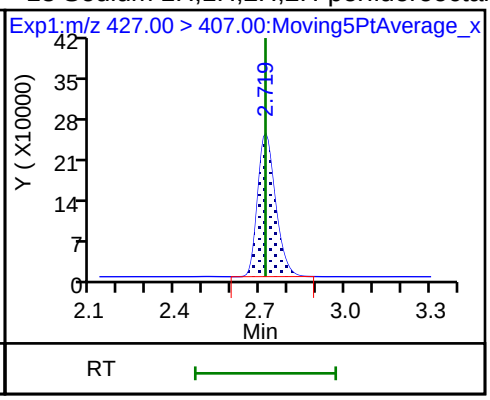
8 Perfluorohexanesulfonic acid



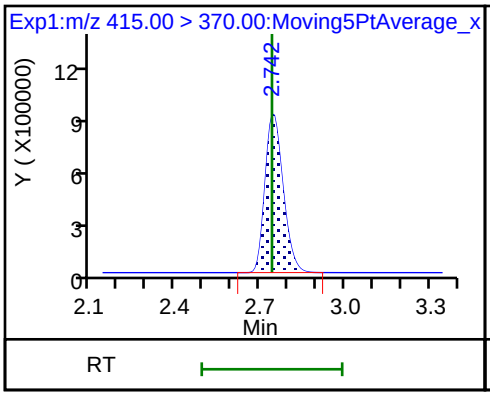
D 12 M2-6:2FTS



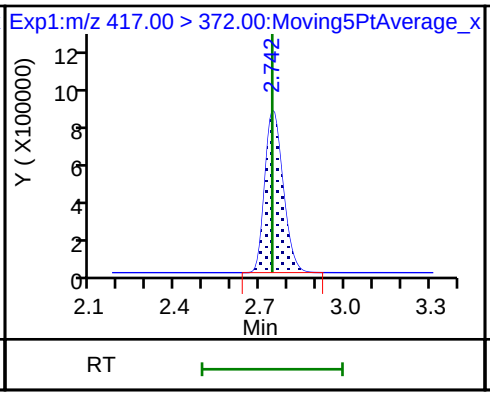
13 Sodium 1H,1H,2H,2H-perfluorooctane



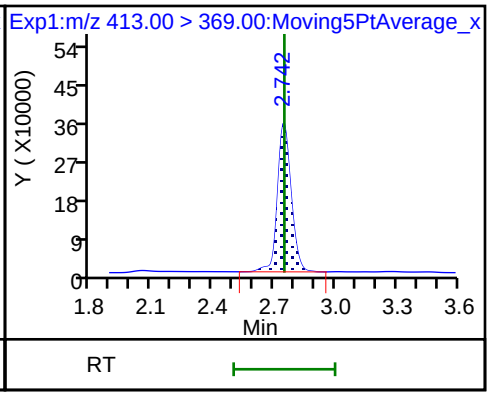
* 62 13C2-PFOA



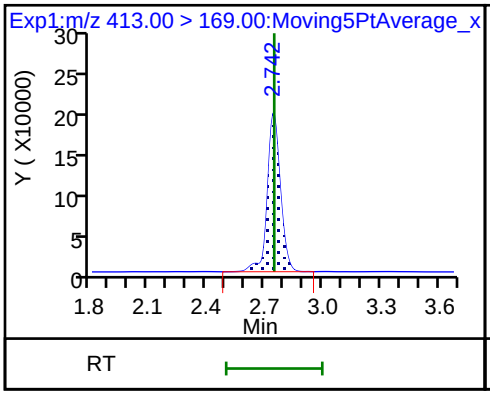
D 14 13C4 PFOA



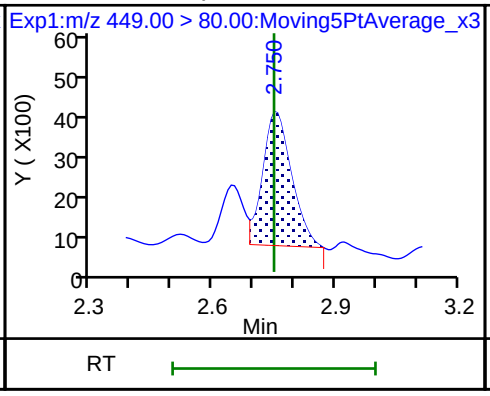
15 Perfluorooctanoic acid



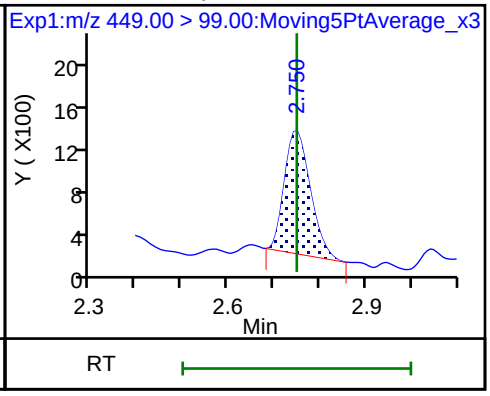
15 Perfluorooctanoic acid



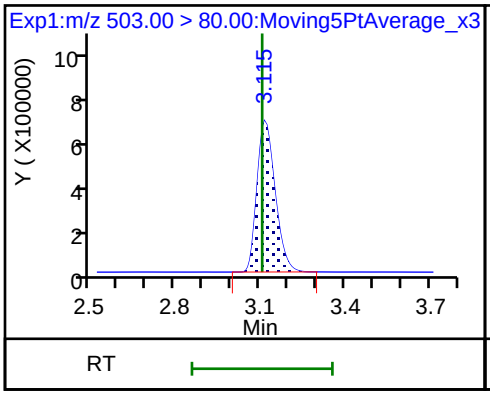
16 Perfluoroheptanesulfonic acid



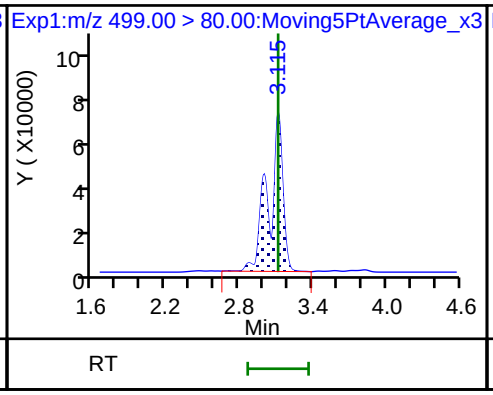
16 Perfluoroheptanesulfonic acid



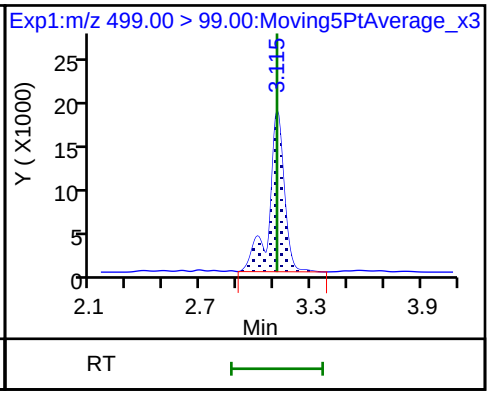
D 18 13C4 PFOS



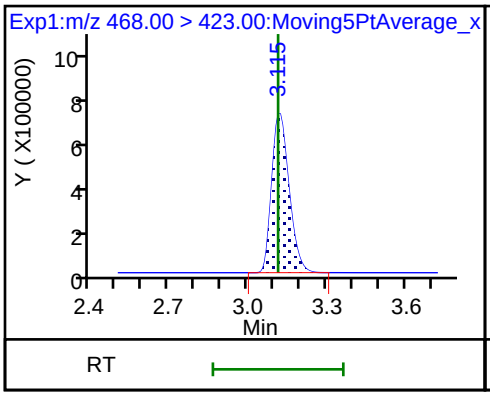
17 Perfluorooctane sulfonic acid



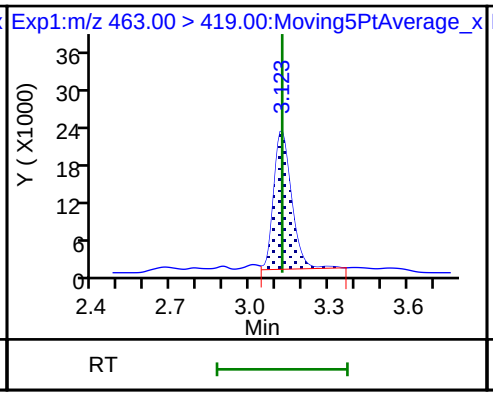
17 Perfluorooctane sulfonic acid



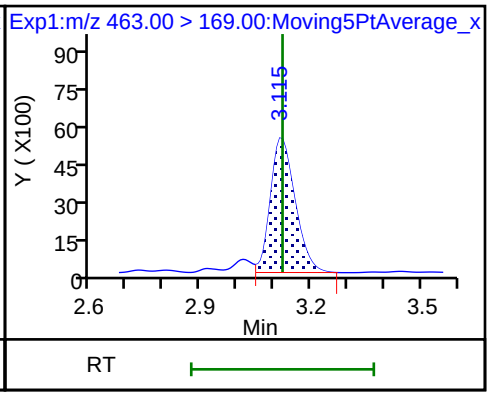
D 19 13C5 PFNA



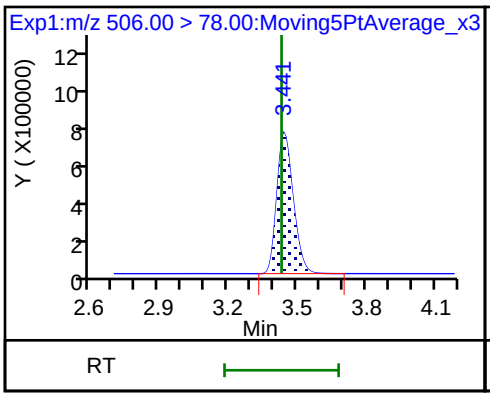
20 Perfluorononanoic acid



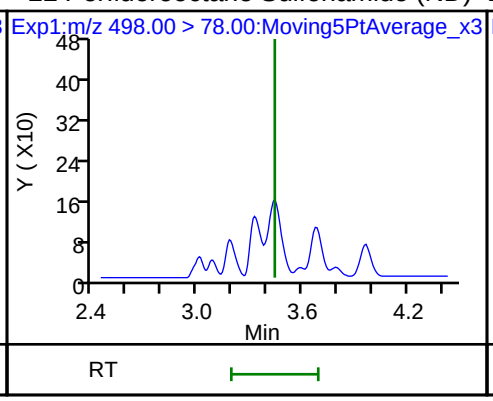
20 Perfluorononanoic acid



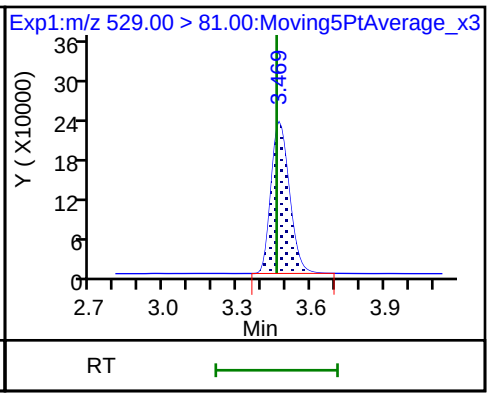
D 21 13C8 FOSA



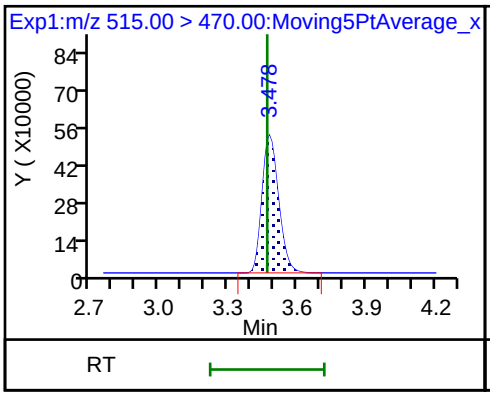
22 Perfluorooctane Sulfonamide (ND)



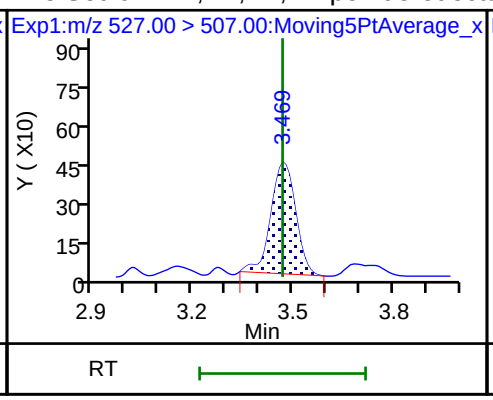
D 26 M2-8:2FTS



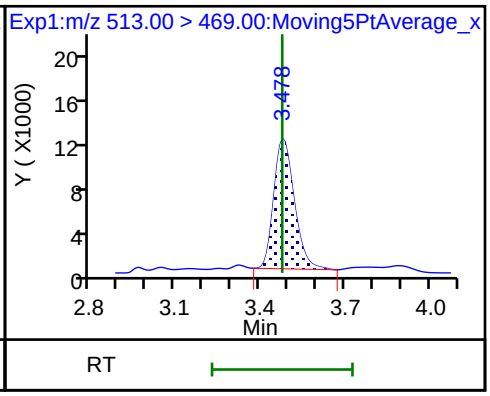
D 23 13C2 PFDA



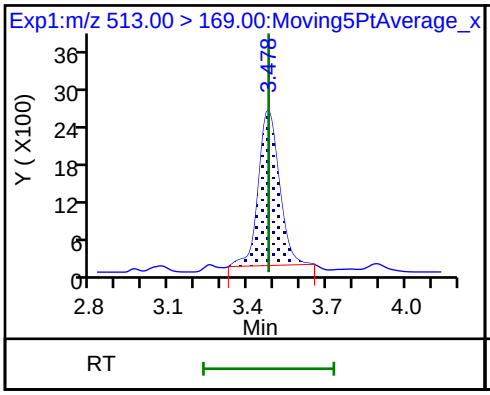
25 Sodium 1H,1H,2H,2H-perfluorodecan



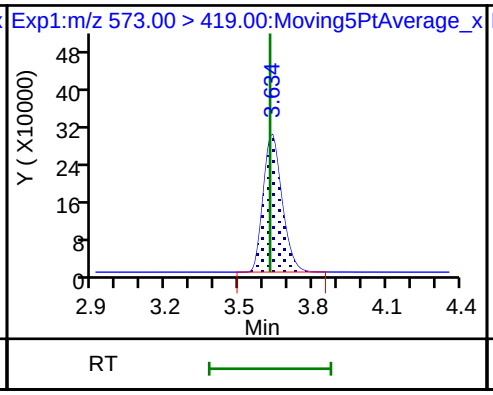
24 Perfluorodecanoic acid



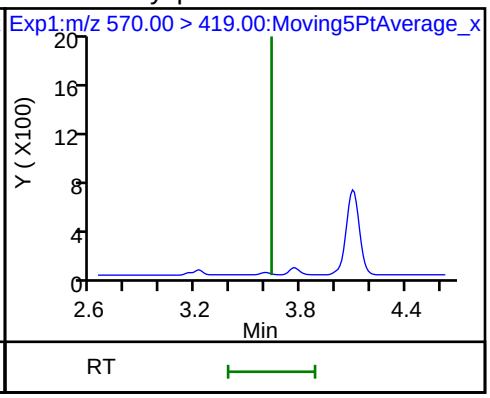
24 Perfluorodecanoic acid



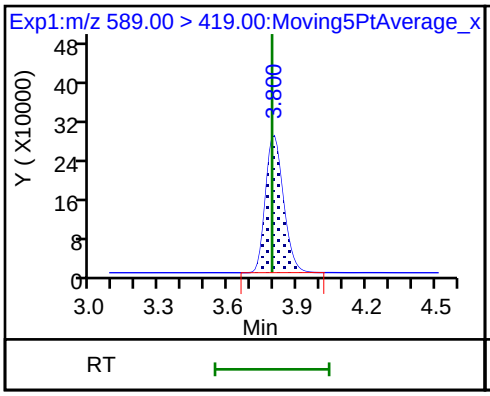
D 27 d3-NMeFOSAA



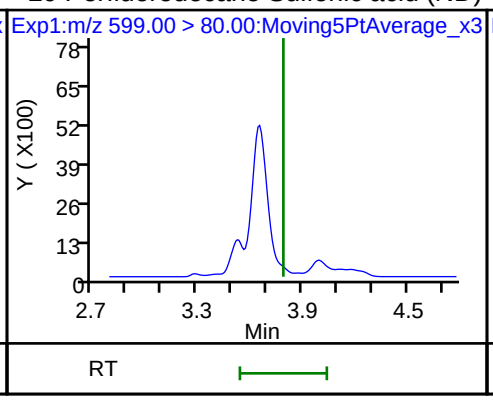
28 N-methyl perfluorooctane sulfonami (ND)



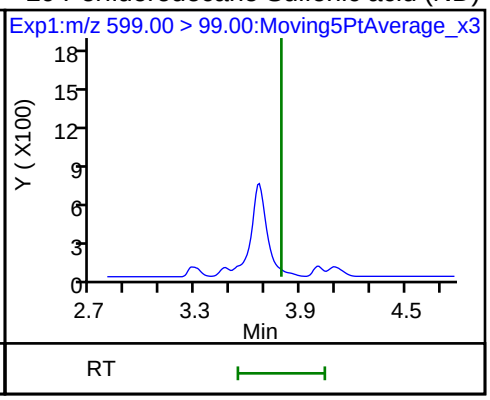
D 32 d5-NEtFOSAA



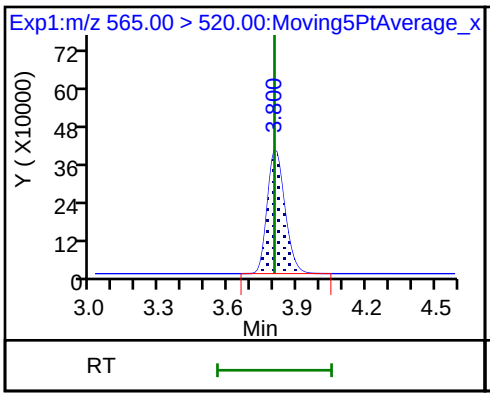
29 Perfluorodecane Sulfonic acid (ND)



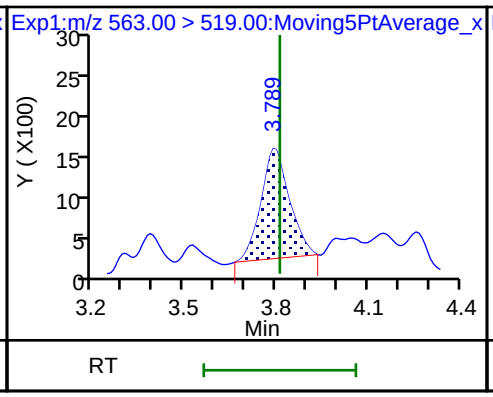
29 Perfluorodecane Sulfonic acid (ND)



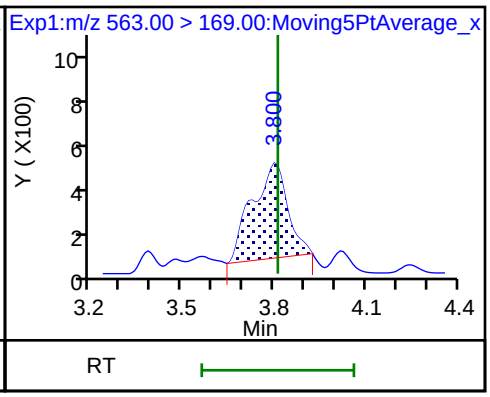
D 30 13C2 PFUnA



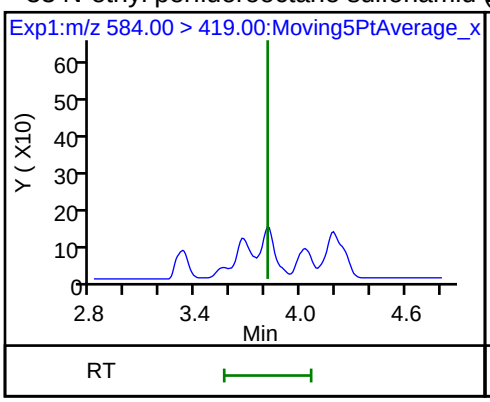
31 Perfluoroundecanoic acid



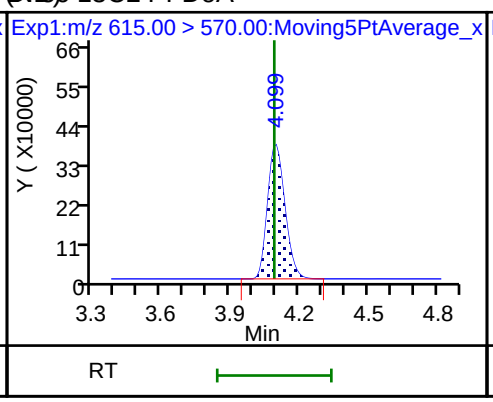
31 Perfluoroundecanoic acid



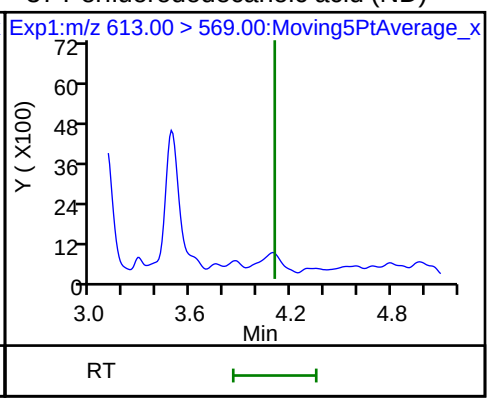
33 N-ethyl perfluorooctane sulfonamid (ND)



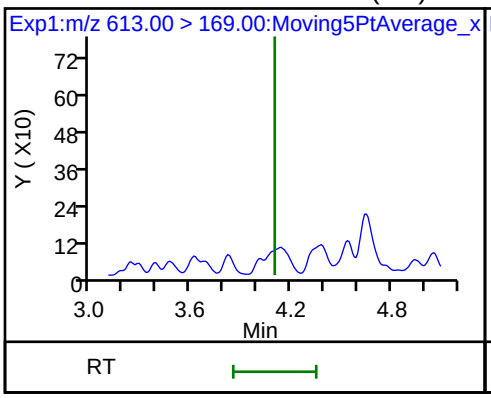
D 36 13C2 PFDoA



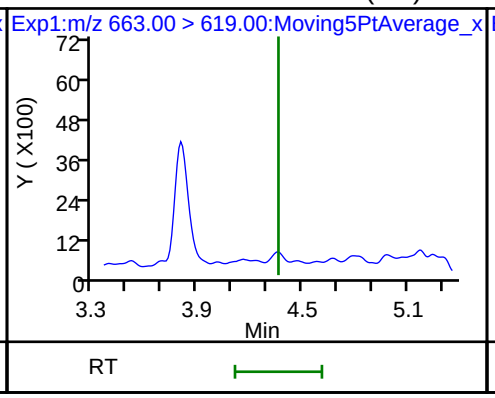
37 Perfluorododecanoic acid (ND)



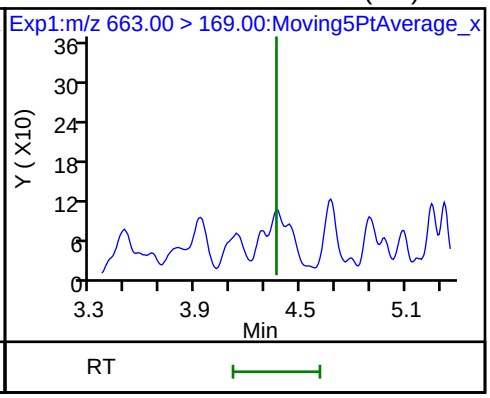
37 Perfluorododecanoic acid (ND)



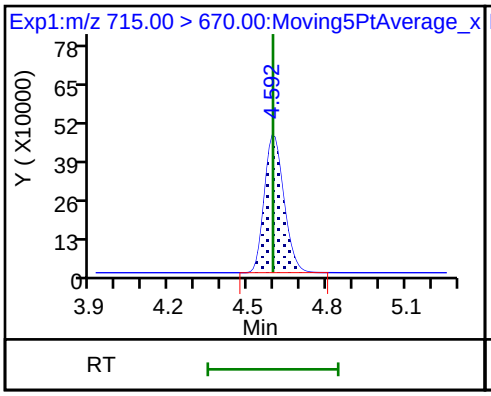
41 Perfluorotridecanoic acid (ND)



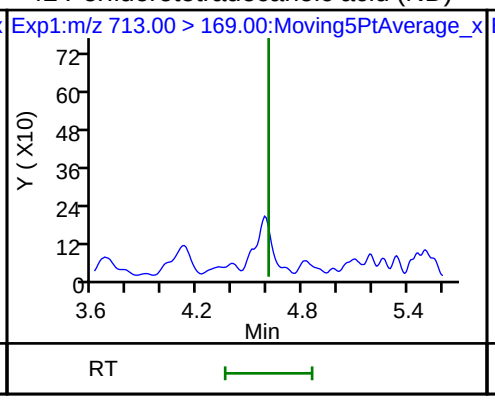
41 Perfluorotridecanoic acid (ND)



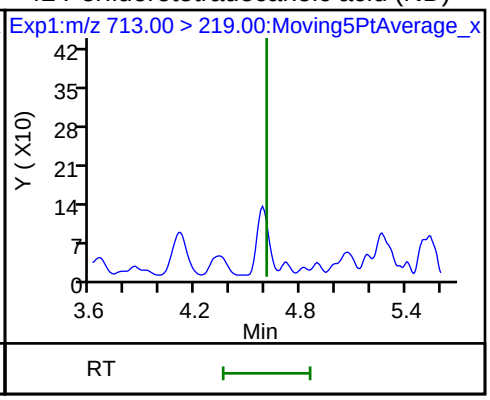
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

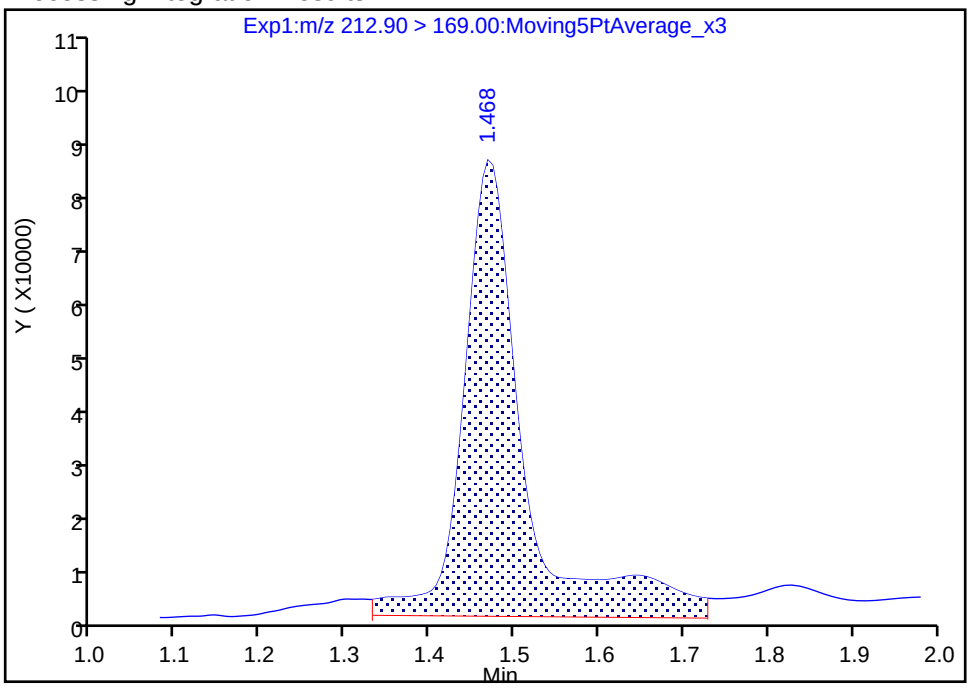
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_005.d				
Injection Date:	10-May-2018 20:15:06	Instrument ID:	A8_N		
Lims ID:	320-38611-A-3-A	Lab Sample ID:	320-38611-3		
Client ID:	GC-MW-108(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	22	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

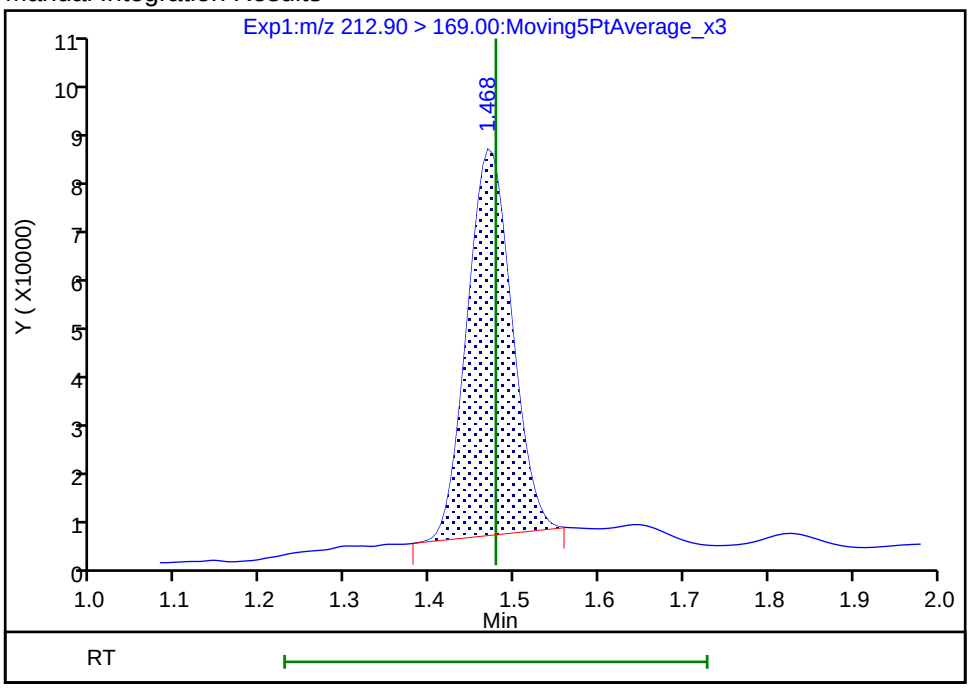
Processing Integration Results

RT: 1.47
Area: 424203
Amount: 0.321610
Amount Units: ng/ml



Manual Integration Results

RT: 1.47
Area: 291314
Amount: 0.220860
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:14:39

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

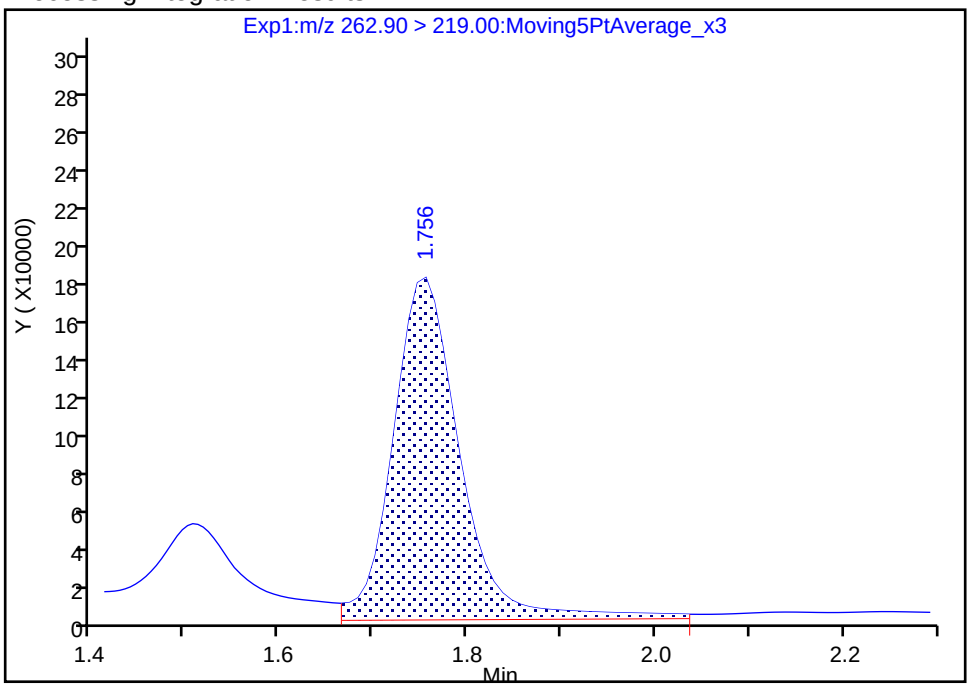
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_005.d				
Injection Date:	10-May-2018 20:15:06	Instrument ID:	A8_N		
Lims ID:	320-38611-A-3-A	Lab Sample ID:	320-38611-3		
Client ID:	GC-MW-108(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	22	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

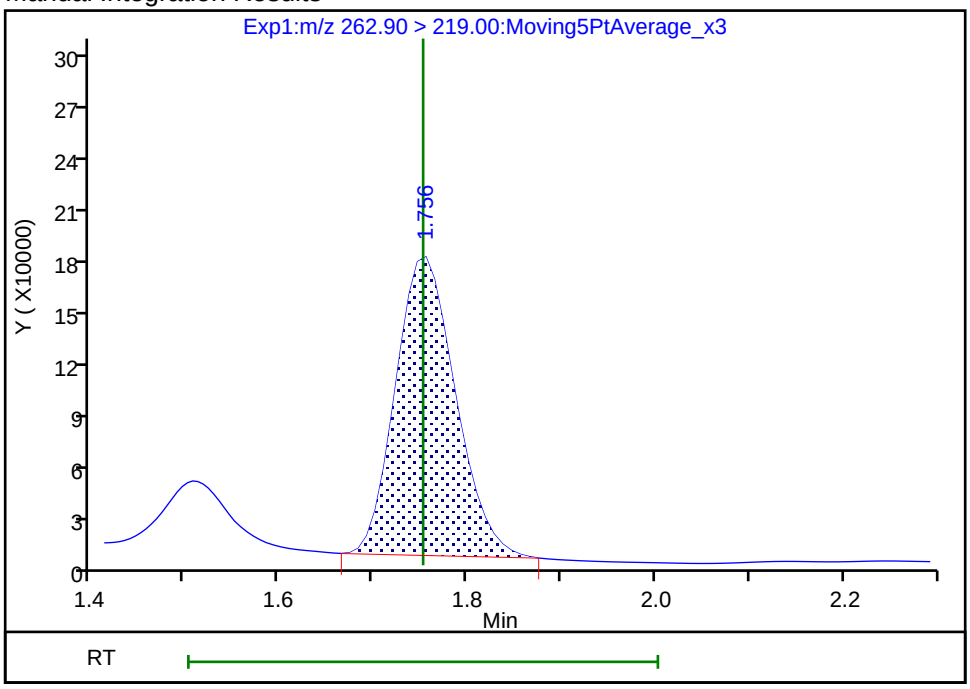
Processing Integration Results

RT: 1.76
Area: 896171
Amount: 0.564985
Amount Units: ng/ml



Manual Integration Results

RT: 1.76
Area: 768385
Amount: 0.484423
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:14:48

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-108(WG) RE | Lab Sample ID: 320-38611-3 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_023.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:50

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 279.1(mL) | Date Analyzed: 05/17/2018 01:53

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*27*	*H*	*1.8*	*0.76*
27619-97-2	*6:2FTS*	*2.0*	*J H*	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	100		25-150
STL02279	M2-6:2FTS	298	*	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_023.d
Lims ID: 320-38611-B-3-B
Client ID: GC-MW-108(WG)
Sample Type: Client
Inject. Date: 17-May-2018 01:53:57 ALS Bottle#: 14 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-3-b
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:58:25 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:58:25

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.453	1.447	0.006	1.000	4686569	1.46		58.4	28536	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.453	1.457	-0.004	1.000	362289	0.2078			82.0	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.712	0.018	0.566	4535577	2.20		88.1	35243	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.730	1.729	0.001	1.000	931622	0.4350			97.4	M
D 47 13C3-PFBS										
301.90 > 83.00	1.757	1.748	0.009	1.000	96588	2.08		89.3	240	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.766	1.765	0.001	1.005	432326	0.1333			35.3	M
298.90 > 99.00	1.757	1.765	-0.008	1.000	179852		2.40(1.25-3.74)		331	
D 7 13C2 PFHxA										
315.00 > 270.00	2.005	1.994	0.011	1.000	5184559	2.36		94.5	76789	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.005	2.014	-0.009	1.000	832831	0.3906			329	M
313.00 > 119.00	2.005	2.014	-0.009	1.000	80837		10.30(5.03-15.10)		694	
D 9 13C4-PFHpA										
367.00 > 322.00	2.334	2.321	0.013	1.000	5107606	2.43		97.1	60216	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.334	2.332	0.002	1.000	508473	0.2356			326	
363.00 > 169.00	2.334	2.332	0.002	1.000	203497		2.50(1.13-3.40)		970	
D 11 18O2 PFHxS										
403.00 > 84.00	2.347	2.334	0.013	1.000	5516841	2.12		89.7	82626	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.347	2.345	0.002	1.000	144905	0.0551			140	
399.00 > 99.00	2.347	2.345	0.002	1.000	39545		3.66(1.50-4.49)		96.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.660	2.645	0.015	1.000	3285337	7.08		298	15338	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.660	2.667	-0.007	1.000	163117	0.0570			1407	
D 14 13C4 PFOA										
417.00 > 372.00	2.690	2.668	0.022	1.000	4988401	2.51		100	71258	
* 62 13C2-PFOA										
415.00 > 370.00	2.690	2.689	0.001		5252680	2.50			62278	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.690	2.689	0.001	1.000	1750092	0.7452			790	
413.00 > 169.00	2.690	2.689	0.001	1.000	934309		1.87(0.84-2.52)		3115	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.698	2.697	0.001	1.000	20356	0.009403			60.3	
449.00 > 99.00	2.698	2.697	0.001	1.000	5519		3.69(1.94-5.82)		37.4	M
D 18 13C4 PFOS										
503.00 > 80.00	3.056	3.029	0.027	1.000	3884312	2.17		91.0	19153	
D 19 13C5 PFNA										
468.00 > 423.00	3.056	3.036	0.020	1.000	4377746	2.69		108	75455	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.056	3.051	0.005	1.000	684090	0.3580			3613	
499.00 > 99.00	3.056	3.051	0.005	1.000	122435		5.59(2.31-6.93)		921	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.056	3.051	0.005	1.000	114338	0.0616			193	M
463.00 > 169.00	3.063	3.051	0.012	1.002	26974		4.24(1.90-5.69)		488	M
D 26 M2-8:2FTS										
529.00 > 81.00	3.404	3.376	0.028	1.000	1680892	3.18		133	17109	
D 21 13C8 FOSA										
506.00 > 78.00	3.395	3.376	0.019	1.000	4720730	2.02		80.8	49423	
D 23 13C2 PFDA										
515.00 > 470.00	3.413	3.385	0.028	1.000	3380834	2.44		97.7	65691	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.413	3.407	0.006	1.000	74712	0.0568			274	
513.00 > 169.00	3.413	3.407	0.006	1.000	18379		4.07(2.36-7.09)		350	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.562	3.544	0.018	1.000	1969671	2.58		103	28225	
D 30 13C2 PFUnA										
565.00 > 520.00	3.747	3.716	0.031	1.000	2675537	2.44		97.6	54824	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.737	3.716	0.021	1.000	2028964	2.59		104	18577	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	3.747	3.740	0.007	1.000	8402	0.009400			41.2	
563.00 > 169.00	3.758	3.740	0.018	1.003	1749		4.80(2.12-6.36)		28.3	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.037	4.006	0.031	1.000	2599603	2.20		88.2	21365	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.540	4.511	0.029	1.000	3201074	2.21		88.4	15071	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 13:58:25 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_023.d

Injection Date: 17-May-2018 01:53:57 Instrument ID: A8_N

Lims ID: 320-38611-B-3-B Lab Sample ID: 320-38611-3

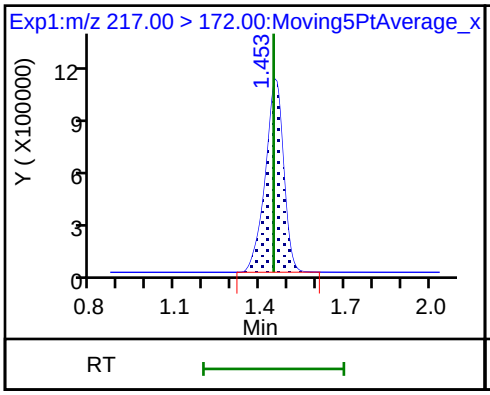
Client ID: GC-MW-108(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 15

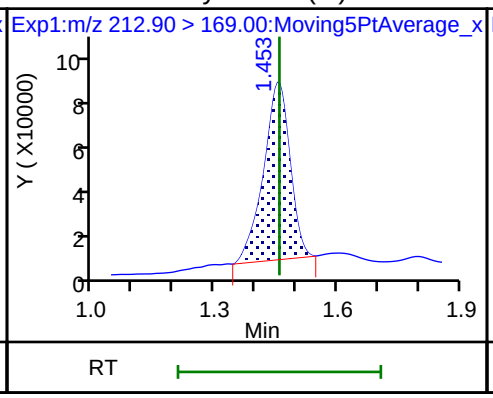
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

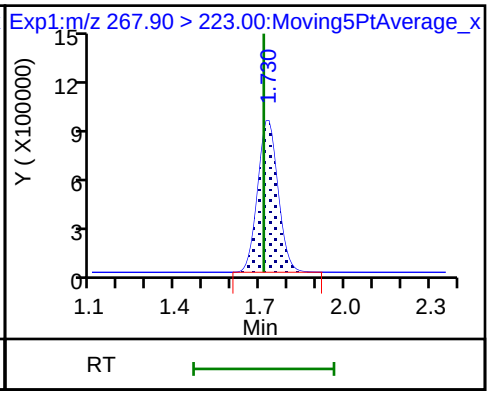
D 1 13C4 PFBA



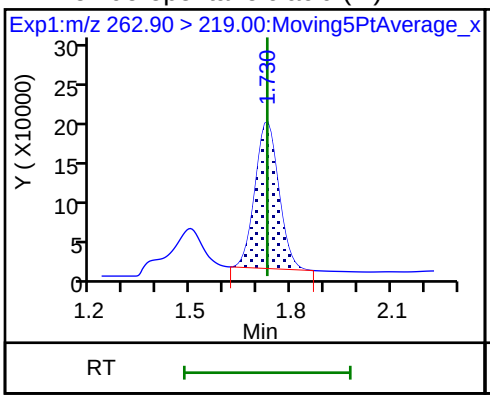
2 Perfluorobutyric acid (M)



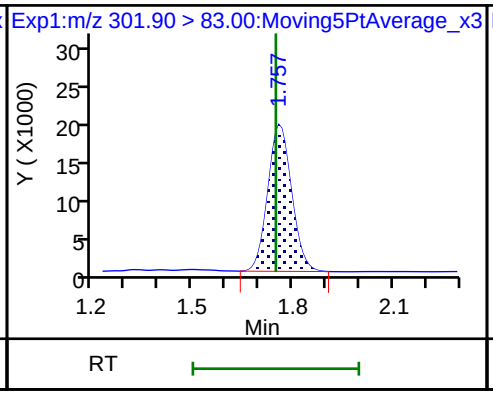
D 3 13C5-PFPeA



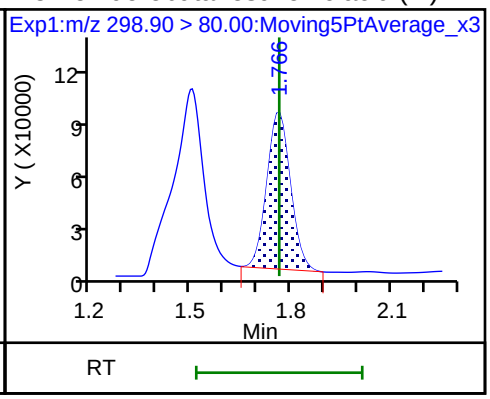
4 Perfluoropentanoic acid (M)



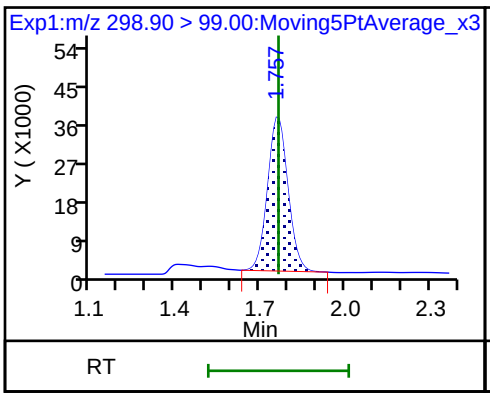
D 47 13C3-PFBS



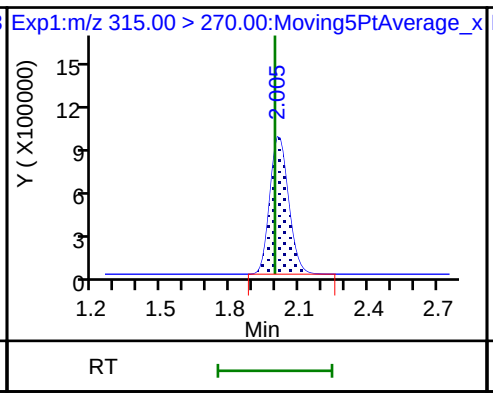
5 Perfluorobutanesulfonic acid (M)



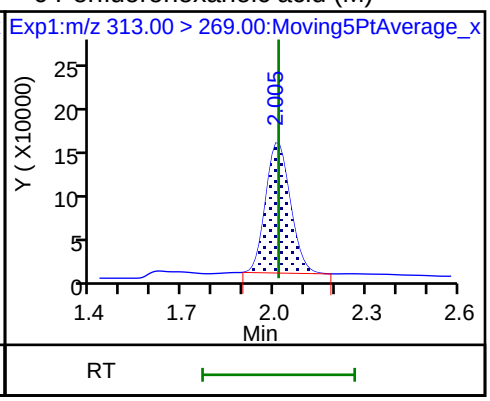
5 Perfluorobutanesulfonic acid



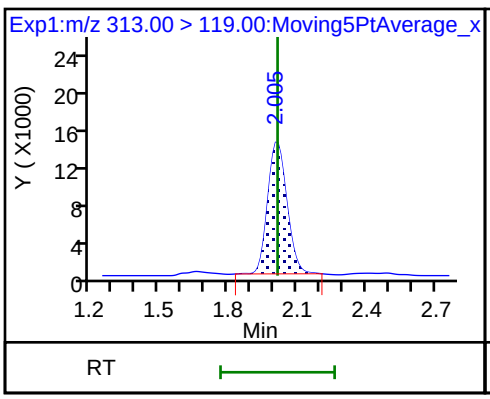
D 7 13C2 PFHxA



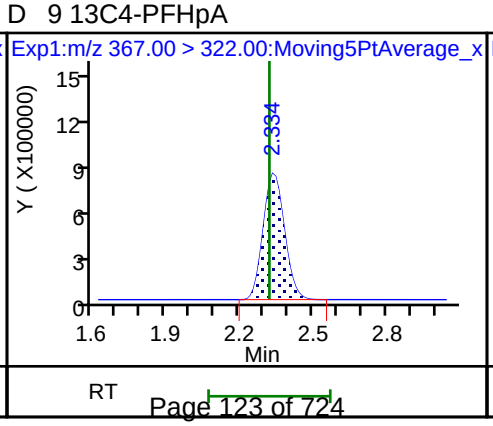
6 Perfluorohexanoic acid (M)



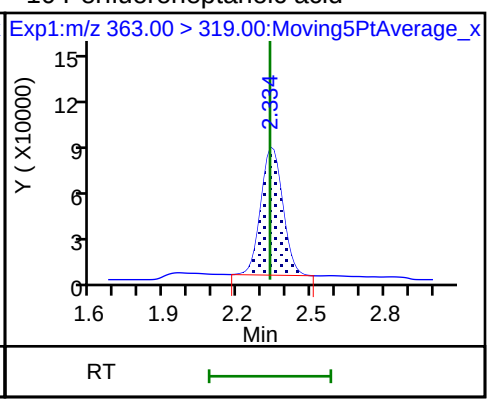
6 Perfluorohexanoic acid



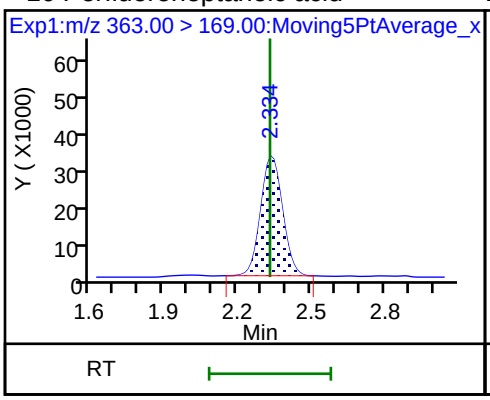
D 9 13C4-PFHpA



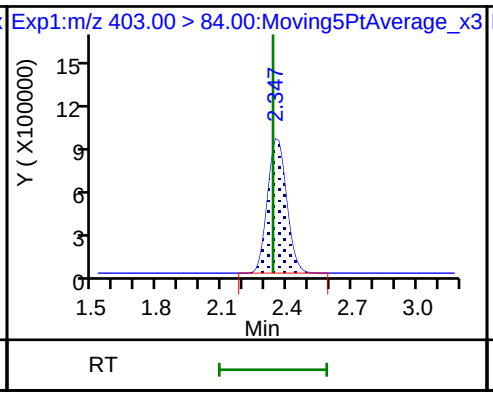
10 Perfluoroheptanoic acid



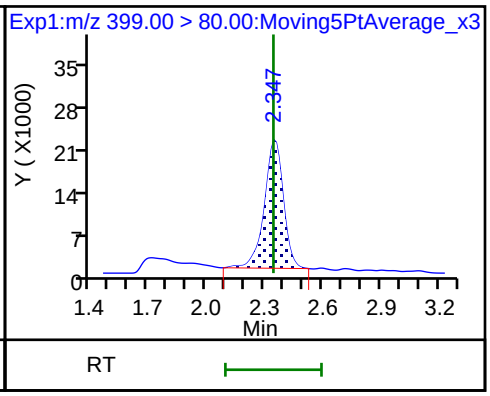
10 Perfluoroheptanoic acid



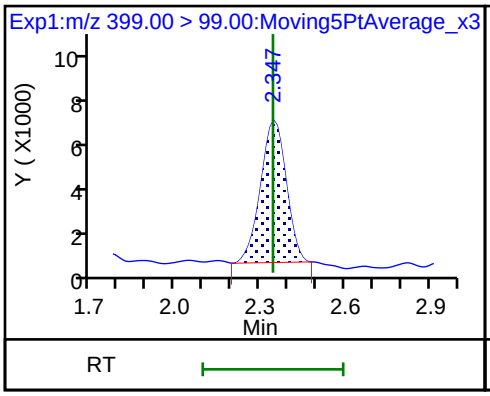
D 11 18O2 PFHxS



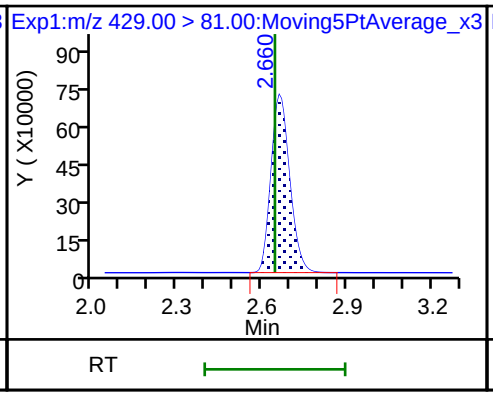
8 Perfluorohexanesulfonic acid



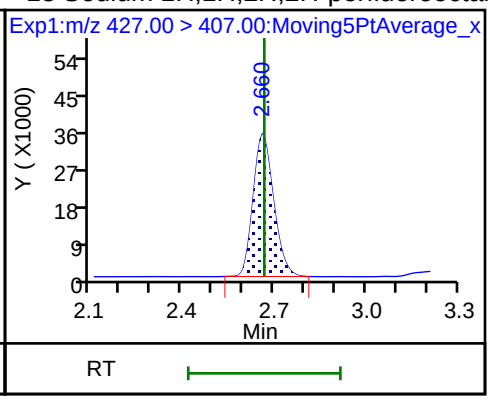
8 Perfluorohexanesulfonic acid



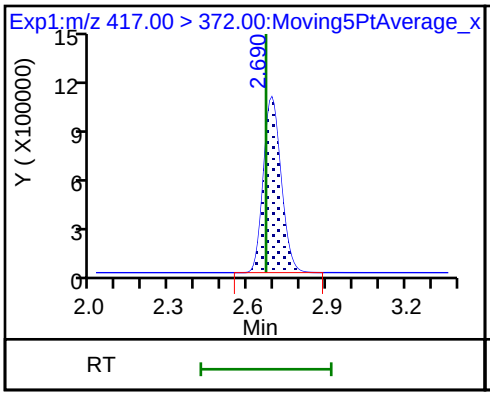
D 12 M2-6:2FTS



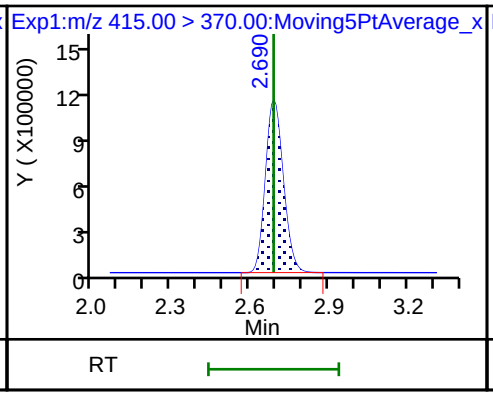
13 Sodium 1H,1H,2H,2H-perfluorooctane



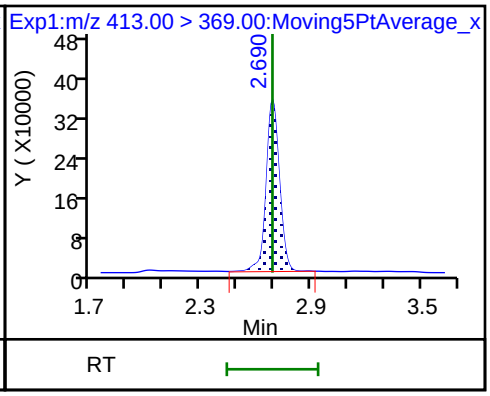
D 14 13C4 PFOA



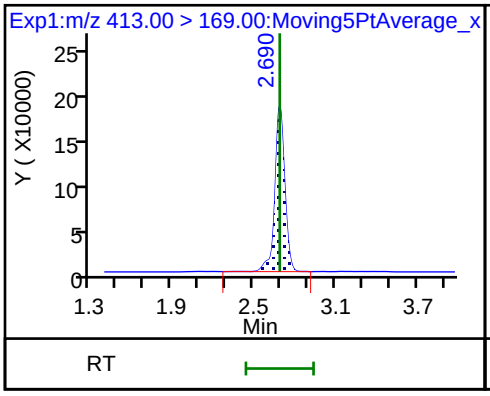
* 62 13C2-PFOA



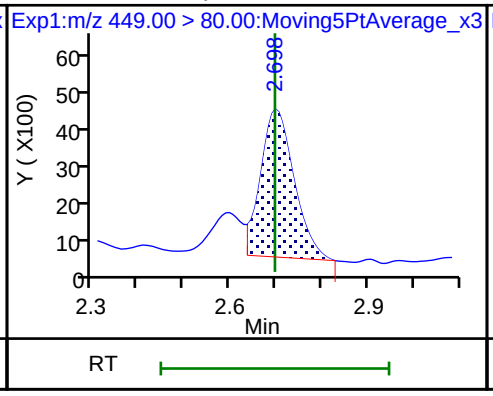
15 Perfluorooctanoic acid



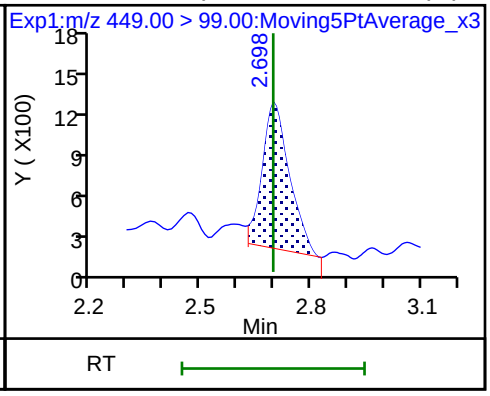
15 Perfluorooctanoic acid



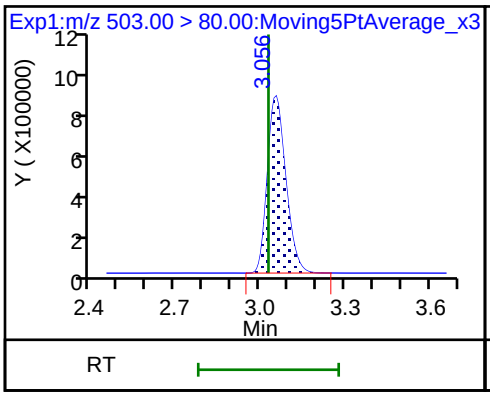
16 Perfluoroheptanesulfonic acid



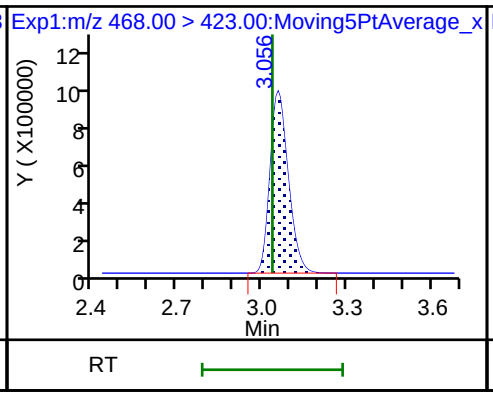
16 Perfluoroheptanesulfonic acid (M)



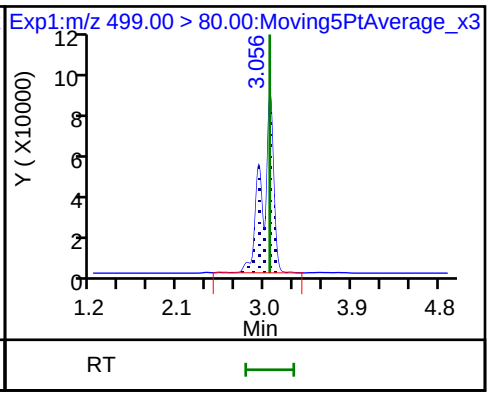
D 18 13C4 PFOS



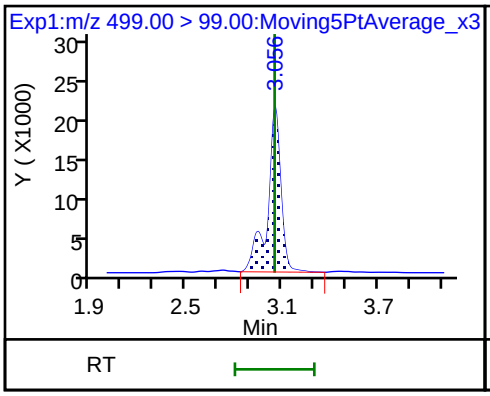
D 19 13C5 PFNA



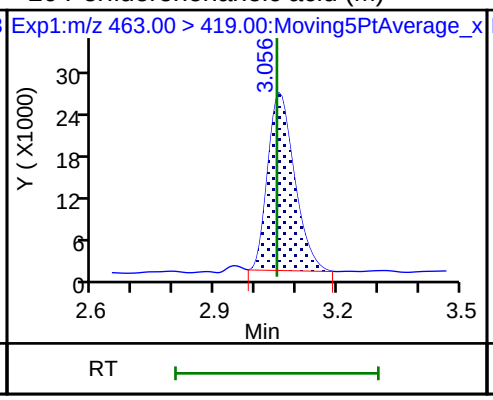
17 Perfluorooctane sulfonic acid



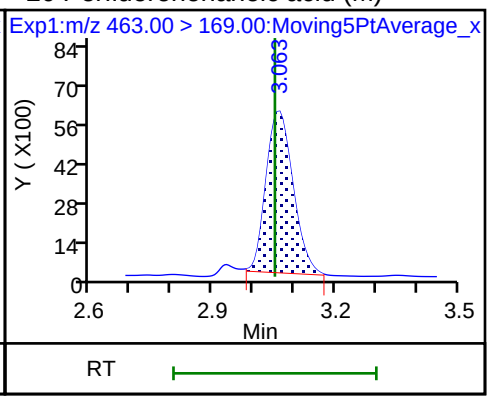
17 Perfluorooctane sulfonic acid



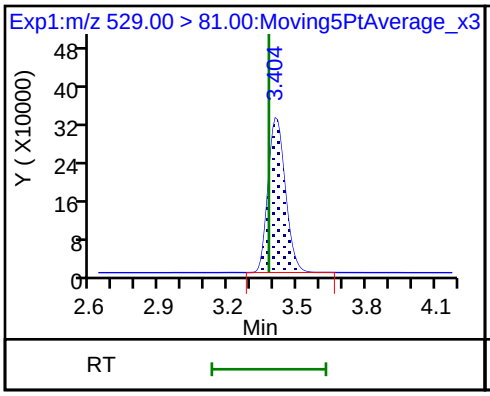
20 Perfluorononanoic acid (M)



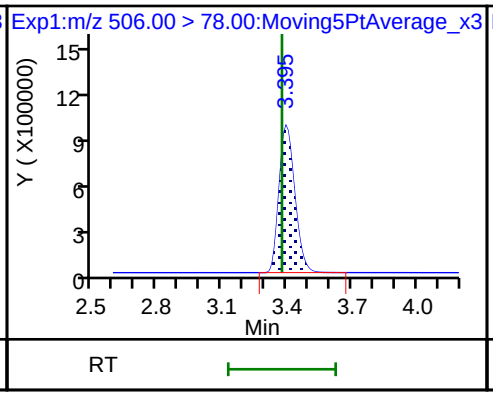
20 Perfluorononanoic acid (M)



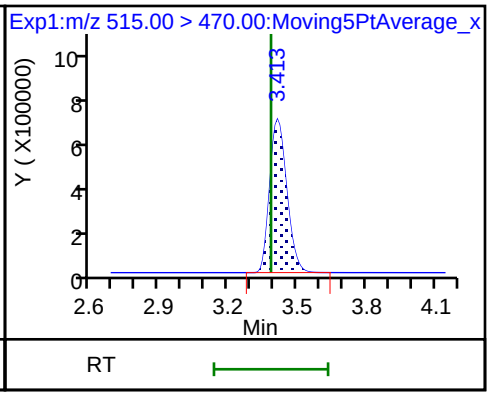
D 26 M2-8:2FTS



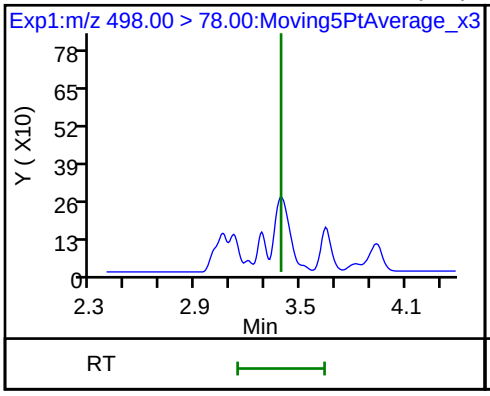
D 21 13C8 FOSA



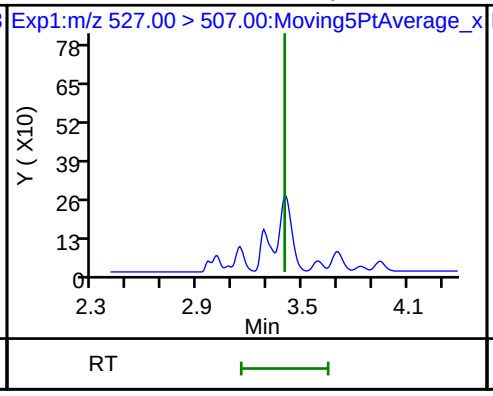
D 23 13C2 PFDA



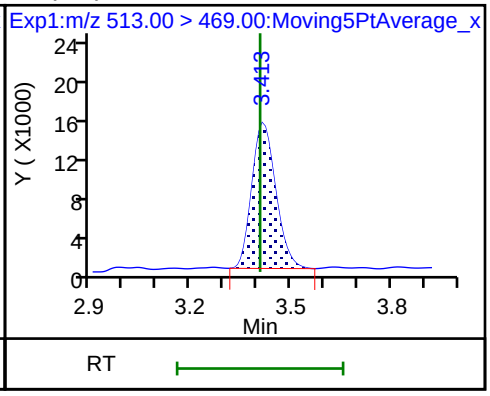
22 Perfluorooctane Sulfonamide (ND)



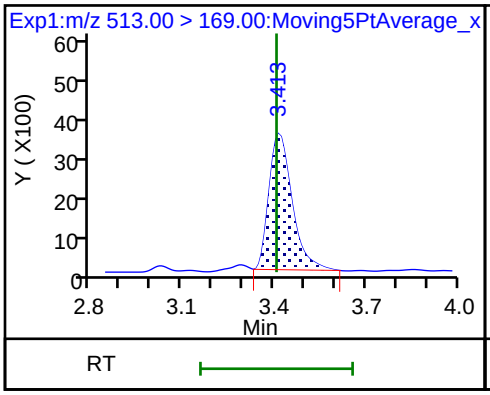
25 Sodium 1H,1H,2H,2H-perfluorodecane2(ND)



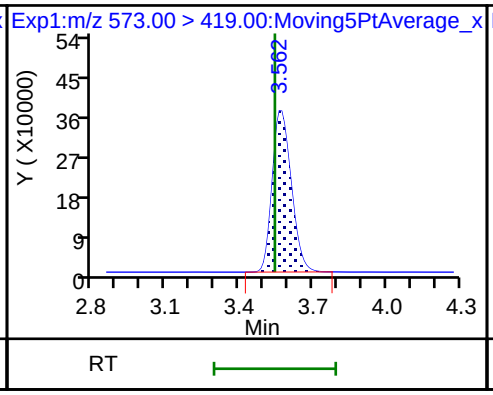
fluorodecanoic acid



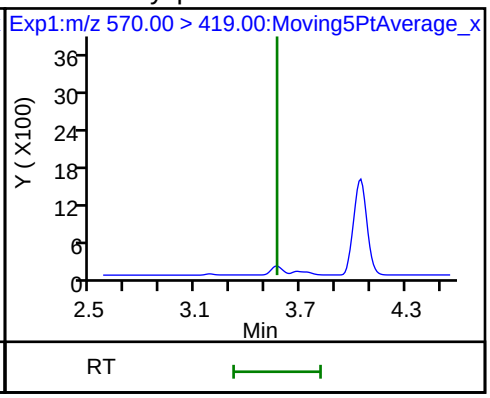
24 Perfluorodecanoic acid



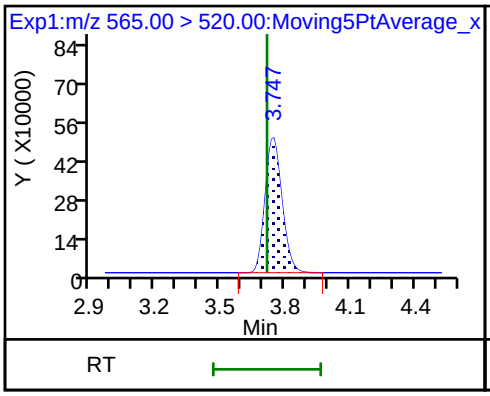
D 27 d3-NMeFOSAA



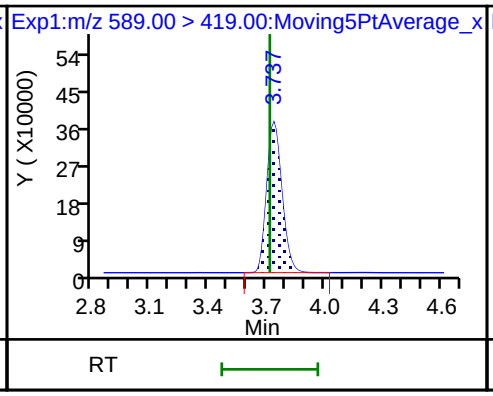
28 N-methyl perfluorooctane sulfonami (ND)



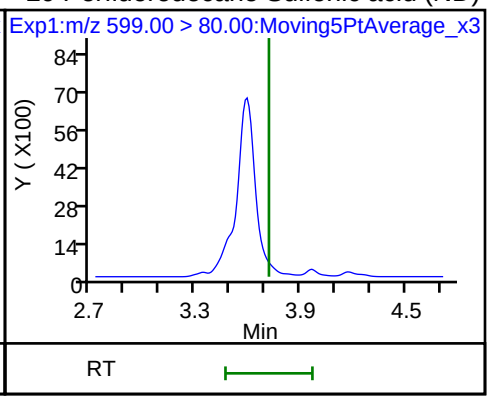
D 30 13C2 PFUnA



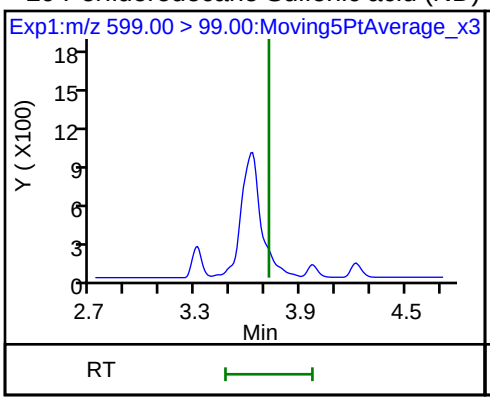
D 32 d5-NEtFOSAA



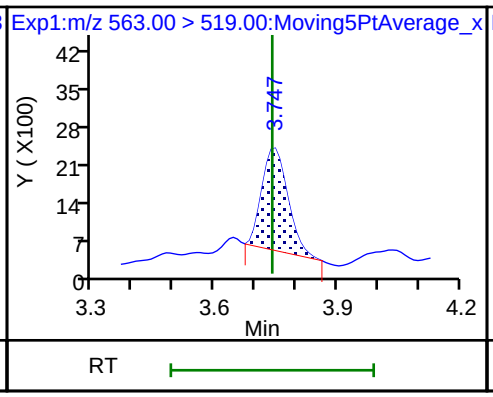
29 Perfluorodecane Sulfonic acid (ND)



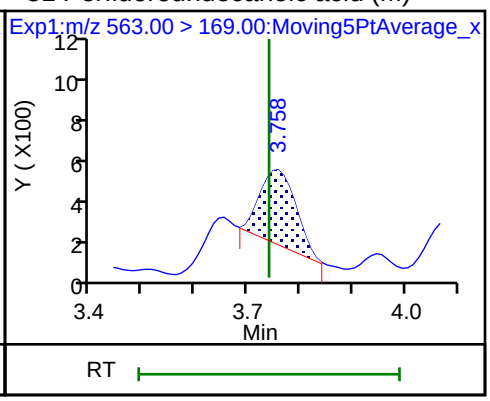
29 Perfluorodecane Sulfonic acid (ND)



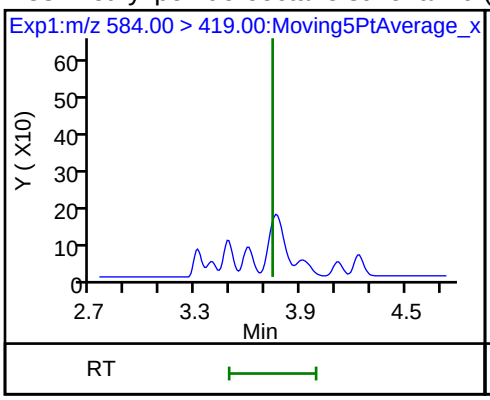
31 Perfluoroundecanoic acid



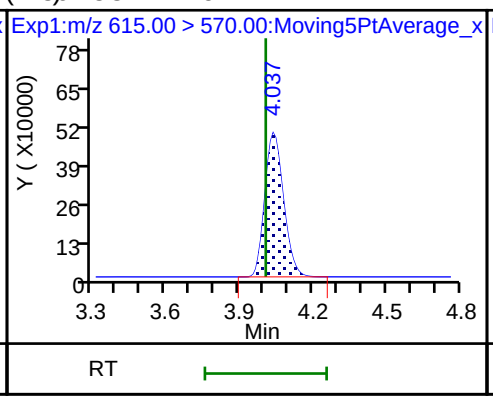
31 Perfluoroundecanoic acid (M)



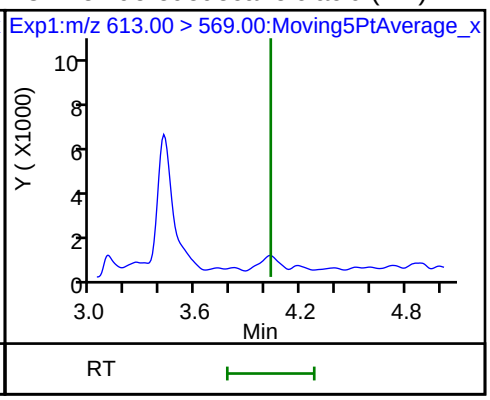
33 N-ethyl perfluorooctane sulfonamid (ND)



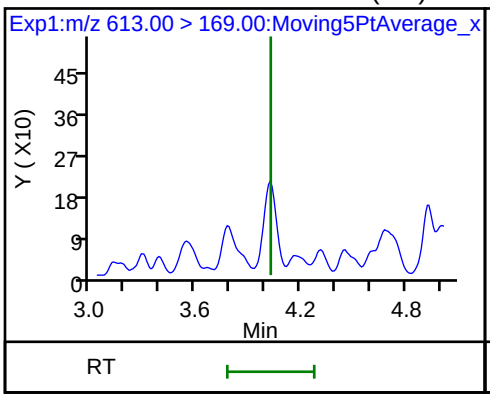
D 36 13C2 PFDoA



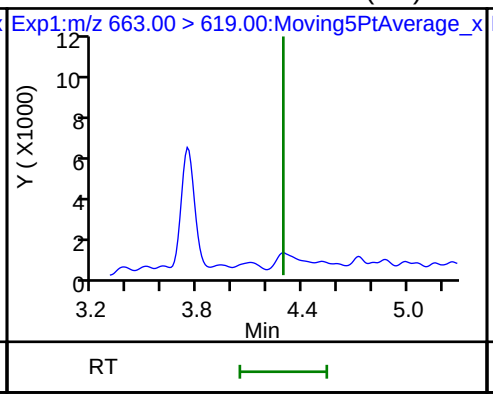
37 Perfluorododecanoic acid (ND)



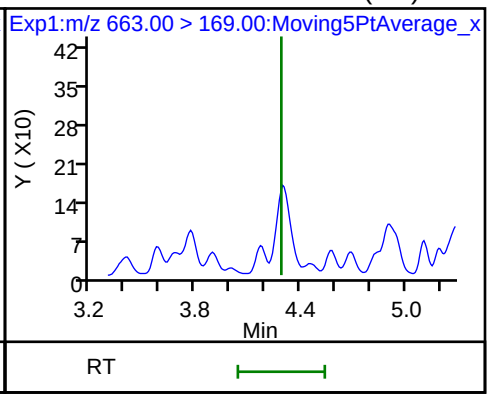
37 Perfluorododecanoic acid (ND)



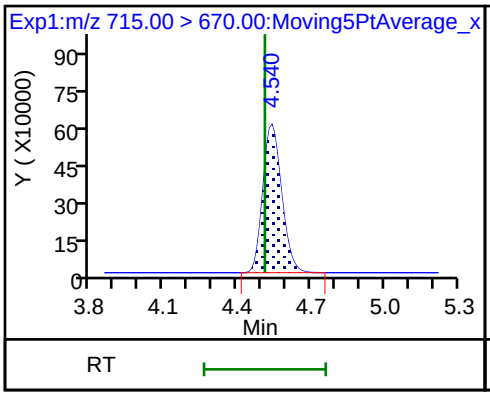
41 Perfluorotridecanoic acid (ND)



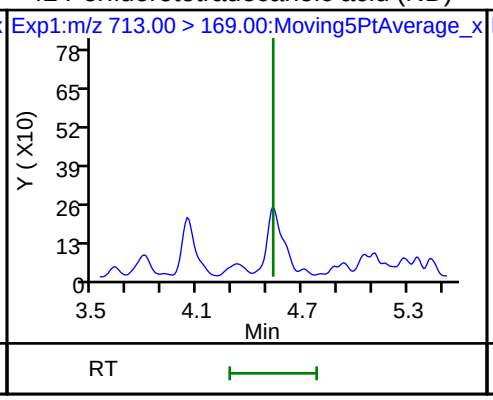
41 Perfluorotridecanoic acid (ND)



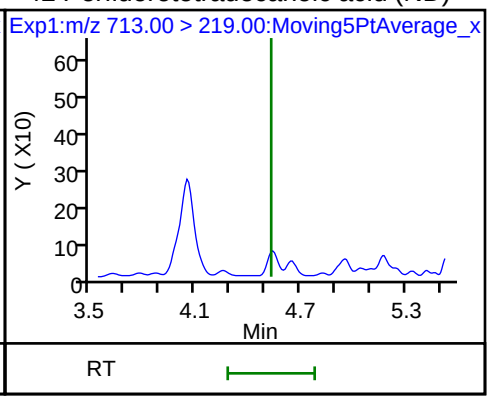
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 320-38611-4

Matrix: Water | Lab File ID: 2018.05.10LLB_006.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 12:35

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 283.3(mL) | Date Analyzed: 05/10/2018 20:22

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	5.8	B	1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	6.2		1.8	0.43
307-24-4	Perfluorohexanoic acid (PFHxA)	7.0		1.8	0.51
375-85-9	Perfluoroheptanoic acid (PFHpA)	7.3		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	29	B	1.8	0.75
375-95-1	Perfluorononanoic acid (PFNA)	1.2	J	1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	4.3		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	3.3	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	7.9		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2FTS	26	B *	18	1.8
39108-34-4	8:2FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 320-38611-4

Matrix: Water | Lab File ID: 2018.05.10LLB_006.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 12:35

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 283.3(mL) | Date Analyzed: 05/10/2018 20:22

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	86		25-150
STL01893	13C5 PFPeA	99		25-150
STL00993	13C2 PFHxA	100		25-150
STL01892	13C4-PFHpA	105		25-150
STL00990	13C4 PFOA	101		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	101		25-150
STL00997	13C2 PFUnA	91		25-150
STL00998	13C2 PFDoA	87		25-150
STL02116	13C2-PFTeDA	89		25-150
STL02337	13C3-PFBS	97		25-150
STL00994	18O2 PFHxS	104		25-150
STL00991	13C4 PFOS	96		25-150
STL01056	13C8 FOSA	88		25-150
STL02118	d3-NMeFOSAA	90		25-150
STL02117	d5-NEtFOSAA	97		25-150
STL02279	M2-6:2FTS	116		25-150
STL02280	M2-8:2FTS	109		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_006.d
Lims ID: 320-38611-A-4-A
Client ID: GC-MW-1B(WG)
Sample Type: Client
Inject. Date: 10-May-2018 20:22:55 ALS Bottle#: 23 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-4-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:17:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.468	1.469	-0.001	1.000	4442976	2.15		85.8	37951	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.468	1.478	-0.010	1.000	269372	0.1632			198	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.747	0.008	0.564	3291411	2.47		98.6	45339	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.755	1.753	0.002	1.000	275223	0.1754			107	
D 47 13C3-PFBS										
301.90 > 83.00	1.791	1.783	0.008	1.000	69308	2.26		97.3	290	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.791	1.798	-0.007	1.000	286401	0.1227			155	
298.90 > 99.00	1.791	1.798	-0.007	1.000	127885		2.24(1.25-3.74)		242	
D 7 13C2 PFHxA										
315.00 > 270.00	2.047	2.048	-0.001	1.000	3690337	2.50		100.0	77018	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.047	2.056	-0.009	1.000	296096	0.1974			197	
313.00 > 119.00	2.047	2.056	-0.009	1.000	28071		10.55(5.03-15.10)		247	
D 9 13C4-PFHpA										
367.00 > 322.00	2.383	2.384	-0.001	1.000	3783440	2.63		105	74448	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.383	2.392	-0.009	1.000	312347	0.2062			317	
363.00 > 169.00	2.383	2.392	-0.009	1.000	122549		2.55(1.13-3.40)		813	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.395	0.0	1.000	4366758	2.46		104	78981	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.395	2.403	-0.008	1.000	197166	0.0944			191	
399.00 > 99.00	2.395	2.403	-0.008	1.000	73783		2.67(1.50-4.49)		274	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.719	2.712	0.007	1.000	849876	2.76		116	5707	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.719	2.718	0.001	1.000	438547	0.7250			12455	
* 62 13C2-PFOA										
415.00 > 370.00	2.742	2.741	0.001		3848661	2.50			67105	
D 14 13C4 PFOA										
417.00 > 372.00	2.742	2.742	0.0	1.000	3594086	2.52		101	74217	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.742	2.749	-0.007	1.000	1365810	0.8223			722	
413.00 > 169.00	2.742	2.749	-0.007	1.000	746829		1.83(0.84-2.52)		2813	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.765	2.749	0.016	1.000	20070	0.0127			49.1	
449.00 > 99.00	2.758	2.749	0.009	0.997	3756		5.34(1.94-5.82)		42.0	
D 18 13C4 PFOS										
503.00 > 80.00	3.115	3.106	0.009	1.000	2836755	2.28		95.6	12984	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.000	3.114	-0.114	0.963	289122	0.2239			642	
499.00 > 99.00	3.115	3.114	0.001	1.000	46789		6.18(2.31-6.93)		427	
D 19 13C5 PFNA										
468.00 > 423.00	3.115	3.114	0.001	1.000	2985462	2.43		97.3	93842	
20 Perfluorononanoic acid										
463.00 > 419.00	3.115	3.122	-0.007	1.000	42332	0.0340			78.1	
463.00 > 169.00	3.115	3.122	-0.007	1.000	10086		4.20(1.90-5.69)		200	
D 21 13C8 FOSA										
506.00 > 78.00	3.441	3.431	0.010	1.000	3401463	2.19		87.7	34587	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.441	3.441	0.0	1.000	5380	0.003909			119	
D 26 M2-8:2FTS										
529.00 > 81.00	3.468	3.459	0.009	1.000	971755	2.62		109	7769	
D 23 13C2 PFDA										
515.00 > 470.00	3.478	3.468	0.010	1.000	2599099	2.52		101	65830	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.459	3.469	-0.010	0.997	1429	0.002783			74.8	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.478	3.478	0.0	1.000	5080	0.004737			21.4	
513.00 > 169.00	3.468	3.478	-0.010	0.997	808		6.29(2.36-7.09)		21.7	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.634	3.624	0.010	1.000	1322724	2.26		90.5	19257	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.799	3.790	0.009	1.000	1397917	2.42		96.9	18423	
D 30 13C2 PFUnA										
565.00 > 520.00	3.799	3.800	-0.001	1.000	2033626	2.29		91.4	47920	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.799	3.811	-0.012	1.000	7991	0.0116			38.1	
563.00 > 169.00	3.809	3.811	-0.002	1.003	1721		4.64(2.12-6.36)		49.2	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.809	3.811	-0.002	1.003	4562	0.008730			74.5	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 36 13C2 PFDoA										
615.00 > 570.00	4.098	4.091	0.007	1.000	2088205	2.17		86.9	21010	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.088	4.102	-0.014	0.997	7710	0.008851			8.6	
613.00 > 169.00	4.098	4.102	-0.004	1.000	1891		4.08(2.13-6.40)		24.9	
41 Perfluorotridecanoic acid										R
663.00 > 619.00	4.360	4.362	-0.002	1.000	10180	0.0100			10.1	R
663.00 > 169.00	4.360	4.362	-0.002	1.000	2570		3.96(1.25-3.76)		40.3	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.601	4.595	0.006	1.000	2710247	2.22		89.0	18668	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.601	4.605	-0.004	1.000	1790	0.006574			26.9	
713.00 > 219.00	4.591	4.605	-0.014	0.998	2453		0.73(0.71-2.13)		46.3	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:44 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_006.d

Injection Date: 10-May-2018 20:22:55 Instrument ID: A8_N

Lims ID: 320-38611-A-4-A Lab Sample ID: 320-38611-4

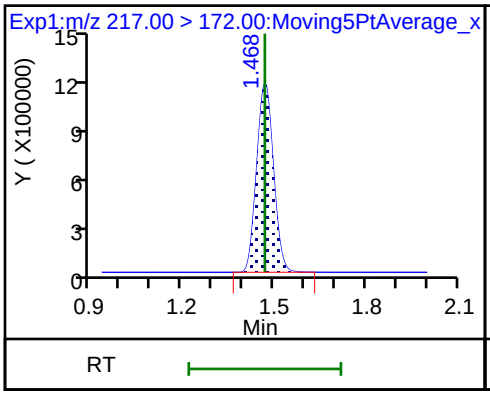
Client ID: GC-MW-1B(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 23 Worklist Smp#: 8

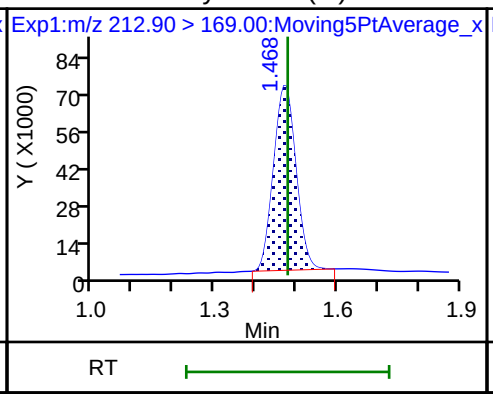
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

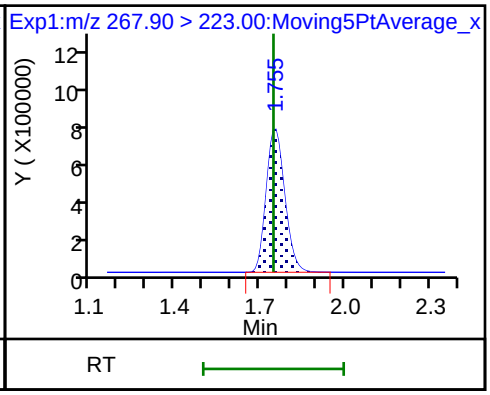
D 1 13C4 PFBA



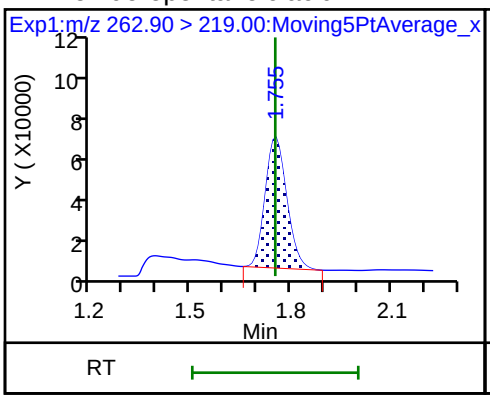
2 Perfluorobutyric acid (M)



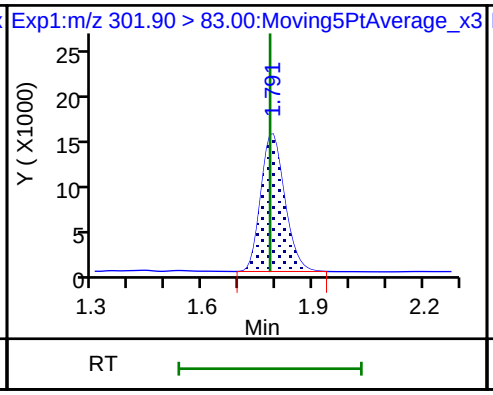
D 3 13C5-PFPeA



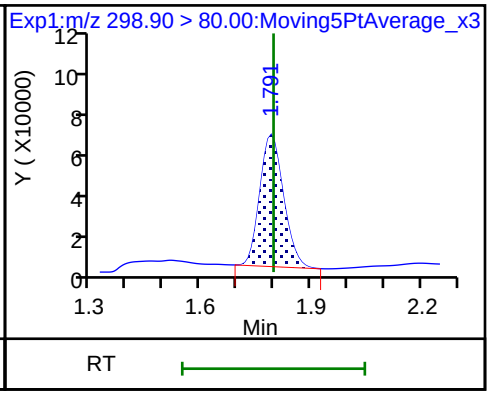
4 Perfluoropentanoic acid



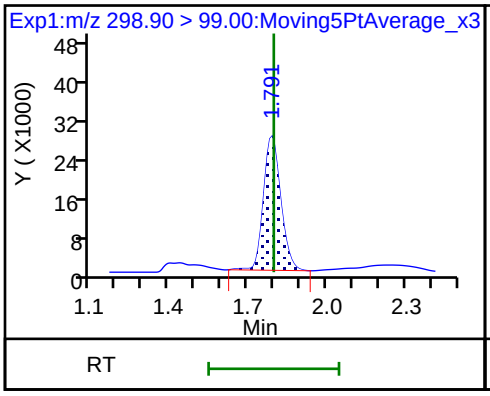
D 47 13C3-PFBS



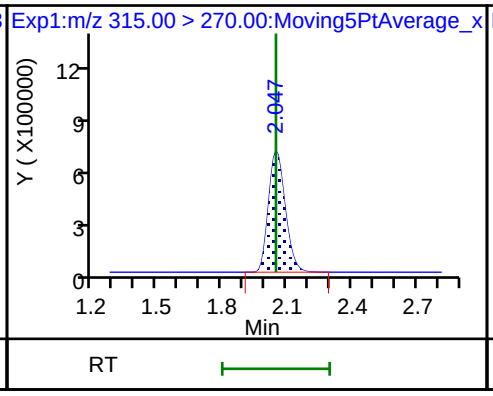
5 Perfluorobutanesulfonic acid



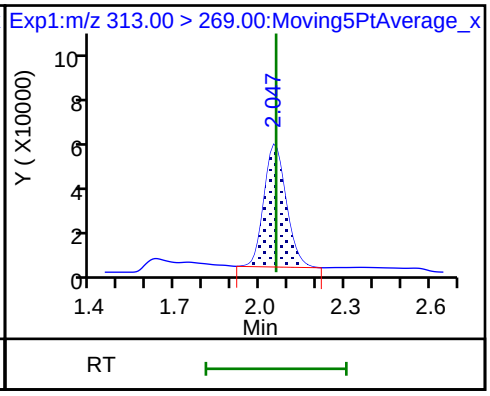
5 Perfluorobutanesulfonic acid



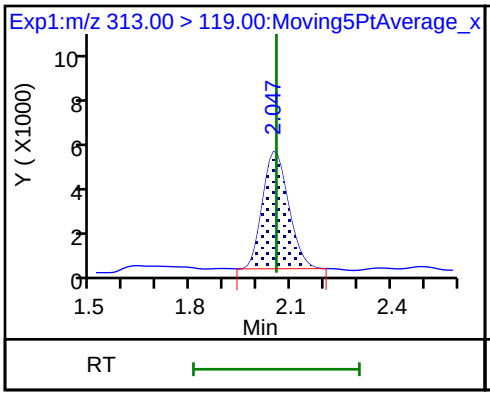
D 7 13C2 PFHxA



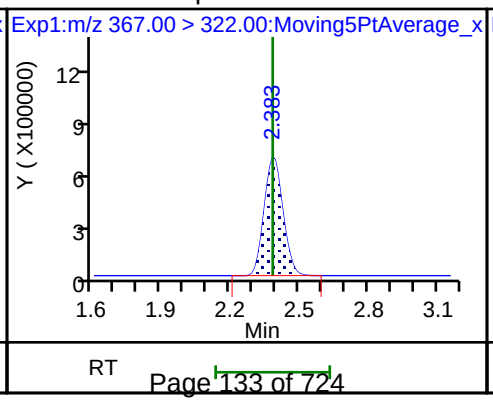
6 Perfluorohexanoic acid



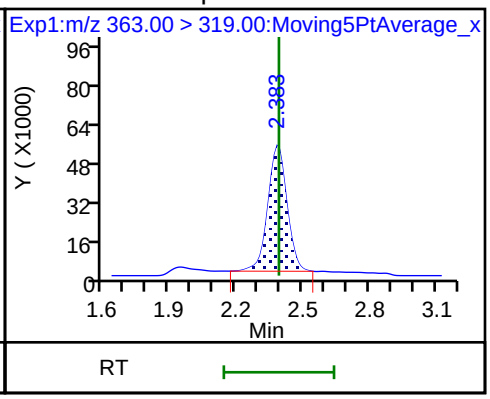
6 Perfluorohexanoic acid



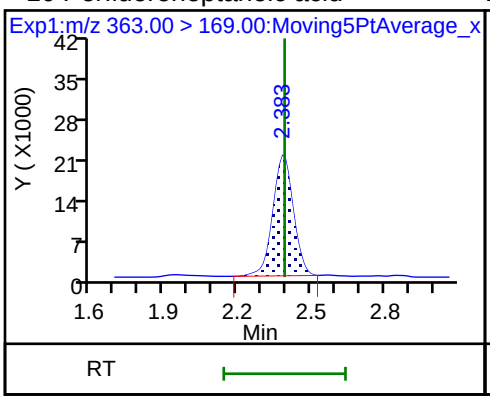
D 9 13C4-PFHpA



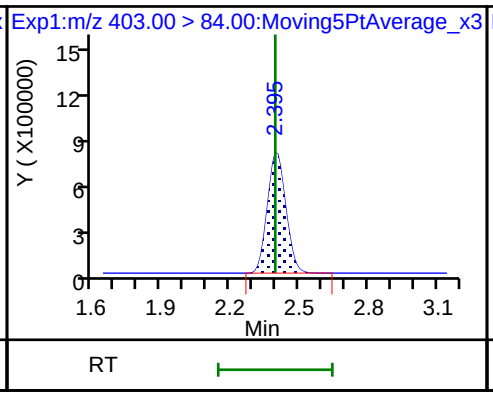
10 Perfluoroheptanoic acid



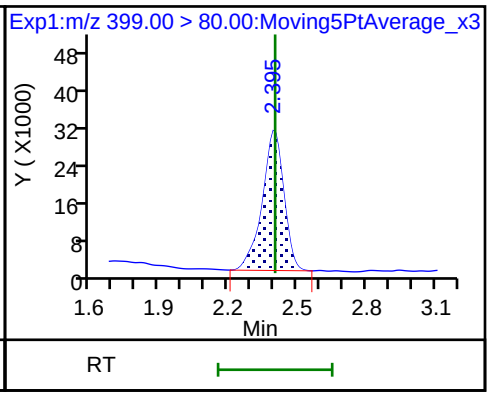
10 Perfluoroheptanoic acid



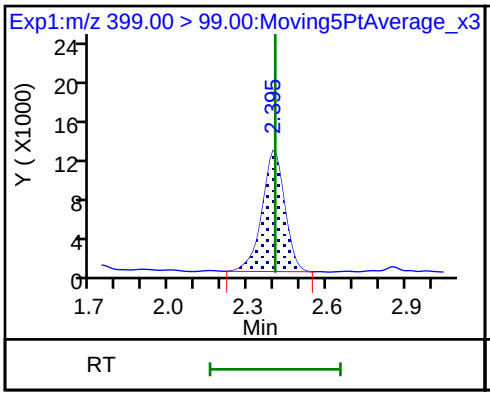
D 11 18O2 PFHxS



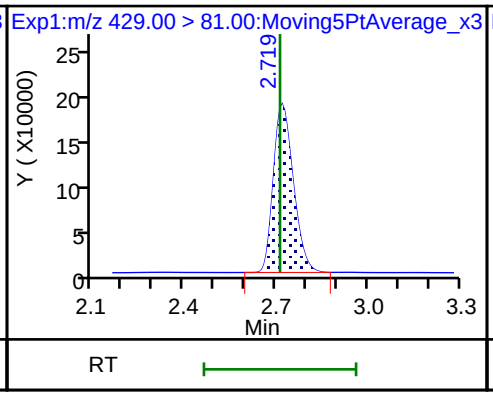
8 Perfluorohexanesulfonic acid



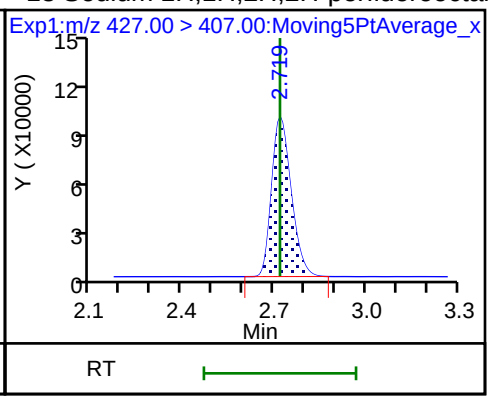
8 Perfluorohexanesulfonic acid



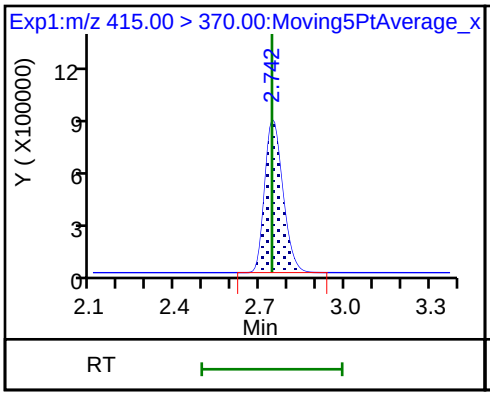
D 12 M2-6:2FTS



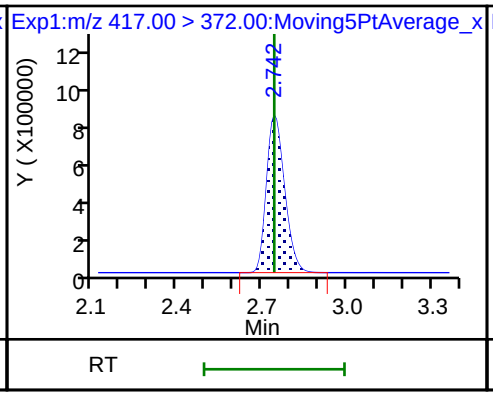
13 Sodium 1H,1H,2H,2H-perfluorooctane



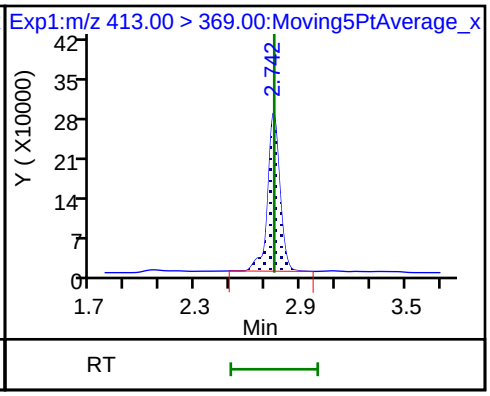
* 62 13C2-PFOA



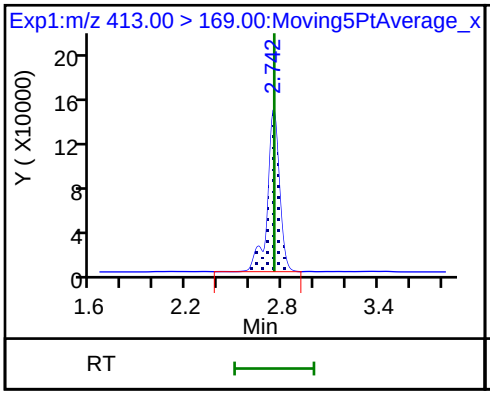
D 14 13C4 PFOA



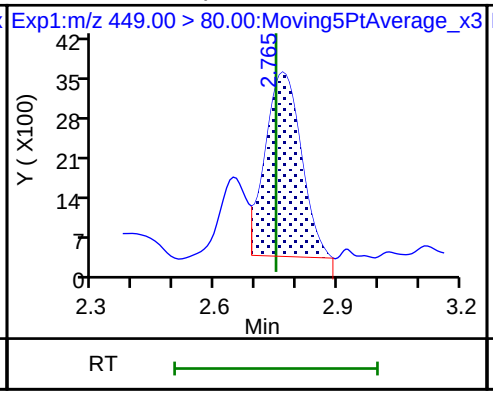
15 Perfluorooctanoic acid



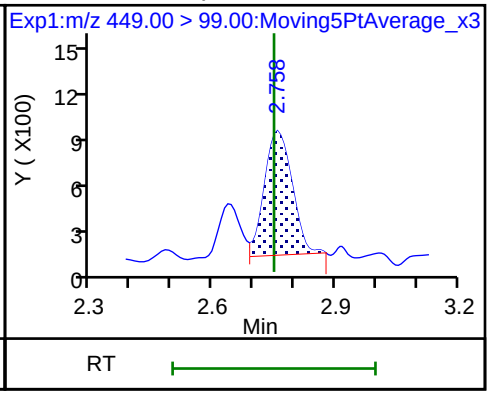
15 Perfluorooctanoic acid



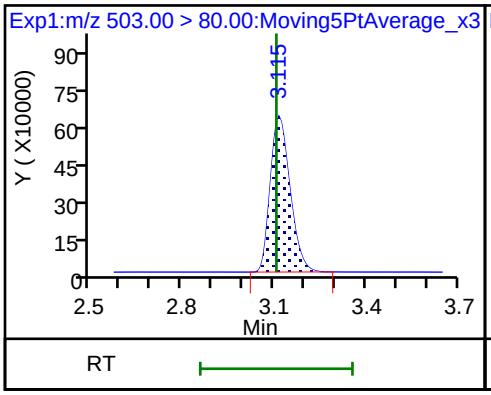
16 Perfluoroheptanesulfonic acid



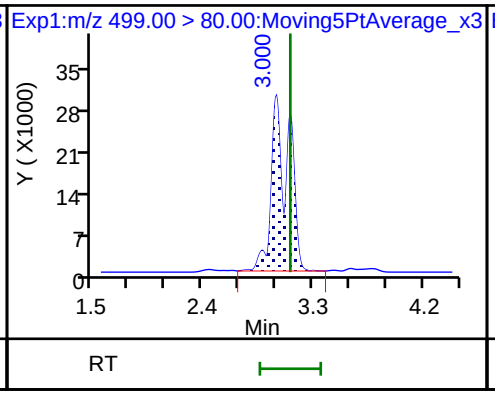
16 Perfluoroheptanesulfonic acid



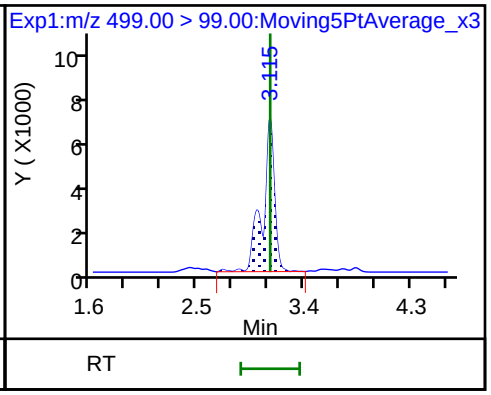
D 18 13C4 PFOS



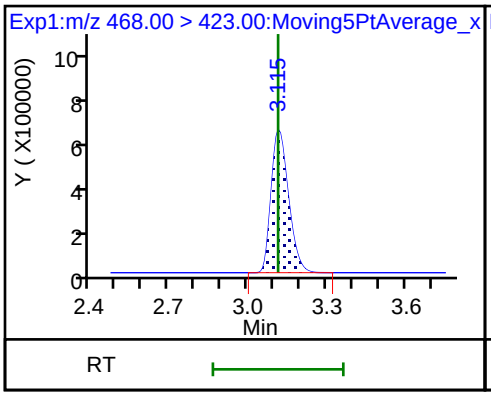
17 Perfluorooctane sulfonic acid



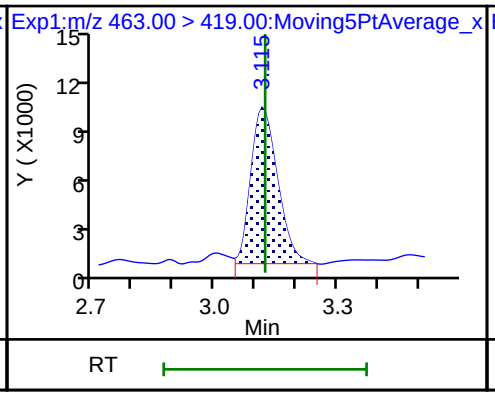
17 Perfluorooctane sulfonic acid



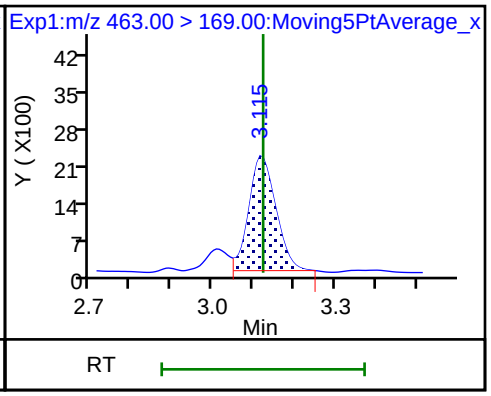
D 19 13C5 PFNA



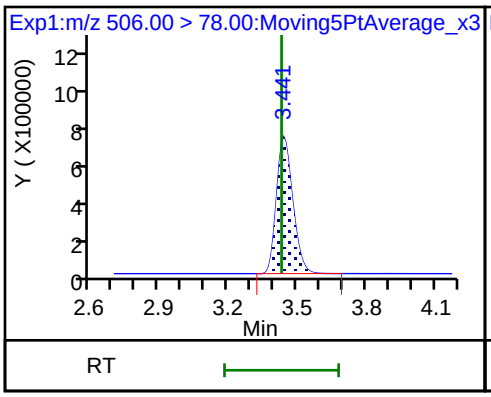
20 Perfluorononanoic acid



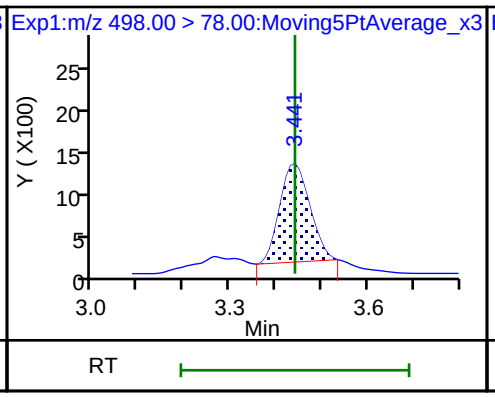
20 Perfluorononanoic acid



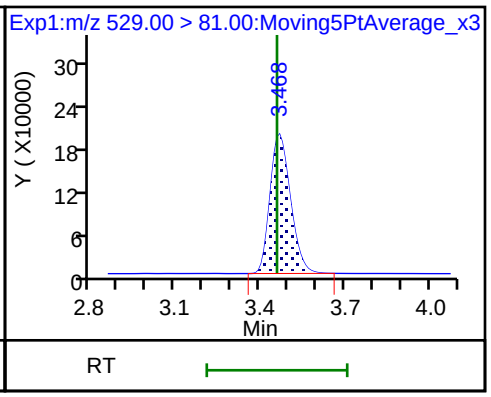
D 21 13C8 FOSA



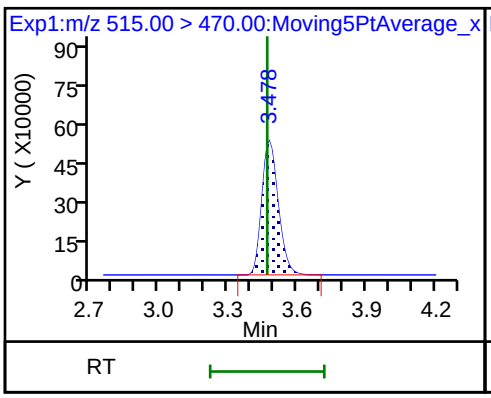
22 Perfluorooctane Sulfonamide



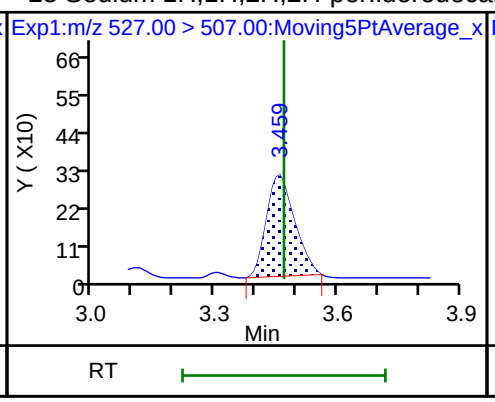
D 26 M2-8:2FTS



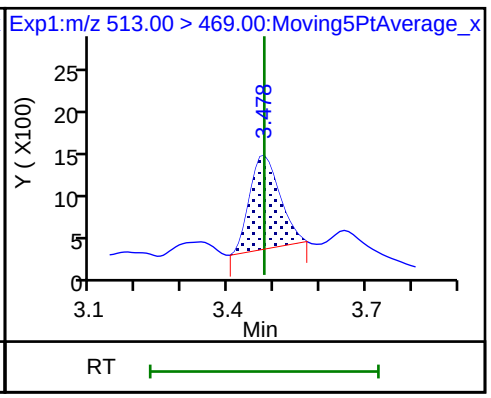
D 23 13C2 PFDA



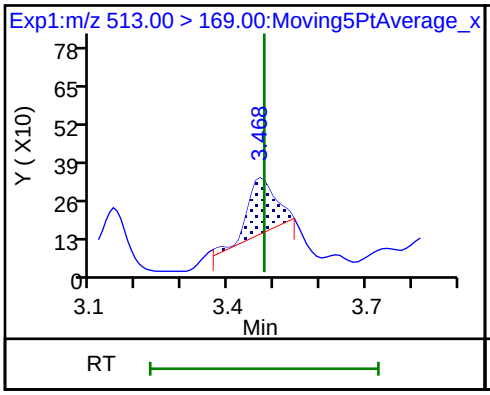
25 Sodium 1H,1H,2H,2H-perfluorodecan



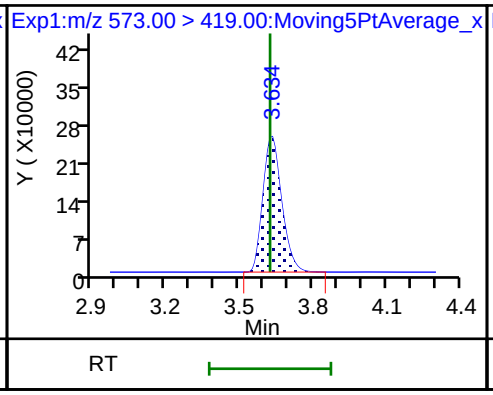
24 Perfluorodecanoic acid



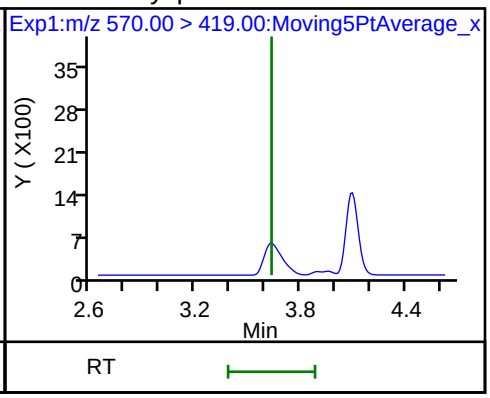
24 Perfluorodecanoic acid



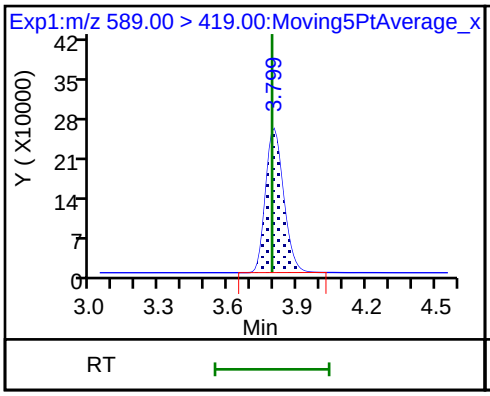
D 27 d3-NMeFOSAA



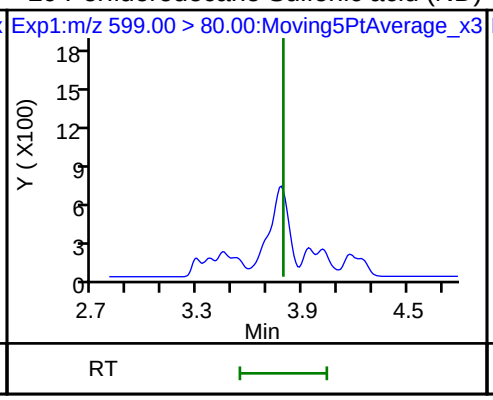
28 N-methyl perfluorooctane sulfonami (ND)



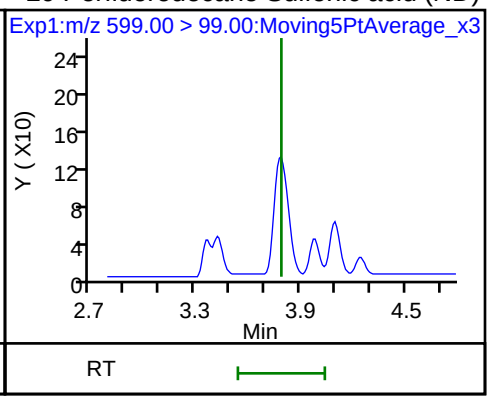
D 32 d5-NEtFOSAA



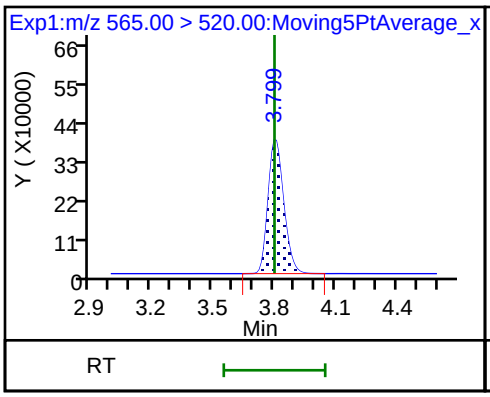
29 Perfluorodecane Sulfonic acid (ND)



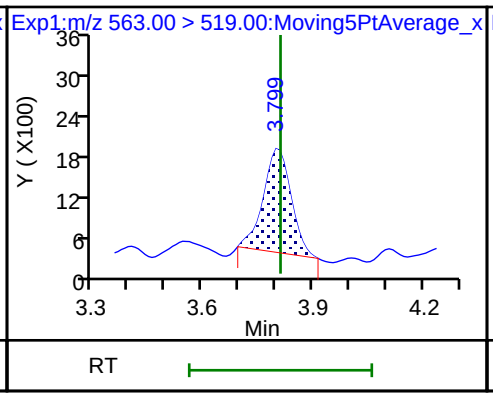
29 Perfluorodecane Sulfonic acid (ND)



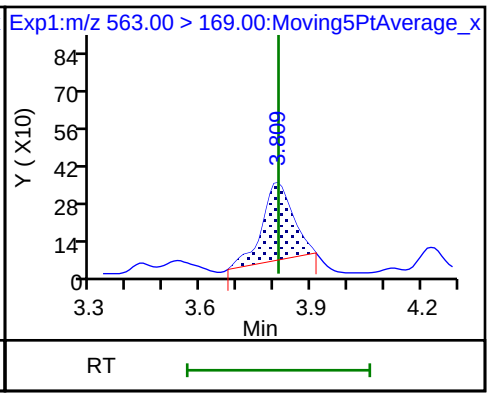
D 30 13C2 PFUnA



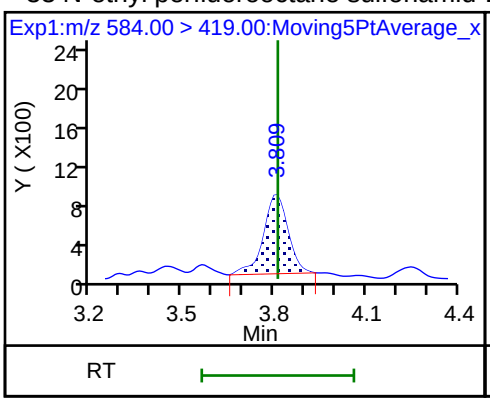
31 Perfluoroundecanoic acid



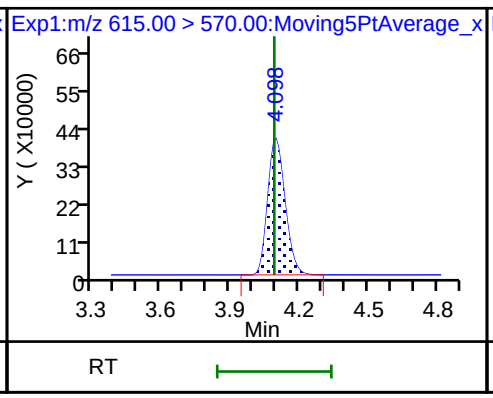
31 Perfluoroundecanoic acid



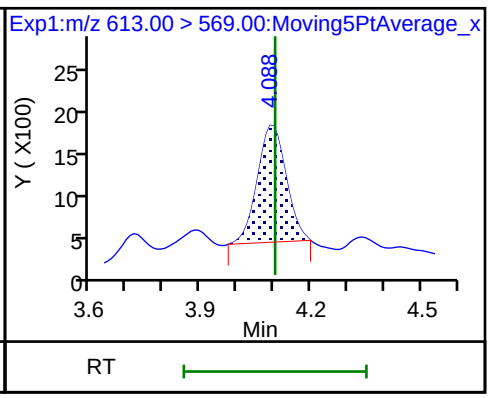
33 N-ethyl perfluorooctane sulfonamid



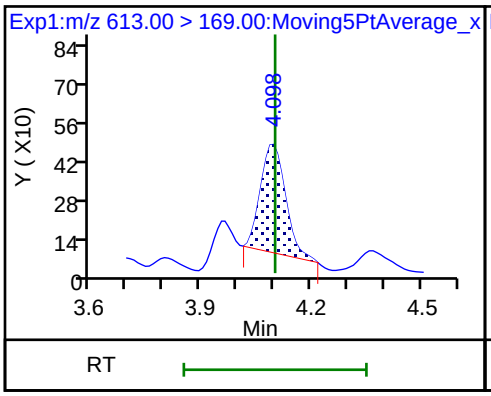
D 36 13C2 PFDoA



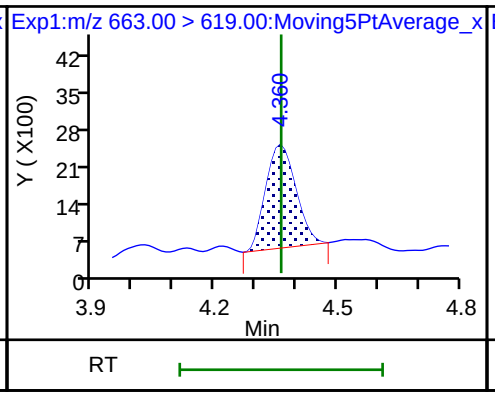
37 Perfluorododecanoic acid



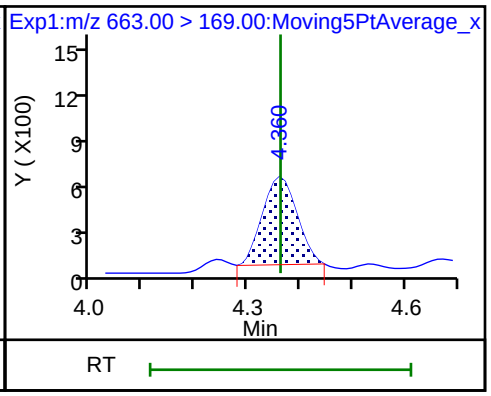
37 Perfluorododecanoic acid



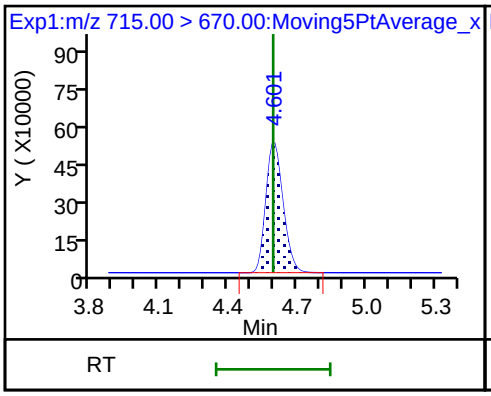
41 Perfluorotridecanoic acid



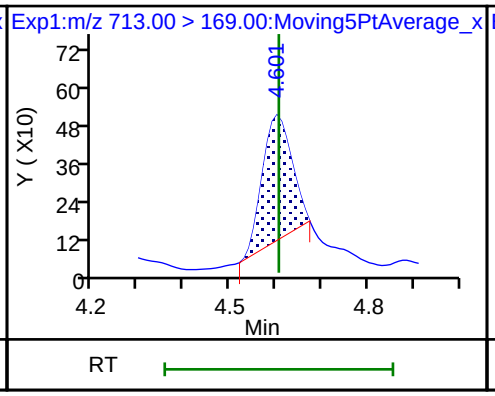
41 Perfluorotridecanoic acid



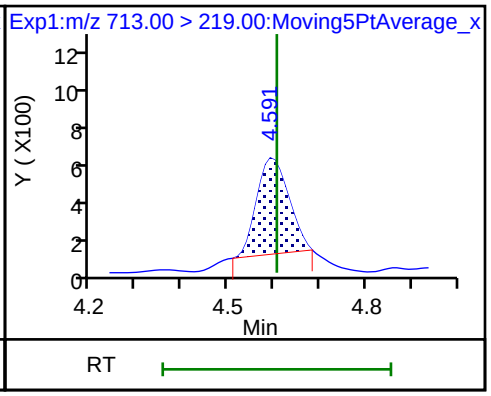
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

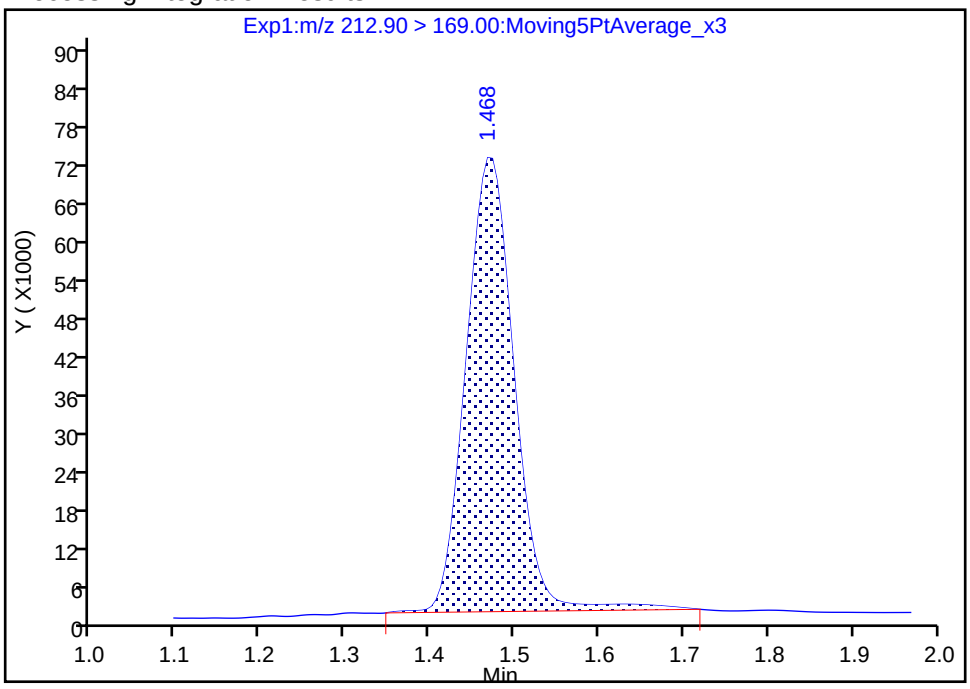
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_006.d				
Injection Date:	10-May-2018 20:22:55	Instrument ID:	A8_N		
Lims ID:	320-38611-A-4-A	Lab Sample ID:	320-38611-4		
Client ID:	GC-MW-1B(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	23	Worklist Smp#:	8
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

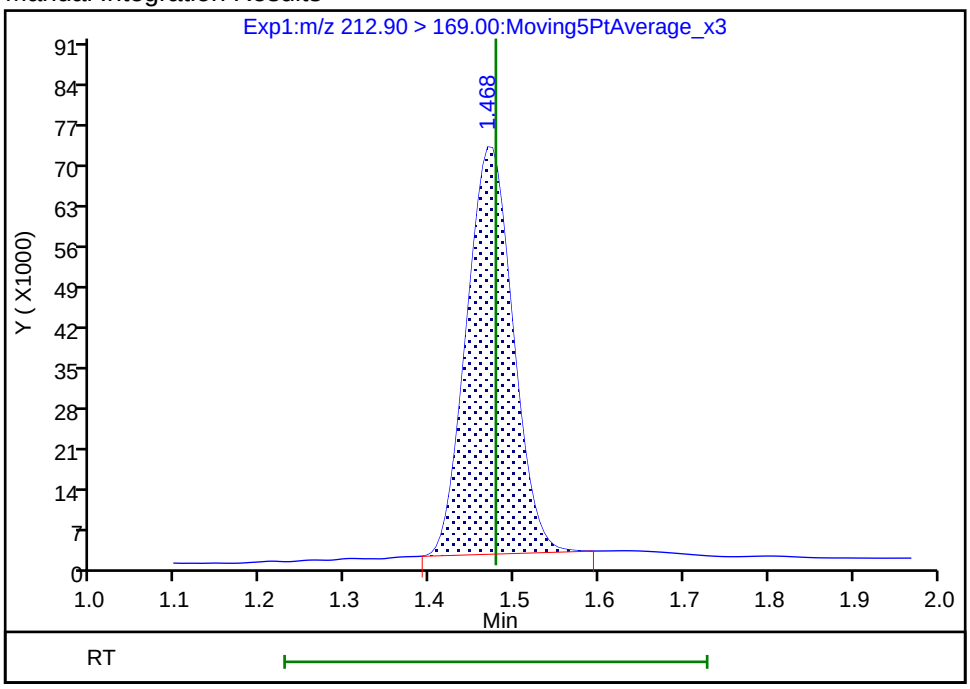
Processing Integration Results

RT: 1.47
Area: 282329
Amount: 0.171085
Amount Units: ng/ml



Manual Integration Results

RT: 1.47
Area: 269372
Amount: 0.163233
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:15:46

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) RE | Lab Sample ID: 320-38611-4 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_024.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 12:35

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 280.3(mL) | Date Analyzed: 05/17/2018 02:01

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*21*	*H*	*1.8*	*0.76*
27619-97-2	*6:2FTS*	*ND*	*H*	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	104		25-150
STL02279	M2-6:2FTS	104		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_024.d
Lims ID: 320-38611-B-4-B
Client ID: GC-MW-1B(WG)
Sample Type: Client
Inject. Date: 17-May-2018 02:01:47 ALS Bottle#: 15 Worklist Smp#: 16
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-4-b
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 14:00:48 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 14:00:48

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.457	1.447	0.010	1.000	5782032	1.98		79.3	36076	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.457	1.457	0.0	1.000	330461	0.1537			139	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.728	1.712	0.016	0.566	4237396	2.27		90.7	40062	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.728	1.729	-0.001	1.000	322320	0.1611			99.4	
D 47 13C3-PFBS										
301.90 > 83.00	1.764	1.748	0.016	1.000	89044	2.11		90.7	345	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.764	1.765	-0.001	1.000	375443	0.1255			215	
298.90 > 99.00	1.764	1.765	-0.001	1.000	158287		2.37(1.25-3.74)		282	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	1.994	0.020	1.000	4699418	2.36		94.3	88096	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.014	0.0	1.000	357774	0.1851			216	
313.00 > 119.00	2.002	2.014	-0.012	0.994	32972		10.85(5.03-15.10)		313	
D 9 13C4-PFHpA										
367.00 > 322.00	2.332	2.321	0.011	1.000	4776365	2.50		100	94883	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.332	2.332	0.0	1.000	391117	0.1938			304	
363.00 > 169.00	2.332	2.332	0.0	1.000	139121		2.81(1.13-3.40)		683	
D 11 18O2 PFHxS										
403.00 > 84.00	2.345	2.334	0.011	1.000	5573822	2.36		99.9	81214	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.345	2.345	0.0	1.000	235050	0.0885			266	
399.00 > 99.00	2.345	2.345	0.0	1.000	76767		3.06(1.50-4.49)		204	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.667	2.645	0.022	1.000	1043916	2.48		104	7813	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.659	2.667	-0.008	0.997	12416	0.005858			146	
D 14 13C4 PFOA										
417.00 > 372.00	2.689	2.668	0.021	1.000	4693152	2.60		104	75532	
* 62 13C2-PFOA										
415.00 > 370.00	2.689	2.689	0.0		4767790	2.50			67339	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.689	2.689	0.0	1.000	1299041	0.5879			549	
413.00 > 169.00	2.689	2.689	0.0	1.000	744897		1.74(0.84-2.52)		2191	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.704	2.697	0.007	1.000	25378	0.0124			97.0	
449.00 > 99.00	2.697	2.697	0.0	0.997	5771		4.40(1.94-5.82)		37.1	M
D 18 13C4 PFOS										
503.00 > 80.00	3.048	3.029	0.019	1.000	3666324	2.26		94.6	29631	
D 19 13C5 PFNA										
468.00 > 423.00	3.055	3.036	0.019	1.000	3919688	2.65		106	70433	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.931	3.051	-0.120	0.961	339577	0.1883			1215	
499.00 > 99.00	3.048	3.051	-0.003	1.000	57159		5.94(2.31-6.93)		336	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.055	3.051	0.004	1.000	41521	0.0250			67.0	M
463.00 > 169.00	3.062	3.051	0.011	1.002	10505		3.95(1.90-5.69)		136	M
D 26 M2-8:2FTS										
529.00 > 81.00	3.402	3.376	0.026	1.000	1103105	2.30		96.0	14164	
D 21 13C8 FOSA										
506.00 > 78.00	3.393	3.376	0.017	1.000	4272724	2.01		80.5	38137	
D 23 13C2 PFDA										
515.00 > 470.00	3.411	3.385	0.026	1.000	3013729	2.40		96.0	42421	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.393	3.388	0.005	1.000	2901	0.001743			51.8	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.560	3.544	0.016	1.000	1486261	2.14		85.8	28067	
D 30 13C2 PFUnA										
565.00 > 520.00	3.732	3.716	0.016	1.000	2188729	2.20		88.0	44067	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.732	3.716	0.016	1.000	1559737	2.19		87.7	17666	
D 36 13C2 PFDoA										
615.00 > 570.00	4.030	4.006	0.024	1.000	2300814	2.15		86.0	21455	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.532	4.511	0.021	1.000	2981795	2.27		90.8	15534	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 14:00:48 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_024.d

Injection Date: 17-May-2018 02:01:47 Instrument ID: A8_N

Lims ID: 320-38611-B-4-B Lab Sample ID: 320-38611-4

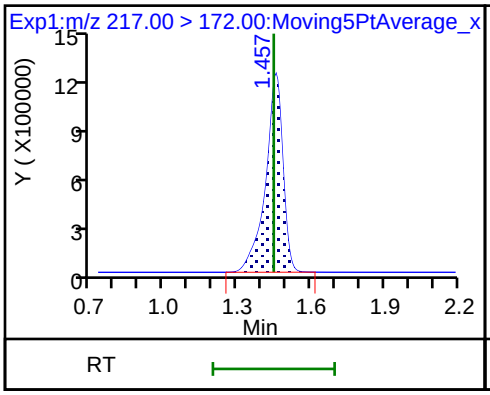
Client ID: GC-MW-1B(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 15 Worklist Smp#: 16

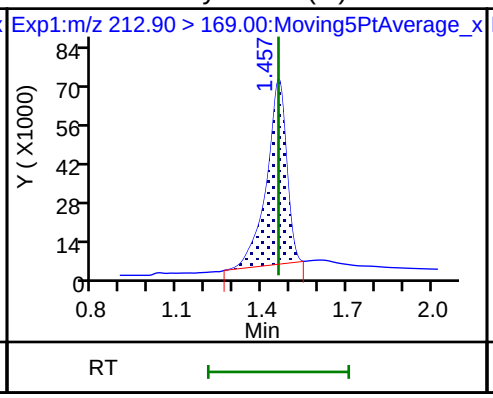
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

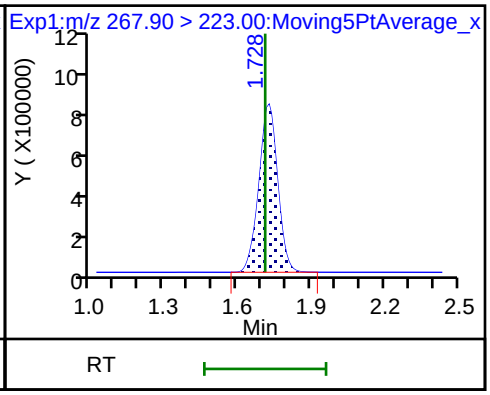
D 1 13C4 PFBA



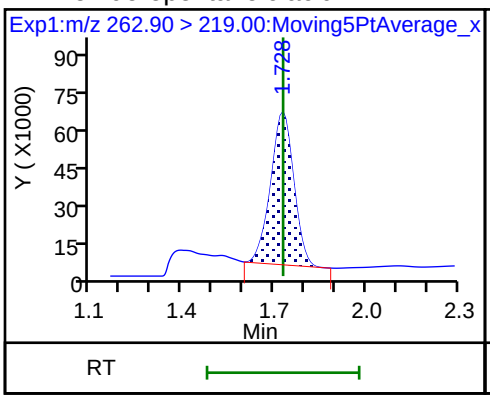
2 Perfluorobutyric acid (M)



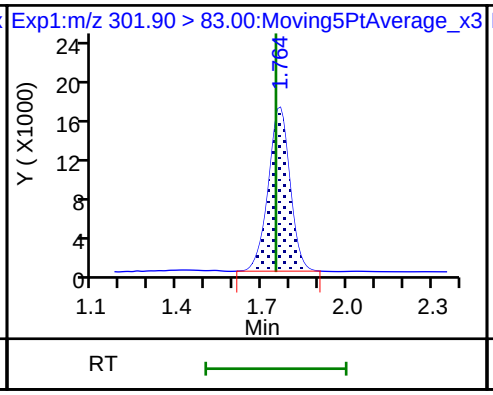
D 3 13C5-PFPeA



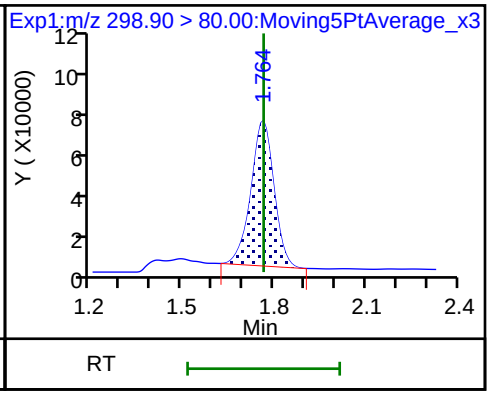
4 Perfluoropentanoic acid



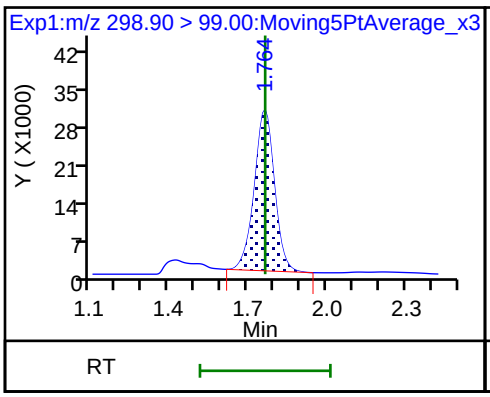
D 47 13C3-PFBS



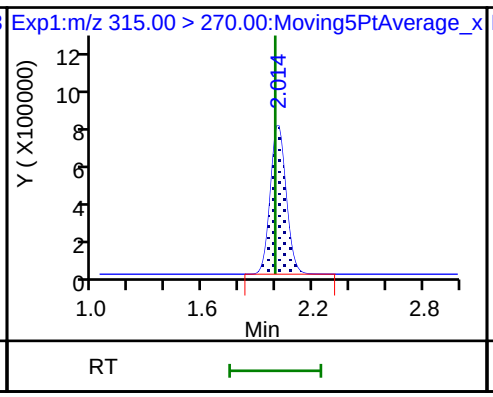
5 Perfluorobutanesulfonic acid



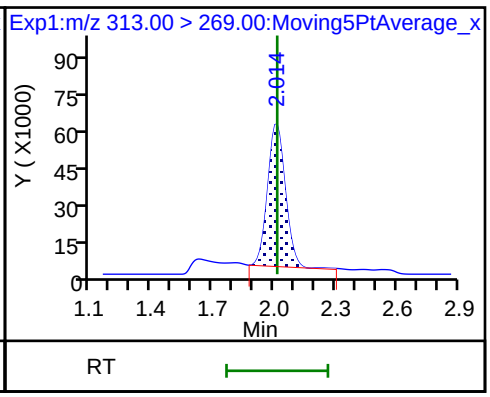
5 Perfluorobutanesulfonic acid



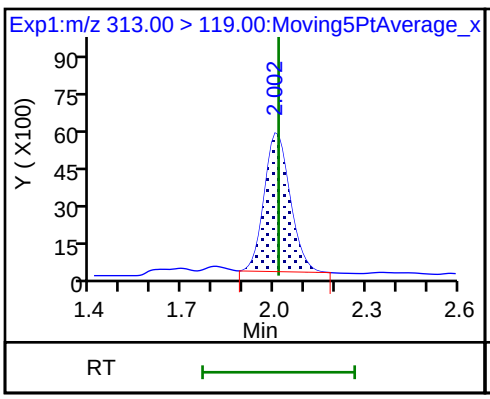
D 7 13C2 PFHxA



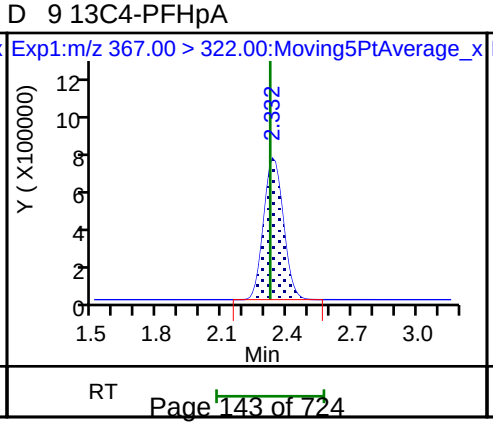
6 Perfluorohexanoic acid



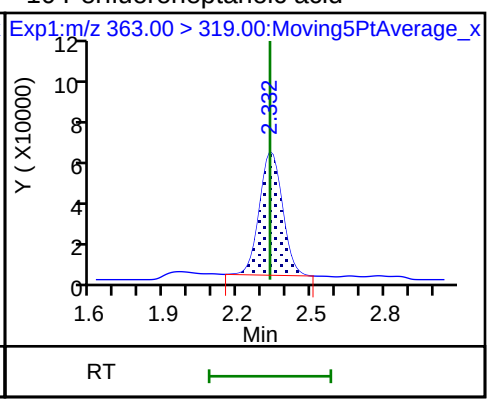
6 Perfluorohexanoic acid



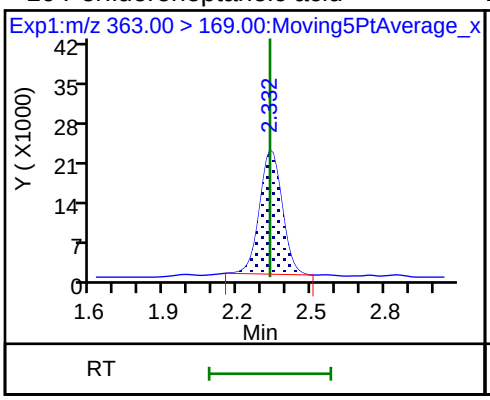
D 9 13C4-PFHpA



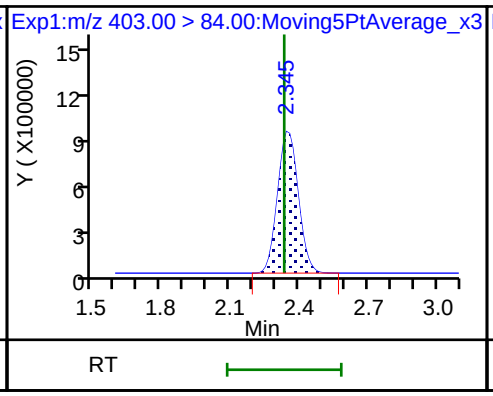
10 Perfluoroheptanoic acid



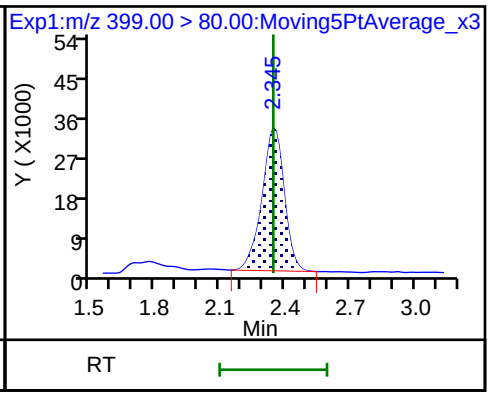
10 Perfluoroheptanoic acid



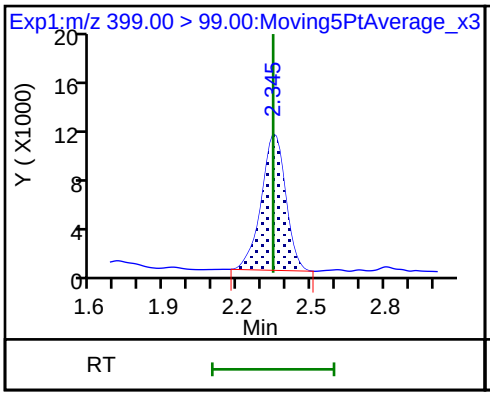
D 11 18O2 PFHxS



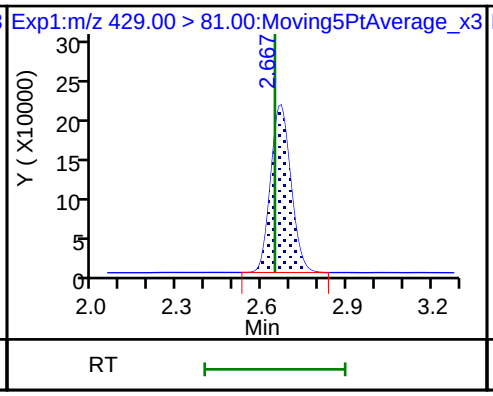
8 Perfluorohexanesulfonic acid



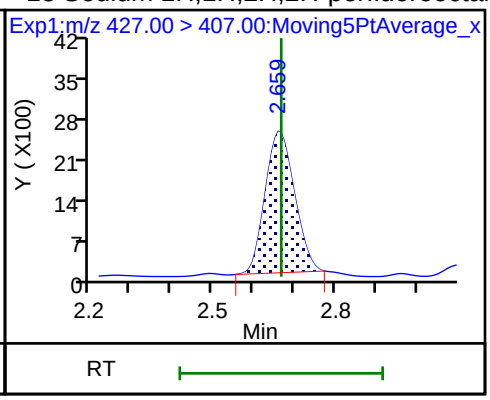
8 Perfluorohexanesulfonic acid



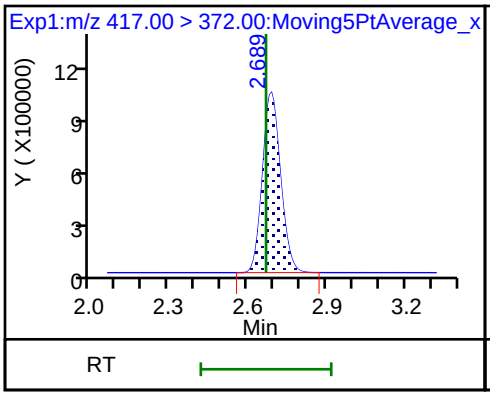
D 12 M2-6:2FTS



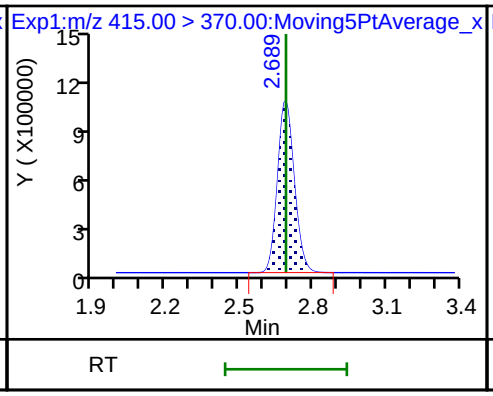
13 Sodium 1H,1H,2H,2H-perfluorooctane



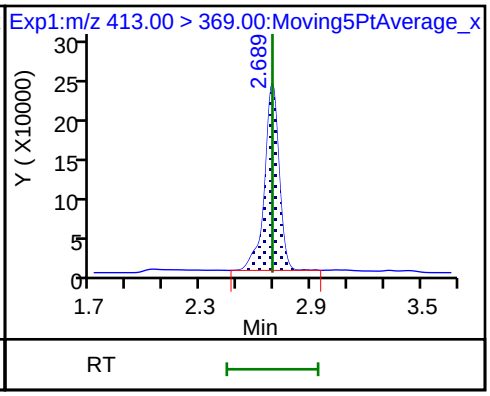
D 14 13C4 PFOA



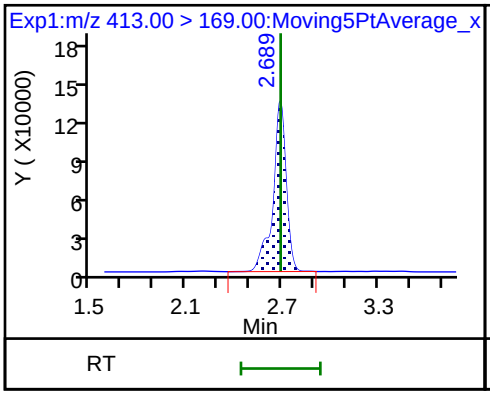
* 62 13C2-PFOA



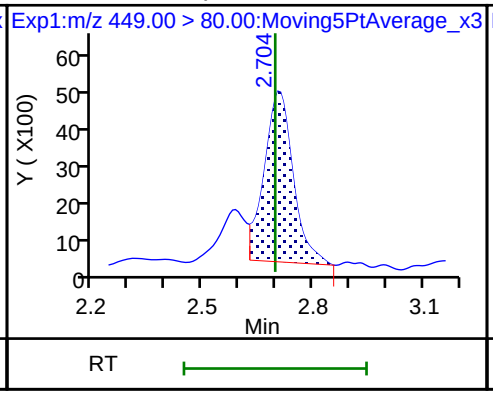
15 Perfluorooctanoic acid



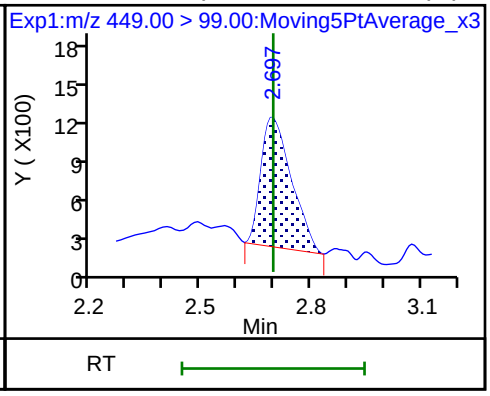
15 Perfluorooctanoic acid



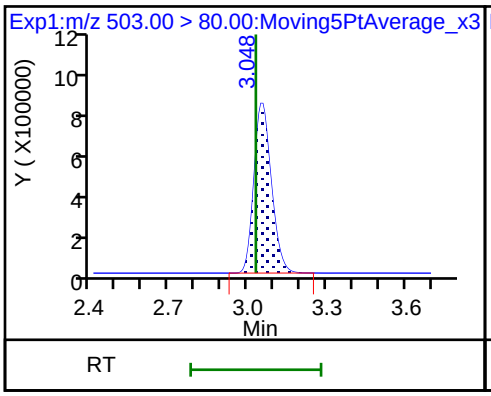
16 Perfluoroheptanesulfonic acid



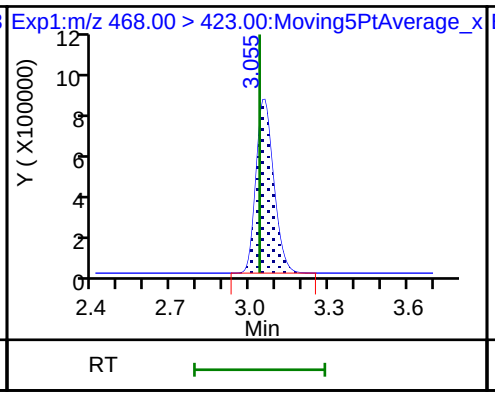
16 Perfluoroheptanesulfonic acid (M)



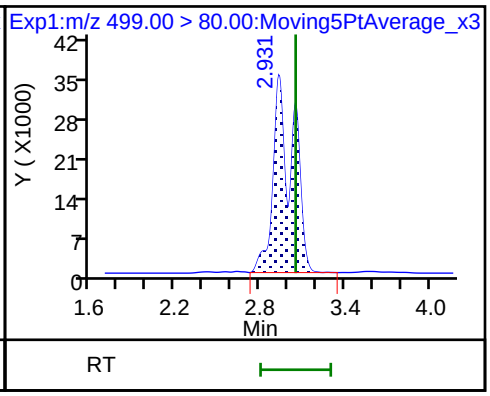
D 18 13C4 PFOS



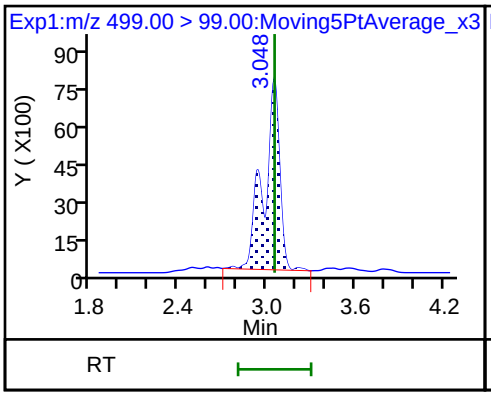
D 19 13C5 PFNA



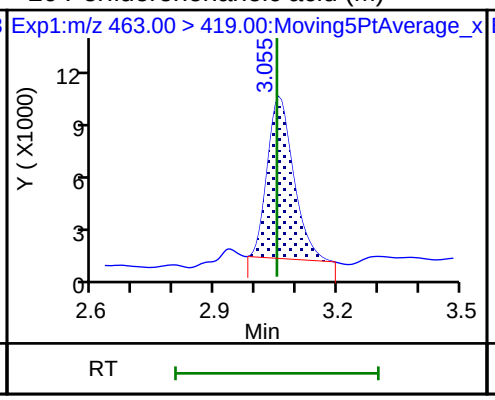
17 Perfluorooctane sulfonic acid



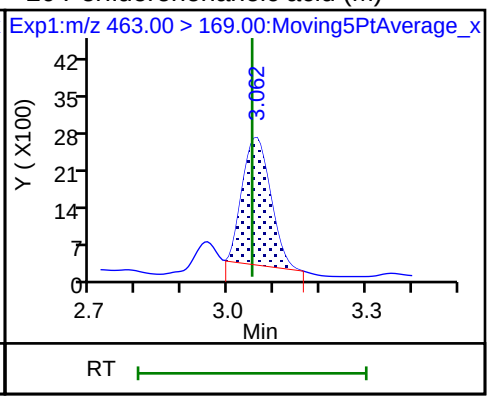
17 Perfluorooctane sulfonic acid



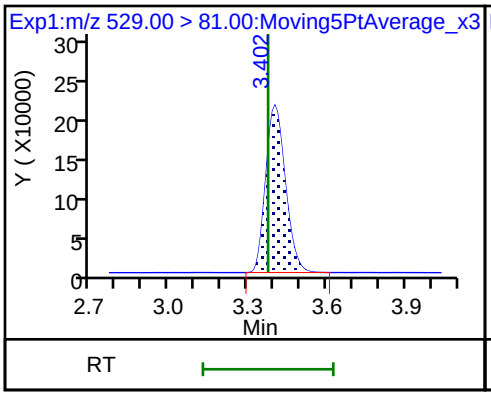
20 Perfluorononanoic acid (M)



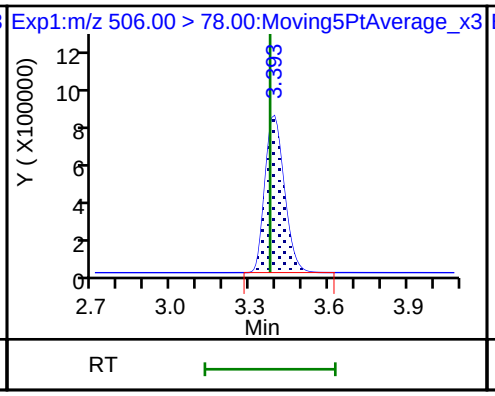
20 Perfluorononanoic acid (M)



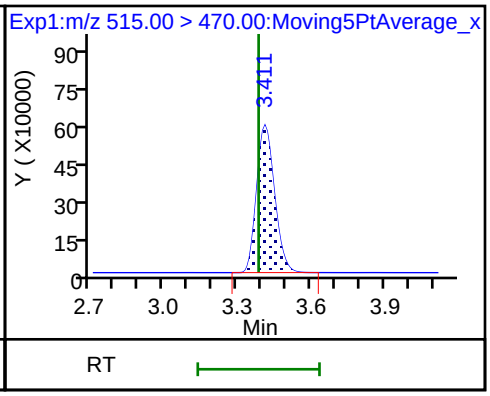
D 26 M2-8:2FTS



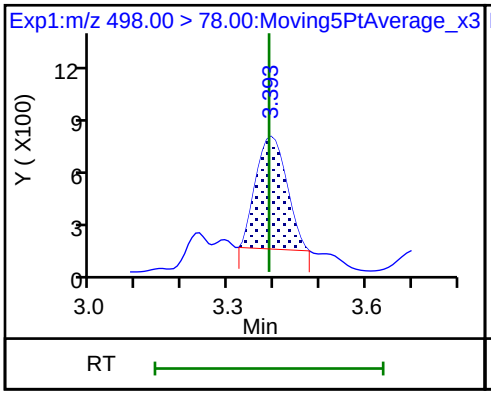
D 21 13C8 FOSA



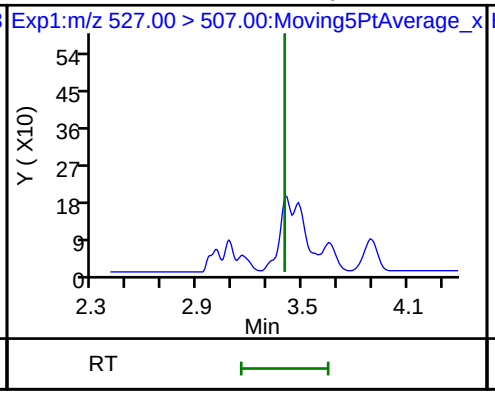
D 23 13C2 PFDA



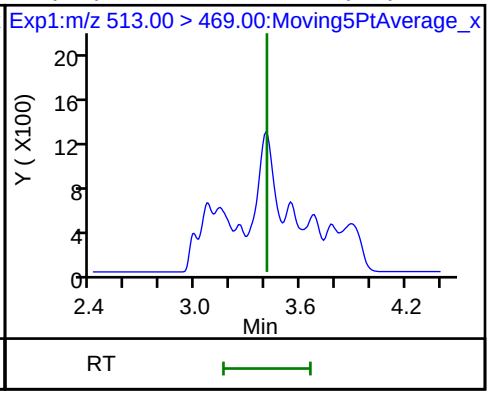
22 Perfluorooctane Sulfonamide



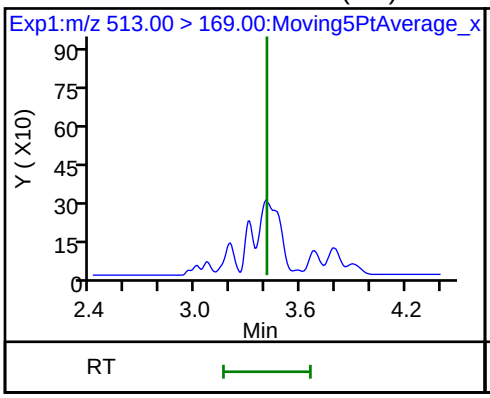
25 Sodium 1H,1H,2H,2H-perfluorodecane 2 (MD)



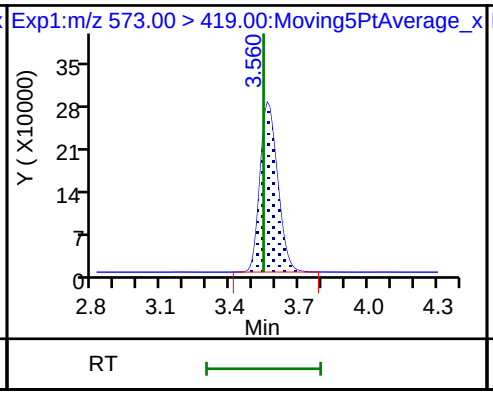
24 Perfluorodecanoic acid (ND)



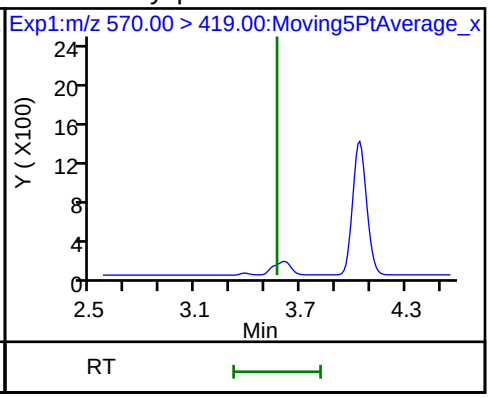
24 Perfluorodecanoic acid (ND)



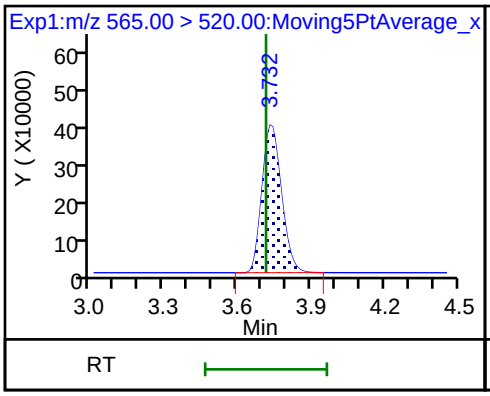
D 27 d3-NMeFOSAA



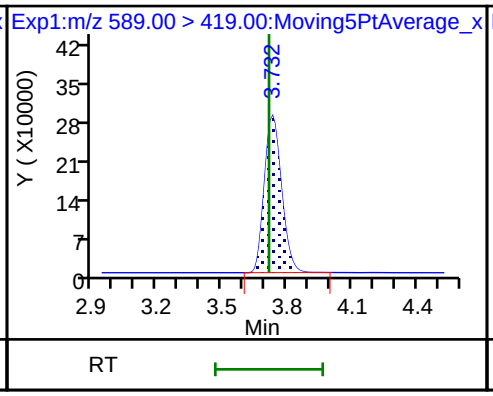
28 N-methyl perfluorooctane sulfonami (ND)



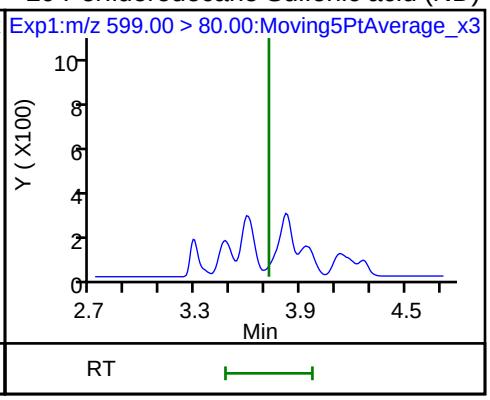
D 30 13C2 PFUnA



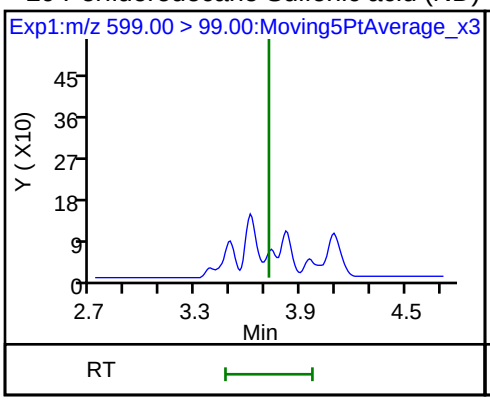
D 32 d5-NEtFOSAA



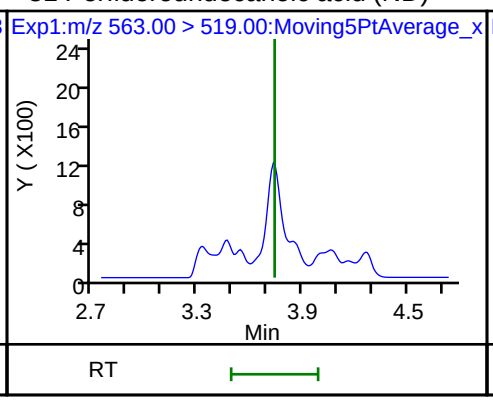
29 Perfluorodecane Sulfonic acid (ND)



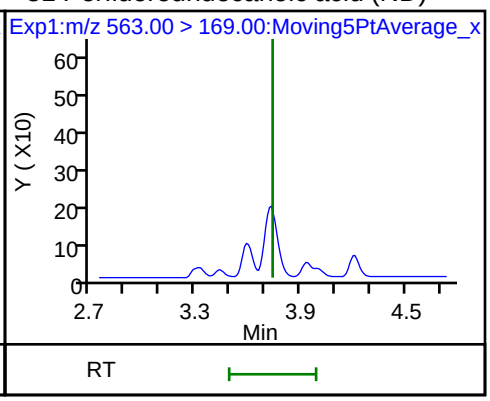
29 Perfluorodecane Sulfonic acid (ND)



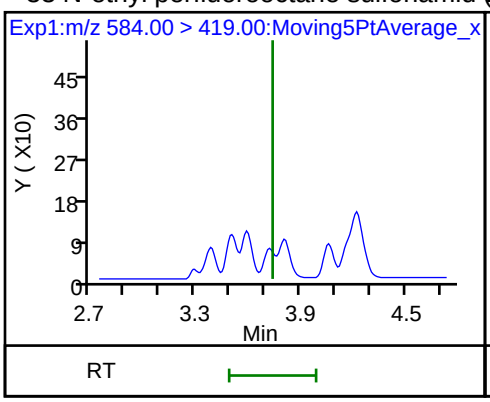
31 Perfluoroundecanoic acid (ND)



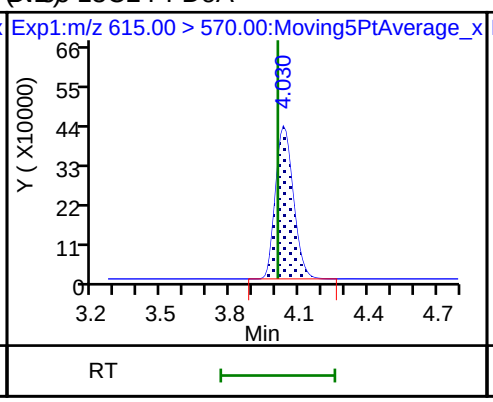
31 Perfluoroundecanoic acid (ND)



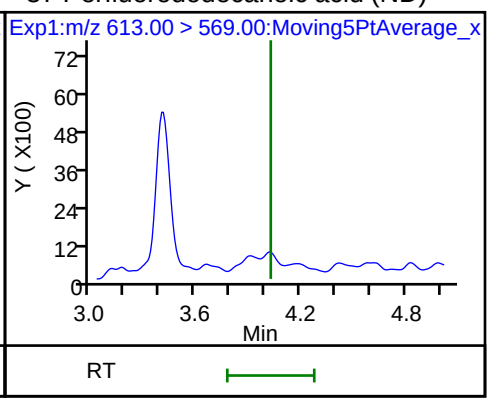
33 N-ethyl perfluorooctane sulfonamid (ND)



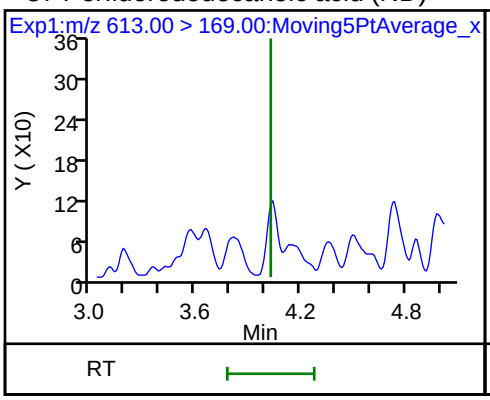
D 36 13C2 PFDoA



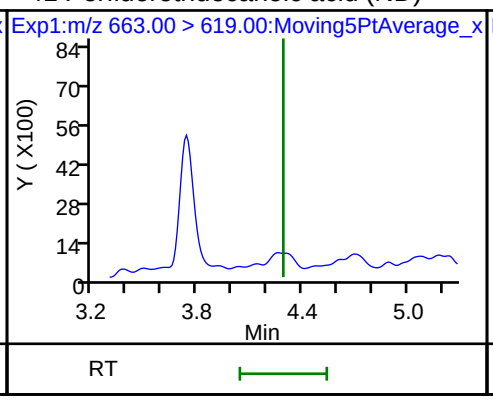
37 Perfluorododecanoic acid (ND)



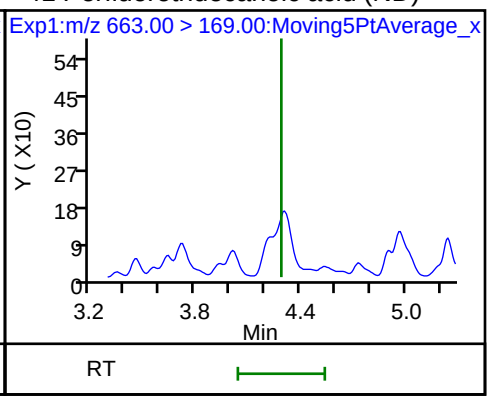
37 Perfluorododecanoic acid (ND)



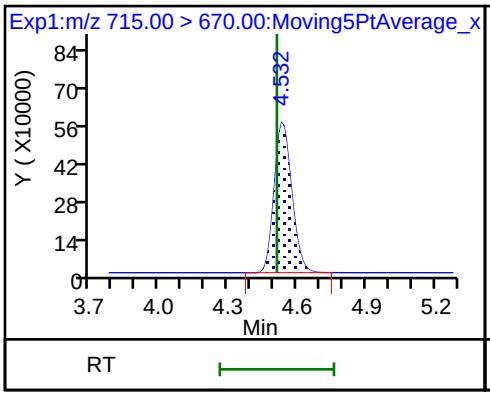
41 Perfluorotridecanoic acid (ND)



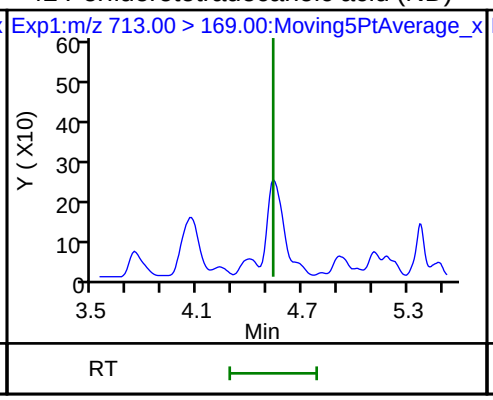
41 Perfluorotridecanoic acid (ND)



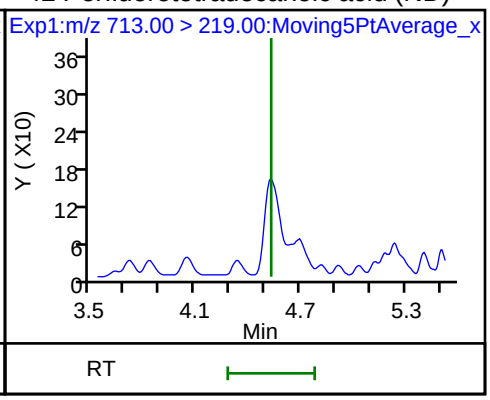
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 320-38611-5

Matrix: Water | Lab File ID: 2018.05.10LLB_007.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:10

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 279.8(mL) | Date Analyzed: 05/10/2018 20:30

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	4.0	B	1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	10		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	8.2		1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	6.6		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	23	B	1.8	0.76
375-95-1	Perfluorononanoic acid (PFNA)	1.8		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	1.6	J	1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	30		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.3	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.29	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	18		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2FTS	25	B *	18	1.8
39108-34-4	8:2FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 320-38611-5

Matrix: Water | Lab File ID: 2018.05.10LLB_007.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:10

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 279.8(mL) | Date Analyzed: 05/10/2018 20:30

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	67		25-150
STL01893	13C5 PFPeA	90		25-150
STL00993	13C2 PFHxA	95		25-150
STL01892	13C4-PFHpA	106		25-150
STL00990	13C4 PFOA	102		25-150
STL00995	13C5 PFNA	99		25-150
STL00996	13C2 PFDA	101		25-150
STL00997	13C2 PFUnA	90		25-150
STL00998	13C2 PFDoA	83		25-150
STL02116	13C2-PFTeDA	75		25-150
STL02337	13C3-PFBS	98		25-150
STL00994	18O2 PFHxS	105		25-150
STL00991	13C4 PFOS	97		25-150
STL01056	13C8 FOSA	92		25-150
STL02118	d3-NMeFOSAA	91		25-150
STL02117	d5-NEtFOSAA	102		25-150
STL02279	M2-6:2FTS	179	*	25-150
STL02280	M2-8:2FTS	134		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_007.d
Lims ID: 320-38611-A-5-A
Client ID: GC-MW-103(WG)
Sample Type: Client
Inject. Date: 10-May-2018 20:30:44 ALS Bottle#: 24 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-5-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:18:24

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.480	1.469	0.011	1.000	3528301	1.68		67.4	33195	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.480	1.478	0.002	1.000	146338	0.1117			21.1	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.765	1.747	0.018	0.565	3038612	2.25		90.1	10964	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.765	1.753	0.012	1.000	421502	0.2910			37.0	M
D 47 13C3-PFBS										
301.90 > 83.00	1.801	1.783	0.018	1.000	70484	2.28		97.9	141	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.801	1.798	0.003	1.000	2023498	0.8526			307	
298.90 > 99.00	1.801	1.798	0.003	1.000	845286		2.39(1.25-3.74)		648	
D 7 13C2 PFHxA										
315.00 > 270.00	2.059	2.048	0.011	1.000	3526637	2.36		94.5	51697	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.059	2.056	0.003	1.000	327022	0.2281			52.6	M
313.00 > 119.00	2.059	2.056	0.003	1.000	30670		10.66(5.03-15.10)		157	
D 9 13C4-PFHpA										
367.00 > 322.00	2.395	2.384	0.011	1.000	3857551	2.66		106	69829	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.395	2.392	0.003	1.000	284629	0.1843			85.5	
363.00 > 169.00	2.395	2.392	0.003	1.000	122101		2.33(1.13-3.40)		646	
D 11 18O2 PFHxS										
403.00 > 84.00	2.406	2.395	0.011	1.000	4450089	2.48		105	54862	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.406	2.403	0.003	1.000	138318	0.0650			93.2	
399.00 > 99.00	2.406	2.403	0.003	1.000	42421		3.26(1.50-4.49)		94.1	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.727	2.712	0.015	1.000	1320013	4.24		179	4307	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.727	2.718	0.009	1.000	649172	0.6909			16173	
* 62 13C2-PFOA										
415.00 > 370.00	2.750	2.741	0.009		3890968	2.50			54700	
D 14 13C4 PFOA										
417.00 > 372.00	2.750	2.742	0.008	1.000	3683391	2.55		102	69297	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.750	2.749	0.001	1.000	1116857	0.6561			443	
413.00 > 169.00	2.750	2.749	0.001	1.000	563964		1.98(0.84-2.52)		1980	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.766	2.749	0.017	1.000	13117	0.008122			26.8	
449.00 > 99.00	2.758	2.749	0.009	0.997	3265		4.02(1.94-5.82)		23.7	
D 18 13C4 PFOS										
503.00 > 80.00	3.124	3.106	0.018	1.000	2907121	2.32		96.9	13947	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.124	3.114	0.010	1.000	670288	0.5066			1168	
499.00 > 99.00	3.124	3.114	0.010	1.000	117247		5.72(2.31-6.93)		941	
D 19 13C5 PFNA										
468.00 > 423.00	3.124	3.114	0.010	1.000	3060798	2.47		98.7	51039	
20 Perfluorononanoic acid										
463.00 > 419.00	3.124	3.122	0.002	1.000	63659	0.0499			89.7	
463.00 > 169.00	3.132	3.122	0.010	1.003	16989		3.75(1.90-5.69)		248	
D 21 13C8 FOSA										
506.00 > 78.00	3.453	3.431	0.022	1.000	3588433	2.29		91.6	38206	
D 26 M2-8:2FTS										
529.00 > 81.00	3.482	3.459	0.023	1.000	1202789	3.21		134	7629	
D 23 13C2 PFDA										
515.00 > 470.00	3.491	3.468	0.023	1.000	2640664	2.53		101	74171	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.482	3.478	0.004	0.997	47708	0.0438			119	
513.00 > 169.00	3.491	3.478	0.013	1.000	9640		4.95(2.36-7.09)		262	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.647	3.624	0.023	1.000	1343535	2.27		90.9	21127	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.813	3.790	0.023	1.000	1494062	2.56		102	16168	
D 30 13C2 PFUnA										
565.00 > 520.00	3.813	3.800	0.013	1.000	2017247	2.24		89.7	31398	
D 36 13C2 PFDoA										
615.00 > 570.00	4.112	4.091	0.021	1.000	2009173	2.07		82.7	27491	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.613	4.595	0.018	1.000	2297334	1.86		74.6	17855	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:45 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_007.d

Injection Date: 10-May-2018 20:30:44 Instrument ID: A8_N

Lims ID: 320-38611-A-5-A Lab Sample ID: 320-38611-5

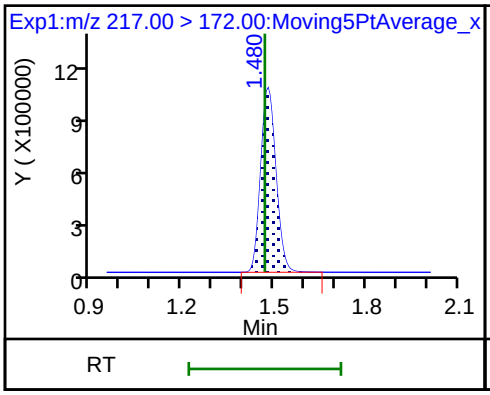
Client ID: GC-MW-103(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 24 Worklist Smp#: 9

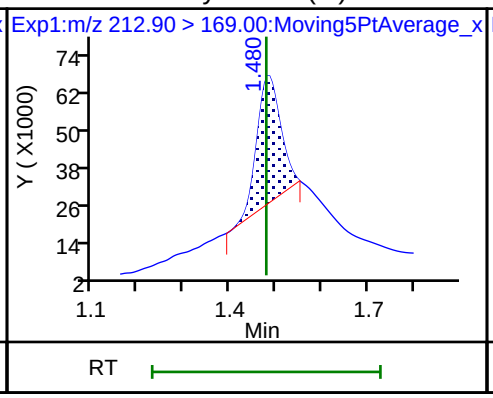
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

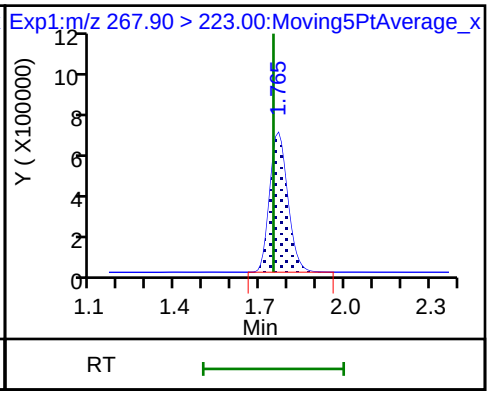
D 1 13C4 PFBA



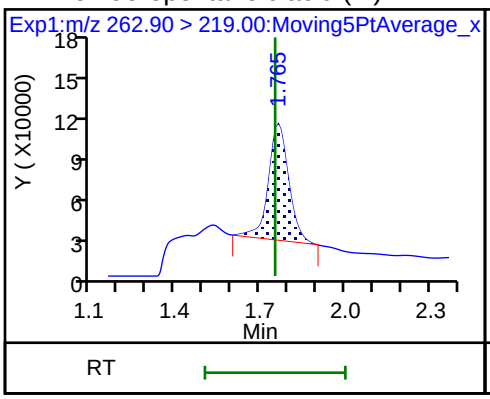
2 Perfluorobutyric acid (M)



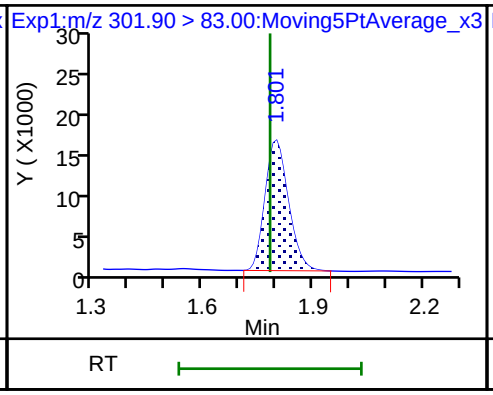
D 3 13C5-PFPeA



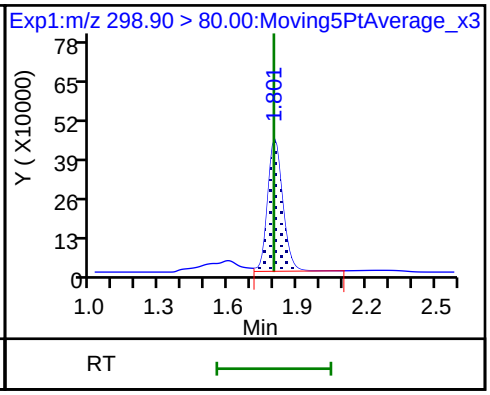
4 Perfluoropentanoic acid (M)



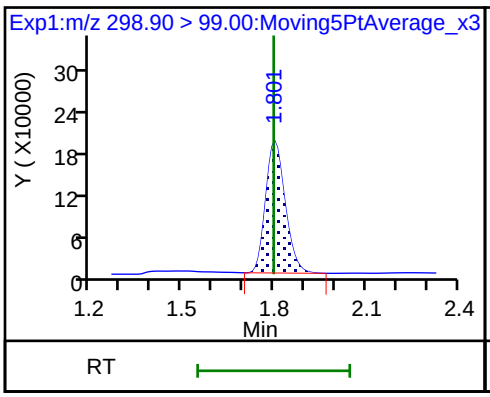
D 47 13C3-PFBS



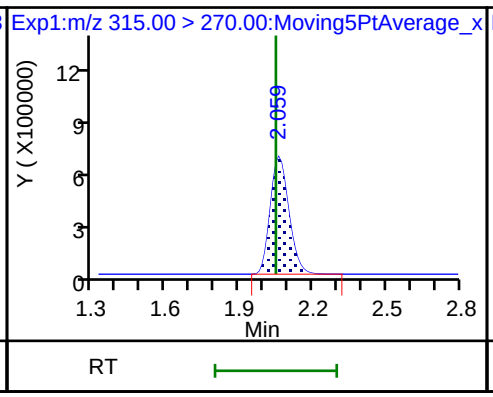
5 Perfluorobutanesulfonic acid



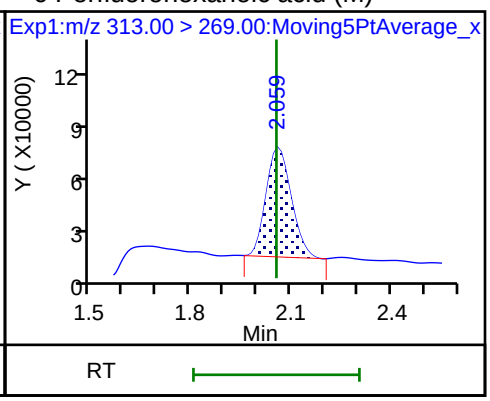
5 Perfluorobutanesulfonic acid



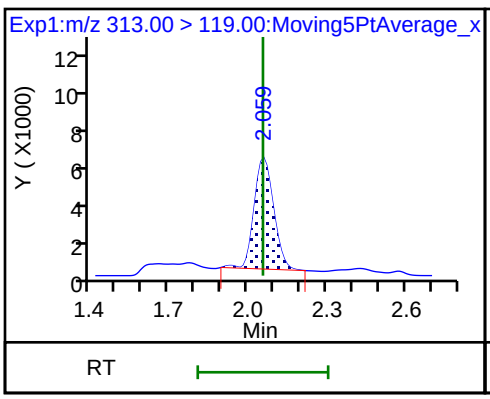
D 7 13C2 PFHxA



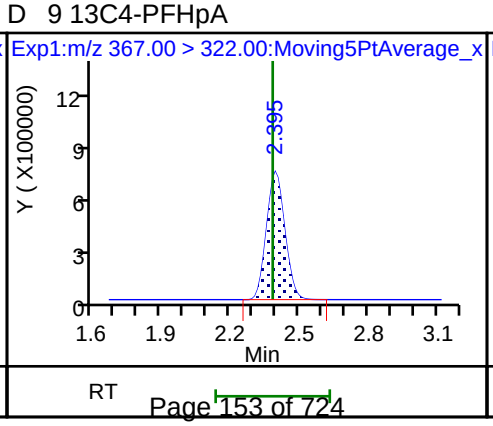
6 Perfluorohexanoic acid (M)



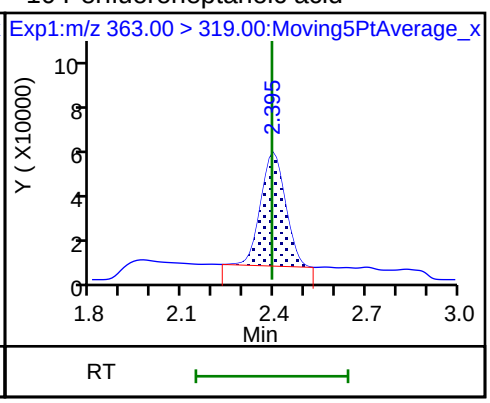
6 Perfluorohexanoic acid



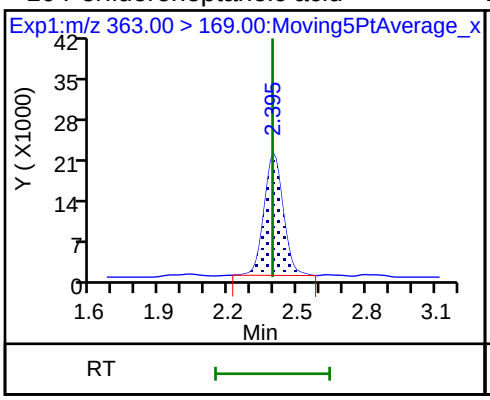
D 9 13C4-PFHpA



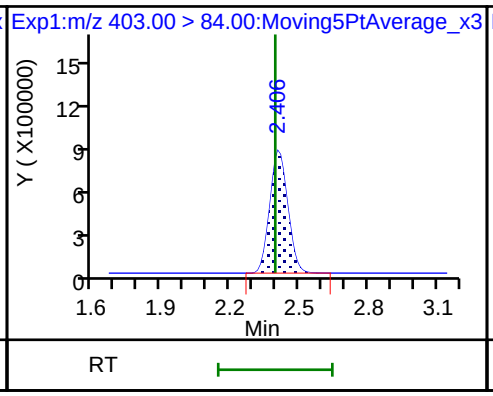
10 Perfluoroheptanoic acid



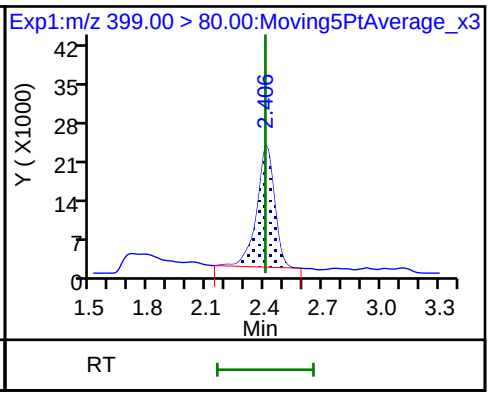
10 Perfluoroheptanoic acid



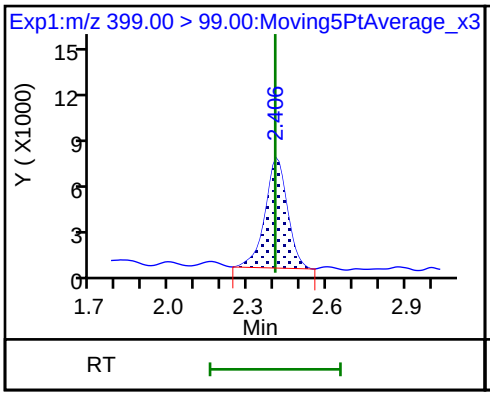
D 11 18O2 PFHxS



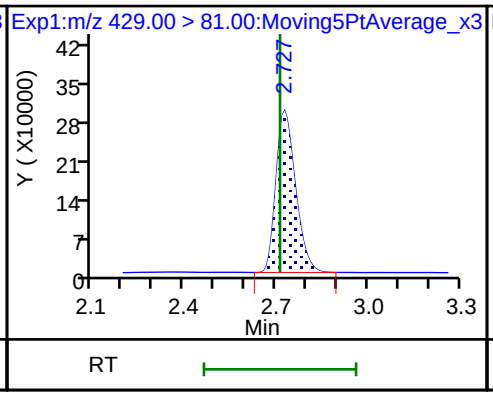
8 Perfluorohexanesulfonic acid



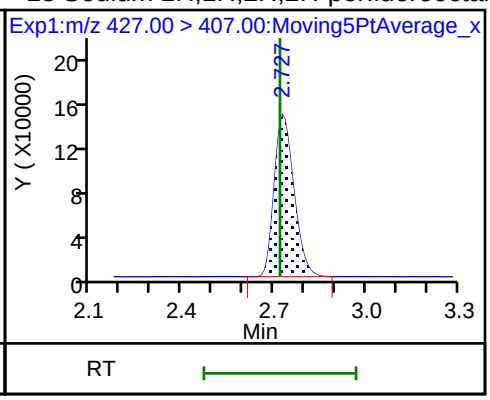
8 Perfluorohexanesulfonic acid



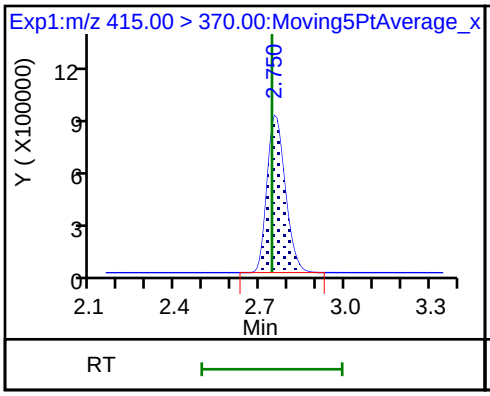
D 12 M2-6:2FTS



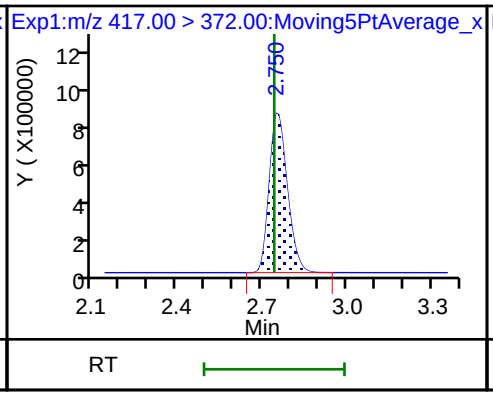
13 Sodium 1H,1H,2H,2H-perfluorooctane



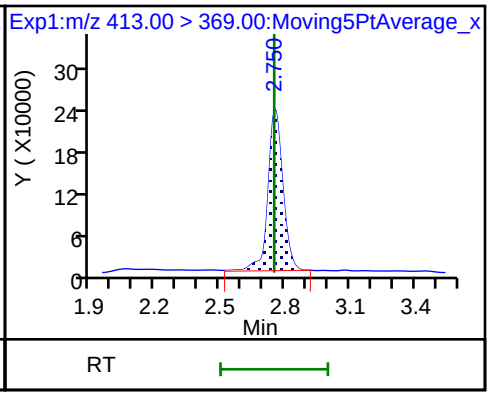
* 62 13C2-PFOA



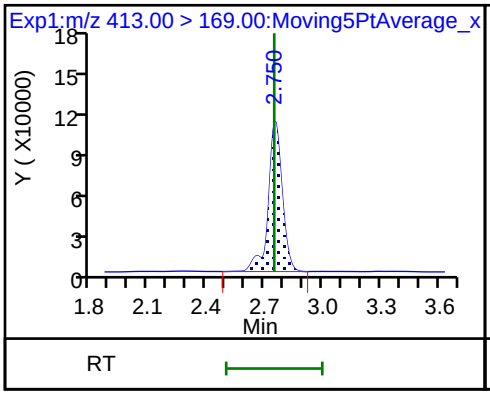
D 14 13C4 PFOA



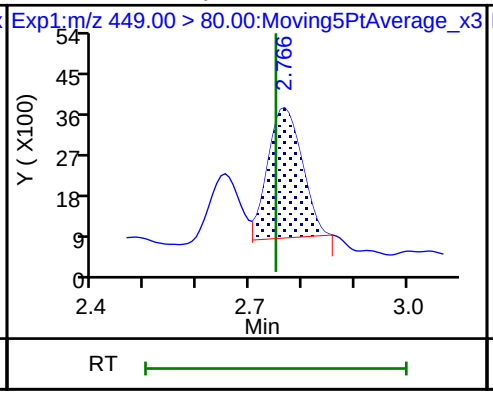
15 Perfluorooctanoic acid



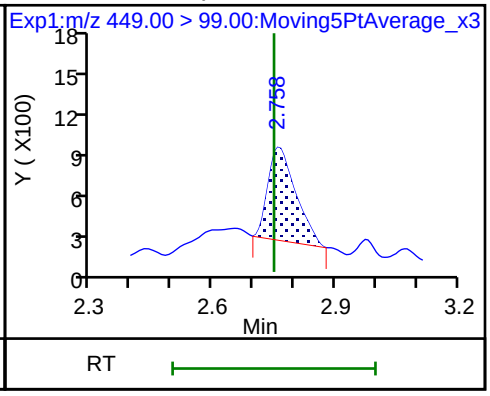
15 Perfluorooctanoic acid



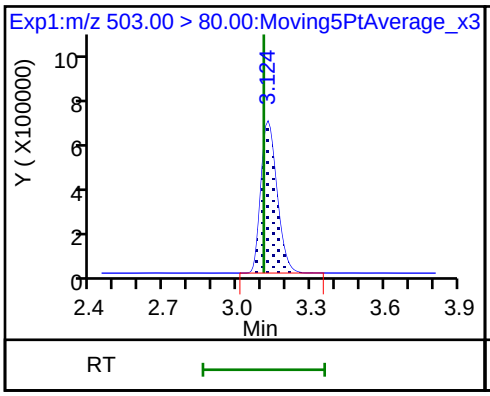
16 Perfluoroheptanesulfonic acid



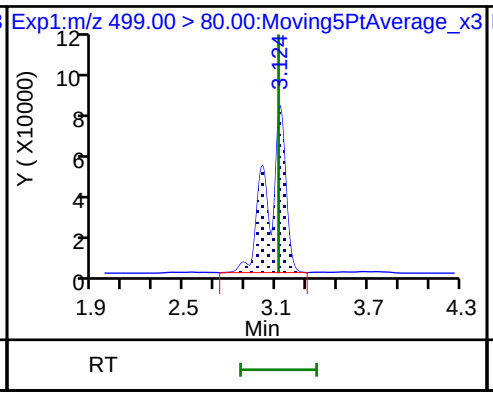
16 Perfluoroheptanesulfonic acid



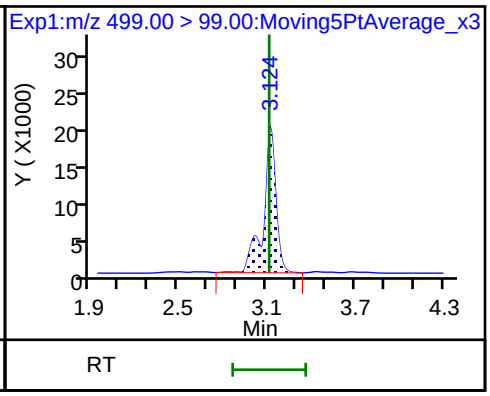
D 18 13C4 PFOS



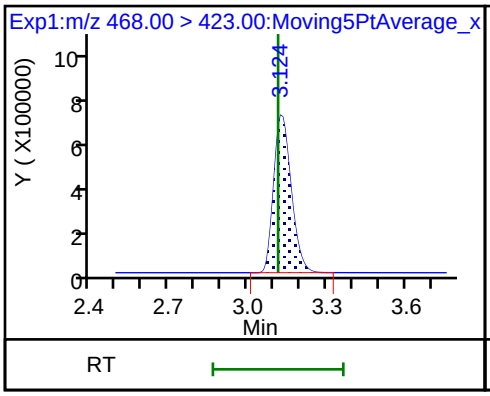
17 Perfluorooctane sulfonic acid



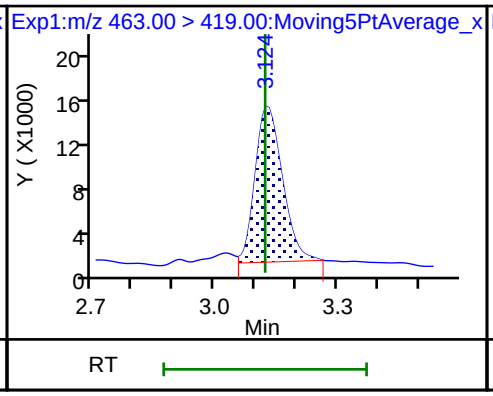
17 Perfluorooctane sulfonic acid



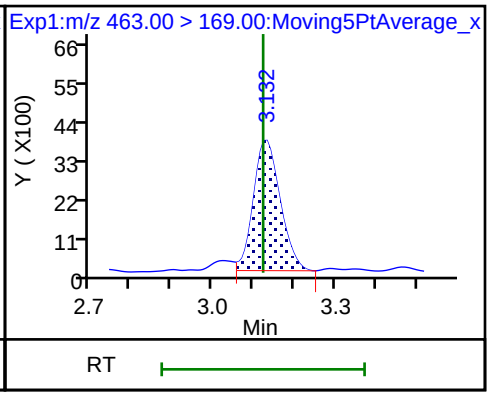
D 19 13C5 PFNA



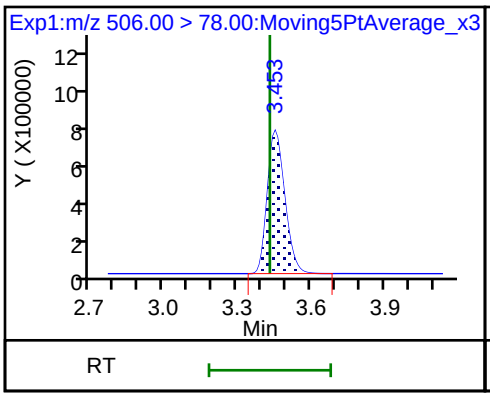
20 Perfluorononanoic acid



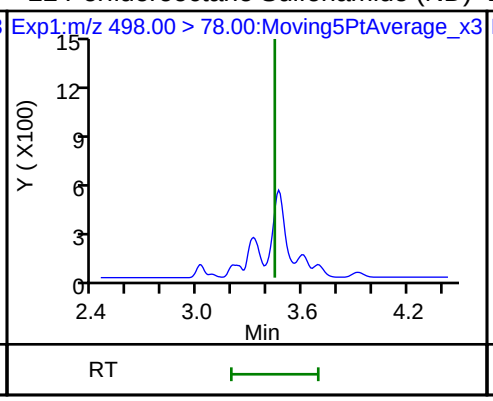
20 Perfluorononanoic acid



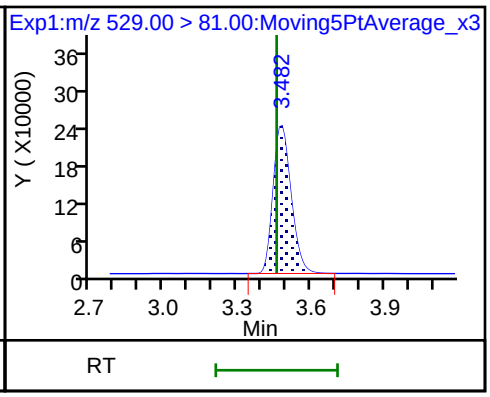
D 21 13C8 FOSA



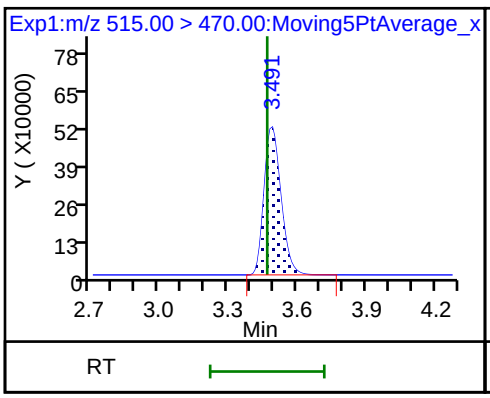
22 Perfluorooctane Sulfonamide (ND)



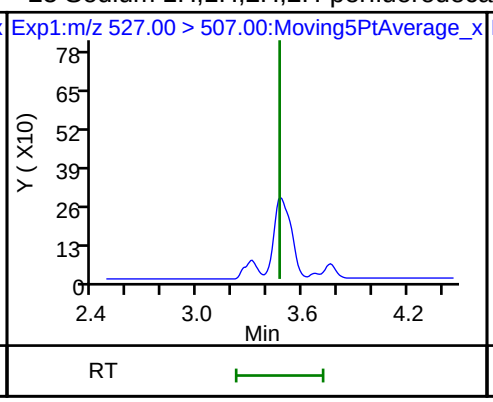
D 26 M2-8:2FTS



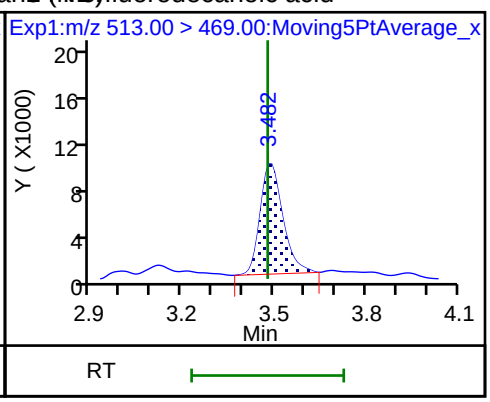
D 23 13C2 PFDA



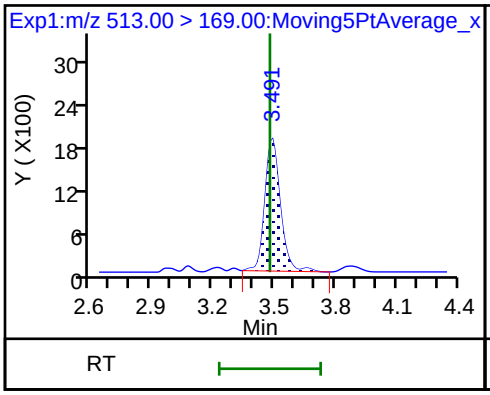
25 Sodium 1H,1H,2H,2H-perfluorodecane2(ND)



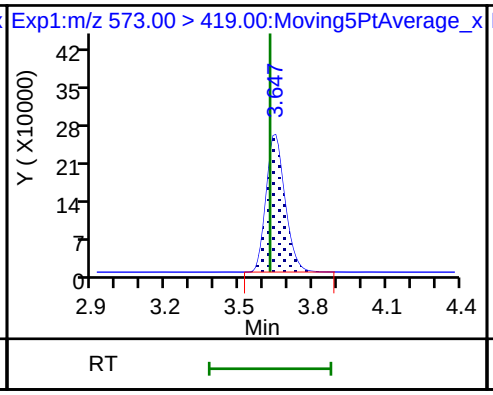
24 Perfluorodecanoic acid



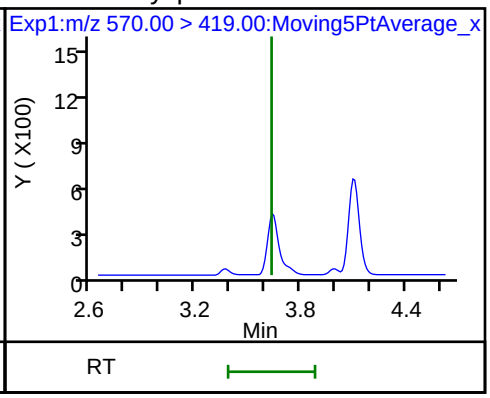
24 Perfluorodecanoic acid



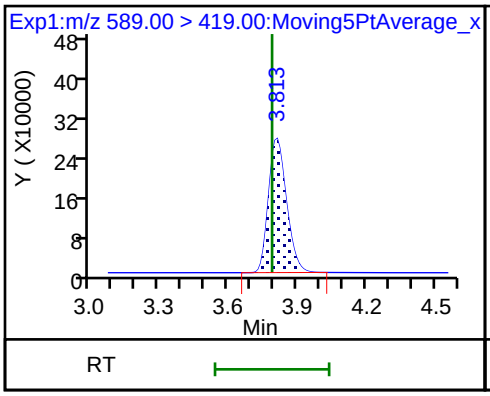
D 27 d3-NMeFOSAA



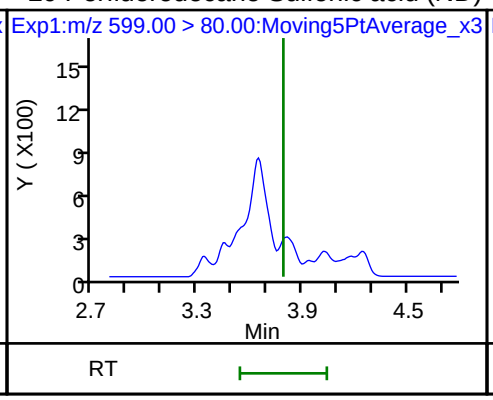
28 N-methyl perfluorooctane sulfonami (ND)



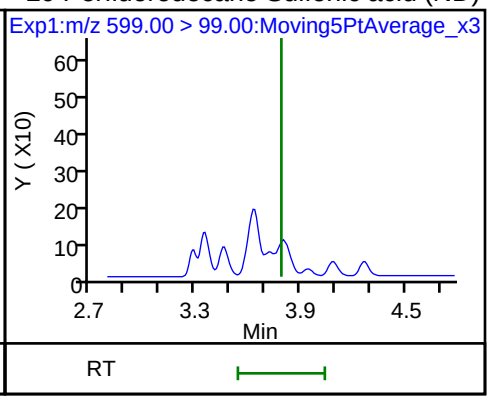
D 32 d5-NEtFOSAA



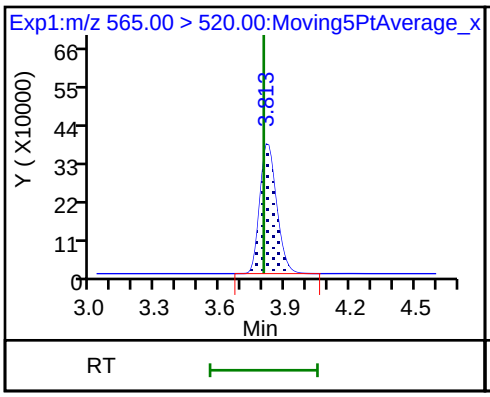
29 Perfluorodecane Sulfonic acid (ND)



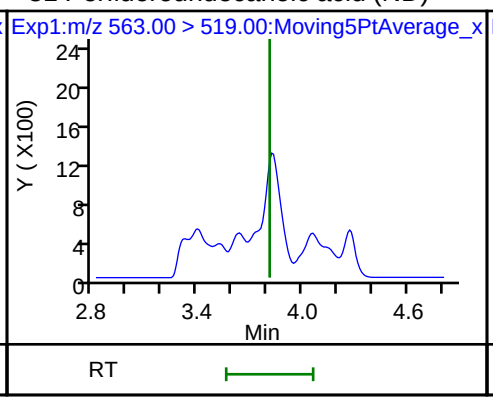
29 Perfluorodecane Sulfonic acid (ND)



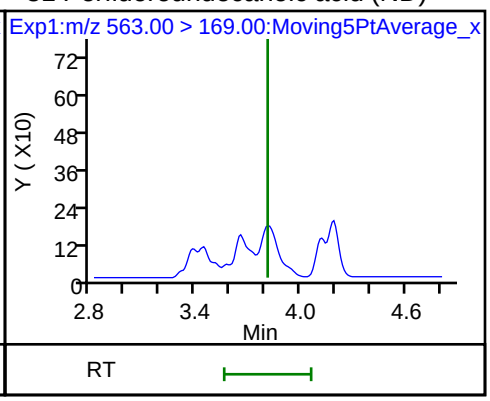
D 30 13C2 PFUnA



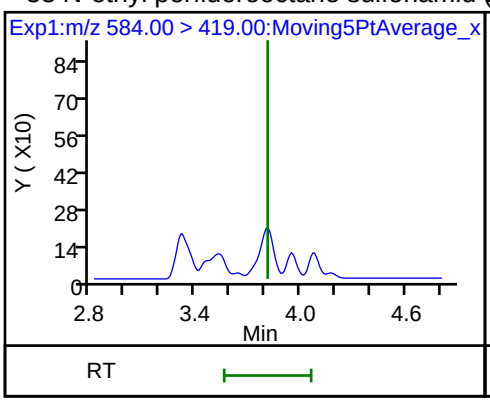
31 Perfluoroundecanoic acid (ND)



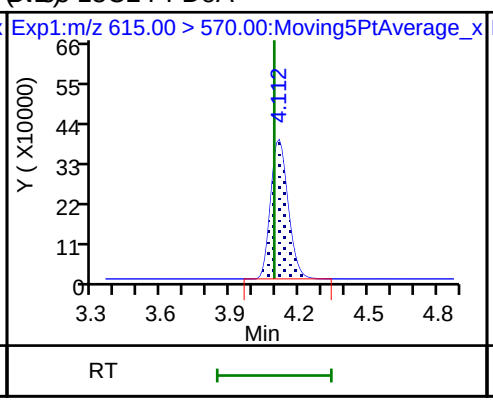
31 Perfluoroundecanoic acid (ND)



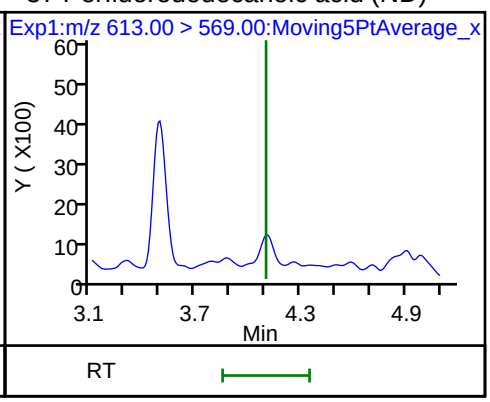
33 N-ethyl perfluorooctane sulfonamid (ND)



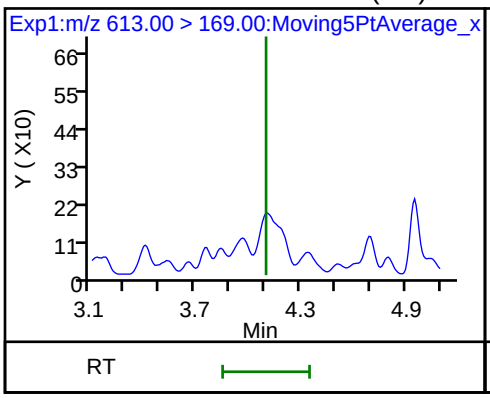
D 36 13C2 PFDoA



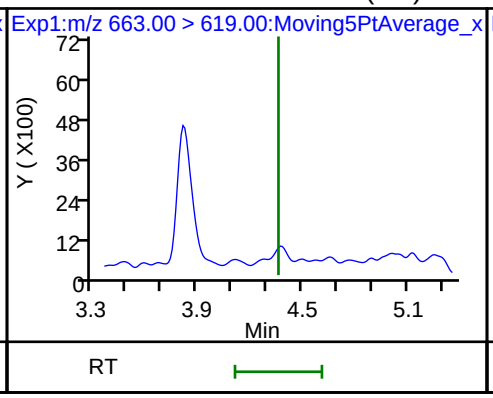
37 Perfluorododecanoic acid (ND)



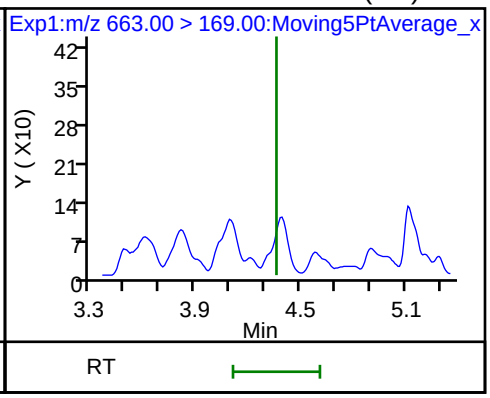
37 Perfluorododecanoic acid (ND)



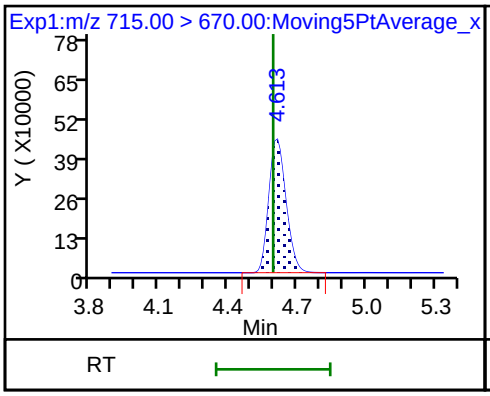
41 Perfluorotridecanoic acid (ND)



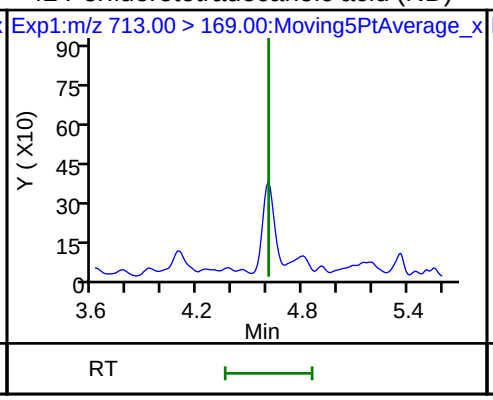
41 Perfluorotridecanoic acid (ND)



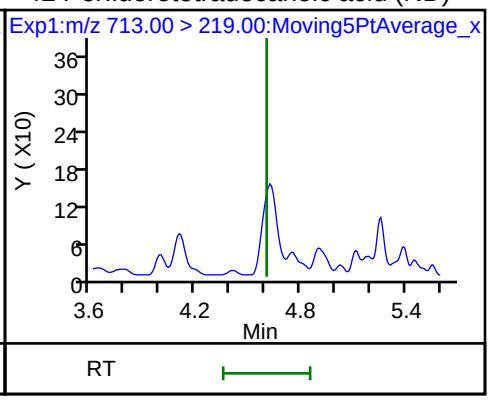
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

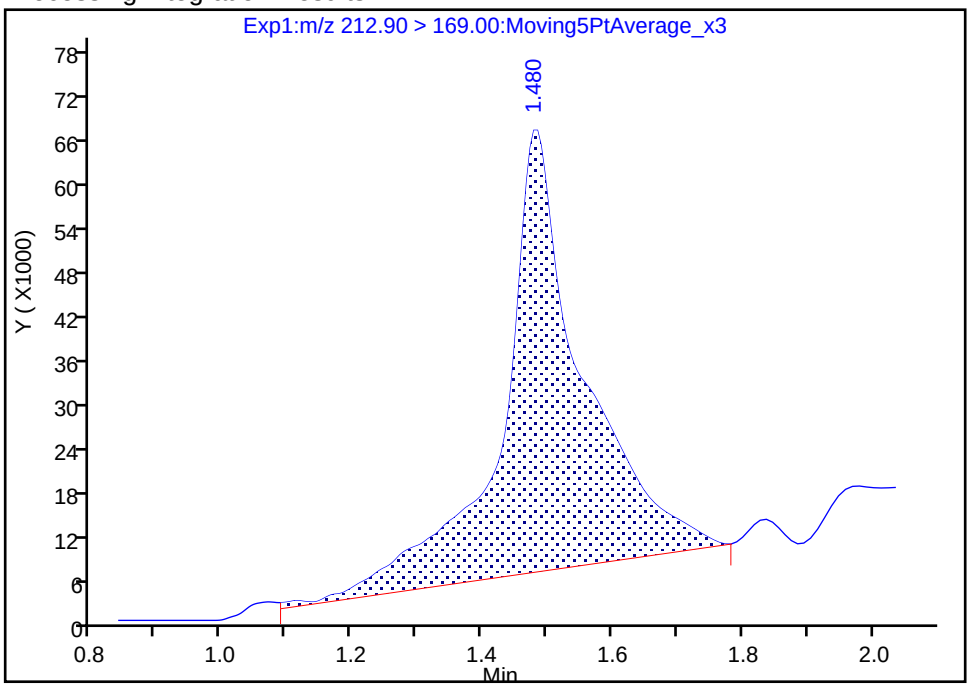
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_007.d				
Injection Date:	10-May-2018 20:30:44	Instrument ID:	A8_N		
Lims ID:	320-38611-A-5-A	Lab Sample ID:	320-38611-5		
Client ID:	GC-MW-103(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	24	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

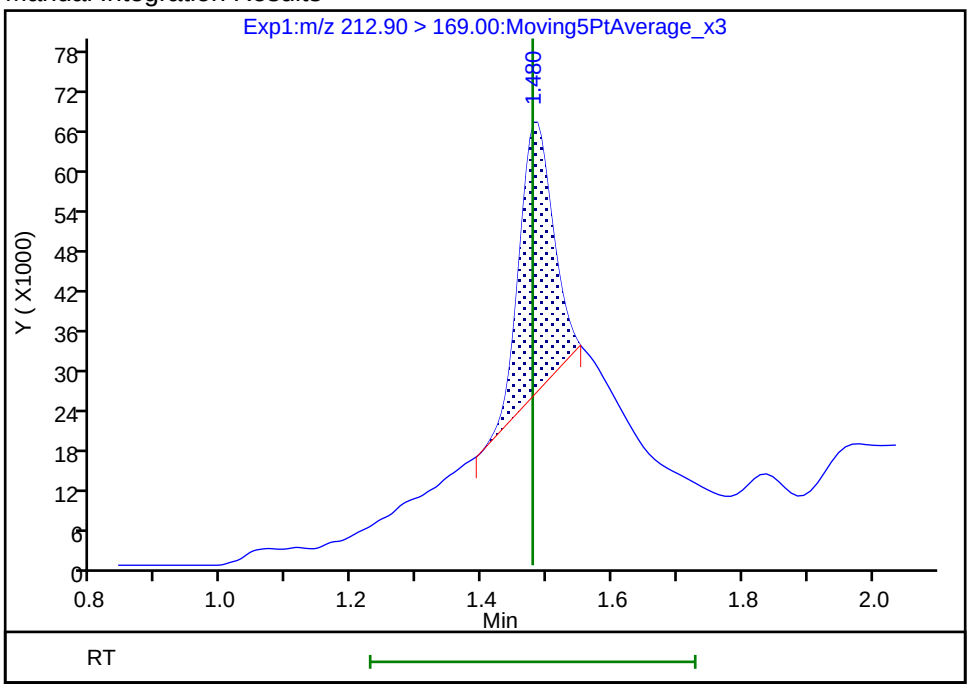
Processing Integration Results

RT: 1.48
Area: 527391
Amount: 0.402436
Amount Units: ng/ml



Manual Integration Results

RT: 1.48
Area: 146338
Amount: 0.111666
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:17:50

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

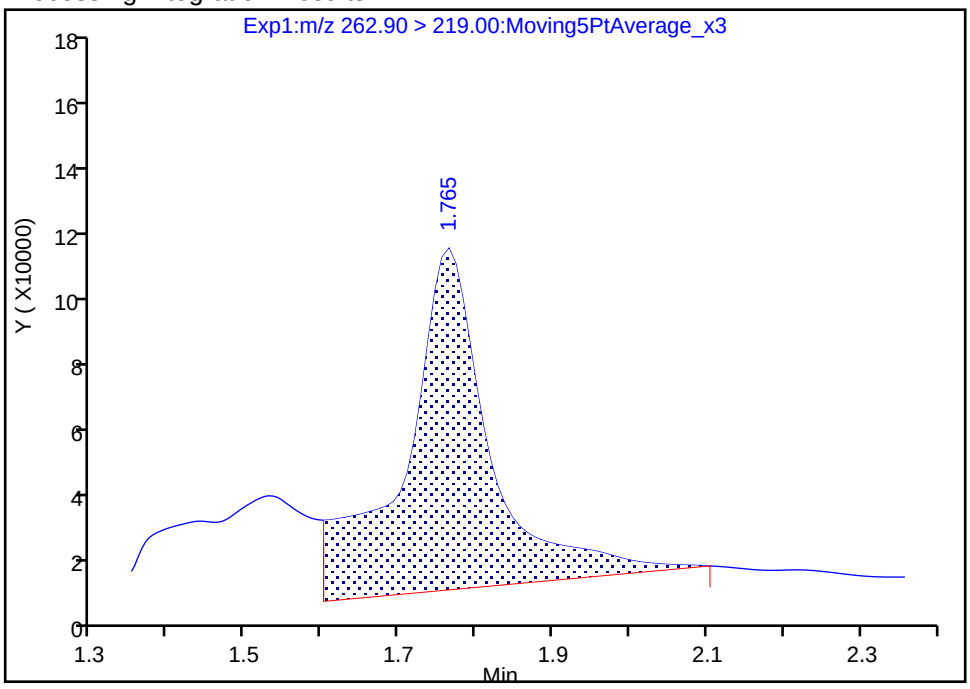
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_007.d				
Injection Date:	10-May-2018 20:30:44	Instrument ID:	A8_N		
Lims ID:	320-38611-A-5-A	Lab Sample ID:	320-38611-5		
Client ID:	GC-MW-103(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	24	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

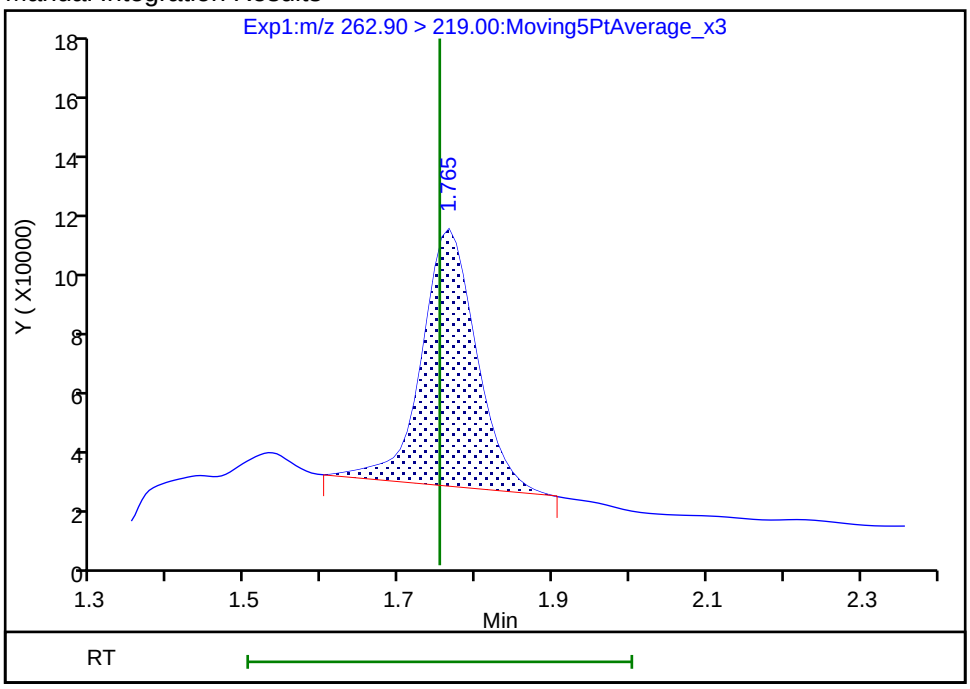
Processing Integration Results

RT: 1.76
Area: 794733
Amount: 0.548647
Amount Units: ng/ml



Manual Integration Results

RT: 1.76
Area: 421502
Amount: 0.290986
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:17:58

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

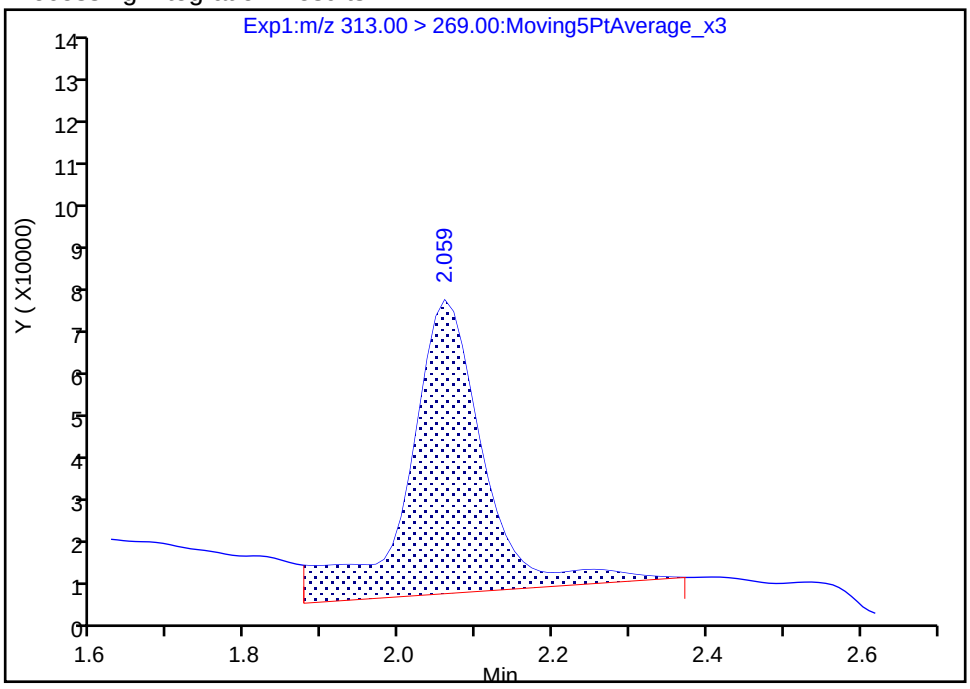
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_007.d				
Injection Date:	10-May-2018 20:30:44	Instrument ID:	A8_N		
Lims ID:	320-38611-A-5-A	Lab Sample ID:	320-38611-5		
Client ID:	GC-MW-103(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	24	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

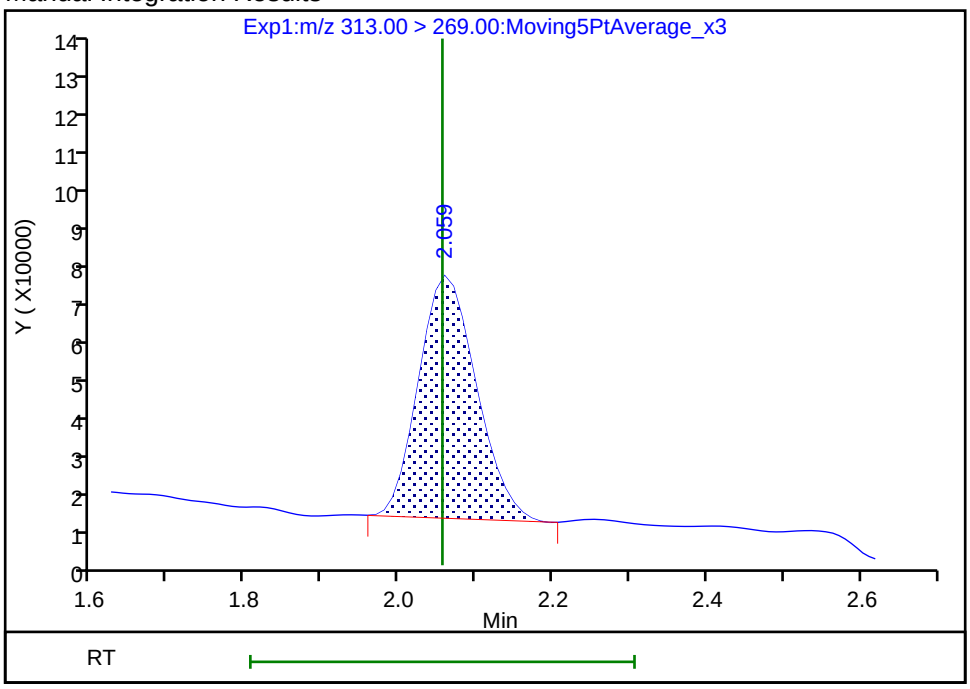
Processing Integration Results

RT: 2.06
Area: 469841
Amount: 0.327774
Amount Units: ng/ml



Manual Integration Results

RT: 2.06
Area: 327022
Amount: 0.228140
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:18:07

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-103(WG) RE | Lab Sample ID: 320-38611-5 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_025.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:10

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 267.8(mL) | Date Analyzed: 05/17/2018 02:09

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*15*	*H*	*1.9*	*0.79*
27619-97-2	*6:2FTS*	*ND*	*H*	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	109		25-150
STL02279	M2-6:2FTS	174	*	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_025.d
Lims ID: 320-38611-B-5-B
Client ID: GC-MW-103(WG)
Sample Type: Client
Inject. Date: 17-May-2018 02:09:39 ALS Bottle#: 16 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-5-b
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 14:02:57 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 14:02:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.450	1.447	0.003	1.000	4747012	1.60		64.1	28005	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.456	1.457	-0.001	1.004	263894	0.1495			23.8	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.726	1.712	0.014	0.566	4073217	2.15		85.8	13053	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.726	1.729	-0.003	1.000	460713	0.2395			32.6	M
D 47 13C3-PFBS										
301.90 > 83.00	1.753	1.748	0.005	1.000	90124	2.10		90.4	145	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.762	1.765	-0.003	1.005	2264945	0.7482			277	M
298.90 > 99.00	1.762	1.765	-0.003	1.005	969221		2.34(1.25-3.74)		698	
D 7 13C2 PFHxA										
315.00 > 270.00	2.000	1.994	0.006	1.000	4595408	2.27		90.8	58206	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.011	2.014	-0.003	1.006	377911	0.2000			58.7	
313.00 > 119.00	2.011	2.014	-0.003	1.006	36074		10.48(5.03-15.10)		179	
D 9 13C4-PFHpA										
367.00 > 322.00	2.329	2.321	0.008	1.000	4819869	2.49		99.4	78053	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.329	2.332	-0.003	1.000	304349	0.1494			82.8	
363.00 > 169.00	2.329	2.332	-0.003	1.000	125113		2.43(1.13-3.40)		540	
D 11 18O2 PFHxS										
403.00 > 84.00	2.342	2.334	0.008	1.000	5486296	2.29		96.8	69053	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.342	2.345	-0.003	1.000	151781	0.0581			105	
399.00 > 99.00	2.342	2.345	-0.003	1.000	44020		3.45(1.50-4.49)		64.2	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.666	2.645	0.021	1.000	1766231	4.13		174	6580	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.659	2.667	-0.008	0.997	24967	0.008892			187	
D 14 13C4 PFOA										
417.00 > 372.00	2.681	2.668	0.013	1.000	5002571	2.73		109	82398	
* 62 13C2-PFOA										
415.00 > 370.00	2.689	2.689	0.0		4842434	2.50			64134	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.689	2.689	0.0	1.003	943498	0.4006			324	
413.00 > 169.00	2.689	2.689	0.0	1.003	529517		1.78(0.84-2.52)		1593	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.696	2.697	-0.001	1.000	17808	0.008618			42.0	
449.00 > 99.00	2.689	2.697	-0.008	0.997	5164		3.45(1.94-5.82)		26.1	M
D 18 13C4 PFOS										
503.00 > 80.00	3.048	3.029	0.019	1.000	3707704	2.25		94.2	17945	
D 19 13C5 PFNA										
468.00 > 423.00	3.048	3.036	0.012	1.000	4289528	2.86		114	78624	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.048	3.051	-0.003	1.000	756297	0.4146			2443	
499.00 > 99.00	3.055	3.051	0.004	1.002	133218		5.68(2.31-6.93)		841	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.055	3.051	0.004	1.002	63294	0.0348			71.7	M
463.00 > 169.00	3.055	3.051	0.004	1.002	17093		3.70(1.90-5.69)		231	M
D 26 M2-8:2FTS										
529.00 > 81.00	3.401	3.376	0.025	1.000	1515765	3.11		130	11169	
D 21 13C8 FOSA										
506.00 > 78.00	3.391	3.376	0.015	1.000	4844951	2.25		89.9	43642	
D 23 13C2 PFDA										
515.00 > 470.00	3.410	3.385	0.025	1.000	3351157	2.63		105	60179	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.410	3.398	0.012	1.003	1875	0.002195			76.8	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.410	3.407	0.003	1.000	52758	0.0405			128	
513.00 > 169.00	3.410	3.407	0.003	1.000	11051		4.77(2.36-7.09)		148	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.568	3.544	0.024	1.000	1856178	2.64		105	43108	
D 30 13C2 PFUnA										
565.00 > 520.00	3.743	3.716	0.027	1.000	2560697	2.53		101	46796	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.732	3.716	0.016	1.000	2027430	2.81		112	15450	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.753	3.740	0.013	1.003	3980	0.004652			11.4	
563.00 > 169.00	3.743	3.740	0.003	1.000	1362		2.92(2.12-6.36)		50.8	
D 36 13C2 PFDoA										
615.00 > 570.00	4.031	4.006	0.025	1.000	2703504	2.49		99.5	26545	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.532	4.511	0.021	1.000	3234250	2.42		96.9	17448	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 14:02:58 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_025.d

Injection Date: 17-May-2018 02:09:39 Instrument ID: A8_N

Lims ID: 320-38611-B-5-B Lab Sample ID: 320-38611-5

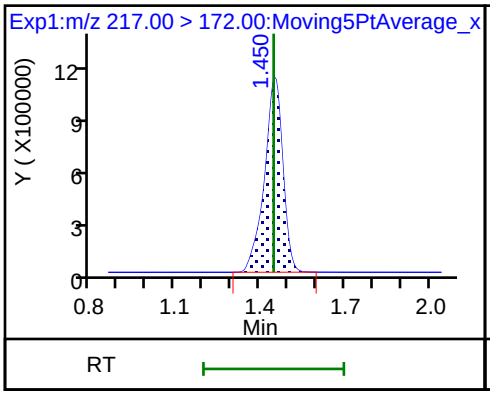
Client ID: GC-MW-103(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 17

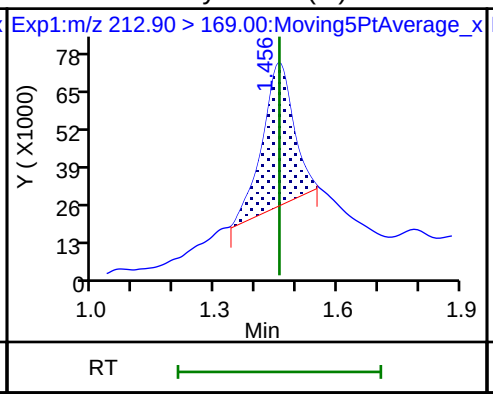
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

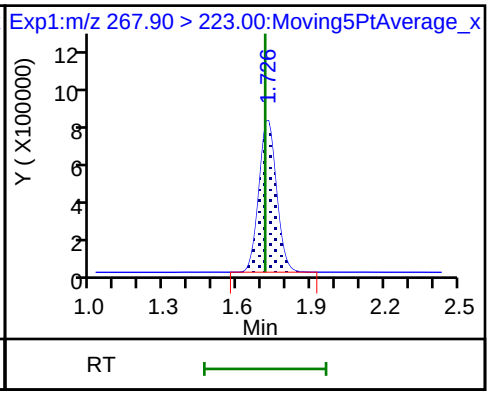
D 1 13C4 PFBA



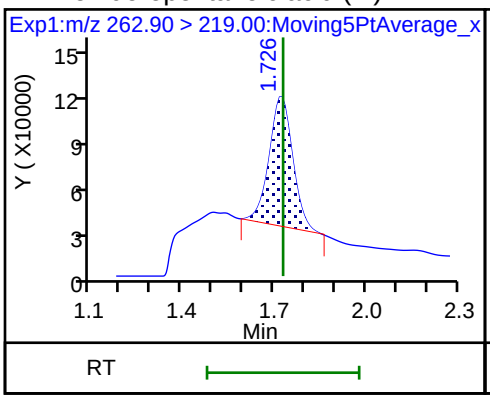
2 Perfluorobutyric acid (M)



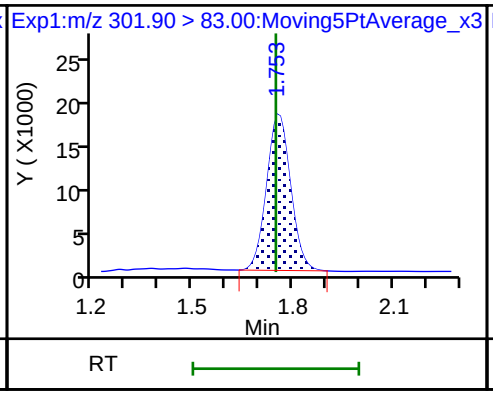
D 3 13C5-PFPeA



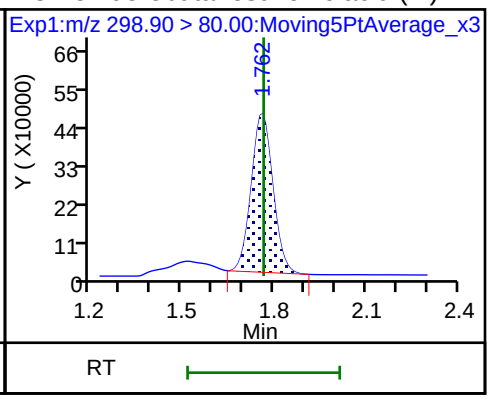
4 Perfluoropentanoic acid (M)



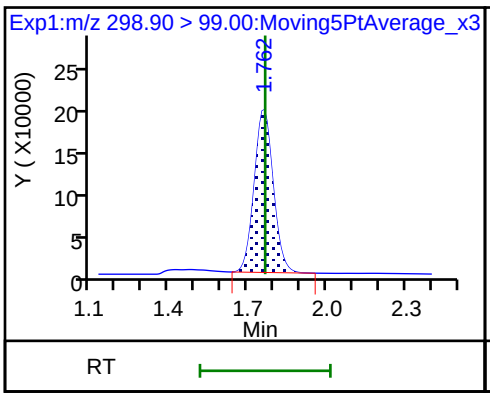
D 47 13C3-PFBS



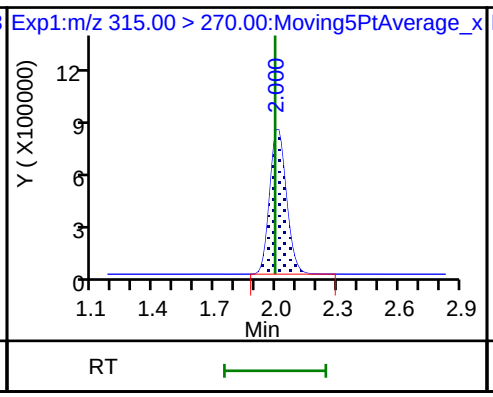
5 Perfluorobutanesulfonic acid (M)



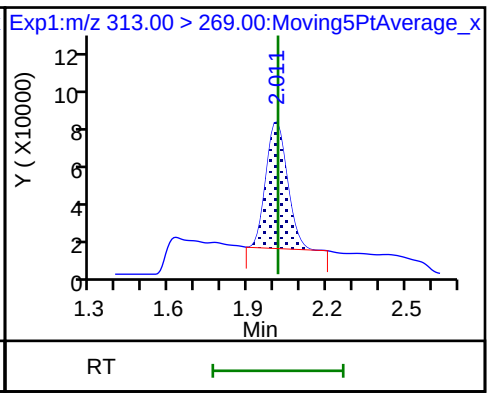
5 Perfluorobutanesulfonic acid



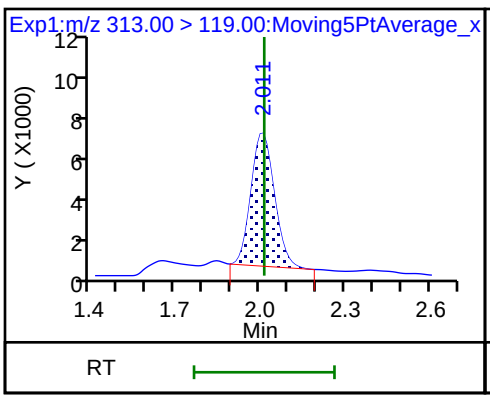
D 7 13C2 PFHxA



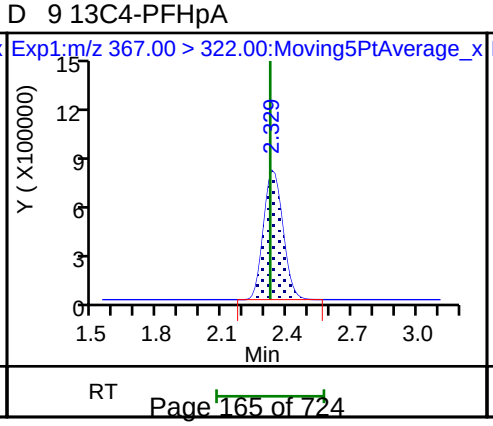
6 Perfluorohexanoic acid



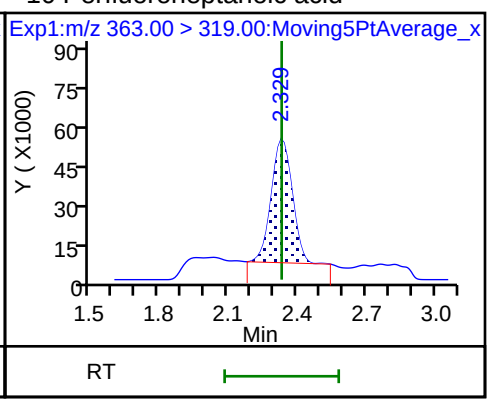
6 Perfluorohexanoic acid



D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



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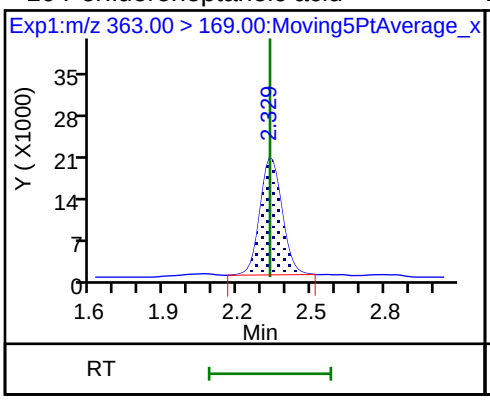
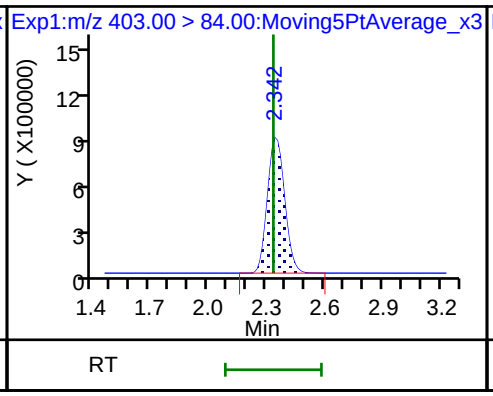
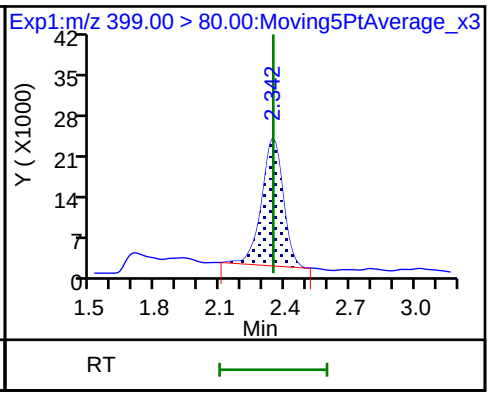


D 11 18O2 PFHxS



8 Perfluorohexanesulfonic acid



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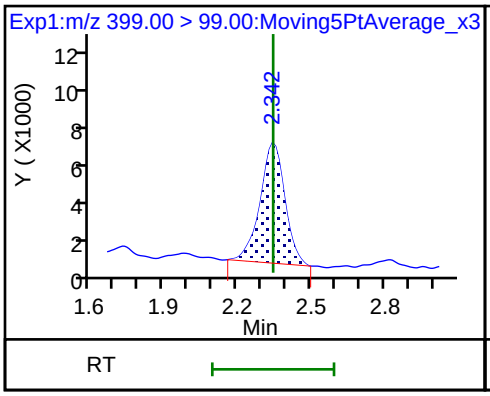
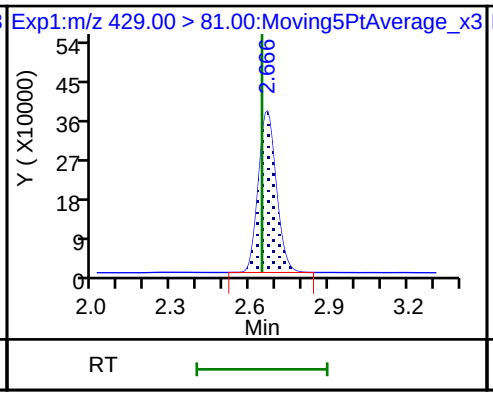
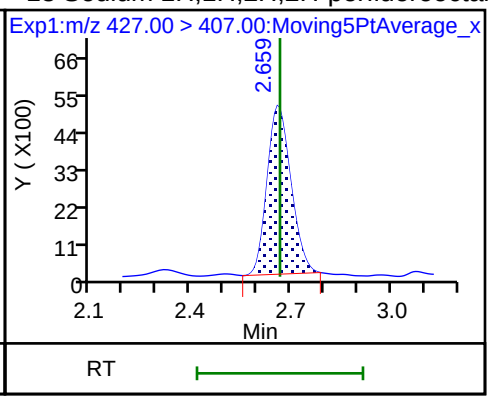


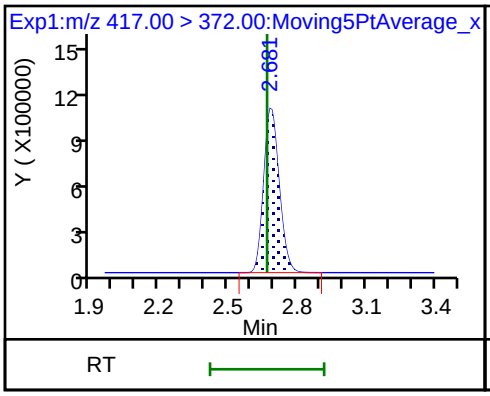
D 12 M2-6:2FTS



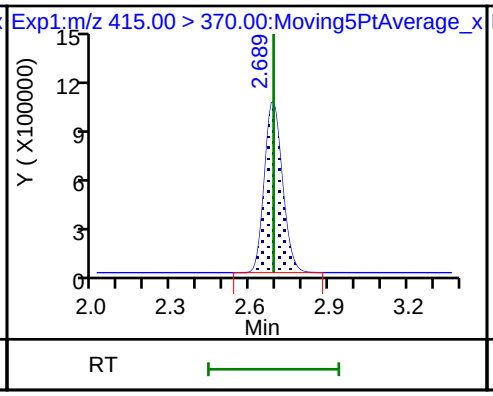
13 Sodium 1H,1H,2H,2H-perfluorooctane



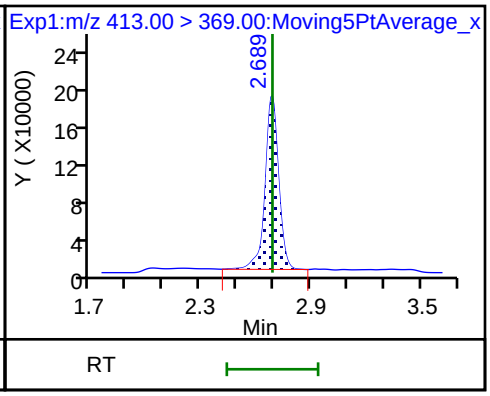
D 14 13C4 PFOA



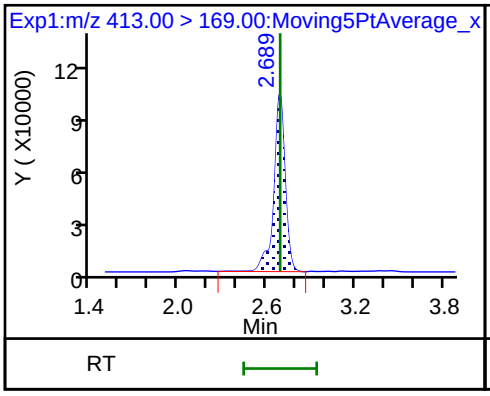
* 62 13C2-PFOA



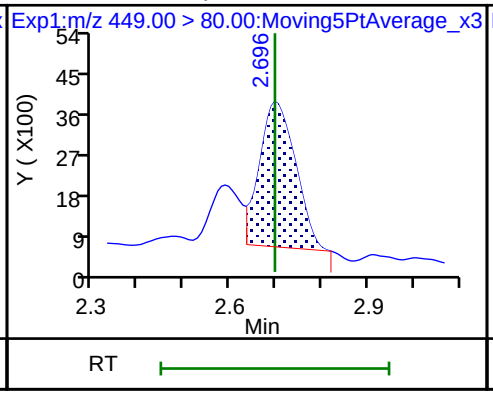
15 Perfluorooctanoic acid



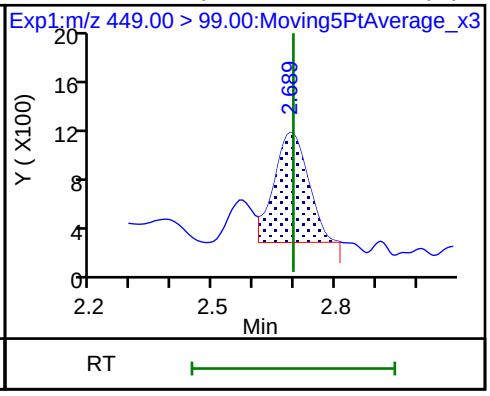
15 Perfluorooctanoic acid



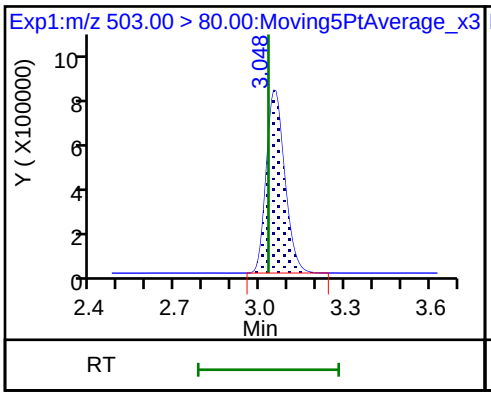
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid (M)



D 18 13C4 PFOS



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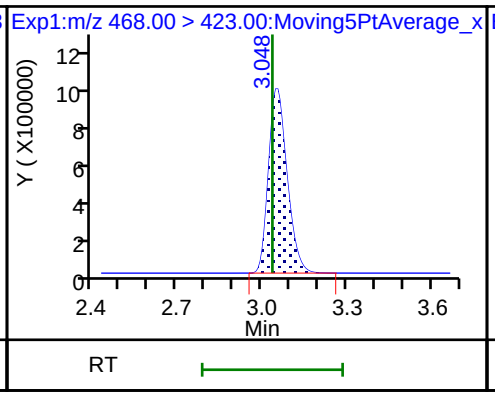
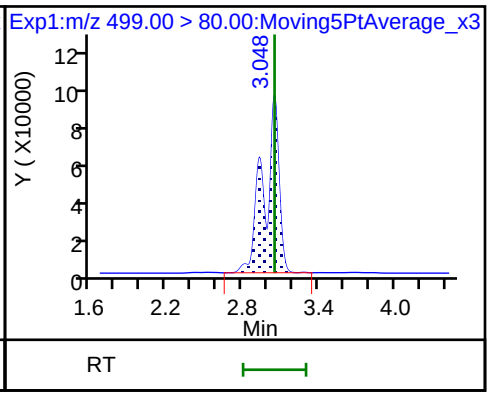
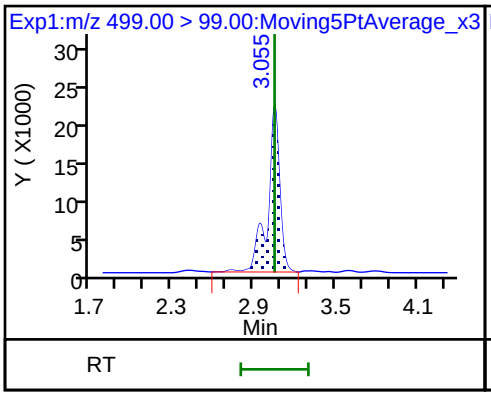


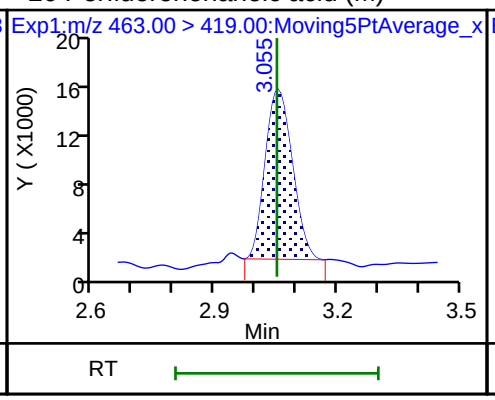
17 Perfluorooctane sulfonic acid



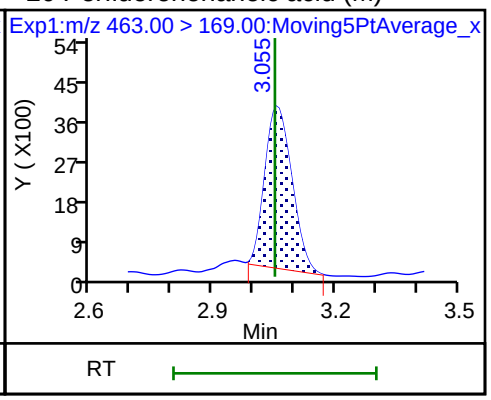
17 Perfluorooctane sulfonic acid



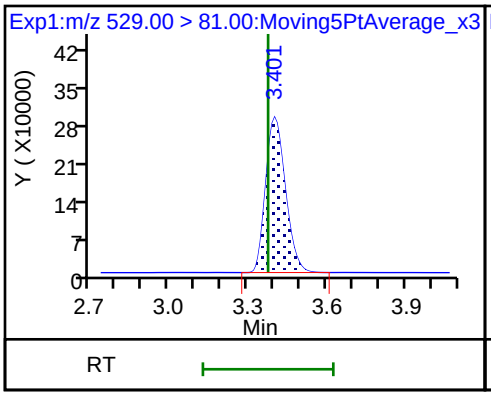
20 Perfluorononanoic acid (M)



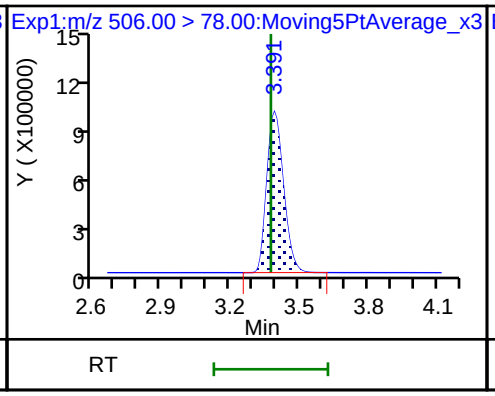
20 Perfluorononanoic acid (M)



D 26 M2-8:2FTS



D 21 13C8 FOSA



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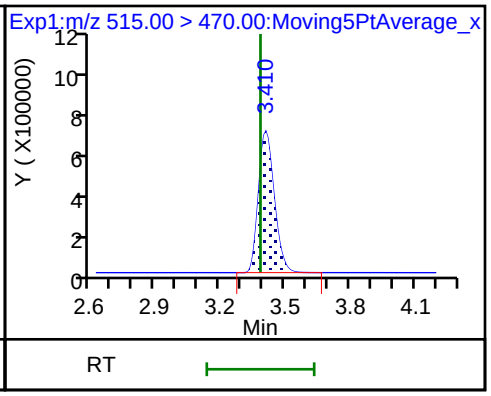
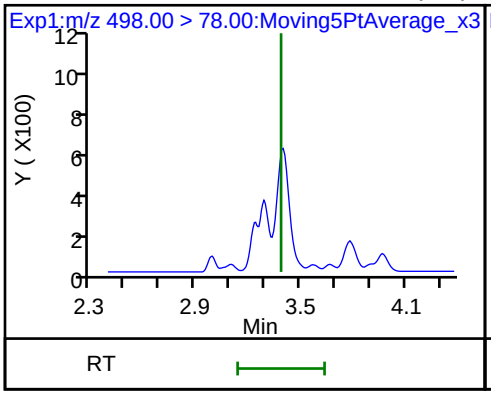
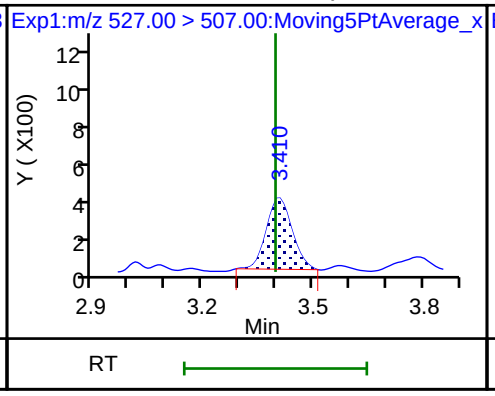


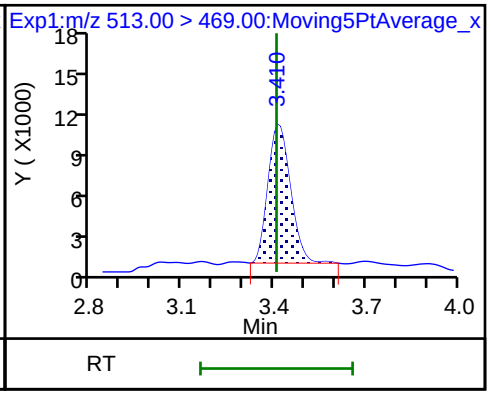
22 Perfluorooctane Sulfonamide (ND)



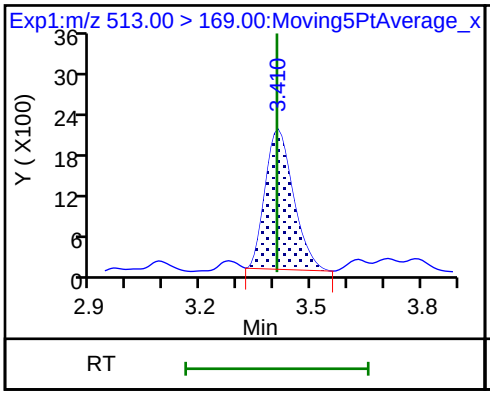
25 Sodium 1H,1H,2H,2H-perfluorodecan



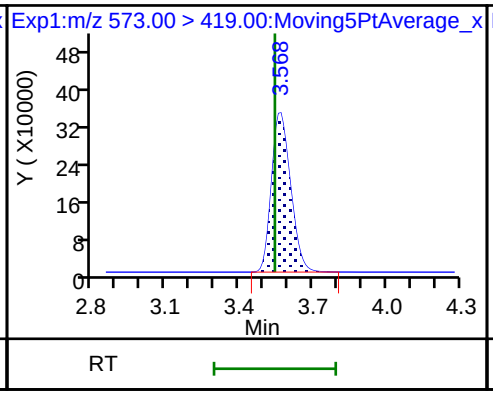
24 Perfluorodecanoic acid



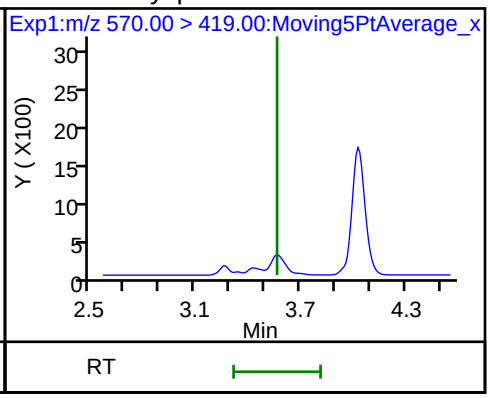
24 Perfluorodecanoic acid



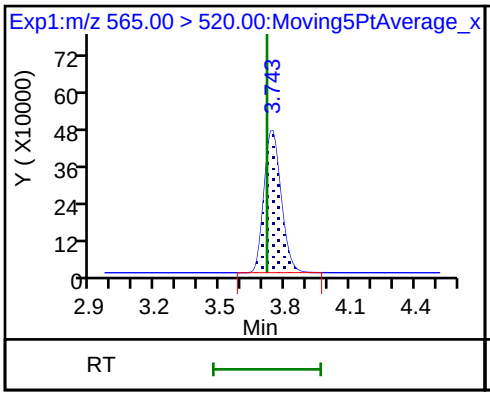
D 27 d3-NMeFOSAA



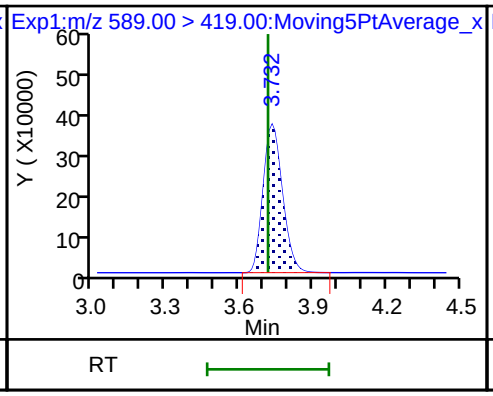
28 N-methyl perfluorooctane sulfonami (ND)



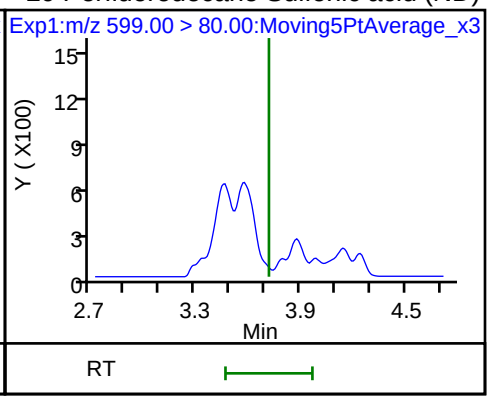
D 30 13C2 PFUnA



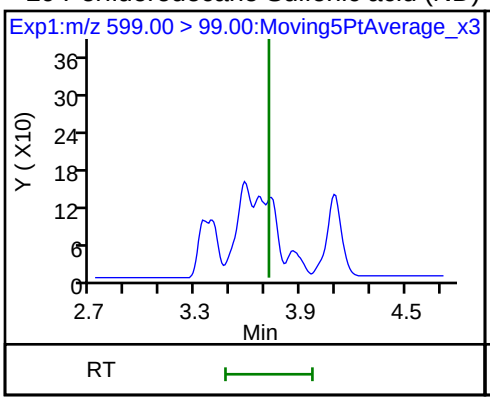
D 32 d5-NEtFOSAA



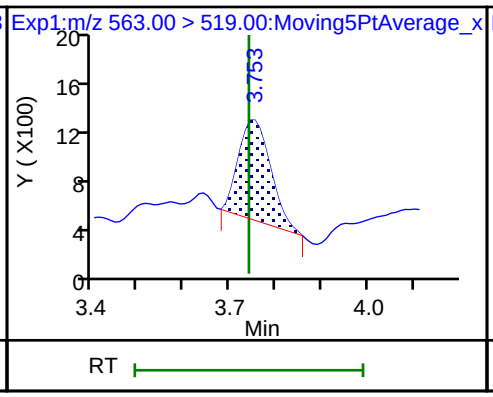
29 Perfluorodecane Sulfonic acid (ND)



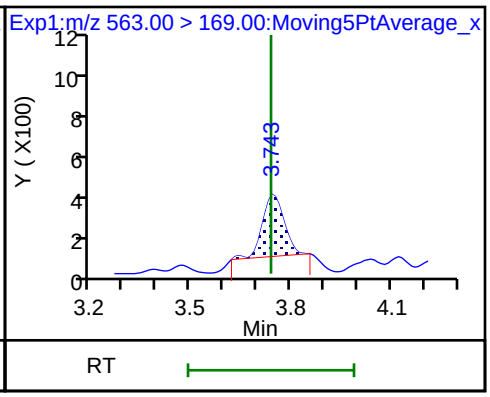
29 Perfluorodecane Sulfonic acid (ND)



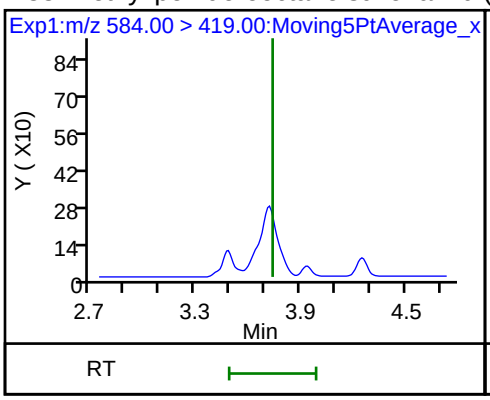
31 Perfluoroundecanoic acid



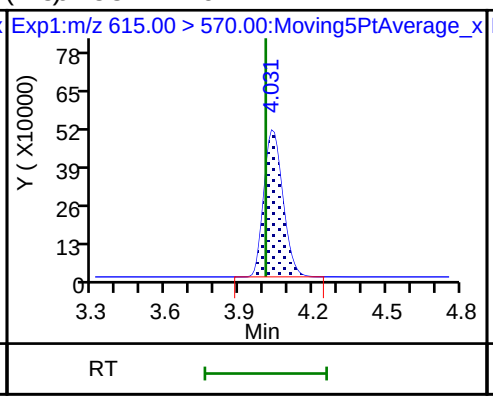
31 Perfluoroundecanoic acid



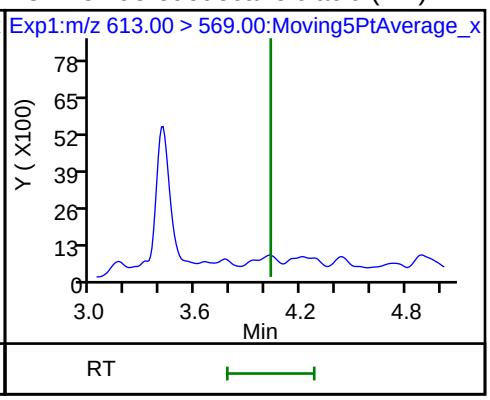
33 N-ethyl perfluorooctane sulfonamid (ND)



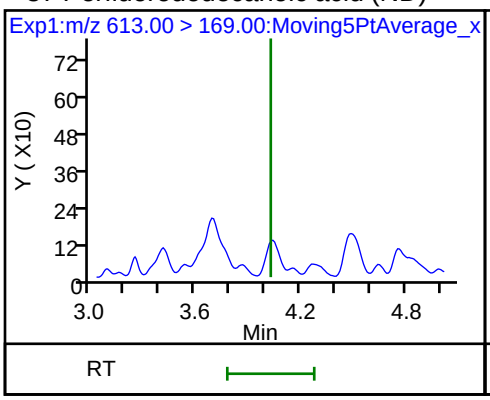
D 36 13C2 PFDoA



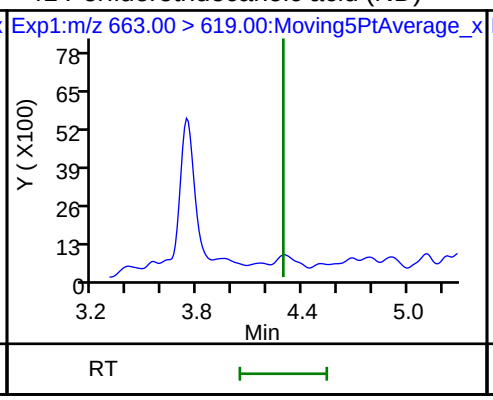
37 Perfluorododecanoic acid (ND)



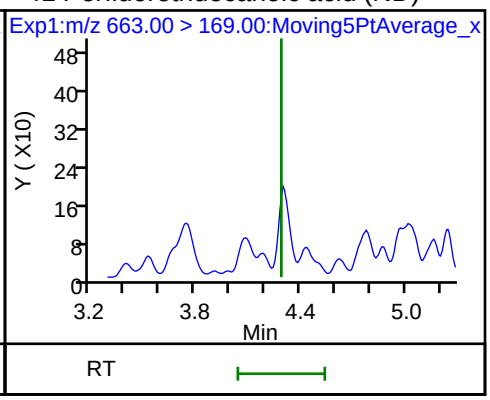
37 Perfluorododecanoic acid (ND)



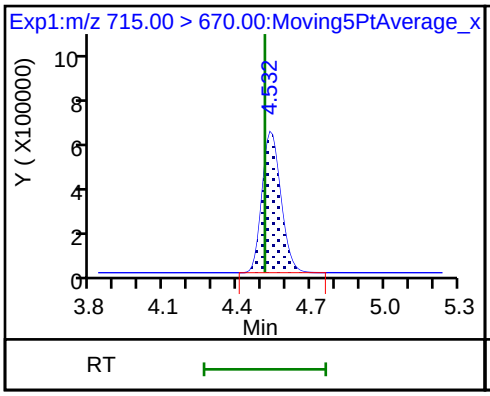
41 Perfluorotridecanoic acid (ND)



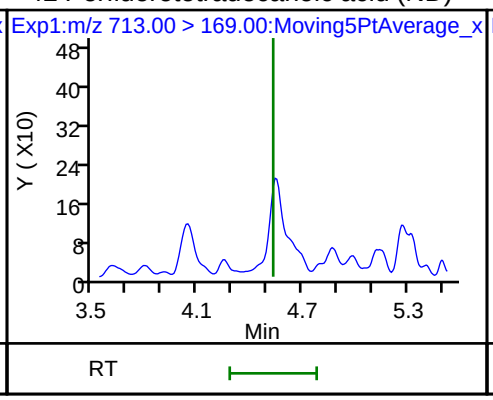
41 Perfluorotridecanoic acid (ND)



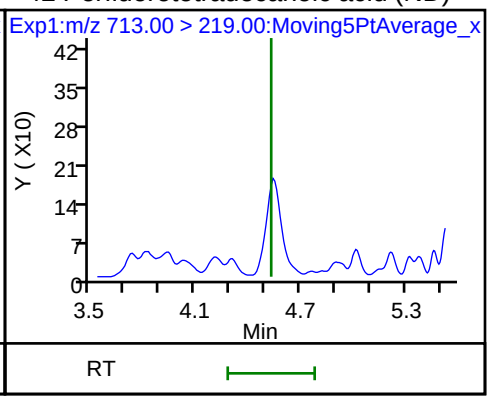
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 320-38611-6

Matrix: Water | Lab File ID: 2018.05.10LLB_008.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 275.7(mL) | Date Analyzed: 05/10/2018 20:38

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	12	B	1.8	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	22		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	24		1.8	0.53
375-85-9	Perfluoroheptanoic acid (PFHpA)	19		1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	37	B	1.8	0.77
375-95-1	Perfluorononanoic acid (PFNA)	1.9		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	1.6	J	1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	11		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	6.5	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.47	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	16		1.8	0.49
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2FTS	23	B *	18	1.8
39108-34-4	8:2FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 320-38611-6

Matrix: Water | Lab File ID: 2018.05.10LLB_008.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 275.7(mL) | Date Analyzed: 05/10/2018 20:38

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	85		25-150
STL01893	13C5 PFPeA	101		25-150
STL00993	13C2 PFHxA	100		25-150
STL01892	13C4-PFHpA	105		25-150
STL00990	13C4 PFOA	101		25-150
STL00995	13C5 PFNA	98		25-150
STL00996	13C2 PFDA	94		25-150
STL00997	13C2 PFUnA	93		25-150
STL00998	13C2 PFDoA	84		25-150
STL02116	13C2-PFTeDA	83		25-150
STL02337	13C3-PFBS	100		25-150
STL00994	18O2 PFHxS	106		25-150
STL00991	13C4 PFOS	96		25-150
STL01056	13C8 FOSA	95		25-150
STL02118	d3-NMeFOSAA	101		25-150
STL02117	d5-NEtFOSAA	100		25-150
STL02279	M2-6:2FTS	133		25-150
STL02280	M2-8:2FTS	115		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_008.d
Lims ID: 320-38611-A-6-A
Client ID: GC-MW-104(WG)
Sample Type: Client
Inject. Date: 10-May-2018 20:38:34 ALS Bottle#: 25 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-6-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:19:24

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.469	1.469	0.0	1.000	4383141	2.13		85.2	34444	
2 Perfluorobutyric acid										
212.90 > 169.00	1.469	1.478	-0.009	1.000	525013	0.3225			371	
D 3 13C5-PFPeA										
267.90 > 223.00	1.748	1.747	0.001	0.561	3354282	2.53		101	44152	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.757	1.753	0.004	1.005	991697	0.6202			369	
D 47 13C3-PFBS										
301.90 > 83.00	1.784	1.783	0.001	1.000	71019	2.33		100	291	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.793	1.798	-0.005	1.005	741274	0.3100			328	
298.90 > 99.00	1.793	1.798	-0.005	1.005	290777		2.55(1.25-3.74)		500	
D 7 13C2 PFHxA										
315.00 > 270.00	2.049	2.048	0.001	1.000	3658095	2.49		99.7	62575	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.049	2.056	-0.007	1.000	981212	0.6599			520	
313.00 > 119.00	2.049	2.056	-0.007	1.000	84007		11.68(5.03-15.10)		751	
D 9 13C4-PFHpA										
367.00 > 322.00	2.385	2.384	0.001	1.000	3761302	2.63		105	94643	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.385	2.392	-0.007	1.000	803376	0.5335			586	
363.00 > 169.00	2.385	2.392	-0.007	1.000	320191		2.51(1.13-3.40)		2523	
D 11 18O2 PFHxS										
403.00 > 84.00	2.397	2.395	0.002	1.000	4407264	2.50		106	65763	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.397	2.403	-0.006	1.000	378252	0.1793			330	
399.00 > 99.00	2.397	2.403	-0.006	1.000	121281		3.12(1.50-4.49)		432	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.721	2.712	0.009	1.000	968809	3.17		133	4702	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.721	2.718	0.003	1.000	445299	0.6457			11103	
* 62 13C2-PFOA										
415.00 > 370.00	2.744	2.741	0.003		3824900	2.50			66667	
D 14 13C4 PFOA										
417.00 > 372.00	2.744	2.742	0.002	1.000	3570658	2.52		101	67562	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.744	2.749	-0.005	1.000	1694062	1.03			792	M
413.00 > 169.00	2.744	2.749	-0.005	1.000	943873		1.79(0.84-2.52)		4160	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.752	2.749	0.003	1.000	20183	0.0129			53.7	
449.00 > 99.00	2.752	2.749	0.003	1.000	4538		4.45(1.94-5.82)		46.6	
D 18 13C4 PFOS										
503.00 > 80.00	3.117	3.106	0.011	1.000	2826191	2.29		95.8	13037	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.117	3.114	0.003	1.000	549959	0.4275			1555	
499.00 > 99.00	3.117	3.114	0.003	1.000	104902		5.24(2.31-6.93)		1136	
D 19 13C5 PFNA										
468.00 > 423.00	3.117	3.114	0.003	1.000	2983636	2.45		97.8	65220	
20 Perfluorononanoic acid										
463.00 > 419.00	3.117	3.122	-0.005	1.000	66133	0.0531			111	
463.00 > 169.00	3.117	3.122	-0.005	1.000	20875		3.17(1.90-5.69)		355	
D 21 13C8 FOSA										
506.00 > 78.00	3.443	3.431	0.012	1.000	3662799	2.38		95.1	32460	
D 26 M2-8:2FTS										
529.00 > 81.00	3.471	3.459	0.012	1.000	1017925	2.76		115	8491	
D 23 13C2 PFDA										
515.00 > 470.00	3.481	3.468	0.013	1.000	2414059	2.35		94.2	53238	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.481	3.478	0.003	1.000	42990	0.0432			164	
513.00 > 169.00	3.481	3.478	0.003	1.000	8975		4.79(2.36-7.09)		187	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.636	3.624	0.012	1.000	1470334	2.53		101	19974	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.801	3.790	0.011	1.000	1440500	2.51		100	14873	
D 30 13C2 PFUnA										
565.00 > 520.00	3.812	3.800	0.012	1.000	2058674	2.33		93.1	48518	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.812	3.811	0.001	1.003	911	0.001692			22.8	
D 36 13C2 PFDoA										
615.00 > 570.00	4.101	4.091	0.010	1.000	2009334	2.10		84.2	21316	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.603	4.595	0.008	1.000	2521012	2.08		83.3	17527	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:47 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_008.d

Injection Date: 10-May-2018 20:38:34 Instrument ID: A8_N

Lims ID: 320-38611-A-6-A Lab Sample ID: 320-38611-6

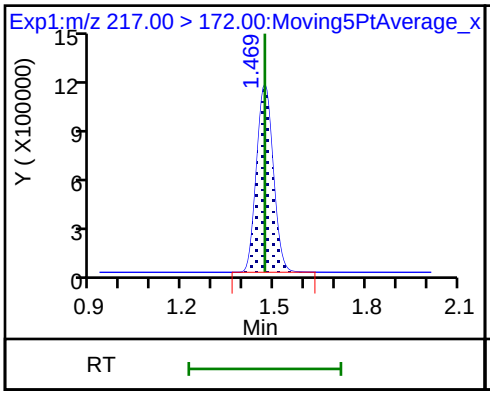
Client ID: GC-MW-104(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 25 Worklist Smp#: 10

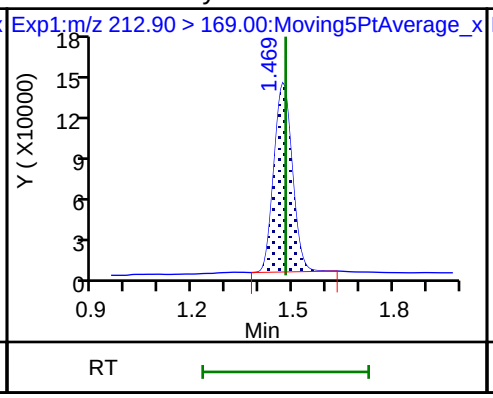
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

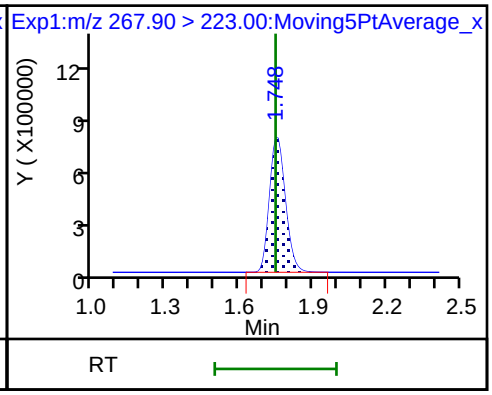
D 1 13C4 PFBA



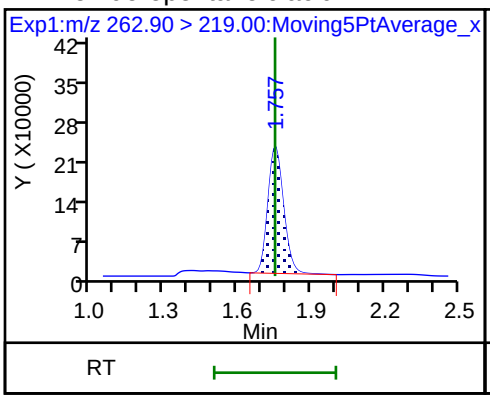
2 Perfluorobutyric acid



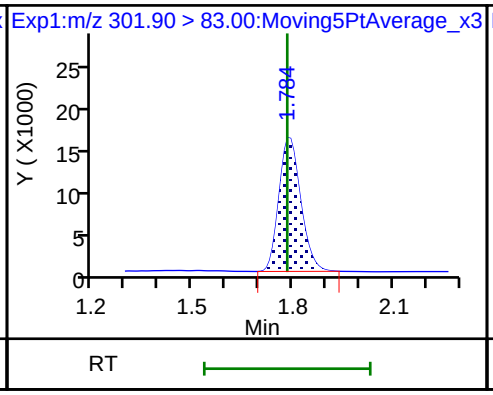
D 3 13C5-PFPeA



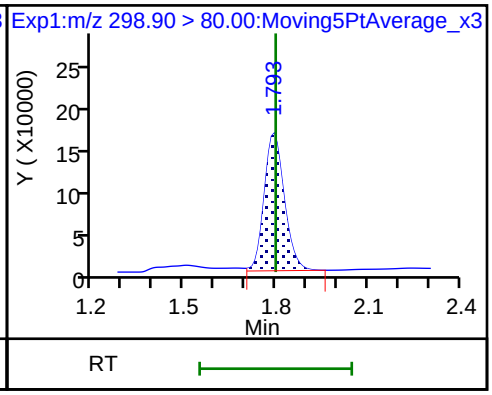
4 Perfluoropentanoic acid



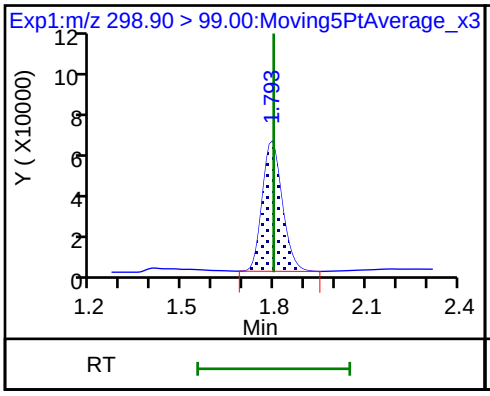
D 47 13C3-PFBS



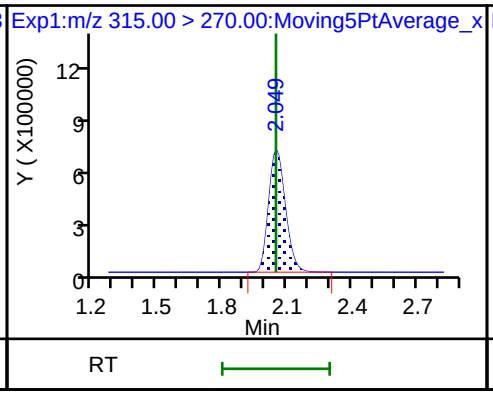
5 Perfluorobutanesulfonic acid



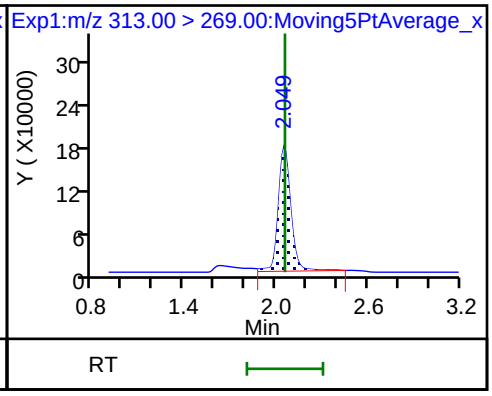
5 Perfluorobutanesulfonic acid



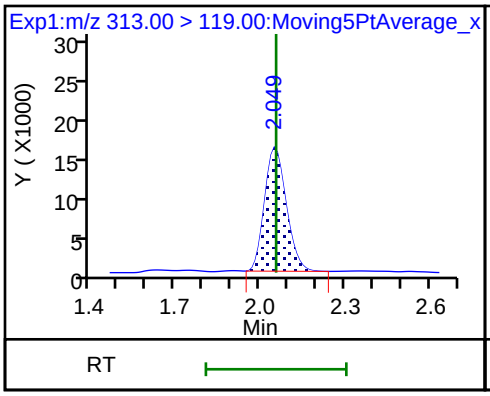
D 7 13C2 PFHxA



6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



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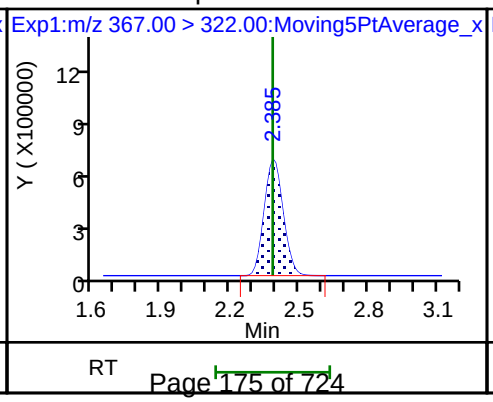
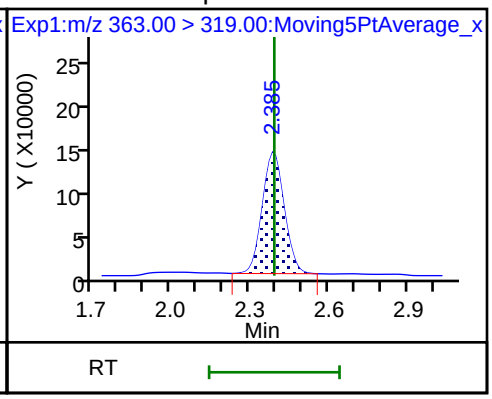
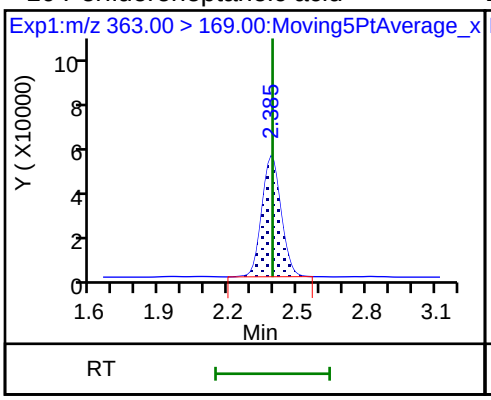


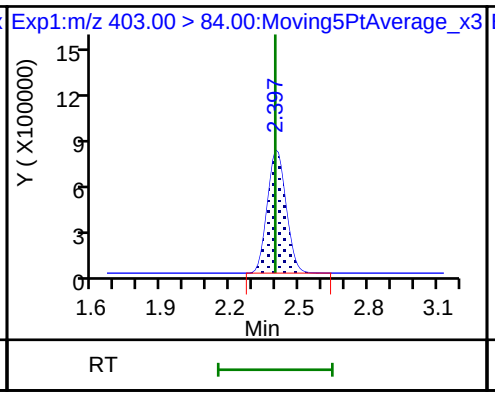
10 Perfluoroheptanoic acid



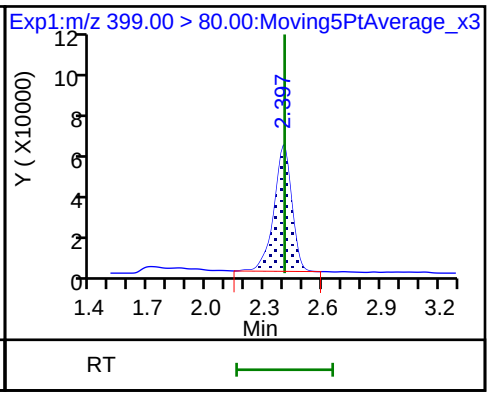
10 Perfluoroheptanoic acid



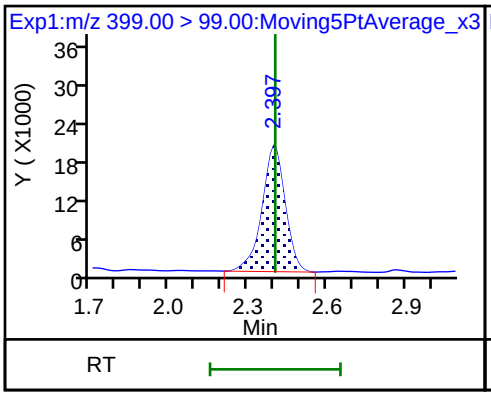
D 11 18O2 PFHxS



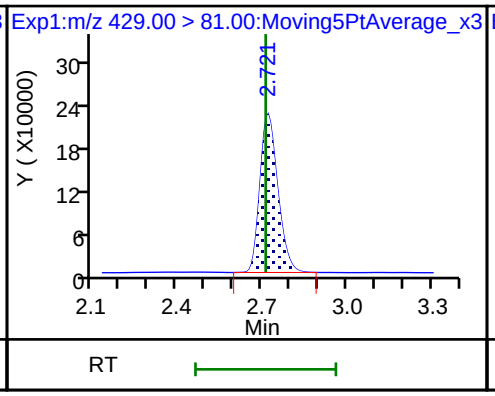
8 Perfluorohexanesulfonic acid



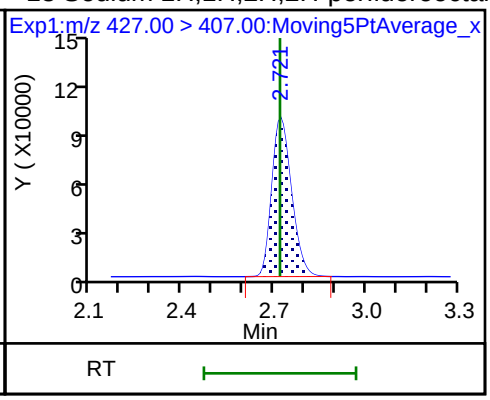
8 Perfluorohexanesulfonic acid



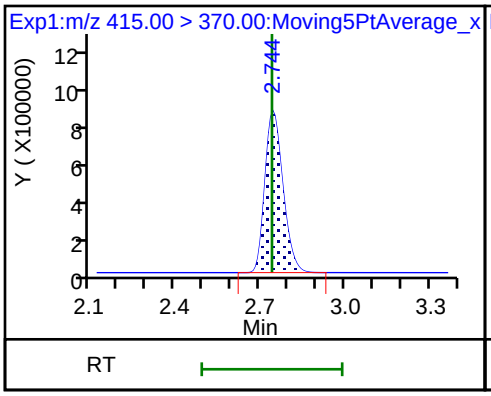
D 12 M2-6:2FTS



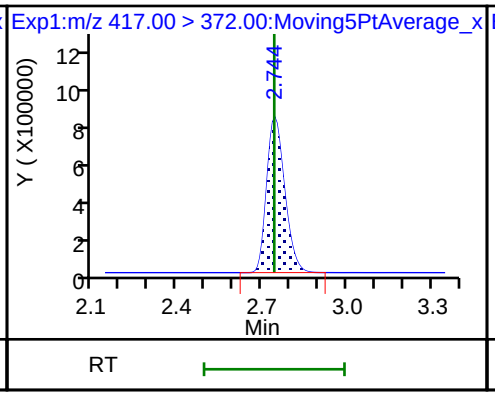
13 Sodium 1H,1H,2H,2H-perfluorooctane



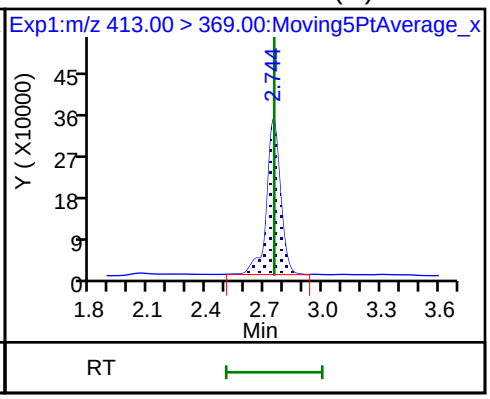
* 62 13C2-PFOA



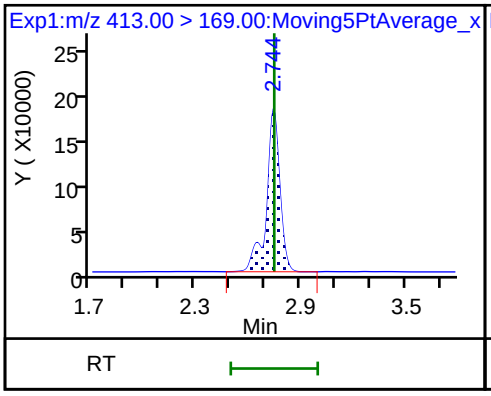
D 14 13C4 PFOA



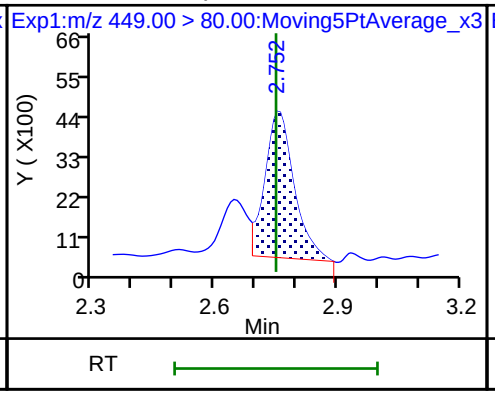
15 Perfluorooctanoic acid (M)



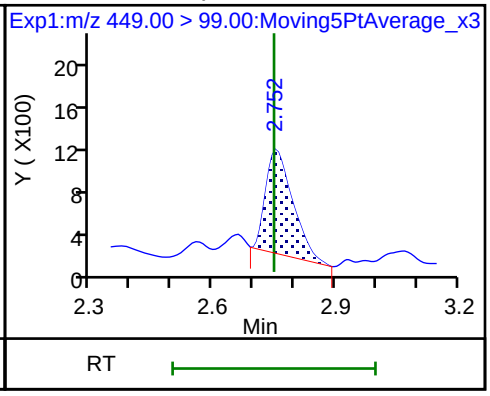
15 Perfluorooctanoic acid



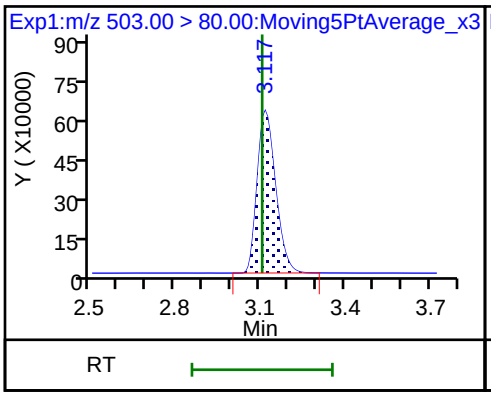
16 Perfluoroheptanesulfonic acid



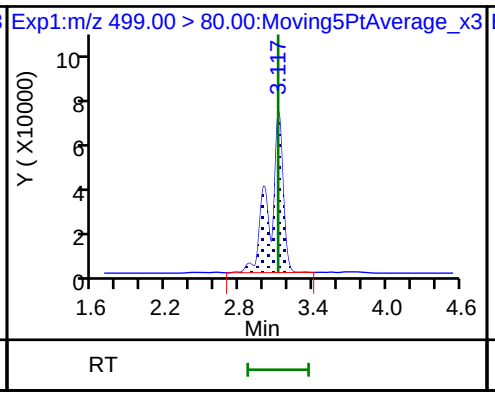
16 Perfluoroheptanesulfonic acid



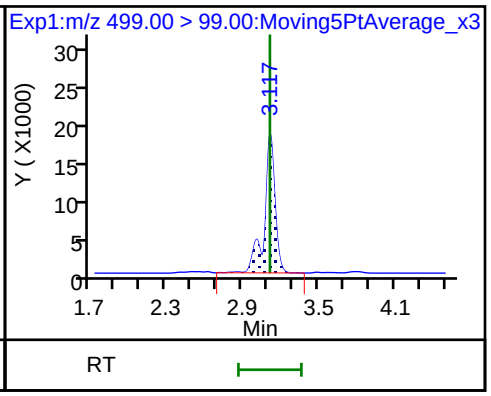
D 18 13C4 PFOS



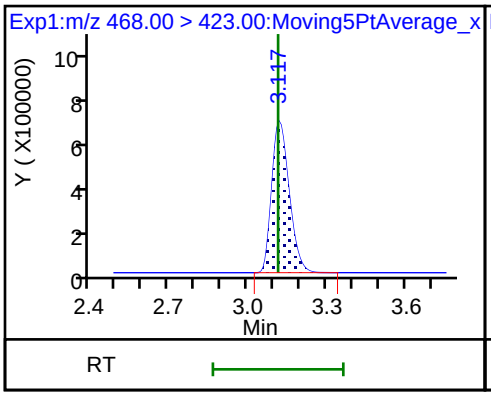
17 Perfluorooctane sulfonic acid



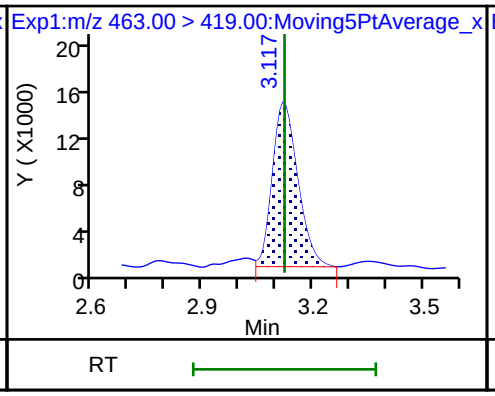
17 Perfluorooctane sulfonic acid



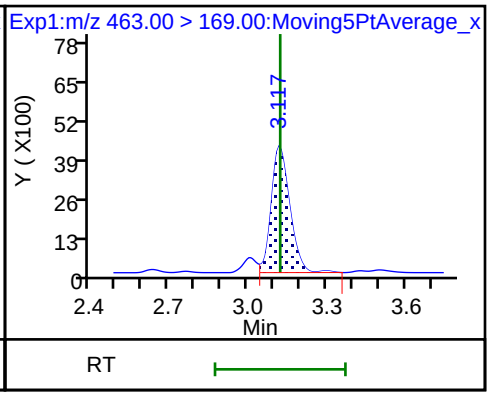
D 19 13C5 PFNA



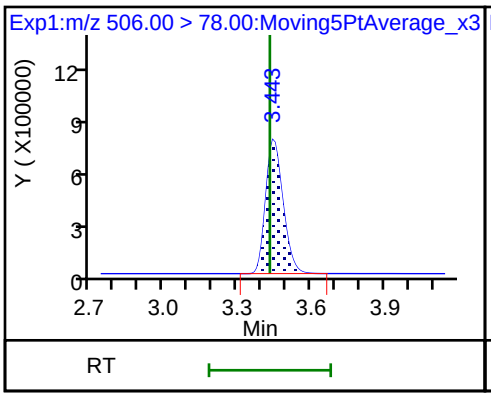
20 Perfluorononanoic acid



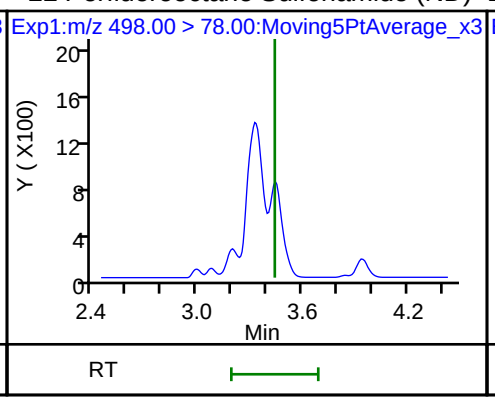
20 Perfluorononanoic acid



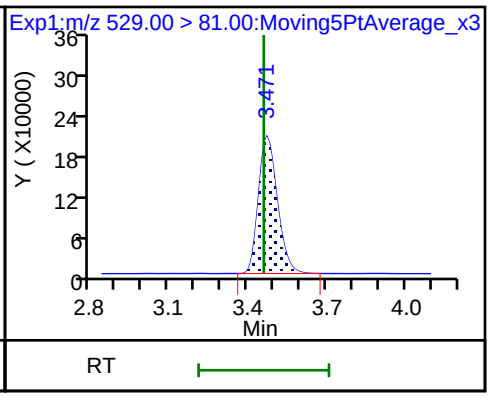
D 21 13C8 FOSA



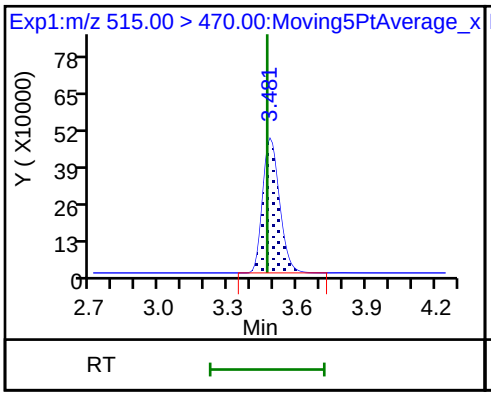
22 Perfluorooctane Sulfonamide (ND)



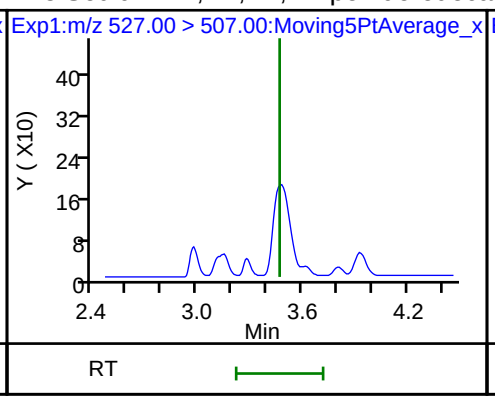
D 26 M2-8:2FTS



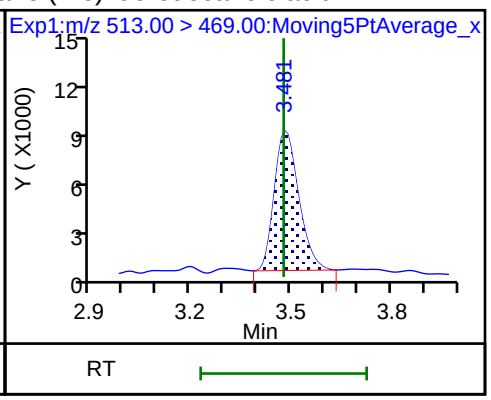
D 23 13C2 PFDA



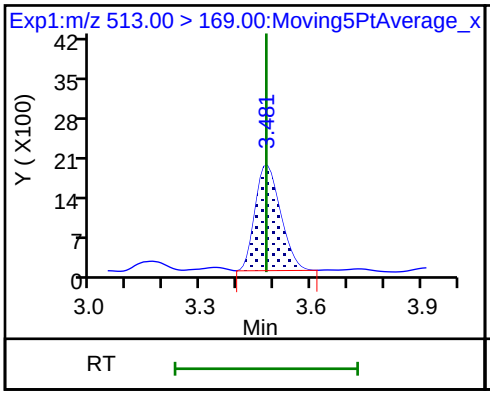
25 Sodium 1H,1H,2H,2H-perfluorodecane2(ND)



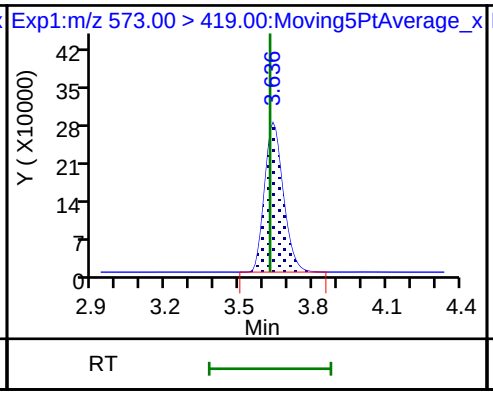
24 Perfluorodecanoic acid



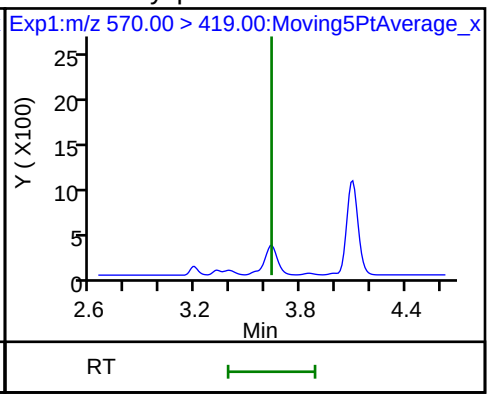
24 Perfluorodecanoic acid



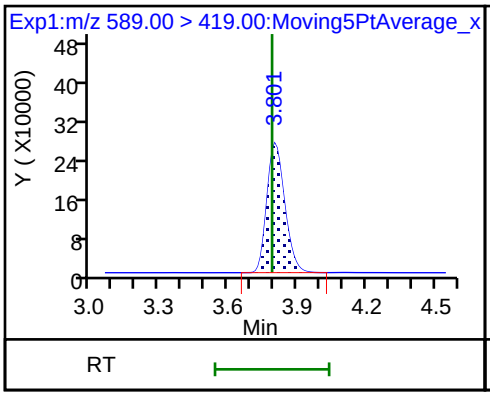
D 27 d3-NMeFOSAA



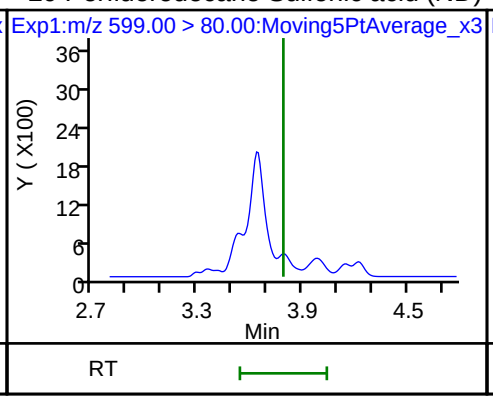
28 N-methyl perfluorooctane sulfonami (ND)



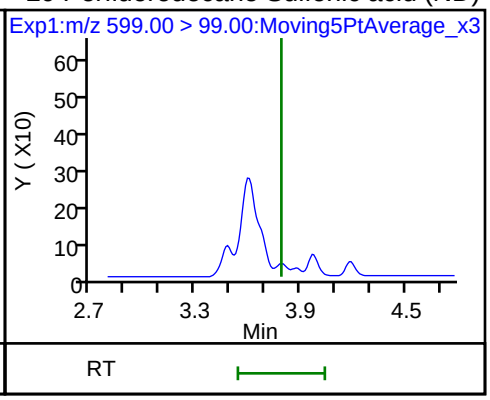
D 32 d5-NEtFOSAA



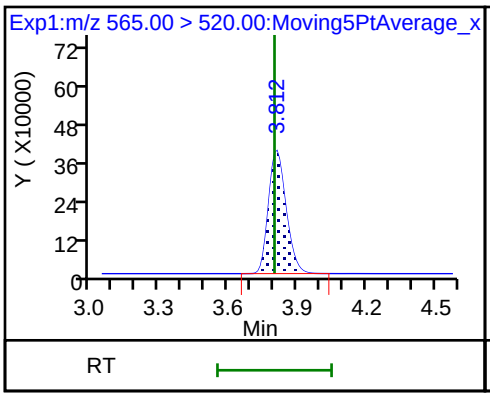
29 Perfluorodecane Sulfonic acid (ND)



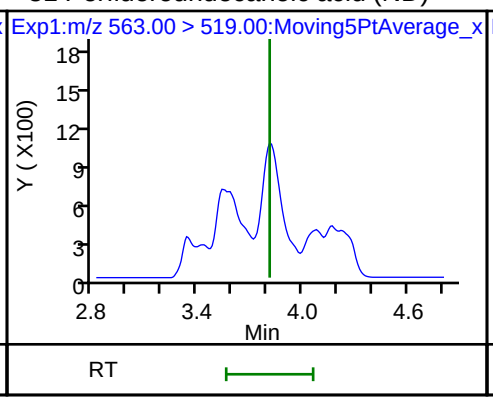
29 Perfluorodecane Sulfonic acid (ND)



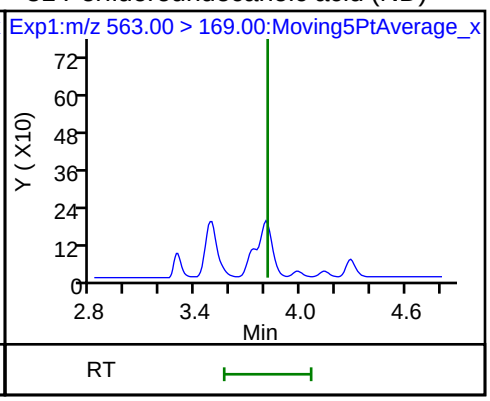
D 30 13C2 PFUnA



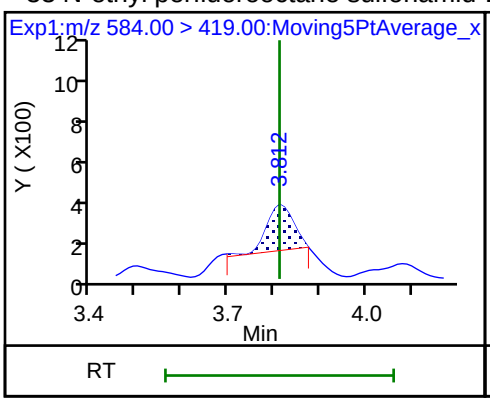
31 Perfluoroundecanoic acid (ND)



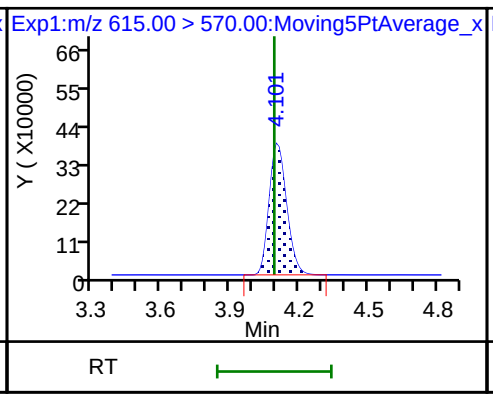
31 Perfluoroundecanoic acid (ND)



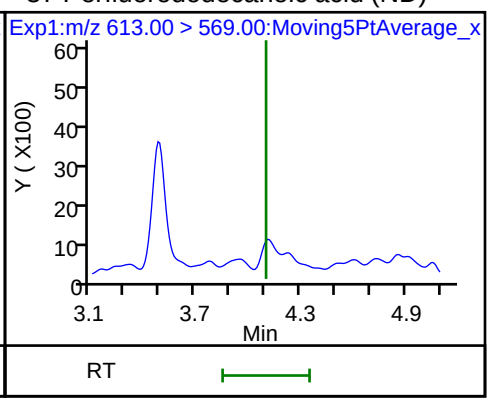
33 N-ethyl perfluorooctane sulfonamid



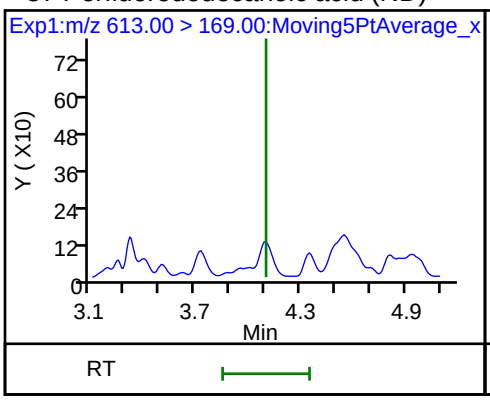
D 36 13C2 PFDoA



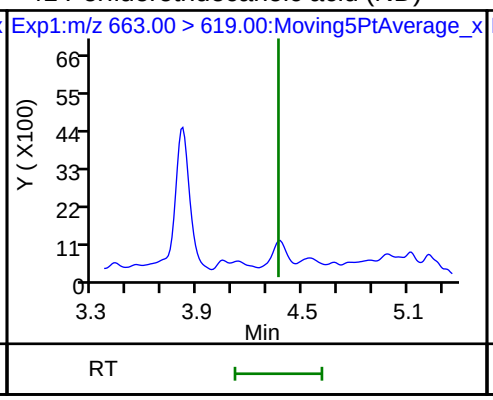
37 Perfluorododecanoic acid (ND)



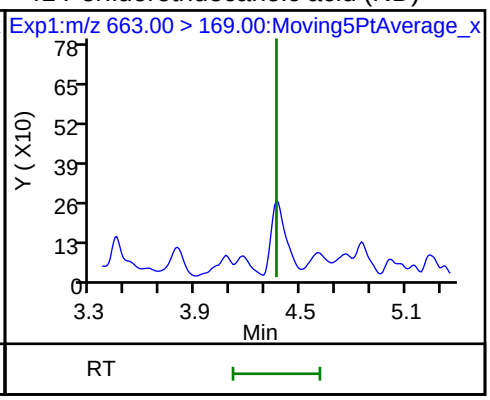
37 Perfluorododecanoic acid (ND)



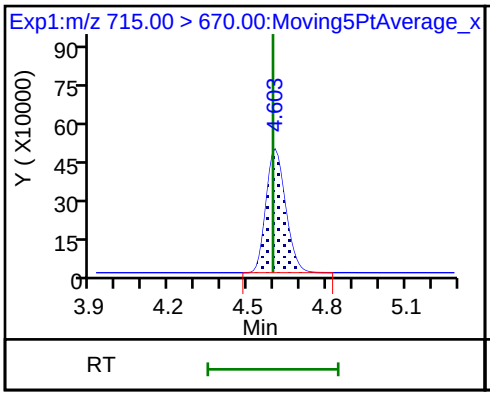
41 Perfluorotridecanoic acid (ND)



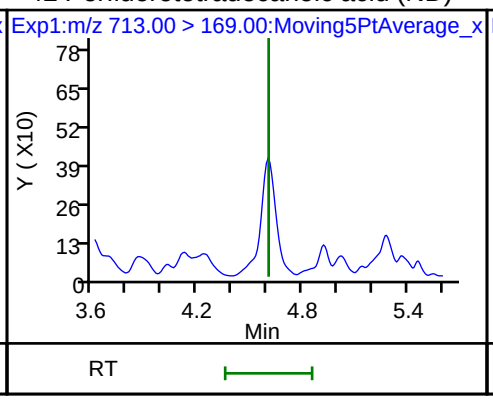
41 Perfluorotridecanoic acid (ND)



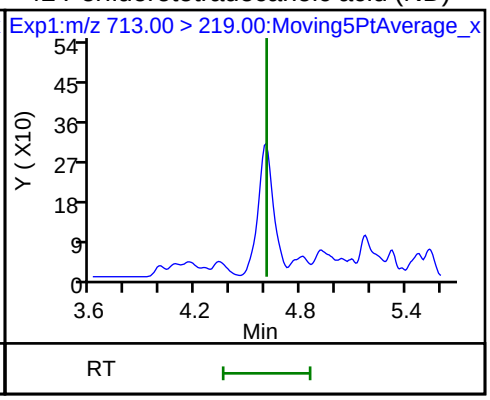
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



TestAmerica Sacramento

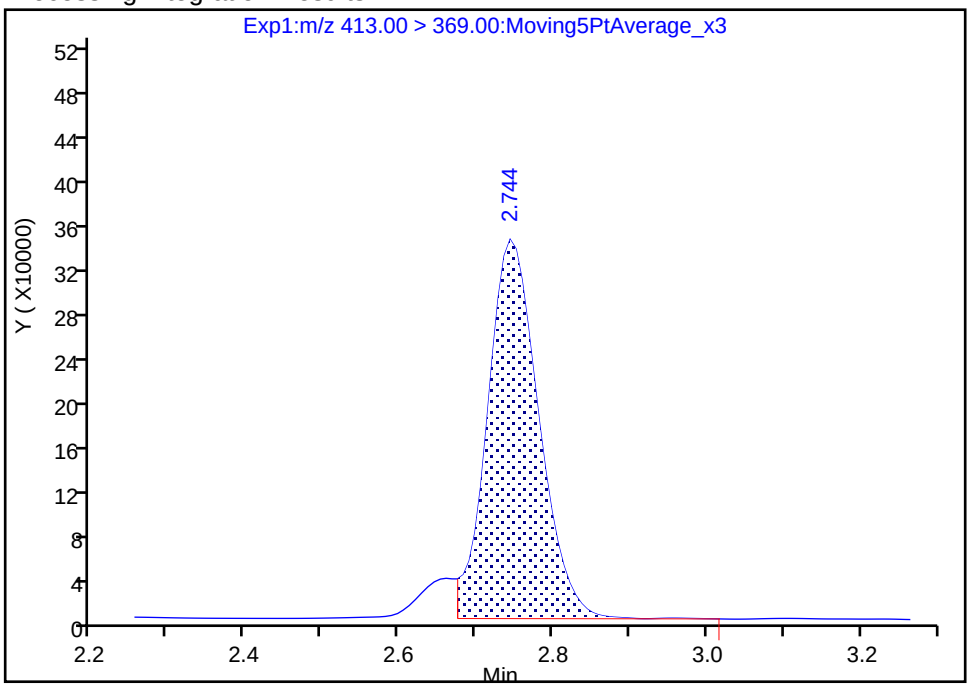
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_008.d				
Injection Date:	10-May-2018 20:38:34	Instrument ID:	A8_N		
Lims ID:	320-38611-A-6-A	Lab Sample ID:	320-38611-6		
Client ID:	GC-MW-104(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	25	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

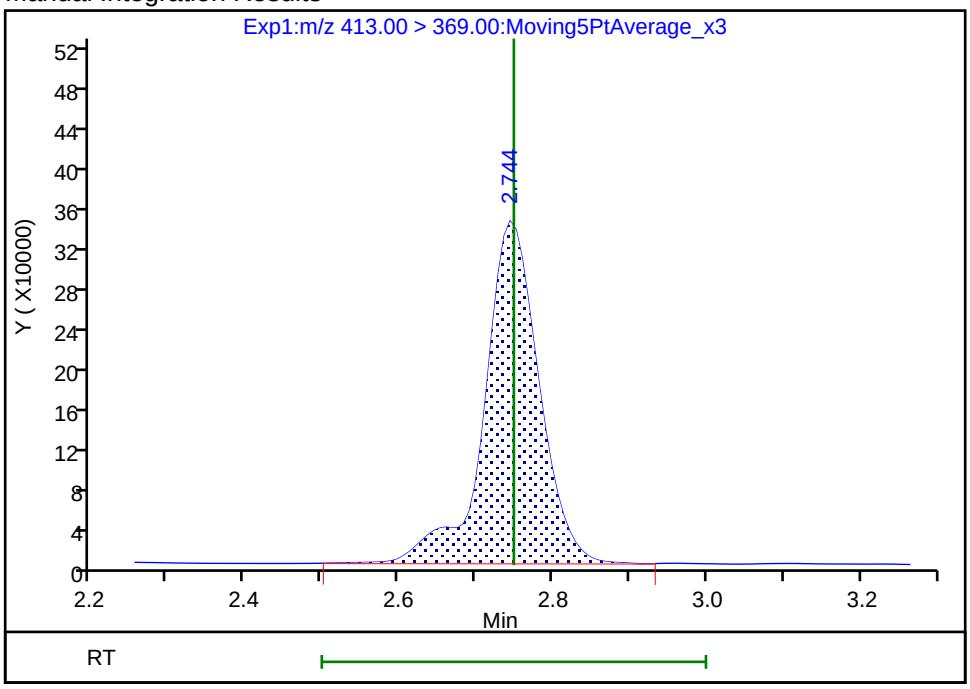
Processing Integration Results

RT: 2.74
Area: 1568012
Amount: 0.950180
Amount Units: ng/ml



Manual Integration Results

RT: 2.74
Area: 1694062
Amount: 1.026563
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:19:08
Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-104(WG) RE | Lab Sample ID: 320-38611-6 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_026.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 282.1(mL) | Date Analyzed: 05/17/2018 02:17

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*28*	*H*	*1.8*	*0.75*
27619-97-2	*6:2FTS*	*ND*	*H*	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	108		25-150
STL02279	M2-6:2FTS	126		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_026.d
Lims ID: 320-38611-B-6-B
Client ID: GC-MW-104(WG)
Sample Type: Client
Inject. Date: 17-May-2018 02:17:30 ALS Bottle#: 17 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-6-b
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 14:06:13 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 14:06:13

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.457	1.447	0.010	1.000	5670128	2.01		80.4	34371	
2 Perfluorobutyric acid										
212.90 > 169.00	1.457	1.457	0.0	1.000	651291	0.3088			277	
D 3 13C5-PFPeA										
267.90 > 223.00	1.728	1.712	0.016	0.566	4407069	2.44		97.5	50430	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.728	1.729	-0.001	1.000	1136102	0.5459			324	
D 47 13C3-PFBS										
301.90 > 83.00	1.755	1.748	0.007	1.000	91064	2.23		95.8	253	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.764	1.765	-0.001	1.005	805306	0.2633			330	M
298.90 > 99.00	1.764	1.765	-0.001	1.005	338935		2.38(1.25-3.74)		592	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	1.994	0.020	1.000	4642631	2.41		96.3	65909	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.014	0.0	1.000	1111238	0.5820			474	
313.00 > 119.00	2.014	2.014	0.0	1.000	98184		11.32(5.03-15.10)		695	
D 9 13C4-PFHpA										
367.00 > 322.00	2.332	2.321	0.011	1.000	4801626	2.60		104	85425	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.332	2.332	0.0	1.000	908679	0.4479			602	
363.00 > 169.00	2.332	2.332	0.0	1.000	353392		2.57(1.13-3.40)		1695	
D 11 18O2 PFHxS										
403.00 > 84.00	2.345	2.334	0.011	1.000	5275475	2.31		97.7	61028	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.345	2.345	0.0	1.000	438195	0.1743			385	
399.00 > 99.00	2.345	2.345	0.0	1.000	140064		3.13(1.50-4.49)		344	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.667	2.645	0.022	1.000	1216206	2.98		126	6170	
13 Sodium 1H,1H,2H,2H-perfluorooctane										M
427.00 > 407.00	2.667	2.667	0.0	1.000	13079	0.004315			132	M
D 14 13C4 PFOA										
417.00 > 372.00	2.689	2.668	0.021	1.000	4726525	2.70		108	83278	
* 62 13C2-PFOA										
415.00 > 370.00	2.689	2.689	0.0		4614064	2.50			57084	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.689	2.689	0.0	1.000	1780490	0.8001			638	
413.00 > 169.00	2.689	2.689	0.0	1.000	1009867		1.76(0.84-2.52)		2475	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.697	2.697	0.0	1.000	25387	0.0119			67.8	
449.00 > 99.00	2.712	2.697	0.015	1.006	6698		3.79(1.94-5.82)		41.0	M
D 18 13C4 PFOS										
503.00 > 80.00	3.055	3.029	0.026	1.000	3837342	2.45		102	23369	
D 19 13C5 PFNA										
468.00 > 423.00	3.055	3.036	0.019	1.000	3899155	2.73		109	60734	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.055	3.051	0.004	1.000	746732	0.3955			2923	
499.00 > 99.00	3.055	3.051	0.004	1.000	143546		5.20(2.31-6.93)		1293	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.055	3.051	0.004	1.000	91356	0.0553			132	M
463.00 > 169.00	3.055	3.051	0.004	1.000	21617		4.23(1.90-5.69)		311	M
D 26 M2-8:2FTS										
529.00 > 81.00	3.402	3.376	0.026	1.000	1268912	2.73		114	11511	
D 21 13C8 FOSA										
506.00 > 78.00	3.393	3.376	0.017	1.000	4580623	2.23		89.2	47455	
D 23 13C2 PFDA										
515.00 > 470.00	3.411	3.385	0.026	1.000	3060543	2.52		101	65632	
22 Perfluorooctane Sulfonamide										M
498.00 > 78.00	3.393	3.388	0.005	1.000	3081	0.001727			13.2	M
24 Perfluorodecanoic acid										
513.00 > 469.00	3.411	3.407	0.004	1.000	54635	0.0459			206	
513.00 > 169.00	3.420	3.407	0.013	1.003	10498		5.20(2.36-7.09)		288	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.570	3.544	0.026	1.000	1802687	2.69		108	24385	
D 30 13C2 PFUnA										
565.00 > 520.00	3.743	3.716	0.027	1.000	2519701	2.62		105	52011	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.732	3.716	0.016	1.000	1812248	2.63		105	15455	
33 N-ethyl perfluorooctane sulfonamid										M
584.00 > 419.00	3.753	3.740	0.013	1.006	1621	0.002379			48.6	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.041	4.006	0.035	1.000	2640221	2.55		102	23412	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.542	4.511	0.031	1.000	3453383	2.72		109	16986	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 14:06:14 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_026.d

Injection Date: 17-May-2018 02:17:30 Instrument ID: A8_N

Lims ID: 320-38611-B-6-B Lab Sample ID: 320-38611-6

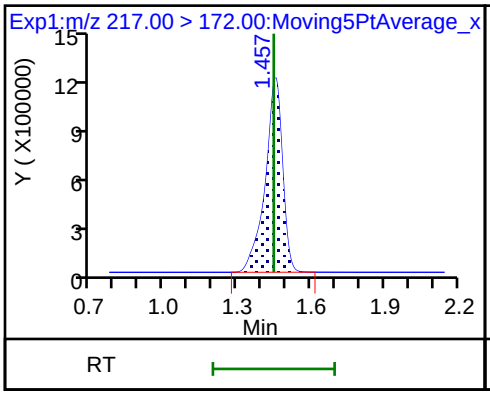
Client ID: GC-MW-104(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 18

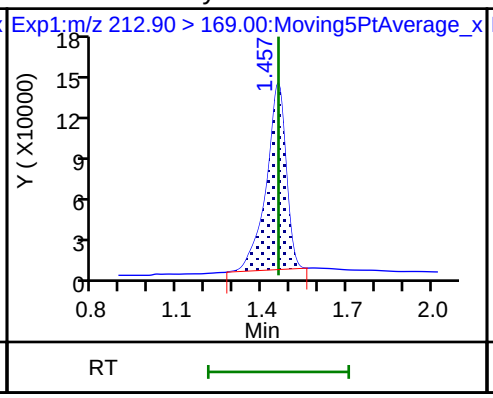
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

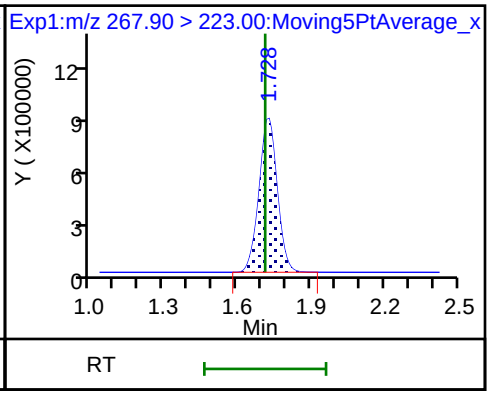
D 1 13C4 PFBA



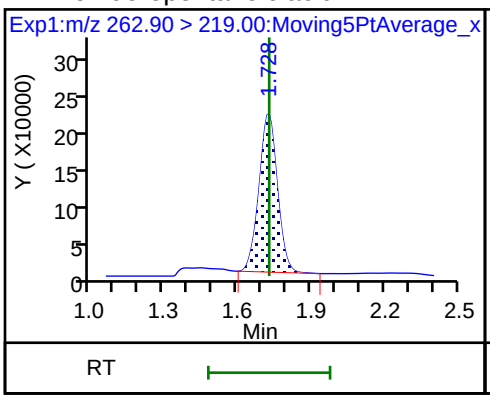
2 Perfluorobutyric acid



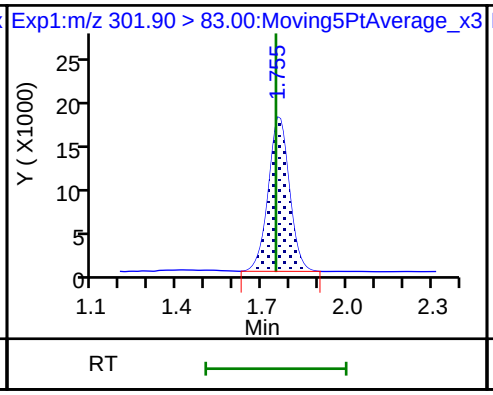
D 3 13C5-PFPeA



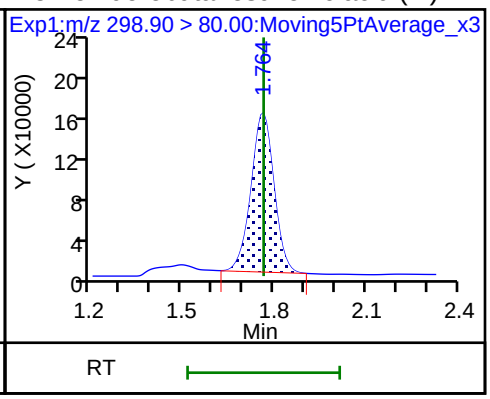
4 Perfluoropentanoic acid



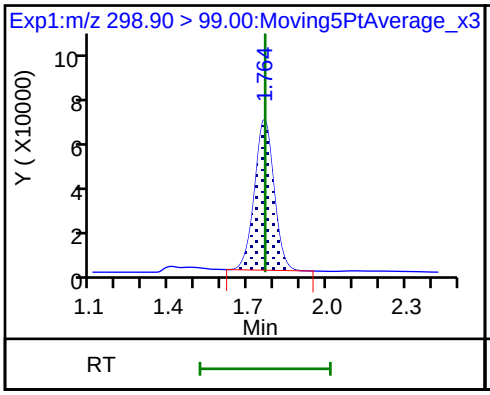
D 47 13C3-PFBS



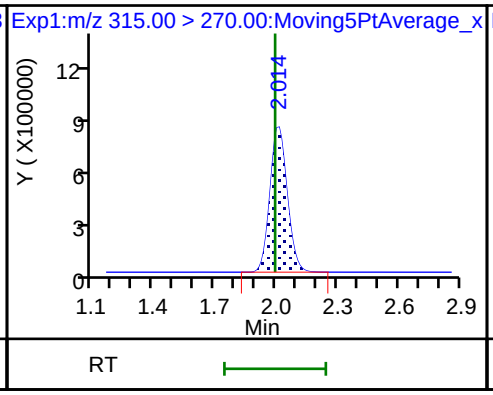
5 Perfluorobutanesulfonic acid (M)



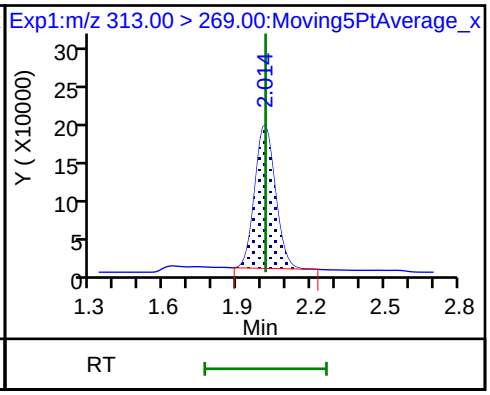
5 Perfluorobutanesulfonic acid



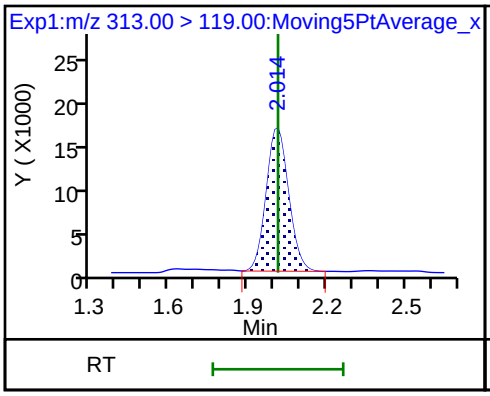
D 7 13C2 PFHxA



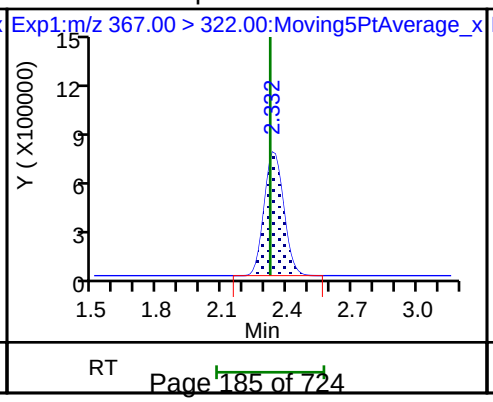
6 Perfluorohexanoic acid



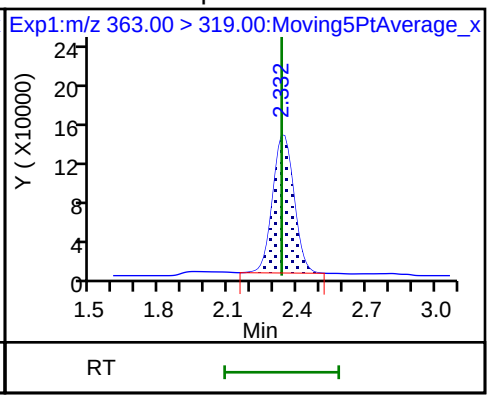
6 Perfluorohexanoic acid



D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



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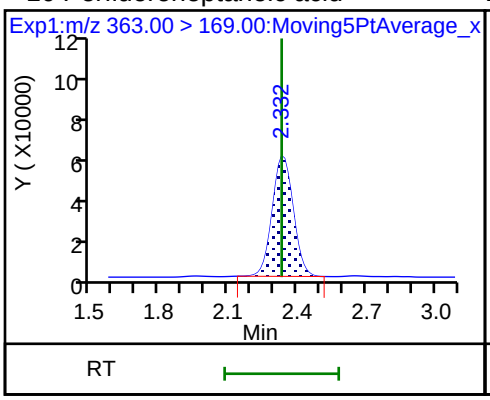
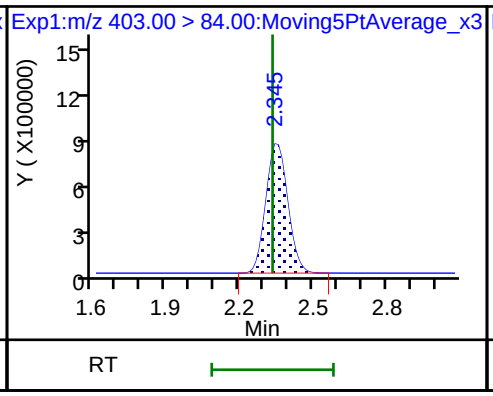
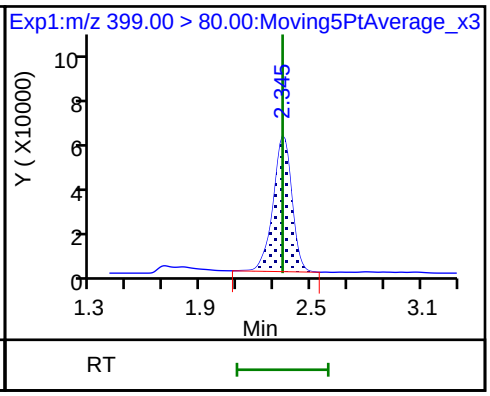


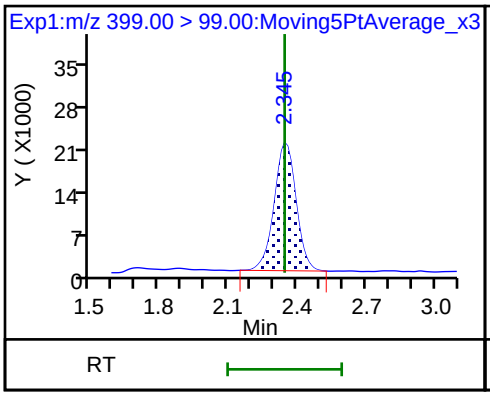
D 11 18O2 PFHxS



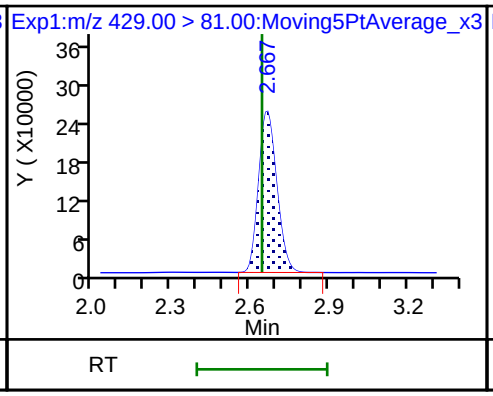
8 Perfluorohexanesulfonic acid



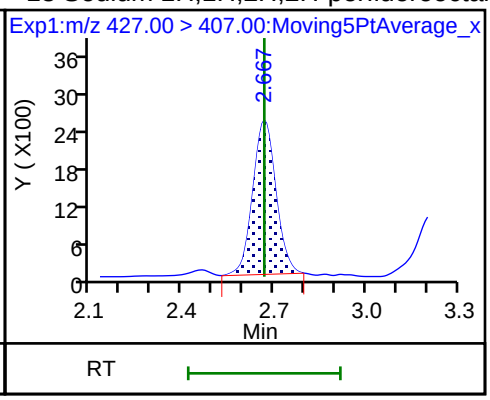
8 Perfluorohexanesulfonic acid



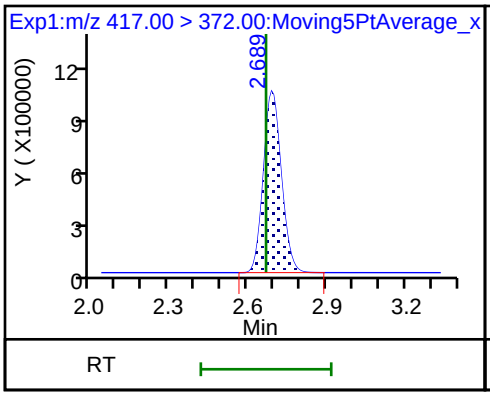
D 12 M2-6:2FTS



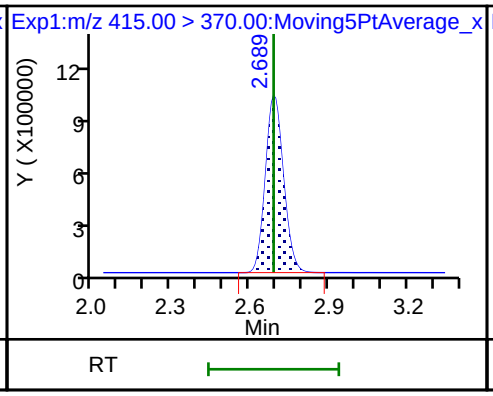
13 Sodium 1H,1H,2H,2H-perfluorooctane (M)



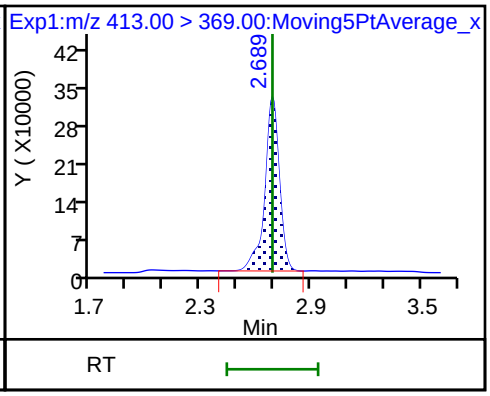
D 14 13C4 PFOA



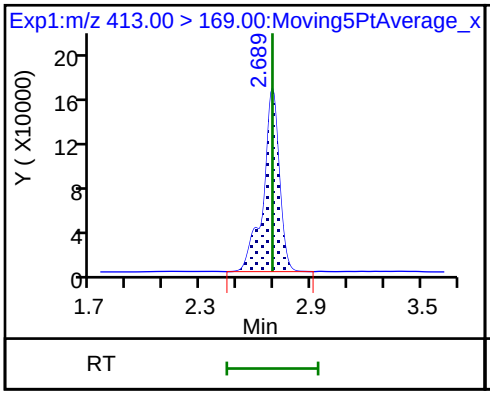
* 62 13C2-PFOA



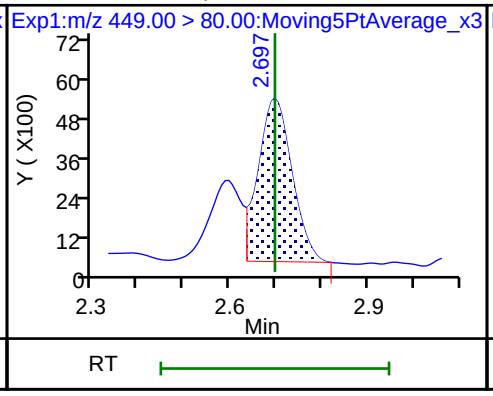
15 Perfluorooctanoic acid



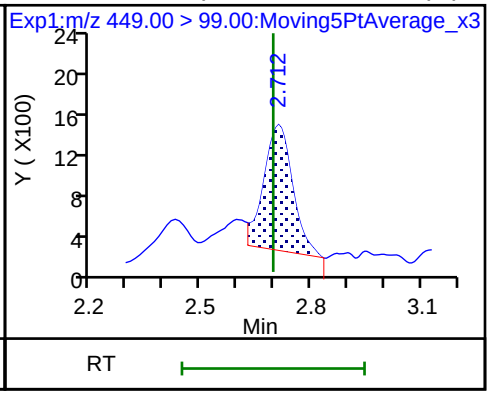
15 Perfluorooctanoic acid



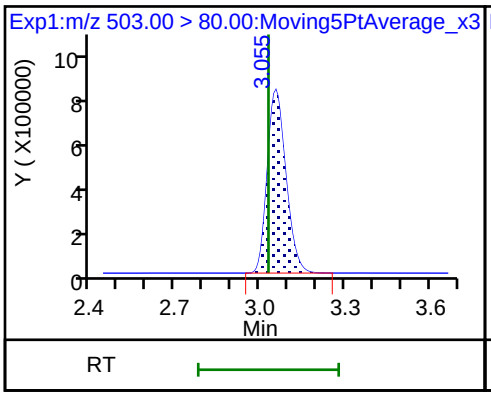
16 Perfluoroheptanesulfonic acid



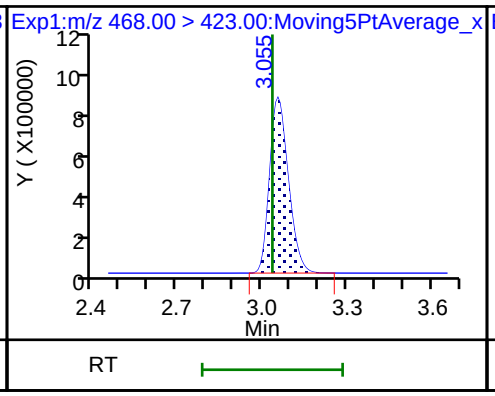
16 Perfluoroheptanesulfonic acid (M)



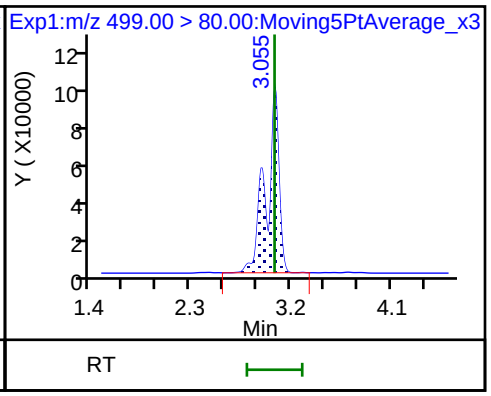
D 18 13C4 PFOS



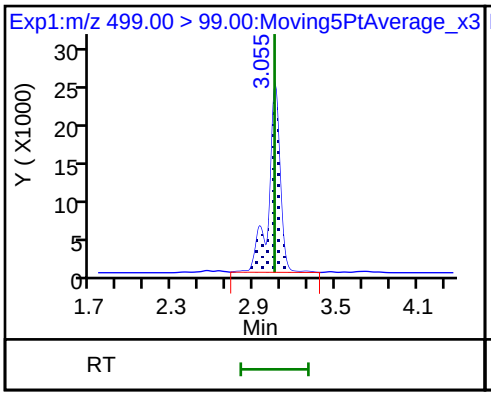
D 19 13C5 PFNA



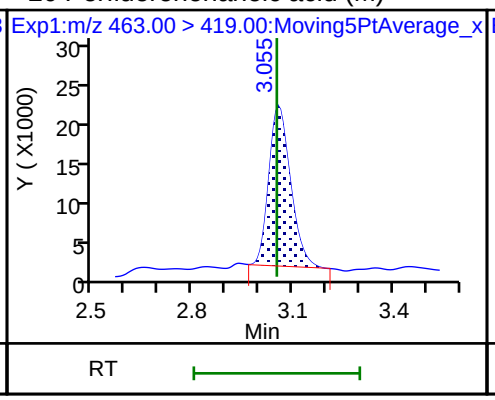
17 Perfluorooctane sulfonic acid



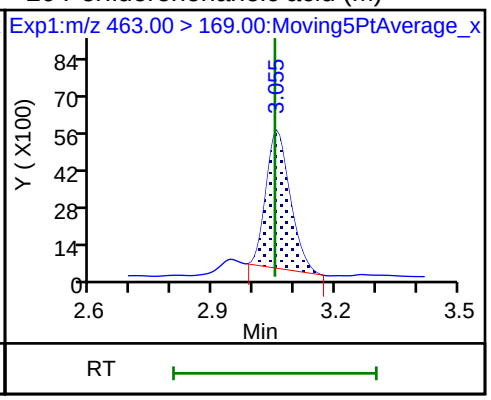
17 Perfluorooctane sulfonic acid



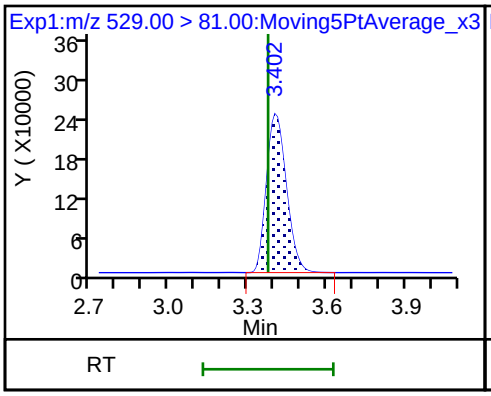
20 Perfluorononanoic acid (M)



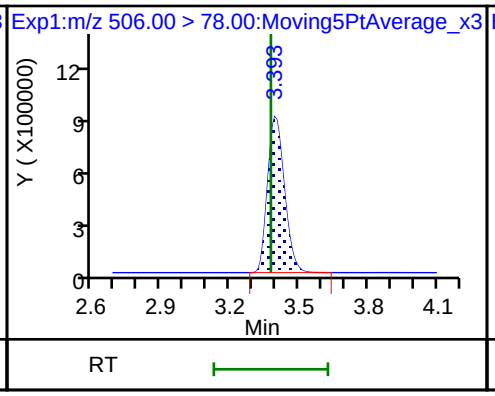
20 Perfluorononanoic acid (M)



D 26 M2-8:2FTS



D 21 13C8 FOSA



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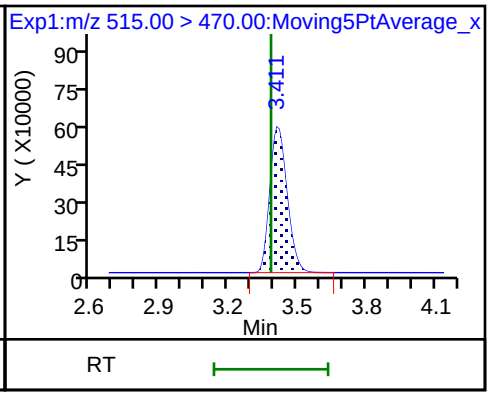
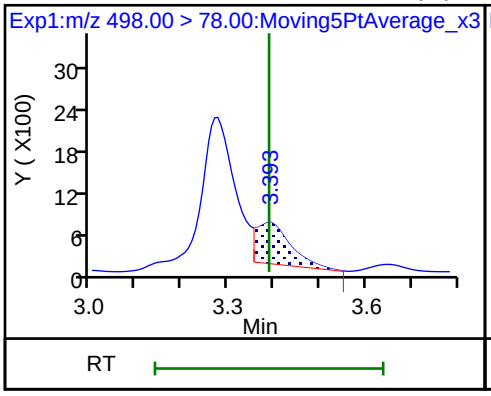
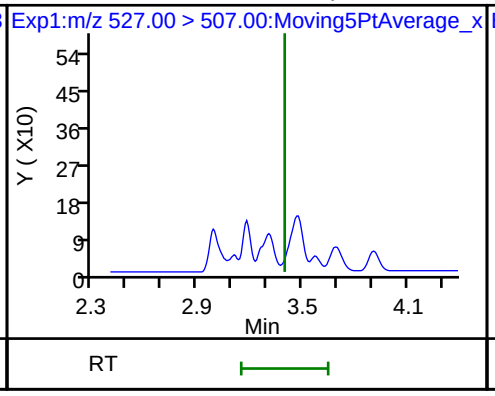


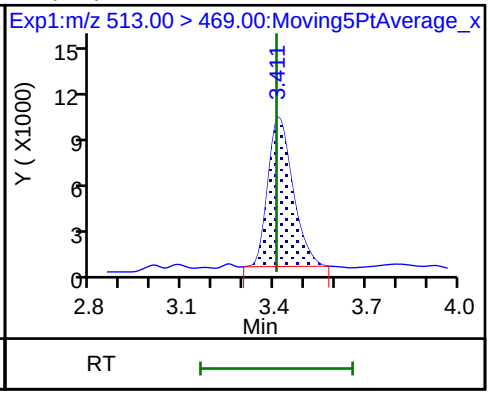
22 Perfluorooctane Sulfonamide (M)



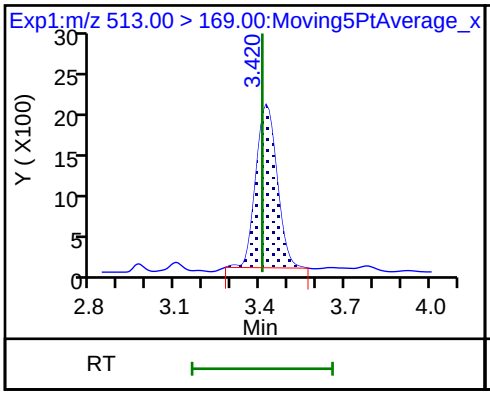
25 Sodium 1H,1H,2H,2H-perfluorodecane (MD)



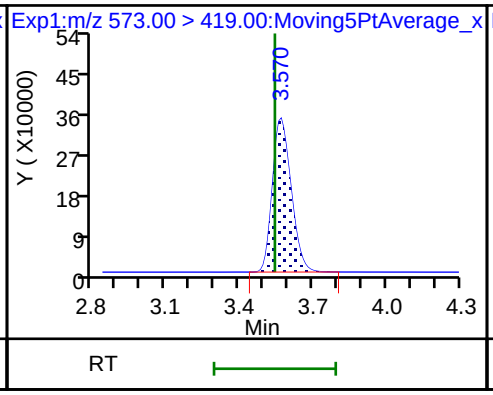
24 Perfluorodecanoic acid



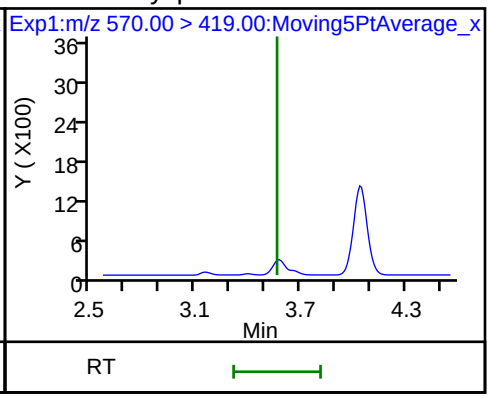
24 Perfluorodecanoic acid



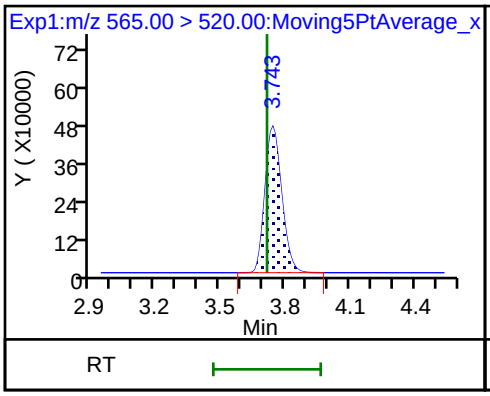
D 27 d3-NMeFOSAA



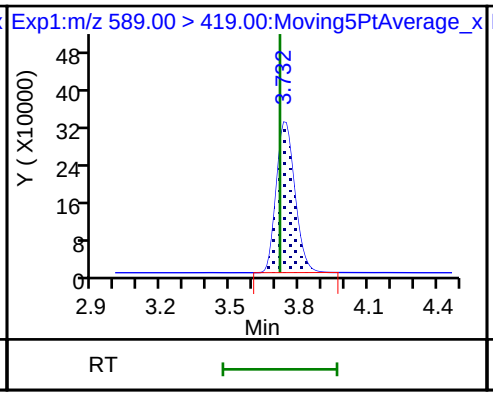
28 N-methyl perfluorooctane sulfonami (ND)



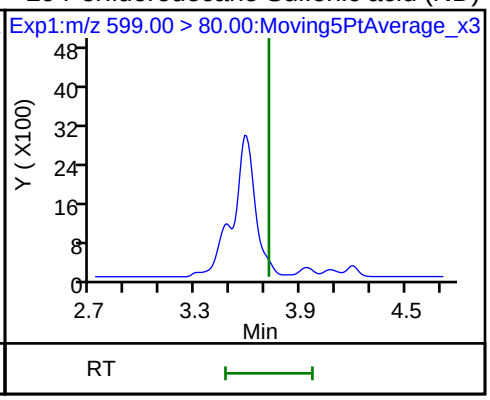
D 30 13C2 PFUnA



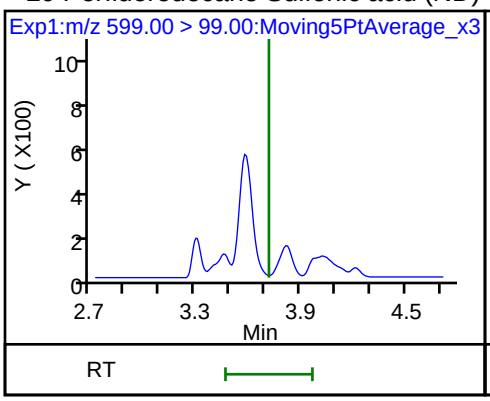
D 32 d5-NEtFOSAA



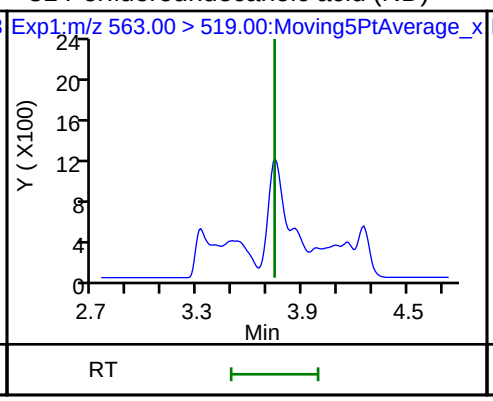
29 Perfluorodecane Sulfonic acid (ND)



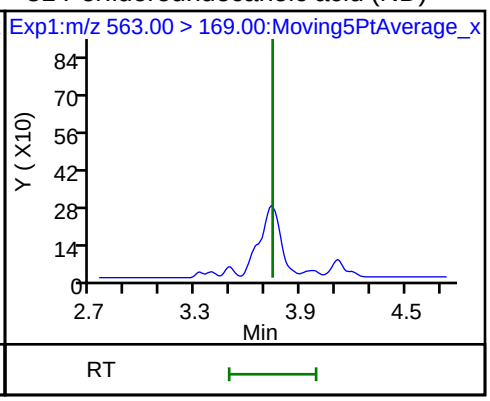
29 Perfluorodecane Sulfonic acid (ND)



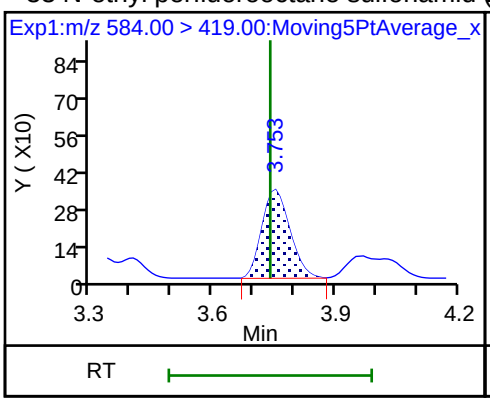
31 Perfluoroundecanoic acid (ND)



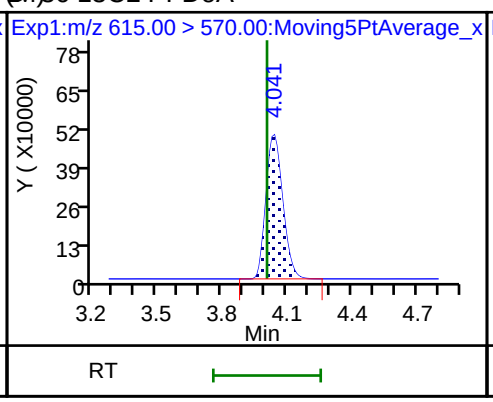
31 Perfluoroundecanoic acid (ND)



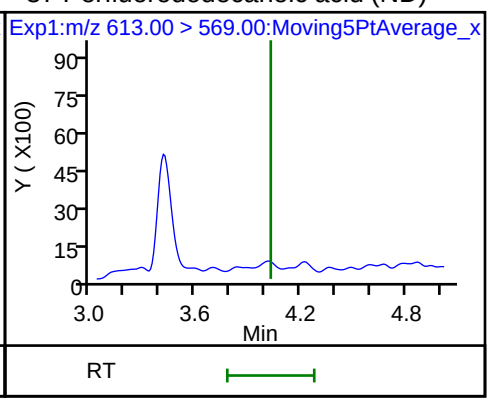
33 N-ethyl perfluorooctane sulfonamid (M)



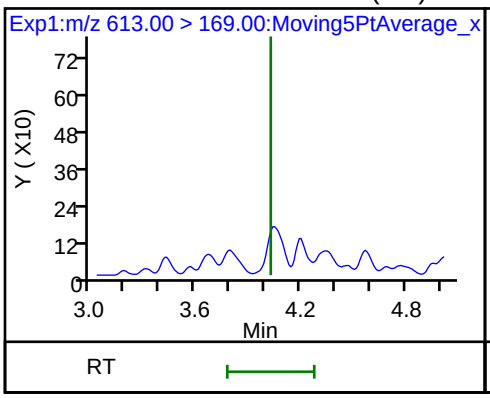
D 36 13C2 PFDoA



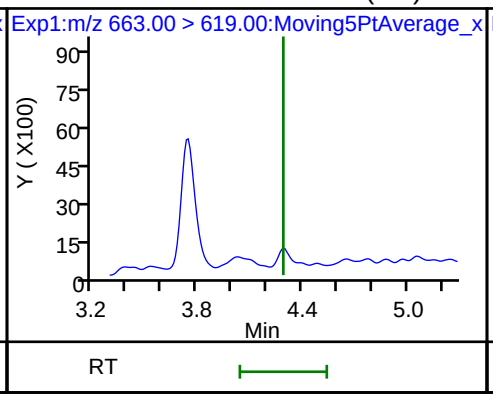
37 Perfluorododecanoic acid (ND)



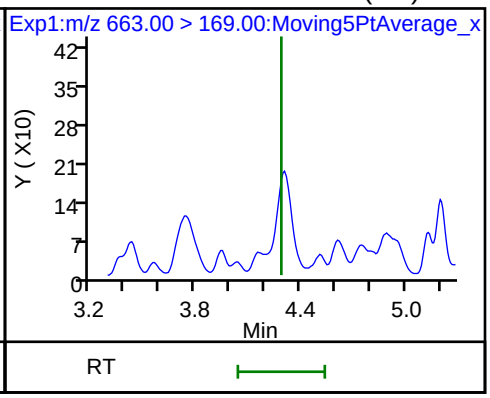
37 Perfluorododecanoic acid (ND)



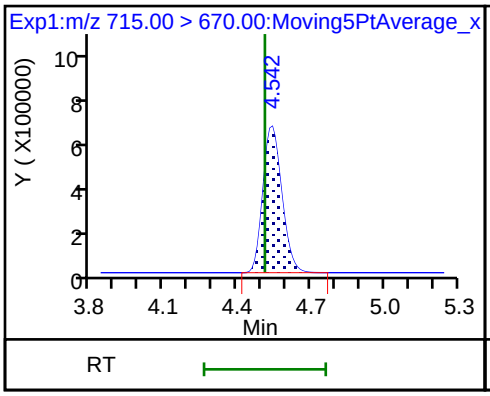
41 Perfluorotridecanoic acid (ND)



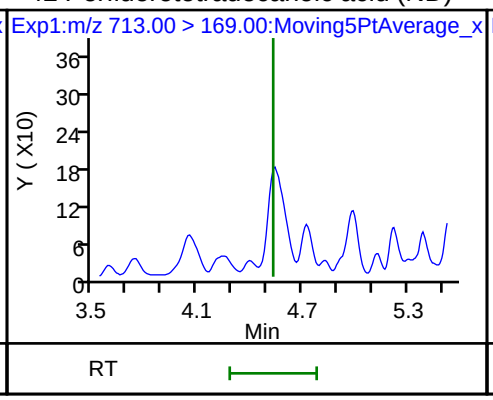
41 Perfluorotridecanoic acid (ND)



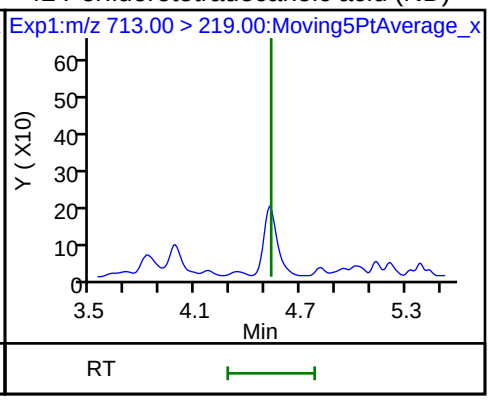
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

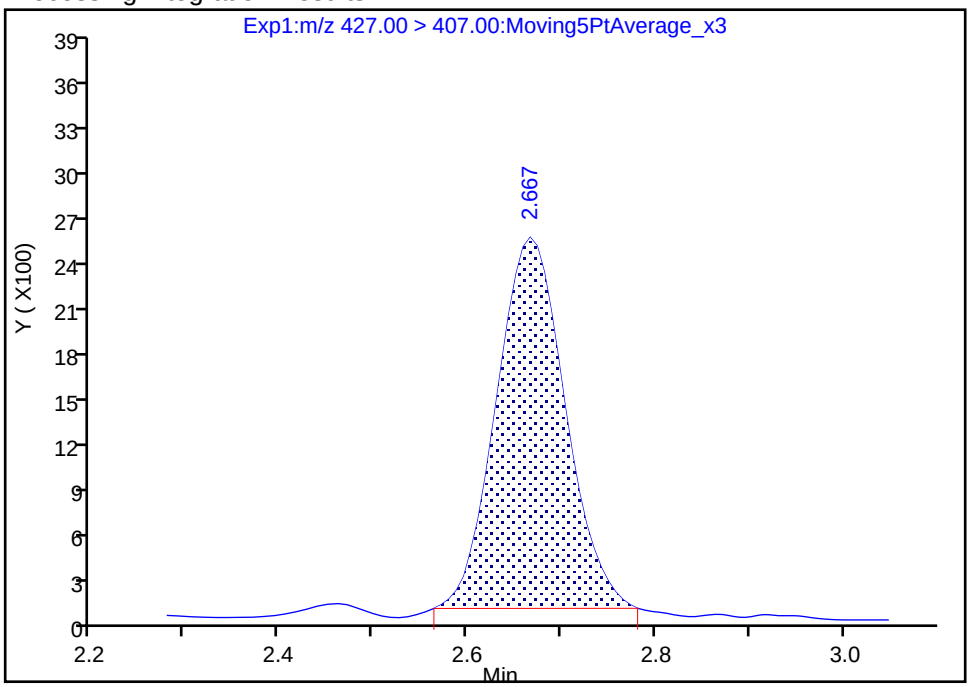
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_026.d				
Injection Date:	17-May-2018 02:17:30	Instrument ID:	A8_N		
Lims ID:	320-38611-B-6-B	Lab Sample ID:	320-38611-6		
Client ID:	GC-MW-104(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

13 Sodium 1H,1H,2H,2H-perfluorooctane sulfonate, CAS: 27619-97-2

Signal: 1

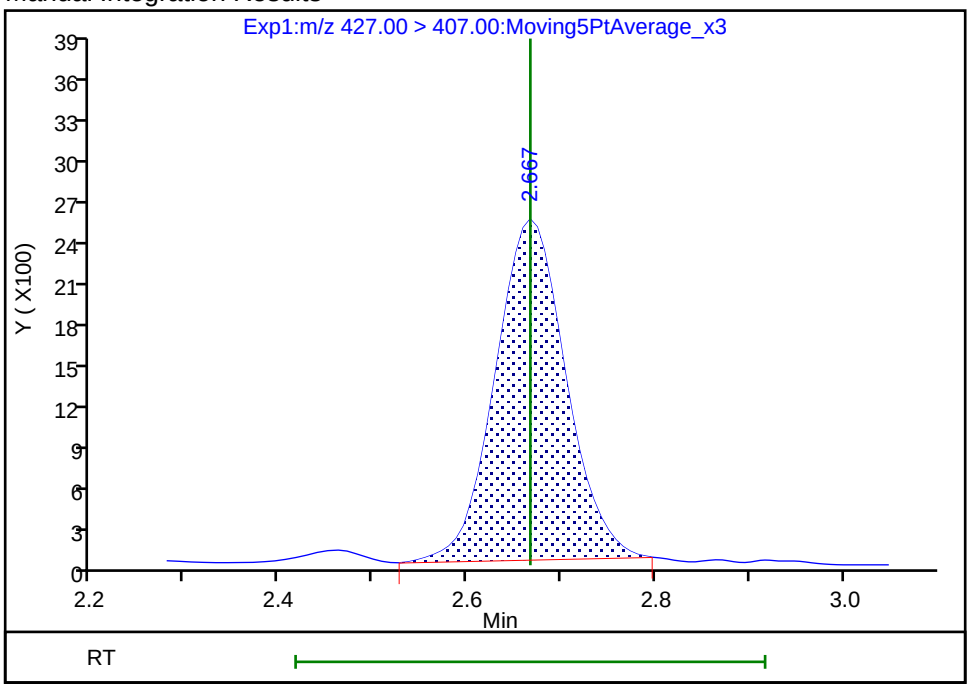
Processing Integration Results

RT: 2.67
Area: 12478
Amount: 0.003647
Amount Units: ng/ml



Manual Integration Results

RT: 2.67
Area: 13079
Amount: 0.004315
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 17-May-2018 14:04:13

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 320-38611-7

Matrix: Water | Lab File ID: 2018.05.10LLB_009.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:43

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 279.4(mL) | Date Analyzed: 05/10/2018 20:46

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	8.8	B	1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	15		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	14		1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	14		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	38	B	1.8	0.76
375-95-1	Perfluorononanoic acid (PFNA)	2.4		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	1.5	J	1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.9		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.1	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	16		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2FTS	26	B *	18	1.8
39108-34-4	8:2FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 320-38611-7

Matrix: Water | Lab File ID: 2018.05.10LLB_009.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:43

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 279.4(mL) | Date Analyzed: 05/10/2018 20:46

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	84		25-150
STL01893	13C5 PFPeA	99		25-150
STL00993	13C2 PFHxA	103		25-150
STL01892	13C4-PFHpA	107		25-150
STL00990	13C4 PFOA	103		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	98		25-150
STL00997	13C2 PFUnA	83		25-150
STL00998	13C2 PFDoA	79		25-150
STL02116	13C2-PFTeDA	87		25-150
STL02337	13C3-PFBS	98		25-150
STL00994	18O2 PFHxS	105		25-150
STL00991	13C4 PFOS	94		25-150
STL01056	13C8 FOSA	90		25-150
STL02118	d3-NMeFOSAA	91		25-150
STL02117	d5-NEtFOSAA	94		25-150
STL02279	M2-6:2FTS	129		25-150
STL02280	M2-8:2FTS	106		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_009.d
Lims ID: 320-38611-A-7-A
Client ID: GC-MW-105(WG)
Sample Type: Client
Inject. Date: 10-May-2018 20:46:23 ALS Bottle#: 26 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-7-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 12-May-2018 14:10:15

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.469	1.469	0.0	1.000	4384631	2.10		84.2	36967	
2 Perfluorobutyric acid										
212.90 > 169.00	1.469	1.478	-0.009	1.000	400602	0.2460			293	
D 3 13C5-PFPeA										
267.90 > 223.00	1.747	1.747	0.0	0.561	3312595	2.47		98.7	49057	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.756	1.753	0.003	1.005	644080	0.4079			272	
D 47 13C3-PFBS										
301.90 > 83.00	1.783	1.783	0.0	1.000	69995	2.27		97.7	335	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.792	1.798	-0.006	1.005	455095	0.1931			248	
298.90 > 99.00	1.792	1.798	-0.006	1.005	190317		2.39(1.25-3.74)		358	
D 7 13C2 PFHxA										
315.00 > 270.00	2.048	2.048	0.0	1.000	3840459	2.59		103	80535	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.048	2.056	-0.008	1.000	603976	0.3869			315	
313.00 > 119.00	2.048	2.056	-0.008	1.000	62742		9.63(5.03-15.10)		622	
D 9 13C4-PFHpA										
367.00 > 322.00	2.384	2.384	0.0	1.000	3868031	2.68		107	85524	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.384	2.392	-0.008	1.000	595154	0.3843			462	
363.00 > 169.00	2.384	2.392	-0.008	1.000	250860		2.37(1.13-3.40)		1579	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.395	0.0	1.000	4413317	2.47		105	79719	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.395	2.403	-0.008	1.000	302302	0.1431			292	
399.00 > 99.00	2.395	2.403	-0.008	1.000	95491		3.17(1.50-4.49)		344	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.712	2.712	0.0	1.000	948992	3.06		129	4821	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.712	2.718	-0.006	1.000	491136	0.7271			12021	
* 62 13C2-PFOA										
415.00 > 370.00	2.735	2.741	-0.006		3871677	2.50			72399	
D 14 13C4 PFOA										
417.00 > 372.00	2.735	2.742	-0.007	1.000	3711216	2.58		103	64420	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.735	2.749	-0.014	1.000	1803209	1.05			912	
413.00 > 169.00	2.735	2.749	-0.014	1.000	1032898		1.75(0.84-2.52)		3785	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.742	2.749	-0.007	1.000	19560	0.0125			52.6	
449.00 > 99.00	2.735	2.749	-0.014	0.997	6360		3.08(1.94-5.82)		48.9	
D 18 13C4 PFOS										
503.00 > 80.00	3.107	3.106	0.001	1.000	2816571	2.25		94.3	13942	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.107	3.114	-0.007	1.000	569564	0.4443			1179	M
499.00 > 99.00	3.107	3.114	-0.007	1.000	104493		5.45(2.31-6.93)		866	
D 19 13C5 PFNA										
468.00 > 423.00	3.115	3.114	0.001	1.000	3003197	2.43		97.3	81660	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.115	3.122	-0.007	1.000	85325	0.0681			146	M
463.00 > 169.00	3.115	3.122	-0.007	1.000	21151		4.03(1.90-5.69)		436	
D 21 13C8 FOSA										
506.00 > 78.00	3.439	3.431	0.008	1.000	3510238	2.25		90.0	59035	
D 26 M2-8:2FTS										
529.00 > 81.00	3.458	3.459	-0.001	1.000	943184	2.53		106	6347	
D 23 13C2 PFDA										
515.00 > 470.00	3.467	3.468	-0.001	1.000	2533042	2.44		97.6	83659	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.467	3.469	-0.002	1.003	1602	0.003215			57.2	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.477	3.478	-0.001	1.003	43546	0.0417			180	
513.00 > 169.00	3.477	3.478	-0.001	1.003	8277		5.26(2.36-7.09)		160	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.631	3.624	0.007	1.000	1339089	2.28		91.1	22919	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.795	3.790	0.005	1.000	1363557	2.35		93.9	19572	
D 30 13C2 PFUnA										
565.00 > 520.00	3.805	3.800	0.005	1.000	1848166	2.06		82.6	57046	
D 36 13C2 PFDoA										
615.00 > 570.00	4.093	4.091	0.002	1.000	1914909	1.98		79.2	23007	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.593	4.595	-0.002	1.000	2663614	2.17		86.9	16346	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:48 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_009.d

Injection Date: 10-May-2018 20:46:23 Instrument ID: A8_N

Lims ID: 320-38611-A-7-A Lab Sample ID: 320-38611-7

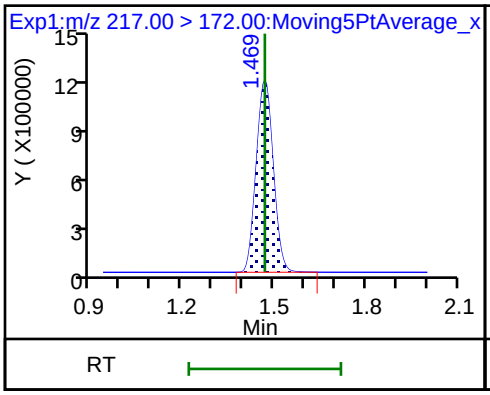
Client ID: GC-MW-105(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 26 Worklist Smp#: 11

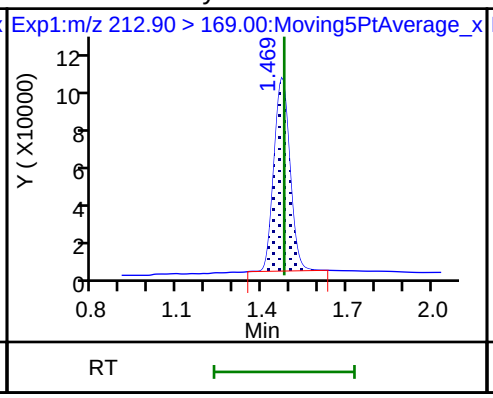
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

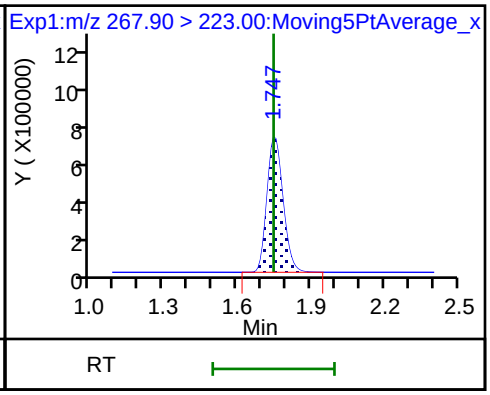
D 1 13C4 PFBA



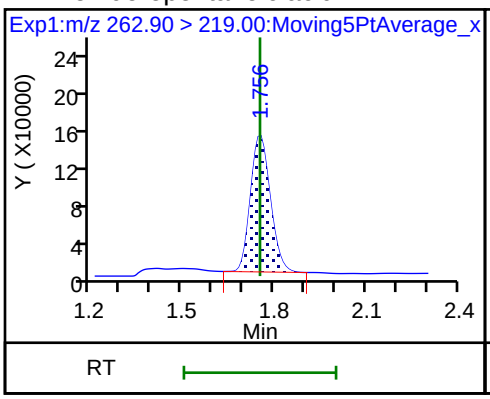
2 Perfluorobutyric acid



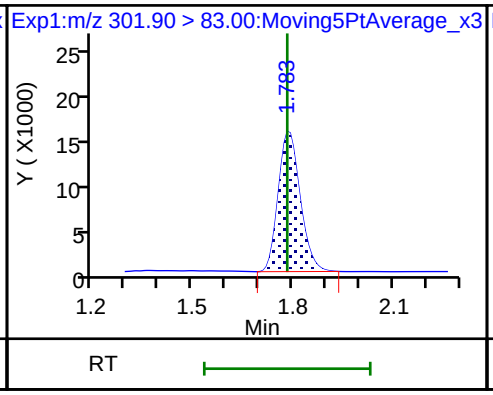
D 3 13C5-PFPeA



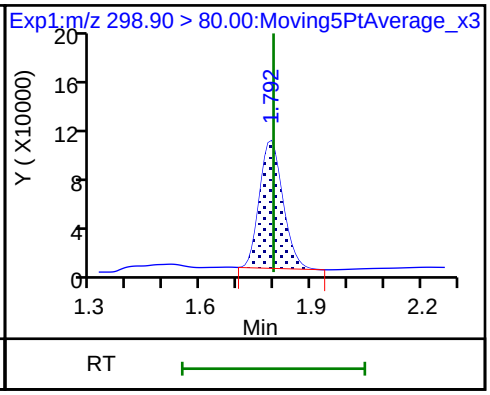
4 Perfluoropentanoic acid



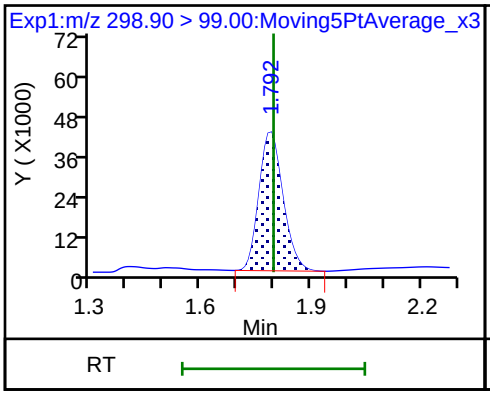
D 47 13C3-PFBS



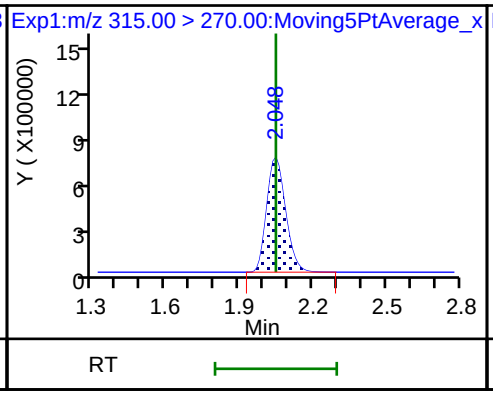
5 Perfluorobutanesulfonic acid



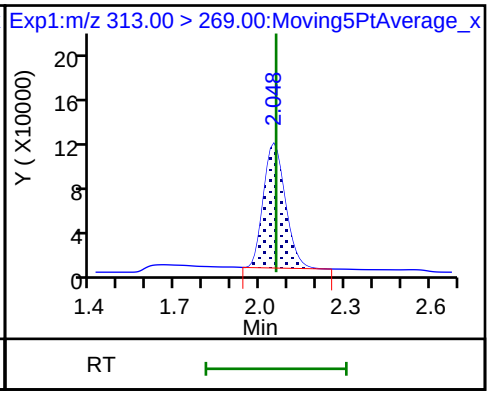
5 Perfluorobutanesulfonic acid



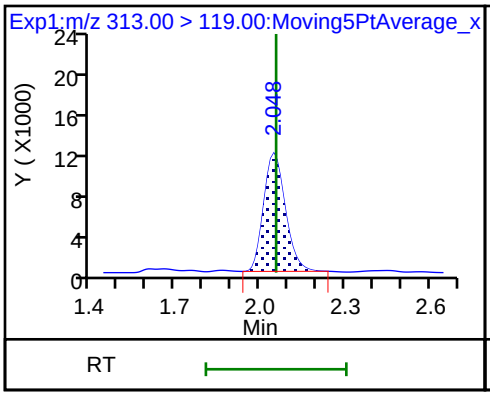
D 7 13C2 PFHxA



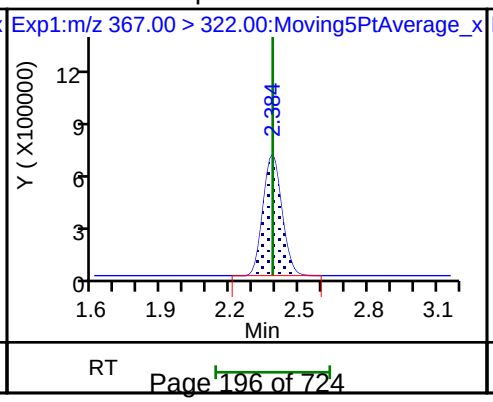
6 Perfluorohexanoic acid



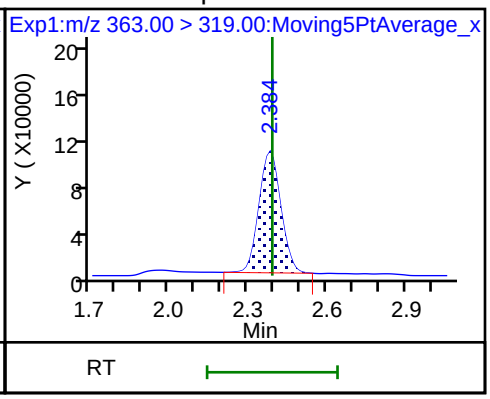
6 Perfluorohexanoic acid



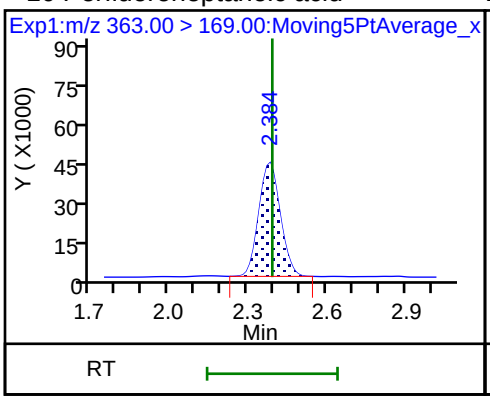
D 9 13C4-PFHpA



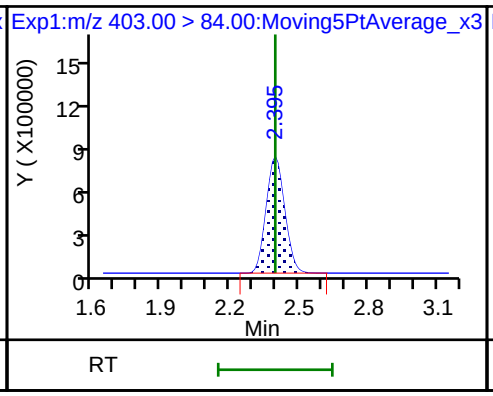
10 Perfluoroheptanoic acid



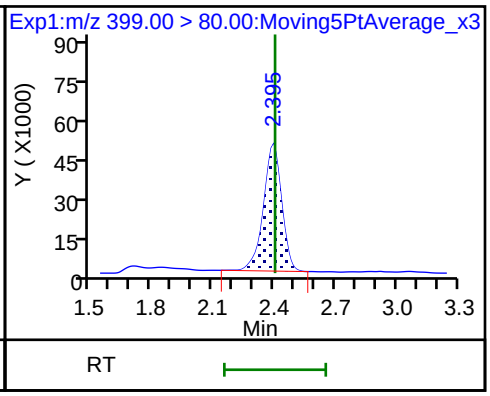
10 Perfluoroheptanoic acid



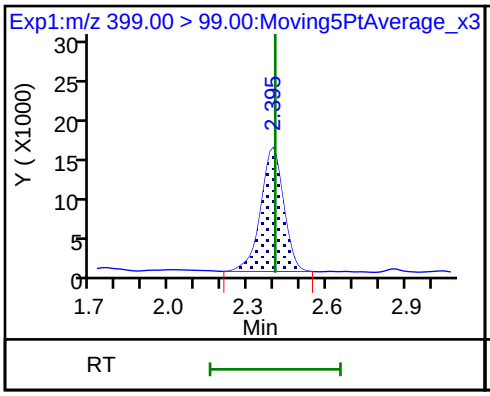
D 11 18O2 PFHxS



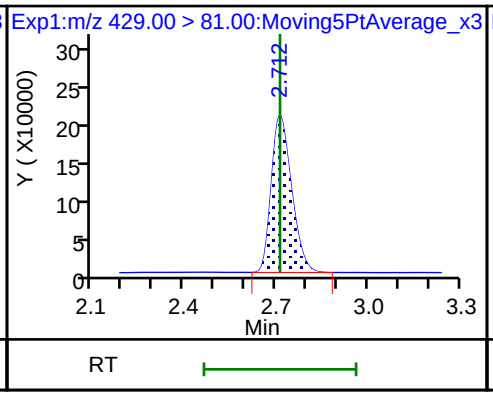
8 Perfluorohexanesulfonic acid



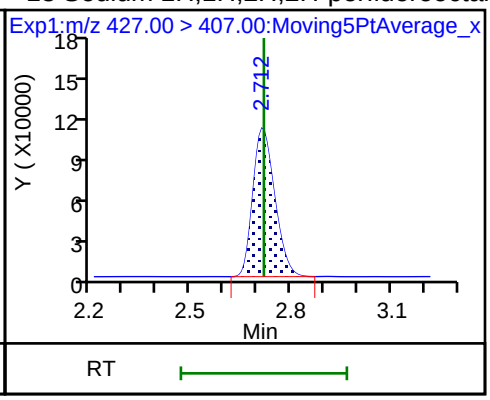
8 Perfluorohexanesulfonic acid



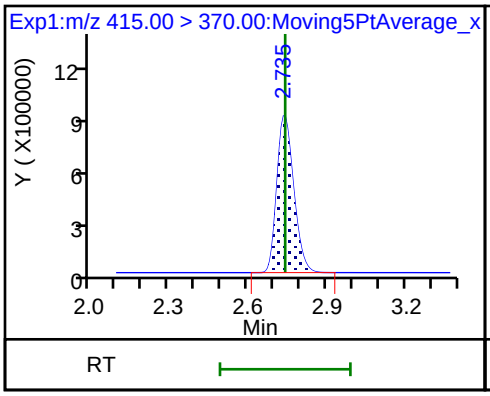
D 12 M2-6:2FTS



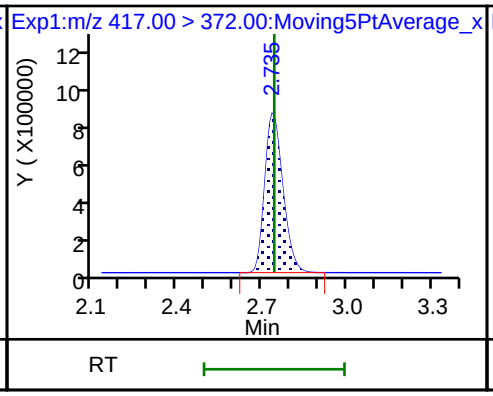
13 Sodium 1H,1H,2H,2H-perfluorooctane



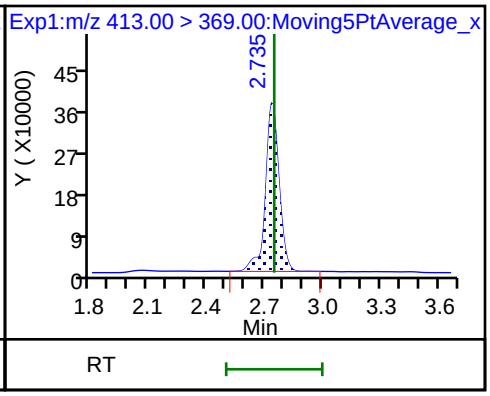
* 62 13C2-PFOA



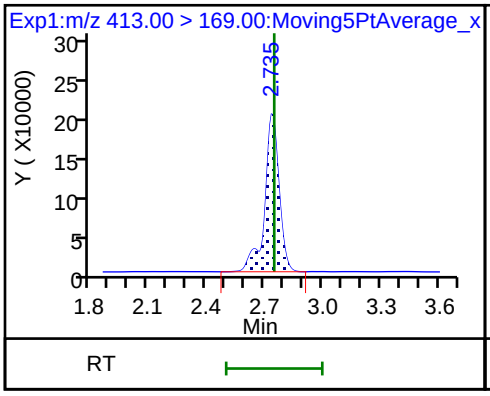
D 14 13C4 PFOA



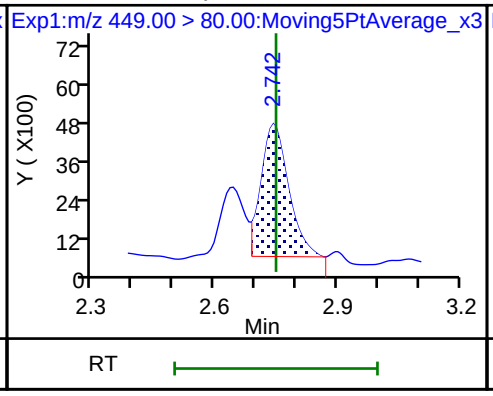
15 Perfluorooctanoic acid



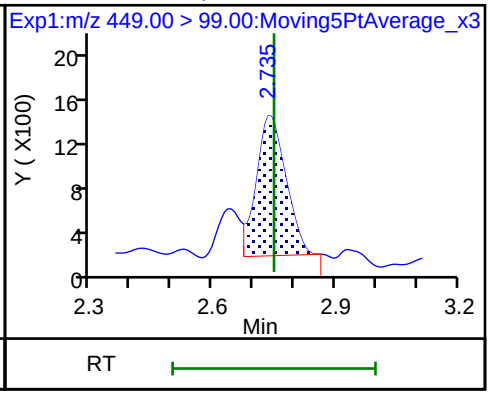
15 Perfluorooctanoic acid



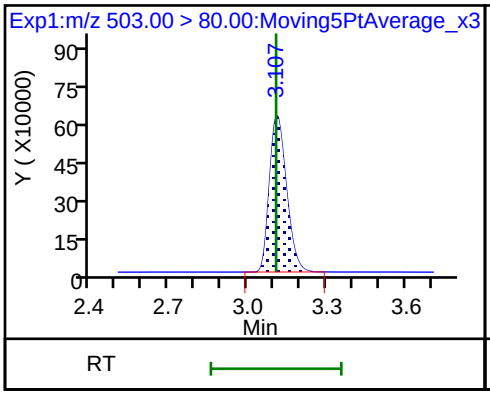
16 Perfluoroheptanesulfonic acid



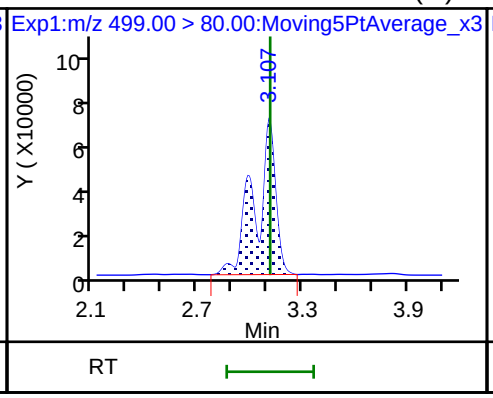
16 Perfluoroheptanesulfonic acid



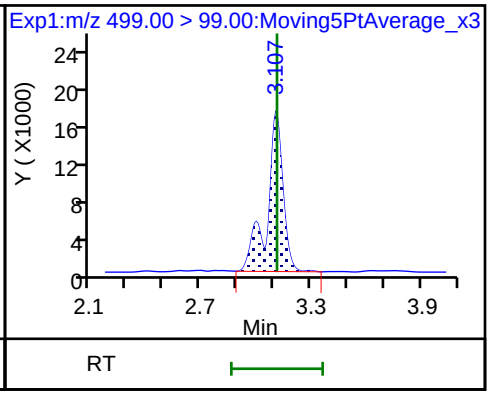
D 18 13C4 PFOS



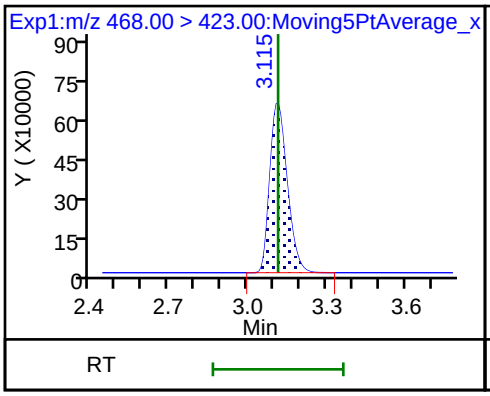
17 Perfluorooctane sulfonic acid (M)



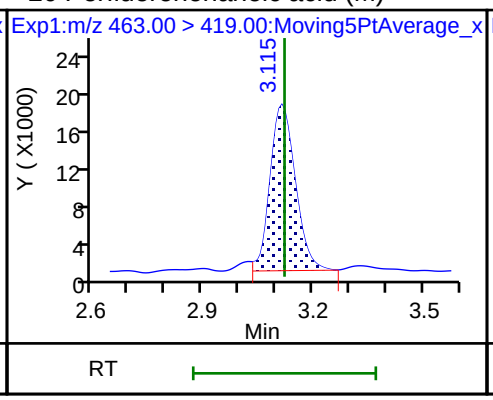
17 Perfluorooctane sulfonic acid



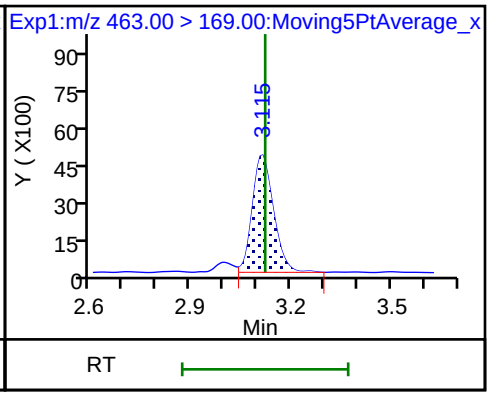
D 19 13C5 PFNA



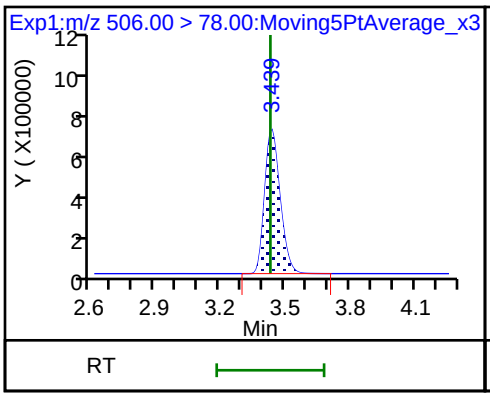
20 Perfluorononanoic acid (M)



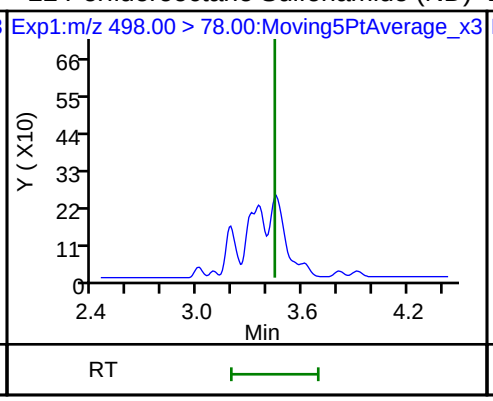
20 Perfluorononanoic acid



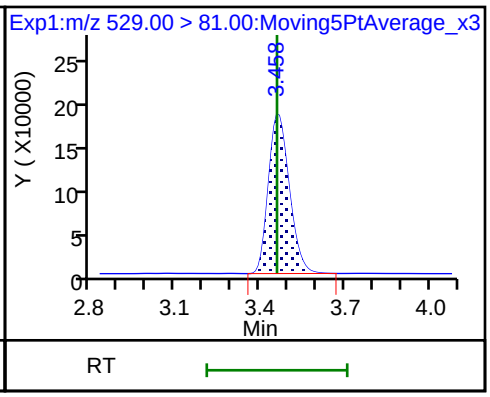
D 21 13C8 FOSA



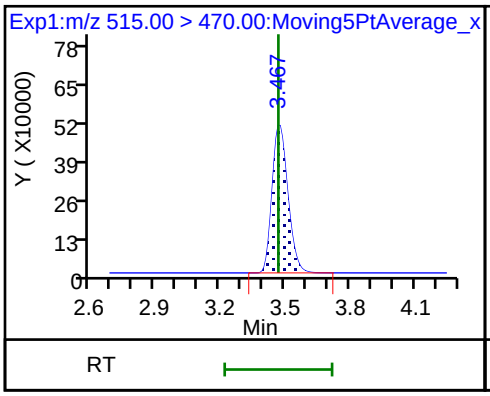
22 Perfluorooctane Sulfonamide (ND)



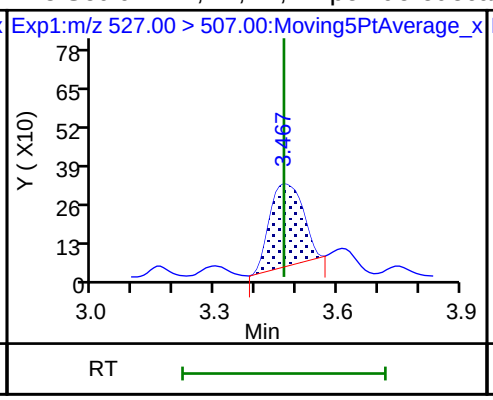
D 26 M2-8:2FTS



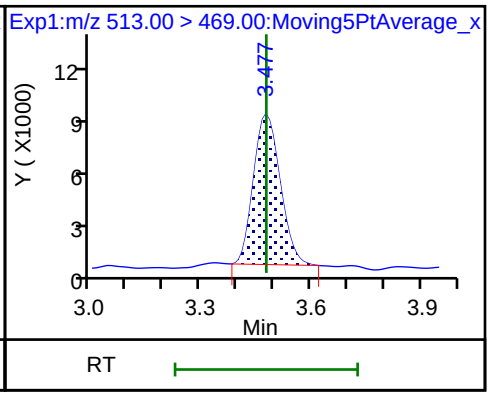
D 23 13C2 PFDA



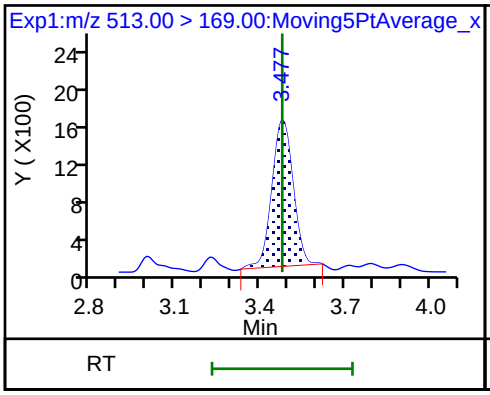
25 Sodium 1H,1H,2H,2H-perfluorodecan



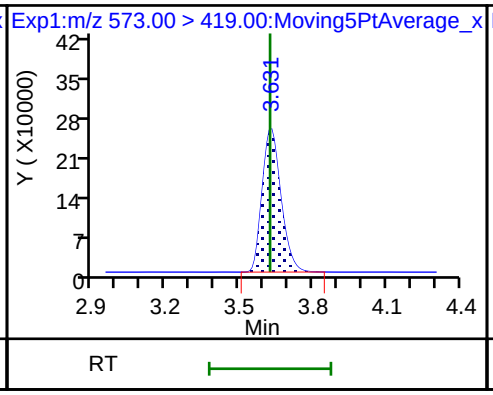
24 Perfluorodecanoic acid



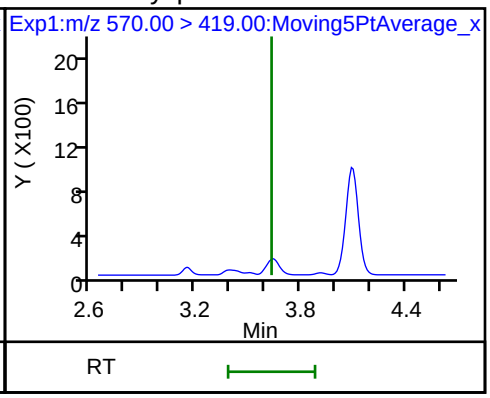
24 Perfluorodecanoic acid



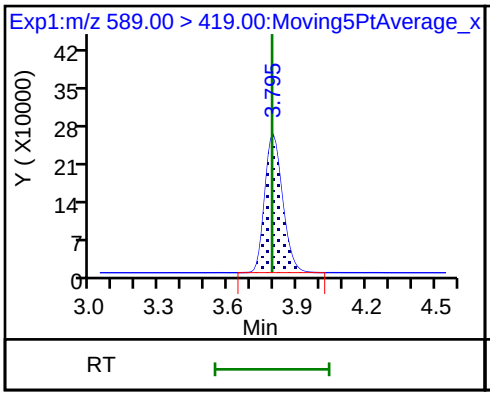
D 27 d3-NMeFOSAA



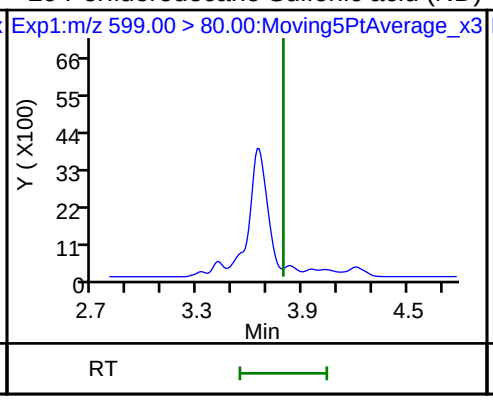
28 N-methyl perfluorooctane sulfonami (ND)



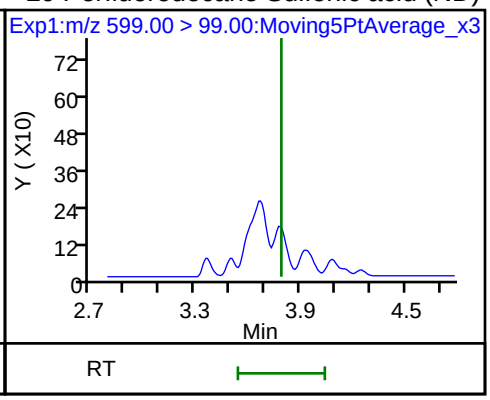
D 32 d5-NEtFOSAA



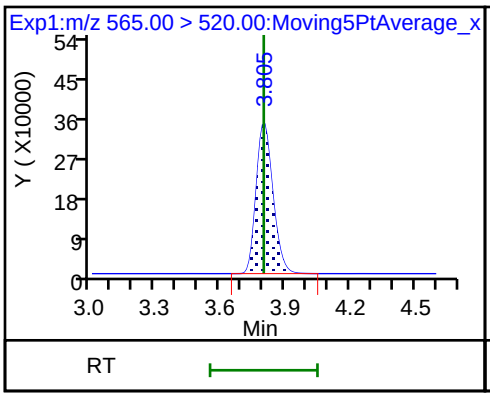
29 Perfluorodecane Sulfonic acid (ND)



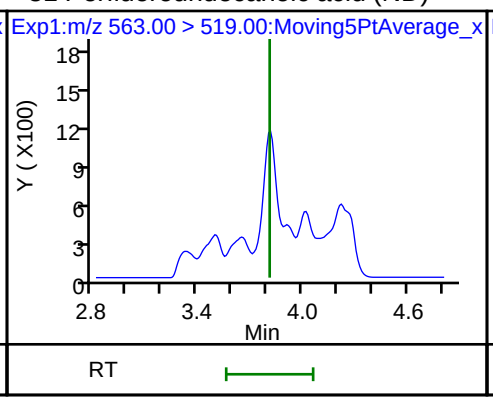
29 Perfluorodecane Sulfonic acid (ND)



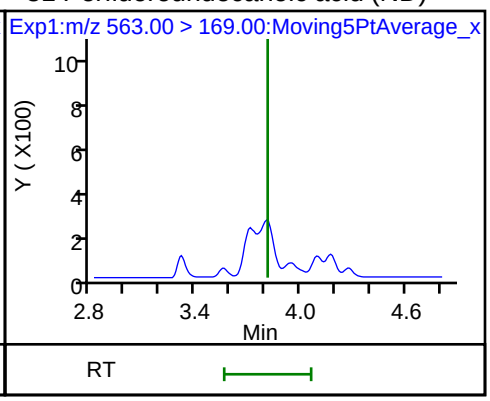
D 30 13C2 PFUnA



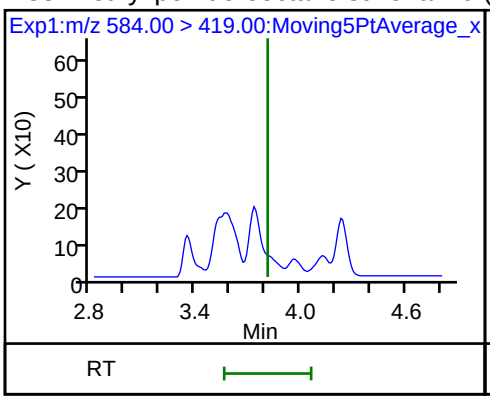
31 Perfluoroundecanoic acid (ND)



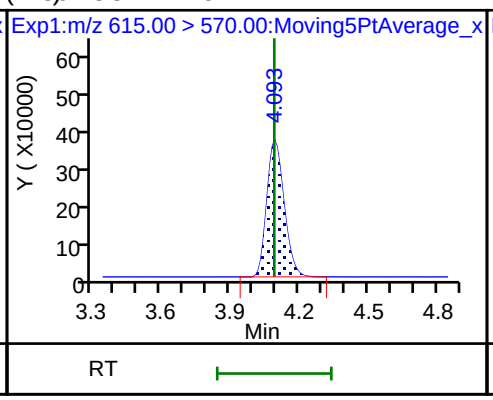
31 Perfluoroundecanoic acid (ND)



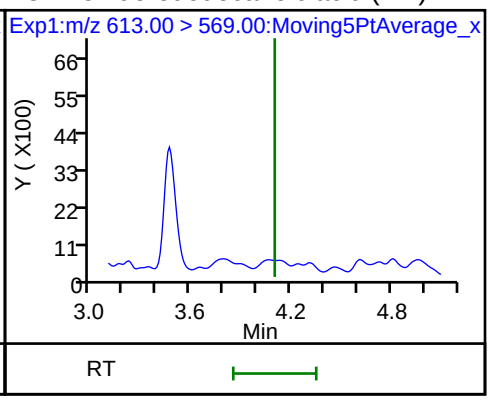
33 N-ethyl perfluorooctane sulfonamid (ND)



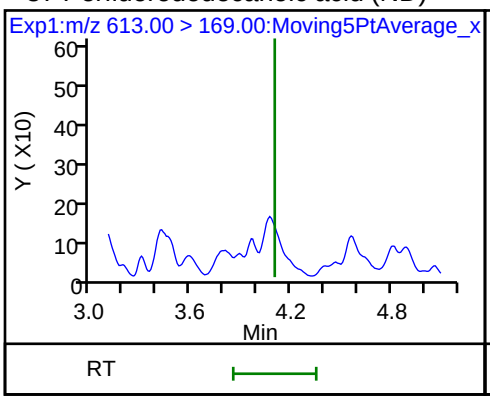
D 36 13C2 PFDoA



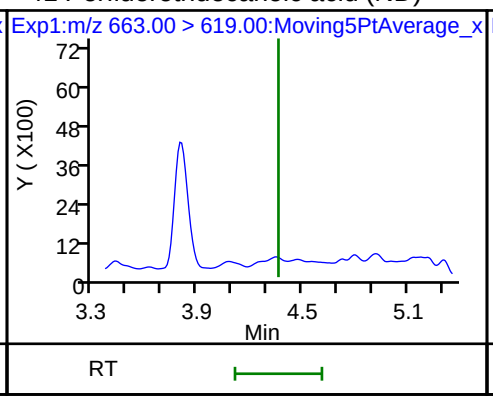
37 Perfluorododecanoic acid (ND)



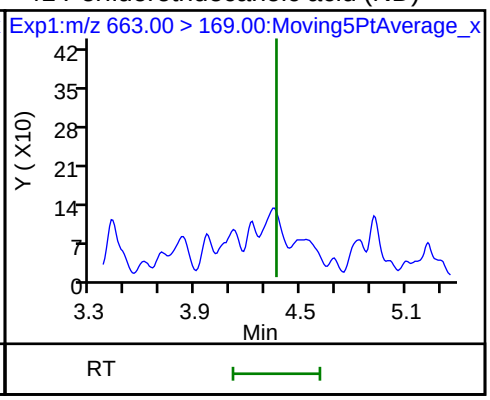
37 Perfluorododecanoic acid (ND)



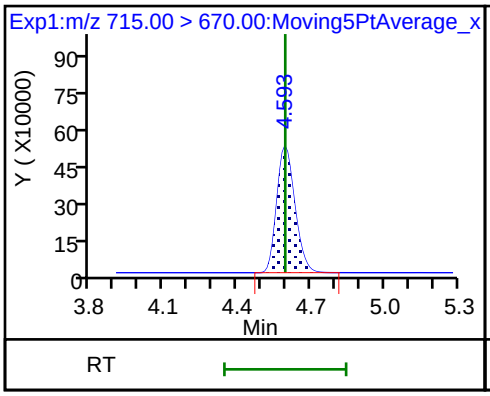
41 Perfluorotridecanoic acid (ND)



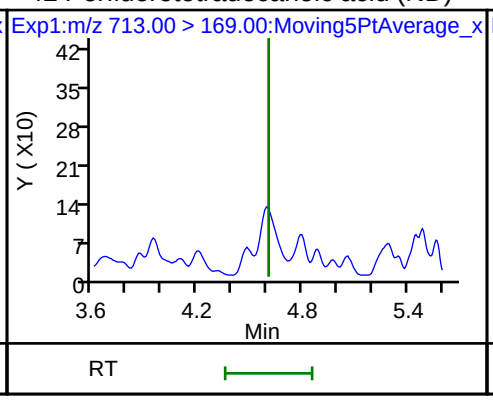
41 Perfluorotridecanoic acid (ND)



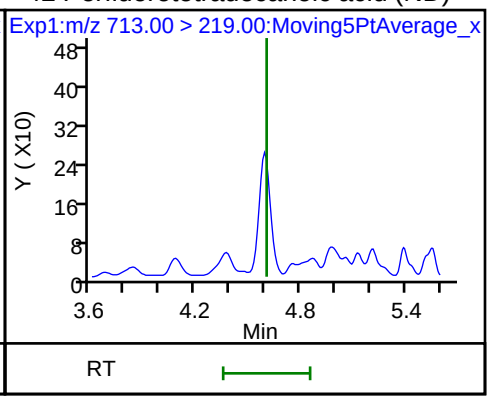
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

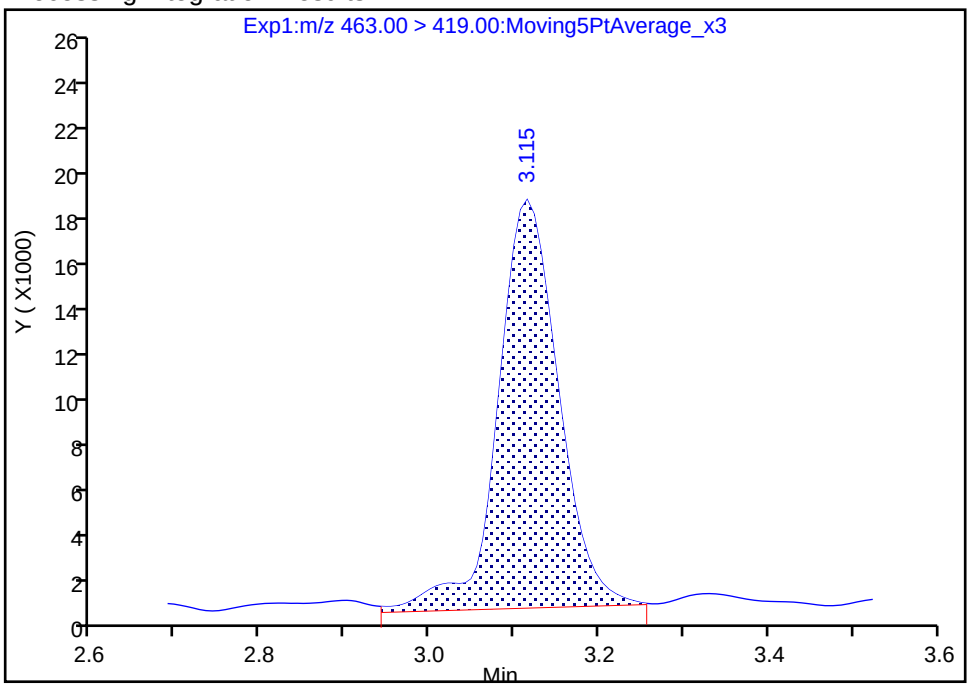
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_009.d				
Injection Date:	10-May-2018 20:46:23	Instrument ID:	A8_N		
Lims ID:	320-38611-A-7-A	Lab Sample ID:	320-38611-7		
Client ID:	GC-MW-105(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	26	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

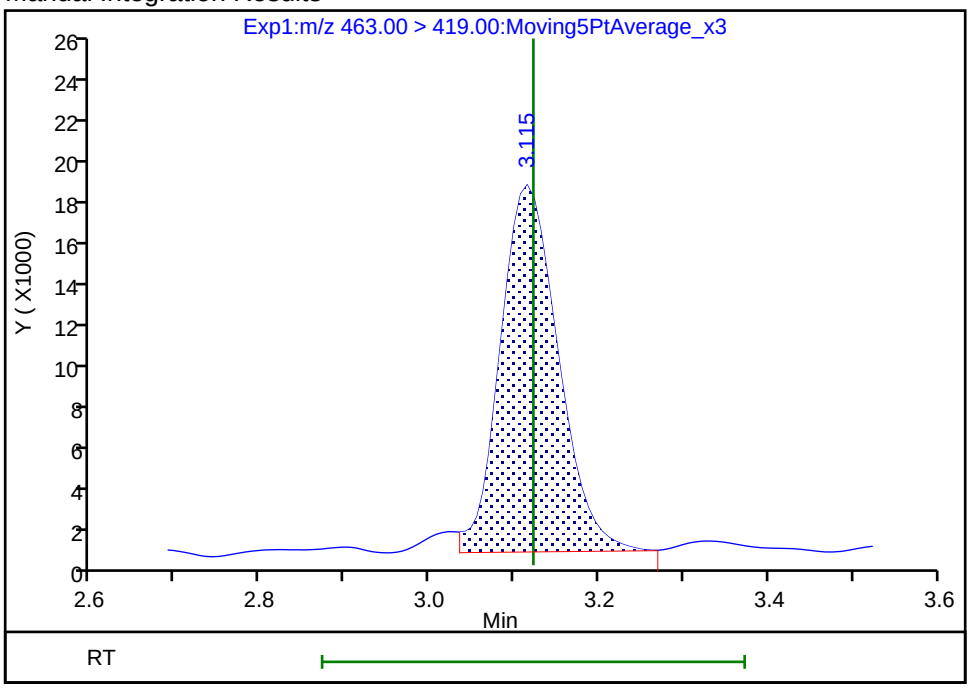
Processing Integration Results

RT: 3.11
Area: 90435
Amount: 0.072198
Amount Units: ng/ml



Manual Integration Results

RT: 3.11
Area: 85325
Amount: 0.068119
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:20:17

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

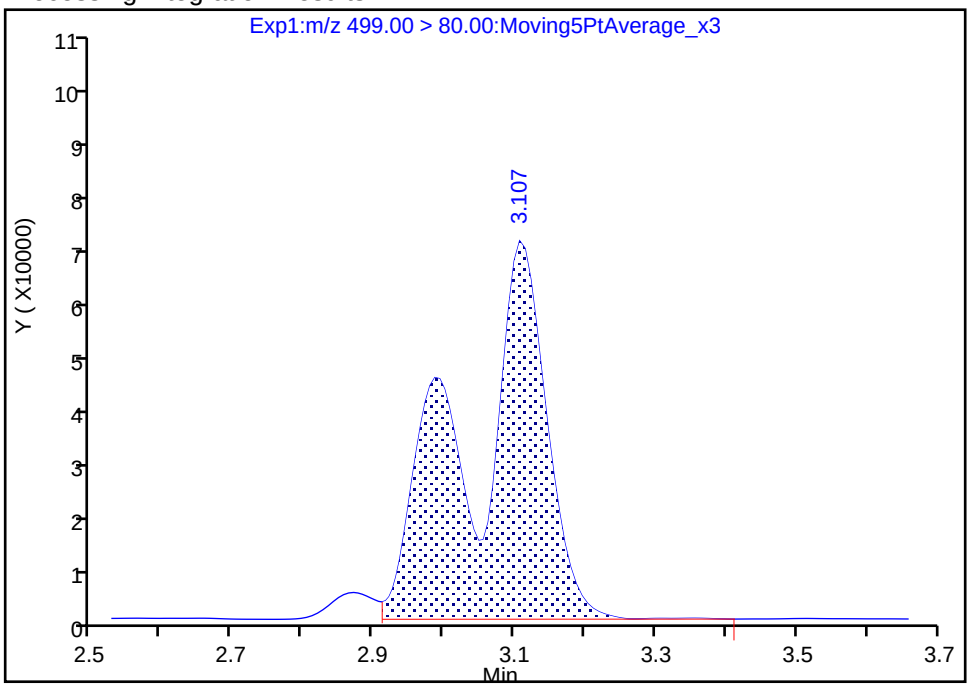
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_009.d				
Injection Date:	10-May-2018 20:46:23	Instrument ID:	A8_N		
Lims ID:	320-38611-A-7-A	Lab Sample ID:	320-38611-7		
Client ID:	GC-MW-105(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	26	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

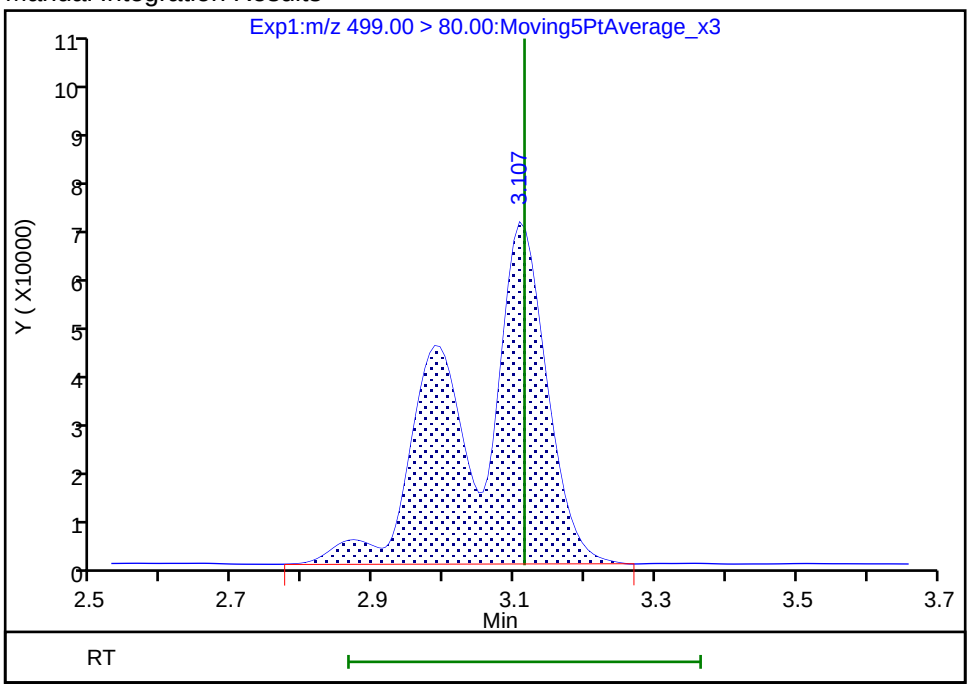
Processing Integration Results

RT: 3.11
Area: 549408
Amount: 0.428557
Amount Units: ng/ml



Manual Integration Results

RT: 3.11
Area: 569564
Amount: 0.444280
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:19:59

Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-105(WG) RE | Lab Sample ID: 320-38611-7 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_027.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:43

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 275.2(mL) | Date Analyzed: 05/17/2018 02:25

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*31*	*H*	*1.8*	*0.77*
27619-97-2	*6:2FTS*	*ND*	*H*	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	102		25-150
STL02279	M2-6:2FTS	116		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_027.d
Lims ID: 320-38611-B-7-B
Client ID: GC-MW-105(WG)
Sample Type: Client
Inject. Date: 17-May-2018 02:25:22 ALS Bottle#: 18 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-7-b
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 14:07:49 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 14:07:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.447	0.005	1.000	6024136	2.00		80.2	41677	
2 Perfluorobutyric acid										
212.90 > 169.00	1.452	1.457	-0.005	1.000	522970	0.2334			232	
D 3 13C5-PFPeA										
267.90 > 223.00	1.719	1.712	0.007	0.563	4487939	2.33		93.2	46700	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.719	1.729	-0.010	1.000	826025	0.3898			276	
D 47 13C3-PFBS										
301.90 > 83.00	1.756	1.748	0.008	1.000	91965	2.11		90.9	325	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.756	1.765	-0.009	1.000	555631	0.1799			304	M
298.90 > 99.00	1.756	1.765	-0.009	1.000	237558		2.34(1.25-3.74)		439	
D 7 13C2 PFHxA										
315.00 > 270.00	2.002	1.994	0.008	1.000	4869650	2.37		94.8	70293	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.002	2.014	-0.012	1.000	824807	0.4119			394	M
313.00 > 119.00	2.002	2.014	-0.012	1.000	78818		10.46(5.03-15.10)		746	
D 9 13C4-PFHpA										
367.00 > 322.00	2.332	2.321	0.011	1.000	4978041	2.53		101	89462	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.332	2.332	0.0	1.000	731392	0.3477			526	
363.00 > 169.00	2.332	2.332	0.0	1.000	272421		2.68(1.13-3.40)		1367	
D 11 18O2 PFHxS										
403.00 > 84.00	2.345	2.334	0.011	1.000	5801323	2.39		101	104987	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.345	2.345	0.0	1.000	376612	0.1363			359	
399.00 > 99.00	2.345	2.345	0.0	1.000	112451		3.35(1.50-4.49)		284	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.659	2.645	0.014	1.000	1197224	2.76		116	6650	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.659	2.667	-0.008	1.000	21500	0.0141			91.9	
D 14 13C4 PFOA										
417.00 > 372.00	2.689	2.668	0.021	1.000	4763255	2.56		102	82894	
* 62 13C2-PFOA										
415.00 > 370.00	2.682	2.689	-0.007		4914396	2.50			94640	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.689	2.689	0.0	1.000	1930515	0.8608			716	
413.00 > 169.00	2.682	2.689	-0.007	0.997	1096463		1.76(0.84-2.52)		3127	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.689	2.697	-0.008	1.000	23033	0.0110			62.0	
449.00 > 99.00	2.704	2.697	0.007	1.006	7283		3.16(1.94-5.82)		52.7	
D 18 13C4 PFOS										
503.00 > 80.00	3.049	3.029	0.020	1.000	3746222	2.24		93.8	25568	
D 19 13C5 PFNA										
468.00 > 423.00	3.055	3.036	0.019	1.000	4027156	2.65		106	73146	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.049	3.051	-0.002	1.000	739851	0.4014			2454	
499.00 > 99.00	3.049	3.051	-0.002	1.000	133729		5.53(2.31-6.93)		1157	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.049	3.051	-0.002	0.998	98007	0.0574			148	M
463.00 > 169.00	3.055	3.051	0.004	1.000	21091		4.65(1.90-5.69)		239	M
D 26 M2-8:2FTS										
529.00 > 81.00	3.402	3.376	0.026	1.000	1278664	2.59		108	11250	
D 21 13C8 FOSA										
506.00 > 78.00	3.393	3.376	0.017	1.000	4894593	2.24		89.5	56904	
D 23 13C2 PFDA										
515.00 > 470.00	3.411	3.385	0.026	1.000	3250635	2.51		100	37087	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.411	3.407	0.004	1.000	53305	0.0422			163	
513.00 > 169.00	3.421	3.407	0.014	1.003	8590		6.21(2.36-7.09)		155	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.561	3.544	0.017	1.000	1928080	2.70		108	28110	
D 30 13C2 PFUnA										
565.00 > 520.00	3.743	3.716	0.027	1.000	2658453	2.59		104	53830	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.733	3.716	0.017	1.000	1923058	2.62		105	19497	
D 36 13C2 PFDoA										
615.00 > 570.00	4.031	4.006	0.025	1.000	2707666	2.45		98.2	26622	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.532	4.511	0.021	1.000	3502881	2.59		103	17360	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 14:07:50 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_027.d

Injection Date: 17-May-2018 02:25:22 Instrument ID: A8_N

Lims ID: 320-38611-B-7-B Lab Sample ID: 320-38611-7

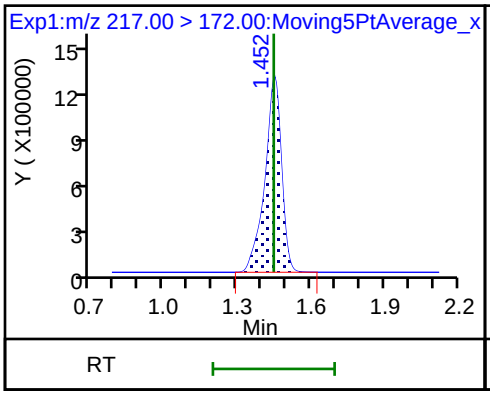
Client ID: GC-MW-105(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 19

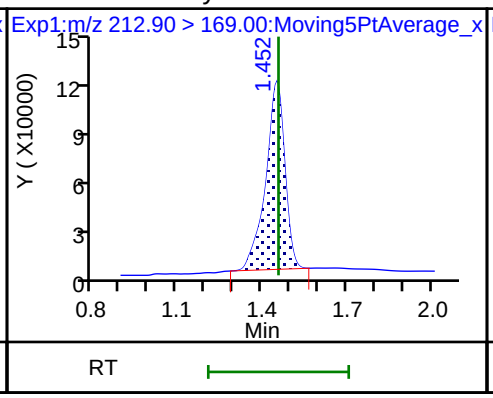
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

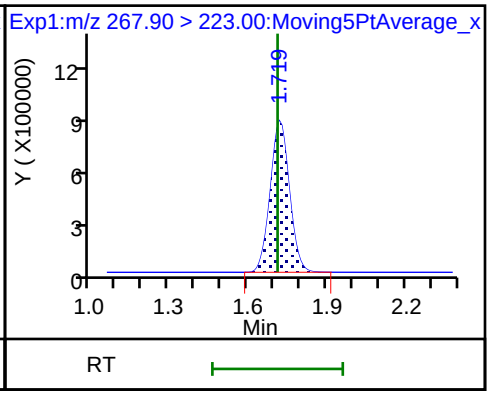
D 1 13C4 PFBA



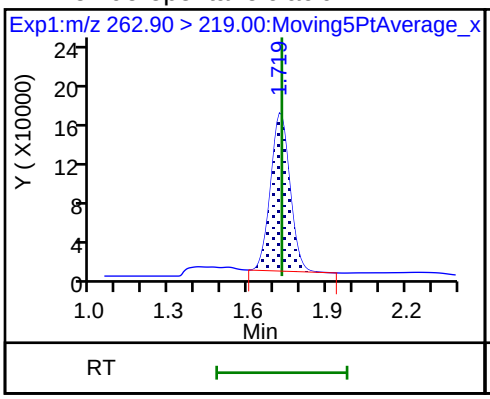
2 Perfluorobutyric acid



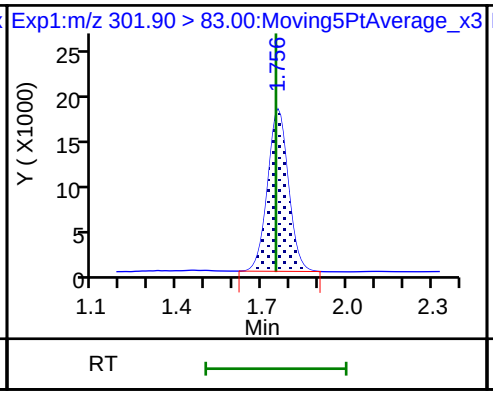
D 3 13C5-PFPeA



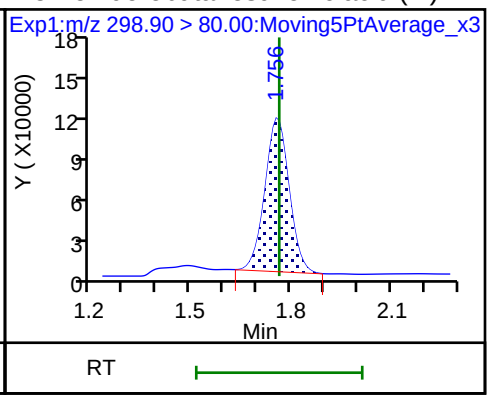
4 Perfluoropentanoic acid



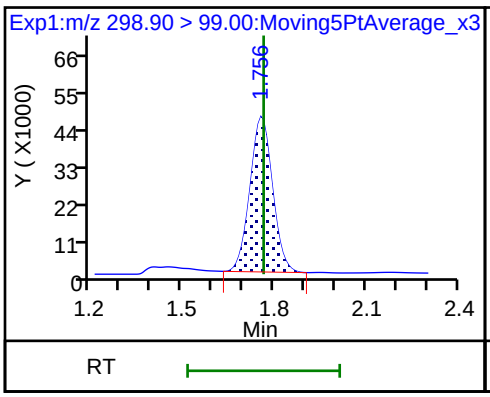
D 47 13C3-PFBS



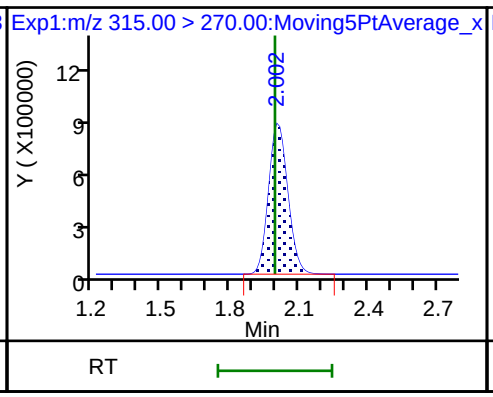
5 Perfluorobutanesulfonic acid (M)



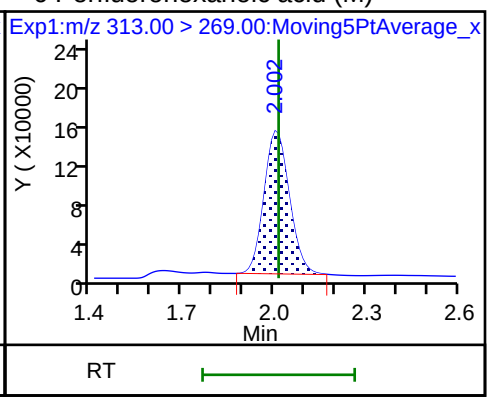
5 Perfluorobutanesulfonic acid



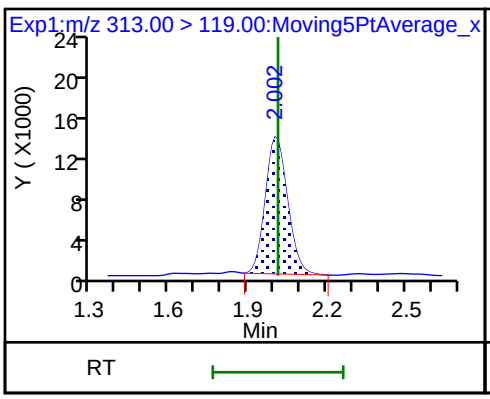
D 7 13C2 PFHxA



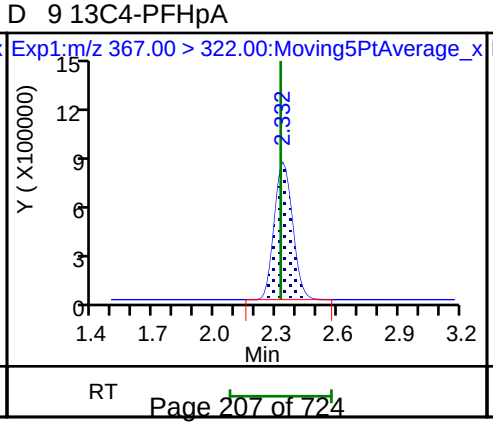
6 Perfluorohexanoic acid (M)



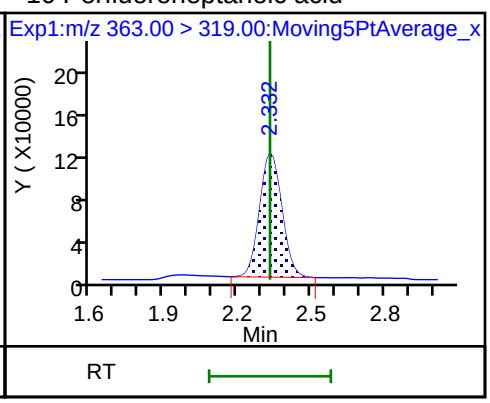
6 Perfluorohexanoic acid



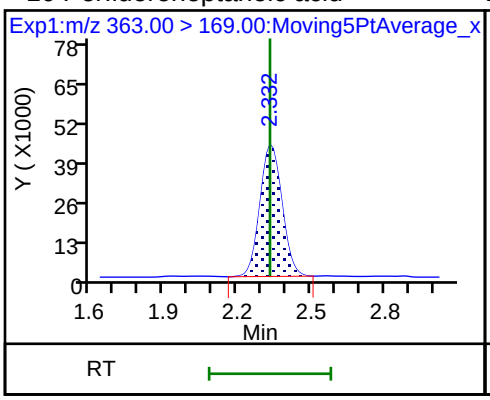
D 9 13C4-PFHpA



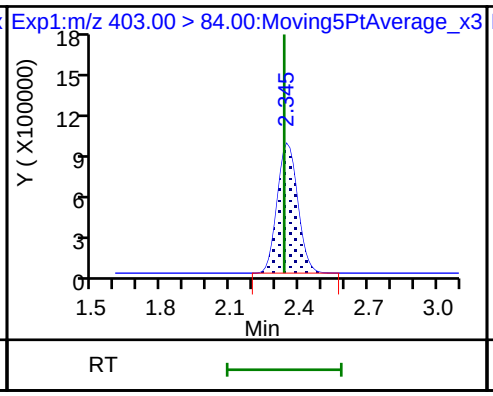
10 Perfluoroheptanoic acid



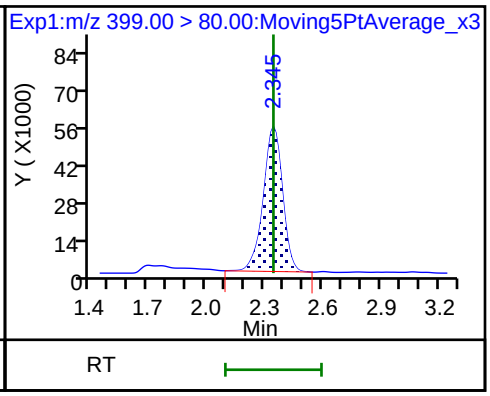
10 Perfluoroheptanoic acid



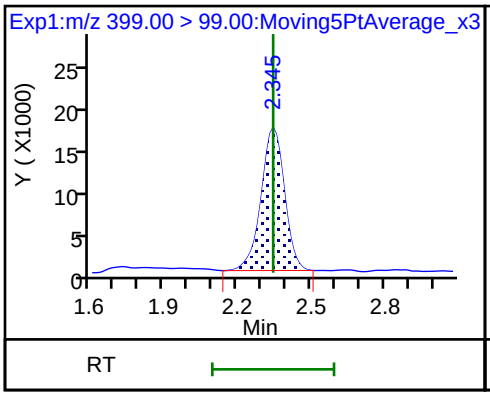
D 11 18O2 PFHxS



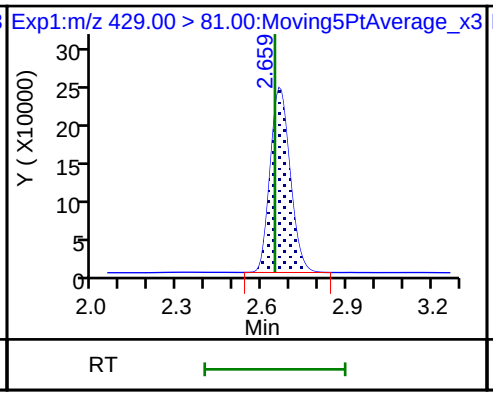
8 Perfluorohexanesulfonic acid



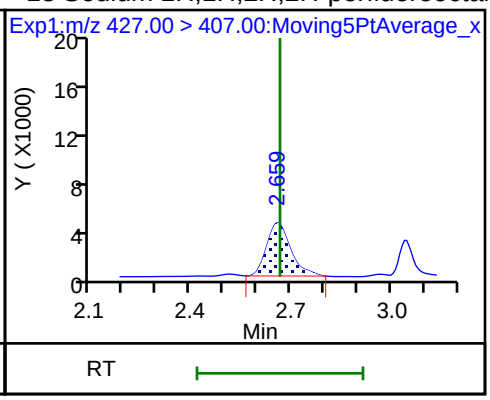
8 Perfluorohexanesulfonic acid



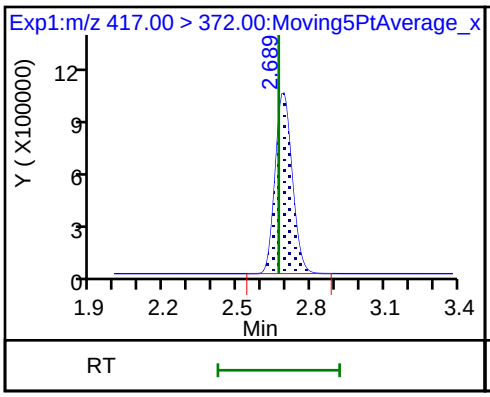
D 12 M2-6:2FTS



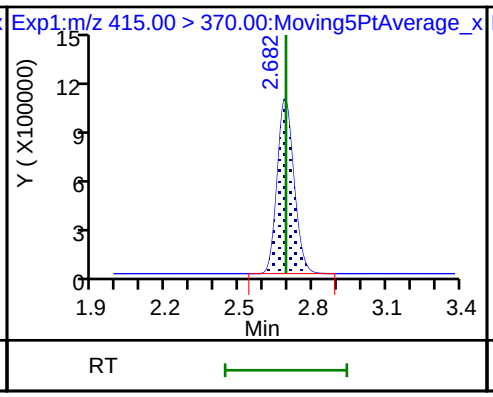
13 Sodium 1H,1H,2H,2H-perfluorooctane



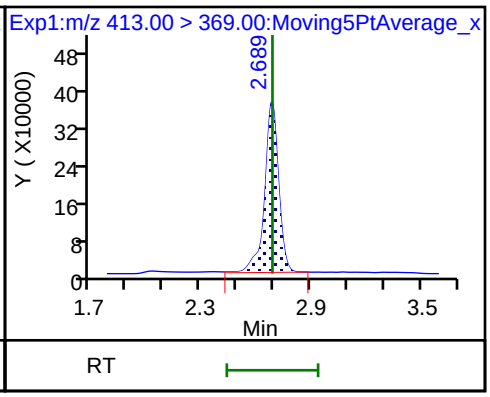
D 14 13C4 PFOA



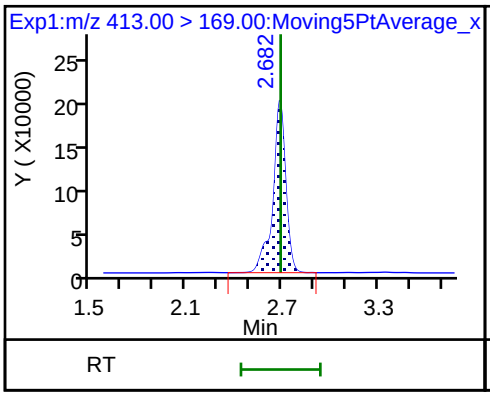
* 62 13C2-PFOA



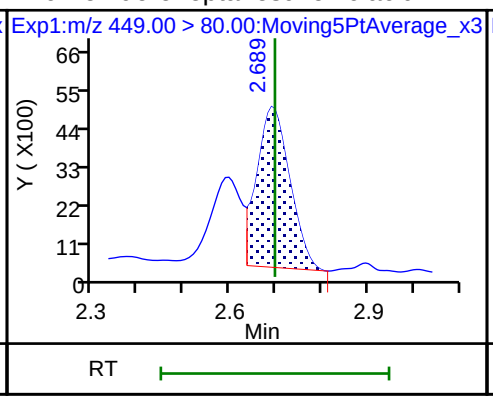
15 Perfluorooctanoic acid



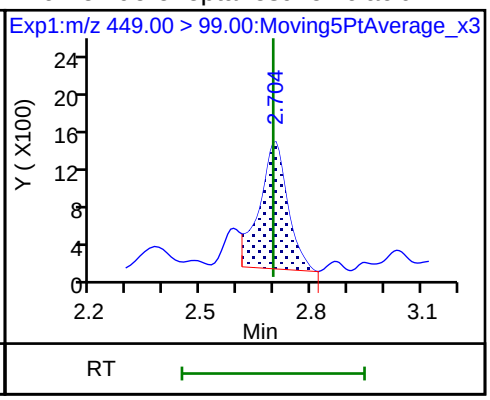
15 Perfluorooctanoic acid



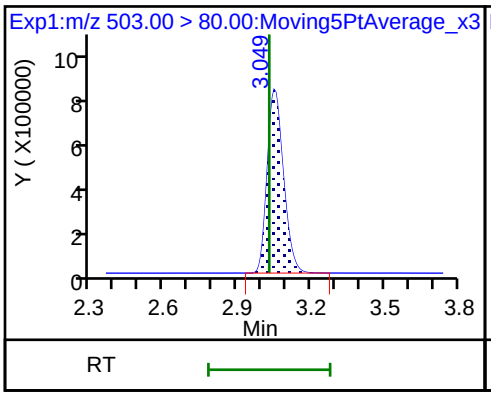
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 18 13C4 PFOS



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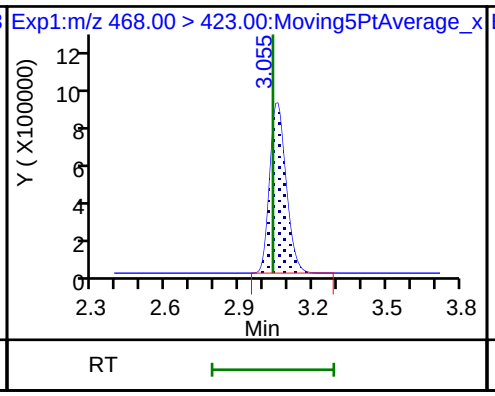
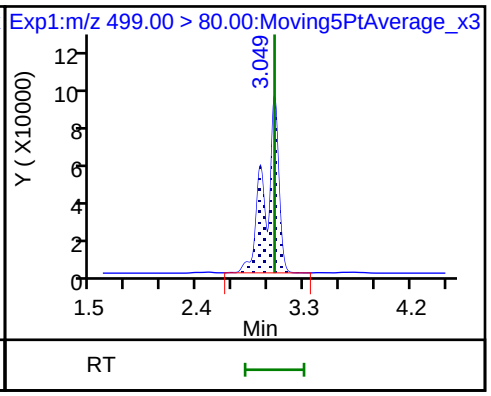
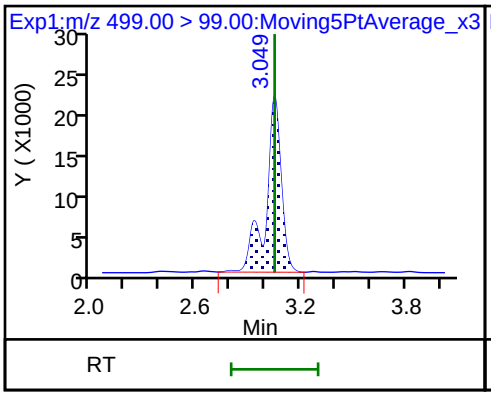


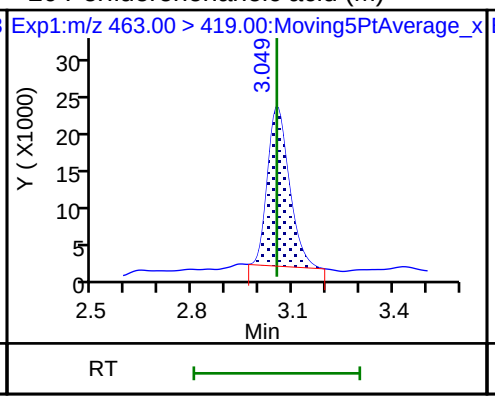
17 Perfluorooctane sulfonic acid



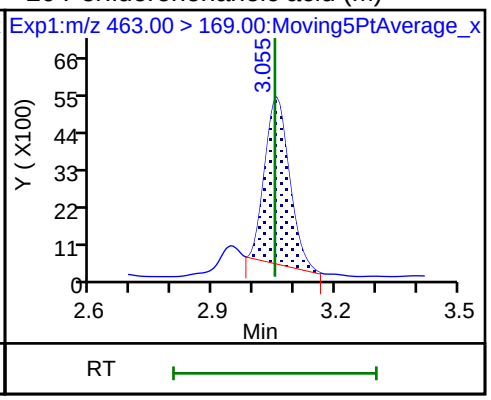
17 Perfluorooctane sulfonic acid



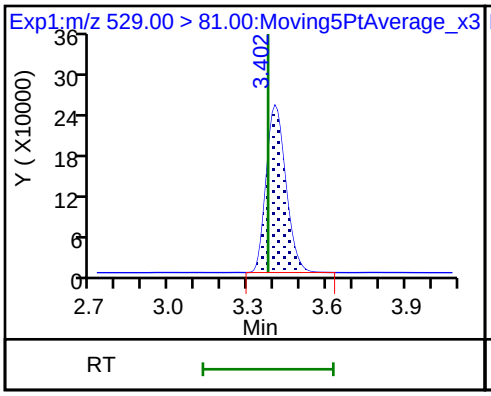
20 Perfluorononanoic acid (M)



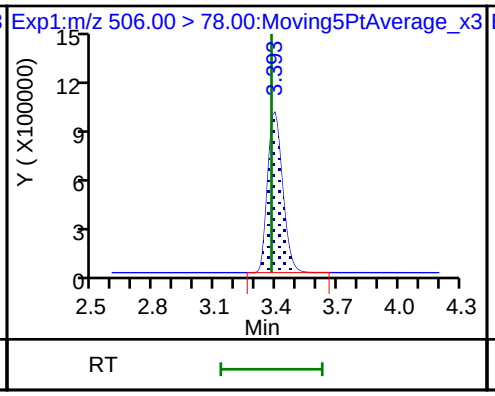
20 Perfluorononanoic acid (M)



D 26 M2-8:2FTS



D 21 13C8 FOSA



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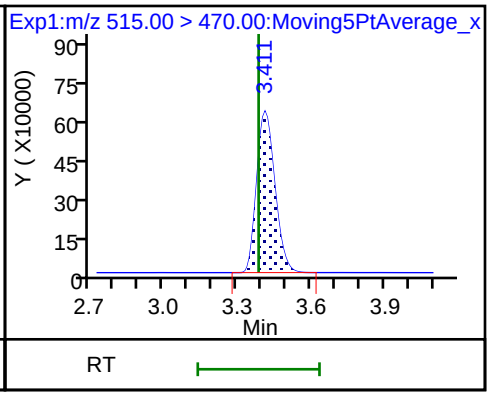
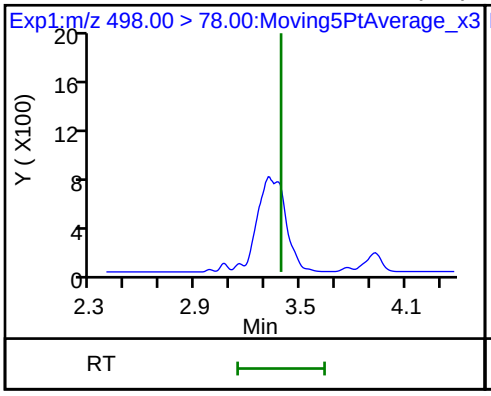
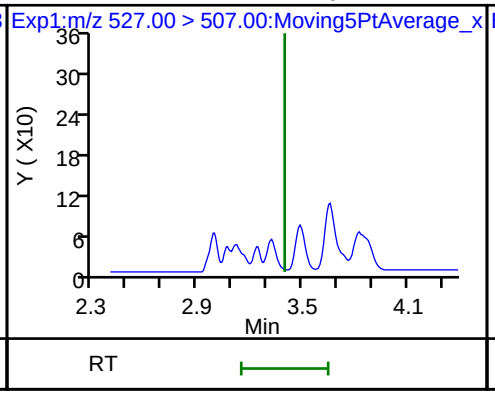


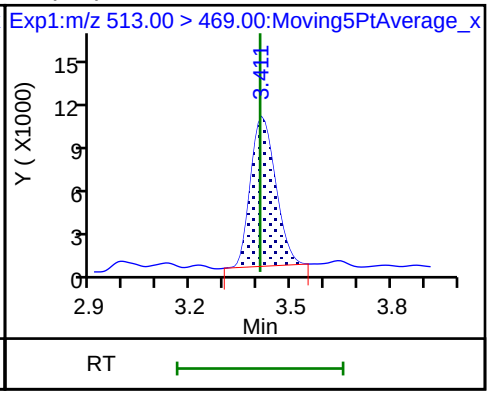
22 Perfluorooctane Sulfonamide (ND)



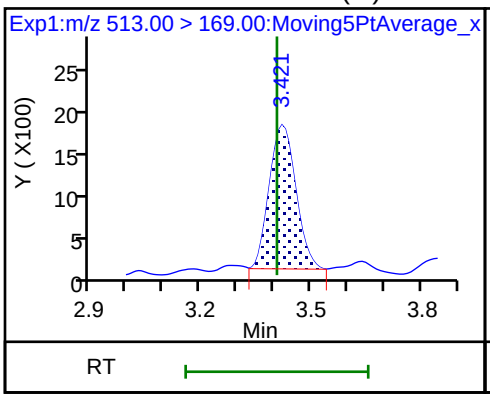
25 Sodium 1H,1H,2H,2H-perfluorodecane (ND)



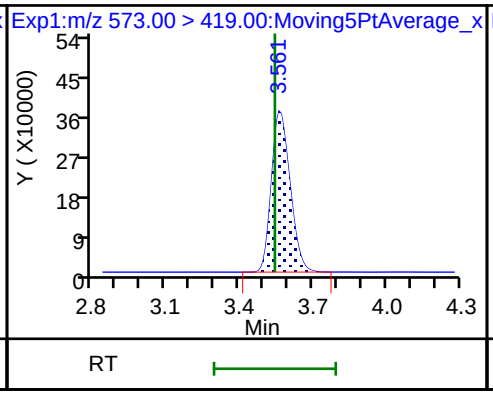
24 Perfluorodecanoic acid



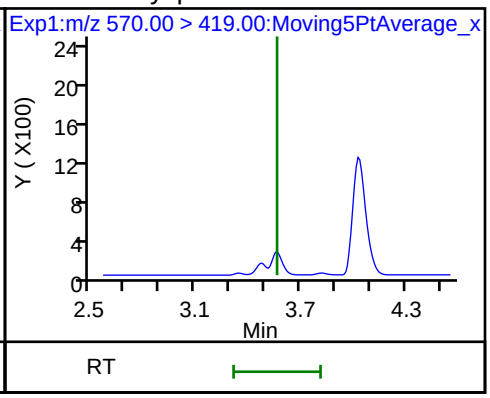
24 Perfluorodecanoic acid (M)



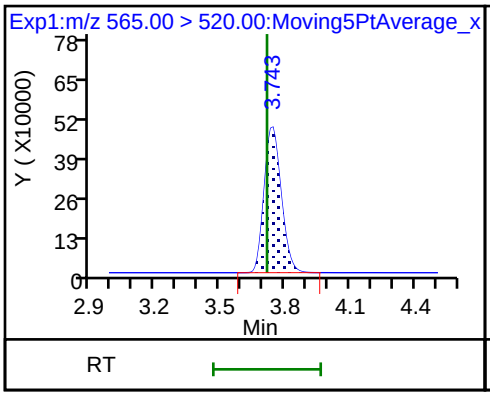
D 27 d3-NMeFOSAA



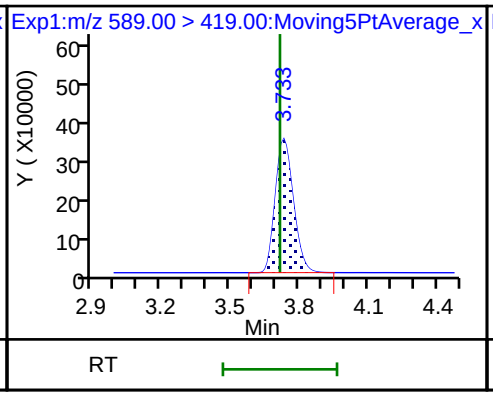
28 N-methyl perfluorooctane sulfonami (ND)



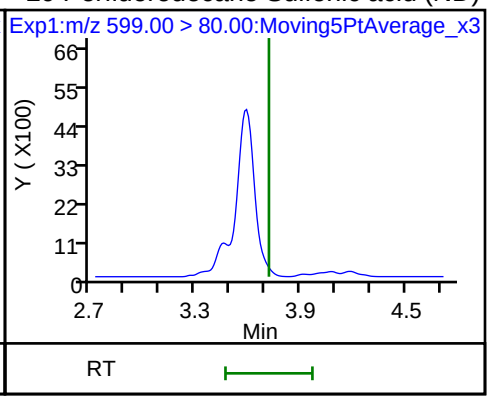
D 30 13C2 PFUnA



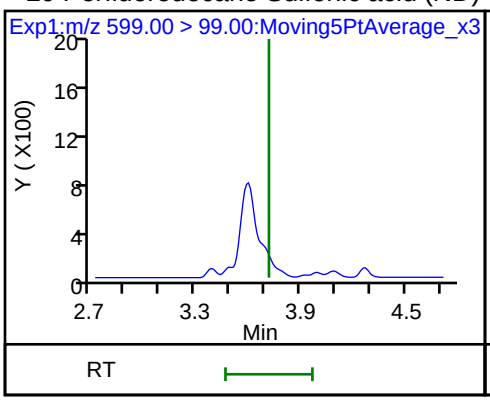
D 32 d5-NEtFOSAA



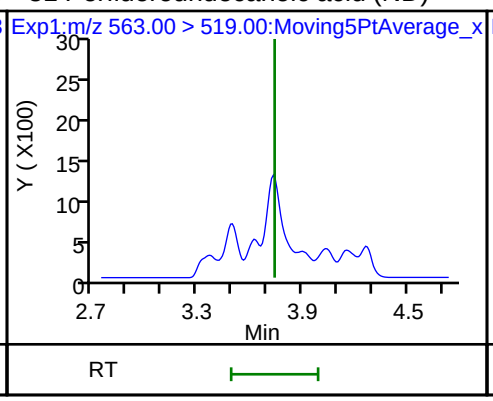
29 Perfluorodecane Sulfonic acid (ND)



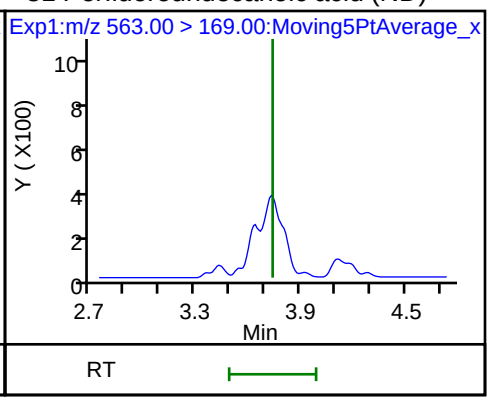
29 Perfluorodecane Sulfonic acid (ND)



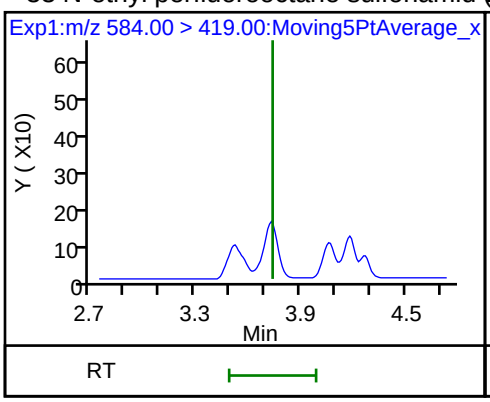
31 Perfluoroundecanoic acid (ND)



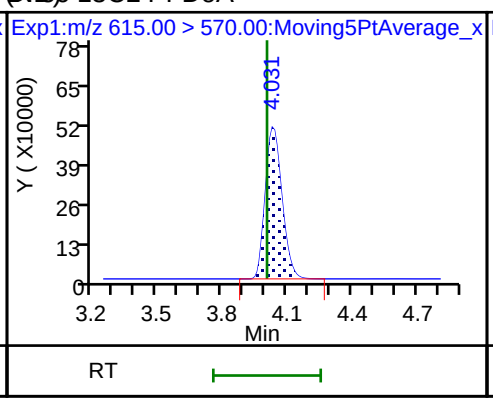
31 Perfluoroundecanoic acid (ND)



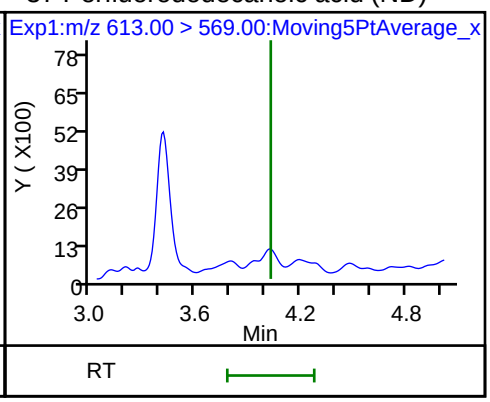
33 N-ethyl perfluorooctane sulfonamid (ND)



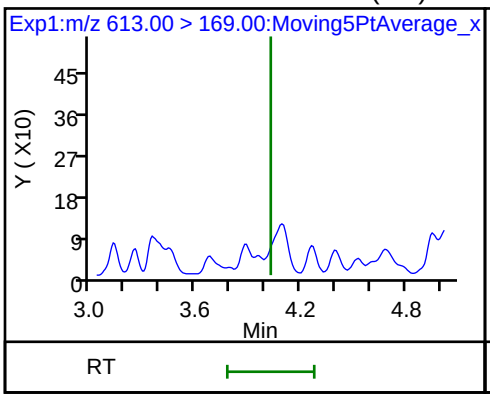
D 36 13C2 PFDoA



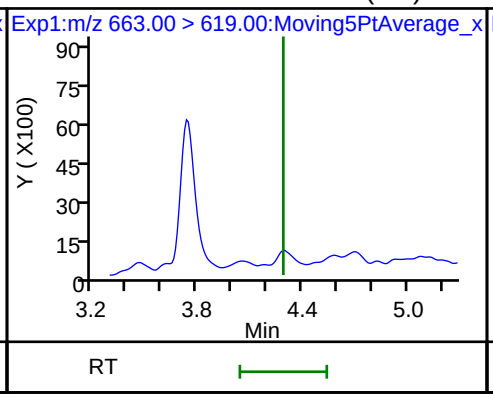
37 Perfluorododecanoic acid (ND)



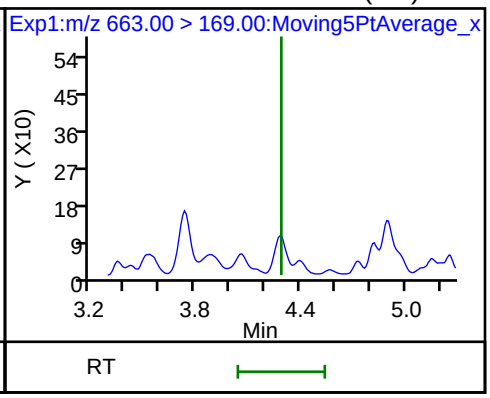
37 Perfluorododecanoic acid (ND)



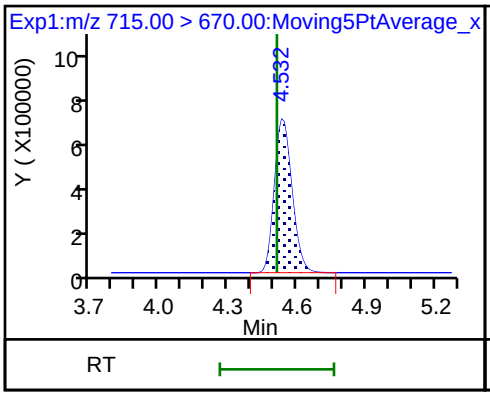
41 Perfluorotridecanoic acid (ND)



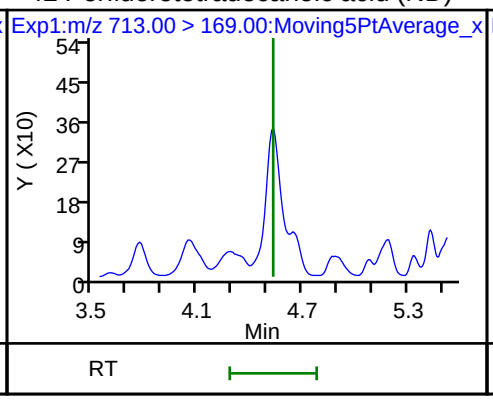
41 Perfluorotridecanoic acid (ND)



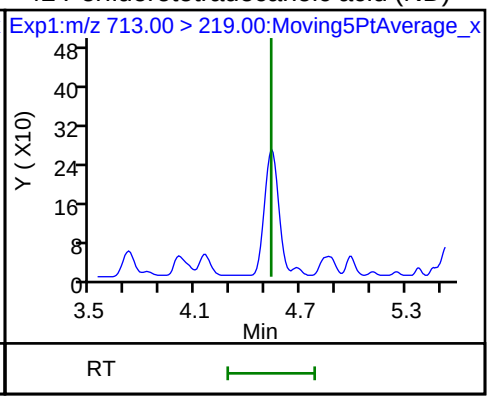
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-DRAIN(WG) | Lab Sample ID: 320-38611-8

Matrix: Water | Lab File ID: 2018.05.10LLB_010.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 247.1(mL) | Date Analyzed: 05/10/2018 20:54

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	120	B	2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	9.3		2.0	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	22		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	26		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	110	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	14		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	20		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	3.6		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	2.2		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.75	J	2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.6	CI	2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.4	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.3	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	130		2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	21		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	27		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	13	J	20	1.9
27619-97-2	6:2FTS	32	B *	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-DRAIN(WG) | Lab Sample ID: 320-38611-8

Matrix: Water | Lab File ID: 2018.05.10LLB_010.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 247.1(mL) | Date Analyzed: 05/10/2018 20:54

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	31		25-150
STL01893	13C5 PFPeA	59		25-150
STL00993	13C2 PFHxA	75		25-150
STL01892	13C4-PFHpA	86		25-150
STL00990	13C4 PFOA	99		25-150
STL00995	13C5 PFNA	106		25-150
STL00996	13C2 PFDA	128		25-150
STL00997	13C2 PFUnA	129		25-150
STL00998	13C2 PFDoA	116		25-150
STL02116	13C2-PFTeDA	83		25-150
STL02337	13C3-PFBS	93		25-150
STL00994	18O2 PFHxS	126		25-150
STL00991	13C4 PFOS	135		25-150
STL01056	13C8 FOSA	96		25-150
STL02118	d3-NMeFOSAA	103		25-150
STL02117	d5-NEtFOSAA	120		25-150
STL02279	M2-6:2FTS	229	*	25-150
STL02280	M2-8:2FTS	283	*	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d
Lims ID: 320-38611-A-8-A
Client ID: GC-MW-DRAIN(WG)
Sample Type: Client
Inject. Date: 10-May-2018 20:54:12 ALS Bottle#: 27 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-8-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 11-May-2018 09:23:12

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.474	1.469	0.005	1.000	967319	0.7634		30.5	5419	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.452	1.478	-0.026	0.985	1042702	2.90			6.0	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.747	0.008	0.563	1194957	1.46		58.5	1394	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.755	1.753	0.002	1.000	131229	0.2304			3.1	M
D 47 13C3-PFBS										
301.90 > 83.00	1.791	1.783	0.008	1.000	40450	2.16		92.8	13.6	
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	1.746	1.798	-0.052	0.975	120666	0.0886			0.0	RM
298.90 > 99.00	1.791	1.798	-0.007	1.000	176525		0.68(1.25-3.74)		26.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.047	2.048	-0.001	1.000	1693222	1.87		75.0	17641	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.047	2.056	-0.009	1.000	378766	0.5504			17.3	M
313.00 > 119.00	2.047	2.056	-0.009	1.000	37506		10.10(5.03-15.10)		53.3	
D 9 13C4-PFHpA										
367.00 > 322.00	2.383	2.384	-0.001	1.000	1894345	2.16		86.2	27708	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.383	2.392	-0.009	1.000	486036	0.6409			69.7	
363.00 > 169.00	2.383	2.392	-0.009	1.000	188879		2.57(1.13-3.40)		431	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.395	0.0	1.000	3242684	2.99		126	21551	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.395	2.403	-0.008	1.000	207907	0.1340			2.6	M
399.00 > 99.00	2.395	2.403	-0.008	1.000	71985		2.89(1.50-4.49)		18.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										M
429.00 > 81.00	2.713	2.712	0.001	1.000	1023096	5.43		229	32.8	M
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.713	2.718	-0.005	1.000	580875	0.7977			4855	
* 62 13C2-PFOA										
415.00 > 370.00	2.743	2.741	0.002		2354420	2.50			33184	
D 14 13C4 PFOA										
417.00 > 372.00	2.743	2.742	0.001	1.000	2168130	2.48		99.3	28758	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.743	2.749	-0.006	1.000	2776589	2.77			506	
413.00 > 169.00	2.743	2.749	-0.006	1.000	1640505		1.69(0.84-2.52)		1045	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.751	2.749	0.002	1.000	42113	0.0310			0.4	M
449.00 > 99.00	2.743	2.749	-0.006	0.997	13710		3.07(1.94-5.82)		12.2	M
D 18 13C4 PFOS										M
503.00 > 80.00	3.108	3.106	0.002	1.000	2446829	3.22		135	41.6	M
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.108	3.114	-0.006	1.000	3574705	3.21			83.3	M
499.00 > 99.00	3.108	3.114	-0.006	1.000	741187		4.82(2.31-6.93)		829	
D 19 13C5 PFNA										
468.00 > 423.00	3.116	3.114	0.002	1.000	1981882	2.64		106	20825	
20 Perfluorononanoic acid										
463.00 > 419.00	3.116	3.122	-0.006	1.000	283826	0.3434			79.4	
463.00 > 169.00	3.116	3.122	-0.006	1.000	71930		3.95(1.90-5.69)		257	
D 21 13C8 FOSA										
506.00 > 78.00	3.441	3.431	0.010	1.000	2283800	2.41		96.3	26915	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.441	3.441	0.0	1.000	474024	0.5130			153	
D 26 M2-8:2FTS										M
529.00 > 81.00	3.469	3.459	0.010	1.000	1539961	6.79		283	76.9	M
D 23 13C2 PFDA										
515.00 > 470.00	3.478	3.468	0.010	1.000	2013613	3.19		128	44852	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.469	3.469	0.0	1.000	5901	0.007253			95.2	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.478	3.478	0.0	1.000	407631	0.4906			244	
513.00 > 169.00	3.469	3.478	-0.009	0.997	77859		5.24(2.36-7.09)		372	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.634	3.624	0.010	1.000	922395	2.58		103	4024	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.634	3.634	0.0	1.000	242443	0.6589			262	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.799	3.790	0.009	1.000	1055609	2.99		120	3534	
D 30 13C2 PFUnA										
565.00 > 520.00	3.809	3.800	0.009	1.000	1751644	3.22		129	32448	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	3.799	3.811	-0.012	0.997	52704	0.0890			44.1	M
563.00 > 169.00	3.809	3.811	-0.002	1.000	14191		3.71(2.12-6.36)		72.8	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.799	3.811	-0.012	1.000	124164	0.3147			271	
D 36 13C2 PFDoA										
615.00 > 570.00	4.098	4.091	0.007	1.000	1705209	2.90		116	16415	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.098	4.102	-0.004	1.000	38788	0.0545			30.9	
613.00 > 169.00	4.098	4.102	-0.004	1.000	9442		4.11(2.13-6.40)		53.3	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.601	4.595	0.006	1.000	1556083	2.09		83.5	10169	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.601	4.605	-0.004	1.000	2898	0.0185			21.8	
713.00 > 219.00	4.601	4.605	-0.004	1.000	2249		1.29(0.71-2.13)		16.2	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:50 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d

Injection Date: 10-May-2018 20:54:12 Instrument ID: A8_N

Lims ID: 320-38611-A-8-A Lab Sample ID: 320-38611-8

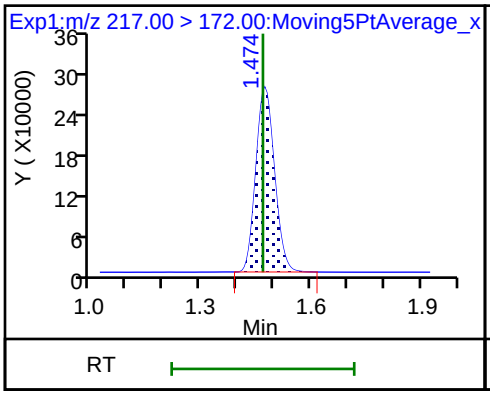
Client ID: GC-MW-DRAIN(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 27 Worklist Smp#: 12

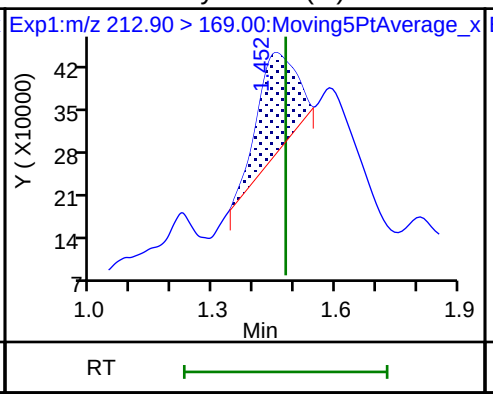
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

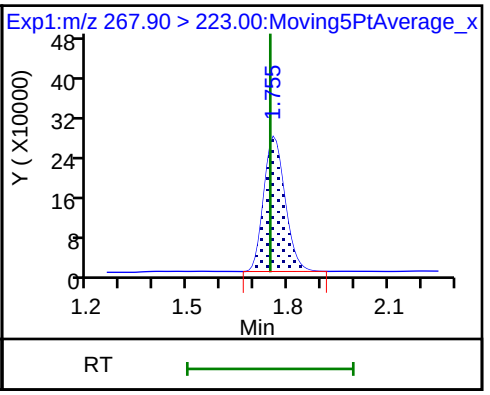
D 1 13C4 PFBA



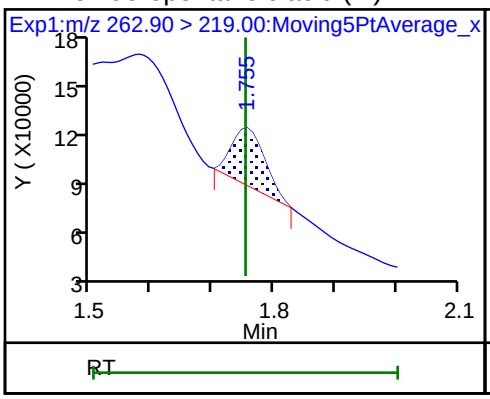
2 Perfluorobutyric acid (M)



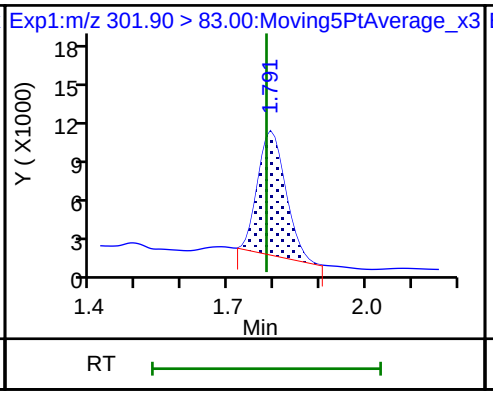
D 3 13C5-PFPeA



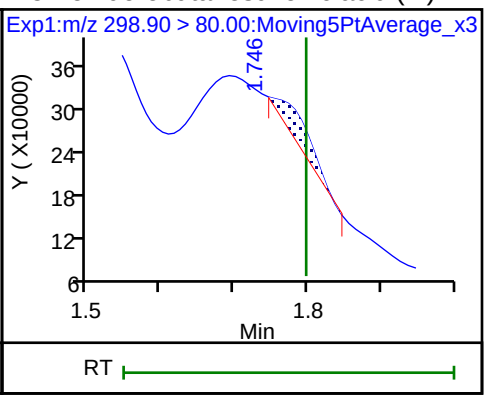
4 Perfluoropentanoic acid (M)



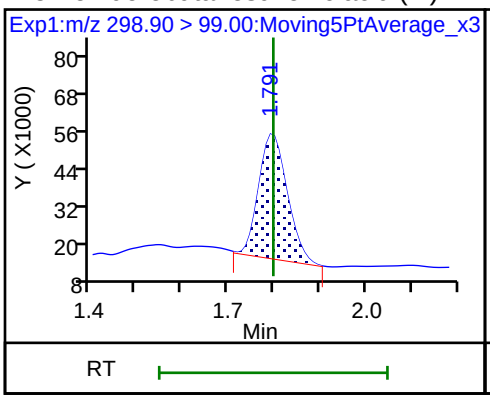
D 47 13C3-PFBS



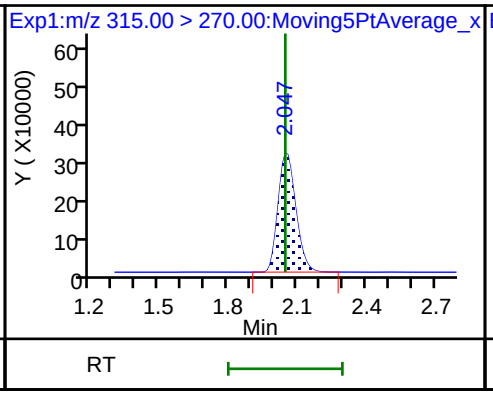
5 Perfluorobutanesulfonic acid (M)



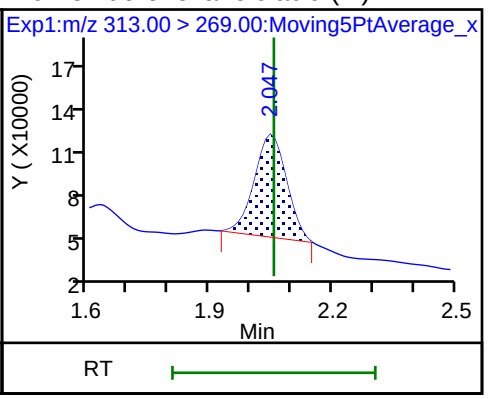
5 Perfluorobutanesulfonic acid (M)



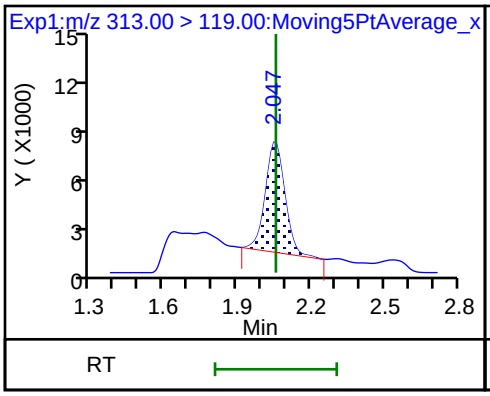
D 7 13C2 PFHxA



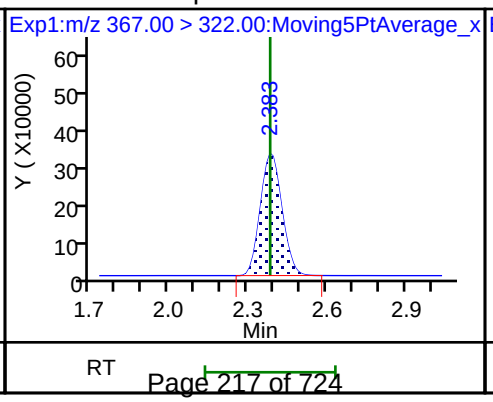
6 Perfluorohexanoic acid (M)



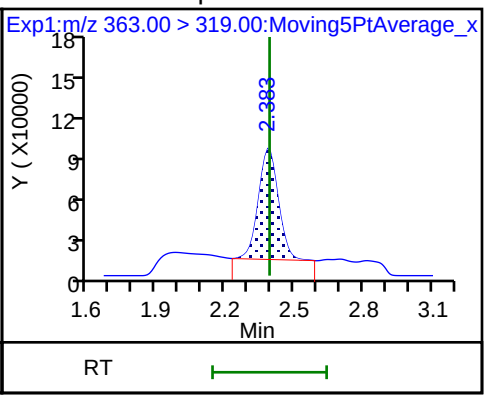
6 Perfluorohexanoic acid



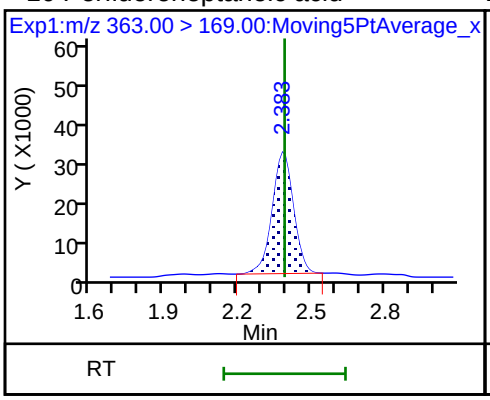
D 9 13C4-PFHpA



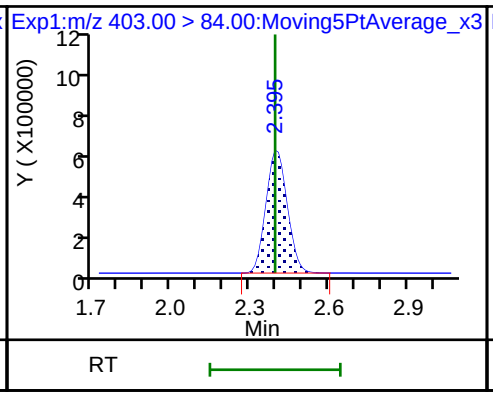
10 Perfluoroheptanoic acid



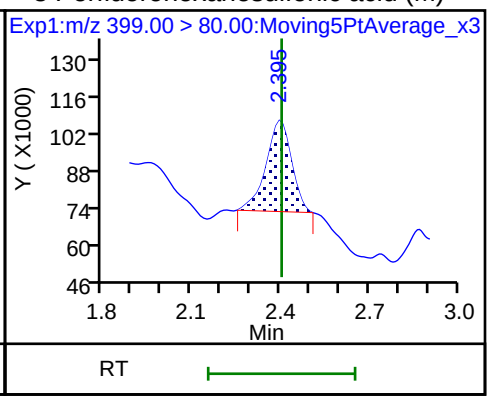
10 Perfluoroheptanoic acid



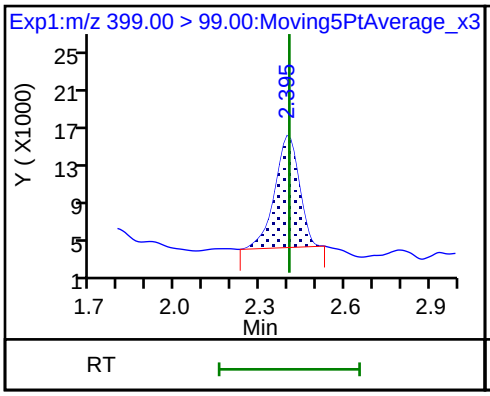
D 11 18O2 PFHxS



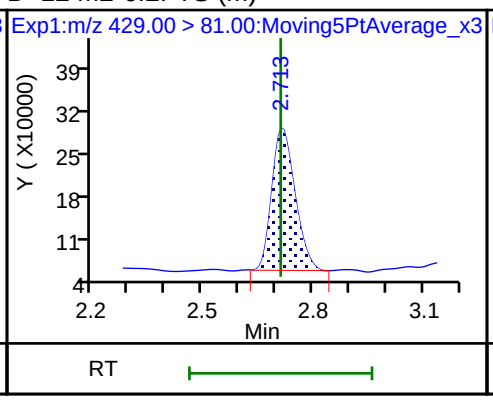
8 Perfluorohexanesulfonic acid (M)



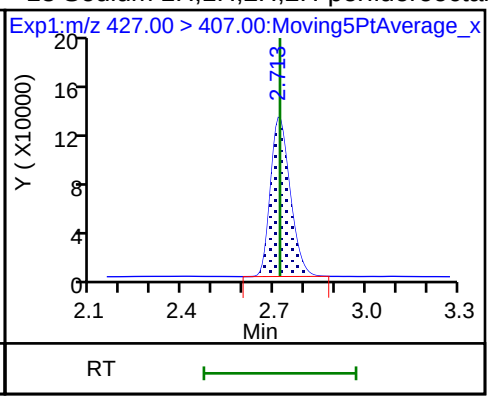
8 Perfluorohexanesulfonic acid



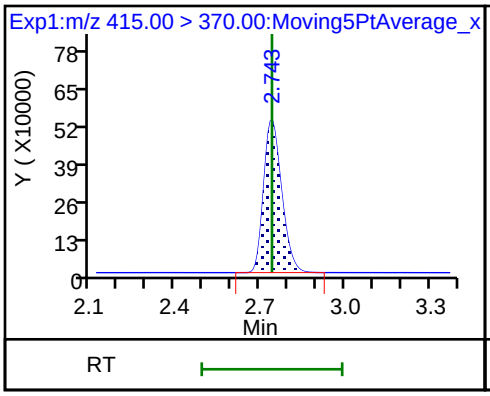
D 12 M2-6:2FTS (M)



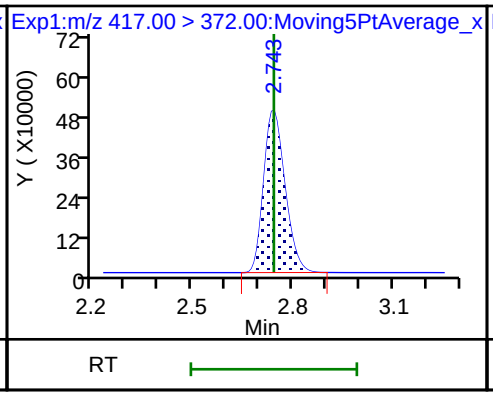
13 Sodium 1H,1H,2H,2H-perfluorooctane



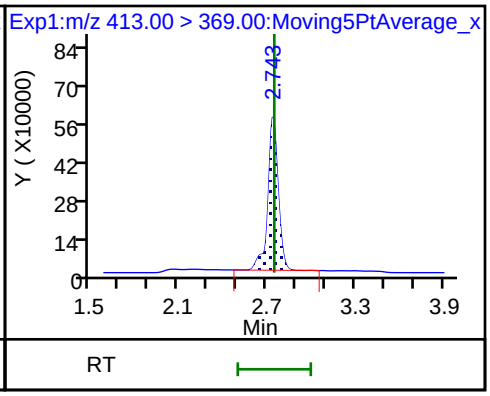
* 62 13C2-PFOA



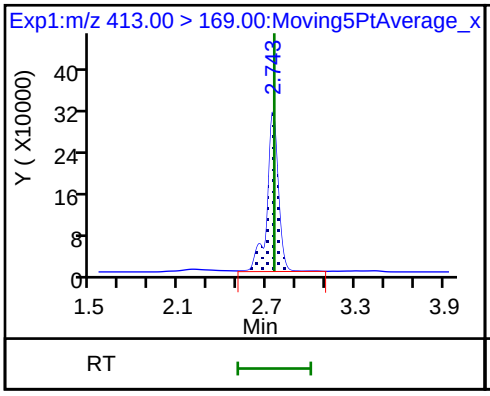
D 14 13C4 PFOA



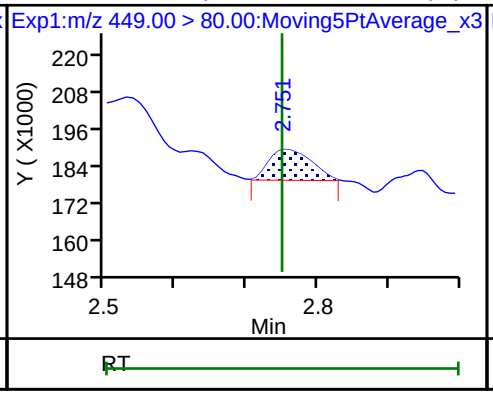
15 Perfluorooctanoic acid



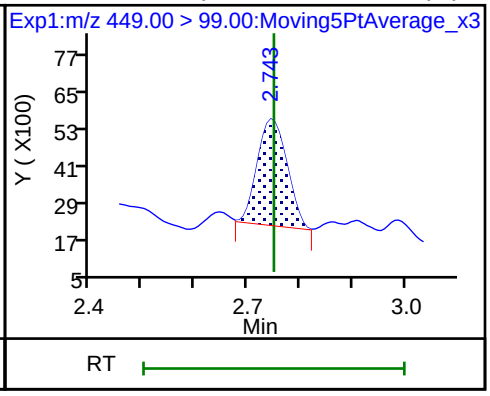
15 Perfluorooctanoic acid



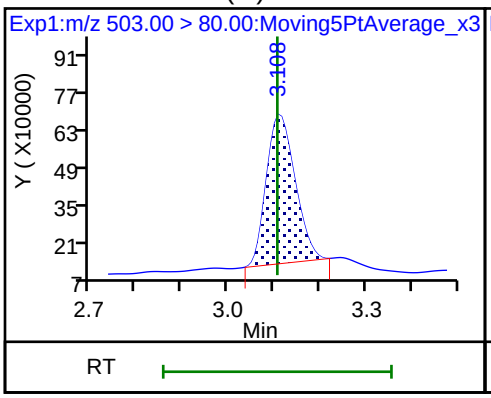
16 Perfluoroheptanesulfonic acid (M)



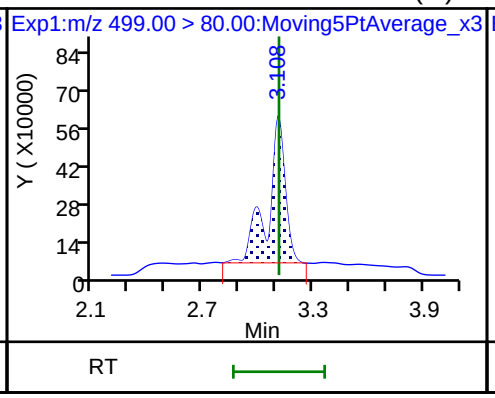
16 Perfluoroheptanesulfonic acid (M)



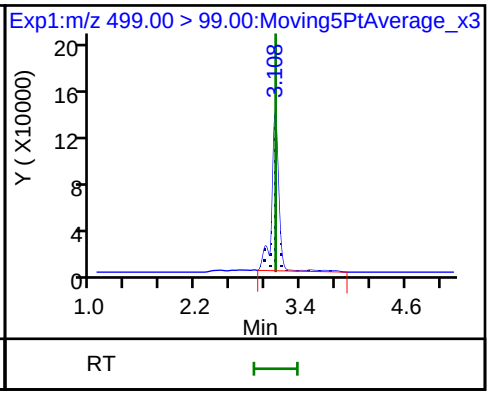
D 18 13C4 PFOS (M)



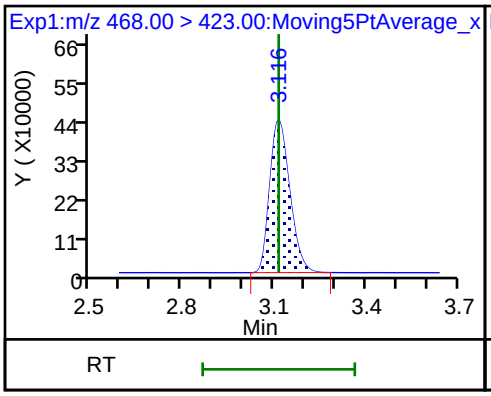
17 Perfluorooctane sulfonic acid (M)



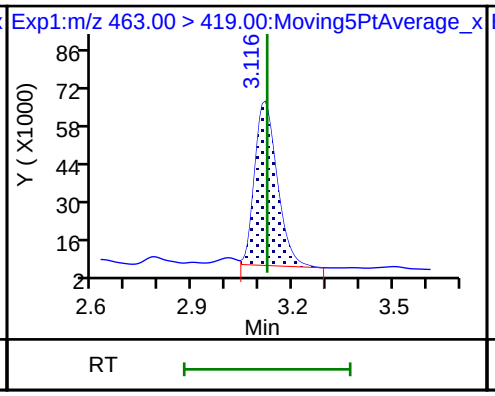
17 Perfluorooctane sulfonic acid



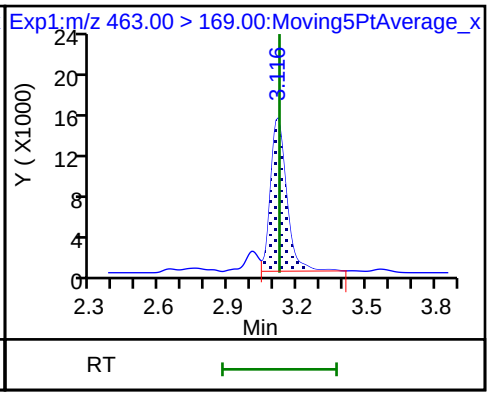
D 19 13C5 PFNA



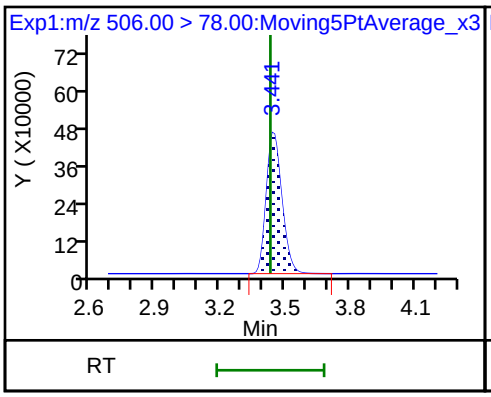
20 Perfluorononanoic acid



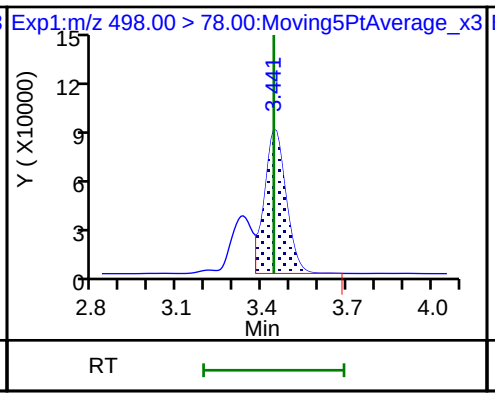
20 Perfluorononanoic acid



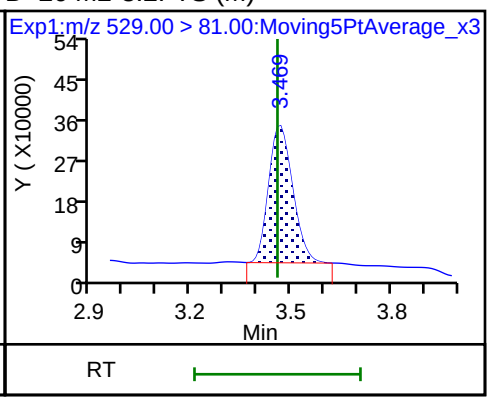
D 21 13C8 FOSA



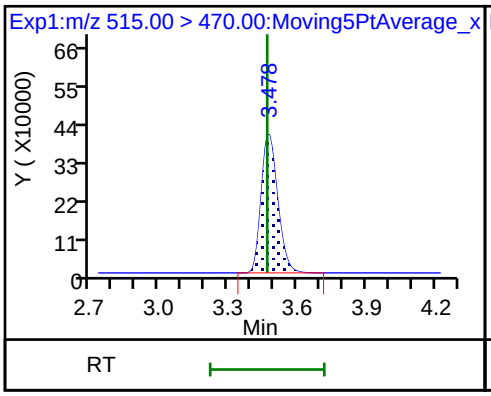
22 Perfluorooctane Sulfonamide



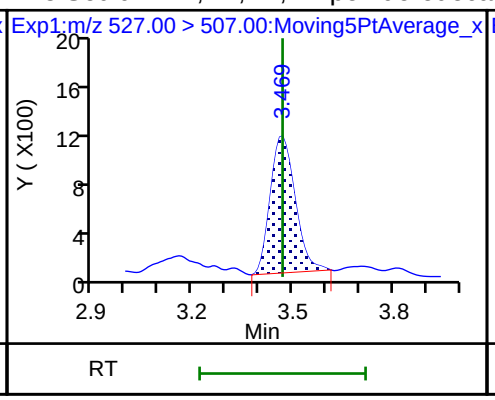
D 26 M2-8:2FTS (M)



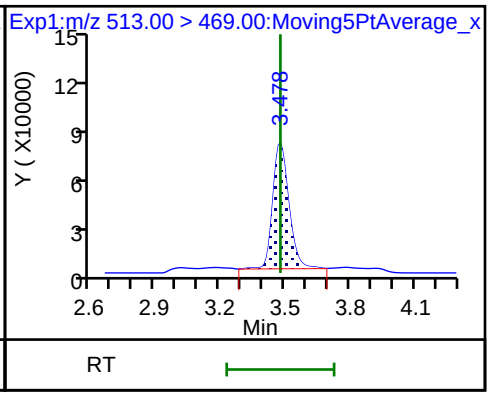
D 23 13C2 PFDA



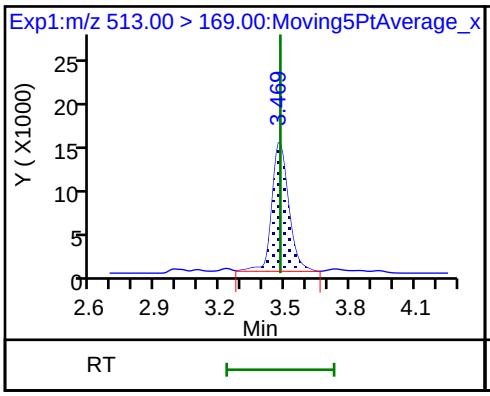
25 Sodium 1H,1H,2H,2H-perfluorodecan



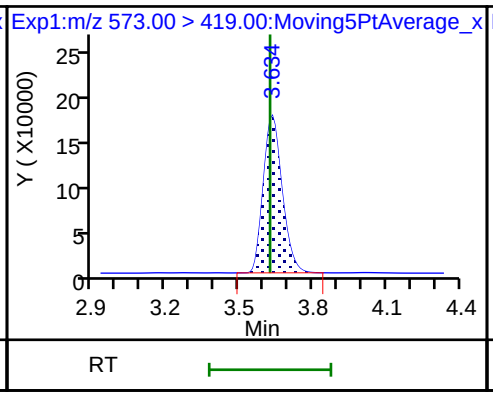
24 Perfluorodecanoic acid



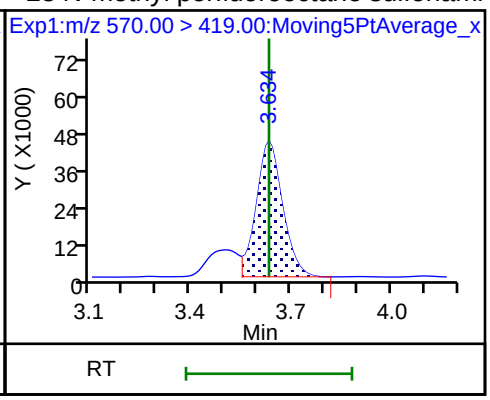
24 Perfluorodecanoic acid



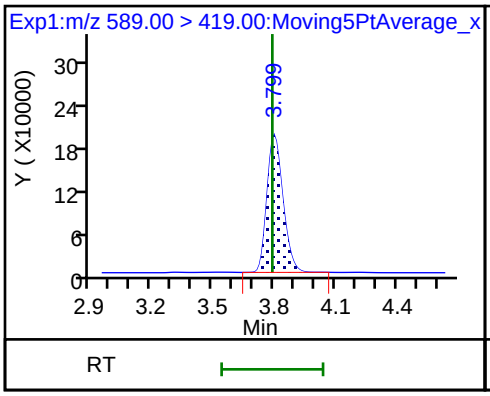
D 27 d3-NMeFOSAA



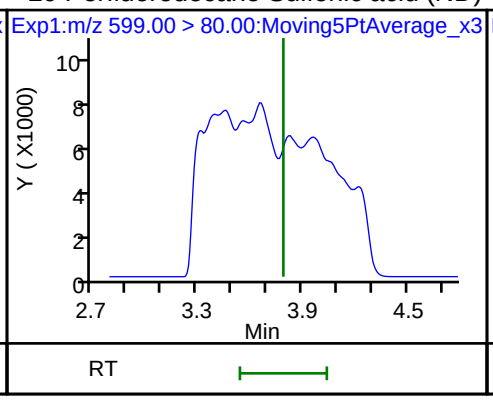
28 N-methyl perfluorooctane sulfonami



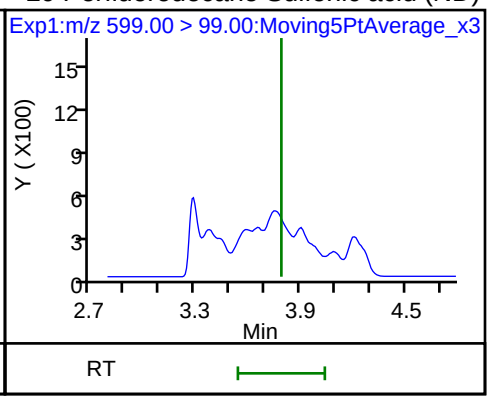
D 32 d5-NEtFOSAA



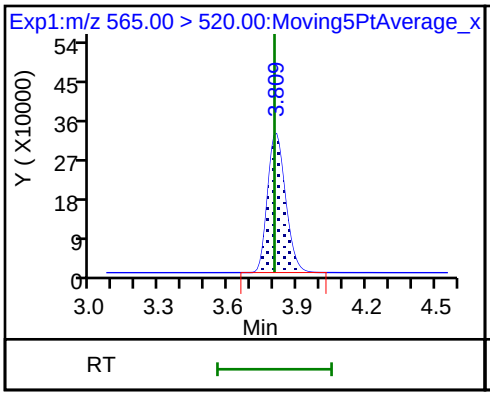
29 Perfluorodecane Sulfonic acid (ND)



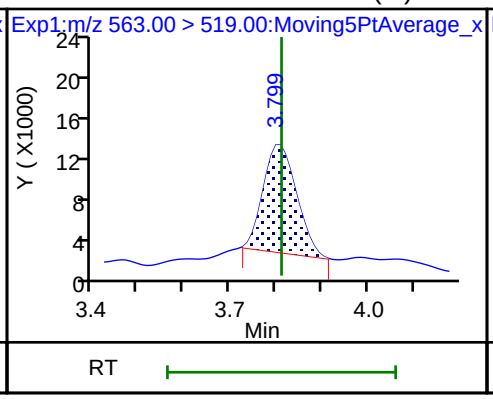
29 Perfluorodecane Sulfonic acid (ND)



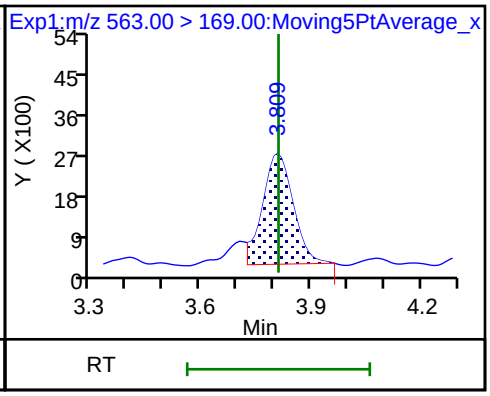
D 30 13C2 PFUnA



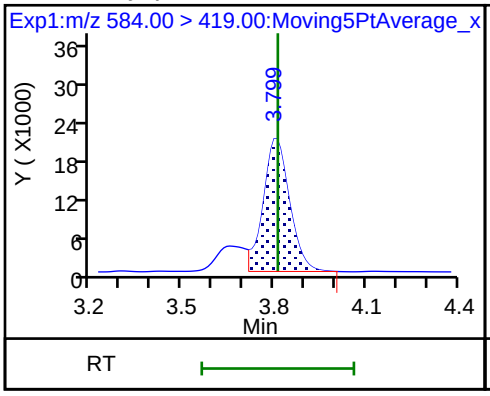
31 Perfluoroundecanoic acid (M)



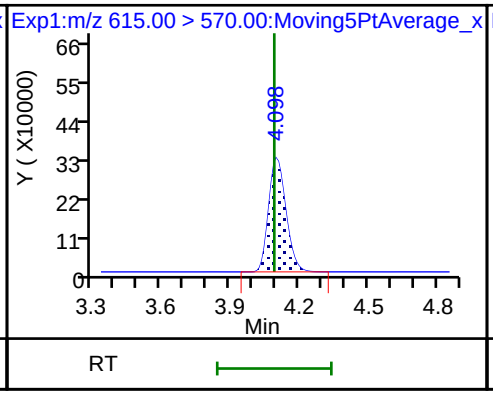
31 Perfluoroundecanoic acid



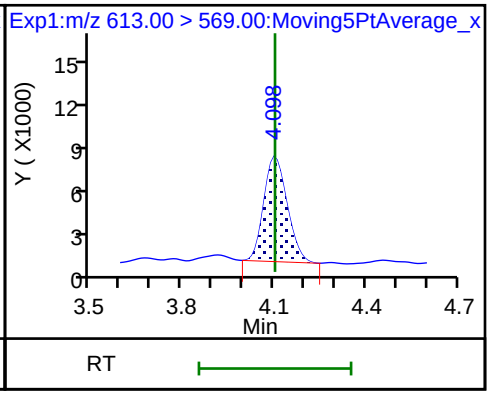
33 N-ethyl perfluorooctane sulfonamid



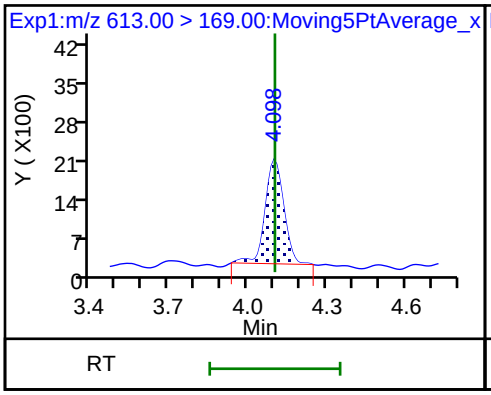
D 36 13C2 PFDoA



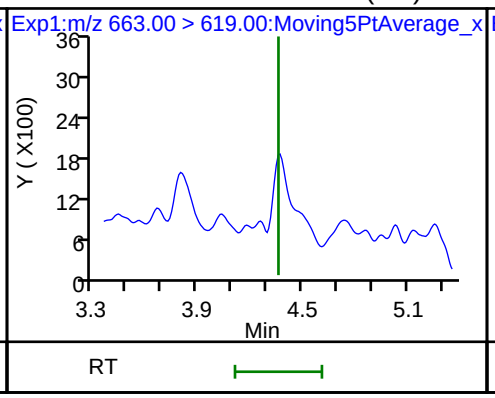
37 Perfluorododecanoic acid



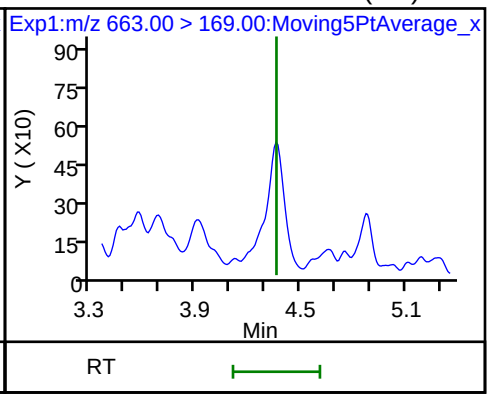
37 Perfluorododecanoic acid



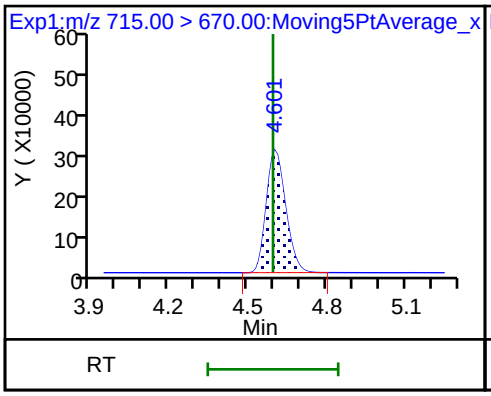
41 Perfluorotridecanoic acid (ND)



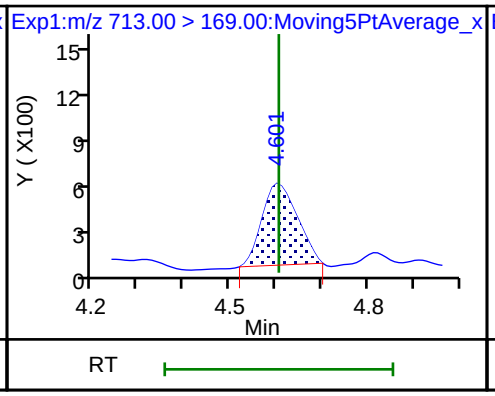
41 Perfluorotridecanoic acid (ND)



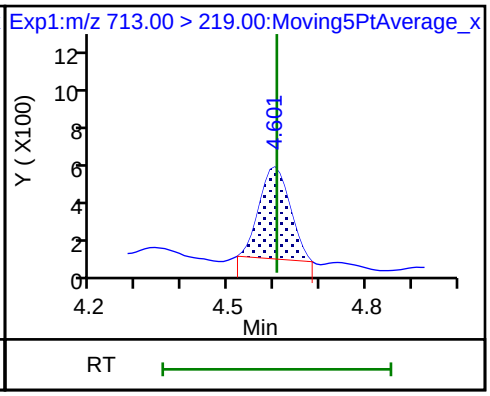
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



TestAmerica Sacramento

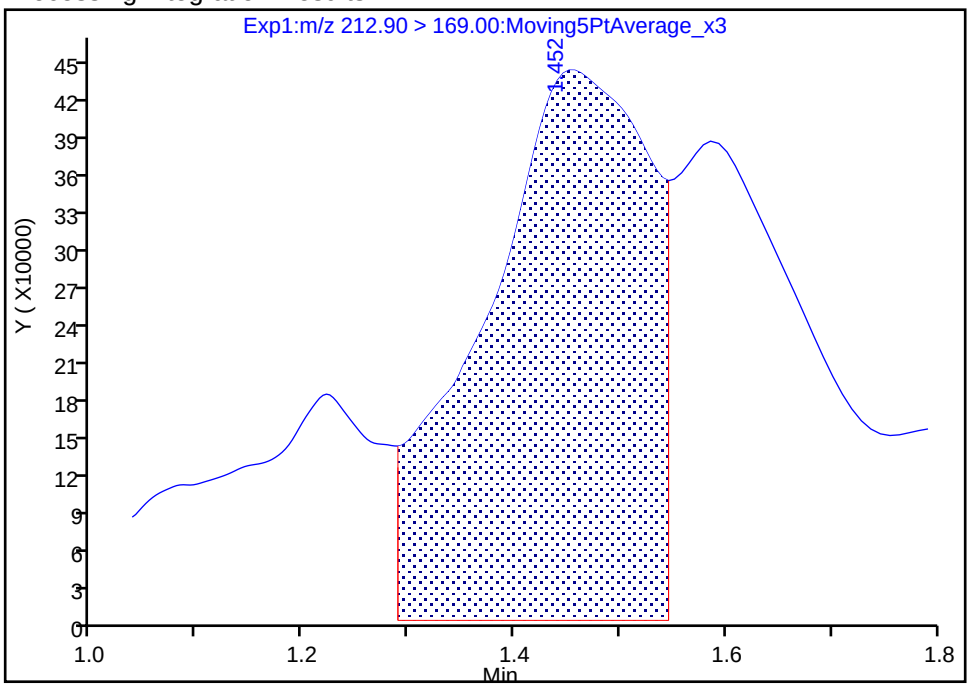
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d
Injection Date: 10-May-2018 20:54:12 Instrument ID: A8_N
Lims ID: 320-38611-A-8-A Lab Sample ID: 320-38611-8
Client ID: GC-MW-DRAIN(WG)
Operator ID: SACINSTLCMS01 ALS Bottle#: 27 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

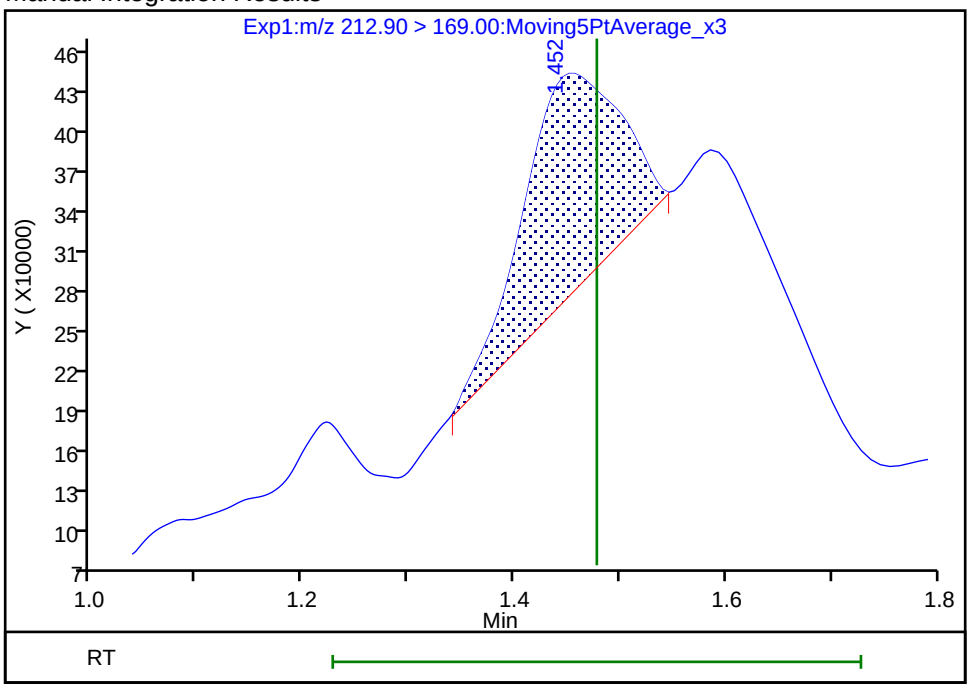
Processing Integration Results

RT: 1.45
Area: 4808683
Amount: 13.384016
Amount Units: ng/ml



Manual Integration Results

RT: 1.45
Area: 1042702
Amount: 2.902154
Amount Units: ng/ml



Reviewer: hannigana, 11-May-2018 09:23:08
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

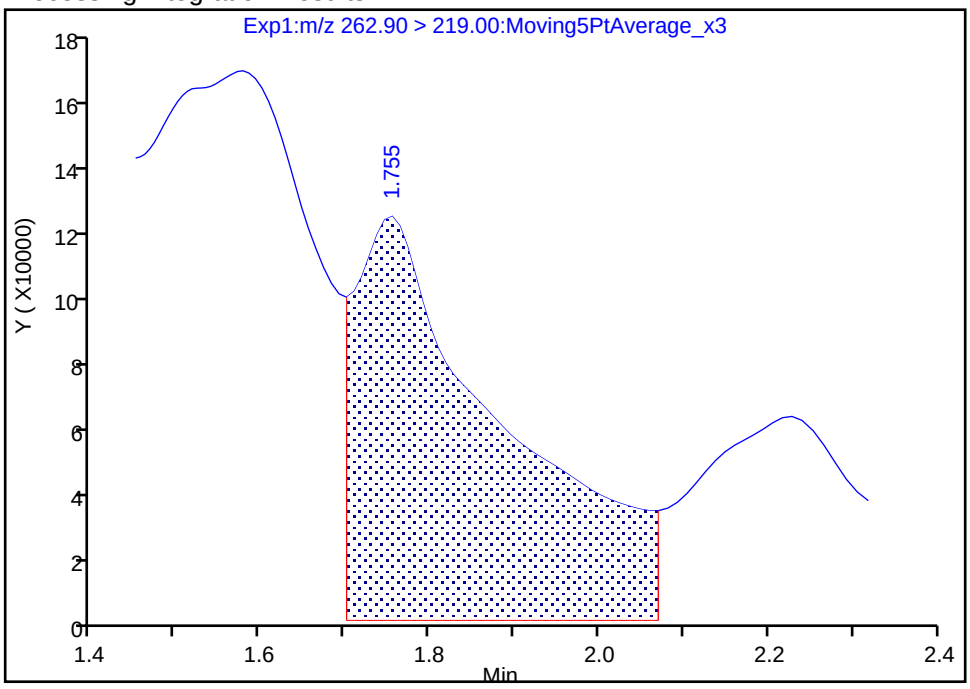
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

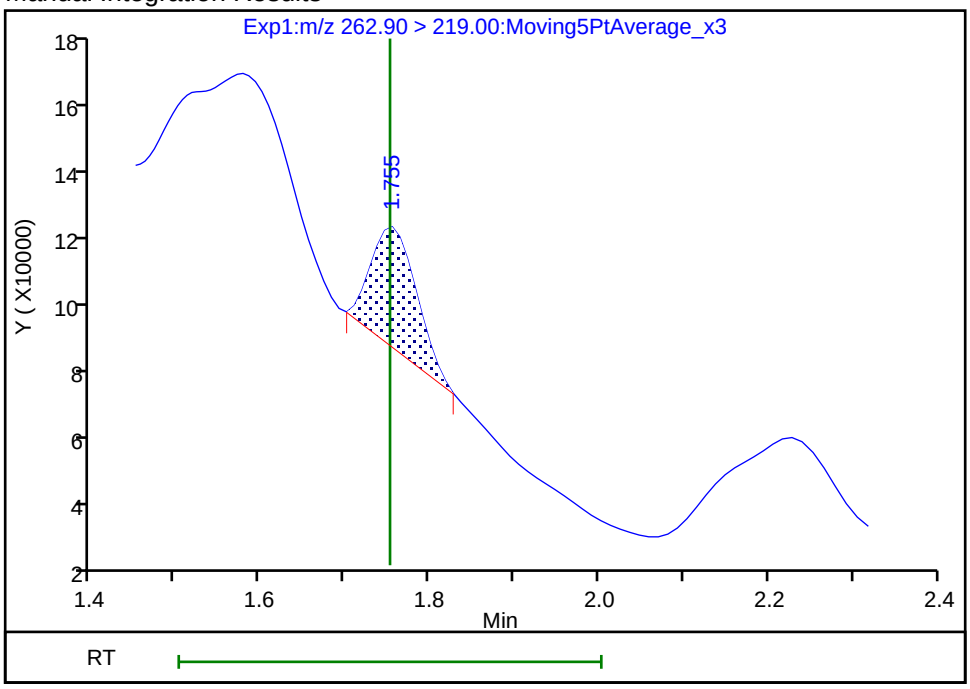
Processing Integration Results

RT: 1.76
Area: 1505394
Amount: 2.642684
Amount Units: ng/ml



Manual Integration Results

RT: 1.76
Area: 131229
Amount: 0.230369
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:21:24

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

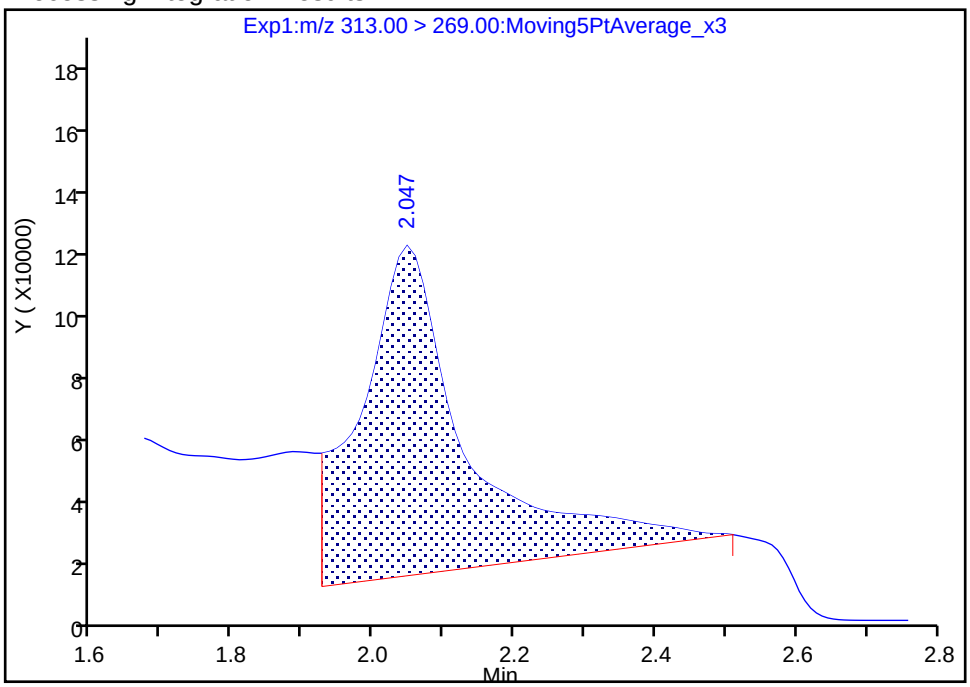
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

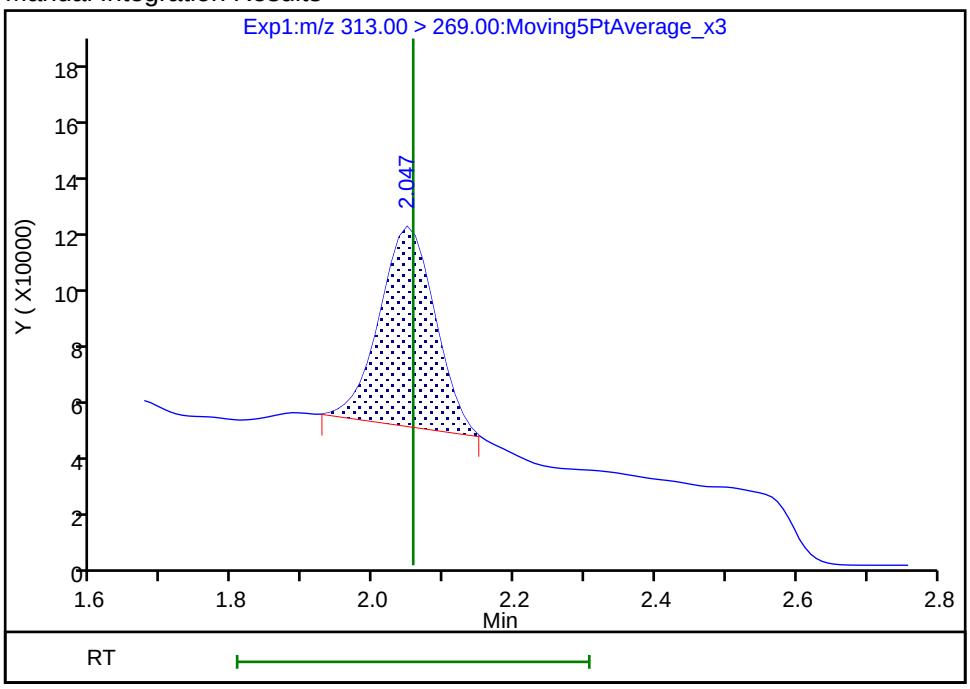
Processing Integration Results

RT: 2.05
Area: 1078241
Amount: 1.566703
Amount Units: ng/ml



Manual Integration Results

RT: 2.05
Area: 378766
Amount: 0.550354
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:21:48

Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

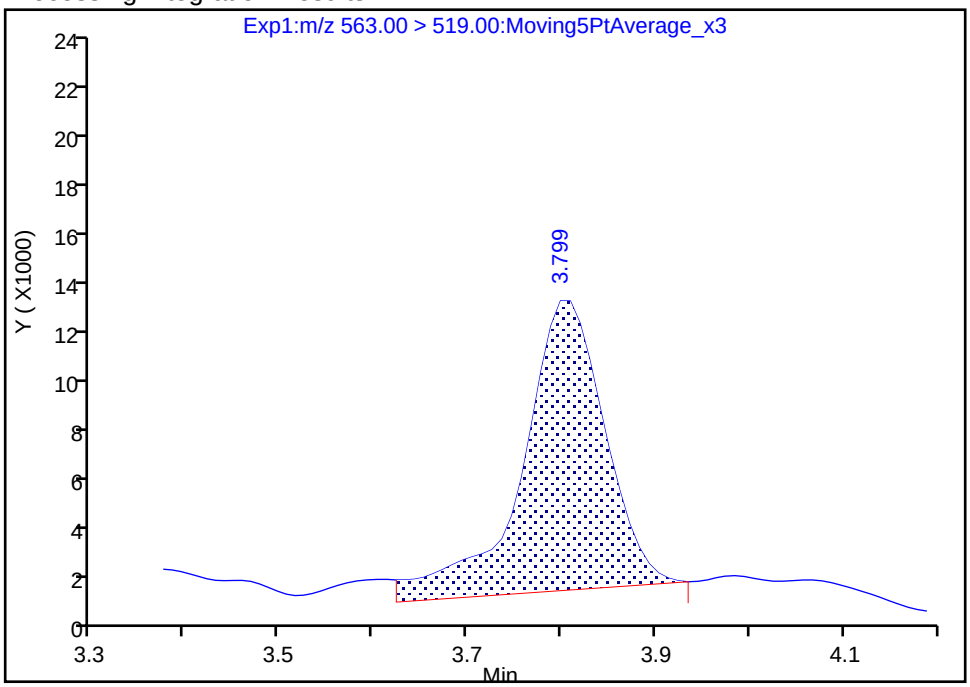
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

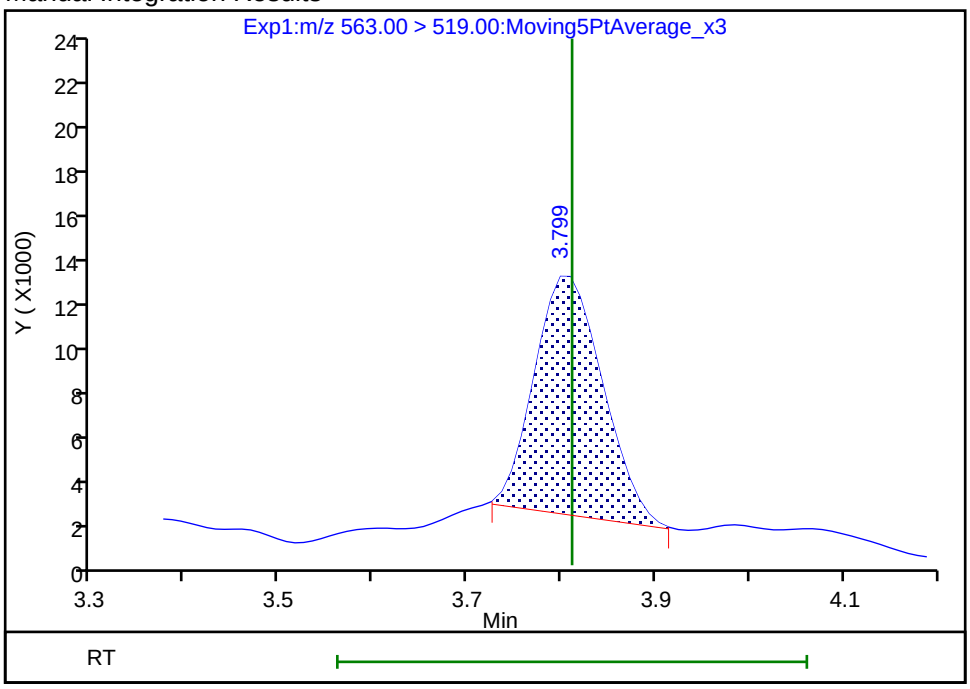
Processing Integration Results

RT: 3.80
Area: 70433
Amount: 0.118950
Amount Units: ng/ml



Manual Integration Results

RT: 3.80
Area: 52704
Amount: 0.089008
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:22:50
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

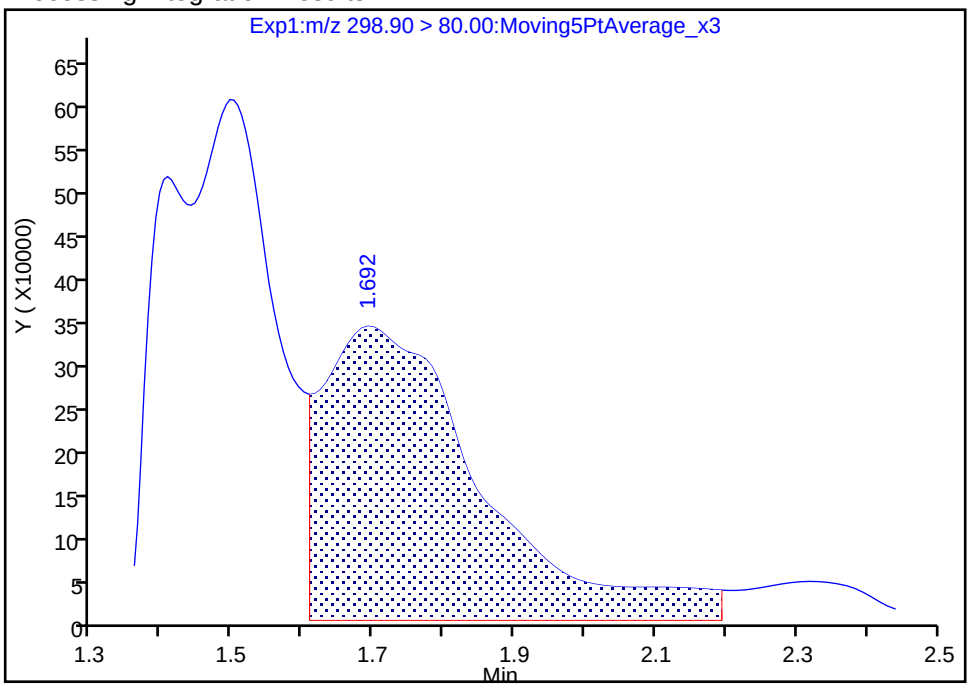
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

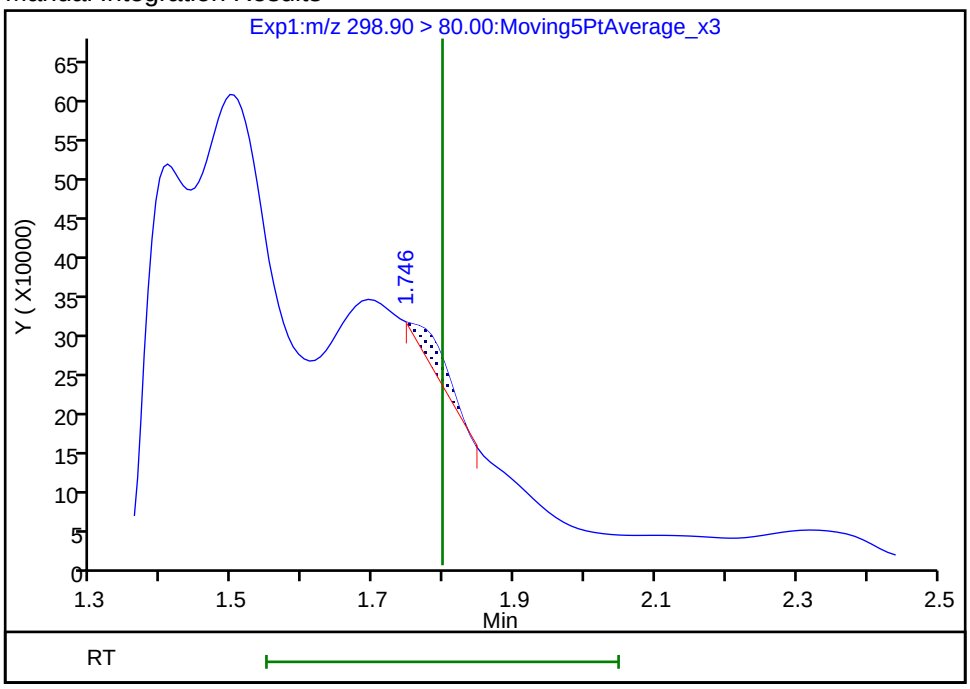
Processing Integration Results

RT: 1.69
Area: 5374003
Amount: 3.945628
Amount Units: ng/ml



Manual Integration Results

RT: 1.75
Area: 120666
Amount: 0.088594
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:21:41

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

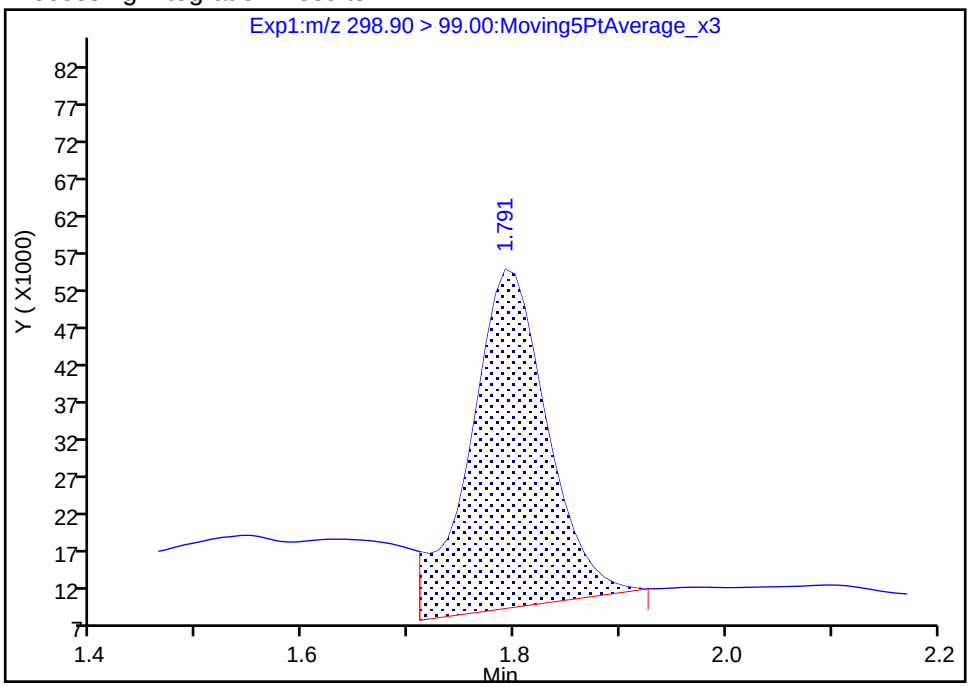
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

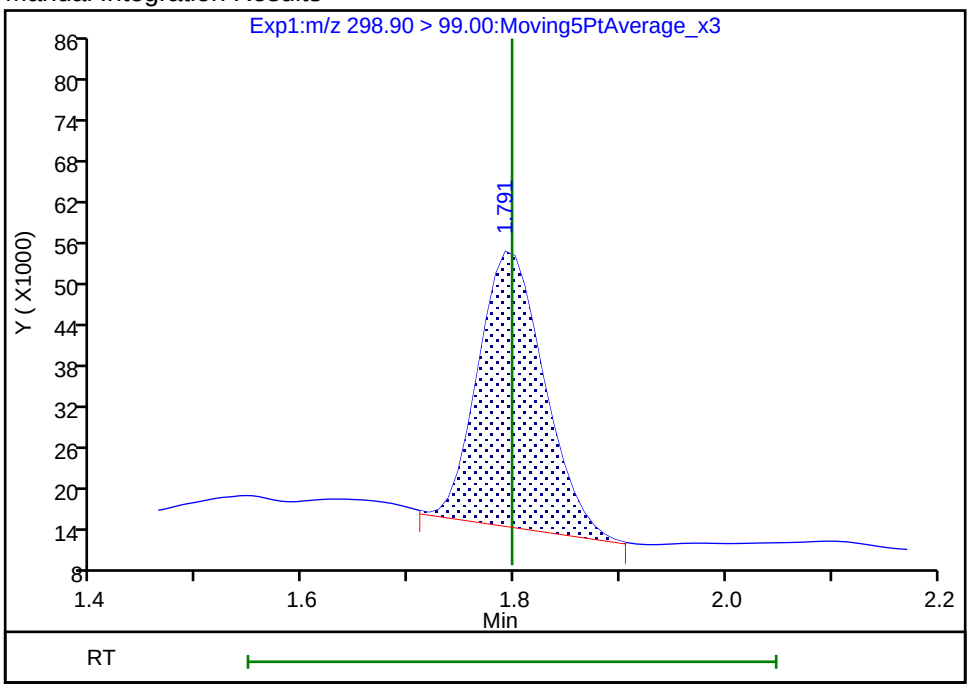
Processing Integration Results

RT: 1.79
Area: 231319
Amount: 3.945628
Amount Units: ng/ml



Manual Integration Results

RT: 1.79
Area: 176525
Amount: 0.088594
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:21:41

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

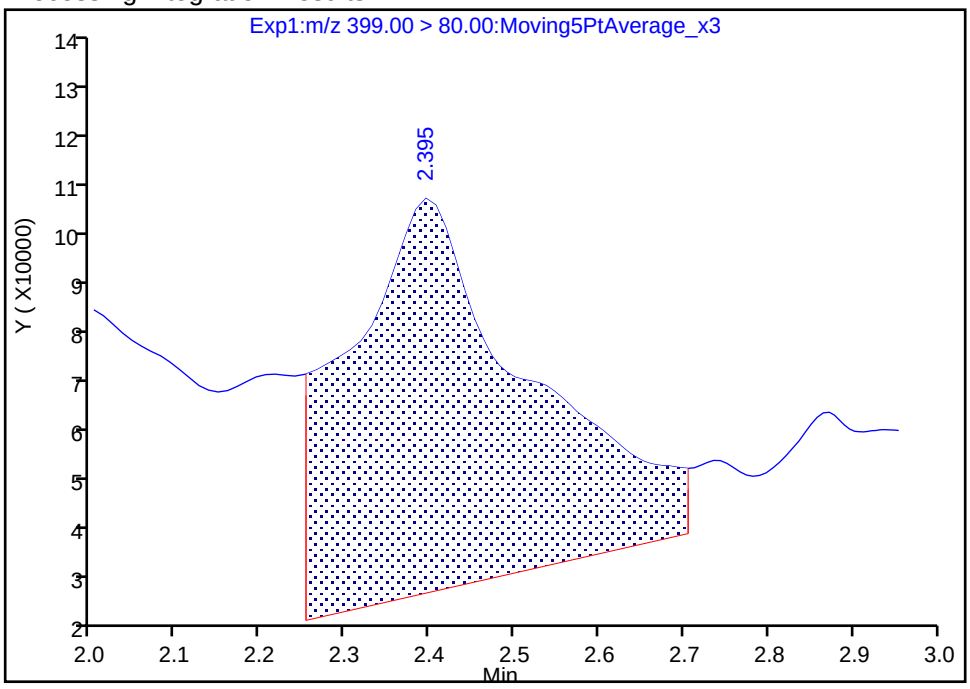
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

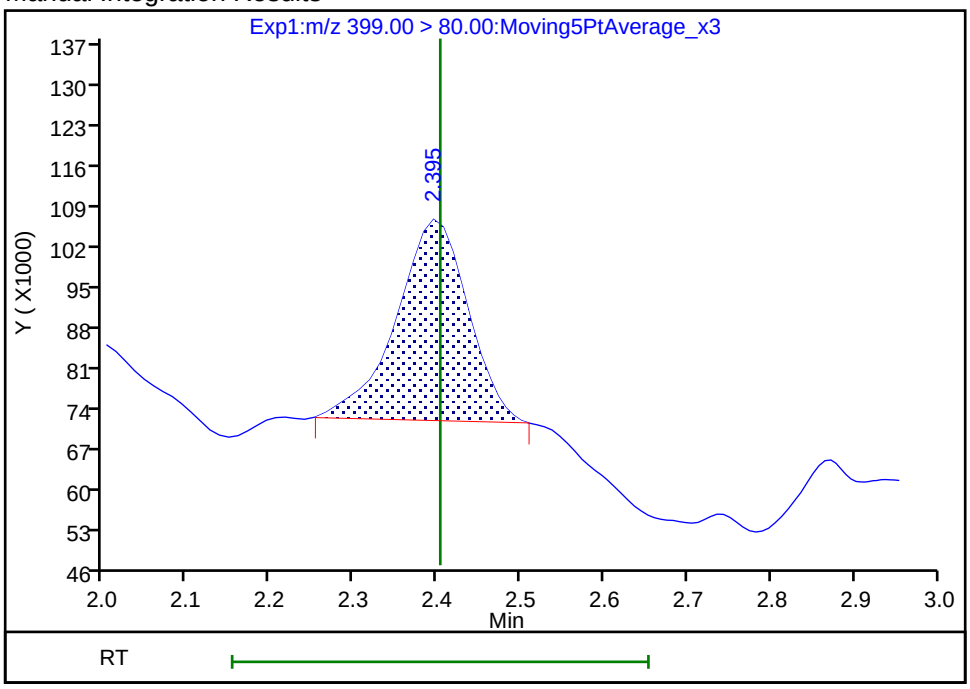
Processing Integration Results

RT: 2.40
Area: 1145789
Amount: 0.738368
Amount Units: ng/ml



Manual Integration Results

RT: 2.40
Area: 207907
Amount: 0.133979
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:21:57

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

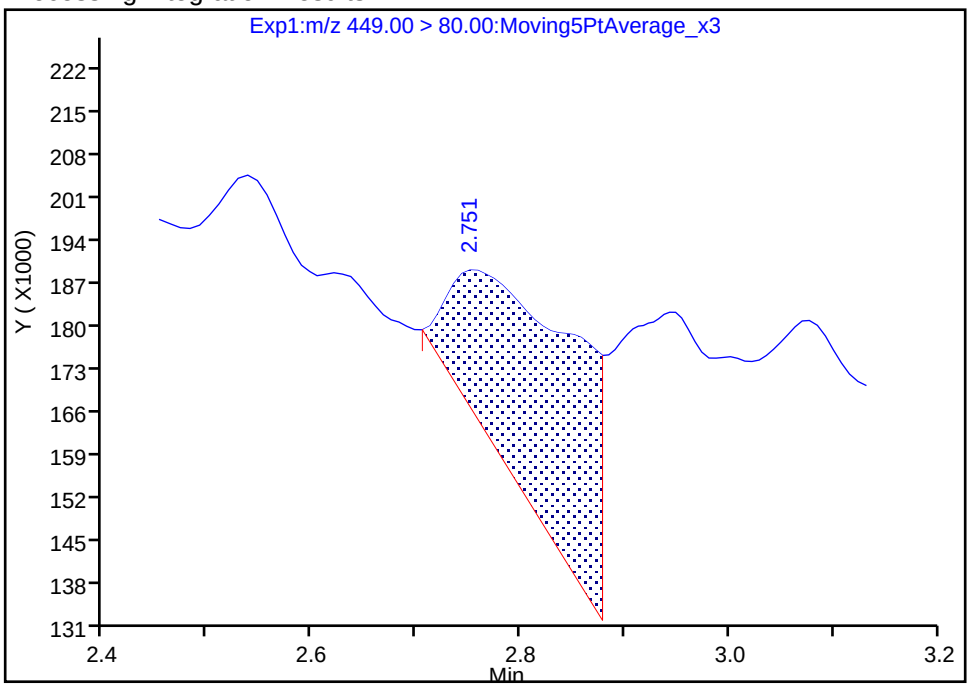
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d
Injection Date: 10-May-2018 20:54:12 Instrument ID: A8_N
Lims ID: 320-38611-A-8-A Lab Sample ID: 320-38611-8
Client ID: GC-MW-DRAIN(WG)
Operator ID: SACINSTLCMS01 ALS Bottle#: 27 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

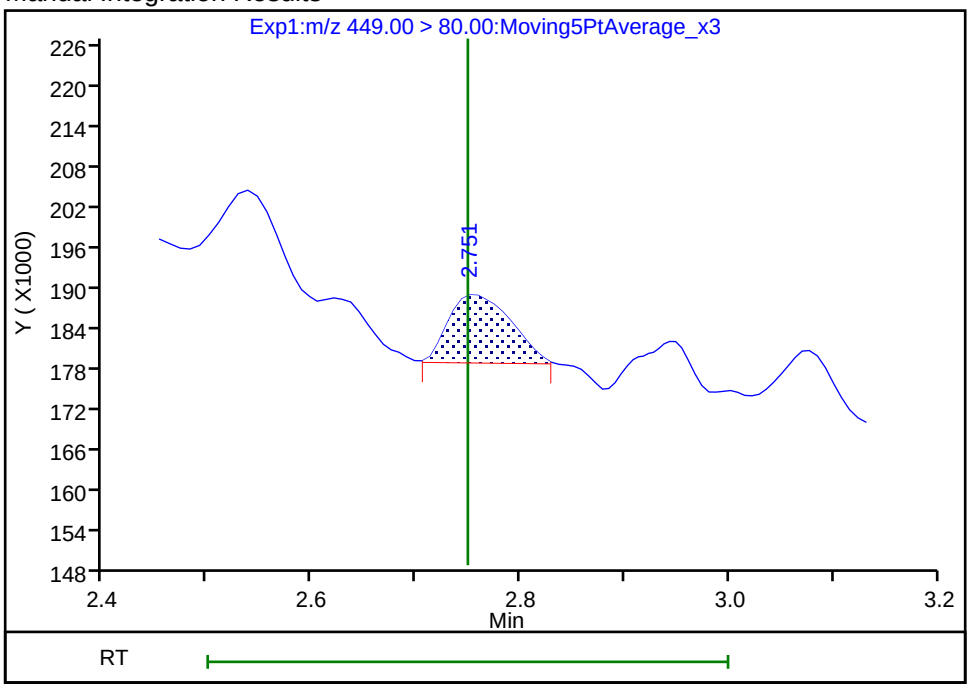
Processing Integration Results

RT: 2.75
Area: 282017
Amount: 0.207483
Amount Units: ng/ml



Manual Integration Results

RT: 2.75
Area: 42113
Amount: 0.030983
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:22:08
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

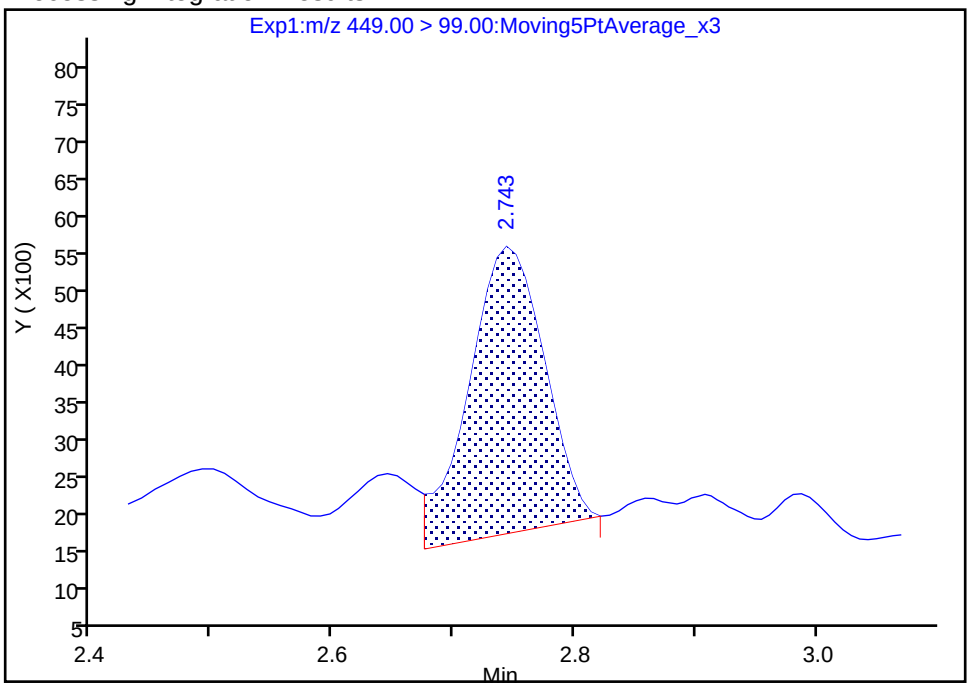
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

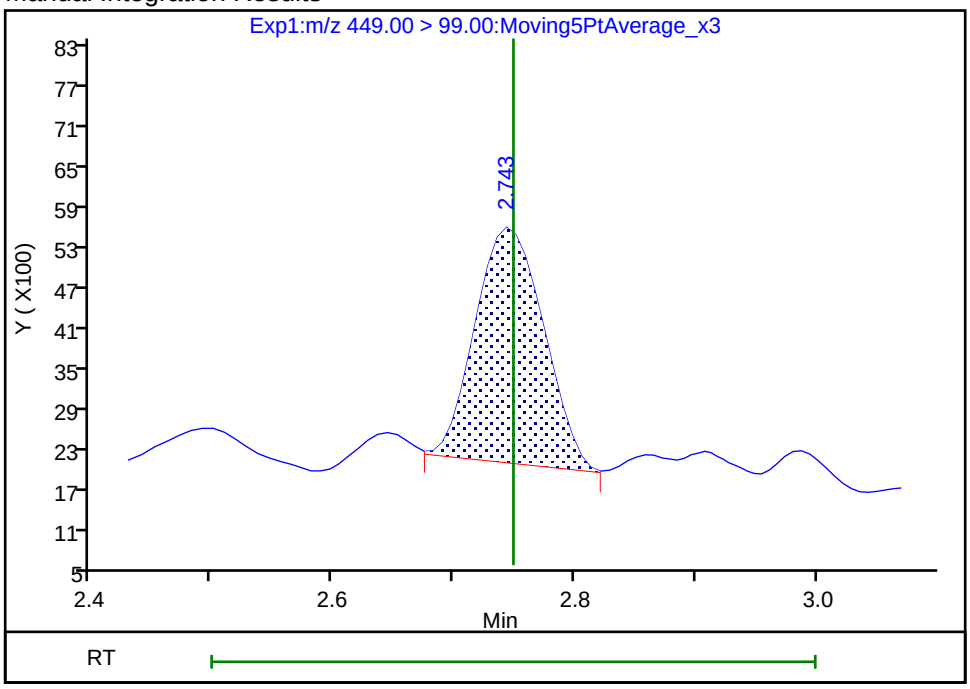
Processing Integration Results

RT: 2.74
Area: 16629
Amount: 0.207483
Amount Units: ng/ml



Manual Integration Results

RT: 2.74
Area: 13710
Amount: 0.030983
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:22:14

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

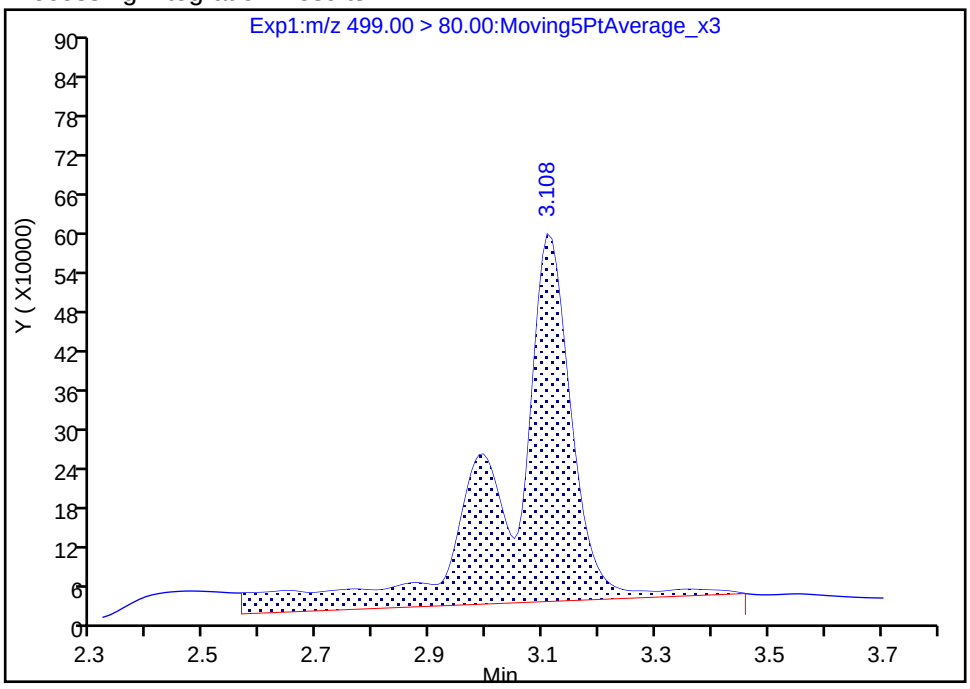
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

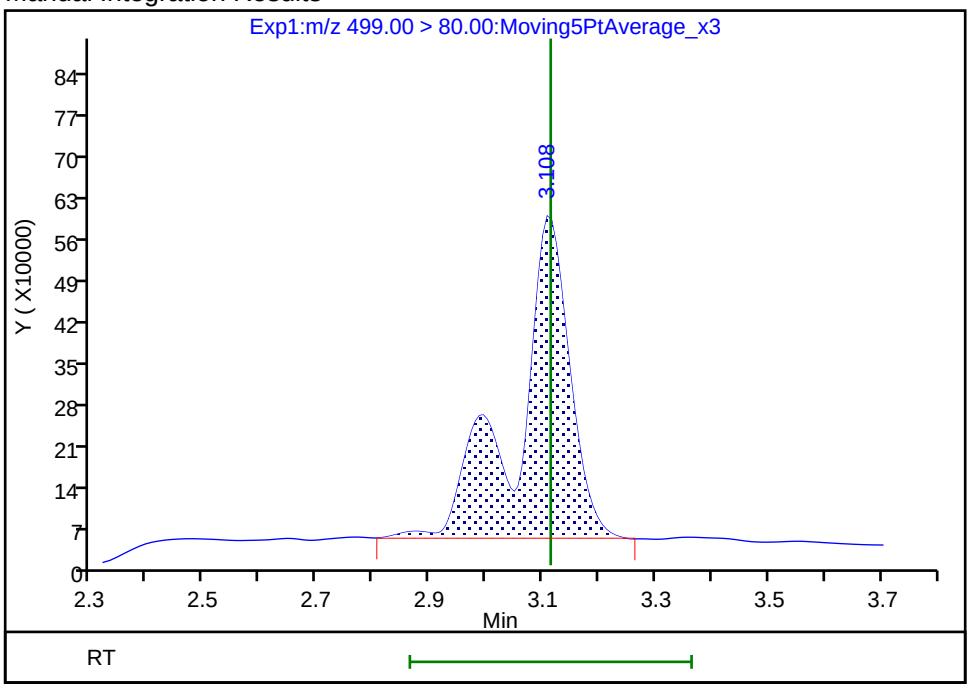
Processing Integration Results

RT: 3.11
Area: 4641347
Amount: 4.167495
Amount Units: ng/ml



Manual Integration Results

RT: 3.11
Area: 3574705
Amount: 3.209750
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:22:21

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

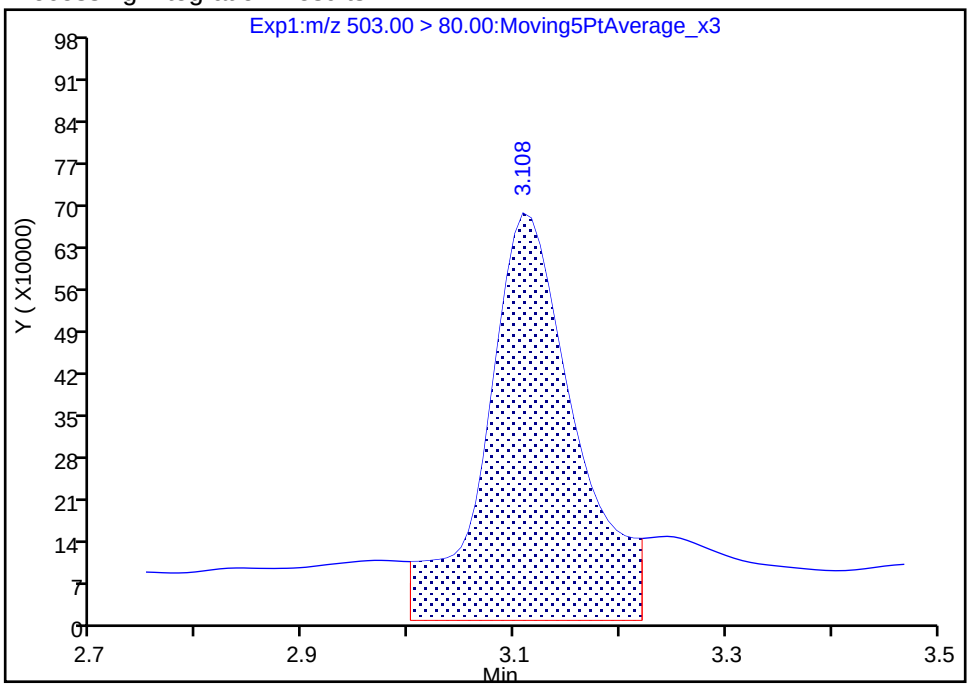
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

D 18 13C4 PFOS, CAS: STL00991

Signal: 1

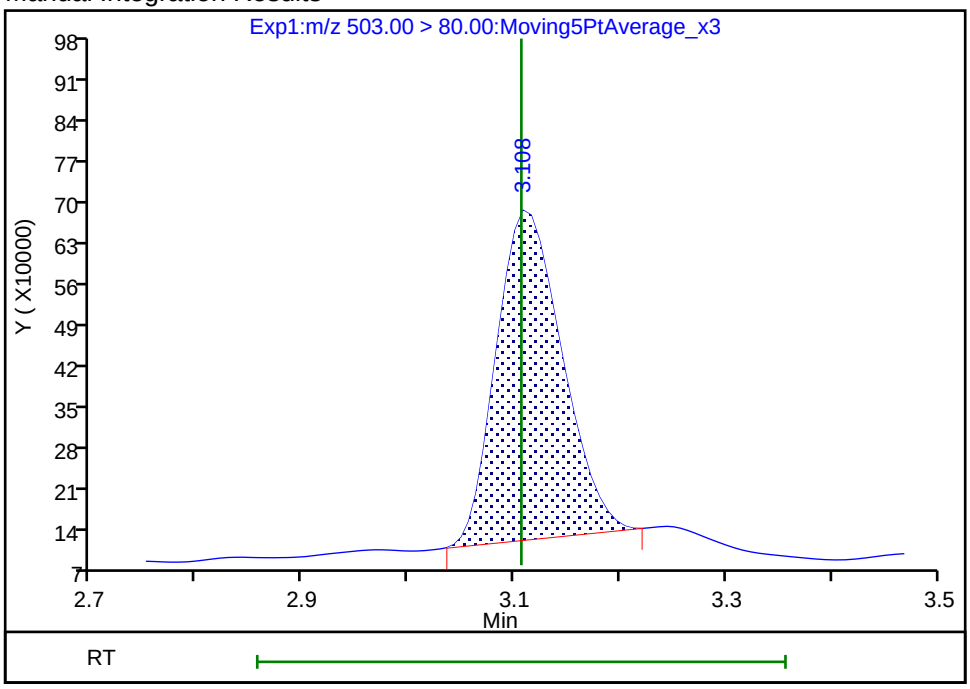
Processing Integration Results

RT: 3.11
Area: 3988323
Amount: 5.250133
Amount Units: ng/ml



Manual Integration Results

RT: 3.11
Area: 2446829
Amount: 3.220947
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:20:50

Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

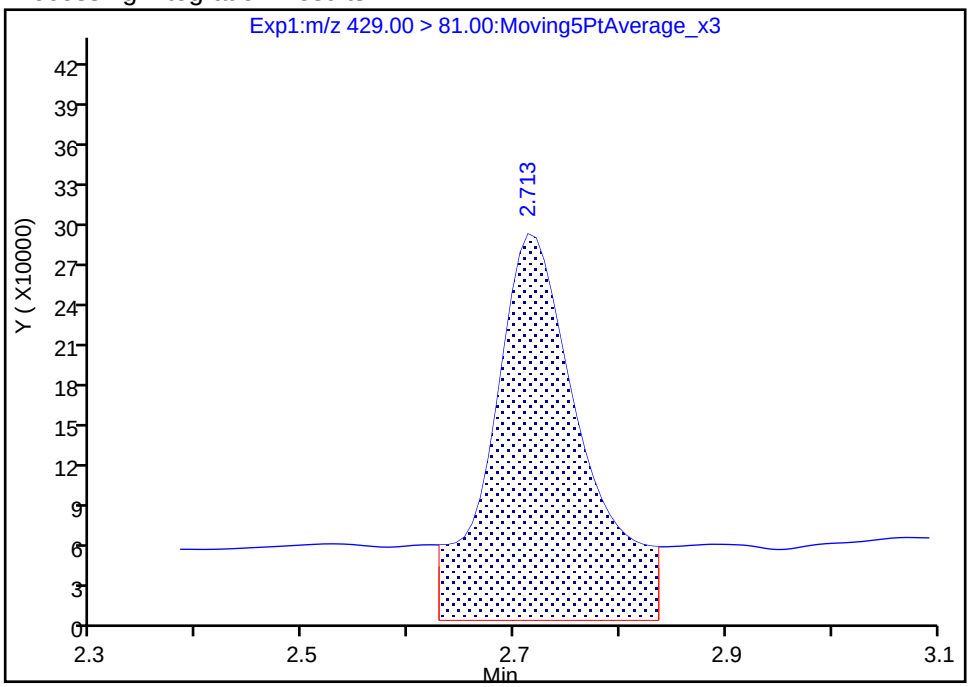
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

D 12 M2-6:2FTS, CAS: STL02279

Signal: 1

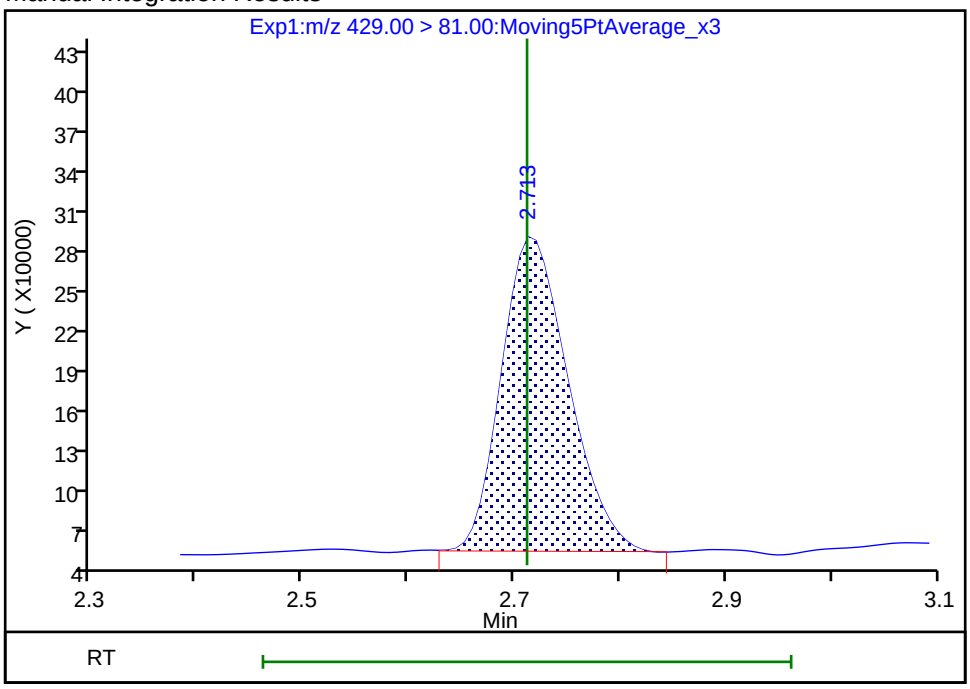
Processing Integration Results

RT: 2.71
Area: 1718450
Amount: 9.124029
Amount Units: ng/ml



Manual Integration Results

RT: 2.71
Area: 1023096
Amount: 5.432080
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:20:43
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

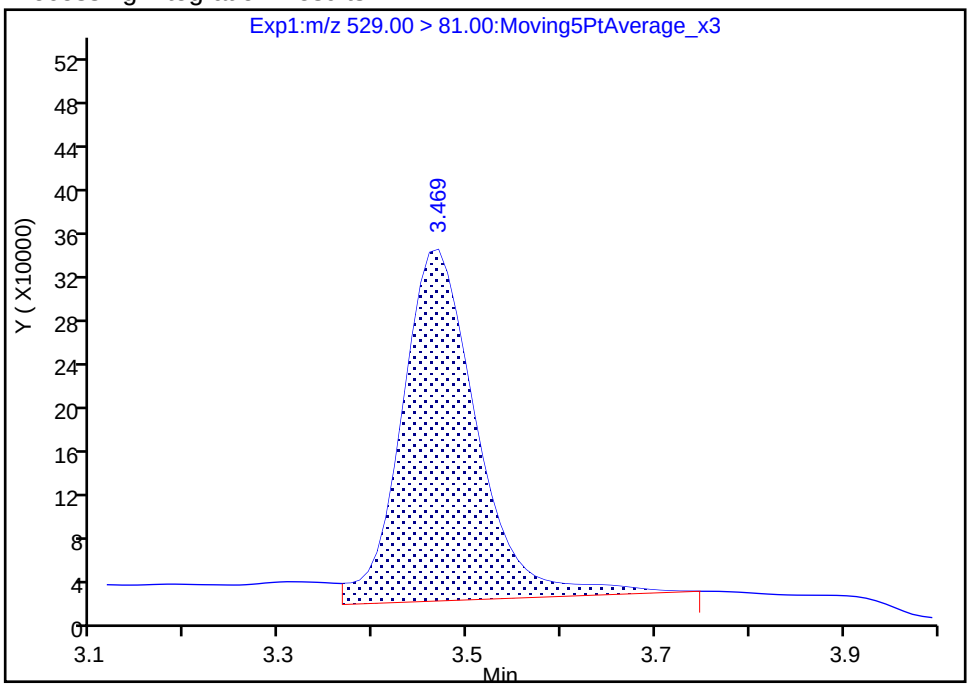
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d				
Injection Date:	10-May-2018 20:54:12	Instrument ID:	A8_N		
Lims ID:	320-38611-A-8-A	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	27	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

D 26 M2-8:2FTS, CAS: STL02280

Signal: 1

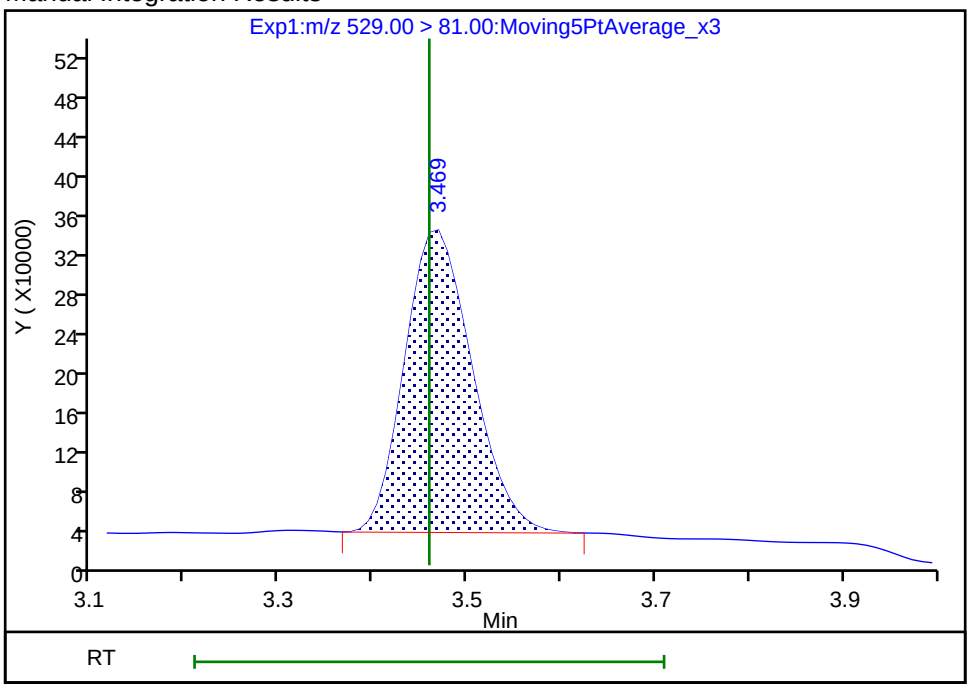
Processing Integration Results

RT: 3.47
Area: 1799591
Amount: 7.933362
Amount Units: ng/ml



Manual Integration Results

RT: 3.47
Area: 1539961
Amount: 6.788802
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:21:06

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-DRAIN(WG) RE | Lab Sample ID: 320-38611-8 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_028.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:00

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 276.6(mL) | Date Analyzed: 05/17/2018 02:33

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*100*	*H*	*1.8*	*0.77*
27619-97-2	*6:2FTS*	*2.6*	*J H*	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	104		25-150
STL02279	M2-6:2FTS	218	*	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_028.d
Lims ID: 320-38611-B-8-B
Client ID: GC-MW-DRAIN(WG)
Sample Type: Client
Inject. Date: 17-May-2018 02:33:14 ALS Bottle#: 19 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-8-b
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 20-May-2018 12:20:45 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK035

First Level Reviewer: hannigana Date: 20-May-2018 12:19:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.446	1.447	-0.001	1.000	1081688	0.6800		27.2	5113	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.435	1.456	-0.021	0.992	1749299	4.35			8.5	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.719	1.712	0.007	0.564	1348342	1.32		52.9	1255	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.719	1.725	-0.006	1.000	179381	0.2817			3.2	M
D 47 13C3-PFBS										M
301.90 > 83.00	1.746	1.748	-0.002	1.000	45828	1.99		85.5	10.9	M
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	1.701	1.761	-0.060	0.974	198372	0.1289			0.1	RM
298.90 > 99.00	1.755	1.761	-0.006	1.005	228347		0.87(1.25-3.74)		27.4	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.003	1.994	0.009	1.000	2093005	1.92		77.0	16480	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.003	2.011	-0.008	1.000	580062	0.6739			23.6	M
313.00 > 119.00	2.003	2.011	-0.008	1.000	40637		14.27(5.03-15.10)		52.0	
D 9 13C4-PFHpA										
367.00 > 322.00	2.333	2.321	0.012	1.000	2174375	2.09		83.5	25188	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.333	2.329	0.004	1.000	561795	0.6115			66.1	
363.00 > 169.00	2.333	2.329	0.004	1.000	225890		2.49(1.13-3.40)		395	
D 11 18O2 PFHxS										
403.00 > 84.00	2.346	2.334	0.012	1.000	3983679	3.09		131	24322	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.333	2.342	-0.009	0.994	312047	0.1644			2.9	M
399.00 > 99.00	2.346	2.342	0.004	1.000	94977		3.29(1.50-4.49)		19.3	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										M
429.00 > 81.00	2.660	2.645	0.015	1.000	1192030	5.18		218	32.1	M
13 Sodium 1H,1H,2H,2H-perfluorooctane										M
427.00 > 407.00	2.660	2.658	0.002	1.000	71383	0.0708			275	M
D 14 13C4 PFOA										
417.00 > 372.00	2.683	2.668	0.015	1.000	2564876	2.60		104	34988	
* 62 13C2-PFOA										
415.00 > 370.00	2.683	2.688	-0.005		2601866	2.50			32997	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.683	2.688	-0.005	1.000	3442667	2.85			453	
413.00 > 169.00	2.683	2.688	-0.005	1.000	1953228		1.76(0.84-2.52)		836	
16 Perfluoroheptanesulfonic acid										RM
449.00 > 80.00	2.690	2.688	0.002	1.000	25178	0.0152			0.3	RM
449.00 > 99.00	2.690	2.688	0.002	1.000	14411		1.75(1.94-5.82)		10.2	M
D 18 13C4 PFOS										M
503.00 > 80.00	3.050	3.029	0.021	1.000	2963368	3.35		140	42.0	M
D 19 13C5 PFNA										
468.00 > 423.00	3.050	3.036	0.014	1.000	2494886	3.10		124	23943	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.050	3.049	0.001	1.000	4786276	3.28			92.9	M
499.00 > 99.00	3.043	3.049	-0.006	0.998	932681		5.13(2.31-6.93)		559	M
20 Perfluorononanoic acid										M
463.00 > 419.00	3.050	3.049	0.001	1.000	324794	0.3073			81.8	M
463.00 > 169.00	3.050	3.049	0.001	1.000	69393		4.68(1.90-5.69)		157	M
D 26 M2-8:2FTS										M
529.00 > 81.00	3.395	3.376	0.019	1.000	1767039	6.75		282	77.2	M
D 21 13C8 FOSA										
506.00 > 78.00	3.395	3.376	0.019	1.000	2644767	2.28		91.3	21879	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.395	3.385	0.010	1.000	569189	0.5526			142	
D 23 13C2 PFDA										
515.00 > 470.00	3.414	3.385	0.029	1.000	2223183	3.24		130	30686	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.395	3.403	-0.008	1.000	4799	0.004820			59.7	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.414	3.413	0.001	1.000	515899	0.5967			245	
513.00 > 169.00	3.414	3.413	0.001	1.000	97830		5.27(2.36-7.09)		374	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.563	3.544	0.019	1.000	1096628	2.90		116	4928	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.563	3.562	0.001	1.000	313594	0.7045			260	
D 30 13C2 PFUnA										
565.00 > 520.00	3.737	3.716	0.021	1.000	2166601	3.99		160	30501	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.737	3.716	0.021	1.000	1377822	3.55		142	3941	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	3.737	3.736	0.001	1.000	69072	0.0954			53.3	M
563.00 > 169.00	3.737	3.736	0.001	1.000	12752		5.42(2.12-6.36)		67.6	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.737	3.736	0.001	1.000	171232	0.3305			271	
D 36 13C2 PFDoA										
615.00 > 570.00	4.037	4.006	0.031	1.000	1906759	3.26		131	15459	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.037	4.037	0.0	1.000	42370	0.0532			31.3	
613.00 > 169.00	4.037	4.037	0.0	1.000	10165		4.17(2.13-6.40)		54.2	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.540	4.511	0.029	1.000	1681015	2.34		93.8	9609	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 20-May-2018 12:20:46 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_028.d

Injection Date: 17-May-2018 02:33:14 Instrument ID: A8_N

Lims ID: 320-38611-B-8-B Lab Sample ID: 320-38611-8

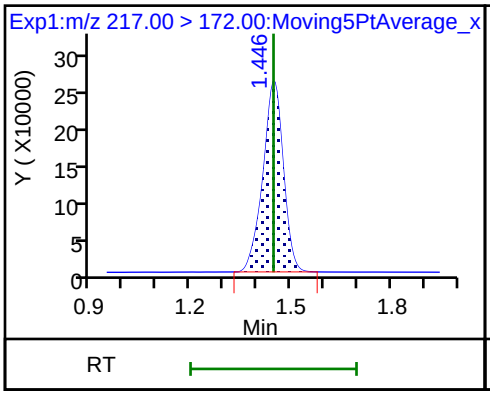
Client ID: GC-MW-DRAIN(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 19 Worklist Smp#: 20

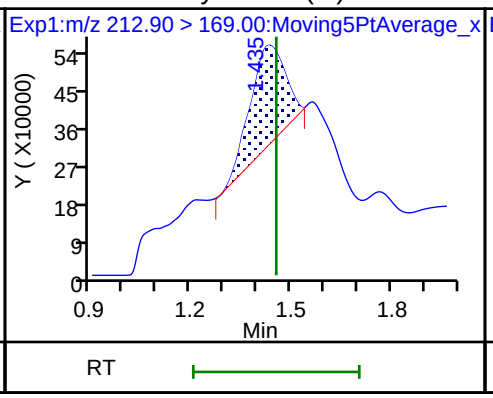
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

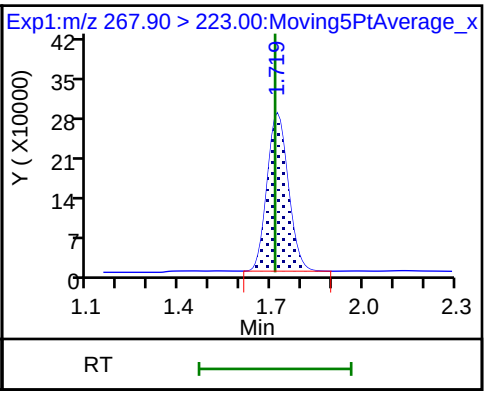
D 1 13C4 PFBA



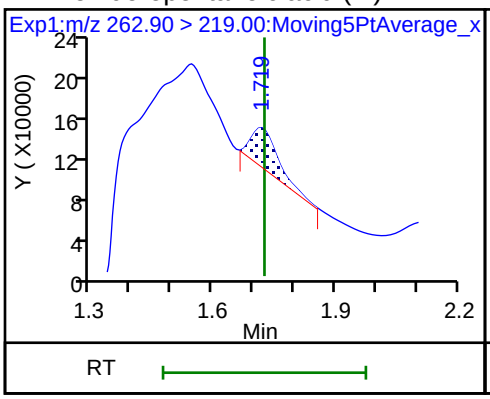
2 Perfluorobutyric acid (M)



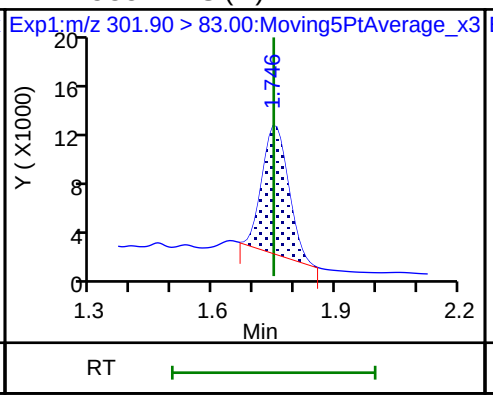
D 3 13C5-PFPeA



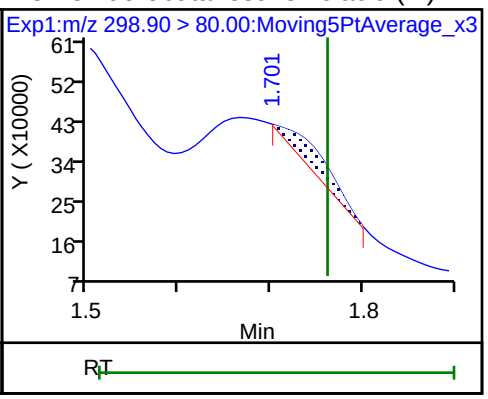
4 Perfluoropentanoic acid (M)



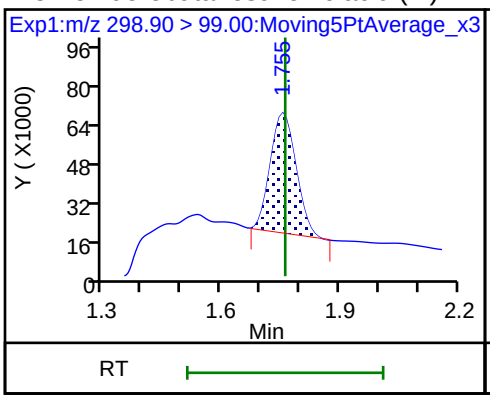
D 47 13C3-PFBS (M)



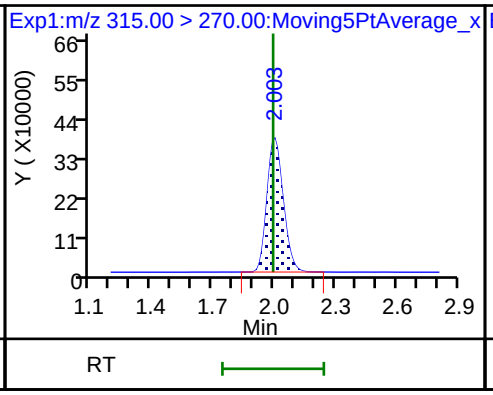
5 Perfluorobutanesulfonic acid (M)



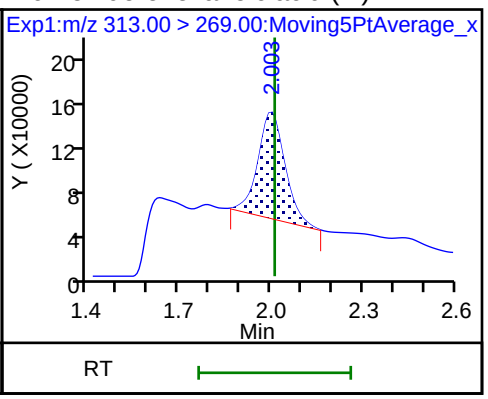
5 Perfluorobutanesulfonic acid (M)



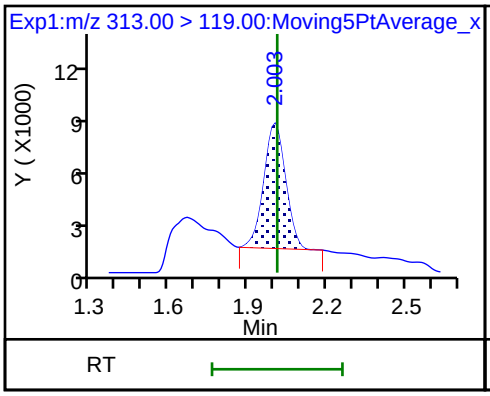
D 7 13C2 PFHxA



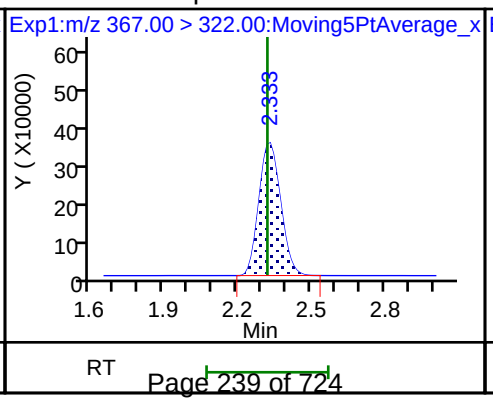
6 Perfluorohexanoic acid (M)



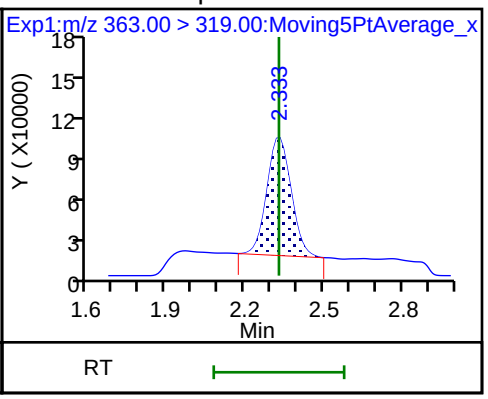
6 Perfluorohexanoic acid



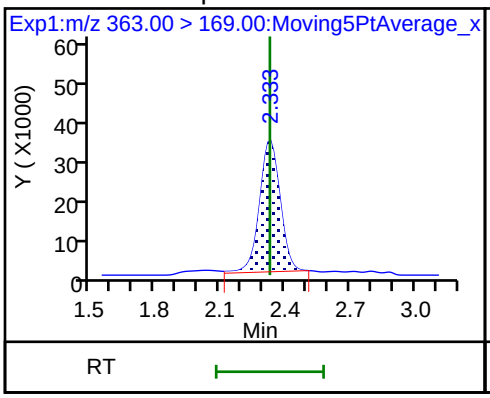
D 9 13C4-PFHpA



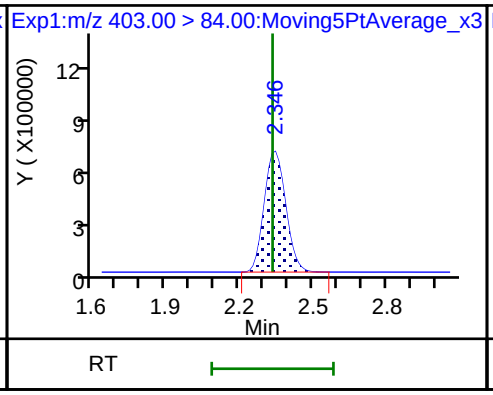
10 Perfluoroheptanoic acid



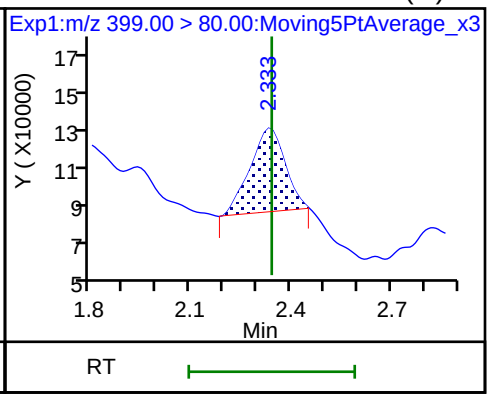
10 Perfluoroheptanoic acid



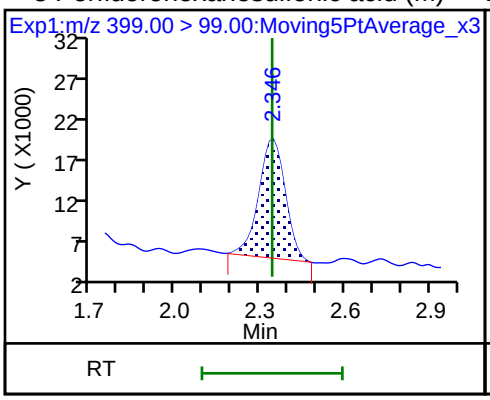
D 11 18O2 PFHxS



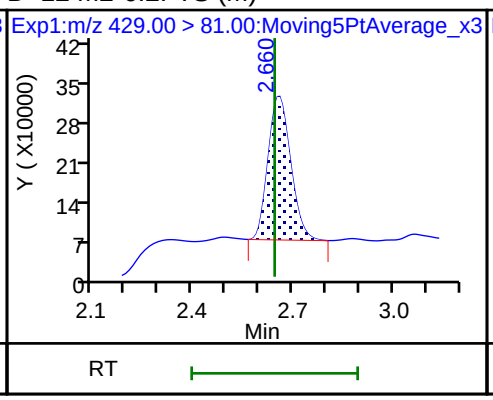
8 Perfluorohexanesulfonic acid (M)



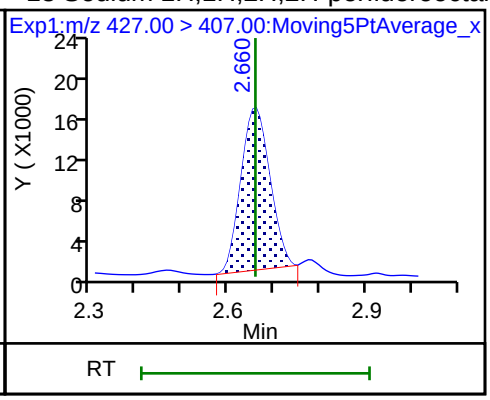
8 Perfluorohexanesulfonic acid (M)



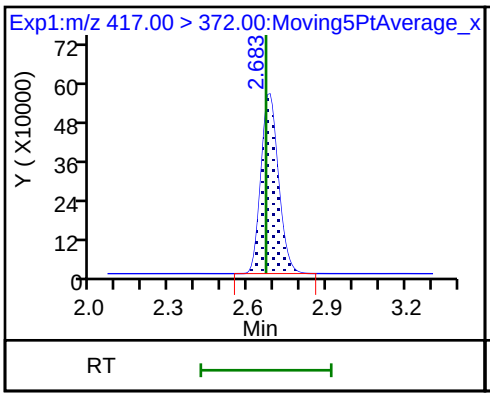
D 12 M2-6:2FTS (M)



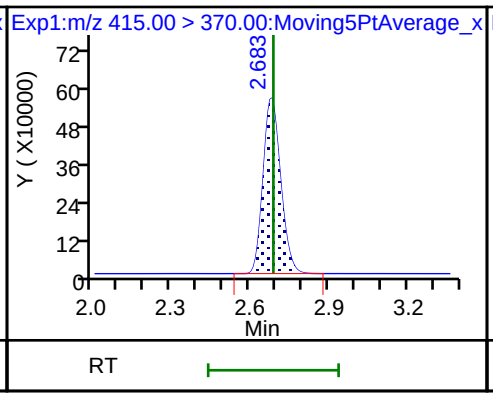
13 Sodium 1H,1H,2H,2H-perfluorooctane (M)



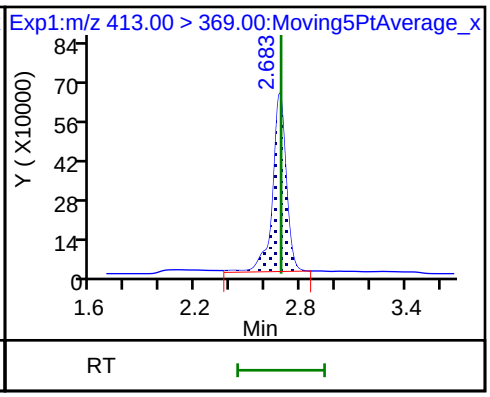
D 14 13C4 PFOA



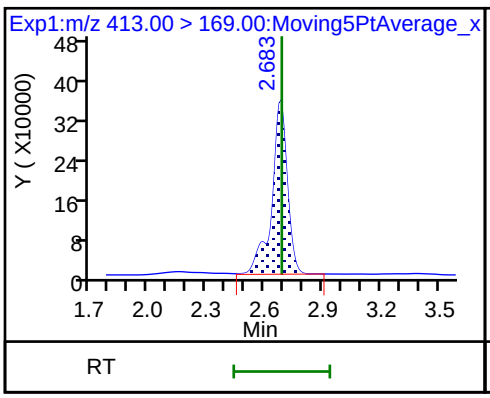
* 62 13C2-PFOA



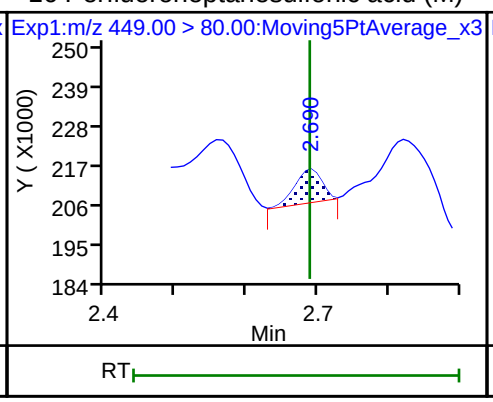
15 Perfluorooctanoic acid



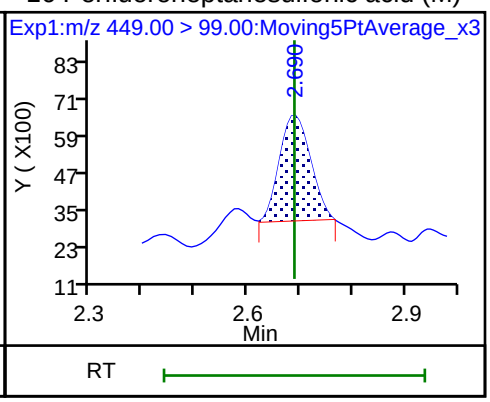
15 Perfluorooctanoic acid



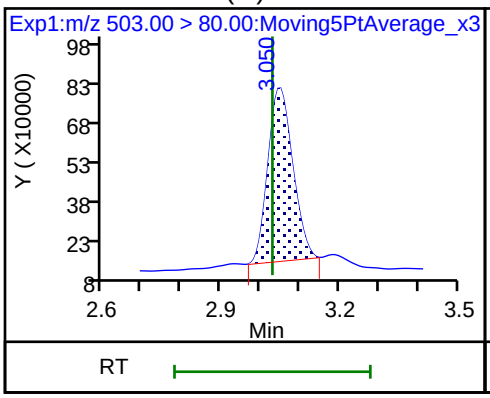
16 Perfluoroheptanesulfonic acid (M)



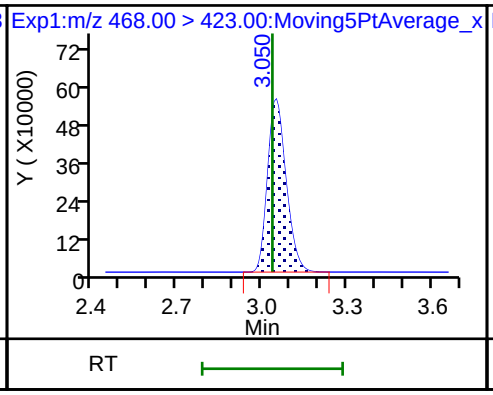
16 Perfluoroheptanesulfonic acid (M)



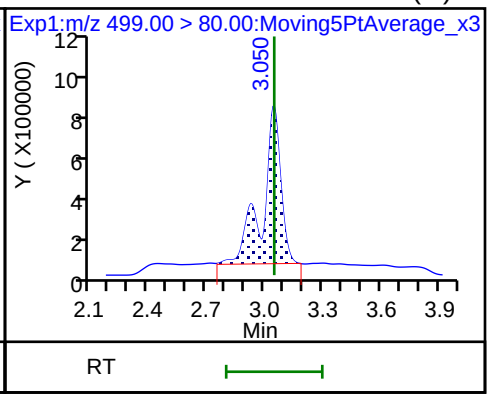
D 18 13C4 PFOS (M)



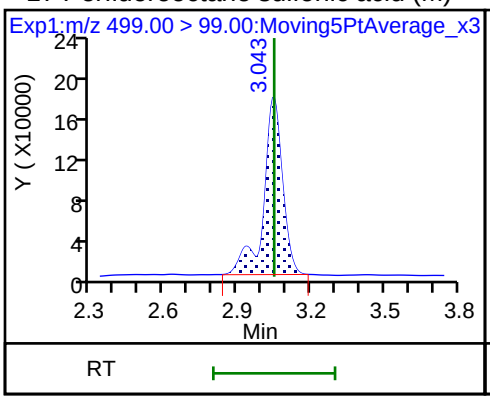
D 19 13C5 PFNA



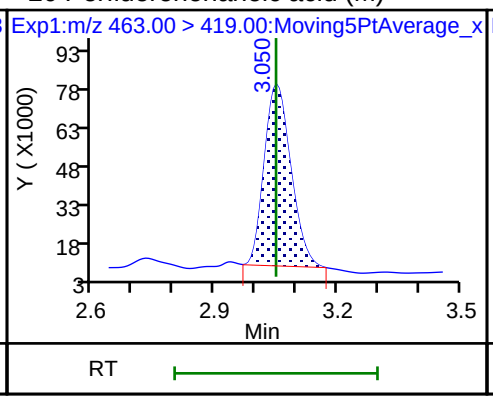
17 Perfluorooctane sulfonic acid (M)



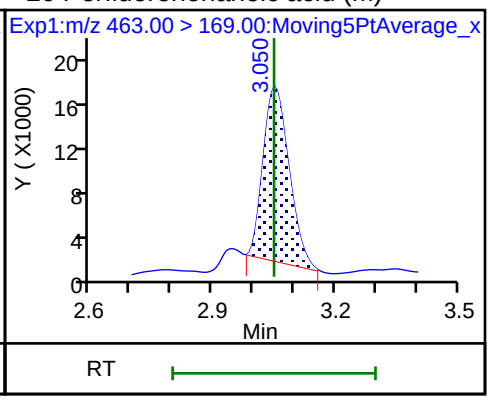
17 Perfluorooctane sulfonic acid (M)



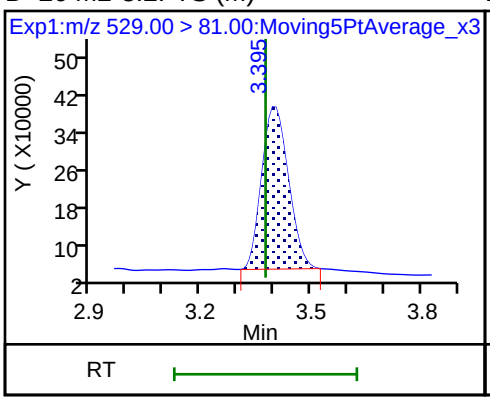
20 Perfluorononanoic acid (M)



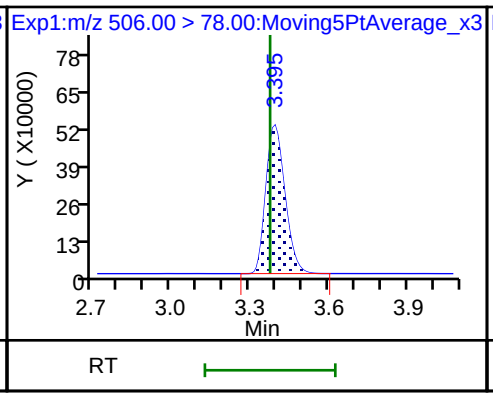
20 Perfluorononanoic acid (M)



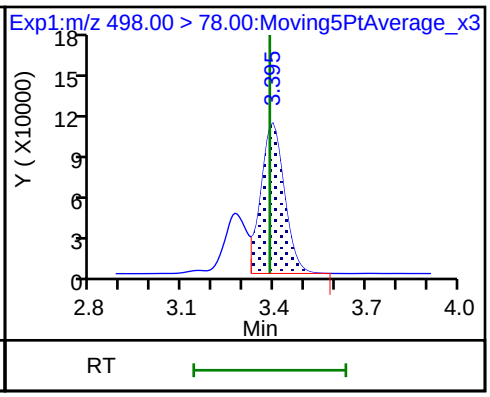
D 26 M2-8:2FTS (M)



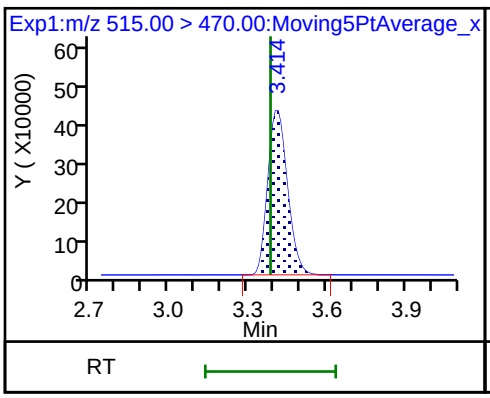
D 21 13C8 FOSA



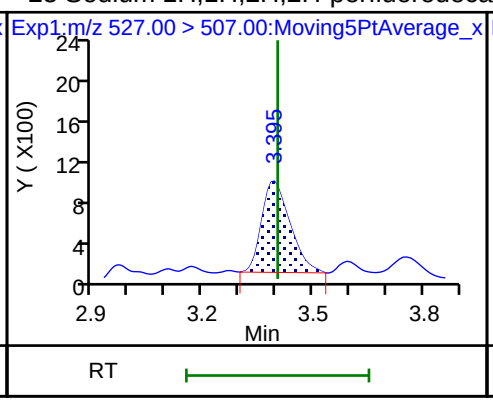
22 Perfluorooctane Sulfonamide



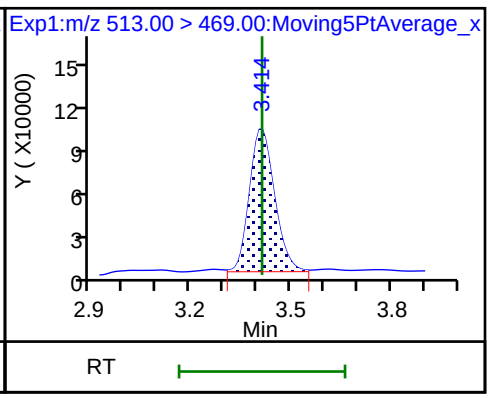
D 23 13C2 PFDA



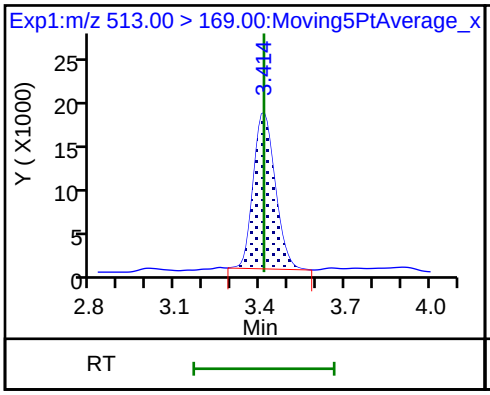
25 Sodium 1H,1H,2H,2H-perfluorodecan



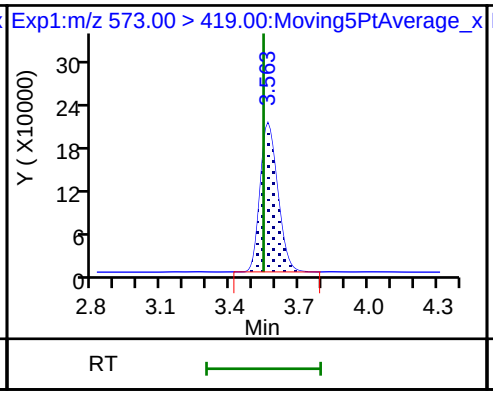
24 Perfluorodecanoic acid



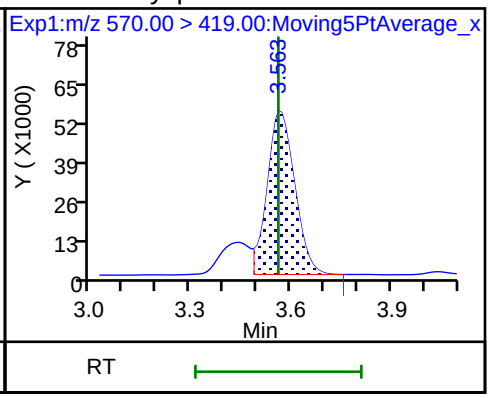
24 Perfluorodecanoic acid



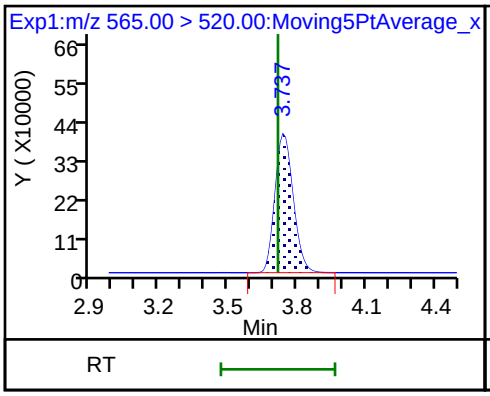
D 27 d3-NMeFOSAA



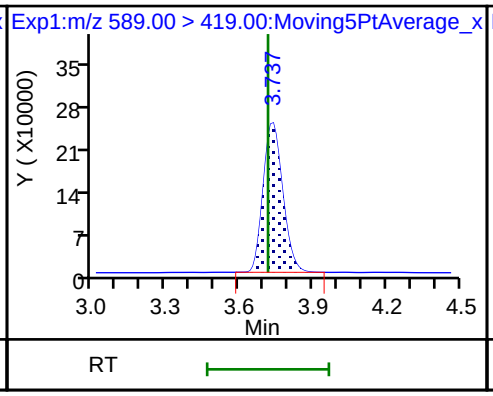
28 N-methyl perfluorooctane sulfonami



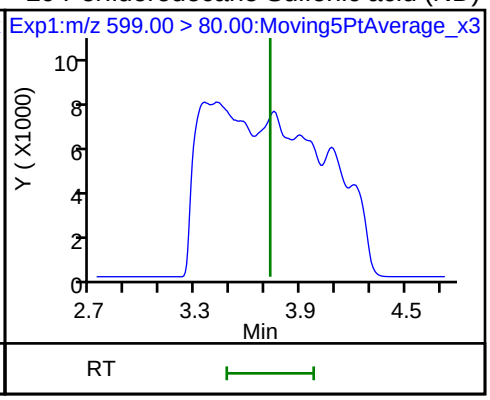
D 30 13C2 PFUnA



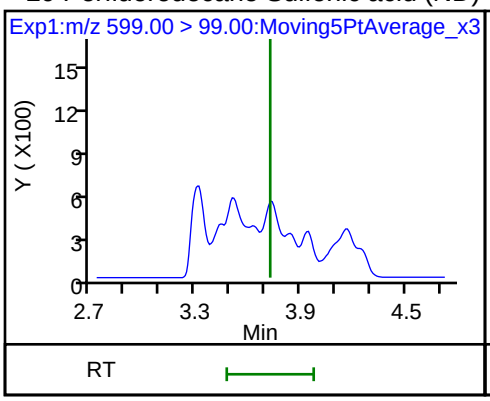
D 32 d5-NEtFOSAA



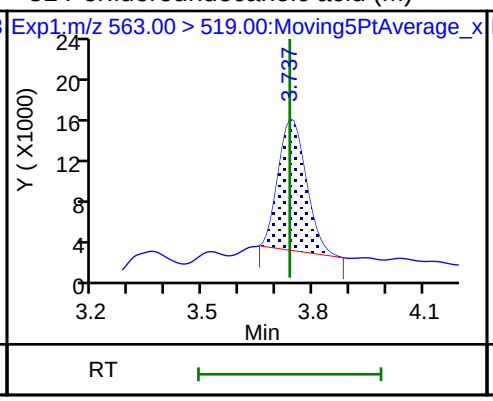
29 Perfluorodecane Sulfonic acid (ND)



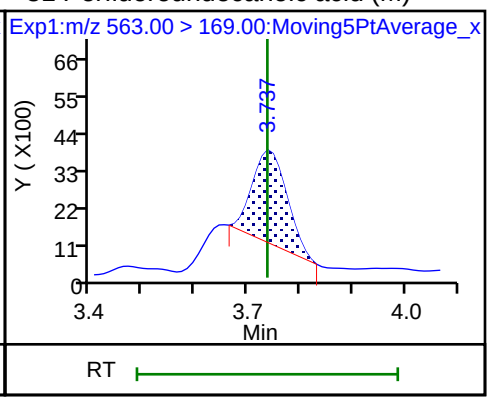
29 Perfluorodecane Sulfonic acid (ND)



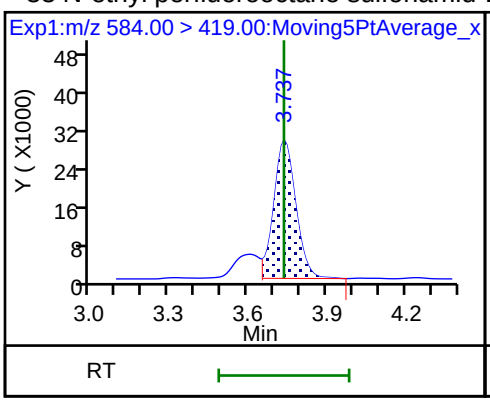
31 Perfluoroundecanoic acid (M)



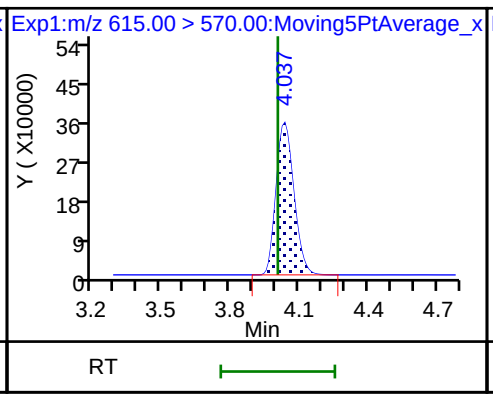
31 Perfluoroundecanoic acid (M)



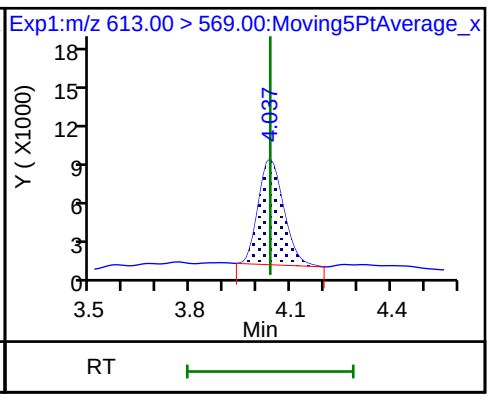
33 N-ethyl perfluorooctane sulfonamid



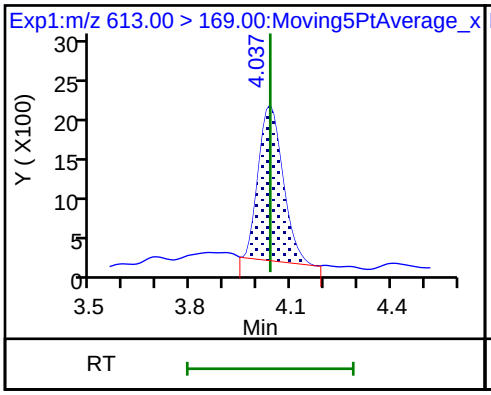
D 36 13C2 PFDoA



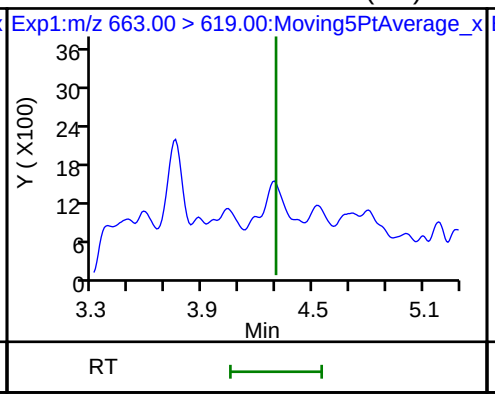
37 Perfluorododecanoic acid



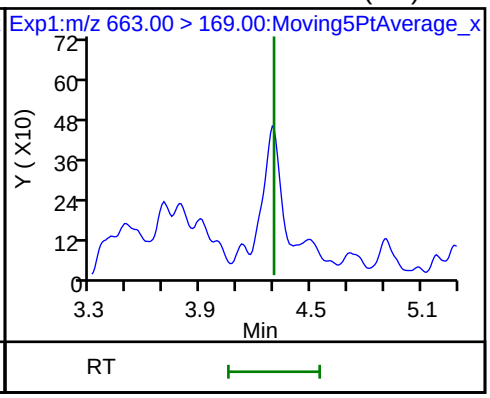
37 Perfluorododecanoic acid



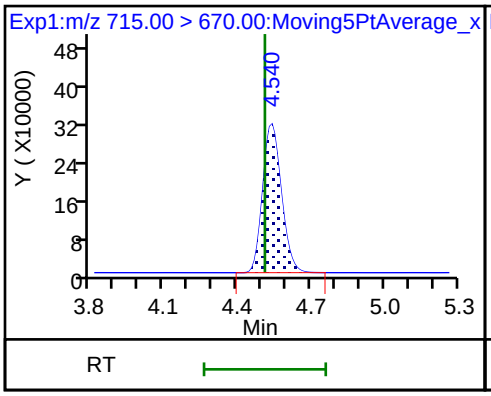
41 Perfluorotridecanoic acid (ND)



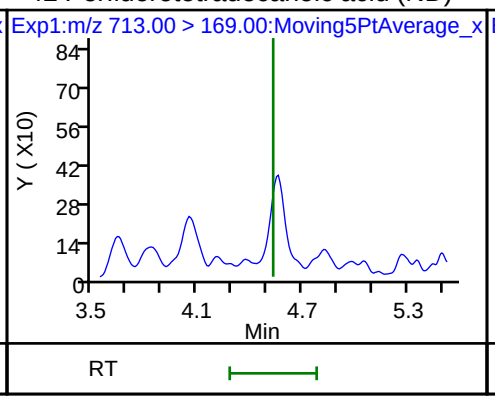
41 Perfluorotridecanoic acid (ND)



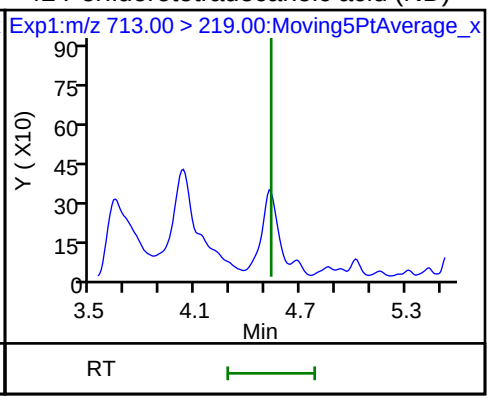
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



TestAmerica Sacramento

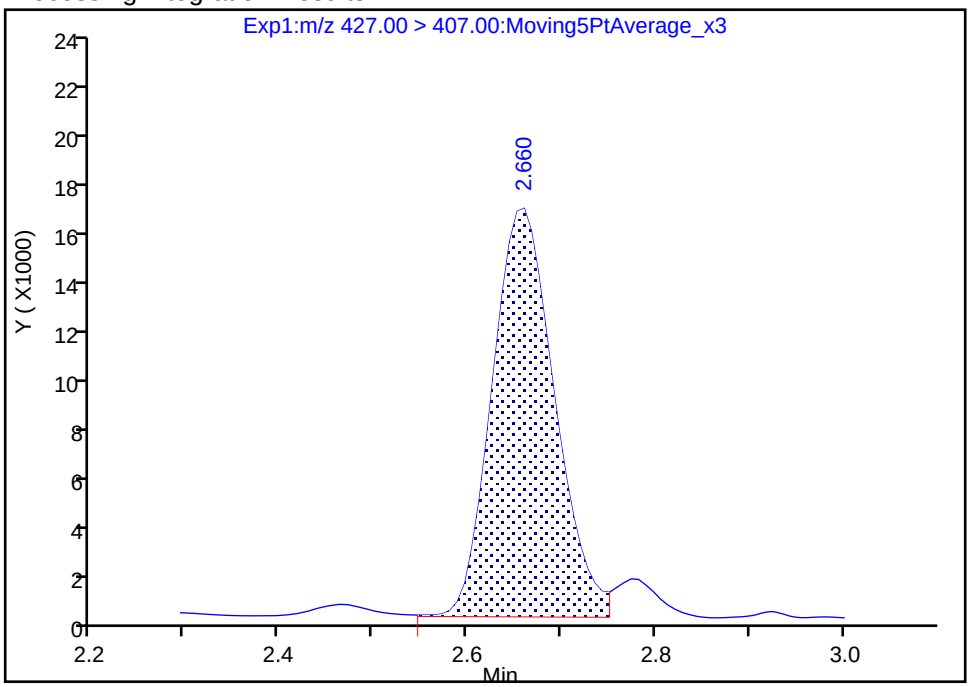
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_028.d				
Injection Date:	17-May-2018 02:33:14	Instrument ID:	A8_N		
Lims ID:	320-38611-B-8-B	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

13 Sodium 1H,1H,2H,2H-perfluorooctane sulfonate, CAS: 27619-97-2

Signal: 1

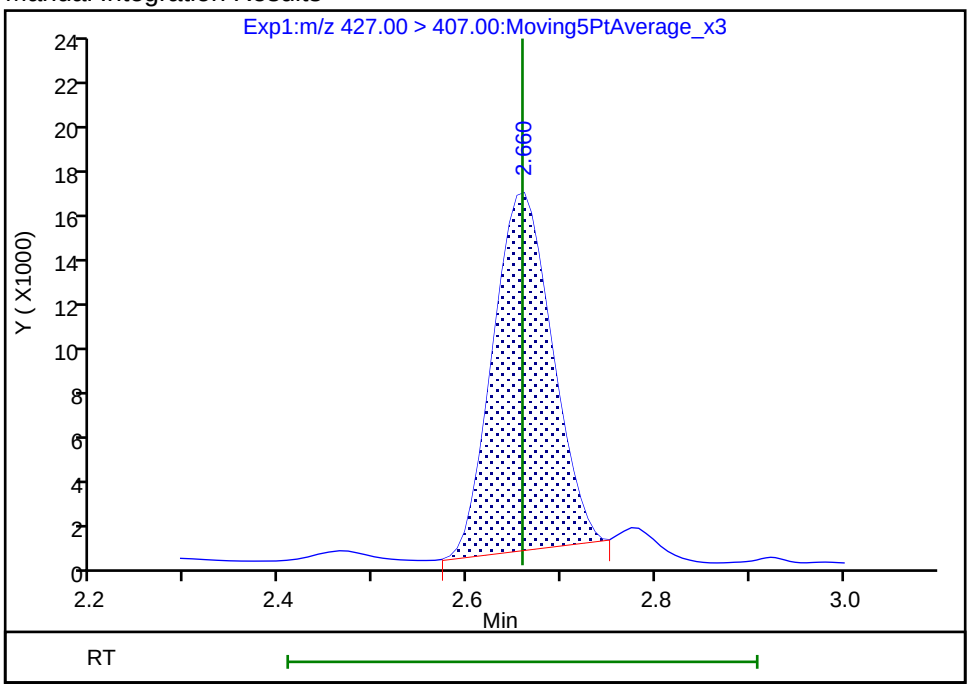
Processing Integration Results

RT: 2.66
Area: 77230
Amount: 0.077438
Amount Units: ng/ml



Manual Integration Results

RT: 2.66
Area: 71383
Amount: 0.070800
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 17-May-2018 14:11:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

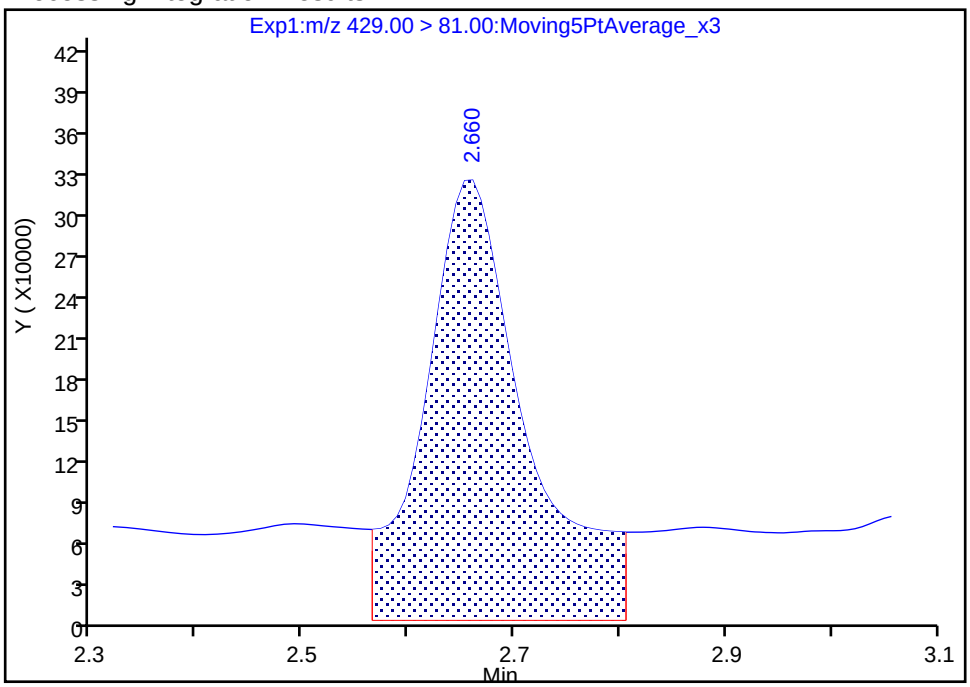
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_028.d				
Injection Date:	17-May-2018 02:33:14	Instrument ID:	A8_N		
Lims ID:	320-38611-B-8-B	Lab Sample ID:	320-38611-8		
Client ID:	GC-MW-DRAIN(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

D 12 M2-6:2FTS, CAS: STL02279

Signal: 1

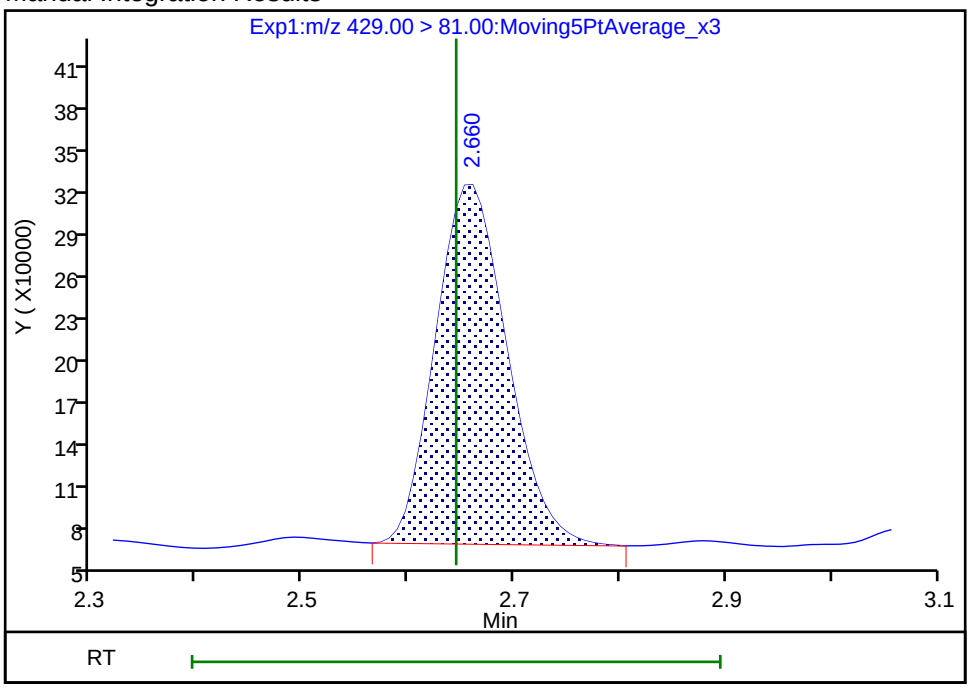
Processing Integration Results

RT: 2.66
Area: 2124458
Amount: 9.238221
Amount Units: ng/ml



Manual Integration Results

RT: 2.66
Area: 1192030
Amount: 5.183551
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 17-May-2018 14:08:50

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK | Lab Sample ID: 320-38611-9

Matrix: Water | Lab File ID: 2018.05.10LLB_013.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 294.5(mL) | Date Analyzed: 05/10/2018 21:17

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.49
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	4.7	B	1.7	0.72
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.26
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.26	J B	1.7	0.14
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.30
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2FTS	24	B *	17	1.7
39108-34-4	8:2FTS	ND		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK | Lab Sample ID: 320-38611-9

Matrix: Water | Lab File ID: 2018.05.10LLB_013.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 294.5(mL) | Date Analyzed: 05/10/2018 21:17

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	106		25-150
STL01893	13C5 PFPeA	110		25-150
STL00993	13C2 PFHxA	105		25-150
STL01892	13C4-PFHpA	106		25-150
STL00990	13C4 PFOA	101		25-150
STL00995	13C5 PFNA	96		25-150
STL00996	13C2 PFDA	96		25-150
STL00997	13C2 PFUnA	93		25-150
STL00998	13C2 PFDoA	89		25-150
STL02116	13C2-PFTeDA	90		25-150
STL02337	13C3-PFBS	102		25-150
STL00994	18O2 PFHxS	102		25-150
STL00991	13C4 PFOS	94		25-150
STL01056	13C8 FOSA	88		25-150
STL02118	d3-NMeFOSAA	95		25-150
STL02117	d5-NEtFOSAA	98		25-150
STL02279	M2-6:2FTS	119		25-150
STL02280	M2-8:2FTS	112		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_013.d
Lims ID: 320-38611-A-9-A
Client ID: GC-EQUIPMENT BLANK
Sample Type: Client
Inject. Date: 10-May-2018 21:17:40 ALS Bottle#: 28 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-9-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:25:29 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:24:52

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.480	1.469	0.011	1.000	5196133	2.65		106	40416	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.486	1.478	0.008	1.004	12151	0.006296			8.2	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.756	1.747	0.009	0.562	3482528	2.76		110	51066	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.765	1.753	0.012	1.005	5216	0.003142			8.0	M
D 47 13C3-PFBS										
301.90 > 83.00	1.792	1.783	0.009	1.000	68553	2.37		102	686	
D 7 13C2 PFHxA										
315.00 > 270.00	2.060	2.048	0.012	1.000	3655981	2.62		105	68517	
D 9 13C4-PFHpA										
367.00 > 322.00	2.396	2.384	0.012	1.000	3600269	2.65		106	63457	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.385	2.392	-0.007	0.995	4239	0.002941			6.9	
363.00 > 169.00	2.407	2.392	0.015	1.005	2878		1.47(1.13-3.40)		18.2	
D 11 18O2 PFHxS										
403.00 > 84.00	2.407	2.395	0.012	1.000	4035614	2.41		102	81977	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.407	2.403	0.004	1.000	14820	0.007674			56.5	
399.00 > 99.00	2.407	2.403	0.004	1.000	5207		2.85(1.50-4.49)		21.6	
D 12 M2-6:2FTS										
429.00 > 81.00	2.728	2.712	0.016	1.000	818801	2.81		119	12210	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.728	2.718	0.010	1.000	410985	0.7052			11531	
* 62 13C2-PFOA										
415.00 > 370.00	2.751	2.741	0.010		3636601	2.50			62979	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 14 13C4 PFOA										
417.00 > 372.00	2.751	2.742	0.009	1.000	3404031	2.52		101	63643	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.751	2.749	0.002	1.000	215880	0.1372			129	
413.00 > 169.00	2.751	2.749	0.002	1.000	112364		1.92(0.84-2.52)		479	
D 18 13C4 PFOS										
503.00 > 80.00	3.125	3.106	0.019	1.000	2647633	2.26		94.4	18172	
D 19 13C5 PFNA										
468.00 > 423.00	3.125	3.114	0.011	1.000	2795849	2.41		96.4	100939	
D 21 13C8 FOSA										
506.00 > 78.00	3.453	3.431	0.022	1.000	3238039	2.21		88.4	40755	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.463	3.441	0.022	1.003	2511	0.001917			64.4	
D 26 M2-8:2FTS										
529.00 > 81.00	3.482	3.459	0.023	1.000	941268	2.69		112	8916	
D 23 13C2 PFDA										
515.00 > 470.00	3.492	3.468	0.024	1.000	2334948	2.40		95.8	50896	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.472	3.469	0.003	0.997	3033	0.006099			111	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.637	3.624	0.013	1.000	1318668	2.39		95.5	20822	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.637	3.634	0.003	1.000	5101	0.009697			68.0	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.812	3.790	0.022	1.000	1334221	2.45		97.9	14465	
D 30 13C2 PFUnA										
565.00 > 520.00	3.812	3.800	0.012	1.000	1947355	2.32		92.6	36928	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.802	3.811	-0.009	0.997	1752	0.003513			42.3	
D 36 13C2 PFDoA										
615.00 > 570.00	4.101	4.091	0.010	1.000	2019846	2.22		89.0	20417	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.603	4.595	0.008	1.000	2598757	2.26		90.3	18167	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:25:33 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_013.d

Injection Date: 10-May-2018 21:17:40 Instrument ID: A8_N

Lims ID: 320-38611-A-9-A Lab Sample ID: 320-38611-9

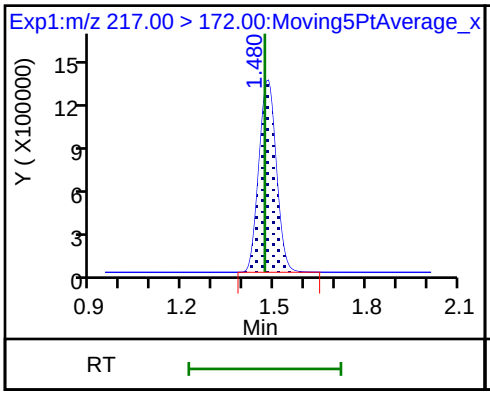
Client ID: GC-EQUIPMENT BLANK

Operator ID: SACINSTLCMS01 ALS Bottle#: 28 Worklist Smp#: 15

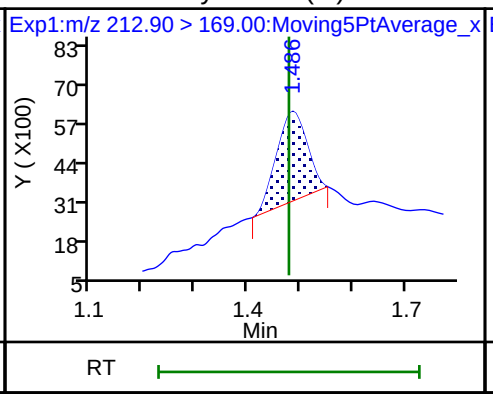
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

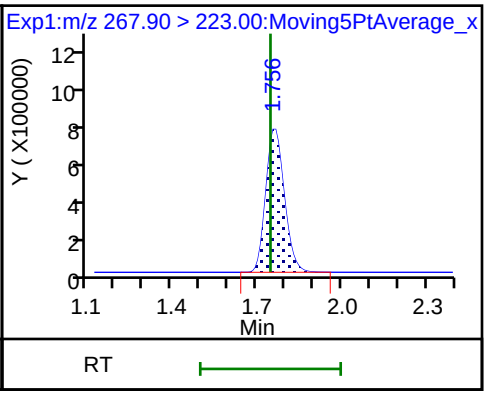
D 1 13C4 PFBA



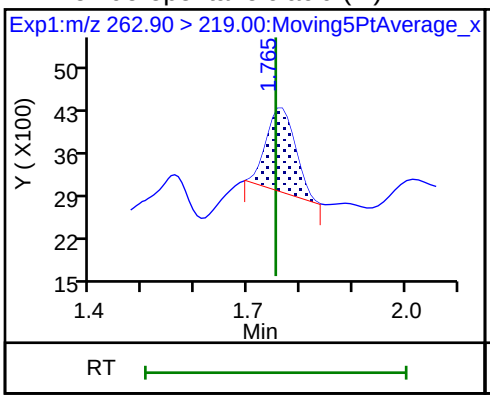
2 Perfluorobutyric acid (M)



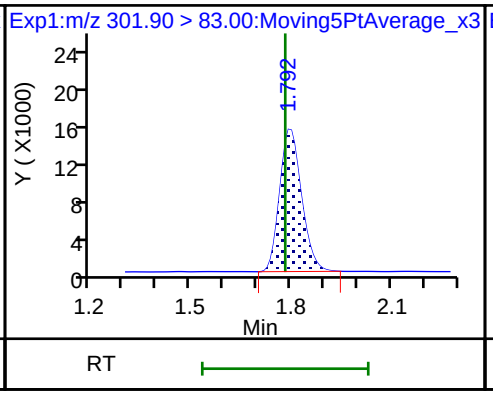
D 3 13C5-PFPeA



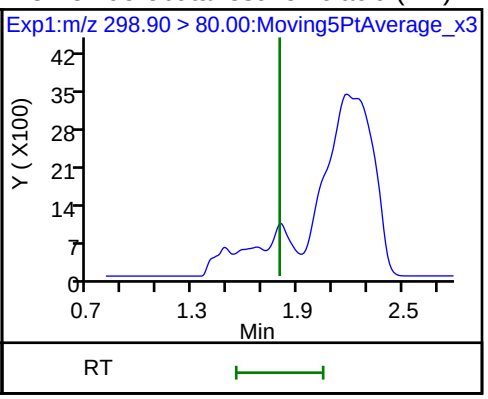
4 Perfluoropentanoic acid (M)



D 47 13C3-PFBS



5 Perfluorobutanesulfonic acid (ND)



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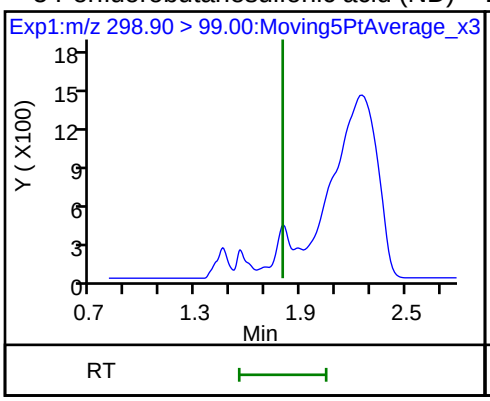
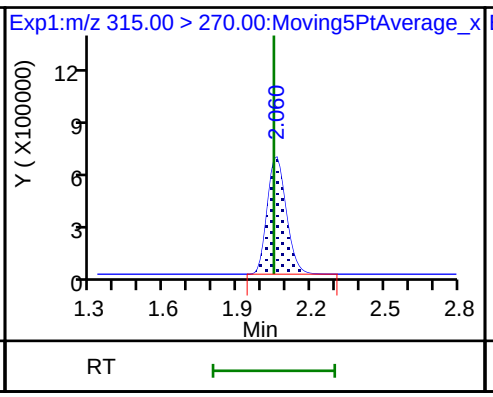


D 7 13C2 PFHxA



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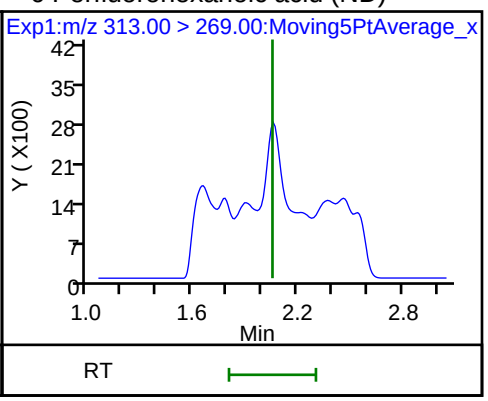

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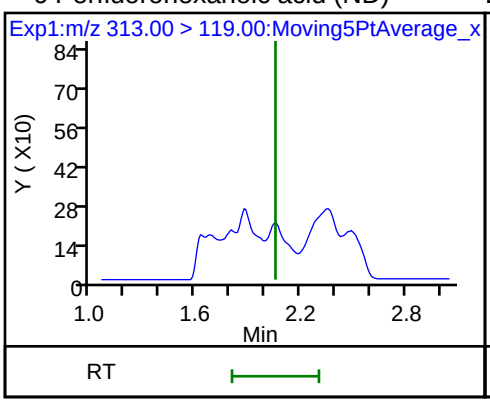

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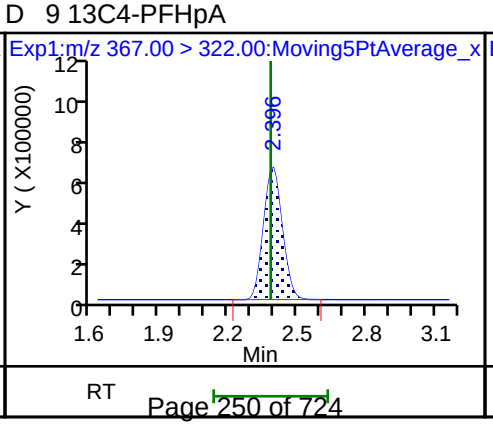
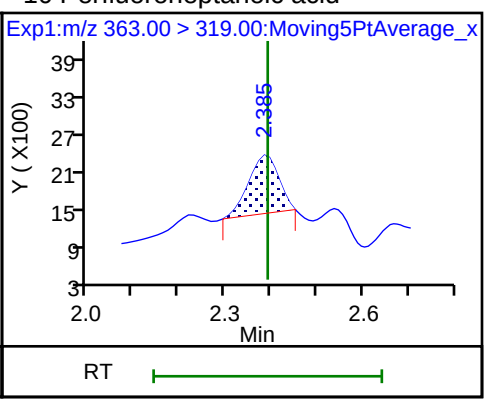


10 Perfluoroheptanoic acid



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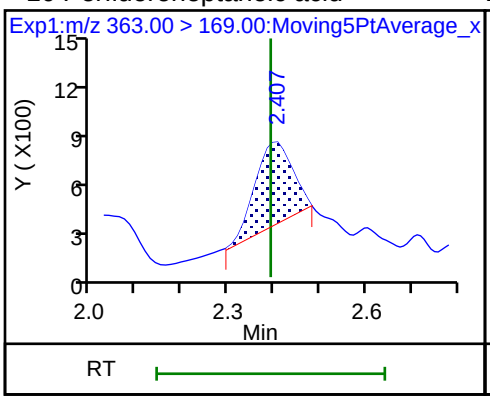

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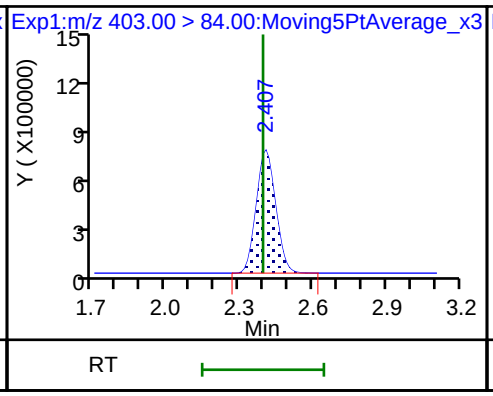
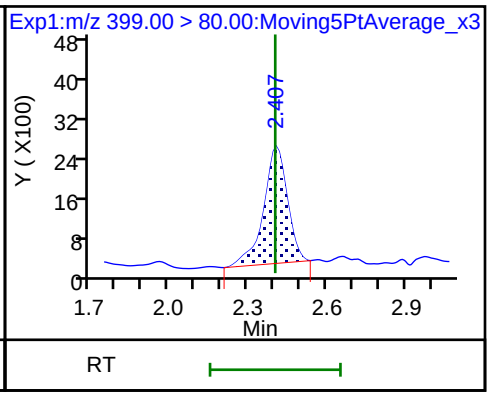


8 Perfluorohexanesulfonic acid



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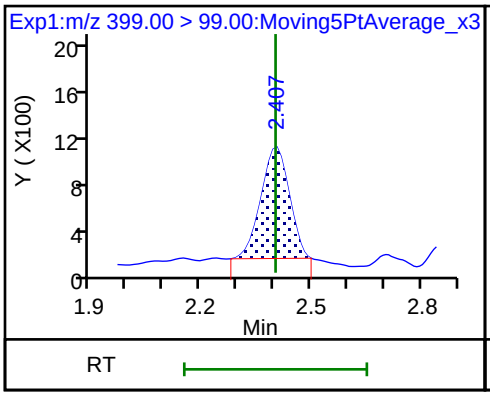
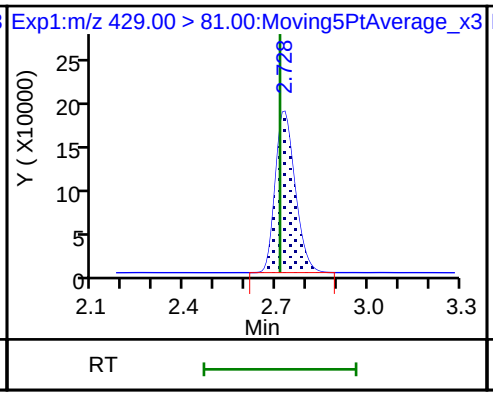
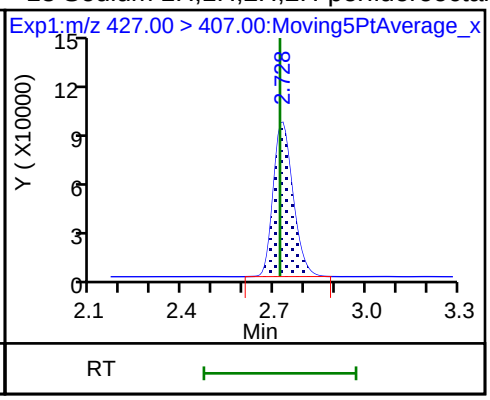


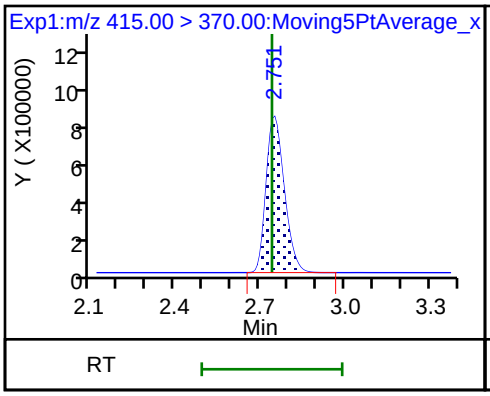
D 12 M2-6:2FTS



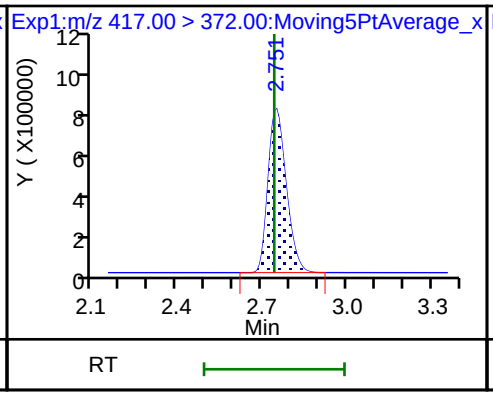
13 Sodium 1H,1H,2H,2H-perfluorooctane



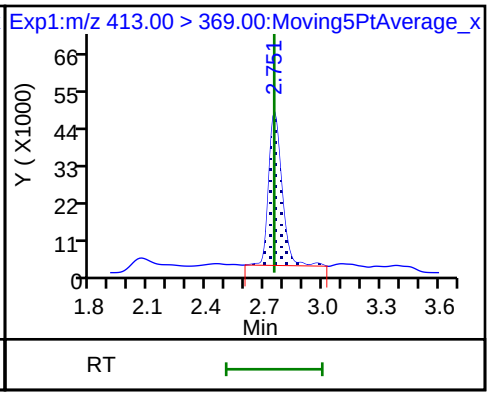
* 62 13C2-PFOA



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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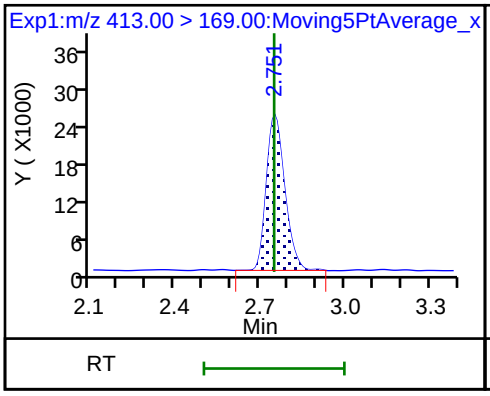
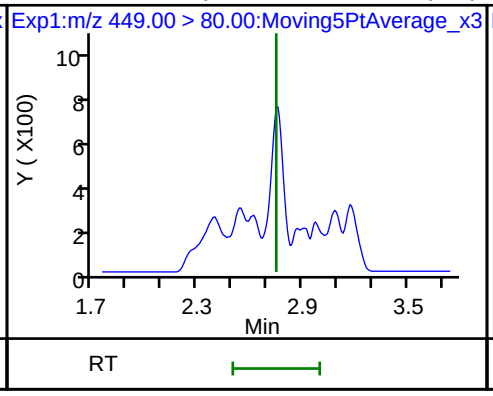
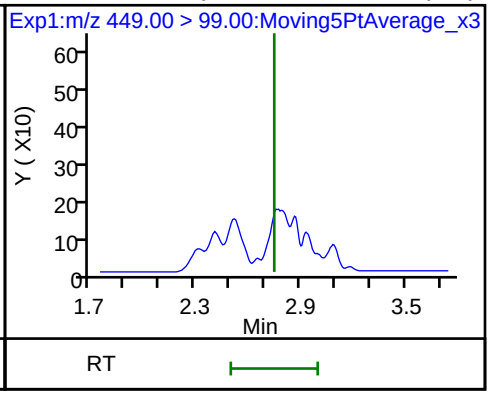


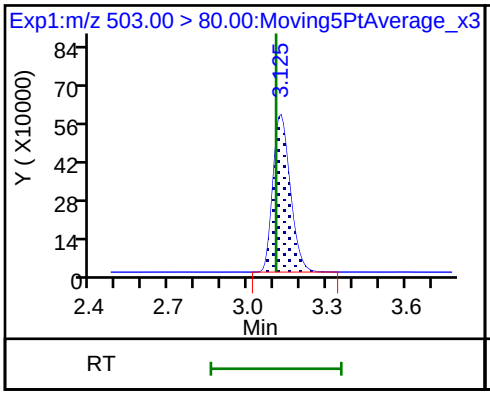
16 Perfluoroheptanesulfonic acid (ND)



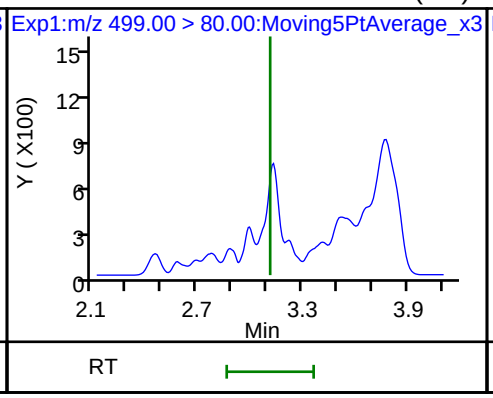
16 Perfluoroheptanesulfonic acid (ND)



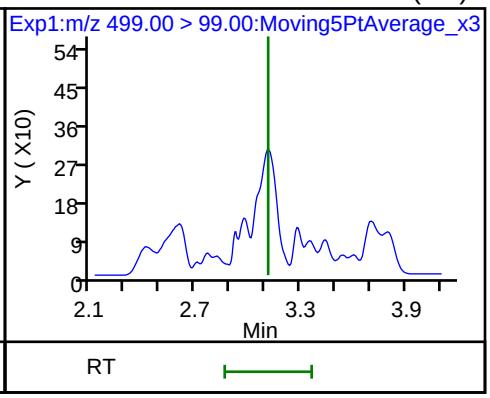
D 18 13C4 PFOS



17 Perfluorooctane sulfonic acid (ND)



17 Perfluorooctane sulfonic acid (ND)



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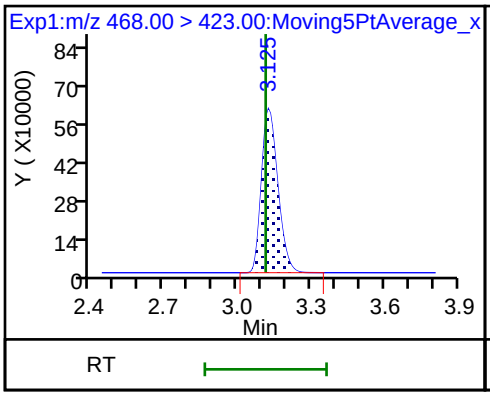
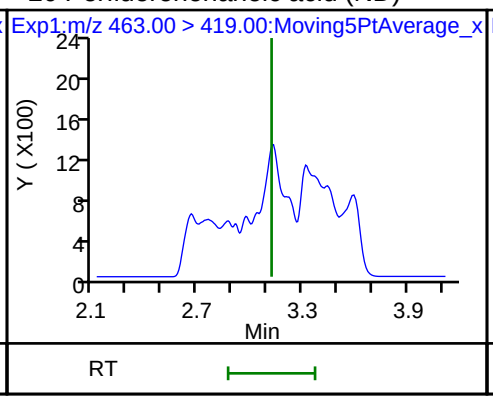


20 Perfluorononanoic acid (ND)



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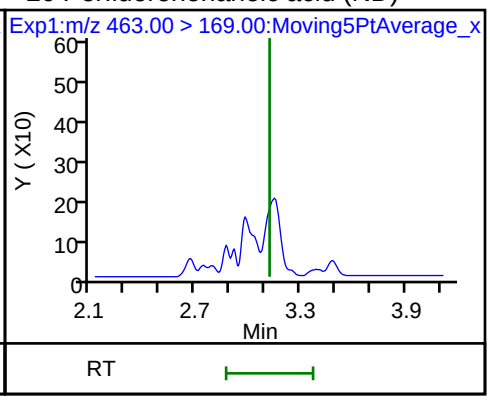
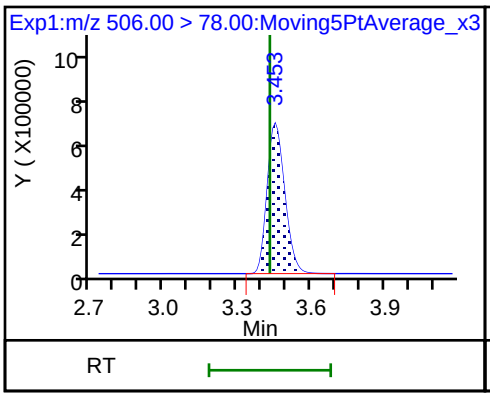
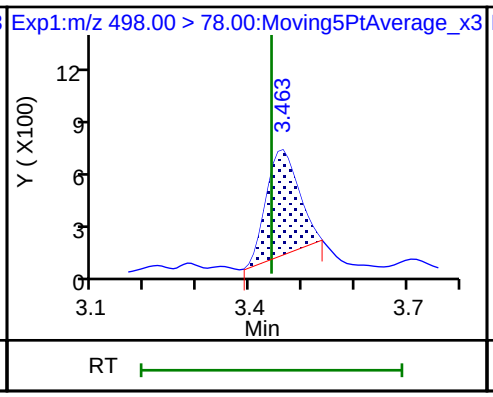


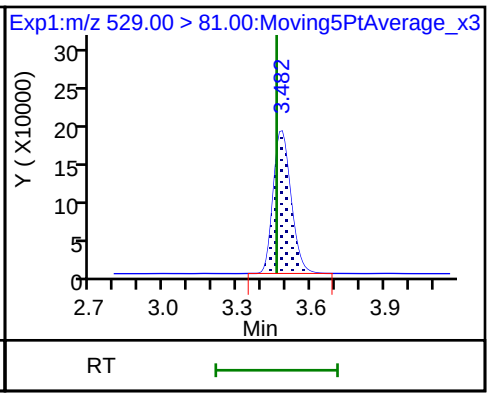
D 21 13C8 FOSA



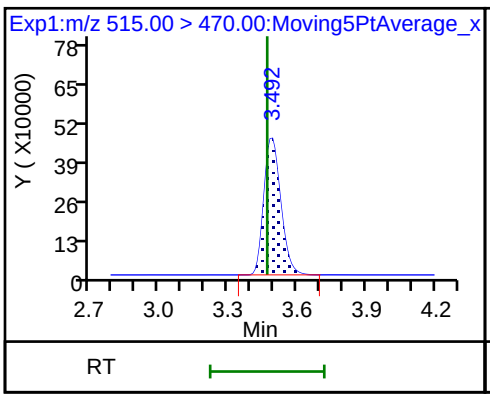
22 Perfluorooctane Sulfonamide



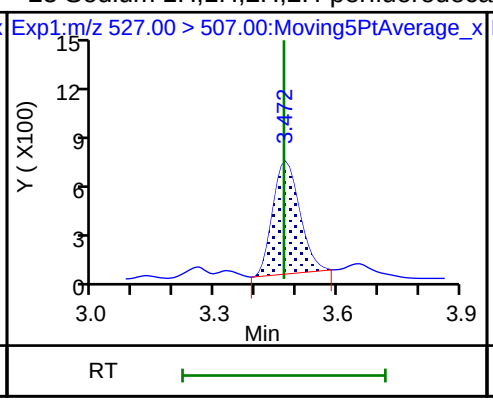
D 26 M2-8:2FTS



D 23 13C2 PFDA



25 Sodium 1H,1H,2H,2H-perfluorodecan



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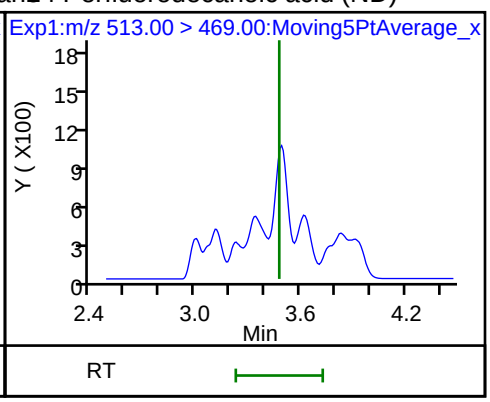

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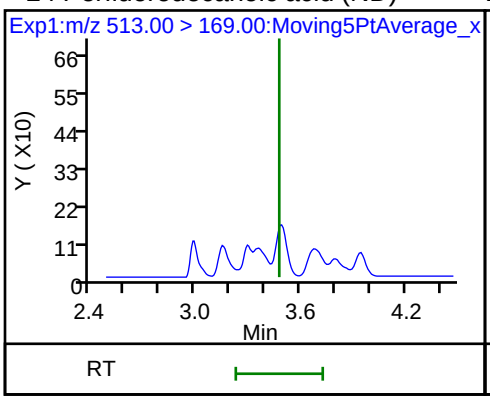
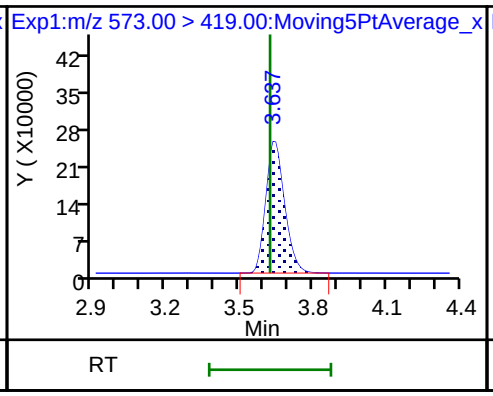
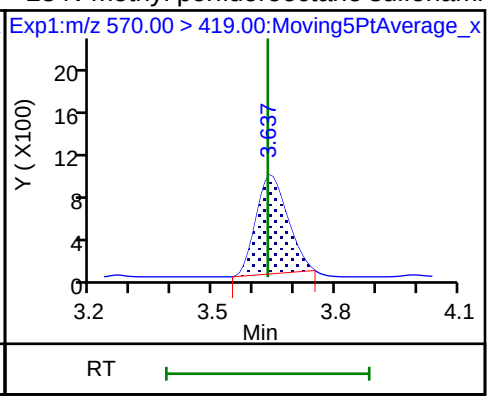


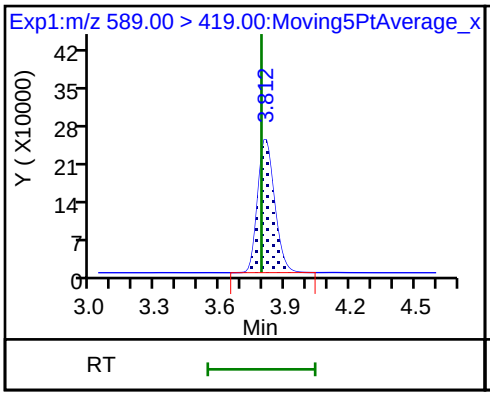
D 27 d3-NMeFOSAA



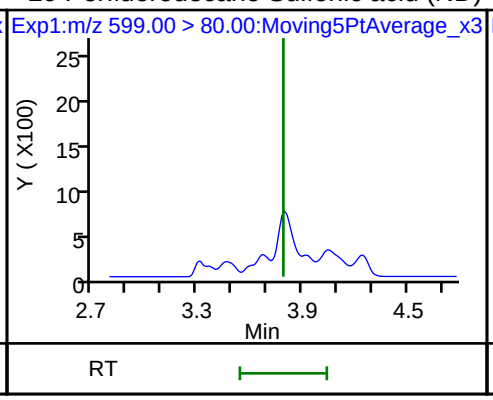
28 N-methyl perfluorooctane sulfonami



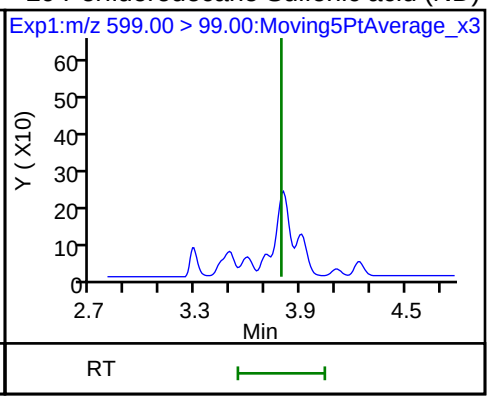
D 32 d5-NEtFOSAA



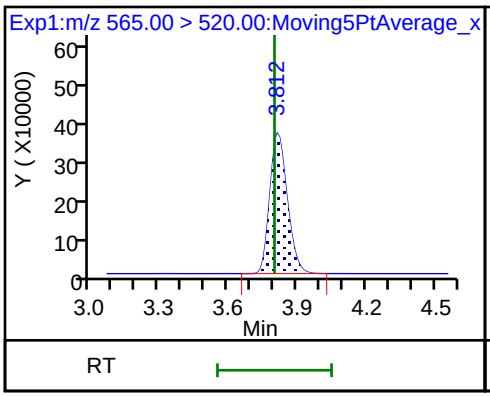
29 Perfluorodecane Sulfonic acid (ND)



29 Perfluorodecane Sulfonic acid (ND)



D 30 13C2 PFUnA



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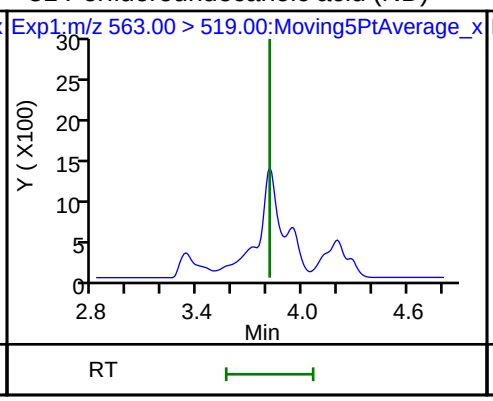
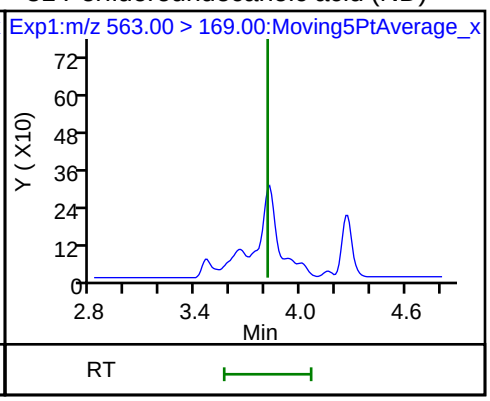
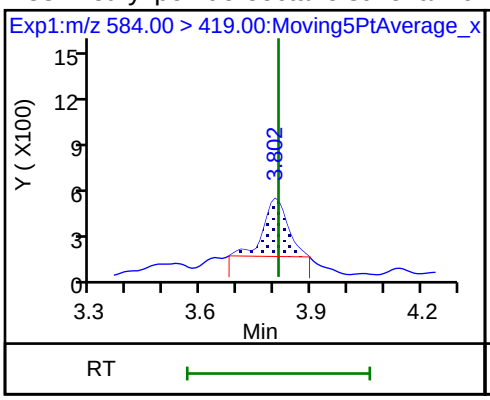


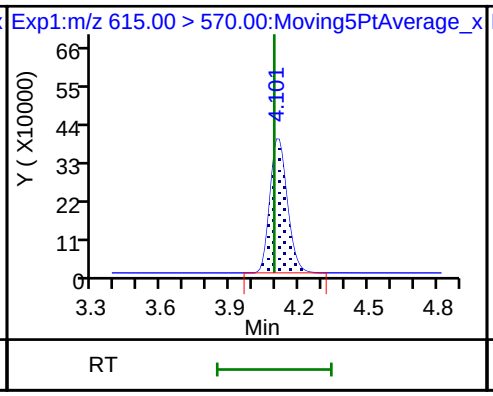
31 Perfluoroundecanoic acid (ND)



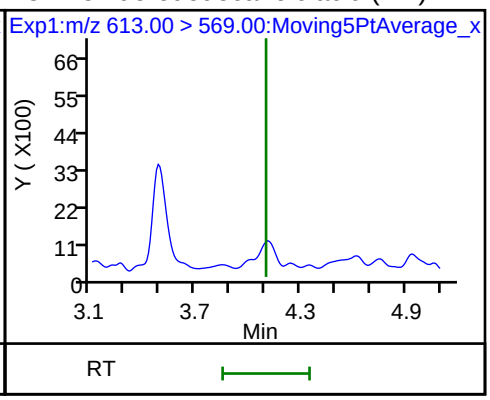
33 N-ethyl perfluorooctane sulfonamid



D 36 13C2 PFDoA



37 Perfluorododecanoic acid (ND)



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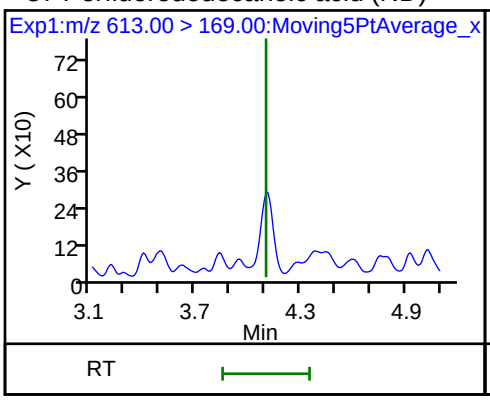

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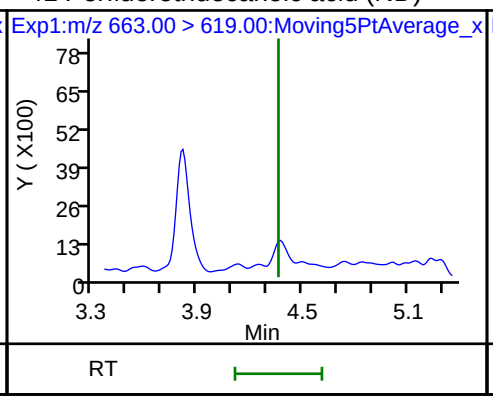

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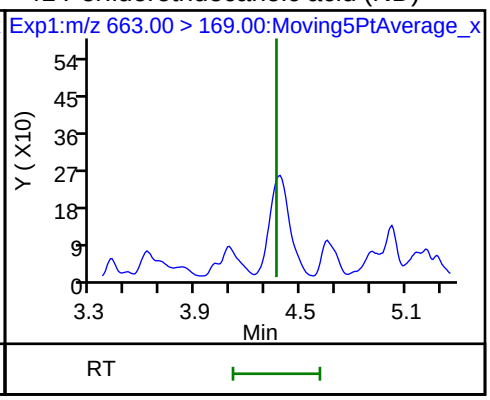
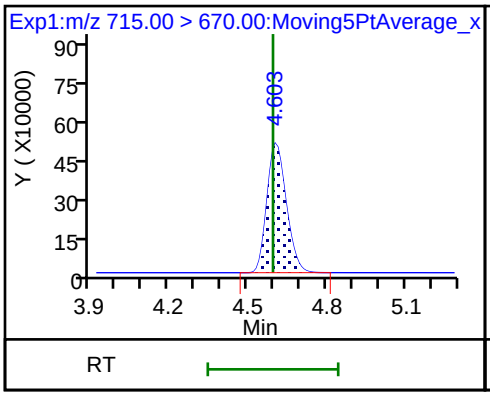
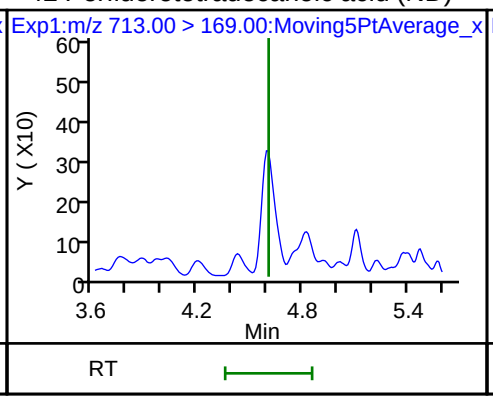


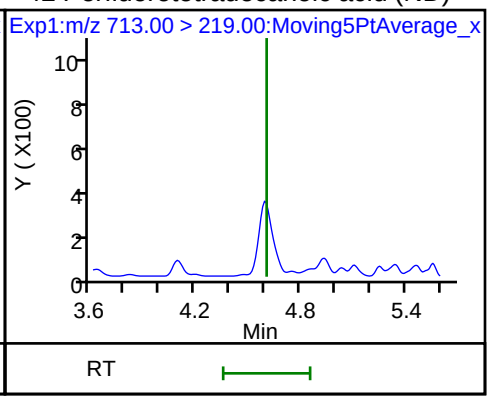
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

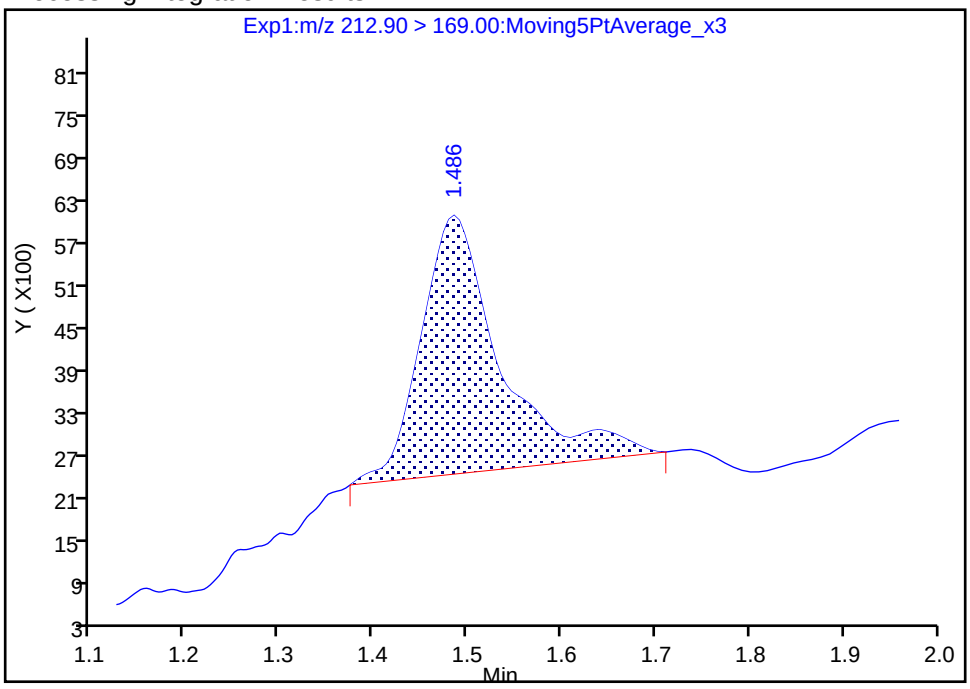
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_013.d				
Injection Date:	10-May-2018 21:17:40	Instrument ID:	A8_N		
Lims ID:	320-38611-A-9-A	Lab Sample ID:	320-38611-9		
Client ID:	GC-EQUIPMENT BLANK				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	28	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

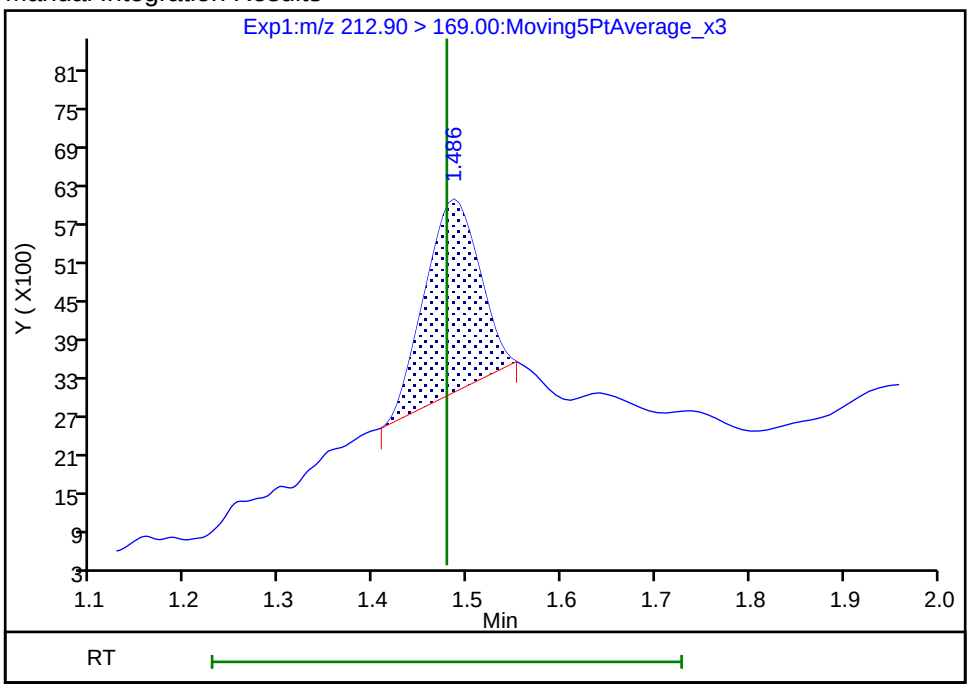
Processing Integration Results

RT: 1.49
Area: 21336
Amount: 0.011055
Amount Units: ng/ml



Manual Integration Results

RT: 1.49
Area: 12151
Amount: 0.006296
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:24:16

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

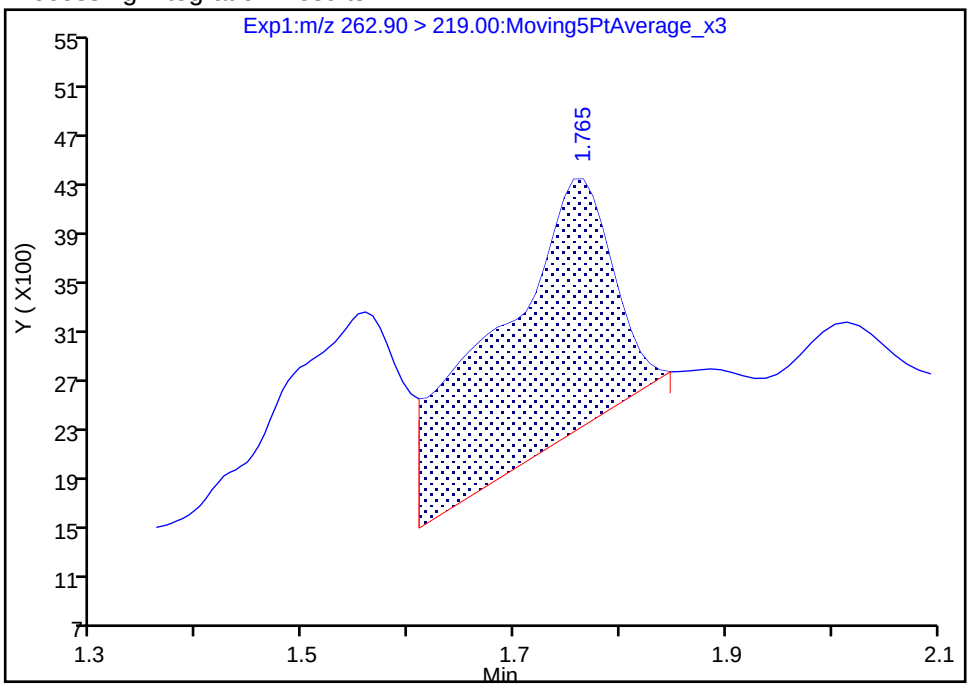
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_013.d				
Injection Date:	10-May-2018 21:17:40	Instrument ID:	A8_N		
Lims ID:	320-38611-A-9-A	Lab Sample ID:	320-38611-9		
Client ID:	GC-EQUIPMENT BLANK				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	28	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

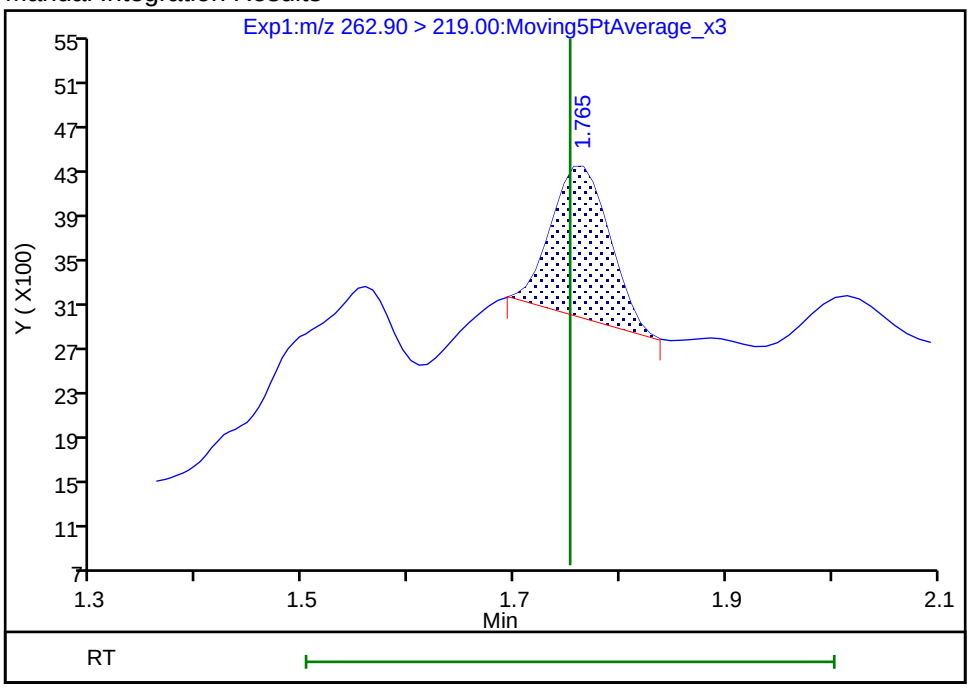
Processing Integration Results

RT: 1.77
Area: 16441
Amount: 0.009903
Amount Units: ng/ml



Manual Integration Results

RT: 1.77
Area: 5216
Amount: 0.003142
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:24:36

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK RE | Lab Sample ID: 320-38611-9 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_029.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 271.4(mL) | Date Analyzed: 05/17/2018 02:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*ND*	*H*	*1.8*	*0.78*
27619-97-2	*6:2FTS*	*2.3*	*J H*	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	106		25-150
STL02279	M2-6:2FTS	112		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_029.d
Lims ID: 320-38611-B-9-B
Client ID: GC-EQUIPMENT BLANK
Sample Type: Client
Inject. Date: 17-May-2018 02:41:04 ALS Bottle#: 20 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-9-b
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 14:19:15 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 14:19:15

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.447	0.011	1.000	7199767	2.58		103	42642	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.458	1.457	0.001	1.000	24830	0.009272			6.8	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.712	0.017	0.566	4530261	2.54		101	52988	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.738	1.729	0.009	1.005	9368	0.004379			4.1	M
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.748	0.017	1.000	91672	2.27		97.7	668	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	1.994	0.020	1.000	4846051	2.54		102	84107	
D 9 13C4-PFHpA										
367.00 > 322.00	2.345	2.321	0.024	1.000	4518620	2.48		99.1	71797	
D 11 18O2 PFHxS										
403.00 > 84.00	2.358	2.334	0.024	1.000	5329407	2.36		99.9	79184	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.358	2.345	0.013	1.000	13785	0.005429			76.5	
399.00 > 99.00	2.358	2.345	0.013	1.000	4819		2.86(1.50-4.49)		22.7	
D 12 M2-6:2FTS										
429.00 > 81.00	2.667	2.645	0.022	1.000	1070212	2.66		112	16055	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.667	2.667	0.0	1.000	57473	0.0624			589	
D 14 13C4 PFOA										
417.00 > 372.00	2.689	2.668	0.021	1.000	4566768	2.65		106	87870	
* 62 13C2-PFOA										
415.00 > 370.00	2.689	2.689	0.0		4556823	2.50			64391	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.689	2.689	0.0	1.000	13015	0.006053			4.4	M
413.00 > 169.00	2.689	2.689	0.0	1.000	4592		2.83(0.84-2.52)		13.9	M
D 18 13C4 PFOS										
503.00 > 80.00	3.056	3.029	0.027	1.000	3700290	2.39		99.9	25461	
D 19 13C5 PFNA										
468.00 > 423.00	3.056	3.036	0.020	1.000	3950448	2.80		112	107592	
D 26 M2-8:2FTS										
529.00 > 81.00	3.402	3.376	0.026	1.000	1254212	2.74		114	17297	
D 21 13C8 FOSA										
506.00 > 78.00	3.393	3.376	0.017	1.000	4486203	2.21		88.5	40224	
D 23 13C2 PFDA										
515.00 > 470.00	3.412	3.385	0.027	1.000	3129481	2.61		104	54976	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.412	3.398	0.014	1.003	5084	0.007194			106	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.570	3.544	0.026	1.000	1751622	2.64		106	27517	
D 30 13C2 PFUnA										
565.00 > 520.00	3.743	3.716	0.027	1.000	2501309	2.63		105	35289	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.733	3.716	0.017	1.000	1707648	2.51		100	19193	
D 36 13C2 PFDoA										
615.00 > 570.00	4.041	4.006	0.035	1.000	2643668	2.58		103	22521	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.542	4.511	0.031	1.000	3372324	2.68		107	16007	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 14:19:16 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_029.d

Injection Date: 17-May-2018 02:41:04 Instrument ID: A8_N

Lims ID: 320-38611-B-9-B Lab Sample ID: 320-38611-9

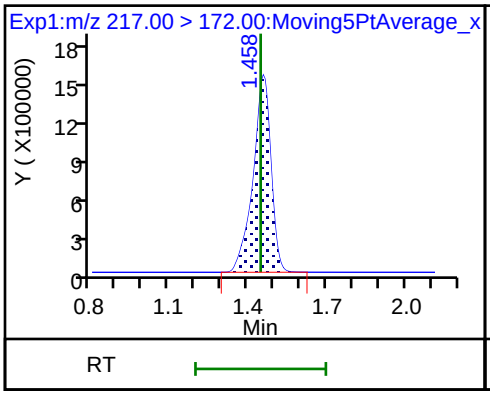
Client ID: GC-EQUIPMENT BLANK

Operator ID: SACINSTLCMS01 ALS Bottle#: 20 Worklist Smp#: 21

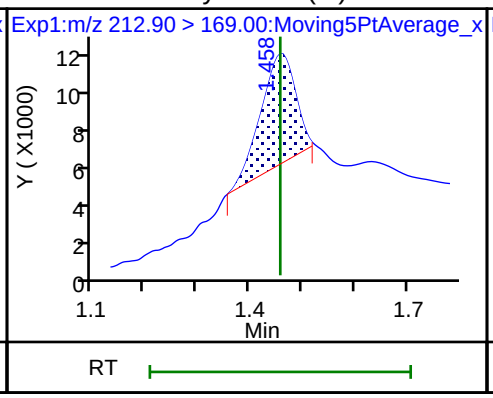
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

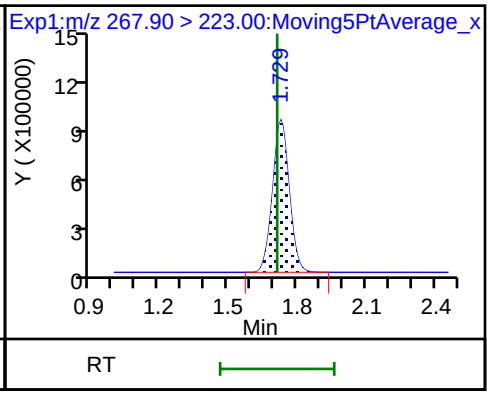
D 1 13C4 PFBA



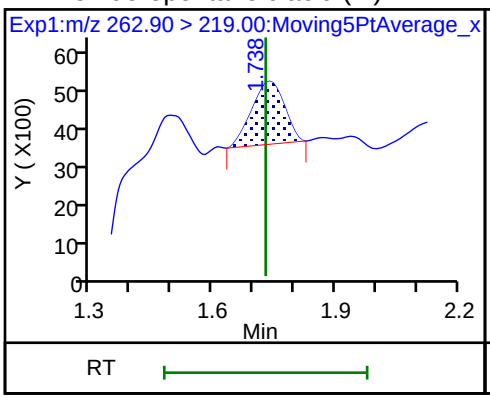
2 Perfluorobutyric acid (M)



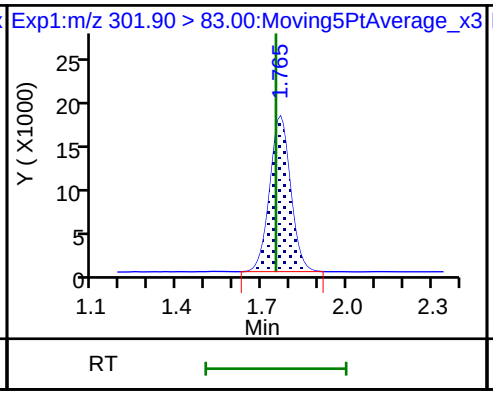
D 3 13C5-PFPeA



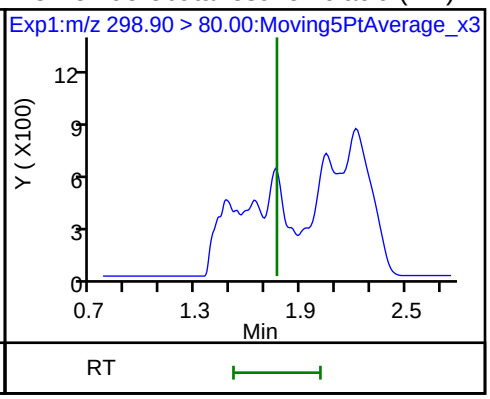
4 Perfluoropentanoic acid (M)



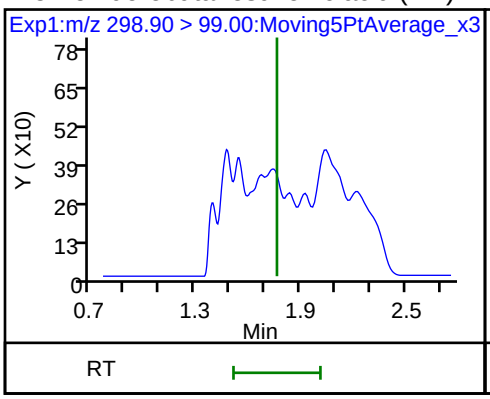
D 47 13C3-PFBS



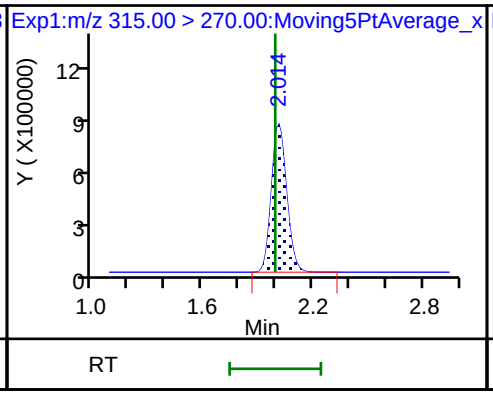
5 Perfluorobutanesulfonic acid (ND)



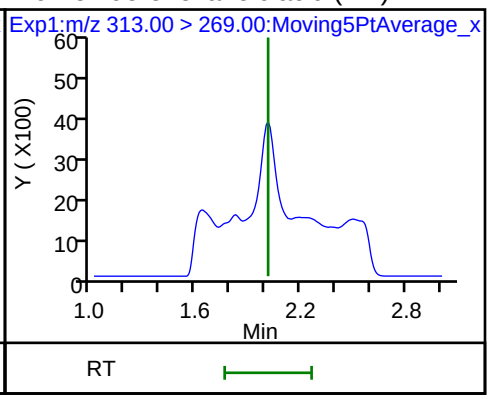
5 Perfluorobutanesulfonic acid (ND)



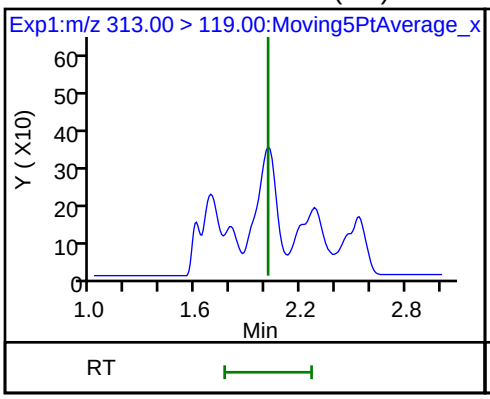
D 7 13C2 PFHxA



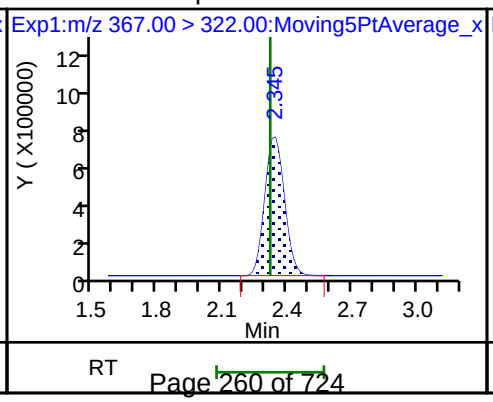
6 Perfluorohexanoic acid (ND)



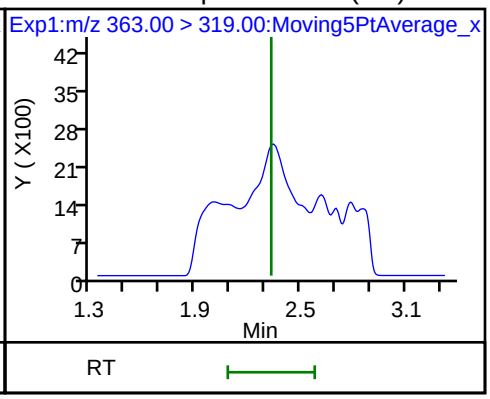
6 Perfluorohexanoic acid (ND)



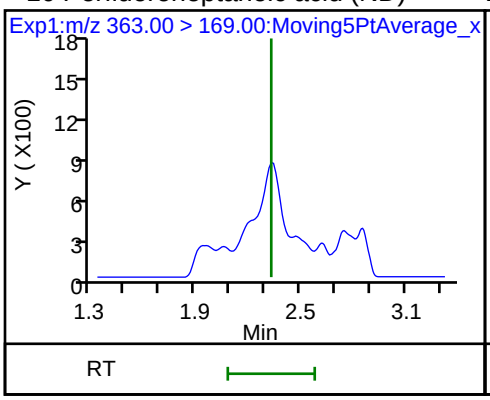
D 9 13C4-PFHpA



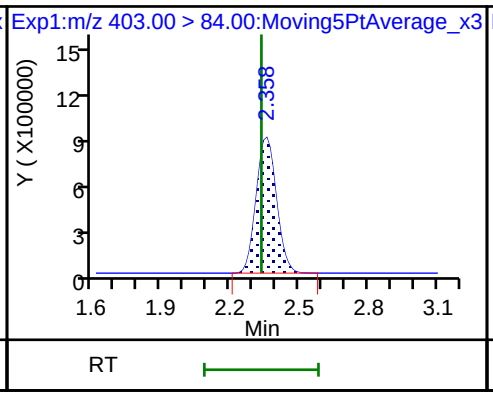
10 Perfluoroheptanoic acid (ND)



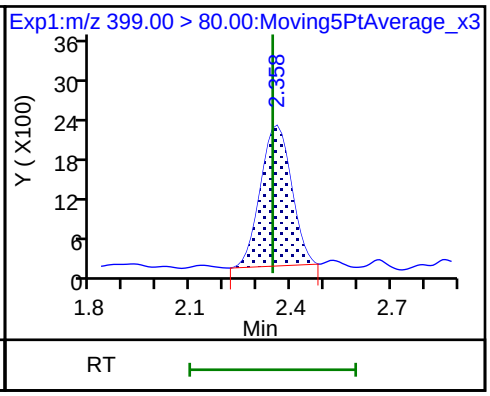
10 Perfluoroheptanoic acid (ND)



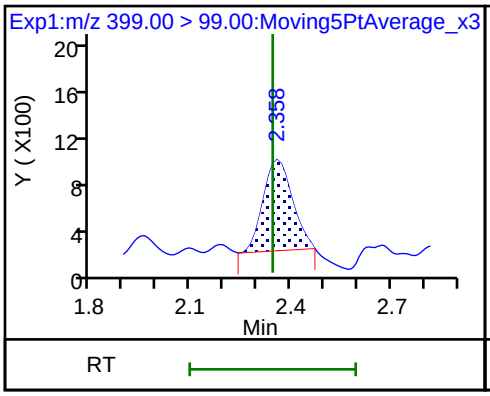
D 11 18O2 PFHxS



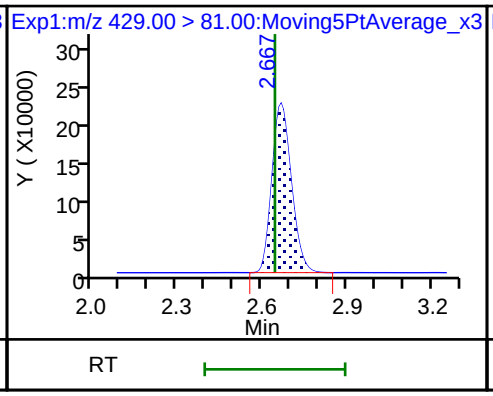
8 Perfluorohexanesulfonic acid



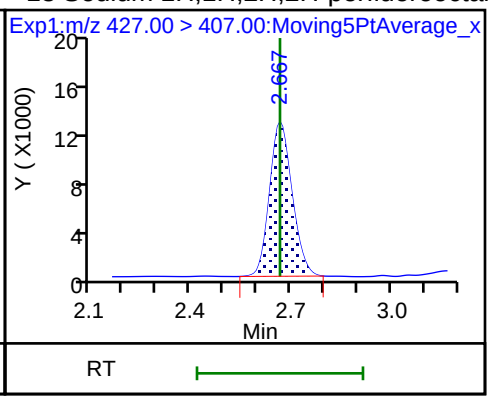
8 Perfluorohexanesulfonic acid



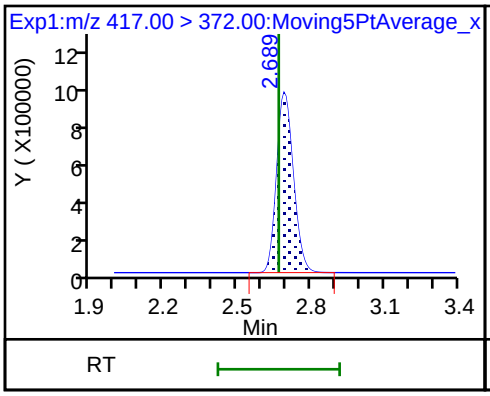
D 12 M2-6:2FTS



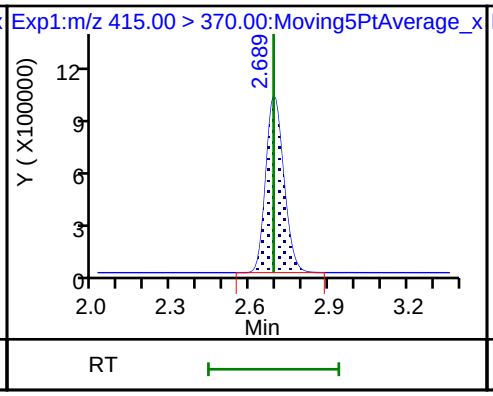
13 Sodium 1H,1H,2H,2H-perfluorooctane



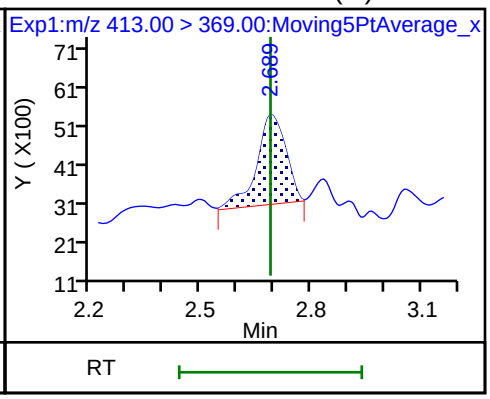
D 14 13C4 PFOA



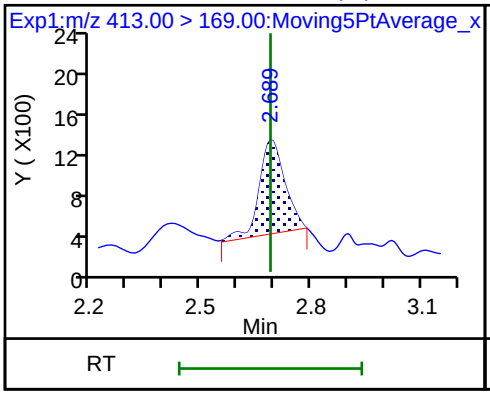
* 62 13C2-PFOA



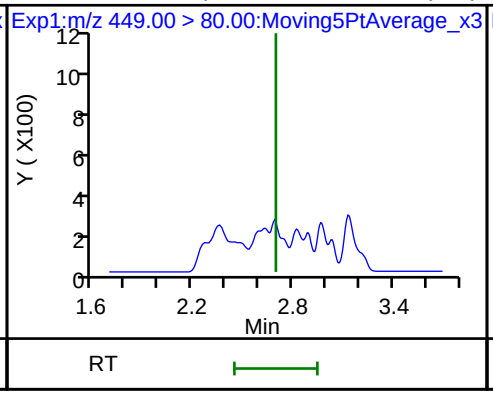
15 Perfluorooctanoic acid (M)



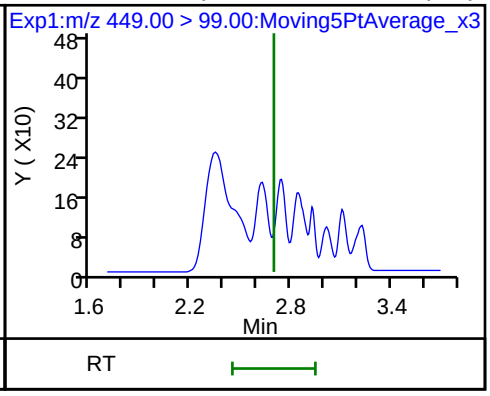
15 Perfluorooctanoic acid (M)



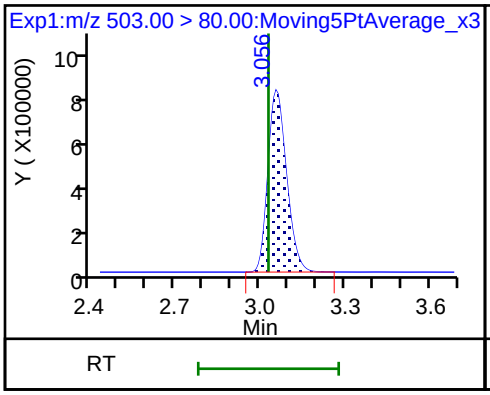
16 Perfluoroheptanesulfonic acid (ND)



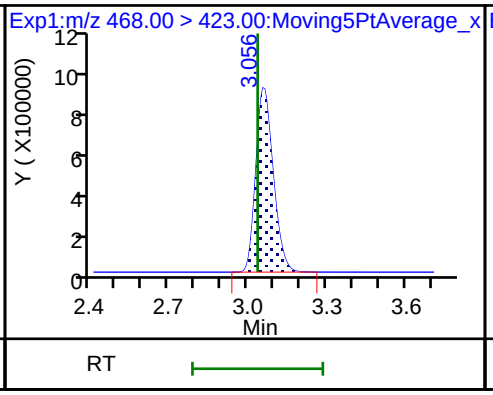
16 Perfluoroheptanesulfonic acid (ND)



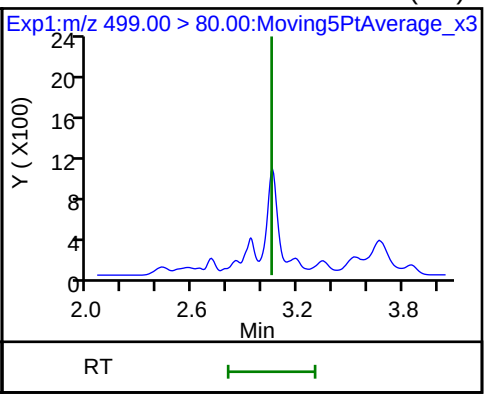
D 18 13C4 PFOS



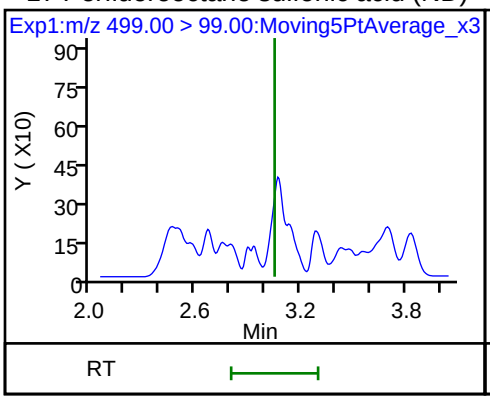
D 19 13C5 PFNA



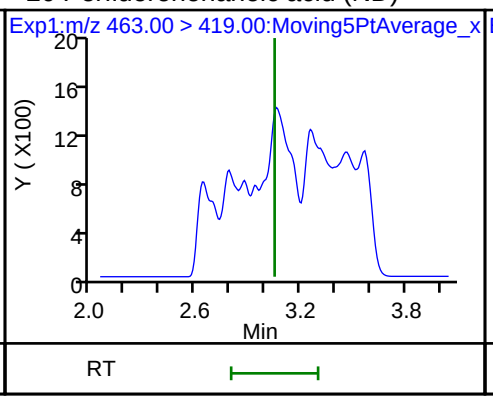
17 Perfluorooctane sulfonic acid (ND)



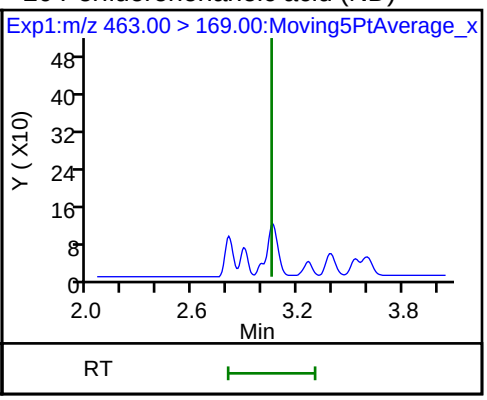
17 Perfluorooctane sulfonic acid (ND)



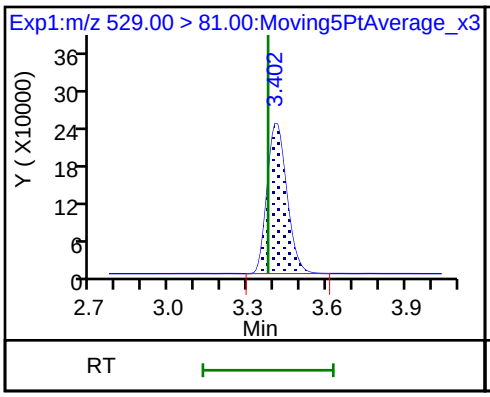
20 Perfluorononanoic acid (ND)



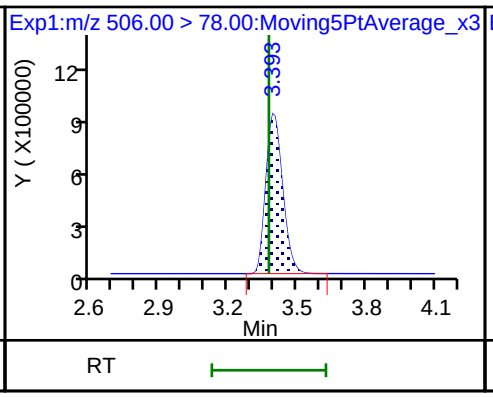
20 Perfluorononanoic acid (ND)



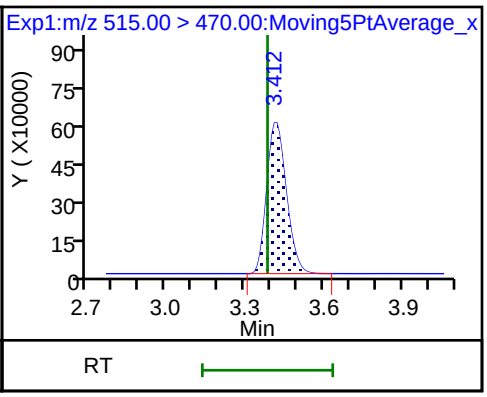
D 26 M2-8:2FTS



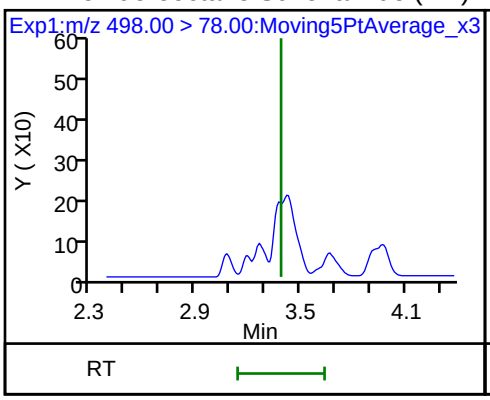
D 21 13C8 FOSA



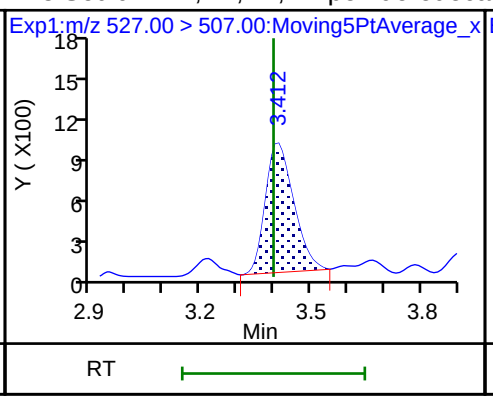
D 23 13C2 PFDA



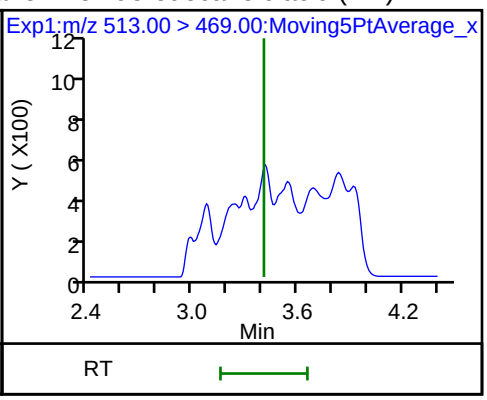
22 Perfluorooctane Sulfonamide (ND)



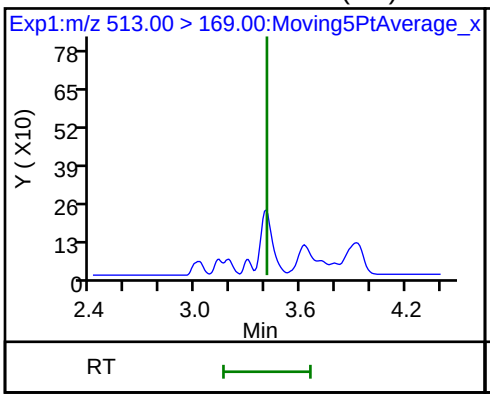
25 Sodium 1H,1H,2H,2H-perfluorodecan



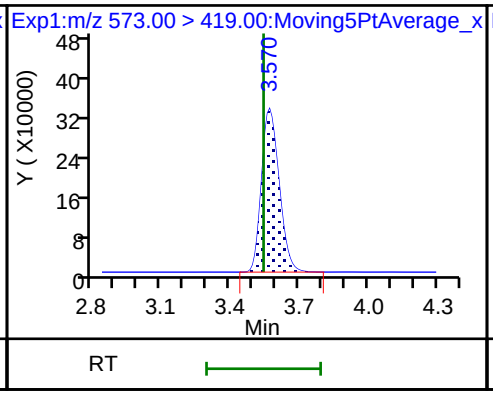
24 Perfluorodecanoic acid (ND)



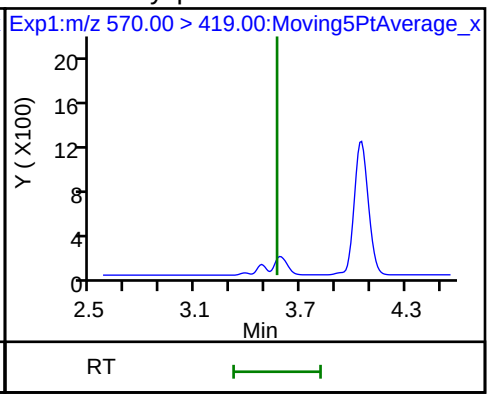
24 Perfluorodecanoic acid (ND)



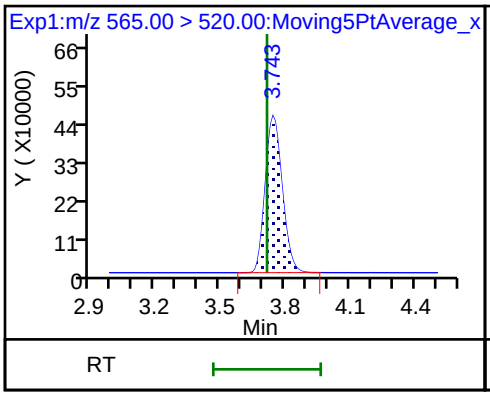
D 27 d3-NMeFOSAA



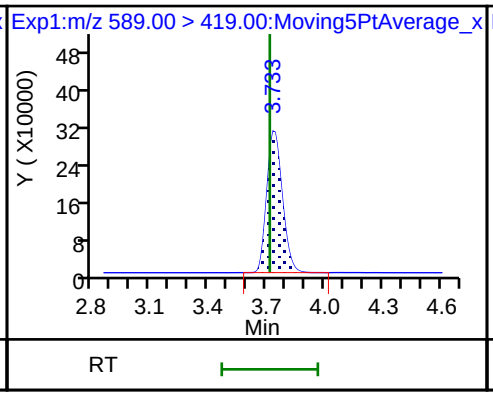
28 N-methyl perfluorooctane sulfonami (ND)



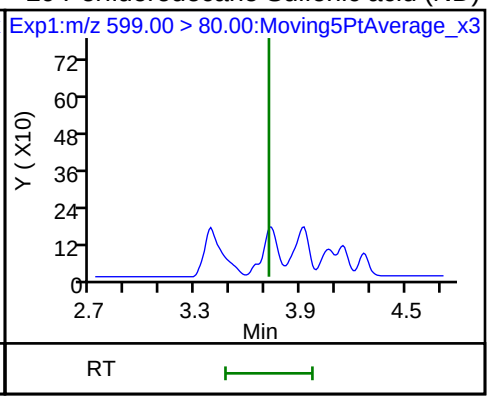
D 30 13C2 PFUnA



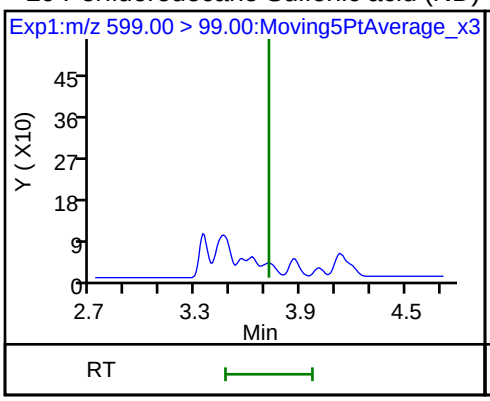
D 32 d5-NEtFOSAA



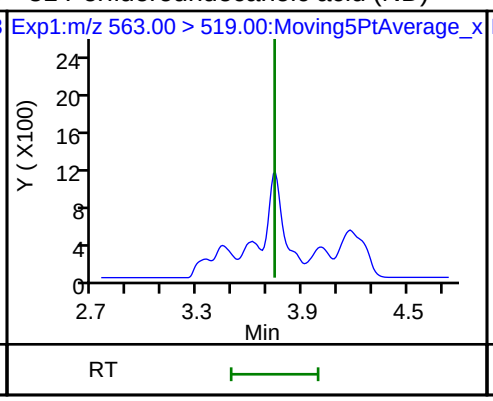
29 Perfluorodecane Sulfonic acid (ND)



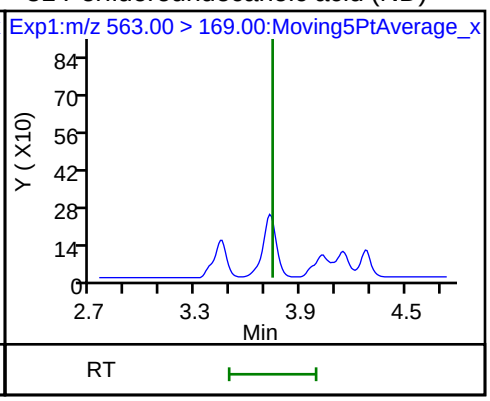
29 Perfluorodecane Sulfonic acid (ND)



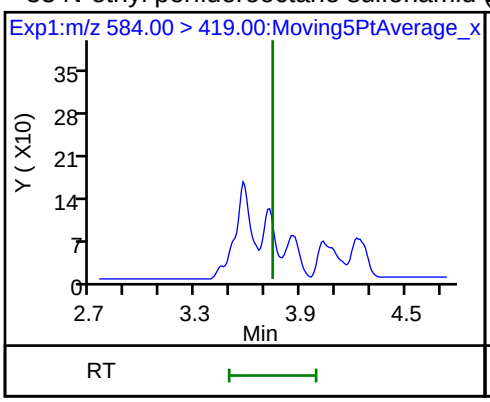
31 Perfluoroundecanoic acid (ND)



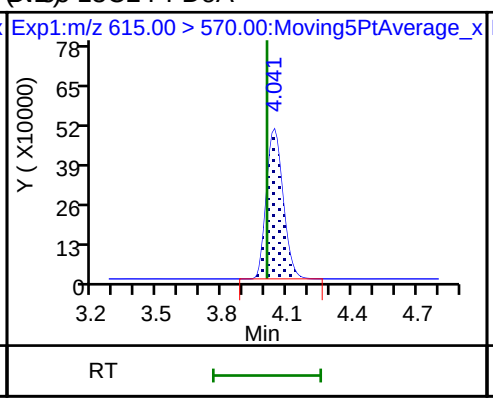
31 Perfluoroundecanoic acid (ND)



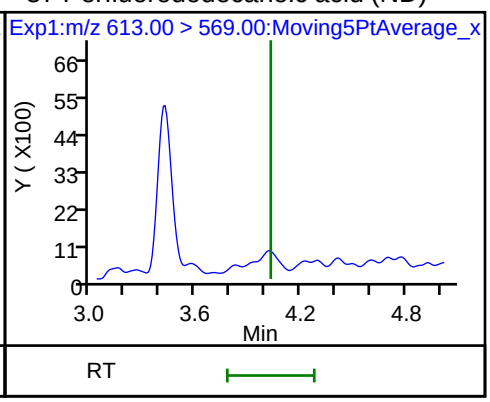
33 N-ethyl perfluorooctane sulfonamid (ND)



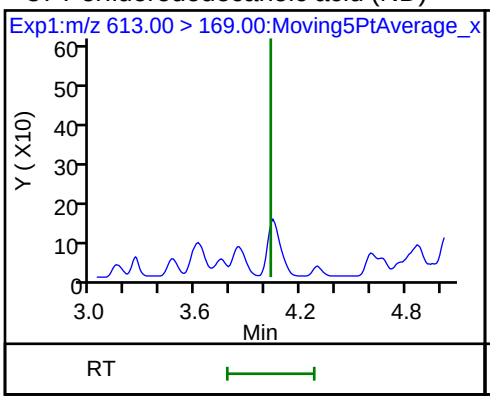
D 36 13C2 PFDoA



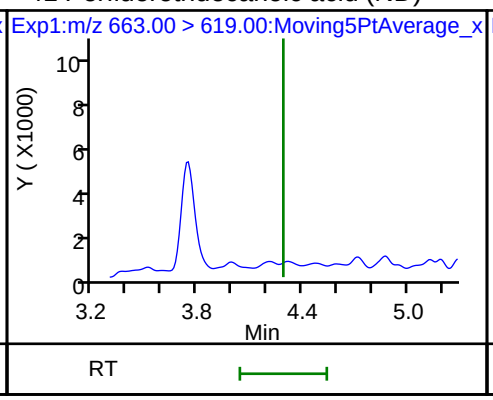
37 Perfluorododecanoic acid (ND)



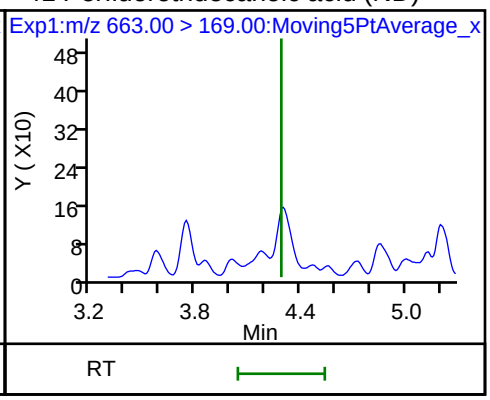
37 Perfluorododecanoic acid (ND)



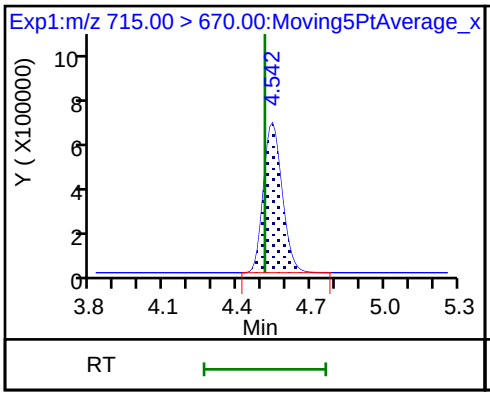
41 Perfluorotridecanoic acid (ND)



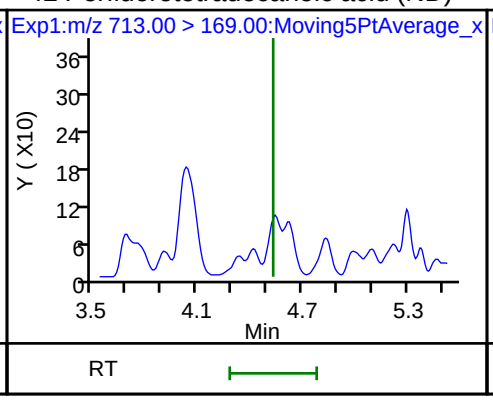
41 Perfluorotridecanoic acid (ND)



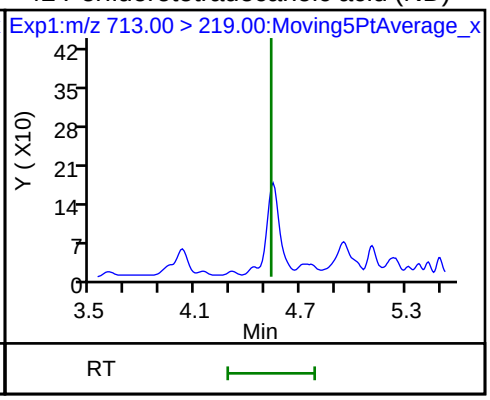
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

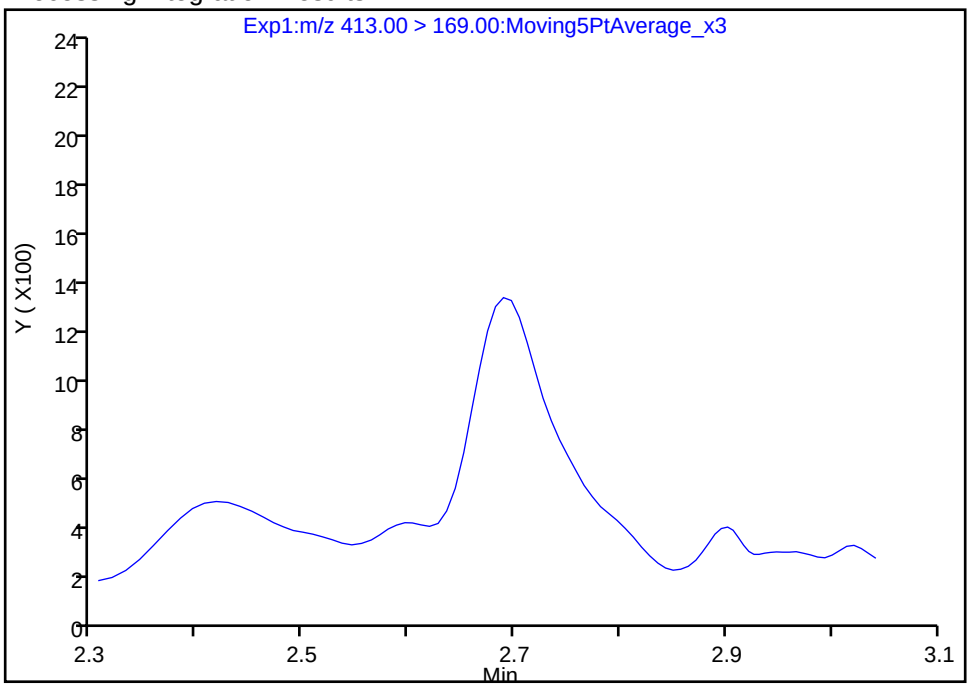
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_029.d				
Injection Date:	17-May-2018 02:41:04	Instrument ID:	A8_N		
Lims ID:	320-38611-B-9-B	Lab Sample ID:	320-38611-9		
Client ID:	GC-EQUIPMENT BLANK				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

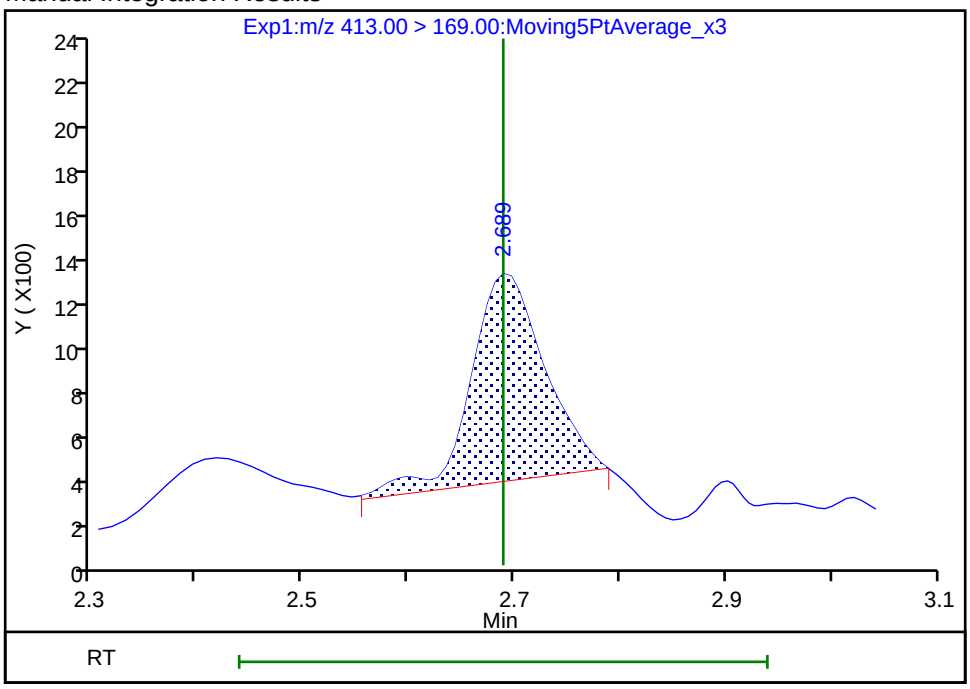
Processing Integration Results

RT: 2.68
Area: 0
Amount: 0.006648
Amount Units: ng/ml



Manual Integration Results

RT: 2.69
Area: 4592
Amount: 0.006053
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 17-May-2018 14:19:00

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

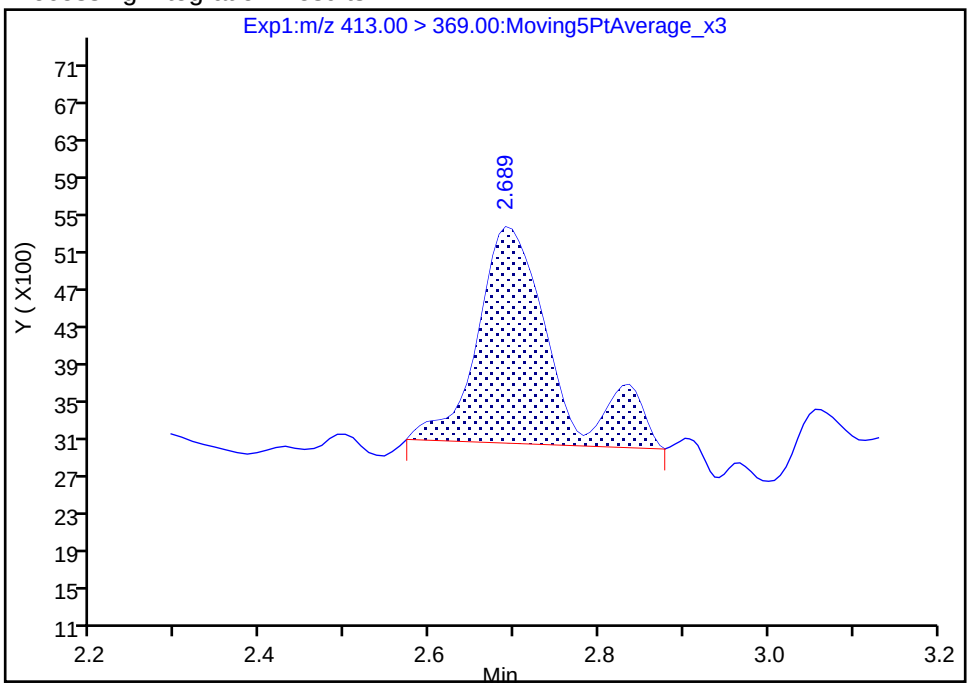
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_029.d				
Injection Date:	17-May-2018 02:41:04	Instrument ID:	A8_N		
Lims ID:	320-38611-B-9-B	Lab Sample ID:	320-38611-9		
Client ID:	GC-EQUIPMENT BLANK				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

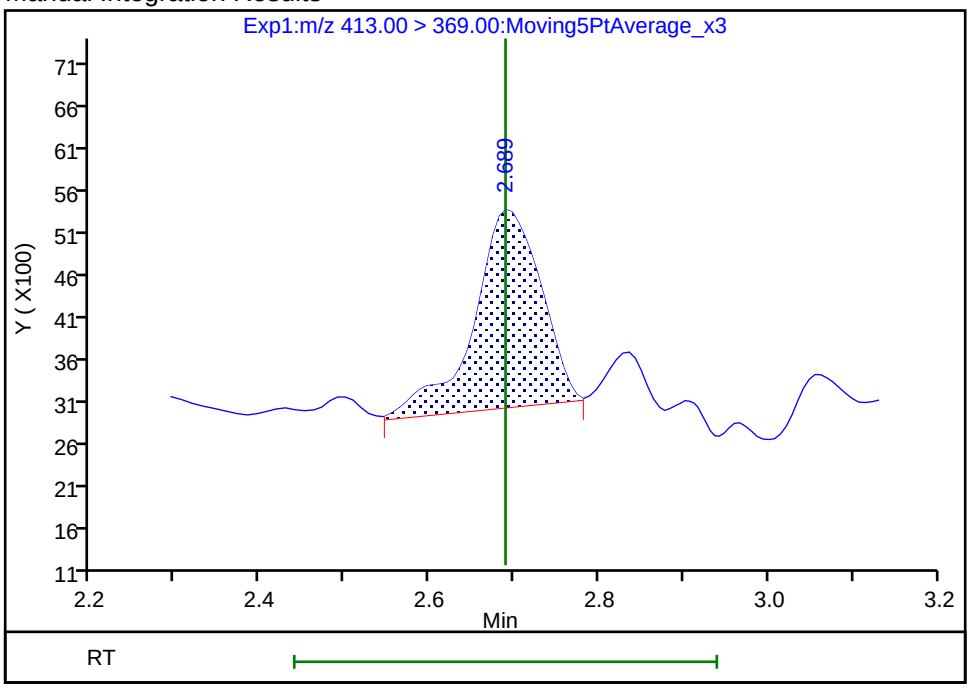
Processing Integration Results

RT: 2.69
Area: 14293
Amount: 0.006648
Amount Units: ng/ml



Manual Integration Results

RT: 2.69
Area: 13015
Amount: 0.006053
Amount Units: ng/ml



Reviewer: ruangyotsakuld, 17-May-2018 14:19:00

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 217359

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2018 18:39 Calibration End Date: 04/10/2018 19:26 Calibration ID: 38527

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-217359/2	2018.04.10LLICAL_002.d
Level 2	IC 320-217359/3	2018.04.10LLICAL_003.d
Level 3	IC 320-217359/4	2018.04.10LLICAL_004.d
Level 4	IC 320-217359/5	2018.04.10LLICAL_005.d
Level 5	IC 320-217359/6	2018.04.10LLICAL_006.d
Level 6	IC 320-217359/7	2018.04.10LLICAL_007.d
Level 7	IC 320-217359/8	2018.04.10LLICAL_008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.9087 0.9558	0.9215 0.9254	0.9250	0.9115	0.9520	AveID		0.9286				2.0		35.0			
Perfluoropentanoic acid (PFPeA)	1.2578 1.1682	1.2108 1.1732	1.1604	1.1461	1.2257	AveID		1.1918				3.4		35.0			
Perfluorobutanesulfonic acid (PFBS)	76.893 81.717	82.786 71.544	78.801	75.066	81.197	AveID		78.286				5.2		50.0			
4:2 FTS	14.379 16.335	17.388 16.450	16.158	15.381	16.133	AveID		16.032				5.9		50.0			
Perfluorohexanoic acid (PFHxA)	0.9165 1.0971	1.0419 0.9805	0.9871	1.0324	1.0575	AveID		1.0161				5.9		35.0			
Perfluoropentanesulfonic acid (PFPeS)	72.651 73.152	73.718 66.574	72.295	69.587	72.578	AveID		71.508				3.6		50.0			
HFPO-DA (GenX)	2.6776 3.4120	2.2053 2.8850	2.9463	2.6401	2.7314	AveID		2.7854				13.1		35.0			
Perfluoroheptanoic acid (PFHpA)	0.8886 1.0632	0.8961 1.0895	1.0153	1.0044	1.0491	AveID		1.0009				7.9		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.3313 1.0960	1.2076 1.0563	1.0824	1.0501	1.0988	AveID		1.1318				9.0		35.0			
Adona	3.4574 3.3221	3.5134 2.9110	3.4665	3.8310	3.7468	AveID		3.4640				8.7		50.0			
6:2FTS	1.5421 1.7475	1.9455 1.7701	1.5586	1.6684	1.6013	AveID		1.6905				8.5		35.0			
Perfluorooctanoic acid (PFOA)	1.2196 1.1748	1.2108 1.1155	1.1409	1.0810	1.1452	AveID		1.1554				4.3		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.2050 1.3855	1.3067 1.3134	1.3594	1.3058	1.4180	AveID		1.3277				5.2		50.0			
Perfluorooctanesulfonic acid (PFOS)	1.0579 1.1424	1.0586 1.1443	1.0560	1.0546	1.1010	AveID		1.0878				3.8		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 217359

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2018 18:39 Calibration End Date: 04/10/2018 19:26 Calibration ID: 38527

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorononanoic acid (PFNA)	0.9233 1.1269	1.1068 1.0188	1.0452	1.0400	1.0380	AveID		1.0427				6.3		35.0			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	1.6407 2.0236	1.8519 1.8739	1.8303	1.9058	2.0694	AveID		1.8851				7.4		50.0			
Perfluorononanesulfonic acid (PFNS)	0.8421 0.8194	0.8119 0.7979	0.7759	0.7194	0.8292	AveID		0.7994				5.2		50.0			
8:2FTS	1.4631 1.3212	1.2394 1.2657	1.1167	1.2298	1.2217	AveID		1.2654				8.4		35.0			
Perfluorooctane Sulfonamide (FOSA)	0.9307 1.0709	1.0441 0.9800	1.0023	1.0041	1.0484	AveID		1.0115				4.7		35.0			
Perfluorodecanoic acid (PFDA)	1.0885 0.9859	1.1057 1.0134	0.9627	1.0005	1.0643	AveID		1.0316				5.3		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.9083 1.1043	0.8872 1.0603	1.0109	0.9545	1.0557	AveID		0.9973				8.3		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.5294 0.7137	0.6184 0.7022	0.6496	0.6477	0.6837	AveID		0.6492				9.6		50.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.7913 0.9588	0.9928 0.9829	0.9228	0.9274	0.9655	AveID		0.9345				7.3		35.0			
Perfluoroundecanoic acid (PFUnA)	0.9440 0.8695	0.9150 0.8330	0.7542	0.7914	0.8086	AveID		0.8451				8.1		35.0			
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	2.7334 2.8552	3.0246 2.5419	3.0187	3.1256	3.0878	AveID		2.9125				7.3		50.0			
Perfluorododecanoic acid (PFDoA)	1.0500 1.0844	0.9584 1.0838	1.0669	0.9590	1.0976	AveID		1.0429				5.7		35.0			
Perfluorotridecanoic Acid (PFTriA)	1.2989 1.2824	1.2093 1.2168	1.1646	1.1001	1.2353	AveID		1.2153				5.6		50.0			
Perfluorotetradecanoic acid (PFTeA)	0.2445 0.2592	0.2707 0.2509	0.2469	0.2461	0.2397	AveID		0.2511				4.2		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.8074 0.9223	1.3282 0.9137	1.0648	0.9768	1.0014	L2ID	0.0211	0.9469							0.9980		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	1.0226 0.9916	0.9945 0.9873	1.0118	0.9863	1.0342	AveID		1.0041				1.9		50.0			
13C4 PFBA	1.2940 1.4238	1.3269 1.4303	1.2929	1.3278	1.3223	Ave		1.3454				4.3		50.0			
13C5 PFPeA	0.8504 0.9141	0.8510 0.9065	0.8296	0.8639	0.8548	Ave		0.8672				3.6		50.0			
13C3-PFBS	0.0195 0.0202	0.0192 0.0216	0.0190	0.0203	0.0195	Ave		0.0199				4.6		50.0			
M2-4:2FTS	0.1407 0.1456	0.1400 0.1466	0.1378	0.1445	0.1424	Ave		0.1425				2.3		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 217359

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2018 18:39 Calibration End Date: 04/10/2018 19:26 Calibration ID: 38527

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2 PFHxA	0.9705 0.9727	0.9235 1.0286	0.9450	0.9498	0.9228	Ave		0.9590				3.8		50.0			
13C3 HFPO-DA	0.0607 0.0558	0.0645 0.0590	0.0536	0.0606	0.0611	Ave		0.0593				6.1		50.0			
13C4-PFHpA	0.9512 0.9245	0.9580 0.9305	0.9001	0.9261	0.9425	Ave		0.9333				2.1		50.0			
18O2 PFHxS	1.1389 1.1679	1.1640 1.1715	1.1515	1.1448	1.1247	Ave		1.1519				1.5		50.0			
M2-6:2FTS	0.2013 0.2035	0.1892 0.1970	0.2051	0.2032	0.2005	Ave		0.2000				2.7		50.0			
13C4 PFOA	0.9343 0.9540	0.9073 0.9397	0.9043	0.9264	0.9275	Ave		0.9276				1.9		50.0			
13C4 PFOS	0.7935 0.8268	0.8168 0.8235	0.7958	0.8102	0.7798	Ave		0.8066				2.2		50.0			
13C5 PFNA	0.8203 0.7821	0.8002 0.8169	0.7761	0.7954	0.7901	Ave		0.7973				2.1		50.0			
M2-8:2FTS	0.2407 0.2360	0.2491 0.2358	0.2375	0.2469	0.2400	Ave		0.2409				2.2		50.0			
13C8 FOSA	1.0076 1.0108	1.0097 1.0199	0.9999	1.0220	0.9804	Ave		1.0072				1.4		50.0			
13C2 PFDA	0.6589 0.7306	0.6313 0.6919	0.6468	0.6894	0.6418	Ave		0.6701				5.3		50.0			
d3-NMeFOSAA	0.3521 0.3880	0.3703 0.4138	0.3721	0.3933	0.3693	Ave		0.3798				5.3		50.0			
d5-NEtFOSAA	0.3917 0.3803	0.3750 0.3593	0.3725	0.3713	0.3740	Ave		0.3749				2.6		50.0			
13C2 PFUnA	0.5883 0.5911	0.5771 0.5697	0.5957	0.5619	0.5626	Ave		0.5781				2.4		50.0			
13C2 PFDoA	0.5964 0.6225	0.6348 0.6364	0.6241	0.6615	0.5939	Ave		0.6242				3.8		50.0			
13C2-PFTeDA	0.7749 0.7948	0.7757 0.8130	0.7679	0.8272	0.7873	Ave		0.7915				2.8		50.0			
13C2-PFHxDA	1.2936 1.3188	1.2730 1.3422	1.2549	1.2935	1.2397	Ave		1.2879				2.8		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 217359

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2018 18:39 Calibration End Date: 04/10/2018 19:26 Calibration ID: 38527

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-217359/2	2018.04.10LLICAL_002.d
Level 2	IC 320-217359/3	2018.04.10LLICAL_003.d
Level 3	IC 320-217359/4	2018.04.10LLICAL_004.d
Level 4	IC 320-217359/5	2018.04.10LLICAL_005.d
Level 5	IC 320-217359/6	2018.04.10LLICAL_006.d
Level 6	IC 320-217359/7	2018.04.10LLICAL_007.d
Level 7	IC 320-217359/8	2018.04.10LLICAL_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	56172 13377174	112834 21784128	580880	2238331	5819896	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	51097 10497161	95082 17503102	467549	1831380	4844578	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	63156 14347107	129549 22532715	642890	2489261	6477140	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	12478 3030208	28749 5473778	139275	538908	1359770	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	42489 10489823	88785 16596765	453023	1813678	4512177	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	63317 13627914	122406 22248169	625836	2448518	6143254	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	7766 1870994	13126 2803143	76650	295687	771939	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	40376 9662627	79218 16683281	443829	1720489	4571563	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	65909 11450464	118037 18531754	550837	2023389	5199428	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
Adona		AveID	131051 26999565	264804 39451342	1339859	5740779	13509817	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
6:2FTS		AveID	14055 3314359	32205 5439954	147222	594490	1407564	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	54434 11016957	101372 17251700	501075	1852208	4910933	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	43482 10719572	93755 16945821	500192	1862796	4867309	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorooctanesulfonic acid (PFOS)		AveID	37213 8615775	74043 14391699	378769	1466540	3684174	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32
Perfluorononanoic acid (PFNA)		AveID	36180 8663453	81721 13696835	394004	1529838	3792206	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 217359

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2018 18:39 Calibration End Date: 04/10/2018 19:26 Calibration ID: 38527

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate		AveID	57962 15327887	130088 23669204	659333	2661617	6954333	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorononanesulfonic acid (PFNS)		AveID	30641 6392773	58744 10381596	287902	1034931	2870093	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
8:2FTS		AveID	16119 2936296	27294 4704229	123407	537990	1298898	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorooctane Sulfonamide (FOSA)		AveID	44800 10640158	97271 16450280	486733	1898032	4752476	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanoic acid (PFDA)		AveID	34262 7080425	64415 11538792	302427	1275776	3158094	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	15277 4211279	30316 7221428	182686	694281	1802851	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	19344 5591516	44930 9173589	242056	935700	2376399	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	14805 3584245	34358 5812610	166943	636880	1669717	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroundecanoic acid (PFUnA)		AveID	26530 5051597	48726 7810732	218231	822546	2103252	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate		AveID	97600 21858692	214741 32450794	1099095	4412145	10487942	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)		AveID	29913 6635970	56140 11350274	323392	1173427	3013785	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotridecanoic Acid (PFTriA)		AveID	37004 7847307	70835 12743041	353030	1346073	3391923	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	9052 2025257	19373 3357209	92073	376531	872520	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	111692 11955765	156018 20182542	648936	2337041	5739538	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	63194 12855038	116814 21808387	616691	2359770	5927518	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PFOA	Ave	6181350 6997865	6122262 5884851	6279614	6139471	6113537	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PFOA	Ave	4062250 4492903	3926283 3729652	4029236	3994638	3952401	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3-PFBS	13PFOA	Ave	86409 92353	82315 82834	85829	87216	83922	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2FTS	13PFOA	Ave	627830 668373	603123 563434	625222	623892	615130	2.34 2.34	2.34 2.34	2.34	2.34	2.34
13C2 PFHxA	13PFOA	Ave	4636047 4780636	4260718 4231897	4589544	4391788	4266668	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PFOA	Ave	290038 274179	297607 242908	260156	279991	282614	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 217359

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2018 18:39 Calibration End Date: 04/10/2018 19:26 Calibration ID: 38527

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C4-PFHpA	13PF OA	Ave	4543661 4543925	4420246 3828332	4371595	4282212	4357585	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	5146760 5430236	5080567 4559710	5290521	5007633	4919272	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2FTS	13PF OA	Ave	913336 950305	829435 769923	946554	892700	880882	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C4 PFOA	13PF OA	Ave	4463374 4688766	4186198 3866213	4391971	4283435	4288230	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFOS	13PF OA	Ave	3623690 3884830	3602676 3239063	3695054	3581436	3447017	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	3918358 3844023	3691890 3361051	3769499	3677661	3653281	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2FTS	13PF OA	Ave	1101720 1111203	1101099 929210	1105113	1093693	1063168	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C8 FOSA	13PF OA	Ave	4813462 4967723	4658336 4196317	4856180	4725832	4533137	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDA	13PF OA	Ave	3147491 3590754	2912736 2846573	3141564	3187733	2967373	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	1681961 1906740	1708589 1702670	1807153	1818526	1707705	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	1870983 1869135	1730407 1478400	1809132	1716798	1729345	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	2810450 2905024	2662627 2344065	2893419	2598322	2601195	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	2848895 3059706	2928766 2618174	3031255	3058842	2745849	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFTeDA	13PF OA	Ave	3701548 3906384	3578927 3344927	3729686	3824690	3639964	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFHxDA	13PF OA	Ave	6179539 6481798	5873165 5522067	6094708	5981114	5731595	2.50 2.50	2.50 2.50	2.50	2.50	2.50

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_002.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2018 18:39:37 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L1-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-Apr-2018 10:50:57 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: roycea Date: 11-Apr-2018 09:12:29

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.432	1.431	0.001	1.000	6181350	2.40		96.2	51986	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.432	1.432	0.0	1.000	56172	0.0245		97.9	31.7	M
4 Perfluoropentanoic acid										
262.90 > 219.00	1.706	1.699	0.007	1.000	51097	0.0264		106	41.9	
D 3 13C5-PFPeA										
267.90 > 223.00	1.706	1.699	0.007	0.560	4062250	2.45		98.1	95308	
D 47 13C3-PFBS										
301.90 > 83.00	1.742	1.735	0.007	1.000	86409	2.27		97.7	767	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.742	1.736	0.006	1.000	63156	0.0217		98.2	279	
298.90 > 99.00	1.742	1.736	0.006	1.000	27507		2.30(1.25-3.74)	98.2	389	
D 60 M2-4:2FTS										
329.00 > 81.00	1.953	1.950	0.003	1.000	627830	2.31		98.7	7913	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.953	1.950	0.003	1.000	12478	0.0209		89.7	710	
D 7 13C2 PFHxA										
315.00 > 270.00	1.986	1.985	0.001	1.000	4636047	2.53		101	101202	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.986	1.985	0.001	1.000	42489	0.0225		90.2	86.3	
313.00 > 119.00	1.986	1.985	0.001	1.000	5567		7.63(5.03-15.10)	90.2	74.7	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.008	2.008	0.0	1.000	63317	0.0238		102	545	
349.00 > 99.00	2.008	2.008	0.0	1.000	22154		2.86(1.36-4.07)	102	547	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.087	2.084	0.003	1.000	290038	2.56		102	7460	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.087	2.087	0.0	1.000	7766	0.0240		96.1	49.1	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.313	2.314	-0.001	1.000	40376	0.0222		88.8	47.6	
363.00 > 169.00	2.313	2.314	-0.001	1.000	16255		2.48(1.13-3.40)	88.8	62.1	
D 9 13C4-PFHpA										
367.00 > 322.00	2.313	2.314	-0.001	1.000	4543661	2.55		102	82661	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.326	2.323	0.003	1.000	65909	0.0268		118	260	
399.00 > 99.00	2.326	2.323	0.003	1.000	23111		2.85(1.50-4.49)	118	253	
D 11 18O2 PFHxS										
403.00 > 84.00	2.326	2.327	-0.001	1.000	5146760	2.34		98.9	93287	
65 Adona										
377.00 > 251.00	2.366	2.360	0.006	1.000	131051	0.0250		99.8	1983	
377.00 > 85.00	2.352	2.360	-0.008	0.994	76139		1.72(0.84-2.53)	99.8	2103	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.648	2.649	-0.001	1.000	14055	0.0216		91.2	251	
D 12 M2-6:2FTS										
429.00 > 81.00	2.648	2.649	-0.001	1.000	913336	2.39		101	13873	
D 14 13C4 PFOA										
417.00 > 372.00	2.679	2.673	0.006	1.000	4463374	2.52		101	72271	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.679	2.674	0.005	1.000	54434	0.0264		106	31.2	
413.00 > 169.00	2.679	2.674	0.005	1.000	29641		1.84(0.84-2.52)	106	116	M
* 62 13C2-PFOA										
415.00 > 370.00	2.679	2.674	0.005		4776998	2.50			72796	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.679	2.680	-0.001	1.000	43482	0.0216		90.8	413	
449.00 > 99.00	2.686	2.680	0.006	1.003	12993		3.35(1.94-5.82)	90.8	376	
D 18 13C4 PFOS										
503.00 > 80.00	3.039	3.041	-0.002	1.000	3623690	2.35		98.4	29511	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.039	3.042	-0.003	1.000	37213	0.0226		97.3	125	
499.00 > 99.00	3.039	3.042	-0.003	1.000	9288		4.01(2.31-6.93)	97.3	122	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.046	3.043	0.003	1.000	36180	0.0221		88.6	86.3	
463.00 > 169.00	3.046	3.043	0.003	1.000	9677		3.74(1.90-5.69)	88.6	183	
D 19 13C5 PFNA										
468.00 > 423.00	3.046	3.045	0.001	1.000	3918358	2.57		103	96245	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.253	3.253	0.0	1.000	57962	0.0203		87.0	1598	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.389	3.388	0.001	1.000	30641	0.0253		105	390	
549.00 > 99.00	3.389	3.388	0.001	1.000	9777		3.13(1.33-3.97)	105	297	
D 26 M2-8:2FTS										
529.00 > 81.00	3.389	3.390	-0.001	1.000	1101720	2.39		99.9	9765	
25 Sodium 1H,1H,2H,2H-perfluorodecane										M
527.00 > 507.00	3.398	3.393	0.005	1.003	16119	0.0277		116	867	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.397	0.001	1.000	4813462	2.50		100	67909	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.407	3.401	0.006	1.003	44800	0.0230		92.0	1056	
D 23 13C2 PFDA										
515.00 > 470.00	3.398	3.401	-0.003	1.000	3147491	2.46		98.3	66677	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.407	3.402	0.005	1.003	34262	0.0264		106	145	
513.00 > 169.00	3.407	3.402	0.005	1.003	5026		6.82(2.36-7.09)	106	79.2	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.557	3.553	0.004	1.000	1681961	2.32		92.7	20302	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.557	3.558	-0.001	1.000	15277	0.0228		91.1	111	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.719	3.715	0.004	1.000	19344	0.0197		81.5	163	
599.00 > 99.00	3.708	3.715	-0.007	0.997	6967		2.78(1.39-4.16)	81.5	357	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.719	3.722	-0.003	1.000	1870983	2.61		104	18488	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.730	3.727	0.003	1.003	14805	0.0212		84.7	220	
D 30 13C2 PFUnA										
565.00 > 520.00	3.730	3.727	0.003	1.000	2810450	2.54		102	70104	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.730	3.727	0.003	1.000	26530	0.0279		112	97.5	
563.00 > 169.00	3.730	3.727	0.003	1.000	6718		3.95(2.12-6.36)	112	163	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.886	3.883	0.003	1.000	97600	0.0221		93.9	2230	
D 36 13C2 PFDoA										
615.00 > 570.00	4.019	4.017	0.002	1.000	2848895	2.39		95.5	25147	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.019	4.020	-0.001	1.000	29913	0.0252		101	33.4	
613.00 > 169.00	4.019	4.020	-0.001	1.000	6518		4.59(2.13-6.40)	101	83.8	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.281	4.278	0.003	1.000	37004	0.0267		107	34.1	
663.00 > 169.00	4.281	4.278	0.003	1.000	11098		3.33(1.25-3.76)	107	130	M
D 43 13C2-PFTeDA										
715.00 > 670.00	4.511	4.513	-0.002	1.000	3701548	2.45		97.9	26989	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.521	4.513	0.008	1.002	9052	0.0243		97.4	86.8	
713.00 > 219.00	4.511	4.513	-0.002	1.000	5901		1.53(0.71-2.13)	97.4	99.4	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.913	4.918	-0.005	1.000	6179539	2.51		100	17318	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.922	4.920	0.002	1.002	111692	0.0254		102	37.2	
813.00 > 169.00	4.913	4.920	-0.007	1.000	18001		6.20(2.86-8.58)	102	160	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.262	5.268	-0.006	1.000	63194	0.0255		102	18.7	
913.00 > 169.00	5.262	5.268	-0.006	1.000	7131		8.86(3.83-11.48)	102	64.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00005 Amount Added: 1.00 Units: mL

Report Date: 11-Apr-2018 10:50:59 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_002.d

Injection Date: 10-Apr-2018 18:39:37 Instrument ID: A8_N

Lims ID: IC L1 Full

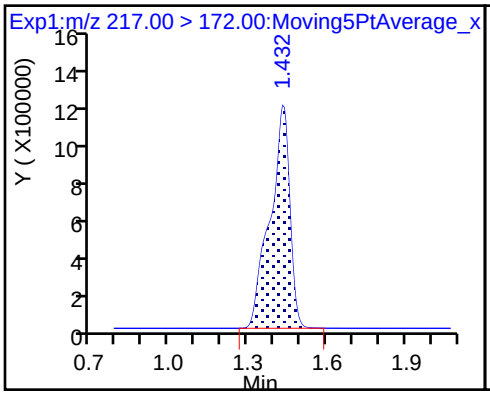
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2

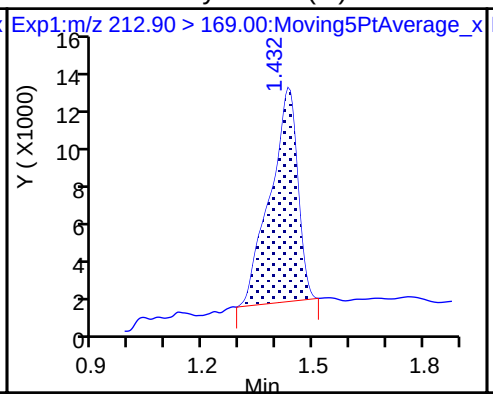
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

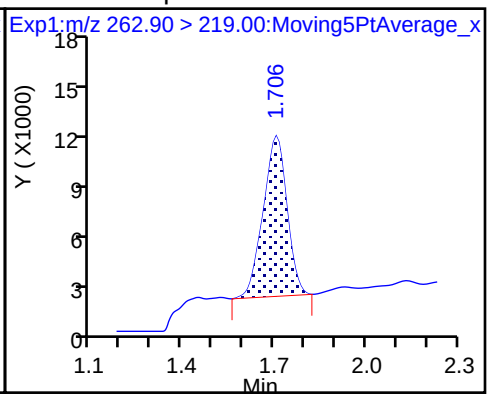
D 1 13C4 PFBA



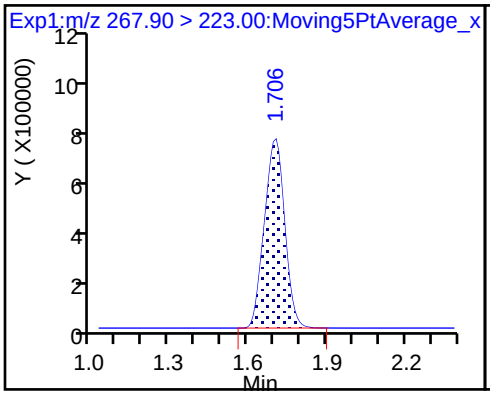
2 Perfluorobutyric acid (M)



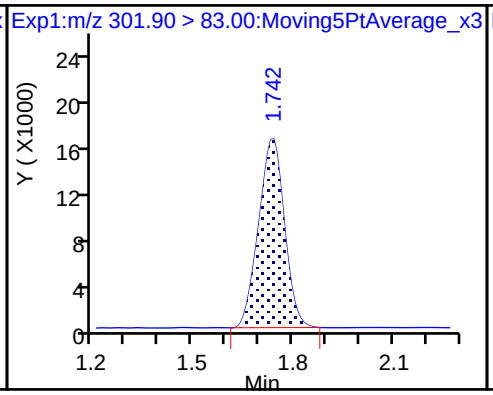
4 Perfluoropentanoic acid



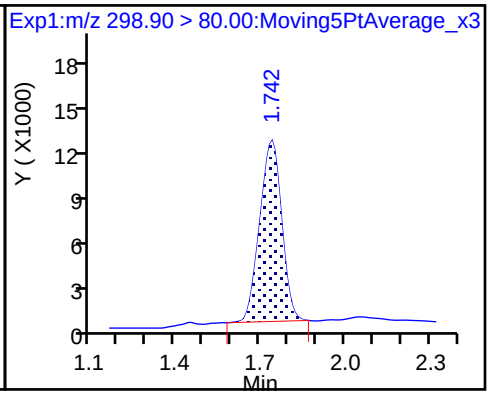
D 3 13C5-PFPeA



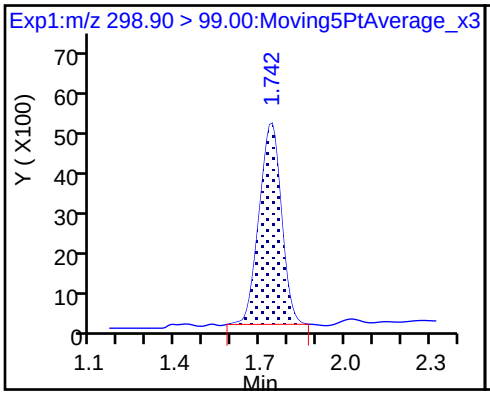
D 47 13C3-PFBS



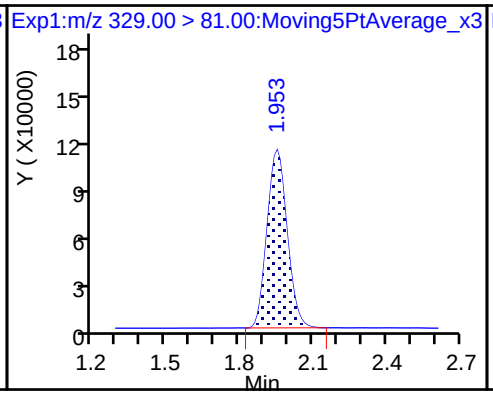
5 Perfluorobutanesulfonic acid



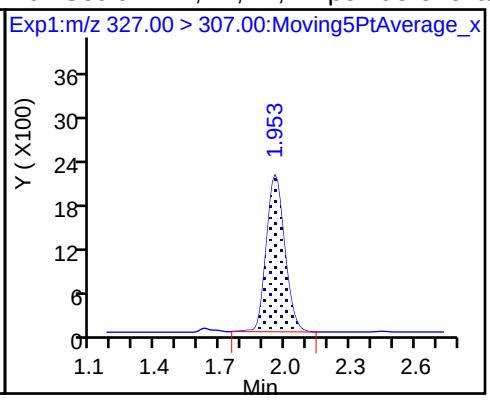
5 Perfluorobutanesulfonic acid



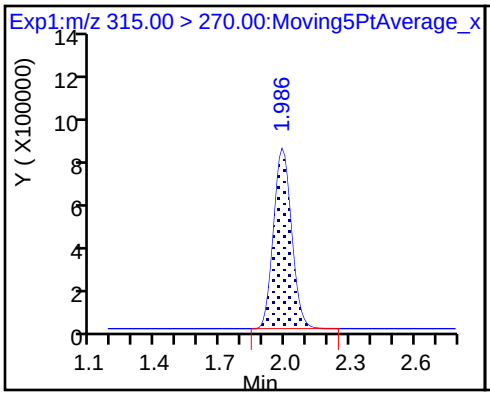
D 60 M2-4:2FTS



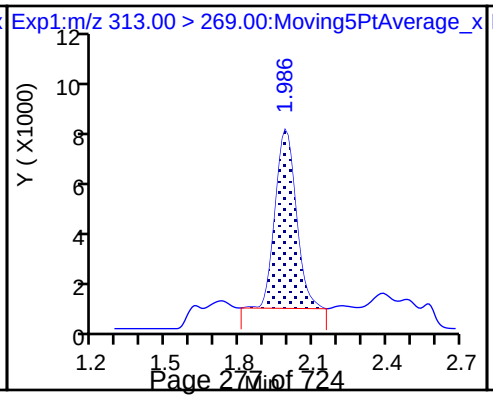
61 Sodium 1H,1H,2H,2H-perfluorohexane



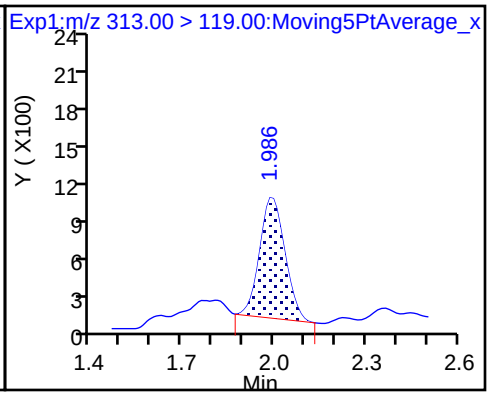
D 7 13C2 PFHxA



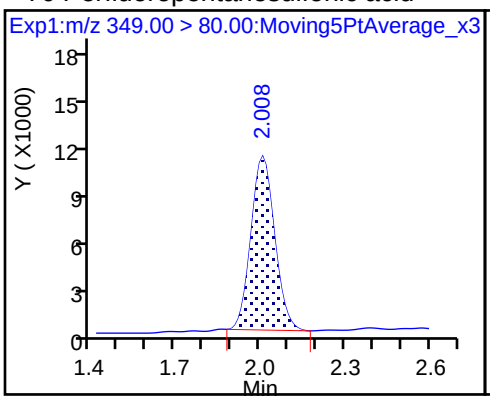
6 Perfluorohexanoic acid



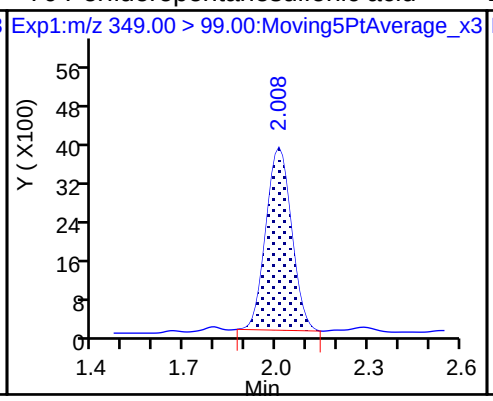
6 Perfluorohexanoic acid



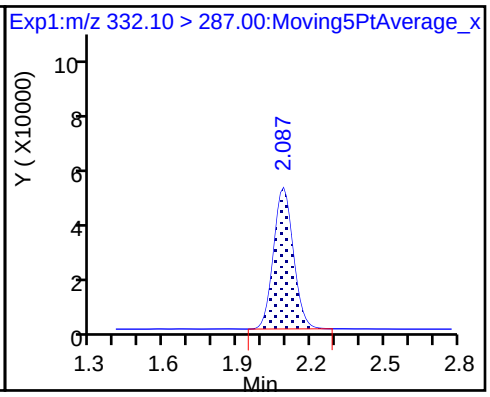
70 Perfluoropentanesulfonic acid



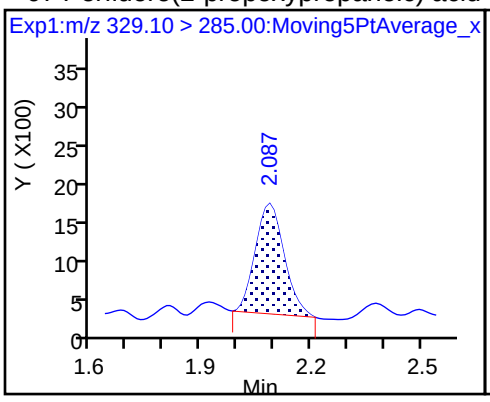
70 Perfluoropentanesulfonic acid



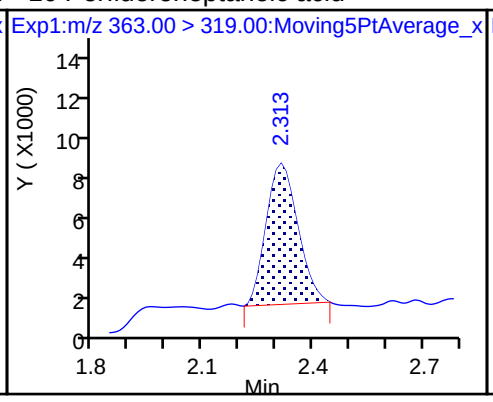
D 64 13C3 HFPO-DA



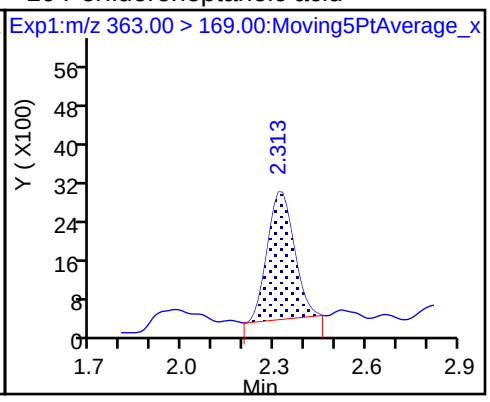
67 Perfluoro(2-propoxypropanoic) acid



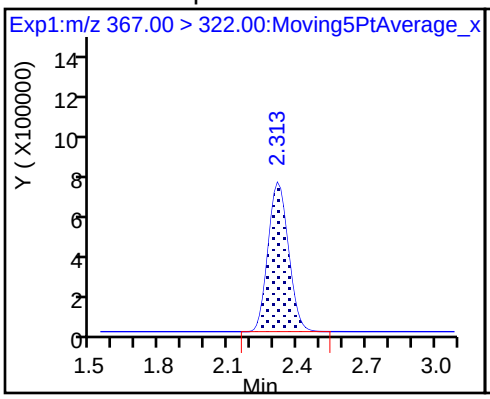
10 Perfluoroheptanoic acid



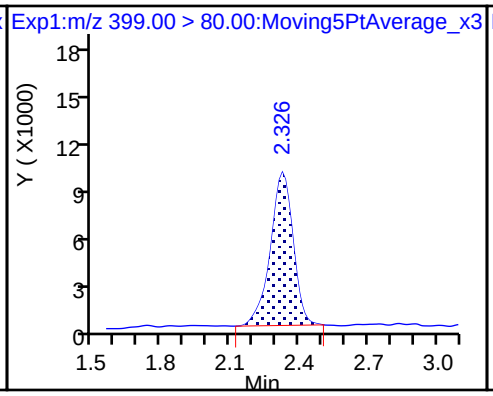
10 Perfluoroheptanoic acid



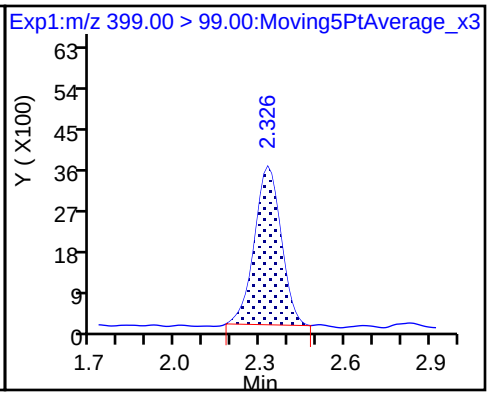
D 9 13C4-PFHpA



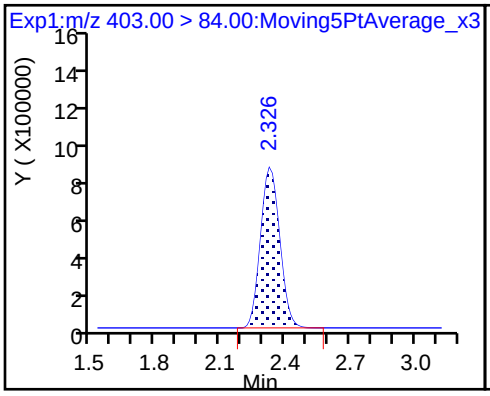
8 Perfluorohexanesulfonic acid



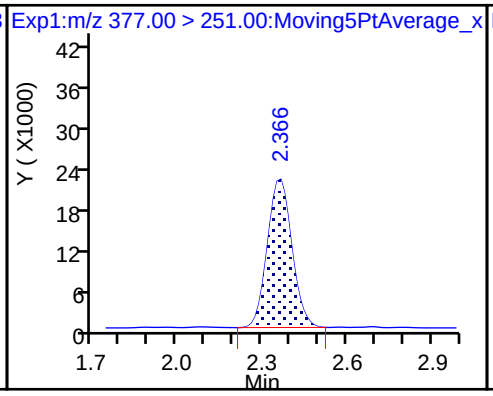
8 Perfluorohexanesulfonic acid



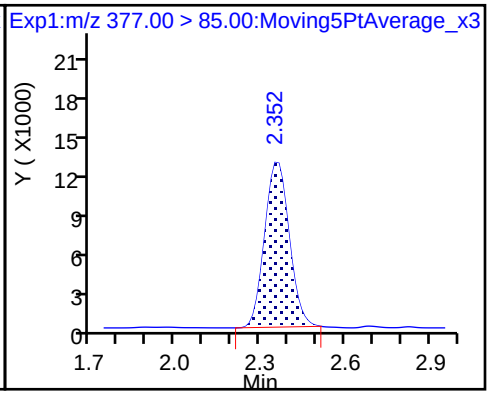
D 11 18O2 PFHxS



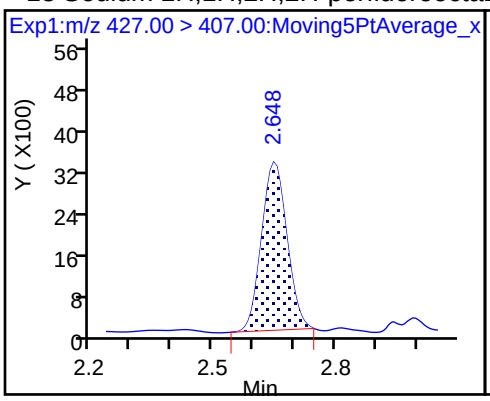
65 Adona



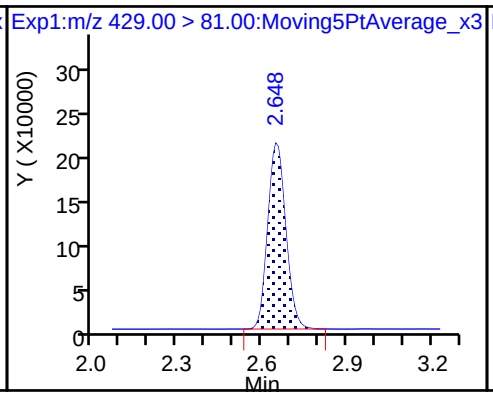
65 Adona



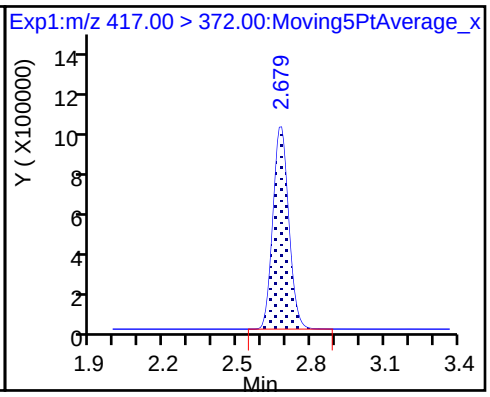
13 Sodium 1H,1H,2H,2H-perfluorooctane



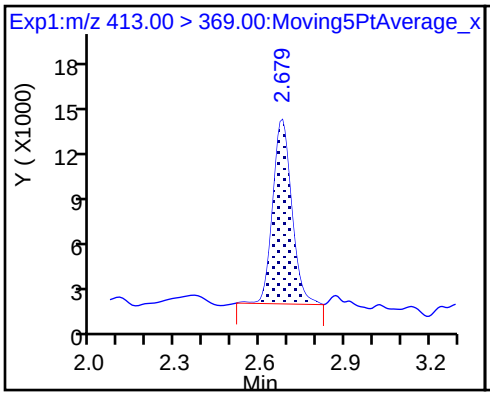
D 12 M2-6:2FTS



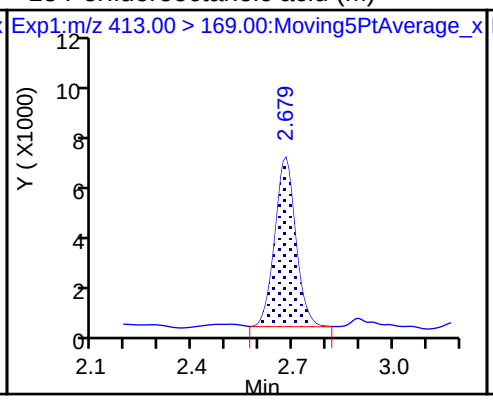
D 14 13C4 PFOA



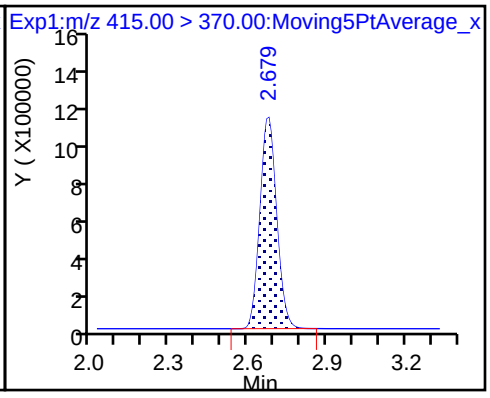
15 Perfluorooctanoic acid



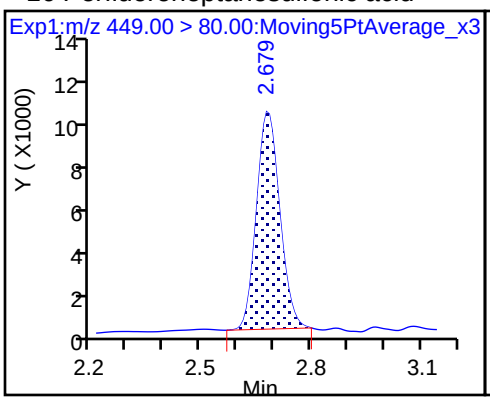
15 Perfluorooctanoic acid (M)



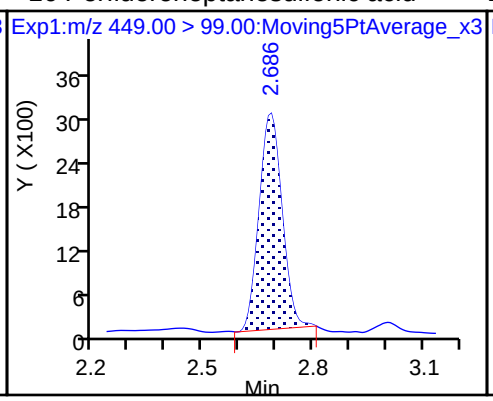
* 62 13C2-PFOA



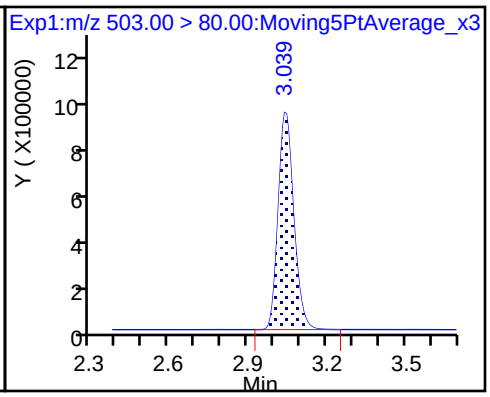
16 Perfluoroheptanesulfonic acid



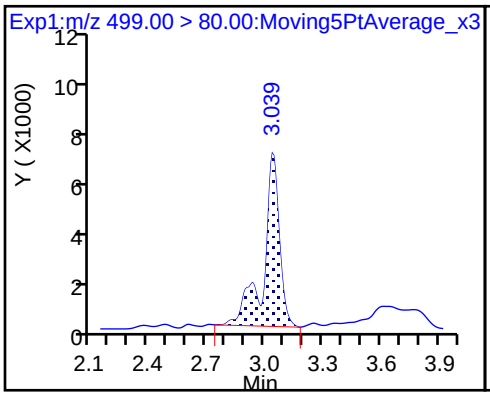
16 Perfluoroheptanesulfonic acid



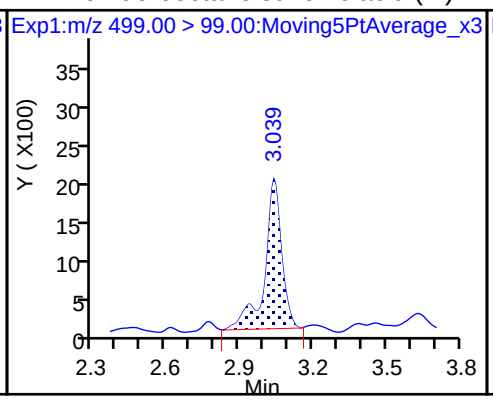
D 18 13C4 PFOS



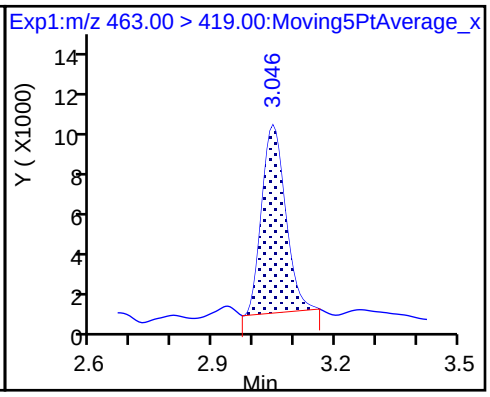
17 Perfluorooctane sulfonic acid



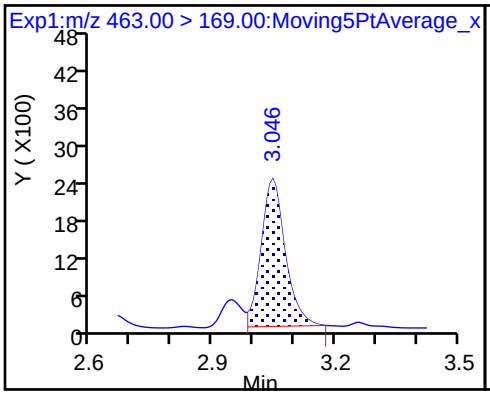
17 Perfluorooctane sulfonic acid (M)



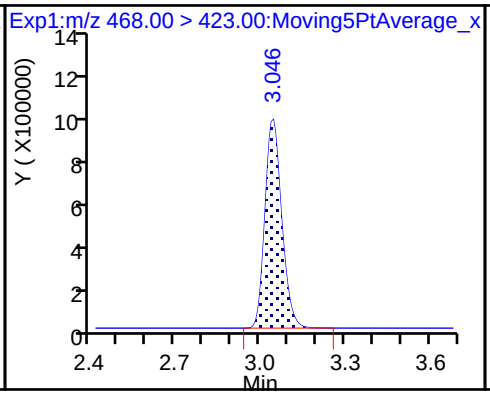
20 Perfluorononanoic acid



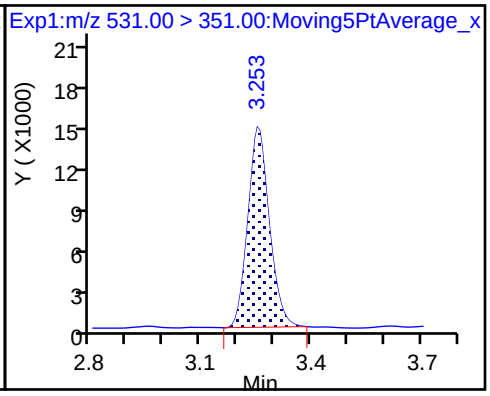
20 Perfluorononanoic acid



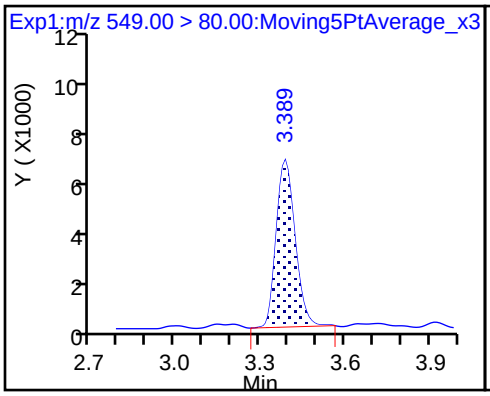
D 19 13C5 PFNA



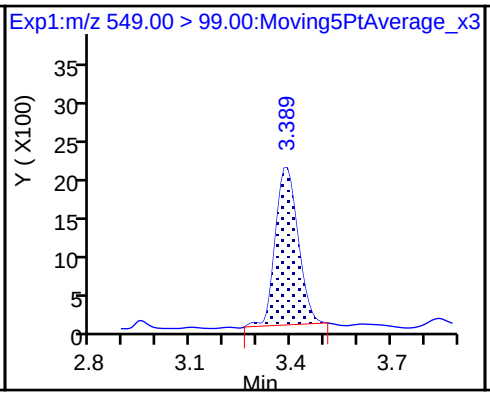
69 9-Chlorohexadecafluoro-3-oxanonane



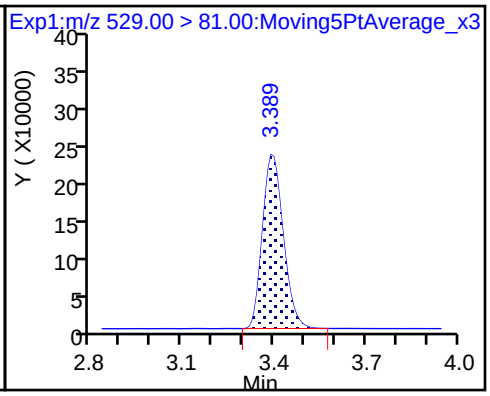
68 Perfluorononanesulfonic acid



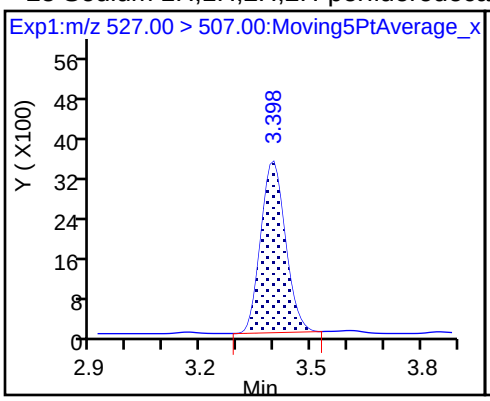
68 Perfluorononanesulfonic acid



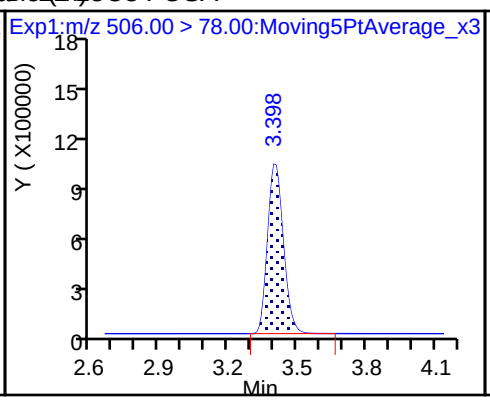
D 26 M2-8:2FTS



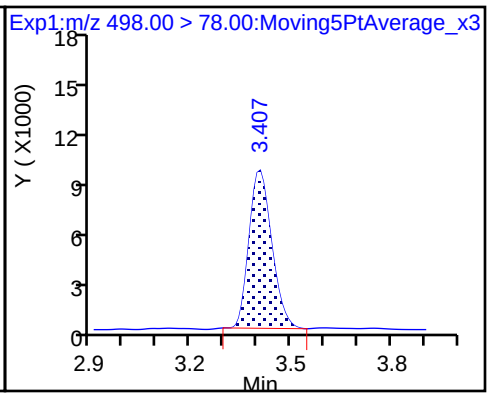
25 Sodium 1H,1H,2H,2H-perfluorodecane(1)



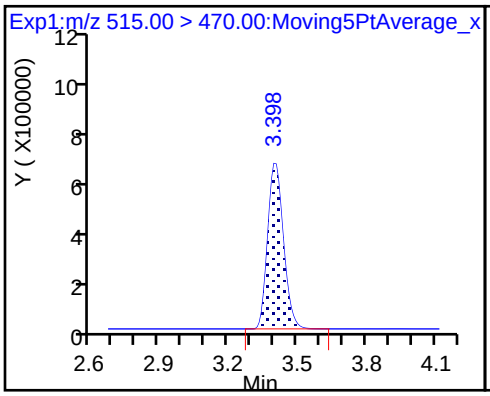
D 21 13C8 FOSA



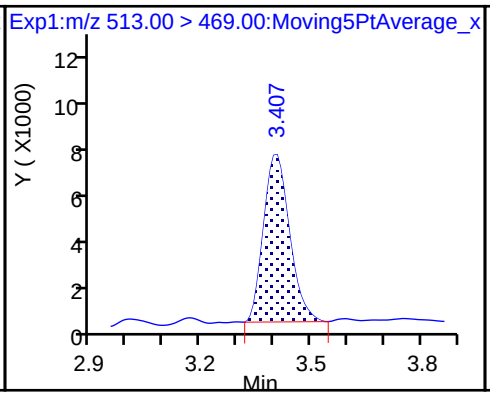
22 Perfluorooctane Sulfonamide



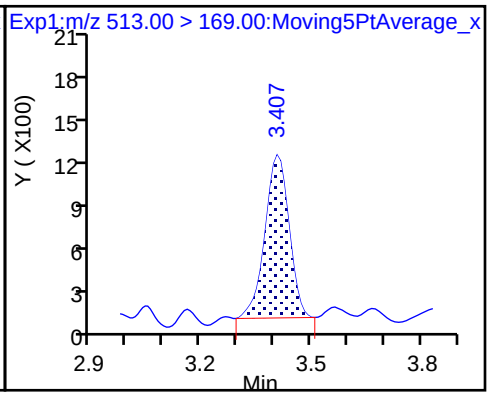
D 23 13C2 PFDA



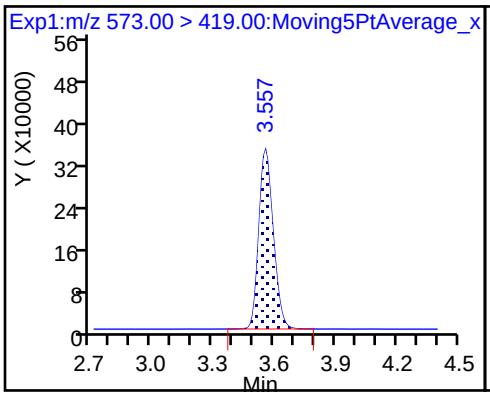
24 Perfluorodecanoic acid



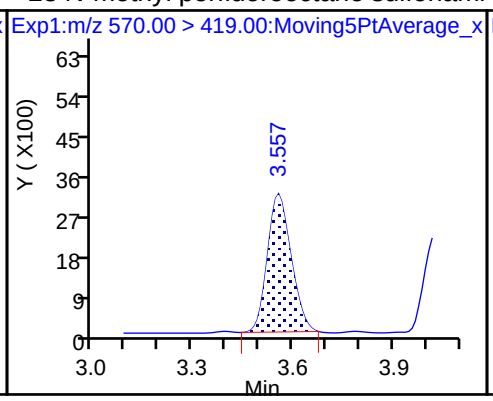
24 Perfluorodecanoic acid



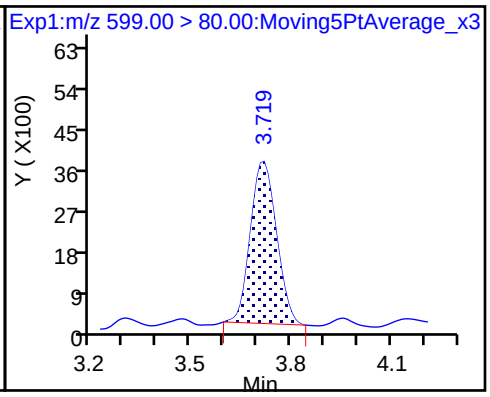
D 27 d3-NMeFOSAA



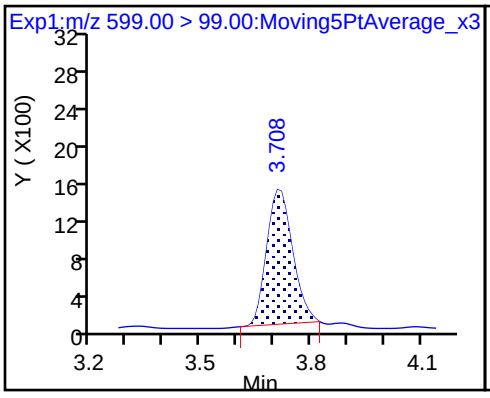
28 N-methyl perfluorooctane sulfonami



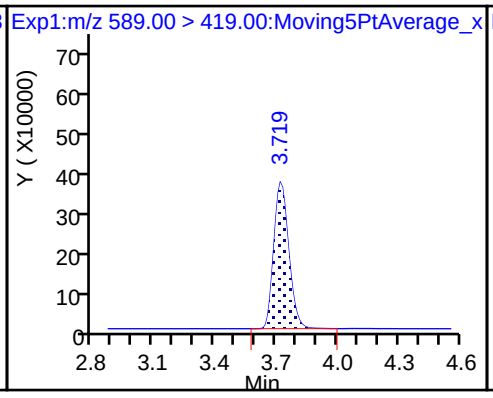
29 Perfluorodecane Sulfonic acid



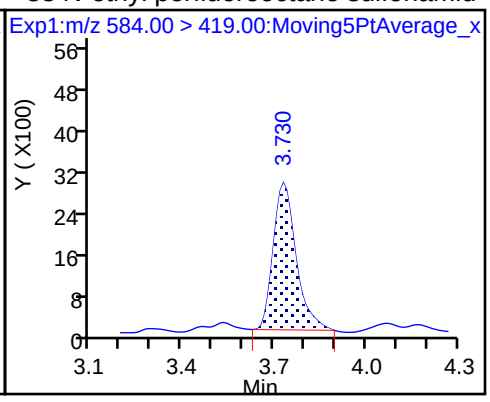
29 Perfluorodecane Sulfonic acid



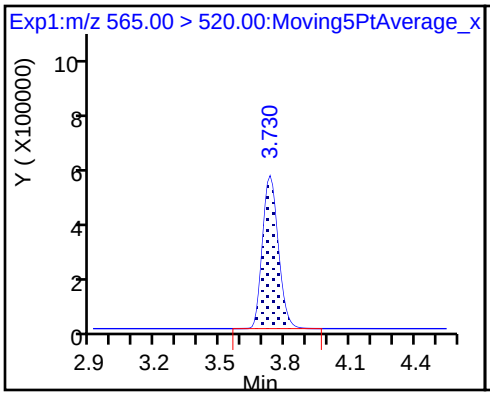
D 32 d5-NEtFOSAA



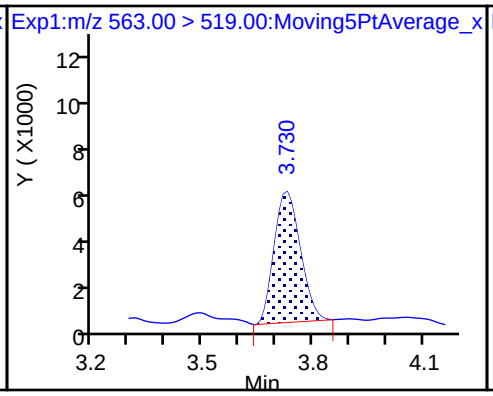
33 N-ethyl perfluorooctane sulfonamid



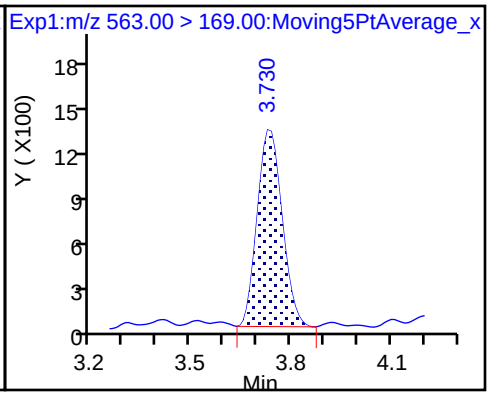
D 30 13C2 PFUnA



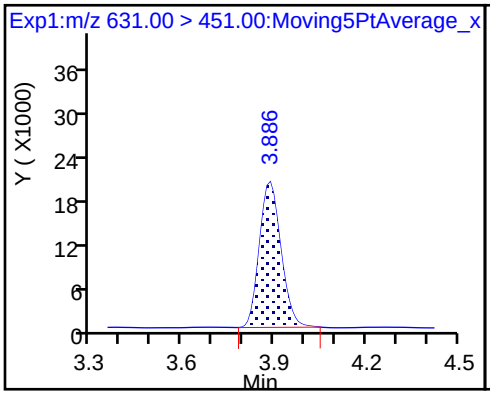
31 Perfluoroundecanoic acid



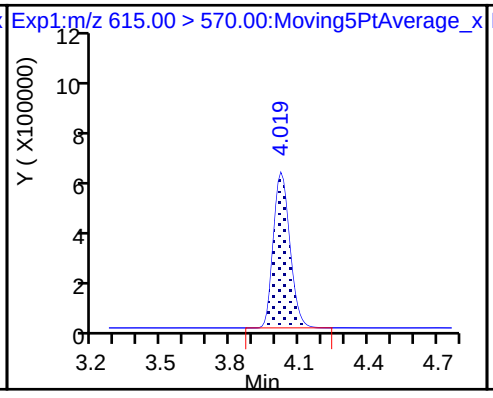
31 Perfluoroundecanoic acid



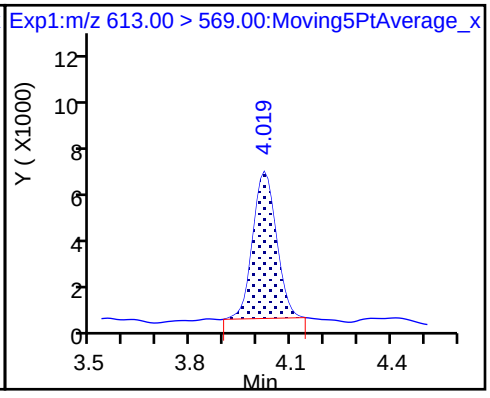
66 11-Chloroeicosafluoro-3-oxaundecan



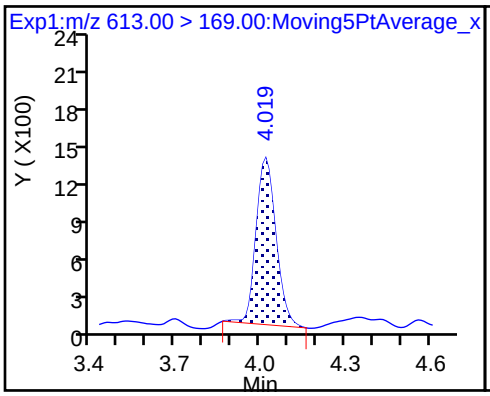
D 36 13C2 PFDoA



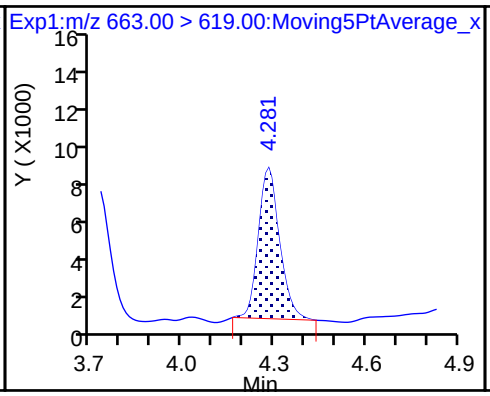
37 Perfluorododecanoic acid



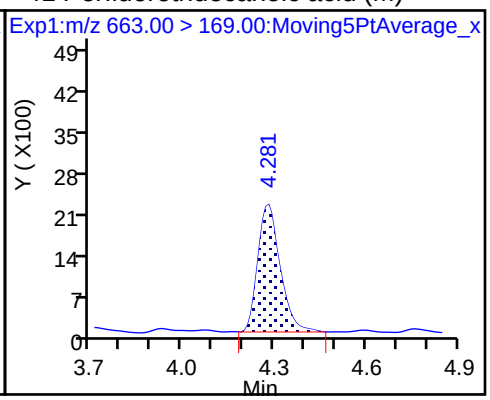
37 Perfluorododecanoic acid



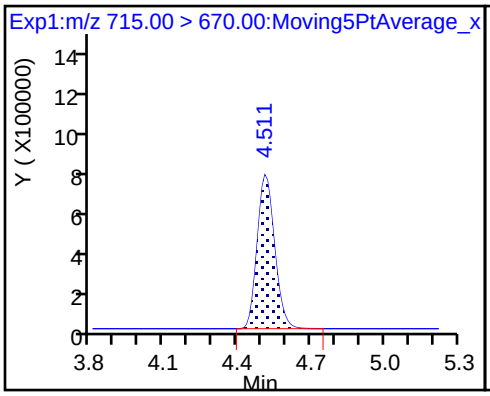
41 Perfluorotridecanoic acid



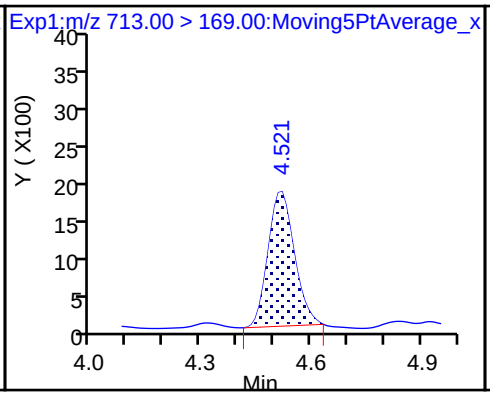
41 Perfluorotridecanoic acid (M)



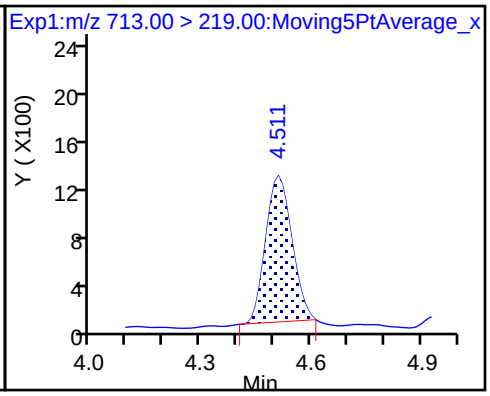
D 43 13C2-PFTeDA



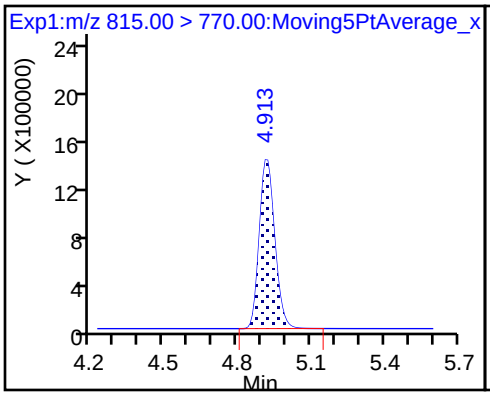
42 Perfluorotetradecanoic acid



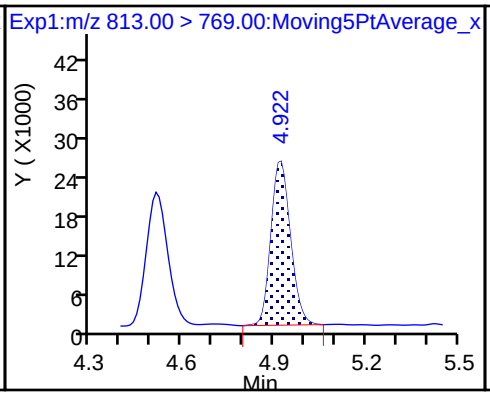
42 Perfluorotetradecanoic acid



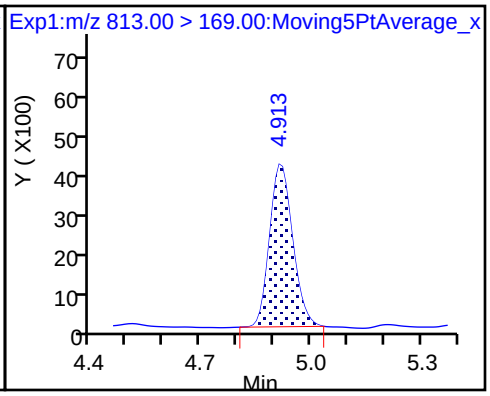
D 44 13C2-PFHxDA



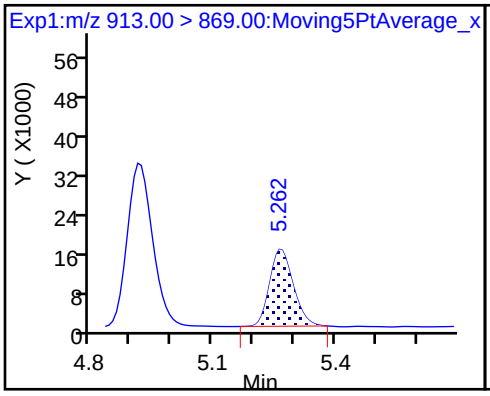
45 Perfluorohexadecanoic acid



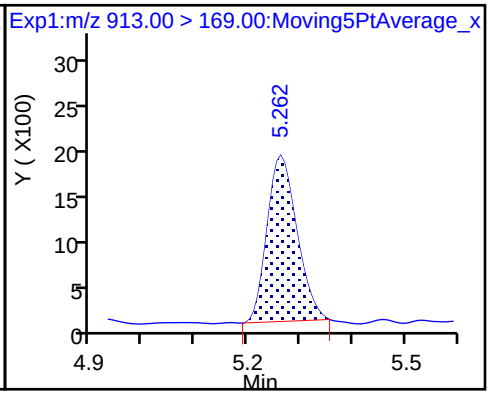
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

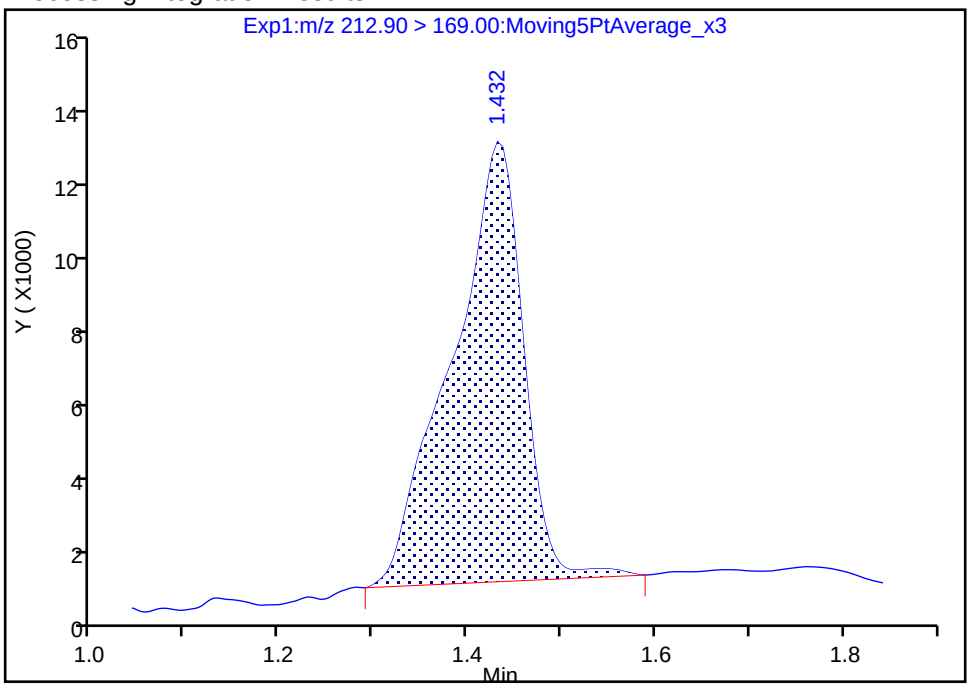
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_002.d
Injection Date: 10-Apr-2018 18:39:37 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

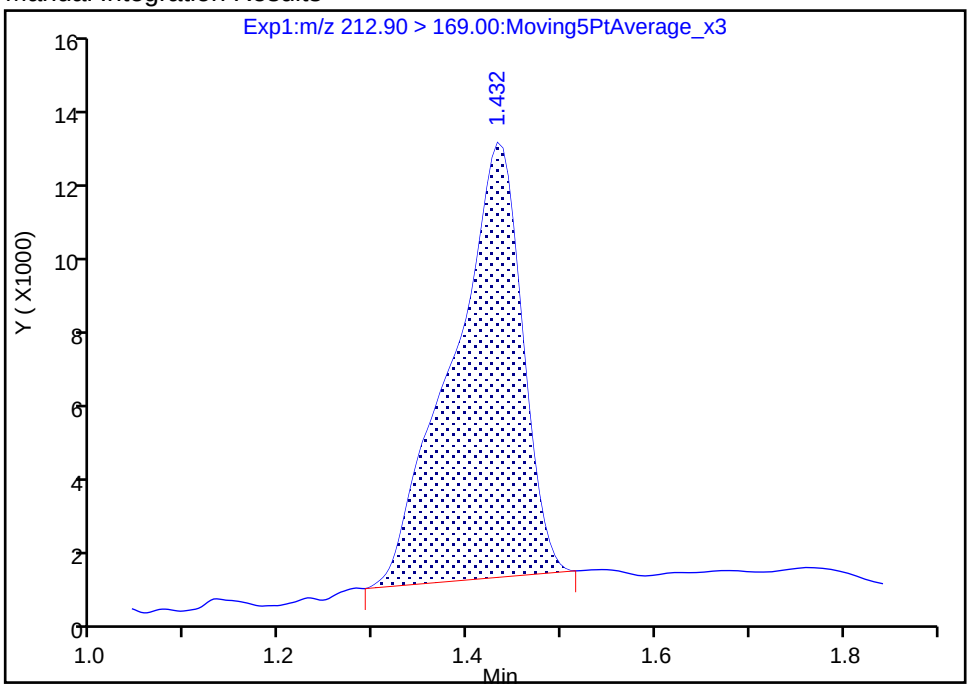
Processing Integration Results

RT: 1.43
Area: 58250
Amount: 0.025241
Amount Units: ng/ml



Manual Integration Results

RT: 1.43
Area: 56172
Amount: 0.024466
Amount Units: ng/ml



Reviewer: roycea, 11-Apr-2018 09:10:46
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

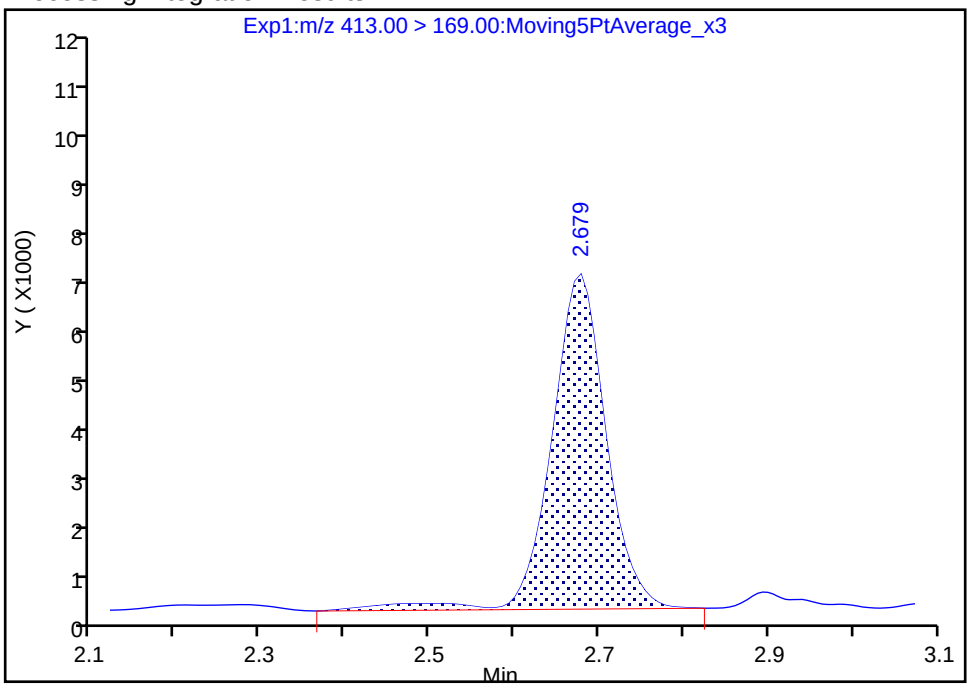
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_002.d
Injection Date: 10-Apr-2018 18:39:37 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

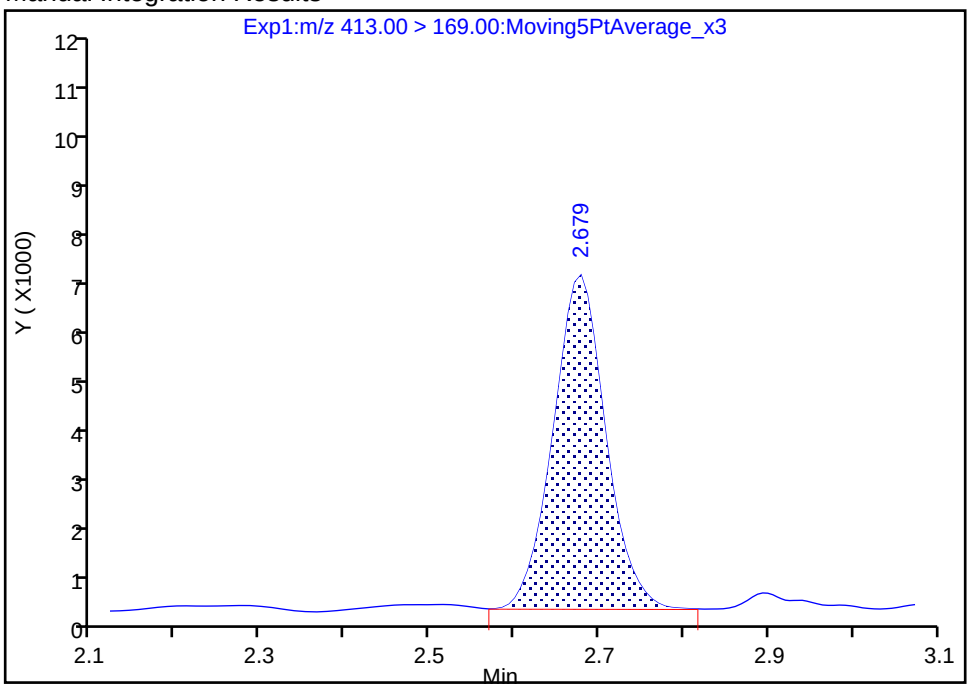
Processing Integration Results

RT: 2.68
Area: 30899
Amount: 0.026388
Amount Units: ng/ml



Manual Integration Results

RT: 2.68
Area: 29641
Amount: 0.026388
Amount Units: ng/ml



Reviewer: roycea, 11-Apr-2018 09:10:16
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

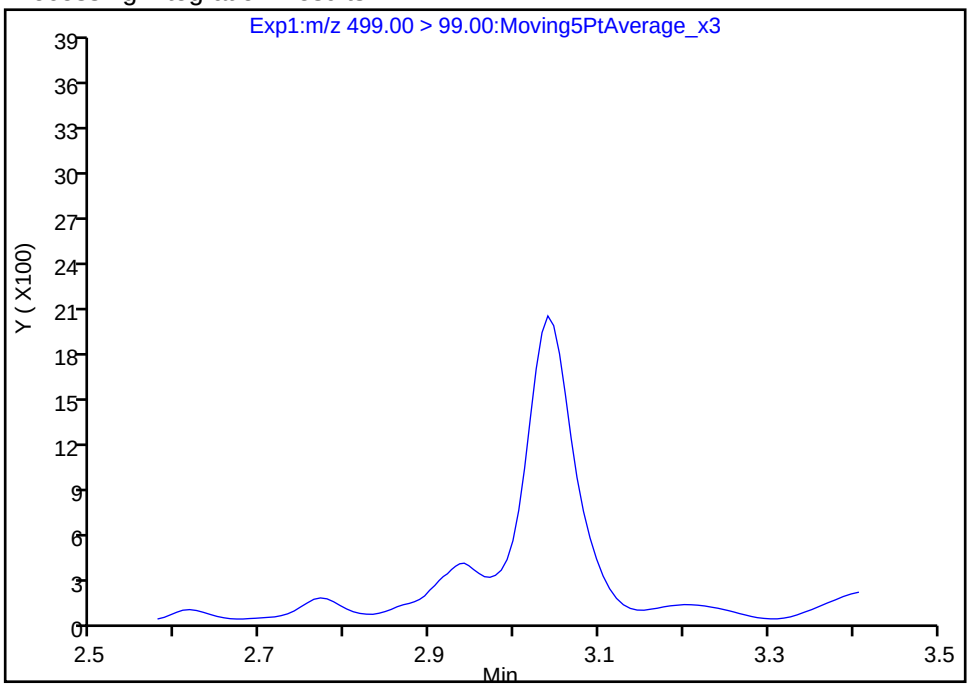
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_002.d
Injection Date: 10-Apr-2018 18:39:37 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

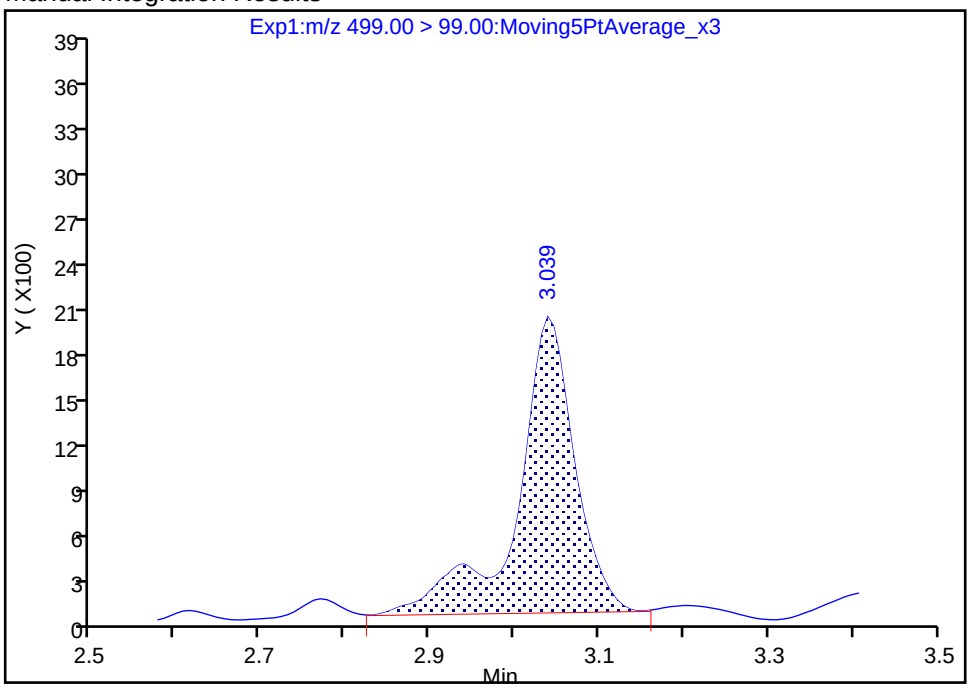
Processing Integration Results

RT: 3.04
Area: 0
Amount: 0.022562
Amount Units: ng/ml



Manual Integration Results

RT: 3.04
Area: 9288
Amount: 0.022562
Amount Units: ng/ml



Reviewer: roycea, 11-Apr-2018 09:10:29
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

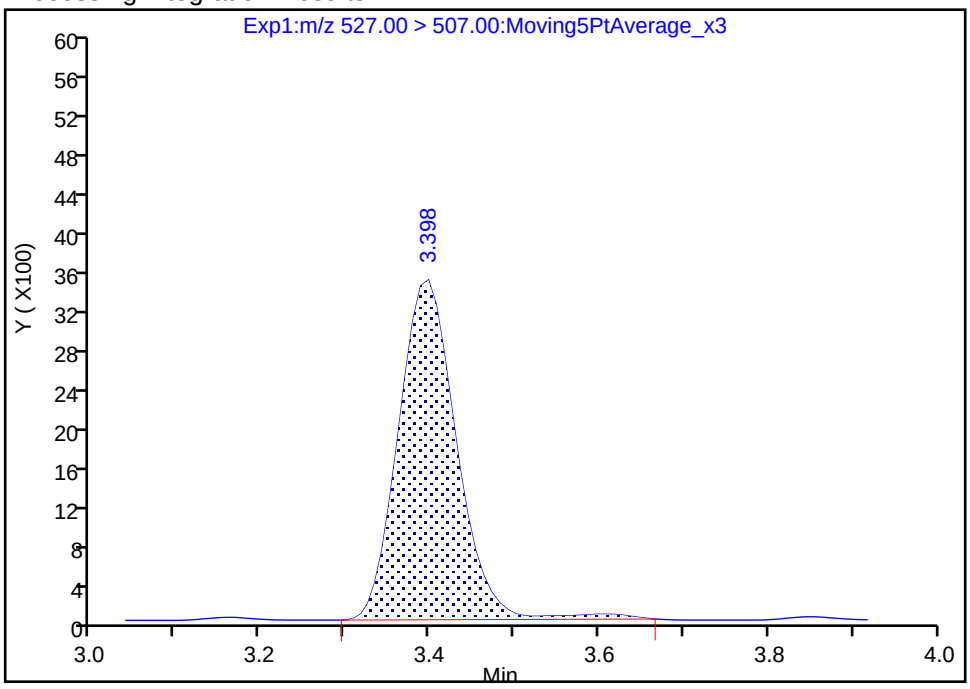
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_002.d
Injection Date: 10-Apr-2018 18:39:37 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

25 Sodium 1H,1H,2H,2H-perfluorodecane sulfonate, CAS: 39108-34-4

Signal: 1

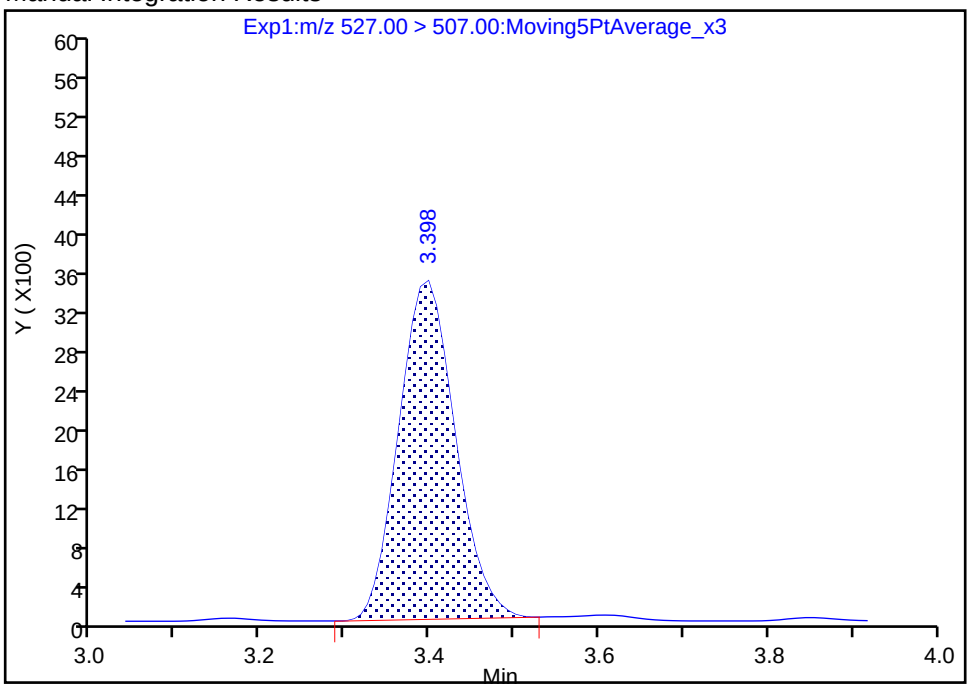
Processing Integration Results

RT: 3.40
Area: 16622
Amount: 0.028410
Amount Units: ng/ml



Manual Integration Results

RT: 3.40
Area: 16119
Amount: 0.027692
Amount Units: ng/ml



Reviewer: roycea, 11-Apr-2018 09:11:26
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

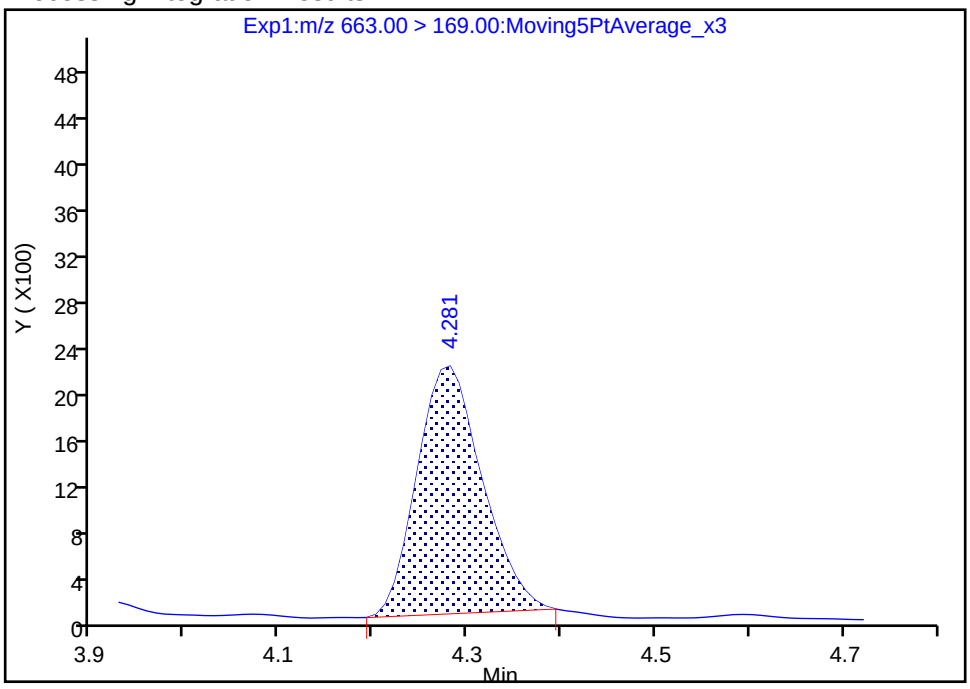
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_002.d
Injection Date: 10-Apr-2018 18:39:37 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

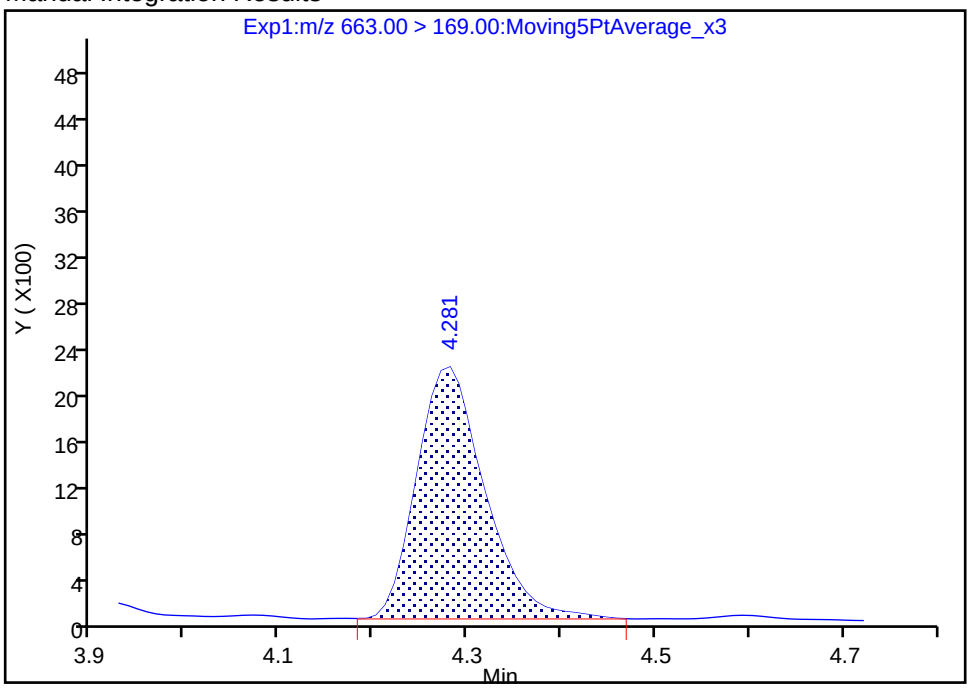
Processing Integration Results

RT: 4.28
Area: 10435
Amount: 0.026719
Amount Units: ng/ml



Manual Integration Results

RT: 4.28
Area: 11098
Amount: 0.026719
Amount Units: ng/ml



Reviewer: roycea, 11-Apr-2018 09:11:49
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_003.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2018 18:47:28 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L2-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-Apr-2018 10:51:01 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: roycea Date: 11-Apr-2018 09:13:40

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.436	1.431	0.005	1.000	6122262	2.47		98.6	45490	
2 Perfluorobutyric acid										
212.90 > 169.00	1.436	1.432	0.004	1.000	112834	0.0496		99.2	64.1	
D 3 13C5-PFPeA										
267.90 > 223.00	1.703	1.699	0.004	0.558	3926283	2.45		98.1	81057	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.703	1.699	0.004	1.000	95082	0.0508		102	82.0	
D 47 13C3-PFBS										
301.90 > 83.00	1.739	1.735	0.004	1.000	82315	2.24		96.4	726	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.739	1.736	0.003	1.000	129549	0.0467		106	581	
298.90 > 99.00	1.739	1.736	0.003	1.000	54808		2.36(1.25-3.74)	106	750	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.950	1.950	0.0	1.000	28749	0.0506		108	1649	
D 60 M2-4:2FTS										
329.00 > 81.00	1.950	1.950	0.0	1.000	603123	2.29		98.2	6638	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.993	1.985	0.008	1.000	88785	0.0513		103	187	
313.00 > 119.00	1.993	1.985	0.008	1.000	8724		10.18(5.03-15.10)	103	121	
D 7 13C2 PFHxA										
315.00 > 270.00	1.993	1.985	0.008	1.000	4260718	2.41		96.3	104826	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.016	2.008	0.008	1.000	122406	0.0483		103	896	
349.00 > 99.00	2.004	2.008	-0.004	0.994	46264		2.65(1.36-4.07)	103	913	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.084	2.084	0.0	1.000	297607	2.72		109	6443	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.095	2.087	0.008	1.005	13126	0.0396		79.2	93.1	
D 9 13C4-PFHpA										
367.00 > 322.00	2.321	2.314	0.007	1.000	4420246	2.57		103	71318	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.321	2.314	0.007	1.000	79218	0.0448		89.5	85.7	
363.00 > 169.00	2.321	2.314	0.007	1.000	35808		2.21(1.13-3.40)	89.5	164	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.321	2.323	-0.002	0.994	118037	0.0485		107	408	
399.00 > 99.00	2.334	2.323	0.011	1.000	37872		3.12(1.50-4.49)	107	437	
D 11 18O2 PFHxS										
403.00 > 84.00	2.334	2.327	0.007	1.000	5080567	2.39		101	118670	
65 Adona										
377.00 > 251.00	2.360	2.360	0.0	1.000	264804	0.0507		101	3382	
377.00 > 85.00	2.360	2.360	0.0	1.000	154875		1.71(0.84-2.53)	101	3689	
D 12 M2-6:2FTS										
429.00 > 81.00	2.653	2.649	0.004	1.000	829435	2.25		94.6	10696	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.653	2.649	0.004	1.000	32205	0.0545		115	547	
D 14 13C4 PFOA										
417.00 > 372.00	2.675	2.673	0.002	1.000	4186198	2.45		97.8	105368	
* 62 13C2-PFOA										
415.00 > 370.00	2.675	2.674	0.001		4613805	2.50			88596	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.675	2.674	0.001	1.000	101372	0.0524		105	60.7	
413.00 > 169.00	2.675	2.674	0.001	1.000	56802		1.78(0.84-2.52)	105	205	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.683	2.680	0.003	1.000	93755	0.0468		98.4	815	
449.00 > 99.00	2.683	2.680	0.003	1.000	23808		3.94(1.94-5.82)	98.4	554	
D 18 13C4 PFOS										
503.00 > 80.00	3.043	3.041	0.002	1.000	3602676	2.42		101	24509	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.043	3.042	0.001	1.000	74043	0.0452		97.3	267	
499.00 > 99.00	3.050	3.042	0.008	1.002	15924		4.65(2.31-6.93)	97.3	249	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.050	3.043	0.007	1.000	81721	0.0531		106	203	
463.00 > 169.00	3.050	3.043	0.007	1.000	20435		4.00(1.90-5.69)	106	366	
D 19 13C5 PFNA										
468.00 > 423.00	3.050	3.045	0.005	1.000	3691890	2.51		100	88911	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.257	3.253	0.004	1.000	130088	0.0458		98.2	3608	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.395	3.388	0.007	1.000	58744	0.0488		102	794	
549.00 > 99.00	3.395	3.388	0.007	1.000	21166		2.78(1.33-3.97)	102	527	
D 26 M2-8:2FTS										
529.00 > 81.00	3.395	3.390	0.005	1.000	1101099	2.48		103	10682	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.395	3.393	0.002	1.000	27294	0.0469		97.9	1136	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.404	3.397	0.007	1.000	4658336	2.51		100	52005	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.404	3.401	0.003	1.000	97271	0.0516		103	2312	
D 23 13C2 PFDA										
515.00 > 470.00	3.404	3.401	0.003	1.000	2912736	2.36		94.2	67644	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.404	3.402	0.002	1.000	64415	0.0536		107	275	
513.00 > 169.00	3.404	3.402	0.002	1.000	11191		5.76(2.36-7.09)	107	302	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.553	3.553	0.0	1.000	1708589	2.44		97.5	20700	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.563	3.558	0.005	1.003	30316	0.0445		89.0	308	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.716	3.715	0.001	1.000	44930	0.0459		95.2	493	
599.00 > 99.00	3.716	3.715	0.001	1.000	14514		3.10(1.39-4.16)	95.2	960	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.727	3.722	0.005	1.000	1730407	2.50		100	16886	
D 30 13C2 PFUnA										
565.00 > 520.00	3.727	3.727	0.0	1.000	2662627	2.50		99.8	58782	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.727	3.727	0.0	1.000	34358	0.0531		106	684	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.737	3.727	0.010	1.003	48726	0.0541		108	200	
563.00 > 169.00	3.727	3.727	0.0	1.000	13759		3.54(2.12-6.36)	108	342	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.883	3.883	0.0	1.000	214741	0.0489		104	3908	
D 36 13C2 PFDoA										
615.00 > 570.00	4.027	4.017	0.010	1.000	2928766	2.54		102	34702	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.027	4.020	0.007	1.000	56140	0.0460		91.9	63.9	
613.00 > 169.00	4.027	4.020	0.007	1.000	16582		3.39(2.13-6.40)	91.9	256	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.279	4.278	0.001	1.000	70835	0.0498		99.5	65.7	
663.00 > 169.00	4.279	4.278	0.001	1.000	22777		3.11(1.25-3.76)	99.5	277	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.520	4.513	0.007	1.000	3578927	2.45		98.0	23308	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.510	4.513	-0.003	0.998	19373	0.0539		108	235	
713.00 > 219.00	4.510	4.513	-0.003	0.998	13443		1.44(0.71-2.13)	108	289	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.921	4.918	0.003	1.000	5873165	2.47		98.8	20125	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.921	4.920	0.001	1.000	156018	0.0479		95.7	51.2	
813.00 > 169.00	4.921	4.920	0.001	1.000	25268		6.17(2.86-8.58)	95.7	222	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.269	5.268	0.001	1.000	116814	0.0495		99.0	34.4	
913.00 > 169.00	5.269	5.268	0.001	1.000	14479		8.07(3.83-11.48)	99.0	141	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00004 Amount Added: 1.00 Units: mL

Report Date: 11-Apr-2018 10:51:02 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_003.d

Injection Date: 10-Apr-2018 18:47:28 Instrument ID: A8_N

Lims ID: IC L2 Full

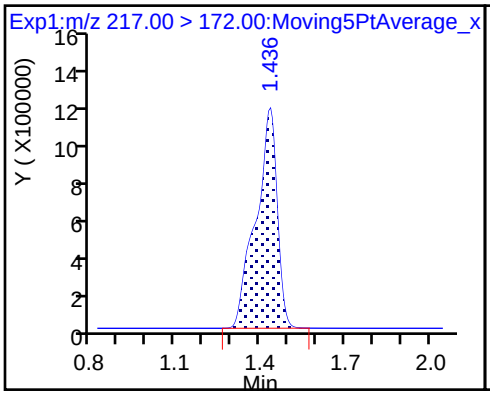
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3

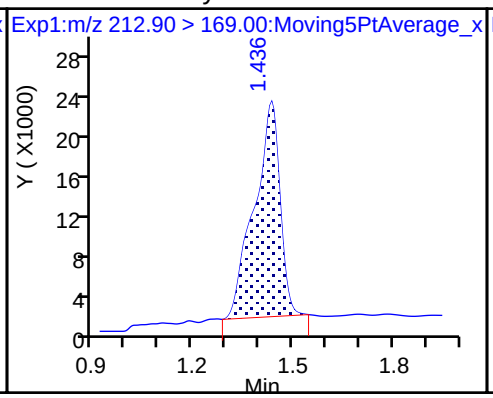
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

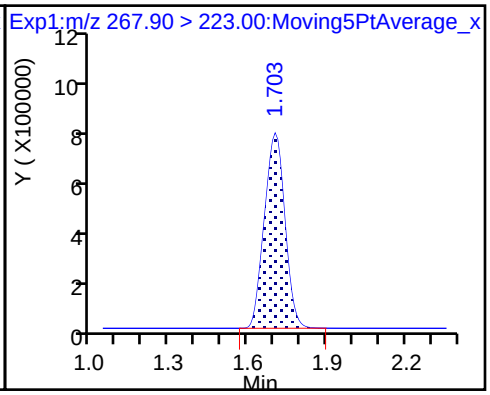
D 1 13C4 PFBA



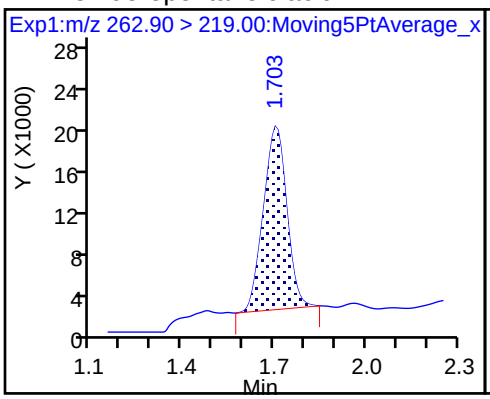
2 Perfluorobutyric acid



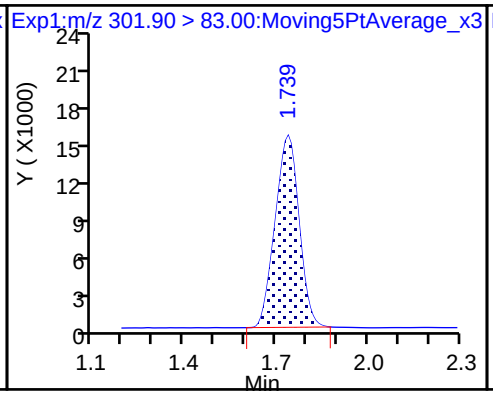
D 3 13C5-PFPeA



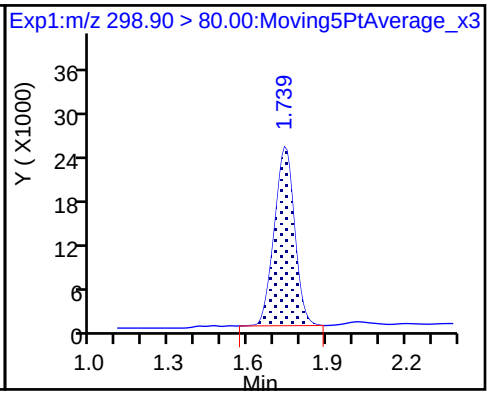
4 Perfluoropentanoic acid



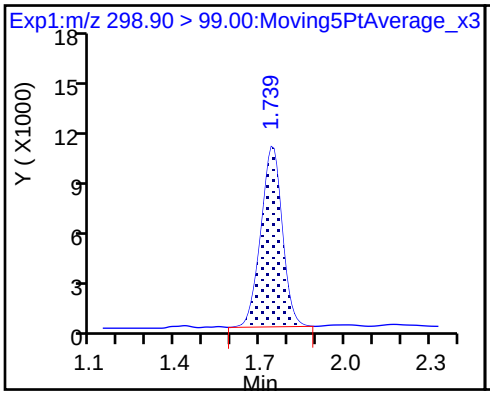
D 47 13C3-PFBS



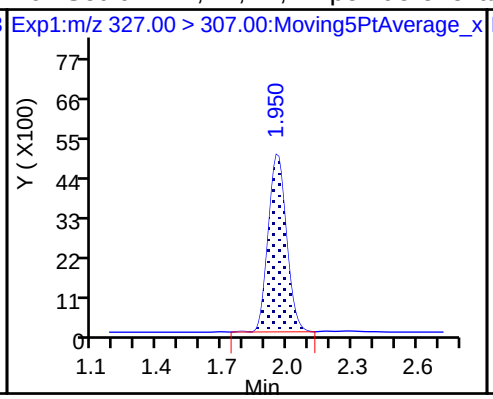
5 Perfluorobutanesulfonic acid



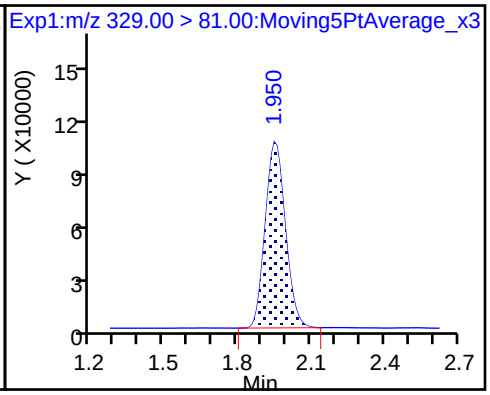
5 Perfluorobutanesulfonic acid



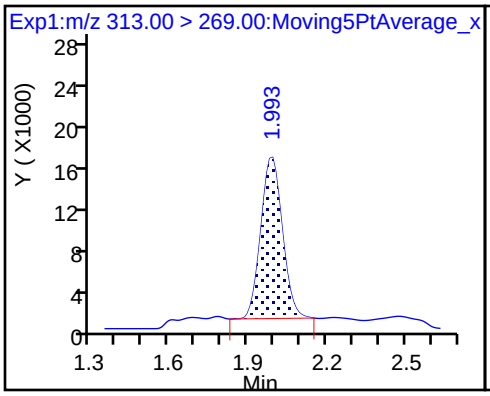
61 Sodium 1H,1H,2H,2H-perfluorohexane



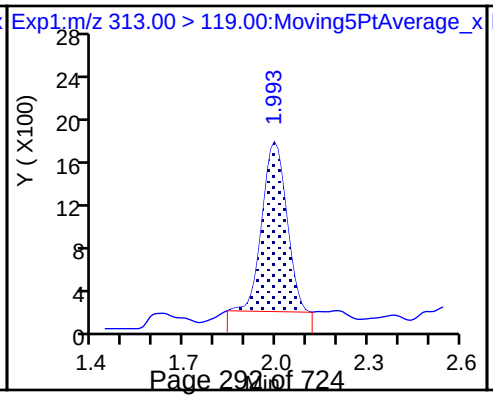
D 60 M2-4:2FTS



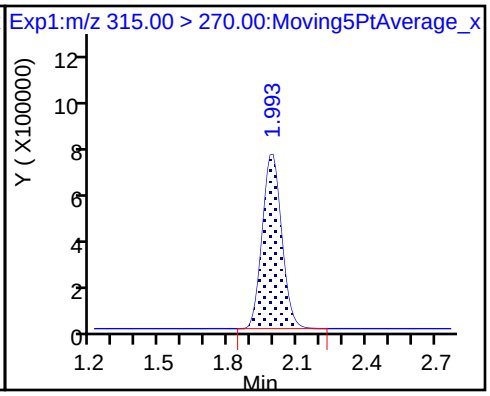
6 Perfluorohexanoic acid



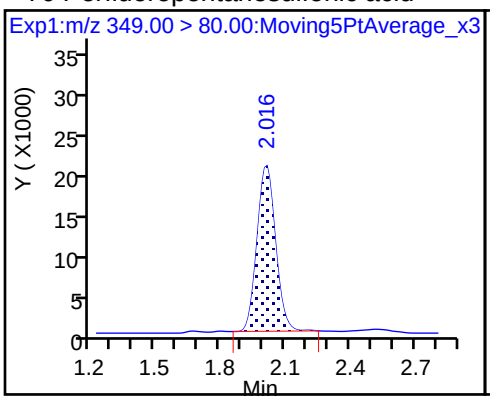
6 Perfluorohexanoic acid



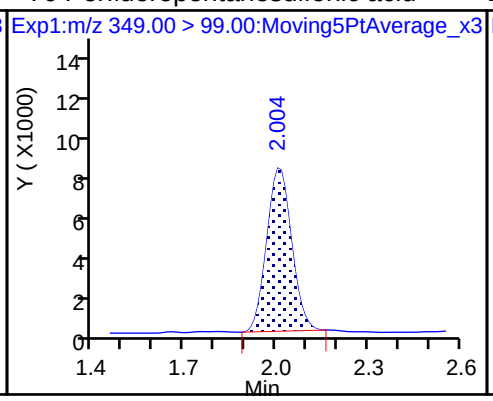
D 7 13C2 PFHxA



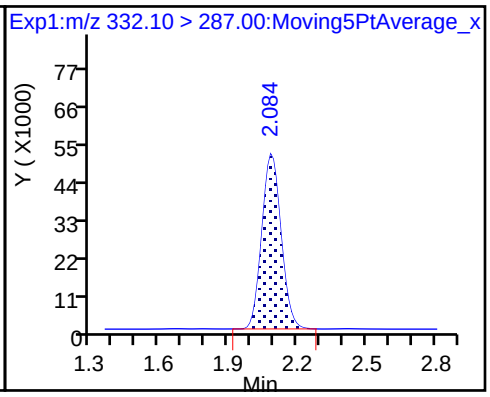
70 Perfluoropentanesulfonic acid



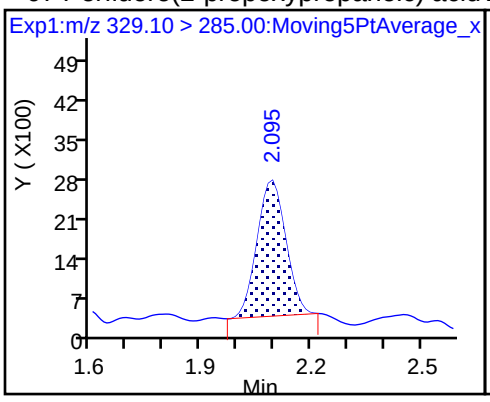
70 Perfluoropentanesulfonic acid



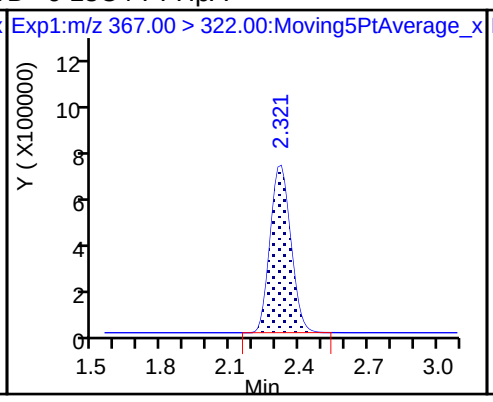
D 64 13C3 HFPO-DA



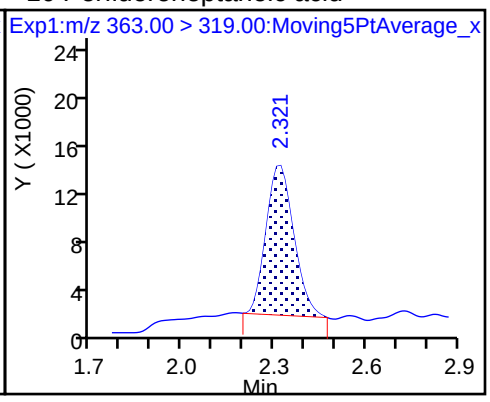
67 Perfluoro(2-propoxypropanoic) acid



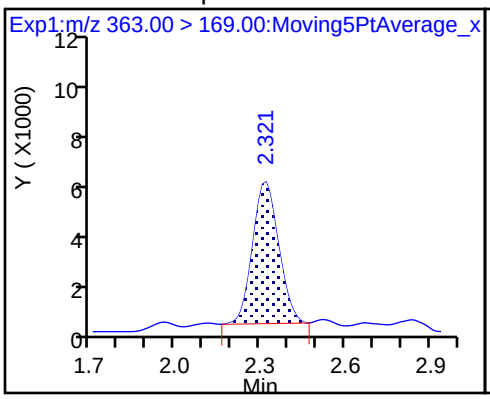
D 9 13C4-PFHpA



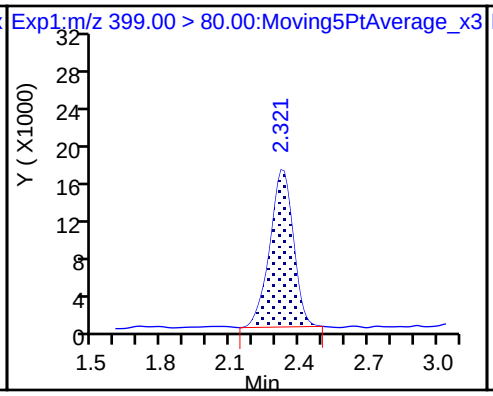
10 Perfluoroheptanoic acid



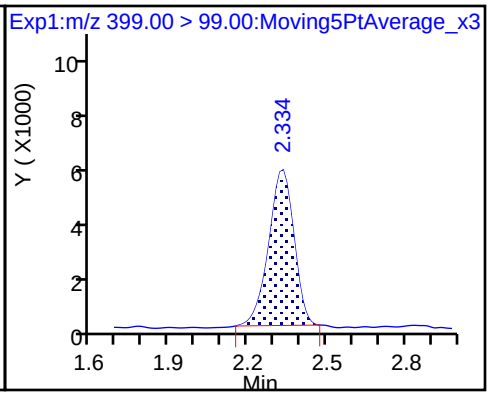
10 Perfluoroheptanoic acid



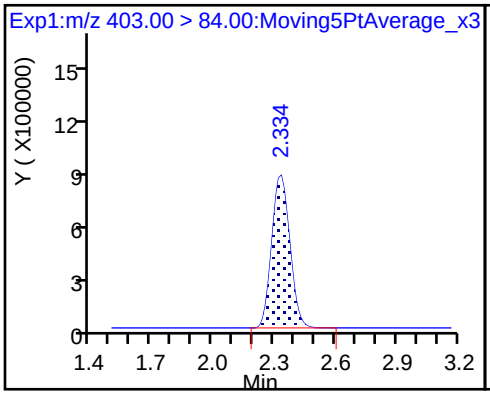
8 Perfluorohexanesulfonic acid



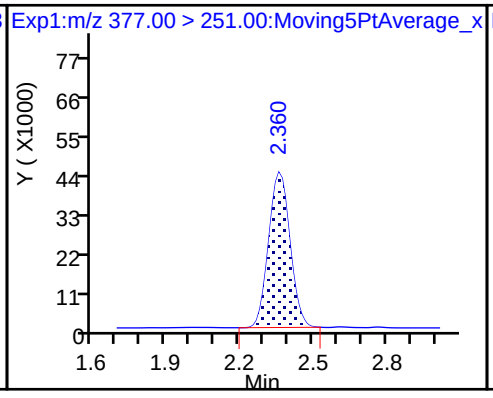
8 Perfluorohexanesulfonic acid



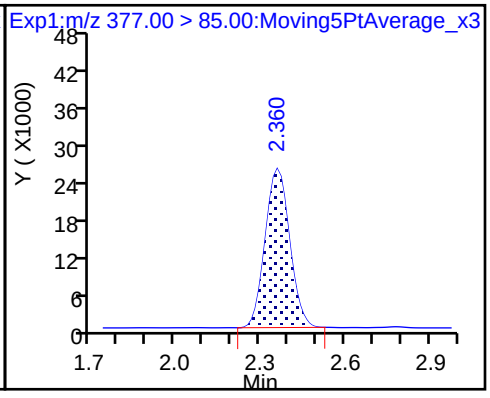
D 11 18O2 PFHxS



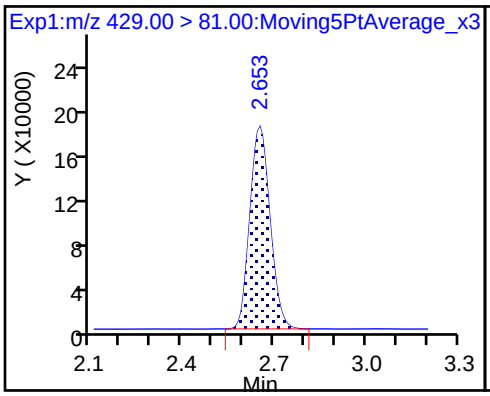
65 Adona



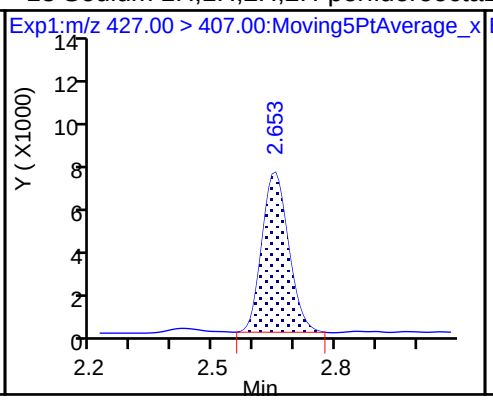
65 Adona



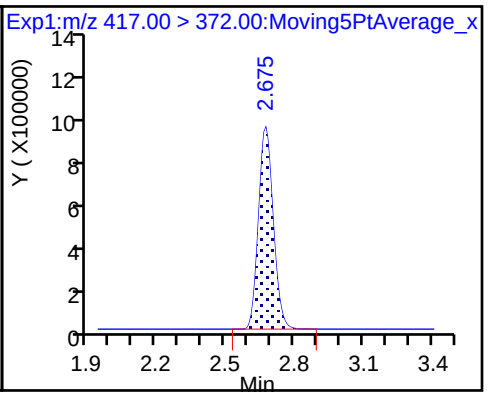
D 12 M2-6:2FTS



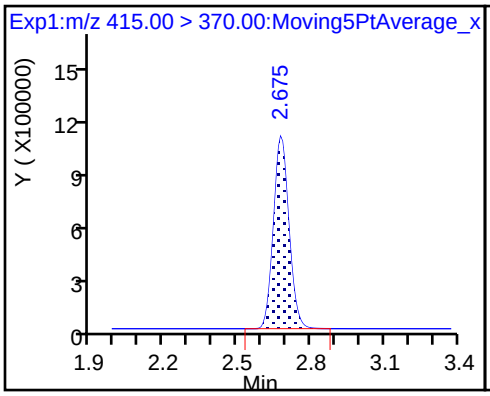
13 Sodium 1H,1H,2H,2H-perfluorooctane



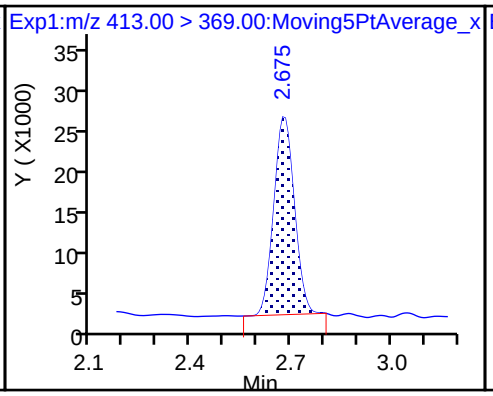
D 14 13C4 PFOA



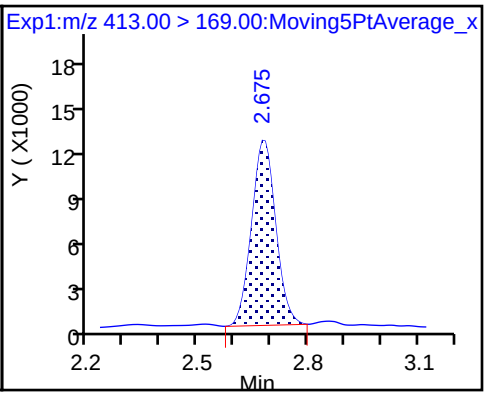
* 62 13C2-PFOA



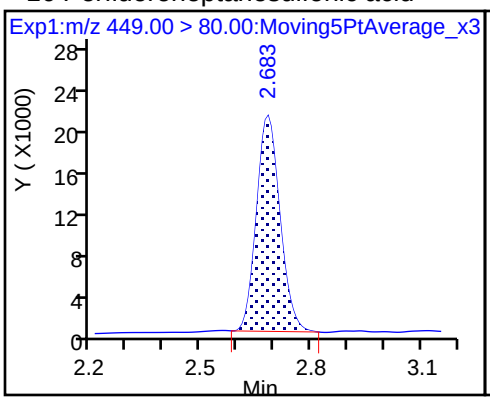
15 Perfluorooctanoic acid



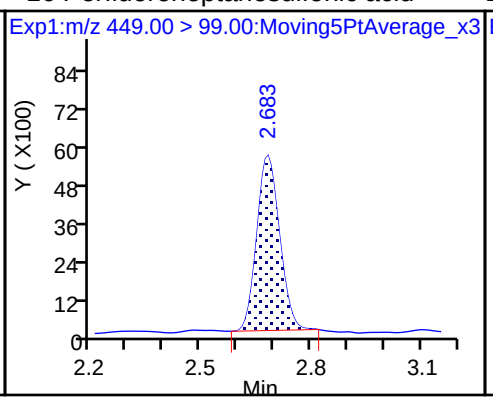
15 Perfluorooctanoic acid



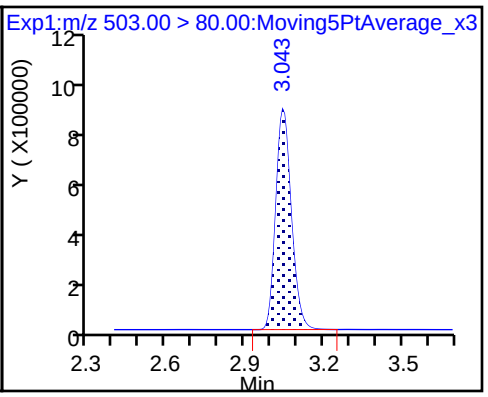
16 Perfluoroheptanesulfonic acid



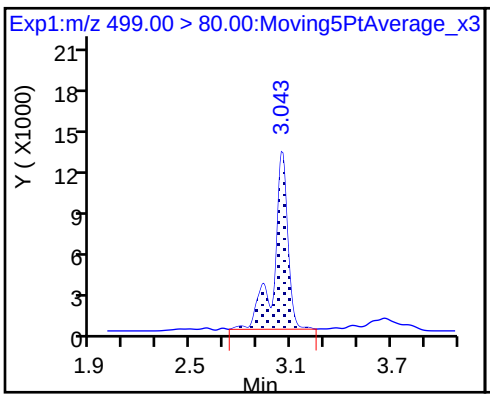
16 Perfluoroheptanesulfonic acid



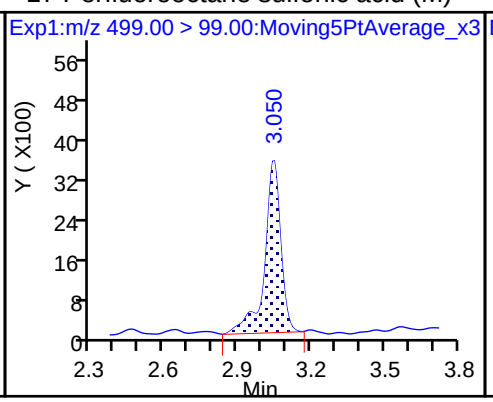
D 18 13C4 PFOS



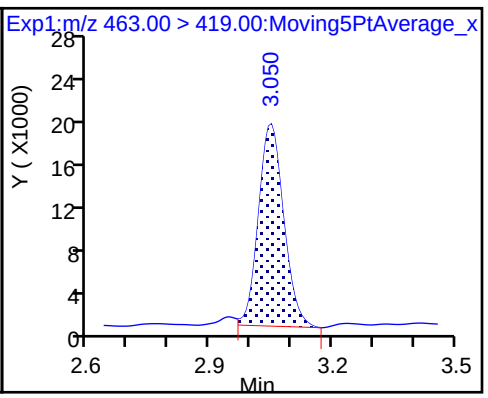
17 Perfluorooctane sulfonic acid



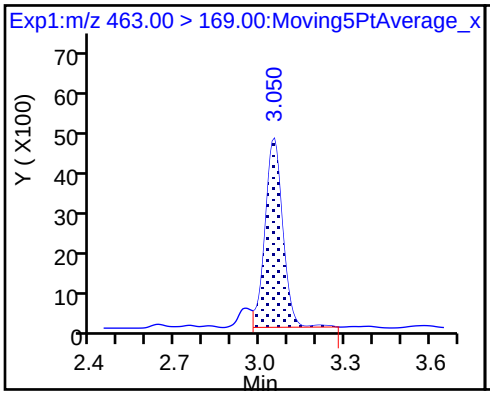
17 Perfluorooctane sulfonic acid (M)



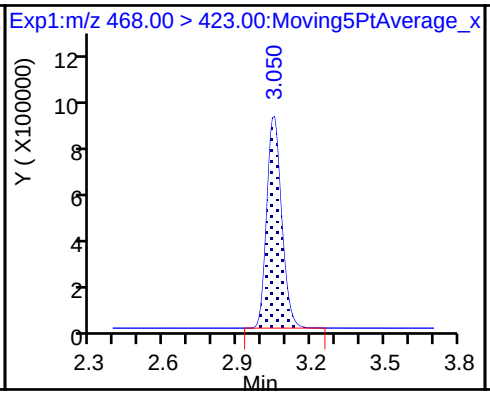
20 Perfluorononanoic acid



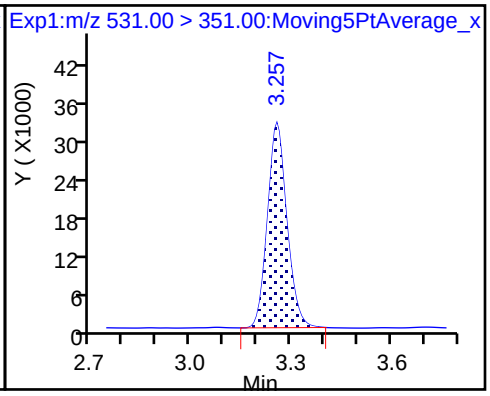
20 Perfluorononanoic acid



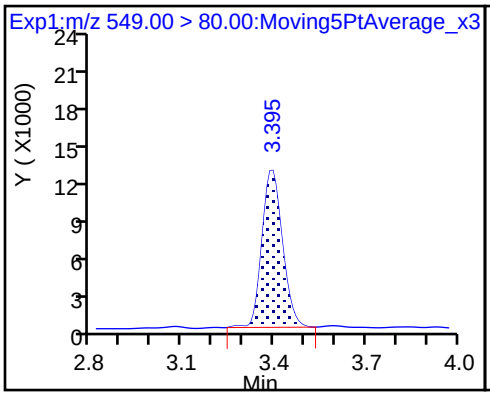
D 19 13C5 PFNA



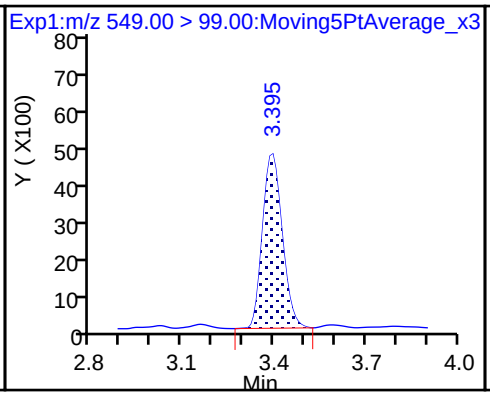
69 9-Chlorohexadecafluoro-3-oxanonane



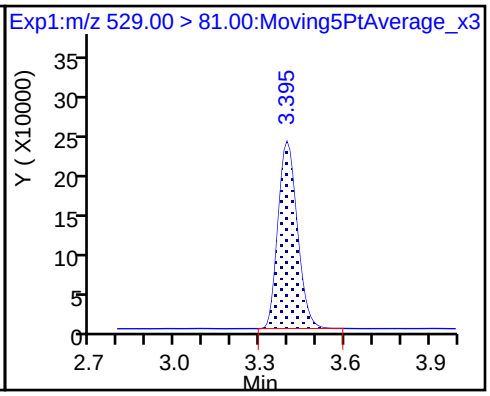
68 Perfluorononanesulfonic acid



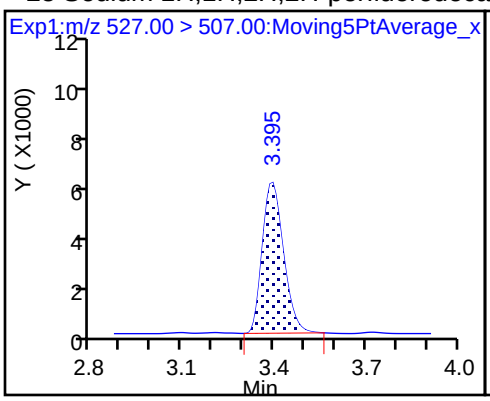
68 Perfluorononanesulfonic acid



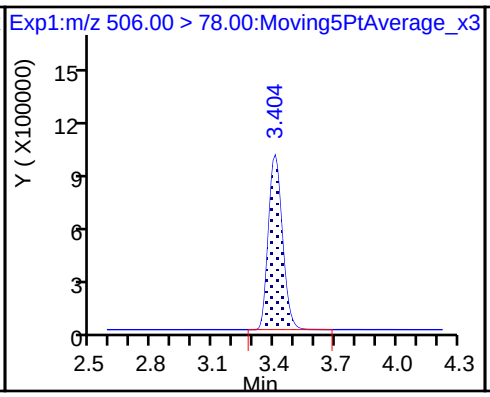
D 26 M2-8:2FTS



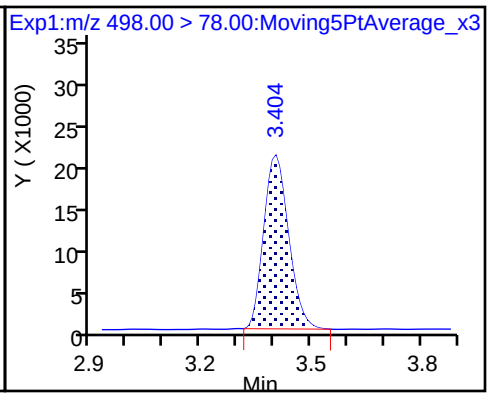
25 Sodium 1H,1H,2H,2H-perfluorodecane



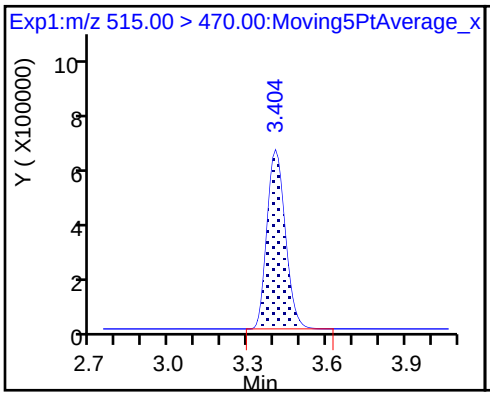
D 21 13C8 FOSA



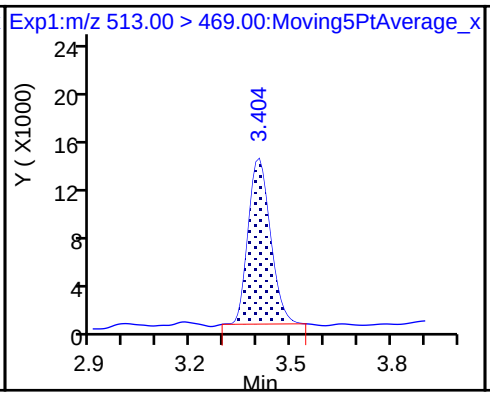
22 Perfluorooctane Sulfonamide



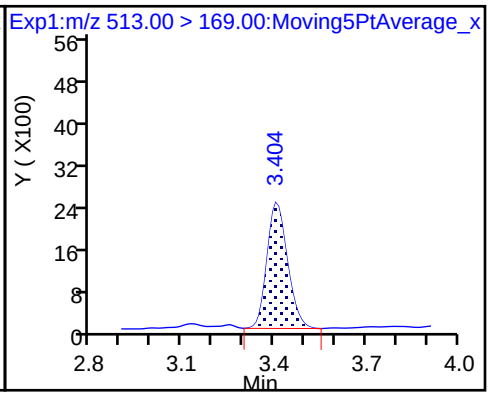
D 23 13C2 PFDA



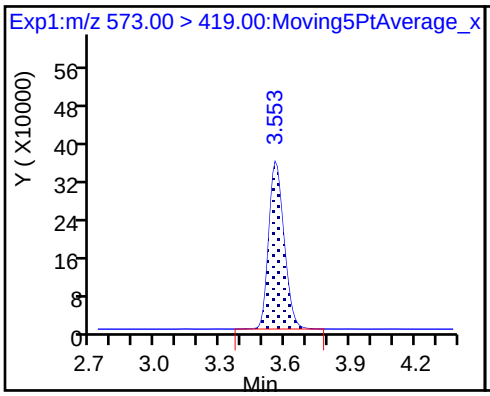
24 Perfluorodecanoic acid



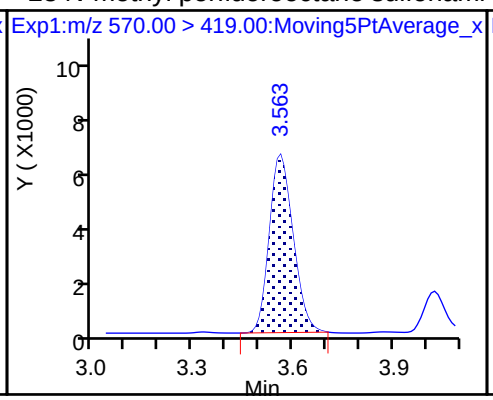
24 Perfluorodecanoic acid



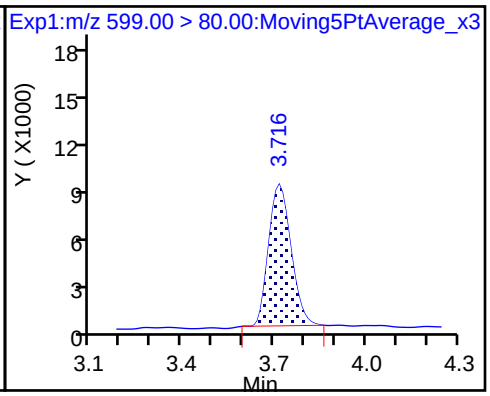
D 27 d3-NMeFOSAA



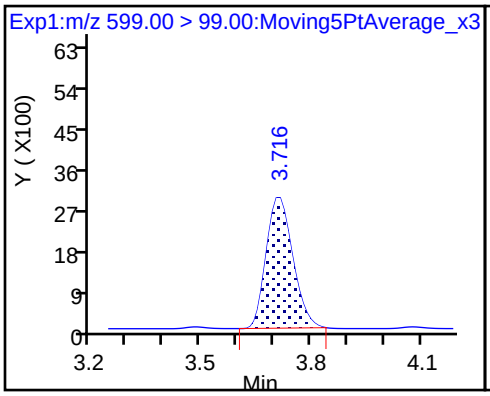
28 N-methyl perfluorooctane sulfonami



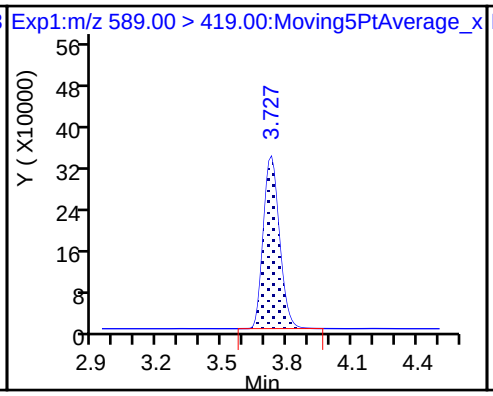
29 Perfluorodecane Sulfonic acid



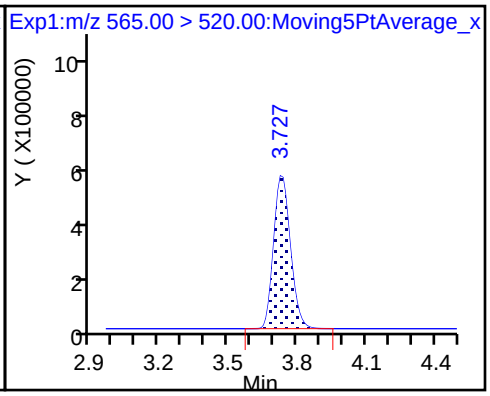
29 Perfluorodecane Sulfonic acid



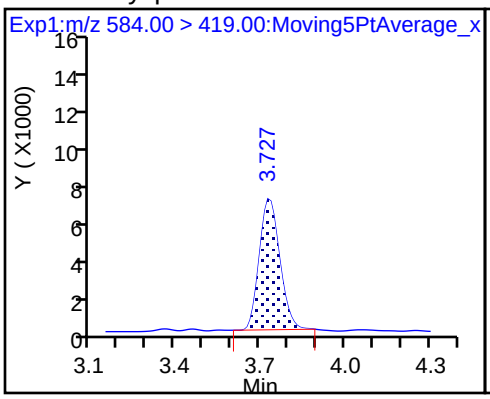
D 32 d5-NEtFOSAA



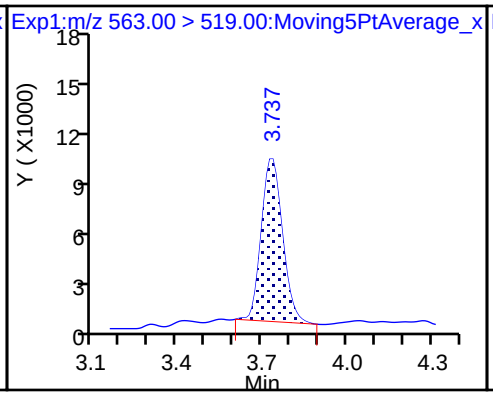
D 30 13C2 PFUnA



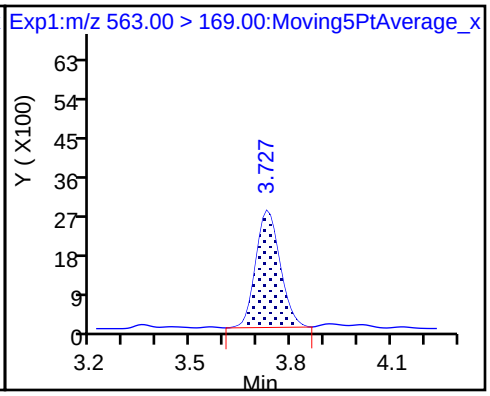
33 N-ethyl perfluorooctane sulfonamid



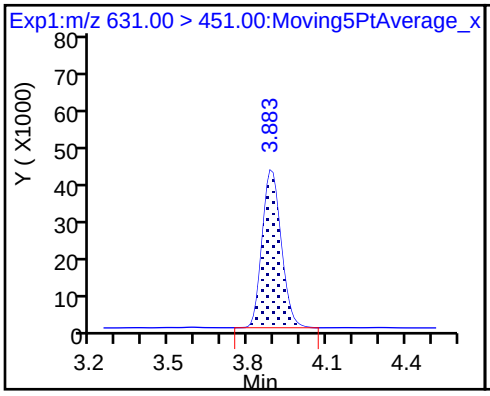
31 Perfluoroundecanoic acid



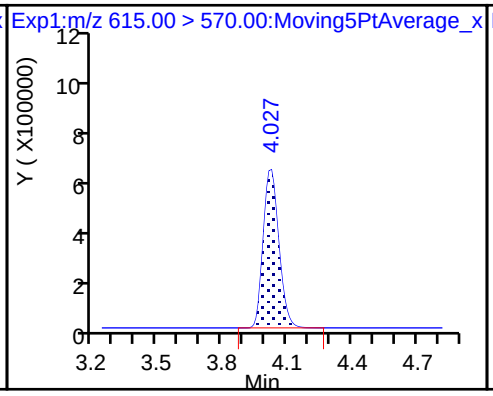
31 Perfluoroundecanoic acid



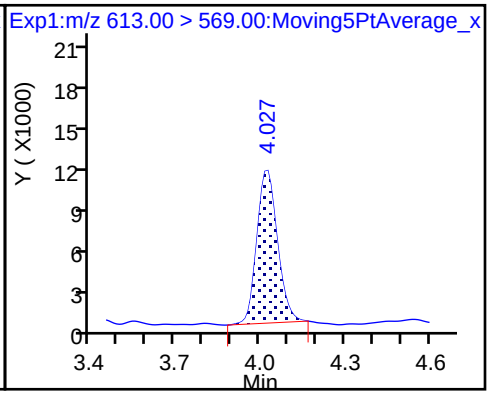
66 11-Chloroeicosafluoro-3-oxaundecan



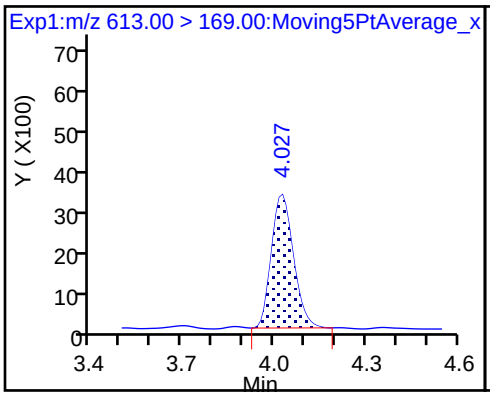
D 36 13C2 PFDoA



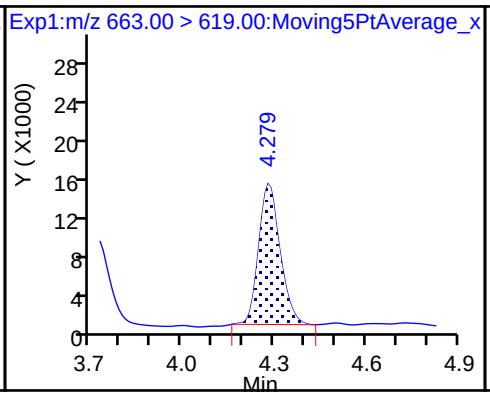
37 Perfluorododecanoic acid



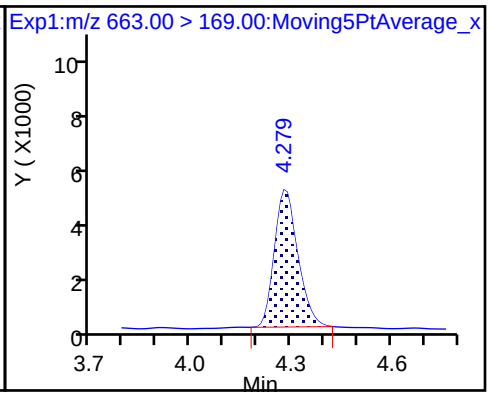
37 Perfluorododecanoic acid



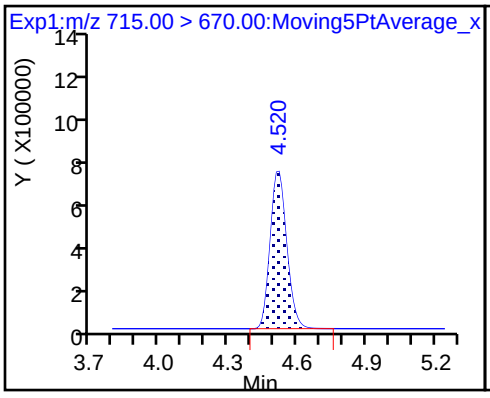
41 Perfluorotridecanoic acid



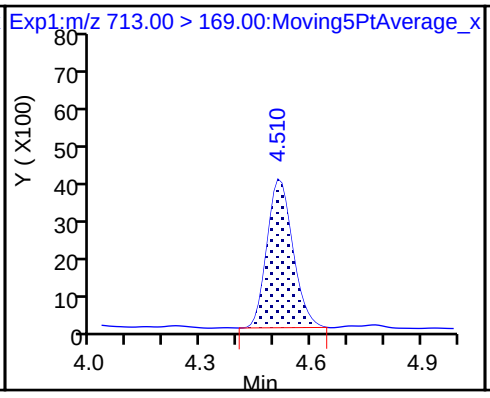
41 Perfluorotridecanoic acid



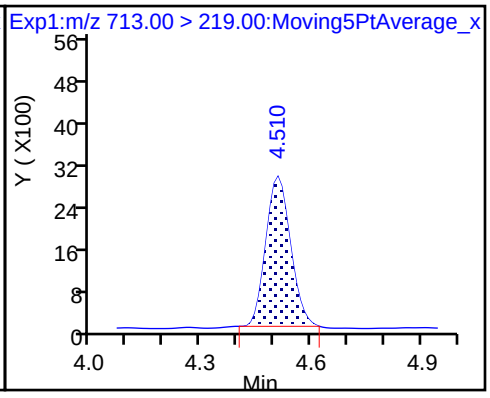
D 43 13C2-PFTeDA



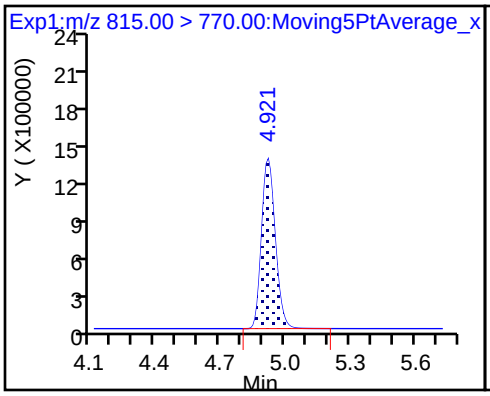
42 Perfluorotetradecanoic acid



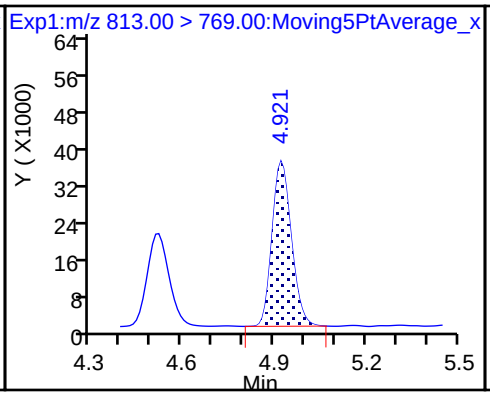
42 Perfluorotetradecanoic acid



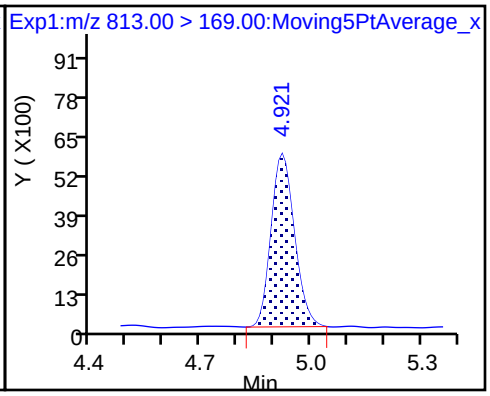
D 44 13C2-PFHxDA



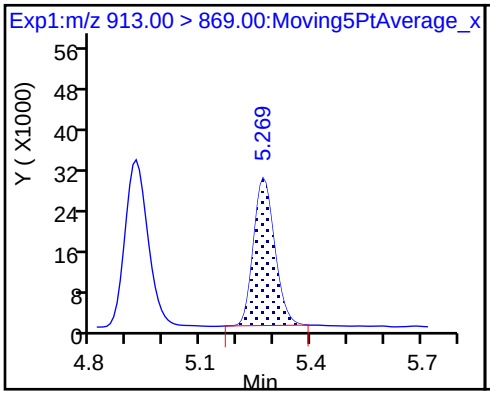
45 Perfluorohexadecanoic acid



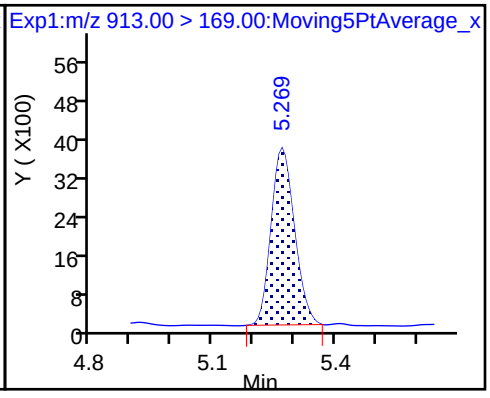
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

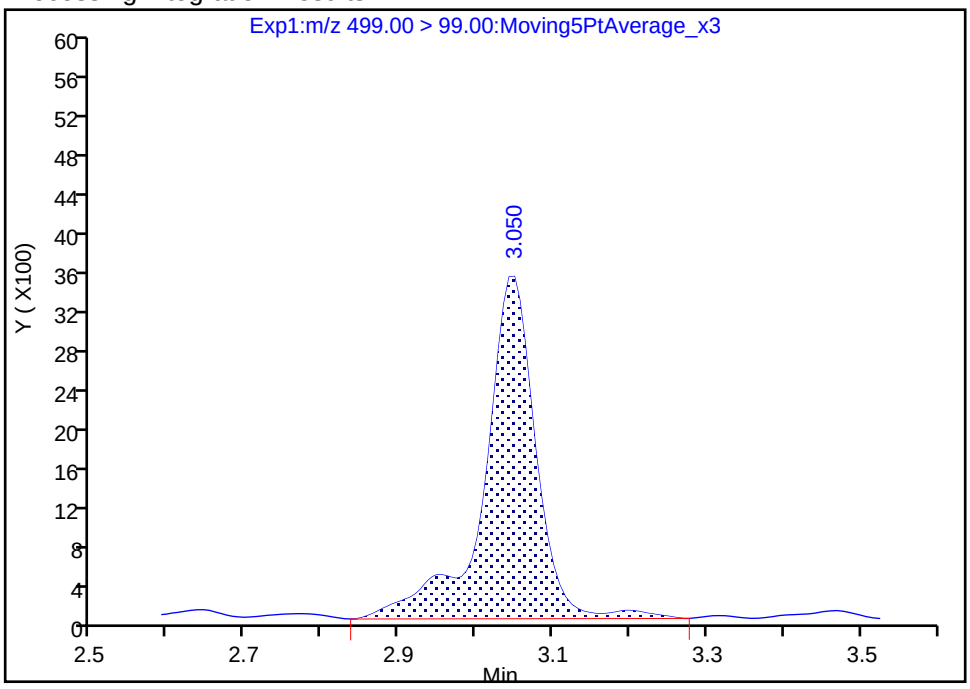
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_003.d
Injection Date: 10-Apr-2018 18:47:28 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

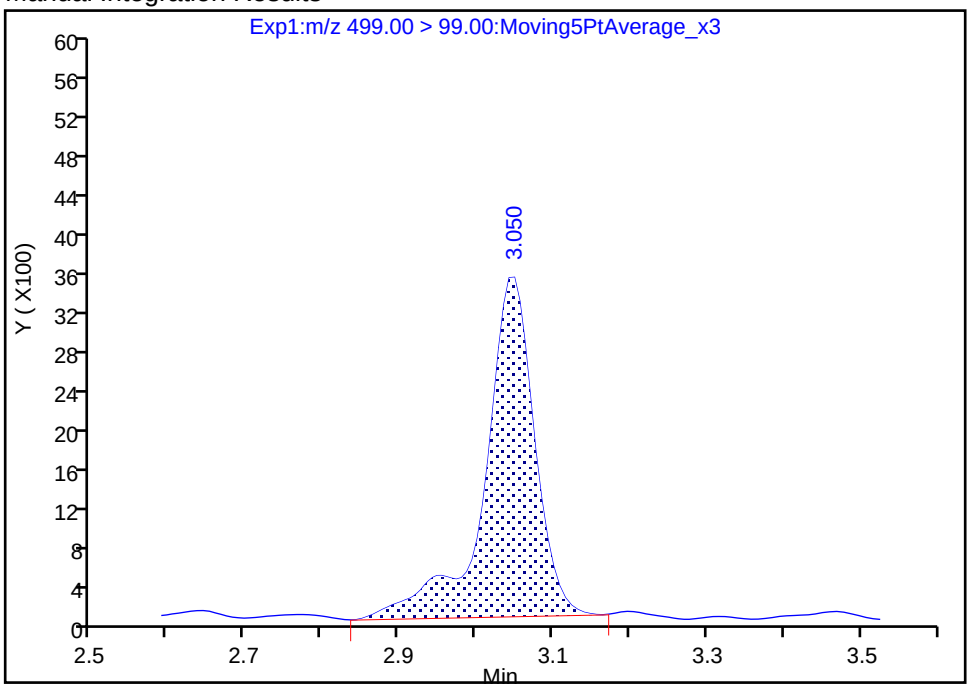
Processing Integration Results

RT: 3.05
Area: 16662
Amount: 0.045154
Amount Units: ng/ml



Manual Integration Results

RT: 3.05
Area: 15924
Amount: 0.045154
Amount Units: ng/ml



Reviewer: roycea, 11-Apr-2018 09:13:05
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_004.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2018 18:55:18 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L3-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-Apr-2018 10:51:05 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: roycea Date: 11-Apr-2018 09:15:48

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.435	1.431	0.004	1.000	6279614	2.40		96.1	48122	
2 Perfluorobutyric acid										
212.90 > 169.00	1.435	1.432	0.003	1.000	580880	0.2490		99.6	342	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.702	1.699	0.003	1.000	467549	0.2434		97.4	427	
D 3 13C5-PFPeA										
267.90 > 223.00	1.702	1.699	0.003	0.558	4029236	2.39		95.7	84337	
D 47 13C3-PFBS										
301.90 > 83.00	1.738	1.735	0.003	1.000	85829	2.22		95.5	892	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.738	1.736	0.002	1.000	642890	0.2225		101	3140	
298.90 > 99.00	1.738	1.736	0.002	1.000	274212		2.34(1.25-3.74)	101	4317	
D 60 M2-4:2FTS										
329.00 > 81.00	1.948	1.950	-0.002	1.000	625222	2.26		96.7	5849	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.948	1.950	-0.002	1.000	139275	0.2353		101	8215	
D 7 13C2 PFHxA										
315.00 > 270.00	1.992	1.985	0.007	1.000	4589544	2.46		98.5	114865	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.992	1.985	0.007	1.000	453023	0.2428		97.1	1126	
313.00 > 119.00	1.992	1.985	0.007	1.000	45129		10.04(5.03-15.10)	97.1	510	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.015	2.008	0.007	1.000	625836	0.2371		101	5727	
349.00 > 99.00	2.003	2.008	-0.005	0.994	236948		2.64(1.36-4.07)	101	6870	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.082	2.084	-0.002	1.000	260156	2.26		90.3	6351	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.094	2.087	0.007	1.005	76650	0.2644		106	612	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.320	2.314	0.006	1.000	443829	0.2536		101	594	
363.00 > 169.00	2.320	2.314	0.006	1.000	183548		2.42(1.13-3.40)	101	819	
D 9 13C4-PFHpA										
367.00 > 322.00	2.320	2.314	0.006	1.000	4371595	2.41		96.4	64932	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.333	2.323	0.010	1.000	550837	0.2176		95.6	1709	
399.00 > 99.00	2.333	2.323	0.010	1.000	175057		3.15(1.50-4.49)	95.6	1638	
D 11 18O2 PFHxS										
403.00 > 84.00	2.333	2.327	0.006	1.000	5290521	2.36		100.0	79356	
65 Adona										
377.00 > 251.00	2.359	2.360	-0.001	1.000	1339859	0.2502		100	20372	
377.00 > 85.00	2.359	2.360	-0.001	1.000	772157		1.74(0.84-2.53)	100	16304	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.653	2.649	0.004	1.000	147222	0.2185		92.2	3008	
D 12 M2-6:2FTS										
429.00 > 81.00	2.653	2.649	0.004	1.000	946554	2.44		103	15607	
D 14 13C4 PFOA										
417.00 > 372.00	2.675	2.673	0.002	1.000	4391971	2.44		97.5	89680	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.675	2.674	0.001	1.000	501075	0.2469		98.7	266	
413.00 > 169.00	2.675	2.674	0.001	1.000	260669		1.92(0.84-2.52)	98.7	1136	
* 62 13C2-PFOA										
415.00 > 370.00	2.675	2.674	0.001		4856867	2.50			62253	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.683	2.680	0.003	1.000	500192	0.2437		102	4655	
449.00 > 99.00	2.683	2.680	0.003	1.000	131175		3.81(1.94-5.82)	102	3786	
D 18 13C4 PFOS										
503.00 > 80.00	3.043	3.041	0.002	1.000	3695054	2.36		98.7	32380	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.050	3.042	0.008	1.002	378769	0.2252		97.1	1651	
499.00 > 99.00	3.043	3.042	0.001	1.000	94059		4.03(2.31-6.93)	97.1	1374	
20 Perfluorononanoic acid										
463.00 > 419.00	3.043	3.043	0.0	0.998	394004	0.2506		100	1139	
463.00 > 169.00	3.050	3.043	0.007	1.000	89167		4.42(1.90-5.69)	100	1764	
D 19 13C5 PFNA										
468.00 > 423.00	3.050	3.045	0.005	1.000	3769499	2.43		97.3	82628	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.257	3.253	0.004	1.000	659333	0.2262		97.1	17883	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.385	3.388	-0.003	1.000	287902	0.2330		97.1	4091	
549.00 > 99.00	3.395	3.388	0.007	1.003	106966		2.69(1.33-3.97)	97.1	2580	
D 26 M2-8:2FTS										
529.00 > 81.00	3.395	3.390	0.005	1.000	1105113	2.36		98.6	11270	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.395	3.393	0.002	1.000	123407	0.2114		88.3	6419	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.404	3.397	0.007	1.000	4856180	2.48		99.3	57058	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.404	3.401	0.003	1.000	486733	0.2477		99.1	17148	
D 23 13C2 PFDA										
515.00 > 470.00	3.404	3.401	0.003	1.000	3141564	2.41		96.5	74258	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.404	3.402	0.002	1.000	302427	0.2333		93.3	1146	
513.00 > 169.00	3.404	3.402	0.002	1.000	51441		5.88(2.36-7.09)	93.3	1188	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.553	3.553	0.0	1.000	1807153	2.45		98.0	18609	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.562	3.558	0.004	1.003	182686	0.2534		101	1647	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.716	3.715	0.001	1.000	242056	0.2411		100	3016	
599.00 > 99.00	3.716	3.715	0.001	1.000	77912		3.11(1.39-4.16)	100	1891	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.726	3.722	0.004	1.000	1809132	2.48		99.4	15271	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.726	3.727	-0.001	1.000	166943	0.2469		98.7	2050	
D 30 13C2 PFUnA										
565.00 > 520.00	3.726	3.727	-0.001	1.000	2893419	2.58		103	82331	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.726	3.727	-0.001	1.000	218231	0.2231		89.2	981	
563.00 > 169.00	3.726	3.727	-0.001	1.000	53370		4.09(2.12-6.36)	89.2	1795	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.883	3.883	0.0	1.000	1099095	0.2441		104	17279	
D 36 13C2 PFDoA										
615.00 > 570.00	4.016	4.017	-0.001	1.000	3031255	2.50		100.0	32020	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.026	4.020	0.006	1.003	323392	0.2558		102	356	
613.00 > 169.00	4.026	4.020	0.006	1.003	76615		4.22(2.13-6.40)	102	964	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.279	4.278	0.001	1.000	353030	0.2396		95.8	325	
663.00 > 169.00	4.279	4.278	0.001	1.000	109952		3.21(1.25-3.76)	95.8	1133	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.510	4.513	-0.003	1.000	3729686	2.43		97.0	27846	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.510	4.513	-0.003	1.000	92073	0.2457		98.3	961	
713.00 > 219.00	4.510	4.513	-0.003	1.000	66153		1.39(0.71-2.13)	98.3	1347	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.921	4.918	0.003	1.000	6094708	2.44		97.4	18710	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.921	4.920	0.001	1.000	648936	0.2588		104	210	
813.00 > 169.00	4.921	4.920	0.001	1.000	100021		6.49(2.86-8.58)	104	777	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.269	5.268	0.001	1.000	616691	0.2519		101	178	
913.00 > 169.00	5.269	5.268	0.001	1.000	75406		8.18(3.83-11.48)	101	660	

Reagents:

LCPFC_LL3_00004 Amount Added: 1.00 Units: mL

Report Date: 11-Apr-2018 10:51:06 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_004.d

Injection Date: 10-Apr-2018 18:55:18 Instrument ID: A8_N

Lims ID: IC L3 Full

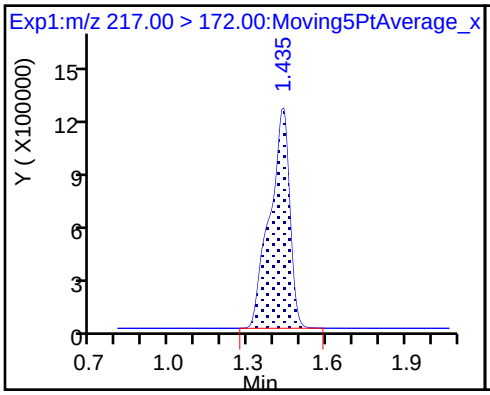
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 4

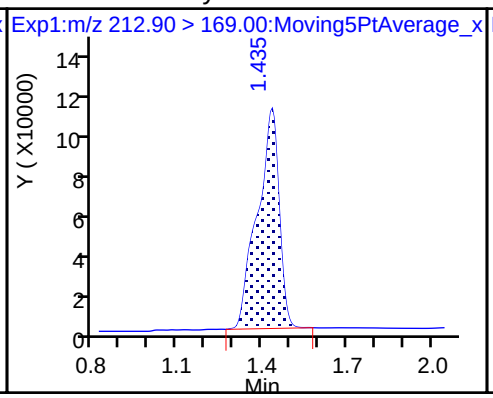
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

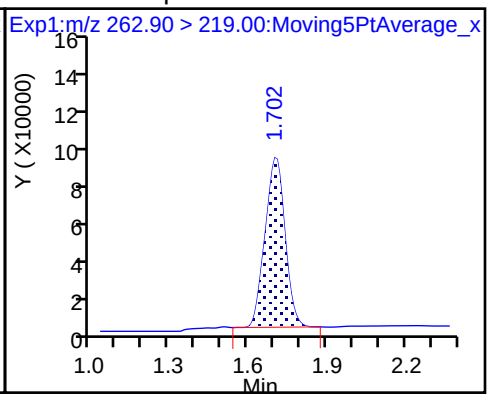
D 1 13C4 PFBA



2 Perfluorobutyric acid



4 Perfluoropentanoic acid



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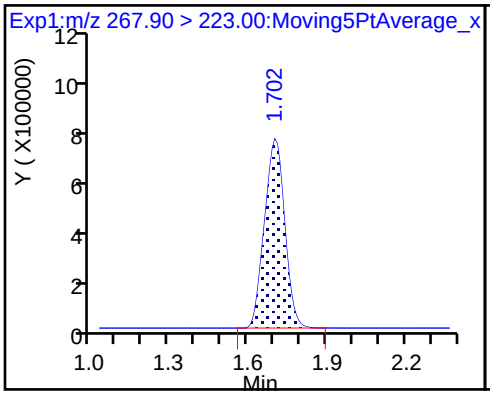
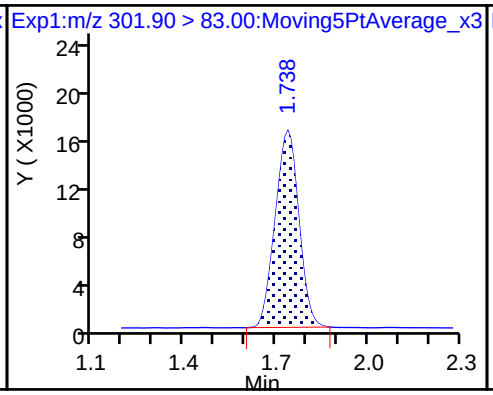
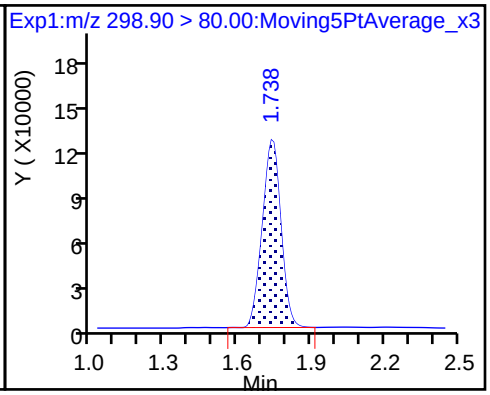


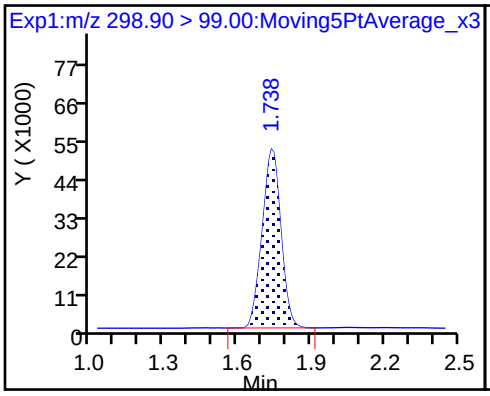
D 47 13C3-PFBS



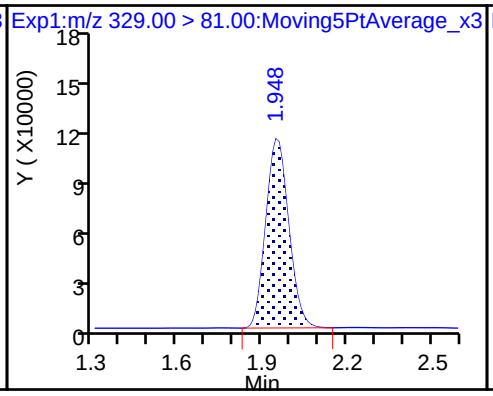
5 Perfluorobutanesulfonic acid



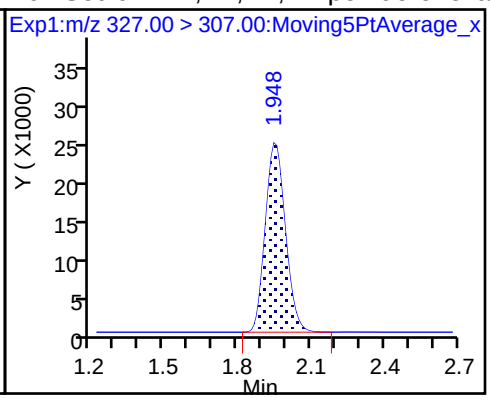
5 Perfluorobutanesulfonic acid



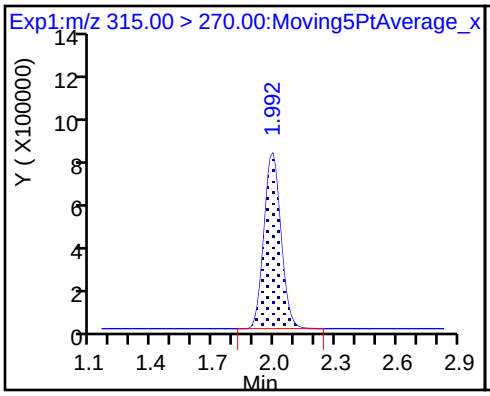
D 60 M2-4:2FTS



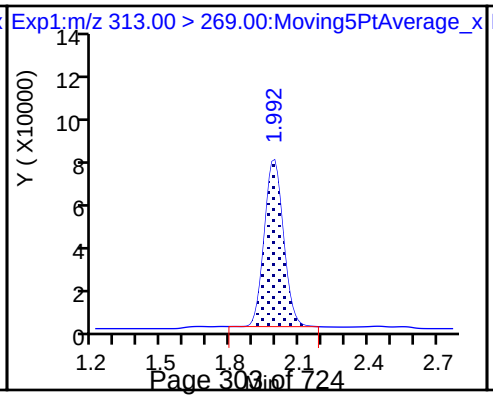
61 Sodium 1H,1H,2H,2H-perfluorohexane



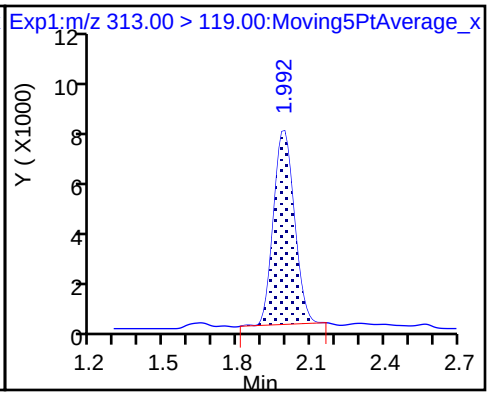
D 7 13C2 PFHxA



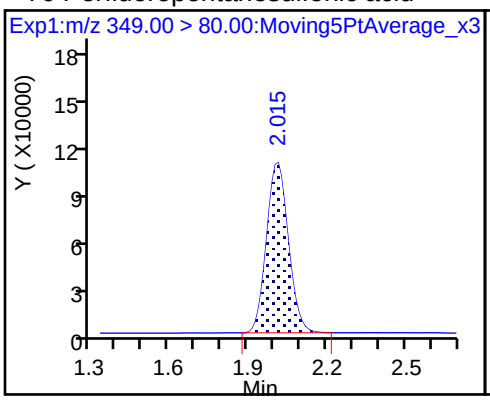
6 Perfluorohexanoic acid



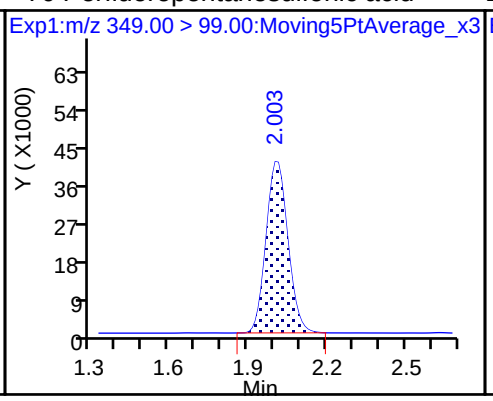
6 Perfluorohexanoic acid



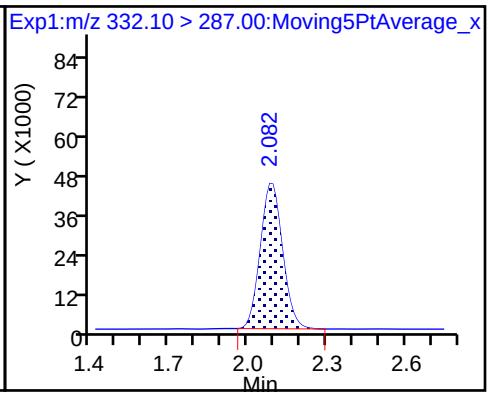
70 Perfluoropentanesulfonic acid



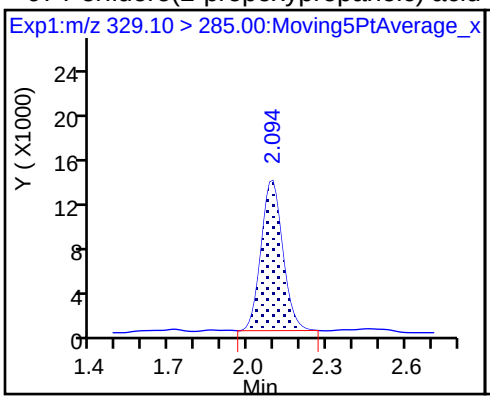
70 Perfluoropentanesulfonic acid



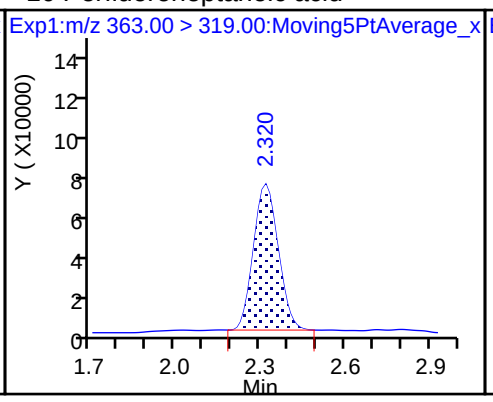
D 64 13C3 HFPO-DA



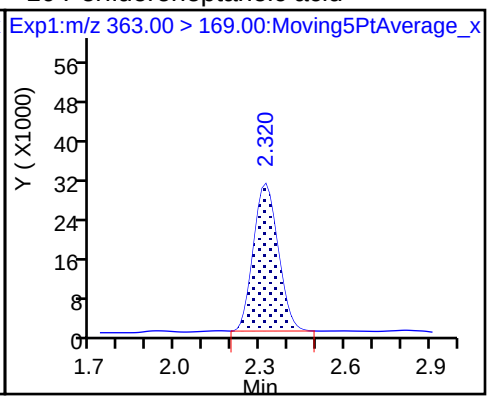
67 Perfluoro(2-propoxypropanoic) acid



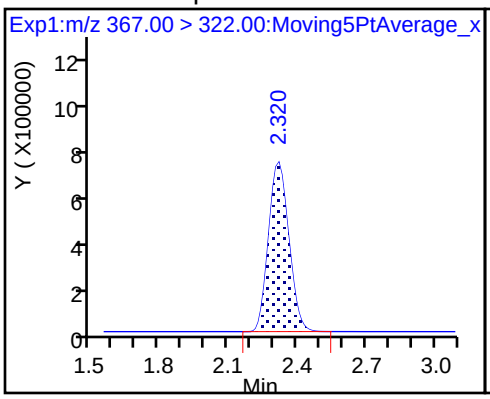
10 Perfluoroheptanoic acid



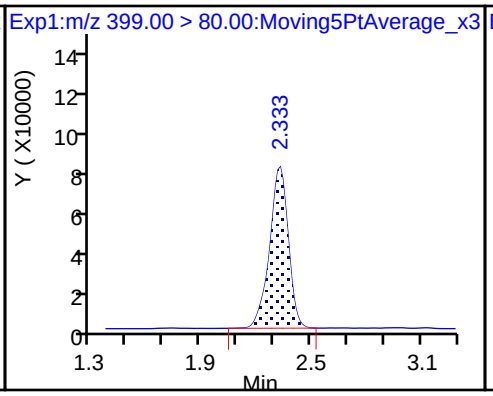
10 Perfluoroheptanoic acid



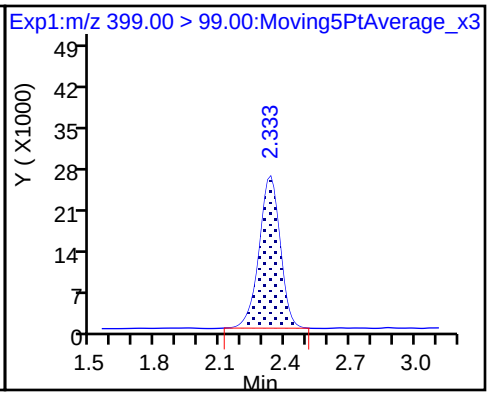
D 9 13C4-PFHpA



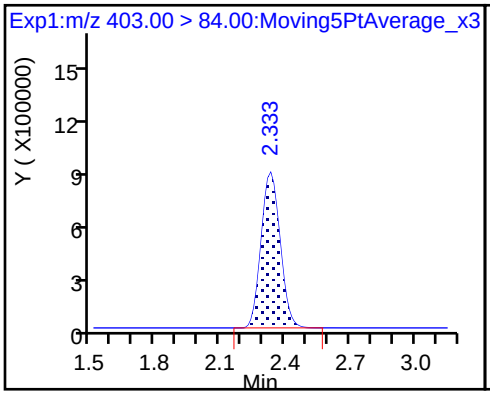
8 Perfluorohexanesulfonic acid



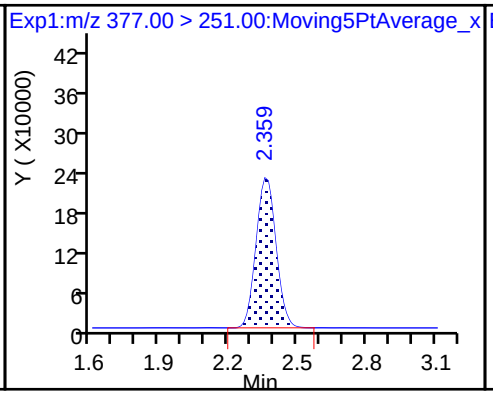
8 Perfluorohexanesulfonic acid



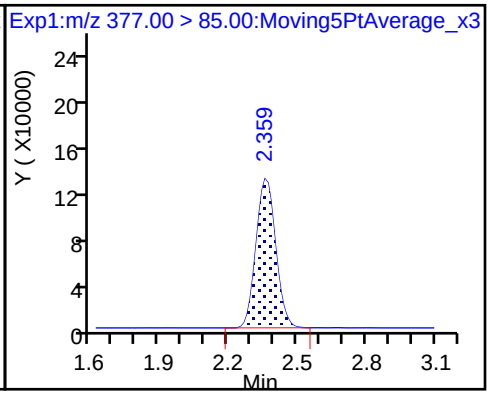
D 11 18O2 PFHxS



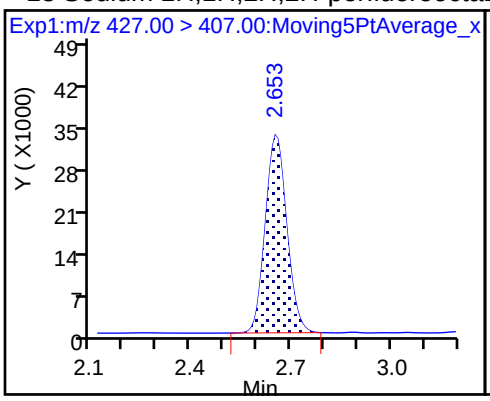
65 Adona



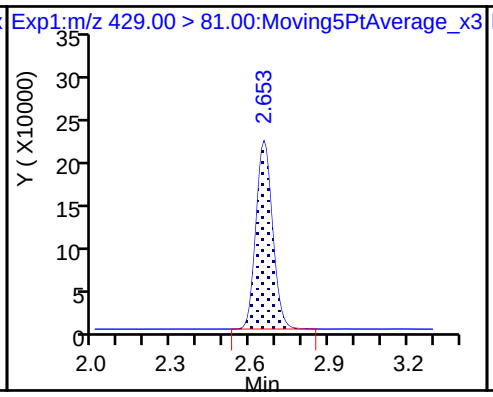
65 Adona



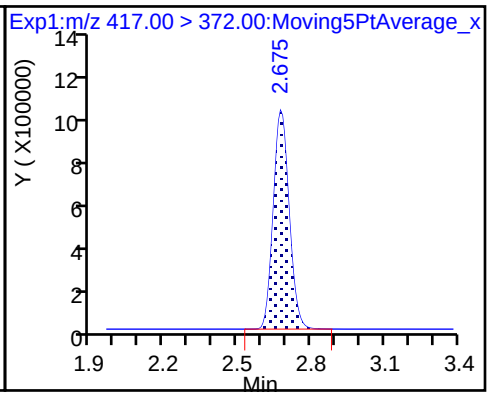
13 Sodium 1H,1H,2H,2H-perfluorooctane



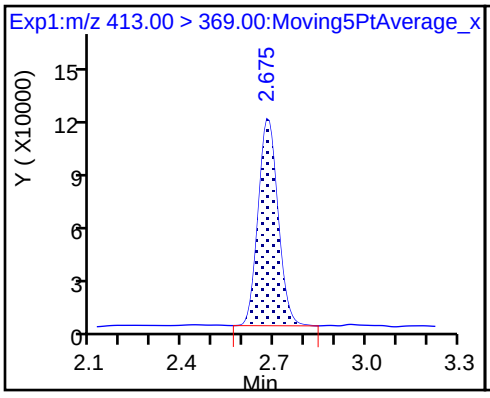
D 12 M2-6:2FTS



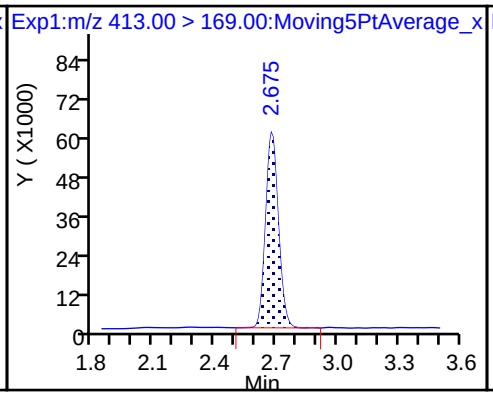
D 14 13C4 PFOA



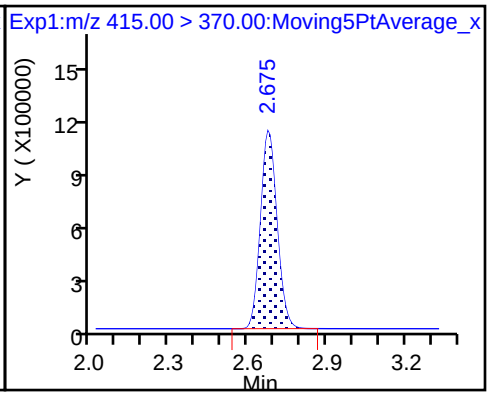
15 Perfluorooctanoic acid



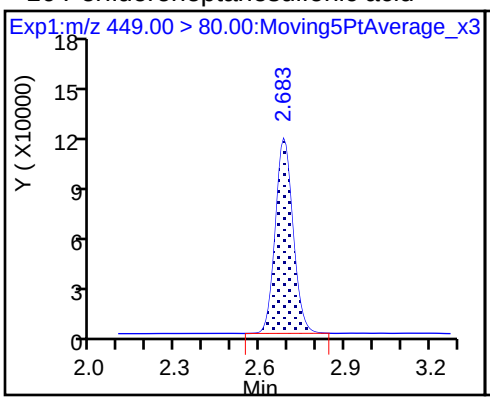
15 Perfluorooctanoic acid



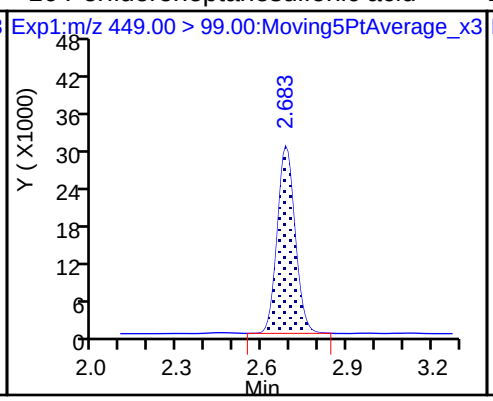
* 62 13C2-PFOA



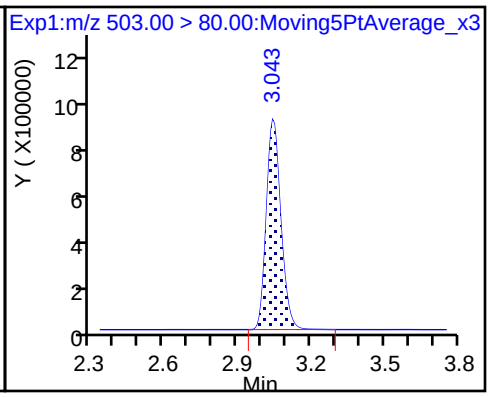
16 Perfluoroheptanesulfonic acid



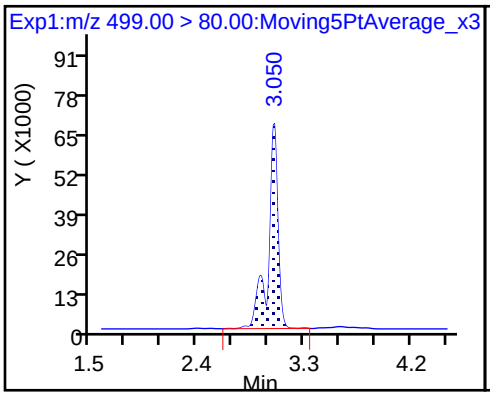
16 Perfluoroheptanesulfonic acid



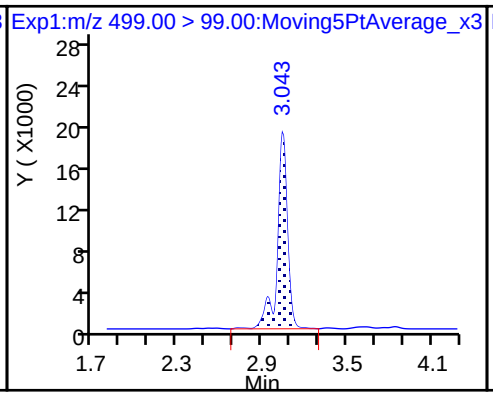
D 18 13C4 PFOS



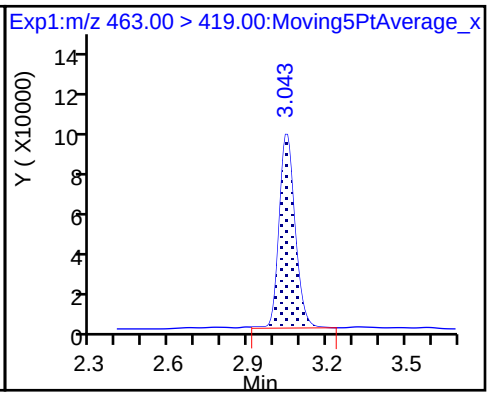
17 Perfluorooctane sulfonic acid



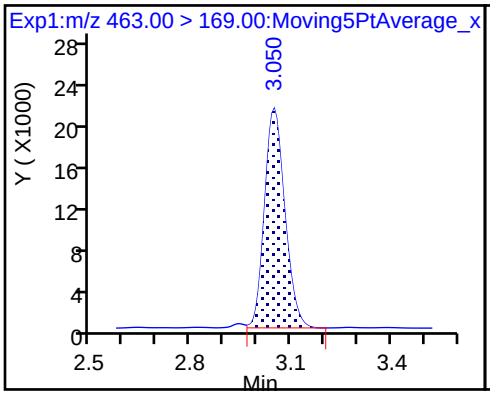
17 Perfluorooctane sulfonic acid



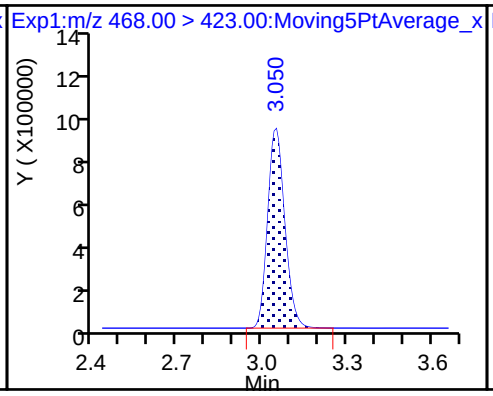
20 Perfluorononanoic acid



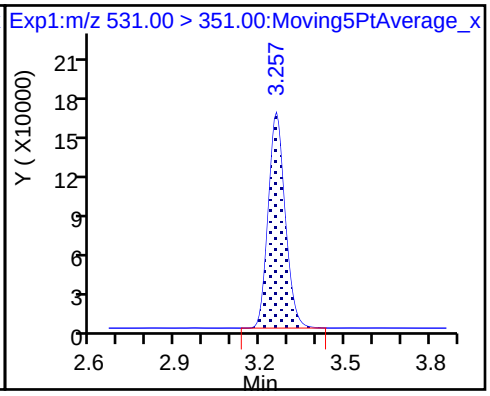
20 Perfluorononanoic acid



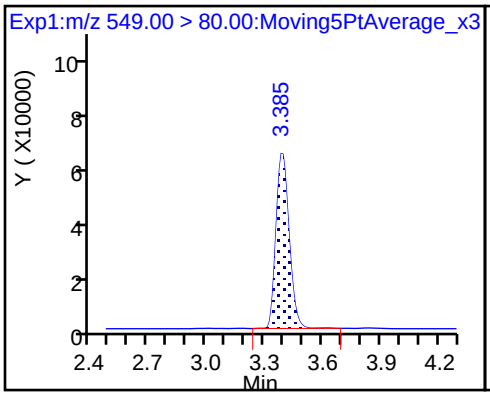
D 19 13C5 PFNA



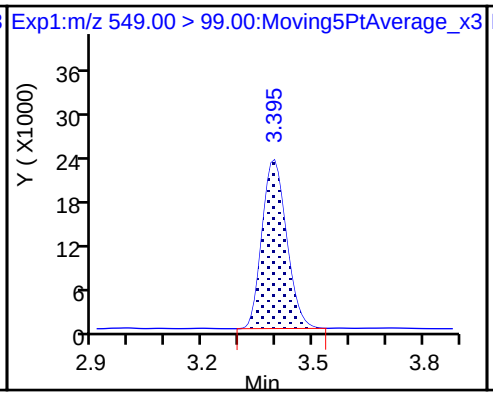
69 9-Chlorohexadecafluoro-3-oxanonane



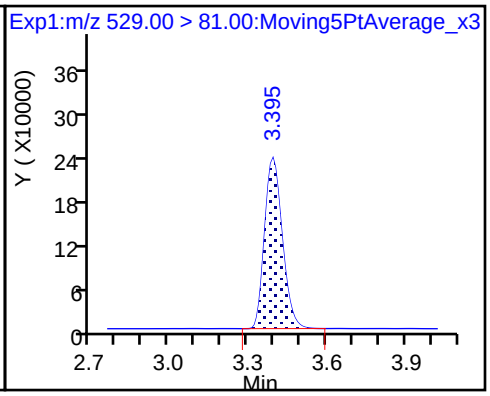
68 Perfluorononanesulfonic acid



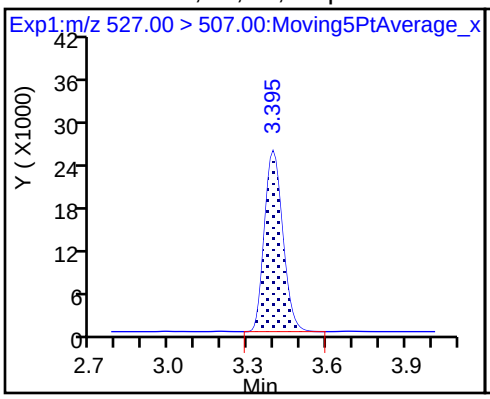
68 Perfluorononanesulfonic acid



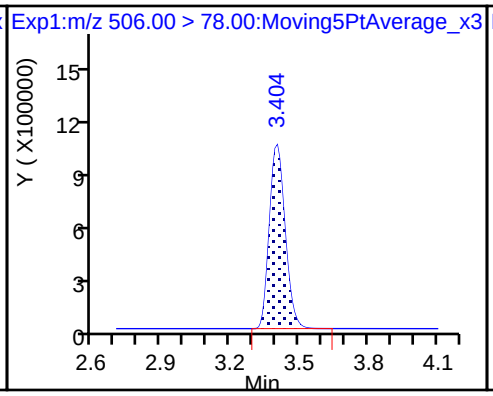
D 26 M2-8:2FTS



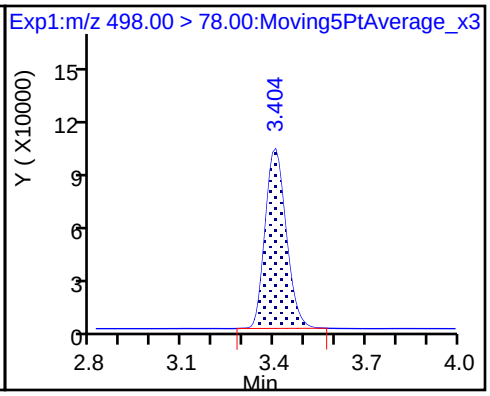
25 Sodium 1H,1H,2H,2H-perfluorodecane



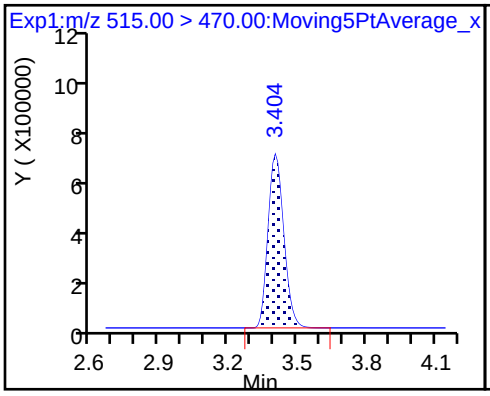
D 21 13C8 FOSA



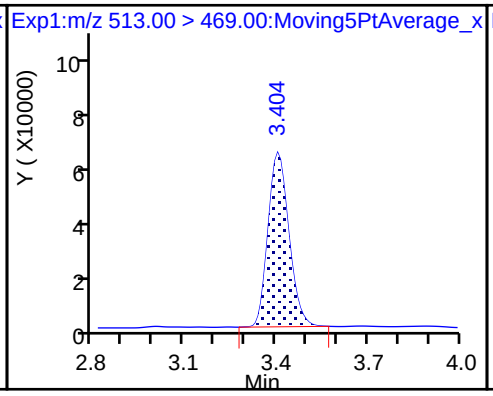
22 Perfluorooctane Sulfonamide



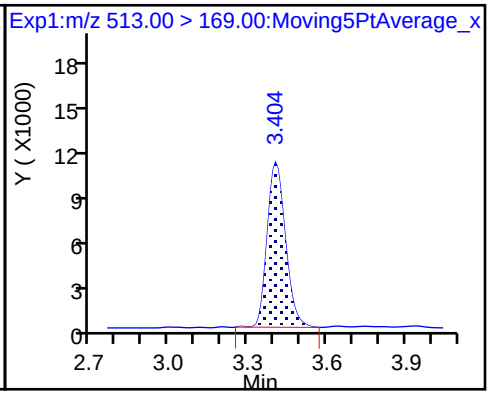
D 23 13C2 PFDA



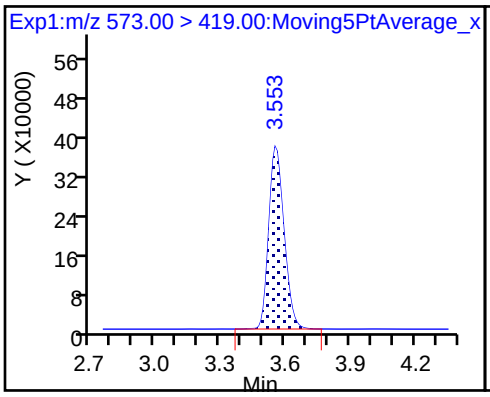
24 Perfluorodecanoic acid



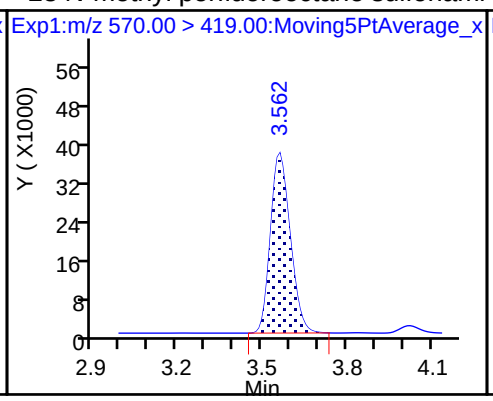
24 Perfluorodecanoic acid



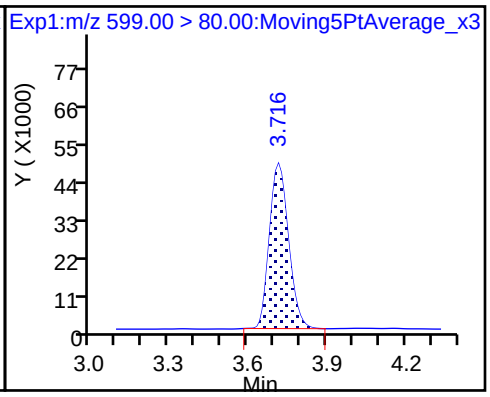
D 27 d3-NMeFOSAA



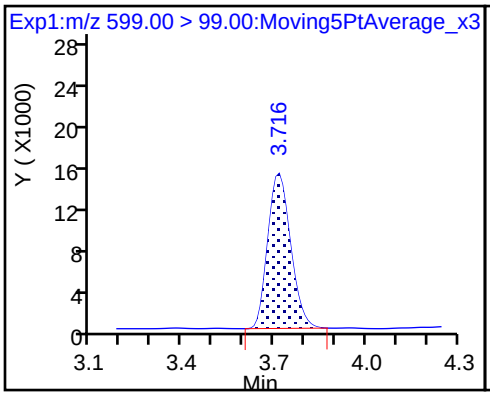
28 N-methyl perfluorooctane sulfonami



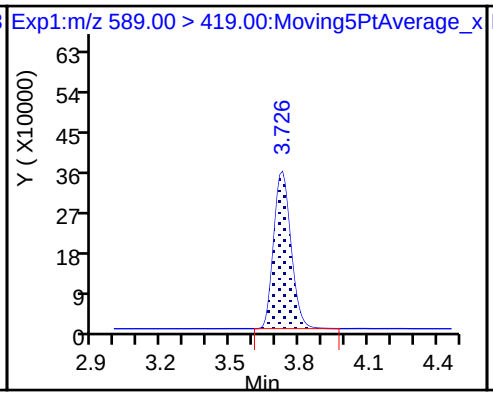
29 Perfluorodecane Sulfonic acid



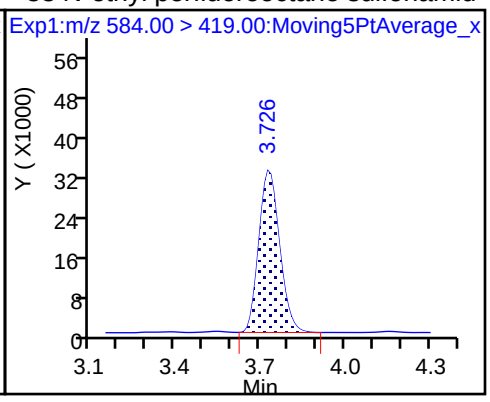
29 Perfluorodecane Sulfonic acid



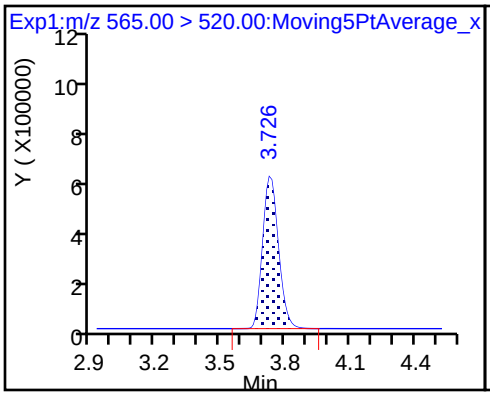
D 32 d5-NEtFOSAA



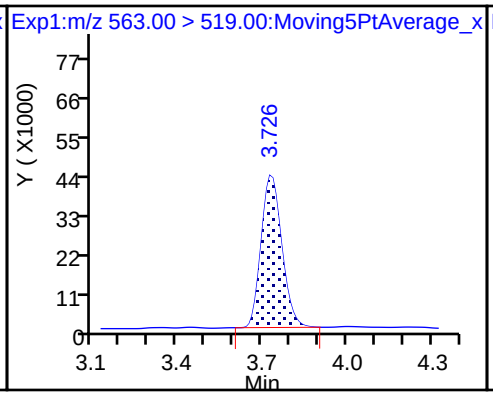
33 N-ethyl perfluorooctane sulfonamid



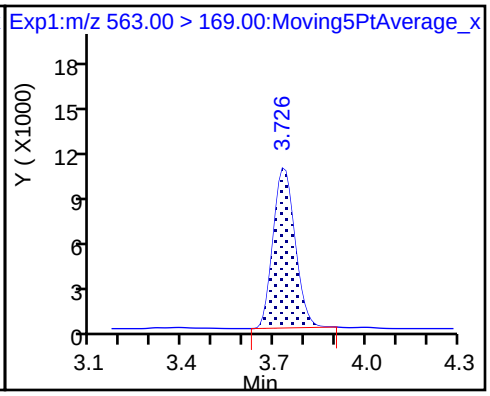
D 30 13C2 PFUnA



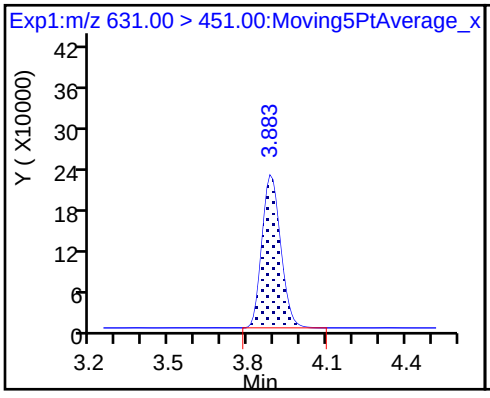
31 Perfluoroundecanoic acid



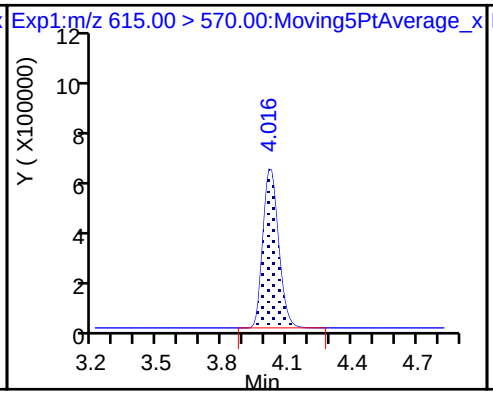
31 Perfluoroundecanoic acid



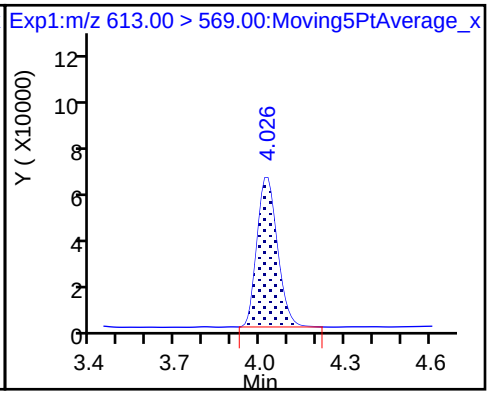
66 11-Chloroeicosafluoro-3-oxaundecan



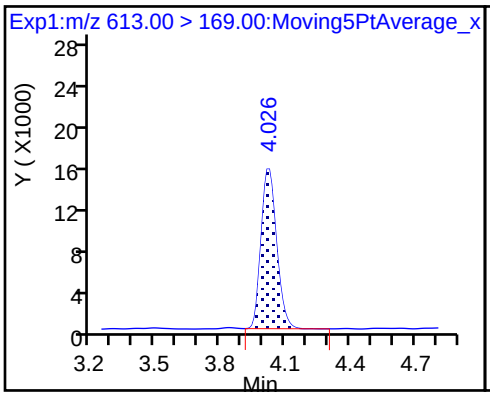
D 36 13C2 PFDoA



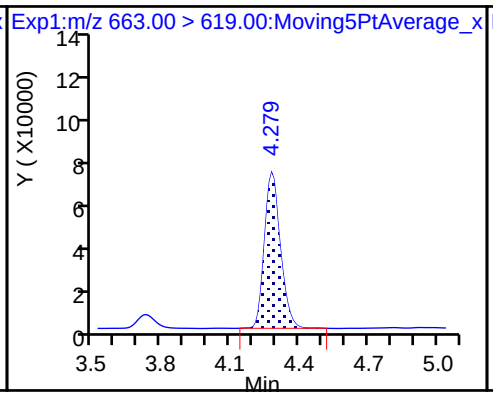
37 Perfluorododecanoic acid



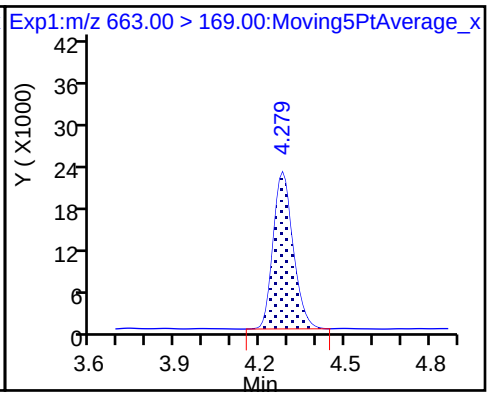
37 Perfluorododecanoic acid



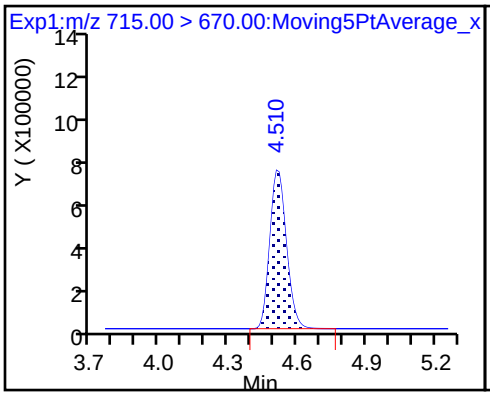
41 Perfluorotridecanoic acid



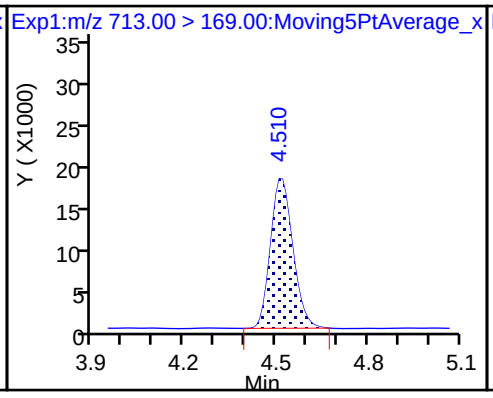
41 Perfluorotridecanoic acid



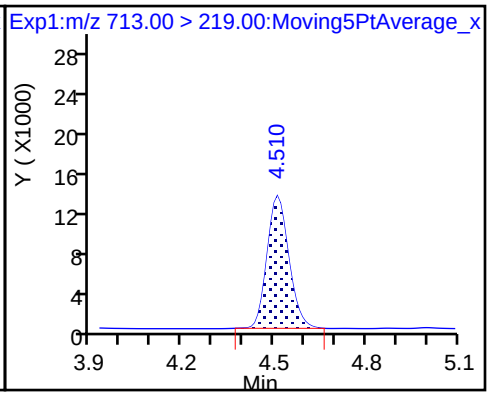
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



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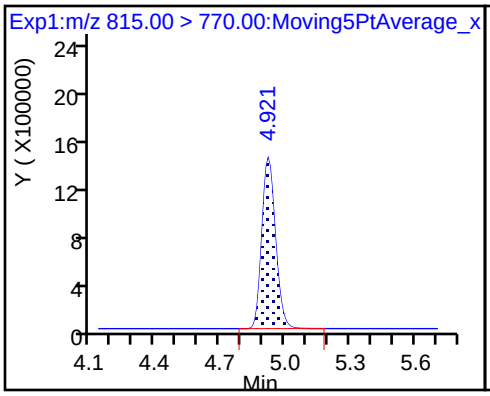
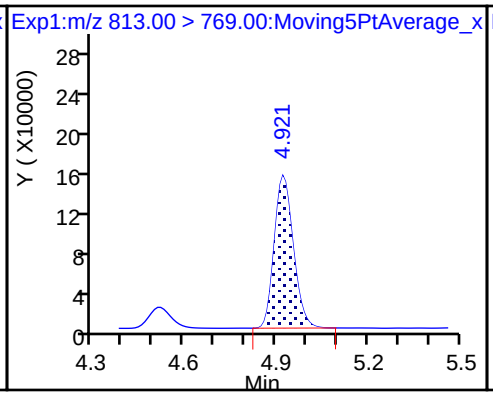
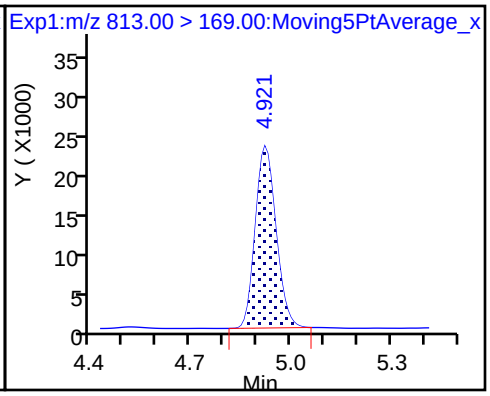


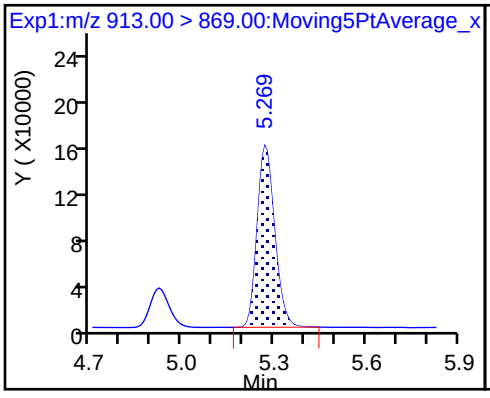
45 Perfluorohexadecanoic acid



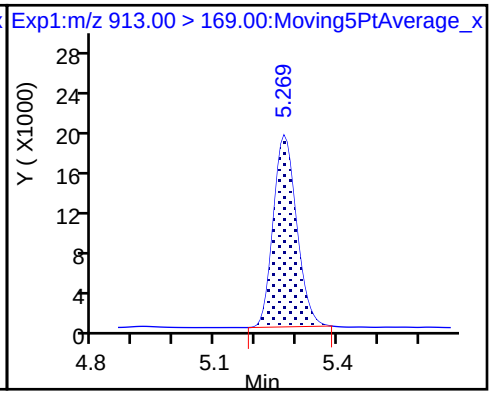
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_005.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 10-Apr-2018 19:03:10 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L4-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-Apr-2018 10:51:08 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: roycea Date: 11-Apr-2018 09:18:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.430	1.431	-0.001	1.000	6139471	2.47		98.7	48680	
2 Perfluorobutyric acid										
212.90 > 169.00	1.430	1.432	-0.002	1.000	2238331	0.9816		98.2	1326	
D 3 13C5-PFPeA										
267.90 > 223.00	1.694	1.699	-0.005	0.557	3994638	2.49		99.6	84241	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.694	1.699	-0.005	1.000	1831380	0.9617		96.2	1761	
D 47 13C3-PFBS										
301.90 > 83.00	1.730	1.735	-0.005	1.000	87216	2.37		102	926	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.739	1.736	0.003	1.005	2489261	0.8476		95.9	14542	
298.90 > 99.00	1.730	1.736	-0.006	1.000	1026363		2.43(1.25-3.74)	95.9	13875	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.950	1.950	0.0	1.000	538908	0.8961		95.9	32256	
D 60 M2-4:2FTS										
329.00 > 81.00	1.950	1.950	0.0	1.000	623892	2.37		101	7451	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.982	1.985	-0.003	1.000	1813678	1.02		102	3998	
313.00 > 119.00	1.982	1.985	-0.003	1.000	170514		10.64(5.03-15.10)	102	2276	
D 7 13C2 PFHxA										
315.00 > 270.00	1.982	1.985	-0.003	1.000	4391788	2.48		99.0	110601	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.005	2.008	-0.003	1.000	2448518	0.9128		97.3	20312	
349.00 > 99.00	2.005	2.008	-0.003	1.000	889950		2.75(1.36-4.07)	97.3	22028	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.084	2.084	0.0	1.000	279991	2.55		102	7988	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.084	2.087	-0.003	1.000	295687	0.9479		94.8	2375	
D 9 13C4-PFHpA										
367.00 > 322.00	2.308	2.314	-0.006	1.000	4282212	2.48		99.2	70470	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.308	2.314	-0.006	1.000	1720489	1.00		100	2264	
363.00 > 169.00	2.308	2.314	-0.006	1.000	645805		2.66(1.13-3.40)	100	2862	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.321	2.323	-0.002	1.000	2023389	0.8443		92.8	6640	
399.00 > 99.00	2.321	2.323	-0.002	1.000	680836		2.97(1.50-4.49)	92.8	7311	
D 11 18O2 PFHxS										
403.00 > 84.00	2.321	2.327	-0.006	1.000	5007633	2.35		99.4	102844	
65 Adona										
377.00 > 251.00	2.360	2.360	0.0	1.000	5740779	1.11		111	74377	
377.00 > 85.00	2.360	2.360	0.0	1.000	3274137		1.75(0.84-2.53)	111	78247	
D 12 M2-6:2FTS										
429.00 > 81.00	2.644	2.649	-0.005	1.000	892700	2.41		102	13338	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.644	2.649	-0.005	1.000	594490	0.9356		98.7	14992	
D 14 13C4 PFOA										
417.00 > 372.00	2.667	2.673	-0.006	1.000	4283435	2.50		99.9	79564	
* 62 13C2-PFOA										
415.00 > 370.00	2.667	2.674	-0.007		4623888	2.50			81419	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.667	2.674	-0.007	1.000	1852208	0.9356		93.6	1057	
413.00 > 169.00	2.667	2.674	-0.007	1.000	965583		1.92(0.84-2.52)	93.6	3850	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.675	2.680	-0.005	1.000	1862796	0.9363		98.4	15147	
449.00 > 99.00	2.675	2.680	-0.005	1.000	507863		3.67(1.94-5.82)	98.4	12696	
D 18 13C4 PFOS										
503.00 > 80.00	3.039	3.041	-0.002	1.000	3581436	2.40		100	25084	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.039	3.042	-0.003	1.000	1466540	0.8996		96.9	6157	
499.00 > 99.00	3.039	3.042	-0.003	1.000	330120		4.44(2.31-6.93)	96.9	8806	
20 Perfluorononanoic acid										
463.00 > 419.00	3.039	3.043	-0.004	1.000	1529838	1.00		99.7	3704	
463.00 > 169.00	3.039	3.043	-0.004	1.000	361461		4.23(1.90-5.69)	99.7	8802	
D 19 13C5 PFNA										
468.00 > 423.00	3.039	3.045	-0.006	1.000	3677661	2.49		99.8	74488	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.247	3.253	-0.006	1.000	2661617	0.9422		101	59184	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.380	3.388	-0.008	1.000	1034931	0.8640		90.0	11093	
549.00 > 99.00	3.380	3.388	-0.008	1.000	415423		2.49(1.33-3.97)	90.0	9871	
D 26 M2-8:2FTS										
529.00 > 81.00	3.389	3.390	-0.001	1.000	1093693	2.46		103	11489	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.389	3.393	-0.004	1.000	537990	0.9310		97.2	28178	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.389	3.397	-0.008	1.000	4725832	2.54		101	62563	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.399	3.401	-0.002	1.003	1898032	0.99		99.3	33374	
D 23 13C2 PFDA										
515.00 > 470.00	3.399	3.401	-0.002	1.000	3187733	2.57		103	83926	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.399	3.402	-0.003	1.000	1275776	0.9699		97.0	5989	
513.00 > 169.00	3.399	3.402	-0.003	1.000	223055		5.72(2.36-7.09)	97.0	4231	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.548	3.553	-0.005	1.000	1818526	2.59		104	25217	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.557	3.558	-0.001	1.003	694281	0.9570		95.7	4614	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.709	3.715	-0.006	1.000	935700	0.9618		99.8	9931	
599.00 > 99.00	3.709	3.715	-0.006	1.000	313308		2.99(1.39-4.16)	99.8	9034	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.720	3.722	-0.002	1.000	1716798	2.48		99.0	15143	
D 30 13C2 PFUnA										
565.00 > 520.00	3.720	3.727	-0.007	1.000	2598322	2.43		97.2	73211	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.720	3.727	-0.007	1.000	636880	0.99		99.2	12406	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.720	3.727	-0.007	1.000	822546	0.9365		93.6	3940	
563.00 > 169.00	3.720	3.727	-0.007	1.000	193601		4.25(2.12-6.36)	93.6	4746	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.876	3.883	-0.007	1.000	4412145	1.01		107	64014	
D 36 13C2 PFDoA										
615.00 > 570.00	4.009	4.017	-0.008	1.000	3058842	2.65		106	28121	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.020	4.020	0.0	1.003	1173427	0.9196		92.0	1328	
613.00 > 169.00	4.009	4.020	-0.011	1.000	277484		4.23(2.13-6.40)	92.0	3949	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.272	4.278	-0.006	1.000	1346073	0.9052		90.5	1176	
663.00 > 169.00	4.272	4.278	-0.006	1.000	415749		3.24(1.25-3.76)	90.5	4126	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.512	4.513	-0.001	1.000	3824690	2.61		105	24410	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.512	4.513	-0.001	1.000	376531	0.9800		98.0	4038	
713.00 > 219.00	4.502	4.513	-0.011	0.998	255558		1.47(0.71-2.13)	98.0	4003	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.914	4.918	-0.004	1.000	5981114	2.51		100	18136	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.914	4.920	-0.006	1.000	2337041	1.01		101	753	
813.00 > 169.00	4.914	4.920	-0.006	1.000	365367		6.40(2.86-8.58)	101	2438	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.263	5.268	-0.005	1.000	2359770	0.9824		98.2	640	
913.00 > 169.00	5.263	5.268	-0.005	1.000	281134		8.39(3.83-11.48)	98.2	1988	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 11-Apr-2018 10:51:09 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_005.d

Injection Date: 10-Apr-2018 19:03:10 Instrument ID: A8_N

Lims ID: IC L4 Full

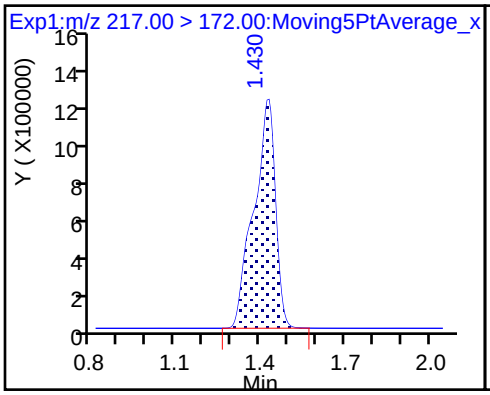
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 5

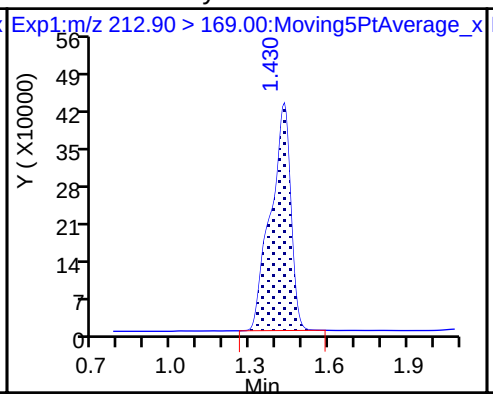
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

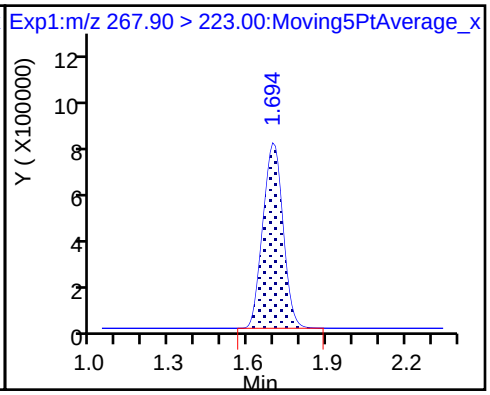
D 1 13C4 PFBA



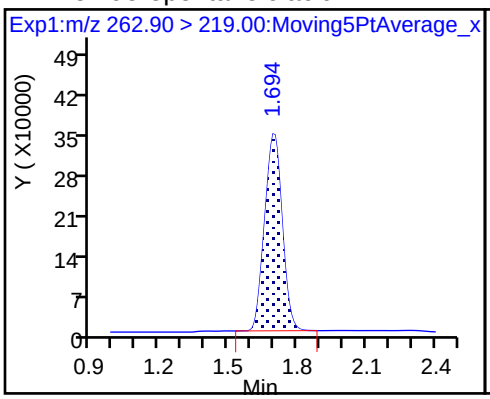
2 Perfluorobutyric acid



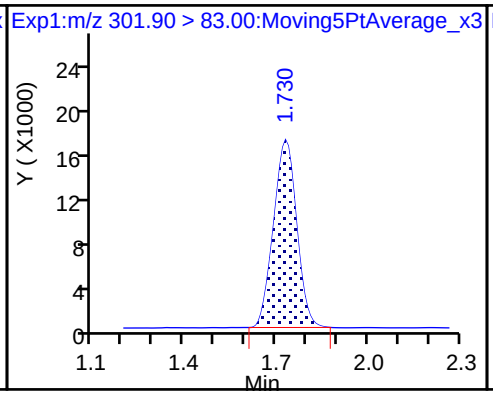
D 3 13C5-PFPeA



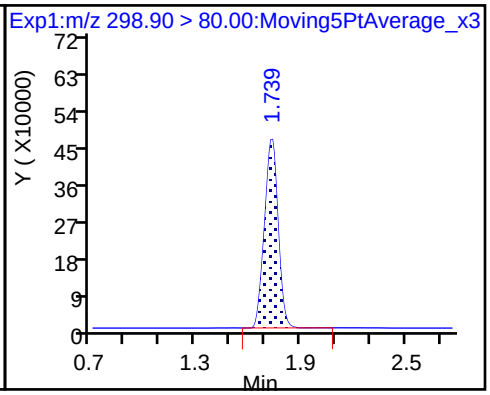
4 Perfluoropentanoic acid



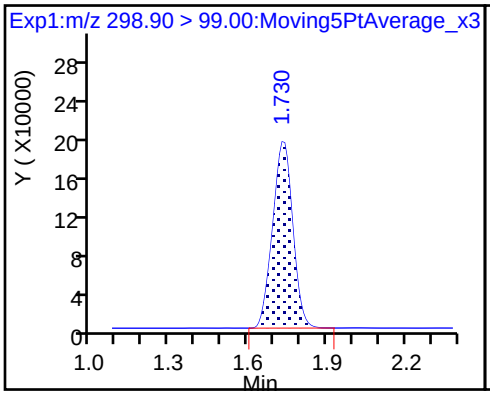
D 47 13C3-PFBS



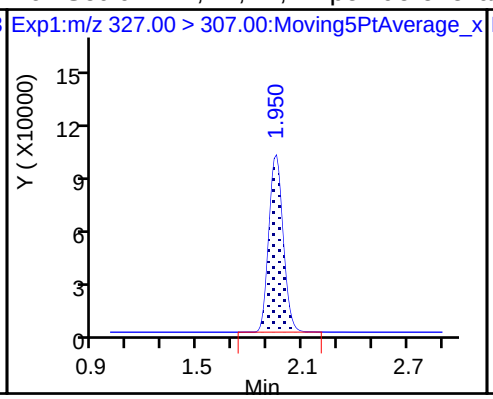
5 Perfluorobutanesulfonic acid



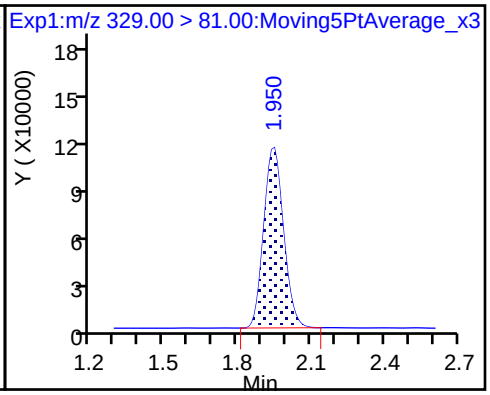
5 Perfluorobutanesulfonic acid



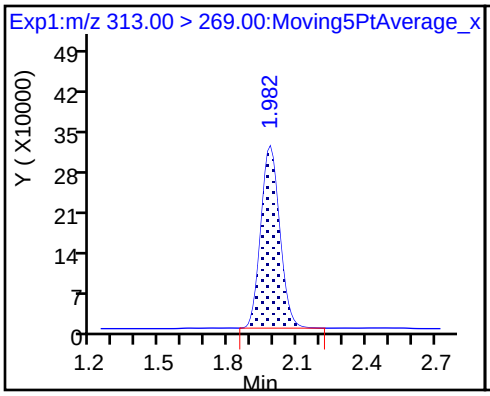
61 Sodium 1H,1H,2H,2H-perfluorohexane



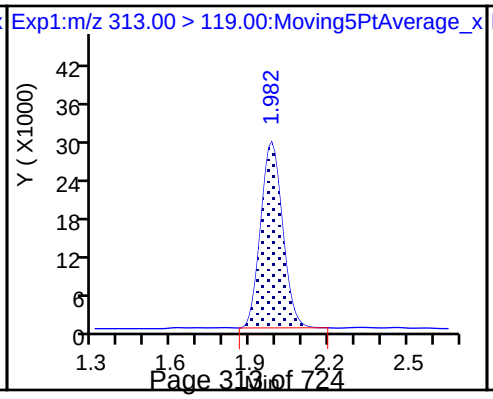
D 60 M2-4:2FTS



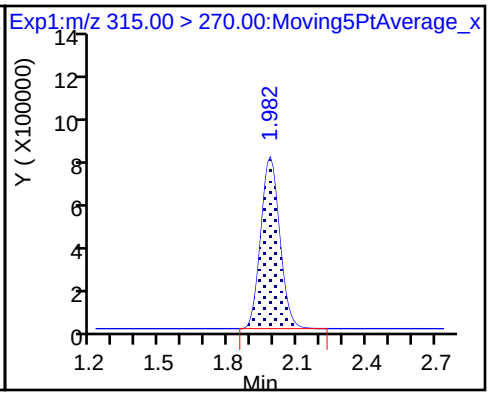
6 Perfluorohexanoic acid



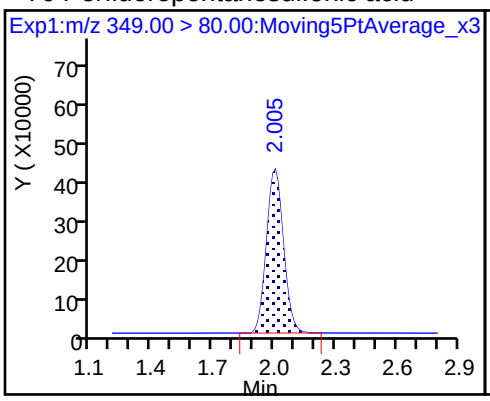
6 Perfluorohexanoic acid



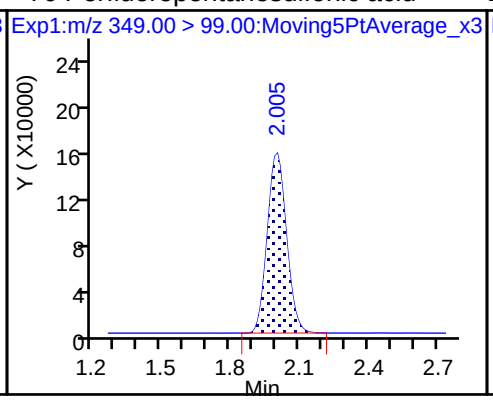
D 7 13C2 PFHxA



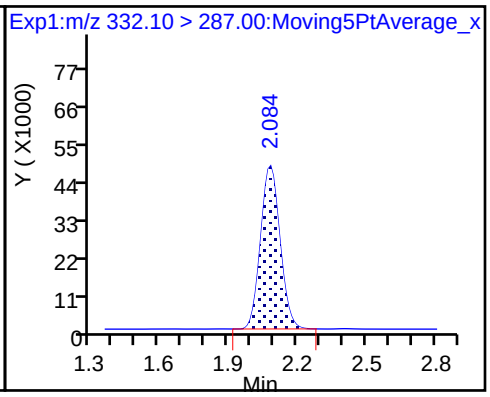
70 Perfluoropentanesulfonic acid



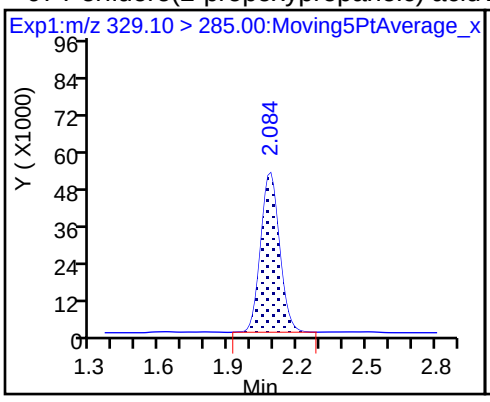
70 Perfluoropentanesulfonic acid



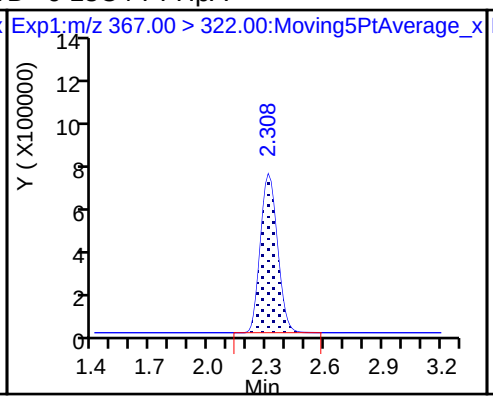
D 64 13C3 HFPO-DA



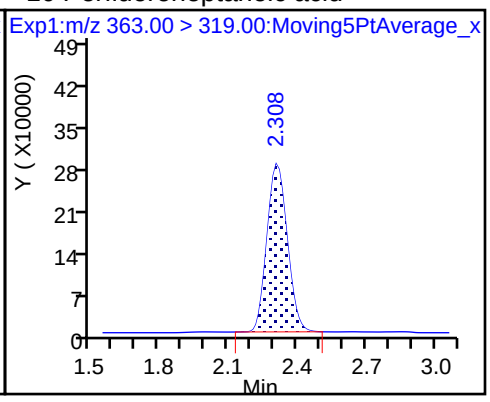
67 Perfluoro(2-propoxypropanoic) acid



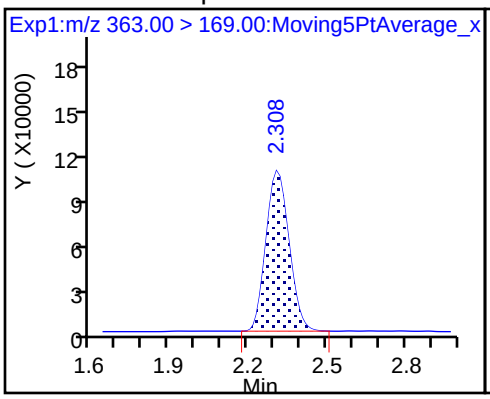
D 9 13C4-PFHpA



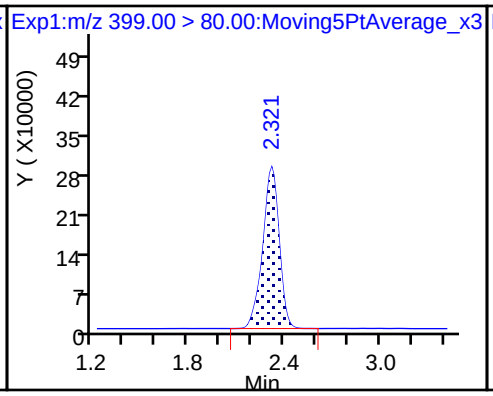
10 Perfluoroheptanoic acid



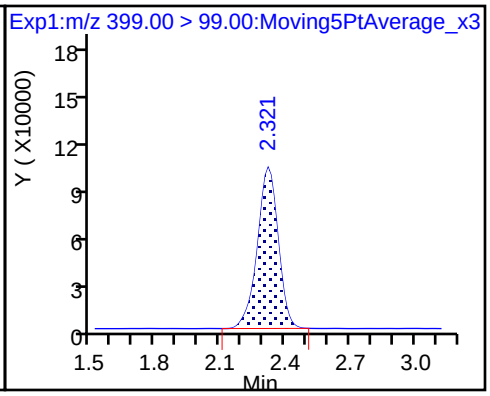
10 Perfluoroheptanoic acid



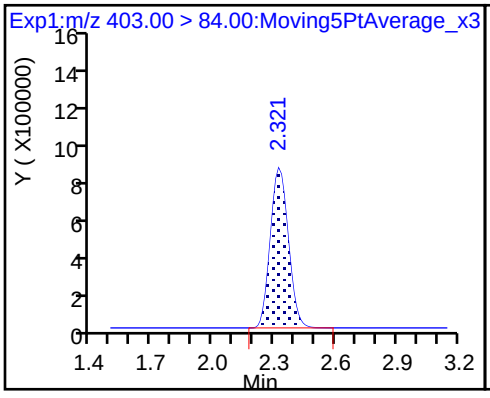
8 Perfluorohexanesulfonic acid



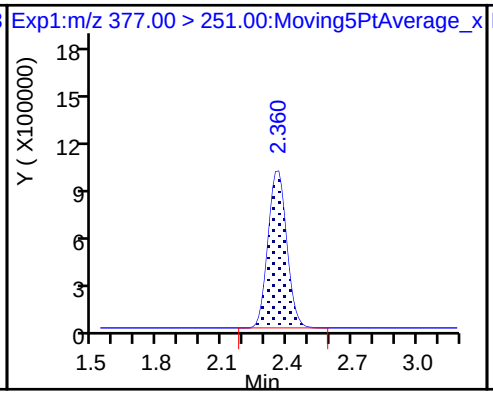
8 Perfluorohexanesulfonic acid



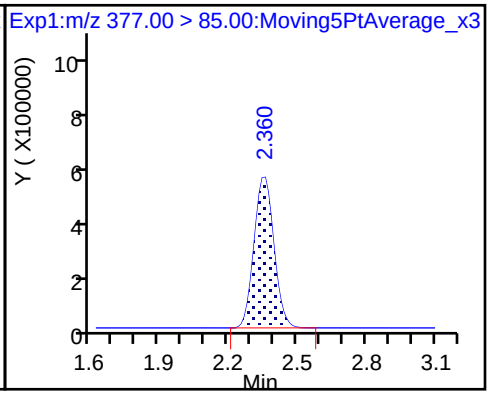
D 11 18O2 PFHxS



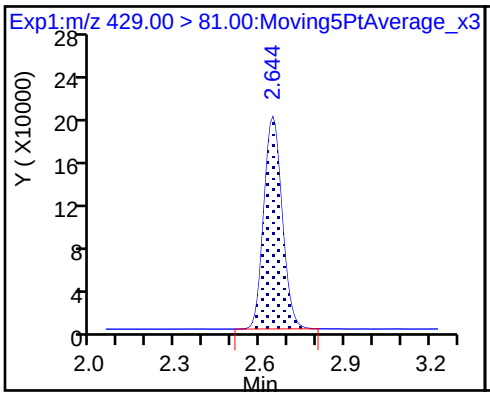
65 Adona



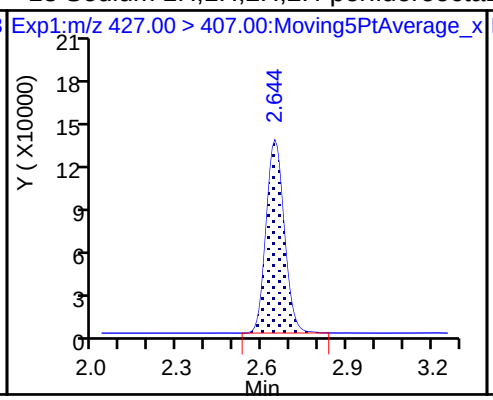
65 Adona



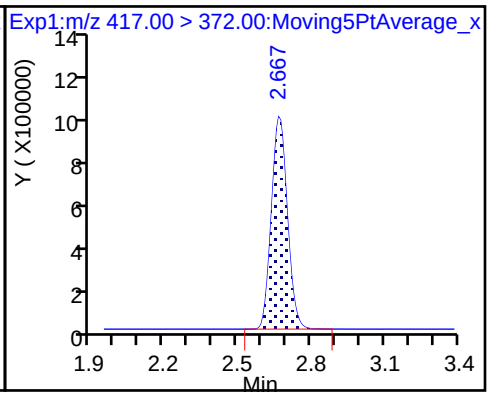
D 12 M2-6:2FTS



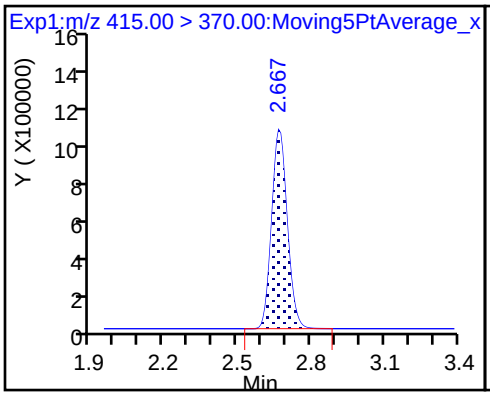
13 Sodium 1H,1H,2H,2H-perfluorooctane



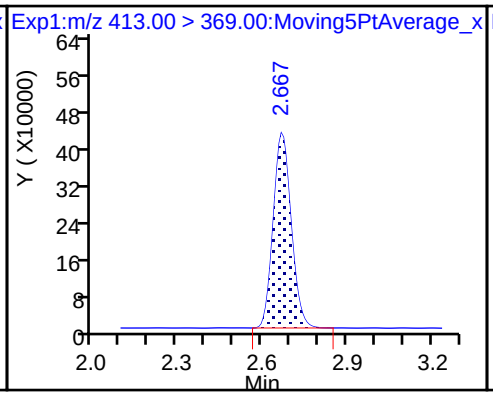
D 14 13C4 PFOA



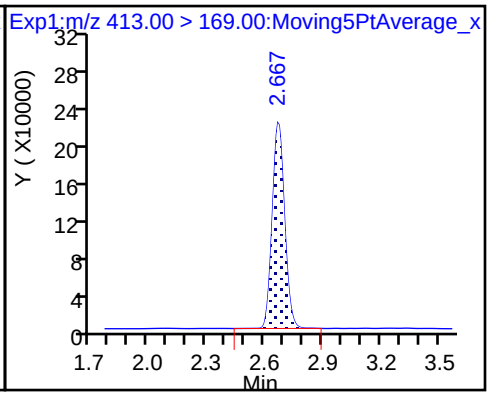
* 62 13C2-PFOA



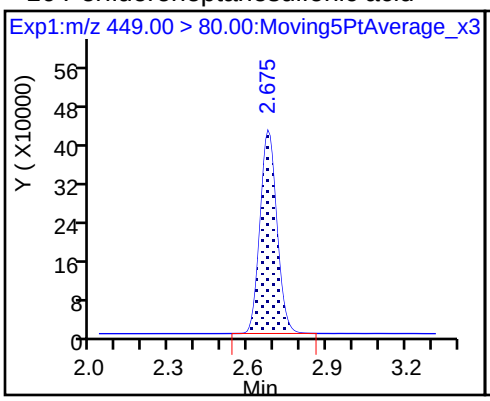
15 Perfluorooctanoic acid



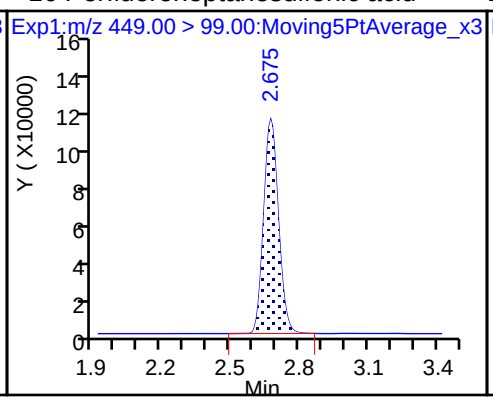
15 Perfluorooctanoic acid



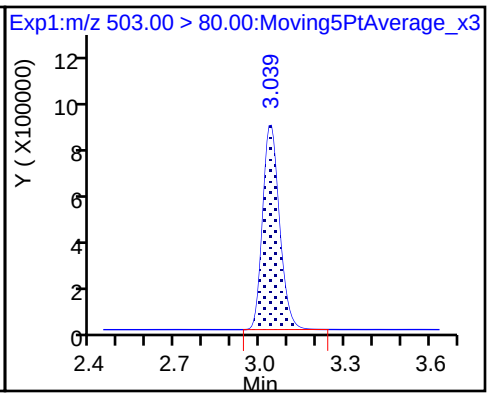
16 Perfluoroheptanesulfonic acid



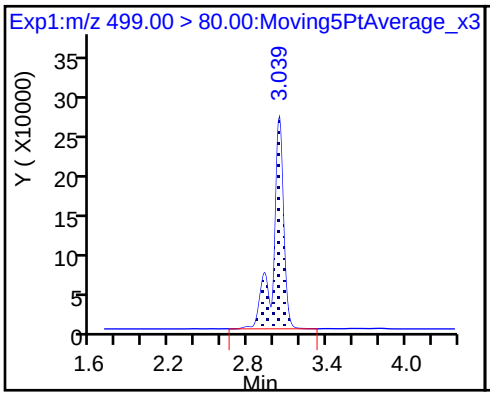
16 Perfluoroheptanesulfonic acid



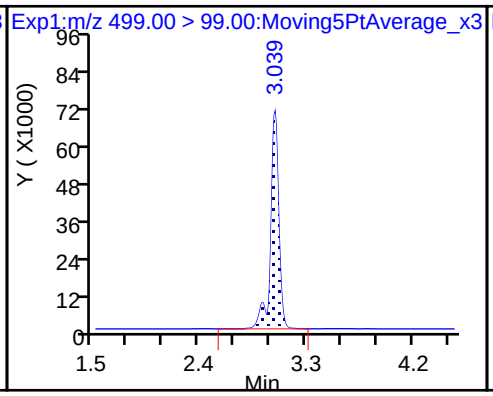
D 18 13C4 PFOS



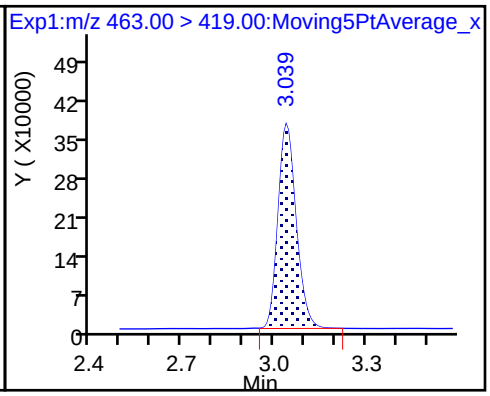
17 Perfluorooctane sulfonic acid



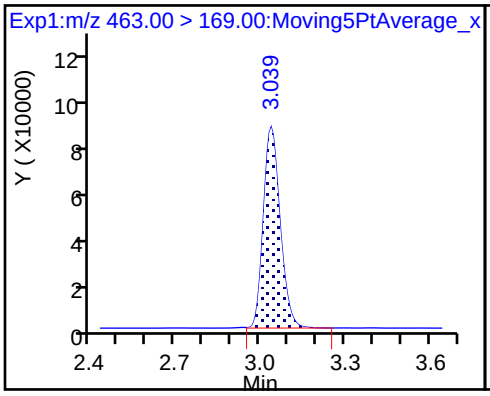
17 Perfluorooctane sulfonic acid



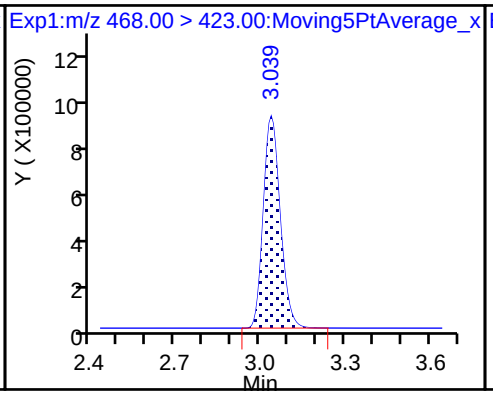
20 Perfluorononanoic acid



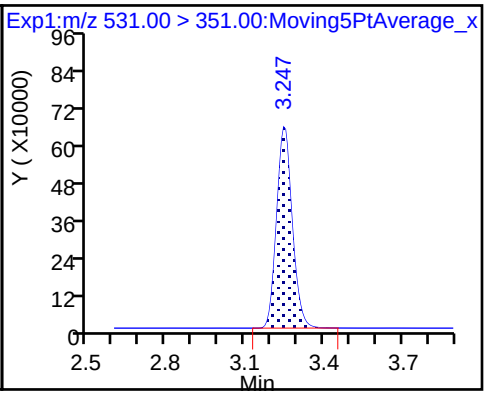
20 Perfluorononanoic acid



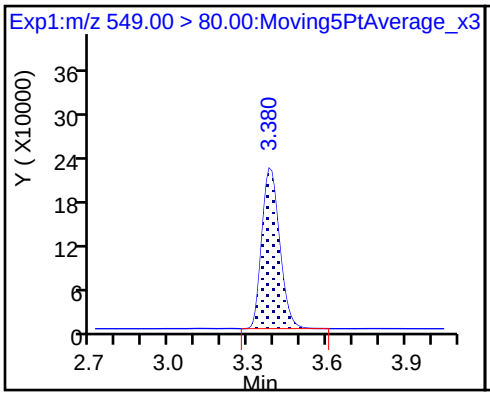
D 19 13C5 PFNA



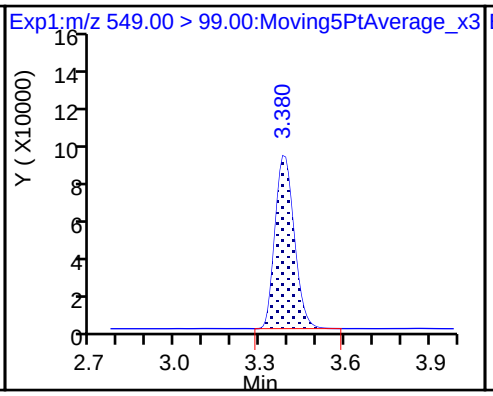
69 9-Chlorohexadecafluoro-3-oxanonane



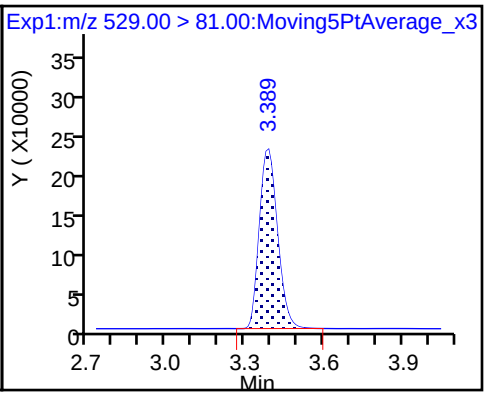
68 Perfluorononanesulfonic acid



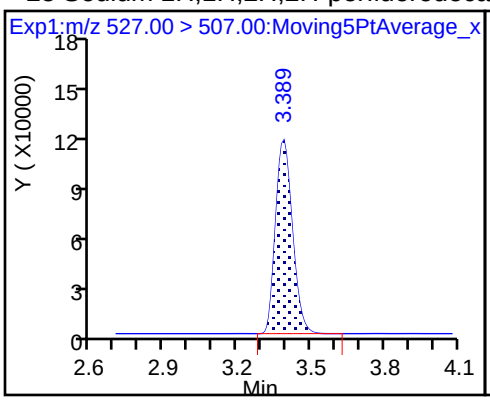
68 Perfluorononanesulfonic acid



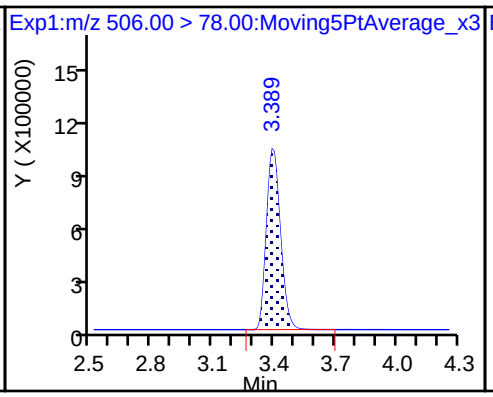
D 26 M2-8:2FTS



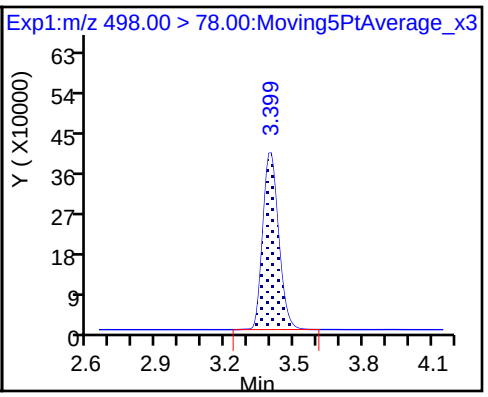
25 Sodium 1H,1H,2H,2H-perfluorodecane



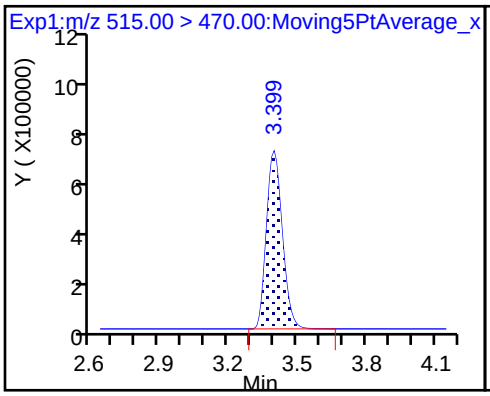
D 21 13C8 FOSA



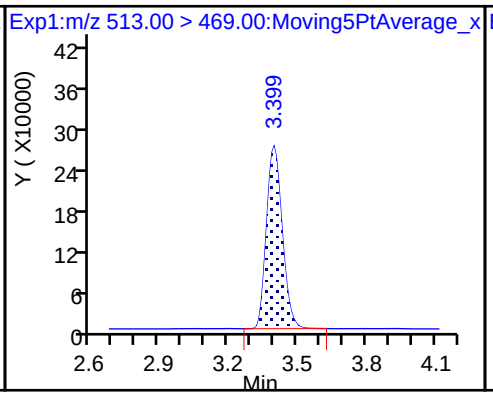
22 Perfluorooctane Sulfonamide



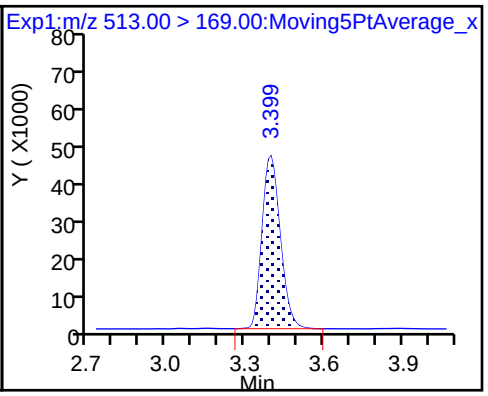
D 23 13C2 PFDA



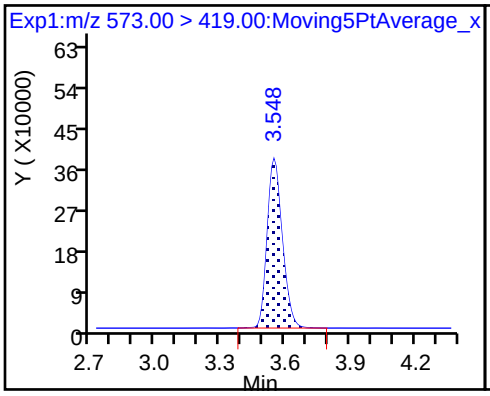
24 Perfluorodecanoic acid



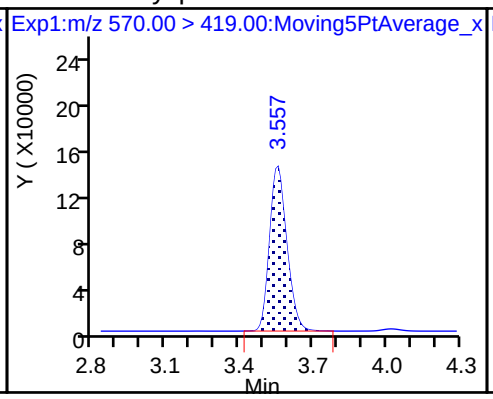
24 Perfluorodecanoic acid



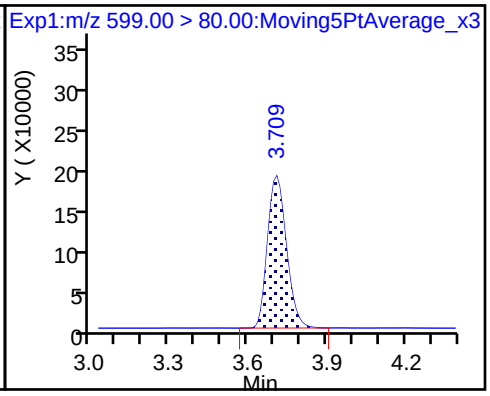
D 27 d3-NMeFOSAA



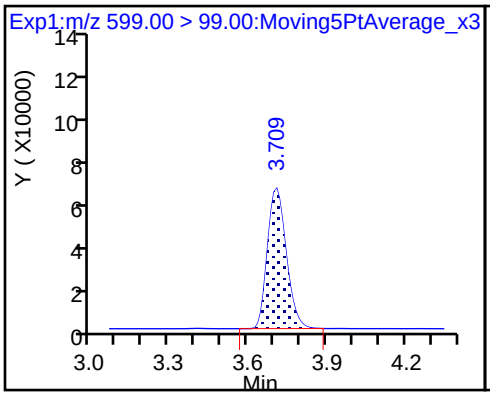
28 N-methyl perfluorooctane sulfonami



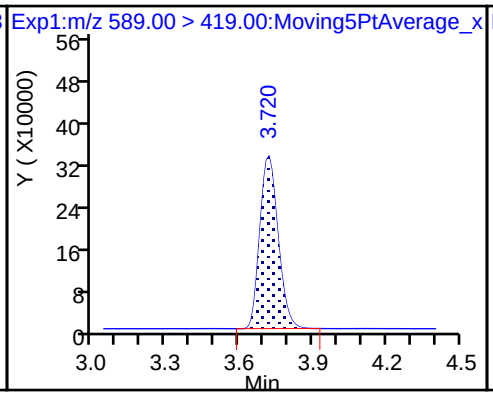
29 Perfluorodecane Sulfonic acid



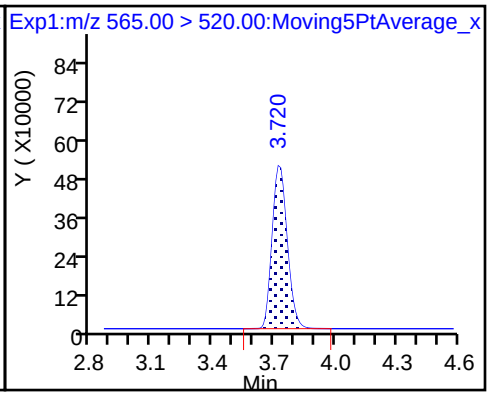
29 Perfluorodecane Sulfonic acid



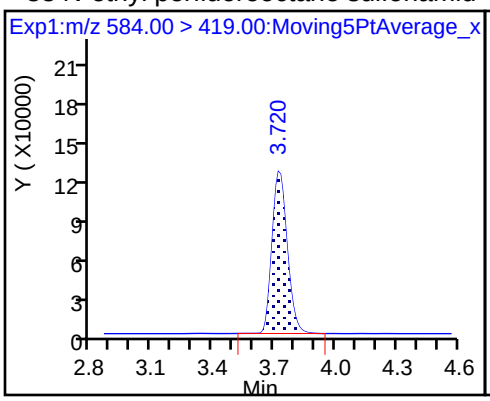
D 32 d5-NEtFOSAA



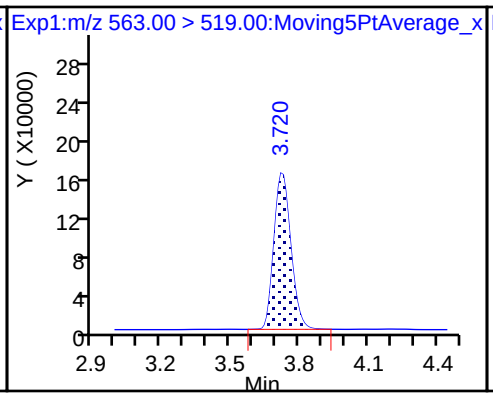
D 30 13C2 PFUnA



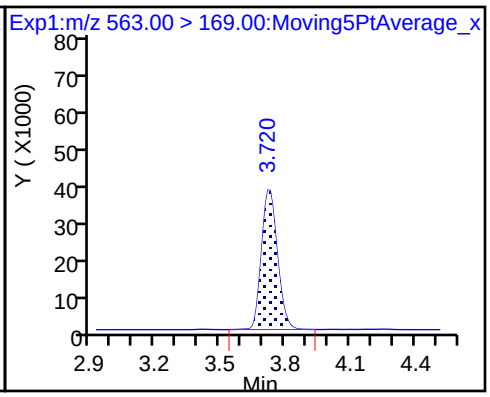
33 N-ethyl perfluorooctane sulfonamid



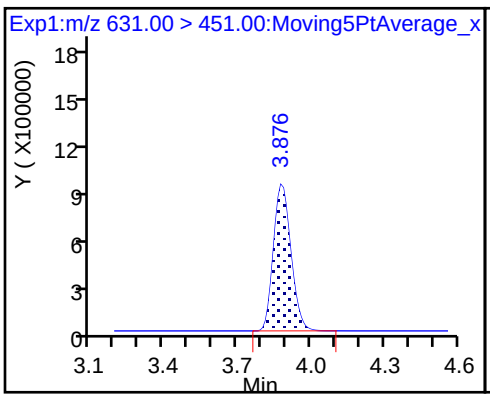
31 Perfluoroundecanoic acid



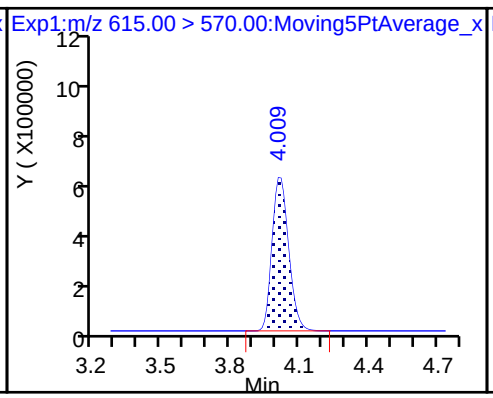
31 Perfluoroundecanoic acid



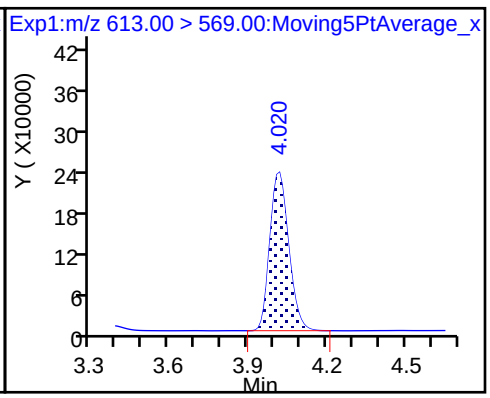
66 11-Chloroeicosafluoro-3-oxaundecan



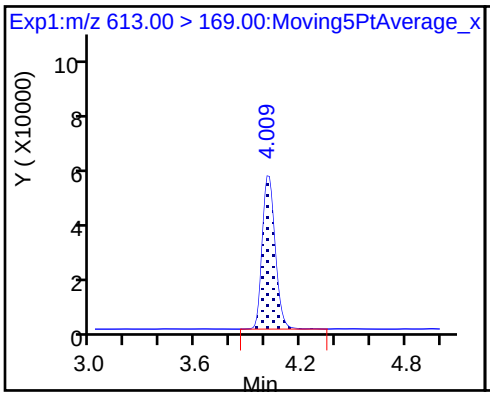
D 36 13C2 PFDoA



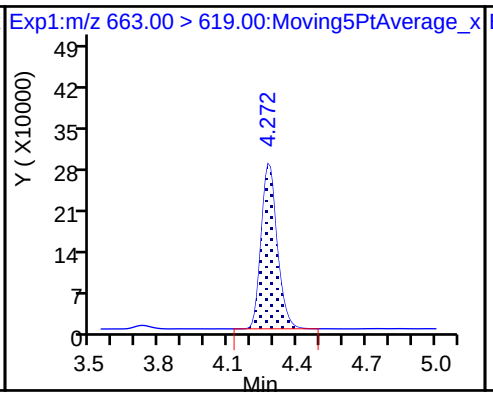
37 Perfluorododecanoic acid



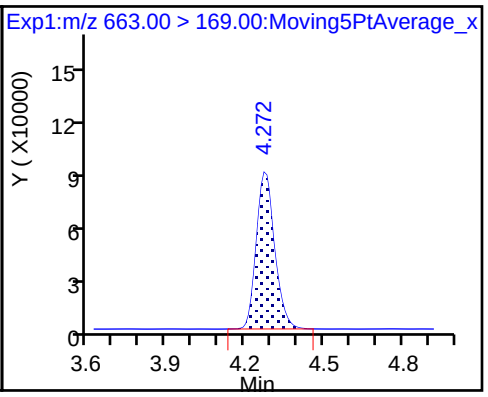
37 Perfluorododecanoic acid



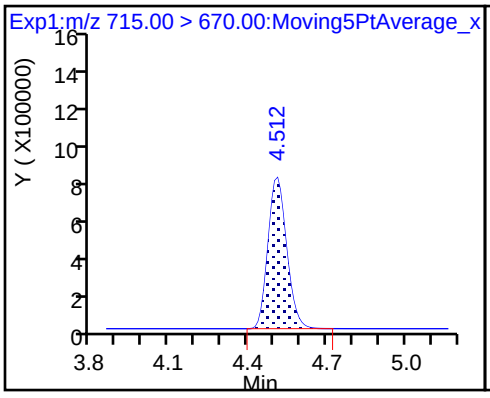
41 Perfluorotridecanoic acid



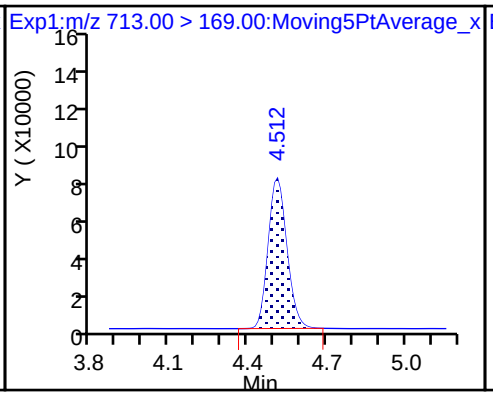
41 Perfluorotridecanoic acid



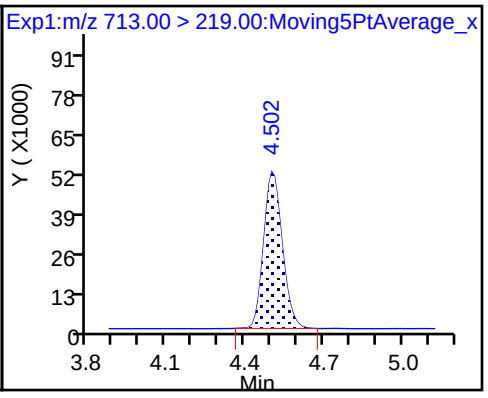
D 43 13C2-PFTeDA



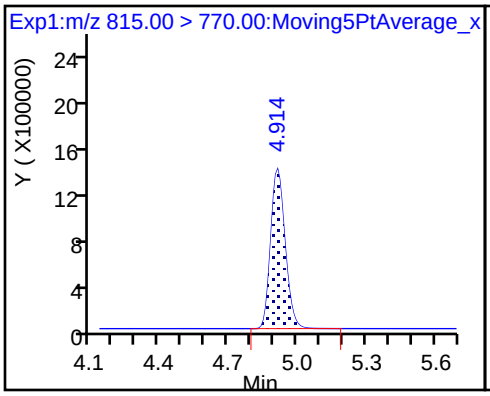
42 Perfluorotetradecanoic acid



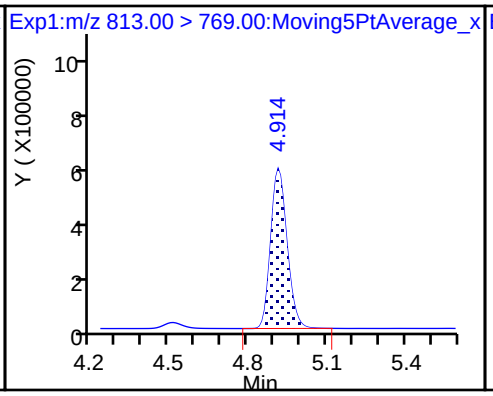
42 Perfluorotetradecanoic acid



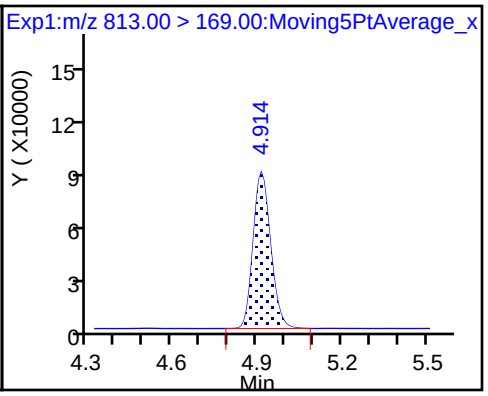
D 44 13C2-PFHxDA



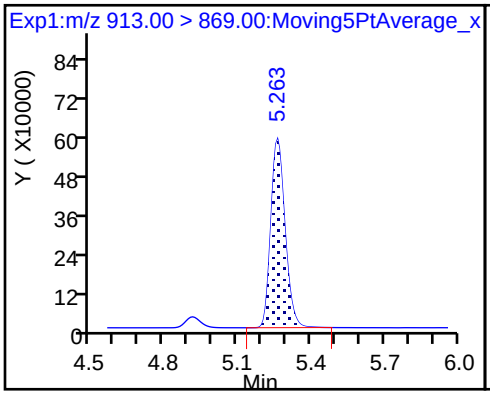
45 Perfluorohexadecanoic acid



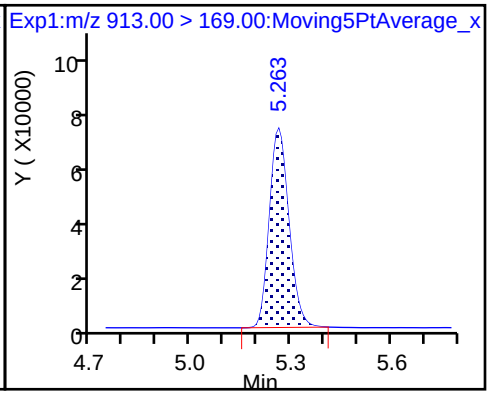
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_006.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2018 19:10:58 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L5-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-Apr-2018 10:51:11 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: roycea Date: 11-Apr-2018 09:19:33

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.430	1.431	-0.001	1.000	6113537	2.46		98.3	50691	
2 Perfluorobutyric acid										
212.90 > 169.00	1.430	1.432	-0.002	1.000	5819896	2.56		103	2506	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.693	1.699	-0.006	1.000	4844578	2.57		103	4840	
D 3 13C5-PFPeA										
267.90 > 223.00	1.693	1.699	-0.006	0.558	3952401	2.46		98.6	74416	
D 47 13C3-PFBS										
301.90 > 83.00	1.729	1.735	-0.006	1.000	83922	2.28		98.1	740	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.729	1.736	-0.007	1.000	6477140	2.29		104	28669	
298.90 > 99.00	1.729	1.736	-0.007	1.000	2643044		2.45(1.25-3.74)	104	34961	
D 60 M2-4:2FTS										
329.00 > 81.00	1.948	1.950	-0.002	1.000	615130	2.33		99.9	6761	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.948	1.950	-0.002	1.000	1359770	2.35		101	79419	
D 7 13C2 PFHxA										
315.00 > 270.00	1.981	1.985	-0.004	1.000	4266668	2.41		96.2	93064	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.981	1.985	-0.004	1.000	4512177	2.60		104	11165	
313.00 > 119.00	1.981	1.985	-0.004	1.000	415818		10.85(5.03-15.10)	104	4827	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.003	2.008	-0.005	1.000	6143254	2.38		101	39164	
349.00 > 99.00	2.003	2.008	-0.005	1.000	2304917		2.67(1.36-4.07)	101	57041	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.082	2.084	-0.002	1.000	282614	2.58		103	8102	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.082	2.087	-0.005	1.000	771939	2.45		98.1	6105	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.306	2.314	-0.008	1.000	4571563	2.62		105	6057	
363.00 > 169.00	2.306	2.314	-0.008	1.000	1750162		2.61(1.13-3.40)	105	10592	
D 9 13C4-PFHpA										
367.00 > 322.00	2.306	2.314	-0.008	1.000	4357585	2.52		101	88768	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.319	2.323	-0.004	1.000	5199428	2.21		97.1	17064	
399.00 > 99.00	2.319	2.323	-0.004	1.000	1684954		3.09(1.50-4.49)	97.1	15461	
D 11 18O2 PFHxS										
403.00 > 84.00	2.319	2.327	-0.008	1.000	4919272	2.31		97.6	100471	
65 Adona										
377.00 > 251.00	2.358	2.360	-0.002	1.000	13509817	2.70		108	130340	
377.00 > 85.00	2.345	2.360	-0.015	0.994	7737038		1.75(0.84-2.53)	108	141597	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.644	2.649	-0.005	1.000	1407564	2.24		94.7	22058	
D 12 M2-6:2FTS										
429.00 > 81.00	2.644	2.649	-0.005	1.000	880882	2.38		100	13167	
D 14 13C4 PFOA										
417.00 > 372.00	2.667	2.673	-0.006	1.000	4288230	2.50		100.0	57314	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.667	2.674	-0.007	1.000	4910933	2.48		99.1	2984	
413.00 > 169.00	2.667	2.674	-0.007	1.000	2476515		1.98(0.84-2.52)	99.1	13949	
* 62 13C2-PFOA										
415.00 > 370.00	2.667	2.674	-0.007		4623543	2.50			75604	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.675	2.680	-0.005	1.000	4867309	2.54		107	34655	
449.00 > 99.00	2.675	2.680	-0.005	1.000	1250756		3.89(1.94-5.82)	107	35350	
D 18 13C4 PFOS										
503.00 > 80.00	3.035	3.041	-0.006	1.000	3447017	2.31		96.7	25534	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.035	3.042	-0.007	1.000	3684174	2.35		101	15653	
499.00 > 99.00	3.035	3.042	-0.007	1.000	824846		4.47(2.31-6.93)	101	12600	
20 Perfluorononanoic acid										
463.00 > 419.00	3.035	3.043	-0.008	1.000	3792206	2.49		99.6	9277	
463.00 > 169.00	3.042	3.043	-0.001	1.002	865580		4.38(1.90-5.69)	99.6	18899	
D 19 13C5 PFNA										
468.00 > 423.00	3.035	3.045	-0.010	1.000	3653281	2.48		99.1	80277	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.250	3.253	-0.003	1.000	6954333	2.56		110	142943	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.384	3.388	-0.004	1.000	2870093	2.49		104	29938	
549.00 > 99.00	3.384	3.388	-0.004	1.000	1016002		2.82(1.33-3.97)	104	24257	
D 26 M2-8:2FTS										
529.00 > 81.00	3.384	3.390	-0.006	1.000	1063168	2.39		99.7	11071	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.384	3.393	-0.009	1.000	1298898	2.31		96.6	67638	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.393	3.397	-0.004	1.000	4533137	2.43		97.3	60119	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.393	3.401	-0.008	1.000	4752476	2.59		104	78074	
D 23 13C2 PFDA										
515.00 > 470.00	3.393	3.401	-0.008	1.000	2967373	2.39		95.8	61893	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.393	3.402	-0.009	1.000	3158094	2.58		103	14590	
513.00 > 169.00	3.393	3.402	-0.009	1.000	519040		6.08(2.36-7.09)	103	12013	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.551	3.553	-0.002	1.000	1707705	2.43		97.2	23521	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.551	3.558	-0.007	1.000	1802851	2.65		106	12762	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.711	3.715	-0.004	1.000	2376399	2.54		105	29437	
599.00 > 99.00	3.711	3.715	-0.004	1.000	777508		3.06(1.39-4.16)	105	25627	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.722	3.722	0.0	1.000	1729345	2.49		99.8	19661	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.722	3.727	-0.005	1.000	1669717	2.58		103	29608	
D 30 13C2 PFUnA										
565.00 > 520.00	3.722	3.727	-0.005	1.000	2601195	2.43		97.3	36634	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.722	3.727	-0.005	1.000	2103252	2.39		95.7	10698	
563.00 > 169.00	3.722	3.727	-0.005	1.000	525073		4.01(2.12-6.36)	95.7	20485	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.880	3.883	-0.003	1.000	10487942	2.50		106	87880	
D 36 13C2 PFDoA										
615.00 > 570.00	4.013	4.017	-0.004	1.000	2745849	2.38		95.1	29081	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.013	4.020	-0.007	1.000	3013785	2.63		105	3414	
613.00 > 169.00	4.013	4.020	-0.007	1.000	730770		4.12(2.13-6.40)	105	9810	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.276	4.278	-0.002	1.000	3391923	2.54		102	3159	
663.00 > 169.00	4.276	4.278	-0.002	1.000	1004489		3.38(1.25-3.76)	102	9947	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.508	4.513	-0.005	1.000	3639964	2.49		99.5	25555	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.508	4.513	-0.005	1.000	872520	2.39		95.4	8442	
713.00 > 219.00	4.508	4.513	-0.005	1.000	674330		1.29(0.71-2.13)	95.4	11267	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.910	4.918	-0.008	1.000	5731595	2.41		96.3	16637	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.919	4.920	-0.001	1.002	5739538	2.62		105	1768	
813.00 > 169.00	4.919	4.920	-0.001	1.002	919527		6.24(2.86-8.58)	105	5404	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.267	5.268	-0.001	1.000	5927518	2.57		103	1545	
913.00 > 169.00	5.260	5.268	-0.008	0.999	709210		8.36(3.83-11.48)	103	3575	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 11-Apr-2018 10:51:12 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_006.d

Injection Date: 10-Apr-2018 19:10:58 Instrument ID: A8_N

Lims ID: IC L5 Full

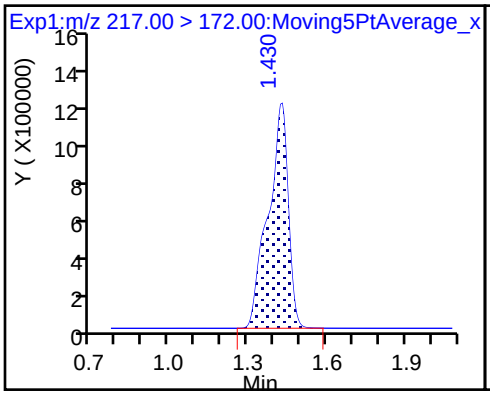
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 6

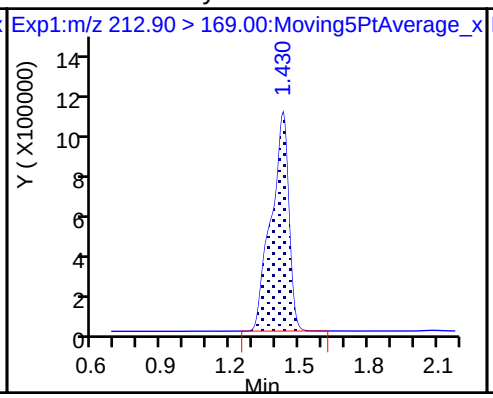
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

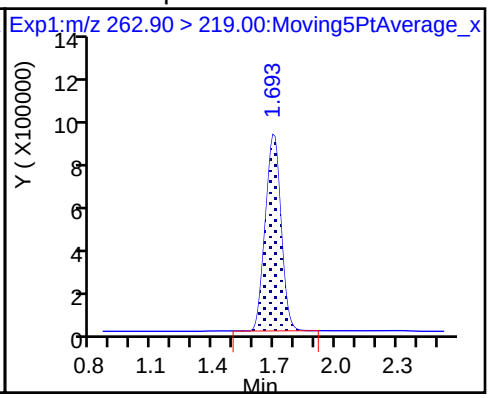
D 1 13C4 PFBA



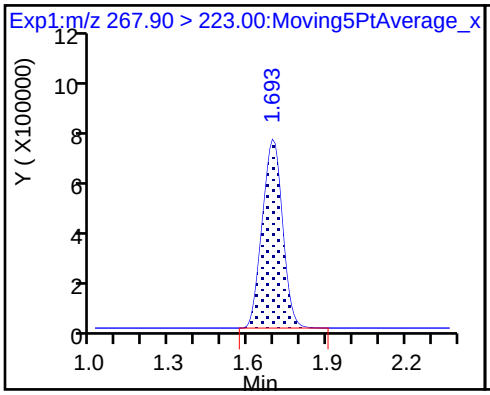
2 Perfluorobutyric acid



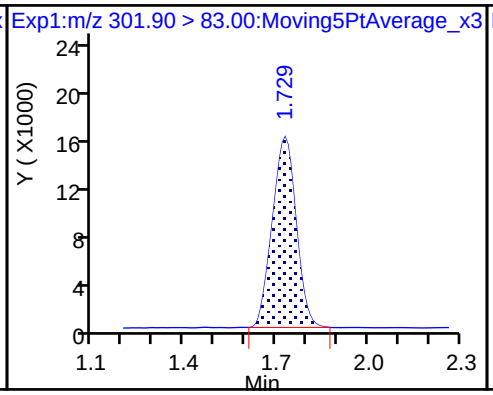
4 Perfluoropentanoic acid



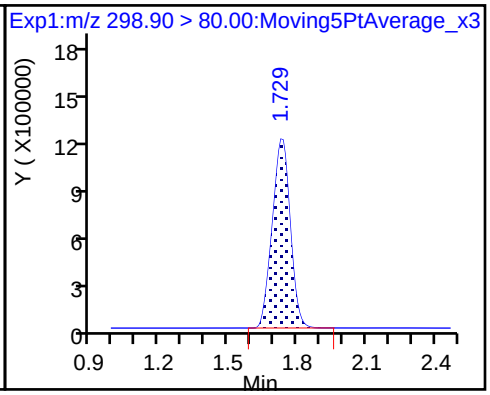
D 3 13C5-PFPeA



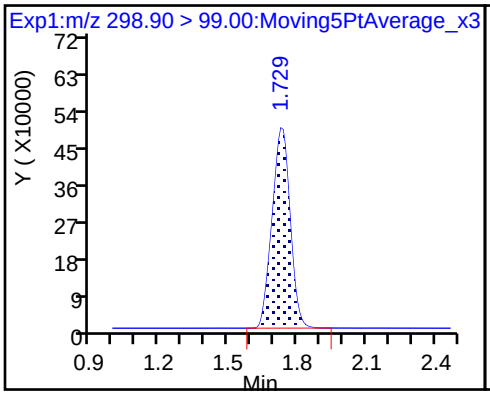
D 47 13C3-PFBS



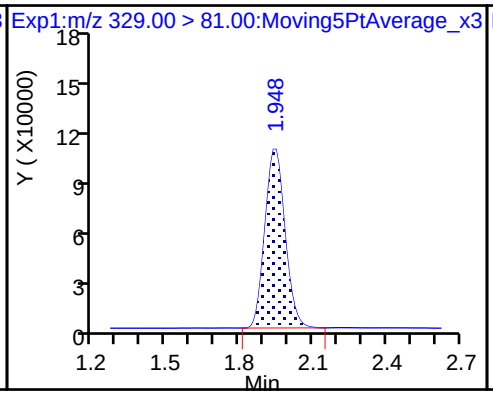
5 Perfluorobutanesulfonic acid



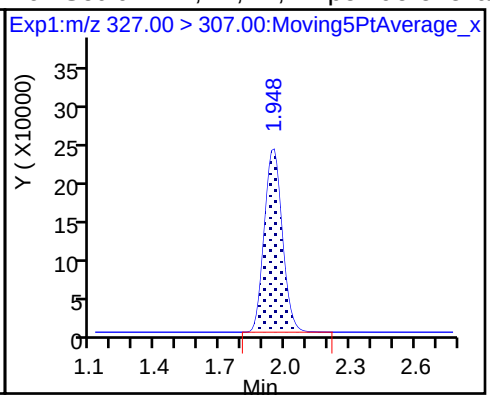
5 Perfluorobutanesulfonic acid



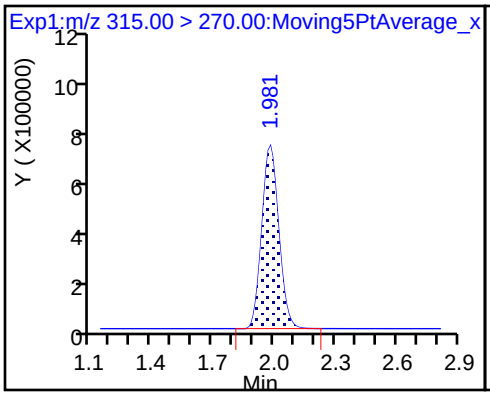
D 60 M2-4:2FTS



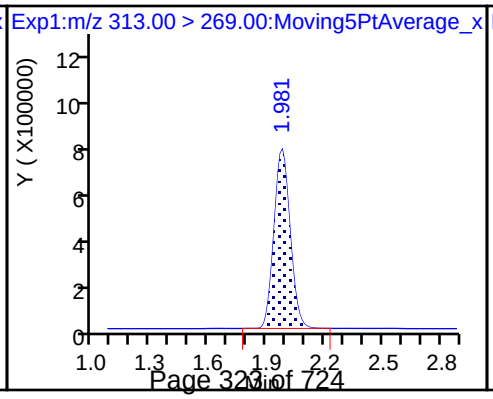
61 Sodium 1H,1H,2H,2H-perfluorohexane



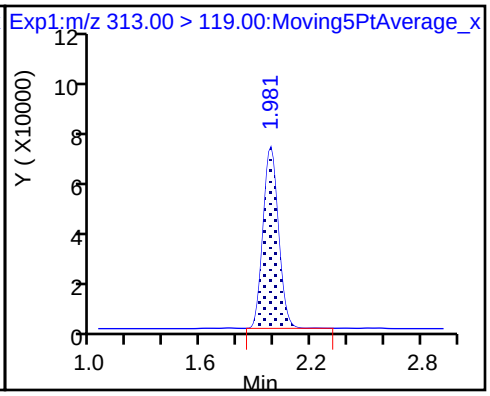
D 7 13C2 PFHxA



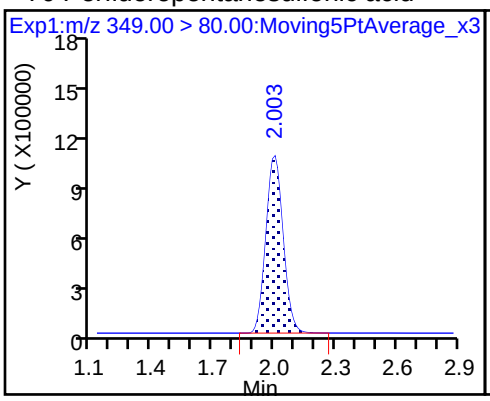
6 Perfluorohexanoic acid



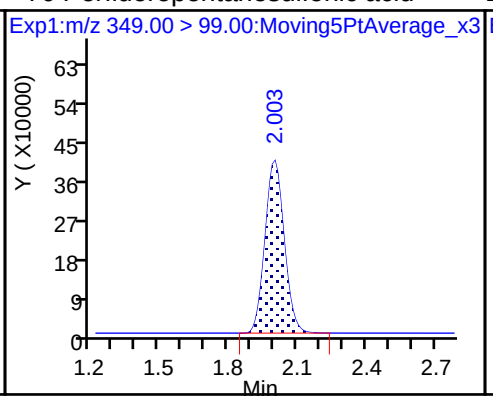
6 Perfluorohexanoic acid



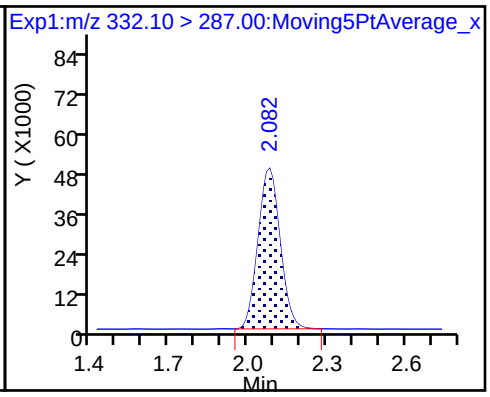
70 Perfluoropentanesulfonic acid



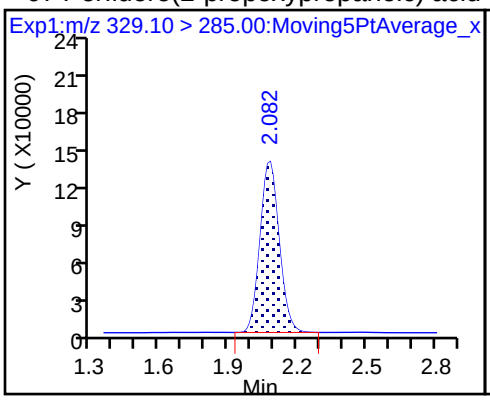
70 Perfluoropentanesulfonic acid



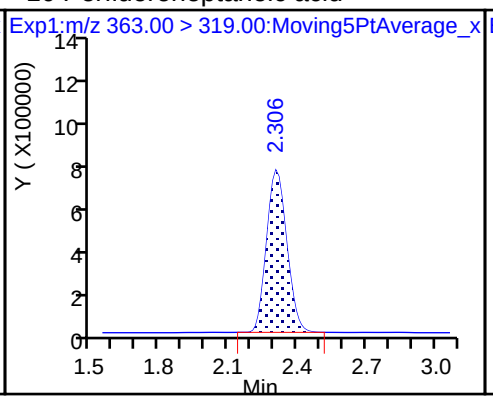
D 64 13C3 HFPO-DA



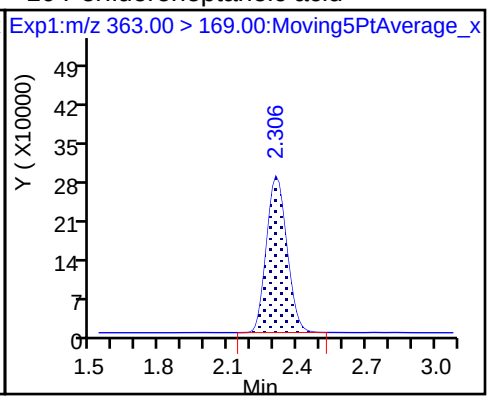
67 Perfluoro(2-propoxypropanoic) acid



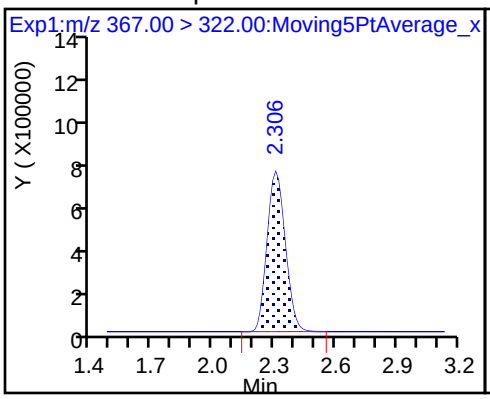
10 Perfluoroheptanoic acid



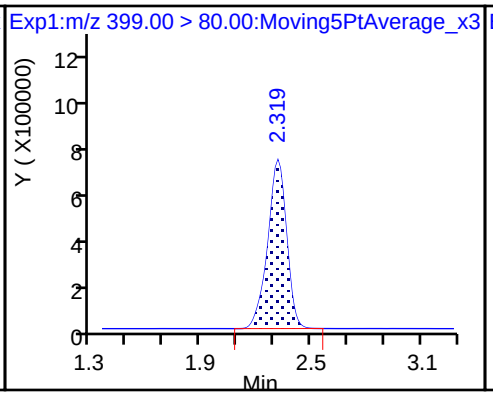
10 Perfluoroheptanoic acid



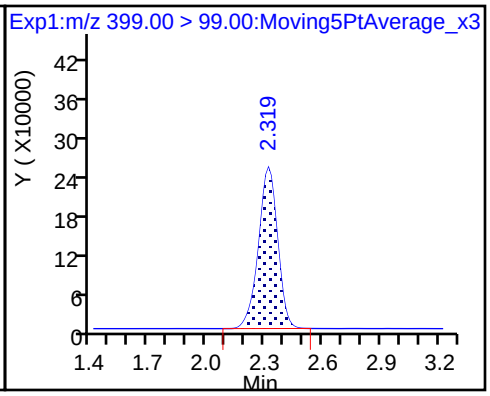
D 9 13C4-PFHpA



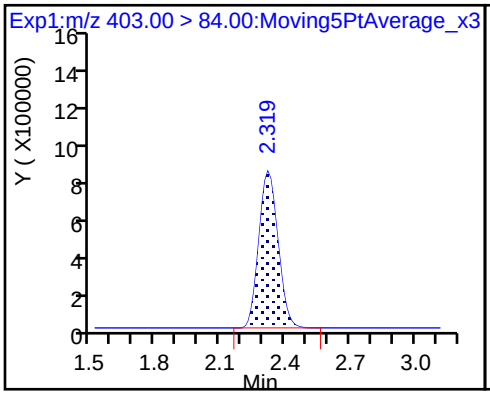
8 Perfluorohexanesulfonic acid



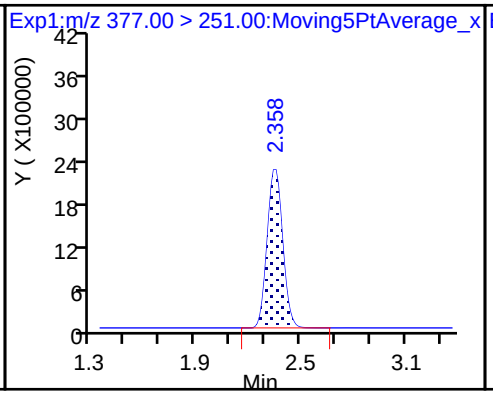
8 Perfluorohexanesulfonic acid



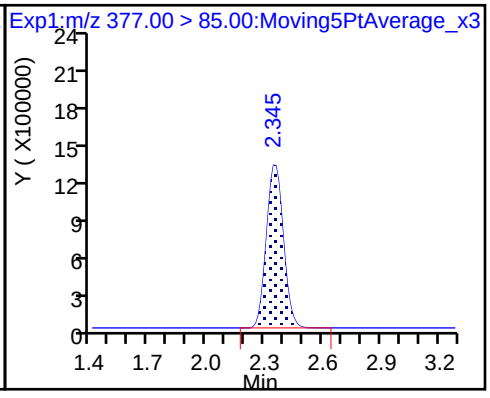
D 11 18O2 PFHxS



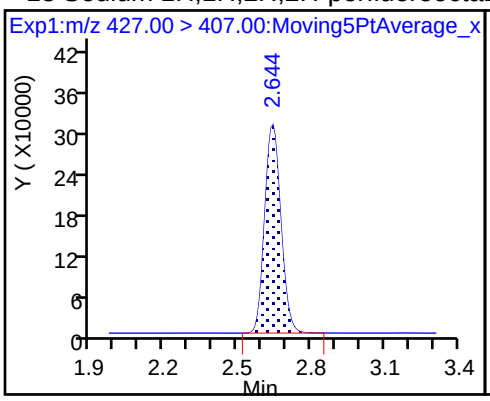
65 Adona



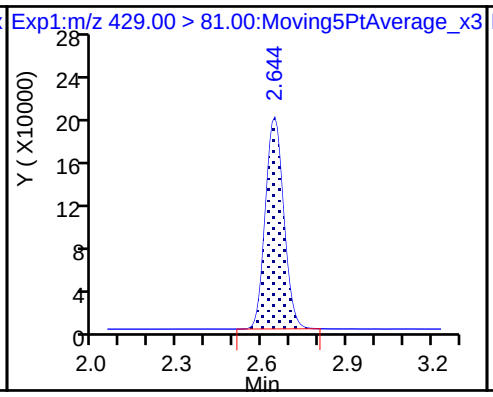
65 Adona



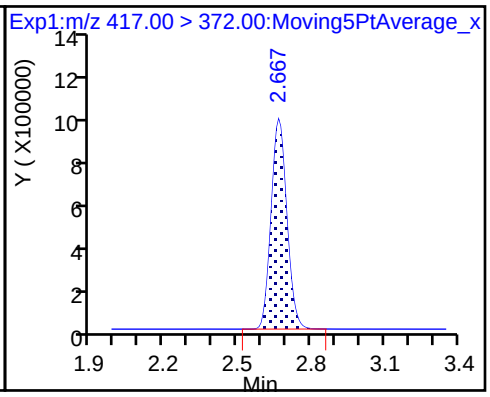
13 Sodium 1H,1H,2H,2H-perfluorooctane



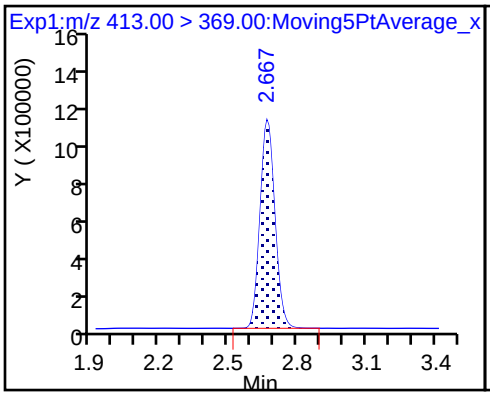
D 12 M2-6:2FTS



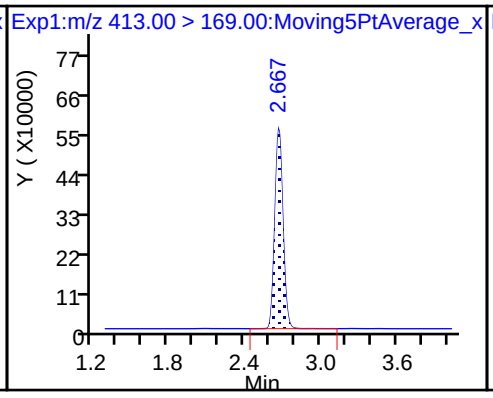
D 14 13C4 PFOA



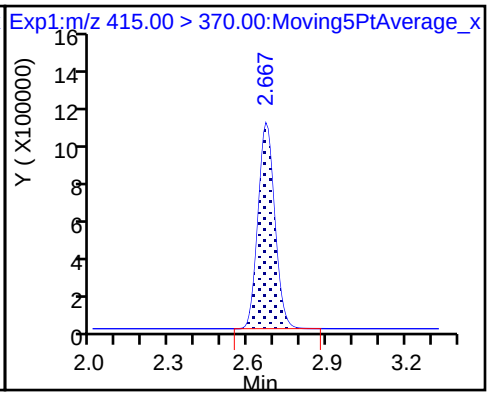
15 Perfluorooctanoic acid



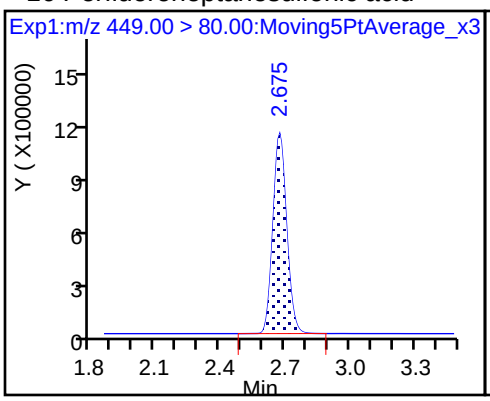
15 Perfluorooctanoic acid



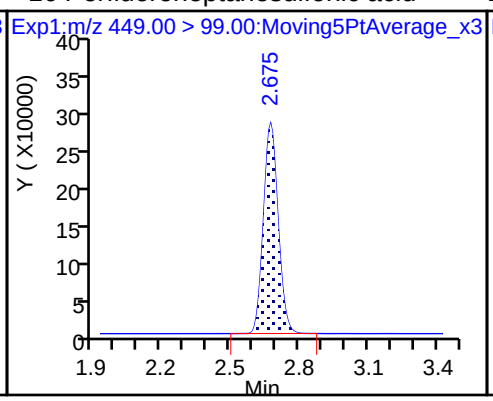
* 62 13C2-PFOA



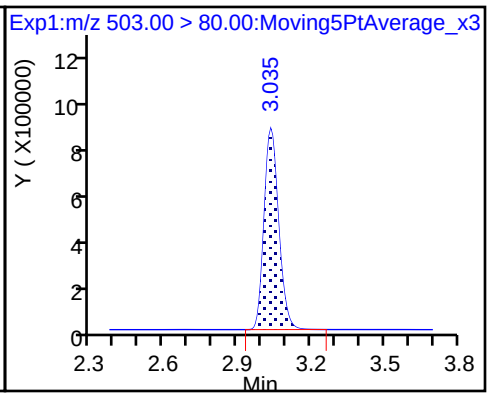
16 Perfluoroheptanesulfonic acid



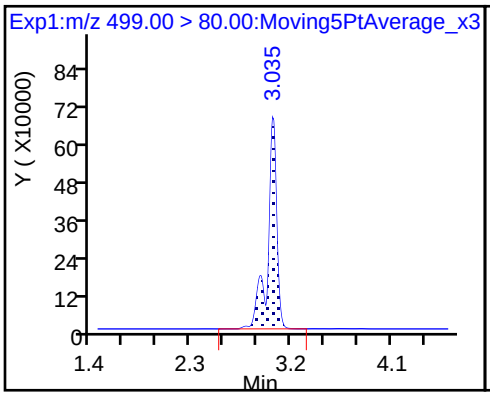
16 Perfluoroheptanesulfonic acid



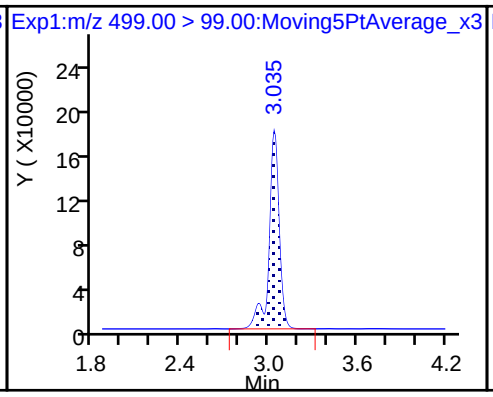
D 18 13C4 PFOS



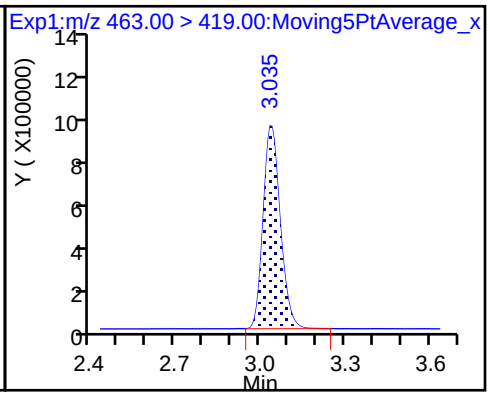
17 Perfluorooctane sulfonic acid



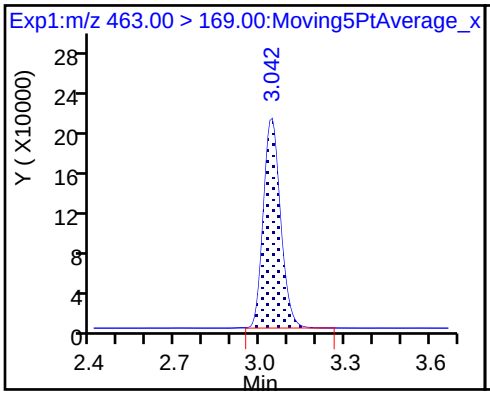
17 Perfluorooctane sulfonic acid



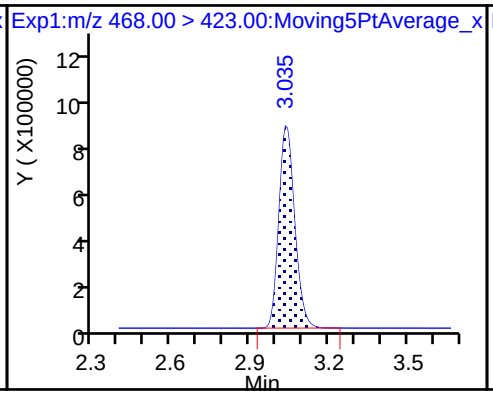
20 Perfluorononanoic acid



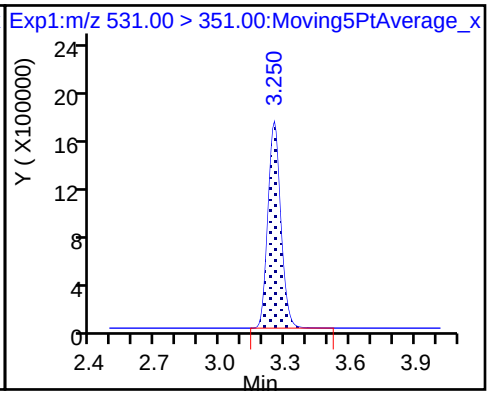
20 Perfluorononanoic acid



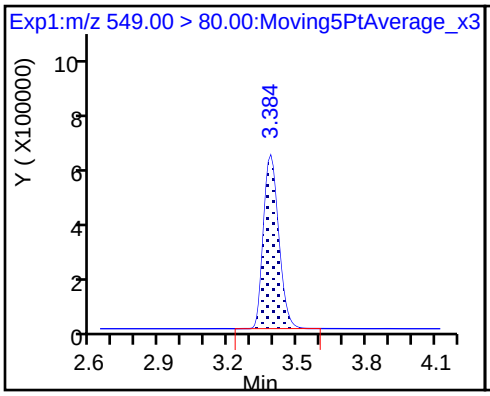
D 19 13C5 PFNA



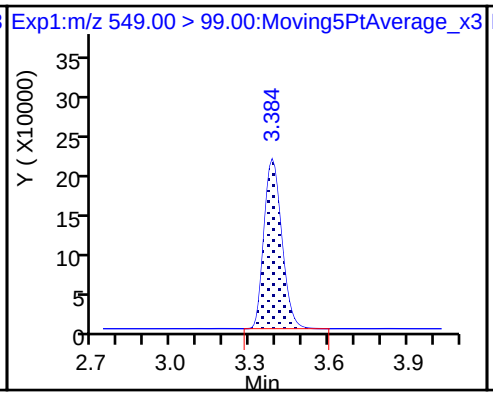
69 9-Chlorohexadecafluoro-3-oxanonane



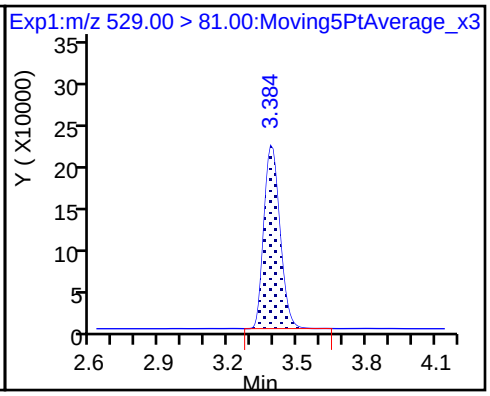
68 Perfluorononanesulfonic acid



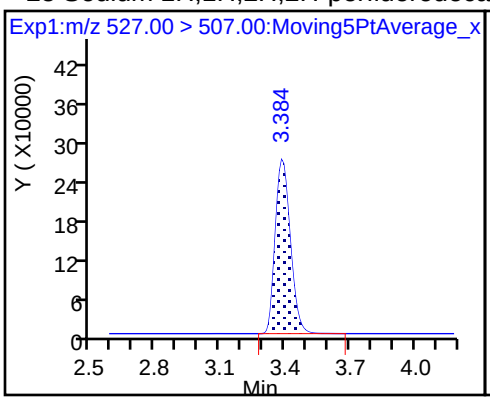
68 Perfluorononanesulfonic acid



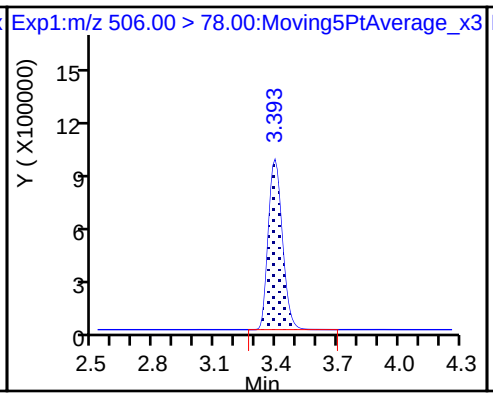
D 26 M2-8:2FTS



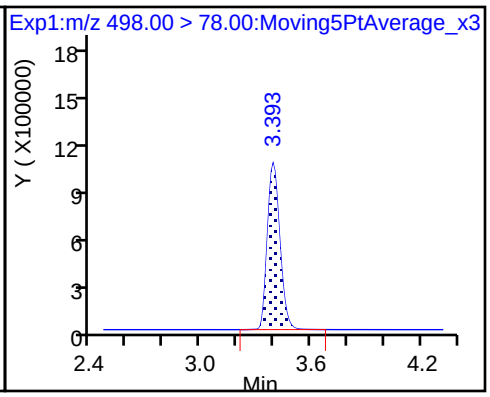
25 Sodium 1H,1H,2H,2H-perfluorodecane



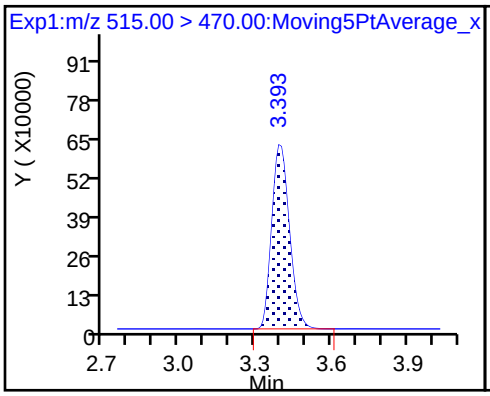
D 21 13C8 FOSA



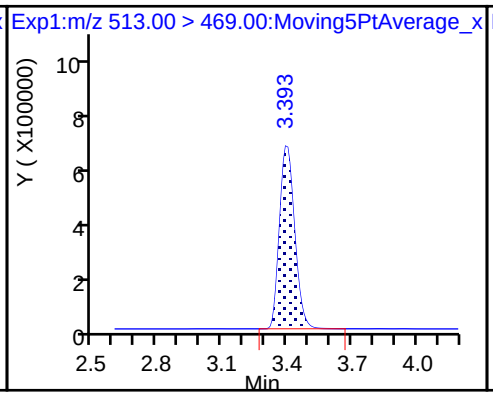
22 Perfluorooctane Sulfonamide



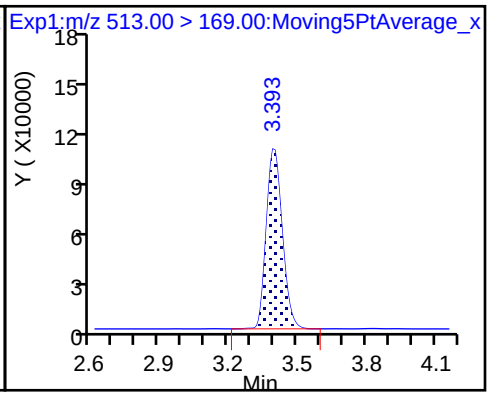
D 23 13C2 PFDA



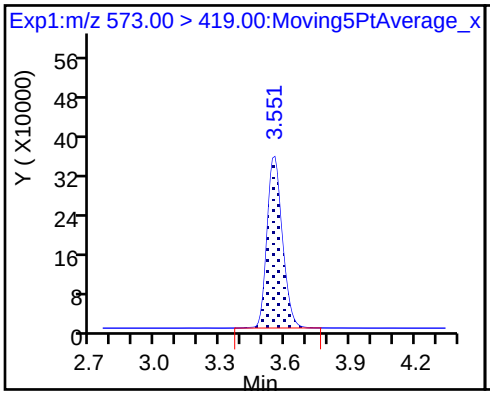
24 Perfluorodecanoic acid



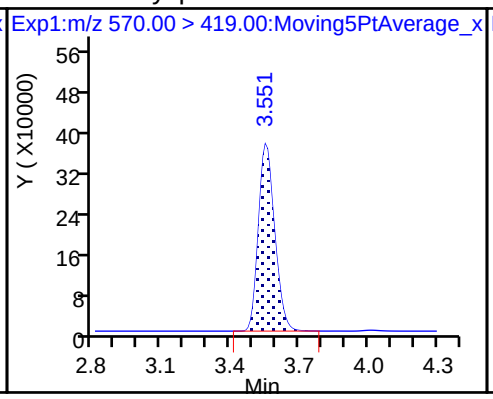
24 Perfluorodecanoic acid



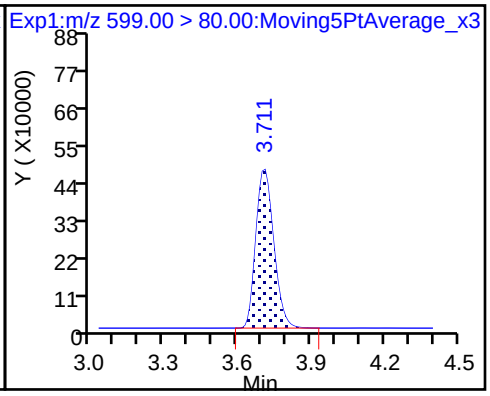
D 27 d3-NMeFOSAA



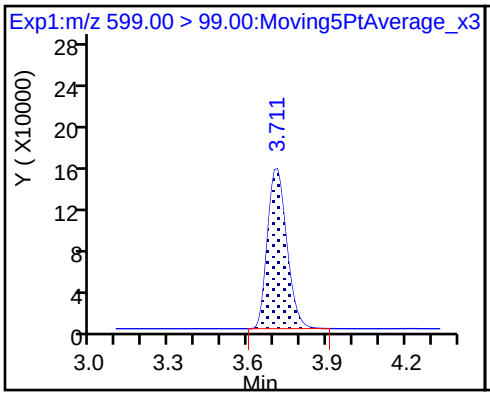
28 N-methyl perfluorooctane sulfonami



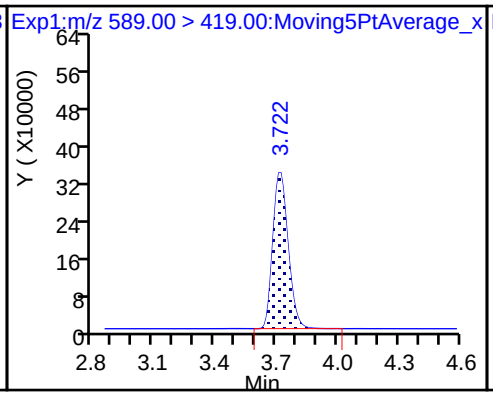
29 Perfluorodecane Sulfonic acid



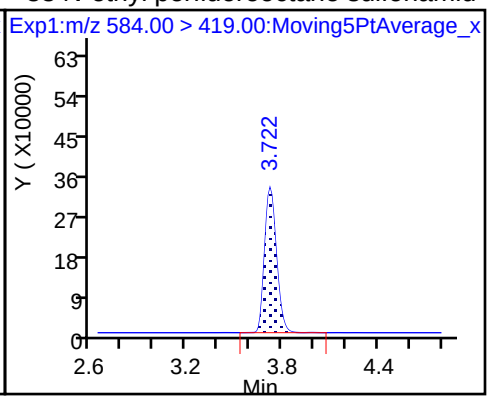
29 Perfluorodecane Sulfonic acid



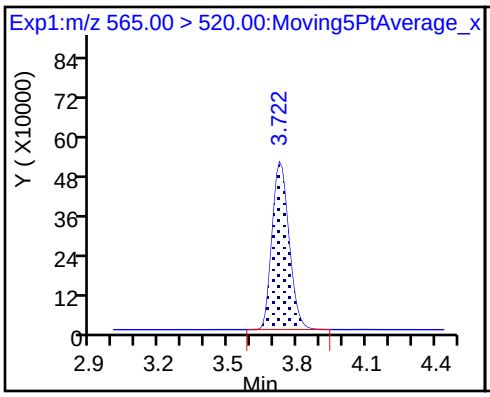
D 32 d5-NEtFOSAA



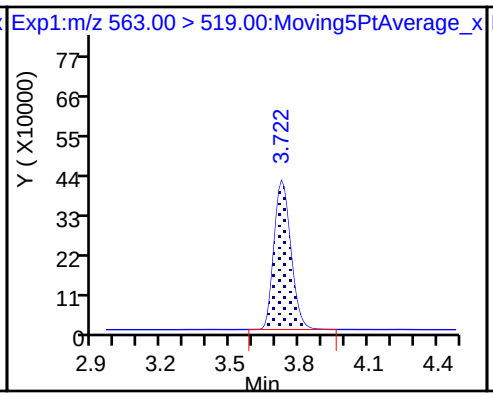
33 N-ethyl perfluorooctane sulfonamid



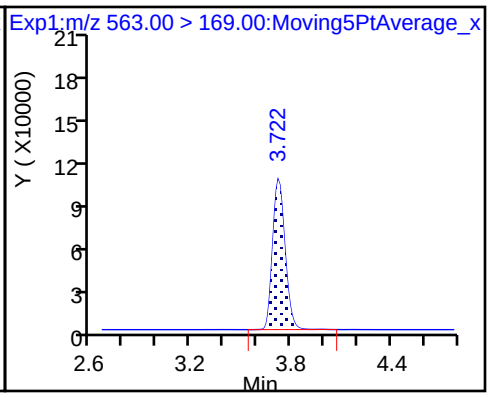
D 30 13C2 PFUnA



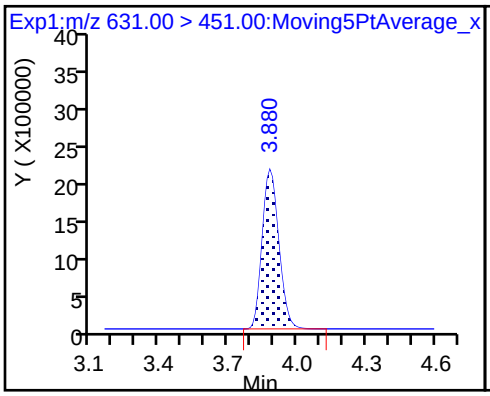
31 Perfluoroundecanoic acid



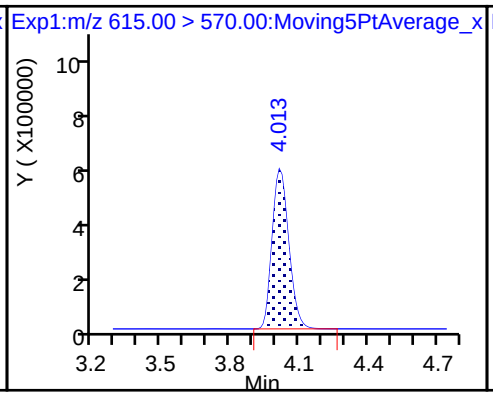
31 Perfluoroundecanoic acid



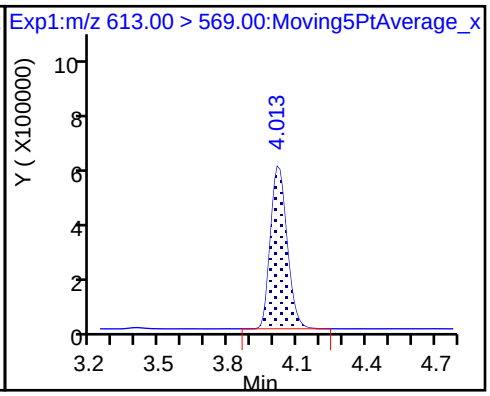
66 11-Chloroeicosafluoro-3-oxaundecan



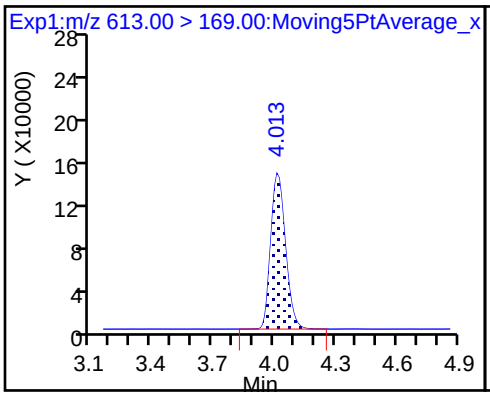
D 36 13C2 PFDoA



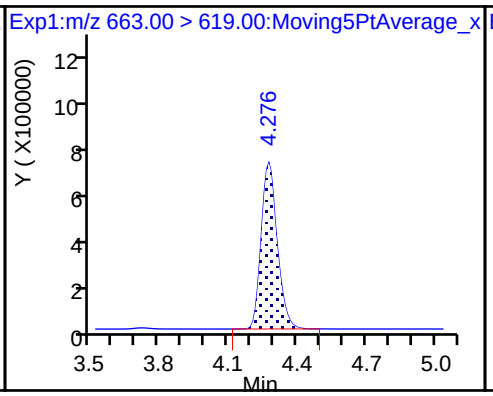
37 Perfluorododecanoic acid



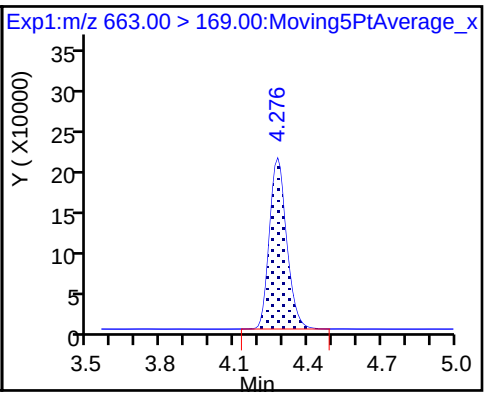
37 Perfluorododecanoic acid



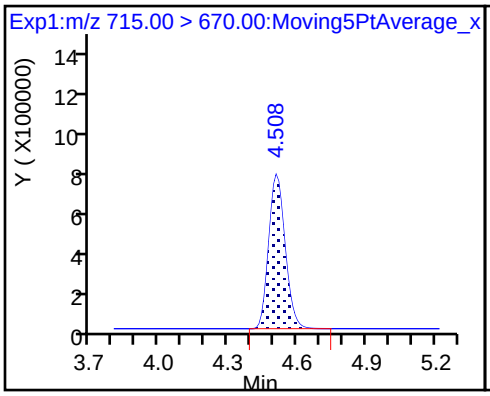
41 Perfluorotridecanoic acid



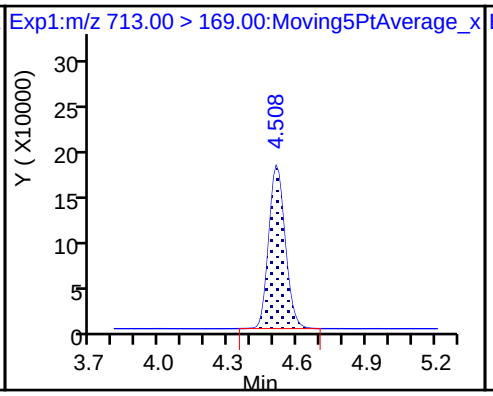
41 Perfluorotridecanoic acid



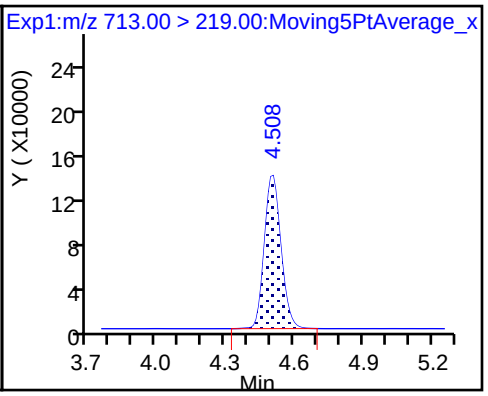
D 43 13C2-PFTeDA



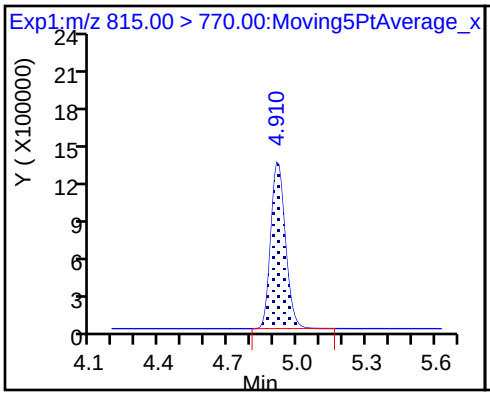
42 Perfluorotetradecanoic acid



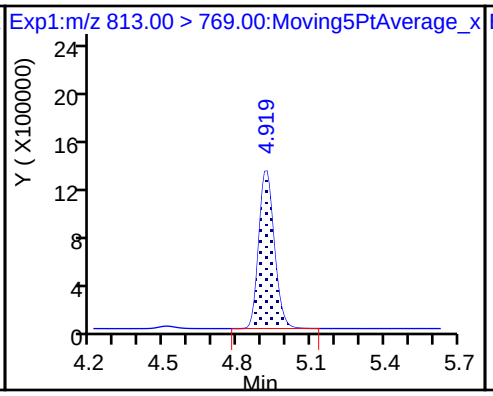
42 Perfluorotetradecanoic acid



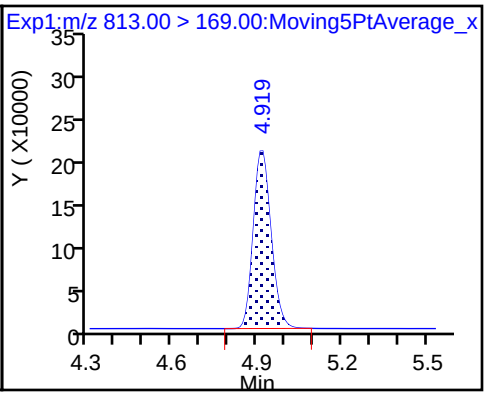
D 44 13C2-PFHxDA



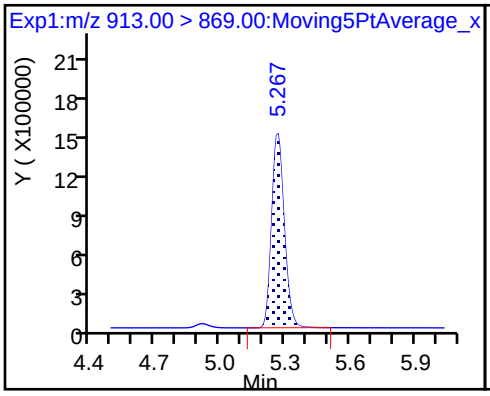
45 Perfluorohexadecanoic acid



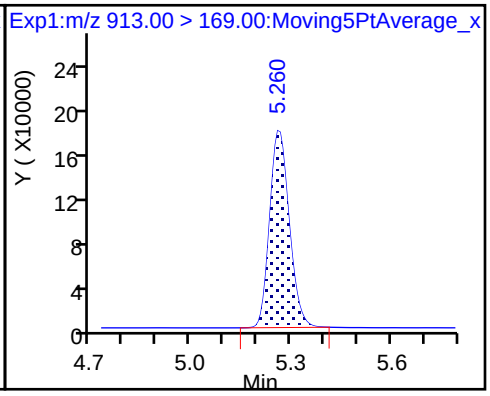
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_007.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2018 19:18:46 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L6-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-Apr-2018 10:51:14 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: roycea Date: 11-Apr-2018 09:20:12

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.425	1.431	-0.006	1.000	6997865	2.65		106	49847	
2 Perfluorobutyric acid										
212.90 > 169.00	1.431	1.432	-0.001	1.004	13377174	5.15		103	7717	
D 3 13C5-PFPeA										
267.90 > 223.00	1.694	1.699	-0.005	0.557	4492903	2.64		105	81359	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.694	1.699	-0.005	1.000	10497161	4.90		98.0	10563	
D 47 13C3-PFBS										
301.90 > 83.00	1.730	1.735	-0.005	1.000	92353	2.36		102	1083	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.730	1.736	-0.006	1.000	14347107	4.61		104	64269	
298.90 > 99.00	1.730	1.736	-0.006	1.000	6127625		2.34(1.25-3.74)	104	70987	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.950	1.950	0.0	1.000	3030208	4.76		102	141069	
D 60 M2-4:2FTS										
329.00 > 81.00	1.950	1.950	0.0	1.000	668373	2.39		102	7685	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.982	1.985	-0.003	1.000	10489823	5.40		108	24333	
313.00 > 119.00	1.982	1.985	-0.003	1.000	894344		11.73(5.03-15.10)	108	11532	
D 7 13C2 PFHxA										
315.00 > 270.00	1.982	1.985	-0.003	1.000	4780636	2.54		101	96741	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.005	2.008	-0.003	1.000	13627914	4.80		102	98334	
349.00 > 99.00	2.005	2.008	-0.003	1.000	5231254		2.61(1.36-4.07)	102	95005	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.084	2.084	0.0	1.000	274179	2.35		94.0	8284	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.084	2.087	-0.003	1.000	1870994	6.12		122	12525	
D 9 13C4-PFHpA										
367.00 > 322.00	2.310	2.314	-0.004	1.000	4543925	2.48		99.1	68671	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.310	2.314	-0.004	1.000	9662627	5.31		106	14097	
363.00 > 169.00	2.310	2.314	-0.004	1.000	4011641		2.41(1.13-3.40)	106	22953	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.323	2.323	0.0	1.000	11450464	4.41		96.8	31512	
399.00 > 99.00	2.323	2.323	0.0	1.000	3849777		2.97(1.50-4.49)	96.8	34232	
D 11 18O2 PFHxS										
403.00 > 84.00	2.323	2.327	-0.004	1.000	5430236	2.40		101	91039	
65 Adona										
377.00 > 251.00	2.362	2.360	0.002	1.000	26999565	4.80		95.9	217494	
377.00 > 85.00	2.362	2.360	0.002	1.000	16841301		1.60(0.84-2.53)	95.9	159720	
D 12 M2-6:2FTS										
429.00 > 81.00	2.645	2.649	-0.004	1.000	950305	2.42		102	15598	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.645	2.649	-0.004	1.000	3314359	4.90		103	51474	
D 14 13C4 PFOA										
417.00 > 372.00	2.668	2.673	-0.005	1.000	4688766	2.57		103	76247	
* 62 13C2-PFOA										
415.00 > 370.00	2.676	2.674	0.002		4914871	2.50			59774	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.676	2.674	0.002	1.003	11016957	5.08		102	7204	
413.00 > 169.00	2.676	2.674	0.002	1.003	5404594		2.04(0.84-2.52)	102	21416	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.683	2.680	0.003	1.000	10719572	4.97		104	63342	
449.00 > 99.00	2.676	2.680	-0.004	0.997	2882422		3.72(1.94-5.82)	104	51468	
D 18 13C4 PFOS										
503.00 > 80.00	3.043	3.041	0.002	1.000	3884830	2.45		103	25175	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.043	3.042	0.001	1.000	8615775	4.87		105	37504	
499.00 > 99.00	3.043	3.042	0.001	1.000	1907418		4.52(2.31-6.93)	105	40242	
20 Perfluorononanoic acid										
463.00 > 419.00	3.043	3.043	0.0	1.000	8663453	5.40		108	21881	
463.00 > 169.00	3.043	3.043	0.0	1.000	1977379		4.38(1.90-5.69)	108	42954	
D 19 13C5 PFNA										
468.00 > 423.00	3.043	3.045	-0.002	1.000	3844023	2.45		98.1	71022	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.252	3.253	-0.001	1.000	15327887	5.00		107	237615	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.387	3.388	-0.001	1.000	6392773	4.92		102	46125	
549.00 > 99.00	3.387	3.388	-0.001	1.000	2379569		2.69(1.33-3.97)	102	42811	
D 26 M2-8:2FTS										
529.00 > 81.00	3.387	3.390	-0.003	1.000	1111203	2.35		98.0	12960	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.396	3.393	0.003	1.003	2936296	5.00		104	87146	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.396	3.397	-0.001	1.000	4967723	2.51		100	59122	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.396	3.401	-0.005	1.000	10640158	5.29		106	83571	
D 23 13C2 PFDA										
515.00 > 470.00	3.405	3.401	0.004	1.000	3590754	2.73		109	63551	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.405	3.402	0.003	1.000	7080425	4.78		95.6	42943	
513.00 > 169.00	3.405	3.402	0.003	1.000	1224285		5.78(2.36-7.09)	95.6	19818	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.555	3.553	0.002	1.000	1906740	2.55		102	32484	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.555	3.558	-0.003	1.000	4211279	5.54		111	24793	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.717	3.715	0.002	1.000	5591516	5.30		110	68704	
599.00 > 99.00	3.717	3.715	0.002	1.000	1873892		2.98(1.39-4.16)	110	41042	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.717	3.722	-0.005	1.000	1869135	2.54		101	18949	
D 30 13C2 PFUnA										
565.00 > 520.00	3.728	3.727	0.001	1.000	2905024	2.56		102	63455	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.728	3.727	0.001	1.003	3584245	5.13		103	43487	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.728	3.727	0.001	1.000	5051597	5.14		103	23183	
563.00 > 169.00	3.728	3.727	0.001	1.000	1197755		4.22(2.12-6.36)	103	29187	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.886	3.883	0.003	1.000	21858692	4.62		98.0	132441	
D 36 13C2 PFDoA										
615.00 > 570.00	4.019	4.017	0.002	1.000	3059706	2.49		99.7	34585	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.019	4.020	-0.001	1.000	6635970	5.20		104	7407	
613.00 > 169.00	4.019	4.020	-0.001	1.000	1580285		4.20(2.13-6.40)	104	18694	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.281	4.278	0.003	1.000	7847307	5.28		106	6944	
663.00 > 169.00	4.281	4.278	0.003	1.000	2374861		3.30(1.25-3.76)	106	19843	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.512	4.513	-0.001	1.000	3906384	2.51		100	23277	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.512	4.513	-0.001	1.000	2025257	5.16		103	14592	
713.00 > 219.00	4.512	4.513	-0.001	1.000	1435695		1.41(0.71-2.13)	103	15337	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.923	4.918	0.005	1.000	6481798	2.56		102	19589	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.923	4.920	0.003	1.000	11955765	4.85		97.0	3378	
813.00 > 169.00	4.923	4.920	0.003	1.000	2040197		5.86(2.86-8.58)	97.0	10211	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.270	5.268	0.002	1.000	12855038	4.94		98.8	2871	
913.00 > 169.00	5.270	5.268	0.002	1.000	1566786		8.20(3.83-11.48)	98.8	6806	

Reagents:

LCPFC_LL6_00005 Amount Added: 1.00 Units: mL

Report Date: 11-Apr-2018 10:51:15 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_007.d

Injection Date: 10-Apr-2018 19:18:46 Instrument ID: A8_N

Lims ID: IC L6 Full

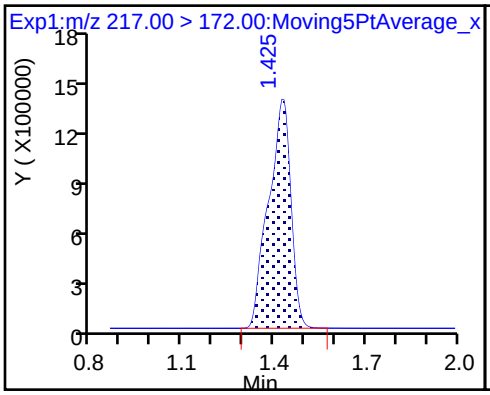
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 15 Worklist Smp#: 7

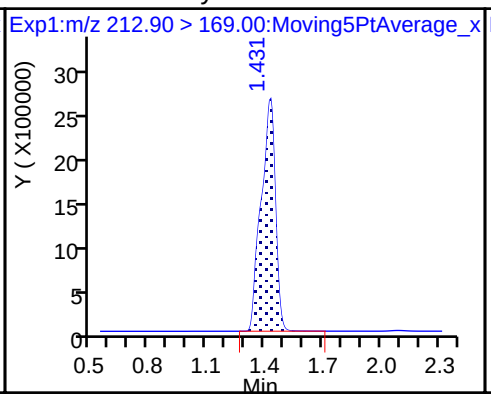
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

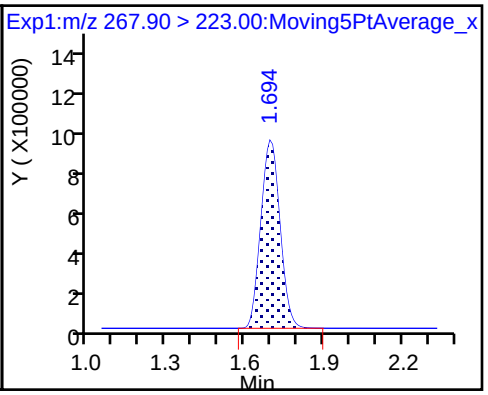
D 1 13C4 PFBA



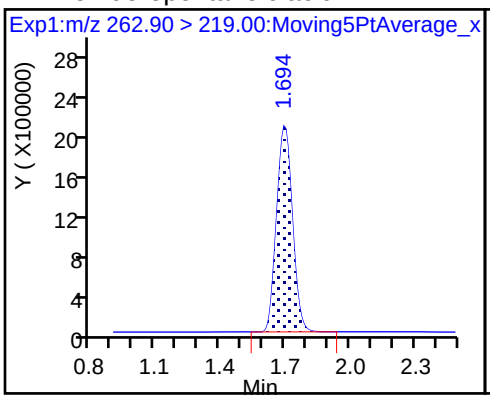
2 Perfluorobutyric acid



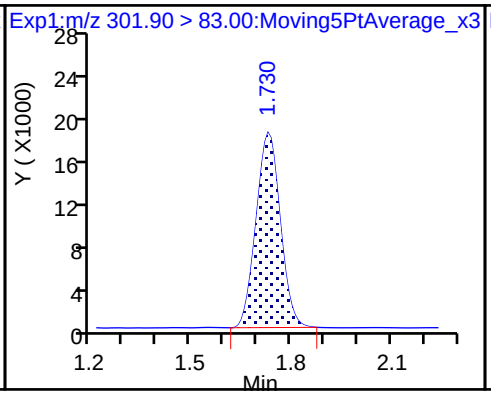
D 3 13C5-PFPeA



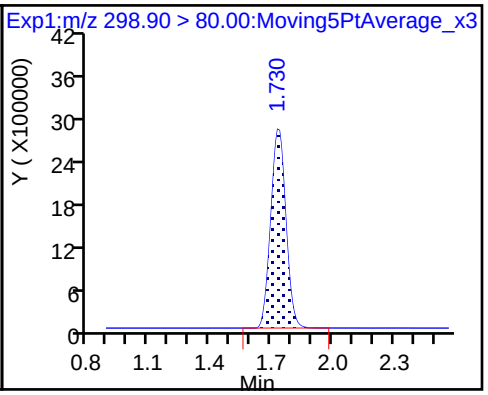
4 Perfluoropentanoic acid



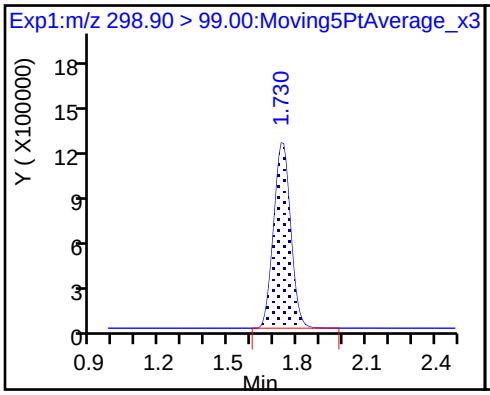
D 47 13C3-PFBS



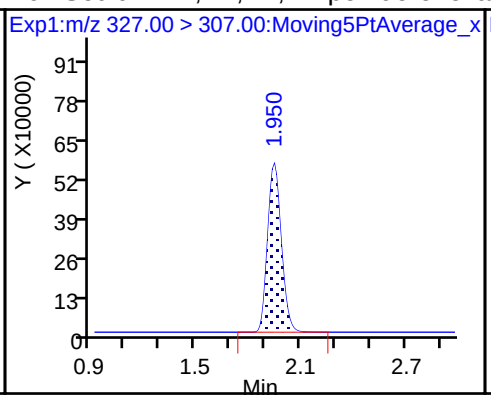
5 Perfluorobutanesulfonic acid



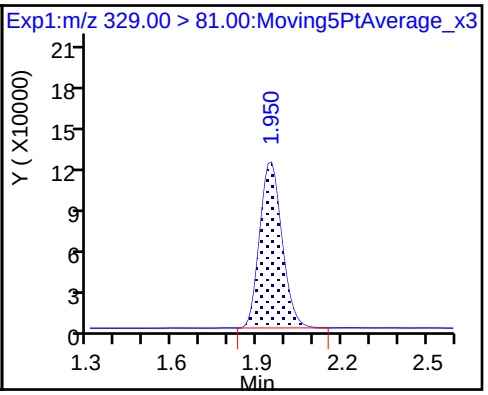
5 Perfluorobutanesulfonic acid



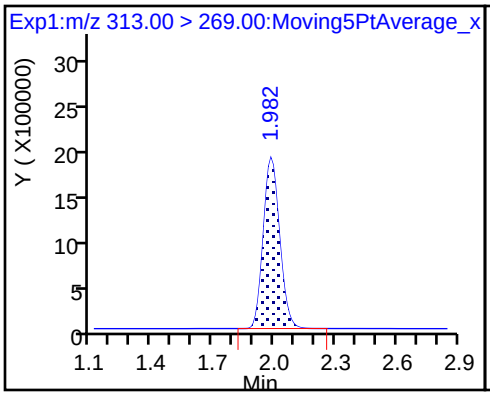
61 Sodium 1H,1H,2H,2H-perfluorohexane



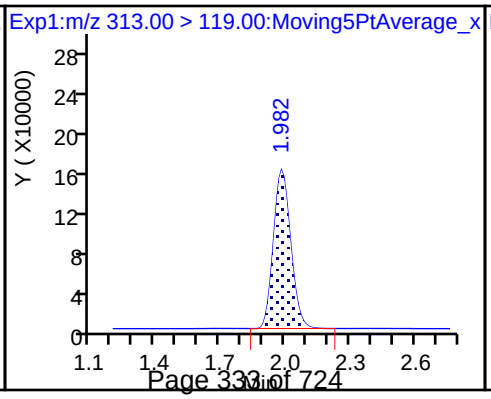
D 60 M2-4:2FTS



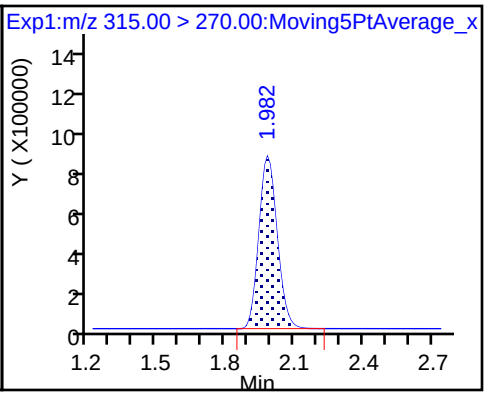
6 Perfluorohexanoic acid



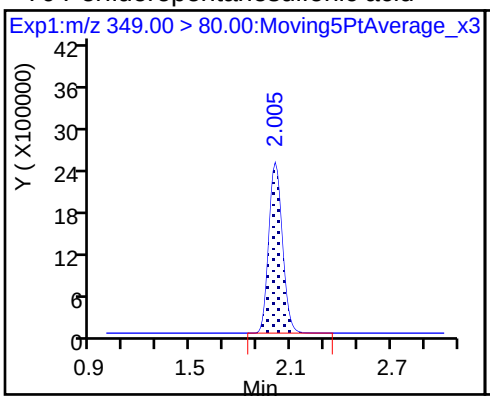
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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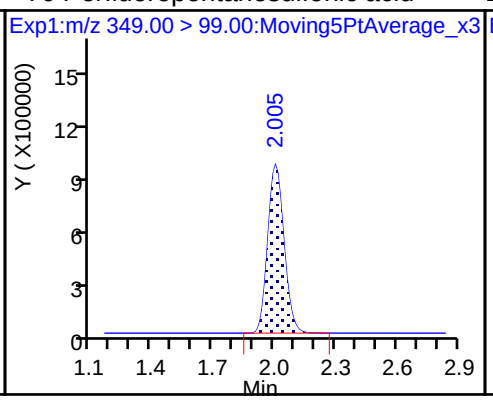
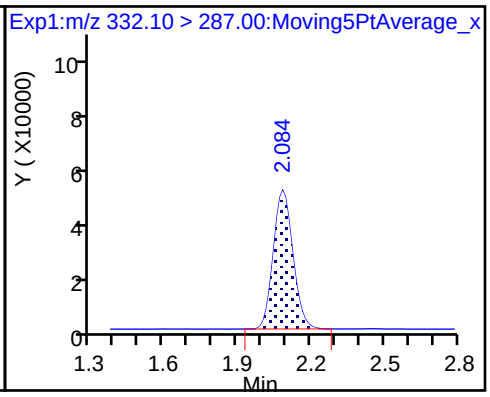
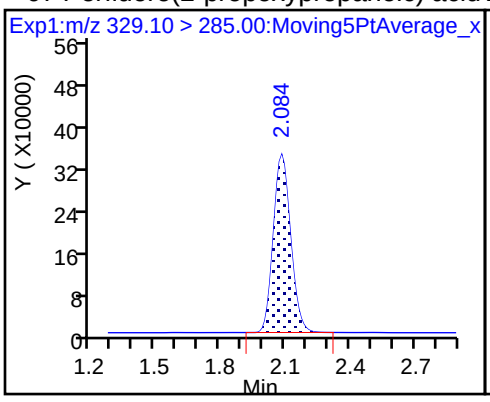


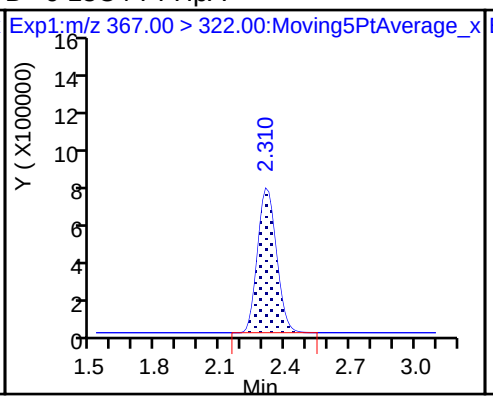
D 64 13C3 HFPO-DA



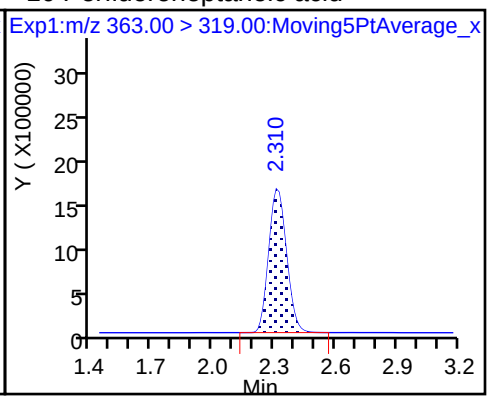
67 Perfluoro(2-propoxypropanoic) acid



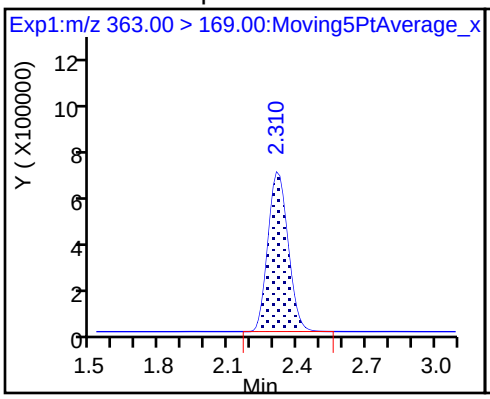
D 9 13C4-PFHpA



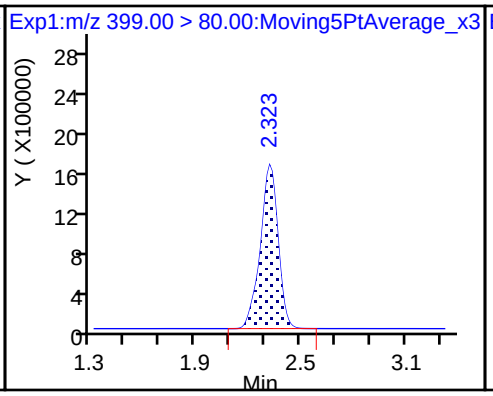
10 Perfluoroheptanoic acid



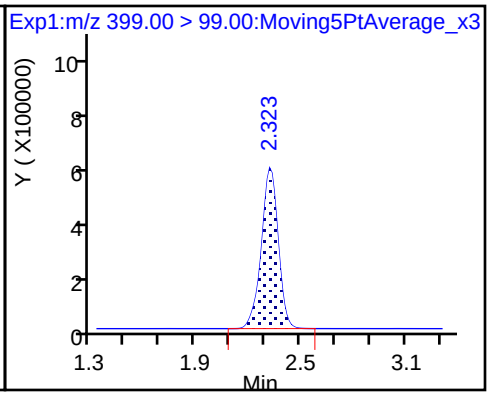
10 Perfluoroheptanoic acid



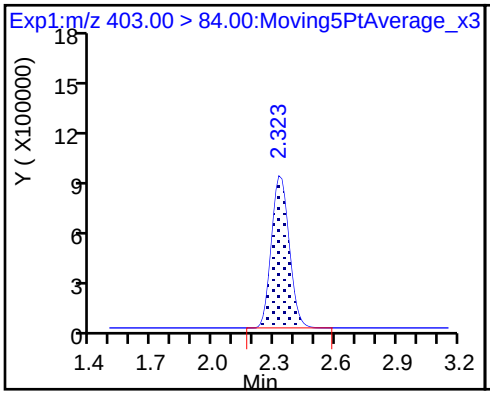
8 Perfluorohexanesulfonic acid



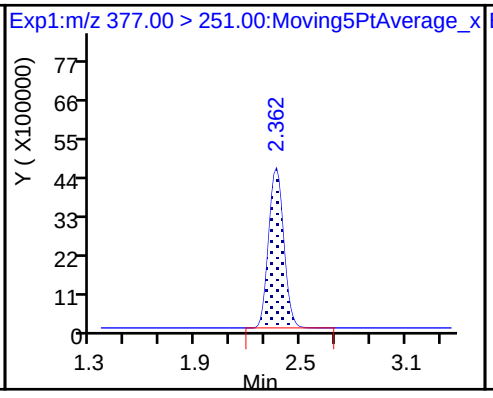
8 Perfluorohexanesulfonic acid



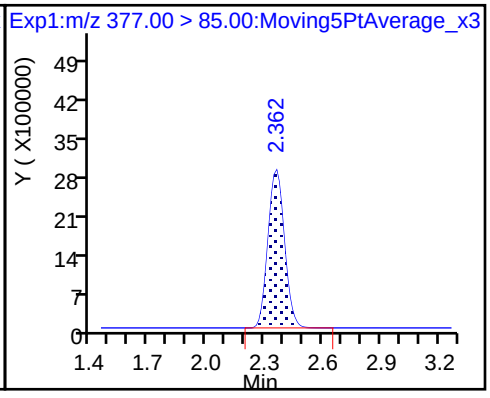
D 11 18O2 PFHxS



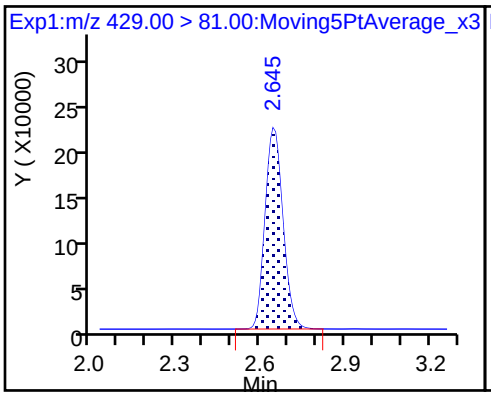
65 Adona



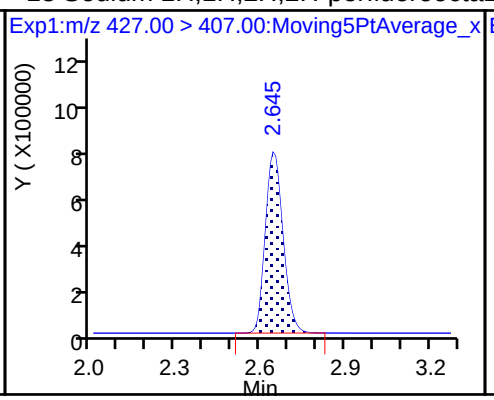
65 Adona



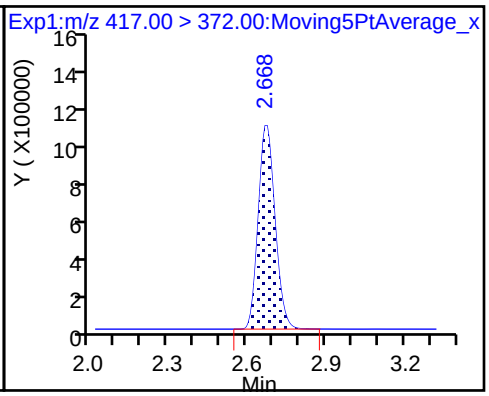
D 12 M2-6:2FTS



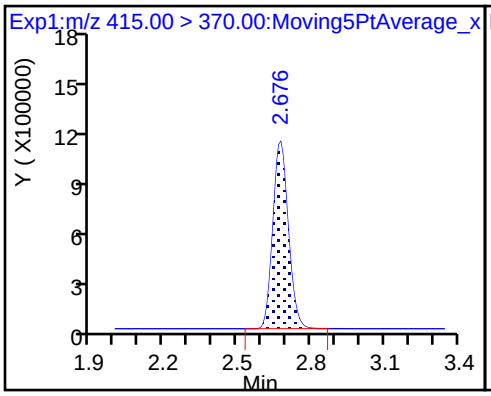
13 Sodium 1H,1H,2H,2H-perfluorooctane



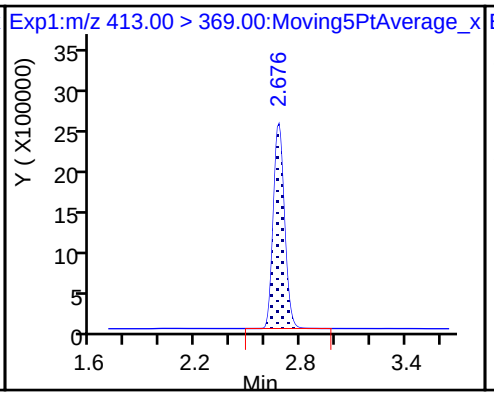
D 14 13C4 PFOA



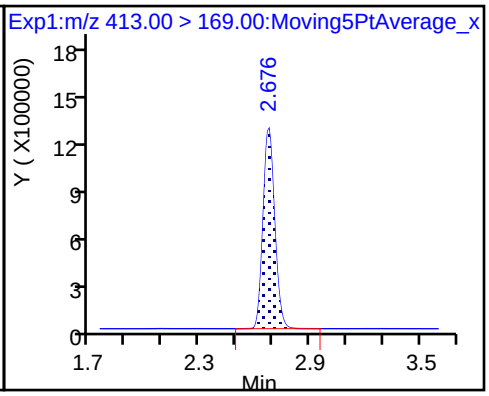
* 62 13C2-PFOA



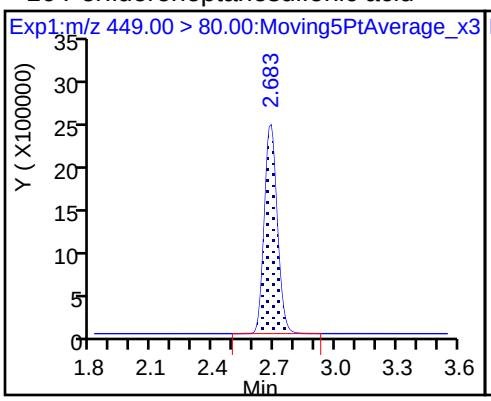
15 Perfluorooctanoic acid



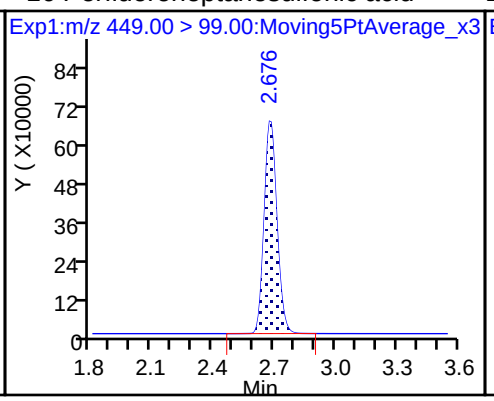
15 Perfluorooctanoic acid



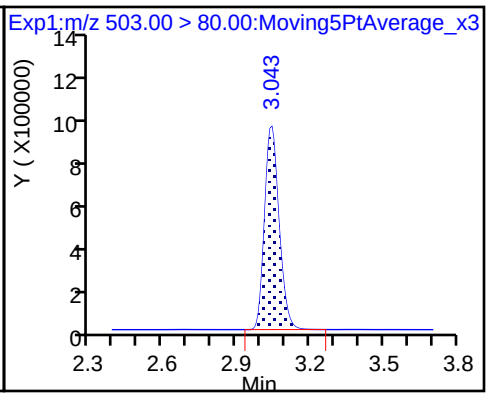
16 Perfluoroheptanesulfonic acid



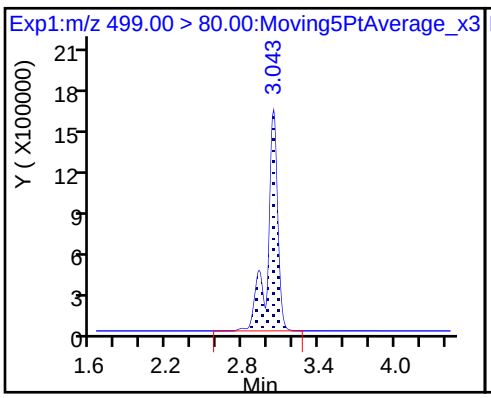
16 Perfluoroheptanesulfonic acid



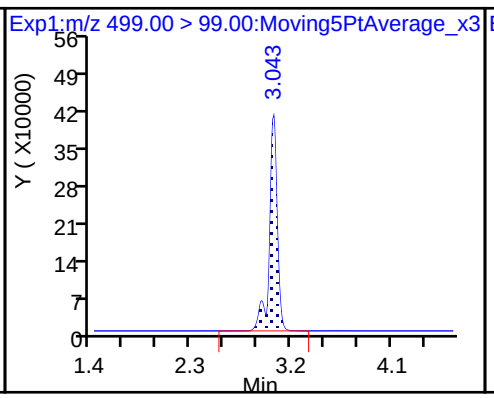
D 18 13C4 PFOS



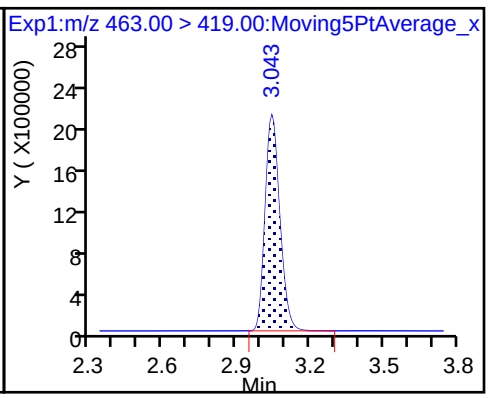
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



20 Perfluorononanoic acid



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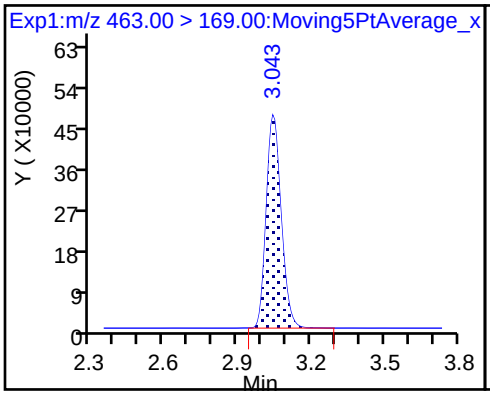
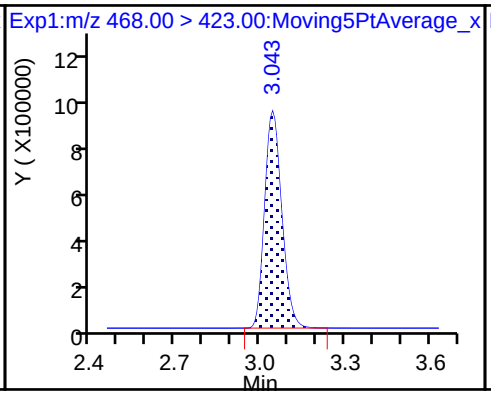
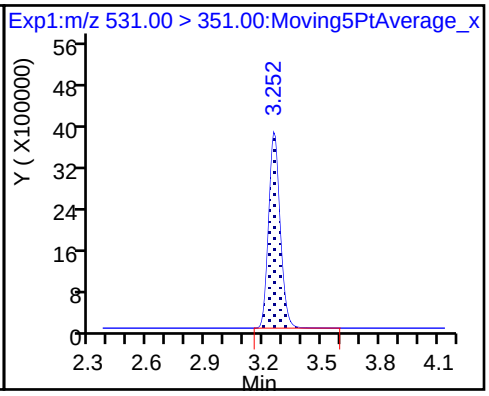


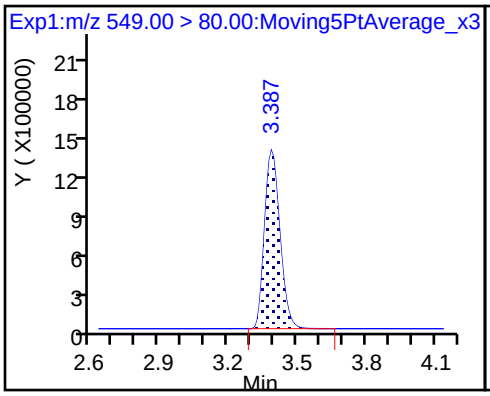
D 19 13C5 PFNA



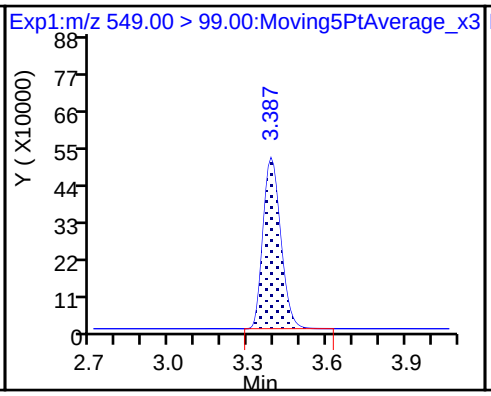
69 9-Chlorohexadecafluoro-3-oxanonane



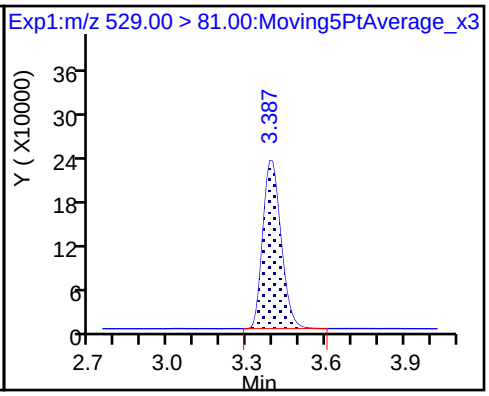
68 Perfluorononanesulfonic acid



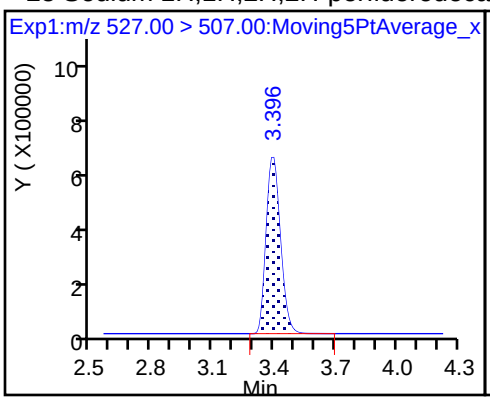
68 Perfluorononanesulfonic acid



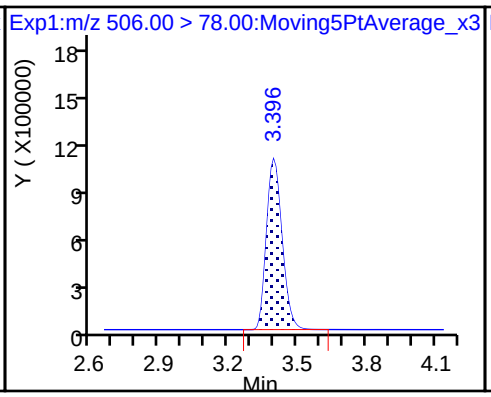
D 26 M2-8:2FTS



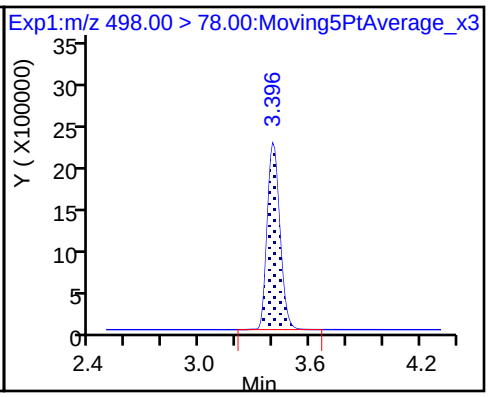
25 Sodium 1H,1H,2H,2H-perfluorodecane



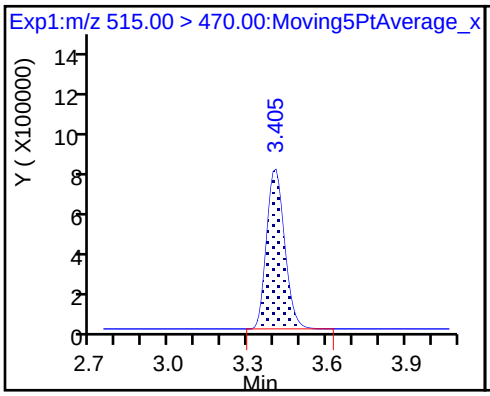
D 21 13C8 FOSA



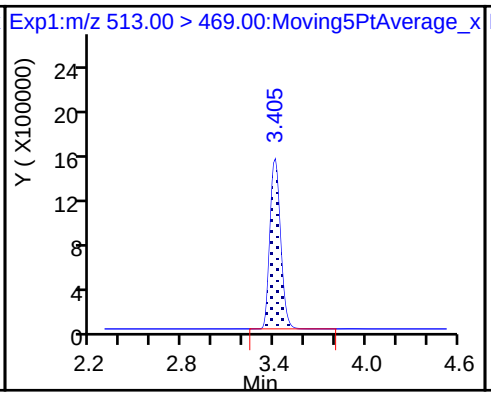
22 Perfluorooctane Sulfonamide



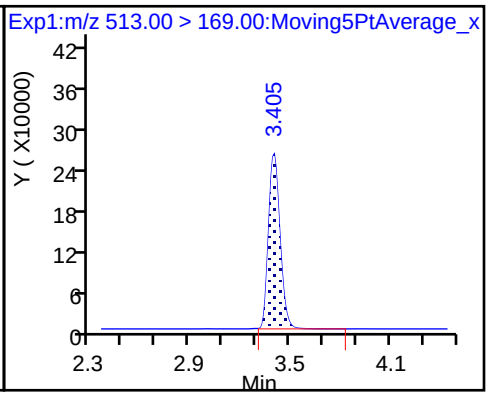
D 23 13C2 PFDA



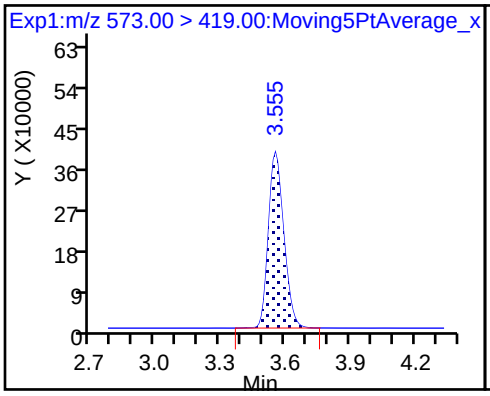
24 Perfluorodecanoic acid



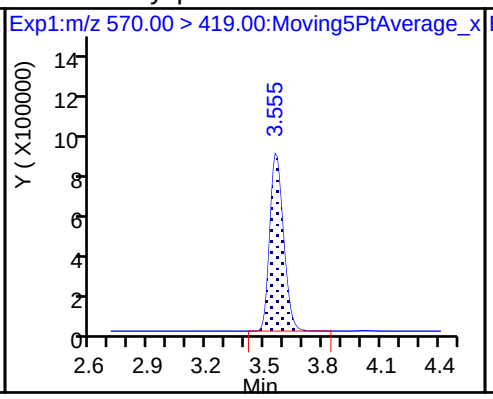
24 Perfluorodecanoic acid



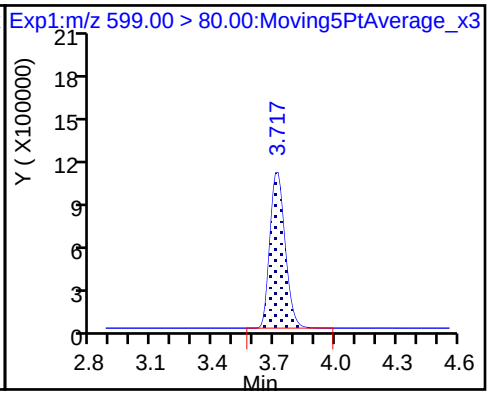
D 27 d3-NMeFOSAA



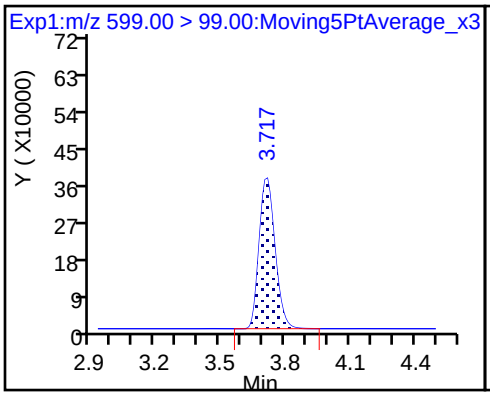
28 N-methyl perfluorooctane sulfonami



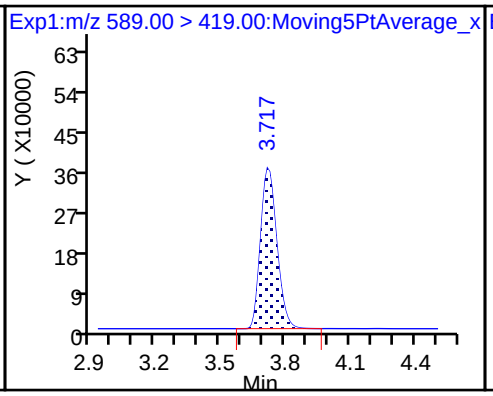
29 Perfluorodecane Sulfonic acid



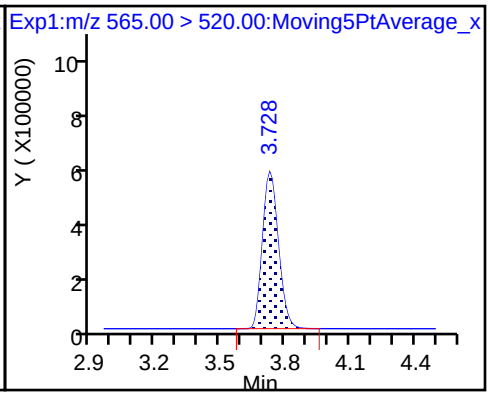
29 Perfluorodecane Sulfonic acid



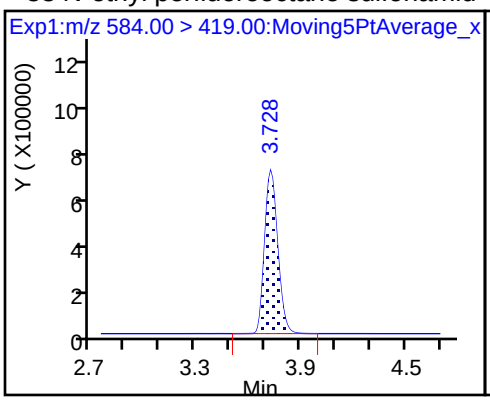
D 32 d5-NEtFOSAA



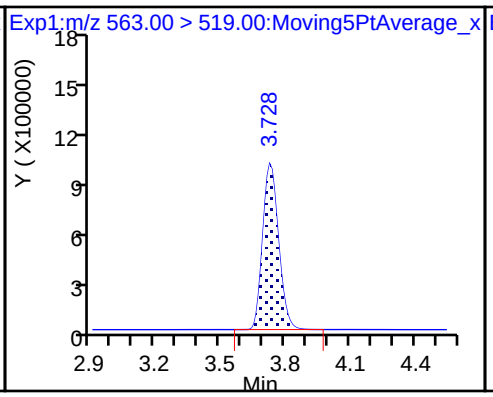
D 30 13C2 PFUnA



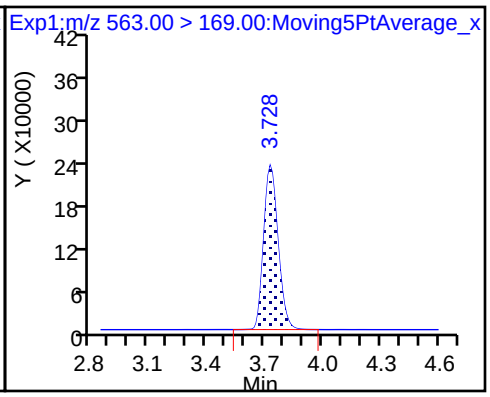
33 N-ethyl perfluorooctane sulfonamid



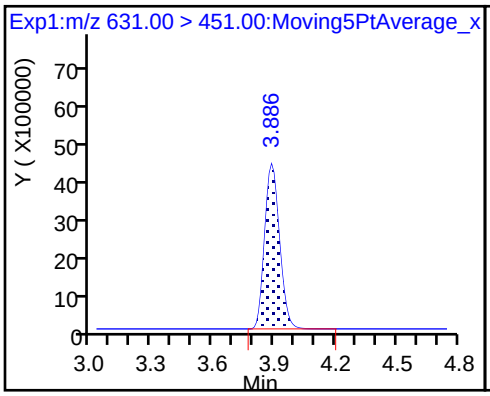
31 Perfluoroundecanoic acid



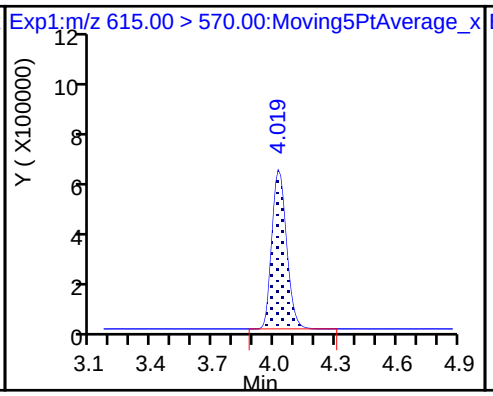
31 Perfluoroundecanoic acid



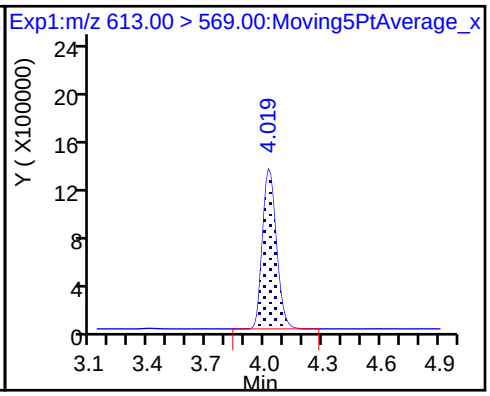
66 11-Chloroeicosafluoro-3-oxaundecan



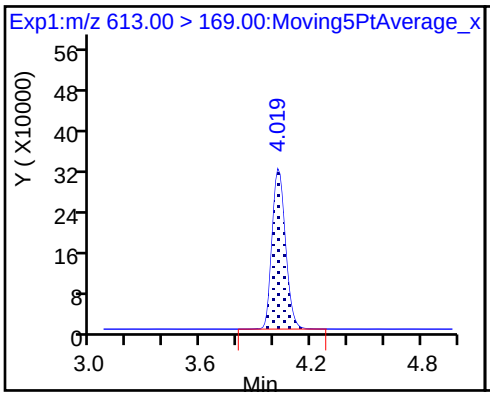
D 36 13C2 PFDoA



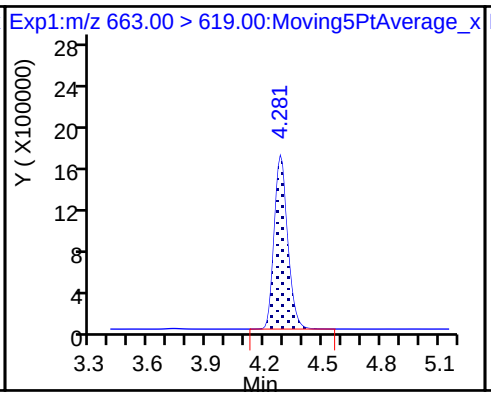
37 Perfluorododecanoic acid



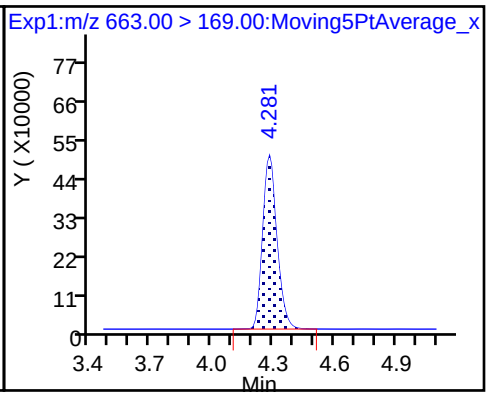
37 Perfluorododecanoic acid



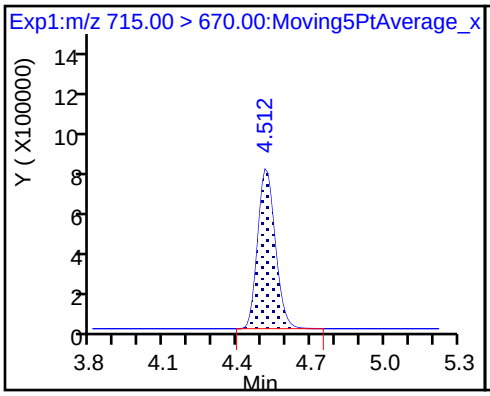
41 Perfluorotridecanoic acid



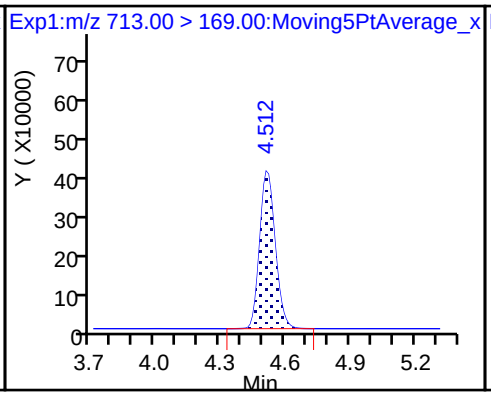
41 Perfluorotridecanoic acid



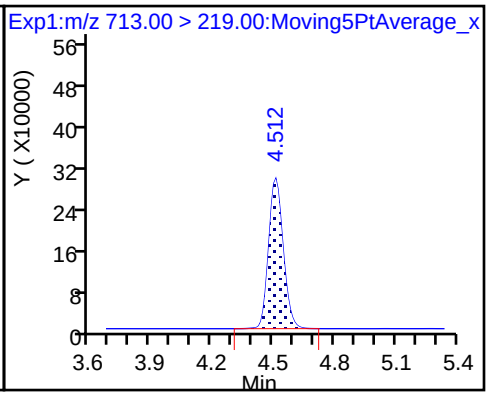
D 43 13C2-PFTeDA



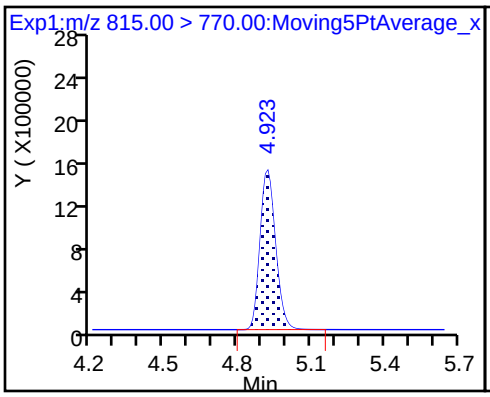
42 Perfluorotetradecanoic acid



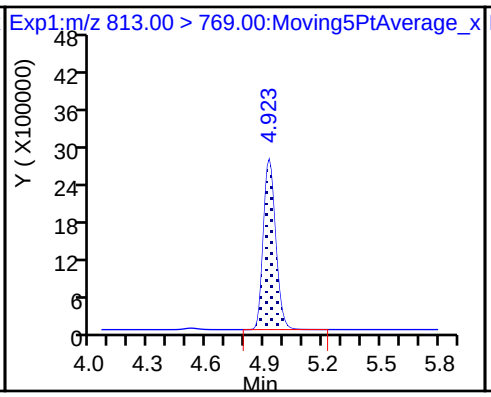
42 Perfluorotetradecanoic acid



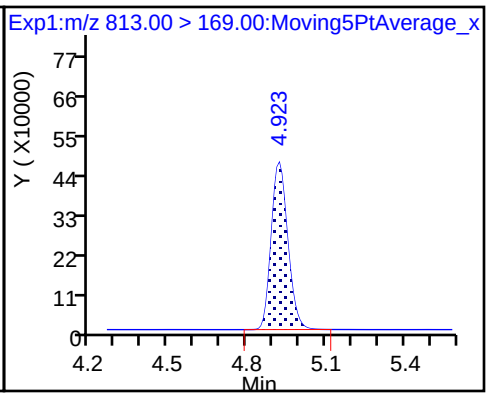
D 44 13C2-PFHxDA



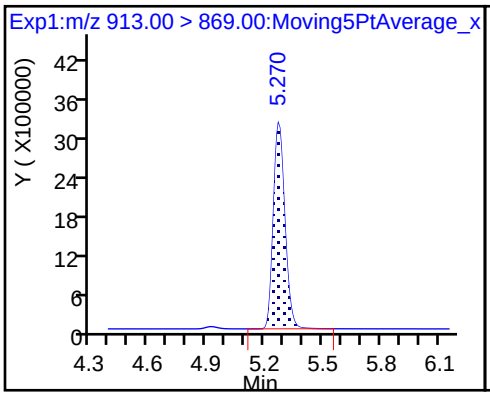
45 Perfluorohexadecanoic acid



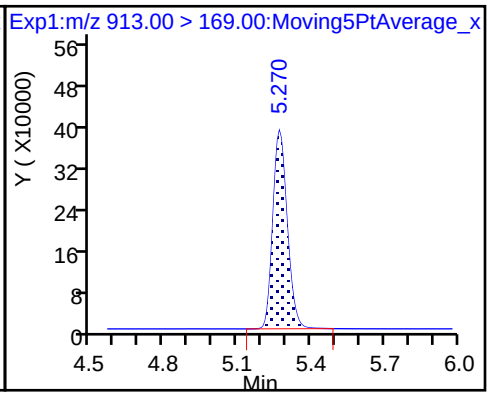
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Apr-2018 19:26:34 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L7-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-Apr-2018 10:51:18 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: roycea Date: 11-Apr-2018 09:20:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.430	1.431	-0.001	1.000	5884851	2.66		106	46581	
2 Perfluorobutyric acid										
212.90 > 169.00	1.430	1.432	-0.002	1.000	21784128	9.97		99.7	11333	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.702	1.699	0.003	1.000	17503102	9.84		98.4	16746	
D 3 13C5-PFPeA										
267.90 > 223.00	1.702	1.699	0.003	0.558	3729652	2.61		105	78108	
D 47 13C3-PFBS										
301.90 > 83.00	1.738	1.735	0.003	1.000	82834	2.53		109	829	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.738	1.736	0.002	1.000	22532715	8.08		91.4	76780	
298.90 > 99.00	1.738	1.736	0.002	1.000	10095018		2.23(1.25-3.74)	91.4	146676	
D 60 M2-4:2FTS										
329.00 > 81.00	1.949	1.950	-0.001	1.000	563434	2.40		103	6225	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.949	1.950	-0.001	1.000	5473778	9.58		103	195589	
D 7 13C2 PFHxA										
315.00 > 270.00	1.981	1.985	-0.004	1.000	4231897	2.68		107	122911	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.981	1.985	-0.004	1.000	16596765	9.65		96.5	37407	
313.00 > 119.00	1.981	1.985	-0.004	1.000	1629067		10.19(5.03-15.10)	96.5	18942	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.003	2.008	-0.005	1.000	22248169	8.73		93.1	165195	
349.00 > 99.00	2.003	2.008	-0.005	1.000	8727242		2.55(1.36-4.07)	93.1	125798	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.083	2.084	-0.001	1.000	242908	2.49		99.5	8616	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.083	2.087	-0.004	1.000	2803143	10.4		104	17925	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.320	2.314	0.006	1.000	16683281	10.9		109	20962	
363.00 > 169.00	2.320	2.314	0.006	1.000	6590526		2.53(1.13-3.40)	109	34535	
D 9 13C4-PFHpA										
367.00 > 322.00	2.320	2.314	0.006	1.000	3828332	2.49		99.7	77251	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.320	2.323	-0.003	0.994	18531754	8.49		93.3	42607	
399.00 > 99.00	2.320	2.323	-0.003	0.994	6460937		2.87(1.50-4.49)	93.3	47012	
D 11 18O2 PFHxS										
403.00 > 84.00	2.333	2.327	0.006	1.000	4559710	2.41		102	82801	
65 Adona										
377.00 > 251.00	2.359	2.360	-0.001	1.000	39451342	8.40		84.0	277885	
377.00 > 85.00	2.359	2.360	-0.001	1.000	26259771		1.50(0.84-2.53)	84.0	255143	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.653	2.649	0.004	1.000	5439954	9.93		105	66881	
D 12 M2-6:2FTS										
429.00 > 81.00	2.653	2.649	0.004	1.000	769923	2.34		98.5	9054	
D 14 13C4 PFOA										
417.00 > 372.00	2.675	2.673	0.002	1.000	3866213	2.53		101	50638	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.675	2.674	0.001	1.000	17251700	9.65		96.5	9651	
413.00 > 169.00	2.675	2.674	0.001	1.000	9097235		1.90(0.84-2.52)	96.5	29224	
* 62 13C2-PFOA										
415.00 > 370.00	2.675	2.674	0.001		4114287	2.50			76246	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.683	2.680	0.003	1.000	16945821	9.42		98.9	66065	
449.00 > 99.00	2.683	2.680	0.003	1.000	4841116		3.50(1.94-5.82)	98.9	91269	
D 18 13C4 PFOS										
503.00 > 80.00	3.043	3.041	0.002	1.000	3239063	2.44		102	17414	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.043	3.042	0.001	1.000	14391699	9.76		105	52846	
499.00 > 99.00	3.043	3.042	0.001	1.000	3174442		4.53(2.31-6.93)	105	34754	
20 Perfluorononanoic acid										
463.00 > 419.00	3.043	3.043	0.0	0.998	13696835	9.77		97.7	34474	
463.00 > 169.00	3.043	3.043	0.0	0.998	3462437		3.96(1.90-5.69)	97.7	45718	
D 19 13C5 PFNA										
468.00 > 423.00	3.050	3.045	0.005	1.000	3361051	2.56		102	67264	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.257	3.253	0.004	1.000	23669204	9.26		99.4	298503	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.395	3.388	0.007	1.000	10381596	9.58		99.8	64461	
549.00 > 99.00	3.395	3.388	0.007	1.000	3993295		2.60(1.33-3.97)	99.8	65048	
D 26 M2-8:2FTS										
529.00 > 81.00	3.395	3.390	0.005	1.000	929210	2.34		97.9	9349	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.395	3.393	0.002	1.000	4704229	9.58		100	196732	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.395	3.397	-0.002	1.000	4196317	2.53		101	46250	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.404	3.401	0.003	1.003	16450280	9.69		96.9	74333	
D 23 13C2 PFDA										
515.00 > 470.00	3.404	3.401	0.003	1.000	2846573	2.58		103	67167	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.404	3.402	0.002	1.000	11538792	9.82		98.2	37953	
513.00 > 169.00	3.404	3.402	0.002	1.000	2042111		5.65(2.36-7.09)	98.2	47982	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.553	3.553	0.0	1.000	1702670	2.72		109	20225	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.563	3.558	0.005	1.003	7221428	10.6		106	41843	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.716	3.715	0.001	1.000	9173589	10.4		108	56586	
599.00 > 99.00	3.716	3.715	0.001	1.000	3114281		2.95(1.39-4.16)	108	76561	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.727	3.722	0.005	1.000	1478400	2.40		95.9	16640	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.737	3.727	0.010	1.003	5812610	10.5		105	50290	
D 30 13C2 PFUnA										
565.00 > 520.00	3.737	3.727	0.010	1.000	2344065	2.46		98.6	49963	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.727	3.727	0.0	0.997	7810732	9.86		98.6	36756	
563.00 > 169.00	3.727	3.727	0.0	0.997	1900318		4.11(2.12-6.36)	98.6	52722	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.885	3.883	0.002	1.000	32450794	8.22		87.3	180198	
D 36 13C2 PFDoA										
615.00 > 570.00	4.018	4.017	0.001	1.000	2618174	2.55		102	22873	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.018	4.020	-0.002	1.000	11350274	10.4		104	14082	
613.00 > 169.00	4.028	4.020	0.008	1.003	2800305		4.05(2.13-6.40)	104	29481	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.280	4.278	0.002	1.000	12743041	10.0		100	11764	
663.00 > 169.00	4.280	4.278	0.002	1.000	3998604		3.19(1.25-3.76)	100	28384	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.522	4.513	0.009	1.000	3344927	2.57		103	23122	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.522	4.513	0.009	1.000	3357209	10.0		99.9	21100	
713.00 > 219.00	4.512	4.513	-0.001	0.998	2463893		1.36(0.71-2.13)	99.9	21721	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.922	4.918	0.004	1.000	5522067	2.61		104	17481	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.922	4.920	0.002	1.000	20182542	9.63		96.3	5657	
813.00 > 169.00	4.922	4.920	0.002	1.000	3386021		5.96(2.86-8.58)	96.3	12815	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.277	5.268	0.009	1.000	21808387	9.83		98.3	4861	
913.00 > 169.00	5.277	5.268	0.009	1.000	2810004		7.76(3.83-11.48)	98.3	7858	

Reagents:

LCPFC_LL7_00004 Amount Added: 1.00 Units: mL

Report Date: 11-Apr-2018 10:51:19 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Injection Date: 10-Apr-2018 19:26:34 Instrument ID: A8_N

Lims ID: IC L7 Full

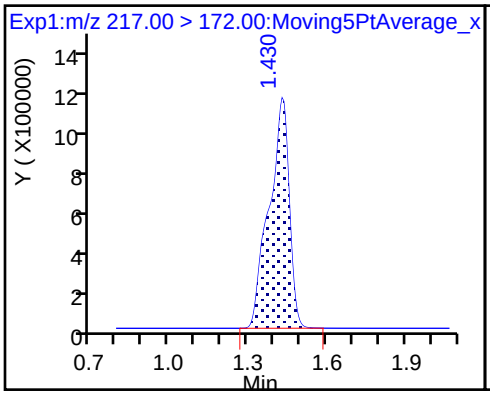
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 8

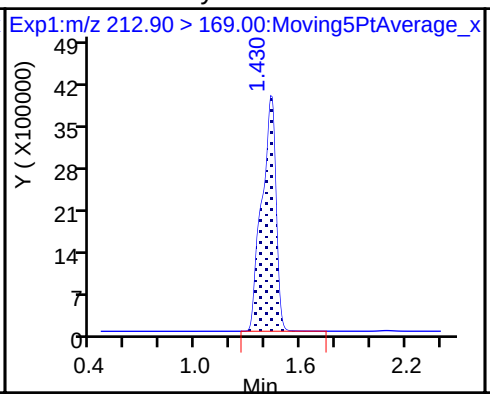
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

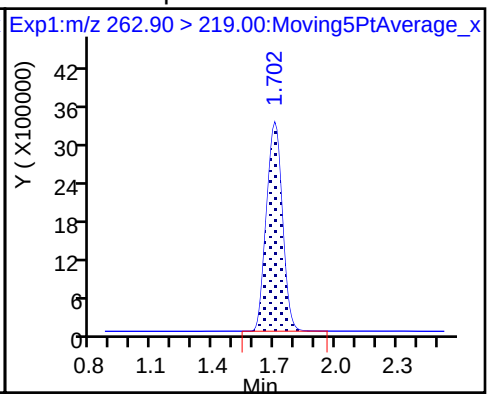
D 1 13C4 PFBA



2 Perfluorobutyric acid



4 Perfluoropentanoic acid



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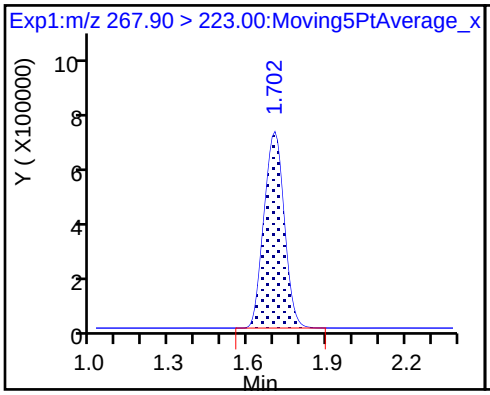
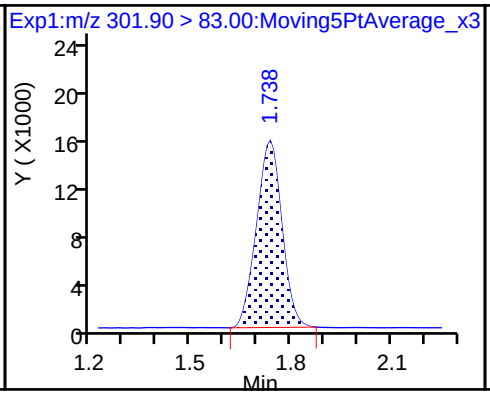
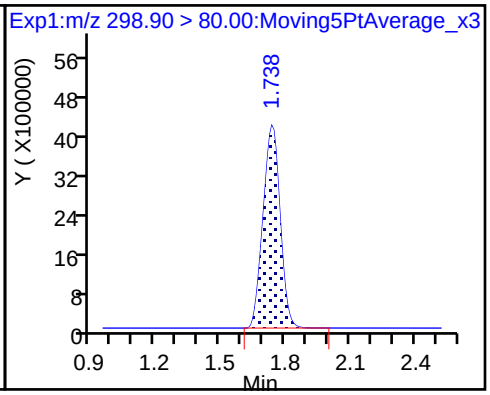


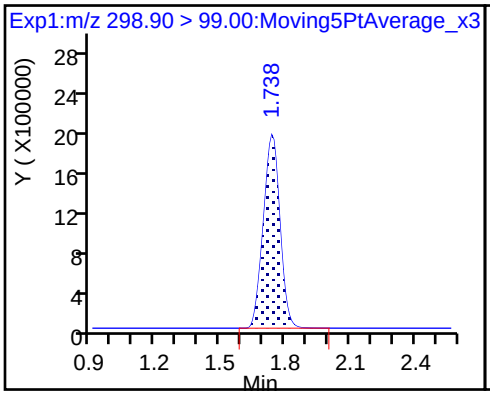
D 47 13C3-PFBS



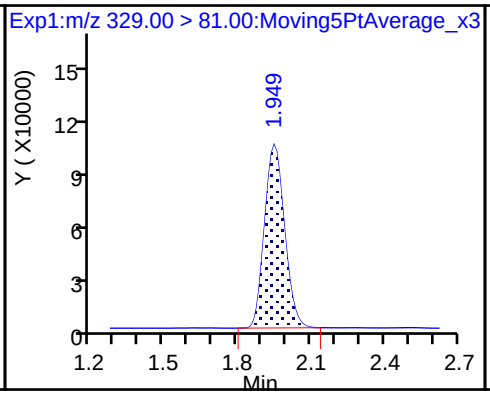
5 Perfluorobutanesulfonic acid



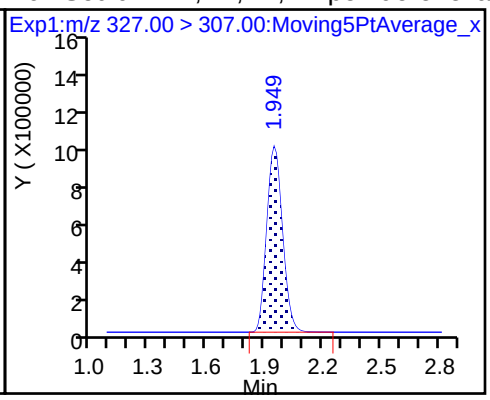
5 Perfluorobutanesulfonic acid



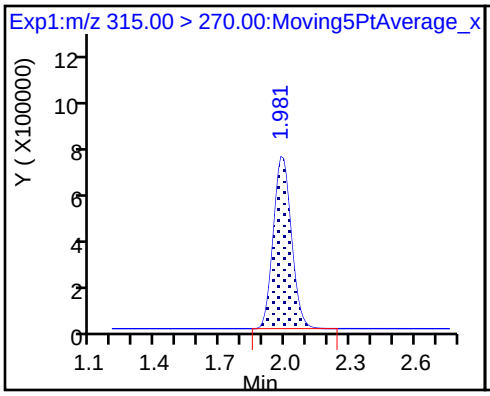
D 60 M2-4:2FTS



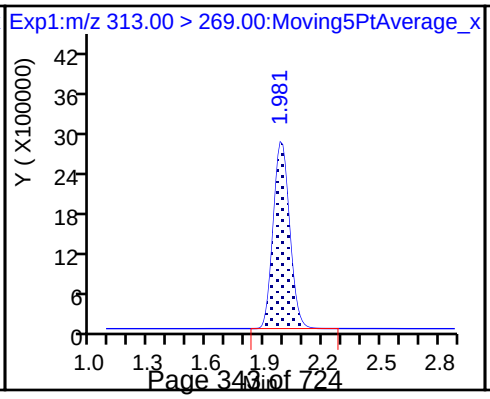
61 Sodium 1H,1H,2H,2H-perfluorohexane



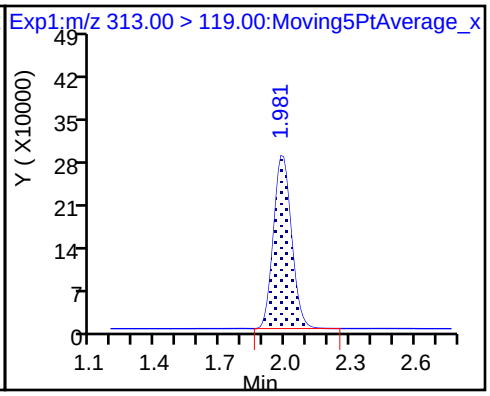
D 7 13C2 PFHxA



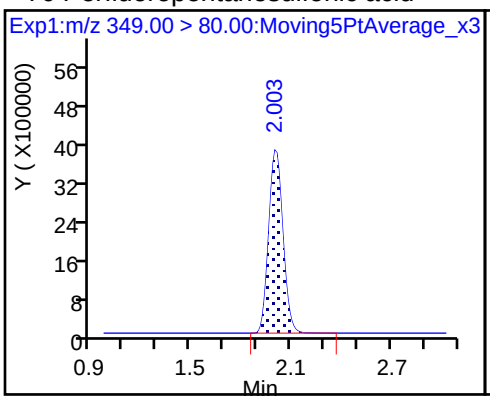
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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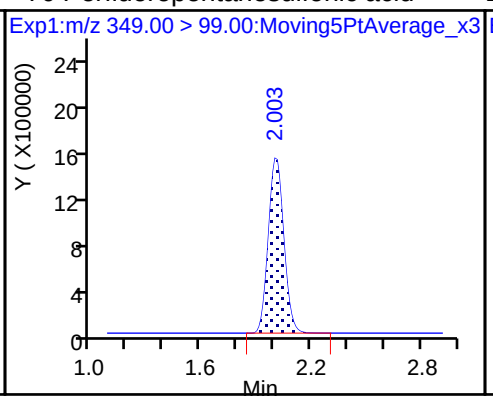
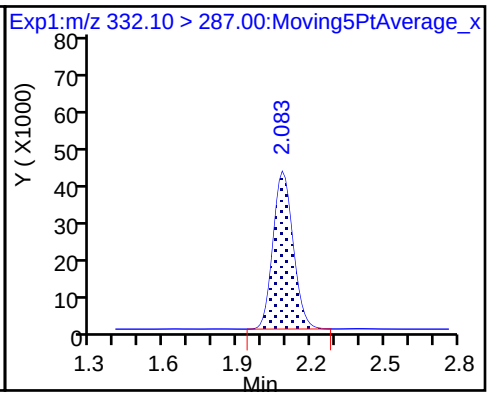
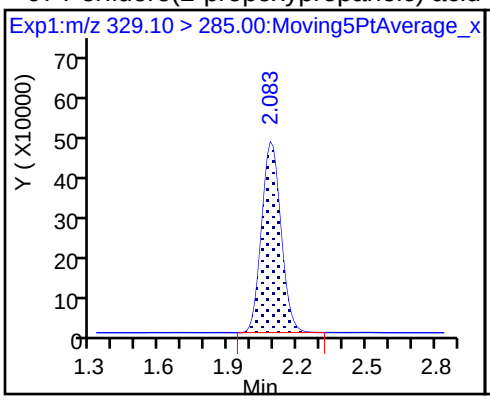


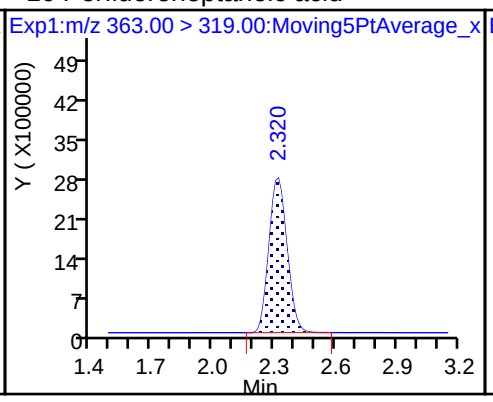
D 64 13C3 HFPO-DA



67 Perfluoro(2-propoxypropanoic) acid



10 Perfluoroheptanoic acid



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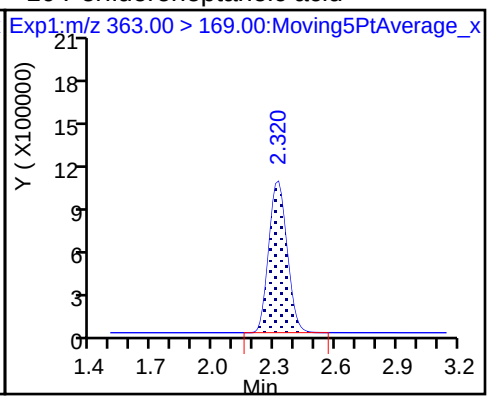
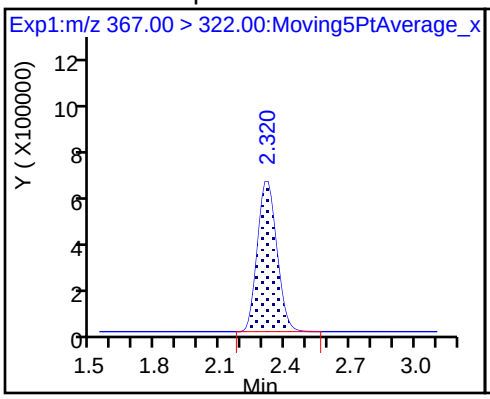
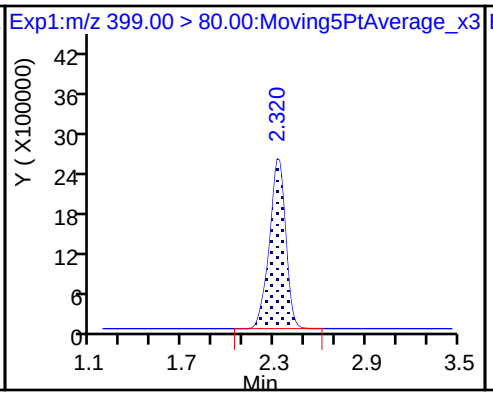


D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid



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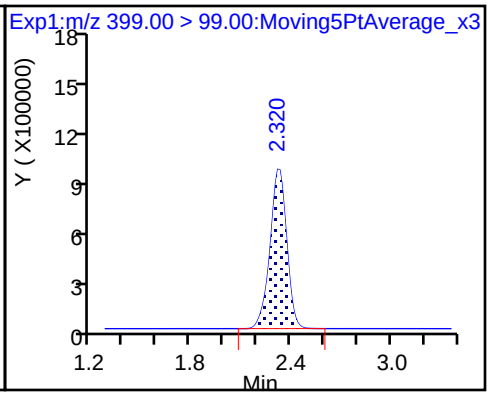
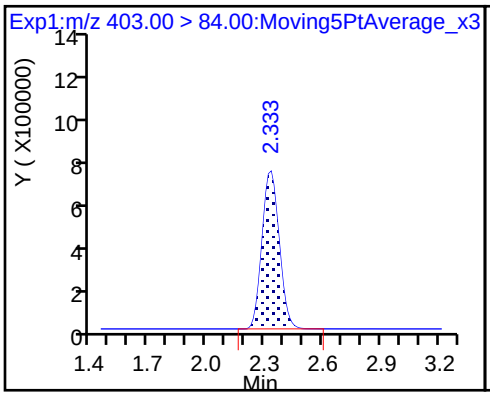
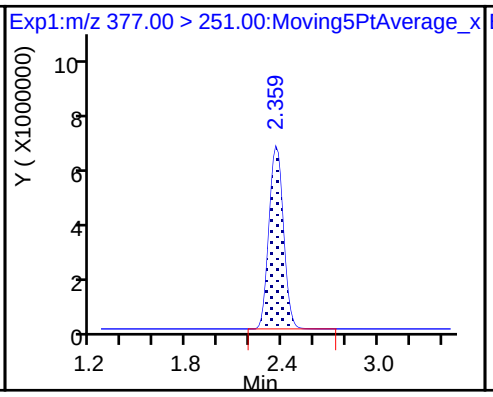


D 11 18O2 PFHxS



65 Adona



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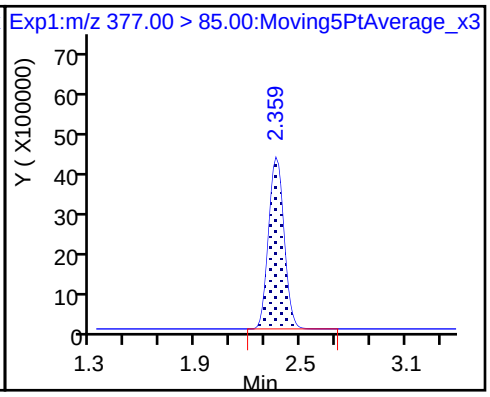
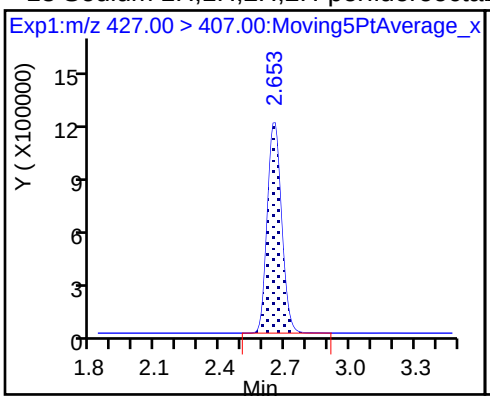
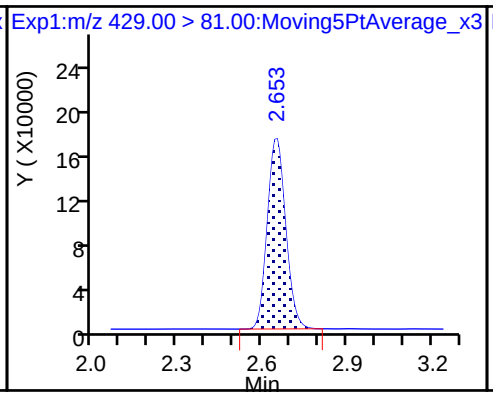


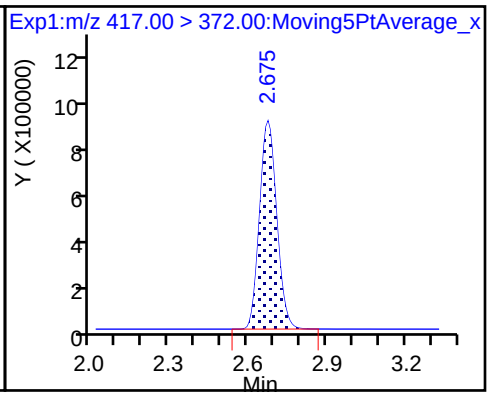
13 Sodium 1H,1H,2H,2H-perfluorooctane



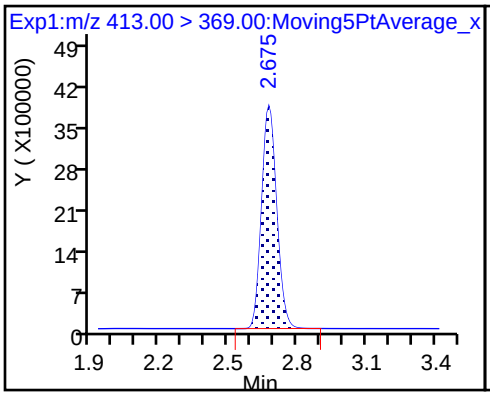
D 12 M2-6:2FTS



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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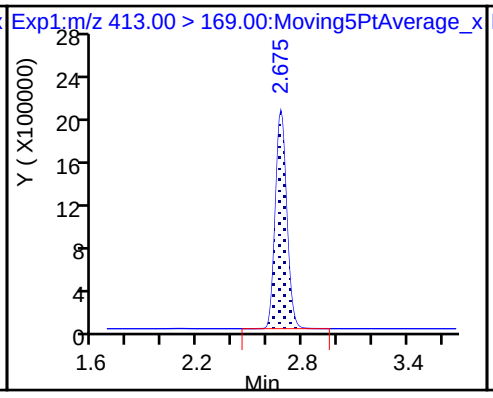
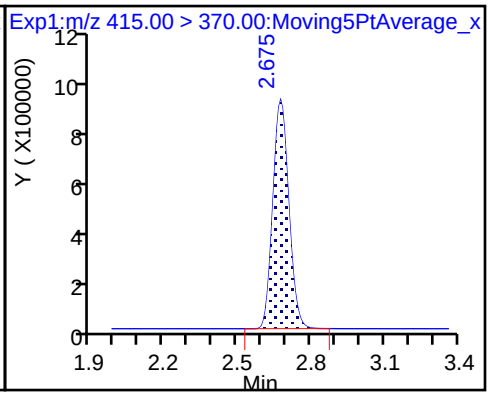
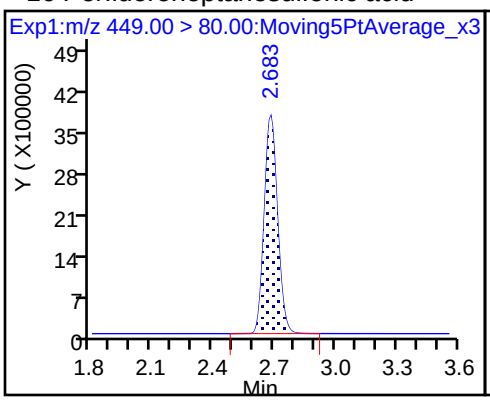


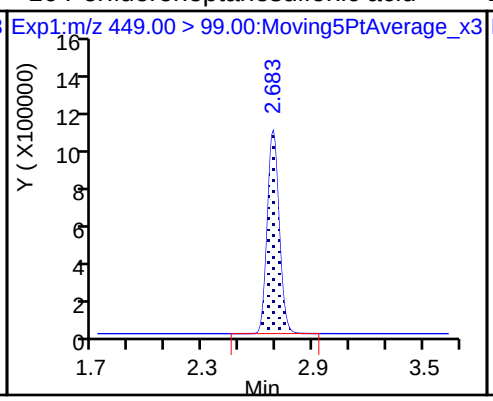
* 62 13C2-PFOA



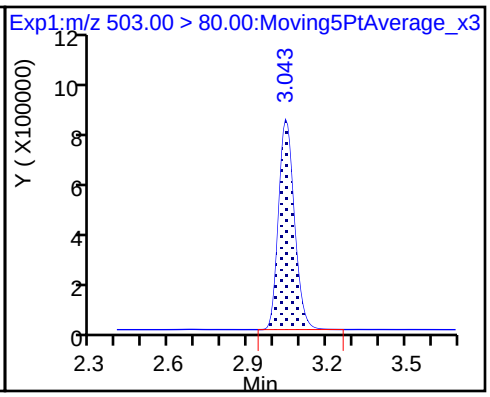
16 Perfluoroheptanesulfonic acid



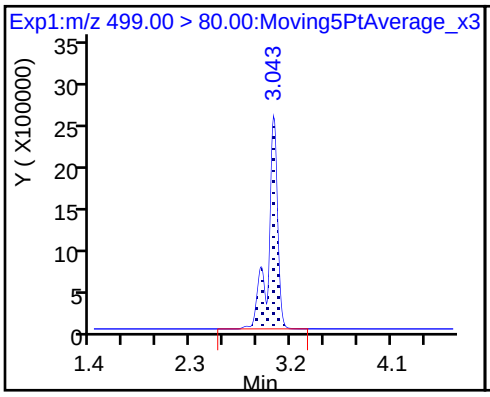
16 Perfluoroheptanesulfonic acid



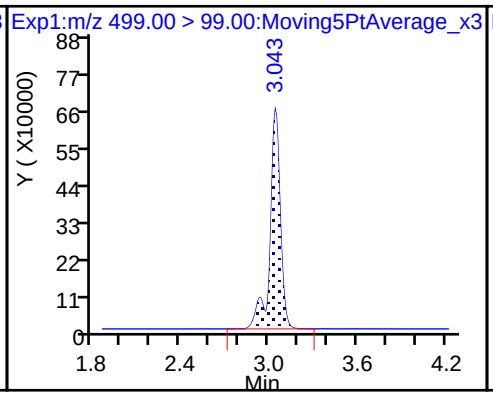
D 18 13C4 PFOS



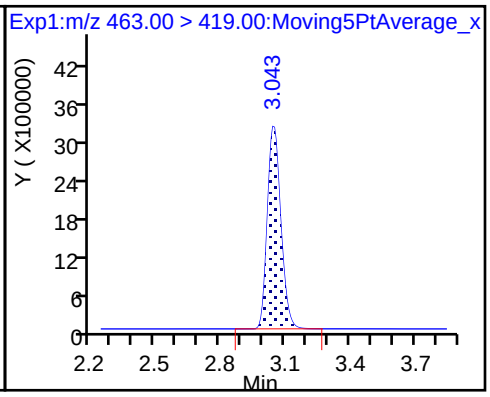
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



20 Perfluorononanoic acid



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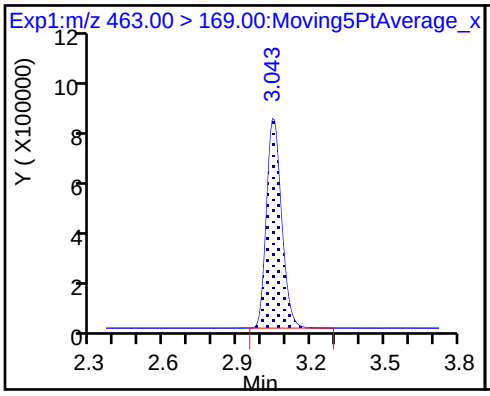
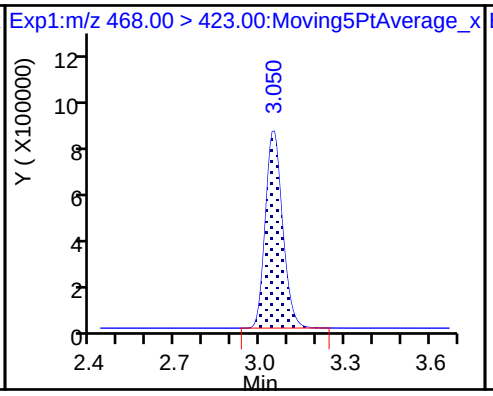
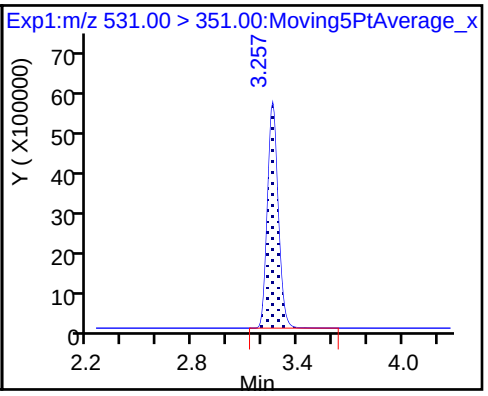


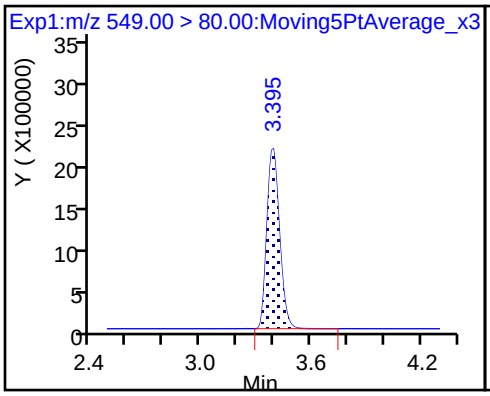
D 19 13C5 PFNA



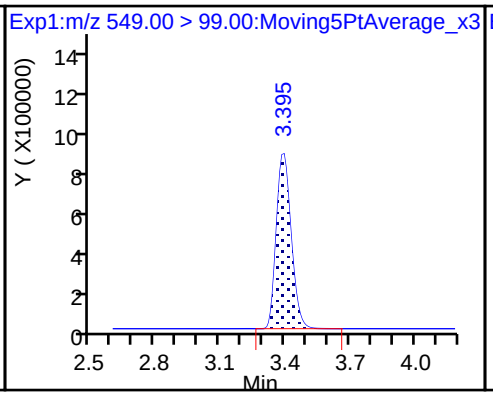
69 9-Chlorohexadecafluoro-3-oxanonane



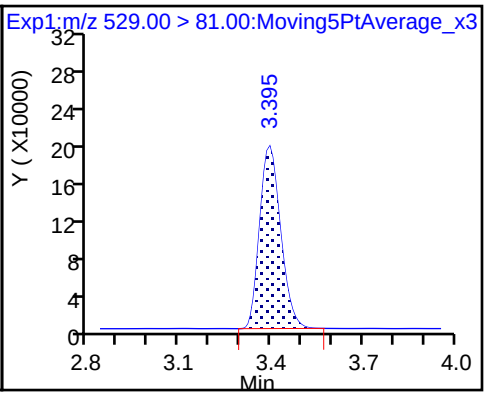
68 Perfluorononanesulfonic acid



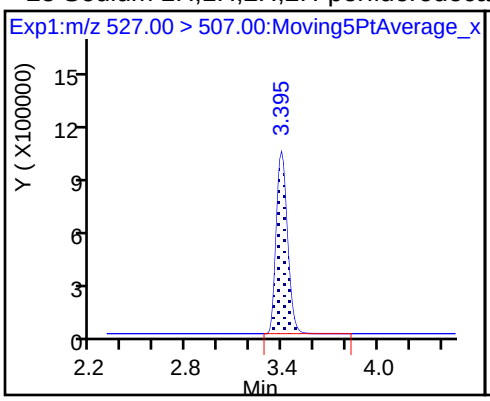
68 Perfluorononanesulfonic acid



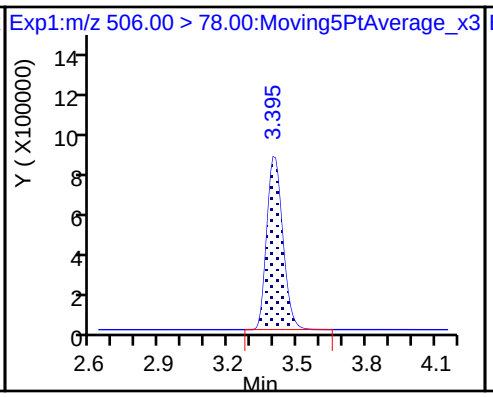
D 26 M2-8:2FTS



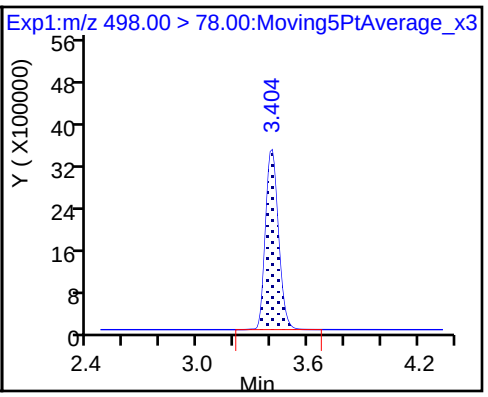
25 Sodium 1H,1H,2H,2H-perfluorodecane



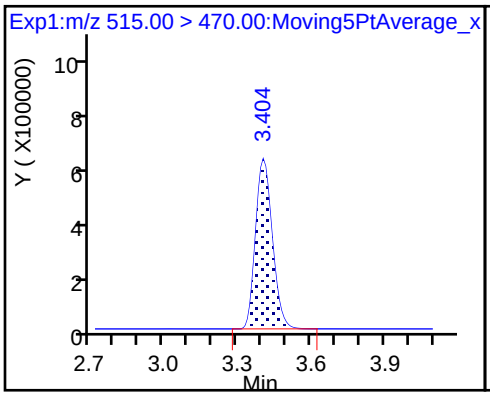
D 21 13C8 FOSA



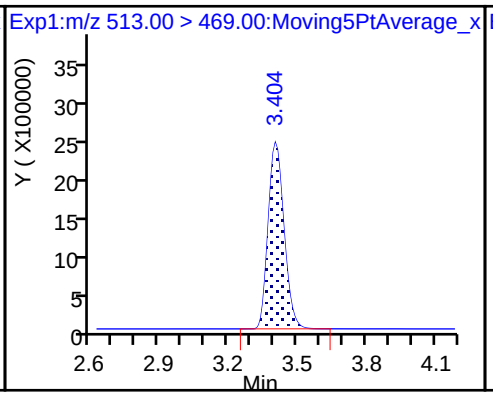
22 Perfluorooctane Sulfonamide



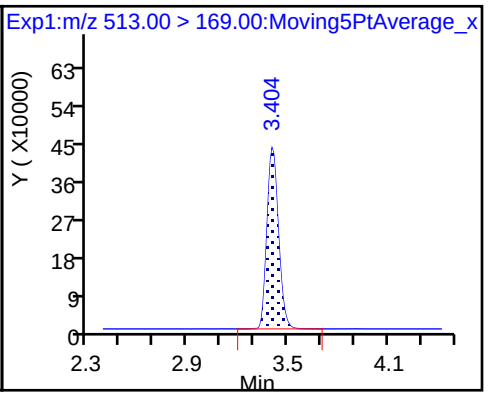
D 23 13C2 PFDA



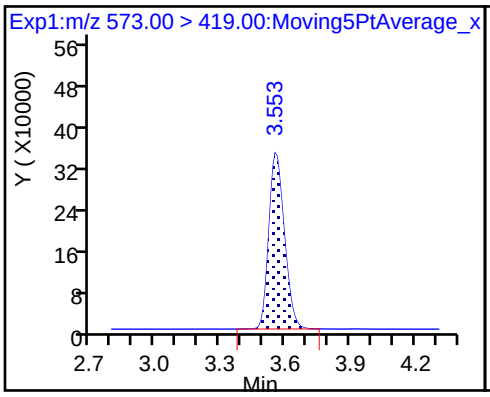
24 Perfluorodecanoic acid



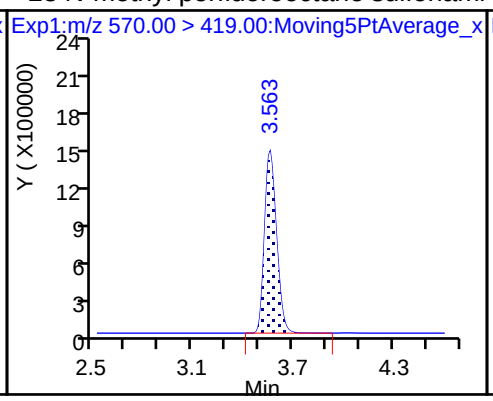
24 Perfluorodecanoic acid



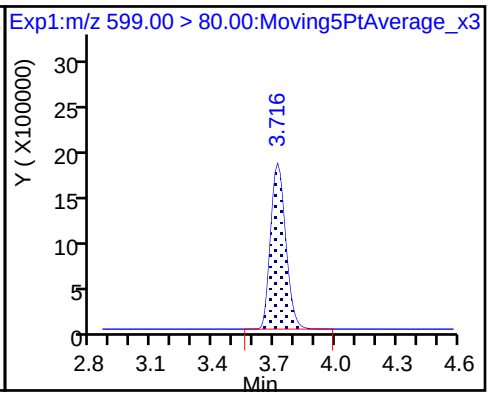
D 27 d3-NMeFOSAA



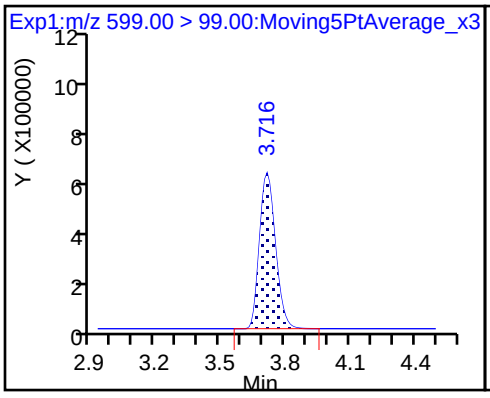
28 N-methyl perfluorooctane sulfonami



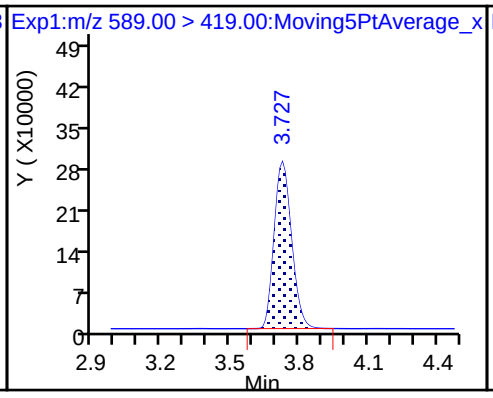
29 Perfluorodecane Sulfonic acid



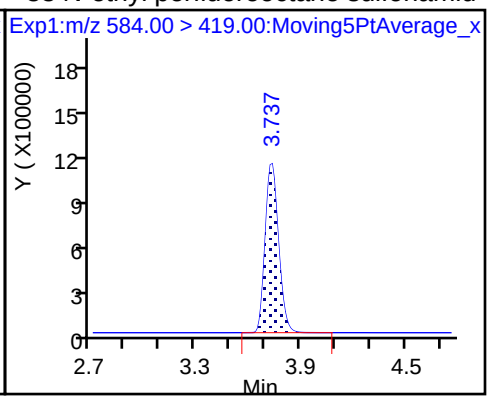
29 Perfluorodecane Sulfonic acid



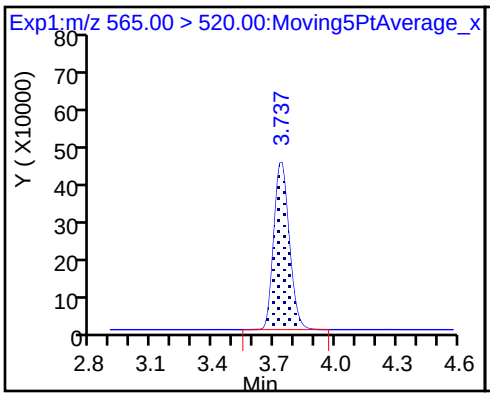
D 32 d5-NEtFOSAA



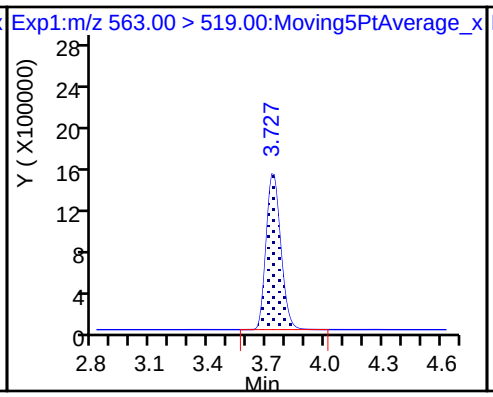
33 N-ethyl perfluorooctane sulfonamid



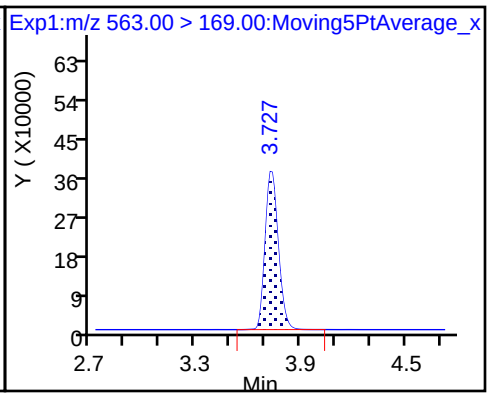
D 30 13C2 PFUnA



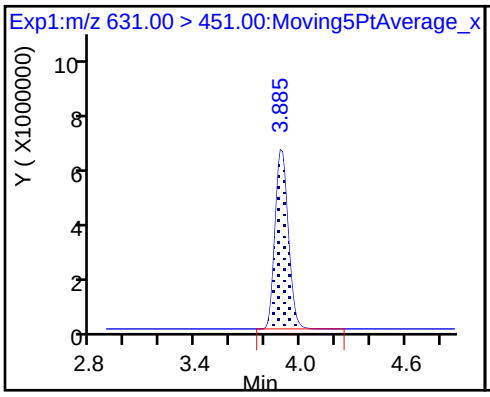
31 Perfluoroundecanoic acid



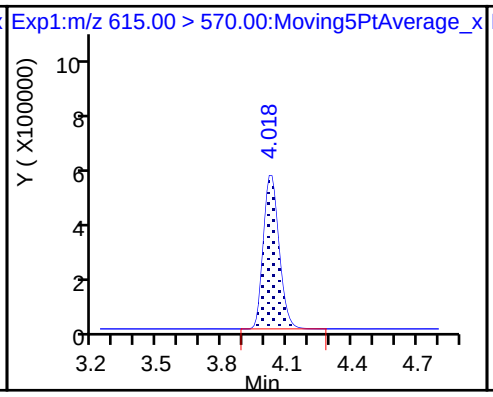
31 Perfluoroundecanoic acid



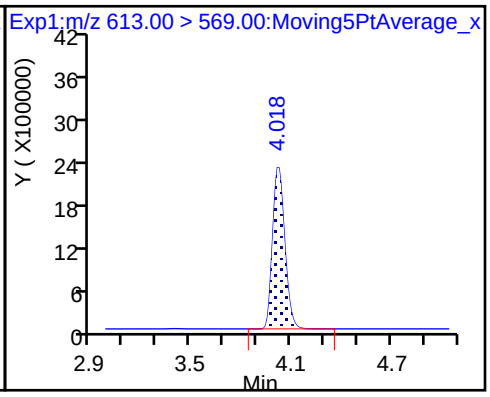
66 11-Chloroeicosafluoro-3-oxaundecan



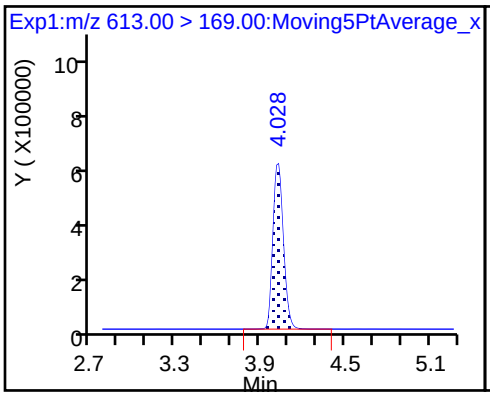
D 36 13C2 PFDoA



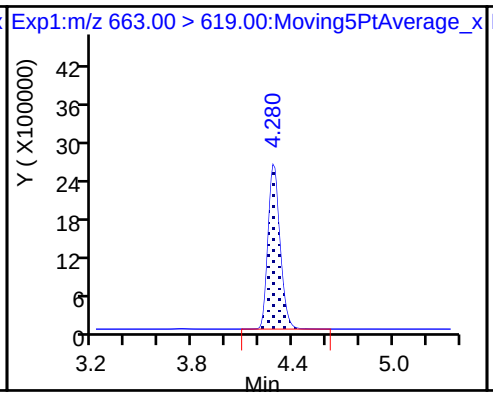
37 Perfluorododecanoic acid



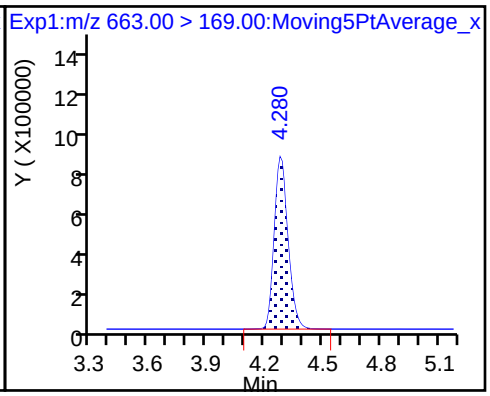
37 Perfluorododecanoic acid



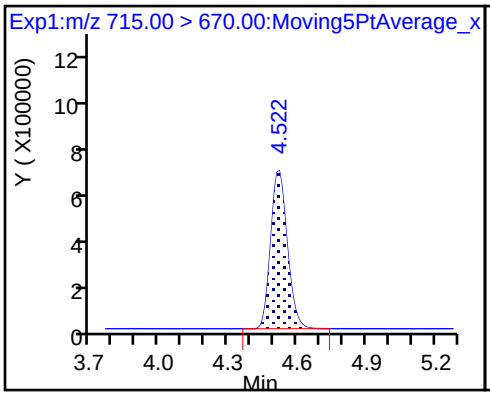
41 Perfluorotridecanoic acid



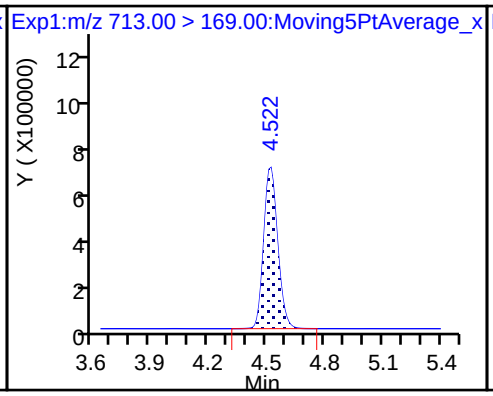
41 Perfluorotridecanoic acid



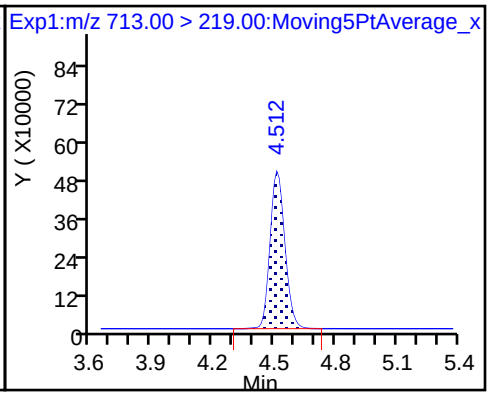
D 43 13C2-PFTeDA



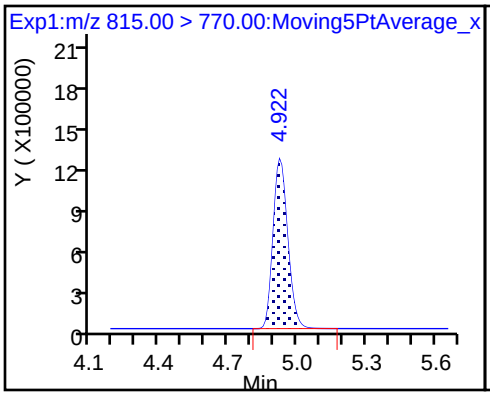
42 Perfluorotetradecanoic acid



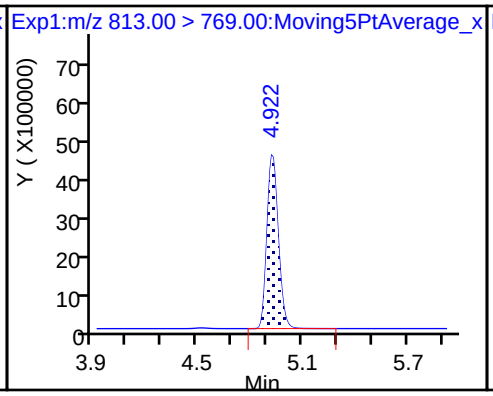
42 Perfluorotetradecanoic acid



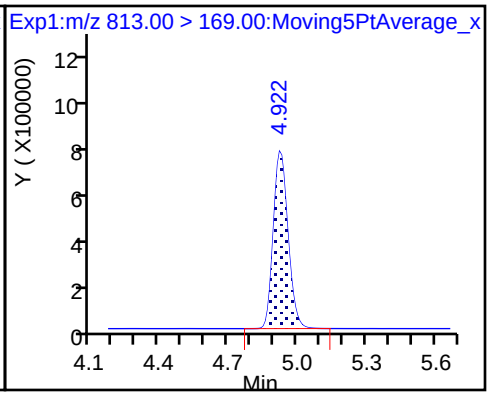
D 44 13C2-PFHxDA



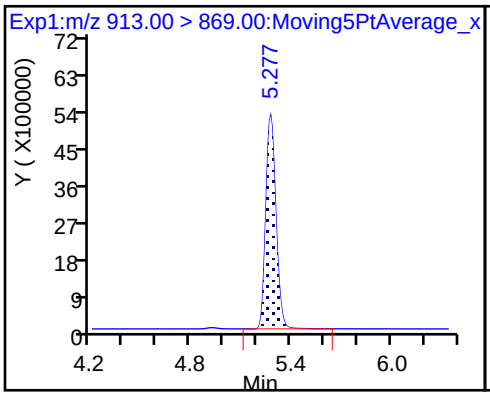
45 Perfluorohexadecanoic acid



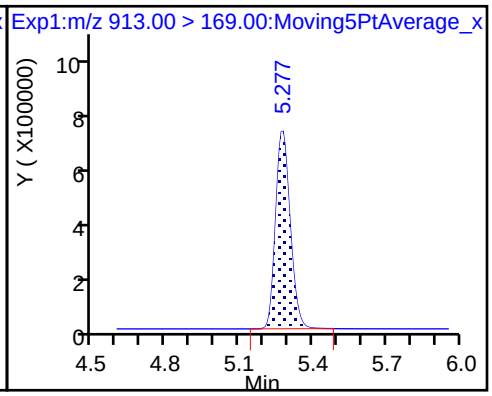
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 223412

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/15/2018 15:13 Calibration End Date: 05/15/2018 16:39 Calibration ID: 39197

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-223412/2	2017.05.15LLB_ICAL_002.d
Level 2	IC 320-223412/3	2017.05.15LLB_ICAL_003.d
Level 3	IC 320-223412/4	2017.05.15LLB_ICAL_004.d
Level 4	IC 320-223412/5	2017.05.15LLB_ICAL_005.d
Level 5	IC 320-223412/11	2018.05.15LLC_ICAL_006.d
Level 6	IC 320-223412/7	2017.05.15LLB_ICAL_007.d
Level 7	IC 320-223412/8	2017.05.15LLB_ICAL_008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.9241 0.9579	0.9313 0.8957	0.9225	0.9212	0.9561	AveID		0.9298				2.3		35.0			
Perfluoropentanoic acid (PFPeA)	1.2625 1.1726	1.2317 1.1540	1.1470	1.1005	1.1953	AveID		1.1805				4.6		35.0			
Perfluorobutanesulfonic acid (PFBS)	73.379 83.642	78.361 74.326	79.854	76.421	80.657	AveID		78.092				4.7		50.0			
4:2 FTS	16.107 17.773	17.745 15.923	15.595	16.119	16.756	AveID		16.574				5.3		50.0			
Perfluorohexanoic acid (PFHxA)	1.0080 1.0411	1.1481 1.0775	0.9804	0.9949	0.9470	AveID		1.0281				6.6		35.0			
Perfluoropentanesulfonic acid (PFPeS)	70.536 74.560	69.604 63.954	70.709	68.100	69.356	AveID		69.545				4.6		50.0			
HFPO-DA (GenX)	2.4769 3.2096	3.1177 3.2768	2.9135	3.1580	3.2449	AveID		3.0568				9.2		35.0			
Perfluoroheptanoic acid (PFHpA)	1.1170 1.0529	1.0612 1.0467	1.0572	0.9754	1.0839	AveID		1.0563				4.1		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.2868 1.0663	1.1929 1.0806	1.1199	1.0451	1.0961	AveID		1.1268				7.6		35.0			
Adona	3.2060 3.4315	3.8072 2.8477	3.3608	3.8067	3.5300	AveID		3.4271				9.9		50.0			
6:2FTS	2.5480 1.7441	2.0146 1.8029	2.1352	1.5658	1.7196	L2ID	0.0180	1.7550							0.9900		0.9900
Perfluorooctanoic acid (PFOA)	1.2824 1.1826	1.3066 1.1018	1.1380	1.1380	1.0898	AveID		1.1770				7.3		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.1977 1.3942	1.4162 1.2900	1.3092	1.3585	1.3580	AveID		1.3320				5.5		50.0			
Perfluorooctanesulfonic acid (PFOS)	1.3297 1.1653	1.2627 1.1063	1.2157	1.0803	1.0707	AveID		1.1758				8.4		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 223412

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/15/2018 15:13 Calibration End Date: 05/15/2018 16:39 Calibration ID: 39197

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorononanoic acid (PFNA)	1.1029 1.0606	1.0209 1.0898	1.0536	1.0094	1.0772	AveID		1.0592				3.3		35.0			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	1.6277 1.9318	1.7857 1.8079	1.7512	1.8511	1.7997	AveID		1.7936				5.2		50.0			
Perfluorooctane Sulfonamide (FOSA)	0.8770 1.0413	0.9364 0.9485	1.0064	0.9683	1.0373	AveID		0.9736				6.1		35.0			
Perfluorononanesulfonic acid (PFNS)	0.7875 0.8013	0.6822 0.7778	0.7467	0.7538	0.7530	AveID		0.7575				5.1		50.0			
8:2FTS	1.3186 1.4577	1.3858 1.2726	1.3462	1.3265	1.3389	AveID		1.3495				4.3		35.0			
Perfluorodecanoic acid (PFDA)	0.8867 1.0214	0.9628 0.9744	0.9707	0.9794	1.0102	AveID		0.9722				4.5		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.9856 1.0502	0.9342 1.0154	0.9935	1.0424	1.0822	AveID		1.0148				4.8		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.6317 0.7056	0.7078 0.6583	0.6836	0.6304	0.6826	AveID		0.6714				4.8		50.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.0524 1.0388	0.7682 0.9642	0.9620	0.9003	0.8944	AveID		0.9400				10.3		35.0			
Perfluoroundecanoic acid (PFUnA)	0.9516 0.8215	0.9138 0.9130	0.7790	0.7312	0.7363	AveID		0.8352				10.9		35.0			
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	2.5003 2.9297	2.7026 2.4951	2.6674	2.7920	2.9488	AveID		2.7194				6.8		50.0			
Perfluorododecanoic acid (PFDoA)	1.0219 1.0427	1.0040 1.0283	1.1136	1.0306	1.0645	AveID		1.0436				3.4		35.0			
Perfluorotridecanoic Acid (PFTriA)	1.1692 1.1573	1.0844 1.0949	1.1780	1.1305	1.1930	AveID		1.1439				3.7		50.0			
Perfluorotetradecanoic acid (PFTeA)	0.2622 0.2525	0.2565 0.2644	0.2270	0.2438	0.2614	AveID		0.2525				5.3		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	+++++ 0.9784	1.4058 +++++	1.0112	0.9493		L2ID	0.0237	0.9288							0.9990		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	+++++ 1.0675	0.9426 +++++	1.1047	1.0937		AveID		1.0570				6.2		50.0			
13C4 PFBA	1.4654 1.5540	1.5722 1.5642	1.5804	1.4802	1.4829	Ave		1.5285				3.3		50.0			
13C5 PFPeA	0.9578 0.9962	0.9914 0.9717	0.9991	0.9890	0.9536	Ave		0.9798				1.9		50.0			
13C3-PFBS	0.0218 0.0216	0.0228 0.0222	0.0227	0.0222	0.0217	Ave		0.0221				2.1		50.0			
M2-4:2FTS	0.1684 0.1644	0.1635 0.1590	0.1596	0.1703	0.1535	Ave		0.1627				3.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 223412

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/15/2018 15:13 Calibration End Date: 05/15/2018 16:39 Calibration ID: 39197

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2 PFHxA	1.0307 1.0550	1.0663 0.9826	1.0830	1.0193	1.0766	Ave		1.0448				3.4		50.0			
13C3 HFPO-DA	0.0499 0.0528	0.0523 0.0542	0.0548	0.0501	0.0477	Ave		0.0517				5.0		50.0			
13C4-PFHpA	1.0218 0.9939	1.0396 0.9433	1.0651	0.9899	0.9531	Ave		1.0010				4.4		50.0			
18O2 PFHxS	1.2582 1.2631	1.2526 1.1763	1.2691	1.2355	1.2049	Ave		1.2371				2.8		50.0			
M2-6:2FTS	0.2275 0.2103	0.2278 0.2007	0.2391	0.2273	0.2142	Ave		0.2210				5.9		50.0			
13C4 PFOA	0.9457 0.9390	0.9493 0.9318	0.9743	0.9365	0.9514	Ave		0.9468				1.5		50.0			
13C4 PFOS	0.8656 0.8476	0.8315 0.8371	0.8880	0.8302	0.8519	Ave		0.8503				2.4		50.0			
13C5 PFNA	0.7820 0.7732	0.8107 0.7385	0.8055	0.7560	0.7553	Ave		0.7745				3.5		50.0			
13C8 FOSA	1.0913 1.1455	1.0548 1.1170	1.1529	1.1228	1.1055	Ave		1.1128				3.0		50.0			
M2-8:2FTS	0.2728 0.2336	0.2681 0.2412	0.2615	0.2403	0.2427	Ave		0.2515				6.2		50.0			
13C2 PFDA	0.6586 0.6472	0.6755 0.6466	0.6955	0.6477	0.6399	Ave		0.6587				3.0		50.0			
d3-NMeFOSAA	0.3554 0.3593	0.3709 0.3833	0.3911	0.3502	0.3334	Ave		0.3634				5.5		50.0			
d5-NEtFOSAA	0.3882 0.3469	0.3862 0.3379	0.3918	0.3798	0.3795	Ave		0.3729				5.8		50.0			
13C2 PFUnA	0.5204 0.5208	0.5248 0.4762	0.5435	0.5432	0.5225	Ave		0.5216				4.3		50.0			
13C2 PFDoA	0.5424 0.5857	0.5507 0.5733	0.5780	0.5627	0.5366	Ave		0.5613				3.3		50.0			
13C2-PFTeDA	0.6921 0.7166	0.5915 0.6818	0.7584	0.7128	0.6707	Ave		0.6891				7.5		50.0			
13C2-PFHxDA	+++++ 1.1633	0.8066 1.2600	1.2363	1.2369	+++++	Ave		1.1406				16.7		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 223412

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/15/2018 15:13 Calibration End Date: 05/15/2018 16:39 Calibration ID: 39197

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-223412/2	2017.05.15LLB_ICAL_002.d
Level 2	IC 320-223412/3	2017.05.15LLB_ICAL_003.d
Level 3	IC 320-223412/4	2017.05.15LLB_ICAL_004.d
Level 4	IC 320-223412/5	2017.05.15LLB_ICAL_005.d
Level 5	IC 320-223412/11	2018.05.15LLC_ICAL_006.d
Level 6	IC 320-223412/7	2017.05.15LLB_ICAL_007.d
Level 7	IC 320-223412/8	2017.05.15LLB_ICAL_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	73922 12934647	162647 26861072	691256	2597444	6642110	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	66005 10150448	135647 21497034	543378	2073422	5339518	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	77106 13863265	175383 28014178	758816	2858265	7259728	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	17882 3112425	41962 6341030	156576	636977	1593481	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	56711 9544553	135987 20297289	503450	1931731	4776223	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	78646 13112812	165299 25577332	712963	2702610	6623884	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	6740 1471265	18129 3404733	75752	301290	725223	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	62298 9093863	122556 18928350	533908	1839273	4839723	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	80424 10650638	151043 22174743	613254	2238132	5630297	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
Adona		AveID	151478 25273614	351664 45699176	1414956	6019764	14089104	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
6:2FTS		L2ID	29994 3021313	48326 6574970	229440	642687	1635620	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	66199 9649258	137784 19682065	525683	2030259	4857127	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	53872 9775395	124538 19707477	524732	2045093	5160059	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorooctanesulfonic acid (PFOS)		AveID	58301 7964833	108239 16474463	474971	1585297	3965534	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32
Perfluorononanoic acid (PFNA)		AveID	47076 7125949	91933 15430529	402423	1453651	3811509	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 223412

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/15/2018 15:13 Calibration End Date: 05/15/2018 16:39 Calibration ID: 39197

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate		AveID	71678 13260701	153727 27038736	687137	2728187	6694592	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorooctane Sulfonamide (FOSA)		AveID	52238 10364812	109720 20311842	550166	2070950	5372059	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorononanesulfonic acid (PFNS)		AveID	35719 5665707	60494 11982938	301811	1144412	2885064	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
8:2FTS		AveID	18812 2834764	39540 5636776	159889	581733	1458360	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorodecanoic acid (PFDA)		AveID	31877 5744357	72253 12079263	320077	1208399	3028523	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	19122 3278986	38494 7460336	184250	695308	1690352	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	28773 5009746	63027 10184141	277428	961059	2626191	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	22302 3130989	32956 6246594	178736	651368	1590051	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroundecanoic acid (PFUnA)		AveID	27031 3717634	53273 8334466	200746	756677	1802433	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate		AveID	111283 20326205	235156 37717270	1057887	4159140	11086572	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)		AveID	30254 5307128	61418 11301274	305166	1104651	2676169	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotridecanoic Acid (PFTriA)		AveID	34616 5890114	66337 12033356	322826	1211735	2999335	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	9904 1571970	16854 3455816	81619	331048	821303	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	+++++ 9889936	125967 +++++	592774	2236578	5252895	+++++ 5.00	0.0500 +++++	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	+++++ 10791279	84461 +++++	647584	2576884	6240519	+++++ 5.00	0.0500 +++++	0.250	1.00	2.50
13C4 PFBA	13PFOA	Ave	7998943 6751655	8732721 7496989	7493234	7049149	6946962	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PFOA	Ave	5228218 4328345	5506602 4657025	4737268	4710025	4467248	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3-PFBS	13PFOA	Ave	110547 87185	117730 99131	99970	98369	94691	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2FTS	13PFOA	Ave	858664 667183	848063 711767	706801	757382	671442	2.34 2.34	2.34 2.34	2.34	2.34	2.34
13C2 PFHxA	13PFOA	Ave	5626147 4583820	5922451 4709249	5134906	4854075	5043564	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PFOA	Ave	272111 229197	290745 259760	260002	238512	223493	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1 Analy Batch No.: 223412

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/15/2018 15:13 Calibration End Date: 05/15/2018 16:39 Calibration ID: 39197

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C4-PFHpA	13PF OA	Ave	5577473 4318388	5774309 4521122	5050240	4714171	4465208	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	6497213 5191664	6581524 5333305	5692452	5565884	5339851	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2FTS	13PF OA	Ave	1179634 867962	1201925 913641	1076802	1028277	953169	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C4 PFOA	13PF OA	Ave	5162191 4079623	5272655 4465836	4619416	4460027	4456920	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFOS	13PF OA	Ave	4516956 3520558	4415247 3835347	4024927	3779459	3815593	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	4268517 3359491	4502703 3539647	3819382	3600246	3538499	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	5956672 4976852	5858621 5353791	5466463	5346931	5178962	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2FTS	13PF OA	Ave	1426703 972368	1426640 1107332	1187676	1096366	1089191	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	3594922 2812041	3752181 3099083	3297462	3084670	2997952	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	1940146 1561125	2060337 1836867	1854527	1667566	1561957	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	2119254 1507014	2144987 1619647	1857905	1808821	1777821	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	2840675 2262574	2914989 2282286	2576940	2587053	2447962	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	2960567 2544838	3058640 2747572	2740425	2679695	2514089	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFTeDA	13PF OA	Ave	3777870 3113223	3285420 3267831	3595983	3394312	3141974	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFHxDA	13PF OA	Ave	+++++ 5054291	4480419 6039184	5862077	5890266	+++++	+++++ 2.50	2.50 2.50	2.50	2.50	+++++

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_002.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-May-2018 15:13:31 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L1-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 16-May-2018 09:19:50 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 16-May-2018 08:31:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.461	1.462	-0.001	1.000	73922	0.0248		99.4	28.8	
D 1 13C4 PFBA										
217.00 > 172.00	1.461	1.462	-0.001	1.000	7998943	2.40		95.9	49727	
D 3 13C5-PFPeA										
267.90 > 223.00	1.743	1.744	-0.001	0.560	5228218	2.44		97.8	84850	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.743	1.745	-0.002	1.000	66005	0.0267		107	33.2	
D 47 13C3-PFBS										
301.90 > 83.00	1.779	1.780	-0.001	1.000	110547	2.29		98.3	732	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.788	1.783	0.005	1.005	77106	0.0208		94.0	369	
298.90 > 99.00	1.788	1.783	0.005	1.005	35336		2.18(1.25-3.74)	94.0	183	
D 60 M2-4:2FTS										
329.00 > 81.00	1.999	1.999	0.0	1.000	858664	2.42		104	9883	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.999	2.000	-0.001	1.000	17882	0.0227		97.2	804	
D 7 13C2 PFHxA										
315.00 > 270.00	2.045	2.037	0.008	1.000	5626147	2.47		98.7	120947	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.045	2.037	0.008	1.000	56711	0.0245		98.0	74.3	
313.00 > 119.00	2.045	2.037	0.008	1.000	4387		12.93(5.03-15.10)	98.0	58.7	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.067	2.059	0.008	1.000	78646	0.0238		101	963	
349.00 > 99.00	2.067	2.059	0.008	1.000	30425		2.58(1.36-4.07)	101	298	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.146	2.134	0.012	1.000	272111	2.41		96.5	4220	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.146	2.134	0.012	1.000	6740	0.0203		81.0	44.3	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.381	2.374	0.007	1.000	62298	0.0264		106	88.9	
363.00 > 169.00	2.381	2.374	0.007	1.000	26606		2.34(1.13-3.40)	106	147	
D 9 13C4-PFHpA										
367.00 > 322.00	2.381	2.374	0.007	1.000	5577473	2.55		102	93695	
D 11 18O2 PFHxS										
403.00 > 84.00	2.392	2.386	0.006	1.000	6497213	2.41		102	91954	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.392	2.386	0.006	1.000	80424	0.0260		114	621	
399.00 > 99.00	2.392	2.386	0.006	1.000	26456		3.04(1.50-4.49)	114	109	
65 Adona										
377.00 > 251.00	2.426	2.418	0.008	1.000	151478	0.0234		93.5	3788	
377.00 > 85.00	2.426	2.418	0.008	1.000	90196		1.68(0.84-2.53)	93.5	1217	
D 12 M2-6:2FTS										
429.00 > 81.00	2.711	2.707	0.004	1.000	1179634	2.45		103	15821	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.711	2.707	0.004	1.000	29994	0.0242		102	323	
D 14 13C4 PFOA										
417.00 > 372.00	2.741	2.731	0.010	1.000	5162191	2.50		99.9	49724	
* 62 13C2-PFOA										
415.00 > 370.00	2.741	2.734	0.007		5458542	2.50			68226	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.741	2.734	0.007	1.000	66199	0.0272		109	24.6	
413.00 > 169.00	2.741	2.734	0.007	1.000	38085		1.74(0.84-2.52)	109	123	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.749	2.739	0.010	1.000	53872	0.0214		89.9	1195	
449.00 > 99.00	2.749	2.739	0.010	1.000	16570		3.25(1.94-5.82)	89.9	211	
D 18 13C4 PFOS										
503.00 > 80.00	3.114	3.104	0.010	1.000	4516956	2.43		102	46480	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.114	3.105	0.009	1.000	58301	0.0262		113	426	
499.00 > 99.00	3.114	3.105	0.009	1.000	13705		4.25(2.31-6.93)	113	145	
D 19 13C5 PFNA										
468.00 > 423.00	3.114	3.107	0.007	1.000	4268517	2.52		101	101008	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.114	3.107	0.007	1.000	47076	0.0260		104	62.4	M
463.00 > 169.00	3.114	3.107	0.007	1.000	10259		4.59(1.90-5.69)	104	219	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.325	3.316	0.009	1.000	71678	0.0211		90.8	897	
D 21 13C8 FOSA										
506.00 > 78.00	3.424	3.420	0.004	1.000	5956672	2.45		98.1	62035	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.424	3.422	0.002	1.000	52238	0.0225		90.1	1147	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.461	3.455	0.006	1.000	35719	0.0250		104	1022	
549.00 > 99.00	3.471	3.455	0.016	1.003	12559		2.84(1.33-3.97)	104	198	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.461	3.458	0.003	0.997	18812	0.0234		97.7	268	
D 26 M2-8:2FTS										
529.00 > 81.00	3.471	3.459	0.012	1.000	1426703	2.60		108	21876	
D 23 13C2 PFDA										
515.00 > 470.00	3.480	3.468	0.012	1.000	3594922	2.50		100.0	47114	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.480	3.468	0.012	1.000	31877	0.0228		91.2	175	
513.00 > 169.00	3.471	3.468	0.003	0.997	5046		6.32(2.36-7.09)	91.2	103	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.637	3.624	0.013	1.000	1940146	2.45		97.8	44718	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.637	3.631	0.006	1.000	19122	0.0243		97.1	205	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.791	3.781	0.010	1.000	28773	0.0227		94.1	551	
599.00 > 99.00	3.791	3.781	0.010	1.000	9859		2.92(1.39-4.16)	94.1	266	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.802	3.794	0.008	1.000	2119254	2.60		104	14171	
D 30 13C2 PFUnA										
565.00 > 520.00	3.812	3.800	0.012	1.000	2840675	2.49		99.8	58088	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.812	3.800	0.012	1.000	27031	0.0285		114	108	
563.00 > 169.00	3.802	3.800	0.002	0.997	5801		4.66(2.12-6.36)	114	153	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.812	3.800	0.012	1.003	22302	0.0280		112	444	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.968	3.958	0.010	1.000	111283	0.0217		91.9	1681	
D 36 13C2 PFDoA										
615.00 > 570.00	4.112	4.099	0.013	1.000	2960567	2.42		96.6	20988	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.112	4.100	0.012	1.000	30254	0.0245		97.9	24.6	
613.00 > 169.00	4.102	4.100	0.002	0.997	7125		4.25(2.13-6.40)	97.9	113	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.383	4.368	0.015	1.000	34616	0.0256		102	19.2	
663.00 > 169.00	4.383	4.368	0.015	1.000	9792		3.54(1.25-3.76)	102	109	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.623	4.608	0.015	1.000	3777870	2.51		100	19057	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.623	4.608	0.015	1.000	9904	0.0260		104	117	
713.00 > 219.00	4.613	4.608	0.005	0.998	7478		1.32(0.71-2.13)	104	135	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.043	5.030	0.013	1.000	6801656	2.73		109	18783	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.043	5.031	0.012	1.000	121507	0.0226		90.2	29.9	
813.00 > 169.00	5.043	5.031	0.012	1.000	19020		6.39(2.86-8.58)	90.2	156	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.429	5.408	0.021	1.000	69164	0.0241		96.2	12.6	
913.00 > 169.00	5.429	5.408	0.021	1.000	9204		7.51(3.83-11.48)	96.2	107	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00005 Amount Added: 1.00 Units: mL

Report Date: 16-May-2018 09:19:52 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_002.d

Injection Date: 15-May-2018 15:13:31 Instrument ID: A8_N

Lims ID: IC L1 Full

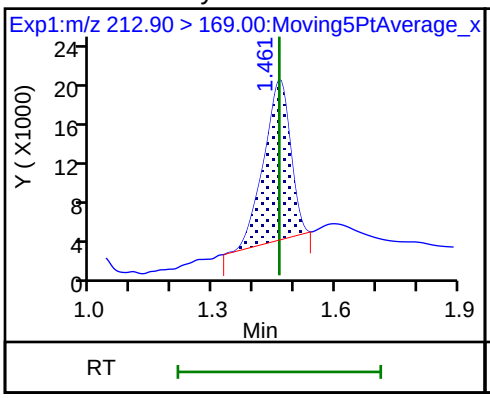
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2

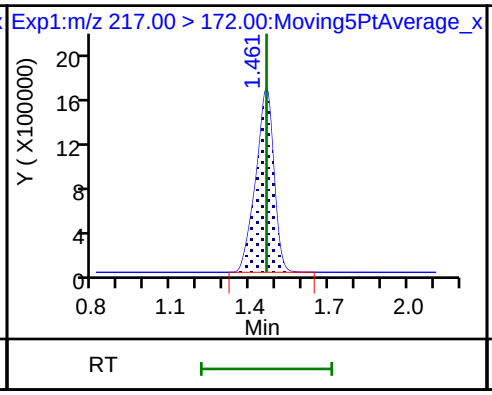
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

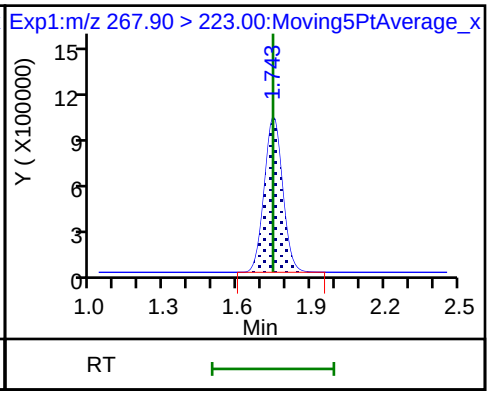
2 Perfluorobutyric acid



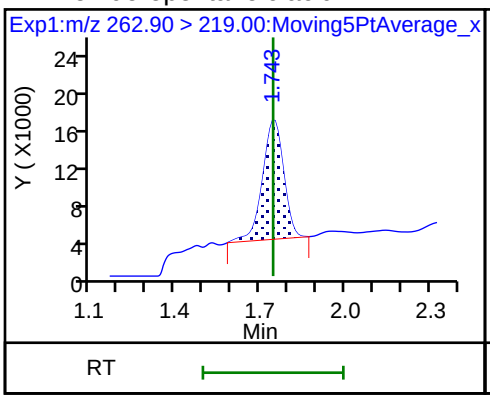
D 1 13C4 PFBA



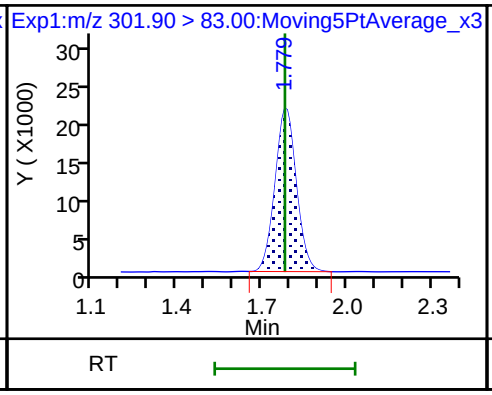
D 3 13C5-PFPeA



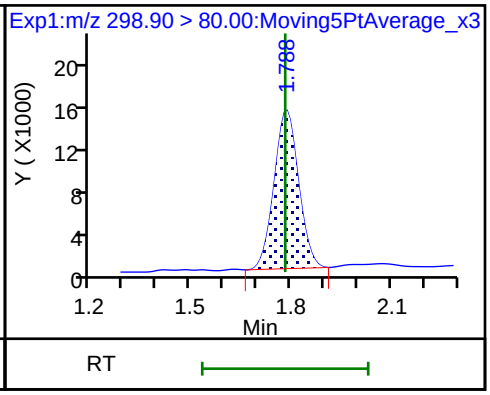
4 Perfluoropentanoic acid



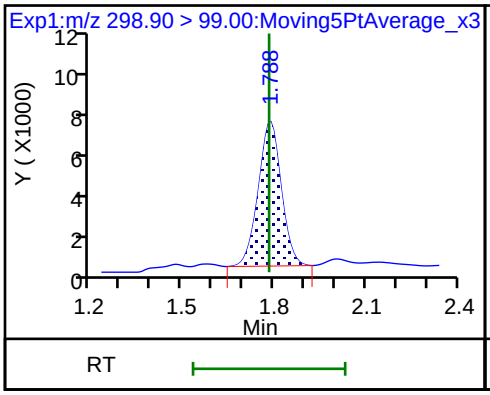
D 47 13C3-PFBS



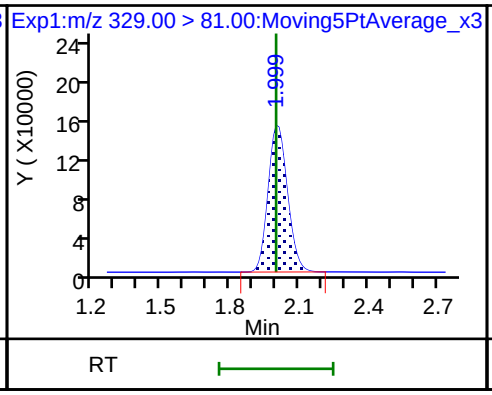
5 Perfluorobutanesulfonic acid



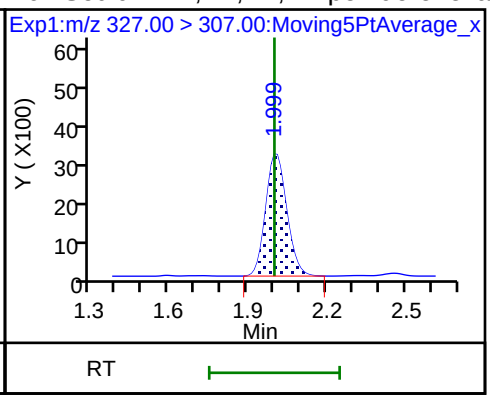
5 Perfluorobutanesulfonic acid



D 60 M2-4:2FTS



61 Sodium 1H,1H,2H,2H-perfluorohexane



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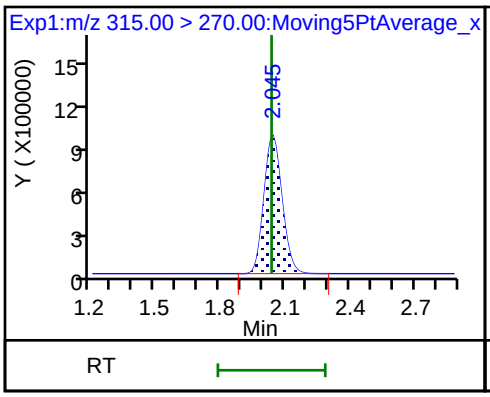
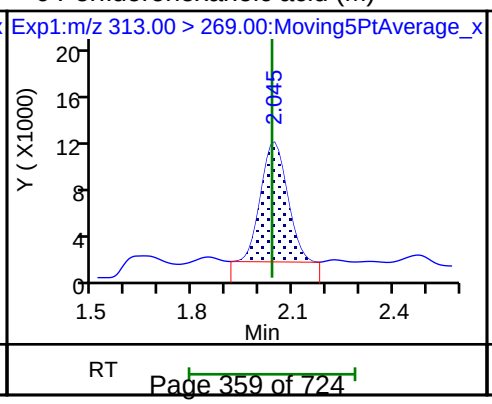
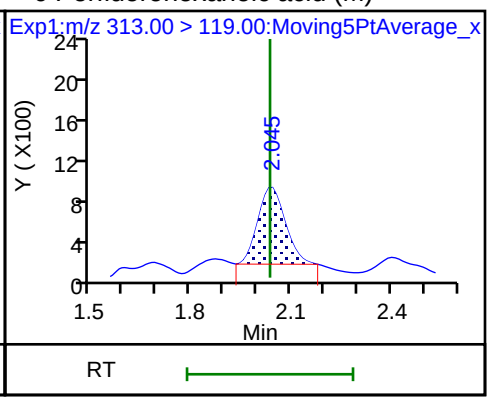


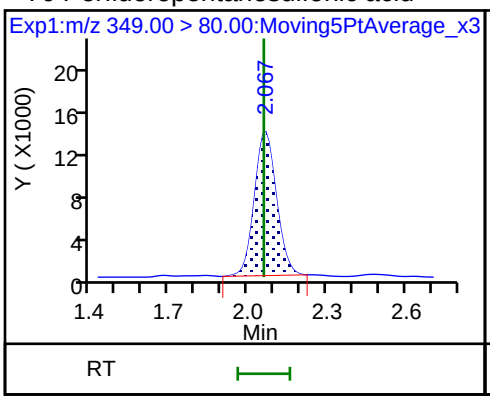
6 Perfluorohexanoic acid (M)



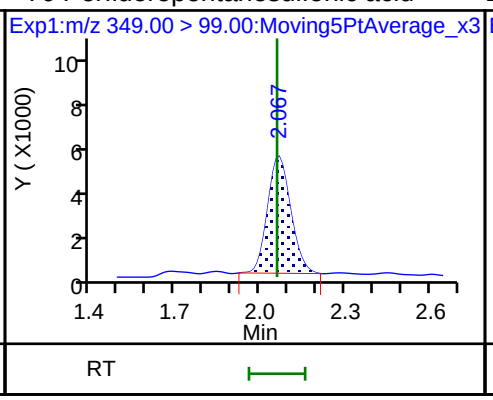
6 Perfluorohexanoic acid (M)



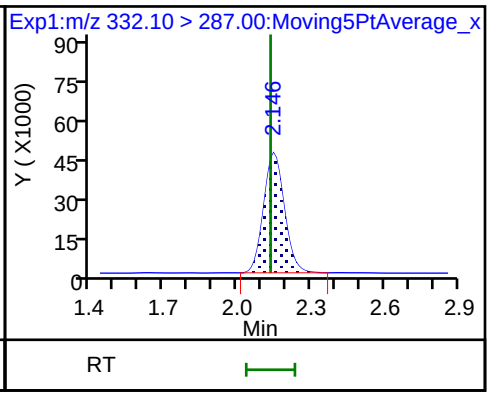
70 Perfluoropentanesulfonic acid



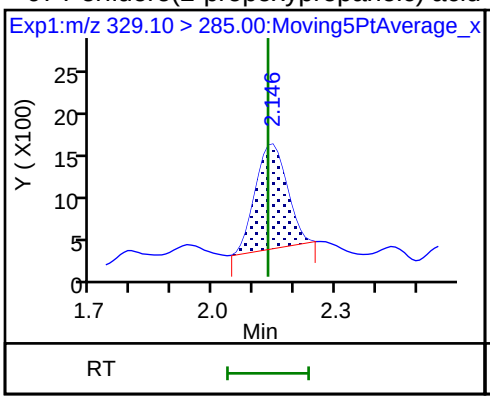
70 Perfluoropentanesulfonic acid



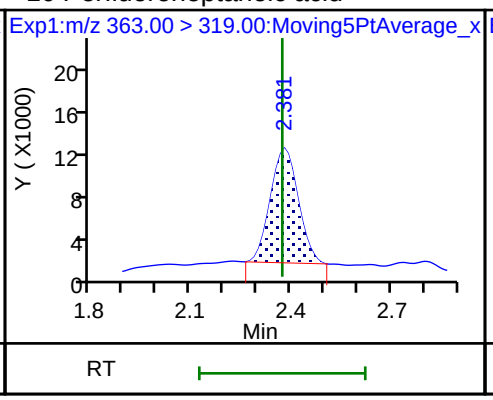
D 64 13C3 HFPO-DA



67 Perfluoro(2-propoxypropanoic) acid



10 Perfluoroheptanoic acid



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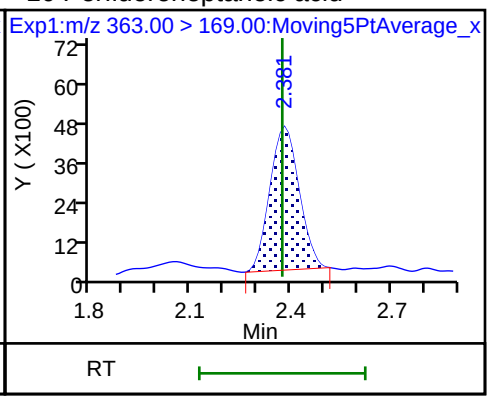
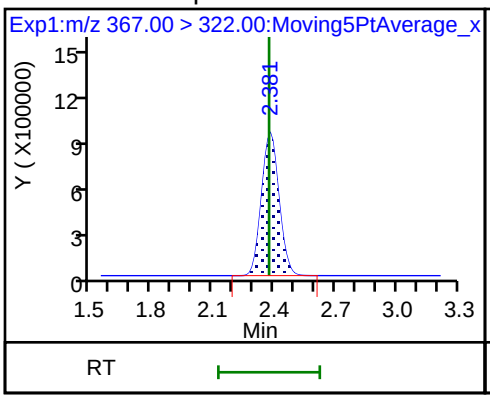


D 9 13C4-PFHpA



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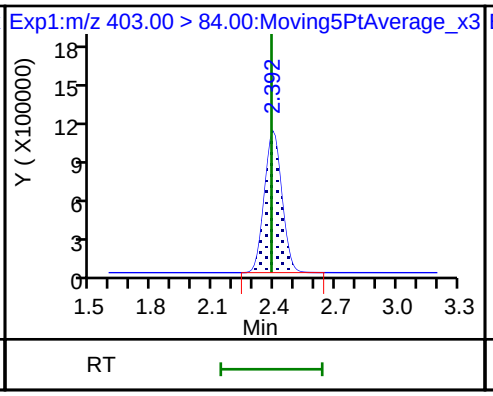
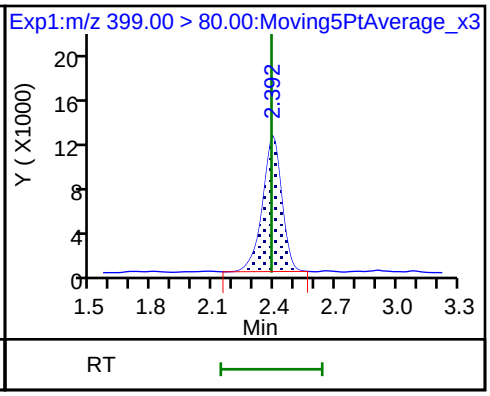
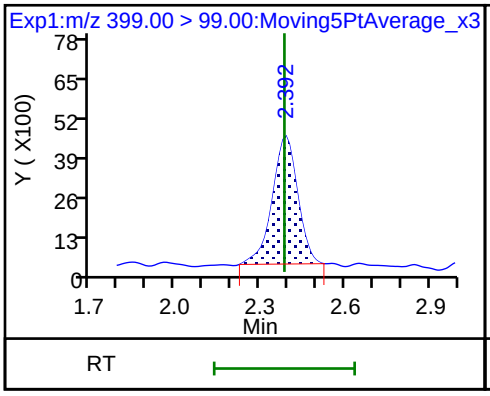


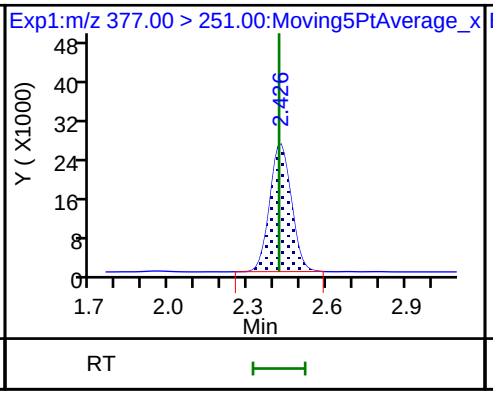
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 Adona



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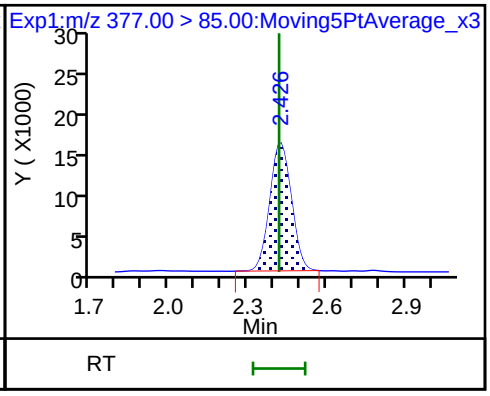
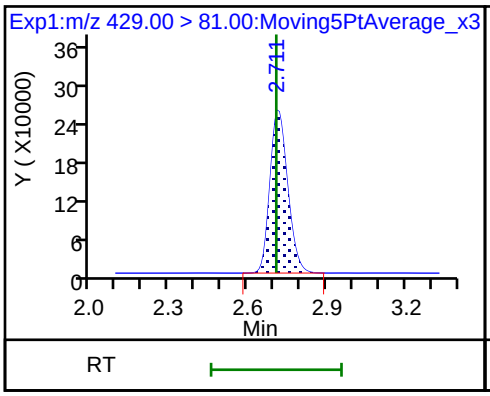
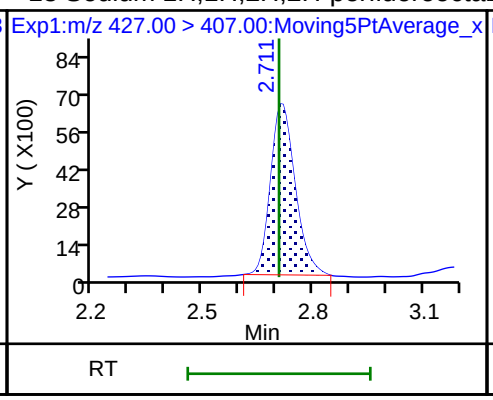


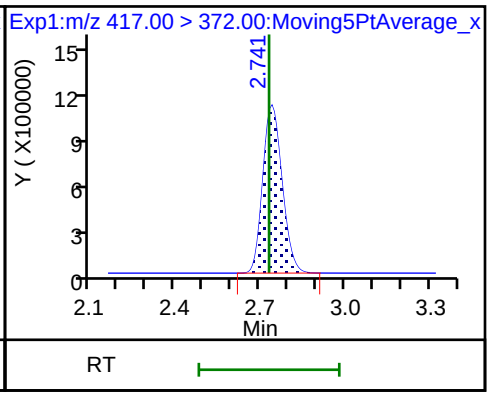
D 12 M2-6:2FTS



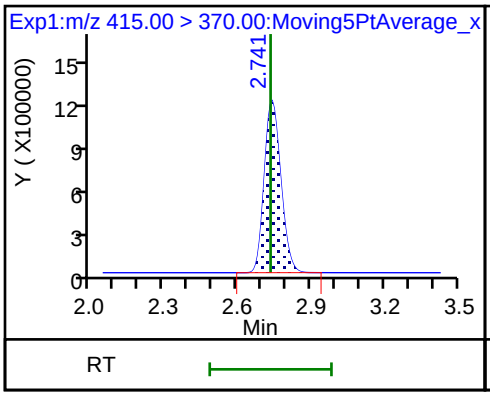
13 Sodium 1H,1H,2H,2H-perfluorooctane



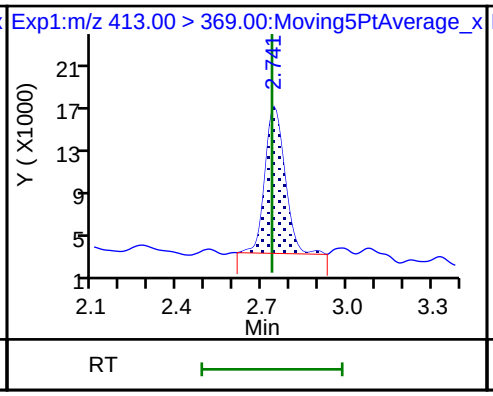
D 14 13C4 PFOA



* 62 13C2-PFOA



15 Perfluorooctanoic acid



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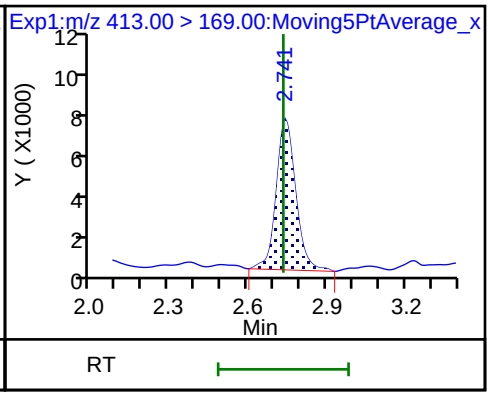
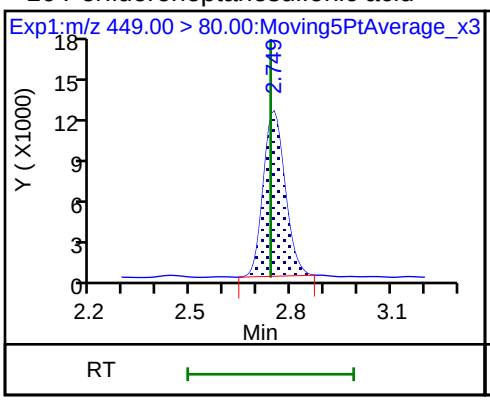
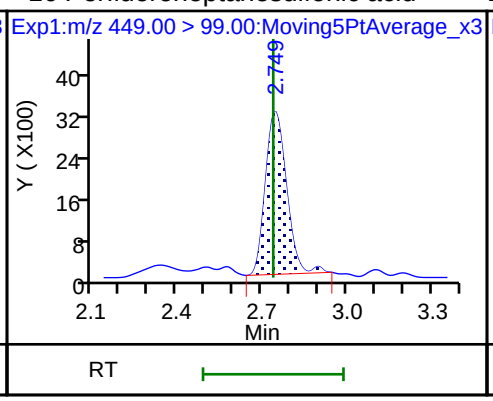


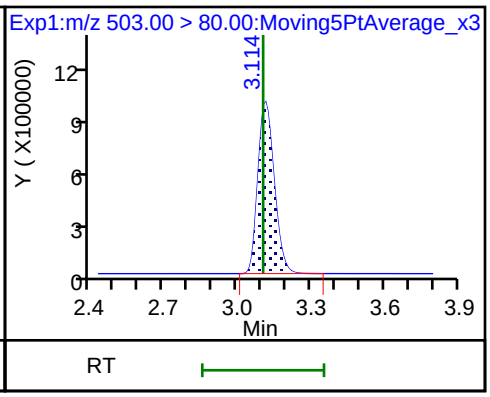
16 Perfluoroheptanesulfonic acid



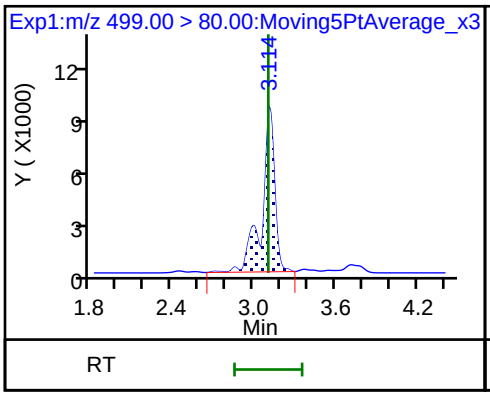
16 Perfluoroheptanesulfonic acid



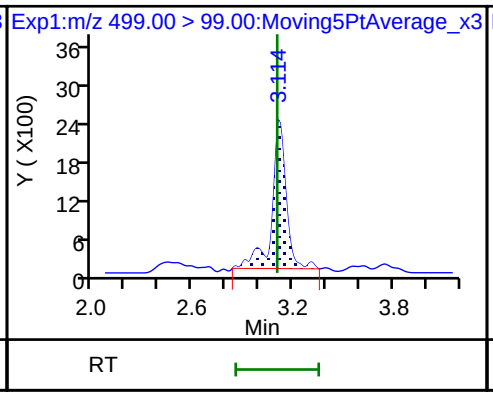
D 18 13C4 PFOS



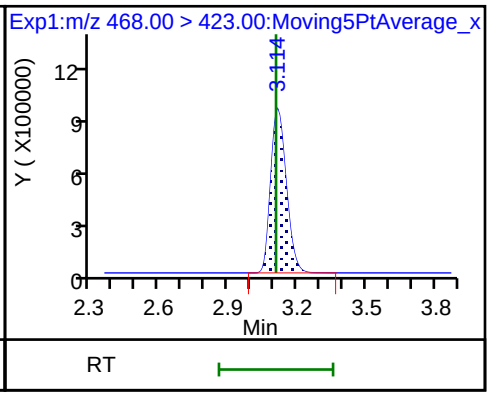
17 Perfluorooctane sulfonic acid



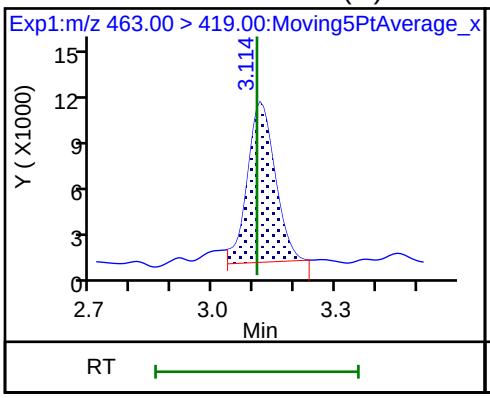
17 Perfluorooctane sulfonic acid



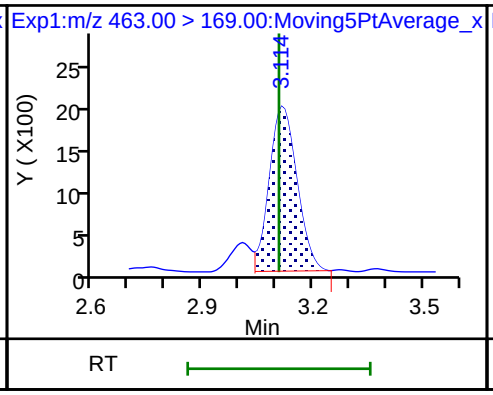
D 19 13C5 PFNA



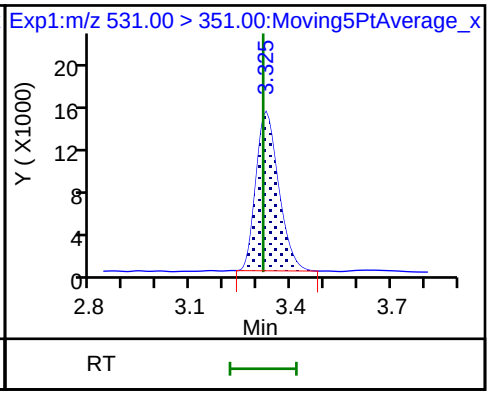
20 Perfluorononanoic acid (M)



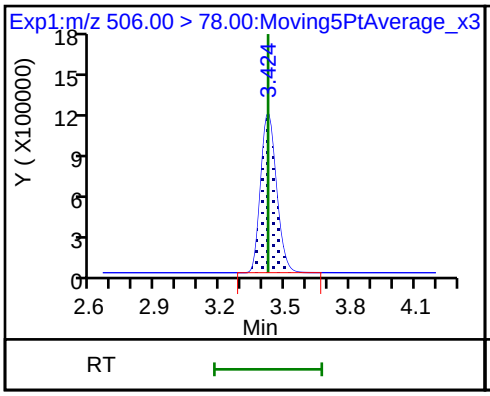
20 Perfluorononanoic acid



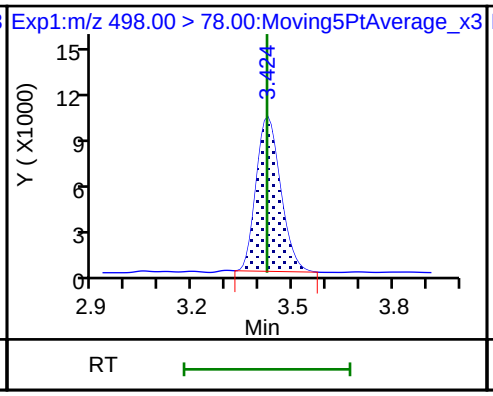
69 9-Chlorohexadecafluoro-3-oxanonane



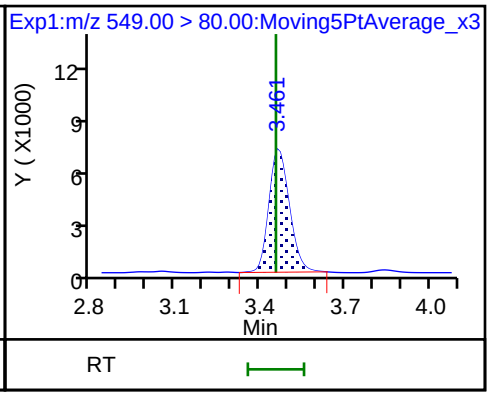
D 21 13C8 FOSA



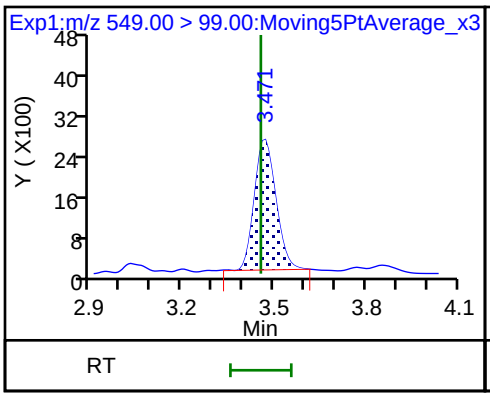
22 Perfluorooctane Sulfonamide



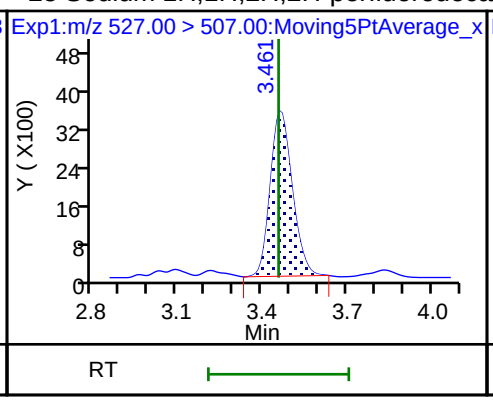
68 Perfluorononanesulfonic acid



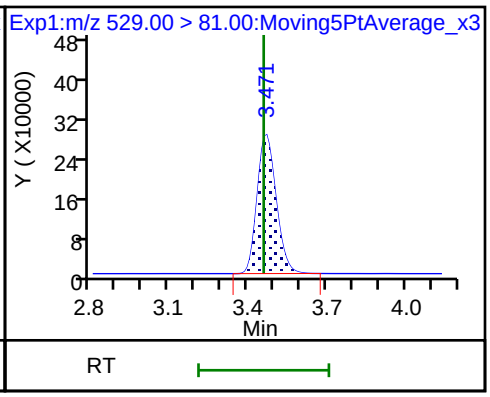
68 Perfluorononanesulfonic acid



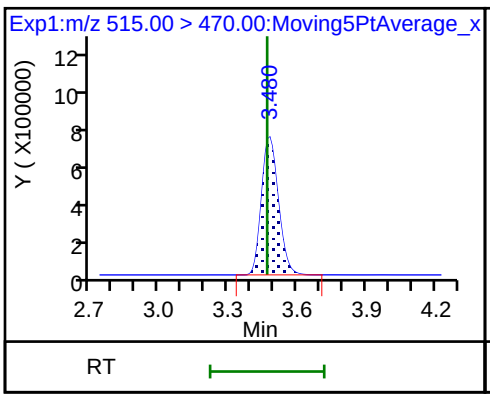
25 Sodium 1H,1H,2H,2H-perfluorodecane



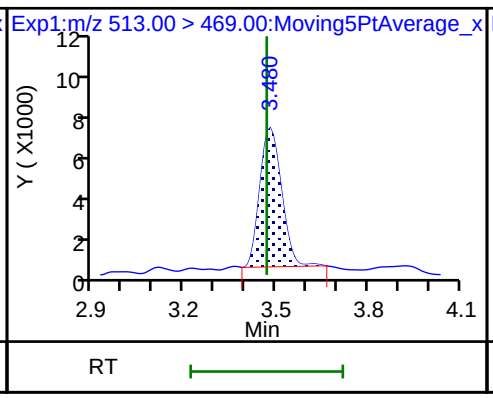
D 26 M2-8:2FTS



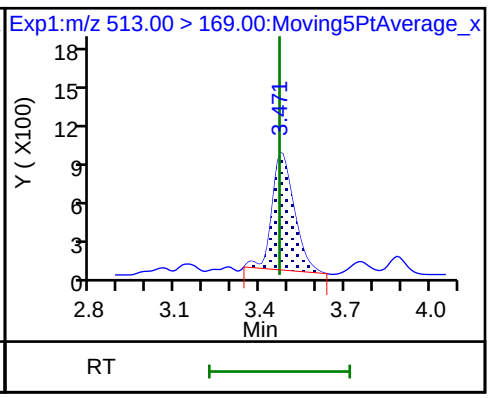
D 23 13C2 PFDA



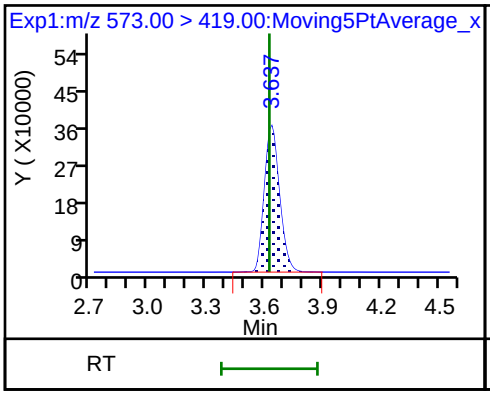
24 Perfluorodecanoic acid



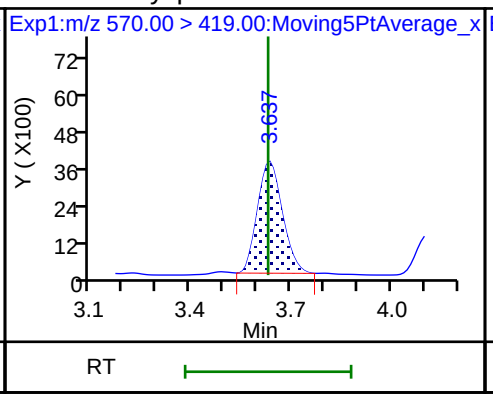
24 Perfluorodecanoic acid



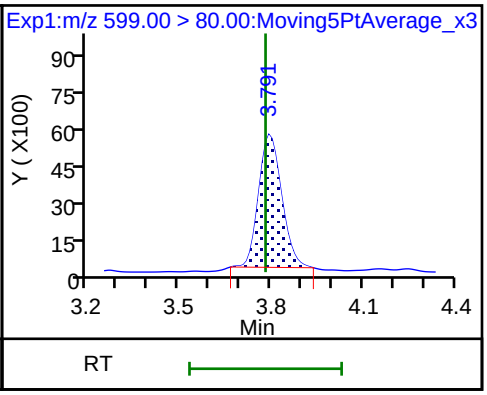
D 27 d3-NMeFOSAA



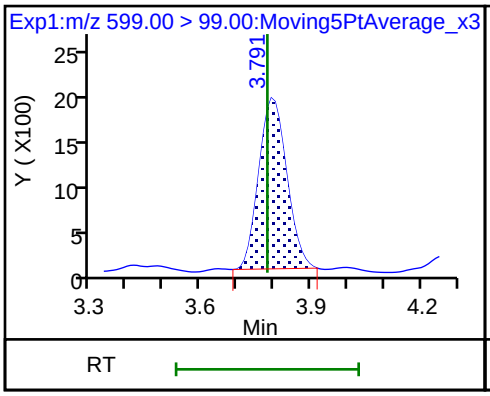
28 N-methyl perfluorooctane sulfonami



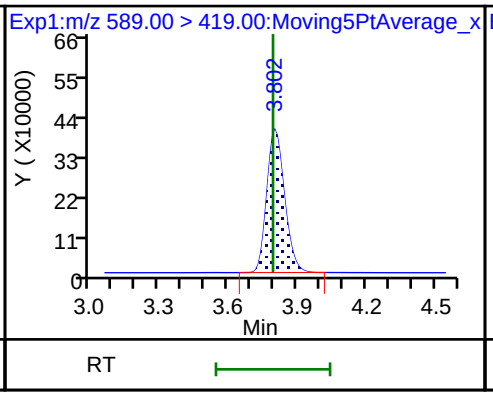
29 Perfluorodecane Sulfonic acid



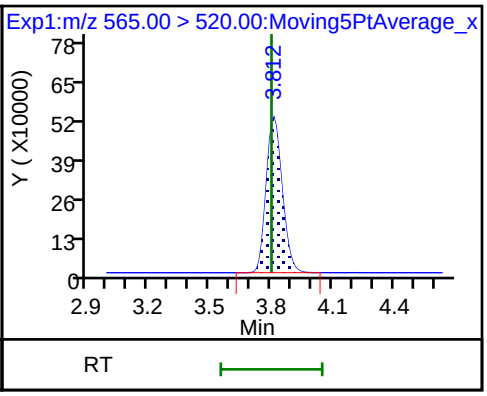
29 Perfluorodecane Sulfonic acid



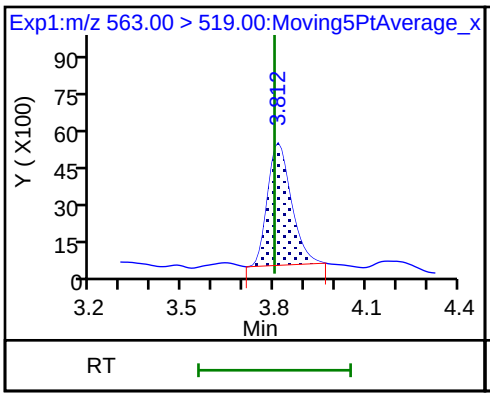
D 32 d5-NEtFOSAA



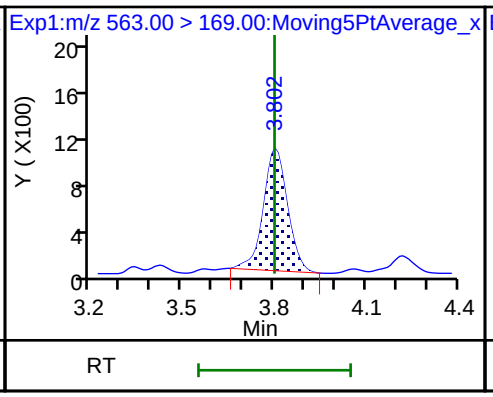
D 30 13C2 PFUnA



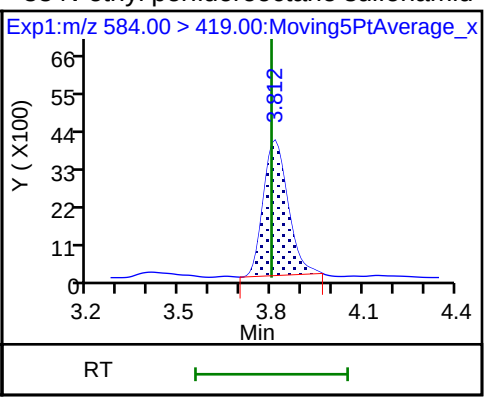
31 Perfluoroundecanoic acid



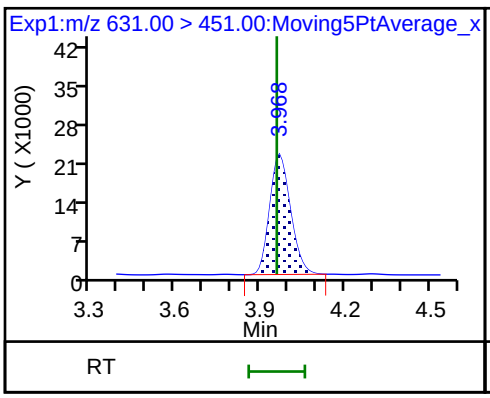
31 Perfluoroundecanoic acid



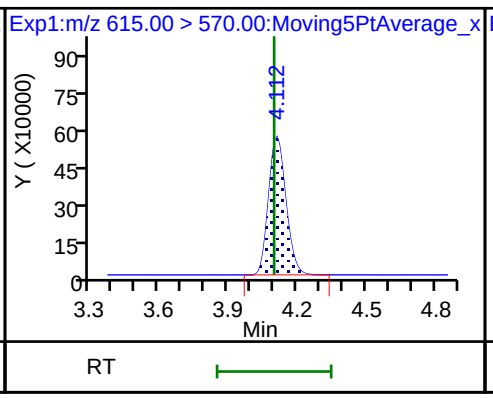
33 N-ethyl perfluorooctane sulfonamid



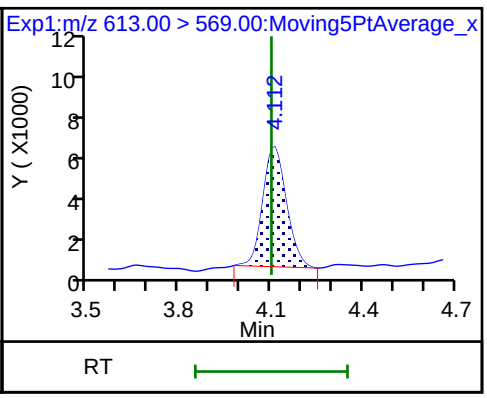
66 11-Chloroeicosafluoro-3-oxaundecan



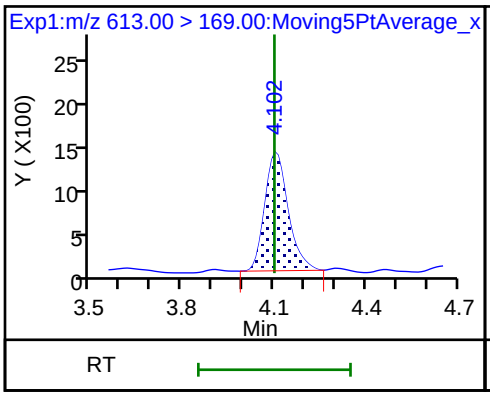
D 36 13C2 PFDoA



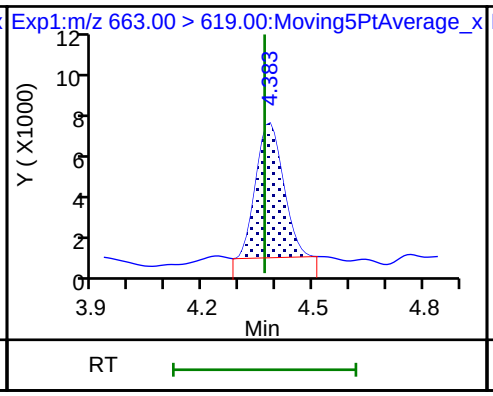
37 Perfluorododecanoic acid



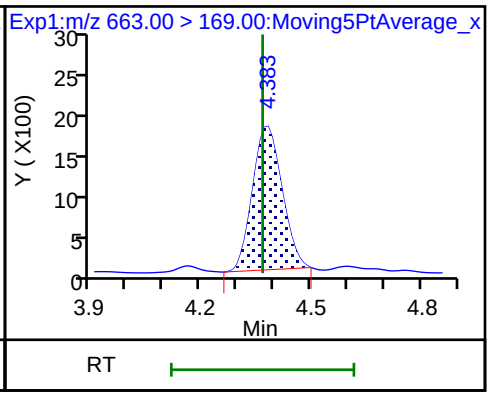
37 Perfluorododecanoic acid



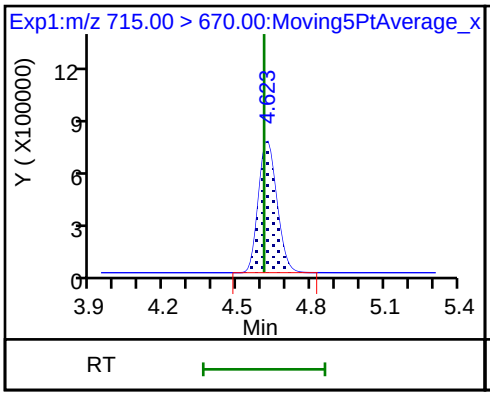
41 Perfluorotridecanoic acid



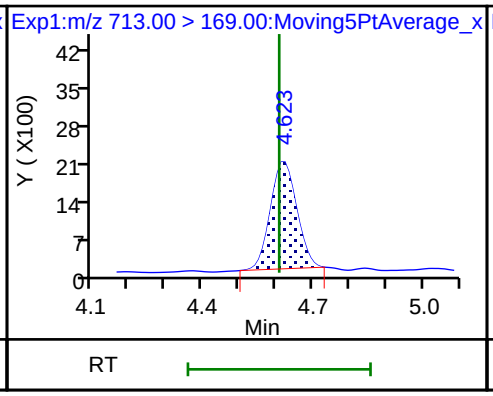
41 Perfluorotridecanoic acid



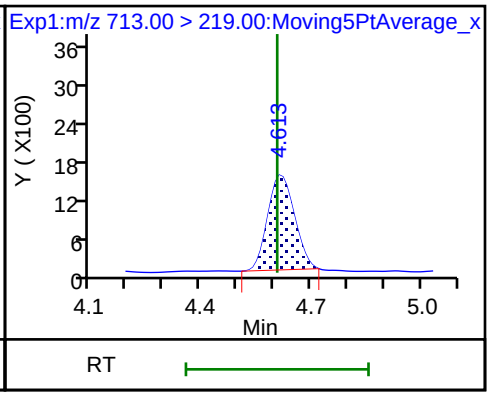
D 43 13C2-PFTeDA



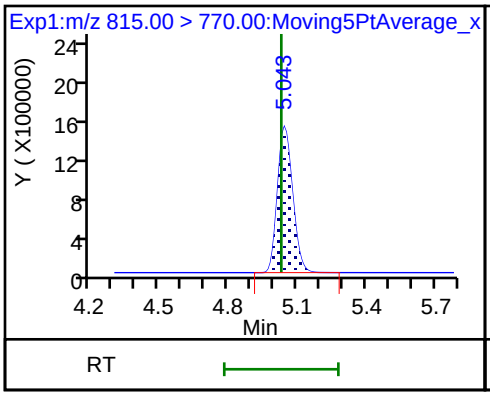
42 Perfluorotetradecanoic acid



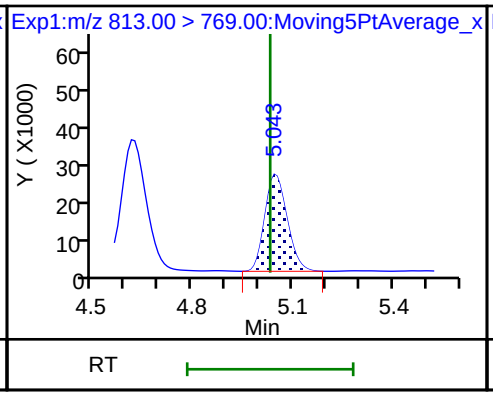
42 Perfluorotetradecanoic acid



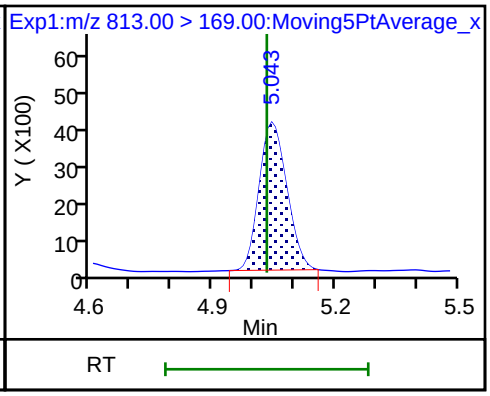
D 44 13C2-PFHxDA



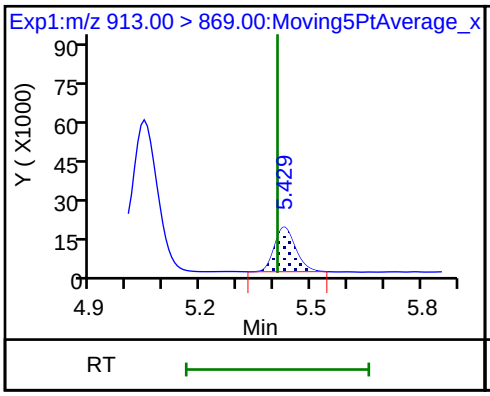
45 Perfluorohexadecanoic acid



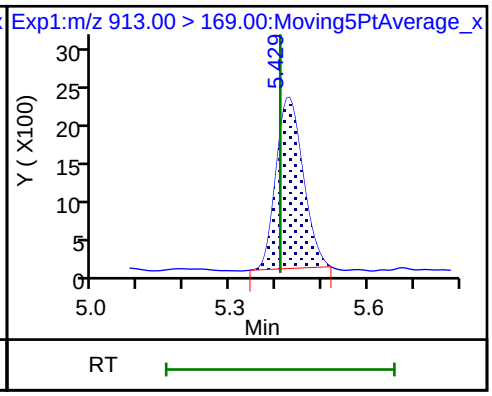
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

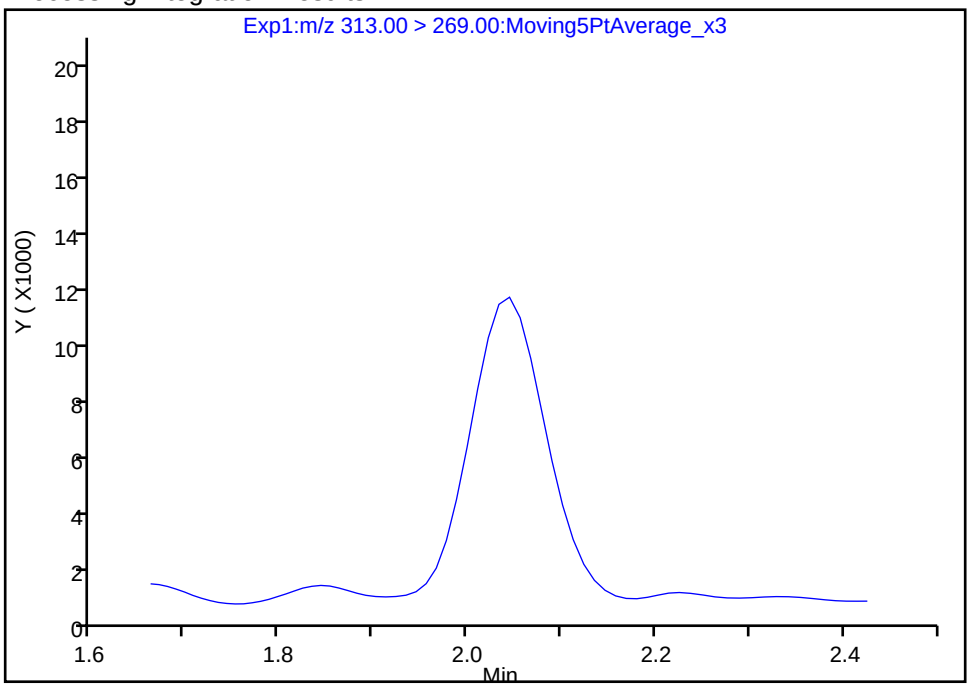
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_002.d
Injection Date: 15-May-2018 15:13:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

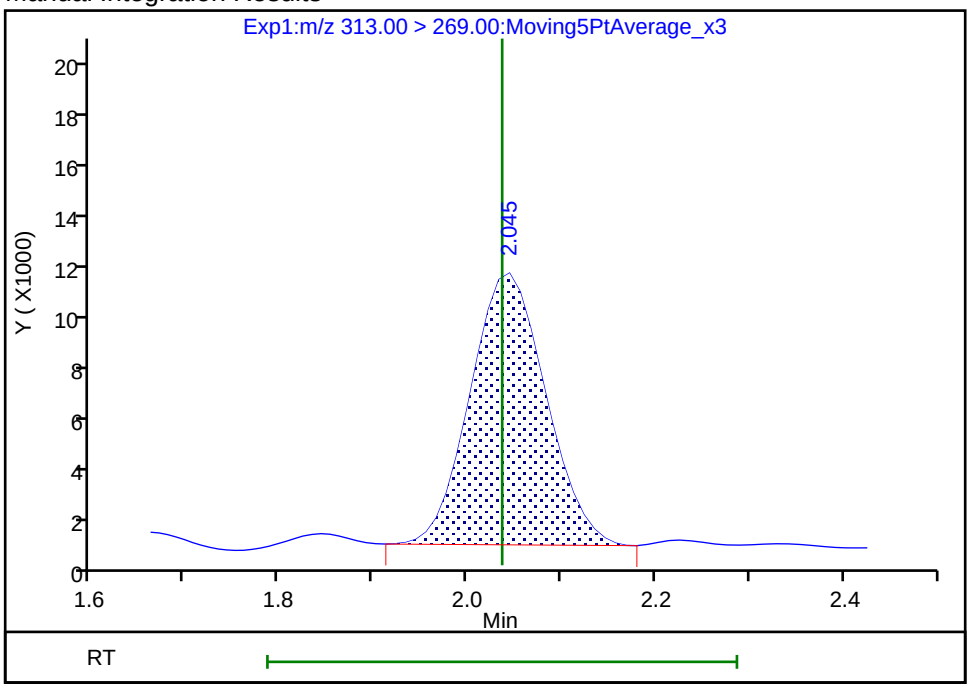
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 2.04
Area: 56711
Amount: 0.024510
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 16:30:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

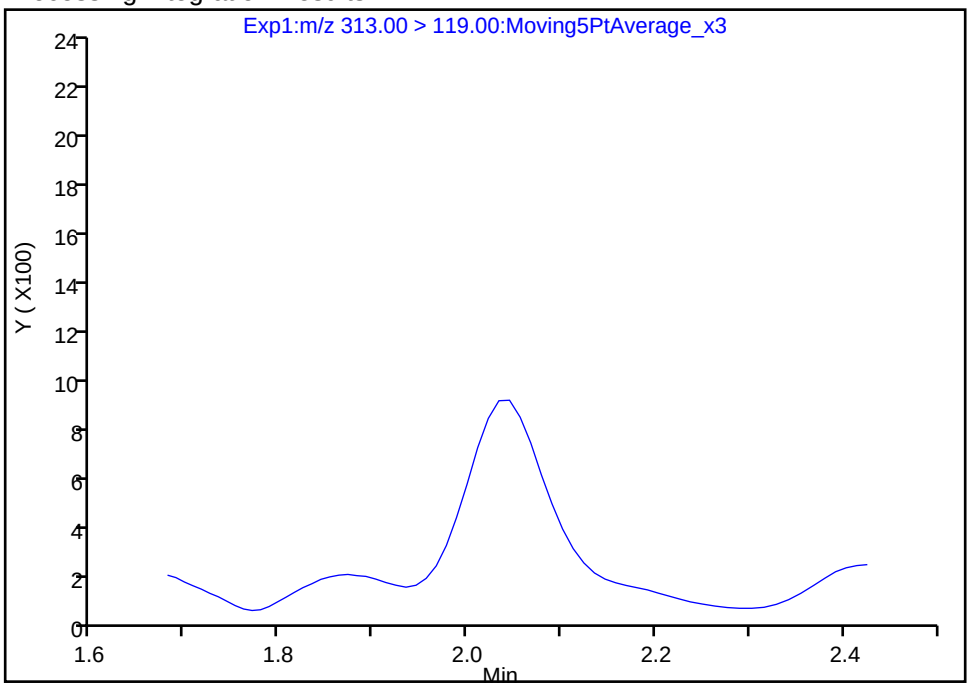
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_002.d
Injection Date: 15-May-2018 15:13:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

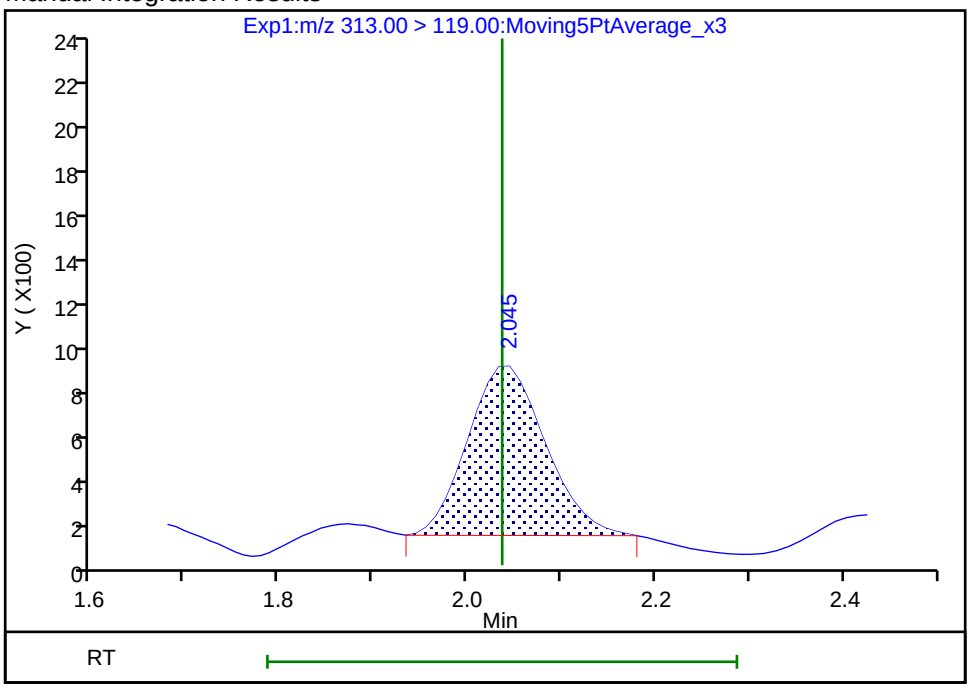
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 2.04
Area: 4387
Amount: 0.024510
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 16:30:21
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

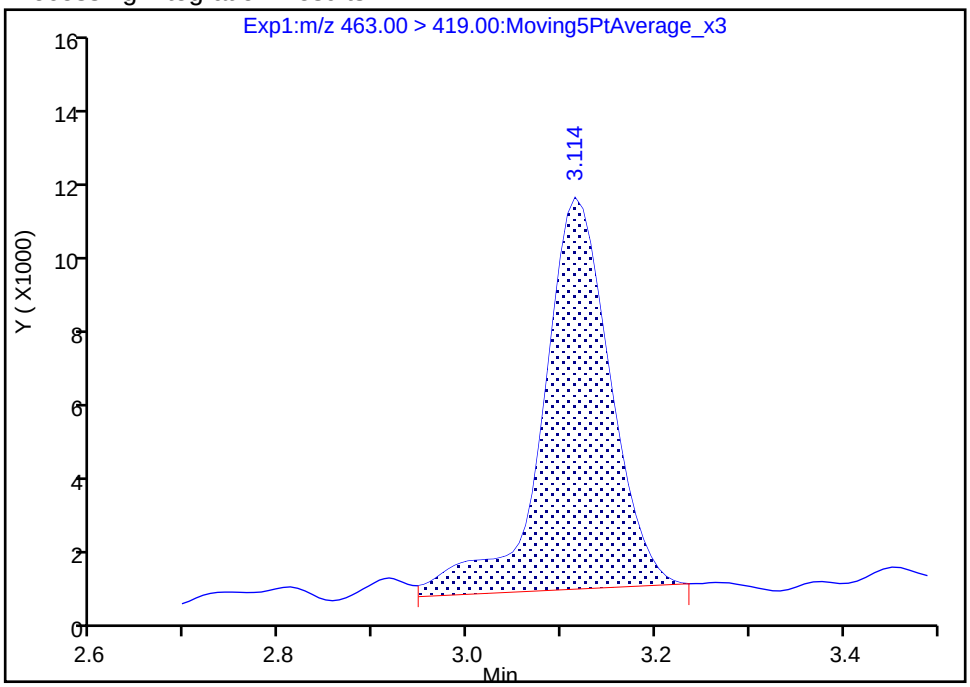
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_002.d
Injection Date: 15-May-2018 15:13:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

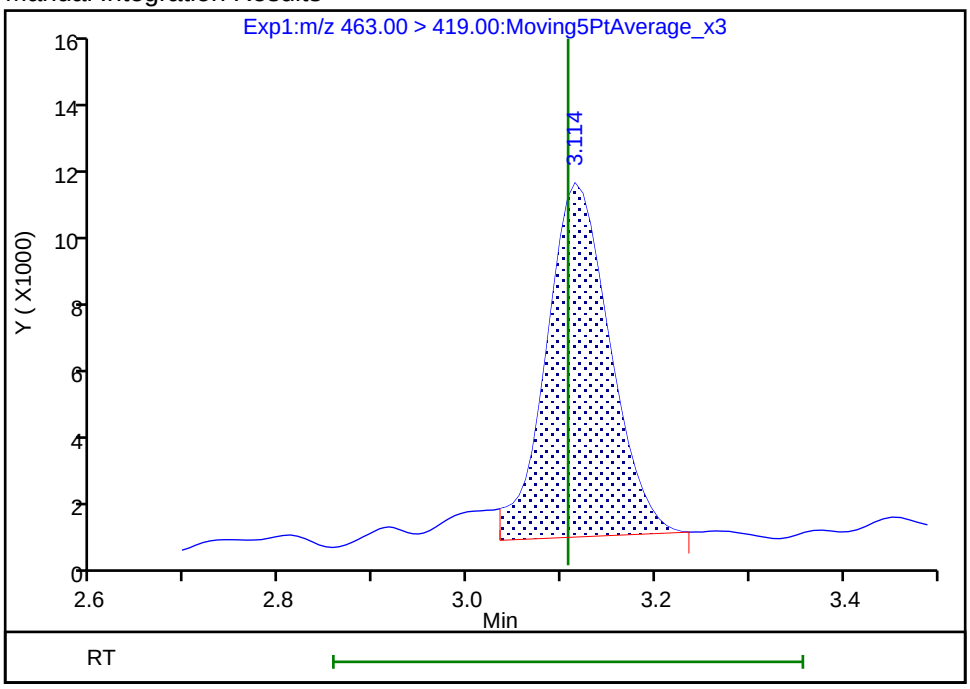
Processing Integration Results

RT: 3.11
Area: 50653
Amount: 0.027722
Amount Units: ng/ml



Manual Integration Results

RT: 3.11
Area: 47076
Amount: 0.026031
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 16:30:34
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_003.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-May-2018 15:21:19 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L2-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 16-May-2018 09:19:54 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: westendorfc Date: 15-May-2018 16:29:16

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.462	0.001	1.000	8732721	2.57		103	57344	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.463	1.462	0.001	1.000	162647	0.0501		100	65.4	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.746	1.744	0.002	0.561	5506602	2.53		101	97404	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.746	1.745	0.001	1.000	135647	0.0522		104	65.4	M
D 47 13C3-PFBS										
301.90 > 83.00	1.782	1.780	0.002	1.000	117730	2.39		103	2547	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.782	1.783	-0.001	1.000	175383	0.0444		100	775	
298.90 > 99.00	1.782	1.783	-0.001	1.000	76550		2.29(1.25-3.74)	100	467	
D 60 M2-4:2FTS										
329.00 > 81.00	2.002	1.999	0.003	1.000	848063	2.35		100	10296	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.002	2.000	0.002	1.000	41962	0.0500		107	2461	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.036	2.037	-0.001	1.000	135987	0.0558		112	199	M
313.00 > 119.00	2.036	2.037	-0.001	1.000	11233		12.11(5.03-15.10)	112	137	
D 7 13C2 PFHxA										
315.00 > 270.00	2.036	2.037	-0.001	1.000	5922451	2.55		102	127595	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.059	2.059	0.0	1.000	165299	0.0469		100	2551	
349.00 > 99.00	2.059	2.059	0.0	1.000	64244		2.57(1.36-4.07)	100	692	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.138	2.134	0.004	0.995	18129	0.0510		102	131	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.149	2.134	0.015	1.000	290745	2.53		101	6092	
D 9 13C4-PFHpA										
367.00 > 322.00	2.383	2.374	0.009	1.000	5774309	2.60		104	73220	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.383	2.374	0.009	1.000	122556	0.0502		100	194	
363.00 > 169.00	2.383	2.374	0.009	1.000	52048		2.35(1.13-3.40)	100	301	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.395	2.386	0.009	1.000	151043	0.0482		106	916	
399.00 > 99.00	2.395	2.386	0.009	1.000	49925		3.03(1.50-4.49)	106	207	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.386	0.009	1.000	6581524	2.39		101	55650	
65 Adona										
377.00 > 251.00	2.417	2.418	-0.001	1.000	351664	0.0555		111	8730	
377.00 > 85.00	2.417	2.418	-0.001	1.000	188630		1.86(0.84-2.53)	111	2054	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.712	2.707	0.005	1.000	48326	0.0442		93.2	358	
D 12 M2-6:2FTS										
429.00 > 81.00	2.712	2.707	0.005	1.000	1201925	2.45		103	16809	
D 14 13C4 PFOA										
417.00 > 372.00	2.734	2.731	0.003	1.000	5272655	2.51		100	53605	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.742	2.734	0.008	1.003	137784	0.0555		111	49.4	
413.00 > 169.00	2.742	2.734	0.008	1.003	70311		1.96(0.84-2.52)	111	252	
* 62 13C2-PFOA										
415.00 > 370.00	2.742	2.734	0.008		5554381	2.50			58494	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.742	2.739	0.003	1.000	124538	0.0506		106	2139	
449.00 > 99.00	2.742	2.739	0.003	1.000	34411		3.62(1.94-5.82)	106	369	
D 18 13C4 PFOS										
503.00 > 80.00	3.107	3.104	0.003	1.000	4415247	2.34		97.8	28897	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.107	3.105	0.002	1.000	108239	0.0498		107	943	
499.00 > 99.00	3.115	3.105	0.010	1.002	22995		4.71(2.31-6.93)	107	171	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.115	3.107	0.008	1.000	91933	0.0482		96.4	143	
463.00 > 169.00	3.115	3.107	0.008	1.000	22431		4.10(1.90-5.69)	96.4	461	
D 19 13C5 PFNA										
468.00 > 423.00	3.115	3.107	0.008	1.000	4502703	2.62		105	106819	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.325	3.316	0.009	1.000	153727	0.0464		99.6	2147	
D 21 13C8 FOSA										
506.00 > 78.00	3.415	3.420	-0.005	1.000	5858621	2.37		94.8	55649	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.424	3.422	0.002	1.003	109720	0.0481		96.2	2692	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.462	3.455	0.007	1.000	60494	0.0432		90.1	1653	
549.00 > 99.00	3.462	3.455	0.007	1.000	27746		2.18(1.33-3.97)	90.1	427	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.462	3.458	0.004	1.000	39540	0.0492		103	808	
D 26 M2-8:2FTS										
529.00 > 81.00	3.462	3.459	0.003	1.000	1426640	2.55		107	16789	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.471	3.468	0.003	1.000	72253	0.0495		99.0	348	
513.00 > 169.00	3.481	3.468	0.013	1.003	14509		4.98(2.36-7.09)	99.0	293	
D 23 13C2 PFDA										
515.00 > 470.00	3.471	3.468	0.003	1.000	3752181	2.56		103	53196	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.627	3.624	0.003	1.000	2060337	2.55		102	42793	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.636	3.631	0.005	1.003	38494	0.0460		92.1	315	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.791	3.781	0.010	1.000	63027	0.0508		105	830	
599.00 > 99.00	3.791	3.781	0.010	1.000	17448		3.61(1.39-4.16)	105	404	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.802	3.794	0.008	1.000	2144987	2.59		104	10654	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.812	3.800	0.012	1.003	32956	0.0409		81.7	755	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.812	3.800	0.012	1.000	53273	0.0547		109	249	
563.00 > 169.00	3.802	3.800	0.002	0.997	11551		4.61(2.12-6.36)	109	528	
D 30 13C2 PFUnA										
565.00 > 520.00	3.812	3.800	0.012	1.000	2914989	2.52		101	41631	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.967	3.958	0.009	1.000	235156	0.0468		99.4	4558	
D 36 13C2 PFDoA										
615.00 > 570.00	4.102	4.099	0.003	1.000	3058640	2.45		98.1	25211	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.102	4.100	0.002	1.000	61418	0.0481		96.2	48.0	
613.00 > 169.00	4.102	4.100	0.002	1.000	16003		3.84(2.13-6.40)	96.2	234	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.372	4.368	0.004	1.000	66337	0.0474		94.8	33.3	
663.00 > 169.00	4.372	4.368	0.004	1.000	21987		3.02(1.25-3.76)	94.8	323	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.613	4.608	0.005	1.000	16854	0.0508		102	219	
713.00 > 219.00	4.613	4.608	0.005	1.000	13370		1.26(0.71-2.13)	102	243	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.613	4.608	0.005	1.000	3285420	2.15		85.8	16076	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.043	5.030	0.013	1.000	4480419	1.77		70.7	12223	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.043	5.031	0.012	1.000	125967	0.0502		100	34.8	
813.00 > 169.00	5.043	5.031	0.012	1.000	20431		6.17(2.86-8.58)	100	163	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.416	5.408	0.008	1.000	84461	0.0446		89.2	21.5	
913.00 > 169.00	5.416	5.408	0.008	1.000	10263		8.23(3.83-11.48)	89.2	114	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00004 Amount Added: 1.00 Units: mL

Report Date: 16-May-2018 09:19:56 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_003.d

Injection Date: 15-May-2018 15:21:19 Instrument ID: A8_N

Lims ID: IC L2 Full

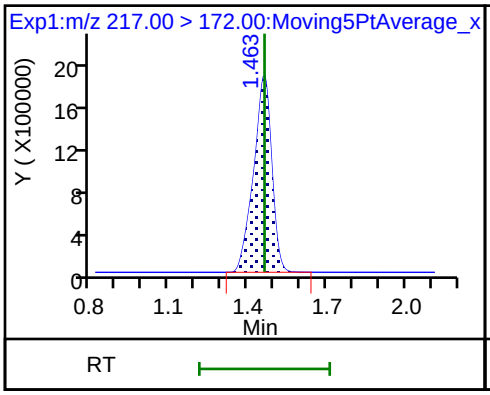
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3

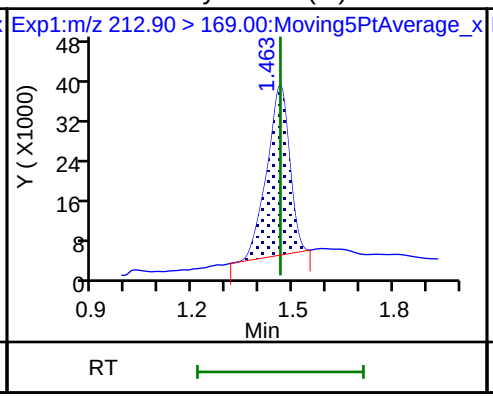
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

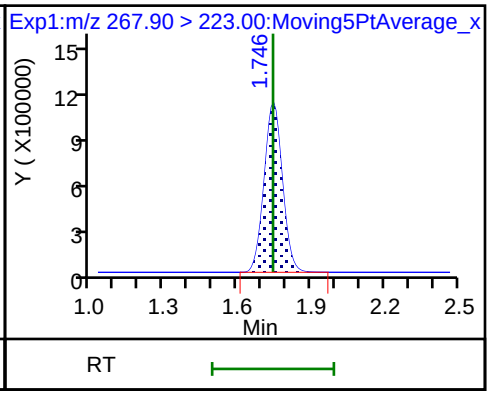
D 1 13C4 PFBA



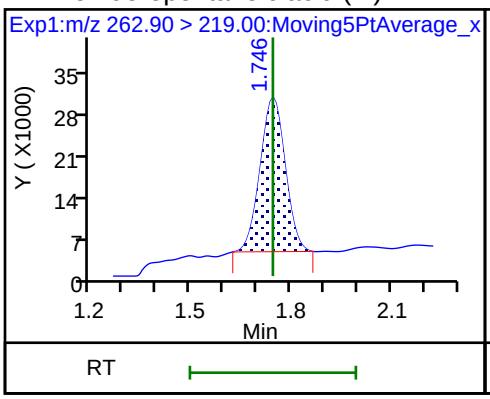
2 Perfluorobutyric acid (M)



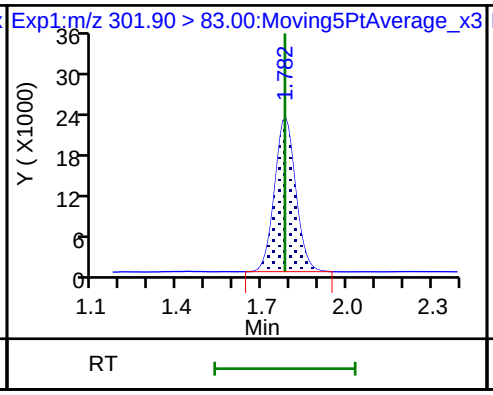
D 3 13C5-PFPeA



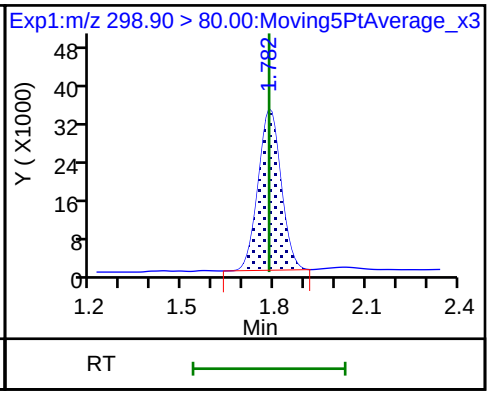
4 Perfluoropentanoic acid (M)



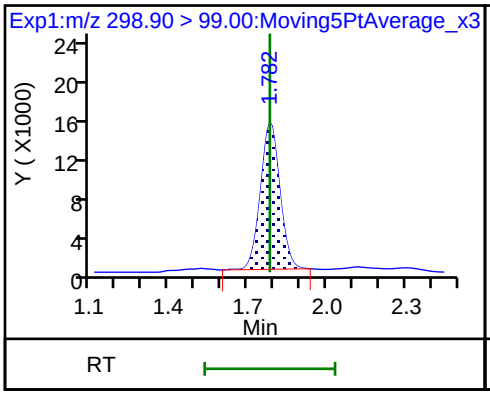
D 47 13C3-PFBS



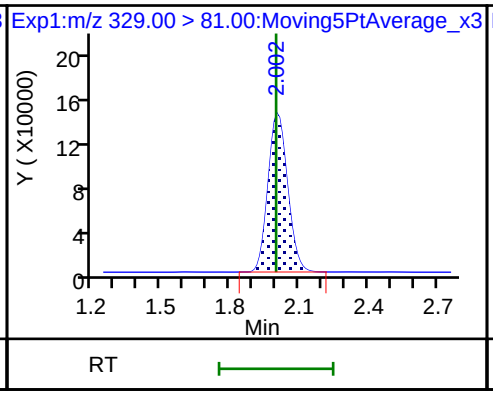
5 Perfluorobutanesulfonic acid



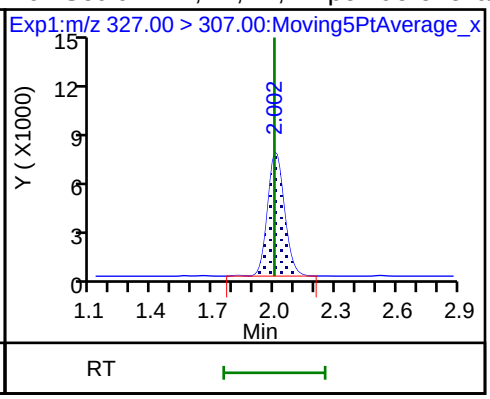
5 Perfluorobutanesulfonic acid



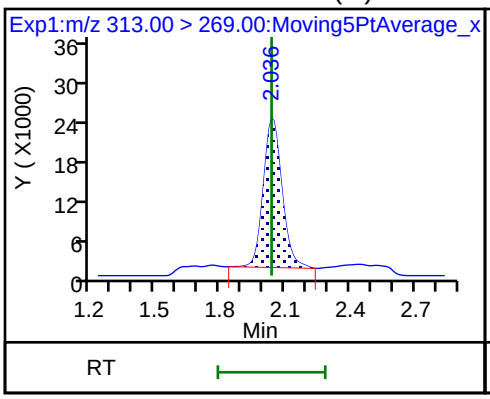
D 60 M2-4:2FTS



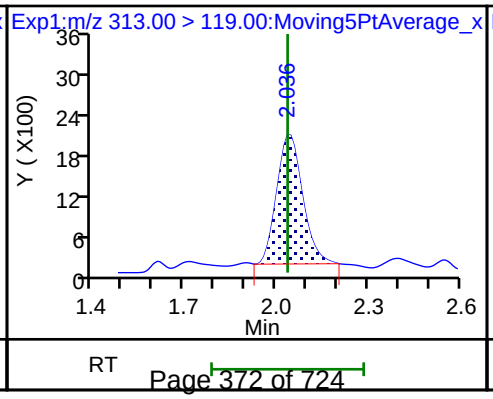
61 Sodium 1H,1H,2H,2H-perfluorohexane



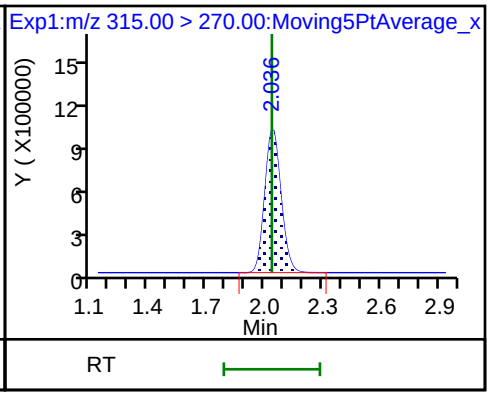
6 Perfluorohexanoic acid (M)



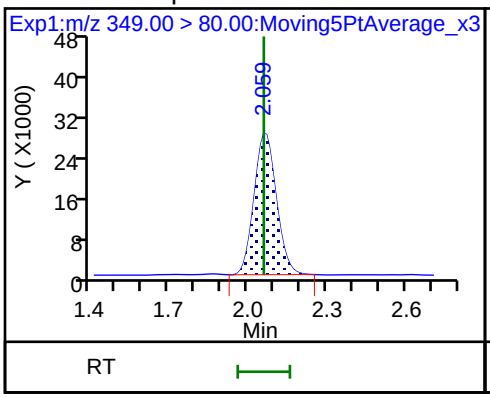
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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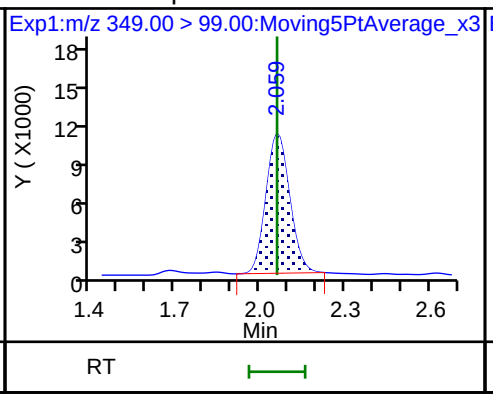
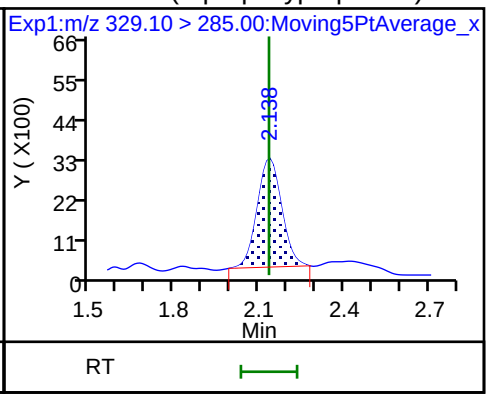
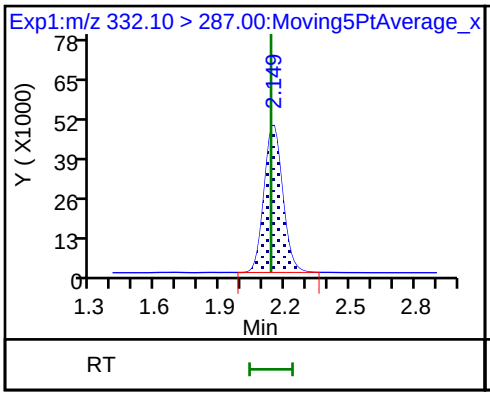


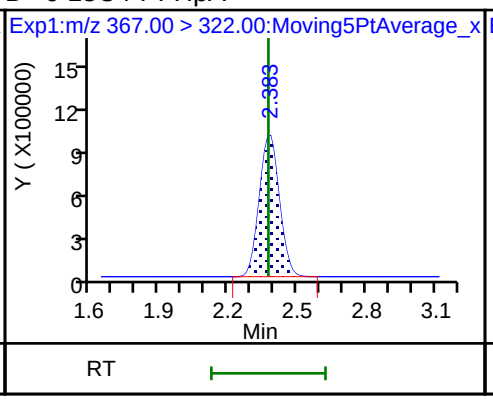
67 Perfluoro(2-propoxypropanoic) acid



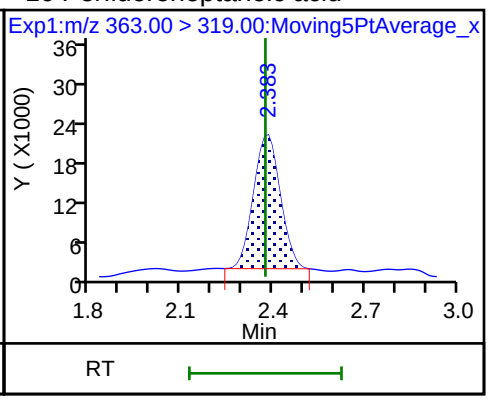
D 64 13C3 HFPO-DA



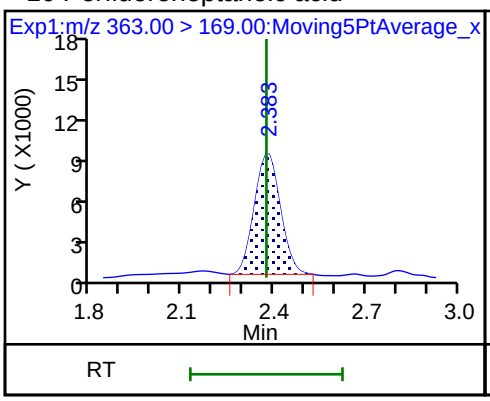
D 9 13C4-PFHpA



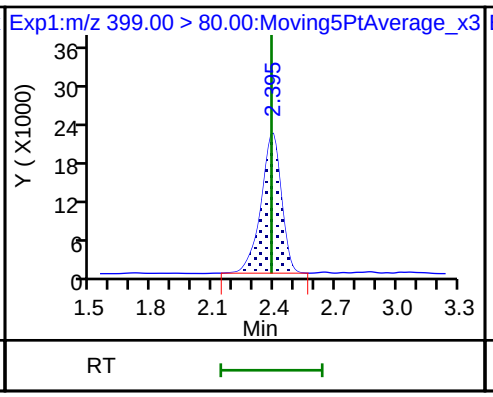
10 Perfluoroheptanoic acid



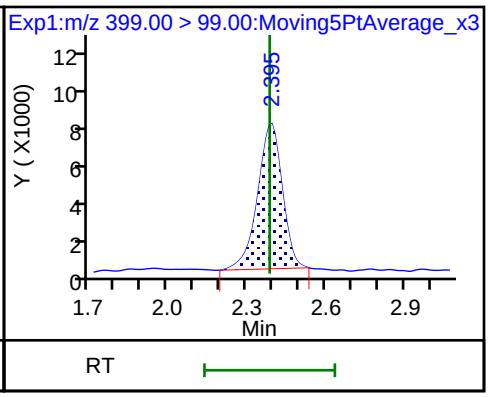
10 Perfluoroheptanoic acid



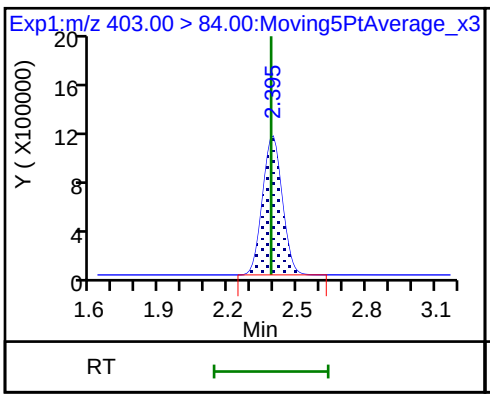
8 Perfluorohexanesulfonic acid



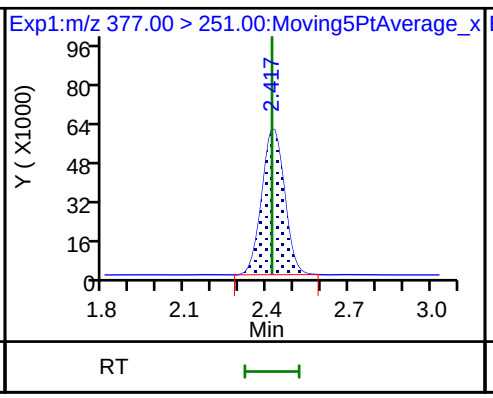
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 Adona



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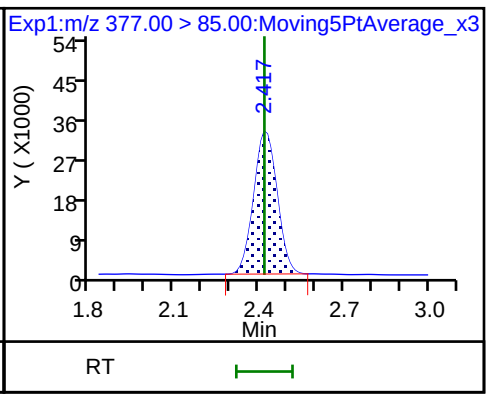
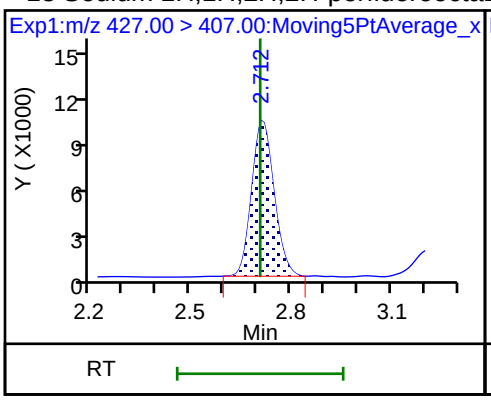
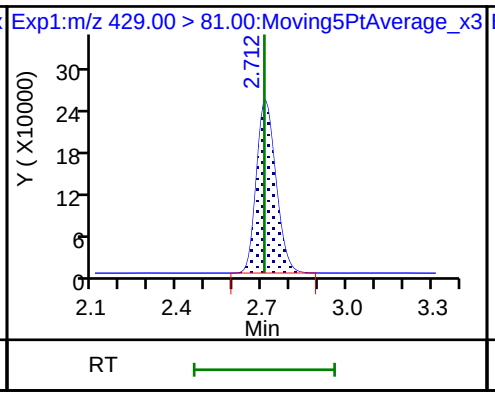


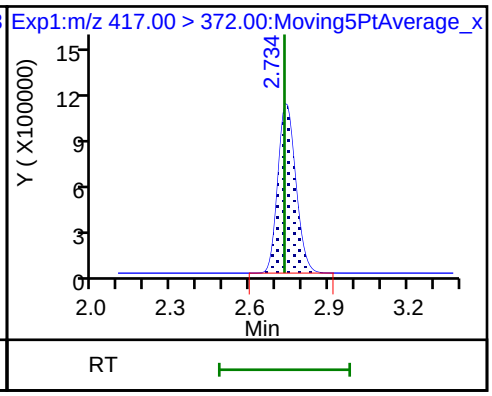
13 Sodium 1H,1H,2H,2H-perfluorooctane



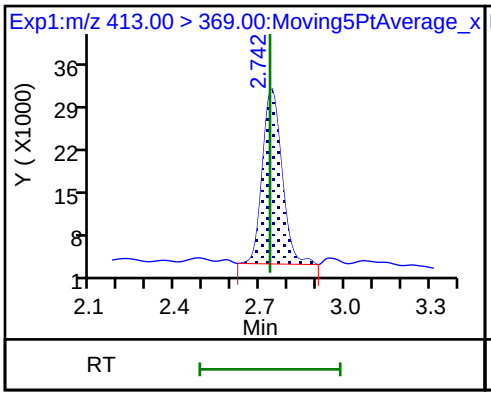
D 12 M2-6:2FTS



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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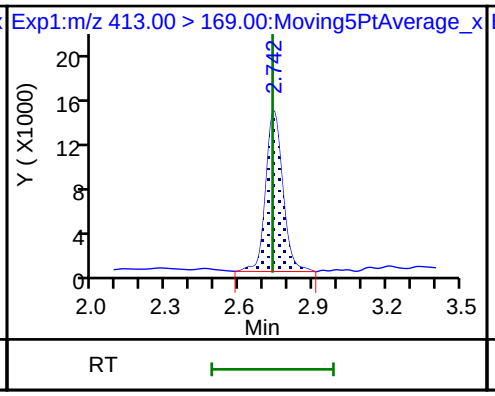
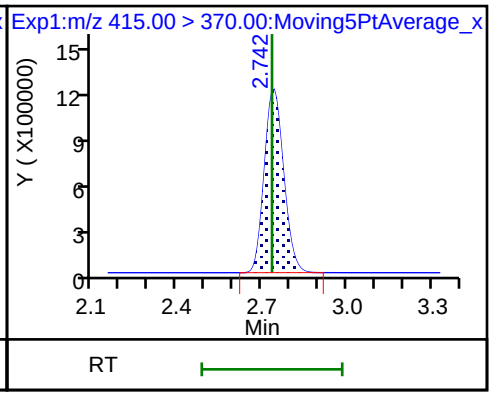
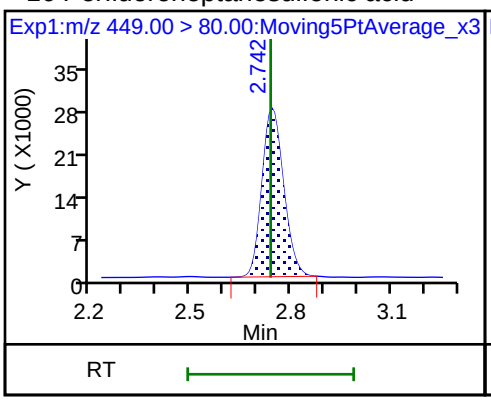


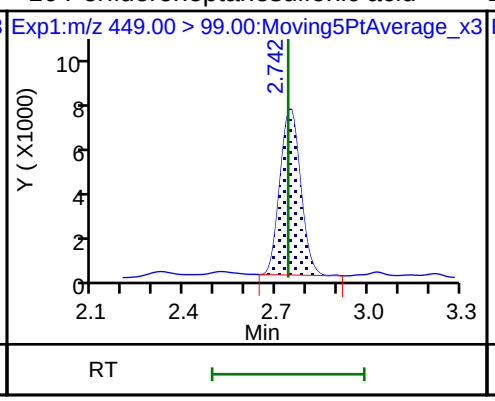
* 62 13C2-PFOA



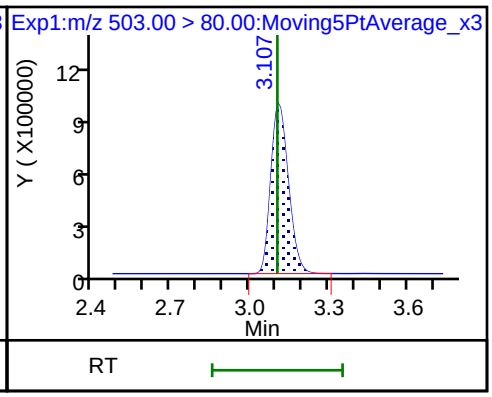
16 Perfluoroheptanesulfonic acid



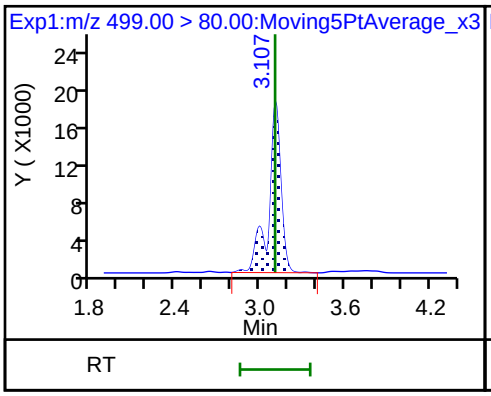
16 Perfluoroheptanesulfonic acid



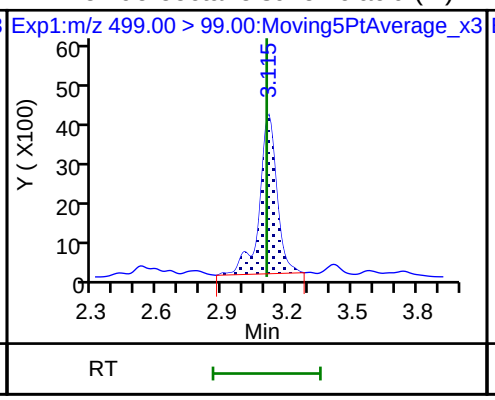
D 18 13C4 PFOS



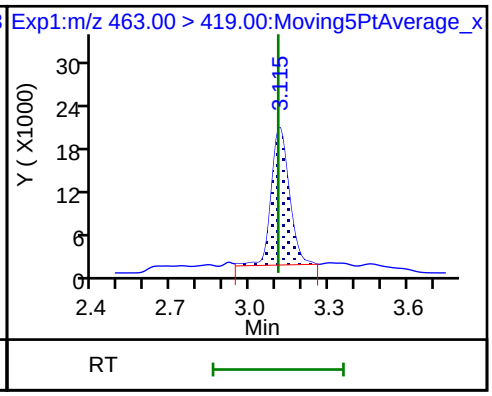
17 Perfluorooctane sulfonic acid



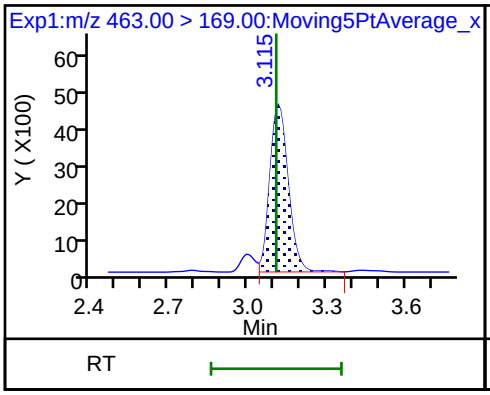
17 Perfluorooctane sulfonic acid (M)



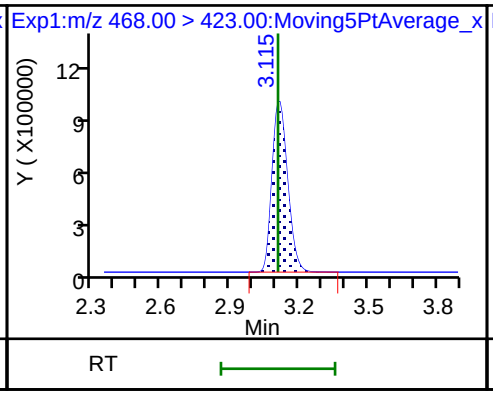
20 Perfluorononanoic acid



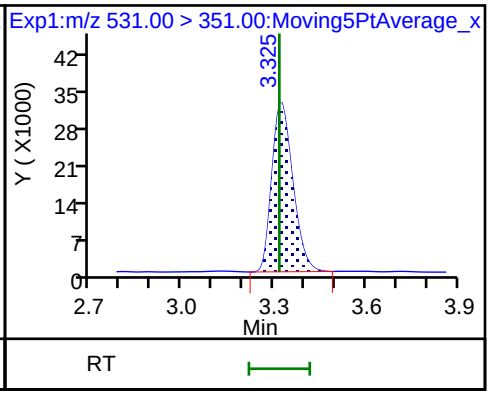
20 Perfluorononanoic acid



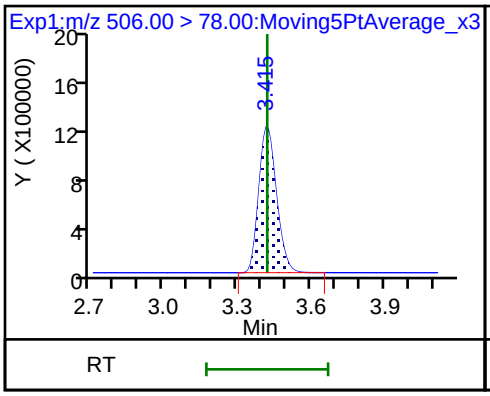
D 19 13C5 PFNA



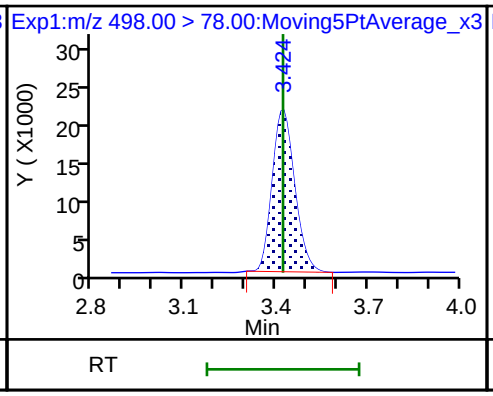
69 9-Chlorohexadecafluoro-3-oxanonane



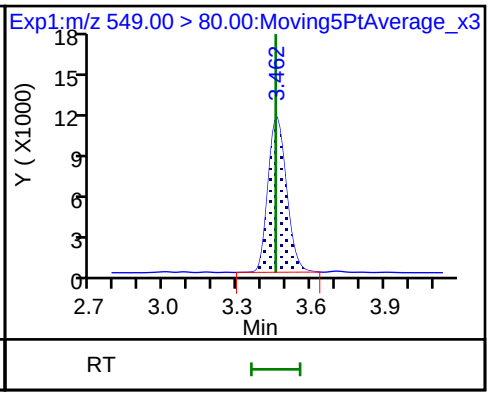
D 21 13C8 FOSA



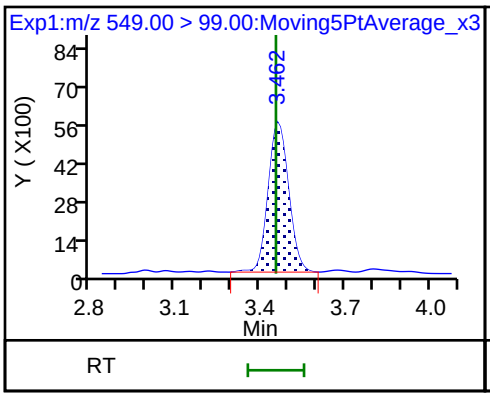
22 Perfluorooctane Sulfonamide



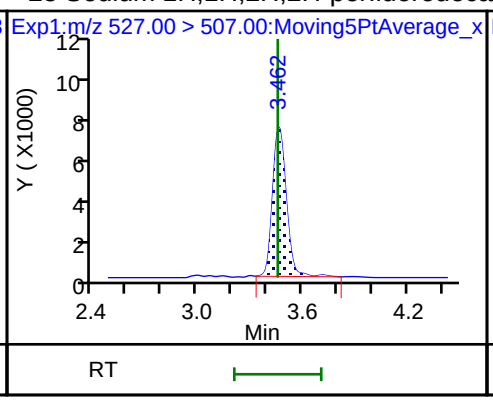
68 Perfluorononanesulfonic acid



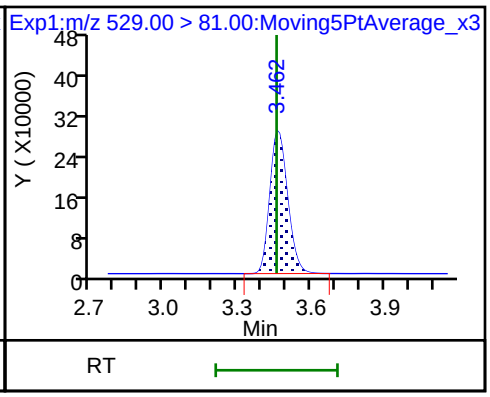
68 Perfluorononanesulfonic acid



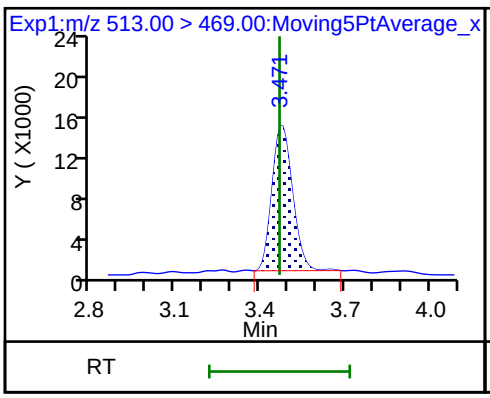
25 Sodium 1H,1H,2H,2H-perfluorodecane



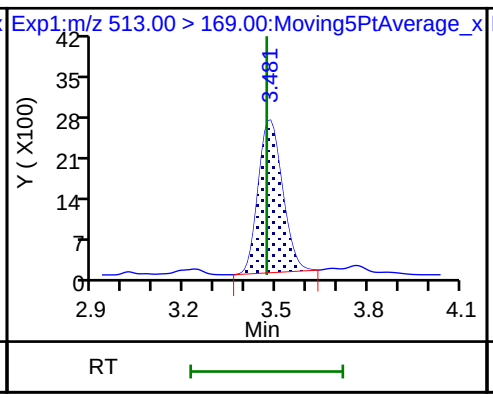
D 26 M2-8:2FTS



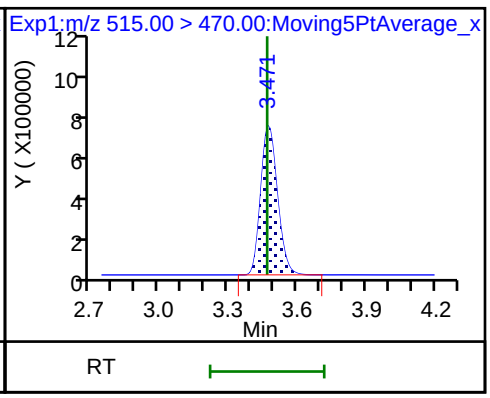
24 Perfluorodecanoic acid



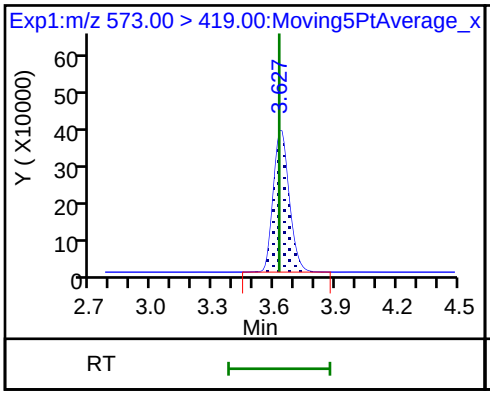
24 Perfluorodecanoic acid



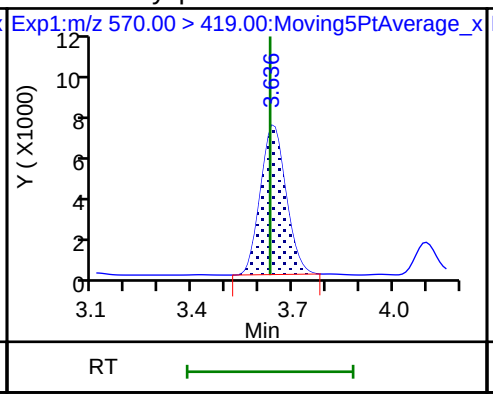
D 23 13C2 PFDA



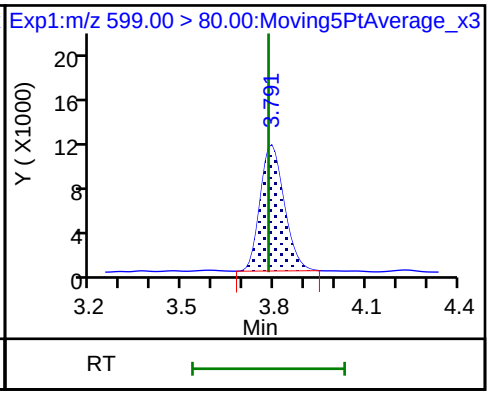
D 27 d3-NMeFOSAA



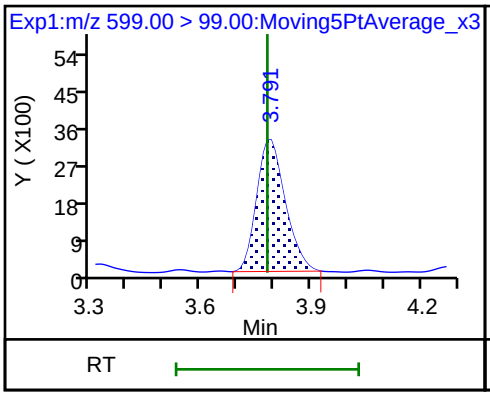
28 N-methyl perfluorooctane sulfonami



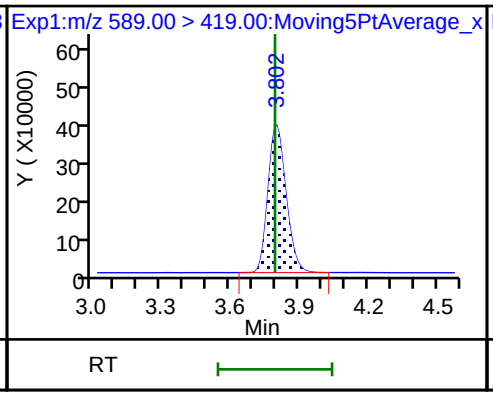
29 Perfluorodecane Sulfonic acid



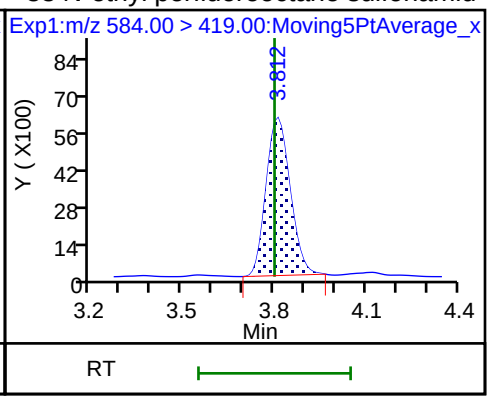
29 Perfluorodecane Sulfonic acid



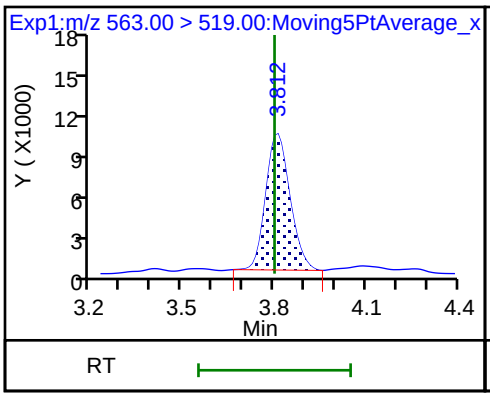
D 32 d5-NEtFOSAA



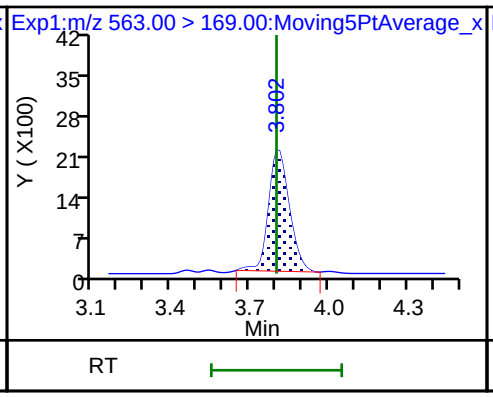
33 N-ethyl perfluorooctane sulfonamid



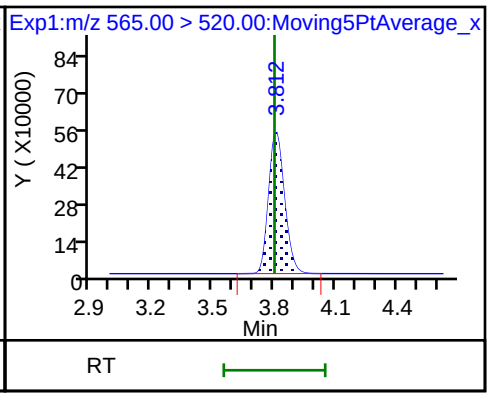
31 Perfluoroundecanoic acid



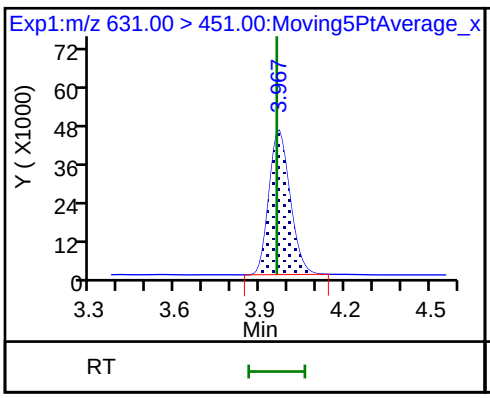
31 Perfluoroundecanoic acid



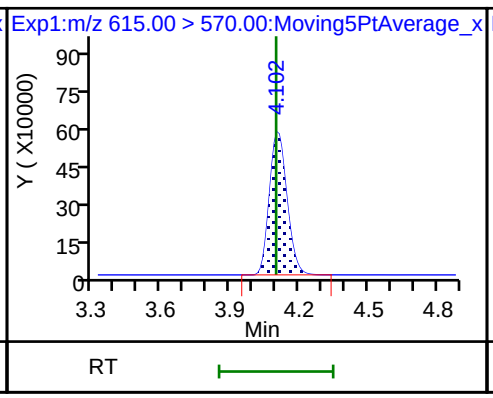
D 30 13C2 PFUnA



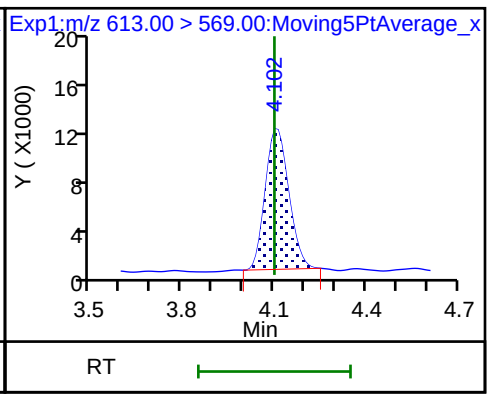
66 11-Chloroeicosafluoro-3-oxaundecan



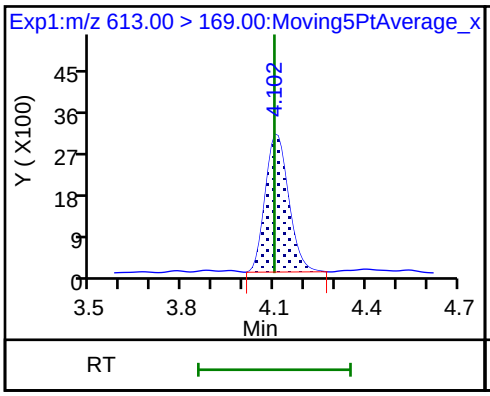
D 36 13C2 PFDoA



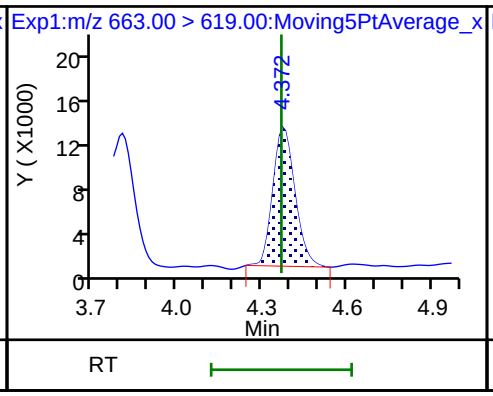
37 Perfluorododecanoic acid



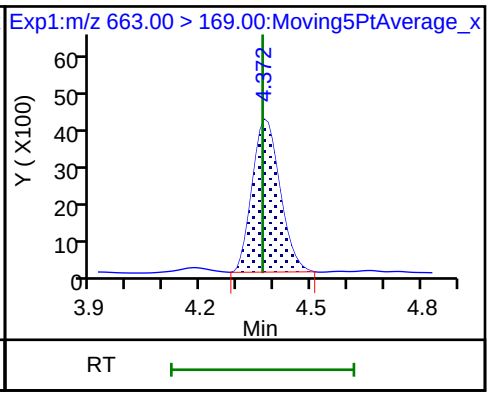
37 Perfluorododecanoic acid



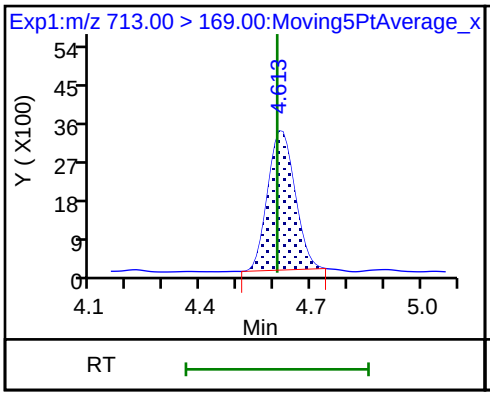
41 Perfluorotridecanoic acid



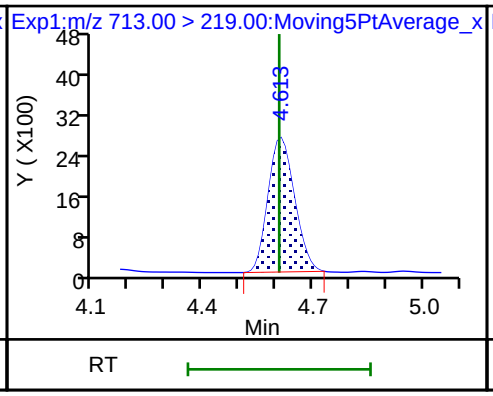
41 Perfluorotridecanoic acid



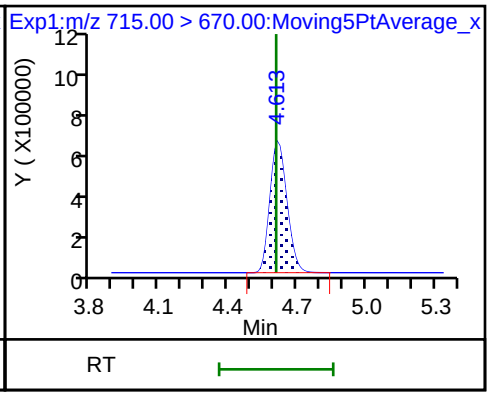
42 Perfluorotetradecanoic acid



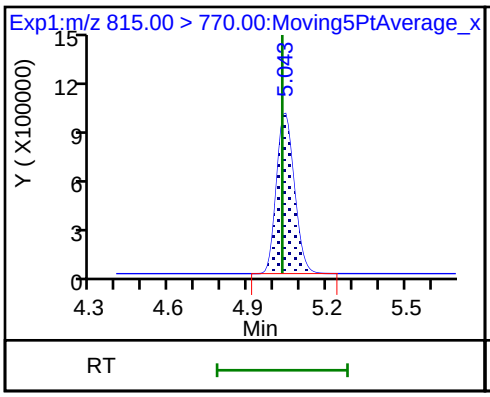
42 Perfluorotetradecanoic acid



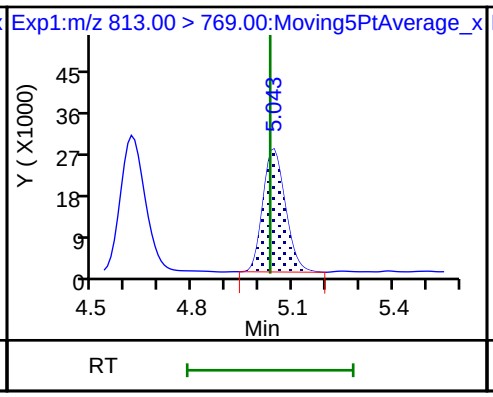
D 43 13C2-PFTeDA



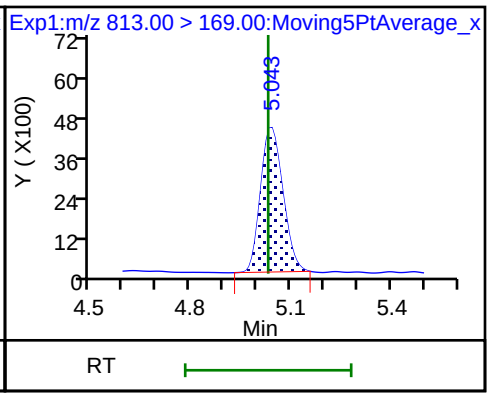
D 44 13C2-PFHxDA



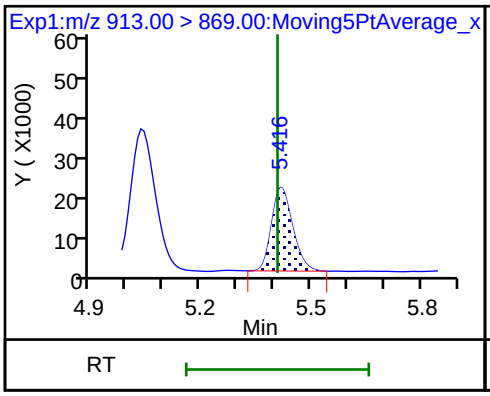
45 Perfluorohexadecanoic acid



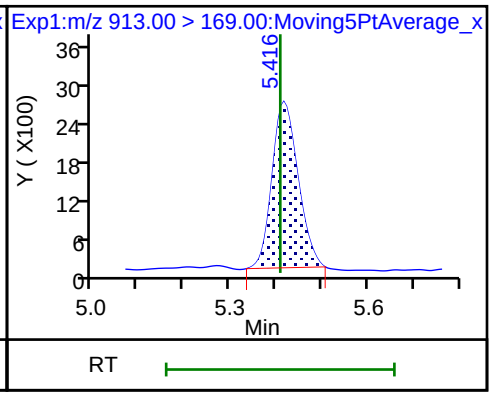
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

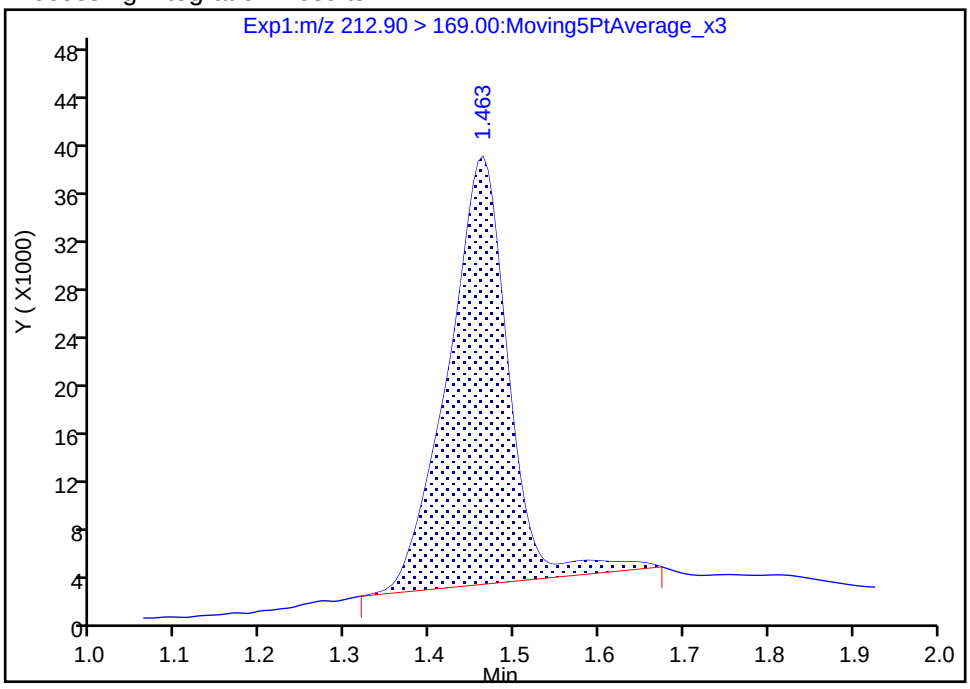
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_003.d
Injection Date: 15-May-2018 15:21:19 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

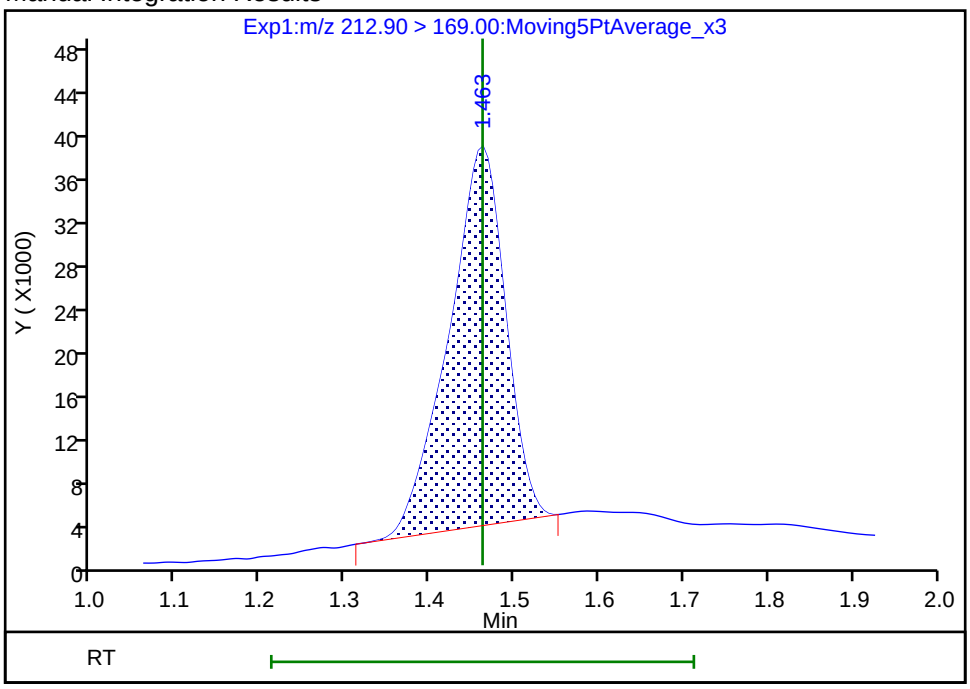
Processing Integration Results

RT: 1.46
Area: 175954
Amount: 0.053585
Amount Units: ng/ml



Manual Integration Results

RT: 1.46
Area: 162647
Amount: 0.050076
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 16:30:59
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

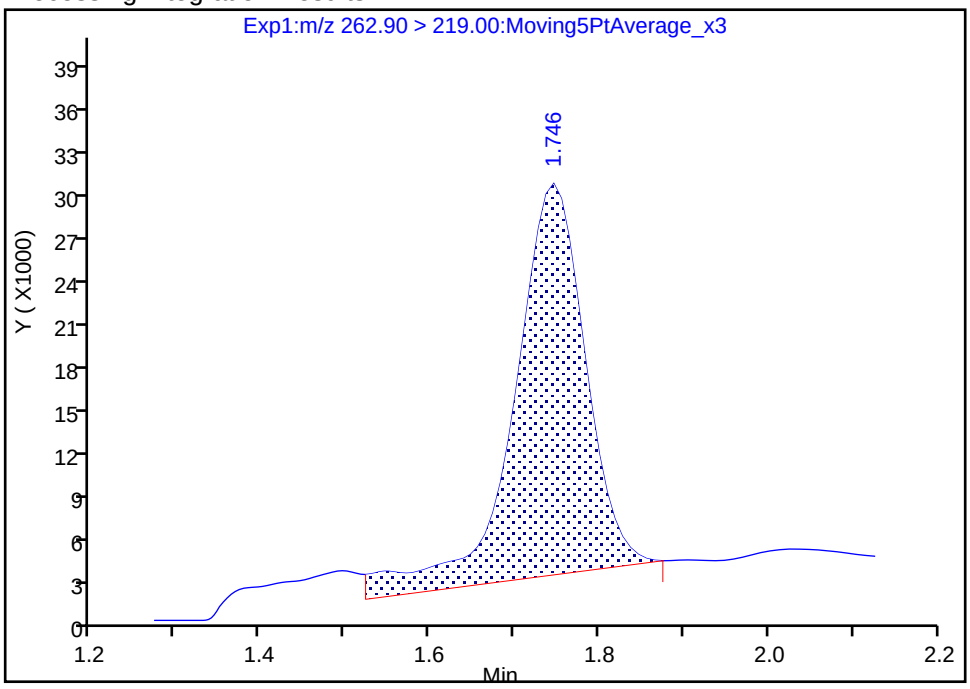
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_003.d
Injection Date: 15-May-2018 15:21:19 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

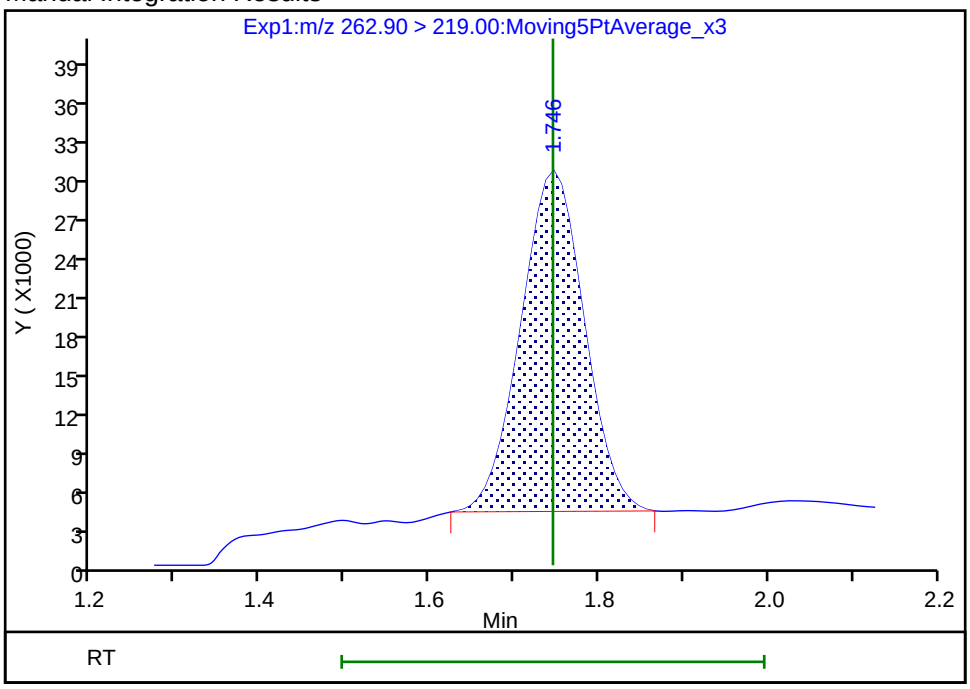
Processing Integration Results

RT: 1.75
Area: 159724
Amount: 0.060141
Amount Units: ng/ml



Manual Integration Results

RT: 1.75
Area: 135647
Amount: 0.052167
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 16:31:05
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

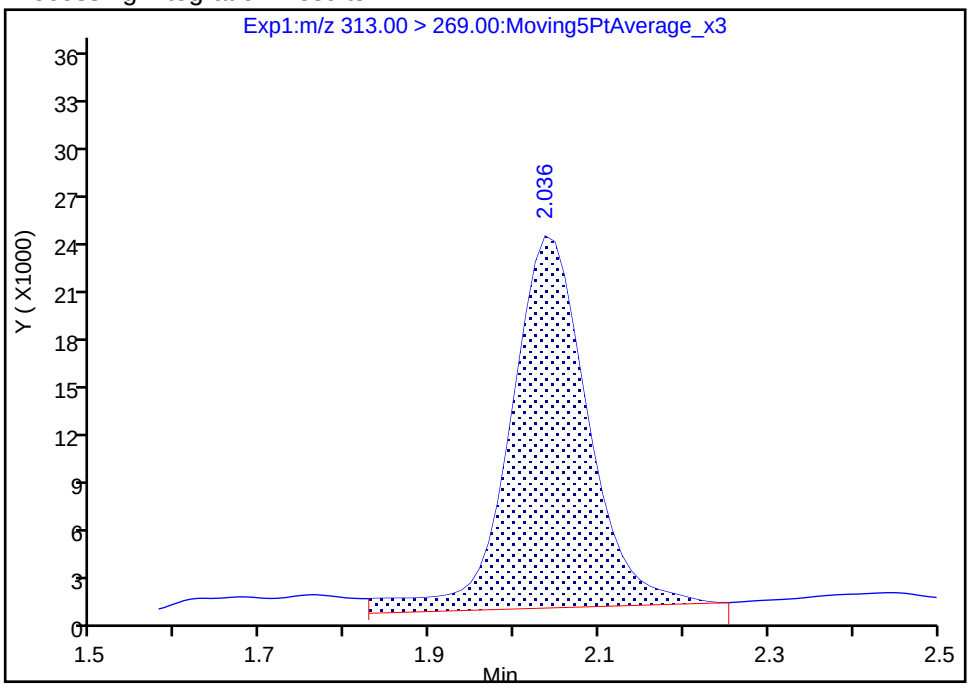
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_003.d
Injection Date: 15-May-2018 15:21:19 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

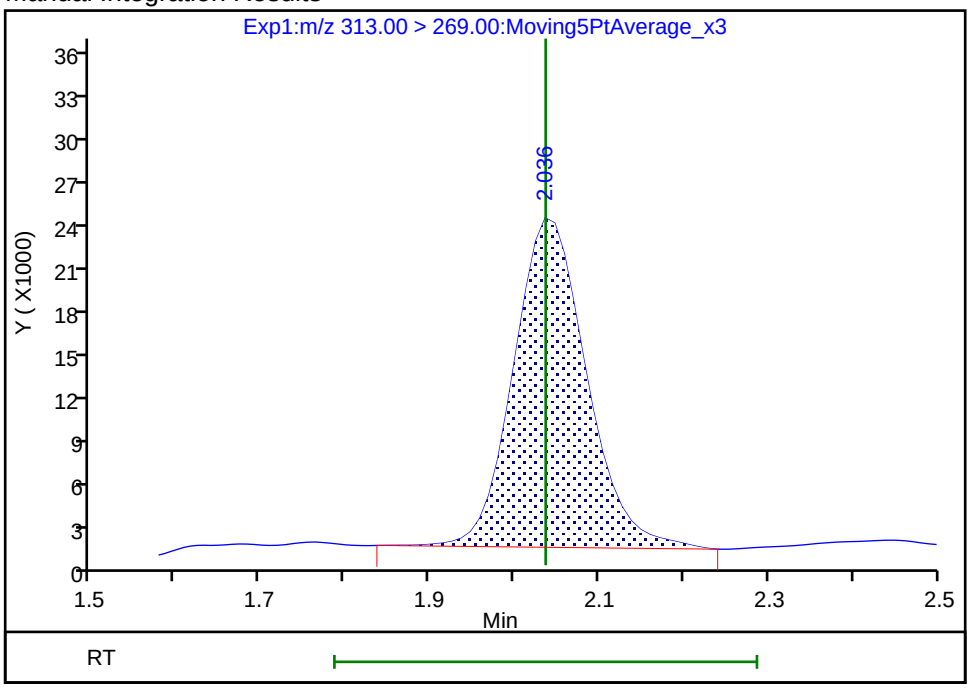
Processing Integration Results

RT: 2.04
Area: 147805
Amount: 0.059147
Amount Units: ng/ml



Manual Integration Results

RT: 2.04
Area: 135987
Amount: 0.055832
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 16:31:10
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

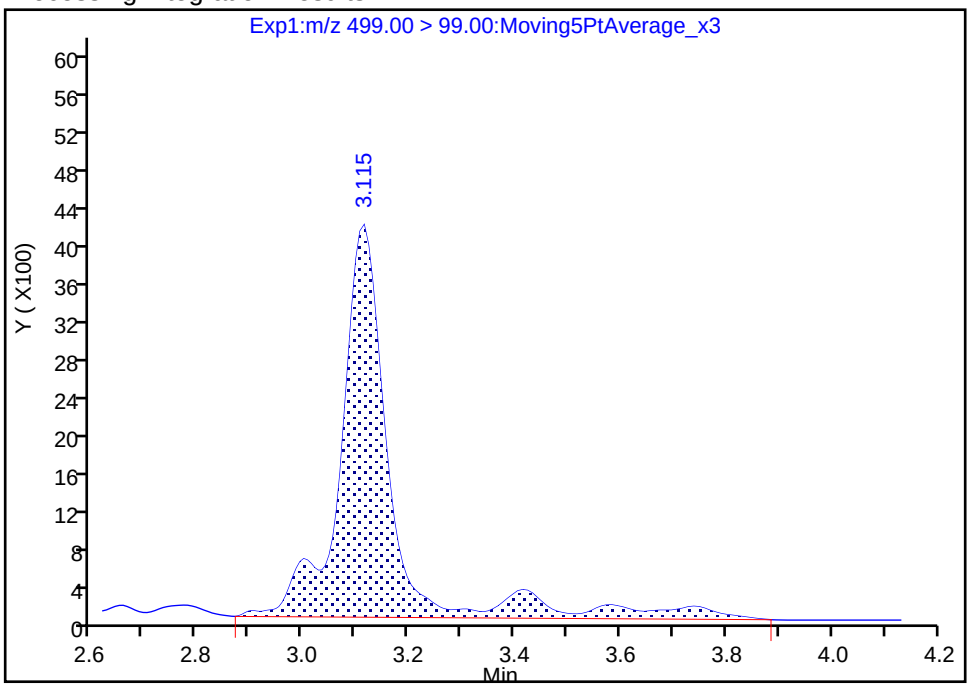
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_003.d
Injection Date: 15-May-2018 15:21:19 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

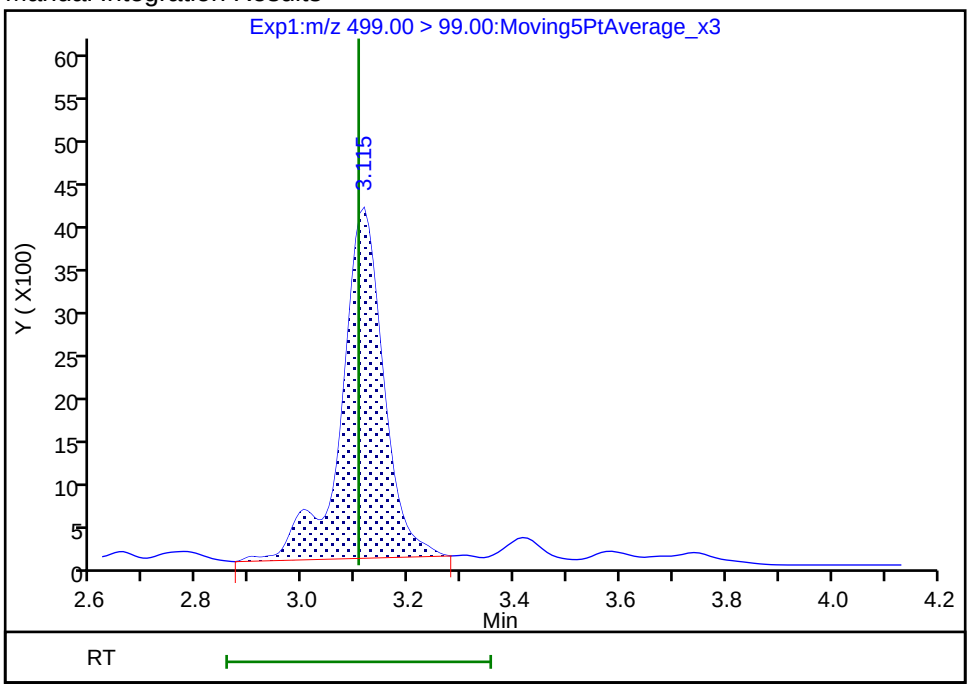
Processing Integration Results

RT: 3.12
Area: 27789
Amount: 0.049099
Amount Units: ng/ml



Manual Integration Results

RT: 3.12
Area: 22995
Amount: 0.049830
Amount Units: ng/ml



Reviewer: westendorfc, 15-May-2018 16:31:21
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_004.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-May-2018 15:29:08 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L3-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 16-May-2018 09:19:58 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: westendorfc Date: 15-May-2018 16:31:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.463	1.462	0.001	1.000	691256	0.2480		99.2	322	
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.462	0.001	1.000	7493234	2.58		103	50123	
D 3 13C5-PFPeA										
267.90 > 223.00	1.748	1.744	0.004	0.562	4737268	2.55		102	69659	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.748	1.745	0.003	1.000	543378	0.2429		97.2	275	
D 47 13C3-PFBS										
301.90 > 83.00	1.784	1.780	0.004	1.000	99970	2.38		102	619	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.784	1.783	0.001	1.000	758816	0.2260		102	3639	
298.90 > 99.00	1.784	1.783	0.001	1.000	311895		2.43(1.25-3.74)	102	2331	
D 60 M2-4:2FTS										
329.00 > 81.00	2.004	1.999	0.005	1.000	706801	2.29		98.1	8517	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.004	2.000	0.004	1.000	156576	0.2197		94.1	6561	
D 7 13C2 PFHxA										
315.00 > 270.00	2.038	2.037	0.001	1.000	5134906	2.59		104	125259	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.038	2.037	0.001	1.000	503450	0.2384		95.4	778	
313.00 > 119.00	2.038	2.037	0.001	1.000	47401		10.62(5.03-15.10)	95.4	559	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.061	2.059	0.002	1.000	712963	0.2384		102	9397	
349.00 > 99.00	2.061	2.059	0.002	1.000	264857		2.69(1.36-4.07)	102	2639	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.140	2.134	0.006	1.000	260002	2.65		106	4919	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.140	2.134	0.006	1.000	75752	0.2383		95.3	658	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.373	2.374	-0.001	1.000	533908	0.2502		100	871	
363.00 > 169.00	2.373	2.374	-0.001	1.000	205760		2.59(1.13-3.40)	100	1440	
D 9 13C4-PFHpA										
367.00 > 322.00	2.373	2.374	-0.001	1.000	5050240	2.66		106	104242	
D 11 18O2 PFHxS										
403.00 > 84.00	2.385	2.386	-0.001	1.000	5692452	2.43		103	49448	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.385	2.386	-0.001	1.000	613254	0.2261		99.4	3758	
399.00 > 99.00	2.385	2.386	-0.001	1.000	206507		2.97(1.50-4.49)	99.4	799	
65 Adona										
377.00 > 251.00	2.419	2.418	0.001	1.000	1414956	0.2452		98.1	40535	
377.00 > 85.00	2.419	2.418	0.001	1.000	889140		1.59(0.84-2.53)	98.1	9606	
D 12 M2-6:2FTS										
429.00 > 81.00	2.714	2.707	0.007	1.000	1076802	2.57		108	20482	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.714	2.707	0.007	1.000	229440	0.2781		117	1932	
D 14 13C4 PFOA										
417.00 > 372.00	2.737	2.731	0.006	1.000	4619416	2.57		103	75506	
* 62 13C2-PFOA										
415.00 > 370.00	2.737	2.734	0.003		4741445	2.50			54856	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.737	2.734	0.003	1.000	525683	0.2417		96.7	189	
413.00 > 169.00	2.737	2.734	0.003	1.000	266346		1.97(0.84-2.52)	96.7	902	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.744	2.739	0.005	1.000	524732	0.2339		98.3	7416	
449.00 > 99.00	2.744	2.739	0.005	1.000	144198		3.64(1.94-5.82)	98.3	1659	
D 18 13C4 PFOS										
503.00 > 80.00	3.110	3.104	0.006	1.000	4024927	2.50		104	31109	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.110	3.105	0.005	1.000	474971	0.2399		103	4702	
499.00 > 99.00	3.110	3.105	0.005	1.000	113620		4.18(2.31-6.93)	103	2518	
D 19 13C5 PFNA										
468.00 > 423.00	3.110	3.107	0.003	1.000	3819382	2.60		104	57297	
20 Perfluorononanoic acid										
463.00 > 419.00	3.110	3.107	0.003	1.000	402423	0.2487		99.5	651	
463.00 > 169.00	3.110	3.107	0.003	1.000	98302		4.09(1.90-5.69)	99.5	1897	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.318	3.316	0.002	1.000	687137	0.2275		97.6	9753	
D 21 13C8 FOSA										
506.00 > 78.00	3.416	3.420	-0.004	1.000	5466463	2.59		104	44835	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.416	3.422	-0.006	1.000	550166	0.2584		103	15371	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.463	3.455	0.008	1.000	301811	0.2366		98.6	5939	
549.00 > 99.00	3.463	3.455	0.008	1.000	113569		2.66(1.33-3.97)	98.6	1592	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.463	3.458	0.005	1.000	159889	0.2389		99.8	2540	
D 26 M2-8:2FTS										
529.00 > 81.00	3.463	3.459	0.004	1.000	1187676	2.49		104	17819	
D 23 13C2 PFDA										
515.00 > 470.00	3.472	3.468	0.004	1.000	3297462	2.64		106	36473	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.472	3.468	0.004	1.000	320077	0.2496		99.8	1743	
513.00 > 169.00	3.472	3.468	0.004	1.000	65839		4.86(2.36-7.09)	99.8	1158	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.627	3.624	0.003	1.000	1854527	2.69		108	58327	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.637	3.631	0.006	1.003	184250	0.2448		97.9	1723	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.782	3.781	0.001	1.000	277428	0.2454		102	4027	
599.00 > 99.00	3.792	3.781	0.011	1.003	86380		3.21(1.39-4.16)	102	2334	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.802	3.794	0.008	1.000	1857905	2.63		105	12991	
D 30 13C2 PFUnA										
565.00 > 520.00	3.802	3.800	0.002	1.000	2576940	2.60		104	59924	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.802	3.800	0.002	1.000	200746	0.2332		93.3	918	
563.00 > 169.00	3.802	3.800	0.002	1.000	51912		3.87(2.12-6.36)	93.3	1560	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.802	3.800	0.002	1.000	178736	0.2558		102	3652	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.959	3.958	0.001	1.000	1057887	0.2310		98.1	20496	
D 36 13C2 PFDoA										
615.00 > 570.00	4.102	4.099	0.003	1.000	2740425	2.57		103	24900	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.102	4.100	0.002	1.000	305166	0.2667		107	260	
613.00 > 169.00	4.102	4.100	0.002	1.000	69161		4.41(2.13-6.40)	107	929	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.372	4.368	0.004	1.000	322826	0.2575		103	180	
663.00 > 169.00	4.372	4.368	0.004	1.000	114369		2.82(1.25-3.76)	103	1366	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.613	4.608	0.005	1.000	3595983	2.75		110	17498	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.613	4.608	0.005	1.000	81619	0.2247		89.9	939	
713.00 > 219.00	4.603	4.608	-0.005	0.998	63777		1.28(0.71-2.13)	89.9	1518	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.035	5.030	0.005	1.000	5862077	2.71		108	14450	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.035	5.031	0.004	1.000	592774	0.2467		98.7	150	
813.00 > 169.00	5.035	5.031	0.004	1.000	95796		6.19(2.86-8.58)	98.7	795	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.417	5.408	0.009	1.000	647584	0.2613		105	124	
913.00 > 169.00	5.417	5.408	0.009	1.000	84829		7.63(3.83-11.48)	105	912	

Reagents:

LCPFC_LL3_00004 Amount Added: 1.00 Units: mL

Report Date: 16-May-2018 09:20:00 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_004.d

Injection Date: 15-May-2018 15:29:08 Instrument ID: A8_N

Lims ID: IC L3 Full

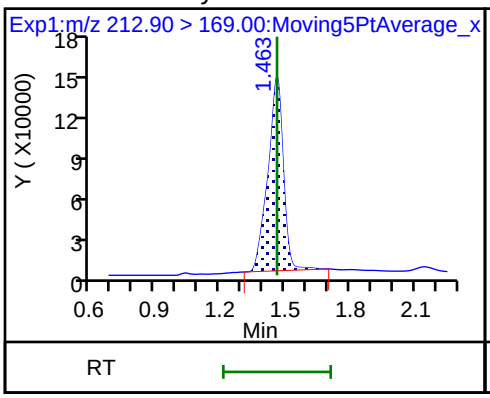
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 4

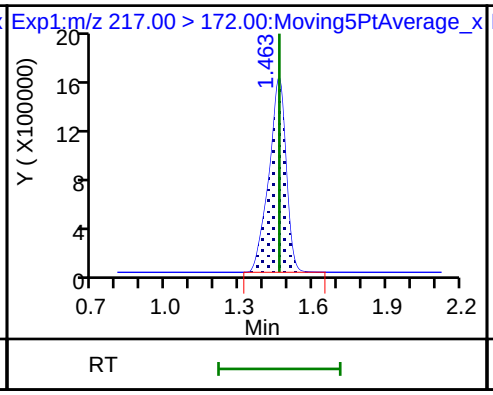
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

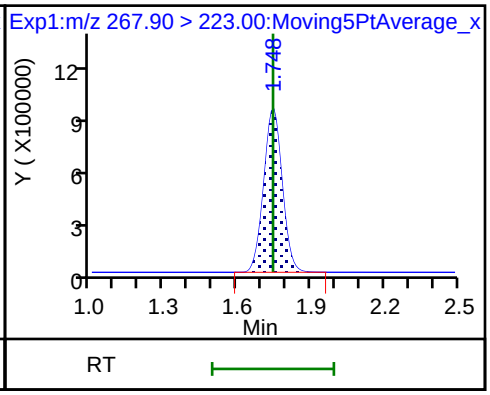
2 Perfluorobutyric acid



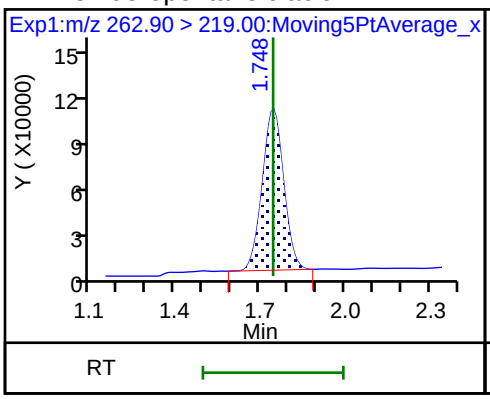
D 1 13C4 PFBA



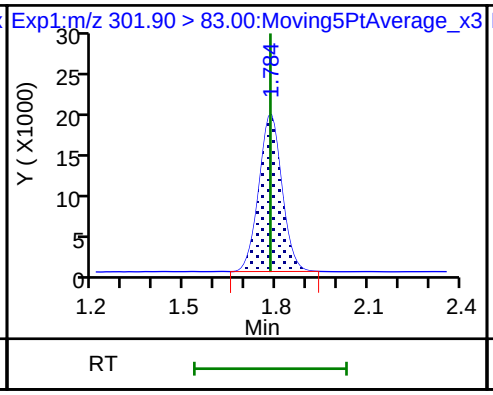
D 3 13C5-PFPeA



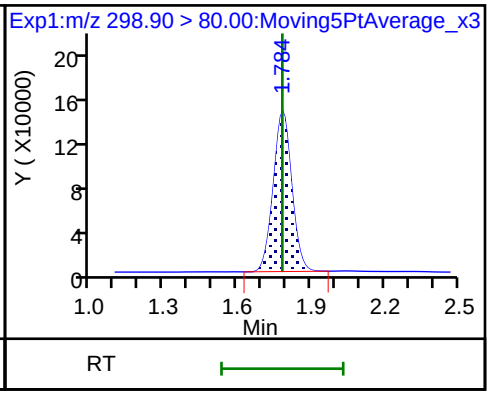
4 Perfluoropentanoic acid



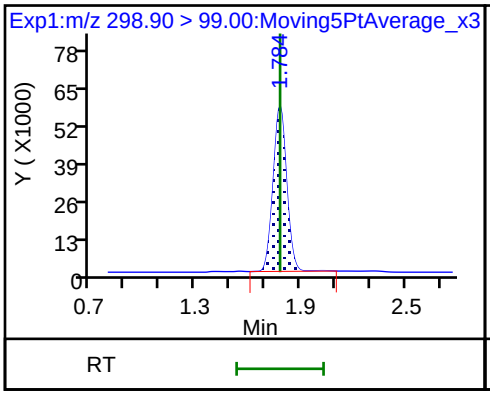
D 47 13C3-PFBS



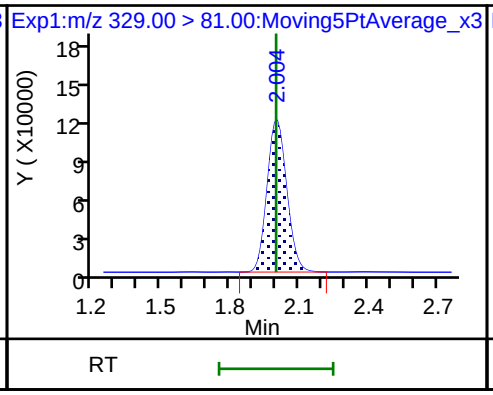
5 Perfluorobutanesulfonic acid



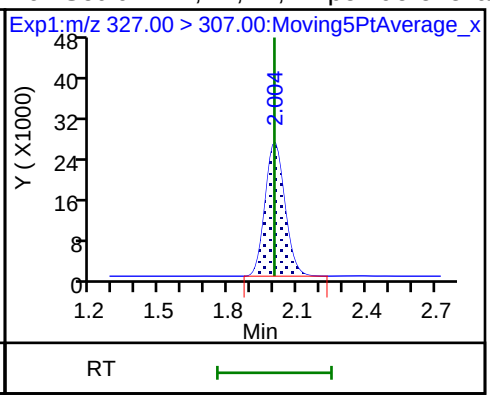
5 Perfluorobutanesulfonic acid



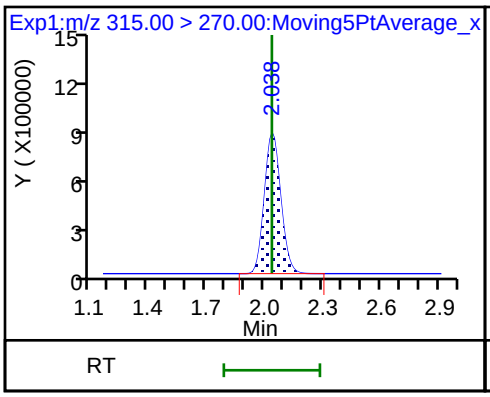
D 60 M2-4:2FTS



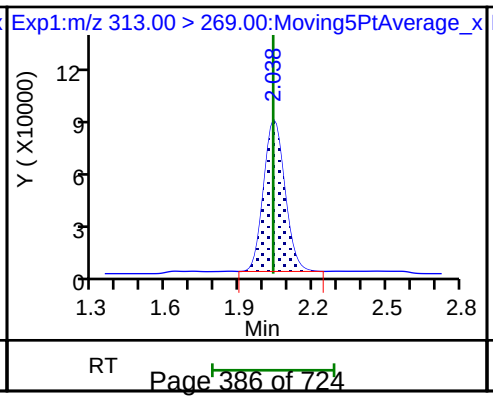
61 Sodium 1H,1H,2H,2H-perfluorohexane



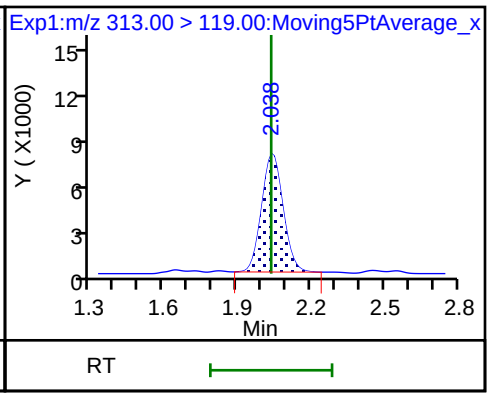
D 7 13C2 PFHxA



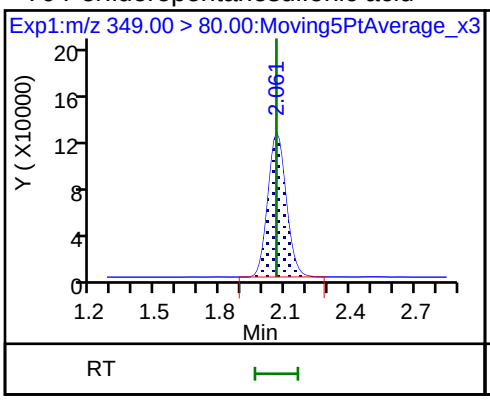
6 Perfluorohexanoic acid



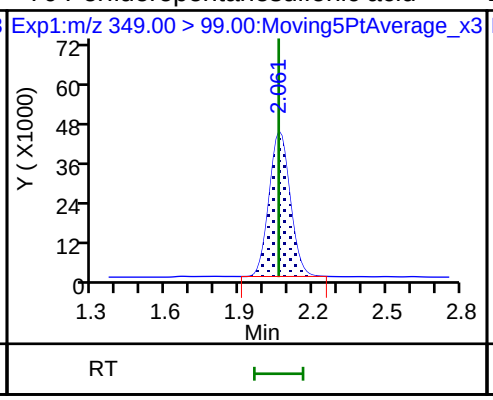
6 Perfluorohexanoic acid



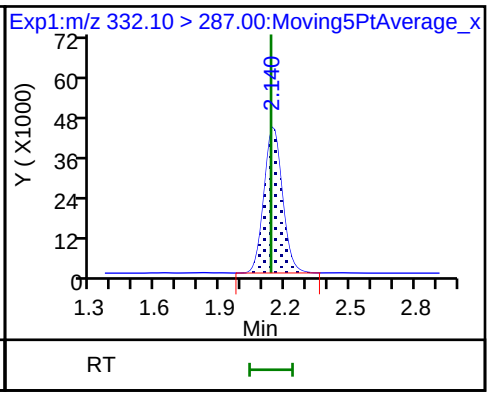
70 Perfluoropentanesulfonic acid



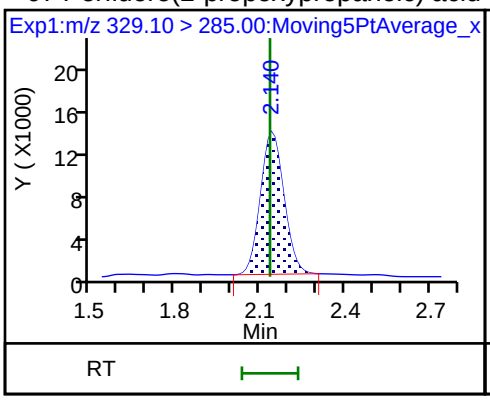
70 Perfluoropentanesulfonic acid



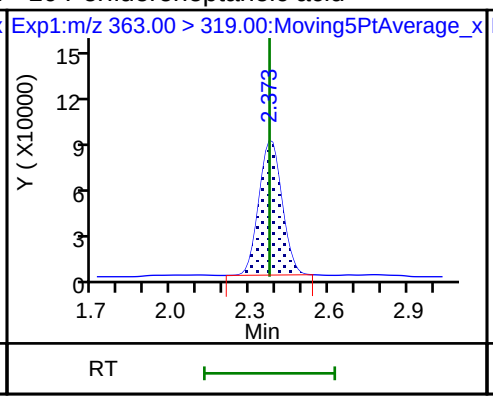
D 64 13C3 HFPO-DA



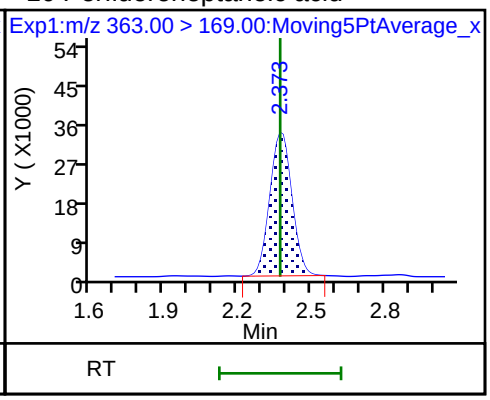
67 Perfluoro(2-propoxypropanoic) acid



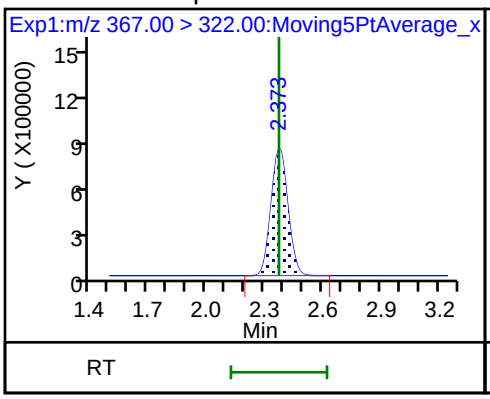
10 Perfluoroheptanoic acid



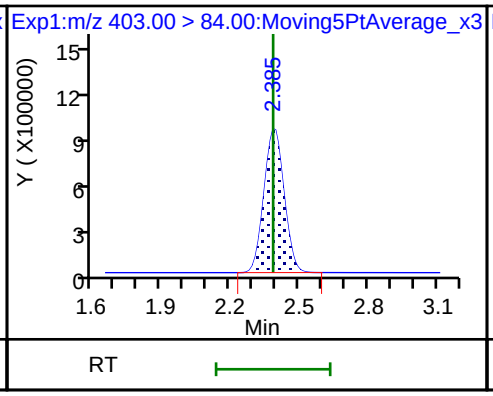
10 Perfluoroheptanoic acid



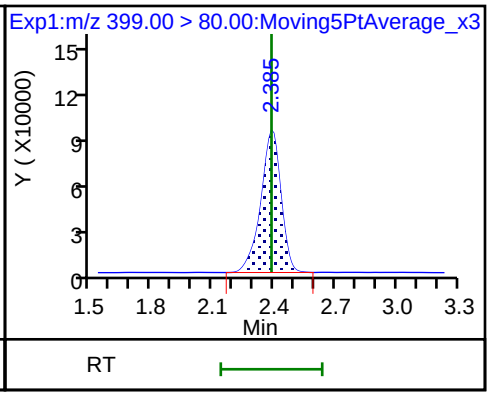
D 9 13C4-PFHpA



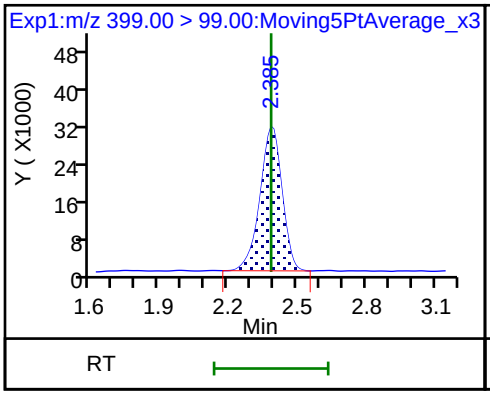
D 11 18O2 PFHxS



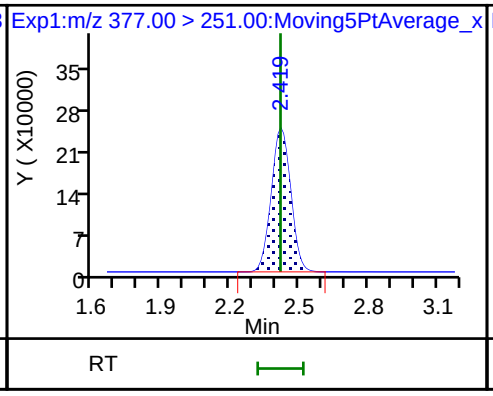
8 Perfluorohexanesulfonic acid



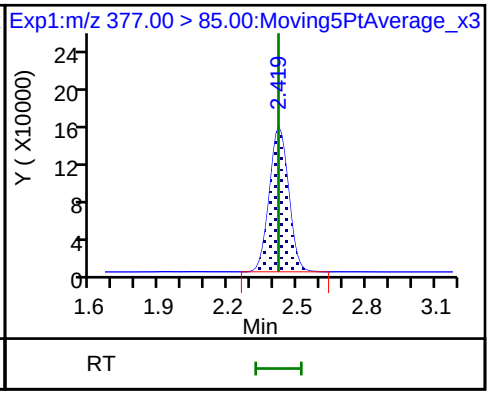
8 Perfluorohexanesulfonic acid



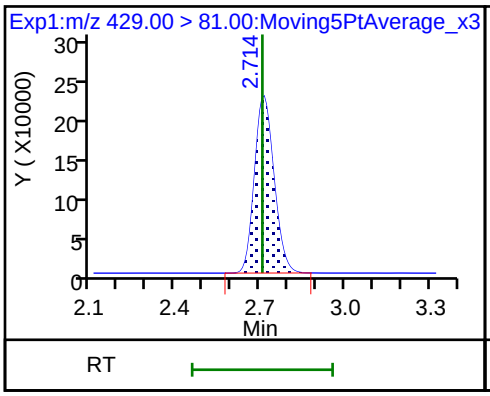
65 Adona



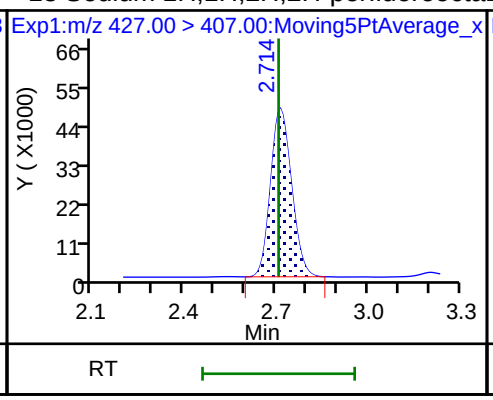
65 Adona



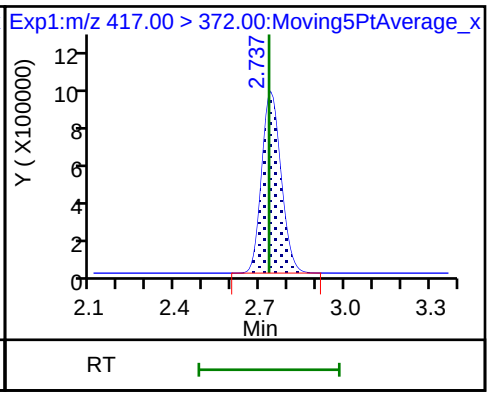
D 12 M2-6:2FTS



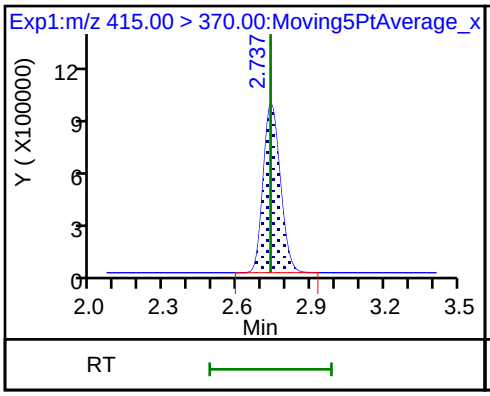
13 Sodium 1H,1H,2H,2H-perfluorooctane



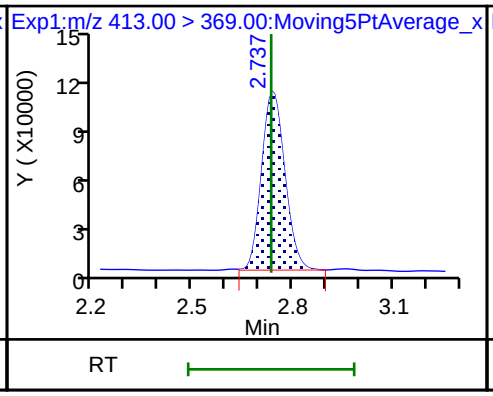
D 14 13C4 PFOA



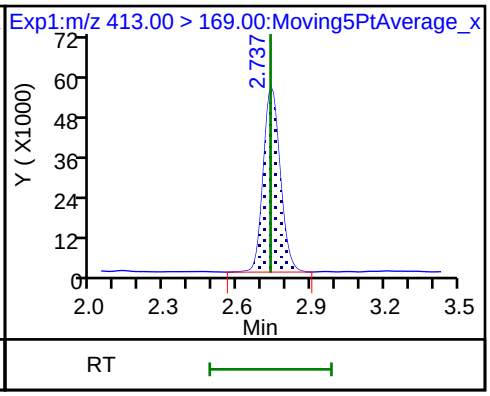
* 62 13C2-PFOA



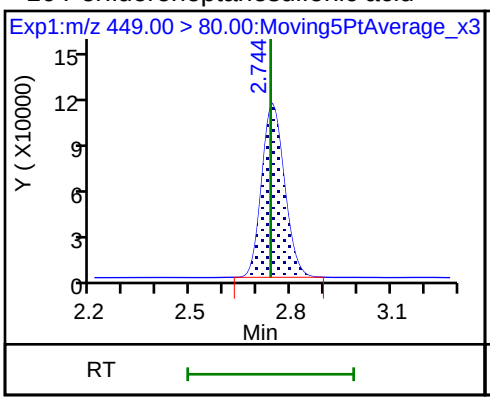
15 Perfluorooctanoic acid



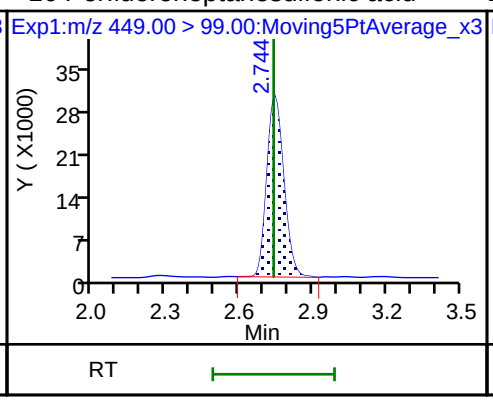
15 Perfluorooctanoic acid



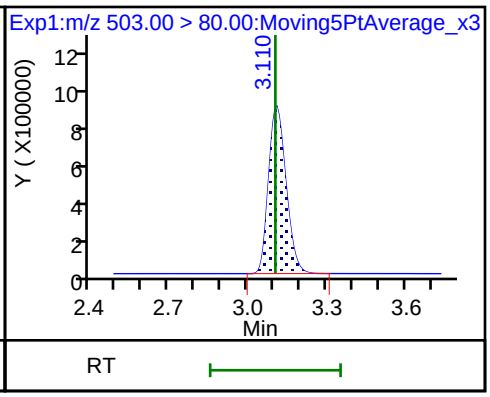
16 Perfluoroheptanesulfonic acid



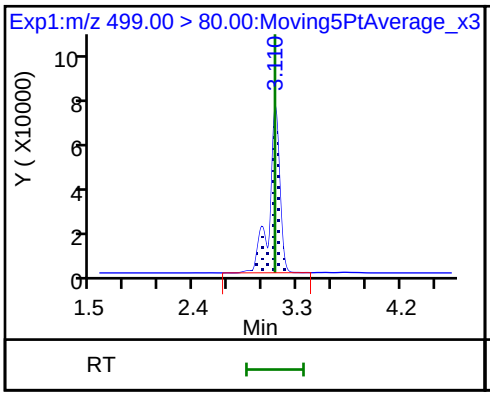
16 Perfluoroheptanesulfonic acid



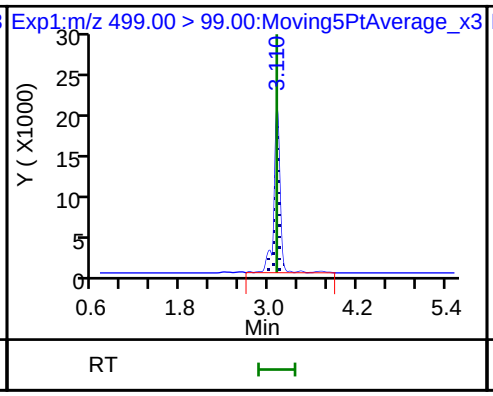
D 18 13C4 PFOS



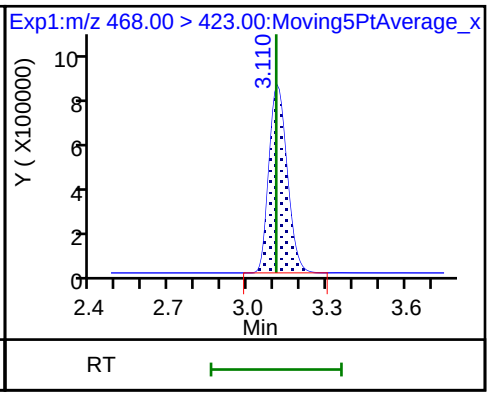
17 Perfluorooctane sulfonic acid



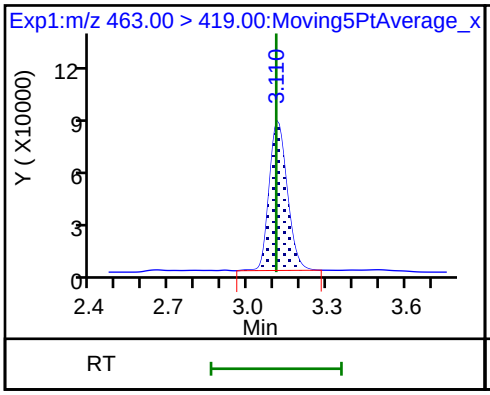
17 Perfluorooctane sulfonic acid



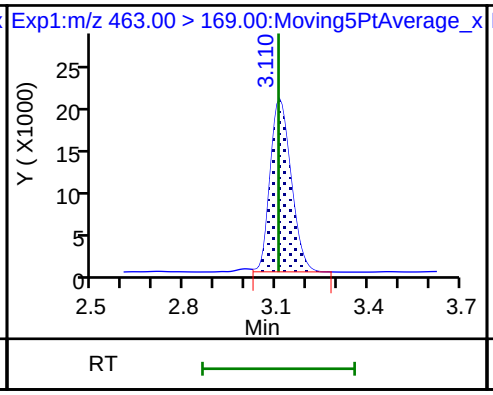
D 19 13C5 PFNA



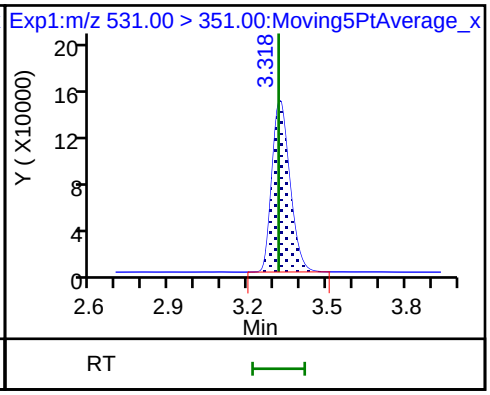
20 Perfluorononanoic acid



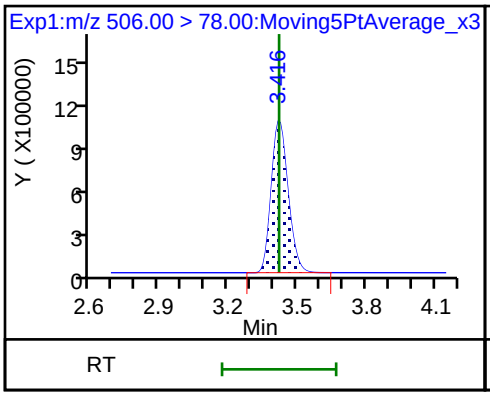
20 Perfluorononanoic acid



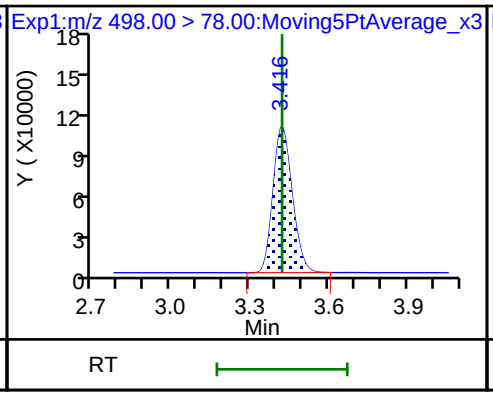
69 9-Chlorohexadecafluoro-3-oxanonane



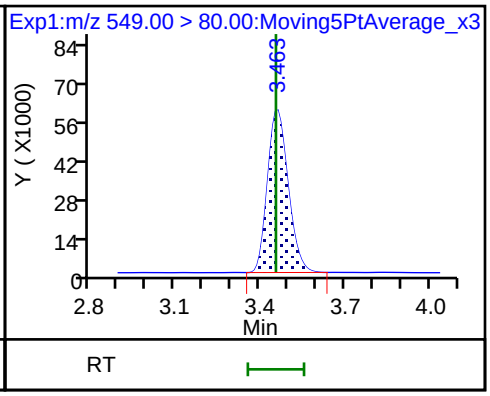
D 21 13C8 FOSA



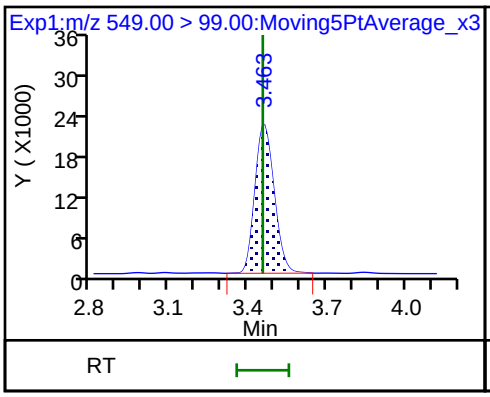
22 Perfluorooctane Sulfonamide



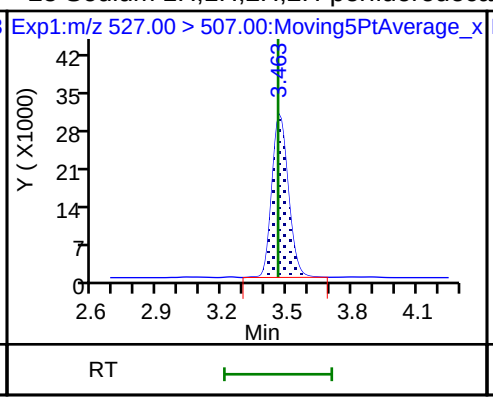
68 Perfluorononanesulfonic acid



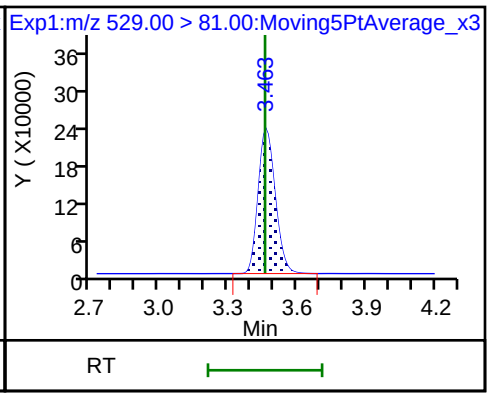
68 Perfluorononanesulfonic acid



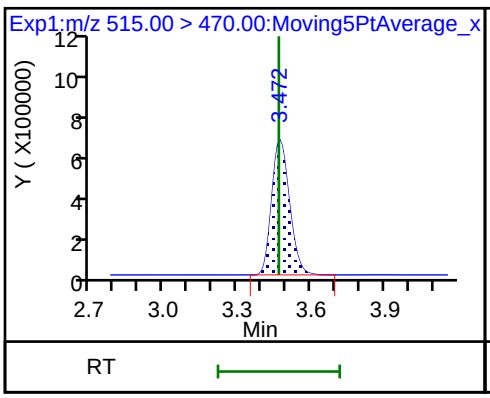
25 Sodium 1H,1H,2H,2H-perfluorodecane



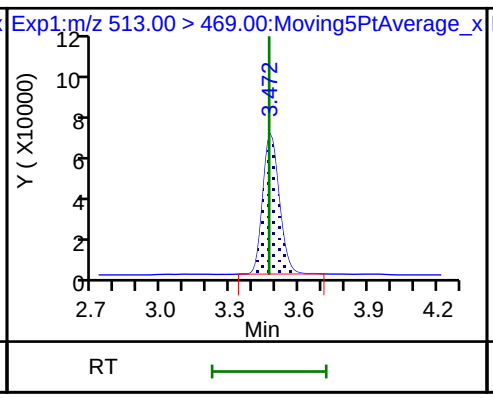
D 26 M2-8:2FTS



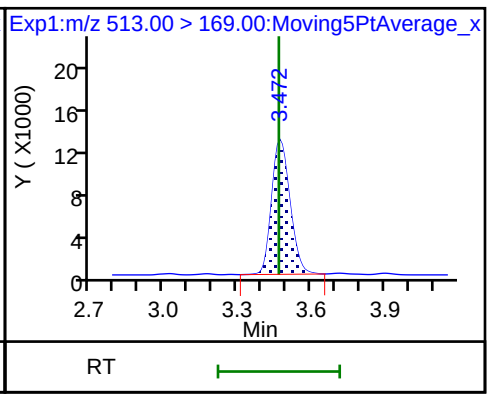
D 23 13C2 PFDA



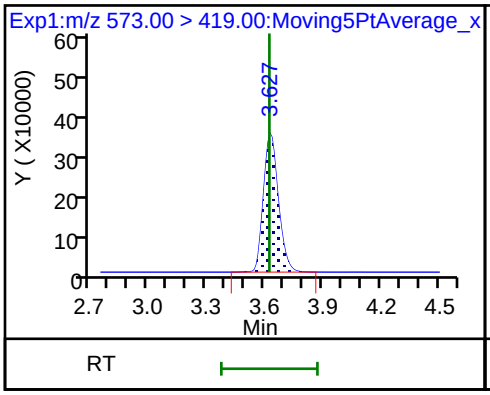
24 Perfluorodecanoic acid



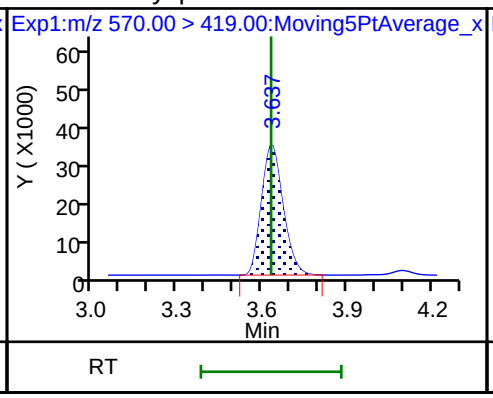
24 Perfluorodecanoic acid



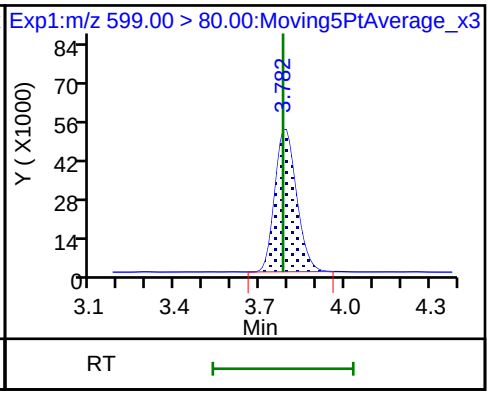
D 27 d3-NMeFOSAA



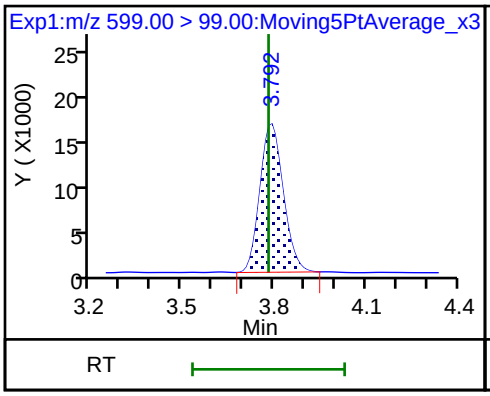
28 N-methyl perfluorooctane sulfonami



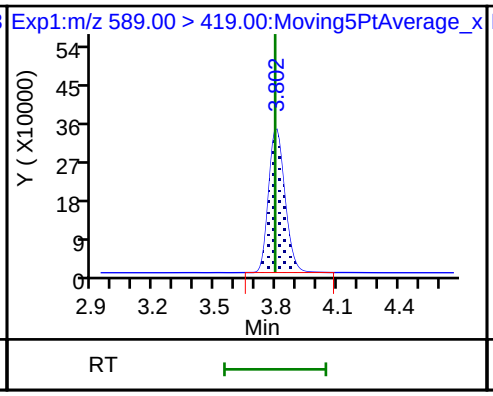
29 Perfluorodecane Sulfonic acid



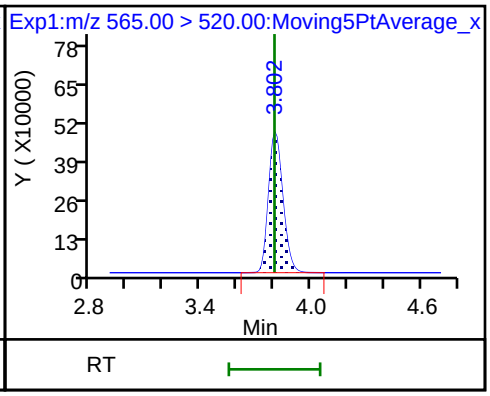
29 Perfluorodecane Sulfonic acid



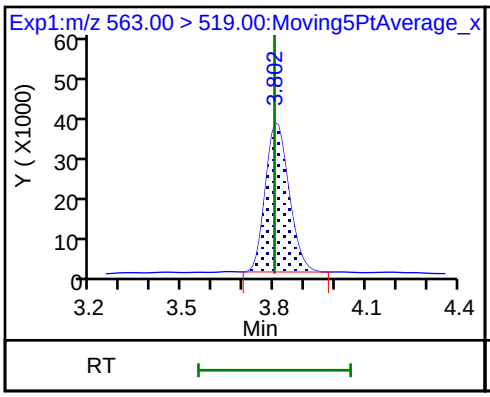
D 32 d5-NEtFOSAA



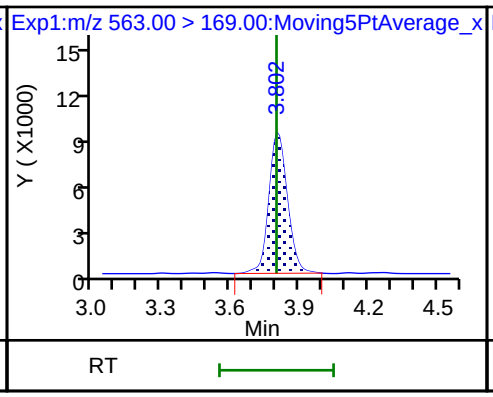
D 30 13C2 PFUnA



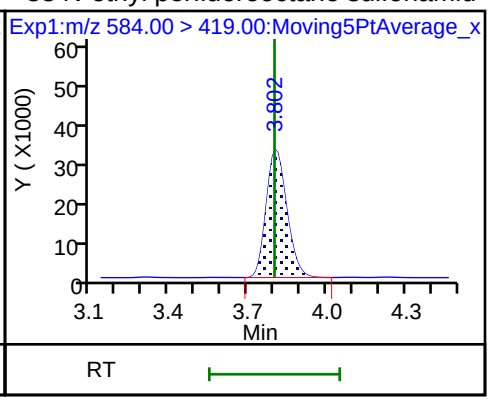
31 Perfluoroundecanoic acid



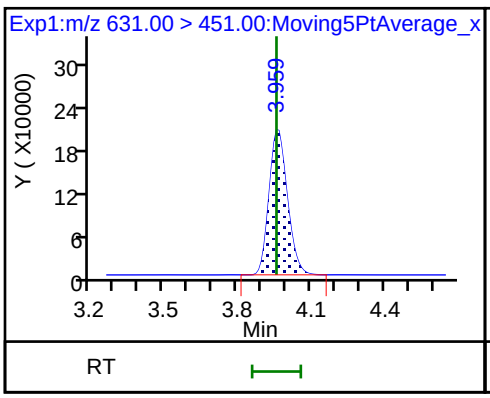
31 Perfluoroundecanoic acid



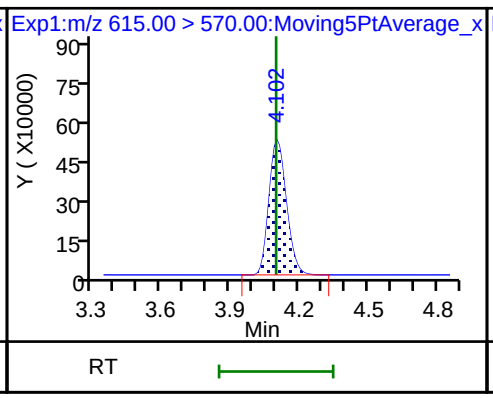
33 N-ethyl perfluorooctane sulfonamid



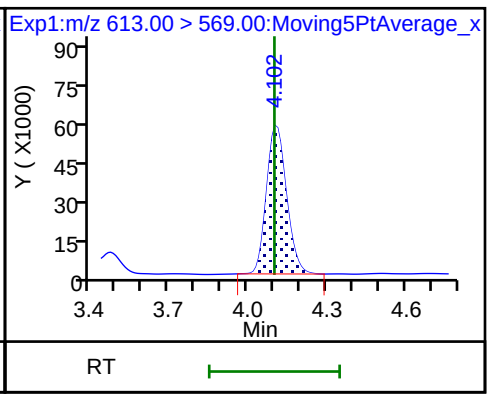
66 11-Chloroeicosafluoro-3-oxaundecan



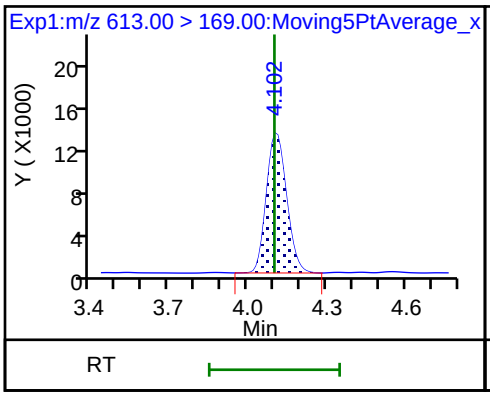
D 36 13C2 PFDoA



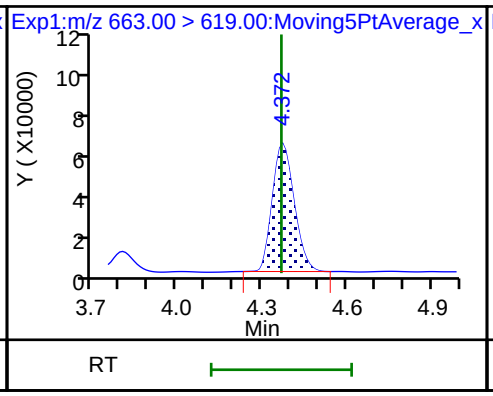
37 Perfluorododecanoic acid



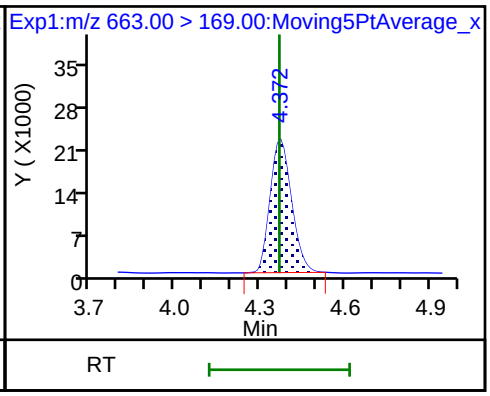
37 Perfluorododecanoic acid



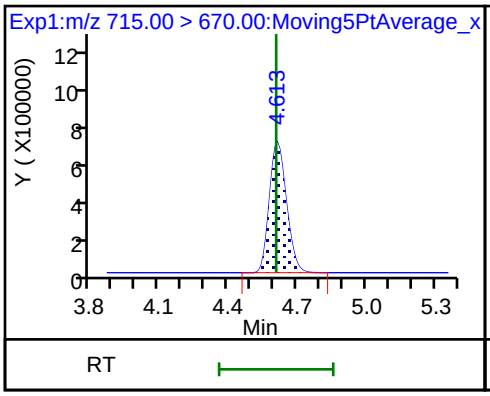
41 Perfluorotridecanoic acid



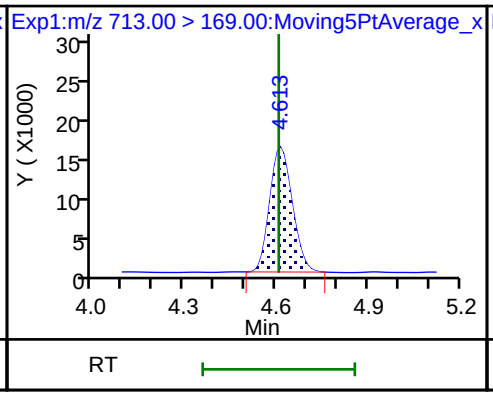
41 Perfluorotridecanoic acid



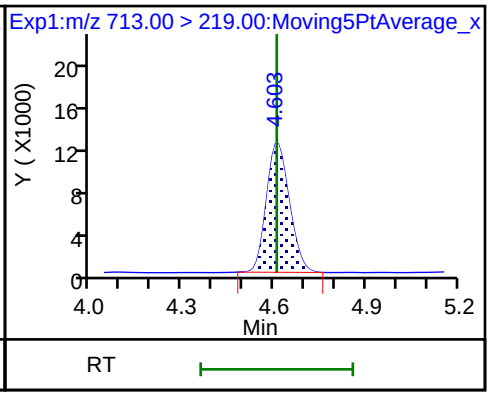
D 43 13C2-PFTeDA



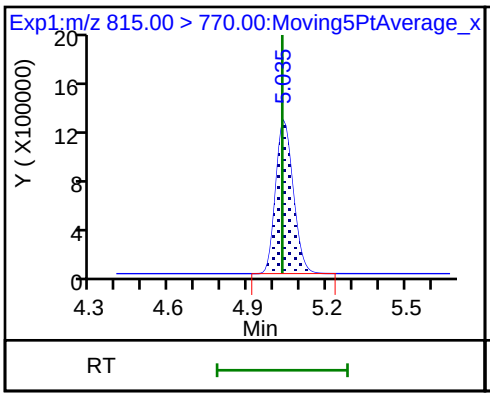
42 Perfluorotetradecanoic acid



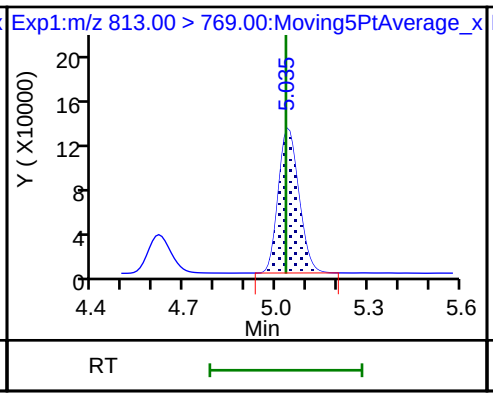
42 Perfluorotetradecanoic acid



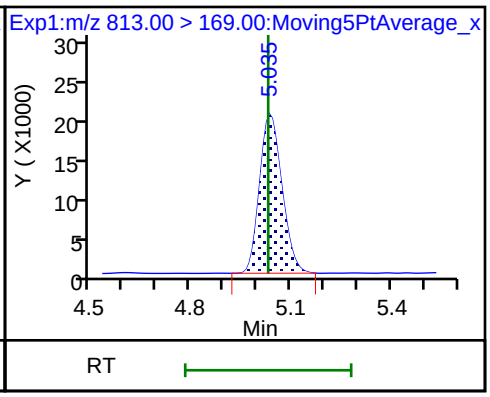
D 44 13C2-PFHxDA



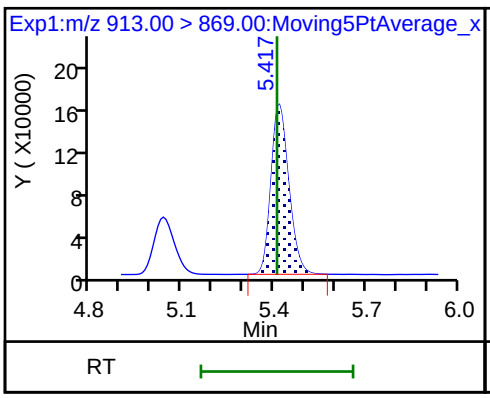
45 Perfluorohexadecanoic acid



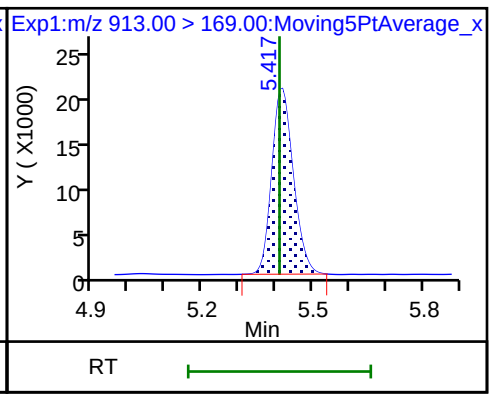
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_005.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 15-May-2018 15:36:58 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L4-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 16-May-2018 09:20:03 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 16-May-2018 08:01:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.461	1.462	-0.001	1.000	7049149	2.42		96.8	46136	
2 Perfluorobutyric acid										
212.90 > 169.00	1.461	1.462	-0.001	1.000	2597444	0.99		99.1	1318	
D 3 13C5-PFPeA										
267.90 > 223.00	1.743	1.744	-0.001	0.561	4710025	2.52		101	87673	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.743	1.745	-0.002	1.000	2073422	0.9323		93.2	1140	
D 47 13C3-PFBS										
301.90 > 83.00	1.779	1.780	-0.001	1.000	98369	2.33		100	653	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.779	1.783	-0.004	1.000	2858265	0.8651		97.9	14624	
298.90 > 99.00	1.779	1.783	-0.004	1.000	1207235		2.37(1.25-3.74)	97.9	7612	
D 60 M2-4:2FTS										
329.00 > 81.00	1.999	1.999	0.0	1.000	757382	2.44		105	9845	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.999	2.000	-0.001	1.000	636977	0.9084		97.3	35258	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.033	2.037	-0.004	1.000	1931731	0.9677		96.8	2942	
313.00 > 119.00	2.033	2.037	-0.004	1.000	169446		11.40(5.03-15.10)	96.8	2297	
D 7 13C2 PFHxA										
315.00 > 270.00	2.033	2.037	-0.004	1.000	4854075	2.44		97.6	80326	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.056	2.059	-0.003	1.000	2702610	0.9185		97.9	30039	
349.00 > 99.00	2.056	2.059	-0.003	1.000	1001761		2.70(1.36-4.07)	97.9	9135	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.135	2.134	0.001	1.000	301290	1.03		103	2693	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.135	2.134	0.001	1.000	238512	2.42		96.9	4336	
D 9 13C4-PFHpA										
367.00 > 322.00	2.368	2.374	-0.006	1.000	4714171	2.47		98.9	75030	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.368	2.374	-0.006	1.000	1839273	0.9234		92.3	2776	
363.00 > 169.00	2.368	2.374	-0.006	1.000	750283		2.45(1.13-3.40)	92.3	4821	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.381	2.386	-0.006	1.000	2238132	0.8440		92.7	14277	
399.00 > 99.00	2.381	2.386	-0.006	1.000	758974		2.95(1.50-4.49)	92.7	2596	
D 11 18O2 PFHxS										
403.00 > 84.00	2.381	2.386	-0.006	1.000	5565884	2.36		99.9	50235	
65 Adona										
377.00 > 251.00	2.414	2.418	-0.004	1.000	6019764	1.11		111	85325	
377.00 > 85.00	2.414	2.418	-0.004	1.000	3416928		1.76(0.84-2.53)	111	41481	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.703	2.707	-0.004	1.000	642687	0.8356		88.1	4840	
D 12 M2-6:2FTS										
429.00 > 81.00	2.703	2.707	-0.004	1.000	1028277	2.44		103	17698	
D 14 13C4 PFOA										
417.00 > 372.00	2.726	2.731	-0.005	1.000	4460027	2.47		98.9	53300	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.733	2.734	-0.001	1.003	2030259	0.9669		96.7	774	
413.00 > 169.00	2.733	2.734	-0.001	1.003	1016402		2.00(0.84-2.52)	96.7	3648	
* 62 13C2-PFOA										
415.00 > 370.00	2.733	2.734	-0.001		4762237	2.50			57613	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.733	2.739	-0.006	1.000	2045093	0.9709		102	23753	
449.00 > 99.00	2.733	2.739	-0.006	1.000	547456		3.74(1.94-5.82)	102	6229	
D 18 13C4 PFOS										
503.00 > 80.00	3.097	3.104	-0.007	1.000	3779459	2.33		97.6	24139	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.105	3.105	0.0	1.002	1585297	0.8526		91.9	11307	
499.00 > 99.00	3.105	3.105	0.0	1.002	364451		4.35(2.31-6.93)	91.9	4761	
20 Perfluorononanoic acid										
463.00 > 419.00	3.105	3.107	-0.002	1.000	1453651	0.9530		95.3	2199	
463.00 > 169.00	3.105	3.107	-0.002	1.000	348207		4.17(1.90-5.69)	95.3	7960	
D 19 13C5 PFNA										
468.00 > 423.00	3.105	3.107	-0.002	1.000	3600246	2.44		97.6	50324	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.313	3.316	-0.003	1.000	2728187	0.9619		103	29405	
D 21 13C8 FOSA										
506.00 > 78.00	3.419	3.420	-0.001	1.000	5346931	2.52		101	38654	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.419	3.422	-0.003	1.000	2070950	0.99		99.5	25217	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.456	3.455	0.001	1.000	1144412	0.9554		99.5	17278	
549.00 > 99.00	3.447	3.455	-0.008	0.997	454699		2.52(1.33-3.97)	99.5	8974	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.456	3.458	-0.002	1.000	581733	0.9417		98.3	11450	
D 26 M2-8:2FTS										
529.00 > 81.00	3.456	3.459	-0.003	1.000	1096366	2.29		95.6	13992	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.465	3.468	-0.003	1.000	1208399	1.01		101	5917	
513.00 > 169.00	3.465	3.468	-0.003	1.000	230921		5.23(2.36-7.09)	101	5650	
D 23 13C2 PFDA										
515.00 > 470.00	3.465	3.468	-0.003	1.000	3084670	2.46		98.3	75429	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.620	3.624	-0.004	1.000	1667566	2.41		96.4	23781	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.630	3.631	-0.001	1.003	695308	1.03		103	6776	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.784	3.781	0.003	1.000	961059	0.9051		93.9	13697	
599.00 > 99.00	3.784	3.781	0.003	1.000	339652		2.83(1.39-4.16)	93.9	7908	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.794	3.794	0.0	1.000	1808821	2.55		102	9758	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.794	3.800	-0.006	1.000	651368	0.9577		95.8	11982	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.794	3.800	-0.006	1.000	756677	0.8755		87.6	4657	
563.00 > 169.00	3.794	3.800	-0.006	1.000	202483		3.74(2.12-6.36)	87.6	7412	
D 30 13C2 PFUnA										
565.00 > 520.00	3.794	3.800	-0.006	1.000	2587053	2.60		104	43529	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.960	3.958	0.002	1.000	4159140	0.9672		103	44374	
D 36 13C2 PFDoA										
615.00 > 570.00	4.092	4.099	-0.007	1.000	2679695	2.51		100	17510	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.102	4.100	0.002	1.003	1104651	0.9875		98.7	918	
613.00 > 169.00	4.092	4.100	-0.008	1.000	275338		4.01(2.13-6.40)	98.7	2899	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.362	4.368	-0.006	1.000	1211735	0.9883		98.8	636	
663.00 > 169.00	4.362	4.368	-0.006	1.000	378967		3.20(1.25-3.76)	98.8	5472	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.605	4.608	-0.003	1.000	331048	0.9655		96.6	4238	
713.00 > 219.00	4.595	4.608	-0.013	0.998	234322		1.41(0.71-2.13)	96.6	3434	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.605	4.608	-0.003	1.000	3394312	2.59		103	16978	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.028	5.030	-0.002	1.000	5890266	2.71		108	15198	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.028	5.031	-0.003	1.000	2236578	1.00		99.7	560	
813.00 > 169.00	5.028	5.031	-0.003	1.000	371148		6.03(2.86-8.58)	99.7	2763	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.406	5.408	-0.002	1.000	2576884	1.03		103	454	
913.00 > 169.00	5.406	5.408	-0.002	1.000	319419		8.07(3.83-11.48)	103	2706	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 16-May-2018 09:20:05 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_005.d

Injection Date: 15-May-2018 15:36:58 Instrument ID: A8_N

Lims ID: IC L4 Full

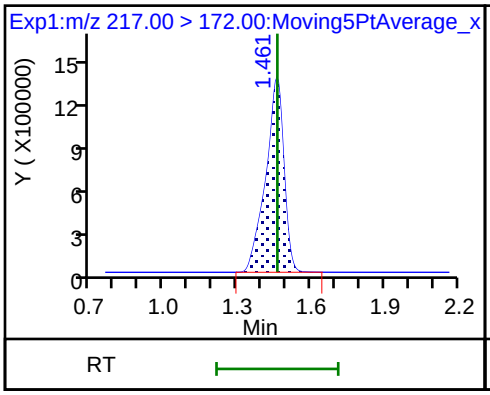
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 5

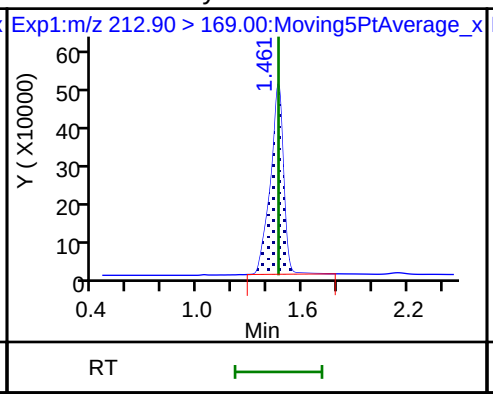
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

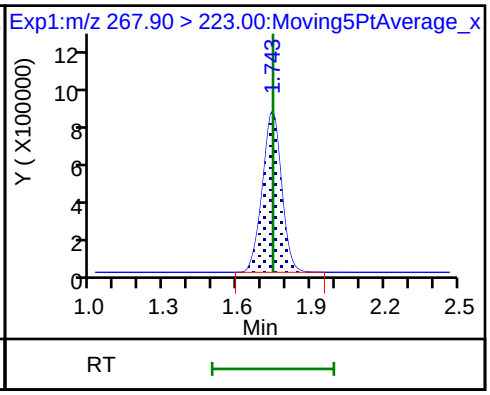
D 1 13C4 PFBA



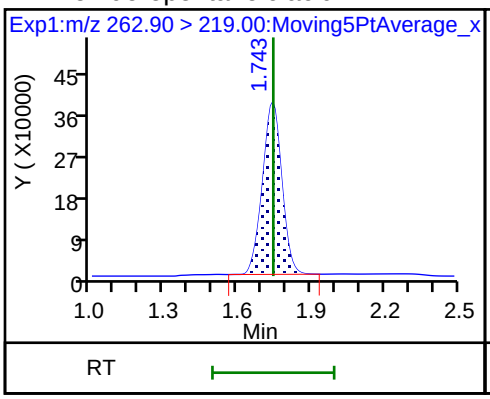
2 Perfluorobutyric acid



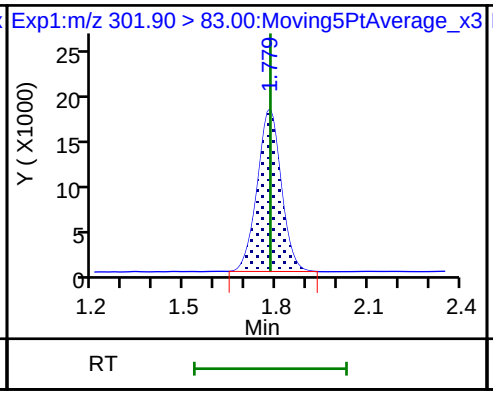
D 3 13C5-PFPeA



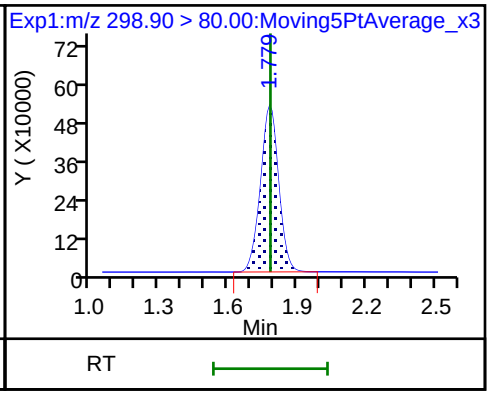
4 Perfluoropentanoic acid



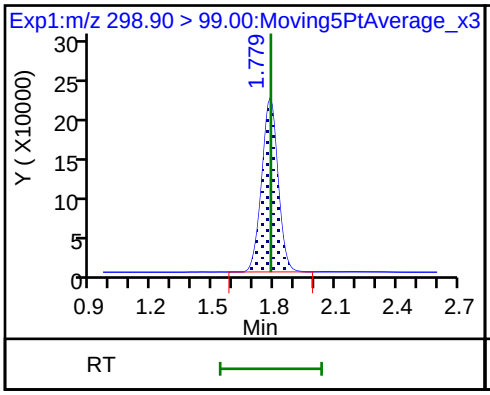
D 47 13C3-PFBS



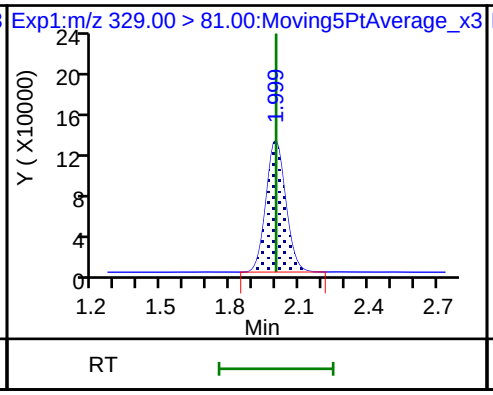
5 Perfluorobutanesulfonic acid



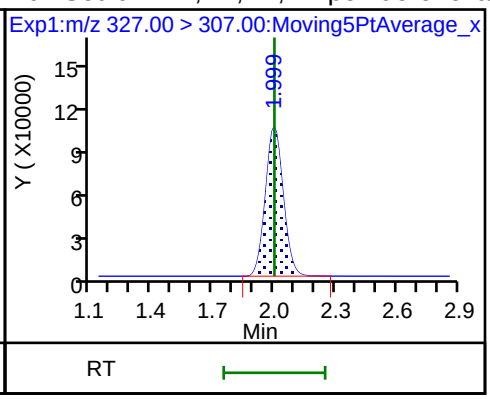
5 Perfluorobutanesulfonic acid



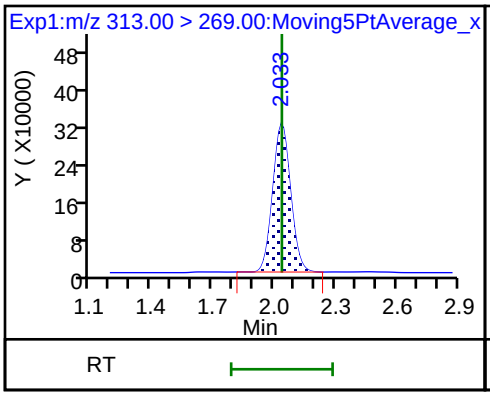
D 60 M2-4:2FTS



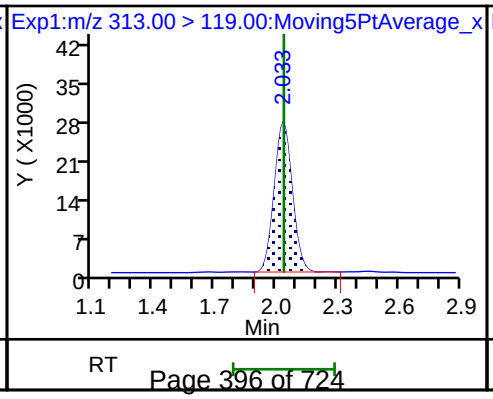
61 Sodium 1H,1H,2H,2H-perfluorohexane



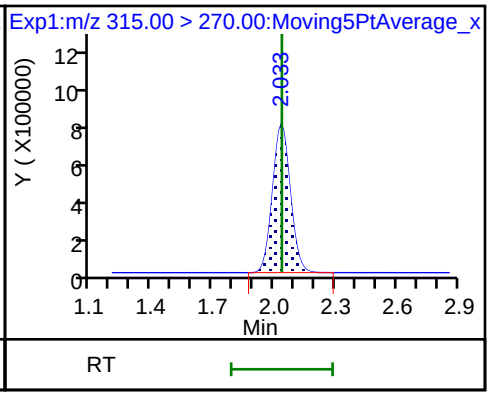
6 Perfluorohexanoic acid



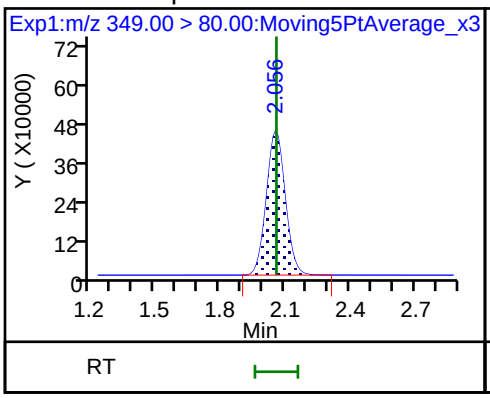
6 Perfluorohexanoic acid



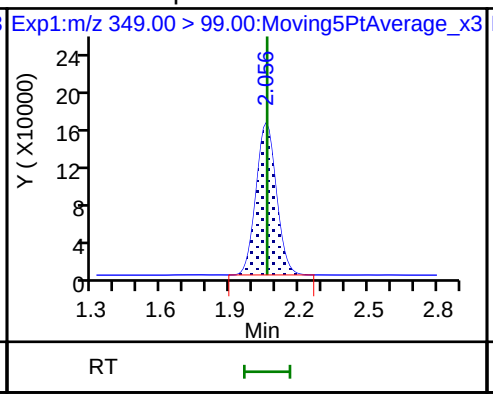
D 7 13C2 PFHxA



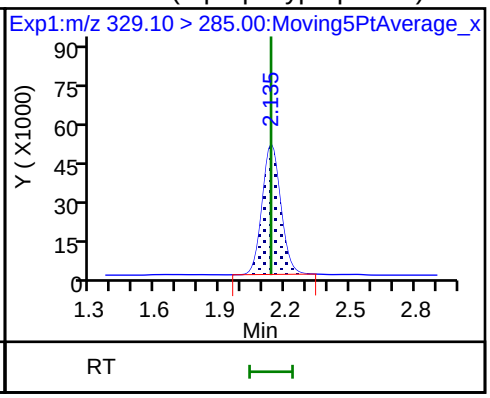
70 Perfluoropentanesulfonic acid



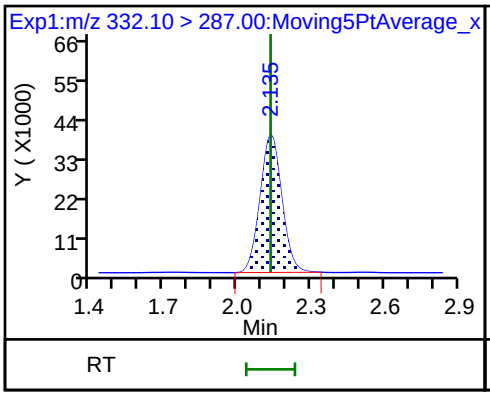
70 Perfluoropentanesulfonic acid



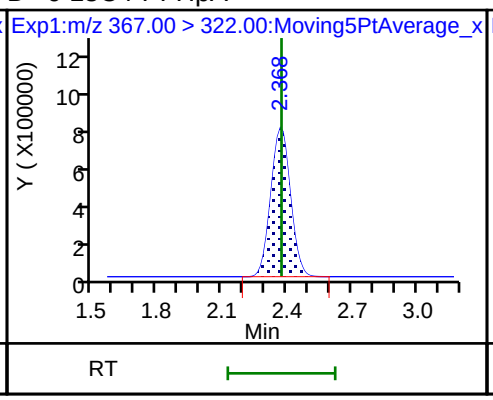
67 Perfluoro(2-propoxypropanoic) acid



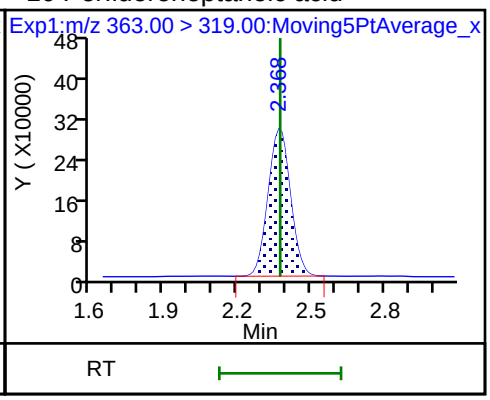
D 64 13C3 HFPO-DA



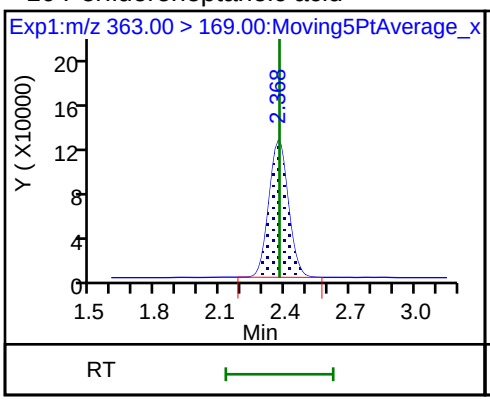
D 9 13C4-PFHpA



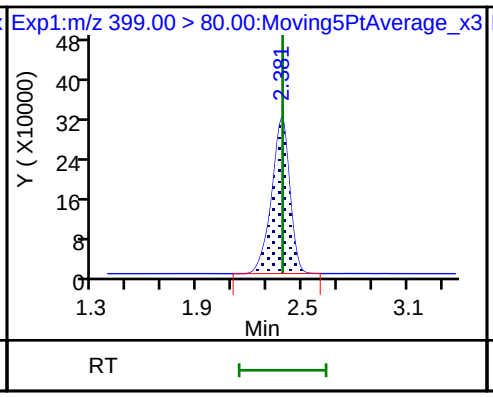
10 Perfluoroheptanoic acid



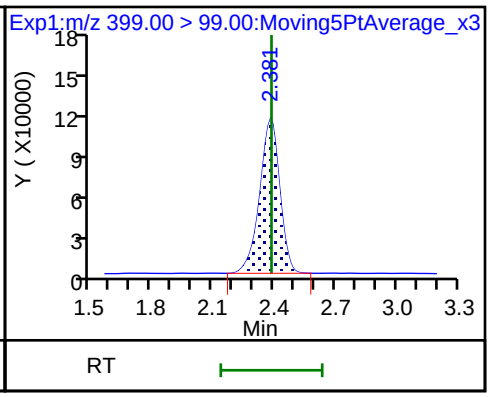
10 Perfluoroheptanoic acid



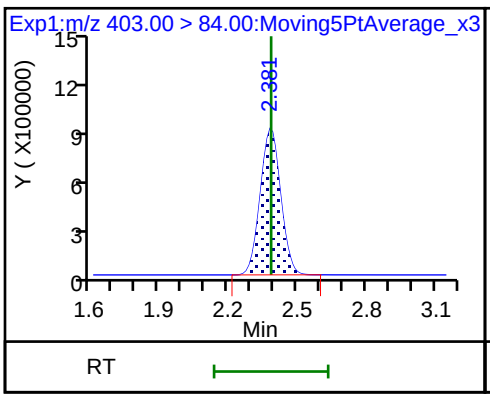
8 Perfluorohexanesulfonic acid



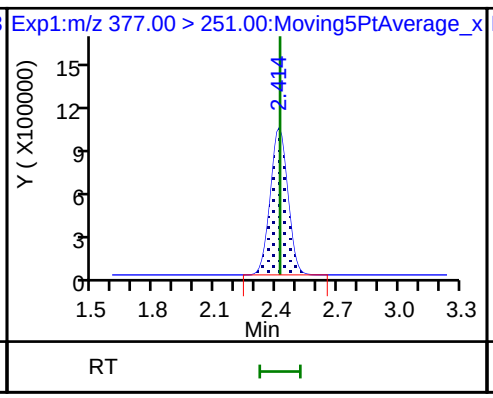
8 Perfluorohexanesulfonic acid



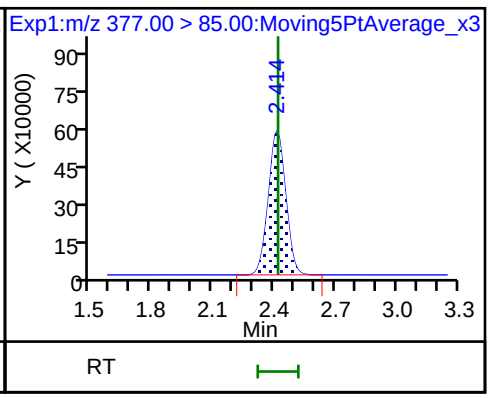
D 11 18O2 PFHxS



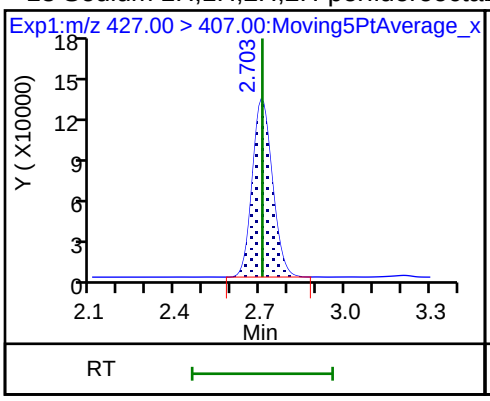
65 Adona



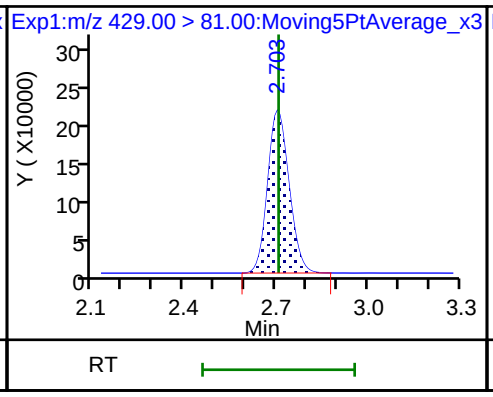
65 Adona



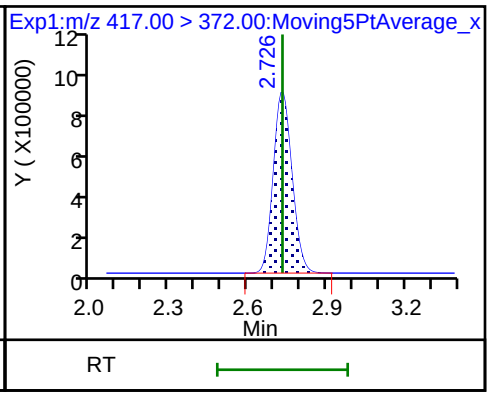
13 Sodium 1H,1H,2H,2H-perfluorooctane



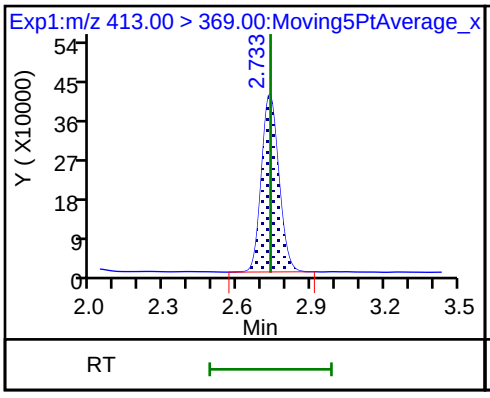
D 12 M2-6:2FTS



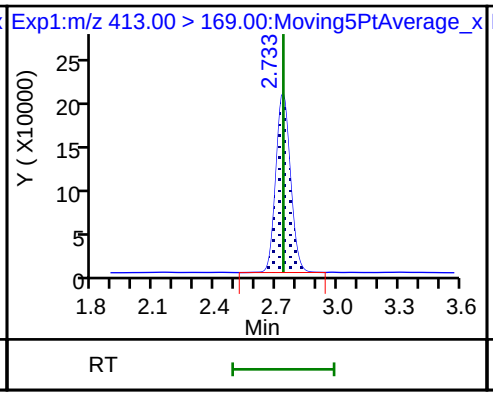
D 14 13C4 PFOA



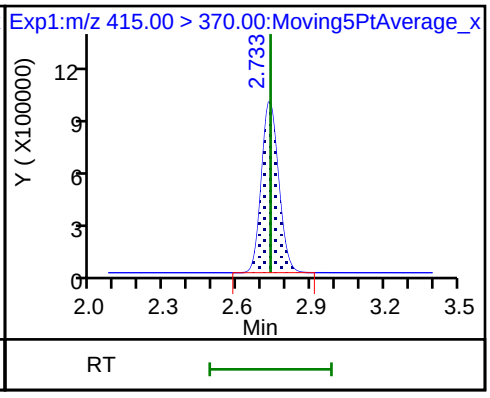
15 Perfluorooctanoic acid



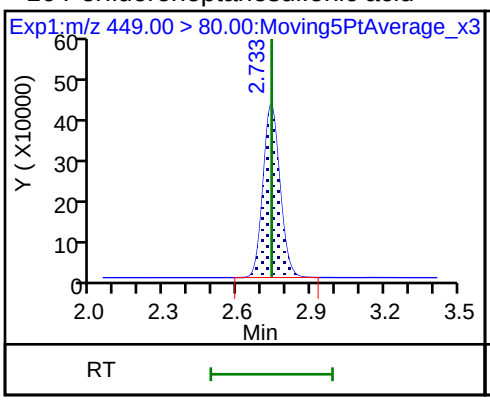
15 Perfluorooctanoic acid



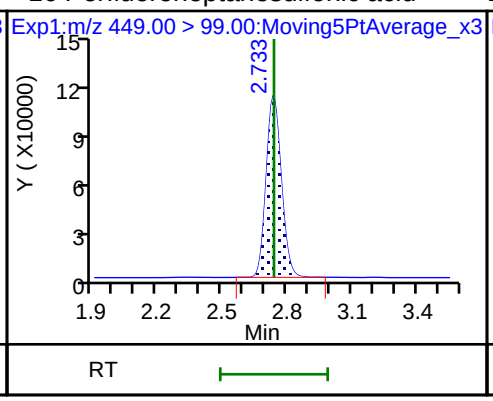
* 62 13C2-PFOA



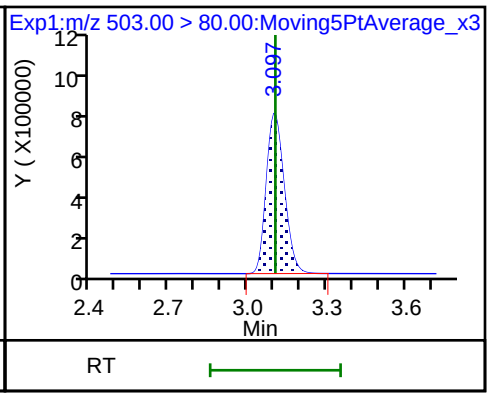
16 Perfluoroheptanesulfonic acid



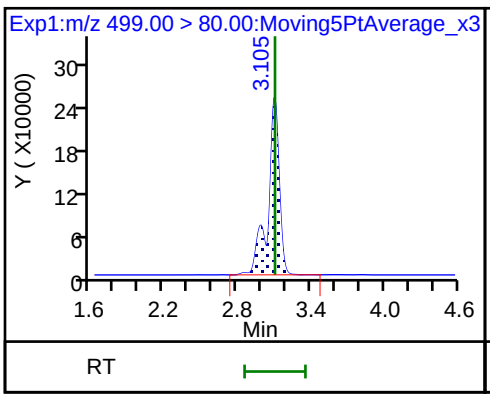
16 Perfluoroheptanesulfonic acid



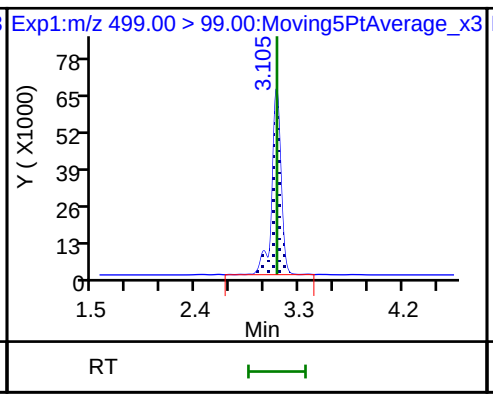
D 18 13C4 PFOS



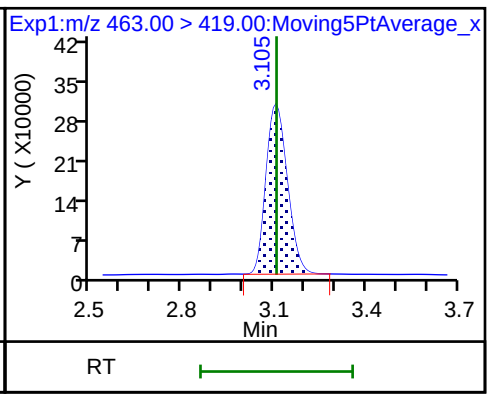
17 Perfluorooctane sulfonic acid



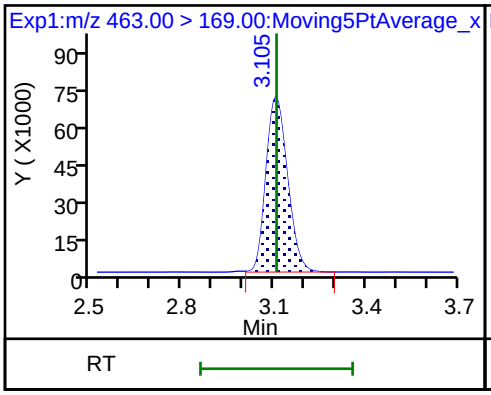
17 Perfluorooctane sulfonic acid



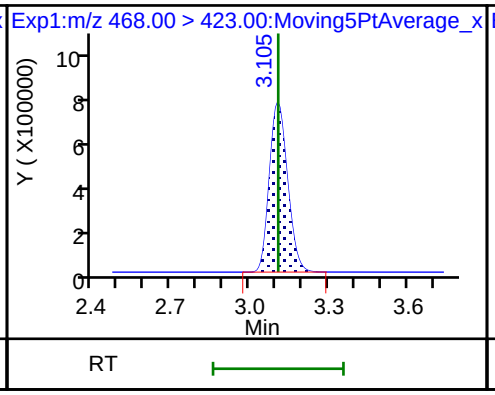
20 Perfluorononanoic acid



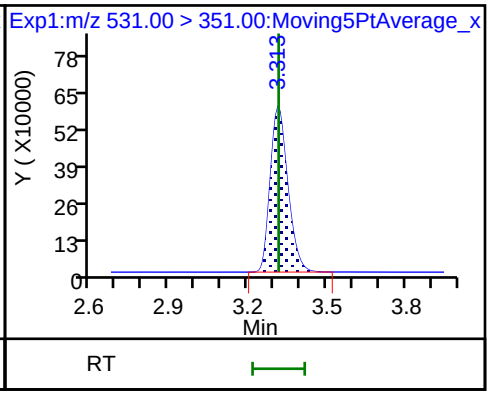
20 Perfluorononanoic acid



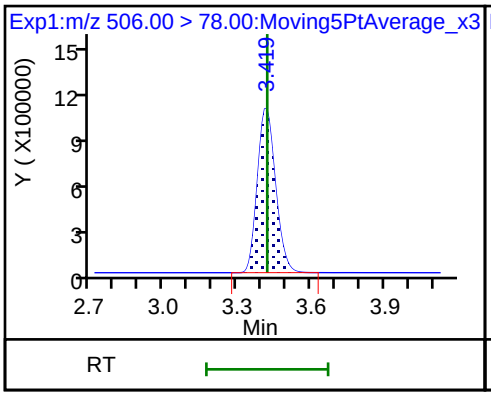
D 19 13C5 PFNA



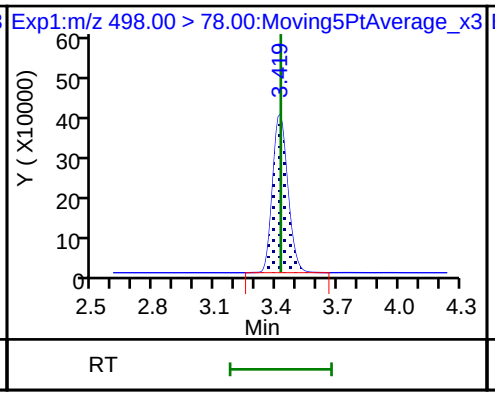
69 9-Chlorohexadecafluoro-3-oxanonane



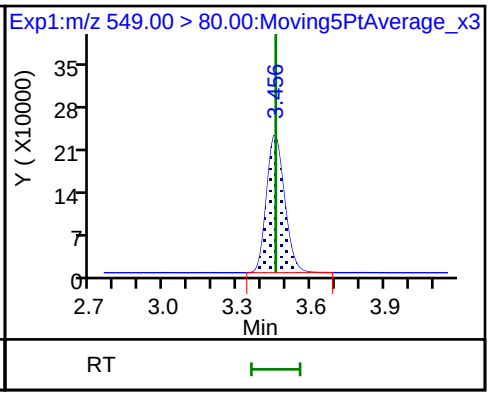
D 21 13C8 FOSA



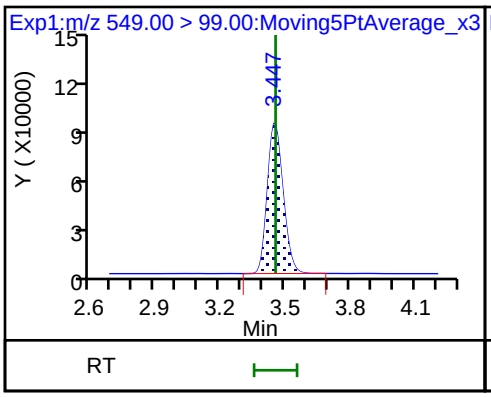
22 Perfluorooctane Sulfonamide



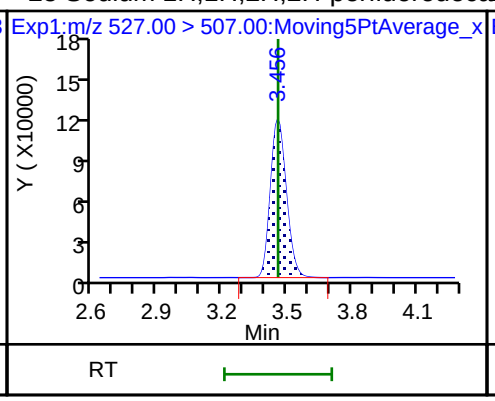
68 Perfluorononanesulfonic acid



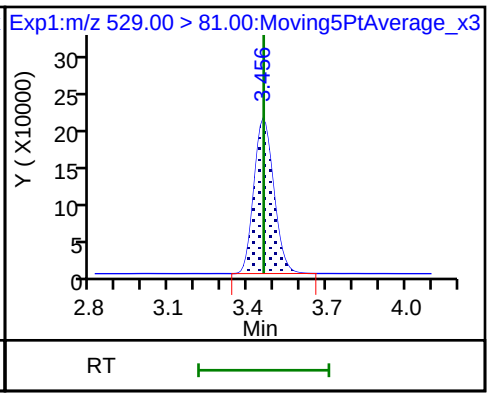
68 Perfluorononanesulfonic acid



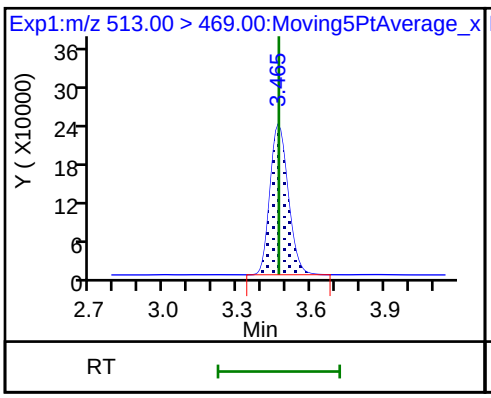
25 Sodium 1H,1H,2H,2H-perfluorodecane



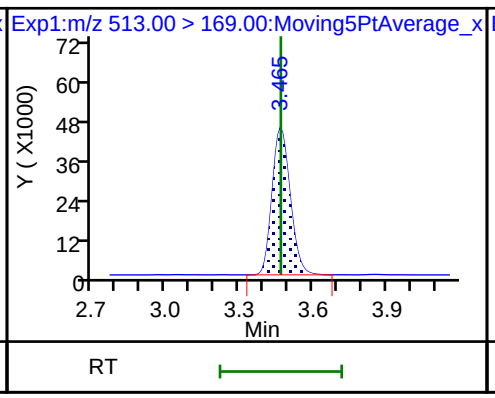
D 26 M2-8:2FTS



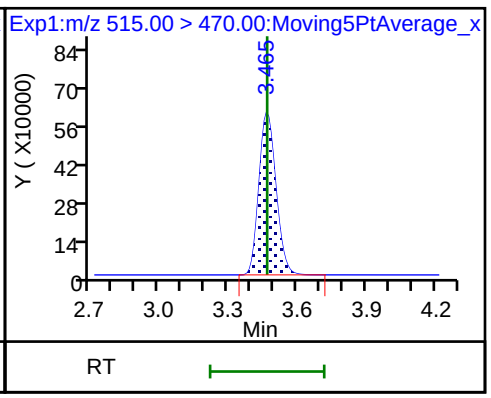
24 Perfluorodecanoic acid



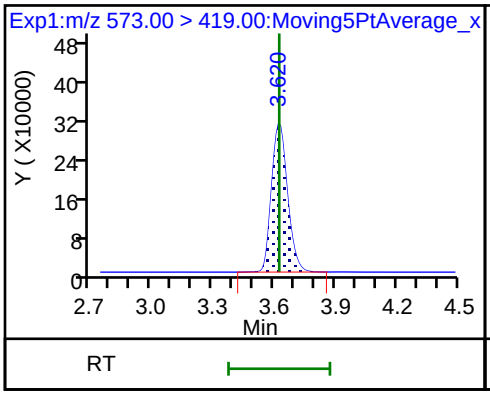
24 Perfluorodecanoic acid



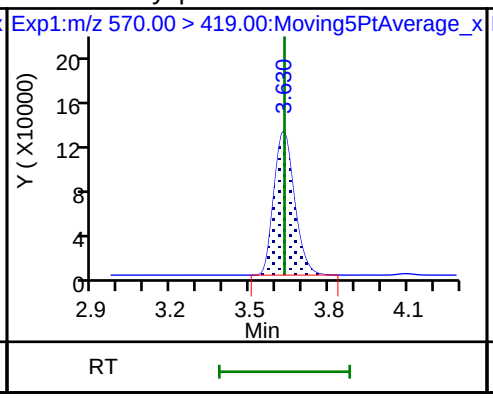
D 23 13C2 PFDA



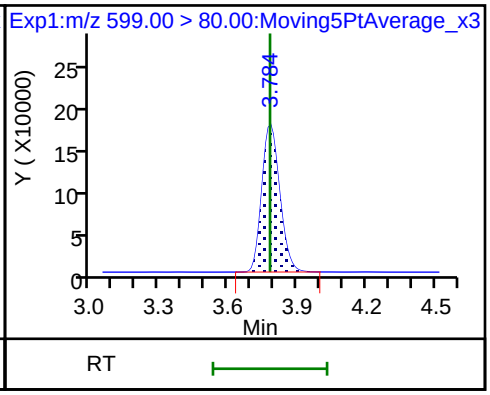
D 27 d3-NMeFOSAA



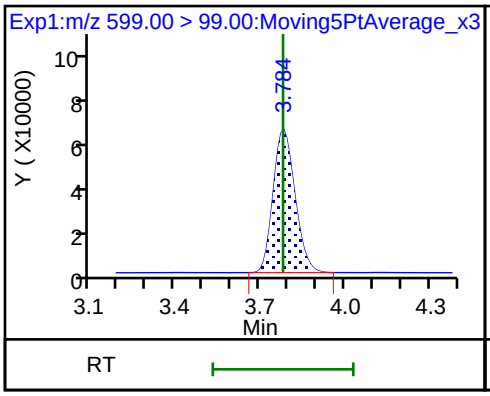
28 N-methyl perfluorooctane sulfonami



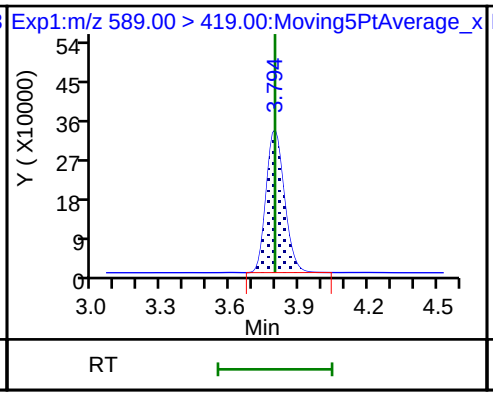
29 Perfluorodecane Sulfonic acid



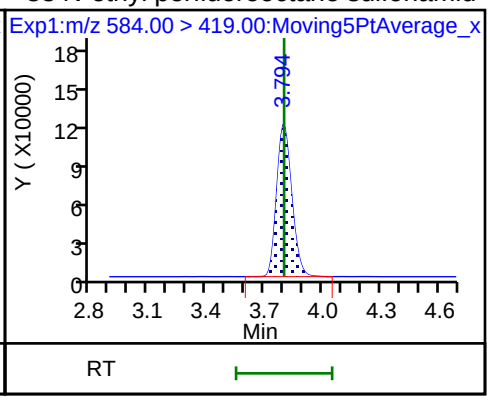
29 Perfluorodecane Sulfonic acid



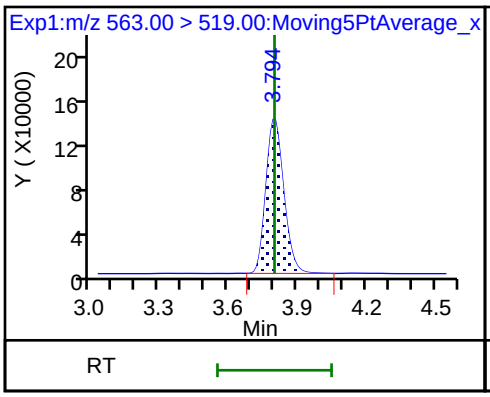
D 32 d5-NEtFOSAA



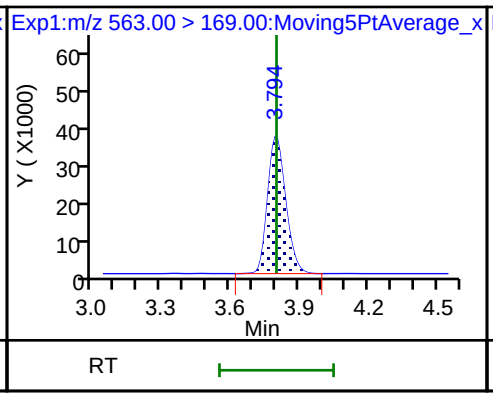
33 N-ethyl perfluorooctane sulfonamid



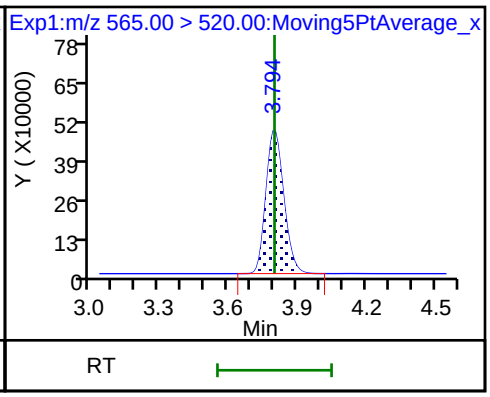
31 Perfluoroundecanoic acid



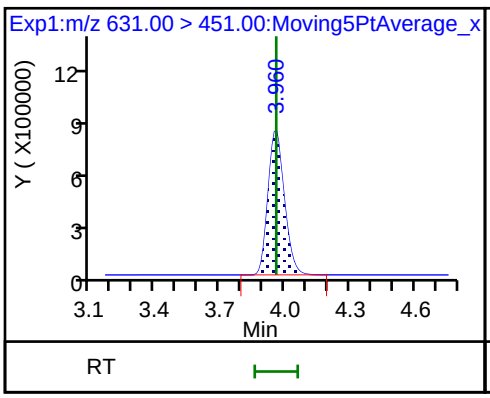
31 Perfluoroundecanoic acid



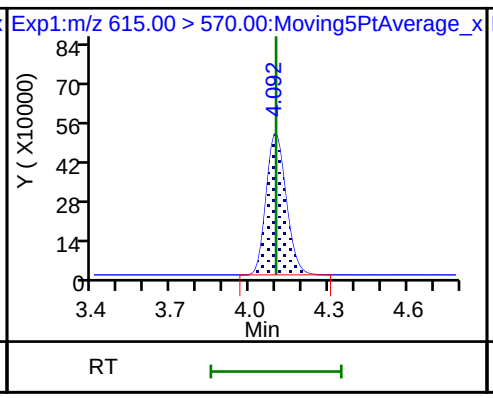
D 30 13C2 PFUnA



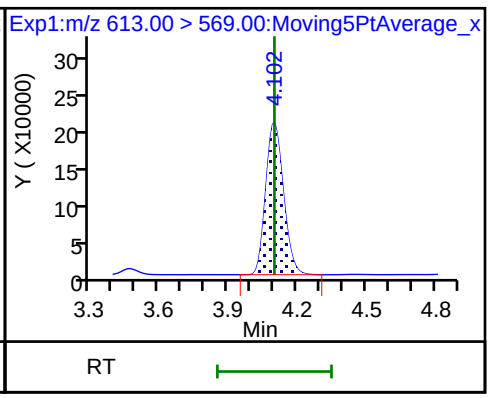
66 11-Chloroeicosafluoro-3-oxaundecan



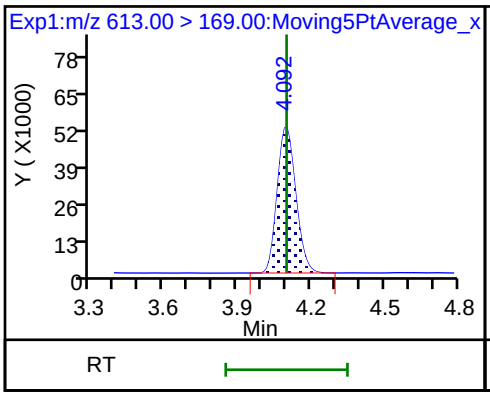
D 36 13C2 PFDoA



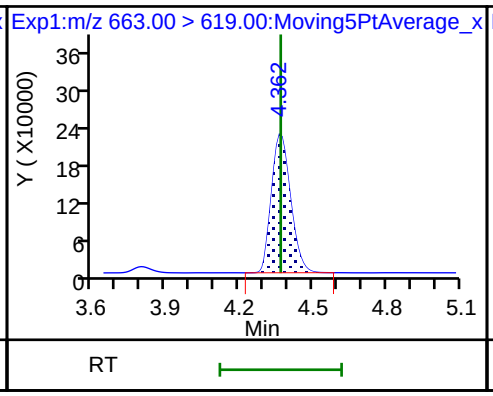
37 Perfluorododecanoic acid



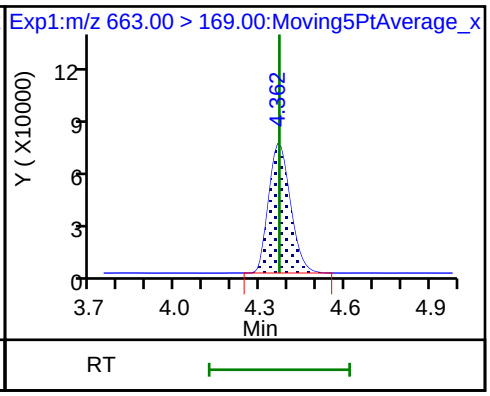
37 Perfluorododecanoic acid



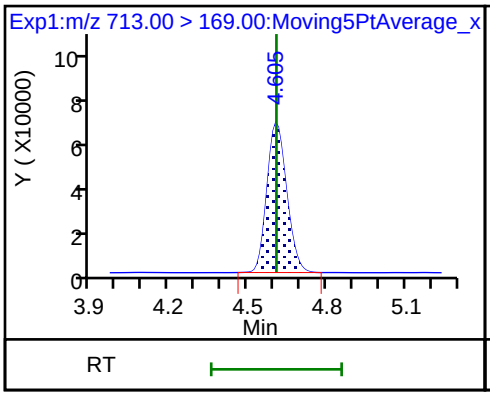
41 Perfluorotridecanoic acid



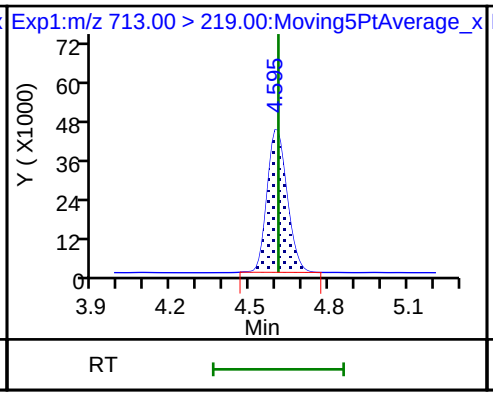
41 Perfluorotridecanoic acid



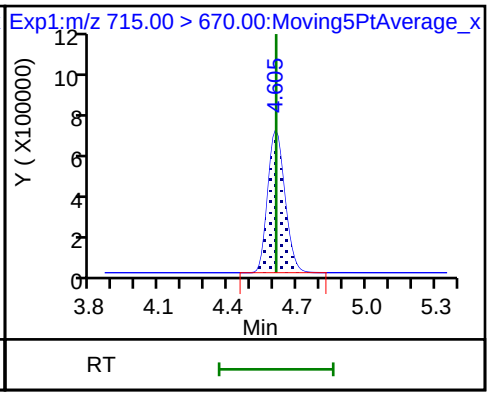
42 Perfluorotetradecanoic acid



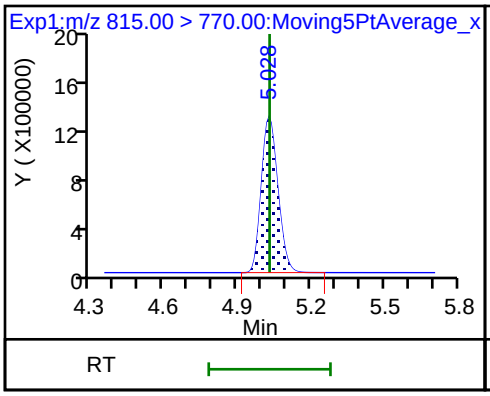
42 Perfluorotetradecanoic acid



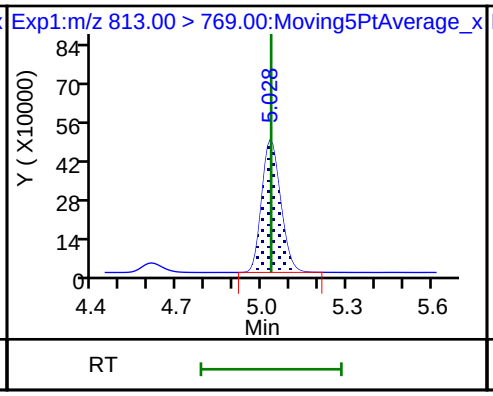
D 43 13C2-PFTeDA



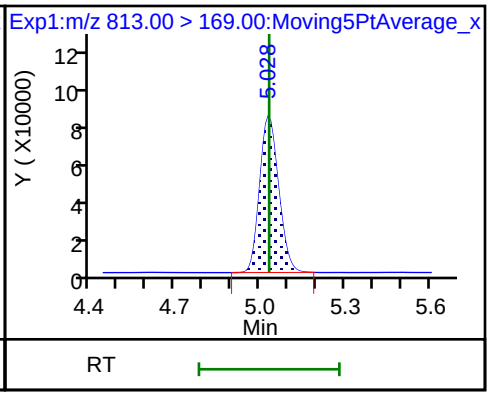
D 44 13C2-PFHxDA



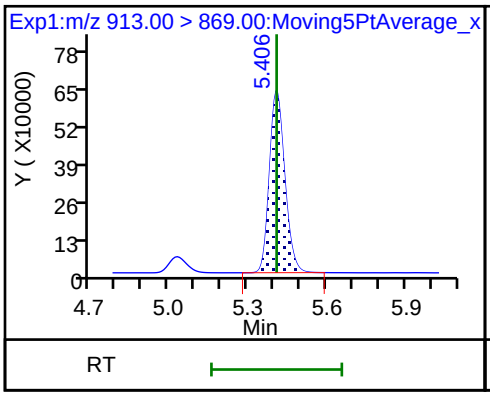
45 Perfluorohexadecanoic acid



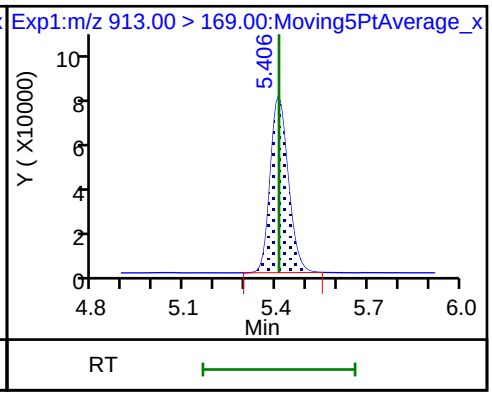
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_007.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-May-2018 15:52:36 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L6-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 16-May-2018 09:20:14 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 16-May-2018 08:02:38

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.463	1.462	0.001	1.000	12934647	5.15		103	7697	
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.462	0.001	1.000	6751655	2.54		102	43716	
D 3 13C5-PFPeA										
267.90 > 223.00	1.747	1.744	0.003	0.563	4328345	2.54		102	61811	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.747	1.745	0.002	1.000	10150448	4.97		99.3	5494	
D 47 13C3-PFBS										
301.90 > 83.00	1.783	1.780	0.003	1.000	87185	2.27		97.4	537	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.783	1.783	0.0	1.000	13863265	4.73		107	62707	
298.90 > 99.00	1.783	1.783	0.0	1.000	5921678		2.34(1.25-3.74)	107	33570	
D 60 M2-4:2FTS										
329.00 > 81.00	2.003	1.999	0.004	1.000	667183	2.36		101	8785	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.003	2.000	0.003	1.000	3112425	5.01		107	179105	
D 7 13C2 PFHxA										
315.00 > 270.00	2.037	2.037	0.0	1.000	4583820	2.52		101	77348	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.037	2.037	0.0	1.000	9544553	5.06		101	17429	
313.00 > 119.00	2.037	2.037	0.0	1.000	864980		11.03(5.03-15.10)	101	12137	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.060	2.059	0.001	1.000	13112812	5.03		107	135793	
349.00 > 99.00	2.060	2.059	0.001	1.000	4899363		2.68(1.36-4.07)	107	39200	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.139	2.134	0.005	1.000	229197	2.55		102	4744	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.139	2.134	0.005	1.000	1471265	5.25		105	11755	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.372	2.374	-0.002	1.000	9093863	4.98		99.7	11594	
363.00 > 169.00	2.372	2.374	-0.002	1.000	3608375		2.52(1.13-3.40)	99.7	18118	
D 9 13C4-PFHpA										
367.00 > 322.00	2.372	2.374	-0.002	1.000	4318388	2.48		99.3	70096	
D 11 18O2 PFHxS										
403.00 > 84.00	2.385	2.386	-0.001	1.000	5191664	2.41		102	44906	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.385	2.386	-0.001	1.000	10650638	4.31		94.6	33451	
399.00 > 99.00	2.385	2.386	-0.001	1.000	3614555		2.95(1.50-4.49)	94.6	11846	
65 Adona										
377.00 > 251.00	2.418	2.418	0.0	1.000	25273614	5.01		100	98920	
377.00 > 85.00	2.418	2.418	0.0	1.000	15668730		1.61(0.84-2.53)	100	80776	
D 12 M2-6:2FTS										
429.00 > 81.00	2.705	2.707	-0.002	1.000	867962	2.26		95.2	14854	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.705	2.707	-0.002	1.000	3021313	4.70		99.2	17776	
D 14 13C4 PFOA										
417.00 > 372.00	2.728	2.731	-0.003	1.000	4079623	2.48		99.2	69266	
* 62 13C2-PFOA										
415.00 > 370.00	2.736	2.734	0.002		4344720	2.50			52764	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.736	2.734	0.002	1.003	9649258	5.02		100	3647	
413.00 > 169.00	2.728	2.734	-0.006	1.000	4988335		1.93(0.84-2.52)	100	15918	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.736	2.739	-0.003	1.000	9775395	4.98		105	59538	
449.00 > 99.00	2.736	2.739	-0.003	1.000	2650153		3.69(1.94-5.82)	105	23801	
D 18 13C4 PFOS										
503.00 > 80.00	3.100	3.104	-0.004	1.000	3520558	2.38		99.7	21492	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.100	3.105	-0.005	1.000	7964833	4.60		99.1	40574	
499.00 > 99.00	3.100	3.105	-0.005	1.000	1714762		4.64(2.31-6.93)	99.1	16094	
D 19 13C5 PFNA										
468.00 > 423.00	3.100	3.107	-0.007	1.000	3359491	2.50		99.8	58281	
20 Perfluorononanoic acid										
463.00 > 419.00	3.100	3.107	-0.007	1.000	7125949	5.01		100	9626	
463.00 > 169.00	3.100	3.107	-0.007	1.000	1697389		4.20(1.90-5.69)	100	38936	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.310	3.316	-0.006	1.000	13260701	5.02		108	75928	
D 21 13C8 FOSA										
506.00 > 78.00	3.415	3.420	-0.005	1.000	4976852	2.57		103	44899	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.415	3.422	-0.007	1.000	10364812	5.35		107	72768	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.452	3.455	-0.003	1.000	5665707	5.08		106	58348	
549.00 > 99.00	3.452	3.455	-0.003	1.000	2073279		2.73(1.33-3.97)	106	26932	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.452	3.458	-0.006	1.000	2834764	5.17		108	68462	
D 26 M2-8:2FTS										
529.00 > 81.00	3.452	3.459	-0.007	1.000	972368	2.23		92.9	15318	
D 23 13C2 PFDA										
515.00 > 470.00	3.462	3.468	-0.006	1.000	2812041	2.46		98.3	45289	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.462	3.468	-0.006	1.000	5744357	5.25		105	23436	
513.00 > 169.00	3.462	3.468	-0.006	1.000	1030600		5.57(2.36-7.09)	105	28166	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.618	3.624	-0.006	1.000	1561125	2.47		98.9	24281	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.628	3.631	-0.003	1.003	3278986	5.17		103	22410	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.772	3.781	-0.009	1.000	5009746	5.07		105	48361	
599.00 > 99.00	3.772	3.781	-0.009	1.000	1665176		3.01(1.39-4.16)	105	27808	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.783	3.794	-0.011	1.000	1507014	2.33		93.0	7190	
D 30 13C2 PFUnA										
565.00 > 520.00	3.794	3.800	-0.006	1.000	2262574	2.50		99.8	34652	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.794	3.800	-0.006	1.000	3717634	4.92		98.4	15246	
563.00 > 169.00	3.794	3.800	-0.006	1.000	938877		3.96(2.12-6.36)	98.4	21508	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.794	3.800	-0.006	1.003	3130989	5.53		111	62545	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.952	3.958	-0.006	1.000	20326205	5.07		108	133460	
D 36 13C2 PFDoA										
615.00 > 570.00	4.097	4.099	-0.002	1.000	2544838	2.61		104	17180	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.097	4.100	-0.003	1.000	5307128	5.00		99.9	4236	
613.00 > 169.00	4.097	4.100	-0.003	1.000	1355731		3.91(2.13-6.40)	99.9	14317	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.360	4.368	-0.008	1.000	5890114	5.06		101	3241	
663.00 > 169.00	4.360	4.368	-0.008	1.000	1785642		3.30(1.25-3.76)	101	15812	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.604	4.608	-0.004	1.000	3113223	2.60		104	13682	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.604	4.608	-0.004	1.000	1571970	5.00		100.0	14331	
713.00 > 219.00	4.593	4.608	-0.015	0.998	1080602		1.45(0.71-2.13)	100.0	15785	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.027	5.030	-0.003	1.000	5054291	2.55		102	12467	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.027	5.031	-0.004	1.000	9889936	5.24		105	2174	
813.00 > 169.00	5.027	5.031	-0.004	1.000	1647631		6.00(2.86-8.58)	105	8949	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.402	5.408	-0.006	1.000	10791279	5.05		101	1744	
913.00 > 169.00	5.402	5.408	-0.006	1.000	1312233		8.22(3.83-11.48)	101	6453	

Reagents:

LCPFC_LL6_00005 Amount Added: 1.00 Units: mL

Report Date: 16-May-2018 09:20:15 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_007.d

Injection Date: 15-May-2018 15:52:36 Instrument ID: A8_N

Lims ID: IC L6 Full

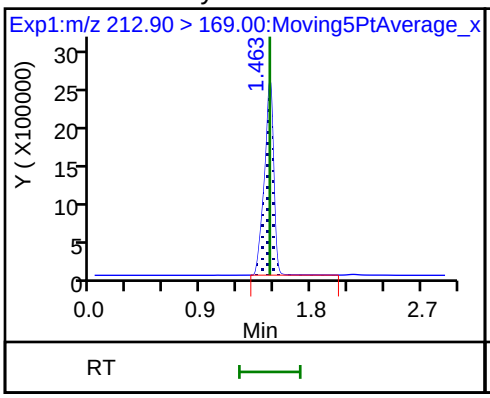
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 15 Worklist Smp#: 7

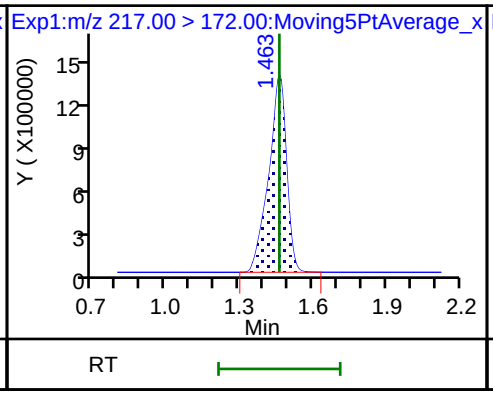
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

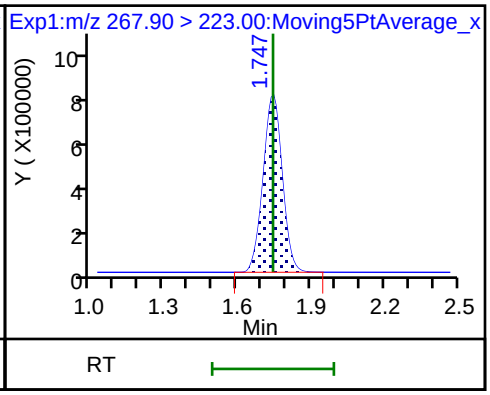
2 Perfluorobutyric acid



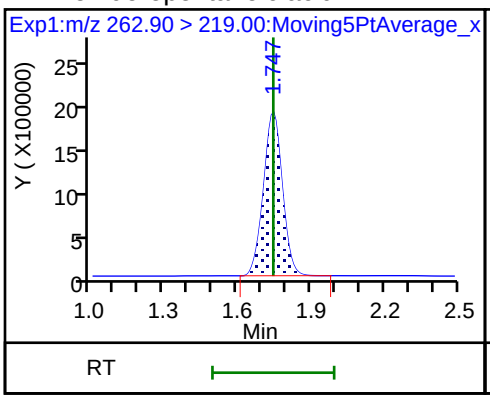
D 1 13C4 PFBA



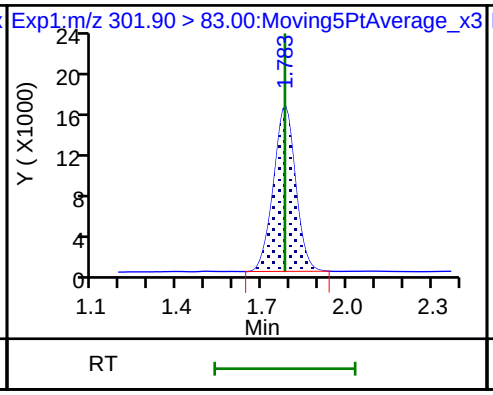
D 3 13C5-PFPeA



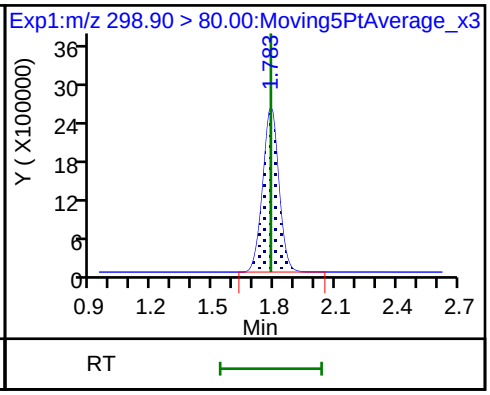
4 Perfluoropentanoic acid



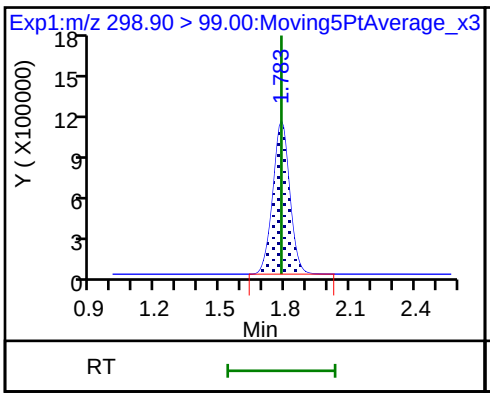
D 47 13C3-PFBS



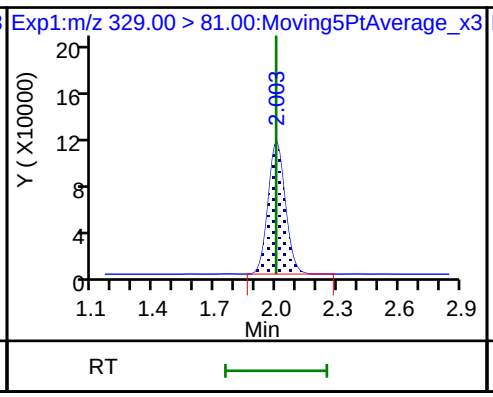
5 Perfluorobutanesulfonic acid



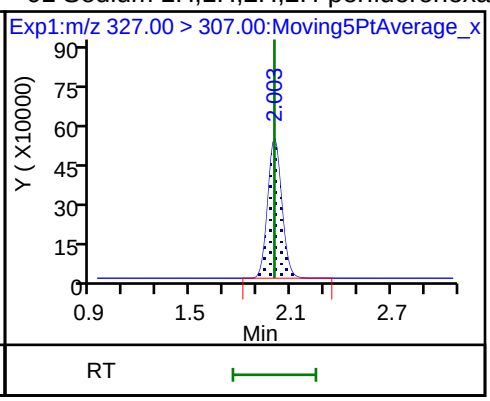
5 Perfluorobutanesulfonic acid



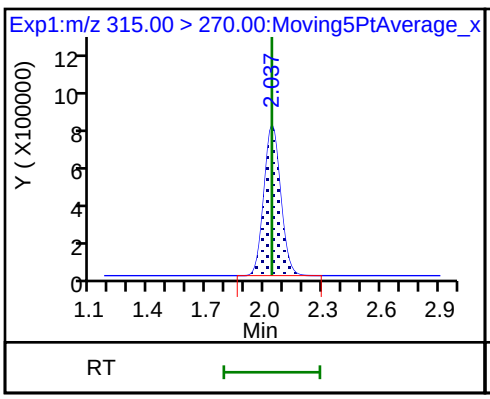
D 60 M2-4:2FTS



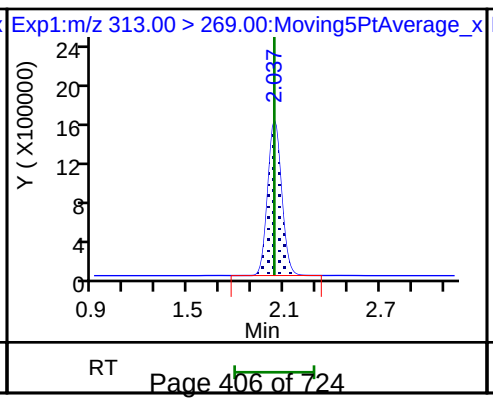
61 Sodium 1H,1H,2H,2H-perfluorohexane



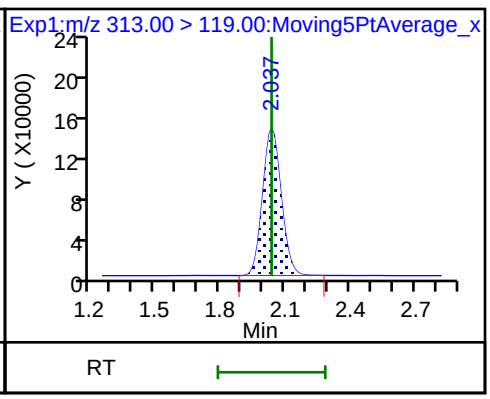
D 7 13C2 PFHxA



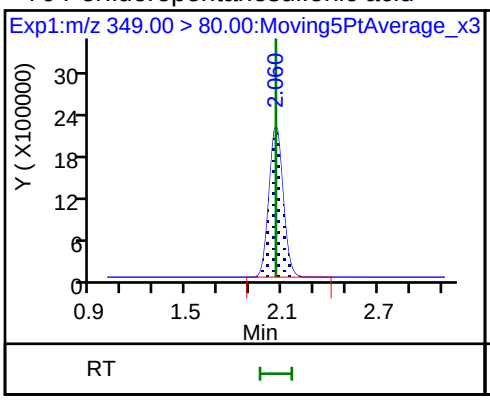
6 Perfluorohexanoic acid



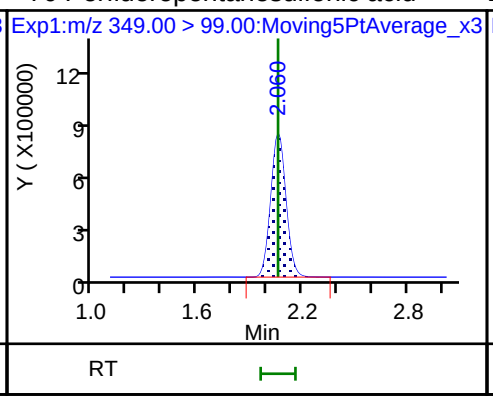
6 Perfluorohexanoic acid



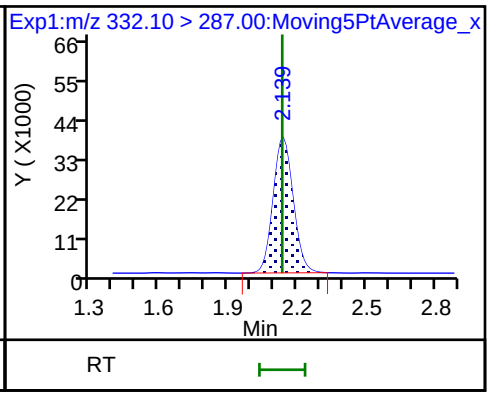
70 Perfluoropentanesulfonic acid



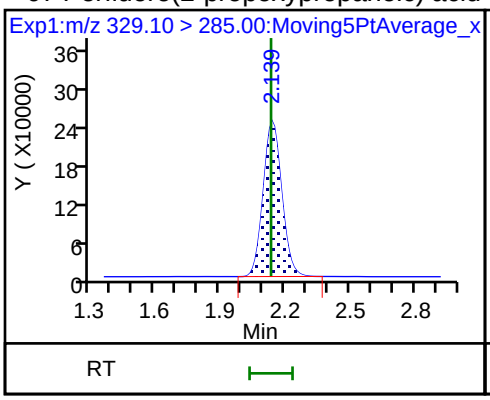
70 Perfluoropentanesulfonic acid



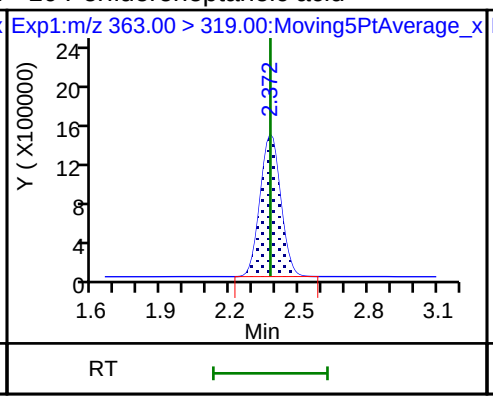
D 64 13C3 HFPO-DA



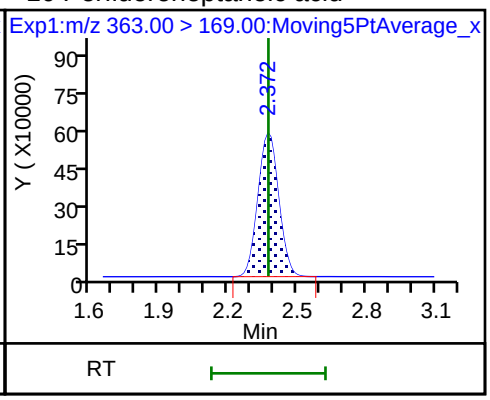
67 Perfluoro(2-propoxypropanoic) acid



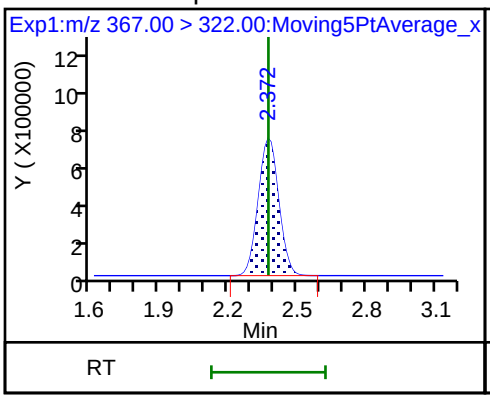
10 Perfluoroheptanoic acid



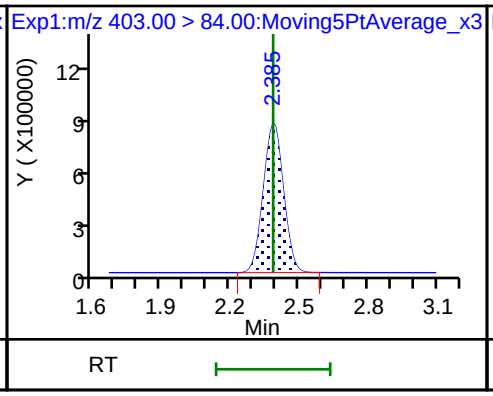
10 Perfluoroheptanoic acid



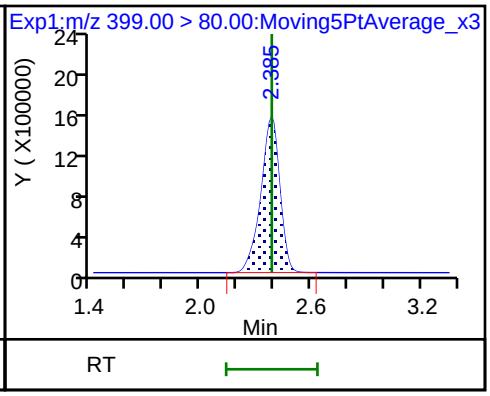
D 9 13C4-PFHpA



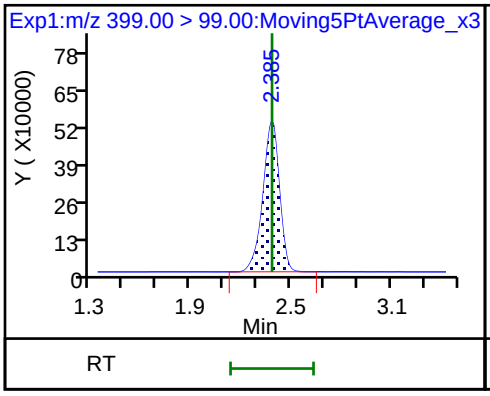
D 11 18O2 PFHxS



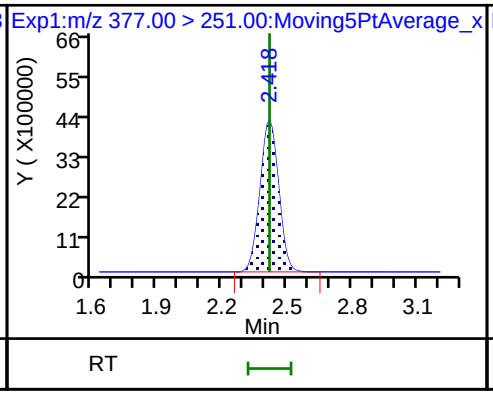
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 Adona



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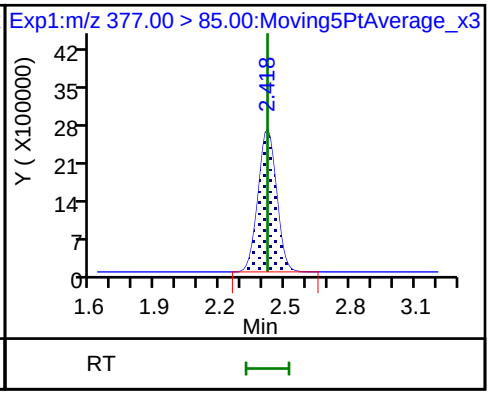
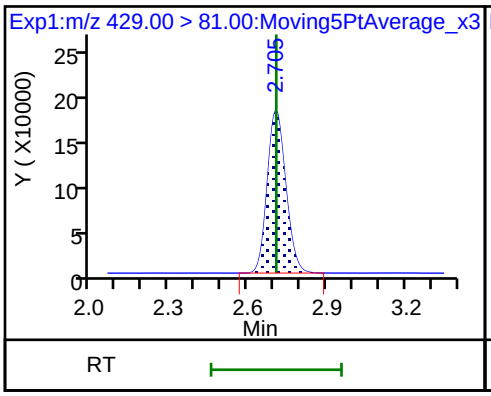
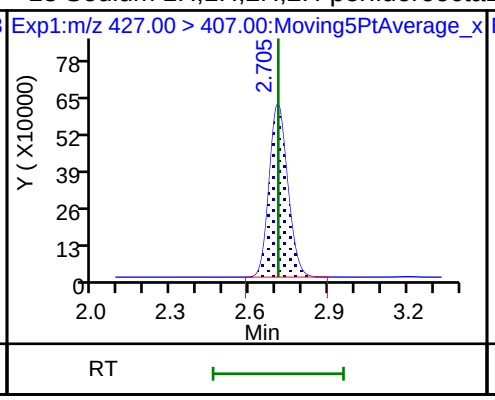


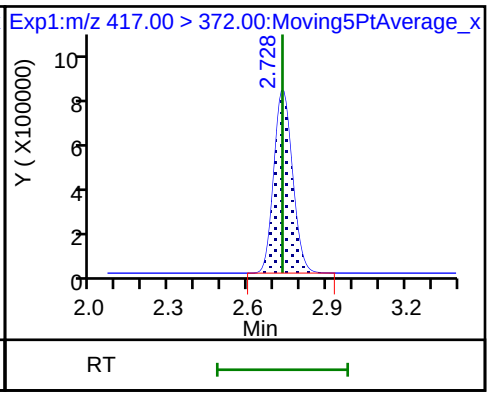
D 12 M2-6:2FTS



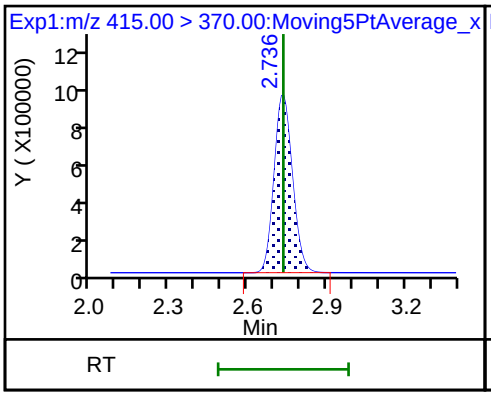
13 Sodium 1H,1H,2H,2H-perfluorooctane



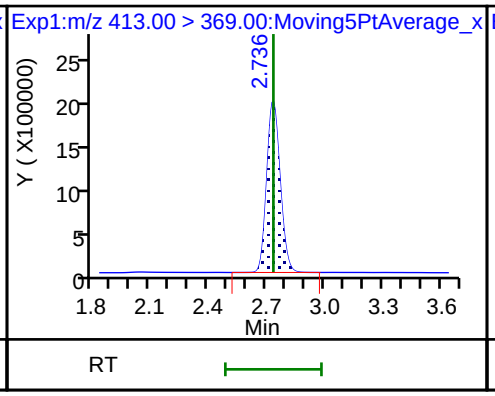
D 14 13C4 PFOA



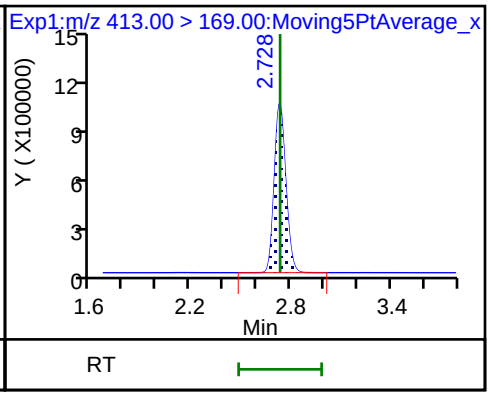
* 62 13C2-PFOA



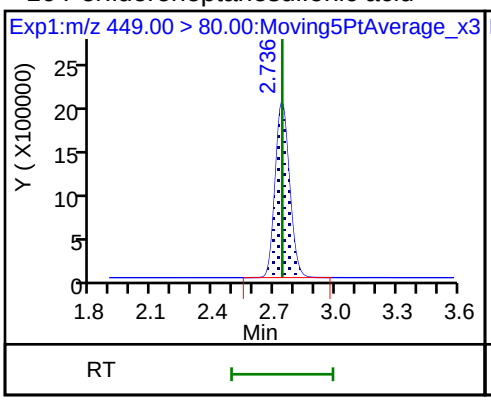
15 Perfluorooctanoic acid



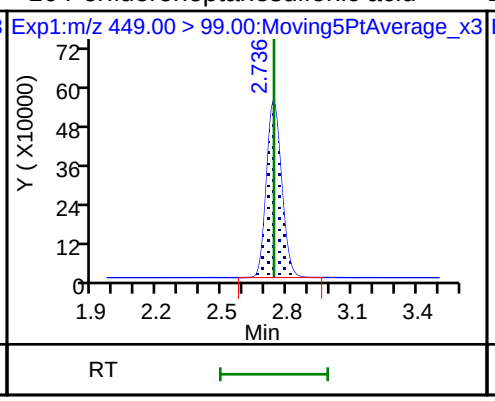
15 Perfluorooctanoic acid



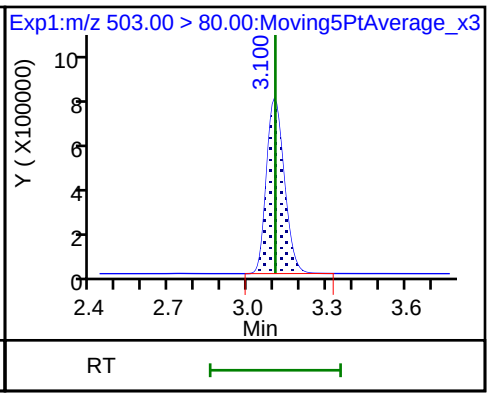
16 Perfluoroheptanesulfonic acid



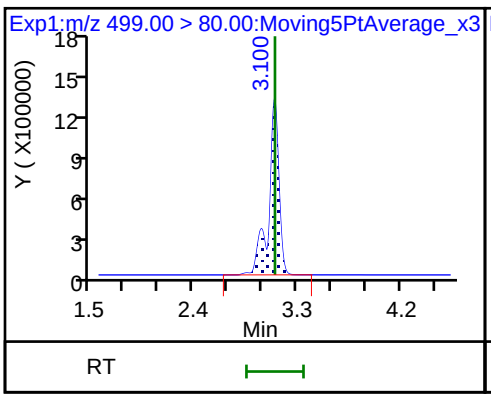
16 Perfluoroheptanesulfonic acid



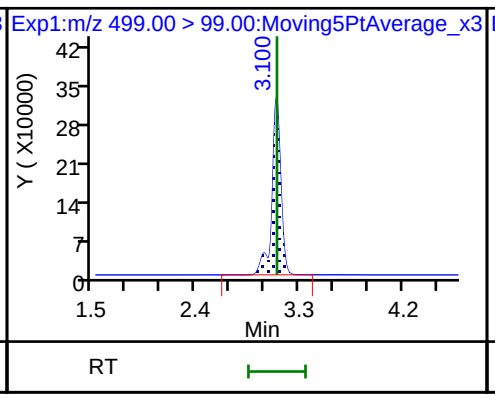
D 18 13C4 PFOS



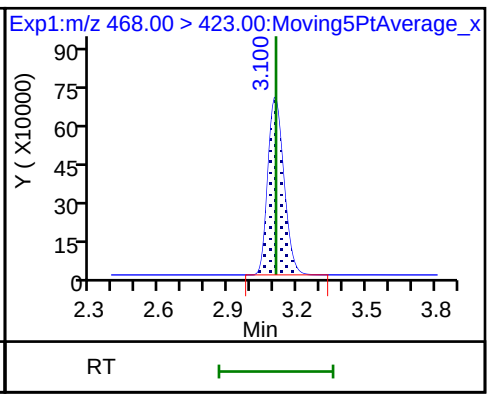
17 Perfluorooctane sulfonic acid



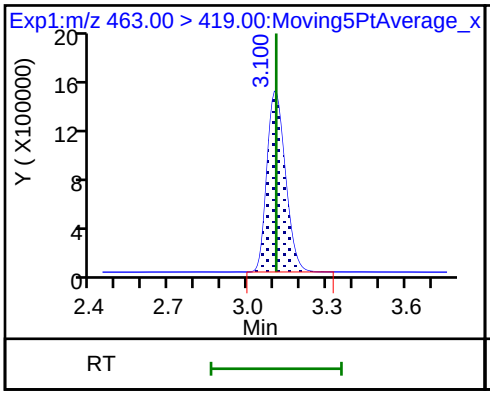
17 Perfluorooctane sulfonic acid



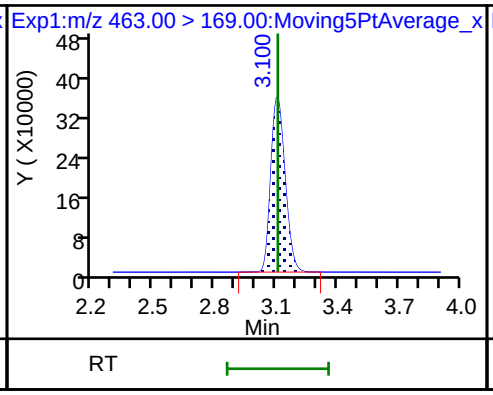
D 19 13C5 PFNA



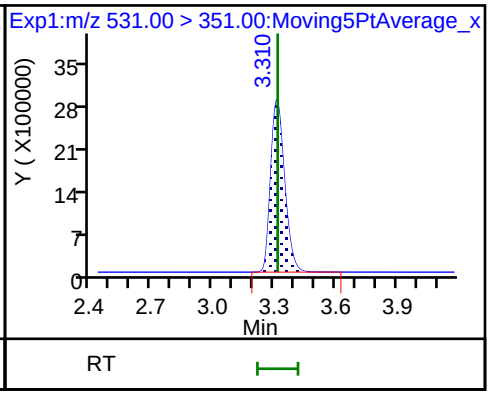
20 Perfluorononanoic acid



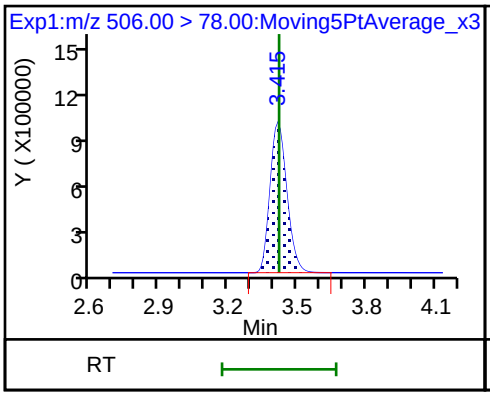
20 Perfluorononanoic acid



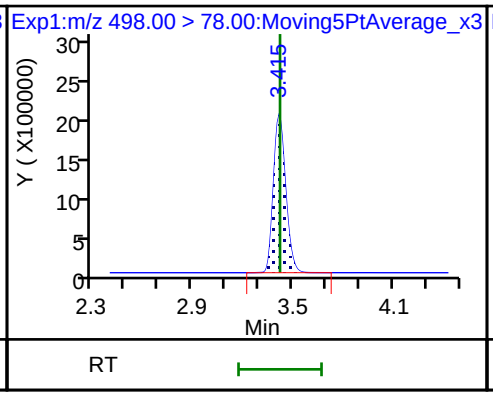
69 9-Chlorohexadecafluoro-3-oxanonane



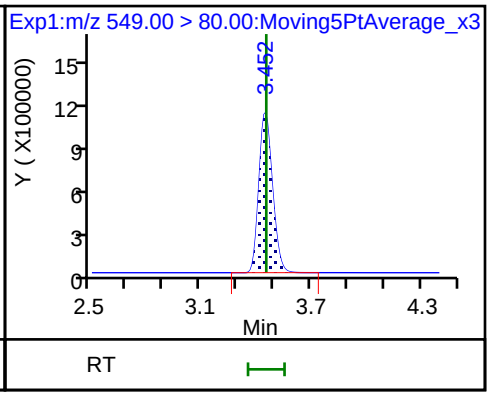
D 21 13C8 FOSA



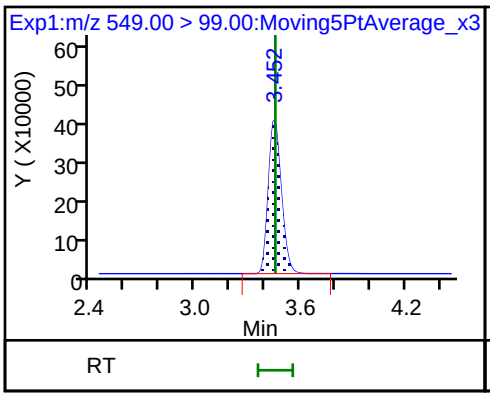
22 Perfluorooctane Sulfonamide



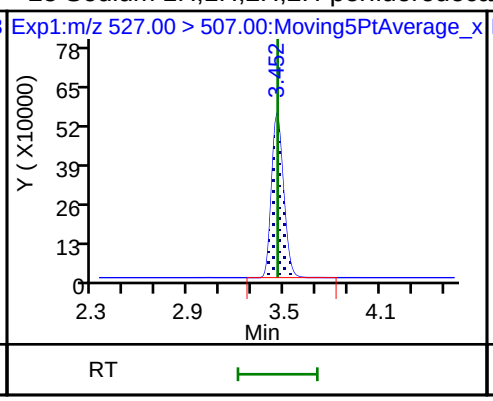
68 Perfluorononanesulfonic acid



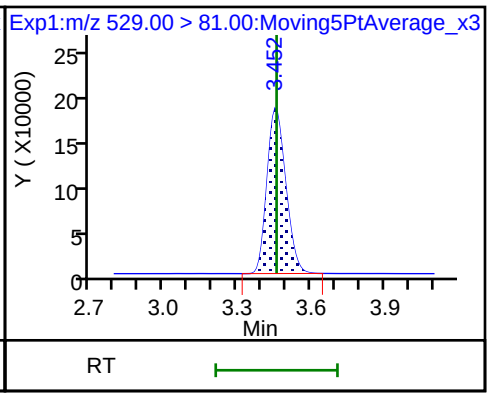
68 Perfluorononanesulfonic acid



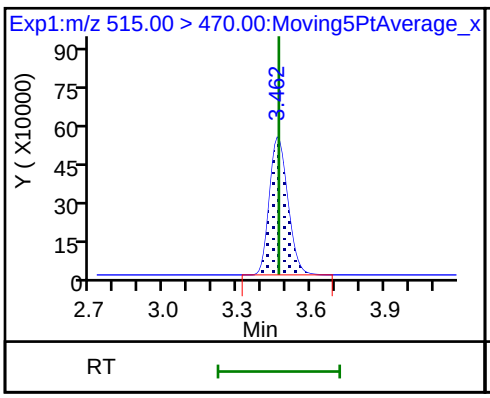
25 Sodium 1H,1H,2H,2H-perfluorodecane



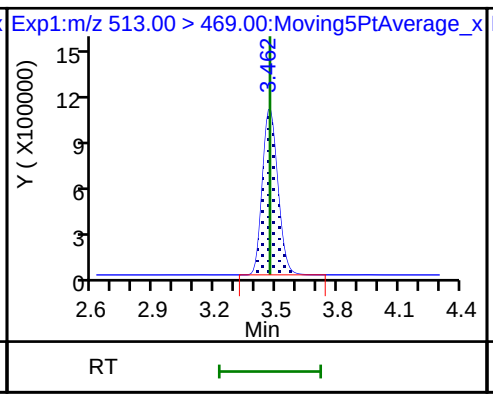
D 26 M2-8:2FTS



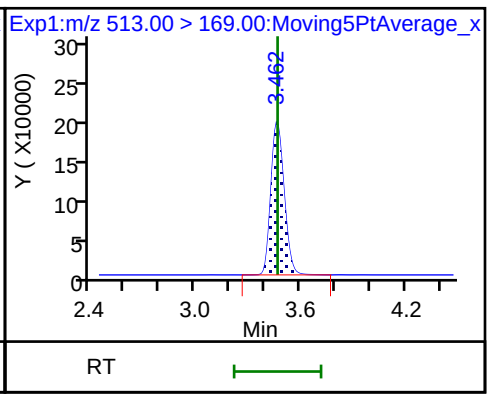
D 23 13C2 PFDA



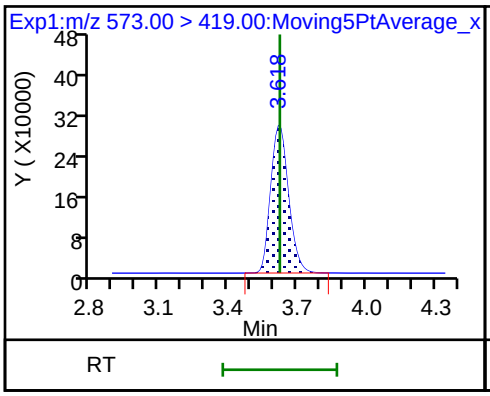
24 Perfluorodecanoic acid



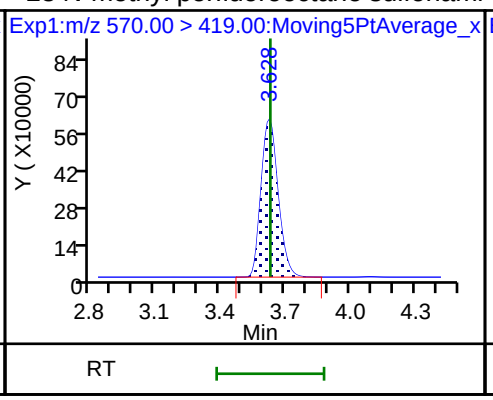
24 Perfluorodecanoic acid



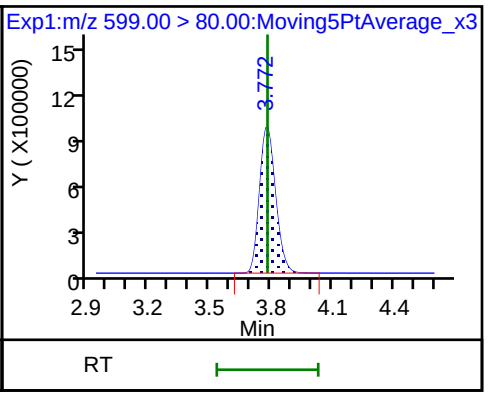
D 27 d3-NMeFOSAA



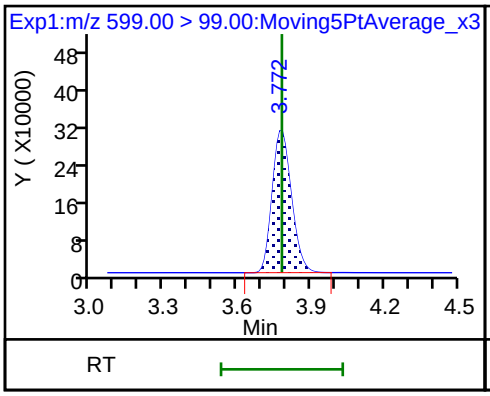
28 N-methyl perfluorooctane sulfonami



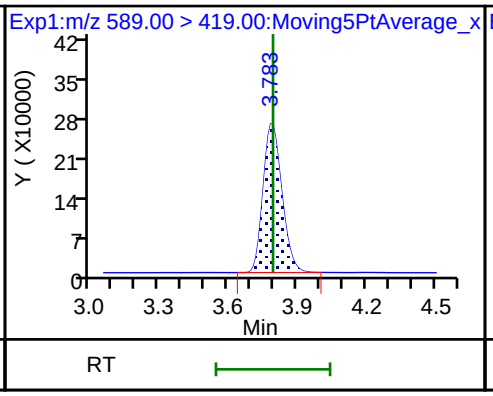
29 Perfluorodecane Sulfonic acid



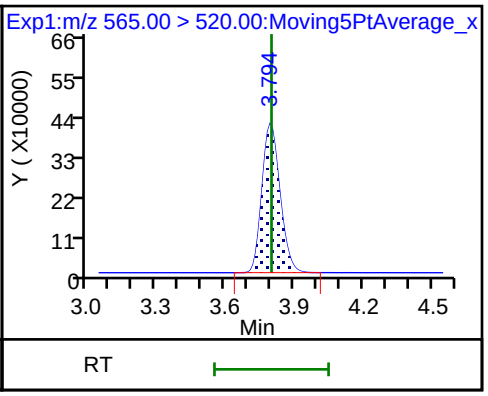
29 Perfluorodecane Sulfonic acid



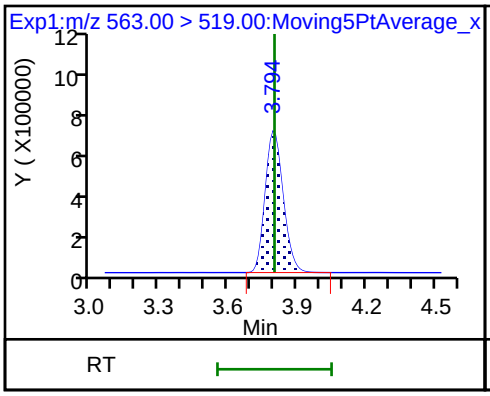
D 32 d5-NEtFOSAA



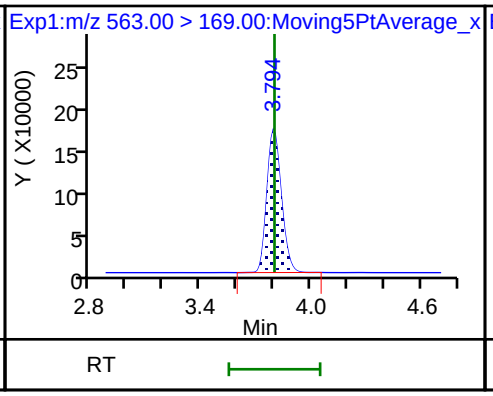
D 30 13C2 PFUnA



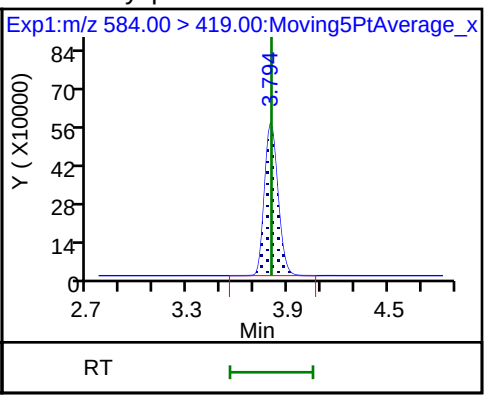
31 Perfluoroundecanoic acid



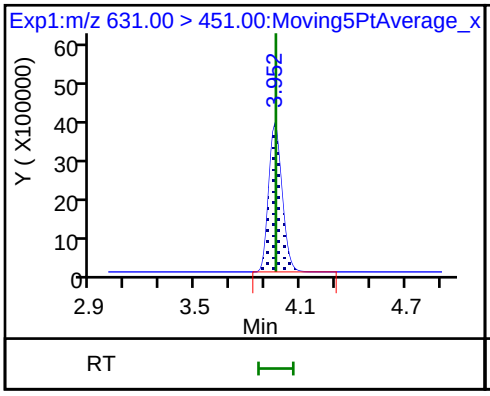
31 Perfluoroundecanoic acid



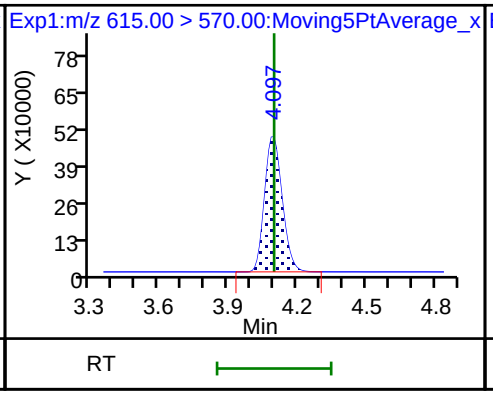
33 N-ethyl perfluorooctane sulfonamid



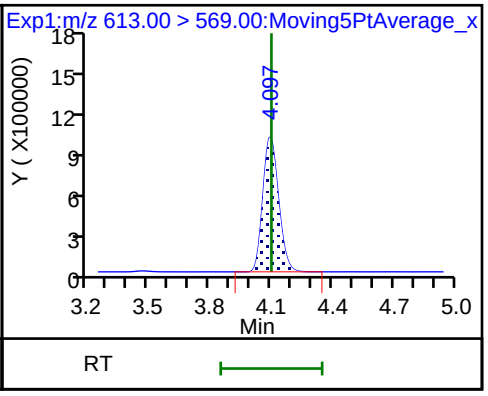
66 11-Chloroeicosafluoro-3-oxaundecan



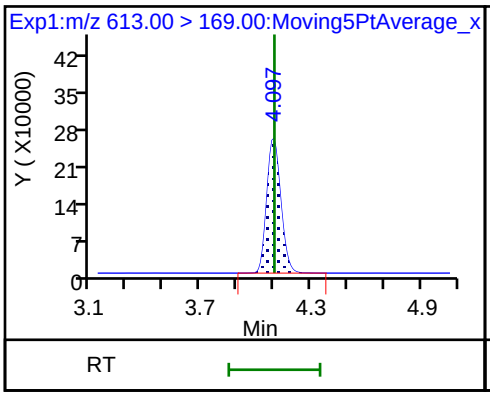
D 36 13C2 PFDoA



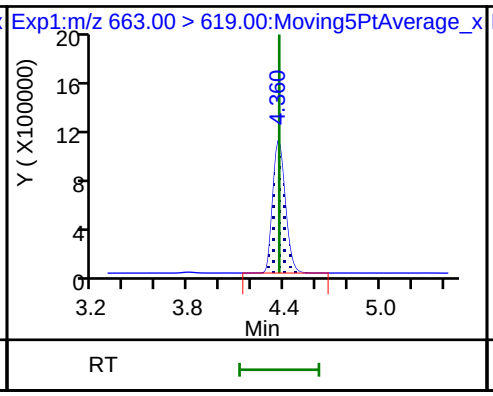
37 Perfluorododecanoic acid



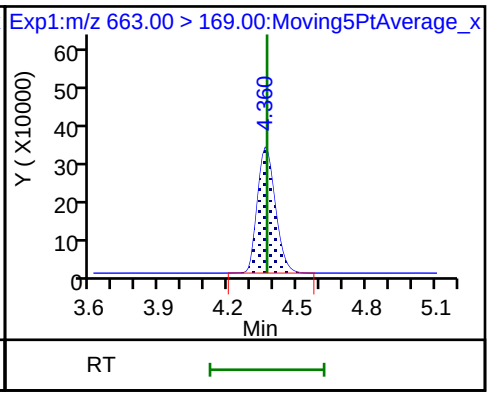
37 Perfluorododecanoic acid



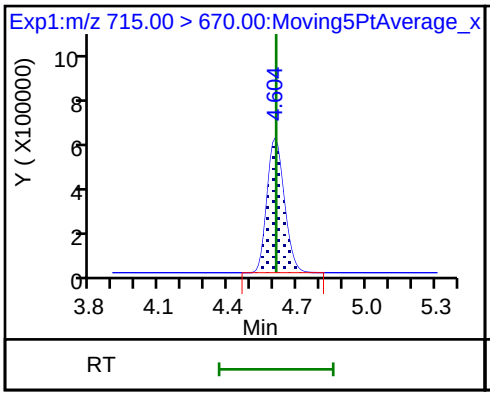
41 Perfluorotridecanoic acid



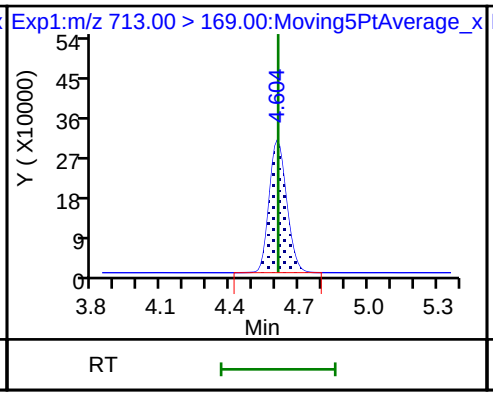
41 Perfluorotridecanoic acid



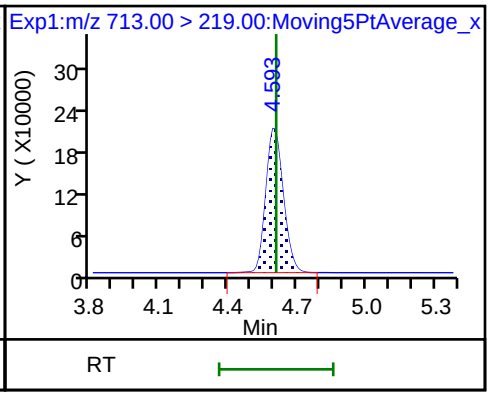
D 43 13C2-PFTeDA



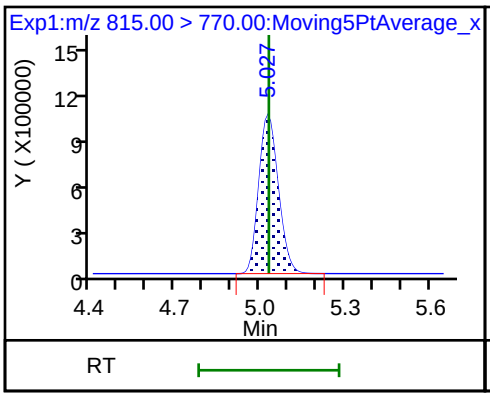
42 Perfluorotetradecanoic acid



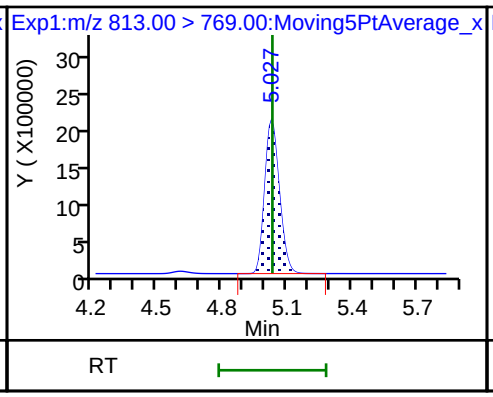
42 Perfluorotetradecanoic acid



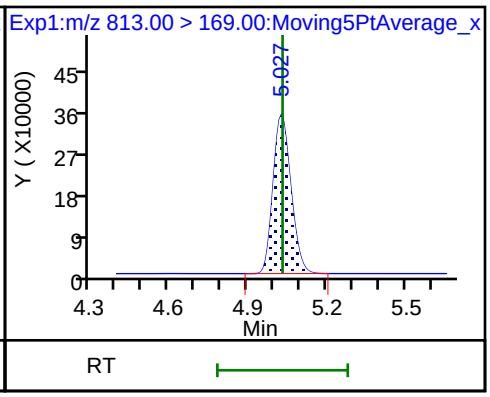
D 44 13C2-PFHxDA



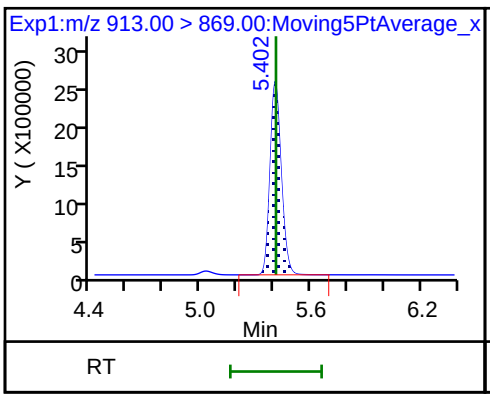
45 Perfluorohexadecanoic acid



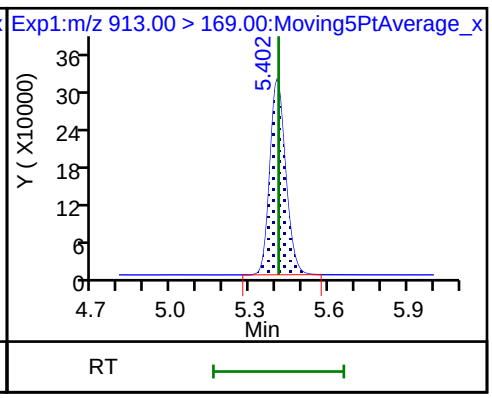
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_008.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 15-May-2018 16:00:25 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L7-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 16-May-2018 09:20:17 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 16-May-2018 08:03:15

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.462	0.001	1.000	7496989	2.56		102	45156	
2 Perfluorobutyric acid										
212.90 > 169.00	1.463	1.462	0.001	1.000	26861072	9.63		96.3	10837	
D 3 13C5-PFPeA										
267.90 > 223.00	1.747	1.744	0.003	0.563	4657025	2.48		99.2	88540	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.747	1.745	0.002	1.000	21497034	9.78		97.8	12049	
D 47 13C3-PFBS										
301.90 > 83.00	1.783	1.780	0.003	1.000	99131	2.34		100	680	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.783	1.783	0.0	1.000	28014178	8.41		95.2	105824	
298.90 > 99.00	1.783	1.783	0.0	1.000	12761331		2.20(1.25-3.74)	95.2	86489	
D 60 M2-4:2FTS										
329.00 > 81.00	1.991	1.999	-0.008	1.000	711767	2.28		97.7	9363	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.991	2.000	-0.009	1.000	6341030	8.97		96.1	269024	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.037	2.037	0.0	1.000	20297289	10.5		105	27327	
313.00 > 119.00	2.037	2.037	0.0	1.000	1901738		10.67(5.03-15.10)	105	32214	
D 7 13C2 PFHxA										
315.00 > 270.00	2.037	2.037	0.0	1.000	4709249	2.35		94.0	113102	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.059	2.059	0.0	1.000	25577332	8.63		92.0	129323	
349.00 > 99.00	2.059	2.059	0.0	1.000	10408450		2.46(1.36-4.07)	92.0	84074	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.138	2.134	0.004	1.005	3404733	10.7		107	25152	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.127	2.134	-0.007	1.000	259760	2.62		105	4872	
D 9 13C4-PFHpA										
367.00 > 322.00	2.372	2.374	-0.002	1.000	4521122	2.36		94.2	103832	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.372	2.374	-0.002	1.000	18928350	9.91		99.1	24502	
363.00 > 169.00	2.372	2.374	-0.002	1.000	7698081		2.46(1.13-3.40)	99.1	38789	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.384	2.386	-0.002	1.000	22174743	8.73		95.9	50739	
399.00 > 99.00	2.384	2.386	-0.002	1.000	7625236		2.91(1.50-4.49)	95.9	19325	
D 11 18O2 PFHxS										
403.00 > 84.00	2.384	2.386	-0.002	1.000	5333305	2.25		95.1	51552	
65 Adona										
377.00 > 251.00	2.418	2.418	0.0	1.000	45699176	8.31		83.1	247060	
377.00 > 85.00	2.418	2.418	0.0	1.000	30434458		1.50(0.84-2.53)	83.1	136808	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.704	2.707	-0.003	1.000	6574970	9.73		103	33349	
D 12 M2-6:2FTS										
429.00 > 81.00	2.704	2.707	-0.003	1.000	913641	2.16		90.8	12419	
D 14 13C4 PFOA										
417.00 > 372.00	2.727	2.731	-0.004	1.000	4465836	2.46		98.4	66165	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.727	2.734	-0.007	1.000	19682065	9.36		93.6	6951	
413.00 > 169.00	2.727	2.734	-0.007	1.000	10699568		1.84(0.84-2.52)	93.6	26447	
* 62 13C2-PFOA										
415.00 > 370.00	2.727	2.734	-0.007		4792823	2.50			55635	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.735	2.739	-0.004	1.000	19707477	9.22		96.8	154276	
449.00 > 99.00	2.735	2.739	-0.004	1.000	5631991		3.50(1.94-5.82)	96.8	51101	
D 18 13C4 PFOS										
503.00 > 80.00	3.102	3.104	-0.002	1.000	3835347	2.35		98.4	14077	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.102	3.105	-0.003	1.000	16474463	8.73		94.1	62171	
499.00 > 99.00	3.102	3.105	-0.003	1.000	3644418		4.52(2.31-6.93)	94.1	38943	
20 Perfluorononanoic acid										
463.00 > 419.00	3.102	3.107	-0.005	1.000	15430529	10.3		103	35152	
463.00 > 169.00	3.102	3.107	-0.005	1.000	3742679		4.12(1.90-5.69)	103	86988	
D 19 13C5 PFNA										
468.00 > 423.00	3.102	3.107	-0.005	1.000	3539647	2.38		95.4	67016	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.313	3.316	-0.003	1.000	27038736	9.39		101	151536	
D 21 13C8 FOSA										
506.00 > 78.00	3.419	3.420	-0.001	1.000	5353791	2.51		100	42855	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.419	3.422	-0.003	1.000	20311842	9.74		97.4	92159	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.447	3.455	-0.008	1.000	11982938	9.86		103	129081	
549.00 > 99.00	3.447	3.455	-0.008	1.000	4517536		2.65(1.33-3.97)	103	36734	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.456	3.458	-0.002	1.000	5636776	9.03		94.3	96836	
D 26 M2-8:2FTS										
529.00 > 81.00	3.456	3.459	-0.003	1.000	1107332	2.30		95.9	17230	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.465	3.468	-0.003	1.000	12079263	10.0		100	50962	
513.00 > 169.00	3.465	3.468	-0.003	1.000	2195345		5.50(2.36-7.09)	100	53198	
D 23 13C2 PFDA										
515.00 > 470.00	3.465	3.468	-0.003	1.000	3099083	2.45		98.2	75403	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.621	3.624	-0.003	1.000	1836867	2.64		105	26085	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.631	3.631	0.0	1.003	7460336	10.0		100	34337	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.776	3.781	-0.005	1.000	10184141	9.45		98.0	62249	
599.00 > 99.00	3.776	3.781	-0.005	1.000	3433819		2.97(1.39-4.16)	98.0	52416	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.787	3.794	-0.007	1.000	1619647	2.27		90.6	6610	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.797	3.800	-0.003	1.003	6246594	10.3		103	48696	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.797	3.800	-0.003	1.000	8334466	10.9		109	30519	
563.00 > 169.00	3.797	3.800	-0.003	1.000	2023681		4.12(2.12-6.36)	109	46537	
D 30 13C2 PFUnA										
565.00 > 520.00	3.797	3.800	-0.003	1.000	2282286	2.28		91.3	46508	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.956	3.958	-0.002	1.000	37717270	8.64		91.8	230708	
D 36 13C2 PFDoA										
615.00 > 570.00	4.092	4.099	-0.007	1.000	2747572	2.55		102	16845	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.092	4.100	-0.008	1.000	11301274	9.85		98.5	8337	
613.00 > 169.00	4.092	4.100	-0.008	1.000	2859090		3.95(2.13-6.40)	98.5	24321	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.369	4.368	0.001	1.000	12033356	9.57		95.7	5602	
663.00 > 169.00	4.369	4.368	0.001	1.000	3833274		3.14(1.25-3.76)	95.7	21634	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.602	4.608	-0.006	1.000	3455816	10.5		105	20553	
713.00 > 219.00	4.602	4.608	-0.006	1.000	2590223		1.33(0.71-2.13)	105	24606	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.602	4.608	-0.006	1.000	3267831	2.47		98.9	13292	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.026	5.030	-0.004	1.000	6039184	2.76		110	15019	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.026	5.031	-0.005	1.000	20254827	9.00		90.0	4013	
813.00 > 169.00	5.026	5.031	-0.005	1.000	3770206		5.37(2.86-8.58)	90.0	15174	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.404	5.408	-0.004	1.000	24654923	9.66		96.6	3137	
913.00 > 169.00	5.397	5.408	-0.011	0.999	3221223		7.65(3.83-11.48)	96.6	9462	

Reagents:

LCPFC_LL7_00004 Amount Added: 1.00 Units: mL

Report Date: 16-May-2018 09:20:19 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2017.05.15LLB_ICAL_008.d

Injection Date: 15-May-2018 16:00:25 Instrument ID: A8_N

Lims ID: IC L7 Full

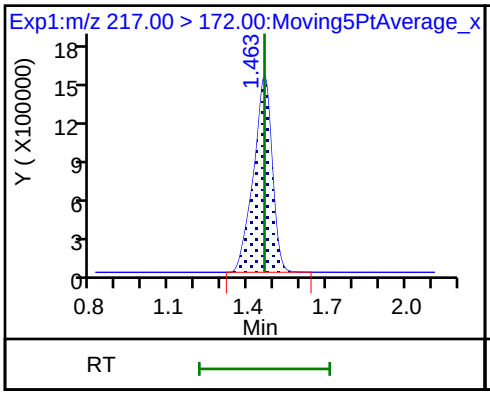
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 8

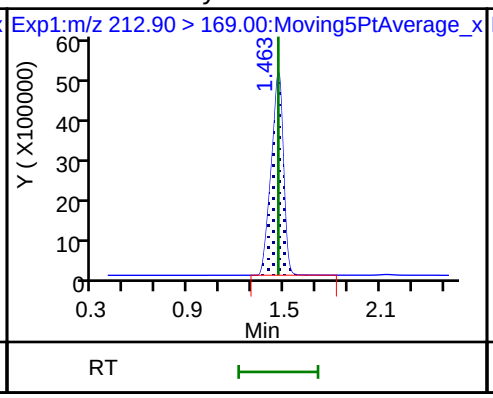
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

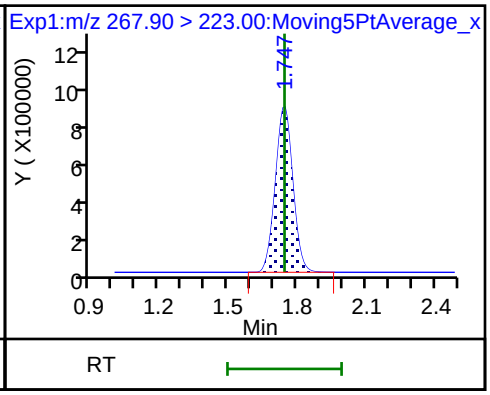
D 1 13C4 PFBA



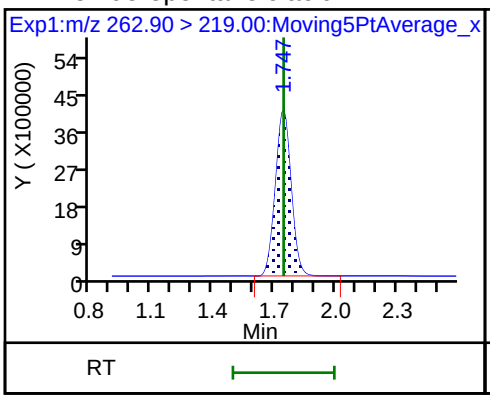
2 Perfluorobutyric acid



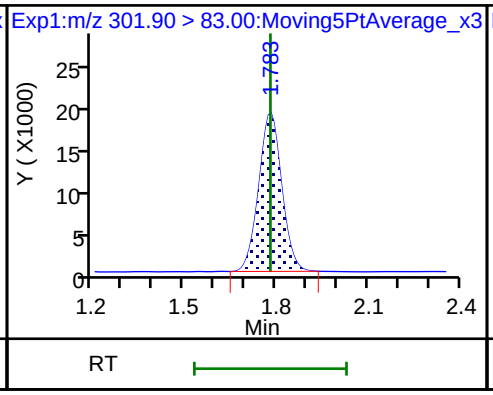
D 3 13C5-PFPeA



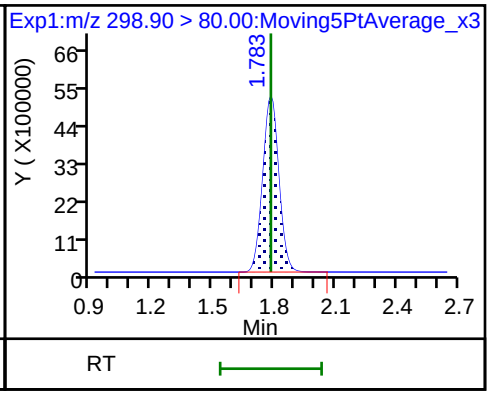
4 Perfluoropentanoic acid



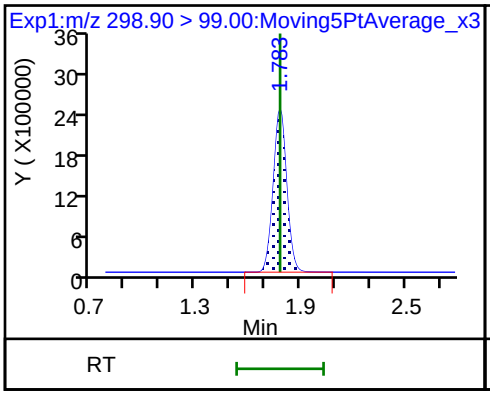
D 47 13C3-PFBS



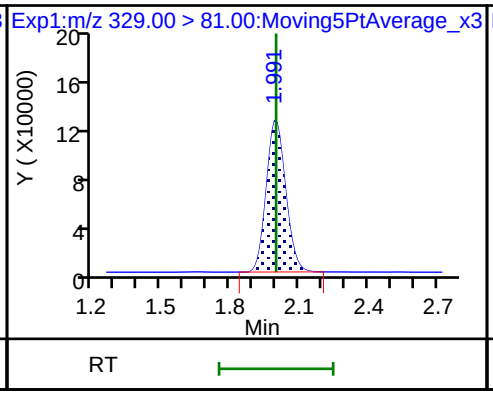
5 Perfluorobutanesulfonic acid



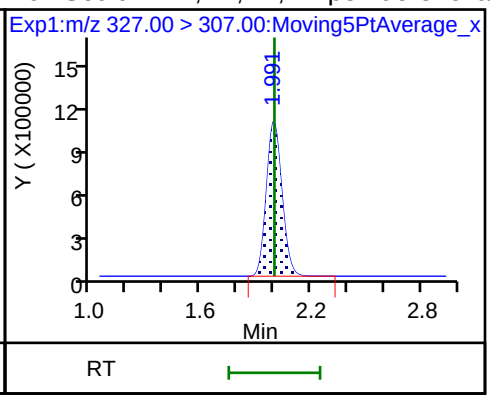
5 Perfluorobutanesulfonic acid



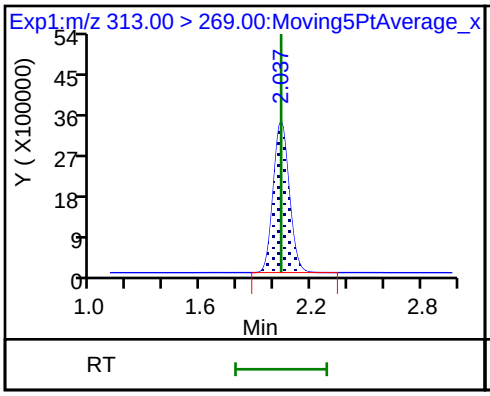
D 60 M2-4:2FTS



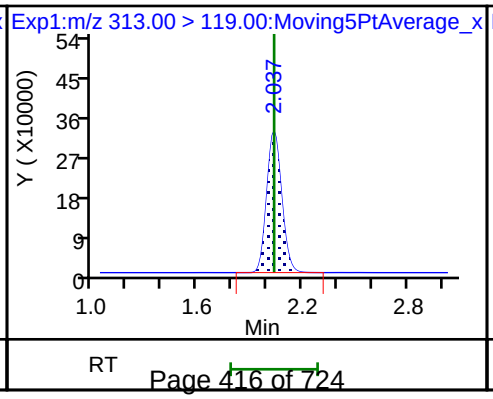
61 Sodium 1H,1H,2H,2H-perfluorohexane



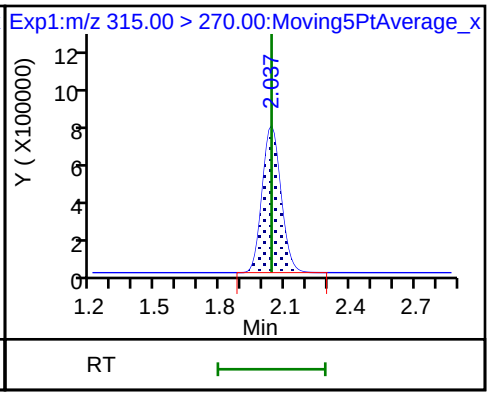
6 Perfluorohexanoic acid



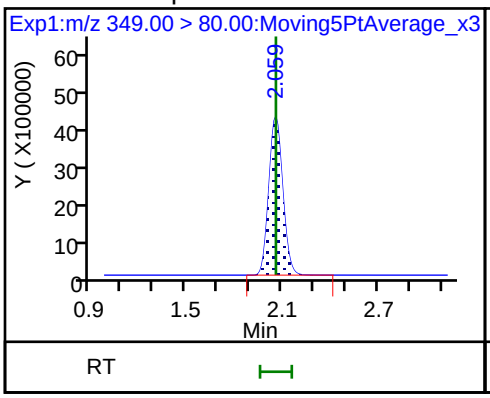
6 Perfluorohexanoic acid



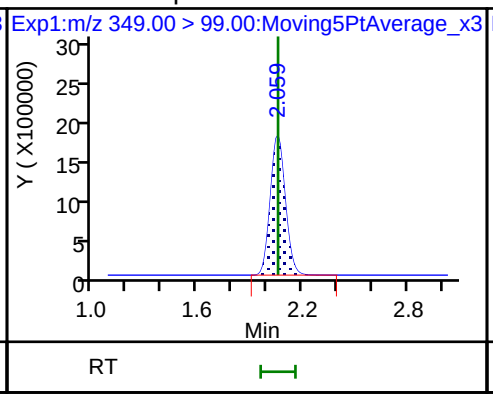
D 7 13C2 PFHxA



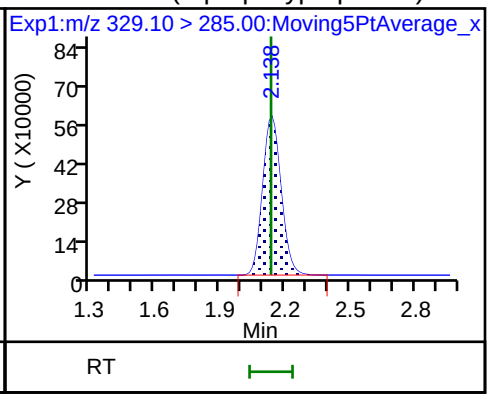
70 Perfluoropentanesulfonic acid



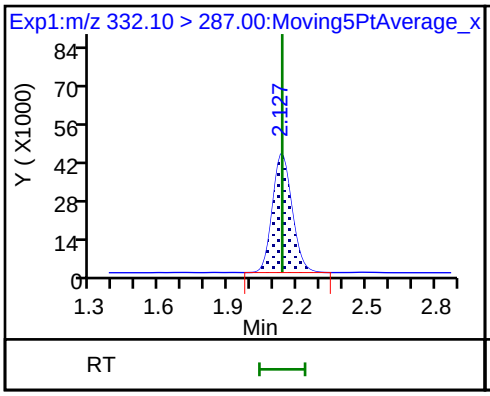
70 Perfluoropentanesulfonic acid



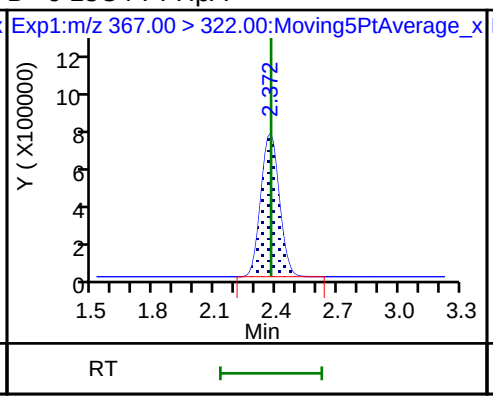
67 Perfluoro(2-propoxypropanoic) acid



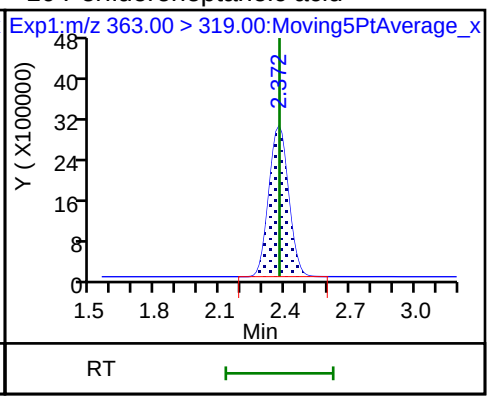
D 64 13C3 HFPO-DA



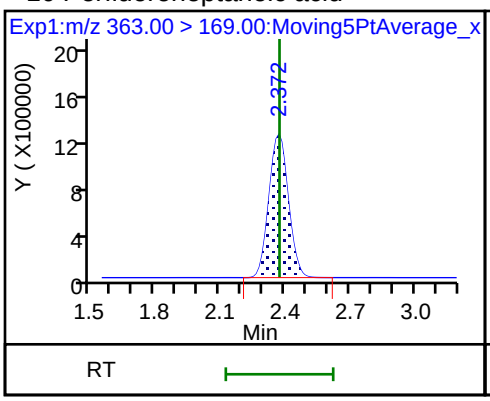
D 9 13C4-PFHpA



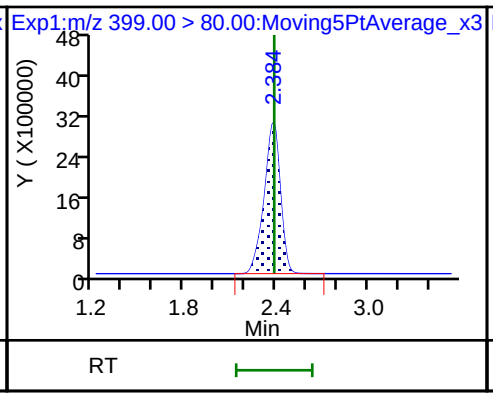
10 Perfluoroheptanoic acid



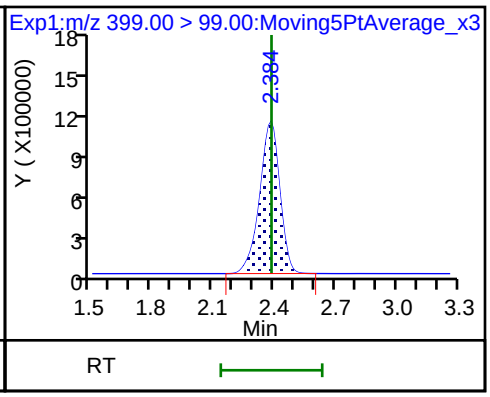
10 Perfluoroheptanoic acid



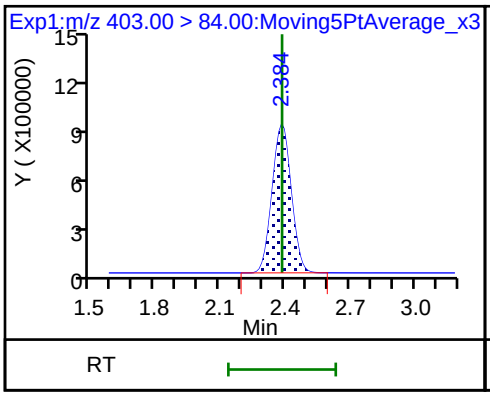
8 Perfluorohexanesulfonic acid



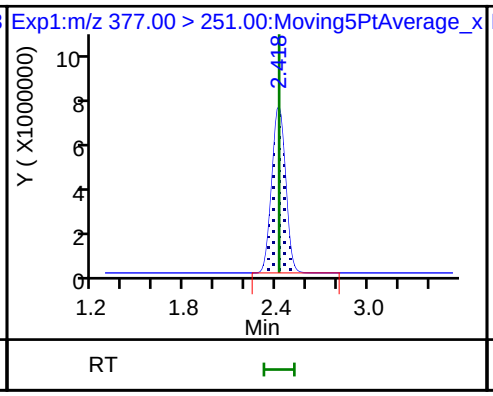
8 Perfluorohexanesulfonic acid



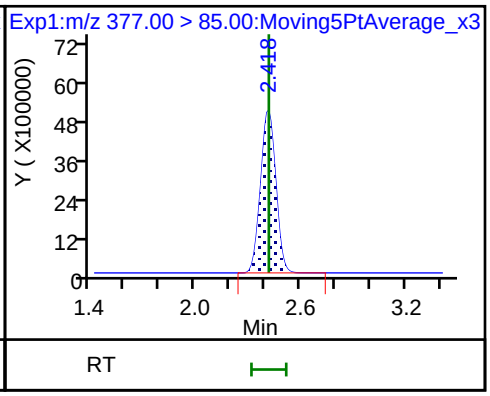
D 11 18O2 PFHxS



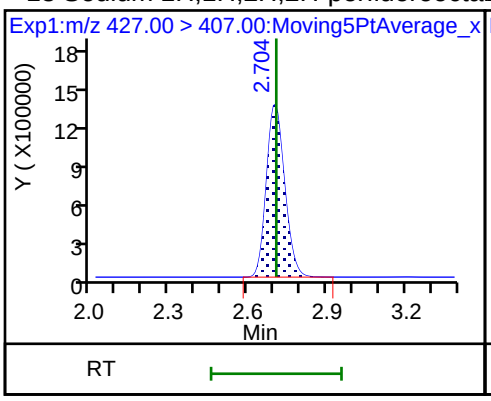
65 Adona



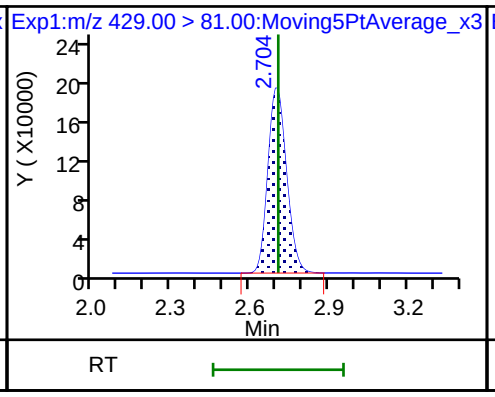
65 Adona



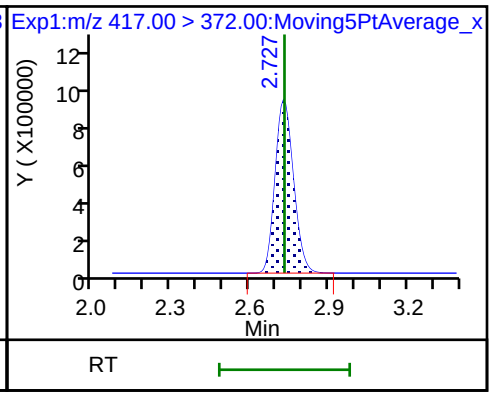
13 Sodium 1H,1H,2H,2H-perfluorooctane



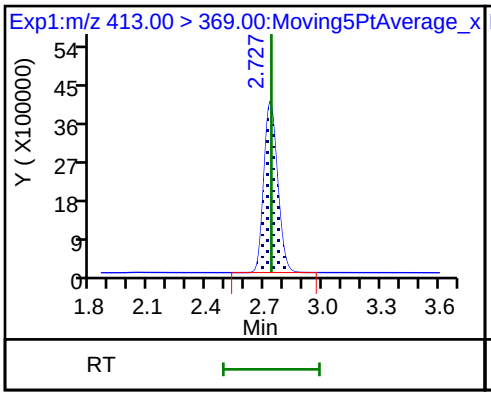
D 12 M2-6:2FTS



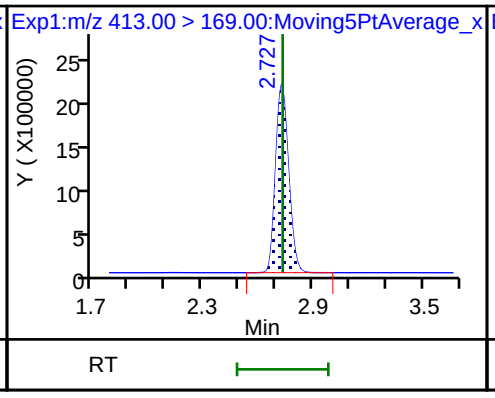
D 14 13C4 PFOA



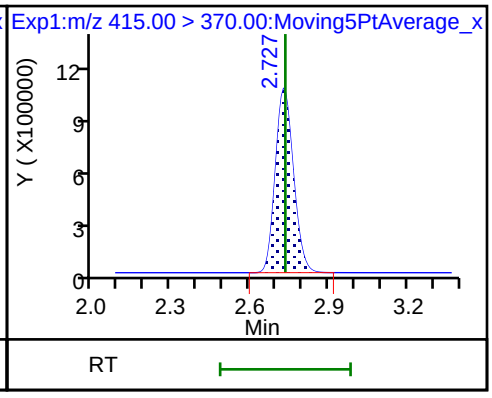
15 Perfluorooctanoic acid



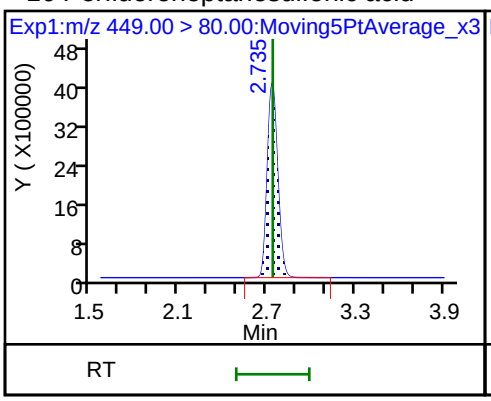
15 Perfluorooctanoic acid



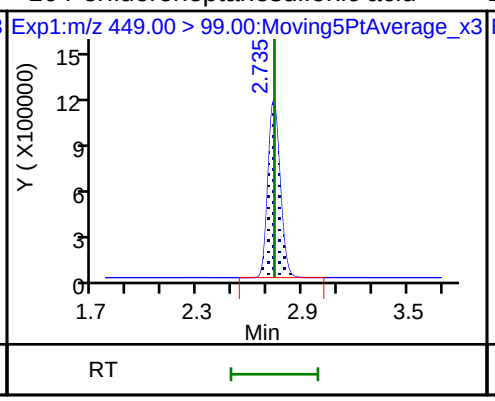
* 62 13C2-PFOA



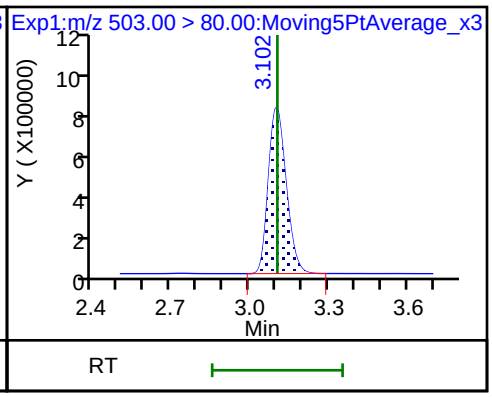
16 Perfluoroheptanesulfonic acid



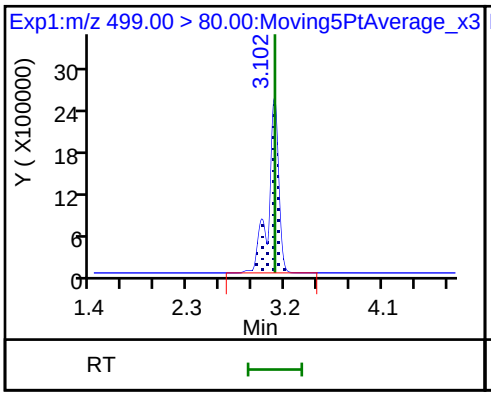
16 Perfluoroheptanesulfonic acid



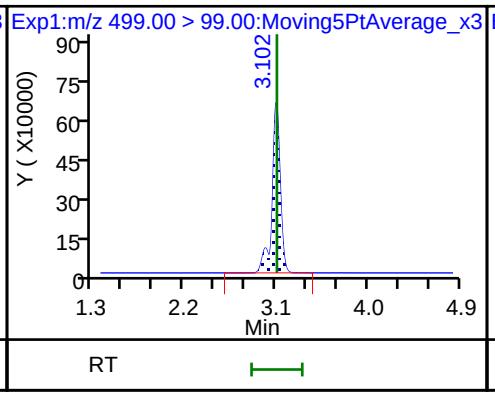
D 18 13C4 PFOS



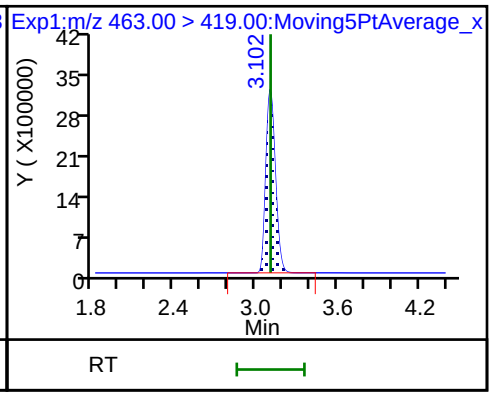
17 Perfluorooctane sulfonic acid



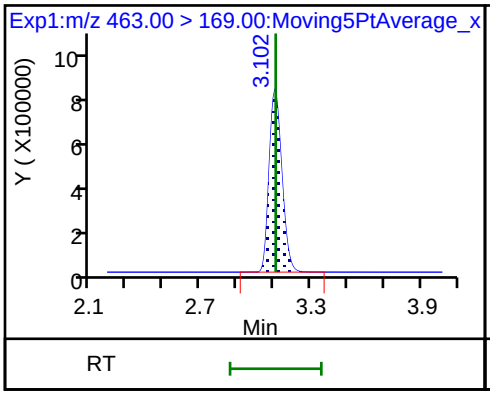
17 Perfluorooctane sulfonic acid



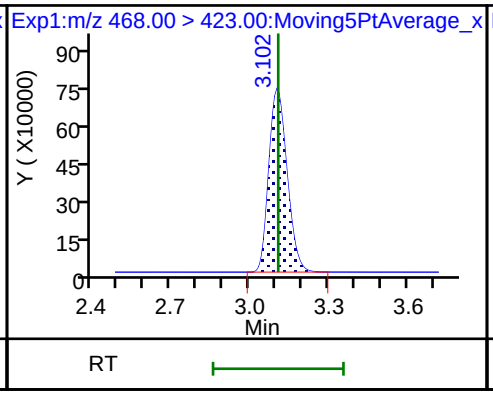
20 Perfluorononanoic acid



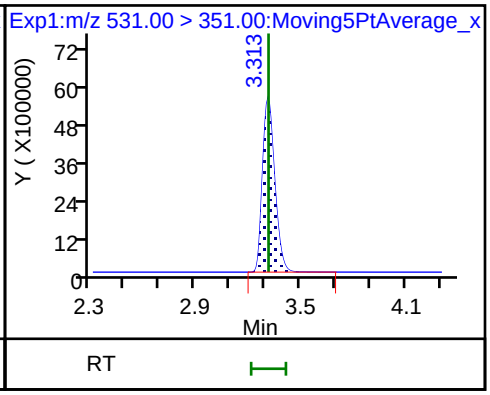
20 Perfluorononanoic acid



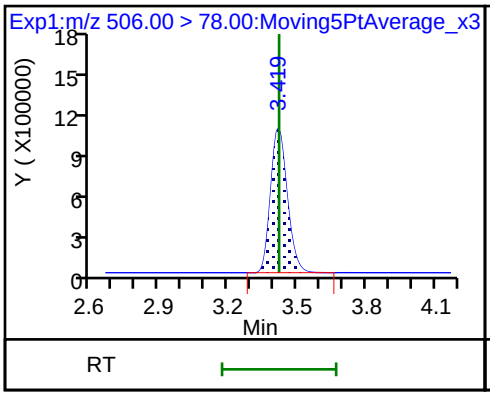
D 19 13C5 PFNA



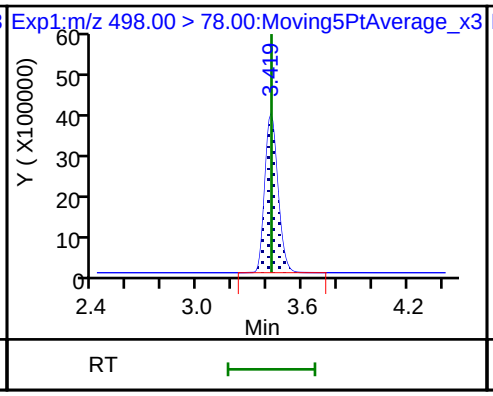
69 9-Chlorohexadecafluoro-3-oxanonane



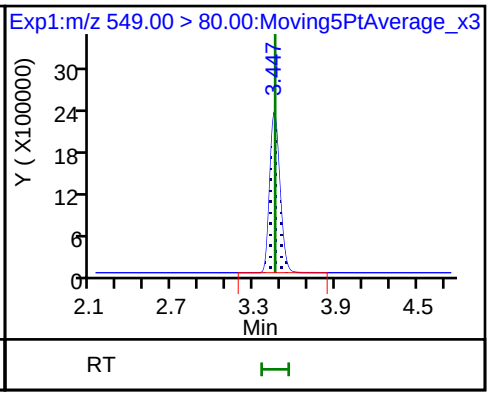
D 21 13C8 FOSA



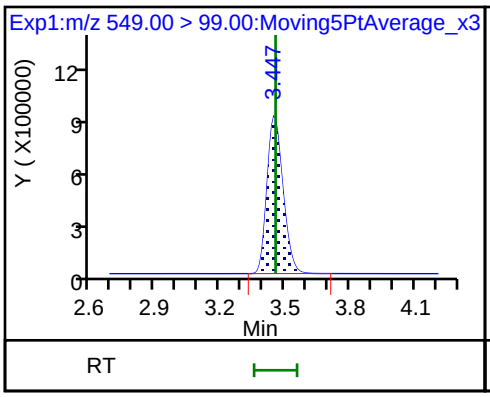
22 Perfluorooctane Sulfonamide



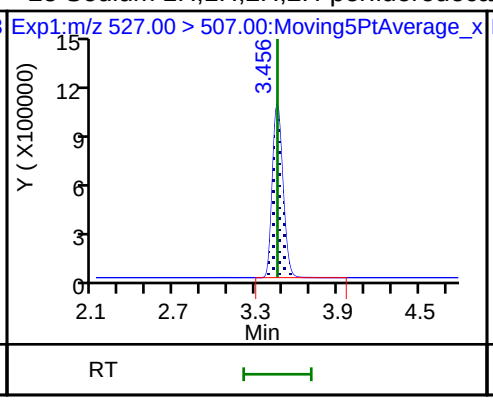
68 Perfluorononanesulfonic acid



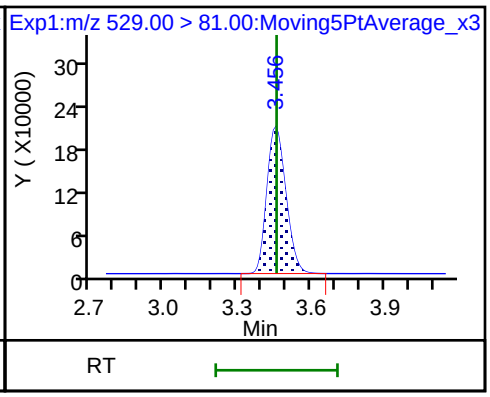
68 Perfluorononanesulfonic acid



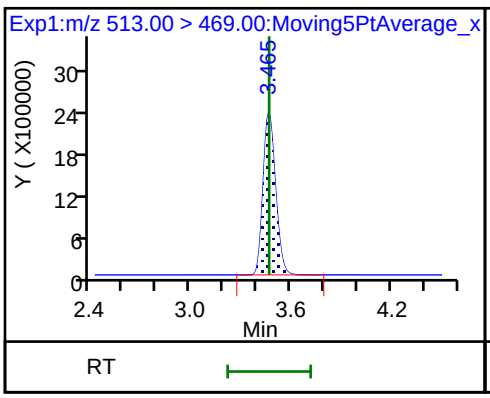
25 Sodium 1H,1H,2H,2H-perfluorodecane



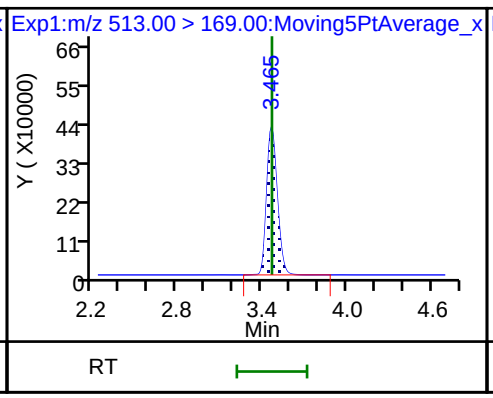
D 26 M2-8:2FTS



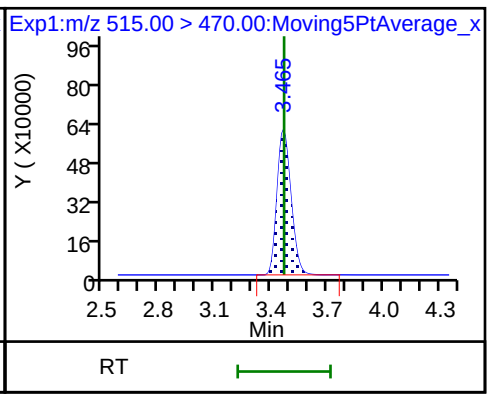
24 Perfluorodecanoic acid



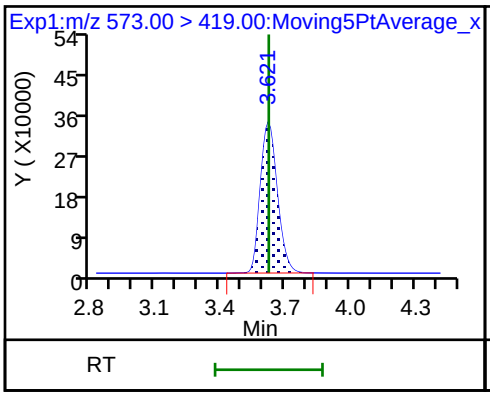
24 Perfluorodecanoic acid



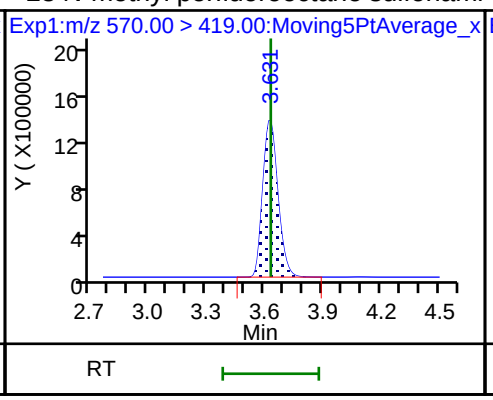
D 23 13C2 PFDA



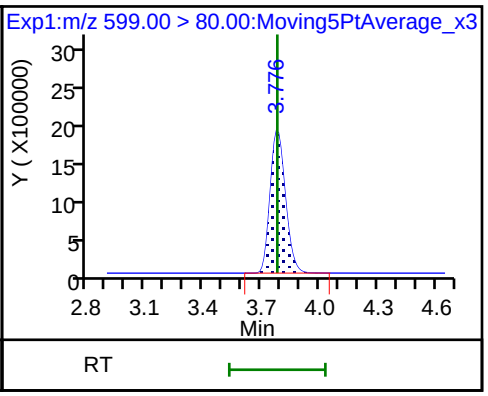
D 27 d3-NMeFOSAA



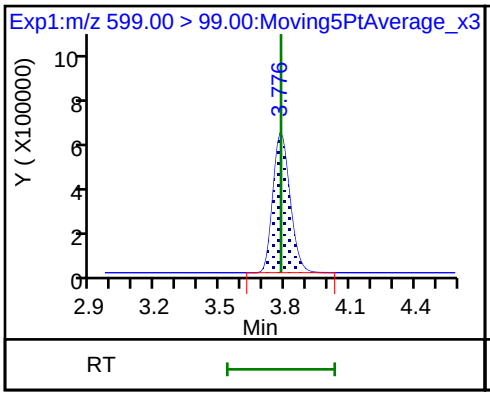
28 N-methyl perfluorooctane sulfonami



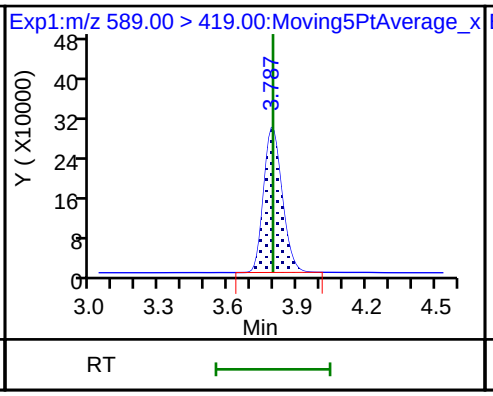
29 Perfluorodecane Sulfonic acid



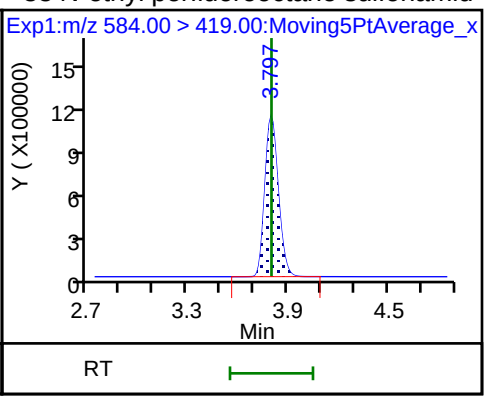
29 Perfluorodecane Sulfonic acid



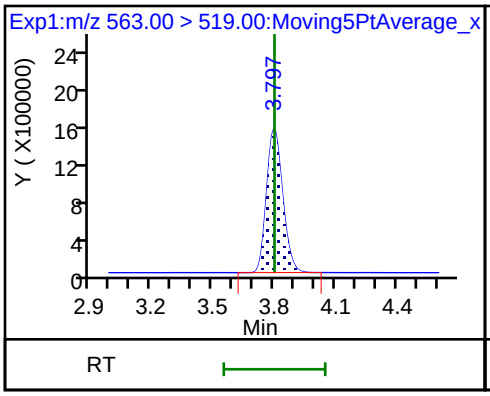
D 32 d5-NEtFOSAA



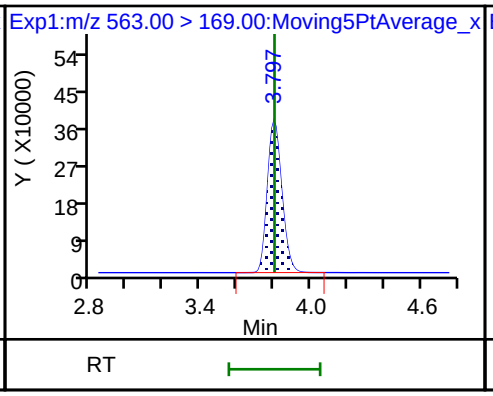
33 N-ethyl perfluorooctane sulfonamid



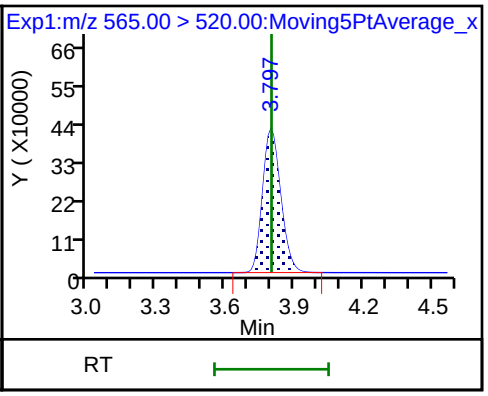
31 Perfluoroundecanoic acid



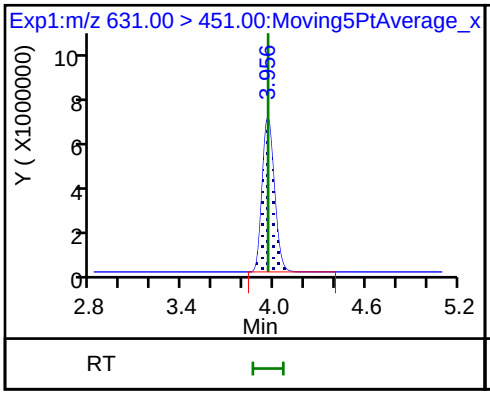
31 Perfluoroundecanoic acid



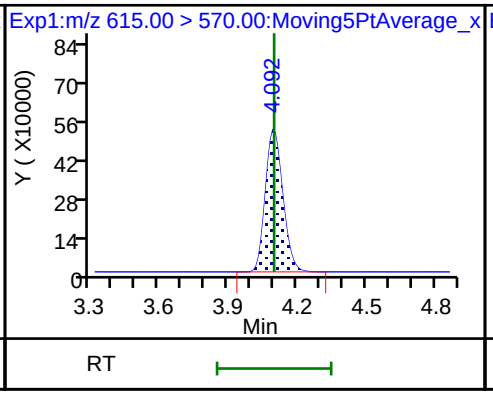
D 30 13C2 PFUnA



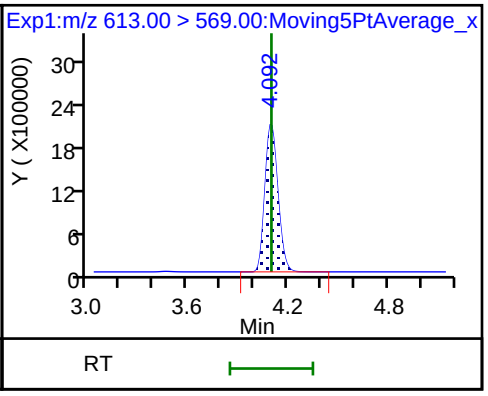
66 11-Chloroeicosafluoro-3-oxaundecan



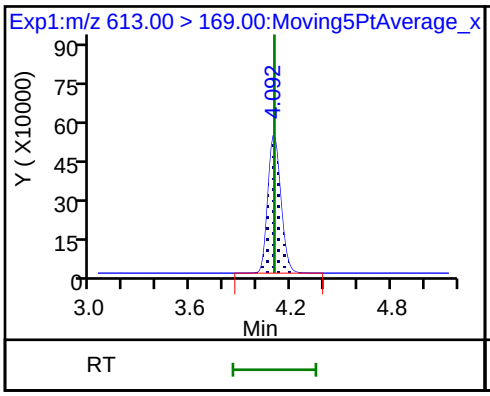
D 36 13C2 PFDoA



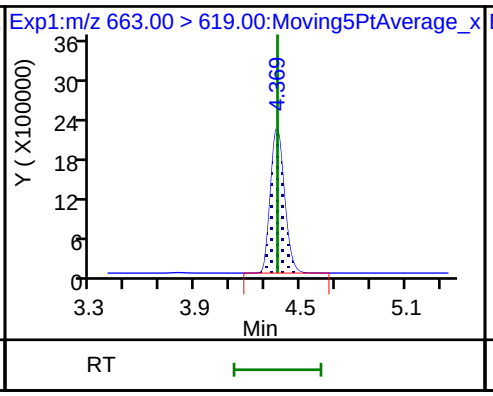
37 Perfluorododecanoic acid



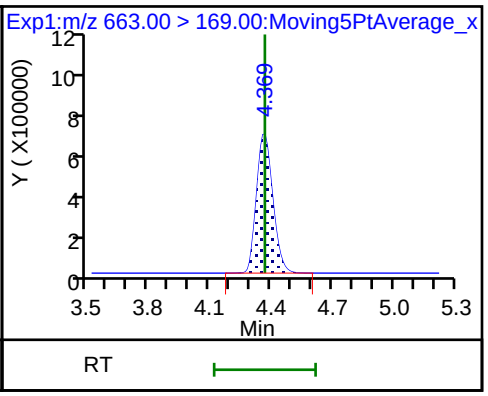
37 Perfluorododecanoic acid



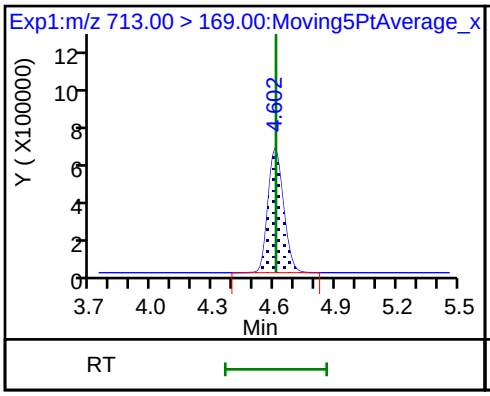
41 Perfluorotridecanoic acid



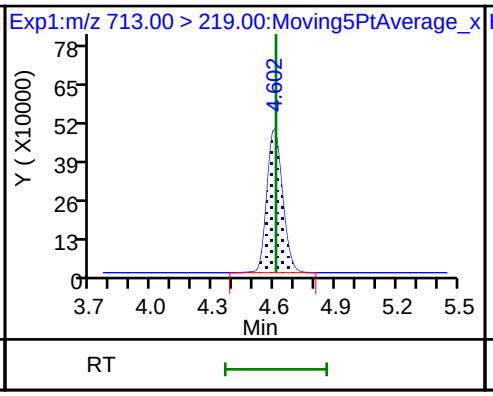
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



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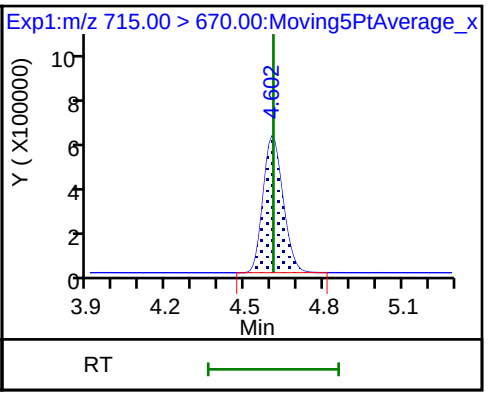

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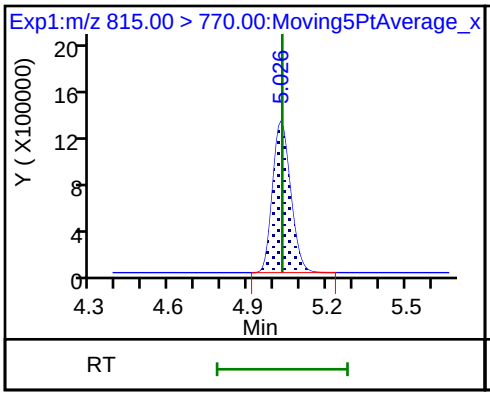
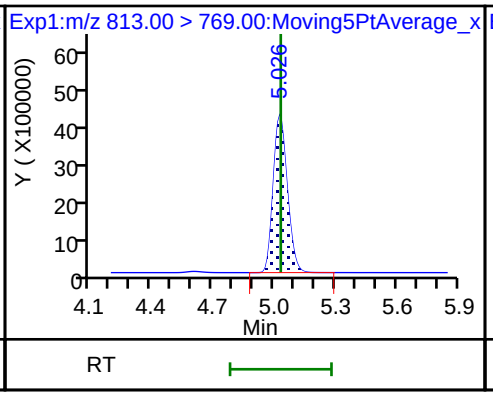
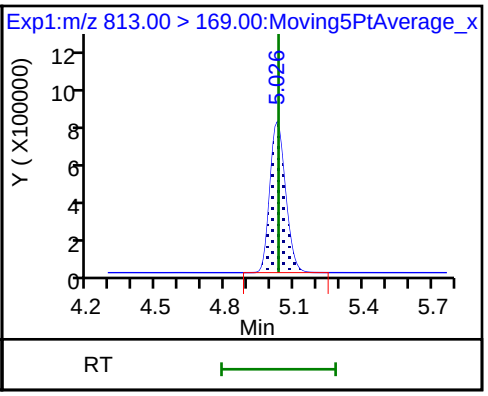


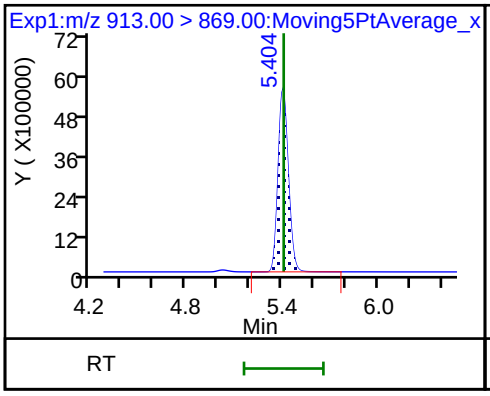
45 Perfluorohexadecanoic acid



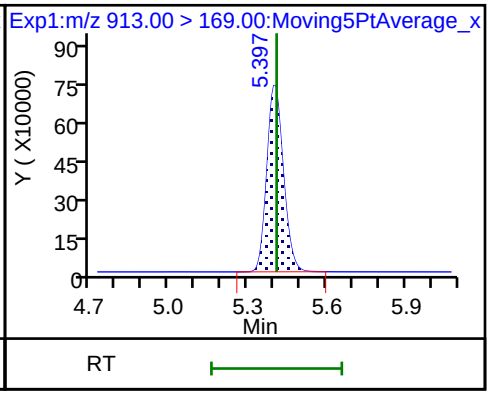
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-May-2018 16:39:20 ALS Bottle#: 14 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L5-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 16-May-2018 09:20:21 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 15-May-2018 17:02:24

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.460	1.462	-0.002	1.000	6642110	2.57		103	3522	
D 1 13C4 PFBA										
217.00 > 172.00	1.460	1.462	-0.002	1.000	6946962	2.43		97.0	48779	
D 3 13C5-PFPeA										
267.90 > 223.00	1.742	1.744	-0.002	0.562	4467248	2.43		97.3	62925	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.742	1.745	-0.003	1.000	5339518	2.53		101	2721	
D 47 13C3-PFBS										
301.90 > 83.00	1.769	1.780	-0.011	1.000	94691	2.28		98.2	560	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.778	1.783	-0.005	1.005	7259728	2.28		103	29926	
298.90 > 99.00	1.778	1.783	-0.005	1.005	2969623		2.44(1.25-3.74)	103	17715	
D 60 M2-4:2FTS										
329.00 > 81.00	1.997	1.999	-0.002	1.000	671442	2.20		94.3	7829	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.997	2.000	-0.003	1.000	1593481	2.36		101	66177	
D 7 13C2 PFHxA										
315.00 > 270.00	2.031	2.037	-0.006	1.000	5043564	2.58		103	120426	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.031	2.037	-0.006	1.000	4776223	2.30		92.1	8080	
313.00 > 119.00	2.031	2.037	-0.006	1.000	454875		10.50(5.03-15.10)	92.1	5745	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.054	2.059	-0.005	1.000	6623884	2.34		99.7	60833	
349.00 > 99.00	2.054	2.059	-0.005	1.000	2517632		2.63(1.36-4.07)	99.7	18835	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.133	2.134	-0.001	1.000	223493	2.31		92.3	4741	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.133	2.134	-0.001	1.000	725223	2.65		106	6005	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.366	2.374	-0.008	1.000	4839723	2.57		103	7018	
363.00 > 169.00	2.366	2.374	-0.008	1.000	1886033		2.57(1.13-3.40)	103	9727	
D 9 13C4-PFHpA										
367.00 > 322.00	2.366	2.374	-0.008	1.000	4465208	2.38		95.2	79790	
D 11 18O2 PFHxS										
403.00 > 84.00	2.378	2.386	-0.008	1.000	5339851	2.30		97.4	57465	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.378	2.386	-0.008	1.000	5630297	2.21		97.3	22030	
399.00 > 99.00	2.378	2.386	-0.008	1.000	1904888		2.96(1.50-4.49)	97.3	6814	
65 Adona										
377.00 > 251.00	2.413	2.418	-0.005	1.000	14089104	2.58		103	89697	
377.00 > 85.00	2.413	2.418	-0.005	1.000	8375544		1.68(0.84-2.53)	103	55492	
D 12 M2-6:2FTS										
429.00 > 81.00	2.701	2.707	-0.006	1.000	953169	2.30		96.9	17534	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.701	2.707	-0.006	1.000	1635620	2.31		97.5	9167	
D 14 13C4 PFOA										
417.00 > 372.00	2.724	2.731	-0.007	1.000	4456920	2.51		100	62304	
* 62 13C2-PFOA										
415.00 > 370.00	2.724	2.734	-0.010		4684803	2.50			69393	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.724	2.734	-0.010	1.000	4857127	2.31		92.6	1728	
413.00 > 169.00	2.724	2.734	-0.010	1.000	2639966		1.84(0.84-2.52)	92.6	10891	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.731	2.739	-0.008	1.000	5160059	2.43		102	33696	
449.00 > 99.00	2.731	2.739	-0.008	1.000	1350563		3.82(1.94-5.82)	102	21055	
D 18 13C4 PFOS										
503.00 > 80.00	3.094	3.104	-0.010	1.000	3815593	2.39		100	27877	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.094	3.105	-0.011	1.000	3965534	2.11		91.1	24321	
499.00 > 99.00	3.094	3.105	-0.011	1.000	911395		4.35(2.31-6.93)	91.1	8420	
D 19 13C5 PFNA										
468.00 > 423.00	3.102	3.107	-0.005	1.000	3538499	2.44		97.5	67448	
20 Perfluorononanoic acid										
463.00 > 419.00	3.102	3.107	-0.005	1.000	3811509	2.54		102	5907	
463.00 > 169.00	3.102	3.107	-0.005	1.000	903128		4.22(1.90-5.69)	102	31191	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.310	3.316	-0.006	1.000	6694592	2.34		100	42297	
D 21 13C8 FOSA										
506.00 > 78.00	3.415	3.420	-0.005	1.000	5178962	2.48		99.3	42716	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.415	3.422	-0.007	1.000	5372059	2.66		107	66457	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.443	3.455	-0.012	1.000	2885064	2.39		99.4	38099	
549.00 > 99.00	3.443	3.455	-0.012	1.000	1131430		2.55(1.33-3.97)	99.4	20200	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.452	3.458	-0.006	1.000	1458360	2.38		99.2	28234	
D 26 M2-8:2FTS										
529.00 > 81.00	3.452	3.459	-0.007	1.000	1089191	2.31		96.5	19371	
D 23 13C2 PFDA										
515.00 > 470.00	3.462	3.468	-0.006	1.000	2997952	2.43		97.1	44831	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.462	3.468	-0.006	1.000	3028523	2.60		104	16268	
513.00 > 169.00	3.462	3.468	-0.006	1.000	523942		5.78(2.36-7.09)	104	12814	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.616	3.624	-0.008	1.000	1561957	2.29		91.8	35761	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.626	3.631	-0.005	1.003	1690352	2.67		107	9358	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.771	3.781	-0.010	1.000	2626191	2.45		102	48906	
599.00 > 99.00	3.771	3.781	-0.010	1.000	877720		2.99(1.39-4.16)	102	16087	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.792	3.794	-0.002	1.000	1777821	2.54		102	10004	
D 30 13C2 PFUnA										
565.00 > 520.00	3.792	3.800	-0.008	1.000	2447962	2.50		100	55931	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.792	3.800	-0.008	1.000	1802433	2.20		88.2	8412	
563.00 > 169.00	3.792	3.800	-0.008	1.000	494938		3.64(2.12-6.36)	88.2	22587	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.792	3.800	-0.008	1.000	1590051	2.38		95.1	28778	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.950	3.958	-0.008	1.000	11086572	2.55		108	67521	
D 36 13C2 PFDoA										
615.00 > 570.00	4.093	4.099	-0.006	1.000	2514089	2.39		95.6	19064	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.093	4.100	-0.007	1.000	2676169	2.55		102	2268	
613.00 > 169.00	4.093	4.100	-0.007	1.000	658572		4.06(2.13-6.40)	102	10193	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.363	4.368	-0.005	1.000	2999335	2.61		104	1572	
663.00 > 169.00	4.363	4.368	-0.005	1.000	941505		3.19(1.25-3.76)	104	10269	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.596	4.608	-0.012	1.000	3141974	2.43		97.3	13003	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.596	4.608	-0.012	1.000	821303	2.59		104	8787	
713.00 > 219.00	4.596	4.608	-0.012	1.000	611068		1.34(0.71-2.13)	104	11665	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.012	5.030	-0.018	1.000	5796576	2.71		108	14652	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.021	5.031	-0.010	1.002	5252895	2.41		96.5	1229	
813.00 > 169.00	5.021	5.031	-0.010	1.002	870423		6.03(2.86-8.58)	96.5	5354	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.389	5.408	-0.019	1.000	6240519	2.55		102	1014	
913.00 > 169.00	5.389	5.408	-0.019	1.000	788129		7.92(3.83-11.48)	102	4740	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 16-May-2018 09:20:23 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Injection Date: 15-May-2018 16:39:20 Instrument ID: A8_N

Lims ID: IC L5 Full

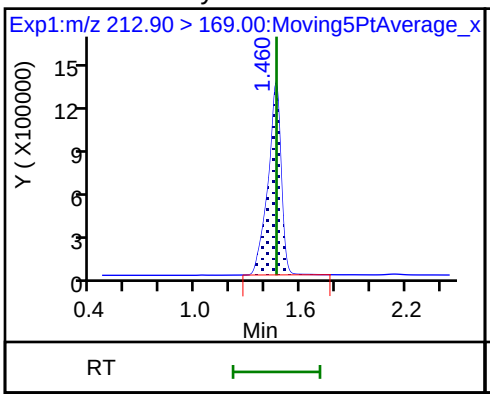
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 11

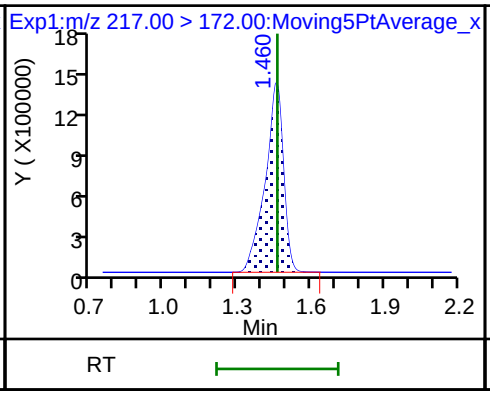
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

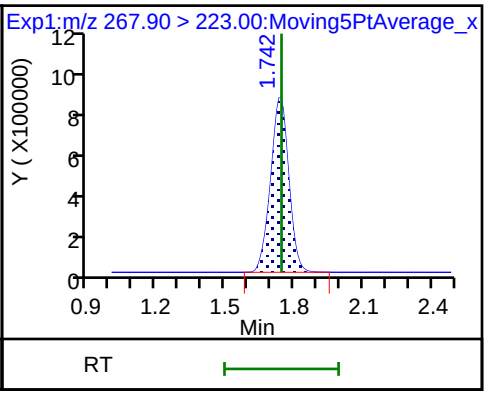
2 Perfluorobutyric acid



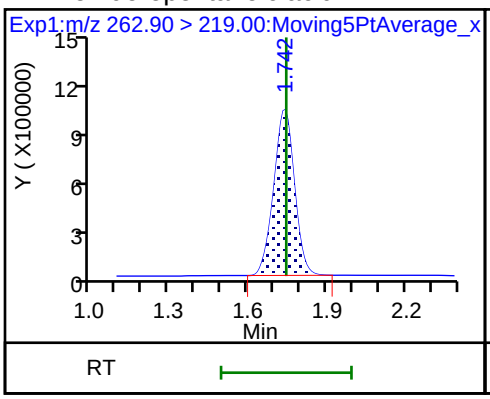
D 1 13C4 PFBA



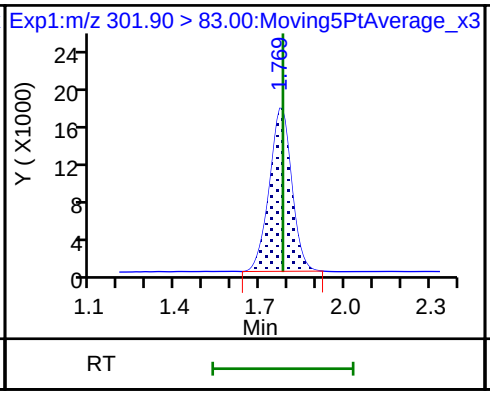
D 3 13C5-PFPeA



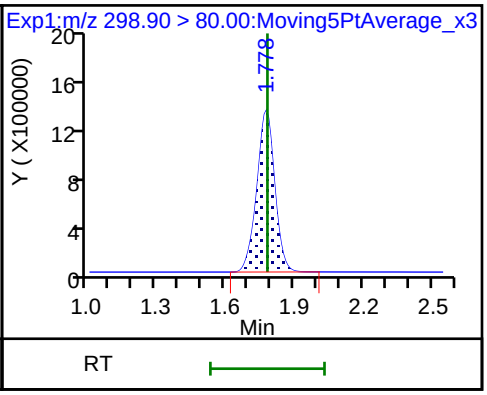
4 Perfluoropentanoic acid



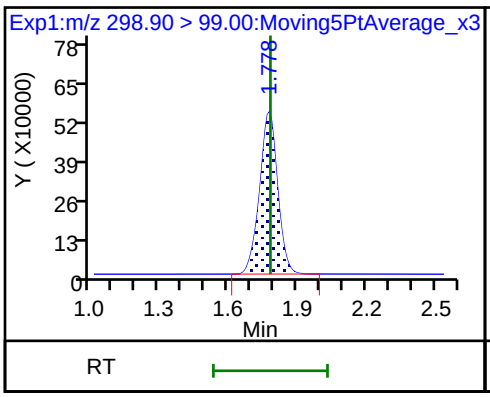
D 47 13C3-PFBS



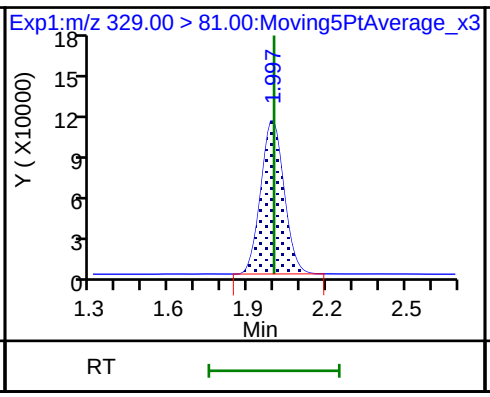
5 Perfluorobutanesulfonic acid



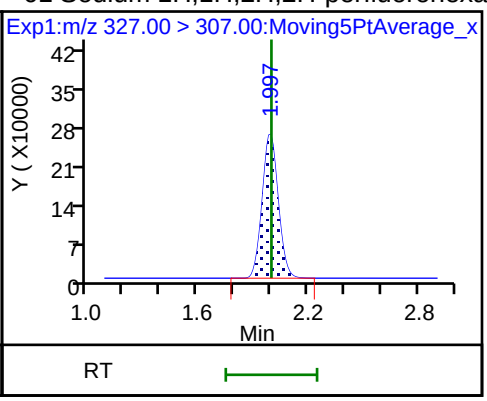
5 Perfluorobutanesulfonic acid



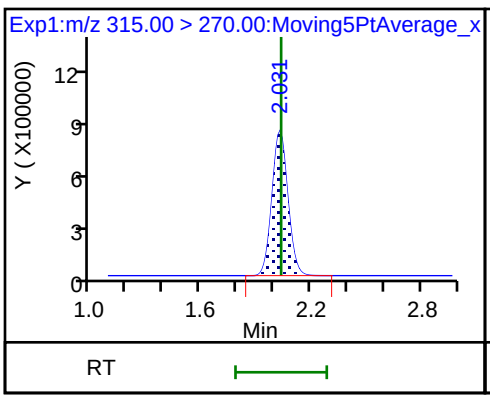
D 60 M2-4:2FTS



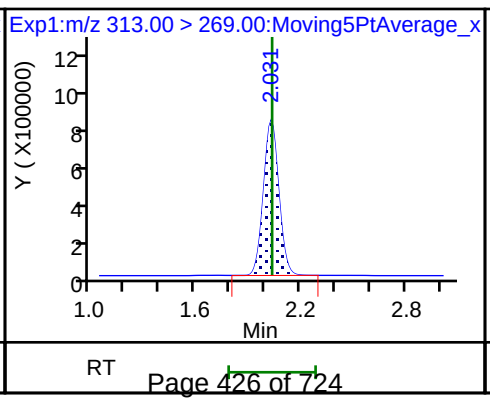
61 Sodium 1H,1H,2H,2H-perfluorohexane



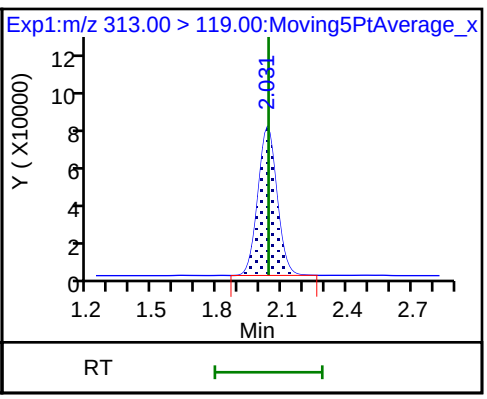
D 7 13C2 PFHxA



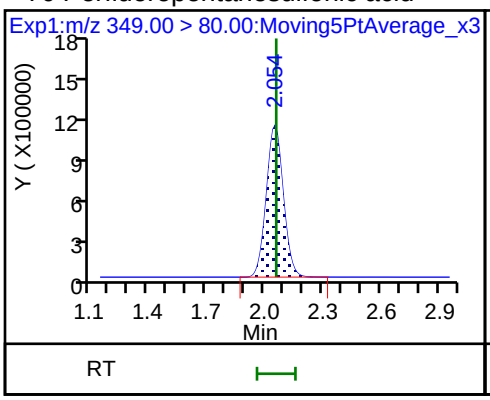
6 Perfluorohexanoic acid



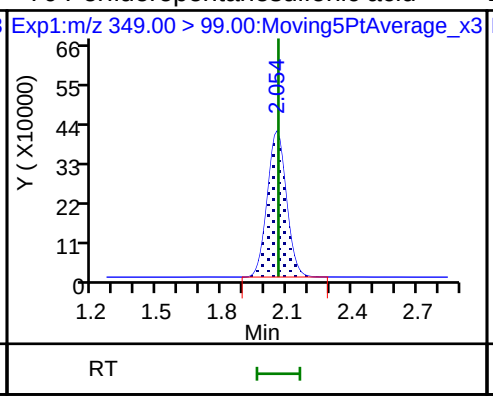
6 Perfluorohexanoic acid



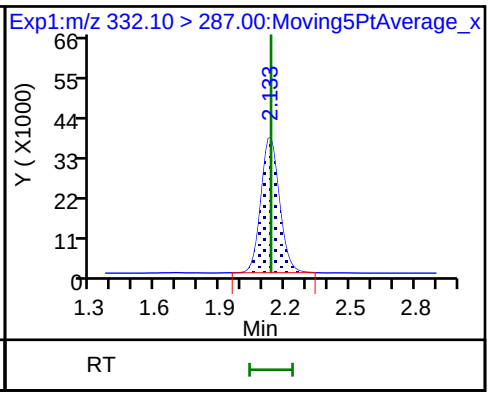
70 Perfluoropentanesulfonic acid



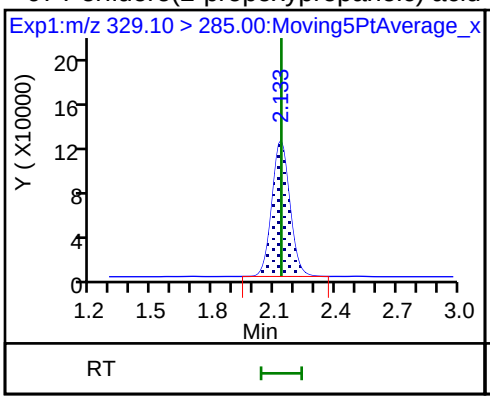
70 Perfluoropentanesulfonic acid



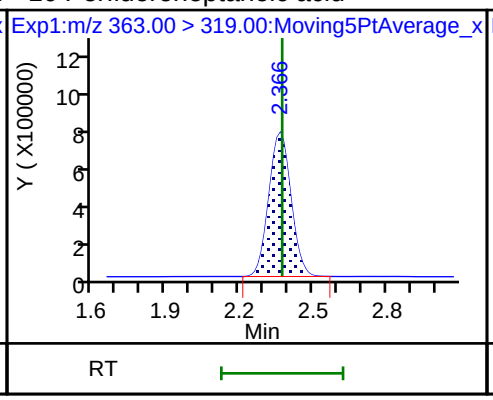
D 64 13C3 HFPO-DA



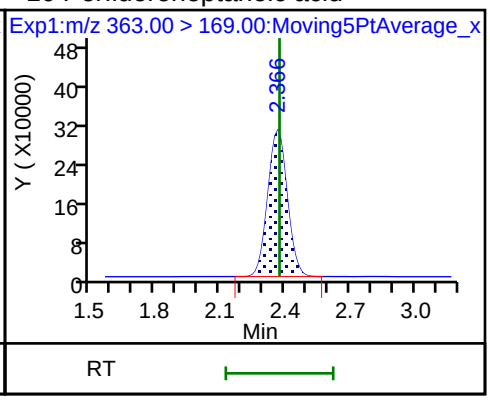
67 Perfluoro(2-propoxypropanoic) acid



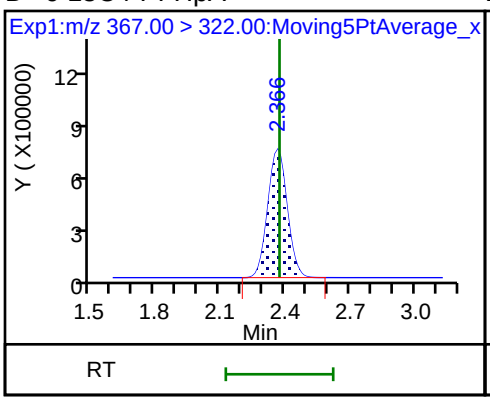
10 Perfluoroheptanoic acid



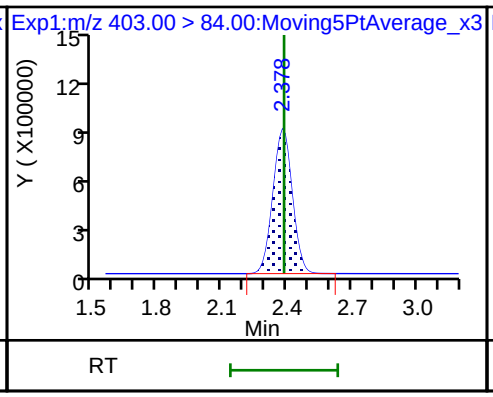
10 Perfluoroheptanoic acid



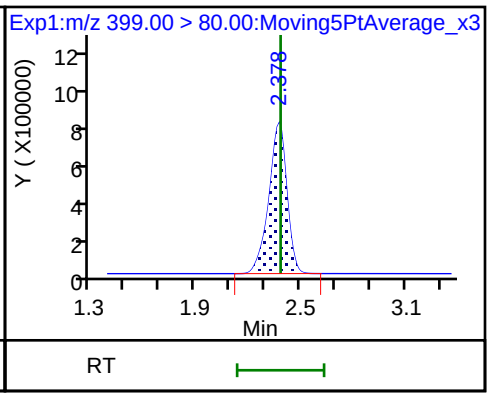
D 9 13C4-PFHpA



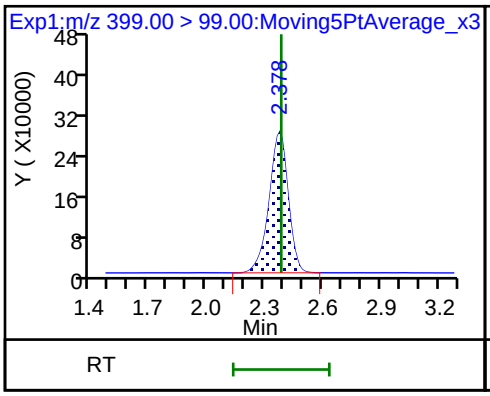
D 11 18O2 PFHxS



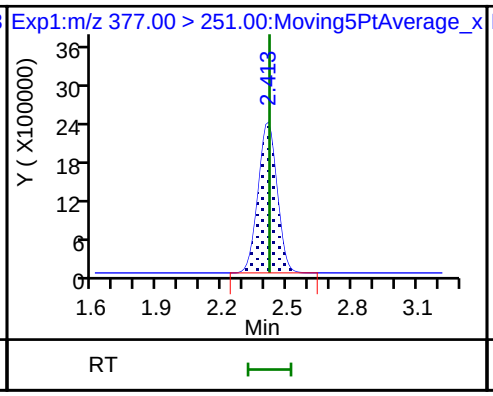
8 Perfluorohexanesulfonic acid



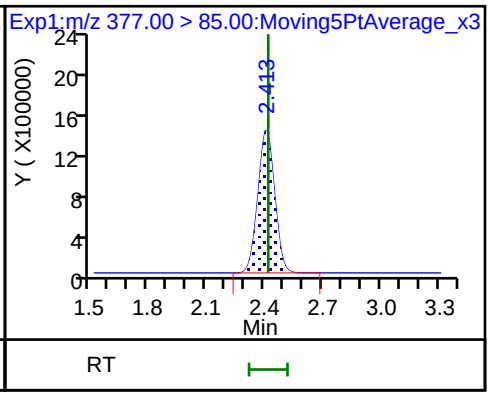
8 Perfluorohexanesulfonic acid



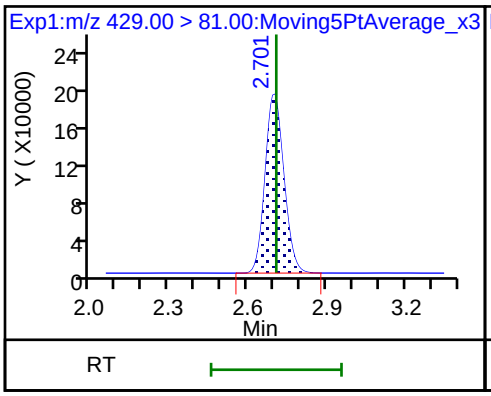
65 Adona



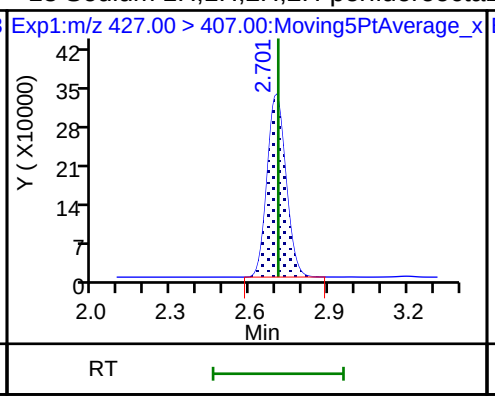
65 Adona



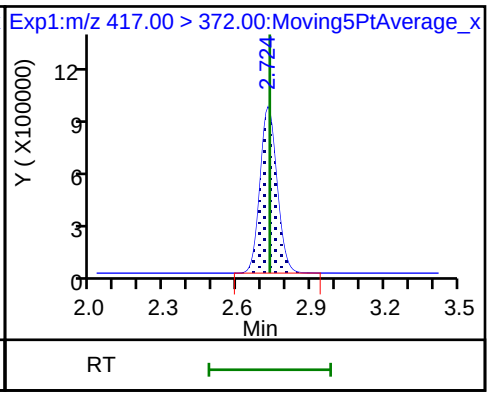
D 12 M2-6:2FTS



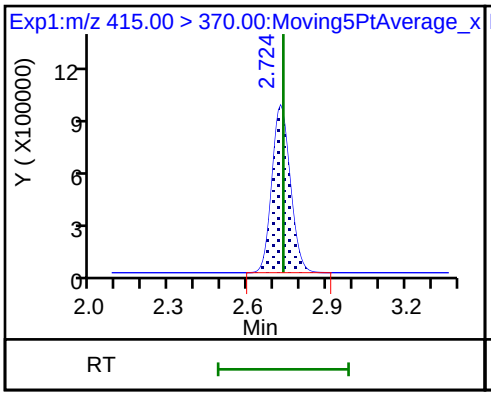
13 Sodium 1H,1H,2H,2H-perfluorooctane



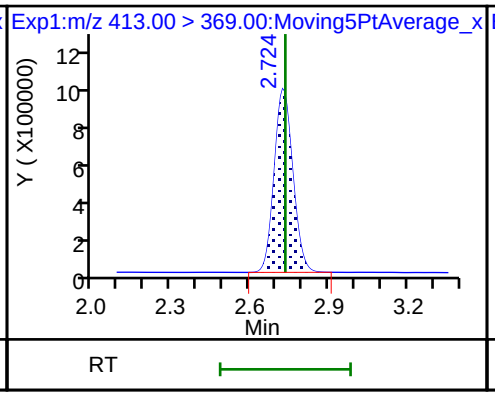
D 14 13C4 PFOA



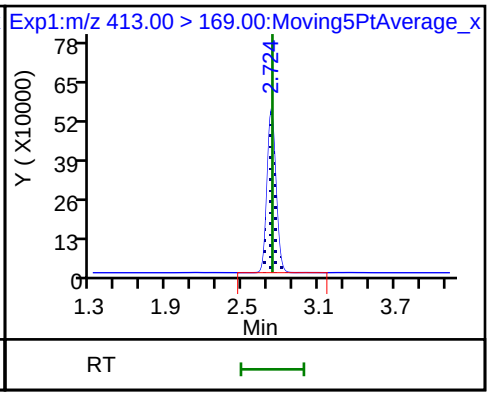
* 62 13C2-PFOA



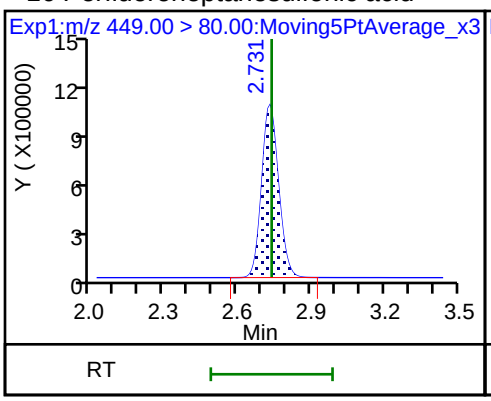
15 Perfluorooctanoic acid



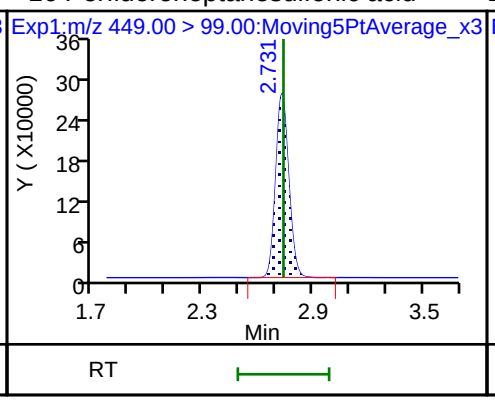
15 Perfluorooctanoic acid



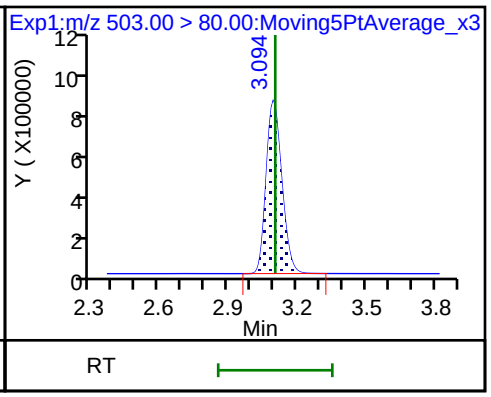
16 Perfluoroheptanesulfonic acid



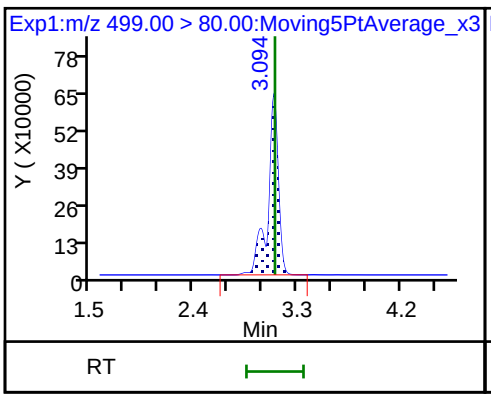
16 Perfluoroheptanesulfonic acid



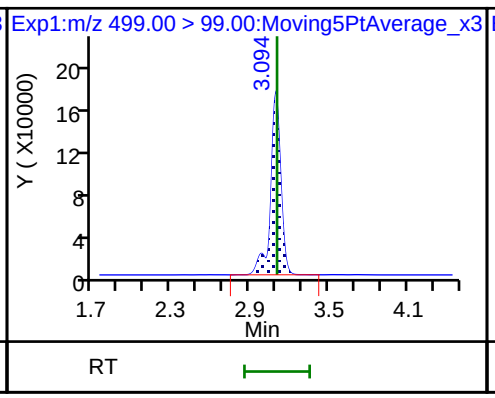
D 18 13C4 PFOS



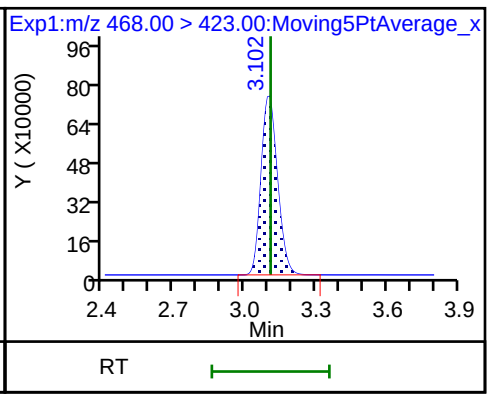
17 Perfluorooctane sulfonic acid



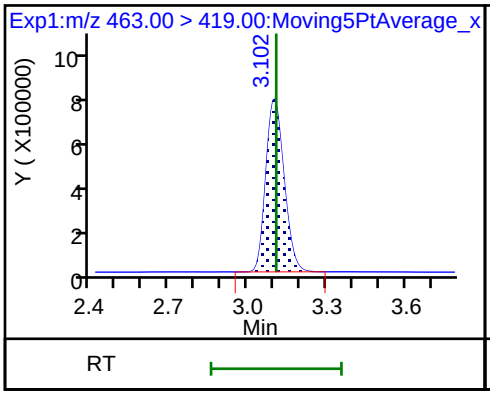
17 Perfluorooctane sulfonic acid



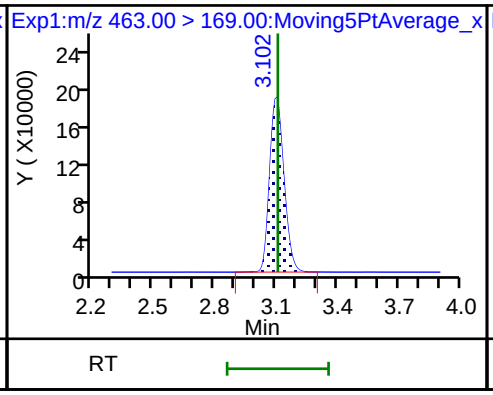
D 19 13C5 PFNA



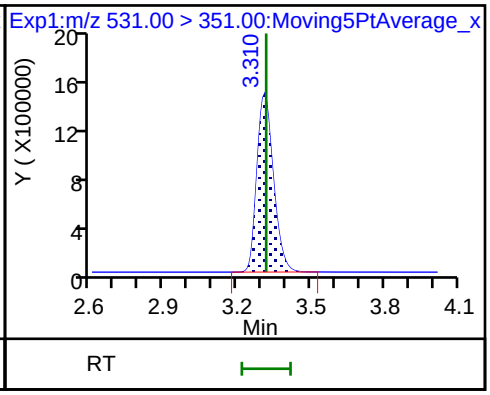
20 Perfluorononanoic acid



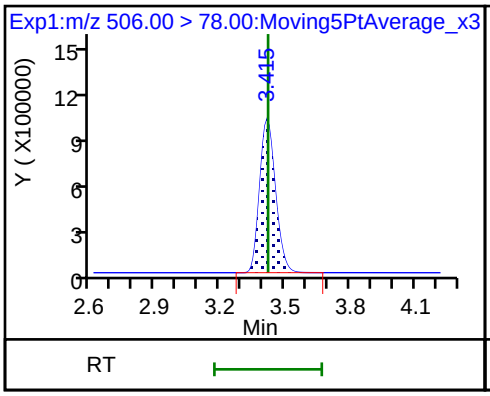
20 Perfluorononanoic acid



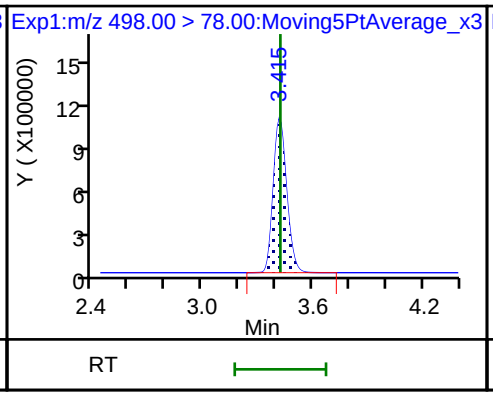
69 9-Chlorohexadecafluoro-3-oxanonane



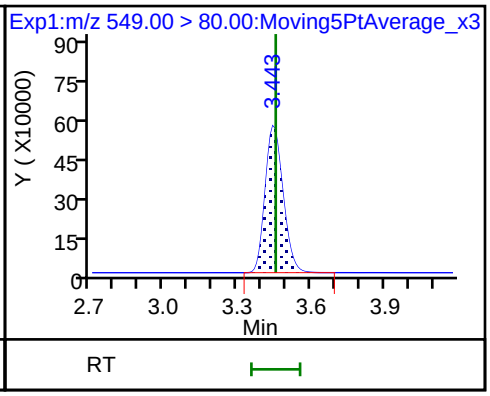
D 21 13C8 FOSA



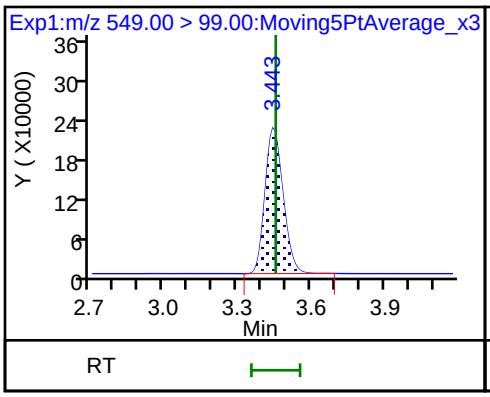
22 Perfluorooctane Sulfonamide



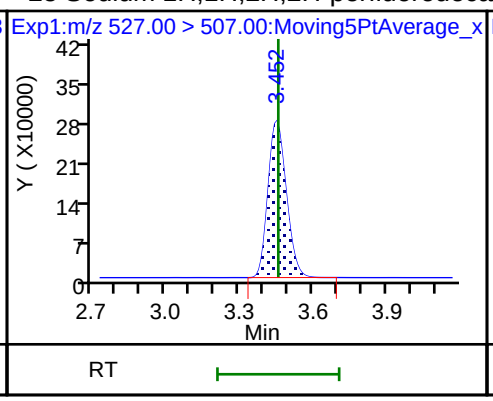
68 Perfluorononanesulfonic acid



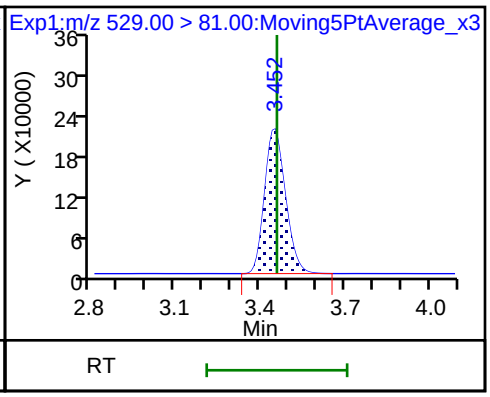
68 Perfluorononanesulfonic acid



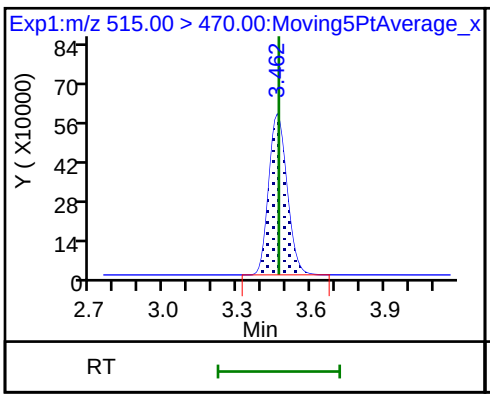
25 Sodium 1H,1H,2H,2H-perfluorodecane



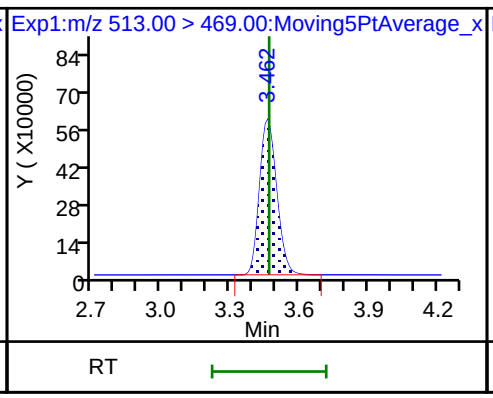
D 26 M2-8:2FTS



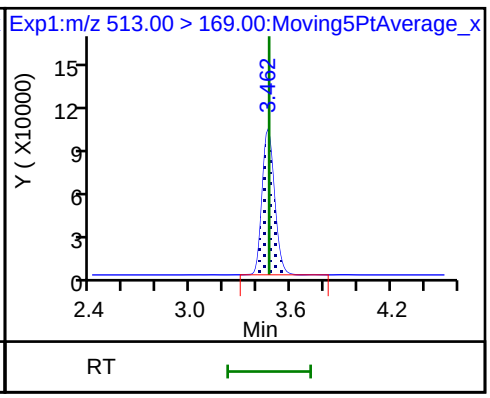
D 23 13C2 PFDA



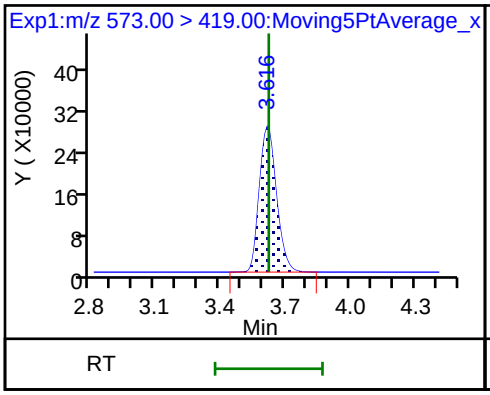
24 Perfluorodecanoic acid



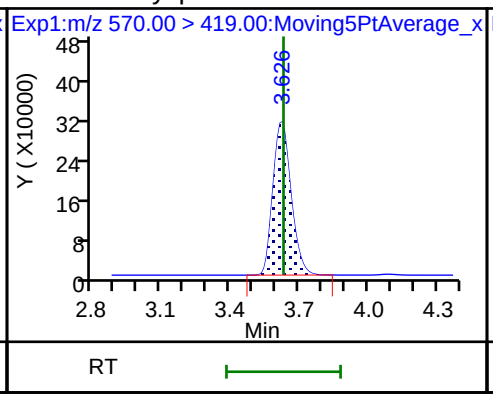
24 Perfluorodecanoic acid



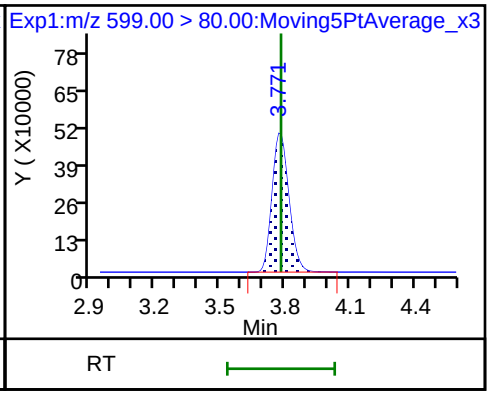
D 27 d3-NMeFOSAA



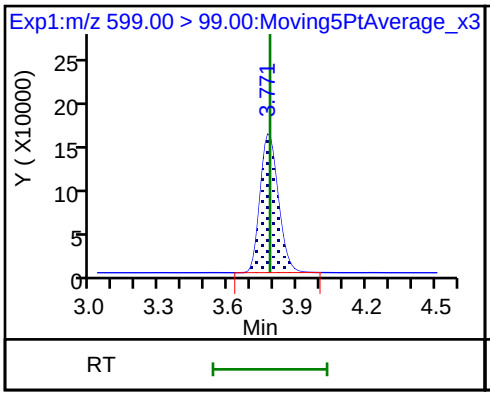
28 N-methyl perfluorooctane sulfonami



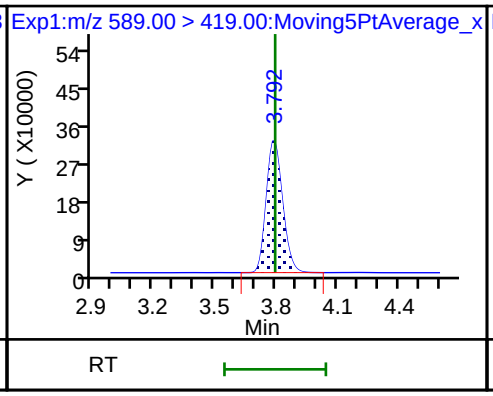
29 Perfluorodecane Sulfonic acid



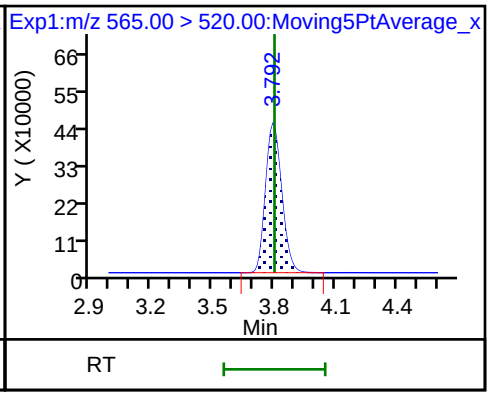
29 Perfluorodecane Sulfonic acid



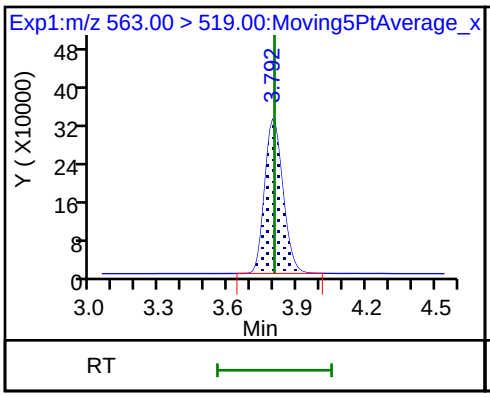
D 32 d5-NEtFOSAA



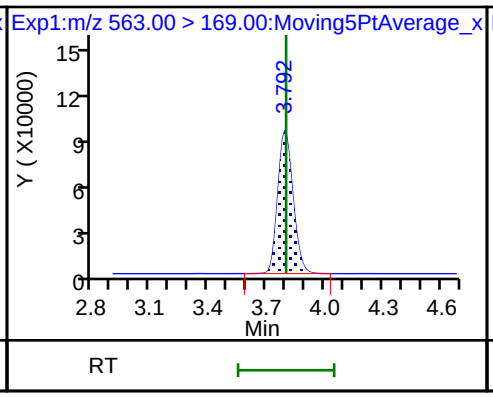
D 30 13C2 PFUnA



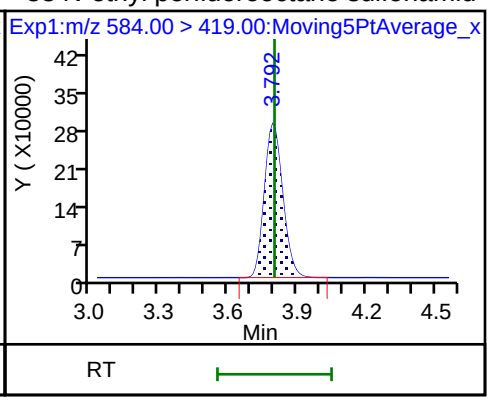
31 Perfluoroundecanoic acid



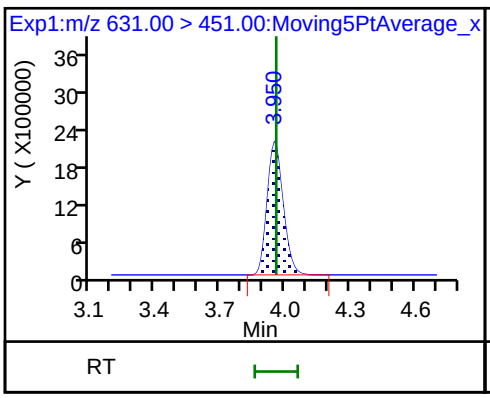
31 Perfluoroundecanoic acid



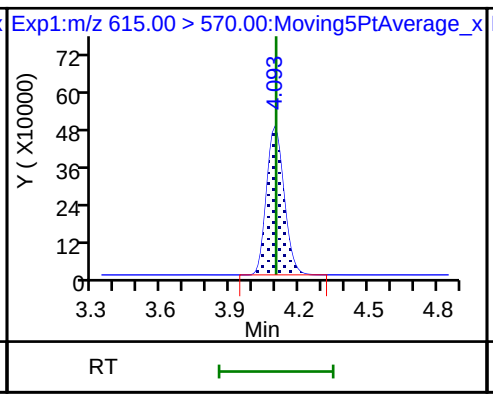
33 N-ethyl perfluorooctane sulfonamid



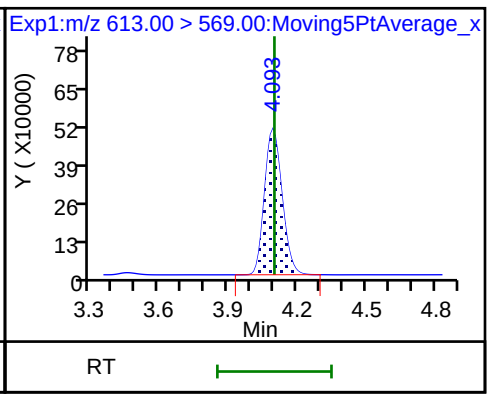
66 11-Chloroeicosafluoro-3-oxaundecan



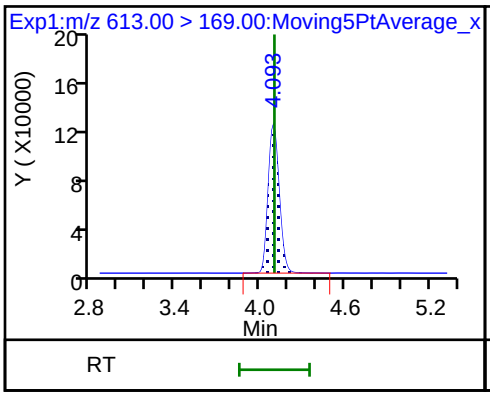
D 36 13C2 PFDoA



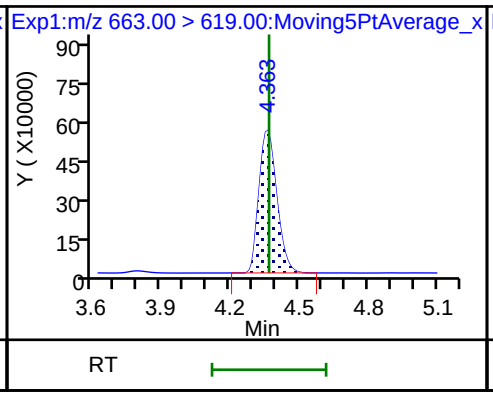
37 Perfluorododecanoic acid



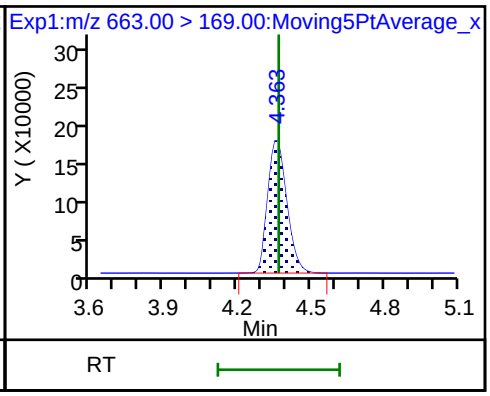
37 Perfluorododecanoic acid



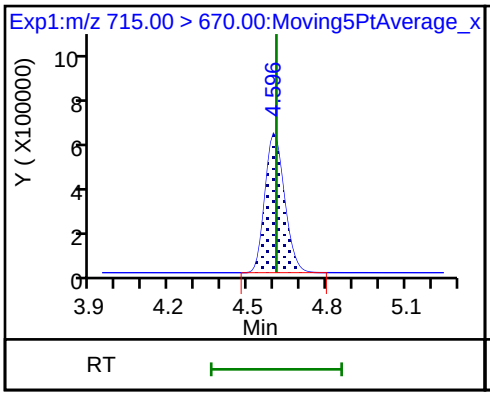
41 Perfluorotridecanoic acid



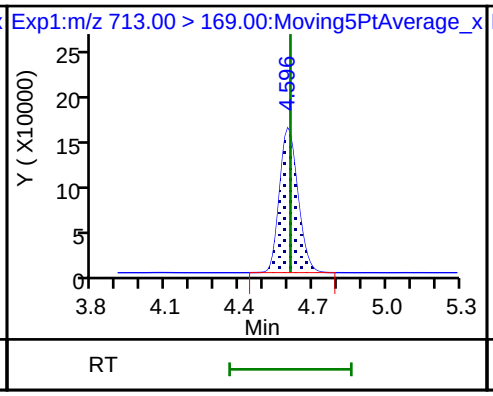
41 Perfluorotridecanoic acid



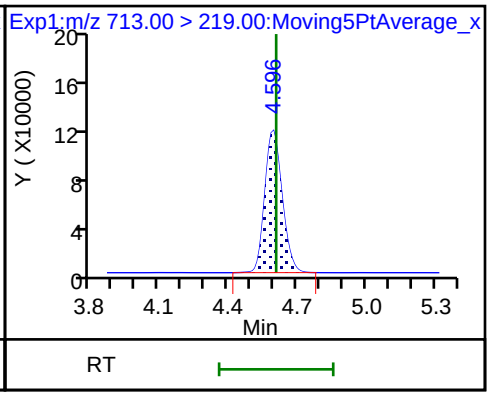
D 43 13C2-PFTeDA



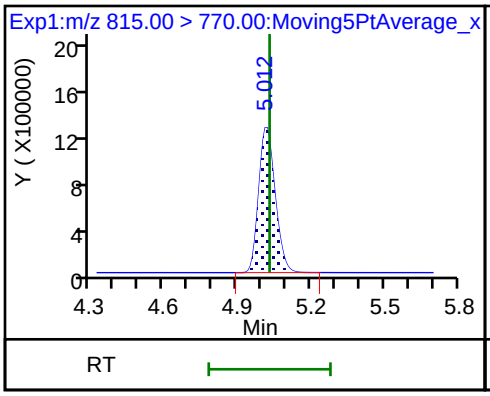
42 Perfluorotetradecanoic acid



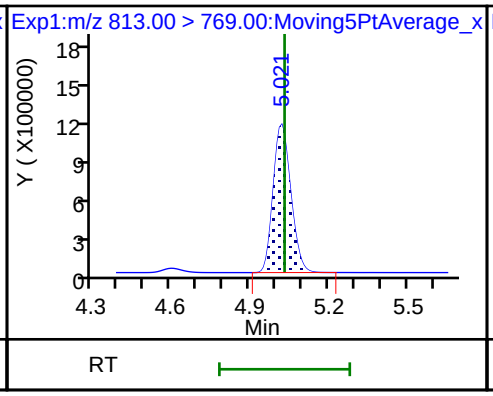
42 Perfluorotetradecanoic acid



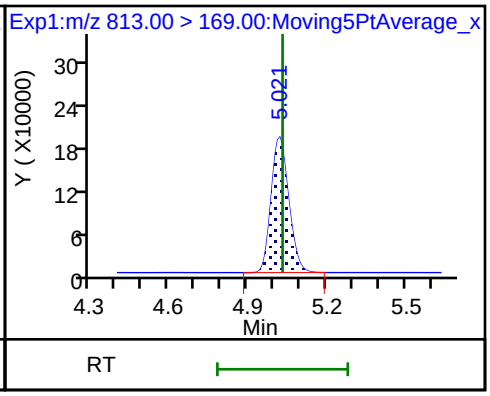
D 44 13C2-PFHxDA



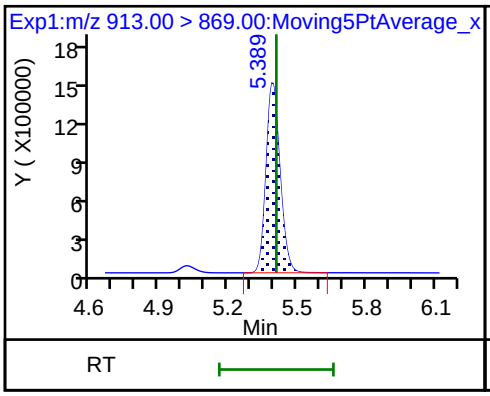
45 Perfluorohexadecanoic acid



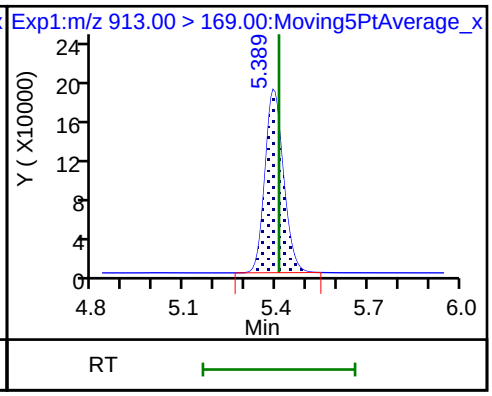
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: ICV 320-217359/10 Calibration Date: 04/10/2018 19:42

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.04.10LLICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	0.9456		2.55	2.50	1.8	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.133		2.38	2.50	-5.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	82.79		2.34	2.21	5.8	50.0
4:2 FTS	AveID	16.03	17.79		2.59	2.34	11.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.016	1.124		2.77	2.50	10.6	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	72.96		2.40	2.35	2.0	50.0
HFPO-DA (GenX)	AveID	2.785	2.549		2.29	2.50	-8.5	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	1.015		2.54	2.50	1.4	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.112		2.24	2.28	-1.7	40.0
Adona	AveID	3.464	3.350		2.42	2.50	-3.3	50.0
6:2FTS	AveID	1.691	1.750		2.46	2.38	3.5	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.174		2.54	2.50	1.6	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.287		2.30	2.38	-3.1	50.0
Perfluorononanoic acid (PFNA)	AveID	1.043	1.033		2.48	2.50	-0.9	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.066		2.27	2.31	-2.0	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.806		2.23	2.33	-4.2	50.0
8:2FTS	AveID	1.265	1.321		2.51	2.40	4.4	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.7710		2.31	2.40	-3.5	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	1.008		2.44	2.50	-2.3	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	1.087		2.69	2.50	7.5	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	1.055		2.65	2.50	5.8	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6537		2.43	2.41	0.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	0.9922		2.65	2.50	6.2	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.8169		2.42	2.50	-3.3	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.801		2.26	2.36	-3.8	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	1.064		2.55	2.50	2.0	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.212		2.49	2.50	-0.3	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2481		2.47	2.50	-1.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9405		2.46	2.50	-1.6	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: ICV 320-217359/10 Calibration Date: 04/10/2018 19:42

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.04.10LLICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	1.011		2.52	2.50	0.7	50.0
13C4 PFBA	Ave	1.345	1.348		2.51	2.50	0.2	50.0
13C5 PFPeA	Ave	0.8672	0.8855		2.55	2.50	2.1	50.0
13C3-PFBS	Ave	0.0199	0.0197		2.31	2.33	-0.8	50.0
M2-4:2FTS	Ave	0.1425	0.1499		2.46	2.34	5.1	50.0
13C2 PFHxA	Ave	0.9590	0.9273		2.42	2.50	-3.3	50.0
13C3 HFPO-DA	Ave	0.0593	0.0610		2.57	2.50	2.9	50.0
13C4-PFHpA	Ave	0.9333	0.9503		2.55	2.50	1.8	50.0
18O2 PFHxS	Ave	1.152	1.130		2.32	2.37	-1.9	50.0
M2-6:2FTS	Ave	0.2000	0.1936		2.30	2.38	-3.2	40.0
13C4 PFOA	Ave	0.9276	0.9247		2.49	2.50	-0.3	50.0
13C4 PFOS	Ave	0.8066	0.8532		2.53	2.39	5.8	50.0
13C5 PFNA	Ave	0.7973	0.8279		2.60	2.50	3.8	50.0
M2-8:2FTS	Ave	0.2409	0.2384		2.37	2.40	-1.0	40.0
13C2 PFDA	Ave	0.6701	0.6944		2.59	2.50	3.6	50.0
13C8 FOSA	Ave	1.007	1.012		2.51	2.50	0.5	50.0
d3-NMeFOSAA	Ave	0.3798	0.3981		2.62	2.50	4.8	50.0
d5-NEtFOSAA	Ave	0.3749	0.3684		2.46	2.50	-1.7	50.0
13C2 PFUnA	Ave	0.5781	0.5516		2.39	2.50	-4.6	50.0
13C2 PFDoA	Ave	0.6242	0.6257		2.51	2.50	0.2	50.0
13C2-PFTeDA	Ave	0.7915	0.8266		2.61	2.50	4.4	50.0
13C2-PFHxDA	Ave	1.288	1.382		2.68	2.50	7.3	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_010.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2018 19:42:10 ALS Bottle#: 18 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist:

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-Apr-2018 10:51:23 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: roycea Date: 11-Apr-2018 09:23:10

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.435	1.431	0.004	1.000	5903140	2.51		100	42897	
2 Perfluorobutyric acid										
212.90 > 169.00	1.435	1.432	0.003	1.000	5582092	2.55			3157	
D 3 13C5-PFPeA										
267.90 > 223.00	1.702	1.699	0.003	0.558	3876443	2.55		102	71438	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.702	1.699	0.003	1.000	4390263	2.38			3574	
D 47 13C3-PFBS										
301.90 > 83.00	1.739	1.735	0.003	1.000	80328	2.31		99.2	737	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.739	1.736	0.002	1.000	6328944	2.34			26552	
298.90 > 99.00	1.739	1.736	0.002	1.000	2603286		2.43(1.25-3.74)		34374	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.949	1.950	-0.001	1.000	1436925	2.59			63389	
D 60 M2-4:2FTS										
329.00 > 81.00	1.949	1.950	-0.001	1.000	612715	2.46		105	5966	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.993	1.985	0.008	1.006	4562329	2.77			12399	
313.00 > 119.00	1.981	1.985	-0.004	1.000	384388		11.87(5.03-15.10)		6555	
D 7 13C2 PFHxA										
315.00 > 270.00	1.981	1.985	-0.004	1.000	4059281	2.42		96.7	114705	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.004	2.008	-0.004	1.000	5923371	2.40			37471	
349.00 > 99.00	2.004	2.008	-0.004	1.000	2141440		2.77(1.36-4.07)		32919	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.083	2.084	-0.001	1.000	267167	2.57		103	7732	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.083	2.087	-0.004	1.000	680925	2.29			4640	
D 9 13C4-PFHpA										
367.00 > 322.00	2.320	2.314	0.006	1.000	4159917	2.55		102	83647	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.320	2.314	0.006	1.000	4222004	2.54			5555	
363.00 > 169.00	2.320	2.314	0.006	1.000	1656229		2.55(1.13-3.40)		8075	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.333	2.323	0.010	1.000	5017849	2.24			13906	
399.00 > 99.00	2.333	2.323	0.010	1.000	1647913		3.04(1.50-4.49)		14109	
D 11 18O2 PFHxS										
403.00 > 84.00	2.333	2.327	0.006	1.000	4679824	2.32		98.1	94921	
65 Adona										
377.00 > 251.00	2.359	2.360	-0.001	1.000	12510918	2.42			98964	
377.00 > 85.00	2.359	2.360	-0.001	1.000	7623155		1.64(0.84-2.53)		115527	
D 12 M2-6:2FTS										
429.00 > 81.00	2.653	2.649	0.004	1.000	805312	2.30		96.8	15934	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.653	2.649	0.004	1.000	1408901	2.46			22533	
D 14 13C4 PFOA										
417.00 > 372.00	2.676	2.673	0.003	1.000	4047870	2.49		99.7	60383	
* 62 13C2-PFOA										
415.00 > 370.00	2.676	2.674	0.002		4377627	2.50			57743	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.676	2.674	0.002	1.000	4752903	2.54			3234	
413.00 > 169.00	2.676	2.674	0.002	1.000	2366488		2.01(0.84-2.52)		10676	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.683	2.680	0.003	1.000	4566459	2.30			32288	
449.00 > 99.00	2.683	2.680	0.003	1.000	1249476		3.65(1.94-5.82)		23451	
D 18 13C4 PFOS										
503.00 > 80.00	3.049	3.041	0.008	1.000	3570537	2.53		106	24066	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.049	3.042	0.007	1.000	3685601	2.27			15600	
499.00 > 99.00	3.049	3.042	0.007	1.000	812986		4.53(2.31-6.93)		15657	
20 Perfluorononanoic acid										
463.00 > 419.00	3.049	3.043	0.006	1.000	3743693	2.48			9400	
463.00 > 169.00	3.049	3.043	0.006	1.000	898645		4.17(1.90-5.69)		36471	
D 19 13C5 PFNA										
468.00 > 423.00	3.049	3.045	0.004	1.000	3624090	2.60		104	67532	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.257	3.253	0.004	1.000	6286262	2.23			103380	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.394	3.388	0.006	1.000	2764509	2.31			32991	
549.00 > 99.00	3.394	3.388	0.006	1.000	1003388		2.76(1.33-3.97)		19714	
D 26 M2-8:2FTS										
529.00 > 81.00	3.394	3.390	0.004	1.000	999777	2.37		99.0	10613	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.394	3.393	0.001	1.000	1323882	2.51			55023	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.404	3.397	0.007	1.000	4432045	2.51		101	58050	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.404	3.401	0.003	1.000	4817944	2.69			67785	
D 23 13C2 PFDA										
515.00 > 470.00	3.404	3.401	0.003	1.000	3039987	2.59		104	79981	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.404	3.402	0.002	1.000	3064833	2.44			12447	
513.00 > 169.00	3.404	3.402	0.002	1.000	528428		5.80(2.36-7.09)		18431	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.562	3.553	0.009	1.000	1742858	2.62		105	25420	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.562	3.558	0.004	1.000	1839262	2.65			12104	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.715	3.715	0.0	1.000	2356067	2.43			29098	
599.00 > 99.00	3.715	3.715	0.0	1.000	795988		2.96(1.39-4.16)		22459	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.726	3.722	0.004	1.000	1612562	2.46		98.3	9989	
D 30 13C2 PFUnA										
565.00 > 520.00	3.737	3.727	0.010	1.000	2414889	2.39		95.4	67805	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.737	3.727	0.010	1.003	1599970	2.65			18023	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.737	3.727	0.010	1.000	1972744	2.42			8361	
563.00 > 169.00	3.737	3.727	0.010	1.000	467144		4.22(2.12-6.36)		11394	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.894	3.883	0.011	1.000	9854892	2.26			104542	
D 36 13C2 PFDoA										
615.00 > 570.00	4.027	4.017	0.010	1.000	2739185	2.51		100	21240	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.027	4.020	0.007	1.000	2914311	2.55			3322	
613.00 > 169.00	4.027	4.020	0.007	1.000	731402		3.98(2.13-6.40)		7033	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.289	4.278	0.011	1.000	3318610	2.49			3147	
663.00 > 169.00	4.289	4.278	0.011	1.000	1033553		3.21(1.25-3.76)		10706	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.521	4.513	0.008	1.000	3618492	2.61		104	23098	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.521	4.513	0.008	1.000	897606	2.47			8678	
713.00 > 219.00	4.511	4.513	-0.002	0.998	658771		1.36(0.71-2.13)		10322	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.930	4.918	0.012	1.000	6051317	2.68		107	16293	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.930	4.920	0.010	1.000	5691508	2.46			1760	
813.00 > 169.00	4.930	4.920	0.010	1.000	909536		6.26(2.86-8.58)		5961	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.277	5.268	0.009	1.000	6120324	2.52			1552	
913.00 > 169.00	5.277	5.268	0.009	1.000	734463		8.33(3.83-11.48)		3317	

Reagents:

LCPFCIC_FULL_00011 Amount Added: 1.00 Units: mL

Report Date: 11-Apr-2018 10:51:24 Chrom Revision: 2.2 13-Mar-2018 08:45:20

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_010.d

Injection Date: 10-Apr-2018 19:42:10 Instrument ID: A8_N

Lims ID: ICV Full

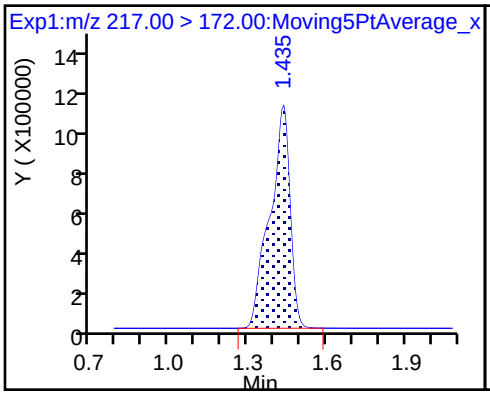
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 10

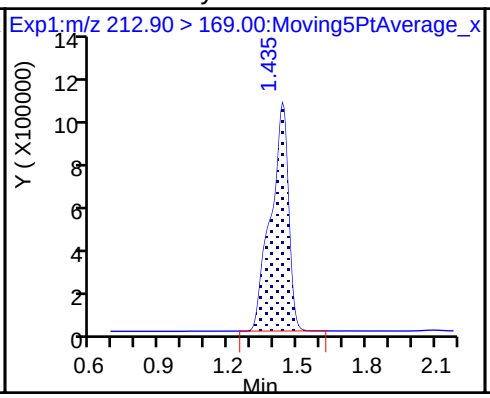
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

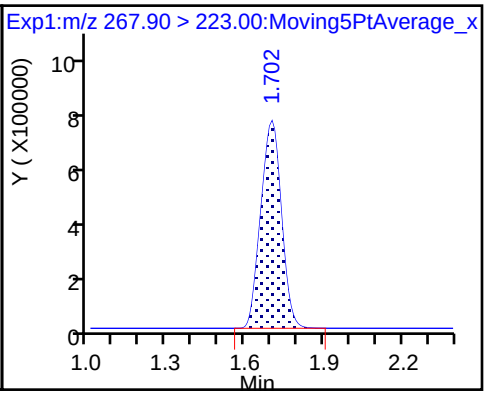
D 1 13C4 PFBA



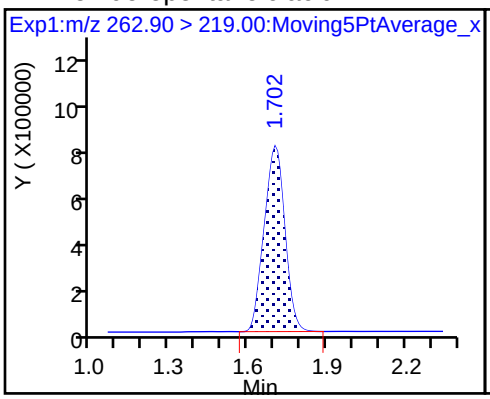
2 Perfluorobutyric acid



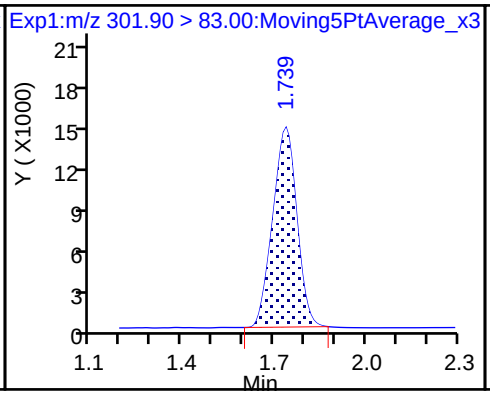
D 3 13C5-PFPeA



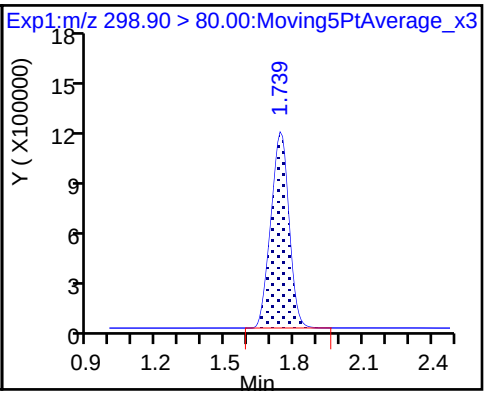
4 Perfluoropentanoic acid



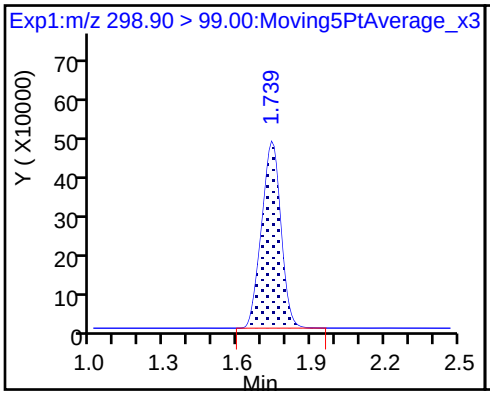
D 47 13C3-PFBS



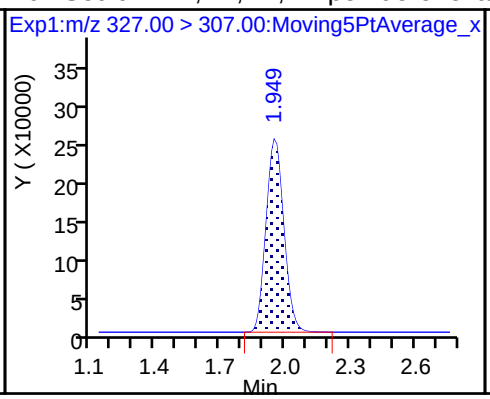
5 Perfluorobutanesulfonic acid



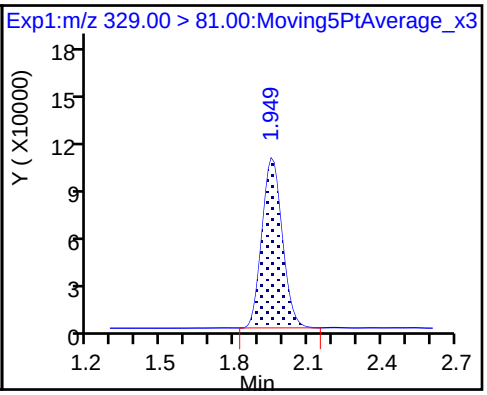
5 Perfluorobutanesulfonic acid



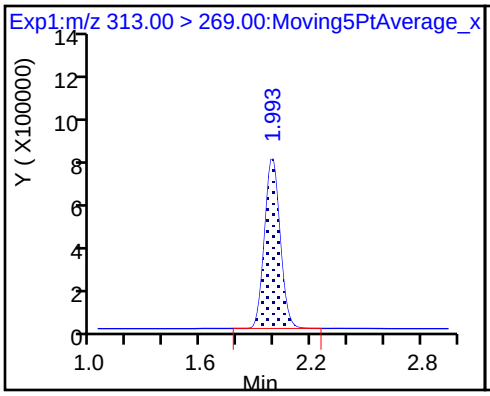
61 Sodium 1H,1H,2H,2H-perfluorohexane



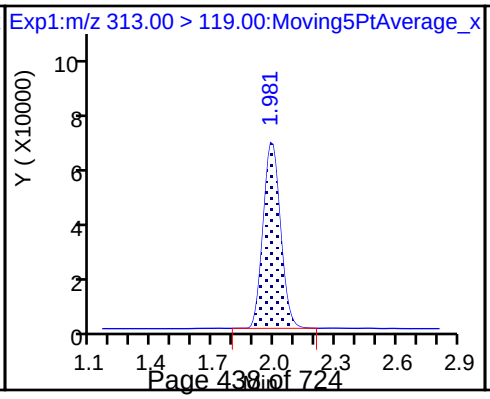
D 60 M2-4:2FTS



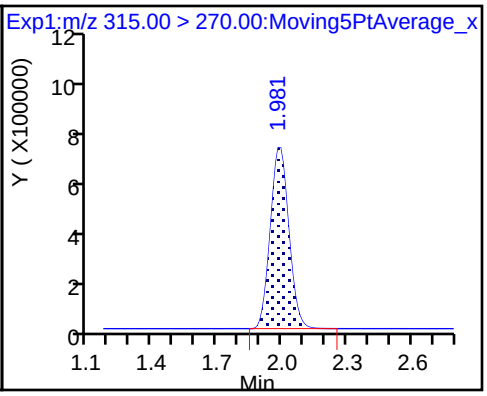
6 Perfluorohexanoic acid



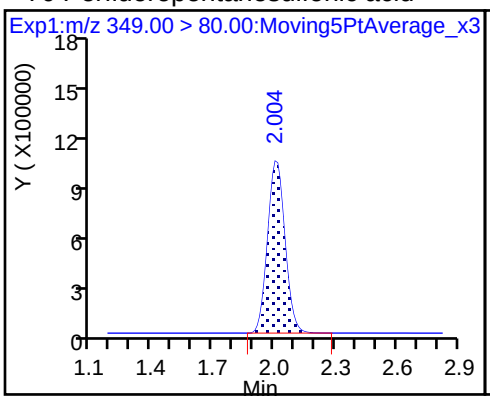
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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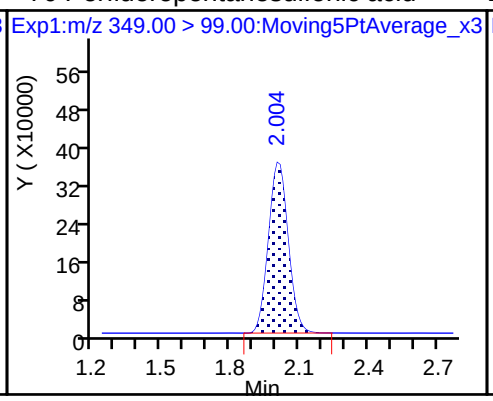
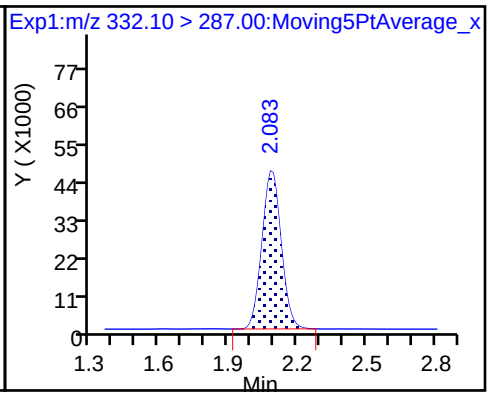
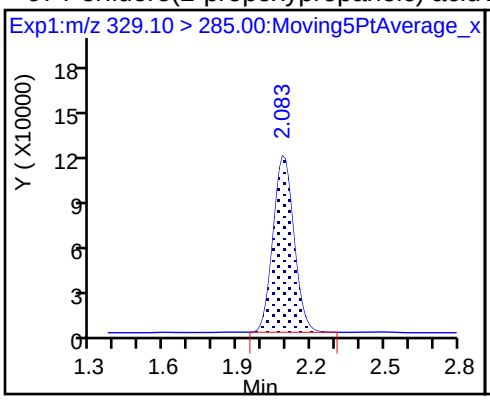


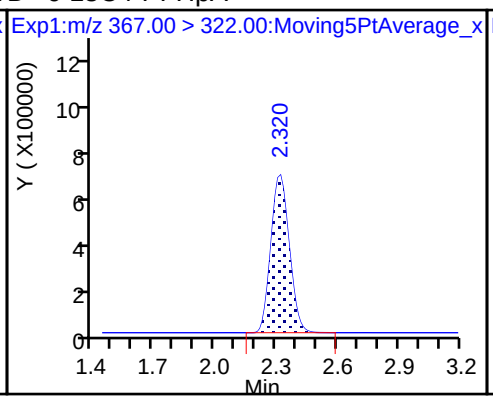
D 64 13C3 HFPO-DA



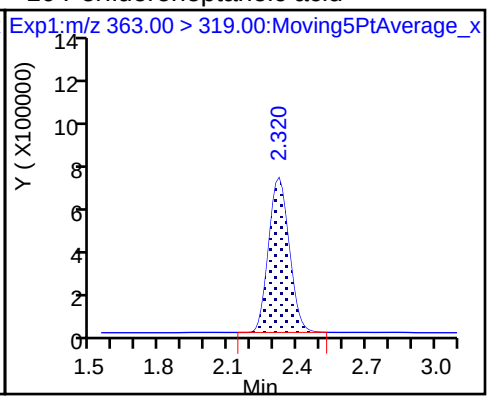
67 Perfluoro(2-propoxypropanoic) acid



D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



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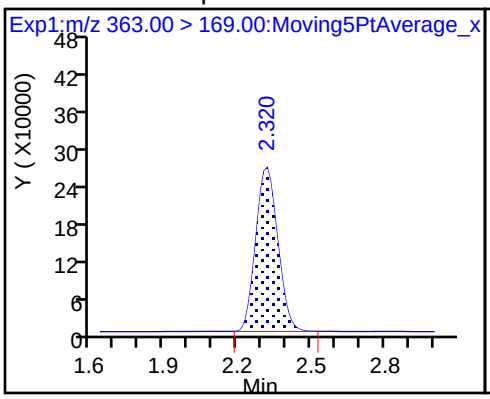
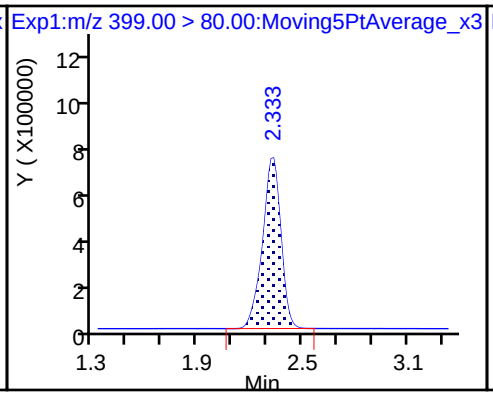
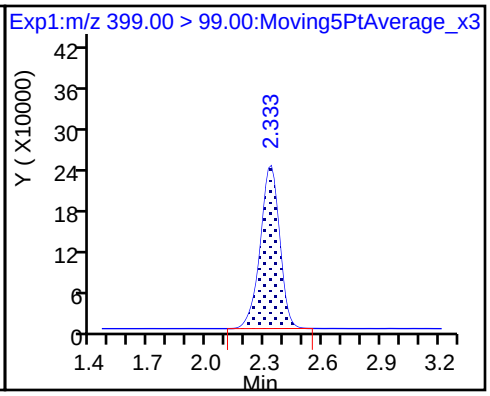


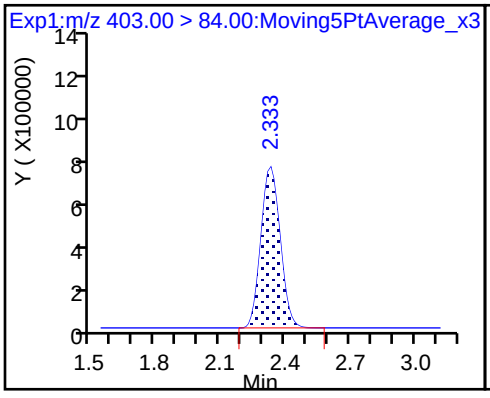
8 Perfluorohexanesulfonic acid



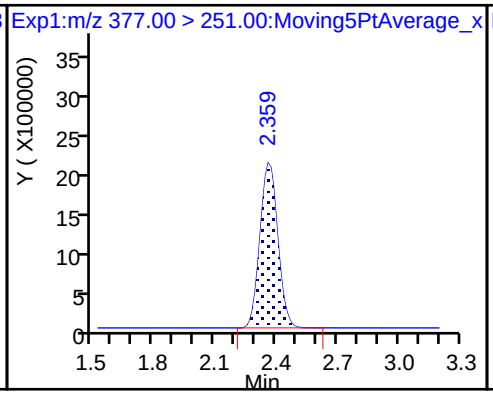
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 Adona



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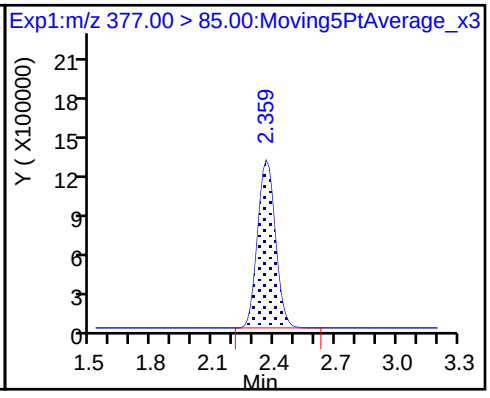
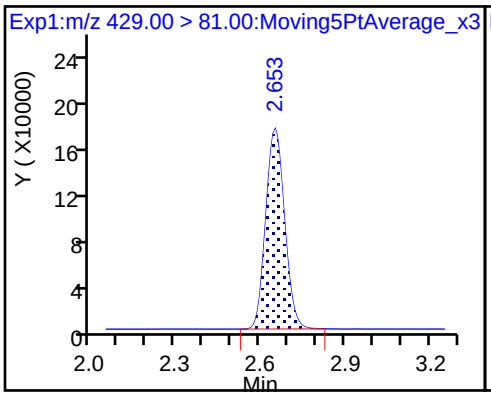
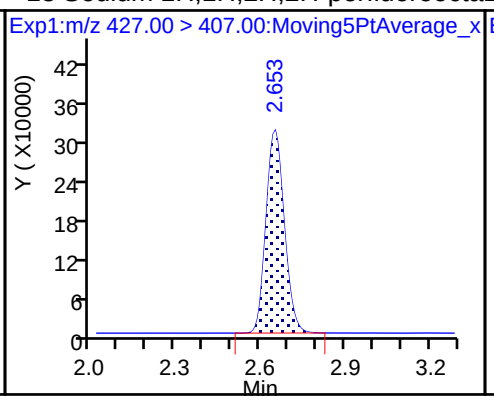


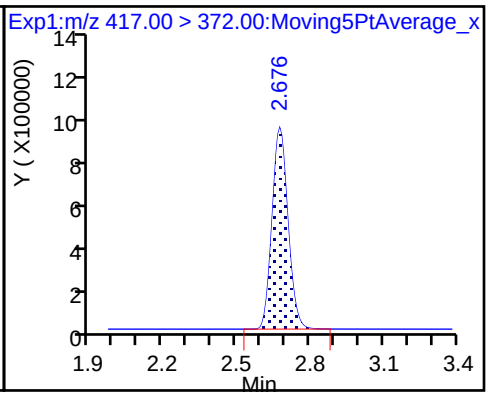
D 12 M2-6:2FTS



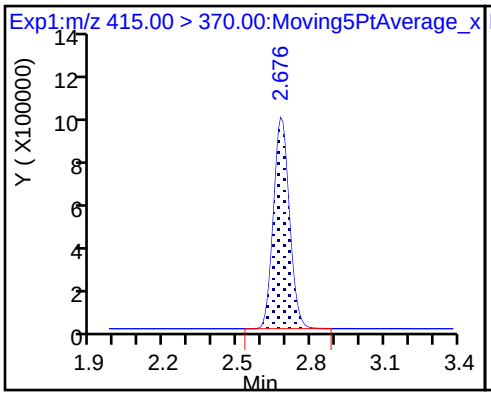
13 Sodium 1H,1H,2H,2H-perfluorooctane



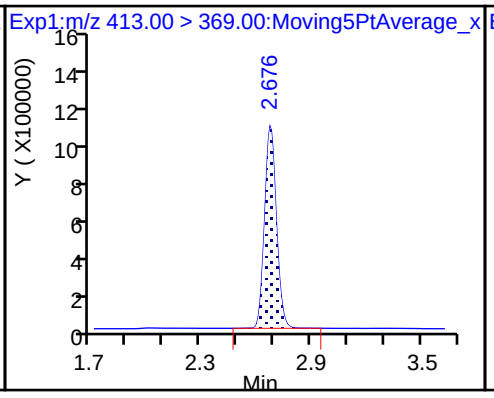
D 14 13C4 PFOA



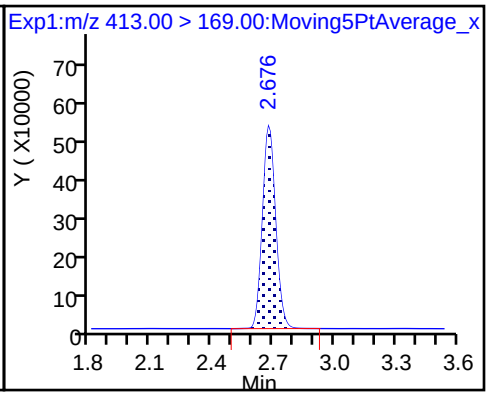
* 62 13C2-PFOA



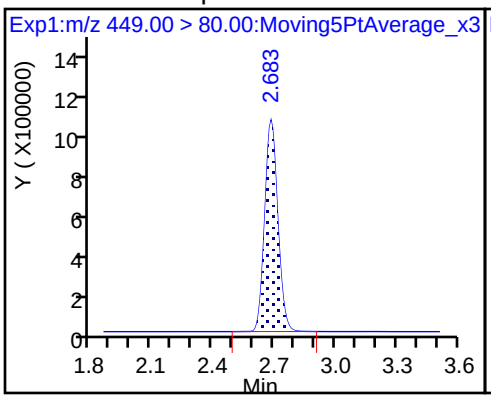
15 Perfluorooctanoic acid



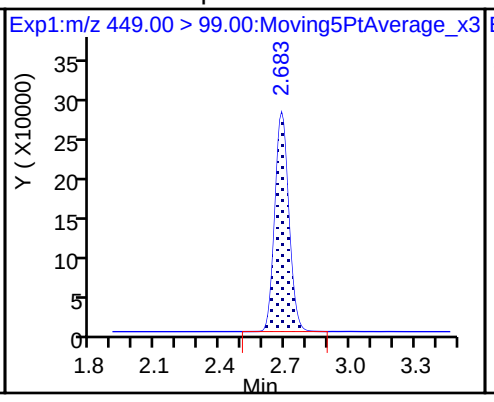
15 Perfluorooctanoic acid



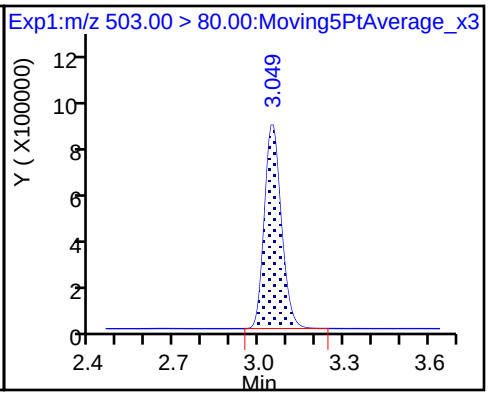
16 Perfluoroheptanesulfonic acid



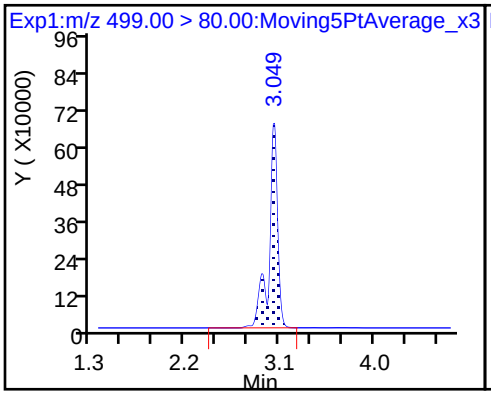
16 Perfluoroheptanesulfonic acid



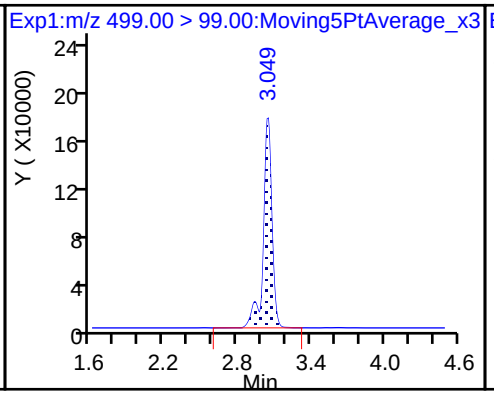
D 18 13C4 PFOS



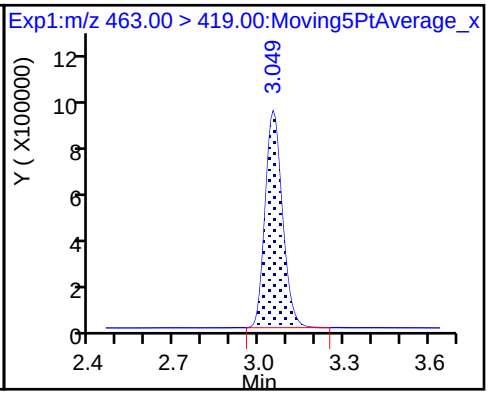
17 Perfluorooctane sulfonic acid



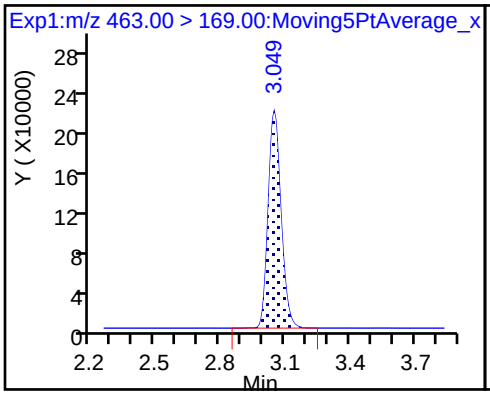
17 Perfluorooctane sulfonic acid



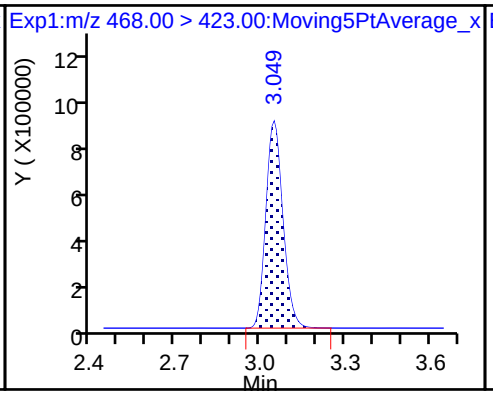
20 Perfluorononanoic acid



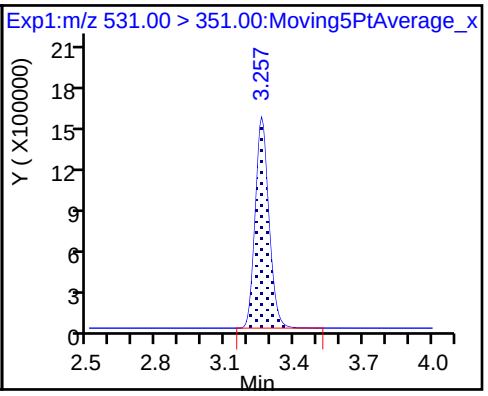
20 Perfluorononanoic acid



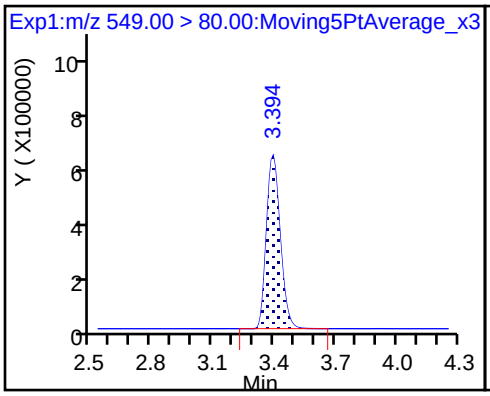
D 19 13C5 PFNA



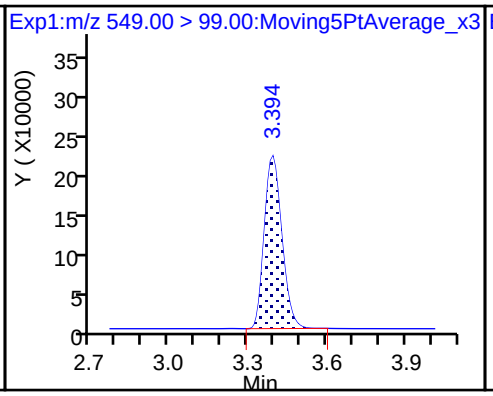
69 9-Chlorohexadecafluoro-3-oxanonane



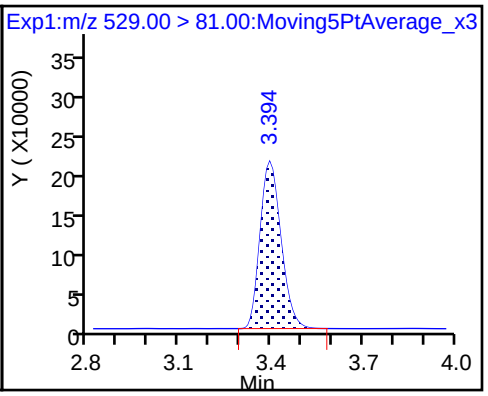
68 Perfluorononanesulfonic acid



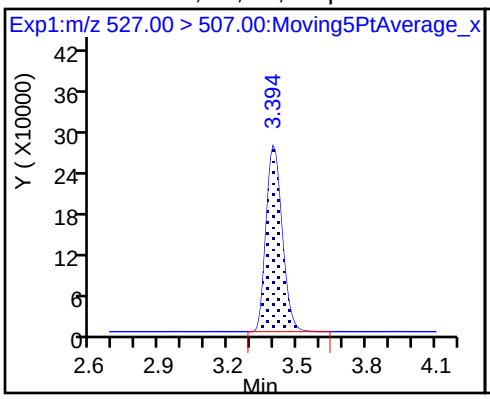
68 Perfluorononanesulfonic acid



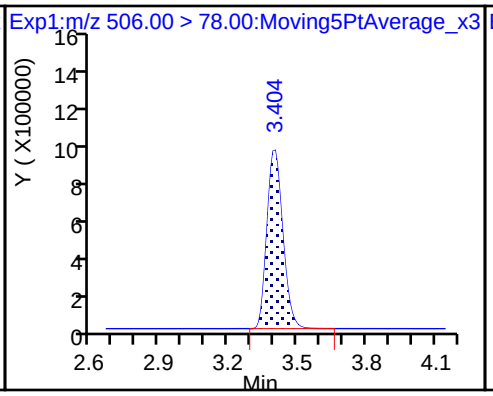
D 26 M2-8:2FTS



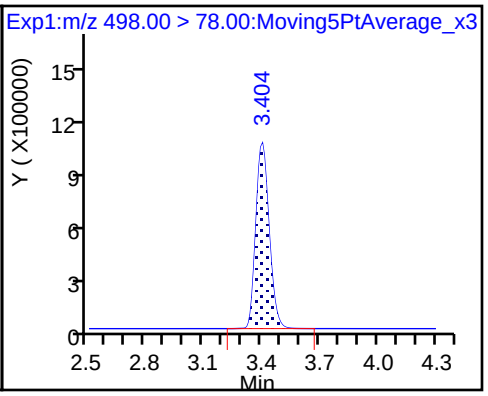
25 Sodium 1H,1H,2H,2H-perfluorodecane



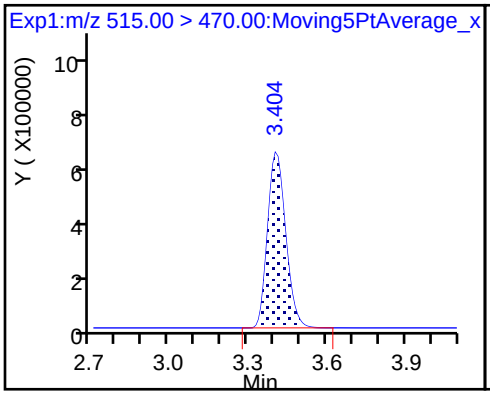
D 21 13C8 FOSA



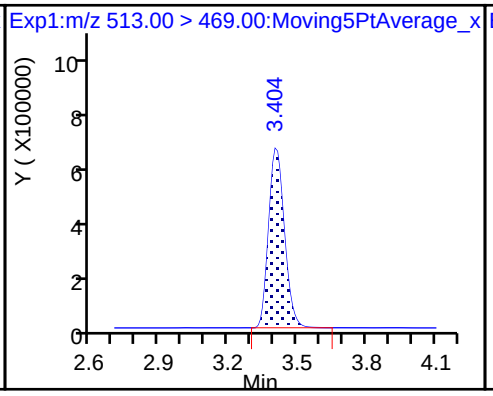
22 Perfluorooctane Sulfonamide



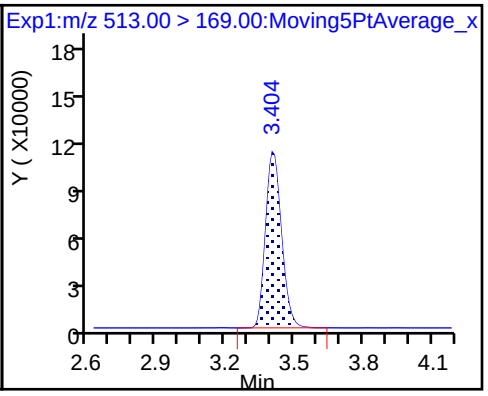
D 23 13C2 PFDA



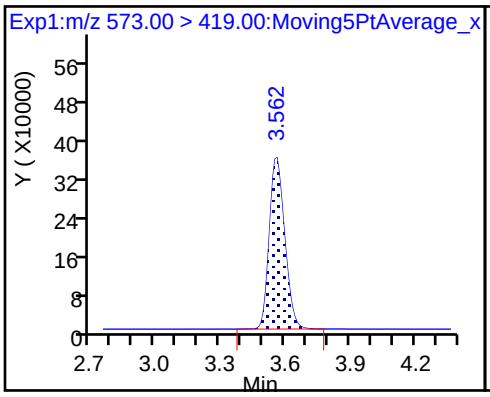
24 Perfluorodecanoic acid



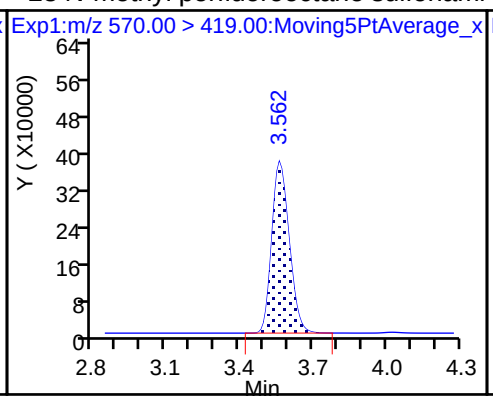
24 Perfluorodecanoic acid



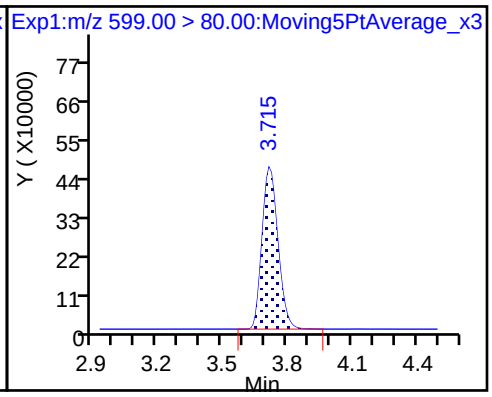
D 27 d3-NMeFOSAA



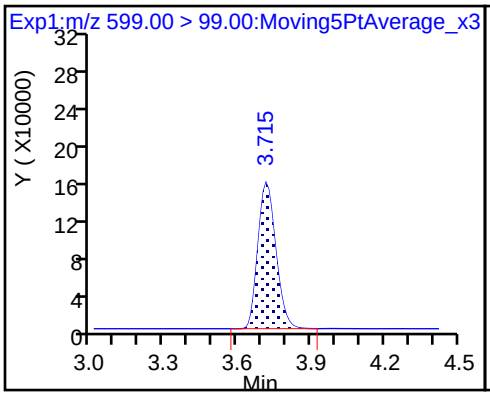
28 N-methyl perfluorooctane sulfonami



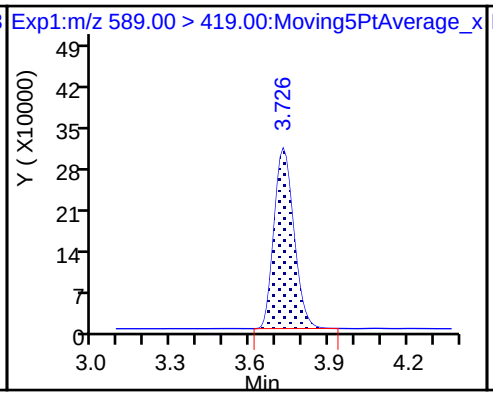
29 Perfluorodecane Sulfonic acid



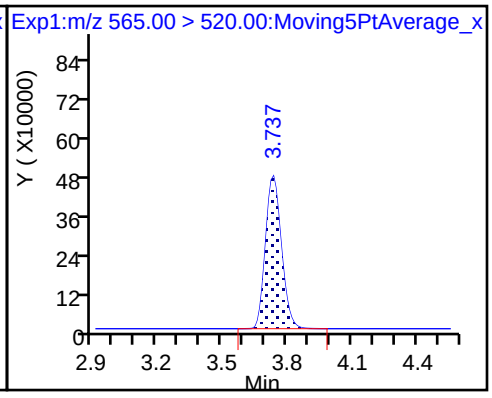
29 Perfluorodecane Sulfonic acid



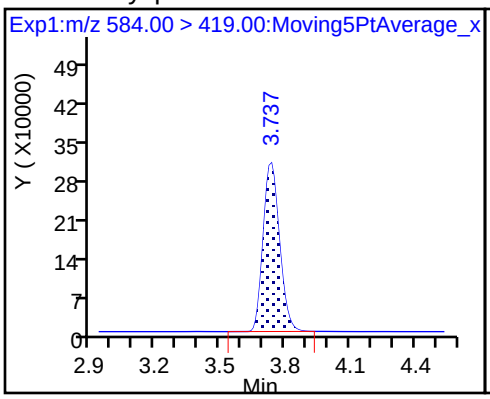
D 32 d5-NEtFOSAA



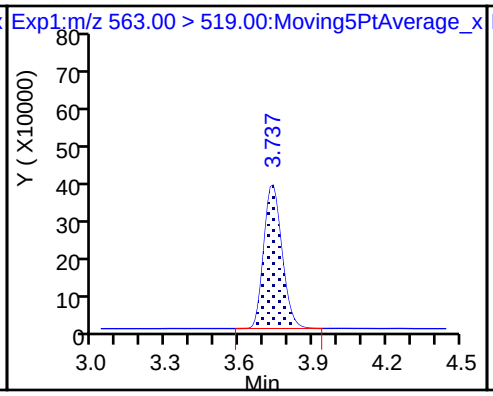
D 30 13C2 PFUnA



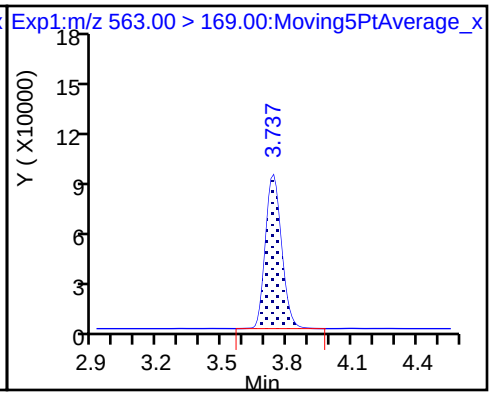
33 N-ethyl perfluorooctane sulfonamid



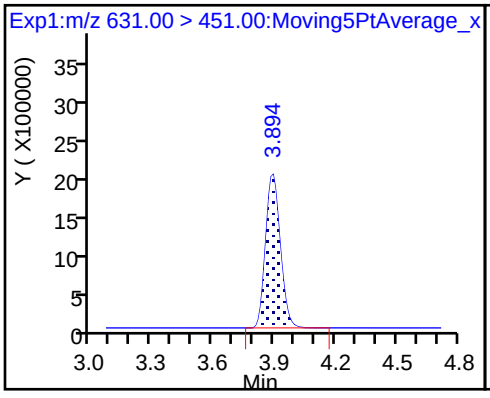
31 Perfluoroundecanoic acid



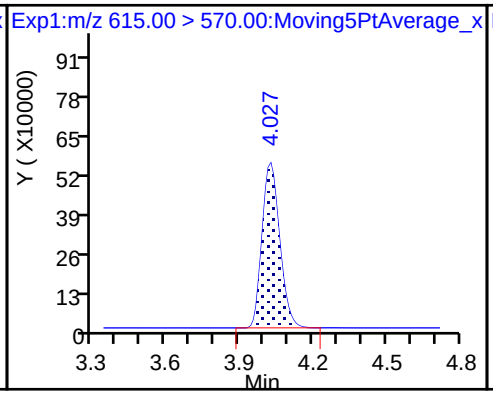
31 Perfluoroundecanoic acid



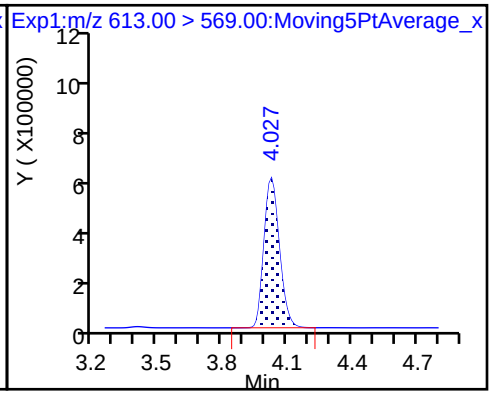
66 11-Chloroeicosafluoro-3-oxaundecan



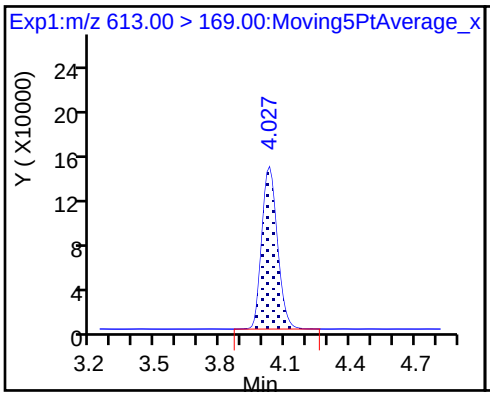
D 36 13C2 PFDoA



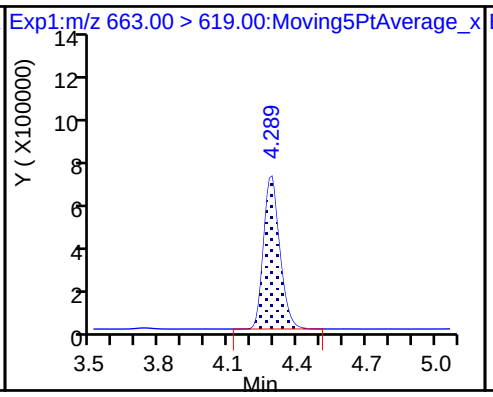
37 Perfluorododecanoic acid



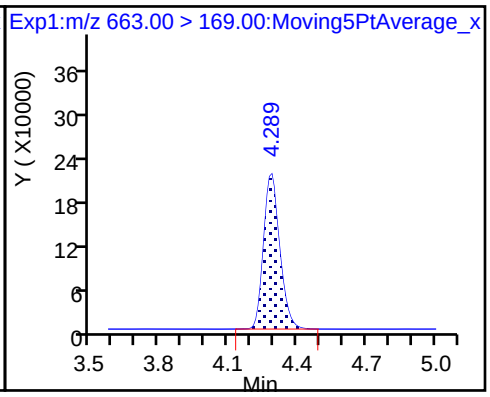
37 Perfluorododecanoic acid



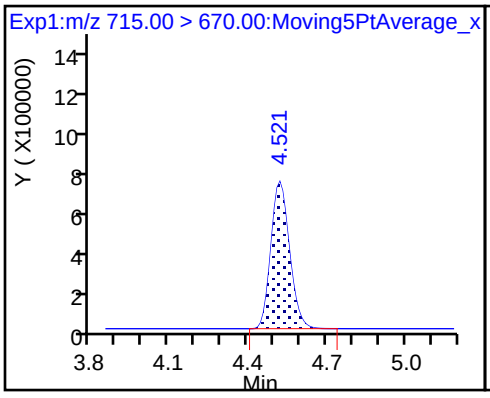
41 Perfluorotridecanoic acid



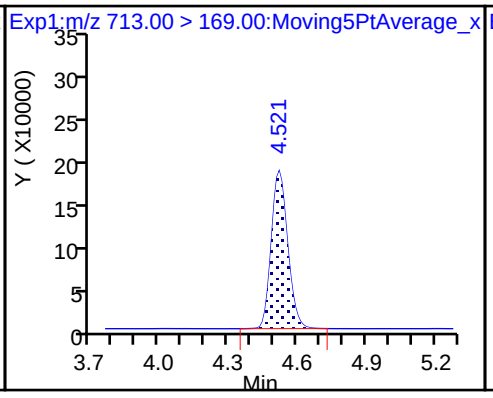
41 Perfluorotridecanoic acid



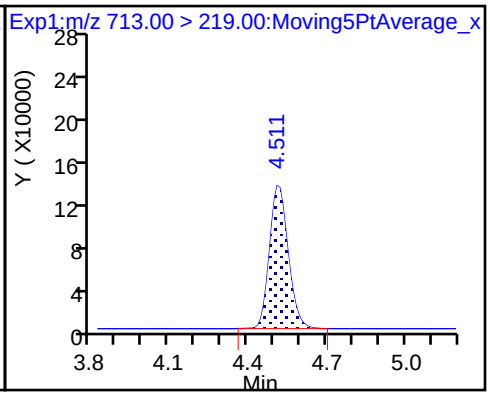
D 43 13C2-PFTeDA



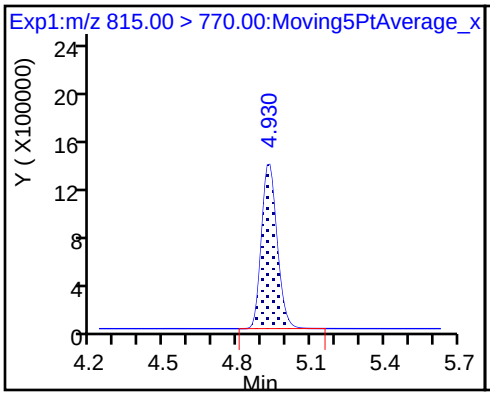
42 Perfluorotetradecanoic acid



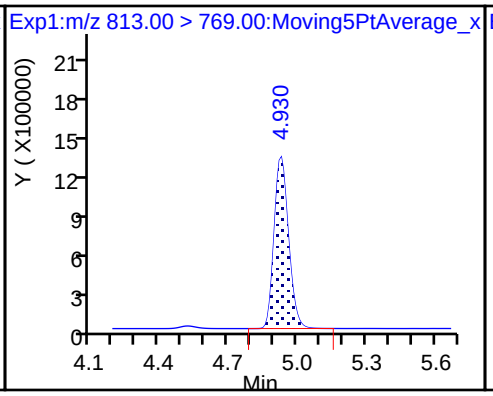
42 Perfluorotetradecanoic acid



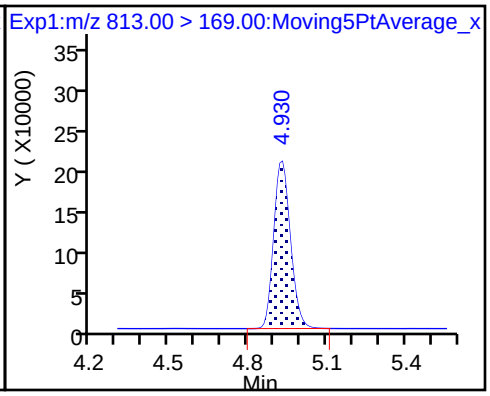
D 44 13C2-PFHxDA



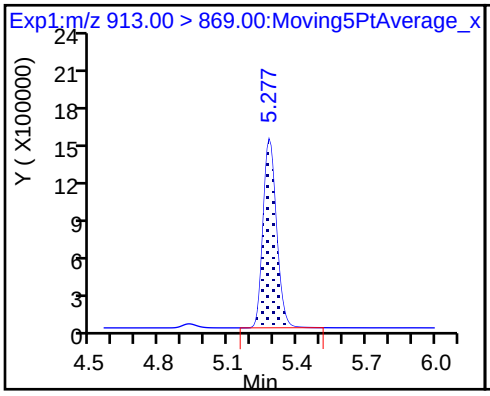
45 Perfluorohexadecanoic acid



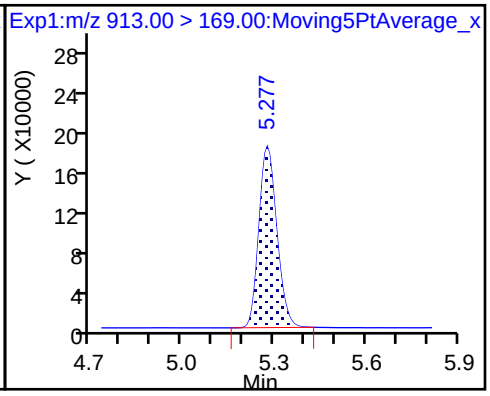
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCVL 320-222474/2 Calibration Date: 05/10/2018 07:02

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.09LLC_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	1.179		0.0635	0.0500	26.9	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.208		0.0507	0.0500	1.3	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	81.14		0.0458	0.0442	3.6	50.0
4:2 FTS	AveID	16.03	18.59			0.0467	15.9	
Perfluorohexanoic acid (PFHxA)	AveID	1.016	1.135		0.0558	0.0500	11.7	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	66.79		0.0438	0.0469	-6.6	50.0
HFPO-DA (GenX)	AveID	2.785	3.244		0.0582	0.0500	16.4	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	0.9637		0.0481	0.0500	-3.7	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.207		0.0485	0.0455	6.7	50.0
Adona	AveID	3.464	3.637		0.0525	0.0500	5.0	50.0
6:2FTS	AveID	1.691	1.715			0.0474	1.5	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.241		0.0445	0.0476	-6.5	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.206		0.0522	0.0500	4.4	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.115		0.0476	0.0464	2.5	50.0
Perfluorononanoic acid (PFNA)	AveID	1.043	1.019		0.0489	0.0500	-2.3	50.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.740		0.0430	0.0466	-7.7	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	0.9444		0.0467	0.0500	-6.6	50.0
8:2FTS	AveID	1.265	1.320		0.0500	0.0479	4.3	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.8606		0.0517	0.0480	7.7	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	0.9776		0.0474	0.0500	-5.2	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	1.058			0.0500	6.1	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6927		0.0514	0.0482	6.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	0.9183		0.0491	0.0500	-1.7	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.8948		0.0529	0.0500	5.9	50.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.748		0.0444	0.0471	-5.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	1.120		0.0537	0.0500	7.4	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.073		0.0441	0.0500	-11.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2753		0.0548	0.0500	9.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.325		0.0477	0.0500	-4.6	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCVL 320-222474/2 Calibration Date: 05/10/2018 07:02

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.09LLC_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	1.074		0.0535	0.0500	7.0	50.0
13C4 PFBA	Ave	1.345	1.429		2.66	2.50	6.2	50.0
13C5 PFPeA	Ave	0.8672	0.9176		2.65	2.50	5.8	50.0
13C3-PFBS	Ave	0.0199	0.0200		2.34	2.33	0.5	50.0
M2-4:2FTS	Ave	0.1425	0.1595		2.61	2.34	11.9	50.0
13C2 PFHxA	Ave	0.9590	1.047		2.73	2.50	9.1	50.0
13C3 HFPO-DA	Ave	0.0593	0.0551		2.32	2.50	-7.1	50.0
13C4-PFHpA	Ave	0.9333	1.026		2.75	2.50	10.0	50.0
18O2 PFHxS	Ave	1.152	1.188		2.44	2.37	3.1	50.0
M2-6:2FTS	Ave	0.2000	0.2367		2.81	2.38	18.3	50.0
13C4 PFOA	Ave	0.9276	0.9446		2.55	2.50	1.8	50.0
13C4 PFOS	Ave	0.8066	0.8238		2.44	2.39	2.1	50.0
13C5 PFNA	Ave	0.7973	0.8291		2.60	2.50	4.0	50.0
13C8 FOSA	Ave	1.007	1.012		2.51	2.50	0.5	50.0
M2-8:2FTS	Ave	0.2409	0.2547		2.53	2.40	5.7	50.0
13C2 PFDA	Ave	0.6701	0.6537		2.44	2.50	-2.4	50.0
d3-NMeFOSAA	Ave	0.3798	0.3920		2.58	2.50	3.2	50.0
d5-NEtFOSAA	Ave	0.3749	0.4229		2.82	2.50	12.8	50.0
13C2 PFUnA	Ave	0.5781	0.5571		2.41	2.50	-3.6	50.0
13C2 PFDoA	Ave	0.6242	0.5887		2.36	2.50	-5.7	50.0
13C2-PFTeDA	Ave	0.7915	0.7584		2.40	2.50	-4.2	50.0
13C2-PFHxDA	Ave	1.288	1.321		2.56	2.50	2.6	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57954.b\2018.05.09LLC_005.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 10-May-2018 07:02:03 ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57954.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 10-May-2018 10:20:48 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK030

First Level Reviewer: westendorfc Date: 10-May-2018 10:16:59

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.458	1.463	-0.005	1.000	5166880	2.66		106	34964	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.463	-0.005	1.000	121799	0.0635		127	76.0	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.737	-0.008	0.559	3316515	2.65		106	58659	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.747	-0.018	1.000	80114	0.0507		101	59.5	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.764	0.001	1.000	67189	2.34		100	622	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.783	-0.018	1.000	103639	0.0458		104	86.8	
298.90 > 99.00	1.765	1.783	-0.018	1.000	40229		2.58(1.25-3.74)		80.3	
D 60 M2-4:2FTS										
329.00 > 81.00	1.991	1.991	0.0	1.000	538485	2.61		112	6216	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.991	2.003	-0.012	1.000	25083	0.0541		116	1505	
D 7 13C2 PFHxA										
315.00 > 270.00	2.025	2.025	0.0	1.000	3782997	2.73		109	99926	
6 Perfluorohexanoic acid										R
313.00 > 269.00	2.025	2.037	-0.012	1.000	85861	0.0558		112	146	R
313.00 > 119.00	2.025	2.037	-0.012	1.000	5598		15.34(5.03-15.10)		77.5	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.048	2.059	-0.011	1.000	90518	0.0438		93.4	1104	
349.00 > 99.00	2.048	2.059	-0.011	1.000	37162		2.44(1.36-4.07)		700	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.127	2.127	0.0	1.000	199104	2.32		92.9	5257	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.127	2.138	-0.011	1.000	12916	0.0582		116	103	
D 9 13C4-PFHpA										
367.00 > 322.00	2.358	2.358	0.0	1.000	3708945	2.75		110	78911	
D 11 18O2 PFHxS										
403.00 > 84.00	2.372	2.371	0.001	1.000	4061287	2.44		103	43624	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.358	2.372	-0.014	1.000	71489	0.0481		96.3	98.9	
363.00 > 169.00	2.358	2.372	-0.014	1.000	31302		2.28(1.13-3.40)		178	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.372	2.384	-0.012	1.000	94340	0.0485		107	322	
399.00 > 99.00	2.372	2.384	-0.012	1.000	33781		2.79(1.50-4.49)		222	
65 Adona										
377.00 > 251.00	2.406	2.418	-0.012	1.000	216616	0.0525		105	4246	
377.00 > 85.00	2.406	2.418	-0.012	1.000	128843		1.68(0.84-2.53)		3860	
D 12 M2-6:2FTS										
429.00 > 81.00	2.690	2.697	-0.007	1.000	812598	2.81		118	14072	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.690	2.712	-0.022	1.000	27821	0.0481		101	910	
D 14 13C4 PFOA										
417.00 > 372.00	2.720	2.719	0.001	1.000	3414190	2.55		102	50517	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.720	2.735	-0.015	1.000	82365	0.0522		104	37.2	
413.00 > 169.00	2.720	2.735	-0.015	1.000	44518		1.85(0.84-2.52)		174	
* 62 13C2-PFOA										
415.00 > 370.00	2.720	2.735	-0.015		3614482	2.50			50599	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.720	2.743	-0.023	1.000	70380	0.0445		93.5	785	
449.00 > 99.00	2.720	2.743	-0.023	1.000	19691		3.57(1.94-5.82)		500	
D 18 13C4 PFOS										
503.00 > 80.00	3.084	3.092	-0.008	1.000	2846653	2.44		102	17017	
D 19 13C5 PFNA										
468.00 > 423.00	3.092	3.099	-0.007	1.000	2996693	2.60		104	61734	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.084	3.106	-0.022	1.000	61617	0.0476		102	246	
499.00 > 99.00	3.084	3.106	-0.022	1.000	11719		5.26(2.31-6.93)		108	
20 Perfluorononanoic acid										
463.00 > 419.00	3.092	3.114	-0.022	1.000	61060	0.0489		97.7	174	
463.00 > 169.00	3.084	3.114	-0.030	0.998	11349		5.38(1.90-5.69)		262	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.299	3.321	-0.022	1.000	96573	0.0430		92.3	2729	
D 21 13C8 FOSA										
506.00 > 78.00	3.421	3.430	-0.009	1.000	3658286	2.51		100	35509	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.421	3.447	-0.026	1.000	69100	0.0467		93.4	2077	
D 26 M2-8:2FTS										
529.00 > 81.00	3.440	3.449	-0.009	1.000	881986	2.53		106	10318	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.440	3.457	-0.017	1.000	49200	0.0517		108	760	
549.00 > 99.00	3.440	3.457	-0.017	1.000	14325		3.43(1.33-3.97)		317	
D 23 13C2 PFDA										
515.00 > 470.00	3.449	3.458	-0.009	1.000	2362786	2.44		97.6	43067	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.440	3.466	-0.026	1.000	23282	0.0500		104	1200	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.449	3.475	-0.026	1.000	46195	0.0474		94.8	209	
513.00 > 169.00	3.458	3.475	-0.017	1.003	9769		4.73(2.36-7.09)		252	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.611	3.621	-0.010	1.000	1416955	2.58		103	15577	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.611	3.630	-0.019	1.000	29976	0.0530		106	350	
D 30 13C2 PFUnA										
565.00 > 520.00	3.785	3.784	0.001	1.000	2013542	2.41		96.4	54149	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.774	3.784	-0.010	1.000	1528642	2.82		113	21877	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.764	3.785	-0.021	1.000	39770	0.0514		107	381	
599.00 > 99.00	3.764	3.785	-0.021	1.000	13167		3.02(1.39-4.16)		434	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.774	3.806	-0.032	1.000	28074	0.0491		98.3	424	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.785	3.806	-0.021	1.000	36033	0.0529		106	190	
563.00 > 169.00	3.785	3.806	-0.021	1.000	8421		4.28(2.12-6.36)		396	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.941	3.962	-0.021	1.000	154159	0.0444		94.4	4338	
D 36 13C2 PFDoA										
615.00 > 570.00	4.072	4.082	-0.010	1.000	2127790	2.36		94.3	22754	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.072	4.097	-0.025	1.000	47676	0.0537		107	65.0	
613.00 > 169.00	4.072	4.097	-0.025	1.000	10888		4.38(2.13-6.40)		152	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.341	4.358	-0.017	1.000	45667	0.0441		88.3	50.9	
663.00 > 169.00	4.341	4.358	-0.017	1.000	14093		3.24(1.25-3.76)		179	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.583	4.583	0.0	1.000	2741101	2.40		95.8	19538	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.583	4.592	-0.009	1.000	15093	0.0548		110	208	
713.00 > 219.00	4.573	4.592	-0.019	0.998	10027		1.51(0.71-2.13)		349	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.000	5.000	0.0	1.000	4775709	2.56		103	12007	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.000	5.008	-0.008	1.000	126582	0.0477		95.4	57.6	
813.00 > 169.00	5.000	5.008	-0.008	1.000	20244		6.25(2.86-8.58)		218	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.363	5.374	-0.011	1.000	102612	0.0535		107	40.6	
913.00 > 169.00	5.363	5.374	-0.011	1.000	11856		8.65(3.83-11.48)		179	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Reagents:

LCPFC_LL2_00004 Amount Added: 1.00 Units: mL

Report Date: 10-May-2018 10:20:50 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57954.b\2018.05.09LLC_005.d

Injection Date: 10-May-2018 07:02:03 Instrument ID: A8_N

Lims ID: CCVL

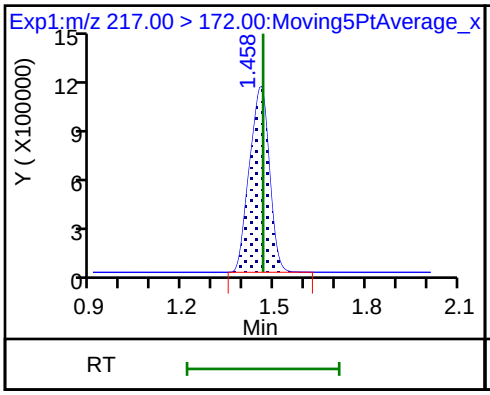
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 21 Worklist Smp#: 2

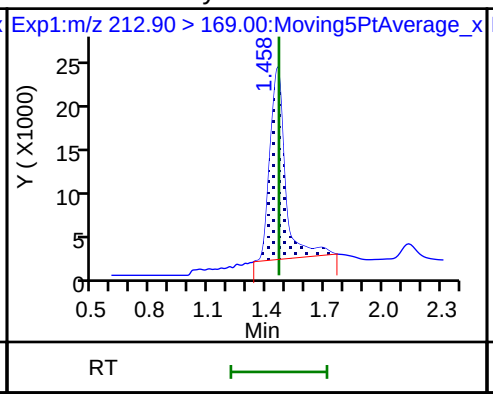
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

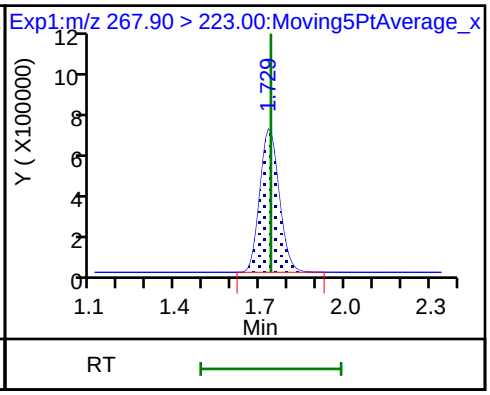
D 1 13C4 PFBA



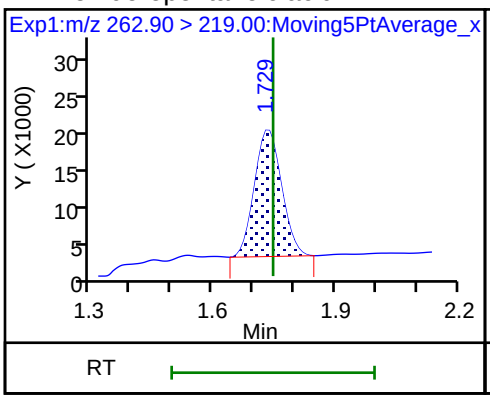
2 Perfluorobutyric acid



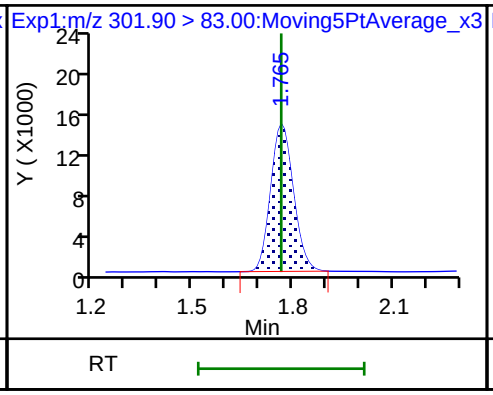
D 3 13C5-PFPeA



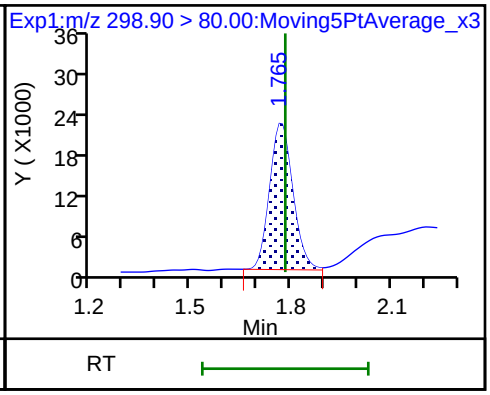
4 Perfluoropentanoic acid



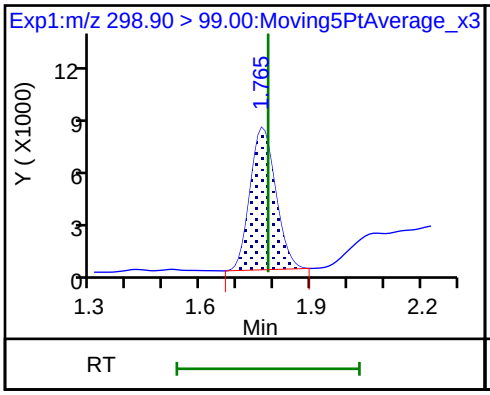
D 47 13C3-PFBS



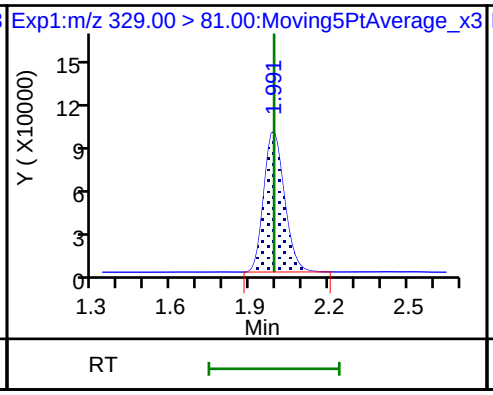
5 Perfluorobutanesulfonic acid



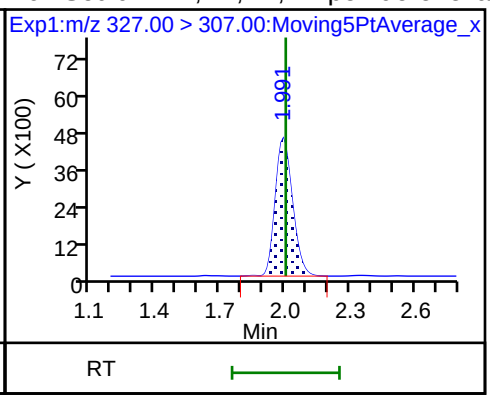
5 Perfluorobutanesulfonic acid



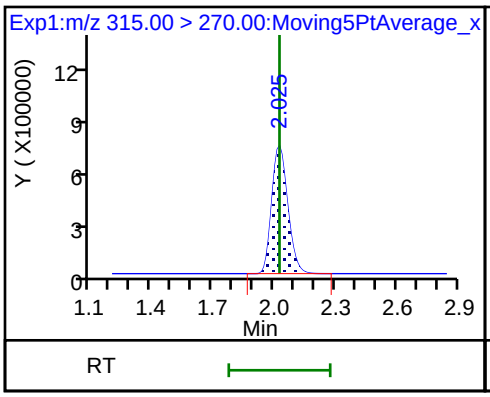
D 60 M2-4:2FTS



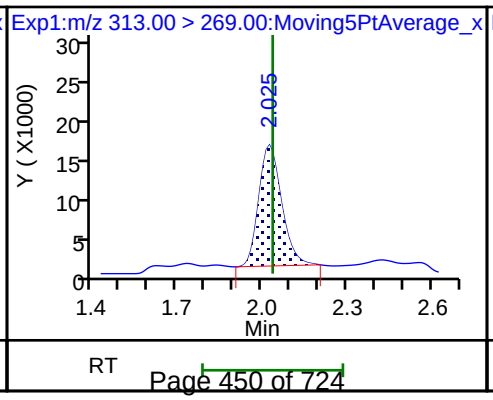
61 Sodium 1H,1H,2H,2H-perfluorohexane



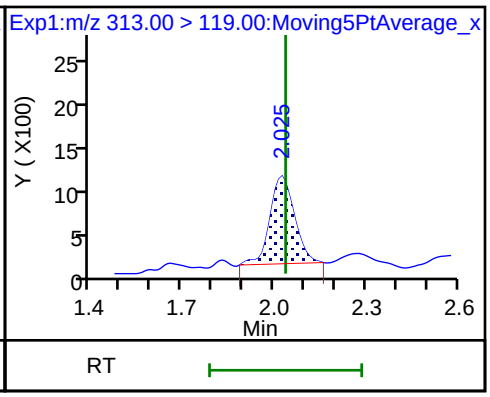
D 7 13C2 PFHxA



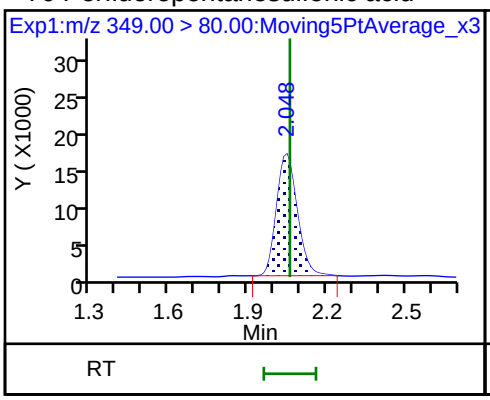
6 Perfluorohexanoic acid



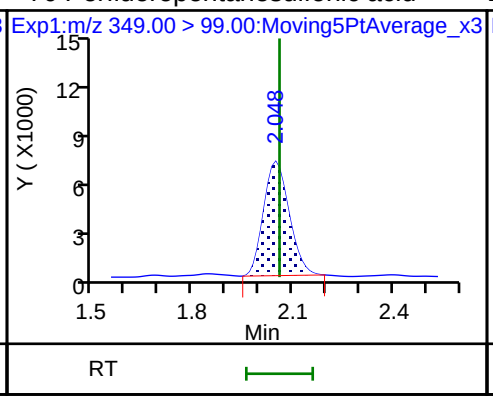
6 Perfluorohexanoic acid



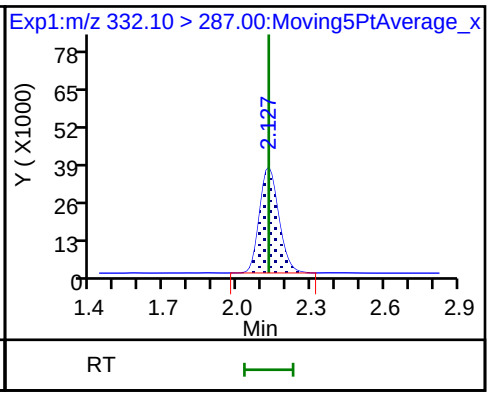
70 Perfluoropentanesulfonic acid



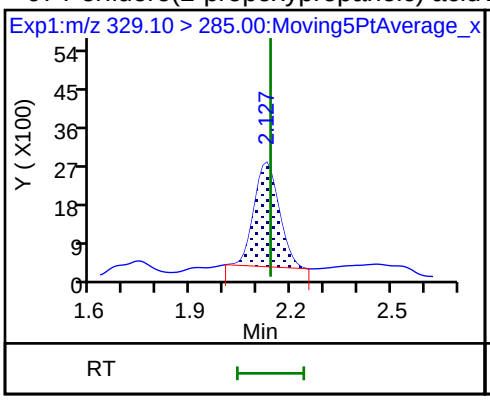
70 Perfluoropentanesulfonic acid



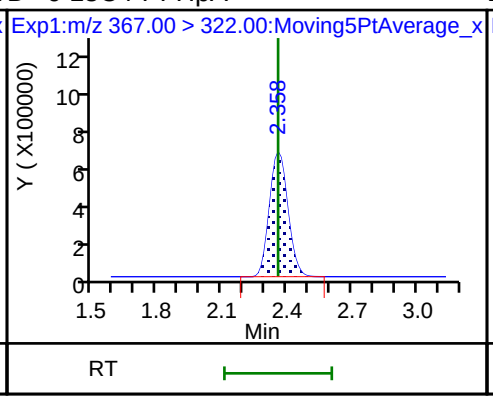
D 64 13C3 HFPO-DA



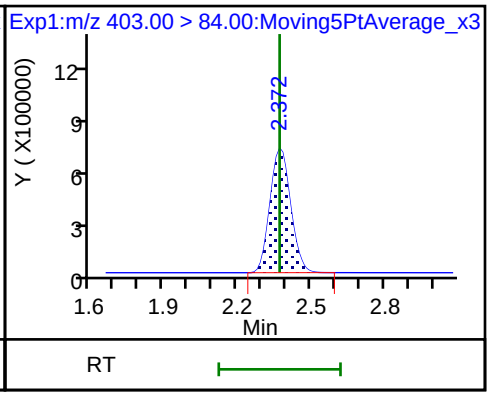
67 Perfluoro(2-propoxypropanoic) acid



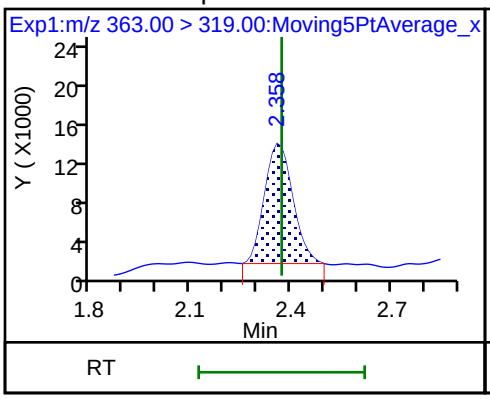
D 9 13C4-PFHpA



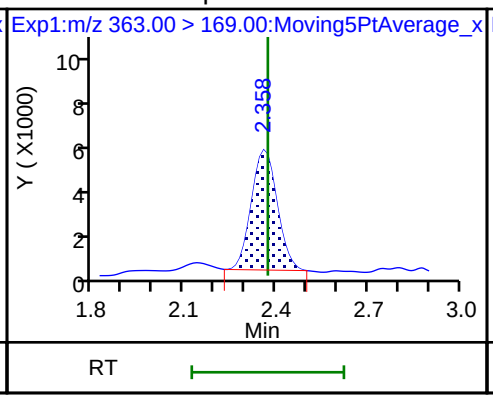
D 11 18O2 PFHxS



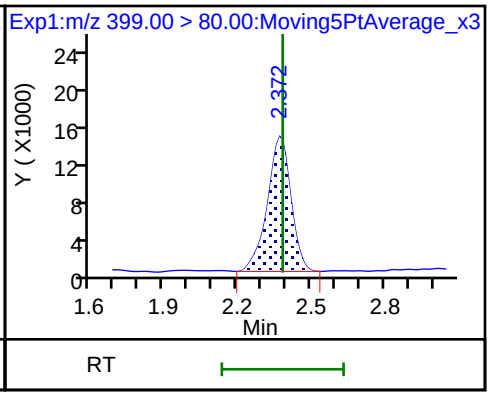
10 Perfluoroheptanoic acid



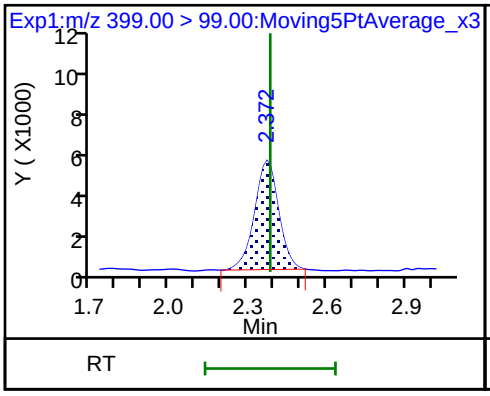
10 Perfluoroheptanoic acid



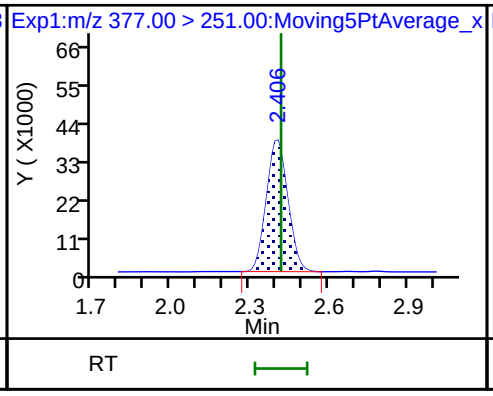
8 Perfluorohexanesulfonic acid



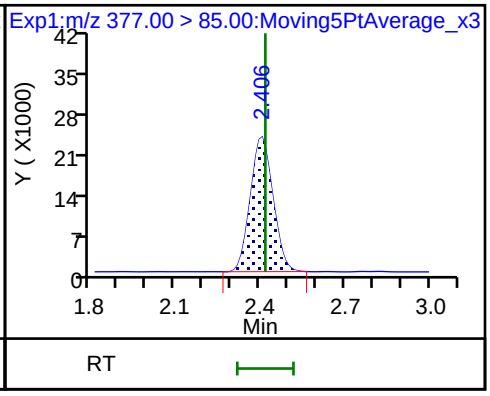
8 Perfluorohexanesulfonic acid



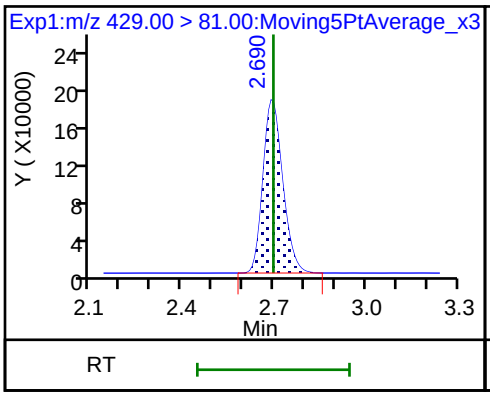
65 Adona



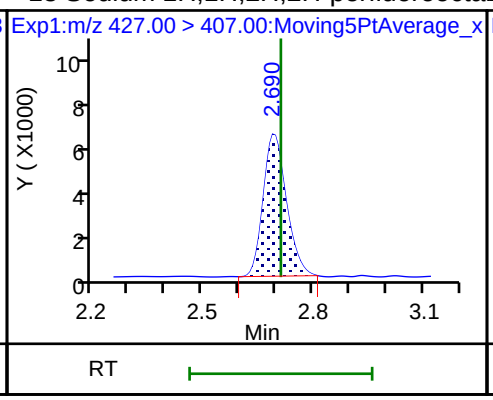
65 Adona



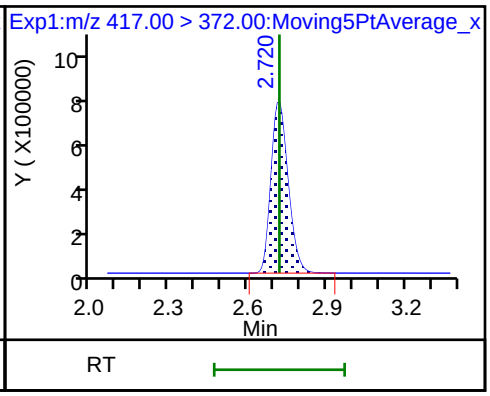
D 12 M2-6:2FTS



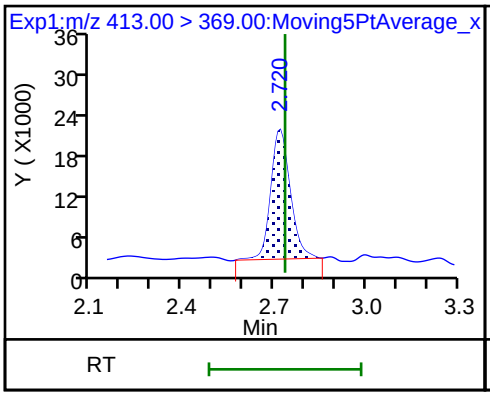
13 Sodium 1H,1H,2H,2H-perfluorooctane



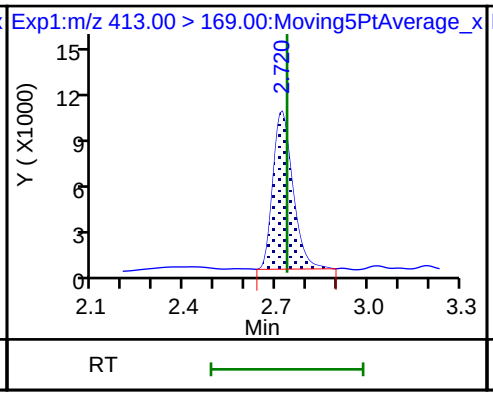
D 14 13C4 PFOA



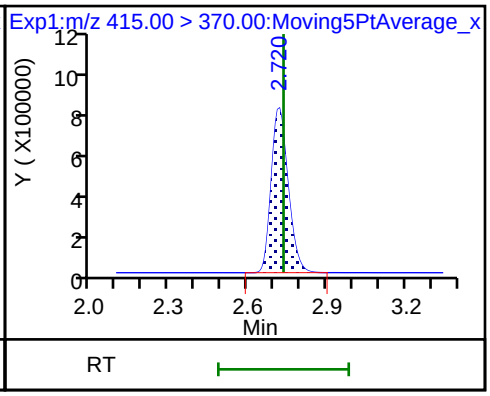
15 Perfluorooctanoic acid



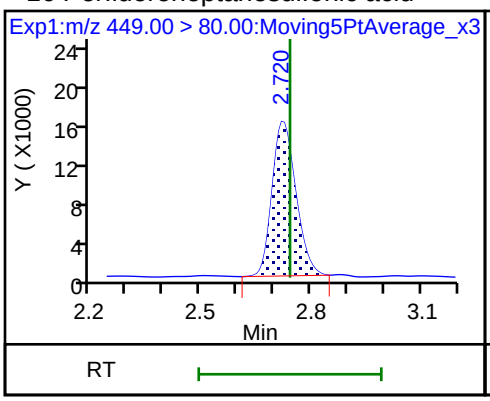
15 Perfluorooctanoic acid



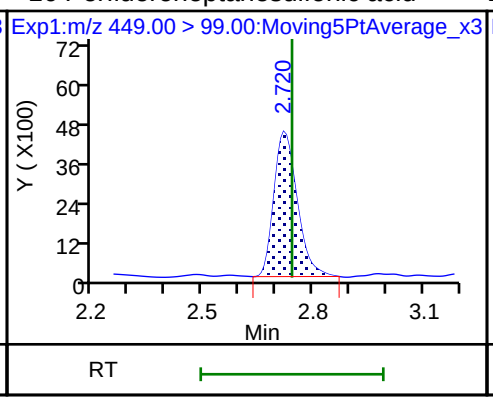
* 62 13C2-PFOA



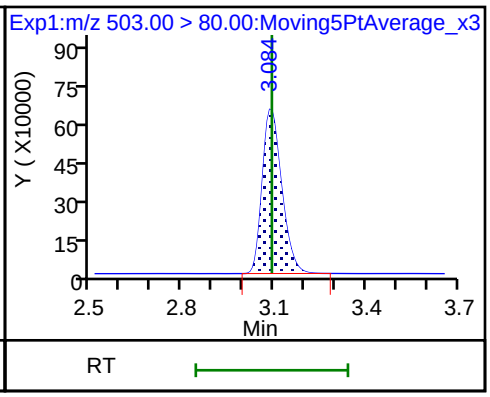
16 Perfluoroheptanesulfonic acid



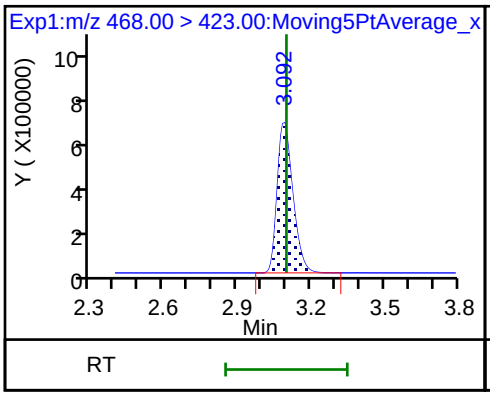
16 Perfluoroheptanesulfonic acid



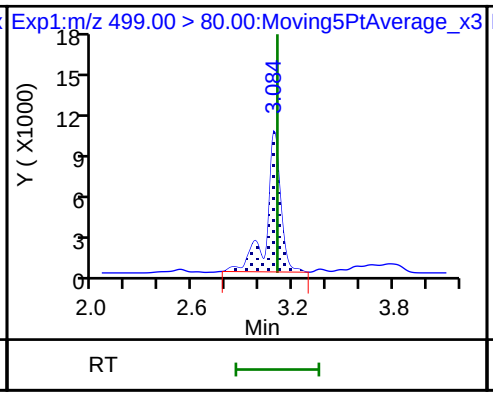
D 18 13C4 PFOS



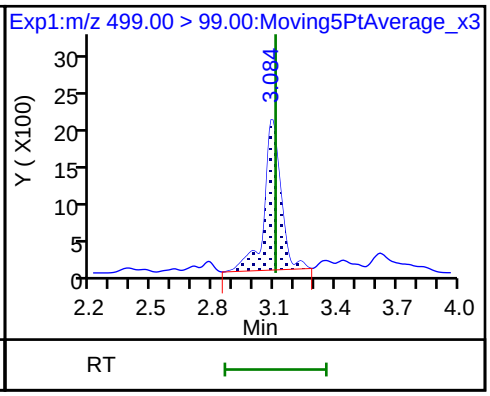
D 19 13C5 PFNA



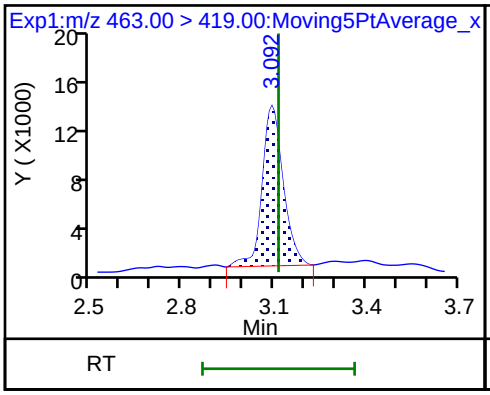
17 Perfluorooctane sulfonic acid



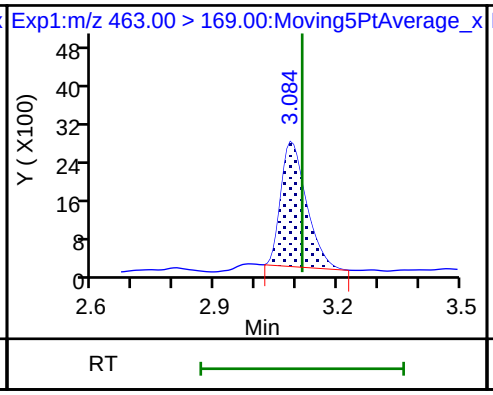
17 Perfluorooctane sulfonic acid



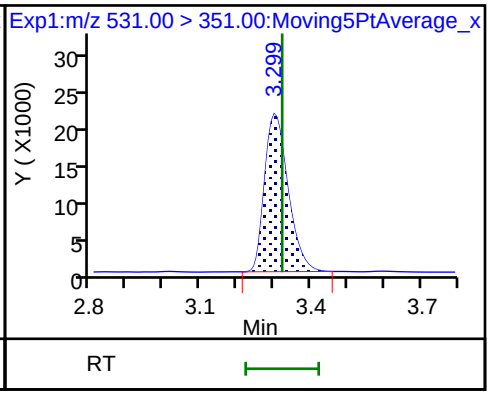
20 Perfluorononanoic acid



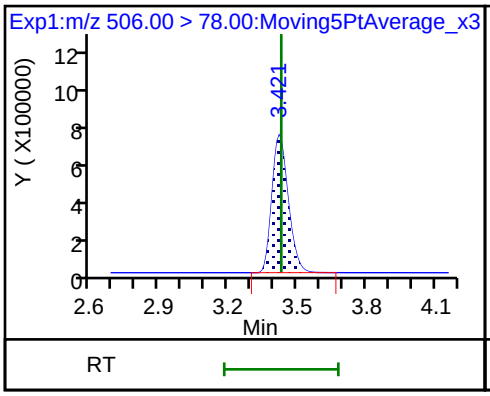
20 Perfluorononanoic acid



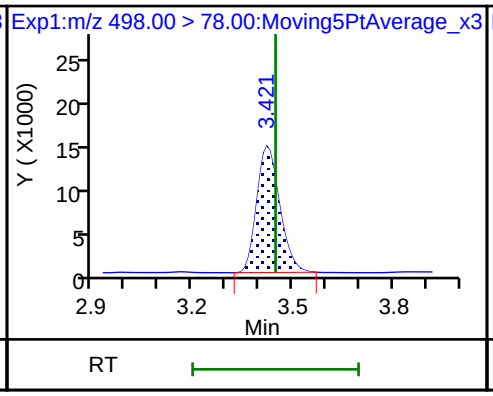
69 9-Chlorohexadecafluoro-3-oxanonane



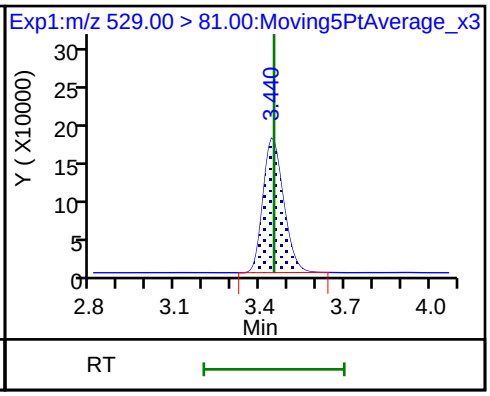
D 21 13C8 FOSA



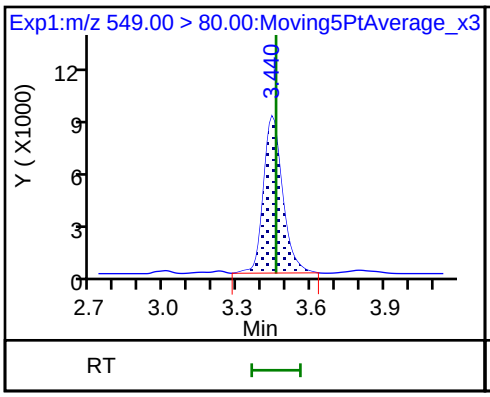
22 Perfluorooctane Sulfonamide



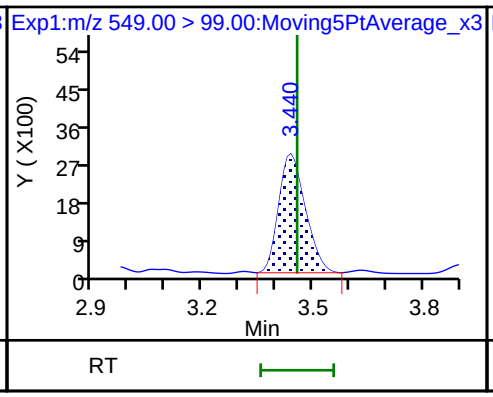
D 26 M2-8:2FTS



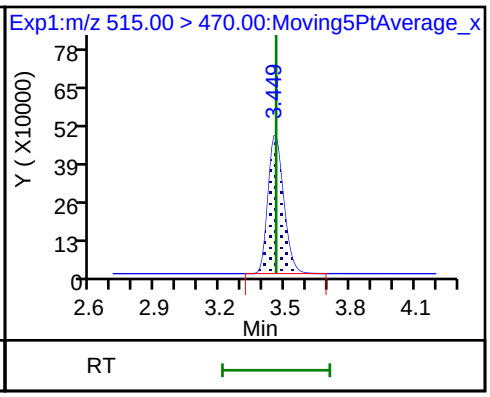
68 Perfluorononanesulfonic acid



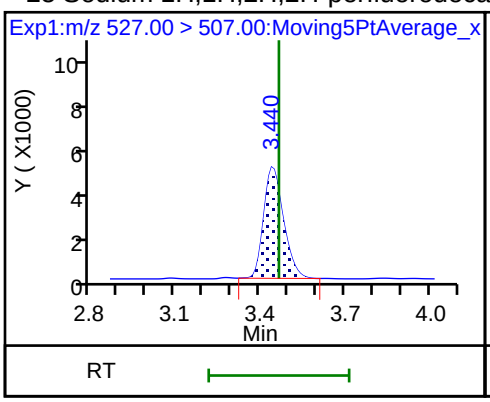
68 Perfluorononanesulfonic acid



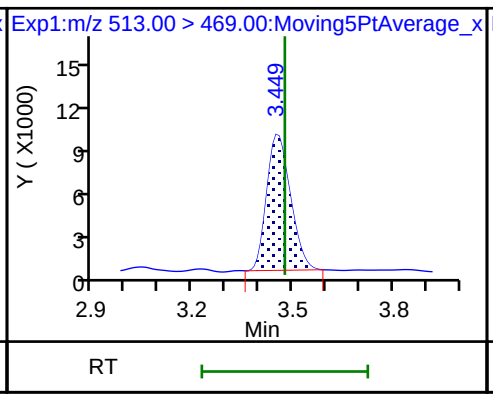
D 23 13C2 PFDA



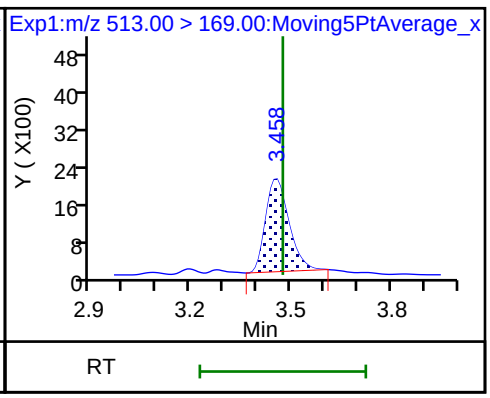
25 Sodium 1H,1H,2H,2H-perfluorodecane



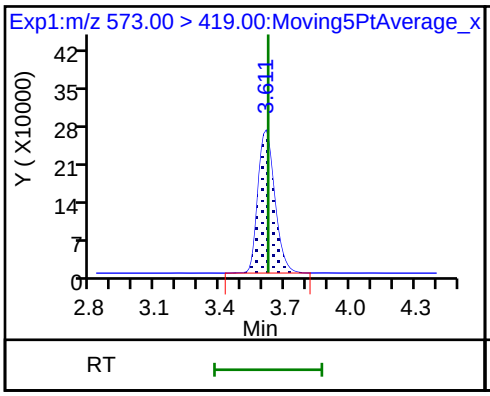
24 Perfluorodecanoic acid



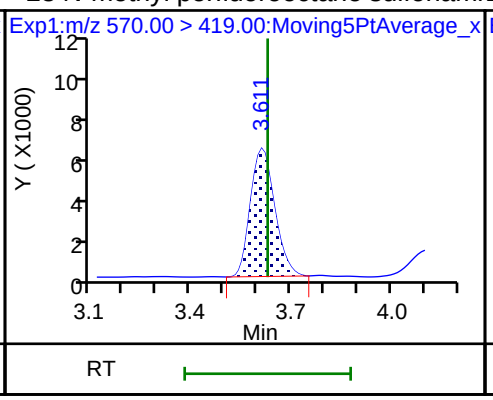
24 Perfluorodecanoic acid



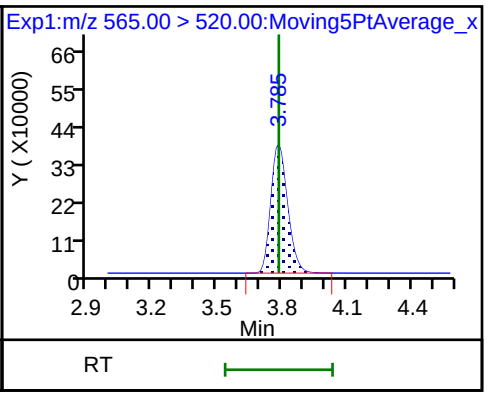
D 27 d3-NMeFOSAA



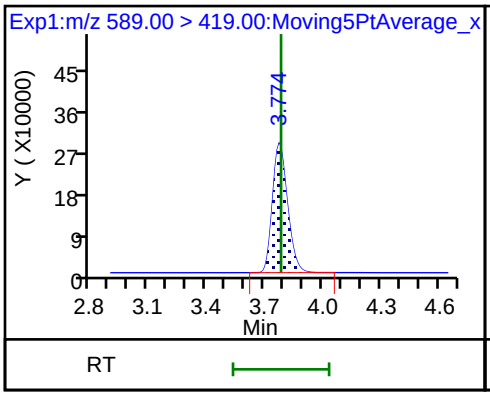
28 N-methyl perfluorooctane sulfonami



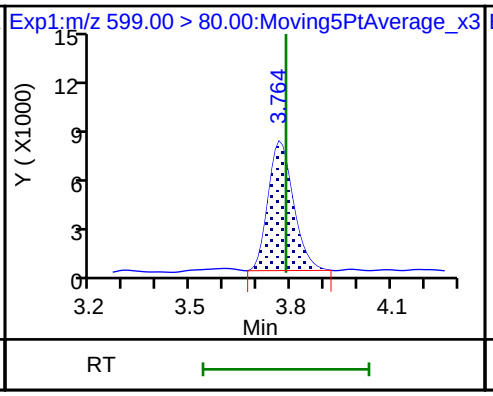
D 30 13C2 PFUnA



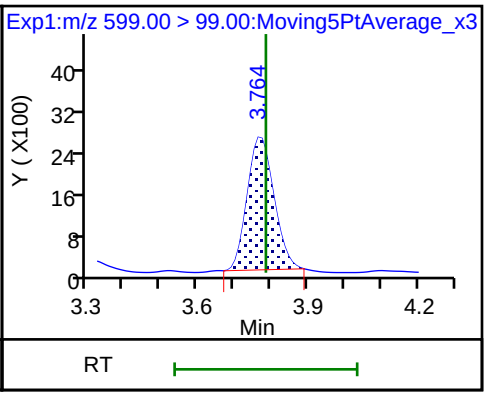
D 32 d5-NEtFOSAA



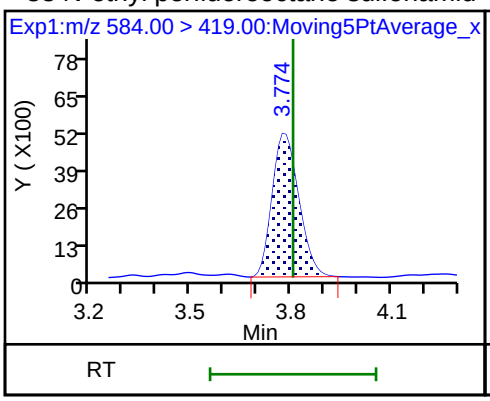
29 Perfluorodecane Sulfonic acid



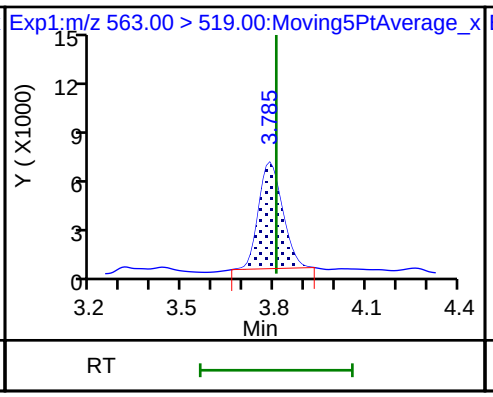
29 Perfluorodecane Sulfonic acid



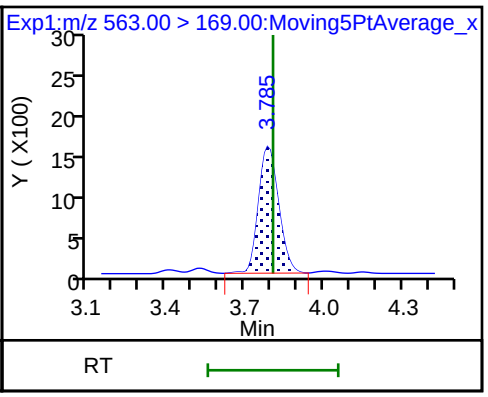
33 N-ethyl perfluorooctane sulfonamid



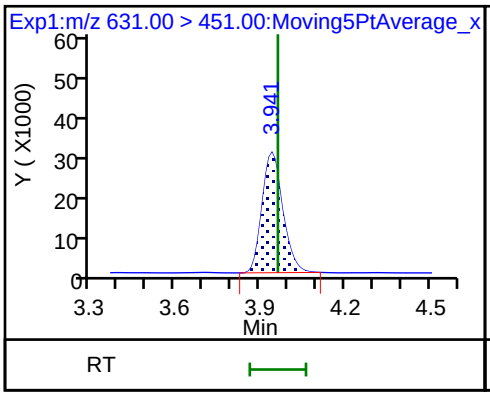
31 Perfluoroundecanoic acid



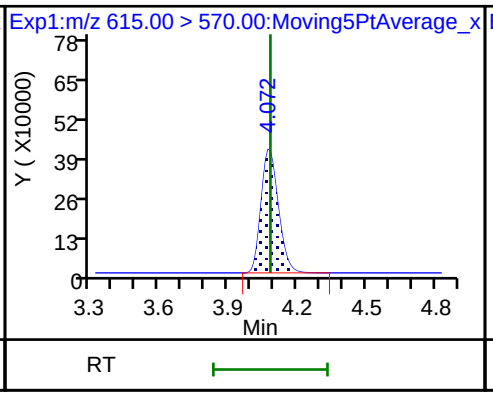
31 Perfluoroundecanoic acid



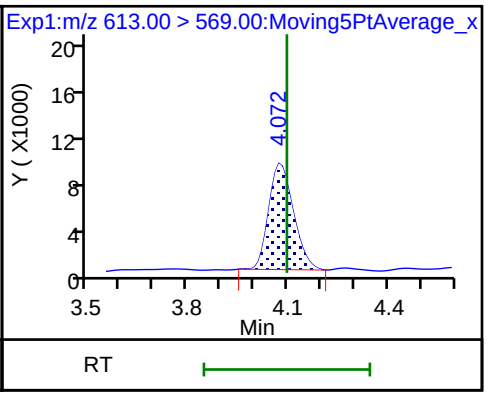
66 11-Chloroeicosafluoro-3-oxaundecan



D 36 13C2 PFDoA



37 Perfluorododecanoic acid



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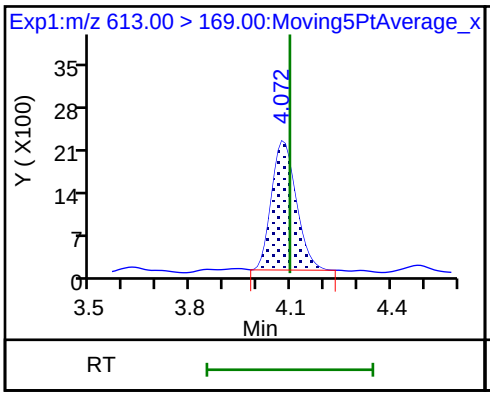
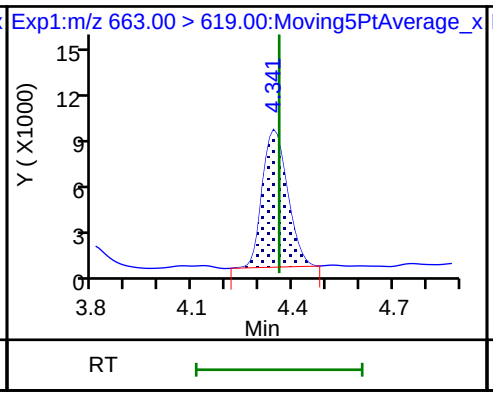


41 Perfluorotridecanoic acid



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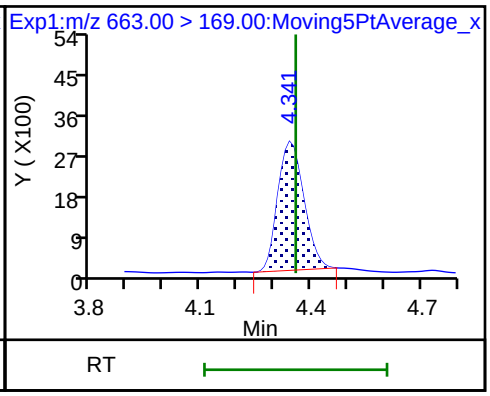
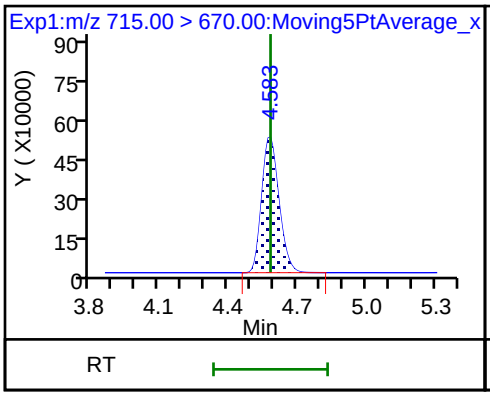
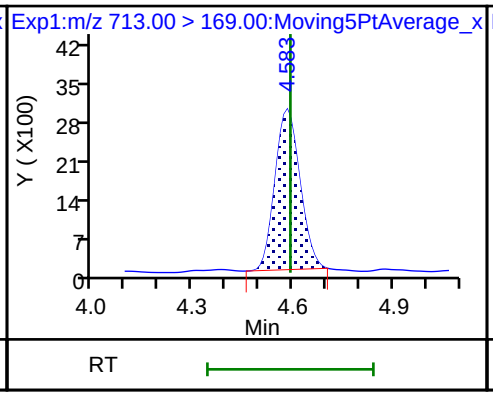


D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



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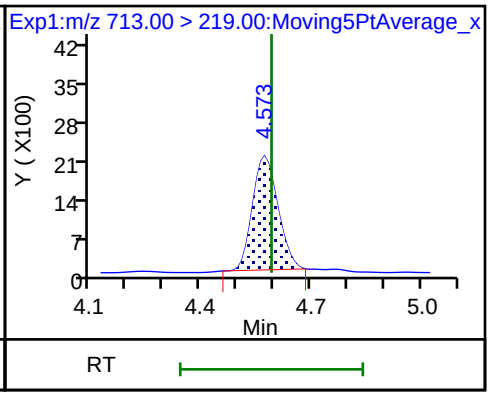

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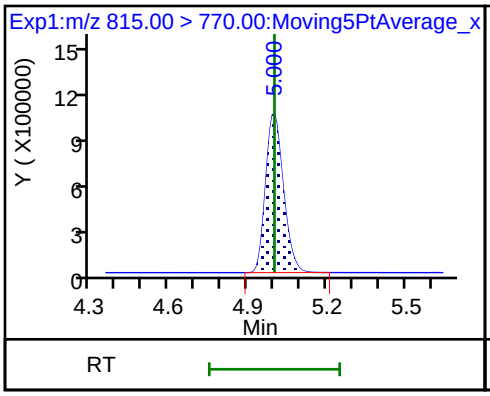
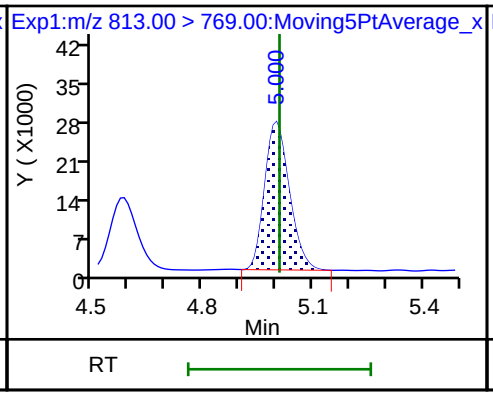
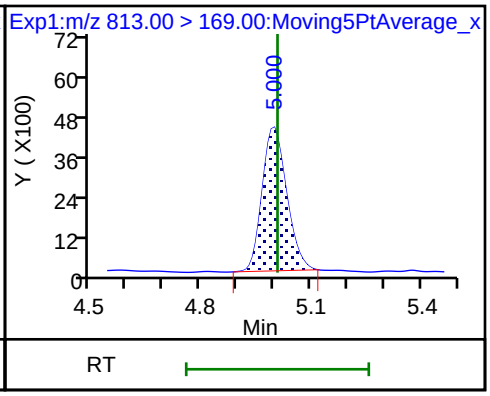


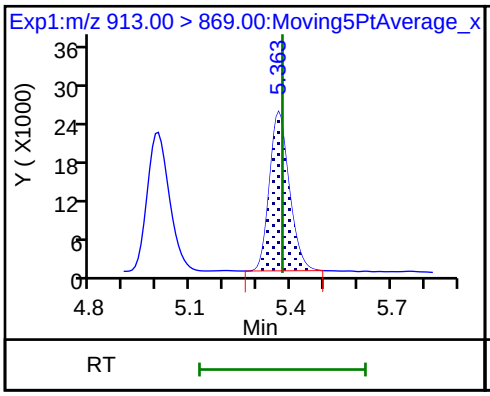
45 Perfluorohexadecanoic acid



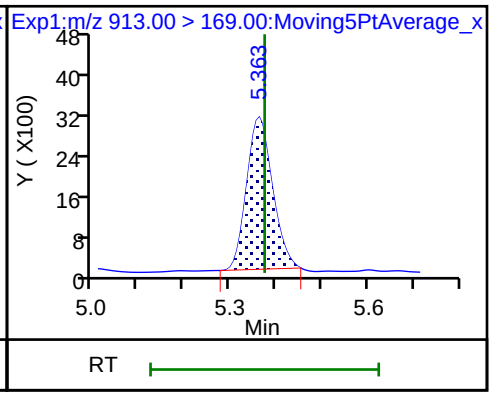
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222474/3 Calibration Date: 05/10/2018 07:09

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.09LLC_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	0.9207		0.992	1.00	-0.8	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.143		0.959	1.00	-4.1	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	78.82		0.890	0.884	0.7	50.0
4:2 FTS	AveID	16.03	17.66		1.03	0.934	10.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.016	0.9869		0.971	1.00	-2.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	70.79		0.929	0.938	-1.0	50.0
HFPO-DA (GenX)	AveID	2.785	2.904		1.04	1.00	4.3	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	1.010		1.01	1.00	0.9	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.044		0.839	0.910	-7.8	40.0
Adona	AveID	3.464	3.649		1.05	1.00	5.3	50.0
6:2FTS	AveID	1.691	1.694		0.950	0.948	0.2	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.114		0.964	1.00	-3.6	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.332		0.955	0.952	0.4	50.0
Perfluorononanoic acid (PFNA)	AveID	1.043	0.9818		0.942	1.00	-5.8	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.082		0.923	0.928	-0.6	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.808		0.894	0.932	-4.1	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	0.9518		0.941	1.00	-5.9	40.0
8:2FTS	AveID	1.265	1.348		1.02	0.958	6.5	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.7441		0.894	0.960	-6.9	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	0.9783		0.948	1.00	-5.2	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	0.9801		0.983	1.00	-1.7	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6268		0.931	0.964	-3.5	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	0.9642		1.03	1.00	3.2	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.7846		0.928	1.00	-7.2	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.834		0.917	0.942	-2.7	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	0.9760		0.936	1.00	-6.4	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.110		0.913	1.00	-8.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2456		0.978	1.00	-2.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9556		0.987	1.00	-1.3	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222474/3 Calibration Date: 05/10/2018 07:09

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.09LLC_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	1.066		1.06	1.00	6.2	50.0
13C4 PFBA	Ave	1.345	1.423		2.64	2.50	5.8	50.0
13C5 PFPeA	Ave	0.8672	0.9275		2.67	2.50	7.0	50.0
13C3-PFBS	Ave	0.0199	0.0207		2.42	2.33	4.2	50.0
M2-4:2FTS	Ave	0.1425	0.1623		2.66	2.34	13.9	50.0
13C2 PFHxA	Ave	0.9590	1.005		2.62	2.50	4.8	50.0
13C3 HFPO-DA	Ave	0.0593	0.0591		2.49	2.50	-0.4	50.0
13C4-PFHpA	Ave	0.9333	1.027		2.75	2.50	10.1	50.0
18O2 PFHxS	Ave	1.152	1.219		2.50	2.37	5.8	50.0
M2-6:2FTS	Ave	0.2000	0.2323		2.76	2.38	16.1	40.0
13C4 PFOA	Ave	0.9276	0.9693		2.61	2.50	4.5	50.0
13C4 PFOS	Ave	0.8066	0.8094		2.40	2.39	0.3	50.0
13C5 PFNA	Ave	0.7973	0.7925		2.48	2.50	-0.6	50.0
13C8 FOSA	Ave	1.007	1.025		2.54	2.50	1.7	50.0
M2-8:2FTS	Ave	0.2409	0.2484		2.47	2.40	3.1	40.0
13C2 PFDA	Ave	0.6701	0.6822		2.55	2.50	1.8	50.0
d3-NMeFOSAA	Ave	0.3798	0.4051		2.67	2.50	6.6	50.0
d5-NEtFOSAA	Ave	0.3749	0.4297		2.87	2.50	14.6	50.0
13C2 PFUnA	Ave	0.5781	0.5702		2.47	2.50	-1.4	50.0
13C2 PFDoA	Ave	0.6242	0.5878		2.35	2.50	-5.8	50.0
13C2-PFTeDA	Ave	0.7915	0.7339		2.32	2.50	-7.3	50.0
13C2-PFHxDA	Ave	1.288	1.322		2.57	2.50	2.6	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57954.b\2018.05.09LLC_006.d
Lims ID: CCV L4
Client ID:
Sample Type: CCVIS
Inject. Date: 10-May-2018 07:09:51 ALS Bottle#: 37 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57954.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 10-May-2018 10:20:53 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK030

First Level Reviewer: westendorfc Date: 10-May-2018 09:44:08

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.461	1.463	-0.002	1.000	5557342	2.64		106	38803	
2 Perfluorobutyric acid										
212.90 > 169.00	1.461	1.461	0.0	1.000	2046730	0.99		99.2	1401	
D 3 13C5-PFPeA										
267.90 > 223.00	1.734	1.737	-0.003	0.559	3622143	2.67		107	69589	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.743	1.743	0.0	1.005	1656569	0.9594		95.9	1425	
D 47 13C3-PFBS										
301.90 > 83.00	1.770	1.764	0.006	1.000	75308	2.42		104	760	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.779	1.779	0.0	1.005	2256932	0.8900		101	1952	
298.90 > 99.00	1.779	1.779	0.0	1.005	930128		2.43(1.25-3.74)		1859	
D 60 M2-4:2FTS										
329.00 > 81.00	1.999	1.991	0.008	1.000	592108	2.66		114	6072	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.999	1.999	0.0	1.000	534298	1.03		110	33485	
D 7 13C2 PFHxA										
315.00 > 270.00	2.033	2.025	0.008	1.000	3925515	2.62		105	80788	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.033	2.033	0.0	1.000	1549633	0.9712		97.1	3033	
313.00 > 119.00	2.033	2.033	0.0	1.000	148840		10.41(5.03-15.10)		3011	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.056	2.056	0.0	1.000	2150747	0.9286		99.0	17251	
349.00 > 99.00	2.056	2.056	0.0	1.000	754012		2.85(1.36-4.07)		13798	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.135	2.127	0.008	1.000	230693	2.49		99.6	5218	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.135	2.135	0.0	1.000	268010	1.04		104	2229	
D 9 13C4-PFHpA										
367.00 > 322.00	2.368	2.358	0.010	1.000	4012681	2.75		110	69498	
D 11 18O2 PFHxS										
403.00 > 84.00	2.392	2.371	0.021	1.000	4502082	2.50		106	56107	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.368	2.368	0.0	1.000	1621679	1.01		101	2488	
363.00 > 169.00	2.368	2.368	0.0	1.000	609716		2.66(1.13-3.40)		3948	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.380	2.380	0.0	0.995	1808308	0.8393		92.2	7616	
399.00 > 99.00	2.380	2.380	0.0	0.995	591480		3.06(1.50-4.49)		4436	
65 Adona										
377.00 > 251.00	2.414	2.414	0.0	1.000	4613691	1.05		105	60095	
377.00 > 85.00	2.414	2.414	0.0	1.000	2783168		1.66(0.84-2.53)		56230	
D 12 M2-6:2FTS										
429.00 > 81.00	2.703	2.697	0.006	1.000	861737	2.76		116	14926	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.703	2.703	0.0	1.000	582581	0.9498		100	16503	
D 14 13C4 PFOA										
417.00 > 372.00	2.733	2.719	0.014	1.000	3785463	2.61		104	64929	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.733	2.733	0.0	1.000	1687365	0.9645		96.4	862	
413.00 > 169.00	2.733	2.733	0.0	1.000	826928		2.04(0.84-2.52)		3413	
* 62 13C2-PFOA										
415.00 > 370.00	2.733	2.733	0.0		3905411	2.50			49153	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.741	2.741	0.0	1.000	1603767	0.9554		100	13326	
449.00 > 99.00	2.741	2.741	0.0	1.000	442192		3.63(1.94-5.82)		8265	
D 18 13C4 PFOS										
503.00 > 80.00	3.103	3.092	0.011	1.000	3021811	2.40		100	16474	
D 19 13C5 PFNA										
468.00 > 423.00	3.103	3.099	0.004	1.000	3094868	2.48		99.4	98013	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.103	3.103	0.0	1.000	1269153	0.9227		99.4	4284	
499.00 > 99.00	3.103	3.103	0.0	1.000	279245		4.54(2.31-6.93)		3862	
20 Perfluorononanoic acid										
463.00 > 419.00	3.103	3.103	0.0	1.000	1215351	0.9415		94.2	3575	
463.00 > 169.00	3.111	3.103	0.008	1.002	306691		3.96(1.90-5.69)		9694	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.318	3.318	0.0	1.000	2130187	0.8937		95.9	43486	
D 21 13C8 FOSA										
506.00 > 78.00	3.435	3.430	0.005	1.000	4001156	2.54		102	42619	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.435	3.435	0.0	1.000	1523260	0.9409		94.1	38342	
D 26 M2-8:2FTS										
529.00 > 81.00	3.454	3.449	0.005	1.000	929371	2.47		103	11306	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.454	3.454	0.0	1.000	903226	0.8937		93.1	10227	
549.00 > 99.00	3.454	3.454	0.0	1.000	341723		2.64(1.33-3.97)		9824	
D 23 13C2 PFDA										
515.00 > 470.00	3.463	3.458	0.005	1.000	2664169	2.55		102	44814	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.454	3.454	0.0	1.000	501138	1.02		107	32734	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.463	3.463	0.0	1.000	1042504	0.9483		94.8	5239	
513.00 > 169.00	3.463	3.463	0.0	1.000	192545		5.41(2.36-7.09)		4850	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.627	3.621	0.006	1.000	1582028	2.67		107	24450	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.627	3.627	0.0	1.000	620192	0.9827		98.3	4360	
D 30 13C2 PFUnA										
565.00 > 520.00	3.802	3.784	0.018	1.000	2226976	2.47		98.6	37715	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.792	3.784	0.008	1.000	1678182	2.87		115	18372	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.782	3.782	0.0	1.000	763948	0.9307		96.5	7648	
599.00 > 99.00	3.782	3.782	0.0	1.000	271901		2.81(1.39-4.16)		6495	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.792	3.792	0.0	1.000	647271	1.03		103	12054	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.802	3.802	0.0	1.000	698913	0.9284		92.8	5470	
563.00 > 169.00	3.792	3.802	-0.010	0.997	175329		3.99(2.12-6.36)		3625	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.959	3.959	0.0	1.000	3375733	0.9167		97.3	40670	
D 36 13C2 PFDoA										
615.00 > 570.00	4.091	4.082	0.009	1.000	2295387	2.35		94.2	24364	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.091	4.091	0.0	1.000	896071	0.9358		93.6	1323	
613.00 > 169.00	4.091	4.091	0.0	1.000	238635		3.75(2.13-6.40)		4543	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.351	4.351	0.0	1.000	1018783	0.9130		91.3	1060	
663.00 > 169.00	4.351	4.351	0.0	1.000	329014		3.10(1.25-3.76)		4414	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.594	4.583	0.011	1.000	2865979	2.32		92.7	16374	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.594	4.594	0.0	1.000	281576	0.9780		97.8	3580	
713.00 > 219.00	4.584	4.594	-0.010	0.998	210236		1.34(0.71-2.13)		3664	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.010	5.000	0.010	1.000	5161766	2.57		103	13603	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.010	5.010	0.0	1.000	1973057	0.9869		98.7	906	
813.00 > 169.00	5.010	5.010	0.0	1.000	307140		6.42(2.86-8.58)		2544	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.370	5.370	0.0	1.000	2201755	1.06		106	788	
913.00 > 169.00	5.370	5.370	0.0	1.000	267817		8.22(3.83-11.48)		2539	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 10-May-2018 10:20:55 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57954.b\2018.05.09LLC_006.d

Injection Date: 10-May-2018 07:09:51 Instrument ID: A8_N

Lims ID: CCV L4

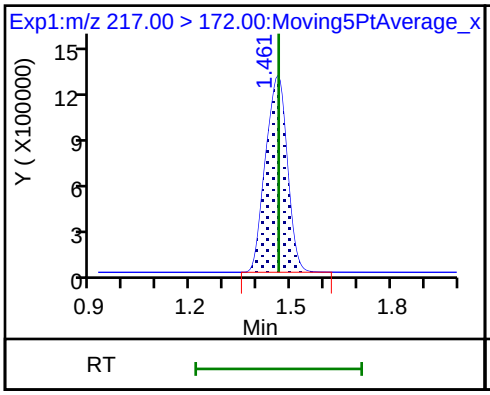
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 37 Worklist Smp#: 3

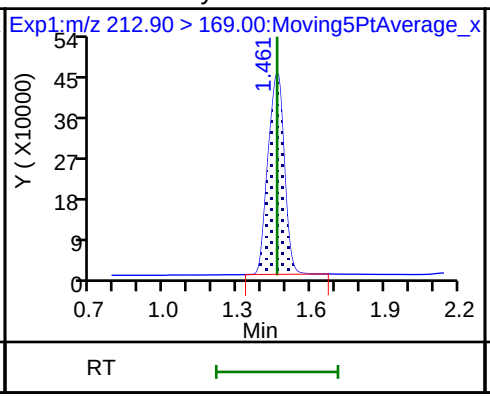
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

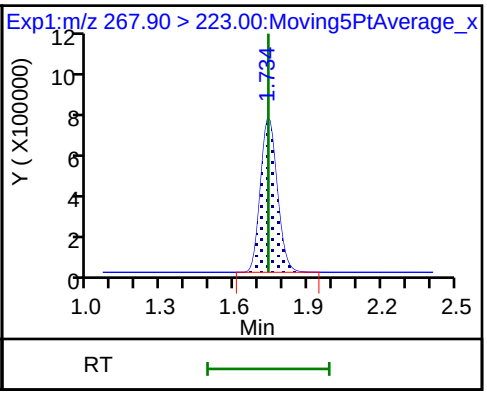
D 1 13C4 PFBA



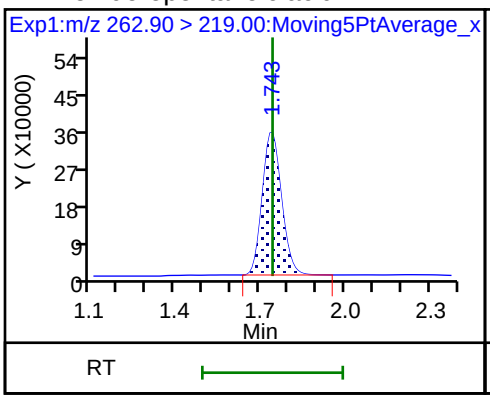
2 Perfluorobutyric acid



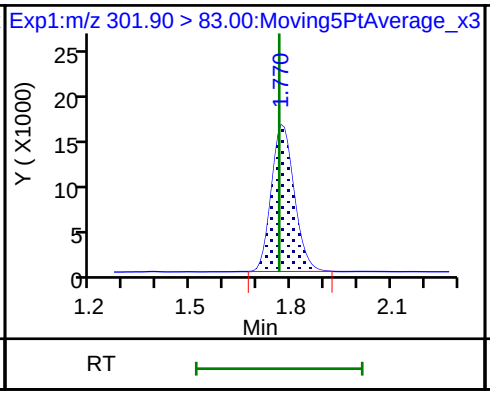
D 3 13C5-PFPeA



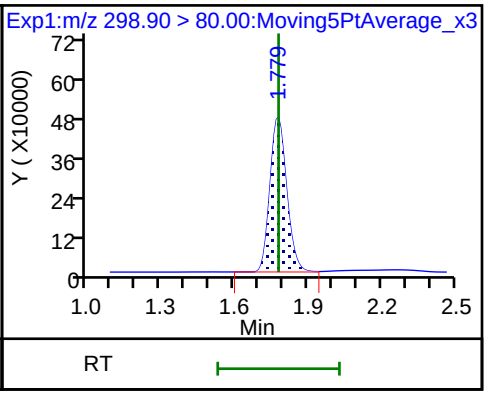
4 Perfluoropentanoic acid



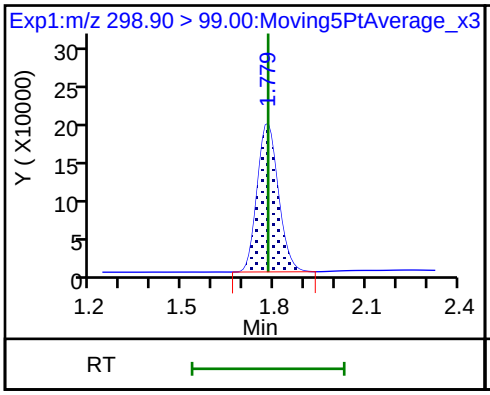
D 47 13C3-PFBS



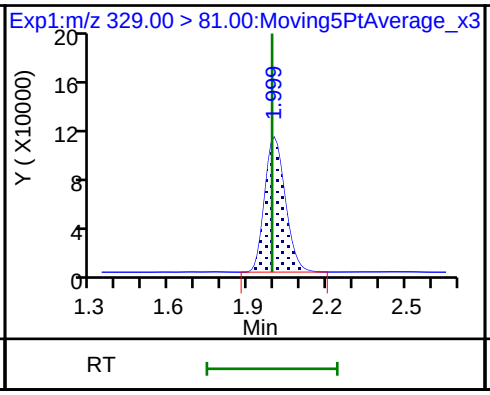
5 Perfluorobutanesulfonic acid



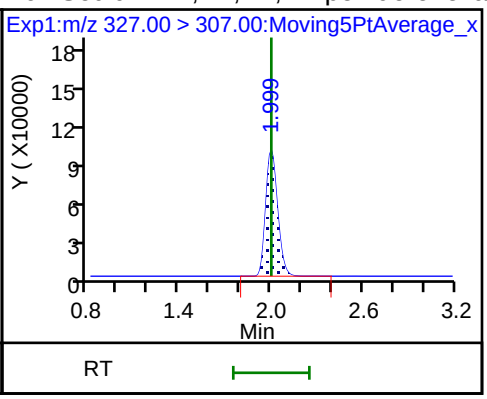
5 Perfluorobutanesulfonic acid



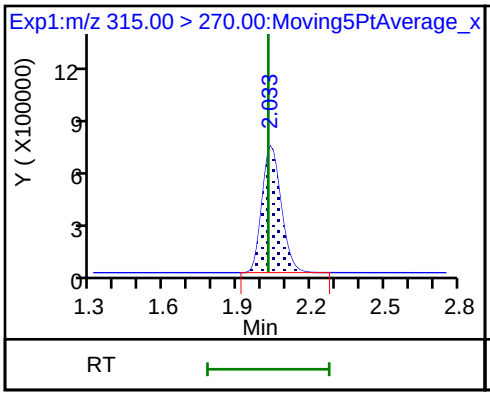
D 60 M2-4:2FTS



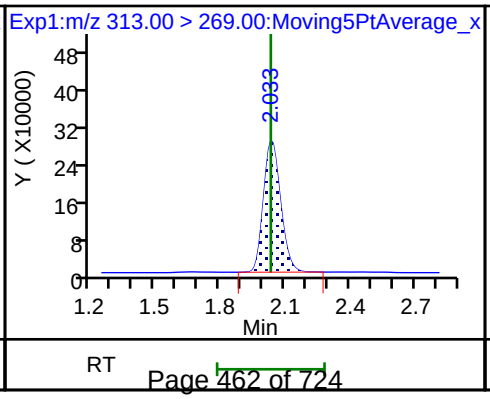
61 Sodium 1H,1H,2H,2H-perfluorohexane



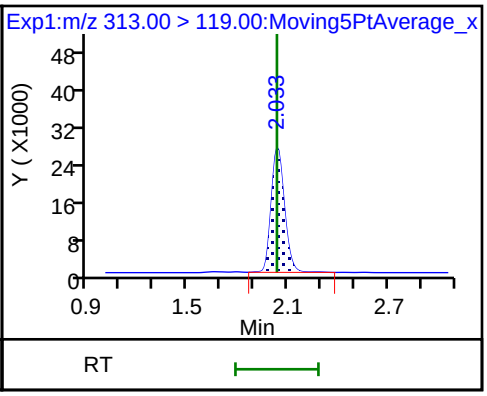
D 7 13C2 PFHxA



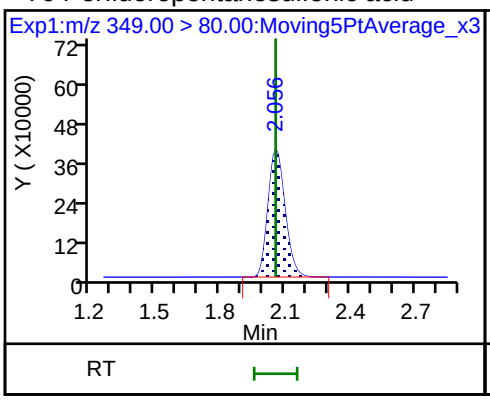
6 Perfluorohexanoic acid



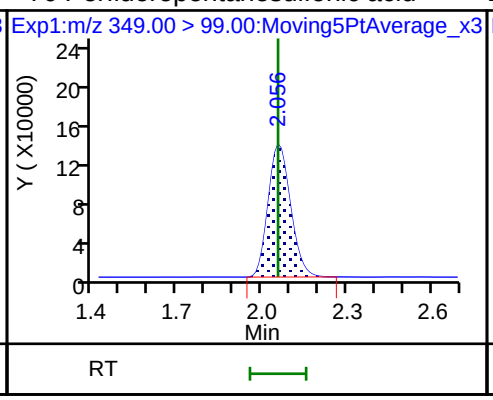
6 Perfluorohexanoic acid



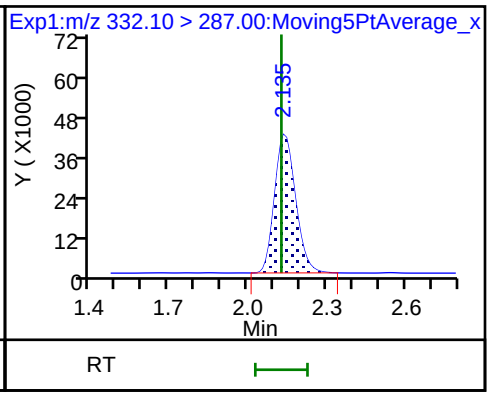
70 Perfluoropentanesulfonic acid



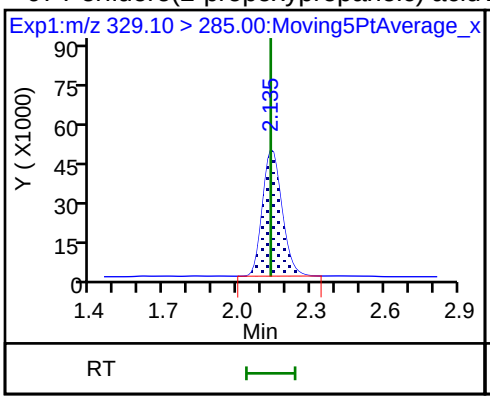
70 Perfluoropentanesulfonic acid



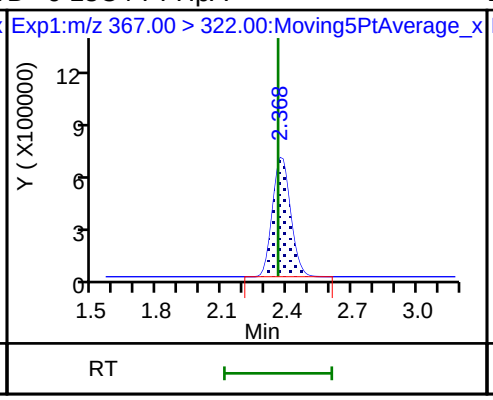
D 64 13C3 HFPO-DA



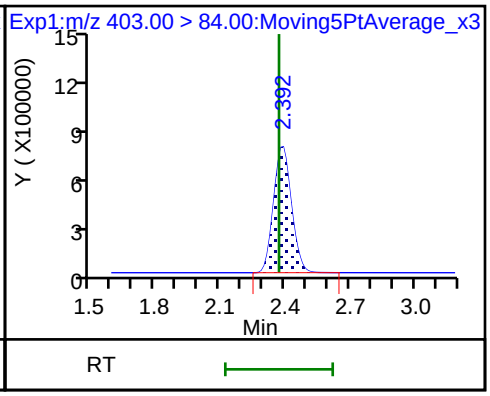
67 Perfluoro(2-propoxypropanoic) acid



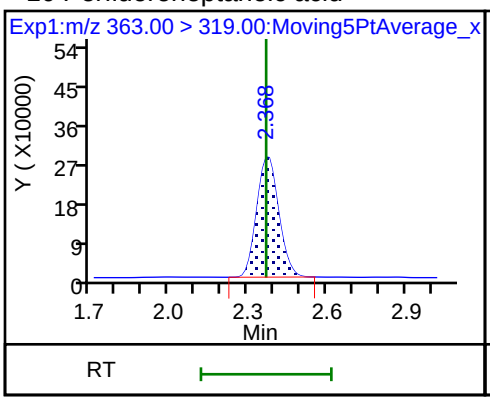
D 9 13C4-PFHpA



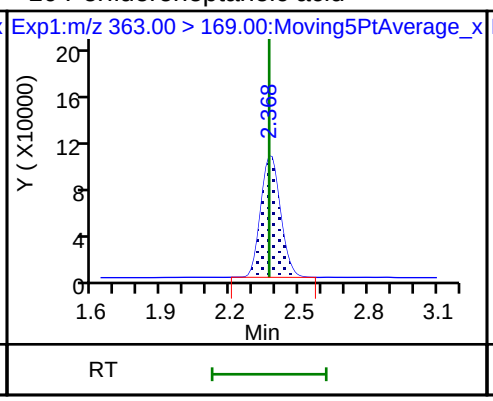
D 11 18O2 PFHxS



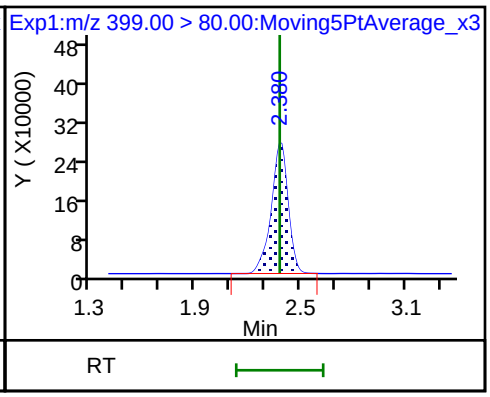
10 Perfluoroheptanoic acid



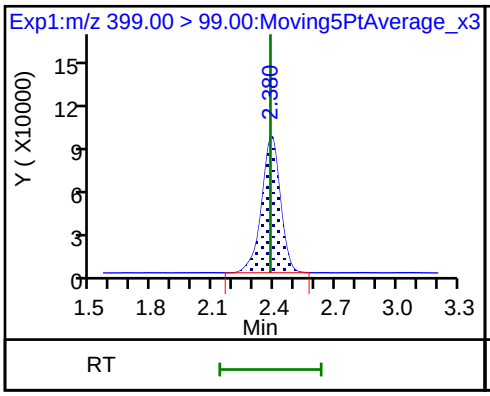
10 Perfluoroheptanoic acid



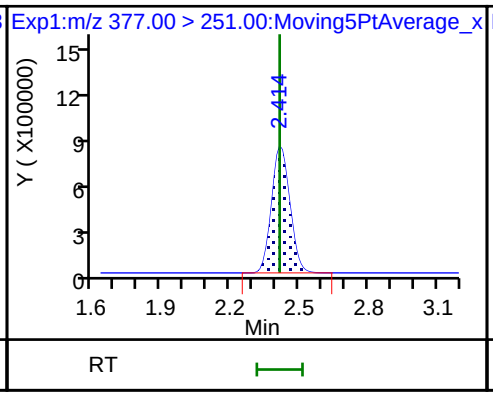
8 Perfluorohexanesulfonic acid



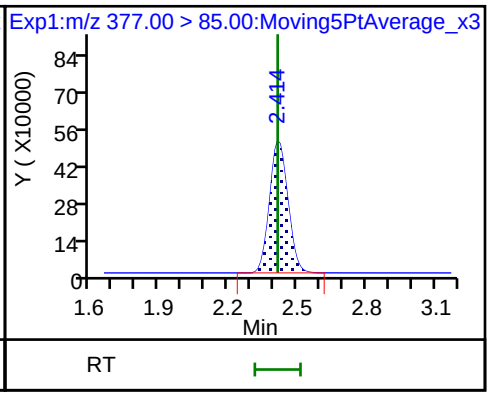
8 Perfluorohexanesulfonic acid



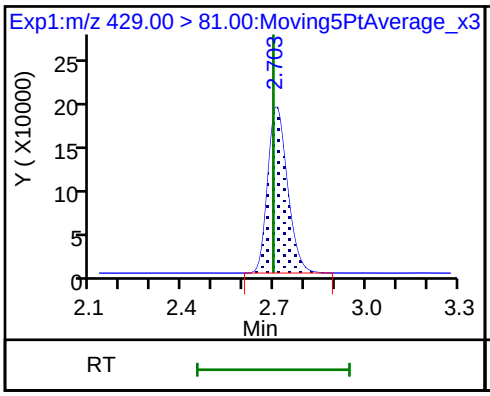
65 Adona



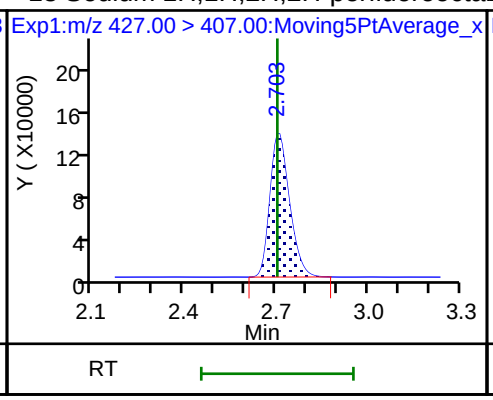
65 Adona



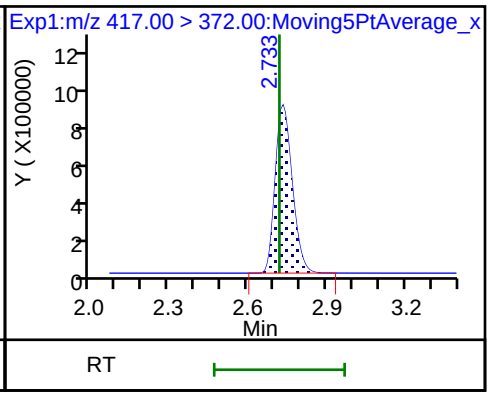
D 12 M2-6:2FTS



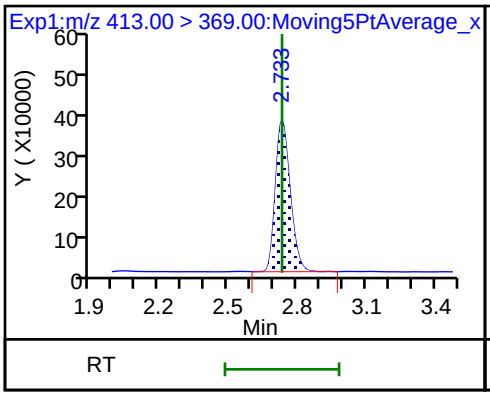
13 Sodium 1H,1H,2H,2H-perfluorooctane



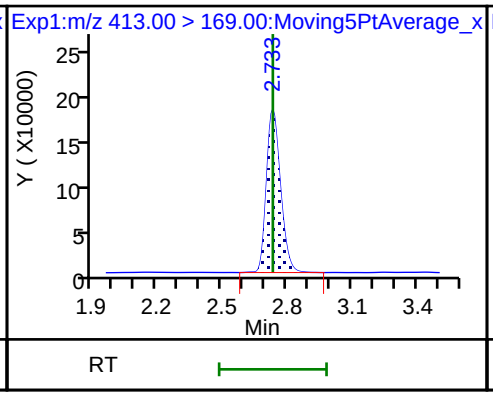
D 14 13C4 PFOA



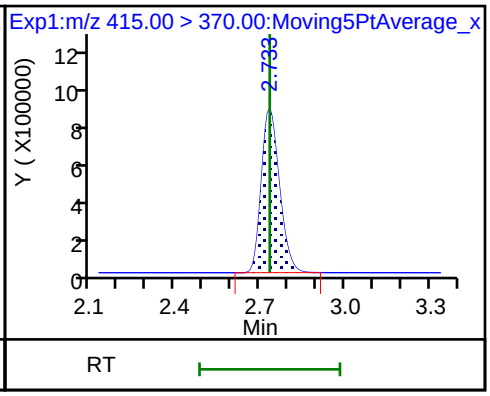
15 Perfluorooctanoic acid



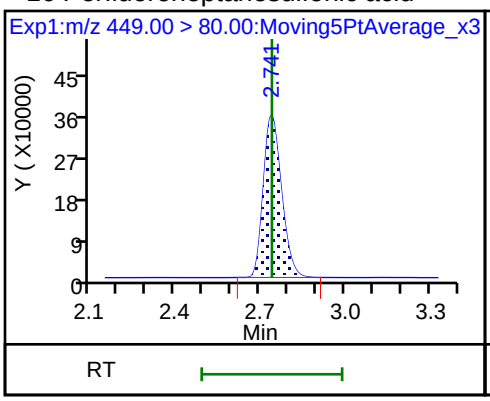
15 Perfluorooctanoic acid



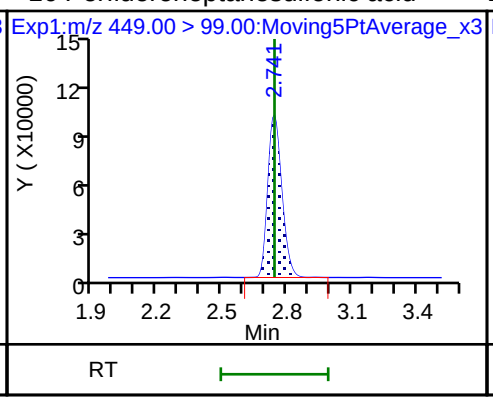
* 62 13C2-PFOA



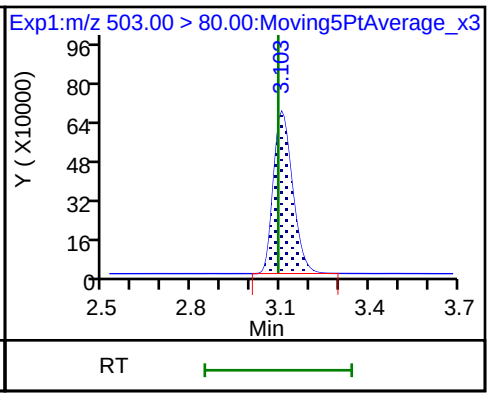
16 Perfluoroheptanesulfonic acid



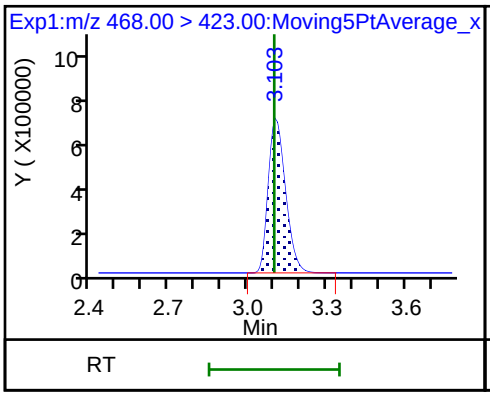
16 Perfluoroheptanesulfonic acid



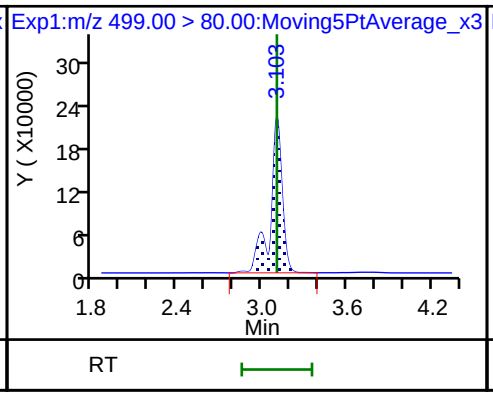
D 18 13C4 PFOS



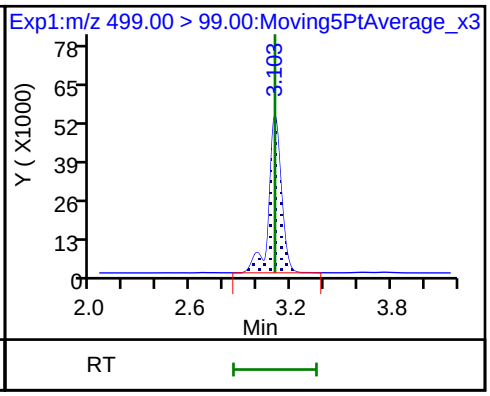
D 19 13C5 PFNA



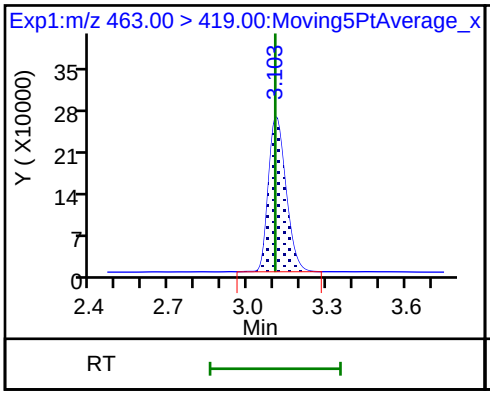
17 Perfluorooctane sulfonic acid



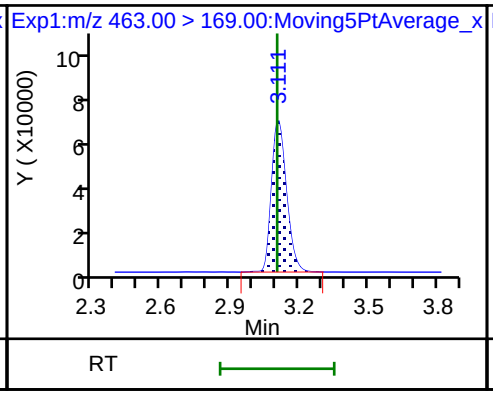
17 Perfluorooctane sulfonic acid



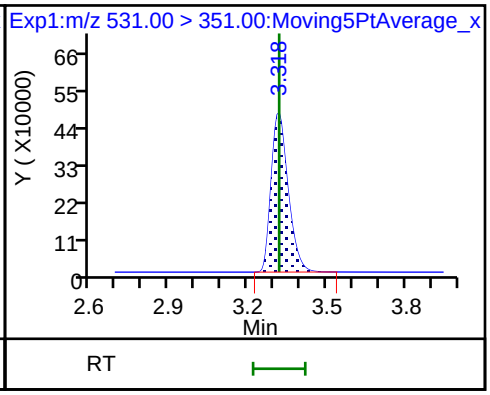
20 Perfluorononanoic acid



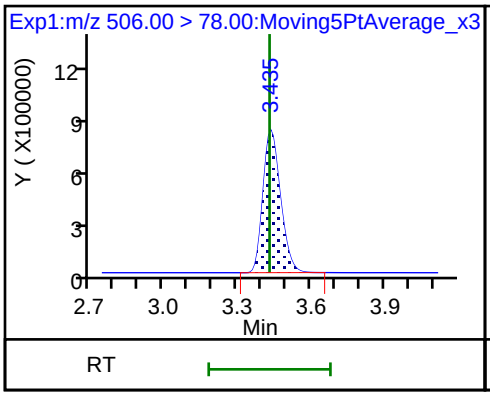
20 Perfluorononanoic acid



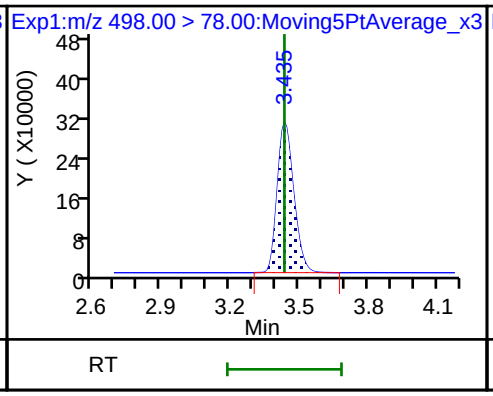
69 9-Chlorohexadecafluoro-3-oxanonane



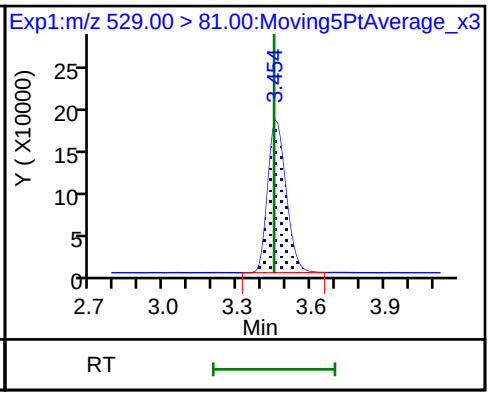
D 21 13C8 FOSA



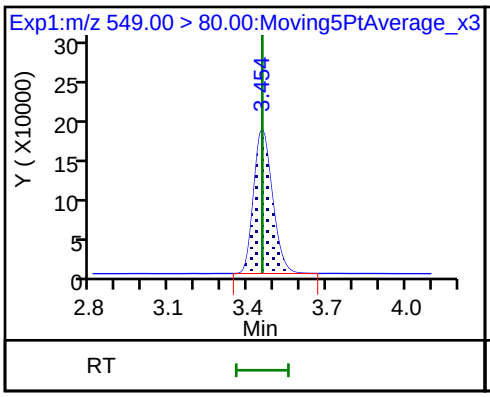
22 Perfluorooctane Sulfonamide



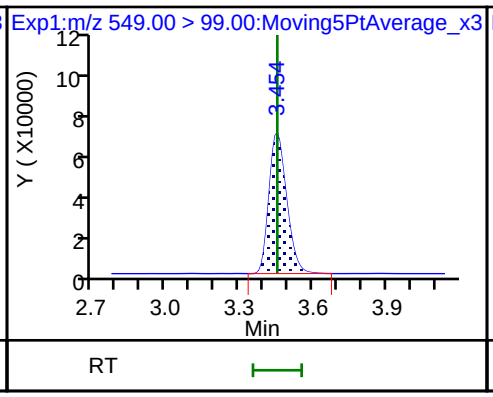
D 26 M2-8:2FTS



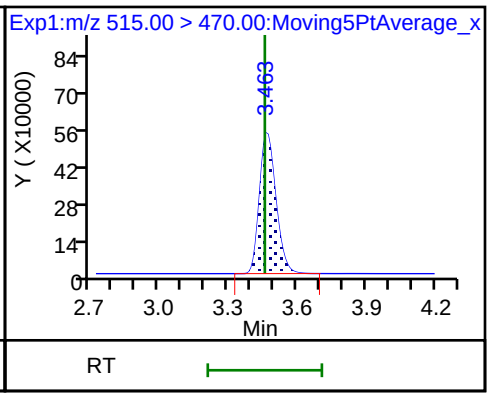
68 Perfluorononanesulfonic acid



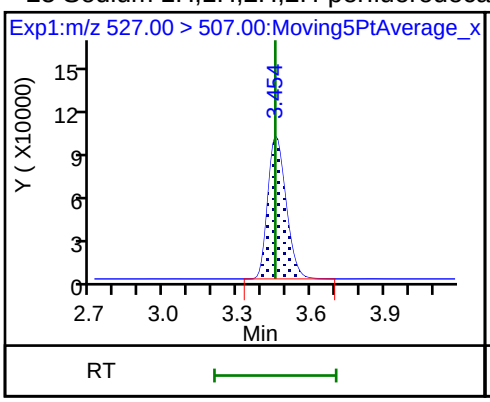
68 Perfluorononanesulfonic acid



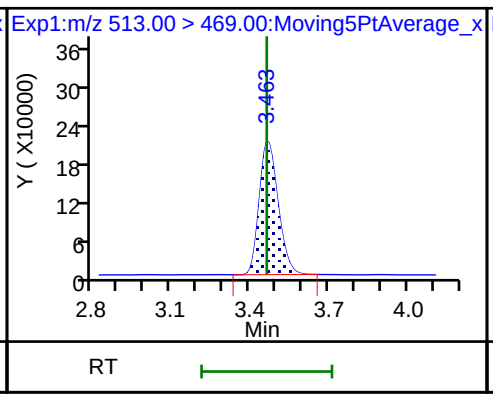
D 23 13C2 PFDA



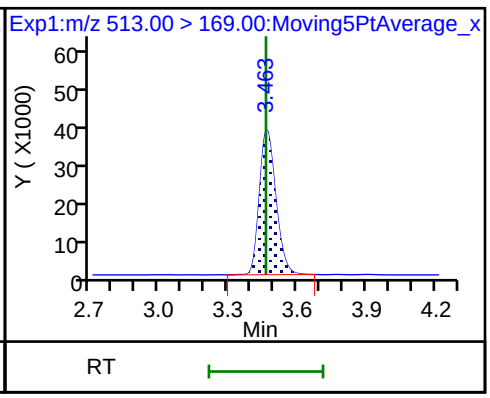
25 Sodium 1H,1H,2H,2H-perfluorodecane



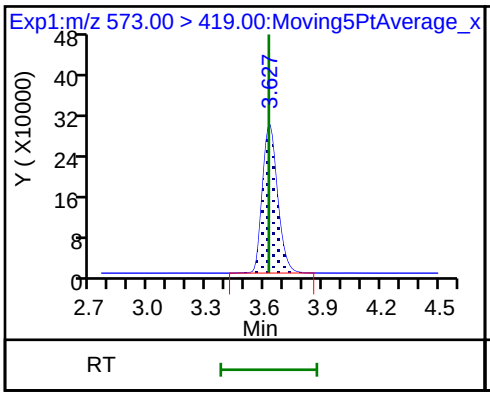
24 Perfluorodecanoic acid



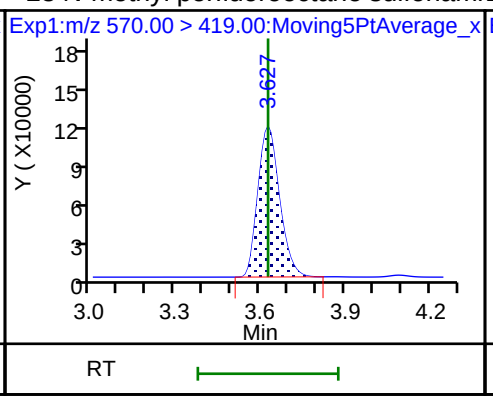
24 Perfluorodecanoic acid



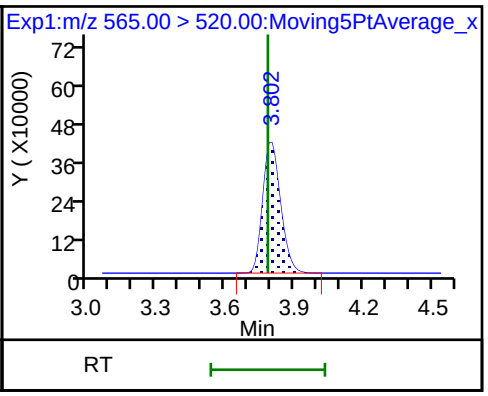
D 27 d3-NMeFOSAA



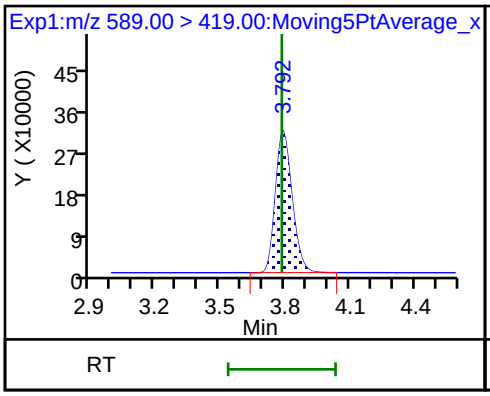
28 N-methyl perfluorooctane sulfonami



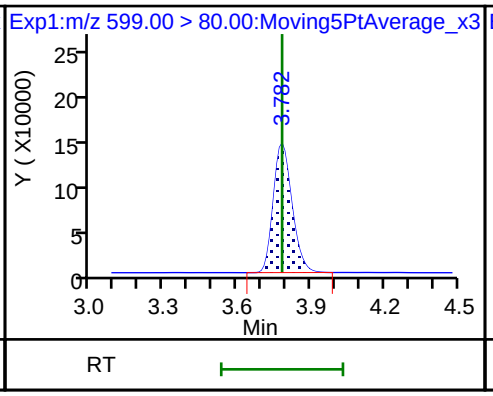
D 30 13C2 PFUnA



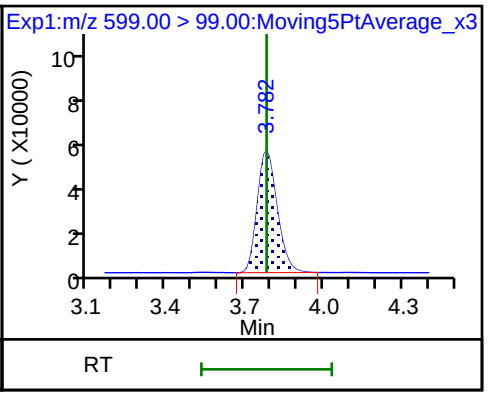
D 32 d5-NEtFOSAA



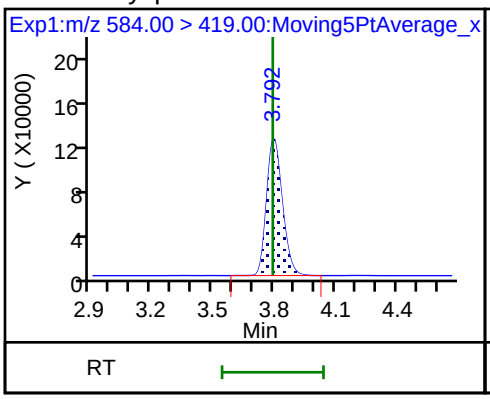
29 Perfluorodecane Sulfonic acid



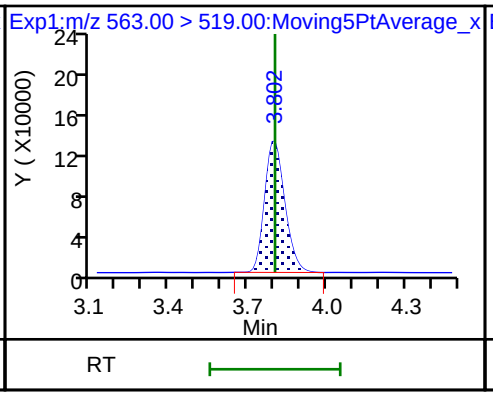
29 Perfluorodecane Sulfonic acid



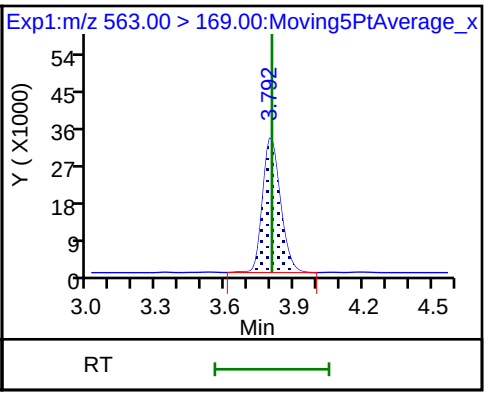
33 N-ethyl perfluorooctane sulfonamid



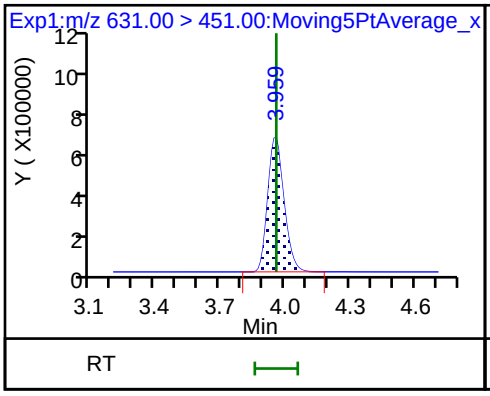
31 Perfluoroundecanoic acid



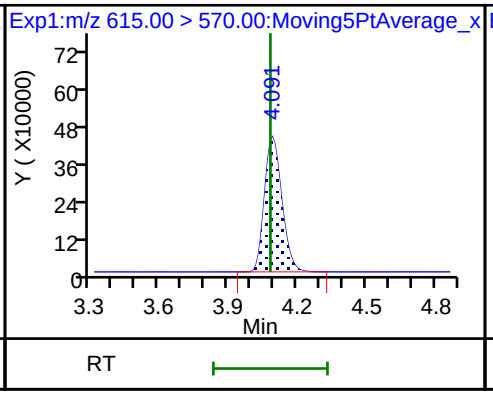
31 Perfluoroundecanoic acid



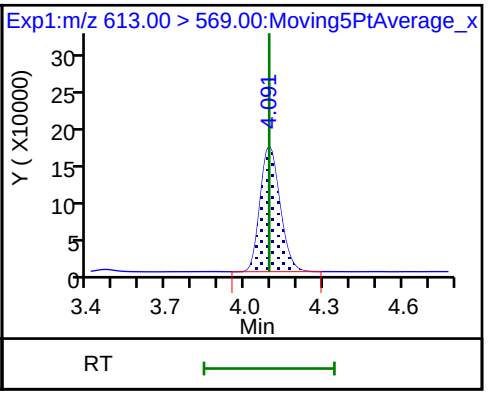
66 11-Chloroeicosafluoro-3-oxaundecan



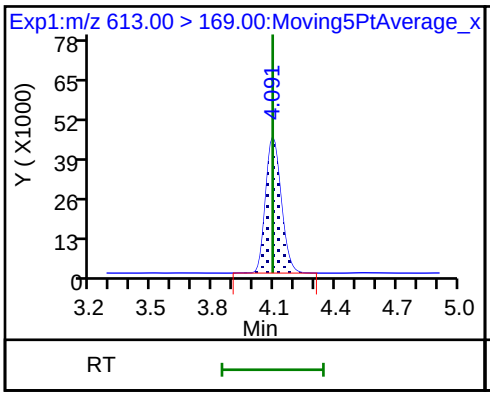
D 36 13C2 PFDoA



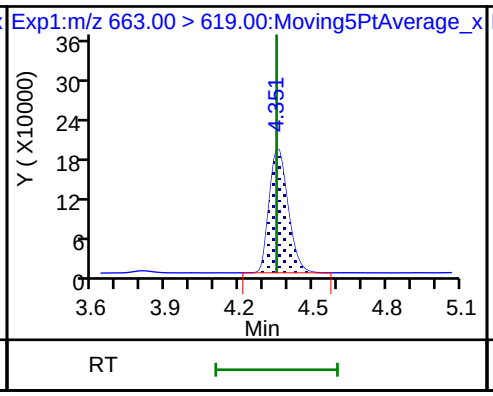
37 Perfluorododecanoic acid



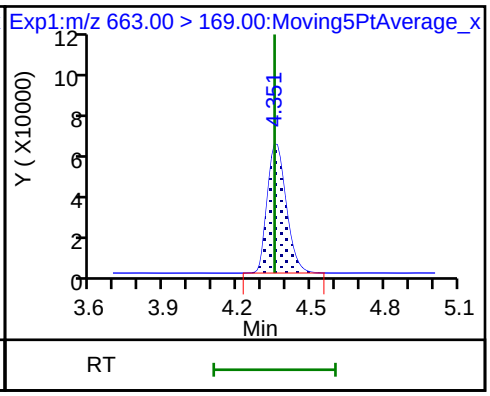
37 Perfluorododecanoic acid



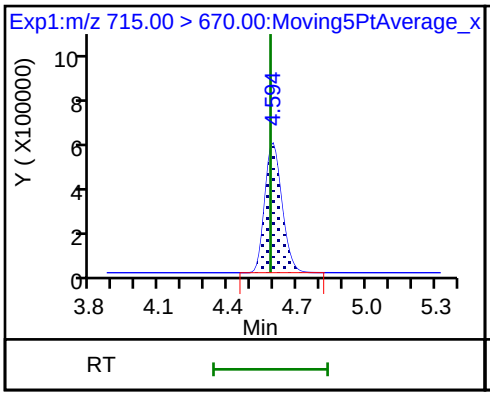
41 Perfluorotridecanoic acid



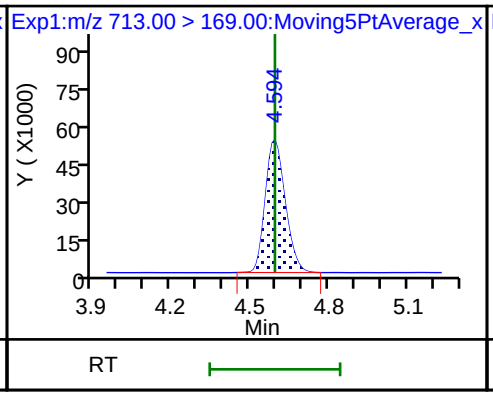
41 Perfluorotridecanoic acid



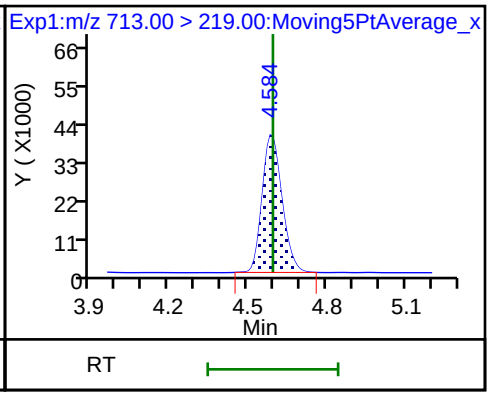
D 43 13C2-PFTeDA



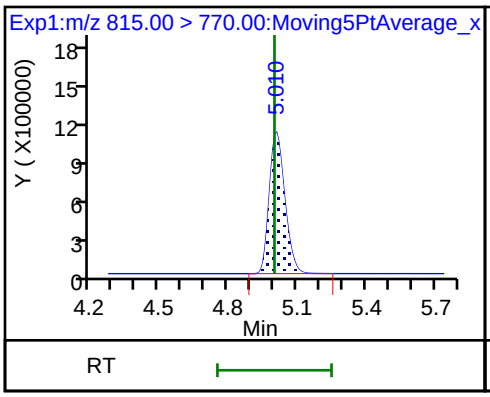
42 Perfluorotetradecanoic acid



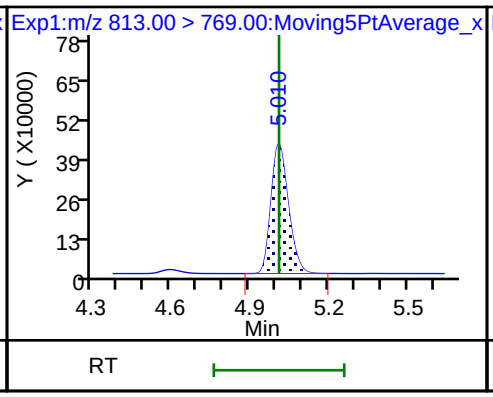
42 Perfluorotetradecanoic acid



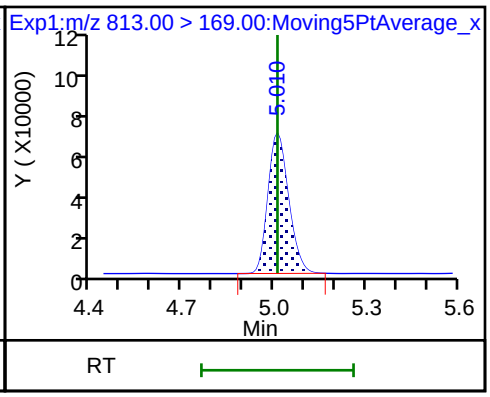
D 44 13C2-PFHxDA



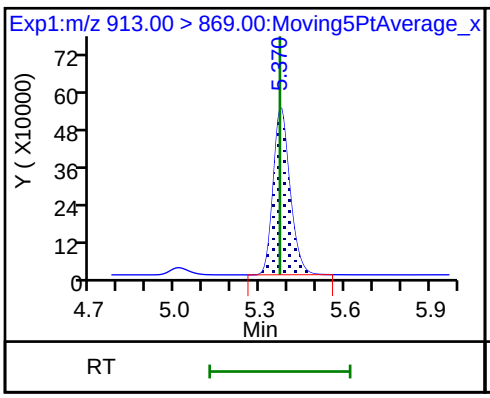
45 Perfluorohexadecanoic acid



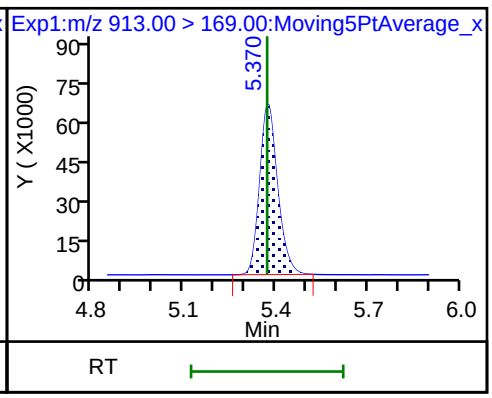
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222476/1 Calibration Date: 05/10/2018 08:51

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.09LLC_019.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	0.9366		2.52	2.50	0.9	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.164		2.44	2.50	-2.3	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	81.09		2.29	2.21	3.6	50.0
4:2 FTS	AveID	16.03	18.21		2.65	2.34	13.6	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.016	1.001		2.46	2.50	-1.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	74.20		2.43	2.35	3.8	50.0
HFPO-DA (GenX)	AveID	2.785	3.015		2.71	2.50	8.3	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	1.063		2.65	2.50	6.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.064		2.14	2.28	-6.0	40.0
Adona	AveID	3.464	3.769		2.72	2.50	8.8	50.0
6:2FTS	AveID	1.691	1.710		2.40	2.37	1.1	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.130		2.45	2.50	-2.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.334		2.39	2.38	0.5	50.0
Perfluorononanoic acid (PFNA)	AveID	1.043	1.089		2.61	2.50	4.4	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.121		2.39	2.32	3.0	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.893		2.34	2.33	0.4	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	1.052		2.60	2.50	4.0	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.7930		2.38	2.40	-0.8	50.0
8:2FTS	AveID	1.265	1.310		2.48	2.40	3.5	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	0.9878		2.39	2.50	-4.2	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	0.999		2.50	2.50	0.2	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6682		2.48	2.41	2.9	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	0.9650		2.58	2.50	3.3	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.8314		2.46	2.50	-1.6	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.800		2.26	2.36	-3.8	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	1.143		2.74	2.50	9.6	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.281		2.63	2.50	5.4	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2582		2.57	2.50	2.8	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9573		2.51	2.50	0.2	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222476/1 Calibration Date: 05/10/2018 08:51

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.09LLC_019.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	1.056		2.63	2.50	5.2	50.0
13C4 PFBA	Ave	1.345	1.397		2.60	2.50	3.8	50.0
13C5 PFPeA	Ave	0.8672	0.9125		2.63	2.50	5.2	50.0
13C3-PFBS	Ave	0.0199	0.0200		2.34	2.33	0.6	50.0
M2-4:2FTS	Ave	0.1425	0.1661		2.72	2.34	16.6	50.0
13C2 PFHxA	Ave	0.9590	1.034		2.69	2.50	7.8	50.0
13C3 HFPO-DA	Ave	0.0593	0.0580		2.44	2.50	-2.2	50.0
13C4-PFHpA	Ave	0.9333	0.9599		2.57	2.50	2.9	50.0
18O2 PFHxS	Ave	1.152	1.186		2.44	2.37	3.0	50.0
M2-6:2FTS	Ave	0.2000	0.2228		2.65	2.38	11.4	40.0
13C4 PFOA	Ave	0.9276	0.9330		2.51	2.50	0.6	50.0
13C4 PFOS	Ave	0.8066	0.8021		2.38	2.39	-0.6	50.0
13C5 PFNA	Ave	0.7973	0.7590		2.38	2.50	-4.8	50.0
13C8 FOSA	Ave	1.007	0.9882		2.45	2.50	-1.9	50.0
M2-8:2FTS	Ave	0.2409	0.2528		2.51	2.40	5.0	40.0
13C2 PFDA	Ave	0.6701	0.6689		2.50	2.50	-0.2	50.0
d3-NMeFOSAA	Ave	0.3798	0.4151		2.73	2.50	9.3	50.0
d5-NEtFOSAA	Ave	0.3749	0.3907		2.61	2.50	4.2	50.0
13C2 PFUnA	Ave	0.5781	0.5378		2.33	2.50	-7.0	50.0
13C2 PFDoA	Ave	0.6242	0.5394		2.16	2.50	-13.6	50.0
13C2-PFTeDA	Ave	0.7915	0.7618		2.41	2.50	-3.8	50.0
13C2-PFHxDA	Ave	1.288	1.367		2.65	2.50	6.2	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_019.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 10-May-2018 08:51:22 ALS Bottle#: 38 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 17:00:46 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 15-May-2018 16:52:06

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.468	1.463	0.005	1.000	5326470	2.60		104	37431	
2 Perfluorobutyric acid										
212.90 > 169.00	1.468	1.468	0.0	1.000	4988857	2.52		101	3804	
D 3 13C5-PFPeA										
267.90 > 223.00	1.747	1.738	0.009	0.561	3478955	2.63		105	60093	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.747	1.747	0.0	1.000	4050936	2.44		97.7	4453	
D 47 13C3-PFBS										
301.90 > 83.00	1.783	1.774	0.009	1.000	70980	2.34		101	643	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.783	1.783	0.0	1.000	5471032	2.29		104	4639	
298.90 > 99.00	1.783	1.783	0.0	1.000	2262741		2.42(1.25-3.74)		4712	
D 60 M2-4:2FTS										
329.00 > 81.00	2.003	2.003	-0.001	1.000	591515	2.72		117	5220	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.003	2.003	0.0	1.000	1297883	2.65		114	59459	
D 7 13C2 PFHxA										
315.00 > 270.00	2.036	2.037	-0.001	1.000	3941174	2.69		108	72102	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.036	2.036	0.0	1.000	3944577	2.46		98.5	6882	
313.00 > 119.00	2.036	2.036	0.0	1.000	374002		10.55(5.03-15.10)		5660	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.059	2.059	0.0	1.000	5312134	2.43		104	45810	
349.00 > 99.00	2.059	2.059	0.0	1.000	1888934		2.81(1.36-4.07)		30959	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.138	2.138	0.0	1.000	221140	2.44		97.8	4028	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.138	2.138	0.0	1.000	666779	2.71		108	4168	
D 9 13C4-PFHpA										
367.00 > 322.00	2.371	2.372	-0.001	1.000	3659677	2.57		103	51935	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.384	2.384	0.0	1.005	3888824	2.65		106	6079	
363.00 > 169.00	2.384	2.384	0.0	1.005	1582082		2.46(1.13-3.40)		11787	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.384	2.384	0.0	0.995	4378555	2.14		94.0	14824	
399.00 > 99.00	2.395	2.384	0.011	1.000	1502451		2.91(1.50-4.49)		8750	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.395	0.0	1.000	4278637	2.44		103	57793	
65 Adona										
377.00 > 251.00	2.417	2.417	0.0	1.000	11524435	2.72		109	83917	
377.00 > 85.00	2.417	2.417	0.0	1.000	6725015		1.71(0.84-2.53)		67971	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.712	2.712	0.0	1.000	1376763	2.40		101	34301	
D 12 M2-6:2FTS										
429.00 > 81.00	2.712	2.712	0.0	1.000	806986	2.65		111	10027	
D 14 13C4 PFOA										
417.00 > 372.00	2.734	2.735	-0.001	1.000	3556968	2.51		101	49762	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.734	2.734	0.0	1.000	4020066	2.45		97.8	1853	
413.00 > 169.00	2.734	2.734	0.0	1.000	2058140		1.95(0.84-2.52)		8928	
* 62 13C2-PFOA										
415.00 > 370.00	2.734	2.734	0.0		3812492	2.50			40579	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.742	2.742	0.0	1.000	3884631	2.39		101	24111	
449.00 > 99.00	2.742	2.742	0.0	1.000	1115475		3.48(1.94-5.82)		25034	
D 18 13C4 PFOS										
503.00 > 80.00	3.113	3.106	0.007	1.000	2923456	2.38		99.4	21562	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.113	3.113	0.0	1.000	3180635	2.39		103	10127	
499.00 > 99.00	3.113	3.113	0.0	1.000	693522		4.59(2.31-6.93)		7893	
20 Perfluorononanoic acid										
463.00 > 419.00	3.113	3.113	0.0	1.000	3149993	2.61		104	10515	
463.00 > 169.00	3.113	3.113	0.0	1.000	759511		4.15(1.90-5.69)		12786	
D 19 13C5 PFNA										
468.00 > 423.00	3.113	3.114	-0.001	1.000	2893479	2.38		95.2	49197	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.322	3.322	0.0	1.000	5394048	2.34		100	54430	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.448	3.448	0.0	1.003	3963565	2.60		104	44199	
D 21 13C8 FOSA										
506.00 > 78.00	3.439	3.447	-0.008	1.000	3767588	2.45		98.1	37731	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.457	3.457	0.0	1.000	2327961	2.38		99.2	24876	
549.00 > 99.00	3.457	3.457	0.0	1.000	855348		2.72(1.33-3.97)		24461	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.466	3.466	0.0	1.000	1209760	2.48		104	33634	
D 26 M2-8:2FTS										
529.00 > 81.00	3.466	3.466	0.0	1.000	923392	2.51		105	10637	
D 23 13C2 PFDA										
515.00 > 470.00	3.476	3.475	0.001	1.000	2550251	2.50		99.8	50981	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.476	3.476	0.0	1.000	2519135	2.39		95.8	15173	
513.00 > 169.00	3.476	3.476	0.0	1.000	449873		5.60(2.36-7.09)		9966	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.630	3.630	0.0	1.000	1582733	2.73		109	21363	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.640	3.640	0.0	1.003	1581344	2.50		100	15565	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.786	3.786	0.0	1.000	1969639	2.48		103	21683	
599.00 > 99.00	3.786	3.786	0.0	1.000	650518		3.03(1.39-4.16)		15275	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.807	3.807	0.0	1.003	1437477	2.58		103	37887	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.796	3.796	0.0	1.000	1489626	2.61		104	19203	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.807	3.807	0.0	1.000	1704533	2.46		98.4	9669	
563.00 > 169.00	3.807	3.807	0.0	1.000	416137		4.10(2.12-6.36)		8525	
D 30 13C2 PFUnA										
565.00 > 520.00	3.807	3.806	0.001	1.000	2050216	2.33		93.0	38121	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.963	3.963	0.0	1.000	8066849	2.26		96.2	87475	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.097	4.097	0.0	1.000	2349649	2.74		110	3377	
613.00 > 169.00	4.097	4.097	0.0	1.000	578094		4.06(2.13-6.40)		7370	
D 36 13C2 PFDoA										
615.00 > 570.00	4.097	4.097	0.0	1.000	2056450	2.16		86.4	20566	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.359	4.359	0.0	1.000	2633291	2.63		105	2771	
663.00 > 169.00	4.359	4.359	0.0	1.000	785683		3.35(1.25-3.76)		7265	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.603	4.592	0.011	1.000	2904393	2.41		96.2	20040	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.603	4.603	0.0	1.000	749875	2.57		103	7541	
713.00 > 219.00	4.593	4.603	-0.010	0.998	519387		1.44(0.71-2.13)		10058	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.017	5.008	0.009	1.000	5212810	2.65		106	13612	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.017	5.017	0.0	1.000	4990290	2.51		100	1969	
813.00 > 169.00	5.017	5.017	0.0	1.000	835421		5.97(2.86-8.58)		5336	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.374	5.374	0.0	1.000	5504447	2.63		105	1695	
913.00 > 169.00	5.374	5.374	0.0	1.000	662550		8.31(3.83-11.48)		4352	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 15-May-2018 17:00:47 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_019.d

Injection Date: 10-May-2018 08:51:22 Instrument ID: A8_N

Lims ID: CCV L5

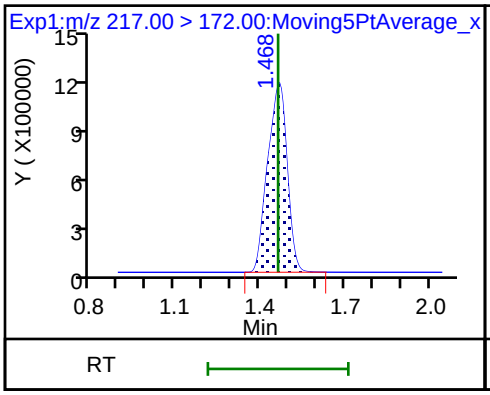
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 38 Worklist Smp#: 1

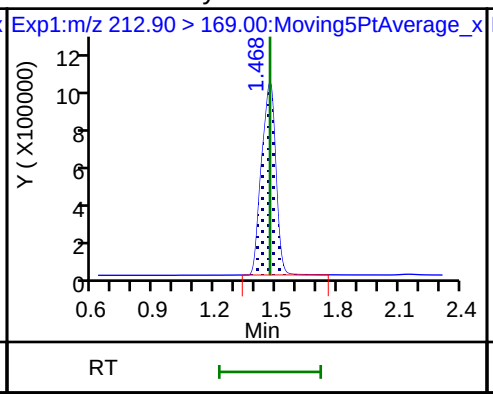
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

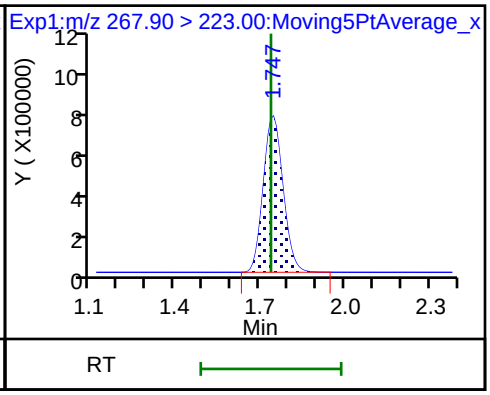
D 1 13C4 PFBA



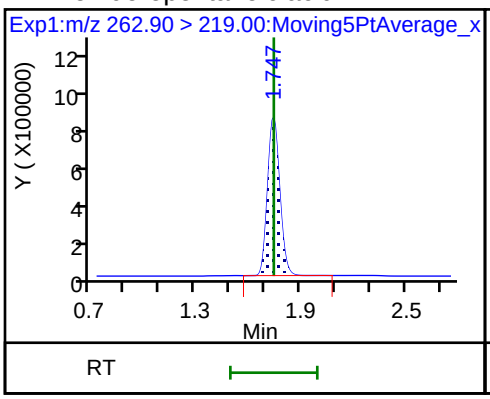
2 Perfluorobutyric acid



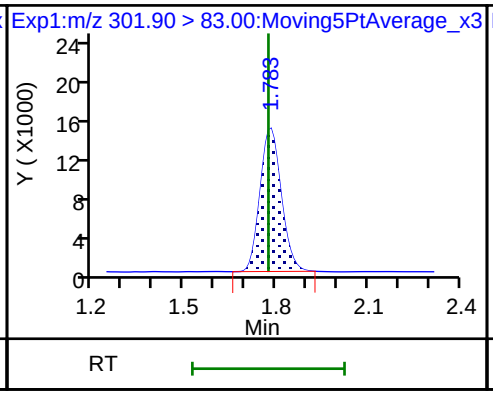
D 3 13C5-PFPeA



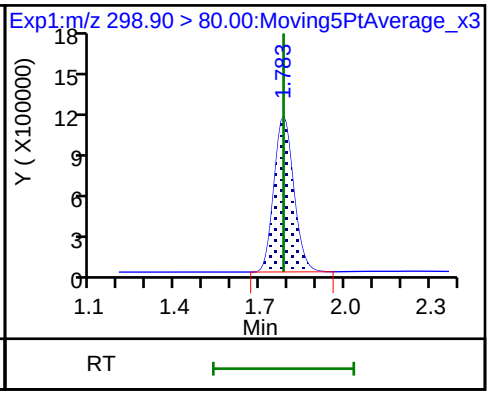
4 Perfluoropentanoic acid



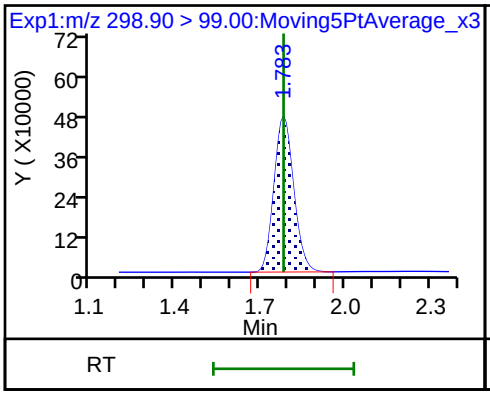
D 47 13C3-PFBS



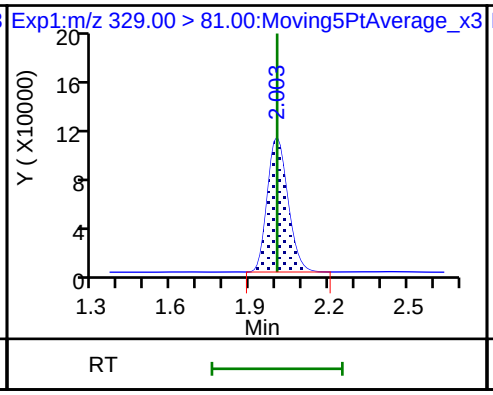
5 Perfluorobutanesulfonic acid



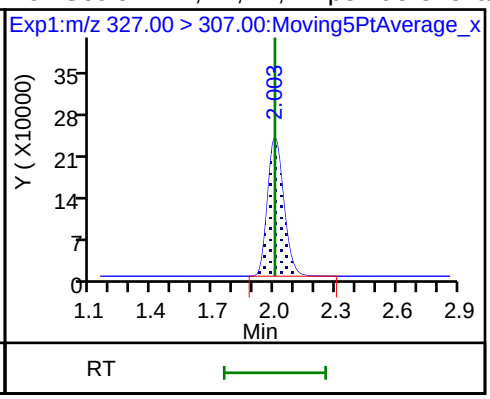
5 Perfluorobutanesulfonic acid



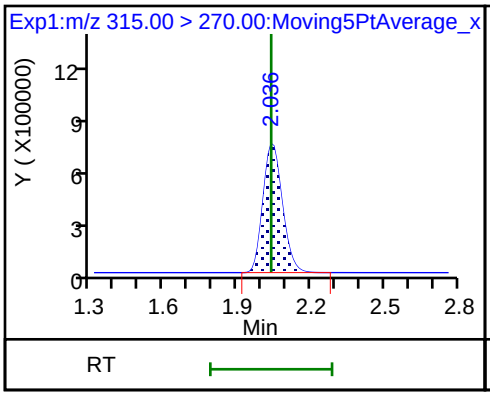
D 60 M2-4:2FTS



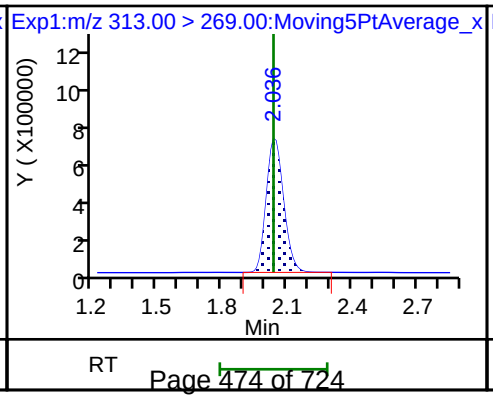
61 Sodium 1H,1H,2H,2H-perfluorohexane



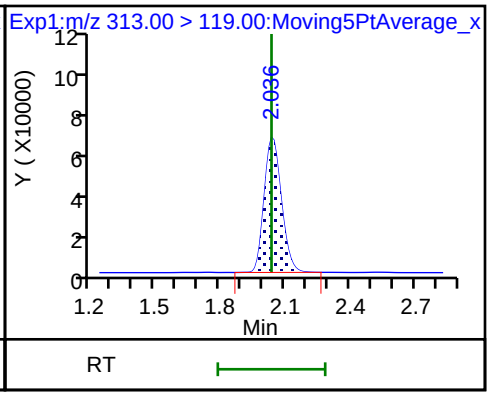
D 7 13C2 PFHxA



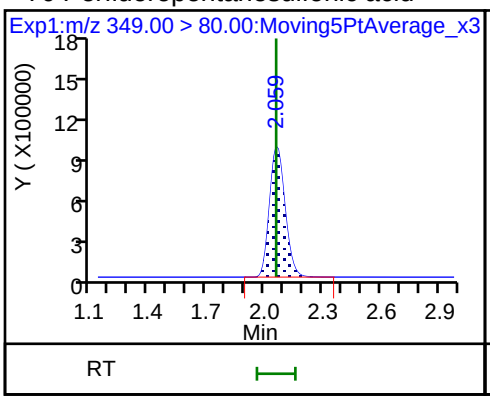
6 Perfluorohexanoic acid



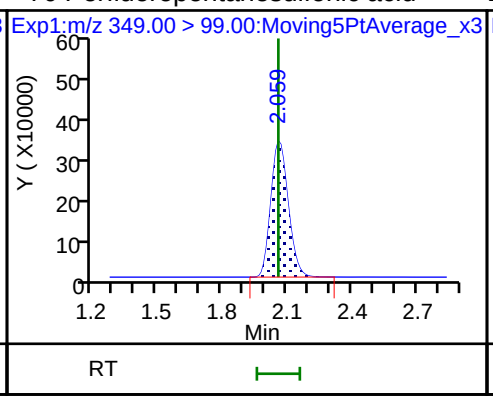
6 Perfluorohexanoic acid



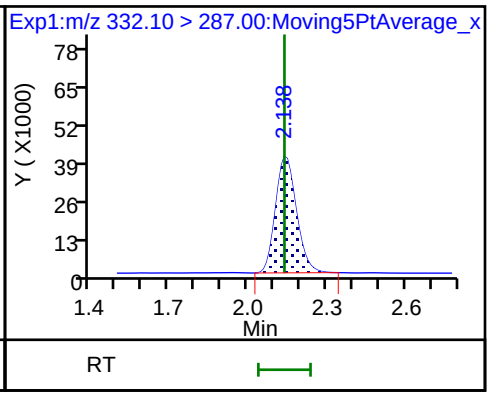
70 Perfluoropentanesulfonic acid



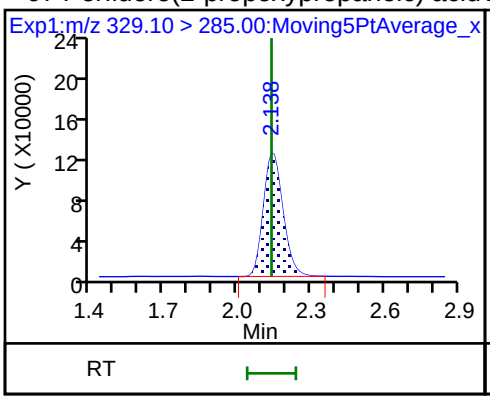
70 Perfluoropentanesulfonic acid



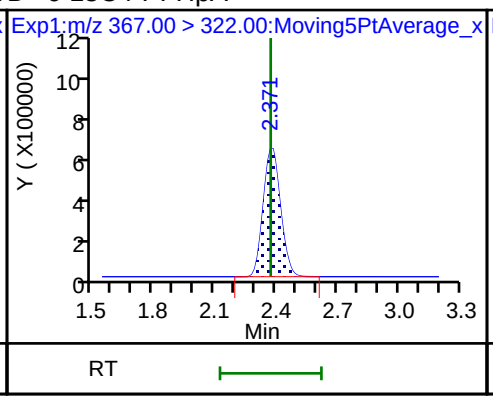
D 64 13C3 HFPO-DA



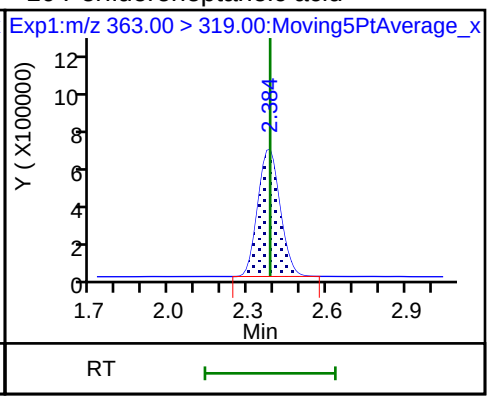
67 Perfluoro(2-propoxypropanoic) acid



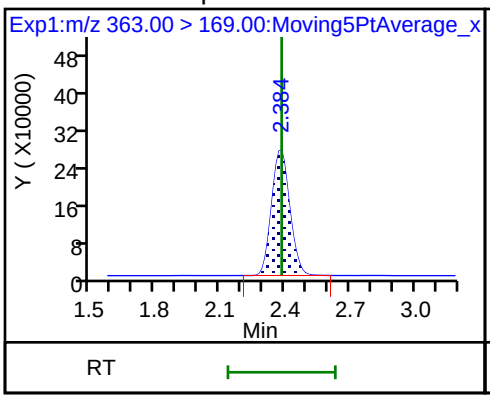
D 9 13C4-PFHpA



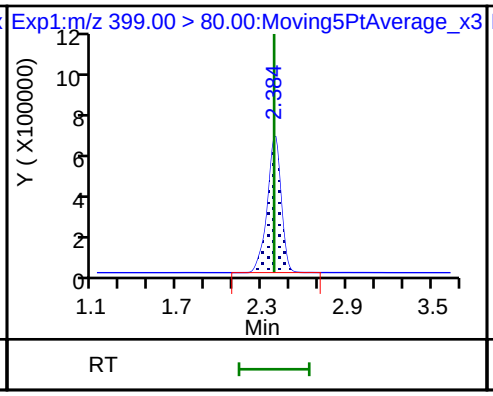
10 Perfluoroheptanoic acid



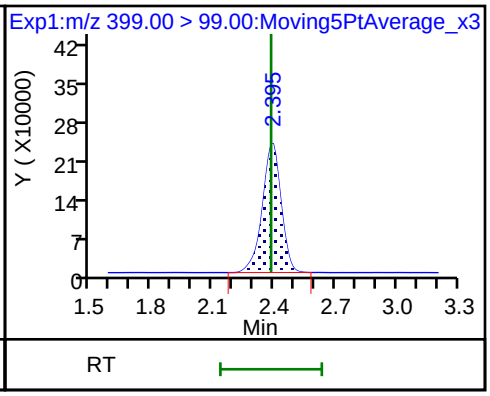
10 Perfluoroheptanoic acid



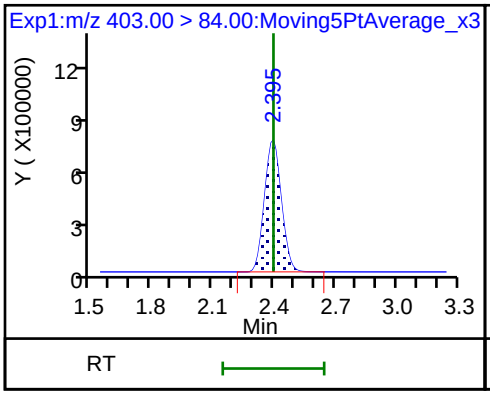
8 Perfluorohexanesulfonic acid



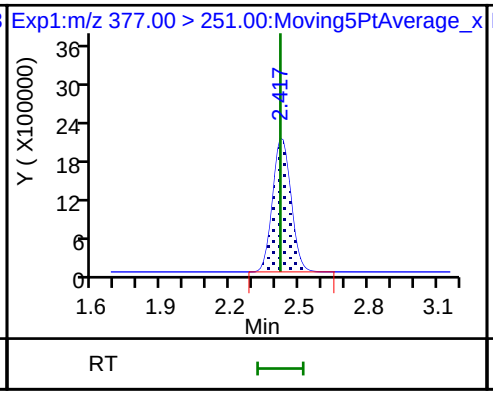
8 Perfluorohexanesulfonic acid



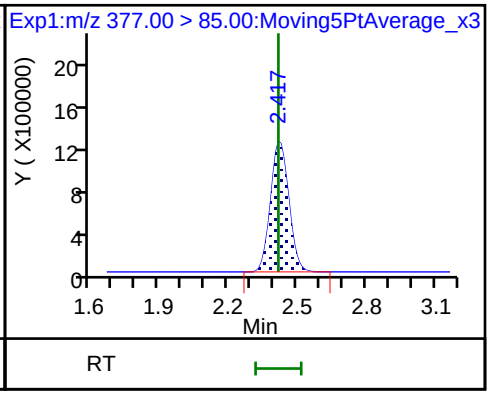
D 11 18O2 PFHxS



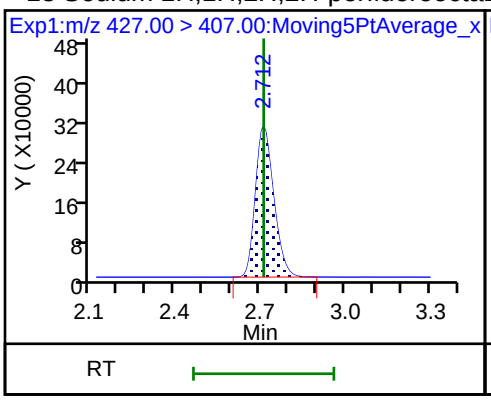
65 Adona



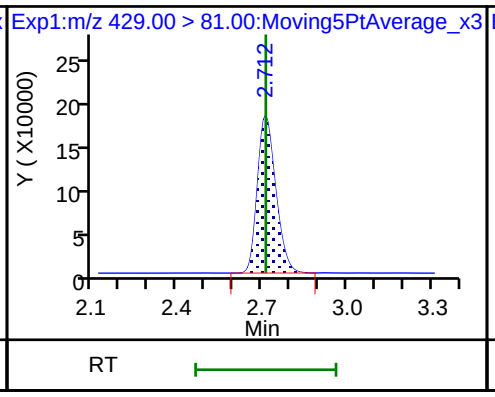
65 Adona



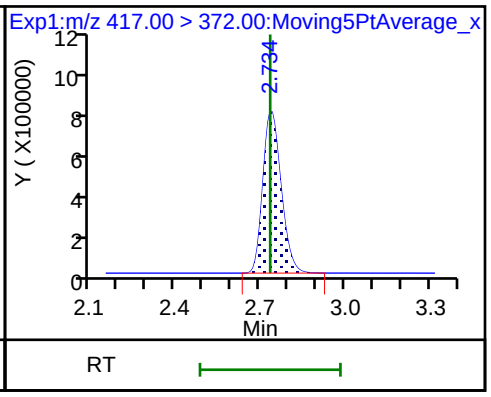
13 Sodium 1H,1H,2H,2H-perfluorooctane



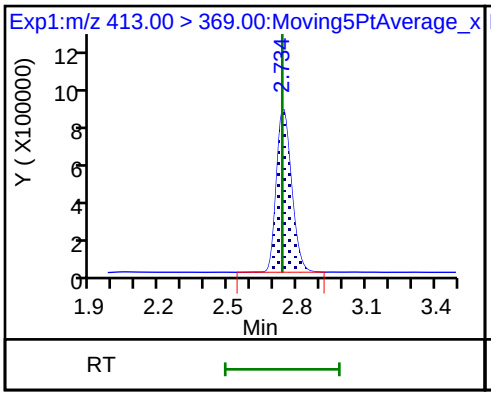
D 12 M2-6:2FTS



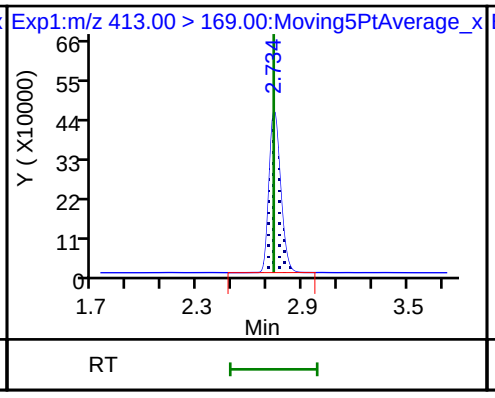
D 14 13C4 PFOA



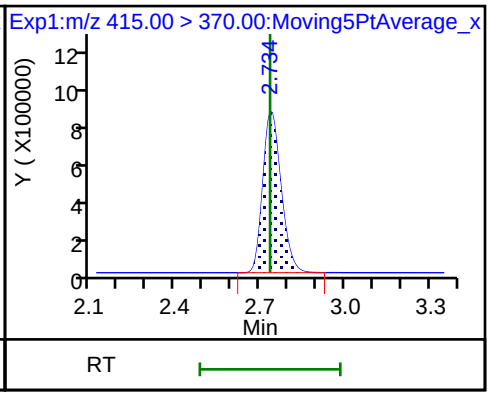
15 Perfluorooctanoic acid



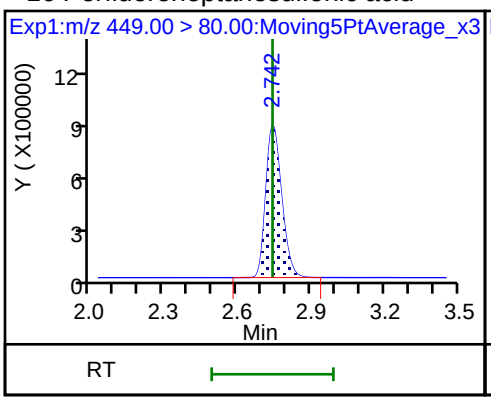
15 Perfluorooctanoic acid



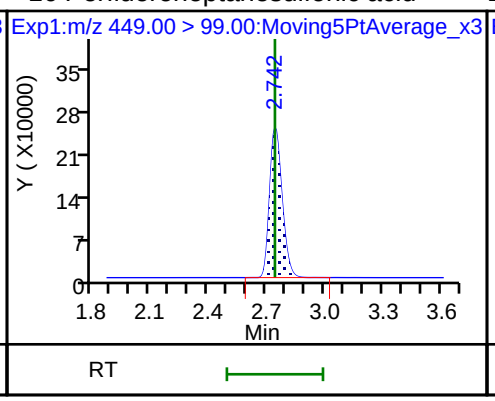
* 62 13C2-PFOA



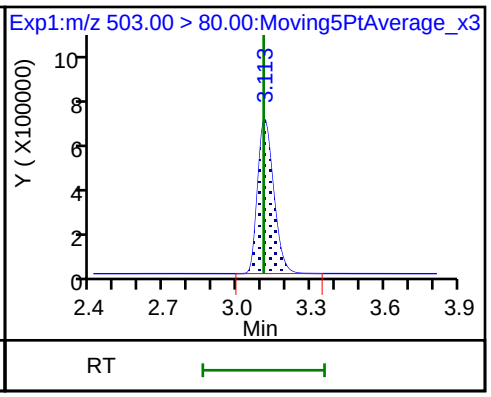
16 Perfluoroheptanesulfonic acid



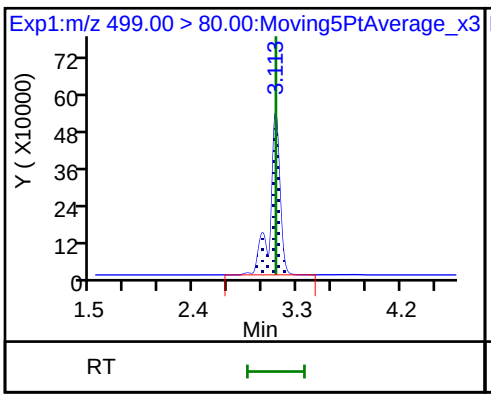
16 Perfluoroheptanesulfonic acid



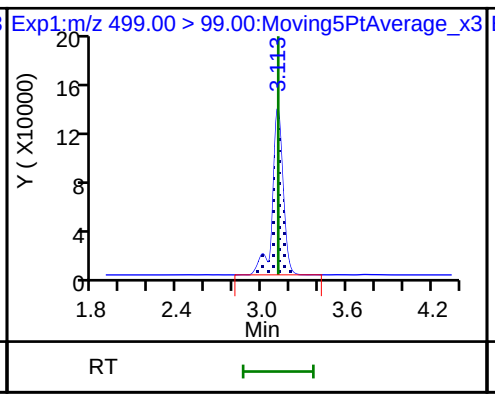
D 18 13C4 PFOS



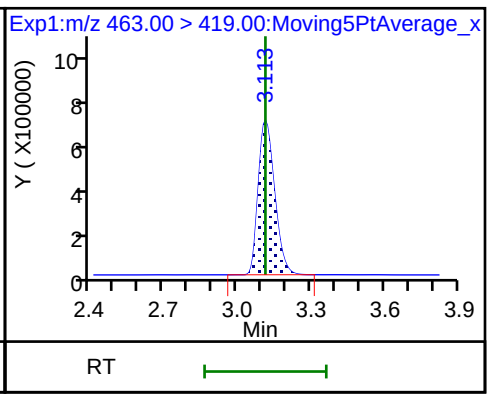
17 Perfluorooctane sulfonic acid



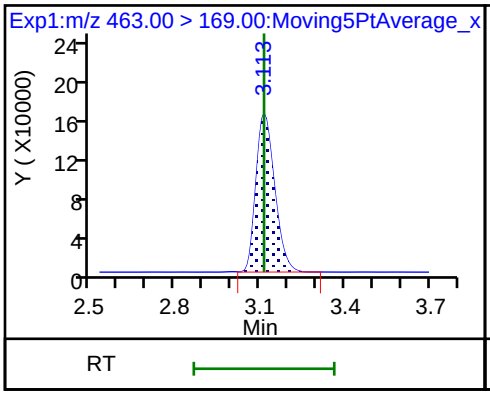
17 Perfluorooctane sulfonic acid



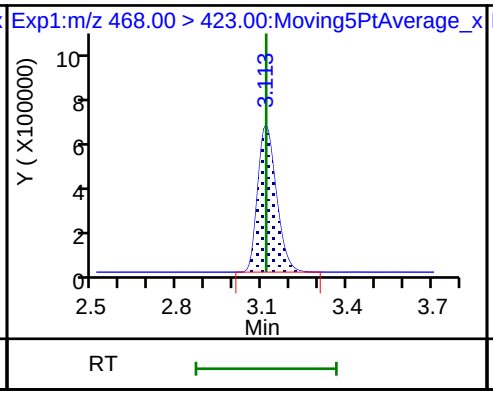
20 Perfluorononanoic acid



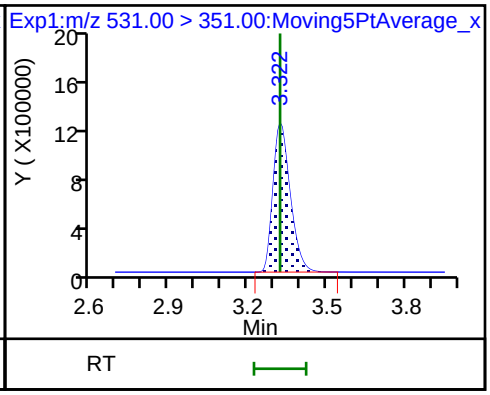
20 Perfluorononanoic acid



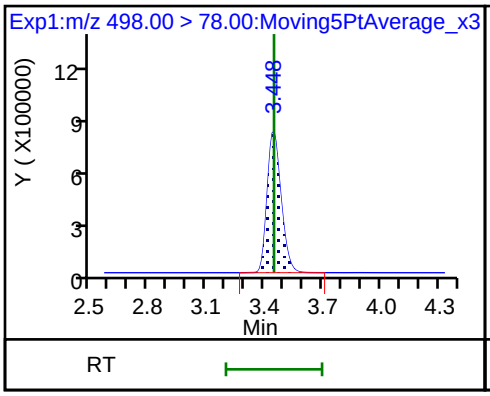
D 19 13C5 PFNA



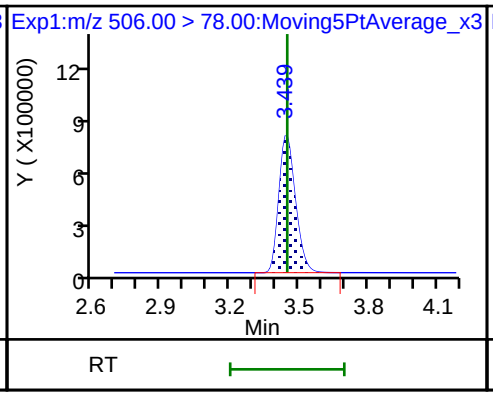
69 9-Chlorohexadecafluoro-3-oxanonane



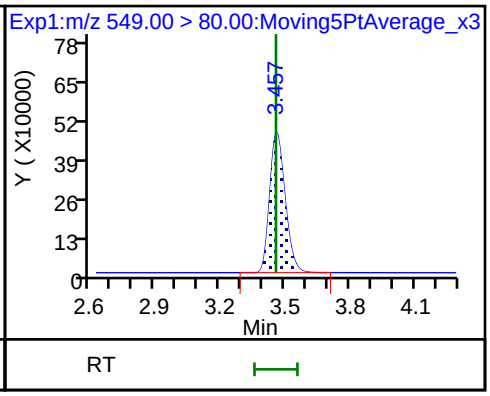
22 Perfluorooctane Sulfonamide



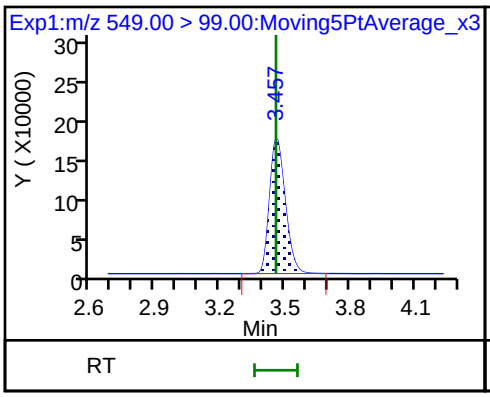
D 21 13C8 FOSA



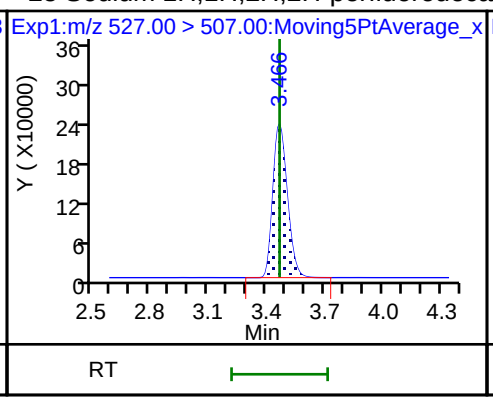
68 Perfluorononanesulfonic acid



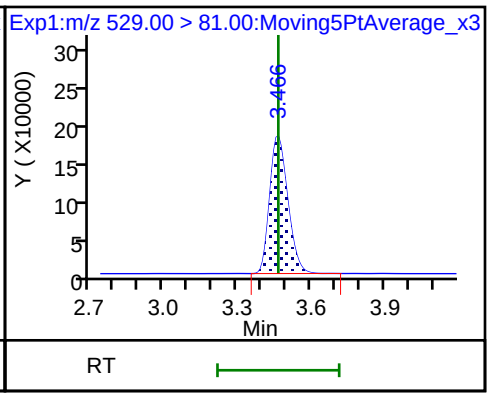
68 Perfluorononanesulfonic acid



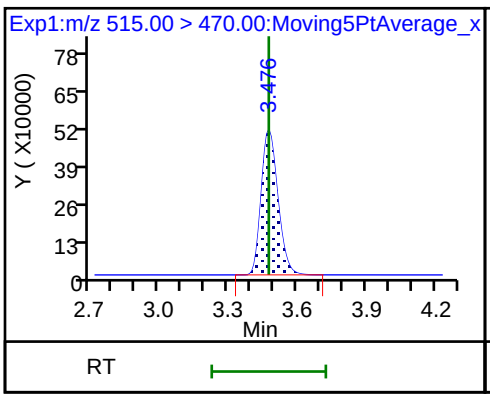
25 Sodium 1H,1H,2H,2H-perfluorodecane



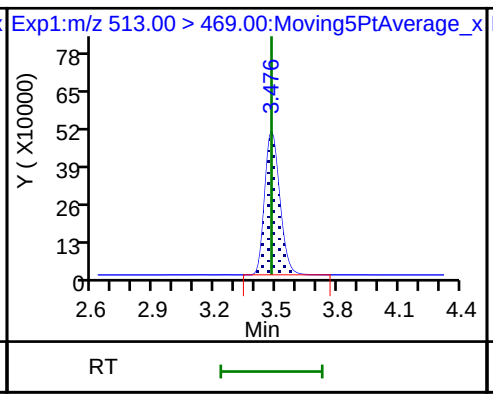
D 26 M2-8:2FTS



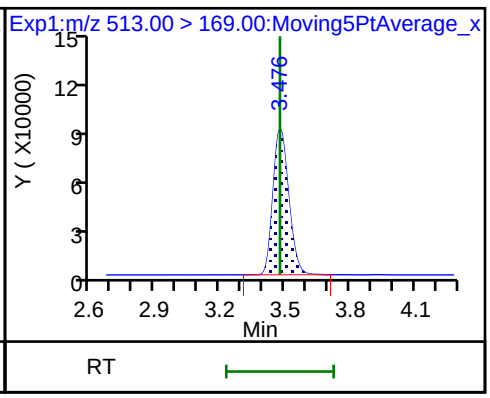
D 23 13C2 PFDA



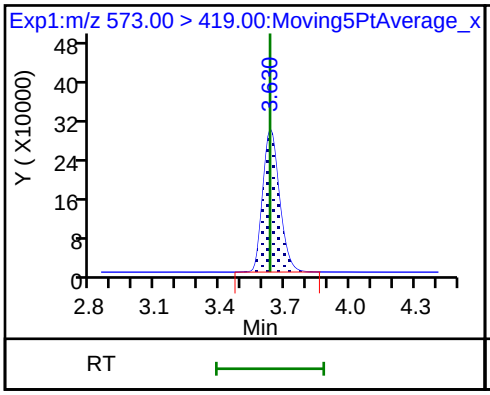
24 Perfluorodecanoic acid



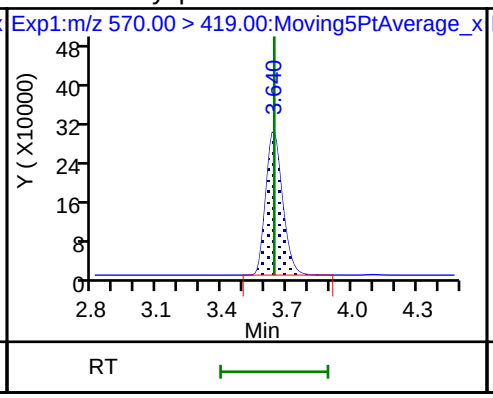
24 Perfluorodecanoic acid



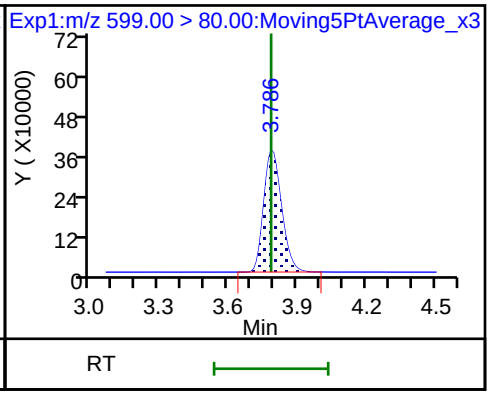
D 27 d3-NMeFOSAA



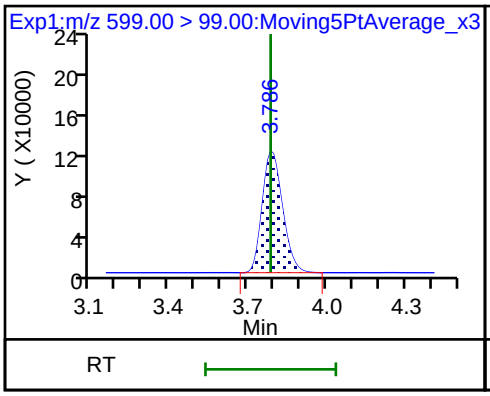
28 N-methyl perfluorooctane sulfonami



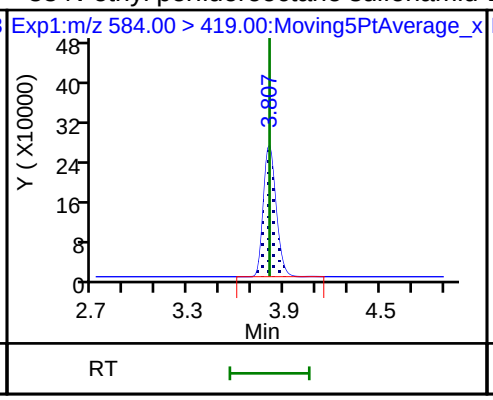
29 Perfluorodecane Sulfonic acid



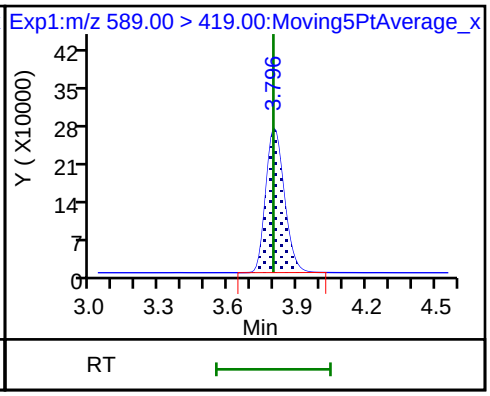
29 Perfluorodecane Sulfonic acid



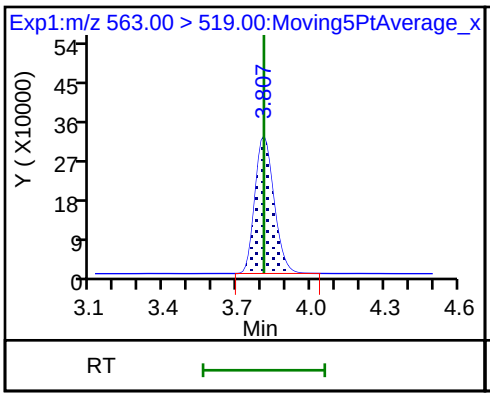
33 N-ethyl perfluorooctane sulfonamid



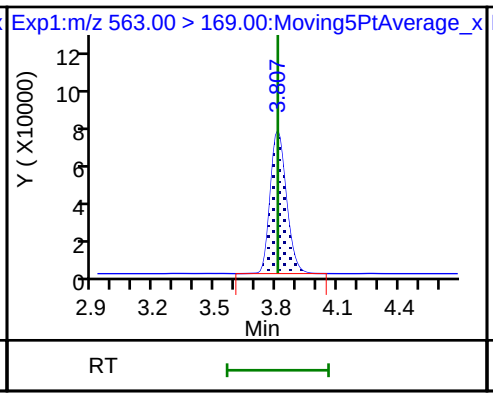
D 32 d5-NEtFOSAA



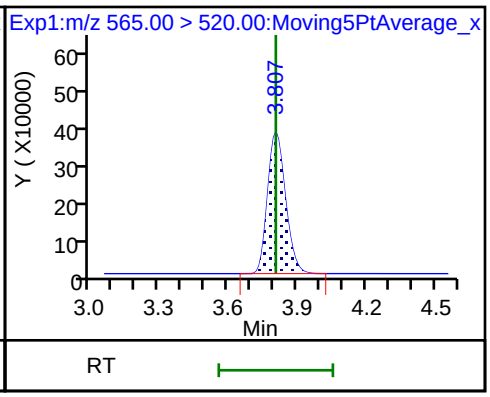
31 Perfluoroundecanoic acid



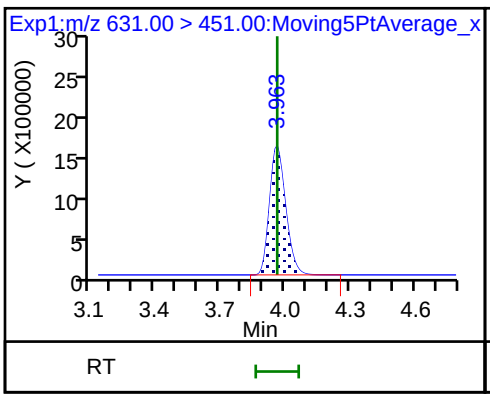
31 Perfluoroundecanoic acid



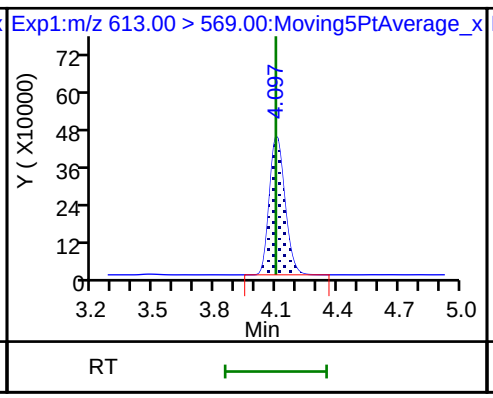
D 30 13C2 PFUnA



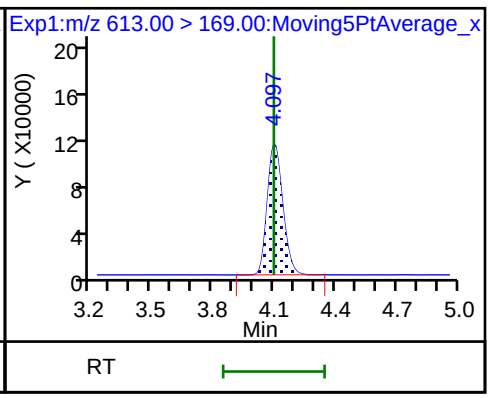
66 11-Chloroeicosafluoro-3-oxaundecan



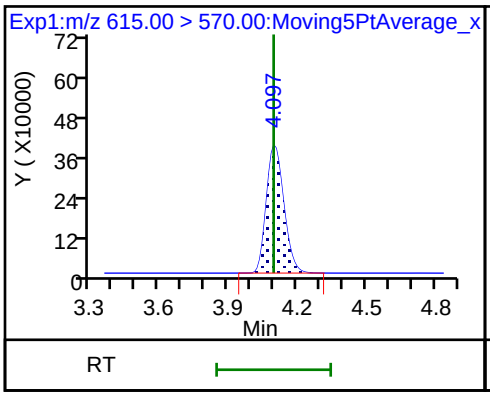
37 Perfluorododecanoic acid



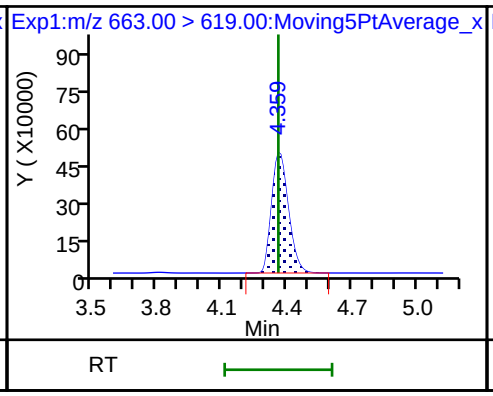
37 Perfluorododecanoic acid



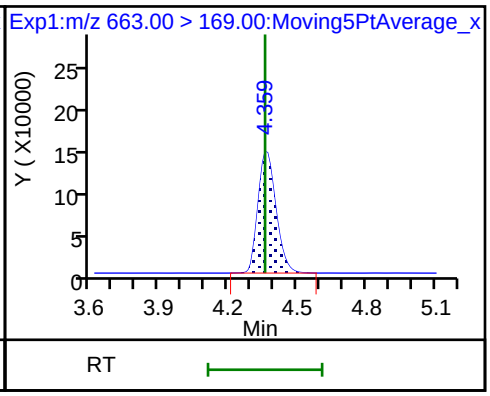
D 36 13C2 PFDoA



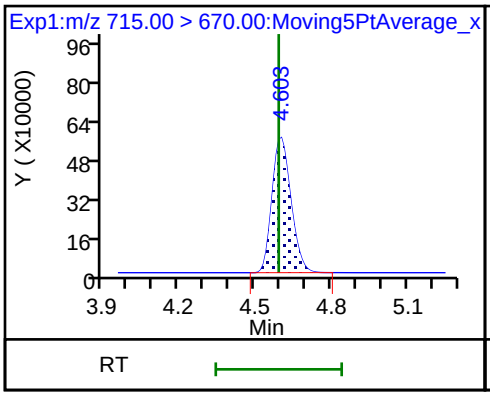
41 Perfluorotridecanoic acid



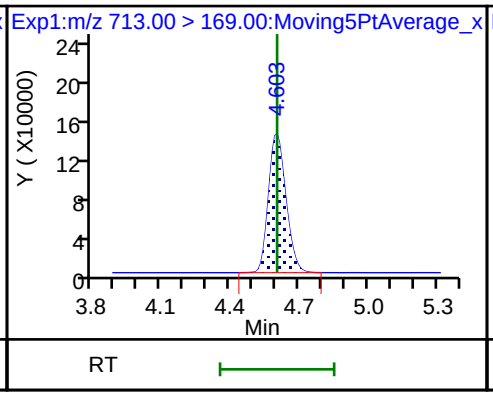
41 Perfluorotridecanoic acid



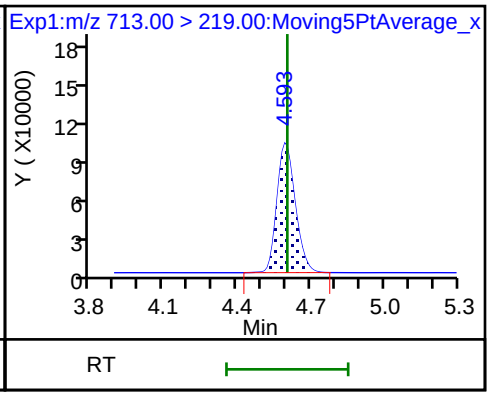
D 43 13C2-PFTeDA



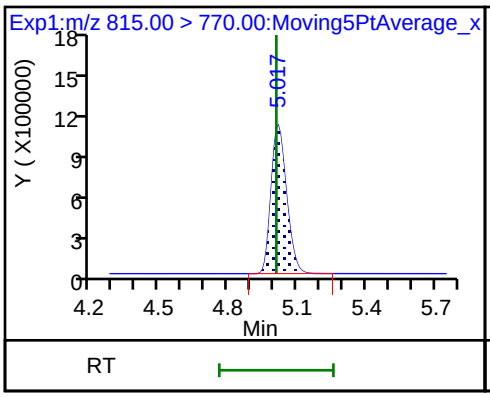
42 Perfluorotetradecanoic acid



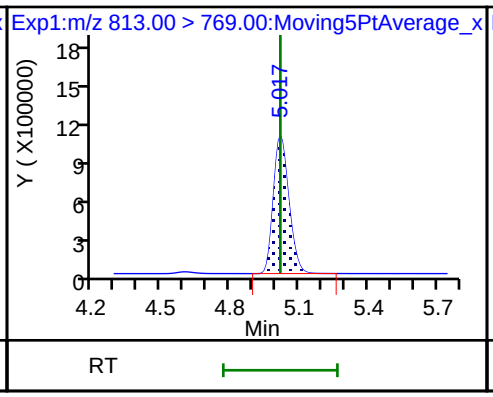
42 Perfluorotetradecanoic acid



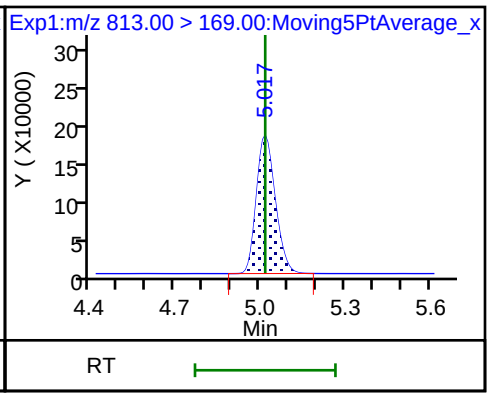
D 44 13C2-PFHxDA



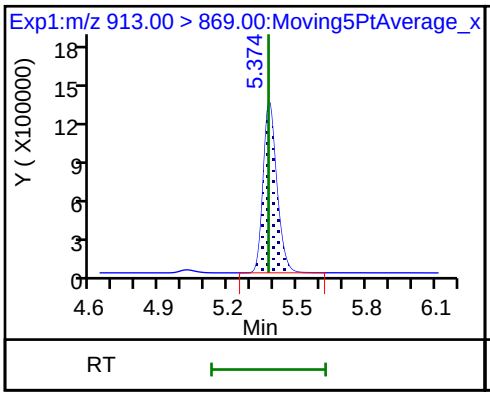
45 Perfluorohexadecanoic acid



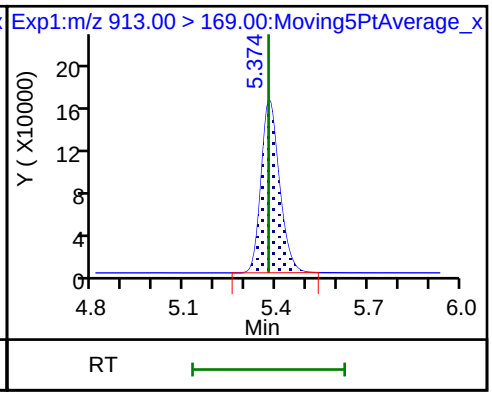
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222476/10 Calibration Date: 05/10/2018 10:01

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.09LLC_028.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	0.9158		0.986	1.00	-1.4	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.140		0.957	1.00	-4.3	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	75.06		0.848	0.884	-4.1	50.0
4:2 FTS	AveID	16.03	17.27		1.01	0.934	7.7	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.016	0.996		0.981	1.00	-1.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	68.07		0.893	0.938	-4.8	50.0
HFPO-DA (GenX)	AveID	2.785	2.570		0.923	1.00	-7.7	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	1.026		1.02	1.00	2.5	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.007		0.809	0.910	-11.1	40.0
Adona	AveID	3.464	3.851		1.11	1.00	11.2	50.0
6:2FTS	AveID	1.691	1.614		0.905	0.948	-4.5	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.124		0.973	1.00	-2.7	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.353		0.970	0.952	1.9	50.0
Perfluorononanoic acid (PFNA)	AveID	1.043	0.9706		0.931	1.00	-6.9	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.136		0.969	0.928	4.4	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.784		0.882	0.932	-5.3	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	0.9751		0.964	1.00	-3.6	40.0
8:2FTS	AveID	1.265	1.206		0.913	0.958	-4.7	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.7564		0.908	0.960	-5.4	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	0.9622		0.933	1.00	-6.7	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	0.9914		0.994	1.00	-0.6	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6473		0.961	0.964	-0.3	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	0.8904		0.953	1.00	-4.7	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.7617		0.901	1.00	-9.9	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.740		0.886	0.942	-5.9	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	1.027		0.984	1.00	-1.6	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.111		0.914	1.00	-8.6	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2285		0.910	1.00	-9.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9464		0.977	1.00	-2.3	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222476/10 Calibration Date: 05/10/2018 10:01

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.09LLC_028.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	1.054		1.05	1.00	5.0	50.0
13C4 PFBA	Ave	1.345	1.453		2.70	2.50	8.0	50.0
13C5 PFPeA	Ave	0.8672	0.9674		2.79	2.50	11.6	50.0
13C3-PFBS	Ave	0.0199	0.0220		2.57	2.33	10.4	50.0
M2-4:2FTS	Ave	0.1425	0.1741		2.85	2.34	22.2	50.0
13C2 PFHxA	Ave	0.9590	1.047		2.73	2.50	9.2	50.0
13C3 HFPO-DA	Ave	0.0593	0.0689		2.90	2.50	16.0	50.0
13C4-PFHpA	Ave	0.9333	1.044		2.80	2.50	11.8	50.0
18O2 PFHxS	Ave	1.152	1.213		2.49	2.37	5.3	50.0
M2-6:2FTS	Ave	0.2000	0.2444		2.90	2.38	22.2	40.0
13C4 PFOA	Ave	0.9276	0.9499		2.56	2.50	2.4	50.0
13C4 PFOS	Ave	0.8066	0.8238		2.44	2.39	2.1	50.0
13C5 PFNA	Ave	0.7973	0.8590		2.69	2.50	7.7	50.0
13C8 FOSA	Ave	1.007	1.061		2.63	2.50	5.3	50.0
M2-8:2FTS	Ave	0.2409	0.2740		2.72	2.40	13.8	40.0
13C2 PFDA	Ave	0.6701	0.6845		2.55	2.50	2.2	50.0
d3-NMeFOSAA	Ave	0.3798	0.4247		2.79	2.50	11.8	50.0
d5-NEtFOSAA	Ave	0.3749	0.4319		2.88	2.50	15.2	50.0
13C2 PFUnA	Ave	0.5781	0.5794		2.51	2.50	0.2	50.0
13C2 PFDoA	Ave	0.6242	0.6040		2.42	2.50	-3.2	50.0
13C2-PFTeDA	Ave	0.7915	0.8042		2.54	2.50	1.6	50.0
13C2-PFHxDA	Ave	1.288	1.352		2.63	2.50	5.0	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_028.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 10-May-2018 10:01:38 ALS Bottle#: 37 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 17:00:44 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 15-May-2018 17:00:44

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.463	0.0	1.000	5388829	2.70		108	38902	
2 Perfluorobutyric acid										
212.90 > 169.00	1.463	1.463	0.0	1.000	1974035	0.9863		98.6	1209	
D 3 13C5-PFPeA										
267.90 > 223.00	1.738	1.738	0.0	0.559	3588413	2.79		112	75903	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.738	1.738	0.0	1.000	1636586	0.9567		95.7	1388	
D 47 13C3-PFBS										
301.90 > 83.00	1.774	1.774	0.0	1.000	75751	2.57		110	684	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.774	1.774	0.0	1.000	2161750	0.8475		95.9	1940	
298.90 > 99.00	1.774	1.774	0.0	1.000	926451		2.33(1.25-3.74)		1852	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.004	2.004	0.0	1.000	525660	1.01		108	24039	
D 60 M2-4:2FTS										
329.00 > 81.00	2.004	2.003	0.001	1.000	603241	2.85		122	5252	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.037	2.037	0.0	1.000	1548096	0.9807		98.1	2939	
313.00 > 119.00	2.037	2.037	0.0	1.000	145868		10.61(5.03-15.10)		2188	
D 7 13C2 PFHxA										
315.00 > 270.00	2.037	2.037	0.0	1.000	3883901	2.73		109	78685	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.060	2.060	0.0	1.000	2080393	0.8929		95.2	16506	
349.00 > 99.00	2.060	2.060	0.0	1.000	803574		2.59(1.36-4.07)		14739	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.139	2.139	0.0	1.000	262537	0.9227		92.3	1655	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.139	2.138	0.001	1.000	255368	2.90		116	5921	
D 9 13C4-PFHpA										
367.00 > 322.00	2.373	2.372	0.0	1.000	3870891	2.80		112	51073	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.373	2.373	0.0	1.000	1588036	1.02		102	2501	
363.00 > 169.00	2.373	2.373	0.0	1.000	618796		2.57(1.13-3.40)		3655	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.385	2.385	0.0	1.000	1648635	0.8094		88.9	5617	
399.00 > 99.00	2.385	2.385	0.0	1.000	570311		2.89(1.50-4.49)		4081	
D 11 18O2 PFHxS										
403.00 > 84.00	2.385	2.395	-0.010	1.000	4256487	2.49		105	61950	
65 Adona										
377.00 > 251.00	2.418	2.418	0.0	1.000	4706710	1.11		111	66161	
377.00 > 85.00	2.418	2.418	0.0	1.000	2667727		1.76(0.84-2.53)		48424	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.705	2.705	0.0	1.000	554876	0.9051		95.5	12289	
D 12 M2-6:2FTS										
429.00 > 81.00	2.705	2.712	-0.007	1.000	861286	2.90		122	14923	
* 62 13C2-PFOA										
415.00 > 370.00	2.736	2.736	0.0		3709230	2.50			43278	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.736	2.736	0.0	1.000	1583610	0.9726		97.3	777	
413.00 > 169.00	2.736	2.736	0.0	1.000	833010		1.90(0.84-2.52)		4199	
D 14 13C4 PFOA										
417.00 > 372.00	2.736	2.735	0.001	1.000	3523221	2.56		102	44036	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.743	2.743	0.0	1.000	1574610	0.9703		102	11659	
449.00 > 99.00	2.743	2.743	0.0	1.000	442803		3.56(1.94-5.82)		16428	
D 18 13C4 PFOS										
503.00 > 80.00	3.107	3.106	0.001	1.000	2921333	2.44		102	21417	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.107	3.107	0.0	1.000	1288058	0.9687		104	42975	
499.00 > 99.00	3.107	3.107	0.0	1.000	267404		4.82(2.31-6.93)		3252	
20 Perfluorononanoic acid										
463.00 > 419.00	3.107	3.107	0.0	1.000	1236933	0.9308		93.1	3049	
463.00 > 169.00	3.107	3.107	0.0	1.000	296393		4.17(1.90-5.69)		6519	
D 19 13C5 PFNA										
468.00 > 423.00	3.107	3.114	-0.007	1.000	3186146	2.69		108	70178	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.323	3.323	0.0	1.000	2032782	0.8822		94.7	40684	
D 21 13C8 FOSA										
506.00 > 78.00	3.439	3.447	-0.008	1.000	3935491	2.63		105	49977	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.439	3.439	0.0	1.000	1535036	0.9640		96.4	28034	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.458	3.458	0.0	1.000	887557	0.9084		94.6	11970	
549.00 > 99.00	3.458	3.458	0.0	1.000	339559		2.61(1.33-3.97)		11273	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 26 M2-8:2FTS										
529.00 > 81.00	3.458	3.466	-0.008	1.000	973741	2.72		114	10212	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.458	3.458	0.0	1.000	469817	0.9132		95.3	18537	
D 23 13C2 PFDA										
515.00 > 470.00	3.477	3.475	0.002	1.000	2539133	2.55		102	55842	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.477	3.477	0.0	1.000	977299	0.9328		93.3	5551	
513.00 > 169.00	3.477	3.477	0.0	1.000	182071		5.37(2.36-7.09)		3279	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.631	3.630	0.001	1.000	1575173	2.79		112	24781	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.631	3.631	0.0	1.000	624660	0.99		99.4	6605	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.785	3.785	0.0	1.000	762667	0.9610		99.7	7654	
599.00 > 99.00	3.785	3.785	0.0	1.000	260699		2.93(1.39-4.16)		8337	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.795	3.796	-0.001	1.000	1601890	2.88		115	27014	
D 30 13C2 PFUnA										
565.00 > 520.00	3.805	3.806	-0.001	1.000	2149213	2.51		100	45069	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.795	3.795	0.0	1.000	570551	0.9528		95.3	13229	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.805	3.805	0.0	1.000	654825	0.9013		90.1	3508	
563.00 > 169.00	3.805	3.805	0.0	1.000	167306		3.91(2.12-6.36)		4471	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.961	3.961	0.0	1.000	3155308	0.8863		94.1	88298	
D 36 13C2 PFDoA										
615.00 > 570.00	4.093	4.097	-0.004	1.000	2240422	2.42		96.8	20311	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.093	4.093	0.0	1.000	920021	0.9844		98.4	1325	
613.00 > 169.00	4.093	4.093	0.0	1.000	216326		4.25(2.13-6.40)		2743	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.352	4.352	0.0	1.000	996007	0.9145		91.4	1112	
663.00 > 169.00	4.352	4.352	0.0	1.000	314242		3.17(1.25-3.76)		3220	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.596	4.592	0.004	1.000	2982868	2.54		102	16761	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.596	4.596	0.0	1.000	272637	0.9098		91.0	3515	
713.00 > 219.00	4.585	4.596	-0.011	0.998	202045		1.35(0.71-2.13)		3590	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.011	5.008	0.003	1.000	5016177	2.63		105	12124	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.011	5.011	0.0	1.000	1898903	0.9772		97.7	861	
813.00 > 169.00	5.011	5.011	0.0	1.000	317323		5.98(2.86-8.58)		2440	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.370	5.370	0.0	1.000	2115387	1.05		105	763	
913.00 > 169.00	5.370	5.370	0.0	1.000	260069		8.13(3.83-11.48)		2535	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 15-May-2018 17:00:45 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_028.d

Injection Date: 10-May-2018 10:01:38 Instrument ID: A8_N

Lims ID: CCV L4

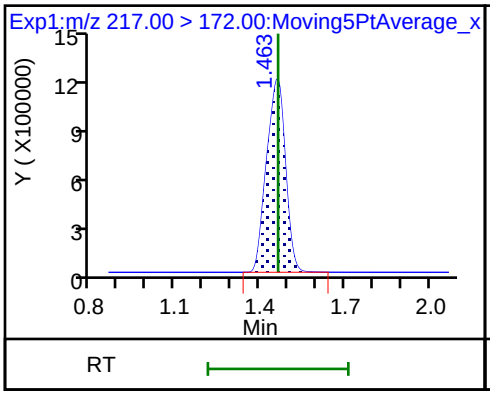
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 37 Worklist Smp#: 10

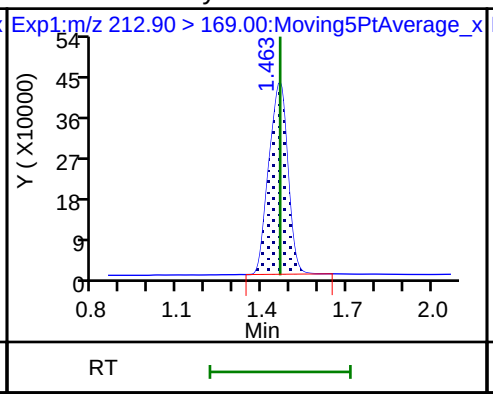
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

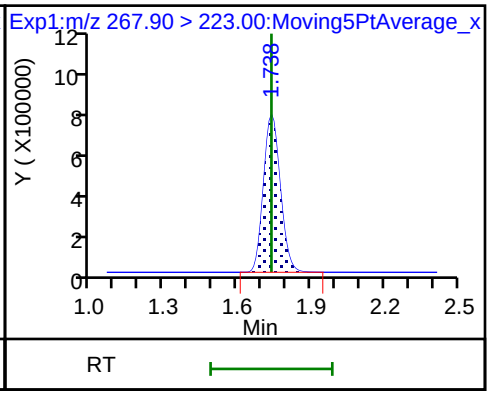
D 1 13C4 PFBA



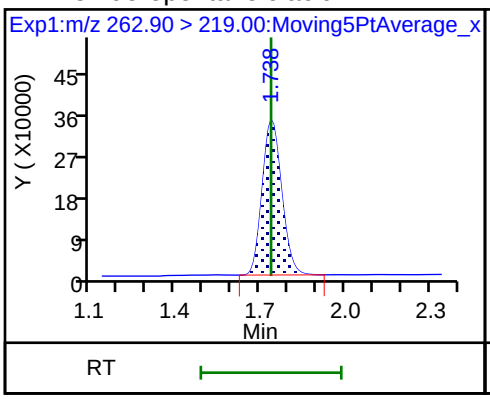
2 Perfluorobutyric acid



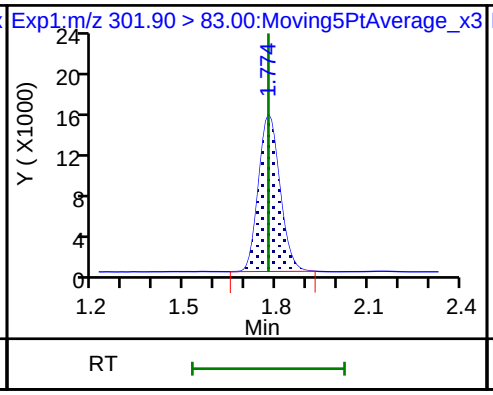
D 3 13C5-PFPeA



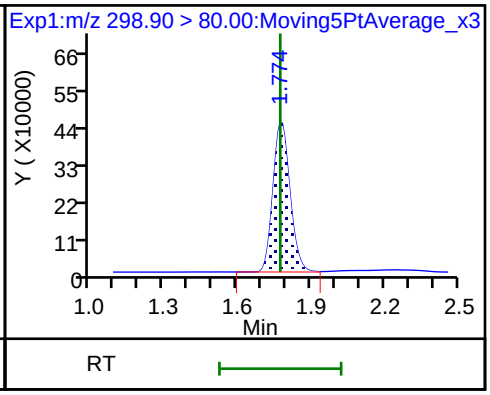
4 Perfluoropentanoic acid



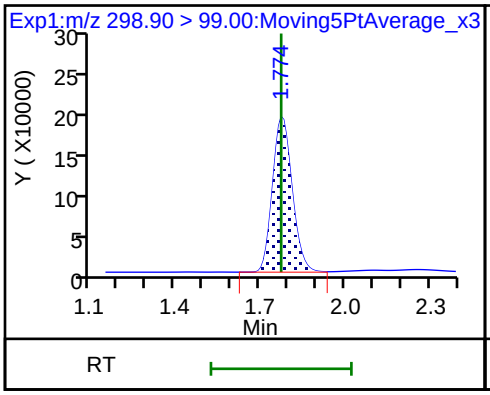
D 47 13C3-PFBS



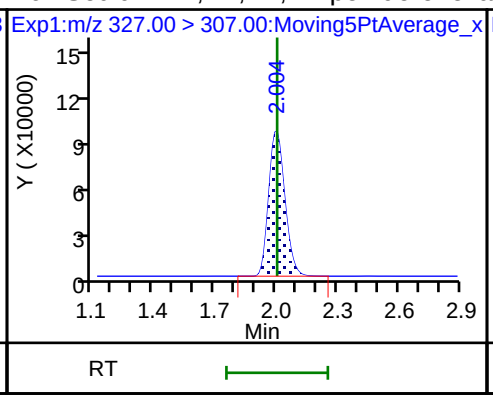
5 Perfluorobutanesulfonic acid



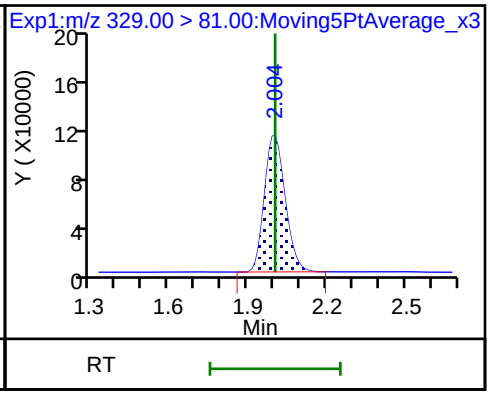
5 Perfluorobutanesulfonic acid



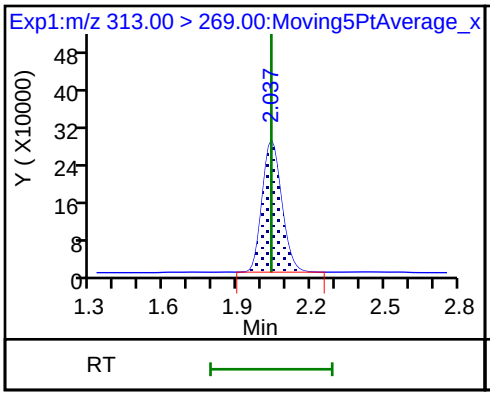
61 Sodium 1H,1H,2H,2H-perfluorohexane



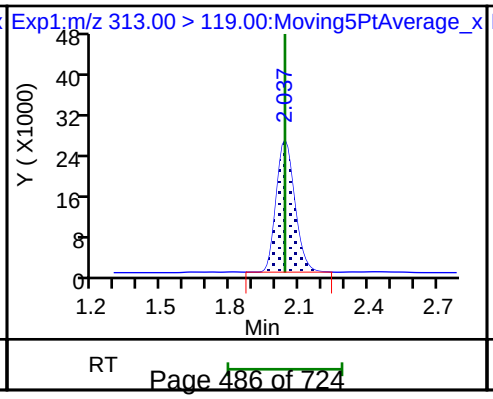
D 60 M2-4:2FTS



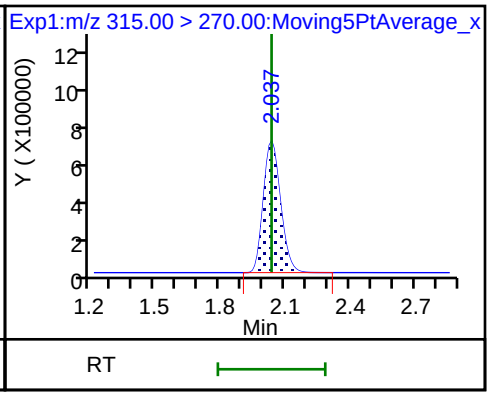
6 Perfluorohexanoic acid



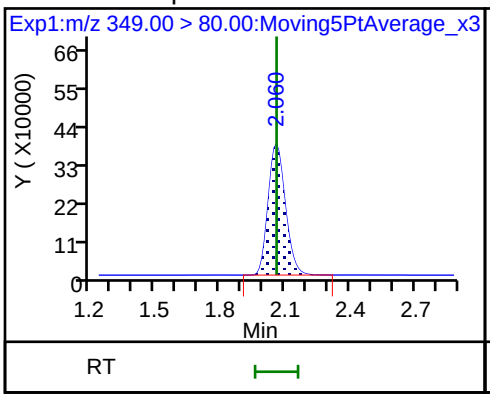
6 Perfluorohexanoic acid



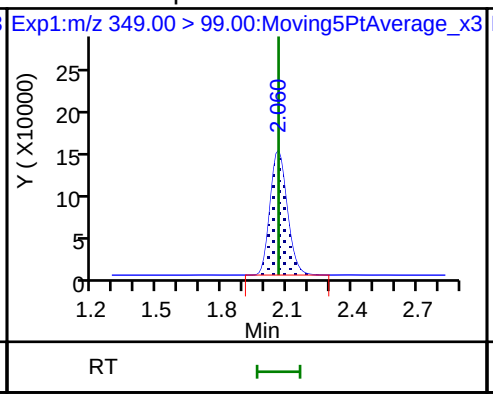
D 7 13C2 PFHxA



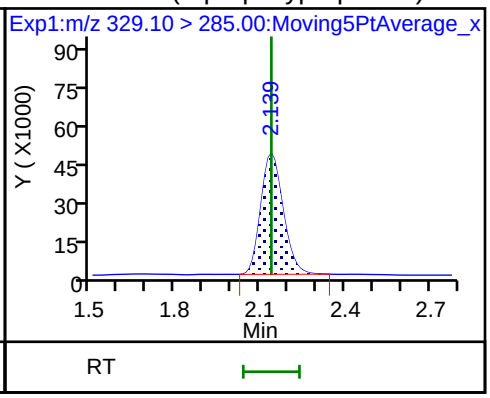
70 Perfluoropentanesulfonic acid



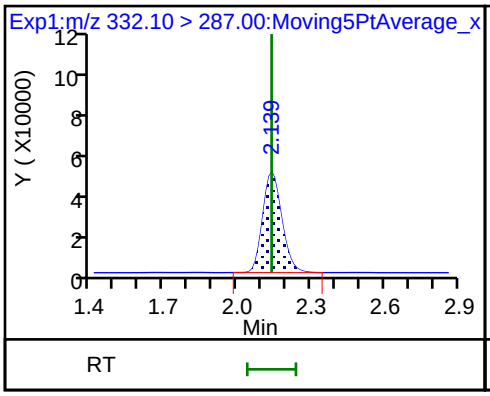
70 Perfluoropentanesulfonic acid



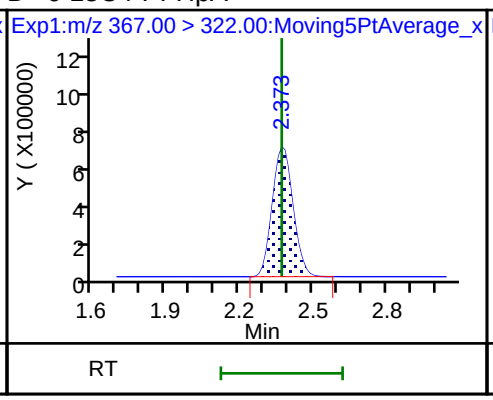
67 Perfluoro(2-propoxypropanoic) acid



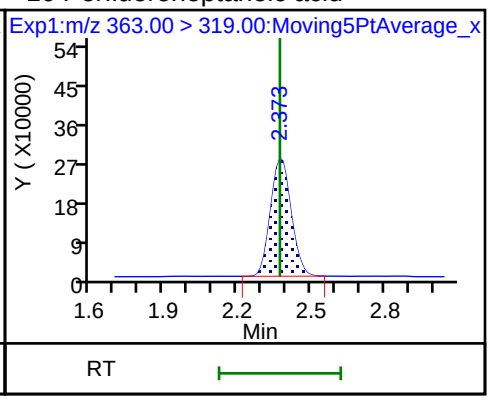
D 64 13C3 HFPO-DA



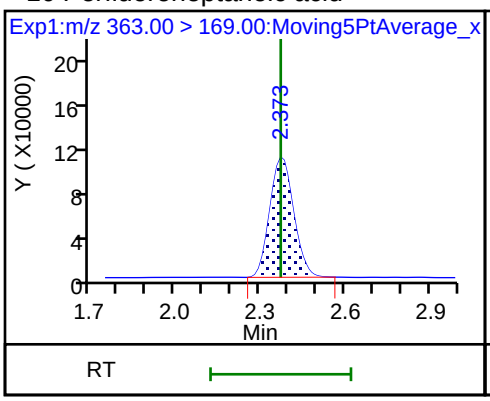
D 9 13C4-PFHpA



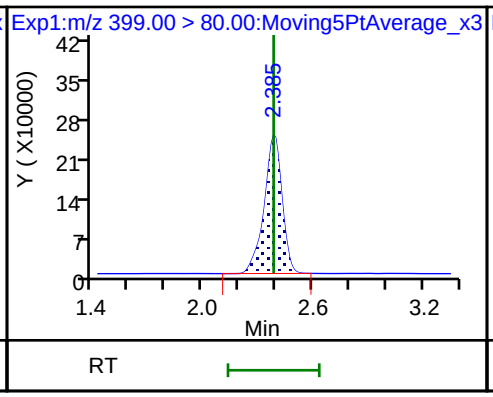
10 Perfluoroheptanoic acid



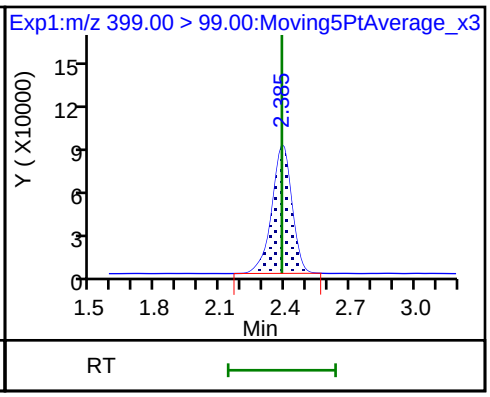
10 Perfluoroheptanoic acid



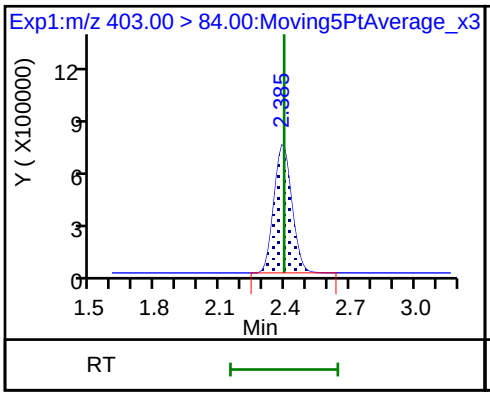
8 Perfluorohexanesulfonic acid



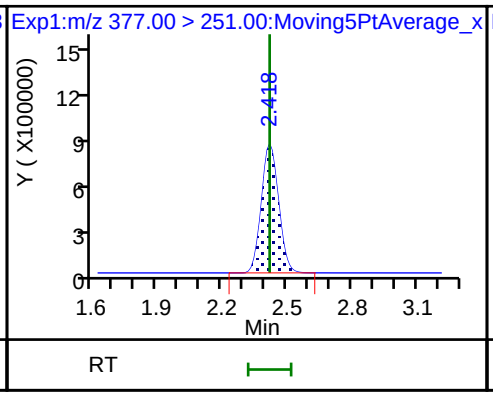
8 Perfluorohexanesulfonic acid



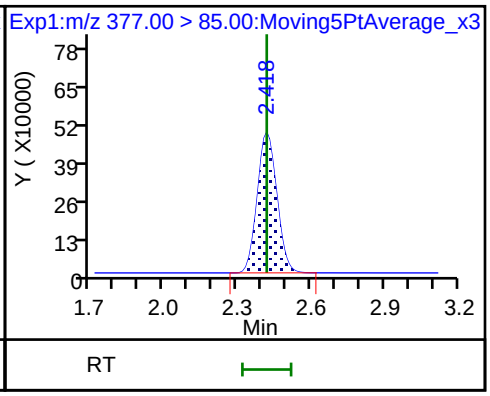
D 11 18O2 PFHxS



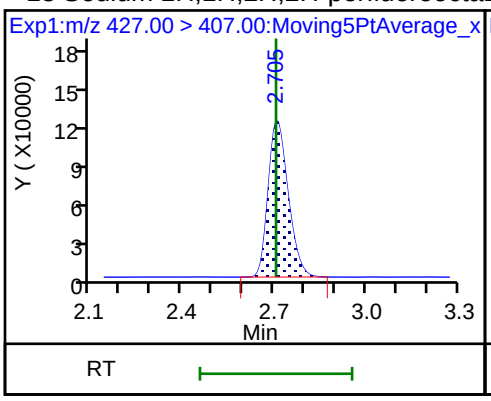
65 Adona



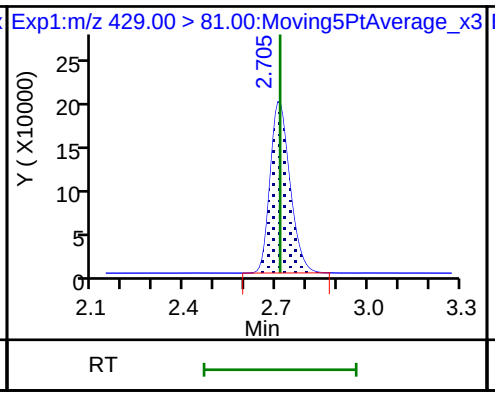
65 Adona



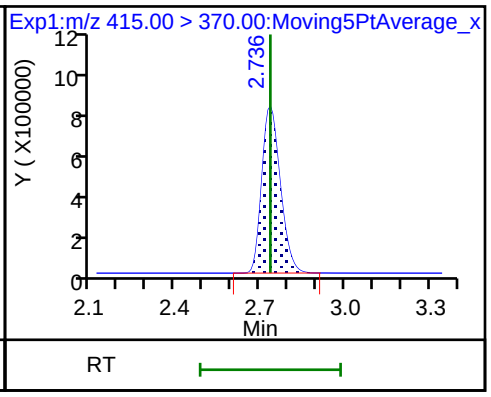
13 Sodium 1H,1H,2H,2H-perfluorooctane



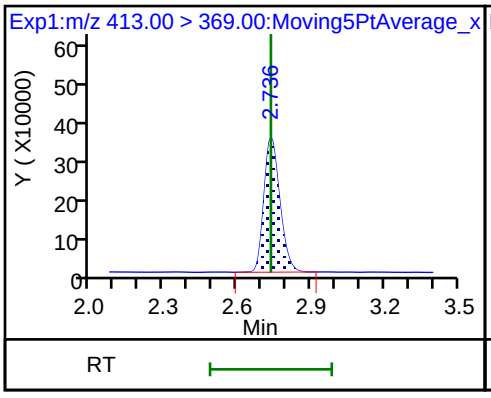
D 12 M2-6:2FTS



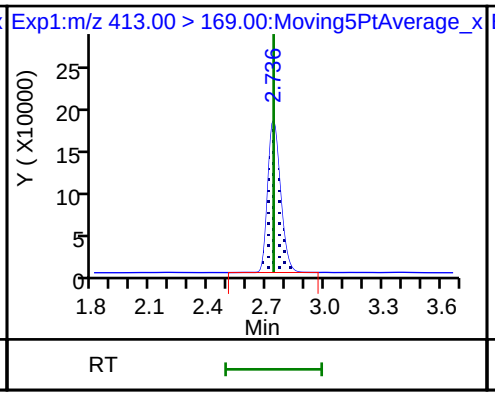
* 62 13C2-PFOA



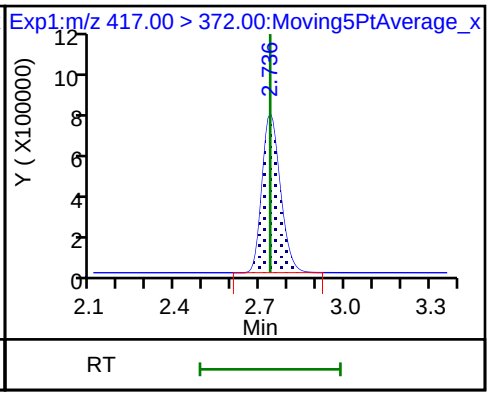
15 Perfluorooctanoic acid



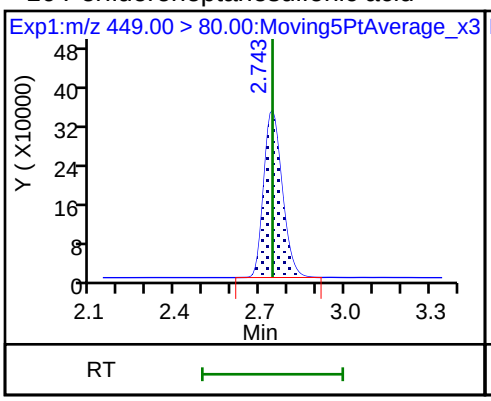
15 Perfluorooctanoic acid



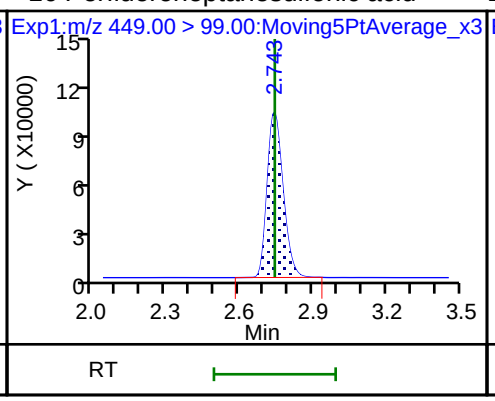
D 14 13C4 PFOA



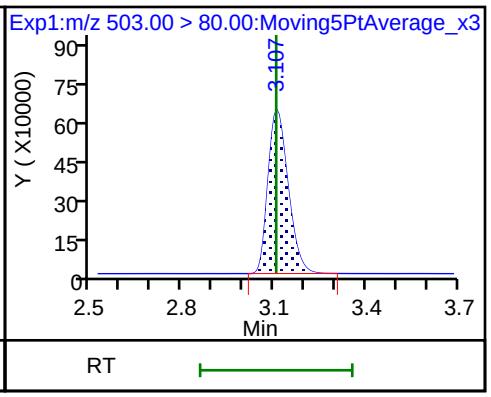
16 Perfluoroheptanesulfonic acid



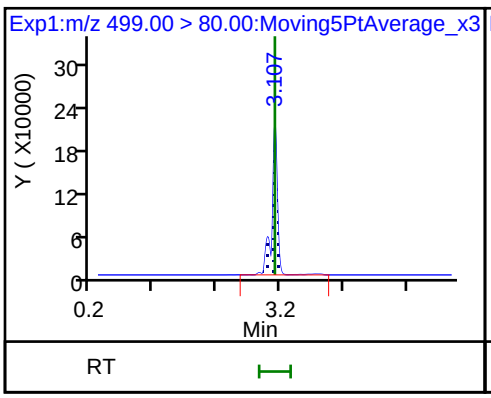
16 Perfluoroheptanesulfonic acid



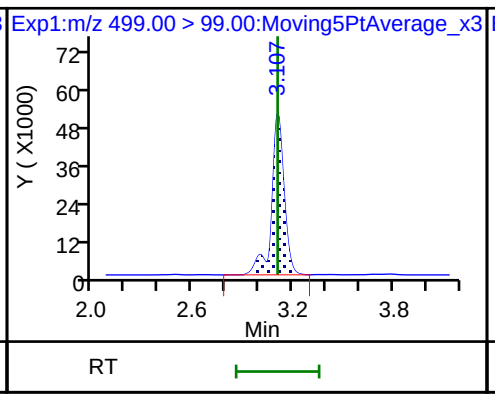
D 18 13C4 PFOS



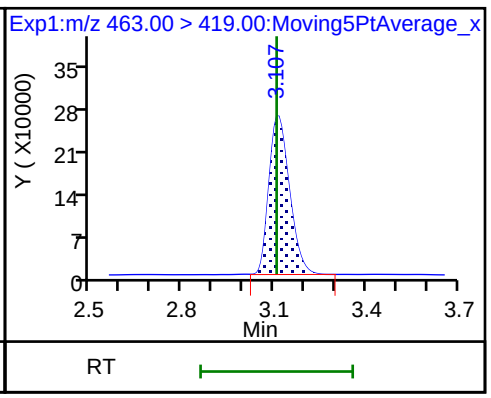
17 Perfluorooctane sulfonic acid



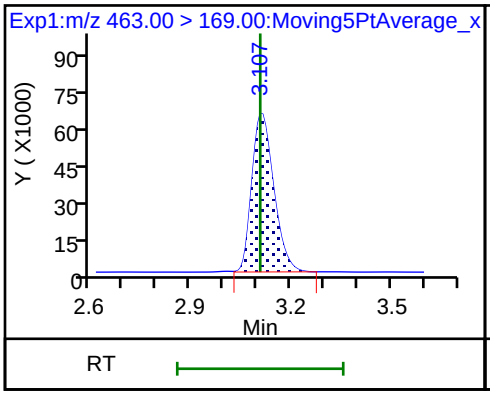
17 Perfluorooctane sulfonic acid



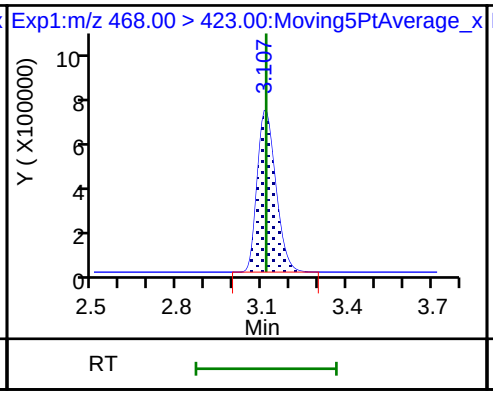
20 Perfluorononanoic acid



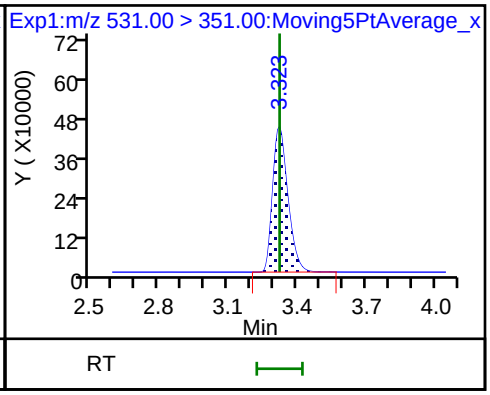
20 Perfluorononanoic acid



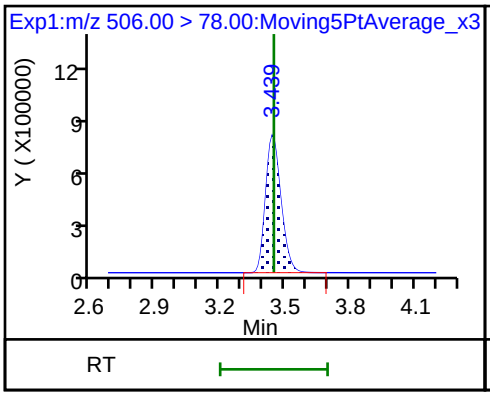
D 19 13C5 PFNA



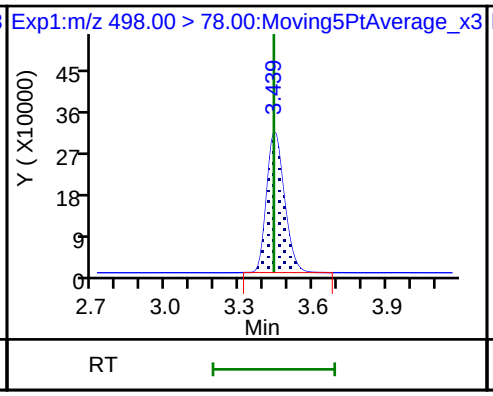
69 9-Chlorohexadecafluoro-3-oxanonane



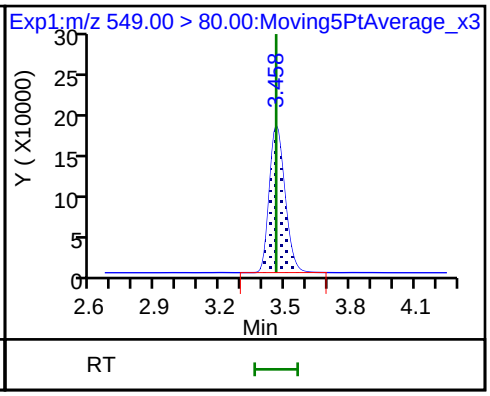
D 21 13C8 FOSA



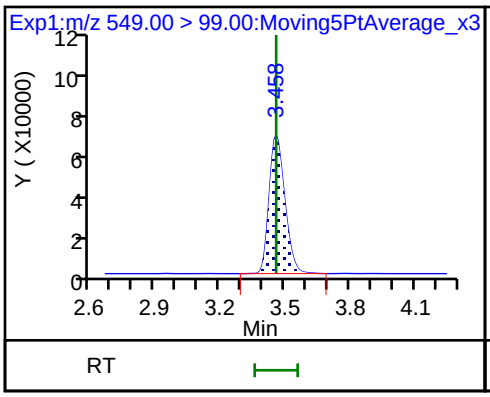
22 Perfluorooctane Sulfonamide



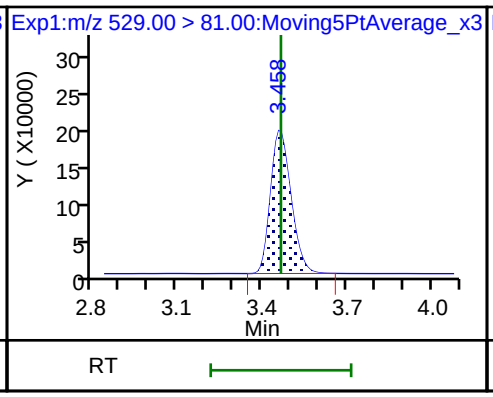
68 Perfluorononanesulfonic acid



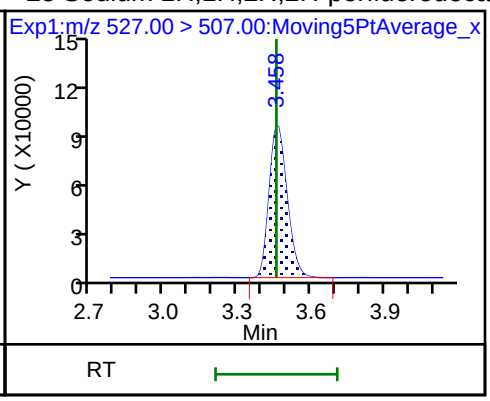
68 Perfluorononanesulfonic acid



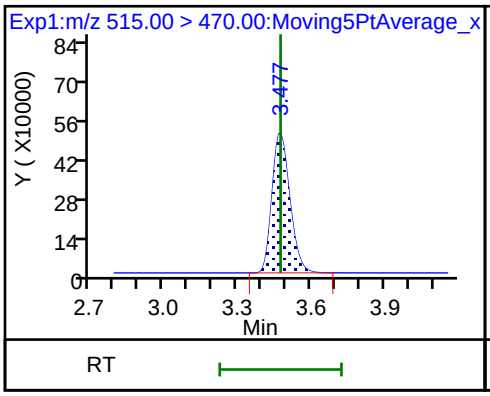
D 26 M2-8:2FTS



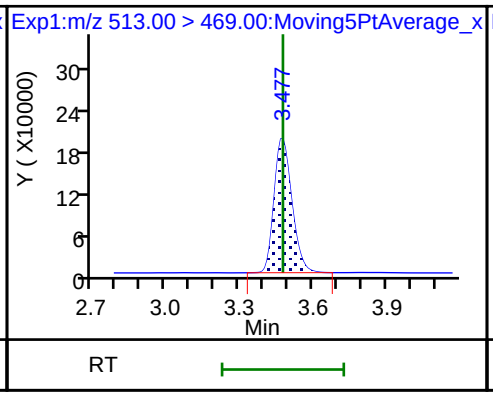
25 Sodium 1H,1H,2H,2H-perfluorodecane



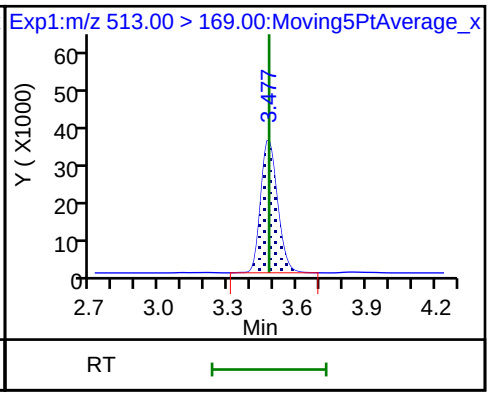
D 23 13C2 PFDA



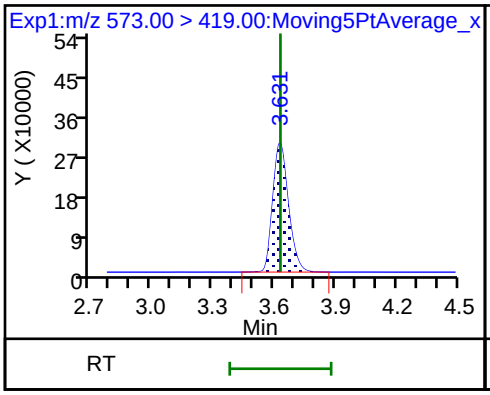
24 Perfluorodecanoic acid



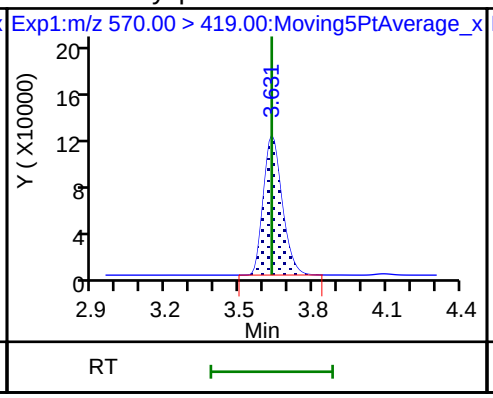
24 Perfluorodecanoic acid



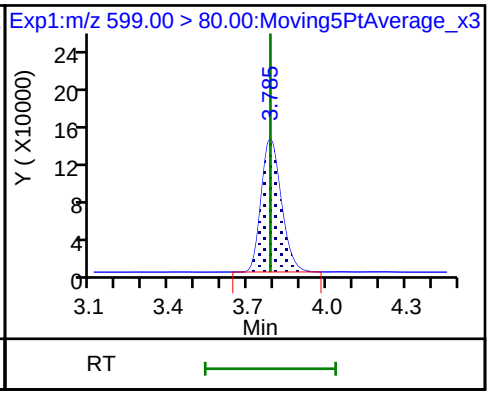
D 27 d3-NMeFOSAA



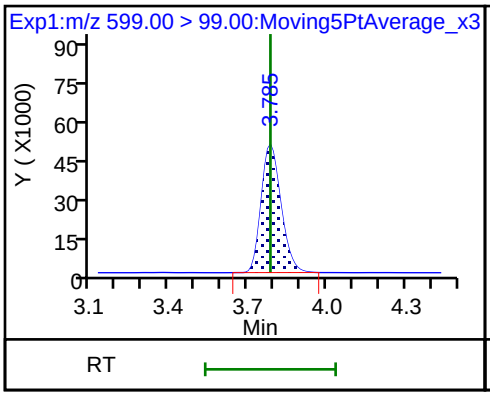
28 N-methyl perfluorooctane sulfonami



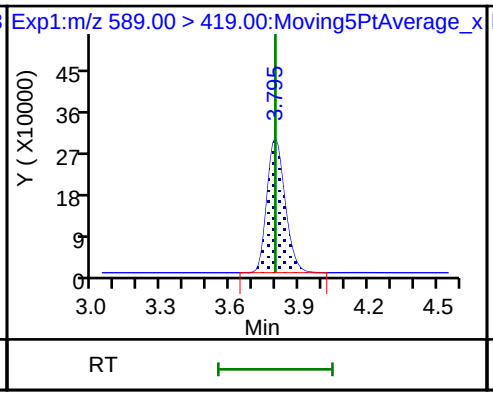
29 Perfluorodecane Sulfonic acid



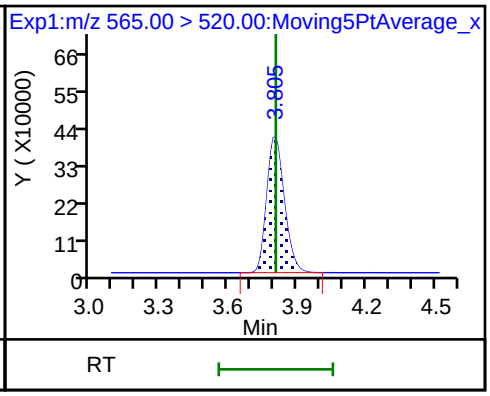
29 Perfluorodecane Sulfonic acid



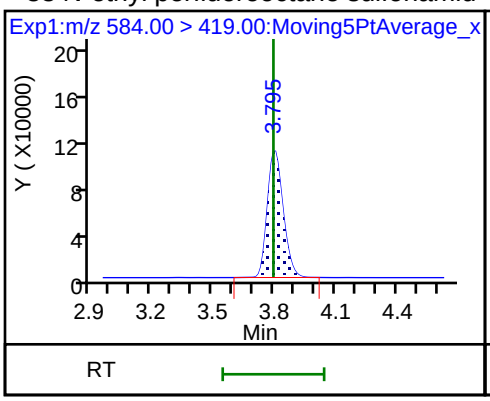
D 32 d5-NEtFOSAA



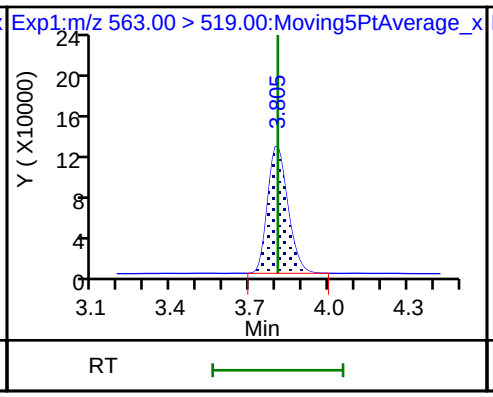
D 30 13C2 PFUnA



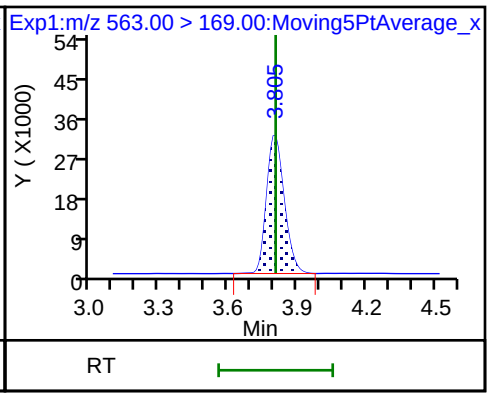
33 N-ethyl perfluorooctane sulfonamid



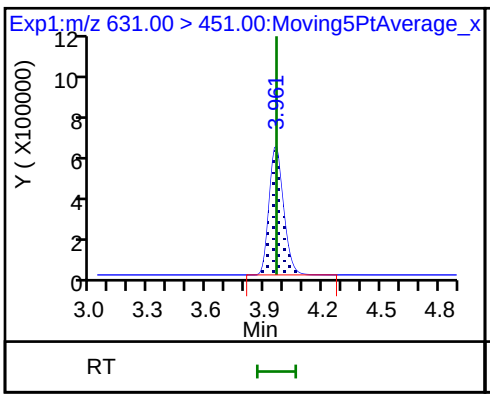
31 Perfluoroundecanoic acid



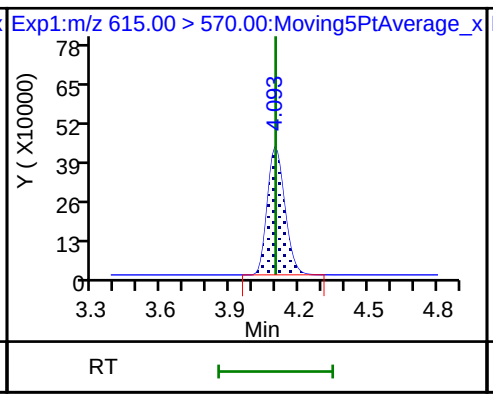
31 Perfluoroundecanoic acid



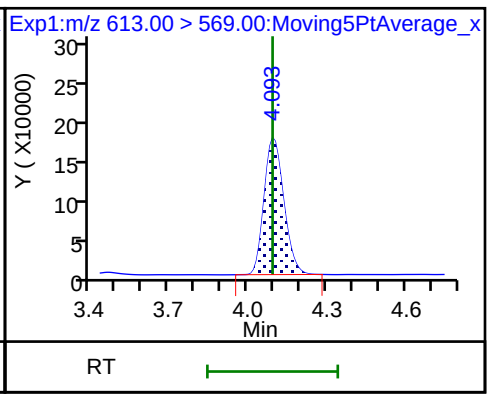
66 11-Chloroeicosafluoro-3-oxaundecan



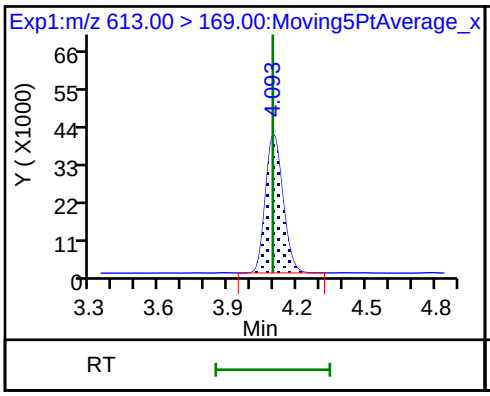
D 36 13C2 PFDoA



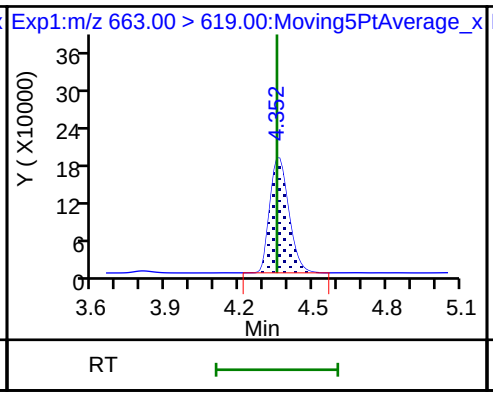
37 Perfluorododecanoic acid



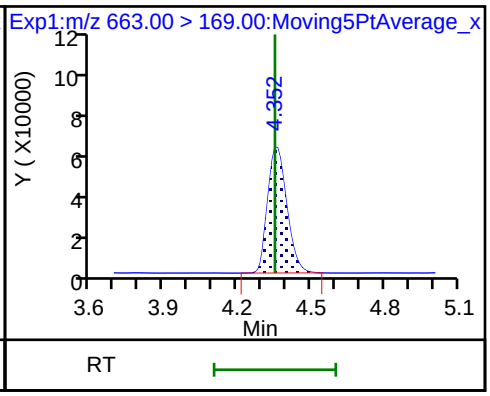
37 Perfluorododecanoic acid



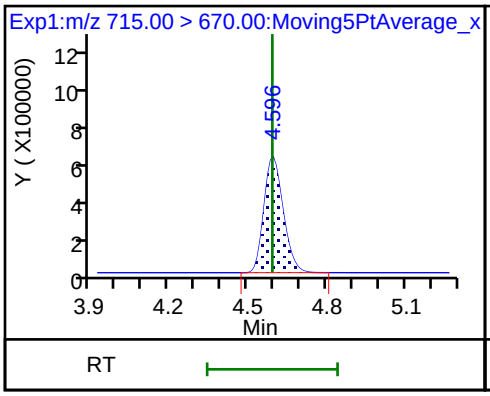
41 Perfluorotridecanoic acid



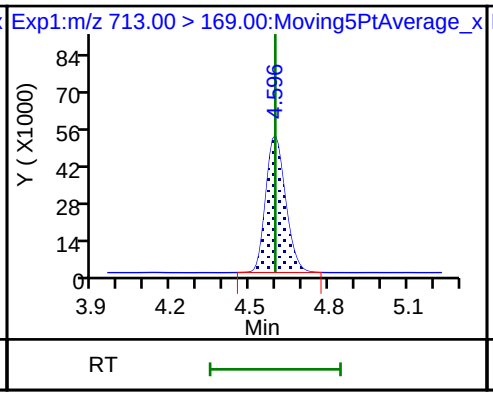
41 Perfluorotridecanoic acid



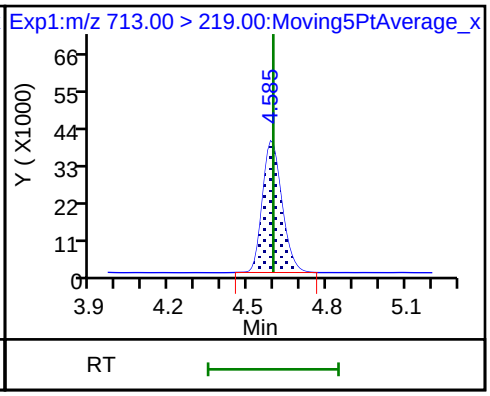
D 43 13C2-PFTeDA



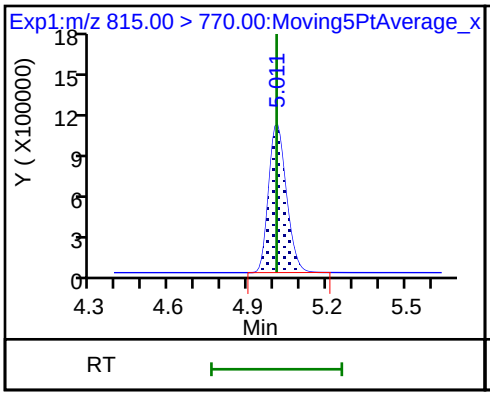
42 Perfluorotetradecanoic acid



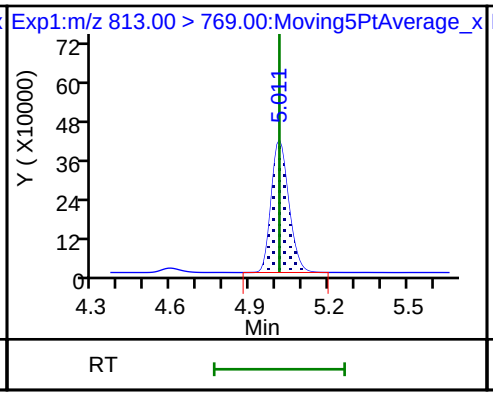
42 Perfluorotetradecanoic acid



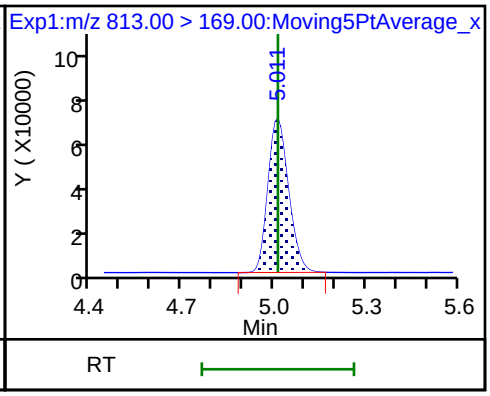
D 44 13C2-PFHxDA



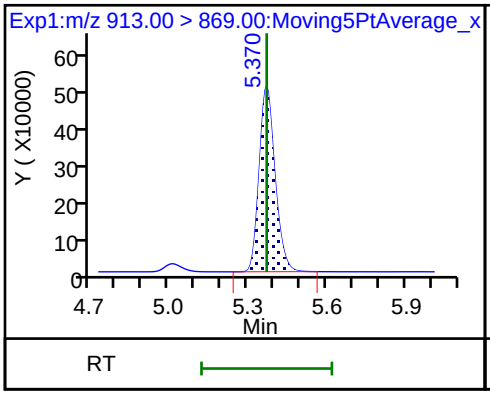
45 Perfluorohexadecanoic acid



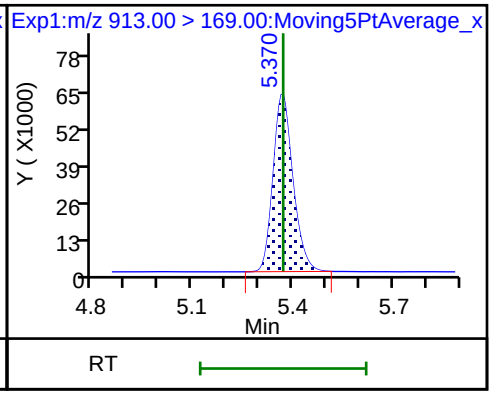
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCVL 320-222655/2 Calibration Date: 05/10/2018 19:35

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.10LLB_041.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	1.034		0.0557	0.0500	11.4	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.240		0.0520	0.0500	4.0	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	79.93		0.0451	0.0442	2.1	50.0
4:2 FTS	AveID	16.03	15.51			0.0467	-3.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.016	1.037		0.0510	0.0500	2.1	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	72.31		0.0474	0.0469	1.1	50.0
HFPO-DA (GenX)	AveID	2.785	2.662		0.0478	0.0500	-4.4	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	1.220		0.0609	0.0500	21.8	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.147		0.0461	0.0455	1.3	50.0
Adona	AveID	3.464	3.748		0.0541	0.0500	8.2	50.0
6:2FTS	AveID	1.691	1.717			0.0474	1.6	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.209		0.0433	0.0476	-9.0	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.221		0.0528	0.0500	5.7	50.0
Perfluorononanoic acid (PFNA)	AveID	1.043	1.044		0.0501	0.0500	0.2	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.134		0.0484	0.0464	4.2	50.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.664		0.0411	0.0466	-11.7	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	0.8730		0.0432	0.0500	-13.7	50.0
8:2FTS	AveID	1.265	1.184			0.0479	-6.5	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.7869		0.0472	0.0480	-1.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	1.117		0.0541	0.0500	8.2	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	1.249			0.0500	25.3	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6861		0.0509	0.0482	5.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	1.074		0.0574	0.0500	14.9	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.8605		0.0509	0.0500	1.8	50.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.582		0.0418	0.0471	-11.4	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	1.216		0.0583	0.0500	16.6	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.142		0.0470	0.0500	-6.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2557		0.0509	0.0500	1.8	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.373		0.0502	0.0500	0.4	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCVL 320-222655/2 Calibration Date: 05/10/2018 19:35

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.10LLB_041.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	0.9878		0.0492	0.0500	-1.6	50.0
13C4 PFBA	Ave	1.345	1.406		2.61	2.50	4.5	50.0
13C5 PFPeA	Ave	0.8672	0.9250		2.67	2.50	6.7	50.0
13C3-PFBS	Ave	0.0199	0.0203		2.37	2.33	1.9	50.0
M2-4:2FTS	Ave	0.1425	0.1554		2.55	2.34	9.1	50.0
13C2 PFHxA	Ave	0.9590	1.038		2.71	2.50	8.2	50.0
13C3 HFPO-DA	Ave	0.0593	0.0568		2.39	2.50	-4.2	50.0
13C4-PFHpA	Ave	0.9333	0.9801		2.63	2.50	5.0	50.0
18O2 PFHxS	Ave	1.152	1.257		2.58	2.37	9.1	50.0
M2-6:2FTS	Ave	0.2000	0.2256		2.68	2.38	12.8	50.0
13C4 PFOA	Ave	0.9276	0.9567		2.58	2.50	3.1	50.0
13C4 PFOS	Ave	0.8066	0.8060		2.39	2.39	-0.0	50.0
13C5 PFNA	Ave	0.7973	0.8032		2.52	2.50	0.7	50.0
13C8 FOSA	Ave	1.007	1.024		2.54	2.50	1.7	50.0
M2-8:2FTS	Ave	0.2409	0.2545		2.53	2.40	5.7	50.0
13C2 PFDA	Ave	0.6701	0.6733		2.51	2.50	0.5	50.0
d3-NMeFOSAA	Ave	0.3798	0.3778		2.49	2.50	-0.5	50.0
d5-NEtFOSAA	Ave	0.3749	0.4088		2.73	2.50	9.0	50.0
13C2 PFUnA	Ave	0.5781	0.5724		2.48	2.50	-1.0	50.0
13C2 PFDoA	Ave	0.6242	0.5693		2.28	2.50	-8.8	50.0
13C2-PFTeDA	Ave	0.7915	0.7474		2.36	2.50	-5.6	50.0
13C2-PFHxDA	Ave	1.288	1.334		2.59	2.50	3.6	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_041.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 10-May-2018 19:35:53 ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-May-2018 15:22:20 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK042

First Level Reviewer: hannigana Date: 11-May-2018 15:21:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.479	1.469	0.010	1.000	5068293	2.61		104	38820	
2 Perfluorobutyric acid										
212.90 > 169.00	1.479	1.474	0.005	1.000	104809	0.0557		111	70.9	
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.747	0.008	0.562	3335109	2.67		107	65358	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.755	1.755	0.0	1.000	82707	0.0520		104	68.3	
D 47 13C3-PFBS										
301.90 > 83.00	1.791	1.783	0.008	1.000	67969	2.37		102	666	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.791	1.792	-0.001	1.000	103275	0.0451		102	166	
298.90 > 99.00	1.791	1.792	-0.001	1.000	43206		2.39(1.25-3.74)		183	
D 60 M2-4:2FTS										
329.00 > 81.00	2.014	2.003	0.011	1.000	523418	2.55		109	7526	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.014	2.014	0.0	1.000	21177	0.0452		96.8	1322	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.048	2.048	0.0	1.000	77629	0.0510		102	145	
313.00 > 119.00	2.048	2.048	0.0	1.000	9591		8.09(5.03-15.10)		142	
D 7 13C2 PFHxA										
315.00 > 270.00	2.048	2.048	0.0	1.000	3741962	2.71		108	86004	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.070	2.070	0.0	1.000	99137	0.0474		101	904	
349.00 > 99.00	2.070	2.070	0.0	1.000	34554		2.87(1.36-4.07)		794	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.149	2.149	0.0	1.000	10911	0.0478		95.6	70.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.149	2.150	-0.001	1.000	204918	2.39		95.8	4239	
D 9 13C4-PFHpA										
367.00 > 322.00	2.395	2.384	0.011	1.000	3533676	2.63		105	46854	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.395	2.395	0.0	1.000	86188	0.0609		122	119	
363.00 > 169.00	2.395	2.395	0.0	1.000	30931		2.79(1.13-3.40)		217	
D 11 18O2 PFHxS										
403.00 > 84.00	2.406	2.395	0.011	1.000	4287880	2.58		109	54593	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.395	2.406	-0.011	0.995	94620	0.0461		101	342	
399.00 > 99.00	2.406	2.406	0.0	1.000	32437		2.92(1.50-4.49)		315	
65 Adona										
377.00 > 251.00	2.429	2.429	0.0	1.000	217834	0.0541		108	3713	
377.00 > 85.00	2.429	2.429	0.0	1.000	121018		1.80(0.84-2.53)		2521	
D 12 M2-6:2FTS										
429.00 > 81.00	2.719	2.712	0.007	1.000	772741	2.68		113	17496	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.727	2.719	0.008	1.003	26485	0.0482		102	885	
D 14 13C4 PFOA										
417.00 > 372.00	2.750	2.742	0.008	1.000	3449654	2.58		103	59566	
* 62 13C2-PFOA										
415.00 > 370.00	2.750	2.750	0.0		3605624	2.50			40602	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.750	2.750	0.0	1.000	84257	0.0528		106	42.6	
413.00 > 169.00	2.750	2.750	0.0	1.000	50027		1.68(0.84-2.52)		189	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.750	2.750	0.0	1.000	66877	0.0433		91.0	489	
449.00 > 99.00	2.750	2.750	0.0	1.000	19122		3.50(1.94-5.82)		489	
D 18 13C4 PFOS										
503.00 > 80.00	3.115	3.106	0.009	1.000	2778306	2.39		99.9	21099	
D 19 13C5 PFNA										
468.00 > 423.00	3.123	3.114	0.009	1.000	2896053	2.52		101	90432	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.123	3.123	0.001	1.003	61150	0.0484		104	231	
499.00 > 99.00	3.123	3.123	0.001	1.003	14182		4.31(2.31-6.93)		146	
20 Perfluorononanoic acid										
463.00 > 419.00	3.123	3.123	0.001	1.000	60490	0.0501		100	142	
463.00 > 169.00	3.123	3.123	0.001	1.000	16691		3.62(1.90-5.69)		336	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.331	3.331	0.0	1.000	90140	0.0411		88.3	2160	
D 21 13C8 FOSA										
506.00 > 78.00	3.450	3.431	0.019	1.000	3693068	2.54		102	53236	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.450	3.450	0.0	1.000	64483	0.0432		86.3	2090	
D 26 M2-8:2FTS										
529.00 > 81.00	3.469	3.459	0.010	1.000	879169	2.53		106	9575	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.488	3.468	0.020	1.000	2427551	2.51		100	68589	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.469	3.468	0.001	1.000	20814	0.0448		93.5	684	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.469	3.468	0.001	1.000	43905	0.0472		98.4	578	
549.00 > 99.00	3.469	3.468	0.001	1.000	14997		2.93(1.33-3.97)		562	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.478	3.488	-0.010	0.997	54208	0.0541		108	268	
513.00 > 169.00	3.478	3.488	-0.010	0.997	8190		6.62(2.36-7.09)		202	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.634	3.624	0.010	1.000	1362301	2.49		99.5	16952	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.644	3.643	0.001	1.003	34034	0.0626		125	389	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.799	3.790	0.009	1.000	1473823	2.73		109	17009	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.799	3.799	0.0	1.000	38441	0.0509		106	607	
599.00 > 99.00	3.799	3.799	0.0	1.000	12971		2.96(1.39-4.16)		303	
D 30 13C2 PFUnA										
565.00 > 520.00	3.810	3.800	0.010	1.000	2063697	2.48		99.0	55109	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.810	3.809	0.001	1.000	35515	0.0509		102	191	
563.00 > 169.00	3.810	3.809	0.001	1.000	8066		4.40(2.12-6.36)		206	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.810	3.809	0.001	1.003	31645	0.0574		115	809	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.965	3.964	0.001	1.000	141361	0.0418		88.6	2514	
D 36 13C2 PFDoA										
615.00 > 570.00	4.109	4.091	0.018	1.000	2052761	2.28		91.2	17933	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.109	4.108	0.001	1.000	49941	0.0583		117	69.1	
613.00 > 169.00	4.109	4.108	0.001	1.000	11532		4.33(2.13-6.40)		143	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.371	4.370	0.001	1.000	46903	0.0470		94.0	48.3	
663.00 > 169.00	4.371	4.370	0.001	1.000	14656		3.20(1.25-3.76)		186	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.601	4.595	0.006	1.000	2694792	2.36		94.4	17344	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.601	4.603	-0.002	1.000	13780	0.0509		102	150	
713.00 > 219.00	4.601	4.603	-0.002	1.000	10202		1.35(0.71-2.13)		291	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.025	5.010	0.015	1.000	4811284	2.59		104	13033	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.025	5.017	0.008	1.000	132126	0.0502		100	56.1	
813.00 > 169.00	5.025	5.017	0.008	1.000	20876		6.33(2.86-8.58)		190	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.385	5.380	0.005	1.000	95049	0.0492		98.4	34.8	
913.00 > 169.00	5.385	5.380	0.005	1.000	11722		8.11(3.83-11.48)		144	

Reagents:

LCPFC_LL2_00004 Amount Added: 1.00 Units: mL

Report Date: 11-May-2018 15:22:21 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_041.d

Injection Date: 10-May-2018 19:35:53 Instrument ID: A8_N

Lims ID: CCVL

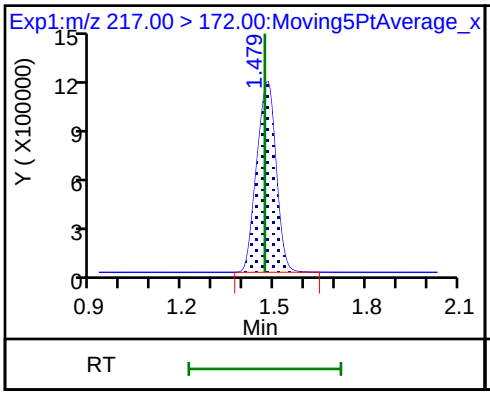
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 21 Worklist Smp#: 2

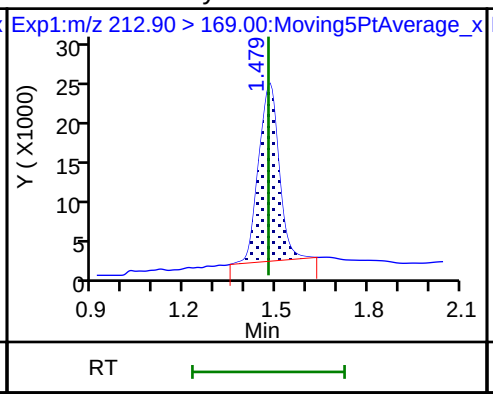
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

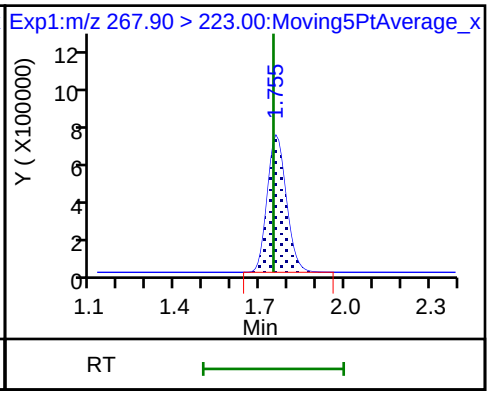
D 1 13C4 PFBA



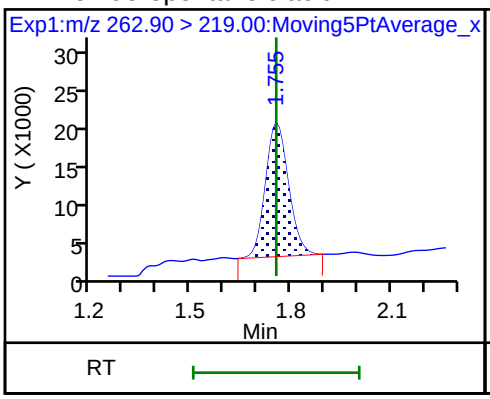
2 Perfluorobutyric acid



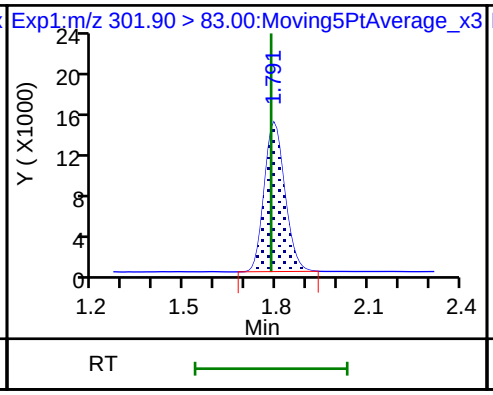
D 3 13C5-PFPeA



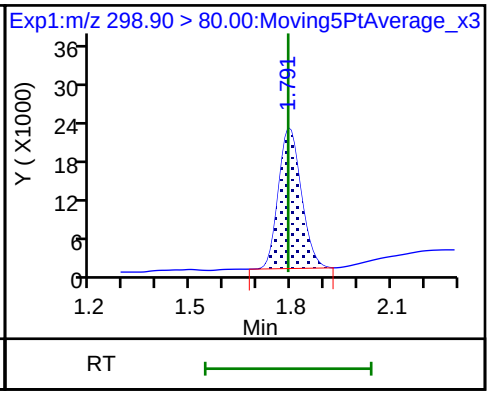
4 Perfluoropentanoic acid



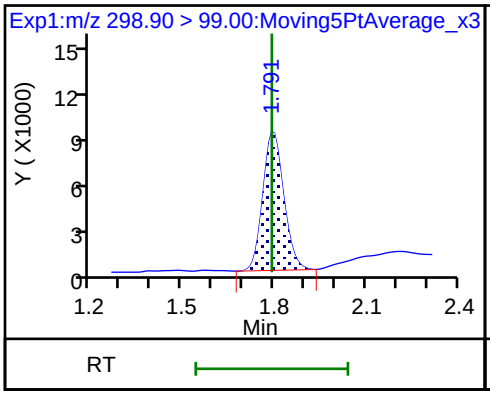
D 47 13C3-PFBS



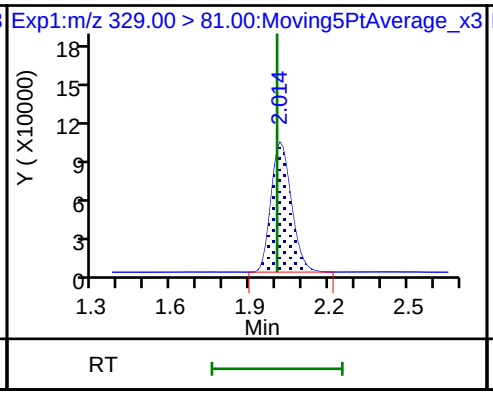
5 Perfluorobutanesulfonic acid



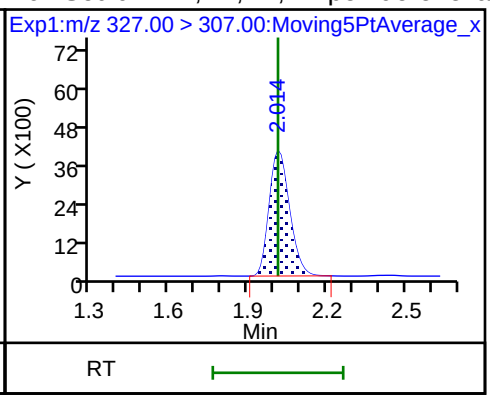
5 Perfluorobutanesulfonic acid



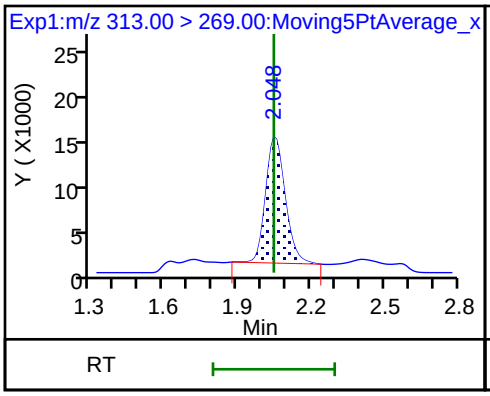
D 60 M2-4:2FTS



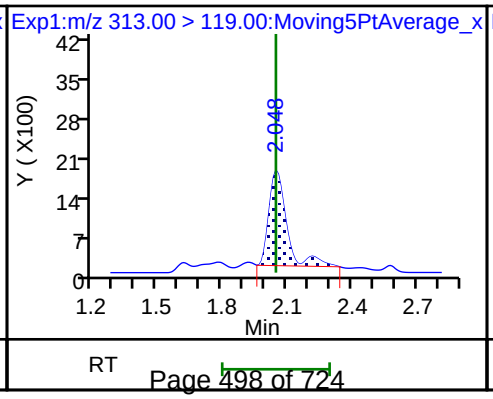
61 Sodium 1H,1H,2H,2H-perfluorohexane



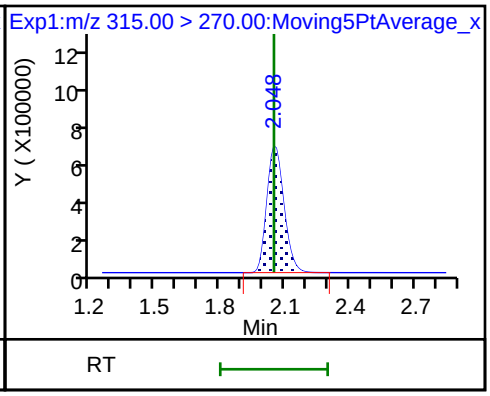
6 Perfluorohexanoic acid



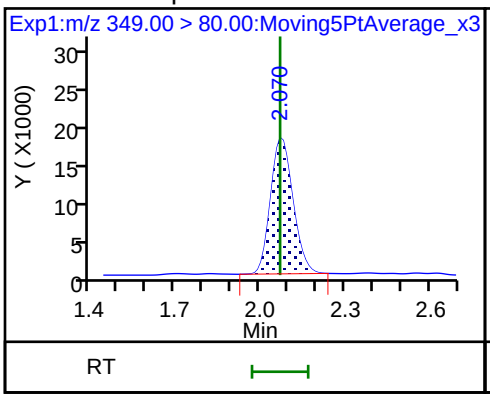
6 Perfluorohexanoic acid



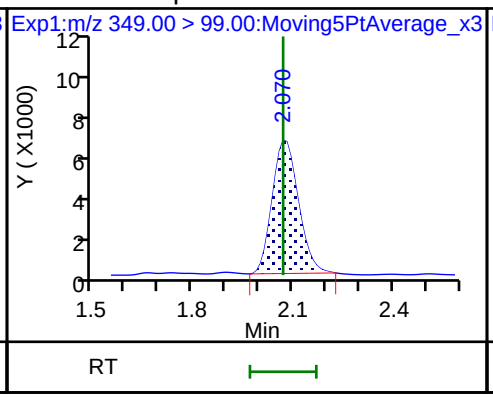
D 7 13C2 PFHxA



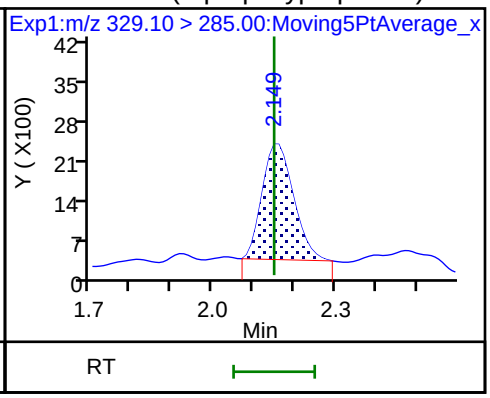
70 Perfluoropentanesulfonic acid



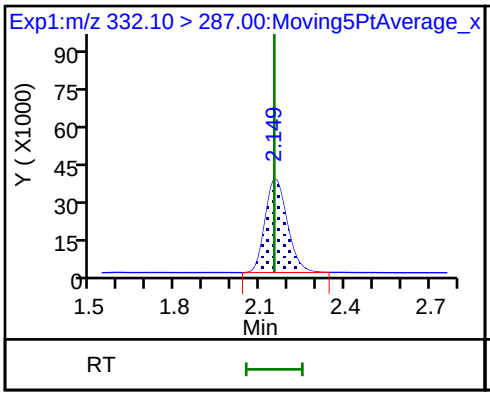
70 Perfluoropentanesulfonic acid



67 Perfluoro(2-propoxypropanoic) acid



D 64 13C3 HFPO-DA



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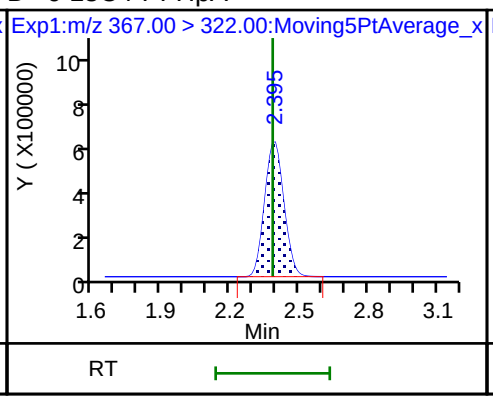
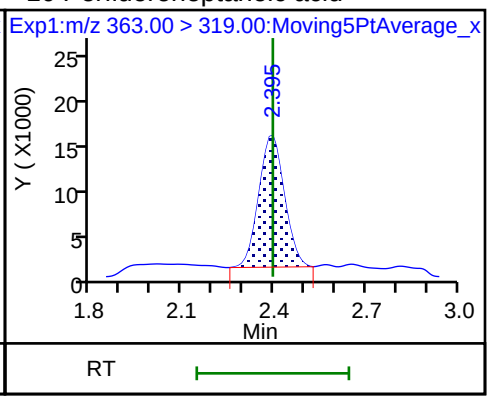
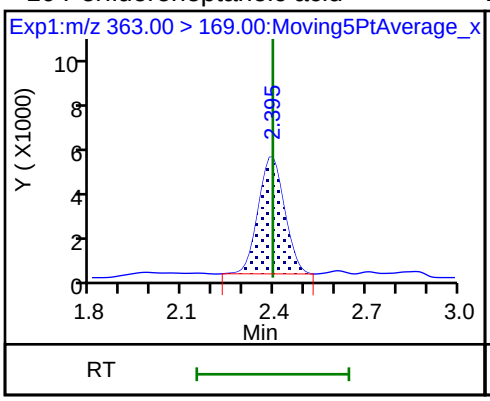


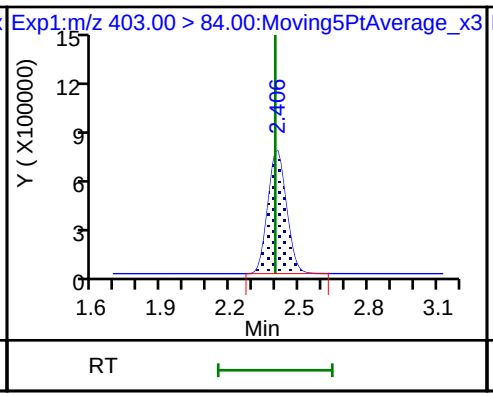
10 Perfluoroheptanoic acid



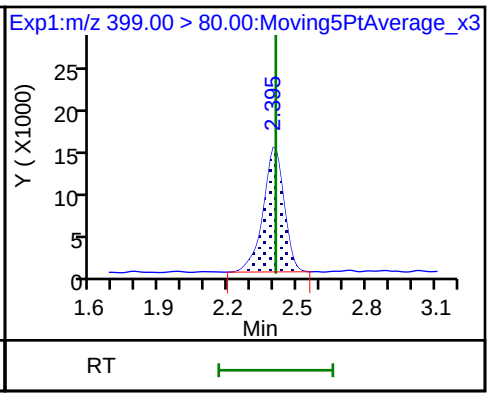
10 Perfluoroheptanoic acid



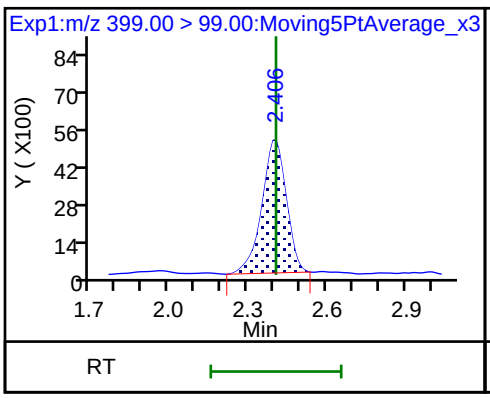
D 11 18O2 PFHxS



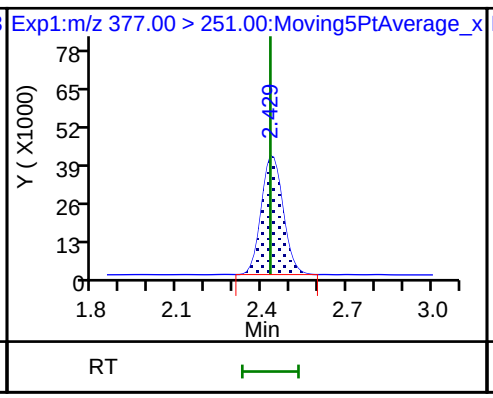
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 Adona



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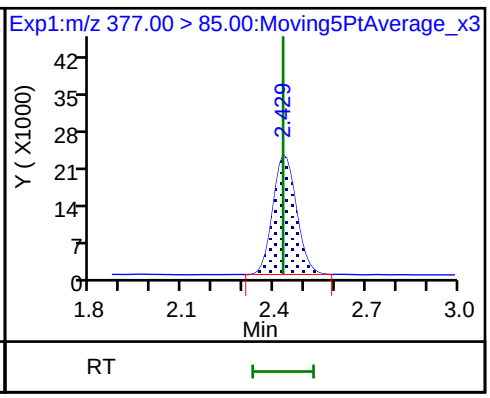
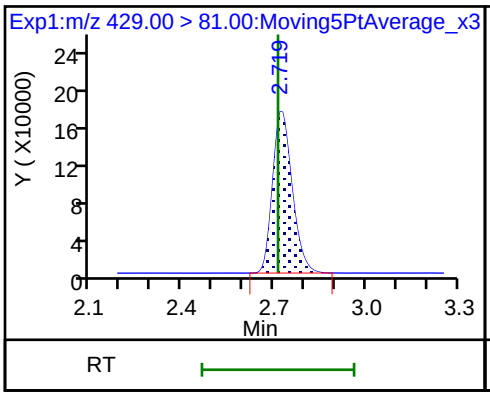
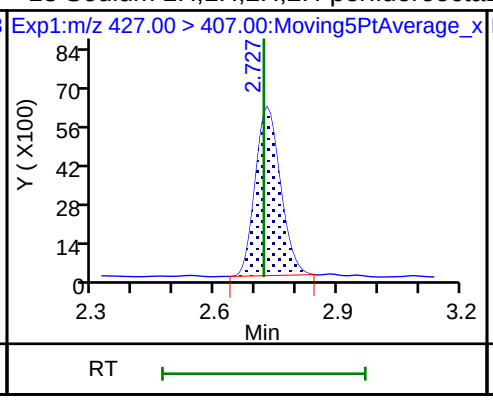


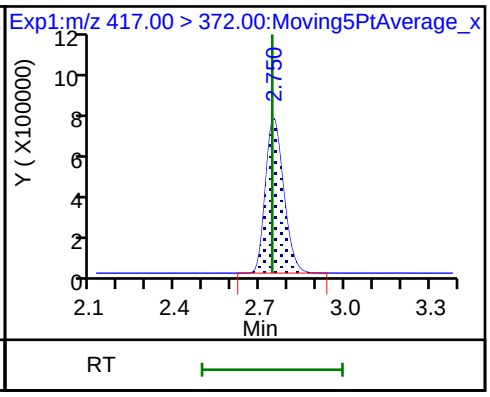
D 12 M2-6:2FTS



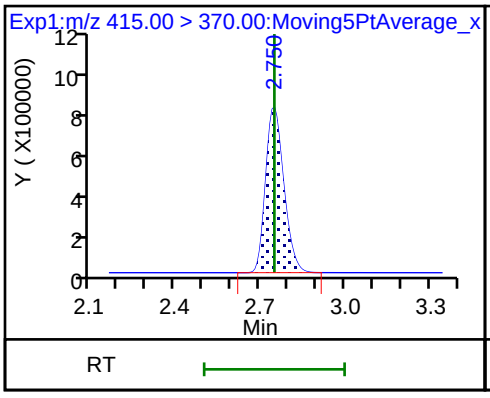
13 Sodium 1H,1H,2H,2H-perfluorooctane



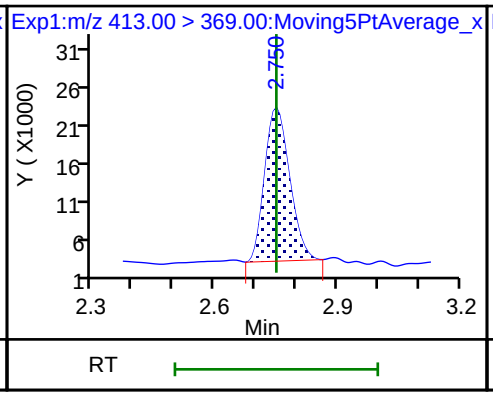
D 14 13C4 PFOA



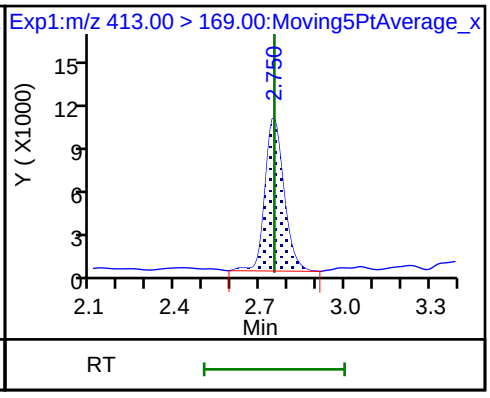
* 62 13C2-PFOA



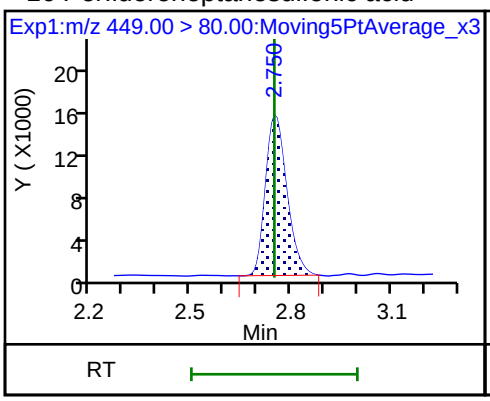
15 Perfluorooctanoic acid



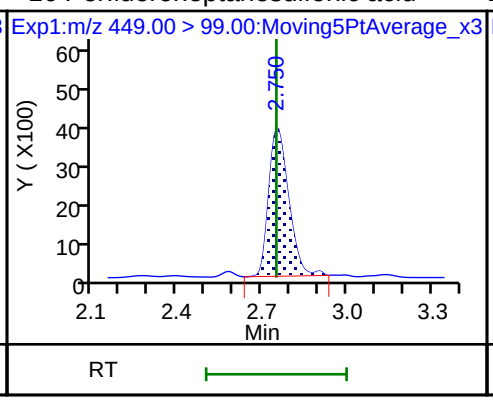
15 Perfluorooctanoic acid



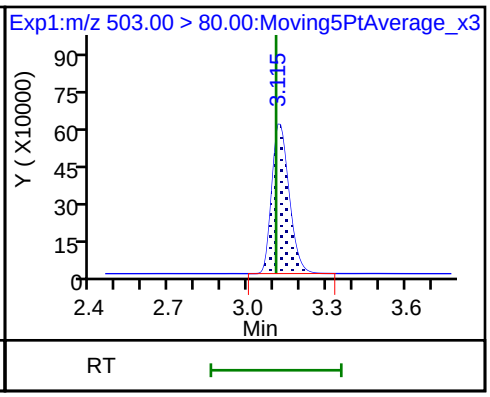
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 18 13C4 PFOS



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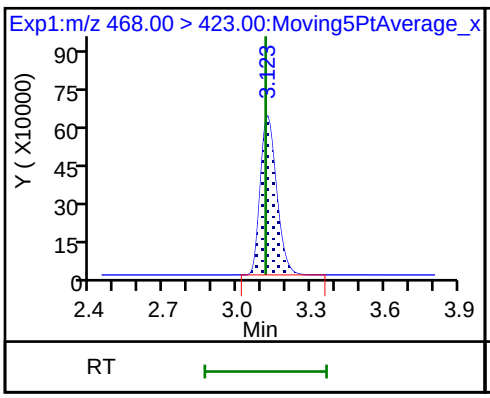
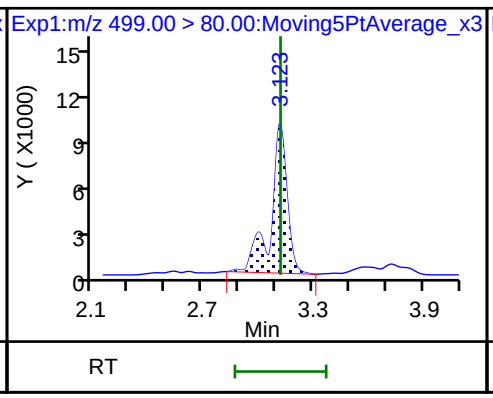
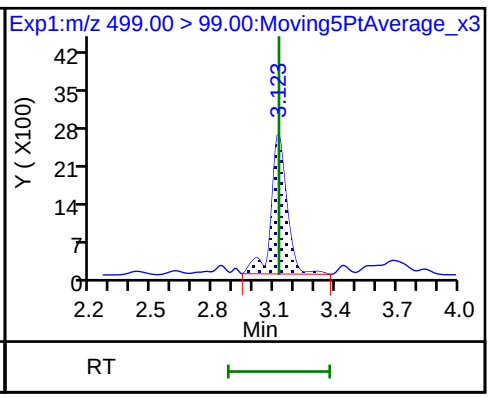


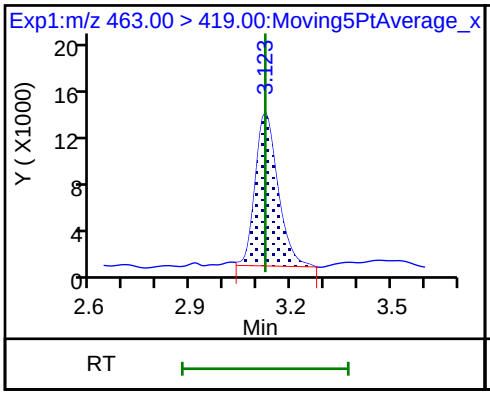
17 Perfluorooctane sulfonic acid



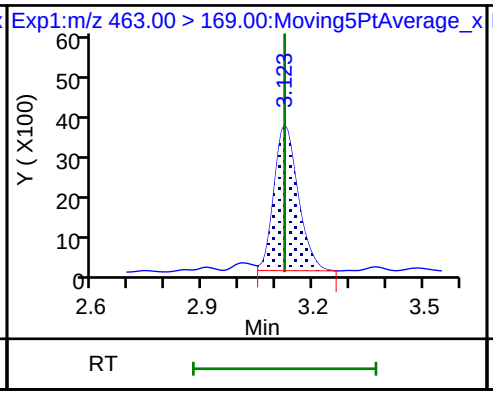
17 Perfluorooctane sulfonic acid



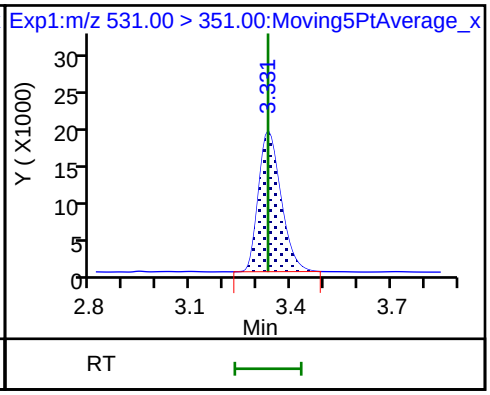
20 Perfluorononanoic acid



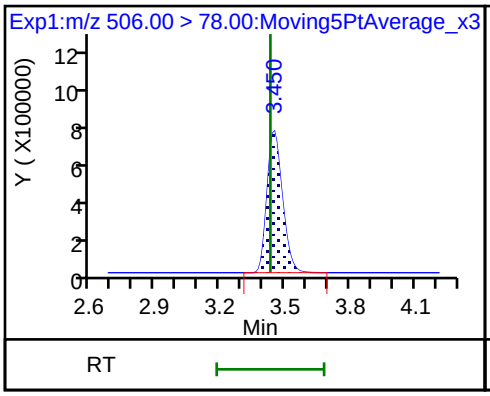
20 Perfluorononanoic acid



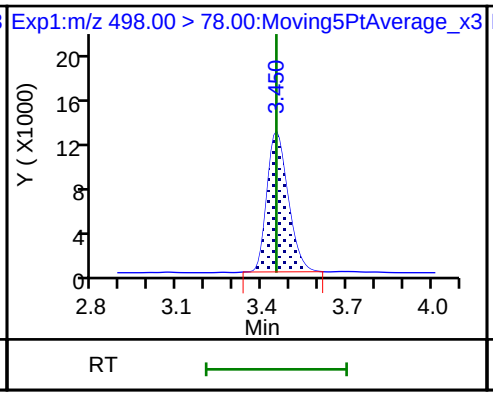
69 9-Chlorohexadecafluoro-3-oxanonane



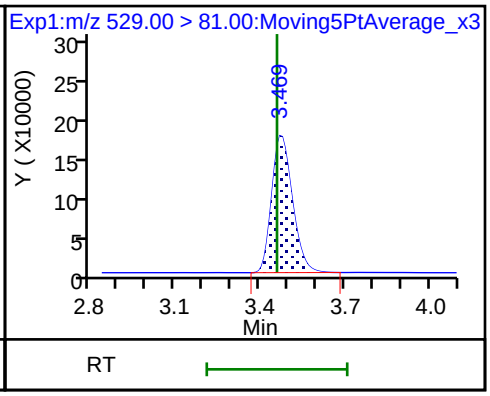
D 21 13C8 FOSA



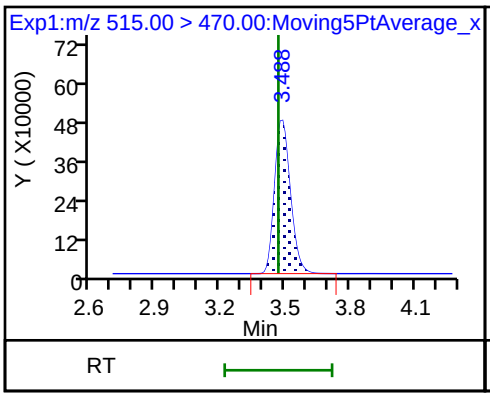
22 Perfluorooctane Sulfonamide



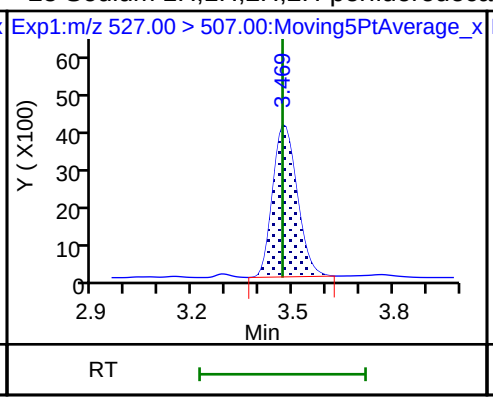
D 26 M2-8:2FTS



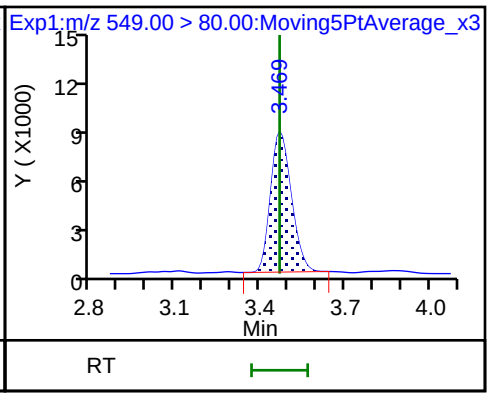
D 23 13C2 PFDA



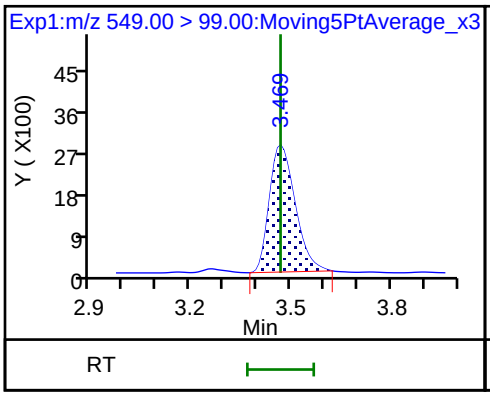
25 Sodium 1H,1H,2H,2H-perfluorodecane



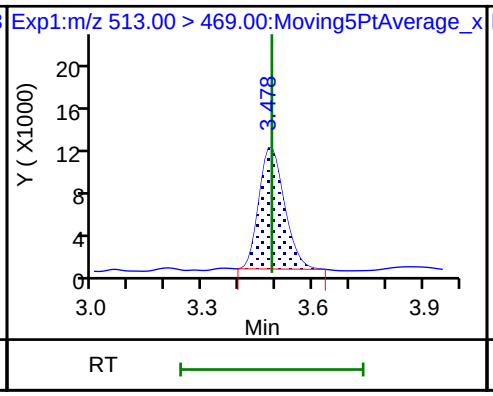
68 Perfluorononanesulfonic acid



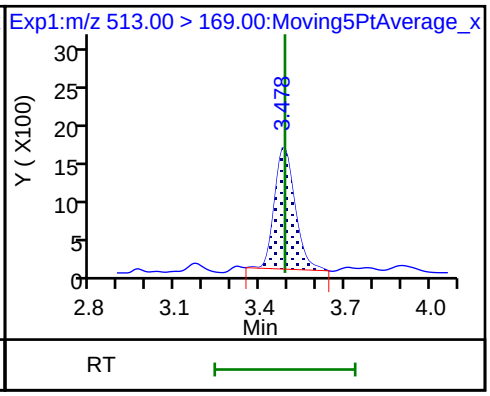
68 Perfluorononanesulfonic acid



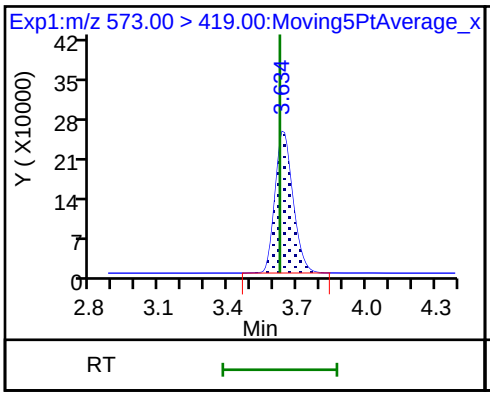
24 Perfluorodecanoic acid



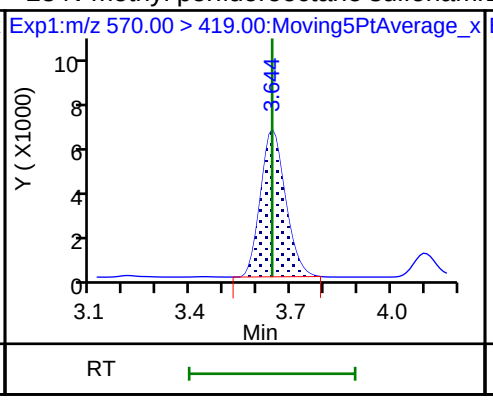
24 Perfluorodecanoic acid



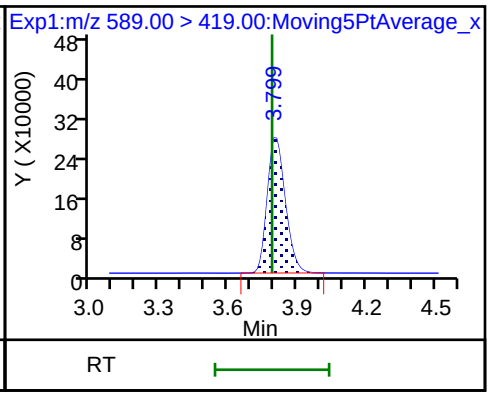
D 27 d3-NMeFOSAA



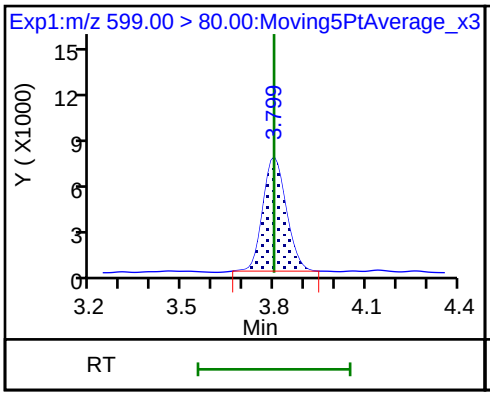
28 N-methyl perfluorooctane sulfonami



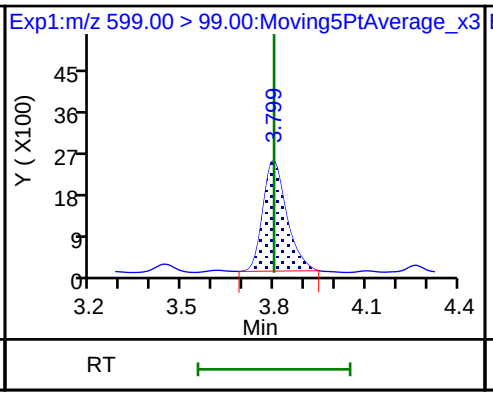
D 32 d5-NEtFOSAA



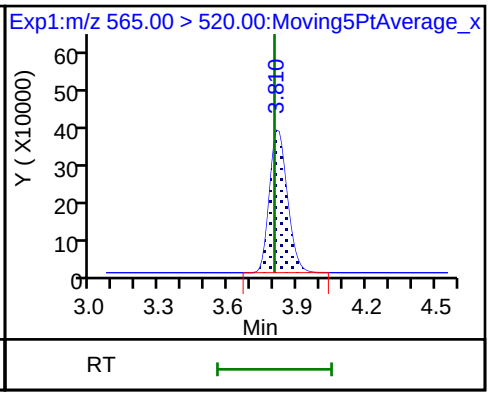
29 Perfluorodecane Sulfonic acid



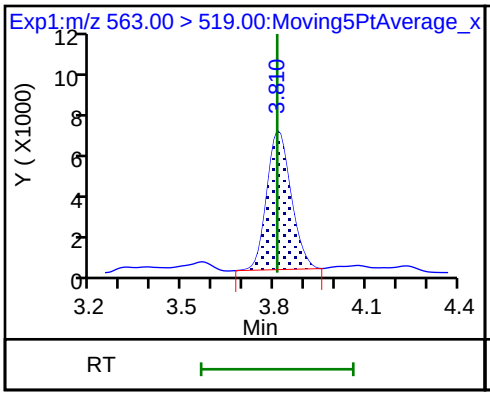
29 Perfluorodecane Sulfonic acid



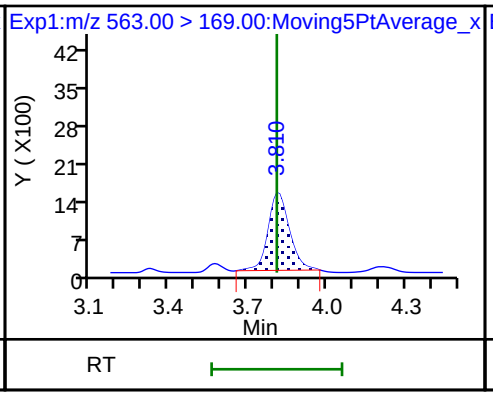
D 30 13C2 PFUnA



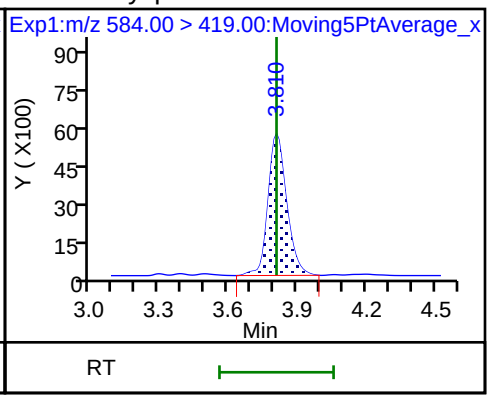
31 Perfluoroundecanoic acid



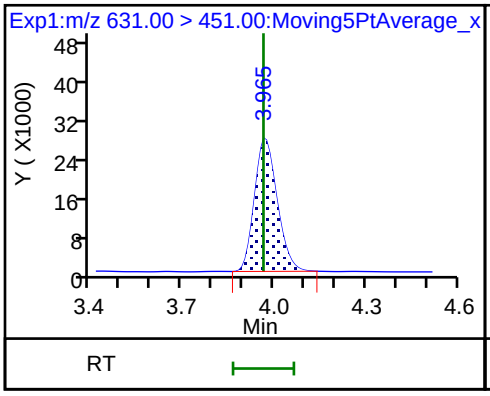
31 Perfluoroundecanoic acid



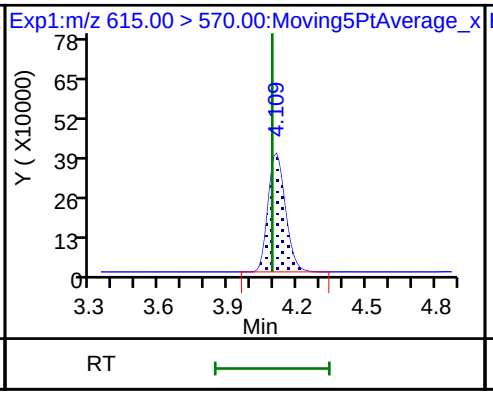
33 N-ethyl perfluorooctane sulfonamid



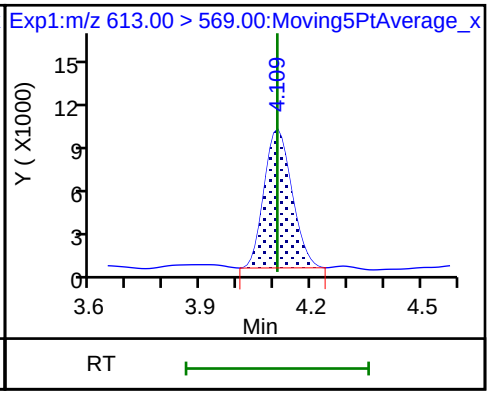
66 11-Chloroeicosafluoro-3-oxaundecan



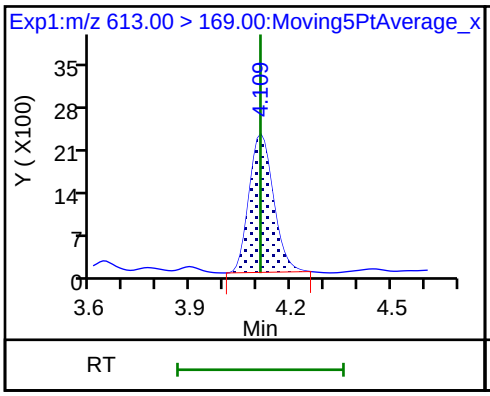
D 36 13C2 PFDoA



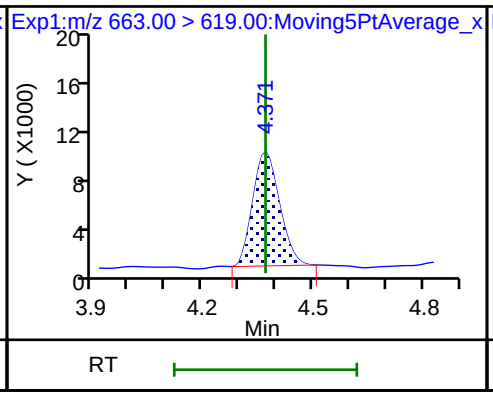
37 Perfluorododecanoic acid



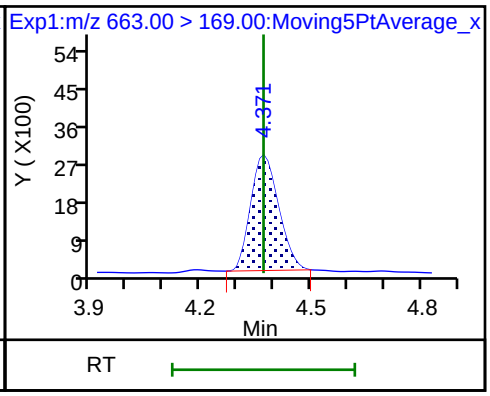
37 Perfluorododecanoic acid



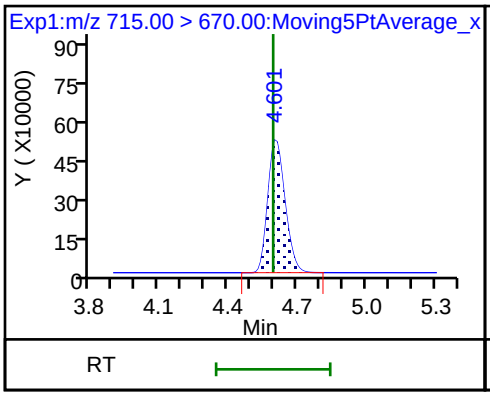
41 Perfluorotridecanoic acid



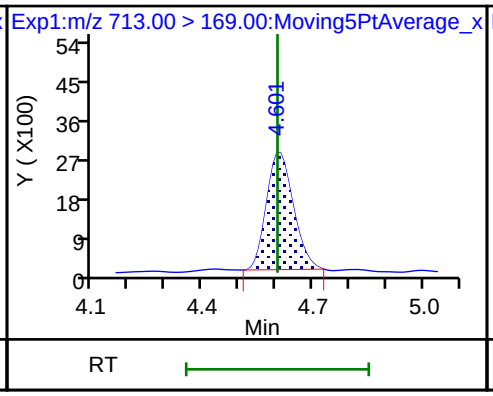
41 Perfluorotridecanoic acid



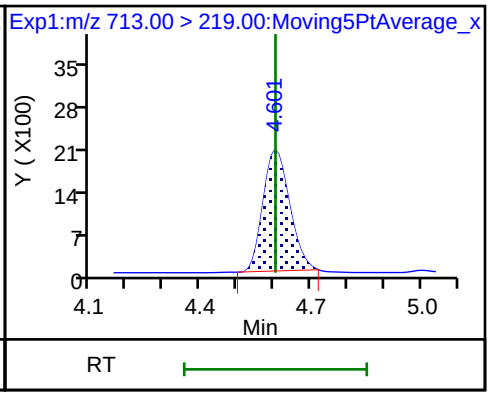
D 43 13C2-PFTeDA



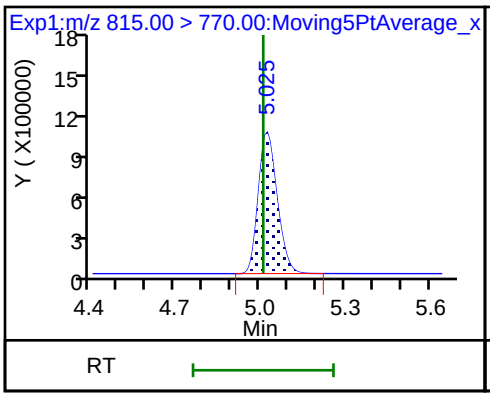
42 Perfluorotetradecanoic acid



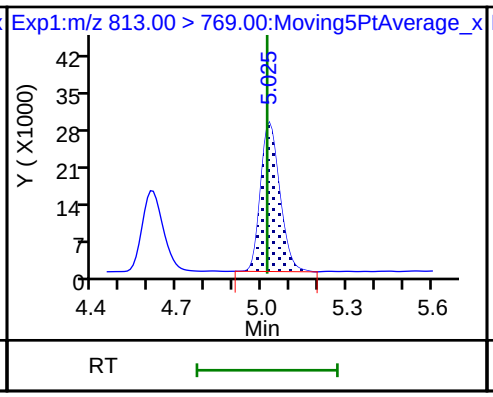
42 Perfluorotetradecanoic acid



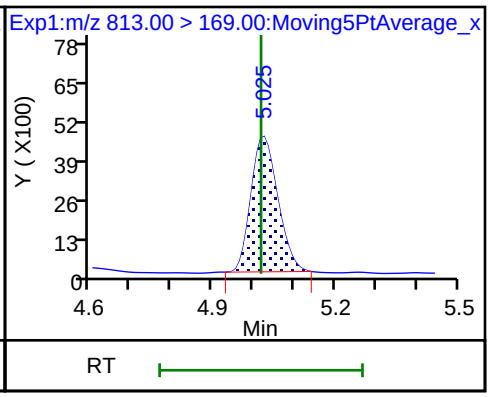
D 44 13C2-PFHxDA



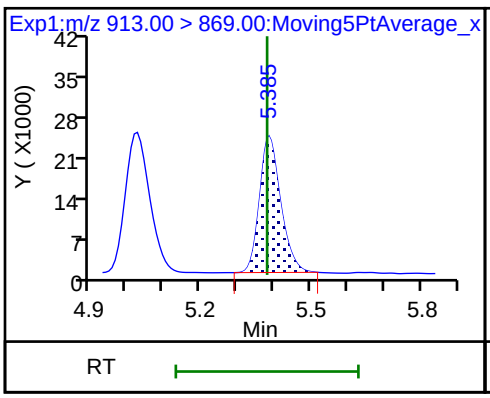
45 Perfluorohexadecanoic acid



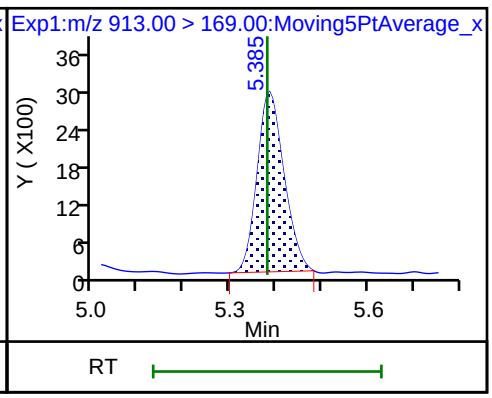
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222655/3 Calibration Date: 05/10/2018 19:43

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.10LLB_001.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	0.9148		0.985	1.00	-1.5	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.124		0.944	1.00	-5.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	76.25		0.861	0.884	-2.6	50.0
4:2 FTS	AveID	16.03	17.17		1.00	0.934	7.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.016	0.9588		0.944	1.00	-5.6	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	69.08		0.906	0.938	-3.4	50.0
HFPO-DA (GenX)	AveID	2.785	2.726		0.979	1.00	-2.1	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	1.053		1.05	1.00	5.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.057		0.850	0.910	-6.6	40.0
Adona	AveID	3.464	3.582		1.03	1.00	3.4	50.0
6:2FTS	AveID	1.691	1.693		0.949	0.948	0.1	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.299		0.931	0.952	-2.2	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.106		0.958	1.00	-4.2	40.0
Perfluorononanoic acid (PFNA)	AveID	1.043	1.021		0.979	1.00	-2.1	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.051		0.897	0.928	-3.4	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.772		0.876	0.932	-6.0	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	0.9820		0.971	1.00	-2.9	40.0
8:2FTS	AveID	1.265	1.226		0.928	0.958	-3.1	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.7390		0.887	0.960	-7.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	0.9458		0.917	1.00	-8.3	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	1.032		1.03	1.00	3.5	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6389		0.949	0.964	-1.6	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	0.9528		1.02	1.00	2.0	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.7554		0.894	1.00	-10.6	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.646		0.856	0.942	-9.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	1.043		1.00	1.00	0.0	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.093		0.899	1.00	-10.1	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2567		1.02	1.00	2.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9032		0.932	1.00	-6.8	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222655/3 Calibration Date: 05/10/2018 19:43

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.10LLB_001.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	1.013		1.01	1.00	0.9	50.0
13C4 PFBA	Ave	1.345	1.407		2.61	2.50	4.5	50.0
13C5 PFPeA	Ave	0.8672	0.9201		2.65	2.50	6.1	50.0
13C3-PFBS	Ave	0.0199	0.0204		2.38	2.33	2.4	50.0
M2-4:2FTS	Ave	0.1425	0.1621		2.66	2.34	13.8	50.0
13C2 PFHxA	Ave	0.9590	1.004		2.62	2.50	4.7	50.0
13C3 HFPO-DA	Ave	0.0593	0.0548		2.31	2.50	-7.6	50.0
13C4-PFHpA	Ave	0.9333	0.9746		2.61	2.50	4.4	50.0
18O2 PFHxS	Ave	1.152	1.177		2.42	2.37	2.1	50.0
M2-6:2FTS	Ave	0.2000	0.2102		2.50	2.38	5.1	40.0
13C4 PFOA	Ave	0.9276	0.9086		2.45	2.50	-2.1	50.0
13C4 PFOS	Ave	0.8066	0.8026		2.38	2.39	-0.5	50.0
13C5 PFNA	Ave	0.7973	0.7839		2.46	2.50	-1.7	50.0
13C8 FOSA	Ave	1.007	0.9889		2.45	2.50	-1.8	50.0
M2-8:2FTS	Ave	0.2409	0.2450		2.44	2.40	1.7	40.0
13C2 PFDA	Ave	0.6701	0.6489		2.42	2.50	-3.2	50.0
d3-NMeFOSAA	Ave	0.3798	0.3733		2.46	2.50	-1.7	50.0
13C2 PFUnA	Ave	0.5781	0.5615		2.43	2.50	-2.9	50.0
d5-NEtFOSAA	Ave	0.3749	0.3803		2.54	2.50	1.4	50.0
13C2 PFDoA	Ave	0.6242	0.5549		2.22	2.50	-11.1	50.0
13C2-PFTeDA	Ave	0.7915	0.7179		2.27	2.50	-9.3	50.0
13C2-PFHxDA	Ave	1.288	1.260		2.44	2.50	-2.2	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_001.d
Lims ID: CCV L4
Client ID:
Sample Type: CCVIS
Inject. Date: 10-May-2018 19:43:44 ALS Bottle#: 37 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 11-May-2018 15:22:23 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK042

First Level Reviewer: hannigana Date: 11-May-2018 15:22:11

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.468	1.469	-0.001	1.000	5334673	2.61		105	43143	
2 Perfluorobutyric acid										
212.90 > 169.00	1.474	1.474	0.0	1.004	1952096	0.9852		98.5	1416	
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.747	0.008	0.562	3489673	2.65		106	68707	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.755	1.755	0.0	1.000	1569589	0.9435		94.4	1476	
D 47 13C3-PFBS										
301.90 > 83.00	1.792	1.783	0.009	1.000	71873	2.38		102	852	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.792	1.792	0.0	1.000	2083814	0.8611		97.4	3479	
298.90 > 99.00	1.792	1.792	0.0	1.000	905076		2.30(1.25-3.74)		4164	
D 60 M2-4:2FTS										
329.00 > 81.00	2.014	2.003	0.011	1.000	574311	2.66		114	5725	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.014	2.014	0.0	1.000	495712	1.00		107	31130	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.048	2.048	0.0	1.000	1460361	0.9436		94.4	2887	
313.00 > 119.00	2.048	2.048	0.0	1.000	141282		10.34(5.03-15.10)		2008	
D 7 13C2 PFHxA										
315.00 > 270.00	2.048	2.048	0.0	1.000	3807632	2.62		105	100336	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.070	2.070	0.0	1.000	2002999	0.9061		96.6	15451	
349.00 > 99.00	2.070	2.070	0.0	1.000	751203		2.67(1.36-4.07)		15439	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.149	2.149	0.0	1.000	226631	0.9786		97.9	1796	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.149	2.150	-0.001	1.000	207856	2.31		92.4	6384	
D 9 13C4-PFHpA										
367.00 > 322.00	2.384	2.384	0.0	1.000	3696512	2.61		104	63997	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.395	2.395	0.0	1.005	1557492	1.05		105	2426	
363.00 > 169.00	2.384	2.395	-0.011	1.000	575674		2.71(1.13-3.40)		3887	
D 11 18O2 PFHxS										
403.00 > 84.00	2.406	2.395	0.011	1.000	4221571	2.42		102	94203	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.406	2.406	0.0	1.000	1716903	0.8499		93.4	6139	
399.00 > 99.00	2.406	2.406	0.0	1.000	556259		3.09(1.50-4.49)		4507	
65 Adona										
377.00 > 251.00	2.429	2.429	0.0	1.000	4360942	1.03		103	54250	
377.00 > 85.00	2.429	2.429	0.0	1.000	2577078		1.69(0.84-2.53)		43589	
D 12 M2-6:2FTS										
429.00 > 81.00	2.719	2.712	0.007	1.000	757517	2.50		105	10447	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.719	2.719	0.0	1.000	511861	0.9493		100	11312	
D 14 13C4 PFOA										
417.00 > 372.00	2.750	2.742	0.008	1.000	3445965	2.45		97.9	54487	
* 62 13C2-PFOA										
415.00 > 370.00	2.750	2.750	0.0		3792763	2.50			42258	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.750	2.750	0.0	1.000	1525126	0.9576		95.8	867	
413.00 > 169.00	2.750	2.750	0.0	1.000	817533		1.87(0.84-2.52)		3997	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.750	2.750	0.0	1.000	1505209	0.9312		97.8	9583	
449.00 > 99.00	2.758	2.750	0.008	1.003	408171		3.69(1.94-5.82)		10079	
D 18 13C4 PFOS										
503.00 > 80.00	3.114	3.106	0.008	1.000	2909963	2.38		99.5	23102	
D 19 13C5 PFNA										
468.00 > 423.00	3.123	3.114	0.008	1.000	2973146	2.46		98.3	71898	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.123	3.123	0.0	1.003	1187499	0.8966		96.6	4847	
499.00 > 99.00	3.114	3.123	-0.008	1.000	254265		4.67(2.31-6.93)		3479	
20 Perfluorononanoic acid										
463.00 > 419.00	3.123	3.123	0.0	1.000	1213741	0.9788		97.9	3468	
463.00 > 169.00	3.123	3.123	0.0	1.000	287681		4.22(1.90-5.69)		6858	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.331	3.331	0.0	1.000	2010945	0.8761		94.0	36286	
D 21 13C8 FOSA										
506.00 > 78.00	3.450	3.431	0.019	1.000	3750758	2.45		98.2	35816	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.450	3.450	0.0	1.000	1473226	0.9708		97.1	27142	
D 26 M2-8:2FTS										
529.00 > 81.00	3.468	3.459	0.009	1.000	890230	2.44		102	8686	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.478	3.468	0.010	1.000	2461156	2.42		96.8	48054	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.468	3.468	0.0	1.000	436516	0.9281		96.9	10637	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.468	3.468	0.0	1.000	863804	0.8875		92.4	11628	
549.00 > 99.00	3.468	3.468	0.0	1.000	326635		2.64(1.33-3.97)		8209	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.488	3.488	0.0	1.003	931063	0.9168		91.7	4098	
513.00 > 169.00	3.478	3.488	-0.010	1.000	177725		5.24(2.36-7.09)		3903	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.634	3.624	0.010	1.000	1415678	2.46		98.3	24272	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.643	3.643	0.0	1.003	584417	1.03		103	7852	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.809	3.790	0.019	1.000	1442443	2.54		101	13259	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.799	3.799	0.0	1.000	749888	0.9486		98.4	8775	
599.00 > 99.00	3.799	3.799	0.0	1.000	276815		2.71(1.39-4.16)		7422	
D 30 13C2 PFUnA										
565.00 > 520.00	3.809	3.800	0.009	1.000	2129715	2.43		97.1	57898	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.809	3.809	0.0	1.000	643539	0.8939		89.4	3569	
563.00 > 169.00	3.809	3.809	0.0	1.000	173785		3.70(2.12-6.36)		6396	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.809	3.809	0.0	1.000	549729	1.02		102	10294	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.964	3.964	0.0	1.000	3034544	0.8557		90.8	34806	
D 36 13C2 PFDoA										
615.00 > 570.00	4.108	4.091	0.017	1.000	2104696	2.22		88.9	22253	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.108	4.108	0.0	1.000	878208	1.00		100	1150	
613.00 > 169.00	4.108	4.108	0.0	1.000	213350		4.12(2.13-6.40)		3711	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.370	4.370	0.0	1.000	919999	0.8992		89.9	860	
663.00 > 169.00	4.370	4.370	0.0	1.000	300885		3.06(1.25-3.76)		3124	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.603	4.595	0.008	1.000	2722664	2.27		90.7	20409	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.603	4.603	0.0	1.000	279563	1.02		102	2856	
713.00 > 219.00	4.593	4.603	-0.010	0.998	194633		1.44(0.71-2.13)		3410	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.017	5.010	0.007	1.000	4777266	2.44		97.8	12555	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.017	5.017	0.0	1.000	1725949	0.9316		93.2	734	
813.00 > 169.00	5.017	5.017	0.0	1.000	293034		5.89(2.86-8.58)		2433	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.380	5.380	0.0	1.000	1935782	1.01		101	704	
913.00 > 169.00	5.380	5.380	0.0	1.000	242142		7.99(3.83-11.48)		2406	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 11-May-2018 15:22:24 Chrom Revision: 2.2 26-Apr-2018 11:26:08

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_001.d

Injection Date: 10-May-2018 19:43:44 Instrument ID: A8_N

Lims ID: CCV L4

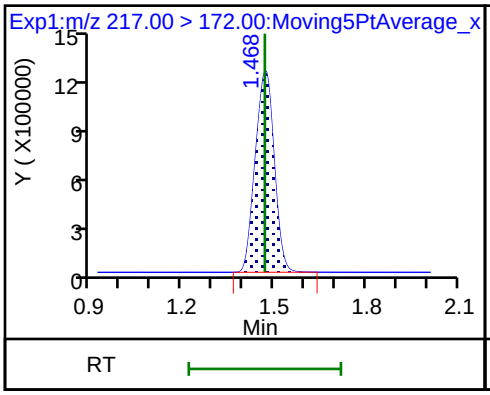
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 37 Worklist Smp#: 3

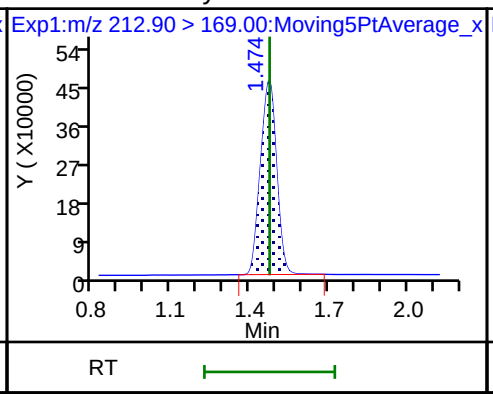
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

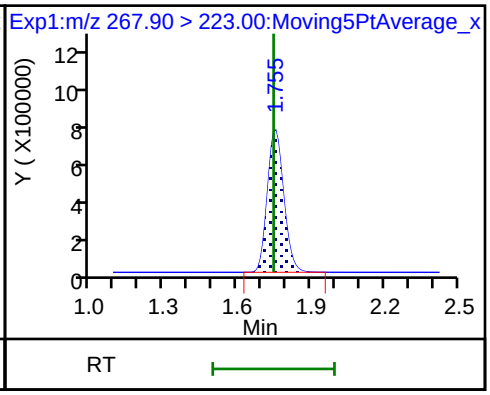
D 1 13C4 PFBA



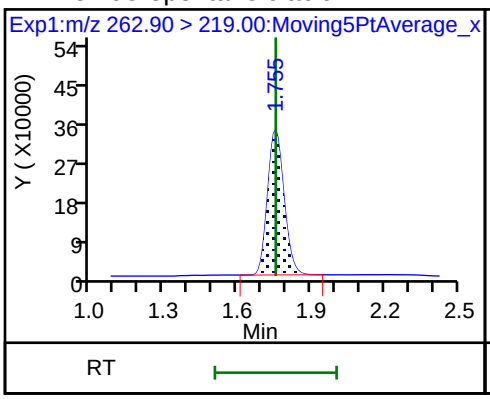
2 Perfluorobutyric acid



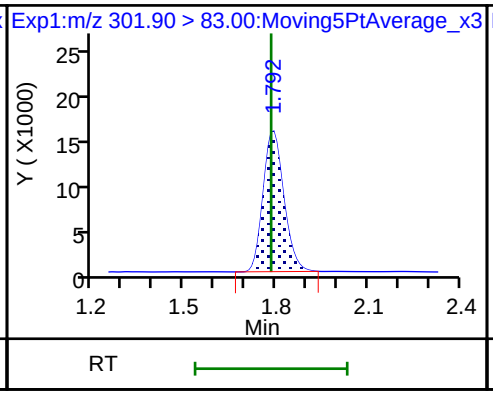
D 3 13C5-PFPeA



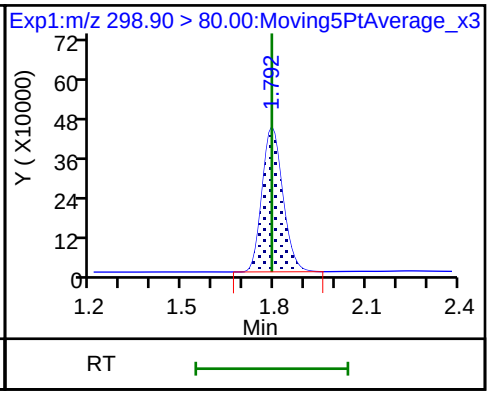
4 Perfluoropentanoic acid



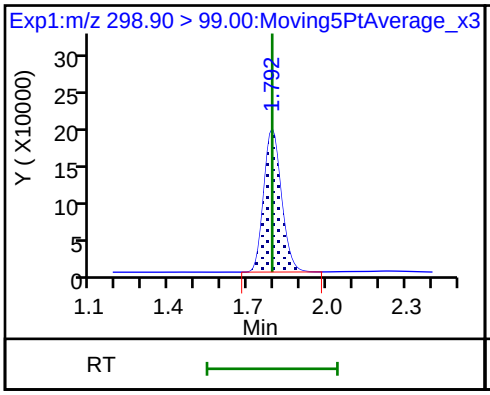
D 47 13C3-PFBS



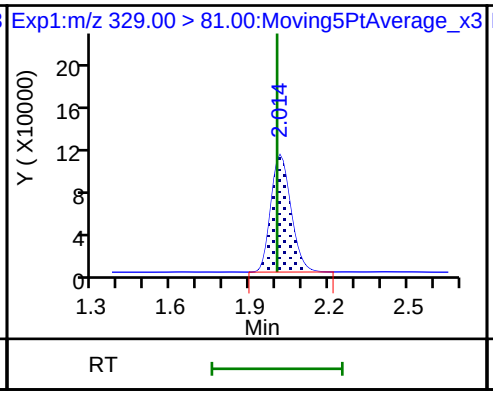
5 Perfluorobutanesulfonic acid



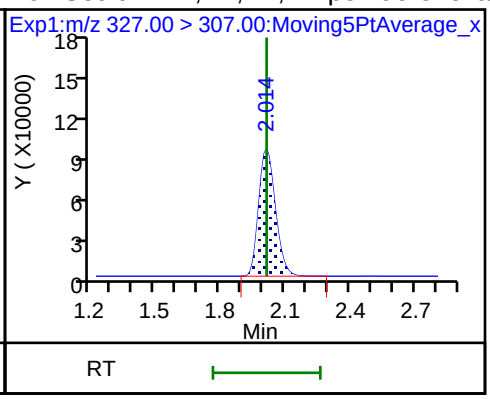
5 Perfluorobutanesulfonic acid



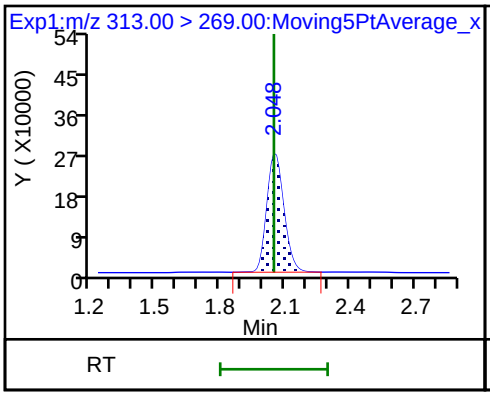
D 60 M2-4:2FTS



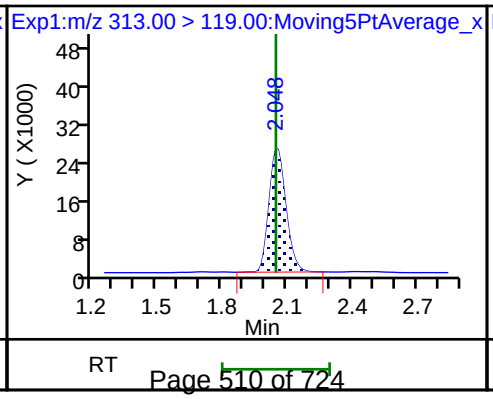
61 Sodium 1H,1H,2H,2H-perfluorohexane



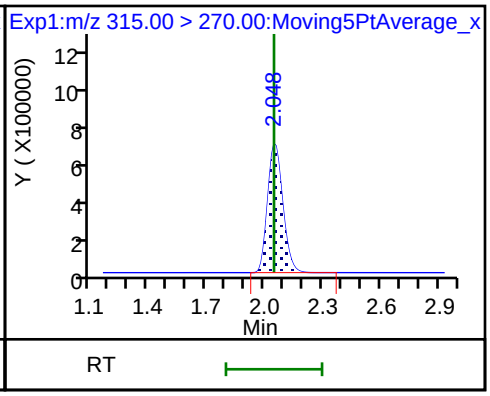
6 Perfluorohexanoic acid



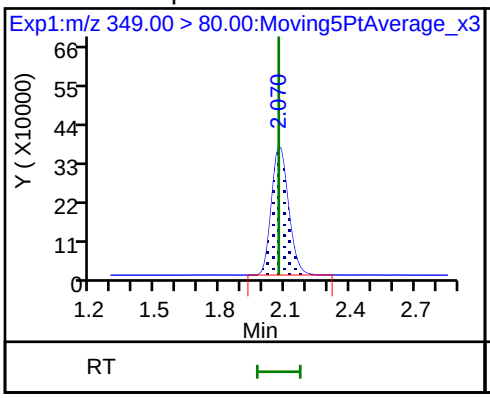
6 Perfluorohexanoic acid



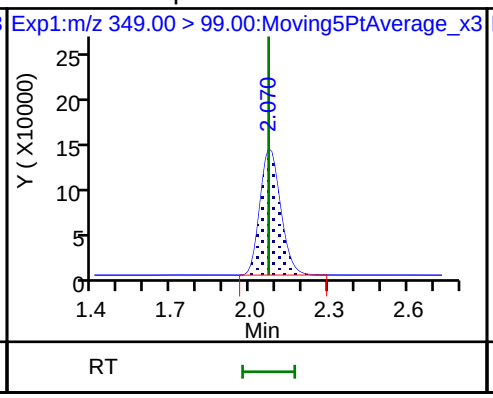
D 7 13C2 PFHxA



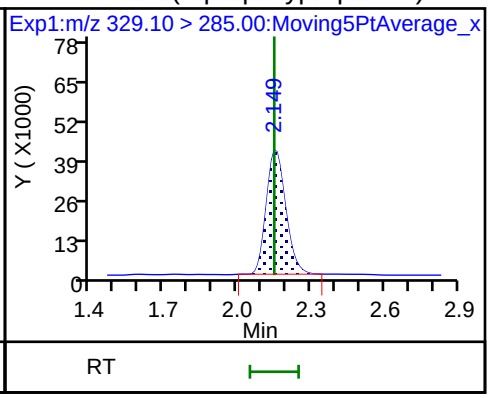
70 Perfluoropentanesulfonic acid



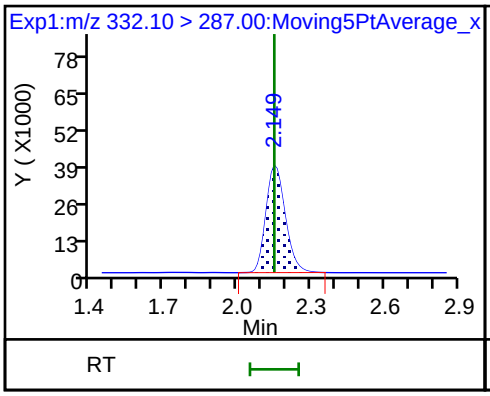
70 Perfluoropentanesulfonic acid



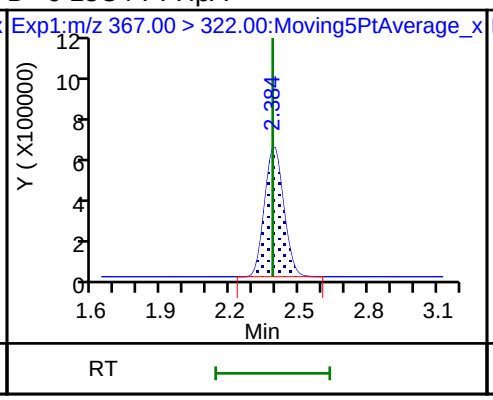
67 Perfluoro(2-propoxypropanoic) acid



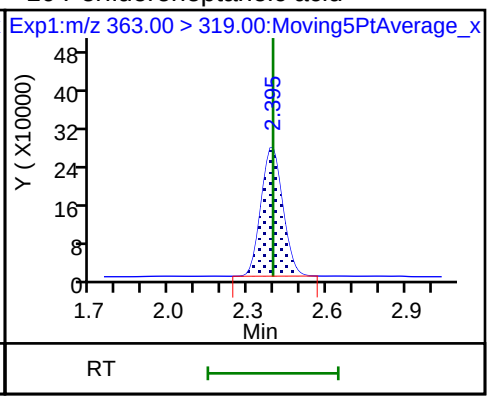
D 64 13C3 HFPO-DA



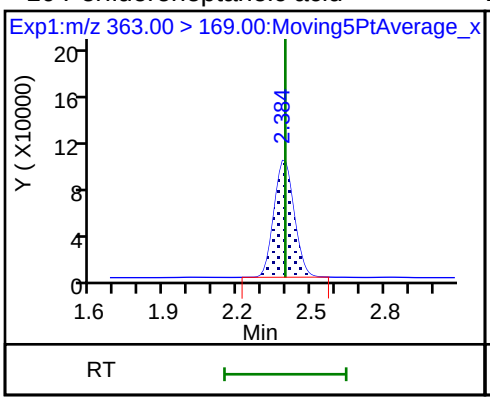
D 9 13C4-PFHpA



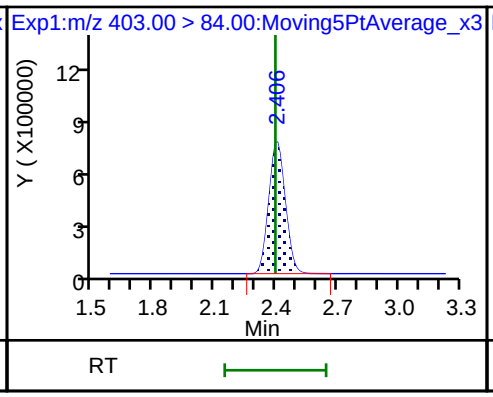
10 Perfluoroheptanoic acid



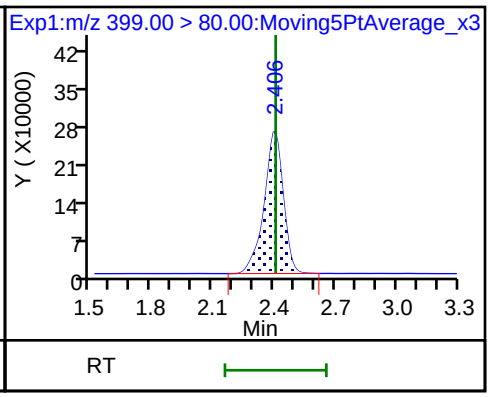
10 Perfluoroheptanoic acid



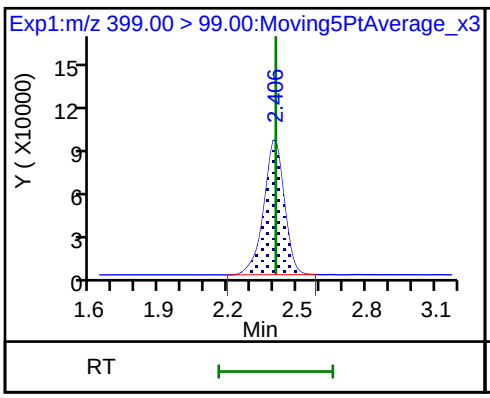
D 11 18O2 PFHxS



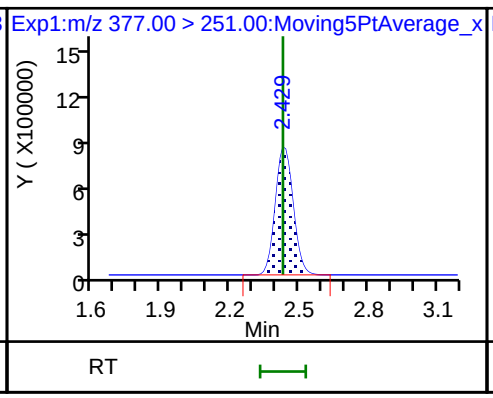
8 Perfluorohexanesulfonic acid



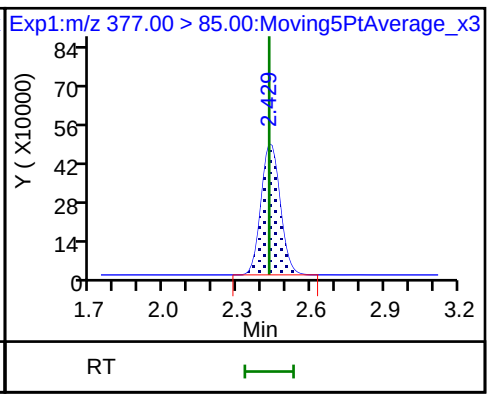
8 Perfluorohexanesulfonic acid



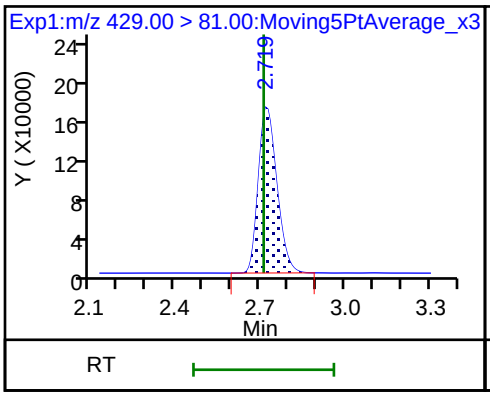
65 Adona



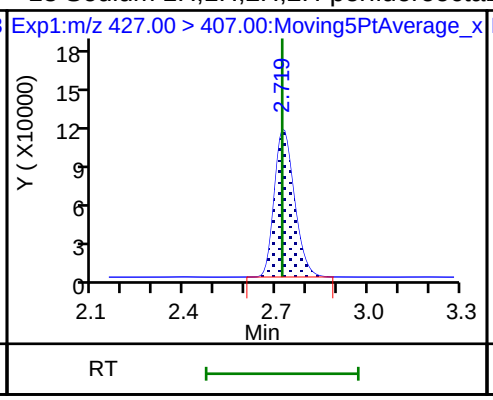
65 Adona



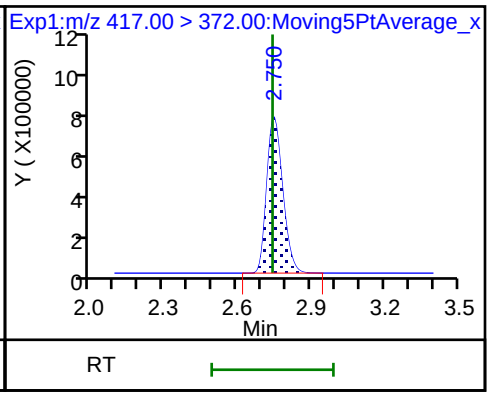
D 12 M2-6:2FTS



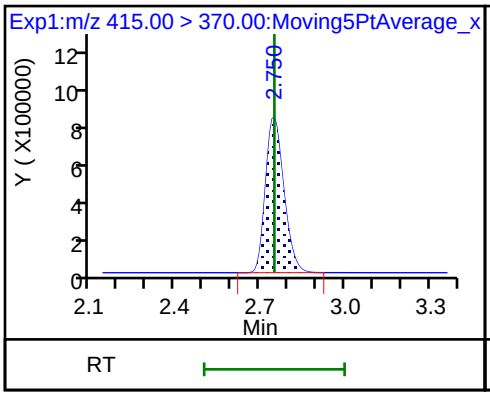
13 Sodium 1H,1H,2H,2H-perfluorooctane



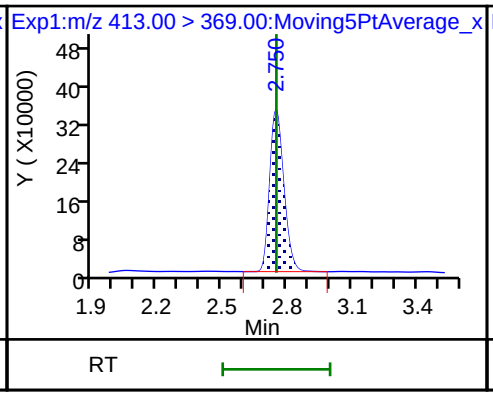
D 14 13C4 PFOA



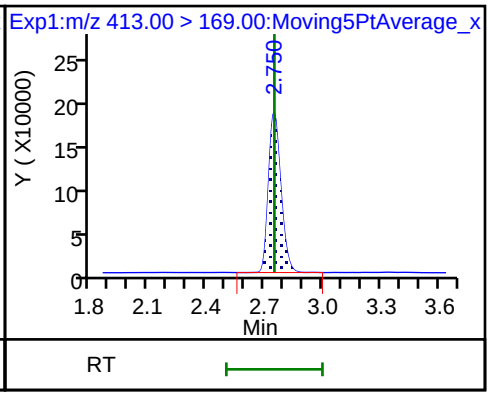
* 62 13C2-PFOA



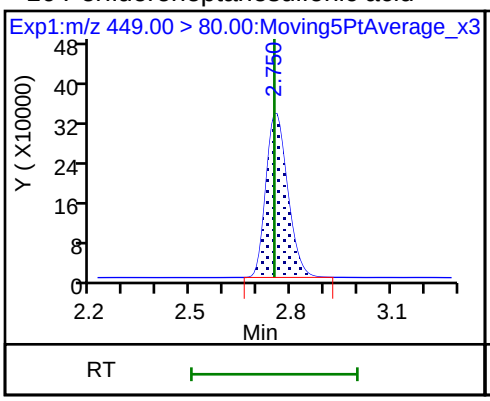
15 Perfluorooctanoic acid



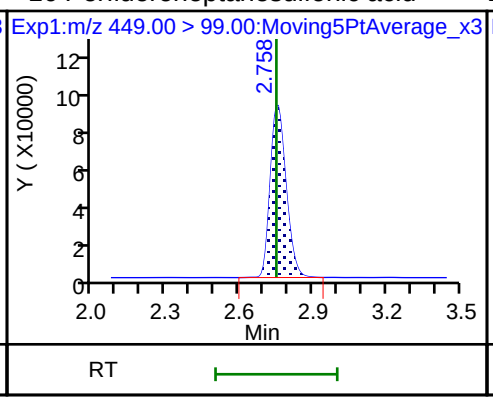
15 Perfluorooctanoic acid



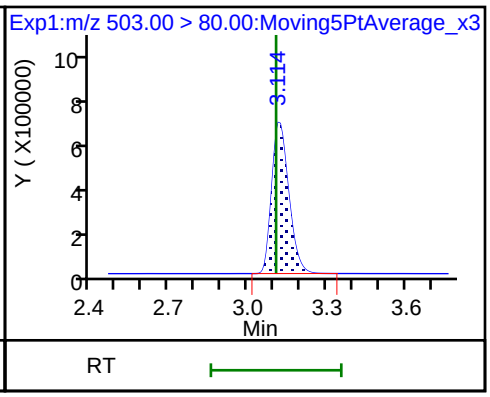
16 Perfluoroheptanesulfonic acid



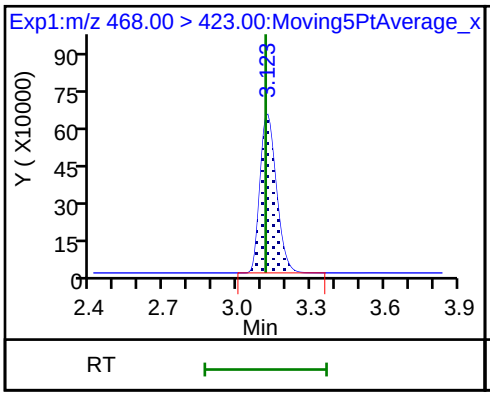
16 Perfluoroheptanesulfonic acid



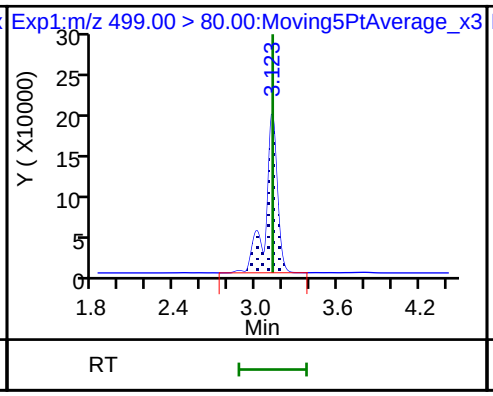
D 18 13C4 PFOS



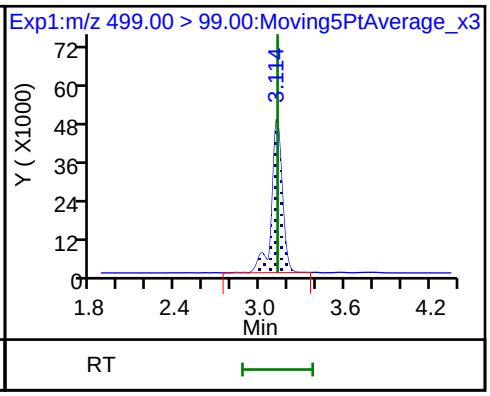
D 19 13C5 PFNA



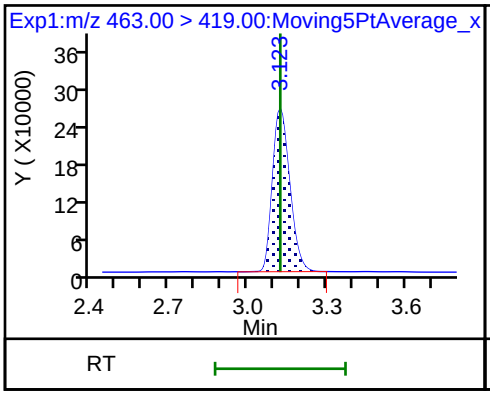
17 Perfluorooctane sulfonic acid



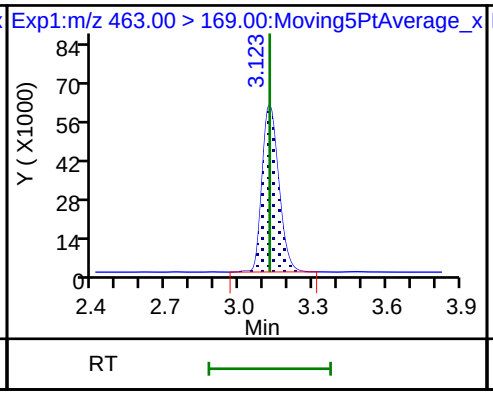
17 Perfluorooctane sulfonic acid



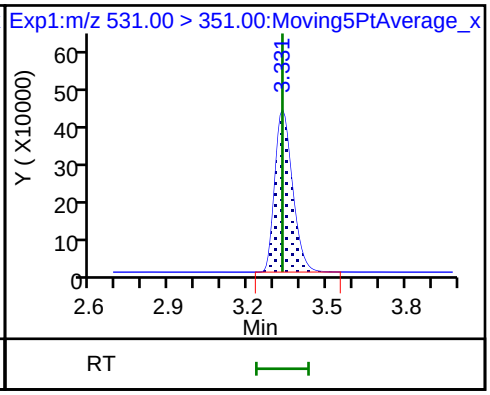
20 Perfluorononanoic acid



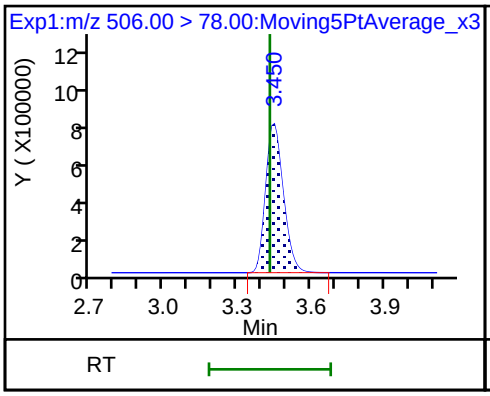
20 Perfluorononanoic acid



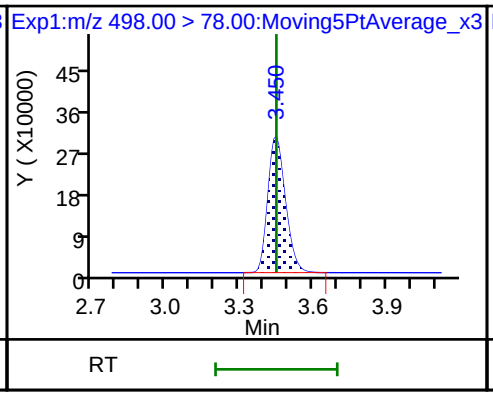
69 9-Chlorohexadecafluoro-3-oxanonane



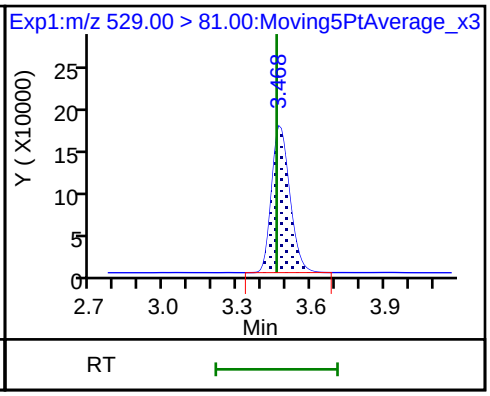
D 21 13C8 FOSA



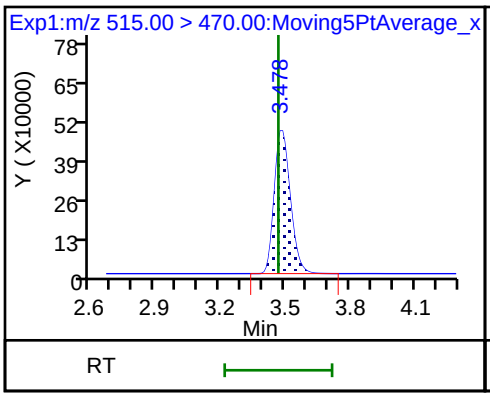
22 Perfluorooctane Sulfonamide



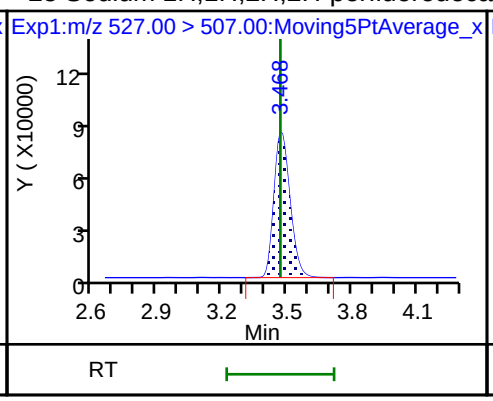
D 26 M2-8:2FTS



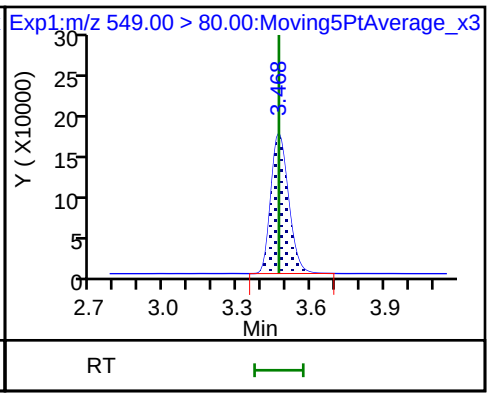
D 23 13C2 PFDA



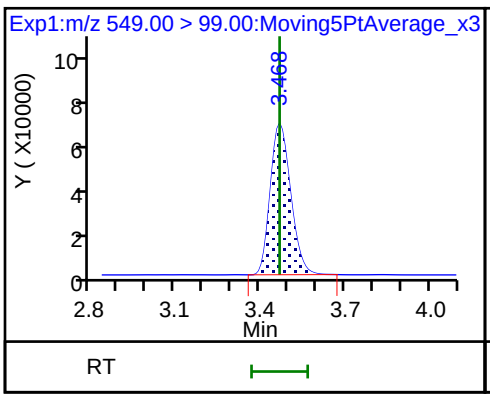
25 Sodium 1H,1H,2H,2H-perfluorodecane



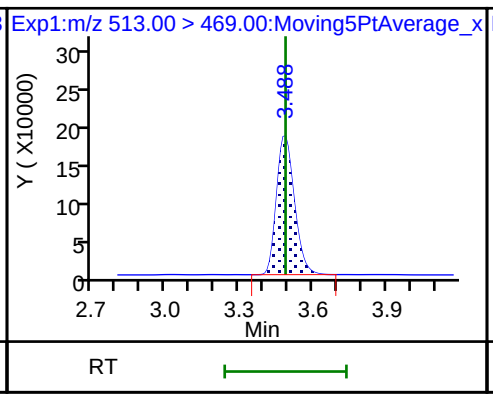
68 Perfluorononanesulfonic acid



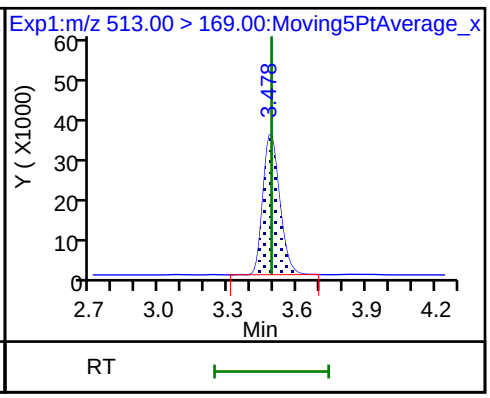
68 Perfluorononanesulfonic acid



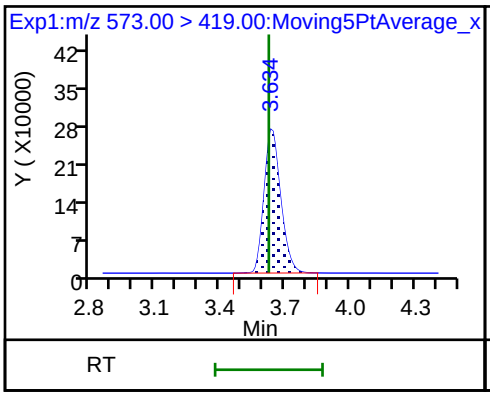
24 Perfluorodecanoic acid



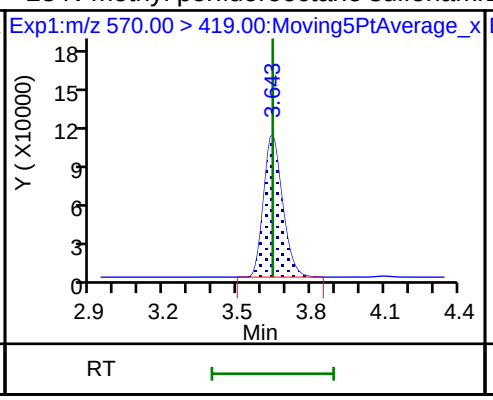
24 Perfluorodecanoic acid



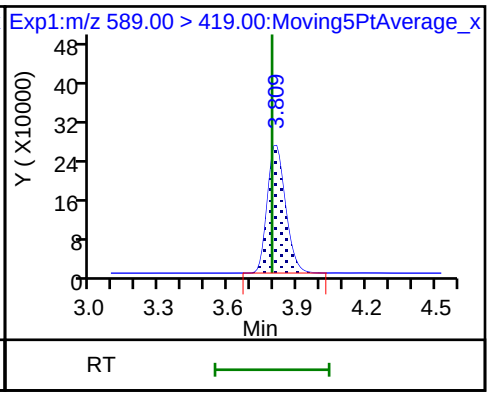
D 27 d3-NMeFOSAA



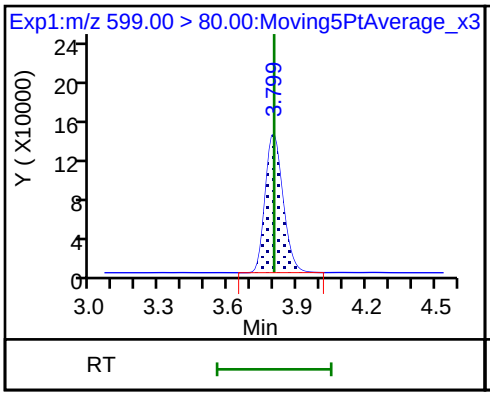
28 N-methyl perfluorooctane sulfonami



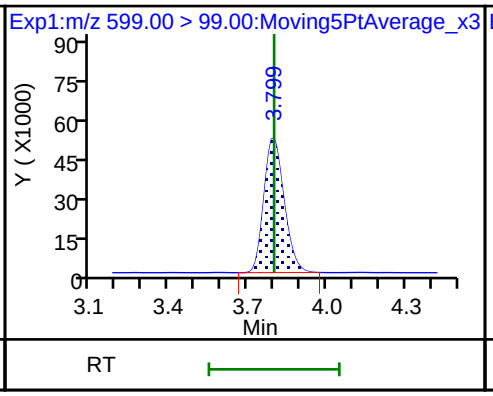
D 32 d5-NEtFOSAA



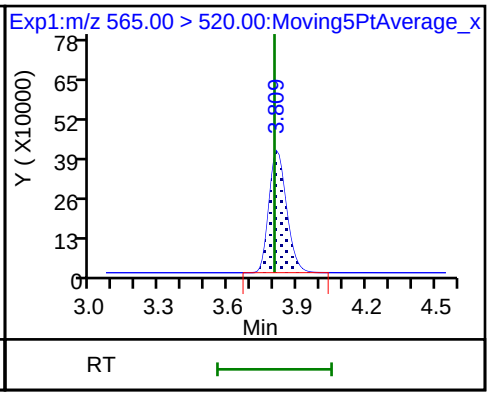
29 Perfluorodecane Sulfonic acid



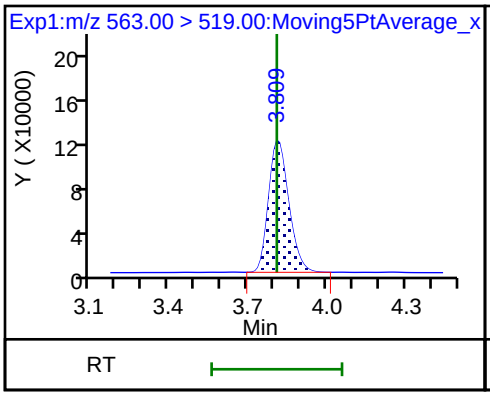
29 Perfluorodecane Sulfonic acid



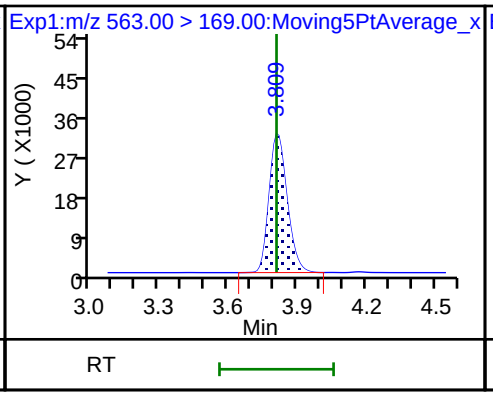
D 30 13C2 PFUnA



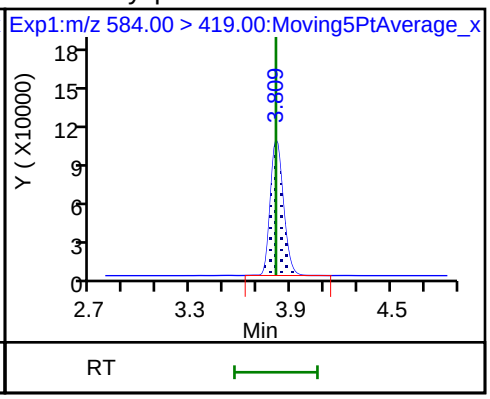
31 Perfluoroundecanoic acid



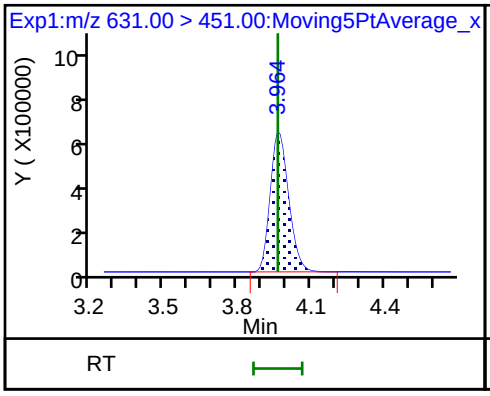
31 Perfluoroundecanoic acid



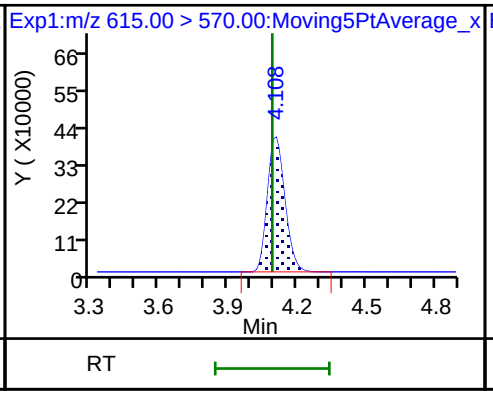
33 N-ethyl perfluorooctane sulfonamid



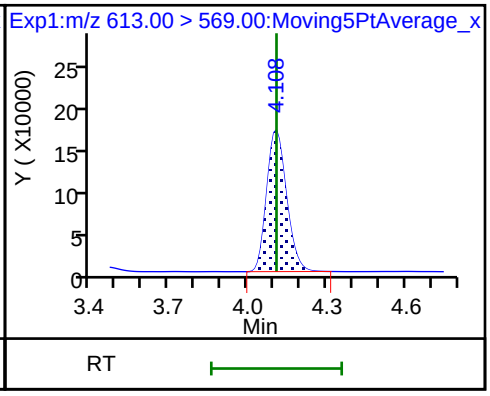
66 11-Chloroeicosafluoro-3-oxaundecan



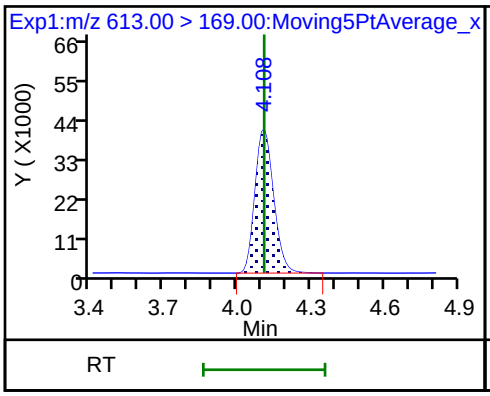
D 36 13C2 PFDoA



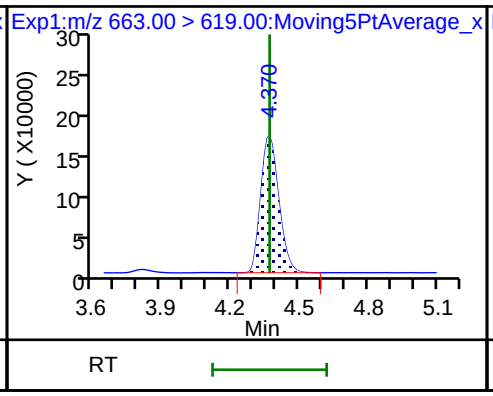
37 Perfluorododecanoic acid



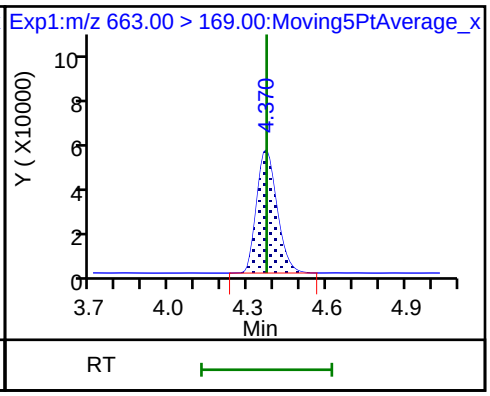
37 Perfluorododecanoic acid



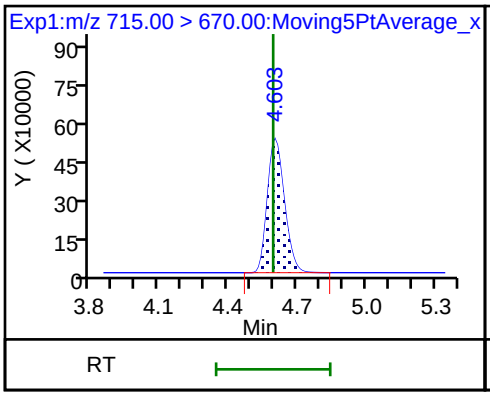
41 Perfluorotridecanoic acid



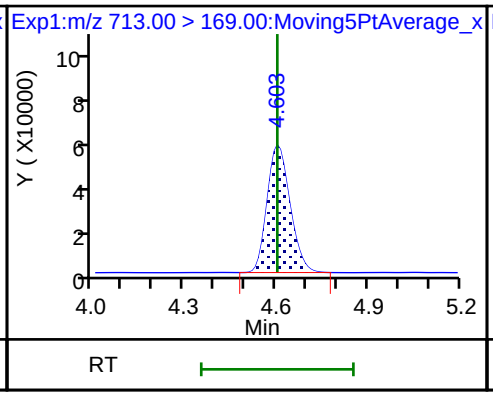
41 Perfluorotridecanoic acid



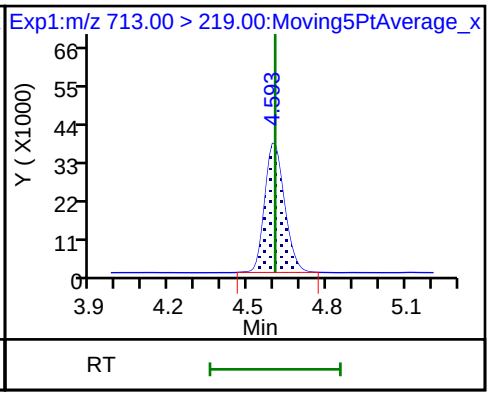
D 43 13C2-PFTeDA



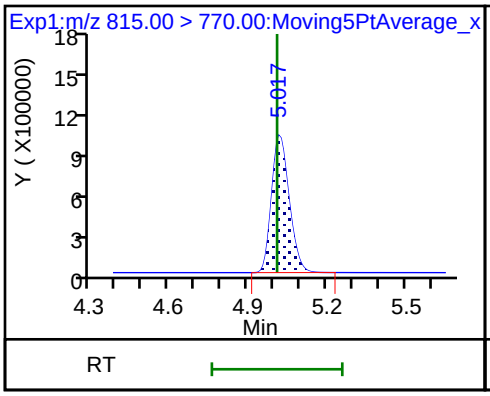
42 Perfluorotetradecanoic acid



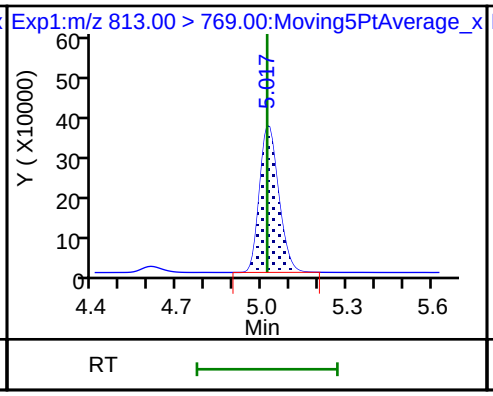
42 Perfluorotetradecanoic acid



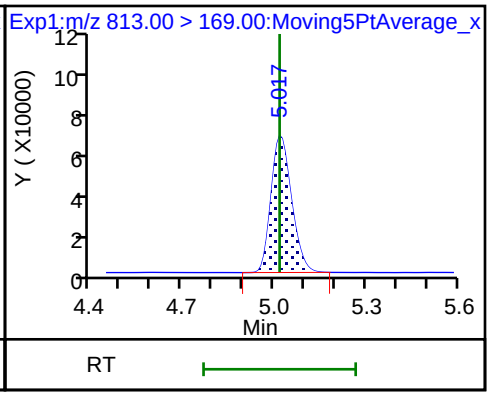
D 44 13C2-PFHxDA



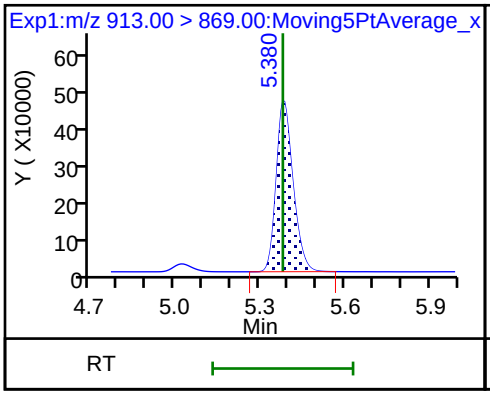
45 Perfluorohexadecanoic acid



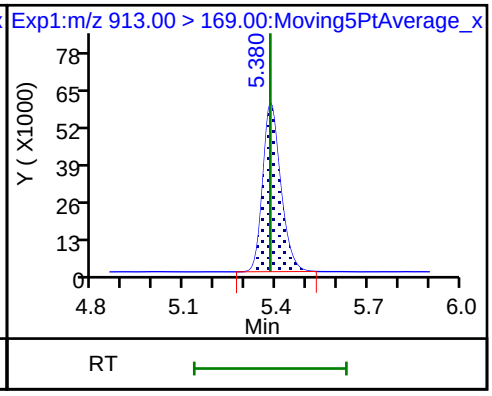
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222655/14 Calibration Date: 05/10/2018 21:09

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.10LLB_012.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	0.9529		2.57	2.50	2.6	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.159		2.43	2.50	-2.8	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	84.22		2.38	2.21	7.6	50.0
4:2 FTS	AveID	16.03	16.99		2.47	2.34	6.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.016	1.032		2.54	2.50	1.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	75.20		2.47	2.35	5.2	50.0
HFPO-DA (GenX)	AveID	2.785	3.408		3.06	2.50	22.3	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	1.054		2.63	2.50	5.3	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.042		2.10	2.28	-7.9	40.0
Adona	AveID	3.464	3.719		2.68	2.50	7.4	50.0
6:2FTS	AveID	1.691	1.615		2.26	2.37	-4.5	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.375		2.46	2.38	3.6	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.134		2.45	2.50	-1.8	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.095		2.34	2.32	0.7	40.0
Perfluorononanoic acid (PFNA)	AveID	1.043	1.078		2.59	2.50	3.4	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.872		2.31	2.33	-0.7	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	1.063		2.63	2.50	5.0	40.0
8:2FTS	AveID	1.265	1.312		2.48	2.40	3.7	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.8023		2.41	2.40	0.4	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	0.9501		2.30	2.50	-7.9	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	1.060		2.66	2.50	6.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6361		2.36	2.41	-2.0	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	0.8869		2.37	2.50	-5.1	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.7842		2.32	2.50	-7.2	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.767		2.24	2.36	-5.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	1.067		2.56	2.50	2.3	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.195		2.46	2.50	-1.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2539		2.53	2.50	1.1	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9319		2.44	2.50	-2.5	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222655/14 Calibration Date: 05/10/2018 21:09

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.10LLB_012.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	1.000		2.49	2.50	-0.4	50.0
13C4 PFBA	Ave	1.345	1.480		2.75	2.50	10.0	50.0
13C5 PFPeA	Ave	0.8672	0.9670		2.79	2.50	11.5	50.0
13C3-PFBS	Ave	0.0199	0.0207		2.42	2.33	4.2	50.0
M2-4:2FTS	Ave	0.1425	0.1626		2.66	2.34	14.1	50.0
13C2 PFHxA	Ave	0.9590	1.050		2.74	2.50	9.5	50.0
13C3 HFPO-DA	Ave	0.0593	0.0514		2.17	2.50	-13.4	50.0
13C4-PFHpA	Ave	0.9333	1.053		2.82	2.50	12.8	50.0
18O2 PFHxS	Ave	1.152	1.248		2.56	2.37	8.4	50.0
M2-6:2FTS	Ave	0.2000	0.2331		2.77	2.38	16.6	40.0
13C4 PFOA	Ave	0.9276	0.9471		2.55	2.50	2.1	50.0
13C4 PFOS	Ave	0.8066	0.8257		2.45	2.39	2.4	50.0
13C5 PFNA	Ave	0.7973	0.7808		2.45	2.50	-2.1	50.0
13C8 FOSA	Ave	1.007	1.052		2.61	2.50	4.4	50.0
M2-8:2FTS	Ave	0.2409	0.2623		2.61	2.40	8.9	40.0
13C2 PFDA	Ave	0.6701	0.7022		2.62	2.50	4.8	50.0
d3-NMeFOSAA	Ave	0.3798	0.4150		2.73	2.50	9.3	50.0
d5-NEtFOSAA	Ave	0.3749	0.4148		2.77	2.50	10.7	50.0
13C2 PFUnA	Ave	0.5781	0.5792		2.50	2.50	0.2	50.0
13C2 PFDoA	Ave	0.6242	0.5948		2.38	2.50	-4.7	50.0
13C2-PFTeDA	Ave	0.7915	0.7657		2.42	2.50	-3.3	50.0
13C2-PFHxDA	Ave	1.288	1.432		2.78	2.50	11.2	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_012.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 10-May-2018 21:09:50 ALS Bottle#: 38 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:25:29 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:23:28

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.478	1.469	0.009	1.000	5281134	2.75		110	36558	
2 Perfluorobutyric acid										
212.90 > 169.00	1.478	1.478	0.0	1.000	5032499	2.57		103	4012	
D 3 13C5-PFPeA										
267.90 > 223.00	1.753	1.747	0.006	0.561	3449577	2.79		112	57076	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.753	1.753	0.0	1.000	3996880	2.43		97.2	3819	
D 47 13C3-PFBS										
301.90 > 83.00	1.789	1.783	0.006	1.000	68808	2.42		104	696	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.798	1.798	0.0	1.005	5508466	2.38		108	8931	
298.90 > 99.00	1.798	1.798	0.0	1.005	2311482		2.38(1.25-3.74)		9348	
D 60 M2-4:2FTS										
329.00 > 81.00	2.011	2.003	0.008	1.000	541763	2.66		114	5314	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.011	2.011	0.0	1.000	1174178	2.47		106	71779	
D 7 13C2 PFHxA										
315.00 > 270.00	2.056	2.048	0.008	1.000	3747113	2.74		110	76330	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.056	2.056	0.0	1.000	3865261	2.54		102	7537	
313.00 > 119.00	2.056	2.056	0.0	1.000	344726		11.21(5.03-15.10)		4533	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.079	2.079	0.0	1.000	5218854	2.47		105	35294	
349.00 > 99.00	2.079	2.079	0.0	1.000	1878933		2.78(1.36-4.07)		38250	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.158	2.150	0.008	1.000	183319	2.17		86.6	4116	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.158	2.158	0.0	1.000	624720	3.06		122	4374	
D 9 13C4-PFHpA										
367.00 > 322.00	2.392	2.384	0.008	1.000	3755639	2.82		113	59490	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.392	2.392	0.0	1.000	3959769	2.63		105	5784	
363.00 > 169.00	2.392	2.392	0.0	1.000	1525658		2.60(1.13-3.40)		8694	
D 11 18O2 PFHxS										
403.00 > 84.00	2.403	2.395	0.008	1.000	4212181	2.56		108	68912	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.403	2.403	0.0	1.000	4223117	2.10		92.1	12717	
399.00 > 99.00	2.403	2.403	0.0	1.000	1443585		2.93(1.50-4.49)		9738	
65 Adona										
377.00 > 251.00	2.437	2.437	0.0	1.000	10955551	2.68		107	80275	
377.00 > 85.00	2.426	2.437	-0.011	0.995	6524517		1.68(0.84-2.53)		60040	
D 12 M2-6:2FTS										
429.00 > 81.00	2.718	2.712	0.006	1.000	789938	2.77		117	12797	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.718	2.718	0.0	1.000	1272794	2.26		95.5	23868	
D 14 13C4 PFOA										
417.00 > 372.00	2.741	2.742	-0.001	1.000	3378668	2.55		102	73647	
* 62 13C2-PFOA										
415.00 > 370.00	2.741	2.741	0.0		3567361	2.50			60176	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.749	2.749	0.0	1.003	3832555	2.45		98.2	1990	
413.00 > 169.00	2.749	2.749	0.0	1.003	1977457		1.94(0.84-2.52)		8883	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.749	2.749	0.0	1.000	3855705	2.46		104	26087	
449.00 > 99.00	2.749	2.749	0.0	1.000	1032108		3.74(1.94-5.82)		25591	
D 18 13C4 PFOS										
503.00 > 80.00	3.114	3.106	0.008	1.000	2816058	2.45		102	15886	
D 19 13C5 PFNA										
468.00 > 423.00	3.122	3.114	0.008	1.000	2785452	2.45		97.9	54445	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.114	3.114	0.0	1.000	2994283	2.34		101	10782	
499.00 > 99.00	3.114	3.114	0.0	1.000	636795		4.70(2.31-6.93)		8676	
20 Perfluorononanoic acid										
463.00 > 419.00	3.122	3.122	0.0	1.000	3003562	2.59		103	6939	
463.00 > 169.00	3.122	3.122	0.0	1.000	718731		4.18(1.90-5.69)		51599	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.323	3.323	0.0	1.000	5139708	2.31		99.3	55052	
D 21 13C8 FOSA										
506.00 > 78.00	3.441	3.431	0.010	1.000	3751495	2.61		104	35981	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.441	3.441	0.0	1.000	3986107	2.63		105	57713	
D 26 M2-8:2FTS										
529.00 > 81.00	3.469	3.459	0.010	1.000	896263	2.61		109	7278	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.478	3.468	0.010	1.000	2504943	2.62		105	45103	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.469	3.469	0.0	1.000	1175630	2.48		104	33082	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.469	3.469	0.0	1.000	2268724	2.41		100	15238	
549.00 > 99.00	3.469	3.469	0.0	1.000	836865		2.71(1.33-3.97)		18463	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.478	3.478	0.0	1.000	2379892	2.30		92.1	10356	
513.00 > 169.00	3.478	3.478	0.0	1.000	442943		5.37(2.36-7.09)		9697	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.634	3.624	0.010	1.000	1480562	2.73		109	21507	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.634	3.634	0.0	1.000	1568962	2.66		106	17317	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.801	3.790	0.011	1.000	1479781	2.77		111	19272	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.790	3.790	0.0	1.000	1806380	2.36		98.0	16741	
599.00 > 99.00	3.790	3.790	0.0	1.000	639772		2.82(1.39-4.16)		13039	
D 30 13C2 PFUnA										
565.00 > 520.00	3.811	3.800	0.011	1.000	2066242	2.50		100	54208	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.811	3.811	0.0	1.000	1620368	2.32		92.8	7842	
563.00 > 169.00	3.811	3.811	0.0	1.000	416417		3.89(2.12-6.36)		12721	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.811	3.811	0.0	1.003	1312344	2.37		94.9	19929	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.968	3.968	0.0	1.000	7679004	2.24		95.0	55080	
D 36 13C2 PFDoA										
615.00 > 570.00	4.102	4.091	0.011	1.000	2121940	2.38		95.3	19260	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.102	4.102	0.0	1.000	2263310	2.56		102	2560	
613.00 > 169.00	4.102	4.102	0.0	1.000	543667		4.16(2.13-6.40)		7956	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.362	4.362	0.0	1.000	2536230	2.46		98.3	2506	
663.00 > 169.00	4.362	4.362	0.0	1.000	782438		3.24(1.25-3.76)		7570	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.605	4.595	0.010	1.000	2731533	2.42		96.7	16402	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.605	4.605	0.0	1.000	693612	2.53		101	6028	
713.00 > 219.00	4.595	4.605	-0.010	0.998	505184		1.37(0.71-2.13)		8782	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.019	5.010	0.009	1.000	5109926	2.78		111	14447	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.019	5.019	0.0	1.000	4761886	2.44		97.5	1813	
813.00 > 169.00	5.019	5.019	0.0	1.000	784560		6.07(2.86-8.58)		5302	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.382	5.382	0.0	1.000	5109388	2.49		99.6	1681	
913.00 > 169.00	5.382	5.382	0.0	1.000	618881		8.26(3.83-11.48)		4447	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 18-May-2018 15:25:31 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_012.d

Injection Date: 10-May-2018 21:09:50 Instrument ID: A8_N

Lims ID: CCV L5

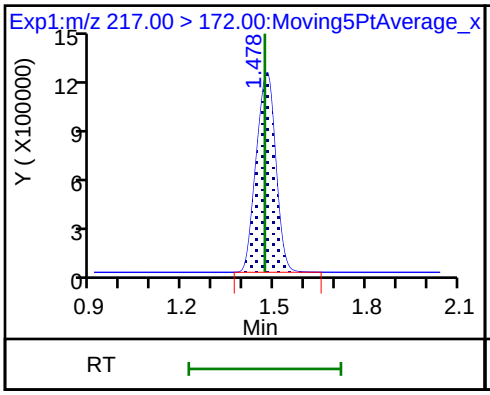
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 38 Worklist Smp#: 14

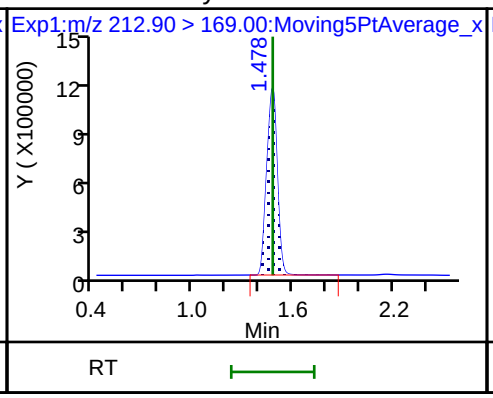
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

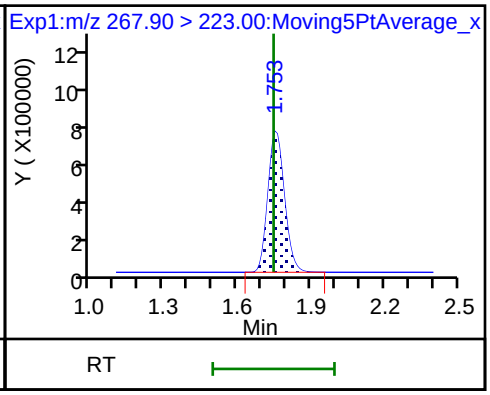
D 1 13C4 PFBA



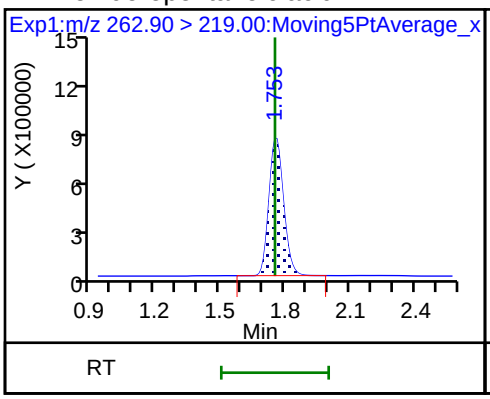
2 Perfluorobutyric acid



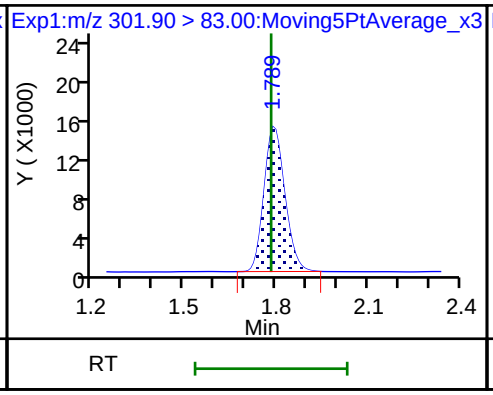
D 3 13C5-PFPeA



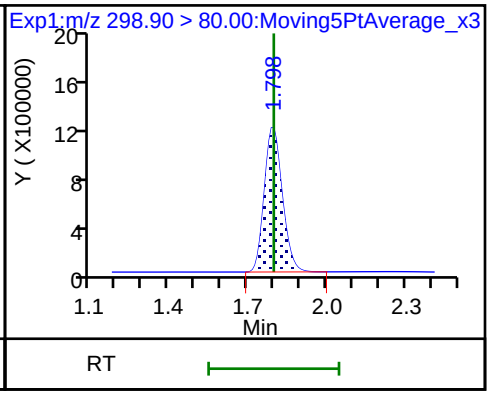
4 Perfluoropentanoic acid



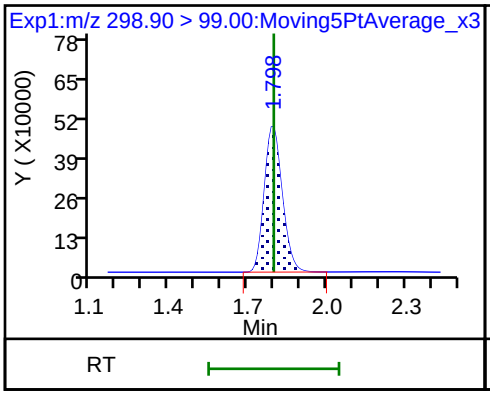
D 47 13C3-PFBS



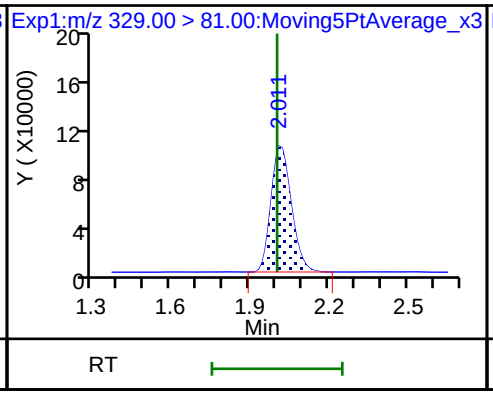
5 Perfluorobutanesulfonic acid



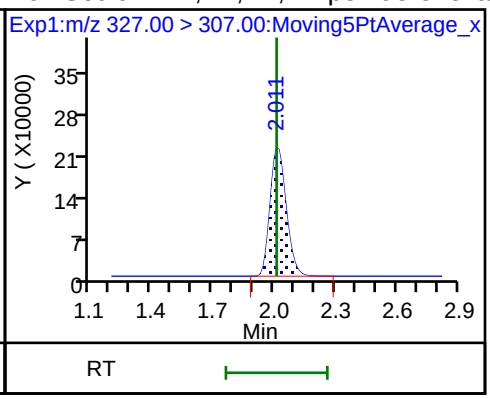
5 Perfluorobutanesulfonic acid



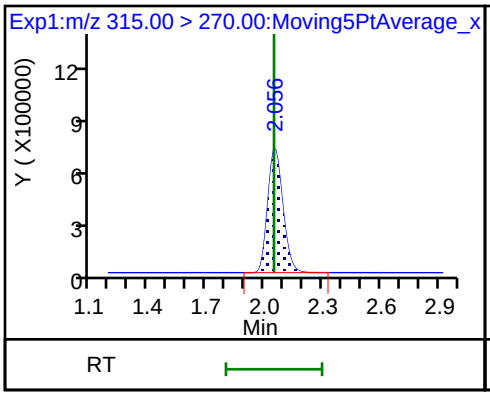
D 60 M2-4:2FTS



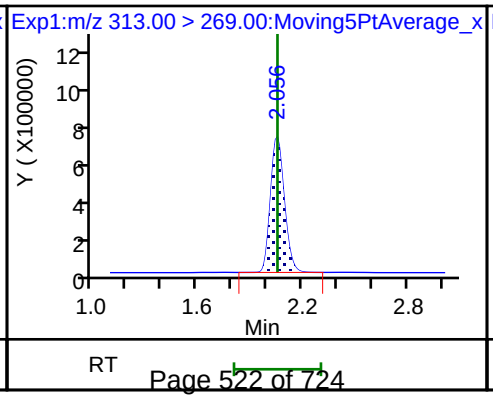
61 Sodium 1H,1H,2H,2H-perfluorohexane



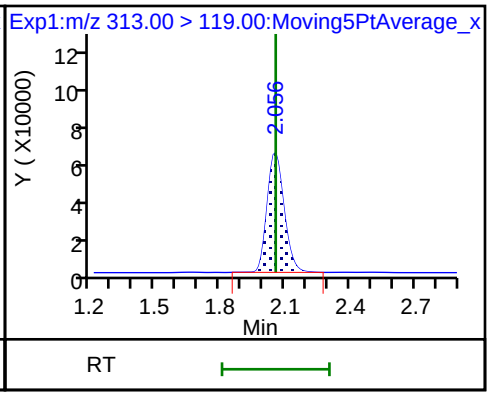
D 7 13C2 PFHxA



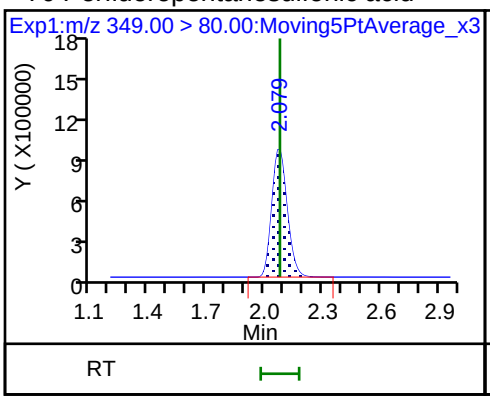
6 Perfluorohexanoic acid



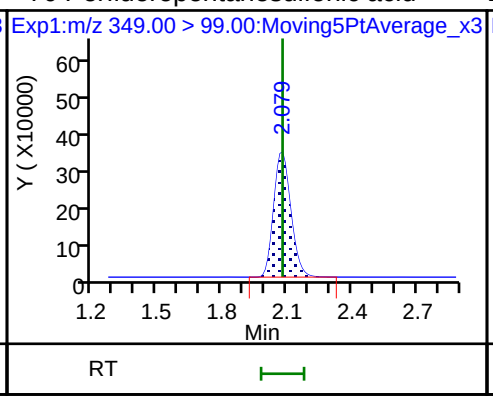
6 Perfluorohexanoic acid



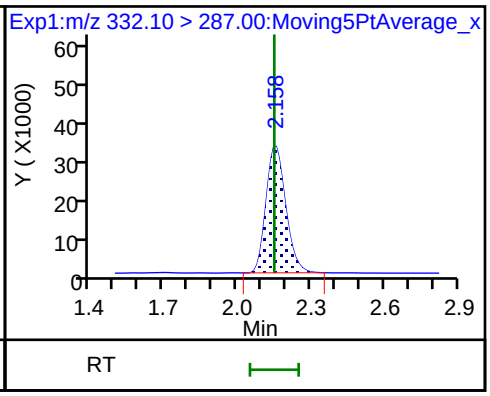
70 Perfluoropentanesulfonic acid



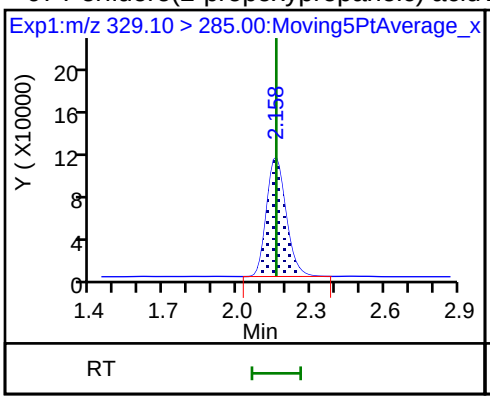
70 Perfluoropentanesulfonic acid



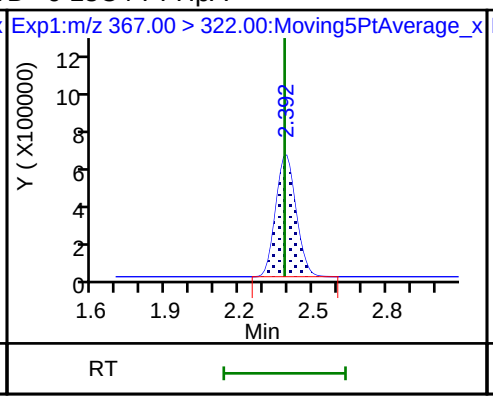
D 64 13C3 HFPO-DA



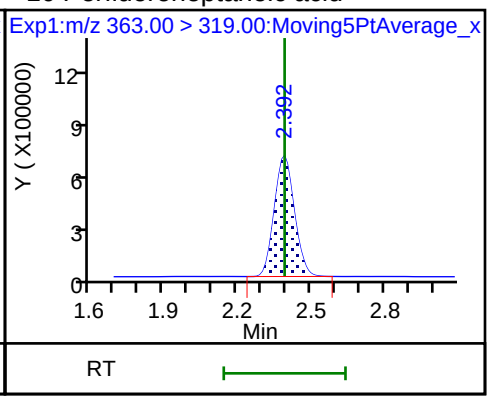
67 Perfluoro(2-propoxypropanoic) acid



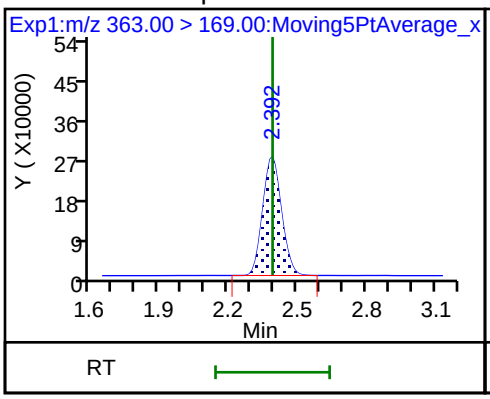
D 9 13C4-PFHpA



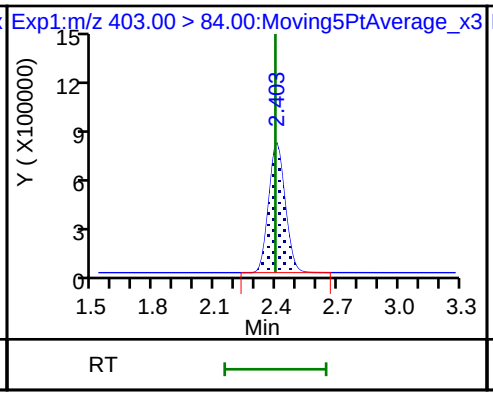
10 Perfluoroheptanoic acid



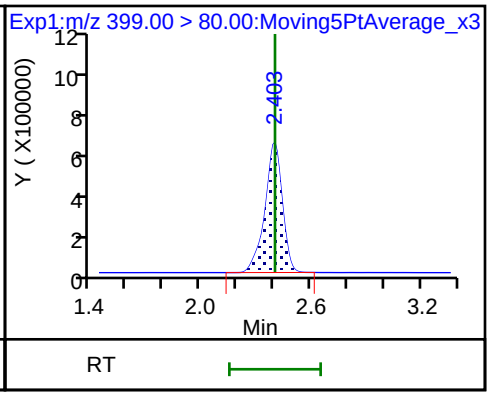
10 Perfluoroheptanoic acid



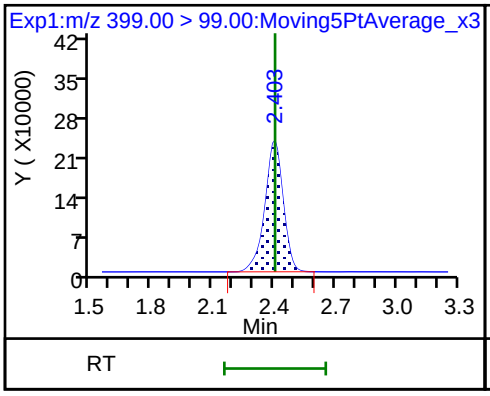
D 11 18O2 PFHxS



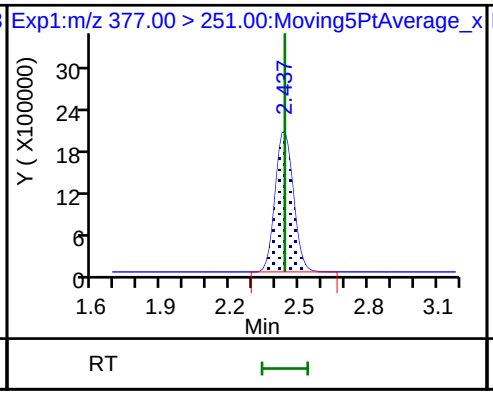
8 Perfluorohexanesulfonic acid



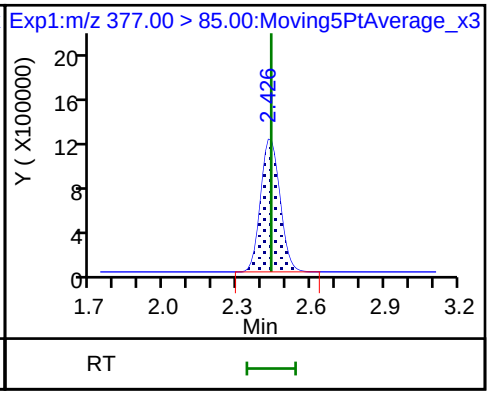
8 Perfluorohexanesulfonic acid



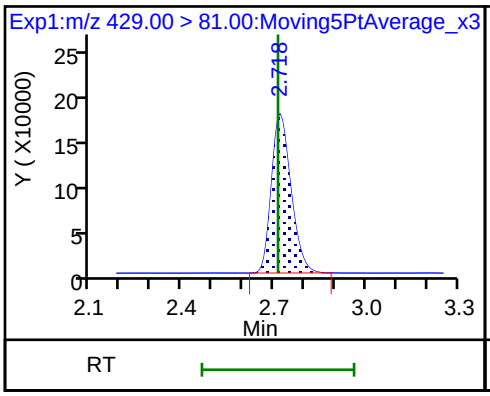
65 Adona



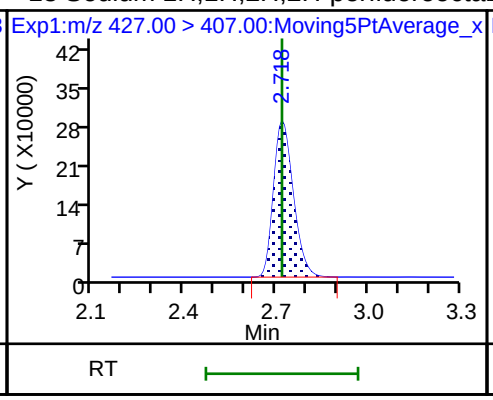
65 Adona



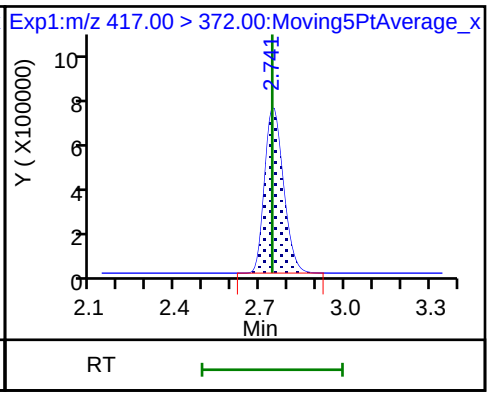
D 12 M2-6:2FTS



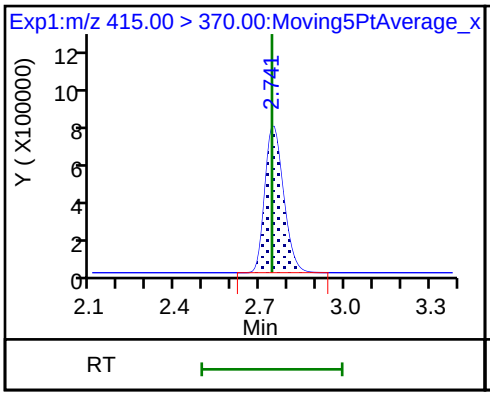
13 Sodium 1H,1H,2H,2H-perfluorooctane



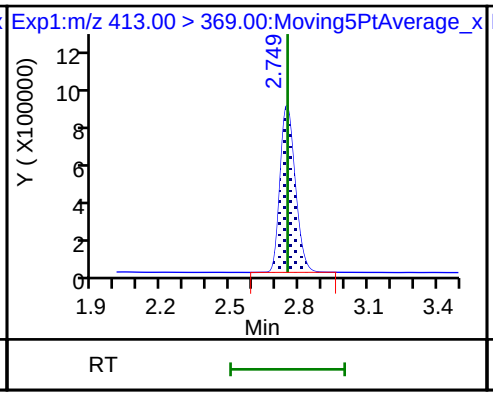
D 14 13C4 PFOA



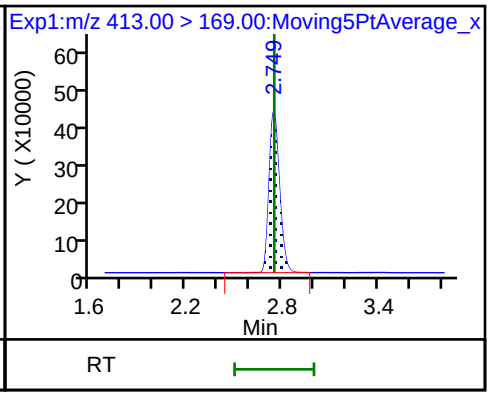
* 62 13C2-PFOA



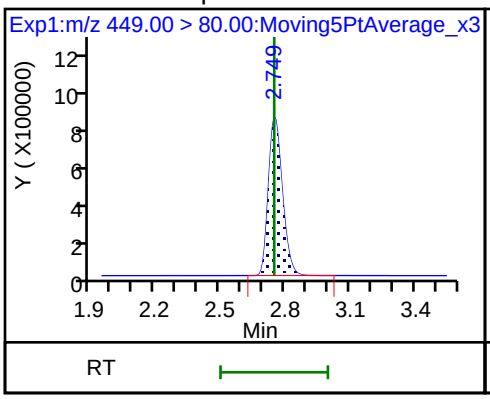
15 Perfluorooctanoic acid



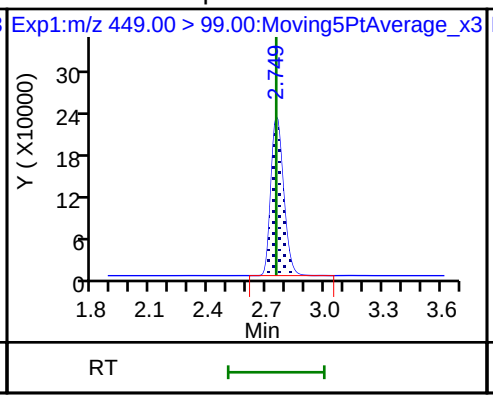
15 Perfluorooctanoic acid



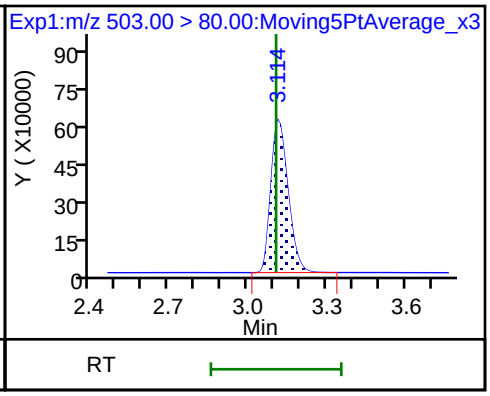
16 Perfluoroheptanesulfonic acid



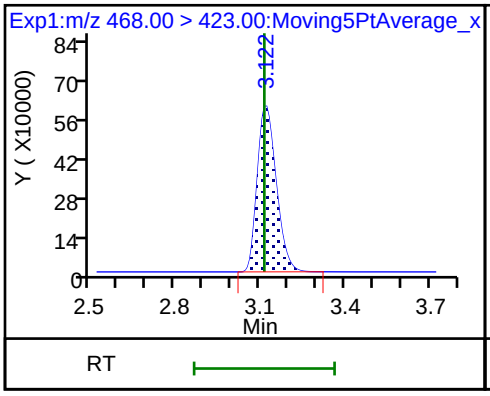
16 Perfluoroheptanesulfonic acid



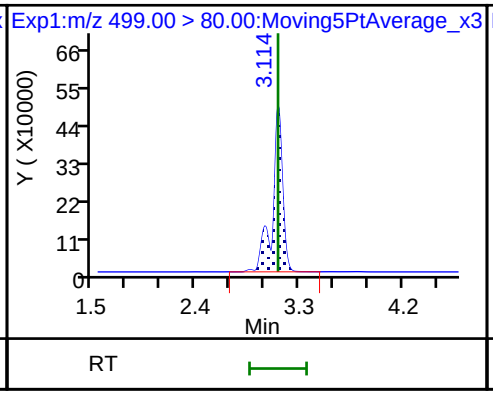
D 18 13C4 PFOS



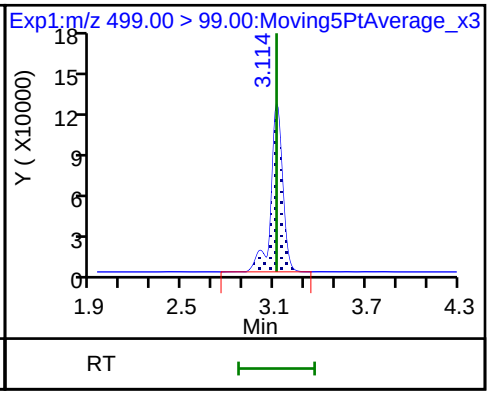
D 19 13C5 PFNA



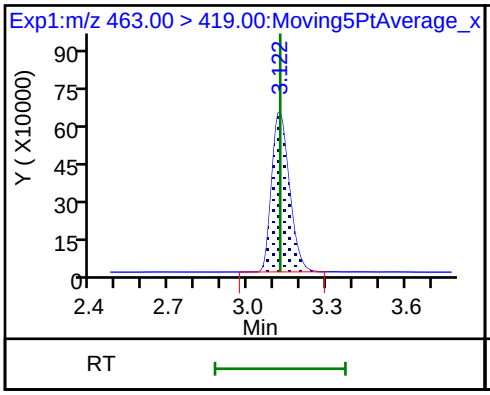
17 Perfluorooctane sulfonic acid



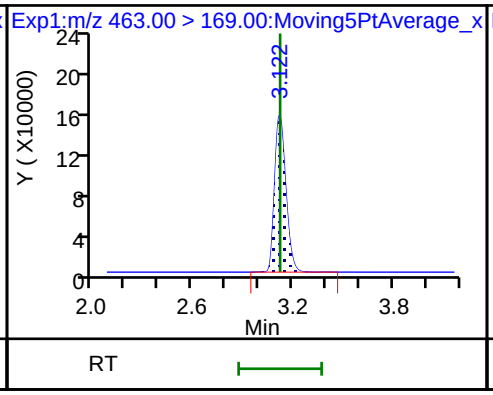
17 Perfluorooctane sulfonic acid



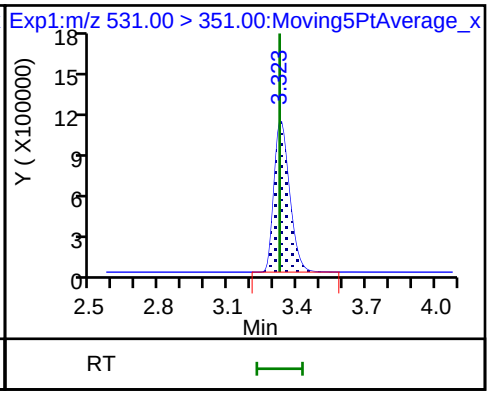
20 Perfluorononanoic acid



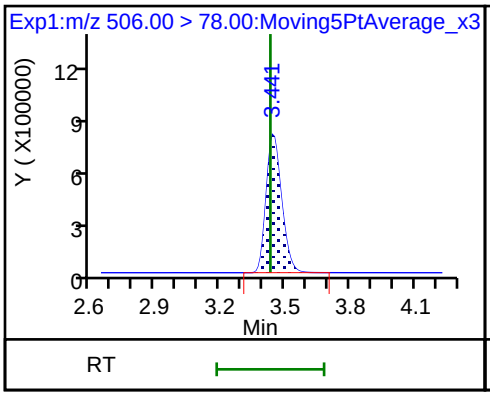
20 Perfluorononanoic acid



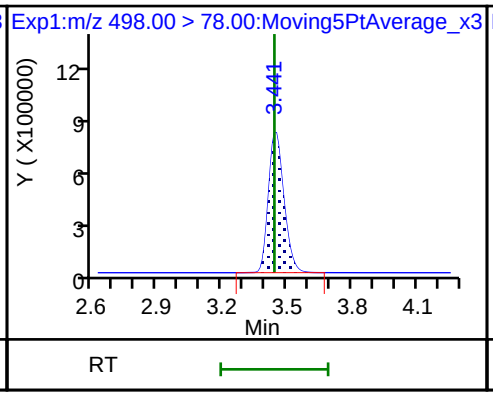
69 9-Chlorohexadecafluoro-3-oxanonane



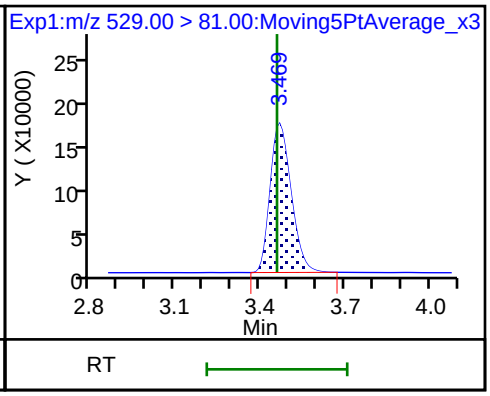
D 21 13C8 FOSA



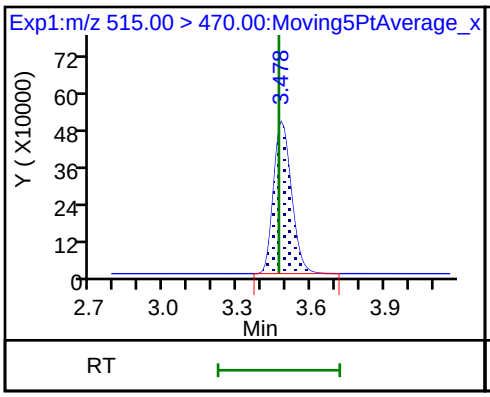
22 Perfluorooctane Sulfonamide



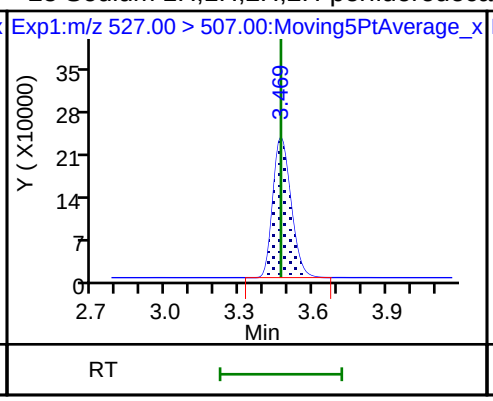
D 26 M2-8:2FTS



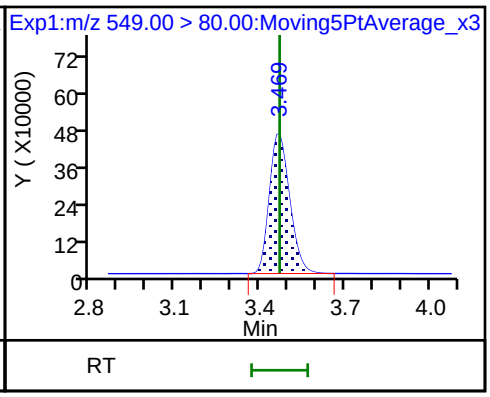
D 23 13C2 PFDA



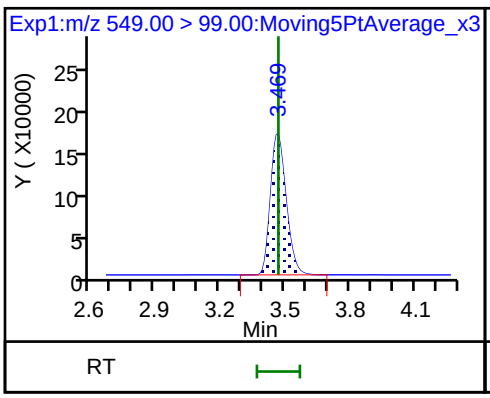
25 Sodium 1H,1H,2H,2H-perfluorodecane



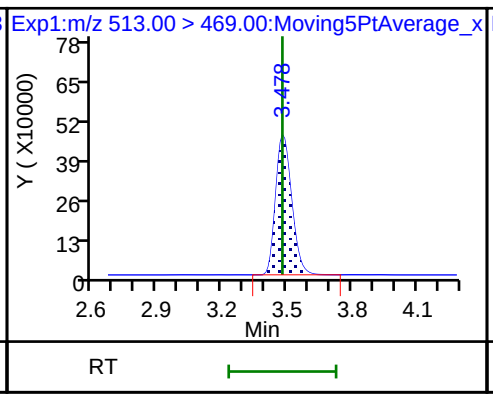
68 Perfluorononanesulfonic acid



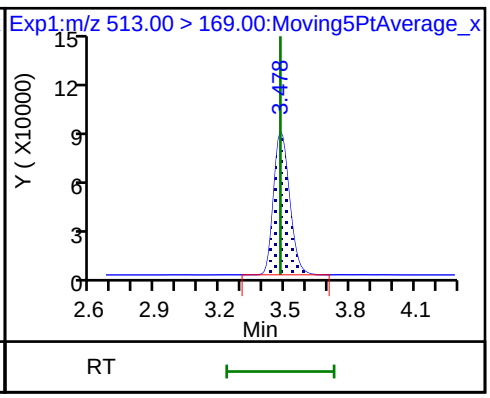
68 Perfluorononanesulfonic acid



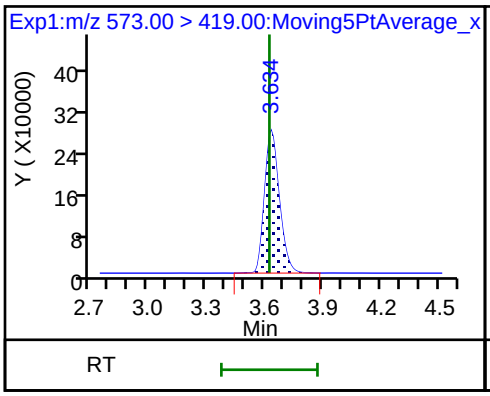
24 Perfluorodecanoic acid



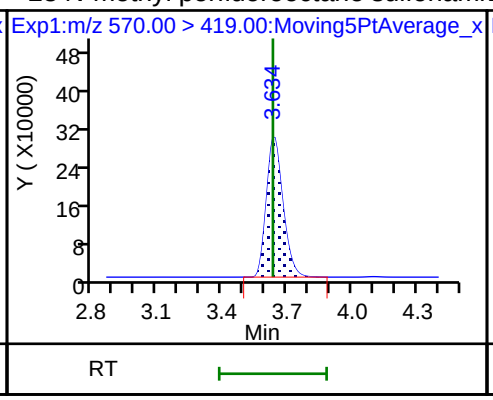
24 Perfluorodecanoic acid



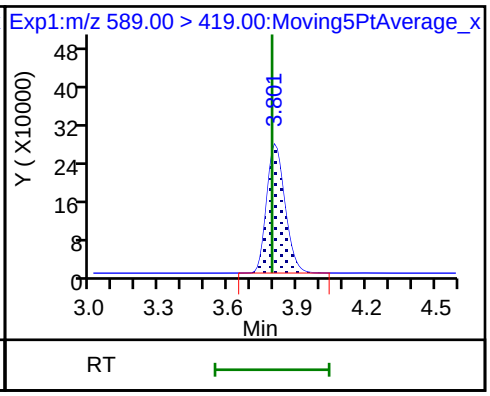
D 27 d3-NMeFOSAA



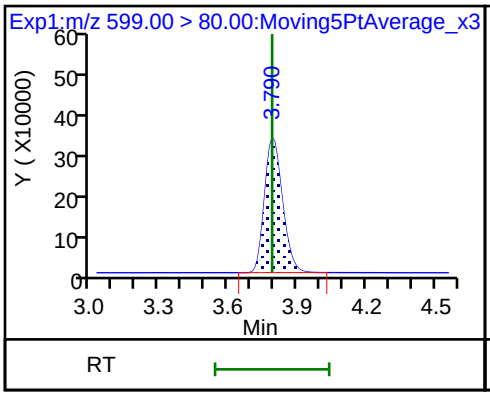
28 N-methyl perfluorooctane sulfonami



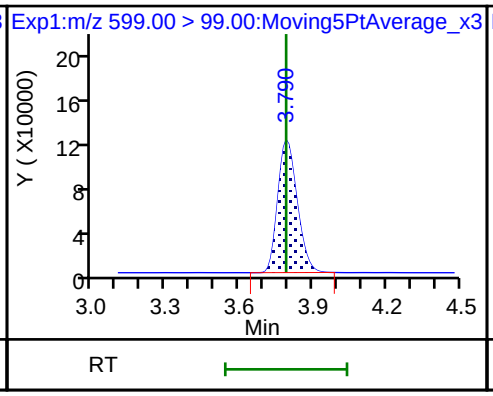
D 32 d5-NEtFOSAA



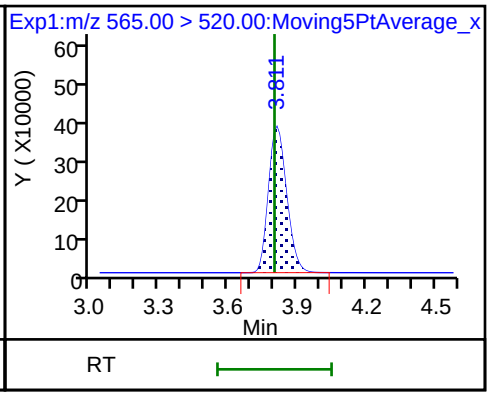
29 Perfluorodecane Sulfonic acid



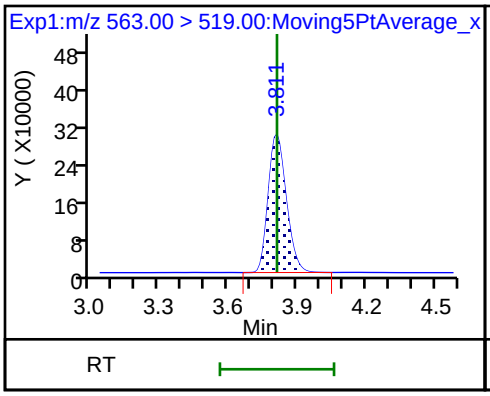
29 Perfluorodecane Sulfonic acid



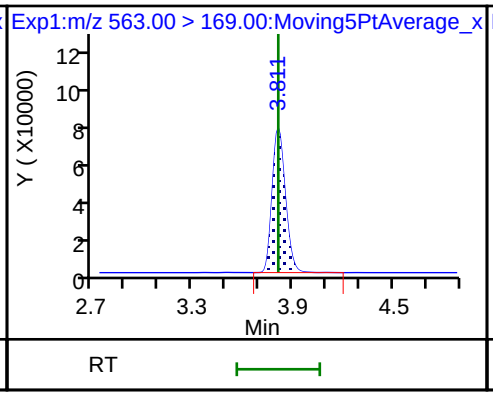
D 30 13C2 PFUnA



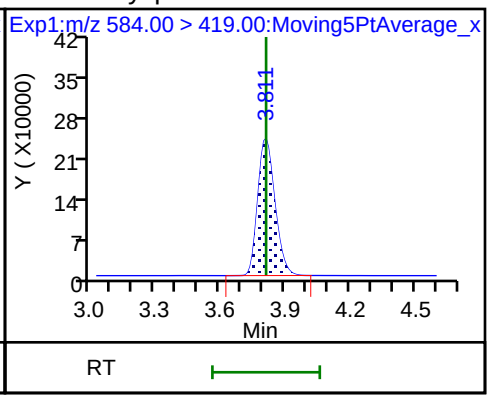
31 Perfluoroundecanoic acid



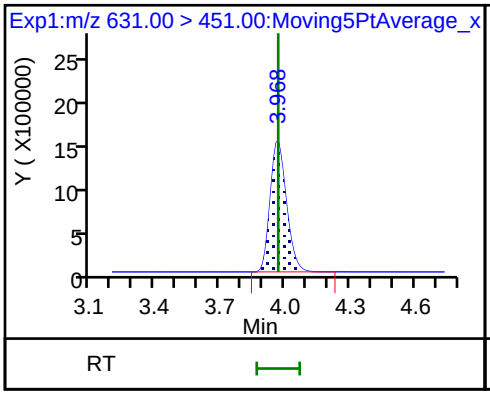
31 Perfluoroundecanoic acid



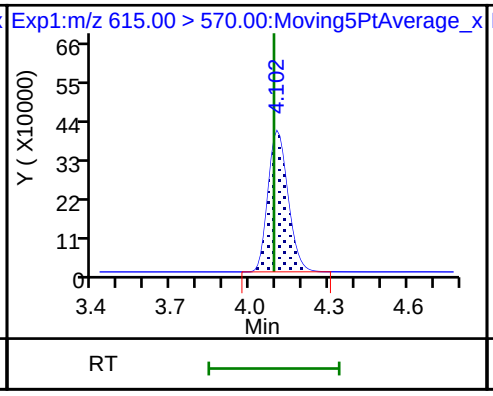
33 N-ethyl perfluorooctane sulfonamid



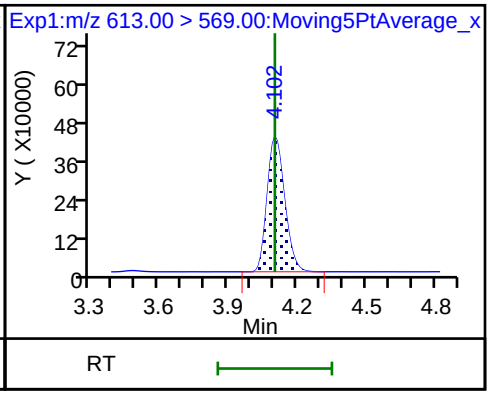
66 11-Chloroeicosafluoro-3-oxaundecan



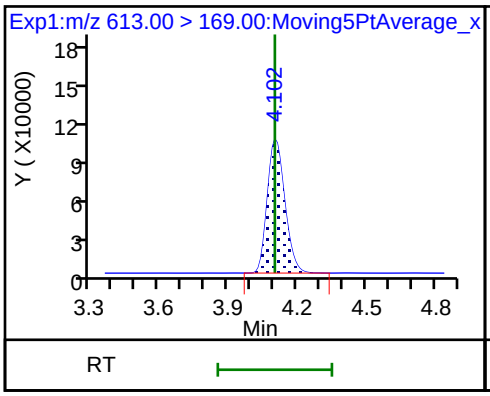
D 36 13C2 PFDoA



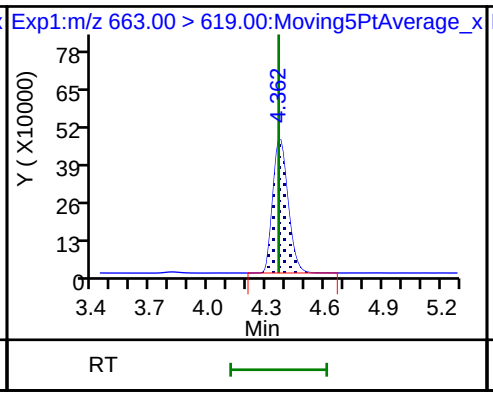
37 Perfluorododecanoic acid



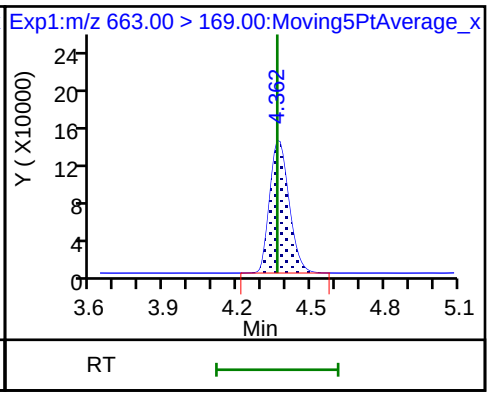
37 Perfluorododecanoic acid



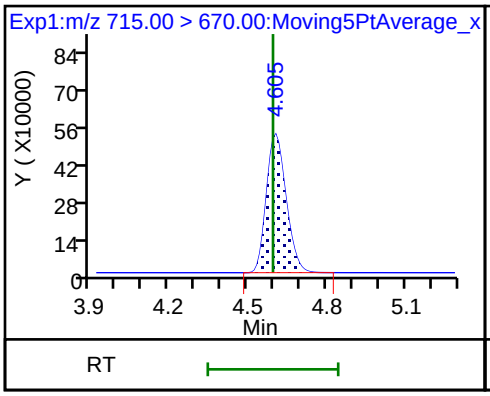
41 Perfluorotridecanoic acid



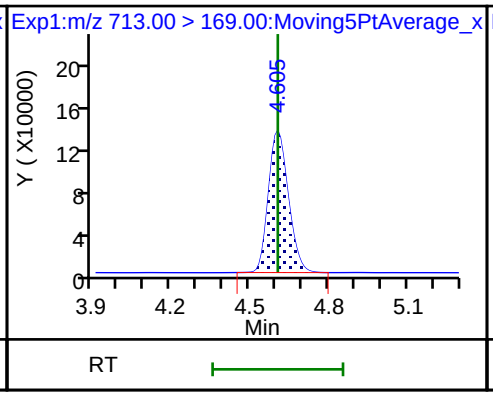
41 Perfluorotridecanoic acid



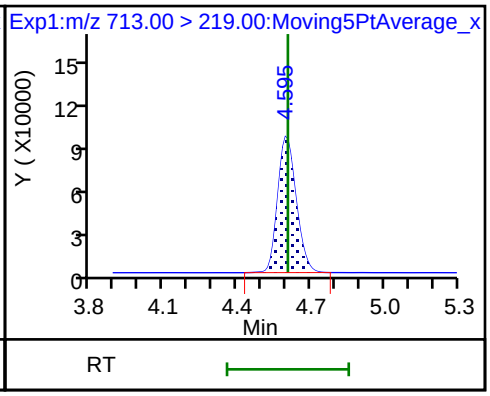
D 43 13C2-PFTeDA



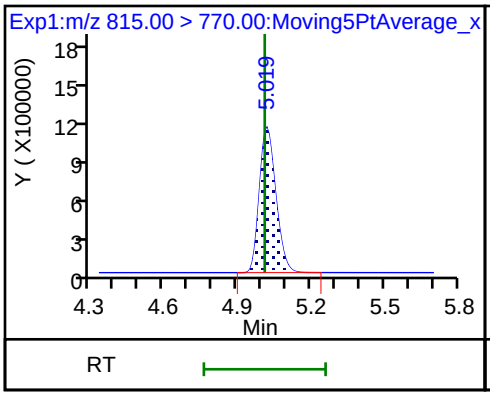
42 Perfluorotetradecanoic acid



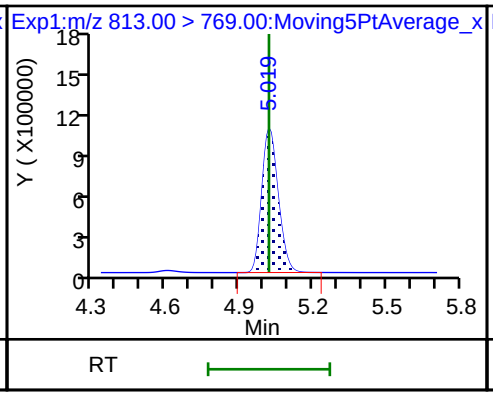
42 Perfluorotetradecanoic acid



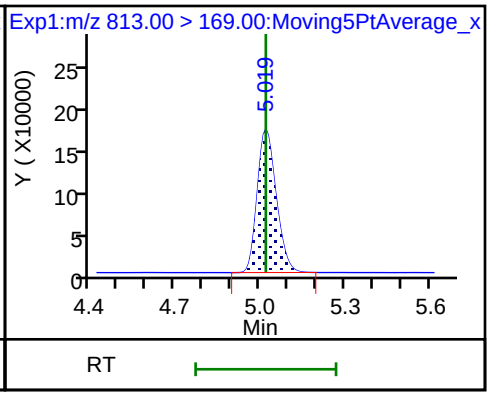
D 44 13C2-PFHxDA



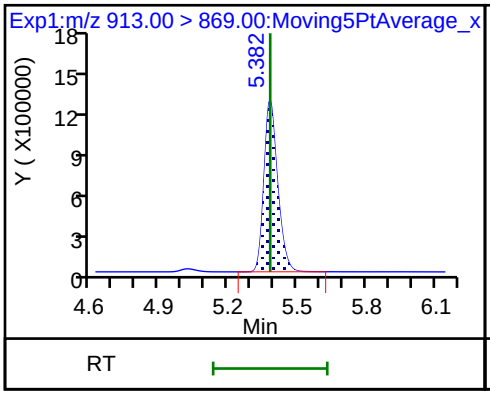
45 Perfluorohexadecanoic acid



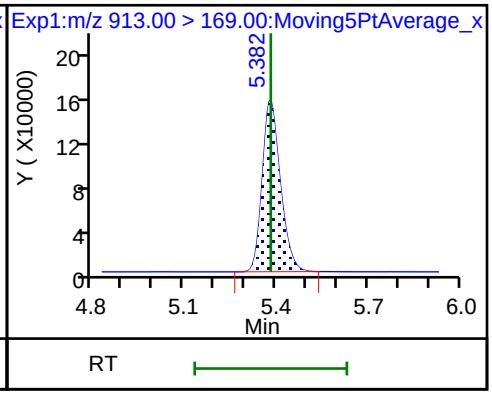
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222655/16 Calibration Date: 05/10/2018 21:25

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.10LLB_014.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9286	0.9021		0.971	1.00	-2.9	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.192	1.103		0.926	1.00	-7.4	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.29	77.90		0.880	0.884	-0.5	50.0
4:2 FTS	AveID	16.03	17.33		1.01	0.934	8.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.016	0.9431		0.928	1.00	-7.2	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	71.51	72.68		0.953	0.938	1.6	50.0
HFPO-DA (GenX)	AveID	2.785	3.082		1.11	1.00	10.7	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.001	1.068		1.07	1.00	6.7	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.132	1.003		0.806	0.910	-11.4	40.0
Adona	AveID	3.464	3.583		1.03	1.00	3.4	50.0
6:2FTS	AveID	1.691	1.706		0.957	0.948	0.9	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.155	1.070		0.926	1.00	-7.4	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.328	1.300		0.932	0.952	-2.1	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.088	1.019		0.869	0.928	-6.3	40.0
Perfluorononanoic acid (PFNA)	AveID	1.043	1.079		1.03	1.00	3.5	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.885	1.739		0.860	0.932	-7.8	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.012	0.9545		0.944	1.00	-5.6	40.0
8:2FTS	AveID	1.265	1.280		0.969	0.958	1.2	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7994	0.7189		0.863	0.960	-10.1	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.032	0.9900		0.960	1.00	-4.0	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.997	1.088		1.09	1.00	9.1	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6492	0.6366		0.945	0.964	-1.9	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9345	0.9205		0.985	1.00	-1.5	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8451	0.7686		0.910	1.00	-9.0	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.912	2.689		0.870	0.942	-7.7	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.043	1.036		0.994	1.00	-0.6	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.215	1.119		0.921	1.00	-7.9	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2511	0.2359		0.939	1.00	-6.1	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9523		0.983	1.00	-1.7	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-222655/16 Calibration Date: 05/10/2018 21:25

Instrument ID: A8_N Calib Start Date: 04/10/2018 18:39

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 04/10/2018 19:26

Lab File ID: 2018.05.10LLB_014.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.004	1.023		1.02	1.00	1.9	50.0
13C4 PFBA	Ave	1.345	1.398		2.60	2.50	3.9	50.0
13C5 PFPeA	Ave	0.8672	0.9313		2.68	2.50	7.4	50.0
13C3-PFBS	Ave	0.0199	0.0195		2.28	2.33	-2.0	50.0
M2-4:2FTS	Ave	0.1425	0.1531		2.51	2.34	7.4	50.0
13C2 PFHxA	Ave	0.9590	1.000		2.61	2.50	4.3	50.0
13C3 HFPO-DA	Ave	0.0593	0.0514		2.17	2.50	-13.3	50.0
13C4-PFHpA	Ave	0.9333	0.9614		2.58	2.50	3.0	50.0
18O2 PFHxS	Ave	1.152	1.195		2.45	2.37	3.8	50.0
M2-6:2FTS	Ave	0.2000	0.2159		2.56	2.38	7.9	40.0
13C4 PFOA	Ave	0.9276	0.9276		2.50	2.50	0.0	50.0
13C4 PFOS	Ave	0.8066	0.8028		2.38	2.39	-0.5	50.0
13C5 PFNA	Ave	0.7973	0.7568		2.37	2.50	-5.1	50.0
13C8 FOSA	Ave	1.007	0.9765		2.42	2.50	-3.1	50.0
M2-8:2FTS	Ave	0.2409	0.2459		2.44	2.40	2.1	40.0
13C2 PFDA	Ave	0.6701	0.6452		2.41	2.50	-3.7	50.0
d3-NMeFOSAA	Ave	0.3798	0.3664		2.41	2.50	-3.5	50.0
d5-NEtFOSAA	Ave	0.3749	0.3811		2.54	2.50	1.7	50.0
13C2 PFUnA	Ave	0.5781	0.5562		2.41	2.50	-3.8	50.0
13C2 PFDoA	Ave	0.6242	0.5569		2.23	2.50	-10.8	50.0
13C2-PFTeDA	Ave	0.7915	0.7236		2.29	2.50	-8.6	50.0
13C2-PFHxDA	Ave	1.288	1.200		2.33	2.50	-6.8	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_014.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 10-May-2018 21:25:33 ALS Bottle#: 37 Worklist Smp#: 16
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:25:34 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:25:20

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.475	1.469	0.006	1.000	5323660	2.60		104	38377	
2 Perfluorobutyric acid										
212.90 > 169.00	1.475	1.475	0.0	1.000	1920956	0.9715		97.1	1589	
D 3 13C5-PFPeA										
267.90 > 223.00	1.757	1.747	0.010	0.564	3547435	2.68		107	84793	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.757	1.757	0.0	1.000	1565377	0.9257		92.6	1432	
D 47 13C3-PFBS										
301.90 > 83.00	1.793	1.783	0.010	1.000	69113	2.28		98.0	566	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.793	1.793	0.0	1.000	2046938	0.8796		99.5	3268	
298.90 > 99.00	1.793	1.793	0.0	1.000	898068		2.28(1.25-3.74)		4026	
D 60 M2-4:2FTS										
329.00 > 81.00	2.015	2.003	0.012	1.000	544680	2.51		107	6348	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.015	2.015	0.0	1.000	481245	1.01		108	29763	
D 7 13C2 PFHxA										
315.00 > 270.00	2.049	2.048	0.001	1.000	3810080	2.61		104	78465	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.049	2.049	0.0	1.000	1437263	0.9281		92.8	3210	
313.00 > 119.00	2.049	2.049	0.0	1.000	138214		10.40(5.03-15.10)		1689	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.072	2.072	0.0	1.000	2026445	0.9533		102	15691	
349.00 > 99.00	2.072	2.072	0.0	1.000	736131		2.75(1.36-4.07)		17180	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.151	2.150	0.001	1.000	195943	2.17		86.7	5147	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.151	2.151	0.0	1.000	241575	1.11		111	1945	
D 9 13C4-PFHpA										
367.00 > 322.00	2.385	2.384	0.001	1.000	3662208	2.58		103	57732	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.385	2.385	0.0	1.000	1564587	1.07		107	2298	
363.00 > 169.00	2.385	2.385	0.0	1.000	558168		2.80(1.13-3.40)		3560	
D 11 18O2 PFHxS										
403.00 > 84.00	2.397	2.395	0.002	1.000	4307690	2.45		104	45160	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.397	2.397	0.0	1.000	1661824	0.8061		88.6	5089	
399.00 > 99.00	2.397	2.397	0.0	1.000	558710		2.97(1.50-4.49)		5289	
65 Adona										
377.00 > 251.00	2.430	2.430	0.0	1.000	4382789	1.03		103	62978	
377.00 > 85.00	2.430	2.430	0.0	1.000	2572310		1.70(0.84-2.53)		59299	
D 12 M2-6:2FTS										
429.00 > 81.00	2.721	2.712	0.009	1.000	781117	2.56		108	10920	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.721	2.721	0.0	1.000	531854	0.9566		101	10025	
* 62 13C2-PFOA										
415.00 > 370.00	2.744	2.744	0.0		3809239	2.50			49804	
D 14 13C4 PFOA										
417.00 > 372.00	2.744	2.742	0.002	1.000	3533523	2.50		100	78689	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.744	2.744	0.0	1.000	1512654	0.9263		92.6	700	
413.00 > 169.00	2.744	2.744	0.0	1.000	834614		1.81(0.84-2.52)		3423	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.752	2.752	0.0	1.000	1513449	0.9319		97.9	10611	
449.00 > 99.00	2.752	2.752	0.0	1.000	413507		3.66(1.94-5.82)		9216	
D 18 13C4 PFOS										
503.00 > 80.00	3.116	3.106	0.010	1.000	2923665	2.38		99.5	18199	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.116	3.116	0.0	1.000	1156902	0.8694		93.7	6189	
499.00 > 99.00	3.116	3.116	0.0	1.000	261367		4.43(2.31-6.93)		4648	
D 19 13C5 PFNA										
468.00 > 423.00	3.116	3.114	0.002	1.000	2882939	2.37		94.9	56900	
20 Perfluorononanoic acid										
463.00 > 419.00	3.124	3.124	0.0	1.003	1244158	1.03		103	3089	
463.00 > 169.00	3.116	3.124	-0.008	1.000	291159		4.27(1.90-5.69)		7020	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.325	3.325	0.0	1.000	1982285	0.8596		92.2	30564	
D 21 13C8 FOSA										
506.00 > 78.00	3.442	3.431	0.011	1.000	3719585	2.42		96.9	37389	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.442	3.442	0.0	1.000	1420084	0.9436		94.4	25775	
D 26 M2-8:2FTS										
529.00 > 81.00	3.470	3.459	0.011	1.000	897285	2.44		102	8483	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.480	3.468	0.012	1.000	2457849	2.41		96.3	49289	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.470	3.470	0.0	1.000	459382	0.9690		101	22360	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.470	3.470	0.0	1.000	844207	0.8633		89.9	10477	
549.00 > 99.00	3.470	3.470	0.0	1.000	304131		2.78(1.33-3.97)		9991	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.480	3.480	0.0	1.000	973268	0.9596		96.0	4665	
513.00 > 169.00	3.480	3.480	0.0	1.000	177567		5.48(2.36-7.09)		3268	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.635	3.624	0.011	1.000	1395739	2.41		96.5	26168	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.635	3.635	0.0	1.000	607285	1.09		109	7690	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.800	3.790	0.010	1.000	1451759	2.54		102	12178	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.790	3.790	0.0	1.000	750744	0.9453		98.1	8264	
599.00 > 99.00	3.790	3.790	0.0	1.000	234176		3.21(1.39-4.16)		7440	
D 30 13C2 PFUnA										
565.00 > 520.00	3.811	3.800	0.011	1.000	2118572	2.41		96.2	44636	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.811	3.811	0.0	1.000	651353	0.9095		91.0	3645	
563.00 > 169.00	3.811	3.811	0.0	1.000	171115		3.81(2.12-6.36)		4575	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.811	3.811	0.0	1.003	534513	0.9850		98.5	16380	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.966	3.966	0.0	1.000	3098823	0.8698		92.3	33655	
D 36 13C2 PFDoA										
615.00 > 570.00	4.100	4.091	0.009	1.000	2121199	2.23		89.2	25204	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.100	4.100	0.0	1.000	879413	0.99		99.4	1224	
613.00 > 169.00	4.100	4.100	0.0	1.000	216222		4.07(2.13-6.40)		3125	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.372	4.372	0.0	1.000	949678	0.9209		92.1	934	
663.00 > 169.00	4.372	4.372	0.0	1.000	300973		3.16(1.25-3.76)		3068	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.604	4.595	0.009	1.000	2756479	2.29		91.4	19172	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.604	4.604	0.0	1.000	260142	0.9394		93.9	2955	
713.00 > 219.00	4.604	4.604	0.0	1.000	195230		1.33(0.71-2.13)		2334	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.018	5.010	0.008	1.000	4571419	2.33		93.2	13552	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.027	5.027	0.0	1.002	1741370	0.9834		98.3	717	
813.00 > 169.00	5.027	5.027	0.0	1.002	290207		6.00(2.86-8.58)		2687	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.387	5.387	0.0	1.000	1871112	1.02		102	694	
913.00 > 169.00	5.381	5.387	-0.006	0.999	244682		7.65(3.83-11.48)		2415	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 18-May-2018 15:25:36 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_014.d

Injection Date: 10-May-2018 21:25:33 Instrument ID: A8_N

Lims ID: CCV L4

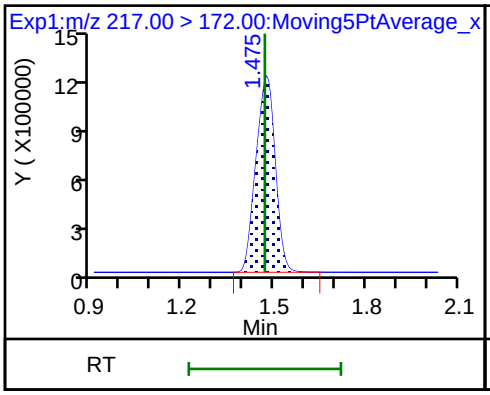
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 37 Worklist Smp#: 16

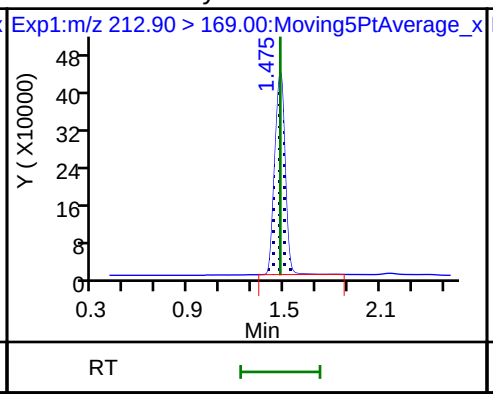
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

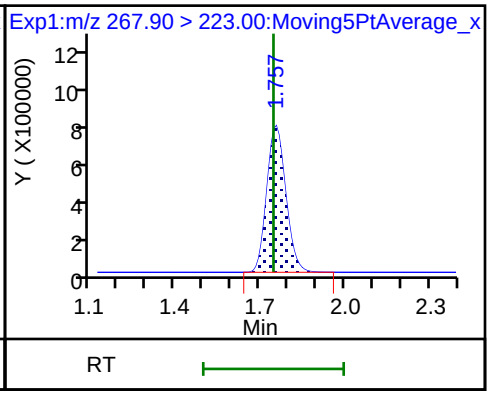
D 1 13C4 PFBA



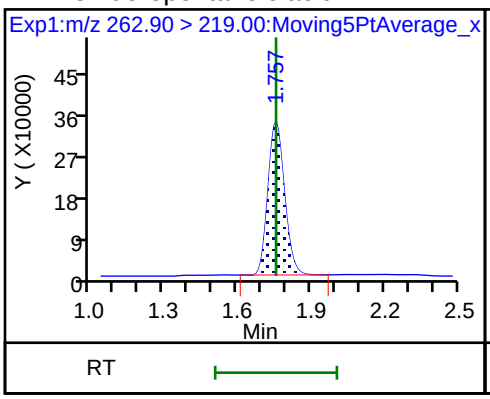
2 Perfluorobutyric acid



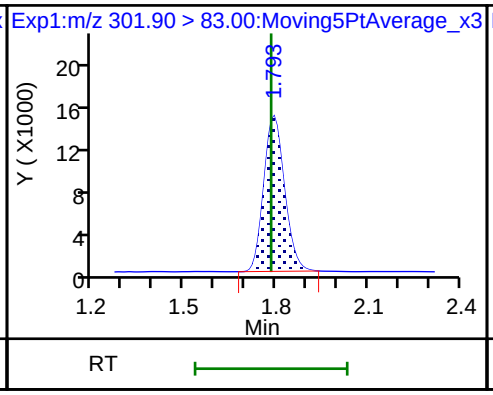
D 3 13C5-PFPeA



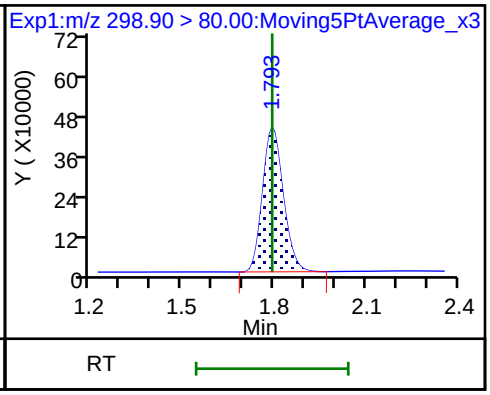
4 Perfluoropentanoic acid



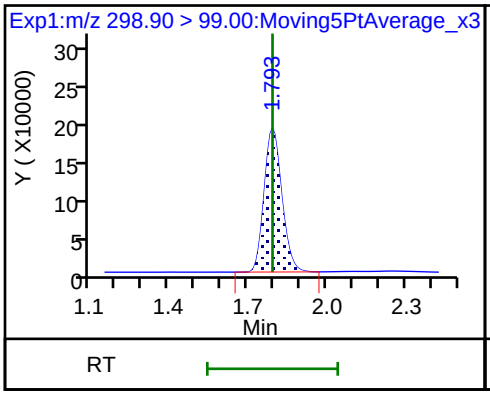
D 47 13C3-PFBS



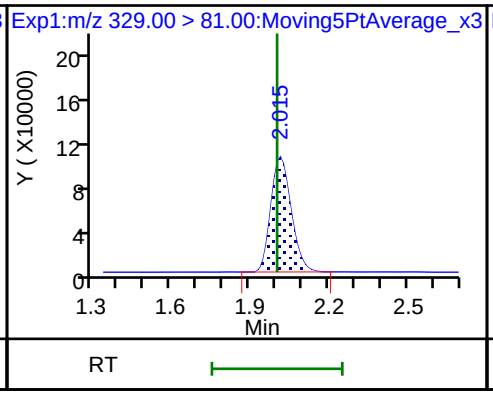
5 Perfluorobutanesulfonic acid



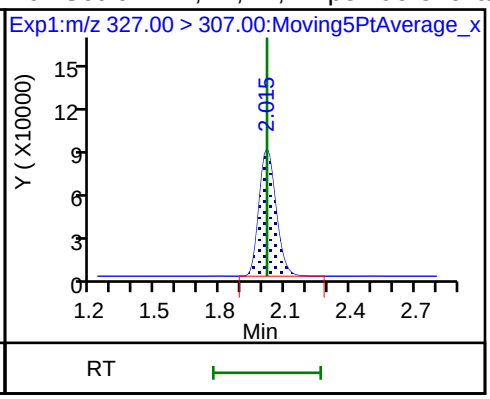
5 Perfluorobutanesulfonic acid



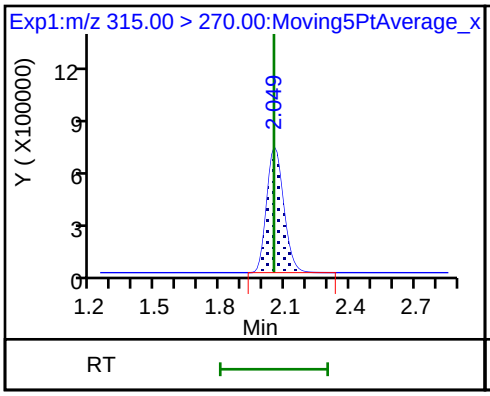
D 60 M2-4:2FTS



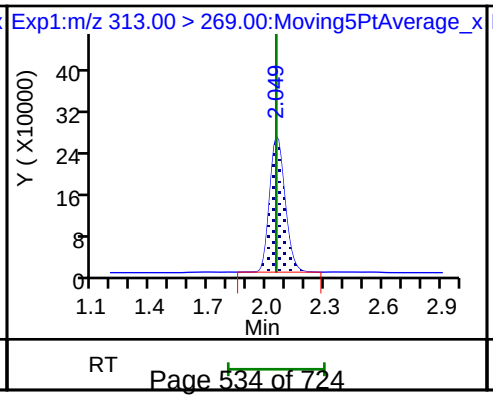
61 Sodium 1H,1H,2H,2H-perfluorohexane



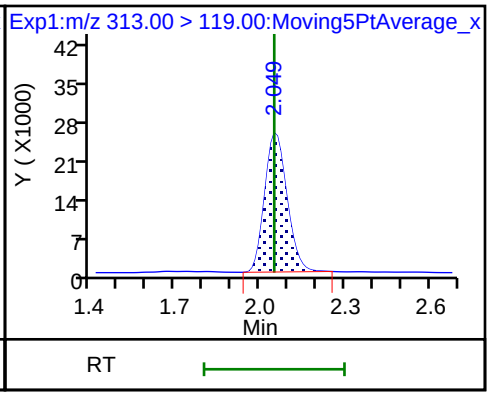
D 7 13C2 PFHxA



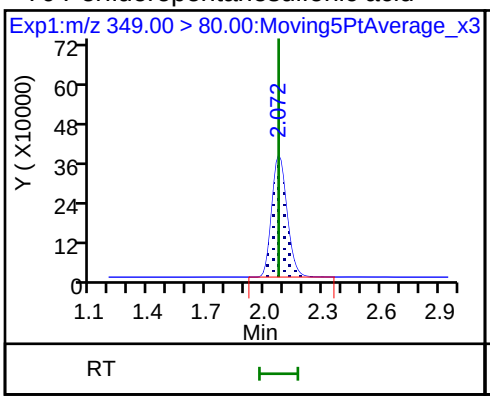
6 Perfluorohexanoic acid



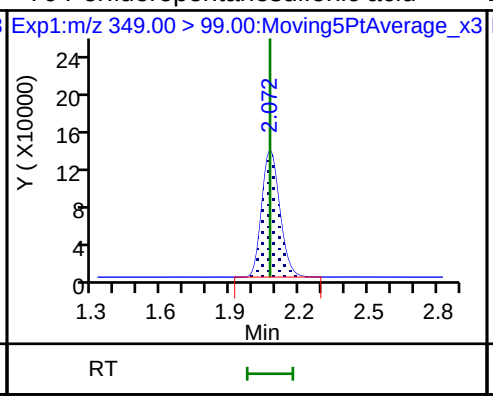
6 Perfluorohexanoic acid



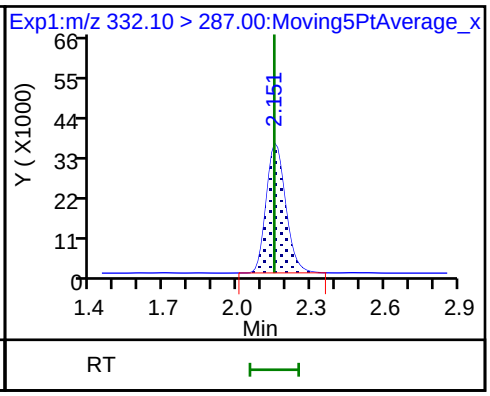
70 Perfluoropentanesulfonic acid



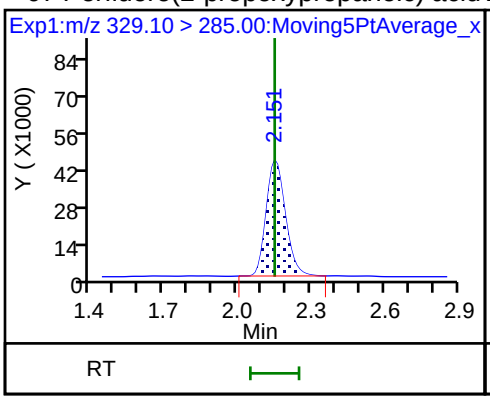
70 Perfluoropentanesulfonic acid



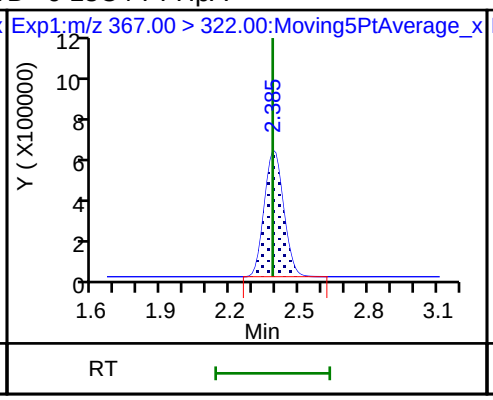
D 64 13C3 HFPO-DA



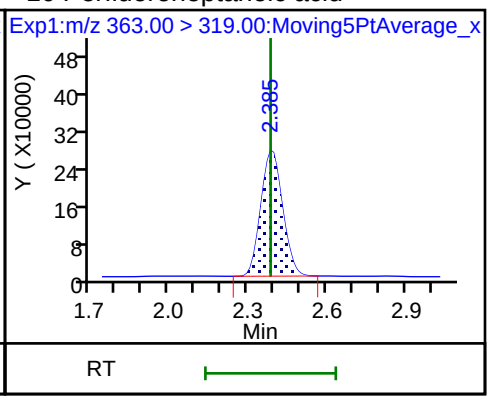
67 Perfluoro(2-propoxypropanoic) acid



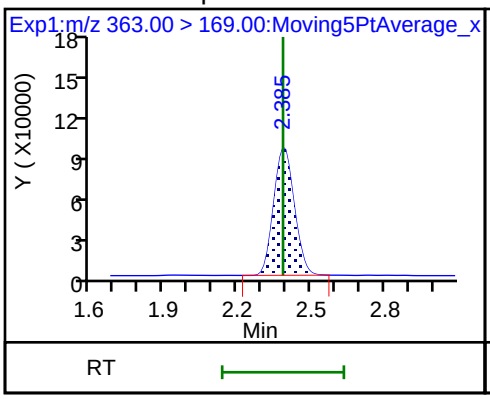
D 9 13C4-PFHpA



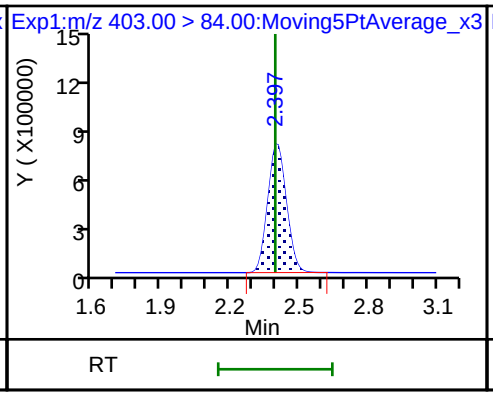
10 Perfluoroheptanoic acid



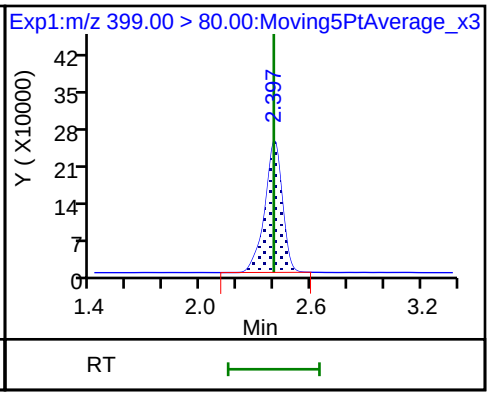
10 Perfluoroheptanoic acid



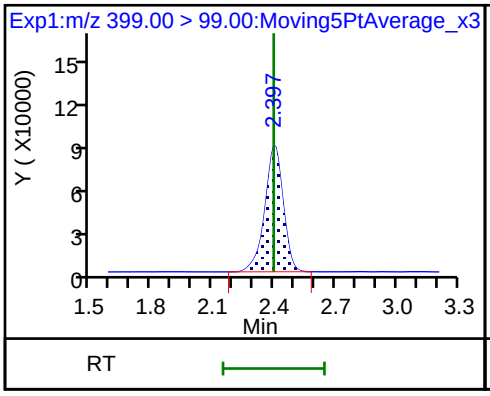
D 11 18O2 PFHxS



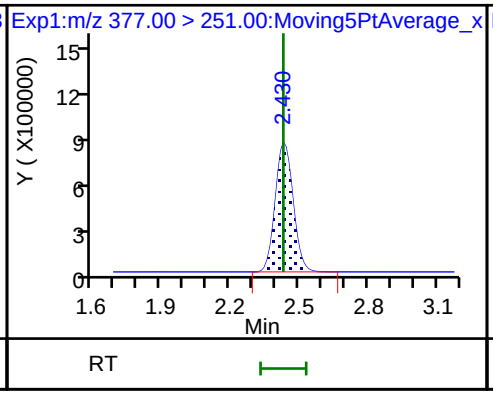
8 Perfluorohexanesulfonic acid



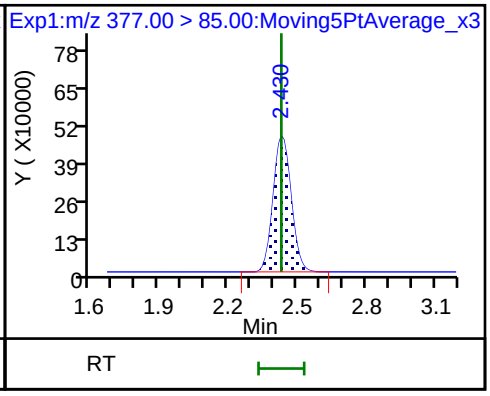
8 Perfluorohexanesulfonic acid



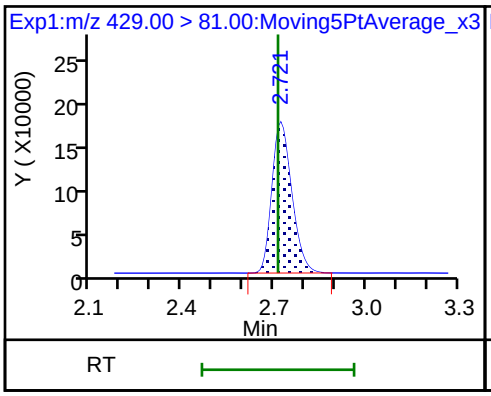
65 Adona



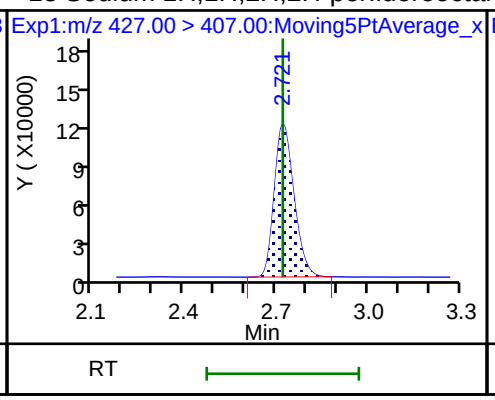
65 Adona



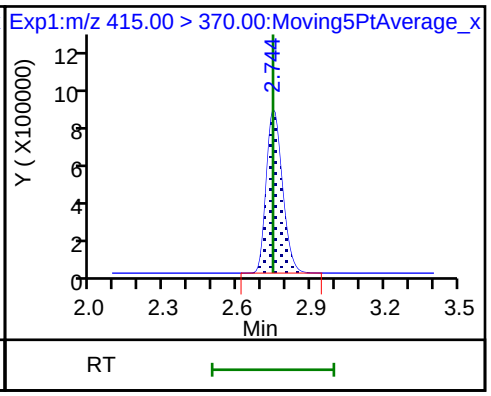
D 12 M2-6:2FTS



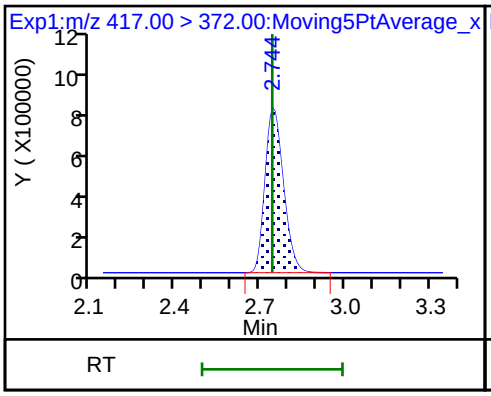
13 Sodium 1H,1H,2H,2H-perfluorooctane



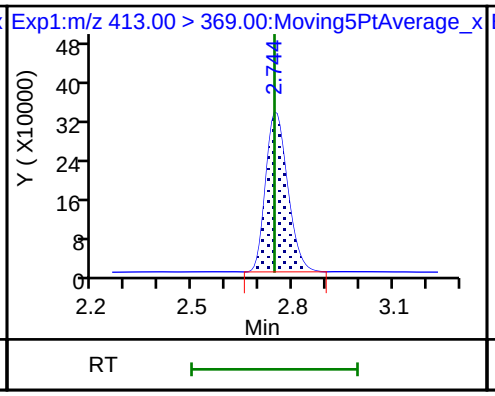
* 62 13C2-PFOA



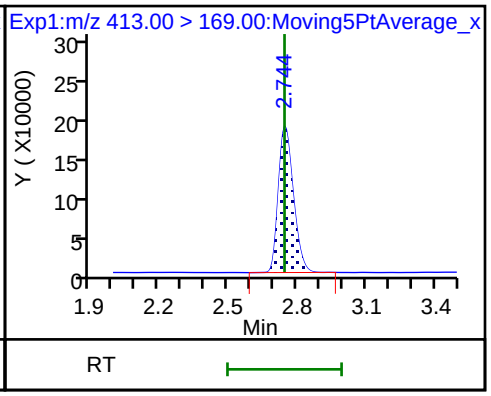
D 14 13C4 PFOA



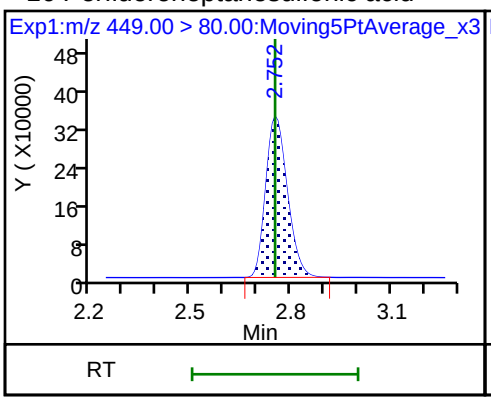
15 Perfluorooctanoic acid



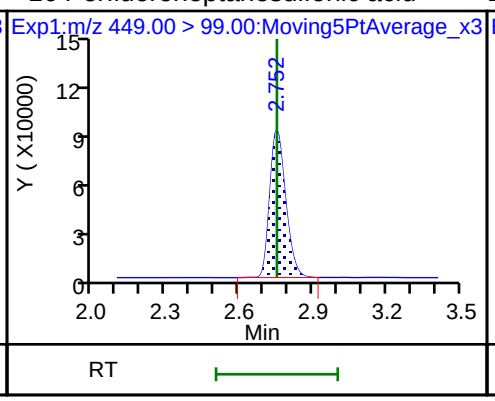
15 Perfluorooctanoic acid



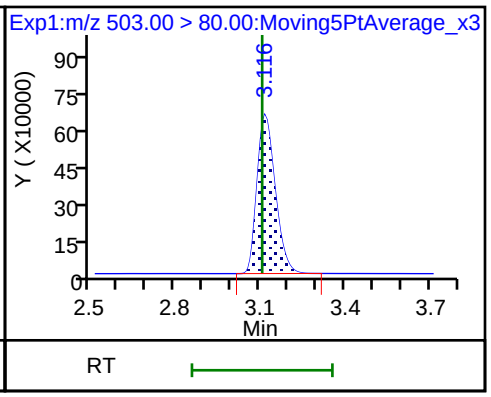
16 Perfluoroheptanesulfonic acid



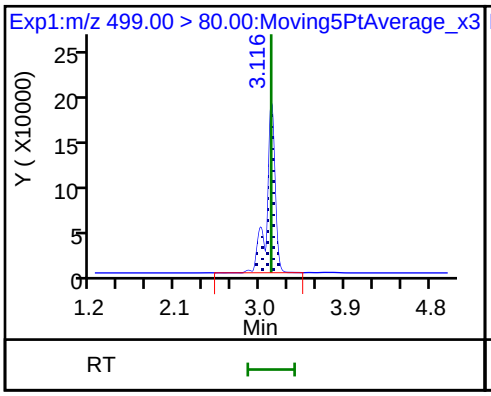
16 Perfluoroheptanesulfonic acid



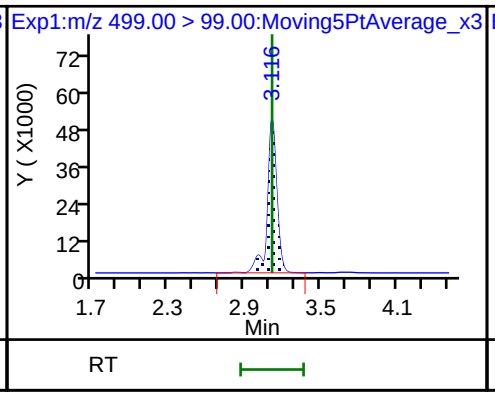
D 18 13C4 PFOS



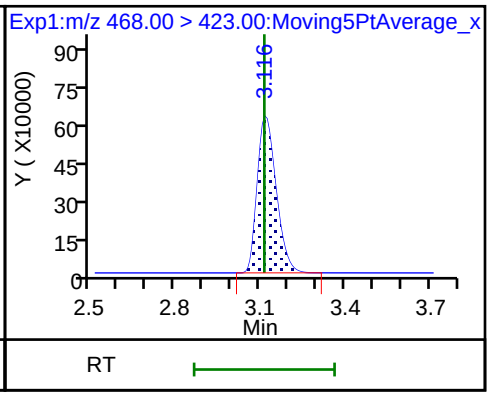
17 Perfluorooctane sulfonic acid



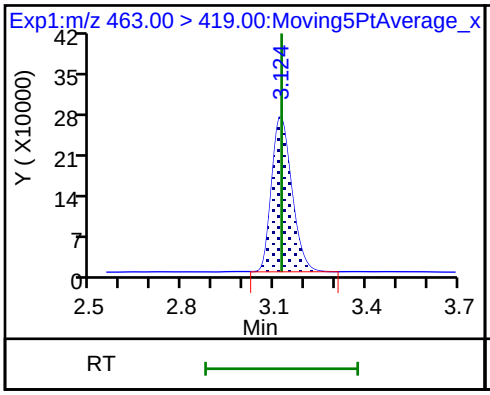
17 Perfluorooctane sulfonic acid



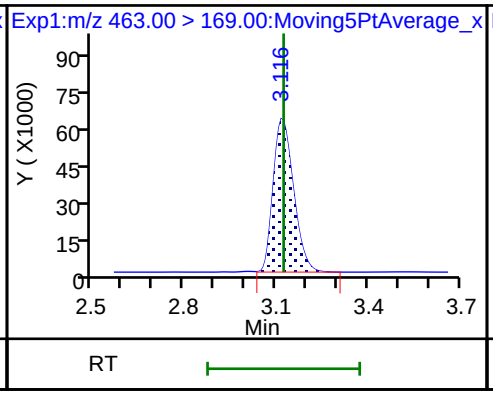
D 19 13C5 PFNA



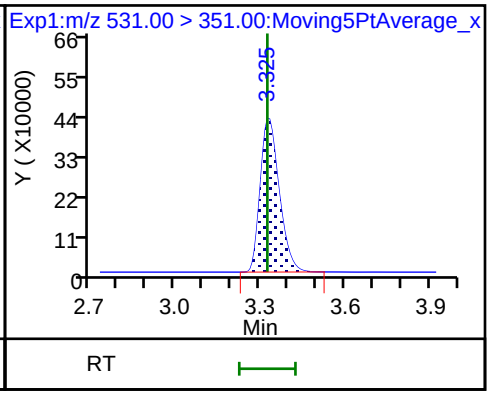
20 Perfluorononanoic acid



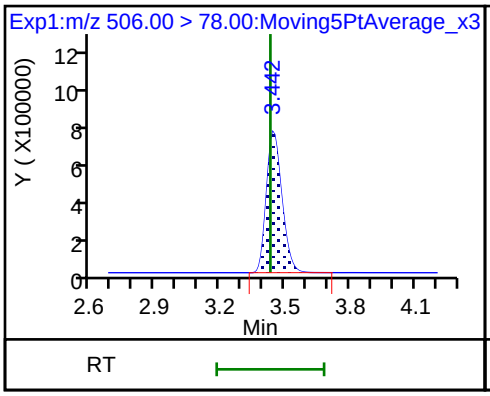
20 Perfluorononanoic acid



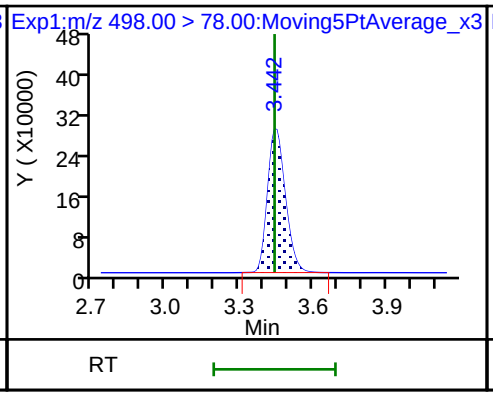
69 9-Chlorohexadecafluoro-3-oxanonane



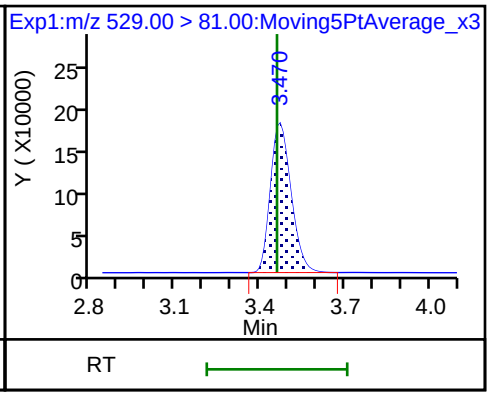
D 21 13C8 FOSA



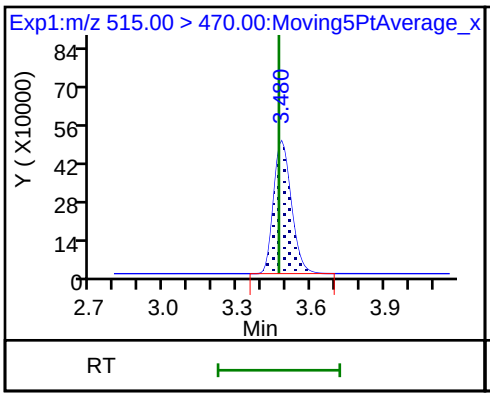
22 Perfluorooctane Sulfonamide



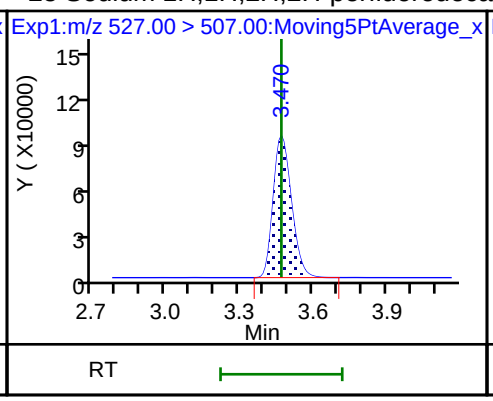
D 26 M2-8:2FTS



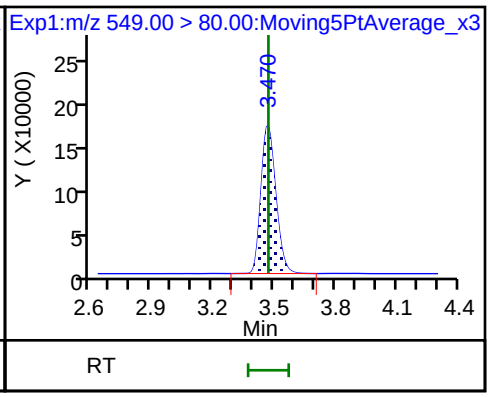
D 23 13C2 PFDA



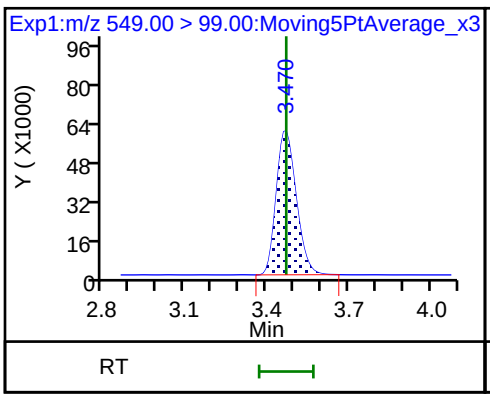
25 Sodium 1H,1H,2H,2H-perfluorodecane



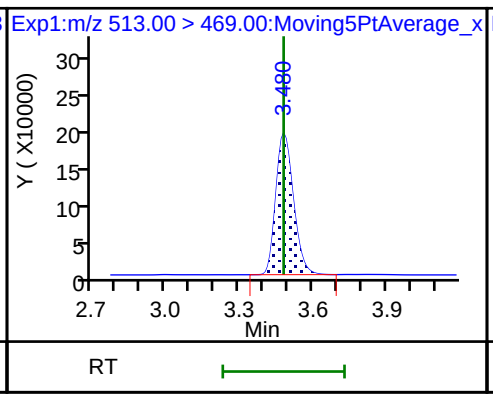
68 Perfluorononanesulfonic acid



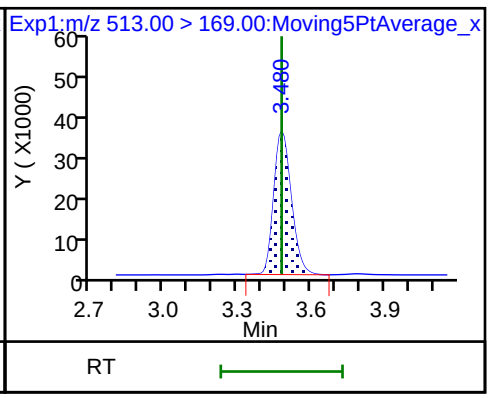
68 Perfluorononanesulfonic acid



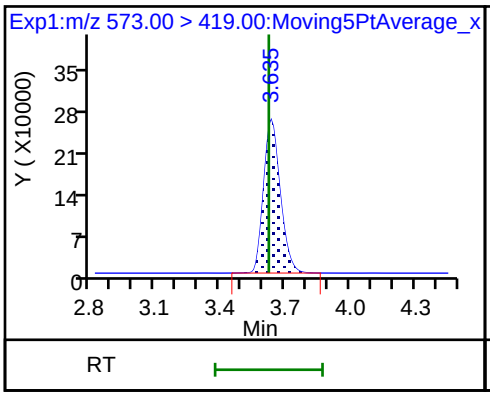
24 Perfluorodecanoic acid



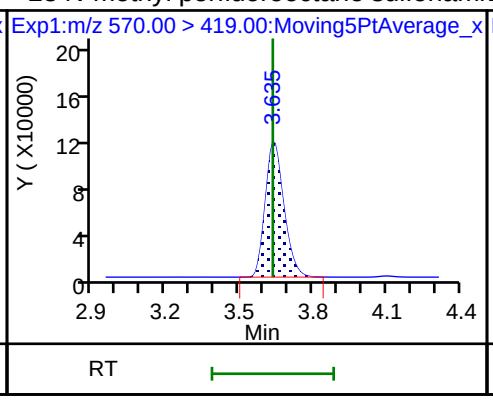
24 Perfluorodecanoic acid



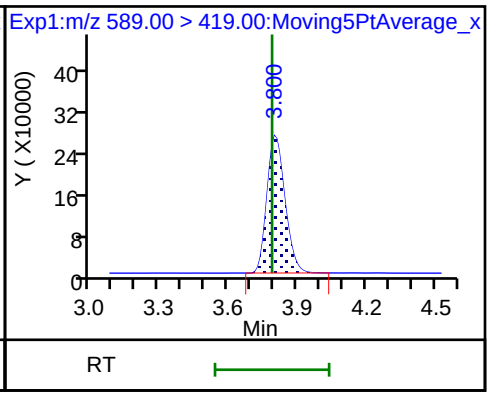
D 27 d3-NMeFOSAA



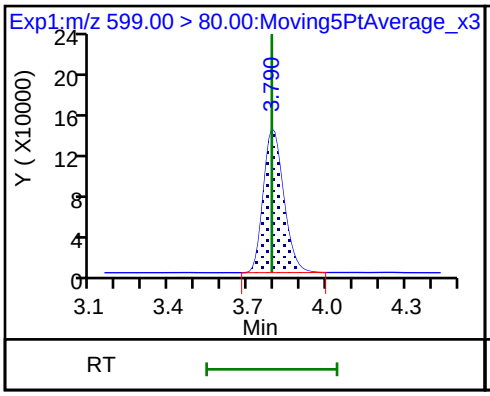
28 N-methyl perfluorooctane sulfonami



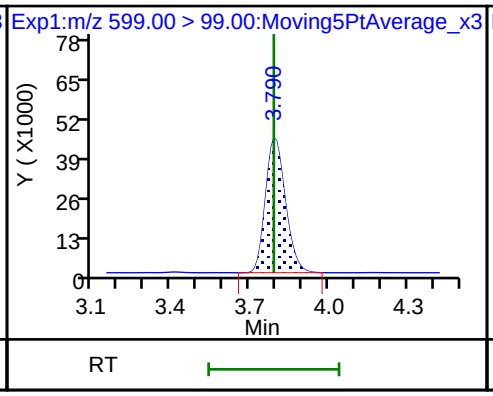
D 32 d5-NEtFOSAA



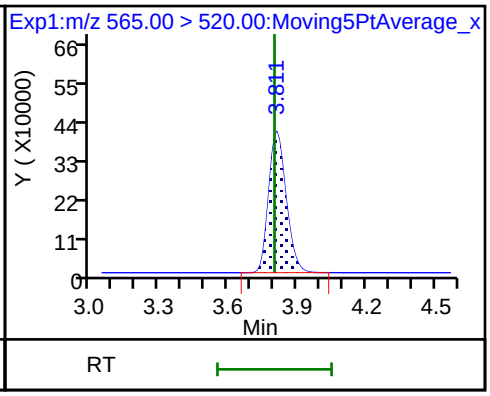
29 Perfluorodecane Sulfonic acid



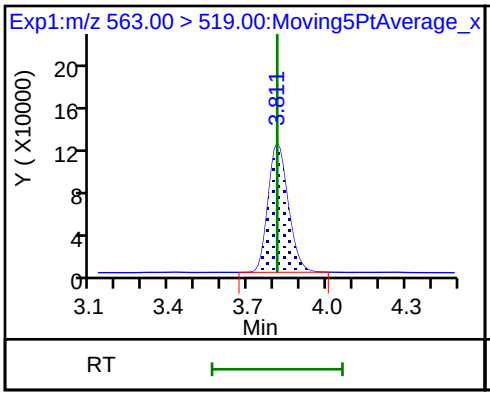
29 Perfluorodecane Sulfonic acid



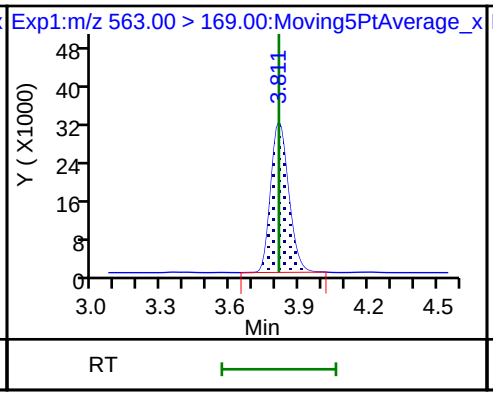
D 30 13C2 PFUnA



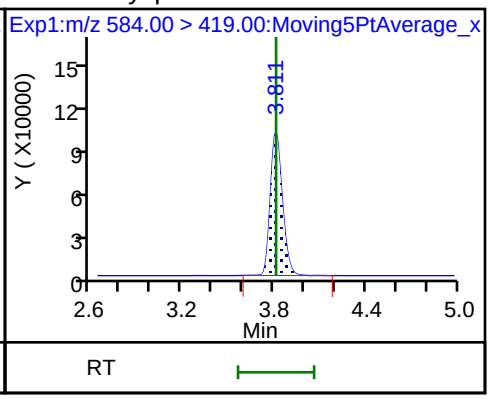
31 Perfluoroundecanoic acid



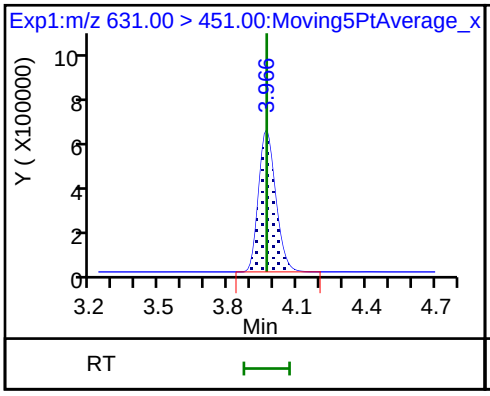
31 Perfluoroundecanoic acid



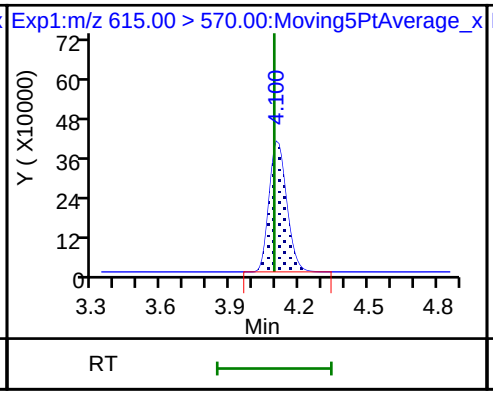
33 N-ethyl perfluorooctane sulfonamid



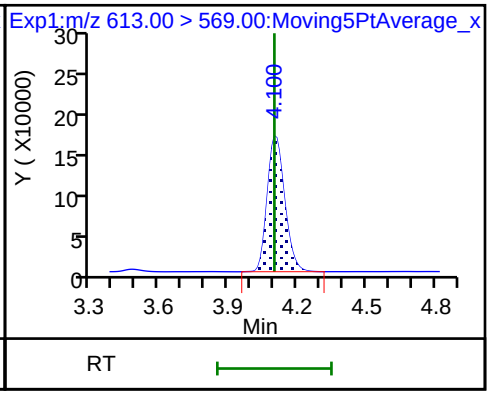
66 11-Chloroeicosafluoro-3-oxaundecan



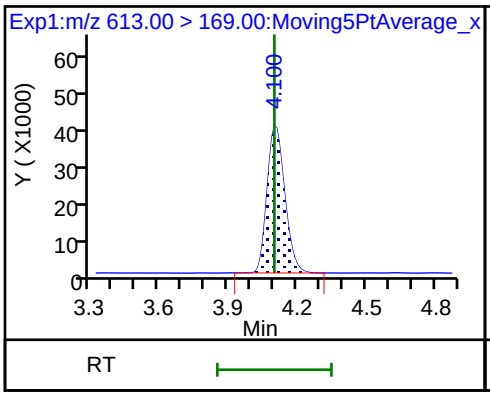
D 36 13C2 PFDoA



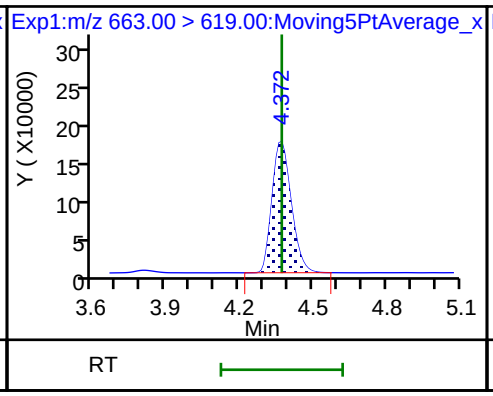
37 Perfluorododecanoic acid



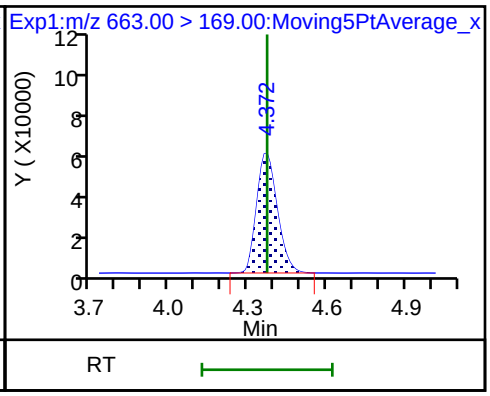
37 Perfluorododecanoic acid



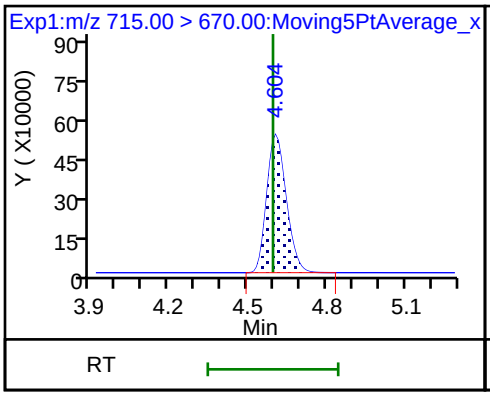
41 Perfluorotridecanoic acid



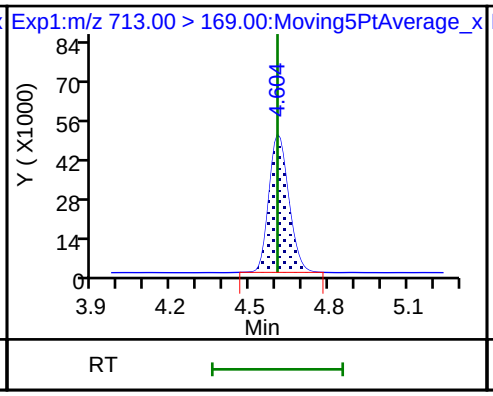
41 Perfluorotridecanoic acid



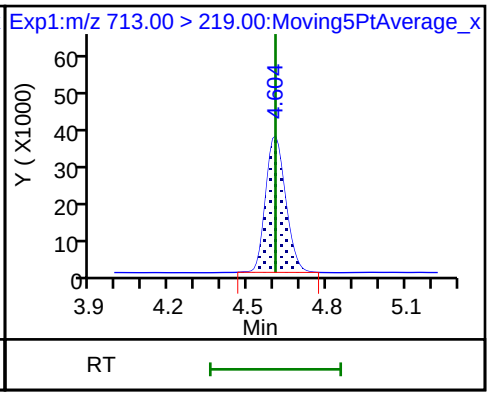
D 43 13C2-PFTeDA



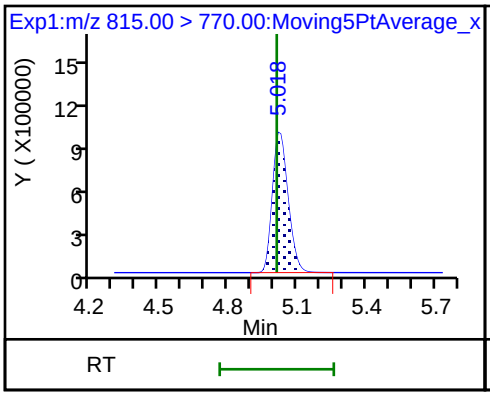
42 Perfluorotetradecanoic acid



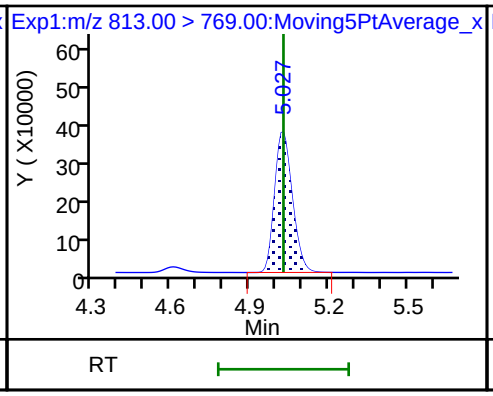
42 Perfluorotetradecanoic acid



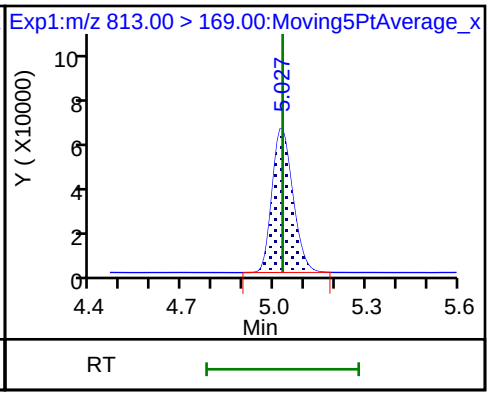
D 44 13C2-PFHxDA



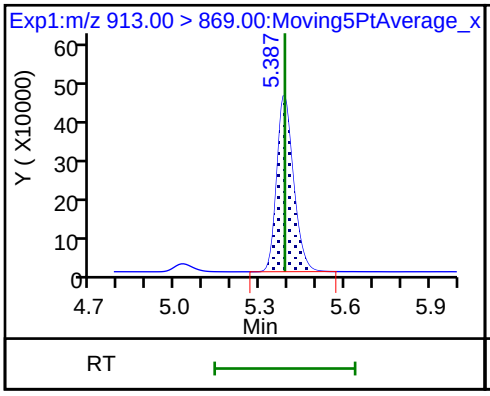
45 Perfluorohexadecanoic acid



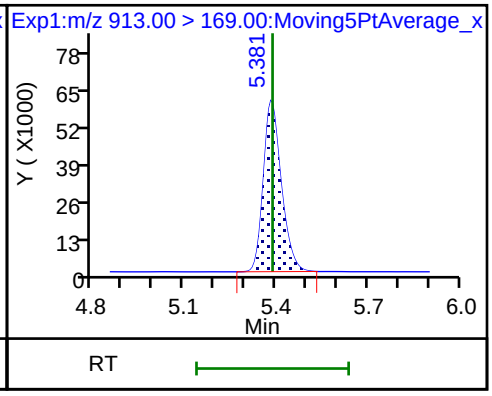
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: ICV 320-223412/13 Calibration Date: 05/15/2018 17:23

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.15LLCC_ICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9298	0.9503		2.55	2.50	2.2	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.181	1.167		2.47	2.50	-1.1	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.09	82.15		2.33	2.21	5.2	50.0
4:2 FTS	AveID	16.57	18.05		2.55	2.34	8.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.028	1.004		2.44	2.50	-2.3	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.55	71.81		2.43	2.35	3.3	50.0
HFPO-DA (GenX)	AveID	3.057	3.130		2.56	2.50	2.4	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.056	1.142		2.70	2.50	8.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.127	1.055		2.14	2.28	-6.3	40.0
Adona	AveID	3.427	3.558		2.60	2.50	3.8	50.0
6:2FTS	L2ID		1.554		2.09	2.38	-11.9	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.177	1.151		2.44	2.50	-2.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.332	1.351		2.41	2.38	1.4	50.0
Perfluorononanoic acid (PFNA)	AveID	1.059	1.072		2.53	2.50	1.2	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.176	1.149		2.26	2.31	-2.3	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.794	1.828		2.38	2.33	1.9	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.9902		2.54	2.50	1.7	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7575	0.7598		2.41	2.40	0.3	50.0
8:2FTS	AveID	1.349	1.309		2.33	2.40	-3.0	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9722	1.037		2.67	2.50	6.7	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.015	1.021		2.52	2.50	0.6	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6714	0.7025		2.52	2.41	4.6	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9400	0.9652		2.57	2.50	2.7	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8352	0.7177		2.15	2.50	-14.1	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.719	2.855		2.47	2.36	5.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.044	0.996		2.39	2.50	-4.5	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.144	1.104		2.41	2.50	-3.5	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2525	0.2469		2.44	2.50	-2.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID	1.086	0.9817		2.62	2.50	4.7	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: ICV 320-223412/13 Calibration Date: 05/15/2018 17:23

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.15LLCC_ICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.052	1.007		2.38	2.50	-4.3	50.0
13C4 PFBA	Ave	1.528	1.462		2.39	2.50	-4.3	50.0
13C5 PFPeA	Ave	0.9798	0.9296		2.37	2.50	-5.1	50.0
13C3-PFBS	Ave	0.0221	0.0208		2.18	2.33	-6.0	50.0
M2-4:2FTS	Ave	0.1627	0.1546		2.22	2.34	-5.0	50.0
13C2 PFHxA	Ave	1.045	0.998		2.39	2.50	-4.5	50.0
13C3 HFPO-DA	Ave	0.0517	0.0454		2.20	2.50	-12.1	50.0
13C4-PFHpA	Ave	1.001	0.9156		2.29	2.50	-8.5	50.0
18O2 PFHxS	Ave	1.237	1.175		2.25	2.37	-5.0	50.0
M2-6:2FTS	Ave	0.2210	0.2207		2.37	2.38	-0.1	40.0
13C4 PFOA	Ave	0.9468	0.8898		2.35	2.50	-6.0	50.0
13C4 PFOS	Ave	0.8503	0.8094		2.28	2.39	-4.8	50.0
13C5 PFNA	Ave	0.7745	0.7379		2.38	2.50	-4.7	50.0
13C8 FOSA	Ave	1.113	1.119		2.51	2.50	0.6	50.0
M2-8:2FTS	Ave	0.2515	0.2407		2.29	2.40	-4.3	40.0
13C2 PFDA	Ave	0.6587	0.6073		2.30	2.50	-7.8	50.0
d3-NMeFOSAA	Ave	0.3634	0.3568		2.45	2.50	-1.8	50.0
d5-NEtFOSAA	Ave	0.3729	0.3488		2.34	2.50	-6.5	50.0
13C2 PFUnA	Ave	0.5216	0.4944		2.37	2.50	-5.2	50.0
13C2 PFDoA	Ave	0.5613	0.5571		2.48	2.50	-0.8	50.0
13C2-PFTeDA	Ave	0.6891	0.6919		2.51	2.50	0.4	50.0
13C2-PFHxDA	Ave	1.141	1.171		2.57	2.50	2.6	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLCC_ICAL_010.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 15-May-2018 17:23:06 ALS Bottle#: 18 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist:

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 16-May-2018 09:20:42 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: hannigana Date: 15-May-2018 17:33:11

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.462	-0.010	1.000	6558644	2.39		95.7	44583	
2 Perfluorobutyric acid										
212.90 > 169.00	1.458	1.462	-0.004	1.004	6232384	2.55			3830	
D 3 13C5-PFPeA										
267.90 > 223.00	1.730	1.744	-0.014	0.560	4169955	2.37		94.9	71064	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.739	1.745	-0.006	1.005	4867541	2.47			2619	
D 47 13C3-PFBS										
301.90 > 83.00	1.766	1.780	-0.014	1.000	86804	2.18		94.0	672	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.775	1.783	-0.008	1.005	6786179	2.33			32587	
298.90 > 99.00	1.775	1.783	-0.008	1.005	2714789		2.50(1.25-3.74)		20109	
D 60 M2-4:2FTS										
329.00 > 81.00	1.982	1.999	-0.017	1.000	647709	2.22		95.0	9057	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.993	2.000	-0.007	1.000	1575421	2.55			89480	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.027	2.037	-0.010	1.000	4497390	2.44			7112	
313.00 > 119.00	2.027	2.037	-0.010	1.000	434640		10.35(5.03-15.10)		6592	
D 7 13C2 PFHxA										
315.00 > 270.00	2.027	2.037	-0.010	1.000	4477812	2.39		95.5	93567	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.049	2.059	-0.010	1.000	6300178	2.43			66597	
349.00 > 99.00	2.049	2.059	-0.010	1.000	2290834		2.75(1.36-4.07)		32182	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.129	2.134	-0.005	1.000	637807	2.56			5920	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.129	2.134	-0.005	1.000	203771	2.20		87.9	3726	
D 9 13C4-PFHpA										
367.00 > 322.00	2.360	2.374	-0.014	1.000	4107005	2.29		91.5	82212	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.360	2.374	-0.014	1.000	4689174	2.70			6790	
363.00 > 169.00	2.360	2.374	-0.014	1.000	1789663		2.62(1.13-3.40)		10179	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.373	2.386	-0.013	1.000	5072324	2.14			23515	
399.00 > 99.00	2.373	2.386	-0.013	1.000	1702243		2.98(1.50-4.49)		6349	
D 11 18O2 PFHxS										
403.00 > 84.00	2.373	2.386	-0.013	1.000	4985793	2.25		95.0	50631	
65 Adona										
377.00 > 251.00	2.408	2.418	-0.010	1.000	12919348	2.60			166549	
377.00 > 85.00	2.408	2.418	-0.010	1.000	7441901		1.74(0.84-2.53)		56906	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.691	2.707	-0.016	1.000	1461549	2.09			9568	
D 12 M2-6:2FTS										
429.00 > 81.00	2.691	2.707	-0.016	1.000	940677	2.37		99.9	19507	
D 14 13C4 PFOA										
417.00 > 372.00	2.721	2.731	-0.010	1.000	3991539	2.35		94.0	60154	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.721	2.734	-0.013	1.000	4593918	2.44			2031	
413.00 > 169.00	2.721	2.734	-0.013	1.000	2532726		1.81(0.84-2.52)		10558	
* 62 13C2-PFOA										
415.00 > 370.00	2.721	2.734	-0.013		4485749	2.50			73224	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.729	2.739	-0.010	1.000	4660030	2.41			28740	
449.00 > 99.00	2.721	2.739	-0.018	0.997	1234090		3.78(1.94-5.82)		21469	
D 18 13C4 PFOS										
503.00 > 80.00	3.091	3.104	-0.013	1.000	3470981	2.28		95.2	22643	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.091	3.105	-0.014	1.000	3860176	2.26			30403	
499.00 > 99.00	3.091	3.105	-0.014	1.000	819041		4.71(2.31-6.93)		8926	
20 Perfluorononanoic acid										
463.00 > 419.00	3.091	3.107	-0.016	1.000	3549673	2.53			6315	
463.00 > 169.00	3.091	3.107	-0.016	1.000	831344		4.27(1.90-5.69)		24932	
D 19 13C5 PFNA										
468.00 > 423.00	3.091	3.107	-0.016	1.000	3310210	2.38		95.3	54117	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.299	3.316	-0.017	1.000	6187168	2.38			45851	
D 21 13C8 FOSA										
506.00 > 78.00	3.411	3.420	-0.009	1.000	5020010	2.51		101	47676	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.411	3.422	-0.011	1.000	4970983	2.54			51844	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.439	3.455	-0.016	1.000	2648226	2.41			40237	
549.00 > 99.00	3.439	3.455	-0.016	1.000	1029286		2.57(1.33-3.97)		18505	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.449	3.458	-0.009	1.000	1356197	2.33			23529	
D 26 M2-8:2FTS										
529.00 > 81.00	3.449	3.459	-0.010	1.000	1034203	2.29		95.7	24982	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.458	3.468	-0.010	1.000	2825404	2.67			13587	
513.00 > 169.00	3.458	3.468	-0.010	1.000	488632		5.78(2.36-7.09)		13700	
D 23 13C2 PFDA										
515.00 > 470.00	3.458	3.468	-0.010	1.000	2724371	2.30		92.2	41092	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.611	3.624	-0.013	1.000	1600454	2.45		98.2	21404	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.611	3.631	-0.020	1.000	1634540	2.52			10505	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.764	3.781	-0.017	1.000	2461174	2.52			34940	
599.00 > 99.00	3.764	3.781	-0.017	1.000	854811		2.88(1.39-4.16)		19804	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.775	3.794	-0.019	1.000	1564712	2.34		93.5	7242	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.786	3.800	-0.014	1.003	1510273	2.57			19551	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.786	3.800	-0.014	1.000	1591556	2.15			6601	
563.00 > 169.00	3.786	3.800	-0.014	1.000	437354		3.64(2.12-6.36)		16106	
D 30 13C2 PFUnA										
565.00 > 520.00	3.786	3.800	-0.014	1.000	2217674	2.37		94.8	41351	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.943	3.958	-0.015	1.000	9764129	2.47			81201	
D 36 13C2 PFDoA										
615.00 > 570.00	4.086	4.099	-0.013	1.000	2498767	2.48		99.2	20633	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.086	4.100	-0.014	1.000	2489518	2.39			2192	
613.00 > 169.00	4.086	4.100	-0.014	1.000	660158		3.77(2.13-6.40)		9524	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.347	4.368	-0.021	1.000	2757903	2.41			1498	
663.00 > 169.00	4.347	4.368	-0.021	1.000	830586		3.32(1.25-3.76)		8581	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.592	4.608	-0.016	1.000	766392	2.44			8270	
713.00 > 219.00	4.582	4.608	-0.026	0.998	552064		1.39(0.71-2.13)		8171	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.592	4.608	-0.016	1.000	3103625	2.51		100	14331	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.008	5.030	-0.022	1.000	5251192	2.57		103	12649	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.008	5.031	-0.023	1.000	5155170	2.62			1223	
813.00 > 169.00	5.008	5.031	-0.023	1.000	844334		6.11(2.86-8.58)		6207	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.386	5.408	-0.022	1.000	5286159	2.38			935	
913.00 > 169.00	5.386	5.408	-0.022	1.000	634791		8.33(3.83-11.48)		4660	

Reagents:

LCPFCIC_FULL_00011 Amount Added: 1.00 Units: mL

Report Date: 16-May-2018 09:20:43 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLCC_ICAL_010.d

Injection Date: 15-May-2018 17:23:06 Instrument ID: A8_N

Lims ID: ICV Full

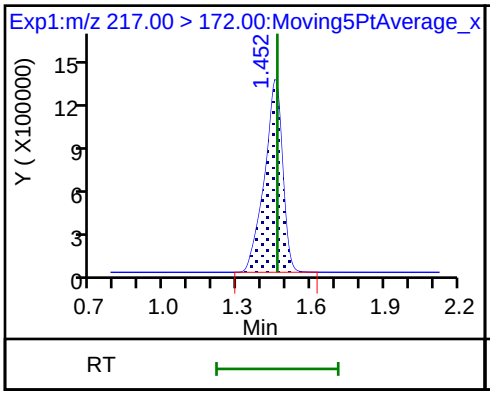
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 13

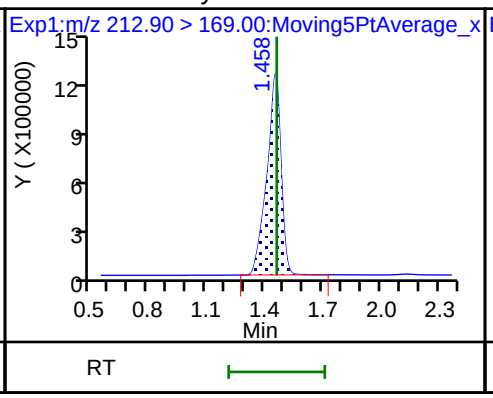
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

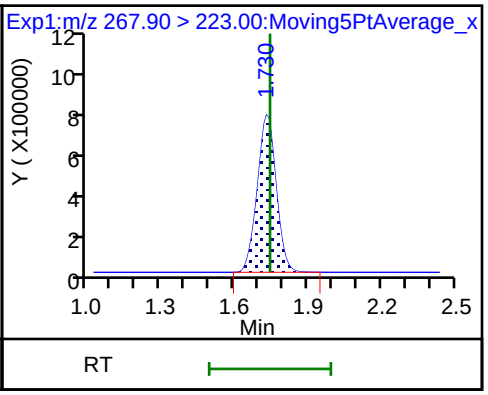
D 1 13C4 PFBA



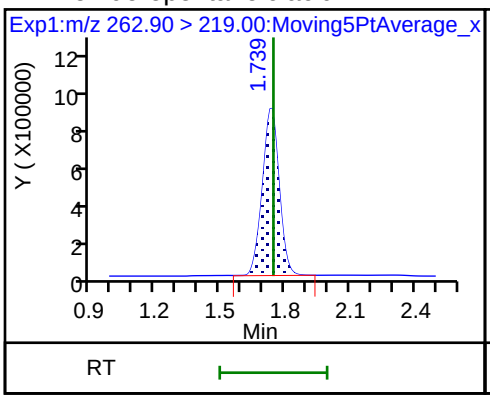
2 Perfluorobutyric acid



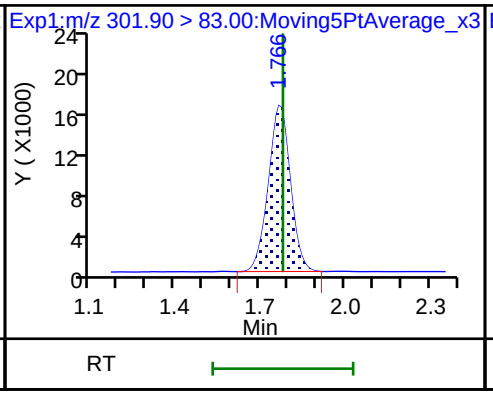
D 3 13C5-PFPeA



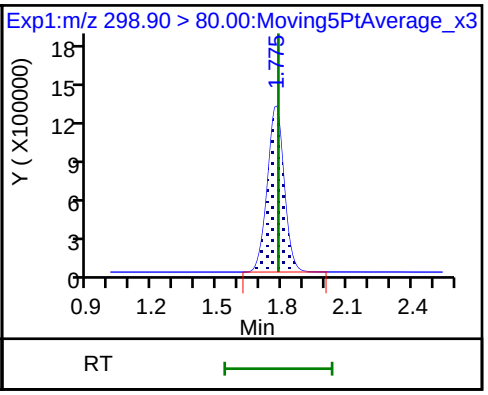
4 Perfluoropentanoic acid



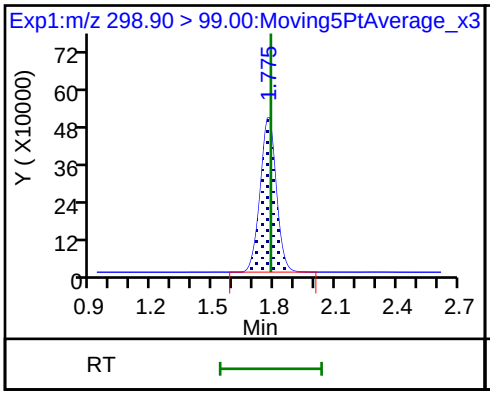
D 47 13C3-PFBS



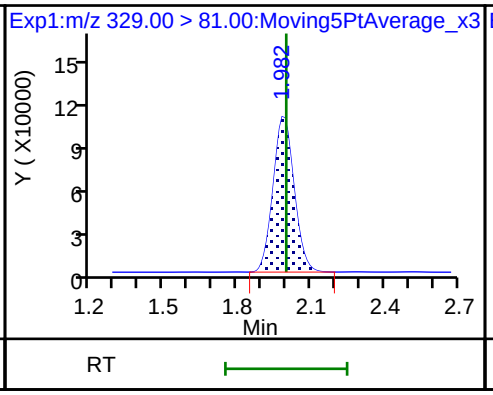
5 Perfluorobutanesulfonic acid



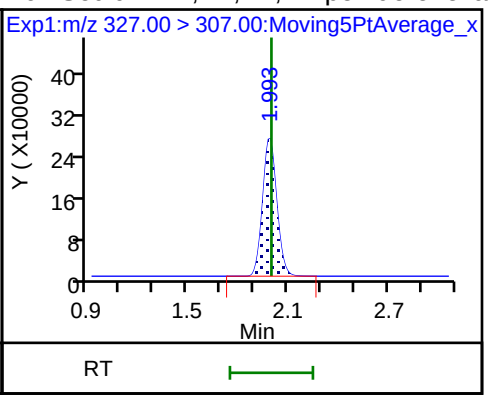
5 Perfluorobutanesulfonic acid



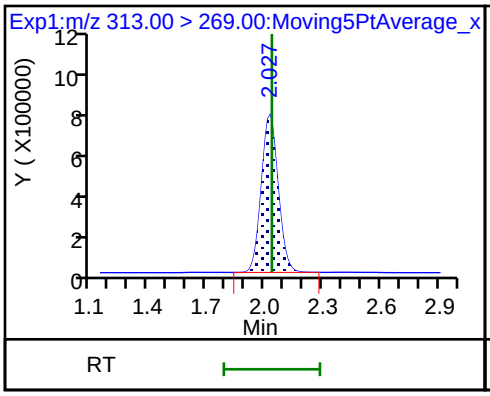
D 60 M2-4:2FTS



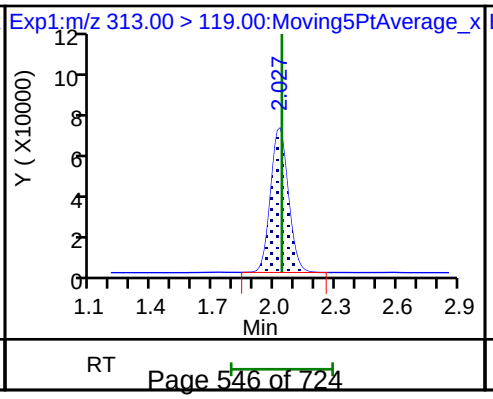
61 Sodium 1H,1H,2H,2H-perfluorohexane



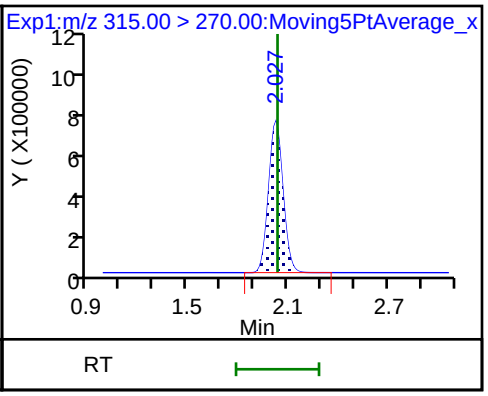
6 Perfluorohexanoic acid



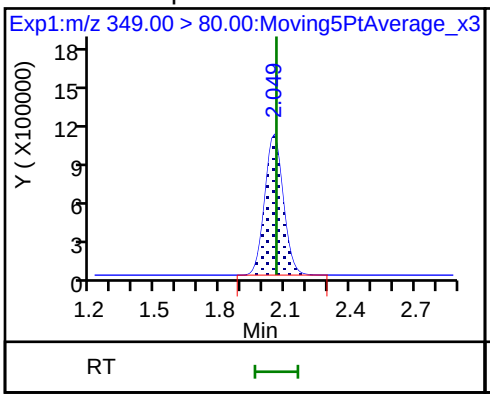
6 Perfluorohexanoic acid



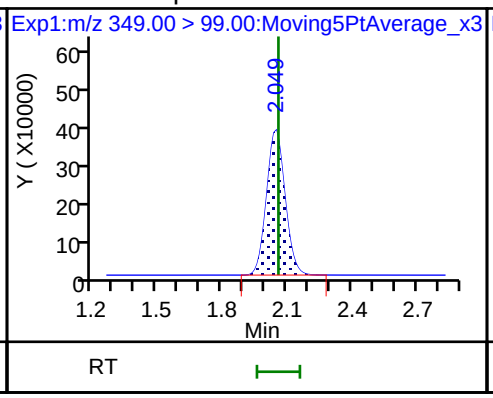
D 7 13C2 PFHxA



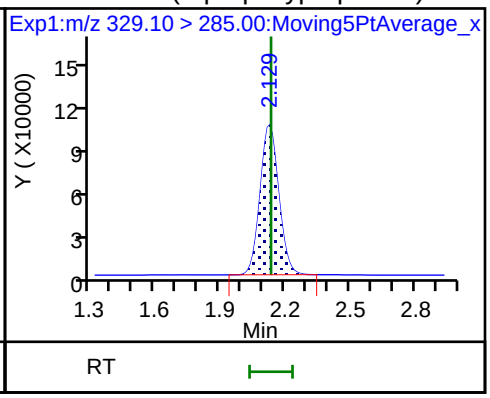
70 Perfluoropentanesulfonic acid



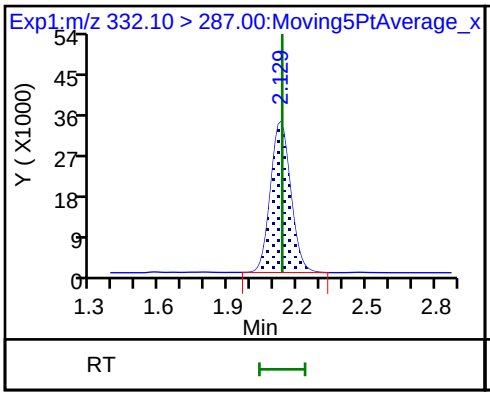
70 Perfluoropentanesulfonic acid



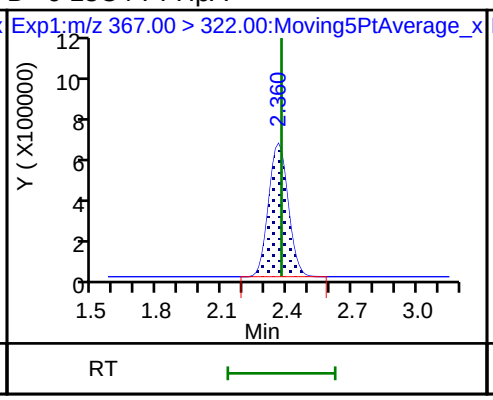
67 Perfluoro(2-propoxypropanoic) acid



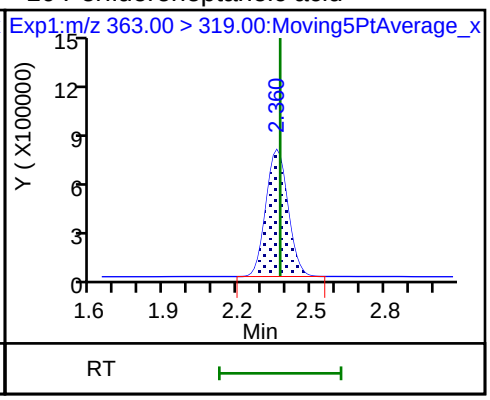
D 64 13C3 HFPO-DA



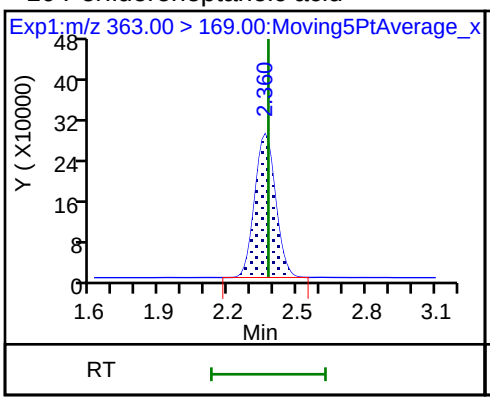
D 9 13C4-PFHpA



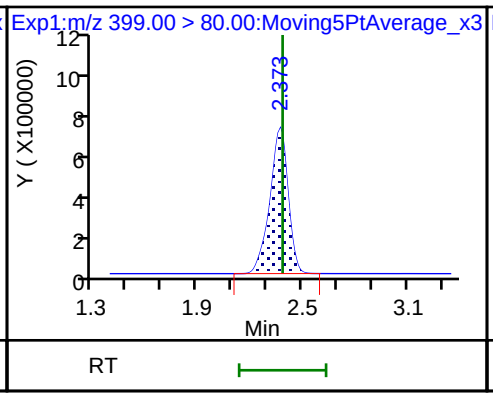
10 Perfluoroheptanoic acid



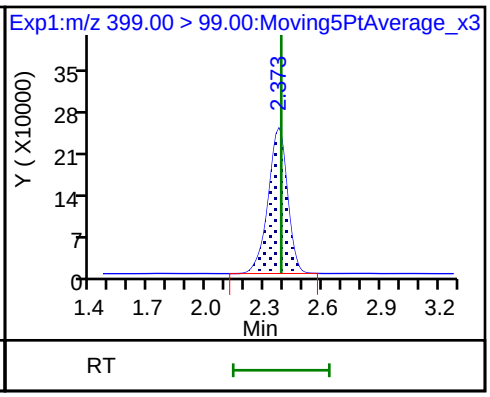
10 Perfluoroheptanoic acid



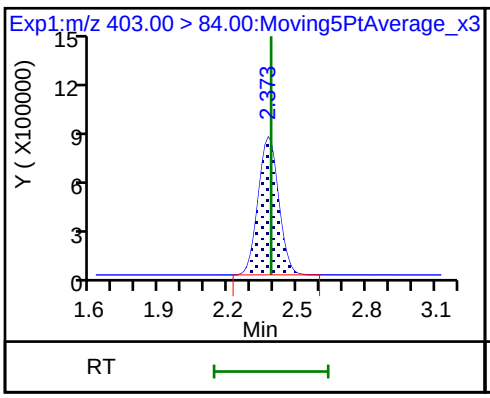
8 Perfluorohexanesulfonic acid



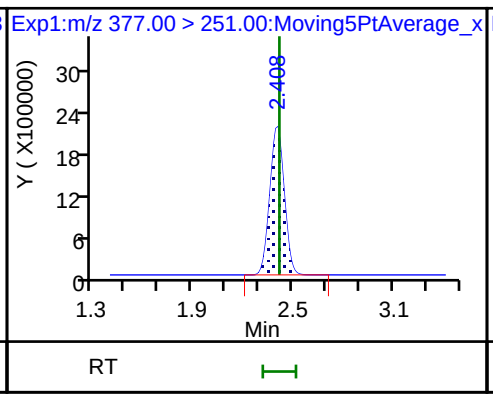
8 Perfluorohexanesulfonic acid



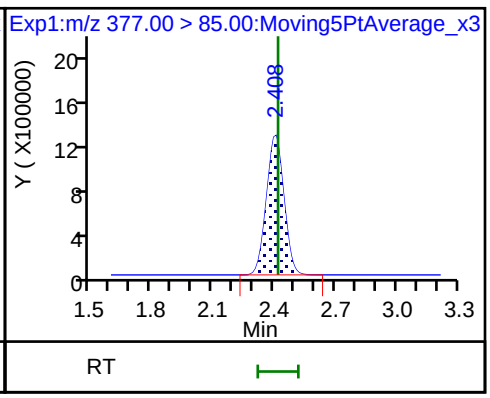
D 11 18O2 PFHxS



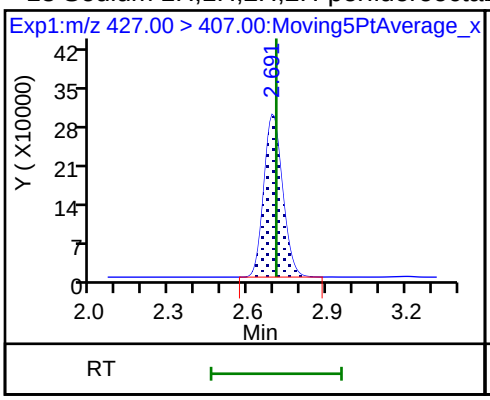
65 Adona



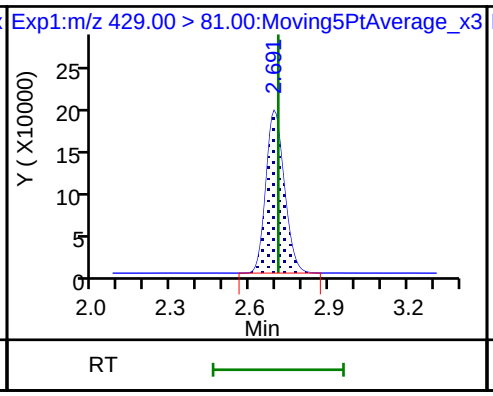
65 Adona



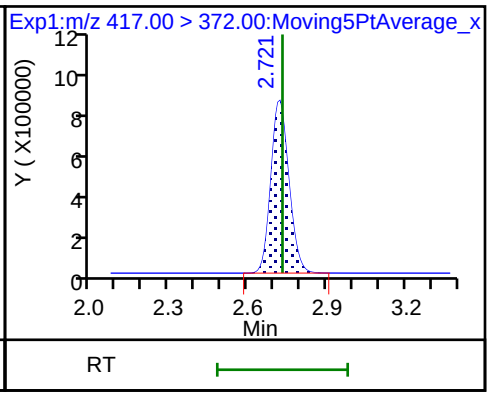
13 Sodium 1H,1H,2H,2H-perfluorooctane



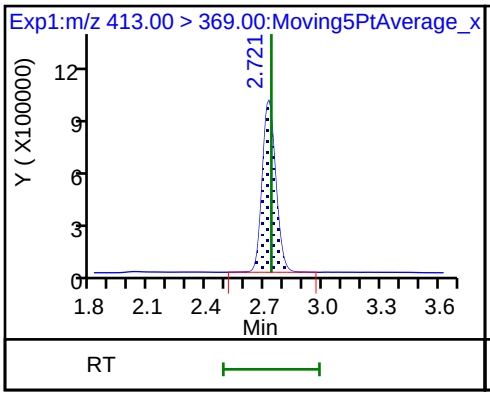
D 12 M2-6:2FTS



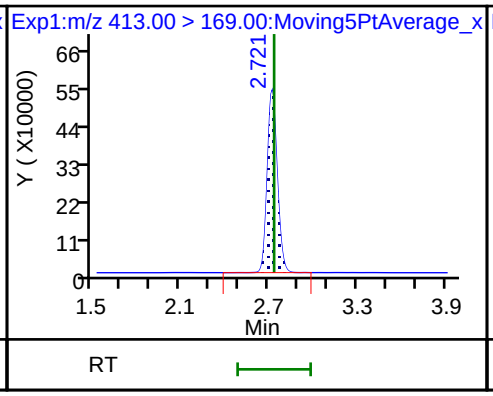
D 14 13C4 PFOA



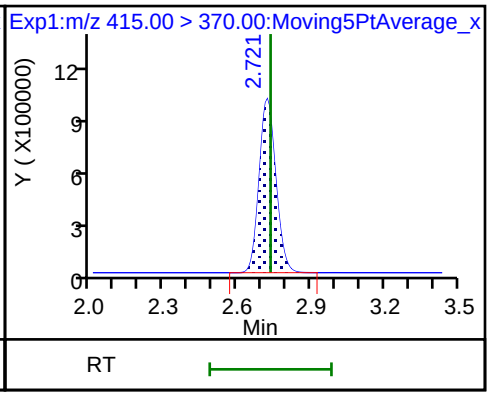
15 Perfluorooctanoic acid



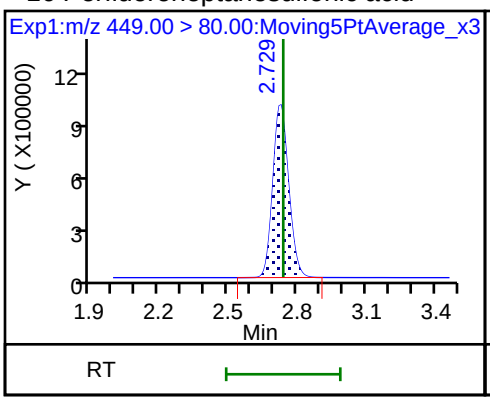
15 Perfluorooctanoic acid



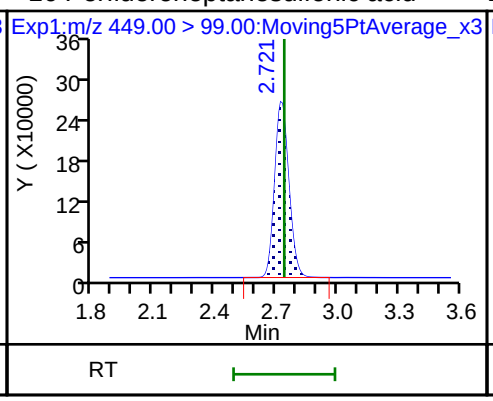
* 62 13C2-PFOA



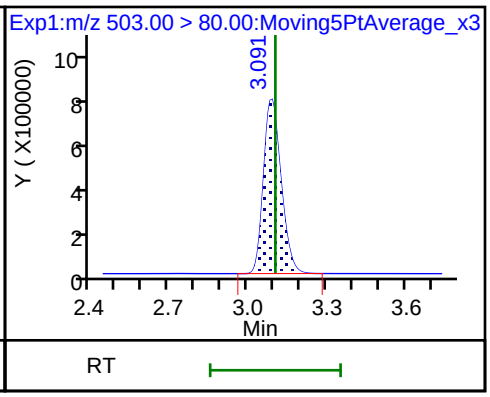
16 Perfluoroheptanesulfonic acid



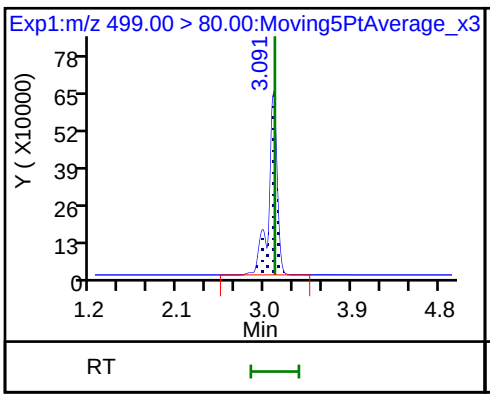
16 Perfluoroheptanesulfonic acid



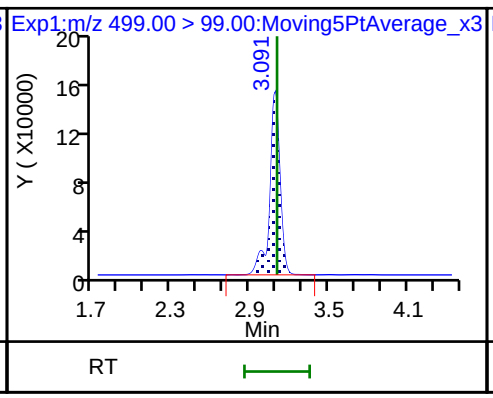
D 18 13C4 PFOS



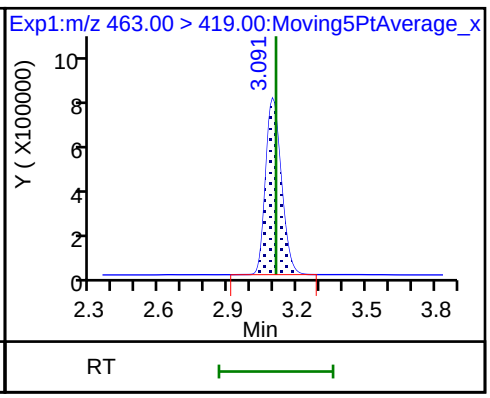
17 Perfluorooctane sulfonic acid



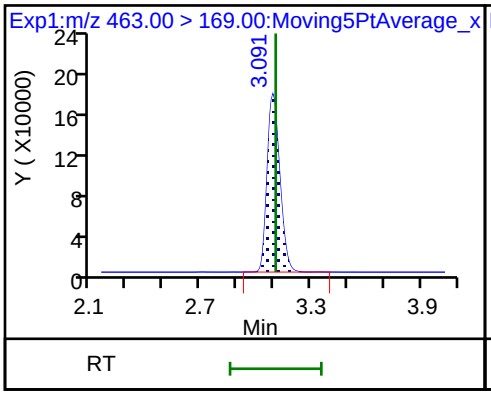
17 Perfluorooctane sulfonic acid



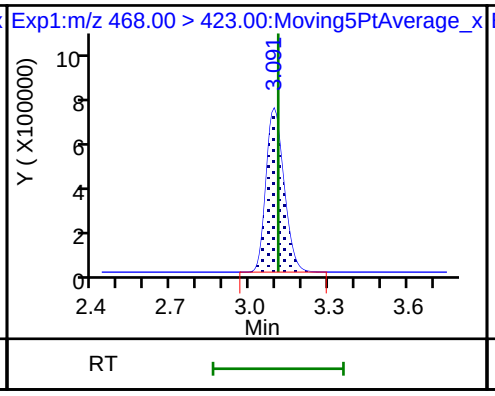
20 Perfluorononanoic acid



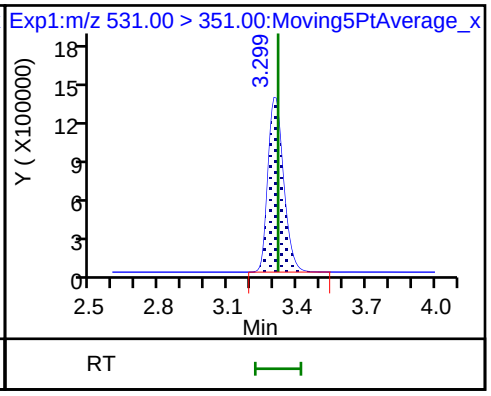
20 Perfluorononanoic acid



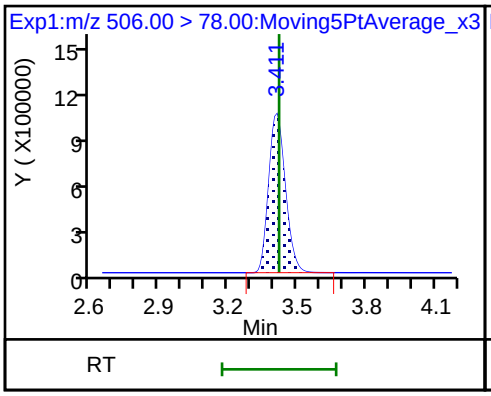
D 19 13C5 PFNA



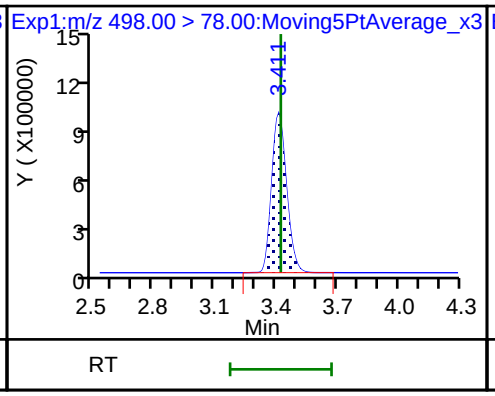
69 9-Chlorohexadecafluoro-3-oxanonane



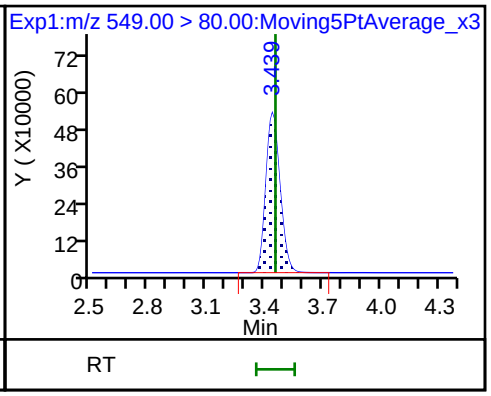
D 21 13C8 FOSA



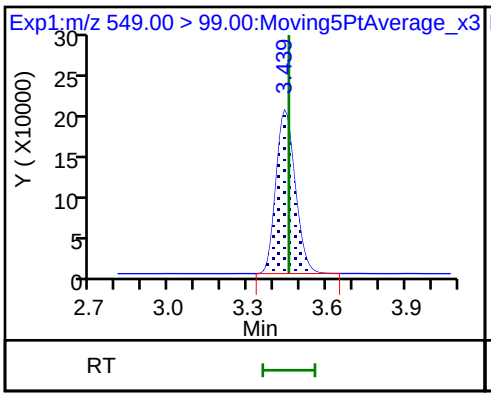
22 Perfluorooctane Sulfonamide



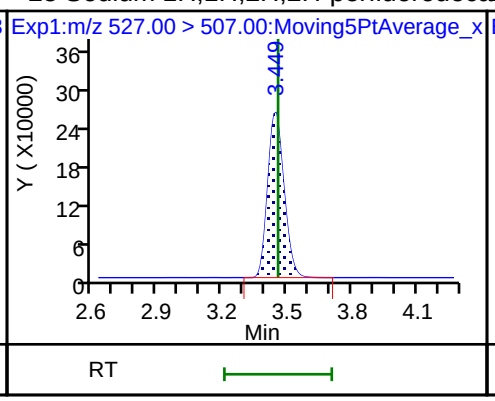
68 Perfluorononanesulfonic acid



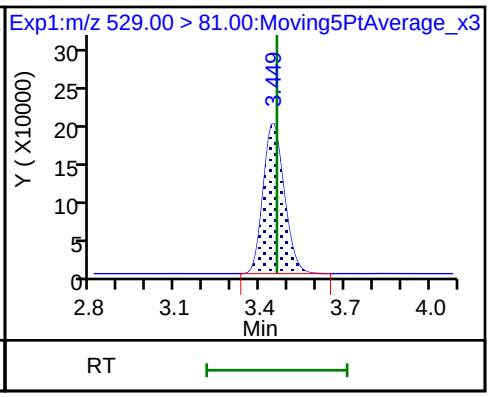
68 Perfluorononanesulfonic acid



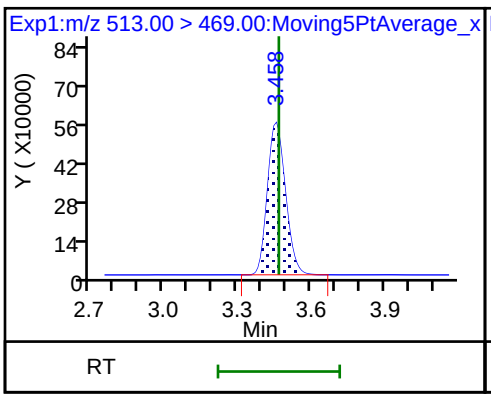
25 Sodium 1H,1H,2H,2H-perfluorodecane



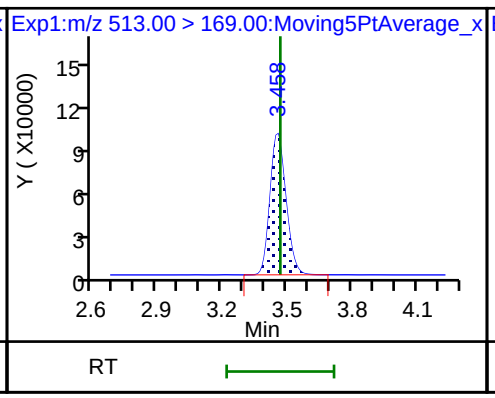
D 26 M2-8:2FTS



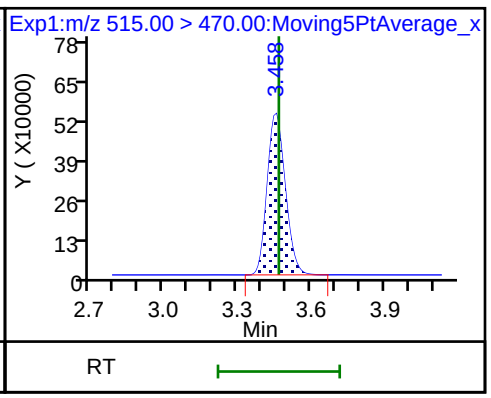
24 Perfluorodecanoic acid



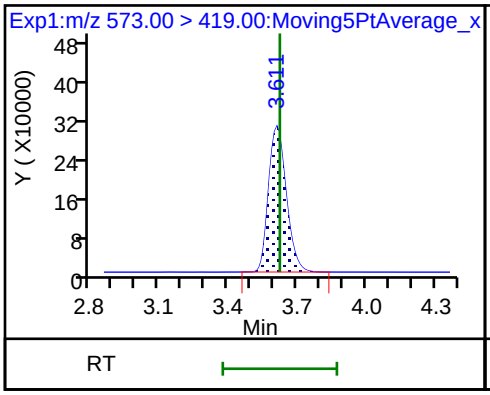
24 Perfluorodecanoic acid



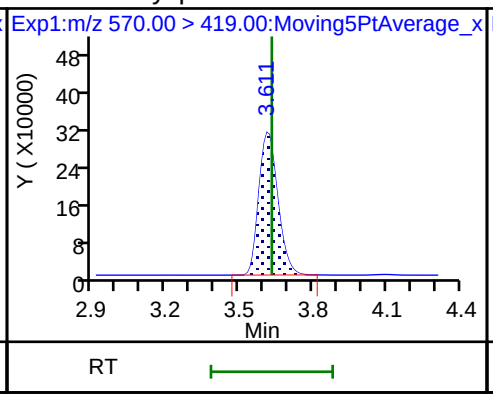
D 23 13C2 PFDA



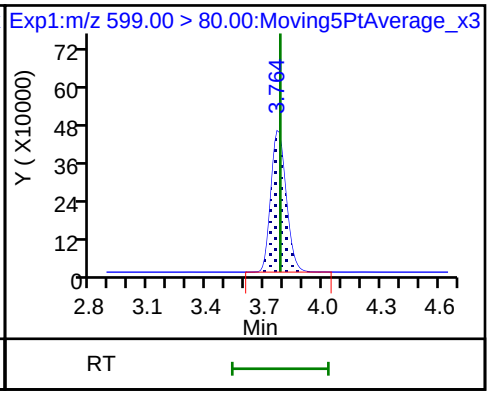
D 27 d3-NMeFOSAA



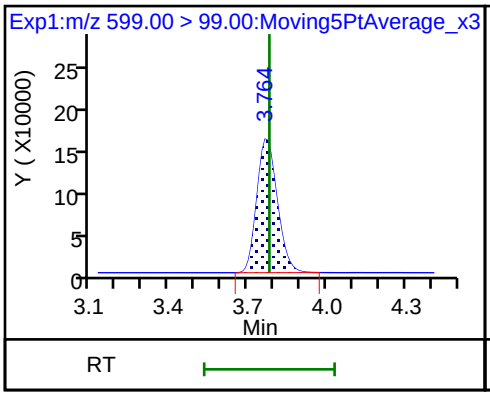
28 N-methyl perfluorooctane sulfonami



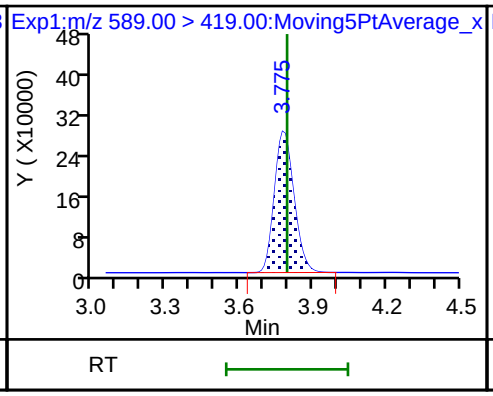
29 Perfluorodecane Sulfonic acid



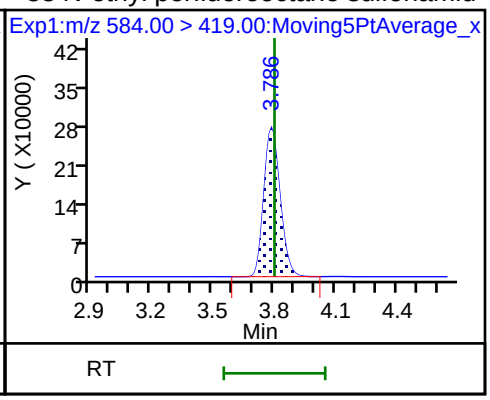
29 Perfluorodecane Sulfonic acid



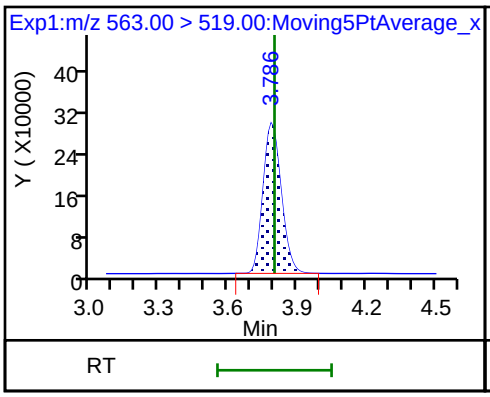
D 32 d5-NEtFOSAA



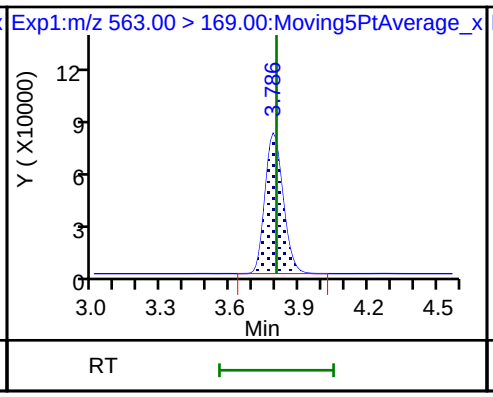
33 N-ethyl perfluorooctane sulfonamid



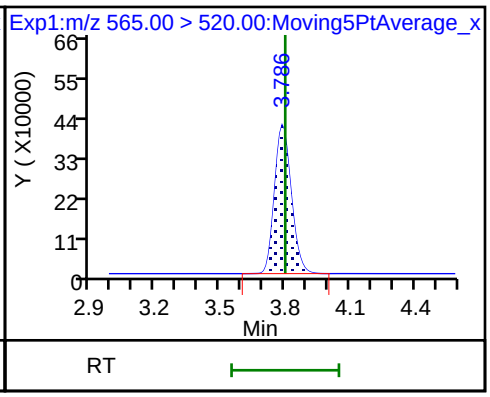
31 Perfluoroundecanoic acid



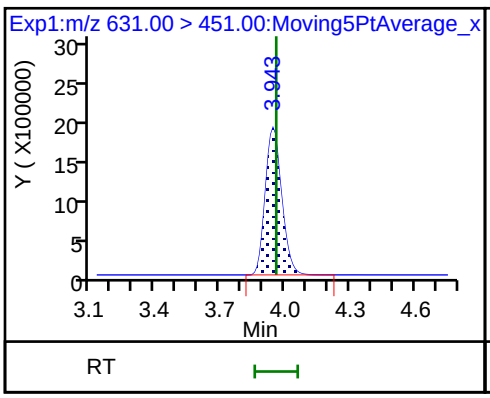
31 Perfluoroundecanoic acid



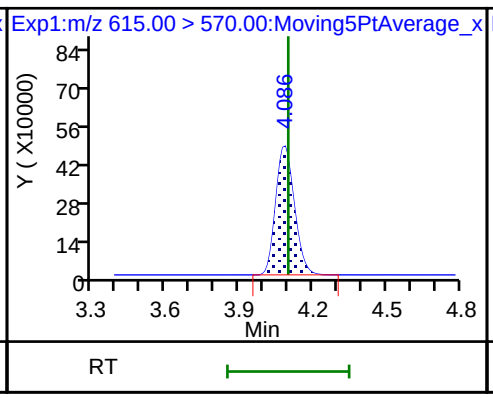
D 30 13C2 PFUnA



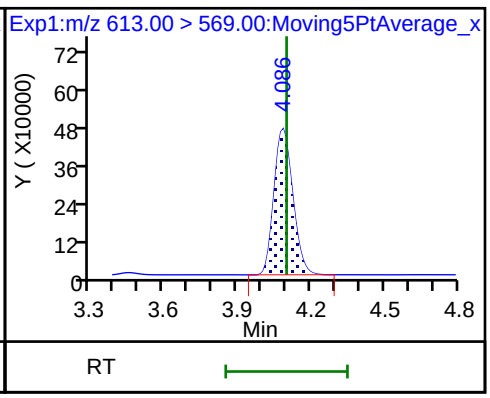
66 11-Chloroeicosafluoro-3-oxaundecan



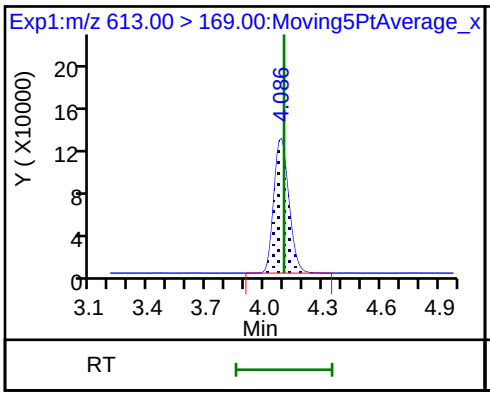
D 36 13C2 PFDoA



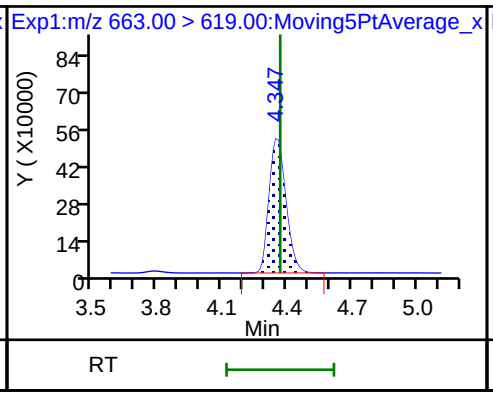
37 Perfluorododecanoic acid



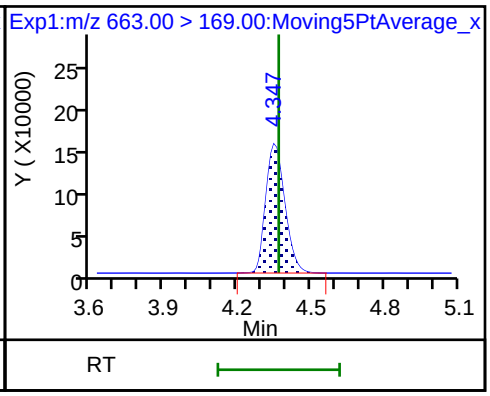
37 Perfluorododecanoic acid



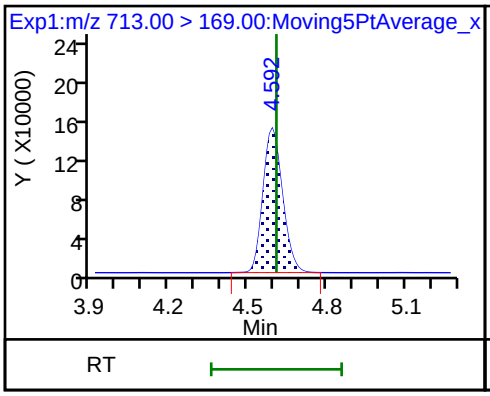
41 Perfluorotridecanoic acid



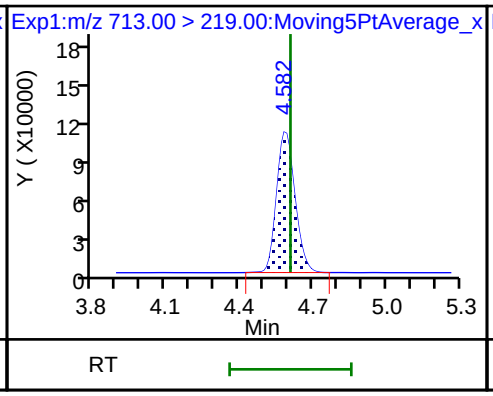
41 Perfluorotridecanoic acid



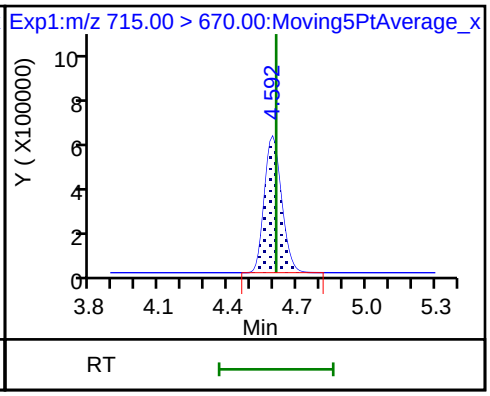
42 Perfluorotetradecanoic acid



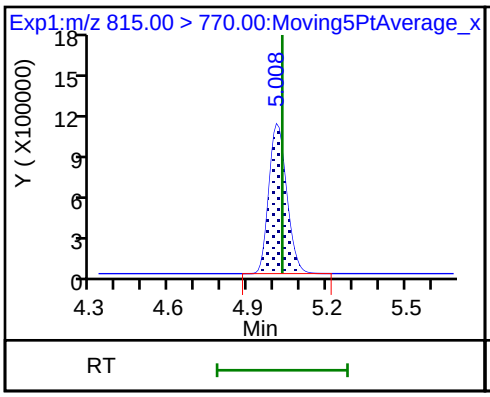
42 Perfluorotetradecanoic acid



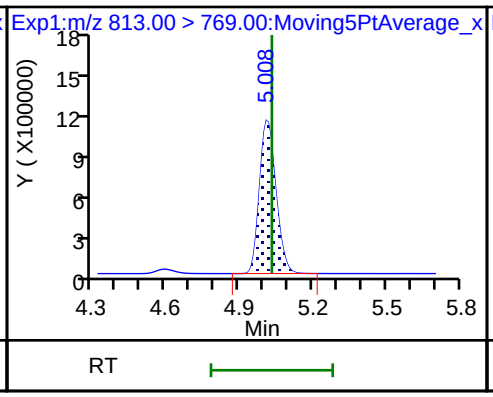
D 43 13C2-PFTeDA



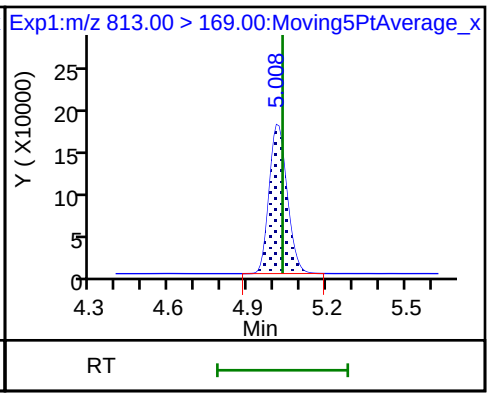
D 44 13C2-PFHxDA



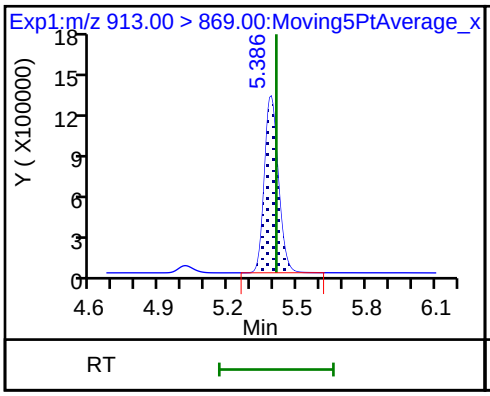
45 Perfluorohexadecanoic acid



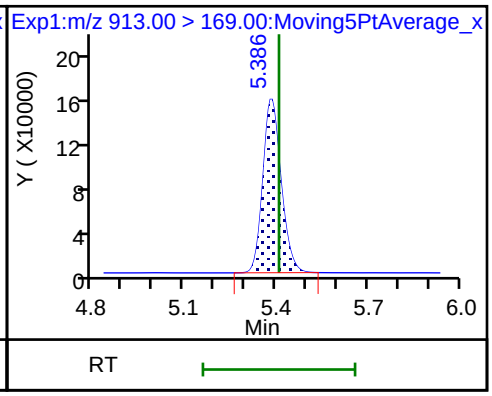
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCVL 320-223710/2 Calibration Date: 05/16/2018 23:33

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9298	0.9503		0.0511	0.0500	2.2	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.181	1.223		0.0518	0.0500	3.6	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.09	79.15		0.0448	0.0442	1.3	50.0
4:2 FTS	AveID	16.57	16.71			0.0467	0.8	
Perfluorohexanoic acid (PFHxA)	AveID	1.028	1.102		0.0536	0.0500	7.2	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.55	68.29		0.0461	0.0469	-1.8	50.0
HFPO-DA (GenX)	AveID	3.057	2.682		0.0439	0.0500	-12.3	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.056	0.8903		0.0421	0.0500	-15.7	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.127	1.236		0.0499	0.0455	9.7	50.0
Adona	AveID	3.427	3.584		0.0523	0.0500	4.6	50.0
6:2FTS	L2ID		1.721			0.0474	-23.6	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.332	1.305		0.0466	0.0476	-2.0	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.177	1.333		0.0566	0.0500	13.3	50.0
Perfluorononanoic acid (PFNA)	AveID	1.059	1.073		0.0507	0.0500	1.3	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.176	1.061		0.0419	0.0464	-9.7	50.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.794	1.671		0.0434	0.0466	-6.8	50.0
8:2FTS	AveID	1.349	1.323			0.0479	-2.0	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7575	0.7346		0.0465	0.0480	-3.0	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.996		0.0511	0.0500	2.3	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.9722	1.063		0.0547	0.0500	9.3	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.015	1.082			0.0500	6.6	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6714	0.6396		0.0459	0.0482	-4.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9400	1.063		0.0565	0.0500	13.1	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8352	0.8417		0.0504	0.0500	0.8	50.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.719	2.938		0.0509	0.0471	8.1	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.044	1.098		0.0526	0.0500	5.2	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.144	1.198		0.0524	0.0500	4.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2525	0.2922		0.0579	0.0500	15.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID	1.086	1.372		0.0484	0.0500	-3.3	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCVL 320-223710/2 Calibration Date: 05/16/2018 23:33

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.052	1.072		0.0507	0.0500	1.9	50.0
13C4 PFBA	Ave	1.528	1.387		2.27	2.50	-9.3	50.0
13C5 PFPeA	Ave	0.9798	0.9469		2.42	2.50	-3.4	50.0
13C3-PFBS	Ave	0.0221	0.0208		2.18	2.33	-6.0	50.0
M2-4:2FTS	Ave	0.1627	0.1641		2.36	2.34	0.9	50.0
13C2 PFHxA	Ave	1.045	0.995		2.38	2.50	-4.7	50.0
13C3 HFPO-DA	Ave	0.0517	0.0489		2.37	2.50	-5.3	50.0
13C4-PFHpA	Ave	1.001	1.008		2.52	2.50	0.7	50.0
18O2 PFHxS	Ave	1.237	1.166		2.23	2.37	-5.8	50.0
M2-6:2FTS	Ave	0.2210	0.2279		2.45	2.38	3.1	50.0
13C4 PFOA	Ave	0.9468	0.9418		2.49	2.50	-0.5	50.0
13C4 PFOS	Ave	0.8503	0.8338		2.34	2.39	-1.9	50.0
13C5 PFNA	Ave	0.7745	0.7958		2.57	2.50	2.8	50.0
13C8 FOSA	Ave	1.113	1.024		2.30	2.50	-7.9	50.0
M2-8:2FTS	Ave	0.2515	0.2736		2.61	2.40	8.8	50.0
13C2 PFDA	Ave	0.6587	0.6440		2.44	2.50	-2.2	50.0
d3-NMeFOSAA	Ave	0.3634	0.3828		2.63	2.50	5.3	50.0
d5-NEtFOSAA	Ave	0.3729	0.3938		2.64	2.50	5.6	50.0
13C2 PFUnA	Ave	0.5216	0.5036		2.41	2.50	-3.4	50.0
13C2 PFDoA	Ave	0.5613	0.5366		2.39	2.50	-4.4	50.0
13C2-PFTeDA	Ave	0.6891	0.6923		2.51	2.50	0.5	50.0
13C2-PFHxDA	Ave	1.141	1.269		2.78	2.50	11.2	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58288.b\2018.05.16LLD_005.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 16-May-2018 23:33:05 ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58288.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 09:07:47 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK010

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.452	1.450	0.002	1.000	129966	0.0511		102	61.7	
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.458	-0.006	1.000	6838289	2.27		90.7	45294	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.712	1.716	-0.004	1.000	114223	0.0518		104	75.9	
D 3 13C5-PFPeA										
267.90 > 223.00	1.712	1.730	-0.018	0.565	4668899	2.42		96.6	67042	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.748	1.752	-0.004	1.000	143557	0.0448		101	840	
298.90 > 99.00	1.757	1.752	0.005	1.005	63731		2.25(1.25-3.74)		500	
D 47 13C3-PFBS										
301.90 > 83.00	1.748	1.766	-0.018	1.000	95411	2.18		94.0	1033	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.960	1.956	0.004	1.000	32023	0.0471		101	1690	
D 60 M2-4:2FTS										
329.00 > 81.00	1.960	1.982	-0.022	1.000	755627	2.36		101	11373	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.993	1.999	-0.006	1.000	108191	0.0536		107	179	
313.00 > 119.00	1.993	1.999	-0.006	1.000	8434		12.83(5.03-15.10)		119	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.016	2.011	0.005	1.000	131438	0.0461		98.2	2143	
349.00 > 99.00	2.016	2.011	0.005	1.000	49035		2.68(1.36-4.07)		617	
D 7 13C2 PFHxA										
315.00 > 270.00	1.993	2.016	-0.023	1.000	4907124	2.38		95.3	81265	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.095	2.090	0.005	1.000	12943	0.0439		87.7	110	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.095	2.118	-0.023	1.000	241300	2.37		94.7	4959	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.320	2.316	0.004	1.000	88493	0.0421		84.3	106	
363.00 > 169.00	2.320	2.316	0.004	1.000	39407		2.25(1.13-3.40)		229	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.334	2.329	0.005	1.000	129263	0.0499		110	819	
399.00 > 99.00	2.334	2.329	0.005	1.000	37434		3.45(1.50-4.49)		187	
D 9 13C4-PFHpA										
367.00 > 322.00	2.320	2.347	-0.027	1.000	4969621	2.52		101	64155	
D 11 18O2 PFHxS										
403.00 > 84.00	2.334	2.360	-0.026	1.000	5437763	2.23		94.2	44105	
65 Adona										
377.00 > 251.00	2.360	2.368	-0.008	1.000	294724	0.0523		105	5817	
377.00 > 85.00	2.360	2.368	-0.008	1.000	175448		1.68(0.84-2.53)		2315	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.645	2.642	0.003	1.000	36660	0.0362		76.4	274	
* 62 13C2-PFOA										
415.00 > 370.00	2.668	2.666	0.002		4931005	2.50			45739	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.668	2.673	-0.005	1.000	102142	0.0466		98.0	1570	
449.00 > 99.00	2.676	2.673	0.003	1.003	28259		3.61(1.94-5.82)		415	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.668	2.673	-0.005	1.000	123842	0.0566		113	55.7	
413.00 > 169.00	2.661	2.673	-0.012	0.997	61245		2.02(0.84-2.52)		199	
D 12 M2-6:2FTS										
429.00 > 81.00	2.645	2.683	-0.037	1.000	1067584	2.45		103	17852	
D 14 13C4 PFOA										
417.00 > 372.00	2.668	2.705	-0.037	1.000	4643983	2.49		99.5	67389	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.030	3.029	0.001	1.000	80993	0.0419		90.3	730	
499.00 > 99.00	3.023	3.029	-0.006	0.998	20171		4.02(2.31-6.93)		238	
20 Perfluorononanoic acid										
463.00 > 419.00	3.030	3.036	-0.006	1.000	84239	0.0507		101	200	
463.00 > 169.00	3.030	3.036	-0.006	1.000	19361		4.35(1.90-5.69)		375	
D 18 13C4 PFOS										
503.00 > 80.00	3.030	3.072	-0.042	1.000	3930702	2.34		98.1	32368	
D 19 13C5 PFNA										
468.00 > 423.00	3.030	3.072	-0.042	1.000	3924088	2.57		103	60019	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.238	3.244	-0.006	1.000	128071	0.0434		93.2	453	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.378	3.376	0.002	1.000	34192	0.0470		98.0	726	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.378	3.376	0.002	1.000	100590	0.0511		102	2476	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.378	3.376	0.002	1.000	57990	0.0465		97.0	1428	
549.00 > 99.00	3.368	3.376	-0.008	0.997	21198		2.74(1.33-3.97)		301	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	3.387	3.385	0.002	1.000	67506	0.0547		109	283	
513.00 > 169.00	3.378	3.385	-0.007	0.997	11228		6.01(2.36-7.09)		255	
D 21 13C8 FOSA										
506.00 > 78.00	3.378	3.407	-0.029	1.000	5051789	2.30		92.1	65614	
D 26 M2-8:2FTS										
529.00 > 81.00	3.378	3.425	-0.047	1.000	1292369	2.61		109	25227	
D 23 13C2 PFDA										
515.00 > 470.00	3.387	3.435	-0.048	1.000	3175615	2.44		97.8	47614	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.545	3.544	0.001	1.003	40824	0.0533		107	446	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.536	3.585	-0.049	1.000	1887357	2.63		105	32194	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.696	3.705	-0.009	1.000	50705	0.0459		95.3	718	
599.00 > 99.00	3.696	3.705	-0.009	1.000	16901		3.00(1.39-4.16)		610	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.717	3.715	0.002	1.003	41274	0.0565		113	1035	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.717	3.715	0.002	1.000	41807	0.0504		101	169	
563.00 > 169.00	3.717	3.715	0.002	1.000	10967		3.81(2.12-6.36)		333	
D 30 13C2 PFUnA										
565.00 > 520.00	3.717	3.761	-0.044	1.000	2483448	2.41		96.6	25000	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.706	3.761	-0.055	1.000	1941742	2.64		106	15224	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.874	3.872	0.002	1.000	227614	0.0509		108	1154	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.007	4.016	-0.009	1.000	58093	0.0526		105	57.7	
613.00 > 169.00	4.007	4.016	-0.009	1.000	14214		4.09(2.13-6.40)		342	
D 36 13C2 PFDoA										
615.00 > 570.00	4.007	4.061	-0.054	1.000	2645944	2.39		95.6	19823	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.270	4.268	0.002	1.000	63397	0.0524		105	52.0	
663.00 > 169.00	4.260	4.268	-0.008	0.998	20564		3.08(1.25-3.76)		249	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.510	4.510	0.0	1.000	19948	0.0579		116	287	
713.00 > 219.00	4.500	4.510	-0.010	0.998	12312		1.62(0.71-2.13)		326	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.510	4.565	-0.054	1.000	3413667	2.51		100	13122	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.913	4.921	-0.008	0.998	171705	0.0484		96.7	55.5	
813.00 > 169.00	4.913	4.921	-0.008	0.998	27874		6.16(2.86-8.58)		329	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.921	4.985	-0.064	1.000	6256195	2.78		111	14198	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.269	5.269	0.0	1.000	134159	0.0507		101	28.9	
913.00 > 169.00	5.269	5.269	0.0	1.000	16763		8.00(3.83-11.48)		257	

Reagents:

LCPFC_LL2_00004 Amount Added: 1.00 Units: mL

Report Date: 17-May-2018 09:07:48 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58288.b\2018.05.16LLD_005.d

Injection Date: 16-May-2018 23:33:05 Instrument ID: A8_N

Lims ID: CCVL

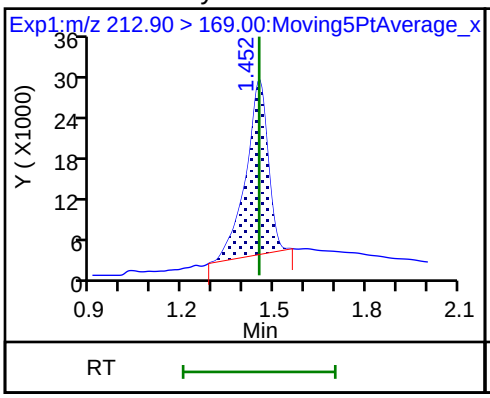
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 21 Worklist Smp#: 2

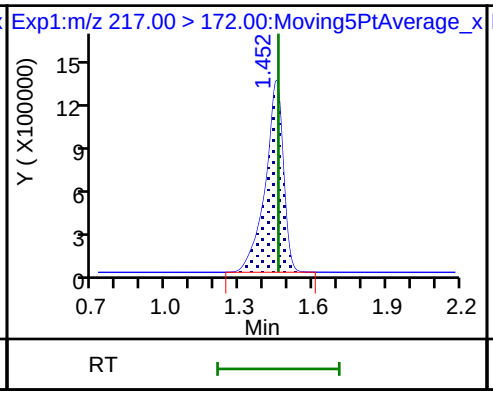
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

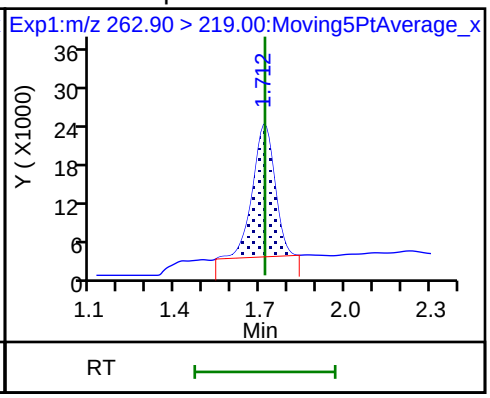
2 Perfluorobutyric acid



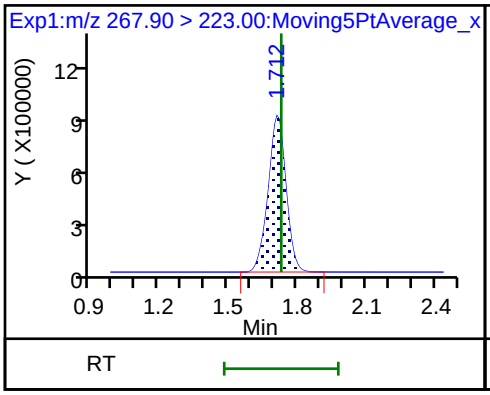
D 1 13C4 PFBA



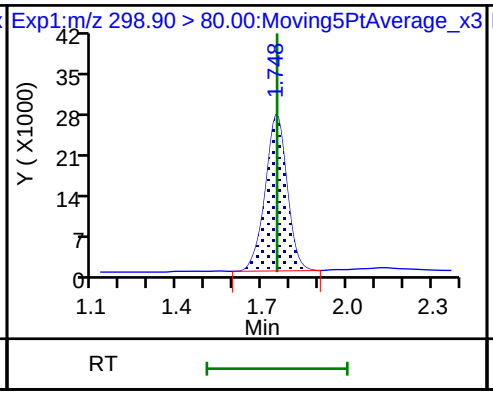
4 Perfluoropentanoic acid



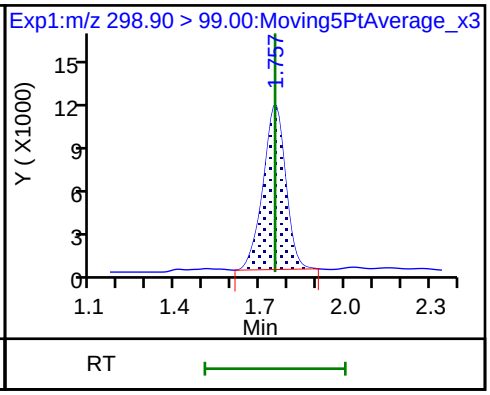
D 3 13C5-PFPeA



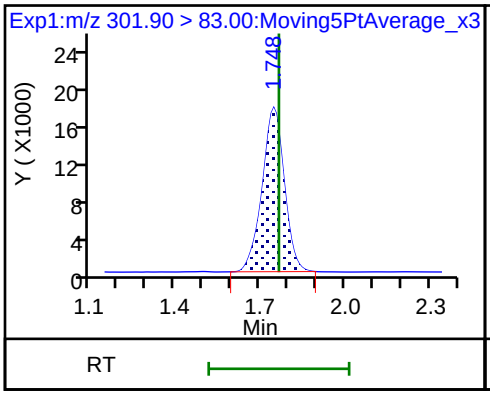
5 Perfluorobutanesulfonic acid



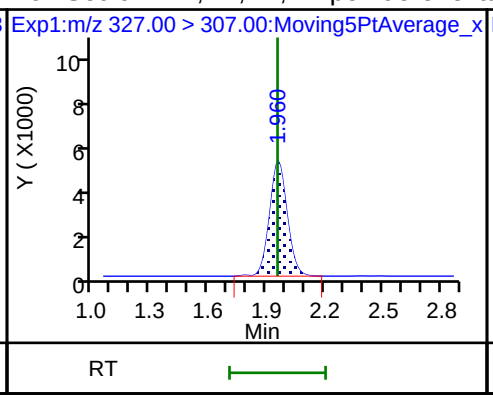
5 Perfluorobutanesulfonic acid



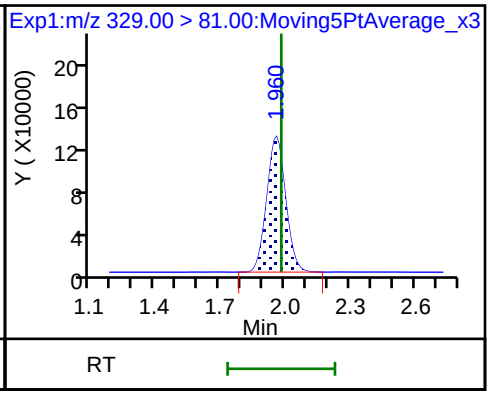
D 47 13C3-PFBS



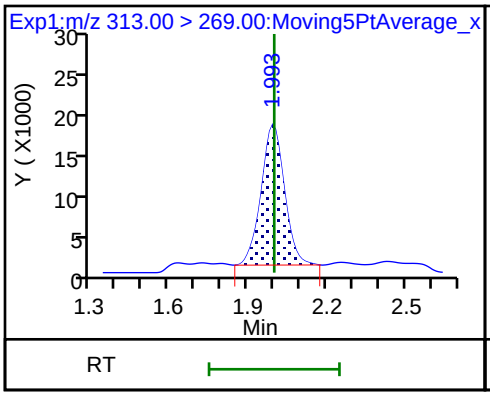
61 Sodium 1H,1H,2H,2H-perfluorohexane



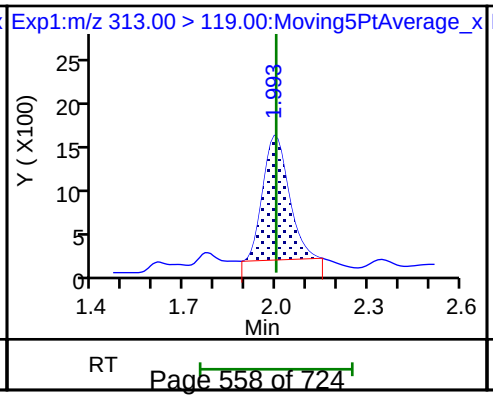
D 60 M2-4:2FTS



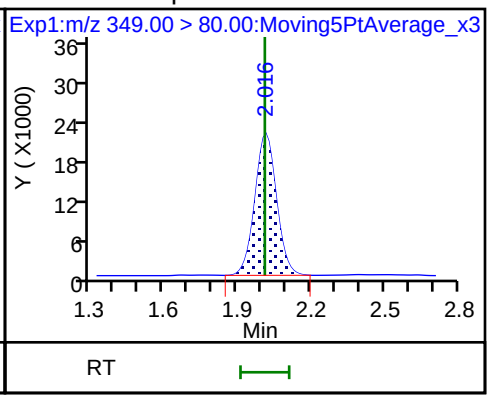
6 Perfluorohexanoic acid



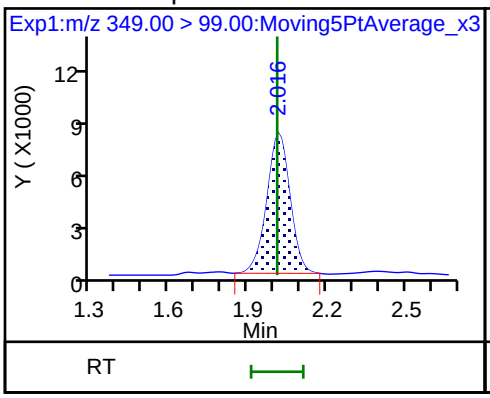
6 Perfluorohexanoic acid



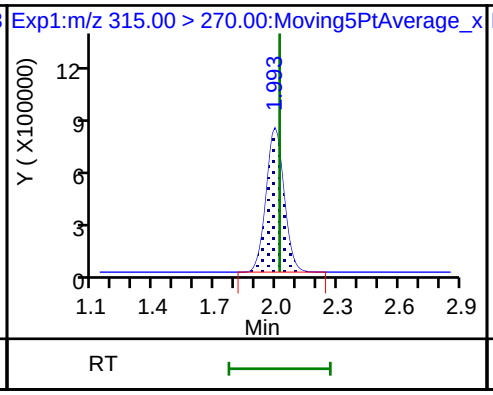
70 Perfluoropentanesulfonic acid



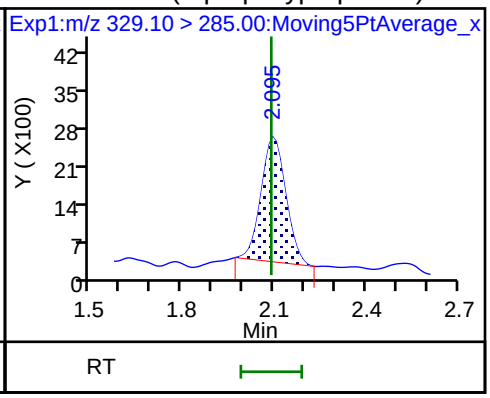
70 Perfluoropentanesulfonic acid



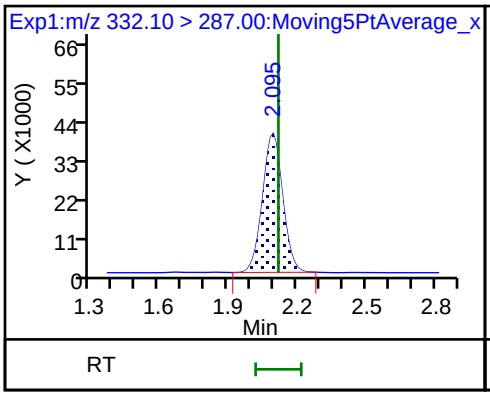
D 7 13C2 PFHxA



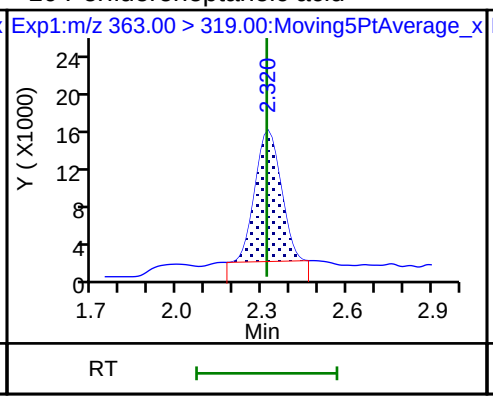
67 Perfluoro(2-propoxypropanoic) acid



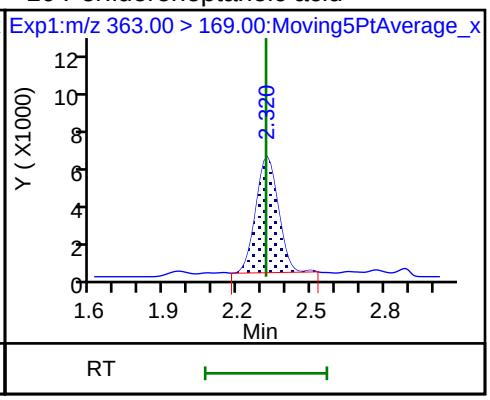
D 64 13C3 HFPO-DA



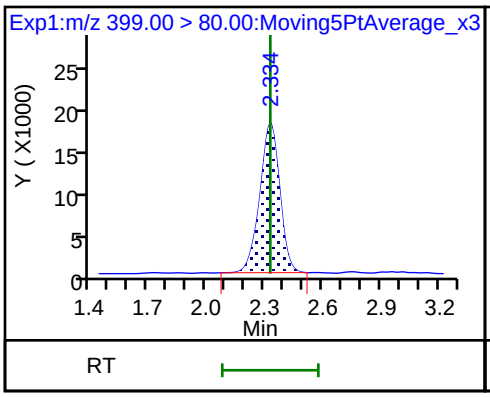
10 Perfluoroheptanoic acid



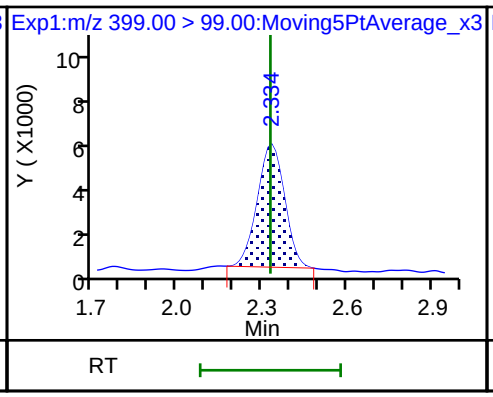
10 Perfluoroheptanoic acid



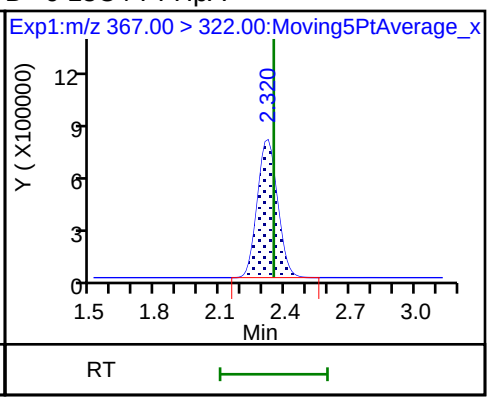
8 Perfluorohexanesulfonic acid



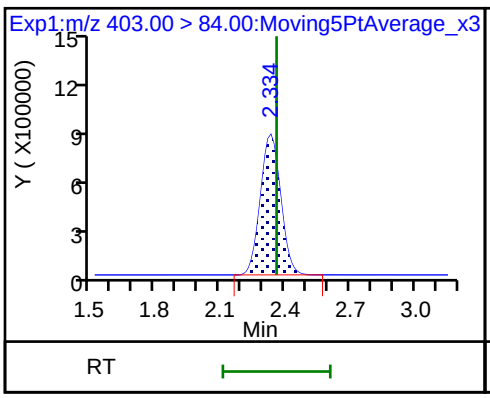
8 Perfluorohexanesulfonic acid



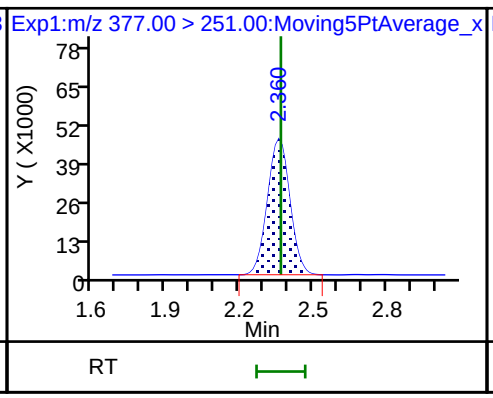
D 9 13C4-PFHpA



D 11 18O2 PFHxS



65 Adona



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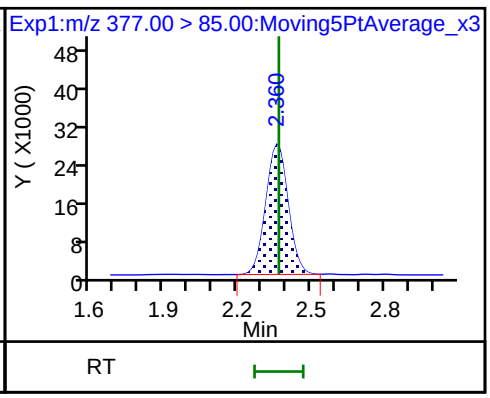
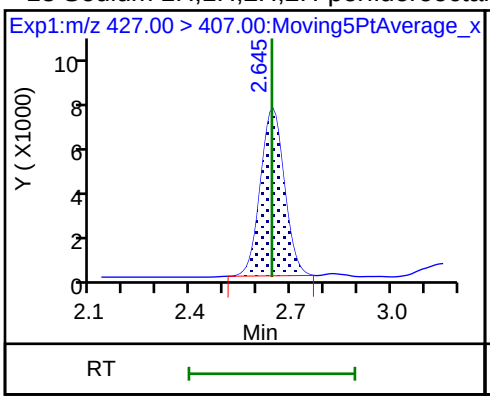
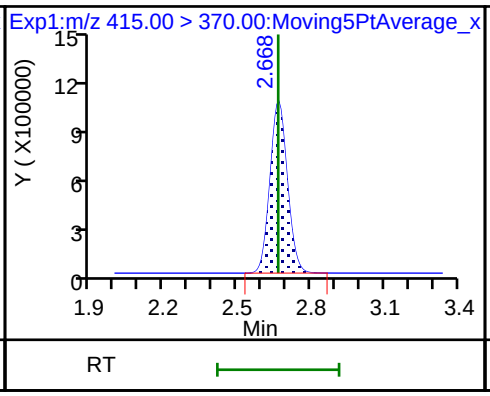


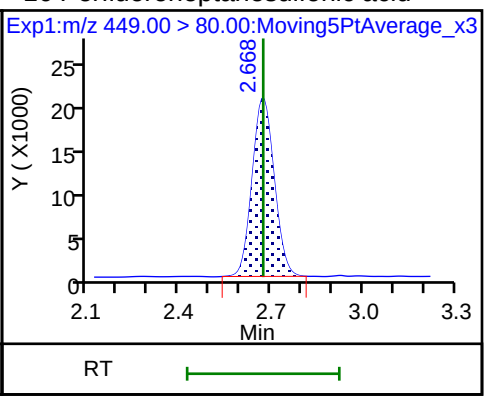
13 Sodium 1H,1H,2H,2H-perfluorooctane



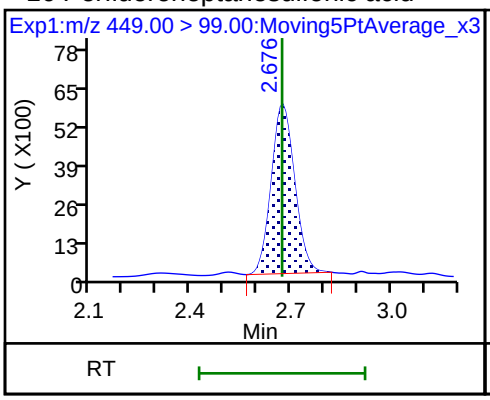
M2 13C2-PFOA



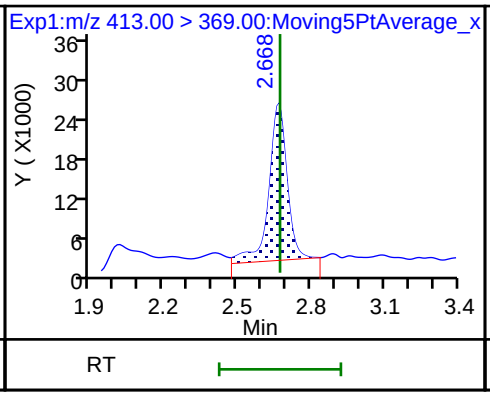
16 Perfluoroheptanesulfonic acid



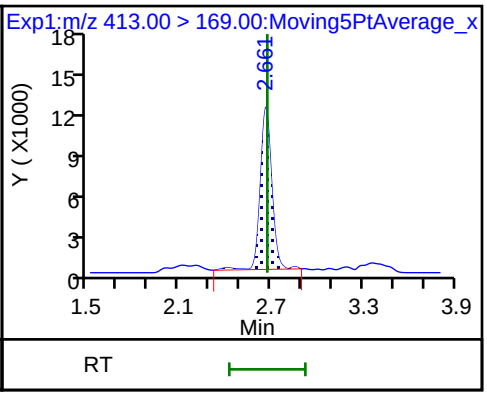
16 Perfluoroheptanesulfonic acid



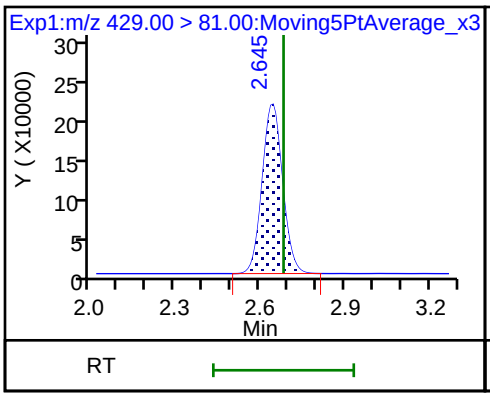
15 Perfluorooctanoic acid



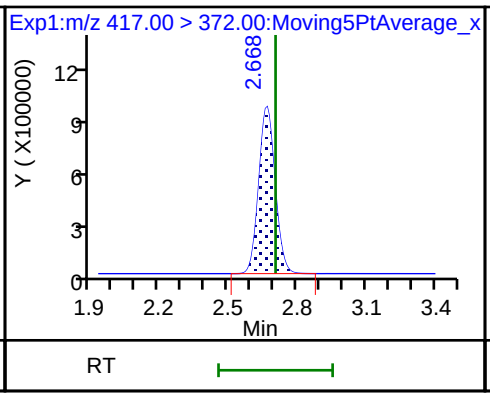
15 Perfluorooctanoic acid



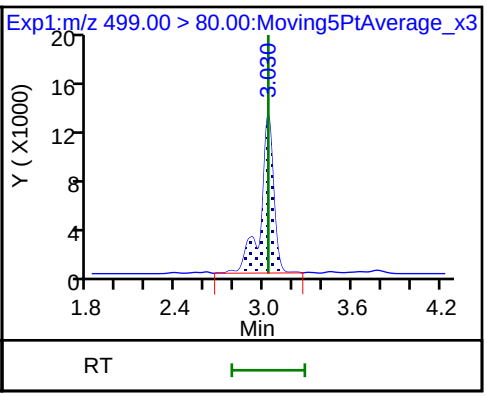
D 12 M2-6:2FTS



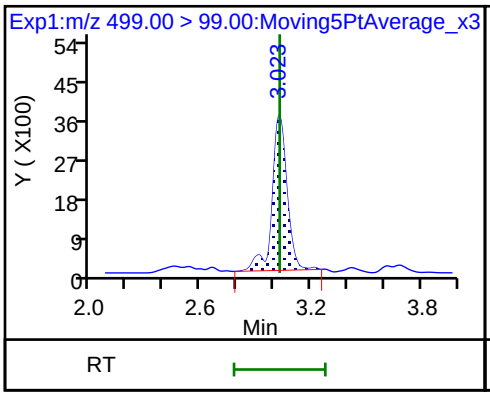
D 14 13C4 PFOA



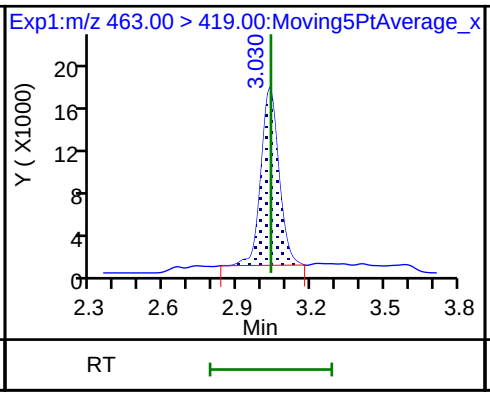
17 Perfluorooctane sulfonic acid



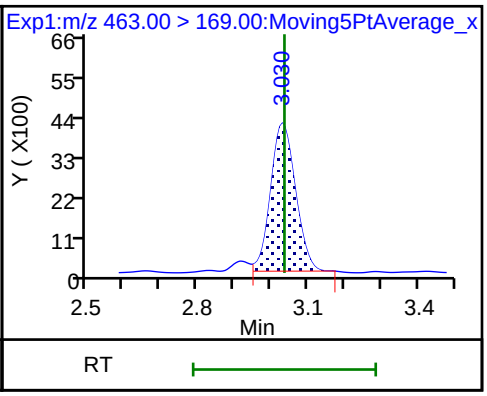
17 Perfluorooctane sulfonic acid



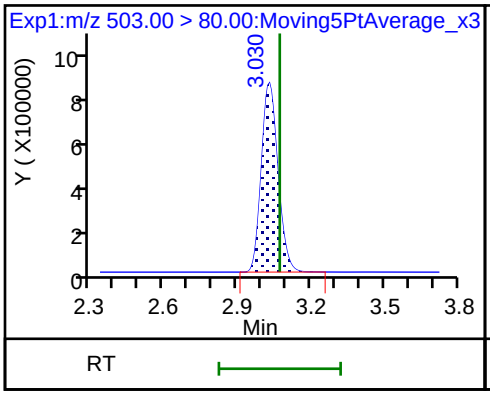
20 Perfluorononanoic acid



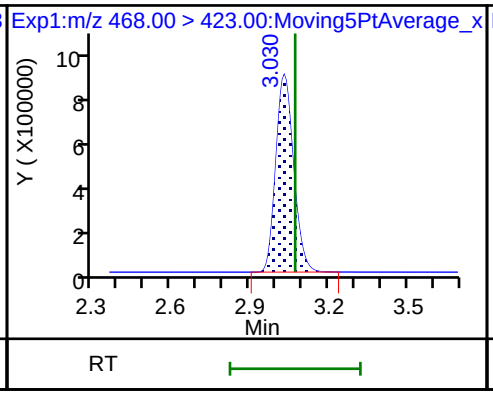
20 Perfluorononanoic acid



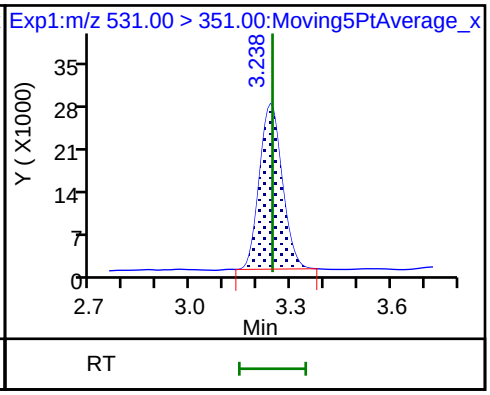
D 18 13C4 PFOS



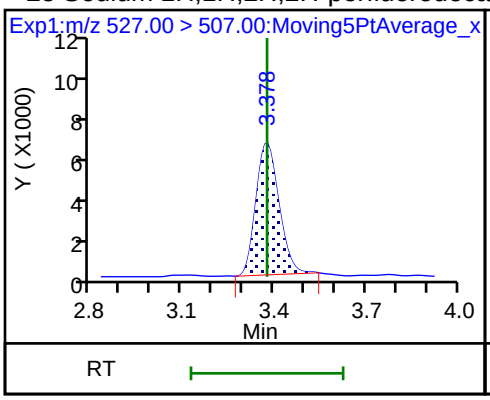
D 19 13C5 PFNA



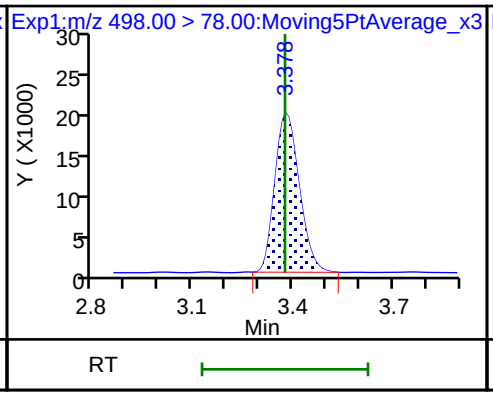
69 9-Chlorohexadecafluoro-3-oxanonane



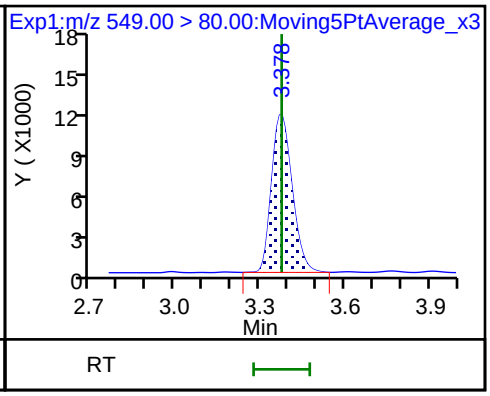
25 Sodium 1H,1H,2H,2H-perfluorodecan



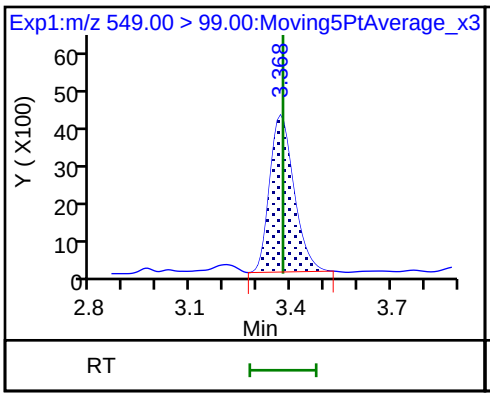
22 Perfluorooctane Sulfonamide



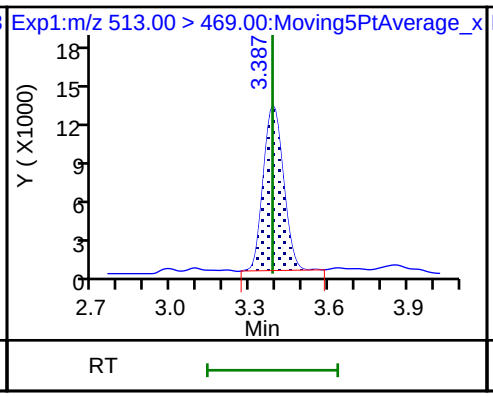
68 Perfluorononanesulfonic acid



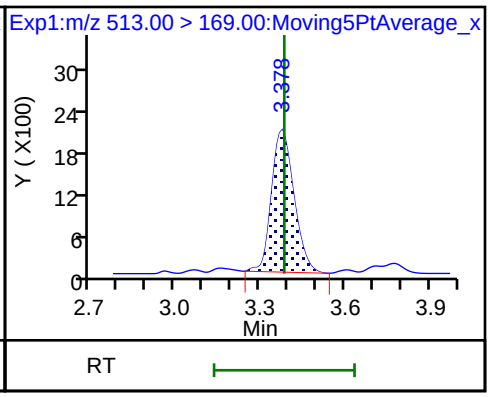
68 Perfluorononanesulfonic acid



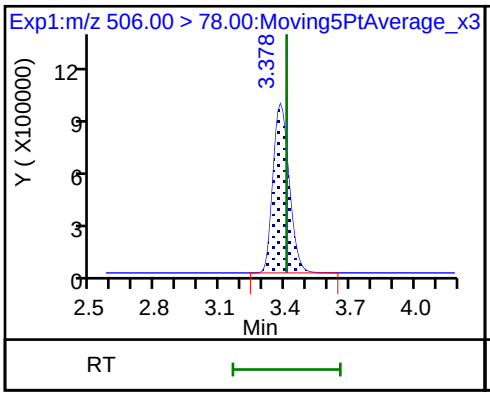
24 Perfluorodecanoic acid



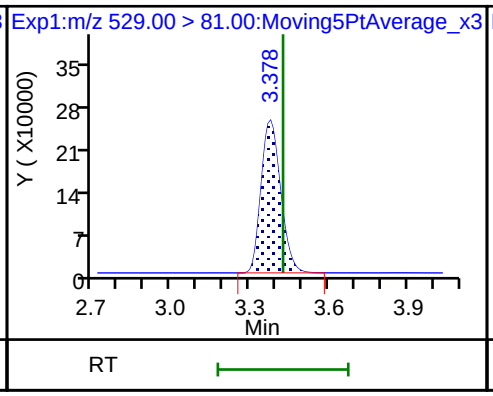
24 Perfluorodecanoic acid



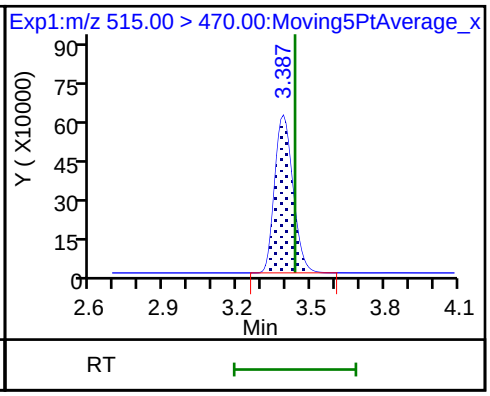
D 21 13C8 FOSA



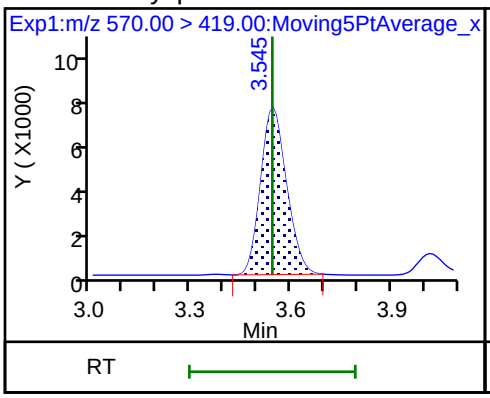
D 26 M2-8:2FTS



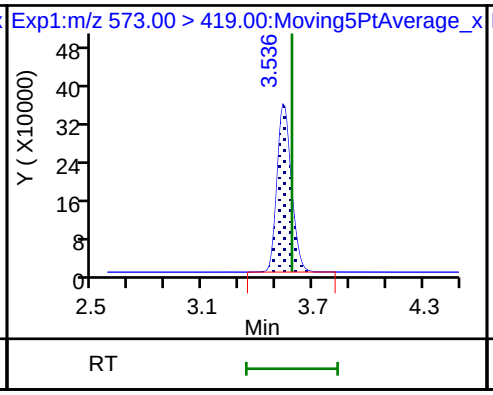
D 23 13C2 PFDA



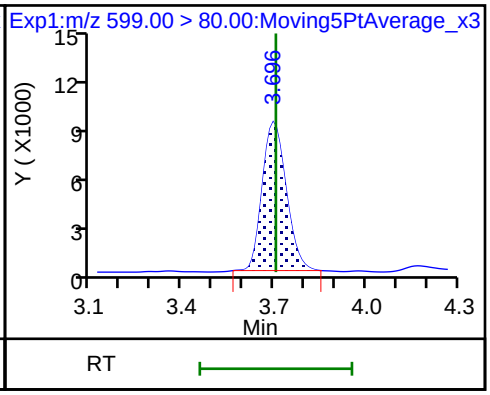
28 N-methyl perfluorooctane sulfonami



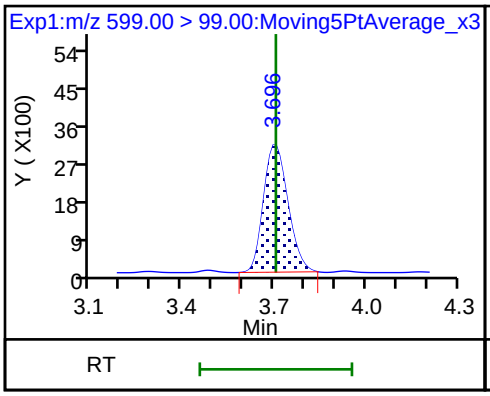
D 27 d3-NMeFOSAA



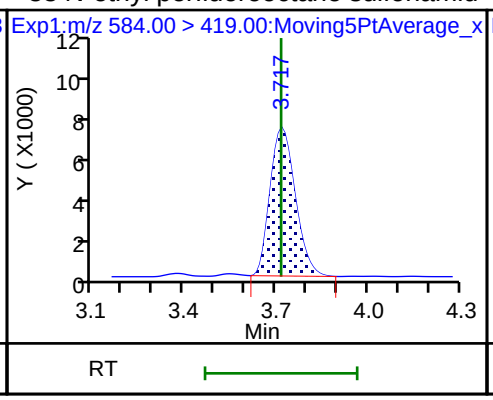
29 Perfluorodecane Sulfonic acid



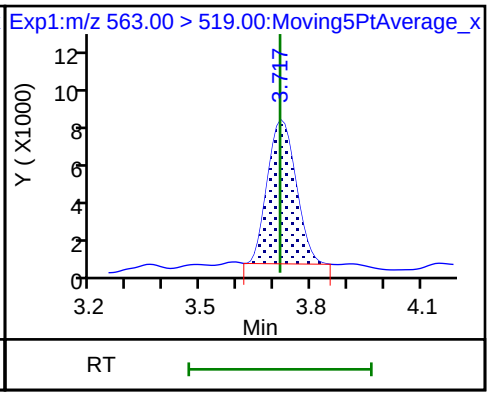
29 Perfluorodecane Sulfonic acid



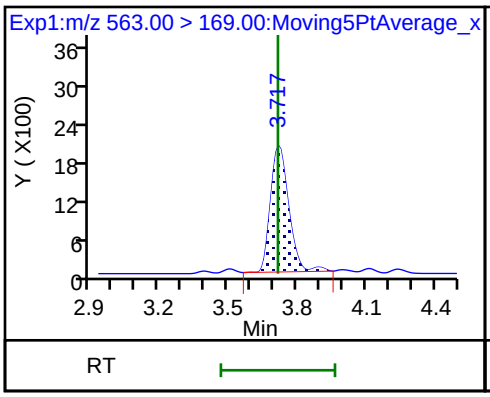
33 N-ethyl perfluorooctane sulfonamid



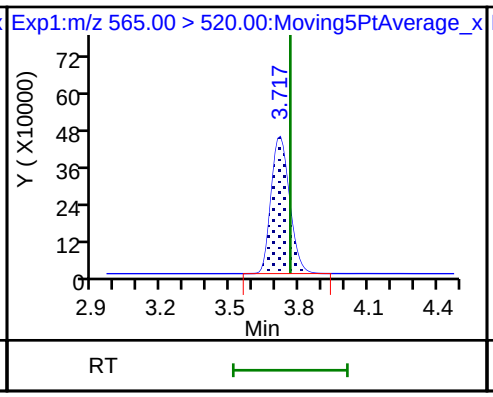
31 Perfluoroundecanoic acid



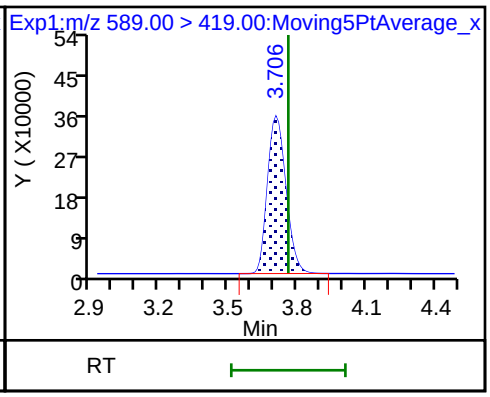
31 Perfluoroundecanoic acid



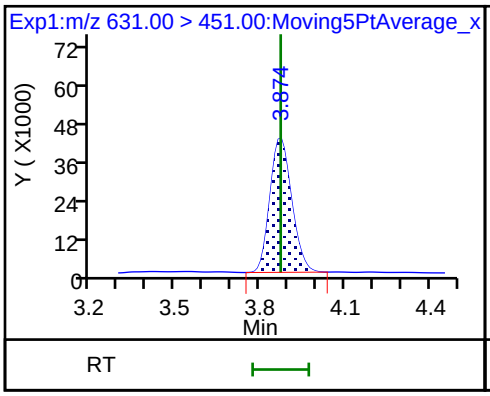
D 30 13C2 PFUnA



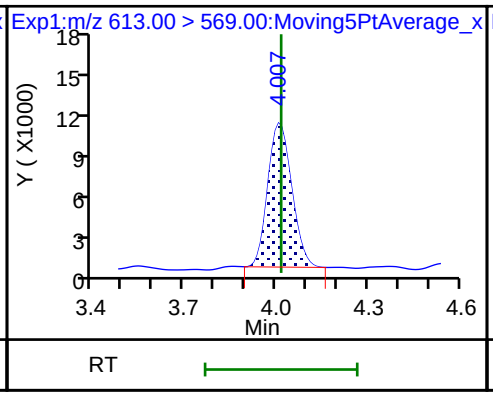
D 32 d5-NEtFOSAA



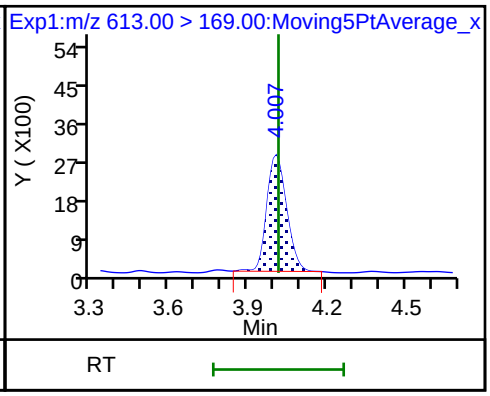
66 11-Chloroeicosafluoro-3-oxaundecan



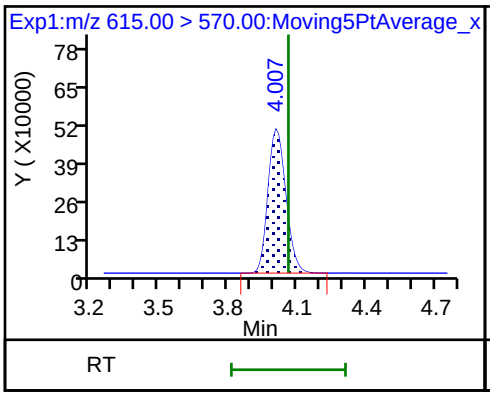
37 Perfluorododecanoic acid



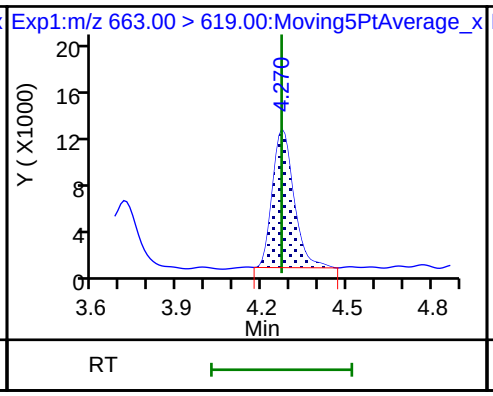
37 Perfluorododecanoic acid



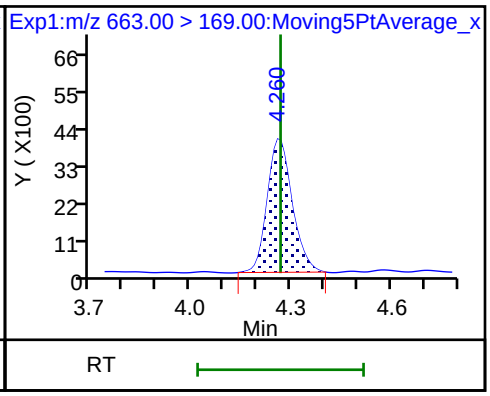
D 36 13C2 PFDoA



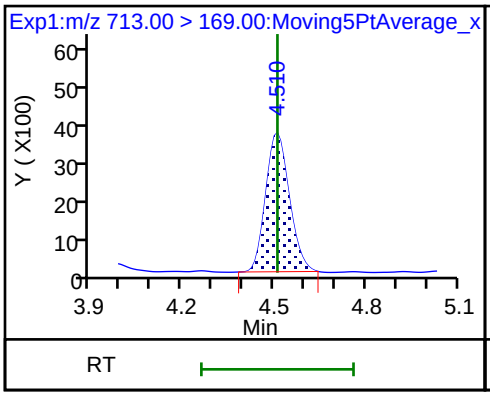
41 Perfluorotridecanoic acid



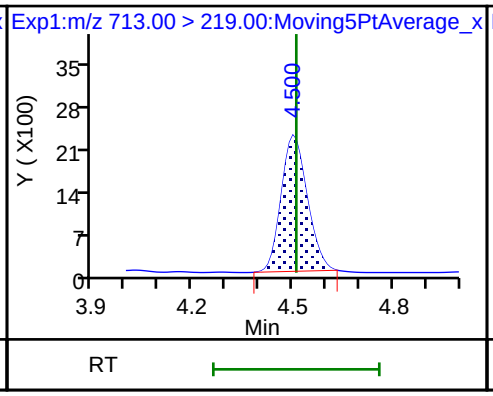
41 Perfluorotridecanoic acid



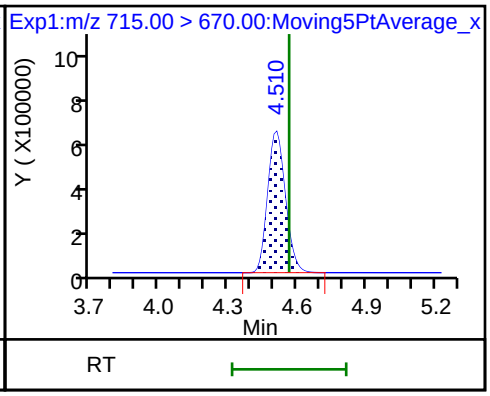
42 Perfluorotetradecanoic acid



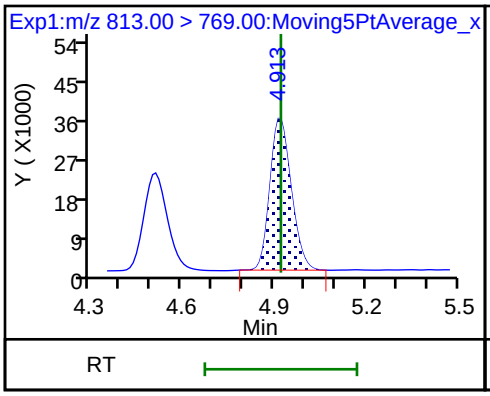
42 Perfluorotetradecanoic acid



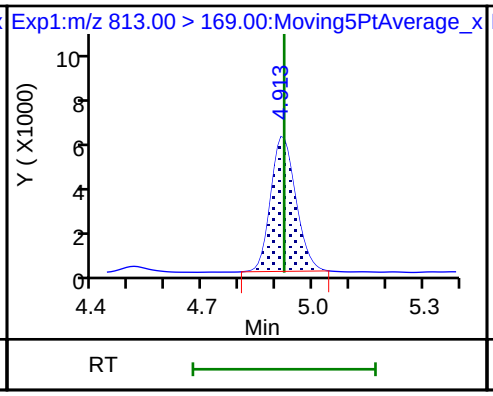
D 43 13C2-PFTeDA



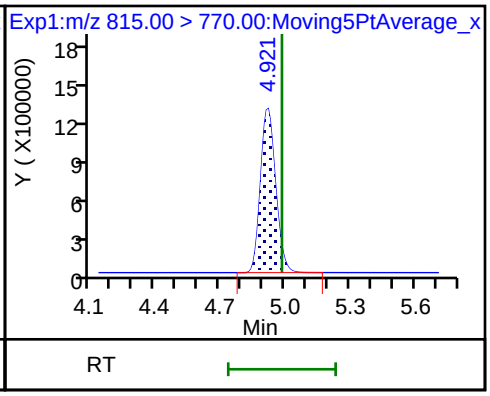
45 Perfluorohexadecanoic acid



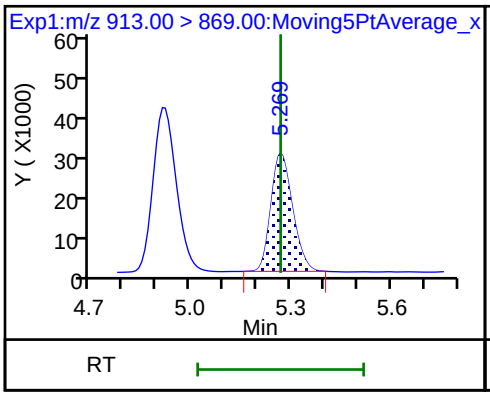
45 Perfluorohexadecanoic acid



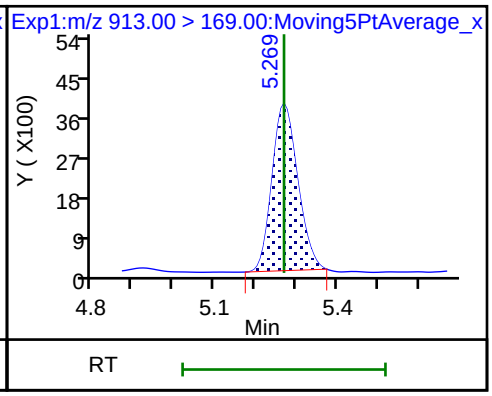
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-223710/3 Calibration Date: 05/16/2018 23:40

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9298	0.9150		0.984	1.00	-1.6	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.181	1.152		0.976	1.00	-2.4	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.09	79.00		0.894	0.884	1.2	50.0
4:2 FTS	AveID	16.57	17.20		0.969	0.934	3.8	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.028	0.9551		0.929	1.00	-7.1	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.55	67.36		0.909	0.938	-3.1	50.0
HFPO-DA (GenX)	AveID	3.057	3.230		1.06	1.00	5.7	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.056	1.041		0.986	1.00	-1.4	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.127	1.028		0.831	0.910	-8.7	40.0
Adona	AveID	3.427	3.402		0.993	1.00	-0.7	50.0
6:2FTS	L2ID		1.617		0.863	0.948	-8.9	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.332	1.257		0.899	0.952	-5.6	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.177	1.102		0.936	1.00	-6.4	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.176	1.025		0.809	0.928	-12.8	40.0
Perfluorononanoic acid (PFNA)	AveID	1.059	0.9938		0.938	1.00	-6.2	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.794	1.741		0.905	0.932	-2.9	50.0
8:2FTS	AveID	1.349	1.275		0.905	0.958	-5.5	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7575	0.6966		0.883	0.960	-8.0	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.9912		1.02	1.00	1.8	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9722	1.012		1.04	1.00	4.1	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.015	1.013		0.998	1.00	-0.2	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6714	0.6036		0.867	0.964	-10.1	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9400	0.8828		0.939	1.00	-6.1	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8352	0.7203		0.862	1.00	-13.8	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.719	2.767		0.958	0.942	1.7	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.044	0.996		0.954	1.00	-4.6	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.144	1.086		0.949	1.00	-5.1	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2525	0.2490		0.986	1.00	-1.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID	1.086	0.8782		0.920	1.00	-8.0	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-223710/3 Calibration Date: 05/16/2018 23:40

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.052	0.9936		0.940	1.00	-5.6	50.0
13C4 PFBA	Ave	1.528	1.436		2.35	2.50	-6.0	50.0
13C5 PFPeA	Ave	0.9798	0.9358		2.39	2.50	-4.5	50.0
13C3-PFBS	Ave	0.0221	0.0210		2.21	2.33	-5.1	50.0
M2-4:2FTS	Ave	0.1627	0.1655		2.38	2.34	1.7	50.0
13C2 PFHxA	Ave	1.045	1.050		2.51	2.50	0.5	50.0
13C3 HFPO-DA	Ave	0.0517	0.0504		2.44	2.50	-2.4	50.0
13C4-PFHpA	Ave	1.001	0.9868		2.46	2.50	-1.4	50.0
18O2 PFHxS	Ave	1.237	1.177		2.25	2.37	-4.9	50.0
M2-6:2FTS	Ave	0.2210	0.2317		2.49	2.38	4.9	40.0
13C4 PFOA	Ave	0.9468	0.9374		2.47	2.50	-1.0	50.0
13C4 PFOS	Ave	0.8503	0.8565		2.41	2.39	0.7	50.0
13C5 PFNA	Ave	0.7745	0.7784		2.51	2.50	0.5	50.0
13C8 FOSA	Ave	1.113	1.066		2.40	2.50	-4.2	50.0
M2-8:2FTS	Ave	0.2515	0.2658		2.53	2.40	5.7	40.0
13C2 PFDA	Ave	0.6587	0.6472		2.46	2.50	-1.8	50.0
d3-NMeFOSAA	Ave	0.3634	0.3803		2.62	2.50	4.7	50.0
d5-NEtFOSAA	Ave	0.3729	0.4024		2.70	2.50	7.9	50.0
13C2 PFUnA	Ave	0.5216	0.5383		2.58	2.50	3.2	50.0
13C2 PFDoA	Ave	0.5613	0.5776		2.57	2.50	2.9	50.0
13C2-PFTeDA	Ave	0.6891	0.6994		2.54	2.50	1.5	50.0
13C2-PFHxDA	Ave	1.141	1.366		2.99	2.50	19.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58288.b\2018.05.16LLD_006.d
Lims ID: CCV L4
Client ID:
Sample Type: CCVIS
Inject. Date: 16-May-2018 23:40:54 ALS Bottle#: 13 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58288.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 09:07:50 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK010

First Level Reviewer: westendorfc Date: 17-May-2018 09:07:28

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.450	1.450	0.0	1.004	2580547	0.9841		98.4	1293	
D 1 13C4 PFBA										
217.00 > 172.00	1.444	1.458	-0.014	1.000	7050535	2.35		94.0	48553	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.716	1.716	0.0	1.000	2117415	0.9762		97.6	1452	
D 3 13C5-PFPeA										
267.90 > 223.00	1.716	1.730	-0.014	0.565	4593259	2.39		95.5	70878	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.752	1.752	0.0	1.005	2880879	0.8943		101	15662	
298.90 > 99.00	1.752	1.752	0.0	1.005	1207433		2.39(1.25-3.74)		9303	
D 47 13C3-PFBS										
301.90 > 83.00	1.743	1.766	-0.023	1.000	95912	2.21		94.9	838	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.956	1.956	0.0	1.000	662651	0.9692		104	27923	
D 60 M2-4:2FTS										
329.00 > 81.00	1.956	1.982	-0.026	1.000	758738	2.38		102	7458	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.999	1.999	0.0	1.006	1968583	0.9289		92.9	3529	
313.00 > 119.00	1.999	1.999	0.0	1.006	181149		10.87(5.03-15.10)		2113	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.011	2.011	0.0	1.000	2606463	0.9085		96.9	30708	
349.00 > 99.00	2.011	2.011	0.0	1.000	1001444		2.60(1.36-4.07)		11773	
D 7 13C2 PFHxA										
315.00 > 270.00	1.988	2.016	-0.028	1.000	5153112	2.51		100	95136	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.090	2.090	0.0	1.000	319852	1.06		106	2825	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.090	2.118	-0.028	1.000	247601	2.44		97.6	5179	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.316	2.316	0.0	1.000	2017889	0.9860		98.6	2710	
363.00 > 169.00	2.316	2.316	0.0	1.000	780151		2.59(1.13-3.40)		4208	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.329	2.329	0.0	1.000	2162106	0.8305		91.3	12171	
399.00 > 99.00	2.329	2.329	0.0	1.000	727270		2.97(1.50-4.49)		3526	
D 9 13C4-PFHpA										
367.00 > 322.00	2.316	2.347	-0.031	1.000	4843749	2.46		98.6	62631	
D 11 18O2 PFHxS										
403.00 > 84.00	2.329	2.360	-0.031	1.000	5463961	2.25		95.1	42348	
65 Adona										
377.00 > 251.00	2.368	2.368	0.0	1.000	5720773	0.99		99.3	69549	
377.00 > 85.00	2.355	2.368	-0.013	0.994	3415588		1.67(0.84-2.53)		41674	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.642	2.642	0.0	1.000	697537	0.8633		91.1	5759	
* 62 13C2-PFOA										
415.00 > 370.00	2.666	2.666	0.0		4908443	2.50			81327	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.673	2.673	0.0	1.000	2012762	0.8986		94.4	25847	
449.00 > 99.00	2.673	2.673	0.0	1.000	557076		3.61(1.94-5.82)		7642	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.673	2.673	0.0	1.003	2028066	0.9362		93.6	943	
413.00 > 169.00	2.673	2.673	0.0	1.003	1074697		1.89(0.84-2.52)		3427	
D 12 M2-6:2FTS										
429.00 > 81.00	2.642	2.683	-0.040	1.000	1080600	2.49		105	16493	
D 14 13C4 PFOA										
417.00 > 372.00	2.666	2.705	-0.039	1.000	4600917	2.47		99.0	66836	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.029	3.029	0.0	1.000	1599448	0.8089		87.2	14147	
499.00 > 99.00	3.029	3.029	0.0	1.000	360296		4.44(2.31-6.93)		4526	
20 Perfluorononanoic acid										
463.00 > 419.00	3.036	3.036	0.0	1.000	1518802	0.9383		93.8	4073	
463.00 > 169.00	3.036	3.036	0.0	1.000	371979		4.08(1.90-5.69)		7848	
D 18 13C4 PFOS										
503.00 > 80.00	3.029	3.072	-0.043	1.000	4019262	2.41		101	31253	
D 19 13C5 PFNA										
468.00 > 423.00	3.036	3.072	-0.036	1.000	3820636	2.51		101	51028	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.244	3.244	0.0	1.000	2728468	0.9046		97.1	9852	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.376	3.376	0.0	1.000	637704	0.9054		94.5	13561	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.376	3.376	0.0	1.000	2075105	1.02		102	22439	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.376	3.376	0.0	1.000	1124663	0.8829		92.0	31565	
549.00 > 99.00	3.376	3.376	0.0	1.000	440568		2.55(1.33-3.97)		6659	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	3.385	3.385	0.0	1.000	1285975	1.04		104	5153	
513.00 > 169.00	3.385	3.385	0.0	1.000	221337		5.81(2.36-7.09)		4165	
D 21 13C8 FOSA										
506.00 > 78.00	3.376	3.407	-0.031	1.000	5233682	2.40		95.8	44541	
D 26 M2-8:2FTS										
529.00 > 81.00	3.376	3.425	-0.049	1.000	1250040	2.53		106	19817	
D 23 13C2 PFDA										
515.00 > 470.00	3.385	3.435	-0.050	1.000	3176526	2.46		98.2	36024	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.544	3.544	0.0	1.000	756283	1.00		99.8	4376	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.544	3.585	-0.041	1.000	1866788	2.62		105	28924	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.705	3.705	0.0	1.000	978555	0.8666		89.9	13806	
599.00 > 99.00	3.705	3.705	0.0	1.000	330272		2.96(1.39-4.16)		12108	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.715	3.715	0.0	1.003	697482	0.9392		93.9	9672	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.715	3.715	0.0	1.000	761276	0.8624		86.2	3937	
563.00 > 169.00	3.715	3.715	0.0	1.000	212759		3.58(2.12-6.36)		9850	
D 30 13C2 PFUnA										
565.00 > 520.00	3.715	3.761	-0.046	1.000	2642230	2.58		103	30152	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.705	3.761	-0.056	1.000	1975114	2.70		108	12741	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.872	3.872	0.0	1.000	4383259	0.9585		102	23242	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.016	4.016	0.0	1.000	1129245	0.9541		95.4	1224	
613.00 > 169.00	4.016	4.016	0.0	1.000	282960		3.99(2.13-6.40)		5731	
D 36 13C2 PFDoA										
615.00 > 570.00	4.016	4.061	-0.045	1.000	2835177	2.57		103	26445	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.268	4.268	0.0	1.000	1231242	0.9491		94.9	1022	
663.00 > 169.00	4.268	4.268	0.0	1.000	385582		3.19(1.25-3.76)		5523	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.510	4.510	0.0	1.000	341853	0.9859		98.6	3347	
713.00 > 219.00	4.500	4.510	-0.010	0.998	241844		1.41(0.71-2.13)		5620	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.510	4.565	-0.054	1.000	3432804	2.54		101	14047	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.921	4.921	0.0	1.000	2354657	0.9200		92.0	715	
813.00 > 169.00	4.921	4.921	0.0	1.000	412676		5.71(2.86-8.58)		4567	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.921	4.985	-0.064	1.000	6702964	2.99		120	14303	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.269	5.269	0.0	1.000	2663895	0.9400		94.0	536	
913.00 > 169.00	5.269	5.269	0.0	1.000	335514		7.94(3.83-11.48)		2963	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 17-May-2018 09:07:51 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58288.b\2018.05.16LLD_006.d

Injection Date: 16-May-2018 23:40:54 Instrument ID: A8_N

Lims ID: CCV L4

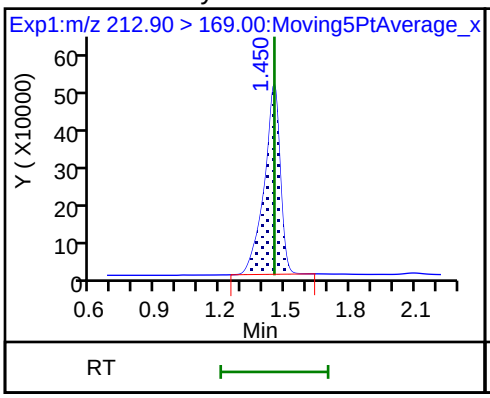
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 3

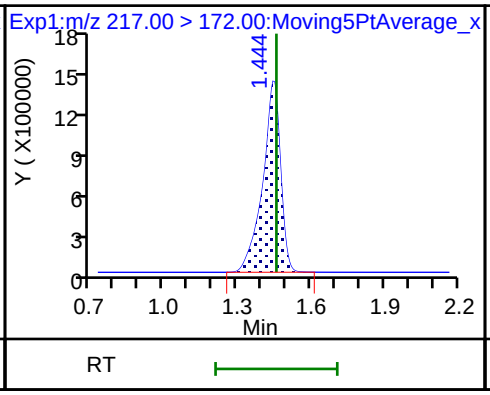
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

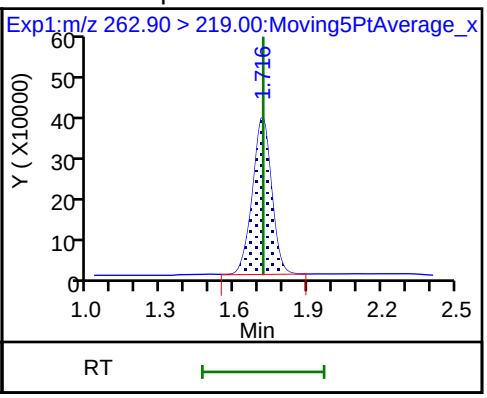
2 Perfluorobutyric acid



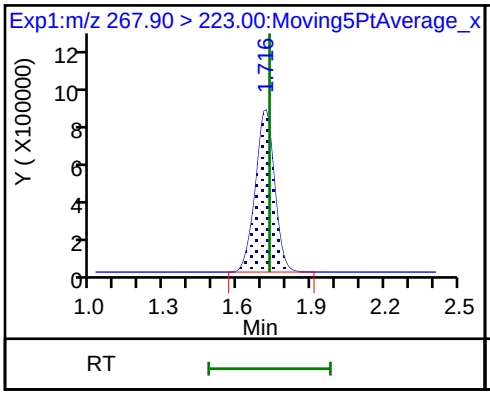
D 1 13C4 PFBA



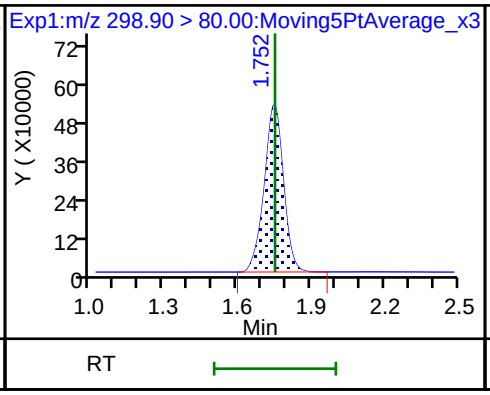
4 Perfluoropentanoic acid



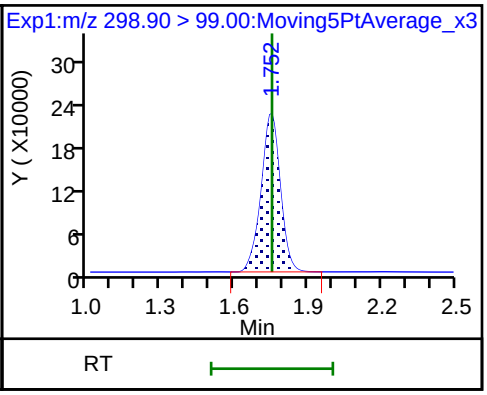
D 3 13C5-PFPeA



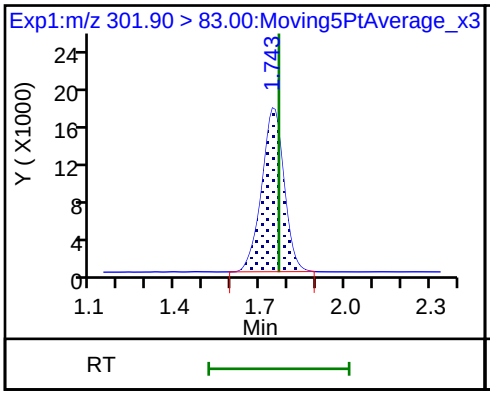
5 Perfluorobutanesulfonic acid



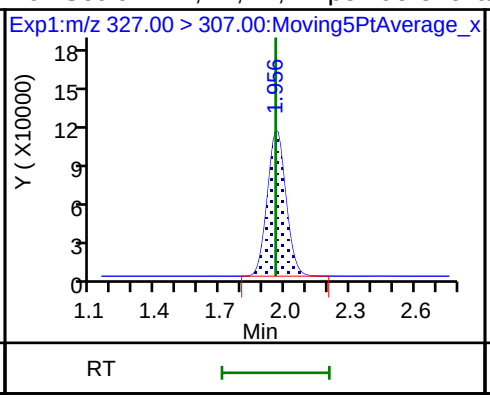
5 Perfluorobutanesulfonic acid



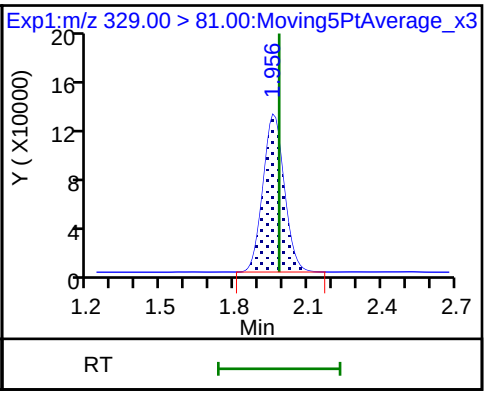
D 47 13C3-PFBS



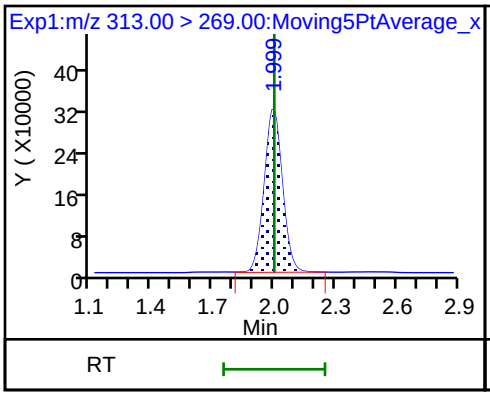
61 Sodium 1H,1H,2H,2H-perfluorohexa



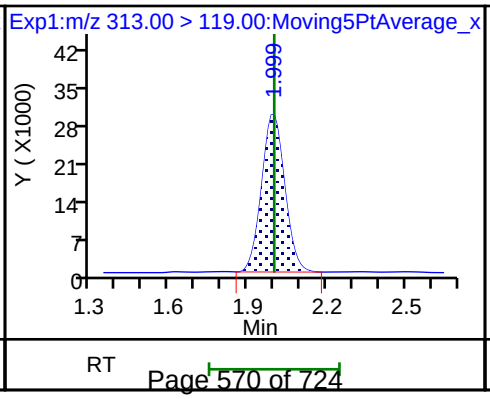
D 60 M2-4:2FTS



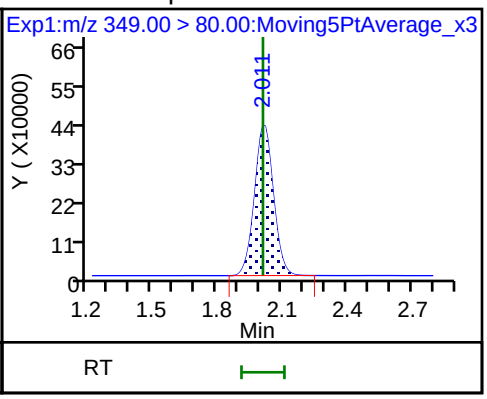
6 Perfluorohexanoic acid



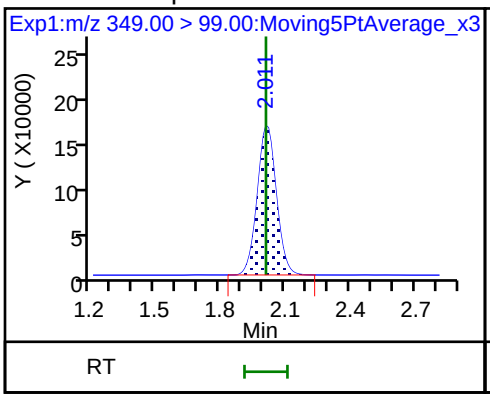
6 Perfluorohexanoic acid



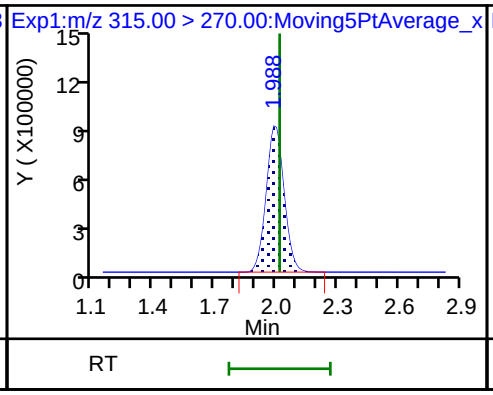
70 Perfluoropentanesulfonic acid



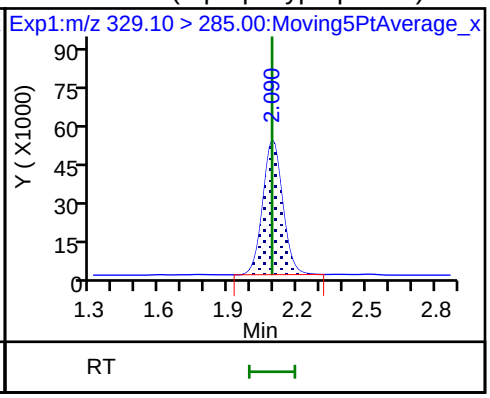
70 Perfluoropentanesulfonic acid



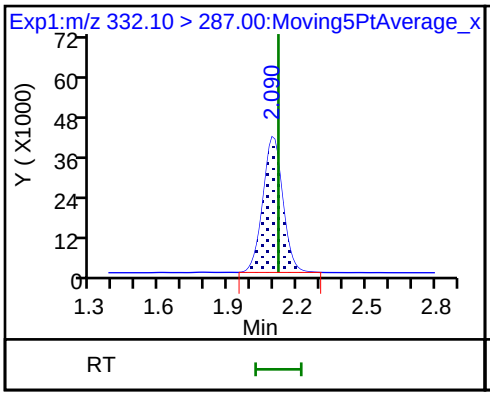
D 7 13C2 PFHxA



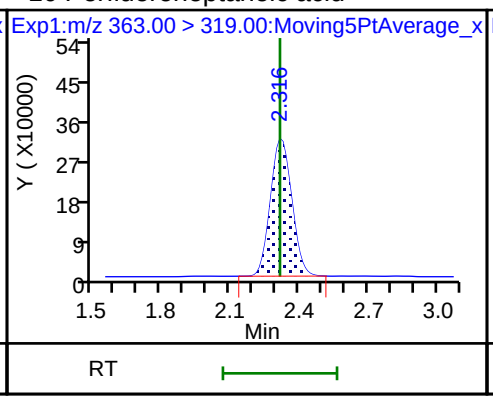
67 Perfluoro(2-propoxypropanoic) acid



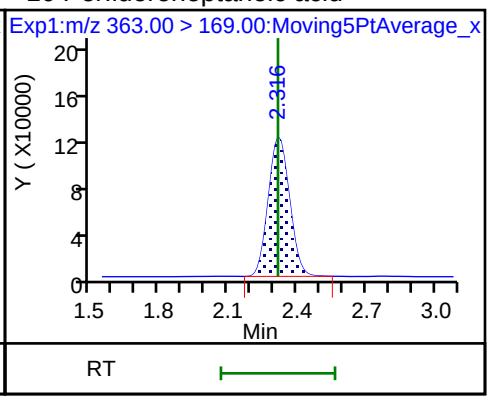
D 64 13C3 HFPO-DA



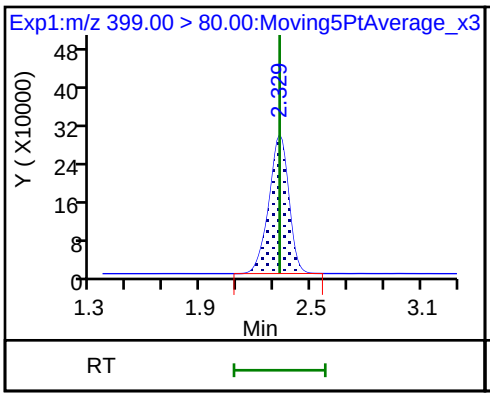
10 Perfluoroheptanoic acid



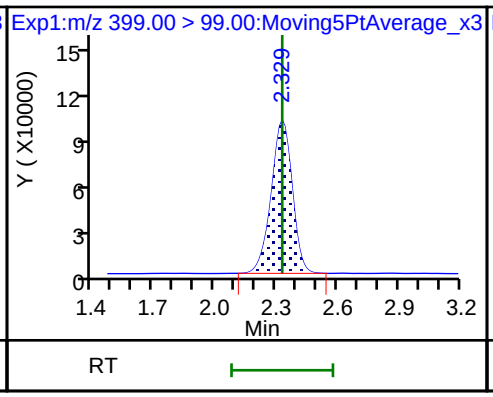
10 Perfluoroheptanoic acid



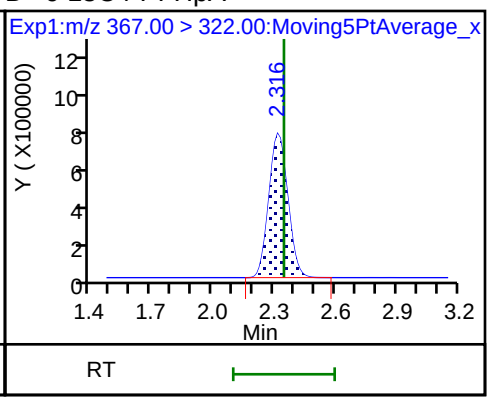
8 Perfluorohexanesulfonic acid



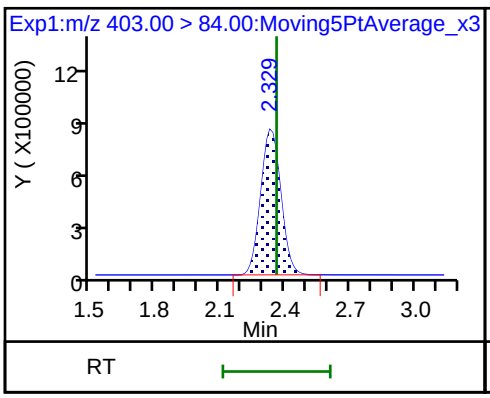
8 Perfluorohexanesulfonic acid



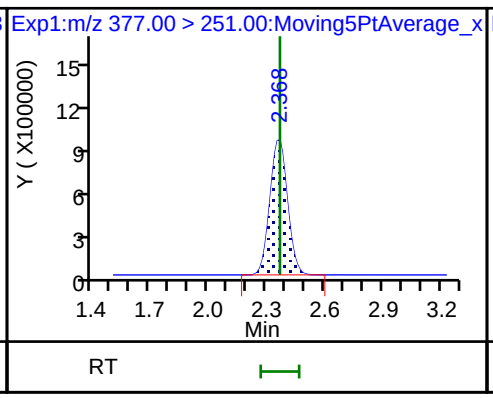
D 9 13C4-PFHpA



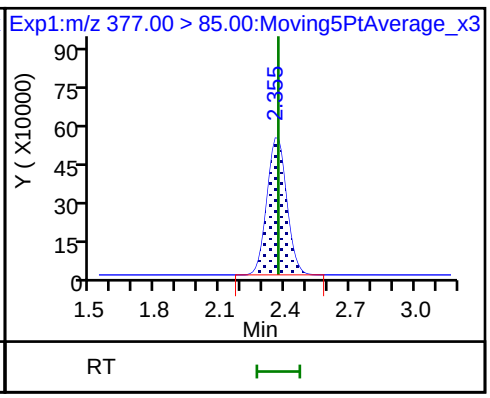
D 11 18O2 PFHxS



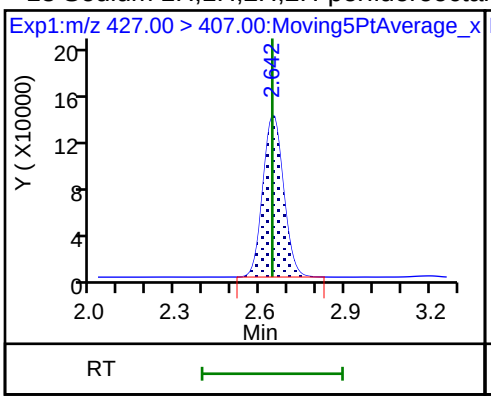
65 Adona



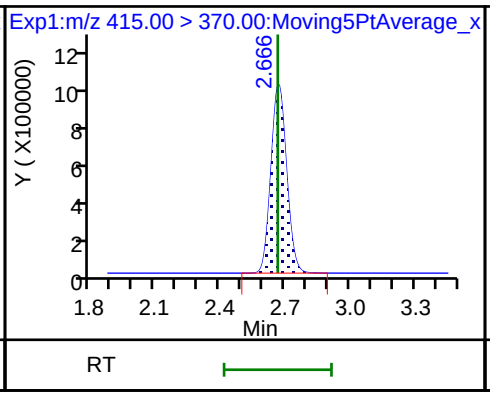
65 Adona



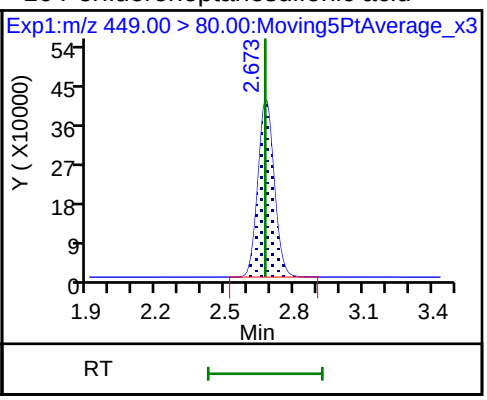
13 Sodium 1H,1H,2H,2H-perfluorooctane



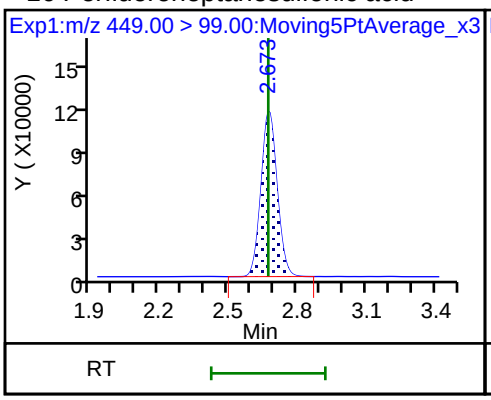
62 13C2-PFOA



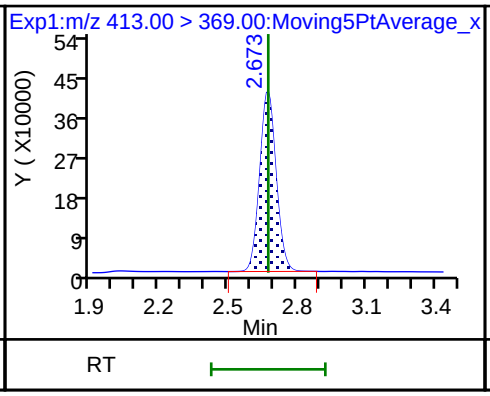
16 Perfluoroheptanesulfonic acid



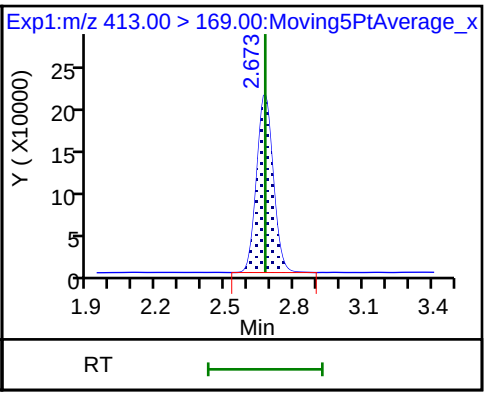
16 Perfluoroheptanesulfonic acid



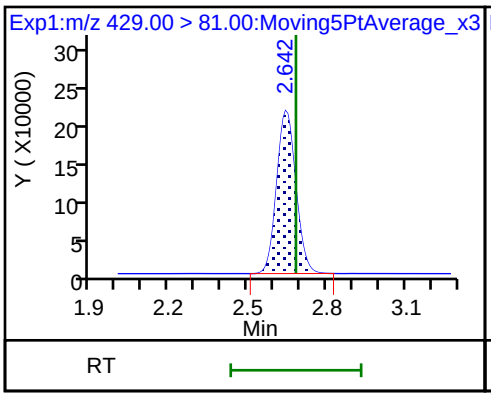
15 Perfluorooctanoic acid



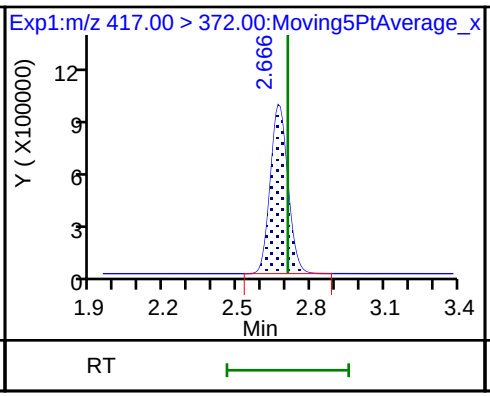
15 Perfluorooctanoic acid



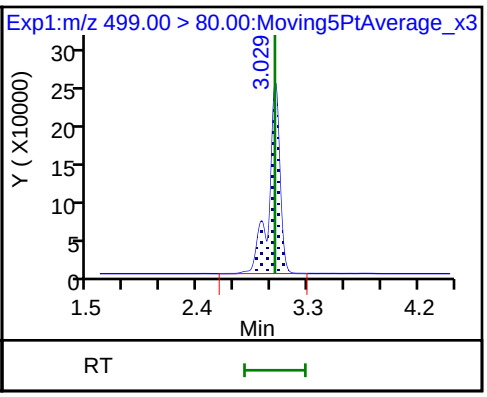
D 12 M2-6:2FTS



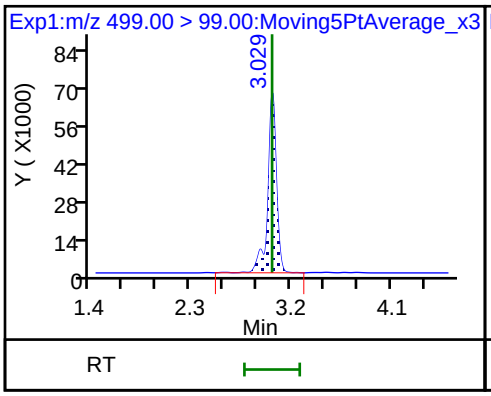
D 14 13C4 PFOA



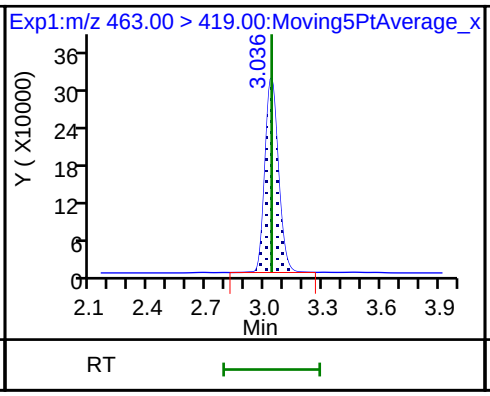
17 Perfluorooctane sulfonic acid



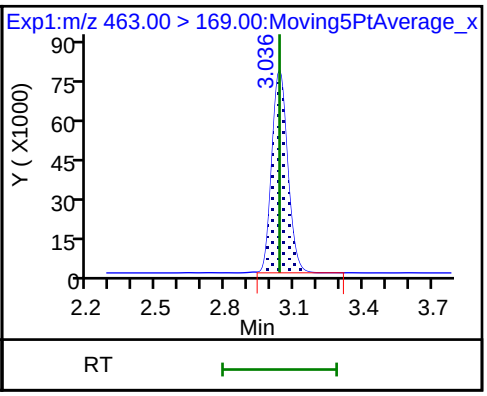
17 Perfluorooctane sulfonic acid



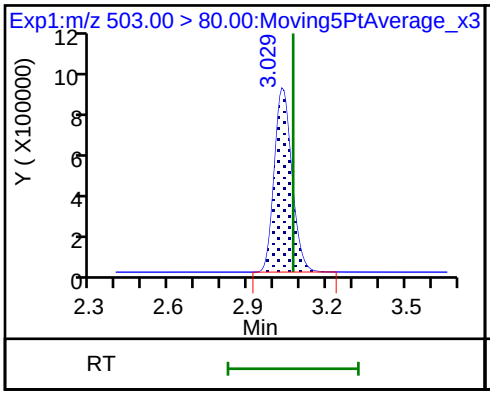
20 Perfluorononanoic acid



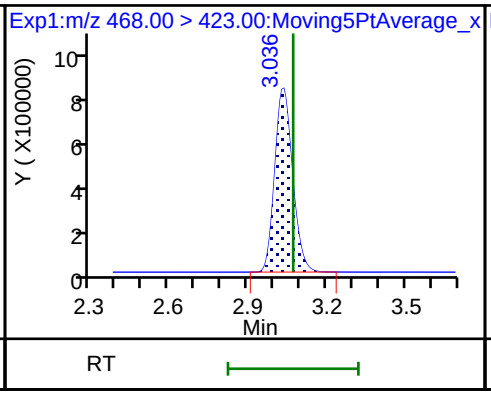
20 Perfluorononanoic acid



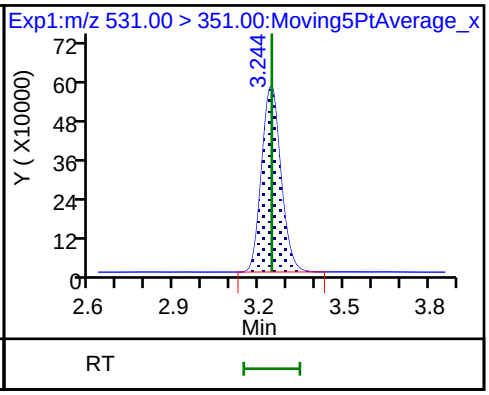
D 18 13C4 PFOS



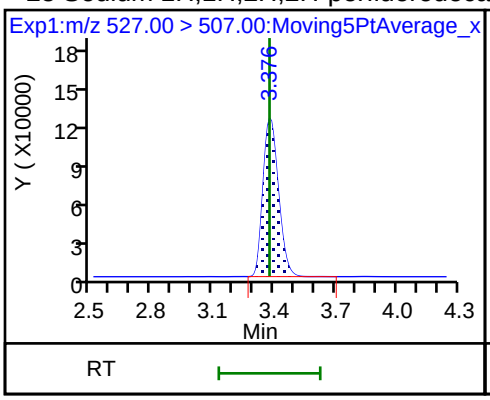
D 19 13C5 PFNA



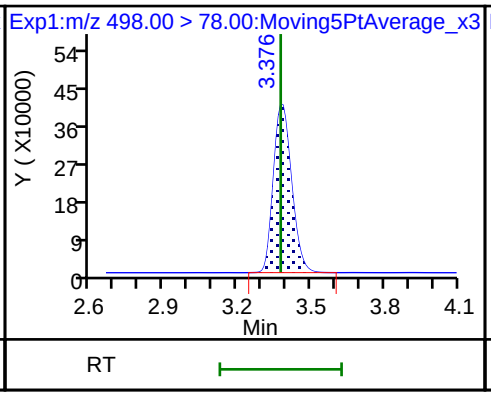
69 9-Chlorohexadecafluoro-3-oxanonane



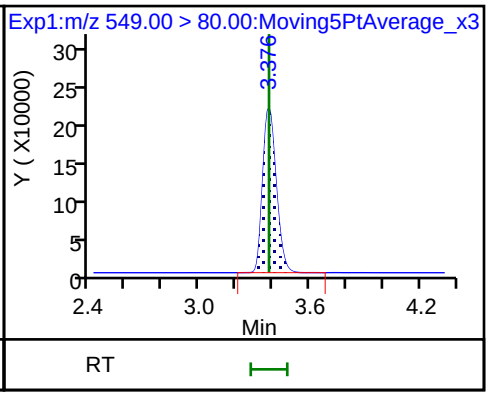
25 Sodium 1H,1H,2H,2H-perfluorodecane



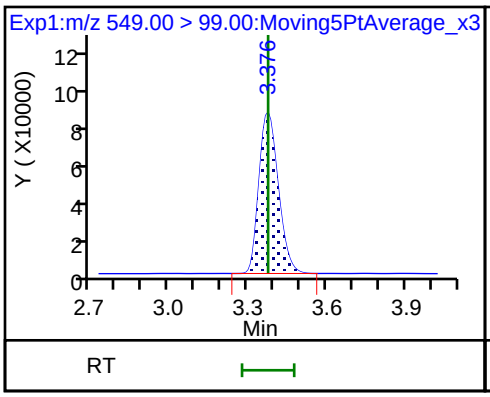
22 Perfluorooctane Sulfonamide



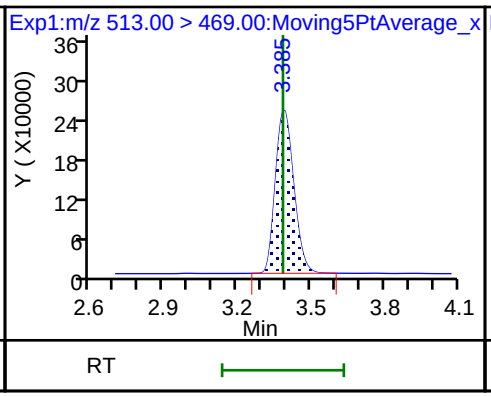
68 Perfluorononanesulfonic acid



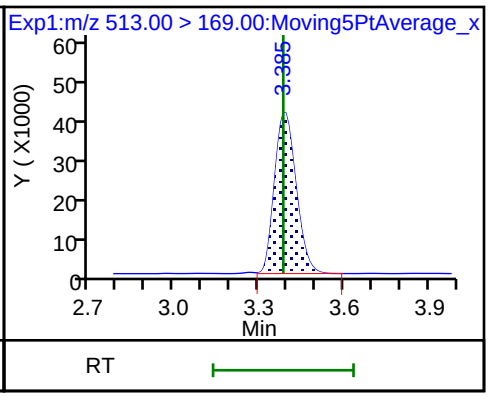
68 Perfluorononanesulfonic acid



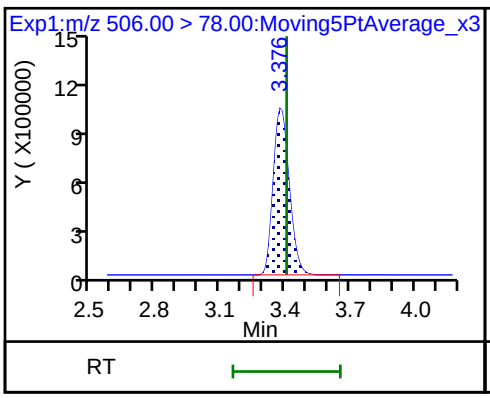
24 Perfluorodecanoic acid



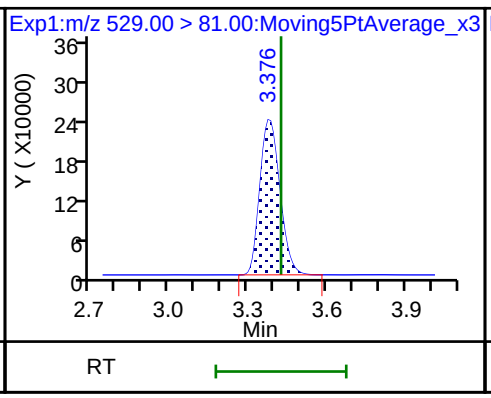
24 Perfluorodecanoic acid



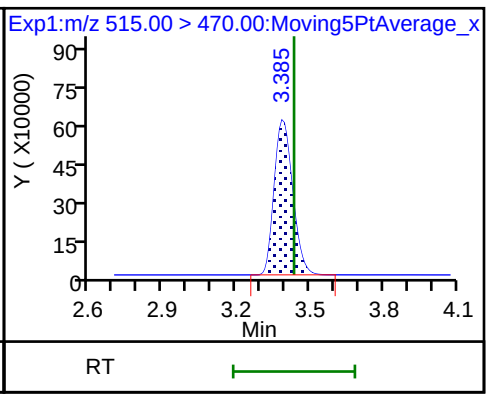
D 21 13C8 FOSA



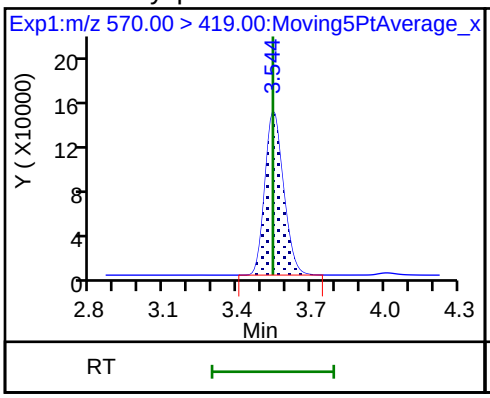
D 26 M2-8:2FTS



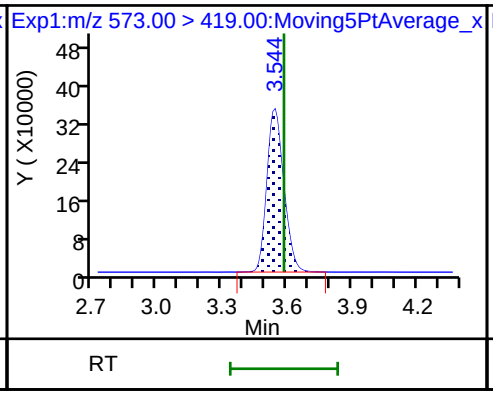
D 23 13C2 PFDA



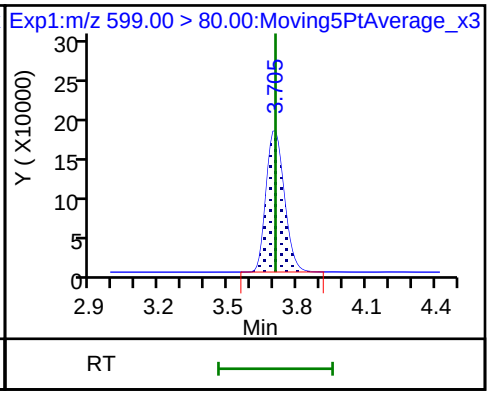
28 N-methyl perfluorooctane sulfonami



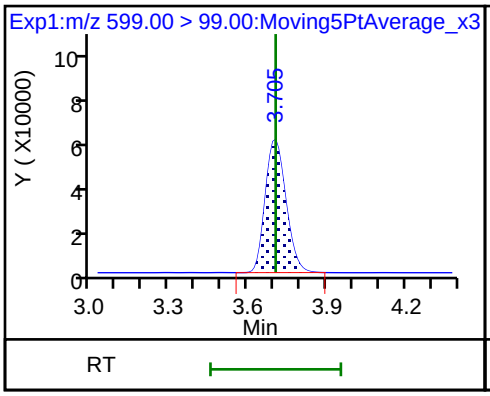
D 27 d3-NMeFOSAA



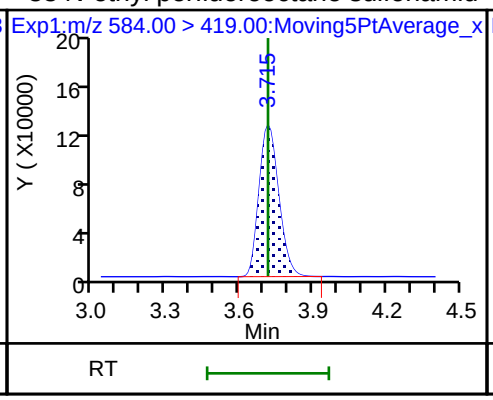
29 Perfluorodecane Sulfonic acid



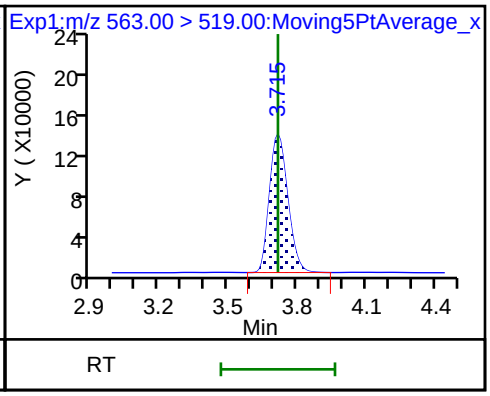
29 Perfluorodecane Sulfonic acid



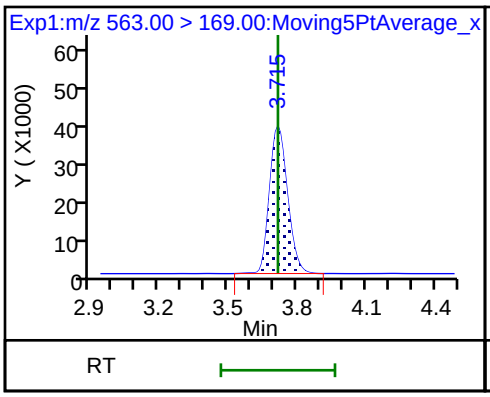
33 N-ethyl perfluorooctane sulfonamid



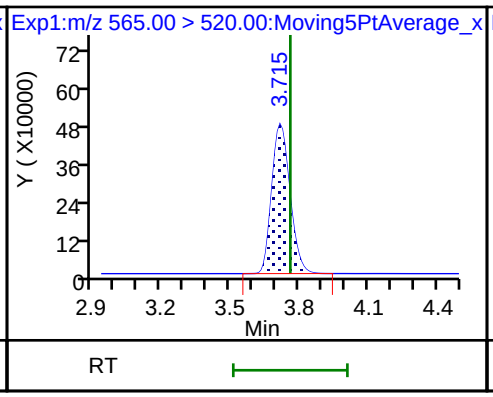
31 Perfluoroundecanoic acid



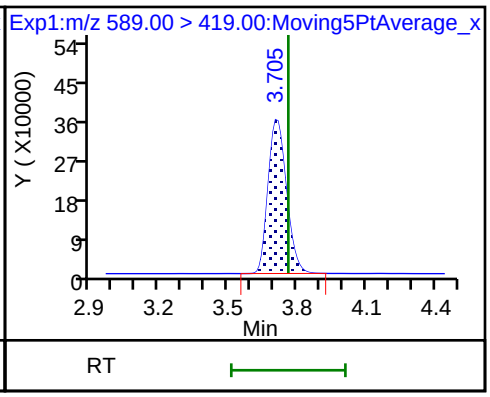
31 Perfluoroundecanoic acid



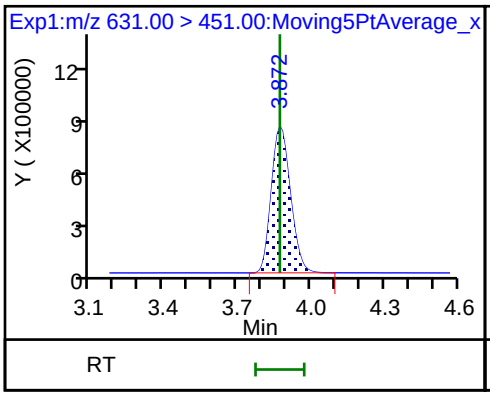
D 30 13C2 PFUnA



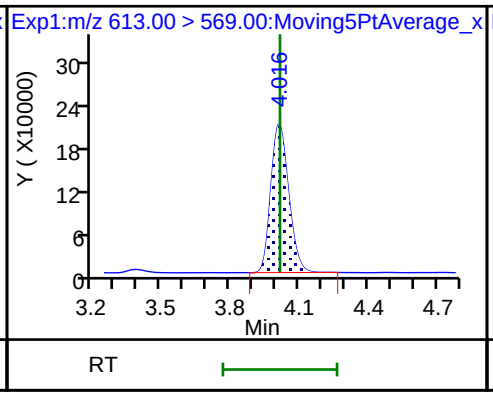
D 32 d5-NEtFOSAA



66 11-Chloroeicosafluoro-3-oxaundecan



37 Perfluorododecanoic acid



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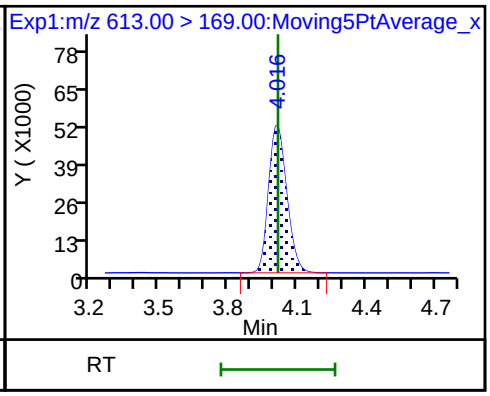
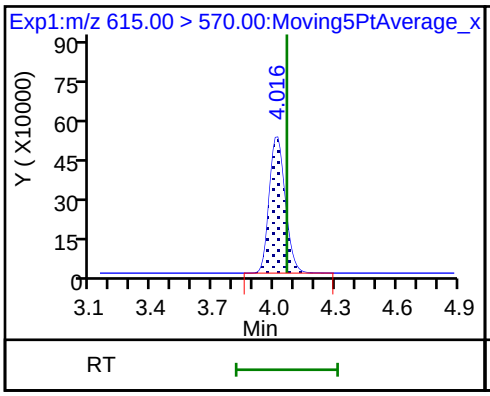
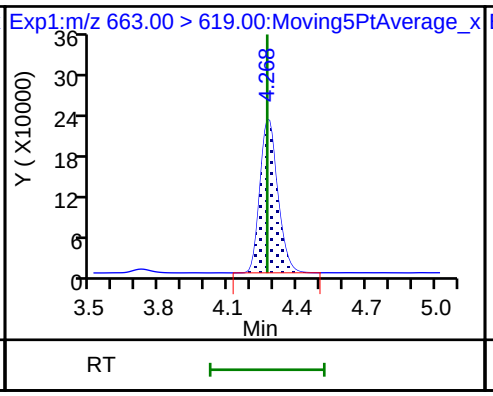


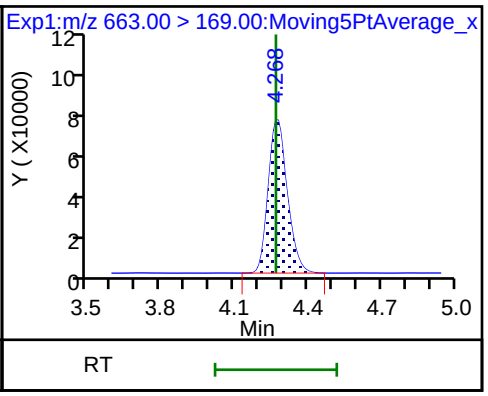
D 36 13C2 PFDoA



41 Perfluorotridecanoic acid



41 Perfluorotridecanoic acid



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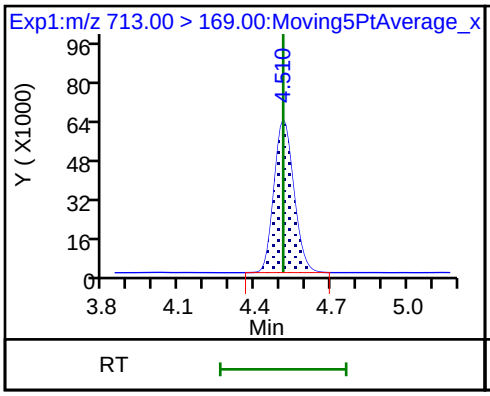
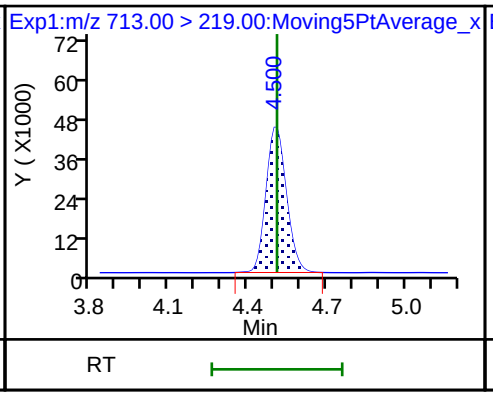
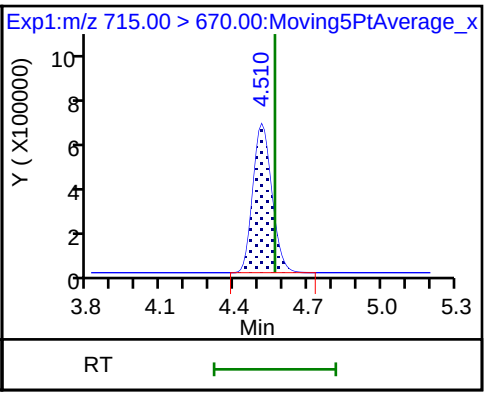


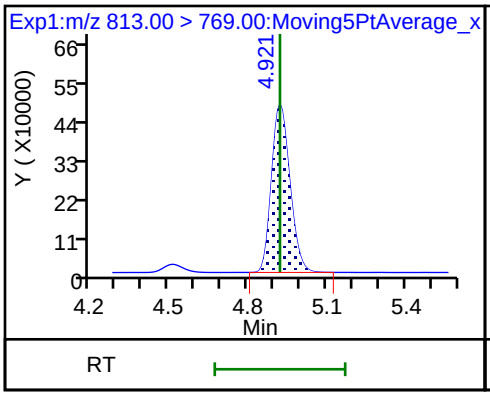
42 Perfluorotetradecanoic acid



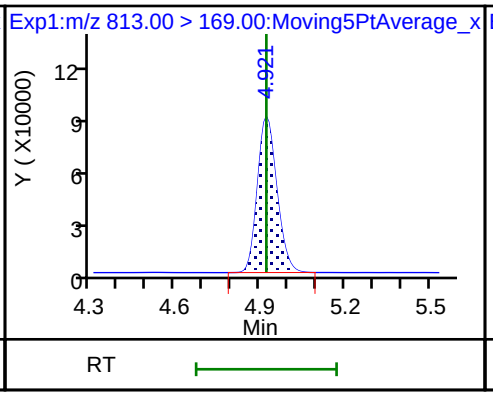
D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



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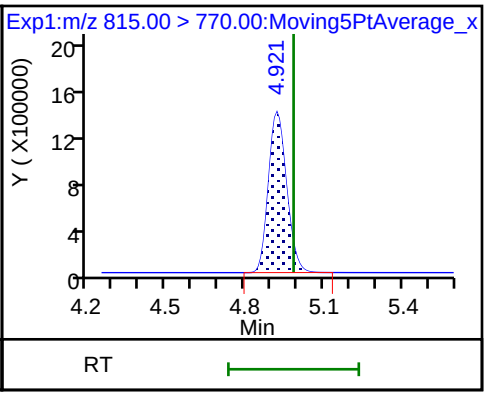
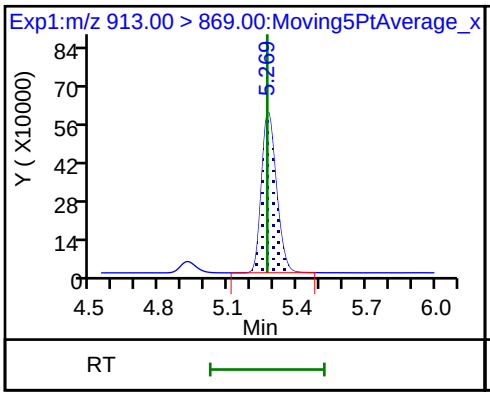
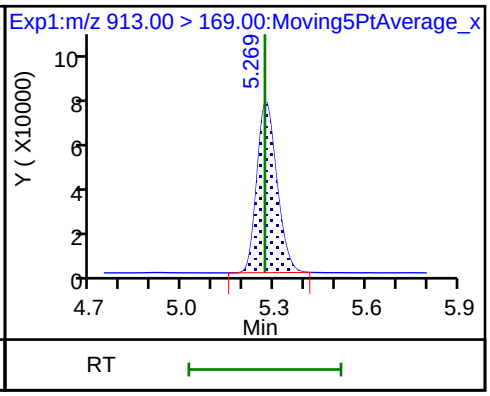


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-223714/1 Calibration Date: 05/17/2018 00:04

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_009.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9298	0.9460		2.54	2.50	1.7	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.181	1.143		2.42	2.50	-3.1	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.09	78.84		2.23	2.21	1.0	50.0
4:2 FTS	AveID	16.57	17.59		2.48	2.34	6.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.028	1.027		2.50	2.50	-0.2	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.55	69.07		2.33	2.35	-0.7	50.0
HFPO-DA (GenX)	AveID	3.057	3.190		2.61	2.50	4.3	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.056	1.061		2.51	2.50	0.4	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.127	1.075		2.17	2.28	-4.6	40.0
Adona	AveID	3.427	3.727		2.72	2.50	8.7	50.0
6:2FTS	L2ID		1.652		2.22	2.37	-6.3	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.177	1.086		2.31	2.50	-7.8	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.332	1.414		2.53	2.38	6.1	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.176	1.097		2.16	2.32	-6.7	40.0
Perfluorononanoic acid (PFNA)	AveID	1.059	1.023		2.41	2.50	-3.4	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.794	1.892		2.46	2.33	5.5	50.0
8:2FTS	AveID	1.349	1.185		2.10	2.40	-12.2	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7575	0.7797		2.47	2.40	2.9	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	1.047		2.69	2.50	7.5	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9722	1.033		2.66	2.50	6.2	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.015	1.051		2.59	2.50	3.6	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6714	0.6639		2.38	2.41	-1.1	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9400	0.9597		2.55	2.50	2.1	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8352	0.8240		2.47	2.50	-1.3	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.719	2.962		2.57	2.36	8.9	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.044	1.098		2.63	2.50	5.3	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.144	1.195		2.61	2.50	4.5	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2525	0.2535		2.51	2.50	0.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID	1.086	1.018		2.71	2.50	8.6	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-223714/1 Calibration Date: 05/17/2018 00:04

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_009.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.052	1.145		2.71	2.50	8.8	50.0
13C4 PFBA	Ave	1.528	1.487		2.43	2.50	-2.7	50.0
13C5 PFPeA	Ave	0.9798	1.014		2.59	2.50	3.5	50.0
13C3-PFBS	Ave	0.0221	0.0223		2.34	2.33	0.7	50.0
M2-4:2FTS	Ave	0.1627	0.1707		2.45	2.34	4.9	50.0
13C2 PFHxA	Ave	1.045	1.059		2.53	2.50	1.4	50.0
13C3 HFPO-DA	Ave	0.0517	0.0497		2.40	2.50	-3.9	50.0
13C4-PFHpA	Ave	1.001	1.028		2.57	2.50	2.7	50.0
18O2 PFHxS	Ave	1.237	1.214		2.32	2.37	-1.9	50.0
M2-6:2FTS	Ave	0.2210	0.2349		2.53	2.38	6.3	40.0
13C4 PFOA	Ave	0.9468	0.9823		2.59	2.50	3.7	50.0
13C4 PFOS	Ave	0.8503	0.8365		2.35	2.39	-1.6	50.0
13C5 PFNA	Ave	0.7745	0.8126		2.62	2.50	4.9	50.0
13C8 FOSA	Ave	1.113	1.084		2.43	2.50	-2.6	50.0
M2-8:2FTS	Ave	0.2515	0.2628		2.50	2.40	4.5	40.0
13C2 PFDA	Ave	0.6587	0.6493		2.46	2.50	-1.4	50.0
d3-NMeFOSAA	Ave	0.3634	0.3909		2.69	2.50	7.6	50.0
d5-NEtFOSAA	Ave	0.3729	0.3926		2.63	2.50	5.3	50.0
13C2 PFUnA	Ave	0.5216	0.5135		2.46	2.50	-1.6	50.0
13C2 PFDoA	Ave	0.5613	0.5552		2.47	2.50	-1.1	50.0
13C2-PFTeDA	Ave	0.6891	0.7241		2.63	2.50	5.1	50.0
13C2-PFHxDA	Ave	1.141	1.279		2.80	2.50	12.1	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_009.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2018 00:04:19 ALS Bottle#: 14 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:07:58 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:07:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.447	0.005	1.000	6899050	2.43		97.3	50655	
2 Perfluorobutyric acid										
212.90 > 169.00	1.452	1.452	0.0	1.000	6526239	2.54		102	3246	
D 3 13C5-PFPeA										
267.90 > 223.00	1.712	1.712	0.0	0.562	4704117	2.59		103	58113	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.712	1.712	0.0	1.000	5378779	2.42		96.9	3578	
D 47 13C3-PFBS										
301.90 > 83.00	1.748	1.748	0.0	1.000	96182	2.34		101	836	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.757	1.757	0.0	1.005	7208084	2.23		101	36680	
298.90 > 99.00	1.757	1.757	0.0	1.005	3039679		2.37(1.25-3.74)		22369	
D 60 M2-4:2FTS										
329.00 > 81.00	1.960	1.961	-0.001	1.000	739320	2.45		105	8244	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.960	1.960	0.0	1.000	1699395	2.48		106	71494	
D 7 13C2 PFHxA										
315.00 > 270.00	1.993	1.994	-0.001	1.000	4913840	2.53		101	89435	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.993	1.993	0.0	1.000	5044417	2.50		99.8	10550	
313.00 > 119.00	1.993	1.993	0.0	1.000	473696		10.65(5.03-15.10)		8756	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.016	2.016	0.0	1.000	6700195	2.33		99.3	68048	
349.00 > 99.00	2.016	2.016	0.0	1.000	2503630		2.68(1.36-4.07)		31583	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.095	2.095	0.0	1.000	230375	2.40		96.1	6318	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.095	2.095	0.0	1.000	734792	2.61		104	6031	
D 9 13C4-PFHpA										
367.00 > 322.00	2.321	2.321	0.0	1.000	4769118	2.57		103	56769	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.321	2.321	0.0	1.000	5060097	2.51		100	6279	
363.00 > 169.00	2.321	2.321	0.0	1.000	1938638		2.61(1.13-3.40)		10355	
D 11 18O2 PFHxS										
403.00 > 84.00	2.334	2.334	0.0	1.000	5325632	2.32		98.1	63290	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.334	2.334	0.0	1.000	5506666	2.17		95.4	20553	
399.00 > 99.00	2.334	2.334	0.0	1.000	1913433		2.88(1.50-4.49)		8227	
65 Adona										
377.00 > 251.00	2.373	2.373	0.0	1.000	14460829	2.72		109	142328	
377.00 > 85.00	2.373	2.373	0.0	1.000	8795940		1.64(0.84-2.53)		63468	
D 12 M2-6:2FTS										
429.00 > 81.00	2.654	2.645	0.009	1.000	1035295	2.53		106	17053	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.654	2.654	0.0	1.000	1706627	2.22		93.7	15481	
D 14 13C4 PFOA										
417.00 > 372.00	2.676	2.668	0.008	1.000	4556516	2.59		104	46353	
* 62 13C2-PFOA										
415.00 > 370.00	2.676	2.676	0.0		4638638	2.50			46505	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.676	2.676	0.0	1.000	4946774	2.31		92.2	2107	
413.00 > 169.00	2.676	2.676	0.0	1.000	2637828		1.88(0.84-2.52)		8757	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.684	2.684	0.0	1.000	5222310	2.53		106	34034	
449.00 > 99.00	2.684	2.684	0.0	1.000	1360685		3.84(1.94-5.82)		16995	
D 18 13C4 PFOS										
503.00 > 80.00	3.036	3.029	0.007	1.000	3709596	2.35		98.4	23820	
D 19 13C5 PFNA										
468.00 > 423.00	3.043	3.036	0.007	1.000	3769170	2.62		105	50136	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.036	3.036	0.0	1.000	3950640	2.16		93.3	26723	
499.00 > 99.00	3.036	3.036	0.0	1.000	899859		4.39(2.31-6.93)		8303	
20 Perfluorononanoic acid										
463.00 > 419.00	3.043	3.043	0.0	1.000	3854849	2.41		96.6	8154	
463.00 > 169.00	3.043	3.043	0.0	1.000	922570		4.18(1.90-5.69)		21491	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.252	3.252	0.0	1.000	6841042	2.46		105	25982	
D 26 M2-8:2FTS										
529.00 > 81.00	3.387	3.376	0.011	1.000	1167885	2.50		105	17417	
D 21 13C8 FOSA										
506.00 > 78.00	3.387	3.376	0.011	1.000	5026844	2.43		97.4	64384	
D 23 13C2 PFDA										
515.00 > 470.00	3.396	3.385	0.011	1.000	3011695	2.46		98.6	28750	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.387	3.387	0.0	1.000	5260808	2.69		107	44249	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.387	3.387	0.0	1.000	1384086	2.10		87.8	20058	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.387	3.387	0.0	1.000	2904480	2.47		103	46785	
549.00 > 99.00	3.387	3.387	0.0	1.000	1100761		2.64(1.33-3.97)		14266	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.396	3.396	0.0	1.000	3110263	2.66		106	15929	
513.00 > 169.00	3.396	3.396	0.0	1.000	531810		5.85(2.36-7.09)		11007	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.545	3.544	0.001	1.000	1813029	2.69		108	23884	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.554	3.554	0.0	1.003	1905749	2.59		104	12290	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.717	3.716	0.001	1.000	1821017	2.63		105	15232	
D 30 13C2 PFUnA										
565.00 > 520.00	3.728	3.716	0.012	1.000	2381969	2.46		98.4	35315	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.706	3.706	0.0	1.000	2483253	2.38		98.9	25118	
599.00 > 99.00	3.706	3.706	0.0	1.000	833803		2.98(1.39-4.16)		19042	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.728	3.728	0.0	1.000	1962753	2.47		98.7	11370	
563.00 > 169.00	3.728	3.728	0.0	1.000	510167		3.85(2.12-6.36)		14938	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.728	3.728	0.0	1.003	1747636	2.55		102	23887	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.885	3.885	0.0	1.000	10826744	2.57		109	43151	
D 36 13C2 PFDoA										
615.00 > 570.00	4.018	4.006	0.012	1.000	2575554	2.47		98.9	18399	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.018	4.018	0.0	1.000	2829233	2.63		105	3013	
613.00 > 169.00	4.018	4.018	0.0	1.000	690432		4.10(2.13-6.40)		9127	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.280	4.280	0.0	1.000	3078120	2.61		104	2664	
663.00 > 169.00	4.280	4.280	0.0	1.000	982310		3.13(1.25-3.76)		11030	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.522	4.511	0.011	1.000	3358912	2.63		105	14472	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.522	4.522	0.0	1.000	851362	2.51		100	8878	
713.00 > 219.00	4.511	4.522	-0.011	0.998	610877		1.39(0.71-2.13)		11430	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.931	4.922	0.009	1.000	5933689	2.80		112	13072	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.931	4.931	0.0	1.000	6040458	2.71		109	1782	
813.00 > 169.00	4.931	4.931	0.0	1.000	952758		6.34(2.86-8.58)		7176	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.285	5.285	0.0	1.000	6792872	2.71		108	1341	
913.00 > 169.00	5.285	5.285	0.0	1.000	813957		8.35(3.83-11.48)		4581	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 17-May-2018 13:07:59 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_009.d

Injection Date: 17-May-2018 00:04:19 Instrument ID: A8_N

Lims ID: CCV L5

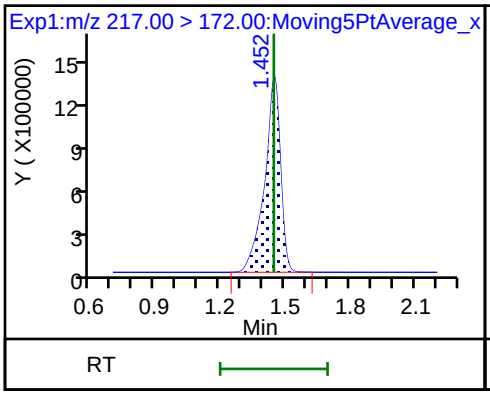
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 1

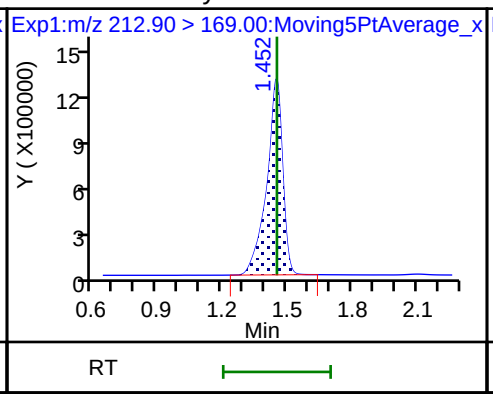
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

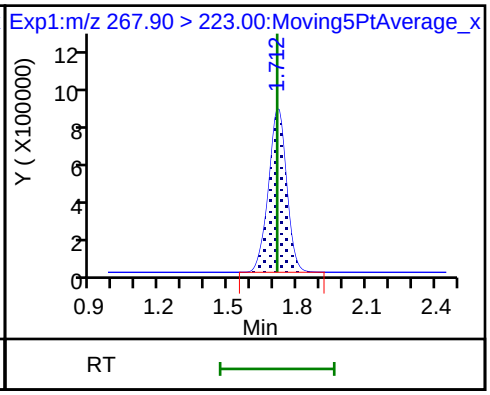
D 1 13C4 PFBA



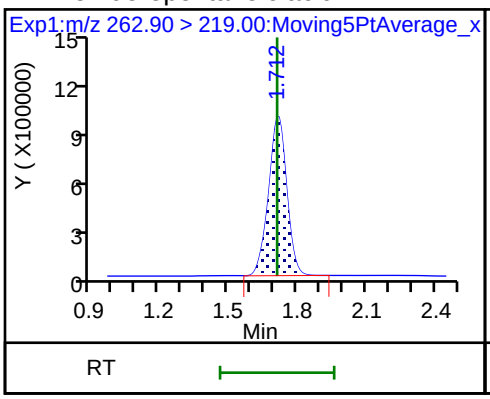
2 Perfluorobutyric acid



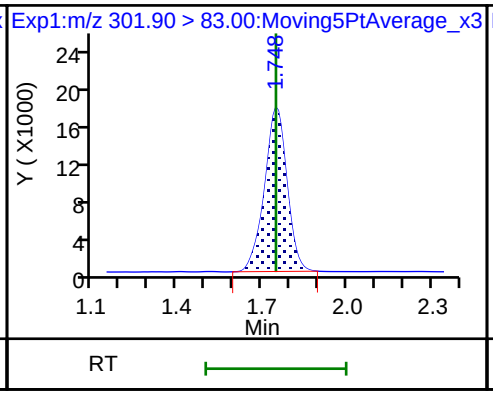
D 3 13C5-PFPeA



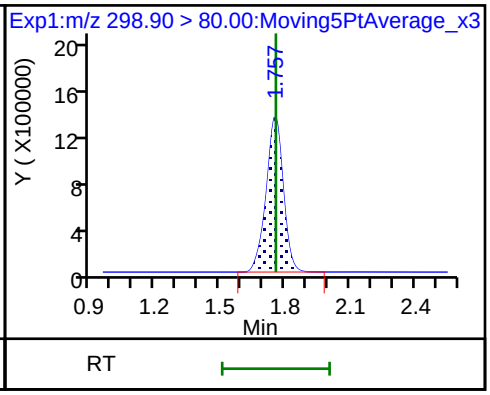
4 Perfluoropentanoic acid



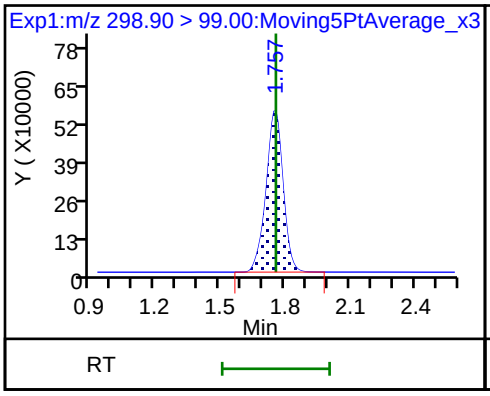
D 47 13C3-PFBS



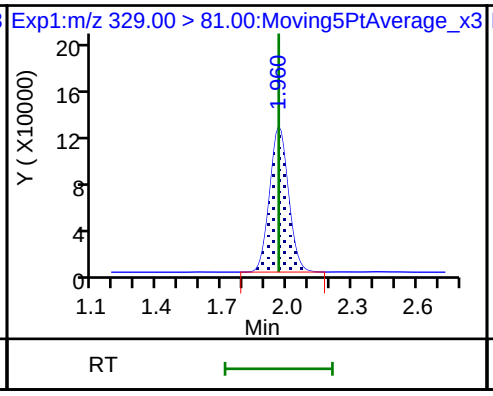
5 Perfluorobutanesulfonic acid



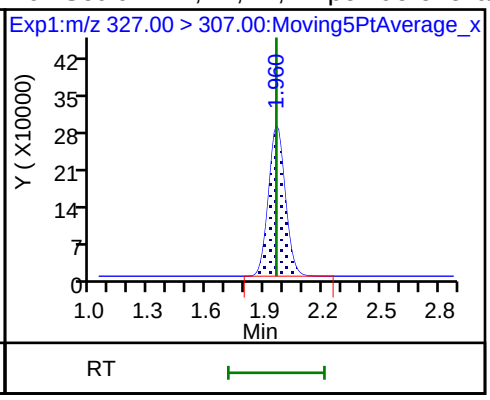
5 Perfluorobutanesulfonic acid



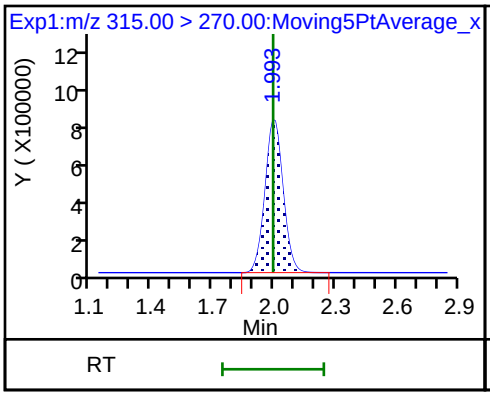
D 60 M2-4:2FTS



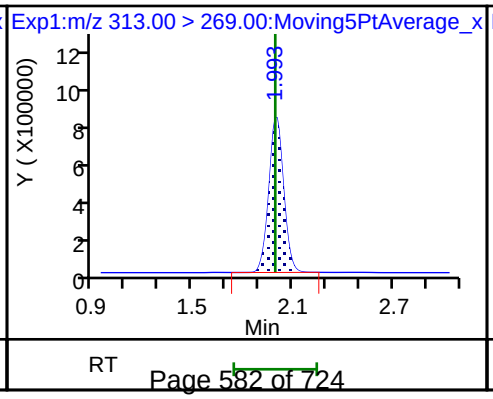
61 Sodium 1H,1H,2H,2H-perfluorohexane



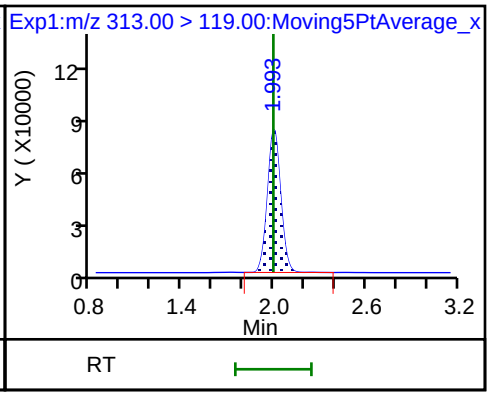
D 7 13C2 PFHxA



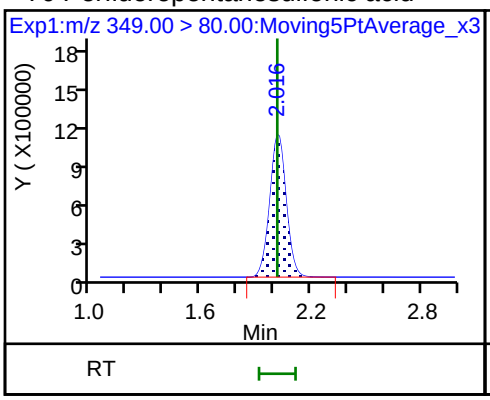
6 Perfluorohexanoic acid



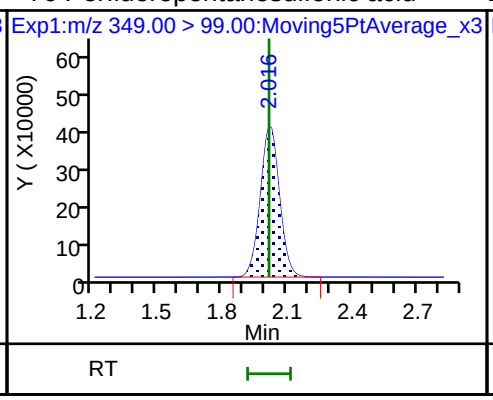
6 Perfluorohexanoic acid



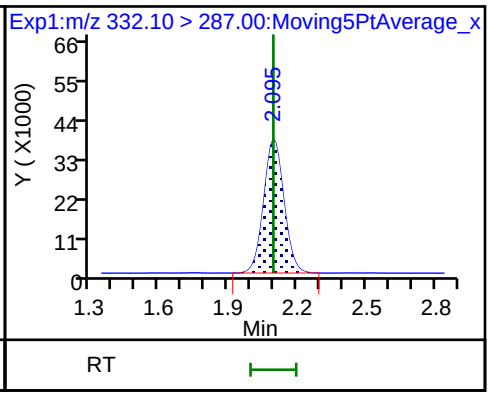
70 Perfluoropentanesulfonic acid



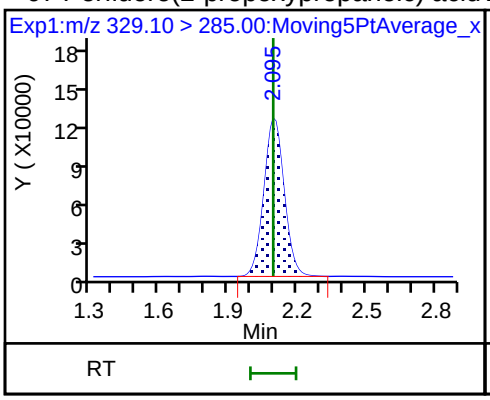
70 Perfluoropentanesulfonic acid



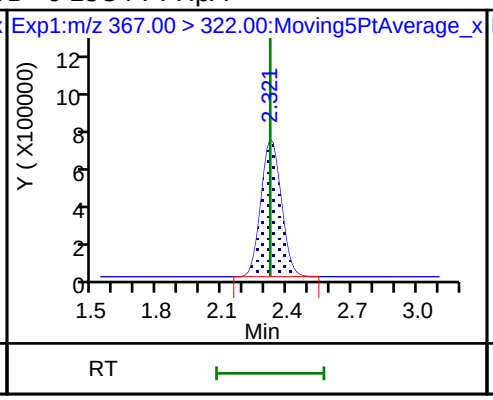
D 64 13C3 HFPO-DA



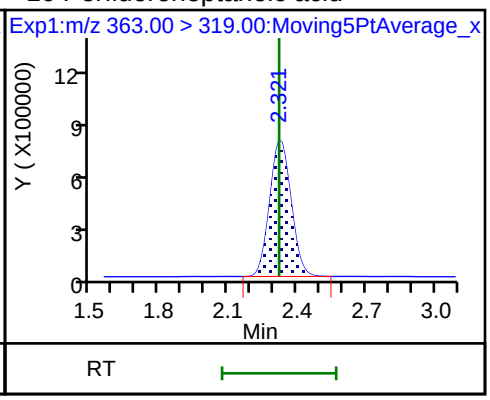
67 Perfluoro(2-propoxypropanoic) acid



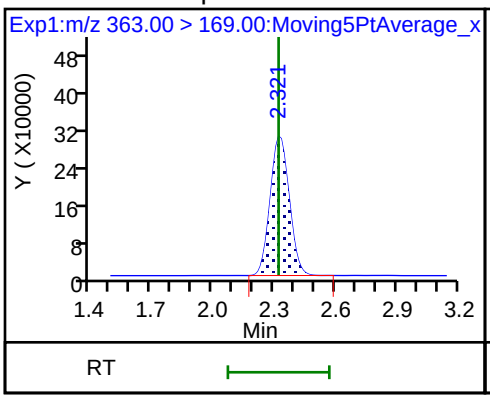
D 9 13C4-PFHpA



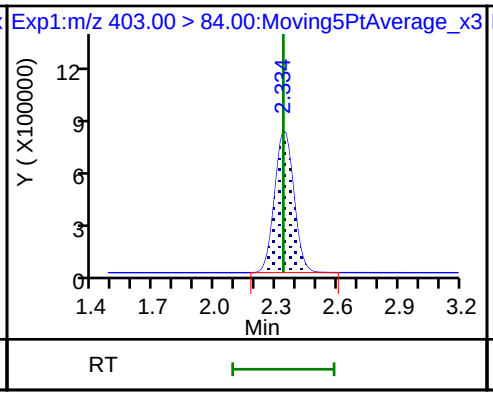
10 Perfluoroheptanoic acid



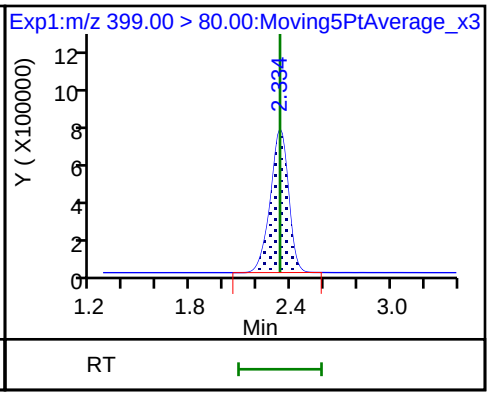
10 Perfluoroheptanoic acid



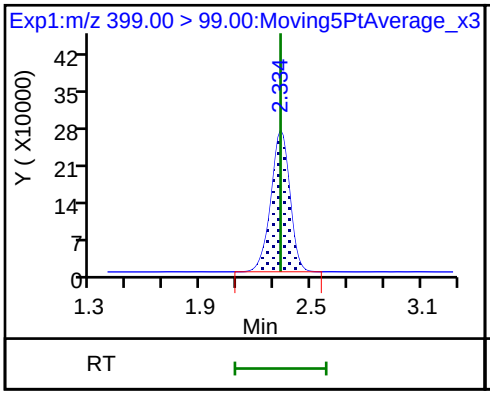
D 11 18O2 PFHxS



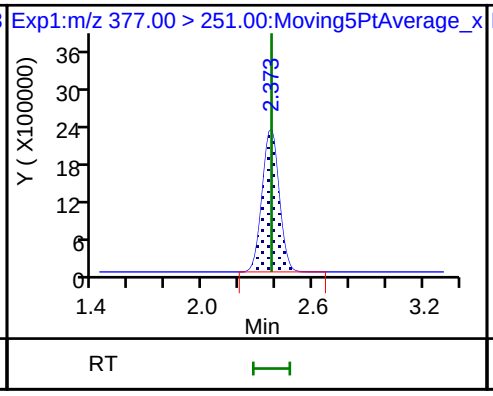
8 Perfluorohexanesulfonic acid



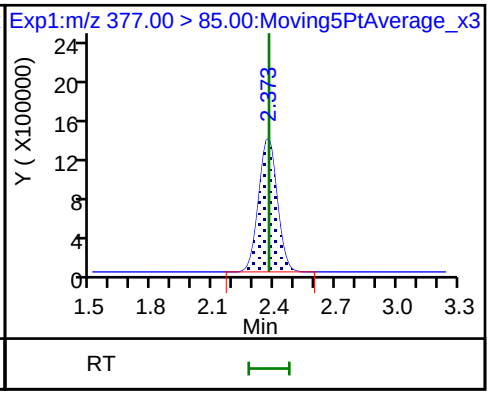
8 Perfluorohexanesulfonic acid



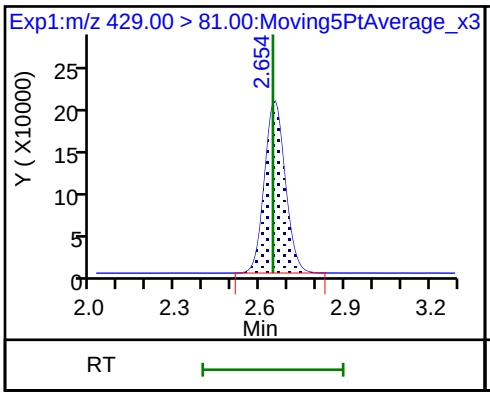
65 Adona



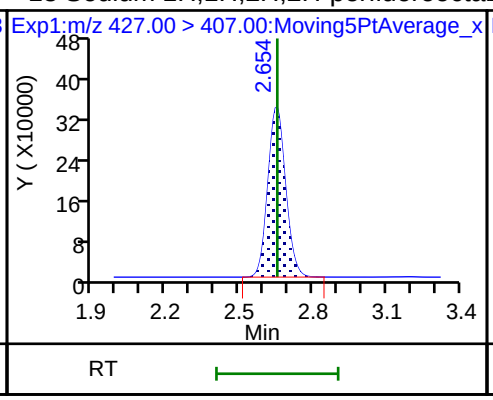
65 Adona



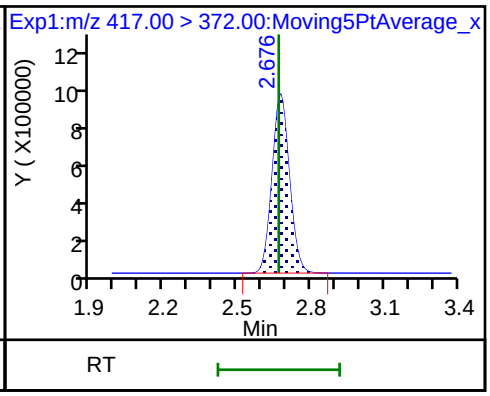
D 12 M2-6:2FTS



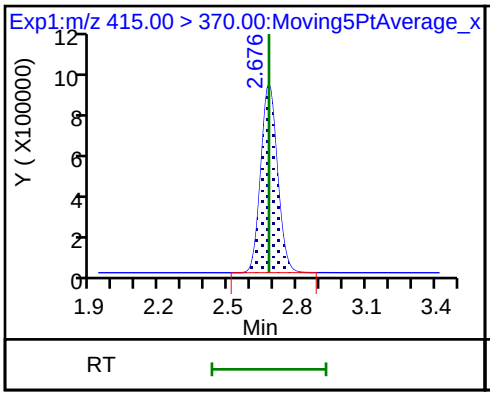
13 Sodium 1H,1H,2H,2H-perfluorooctane



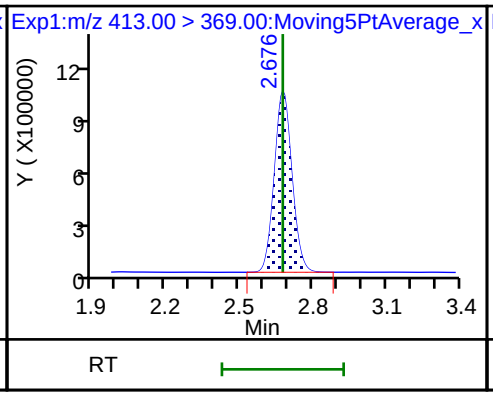
D 14 13C4 PFOA



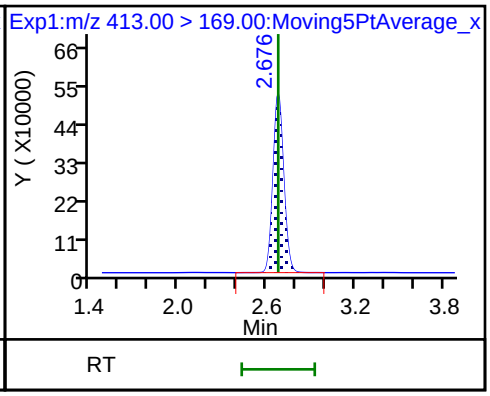
* 62 13C2-PFOA



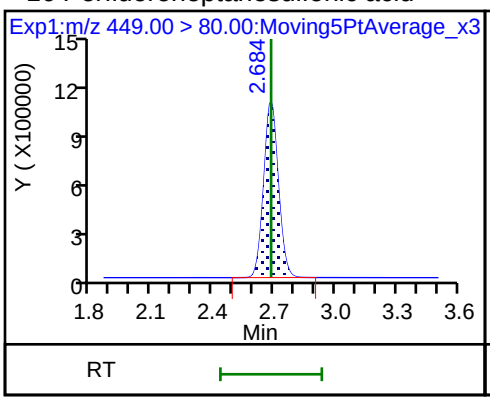
15 Perfluorooctanoic acid



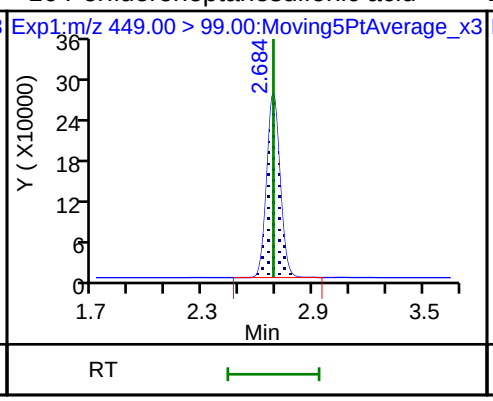
15 Perfluorooctanoic acid



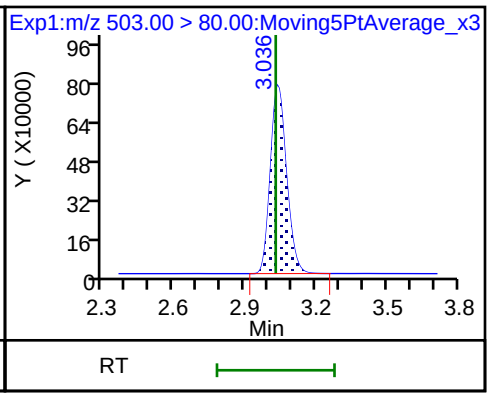
16 Perfluoroheptanesulfonic acid



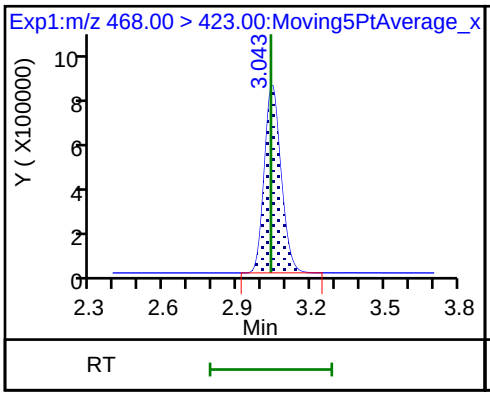
16 Perfluoroheptanesulfonic acid



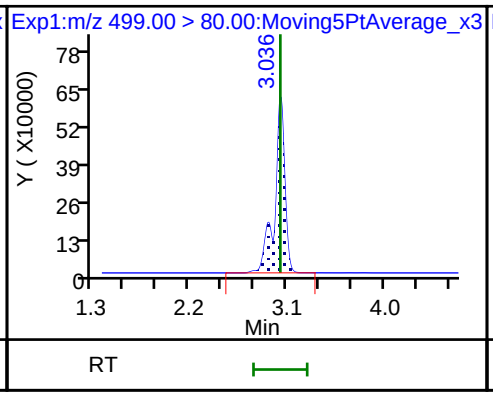
D 18 13C4 PFOS



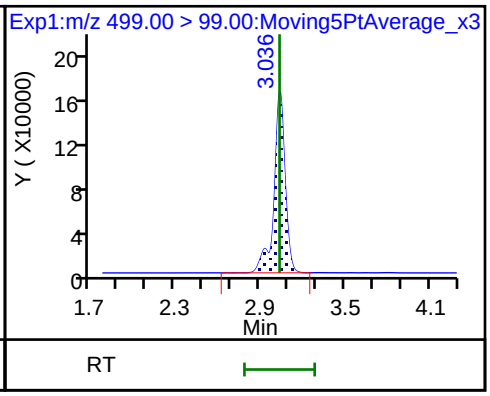
D 19 13C5 PFNA



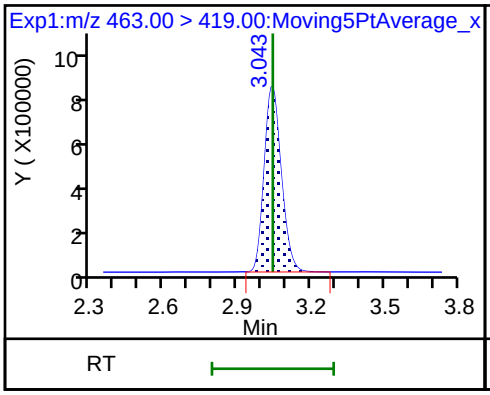
17 Perfluorooctane sulfonic acid



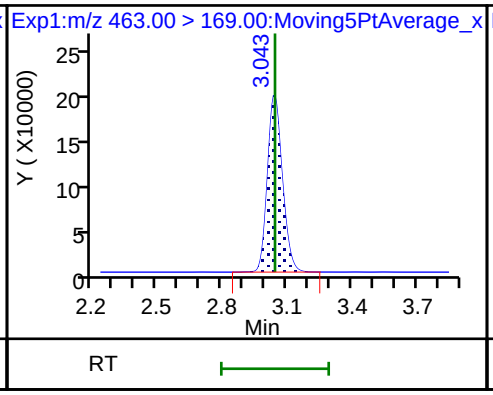
17 Perfluorooctane sulfonic acid



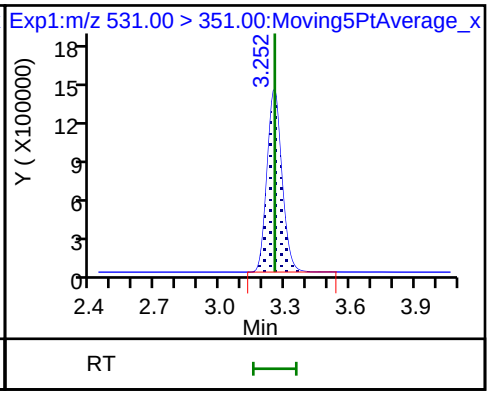
20 Perfluorononanoic acid



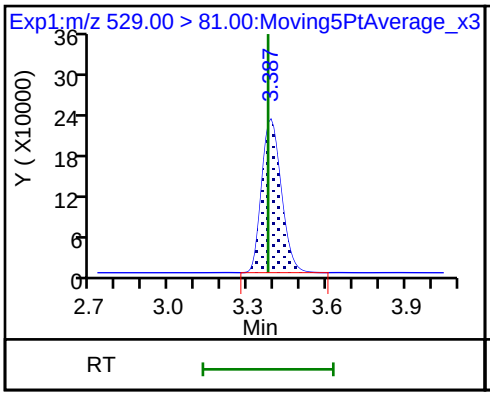
20 Perfluorononanoic acid



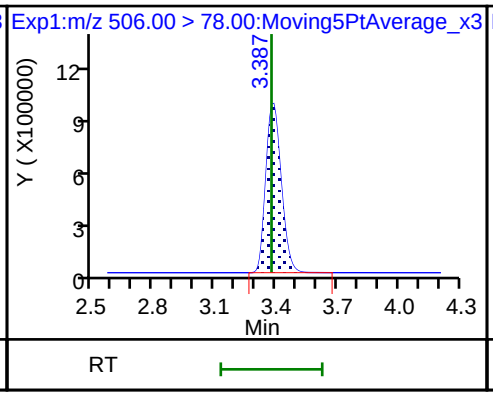
69 9-Chlorohexadecafluoro-3-oxanonane



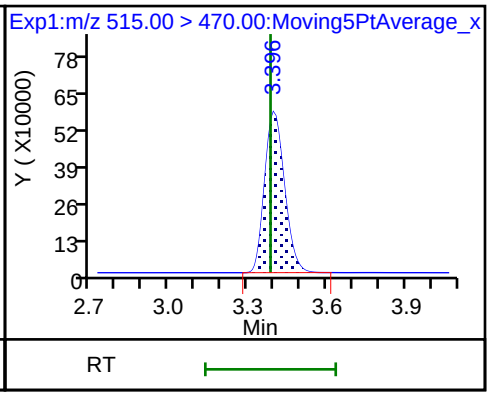
D 26 M2-8:2FTS



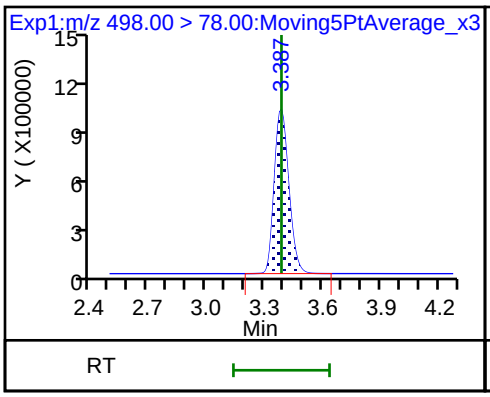
D 21 13C8 FOSA



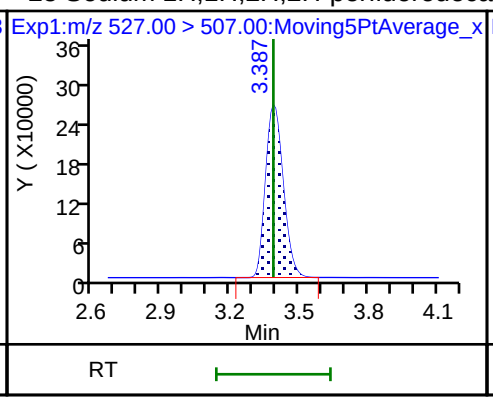
D 23 13C2 PFDA



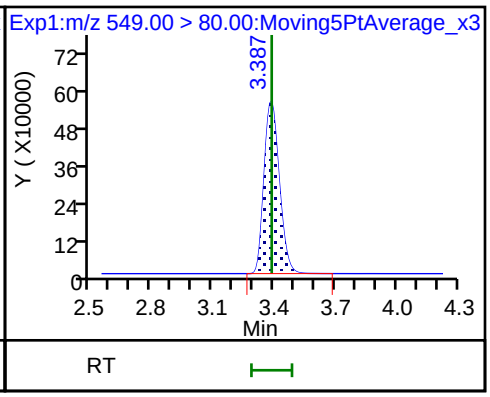
22 Perfluorooctane Sulfonamide



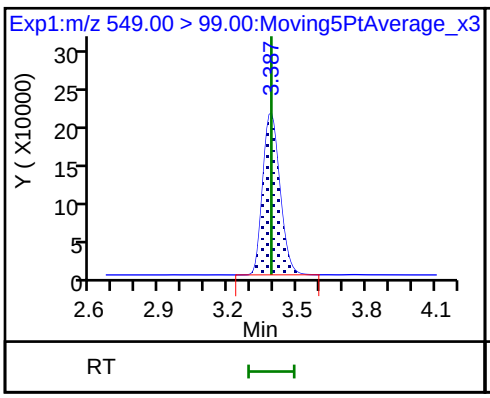
25 Sodium 1H,1H,2H,2H-perfluorodecane



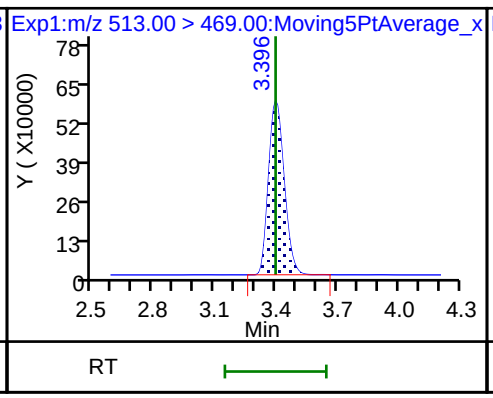
68 Perfluorononanesulfonic acid



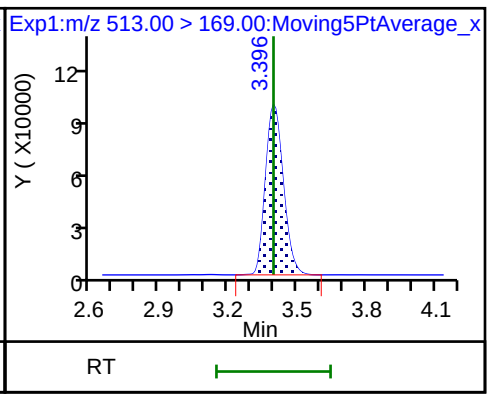
68 Perfluorononanesulfonic acid



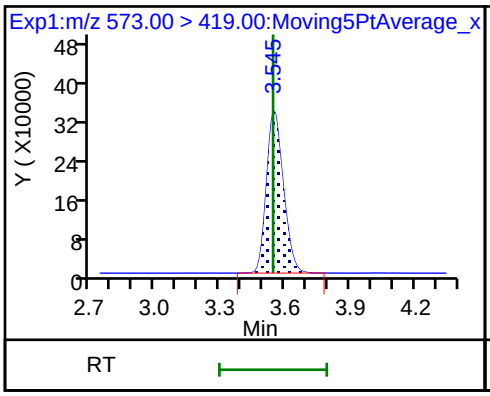
24 Perfluorodecanoic acid



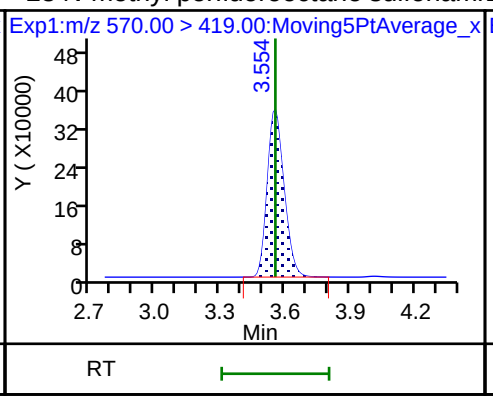
24 Perfluorodecanoic acid



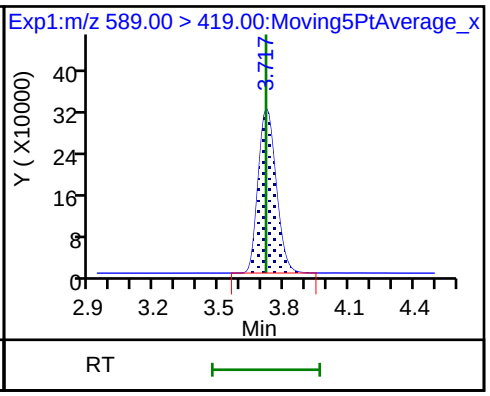
D 27 d3-NMeFOSAA



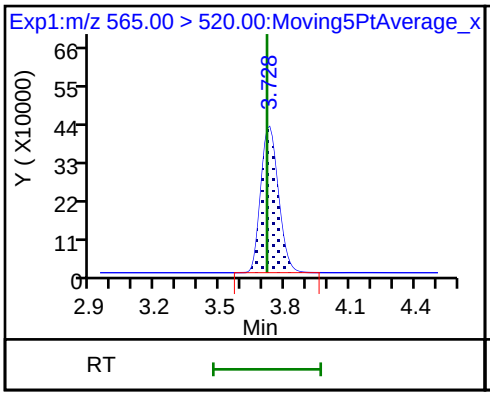
28 N-methyl perfluorooctane sulfonami



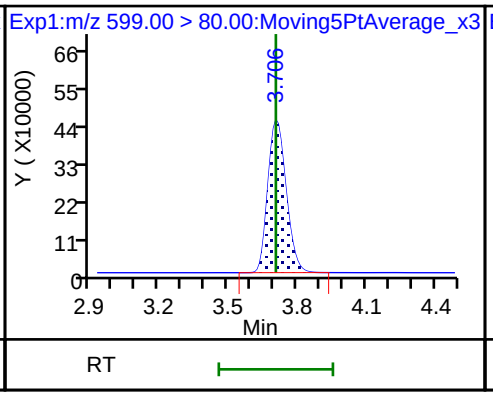
D 32 d5-NEtFOSAA



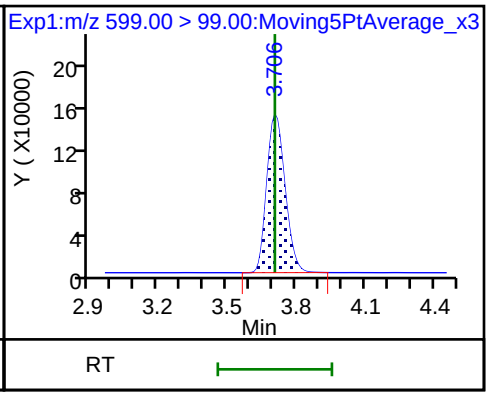
D 30 13C2 PFUnA



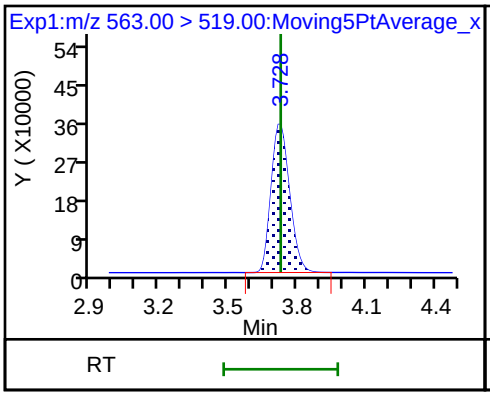
29 Perfluorodecane Sulfonic acid



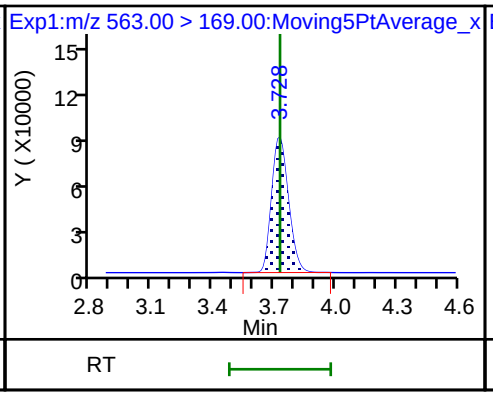
29 Perfluorodecane Sulfonic acid



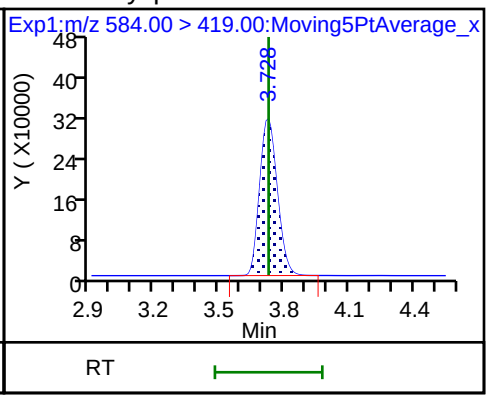
31 Perfluoroundecanoic acid



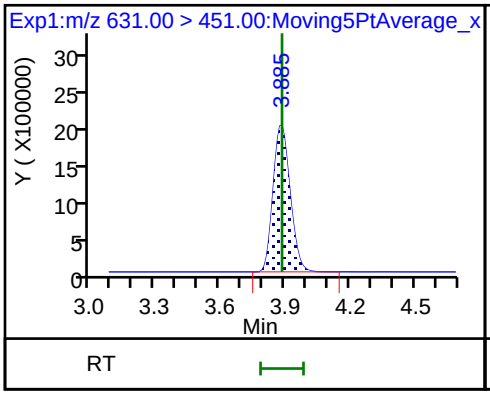
31 Perfluoroundecanoic acid



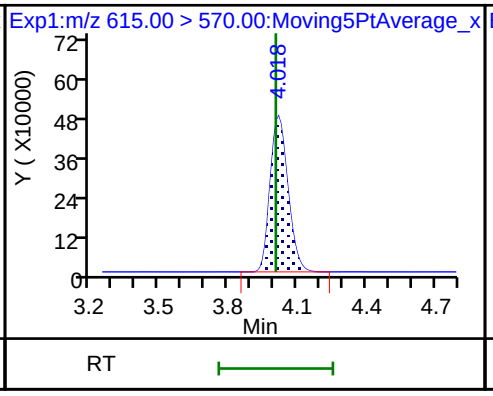
33 N-ethyl perfluorooctane sulfonamid



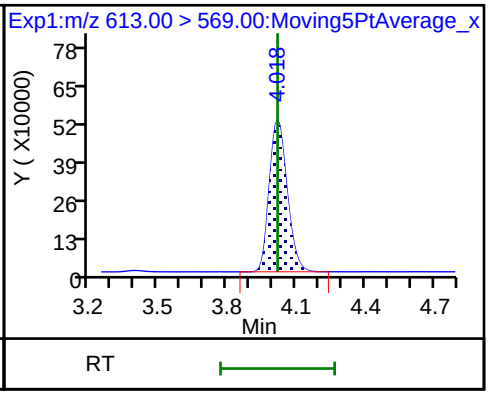
66 11-Chloroeicosafluoro-3-oxaundecan



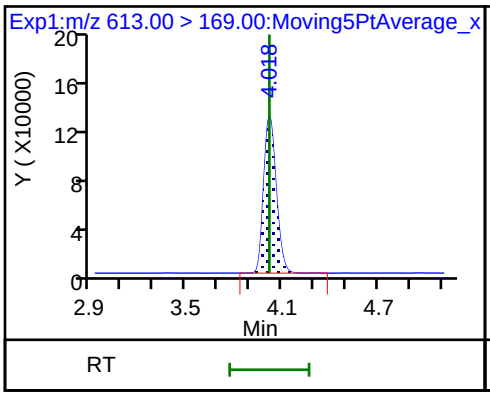
D 36 13C2 PFDoA



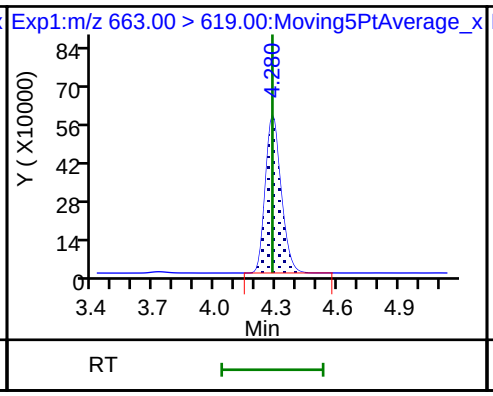
37 Perfluorododecanoic acid



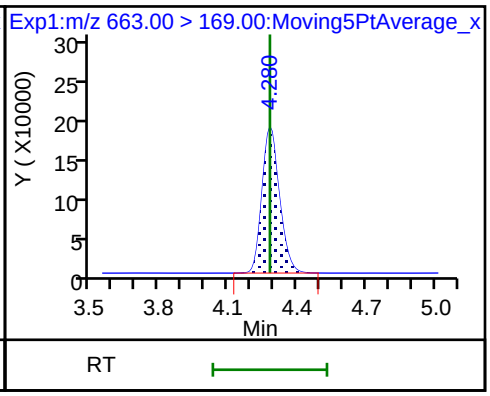
37 Perfluorododecanoic acid



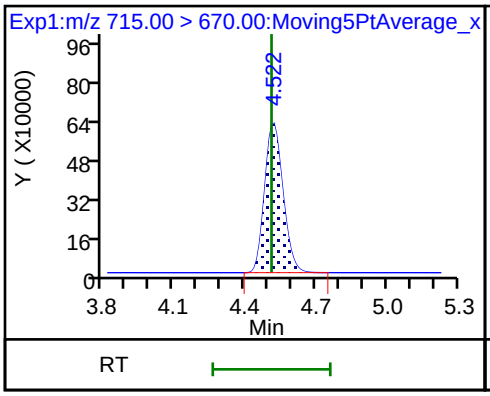
41 Perfluorotridecanoic acid



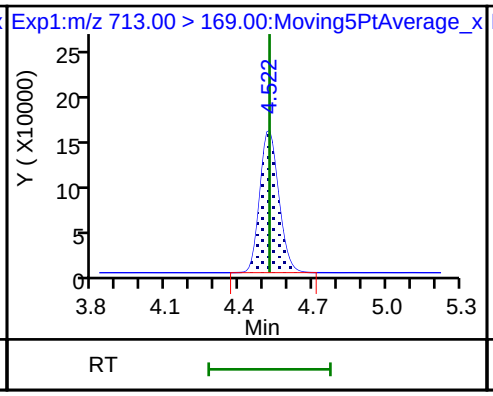
41 Perfluorotridecanoic acid



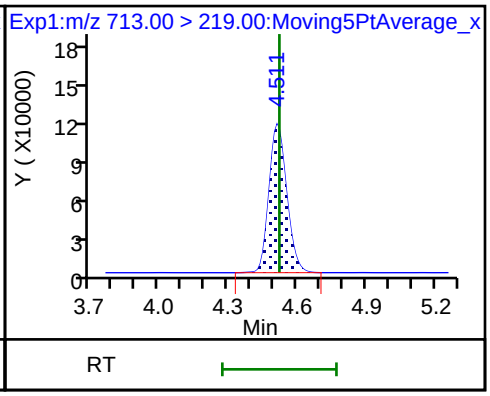
D 43 13C2-PFTeDA



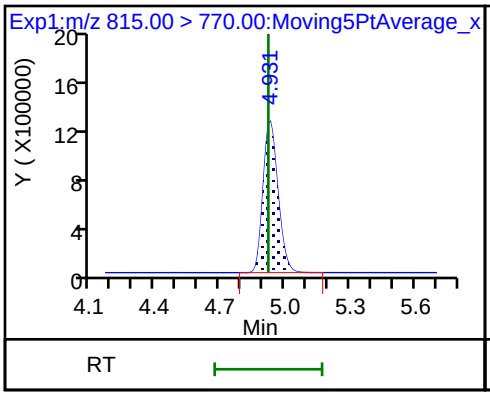
42 Perfluorotetradecanoic acid



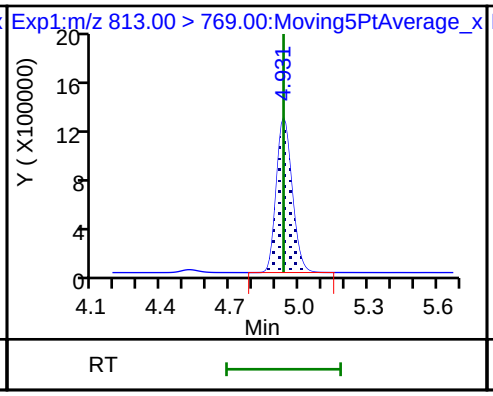
42 Perfluorotetradecanoic acid



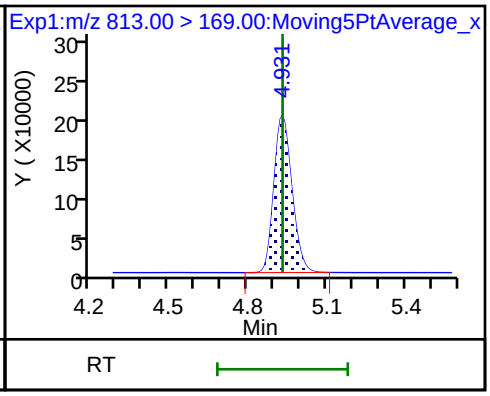
D 44 13C2-PFHxDA



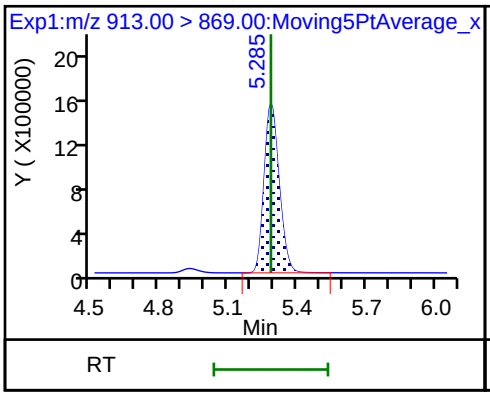
45 Perfluorohexadecanoic acid



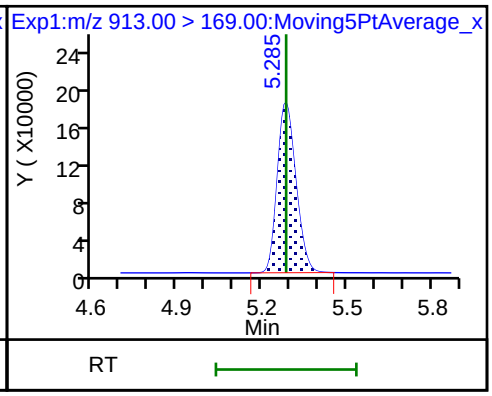
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-223714/12 Calibration Date: 05/17/2018 01:30

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_020.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9298	0.9161		0.985	1.00	-1.5	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.181	1.173		0.993	1.00	-0.7	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.09	78.78		0.892	0.884	0.9	50.0
4:2 FTS	AveID	16.57	16.94		0.955	0.934	2.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.028	0.999		0.971	1.00	-2.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.55	71.54		0.965	0.938	2.9	50.0
HFPO-DA (GenX)	AveID	3.057	3.386		1.11	1.00	10.8	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.056	1.005		0.951	1.00	-4.9	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.127	1.038		0.838	0.910	-7.9	40.0
Adona	AveID	3.427	3.697		1.08	1.00	7.9	50.0
6:2FTS	L2ID		1.599		0.854	0.948	-9.9	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.177	1.081		0.918	1.00	-8.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.332	1.291		0.923	0.952	-3.1	50.0
Perfluorononanoic acid (PFNA)	AveID	1.059	1.016		0.959	1.00	-4.1	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.176	1.079		0.852	0.928	-8.2	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.794	1.879		0.976	0.932	4.8	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.9909		1.02	1.00	1.8	40.0
8:2FTS	AveID	1.349	1.323		0.939	0.958	-2.0	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7575	0.7562		0.958	0.960	-0.2	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.9722	0.9337		0.960	1.00	-4.0	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.015	0.9604		0.946	1.00	-5.4	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6714	0.6142		0.882	0.964	-8.5	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9400	0.8794		0.935	1.00	-6.5	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8352	0.7714		0.924	1.00	-7.6	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.719	2.855		0.989	0.942	5.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.044	0.9616		0.921	1.00	-7.9	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.144	1.151		1.01	1.00	0.6	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2525	0.2510		0.994	1.00	-0.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID	1.086	0.9403		0.987	1.00	-1.3	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-223714/12 Calibration Date: 05/17/2018 01:30

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_020.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.052	1.056		0.999	1.00	0.4	50.0
13C4 PFBA	Ave	1.528	1.468		2.40	2.50	-4.0	50.0
13C5 PFPeA	Ave	0.9798	0.9473		2.42	2.50	-3.3	50.0
13C3-PFBS	Ave	0.0221	0.0213		2.23	2.33	-4.0	50.0
M2-4:2FTS	Ave	0.1627	0.1741		2.50	2.34	7.0	50.0
13C2 PFHxA	Ave	1.045	1.075		2.57	2.50	2.9	50.0
13C3 HFPO-DA	Ave	0.0517	0.0461		2.23	2.50	-10.8	50.0
13C4-PFHpA	Ave	1.001	1.033		2.58	2.50	3.2	50.0
18O2 PFHxS	Ave	1.237	1.214		2.32	2.37	-1.9	50.0
M2-6:2FTS	Ave	0.2210	0.2290		2.46	2.38	3.6	40.0
13C4 PFOA	Ave	0.9468	0.9555		2.52	2.50	0.9	50.0
13C4 PFOS	Ave	0.8503	0.8251		2.32	2.39	-3.0	50.0
13C5 PFNA	Ave	0.7745	0.7967		2.57	2.50	2.9	50.0
13C8 FOSA	Ave	1.113	1.045		2.35	2.50	-6.1	50.0
M2-8:2FTS	Ave	0.2515	0.2514		2.39	2.40	-0.0	40.0
13C2 PFDA	Ave	0.6587	0.6624		2.51	2.50	0.6	50.0
d3-NMeFOSAA	Ave	0.3634	0.3879		2.67	2.50	6.7	50.0
d5-NEtFOSAA	Ave	0.3729	0.4204		2.82	2.50	12.7	50.0
13C2 PFUnA	Ave	0.5216	0.5394		2.59	2.50	3.4	50.0
13C2 PFDoA	Ave	0.5613	0.5925		2.64	2.50	5.6	50.0
13C2-PFTeDA	Ave	0.6891	0.6848		2.48	2.50	-0.6	50.0
13C2-PFHxDA	Ave	1.141	1.353		2.97	2.50	18.6	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_020.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2018 01:30:24 ALS Bottle#: 13 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:50:40 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:50:40

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.457	1.447	0.010	1.000	7018139	2.40		96.0	47056	
2 Perfluorobutyric acid										
212.90 > 169.00	1.457	1.457	0.0	1.000	2571625	0.9852		98.5	1294	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.729	1.729	0.0	1.000	2124173	0.99		99.3	1356	
D 3 13C5-PFPeA										
267.90 > 223.00	1.729	1.712	0.017	0.567	4528653	2.42		96.7	70635	
D 47 13C3-PFBS										
301.90 > 83.00	1.765	1.748	0.017	1.000	94520	2.23		96.0	673	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.765	0.0	1.000	2831103	0.8918		101	15943	
298.90 > 99.00	1.765	1.765	0.0	1.000	1164962		2.43(1.25-3.74)		9767	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.970	1.970	0.0	1.000	643232	0.9546		102	35739	
D 60 M2-4:2FTS										
329.00 > 81.00	1.970	1.961	0.009	1.000	777413	2.50		107	10204	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.014	2.014	0.0	1.000	2051914	0.9712		97.1	5067	
313.00 > 119.00	2.014	2.014	0.0	1.000	176460		11.63(5.03-15.10)		1925	
D 7 13C2 PFHxA										
315.00 > 270.00	2.014	1.994	0.020	1.000	5137154	2.57		103	106605	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.036	2.036	0.0	1.000	2727996	0.9649		103	34515	
349.00 > 99.00	2.036	2.036	0.0	1.000	1000129		2.73(1.36-4.07)		13716	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.104	2.104	0.0	1.000	298368	1.11		111	2590	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.104	2.095	0.009	1.000	220283	2.23		89.2	4528	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.332	2.332	0.0	1.000	1984530	0.9515		95.1	2788	
363.00 > 169.00	2.332	2.332	0.0	1.000	800931		2.48(1.13-3.40)		4135	
D 9 13C4-PFHpA										
367.00 > 322.00	2.332	2.321	0.011	1.000	4936235	2.58		103	59507	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.345	2.345	0.0	1.000	2192458	0.8383		92.1	11992	
399.00 > 99.00	2.345	2.345	0.0	1.000	706615		3.10(1.50-4.49)		3228	
D 11 18O2 PFHxS										
403.00 > 84.00	2.345	2.334	0.011	1.000	5488952	2.32		98.1	71249	
65 Adona										
377.00 > 251.00	2.384	2.384	0.0	1.000	5832469	1.08		108	67611	
377.00 > 85.00	2.384	2.384	0.0	1.000	3409681		1.71(0.84-2.53)		36752	
D 12 M2-6:2FTS										
429.00 > 81.00	2.659	2.645	0.014	1.000	1039903	2.46		104	12873	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.667	2.667	0.0	1.003	663916	0.8537		90.1	8175	
D 14 13C4 PFOA										
417.00 > 372.00	2.689	2.668	0.021	1.000	4568061	2.52		101	72028	
* 62 13C2-PFOA										
415.00 > 370.00	2.689	2.689	0.0		4780723	2.50			44341	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.689	2.689	0.0	1.000	1974893	0.9183		91.8	758	
413.00 > 169.00	2.689	2.689	0.0	1.000	1025028		1.93(0.84-2.52)		4473	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.697	2.697	0.0	1.000	1939132	0.9227		96.9	19893	
449.00 > 99.00	2.697	2.697	0.0	1.000	535595		3.62(1.94-5.82)		6449	
D 18 13C4 PFOS										
503.00 > 80.00	3.051	3.029	0.022	1.000	3770787	2.32		97.0	31894	
D 19 13C5 PFNA										
468.00 > 423.00	3.051	3.036	0.015	1.000	3808974	2.57		103	61445	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.051	3.051	0.0	1.000	1580261	0.8519		91.8	12152	
499.00 > 99.00	3.051	3.051	0.0	1.000	350866		4.50(2.31-6.93)		6088	
20 Perfluorononanoic acid										
463.00 > 419.00	3.051	3.051	0.0	1.000	1548243	0.9594		95.9	2984	
463.00 > 169.00	3.051	3.051	0.0	1.000	377650		4.10(1.90-5.69)		7115	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.259	3.259	0.0	1.000	2762885	0.9764		105	14830	
D 26 M2-8:2FTS										
529.00 > 81.00	3.398	3.376	0.022	1.000	1151285	2.39		100.0	18435	
D 21 13C8 FOSA										
506.00 > 78.00	3.388	3.376	0.012	1.000	4997173	2.35		93.9	46124	
D 23 13C2 PFDA										
515.00 > 470.00	3.407	3.385	0.022	1.000	3166702	2.51		101	38314	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.388	3.388	0.0	1.000	1980642	1.02		102	29738	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.398	3.398	0.0	1.000	609305	0.9393		98.0	11772	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.398	3.398	0.0	1.000	1145329	0.9584		99.8	17244	
549.00 > 99.00	3.398	3.398	0.0	1.000	431725		2.65(1.33-3.97)		4984	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.407	3.407	0.0	1.000	1182689	0.9604		96.0	4631	
513.00 > 169.00	3.407	3.407	0.0	1.000	220256		5.37(2.36-7.09)		3816	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.556	3.544	0.012	1.000	1854435	2.67		107	21421	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.565	3.565	0.0	1.003	712409	0.9464		94.6	5275	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.718	3.718	0.0	1.000	934220	0.8819		91.5	12149	
599.00 > 99.00	3.718	3.718	0.0	1.000	335280		2.79(1.39-4.16)		6734	
D 30 13C2 PFUnA										
565.00 > 520.00	3.740	3.716	0.024	1.000	2578806	2.59		103	39102	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.729	3.716	0.013	1.000	2009713	2.82		113	17149	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.740	3.740	0.0	1.000	795682	0.9236		92.4	3686	
563.00 > 169.00	3.740	3.740	0.0	1.000	210380		3.78(2.12-6.36)		4780	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.740	3.740	0.0	1.003	706904	0.9355		93.5	14009	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.896	3.896	0.0	1.000	4243851	0.9891		105	26294	
D 36 13C2 PFDoA										
615.00 > 570.00	4.029	4.006	0.023	1.000	2832617	2.64		106	24122	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.029	4.029	0.0	1.000	1089493	0.9213		92.1	1123	
613.00 > 169.00	4.029	4.029	0.0	1.000	285550		3.82(2.13-6.40)		3532	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.290	4.290	0.0	1.000	1304517	1.01		101	1113	
663.00 > 169.00	4.298	4.290	0.008	1.002	422057		3.09(1.25-3.76)		5723	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.531	4.511	0.020	1.000	3273658	2.48		99.4	13323	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.531	4.531	0.0	1.000	328696	0.99		99.4	3850	
713.00 > 219.00	4.531	4.531	0.0	1.000	237076		1.39(0.71-2.13)		4982	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.948	4.922	0.026	1.000	6468952	2.97		119	14762	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.948	4.948	0.0	1.000	2433036	0.9869		98.7	794	
813.00 > 169.00	4.948	4.948	0.0	1.000	395058		6.16(2.86-8.58)		3329	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.306	5.306	0.0	1.000	2733451	1.00		99.9	574	
913.00 > 169.00	5.306	5.306	0.0	1.000	326667		8.37(3.83-11.48)		2435	

Reagents:

LCPFC_LL4_00004 Amount Added: 1.00 Units: mL

Report Date: 17-May-2018 13:50:42 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_020.d

Injection Date: 17-May-2018 01:30:24 Instrument ID: A8_N

Lims ID: CCV L4

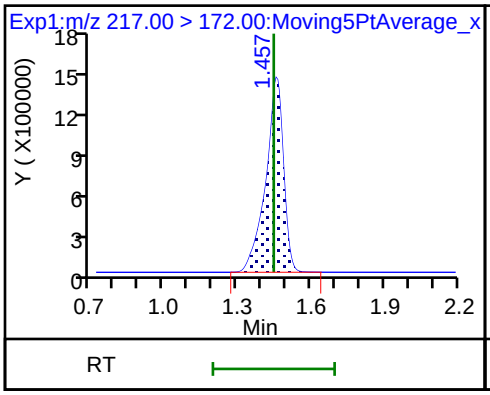
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 12

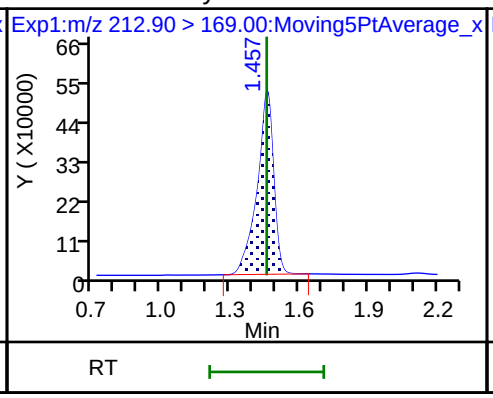
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

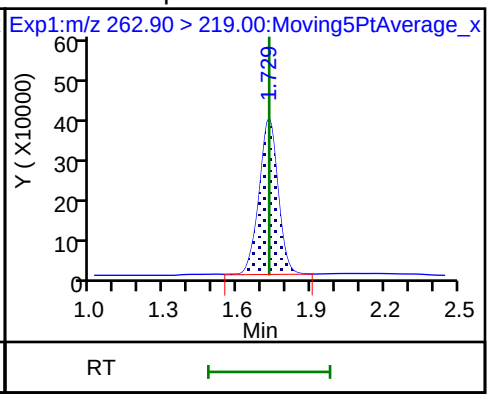
D 1 13C4 PFBA



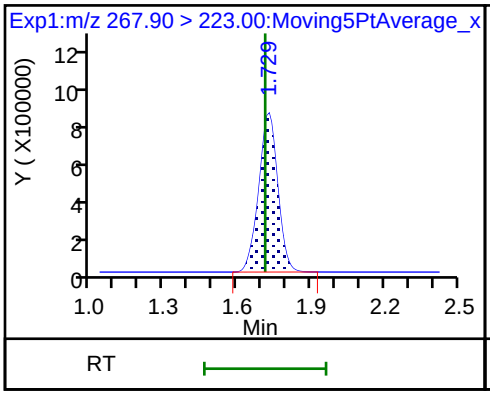
2 Perfluorobutyric acid



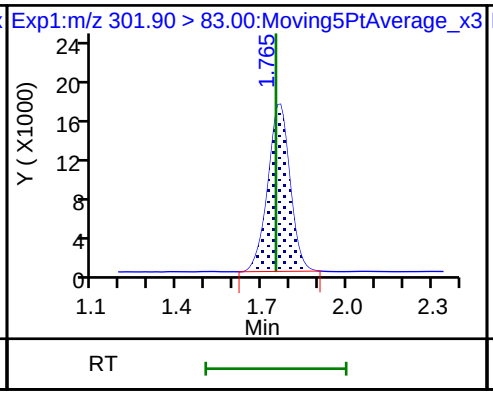
4 Perfluoropentanoic acid



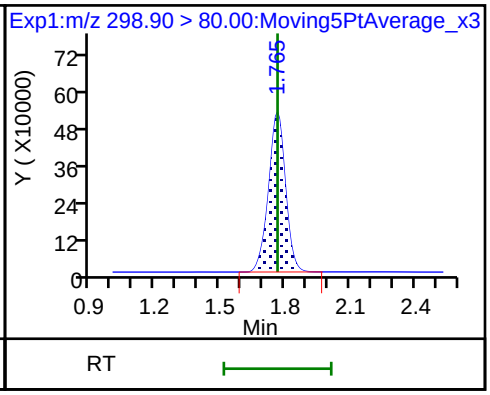
D 3 13C5-PFPeA



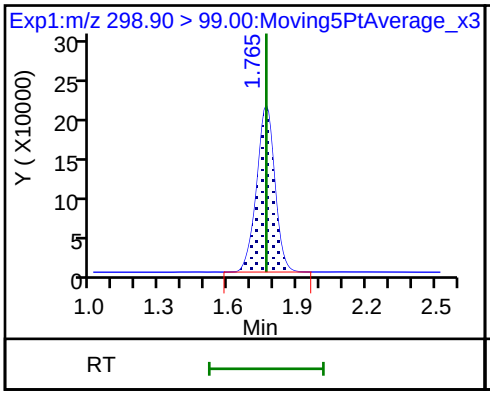
D 47 13C3-PFBS



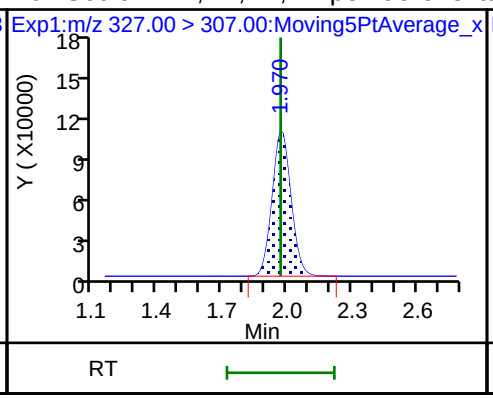
5 Perfluorobutanesulfonic acid



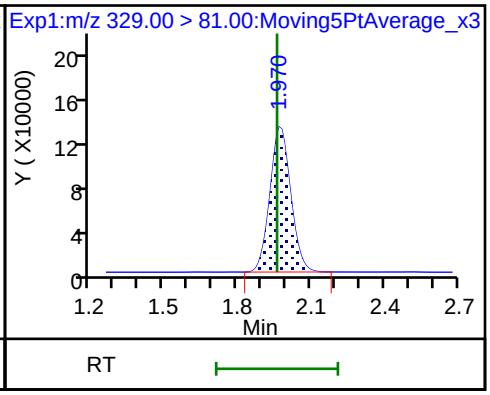
5 Perfluorobutanesulfonic acid



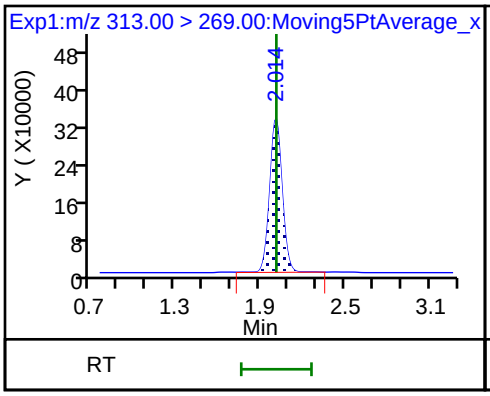
61 Sodium 1H,1H,2H,2H-perfluorohexa



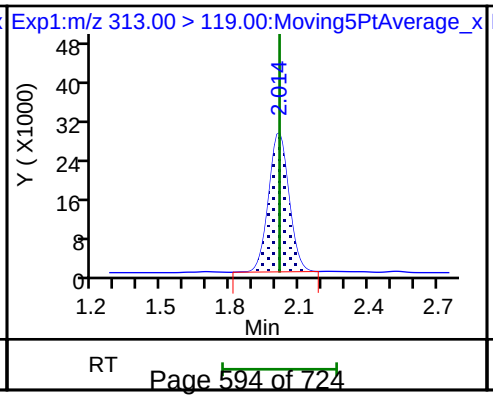
D 60 M2-4:2FTS



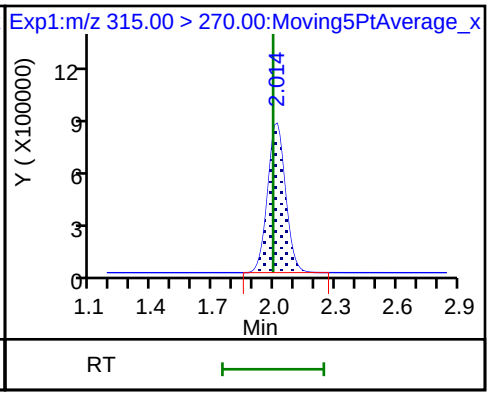
6 Perfluorohexanoic acid



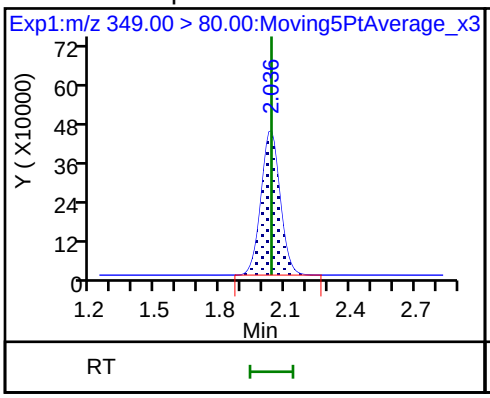
6 Perfluorohexanoic acid



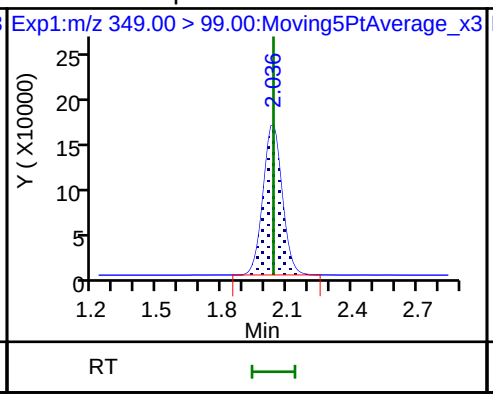
D 7 13C2 PFHxA



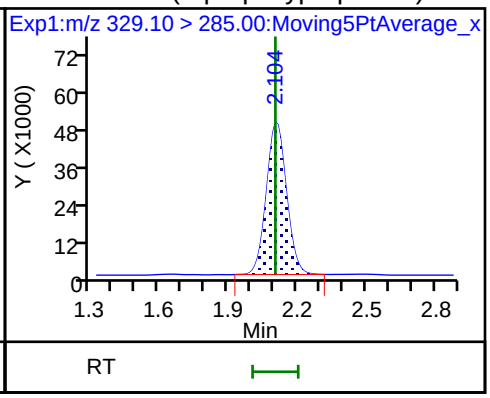
70 Perfluoropentanesulfonic acid



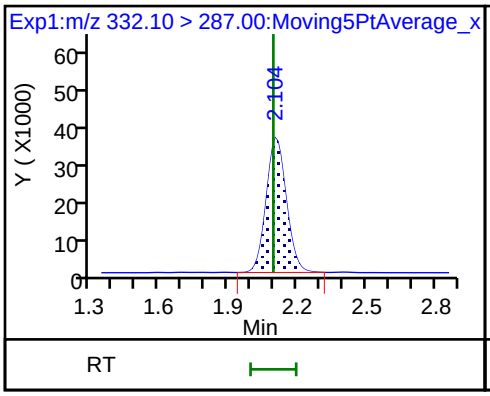
70 Perfluoropentanesulfonic acid



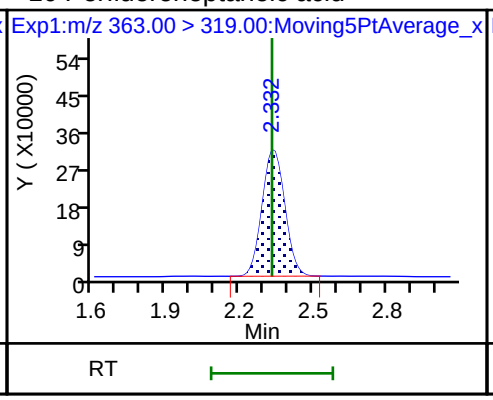
67 Perfluoro(2-propoxypropanoic) acid



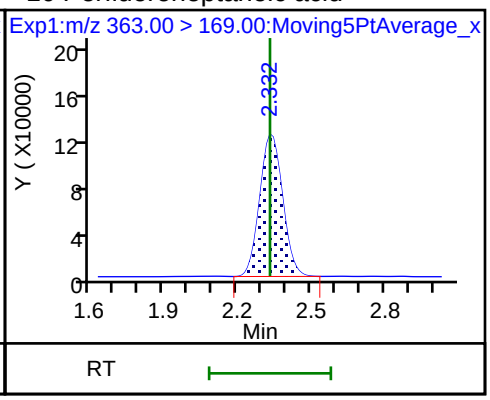
D 64 13C3 HFPO-DA



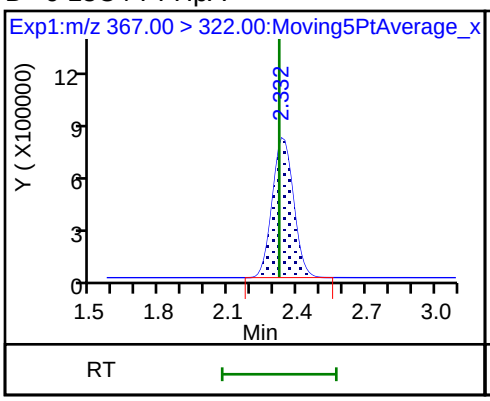
10 Perfluoroheptanoic acid



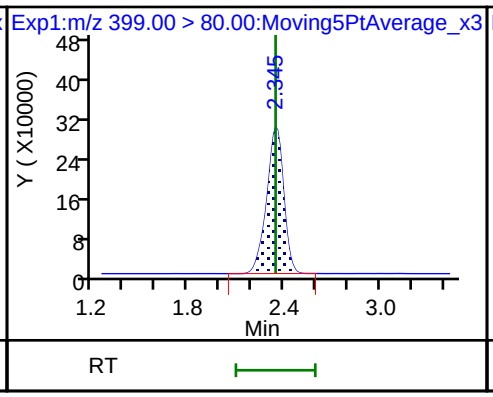
10 Perfluoroheptanoic acid



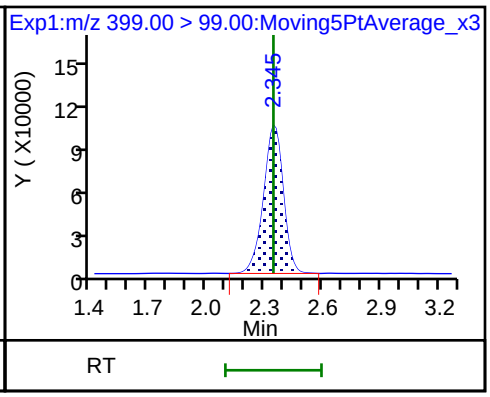
D 9 13C4-PFHpA



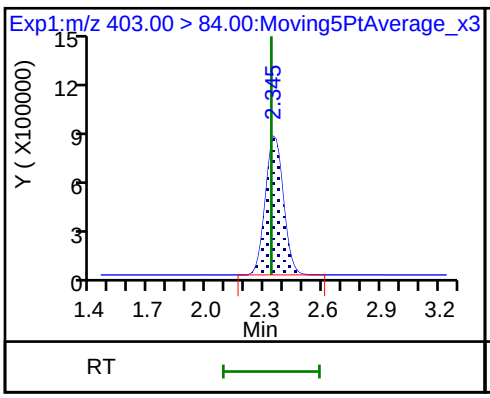
8 Perfluorohexanesulfonic acid



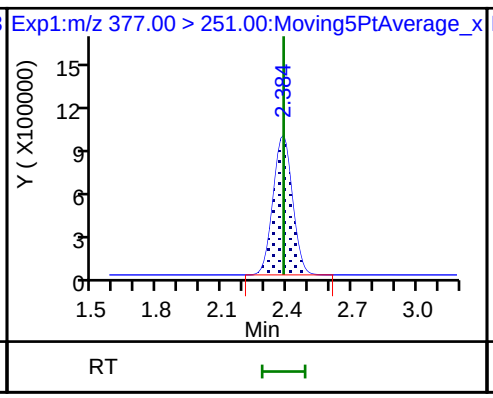
8 Perfluorohexanesulfonic acid



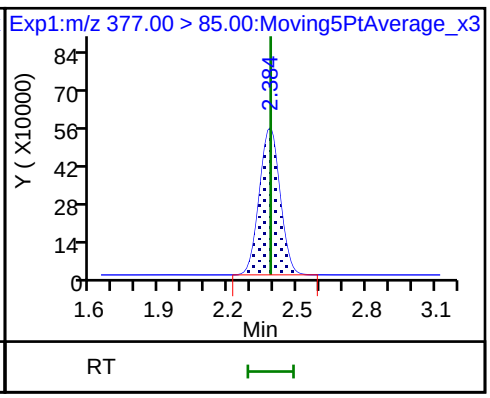
D 11 18O2 PFHxS



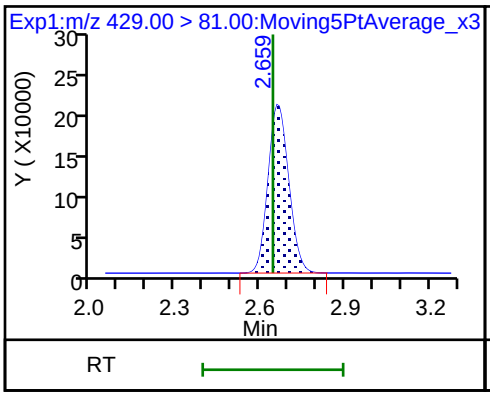
65 Adona



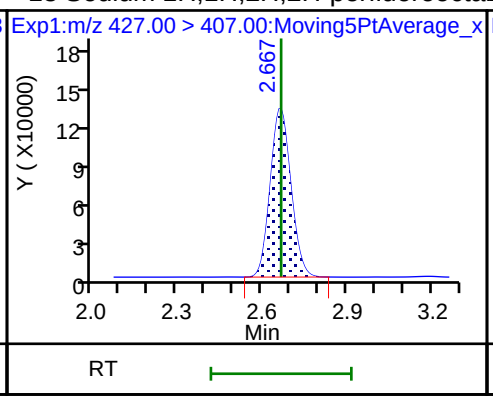
65 Adona



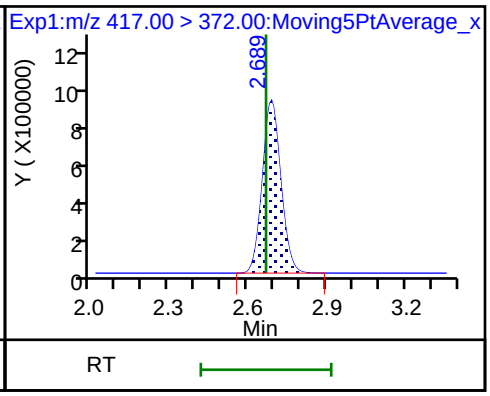
D 12 M2-6:2FTS



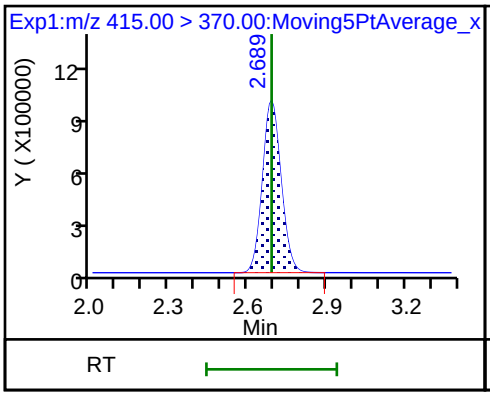
13 Sodium 1H,1H,2H,2H-perfluorooctane



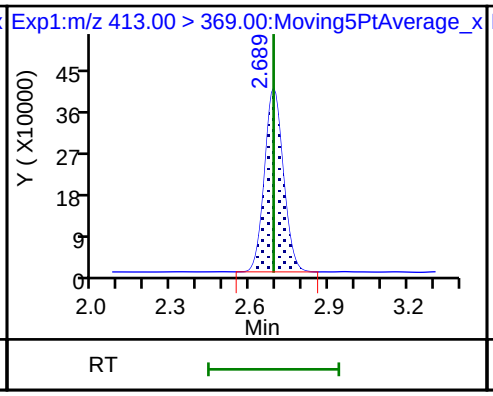
D 14 13C4 PFOA



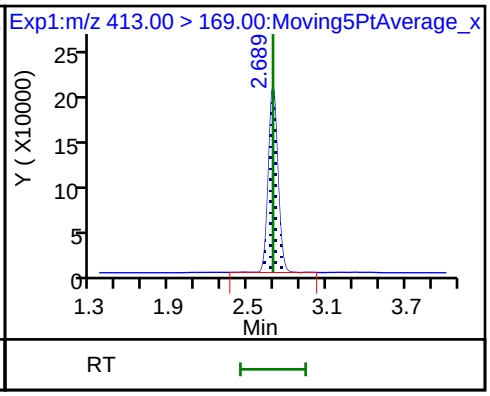
* 62 13C2-PFOA



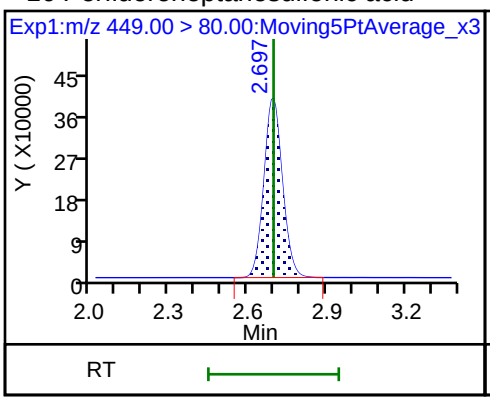
15 Perfluorooctanoic acid



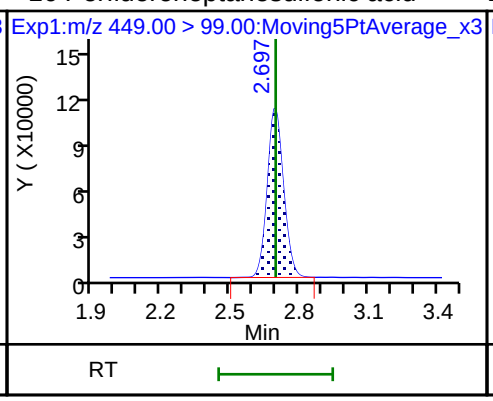
15 Perfluorooctanoic acid



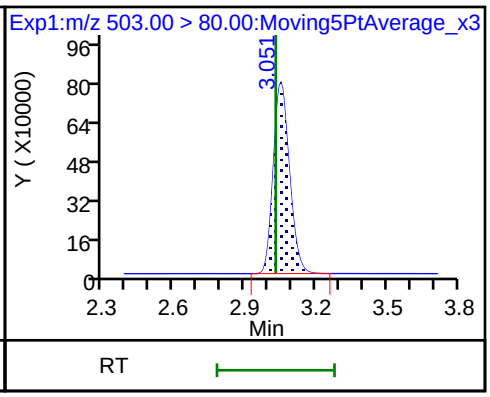
16 Perfluoroheptanesulfonic acid



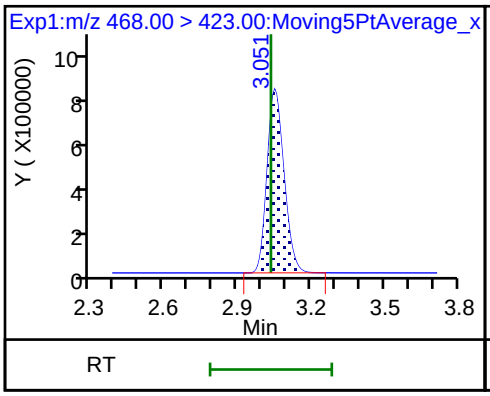
16 Perfluoroheptanesulfonic acid



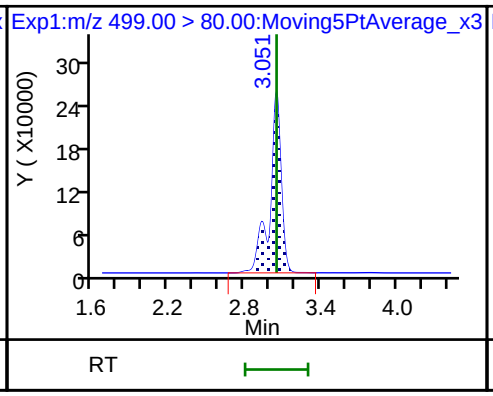
D 18 13C4 PFOS



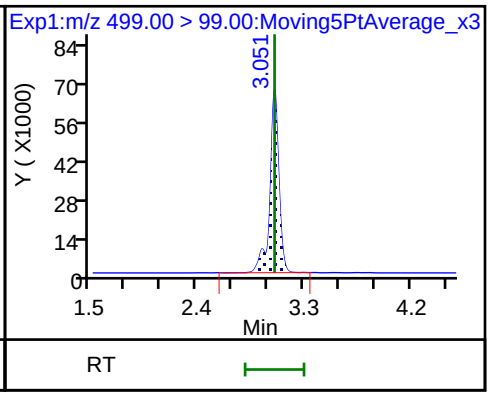
D 19 13C5 PFNA



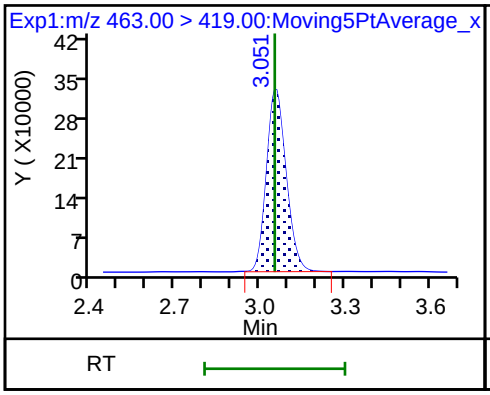
17 Perfluorooctane sulfonic acid



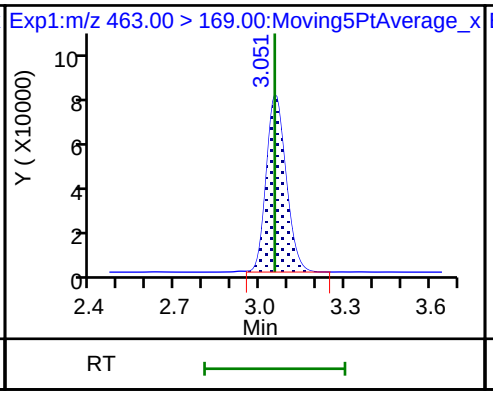
17 Perfluorooctane sulfonic acid



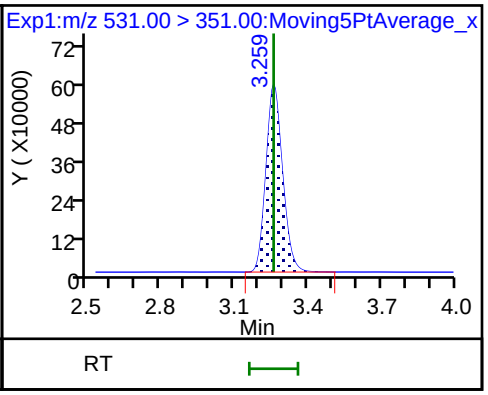
20 Perfluorononanoic acid



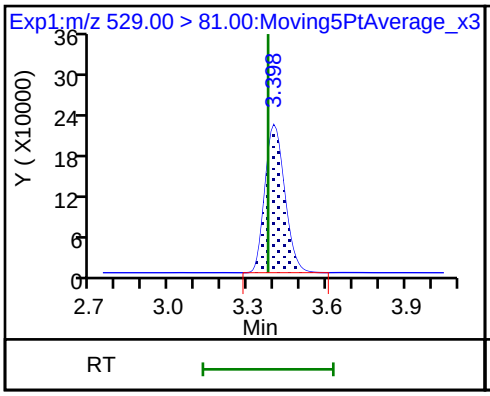
20 Perfluorononanoic acid



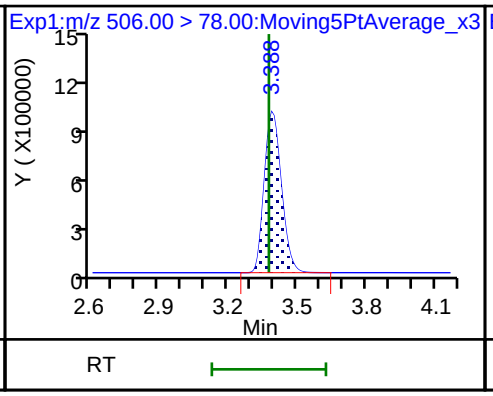
69 9-Chlorohexadecafluoro-3-oxanonane



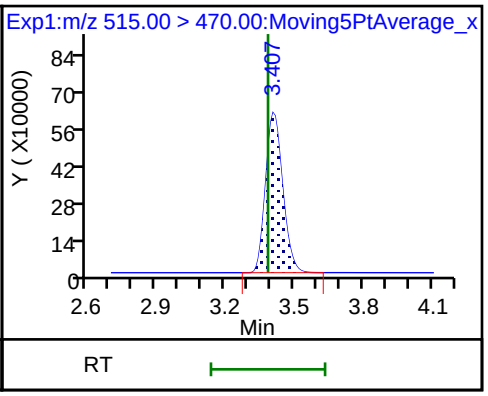
D 26 M2-8:2FTS



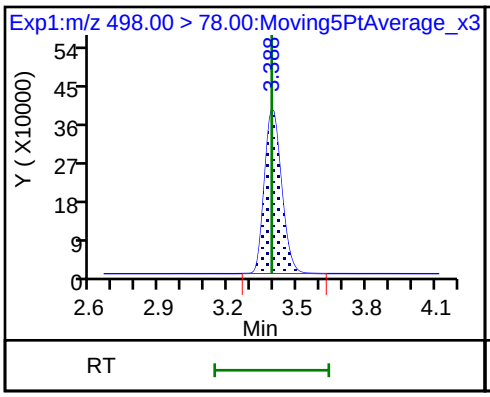
D 21 13C8 FOSA



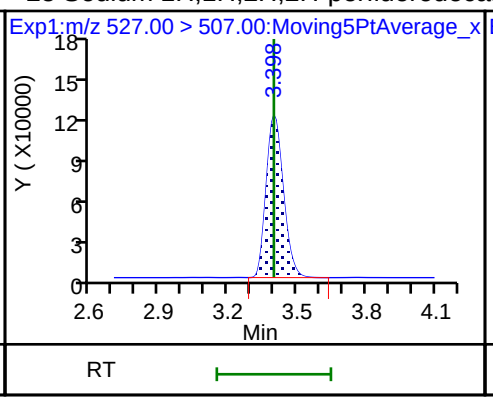
D 23 13C2 PFDA



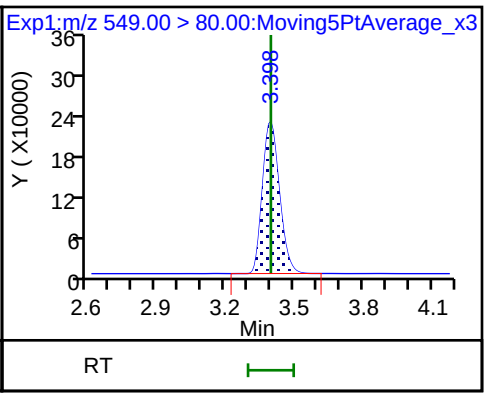
22 Perfluorooctane Sulfonamide



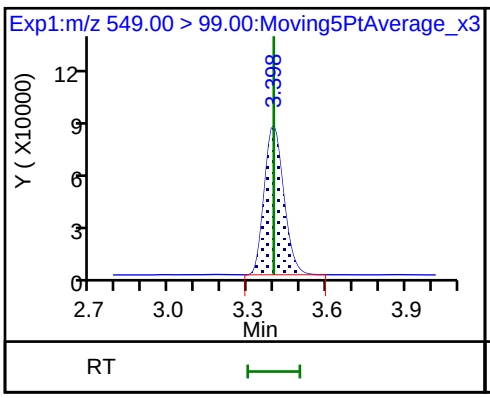
25 Sodium 1H,1H,2H,2H-perfluorodecane



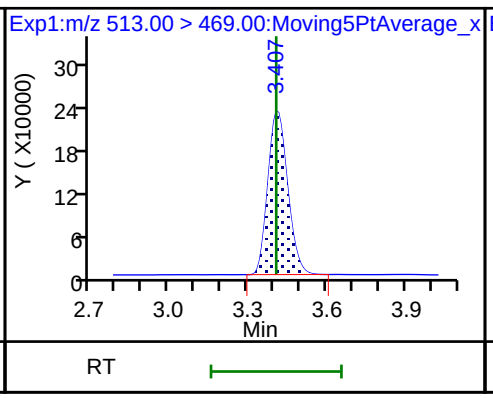
68 Perfluorononanesulfonic acid



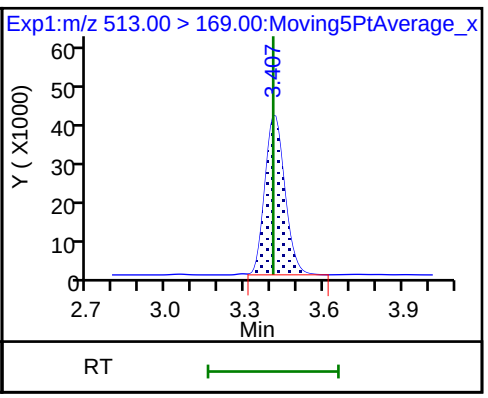
68 Perfluorononanesulfonic acid



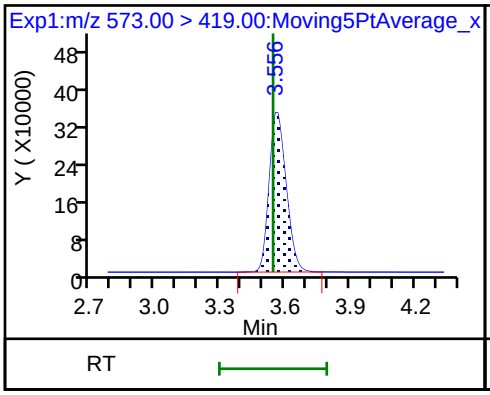
24 Perfluorodecanoic acid



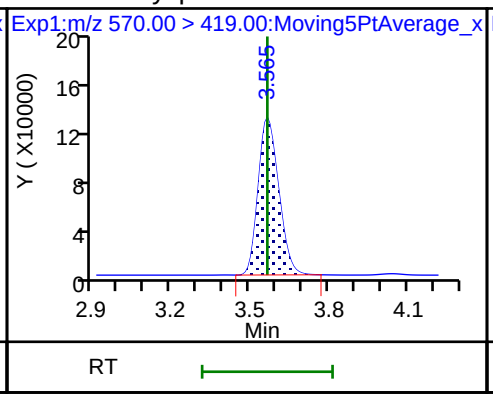
24 Perfluorodecanoic acid



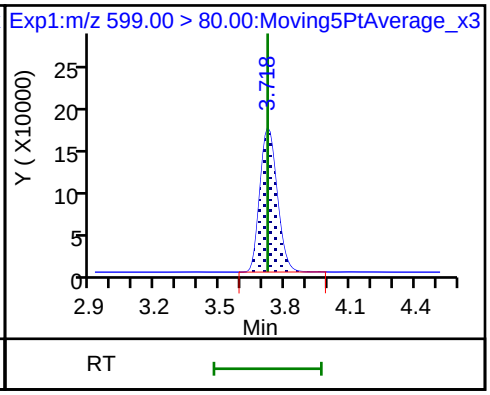
D 27 d3-NMeFOSAA



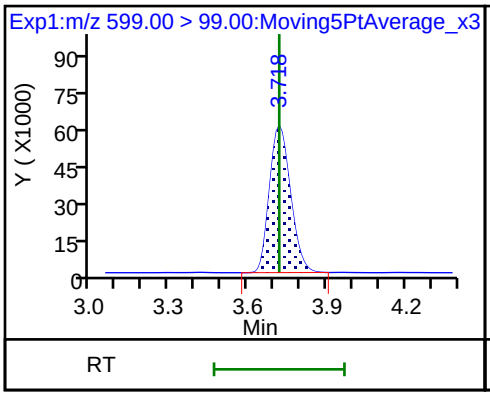
28 N-methyl perfluorooctane sulfonami



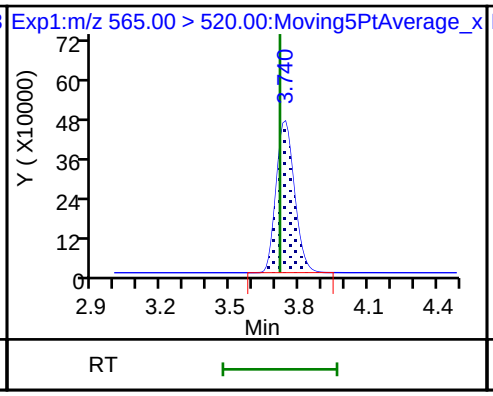
29 Perfluorodecane Sulfonic acid



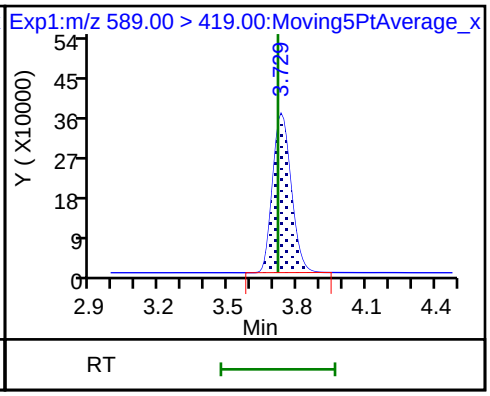
29 Perfluorodecane Sulfonic acid



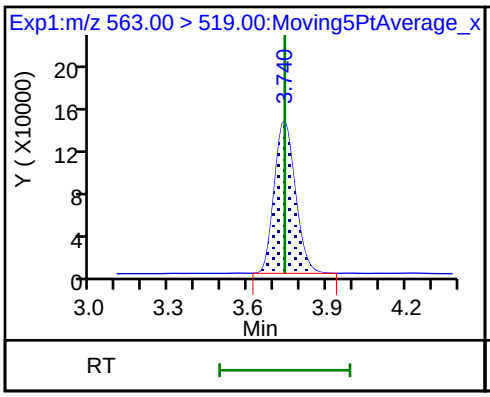
D 30 13C2 PFUnA



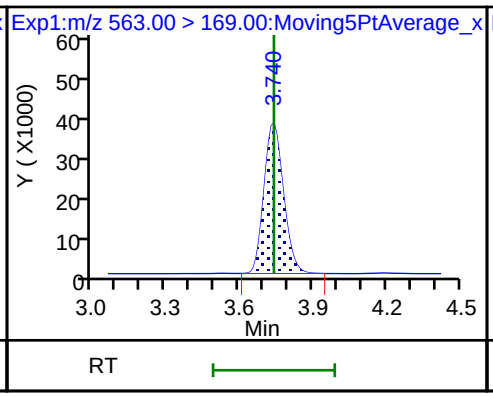
D 32 d5-NEtFOSAA



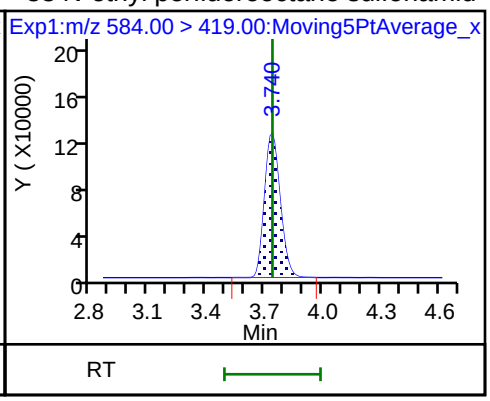
31 Perfluoroundecanoic acid



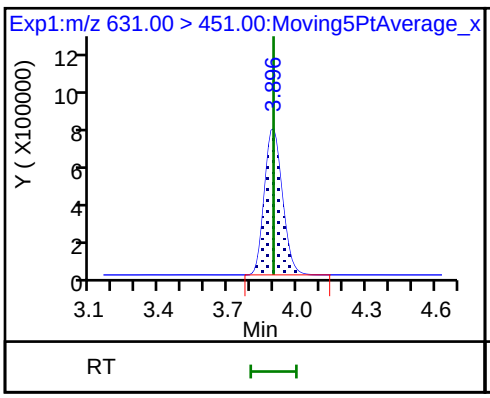
31 Perfluoroundecanoic acid



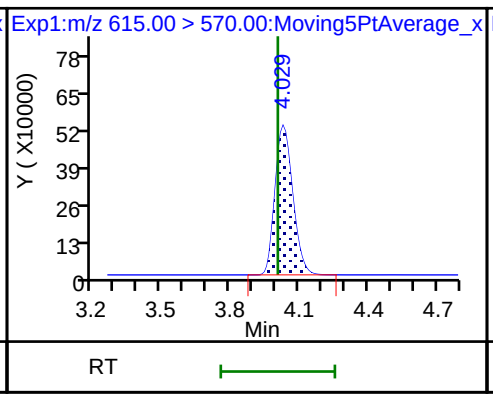
33 N-ethyl perfluorooctane sulfonamid



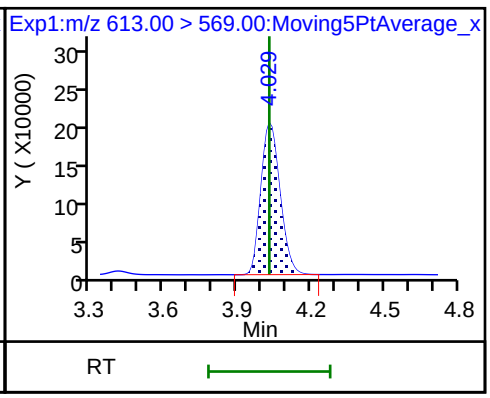
66 11-Chloroeicosafluoro-3-oxaundecan



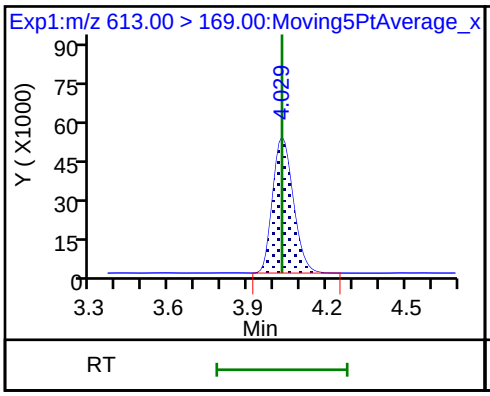
D 36 13C2 PFDoA



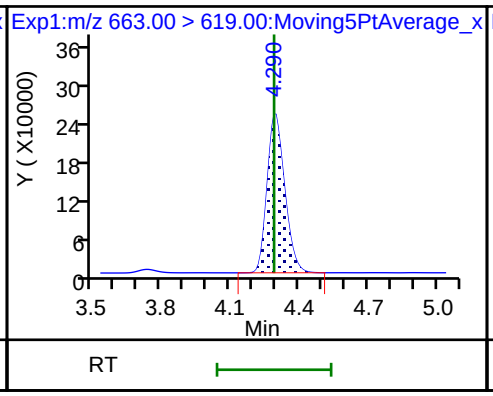
37 Perfluorododecanoic acid



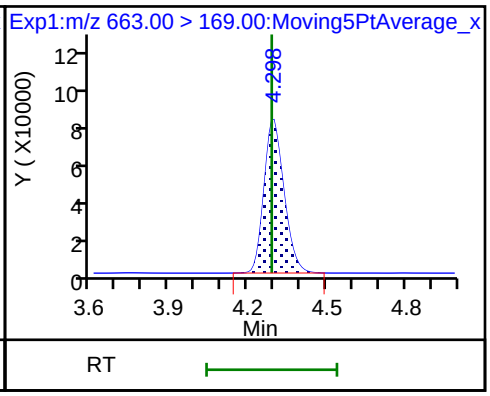
37 Perfluorododecanoic acid



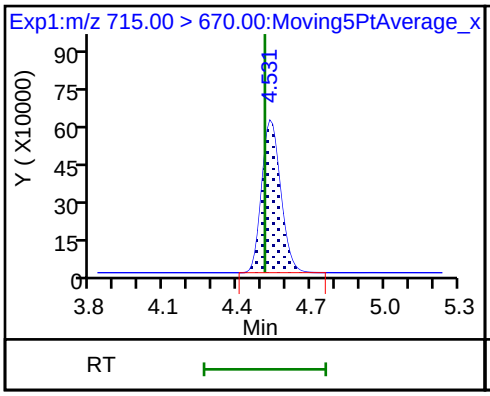
41 Perfluorotridecanoic acid



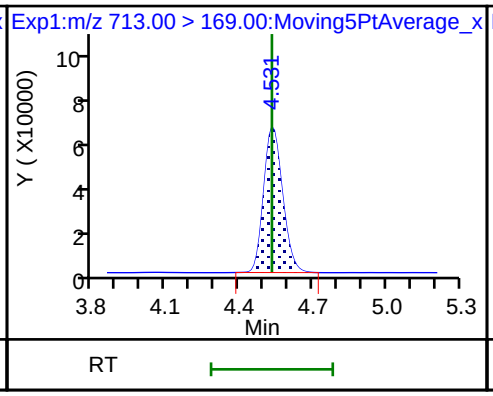
41 Perfluorotridecanoic acid



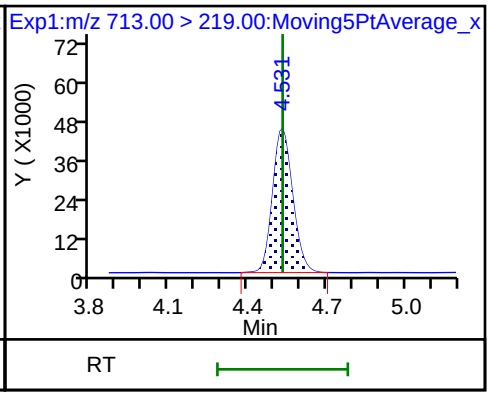
D 43 13C2-PFTeDA



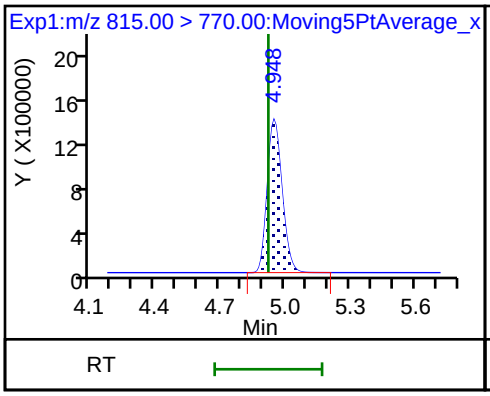
42 Perfluorotetradecanoic acid



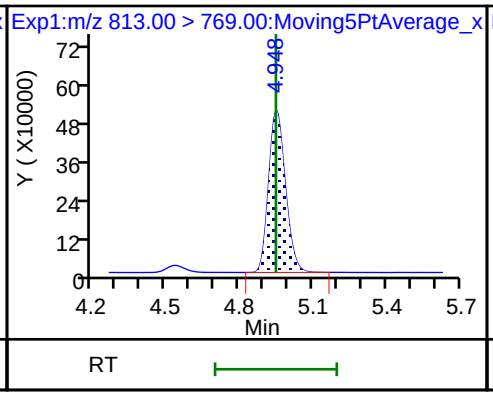
42 Perfluorotetradecanoic acid



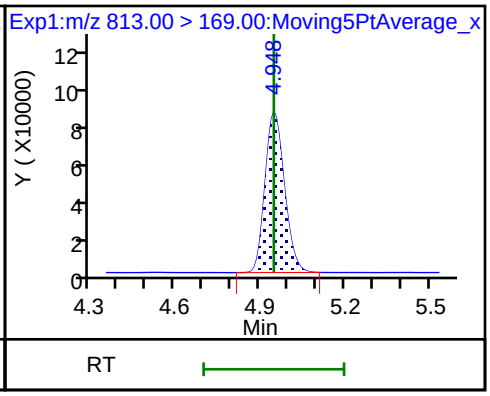
D 44 13C2-PFHxDA



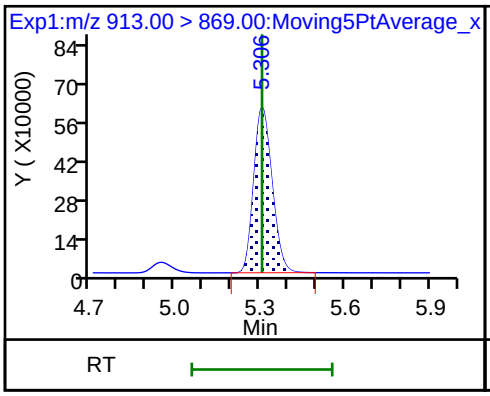
45 Perfluorohexadecanoic acid



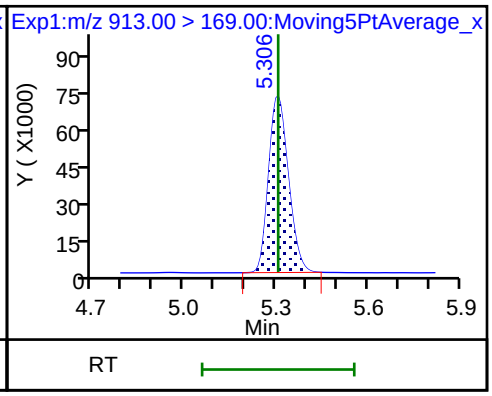
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-223714/23 Calibration Date: 05/17/2018 02:56

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_031.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9298	0.9381		2.52	2.50	0.9	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.181	1.181		2.50	2.50	0.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.09	79.80		2.26	2.21	2.2	50.0
4:2 FTS	AveID	16.57	18.33		2.58	2.34	10.6	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.028	1.064		2.59	2.50	3.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	69.55	74.61		2.52	2.35	7.3	50.0
HFPO-DA (GenX)	AveID	3.057	3.407		2.79	2.50	11.5	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.056	1.083		2.56	2.50	2.5	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.127	1.073		2.17	2.28	-4.8	40.0
Adona	AveID	3.427	3.732		2.72	2.50	8.9	50.0
6:2FTS	L2ID		1.618		2.17	2.37	-8.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.332	1.361		2.43	2.38	2.2	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.177	1.208		2.57	2.50	2.6	40.0
Perfluorononanoic acid (PFNA)	AveID	1.059	1.015		2.40	2.50	-4.2	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.176	1.096		2.16	2.32	-6.8	40.0
9-Chlorohexadecafluoro-3-oxa nonane-1-sulfonate	AveID	1.794	1.910		2.48	2.33	6.5	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	1.042		2.68	2.50	7.0	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7575	0.7319		2.32	2.40	-3.4	50.0
8:2FTS	AveID	1.349	1.336		2.37	2.40	-1.0	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9722	0.9882		2.54	2.50	1.6	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.015	1.112		2.74	2.50	9.6	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6714	0.6533		2.34	2.41	-2.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.9400	0.9223		2.45	2.50	-1.9	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8352	0.8044		2.41	2.50	-3.7	40.0
11-Chloroeicosafluoro-3-oxau ndecane-1-sulfonate	AveID	2.719	2.863		2.48	2.36	5.3	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.044	1.093		2.62	2.50	4.7	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.144	1.213		2.65	2.50	6.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2525	0.2400		2.38	2.50	-5.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID	1.086	0.9742		2.60	2.50	3.9	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Lab Sample ID: CCV 320-223714/23 Calibration Date: 05/17/2018 02:56

Instrument ID: A8_N Calib Start Date: 05/15/2018 15:13

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 05/15/2018 16:39

Lab File ID: 2018.05.16LLD_031.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.052	1.066		2.52	2.50	1.3	50.0
13C4 PFBA	Ave	1.528	1.481		2.42	2.50	-3.1	50.0
13C5 PFPeA	Ave	0.9798	0.9608		2.45	2.50	-1.9	50.0
13C3-PFBS	Ave	0.0221	0.0214		2.25	2.33	-3.4	50.0
M2-4:2FTS	Ave	0.1627	0.1749		2.51	2.34	7.5	50.0
13C2 PFHxA	Ave	1.045	0.997		2.38	2.50	-4.6	50.0
13C3 HFPO-DA	Ave	0.0517	0.0477		2.31	2.50	-7.7	50.0
13C4-PFHpA	Ave	1.001	0.9945		2.48	2.50	-0.6	50.0
18O2 PFHxS	Ave	1.237	1.219		2.33	2.37	-1.5	50.0
M2-6:2FTS	Ave	0.2210	0.2447		2.63	2.38	10.7	40.0
13C4 PFOA	Ave	0.9468	0.9498		2.51	2.50	0.3	50.0
13C4 PFOS	Ave	0.8503	0.8409		2.36	2.39	-1.1	50.0
13C5 PFNA	Ave	0.7745	0.8238		2.66	2.50	6.4	50.0
13C8 FOSA	Ave	1.113	1.022		2.30	2.50	-8.2	50.0
M2-8:2FTS	Ave	0.2515	0.2637		2.51	2.40	4.9	40.0
13C2 PFDA	Ave	0.6587	0.6816		2.59	2.50	3.5	50.0
d3-NMeFOSAA	Ave	0.3634	0.3886		2.67	2.50	7.0	50.0
d5-NEtFOSAA	Ave	0.3729	0.3915		2.62	2.50	5.0	50.0
13C2 PFUnA	Ave	0.5216	0.5425		2.60	2.50	4.0	50.0
13C2 PFDoA	Ave	0.5613	0.5668		2.52	2.50	1.0	50.0
13C2-PFTeDA	Ave	0.6891	0.7582		2.75	2.50	10.0	50.0
13C2-PFHxDA	Ave	1.141	1.381		3.03	2.50	21.1	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_031.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2018 02:56:42 ALS Bottle#: 14 Worklist Smp#: 23
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 14:23:32 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 14:23:32

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.450	1.447	0.003	1.000	7029850	2.42		96.9	40659	
2 Perfluorobutyric acid										
212.90 > 169.00	1.456	1.456	0.0	1.004	6594624	2.52		101	2929	
D 3 13C5-PFPeA										
267.90 > 223.00	1.716	1.712	0.004	0.563	4559820	2.45		98.1	64969	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.725	1.725	0.0	1.005	5382896	2.50		100	3255	
D 47 13C3-PFBS										
301.90 > 83.00	1.752	1.748	0.004	1.000	94410	2.25		96.6	693	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.761	1.761	0.0	1.005	7161282	2.26		102	29540	
298.90 > 99.00	1.761	1.761	0.0	1.005	2993242		2.39(1.25-3.74)		25889	
D 60 M2-4:2FTS										
329.00 > 81.00	1.967	1.961	0.006	1.000	775211	2.51		108	8146	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.967	1.967	0.0	1.000	1737792	2.58		111	96762	
D 7 13C2 PFHxA										
315.00 > 270.00	1.999	1.994	0.005	1.000	4729900	2.38		95.4	76659	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.011	2.011	0.0	1.006	5031055	2.59		103	9657	
313.00 > 119.00	2.011	2.011	0.0	1.006	436555		11.52(5.03-15.10)		4704	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.022	2.022	0.0	1.000	7104903	2.52		107	72993	
349.00 > 99.00	2.022	2.022	0.0	1.000	2540342		2.80(1.36-4.07)		29838	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.101	2.095	0.006	1.000	226350	2.31		92.3	4121	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.101	2.101	0.0	1.000	771240	2.79		111	6662	
D 9 13C4-PFHpA										
367.00 > 322.00	2.329	2.321	0.008	1.000	4719902	2.48		99.4	55817	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.329	2.329	0.0	1.000	5110747	2.56		103	6953	
363.00 > 169.00	2.329	2.329	0.0	1.000	1960181		2.61(1.13-3.40)		10442	
D 11 18O2 PFHxS										
403.00 > 84.00	2.342	2.334	0.008	1.000	5473728	2.33		98.5	47285	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.342	2.342	0.0	1.000	5647732	2.17		95.2	23888	
399.00 > 99.00	2.342	2.342	0.0	1.000	1838047		3.07(1.50-4.49)		7602	
65 Adona										
377.00 > 251.00	2.381	2.381	0.0	1.000	14895140	2.72		109	131919	
377.00 > 85.00	2.381	2.381	0.0	1.000	8906061		1.67(0.84-2.53)		64564	
D 12 M2-6:2FTS										
429.00 > 81.00	2.658	2.645	0.013	1.000	1103084	2.63		111	18343	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.658	2.658	0.0	1.000	1781201	2.17		91.8	12685	
D 14 13C4 PFOA										
417.00 > 372.00	2.688	2.668	0.020	1.000	4507835	2.51		100	47791	
* 62 13C2-PFOA										
415.00 > 370.00	2.688	2.688	0.0		4746073	2.50			55660	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.688	2.688	0.0	1.000	5445794	2.57		103	2377	
413.00 > 169.00	2.688	2.688	0.0	1.000	2696394		2.02(0.84-2.52)		9760	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.688	2.688	0.0	1.000	5170119	2.43		102	34087	
449.00 > 99.00	2.688	2.688	0.0	1.000	1361003		3.80(1.94-5.82)		16014	
D 18 13C4 PFOS										
503.00 > 80.00	3.049	3.029	0.020	1.000	3815441	2.36		98.9	24065	
D 19 13C5 PFNA										
468.00 > 423.00	3.049	3.036	0.013	1.000	3910013	2.66		106	51810	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.049	3.049	0.0	1.000	4060032	2.16		93.2	34115	
499.00 > 99.00	3.049	3.049	0.0	1.000	898029		4.52(2.31-6.93)		8327	
20 Perfluorononanoic acid										
463.00 > 419.00	3.049	3.049	0.0	1.000	3969258	2.40		95.8	9274	
463.00 > 169.00	3.049	3.049	0.0	1.000	969222		4.10(1.90-5.69)		33624	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.257	3.257	0.0	1.000	7103607	2.48		106	34281	
D 26 M2-8:2FTS										
529.00 > 81.00	3.403	3.376	0.027	1.000	1199105	2.51		105	19217	
D 21 13C8 FOSA										
506.00 > 78.00	3.385	3.376	0.009	1.000	4849019	2.30		91.8	37263	
D 23 13C2 PFDA										
515.00 > 470.00	3.413	3.385	0.028	1.000	3234885	2.59		103	47244	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.385	3.385	0.0	1.000	5052199	2.68		107	44004	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.403	3.403	0.0	1.000	1602089	2.37		99.0	37806	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.394	3.394	0.0	1.000	2804294	2.32		96.6	33880	
549.00 > 99.00	3.394	3.394	0.0	1.000	1046680		2.68(1.33-3.97)		13313	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.413	3.413	0.0	1.000	3196536	2.54		102	12586	
513.00 > 169.00	3.413	3.413	0.0	1.000	583497		5.48(2.36-7.09)		18599	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.562	3.544	0.018	1.000	1844491	2.67		107	37594	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.562	3.562	0.0	1.000	2050847	2.74		110	12368	
D 30 13C2 PFUnA										
565.00 > 520.00	3.736	3.716	0.020	1.000	2574625	2.60		104	42225	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.726	3.716	0.010	1.000	1857877	2.62		105	13041	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.726	3.726	0.0	1.000	2513342	2.34		97.3	28401	
599.00 > 99.00	3.726	3.726	0.0	1.000	829902		3.03(1.39-4.16)		16672	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.736	3.736	0.0	1.000	2071119	2.41		96.3	9643	
563.00 > 169.00	3.736	3.736	0.0	1.000	539958		3.84(2.12-6.36)		32665	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.736	3.736	0.0	1.003	1713517	2.45		98.1	27862	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.894	3.894	0.0	1.000	10764568	2.48		105	41670	
D 36 13C2 PFDoA										
615.00 > 570.00	4.037	4.006	0.031	1.000	2690223	2.52		101	21478	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.037	4.037	0.0	1.000	2940543	2.62		105	2855	
613.00 > 169.00	4.037	4.037	0.0	1.000	702284		4.19(2.13-6.40)		10607	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.298	4.298	0.0	1.000	3263476	2.65		106	2596	
663.00 > 169.00	4.298	4.298	0.0	1.000	1006872		3.24(1.25-3.76)		9520	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.531	4.511	0.020	1.000	3598543	2.75		110	15315	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.531	4.531	0.0	1.000	863461	2.38		95.0	7988	
713.00 > 219.00	4.531	4.531	0.0	1.000	613798		1.41(0.71-2.13)		10371	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.948	4.922	0.026	1.000	6553349	3.03		121	13723	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.948	4.948	0.0	1.000	6384133	2.60		104	2012	
813.00 > 169.00	4.948	4.948	0.0	1.000	1011310		6.31(2.86-8.58)		6580	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.313	5.313	0.0	1.000	6985799	2.52		101	1406	
913.00 > 169.00	5.306	5.313	-0.007	0.999	800753		8.72(3.83-11.48)		4292	

Reagents:

LCPFC_LL5_00004 Amount Added: 1.00 Units: mL

Report Date: 17-May-2018 14:23:34 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_031.d

Injection Date: 17-May-2018 02:56:42 Instrument ID: A8_N

Lims ID: CCV L5

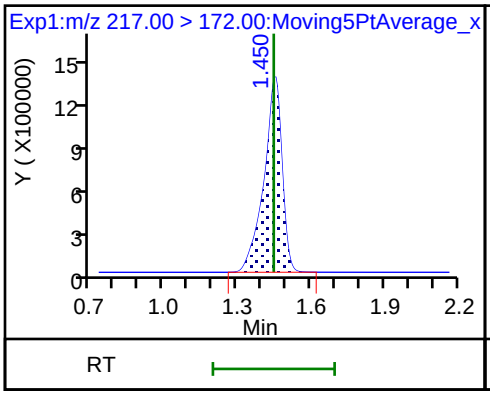
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 23

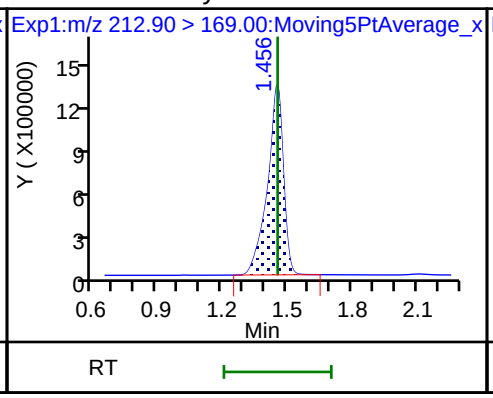
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

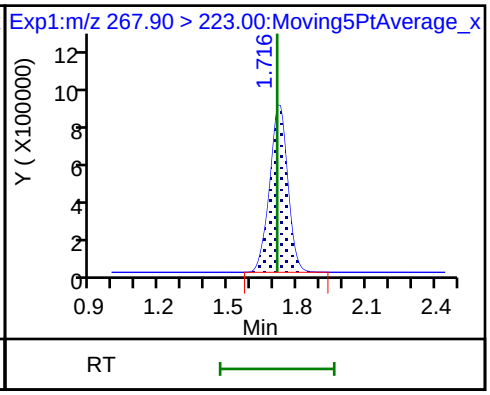
D 1 13C4 PFBA



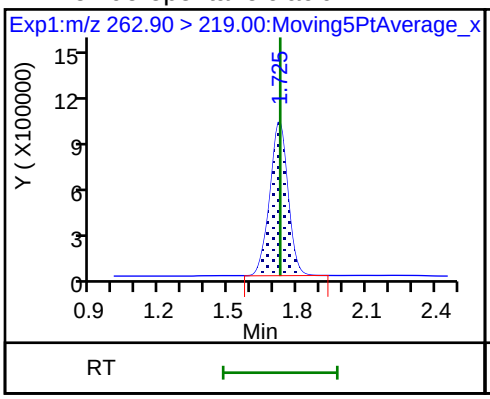
2 Perfluorobutyric acid



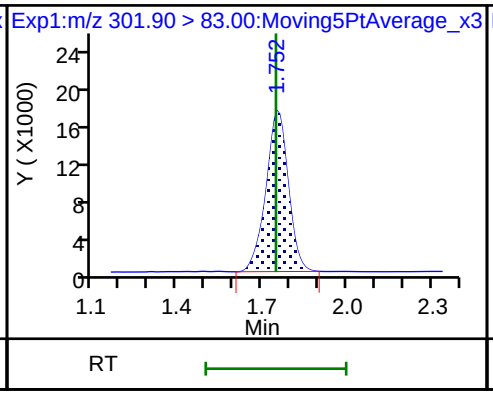
D 3 13C5-PFPeA



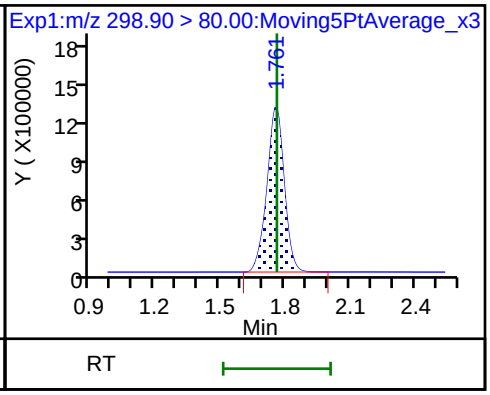
4 Perfluoropentanoic acid



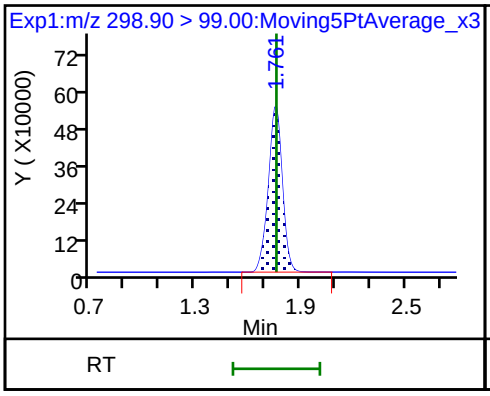
D 47 13C3-PFBS



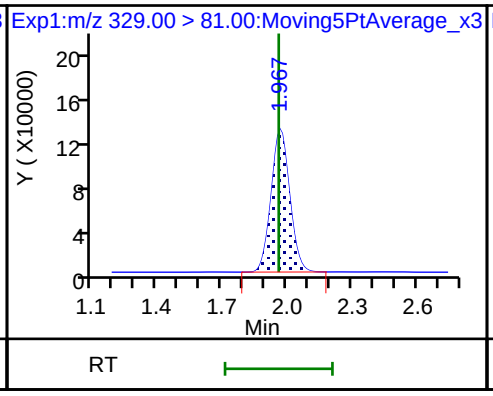
5 Perfluorobutanesulfonic acid



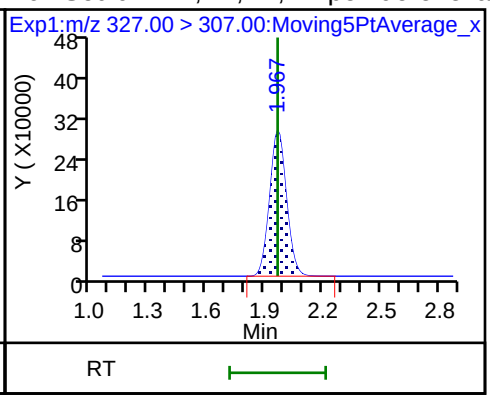
5 Perfluorobutanesulfonic acid



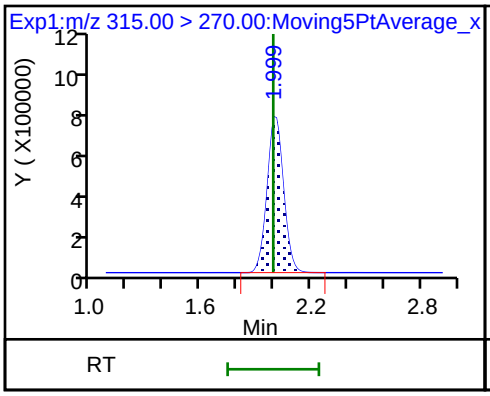
D 60 M2-4:2FTS



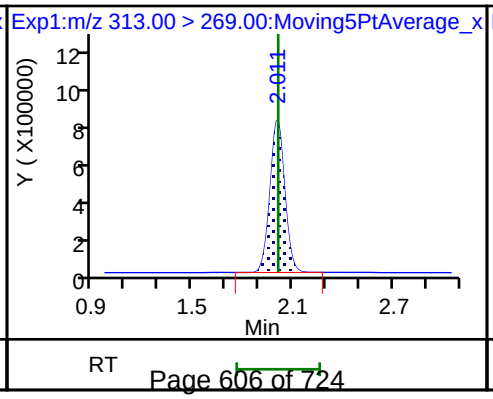
61 Sodium 1H,1H,2H,2H-perfluorohexane



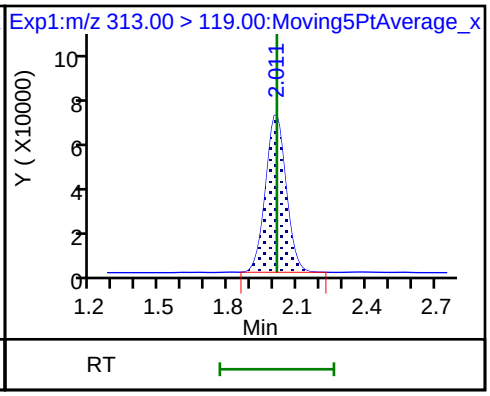
D 7 13C2 PFHxA



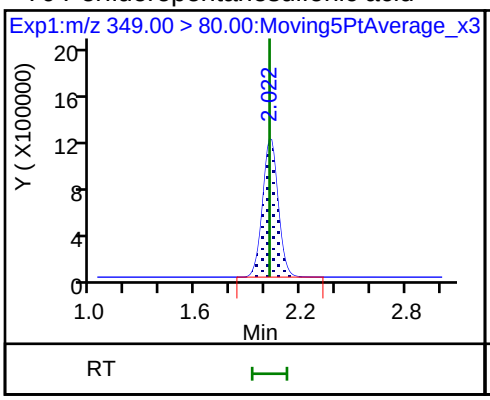
6 Perfluorohexanoic acid



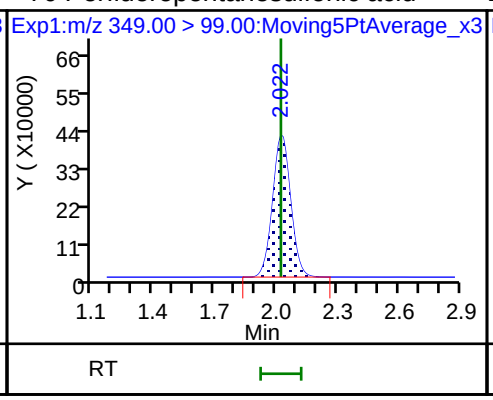
6 Perfluorohexanoic acid



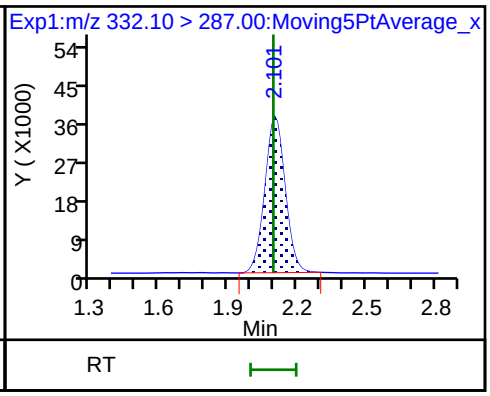
70 Perfluoropentanesulfonic acid



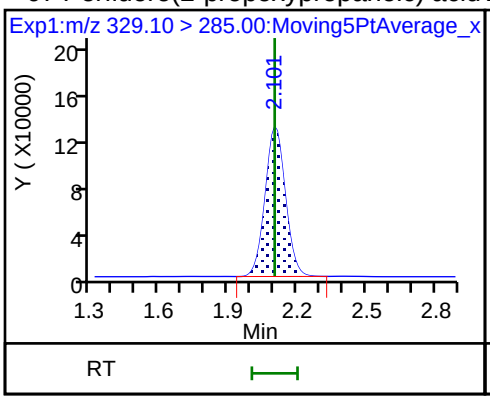
70 Perfluoropentanesulfonic acid



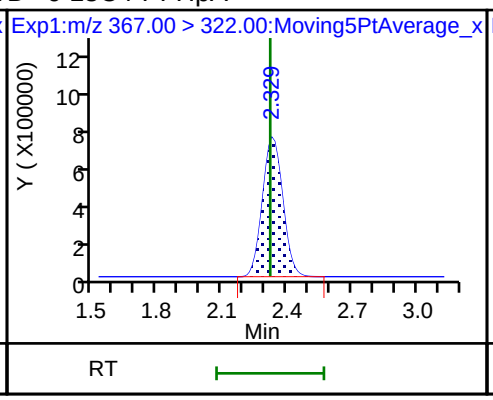
D 64 13C3 HFPO-DA



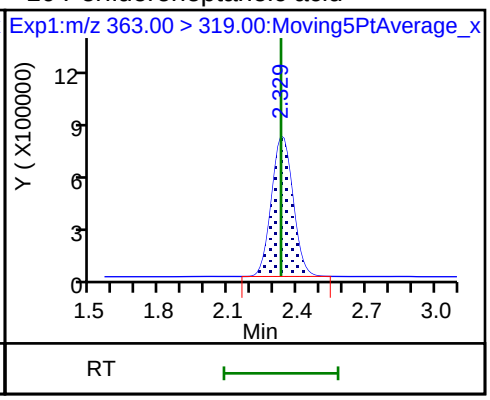
67 Perfluoro(2-propoxypropanoic) acid



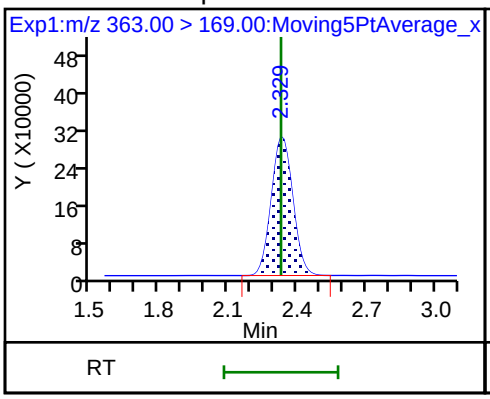
D 9 13C4-PFHpA



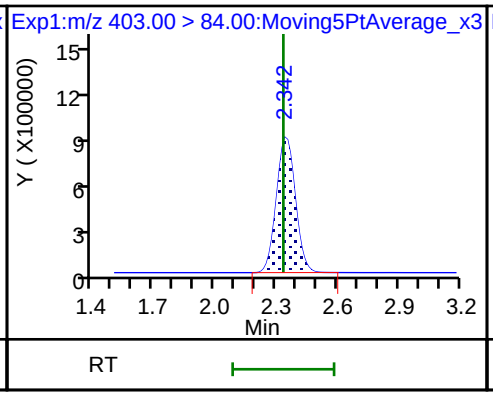
10 Perfluoroheptanoic acid



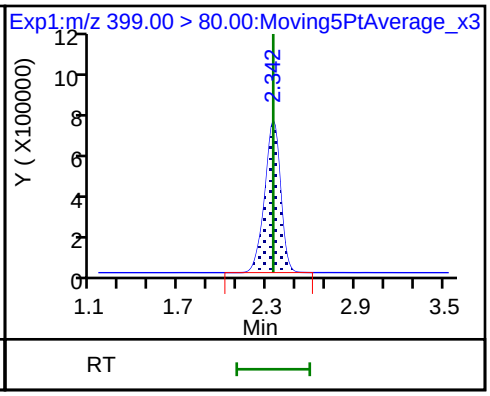
10 Perfluoroheptanoic acid



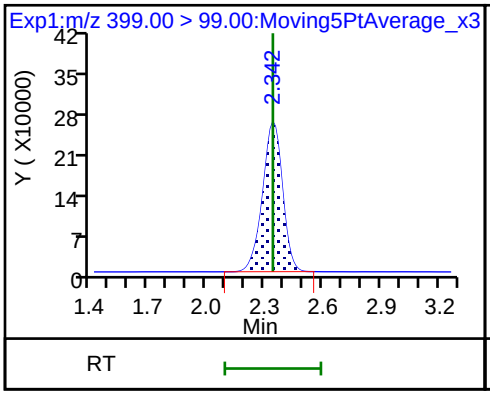
D 11 18O2 PFHxS



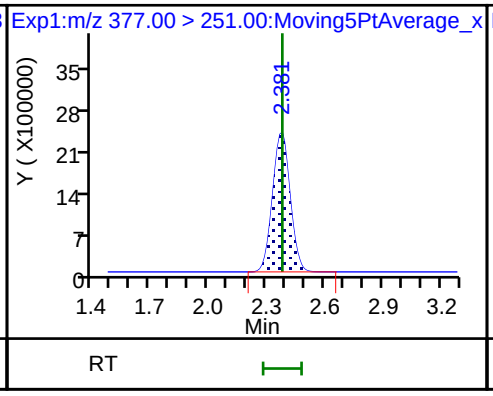
8 Perfluorohexanesulfonic acid



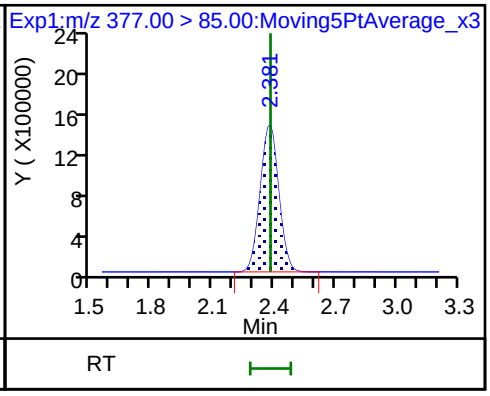
8 Perfluorohexanesulfonic acid



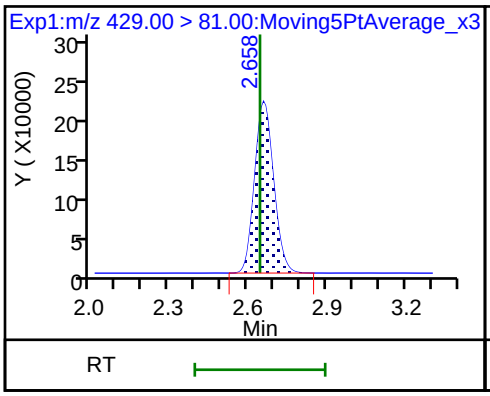
65 Adona



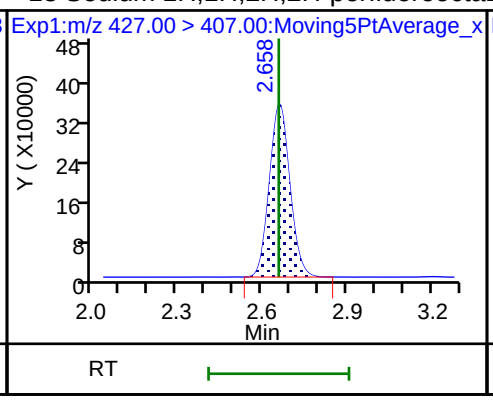
65 Adona



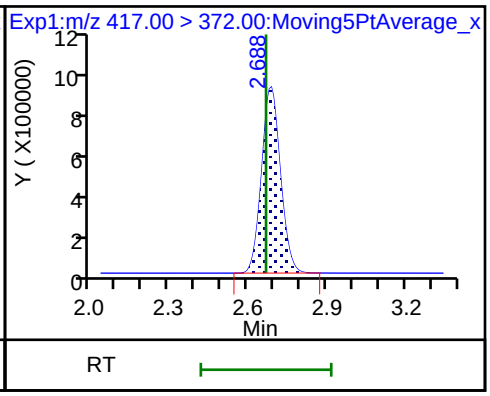
D 12 M2-6:2FTS



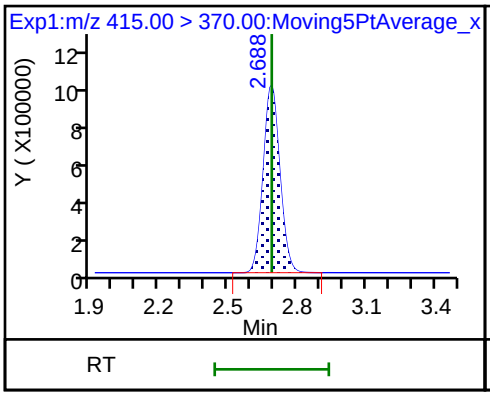
13 Sodium 1H,1H,2H,2H-perfluorooctane



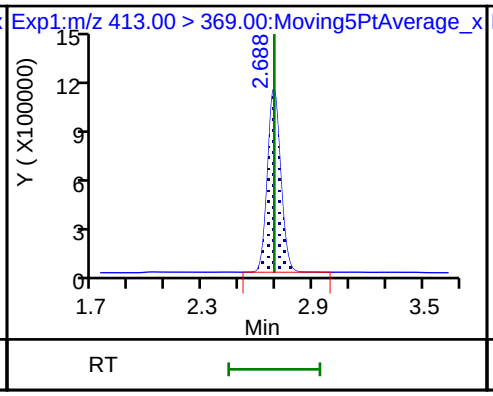
D 14 13C4 PFOA



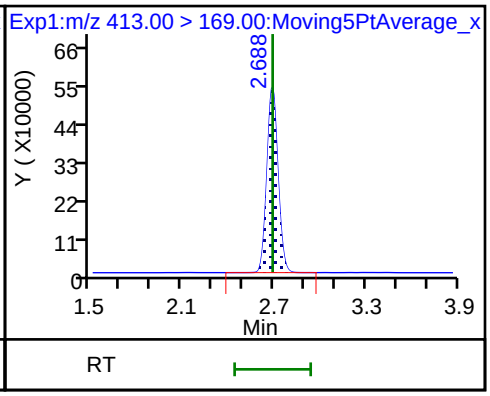
* 62 13C2-PFOA



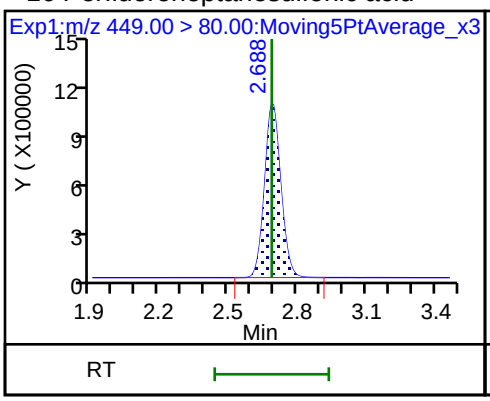
15 Perfluorooctanoic acid



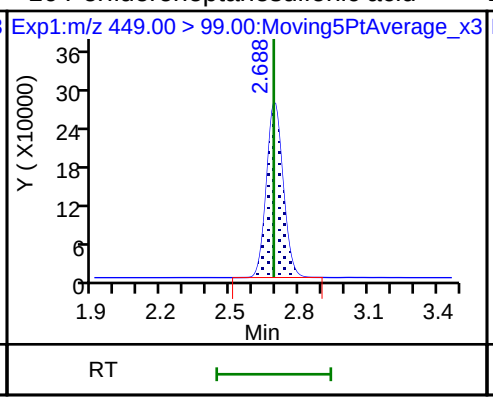
15 Perfluorooctanoic acid



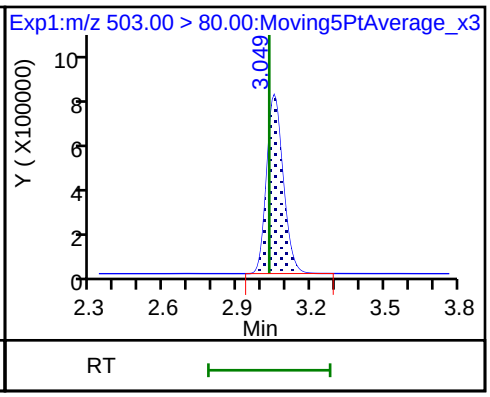
16 Perfluoroheptanesulfonic acid



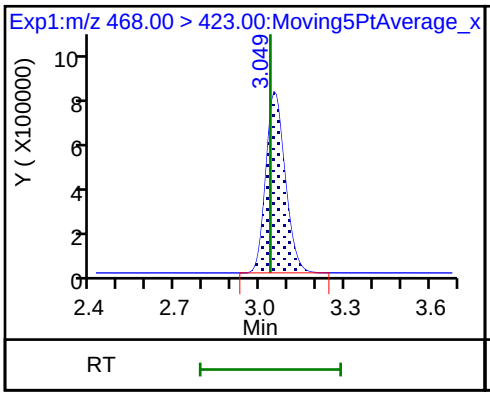
16 Perfluoroheptanesulfonic acid



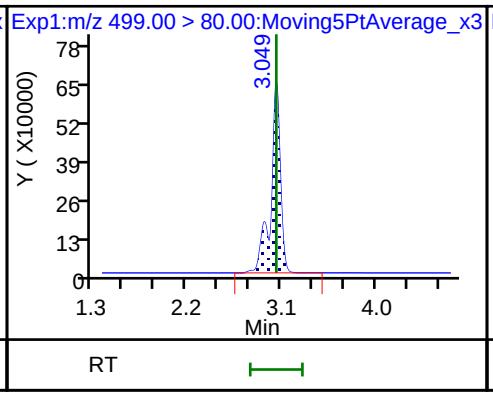
D 18 13C4 PFOS



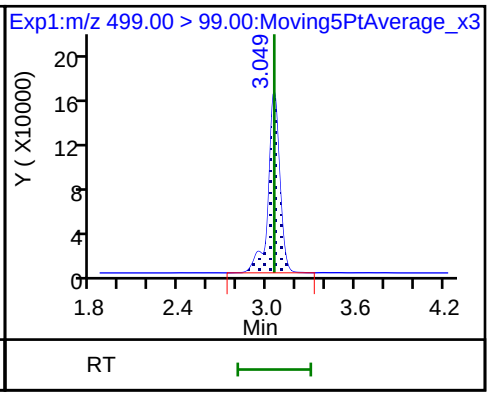
D 19 13C5 PFNA



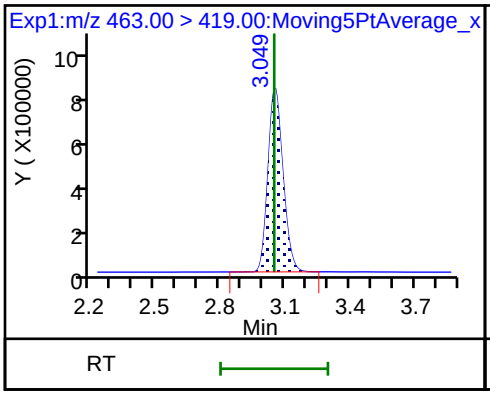
17 Perfluorooctane sulfonic acid



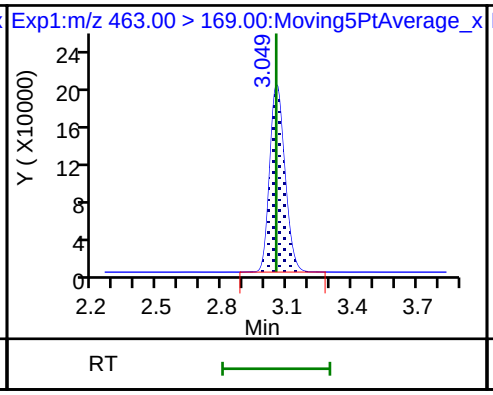
17 Perfluorooctane sulfonic acid



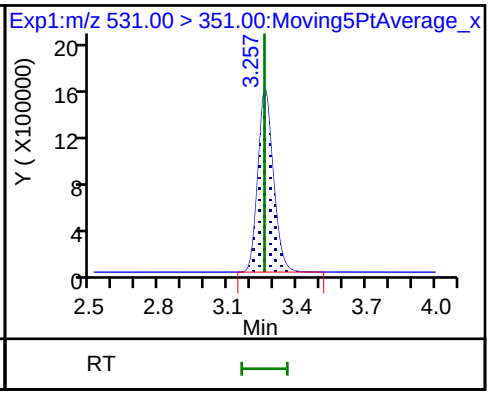
20 Perfluorononanoic acid



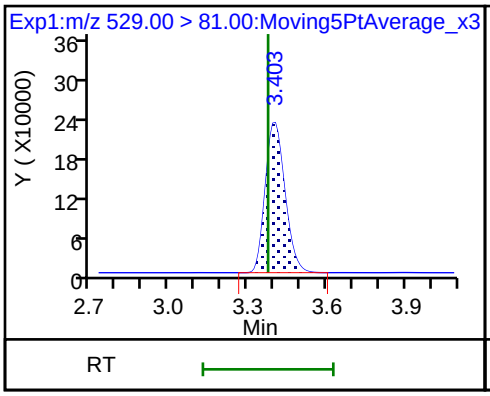
20 Perfluorononanoic acid



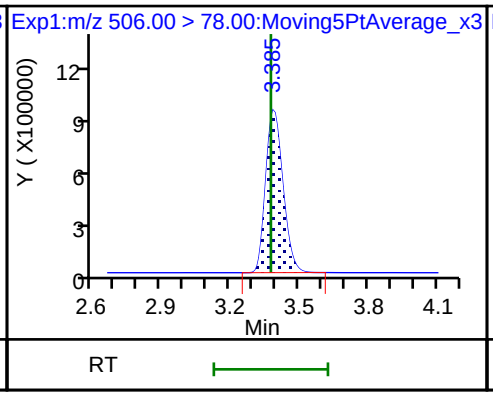
69 9-Chlorohexadecafluoro-3-oxanonane



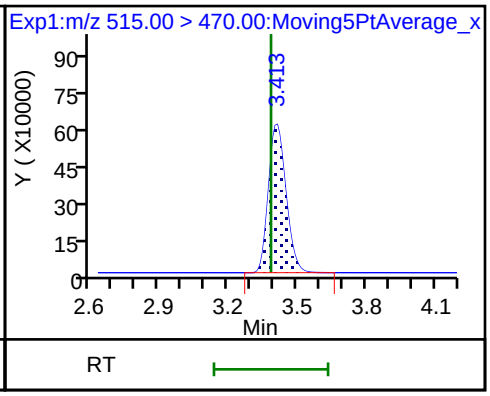
D 26 M2-8:2FTS



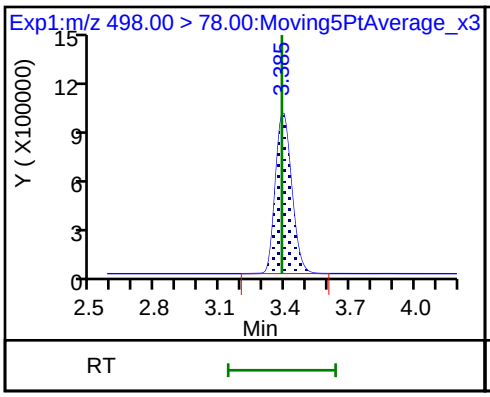
D 21 13C8 FOSA



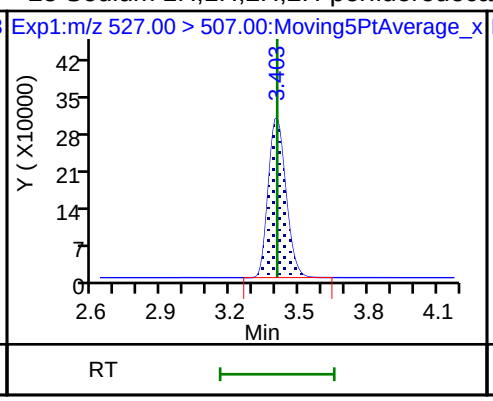
D 23 13C2 PFDA



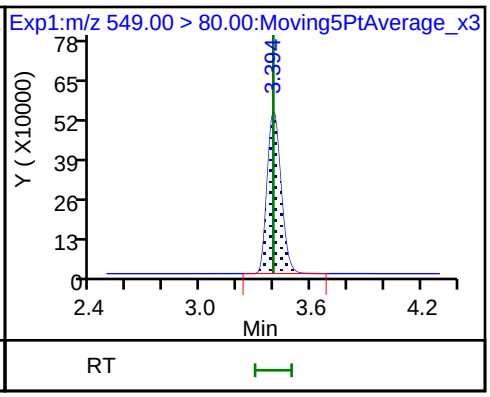
22 Perfluorooctane Sulfonamide



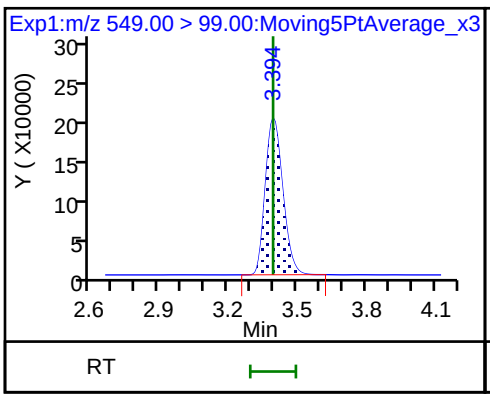
25 Sodium 1H,1H,2H,2H-perfluorodecane



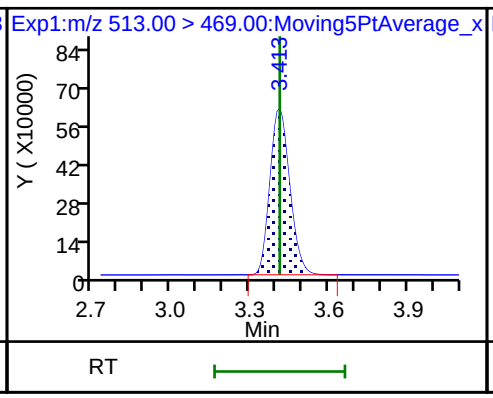
68 Perfluorononanesulfonic acid



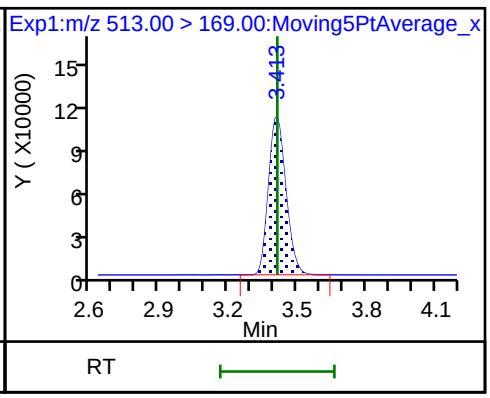
68 Perfluorononanesulfonic acid



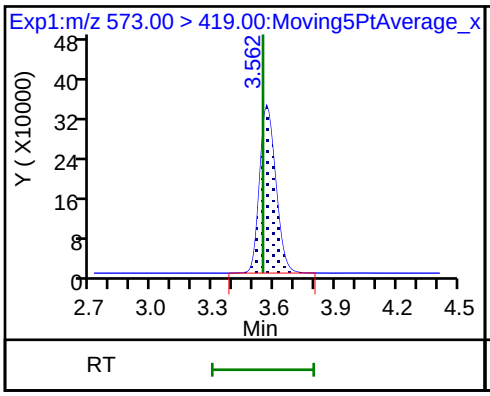
24 Perfluorodecanoic acid



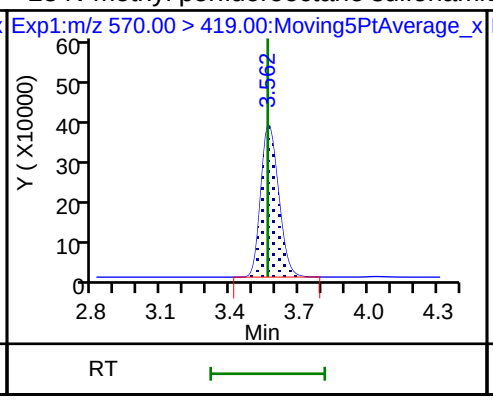
24 Perfluorodecanoic acid



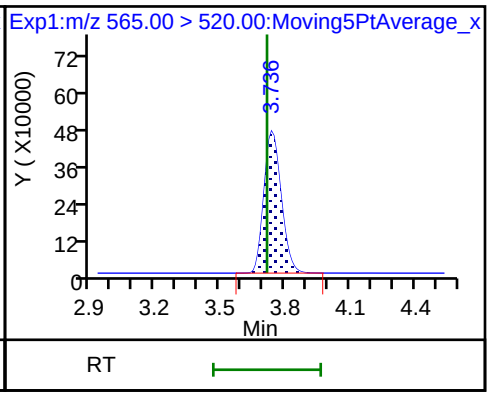
D 27 d3-NMeFOSAA



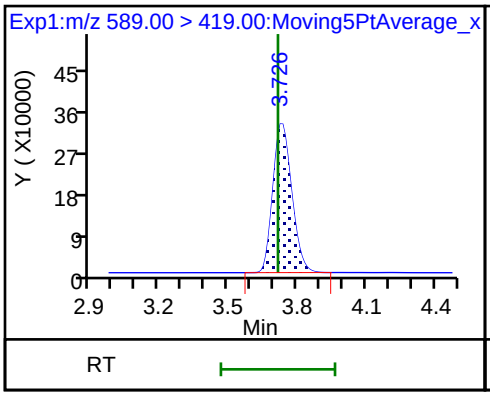
28 N-methyl perfluorooctane sulfonami



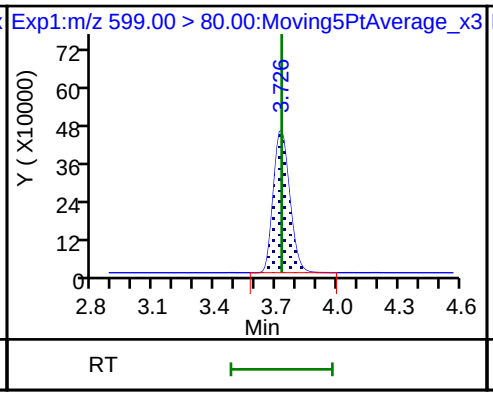
D 30 13C2 PFUnA



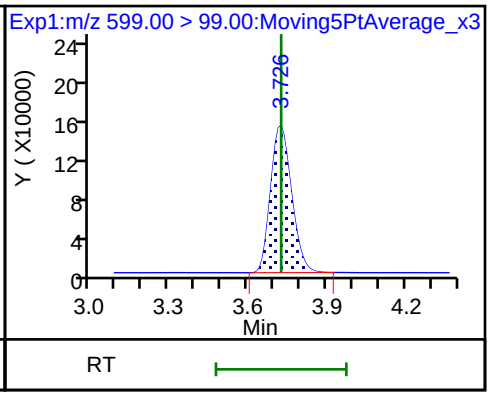
D 32 d5-NEtFOSAA



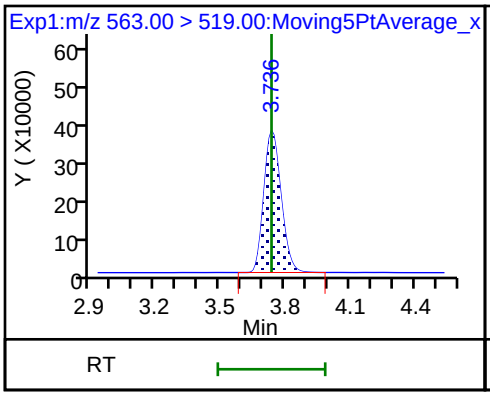
29 Perfluorodecane Sulfonic acid



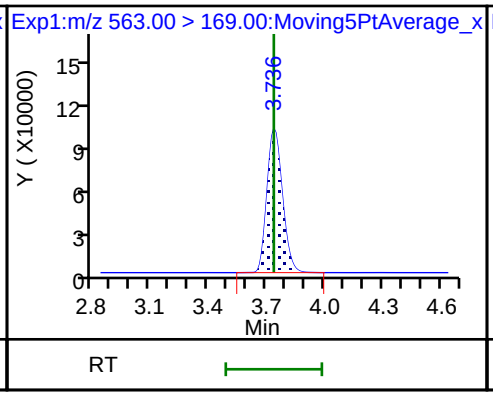
29 Perfluorodecane Sulfonic acid



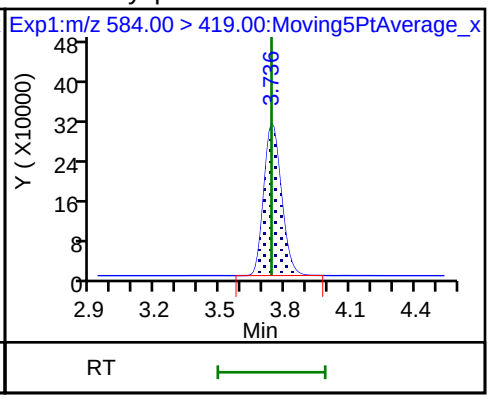
31 Perfluoroundecanoic acid



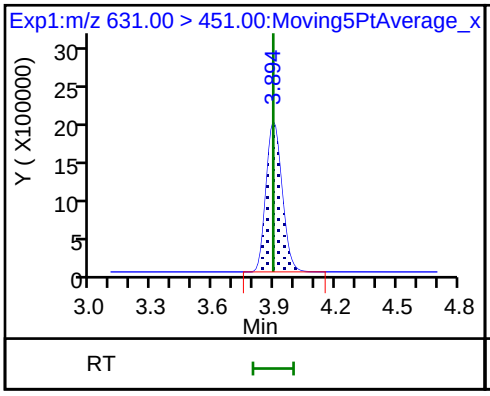
31 Perfluoroundecanoic acid



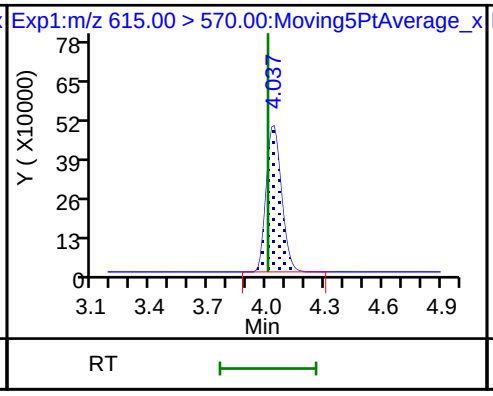
33 N-ethyl perfluorooctane sulfonamid



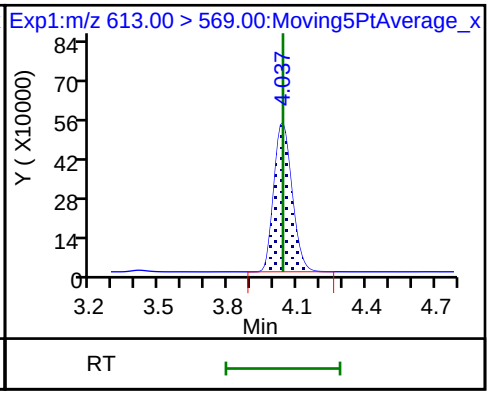
66 11-Chloroeicosafluoro-3-oxaundecan



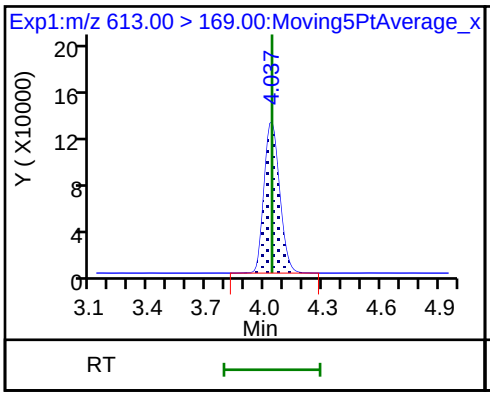
D 36 13C2 PFDoA



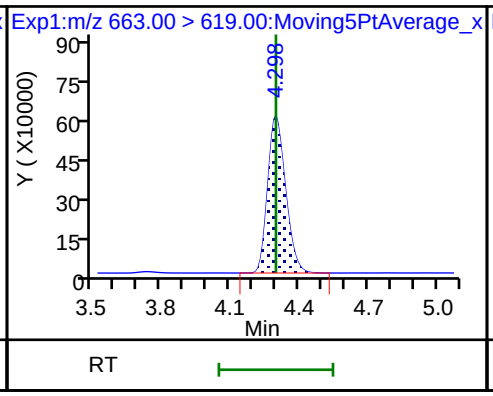
37 Perfluorododecanoic acid



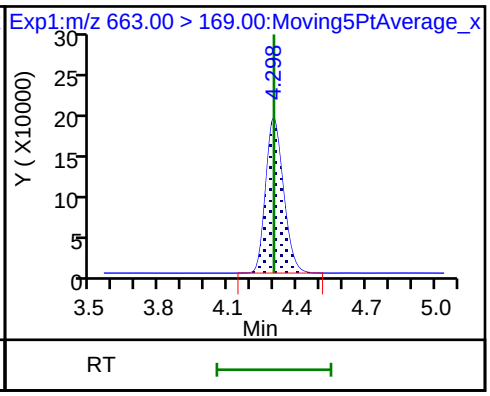
37 Perfluorododecanoic acid



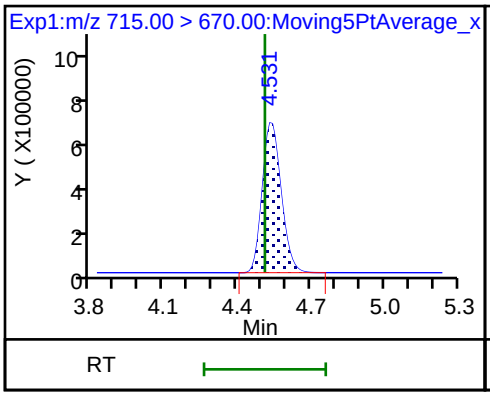
41 Perfluorotridecanoic acid



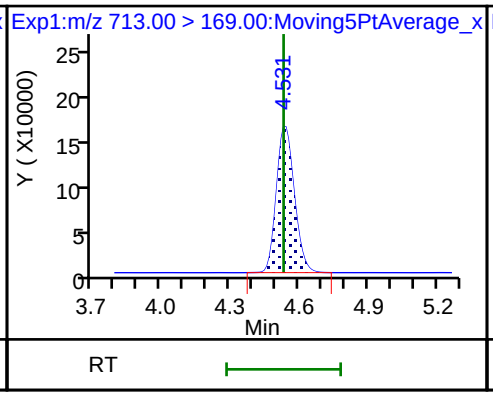
41 Perfluorotridecanoic acid



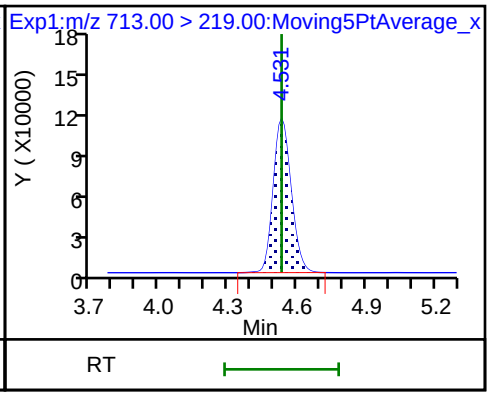
D 43 13C2-PFTeDA



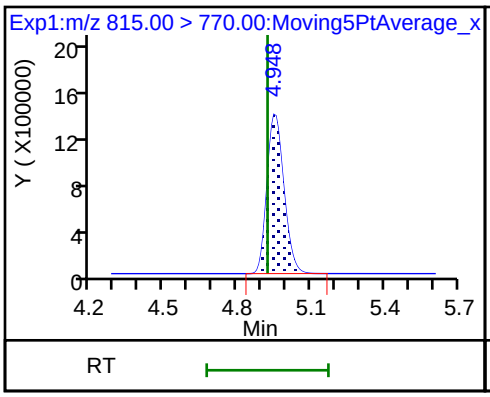
42 Perfluorotetradecanoic acid



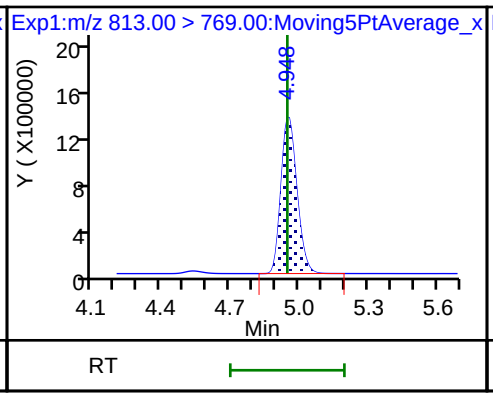
42 Perfluorotetradecanoic acid



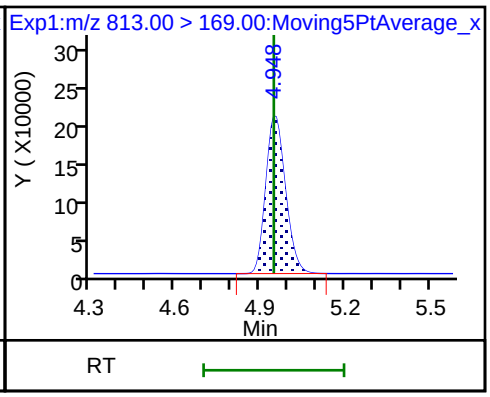
D 44 13C2-PFHxDA



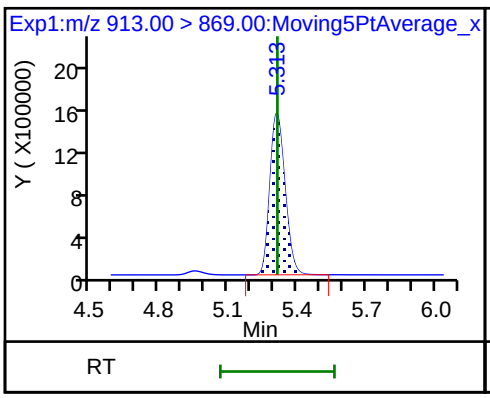
45 Perfluorohexadecanoic acid



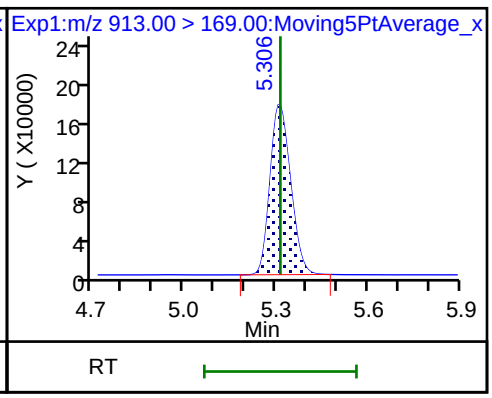
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-222044/1-A

Matrix: Water | Lab File ID: 2018.05.09LLC_020.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 250(mL) | Date Analyzed: 05/10/2018 08:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222476 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.453	J	2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	4.21		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.267	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	26.9		20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-222044/1-A

Matrix: Water | Lab File ID: 2018.05.09LLC_020.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 250(mL) | Date Analyzed: 05/10/2018 08:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222476 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	102		25-150
STL01893	13C5 PFPeA	107		25-150
STL00993	13C2 PFHxA	103		25-150
STL01892	13C4-PFHpA	108		25-150
STL00990	13C4 PFOA	103		25-150
STL00995	13C5 PFNA	99		25-150
STL00996	13C2 PFDA	101		25-150
STL00997	13C2 PFUnA	94		25-150
STL00998	13C2 PFDoA	97		25-150
STL02116	13C2-PFTeDA	93		25-150
STL02337	13C3-PFBS	103		25-150
STL00994	18O2 PFHxS	108		25-150
STL00991	13C4 PFOS	102		25-150
STL01056	13C8 FOSA	94		25-150
STL02118	d3-NMeFOSAA	106		25-150
STL02117	d5-NEtFOSAA	110		25-150
STL02279	M2-6:2FTS	127		25-150
STL02280	M2-8:2FTS	119		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_020.d
Lims ID: MB 320-222044/1-A
Client ID:
Sample Type: MB
Inject. Date: 10-May-2018 08:59:11 ALS Bottle#: 11 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-222044/1-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 17:00:46 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: barnettj Date: 10-May-2018 15:25:42

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.461	1.463	-0.002	1.000	5250581	2.56		102	42751	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.472	1.468	0.004	1.008	22080	0.0113			10.4	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.744	1.738	0.006	0.560	3546333	2.68		107	79316	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.744	1.747	-0.003	1.000	3355	0.001985			3.0	M
D 47 13C3-PFBS										
301.90 > 83.00	1.780	1.774	0.006	1.000	72497	2.39		103	705	
D 7 13C2 PFHxA										
315.00 > 270.00	2.045	2.037	0.008	1.000	3773579	2.58		103	100777	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.147	2.138	0.009	1.000	230520	2.55		102	5937	
D 9 13C4-PFHpA										
367.00 > 322.00	2.381	2.372	0.009	1.000	3854367	2.71		108	68093	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.392	2.384	0.008	1.000	14334	0.006674			64.4	
399.00 > 99.00	2.392	2.384	0.008	1.000	5642		2.54(1.50-4.49)		39.8	
D 11 18O2 PFHxS										
403.00 > 84.00	2.392	2.395	-0.003	1.000	4487698	2.55		108	80871	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.711	2.712	-0.001	1.000	439895	0.6727			9876	
D 12 M2-6:2FTS										
429.00 > 81.00	2.711	2.712	-0.001	1.000	918708	3.01		127	12176	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.742	2.734	0.008	1.003	176471	0.1052			84.2	
413.00 > 169.00	2.742	2.734	0.008	1.003	86371		2.04(0.84-2.52)		344	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 62 13C2-PFOA										
415.00 > 370.00	2.734	2.734	0.0		3814715	2.50			84418	
D 14 13C4 PFOA										
417.00 > 372.00	2.734	2.735	-0.001	1.000	3628572	2.56		103	62496	
D 18 13C4 PFOS										
503.00 > 80.00	3.113	3.106	0.007	1.000	3006947	2.44		102	19727	
20 Perfluorononanoic acid										
463.00 > 419.00	3.113	3.113	0.0	1.000	2282	0.001812			6.4	
463.00 > 169.00	3.121	3.113	0.008	1.003	555		4.11(1.90-5.69)		16.4	
D 19 13C5 PFNA										
468.00 > 423.00	3.113	3.114	-0.001	1.000	3019618	2.48		99.3	66167	
D 21 13C8 FOSA										
506.00 > 78.00	3.447	3.447	0.0	1.000	3605964	2.35		93.9	34699	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.438	3.448	-0.010	0.997	3974	0.002724			83.6	
D 26 M2-8:2FTS										
529.00 > 81.00	3.466	3.466	0.0	1.000	1047292	2.85		119	10444	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.466	3.466	0.0	1.000	1752	0.003166			82.2	
D 23 13C2 PFDA										
515.00 > 470.00	3.475	3.475	0.0	1.000	2580564	2.52		101	85572	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.630	3.630	0.0	1.000	1540754	2.66		106	26675	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.640	3.640	0.0	1.003	6746	0.0110			66.6	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.794	3.796	-0.002	1.000	1572095	2.75		110	24396	
D 30 13C2 PFUnA										
565.00 > 520.00	3.805	3.806	-0.001	1.000	2075399	2.35		94.1	65662	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.805	3.807	-0.002	1.003	3421	0.005821			49.4	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.794	3.807	-0.013	0.997	4950	0.007056			24.7	
563.00 > 169.00	3.805	3.807	-0.002	1.000	1523		3.25(2.12-6.36)		84.0	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.969	3.963	0.006	1.000	4852	0.001324			123	
D 36 13C2 PFDoA										
615.00 > 570.00	4.092	4.097	-0.005	1.000	2304621	2.42		96.8	21403	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.593	4.592	0.001	1.000	2804640	2.32		92.9	18300	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.009	5.008	0.0	1.000	4650748	2.37		94.7	13669	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.009	5.017	-0.009	1.000	44290	0.002860			20.8	
813.00 > 169.00	5.009	5.017	-0.009	1.000	7624		5.81(2.86-8.58)		75.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-May-2018 17:00:49 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_020.d

Injection Date: 10-May-2018 08:59:11 Instrument ID: A8_N

Lims ID: MB 320-222044/1-A

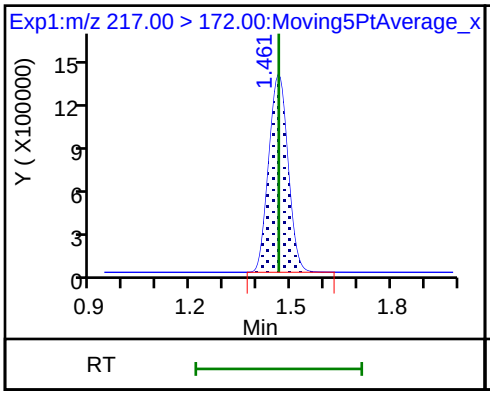
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 2

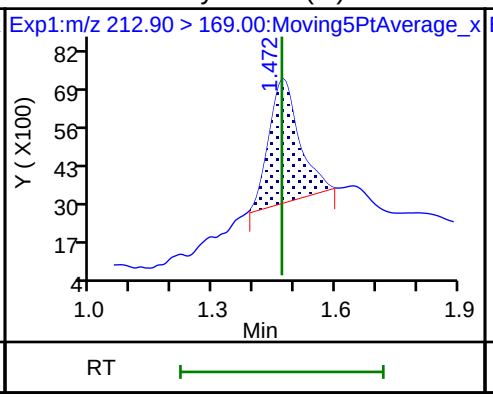
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

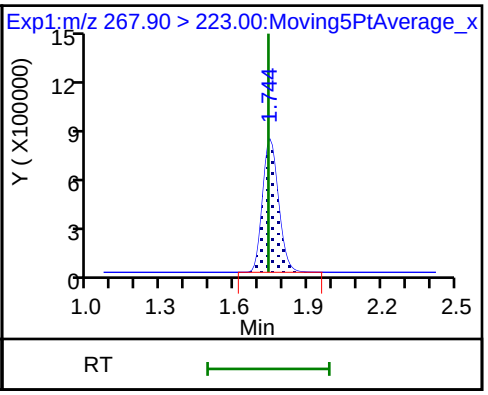
D 1 13C4 PFBA



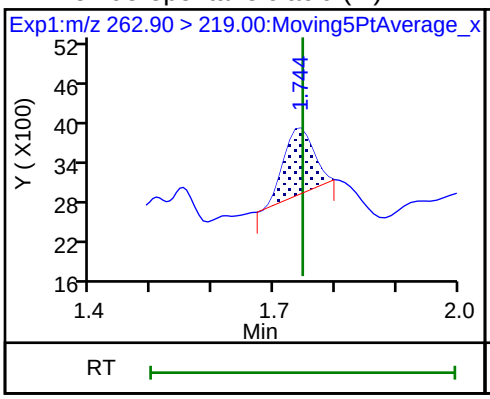
2 Perfluorobutyric acid (M)



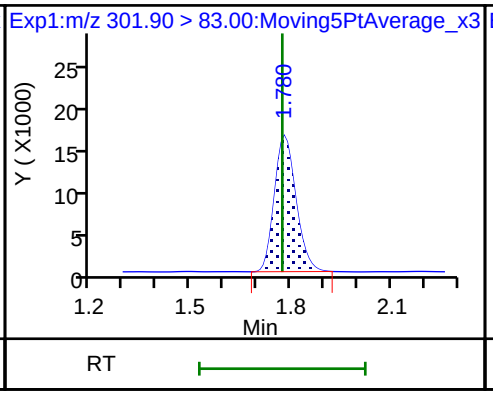
D 3 13C5-PFPeA



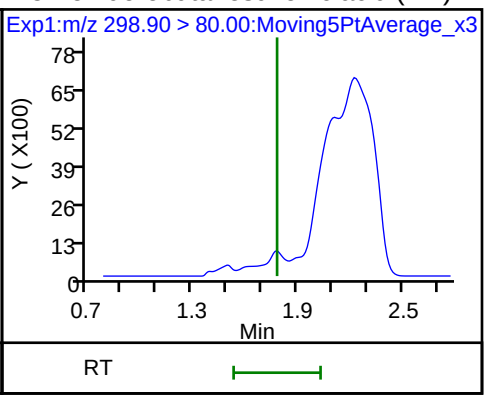
4 Perfluoropentanoic acid (M)



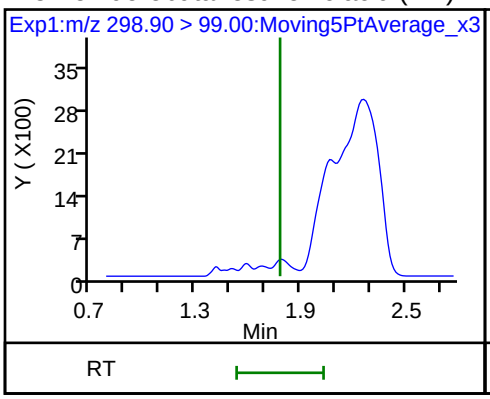
D 47 13C3-PFBS



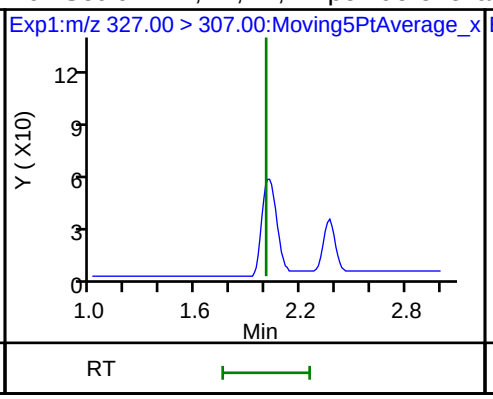
5 Perfluorobutanesulfonic acid (ND)



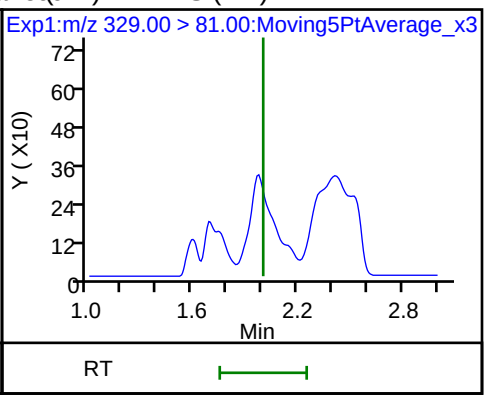
5 Perfluorobutanesulfonic acid (ND)



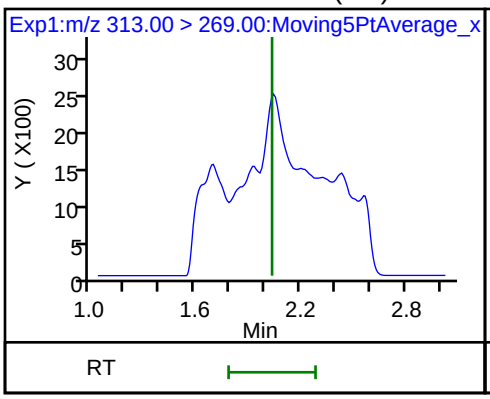
61 Sodium 1H,1H,2H,2H-perfluorohexanesulfonate (ND)



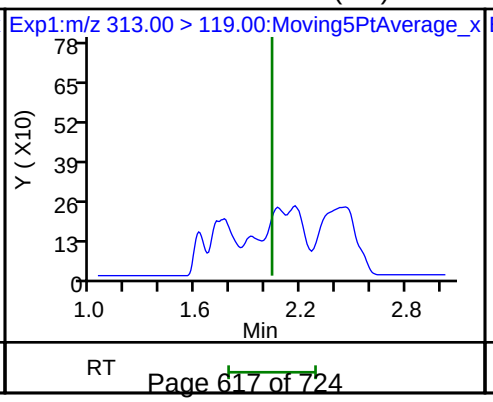
D 60 M2-4:2FTS (ND)



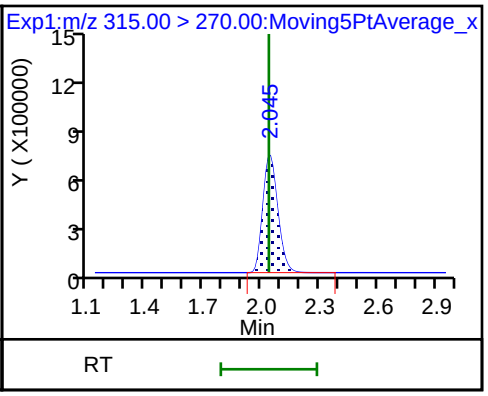
6 Perfluorohexanoic acid (ND)



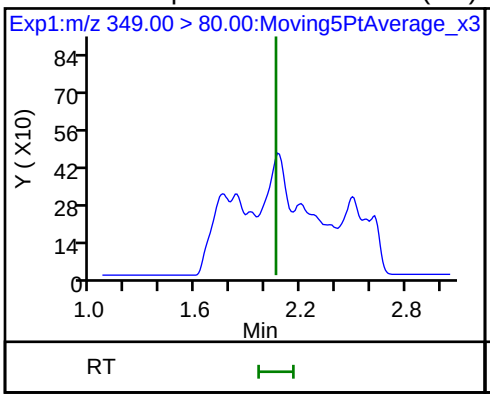
6 Perfluorohexanoic acid (ND)



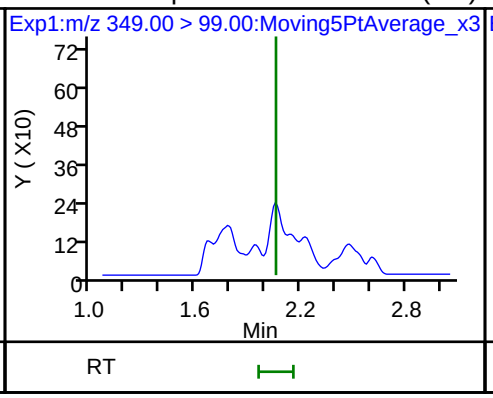
D 7 13C2 PFHxA



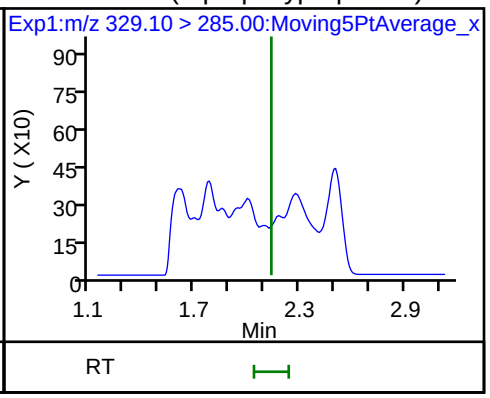
70 Perfluoropentanesulfonic acid (ND)



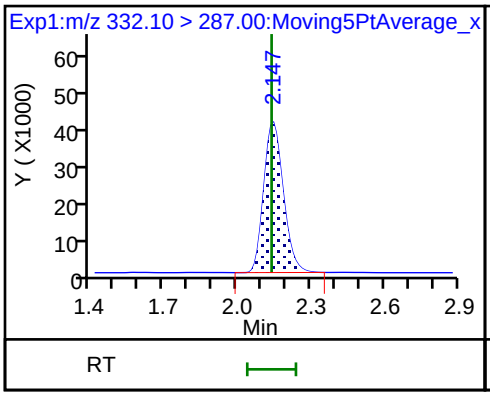
70 Perfluoropentanesulfonic acid (ND)



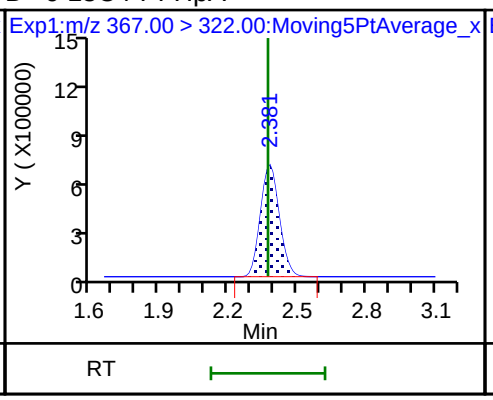
67 Perfluoro(2-propoxypropanoic) acid (ND)



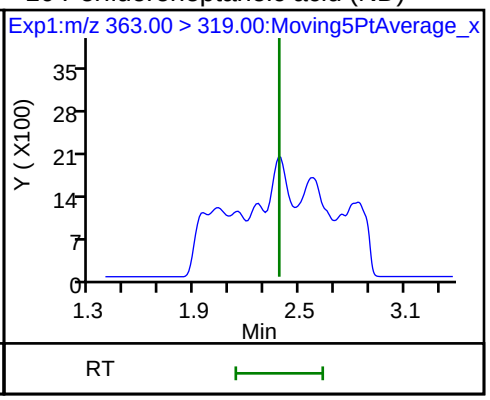
D 64 13C3 HFPO-DA



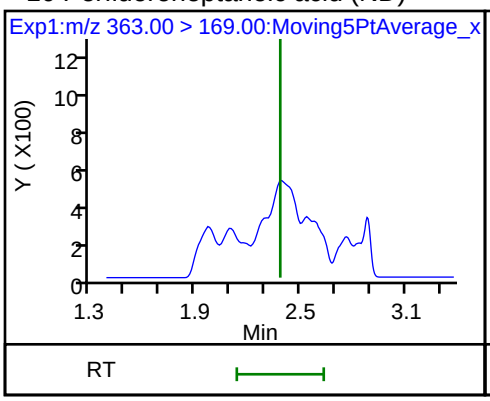
D 9 13C4-PFHpA



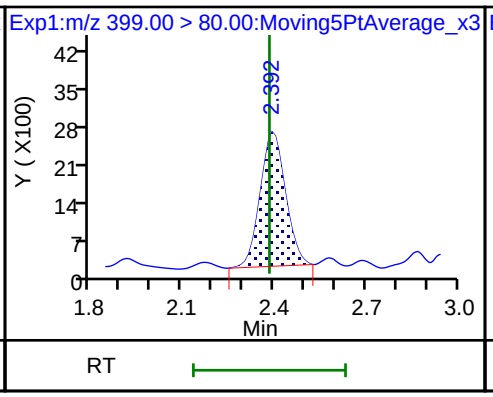
10 Perfluoroheptanoic acid (ND)



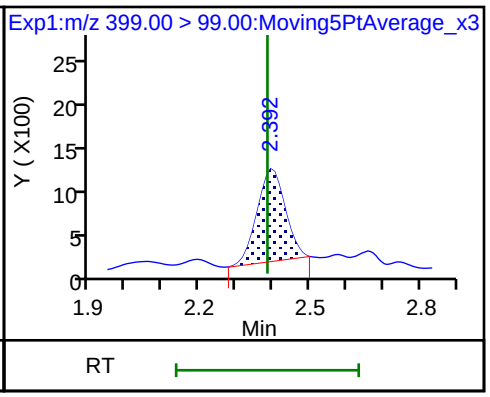
10 Perfluoroheptanoic acid (ND)



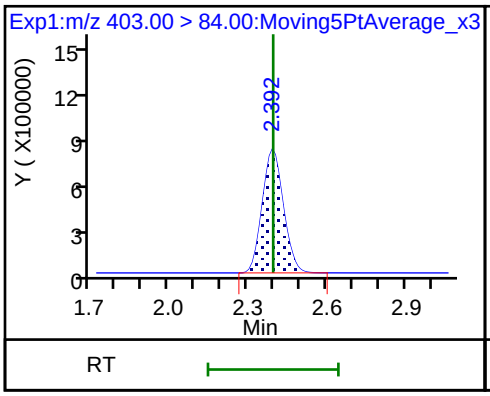
8 Perfluorohexanesulfonic acid



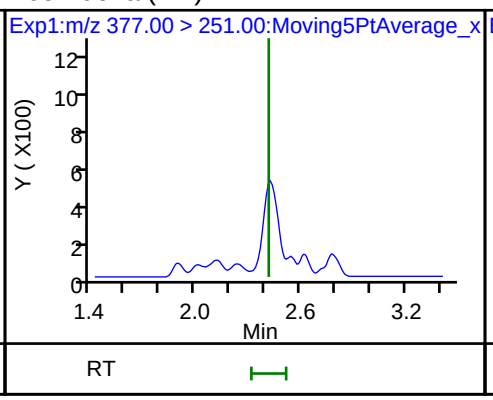
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 Adona (ND)



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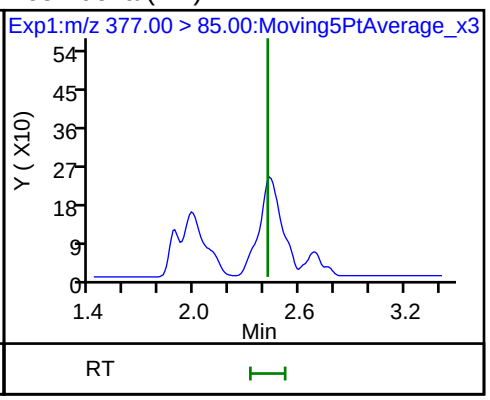
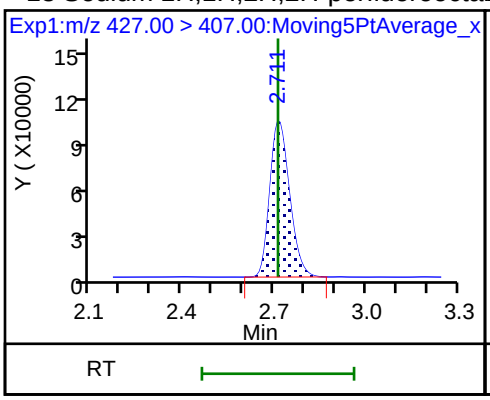
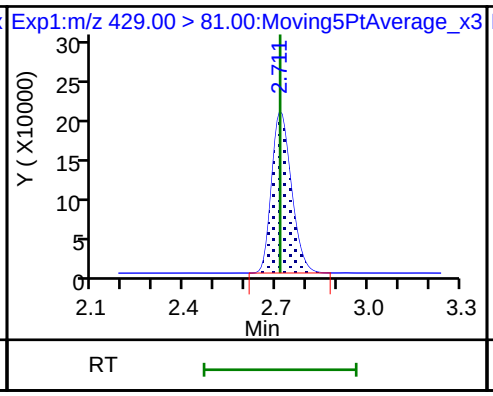


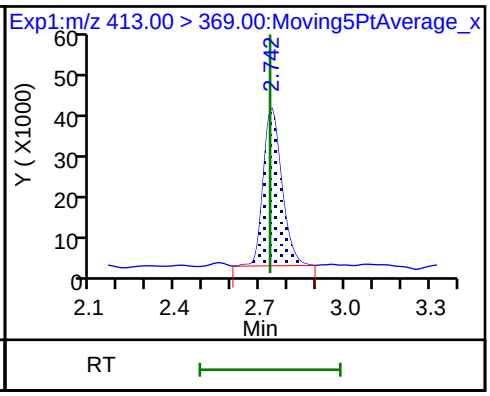
13 Sodium 1H,1H,2H,2H-perfluorooctane



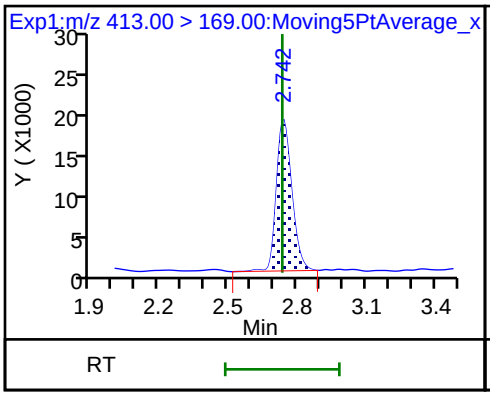
D 12 M2-6:2FTS



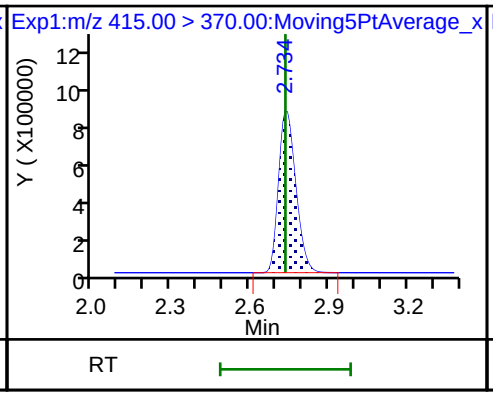
15 Perfluorooctanoic acid



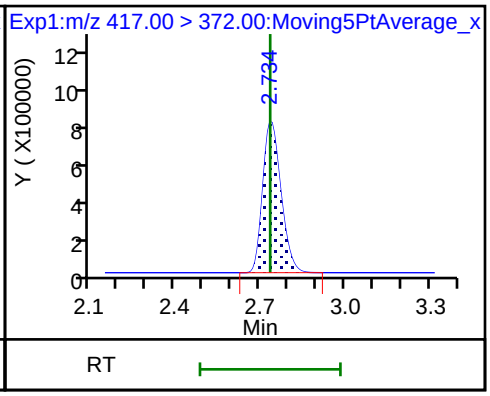
15 Perfluorooctanoic acid



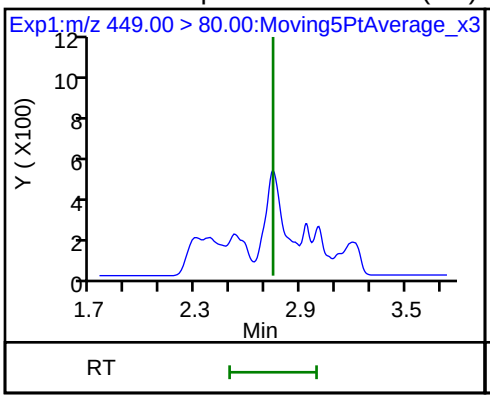
* 62 13C2-PFOA



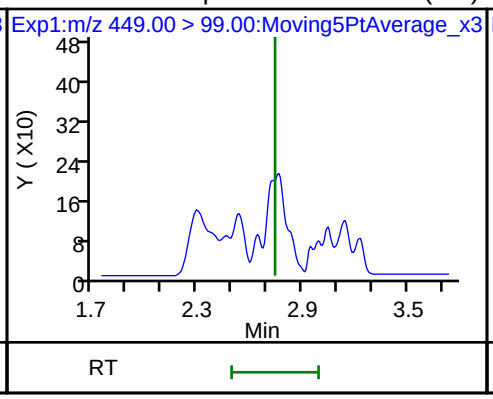
D 14 13C4 PFOA



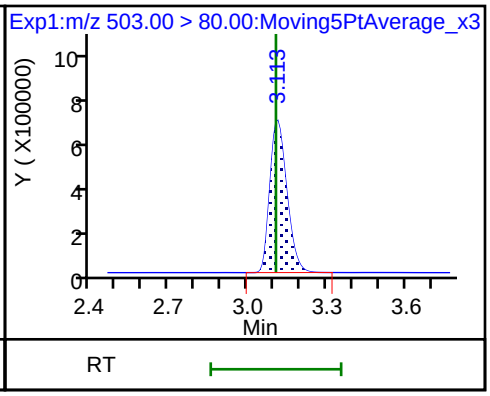
16 Perfluoroheptanesulfonic acid (ND)



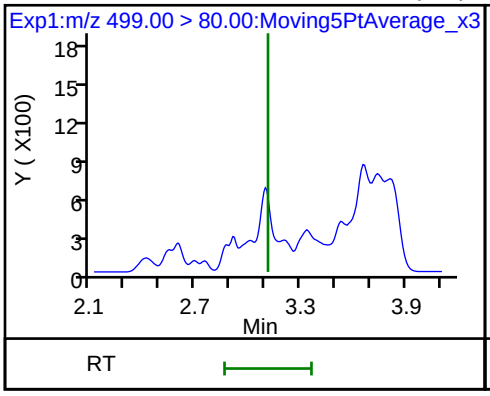
16 Perfluoroheptanesulfonic acid (ND)



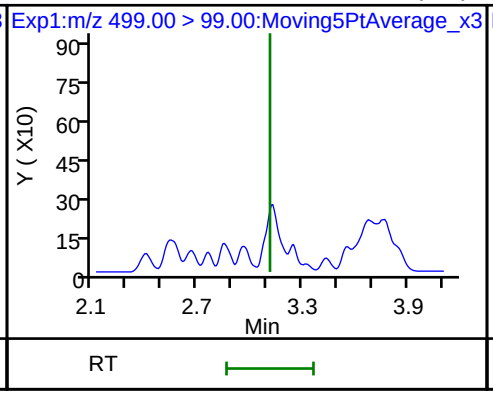
D 18 13C4 PFOS



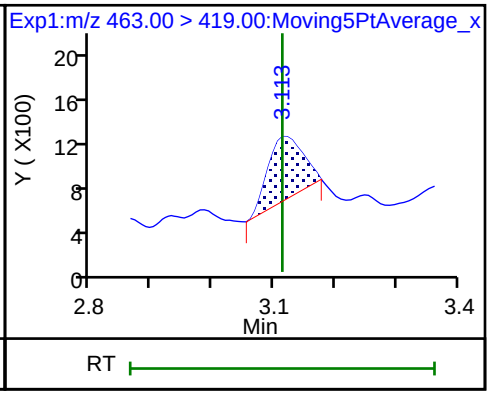
17 Perfluorooctane sulfonic acid (ND)



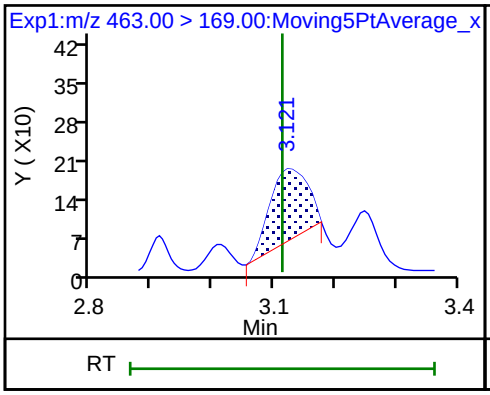
17 Perfluorooctane sulfonic acid (ND)



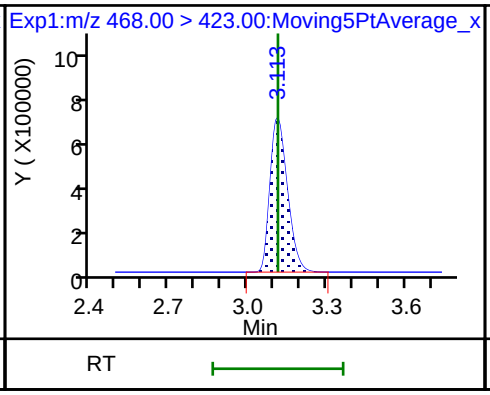
20 Perfluorononanoic acid



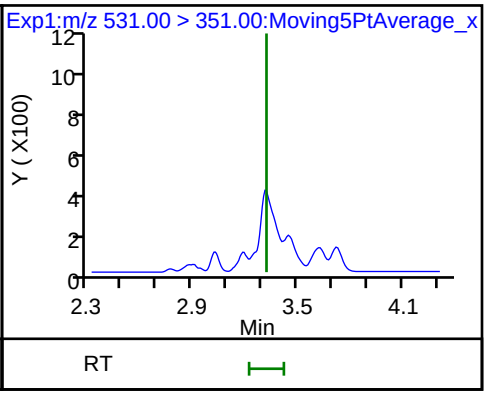
20 Perfluorononanoic acid



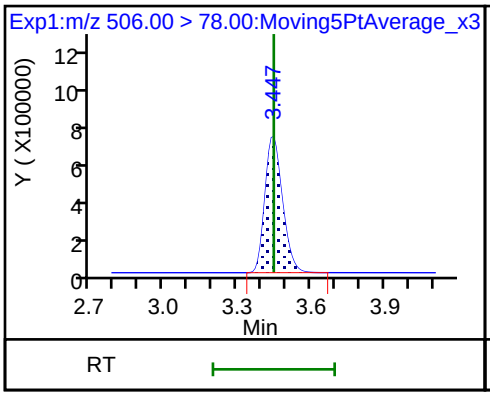
D 19 13C5 PFNA



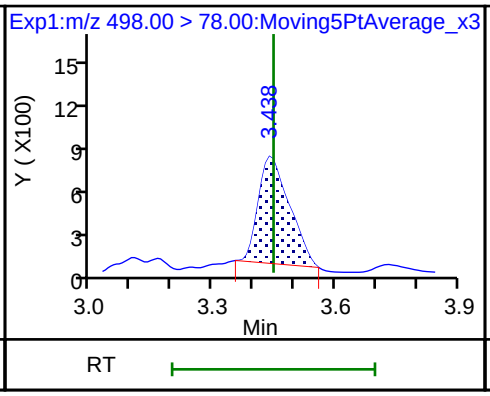
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



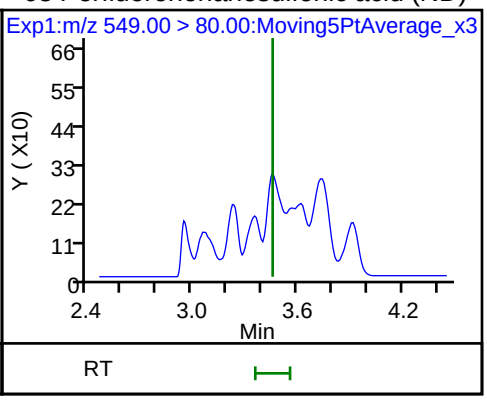
D 21 13C8 FOSA



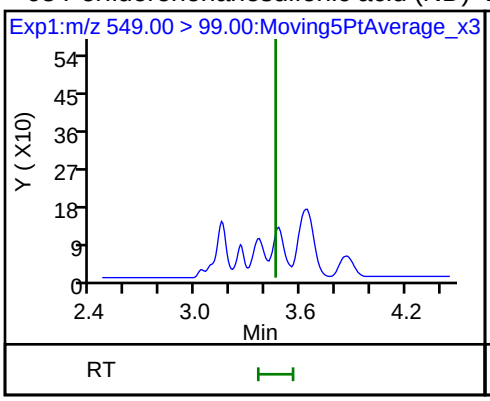
22 Perfluorooctane Sulfonamide



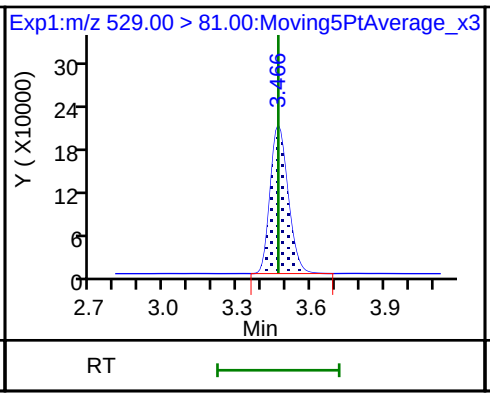
68 Perfluorononanesulfonic acid (ND)



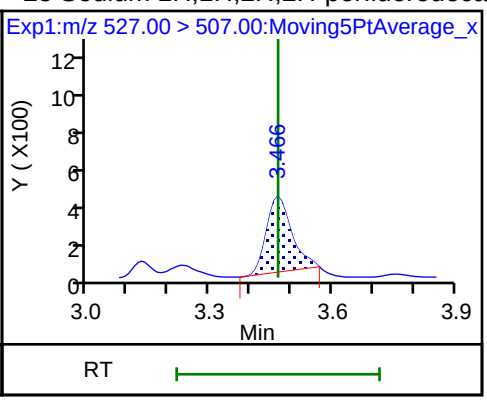
68 Perfluorononanesulfonic acid (ND)



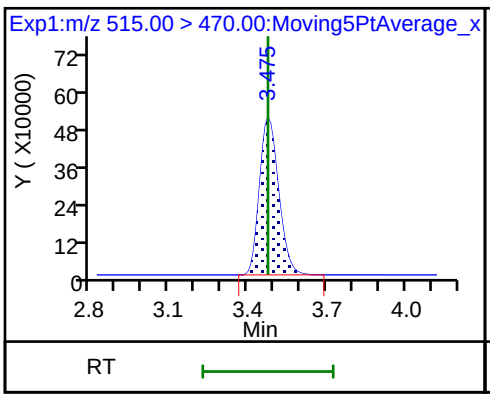
D 26 M2-8:2FTS



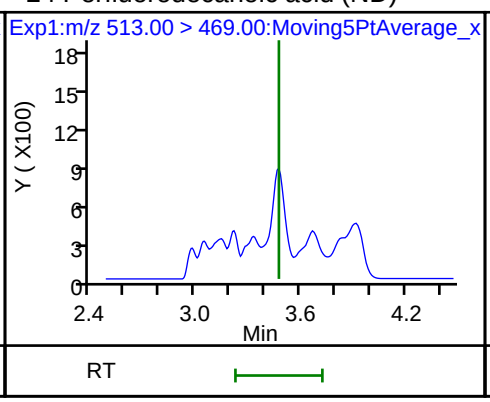
25 Sodium 1H,1H,2H,2H-perfluorodecane



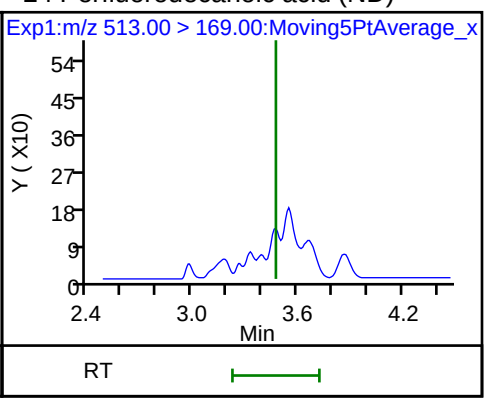
D 23 13C2 PFDA



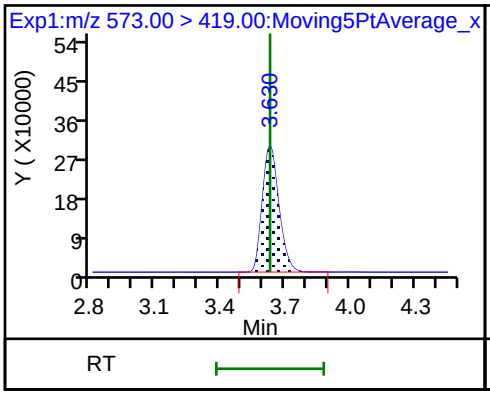
24 Perfluorodecanoic acid (ND)



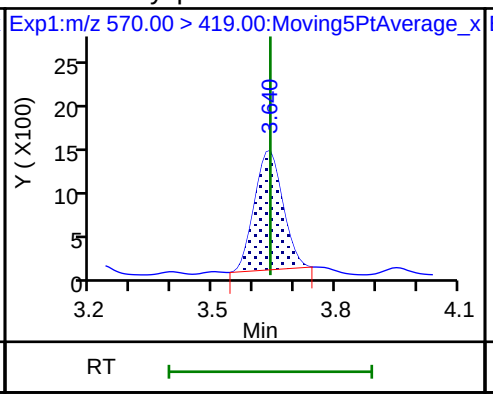
24 Perfluorodecanoic acid (ND)



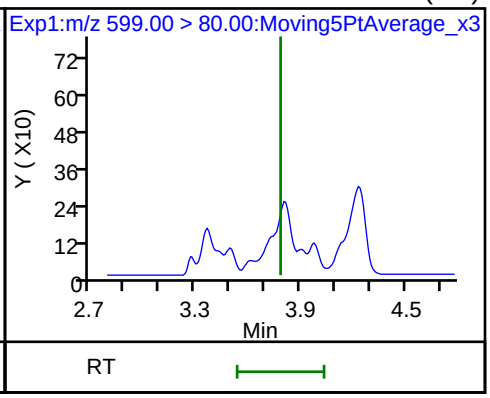
D 27 d3-NMeFOSAA



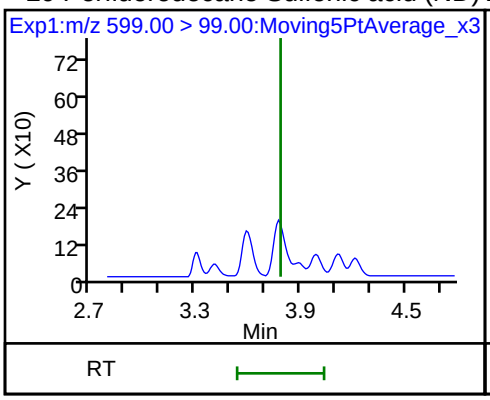
28 N-methyl perfluorooctane sulfonami



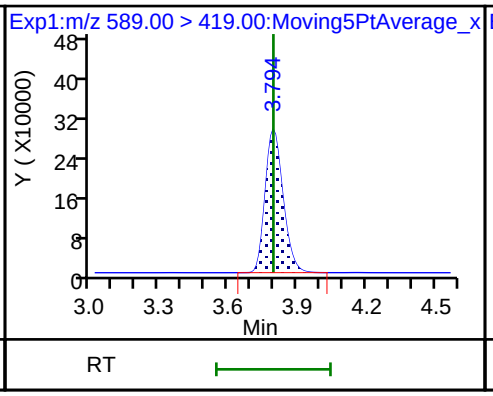
29 Perfluorodecane Sulfonic acid (ND)



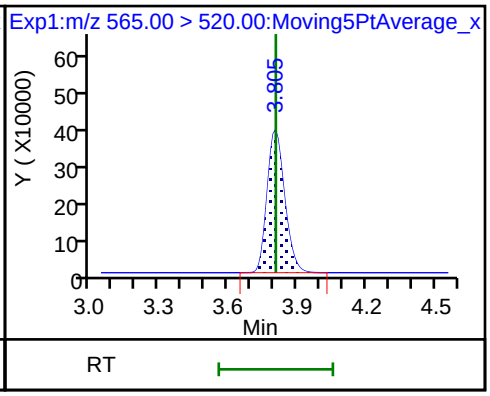
29 Perfluorodecane Sulfonic acid (ND)



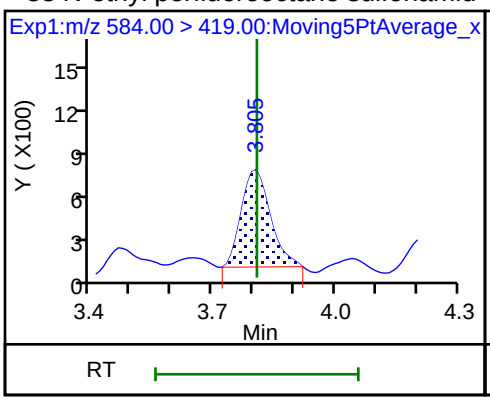
D 32 d5-NEtFOSAA



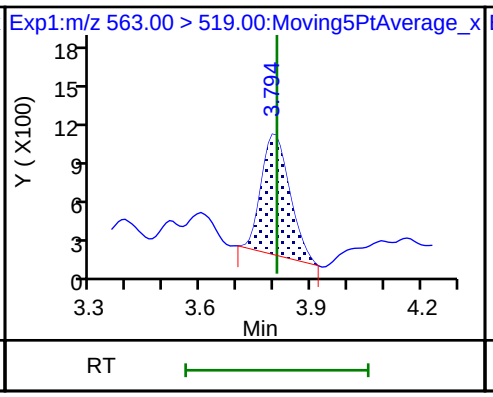
D 30 13C2 PFUnA



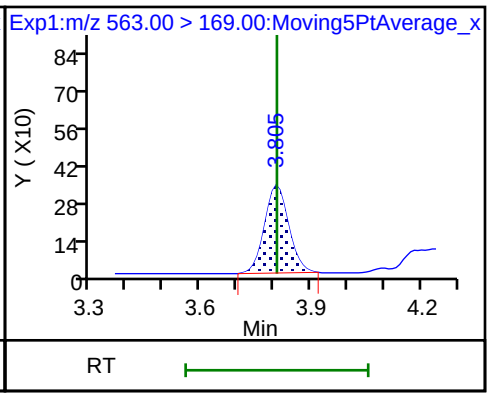
33 N-ethyl perfluorooctane sulfonamid



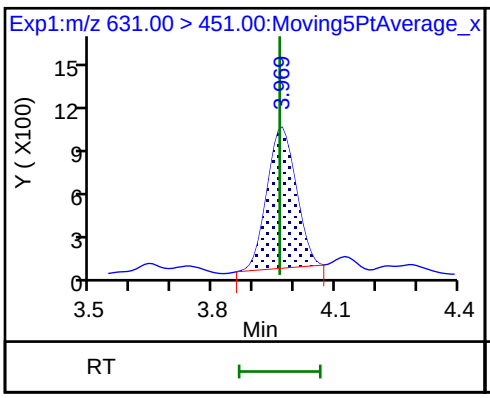
31 Perfluoroundecanoic acid



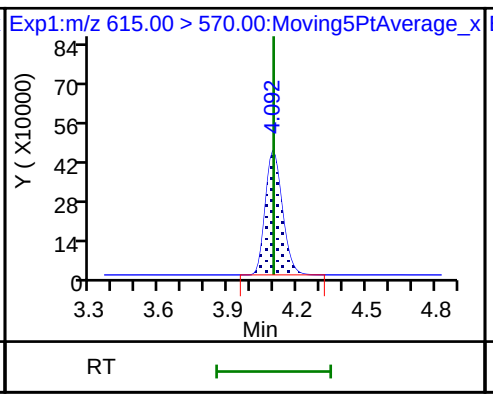
31 Perfluoroundecanoic acid



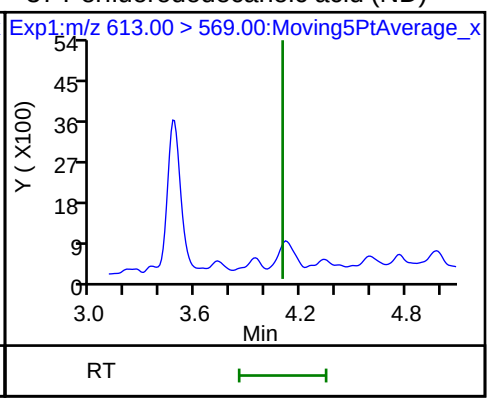
66 11-Chloroeicosafluoro-3-oxaundecan



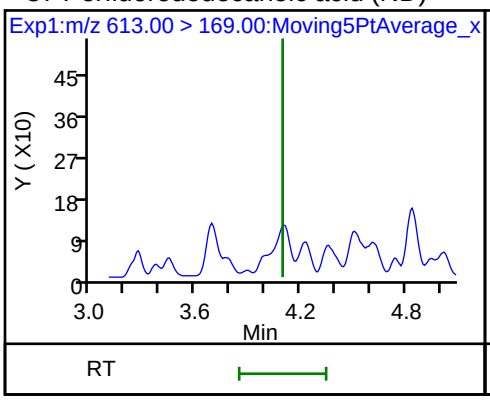
D 36 13C2 PFDoA



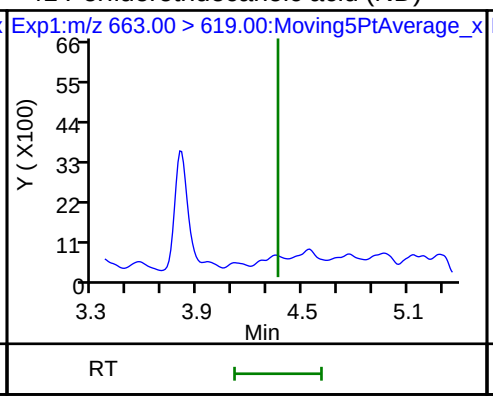
37 Perfluorododecanoic acid (ND)



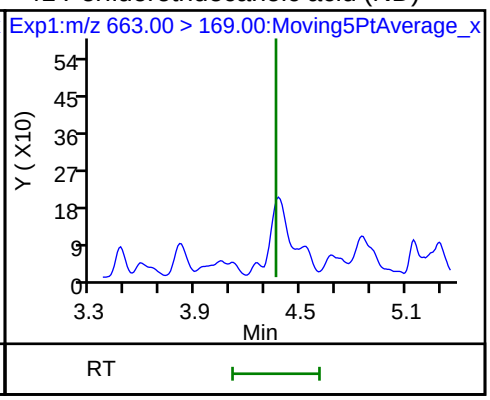
37 Perfluorododecanoic acid (ND)



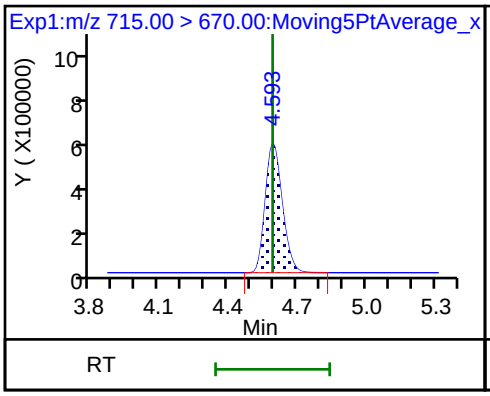
41 Perfluorotridecanoic acid (ND)



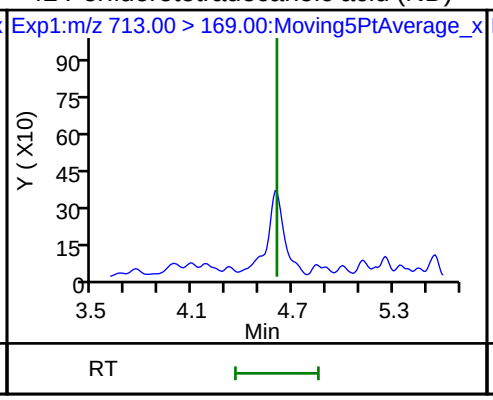
41 Perfluorotridecanoic acid (ND)



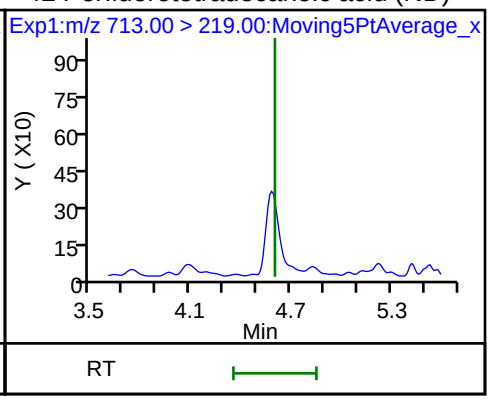
D 43 13C2-PFTeDA



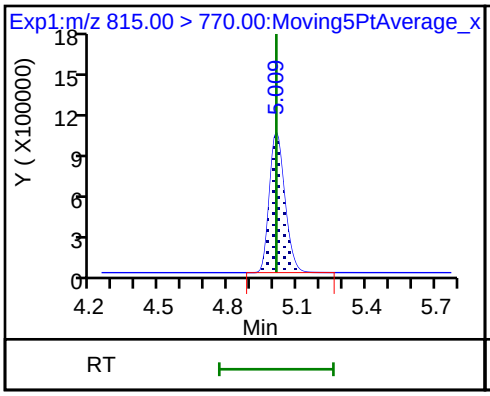
42 Perfluorotetradecanoic acid (ND)



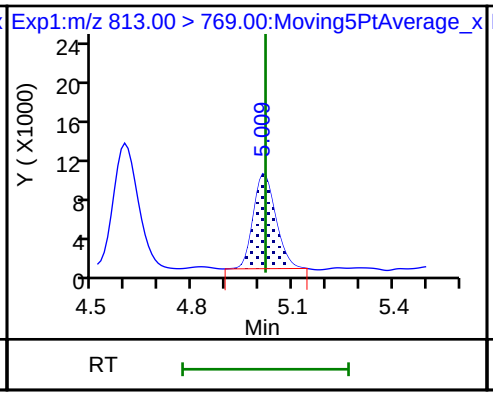
42 Perfluorotetradecanoic acid (ND)



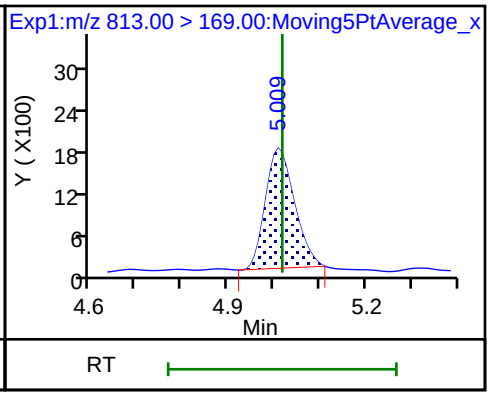
D 44 13C2-PFHxDA



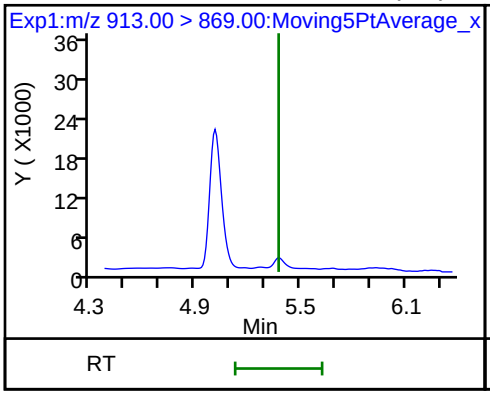
45 Perfluorohexadecanoic acid



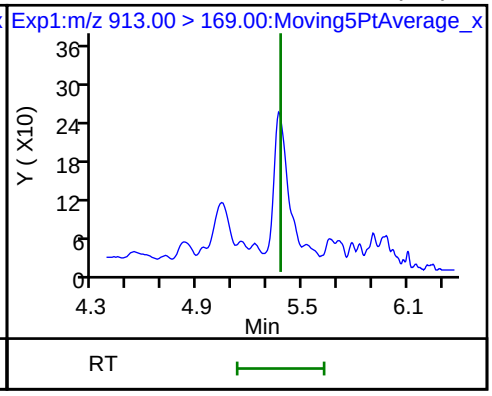
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



TestAmerica Sacramento

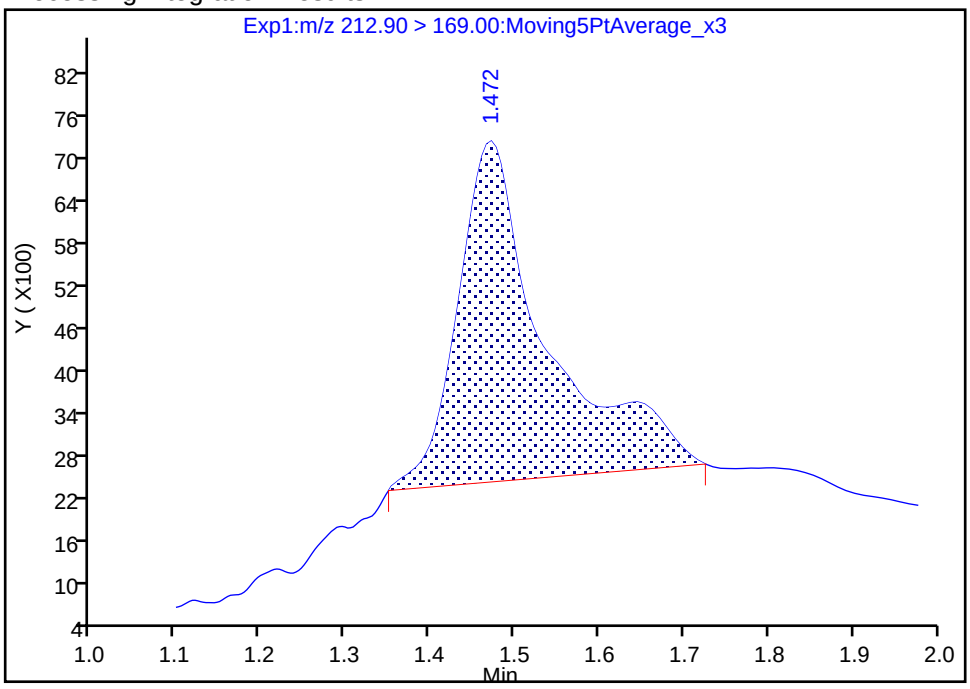
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_020.d
Injection Date: 10-May-2018 08:59:11 Instrument ID: A8_N
Lims ID: MB 320-222044/1-A
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

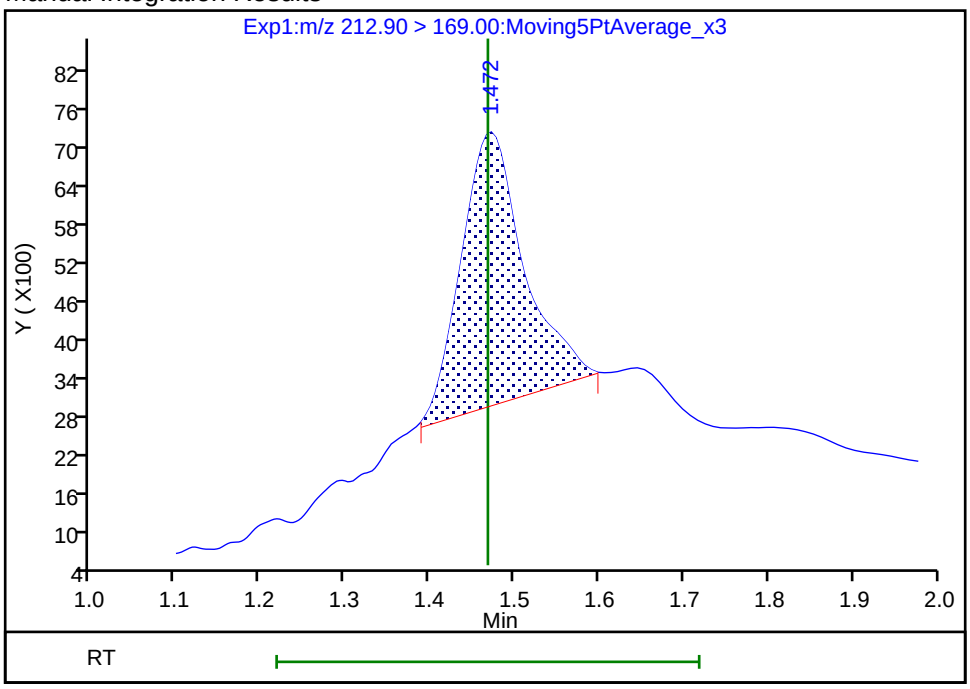
Processing Integration Results

RT: 1.47
Area: 34947
Amount: 0.017920
Amount Units: ng/ml



Manual Integration Results

RT: 1.47
Area: 22080
Amount: 0.011322
Amount Units: ng/ml



Reviewer: barnettj, 10-May-2018 15:23:24
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

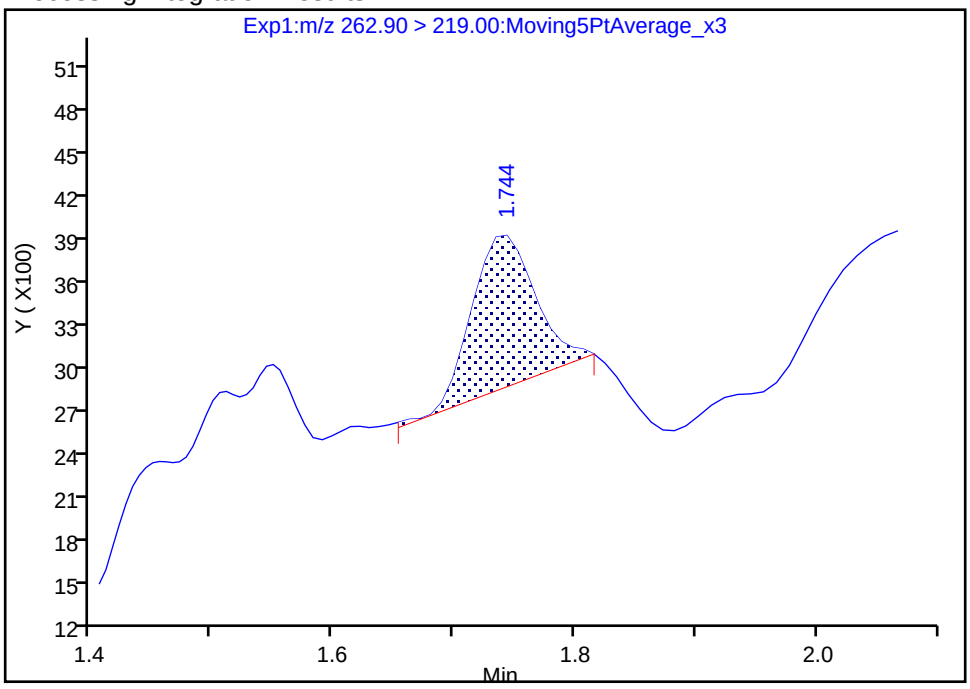
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_020.d
Injection Date: 10-May-2018 08:59:11 Instrument ID: A8_N
Lims ID: MB 320-222044/1-A
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

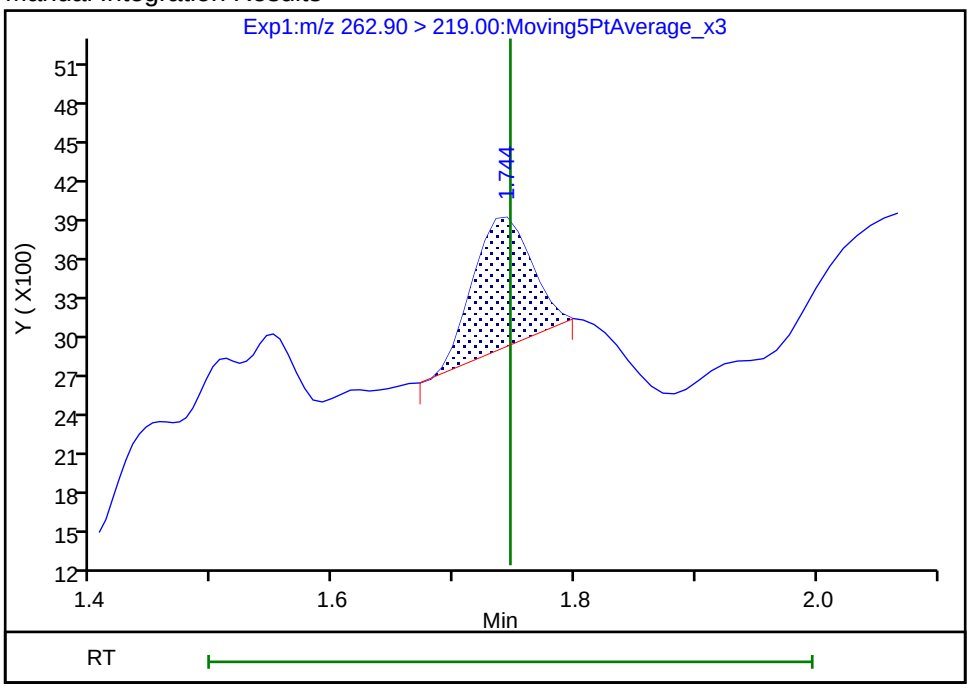
Processing Integration Results

RT: 1.74
Area: 3836
Amount: 0.002269
Amount Units: ng/ml



Manual Integration Results

RT: 1.74
Area: 3355
Amount: 0.001985
Amount Units: ng/ml



Reviewer: barnettj, 10-May-2018 15:23:45
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-223391/1-A

Matrix: Water | Lab File ID: 2018.05.16LLD_010.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 250(mL) | Date Analyzed: 05/17/2018 00:12

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.85
27619-97-2	6:2FTS	ND		20	2.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	104		25-150
STL02279	M2-6:2FTS	116		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_010.d
Lims ID: MB 320-223391/1-A
Client ID:
Sample Type: MB
Inject. Date: 17-May-2018 00:12:07 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-223391/1-a
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:11:59 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:11:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.446	1.447	-0.001	1.000	7098934	2.52		101	51037	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.446	1.452	-0.006	1.000	20211	0.007655			8.4	M
4 Perfluoropentanoic acid										
262.90 > 219.00	1.719	1.712	0.007	1.005	7857	0.003644			4.2	
D 3 13C5-PFPeA										
267.90 > 223.00	1.710	1.712	-0.002	0.563	4565889	2.52		101	72973	
D 47 13C3-PFBS										
301.90 > 83.00	1.746	1.748	-0.002	1.000	90233	2.21		94.9	667	
D 7 13C2 PFHxA										
315.00 > 270.00	1.991	1.994	-0.003	1.000	4978276	2.58		103	106522	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.093	2.095	-0.002	1.000	225702	2.37		94.6	5525	
D 9 13C4-PFHpA										
367.00 > 322.00	2.319	2.321	-0.002	1.000	4896371	2.65		106	78144	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.345	2.334	0.011	1.006	19874	0.007691			157	
399.00 > 99.00	2.332	2.334	-0.002	1.000	5983		3.32(1.50-4.49)		29.5	
D 11 18O2 PFHxS										
403.00 > 84.00	2.332	2.334	-0.002	1.000	5423485	2.37		100	107881	
D 12 M2-6:2FTS										
429.00 > 81.00	2.652	2.645	0.007	1.000	1119660	2.74		116	19565	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.659	2.654	0.005	1.003	7152	-0.001593			73.7	
D 14 13C4 PFOA										
417.00 > 372.00	2.674	2.668	0.006	1.000	4526763	2.59		104	59361	
* 62 13C2-PFOA										
415.00 > 370.00	2.674	2.676	-0.002		4616306	2.50			81633	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										
413.00 > 369.00	2.682	2.676	0.006	1.003	16618	0.007797			6.1	
413.00 > 169.00	2.674	2.676	-0.002	1.000	9250		1.80(0.84-2.52)		27.0	
D 18 13C4 PFOS										
503.00 > 80.00	3.036	3.029	0.007	1.000	3760510	2.40		100	35632	
D 19 13C5 PFNA										
468.00 > 423.00	3.036	3.036	0.0	1.000	3724961	2.60		104	61380	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.252	3.252	0.0	1.000	5542	0.001964			20.0	
D 26 M2-8:2FTS										
529.00 > 81.00	3.386	3.376	0.010	1.000	1225341	2.64		110	19798	
D 21 13C8 FOSA										
506.00 > 78.00	3.386	3.376	0.010	1.000	4422953	2.15		86.1	57524	
D 23 13C2 PFDA										
515.00 > 470.00	3.396	3.385	0.011	1.000	2977364	2.45		97.9	41446	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.377	3.387	-0.010	0.997	8686	0.005043			145	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.554	3.544	0.010	1.000	1733877	2.58		103	23527	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.554	3.554	0.0	1.000	9809	0.0139			89.3	
D 30 13C2 PFUnA										
565.00 > 520.00	3.728	3.716	0.012	1.000	2489049	2.58		103	37831	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.717	3.716	0.001	1.000	1758201	2.55		102	17653	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.728	3.728	0.0	1.000	8335	0.0100			38.0	
563.00 > 169.00	3.717	3.728	-0.011	0.997	1892		4.41(2.12-6.36)		54.7	
33 N-ethyl perfluorooctane sulfonamid										M
584.00 > 419.00	3.728	3.728	0.0	1.003	12943	0.0196			324	M
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.884	3.885	-0.001	1.000	24446	0.005713			158	
D 36 13C2 PFDoA										
615.00 > 570.00	4.017	4.006	0.011	1.000	2512584	2.42		97.0	18231	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.017	4.018	-0.001	1.000	12246	0.0117			11.8	
613.00 > 169.00	4.017	4.018	-0.001	1.000	3123		3.92(2.13-6.40)		54.6	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.279	4.280	-0.001	1.000	24631	0.0214			21.2	
663.00 > 169.00	4.279	4.280	-0.001	1.000	7583		3.25(1.25-3.76)		89.6	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.520	4.511	0.009	1.000	3288150	2.58		103	12825	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.520	4.522	-0.002	1.000	5909	0.0178			69.3	
713.00 > 219.00	4.510	4.522	-0.012	0.998	4913		1.20(0.71-2.13)		156	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.930	4.922	0.008	1.000	5735287	2.72		109	14381	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.930	4.931	-0.001	1.000	68109	0.006441			21.7	
813.00 > 169.00	4.930	4.931	-0.001	1.000	12615		5.40(2.86-8.58)		162	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 13:11:59 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_010.d

Injection Date: 17-May-2018 00:12:07 Instrument ID: A8_N

Lims ID: MB 320-223391/1-A

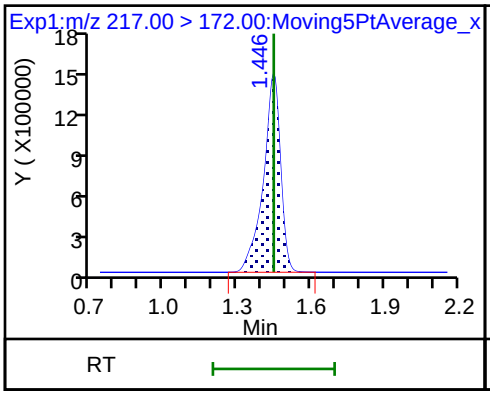
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 2 Worklist Smp#: 2

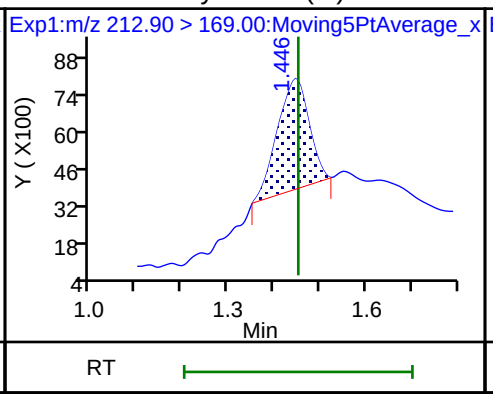
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

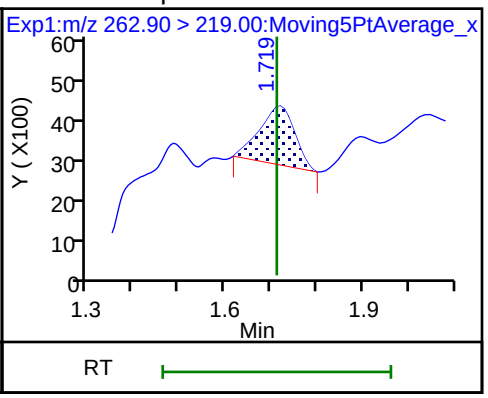
D 1 13C4 PFBA



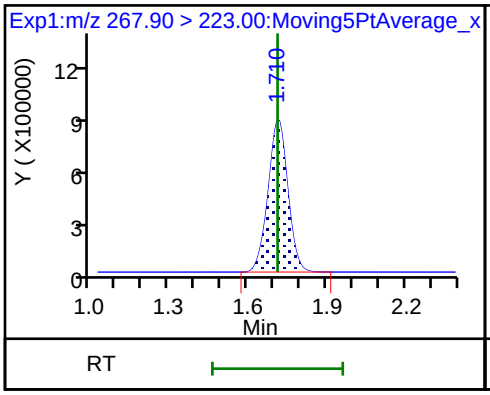
2 Perfluorobutyric acid (M)



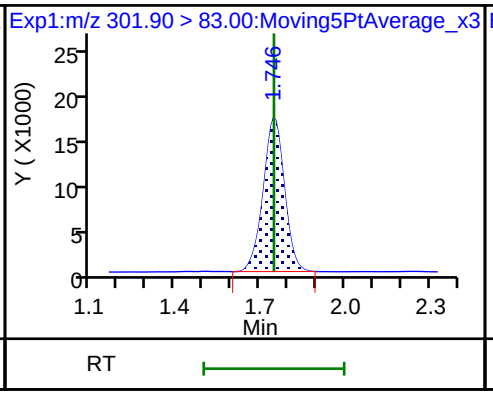
4 Perfluoropentanoic acid



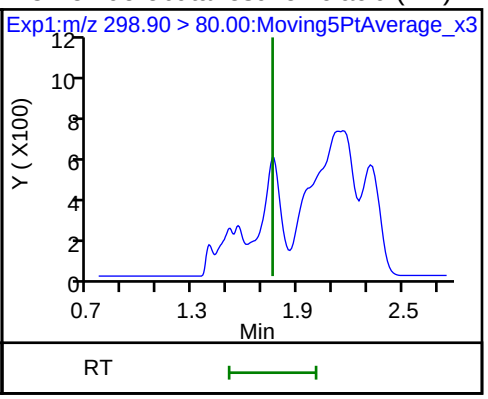
D 3 13C5-PFPeA



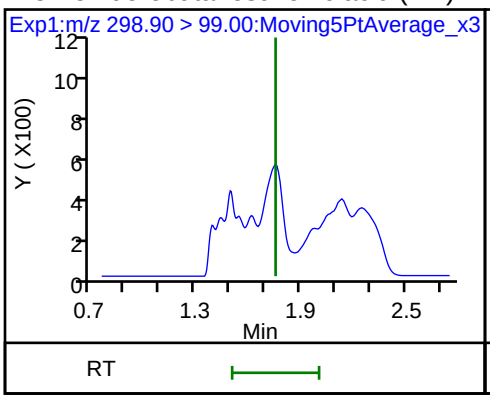
D 47 13C3-PFBS



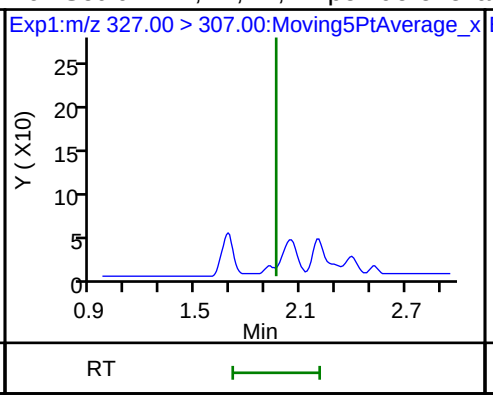
5 Perfluorobutanesulfonic acid (ND)



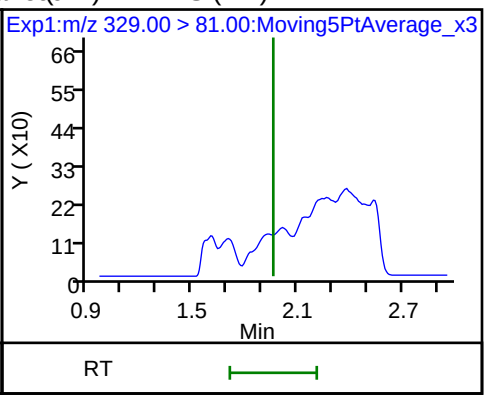
5 Perfluorobutanesulfonic acid (ND)



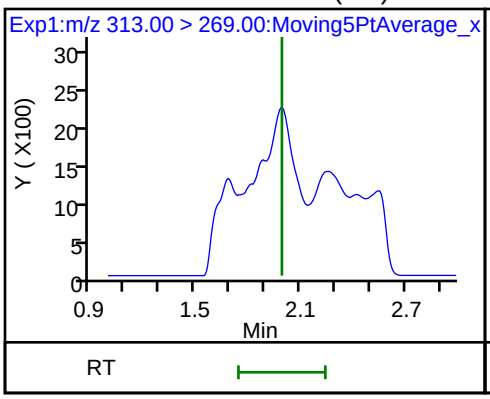
61 Sodium 1H,1H,2H,2H-perfluorohexanesulfonate (ND)



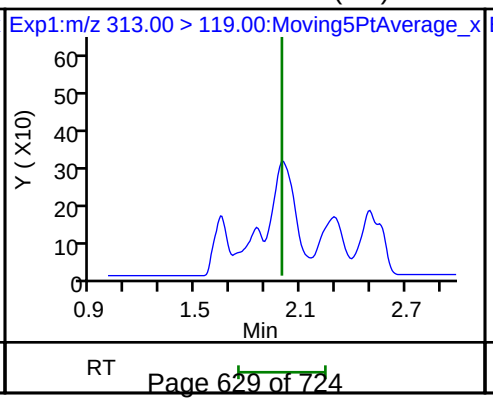
D 60 M2-4:2FTS (ND)



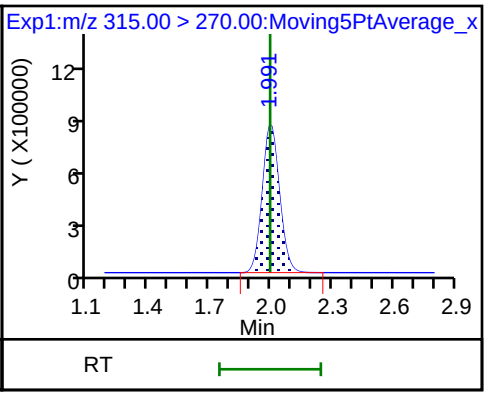
6 Perfluorohexanoic acid (ND)



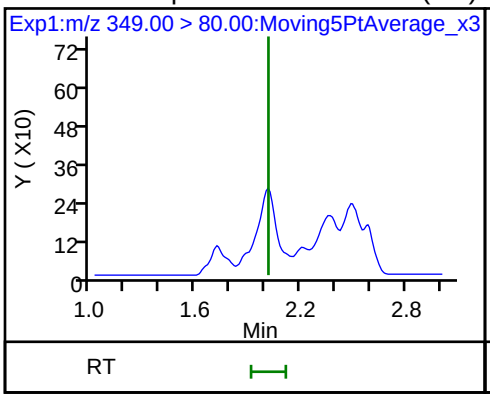
6 Perfluorohexanoic acid (ND)



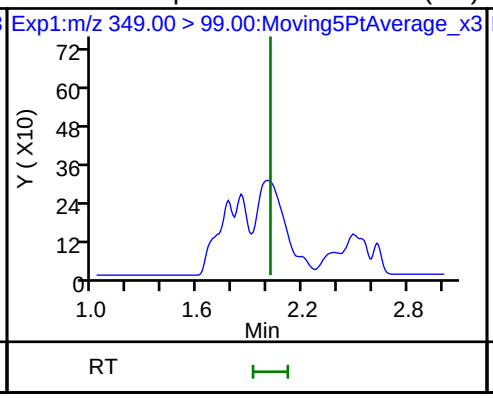
D 7 13C2 PFHxA



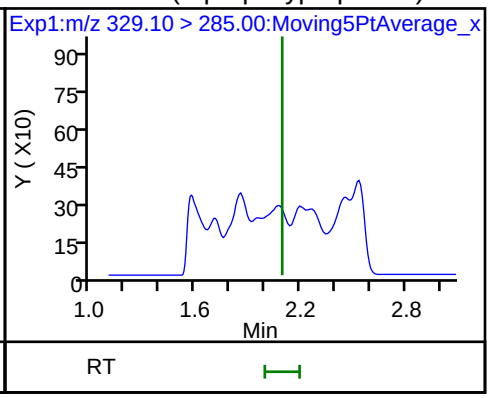
70 Perfluoropentanesulfonic acid (ND)



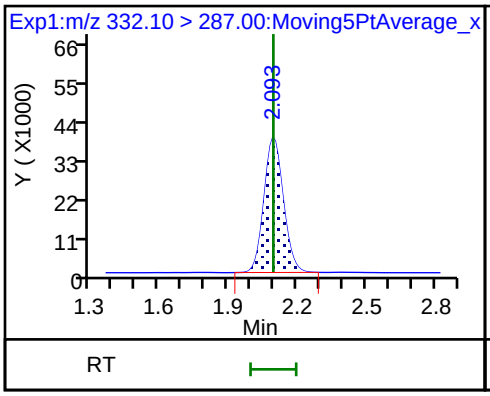
70 Perfluoropentanesulfonic acid (ND)



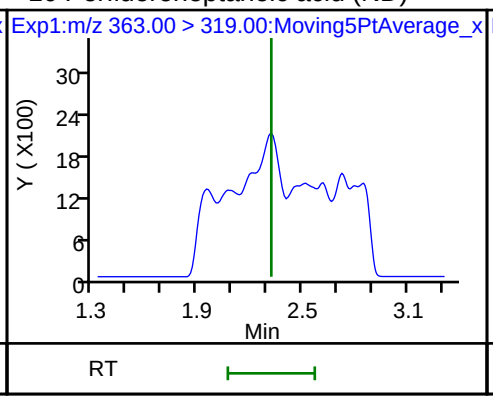
67 Perfluoro(2-propoxypropanoic) acid (ND)



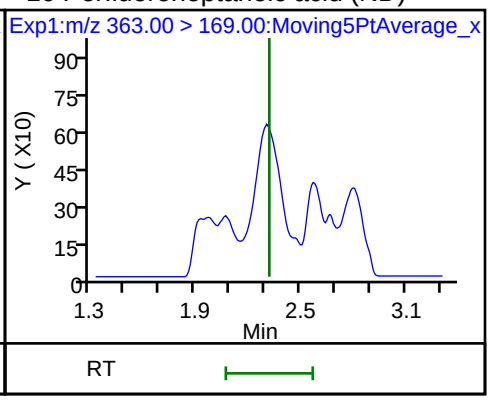
D 64 13C3 HFPO-DA



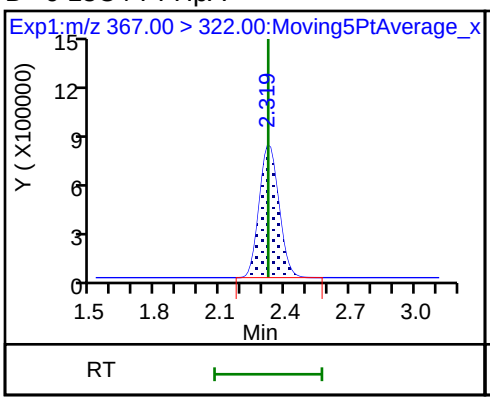
10 Perfluoroheptanoic acid (ND)



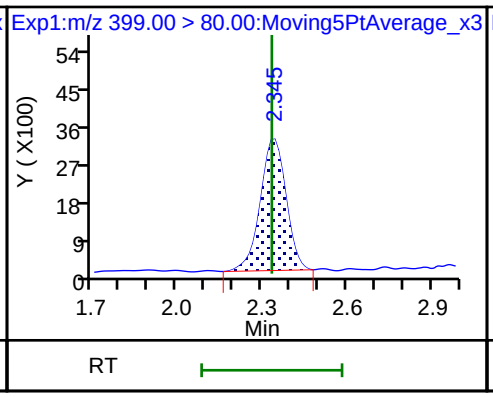
10 Perfluoroheptanoic acid (ND)



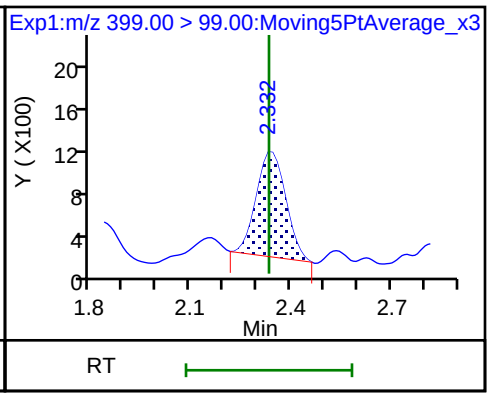
D 9 13C4-PFHpA



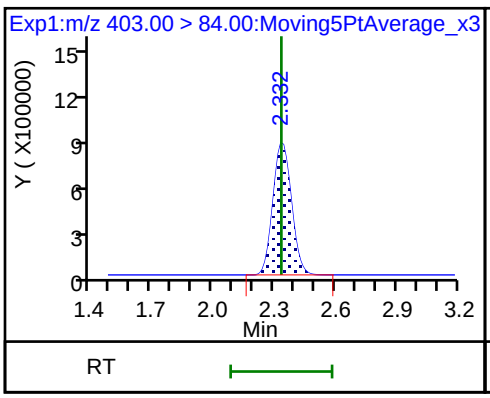
8 Perfluorohexanesulfonic acid



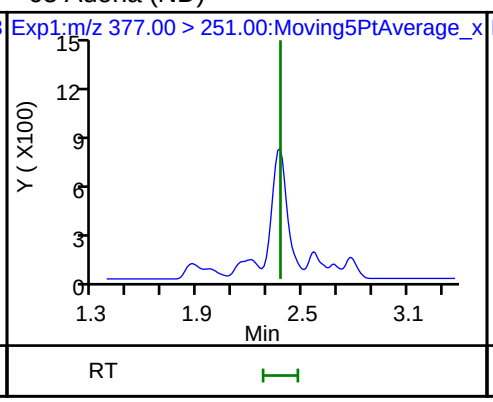
8 Perfluorohexanesulfonic acid



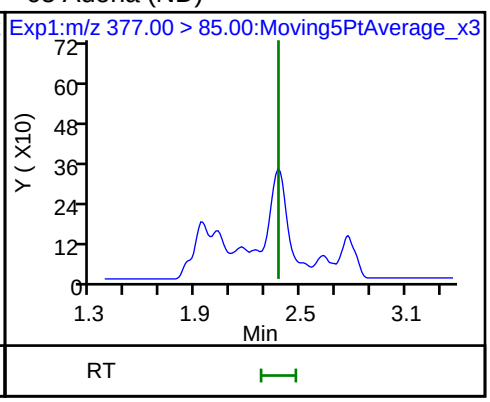
D 11 18O2 PFHxS



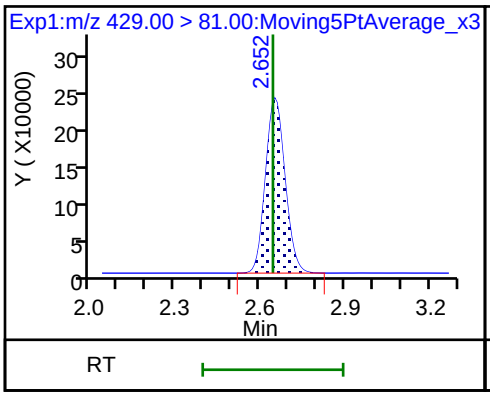
65 Adona (ND)



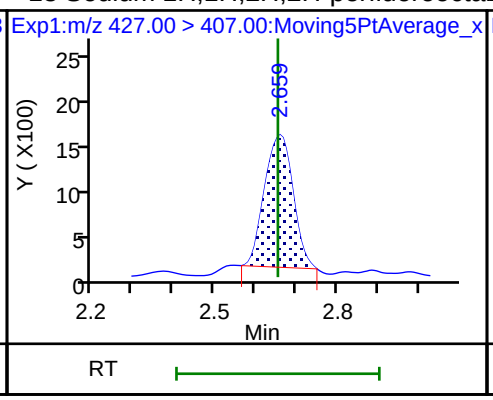
65 Adona (ND)



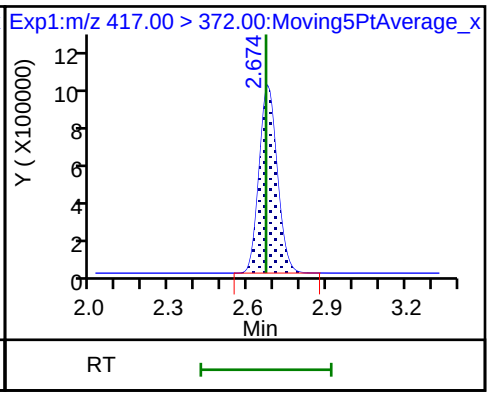
D 12 M2-6:2FTS



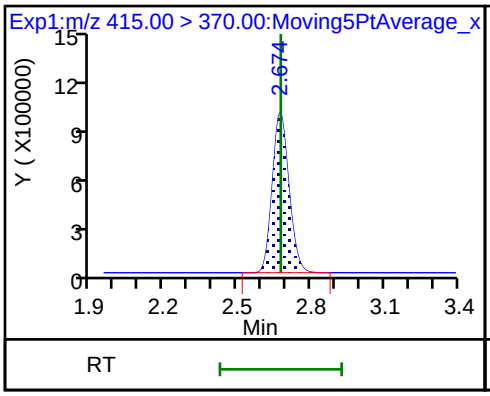
13 Sodium 1H,1H,2H,2H-perfluorooctane



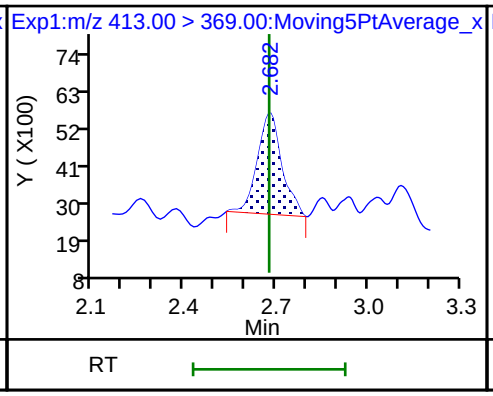
D 14 13C4 PFOA



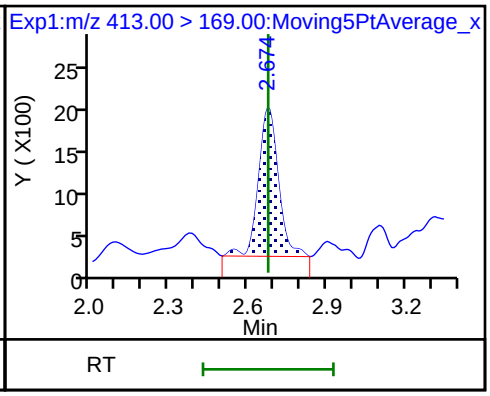
* 62 13C2-PFOA



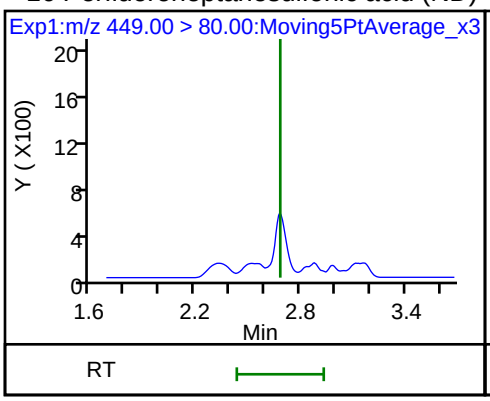
15 Perfluorooctanoic acid



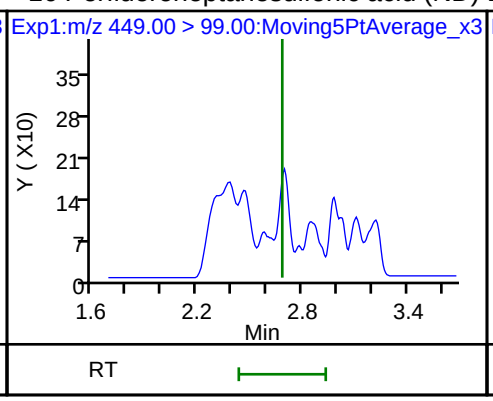
15 Perfluorooctanoic acid



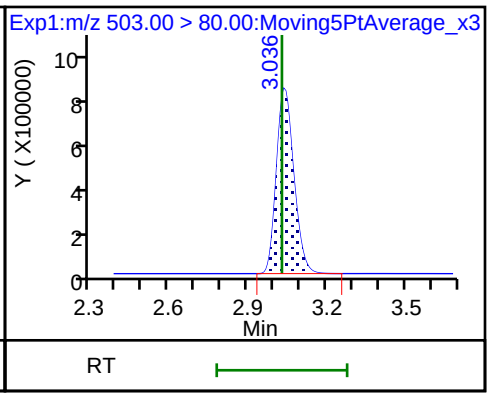
16 Perfluoroheptanesulfonic acid (ND)



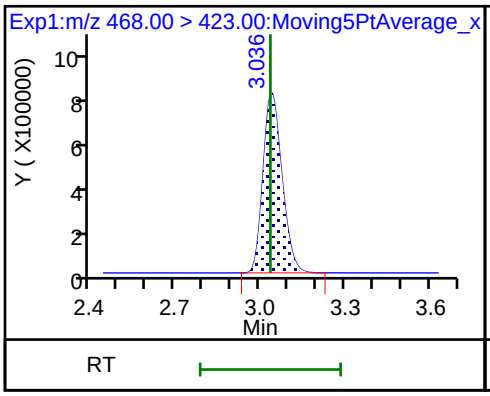
16 Perfluoroheptanesulfonic acid (ND)



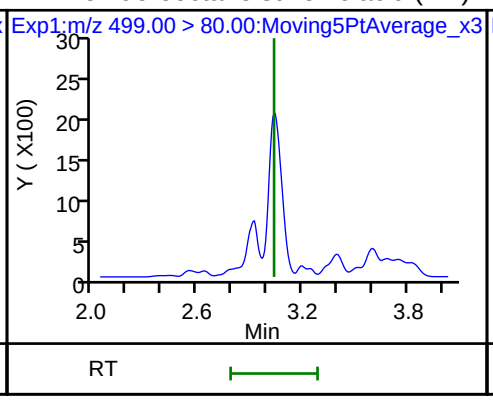
D 18 13C4 PFOS



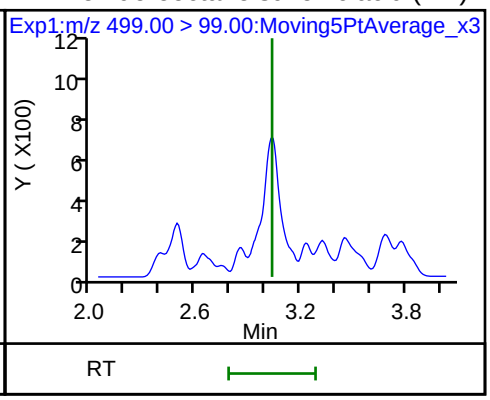
D 19 13C5 PFNA



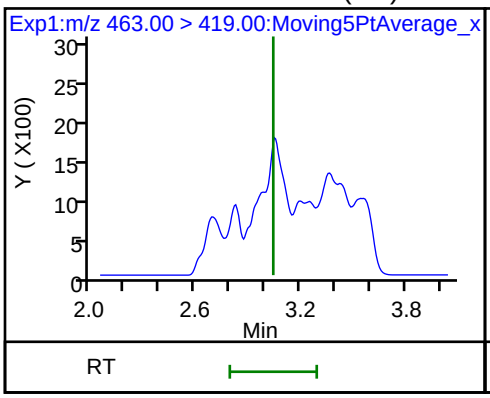
17 Perfluorooctane sulfonic acid (ND)



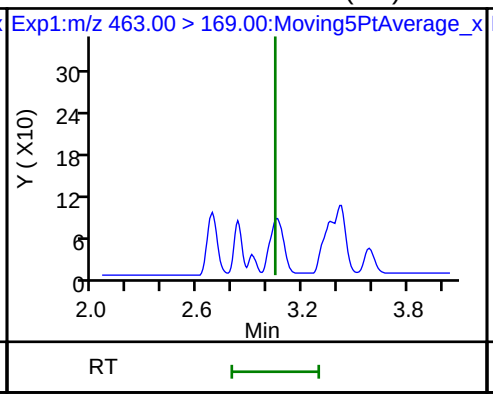
17 Perfluorooctane sulfonic acid (ND)



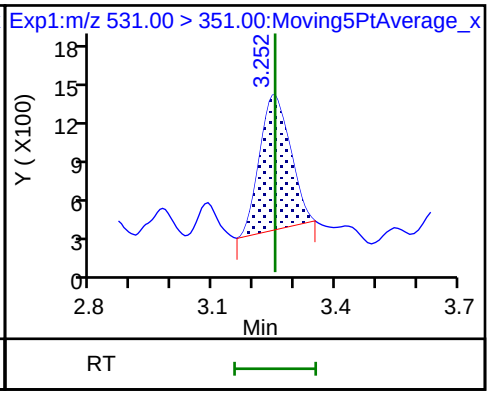
20 Perfluorononanoic acid (ND)



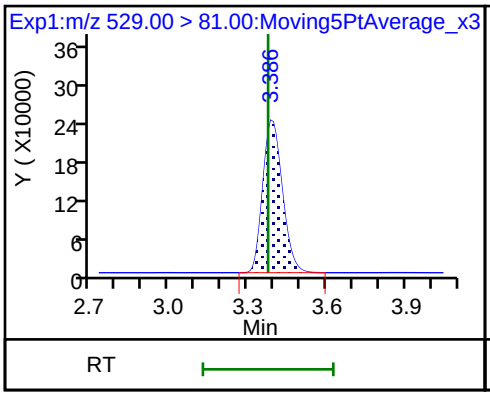
20 Perfluorononanoic acid (ND)



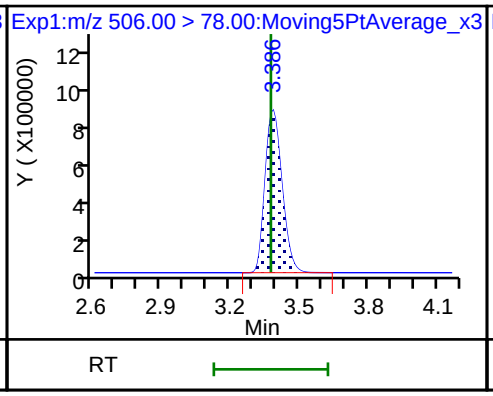
69 9-Chlorohexadecafluoro-3-oxanonane



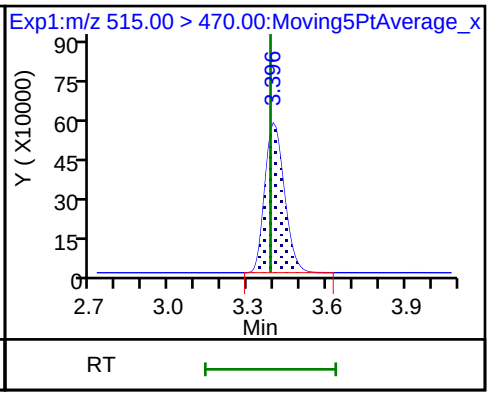
D 26 M2-8:2FTS



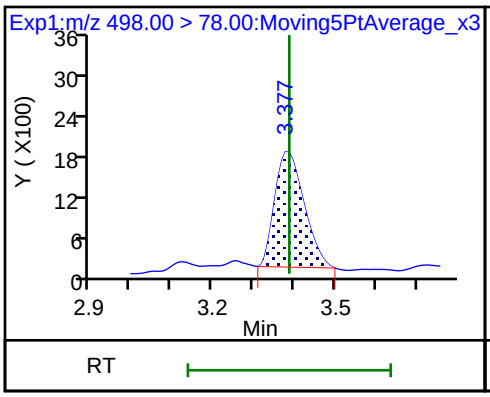
D 21 13C8 FOSA



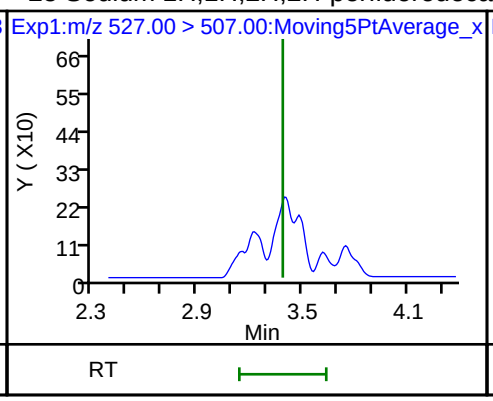
D 23 13C2 PFDA



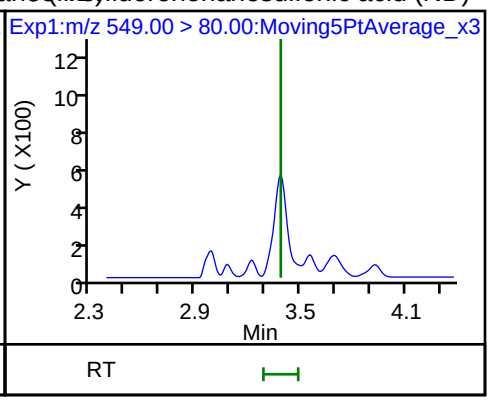
22 Perfluorooctane Sulfonamide



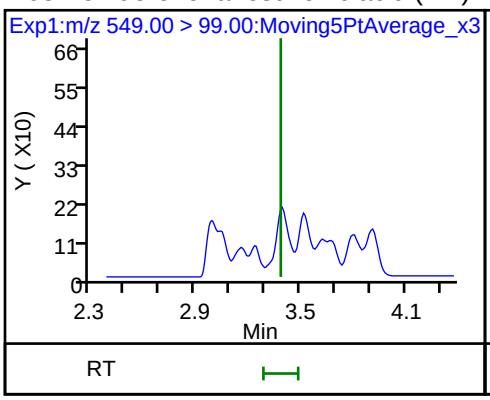
25 Sodium 1H,1H,2H,2H-perfluorodecanesulfonate



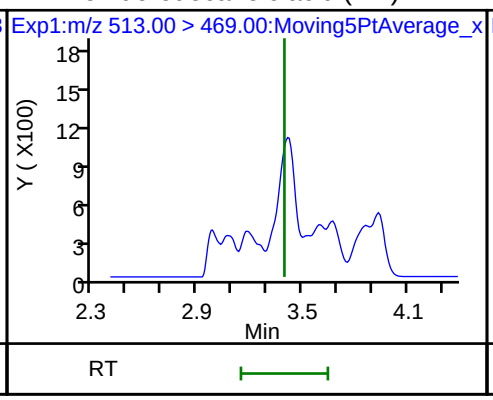
68 Perfluorononanesulfonic acid (ND)



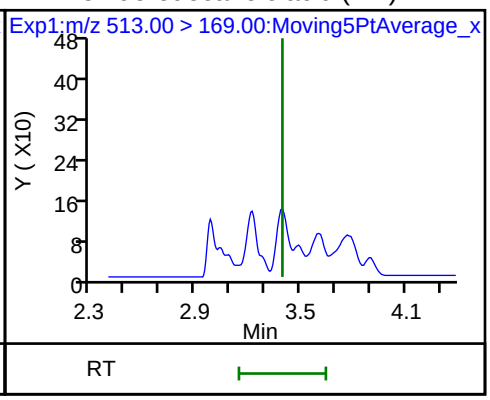
68 Perfluorononanesulfonic acid (ND)



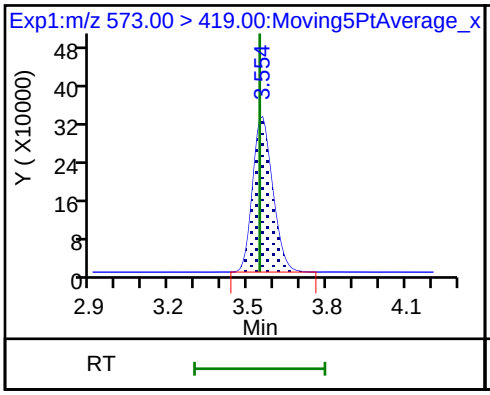
24 Perfluorodecanoic acid (ND)



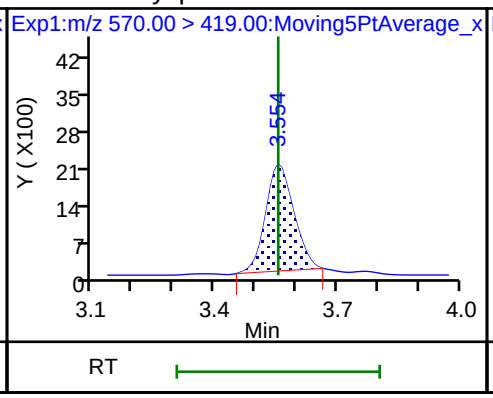
24 Perfluorodecanoic acid (ND)



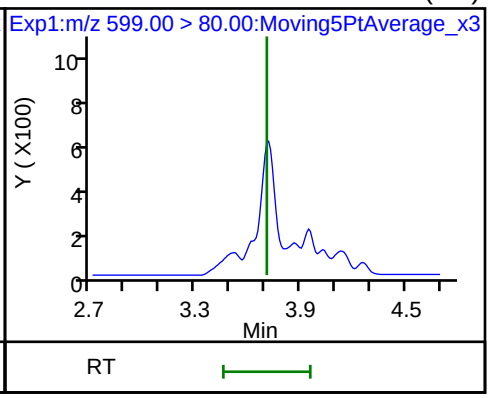
D 27 d3-NMeFOSAA



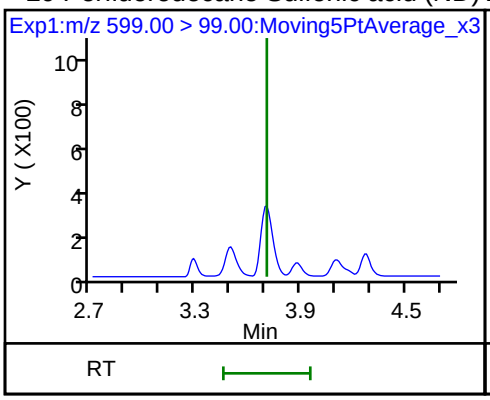
28 N-methyl perfluorooctane sulfonami



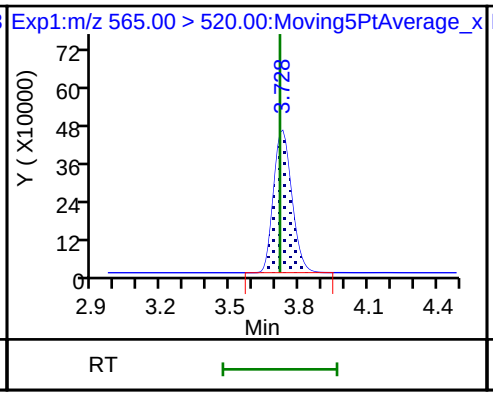
29 Perfluorodecane Sulfonic acid (ND)



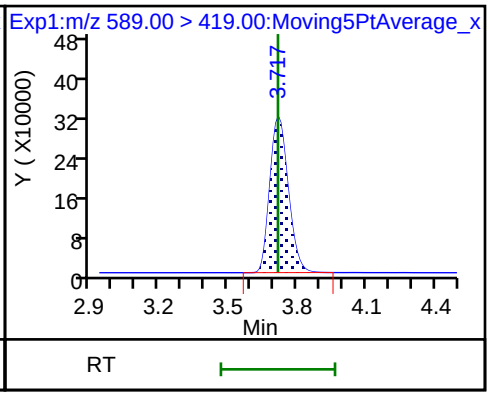
29 Perfluorodecane Sulfonic acid (ND)



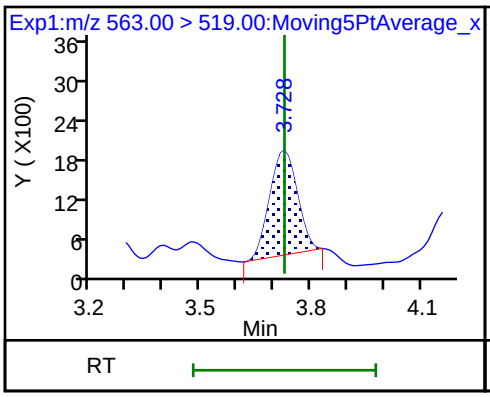
D 30 13C2 PFUnA



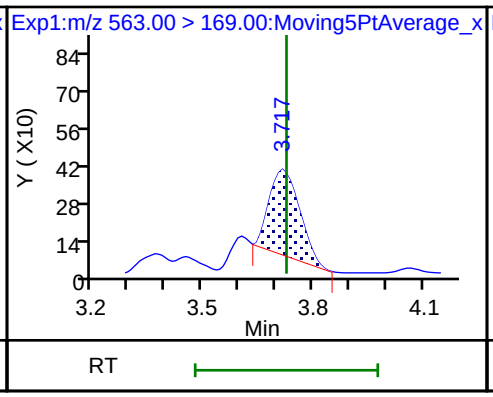
D 32 d5-NEtFOSAA



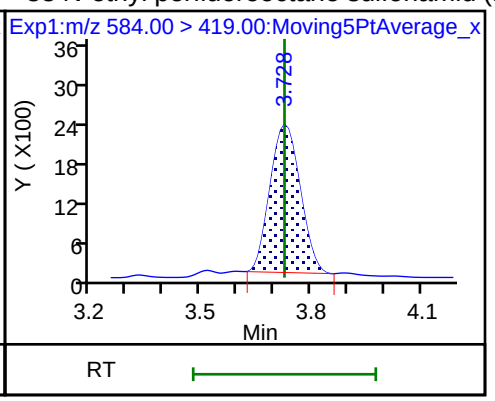
31 Perfluoroundecanoic acid



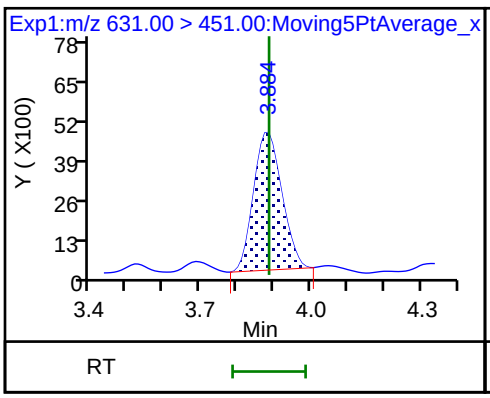
31 Perfluoroundecanoic acid



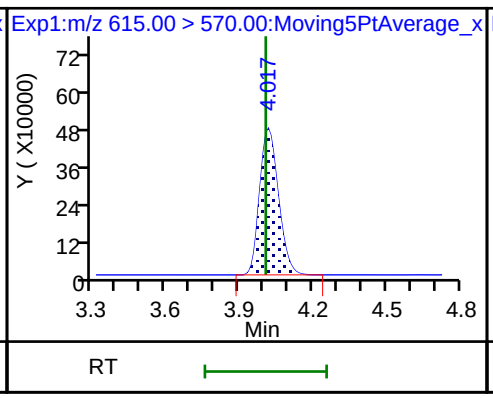
33 N-ethyl perfluorooctane sulfonamid (M)



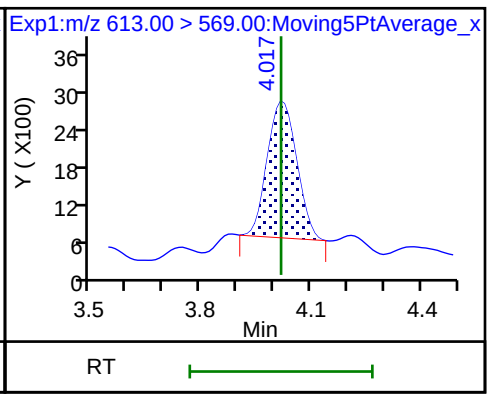
66 11-Chloroeicosafluoro-3-oxaundecan



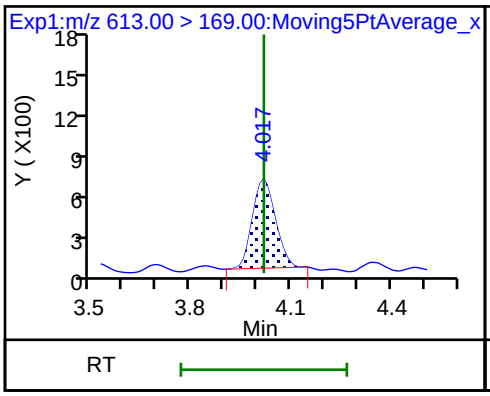
D 36 13C2 PFDoA



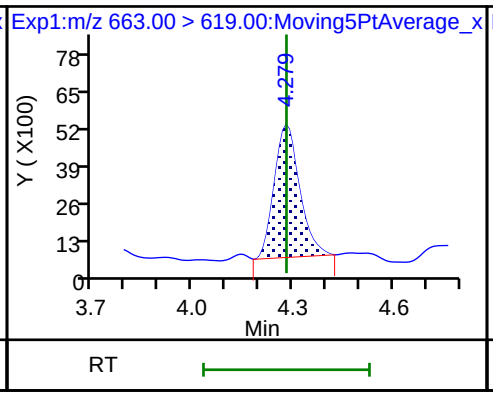
37 Perfluorododecanoic acid



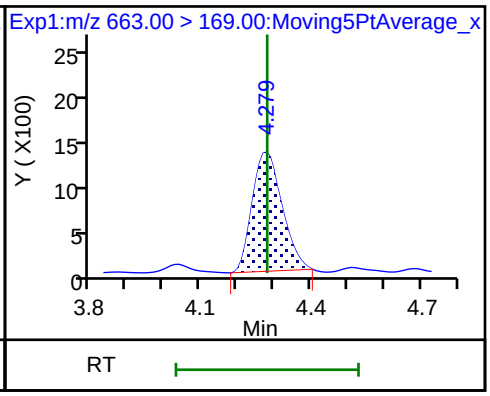
37 Perfluorododecanoic acid



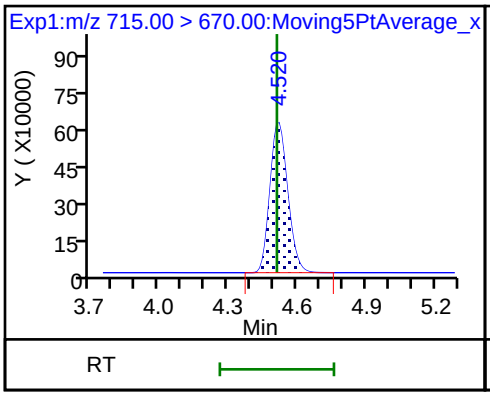
41 Perfluorotridecanoic acid



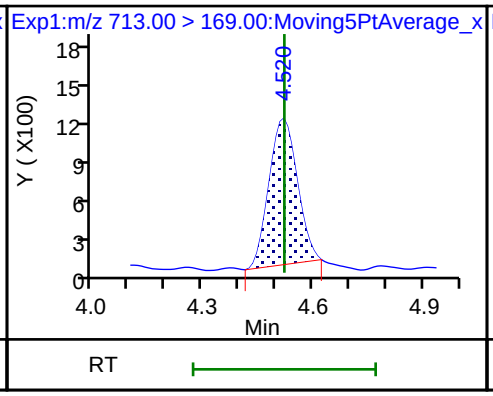
41 Perfluorotridecanoic acid



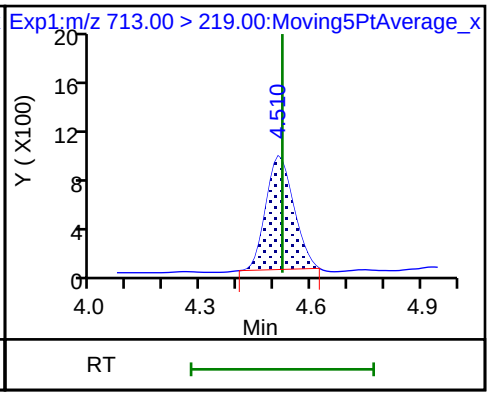
D 43 13C2-PFTeDA



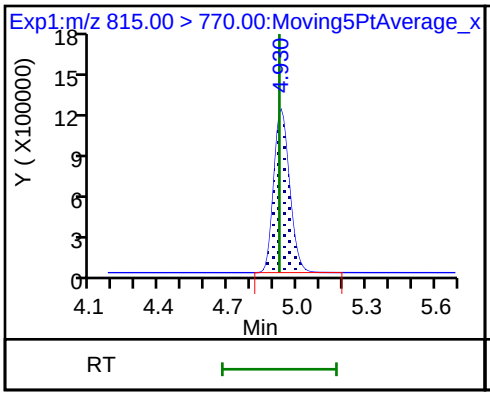
42 Perfluorotetradecanoic acid



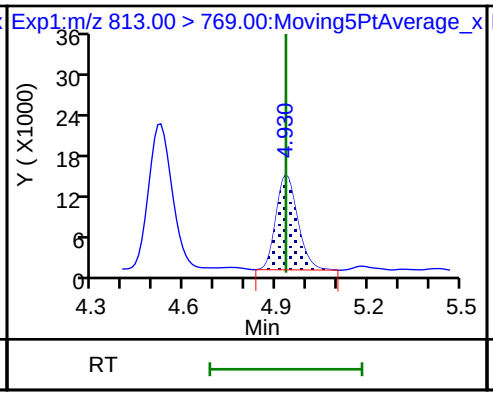
42 Perfluorotetradecanoic acid



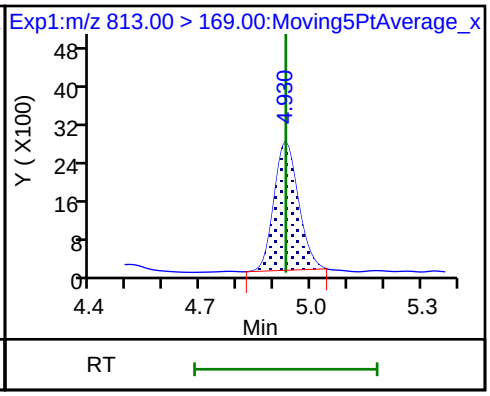
D 44 13C2-PFHxDA



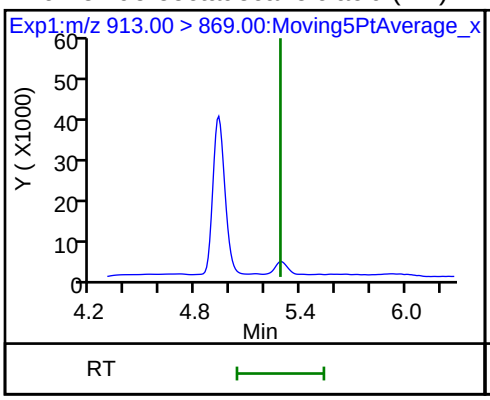
45 Perfluorohexadecanoic acid



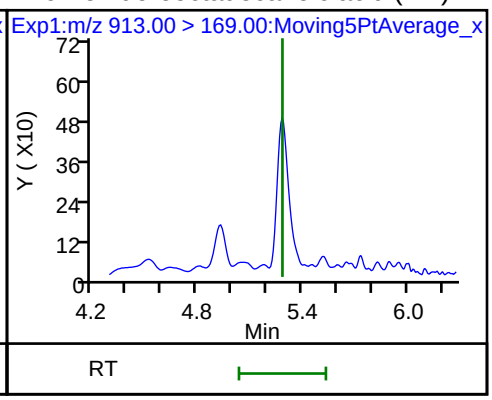
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-222044/2-A

Matrix: Water | Lab File ID: 2018.05.09LLC_021.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 250(mL) | Date Analyzed: 05/10/2018 09:06

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222476 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	42.0		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	37.4		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	40.8		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	40.7		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	41.1		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	40.9		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	38.0		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	38.8		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	40.6		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	37.1		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	39.6		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	34.6		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	32.8		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	38.1		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	36.4		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	38.1		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	40.2		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	43.3		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.3		20	1.9
27619-97-2	6:2FTS	65.0		20	2.0
39108-34-4	8:2FTS	40.9		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-222044/2-A

Matrix: Water | Lab File ID: 2018.05.09LLC_021.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 250(mL) | Date Analyzed: 05/10/2018 09:06

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222476 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	105		25-150
STL01893	13C5 PFPeA	108		25-150
STL00993	13C2 PFHxA	104		25-150
STL01892	13C4-PFHpA	107		25-150
STL00990	13C4 PFOA	108		25-150
STL00995	13C5 PFNA	99		25-150
STL00996	13C2 PFDA	102		25-150
STL00997	13C2 PFUnA	89		25-150
STL00998	13C2 PFDoA	91		25-150
STL02116	13C2-PFTeDA	93		25-150
STL02337	13C3-PFBS	102		25-150
STL00994	18O2 PFHxS	103		25-150
STL00991	13C4 PFOS	99		25-150
STL01056	13C8 FOSA	87		25-150
STL02118	d3-NMeFOSAA	99		25-150
STL02117	d5-NEtFOSAA	107		25-150
STL02279	M2-6:2FTS	120		25-150
STL02280	M2-8:2FTS	108		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_021.d
Lims ID: LCS 320-222044/2-A
Client ID:
Sample Type: LCS
Inject. Date: 10-May-2018 09:06:59 ALS Bottle#: 12 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-222044/2
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-May-2018 17:00:46 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK037

First Level Reviewer: barnettj Date: 10-May-2018 15:26:55

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.463	1.463	0.0	1.000	5396239	2.63		105	47252	
2 Perfluorobutyric acid										
212.90 > 169.00	1.463	1.468	-0.005	1.000	2105381	1.05		105	1572	
D 3 13C5-PFPeA										
267.90 > 223.00	1.747	1.738	0.009	0.562	3583050	2.71		108	72686	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.747	1.747	0.0	1.000	1596248	0.9345		93.5	1435	
D 47 13C3-PFBS										
301.90 > 83.00	1.783	1.774	0.009	1.000	72210	2.38		102	794	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.783	1.783	0.0	1.000	2103621	0.8652		97.9	2007	
298.90 > 99.00	1.783	1.783	0.0	1.000	890571		2.36(1.25-3.74)		1974	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.003	2.003	0.001	1.000	567435	1.14		122	27208	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.037	2.036	0.001	1.000	1578372	1.02		102	3041	
313.00 > 119.00	2.037	2.036	0.001	1.000	129027		12.23(5.03-15.10)		1850	
D 7 13C2 PFHxA										
315.00 > 270.00	2.037	2.037	0.0	1.000	3809289	2.60		104	89231	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.060	2.059	0.001	1.000	1938217	0.8727		93.0	18329	
349.00 > 99.00	2.060	2.059	0.001	1.000	714863		2.71(1.36-4.07)		12193	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.139	2.138	0.001	1.000	268556	1.16		116	1932	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.139	2.138	0.001	1.000	207336	2.29		91.7	4846	
D 9 13C4-PFHpA										
367.00 > 322.00	2.372	2.372	0.0	1.000	3806325	2.67		107	55020	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.372	2.384	-0.012	1.000	1548685	1.02		102	2176	
363.00 > 169.00	2.384	2.384	0.0	1.005	619484		2.50(1.13-3.40)		4138	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.384	2.384	0.0	0.995	1681850	0.8202		90.1	6016	
399.00 > 99.00	2.396	2.384	0.012	1.000	570844		2.95(1.50-4.49)		2314	
D 11 18O2 PFHxS										
403.00 > 84.00	2.396	2.395	0.001	1.000	4284890	2.44		103	69321	
65 Adona										
377.00 > 251.00	2.418	2.417	0.001	1.000	4544312	1.08		108	49342	
377.00 > 85.00	2.418	2.417	0.001	1.000	2681734		1.69(0.84-2.53)		38463	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.713	2.712	0.001	1.000	1000991	1.62		171	28047	
D 12 M2-6:2FTS										
429.00 > 81.00	2.713	2.712	0.001	1.000	865967	2.84		120	12939	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.735	2.734	0.001	1.000	1813256	1.03		103	950	
413.00 > 169.00	2.735	2.734	0.001	1.000	959708		1.89(0.84-2.52)		3744	
* 62 13C2-PFOA										
415.00 > 370.00	2.735	2.734	0.001		3812196	2.50			71276	
D 14 13C4 PFOA										
417.00 > 372.00	2.735	2.735	0.0	1.000	3814987	2.70		108	79391	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.743	2.742	0.001	1.000	1537701	0.9526		100	12626	
449.00 > 99.00	2.743	2.742	0.001	1.000	415948		3.70(1.94-5.82)		7224	
D 18 13C4 PFOS										
503.00 > 80.00	3.111	3.106	0.004	1.000	2905726	2.36		98.8	22515	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.111	3.113	-0.003	1.000	1202284	0.9090		98.0	4407	
499.00 > 99.00	3.111	3.113	-0.003	1.000	262968		4.57(2.31-6.93)		2823	
20 Perfluorononanoic acid										
463.00 > 419.00	3.111	3.113	-0.003	1.000	1280792	1.02		102	3794	
463.00 > 169.00	3.111	3.113	-0.003	1.000	296671		4.32(1.90-5.69)		8282	
D 19 13C5 PFNA										
468.00 > 423.00	3.111	3.114	-0.004	1.000	3006069	2.47		98.9	46958	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.318	3.322	-0.004	1.000	2113142	0.9220		98.9	32917	
D 21 13C8 FOSA										
506.00 > 78.00	3.444	3.447	-0.003	1.000	3321397	2.16		86.5	51220	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.444	3.448	-0.004	1.000	1349319	1.00		100	24794	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.463	3.457	0.006	1.000	917071	0.9436		98.3	10389	
549.00 > 99.00	3.463	3.457	0.006	1.000	335631		2.73(1.33-3.97)		6648	
D 26 M2-8:2FTS										
529.00 > 81.00	3.463	3.466	-0.003	1.000	947576	2.58		108	13305	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.463	3.466	-0.003	1.000	512187	1.02		107	19920	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.472	3.475	-0.003	1.000	2604152	2.55		102	57866	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.472	3.476	-0.004	1.000	1019814	0.9491		94.9	5341	
513.00 > 169.00	3.472	3.476	-0.004	1.000	188686		5.40(2.36-7.09)		6333	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.627	3.630	-0.003	1.000	1434951	2.48		99.1	16833	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.637	3.640	-0.003	1.003	619421	1.08		108	6406	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.781	3.786	-0.005	1.000	752077	0.9528		98.8	12842	
599.00 > 99.00	3.781	3.786	-0.005	1.000	253679		2.96(1.39-4.16)		7972	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.792	3.796	-0.004	1.000	1523781	2.67		107	16710	
D 30 13C2 PFUnA										
565.00 > 520.00	3.802	3.806	-0.004	1.000	1958293	2.22		88.9	61075	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.802	3.807	-0.005	1.003	574144	1.01		101	10765	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.802	3.807	-0.005	1.000	642074	0.9699		97.0	3957	
563.00 > 169.00	3.802	3.807	-0.005	1.000	153874		4.17(2.12-6.36)		4779	
35 MeFOSA										
512.00 > 169.00	3.627	3.875	-0.248		6854	NC			290	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.958	3.963	-0.005	1.000	3124014	0.8823		93.7	61022	
D 36 13C2 PFDoA										
615.00 > 570.00	4.091	4.097	-0.006	1.000	2166139	2.28		91.0	25876	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.091	4.097	-0.006	1.000	916874	1.01		101	1380	
613.00 > 169.00	4.091	4.097	-0.006	1.000	228436		4.01(2.13-6.40)		2942	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.351	4.359	-0.008	1.000	977077	0.9279		92.8	1083	
663.00 > 169.00	4.351	4.359	-0.008	1.000	291506		3.35(1.25-3.76)		2877	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.595	4.592	0.003	1.000	2792293	2.31		92.5	18755	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.595	4.603	-0.008	1.000	277774	0.99		99.0	3587	
713.00 > 219.00	4.584	4.603	-0.019	0.998	198966		1.40(0.71-2.13)		3508	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.002	5.008	-0.006	1.000	4895445	2.49		99.7	12949	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.010	5.017	-0.007	1.002	1919317	1.01		101	879	
813.00 > 169.00	5.002	5.017	-0.015	1.000	321322		5.97(2.86-8.58)		2555	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.369	5.374	-0.005	1.000	2226192	1.13		113	762	
913.00 > 169.00	5.369	5.374	-0.005	1.000	273195		8.15(3.83-11.48)		2454	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 15-May-2018 17:00:51 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180510-57955.b\2018.05.09LLC_021.d

Injection Date: 10-May-2018 09:06:59 Instrument ID: A8_N

Lims ID: LCS 320-222044/2-A

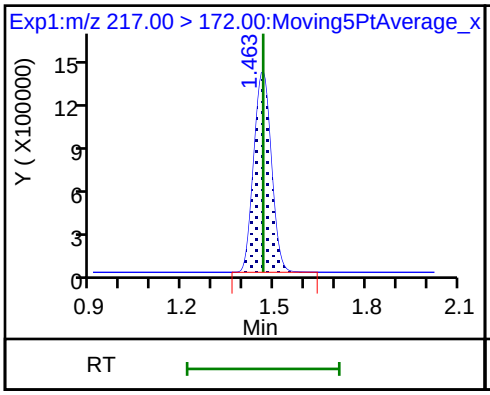
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 3

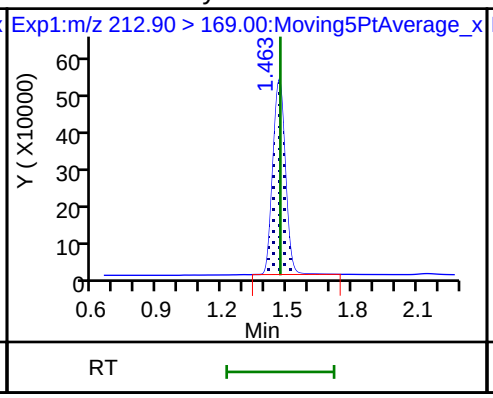
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

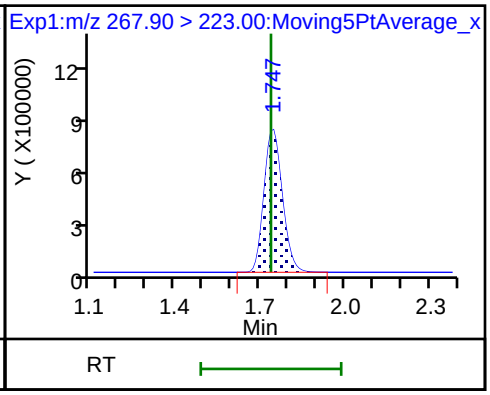
D 1 13C4 PFBA



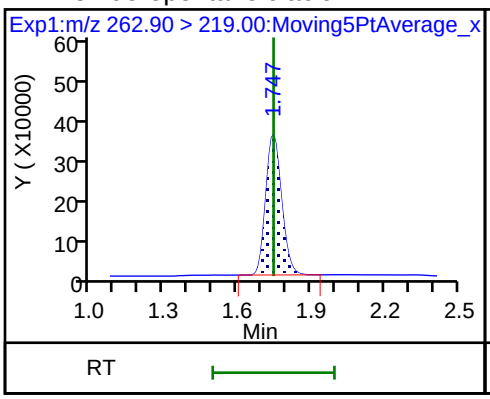
2 Perfluorobutyric acid



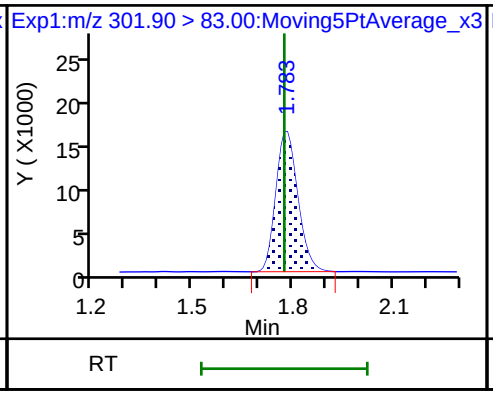
D 3 13C5-PFPeA



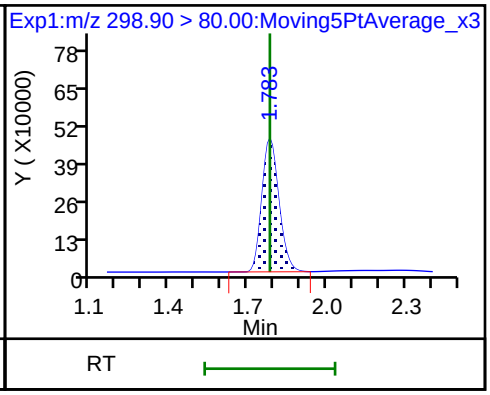
4 Perfluoropentanoic acid



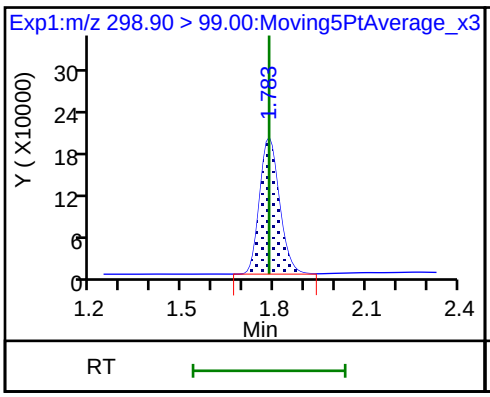
D 47 13C3-PFBS



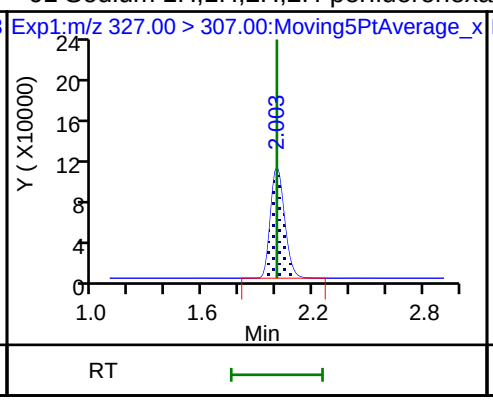
5 Perfluorobutanesulfonic acid



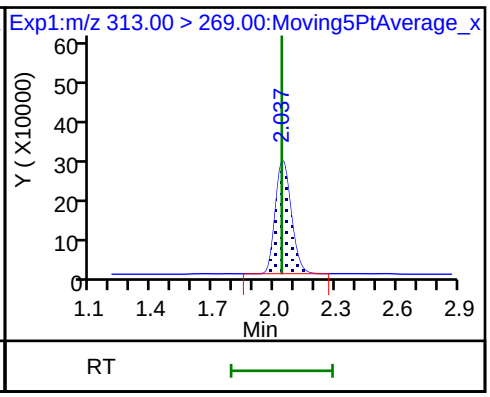
5 Perfluorobutanesulfonic acid



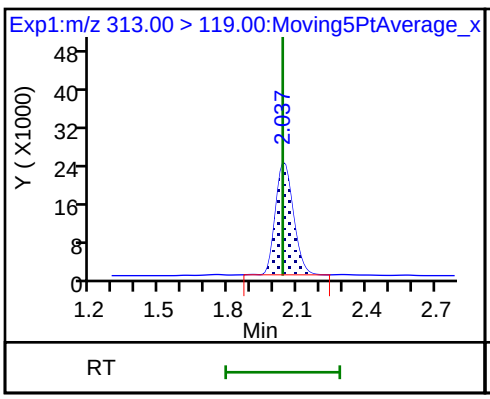
61 Sodium 1H,1H,2H,2H-perfluorohexane



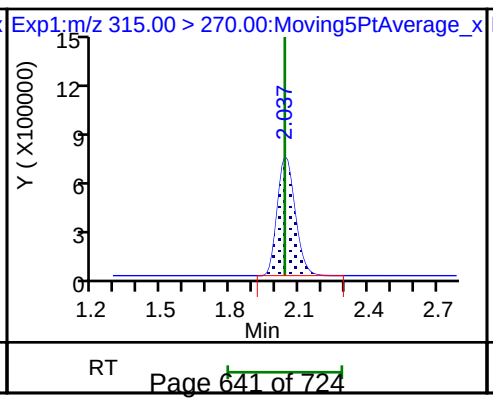
6 Perfluorohexanoic acid



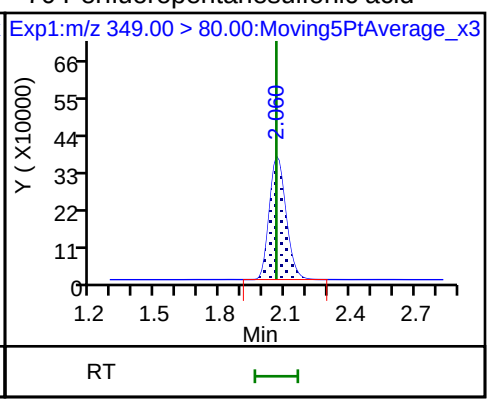
6 Perfluorohexanoic acid



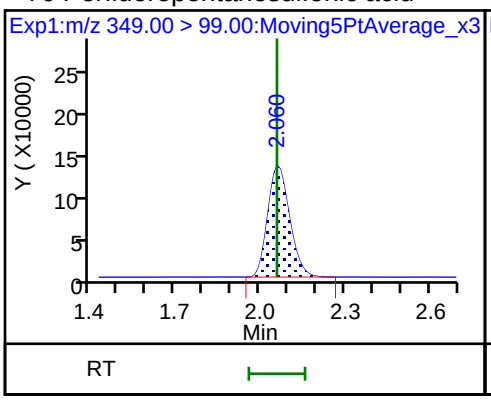
D 7 13C2 PFHxA



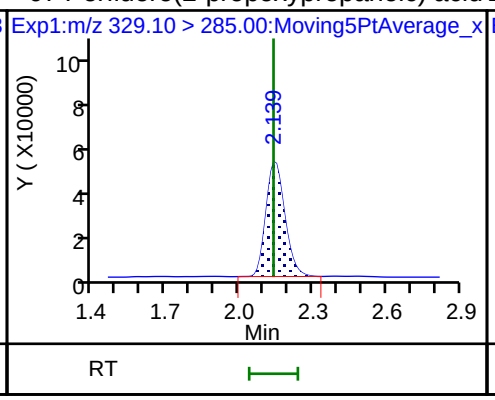
70 Perfluoropentanesulfonic acid



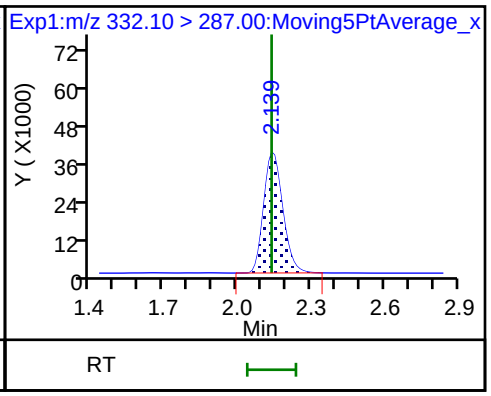
70 Perfluoropentanesulfonic acid



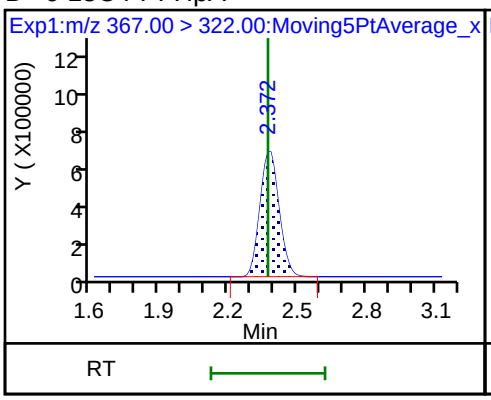
67 Perfluoro(2-propoxypropanoic) acid



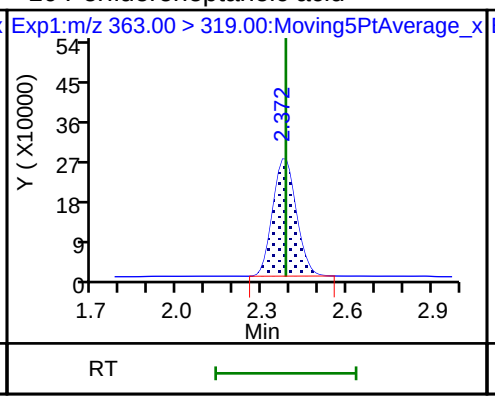
D 64 13C3 HFPO-DA



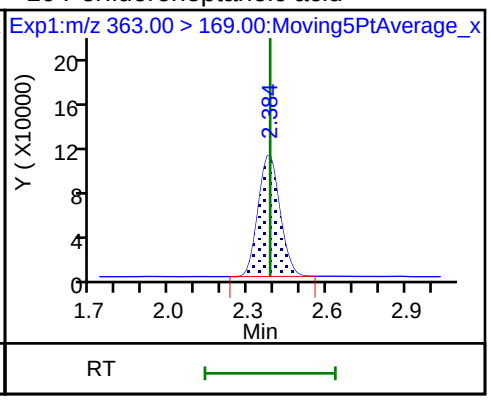
D 9 13C4-PFHpA



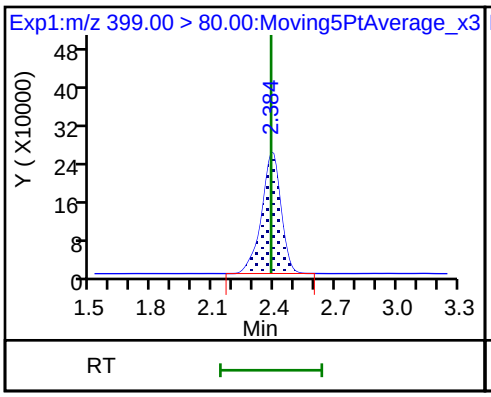
10 Perfluoroheptanoic acid



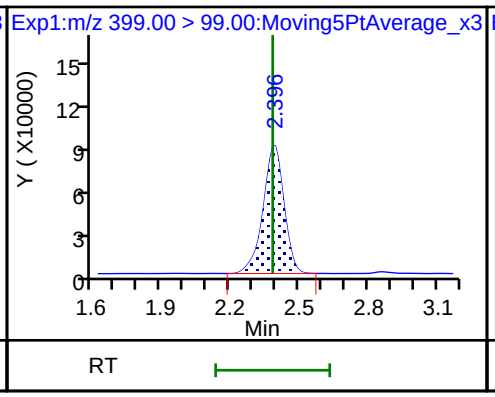
10 Perfluoroheptanoic acid



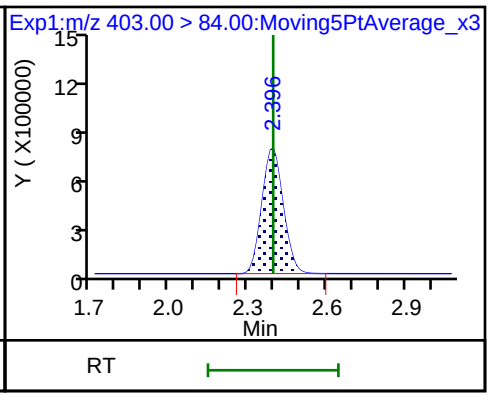
8 Perfluorohexanesulfonic acid



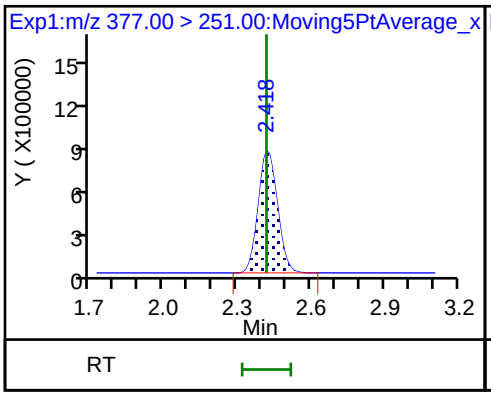
8 Perfluorohexanesulfonic acid



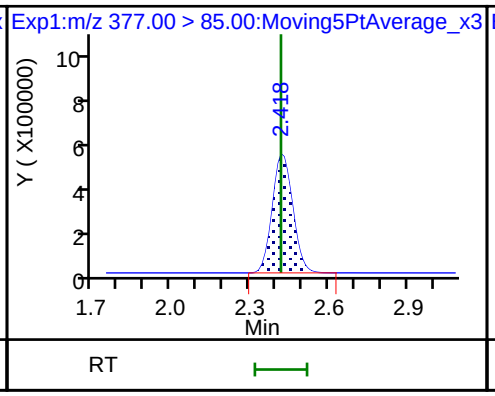
D 11 18O2 PFHxS



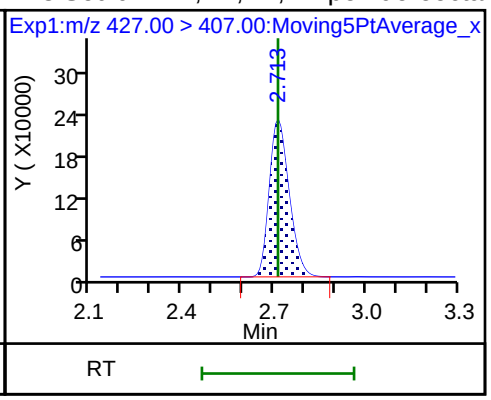
65 Adona



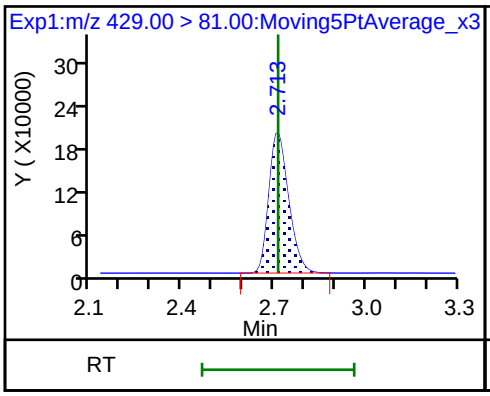
65 Adona



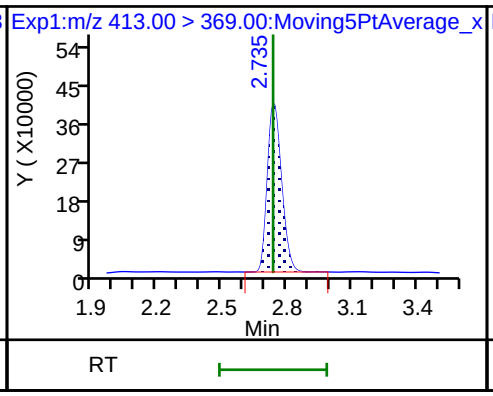
13 Sodium 1H,1H,2H,2H-perfluorooctane



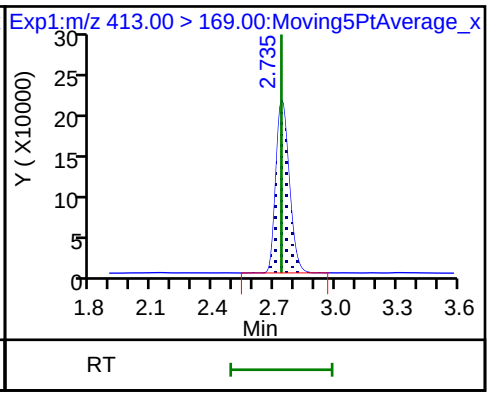
D 12 M2-6:2FTS



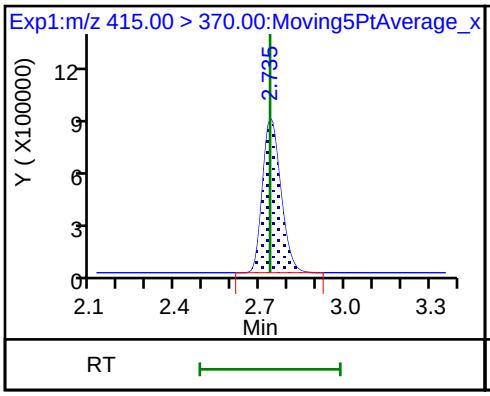
15 Perfluorooctanoic acid



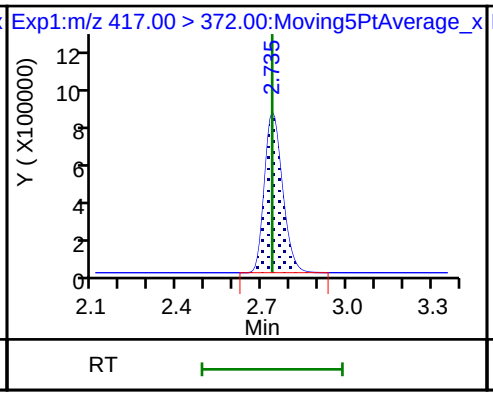
15 Perfluorooctanoic acid



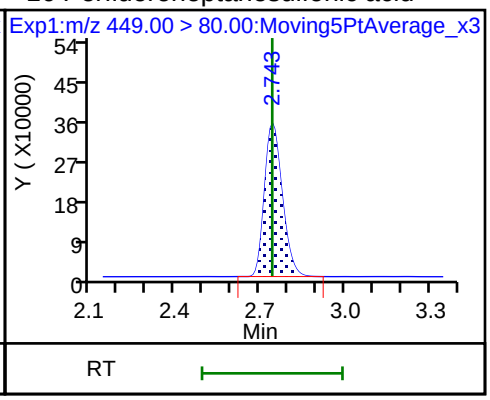
* 62 13C2-PFOA



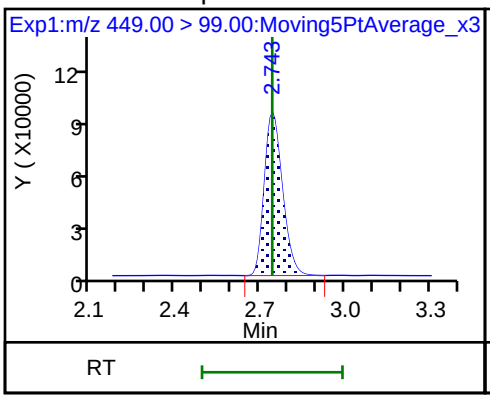
D 14 13C4 PFOA



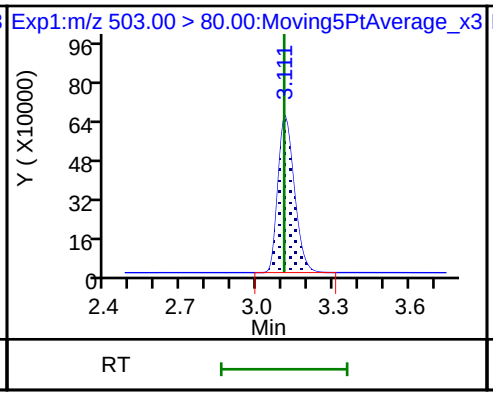
16 Perfluoroheptanesulfonic acid



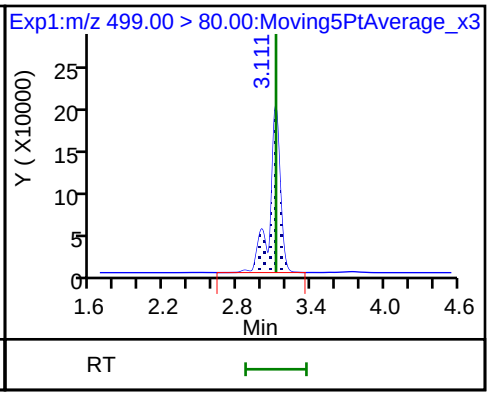
16 Perfluoroheptanesulfonic acid



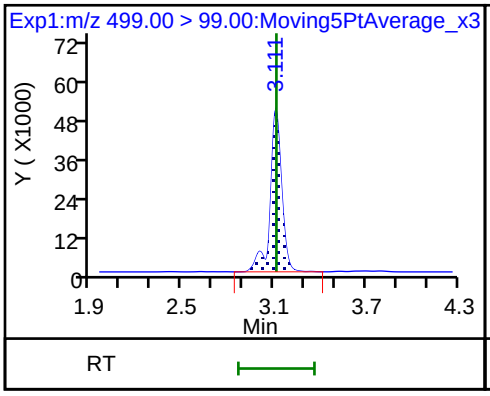
D 18 13C4 PFOS



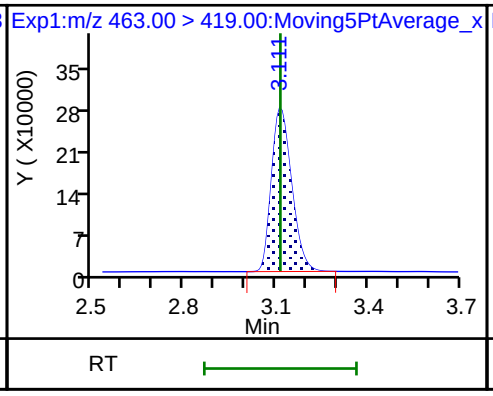
17 Perfluorooctane sulfonic acid



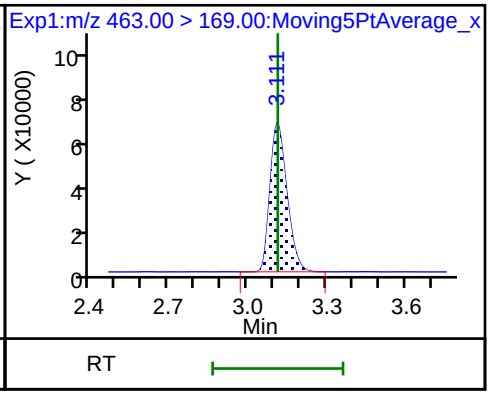
17 Perfluorooctane sulfonic acid



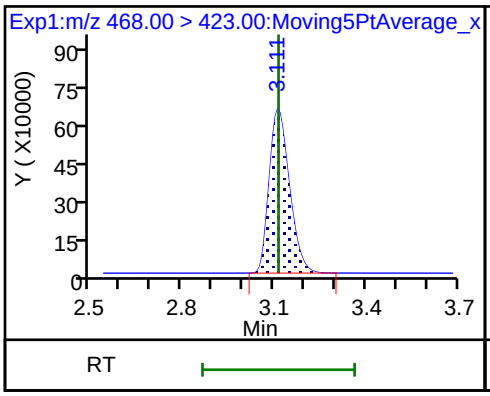
20 Perfluorononanoic acid



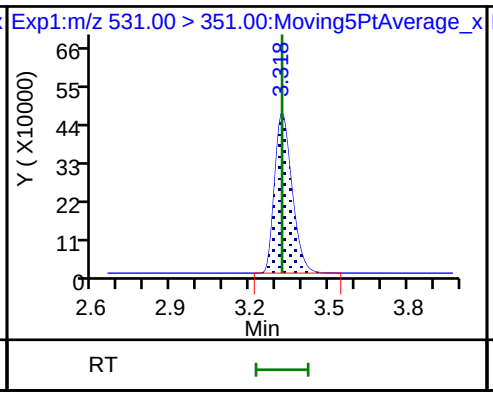
20 Perfluorononanoic acid



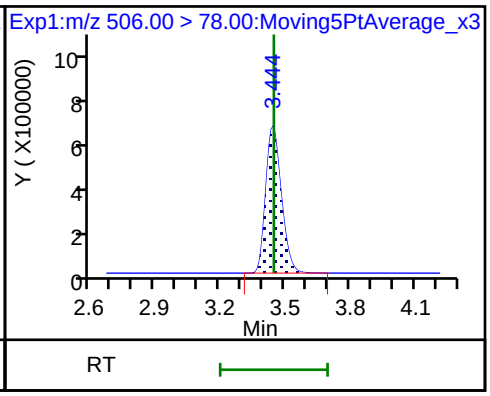
D 19 13C5 PFNA



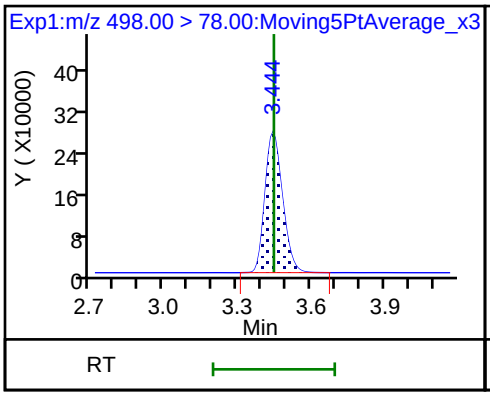
69 9-Chlorohexadecafluoro-3-oxanonane



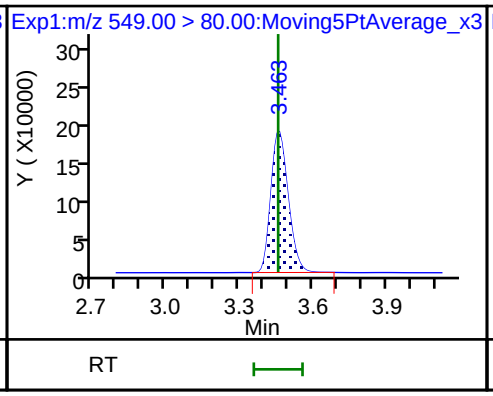
D 21 13C8 FOSA



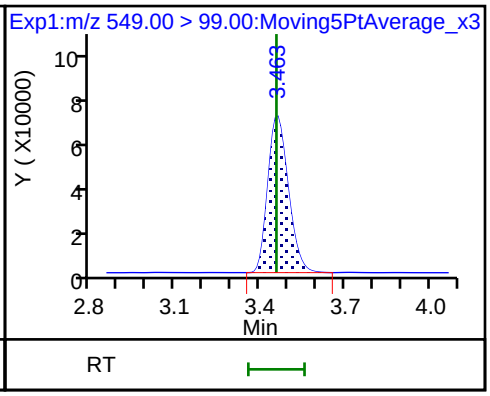
22 Perfluorooctane Sulfonamide



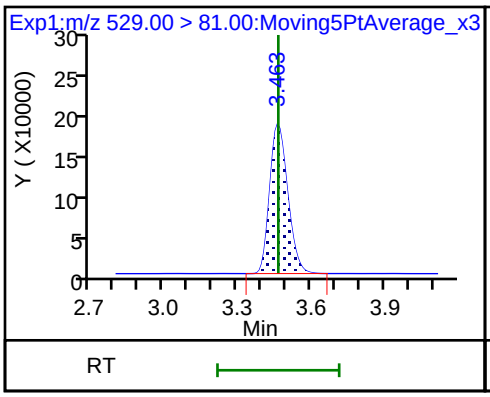
68 Perfluorononanesulfonic acid



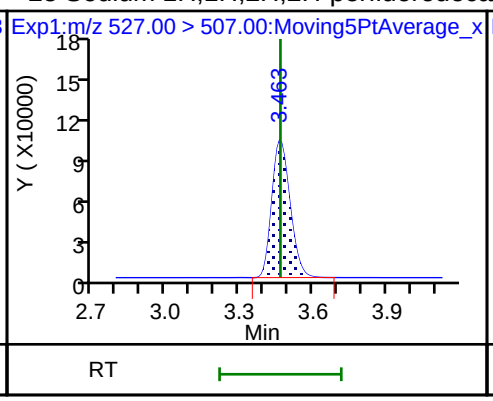
68 Perfluorononanesulfonic acid



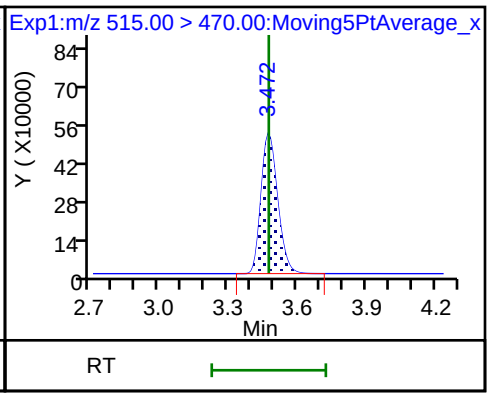
D 26 M2-8:2FTS



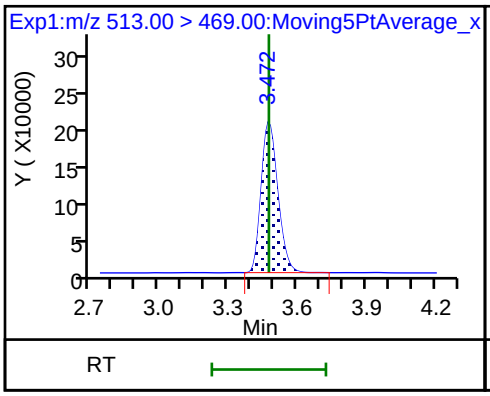
25 Sodium 1H,1H,2H,2H-perfluorodecane



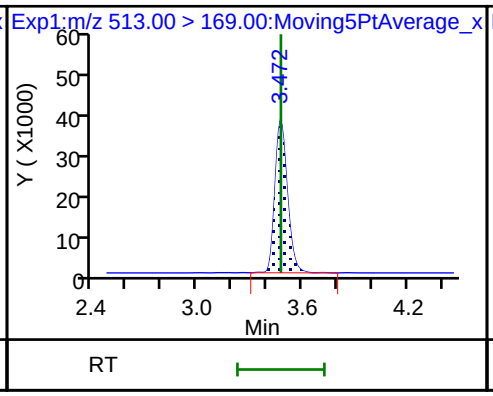
D 23 13C2 PFDA



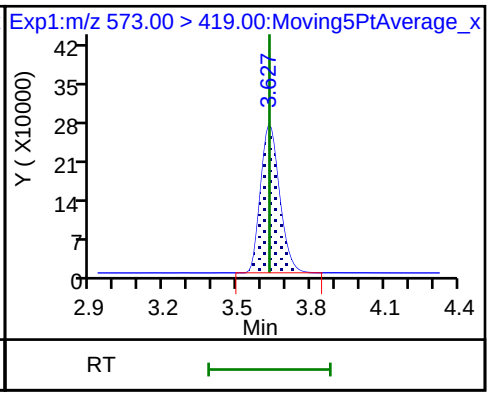
24 Perfluorodecanoic acid



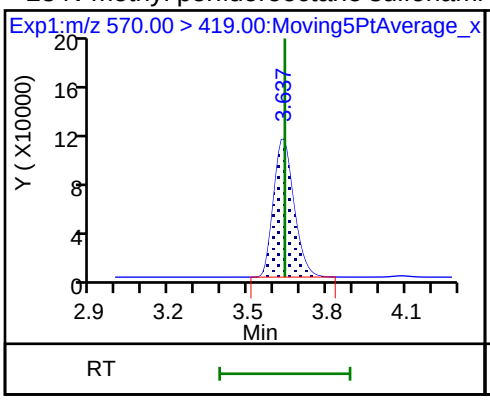
24 Perfluorodecanoic acid



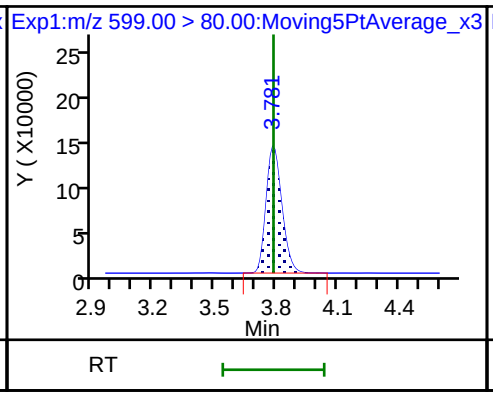
D 27 d3-NMeFOSAA



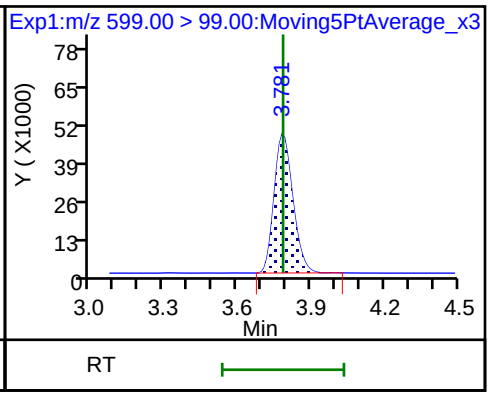
28 N-methyl perfluorooctane sulfonami



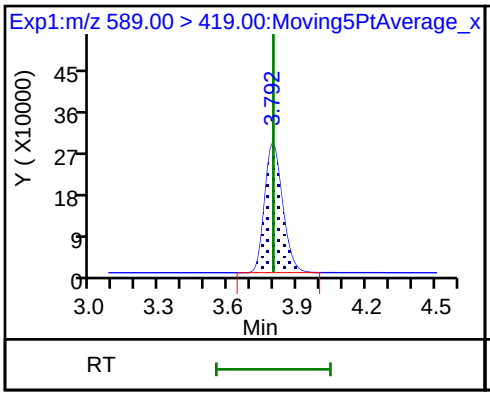
29 Perfluorodecane Sulfonic acid



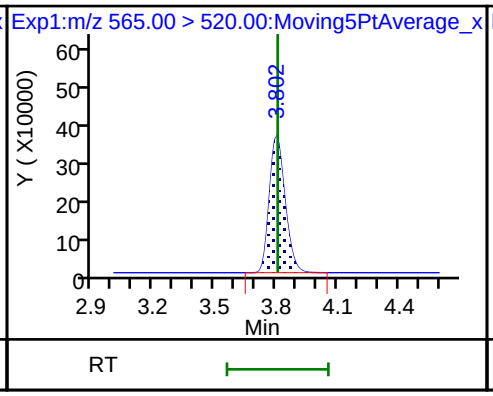
29 Perfluorodecane Sulfonic acid



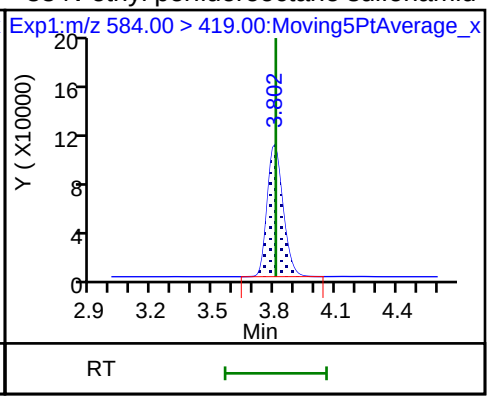
D 32 d5-NEtFOSAA



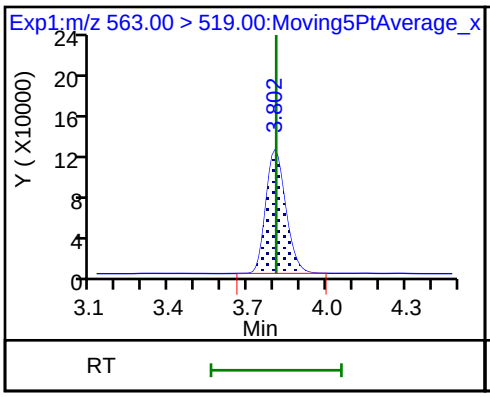
D 30 13C2 PFUnA



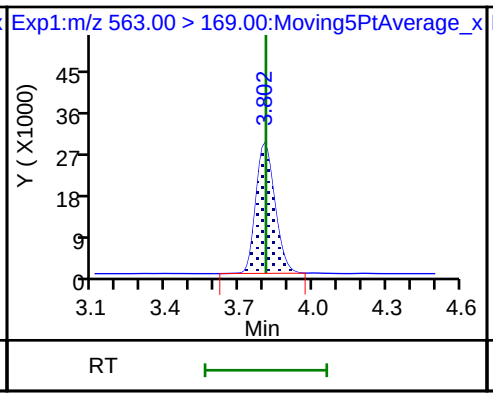
33 N-ethyl perfluorooctane sulfonamid



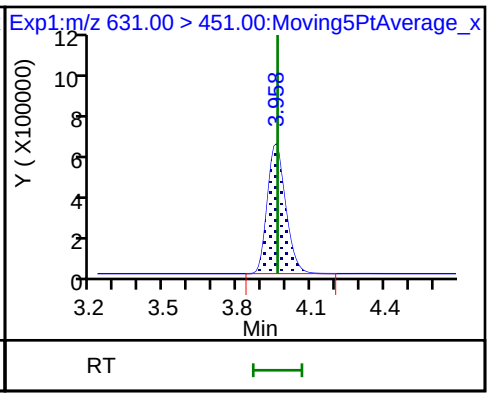
31 Perfluoroundecanoic acid



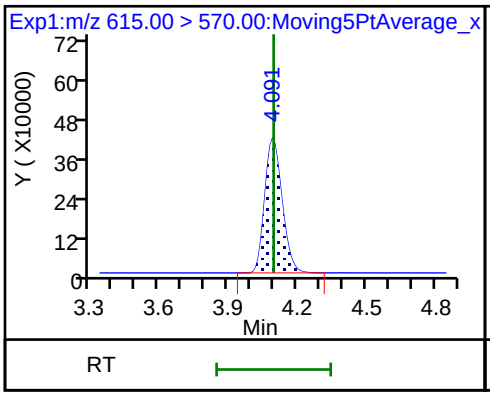
31 Perfluoroundecanoic acid



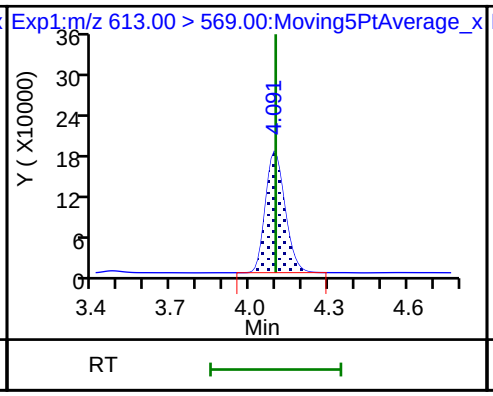
66 11-Chloroeicosafluoro-3-oxaundecan



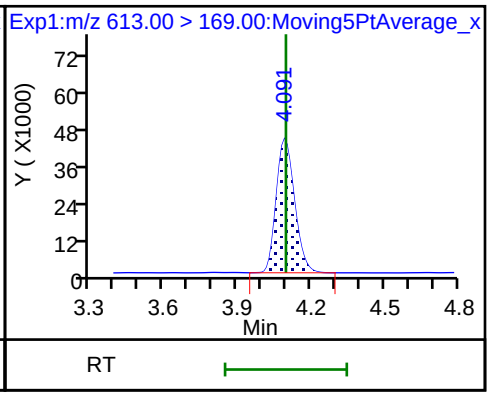
D 36 13C2 PFDoA



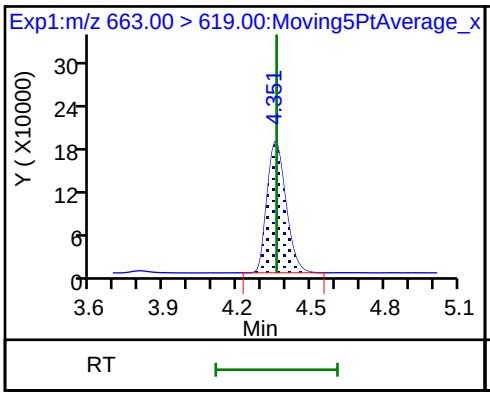
37 Perfluorododecanoic acid



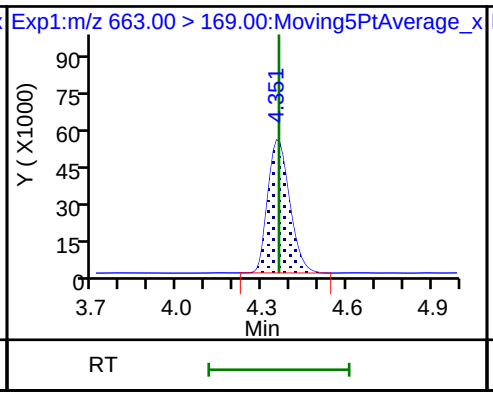
37 Perfluorododecanoic acid



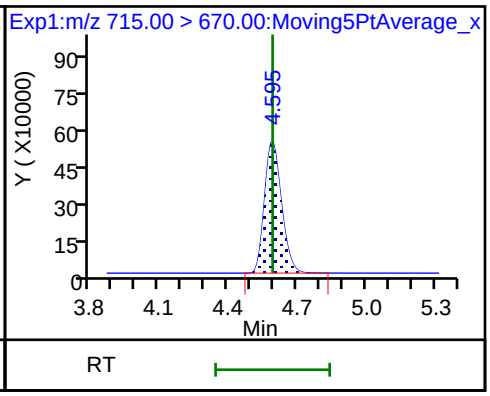
41 Perfluorotridecanoic acid



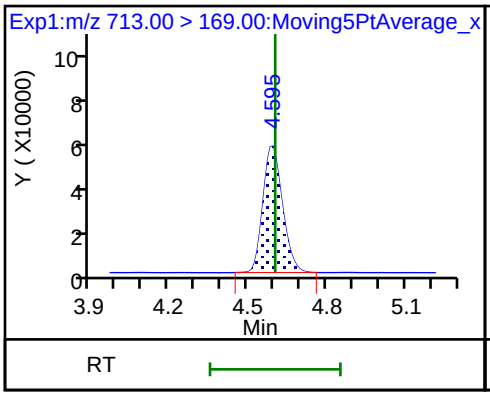
41 Perfluorotridecanoic acid



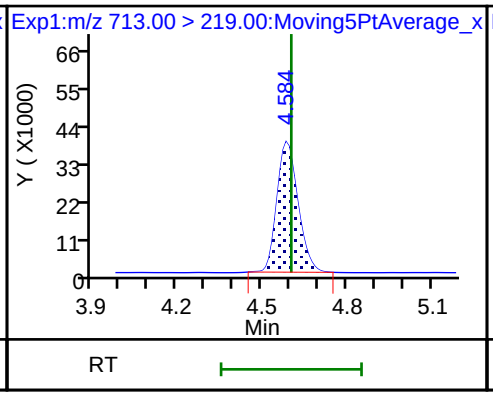
D 43 13C2-PFTeDA



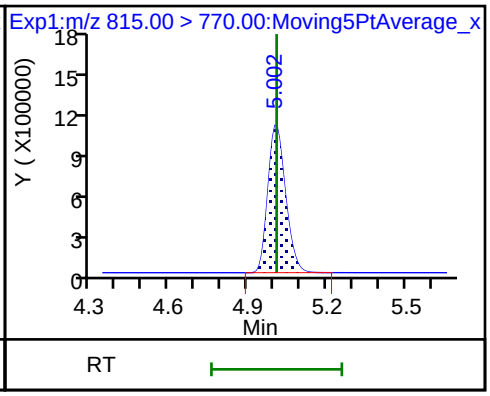
42 Perfluorotetradecanoic acid



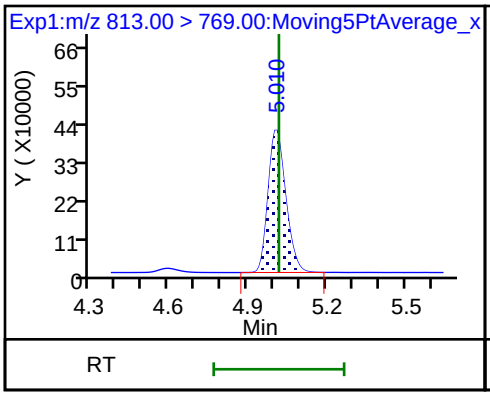
42 Perfluorotetradecanoic acid



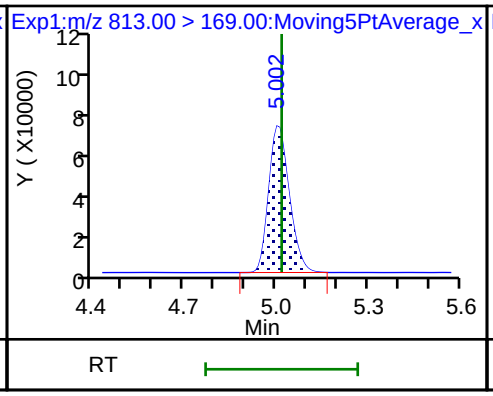
D 44 13C2-PFHxDA



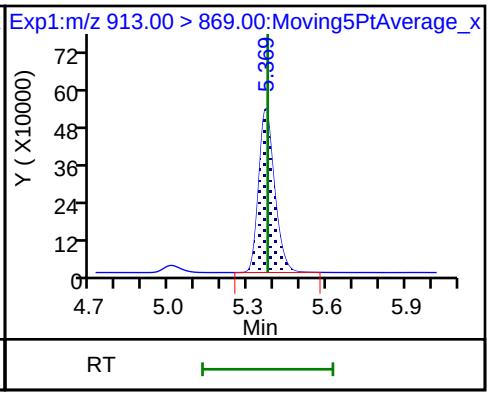
45 Perfluorohexadecanoic acid



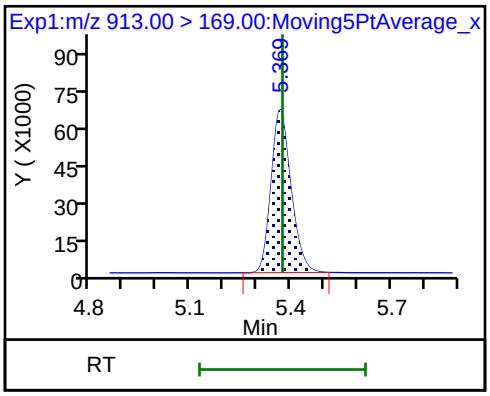
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-223391/2-A

Matrix: Water | Lab File ID: 2018.05.16LLD_011.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 250(mL) | Date Analyzed: 05/17/2018 00:19

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	Perfluorooctanoic acid (PFOA)	39.3		2.0	0.85
27619-97-2	6:2FTS	36.6		20	2.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	106		25-150
STL02279	M2-6:2FTS	111		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_011.d
Lims ID: LCS 320-223391/2-A
Client ID:
Sample Type: LCS
Inject. Date: 17-May-2018 00:19:56 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-223391/2-a
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:14:03 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:14:03

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.447	1.447	0.0	1.000	6969004	2.57		103	53853	
2 Perfluorobutyric acid										
212.90 > 169.00	1.447	1.452	-0.005	1.000	2812085	1.08		108	1557	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.721	1.712	0.009	1.005	2060554	0.9864		98.6	1379	
D 3 13C5-PFPeA										
267.90 > 223.00	1.712	1.712	0.0	0.562	4424067	2.54		102	77565	
D 47 13C3-PFBS										
301.90 > 83.00	1.748	1.748	0.0	1.000	88794	2.26		97.1	769	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.757	1.757	0.0	1.005	2813558	0.9434		107	15787	
298.90 > 99.00	1.757	1.757	0.0	1.005	1160371		2.42(1.25-3.74)		8870	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.960	1.960	0.0	1.000	675812	1.07		114	29458	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.004	1.993	0.011	1.006	1942885	1.03		103	3981	
313.00 > 119.00	2.004	1.993	0.011	1.006	185586		10.47(5.03-15.10)		2824	
D 7 13C2 PFHxA										
315.00 > 270.00	1.993	1.994	-0.001	1.000	4594549	2.48		99.0	97027	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.015	2.016	-0.001	1.000	2677143	1.01		107	32838	
349.00 > 99.00	2.015	2.016	-0.001	1.000	952168		2.81(1.36-4.07)		11644	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.095	2.095	0.0	1.000	304403	1.01		101	2446	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.095	2.095	0.0	1.000	246914	2.69		108	6998	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.320	2.321	-0.001	1.000	2034281	1.04		104	2613	
363.00 > 169.00	2.320	2.321	-0.001	1.000	805675		2.52(1.13-3.40)		3958	
D 9 13C4-PFHpA										
367.00 > 322.00	2.320	2.321	-0.001	1.000	4622953	2.60		104	104816	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.333	2.334	-0.001	1.000	2182234	0.8407		92.4	15852	
399.00 > 99.00	2.333	2.334	-0.001	1.000	722342		3.02(1.50-4.49)		3112	
D 11 18O2 PFHxS										
403.00 > 84.00	2.333	2.334	-0.001	1.000	5447995	2.48		105	109110	
65 Adona										
377.00 > 251.00	2.373	2.373	0.0	1.000	5572759	1.07		107	81911	
377.00 > 85.00	2.373	2.373	0.0	1.000	3239163		1.72(0.84-2.53)		30912	
D 12 M2-6:2FTS										
429.00 > 81.00	2.654	2.645	0.009	1.000	1032963	2.63		111	19435	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.654	2.654	0.0	1.000	706130	0.9148		96.5	6260	
D 14 13C4 PFOA										
417.00 > 372.00	2.676	2.668	0.008	1.000	4475106	2.66		106	117366	
* 62 13C2-PFOA										
415.00 > 370.00	2.676	2.676	0.0		4440398	2.50			84664	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.676	2.676	0.0	1.000	2072063	0.9834		98.3	955	
413.00 > 169.00	2.676	2.676	0.0	1.000	1051456		1.97(0.84-2.52)		3932	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.684	2.684	0.0	1.000	2002685	0.99		104	24762	
449.00 > 99.00	2.684	2.684	0.0	1.000	541839		3.70(1.94-5.82)		8673	
D 18 13C4 PFOS										
503.00 > 80.00	3.040	3.029	0.011	1.000	3615613	2.39		100	31651	
D 19 13C5 PFNA										
468.00 > 423.00	3.047	3.036	0.011	1.000	3770082	2.74		110	53203	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.040	3.036	0.004	1.000	1619200	0.9103		98.1	11089	M
499.00 > 99.00	3.040	3.036	0.004	1.000	348879		4.64(2.31-6.93)		5637	
20 Perfluorononanoic acid										
463.00 > 419.00	3.047	3.043	0.004	1.000	1548487	0.9694		96.9	3226	
463.00 > 169.00	3.040	3.043	-0.003	0.998	377379		4.10(1.90-5.69)		13712	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.254	3.252	0.002	1.000	2803914	1.03		111	13140	
D 26 M2-8:2FTS										
529.00 > 81.00	3.389	3.376	0.013	1.000	1107389	2.48		104	16514	
D 21 13C8 FOSA										
506.00 > 78.00	3.389	3.376	0.013	1.000	4382144	2.22		88.7	39059	
D 23 13C2 PFDA										
515.00 > 470.00	3.399	3.385	0.014	1.000	2959516	2.53		101	44447	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.389	3.387	0.002	1.000	1813567	1.06		106	27577	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.389	3.387	0.002	1.000	651221	1.04		109	12781	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.389	3.387	0.002	1.000	1102540	0.9621		100	24078	
549.00 > 99.00	3.389	3.387	0.002	1.000	444278		2.48(1.33-3.97)		5849	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.399	3.396	0.003	1.000	1248169	1.08		108	4892	
513.00 > 169.00	3.399	3.396	0.003	1.000	214540		5.82(2.36-7.09)		5117	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.557	3.544	0.013	1.000	1638640	2.54		102	34129	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.557	3.554	0.003	1.000	739211	1.11		111	6341	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.709	3.706	0.003	1.000	909241	0.8951		92.9	14209	
599.00 > 99.00	3.709	3.706	0.003	1.000	316881		2.87(1.39-4.16)		9572	
D 30 13C2 PFUnA										
565.00 > 520.00	3.730	3.716	0.014	1.000	2239845	2.42		96.7	45020	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.719	3.716	0.003	1.000	1617087	2.44		97.7	16228	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.730	3.728	0.002	1.000	772503	1.03		103	4567	
563.00 > 169.00	3.730	3.728	0.002	1.000	200241		3.86(2.12-6.36)		6135	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.730	3.728	0.002	1.003	652175	1.07		107	23321	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.887	3.885	0.002	1.000	4105819	1.00		106	23320	
D 36 13C2 PFDoA										
615.00 > 570.00	4.019	4.006	0.013	1.000	2445190	2.45		98.1	16241	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.019	4.018	0.001	1.000	1081378	1.06		106	1141	
613.00 > 169.00	4.019	4.018	0.001	1.000	277202		3.90(2.13-6.40)		3728	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.281	4.280	0.001	1.000	1234421	1.10		110	1130	
663.00 > 169.00	4.281	4.280	0.001	1.000	405583		3.04(1.25-3.76)		5210	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.522	4.511	0.011	1.000	3143841	2.57		103	14753	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.522	4.522	0.0	1.000	321796	1.01		101	4665	
713.00 > 219.00	4.522	4.522	0.0	1.000	229717		1.40(0.71-2.13)		4766	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.931	4.922	0.009	1.000	5773165	2.85		114	12485	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.940	4.931	0.009	1.002	2235107	1.02		102	724	
813.00 > 169.00	4.931	4.931	0.0	1.000	367256		6.09(2.86-8.58)		3620	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.292	5.285	0.007	1.000	2499021	1.02		102	554	
913.00 > 169.00	5.292	5.285	0.007	1.000	312498		8.00(3.83-11.48)		2564	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 13:14:03 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_011.d

Injection Date: 17-May-2018 00:19:56 Instrument ID: A8_N

Lims ID: LCS 320-223391/2-A

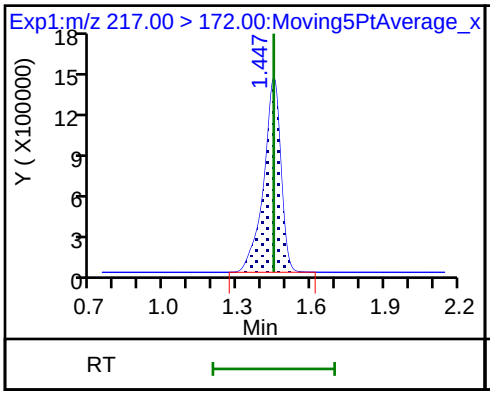
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 3 Worklist Smp#: 3

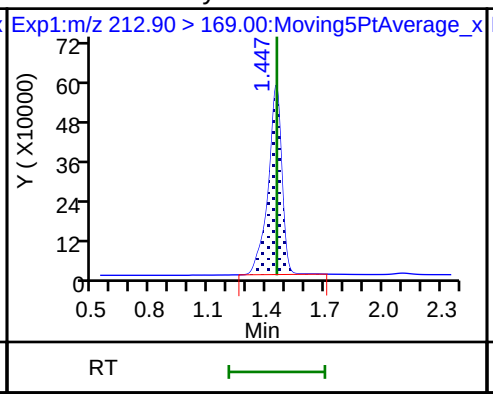
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

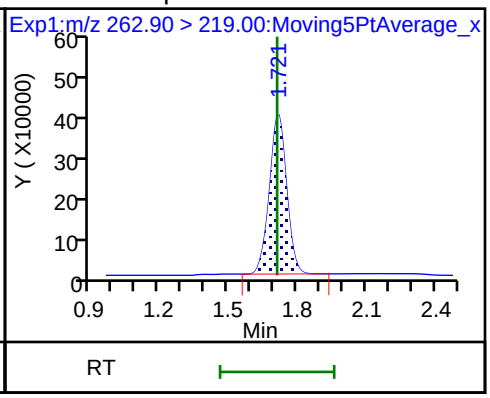
D 1 13C4 PFBA



2 Perfluorobutyric acid



4 Perfluoropentanoic acid



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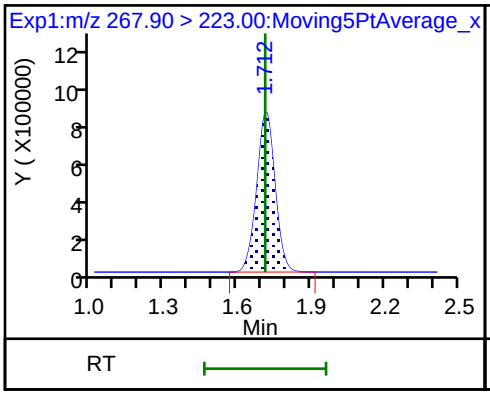

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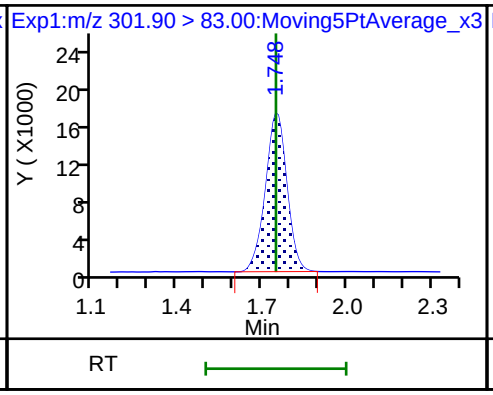
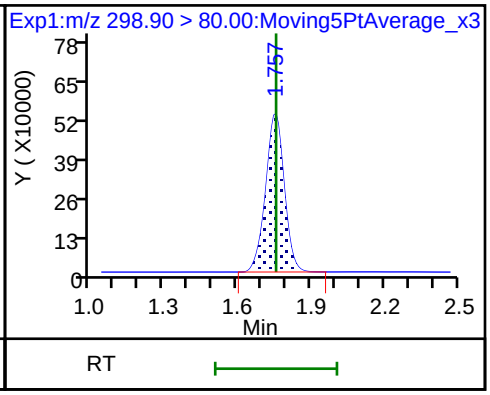
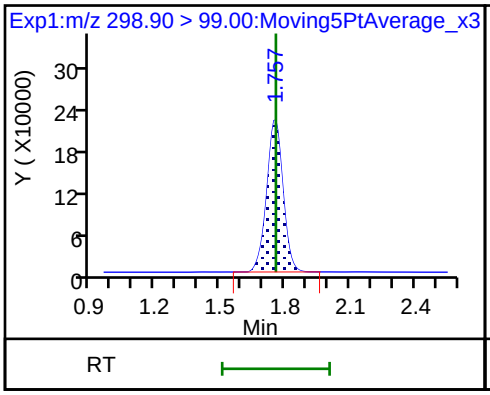


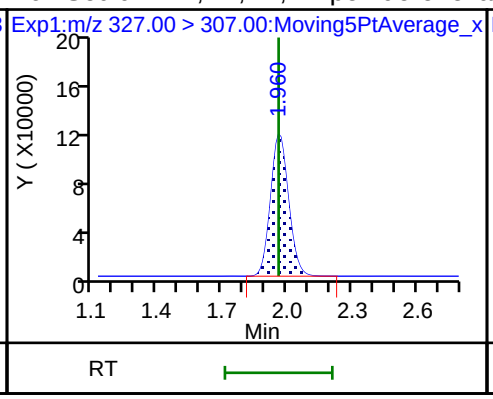
5 Perfluorobutanesulfonic acid



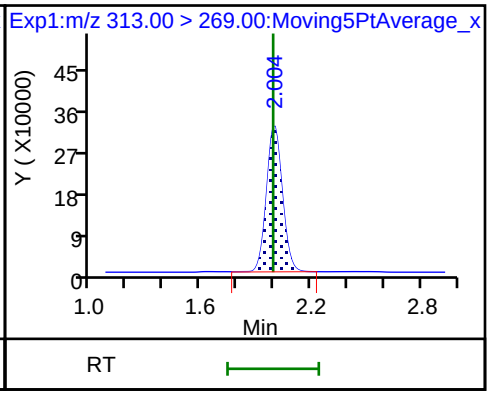
5 Perfluorobutanesulfonic acid



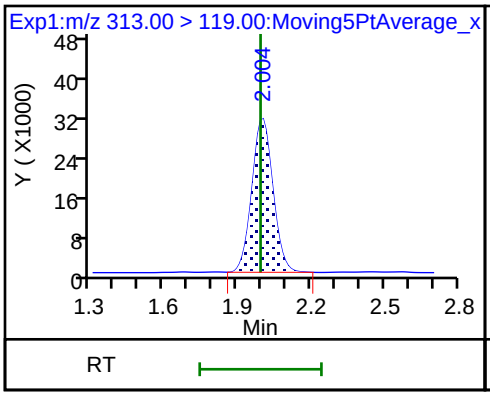
61 Sodium 1H,1H,2H,2H-perfluorohexane



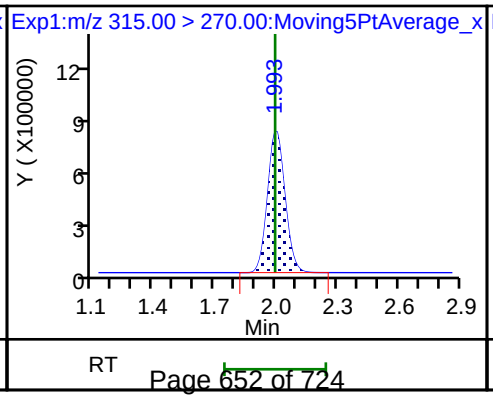
6 Perfluorohexanoic acid



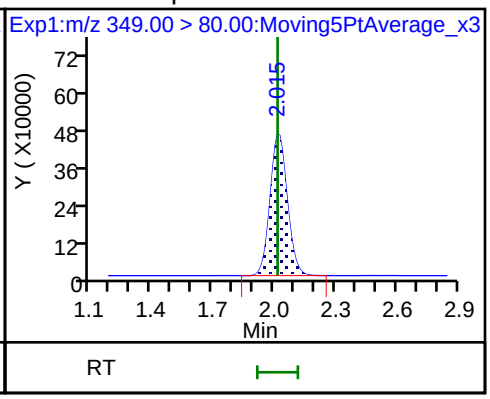
6 Perfluorohexanoic acid



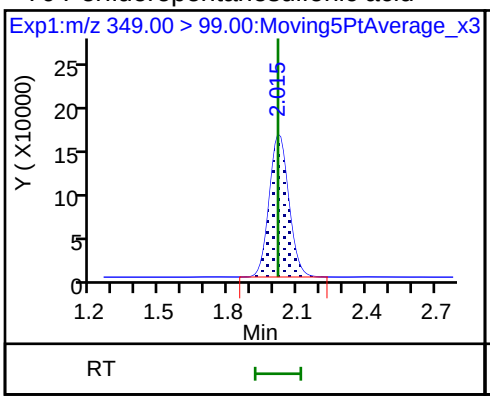
D 7 13C2 PFHxA



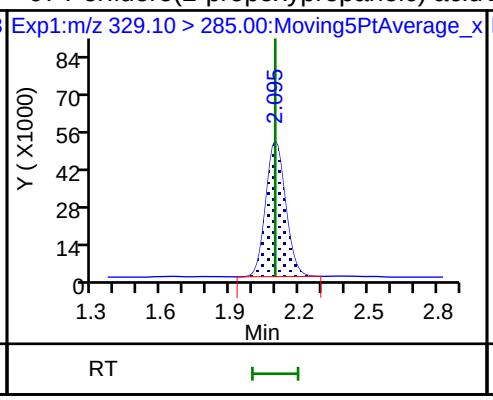
70 Perfluoropentanesulfonic acid



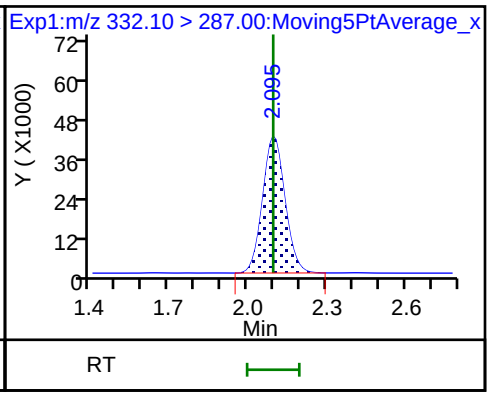
70 Perfluoropentanesulfonic acid



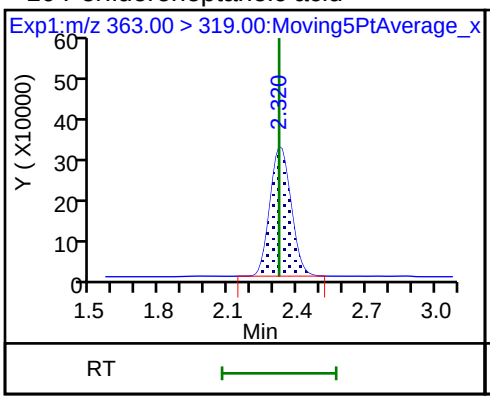
67 Perfluoro(2-propoxypropanoic) acid



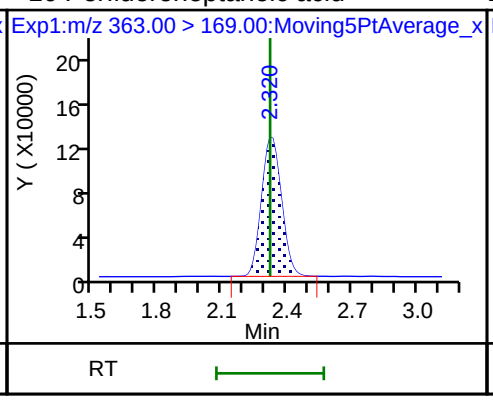
D 64 13C3 HFPO-DA



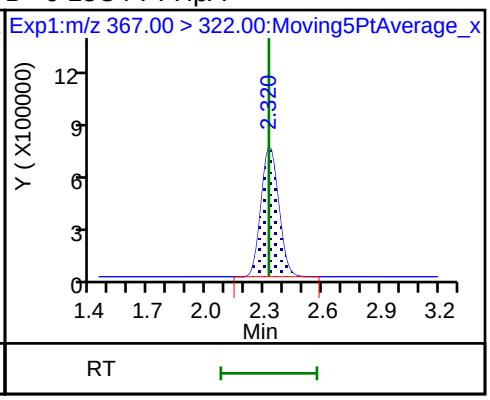
10 Perfluoroheptanoic acid



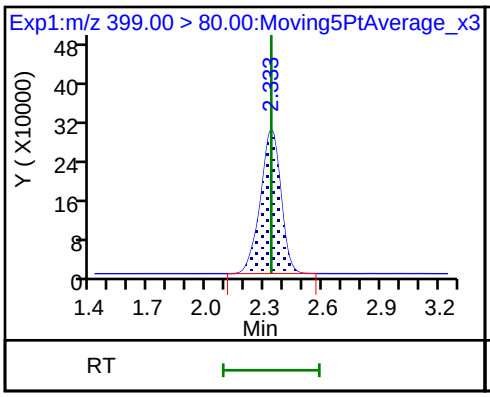
10 Perfluoroheptanoic acid



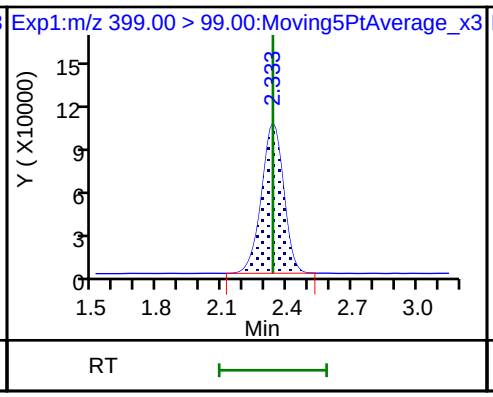
D 9 13C4-PFHpA



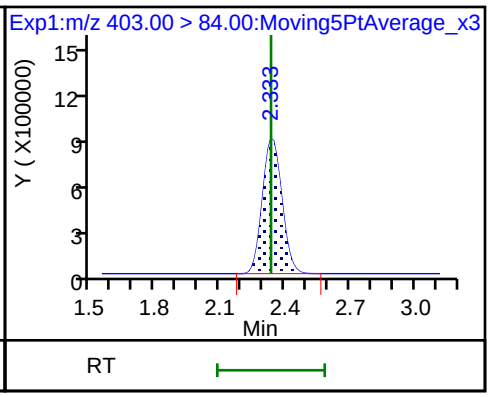
8 Perfluorohexanesulfonic acid



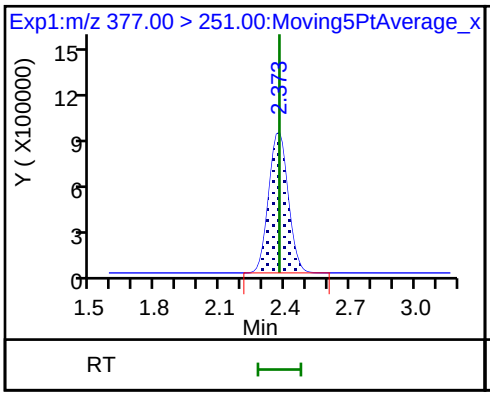
8 Perfluorohexanesulfonic acid



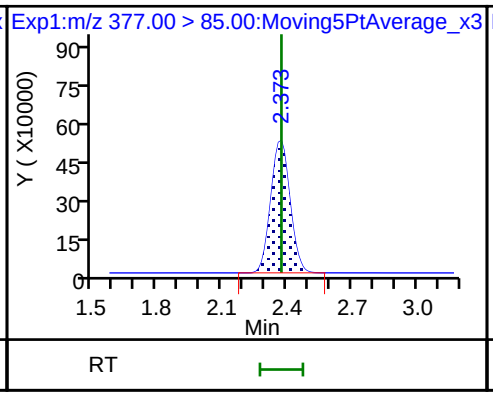
D 11 18O2 PFHxS



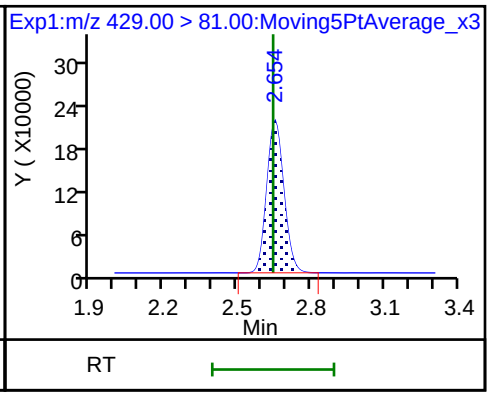
65 Adona



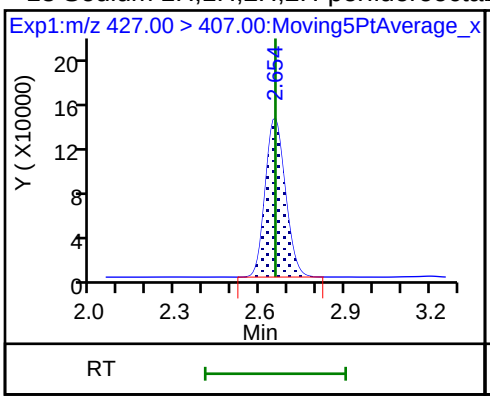
65 Adona



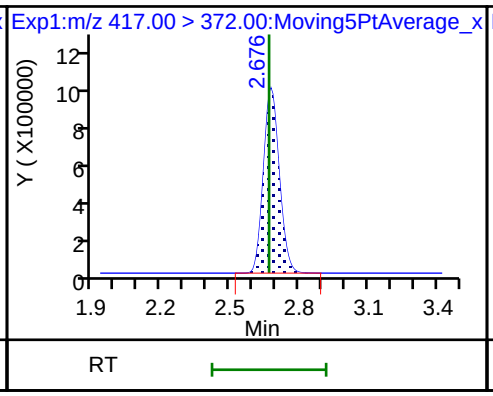
D 12 M2-6:2FTS



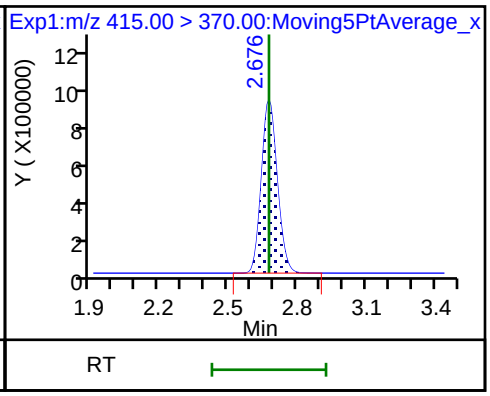
13 Sodium 1H,1H,2H,2H-perfluorooctane



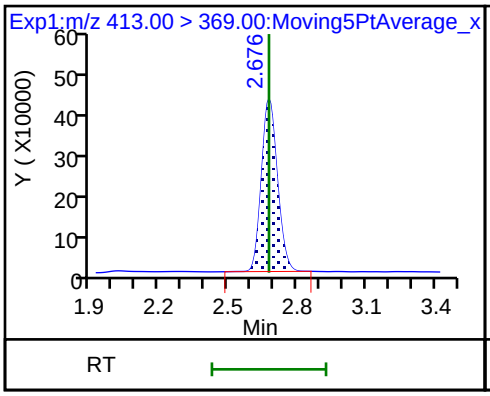
D 14 13C4 PFOA



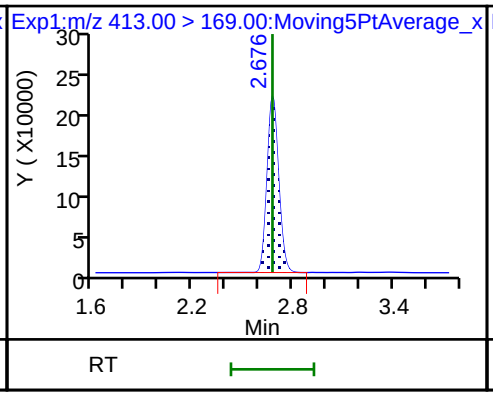
* 62 13C2-PFOA



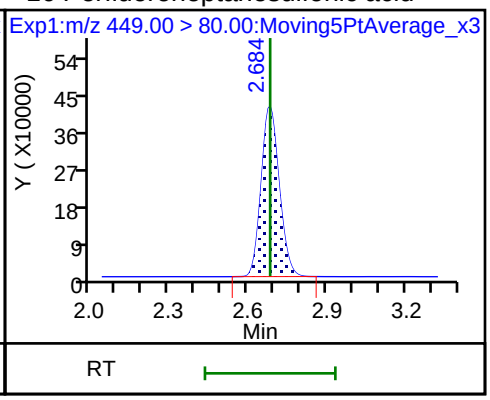
15 Perfluorooctanoic acid



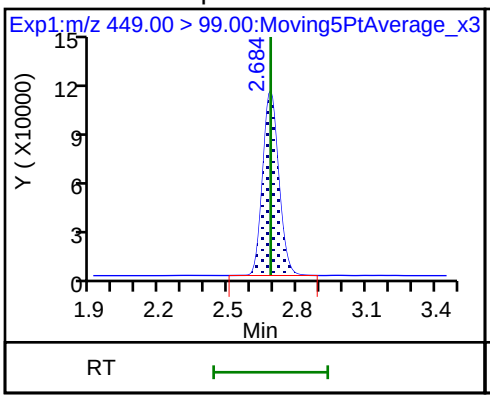
15 Perfluorooctanoic acid



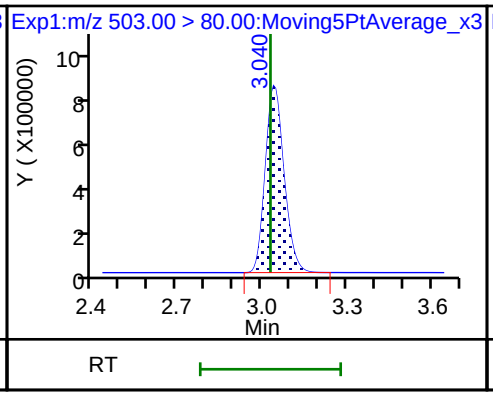
16 Perfluoroheptanesulfonic acid



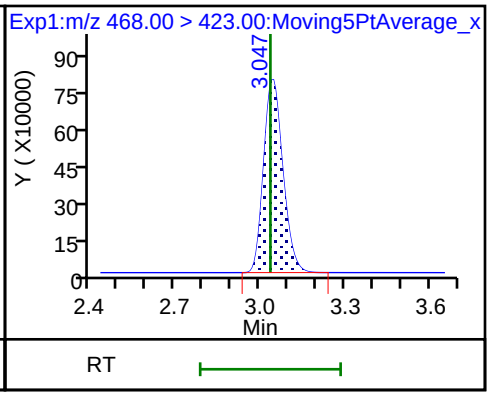
16 Perfluoroheptanesulfonic acid



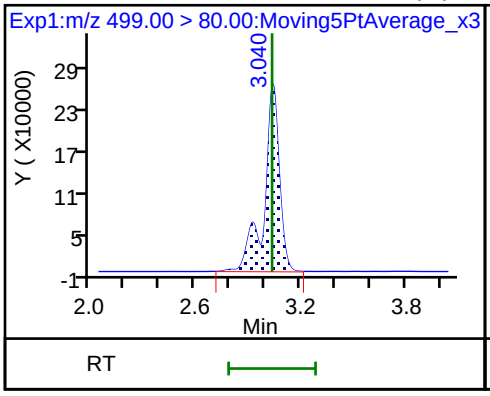
D 18 13C4 PFOS



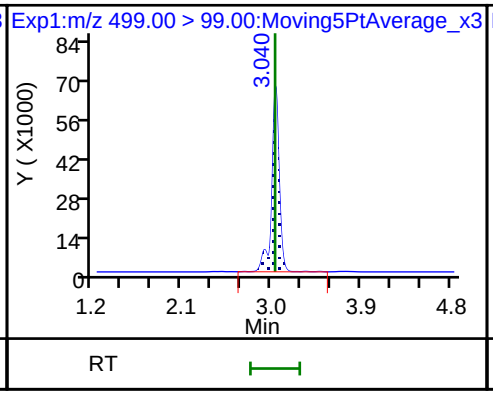
D 19 13C5 PFNA



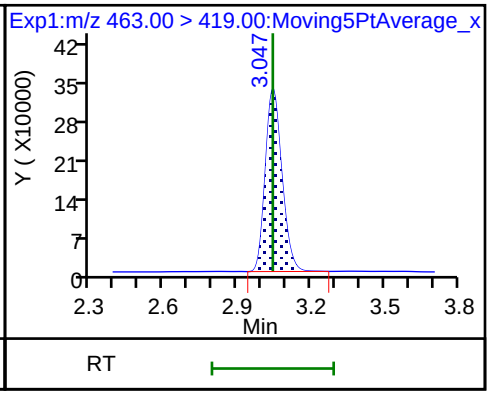
17 Perfluorooctane sulfonic acid (M)



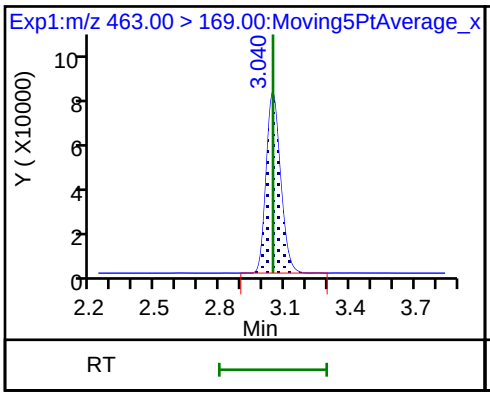
17 Perfluorooctane sulfonic acid



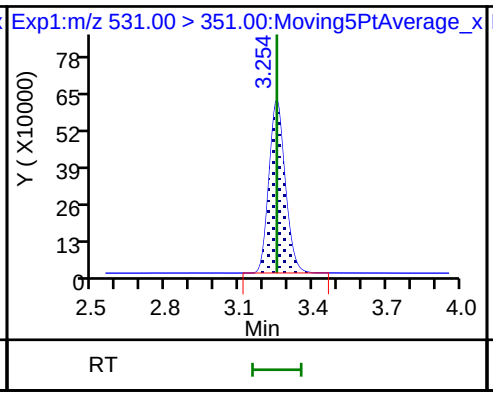
20 Perfluorononanoic acid



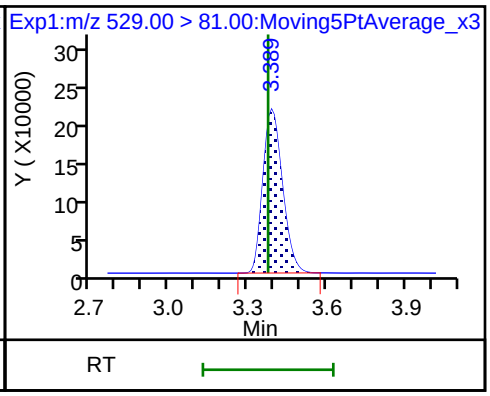
20 Perfluorononanoic acid



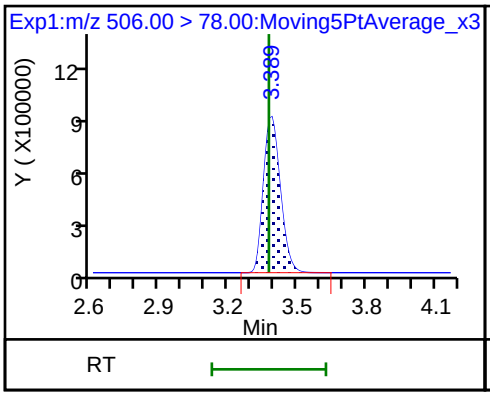
69 9-Chlorohexadecafluoro-3-oxanonane



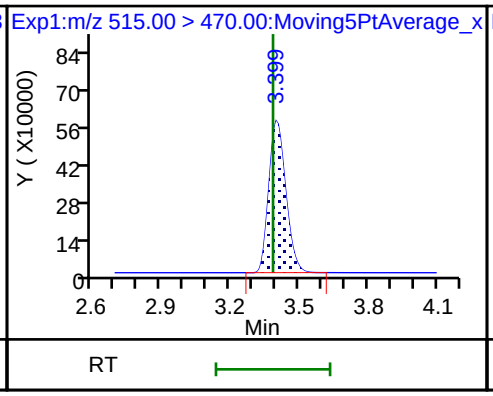
D 26 M2-8:2FTS



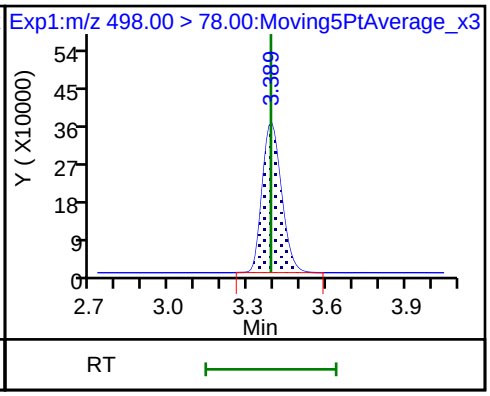
D 21 13C8 FOSA



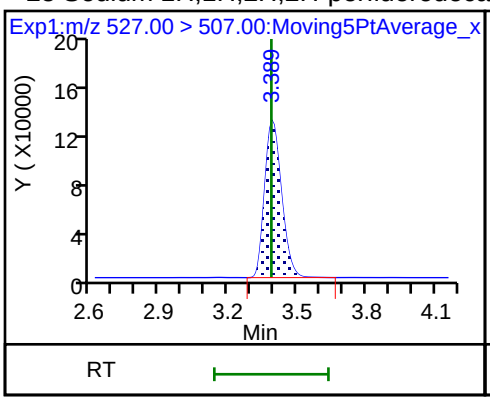
D 23 13C2 PFDA



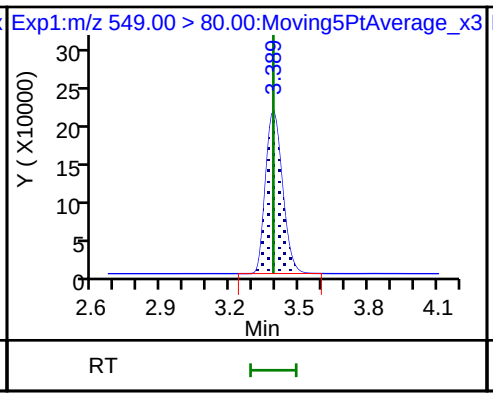
22 Perfluorooctane Sulfonamide



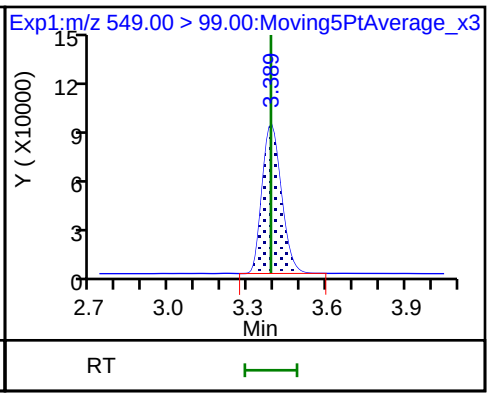
25 Sodium 1H,1H,2H,2H-perfluorodecane



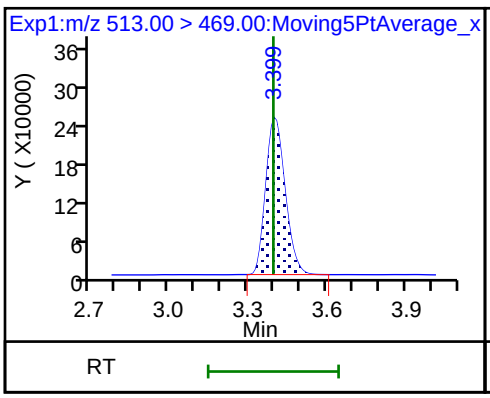
68 Perfluorononanesulfonic acid



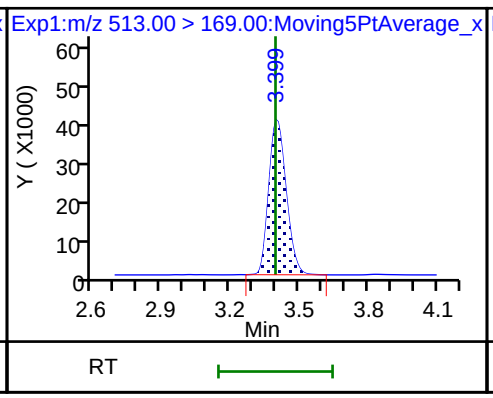
68 Perfluorononanesulfonic acid



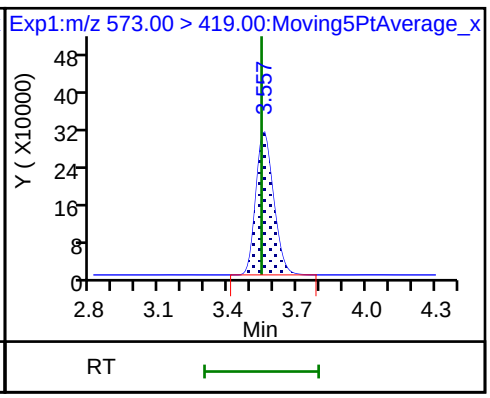
24 Perfluorodecanoic acid



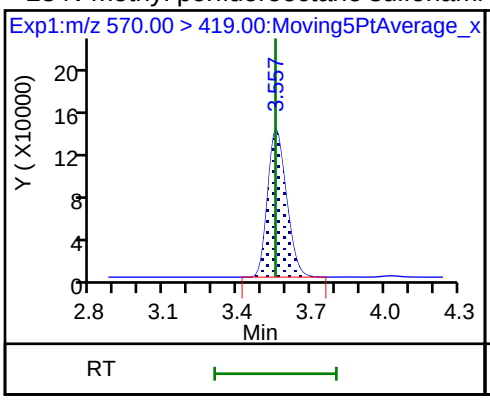
24 Perfluorodecanoic acid



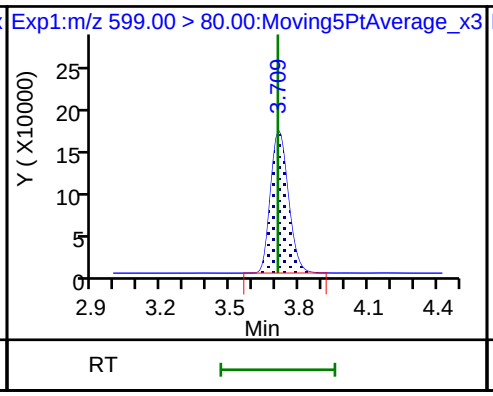
D 27 d3-NMeFOSAA



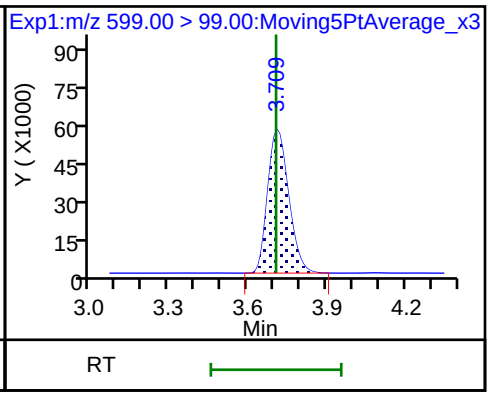
28 N-methyl perfluorooctane sulfonami



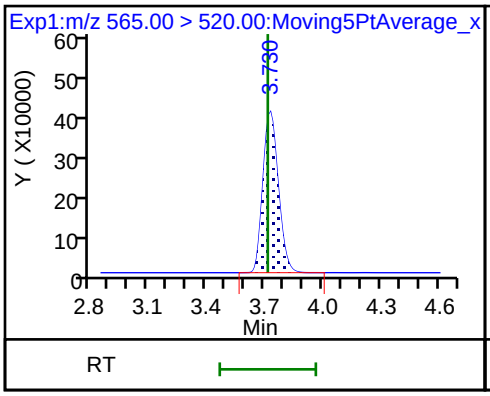
29 Perfluorodecane Sulfonic acid



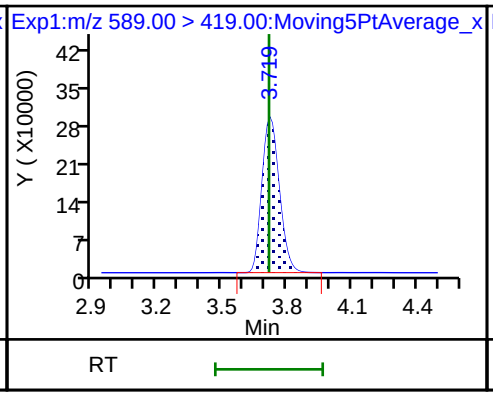
29 Perfluorodecane Sulfonic acid



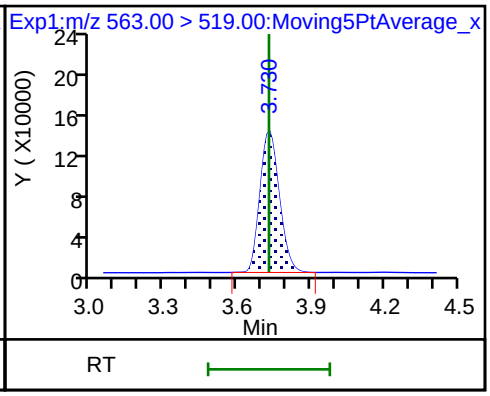
D 30 13C2 PFUnA



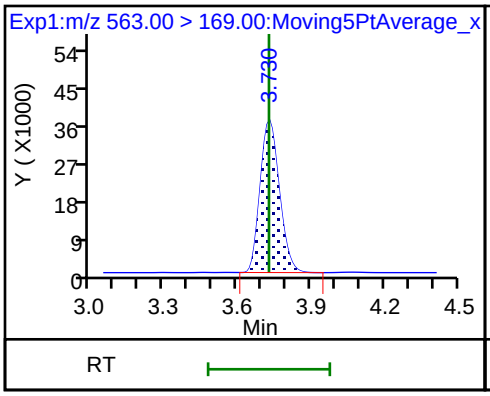
D 32 d5-NEtFOSAA



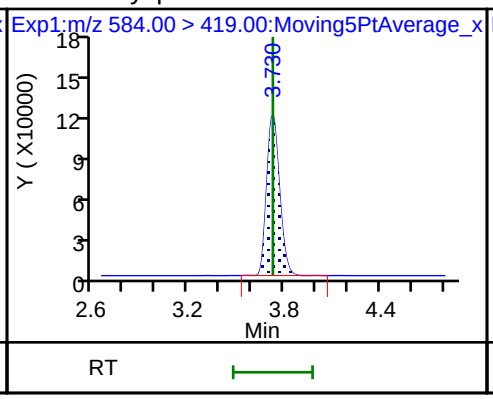
31 Perfluoroundecanoic acid



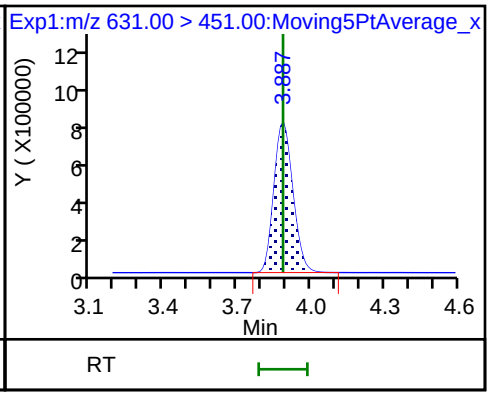
31 Perfluoroundecanoic acid



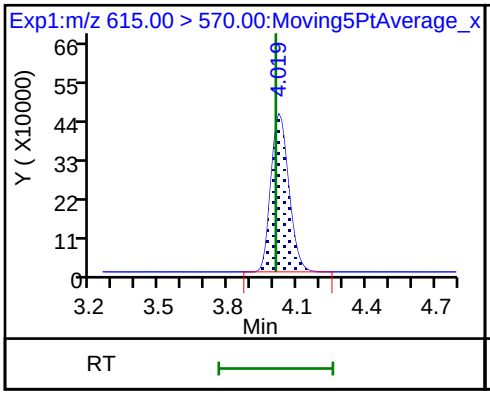
33 N-ethyl perfluorooctane sulfonamid



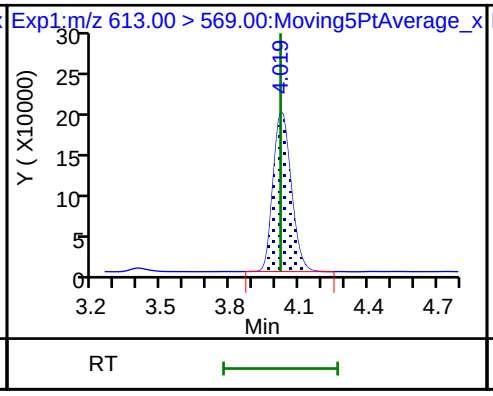
66 11-Chloroeicosafluoro-3-oxaundecan



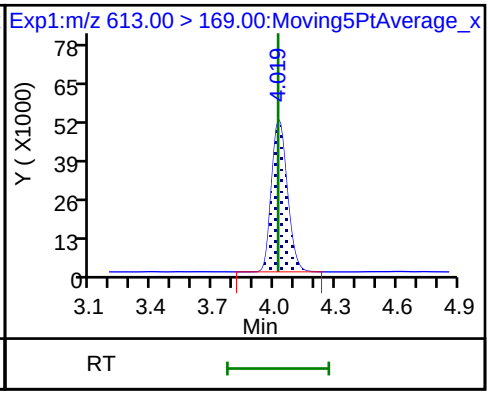
D 36 13C2 PFDoA



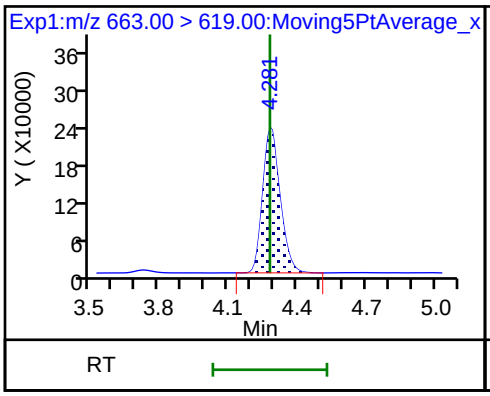
37 Perfluorododecanoic acid



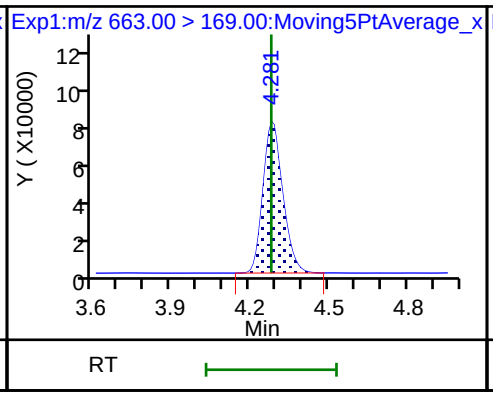
37 Perfluorododecanoic acid



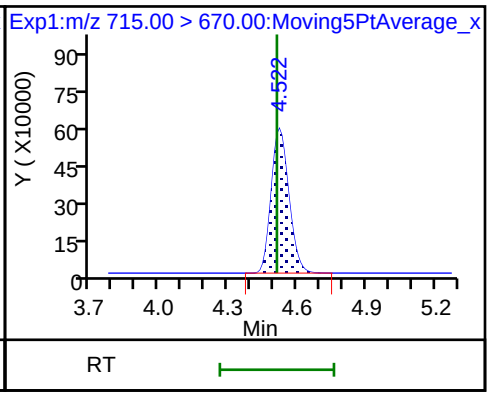
41 Perfluorotridecanoic acid



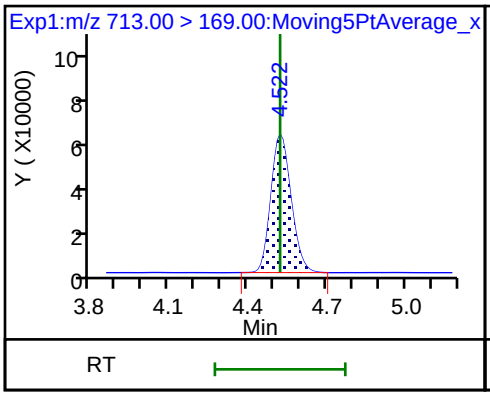
41 Perfluorotridecanoic acid



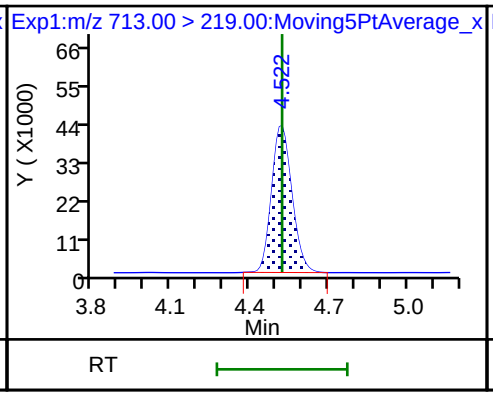
D 43 13C2-PFTeDA



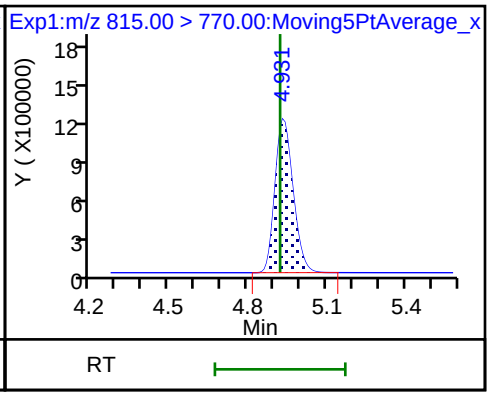
42 Perfluorotetradecanoic acid



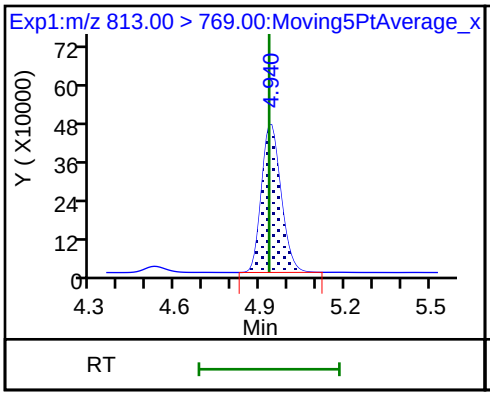
42 Perfluorotetradecanoic acid



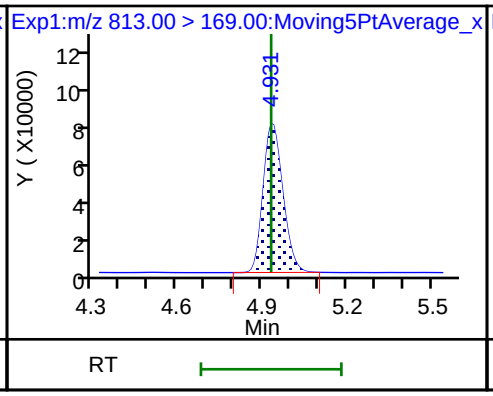
D 44 13C2-PFHxDA



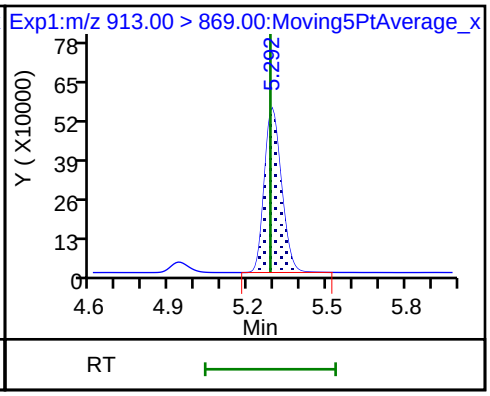
45 Perfluorohexadecanoic acid



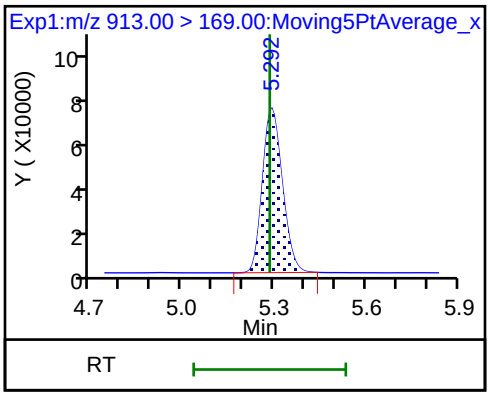
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MS | Lab Sample ID: 320-38611-1 MS

Matrix: Water | Lab File ID: 2018.05.10LLB_002.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 268.7(mL) | Date Analyzed: 05/10/2018 19:51

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	48.4		1.9	0.33
2706-90-3	Perfluoropentanoic acid (PFPeA)	48.6		1.9	0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	54.2		1.9	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	52.1		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	71.8		1.9	0.79
375-95-1	Perfluorononanoic acid (PFNA)	43.0		1.9	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	38.6		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	34.2		1.9	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	37.0		1.9	0.51
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	33.6		1.9	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	38.0		1.9	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	40.6		1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	34.2		1.9	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	36.7		1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	51.5		1.9	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	33.5		1.9	0.30
754-91-6	Perfluorooctane Sulfonamide (FOSA)	39.1		1.9	0.33
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	41.4		19	2.9
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	38.8		19	1.8
27619-97-2	6:2FTS	66.8		19	1.9
39108-34-4	8:2FTS	39.3		19	1.9

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MS | Lab Sample ID: 320-38611-1 MS

Matrix: Water | Lab File ID: 2018.05.10LLB_002.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 268.7(mL) | Date Analyzed: 05/10/2018 19:51

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	87		25-150
STL01893	13C5 PFPeA	107		25-150
STL00993	13C2 PFHxA	102		25-150
STL01892	13C4-PFHpA	108		25-150
STL00990	13C4 PFOA	103		25-150
STL00995	13C5 PFNA	98		25-150
STL00996	13C2 PFDA	98		25-150
STL00997	13C2 PFUnA	92		25-150
STL00998	13C2 PFDoA	91		25-150
STL02116	13C2-PFTeDA	88		25-150
STL02337	13C3-PFBS	101		25-150
STL00994	18O2 PFHxS	108		25-150
STL00991	13C4 PFOS	99		25-150
STL01056	13C8 FOSA	93		25-150
STL02118	d3-NMeFOSAA	105		25-150
STL02117	d5-NEtFOSAA	102		25-150
STL02279	M2-6:2FTS	130		25-150
STL02280	M2-8:2FTS	113		25-150

Report Date: 18-May-2018 15:23:36 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_002.d
Lims ID: 320-38611-A-1-B MS
Client ID: GC-MW-107(WG)
Sample Type: MS
Inject. Date: 10-May-2018 19:51:35 ALS Bottle#: 19 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-1-b ms
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: roycea Date: 18-May-2018 11:52:21

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.472	1.469	0.003	1.000	4251534	2.17		86.9	34732	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.472	1.478	-0.006	1.000	2055253	1.30		130	537	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.752	1.747	0.005	0.562	3384251	2.68		107	34630	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.752	1.753	-0.001	1.000	2104672	1.30		130	481	M
D 47 13C3-PFBS										
301.90 > 83.00	1.788	1.783	0.005	1.000	67721	2.34		101	266	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.788	1.798	-0.010	1.000	2485546	1.09		123	985	
298.90 > 99.00	1.788	1.798	-0.010	1.000	1065380		2.33(1.25-3.74)		1701	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.010	2.011	-0.001	1.000	694971	1.49		159	26433	
D 7 13C2 PFHxA										
315.00 > 270.00	2.044	2.048	-0.004	1.000	3561621	2.55		102	60198	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.044	2.056	-0.012	1.000	2109407	1.46		146	941	
313.00 > 119.00	2.044	2.056	-0.012	1.000	194403		10.85(5.03-15.10)		1707	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.067	2.079	-0.012	1.000	1968865	0.9453		101	3232	
349.00 > 99.00	2.067	2.079	-0.012	1.000	734938		2.68(1.36-4.07)		3373	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.157	2.150	0.007	1.000	165614	1.92		76.7	3080	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.146	2.158	-0.012	0.995	226035	1.22		122	407	
D 9 13C4-PFHpA										
367.00 > 322.00	2.380	2.384	-0.004	1.000	3675150	2.71		108	71318	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.380	2.392	-0.012	1.000	2060309	1.40		140	1585	
363.00 > 169.00	2.380	2.392	-0.012	1.000	776190		2.65(1.13-3.40)		6143	
D 11 18O2 PFHxS										
403.00 > 84.00	2.403	2.395	0.008	1.000	4273335	2.55		108	76543	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.403	2.403	0.0	1.000	1878218	0.9184		101	1717	
399.00 > 99.00	2.391	2.403	-0.012	0.995	600915		3.13(1.50-4.49)		2430	
65 Adona										
377.00 > 251.00	2.425	2.437	-0.012	1.000	4361148	1.09		109	62796	
377.00 > 85.00	2.425	2.437	-0.012	1.000	2642063		1.65(0.84-2.53)		15461	
D 12 M2-6:2FTS										
429.00 > 81.00	2.718	2.712	0.006	1.000	896429	3.08		130	5454	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.718	2.718	0.0	1.000	1145096	1.79		189	26128	
* 62 13C2-PFOA										
415.00 > 370.00	2.741	2.741	0.0		3638357	2.50			66910	
D 14 13C4 PFOA										
417.00 > 372.00	2.741	2.742	-0.001	1.000	3466256	2.57		103	77866	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.741	2.749	-0.008	1.000	3091737	1.93		193	1574	
413.00 > 169.00	2.741	2.749	-0.008	1.000	1635978		1.89(0.84-2.52)		7308	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.749	2.749	0.0	1.000	1517521	0.9857		104	5221	
449.00 > 99.00	2.749	2.749	0.0	1.000	411477		3.69(1.94-5.82)		4257	
D 18 13C4 PFOS										
503.00 > 80.00	3.118	3.106	0.012	1.000	2771432	2.36		98.8	12258	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.118	3.114	0.004	1.000	1743985	1.38		149	5564	
499.00 > 99.00	3.118	3.114	0.004	1.000	357432		4.88(2.31-6.93)		3314	
D 19 13C5 PFNA										
468.00 > 423.00	3.118	3.114	0.004	1.000	2833092	2.44		97.7	56244	
20 Perfluorononanoic acid										
463.00 > 419.00	3.118	3.122	-0.004	1.000	1365966	1.16		116	2513	
463.00 > 169.00	3.118	3.122	-0.004	1.000	354022		3.86(1.90-5.69)		8561	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.326	3.323	0.003	1.000	1983659	0.9075		97.4	27113	
D 21 13C8 FOSA										
506.00 > 78.00	3.445	3.431	0.014	1.000	3418256	2.33		93.3	36371	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.445	3.441	0.004	1.000	1453666	1.05		105	26886	
D 26 M2-8:2FTS										
529.00 > 81.00	3.473	3.459	0.014	1.000	946519	2.70		113	8032	
D 23 13C2 PFDA										
515.00 > 470.00	3.482	3.468	0.014	1.000	2379861	2.44		97.6	58754	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.473	3.469	0.004	1.000	528706	1.06		110	34143	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.463	3.469	-0.006	1.000	867396	0.9357		97.5	7996	
549.00 > 99.00	3.463	3.469	-0.006	1.000	320849		2.70(1.33-3.97)		8039	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.482	3.478	0.004	1.000	1017491	1.04		104	3562	
513.00 > 169.00	3.482	3.478	0.004	1.000	185850		5.47(2.36-7.09)		3652	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.637	3.624	0.013	1.000	1449291	2.62		105	24831	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.637	3.634	0.003	1.000	642864	1.11		111	7567	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.803	3.790	0.013	1.000	1395859	2.56		102	11739	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.792	3.790	0.002	1.000	678134	0.9007		93.4	3052	
599.00 > 99.00	3.792	3.790	0.002	1.000	228604		2.97(1.39-4.16)		6116	
D 30 13C2 PFUnA										
565.00 > 520.00	3.813	3.800	0.013	1.000	1929289	2.29		91.7	32708	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.813	3.811	0.002	1.000	599150	0.9187		91.9	2484	
563.00 > 169.00	3.813	3.811	0.002	1.000	161663		3.71(2.12-6.36)		4382	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.813	3.811	0.002	1.003	543587	1.04		104	12495	
35 MeFOSA										
512.00 > 169.00	3.647	3.875	-0.228		6641	NC			255	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.968	3.968	0.0	1.000	2863414	0.8478		90.0	39948	
D 36 13C2 PFDoA										
615.00 > 570.00	4.102	4.091	0.011	1.000	2066062	2.27		91.0	21931	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.102	4.102	0.0	1.000	856266	0.99		99.4	1098	
613.00 > 169.00	4.102	4.102	0.0	1.000	209984		4.08(2.13-6.40)		2501	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.372	4.362	0.010	1.000	905501	0.9015		90.2	893	
663.00 > 169.00	4.372	4.362	0.010	1.000	266170		3.40(1.25-3.76)		4107	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.603	4.595	0.008	1.000	2540292	2.21		88.2	18245	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.603	4.605	-0.002	1.000	260698	1.02		102	3000	
713.00 > 219.00	4.603	4.605	-0.002	1.000	185139		1.41(0.71-2.13)		2993	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.017	5.010	0.007	1.000	4347547	2.32		92.8	13495	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.017	5.019	-0.002	1.000	1693472	1.01		101	724	
813.00 > 169.00	5.017	5.019	-0.002	1.000	280513		6.04(2.86-8.58)		2611	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.380	5.382	-0.002	1.000	1859906	1.07		107	669	
913.00 > 169.00	5.380	5.382	-0.002	1.000	228591		8.14(3.83-11.48)		2256	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:37 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_002.d

Injection Date: 10-May-2018 19:51:35 Instrument ID: A8_N

Lims ID: 320-38611-A-1-B MS

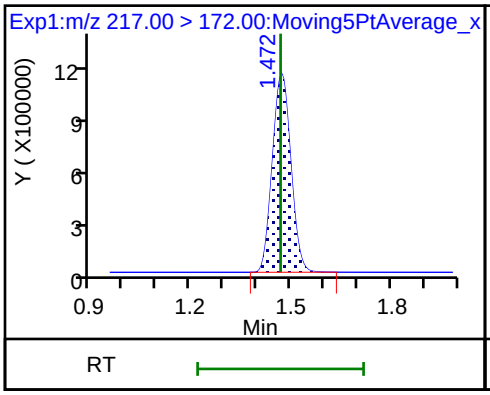
Client ID: GC-MW-107(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 19 Worklist Smp#: 4

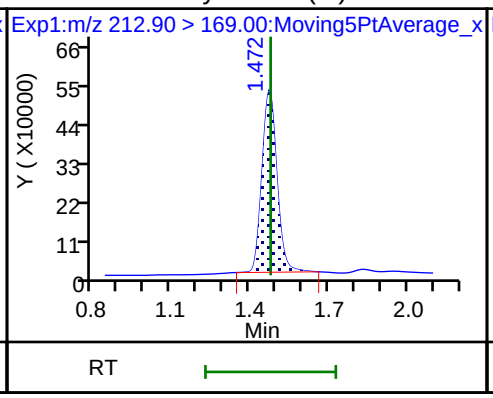
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

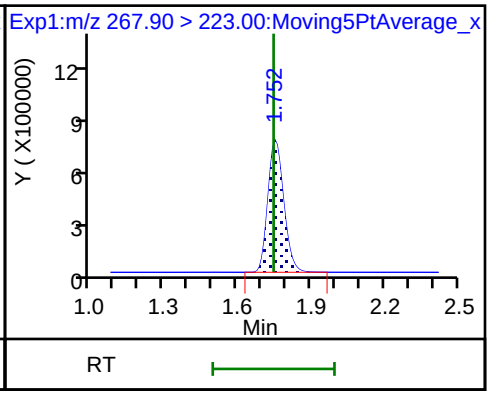
D 1 13C4 PFBA



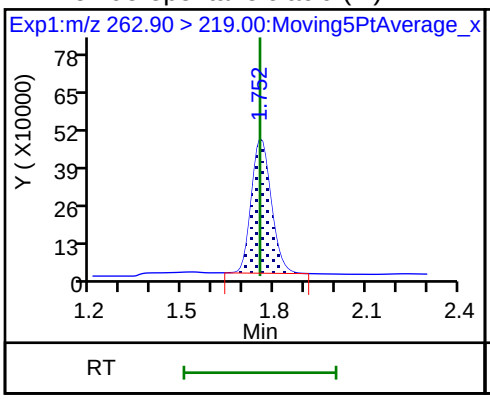
2 Perfluorobutyric acid (M)



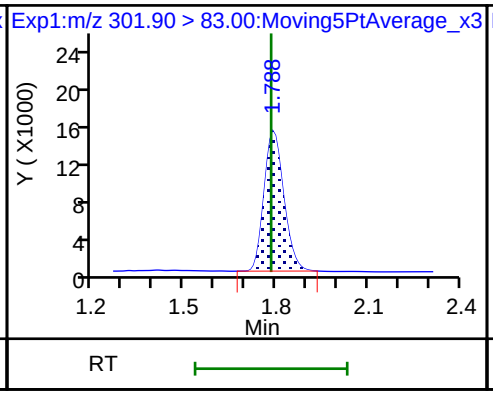
D 3 13C5-PFPeA



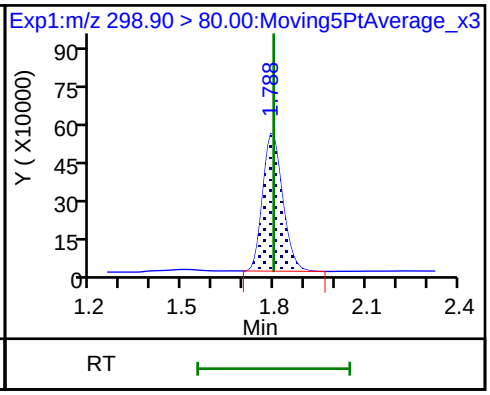
4 Perfluoropentanoic acid (M)



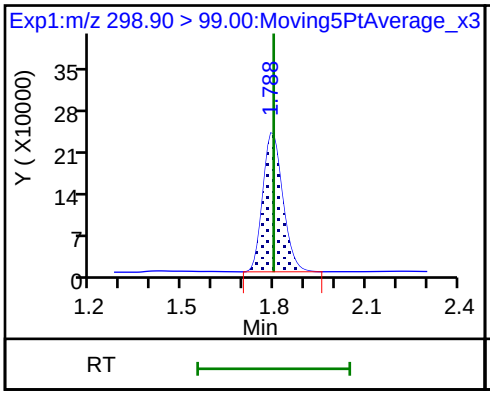
D 47 13C3-PFBS



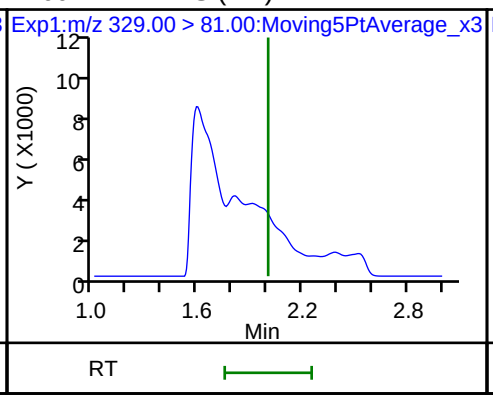
5 Perfluorobutanesulfonic acid



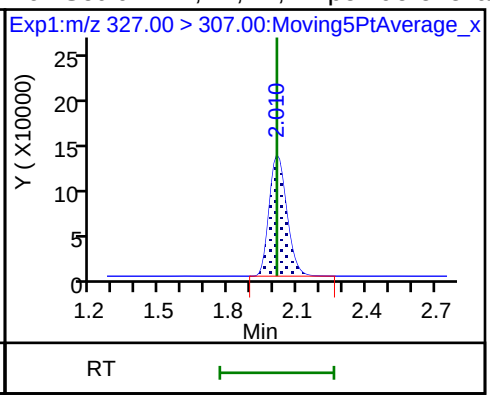
5 Perfluorobutanesulfonic acid



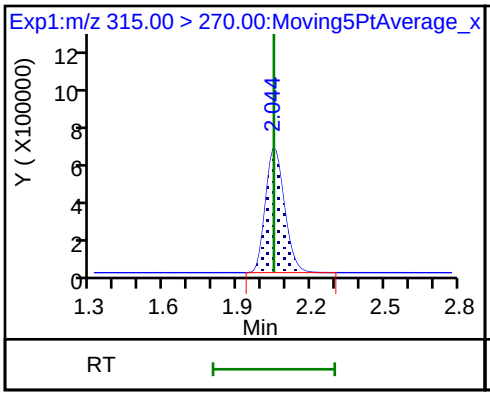
D 60 M2-4:2FTS (ND)



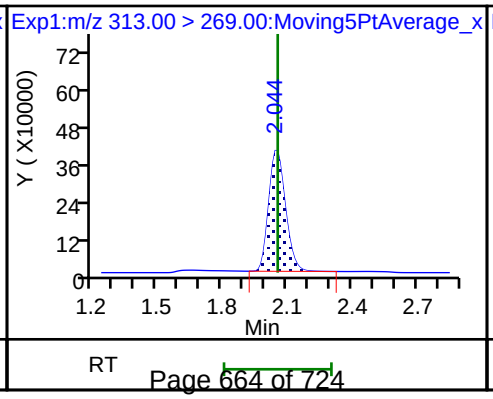
61 Sodium 1H,1H,2H,2H-perfluorohexane



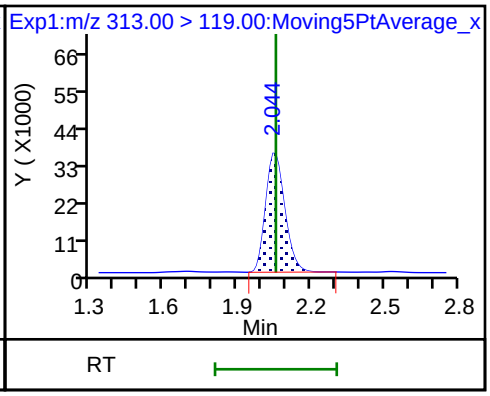
D 7 13C2 PFHxA



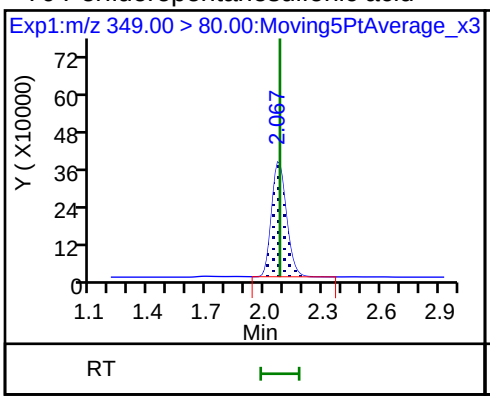
6 Perfluorohexanoic acid



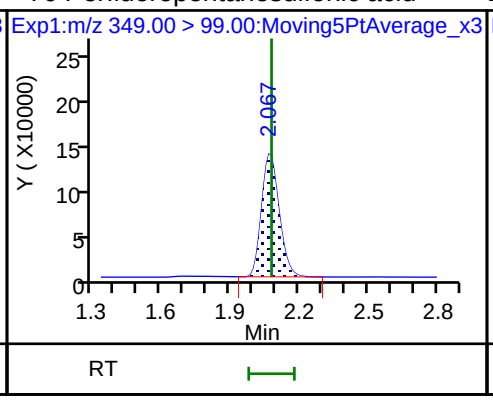
6 Perfluorohexanoic acid



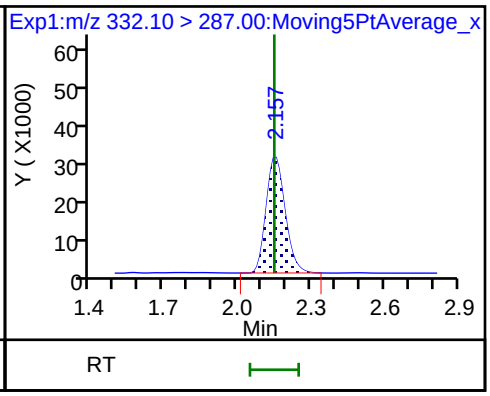
70 Perfluoropentanesulfonic acid



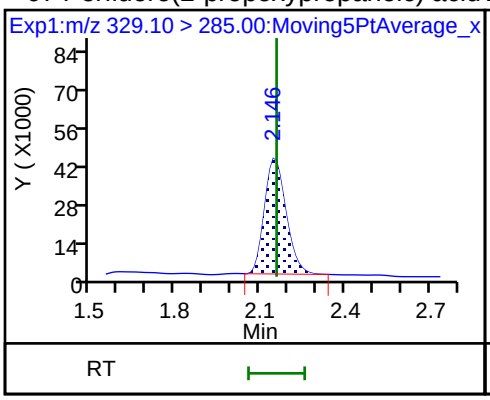
70 Perfluoropentanesulfonic acid



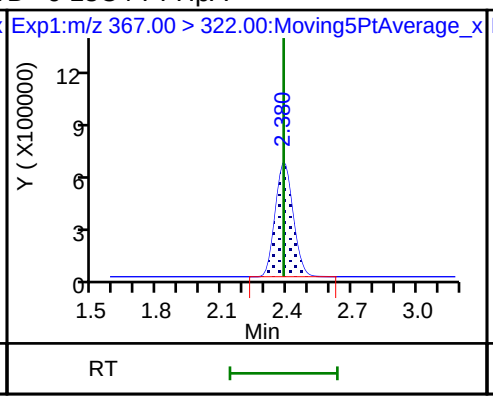
D 64 13C3 HFPO-DA



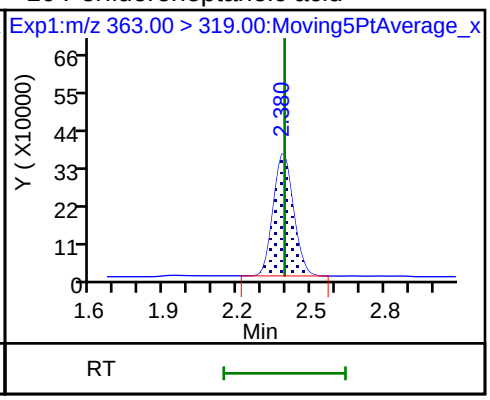
67 Perfluoro(2-propoxypropanoic) acid



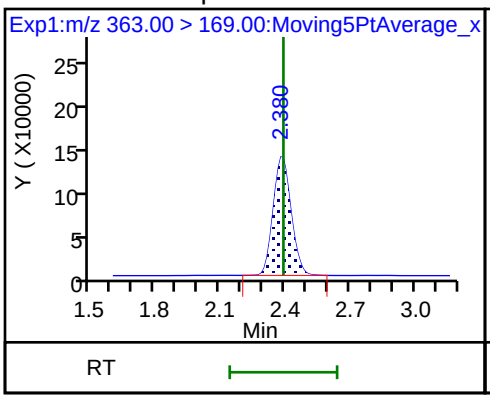
D 9 13C4-PFHpA



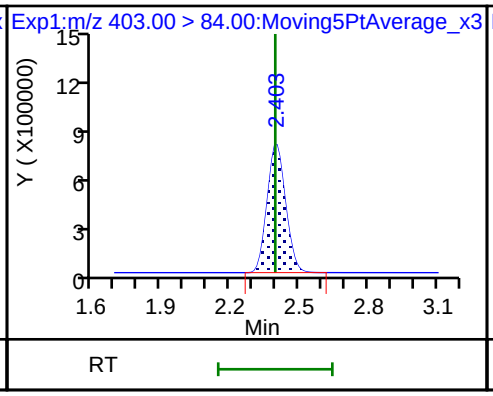
10 Perfluoroheptanoic acid



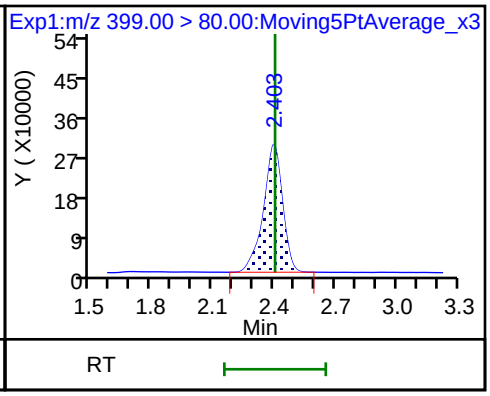
10 Perfluoroheptanoic acid



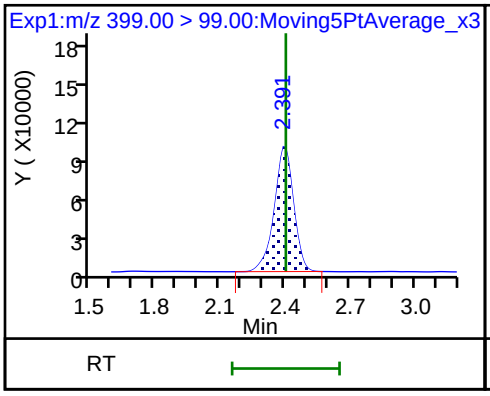
D 11 18O2 PFHxS



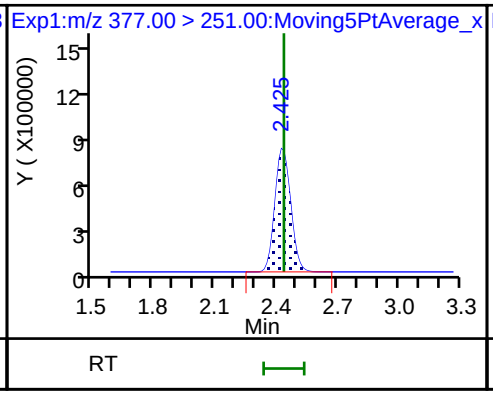
8 Perfluorohexanesulfonic acid



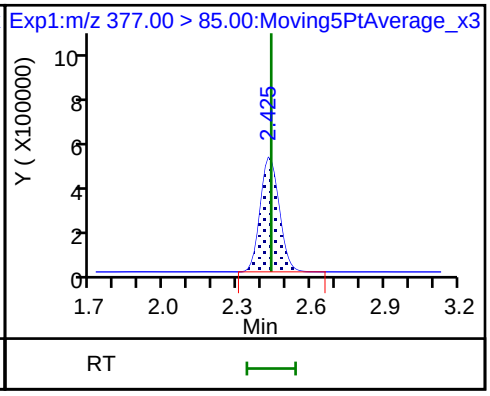
8 Perfluorohexanesulfonic acid



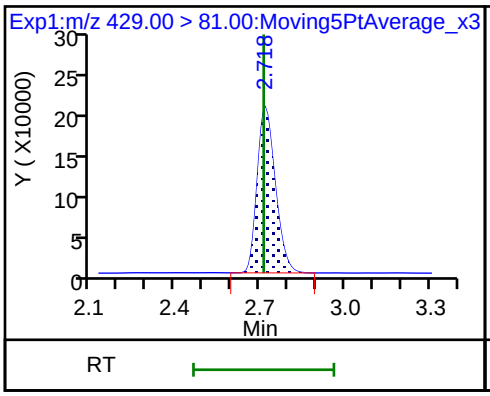
65 Adona



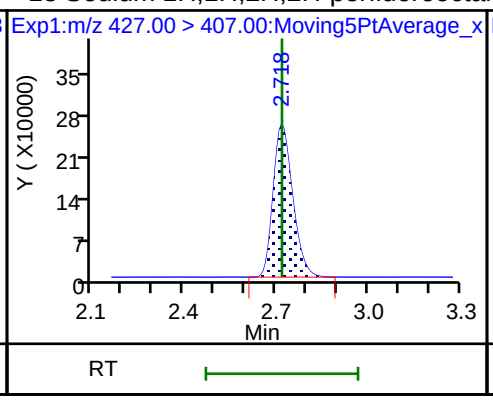
65 Adona



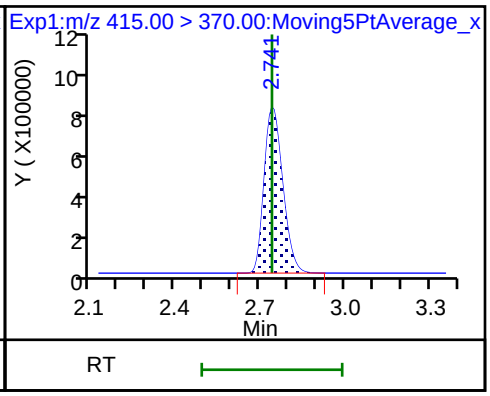
D 12 M2-6:2FTS



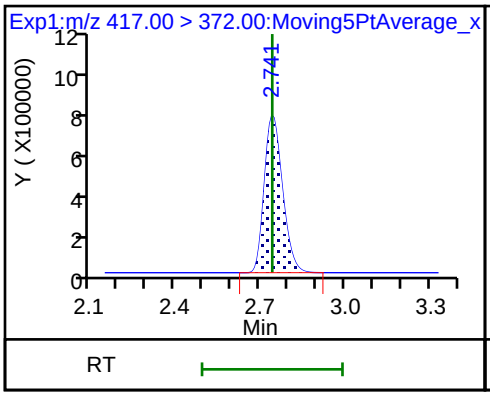
13 Sodium 1H,1H,2H,2H-perfluorooctane



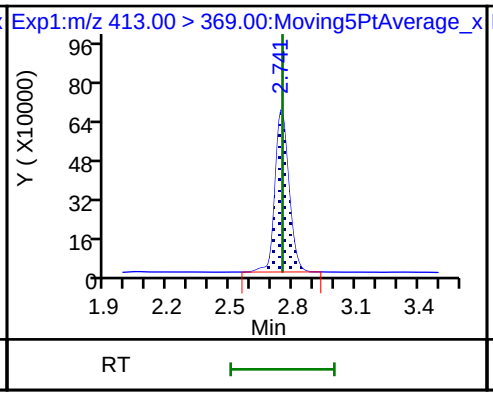
M2 13C2-PFOA



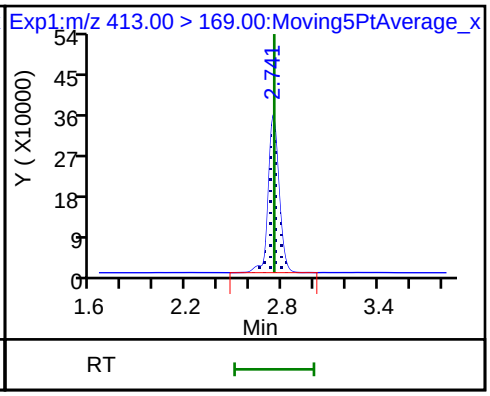
D 14 13C4 PFOA



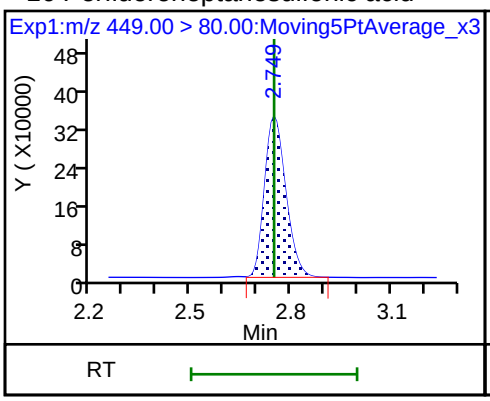
15 Perfluorooctanoic acid



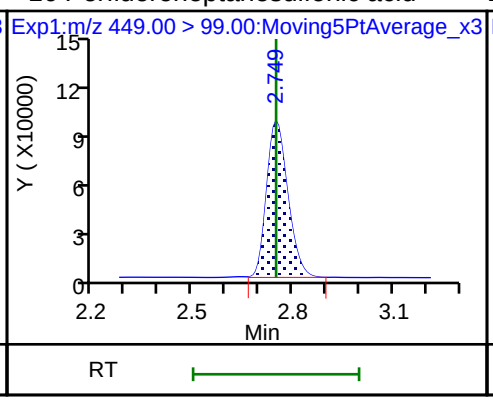
15 Perfluorooctanoic acid



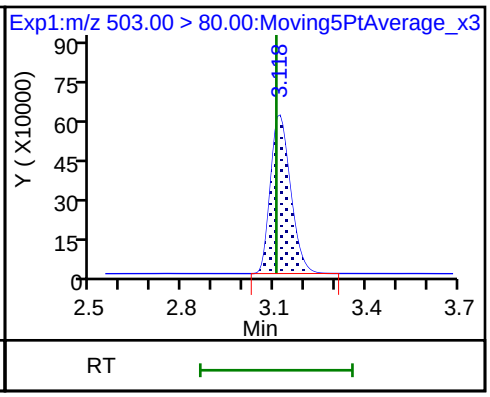
16 Perfluoroheptanesulfonic acid



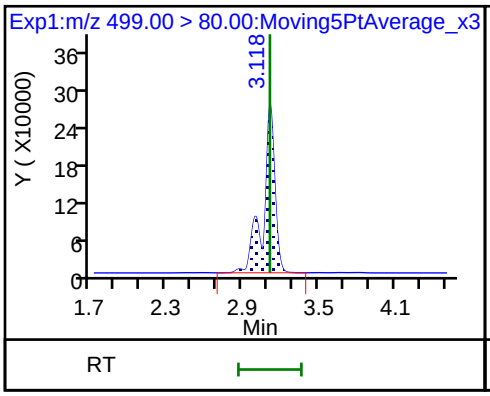
16 Perfluoroheptanesulfonic acid



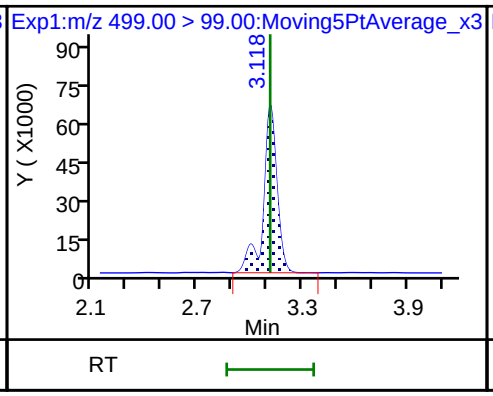
D 18 13C4 PFOS



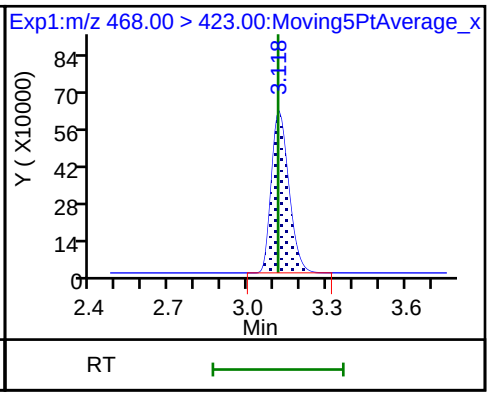
17 Perfluorooctane sulfonic acid



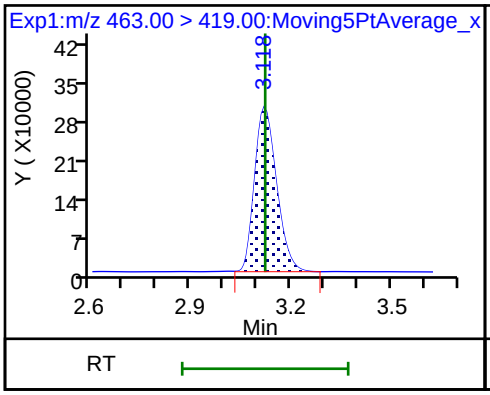
17 Perfluorooctane sulfonic acid



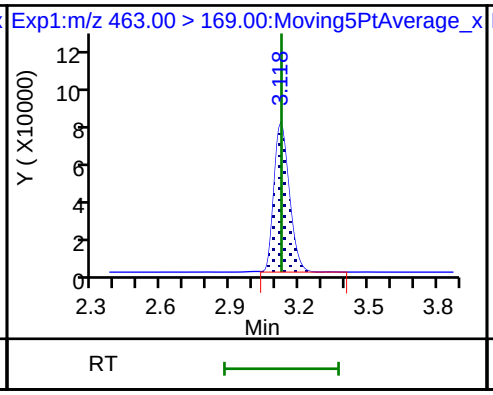
D 19 13C5 PFNA



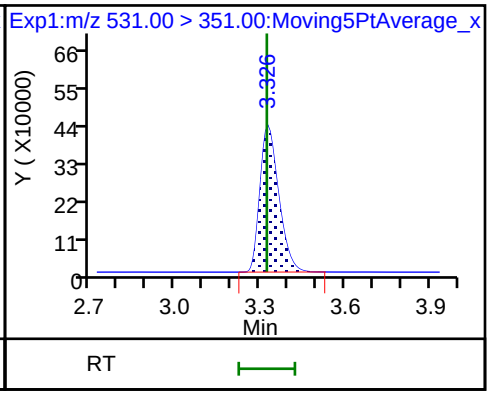
20 Perfluorononanoic acid



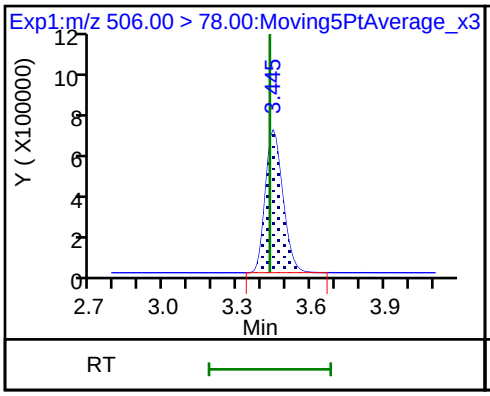
20 Perfluorononanoic acid



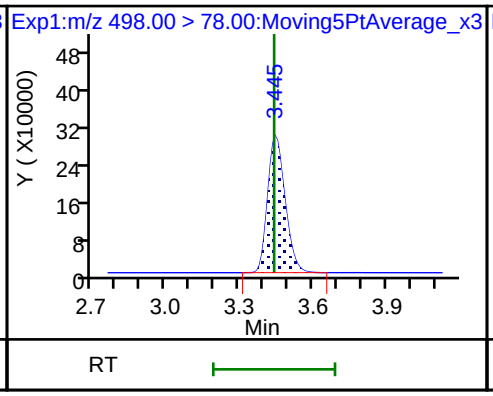
69 9-Chlorohexadecafluoro-3-oxanonane



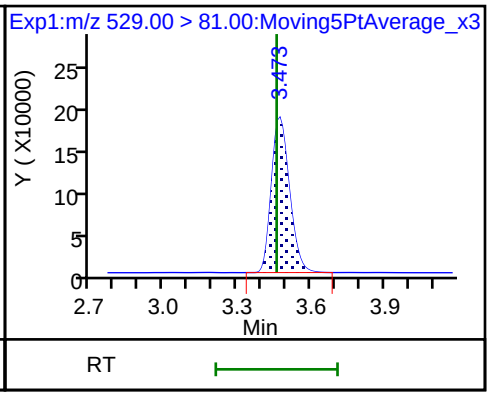
D 21 13C8 FOSA



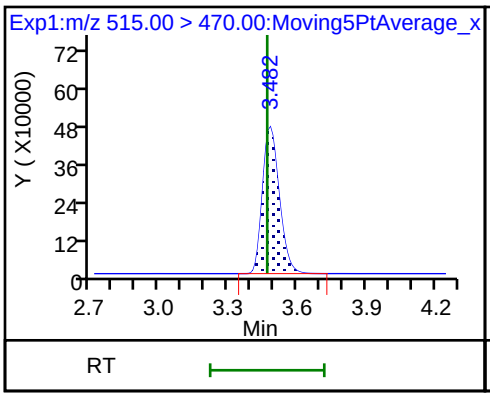
22 Perfluorooctane Sulfonamide



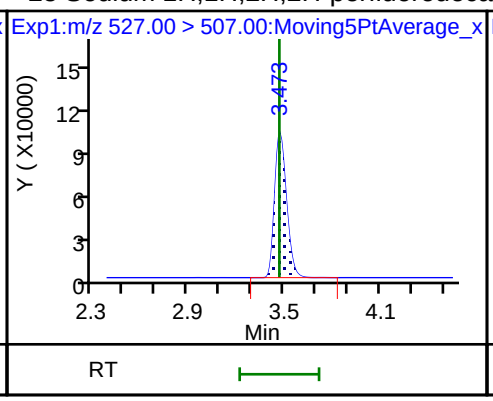
D 26 M2-8:2FTS



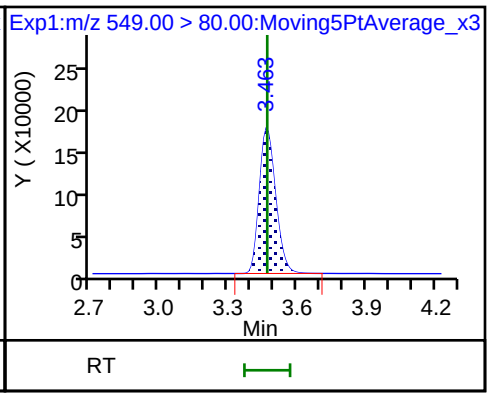
D 23 13C2 PFDA



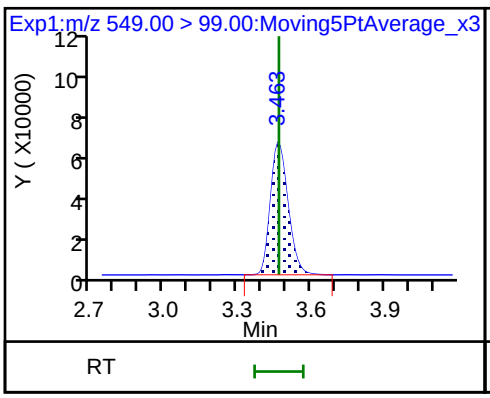
25 Sodium 1H,1H,2H,2H-perfluorodecane



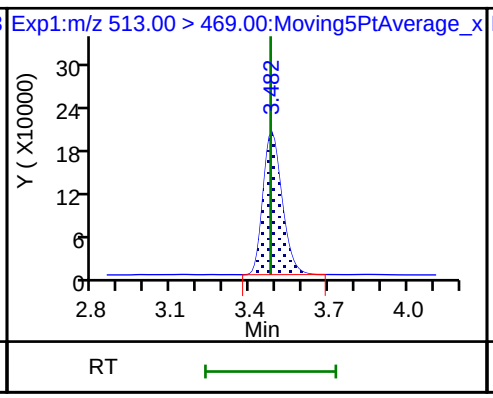
68 Perfluorononanesulfonic acid



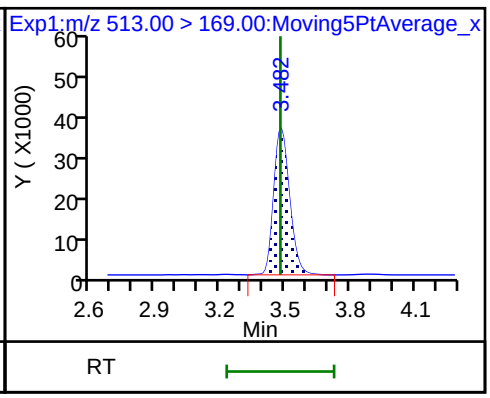
68 Perfluorononanesulfonic acid



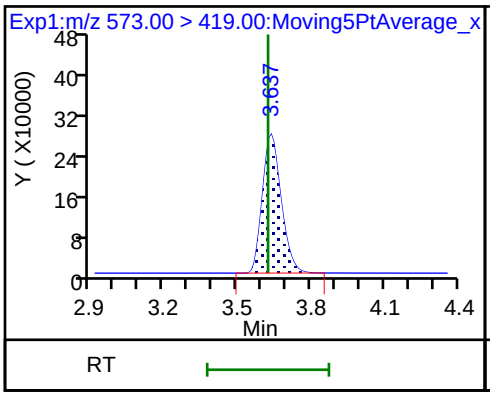
24 Perfluorodecanoic acid



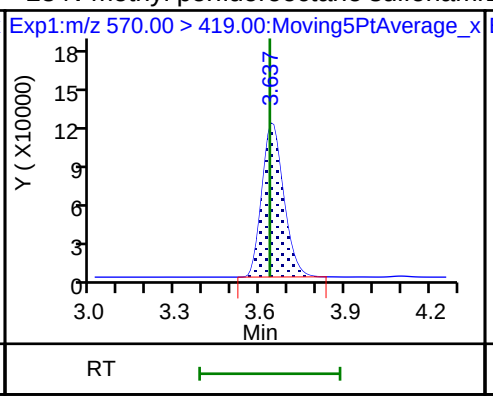
24 Perfluorodecanoic acid



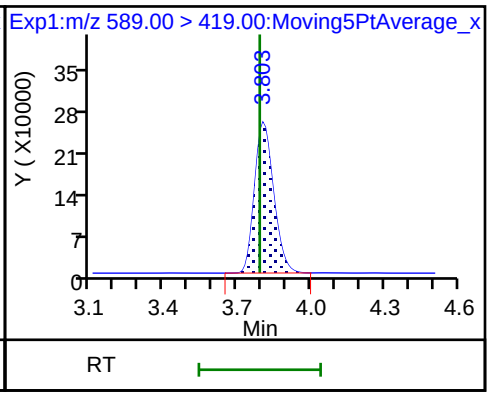
D 27 d3-NMeFOSAA



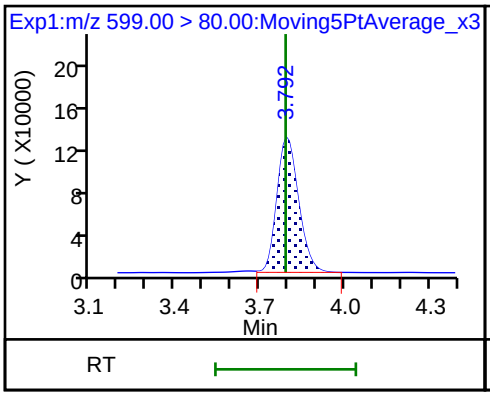
28 N-methyl perfluorooctane sulfonami



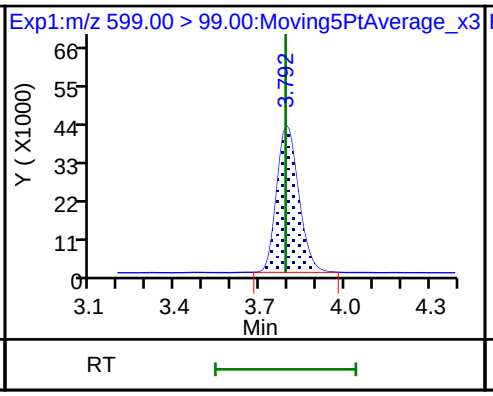
D 32 d5-NEtFOSAA



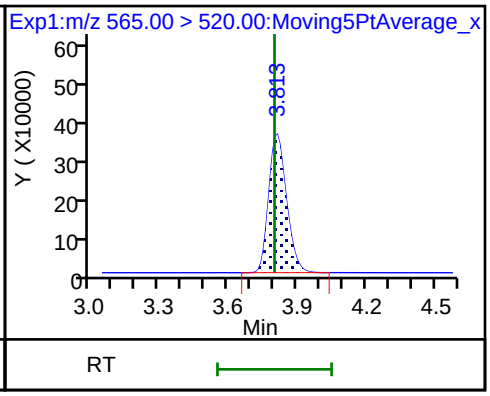
29 Perfluorodecane Sulfonic acid



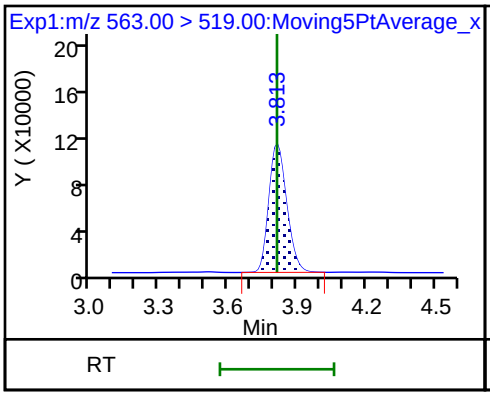
29 Perfluorodecane Sulfonic acid



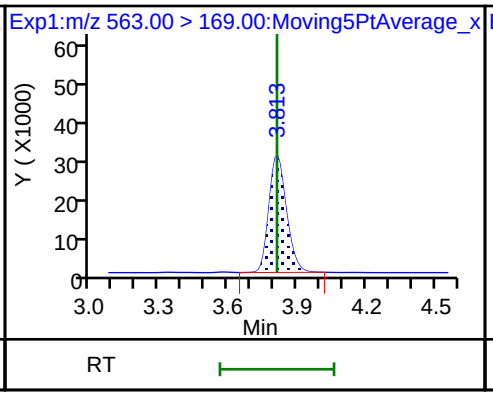
D 30 13C2 PFUnA



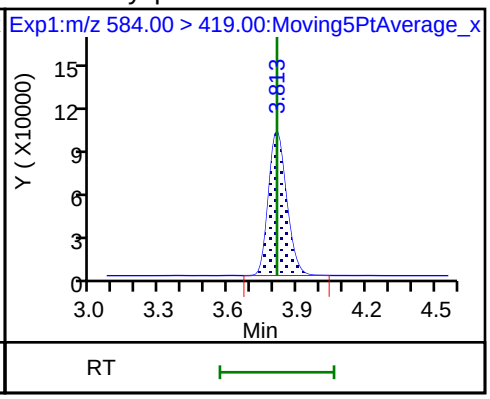
31 Perfluoroundecanoic acid



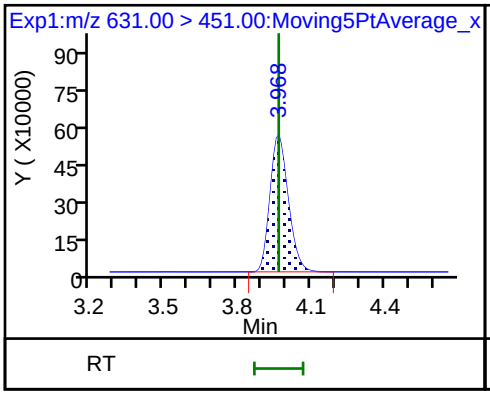
31 Perfluoroundecanoic acid



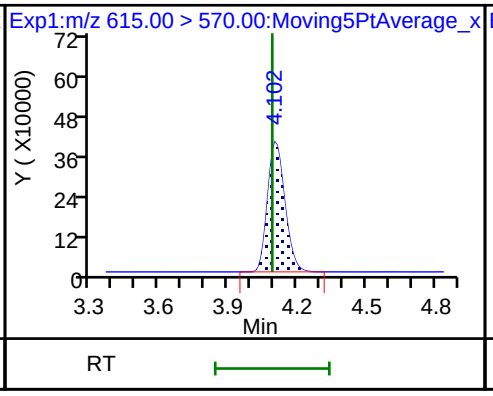
33 N-ethyl perfluorooctane sulfonamid



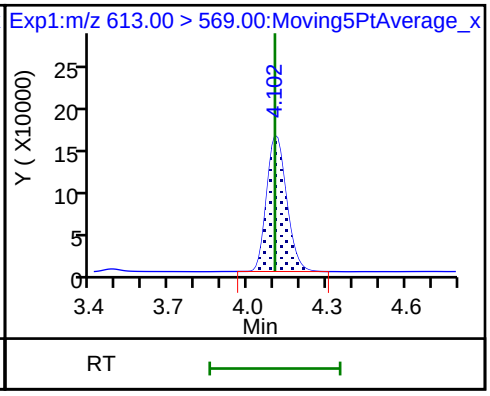
66 11-Chloroeicosafluoro-3-oxaundecan



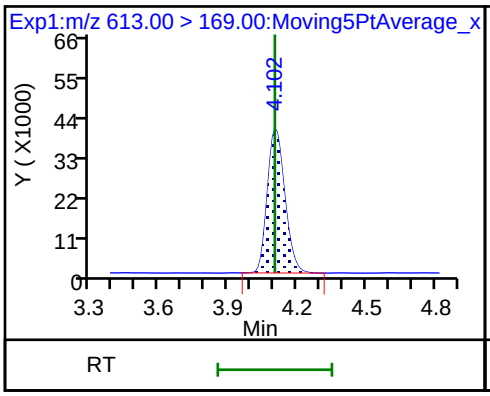
D 36 13C2 PFDoA



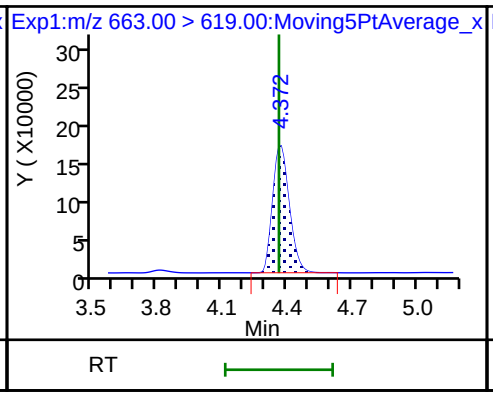
37 Perfluorododecanoic acid



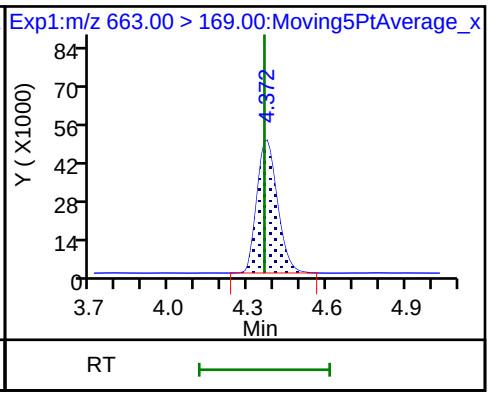
37 Perfluorododecanoic acid



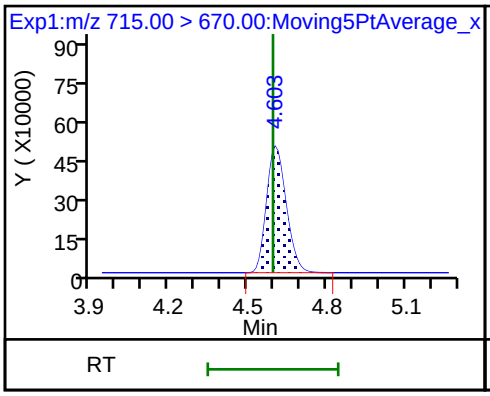
41 Perfluorotridecanoic acid



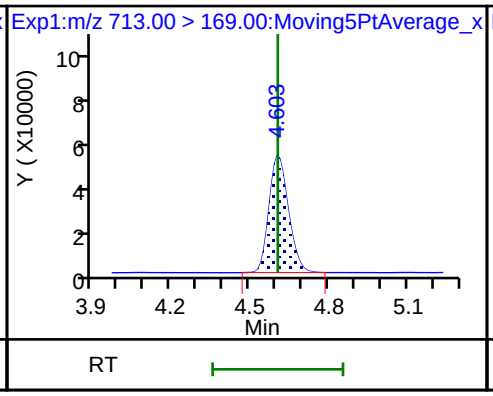
41 Perfluorotridecanoic acid



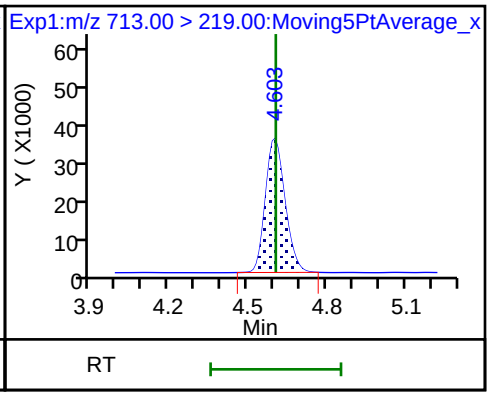
D 43 13C2-PFTeDA



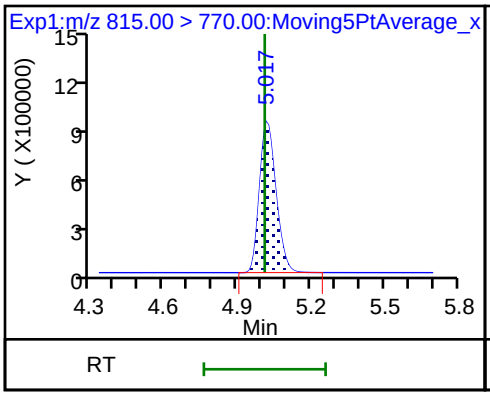
42 Perfluorotetradecanoic acid



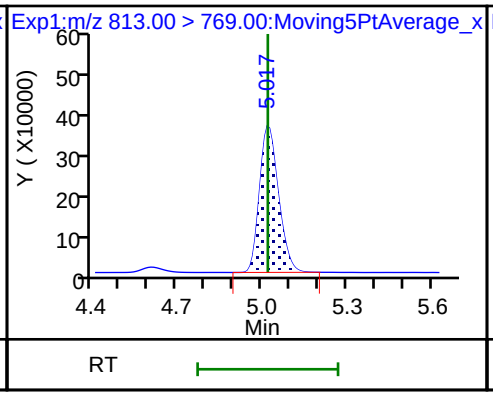
42 Perfluorotetradecanoic acid



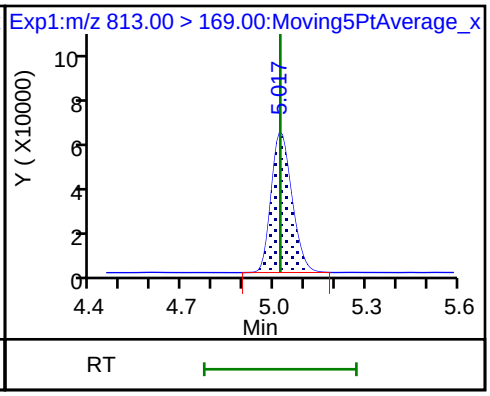
D 44 13C2-PFHxDA



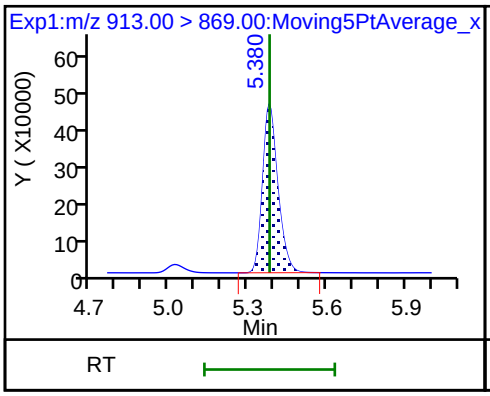
45 Perfluorohexadecanoic acid



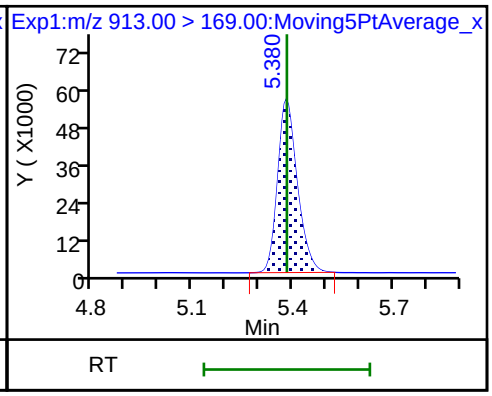
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

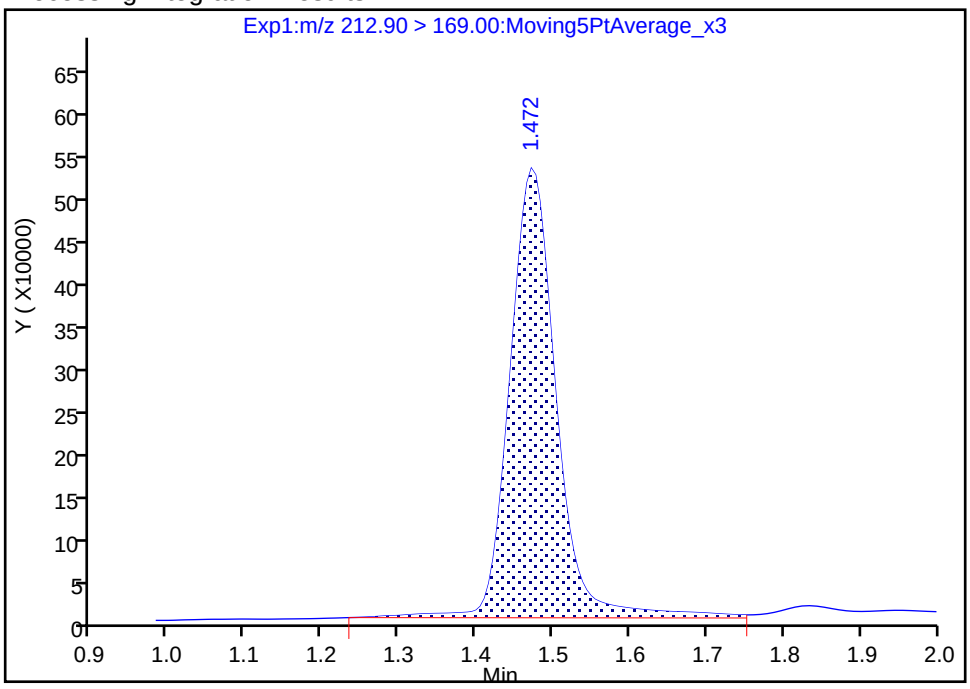
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_002.d
Injection Date: 10-May-2018 19:51:35 Instrument ID: A8_N
Lims ID: 320-38611-A-1-B MS
Client ID: GC-MW-107(WG)
Operator ID: SACINSTLCMS01 ALS Bottle#: 19 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

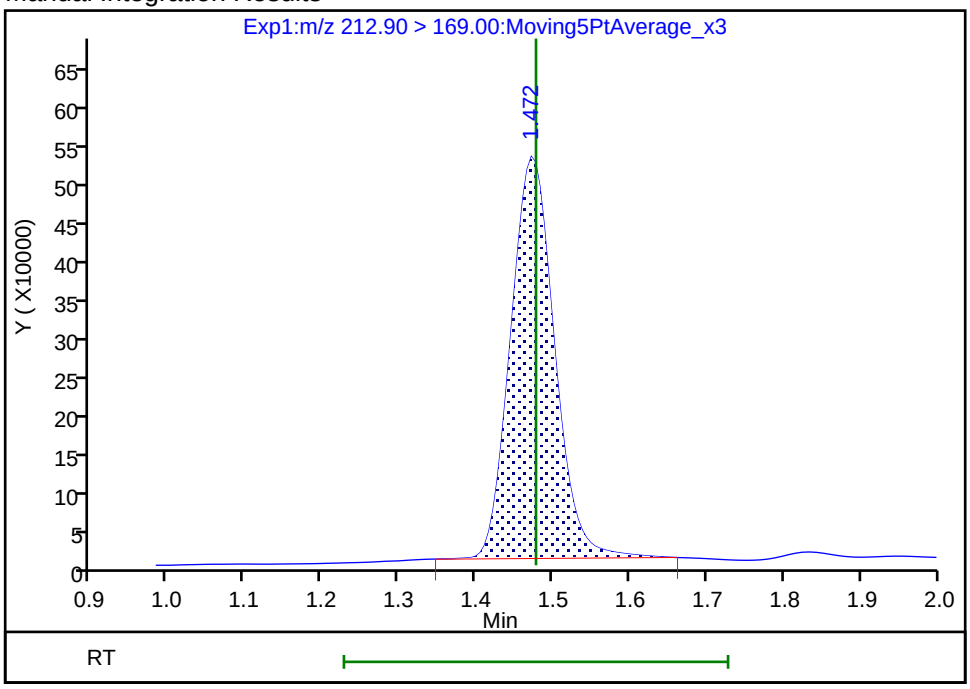
Processing Integration Results

RT: 1.47
Area: 2211519
Amount: 1.400474
Amount Units: ng/ml



Manual Integration Results

RT: 1.47
Area: 2055253
Amount: 1.301516
Amount Units: ng/ml



Reviewer: roycea, 18-May-2018 11:51:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

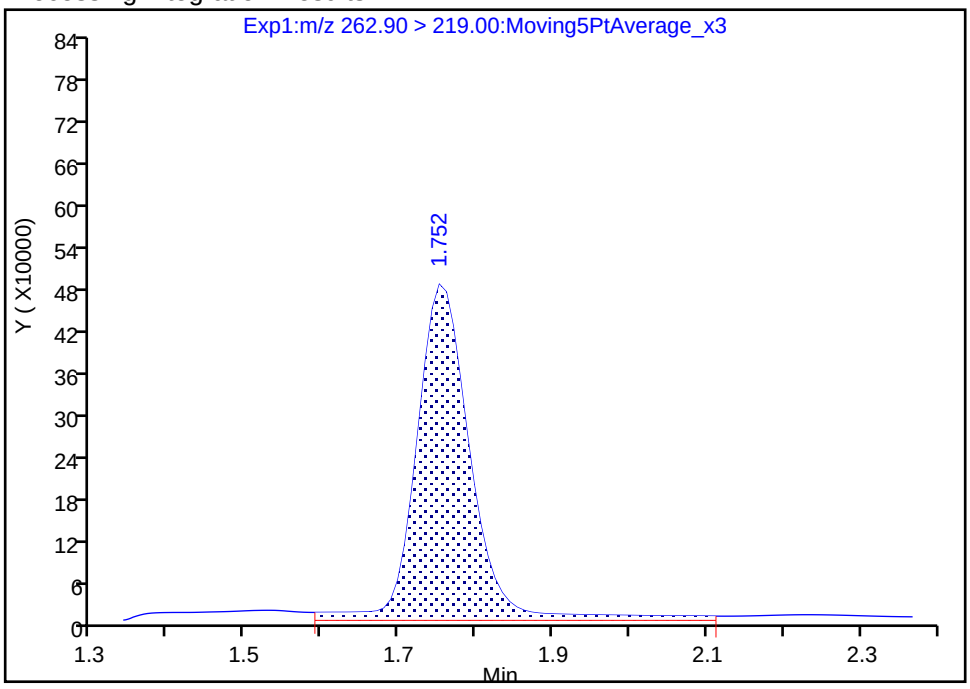
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_002.d				
Injection Date:	10-May-2018 19:51:35	Instrument ID:	A8_N		
Lims ID:	320-38611-A-1-B MS				
Client ID:	GC-MW-107(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	19	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

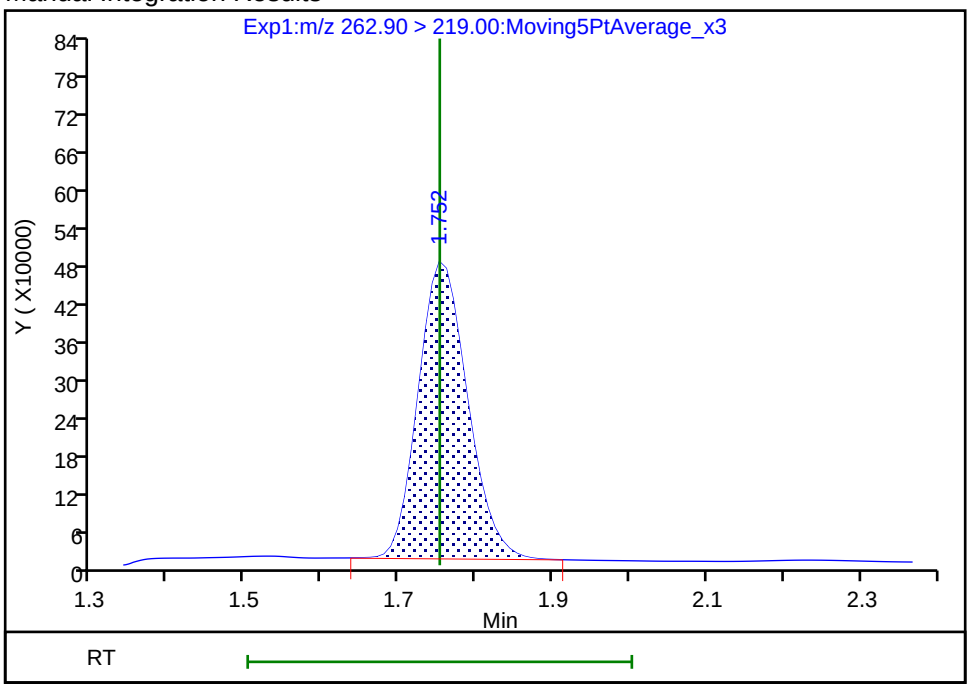
Processing Integration Results

RT: 1.75
Area: 2384716
Amount: 1.478160
Amount Units: ng/ml



Manual Integration Results

RT: 1.75
Area: 2104672
Amount: 1.304576
Amount Units: ng/ml



Reviewer: roycea, 18-May-2018 11:51:48

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MS RE | Lab Sample ID: 320-38611-1 MS RE

Matrix: Water | Lab File ID: 2018.05.16LLD_019.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 279(mL) | Date Analyzed: 05/17/2018 01:22

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*59.6*		*1.8*	*0.76*
27619-97-2	*6:2FTS*	*37.6*		*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	111		25-150
STL02279	M2-6:2FTS	126		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_019.d
Lims ID: 320-38611-B-1-D MS
Client ID: GC-MW-107(WG)
Sample Type: MS
Inject. Date: 17-May-2018 01:22:35 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-1-d ms
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:49:42 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:49:42

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.447	0.005	1.000	5469933	1.98		79.1	34070	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.457	1.452	0.005	1.004	2616253	1.29		129	450	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.729	1.712	0.017	1.005	2662583	1.31		131	477	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.720	1.712	0.008	0.564	4296652	2.42		96.9	30803	
D 47 13C3-PFBS										
301.90 > 83.00	1.756	1.748	0.008	1.000	91665	2.29		98.3	226	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.765	1.757	0.008	1.005	3373247	1.10		124	1369	
298.90 > 99.00	1.756	1.757	-0.001	1.000	1394592		2.42(1.25-3.74)		2477	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.970	1.960	0.010	1.000	966292	1.48		158	42400	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.003	1.993	0.010	1.000	2670266	1.39		139	981	M
313.00 > 119.00	2.003	1.993	0.010	1.000	234869		11.37(5.03-15.10)		2513	
D 7 13C2 PFHxA										
315.00 > 270.00	2.003	1.994	0.009	1.000	4662043	2.46		98.6	66822	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.025	2.016	0.009	1.000	2531389	0.9232		98.4	3953	
349.00 > 99.00	2.025	2.016	0.009	1.000	958867		2.64(1.36-4.07)		3846	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.104	2.095	0.009	1.000	294044	1.26		126	396	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.104	2.095	0.009	1.000	190952	2.04		81.6	4043	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.332	2.321	0.011	1.000	2588159	1.30		130	1600	
363.00 > 169.00	2.332	2.321	0.011	1.000	979368		2.64(1.13-3.40)		5591	
D 9 13C4-PFHpA										
367.00 > 322.00	2.332	2.321	0.011	1.000	4704518	2.60		104	63092	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.345	2.334	0.011	1.000	2378144	0.9365		103	2555	
399.00 > 99.00	2.345	2.334	0.011	1.000	757046		3.14(1.50-4.49)		2083	
D 11 18O2 PFHxS										
403.00 > 84.00	2.345	2.334	0.011	1.000	5329817	2.38		101	95430	
65 Adona										
377.00 > 251.00	2.384	2.373	0.011	1.000	5699688	1.07		107	72596	
377.00 > 85.00	2.384	2.373	0.011	1.000	3327135		1.71(0.84-2.53)		16221	
D 12 M2-6:2FTS										
429.00 > 81.00	2.659	2.645	0.014	1.000	1195740	2.99		126	6857	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.659	2.654	0.005	1.000	936110	1.05		111	9825	
D 14 13C4 PFOA										
417.00 > 372.00	2.689	2.668	0.021	1.000	4743907	2.77		111	90553	
* 62 13C2-PFOA										
415.00 > 370.00	2.689	2.676	0.013		4526424	2.50			67274	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.689	2.676	0.013	1.000	3716594	1.66		166	1504	
413.00 > 169.00	2.689	2.676	0.013	1.000	2057116		1.81(0.84-2.52)		7502	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.689	2.684	0.005	1.000	2069409	1.00		105	11584	
449.00 > 99.00	2.689	2.684	0.005	1.000	546803		3.78(1.94-5.82)		5861	
D 18 13C4 PFOS										
503.00 > 80.00	3.051	3.029	0.022	1.000	3713671	2.41		101	23814	
D 19 13C5 PFNA										
468.00 > 423.00	3.051	3.036	0.015	1.000	3707247	2.64		106	114702	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.051	3.036	0.015	1.000	2273901	1.24		134	12566	
499.00 > 99.00	3.051	3.036	0.015	1.000	466732		4.87(2.31-6.93)		6583	
20 Perfluorononanoic acid										
463.00 > 419.00	3.051	3.043	0.008	1.000	1788294	1.14		114	3098	
463.00 > 169.00	3.051	3.043	0.008	1.000	437403		4.09(1.90-5.69)		5792	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.259	3.252	0.007	1.000	2756904	0.9892		106	18920	
D 26 M2-8:2FTS										
529.00 > 81.00	3.398	3.376	0.022	1.000	1237602	2.72		114	17205	
D 21 13C8 FOSA										
506.00 > 78.00	3.398	3.376	0.022	1.000	4595875	2.28		91.2	39140	
D 23 13C2 PFDA										
515.00 > 470.00	3.407	3.385	0.022	1.000	3017911	2.53		101	58386	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.398	3.387	0.011	1.000	1855514	1.04		104	22865	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.398	3.387	0.011	1.000	624305	0.8953		93.5	17017	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.398	3.387	0.011	1.000	1087644	0.9241		96.3	16478	
549.00 > 99.00	3.398	3.387	0.011	1.000	405246		2.68(1.33-3.97)		5270	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.416	3.396	0.020	1.003	1432031	1.22		122	5639	
513.00 > 169.00	3.416	3.396	0.020	1.003	244471		5.86(2.36-7.09)		5754	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.565	3.544	0.021	1.000	1977070	3.01		120	41552	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.565	3.554	0.011	1.000	822727	1.03		103	5974	
29 Perfluorodecane Sulfonic acid										M
599.00 > 80.00	3.718	3.706	0.012	1.000	917704	0.8796		91.2	3394	M
599.00 > 99.00	3.718	3.706	0.012	1.000	311702		2.94(1.39-4.16)		4399	
D 30 13C2 PFUnA										
565.00 > 520.00	3.740	3.716	0.024	1.000	2302179	2.44		97.5	34937	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.729	3.716	0.013	1.000	1725316	2.56		102	14714	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.740	3.728	0.012	1.000	760022	0.9882		98.8	3600	
563.00 > 169.00	3.740	3.728	0.012	1.000	196756		3.86(2.12-6.36)		9188	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.740	3.728	0.012	1.003	653230	1.01		101	29666	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.896	3.885	0.011	1.000	3972910	0.9402		99.8	26770	
D 36 13C2 PFDoA										
615.00 > 570.00	4.029	4.006	0.023	1.000	2495668	2.46		98.2	30751	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.029	4.018	0.011	1.000	1098282	1.05		105	1084	
613.00 > 169.00	4.029	4.018	0.011	1.000	269887		4.07(2.13-6.40)		4548	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.298	4.280	0.018	1.000	1224454	1.07		107	1011	
663.00 > 169.00	4.290	4.280	0.010	0.998	409564		2.99(1.25-3.76)		4329	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.532	4.511	0.021	1.000	3217040	2.58		103	17279	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.532	4.522	0.010	1.000	324395	1.00		99.8	4008	
713.00 > 219.00	4.532	4.522	0.010	1.000	238758		1.36(0.71-2.13)		5029	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.948	4.922	0.026	1.000	5790348	2.80		112	13073	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.948	4.931	0.017	1.000	2318224	1.05		105	770	
813.00 > 169.00	4.948	4.931	0.017	1.000	362979		6.39(2.86-8.58)		2779	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.306	5.285	0.021	1.000	2451290	1.00		100	532	
913.00 > 169.00	5.306	5.285	0.021	1.000	286741		8.55(3.83-11.48)		2408	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 13:49:43 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_019.d

Injection Date: 17-May-2018 01:22:35 Instrument ID: A8_N

Lims ID: 320-38611-B-1-D MS

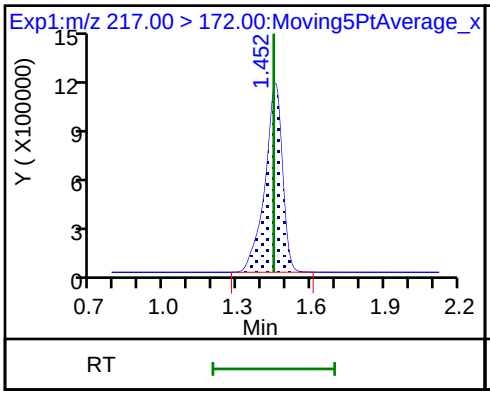
Client ID: GC-MW-107(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 11

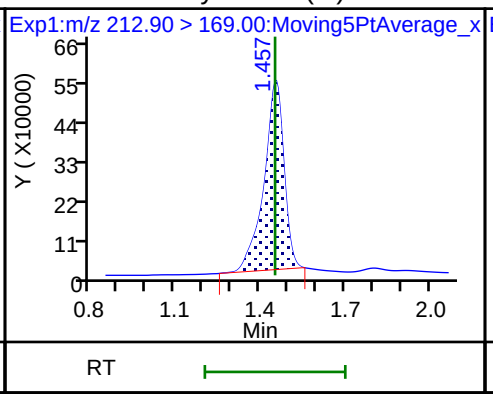
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

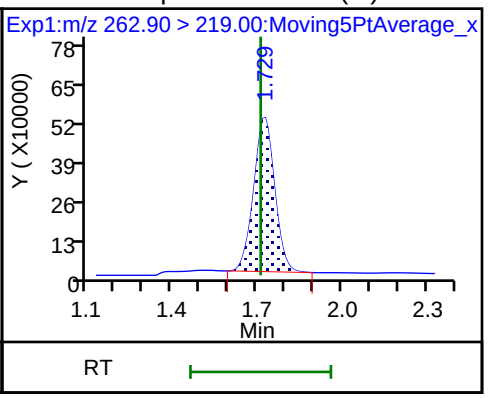
D 1 13C4 PFBA



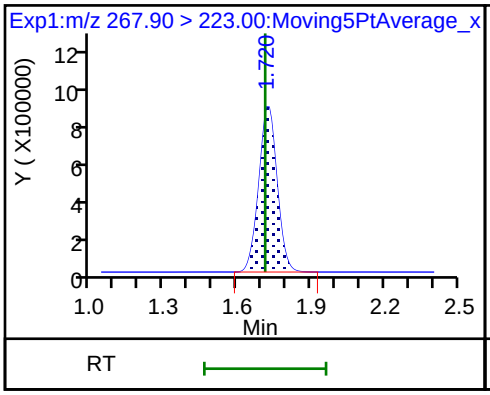
2 Perfluorobutyric acid (M)



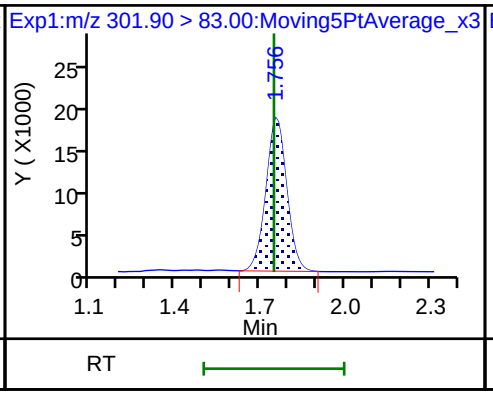
4 Perfluoropentanoic acid (M)



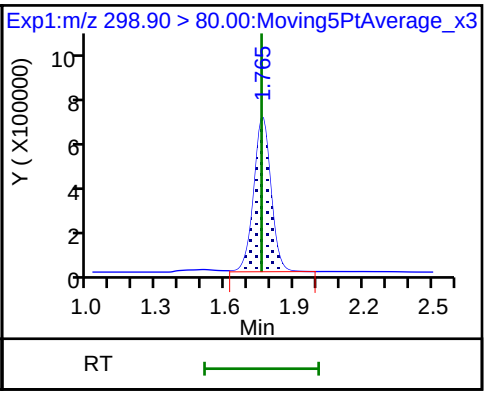
D 3 13C5-PFPeA



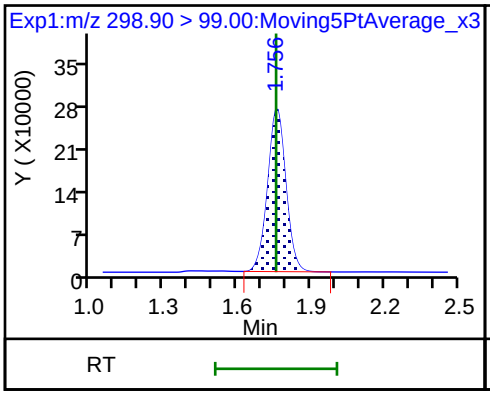
D 47 13C3-PFBS



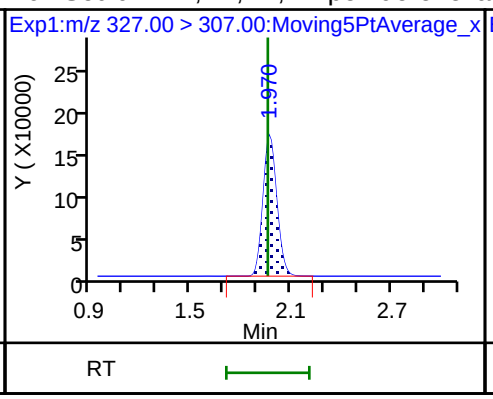
5 Perfluorobutanesulfonic acid



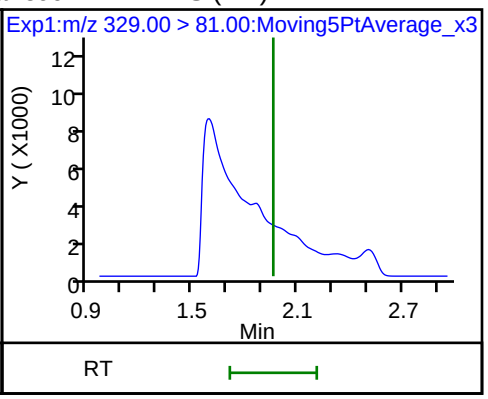
5 Perfluorobutanesulfonic acid



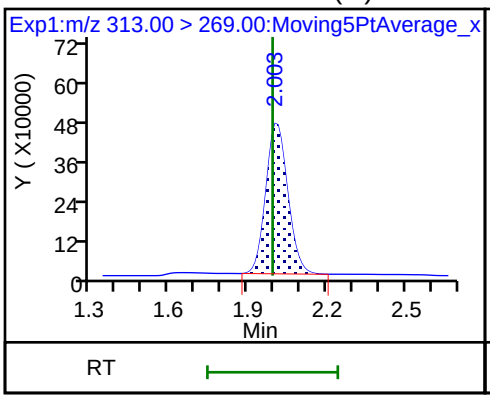
61 Sodium 1H,1H,2H,2H-perfluorohexa



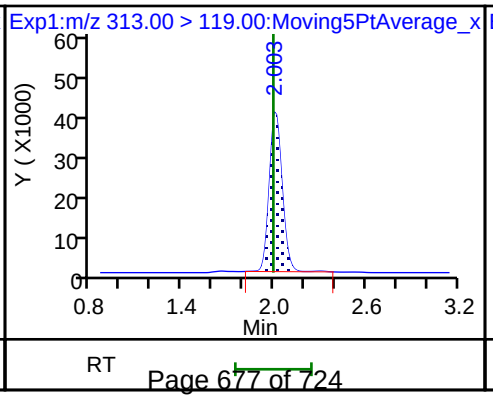
D 60 M2-4:2FTS (ND)



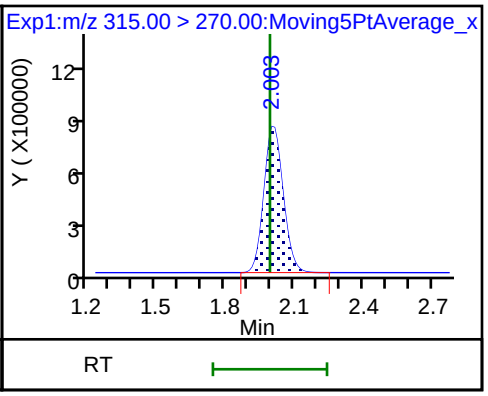
6 Perfluorohexanoic acid (M)



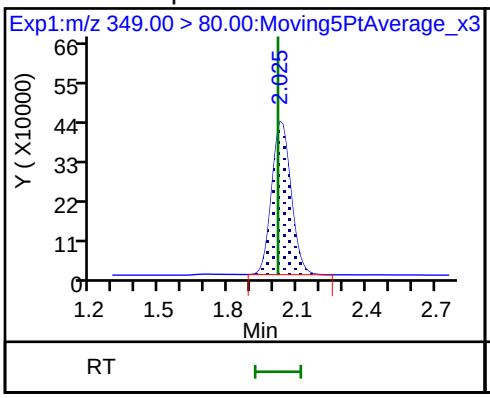
6 Perfluorohexanoic acid



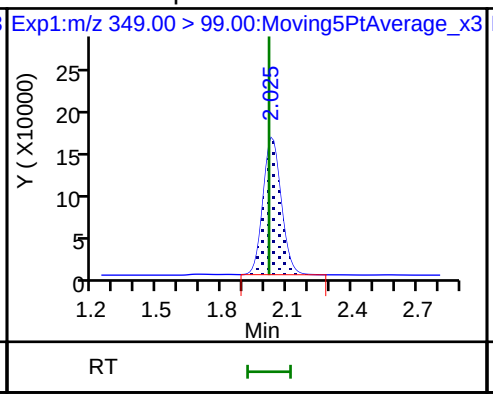
D 7 13C2 PFHxA



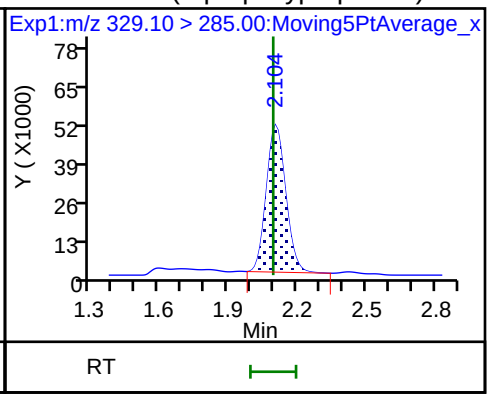
70 Perfluoropentanesulfonic acid



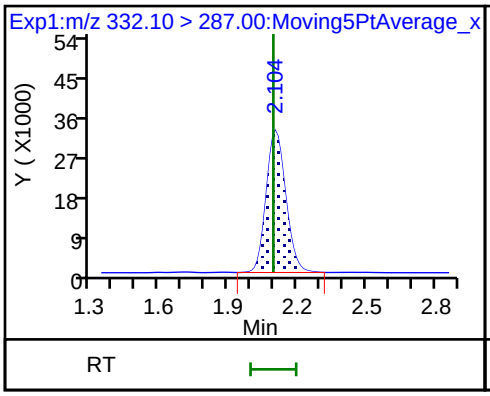
70 Perfluoropentanesulfonic acid



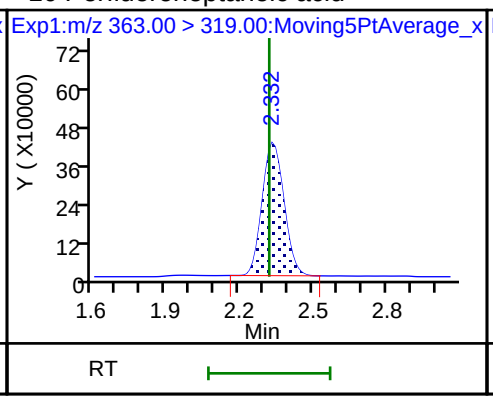
67 Perfluoro(2-propoxypropanoic) acid



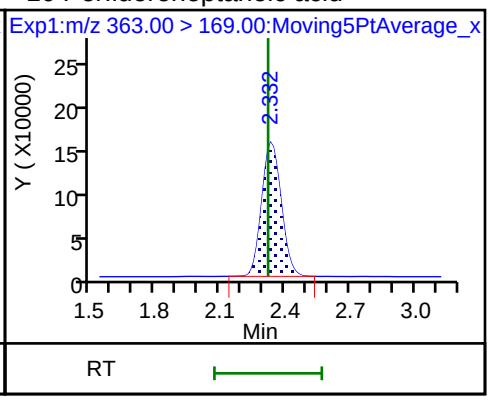
D 64 13C3 HFPO-DA



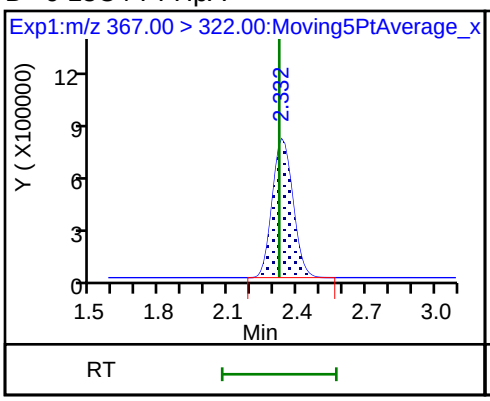
10 Perfluoroheptanoic acid



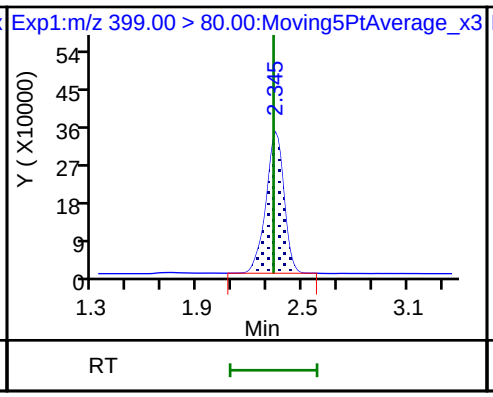
10 Perfluoroheptanoic acid



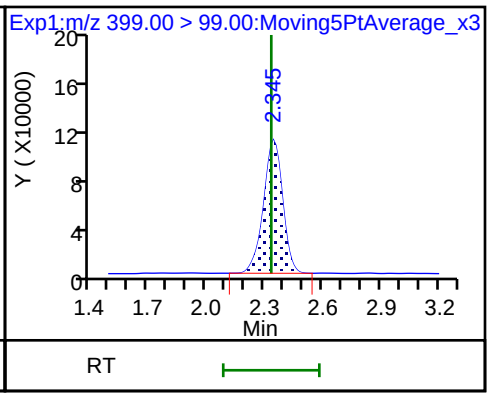
D 9 13C4-PFHpA



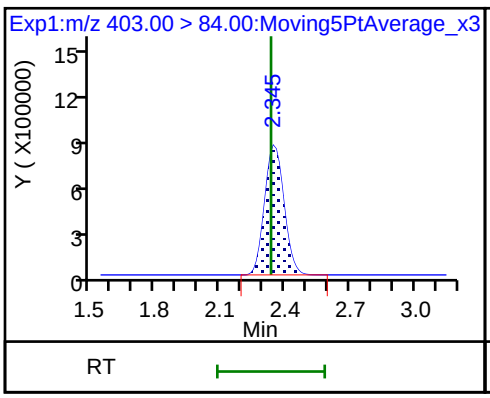
8 Perfluorohexanesulfonic acid



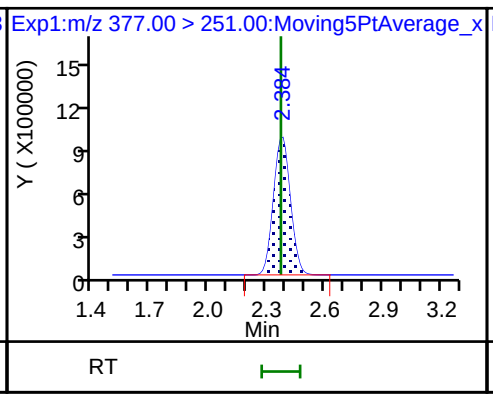
8 Perfluorohexanesulfonic acid



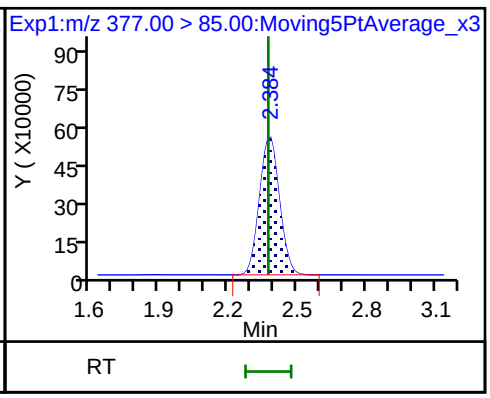
D 11 18O2 PFHxS



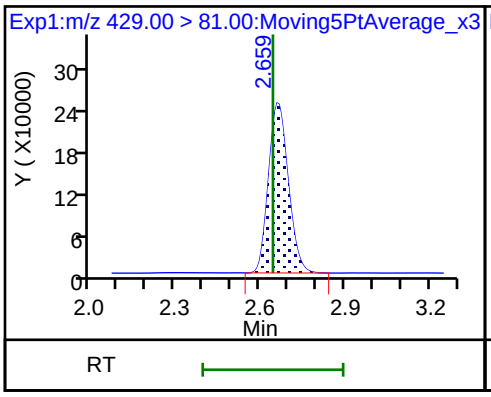
65 Adona



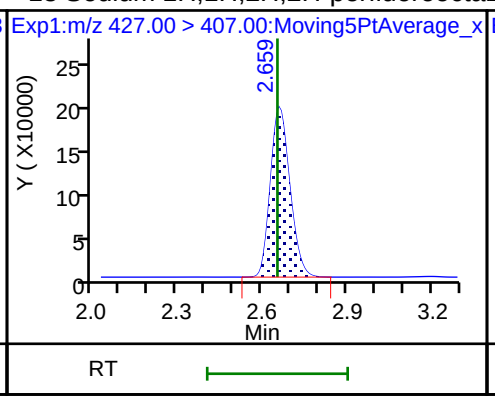
65 Adona



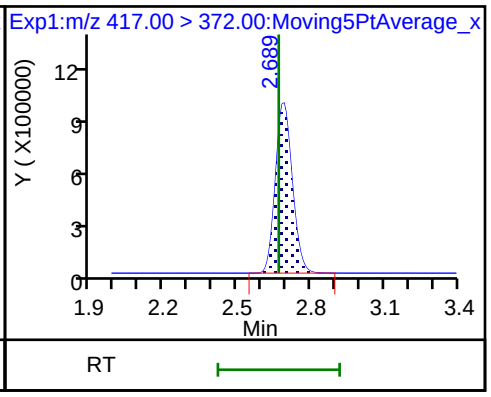
D 12 M2-6:2FTS



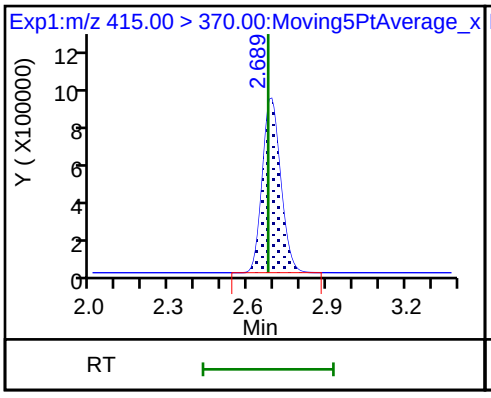
13 Sodium 1H,1H,2H,2H-perfluorooctane



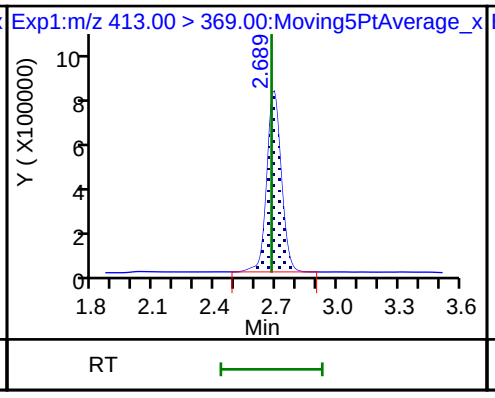
D 14 13C4 PFOA



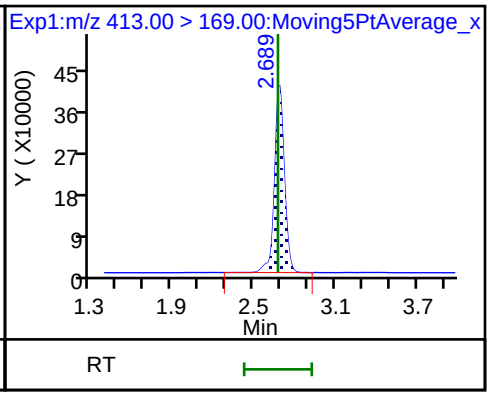
* 62 13C2-PFOA



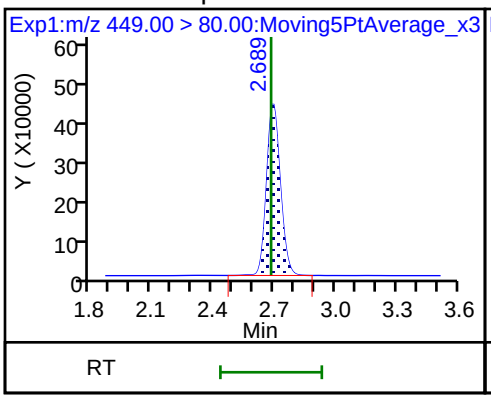
15 Perfluorooctanoic acid



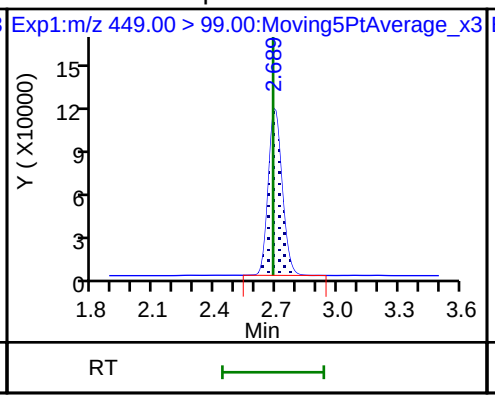
15 Perfluorooctanoic acid



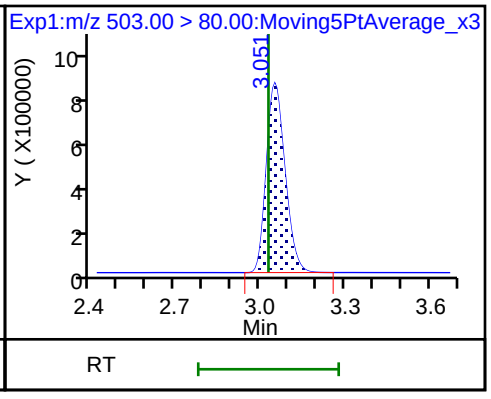
16 Perfluoroheptanesulfonic acid



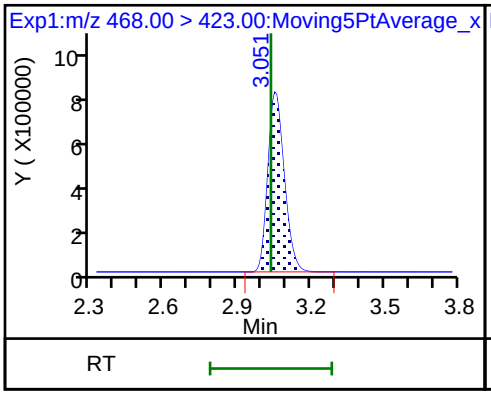
16 Perfluoroheptanesulfonic acid



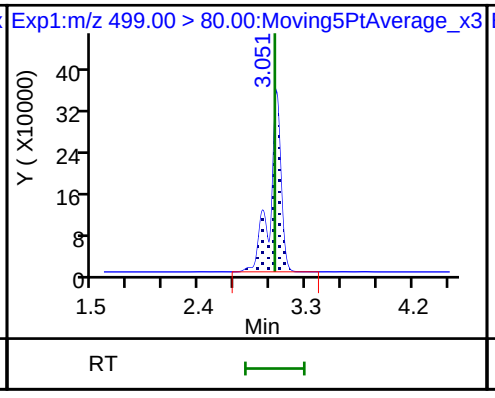
D 18 13C4 PFOS



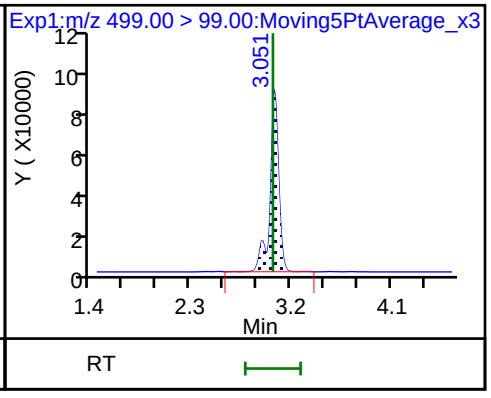
D 19 13C5 PFNA



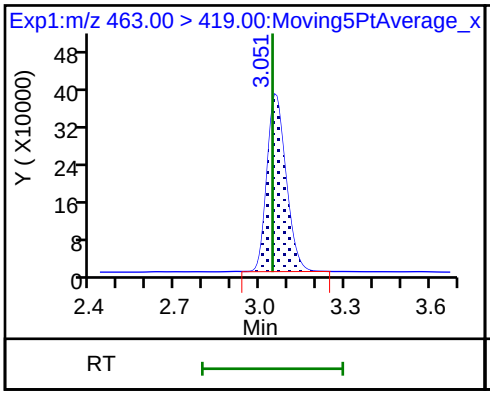
17 Perfluorooctane sulfonic acid



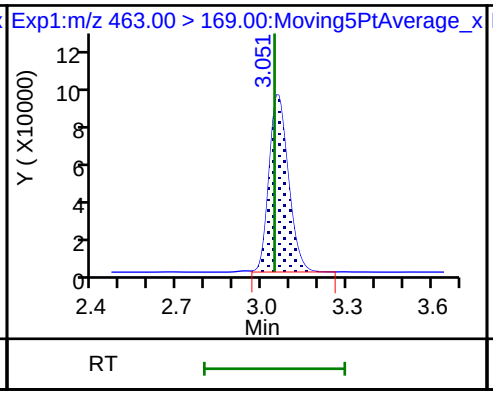
17 Perfluorooctane sulfonic acid



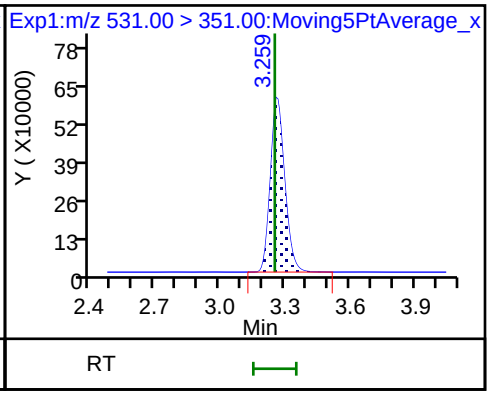
20 Perfluorononanoic acid



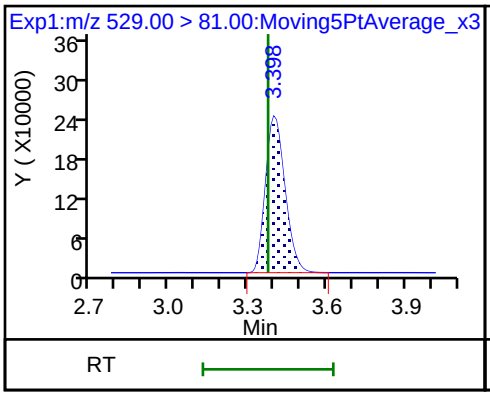
20 Perfluorononanoic acid



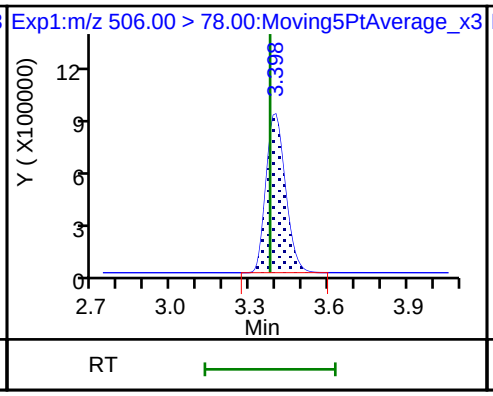
69 9-Chlorohexadecafluoro-3-oxanonane



D 26 M2-8:2FTS



D 21 13C8 FOSA



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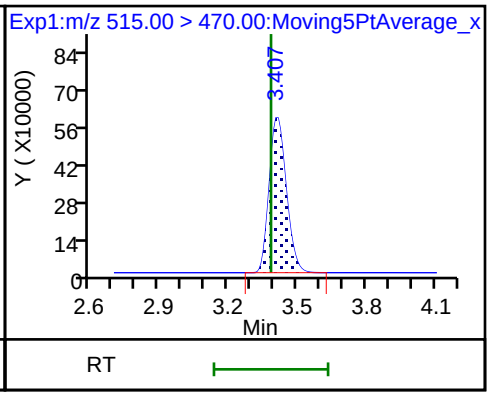
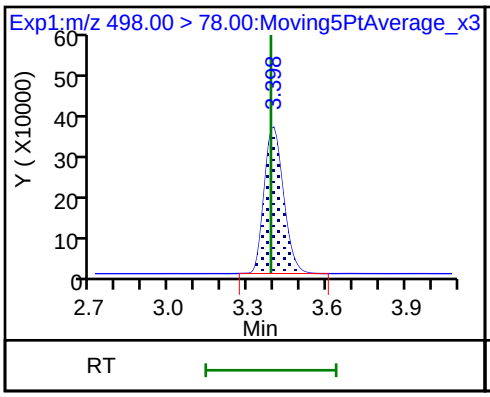
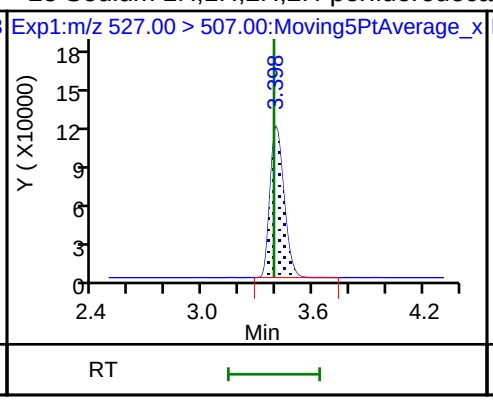


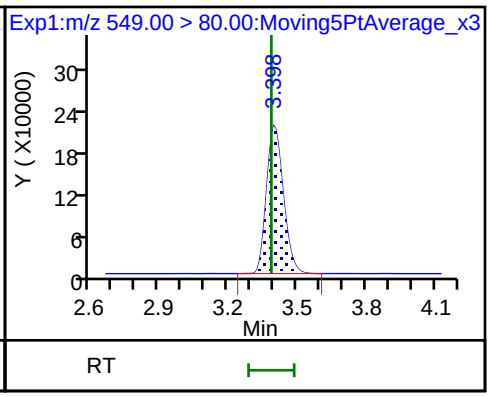
22 Perfluorooctane Sulfonamide



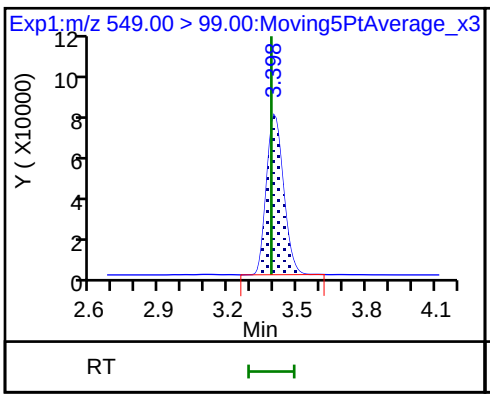
25 Sodium 1H,1H,2H,2H-perfluorodecane



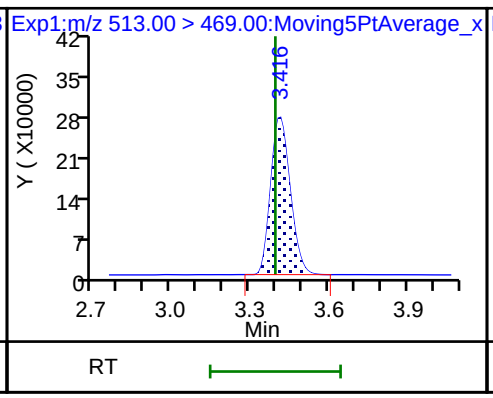
68 Perfluorononanesulfonic acid



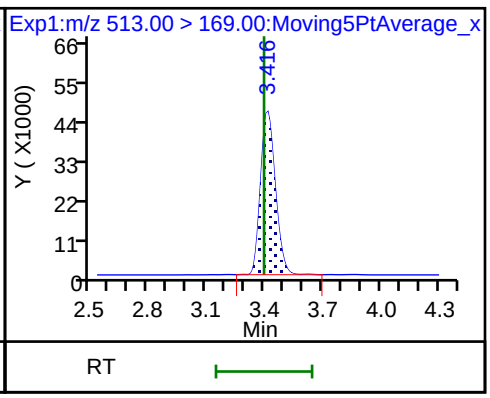
68 Perfluorononanesulfonic acid



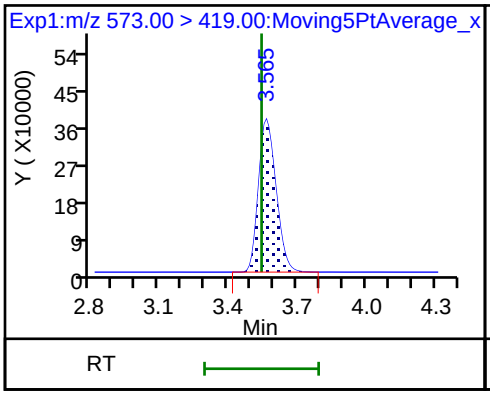
24 Perfluorodecanoic acid



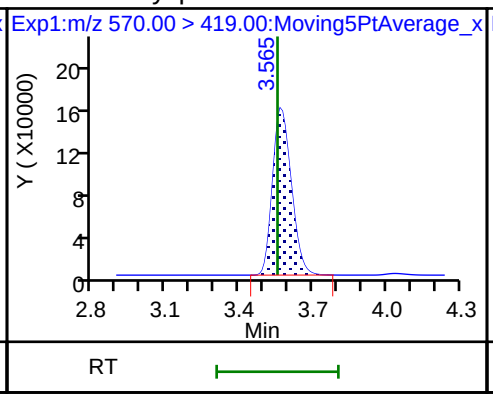
24 Perfluorodecanoic acid



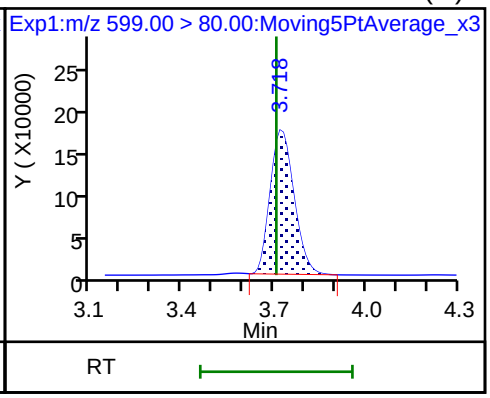
D 27 d3-NMeFOSAA



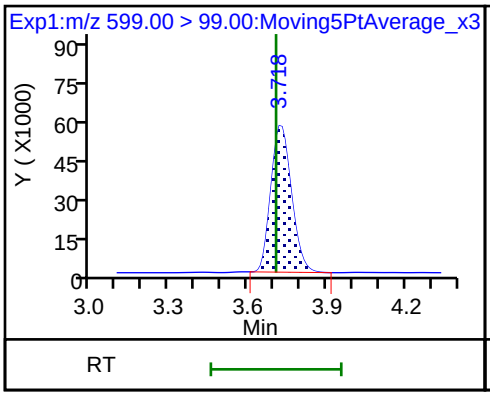
28 N-methyl perfluorooctane sulfonami



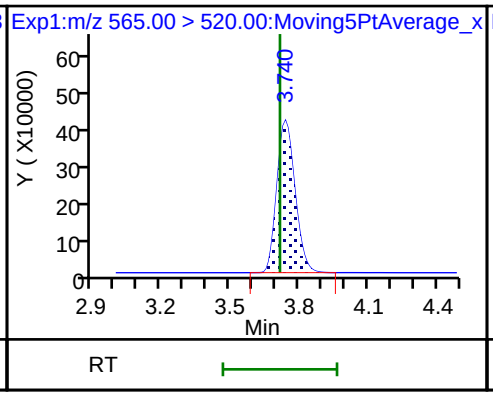
29 Perfluorodecane Sulfonic acid (M)



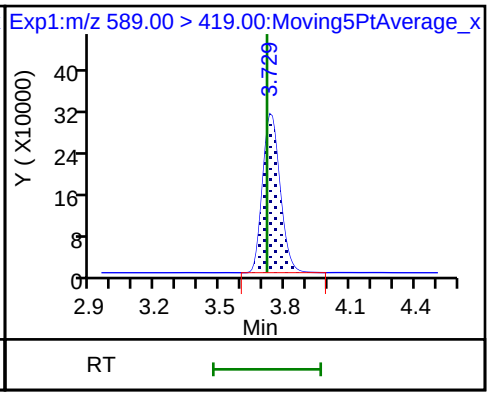
29 Perfluorodecane Sulfonic acid



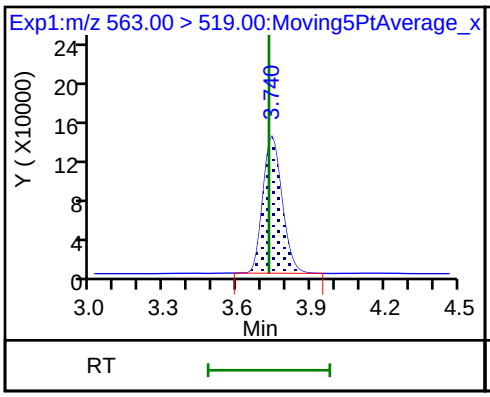
D 30 13C2 PFUnA



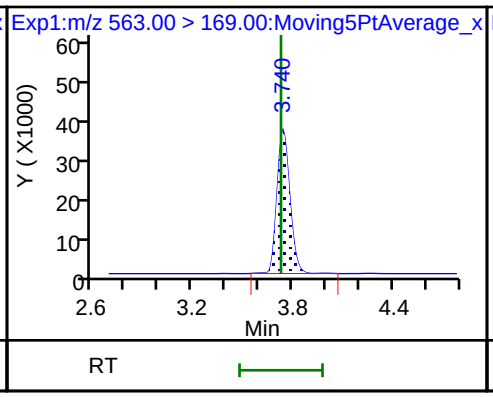
D 32 d5-NEtFOSAA



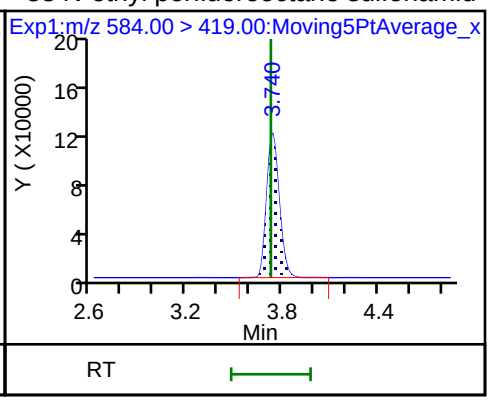
31 Perfluoroundecanoic acid



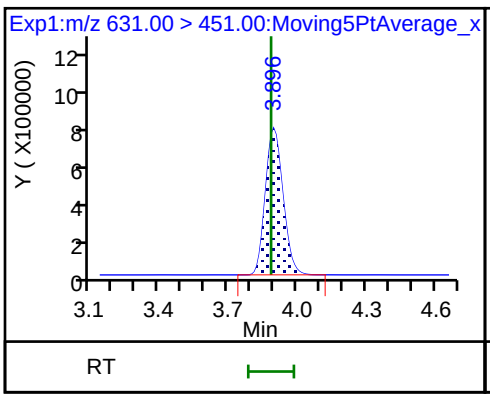
31 Perfluoroundecanoic acid



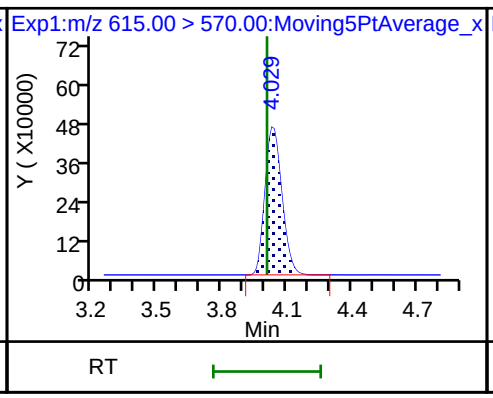
33 N-ethyl perfluorooctane sulfonamid



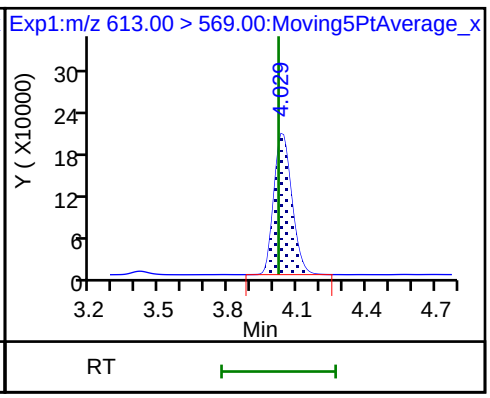
66 11-Chloroeicosafluoro-3-oxaundecan



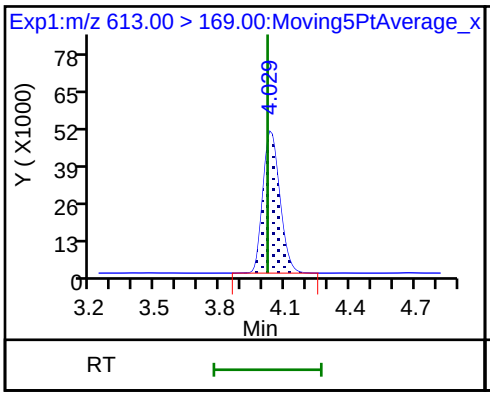
D 36 13C2 PFDoA



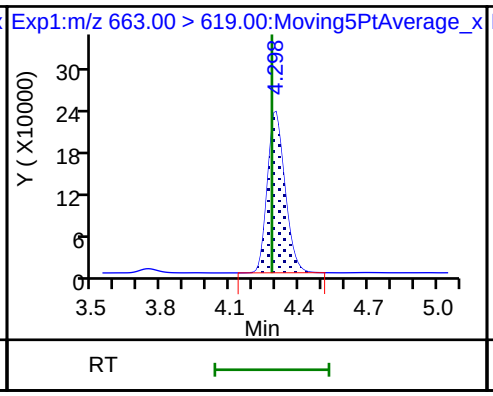
37 Perfluorododecanoic acid



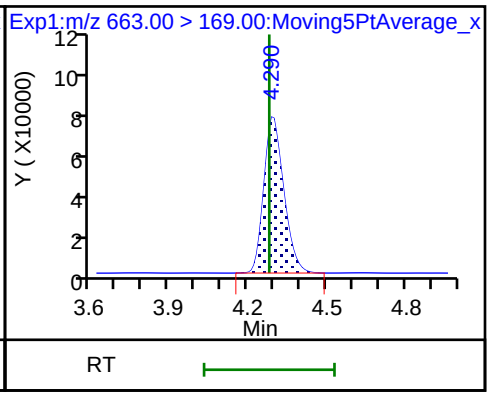
37 Perfluorododecanoic acid



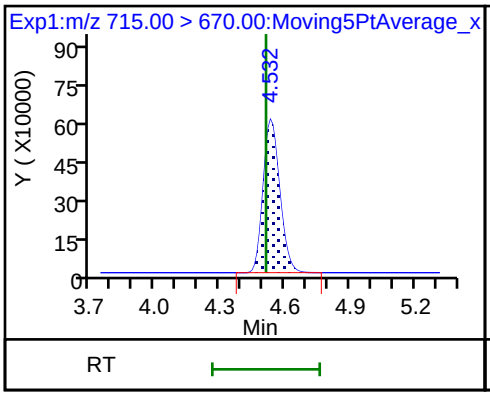
41 Perfluorotridecanoic acid



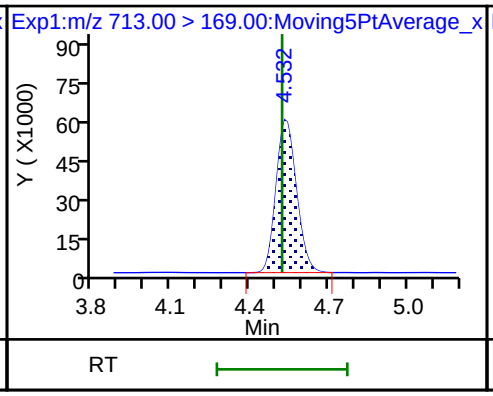
41 Perfluorotridecanoic acid



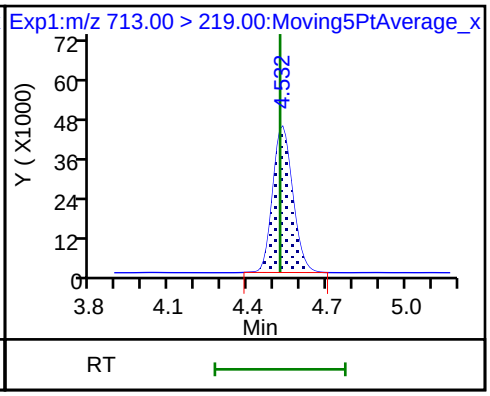
D 43 13C2-PFTeDA



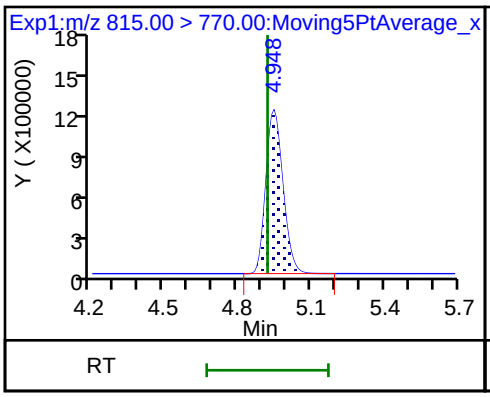
42 Perfluorotetradecanoic acid



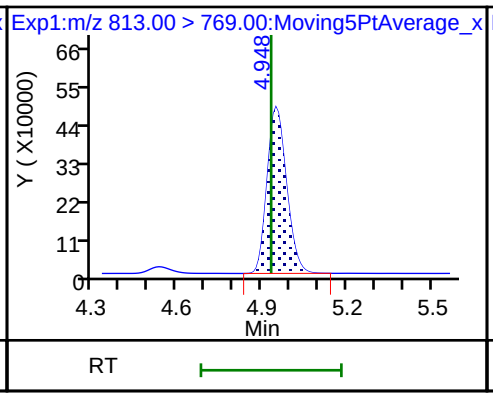
42 Perfluorotetradecanoic acid



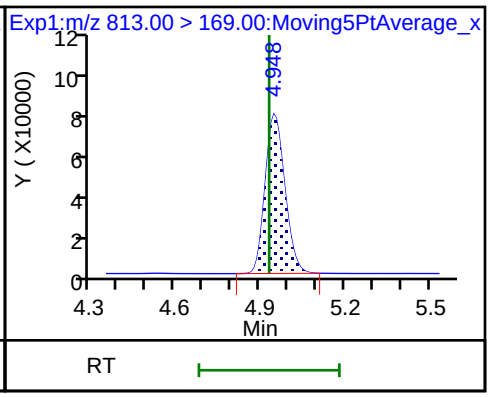
D 44 13C2-PFHxDA



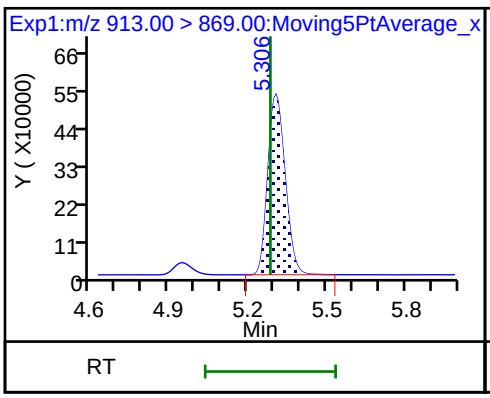
45 Perfluorohexadecanoic acid



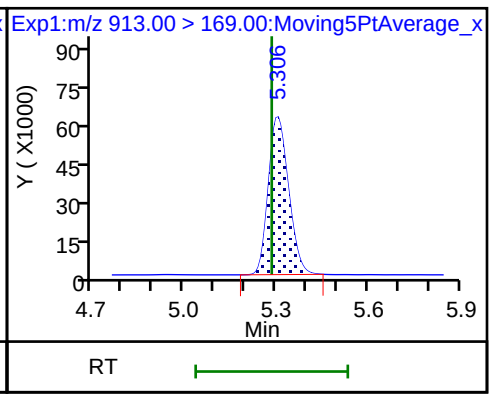
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MSD | Lab Sample ID: 320-38611-1 MSD

Matrix: Water | Lab File ID: 2018.05.10LLB_003.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 272.5(mL) | Date Analyzed: 05/10/2018 19:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	48.2		1.8	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	49.1		1.8	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	50.1		1.8	0.53
375-85-9	Perfluoroheptanoic acid (PFHpA)	51.9		1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	74.4		1.8	0.78
375-95-1	Perfluorononanoic acid (PFNA)	43.3		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	38.2		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	34.6		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	38.2		1.8	0.50
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	34.0		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	35.3		1.8	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	39.9		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	34.3		1.8	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	37.0		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	49.8		1.8	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	32.0		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	35.8		1.8	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.5		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	37.8		18	1.7
27619-97-2	6:2FTS	65.7		18	1.8
39108-34-4	8:2FTS	37.9		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MSD | Lab Sample ID: 320-38611-1 MSD

Matrix: Water | Lab File ID: 2018.05.10LLB_003.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 272.5(mL) | Date Analyzed: 05/10/2018 19:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	85		25-150
STL01893	13C5 PFPeA	100		25-150
STL00993	13C2 PFHxA	102		25-150
STL01892	13C4-PFHpA	108		25-150
STL00990	13C4 PFOA	101		25-150
STL00995	13C5 PFNA	93		25-150
STL00996	13C2 PFDA	97		25-150
STL00997	13C2 PFUnA	88		25-150
STL00998	13C2 PFDoA	83		25-150
STL02116	13C2-PFTeDA	88		25-150
STL02337	13C3-PFBS	101		25-150
STL00994	18O2 PFHxS	104		25-150
STL00991	13C4 PFOS	99		25-150
STL01056	13C8 FOSA	92		25-150
STL02118	d3-NMeFOSAA	102		25-150
STL02117	d5-NEtFOSAA	100		25-150
STL02279	M2-6:2FTS	125		25-150
STL02280	M2-8:2FTS	114		25-150

Report Date: 18-May-2018 15:23:38 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_003.d
Lims ID: 320-38611-A-1-C MSD
Client ID: GC-MW-107(WG)
Sample Type: MSD
Inject. Date: 10-May-2018 19:59:26 ALS Bottle#: 20 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-1-c msd
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 18-May-2018 15:12:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.474	1.469	0.005	1.000	4126199	2.12		84.8	34618	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.474	1.478	-0.004	1.000	2014498	1.31		131	572	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.756	1.747	0.009	0.562	3136449	2.50		100.0	32168	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.756	1.753	0.003	1.000	2000482	1.34		134	475	M
D 47 13C3-PFBS										
301.90 > 83.00	1.792	1.783	0.009	1.000	67877	2.36		101	277	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.792	1.798	-0.006	1.000	2486206	1.09		123	1109	
298.90 > 99.00	1.792	1.798	-0.006	1.000	1043593		2.38(1.25-3.74)		1753	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	2.014	2.011	0.003	1.000	696778	1.49		159	18834	
D 7 13C2 PFHxA										
315.00 > 270.00	2.048	2.048	0.0	1.000	3550894	2.56		102	83256	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.048	2.056	-0.008	1.000	1970473	1.37		137	902	
313.00 > 119.00	2.048	2.056	-0.008	1.000	185237		10.64(5.03-15.10)		1925	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.070	2.079	-0.009	1.000	1953470	0.9357		99.8	3243	
349.00 > 99.00	2.070	2.079	-0.009	1.000	706315		2.77(1.36-4.07)		3032	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.149	2.150	-0.001	1.000	178129	2.08		83.0	3328	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.149	2.158	-0.009	1.000	226255	1.14		114	401	
D 9 13C4-PFHpA										
367.00 > 322.00	2.384	2.384	0.0	1.000	3636397	2.69		108	64535	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.384	2.392	-0.008	1.000	2060469	1.42		142	1542	
363.00 > 169.00	2.384	2.392	-0.008	1.000	761447		2.71(1.13-3.40)		4951	
D 11 18O2 PFHxS										
403.00 > 84.00	2.406	2.395	0.011	1.000	4104516	2.46		104	61687	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.395	2.403	-0.008	0.995	1837371	0.9354		103	1882	
399.00 > 99.00	2.395	2.403	-0.008	0.995	606002		3.03(1.50-4.49)		1990	
65 Adona										
377.00 > 251.00	2.429	2.437	-0.008	1.000	4167557	1.04		104	43344	
377.00 > 85.00	2.429	2.437	-0.008	1.000	2471436		1.69(0.84-2.53)		14946	
D 12 M2-6:2FTS										
429.00 > 81.00	2.719	2.712	0.007	1.000	859092	2.97		125	4979	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.719	2.718	0.001	1.000	1095271	1.79		189	24677	
* 62 13C2-PFOA										
415.00 > 370.00	2.750	2.741	0.009		3617380	2.50			67678	
D 14 13C4 PFOA										
417.00 > 372.00	2.742	2.742	0.0	1.000	3383812	2.52		101	63190	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.750	2.749	0.001	1.003	3170743	2.03		203	1581	
413.00 > 169.00	2.750	2.749	0.001	1.003	1690336		1.88(0.84-2.52)		7069	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.750	2.749	0.001	1.000	1547921	1.01		106	5104	
449.00 > 99.00	2.750	2.749	0.001	1.000	415326		3.73(1.94-5.82)		6314	
D 18 13C4 PFOS										
503.00 > 80.00	3.115	3.106	0.009	1.000	2760090	2.36		98.9	12559	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.123	3.114	0.009	1.003	1704268	1.36		146	5539	
499.00 > 99.00	3.115	3.114	0.001	1.000	361708		4.71(2.31-6.93)		4199	
D 19 13C5 PFNA										
468.00 > 423.00	3.123	3.114	0.009	1.000	2675382	2.32		92.8	47882	
20 Perfluorononanoic acid										
463.00 > 419.00	3.123	3.122	0.001	1.000	1315509	1.18		118	2524	
463.00 > 169.00	3.123	3.122	0.001	1.000	324421		4.05(1.90-5.69)		11634	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.332	3.323	0.009	1.000	1877461	0.8624		92.5	33836	
D 21 13C8 FOSA										
506.00 > 78.00	3.451	3.431	0.020	1.000	3362836	2.31		92.3	35919	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.451	3.441	0.010	1.000	1325541	0.9742		97.4	24409	
D 26 M2-8:2FTS										
529.00 > 81.00	3.470	3.459	0.011	1.000	951083	2.73		114	8035	
D 23 13C2 PFDA										
515.00 > 470.00	3.479	3.468	0.011	1.000	2343172	2.42		96.7	51550	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.479	3.469	0.010	1.003	519599	1.03		108	16881	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.470	3.469	0.001	1.000	828999	0.8980		93.5	6714	
549.00 > 99.00	3.470	3.469	0.001	1.000	314621		2.63(1.33-3.97)		6387	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.489	3.478	0.011	1.003	1007598	1.04		104	3268	
513.00 > 169.00	3.479	3.478	0.001	1.000	173513		5.81(2.36-7.09)		3404	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.635	3.624	0.011	1.000	1401292	2.55		102	22263	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.644	3.634	0.010	1.003	616666	1.10		110	10779	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.800	3.790	0.010	1.000	1352500	2.49		99.7	13167	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.800	3.790	0.010	1.000	653940	0.8722		90.5	2872	
599.00 > 99.00	3.800	3.790	0.010	1.000	238357		2.74(1.39-4.16)		5034	
D 30 13C2 PFUnA										
565.00 > 520.00	3.810	3.800	0.010	1.000	1832801	2.19		87.6	43004	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.810	3.811	-0.001	1.000	584647	0.9437		94.4	2802	
563.00 > 169.00	3.810	3.811	-0.001	1.000	145348		4.02(2.12-6.36)		3888	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.810	3.811	-0.001	1.003	520130	1.03		103	12191	
35 MeFOSA										
512.00 > 169.00	3.644	3.875	-0.231		7013	NC			224	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.966	3.968	-0.002	1.000	2734361	0.8130		86.3	49089	
D 36 13C2 PFDoA										
615.00 > 570.00	4.110	4.091	0.019	1.000	1877958	2.08		83.2	18926	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.110	4.102	0.008	1.000	814714	1.04		104	1068	
613.00 > 169.00	4.110	4.102	0.008	1.000	198783		4.10(2.13-6.40)		2926	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.371	4.362	0.009	1.000	845039	0.9256		92.6	873	
663.00 > 169.00	4.371	4.362	0.009	1.000	274397		3.08(1.25-3.76)		2996	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.604	4.595	0.009	1.000	2527488	2.21		88.3	16902	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.604	4.605	-0.001	1.000	244371	0.9624		96.2	2767	
713.00 > 219.00	4.604	4.605	-0.001	1.000	187660		1.30(0.71-2.13)		3377	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.027	5.010	0.017	1.000	4531484	2.43		97.3	14420	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.027	5.019	0.008	1.000	1715276	0.9771		97.7	765	
813.00 > 169.00	5.027	5.019	0.008	1.000	274885		6.24(2.86-8.58)		2285	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.387	5.382	0.005	1.000	1821848	1.00		100	664	
913.00 > 169.00	5.381	5.382	-0.001	0.999	222827		8.18(3.83-11.48)		2017	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Report Date: 18-May-2018 15:23:39 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_003.d

Injection Date: 10-May-2018 19:59:26 Instrument ID: A8_N

Lims ID: 320-38611-A-1-C MSD

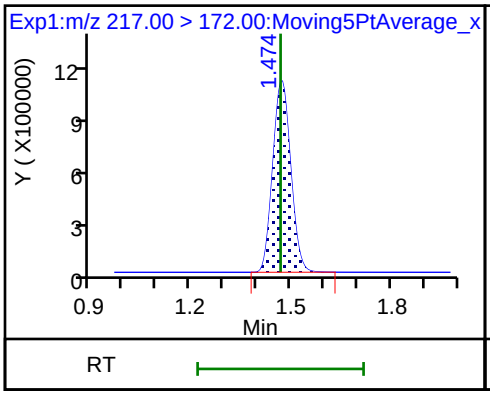
Client ID: GC-MW-107(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 20 Worklist Smp#: 5

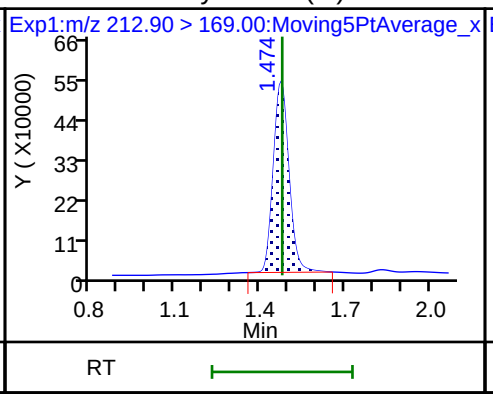
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

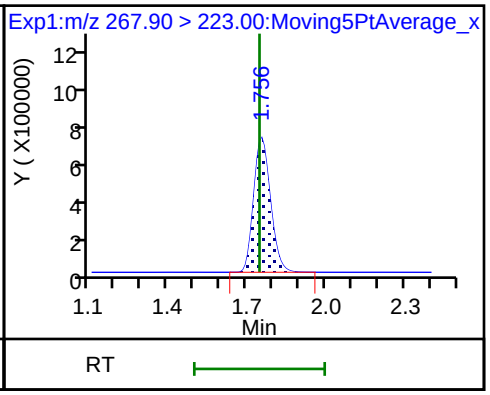
D 1 13C4 PFBA



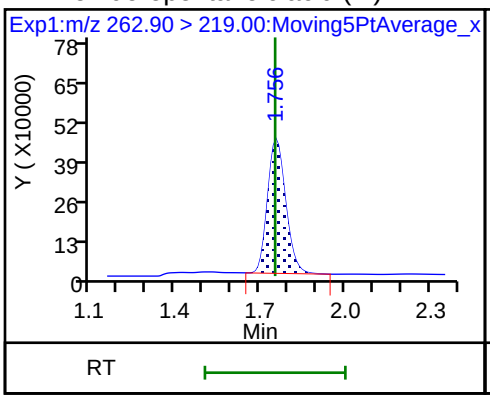
2 Perfluorobutyric acid (M)



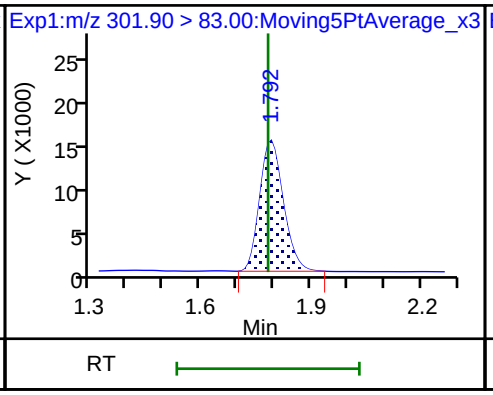
D 3 13C5-PFPeA



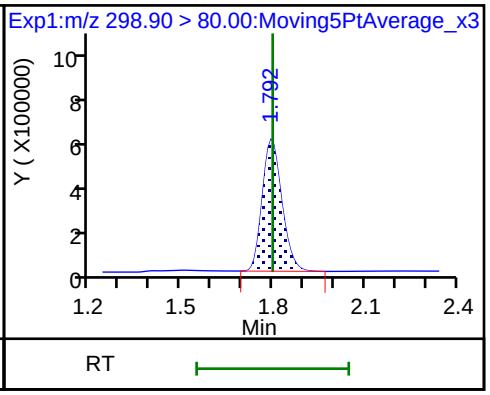
4 Perfluoropentanoic acid (M)



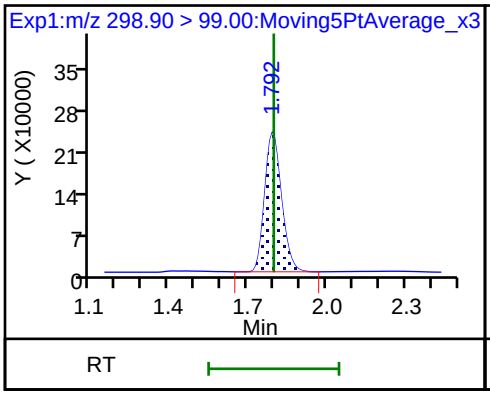
D 47 13C3-PFBS



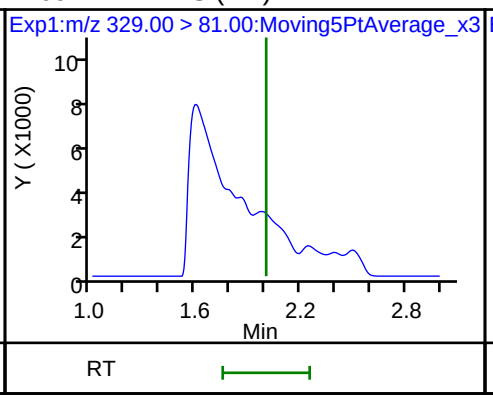
5 Perfluorobutanesulfonic acid



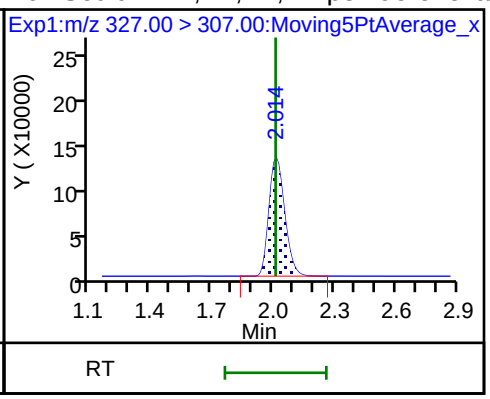
5 Perfluorobutanesulfonic acid



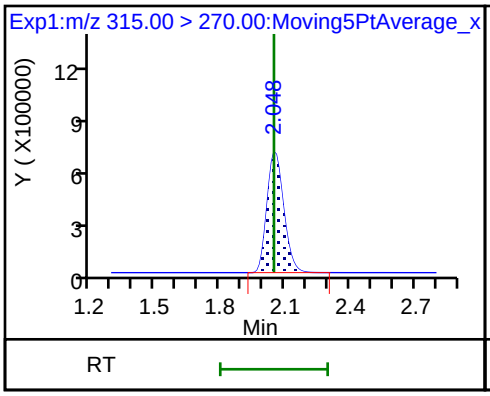
D 60 M2-4:2FTS (ND)



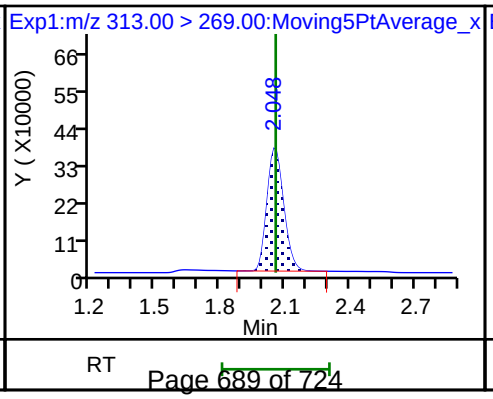
61 Sodium 1H,1H,2H,2H-perfluorohexane



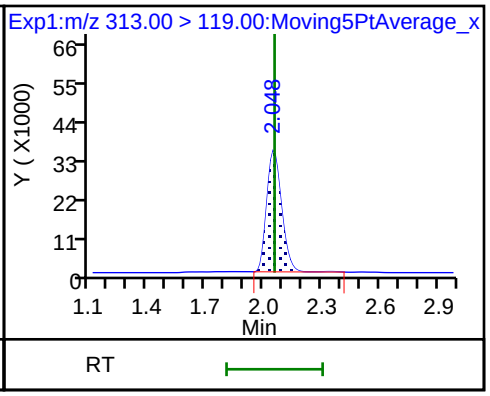
D 7 13C2 PFHxA



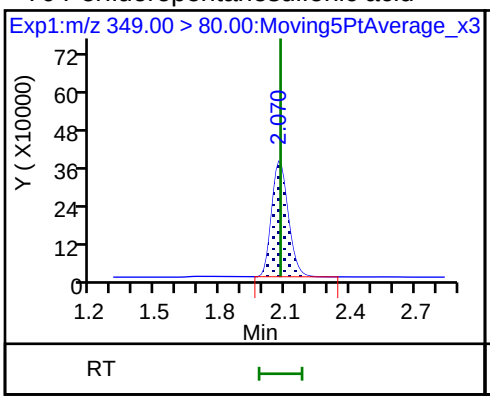
6 Perfluorohexanoic acid



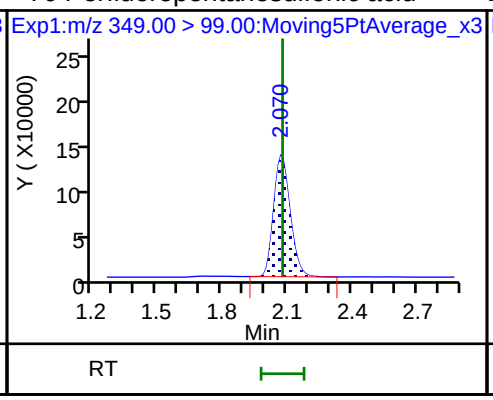
6 Perfluorohexanoic acid



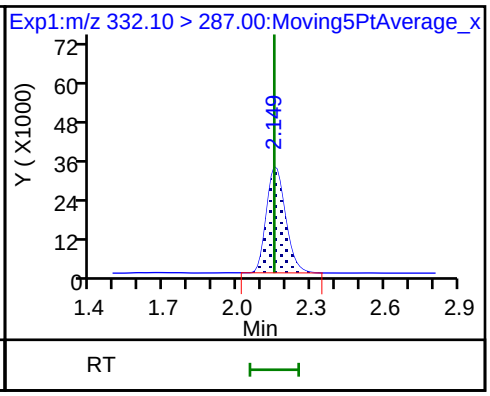
70 Perfluoropentanesulfonic acid



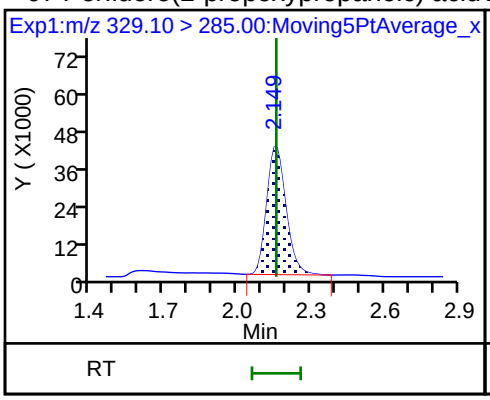
70 Perfluoropentanesulfonic acid



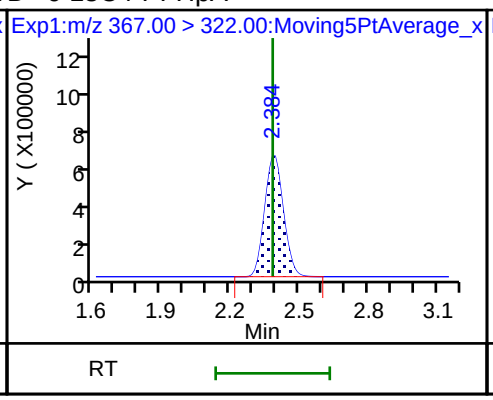
D 64 13C3 HFPO-DA



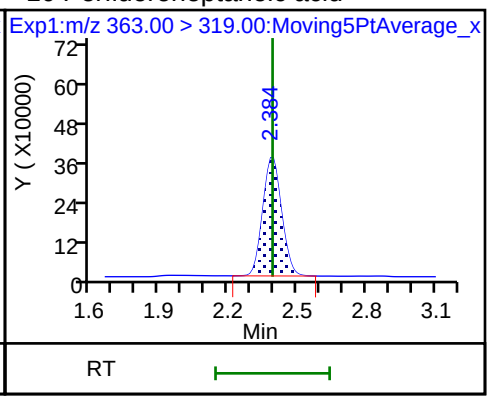
67 Perfluoro(2-propoxypropanoic) acid



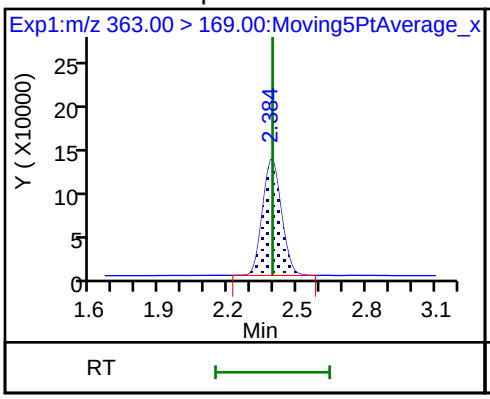
D 9 13C4-PFHpA



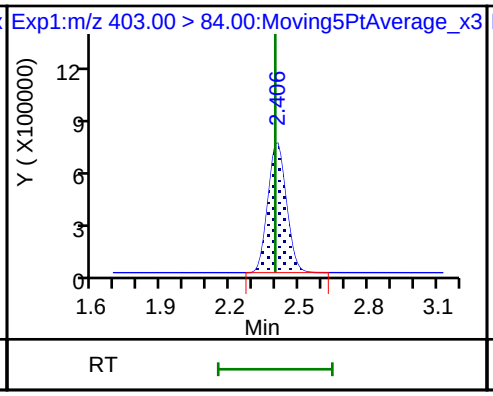
10 Perfluoroheptanoic acid



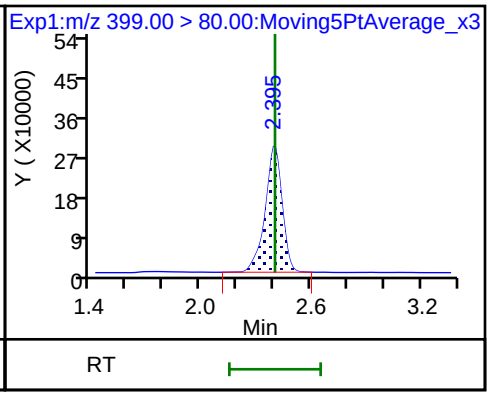
10 Perfluoroheptanoic acid



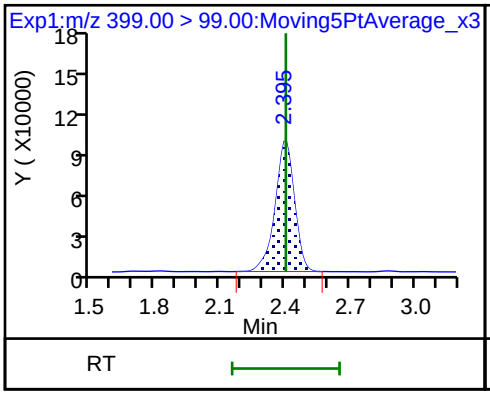
D 11 18O2 PFHxS



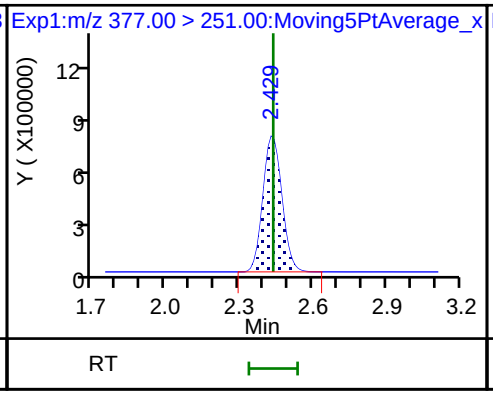
8 Perfluorohexanesulfonic acid



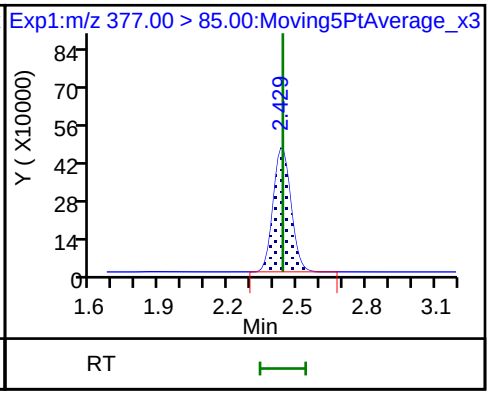
8 Perfluorohexanesulfonic acid



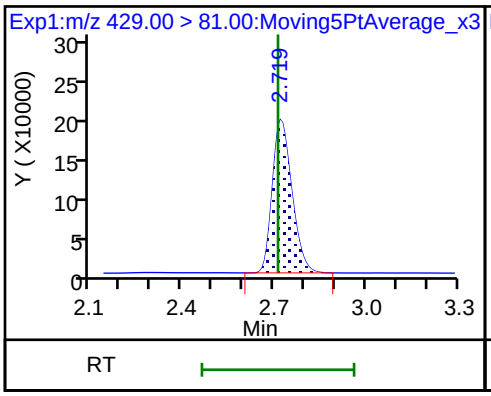
65 Adona



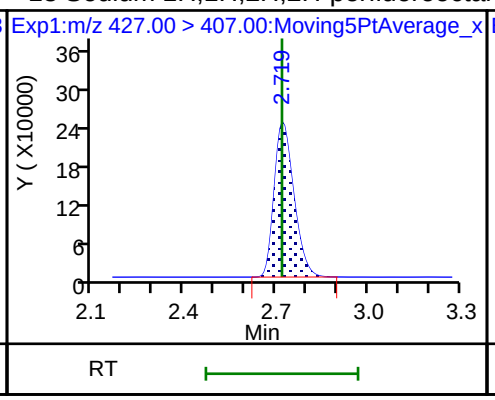
65 Adona



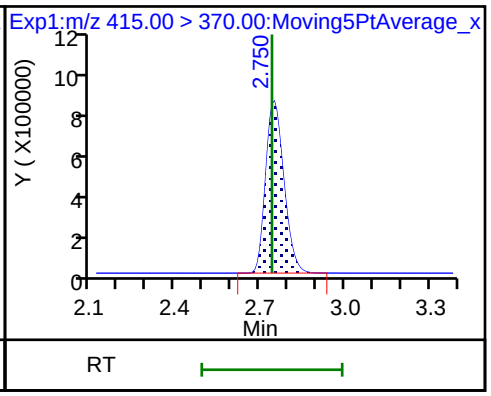
D 12 M2-6:2FTS



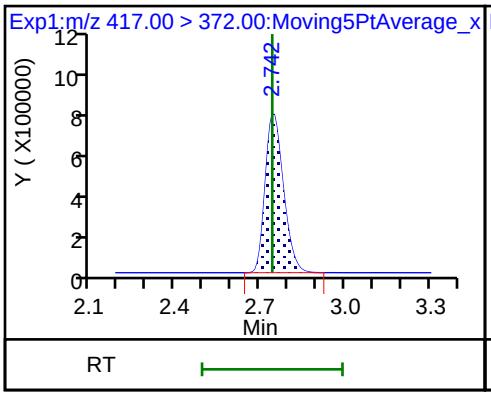
13 Sodium 1H,1H,2H,2H-perfluorooctane



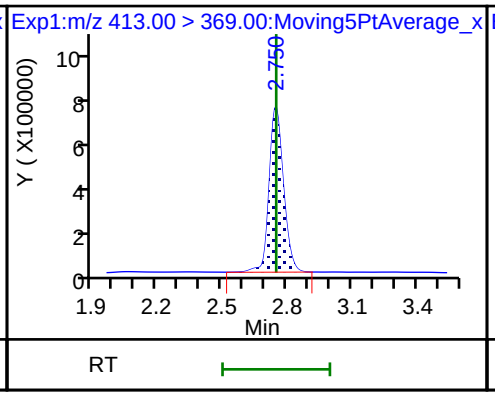
M2 13C2-PFOA



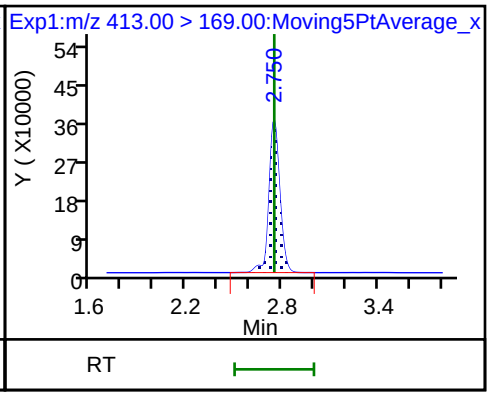
D 14 13C4 PFOA



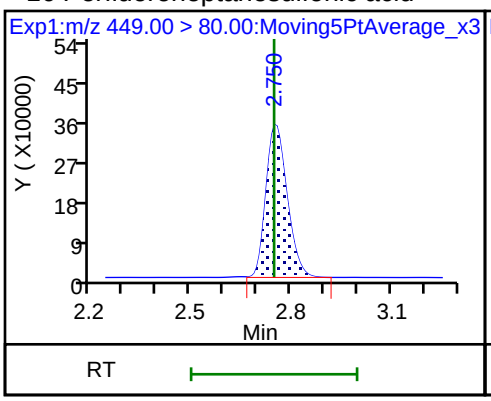
15 Perfluorooctanoic acid



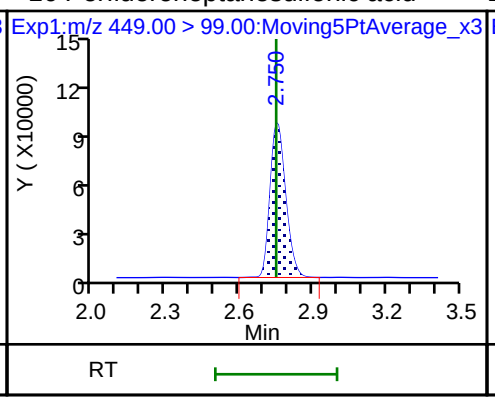
15 Perfluorooctanoic acid



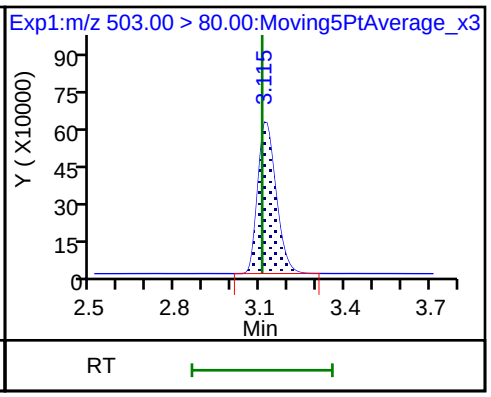
16 Perfluoroheptanesulfonic acid



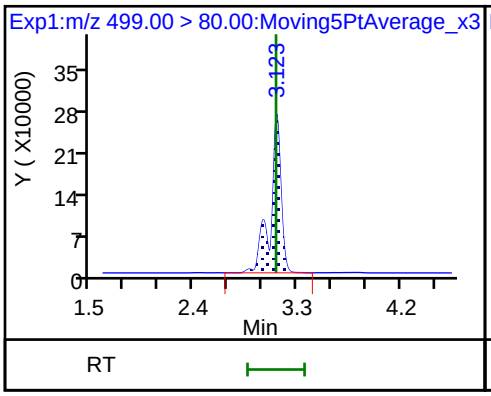
16 Perfluoroheptanesulfonic acid



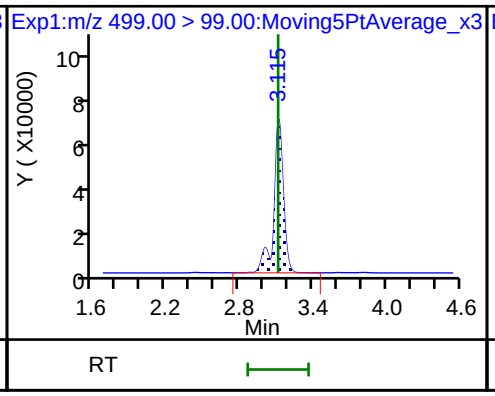
D 18 13C4 PFOS



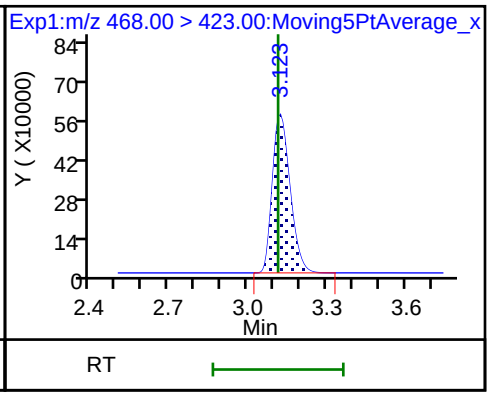
17 Perfluorooctane sulfonic acid



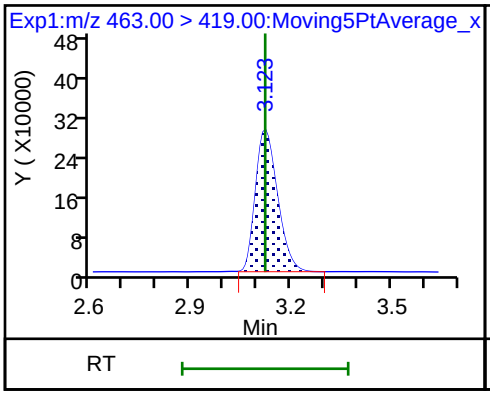
17 Perfluorooctane sulfonic acid



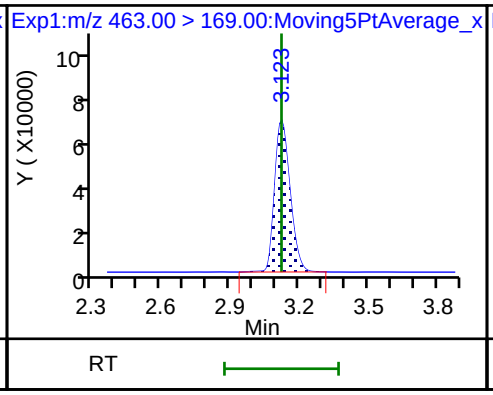
D 19 13C5 PFNA



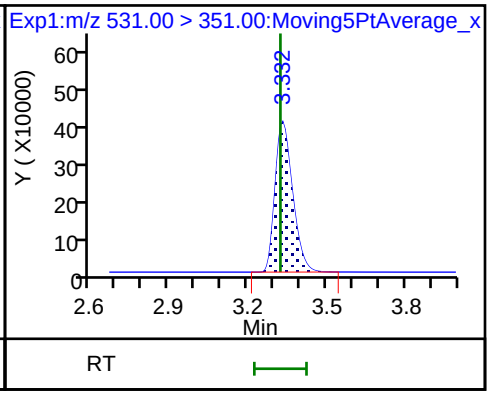
20 Perfluorononanoic acid



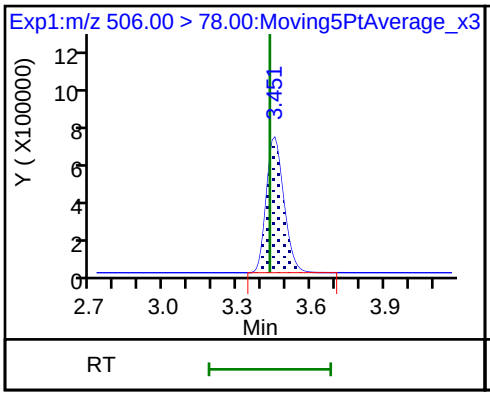
20 Perfluorononanoic acid



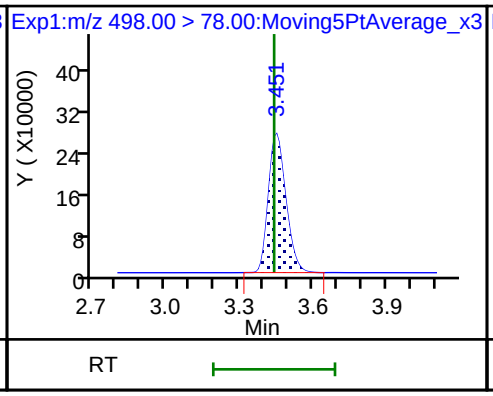
69 9-Chlorohexadecafluoro-3-oxanonane



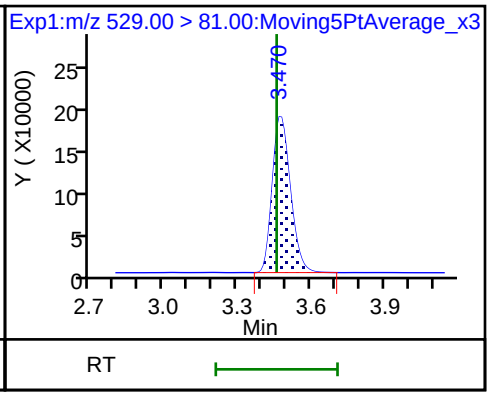
D 21 13C8 FOSA



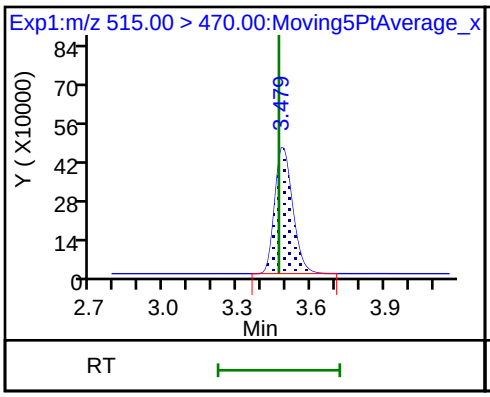
22 Perfluorooctane Sulfonamide



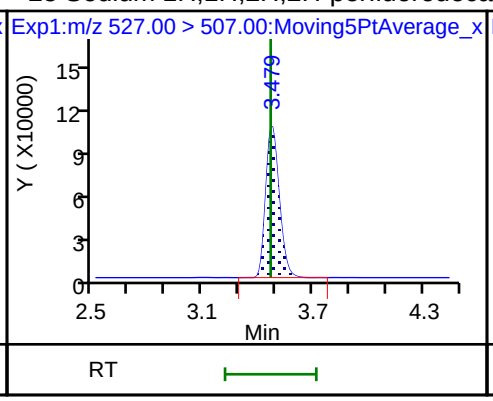
D 26 M2-8:2FTS



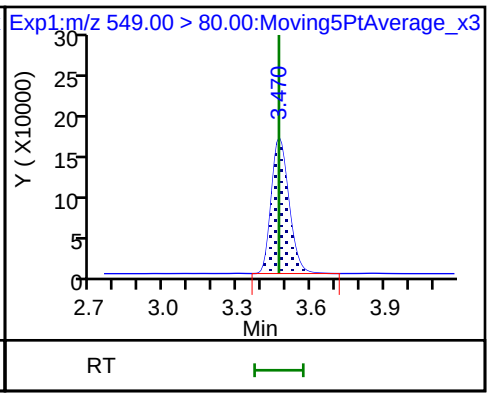
D 23 13C2 PFDA



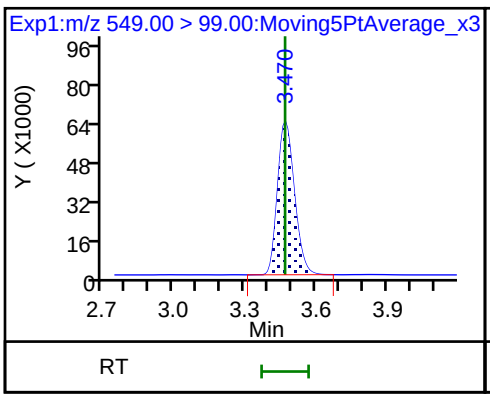
25 Sodium 1H,1H,2H,2H-perfluorodecane



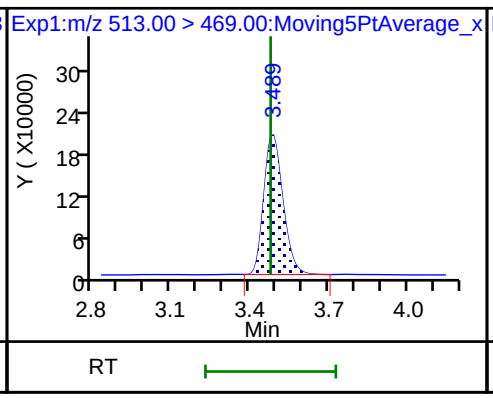
68 Perfluorononanesulfonic acid



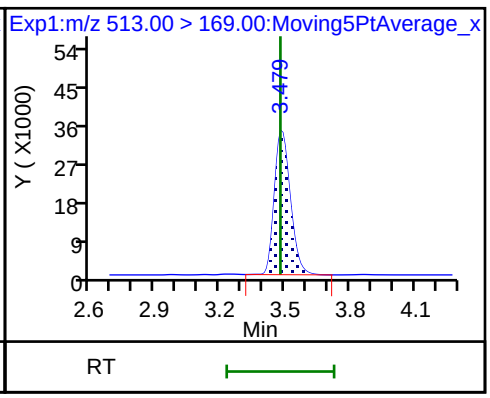
68 Perfluorononanesulfonic acid



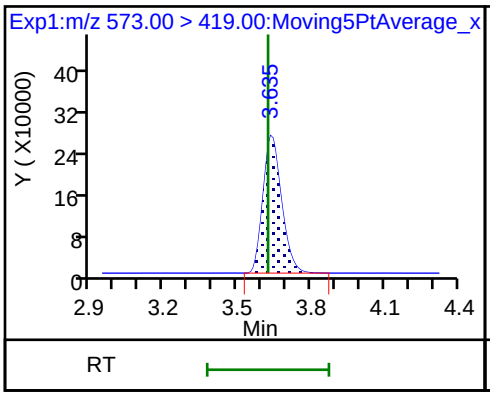
24 Perfluorodecanoic acid



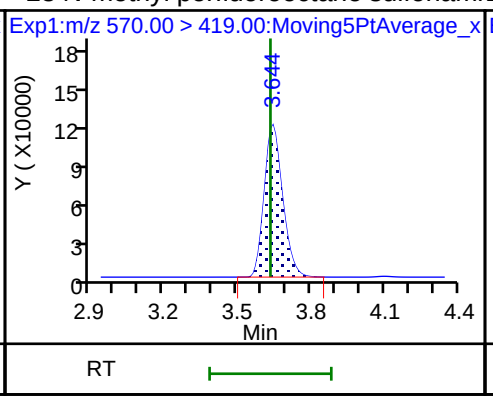
24 Perfluorodecanoic acid



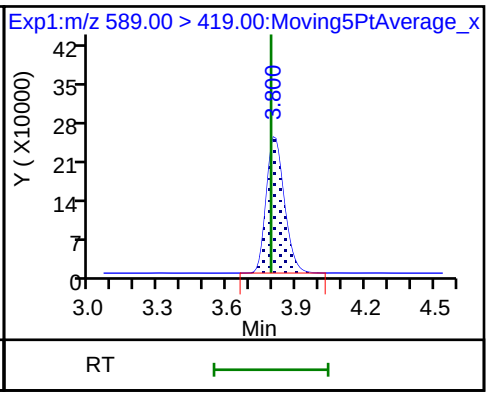
D 27 d3-NMeFOSAA



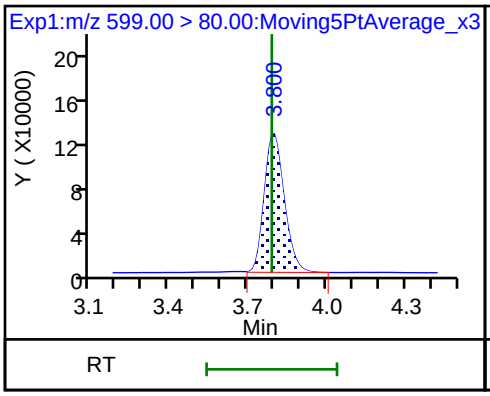
28 N-methyl perfluorooctane sulfonami



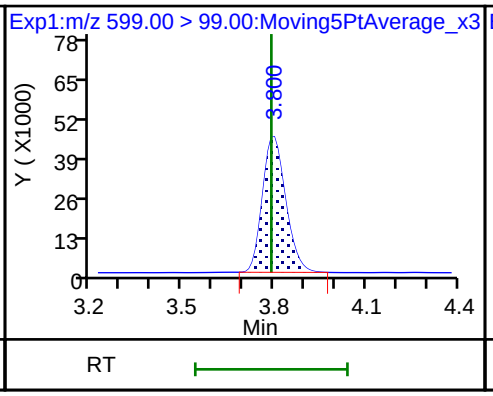
D 32 d5-NEtFOSAA



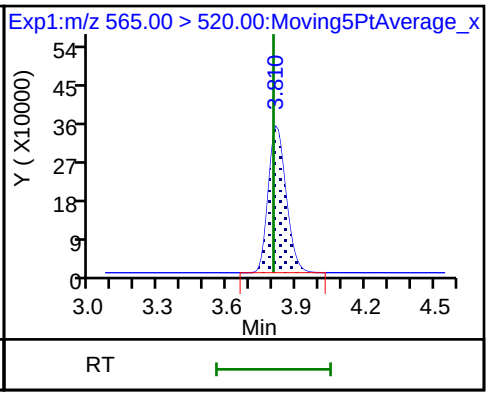
29 Perfluorodecane Sulfonic acid



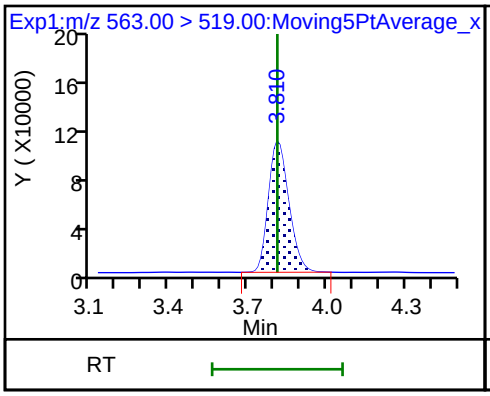
29 Perfluorodecane Sulfonic acid



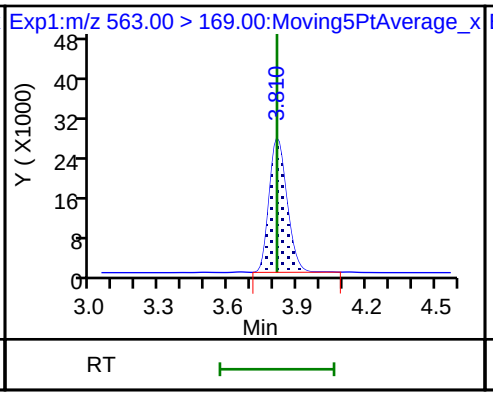
D 30 13C2 PFUnA



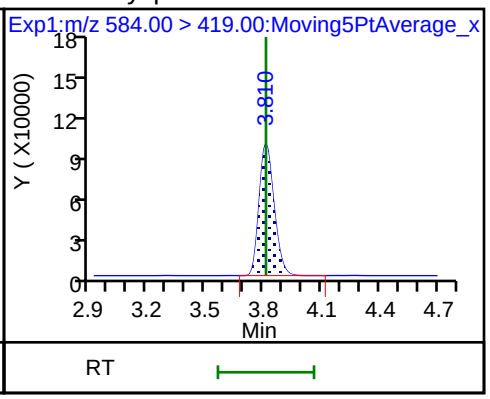
31 Perfluoroundecanoic acid



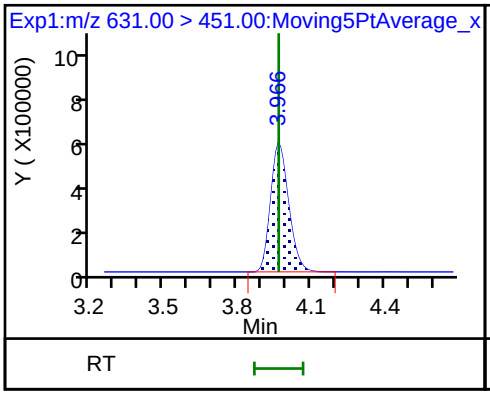
31 Perfluoroundecanoic acid



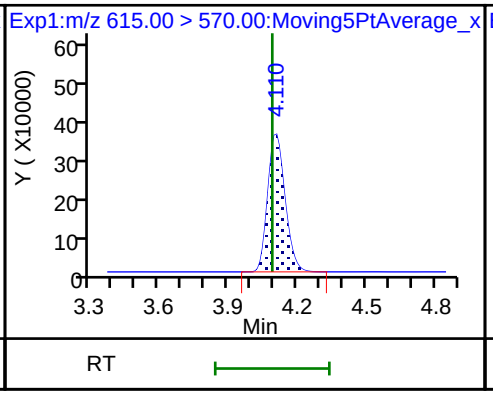
33 N-ethyl perfluorooctane sulfonamid



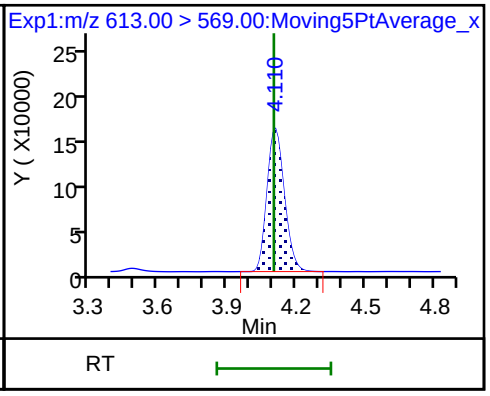
66 11-Chloroeicosafluoro-3-oxaundecan



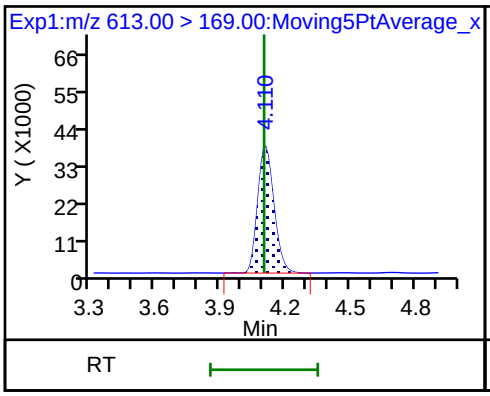
D 36 13C2 PFDoA



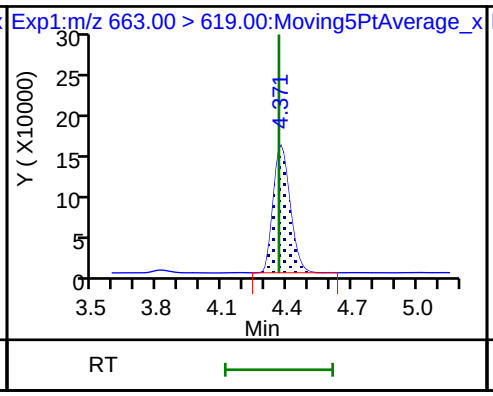
37 Perfluorododecanoic acid



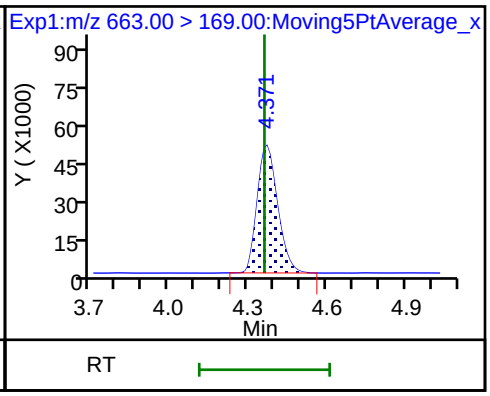
37 Perfluorododecanoic acid



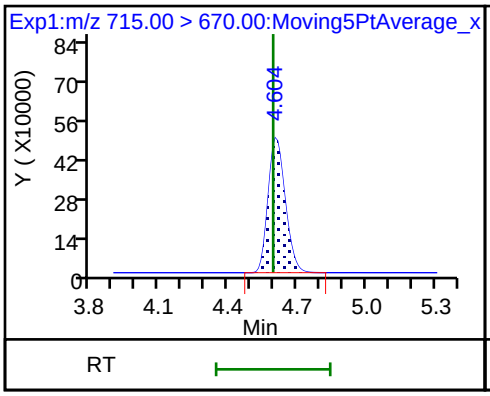
41 Perfluorotridecanoic acid



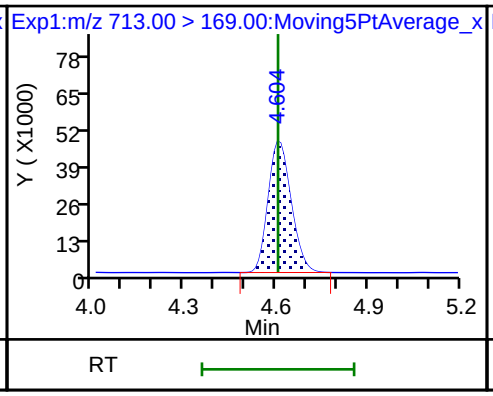
41 Perfluorotridecanoic acid



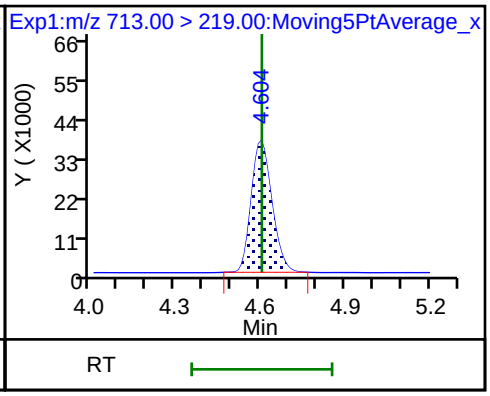
D 43 13C2-PFTeDA



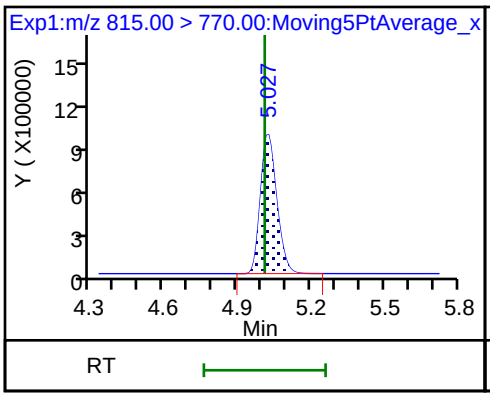
42 Perfluorotetradecanoic acid



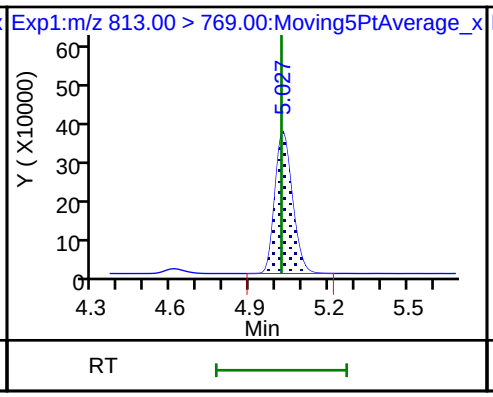
42 Perfluorotetradecanoic acid



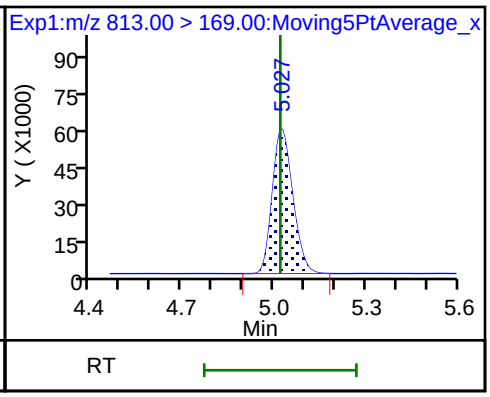
D 44 13C2-PFHxDA



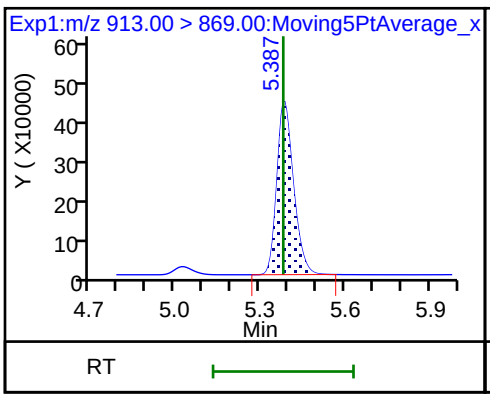
45 Perfluorohexadecanoic acid



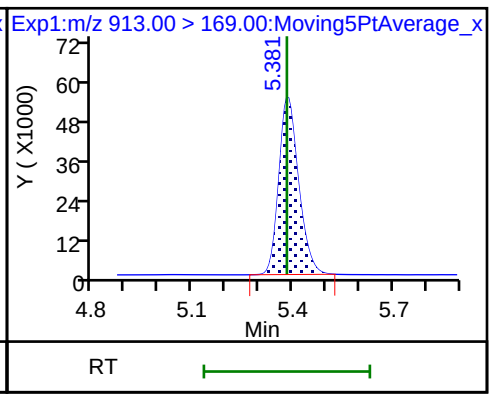
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

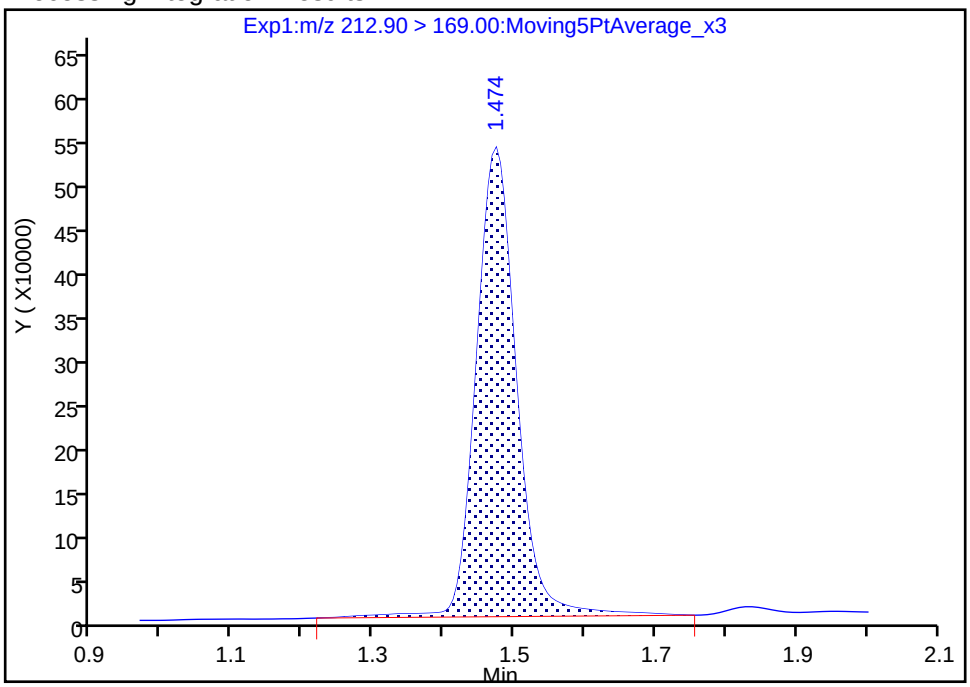
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_003.d				
Injection Date:	10-May-2018 19:59:26	Instrument ID:	A8_N		
Lims ID:	320-38611-A-1-C MSD				
Client ID:	GC-MW-107(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	20	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

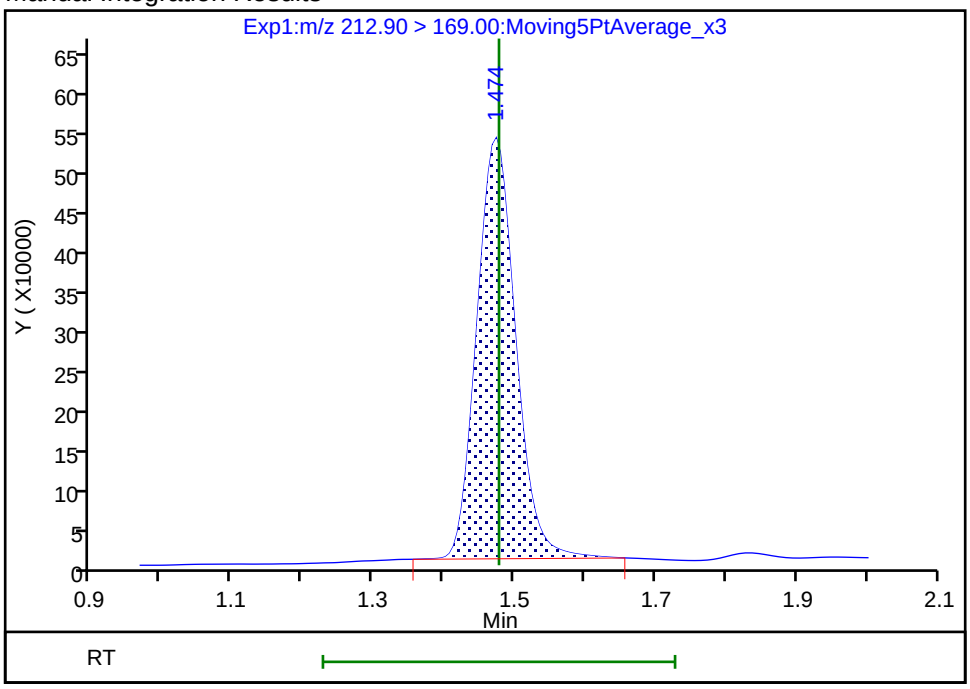
Processing Integration Results

RT: 1.47
Area: 2113716
Amount: 1.379198
Amount Units: ng/ml



Manual Integration Results

RT: 1.47
Area: 2014498
Amount: 1.314458
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:12:09

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

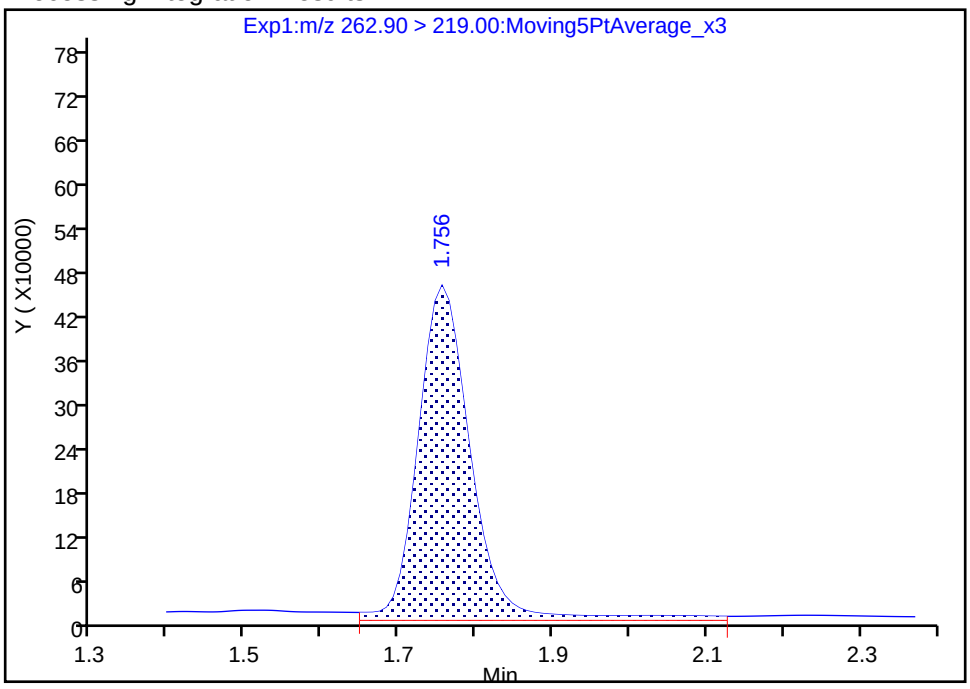
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_003.d				
Injection Date:	10-May-2018 19:59:26	Instrument ID:	A8_N		
Lims ID:	320-38611-A-1-C MSD				
Client ID:	GC-MW-107(WG)				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	20	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

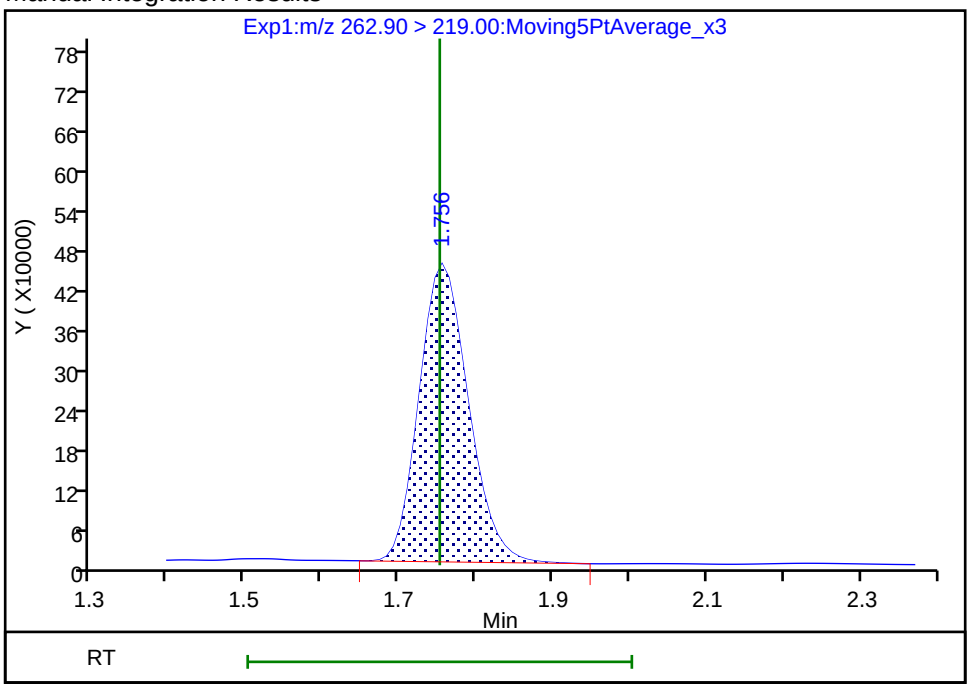
Processing Integration Results

RT: 1.76
Area: 2220890
Amount: 1.485375
Amount Units: ng/ml



Manual Integration Results

RT: 1.76
Area: 2000482
Amount: 1.337962
Amount Units: ng/ml



Reviewer: hannigana, 18-May-2018 15:12:19

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) MSD RE | Lab Sample ID: 320-38611-1 MSD RE

Matrix: Water | Lab File ID: 2018.05.16LLD_021.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 279.4(mL) | Date Analyzed: 05/17/2018 01:38

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*61.4*		*1.8*	*0.76*
27619-97-2	*6:2FTS*	*36.8*		*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	108		25-150
STL02279	M2-6:2FTS	117		25-150

Report Date: 17-May-2018 13:52:19 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_021.d
Lims ID: 320-38611-B-1-E MSD
Client ID: GC-MW-107(WG)
Sample Type: MSD
Inject. Date: 17-May-2018 01:38:12 ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-b-1-e msd
Misc. Info.: Plate: 1 Rack: 5
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 17-May-2018 13:52:18 Calib Date: 15-May-2018 16:39:20
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180515-58217.b\2018.05.15LLC_ICAL_006.d

Column 1 : Det: EXP1
Process Host: XAWRK012

First Level Reviewer: ruangyotsakuld Date: 17-May-2018 13:52:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.452	1.447	0.005	1.000	5707554	1.96		78.4	36607	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.452	1.457	-0.005	1.000	2817964	1.33		133	487	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.728	1.712	0.016	0.566	4353222	2.33		93.3	33082	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.728	1.729	-0.001	1.000	2708390	1.32		132	442	M
D 47 13C3-PFBS										
301.90 > 83.00	1.755	1.748	0.007	1.000	92070	2.18		93.9	1093	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.764	1.765	-0.001	1.005	3467627	1.12		127	1442	
298.90 > 99.00	1.764	1.765	-0.001	1.005	1414944		2.45(1.25-3.74)		2276	
61 Sodium 1H,1H,2H,2H-perfluorohexane										
327.00 > 307.00	1.969	1.970	-0.001	1.000	1017398	1.55		166	26075	
D 7 13C2 PFHxA										
315.00 > 270.00	2.002	1.994	0.008	1.000	4909275	2.47		98.7	78189	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.002	2.014	-0.012	1.000	2665534	1.32		132	955	
313.00 > 119.00	2.002	2.014	-0.012	1.000	251999		10.58(5.03-15.10)		1911	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.025	2.036	-0.011	1.000	2609066	0.9474		101	4168	
349.00 > 99.00	2.025	2.036	-0.011	1.000	939094		2.78(1.36-4.07)		3411	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.104	2.095	0.009	1.000	200970	2.04		81.6	3481	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.104	2.104	0.0	1.000	290675	1.18		118	412	
D 9 13C4-PFHpA										
367.00 > 322.00	2.332	2.321	0.011	1.000	4760243	2.50		99.8	70126	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.332	2.332	0.0	1.000	2576528	1.28		128	1603	
363.00 > 169.00	2.332	2.332	0.0	1.000	1059392		2.43(1.13-3.40)		6612	
D 11 18O2 PFHxS										
403.00 > 84.00	2.345	2.334	0.011	1.000	5413040	2.30		97.1	80449	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.345	2.345	0.0	1.000	2551741	0.9894		109	2683	
399.00 > 99.00	2.345	2.345	0.0	1.000	817446		3.12(1.50-4.49)		2195	
65 Adona										
377.00 > 251.00	2.383	2.384	-0.001	1.000	5697691	1.06		106	52518	
377.00 > 85.00	2.383	2.384	-0.001	1.000	3487969		1.63(0.84-2.53)		16211	
D 12 M2-6:2FTS										
429.00 > 81.00	2.659	2.645	0.014	1.000	1170334	2.78		117	7024	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.666	2.667	-0.001	1.003	897249	1.03		108	9244	
D 14 13C4 PFOA										
417.00 > 372.00	2.689	2.668	0.021	1.000	4873919	2.70		108	94776	
* 62 13C2-PFOA										
415.00 > 370.00	2.689	2.689	0.0		4762966	2.50			84820	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.681	2.689	-0.008	0.997	3933890	1.71		171	1585	
413.00 > 169.00	2.689	2.689	0.0	1.000	2102483		1.87(0.84-2.52)		6201	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.696	2.697	-0.001	1.000	2031588	0.9741		102	12043	
449.00 > 99.00	2.689	2.697	-0.008	0.997	555353		3.66(1.94-5.82)		6552	
D 18 13C4 PFOS										
503.00 > 80.00	3.054	3.029	0.025	1.000	3742358	2.31		96.7	22662	
D 19 13C5 PFNA										
468.00 > 423.00	3.054	3.036	0.018	1.000	3950164	2.68		107	94646	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.047	3.051	-0.004	0.998	2293786	1.25		134	12342	
499.00 > 99.00	3.054	3.051	0.003	1.000	466862		4.91(2.31-6.93)		4310	
20 Perfluorononanoic acid										
463.00 > 419.00	3.054	3.051	0.003	1.000	1824031	1.09		109	2813	
463.00 > 169.00	3.054	3.051	0.003	1.000	466181		3.91(1.90-5.69)		6597	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.260	3.259	0.001	1.000	2767885	0.9856		106	16906	
D 26 M2-8:2FTS										
529.00 > 81.00	3.398	3.376	0.022	1.000	1198223	2.50		104	13318	
D 21 13C8 FOSA										
506.00 > 78.00	3.389	3.376	0.013	1.000	4856734	2.29		91.6	41907	
D 23 13C2 PFDA										
515.00 > 470.00	3.408	3.385	0.023	1.000	3186903	2.54		102	78011	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.389	3.388	0.001	1.000	1871126	0.9893		98.9	21728	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.398	3.398	0.0	1.000	665744	0.9861		103	16211	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.398	3.398	0.0	1.000	1098204	0.9259		96.4	11758	
549.00 > 99.00	3.398	3.398	0.0	1.000	414482		2.65(1.33-3.97)		5015	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.408	3.407	0.001	1.000	1434048	1.16		116	5982	
513.00 > 169.00	3.408	3.407	0.001	1.000	248478		5.77(2.36-7.09)		6838	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.557	3.544	0.013	1.000	2057237	2.97		119	39244	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.566	3.565	0.001	1.003	884455	1.06		106	6709	
D 30 13C2 PFUnA										
565.00 > 520.00	3.740	3.716	0.024	1.000	2556096	2.57		103	51990	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.730	3.716	0.014	1.000	1837545	2.59		103	16592	
29 Perfluorodecane Sulfonic acid										M
599.00 > 80.00	3.719	3.718	0.001	1.000	949455	0.9031		93.7	3230	M
599.00 > 99.00	3.719	3.718	0.001	1.000	312815		3.04(1.39-4.16)		8134	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.740	3.740	0.0	1.000	828482	0.9702		97.0	4428	
563.00 > 169.00	3.740	3.740	0.0	1.000	217741		3.80(2.12-6.36)		9788	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.740	3.740	0.0	1.003	701491	1.02		102	15951	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.897	3.896	0.001	1.000	3906772	0.9175		97.4	26895	
D 36 13C2 PFDoA										
615.00 > 570.00	4.030	4.006	0.024	1.000	2656949	2.48		99.4	21448	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.030	4.029	0.001	1.000	1069431	0.9642		96.4	1076	
613.00 > 169.00	4.030	4.029	0.001	1.000	277810		3.85(2.13-6.40)		4712	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.291	4.290	0.001	1.000	1345384	1.11		111	1148	
663.00 > 169.00	4.291	4.290	0.001	1.000	414424		3.25(1.25-3.76)		4394	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.532	4.511	0.021	1.000	3354191	2.55		102	16054	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.532	4.531	0.001	1.000	343570	1.01		101	5410	
713.00 > 219.00	4.522	4.531	-0.009	0.998	251505		1.37(0.71-2.13)		6732	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.940	4.922	0.018	1.000	5883476	2.71		108	11580	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.949	4.948	0.001	1.002	2288443	1.02		102	732	
813.00 > 169.00	4.949	4.948	0.001	1.002	359495		6.37(2.86-8.58)		2740	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.299	5.306	-0.007	1.000	2601080	1.05		105	526	
913.00 > 169.00	5.299	5.306	-0.007	1.000	319505		8.14(3.83-11.48)		2288	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-May-2018 13:52:19 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180517-58289.b\2018.05.16LLD_021.d

Injection Date: 17-May-2018 01:38:12 Instrument ID: A8_N

Lims ID: 320-38611-B-1-E MSD

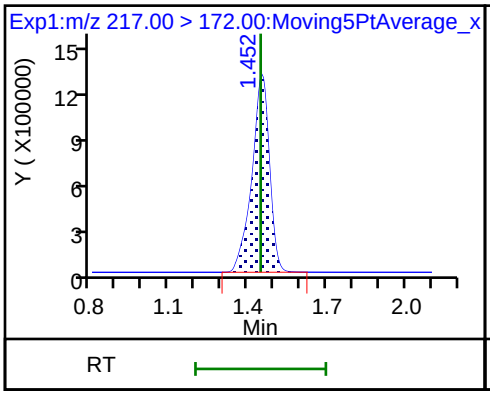
Client ID: GC-MW-107(WG)

Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 13

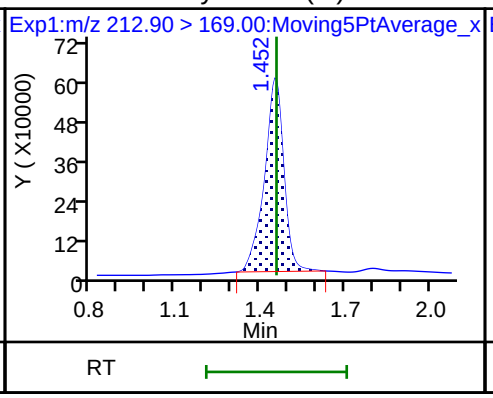
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

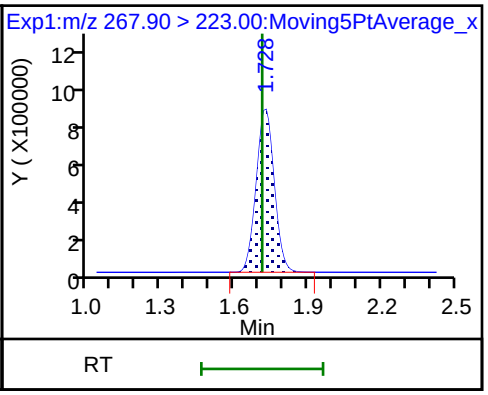
D 1 13C4 PFBA



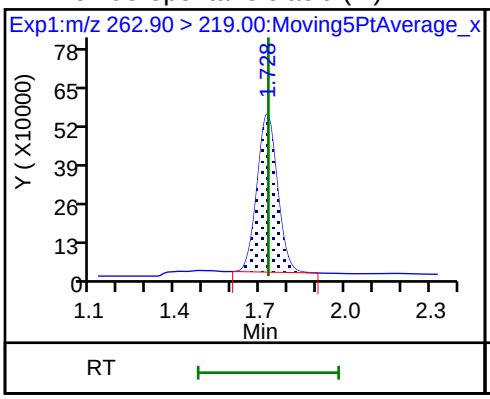
2 Perfluorobutyric acid (M)



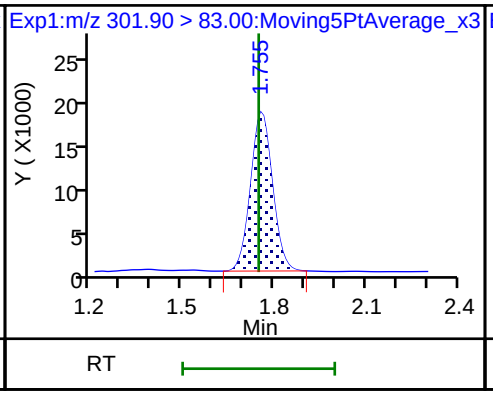
D 3 13C5-PFPeA



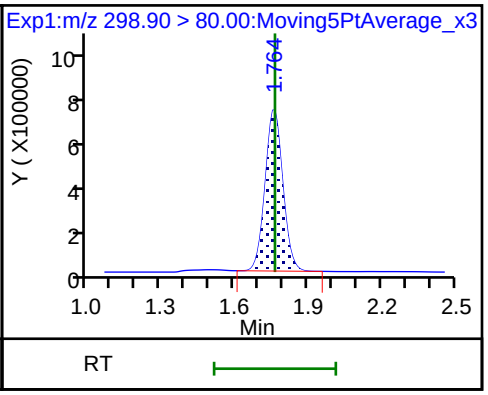
4 Perfluoropentanoic acid (M)



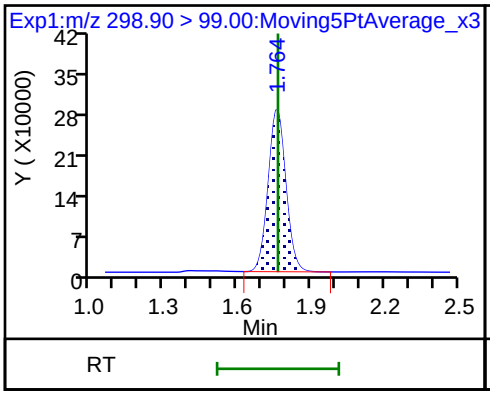
D 47 13C3-PFBS



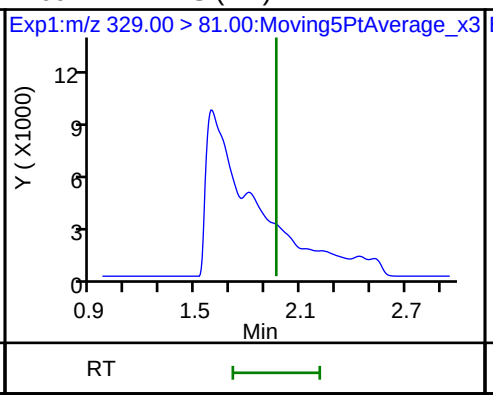
5 Perfluorobutanesulfonic acid



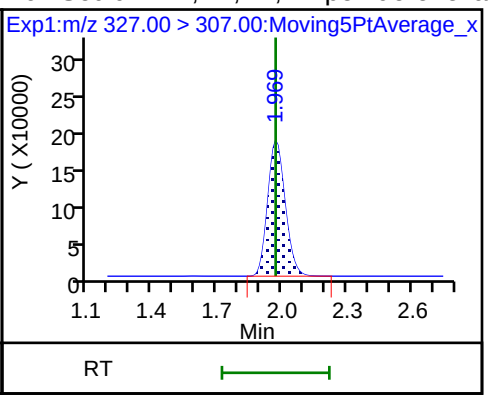
5 Perfluorobutanesulfonic acid



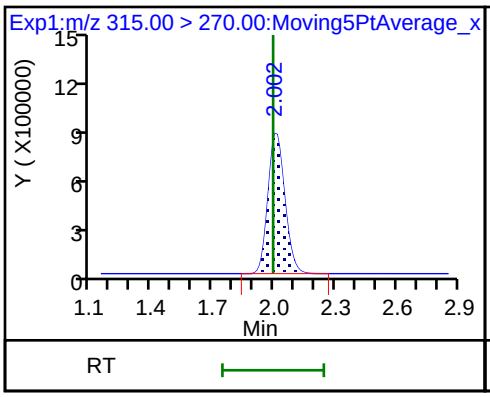
D 60 M2-4:2FTS (ND)



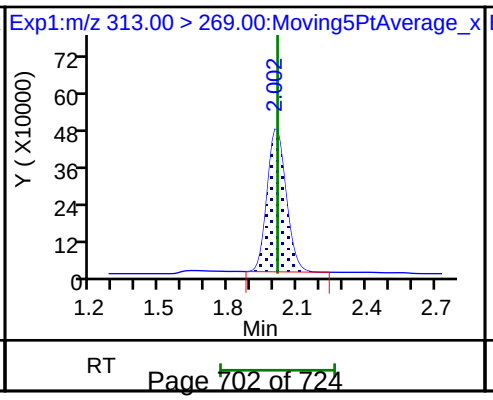
61 Sodium 1H,1H,2H,2H-perfluorohexane



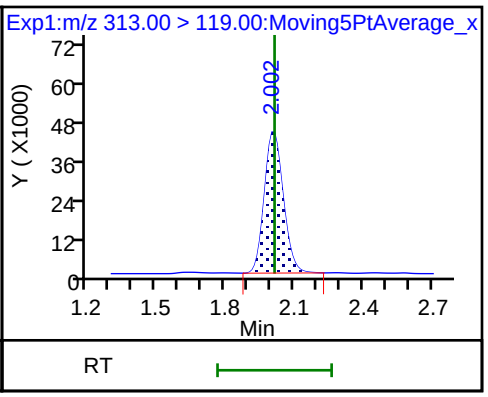
D 7 13C2 PFHxA



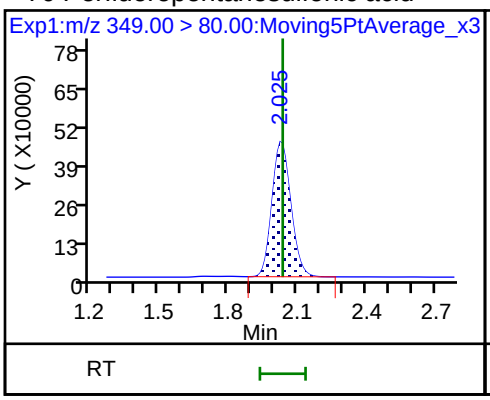
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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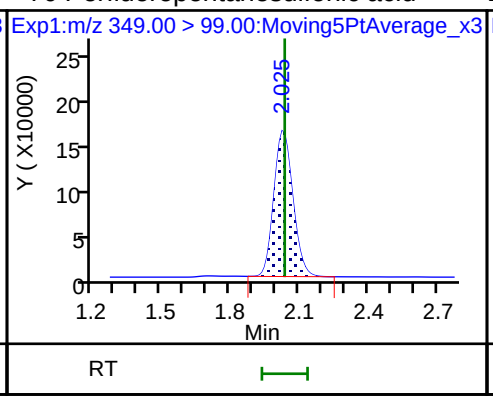
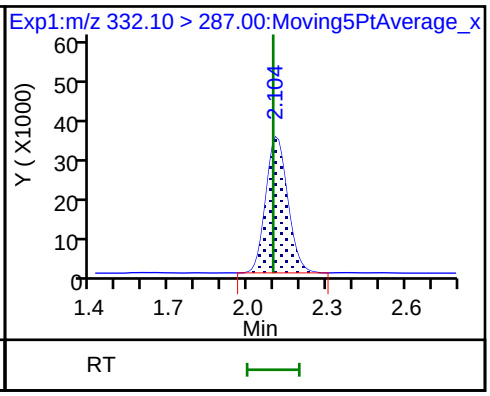
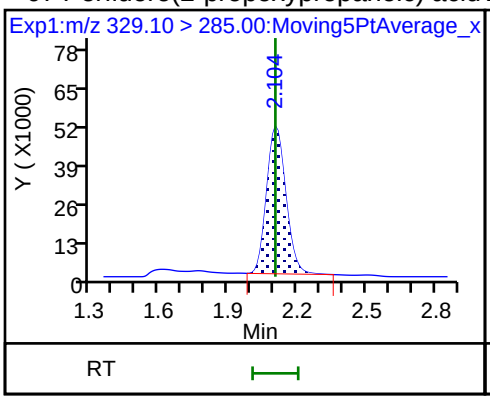


D 64 13C3 HFPO-DA



67 Perfluoro(2-propoxypropanoic) acid



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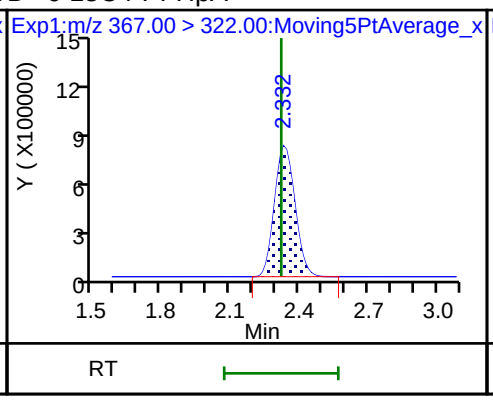
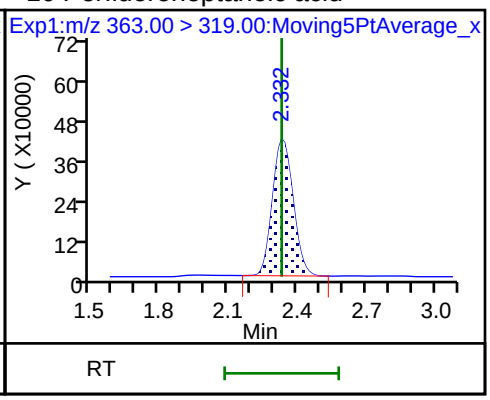
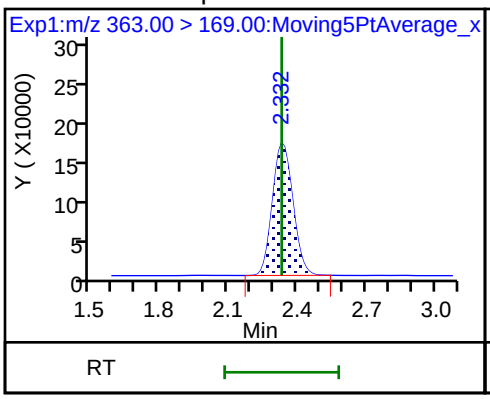


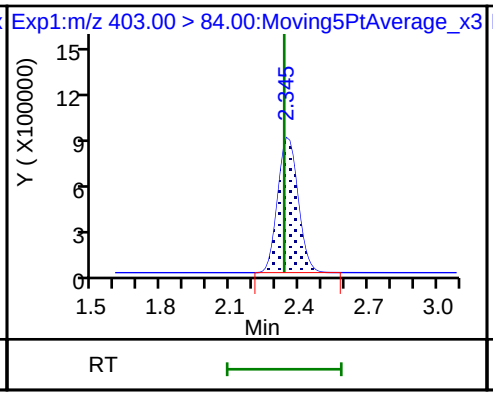
10 Perfluoroheptanoic acid



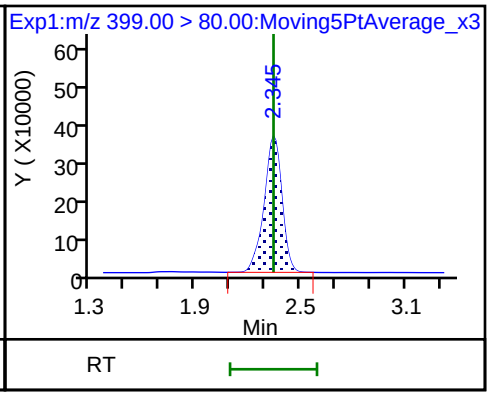
10 Perfluoroheptanoic acid



D 11 18O2 PFHxS



8 Perfluorohexanesulfonic acid



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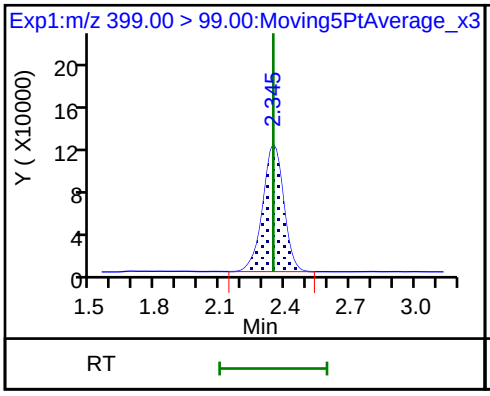
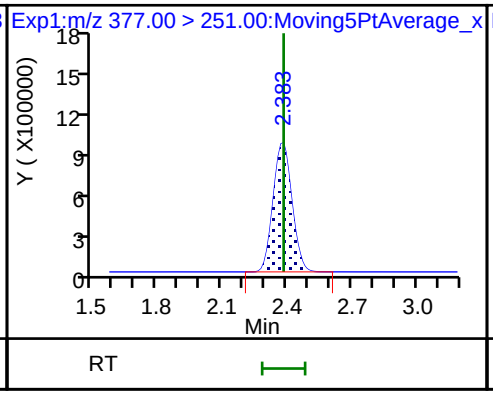


65 Adona



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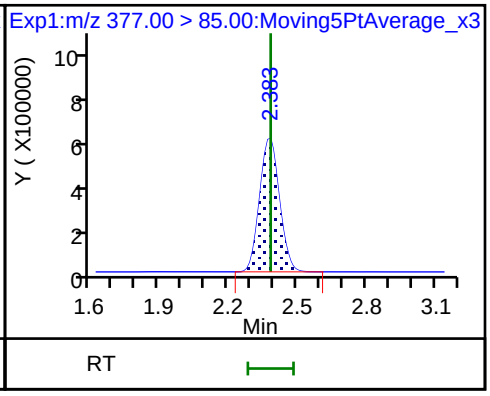
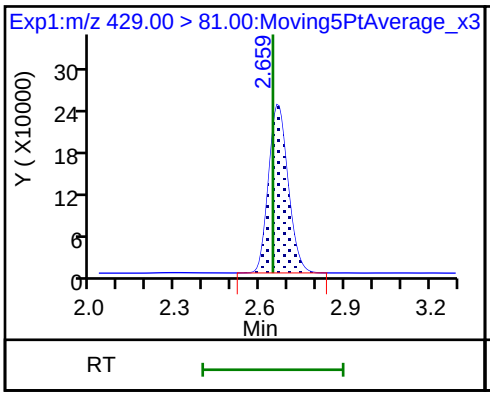
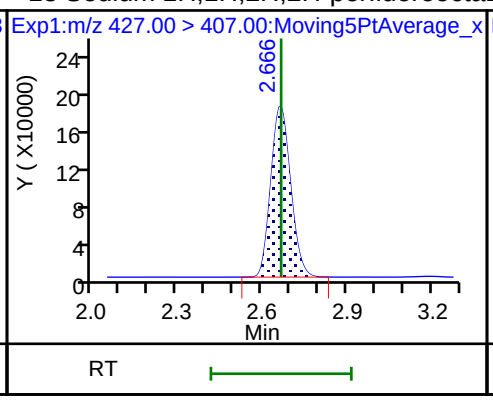


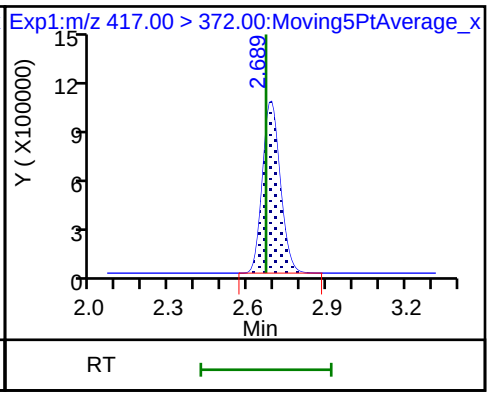
D 12 M2-6:2FTS



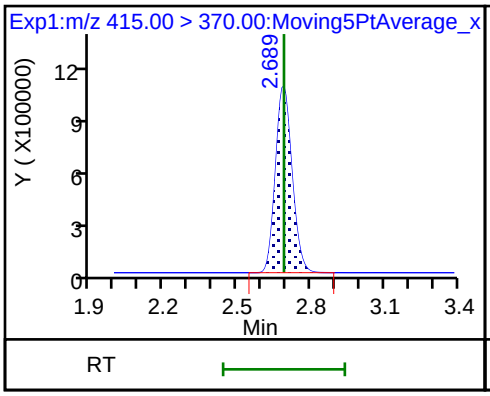
13 Sodium 1H,1H,2H,2H-perfluorooctane



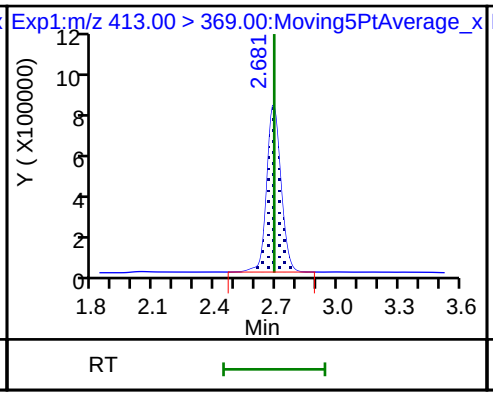
D 14 13C4 PFOA



* 62 13C2-PFOA



15 Perfluorooctanoic acid



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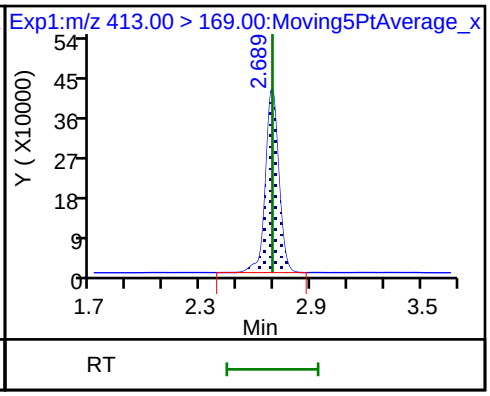
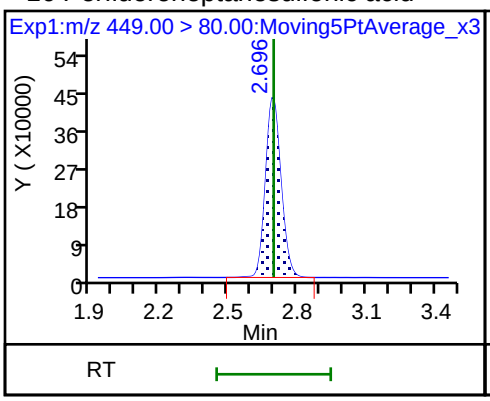


16 Perfluoroheptanesulfonic acid



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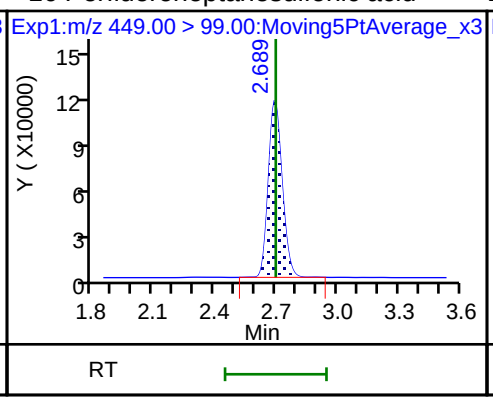

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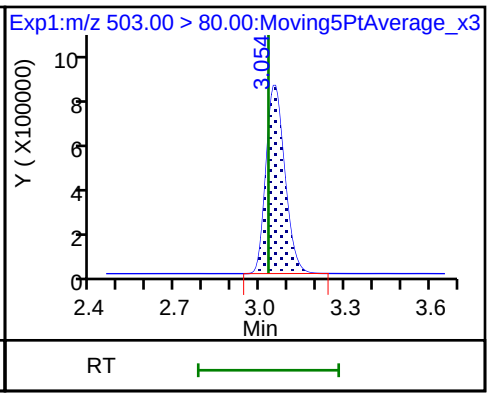

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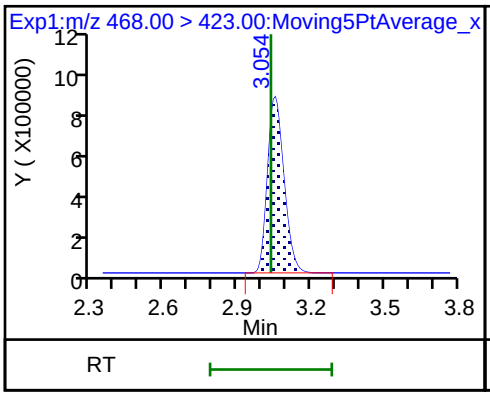
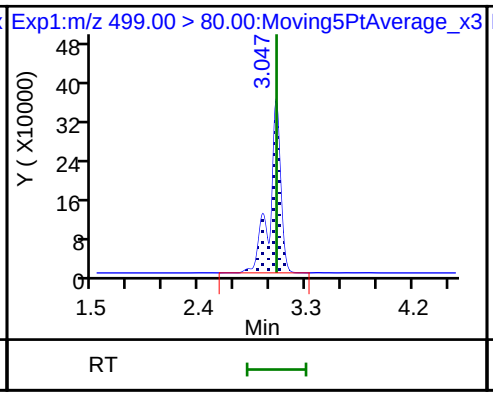
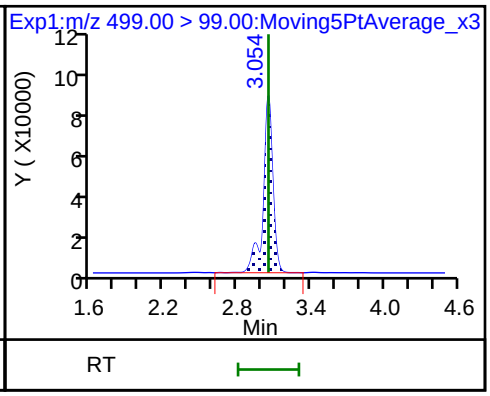


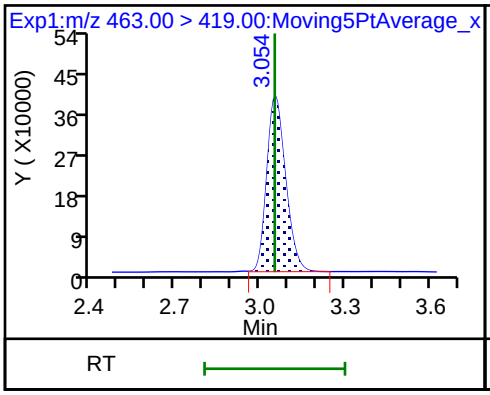
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



20 Perfluorononanoic acid



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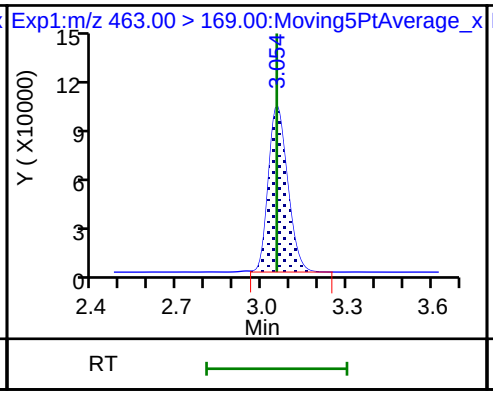
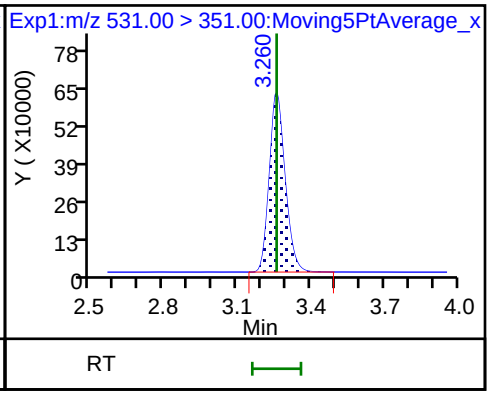


69 9-Chlorohexadecafluoro-3-oxanonane



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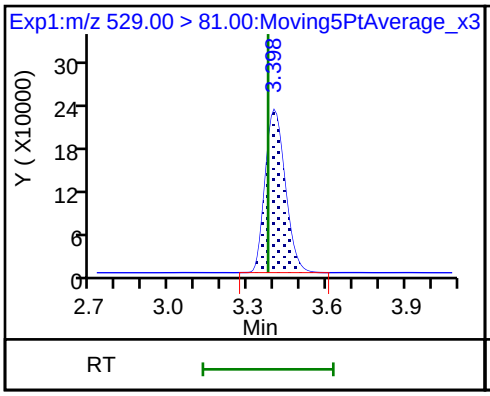

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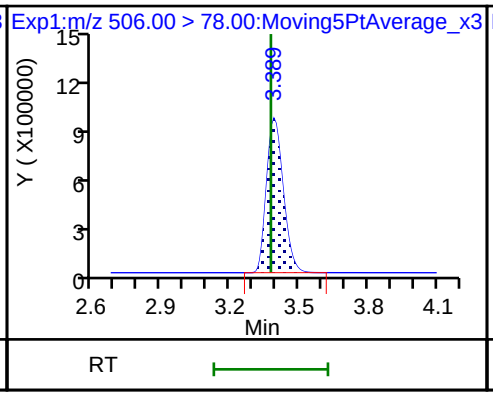

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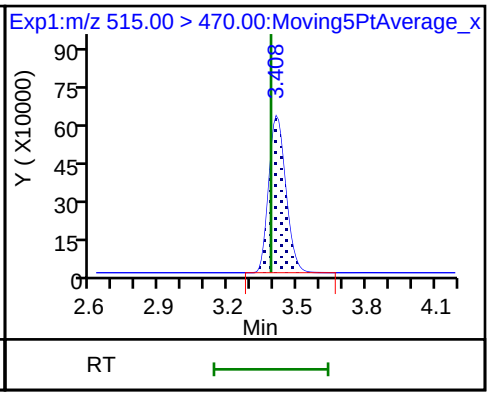
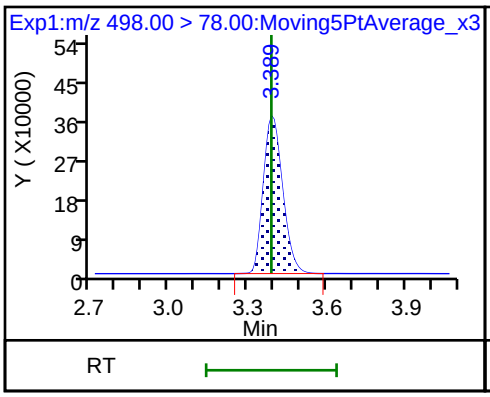
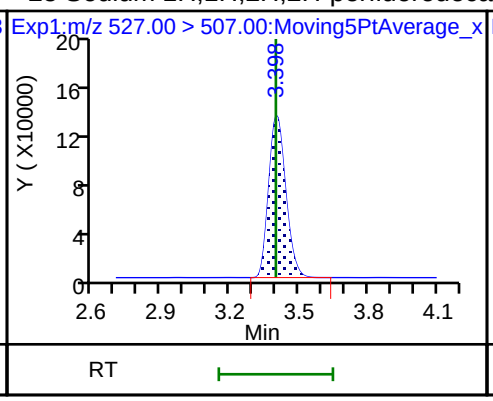


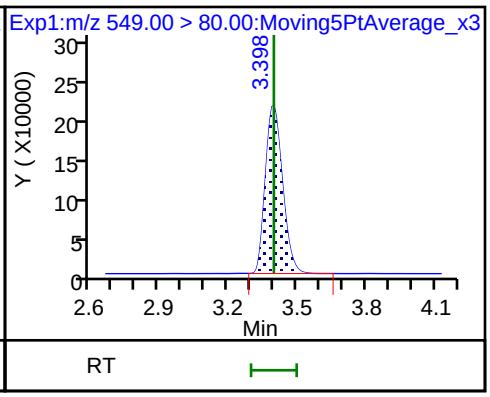
22 Perfluorooctane Sulfonamide



25 Sodium 1H,1H,2H,2H-perfluorodecane



68 Perfluorononanesulfonic acid



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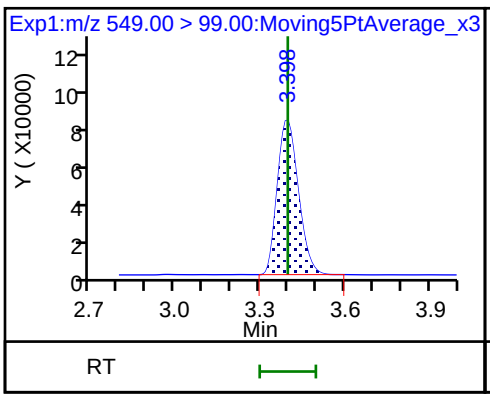
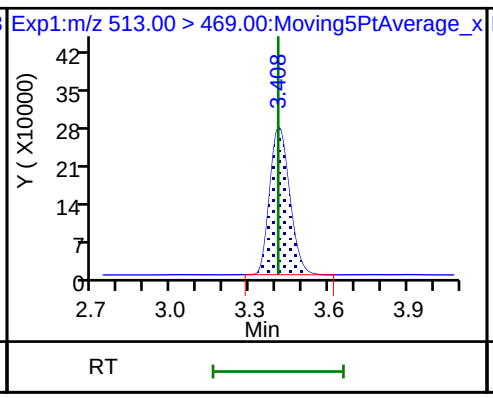
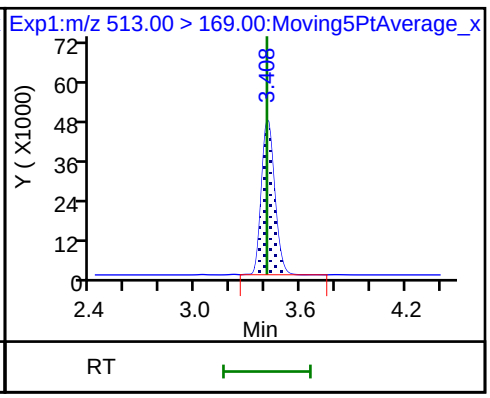


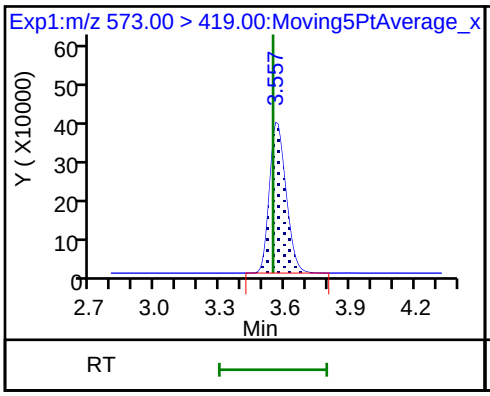
24 Perfluorodecanoic acid



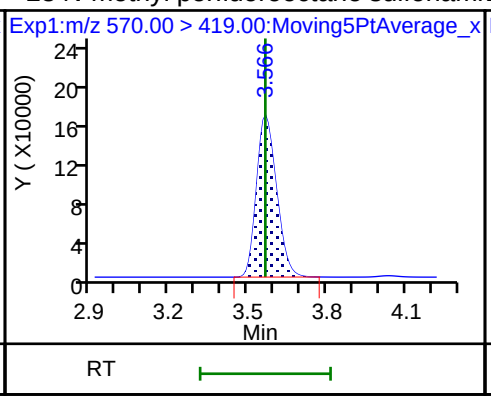
24 Perfluorodecanoic acid



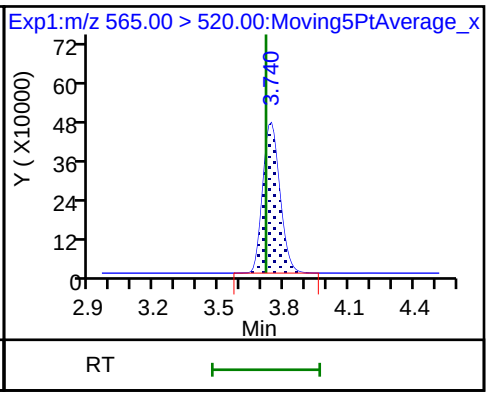
D 27 d3-NMeFOSAA



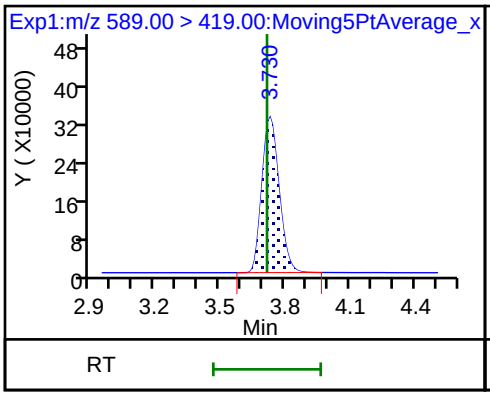
28 N-methyl perfluorooctane sulfonami



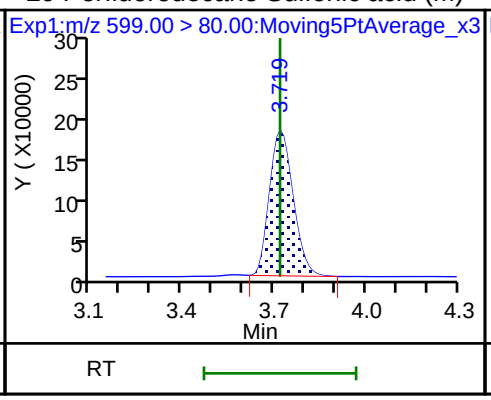
D 30 13C2 PFUnA



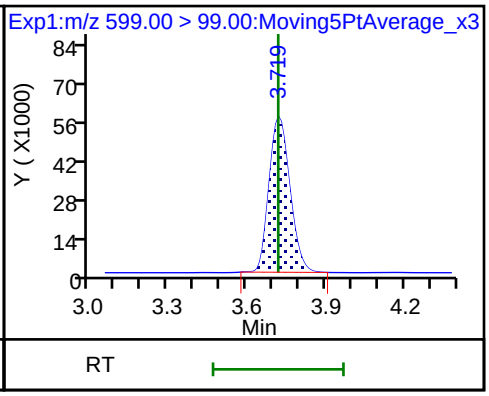
D 32 d5-NEtFOSAA



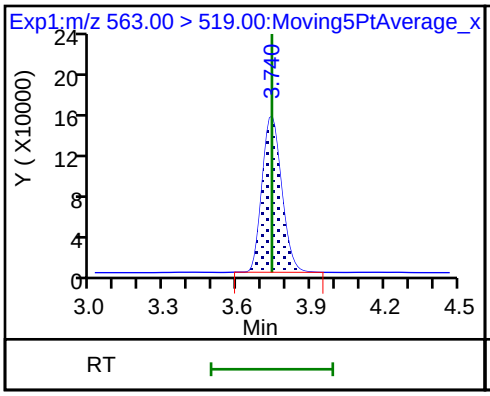
29 Perfluorodecane Sulfonic acid (M)



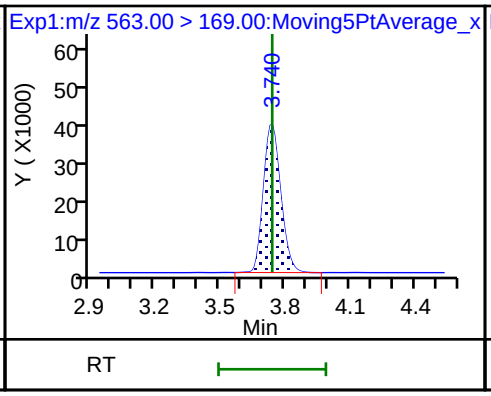
29 Perfluorodecane Sulfonic acid



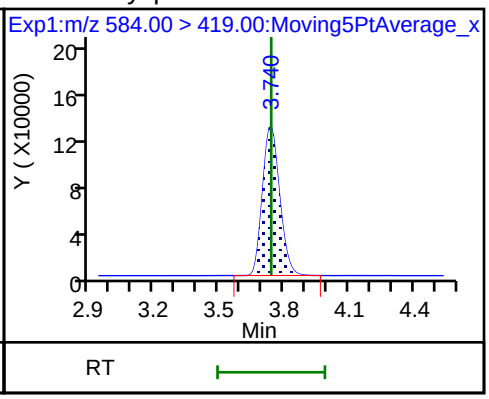
31 Perfluoroundecanoic acid



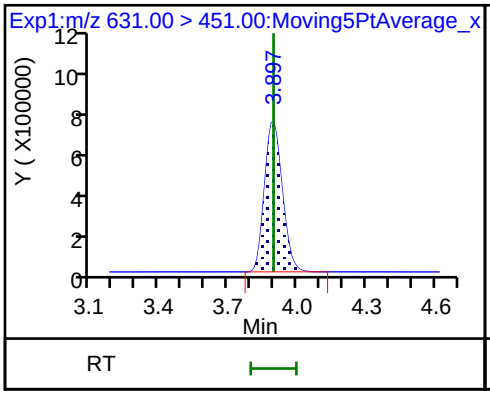
31 Perfluoroundecanoic acid



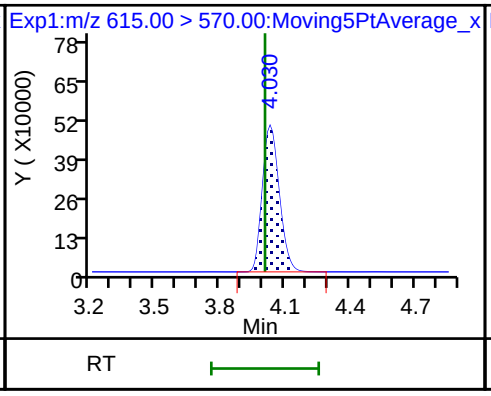
33 N-ethyl perfluorooctane sulfonamid



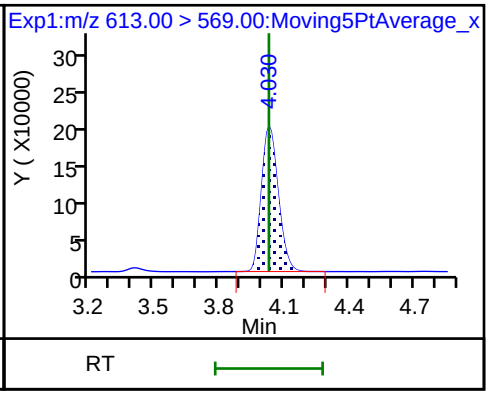
66 11-Chloroeicosafluoro-3-oxaundecan



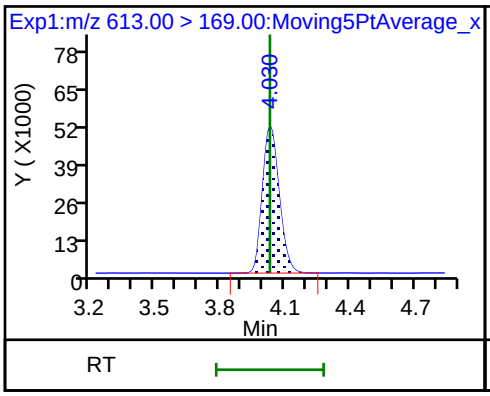
D 36 13C2 PFDoA



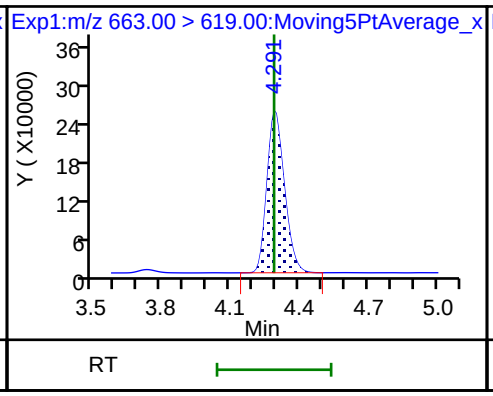
37 Perfluorododecanoic acid



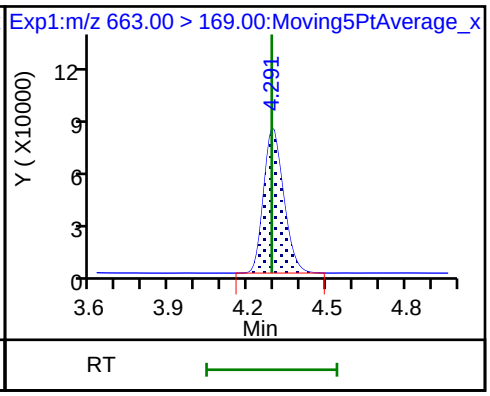
37 Perfluorododecanoic acid



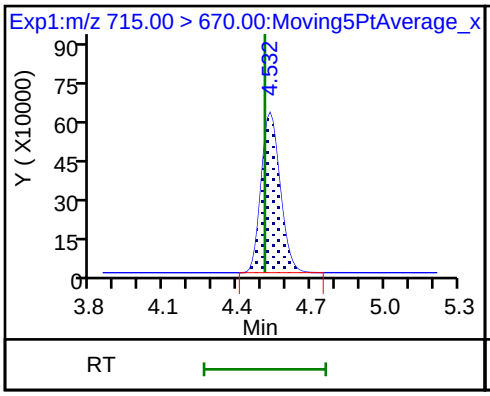
41 Perfluorotridecanoic acid



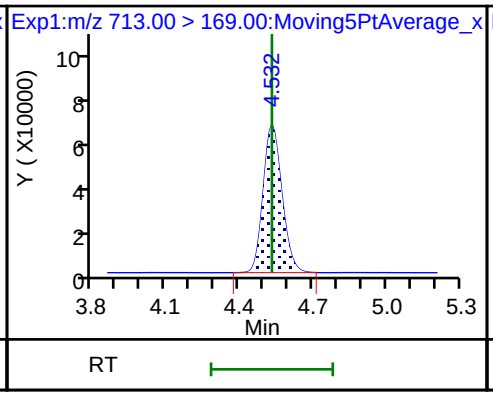
41 Perfluorotridecanoic acid



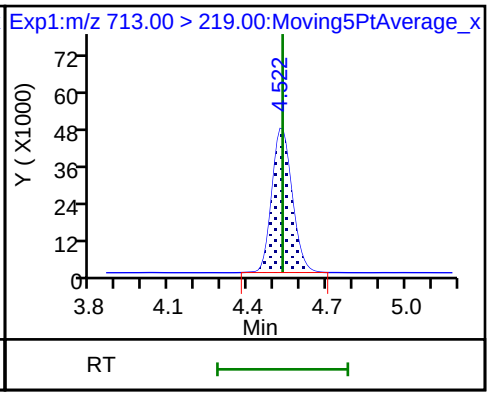
D 43 13C2-PFTeDA



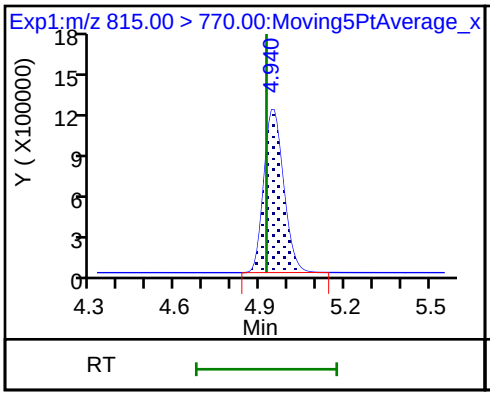
42 Perfluorotetradecanoic acid



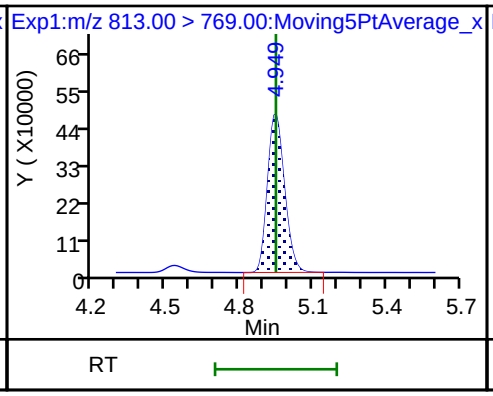
42 Perfluorotetradecanoic acid



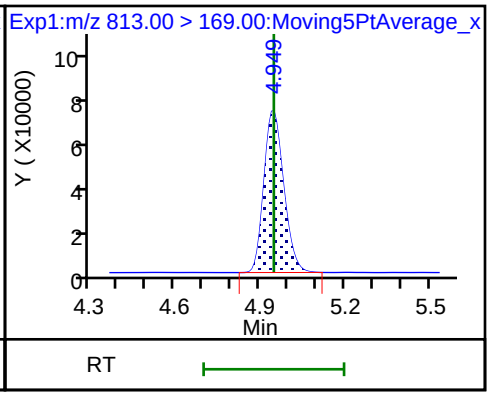
D 44 13C2-PFHxDA



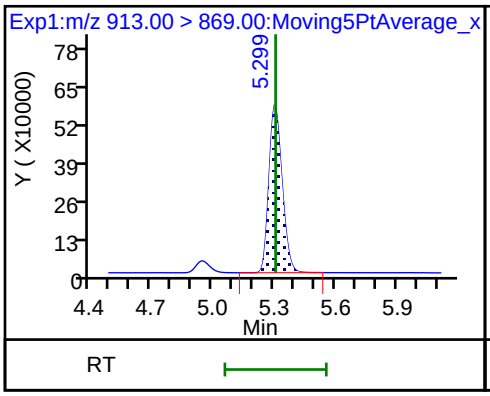
45 Perfluorohexadecanoic acid



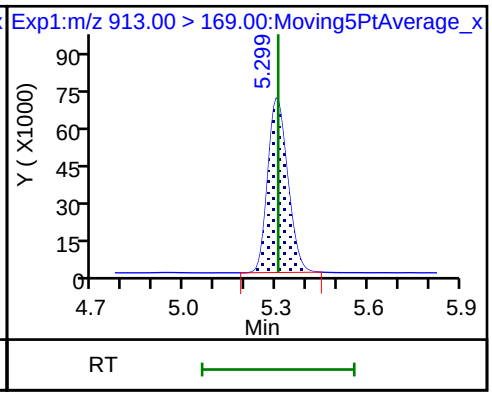
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Instrument ID: A8_N Start Date: 04/10/2018 18:31

Analysis Batch Number: 217359 End Date: 04/10/2018 19:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/10/2018 18:31	1		GeminiC18 3x100 3(mm)
IC 320-217359/2		04/10/2018 18:39	1	2018.04.10LLICAL 002.d	GeminiC18 3x100 3(mm)
IC 320-217359/3		04/10/2018 18:47	1	2018.04.10LLICAL 003.d	GeminiC18 3x100 3(mm)
IC 320-217359/4		04/10/2018 18:55	1	2018.04.10LLICAL 004.d	GeminiC18 3x100 3(mm)
IC 320-217359/5 ICIS		04/10/2018 19:03	1	2018.04.10LLICAL 005.d	GeminiC18 3x100 3(mm)
IC 320-217359/6		04/10/2018 19:10	1	2018.04.10LLICAL 006.d	GeminiC18 3x100 3(mm)
IC 320-217359/7		04/10/2018 19:18	1	2018.04.10LLICAL 007.d	GeminiC18 3x100 3(mm)
IC 320-217359/8		04/10/2018 19:26	1	2018.04.10LLICAL 008.d	GeminiC18 3x100 3(mm)
ICB 320-217359/9		04/10/2018 19:34	1	2018.04.10LLICAL 009.d	GeminiC18 3x100 3(mm)
ICV 320-217359/10		04/10/2018 19:42	1	2018.04.10LLICAL 010.d	GeminiC18 3x100 3(mm)
CCB 320-217359/11		04/10/2018 19:50	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Instrument ID: A8_N Start Date: 05/10/2018 06:54

Analysis Batch Number: 222474 End Date: 05/10/2018 08:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-222474/1		05/10/2018 06:54	1	2018.05.09LLC_004.d	GeminiC18 3x100 3(mm)
CCVL 320-222474/2		05/10/2018 07:02	1	2018.05.09LLC_005.d	GeminiC18 3x100 3(mm)
CCV 320-222474/3 CCVIS		05/10/2018 07:09	1	2018.05.09LLC_006.d	GeminiC18 3x100 3(mm)
CCV 320-222474/15		05/10/2018 08:43	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Instrument ID: A8_N Start Date: 05/10/2018 08:51

Analysis Batch Number: 222476 End Date: 05/10/2018 10:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-222476/1		05/10/2018 08:51	1	2018.05.09LLC_019.d	GeminiC18 3x100 3(mm)
MB 320-222044/1-A		05/10/2018 08:59	1	2018.05.09LLC_020.d	GeminiC18 3x100 3(mm)
LCS 320-222044/2-A		05/10/2018 09:06	1	2018.05.09LLC_021.d	GeminiC18 3x100 3(mm)
ZZZZZ		05/10/2018 09:14	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/10/2018 09:22	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/10/2018 09:30	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/10/2018 09:38	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/10/2018 09:46	1		GeminiC18 3x100 3(mm)
320-38611-1		05/10/2018 09:53	1	2018.05.09LLC_027.d	GeminiC18 3x100 3(mm)
CCV 320-222476/10		05/10/2018 10:01	1	2018.05.09LLC_028.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Instrument ID: A8_N Start Date: 05/10/2018 19:28

Analysis Batch Number: 222655 End Date: 05/10/2018 21:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-222655/1		05/10/2018 19:28	1	2018.05.10LLB_040.d	GeminiC18 3x100 3(mm)
CCVL 320-222655/2		05/10/2018 19:35	1	2018.05.10LLB_041.d	GeminiC18 3x100 3(mm)
CCV 320-222655/3 CCVIS		05/10/2018 19:43	1	2018.05.10LLB_001.d	GeminiC18 3x100 3(mm)
320-38611-1 MS		05/10/2018 19:51	1	2018.05.10LLB_002.d	GeminiC18 3x100 3(mm)
320-38611-1 MSD		05/10/2018 19:59	1	2018.05.10LLB_003.d	GeminiC18 3x100 3(mm)
320-38611-2		05/10/2018 20:07	1	2018.05.10LLB_004.d	GeminiC18 3x100 3(mm)
320-38611-3		05/10/2018 20:15	1	2018.05.10LLB_005.d	GeminiC18 3x100 3(mm)
320-38611-4		05/10/2018 20:22	1	2018.05.10LLB_006.d	GeminiC18 3x100 3(mm)
320-38611-5		05/10/2018 20:30	1	2018.05.10LLB_007.d	GeminiC18 3x100 3(mm)
320-38611-6		05/10/2018 20:38	1	2018.05.10LLB_008.d	GeminiC18 3x100 3(mm)
320-38611-7		05/10/2018 20:46	1	2018.05.10LLB_009.d	GeminiC18 3x100 3(mm)
320-38611-8		05/10/2018 20:54	1	2018.05.10LLB_010.d	GeminiC18 3x100 3(mm)
CCV 320-222655/14		05/10/2018 21:09	1	2018.05.10LLB_012.d	GeminiC18 3x100 3(mm)
320-38611-9		05/10/2018 21:17	1	2018.05.10LLB_013.d	GeminiC18 3x100 3(mm)
CCV 320-222655/16		05/10/2018 21:25	1	2018.05.10LLB_014.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Instrument ID: A8_N Start Date: 05/15/2018 15:13

Analysis Batch Number: 223412 End Date: 05/15/2018 17:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-223412/2		05/15/2018 15:13	1	2017.05.15LLB_ICAL 002.d	GeminiC18 3x100 3(mm)
IC 320-223412/3		05/15/2018 15:21	1	2017.05.15LLB_ICAL 003.d	GeminiC18 3x100 3(mm)
IC 320-223412/4		05/15/2018 15:29	1	2017.05.15LLB_ICAL 004.d	GeminiC18 3x100 3(mm)
IC 320-223412/5 ICIS		05/15/2018 15:36	1	2017.05.15LLB_ICAL 005.d	GeminiC18 3x100 3(mm)
IC 320-223412/7		05/15/2018 15:52	1	2017.05.15LLB_ICAL 007.d	GeminiC18 3x100 3(mm)
IC 320-223412/8		05/15/2018 16:00	1	2017.05.15LLB_ICAL 008.d	GeminiC18 3x100 3(mm)
IC 320-223412/11		05/15/2018 16:39	1	2018.05.15LLC_ICAL 006.d	GeminiC18 3x100 3(mm)
ICB 320-223412/12		05/15/2018 17:15	1	2018.05.15LLCC_ICAL 009.d	GeminiC18 3x100 3(mm)
ICV 320-223412/13		05/15/2018 17:23	1	2018.05.15LLCC_ICAL 010.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Instrument ID: A8_N Start Date: 05/16/2018 23:25

Analysis Batch Number: 223710 End Date: 05/16/2018 23:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-223710/1		05/16/2018 23:25	1	2018.05.16LLD_004.d	GeminiC18 3x100 3(mm)
CCVL 320-223710/2		05/16/2018 23:33	1	2018.05.16LLD_005.d	GeminiC18 3x100 3(mm)
CCV 320-223710/3 CCVIS		05/16/2018 23:40	1	2018.05.16LLD_006.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Instrument ID: A8_N Start Date: 05/17/2018 00:04

Analysis Batch Number: 223714 End Date: 05/17/2018 02:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-223714/1		05/17/2018 00:04	1	2018.05.16LLD_009.d	GeminiC18 3x100 3(mm)
MB 320-223391/1-A		05/17/2018 00:12	1	2018.05.16LLD_010.d	GeminiC18 3x100 3(mm)
LCS 320-223391/2-A		05/17/2018 00:19	1	2018.05.16LLD_011.d	GeminiC18 3x100 3(mm)
ZZZZZ		05/17/2018 00:27	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/17/2018 00:35	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/17/2018 00:43	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/17/2018 00:51	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/17/2018 00:59	1		GeminiC18 3x100 3(mm)
ZZZZZ		05/17/2018 01:06	1		GeminiC18 3x100 3(mm)
320-38611-1 RE		05/17/2018 01:14	1	2018.05.16LLD_018.d	GeminiC18 3x100 3(mm)
320-38611-1 MS RE		05/17/2018 01:22	1	2018.05.16LLD_019.d	GeminiC18 3x100 3(mm)
CCV 320-223714/12		05/17/2018 01:30	1	2018.05.16LLD_020.d	GeminiC18 3x100 3(mm)
320-38611-1 MSD RE		05/17/2018 01:38	1	2018.05.16LLD_021.d	GeminiC18 3x100 3(mm)
320-38611-2 RE		05/17/2018 01:46	1	2018.05.16LLD_022.d	GeminiC18 3x100 3(mm)
320-38611-3 RE		05/17/2018 01:53	1	2018.05.16LLD_023.d	GeminiC18 3x100 3(mm)
320-38611-4 RE		05/17/2018 02:01	1	2018.05.16LLD_024.d	GeminiC18 3x100 3(mm)
320-38611-5 RE		05/17/2018 02:09	1	2018.05.16LLD_025.d	GeminiC18 3x100 3(mm)
320-38611-6 RE		05/17/2018 02:17	1	2018.05.16LLD_026.d	GeminiC18 3x100 3(mm)
320-38611-7 RE		05/17/2018 02:25	1	2018.05.16LLD_027.d	GeminiC18 3x100 3(mm)
320-38611-8 RE		05/17/2018 02:33	1	2018.05.16LLD_028.d	GeminiC18 3x100 3(mm)
320-38611-9 RE		05/17/2018 02:41	1	2018.05.16LLD_029.d	GeminiC18 3x100 3(mm)
ZZZZZ		05/17/2018 02:48	1		GeminiC18 3x100 3(mm)
CCV 320-223714/23		05/17/2018 02:56	1	2018.05.16LLD_031.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Batch Number: 222044 Batch Start Date: 05/08/18 10:18 Batch Analyst: Long, Tyrel W

Batch Method: 3535 Batch End Date: 05/08/18 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC_ALL_SU 00059	LCPFC-IS 00041
MB 320-222044/1		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
LCS 320-222044/2		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
320-38611-A-1	GC-MW-107(WG)	3535, 537 (modified)	T	299.71 g	30.17 g	269.5 mL	10.00 mL	500 uL	500 uL
320-38611-A-1 MS	GC-MW-107(WG)	3535, 537 (modified)	T	296.28 g	27.56 g	268.7 mL	10.00 mL	500 uL	500 uL
320-38611-A-1 MSD	GC-MW-107(WG)	3535, 537 (modified)	T	300.30 g	27.82 g	272.5 mL	10.00 mL	500 uL	500 uL
320-38611-A-2	GC-MW-107D(WG)	3535, 537 (modified)	T	272.92 g	26.77 g	246.2 mL	10.00 mL	500 uL	500 uL
320-38611-A-3	GC-MW-108(WG)	3535, 537 (modified)	T	321.52 g	30.68 g	290.8 mL	10.00 mL	500 uL	500 uL
320-38611-A-4	GC-MW-1B(WG)	3535, 537 (modified)	T	310.95 g	27.68 g	283.3 mL	10.00 mL	500 uL	500 uL
320-38611-A-5	GC-MW-103(WG)	3535, 537 (modified)	T	309.16 g	29.36 g	279.8 mL	10.00 mL	500 uL	500 uL
320-38611-A-6	GC-MW-104(WG)	3535, 537 (modified)	T	304.48 g	28.77 g	275.7 mL	10.00 mL	500 uL	500 uL
320-38611-A-7	GC-MW-105(WG)	3535, 537 (modified)	T	308.17 g	28.81 g	279.4 mL	10.00 mL	500 uL	500 uL
320-38611-A-8	GC-MW-DRAIN(WG)	3535, 537 (modified)	T	274.52 g	27.47 g	247.1 mL	10.00 mL	500 uL	500 uL
320-38611-A-9	GC-EQUIPMENT BLANK	3535, 537 (modified)	T	323.13 g	28.61 g	294.5 mL	10.00 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00138	AnalysisComment				
MB 320-222044/1		3535, 537 (modified)							
LCS 320-222044/2		3535, 537 (modified)		500 uL					
320-38611-A-1	GC-MW-107(WG)	3535, 537 (modified)	T						
320-38611-A-1 MS	GC-MW-107(WG)	3535, 537 (modified)	T	500 uL					
320-38611-A-1 MSD	GC-MW-107(WG)	3535, 537 (modified)	T	500 uL					
320-38611-A-2	GC-MW-107D(WG)	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Batch Number: 222044 Batch Start Date: 05/08/18 10:18 Batch Analyst: Long, Tyrel W

Batch Method: 3535 Batch End Date: 05/08/18 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00138	AnalysisComment				
320-38611-A-3	GC-MW-108(WG)	3535, 537 (modified)	T						
320-38611-A-4	GC-MW-1B(WG)	3535, 537 (modified)	T						
320-38611-A-5	GC-MW-103(WG)	3535, 537 (modified)	T						
320-38611-A-6	GC-MW-104(WG)	3535, 537 (modified)	T						
320-38611-A-7	GC-MW-105(WG)	3535, 537 (modified)	T						
320-38611-A-8	GC-MW-DRAIN(WG)	3535, 537 (modified)	T		Green in color				
320-38611-A-9	GC-EQUIPMENT BLANK	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Batch Number: 222044 Batch Start Date: 05/08/18 10:18 Batch Analyst: Long, Tyrel W

Batch Method: 3535 Batch End Date: 05/08/18 16:00

Batch Notes	
Analyst ID - Aliquot Step	TWL
Balance ID	QA-077
Batch Comment	Client labels match TA labels, 05/08/18
Analyst ID - Final Volume Step	TWL
H2O ID	5-05-18
Hexane ID	1214432
Internal Standard ID#	1231311
Manifold ID	21,22
Methanol ID	1221633
Sodium Hydroxide ID	1219662
Pipette ID	I46360G
Analyst ID - Reagent Drop	TWL
Analyst ID - IS Reagent Drop	TWL
Analyst ID - IS Reagent Drop Witness	JER
Analyst ID - SU Reagent Drop	TWL
Analyst ID - SU Reagent Drop Witness	HJA
Solvent Lot #	1235088
Solvent Name	0.3% NH4OH in meOH
SOP Number	WS-LC-0025
SPE Cartridge Type	Oasis WAX 500mg
Solid Phase Extraction Disk ID	003737320A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Batch Number: 223391 Batch Start Date: 05/15/18 14:33 Batch Analyst: Epstein, Anya M

Batch Method: 3535 Batch End Date: 05/16/18 00:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC_ALL_SU 00060	LCPFC-IS 00045
MB 320-223391/1		3535, 537 (modified)				250 mL	10 mL	500 uL	500 uL
LCS 320-223391/2		3535, 537 (modified)				250 mL	10 mL	500 uL	500 uL
320-38611-B-1	GC-MW-107(WG)	3535, 537 (modified)	T	305.68 g	28.42 g	277.3 mL	10 mL	500 uL	500 uL
320-38611-B-1 MS	GC-MW-107(WG)	3535, 537 (modified)	T	307.15 g	28.14 g	279 mL	10 mL	500 uL	500 uL
320-38611-B-1 MSD	GC-MW-107(WG)	3535, 537 (modified)	T	307.64 g	28.28 g	279.4 mL	10 mL	500 uL	500 uL
320-38611-B-2	GC-MW-107D(WG)	3535, 537 (modified)	T	297.72 g	29.23 g	268.5 mL	10 mL	500 uL	500 uL
320-38611-B-3	GC-MW-108(WG)	3535, 537 (modified)	T	307.79 g	28.68 g	279.1 mL	10 mL	500 uL	500 uL
320-38611-B-4	GC-MW-1B(WG)	3535, 537 (modified)	T	308.58 g	28.30 g	280.3 mL	10 mL	500 uL	500 uL
320-38611-B-5	GC-MW-103(WG)	3535, 537 (modified)	T	296.83 g	29.08 g	267.8 mL	10 mL	500 uL	500 uL
320-38611-B-6	GC-MW-104(WG)	3535, 537 (modified)	T	310.40 g	28.28 g	282.1 mL	10 mL	500 uL	500 uL
320-38611-B-7	GC-MW-105(WG)	3535, 537 (modified)	T	303.04 g	27.80 g	275.2 mL	10 mL	500 uL	500 uL
320-38611-B-8	GC-MW-DRAIN(WG)	3535, 537 (modified)	T	304.55 g	28.00 g	276.6 mL	10 mL	500 uL	500 uL
320-38611-B-9	GC-EQUIPMENT BLANK	3535, 537 (modified)	T	299.91 g	28.48 g	271.4 mL	10 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00138	AnalysisComment				
MB 320-223391/1		3535, 537 (modified)							
LCS 320-223391/2		3535, 537 (modified)		500 uL					
320-38611-B-1	GC-MW-107(WG)	3535, 537 (modified)	T						
320-38611-B-1 MS	GC-MW-107(WG)	3535, 537 (modified)	T	500 uL					
320-38611-B-1 MSD	GC-MW-107(WG)	3535, 537 (modified)	T	500 uL					
320-38611-B-2	GC-MW-107D(WG)	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Batch Number: 223391 Batch Start Date: 05/15/18 14:33 Batch Analyst: Epstein, Anya M

Batch Method: 3535 Batch End Date: 05/16/18 00:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00138	AnalysisComment				
320-38611-B-3	GC-MW-108(WG)	3535, 537 (modified)	T						
320-38611-B-4	GC-MW-1B(WG)	3535, 537 (modified)	T						
320-38611-B-5	GC-MW-103(WG)	3535, 537 (modified)	T						
320-38611-B-6	GC-MW-104(WG)	3535, 537 (modified)	T						
320-38611-B-7	GC-MW-105(WG)	3535, 537 (modified)	T						
320-38611-B-8	GC-MW-DRAIN(WG)	3535, 537 (modified)	T		Extract is bright yellow				
320-38611-B-9	GC-EQUIPMENT BLANK	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Batch Number: 223391 Batch Start Date: 05/15/18 14:33 Batch Analyst: Epstein, Anya M

Batch Method: 3535 Batch End Date: 05/16/18 00:30

Batch Notes	
Analyst ID - Aliquot Step	JER
Balance ID	QA-078
Batch Comment	Sample labels match client IDs: AME
Analyst ID - Final Volume Step	JER
H2O ID	5/14/18
Hexane ID	1242583
Internal Standard ID#	1231848
Manifold ID	10, 21
Methanol ID	1236570
Sodium Hydroxide ID	1241145
Pipette ID	I46345G
Analyst ID - Reagent Drop	TWL
Analyst ID - IS Reagent Drop	JER
Analyst ID - IS Reagent Drop Witness	AME
Analyst ID - SU Reagent Drop	TWL
Analyst ID - SU Reagent Drop Witness	JER
Solvent Lot #	1237547
Solvent Name	0.3% NH4OH/MeOH
SOP Number	WS-LC-0025
SPE Cartridge Type	WAX 500mg
Solid Phase Extraction Disk ID	003337157A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Robinson / E. Ebert	Lab PM: Franklin, Jannel O	Carrier Tracking No(s):	COC No: 320-21364-4773.2
Client Contact: Emily Ebert	Phone: 651-263-4479	E-Mail: jannel.franklin@testamericainc.com		Page: Page 2 of 2 1 of 1
Company: TRC Environmental Corporation		Analysis Requested		Job #:
Address: 1430 Broadway, 10th FL	Due Date Requested:			Preservation Codes:
City: New York	TAT Requested (days): Standard			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S NaHSO4 Q - Na2SO3 MeOH R - Na2S2O3 Amchlor S - H2SO4 Ascorbic Acid T - TSP Dodecahydrate ce U - Acetone DI Water V - MCAA EDTA W - pH 4-5 EDA Z - other (specify)
State, Zip: NY, 10018-3308				
Phone: 212-221-7822(Tel)	PO #: 120097 (as of 3.14.18)			Other:
Email: EEbert@trcsolutions.com	WO #: 279191 Phase 2			
Project Name: GEM Cleaners (PFAs) NYSDEC - TRC/D&B	Project #: 32010918			
Site: Gem Cleaners	SSOW#:			

320-38611 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA - PFAS, Standard List (21 Analytes)	Total Number of c	Special Instructions/Note:
			Preservation Code:				N		
GC-MW-107(WG)	4/25/18	1000	G	Water	N		X		* MS/MSD Samples
GC-MW-107D(WG)		1115		Water	N		X		
GC-MW-107(WG)-MS		1000		Water	N		X		*
GC-MW-107(WG)-MSD		1000		Water	N		X		*
GC-MW-108(WG)		1150		Water	N		X		
GC-MW-1B(WG)		1235		Water	N		X		
GC-MW-103(WG)		1310		Water	N		X		
GC-MW-104(WG)		1335		Water	N		X		
GC-MW-105(WG)		1443		Water	N		X		
GC-MW-DRAIN(WG)		1400		Water	N		X		
GC-Equipment Blank	↓	1500	↓	Water	N		X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Please provide cat B deliverable + NYSDEC EDD

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		4/26/18 1700	T.C.		4/26/18 17:00	GC
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		4/26/18 1720	TRC		4/27/18 840	TA-Sac
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.1°C

→ see attached document for reporting requirements

Ver: 08/04/2016

5/1/18 not on COC. DH

* Received Extra sample GC-MW-107(WG) Page 722 of 724

→ Please batch all GW samples on 1 report

sources of these chemicals. Like routine refinements to parameter lists based on investigative findings, the full PFAS target analyte list may not be needed for all sampling intended to define the extent of contamination. Project managers may approve a shorter analyte list (e.g., just the UCMR3 list) for some reporting on a case by case basis.

1,4-Dioxane Analysis and Reporting: The method detection limit (MDL) for 1,4-dioxane should be no higher than 0.28 µg/l (ppb). ELAP offers certification for both EPA Methods 8260 and 8270. In order to get the appropriate detection limits, the lab would need to run either of these methods in "selective ion monitoring" (SIM) mode. DER is advising the use of method 8270, since this method provides a more robust extraction procedure, uses a larger sample volume, and is less vulnerable to interference from chlorinated solvents (we acknowledge that 8260 has been shown to have a higher recovery in some studies).

Full PFAS Target Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonates	**Perfluorobutanesulfonic acid**	**PFBS**	**375-73-5**
	Perfluorohexanesulfonic acid	**PFHxS**	**355-46-4**
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanessulfonic acid	**PFOS**	**1763-23-1**
	Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluoroalkyl carboxylates	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	**PFHpA**	**375-85-9**
	Perfluorooctanoic acid	**PFOA**	**335-67-1**
	Perfluorononanoic acid	**PFNA**	**375-95-1**
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTriA/PFTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7
Fluorinated Telomer Sulfonates	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctane-sulfonamides	Perfluroroctanesulfonamide	FOSA	754-91-6
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

Bold entries depict the 6 original UCMR3 chemicals

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 320-38611-1

Login Number: 38611
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received extra samples not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 460-161054-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Lindsay O'Hara

Approved for release.
Omayra Penas
Senior Project Manager
7/31/2018 4:00 PM

Designee for
Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
07/31/2018

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 460-161054-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 07/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.0 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples GC-MW-101 (WG) (460-161054-1), GC-MW-102 (WG) (460-161054-2), GC-MW-103 (WG) (460-161054-3), GC-MW-104 (WG) (460-161054-4), GC-MW-105 (WG) (460-161054-5), GC-MW-106 (WG) (460-161054-6), GC-EQUIPMENT BLANK (072318) (460-161054-7) and GC-TB (072318) (460-161054-8) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 07/28/2018 and 07/29/2018.

The continuing calibration verification (CCV) associated with batch 460-540460 recovered above the upper control limit for Methyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY
Samples GC-MW-101 (WG) (460-161054-1) and GC-MW-104 (WG) (460-161054-4) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 07/30/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL DISSOLVED SOLIDS
Samples GC-MW-101 (WG) (460-161054-1) and GC-MW-104 (WG) (460-161054-4) were analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 07/25/2018.

No difficulties were encountered during the TDS analysis.

All quality control parameters were within the acceptance limits.

TOTAL ORGANIC CARBON
Samples GC-MW-101 (WG) (460-161054-1) and GC-MW-104 (WG) (460-161054-4) were analyzed for Total Organic Carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 07/30/2018.

No difficulties were encountered during the TOC analysis.

All quality control parameters were within the acceptance limits.

SULFATE

Samples GC-MW-101 (WG) (460-161054-1) and GC-MW-104 (WG) (460-161054-4) were analyzed for sulfate in accordance with ASTM Method D516-90. The samples were analyzed on 07/27/2018.

No difficulties were encountered during the sulfate analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161054-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-161054-1	GC-MW-101 (WG)	Water	07/23/18 09:30	07/23/18 19:40
460-161054-2	GC-MW-102 (WG)	Water	07/23/18 10:45	07/23/18 19:40
460-161054-3	GC-MW-103 (WG)	Water	07/23/18 11:30	07/23/18 19:40
460-161054-4	GC-MW-104 (WG)	Water	07/23/18 12:20	07/23/18 19:40
460-161054-5	GC-MW-105 (WG)	Water	07/23/18 13:10	07/23/18 19:40
460-161054-6	GC-MW-106 (WG)	Water	07/23/18 09:25	07/23/18 19:40
460-161054-7	GC-EQUIPMENT BLANK (072318)	Water	07/23/18 09:15	07/23/18 19:40
460-161054-8	GC-TB (072318)	Water	07/23/18 00:00	07/23/18 19:40

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161054-1

Client Sample ID: GC-MW-101 (WG) — Lab Sample ID: 460-161054-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	0.35	J	1.0	0.34	mg/L	1		9060A_ASP	Total/NA
Sulfate	10.3		5.0	1.4	mg/L	1		D516-90, 02	Total/NA
Bicarbonate Alkalinity as CaCO3	40.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	40.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	300		10.0	10.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: GC-MW-102 (WG) — Lab Sample ID: 460-161054-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.35	J	1.0	0.33	ug/L	1		8260C	Total/NA
Tetrachloroethene	1.3		1.0	0.25	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-103 (WG) — Lab Sample ID: 460-161054-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.0		1.0	0.25	ug/L	1		8260C	Total/NA

Client Sample ID: GC-MW-104 (WG) — Lab Sample ID: 460-161054-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.36	J	1.0	0.25	ug/L	1		8260C	Total/NA
Total Organic Carbon	0.56	J	1.0	0.34	mg/L	1		9060A_ASP	Total/NA
Sulfate	11.7		5.0	1.4	mg/L	1		D516-90, 02	Total/NA
Bicarbonate Alkalinity as CaCO3	67.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	67.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	758		20.0	20.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: GC-MW-105 (WG) — Lab Sample ID: 460-161054-5

No Detections.

Client Sample ID: GC-MW-106 (WG) — Lab Sample ID: 460-161054-6

No Detections.

Client Sample ID: GC-EQUIPMENT BLANK (072318) — Lab Sample ID: 460-161054-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	11		5.0	1.9	ug/L	1		8260C	Total/NA
Ethylbenzene	0.44	J	1.0	0.30	ug/L	1		8260C	Total/NA
Methylene Chloride	0.67	J	1.0	0.32	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	1.9		1.0	0.30	ug/L	1		8260C	Total/NA
o-Xylene	0.80	J	1.0	0.36	ug/L	1		8260C	Total/NA

Client Sample ID: GC-TB (072318) — Lab Sample ID: 460-161054-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	16		5.0	1.9	ug/L	1		8260C	Total/NA
Ethylbenzene	0.48	J	1.0	0.30	ug/L	1		8260C	Total/NA
Methylene Chloride	0.59	J	1.0	0.32	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	1.8		1.0	0.30	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-TB (072318) (Continued)

Lab Sample ID: 460-161054-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Xylene	0.79	J	1.0	0.36	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161054-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
9060A_ASP	Organic Carbon, Total (TOC)	SW846	TAL EDI
D516-90, 02	Sulfate	ASTM	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

ASTM = ASTM International

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: GC-MW-101 (WG)

Date Collected: 07/23/18 09:30
Date Received: 07/23/18 19:40

Lab Sample ID: 460-161054-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 22:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 22:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 22:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 22:23	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 22:23	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 22:23	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 22:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 22:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 22:23	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 22:23	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 22:23	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 22:23	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 22:23	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 22:23	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 22:23	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 22:23	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 22:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 22:23	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 22:23	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 22:23	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 22:23	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 22:23	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 22:23	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 22:23	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 22:23	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 22:23	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 22:23	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 22:23	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 22:23	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 22:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 22:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 22:23	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 22:23	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 22:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 22:23	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 22:23	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 22:23	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 22:23	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 22:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 22:23	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 22:23	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 22:23	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 22:23	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 22:23	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 22:23	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/28/18 22:23	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 22:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 22:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 22:23	1

Client Sample ID: GC-MW-101 (WG)

Lab Sample ID: 460-161054-1

Date Collected: 07/23/18 09:30

Matrix: Water

Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 22:23	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 22:23	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 22:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 22:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*		*07/28/18 22:23*	*1*
4-Bromofluorobenzene	*98*		*77 - 124*		*07/28/18 22:23*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*07/28/18 22:23*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/28/18 22:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.35**	**J**	1.0	0.34	mg/L			07/30/18 16:39	1
Sulfate	**10.3**		5.0	1.4	mg/L			07/27/18 15:08	1
Bicarbonate Alkalinity as CaCO3	**40.3**		5.0	5.0	mg/L			07/30/18 11:54	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/30/18 11:54	1
Alkalinity	**40.3**		5.0	5.0	mg/L			07/30/18 11:54	1
Hydroxide Alkalinity	5.0	U	5.0	5.0	mg/L			07/30/18 11:54	1
Total Dissolved Solids	**300**		10.0	10.0	mg/L			07/25/18 15:49	1

Client Sample ID: GC-MW-102 (WG)

Lab Sample ID: 460-161054-2

Date Collected: 07/23/18 10:45

Matrix: Water

Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 22:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 22:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 22:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 22:46	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 22:46	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 22:46	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 22:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 22:46	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 22:46	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 22:46	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 22:46	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 22:46	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 22:46	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 22:46	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 22:46	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 22:46	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 22:46	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 22:46	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 22:46	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 22:46	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 22:46	1

Client Sample ID: GC-MW-102 (WG)

Date Collected: 07/23/18 10:45
Date Received: 07/23/18 19:40

Lab Sample ID: 460-161054-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 22:46	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 22:46	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 22:46	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 22:46	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 22:46	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 22:46	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 22:46	1
Chloroform	**0.35**	**J**	1.0	0.33	ug/L			07/28/18 22:46	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 22:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 22:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 22:46	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 22:46	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 22:46	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 22:46	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 22:46	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 22:46	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 22:46	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 22:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 22:46	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 22:46	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 22:46	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 22:46	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 22:46	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 22:46	1
Tetrachloroethene	**1.3**		1.0	0.25	ug/L			07/28/18 22:46	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 22:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 22:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 22:46	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 22:46	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 22:46	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 22:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 22:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*07/28/18 22:46*	*1*
4-Bromofluorobenzene	*97*		*77 - 124*		*07/28/18 22:46*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 131*		*07/28/18 22:46*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/28/18 22:46*	*1*

Client Sample ID: GC-MW-103 (WG)

Date Collected: 07/23/18 11:30
Date Received: 07/23/18 19:40

Lab Sample ID: 460-161054-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 23:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 23:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 23:10	1

Client Sample ID: GC-MW-103 (WG)

Date Collected: 07/23/18 11:30
Date Received: 07/23/18 19:40

Lab Sample ID: 460-161054-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 23:10	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 23:10	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 23:10	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 23:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 23:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 23:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 23:10	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 23:10	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 23:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 23:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 23:10	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 23:10	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 23:10	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 23:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 23:10	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 23:10	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 23:10	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 23:10	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 23:10	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 23:10	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 23:10	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 23:10	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 23:10	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 23:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 23:10	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 23:10	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 23:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 23:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 23:10	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 23:10	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 23:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 23:10	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 23:10	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 23:10	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 23:10	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 23:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 23:10	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 23:10	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 23:10	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 23:10	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 23:10	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 23:10	1
Tetrachloroethene	**1.0**		1.0	0.25	ug/L			07/28/18 23:10	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 23:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 23:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 23:10	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 23:10	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 23:10	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 23:10	1

Client Sample ID: GC-MW-103 (WG)

Lab Sample ID: 460-161054-3

Date Collected: 07/23/18 11:30

Matrix: Water

Date Received: 07/23/18 19:40

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					07/28/18 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		74 - 132		07/28/18 23:10	1
4-Bromofluorobenzene	93		77 - 124		07/28/18 23:10	1
Dibromofluoromethane (Surr)	97		72 - 131		07/28/18 23:10	1
Toluene-d8 (Surr)	96		80 - 120		07/28/18 23:10	1

Client Sample ID: GC-MW-104 (WG)

Lab Sample ID: 460-161054-4

Date Collected: 07/23/18 12:20

Matrix: Water

Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 23:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 23:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 23:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 23:33	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 23:33	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 23:33	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 23:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 23:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 23:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 23:33	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 23:33	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 23:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 23:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 23:33	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 23:33	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 23:33	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 23:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 23:33	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 23:33	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 23:33	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 23:33	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 23:33	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 23:33	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 23:33	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 23:33	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 23:33	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 23:33	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 23:33	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 23:33	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 23:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 23:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 23:33	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 23:33	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 23:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 23:33	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 23:33	1

Client Sample ID: GC-MW-104 (WG)

Lab Sample ID: 460-161054-4

Date Collected: 07/23/18 12:20

Matrix: Water

Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 23:33	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 23:33	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 23:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 23:33	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 23:33	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 23:33	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 23:33	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 23:33	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 23:33	1
Tetrachloroethene	**0.36**	**J**	1.0	0.25	ug/L			07/28/18 23:33	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 23:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 23:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 23:33	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 23:33	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 23:33	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 23:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 23:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*74 - 132*		*07/28/18 23:33*	*1*
4-Bromofluorobenzene	*96*		*77 - 124*		*07/28/18 23:33*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*07/28/18 23:33*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/28/18 23:33*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.56**	**J**	1.0	0.34	mg/L			07/30/18 17:47	1
Sulfate	**11.7**		5.0	1.4	mg/L			07/27/18 15:08	1
Bicarbonate Alkalinity as CaCO3	**67.7**		5.0	5.0	mg/L			07/30/18 12:07	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/30/18 12:07	1
Alkalinity	**67.7**		5.0	5.0	mg/L			07/30/18 12:07	1
Hydroxide Alkalinity	5.0	U	5.0	5.0	mg/L			07/30/18 12:07	1
Total Dissolved Solids	**758**		20.0	20.0	mg/L			07/25/18 15:49	1

Client Sample ID: GC-MW-105 (WG)

Lab Sample ID: 460-161054-5

Date Collected: 07/23/18 13:10

Matrix: Water

Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 23:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 23:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 23:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 23:57	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 23:57	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 23:57	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 23:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 23:57	1

Client Sample ID: GC-MW-105 (WG)

Date Collected: 07/23/18 13:10
Date Received: 07/23/18 19:40

Lab Sample ID: 460-161054-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 23:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 23:57	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 23:57	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 23:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 23:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 23:57	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 23:57	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 23:57	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 23:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 23:57	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 23:57	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 23:57	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 23:57	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 23:57	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 23:57	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 23:57	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 23:57	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 23:57	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 23:57	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 23:57	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 23:57	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 23:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 23:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 23:57	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 23:57	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 23:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 23:57	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 23:57	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 23:57	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 23:57	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 23:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 23:57	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 23:57	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 23:57	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 23:57	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 23:57	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 23:57	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/28/18 23:57	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 23:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 23:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 23:57	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 23:57	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 23:57	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 23:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 23:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*		*07/28/18 23:57*	*1*

Client Sample ID: GC-MW-105 (WG)

Lab Sample ID: 460-161054-5

Date Collected: 07/23/18 13:10
Matrix: Water
Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*77 - 124*		*07/28/18 23:57*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*07/28/18 23:57*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/28/18 23:57*	*1*

Client Sample ID: GC-MW-106 (WG)

Lab Sample ID: 460-161054-6

Date Collected: 07/23/18 09:25
Matrix: Water
Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/29/18 00:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/29/18 00:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/29/18 00:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/29/18 00:20	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/29/18 00:20	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/29/18 00:20	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/29/18 00:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/29/18 00:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/29/18 00:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/29/18 00:20	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/29/18 00:20	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/29/18 00:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/29/18 00:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/29/18 00:20	1
1,4-Dioxane	50	U	50	28	ug/L			07/29/18 00:20	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/29/18 00:20	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/29/18 00:20	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/29/18 00:20	1
Acetone	5.0	U	5.0	5.0	ug/L			07/29/18 00:20	1
Benzene	1.0	U	1.0	0.43	ug/L			07/29/18 00:20	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/29/18 00:20	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/29/18 00:20	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/29/18 00:20	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/29/18 00:20	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/29/18 00:20	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/29/18 00:20	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/29/18 00:20	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/29/18 00:20	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/29/18 00:20	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/29/18 00:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/29/18 00:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/29/18 00:20	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/29/18 00:20	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/29/18 00:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/29/18 00:20	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/29/18 00:20	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/29/18 00:20	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/29/18 00:20	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/29/18 00:20	1

Client Sample ID: GC-MW-106 (WG)

Lab Sample ID: 460-161054-6

Date Collected: 07/23/18 09:25
Matrix: Water
Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/29/18 00:20	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/29/18 00:20	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/29/18 00:20	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/29/18 00:20	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/29/18 00:20	1
Styrene	1.0	U	1.0	0.42	ug/L			07/29/18 00:20	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/29/18 00:20	1
Toluene	1.0	U	1.0	0.38	ug/L			07/29/18 00:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/29/18 00:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/29/18 00:20	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/29/18 00:20	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/29/18 00:20	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/29/18 00:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/29/18 00:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*		*07/29/18 00:20*	*1*
4-Bromofluorobenzene	*99*		*77 - 124*		*07/29/18 00:20*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*07/29/18 00:20*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/29/18 00:20*	*1*

Client Sample ID: GC-EQUIPMENT BLANK (072318)

Lab Sample ID: 460-161054-7

Date Collected: 07/23/18 09:15
Matrix: Water
Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/29/18 00:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/29/18 00:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/29/18 00:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/29/18 00:44	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/29/18 00:44	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/29/18 00:44	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/29/18 00:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/29/18 00:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/29/18 00:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/29/18 00:44	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/29/18 00:44	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/29/18 00:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/29/18 00:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/29/18 00:44	1
1,4-Dioxane	50	U	50	28	ug/L			07/29/18 00:44	1
2-Butanone (MEK)	**11**		5.0	1.9	ug/L			07/29/18 00:44	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/29/18 00:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/29/18 00:44	1
Acetone	5.0	U	5.0	5.0	ug/L			07/29/18 00:44	1
Benzene	1.0	U	1.0	0.43	ug/L			07/29/18 00:44	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/29/18 00:44	1

Client Sample ID: GC-EQUIPMENT BLANK (072318)

Lab Sample ID: 460-161054-7

Date Collected: 07/23/18 09:15
Matrix: Water
Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	1.0	ug/L			07/29/18 00:44	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/29/18 00:44	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/29/18 00:44	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/29/18 00:44	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/29/18 00:44	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/29/18 00:44	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/29/18 00:44	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/29/18 00:44	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/29/18 00:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/29/18 00:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/29/18 00:44	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/29/18 00:44	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/29/18 00:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/29/18 00:44	1
Ethylbenzene	**0.44**	**J**	1.0	0.30	ug/L			07/29/18 00:44	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/29/18 00:44	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/29/18 00:44	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/29/18 00:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/29/18 00:44	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/29/18 00:44	1
Methylene Chloride	**0.67**	**J**	1.0	0.32	ug/L			07/29/18 00:44	1
m-Xylene & p-Xylene	**1.9**		1.0	0.30	ug/L			07/29/18 00:44	1
o-Xylene	**0.80**	**J**	1.0	0.36	ug/L			07/29/18 00:44	1
Styrene	1.0	U	1.0	0.42	ug/L			07/29/18 00:44	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/29/18 00:44	1
Toluene	1.0	U	1.0	0.38	ug/L			07/29/18 00:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/29/18 00:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/29/18 00:44	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/29/18 00:44	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/29/18 00:44	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/29/18 00:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/29/18 00:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*		*07/29/18 00:44*	*1*
4-Bromofluorobenzene	*94*		*77 - 124*		*07/29/18 00:44*	*1*
Dibromofluoromethane (Surr)	*100*		*72 - 131*		*07/29/18 00:44*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/29/18 00:44*	*1*

Client Sample ID: GC-TB (072318)

Lab Sample ID: 460-161054-8

Date Collected: 07/23/18 00:00
Matrix: Water
Date Received: 07/23/18 19:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 22:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 22:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 22:00	1

Client Sample ID: GC-TB (072318)

Date Collected: 07/23/18 00:00
Date Received: 07/23/18 19:40

Lab Sample ID: 460-161054-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 22:00	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 22:00	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 22:00	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 22:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 22:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 22:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 22:00	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 22:00	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 22:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 22:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 22:00	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 22:00	1
2-Butanone (MEK)	**16**		5.0	1.9	ug/L			07/28/18 22:00	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 22:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 22:00	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 22:00	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 22:00	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 22:00	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 22:00	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 22:00	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 22:00	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 22:00	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 22:00	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 22:00	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 22:00	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 22:00	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 22:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 22:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 22:00	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 22:00	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 22:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 22:00	1
Ethylbenzene	**0.48**	**J**	1.0	0.30	ug/L			07/28/18 22:00	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 22:00	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 22:00	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 22:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 22:00	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 22:00	1
Methylene Chloride	**0.59**	**J**	1.0	0.32	ug/L			07/28/18 22:00	1
m-Xylene & p-Xylene	**1.8**		1.0	0.30	ug/L			07/28/18 22:00	1
o-Xylene	**0.79**	**J**	1.0	0.36	ug/L			07/28/18 22:00	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 22:00	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/28/18 22:00	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 22:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 22:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 22:00	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 22:00	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 22:00	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 22:00	1

Client Sample ID: GC-TB (072318)

Date Collected: 07/23/18 00:00
Date Received: 07/23/18 19:40

Lab Sample ID: 460-161054-8

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					07/28/18 22:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		74 - 132		07/28/18 22:00	1
4-Bromofluorobenzene	95		77 - 124		07/28/18 22:00	1
Dibromofluoromethane (Surr)	97		72 - 131		07/28/18 22:00	1
Toluene-d8 (Surr)	96		80 - 120		07/28/18 22:00	1

Surrogate Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161054-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(74-132)	(77-124)	(72-131)	(80-120)
460-161054-1	GC-MW-101 (WG)	108	98	99	99
460-161054-1 MS	GC-MW-101 (WG)	99	95	95	98
460-161054-1 MSD	GC-MW-101 (WG)	100	97	97	98
460-161054-2	GC-MW-102 (WG)	104	97	96	97
460-161054-3	GC-MW-103 (WG)	109	93	97	96
460-161054-4	GC-MW-104 (WG)	110	96	97	96
460-161054-5	GC-MW-105 (WG)	107	97	95	97
460-161054-6	GC-MW-106 (WG)	108	99	98	97
460-161054-7	GC-EQUIPMENT BLANK (0723	107	94	100	98
460-161054-8	GC-TB (072318)	107	95	97	96
LCS 460-540460/4	Lab Control Sample	100	95	92	97
MB 460-540460/9	Method Blank	109	95	97	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-540460/9
Matrix: Water
Analysis Batch: 540460

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 21:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 21:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 21:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 21:12	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 21:12	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 21:12	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 21:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 21:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 21:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 21:12	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 21:12	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 21:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 21:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 21:12	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 21:12	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 21:12	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 21:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 21:12	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 21:12	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 21:12	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 21:12	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 21:12	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 21:12	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 21:12	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 21:12	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 21:12	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 21:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 21:12	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 21:12	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 21:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 21:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 21:12	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 21:12	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 21:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 21:12	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 21:12	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 21:12	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 21:12	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 21:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 21:12	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 21:12	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 21:12	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 21:12	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 21:12	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 21:12	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/28/18 21:12	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 21:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 21:12	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-540460/9
Matrix: Water
Analysis Batch: 540460

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 21:12	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 21:12	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 21:12	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 21:12	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 21:12*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*74 - 132*		*07/28/18 21:12*	*1*
4-Bromofluorobenzene	*95*		*77 - 124*		*07/28/18 21:12*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*07/28/18 21:12*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/28/18 21:12*	*1*

Lab Sample ID: LCS 460-540460/4
Matrix: Water
Analysis Batch: 540460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.2		ug/L		96	75 - 125
1,1,2,2-Tetrachloroethane	20.0	21.5		ug/L		108	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.5		ug/L		103	59 - 150
1,1,2-Trichloroethane	20.0	21.3		ug/L		106	78 - 120
1,1-Dichloroethane	20.0	21.0		ug/L		105	77 - 123
1,1-Dichloroethene	20.0	19.4		ug/L		97	74 - 123
1,2,3-Trichlorobenzene	20.0	21.5		ug/L		107	78 - 131
1,2,4-Trichlorobenzene	20.0	22.8		ug/L		114	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	21.8		ug/L		109	55 - 134
1,2-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 120
1,2-Dichloroethane	20.0	20.4		ug/L		102	76 - 121
1,2-Dichloropropane	20.0	20.6		ug/L		103	77 - 123
1,3-Dichlorobenzene	20.0	20.5		ug/L		103	80 - 120
1,4-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 120
1,4-Dioxane	400	550		ug/L		138	10 - 150
2-Butanone (MEK)	100	92.0		ug/L		92	64 - 120
2-Hexanone	100	103		ug/L		103	71 - 125
4-Methyl-2-pentanone (MIBK)	100	112		ug/L		112	78 - 124
Acetone	100	125		ug/L		125	39 - 150
Benzene	20.0	21.0		ug/L		105	77 - 121
Bromoform	20.0	17.8		ug/L		89	53 - 120
Bromomethane	20.0	13.8		ug/L		69	10 - 150
Carbon disulfide	20.0	19.5		ug/L		98	69 - 133
Carbon tetrachloride	20.0	18.9		ug/L		94	70 - 132
Chlorobenzene	20.0	20.0		ug/L		100	80 - 120
Chlorobromomethane	20.0	18.6		ug/L		93	77 - 127
Chlorodibromomethane	20.0	18.1		ug/L		91	73 - 120
Chloroethane	20.0	16.8		ug/L		84	52 - 150

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-540460/4
Matrix: Water
Analysis Batch: 540460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	20.0	20.0		ug/L		100	80 - 120
Chloromethane	20.0	19.9		ug/L		99	56 - 131
cis-1,2-Dichloroethene	20.0	19.0		ug/L		95	80 - 120
cis-1,3-Dichloropropene	20.0	20.6		ug/L		103	77 - 120
Cyclohexane	20.0	21.2		ug/L		106	56 - 150
Dichlorobromomethane	20.0	19.1		ug/L		96	76 - 120
Dichlorodifluoromethane	20.0	19.6		ug/L		98	50 - 131
Ethylbenzene	20.0	19.9		ug/L		99	80 - 120
Ethylene Dibromide	20.0	19.4		ug/L		97	80 - 120
Isopropylbenzene	20.0	21.3		ug/L		107	80 - 123
Methyl acetate	40.0	55.1		ug/L		138	66 - 144
Methyl tert-butyl ether	20.0	21.2		ug/L		106	79 - 122
Methylcyclohexane	20.0	21.2		ug/L		106	61 - 145
Methylene Chloride	20.0	19.9		ug/L		100	77 - 123
m-Xylene & p-Xylene	20.0	20.7		ug/L		103	80 - 120
o-Xylene	20.0	20.0		ug/L		100	80 - 120
Styrene	20.0	19.8		ug/L		99	80 - 120
Tetrachloroethene	20.0	18.7		ug/L		93	78 - 122
Toluene	20.0	20.4		ug/L		102	80 - 120
trans-1,2-Dichloroethene	20.0	19.9		ug/L		100	79 - 120
trans-1,3-Dichloropropene	20.0	20.4		ug/L		102	76 - 120
Trichloroethene	20.0	18.6		ug/L		93	77 - 120
Trichlorofluoromethane	20.0	18.6		ug/L		93	71 - 143
Vinyl chloride	20.0	17.5		ug/L		87	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*74 - 132*
4-Bromofluorobenzene	*95*		*77 - 124*
Dibromofluoromethane (Surr)	*92*		*72 - 131*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 460-161054-1 MS
Matrix: Water
Analysis Batch: 540460

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	200	185		ug/L		92	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	200	204		ug/L		102	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	209		ug/L		105	59 - 150
1,1,2-Trichloroethane	1.0	U	200	199		ug/L		100	78 - 120
1,1-Dichloroethane	1.0	U	200	206		ug/L		103	77 - 123
1,1-Dichloroethene	1.0	U	200	193		ug/L		96	74 - 123
1,2,3-Trichlorobenzene	1.0	U	200	192		ug/L		96	78 - 131
1,2,4-Trichlorobenzene	1.0	U	200	205		ug/L		102	80 - 124
1,2-Dibromo-3-Chloropropane	1.0	U	200	204		ug/L		102	55 - 134
1,2-Dichlorobenzene	1.0	U	200	201		ug/L		101	80 - 120
1,2-Dichloroethane	1.0	U	200	201		ug/L		100	76 - 121

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-161054-1 MS
Matrix: Water
Analysis Batch: 540460

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	1.0	U	200	200		ug/L		100	77 - 123
1,3-Dichlorobenzene	1.0	U	200	192		ug/L		96	80 - 120
1,4-Dichlorobenzene	1.0	U	200	191		ug/L		95	80 - 120
1,4-Dioxane	50	U	4000	4400		ug/L		110	10 - 150
2-Butanone (MEK)	5.0	U	1000	864		ug/L		86	64 - 120
2-Hexanone	5.0	U	1000	969		ug/L		97	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	1080		ug/L		108	78 - 124
Acetone	5.0	U	1000	1040		ug/L		104	39 - 150
Benzene	1.0	U	200	208		ug/L		104	77 - 121
Bromoform	1.0	U	200	168		ug/L		84	53 - 120
Bromomethane	1.0	U	200	145		ug/L		73	10 - 150
Carbon disulfide	1.0	U	200	176		ug/L		88	69 - 133
Carbon tetrachloride	1.0	U	200	181		ug/L		90	70 - 132
Chlorobenzene	1.0	U	200	192		ug/L		96	80 - 120
Chlorobromomethane	1.0	U	200	183		ug/L		91	77 - 127
Chlorodibromomethane	1.0	U	200	172		ug/L		86	73 - 120
Chloroethane	1.0	U	200	172		ug/L		86	52 - 150
Chloroform	1.0	U	200	195		ug/L		97	80 - 120
Chloromethane	1.0	U	200	200		ug/L		100	56 - 131
cis-1,2-Dichloroethene	1.0	U	200	188		ug/L		94	80 - 120
cis-1,3-Dichloropropene	1.0	U	200	200		ug/L		100	77 - 120
Cyclohexane	1.0	U	200	210		ug/L		105	56 - 150
Dichlorobromomethane	1.0	U	200	179		ug/L		90	76 - 120
Dichlorodifluoromethane	1.0	U	200	195		ug/L		97	50 - 131
Ethylbenzene	1.0	U	200	191		ug/L		96	80 - 120
Ethylene Dibromide	1.0	U	200	194		ug/L		97	80 - 120
Isopropylbenzene	1.0	U	200	213		ug/L		107	80 - 123
Methyl acetate	5.0	U	400	527		ug/L		132	66 - 144
Methyl tert-butyl ether	1.0	U	200	202		ug/L		101	79 - 122
Methylcyclohexane	1.0	U	200	207		ug/L		103	61 - 145
Methylene Chloride	1.0	U	200	190		ug/L		95	77 - 123
m-Xylene & p-Xylene	1.0	U	200	198		ug/L		99	80 - 120
o-Xylene	1.0	U	200	200		ug/L		100	80 - 120
Styrene	1.0	U	200	199		ug/L		99	80 - 120
Tetrachloroethene	1.0	U	200	189		ug/L		94	78 - 122
Toluene	1.0	U	200	205		ug/L		103	80 - 120
trans-1,2-Dichloroethene	1.0	U	200	190		ug/L		95	79 - 120
trans-1,3-Dichloropropene	1.0	U	200	196		ug/L		98	76 - 120
Trichloroethene	1.0	U	200	183		ug/L		91	77 - 120
Trichlorofluoromethane	1.0	U	200	183		ug/L		91	71 - 143
Vinyl chloride	1.0	U	200	176		ug/L		88	62 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*74 - 132*
4-Bromofluorobenzene	*95*		*77 - 124*
Dibromofluoromethane (Surr)	*95*		*72 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-161054-1 MSD
Matrix: Water
Analysis Batch: 540460

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	200	195		ug/L		97	75 - 125	5	30
1,1,2,2-Tetrachloroethane	1.0	U	200	221		ug/L		111	74 - 120	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	213		ug/L		107	59 - 150	2	30
1,1,2-Trichloroethane	1.0	U	200	210		ug/L		105	78 - 120	5	30
1,1-Dichloroethane	1.0	U	200	220		ug/L		110	77 - 123	6	30
1,1-Dichloroethene	1.0	U	200	205		ug/L		102	74 - 123	6	30
1,2,3-Trichlorobenzene	1.0	U	200	209		ug/L		104	78 - 131	8	30
1,2,4-Trichlorobenzene	1.0	U	200	223		ug/L		112	80 - 124	9	30
1,2-Dibromo-3-Chloropropane	1.0	U	200	218		ug/L		109	55 - 134	7	30
1,2-Dichlorobenzene	1.0	U	200	214		ug/L		107	80 - 120	6	30
1,2-Dichloroethane	1.0	U	200	210		ug/L		105	76 - 121	5	30
1,2-Dichloropropane	1.0	U	200	217		ug/L		109	77 - 123	8	30
1,3-Dichlorobenzene	1.0	U	200	204		ug/L		102	80 - 120	6	30
1,4-Dichlorobenzene	1.0	U	200	206		ug/L		103	80 - 120	8	30
1,4-Dioxane	50	U	4000	5700		ug/L		142	10 - 150	26	30
2-Butanone (MEK)	5.0	U	1000	892		ug/L		89	64 - 120	3	30
2-Hexanone	5.0	U	1000	990		ug/L		99	71 - 125	2	30
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	1100		ug/L		110	78 - 124	2	30
Acetone	5.0	U	1000	1250		ug/L		125	39 - 150	18	30
Benzene	1.0	U	200	219		ug/L		109	77 - 121	5	30
Bromoform	1.0	U	200	176		ug/L		88	53 - 120	5	30
Bromomethane	1.0	U	200	140		ug/L		70	10 - 150	4	30
Carbon disulfide	1.0	U	200	181		ug/L		90	69 - 133	3	30
Carbon tetrachloride	1.0	U	200	192		ug/L		96	70 - 132	6	30
Chlorobenzene	1.0	U	200	206		ug/L		103	80 - 120	7	30
Chlorobromomethane	1.0	U	200	192		ug/L		96	77 - 127	5	30
Chlorodibromomethane	1.0	U	200	181		ug/L		91	73 - 120	5	30
Chloroethane	1.0	U	200	172		ug/L		86	52 - 150	0	30
Chloroform	1.0	U	200	207		ug/L		104	80 - 120	6	30
Chloromethane	1.0	U	200	208		ug/L		104	56 - 131	4	30
cis-1,2-Dichloroethene	1.0	U	200	201		ug/L		101	80 - 120	7	30
cis-1,3-Dichloropropene	1.0	U	200	209		ug/L		105	77 - 120	5	30
Cyclohexane	1.0	U	200	219		ug/L		110	56 - 150	4	30
Dichlorobromomethane	1.0	U	200	195		ug/L		98	76 - 120	9	30
Dichlorodifluoromethane	1.0	U	200	202		ug/L		101	50 - 131	4	30
Ethylbenzene	1.0	U	200	206		ug/L		103	80 - 120	7	30
Ethylene Dibromide	1.0	U	200	203		ug/L		101	80 - 120	4	30
Isopropylbenzene	1.0	U	200	218		ug/L		109	80 - 123	2	30
Methyl acetate	5.0	U	400	575		ug/L		144	66 - 144	9	30
Methyl tert-butyl ether	1.0	U	200	214		ug/L		107	79 - 122	6	30
Methylcyclohexane	1.0	U	200	212		ug/L		106	61 - 145	3	30
Methylene Chloride	1.0	U	200	201		ug/L		101	77 - 123	5	30
m-Xylene & p-Xylene	1.0	U	200	205		ug/L		103	80 - 120	4	30
o-Xylene	1.0	U	200	209		ug/L		105	80 - 120	5	30
Styrene	1.0	U	200	209		ug/L		105	80 - 120	5	30
Tetrachloroethene	1.0	U	200	197		ug/L		98	78 - 122	4	30
Toluene	1.0	U	200	211		ug/L		105	80 - 120	3	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-161054-1 MSD
Matrix: Water
Analysis Batch: 540460

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	1.0	U	200	200		ug/L		100	79 - 120	5	30
trans-1,3-Dichloropropene	1.0	U	200	206		ug/L		103	76 - 120	5	30
Trichloroethene	1.0	U	200	187		ug/L		93	77 - 120	2	30
Trichlorofluoromethane	1.0	U	200	190		ug/L		95	71 - 143	4	30
Vinyl chloride	1.0	U	200	187		ug/L		93	62 - 138	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*74 - 132*
4-Bromofluorobenzene	*97*		*77 - 124*
Dibromofluoromethane (Surr)	*97*		*72 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*

Method: 9060A_ASP - Organic Carbon, Total (TOC)

Lab Sample ID: MB 460-540990/3
Matrix: Water
Analysis Batch: 540990

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.34	mg/L			07/30/18 15:52	1

Lab Sample ID: LCSSRM 460-540990/4
Matrix: Water
Analysis Batch: 540990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	45.4	44.97		mg/L		99.2	84.0 - 114.7

Lab Sample ID: 460-161054-1 MS
Matrix: Water
Analysis Batch: 540990

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	0.35	J	50.0	51.66		mg/L		103	85 - 115

Lab Sample ID: 460-161054-1 MSD
Matrix: Water
Analysis Batch: 540990

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	0.35	J	50.0	51.62		mg/L		103	85 - 115	0	10

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 460-540298/30
Matrix: Water
Analysis Batch: 540298

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	5.0	U	5.0	1.4	mg/L			07/27/18 15:08	1

Lab Sample ID: LCSSRM 460-540298/31
Matrix: Water
Analysis Batch: 540298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	19.8	18.86		mg/L		95.3	83.8 - 112.1

Lab Sample ID: 460-161054-1 MS
Matrix: Water
Analysis Batch: 540298

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.3		20.0	28.76		mg/L		92	85 - 115

Lab Sample ID: 460-161054-1 MSD
Matrix: Water
Analysis Batch: 540298

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.3		20.0	29.13		mg/L		94	85 - 115	1	13

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-540834/2
Matrix: Water
Analysis Batch: 540834

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/30/18 10:56	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/30/18 10:56	1
Alkalinity	5.0	U	5.0	5.0	mg/L			07/30/18 10:56	1
Hydroxide Alkalinity	5.0	U	5.0	5.0	mg/L			07/30/18 10:56	1

Lab Sample ID: LCSSRM 460-540834/3
Matrix: Water
Analysis Batch: 540834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	53.9	54.33		mg/L		100.8	85.0 - 114.8

Lab Sample ID: 460-161054-1 DU
Matrix: Water
Analysis Batch: 540834

Client Sample ID: GC-MW-101 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	40.3		40.37		mg/L		0.1	10

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 460-161054-1 DU — **Client Sample ID: GC-MW-101 (WG)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 540834

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	10
Alkalinity	40.3			40.37		mg/L				0.1	10
Hydroxide Alkalinity	5.0	U		5.0	U	mg/L				NC	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 460-539612/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 539612

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			07/25/18 15:49	1

Lab Sample ID: LCSSRM 460-539612/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 539612

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			528	521.0		mg/L		98.7	90.0 - 109.8		

Lab Sample ID: 460-161054-4 DU — **Client Sample ID: GC-MW-104 (WG)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 539612

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	758			774.0		mg/L				2	5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
J	Indicates an estimated value.

General Chemistry

Qualifier	Qualifier Description
U	Indicates analyzed for but not detected.
J	Sample result is greater than the MDL but below the CRDL

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Analysis Batch: 540460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161054-1	GC-MW-101 (WG)	Total/NA	Water	8260C	
460-161054-2	GC-MW-102 (WG)	Total/NA	Water	8260C	
460-161054-3	GC-MW-103 (WG)	Total/NA	Water	8260C	
460-161054-4	GC-MW-104 (WG)	Total/NA	Water	8260C	
460-161054-5	GC-MW-105 (WG)	Total/NA	Water	8260C	
460-161054-6	GC-MW-106 (WG)	Total/NA	Water	8260C	
460-161054-7	GC-EQUIPMENT BLANK (072318)	Total/NA	Water	8260C	
460-161054-8	GC-TB (072318)	Total/NA	Water	8260C	
MB 460-540460/9	Method Blank	Total/NA	Water	8260C	
LCS 460-540460/4	Lab Control Sample	Total/NA	Water	8260C	
460-161054-1 MS	GC-MW-101 (WG)	Total/NA	Water	8260C	
460-161054-1 MSD	GC-MW-101 (WG)	Total/NA	Water	8260C	

General Chemistry

Analysis Batch: 539612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161054-1	GC-MW-101 (WG)	Total/NA	Water	SM 2540C	
460-161054-4	GC-MW-104 (WG)	Total/NA	Water	SM 2540C	
MB 460-539612/1	Method Blank	Total/NA	Water	SM 2540C	
LCSSRM 460-539612/2	Lab Control Sample	Total/NA	Water	SM 2540C	
460-161054-4 DU	GC-MW-104 (WG)	Total/NA	Water	SM 2540C	

Analysis Batch: 540298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161054-1	GC-MW-101 (WG)	Total/NA	Water	D516-90, 02	
460-161054-4	GC-MW-104 (WG)	Total/NA	Water	D516-90, 02	
MB 460-540298/30	Method Blank	Total/NA	Water	D516-90, 02	
LCSSRM 460-540298/31	Lab Control Sample	Total/NA	Water	D516-90, 02	
460-161054-1 MS	GC-MW-101 (WG)	Total/NA	Water	D516-90, 02	
460-161054-1 MSD	GC-MW-101 (WG)	Total/NA	Water	D516-90, 02	

Analysis Batch: 540834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161054-1	GC-MW-101 (WG)	Total/NA	Water	SM 2320B	
460-161054-4	GC-MW-104 (WG)	Total/NA	Water	SM 2320B	
MB 460-540834/2	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-540834/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-161054-1 DU	GC-MW-101 (WG)	Total/NA	Water	SM 2320B	

Analysis Batch: 540990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161054-1	GC-MW-101 (WG)	Total/NA	Water	9060A_ASP	
460-161054-4	GC-MW-104 (WG)	Total/NA	Water	9060A_ASP	
MB 460-540990/3	Method Blank	Total/NA	Water	9060A_ASP	
LCSSRM 460-540990/4	Lab Control Sample	Total/NA	Water	9060A_ASP	
460-161054-1 MS	GC-MW-101 (WG)	Total/NA	Water	9060A_ASP	
460-161054-1 MSD	GC-MW-101 (WG)	Total/NA	Water	9060A_ASP	

Client Sample ID: GC-MW-101 (WG)

Lab Sample ID: 460-161054-1

Date Collected: 07/23/18 09:30

Matrix: Water

Date Received: 07/23/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540460	07/28/18 22:23	XXC	TAL EDI
Total/NA	Analysis	9060A_ASP		1	540990	07/30/18 16:39	JXT	TAL EDI
Total/NA	Analysis	D516-90, 02		1	540298	07/27/18 15:08	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	540834	07/30/18 11:54	PHM	TAL EDI
Total/NA	Analysis	SM 2540C		1	539612	07/25/18 15:49	HTV	TAL EDI

Client Sample ID: GC-MW-102 (WG)

Lab Sample ID: 460-161054-2

Date Collected: 07/23/18 10:45

Matrix: Water

Date Received: 07/23/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540460	07/28/18 22:46	XXC	TAL EDI

Client Sample ID: GC-MW-103 (WG)

Lab Sample ID: 460-161054-3

Date Collected: 07/23/18 11:30

Matrix: Water

Date Received: 07/23/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540460	07/28/18 23:10	XXC	TAL EDI

Client Sample ID: GC-MW-104 (WG)

Lab Sample ID: 460-161054-4

Date Collected: 07/23/18 12:20

Matrix: Water

Date Received: 07/23/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540460	07/28/18 23:33	XXC	TAL EDI
Total/NA	Analysis	9060A_ASP		1	540990	07/30/18 17:47	JXT	TAL EDI
Total/NA	Analysis	D516-90, 02		1	540298	07/27/18 15:08	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	540834	07/30/18 12:07	PHM	TAL EDI
Total/NA	Analysis	SM 2540C		1	539612	07/25/18 15:49	HTV	TAL EDI

Client Sample ID: GC-MW-105 (WG)

Lab Sample ID: 460-161054-5

Date Collected: 07/23/18 13:10

Matrix: Water

Date Received: 07/23/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540460	07/28/18 23:57	XXC	TAL EDI

Client Sample ID: GC-MW-106 (WG)

Lab Sample ID: 460-161054-6

Date Collected: 07/23/18 09:25

Matrix: Water

Date Received: 07/23/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540460	07/29/18 00:20	XXC	TAL EDI

Client Sample ID: GC-EQUIPMENT BLANK (072318)

Lab Sample ID: 460-161054-7

Date Collected: 07/23/18 09:15

Matrix: Water

Date Received: 07/23/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540460	07/29/18 00:44	XXC	TAL EDI

Client Sample ID: GC-TB (072318)

Lab Sample ID: 460-161054-8

Date Collected: 07/23/18 00:00

Matrix: Water

Date Received: 07/23/18 19:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540460	07/28/18 22:00	XXC	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: TRC Environmental Corporation
TestAmerica Job ID: 460-161054-1
Project/Site: GEM Cleaners

Laboratory: TestAmerica Edison

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19
New York	NELAP	2	11452	04-01-19

8260C

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
GC-MW-101 (WG)	460-161054-1	99	108	99	98
GC-MW-102 (WG)	460-161054-2	96	104	97	97
GC-MW-103 (WG)	460-161054-3	97	109	96	93
GC-MW-104 (WG)	460-161054-4	97	110	96	96
GC-MW-105 (WG)	460-161054-5	95	107	97	97
GC-MW-106 (WG)	460-161054-6	98	108	97	99
GC-EQUIPMENT BLANK (072318)	460-161054-7	100	107	98	94
GC-TB (072318)	460-161054-8	97	107	96	95
	MB 460-540460/9	97	109	98	95
	LCS 460-540460/4	92	100	97	95
GC-MW-101 (WG) MS	460-161054-1 MS	95	99	98	95
GC-MW-101 (WG) MSD	460-161054-1 MSD	97	100	98	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	72-131
DCA = 1,2-Dichloroethane-d4 (Surr)	74-132
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene	77-124

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F68327.D

Lab ID: LCS 460-540460/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	19.2	96	75-125	
1,1,2,2-Tetrachloroethane	20.0	21.5	108	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.5	103	59-150	
1,1,2-Trichloroethane	20.0	21.3	106	78-120	
1,1-Dichloroethane	20.0	21.0	105	77-123	
1,1-Dichloroethene	20.0	19.4	97	74-123	
1,2,3-Trichlorobenzene	20.0	21.5	107	78-131	
1,2,4-Trichlorobenzene	20.0	22.8	114	80-124	
1,2-Dibromo-3-Chloropropane	20.0	21.8	109	55-134	
1,2-Dichlorobenzene	20.0	20.9	105	80-120	
1,2-Dichloroethane	20.0	20.4	102	76-121	
1,2-Dichloropropane	20.0	20.6	103	77-123	
1,3-Dichlorobenzene	20.0	20.5	103	80-120	
1,4-Dichlorobenzene	20.0	19.8	99	80-120	
1,4-Dioxane	400	550	138	10-150	
2-Butanone (MEK)	100	92.0	92	64-120	
2-Hexanone	100	103	103	71-125	
4-Methyl-2-pentanone (MIBK)	100	112	112	78-124	
Acetone	100	125	125	39-150	
Benzene	20.0	21.0	105	77-121	
Bromoform	20.0	17.8	89	53-120	
Bromomethane	20.0	13.8	69	10-150	
Carbon disulfide	20.0	19.5	98	69-133	
Carbon tetrachloride	20.0	18.9	94	70-132	
Chlorobenzene	20.0	20.0	100	80-120	
Chlorobromomethane	20.0	18.6	93	77-127	
Chlorodibromomethane	20.0	18.1	91	73-120	
Chloroethane	20.0	16.8	84	52-150	
Chloroform	20.0	20.0	100	80-120	
Chloromethane	20.0	19.9	99	56-131	
cis-1,2-Dichloroethene	20.0	19.0	95	80-120	
cis-1,3-Dichloropropene	20.0	20.6	103	77-120	
Cyclohexane	20.0	21.2	106	56-150	
Dichlorobromomethane	20.0	19.1	96	76-120	
Dichlorodifluoromethane	20.0	19.6	98	50-131	
Ethylbenzene	20.0	19.9	99	80-120	
Ethylene Dibromide	20.0	19.4	97	80-120	
Isopropylbenzene	20.0	21.3	107	80-123	
Methyl acetate	40.0	55.1	138	66-144	
Methyl tert-butyl ether	20.0	21.2	106	79-122	
Methylcyclohexane	20.0	21.2	106	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F68327.D

Lab ID: LCS 460-540460/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	19.9	100	77-123	
m-Xylene & p-Xylene	20.0	20.7	103	80-120	
o-Xylene	20.0	20.0	100	80-120	
Styrene	20.0	19.8	99	80-120	
Tetrachloroethene	20.0	18.7	93	78-122	
Toluene	20.0	20.4	102	80-120	
trans-1,2-Dichloroethene	20.0	19.9	100	79-120	
trans-1,3-Dichloropropene	20.0	20.4	102	76-120	
Trichloroethene	20.0	18.6	93	77-120	
Trichlorofluoromethane	20.0	18.6	93	71-143	
Vinyl chloride	20.0	17.5	87	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F68342.D

Lab ID: 460-161054-1 MS Client ID: GC-MW-101 (WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	200	1.0 U	185	92	75-125	
1,1,2,2-Tetrachloroethane	200	1.0 U	204	102	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	200	1.0 U	209	105	59-150	
1,1,2-Trichloroethane	200	1.0 U	199	100	78-120	
1,1-Dichloroethane	200	1.0 U	206	103	77-123	
1,1-Dichloroethene	200	1.0 U	193	96	74-123	
1,2,3-Trichlorobenzene	200	1.0 U	192	96	78-131	
1,2,4-Trichlorobenzene	200	1.0 U	205	102	80-124	
1,2-Dibromo-3-Chloropropane	200	1.0 U	204	102	55-134	
1,2-Dichlorobenzene	200	1.0 U	201	101	80-120	
1,2-Dichloroethane	200	1.0 U	201	100	76-121	
1,2-Dichloropropane	200	1.0 U	200	100	77-123	
1,3-Dichlorobenzene	200	1.0 U	192	96	80-120	
1,4-Dichlorobenzene	200	1.0 U	191	95	80-120	
1,4-Dioxane	4000	50 U	4400	110	10-150	
2-Butanone (MEK)	1000	5.0 U	864	86	64-120	
2-Hexanone	1000	5.0 U	969	97	71-125	
4-Methyl-2-pentanone (MIBK)	1000	5.0 U	1080	108	78-124	
Acetone	1000	5.0 U	1040	104	39-150	
Benzene	200	1.0 U	208	104	77-121	
Bromoform	200	1.0 U	168	84	53-120	
Bromomethane	200	1.0 U	145	73	10-150	
Carbon disulfide	200	1.0 U	176	88	69-133	
Carbon tetrachloride	200	1.0 U	181	90	70-132	
Chlorobenzene	200	1.0 U	192	96	80-120	
Chlorobromomethane	200	1.0 U	183	91	77-127	
Chlorodibromomethane	200	1.0 U	172	86	73-120	
Chloroethane	200	1.0 U	172	86	52-150	
Chloroform	200	1.0 U	195	97	80-120	
Chloromethane	200	1.0 U	200	100	56-131	
cis-1,2-Dichloroethene	200	1.0 U	188	94	80-120	
cis-1,3-Dichloropropene	200	1.0 U	200	100	77-120	
Cyclohexane	200	1.0 U	210	105	56-150	
Dichlorobromomethane	200	1.0 U	179	90	76-120	
Dichlorodifluoromethane	200	1.0 U	195	97	50-131	
Ethylbenzene	200	1.0 U	191	96	80-120	
Ethylene Dibromide	200	1.0 U	194	97	80-120	
Isopropylbenzene	200	1.0 U	213	107	80-123	
Methyl acetate	400	5.0 U	527	132	66-144	
Methyl tert-butyl ether	200	1.0 U	202	101	79-122	
Methylcyclohexane	200	1.0 U	207	103	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F68342.D

Lab ID: 460-161054-1 MS Client ID: GC-MW-101 (WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	200	1.0 U	190	95	77-123	
m-Xylene & p-Xylene	200	1.0 U	198	99	80-120	
o-Xylene	200	1.0 U	200	100	80-120	
Styrene	200	1.0 U	199	99	80-120	
Tetrachloroethene	200	1.0 U	189	94	78-122	
Toluene	200	1.0 U	205	103	80-120	
trans-1,2-Dichloroethene	200	1.0 U	190	95	79-120	
trans-1,3-Dichloropropene	200	1.0 U	196	98	76-120	
Trichloroethene	200	1.0 U	183	91	77-120	
Trichlorofluoromethane	200	1.0 U	183	91	71-143	
Vinyl chloride	200	1.0 U	176	88	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F68343.D

Lab ID: 460-161054-1 MSD Client ID: GC-MW-101 (WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	200	195	97	5	30	75-125	
1,1,2,2-Tetrachloroethane	200	221	111	8	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	200	213	107	2	30	59-150	
1,1,2-Trichloroethane	200	210	105	5	30	78-120	
1,1-Dichloroethane	200	220	110	6	30	77-123	
1,1-Dichloroethene	200	205	102	6	30	74-123	
1,2,3-Trichlorobenzene	200	209	104	8	30	78-131	
1,2,4-Trichlorobenzene	200	223	112	9	30	80-124	
1,2-Dibromo-3-Chloropropane	200	218	109	7	30	55-134	
1,2-Dichlorobenzene	200	214	107	6	30	80-120	
1,2-Dichloroethane	200	210	105	5	30	76-121	
1,2-Dichloropropane	200	217	109	8	30	77-123	
1,3-Dichlorobenzene	200	204	102	6	30	80-120	
1,4-Dichlorobenzene	200	206	103	8	30	80-120	
1,4-Dioxane	4000	5700	142	26	30	10-150	
2-Butanone (MEK)	1000	892	89	3	30	64-120	
2-Hexanone	1000	990	99	2	30	71-125	
4-Methyl-2-pentanone (MIBK)	1000	1100	110	2	30	78-124	
Acetone	1000	1250	125	18	30	39-150	
Benzene	200	219	109	5	30	77-121	
Bromoform	200	176	88	5	30	53-120	
Bromomethane	200	140	70	4	30	10-150	
Carbon disulfide	200	181	90	3	30	69-133	
Carbon tetrachloride	200	192	96	6	30	70-132	
Chlorobenzene	200	206	103	7	30	80-120	
Chlorobromomethane	200	192	96	5	30	77-127	
Chlorodibromomethane	200	181	91	5	30	73-120	
Chloroethane	200	172	86	0	30	52-150	
Chloroform	200	207	104	6	30	80-120	
Chloromethane	200	208	104	4	30	56-131	
cis-1,2-Dichloroethene	200	201	101	7	30	80-120	
cis-1,3-Dichloropropene	200	209	105	5	30	77-120	
Cyclohexane	200	219	110	4	30	56-150	
Dichlorobromomethane	200	195	98	9	30	76-120	
Dichlorodifluoromethane	200	202	101	4	30	50-131	
Ethylbenzene	200	206	103	7	30	80-120	
Ethylene Dibromide	200	203	101	4	30	80-120	
Isopropylbenzene	200	218	109	2	30	80-123	
Methyl acetate	400	575	144	9	30	66-144	
Methyl tert-butyl ether	200	214	107	6	30	79-122	
Methylcyclohexane	200	212	106	3	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F68343.D

Lab ID: 460-161054-1 MSD Client ID: GC-MW-101 (WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	200	201	101	5	30	77-123	
m-Xylene & p-Xylene	200	205	103	4	30	80-120	
o-Xylene	200	209	105	5	30	80-120	
Styrene	200	209	105	5	30	80-120	
Tetrachloroethene	200	197	98	4	30	78-122	
Toluene	200	211	105	3	30	80-120	
trans-1,2-Dichloroethene	200	200	100	5	30	79-120	
trans-1,3-Dichloropropene	200	206	103	5	30	76-120	
Trichloroethene	200	187	93	2	30	77-120	
Trichlorofluoromethane	200	190	95	4	30	71-143	
Vinyl chloride	200	187	93	6	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Lab File ID: F68332.D Lab Sample ID: MB 460-540460/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS6 Date Analyzed: 07/28/2018 21:12

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-540460/4	F68327.D	07/28/2018 19:16
GC-TB (072318)	460-161054-8	F68334.D	07/28/2018 22:00
GC-MW-101 (WG)	460-161054-1	F68335.D	07/28/2018 22:23
GC-MW-102 (WG)	460-161054-2	F68336.D	07/28/2018 22:46
GC-MW-103 (WG)	460-161054-3	F68337.D	07/28/2018 23:10
GC-MW-104 (WG)	460-161054-4	F68338.D	07/28/2018 23:33
GC-MW-105 (WG)	460-161054-5	F68339.D	07/28/2018 23:57
GC-MW-106 (WG)	460-161054-6	F68340.D	07/29/2018 00:20
GC-EQUIPMENT BLANK (072318)	460-161054-7	F68341.D	07/29/2018 00:44
GC-MW-101 (WG) MS	460-161054-1 MS	F68342.D	07/29/2018 01:06
GC-MW-101 (WG) MSD	460-161054-1 MSD	F68343.D	07/29/2018 01:30

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Lab File ID: F67406.D BFB Injection Date: 07/08/2018

Instrument ID: CVOAMS6 BFB Injection Time: 07:26

Analysis Batch No.: 534406

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	44.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	50.0 - 120.00 % of mass 95	84.2	
175	5.0 - 9.0 % of mass 174	7.0	(8.4) 1
176	95.0 - 101.0 % of mass 174	82.5	(98.0) 1
177	5.0 - 9.0 % of mass 176	4.8	(5.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD7 460-534406/3	F67408.D	07/08/2018	08:14
	STD1 460-534406/4	F67409.D	07/08/2018	08:37
	STD5 460-534406/5	F67410.D	07/08/2018	09:01
	STD20 460-534406/6	F67411.D	07/08/2018	09:24
	STD50 460-534406/7	F67412.D	07/08/2018	09:47
	STD200 460-534406/8	F67413.D	07/08/2018	10:11
	STD500 460-534406/9	F67414.D	07/08/2018	10:34

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Lab File ID: F68324.D BFB Injection Date: 07/28/2018

Instrument ID: CVOAMS6 BFB Injection Time: 18:09

Analysis Batch No.: 540460

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.6	
75	30.0 - 60.0 % of mass 95	49.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	74.4	
175	5.0 - 9.0 % of mass 174	6.0	(8.1) 1
176	95.0 - 101.0 % of mass 174	71.8	(96.6) 1
177	5.0 - 9.0 % of mass 176	4.1	(5.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-540460/3	F68326.D	07/28/2018	18:53
	LCS 460-540460/4	F68327.D	07/28/2018	19:16
	MB 460-540460/9	F68332.D	07/28/2018	21:12
GC-TB (072318)	460-161054-8	F68334.D	07/28/2018	22:00
GC-MW-101 (WG)	460-161054-1	F68335.D	07/28/2018	22:23
GC-MW-102 (WG)	460-161054-2	F68336.D	07/28/2018	22:46
GC-MW-103 (WG)	460-161054-3	F68337.D	07/28/2018	23:10
GC-MW-104 (WG)	460-161054-4	F68338.D	07/28/2018	23:33
GC-MW-105 (WG)	460-161054-5	F68339.D	07/28/2018	23:57
GC-MW-106 (WG)	460-161054-6	F68340.D	07/29/2018	00:20
GC-EQUIPMENT BLANK (072318)	460-161054-7	F68341.D	07/29/2018	00:44
GC-MW-101 (WG) MS	460-161054-1 MS	F68342.D	07/29/2018	01:06
GC-MW-101 (WG) MSD	460-161054-1 MSD	F68343.D	07/29/2018	01:30

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Sample No.: CCVIS 460-540460/3 Date Analyzed: 07/28/2018 18:53

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): F68326.D Heated Purge: (Y/N) N

Calibration ID: 70046

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		112886	3.19	142644	4.24	303422	5.32
UPPER LIMIT		225772	3.69	285288	4.74	606844	5.82
LOWER LIMIT		56443	2.69	71322	3.74	151711	4.82
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-540460/4		121210	3.19	144916	4.23	304095	5.31
MB 460-540460/9		113628	3.19	140298	4.23	269937	5.31
460-161054-8	GC-TB (072318)	118025	3.21	131074	4.24	279452	5.31
460-161054-1	GC-MW-101 (WG)	108368	3.19	121329	4.23	278673	5.31
460-161054-2	GC-MW-102 (WG)	116614	3.19	125247	4.24	274727	5.31
460-161054-3	GC-MW-103 (WG)	118672	3.21	132265	4.24	283460	5.32
460-161054-4	GC-MW-104 (WG)	112828	3.19	137108	4.24	290292	5.32
460-161054-5	GC-MW-105 (WG)	113941	3.21	137981	4.24	292146	5.32
460-161054-6	GC-MW-106 (WG)	119102	3.20	130245	4.24	275483	5.32
460-161054-7	GC-EQUIPMENT BLANK (072318)	109247	3.20	124134	4.24	274412	5.32
460-161054-1 MS	GC-MW-101 (WG) MS	97242	3.18	132681	4.23	282578	5.31
460-161054-1 MSD	GC-MW-101 (WG) MSD	119350	3.19	135395	4.24	270418	5.31

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Sample No.: CCVIS 460-540460/3 Date Analyzed: 07/28/2018 18:53

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): F68326.D Heated Purge: (Y/N) N

Calibration ID: 70046

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		9265	6.02	202580	8.76	109721	10.91
UPPER LIMIT		18530	6.52	405160	9.26	219442	11.41
LOWER LIMIT		4633	5.52	101290	8.26	54861	10.41
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-540460/4		10687	6.02	206709	8.76	112643	10.90
MB 460-540460/9		8141	6.03	176547	8.76	96560	10.91
460-161054-8	GC-TB (072318)	9331	6.05	185625	8.76	101824	10.91
460-161054-1	GC-MW-101 (WG)	8977	6.03	179649	8.76	103039	10.91
460-161054-2	GC-MW-102 (WG)	8493	6.04	176943	8.76	99564	10.91
460-161054-3	GC-MW-103 (WG)	9124	6.06	185387	8.76	98693	10.91
460-161054-4	GC-MW-104 (WG)	8297	6.04	191049	8.76	105814	10.91
460-161054-5	GC-MW-105 (WG)	8670	6.03	189661	8.76	104120	10.91
460-161054-6	GC-MW-106 (WG)	9575	6.05	178561	8.76	99322	10.91
460-161054-7	GC-EQUIPMENT BLANK (072318)	7000	6.04	177237	8.76	95088	10.91
460-161054-1 MS	GC-MW-101 (WG) MS	8274	6.02	188207	8.76	107358	10.90
460-161054-1 MSD	GC-MW-101 (WG) MSD	10123	6.03	181714	8.76	101034	10.90

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) | Lab Sample ID: 460-161054-1

Matrix: Water | Lab File ID: F68335.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 22:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) | Lab Sample ID: 460-161054-1

Matrix: Water | Lab File ID: F68335.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 22:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		74-132
460-00-4	4-Bromofluorobenzene	98		77-124
1868-53-7	Dibromofluoromethane (Surr)	99		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) | Lab Sample ID: 460-161054-1

Matrix: Water | Lab File ID: F68335.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 22:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68335.D
Lims ID: 460-161054-A-1
Client ID: GC-MW-101 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 22:23:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161054-A-1
Misc. Info.: 460-0076265-012
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 13:33:34 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:44:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.185	3.185	0.000	0	108368	1000.0	
* 38 2-Butanone-d5	46	4.228	4.236	-0.008	0	121329	250.0	
48 Chloroform	83	4.540	4.549	-0.009	85	1587	0.2775	M
$ 51 Dibromofluoromethane (Surr	113	4.697	4.705	-0.008	97	68857	49.6	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.042	5.050	-0.008	0	79814	53.8	
* 61 Fluorobenzene	96	5.313	5.321	-0.008	98	278673	50.0	
* 67 1,4-Dioxane-d8	96	6.028	6.019	0.009	0	8977	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	245690	49.6	
* 89 Chlorobenzene-d5	117	8.756	8.756	0.000	88	179649	50.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	87	70727	48.8	
* 116 1,4-Dichlorobenzene-d4	152	10.909	10.908	0.001	97	103039	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

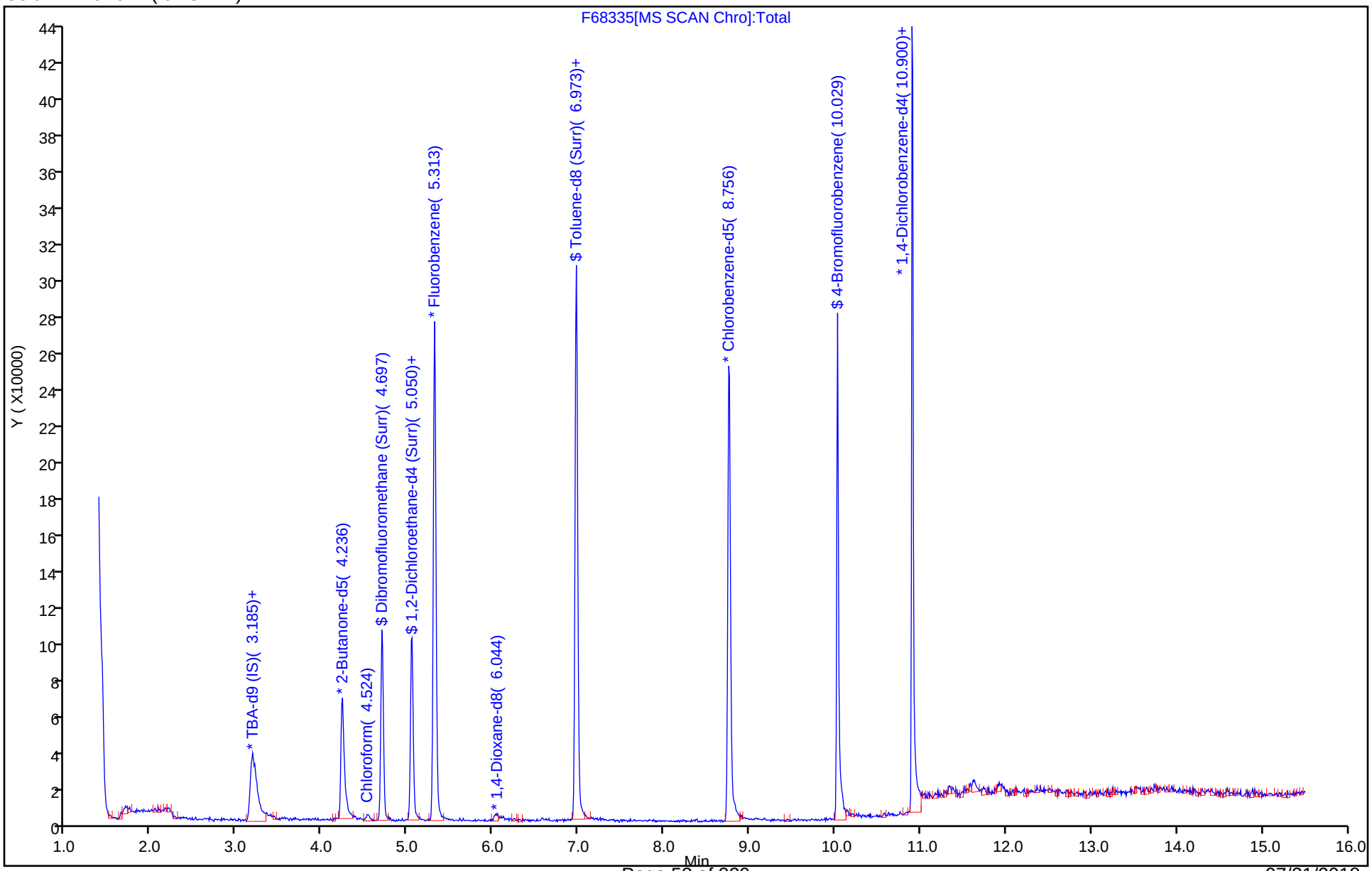
Report Date: 29-Jul-2018 13:33:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68335.D

Injection Date:	28-Jul-2018 22:23:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-161054-A-1	Lab Sample ID:	460-161054-1	Worklist Smp#:	12
Client ID:	GC-MW-101 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



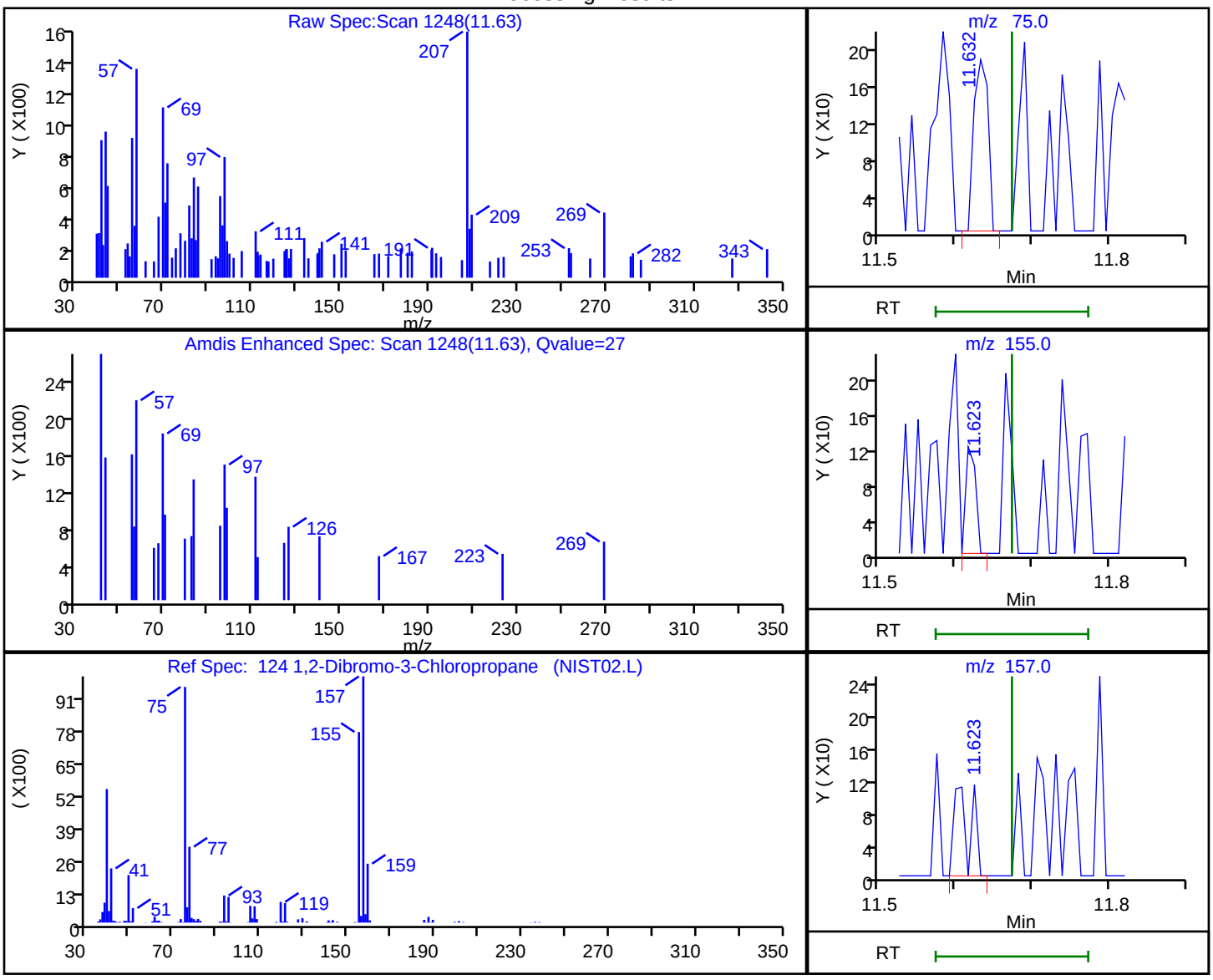
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68335.D		
Injection Date:	28-Jul-2018 22:23:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-1	Lab Sample ID:	460-161054-1
Client ID:	GC-MW-101 (WG)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

124 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results



RT	Mass	Response	Amount
11.63	75.00	235	0.380035
11.62	155.00	109	
11.62	157.00	160	

Reviewer: moroneyc, 29-Jul-2018 07:44:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

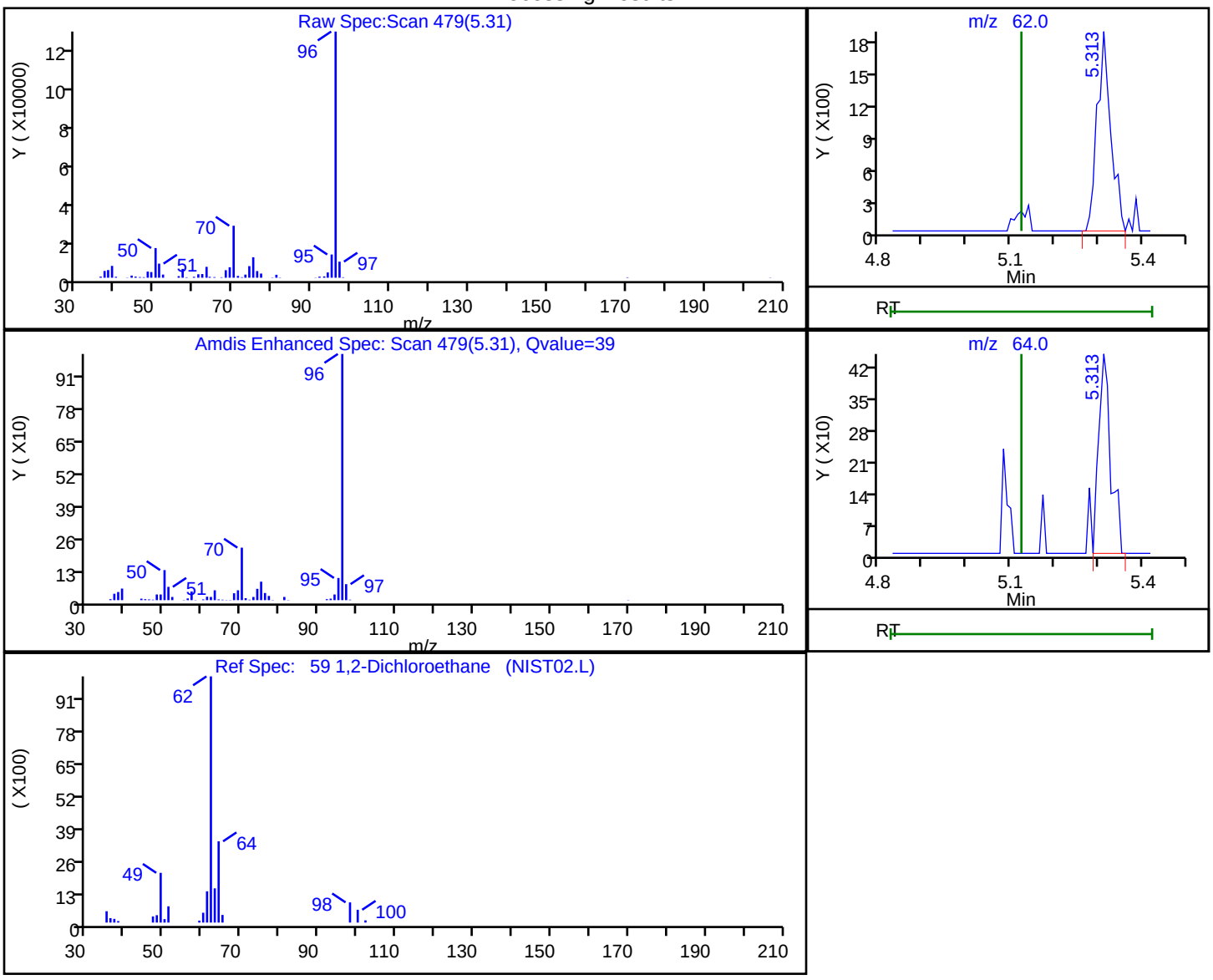
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68335.D				
Injection Date:	28-Jul-2018 22:23:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-1	Lab Sample ID:	460-161054-1		
Client ID:	GC-MW-101 (WG)				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.31	62.00	4008	0.972495
5.31	64.00	850	

Reviewer: moroneyc, 29-Jul-2018 07:44:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

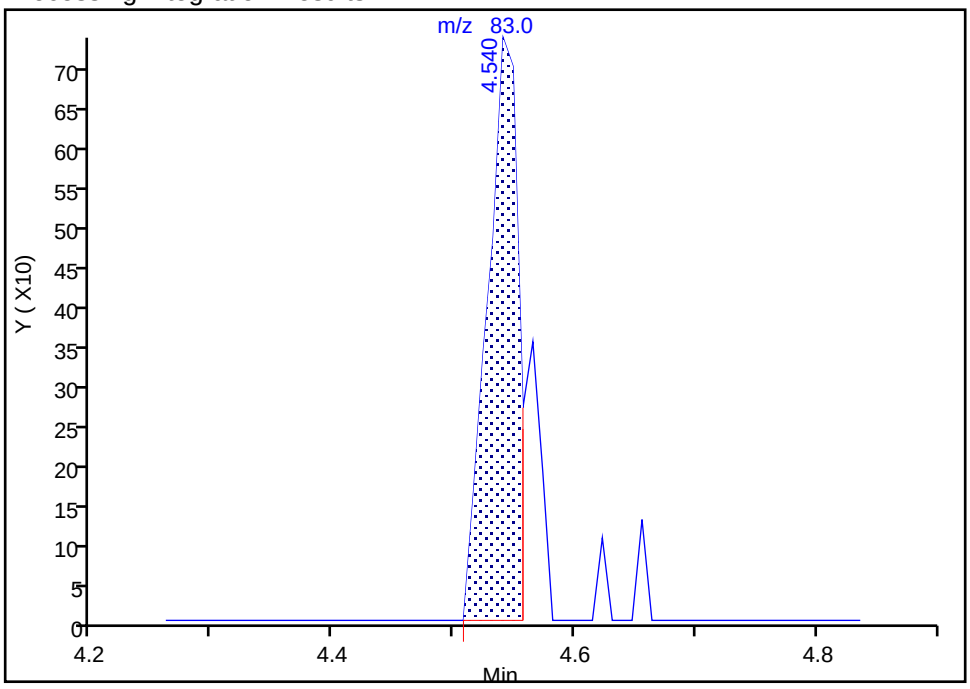
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68335.D		
Injection Date:	28-Jul-2018 22:23:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-1	Lab Sample ID:	460-161054-1
Client ID:	GC-MW-101 (WG)		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

48 Chloroform, CAS: 67-66-3

Signal: 1

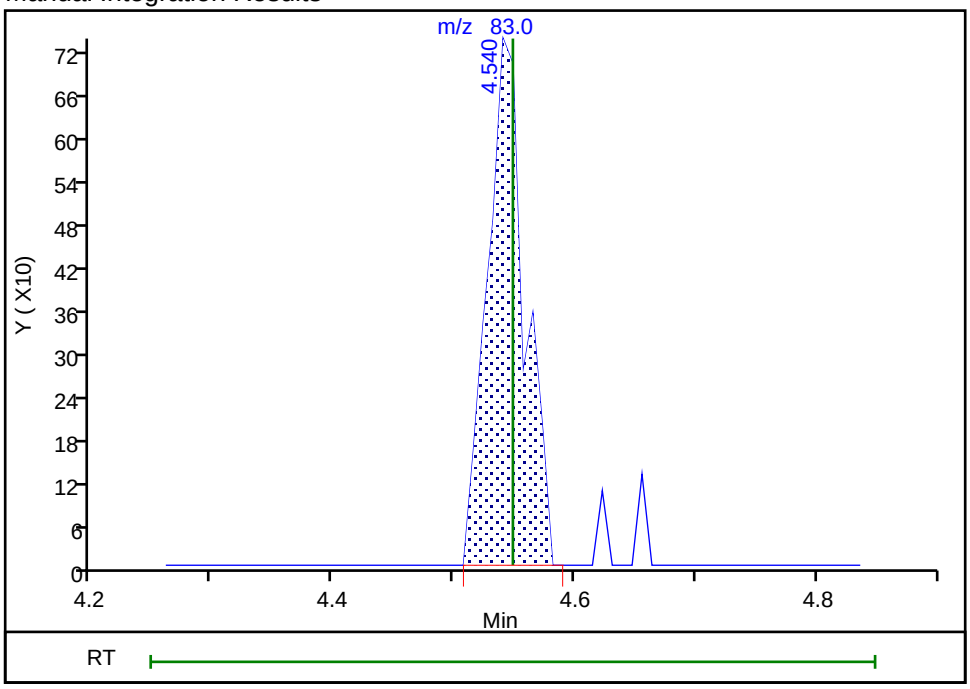
Processing Integration Results

RT: 4.54
Area: 1322
Amount: 0.231137
Amount Units: ug/l



Manual Integration Results

RT: 4.54
Area: 1587
Amount: 0.277469
Amount Units: ug/l



Reviewer: xuyvo, 29-Jul-2018 13:33:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-102 (WG) | Lab Sample ID: 460-161054-2

Matrix: Water | Lab File ID: F68336.D

Analysis Method: 8260C | Date Collected: 07/23/2018 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 22:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	0.35	J	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-102 (WG) | Lab Sample ID: 460-161054-2

Matrix: Water | Lab File ID: F68336.D

Analysis Method: 8260C | Date Collected: 07/23/2018 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 22:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.3		1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		74-132
460-00-4	4-Bromofluorobenzene	97		77-124
1868-53-7	Dibromofluoromethane (Surr)	96		72-131
2037-26-5	Toluene-d8 (Surr)	97		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-102 (WG) | Lab Sample ID: 460-161054-2

Matrix: Water | Lab File ID: F68336.D

Analysis Method: 8260C | Date Collected: 07/23/2018 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 22:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68336.D
Lims ID: 460-161054-A-2
Client ID: GC-MW-102 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 22:46:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161054-A-2
Misc. Info.: 460-0076265-013
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:03:22 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:44:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.193	3.185	0.008	0	116614	1000.0	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	125247	250.0	
48 Chloroform	83	4.540	4.549	-0.009	86	1973	0.3499	
$ 51 Dibromofluoromethane (Surr	113	4.696	4.705	-0.009	97	65560	47.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	76001	52.0	
* 61 Fluorobenzene	96	5.313	5.321	-0.008	98	274727	50.0	
* 67 1,4-Dioxane-d8	96	6.044	6.019	0.025	0	8493	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	236582	48.5	
83 Tetrachloroethene	166	7.663	7.663	0.000	91	4044	1.33	
* 89 Chlorobenzene-d5	117	8.756	8.756	0.000	88	176943	50.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	88	69350	48.6	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.908	0.000	97	99564	50.0	

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

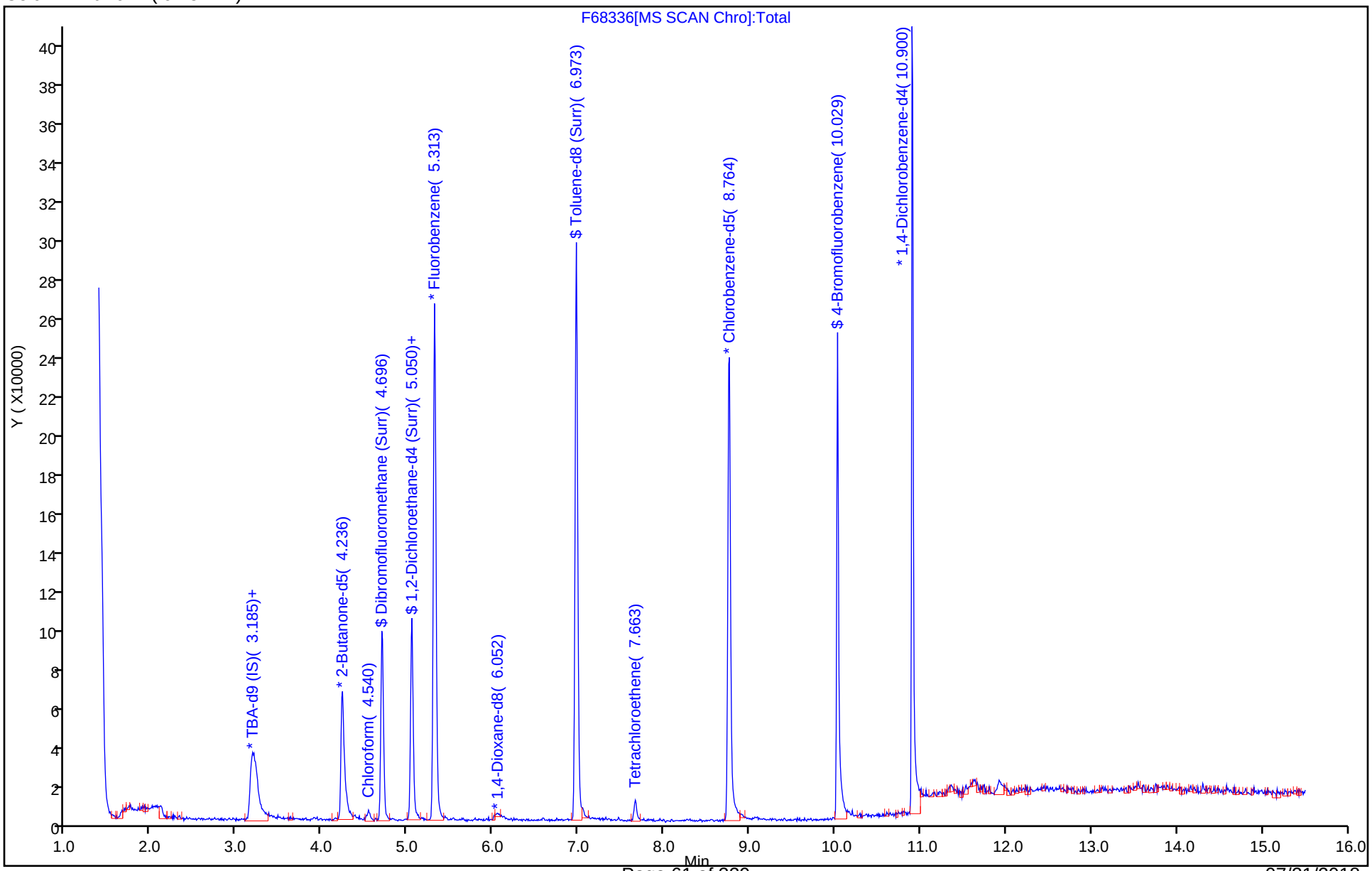
Report Date: 29-Jul-2018 08:04:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68336.D

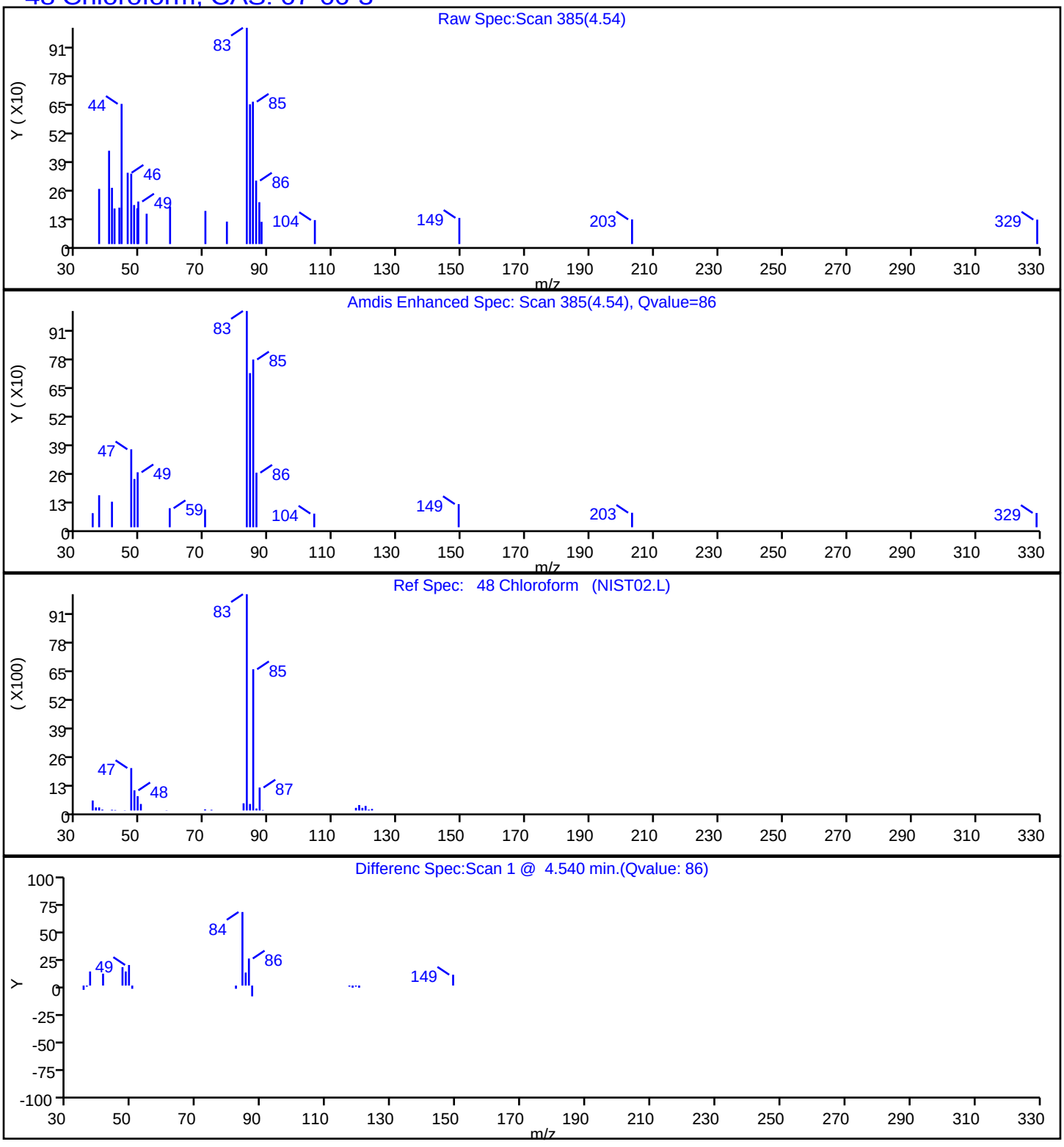
Injection Date:	28-Jul-2018 22:46:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-161054-A-2	Lab Sample ID:	460-161054-2	Worklist Smp#:	13
Client ID:	GC-MW-102 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68336.D
Injection Date: 28-Jul-2018 22:46:30 Instrument ID: CVOAMS6
Lims ID: 460-161054-A-2 Lab Sample ID: 460-161054-2
Client ID: GC-MW-102 (WG)
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

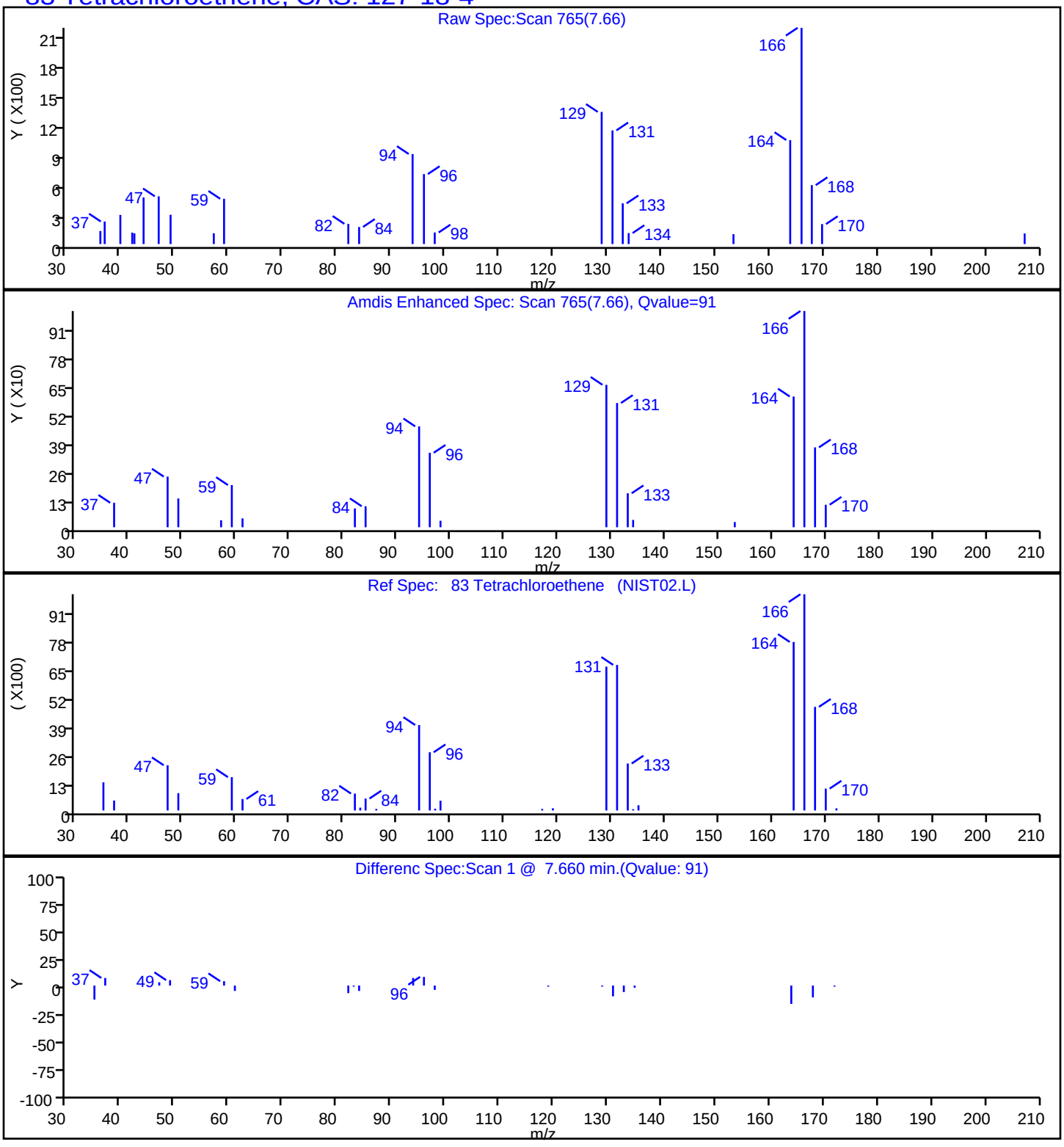
48 Chloroform, CAS: 67-66-3



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68336.D		
Injection Date:	28-Jul-2018 22:46:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-2	Lab Sample ID:	460-161054-2
Client ID:	GC-MW-102 (WG)		
Operator ID:		ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



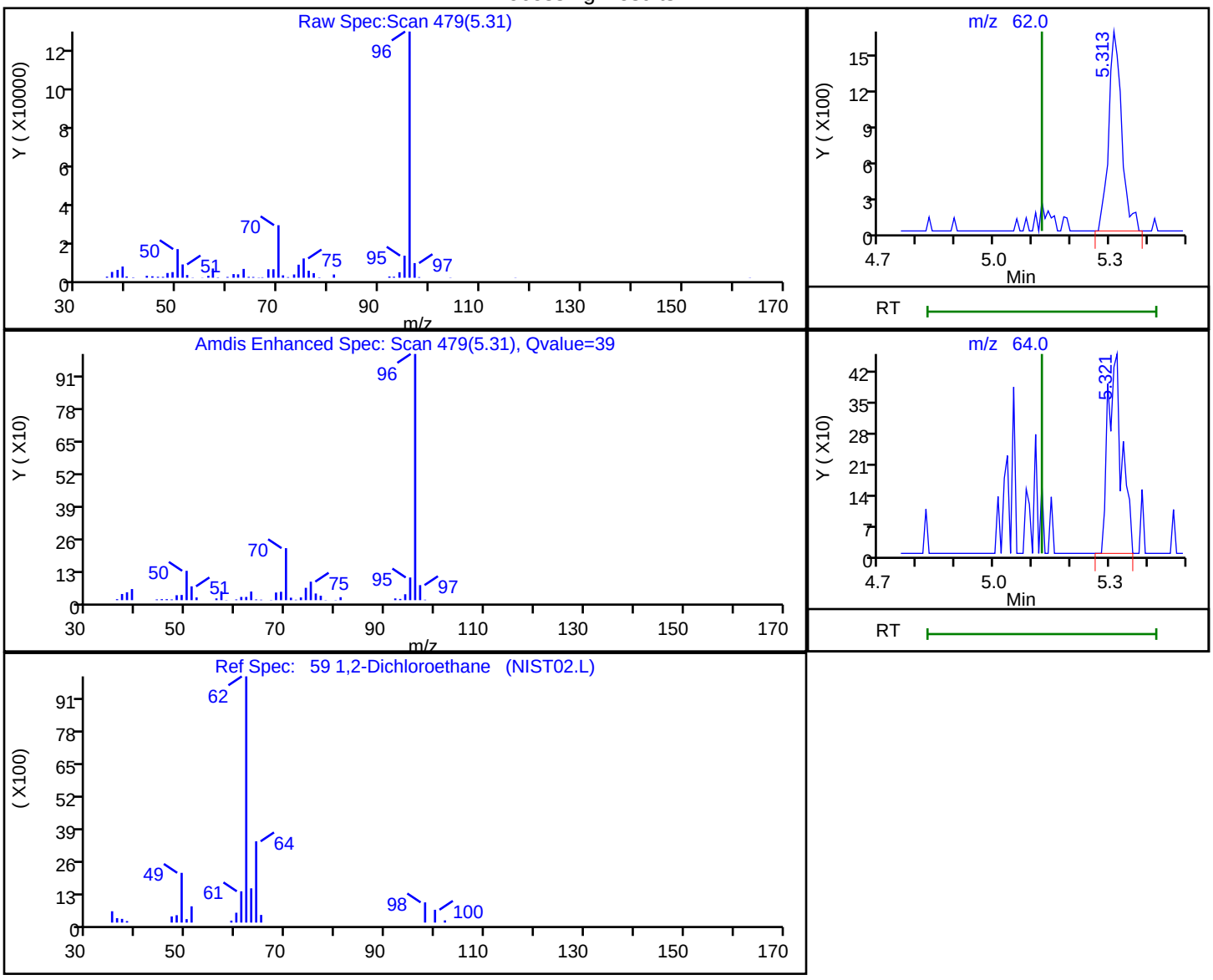
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68336.D				
Injection Date:	28-Jul-2018 22:46:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-2	Lab Sample ID:	460-161054-2		
Client ID:	GC-MW-102 (WG)				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.31	62.00	4001	0.984740
5.32	64.00	1154	

Reviewer: moroneyc, 29-Jul-2018 07:44:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-103 (WG) | Lab Sample ID: 460-161054-3

Matrix: Water | Lab File ID: F68337.D

Analysis Method: 8260C | Date Collected: 07/23/2018 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 23:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-103 (WG) | Lab Sample ID: 460-161054-3

Matrix: Water | Lab File ID: F68337.D

Analysis Method: 8260C | Date Collected: 07/23/2018 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 23:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0		1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		74-132
460-00-4	4-Bromofluorobenzene	93		77-124
1868-53-7	Dibromofluoromethane (Surr)	97		72-131
2037-26-5	Toluene-d8 (Surr)	96		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-103 (WG) | Lab Sample ID: 460-161054-3

Matrix: Water | Lab File ID: F68337.D

Analysis Method: 8260C | Date Collected: 07/23/2018 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 23:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68337.D
Lims ID: 460-161054-A-3
Client ID: GC-MW-103 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 23:10:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161054-A-3
Misc. Info.: 460-0076265-014
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 13:34:48 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:45:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.209	3.185	0.024	0	118672	1000.0	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	132265	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	96	68845	48.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	81887	54.3	
* 61 Fluorobenzene	96	5.321	5.321	0.000	98	283460	50.0	
* 67 1,4-Dioxane-d8	96	6.061	6.019	0.042	0	9124	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	245815	48.1	
83 Tetrachloroethene	166	7.679	7.663	0.016	84	3226	1.01	M
* 89 Chlorobenzene-d5	117	8.764	8.756	0.008	88	185387	50.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	86	69604	46.5	
* 116 1,4-Dichlorobenzene-d4	152	10.909	10.908	0.001	97	98693	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

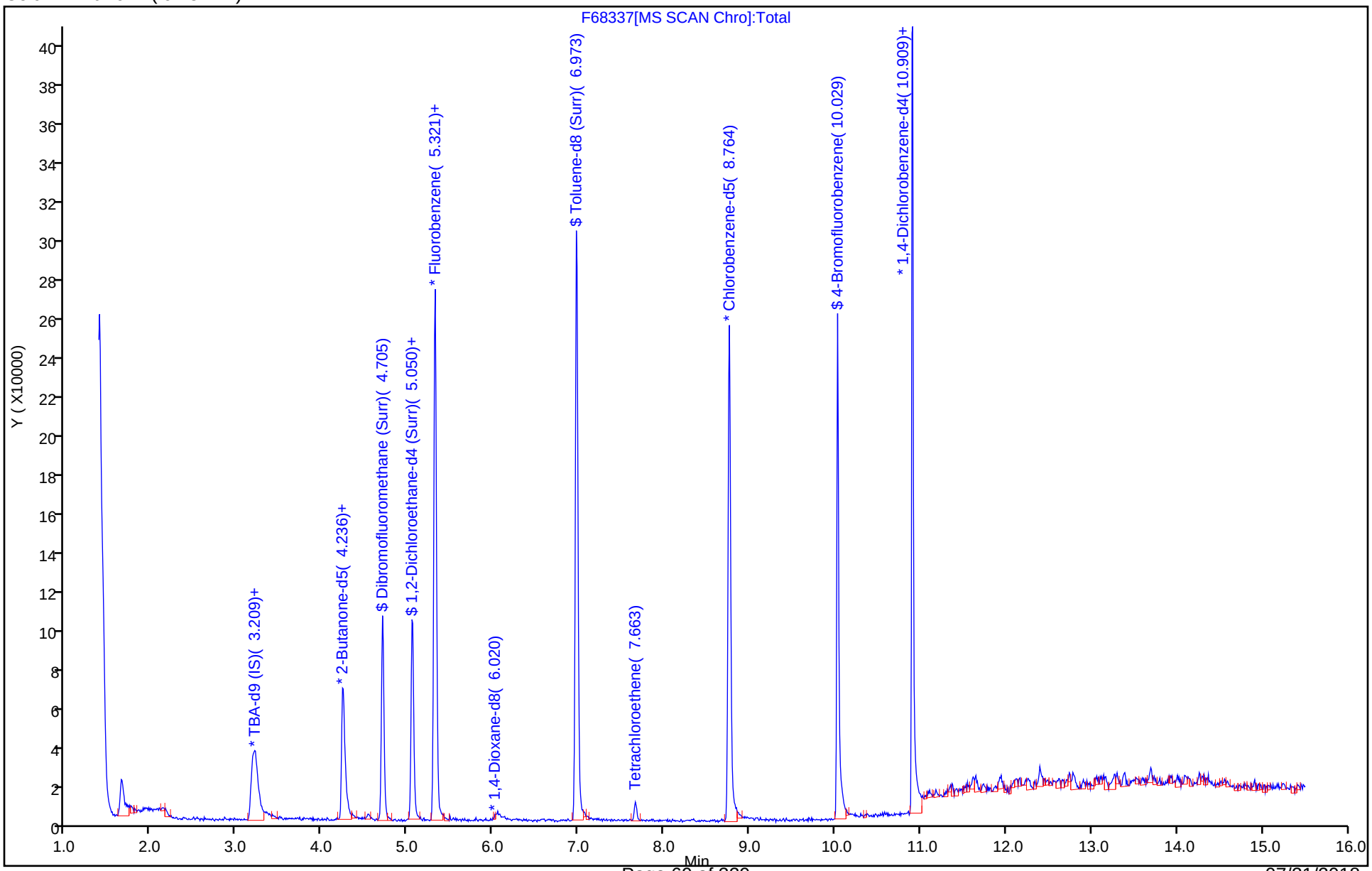
Report Date: 29-Jul-2018 13:34:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68337.D

Injection Date:	28-Jul-2018 23:10:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-161054-A-3	Lab Sample ID:	460-161054-3	Worklist Smp#:	14
Client ID:	GC-MW-103 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

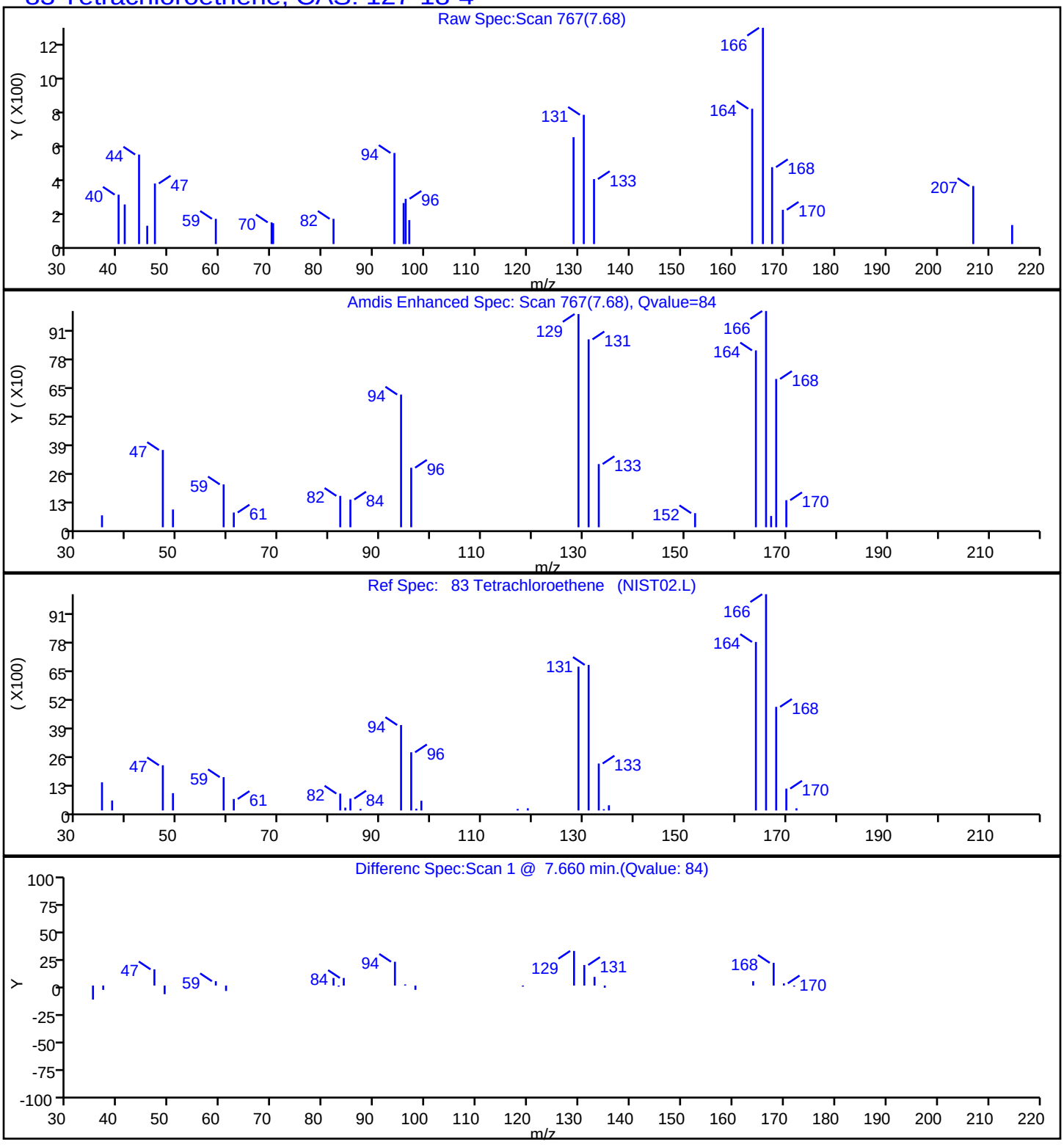
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68337.D		
Injection Date:	28-Jul-2018 23:10:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-3	Lab Sample ID:	460-161054-3
Client ID:	GC-MW-103 (WG)		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



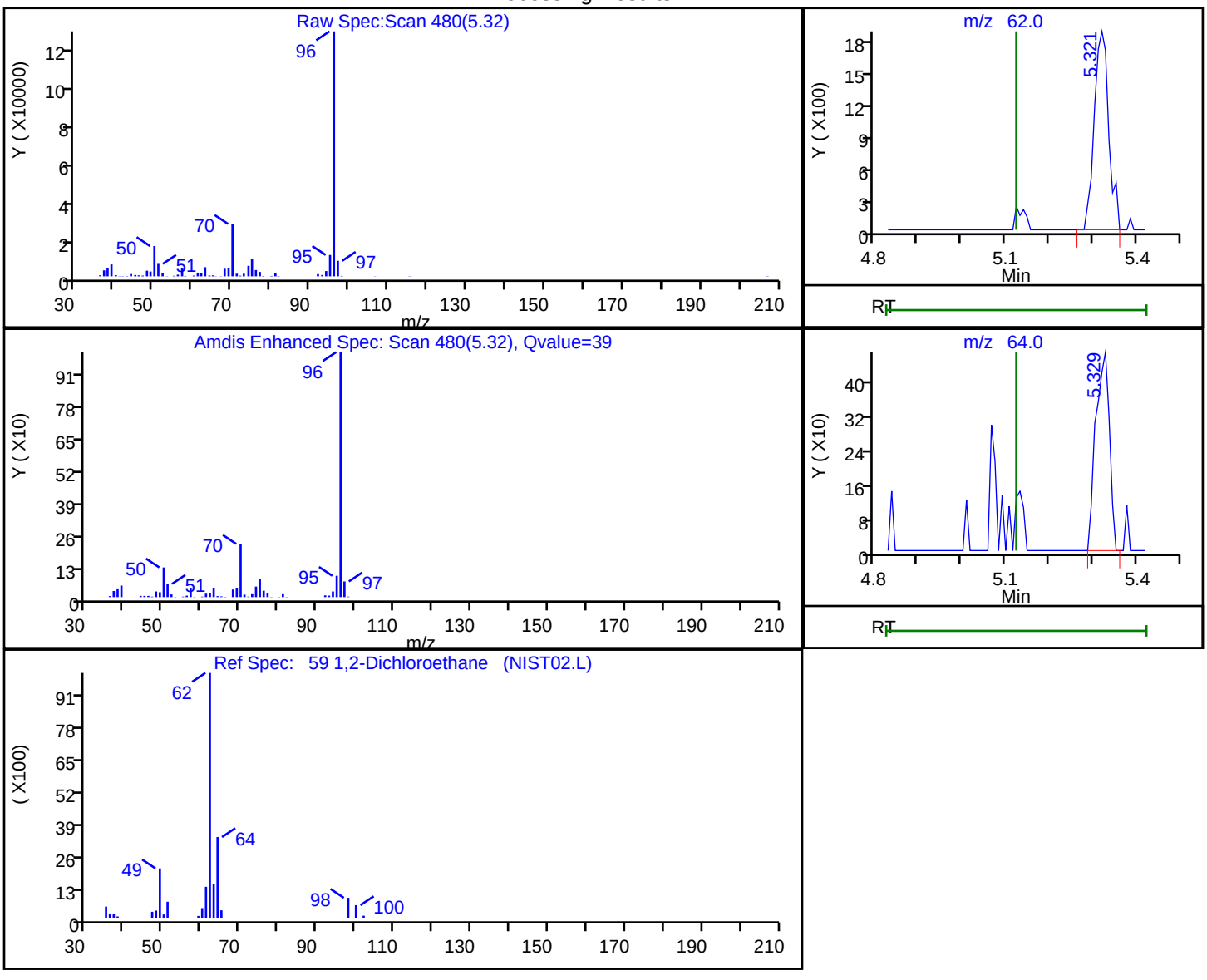
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68337.D				
Injection Date:	28-Jul-2018 23:10:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-3	Lab Sample ID:	460-161054-3		
Client ID:	GC-MW-103 (WG)				
Operator ID:		ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.32	62.00	4240	1.011413
5.33	64.00	1005	

Reviewer: moroneyc, 29-Jul-2018 07:44:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

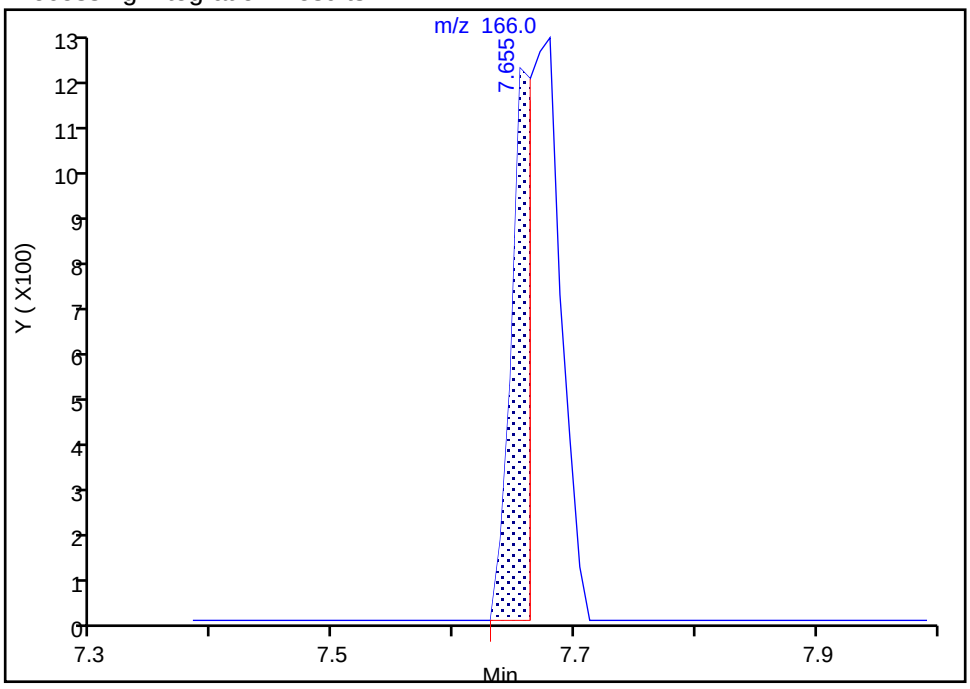
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68337.D		
Injection Date:	28-Jul-2018 23:10:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-3	Lab Sample ID:	460-161054-3
Client ID:	GC-MW-103 (WG)		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4

Signal: 1

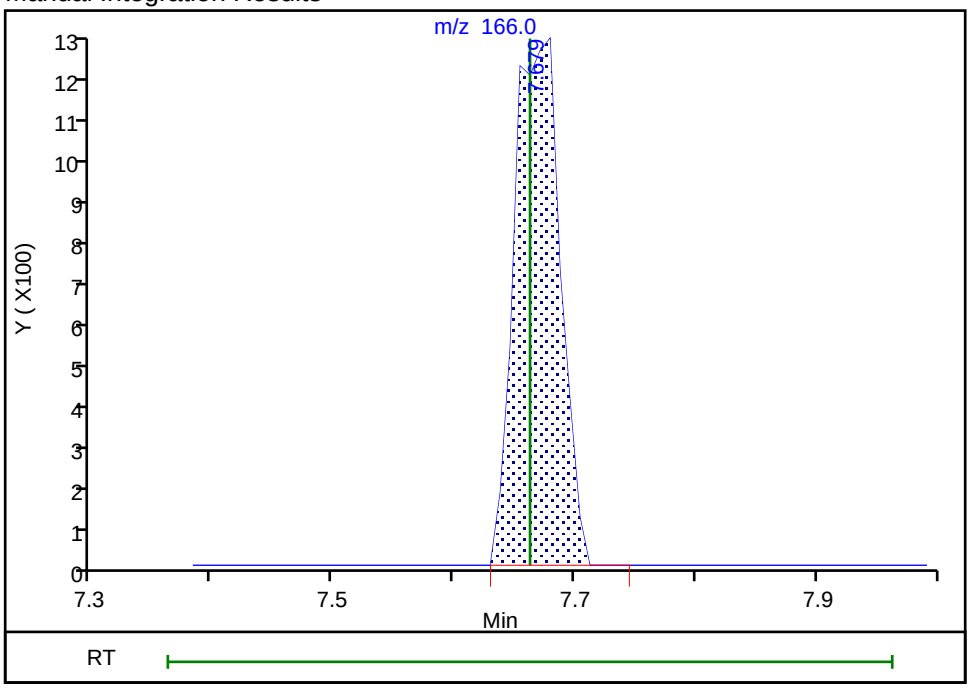
Processing Integration Results

RT: 7.65
Area: 1459
Amount: 0.456586
Amount Units: ug/l



Manual Integration Results

RT: 7.68
Area: 3226
Amount: 1.009559
Amount Units: ug/l



Reviewer: xuyvo, 29-Jul-2018 13:34:42

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-104 (WG) | Lab Sample ID: 460-161054-4

Matrix: Water | Lab File ID: F68338.D

Analysis Method: 8260C | Date Collected: 07/23/2018 12:20

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 23:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-104 (WG) | Lab Sample ID: 460-161054-4

Matrix: Water | Lab File ID: F68338.D

Analysis Method: 8260C | Date Collected: 07/23/2018 12:20

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 23:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	0.36	J	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		74-132
460-00-4	4-Bromofluorobenzene	96		77-124
1868-53-7	Dibromofluoromethane (Surr)	97		72-131
2037-26-5	Toluene-d8 (Surr)	96		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-104 (WG) Lab Sample ID: 460-161054-4

Matrix: Water Lab File ID: F68338.D

Analysis Method: 8260C Date Collected: 07/23/2018 12:20

Sample wt/vol: 5(mL) Date Analyzed: 07/28/2018 23:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 540460 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68338.D
Lims ID: 460-161054-A-4
Client ID: GC-MW-104 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 23:33:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161054-A-4
Misc. Info.: 460-0076265-015
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 13:35:35 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:45:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.193	3.185	0.008	0	112828	1000.0	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	137108	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	97	70395	48.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	84864	54.9	
* 61 Fluorobenzene	96	5.321	5.321	0.000	98	290292	50.0	
* 67 1,4-Dioxane-d8	96	6.044	6.019	0.025	0	8297	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	98	253686	48.2	
83 Tetrachloroethene	166	7.671	7.663	0.008	83	1187	0.3605	M
* 89 Chlorobenzene-d5	117	8.764	8.756	0.008	88	191049	50.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	87	73755	47.8	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.908	0.000	97	105814	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

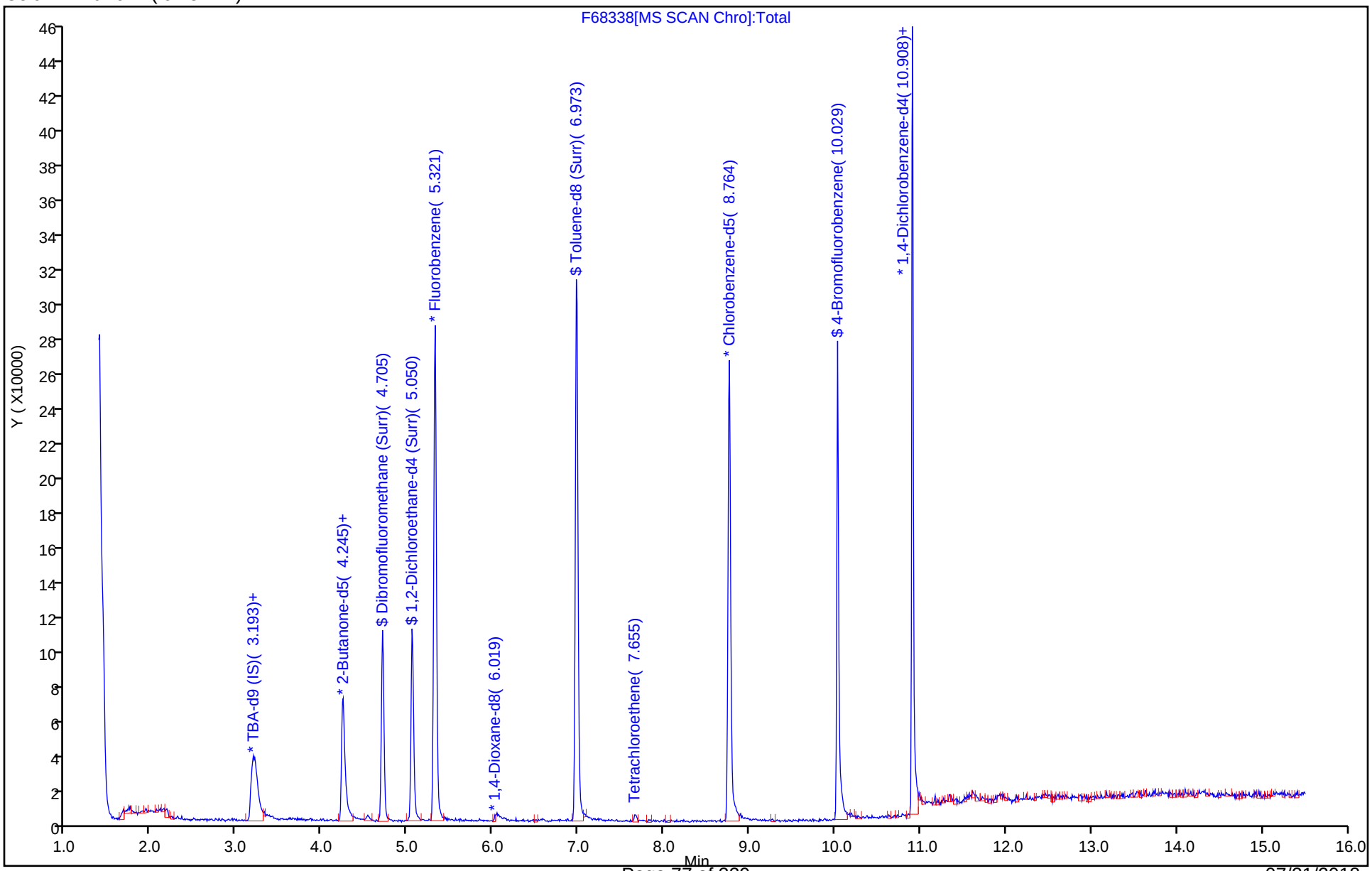
Report Date: 29-Jul-2018 13:35:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68338.D

Injection Date:	28-Jul-2018 23:33:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-161054-A-4	Lab Sample ID:	460-161054-4	Worklist Smp#:	15
Client ID:	GC-MW-104 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

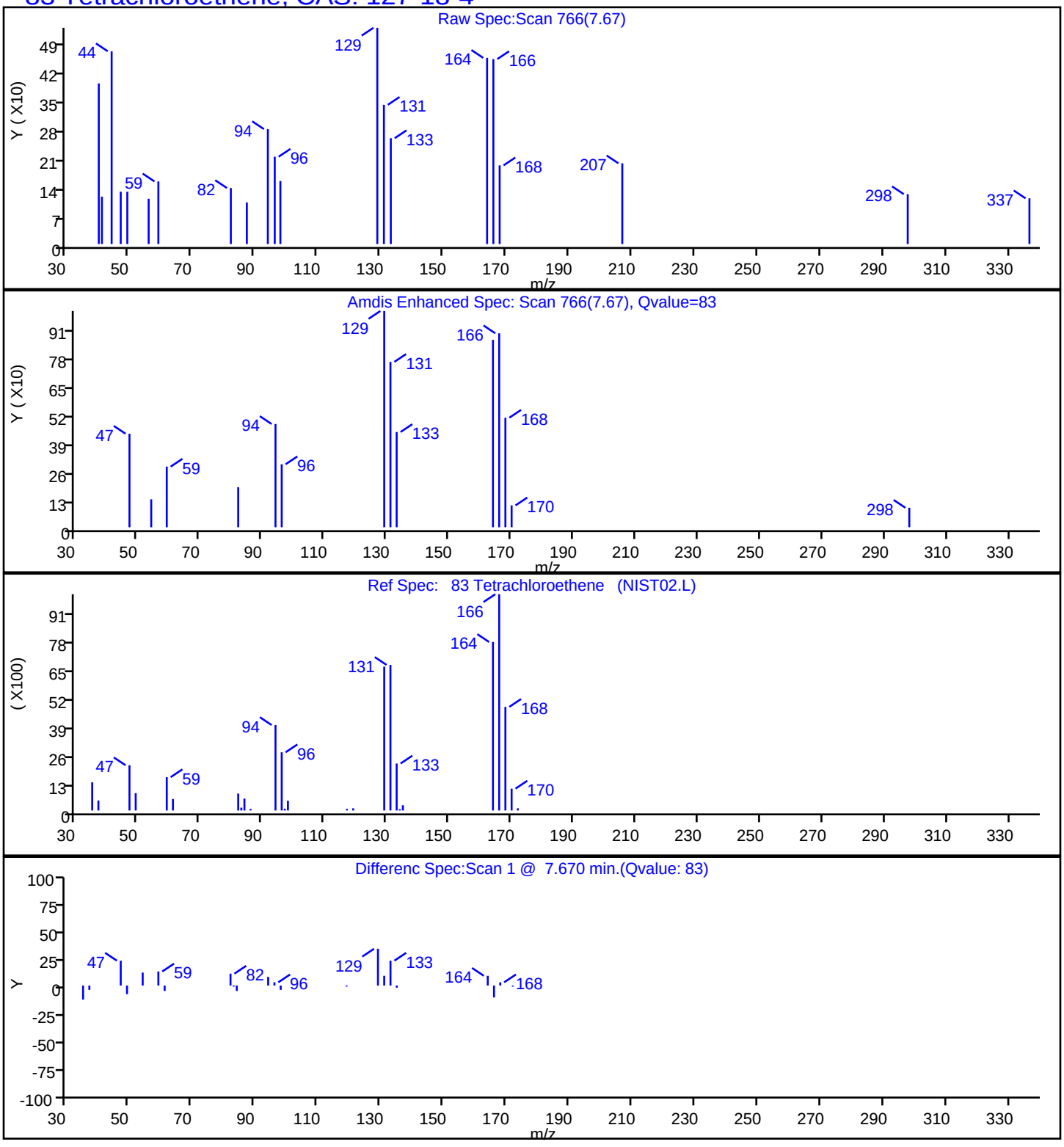
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68338.D		
Injection Date:	28-Jul-2018 23:33:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-4	Lab Sample ID:	460-161054-4
Client ID:	GC-MW-104 (WG)		
Operator ID:		ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



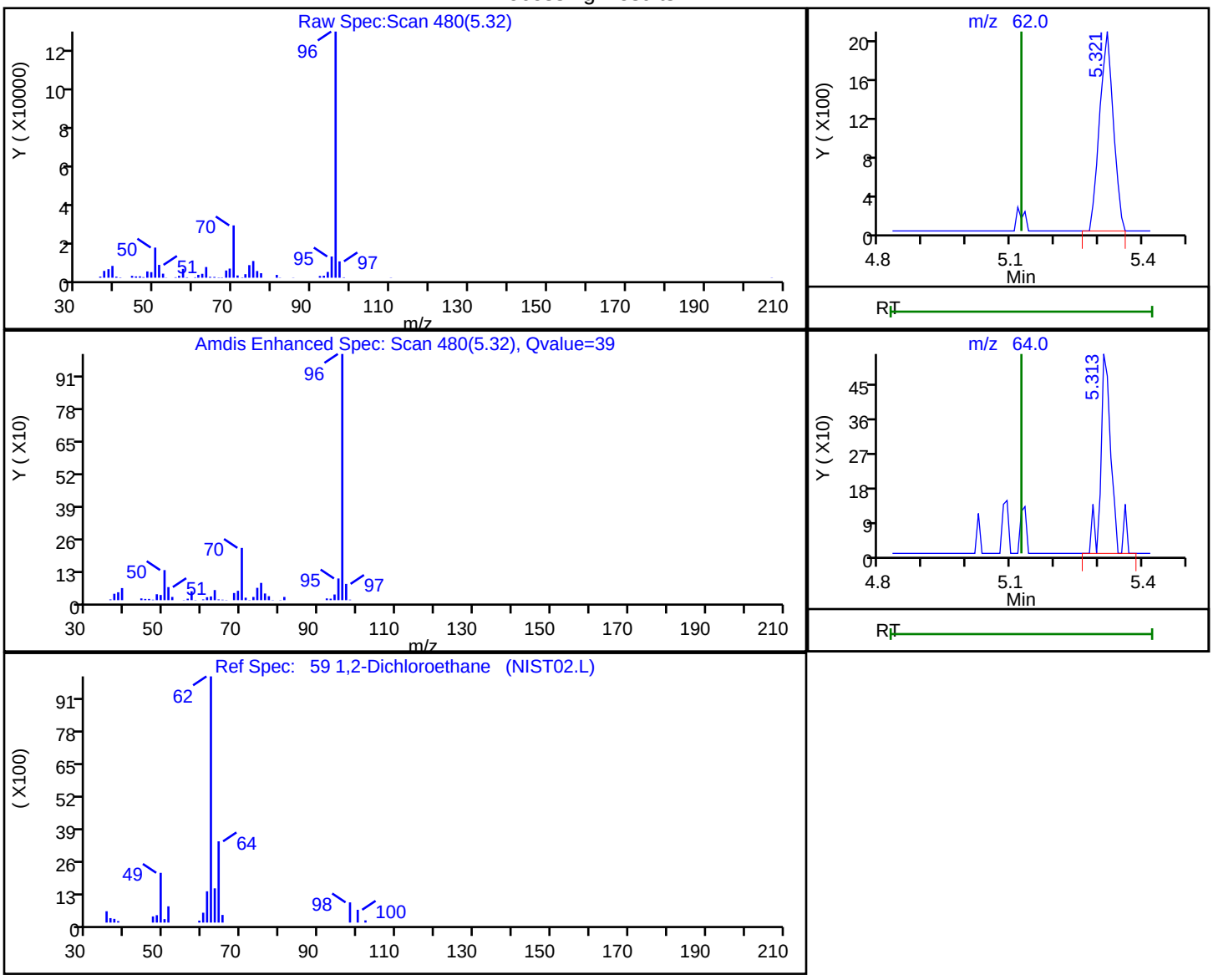
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68338.D				
Injection Date:	28-Jul-2018 23:33:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-4	Lab Sample ID:	460-161054-4		
Client ID:	GC-MW-104 (WG)				
Operator ID:		ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.32	62.00	4482	1.043978
5.31	64.00	883	

Reviewer: moroneyc, 29-Jul-2018 07:45:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

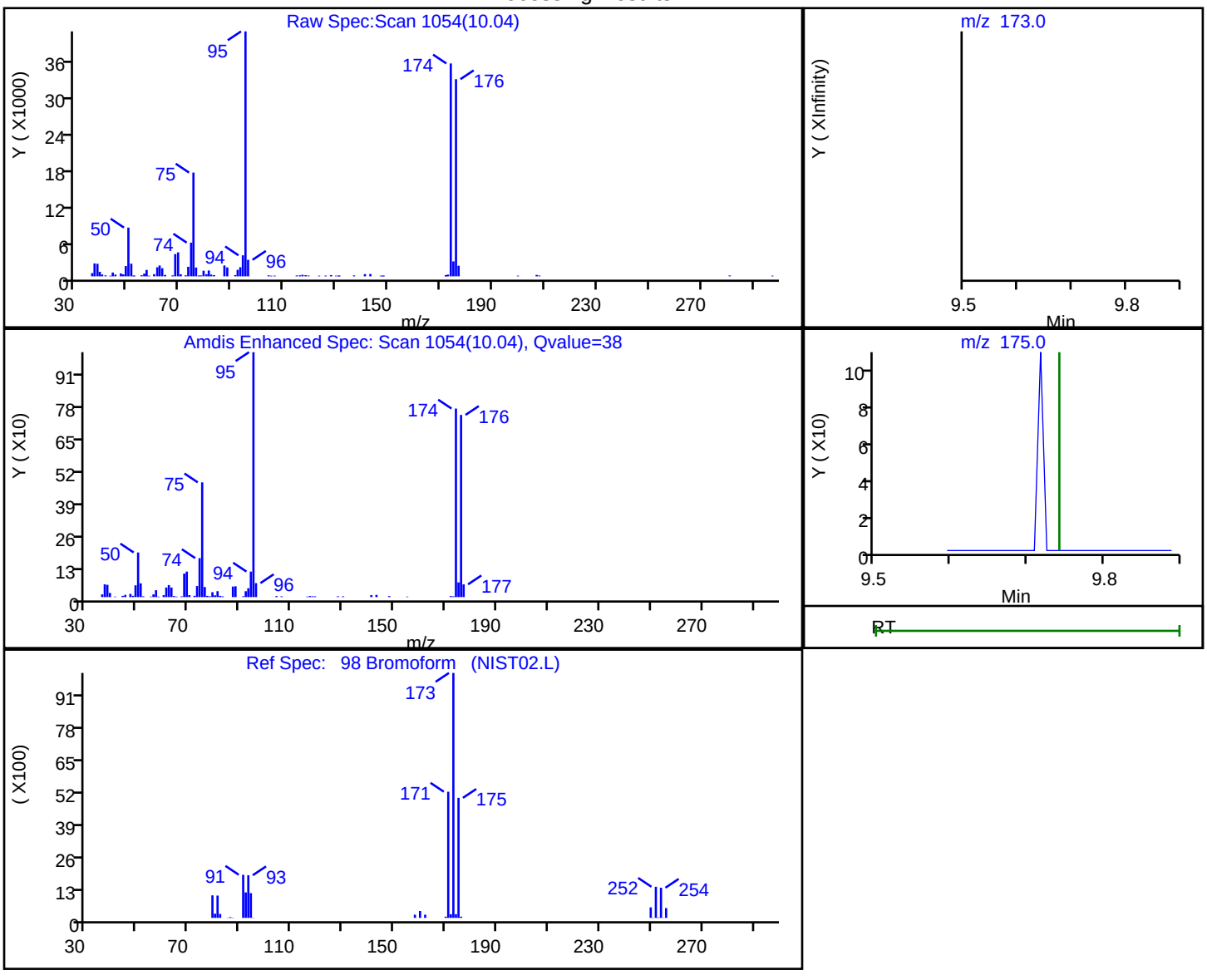
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68338.D				
Injection Date:	28-Jul-2018 23:33:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-4	Lab Sample ID:	460-161054-4		
Client ID:	GC-MW-104 (WG)				
Operator ID:		ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

98 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
10.04	173.00	346	0.185542
10.03	175.00	5263	

Reviewer: moroneyc, 29-Jul-2018 07:45:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Edison

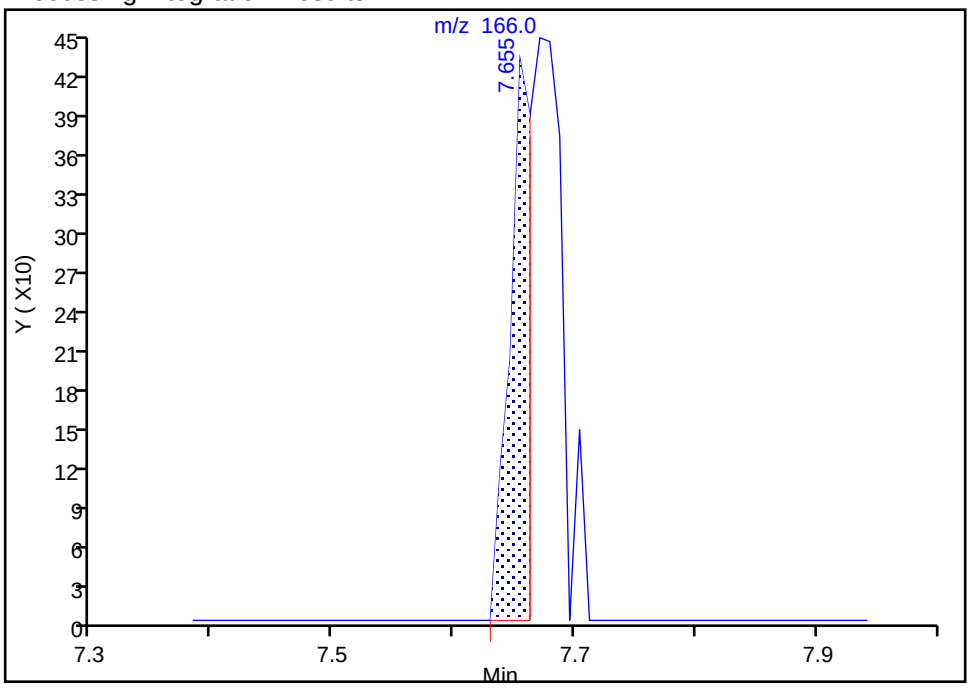
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68338.D		
Injection Date:	28-Jul-2018 23:33:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-4	Lab Sample ID:	460-161054-4
Client ID:	GC-MW-104 (WG)		
Operator ID:		ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4

Signal: 1

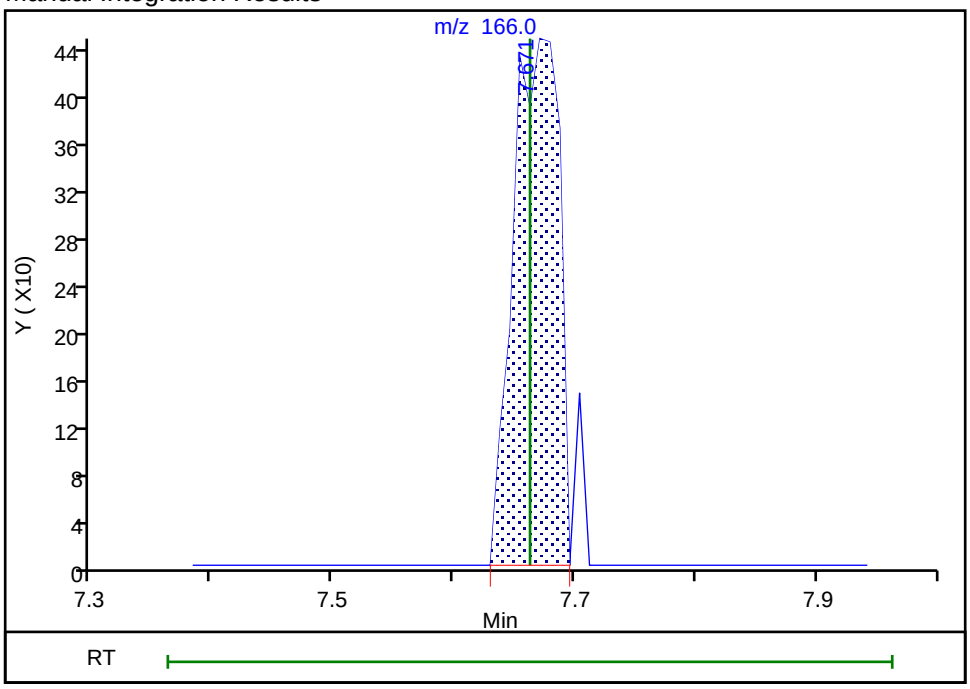
Processing Integration Results

RT: 7.65
Area: 562
Amount: 0.170663
Amount Units: ug/l



Manual Integration Results

RT: 7.67
Area: 1187
Amount: 0.360456
Amount Units: ug/l



Reviewer: xuyvo, 29-Jul-2018 13:35:21
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-105 (WG) | Lab Sample ID: 460-161054-5

Matrix: Water | Lab File ID: F68339.D

Analysis Method: 8260C | Date Collected: 07/23/2018 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 23:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-105 (WG) | Lab Sample ID: 460-161054-5

Matrix: Water | Lab File ID: F68339.D

Analysis Method: 8260C | Date Collected: 07/23/2018 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 23:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		74-132
460-00-4	4-Bromofluorobenzene	97		77-124
1868-53-7	Dibromofluoromethane (Surr)	95		72-131
2037-26-5	Toluene-d8 (Surr)	97		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-105 (WG) | Lab Sample ID: 460-161054-5

Matrix: Water | Lab File ID: F68339.D

Analysis Method: 8260C | Date Collected: 07/23/2018 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 23:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68339.D
Lims ID: 460-161054-A-5
Client ID: GC-MW-105 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 23:57:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161054-A-5
Misc. Info.: 460-0076265-016
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:03:22 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:46:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.209	3.185	0.024	0	113941	1000.0	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	137981	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	96	69184	47.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	83540	53.7	
* 61 Fluorobenzene	96	5.321	5.321	0.000	98	292146	50.0	
* 67 1,4-Dioxane-d8	96	6.028	6.019	0.009	0	8670	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	254681	48.7	
* 89 Chlorobenzene-d5	117	8.764	8.756	0.008	90	189661	50.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	88	74618	48.7	
* 116 1,4-Dichlorobenzene-d4	152	10.909	10.908	0.001	97	104120	50.0	

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

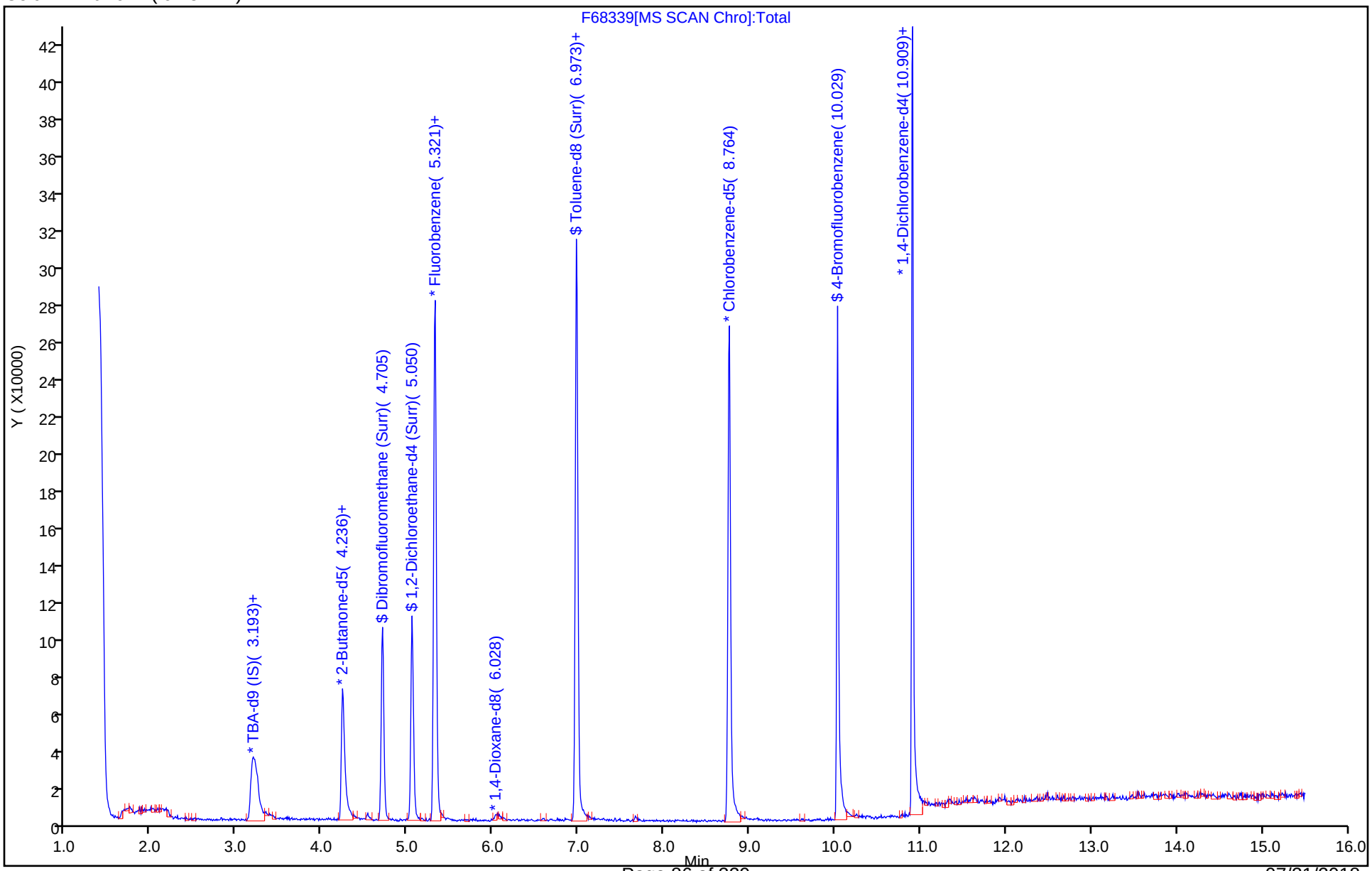
Report Date: 29-Jul-2018 08:04:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68339.D

Injection Date:	28-Jul-2018 23:57:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-161054-A-5	Lab Sample ID:	460-161054-5	Worklist Smp#:	16
Client ID:	GC-MW-105 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-106 (WG) | Lab Sample ID: 460-161054-6

Matrix: Water | Lab File ID: F68340.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:25

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 00:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-106 (WG) | Lab Sample ID: 460-161054-6

Matrix: Water | Lab File ID: F68340.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:25

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 00:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		74-132
460-00-4	4-Bromofluorobenzene	99		77-124
1868-53-7	Dibromofluoromethane (Surr)	98		72-131
2037-26-5	Toluene-d8 (Surr)	97		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-106 (WG) Lab Sample ID: 460-161054-6

Matrix: Water Lab File ID: F68340.D

Analysis Method: 8260C Date Collected: 07/23/2018 09:25

Sample wt/vol: 5(mL) Date Analyzed: 07/29/2018 00:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 540460 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68340.D
Lims ID: 460-161054-A-6
Client ID: GC-MW-106 (WG)
Sample Type: Client
Inject. Date: 29-Jul-2018 00:20:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161054-A-6
Misc. Info.: 460-0076265-017
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:03:22 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:46:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.201	3.185	0.016	0	119102	1000.0	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	130245	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	96	66984	48.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	79255	54.0	
* 61 Fluorobenzene	96	5.321	5.321	0.000	98	275483	50.0	
* 67 1,4-Dioxane-d8	96	6.052	6.019	0.033	0	9575	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	238987	48.6	
* 89 Chlorobenzene-d5	117	8.764	8.756	0.008	88	178561	50.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	87	71541	49.6	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.908	0.000	97	99322	50.0	

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

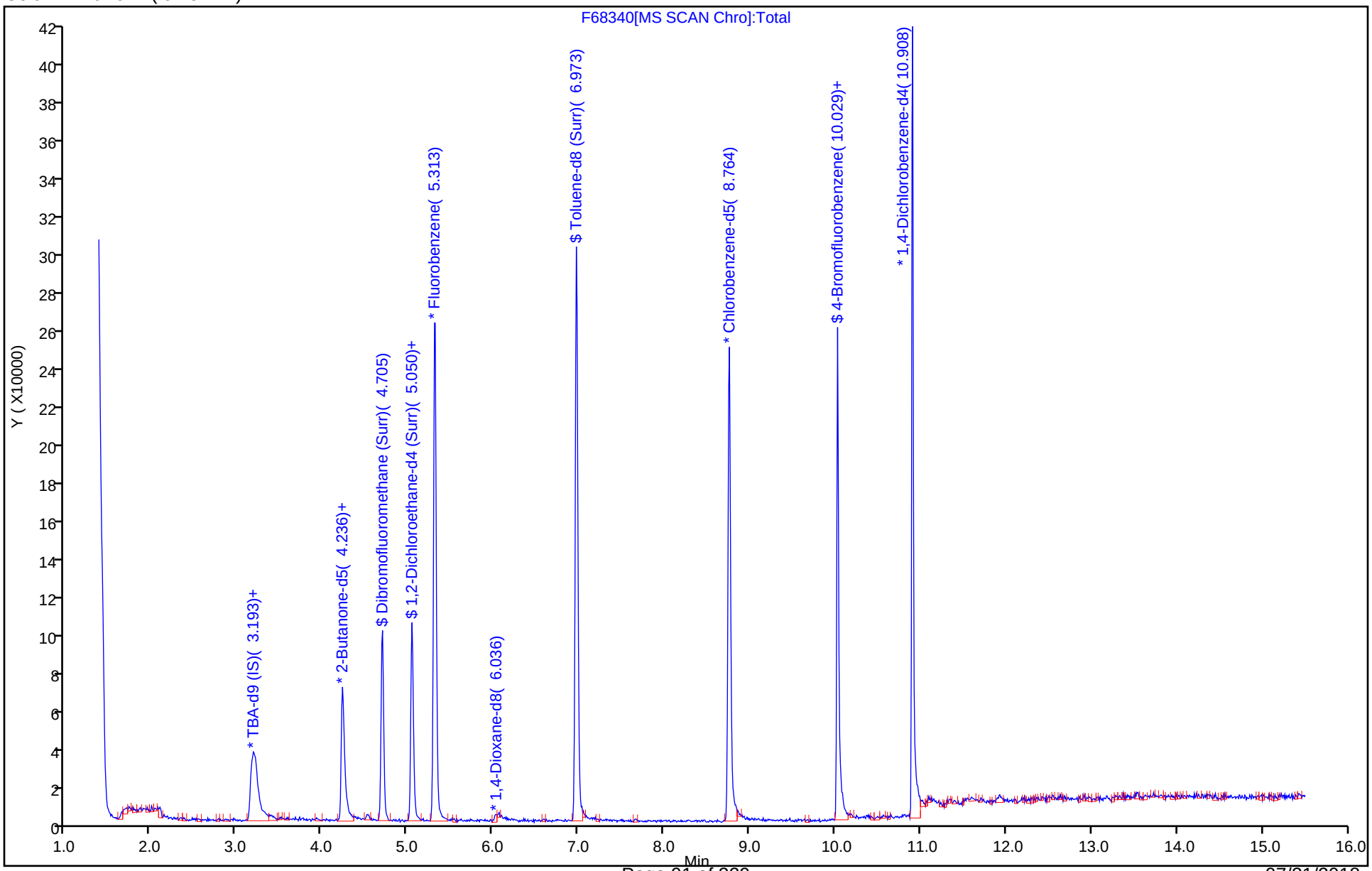
Report Date: 29-Jul-2018 08:04:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68340.D

Injection Date:	29-Jul-2018 00:20:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-161054-A-6	Lab Sample ID:	460-161054-6	Worklist Smp#:	17
Client ID:	GC-MW-106 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



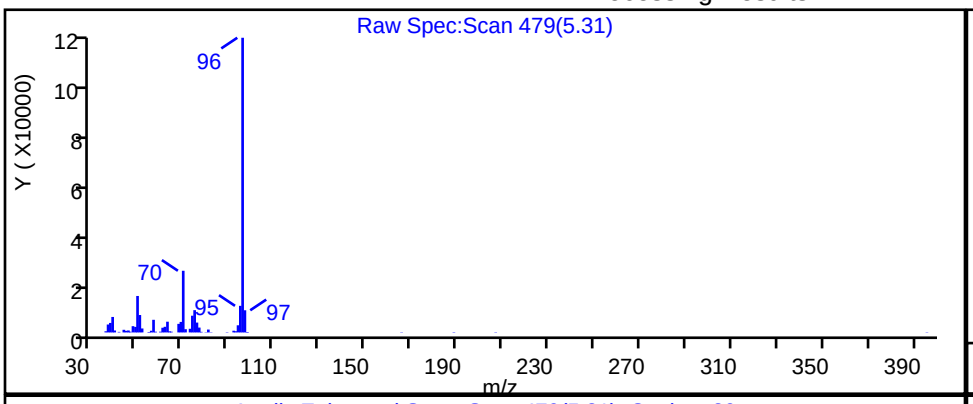
User Disabled Compound Report

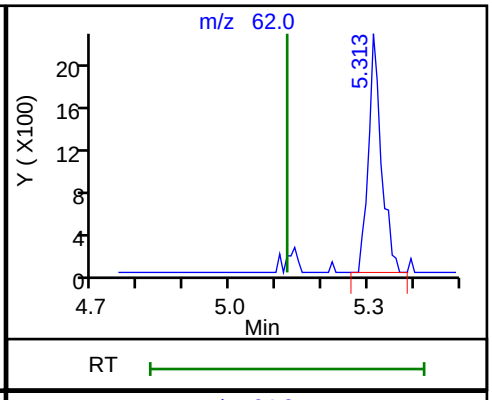
TestAmerica Edison

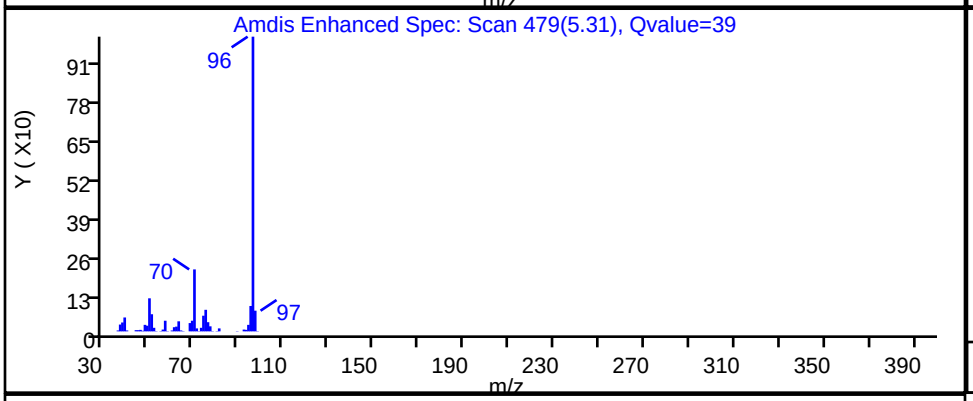
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68340.D		
Injection Date:	29-Jul-2018 00:20:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-6	Lab Sample ID:	460-161054-6
Client ID:	GC-MW-106 (WG)		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

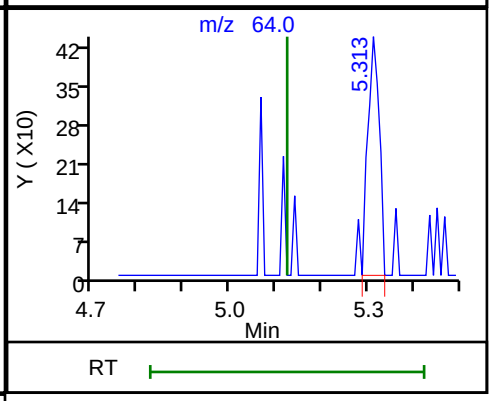
59 1,2-Dichloroethane, CAS: 107-06-2

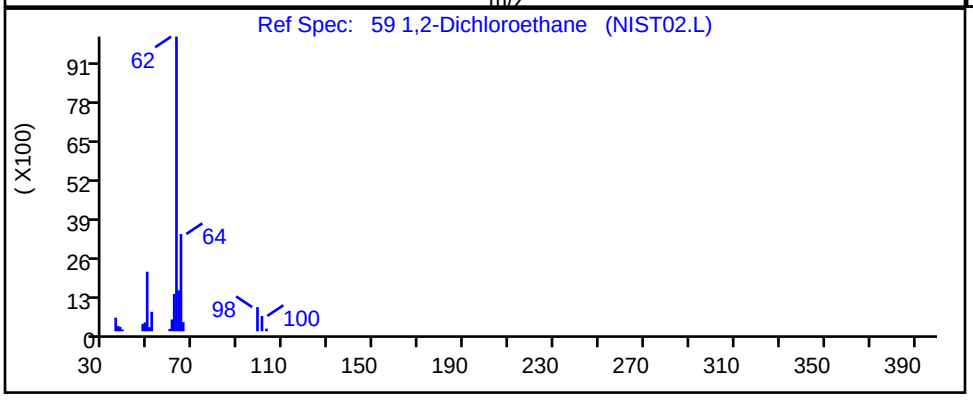
Processing Results











RT	Mass	Response	Amount
5.31	62.00	4387	1.076781
5.31	64.00	756	

Reviewer: moroneyc, 29-Jul-2018 07:46:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK (072318) | Lab Sample ID: 460-161054-7

Matrix: Water | Lab File ID: F68341.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 00:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	11		5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK (072318) | Lab Sample ID: 460-161054-7

Matrix: Water | Lab File ID: F68341.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 00:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12
100-41-4	Ethylbenzene	0.44	J	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	0.67	J	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.9		1.0	0.30
95-47-6	o-Xylene	0.80	J	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		74-132
460-00-4	4-Bromofluorobenzene	94		77-124
1868-53-7	Dibromofluoromethane (Surr)	100		72-131
2037-26-5	Toluene-d8 (Surr)	98		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK (072318) | Lab Sample ID: 460-161054-7

Matrix: Water | Lab File ID: F68341.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 00:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68341.D
Lims ID: 460-161054-A-7
Client ID: GC-EQUIPMENT BLANK (072318)
Sample Type: Client
Inject. Date: 29-Jul-2018 00:44:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161054-A-7
Misc. Info.: 460-0076265-018
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:03:22 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:47:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.201	3.185	0.016	0	109247	1000.0	
27 Methylene Chloride	84	3.185	3.193	-0.008	42	2620	0.6707	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	124134	250.0	
41 2-Butanone (MEK)	72	4.302	4.294	0.008	78	3725	11.3	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	96	68461	50.1	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	78161	53.5	
* 61 Fluorobenzene	96	5.321	5.321	0.000	98	274412	50.0	
* 67 1,4-Dioxane-d8	96	6.036	6.019	0.017	0	7000	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	98	240262	49.2	
* 89 Chlorobenzene-d5	117	8.764	8.756	0.008	88	177237	50.0	
91 Ethylbenzene	106	8.904	8.895	0.009	97	2022	0.4447	
93 m-Xylene & p-Xylene	106	9.060	9.051	0.009	0	10384	1.92	
95 o-Xylene	106	9.503	9.503	0.000	94	4463	0.7967	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	87	67366	47.1	
* 116 1,4-Dichlorobenzene-d4	152	10.909	10.908	0.000	97	95088	50.0	

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

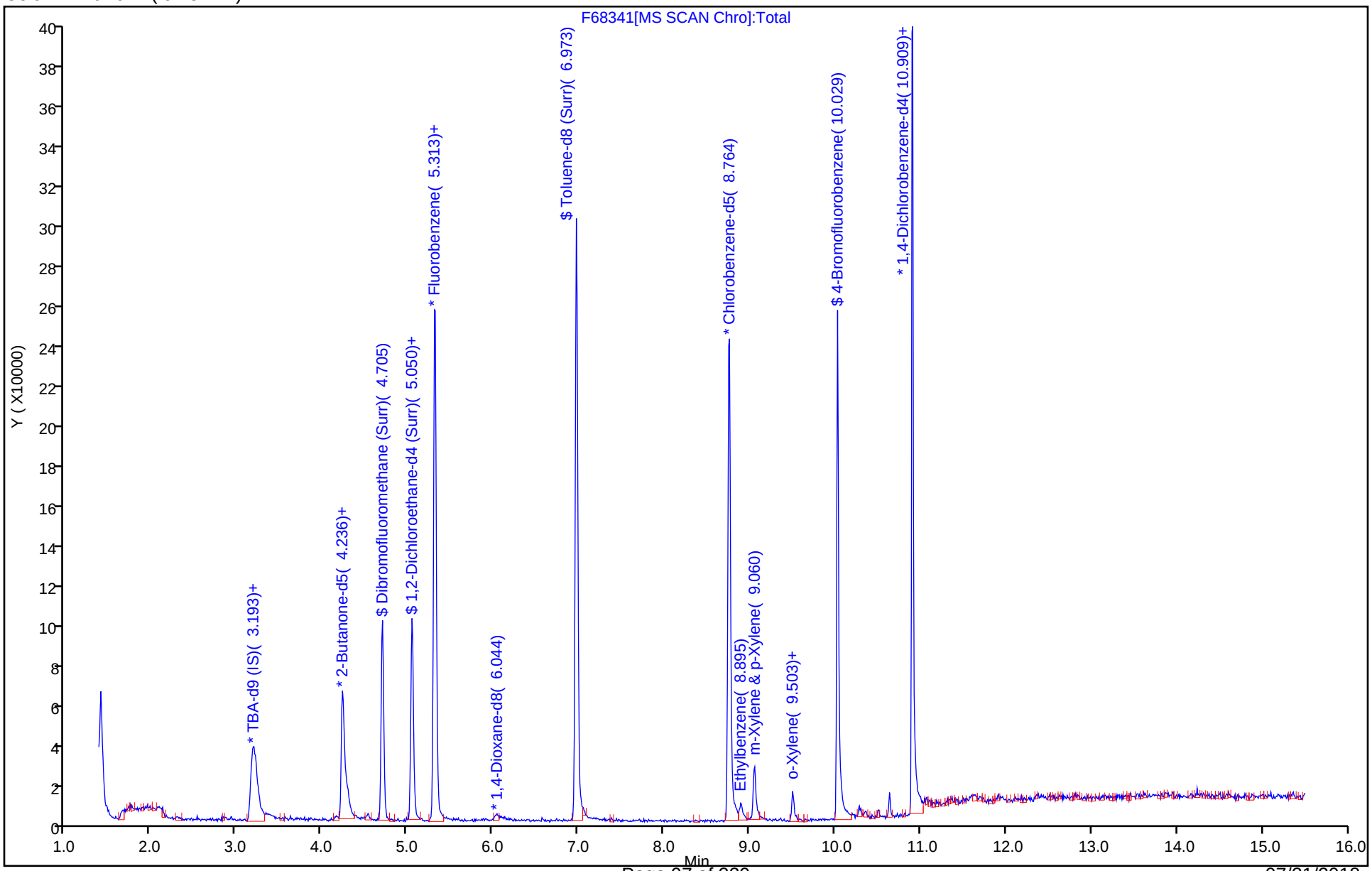
Report Date: 29-Jul-2018 08:04:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68341.D

Injection Date:	29-Jul-2018 00:44:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-161054-A-7	Lab Sample ID:	460-161054-7	Worklist Smp#:	18
Client ID:	GC-EQUIPMENT BLANK (072318)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

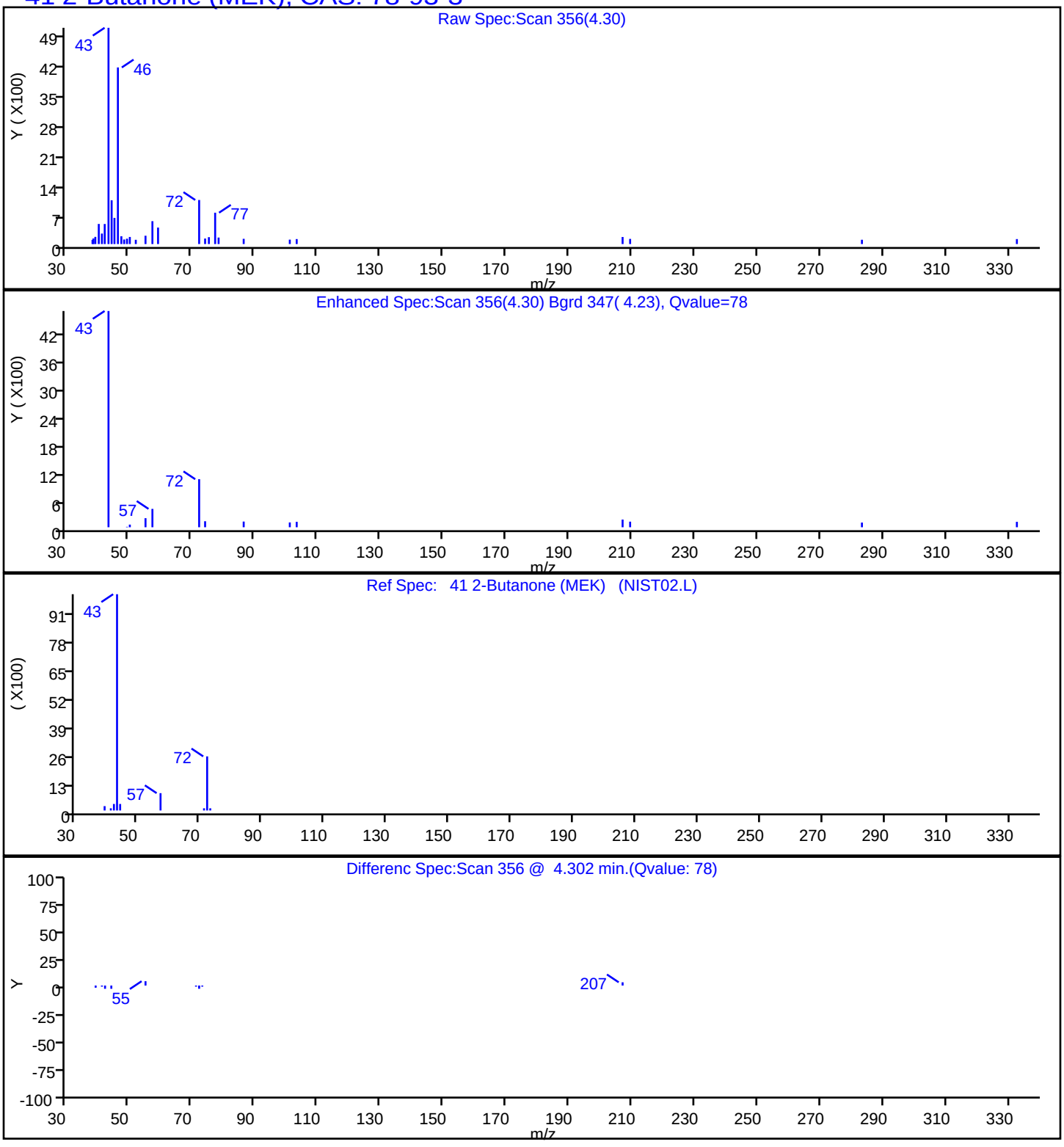
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68341.D		
Injection Date:	29-Jul-2018 00:44:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-7	Lab Sample ID:	460-161054-7
Client ID:	GC-EQUIPMENT BLANK (072318)		
Operator ID:		ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

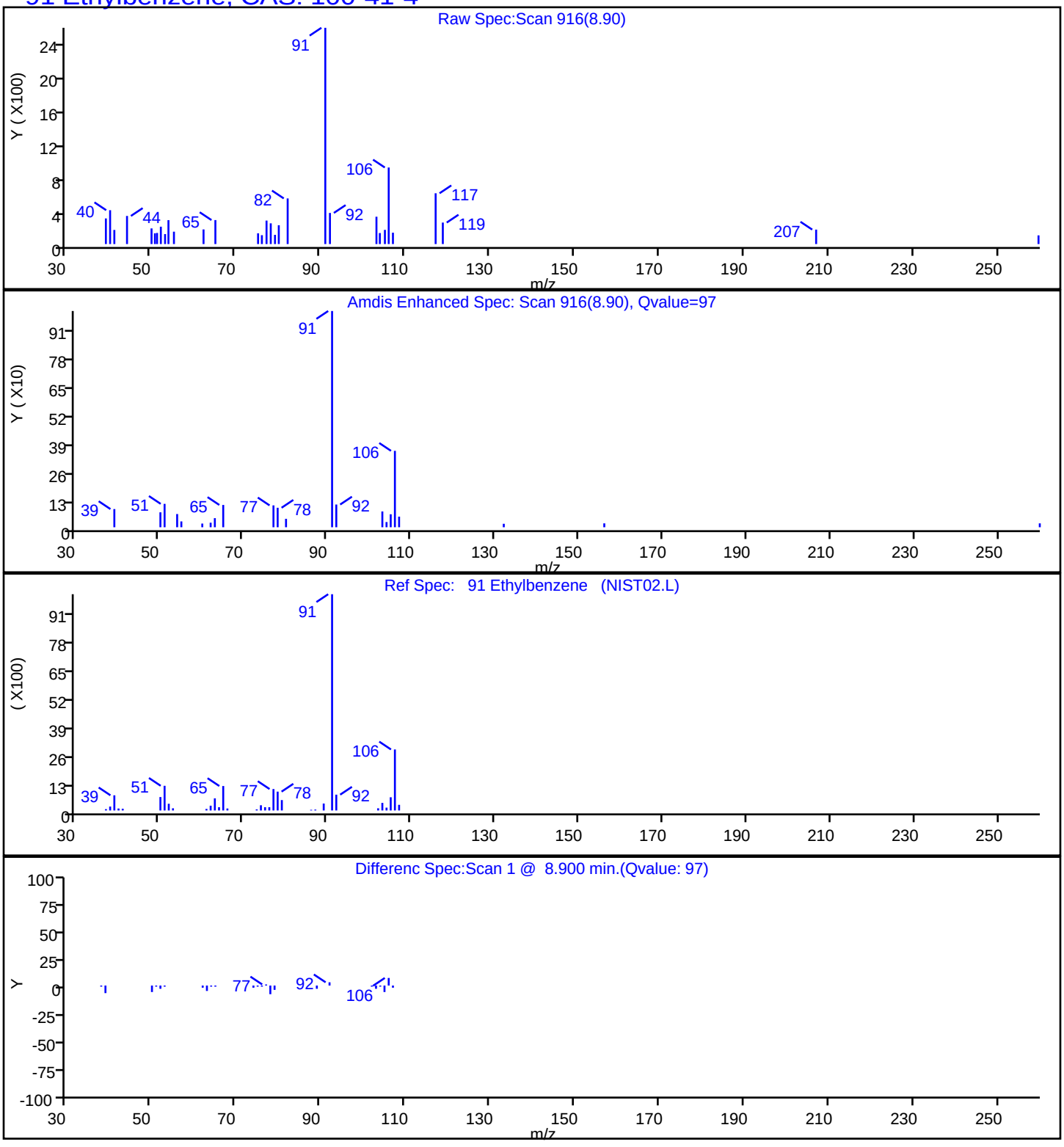
41 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68341.D				
Injection Date:	29-Jul-2018 00:44:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-7	Lab Sample ID:	460-161054-7		
Client ID:	GC-EQUIPMENT BLANK (072318)				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

91 Ethylbenzene, CAS: 100-41-4



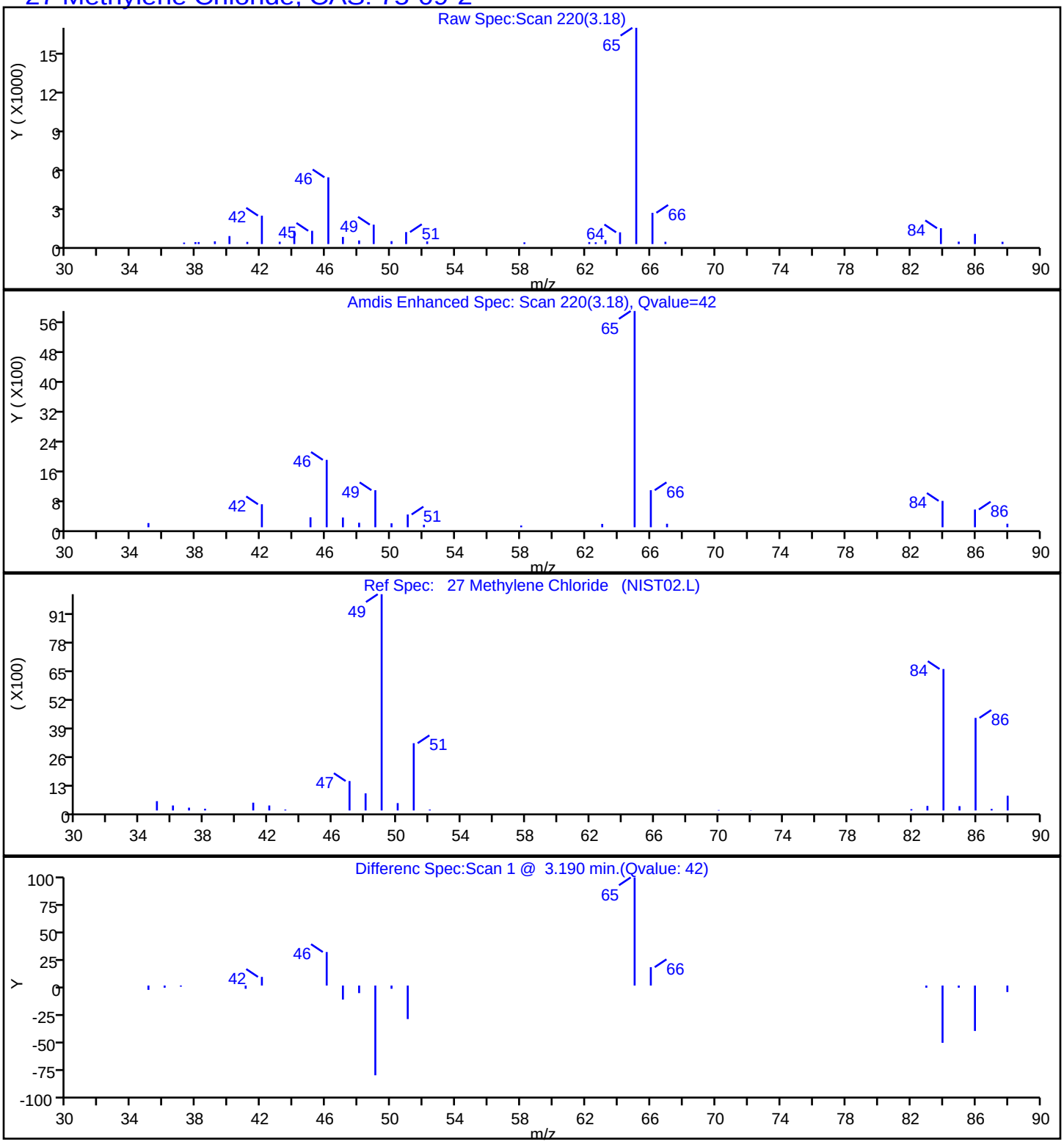
Report Date: 29-Jul-2018 08:04:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68341.D

Injection Date:	29-Jul-2018 00:44:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-7	Lab Sample ID:	460-161054-7		
Client ID:	GC-EQUIPMENT BLANK (072318)				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

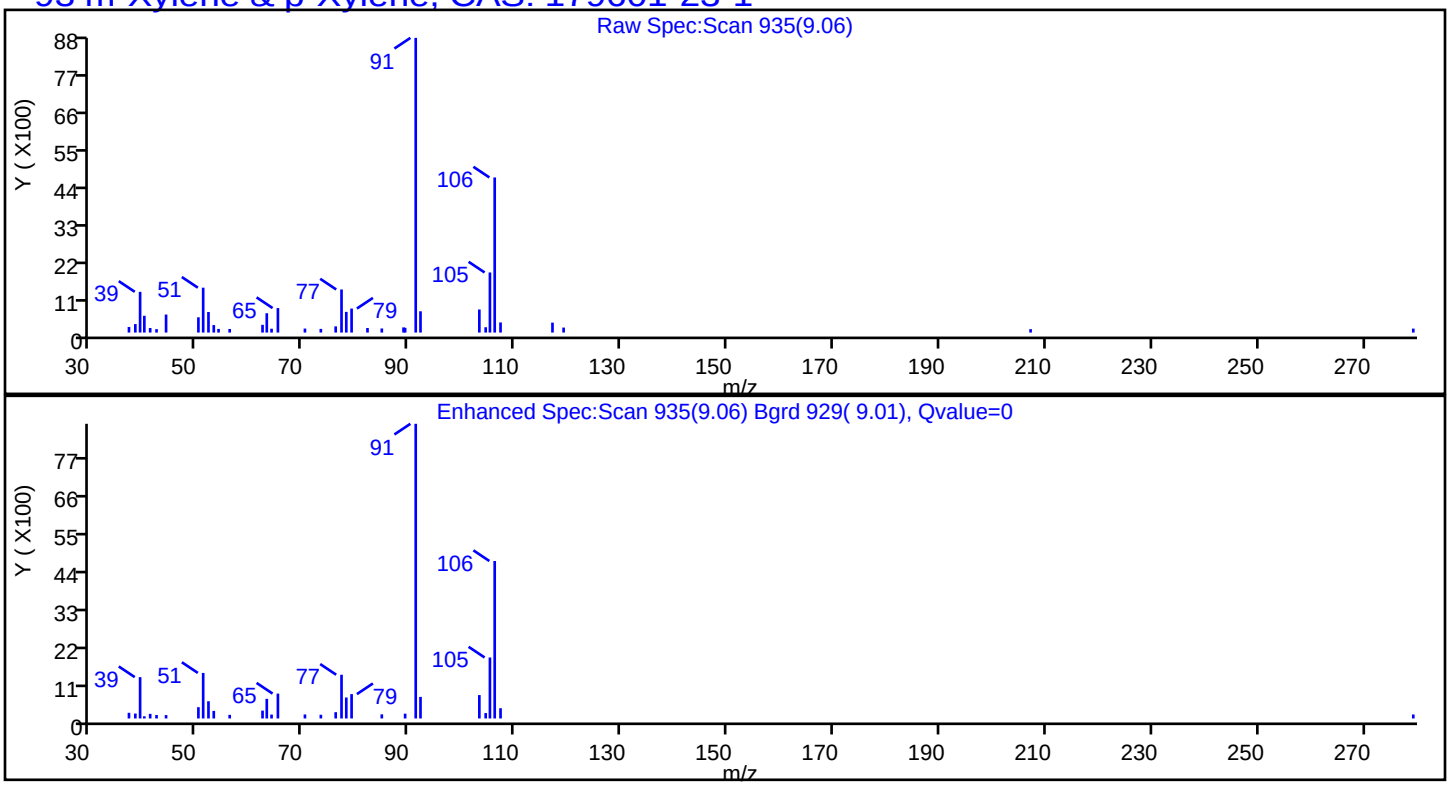
27 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68341.D				
Injection Date:	29-Jul-2018 00:44:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-7	Lab Sample ID:	460-161054-7		
Client ID:	GC-EQUIPMENT BLANK (072318)				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

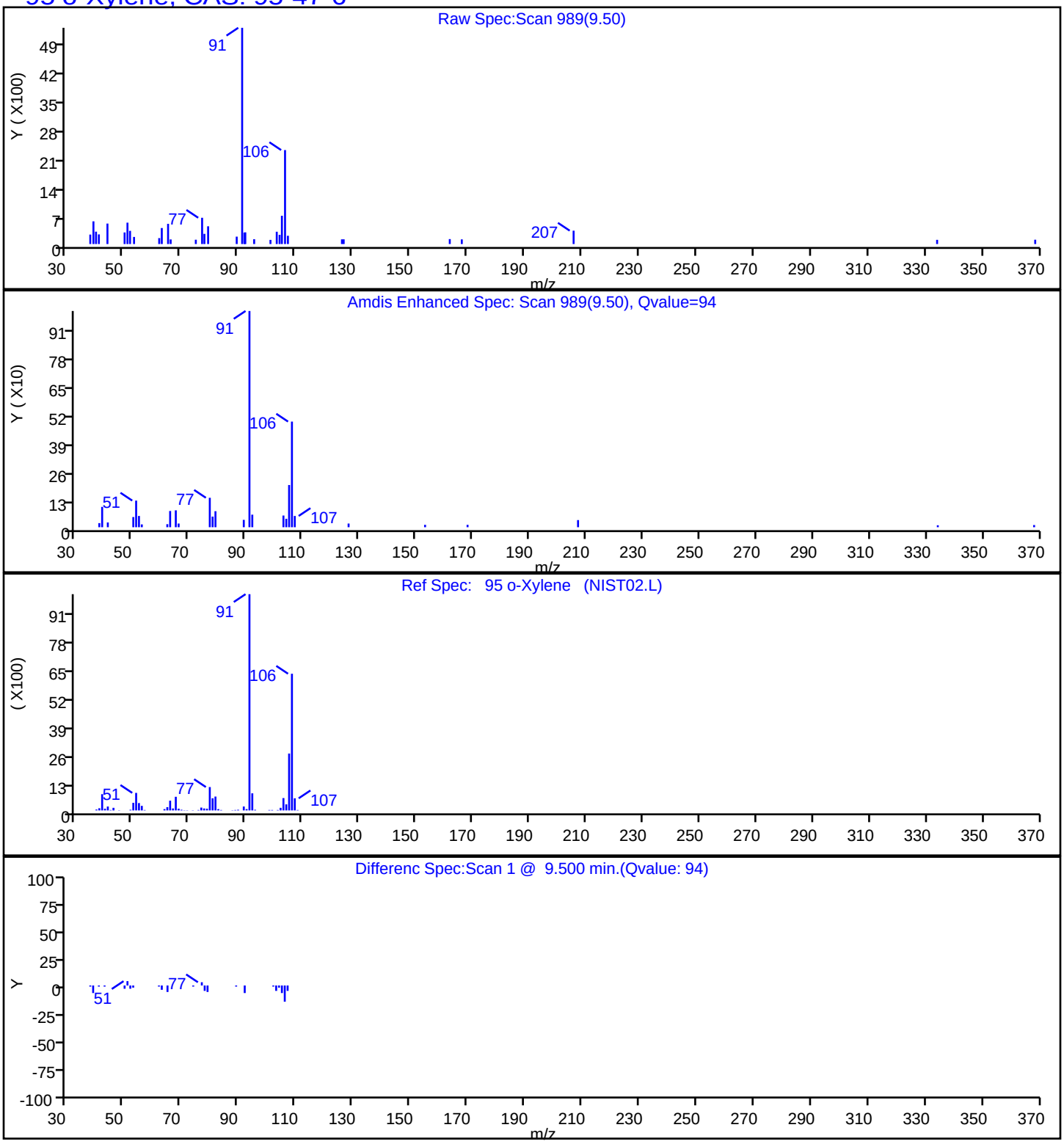
93 m-Xylene & p-Xylene, CAS: 179601-23-1



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68341.D				
Injection Date:	29-Jul-2018 00:44:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-7	Lab Sample ID:	460-161054-7		
Client ID:	GC-EQUIPMENT BLANK (072318)				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

95 o-Xylene, CAS: 95-47-6



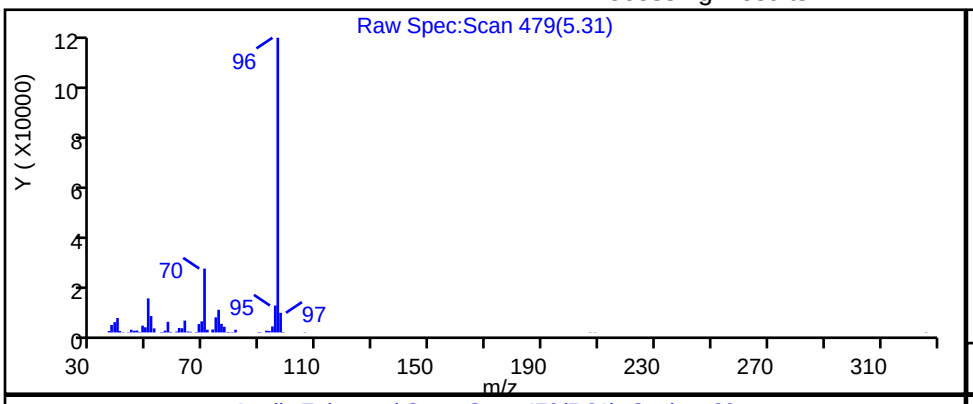
User Disabled Compound Report

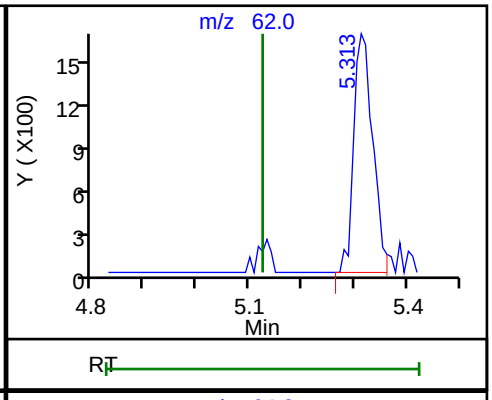
TestAmerica Edison

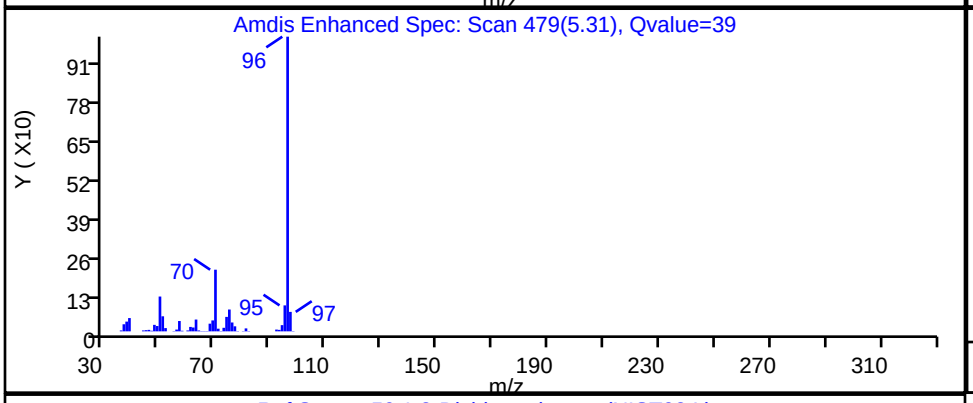
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68341.D				
Injection Date:	29-Jul-2018 00:44:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-7	Lab Sample ID:	460-161054-7		
Client ID:	GC-EQUIPMENT BLANK (072318)				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

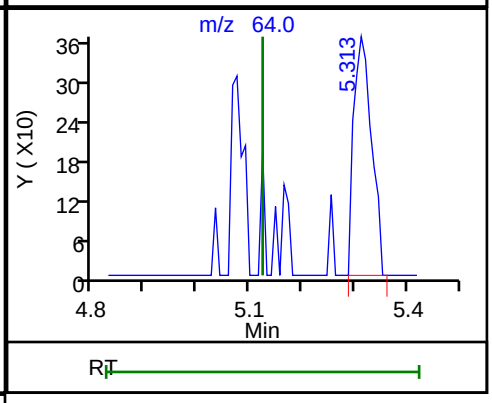
59 1,2-Dichloroethane, CAS: 107-06-2

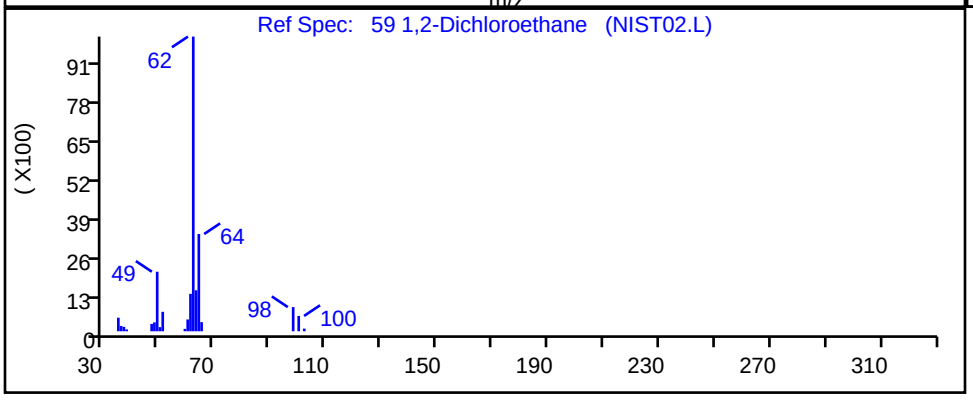
Processing Results











RT	Mass	Response	Amount
5.31	62.00	4164	1.026035
5.31	64.00	863	

Reviewer: moroneyc, 29-Jul-2018 07:46:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-TB (072318) | Lab Sample ID: 460-161054-8

Matrix: Water | Lab File ID: F68334.D

Analysis Method: 8260C | Date Collected: 07/23/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 22:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	16		5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-TB (072318) | Lab Sample ID: 460-161054-8

Matrix: Water | Lab File ID: F68334.D

Analysis Method: 8260C | Date Collected: 07/23/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 22:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.48	J	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	0.59	J	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.8		1.0	0.30
95-47-6	o-Xylene	0.79	J	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		74-132
460-00-4	4-Bromofluorobenzene	95		77-124
1868-53-7	Dibromofluoromethane (Surr)	97		72-131
2037-26-5	Toluene-d8 (Surr)	96		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-TB (072318) Lab Sample ID: 460-161054-8

Matrix: Water Lab File ID: F68334.D

Analysis Method: 8260C Date Collected: 07/23/2018 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/28/2018 22:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 540460 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68334.D
Lims ID: 460-161054-A-8
Client ID: GC-TB (072318)
Sample Type: Client
Inject. Date: 28-Jul-2018 22:00:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161054-A-8
Misc. Info.: 460-0076265-011
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:03:22 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:43:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.209	3.185	0.024	0	118025	1000.0	
27 Methylene Chloride	84	3.176	3.193	-0.017	33	2341	0.5885	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	131074	250.0	
41 2-Butanone (MEK)	72	4.286	4.294	-0.008	84	5675	16.3	
$ 51 Dibromofluoromethane (Surr	113	4.697	4.705	-0.008	96	67512	48.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	79795	53.6	
* 61 Fluorobenzene	96	5.313	5.321	-0.008	98	279452	50.0	
* 67 1,4-Dioxane-d8	96	6.052	6.019	0.033	0	9331	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	246025	48.1	
* 89 Chlorobenzene-d5	117	8.764	8.756	0.008	88	185625	50.0	
91 Ethylbenzene	106	8.895	8.895	0.000	98	2296	0.4822	
93 m-Xylene & p-Xylene	106	9.052	9.051	0.001	0	10490	1.85	
95 o-Xylene	106	9.504	9.503	0.001	91	4653	0.7931	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	87	71102	47.5	
* 116 1,4-Dichlorobenzene-d4	152	10.909	10.908	0.001	97	101824	50.0	

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

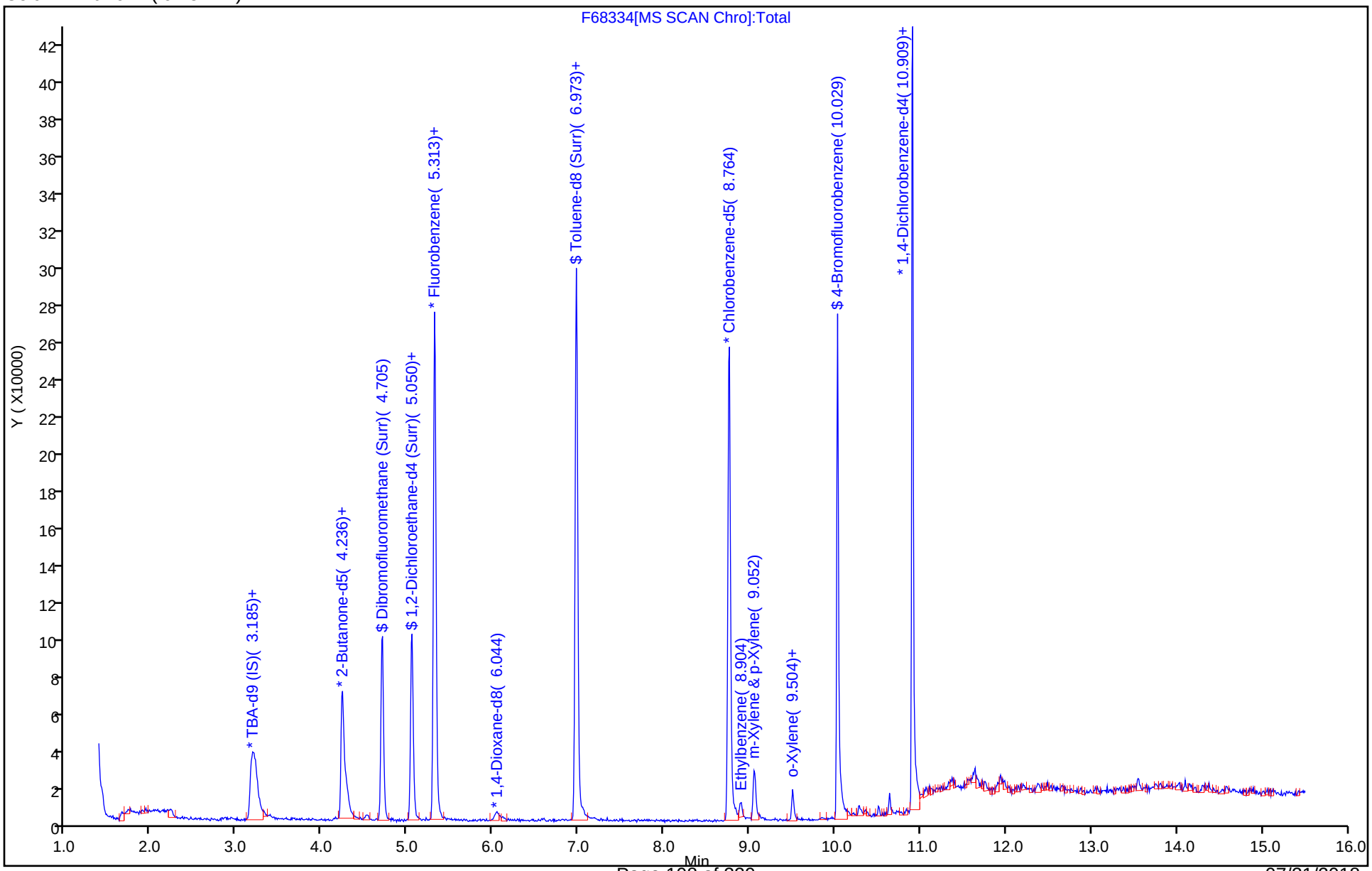
Report Date: 29-Jul-2018 08:04:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68334.D

Injection Date:	28-Jul-2018 22:00:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-161054-A-8	Lab Sample ID:	460-161054-8	Worklist Smp#:	11
Client ID:	GC-TB (072318)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

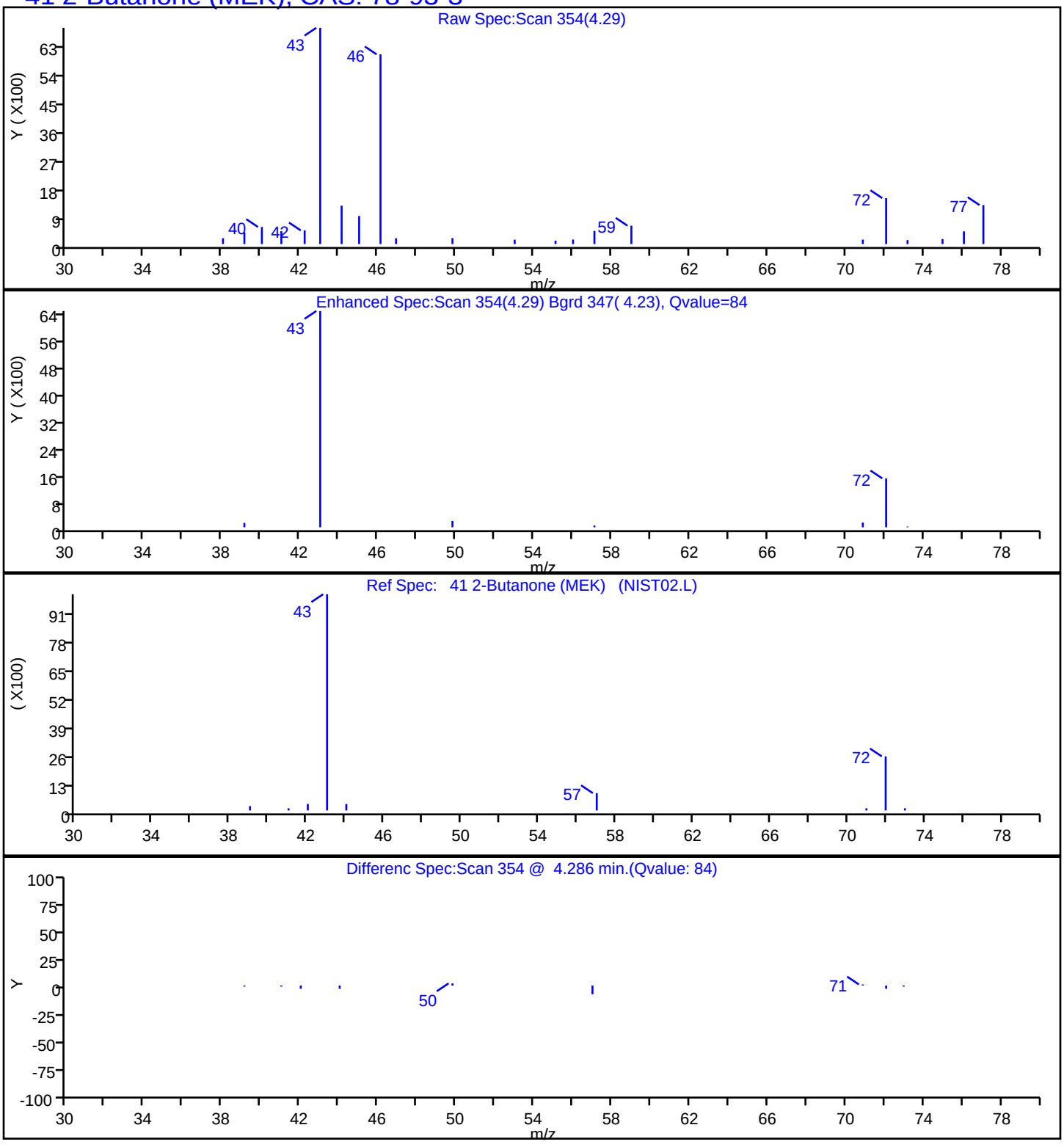
Column: Rtx-624 (0.25 mm)



TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68334.D				
Injection Date:	28-Jul-2018 22:00:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-8	Lab Sample ID:	460-161054-8		
Client ID:	GC-TB (072318)				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

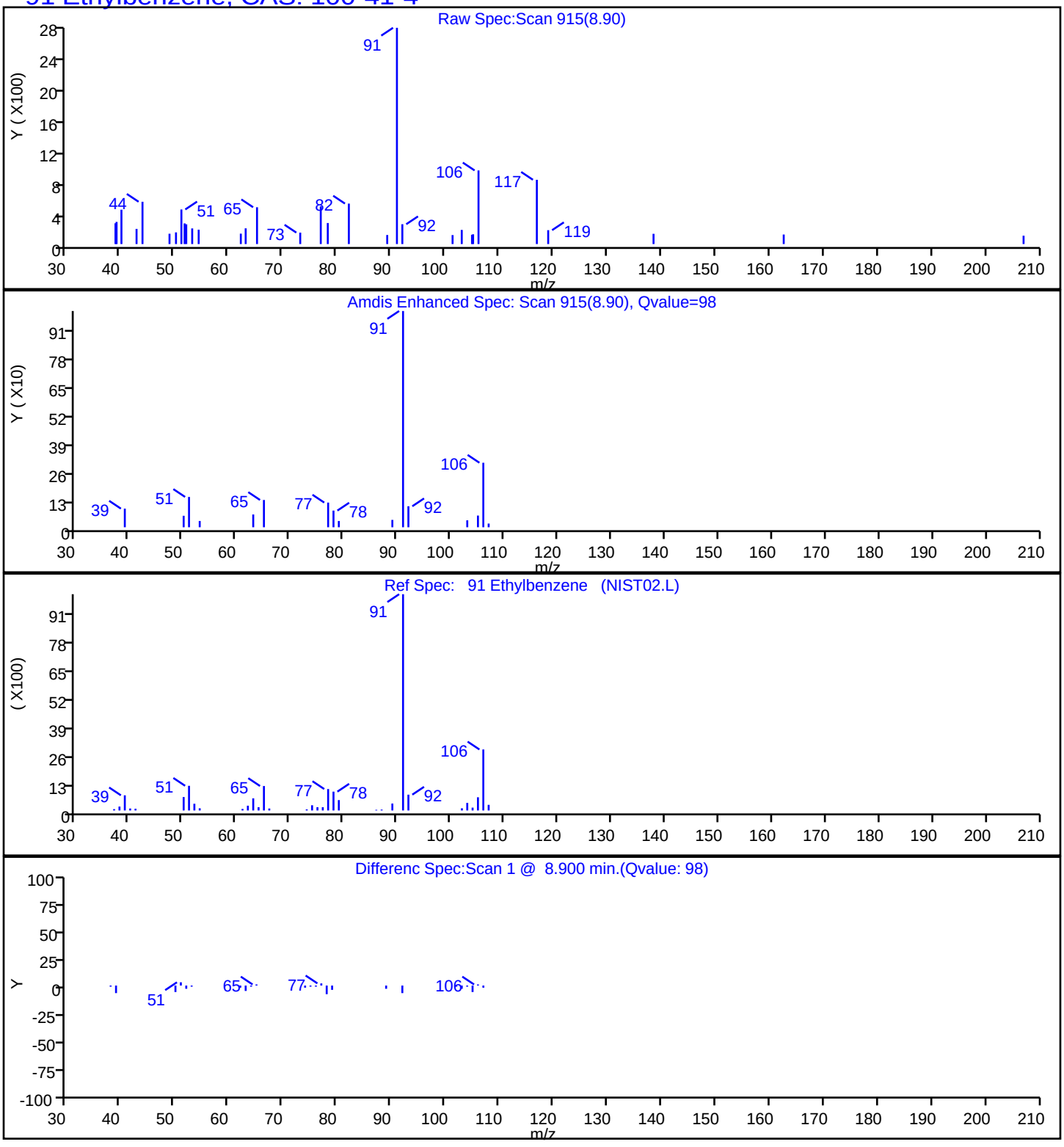
41 2-Butanone (MEK), CAS: 78-93-3



TestAmerica Edison

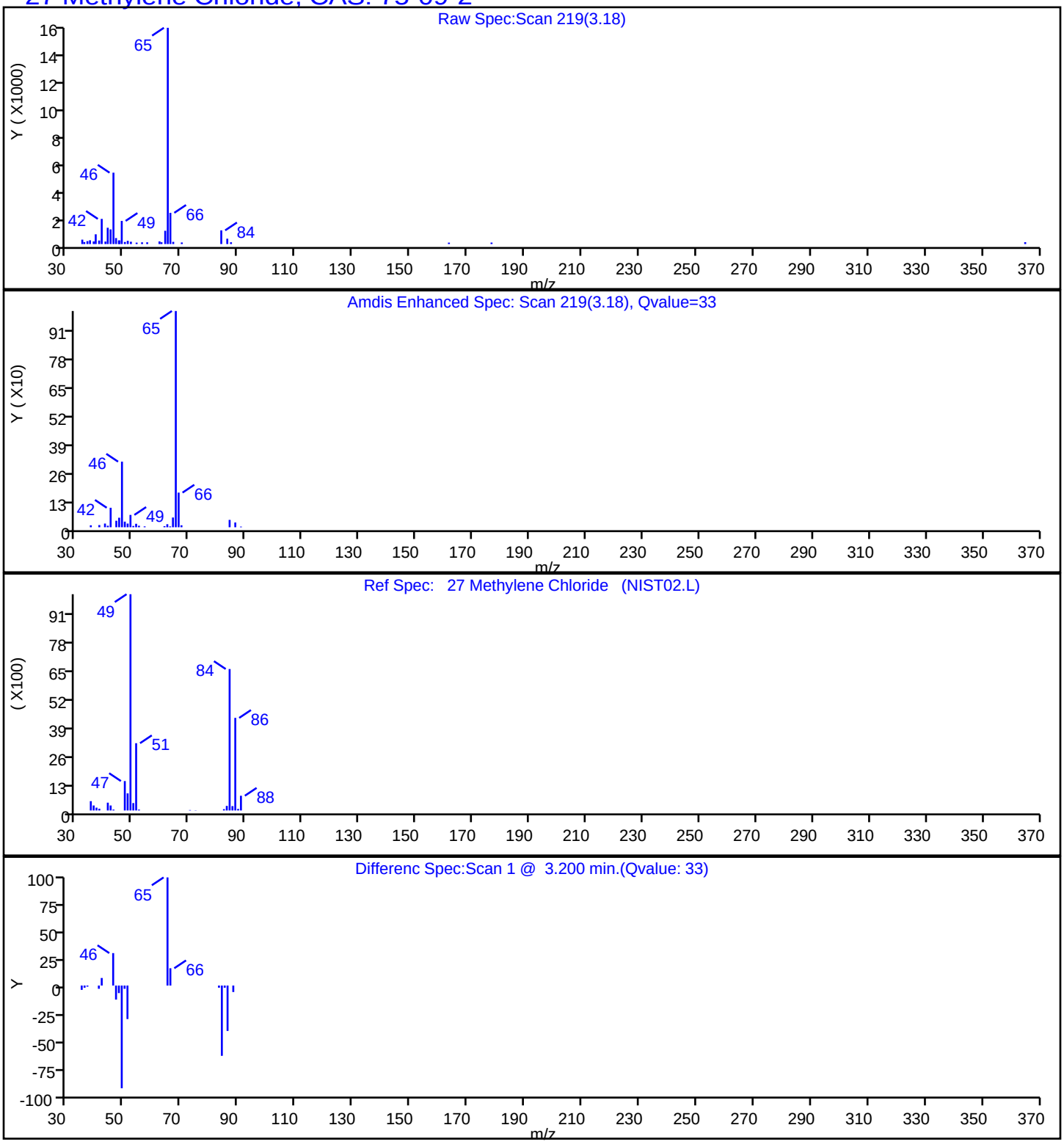
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68334.D		
Injection Date:	28-Jul-2018 22:00:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-8	Lab Sample ID:	460-161054-8
Client ID:	GC-TB (072318)		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

91 Ethylbenzene, CAS: 100-41-4



Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68334.D		
Injection Date:	28-Jul-2018 22:00:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-8	Lab Sample ID:	460-161054-8
Client ID:	GC-TB (072318)		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

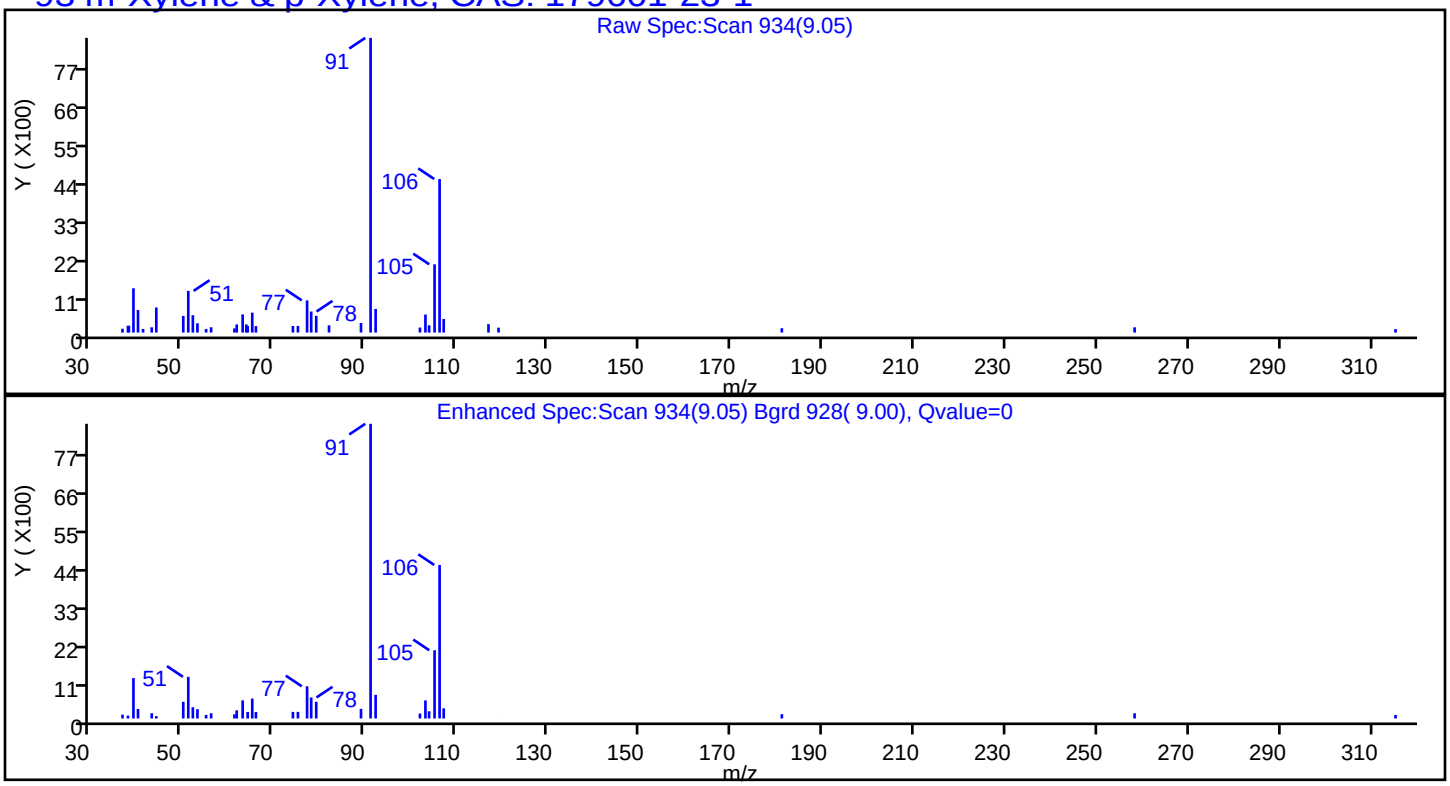
27 Methylene Chloride, CAS: 75-09-2



TestAmerica Edison

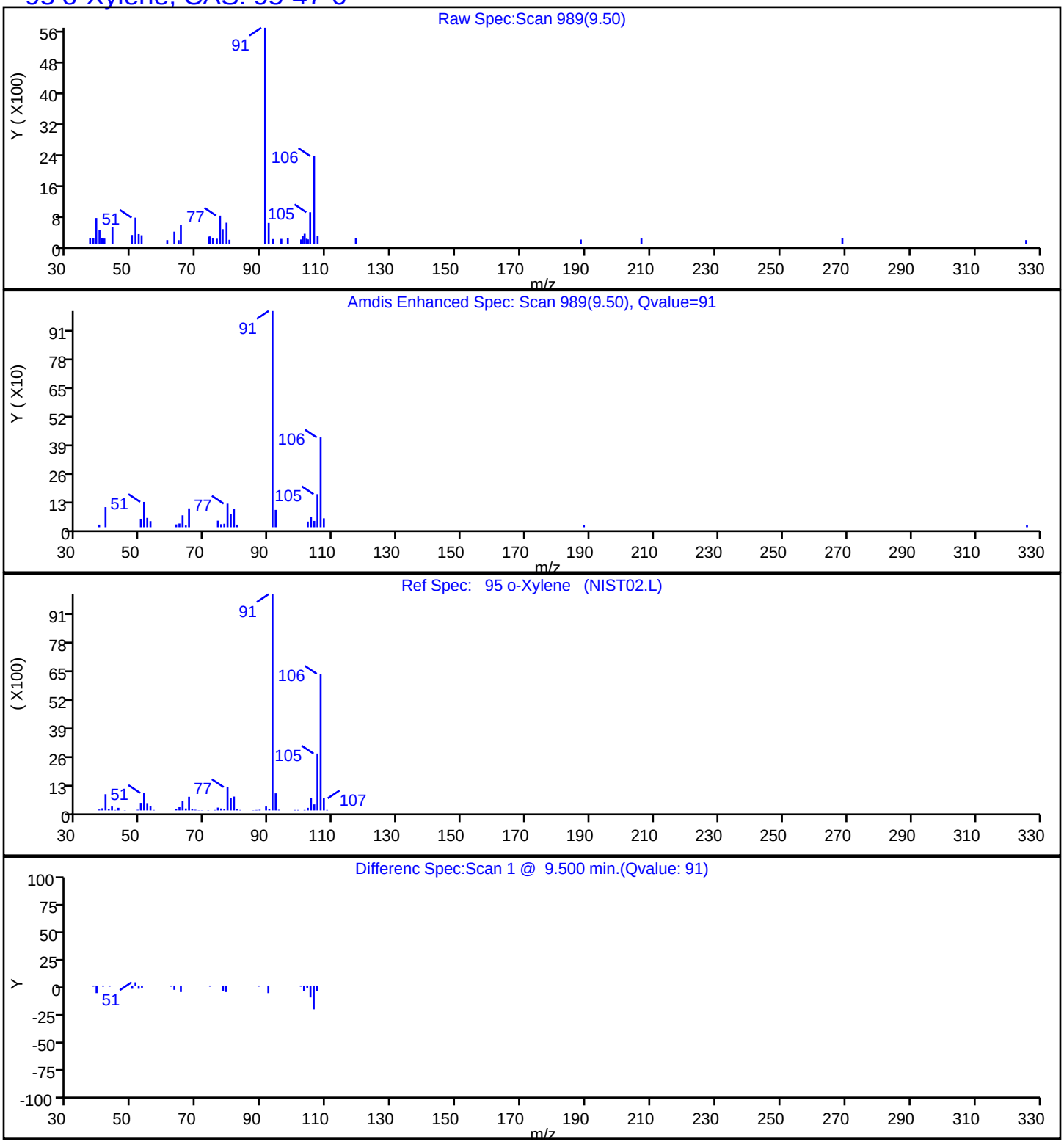
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68334.D				
Injection Date:	28-Jul-2018 22:00:30	Instrument ID:	CVOAMS6		
Lims ID:	460-161054-A-8	Lab Sample ID:	460-161054-8		
Client ID:	GC-TB (072318)				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1



Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68334.D
Injection Date: 28-Jul-2018 22:00:30 Instrument ID: CVOAMS6
Lims ID: 460-161054-A-8 Lab Sample ID: 460-161054-8
Client ID: GC-TB (072318)
Operator ID: ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

95 o-Xylene, CAS: 95-47-6



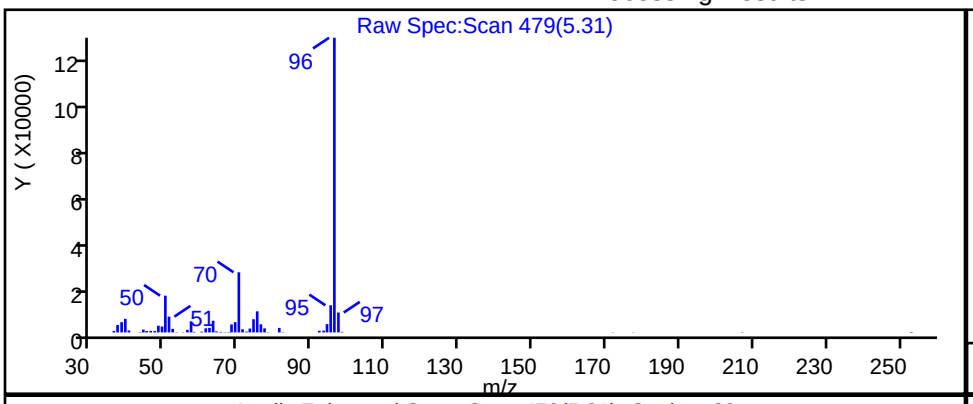
User Disabled Compound Report

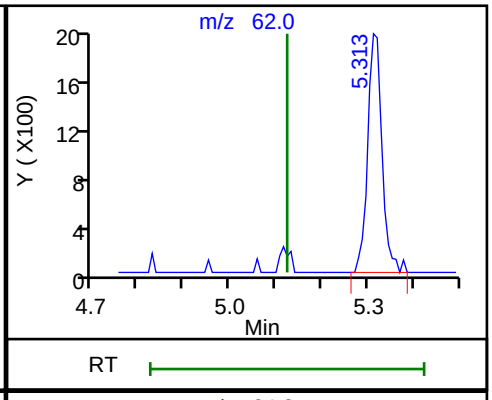
TestAmerica Edison

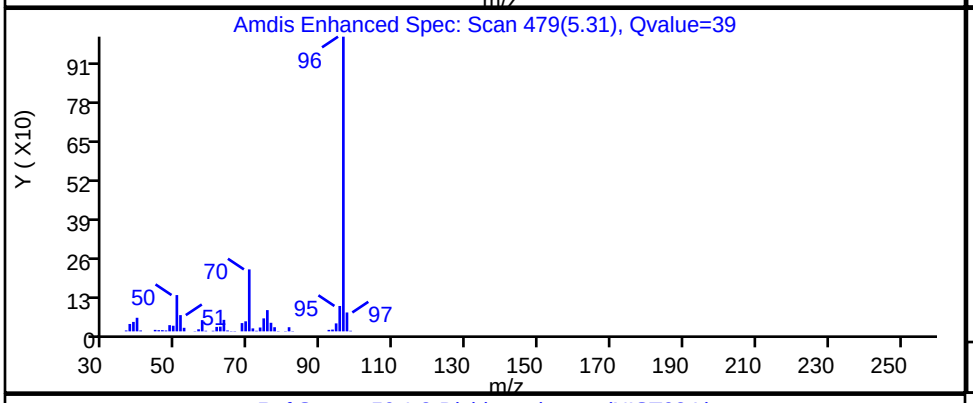
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68334.D		
Injection Date:	28-Jul-2018 22:00:30	Instrument ID:	CVOAMS6
Lims ID:	460-161054-A-8	Lab Sample ID:	460-161054-8
Client ID:	GC-TB (072318)		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

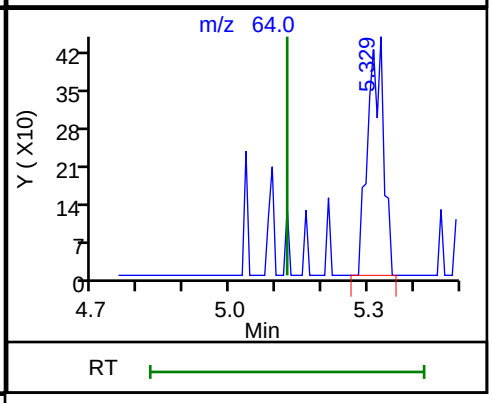
59 1,2-Dichloroethane, CAS: 107-06-2

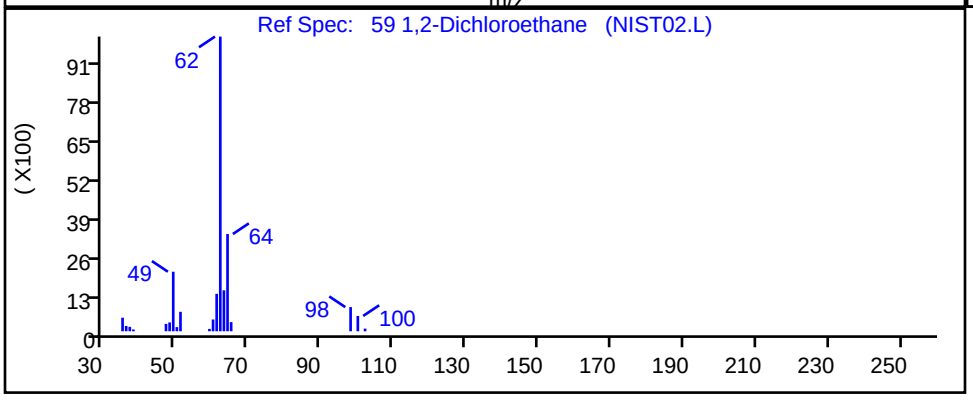
Processing Results











RT	Mass	Response	Amount
5.31	62.00	4338	1.049632
5.33	64.00	1048	

Reviewer: moroneyc, 29-Jul-2018 07:43:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD7 460-534406/3	F67408.D
Level 2	STD1 460-534406/4	F67409.D
Level 3	STD5 460-534406/5	F67410.D
Level 4	STD20 460-534406/6	F67411.D
Level 5	STD50 460-534406/7	F67412.D
Level 6	STD200 460-534406/8	F67413.D
Level 7	STD500 460-534406/9	F67414.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	+++++ 0.4096	0.2804 0.4198	0.3800	0.3596	0.3611	Ave		0.3684				13.5		20.0			
Dichlorodifluoromethane	+++++ 0.9777	0.8283 0.9557	0.9128	0.8433	0.8197	Ave		0.8896			0.1000	7.7		20.0			
Chloromethane	+++++ 1.0946	1.2253 1.0508	1.0793	1.0455	1.0241	Ave		1.0866			0.1000	6.7		20.0			
Vinyl chloride	+++++ 1.1118	1.1186 1.0738	1.1243	1.0610	1.0246	Ave		1.0857			0.1000	3.6		20.0			
Butadiene	1.1300 1.0188	0.9555 1.0017	0.9540	0.9273	0.9227	Ave		0.9872				7.3		20.0			
Bromomethane	+++++ 0.7167	0.9255 0.6884	0.7666	0.7234	0.6823	Ave		0.7505			0.1000	12.1		20.0			
Chloroethane	+++++ 0.6258	0.7473 0.6114	0.6492	0.6249	0.6129	Ave		0.6452			0.1000	8.0		20.0			
Dichlorofluoromethane	+++++ 1.2715	1.3349 1.2435	1.4903	1.4533	1.4233	Ave		1.3695				7.4		20.0			
Pentane	+++++ 5.8294	4.7800 6.1553	8.0669	6.7689	6.2964	Ave		6.3162				17.2		20.0			
Trichlorofluoromethane	+++++ 0.9581	1.0328 0.9605	1.1178	0.9969	0.9673	Ave		1.0055			0.1000	6.2		20.0			
Ethyl ether	+++++ 0.4484	0.4575 0.4436	0.4276	0.4648	0.4492	Ave		0.4485				2.8		20.0			
Ethanol	+++++ 0.0734	0.0984 0.0828	0.0633	0.0810	0.0782	Ave		0.0795				14.6		20.0			
2-Methyl-1,3-butadiene	+++++ 0.4724	0.5765 0.5286	0.5283	0.5301	0.4975	Ave		0.5222				6.7		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	+++++ 0.4982	0.5781 0.5018	0.5727	0.5400	0.5116	Ave		0.5337				6.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acrolein	+++++ 2.0079	1.4232 2.3497	2.0032	2.0775	1.7964	Ave		1.9430				16.0		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.5839	0.6433 0.6083	0.6927	0.6361	0.5719	Ave		0.6227			0.1000	7.1		20.0			
1,1-Dichloroethene	+++++ 0.5611	0.6315 0.5820	0.5820	0.5721	0.5403	Ave		0.5782			0.1000	5.3		20.0			
Acetone	+++++ 1.4873	1.1984 1.3439	1.4691	1.4384	1.6129	Ave		1.4250			0.0500	9.9		20.0			
Iodomethane	+++++ 1.0047	1.1316 0.9801	1.0719	1.0546	1.0182	Ave		1.0435				5.2		20.0			
Isopropyl alcohol	+++++ 1.0829	1.2824 1.2265	1.1822	1.1674	1.0766	Ave		1.1697				6.9		20.0			
Carbon disulfide	+++++ 2.1710	2.7367 2.1530	2.3962	2.2538	2.1717	Ave		2.3137			0.1000	9.8		20.0			
Allyl chloride	+++++ 1.0744	1.1771 1.0410	1.1252	1.1407	1.0800	Ave		1.1064				4.5		20.0			
Methyl acetate	+++++ 0.3317	0.3018 0.3359	0.3541	0.3493	0.3375	Ave		0.3351			0.1000	5.5		20.0			
Cyclopentene	+++++ 1.3821	1.4563 1.4642	1.5134	1.5115	1.4882	Ave		1.4693				3.3		20.0			
Acetonitrile	+++++ 3.4292	2.7672 3.5026	2.7498	4.3151	3.9149	Ave		3.4465				18.0		20.0			
Methylene Chloride	+++++ 0.6644	0.7691 0.6596	0.7613	0.7373	0.6789	Ave		0.7118			0.1000	7.0		20.0			
2-Methyl-2-propanol	+++++ 2.0964	1.9706 2.1826	2.0330	2.3111	2.0234	Ave		2.1028				6.0		20.0			
Methyl tert-butyl ether	+++++ 1.6461	1.8272 1.6192	1.7464	1.7855	1.6563	Ave		1.7134			0.1000	4.9		20.0			
trans-1,2-Dichloroethene	+++++ 0.6140	0.6787 0.5992	0.6422	0.6619	0.6401	Ave		0.6394			0.1000	4.6		20.0			
Acrylonitrile	0.2013 0.1958	0.1525 0.1866	0.1920	0.2072	0.2027	Ave		0.1912				9.6		20.0			
Hexane	+++++ 0.5119	0.5774 0.5259	0.5213	0.5040	0.4857	Ave		0.5210				6.0		20.0			
Isopropyl ether	+++++ 1.8871	1.9363 1.8725	1.9854	2.0933	1.9791	Ave		1.9590				4.1		20.0			
1,1-Dichloroethane	+++++ 1.0576	1.1663 1.0327	1.2735	1.1881	1.0977	Ave		1.1360			0.2000	8.0		20.0			
Vinyl acetate	+++++ 0.1137	0.0908 0.1156	0.1033	0.1199	0.1156	Ave		0.1098				9.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Chloro-1,3-butadiene	+++++ 0.5210	0.6296 0.5429	0.5460	0.5855	0.5576	Ave		0.5638				6.8		20.0			
Tert-butyl ethyl ether	+++++ 1.7986	1.8339 1.7883	1.7792	1.9536	1.8591	Ave		1.8355				3.6		20.0			
2,2-Dichloropropane	+++++ 0.2227	0.2819 0.2258	0.2383	0.2445	0.2249	Ave		0.2397				9.3		20.0			
cis-1,2-Dichloroethene	+++++ 0.6891	0.7157 0.6802	0.7561	0.7586	0.7161	Ave		0.7193			0.1000	4.6		20.0			
Ethyl acetate	+++++ 0.6179	0.8236 0.5744	0.6934	0.6275	0.6300	Ave		0.6611				13.3		20.0			
2-Butanone (MEK)	+++++ 0.6699	0.7017 0.6025	0.6650	0.6871	0.6488	Ave		0.6625			0.0500	5.2		20.0			
Methyl acrylate	+++++ 0.5537	0.5189 0.5682	0.4801	0.5793	0.5226	Ave		0.5371				6.9		20.0			
Propionitrile	+++++ 4.0126	2.6535 3.6997	3.5258	4.3234	4.1101	Ave		3.7209				16.0		20.0			
Chlorobromomethane	+++++ 0.3150	0.3275 0.3100	0.3574	0.3522	0.3292	Ave		0.3319				5.8		20.0			
Tetrahydrofuran	+++++ 0.7348	1.1823 0.6938	0.7781	0.8528	0.7221	Lin2	0.8910	0.7325							0.9940		0.9900
Methacrylonitrile	+++++ 0.2119	0.1985 0.2035	0.2013	0.2183	0.2131	Ave		0.2077				3.7		20.0			
Chloroform	+++++ 0.9832	0.9973 0.9606	1.0655	1.1186	1.0321	Ave		1.0262			0.2000	5.7		20.0			
Cyclohexane	+++++ 0.9577	0.9012 1.0013	0.9836	0.9580	0.9438	Ave		0.9576			0.1000	3.6		20.0			
1,1,1-Trichloroethane	+++++ 0.8551	1.0791 0.8547	0.9097	0.9053	0.8834	Ave		0.9145			0.1000	9.2		20.0			
Carbon tetrachloride	+++++ 0.7193	0.7564 0.7197	0.7826	0.7442	0.7338	Ave		0.7427			0.1000	3.3		20.0			
1,1-Dichloropropene	+++++ 0.7888	0.8023 0.7927	0.8481	0.8246	0.8006	Ave		0.8095				2.8		20.0			
Isobutyl alcohol	+++++ 1.8194	1.4958 1.8475	1.5174	1.7757	1.6967	Ave		1.6921				9.0		20.0			
Benzene	+++++ 3.3104	3.6749 3.0267	3.7998	3.6947	3.4293	Ave		3.4893			0.5000	8.3		20.0			
Isopropyl acetate	+++++ 1.4734	1.4099 1.5307	1.3661	1.4906	1.5226	Ave		1.4656				4.4		20.0			
Tert-amyl methyl ether	+++++ 1.9674	1.8095 1.9640	1.9490	2.0386	1.9844	Ave		1.9521				3.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloroethane	+++++ 0.6746	0.9299 0.6733	0.7345	0.7338	0.6905	Ave		0.7395			0.1000	13.2		20.0			
n-Heptane	+++++ 0.4774	0.4095 0.4770	0.4331	0.4450	0.4483	Ave		0.4484				5.8		20.0			
n-Butanol	+++++ 0.5571	0.0376 0.6177	0.2230	0.4286	0.4365	QuaF		0.5018	0.0000093						1.0000		0.9900
Trichloroethene	+++++ 0.5879	0.6922 0.5847	0.6151	0.6251	0.5924	Ave		0.6162			0.2000	6.6		20.0			
Ethyl acrylate	+++++ 1.4549	0.9726 1.4928	1.3013	1.4040	1.4028	Ave		1.3381				14.2		20.0			
Methylcyclohexane	+++++ 1.1400	0.9621 1.1612	1.0701	1.0983	1.0861	Ave		1.0863			0.1000	6.4		20.0			
1,2-Dichloropropane	+++++ 0.6277	0.6182 0.6312	0.6628	0.6612	0.6292	Ave		0.6384			0.1000	2.9		20.0			
Methyl methacrylate	+++++ 0.1377	0.0706 0.1403	0.1063	0.1272	0.1276	Lin2	-0.128	0.1319							0.9960		0.9900
1,4-Dioxane	+++++ 1.5125	1.9725 +++++	1.8476	2.2013	2.0100	Ave		1.9088				13.4		20.0			
Dibromomethane	+++++ 0.3445	0.4238 0.3447	0.3478	0.3748	0.3454	Ave		0.3635				8.7		20.0			
n-Propyl acetate	+++++ 0.6314	0.5563 0.6721	0.5213	0.5840	0.5910	Ave		0.5927				9.0		20.0			
Dichlorobromomethane	+++++ 0.7719	0.8223 0.7650	0.7444	0.7892	0.7655	Ave		0.7764			0.2000	3.4		20.0			
2-Nitropropane	+++++ 0.1014	0.1413 0.1089	0.1154	0.0997	0.0977	Ave		0.1107				14.8		20.0			
2-Chloroethyl vinyl ether	+++++ 0.3148	0.2196 0.3345	0.2286	0.2778	0.2990	Ave		0.2790				16.7		20.0			
Epichlorohydrin	0.4005 0.5447	0.4639 0.4952	0.4988	0.5495	0.5520	Ave		0.5007				11.1		20.0			
cis-1,3-Dichloropropene	+++++ 1.3044	1.2393 1.2677	1.2216	1.3105	1.2585	Ave		1.2670			0.2000	2.8		20.0			
4-Methyl-2-pentanone (MIBK)	+++++ 5.4727	4.0897 4.6357	5.1063	5.6364	5.7376	Ave		5.1131			0.0500	12.6		20.0			
Toluene	+++++ 3.3961	3.6696 3.0580	3.7301	3.7647	3.5451	Ave		3.5273			0.4000	7.6		20.0			
trans-1,3-Dichloropropene	+++++ 1.0688	1.0837 1.0692	1.0537	1.0444	1.0192	Ave		1.0565			0.1000	2.2		20.0			
Ethyl methacrylate	+++++ 0.9796	0.6332 0.9678	0.7782	0.9031	0.9282	Ave		0.8650				15.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloroethane	+++++ 0.5745	0.5531 0.5695	0.6305	0.6279	0.5687	Ave		0.5874			0.1000	5.7		20.0			
Tetrachloroethene	+++++ 0.8255	0.9118 0.8010	0.9151	0.8829	0.8347	Ave		0.8618			0.2000	5.6		20.0			
1,3-Dichloropropane	+++++ 1.1271	1.0600 1.1073	1.0752	1.1838	1.1141	Ave		1.1112				3.9		20.0			
2-Hexanone	+++++ 3.2781	1.1322 2.9377	2.5032	3.1028	3.1594	Lin2	-10.09	3.1150			0.0500				0.9970		0.9900
n-Butyl acetate	+++++ 0.9999	0.3685 1.0361	0.9370	0.9905	0.9799	Lin2	-0.646	1.0229							0.9990		0.9900
Chlorodibromomethane	+++++ 0.7500	0.7957 0.7302	0.7604	0.7919	0.7391	Ave		0.7612			0.1000	3.6		20.0			
Ethylene Dibromide	+++++ 0.6487	0.5889 0.6297	0.6773	0.6642	0.6354	Ave		0.6407			0.1000	4.8		20.0			
Chlorobenzene	+++++ 2.1535	2.3059 2.0575	2.2586	2.3358	2.2118	Ave		2.2205			0.5000	4.6		20.0			
Ethylbenzene	+++++ 1.2461	1.3386 1.2210	1.2522	1.3569	1.2809	Ave		1.2826			0.1000	4.2		20.0			
1,1,1,2-Tetrachloroethane	+++++ 0.8110	0.8669 0.7777	0.8831	0.8775	0.8351	Ave		0.8419				5.0		20.0			
m-Xylene & p-Xylene	+++++ 1.5415	1.4107 1.4918	1.5428	1.6449	1.5364	Ave		1.5280			0.1000	5.0		20.0			
n-Butyl acrylate	+++++ 0.6188	0.2809 0.6462	0.4751	0.5178	0.5948	Lin2	-0.323	0.5909							0.9930		0.9900
o-Xylene	+++++ 1.5915	1.4835 1.5171	1.5683	1.6948	1.6265	Ave		1.5803			0.3000	4.8		20.0			
Styrene	+++++ 2.5276	2.3069 2.3304	2.3223	2.6994	2.5486	Ave		2.4559			0.3000	6.5		20.0			
Amyl acetate (mixed isomers)	+++++ 2.3224	0.8397 2.4796	1.6152	2.1243	2.1920	Lin2	-1.470	2.2418							0.9920		0.9900
Bromoform	+++++ 0.4899	0.5027 0.4653	0.4897	0.5078	0.4728	Ave		0.4880			0.1000	3.4		20.0			
Isopropylbenzene	+++++ 3.8165	3.5634 3.1366	3.9695	4.2458	4.0536	Ave		3.7976			0.1000	10.5		20.0			
Bromobenzene	+++++ 1.6482	1.8777 1.6436	1.6332	1.8636	1.6992	Ave		1.7276				6.6		20.0			
1,1,2,2-Tetrachloroethane	+++++ 1.5709	1.5903 1.5945	1.6768	1.7730	1.5659	Ave		1.6286			0.3000	5.0		20.0			
N-Propylbenzene	+++++ 7.6180	8.1580 6.1500	8.2138	9.1630	8.2260	Ave		7.9215				12.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichloropropane	+++++ 0.4200	0.5783 0.4327	0.4124	0.4700	0.4437	Ave		0.4595				13.4		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.3721	0.1503 0.4001	0.3090	0.3834	0.3483	Lin2	-0.229	0.3760							0.9970		0.9900
2-Chlorotoluene	+++++ 5.4332	5.7173 4.8935	5.6074	6.2164	5.6221	Ave		5.5817				7.7		20.0			
4-Ethyltoluene	+++++ 6.4488	5.9268 5.6710	6.5017	7.7042	6.9316	Ave		6.5307				11.1		20.0			
1,3,5-Trimethylbenzene	+++++ 5.7514	5.6407 4.9391	5.7673	6.5723	5.8637	Ave		5.7558				9.1		20.0			
4-Chlorotoluene	+++++ 4.7994	4.9389 4.3616	4.9939	5.5613	4.9676	Ave		4.9371				7.8		20.0			
Butyl Methacrylate	+++++ 2.2408	1.2332 2.2743	1.5331	1.9717	2.1110	Qua2	-0.781	1.9628	0.0007536						0.9940		0.9900
tert-Butylbenzene	+++++ 4.8882	4.3097 4.3296	4.4633	5.0540	4.8145	Ave		4.6432				6.8		20.0			
1,2,4-Trimethylbenzene	+++++ 5.8657	5.4970 4.9186	5.9293	6.7587	6.1651	Ave		5.8557				10.6		20.0			
sec-Butylbenzene	+++++ 7.2632	7.0570 5.6427	7.4105	8.0792	7.4519	Ave		7.1508				11.4		20.0			
4-Isopropyltoluene	+++++ 6.2551	5.6428 5.1011	5.9227	6.9414	6.3807	Ave		6.0406				10.5		20.0			
1,3-Dichlorobenzene	+++++ 3.2744	3.3013 3.1236	3.4851	3.7755	3.3672	Ave		3.3878			0.6000	6.6		20.0			
1,4-Dichlorobenzene	+++++ 3.2988	3.4735 3.1073	3.6511	3.9374	3.4887	Ave		3.4928			0.5000	8.2		20.0			
1,2,3-Trimethylbenzene	+++++ 6.1220	6.2852 5.0972	6.2669	7.0617	6.5002	Ave		6.2222				10.3		20.0			
Benzyl chloride	+++++ 3.3289	2.4567 3.1190	2.9110	3.5139	3.3271	Ave		3.1094				12.2		20.0			
Indan	+++++ 5.9743	6.2702 4.8508	6.5989	7.2731	6.5661	Ave		6.2556				13.0		20.0			
p-Diethylbenzene	+++++ 3.5449	3.4328 3.3779	3.7857	4.2794	3.8947	Ave		3.7192				9.1		20.0			
n-Butylbenzene	+++++ 3.4414	3.2999 3.2486	3.3995	3.8000	3.4829	Ave		3.4454				5.6		20.0			
1,2-Dichlorobenzene	+++++ 3.1989	3.4638 2.9521	3.4896	3.7870	3.4658	Ave		3.3929			0.4000	8.4		20.0			
1,2,4,5-Tetramethylbenzene	+++++ 5.8178	5.6373 4.6891	5.5967	6.8353	6.2514	Ave		5.8046				12.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dibromo-3-Chloropropane	+++++ 0.2908	0.3163 0.2930	0.3059	0.3146	0.2796	Ave		0.3001			0.0500	4.9		20.0			
1,3,5-Trichlorobenzene	+++++ 2.4805	2.7233 2.3701	2.7171	2.8699	2.7097	Ave		2.6451				6.9		20.0			
1,2,4-Trichlorobenzene	+++++ 2.3908	2.0941 2.2343	2.3196	2.5877	2.4865	Ave		2.3522			0.2000	7.5		20.0			
Hexachlorobutadiene	+++++ 1.0787	1.2625 1.0285	1.1443	1.1111	1.0674	Ave		1.1154				7.4		20.0			
Naphthalene	+++++ 5.3551	4.1545 4.5511	4.6050	5.5966	5.6051	Ave		4.9779				12.4		20.0			
1,2,3-Trichlorobenzene	+++++ 2.1439	2.4818 1.9963	2.1657	2.4524	2.2920	Ave		2.2553				8.4		20.0			
Dibromofluoromethane (Surr)	0.2645 0.2342	0.2554 0.2323	0.2538	0.2530	0.2510	Ave		0.2492				4.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2621 0.2746	0.2672 0.2970	0.2520	0.2554	0.2550	Ave		0.2662				5.9		20.0			
Toluene-d8 (Surr)	1.3741 1.3672	1.3758 1.3366	1.4239	1.3803	1.3891	Ave		1.3782				1.9		20.0			
4-Bromofluorobenzene	0.3965 0.3978	0.4179 0.3853	0.4145	0.4087	0.4046	Ave		0.4036				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD7 460-534406/3	F67408.D
Level 2	STD1 460-534406/4	F67409.D
Level 3	STD5 460-534406/5	F67410.D
Level 4	STD20 460-534406/6	F67411.D
Level 5	STD50 460-534406/7	F67412.D
Level 6	STD200 460-534406/8	F67413.D
Level 7	STD500 460-534406/9	F67414.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Ave	+++++ 709694	2101 1936409	14256	55175	141971	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorodifluoromethane	FB	Ave	+++++ 1693948	6206 4408691	34244	129388	322297	+++++ 200	1.00 500	5.00	20.0	50.0
Chloromethane	FB	Ave	+++++ 1896409	9180 4846961	40491	160414	402640	+++++ 200	1.00 500	5.00	20.0	50.0
Vinyl chloride	FB	Ave	+++++ 1926255	8381 4953087	42176	162796	402833	+++++ 200	1.00 500	5.00	20.0	50.0
Butadiene	FB	Ave	1864 1765160	7159 4620836	35790	142283	362789	0.250 200	1.00 500	5.00	20.0	50.0
Bromomethane	FB	Ave	+++++ 1241756	6934 3175435	28760	110997	268251	+++++ 200	1.00 500	5.00	20.0	50.0
Chloroethane	FB	Ave	+++++ 1084123	5599 2820281	24353	95876	240980	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorofluoromethane	FB	Ave	+++++ 2202861	10001 5736092	55907	222984	559613	+++++ 200	1.00 500	5.00	20.0	50.0
Pentane	TBAd 9	Ave	+++++ 352397	1110 1096295	10144	34097	86045	+++++ 400	2.00 1000	10.0	40.0	100
Trichlorofluoromethane	FB	Ave	+++++ 1659910	7738 4430449	41932	152955	380312	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl ether	FB	Ave	+++++ 776872	3428 2046129	16040	71323	176623	+++++ 200	1.00 500	5.00	20.0	50.0
Ethanol	TBAd 9	Ave	+++++ 88716	457 294889	1593	8161	21379	+++++ 8000	40.0 20000	200	800	2000
2-Methyl-1,3-butadiene	FB	Ave	+++++ 818433	4319 2438118	19820	81333	195604	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	+++++ 863219	4331 2314842	21483	82854	201129	+++++ 200	1.00 500	5.00	20.0	50.0
Acrolein	TBAd 9	Ave	+++++ 60692	661 167400	5038	10465	24549	+++++ 200	4.00 400	20.0	40.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 1011610	4820 2805995	25985	97594	224849	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloroethene	FB	Ave	+++++ 972069	4731 2684576	21834	87779	212440	+++++ 200	1.00 500	5.00	20.0	50.0
Acetone	BUT	Ave	+++++ 1098210	3274 2964336	20985	87955	253164	+++++ 1000	5.00 2500	25.0	100	250
Iodomethane	FB	Ave	+++++ 1740678	8478 4521161	40210	161807	400327	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl alcohol	TBAd9	Ave	+++++ 327318	1489 1092262	7433	29403	73566	+++++ 2000	10.0 5000	50.0	200	500
Carbon disulfide	FB	Ave	+++++ 3761206	20504 9931387	89893	345818	853831	+++++ 200	1.00 500	5.00	20.0	50.0
Allyl chloride	FB	Ave	+++++ 1861456	8819 4802050	42210	175027	424625	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl acetate	FB	Ave	+++++ 1149470	4522 3098846	26571	107177	265412	+++++ 400	2.00 1000	10.0	40.0	100
Cyclopentene	FB	Ave	+++++ 2394522	10911 6754156	56774	231916	585122	+++++ 200	1.00 500	5.00	20.0	50.0
Acetonitrile	TBAd9	Ave	+++++ 1036510	3213 3119121	17289	108682	267502	+++++ 2000	10.0 5000	50.0	200	500
Methylene Chloride	FB	Ave	+++++ 1151163	5762 3042833	28558	113133	266928	+++++ 200	1.00 500	5.00	20.0	50.0
2-Methyl-2-propanol	TBAd9	Ave	+++++ 633643	2288 1943662	12782	58208	138256	+++++ 2000	10.0 5000	50.0	200	500
Methyl tert-butyl ether	FB	Ave	+++++ 2851896	13690 7468949	65514	273962	651186	+++++ 200	1.00 500	5.00	20.0	50.0
trans-1,2-Dichloroethene	FB	Ave	+++++ 1063814	5085 2764093	24093	101552	251677	+++++ 200	1.00 500	5.00	20.0	50.0
Acrylonitrile	FB	Ave	2656 3392609	11424 8608034	72019	317916	797034	2.00 2000	10.0 5000	50.0	200	500
Hexane	FB	Ave	+++++ 886813	4326 2425866	19556	77335	190970	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl ether	FB	Ave	+++++ 3269485	14507 8637675	74480	321190	778104	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloroethane	FB	Ave	+++++ 1832242	8738 4763691	47774	182293	431590	+++++ 200	1.00 500	5.00	20.0	50.0
Vinyl acetate	FB	Ave	+++++ 393956	1360 1066727	7751	36794	90865	+++++ 400	2.00 1000	10.0	40.0	100
2-Chloro-1,3-butadiene	FB	Ave	+++++ 902621	4717 2504213	20482	89837	219242	+++++ 200	1.00 500	5.00	20.0	50.0
Tert-butyl ethyl ether	FB	Ave	+++++ 3116079	13740 8249314	66745	299751	730944	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
2,2-Dichloropropane	FB	Ave	+++++ 385912	2112 1041602	8939	37516	88442	+++++ 200	1.00 500	5.00	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 1193877	5362 3137762	28363	116397	281551	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl acetate	BUT	Ave	+++++ 182512	900 506767	3962	15347	39552	+++++ 400	2.00 1000	10.0	40.0	100
2-Butanone (MEK)	BUT	Ave	+++++ 494630	1917 1328915	9499	42012	101840	+++++ 1000	5.00 2500	25.0	100	250
Methyl acrylate	CBNZ d5	Ave	+++++ 703275	2625 1967582	12350	63052	148390	+++++ 200	1.00 500	5.00	20.0	50.0
Propionitrile	TBAd 9	Ave	+++++ 1212845	3081 3294672	22168	108891	280840	+++++ 2000	10.0 5000	50.0	200	500
Chlorobromomethane	FB	Ave	+++++ 545825	2454 1429859	13409	54045	129441	+++++ 200	1.00 500	5.00	20.0	50.0
Tetrahydrofuran	BUT	Lin2	+++++ 217035	1292 612177	4446	20859	45338	+++++ 400	2.00 1000	10.0	40.0	100
Methacrylonitrile	FB	Ave	+++++ 3671286	14869 9385838	75501	334922	837786	+++++ 2000	10.0 5000	50.0	200	500
Chloroform	FB	Ave	+++++ 1703395	7472 4430844	39973	171632	405786	+++++ 200	1.00 500	5.00	20.0	50.0
Cyclohexane	FB	Ave	+++++ 1659263	6752 4618908	36899	146994	371058	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1-Trichloroethane	FB	Ave	+++++ 1481430	8085 3942526	34126	138900	347317	+++++ 200	1.00 500	5.00	20.0	50.0
Carbon tetrachloride	FB	Ave	+++++ 1246124	5667 3319730	29360	114190	288500	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloropropene	FB	Ave	+++++ 1366551	6011 3656797	31815	126530	314753	+++++ 200	1.00 500	5.00	20.0	50.0
Isobutyl alcohol	TBAd 9	Ave	+++++ 1374822	4342 4113074	23852	111808	289826	+++++ 5000	25.0 12500	125	500	1250
Benzene	CBNZ d5	Ave	+++++ 4204764	18589 10481196	97753	402110	973646	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl acetate	FB	Ave	+++++ 2552684	10563 7060860	51248	228711	598652	+++++ 200	1.00 500	5.00	20.0	50.0
Tert-amyl methyl ether	FB	Ave	+++++ 3408504	13557 9059390	73115	312799	780186	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloroethane	FB	Ave	+++++ 1168815	6967 3106032	27555	112597	271491	+++++ 200	1.00 500	5.00	20.0	50.0
n-Heptane	FB	Ave	+++++ 827096	3068 2200144	16247	68281	176244	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butanol	TBAd 9	QuaF	+++++ 420980	109 1375300	3506	26985	74557	+++++ 5000	25.0 12500	125	500	1250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Trichloroethene	FB	Ave	+++++ 1018520	5186 2697116	23075	95905	232897	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl acrylate	FB	Ave	+++++ 2520560	7287 6886192	48819	215422	551536	+++++ 200	1.00 500	5.00	20.0	50.0
Methylcyclohexane	FB	Ave	+++++ 1975138	7208 5356346	40143	168517	427028	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloropropane	FB	Ave	+++++ 1087509	4632 2911396	24865	101451	247397	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl methacrylate	FB	Lin2	+++++ 477153	1058 1294397	7979	39048	100300	+++++ 400	2.00 1000	10.0	40.0	100
1,4-Dioxane	DXE	Ave	+++++ 112735	953 +++++	2029	10773	26419	+++++ 4000	50.0 +++++	100	400	1000
Dibromomethane	FB	Ave	+++++ 596905	3175 1590260	13049	57505	135812	+++++ 200	1.00 500	5.00	20.0	50.0
n-Propyl acetate	FB	Ave	+++++ 1093852	4168 3100296	19557	89611	232351	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorobromomethane	FB	Ave	+++++ 1337273	6161 3528767	27927	121094	300964	+++++ 200	1.00 500	5.00	20.0	50.0
2-Nitropropane	FB	Ave	+++++ 351273	2118 1004773	8656	30596	76847	+++++ 400	2.00 1000	10.0	40.0	100
2-Chloroethyl vinyl ether	FB	Ave	+++++ 545482	1645 1542778	8574	42627	117559	+++++ 200	1.00 500	5.00	20.0	50.0
Epichlorohydrin	BUT	Ave	998 1608905	5069 4369507	28499	134393	346568	5.00 4000	20.0 10000	100	400	1000
cis-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 1656751	6269 4389929	31426	142629	357305	+++++ 200	1.00 500	5.00	20.0	50.0
4-Methyl-2-pentanone (MIBK)	BUT	Ave	+++++ 4041093	11173 10225528	72940	344643	900558	+++++ 1000	5.00 2500	25.0	100	250
Toluene	CBNZ d5	Ave	+++++ 4313597	18562 10589556	95962	409728	1006532	+++++ 200	1.00 500	5.00	20.0	50.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 1357534	5482 3702694	27107	113666	289370	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 1244261	3203 3351463	20020	98286	263543	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 729655	2798 1972178	16220	68341	161457	+++++ 200	1.00 500	5.00	20.0	50.0
Tetrachloroethene	CBNZ d5	Ave	+++++ 1048499	4612 2773903	23541	96096	236993	+++++ 200	1.00 500	5.00	20.0	50.0
1,3-Dichloropropane	CBNZ d5	Ave	+++++ 1431570	5362 3834334	27661	128841	316304	+++++ 200	1.00 500	5.00	20.0	50.0
2-Hexanone	BUT	Lin2	+++++ 2420551	3093 6479984	35757	189724	495888	+++++ 1000	5.00 2500	25.0	100	250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
n-Butyl acetate	CBNZ d5	Lin2	+++++ 1269986	1864 3587927	24106	107797	278220	+++++ 200	1.00 500	5.00	20.0	50.0
Chlorodibromomethane	CBNZ d5	Ave	+++++ 952604	4025 2528593	19562	86190	209847	+++++ 200	1.00 500	5.00	20.0	50.0
Ethylene Dibromide	CBNZ d5	Ave	+++++ 823898	2979 2180576	17425	72287	180408	+++++ 200	1.00 500	5.00	20.0	50.0
Chlorobenzene	CBNZ d5	Ave	+++++ 2735326	11664 7124946	58106	254215	627990	+++++ 200	1.00 500	5.00	20.0	50.0
Ethylbenzene	CBNZ d5	Ave	+++++ 1582697	6771 4228207	32213	147681	363682	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1030138	4385 2693250	22718	95501	237090	+++++ 200	1.00 500	5.00	20.0	50.0
m-Xylene & p-Xylene	CBNZ d5	Ave	+++++ 1957917	7136 5166108	39690	179024	436228	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butyl acrylate	CBNZ d5	Lin2	+++++ 786020	1421 2237636	12223	56357	168864	+++++ 200	1.00 500	5.00	20.0	50.0
o-Xylene	CBNZ d5	Ave	+++++ 2021512	7504 5253468	40346	184452	461789	+++++ 200	1.00 500	5.00	20.0	50.0
Styrene	CBNZ d5	Ave	+++++ 3210461	11669 8069972	59744	293795	723592	+++++ 200	1.00 500	5.00	20.0	50.0
Amyl acetate (mixed isomers)	DCBd 4	Lin2	+++++ 1680483	2413 4681947	25124	129234	361611	+++++ 200	1.00 500	5.00	20.0	50.0
Bromoform	CBNZ d5	Ave	+++++ 622246	2543 1611171	12599	55269	134241	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropylbenzene	CBNZ d5	Ave	+++++ 4847598	18025 10861682	102121	462092	1150898	+++++ 200	1.00 500	5.00	20.0	50.0
Bromobenzene	DCBd 4	Ave	+++++ 1192585	5396 3103431	25405	113372	280301	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	+++++ 1136664	4570 3010711	26083	107861	258315	+++++ 200	1.00 500	5.00	20.0	50.0
N-Propylbenzene	DCBd 4	Ave	+++++ 5512304	23444 11612551	127766	557431	1357000	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 303924	1662 816999	6415	28590	73193	+++++ 200	1.00 500	5.00	20.0	50.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin2	+++++ 269249	432 755508	4806	23323	57460	+++++ 200	1.00 500	5.00	20.0	50.0
2-Chlorotoluene	DCBd 4	Ave	+++++ 3931428	16430 9240017	87223	378178	927450	+++++ 200	1.00 500	5.00	20.0	50.0
4-Ethyltoluene	DCBd 4	Ave	+++++ 4666273	17032 10708126	101134	468686	1143475	+++++ 200	1.00 500	5.00	20.0	50.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++ 4161635	16210 9326055	89710	399827	967312	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
4-Chlorotoluene	DCBd 4	Ave	+++++ 3472777	14193 8235664	77680	338320	819475	+++++ 200	1.00 500	5.00	20.0	50.0
Butyl Methacrylate	DCBd 4	Qua2	+++++ 1621447	3544 4294317	23847	119948	348236	+++++ 200	1.00 500	5.00	20.0	50.0
tert-Butylbenzene	DCBd 4	Ave	+++++ 3537058	12385 8175185	69427	307464	794229	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	+++++ 4244360	15797 9287375	92231	411165	1017023	+++++ 200	1.00 500	5.00	20.0	50.0
sec-Butylbenzene	DCBd 4	Ave	+++++ 5255599	20280 10654597	115270	491501	1229308	+++++ 200	1.00 500	5.00	20.0	50.0
4-Isopropyltoluene	DCBd 4	Ave	+++++ 4526133	16216 9632021	92127	422281	1052591	+++++ 200	1.00 500	5.00	20.0	50.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 2369298	9487 5898093	54210	229685	555469	+++++ 200	1.00 500	5.00	20.0	50.0
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 2386982	9982 5867301	56793	239534	575508	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	+++++ 4429798	18062 9624666	97482	429601	1072303	+++++ 200	1.00 500	5.00	20.0	50.0
Benzyl chloride	DCBd 4	Ave	+++++ 2408788	7060 5889342	45280	213768	548852	+++++ 200	1.00 500	5.00	20.0	50.0
Indan	DCBd 4	Ave	+++++ 4322939	18019 9159299	102646	442460	1083183	+++++ 200	1.00 500	5.00	20.0	50.0
p-Diethylbenzene	DCBd 4	Ave	+++++ 2565032	9865 6378237	58887	260337	642482	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butylbenzene	DCBd 4	Ave	+++++ 2490143	9483 6134003	52880	231171	574560	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichlorobenzene	DCBd 4	Ave	+++++ 2314674	9954 5574171	54281	230380	571740	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	+++++ 4209686	16200 8853963	87056	415827	1031262	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 210427	909 553314	4759	19141	46130	+++++ 200	1.00 500	5.00	20.0	50.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	+++++ 1794877	7826 4475172	42265	174592	447000	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 1729926	6018 4218831	36082	157425	410186	+++++ 200	1.00 500	5.00	20.0	50.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 780509	3628 1941946	17800	67593	176091	+++++ 200	1.00 500	5.00	20.0	50.0
Naphthalene	DCBd 4	Ave	+++++ 3874891	11939 8593464	71630	340468	924647	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 1551295	7132 3769448	33688	149191	378094	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161054-1 Analy Batch No.: 534406

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2018 08:14 Calibration End Date: 07/08/2018 10:34 Calibration ID: 70046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dibromofluoromethane (Surr)	FB	Ave	87274 101418	95672 107167	95222	97066	98684	50.0 50.0	50.0 50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	86458 118946	100077 137011	94533	97955	100245	50.0 50.0	50.0 50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	309037 434144	347975 462865	366322	375578	394381	50.0 50.0	50.0 50.0	50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	89171 126322	105689 133441	106636	111206	114885	50.0 50.0	50.0 50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua2 = Quadratic 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 08-Jul-2018 08:14:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD7
Misc. Info.: 460-0075068-003
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub42

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 08-Jul-2018 18:59:57 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: boykink Date: 08-Jul-2018 08:34:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Butadiene	54	1.853	1.837	0.016	71	1864	0.2500	0.2862	
* 26 TBA-d9 (IS)	65	3.184	3.193	-0.009	0	105363	1000.0	1000.0	
31 Acrylonitrile	53	3.464	3.448	0.016	67	2656	2.00	2.11	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	124582	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	97	87274	50.0	53.1	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	86458	50.0	49.2	
* 61 Fluorobenzene	96	5.321	5.321	0.000	99	329916	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.028	6.019	0.009	0	9358	1000.0	1000.0	
75 Epichlorohydrin	57	6.718	6.685	0.033	1	998	5.00	4.00	a
$ 78 Toluene-d8 (Surr)	98	6.972	6.981	-0.009	98	309037	50.0	49.9	
* 89 Chlorobenzene-d5	117	8.764	8.764	0.000	85	224904	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	91	89171	50.0	49.1	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.909	-0.001	95	120459	50.0	50.0	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

GASES Li_00267	Amount Added:	2.50	Units: uL	
ACROLEIN W_00078	Amount Added:	0.00	Units: uL	
GAS Hi_00262	Amount Added:	0.00	Units: uL	
ACRY/EPIH MIX_00051	Amount Added:	20.00	Units: uL	
14DIOXINTER_00086	Amount Added:	0.00	Units: uL	
Ethanol mix_00017	Amount Added:	0.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	0.00	Units: uL	
MIX I Hi_00095	Amount Added:	0.00	Units: uL	
VOA6IS/SURR_00011	Amount Added:	5.00	Units: uL	Run Reagent

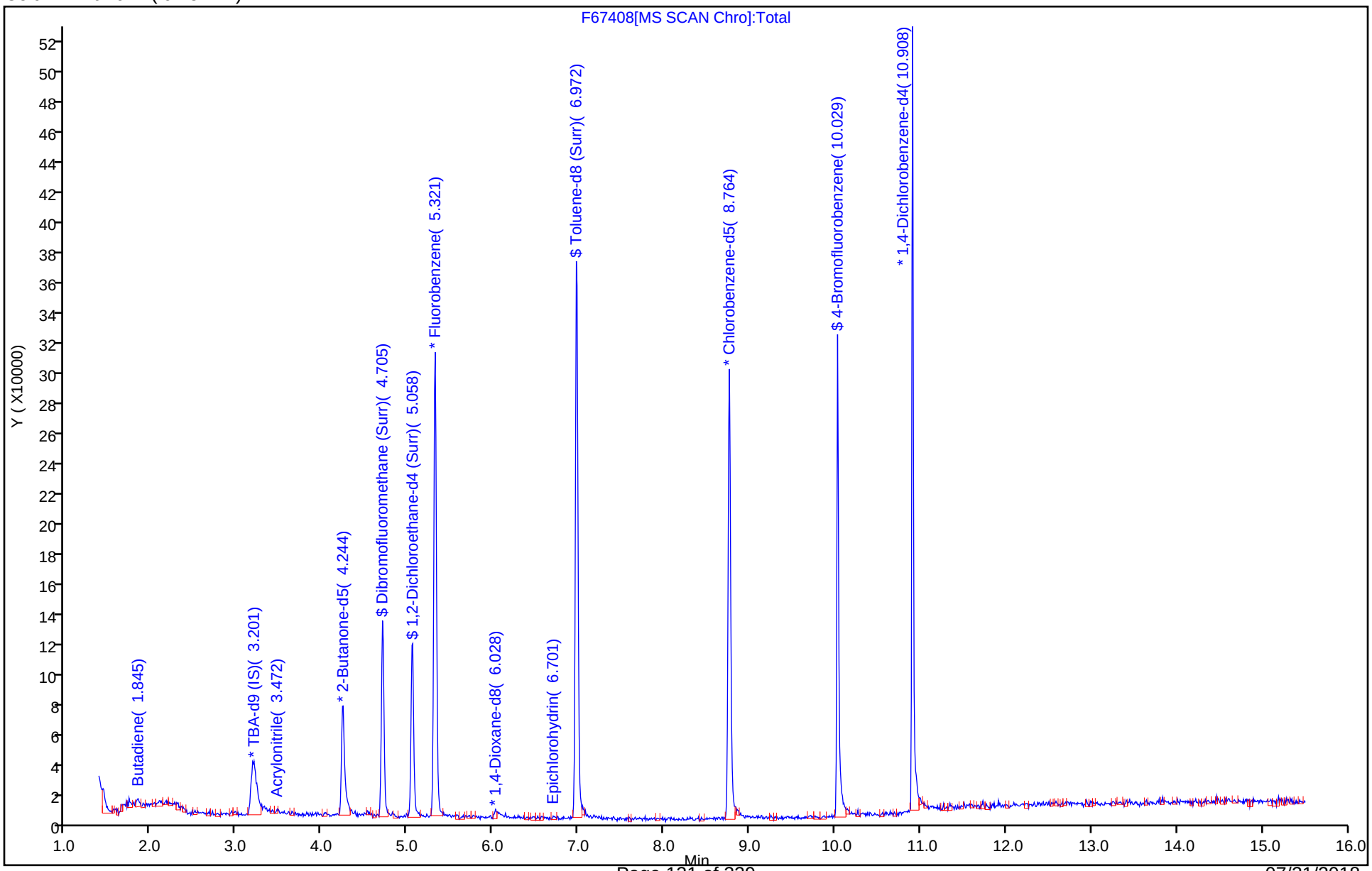
Report Date: 08-Jul-2018 18:59:59 Chrom Revision: 2.2 07-Jun-2018 07:41:54

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D

Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	STD7			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

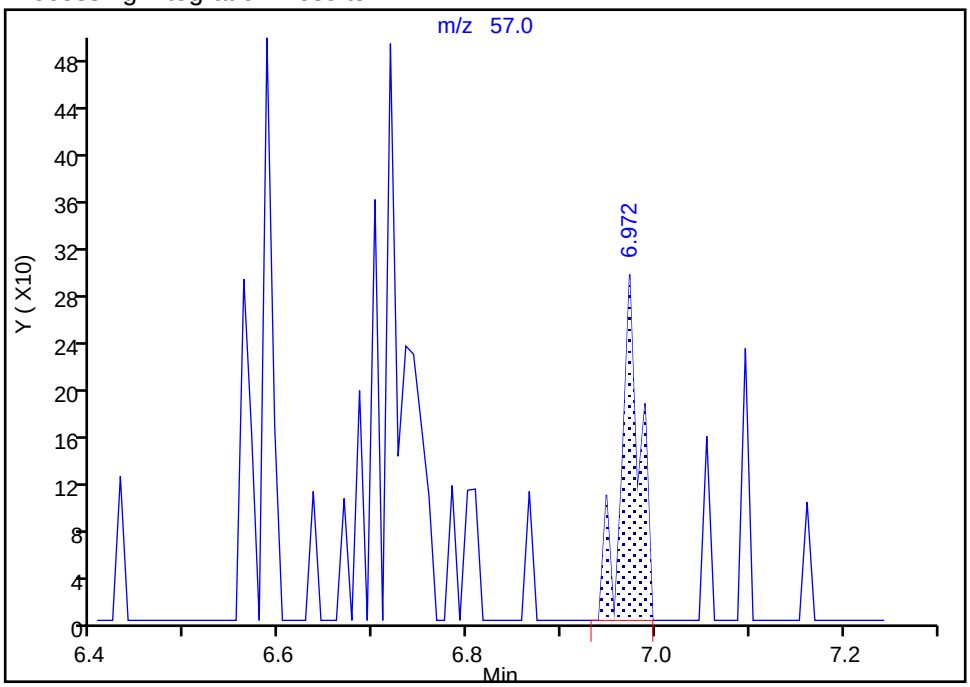
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 Epichlorohydrin, CAS: 106-89-8

Signal: 1

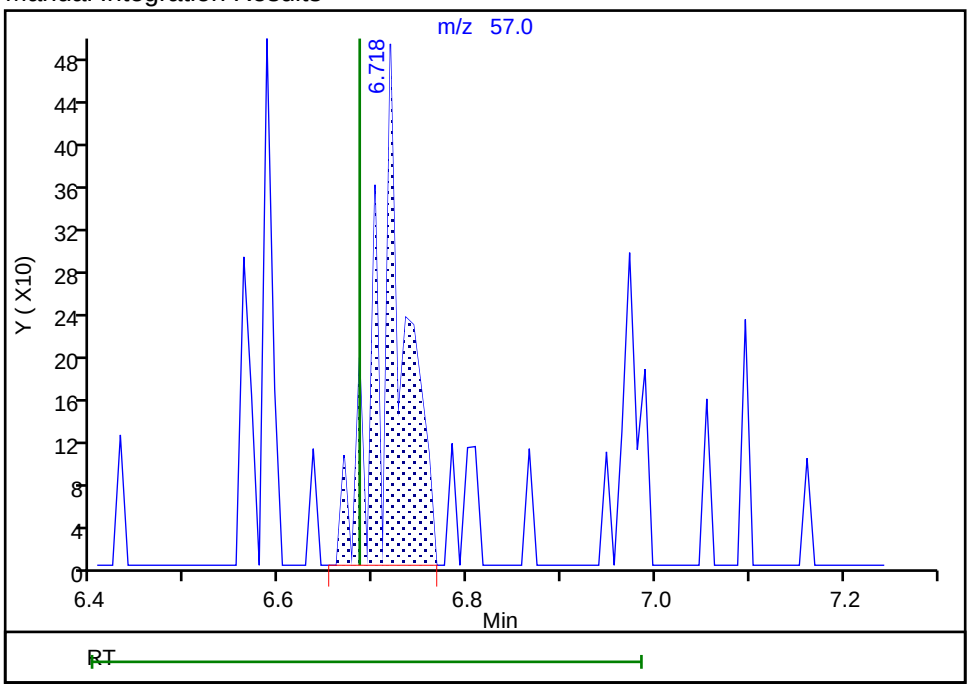
Processing Integration Results

RT: 6.97
Area: 405
Amount: 1.414336
Amount Units: ug/l



Manual Integration Results

RT: 6.72
Area: 998
Amount: 4.000129
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:27:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

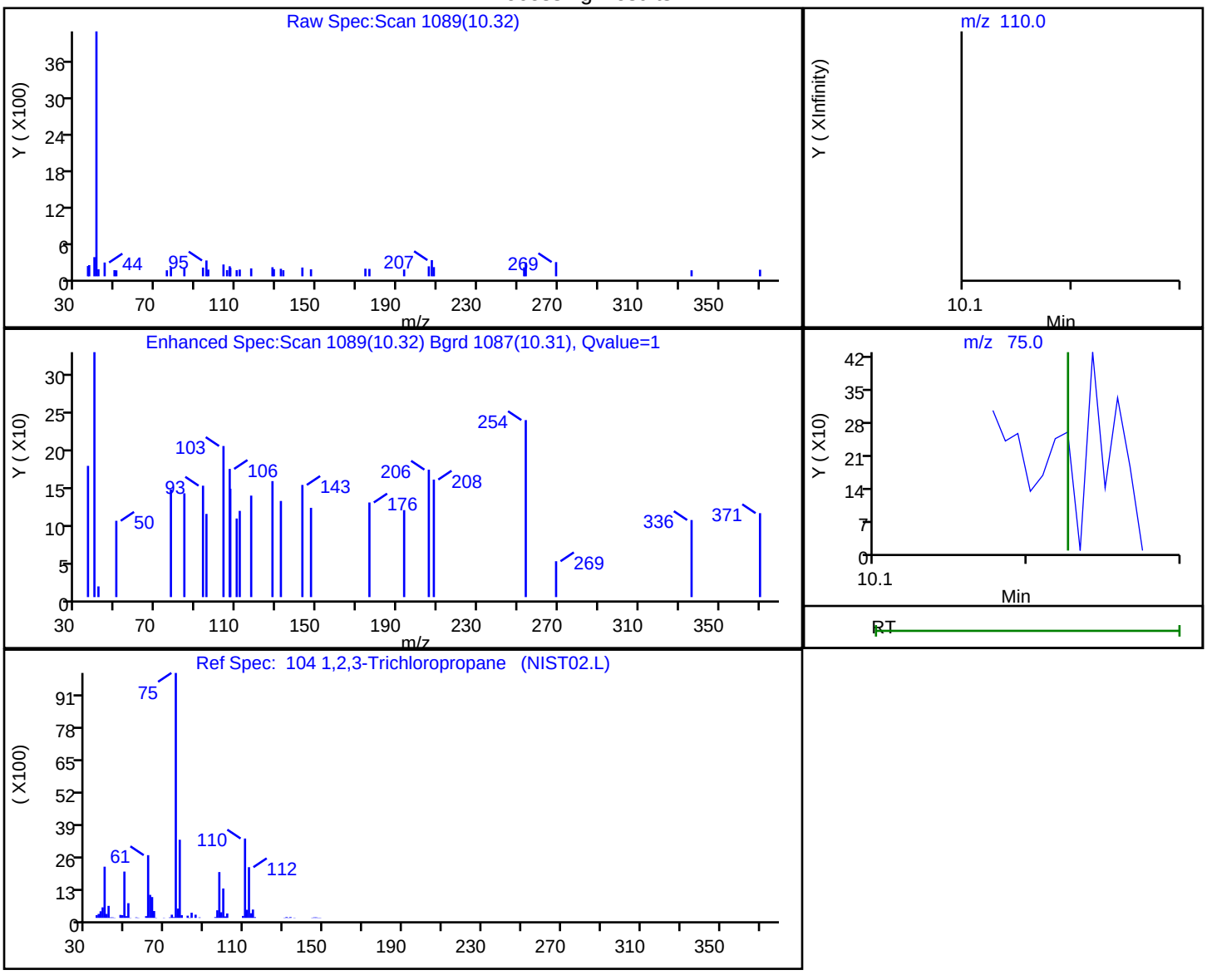
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

104 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
10.32	110.00	51	0.046068
10.33	75.00	277	

Reviewer: delpolitov, 08-Jul-2018 17:42:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

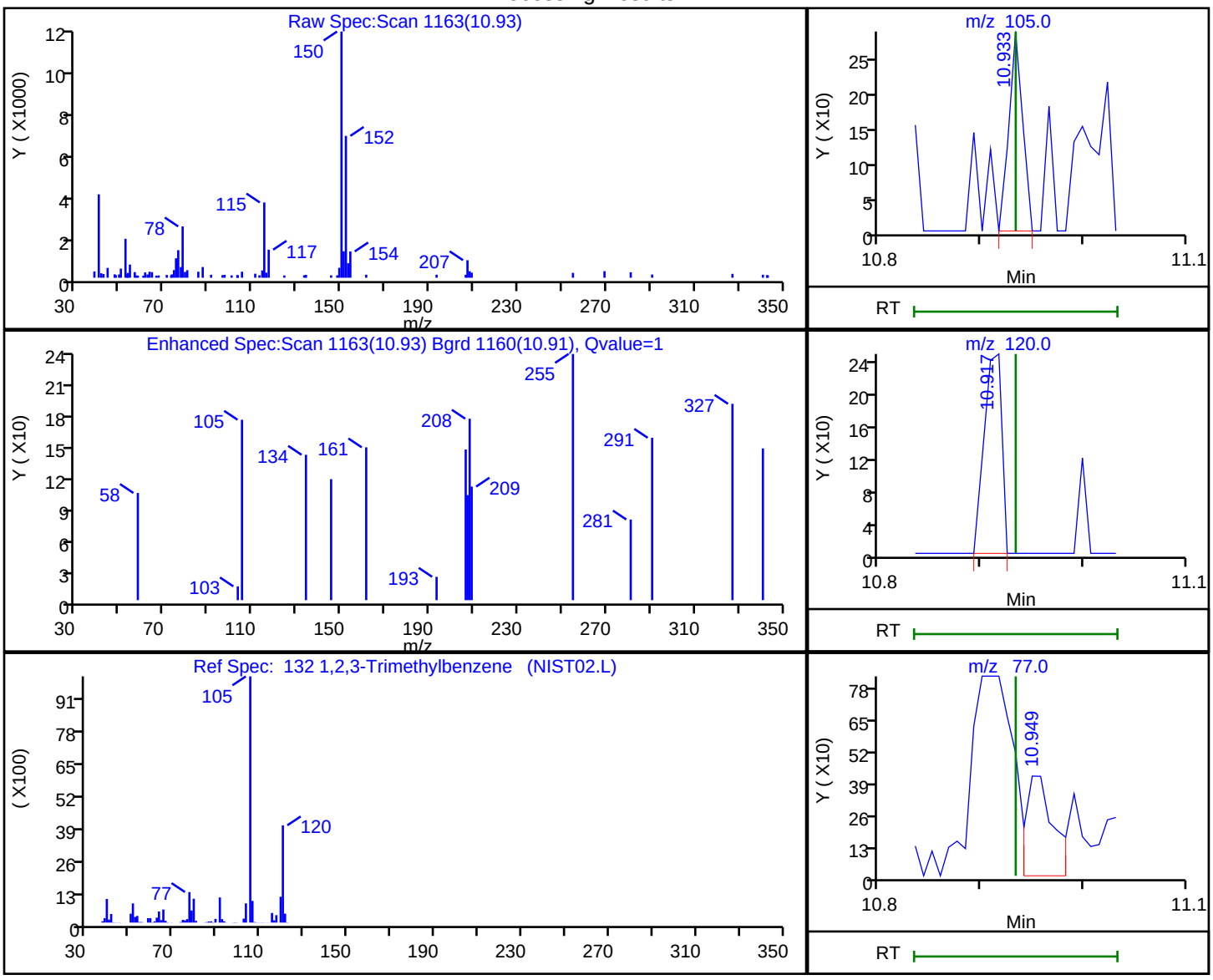
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

132 1,2,3-Trimethylbenzene, CAS: 526-73-8

Processing Results



RT	Mass	Response	Amount
10.93	105.00	269	0.017945
10.92	120.00	300	
10.95	77.00	784	

Reviewer: delpolitov, 08-Jul-2018 17:42:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

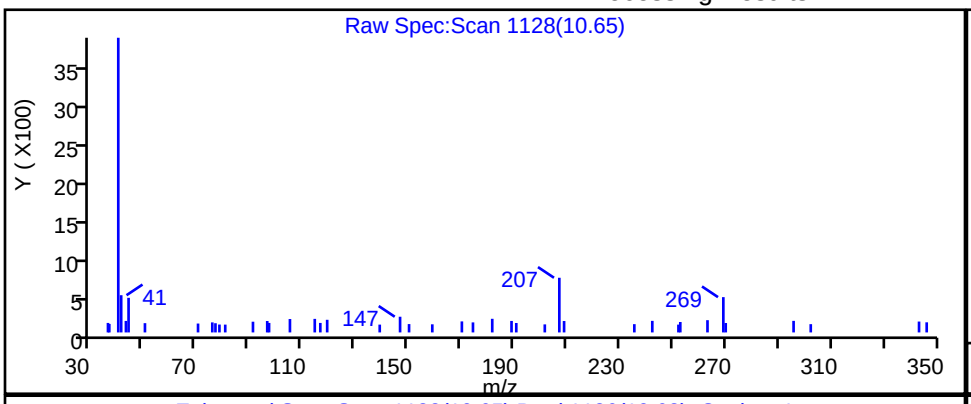
User Disabled Compound Report

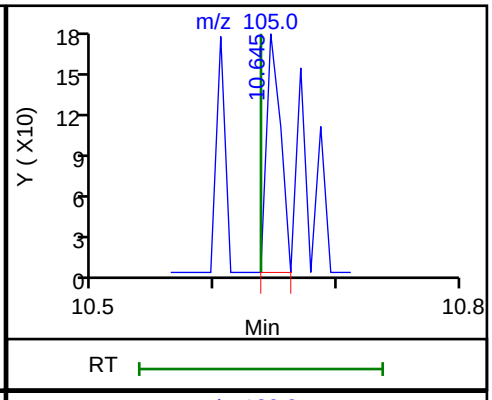
TestAmerica Edison

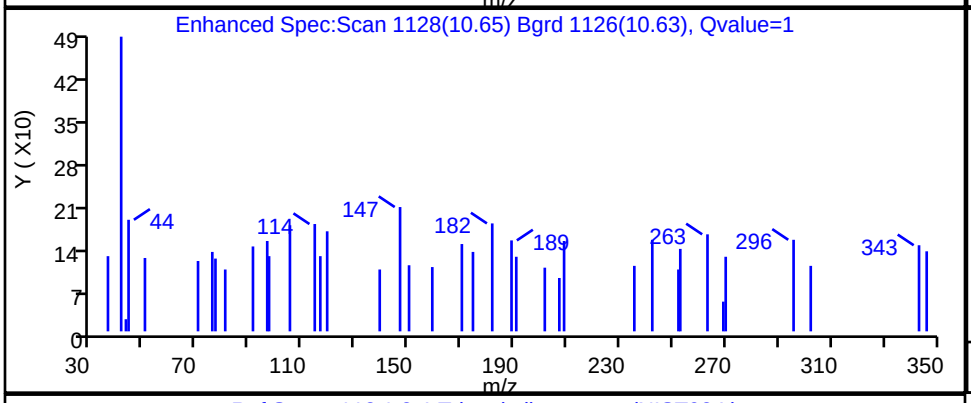
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D				
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

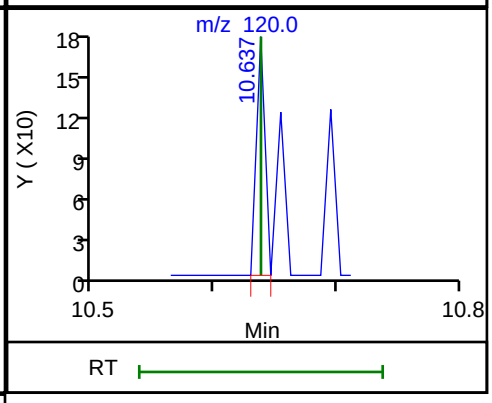
112 1,2,4-Trimethylbenzene, CAS: 95-63-6

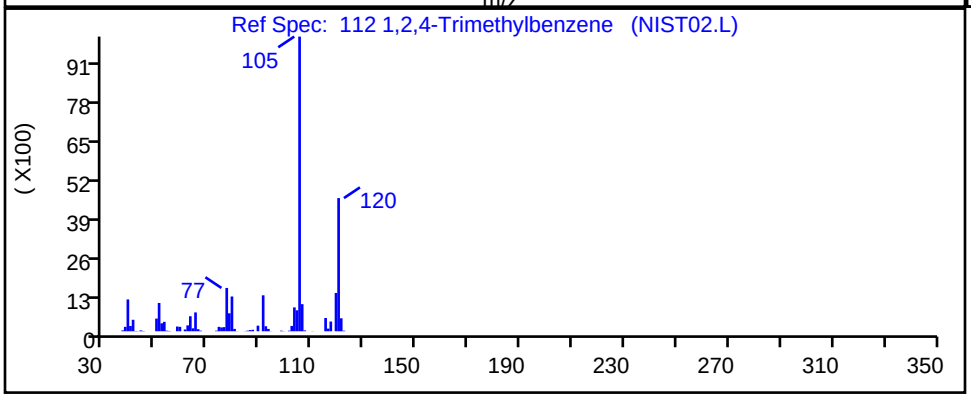
Processing Results











RT	Mass	Response	Amount
10.65	105.00	139	0.009853
10.64	120.00	86	

Reviewer: delpolitov, 08-Jul-2018 17:42:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

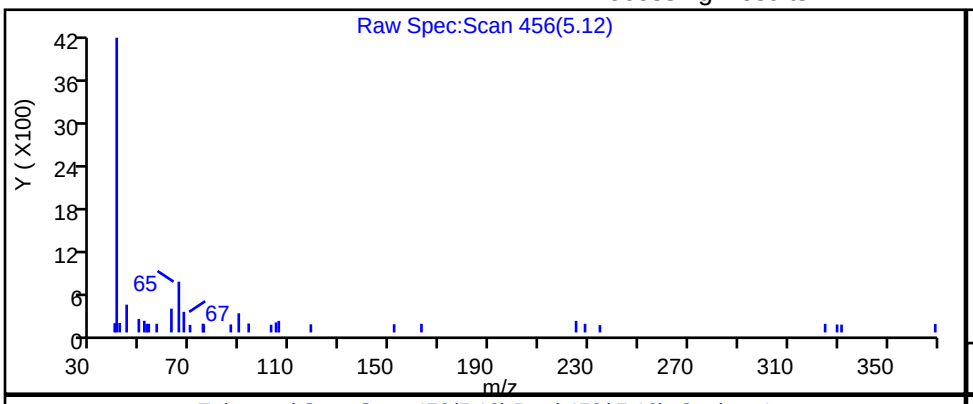
User Disabled Compound Report

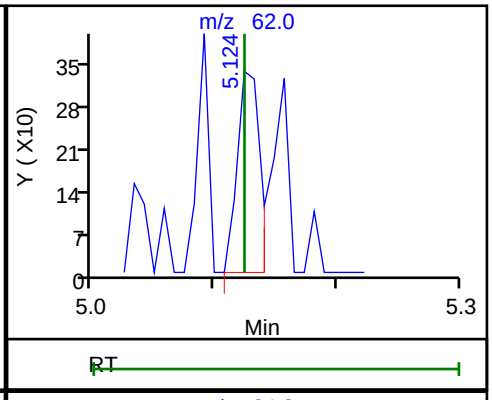
TestAmerica Edison

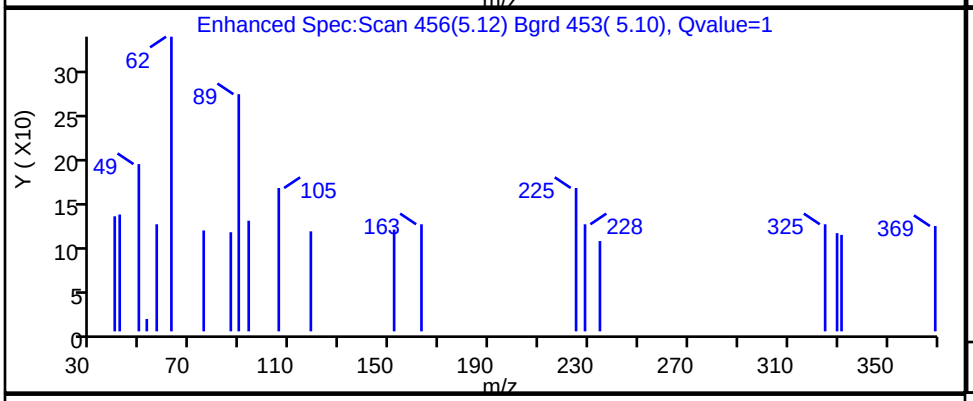
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

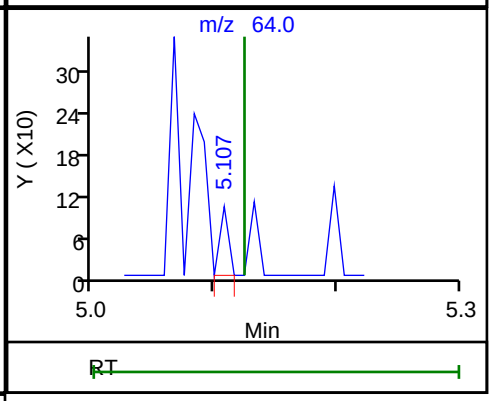
59 1,2-Dichloroethane, CAS: 107-06-2

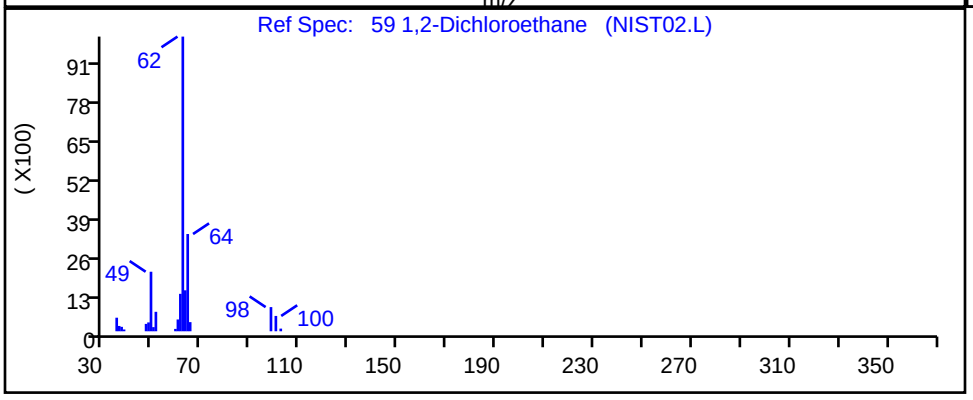
Processing Results











RT	Mass	Response	Amount
5.12	62.00	435	0.089154
5.11	64.00	49	

Reviewer: delpolitov, 08-Jul-2018 17:41:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

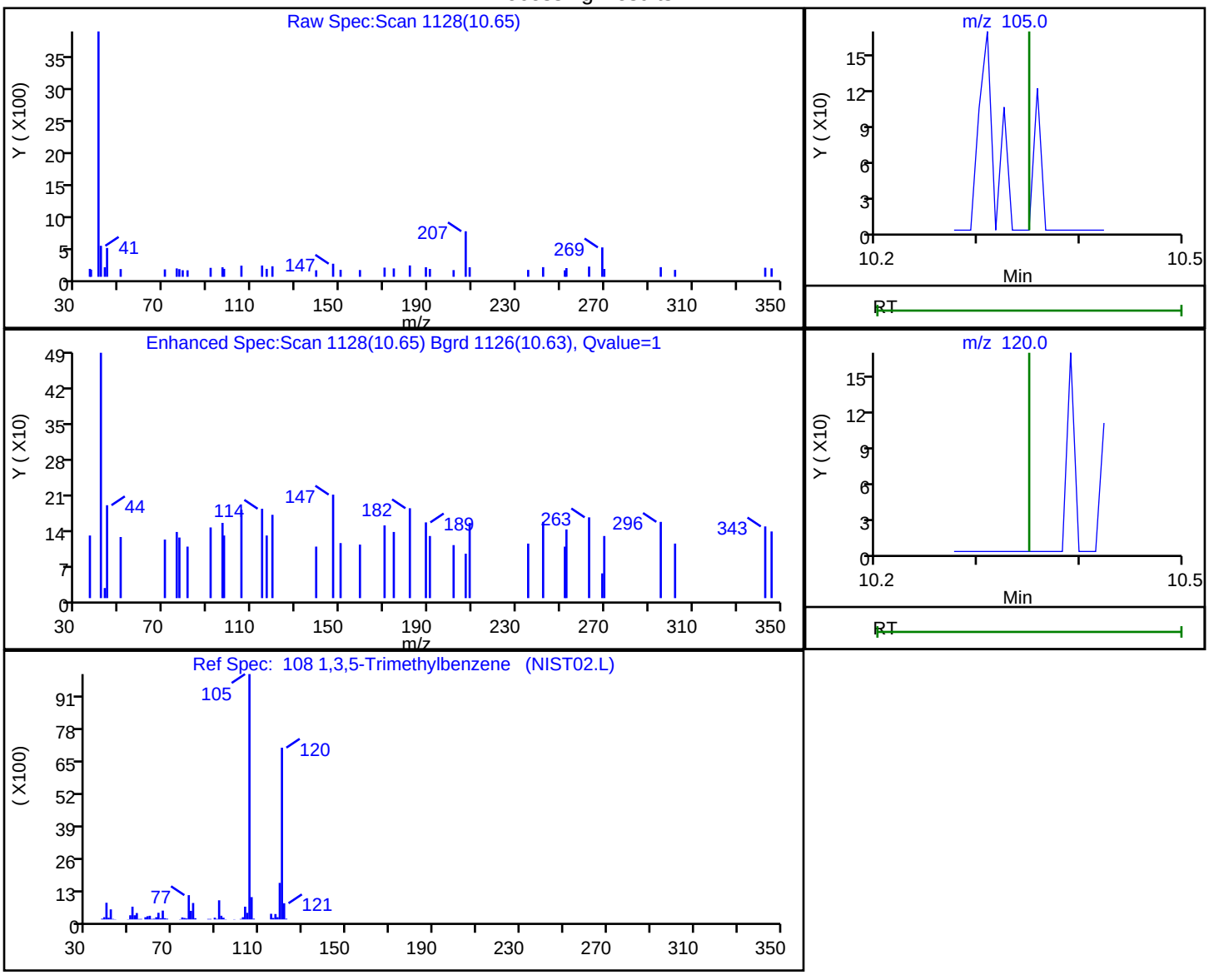
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

108 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
10.65	105.00	139	0.010024
10.64	120.00	86	

Reviewer: delpolitov, 08-Jul-2018 17:42:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

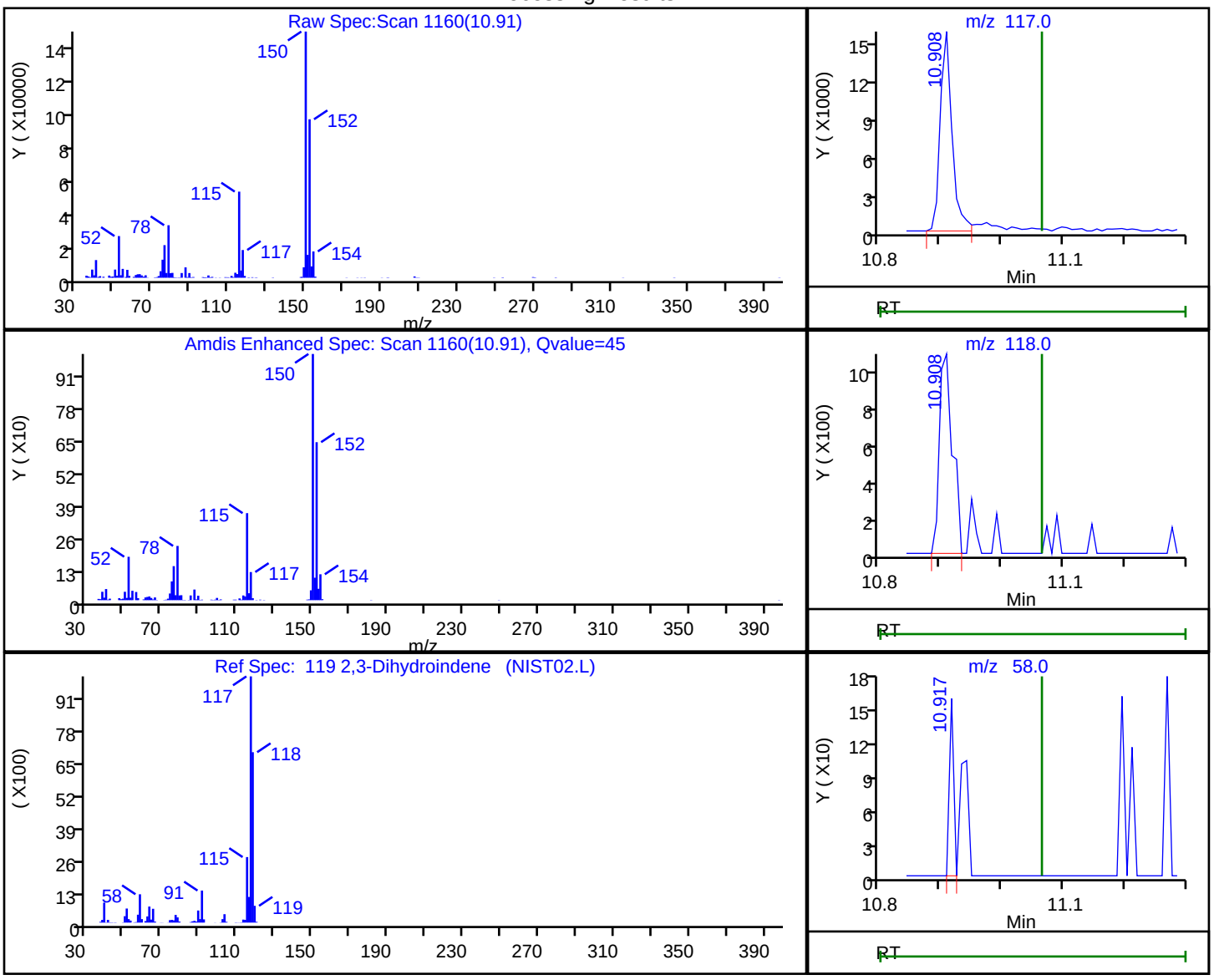
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

119 2,3-Dihydroindene, CAS: 496-11-7

Processing Results



RT	Mass	Response	Amount
10.91	117.00	21528	1.428457
10.91	118.00	1542	
10.92	58.00	79	

Reviewer: delpolitov, 08-Jul-2018 17:42:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

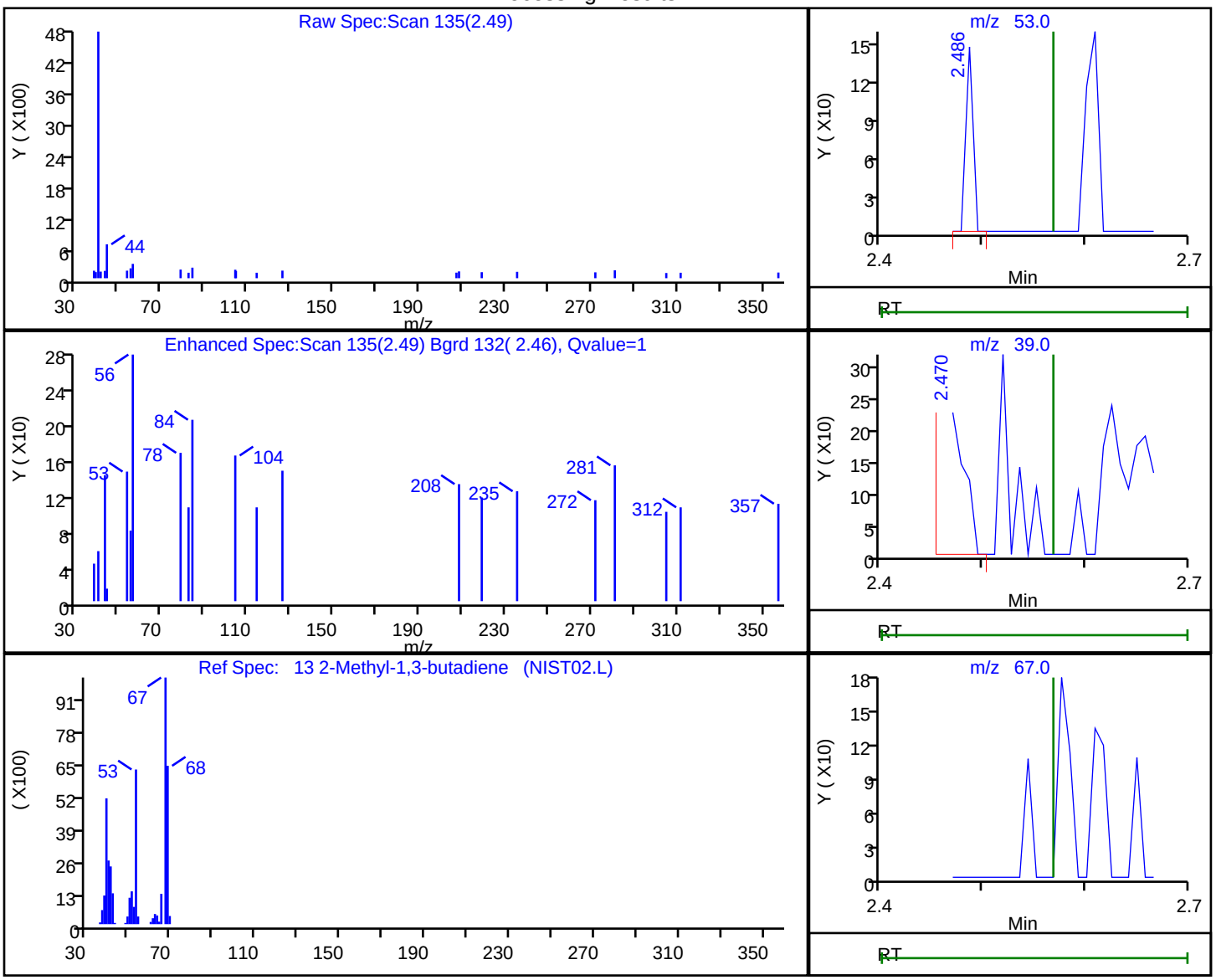
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

13 2-Methyl-1,3-butadiene, CAS: 78-79-5

Processing Results



RT	Mass	Response	Amount
2.49	53.00	71	0.020605
2.47	39.00	338	
2.57	67.00	0	

Reviewer: delpolitov, 08-Jul-2018 17:28:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

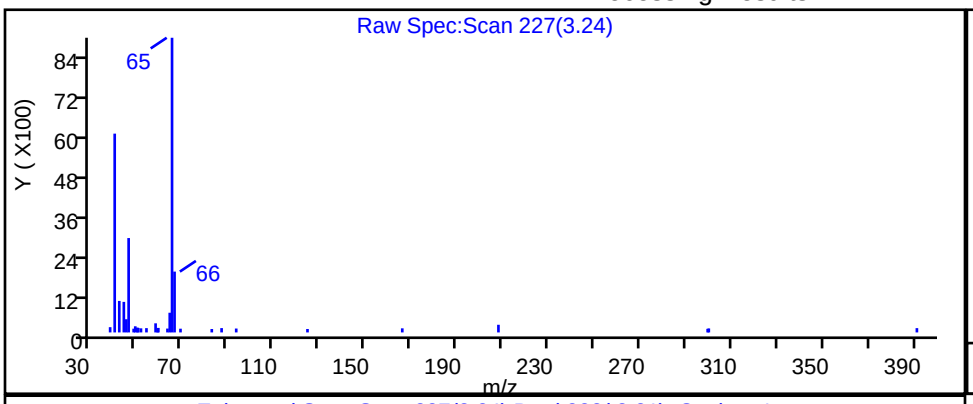
User Disabled Compound Report

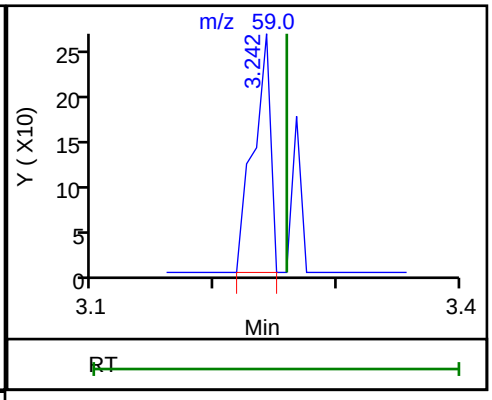
TestAmerica Edison

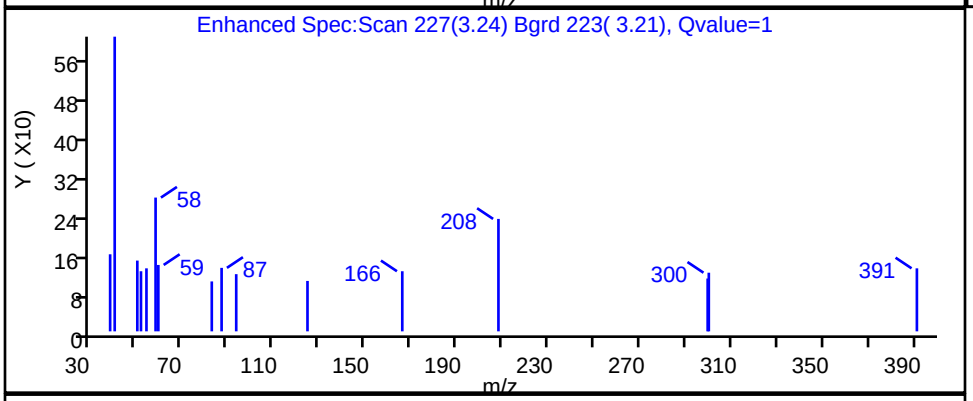
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

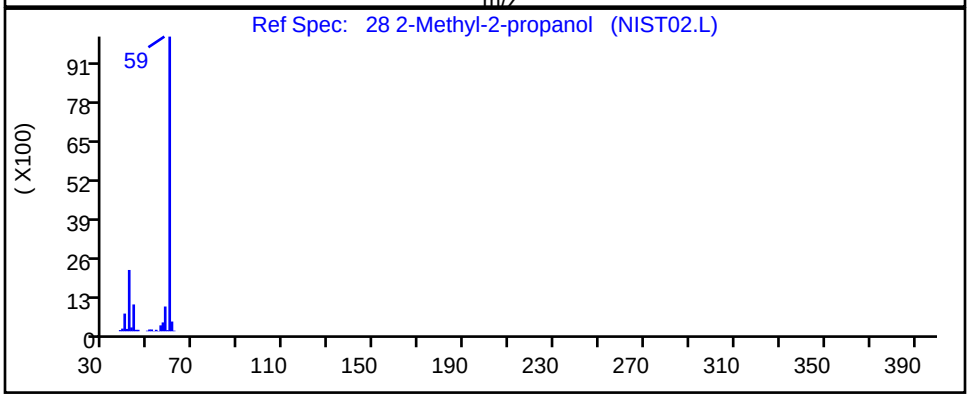
28 2-Methyl-2-propanol, CAS: 75-65-0

Processing Results









RT	Mass	Response	Amount
3.24	59.00	259	1.228827

Reviewer: delpolitov, 08-Jul-2018 17:28:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

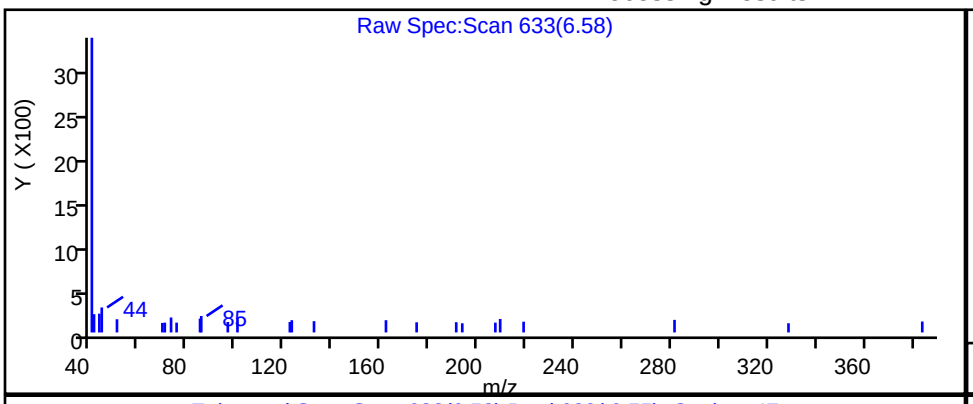
User Disabled Compound Report

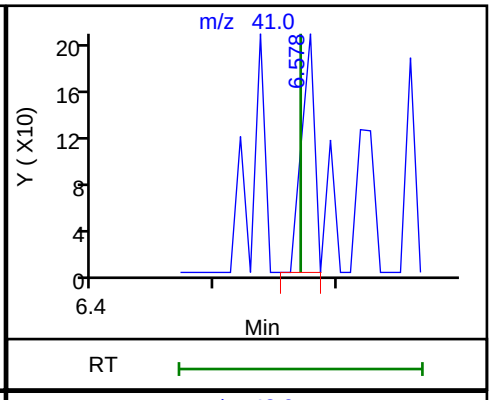
TestAmerica Edison

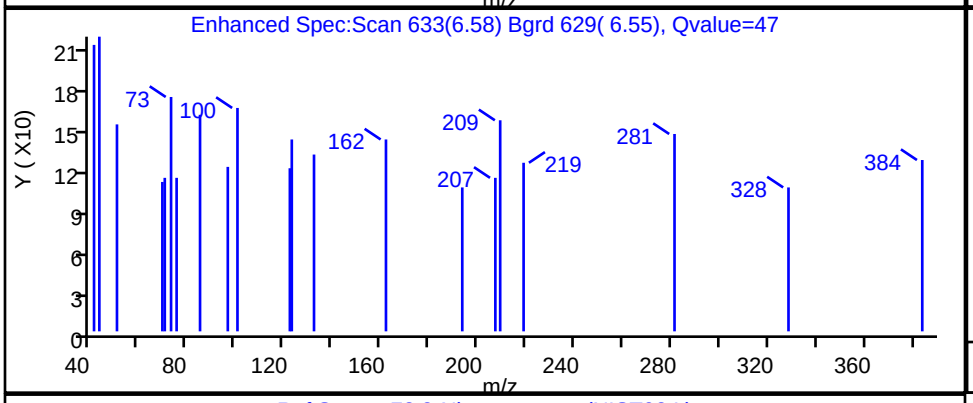
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

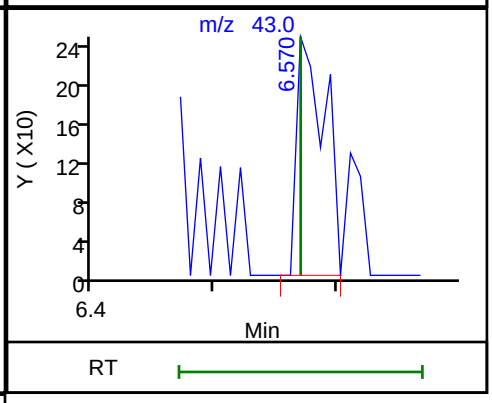
73 2-Nitropropane, CAS: 79-46-9

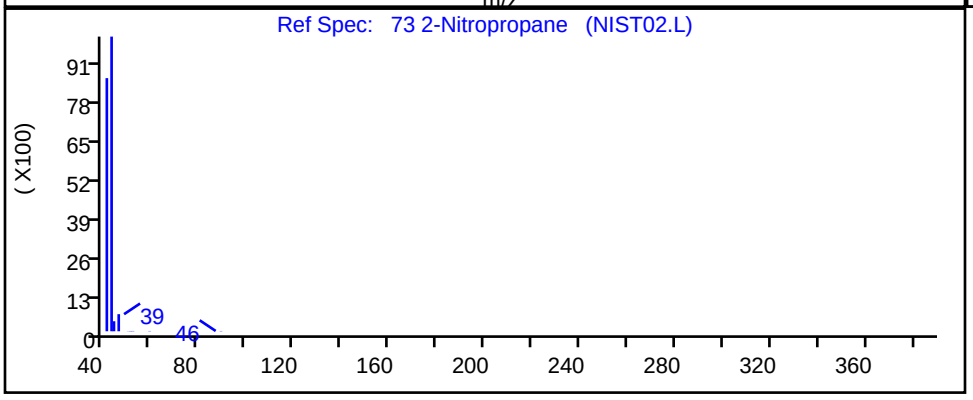
Processing Results











RT	Mass	Response	Amount
6.58	41.00	155	0.212127
6.57	43.00	394	

Reviewer: delpolitov, 08-Jul-2018 17:41:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

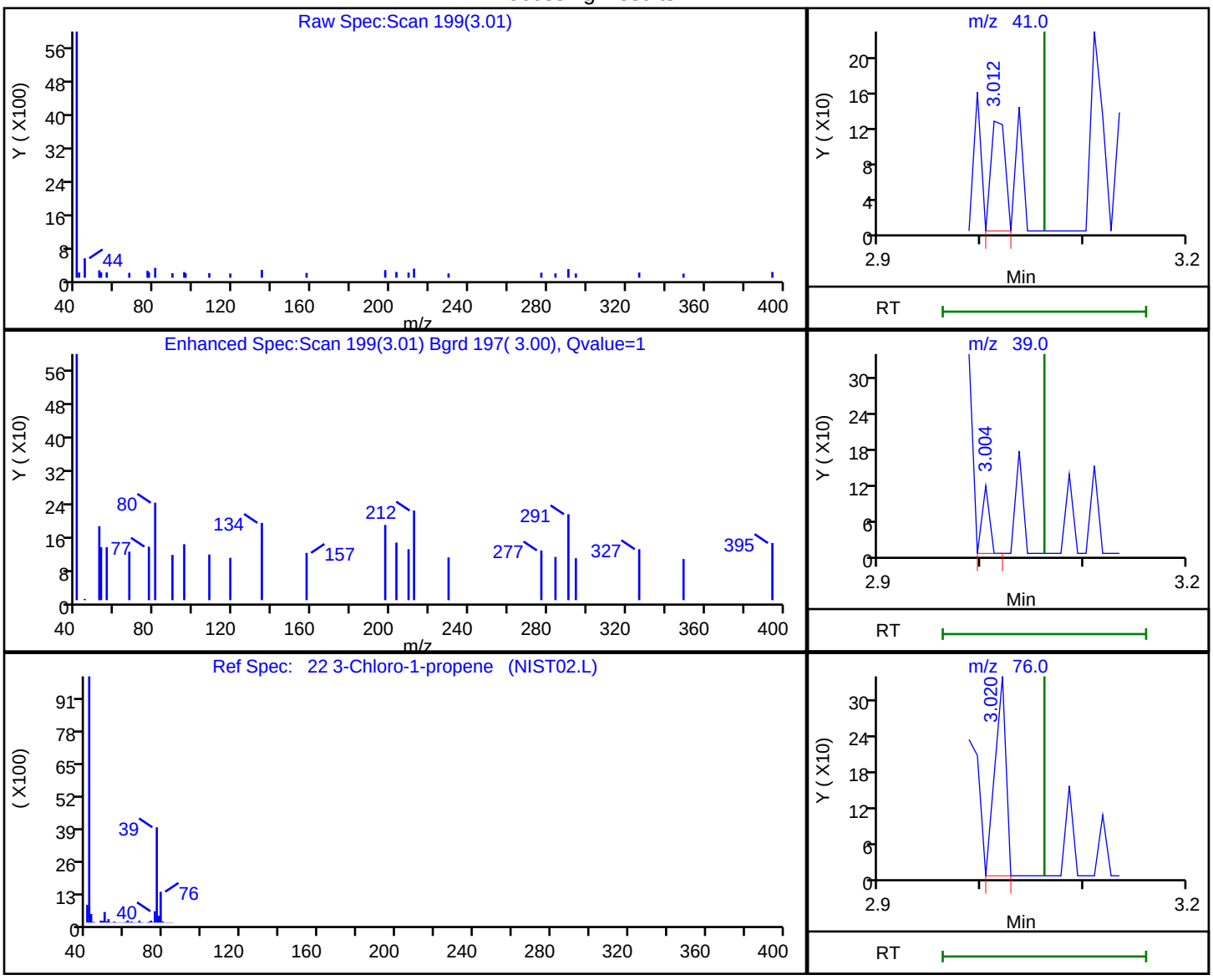
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

22 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
3.01	41.00	121	0.016574
3.00	39.00	56	
3.02	76.00	248	

Reviewer: delpolitov, 08-Jul-2018 17:28:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

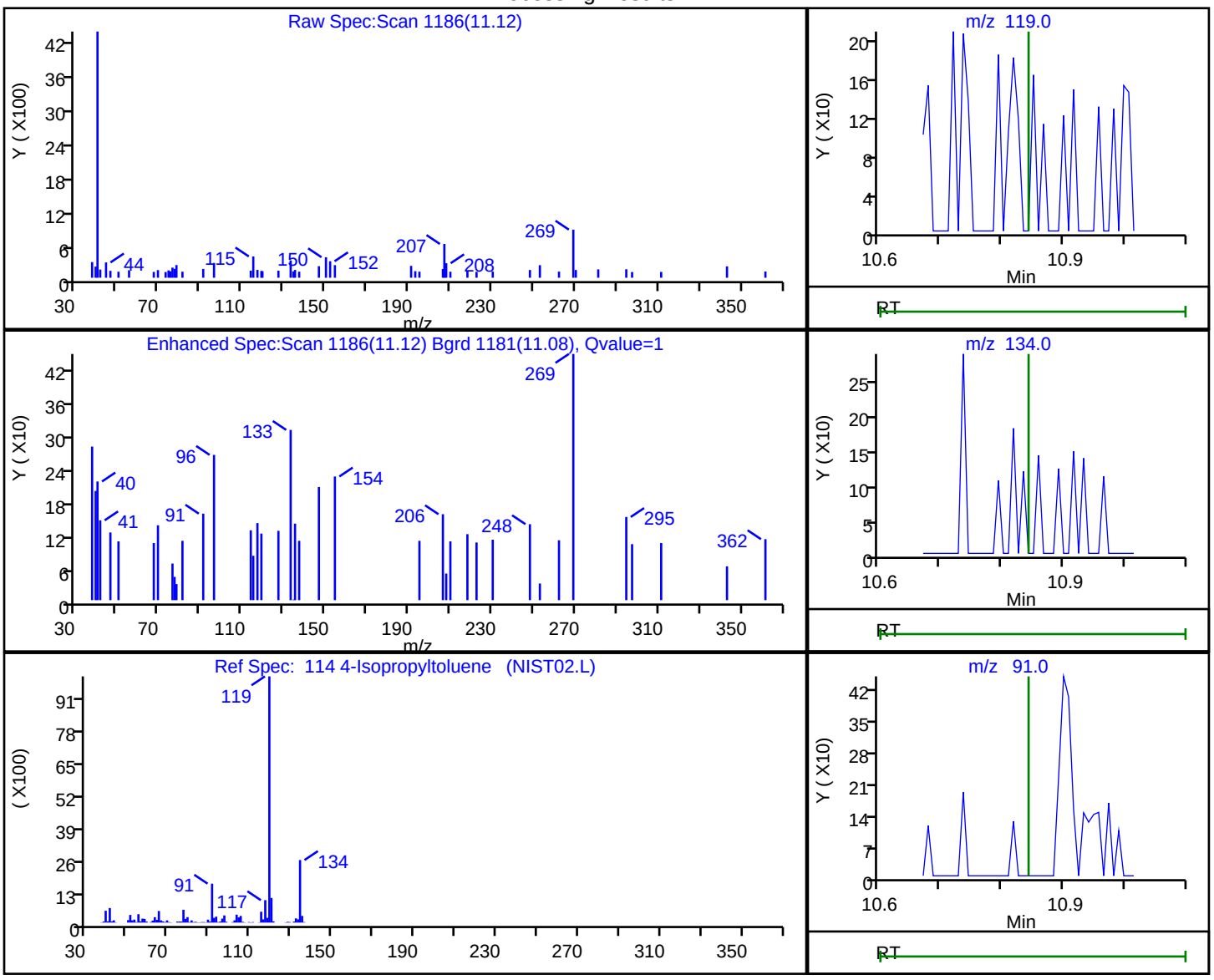
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

114 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
11.12	119.00	510	0.035044
11.12	134.00	55	
11.11	91.00	172	

Reviewer: delpolitov, 08-Jul-2018 17:42:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

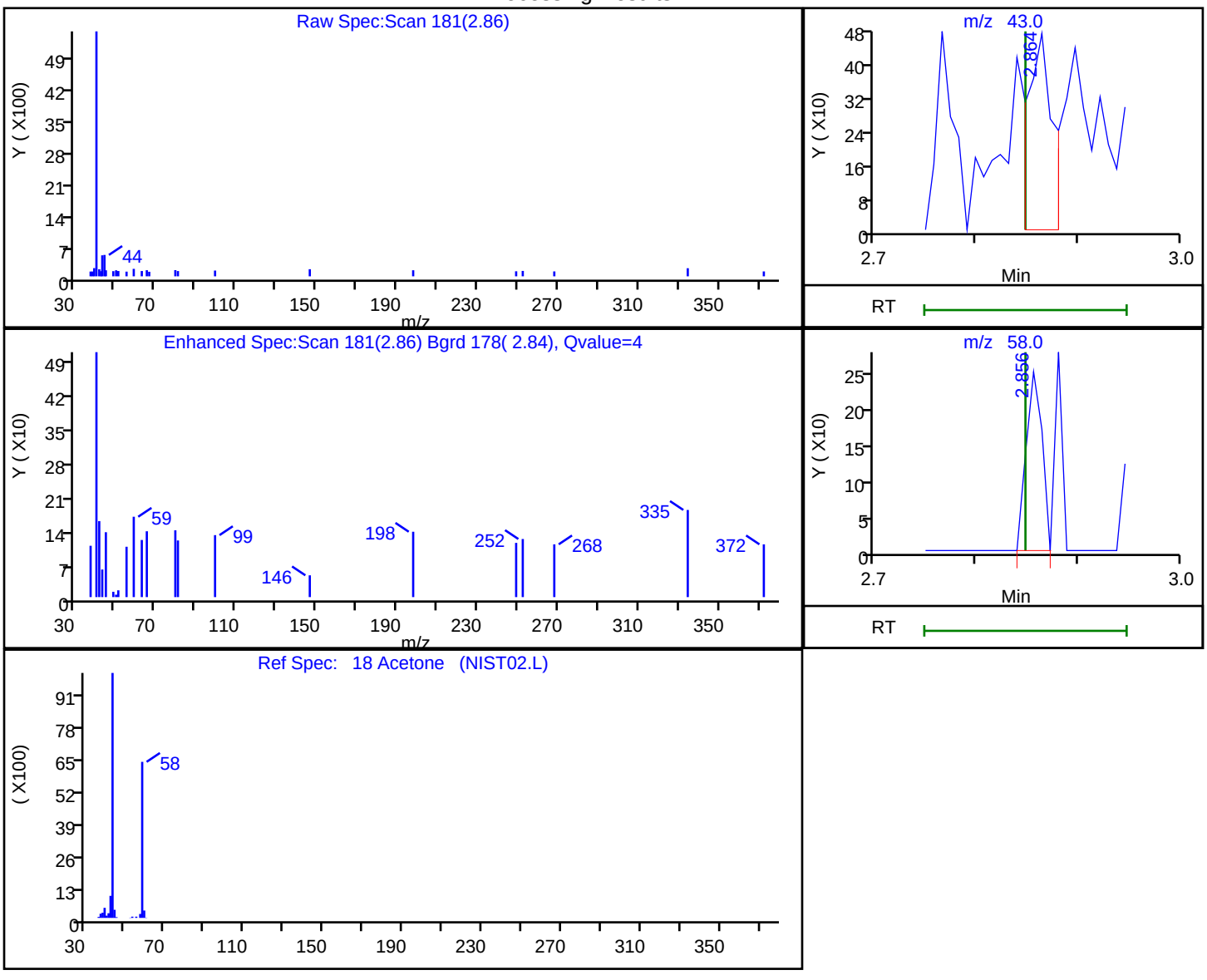
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.86	43.00	804	1.057880
2.86	58.00	267	

Reviewer: delpolitov, 08-Jul-2018 17:28:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

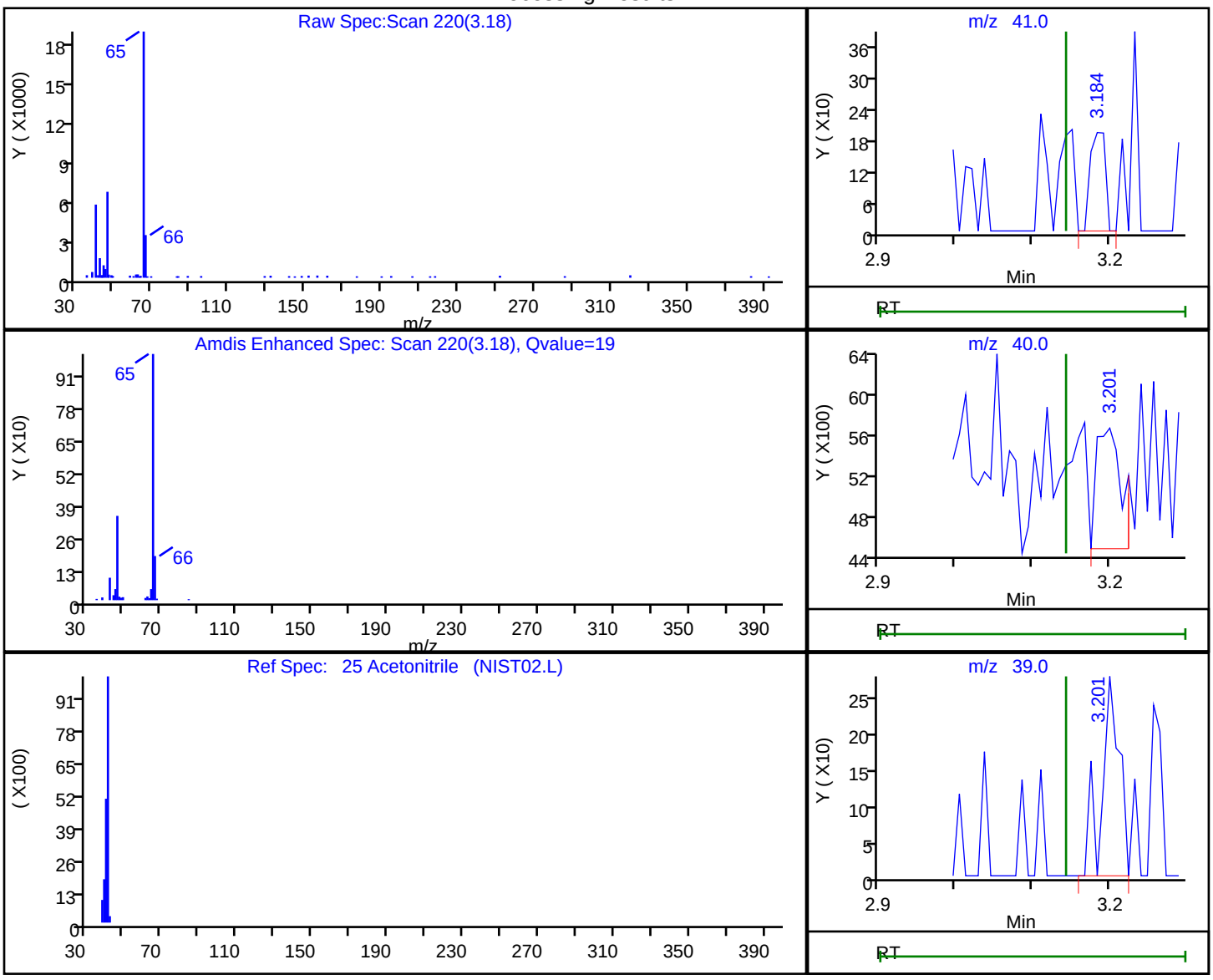
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
3.18	41.00	264	0.389556
3.20	40.00	2550	
3.20	39.00	450	
3.18	38.00	738	

Reviewer: delpolitov, 08-Jul-2018 17:28:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

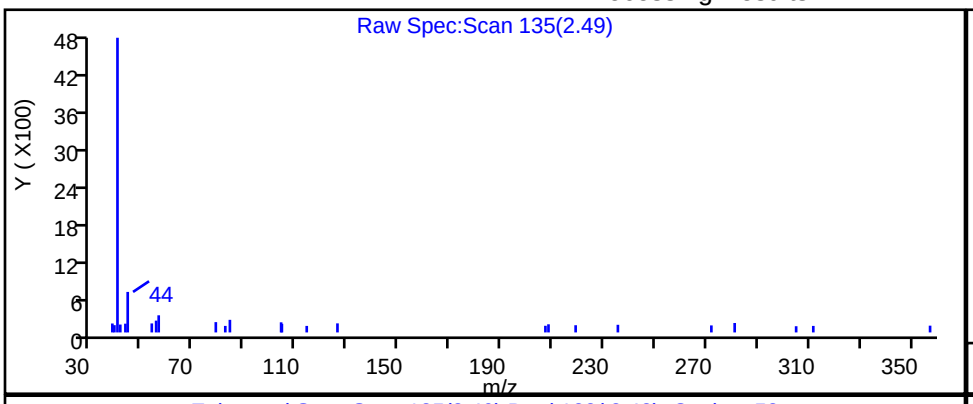
User Disabled Compound Report

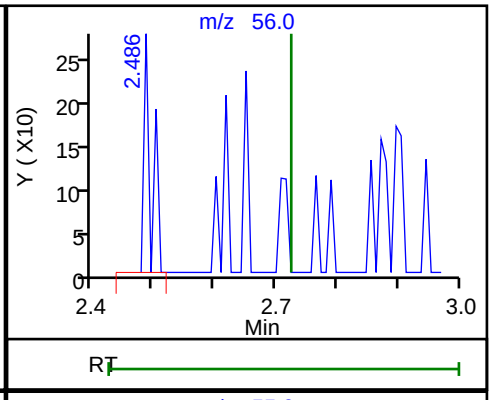
TestAmerica Edison

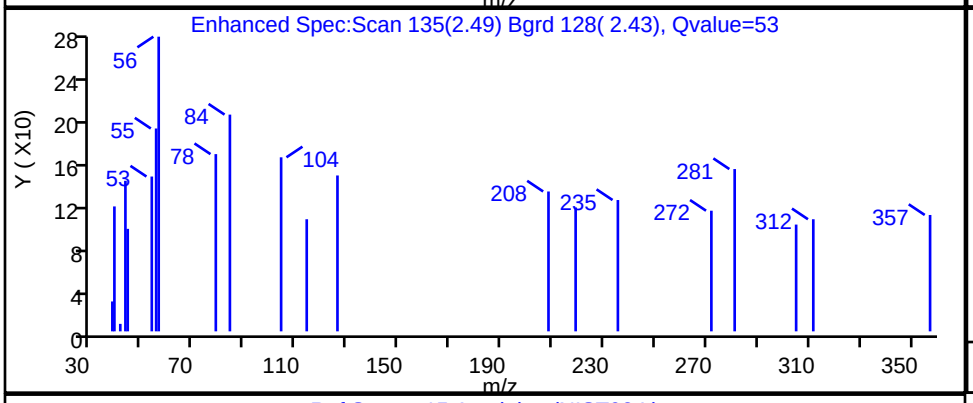
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

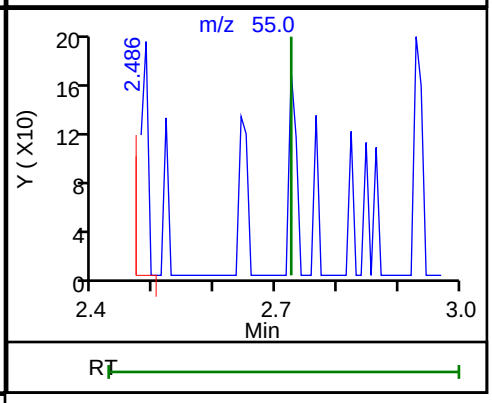
15 Acrolein, CAS: 107-02-8

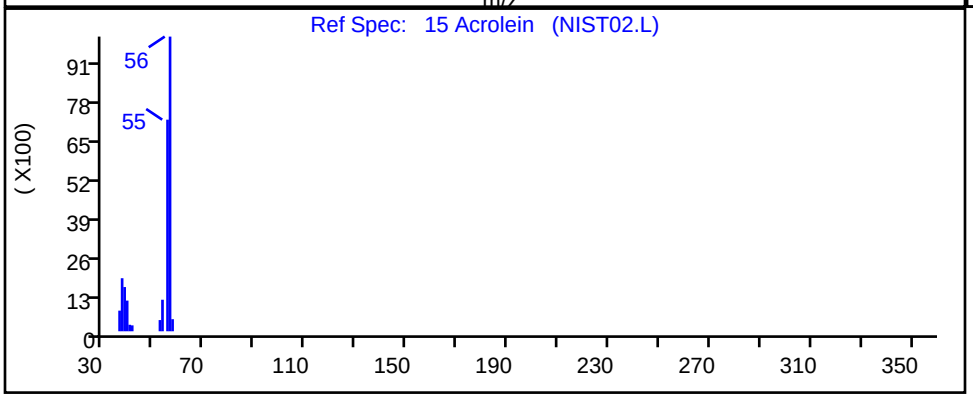
Processing Results











RT	Mass	Response	Amount
2.49	56.00	308	1.449360
2.49	55.00	203	

Reviewer: delpolitov, 08-Jul-2018 17:28:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

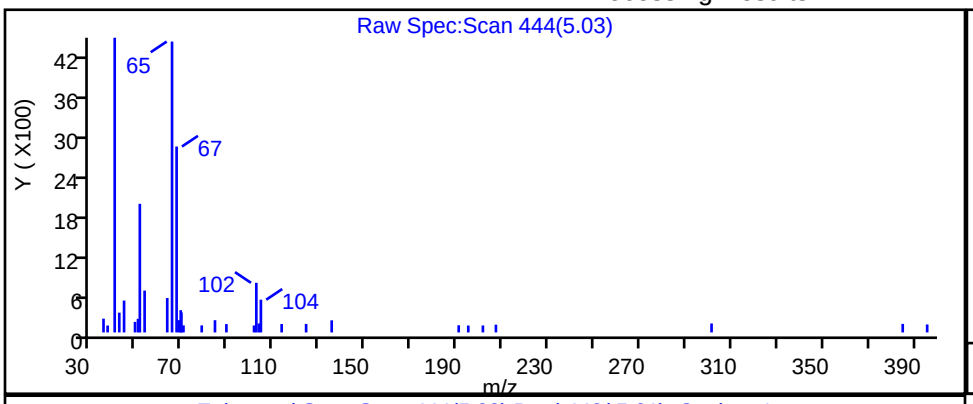
User Disabled Compound Report

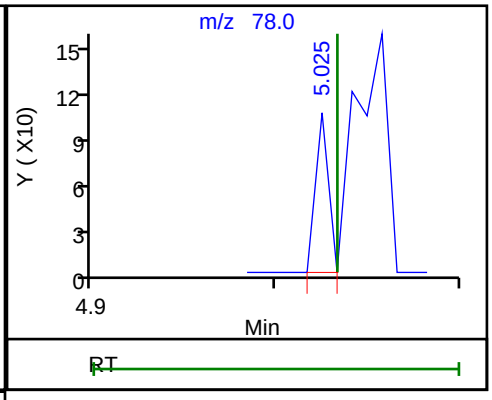
TestAmerica Edison

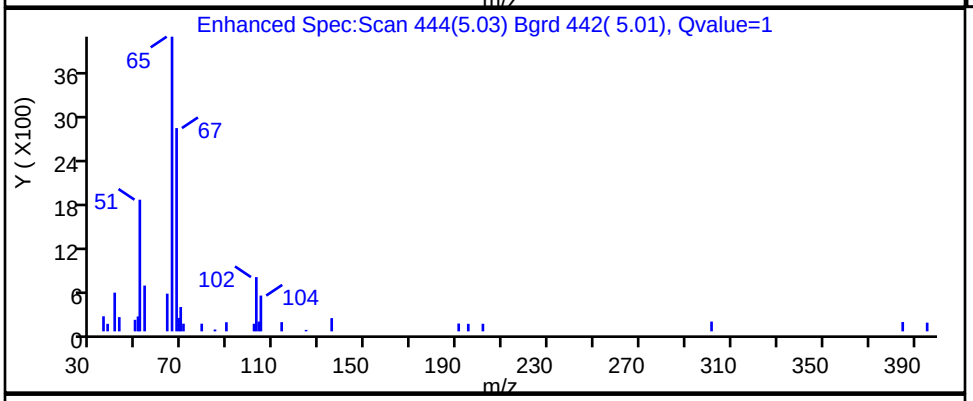
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

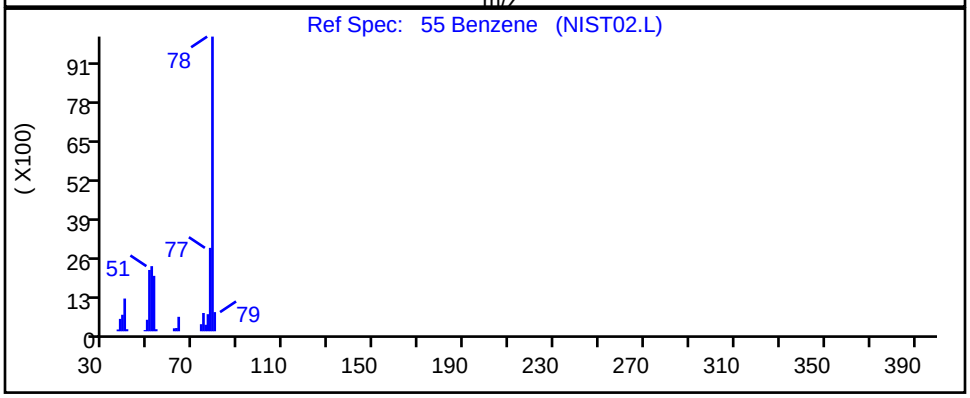
55 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
5.03	78.00	52	0.003313

Reviewer: delpolitov, 08-Jul-2018 17:28:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

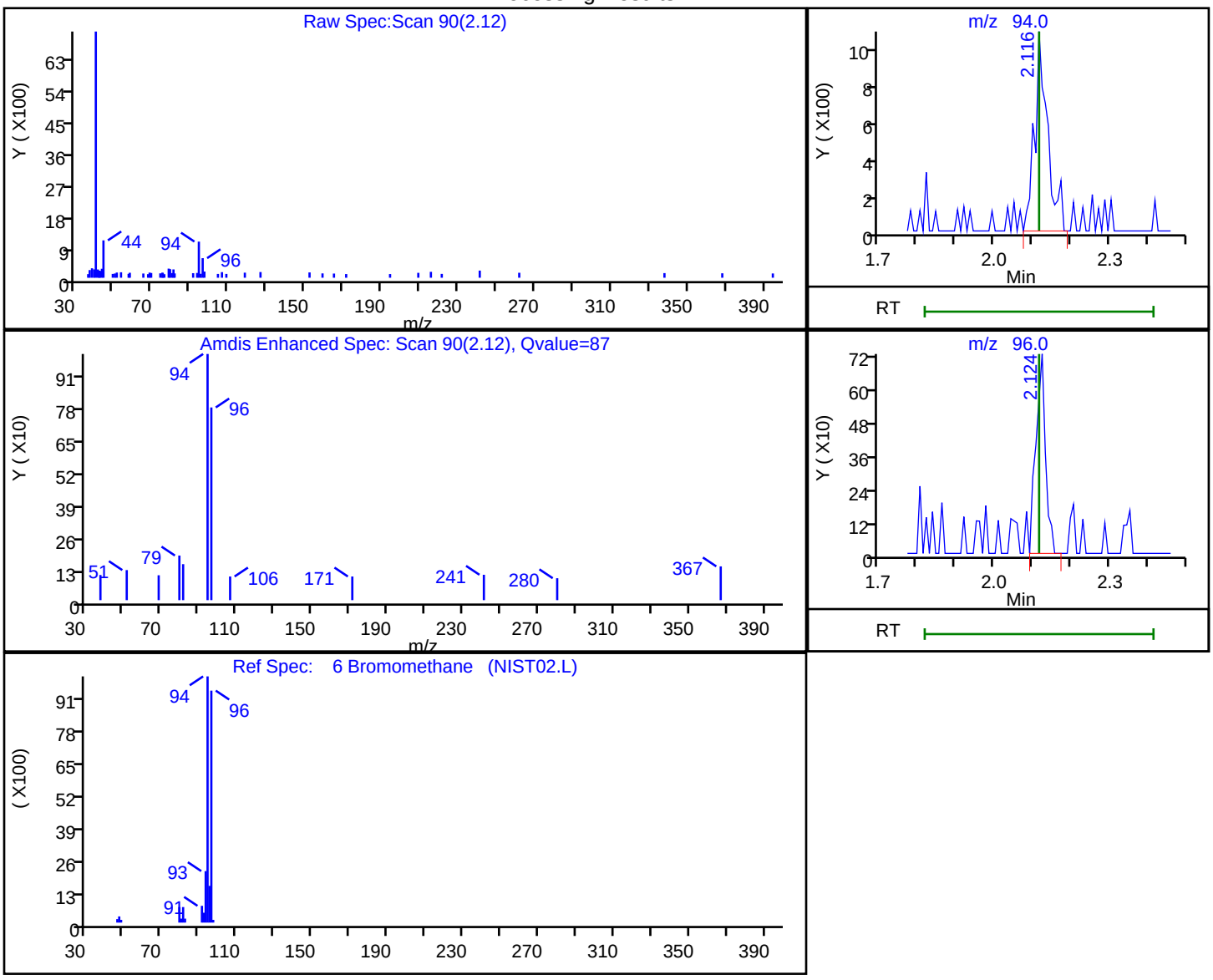
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

6 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.12	94.00	2459	0.511360
2.12	96.00	1264	

Reviewer: delpolitov, 08-Jul-2018 17:28:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

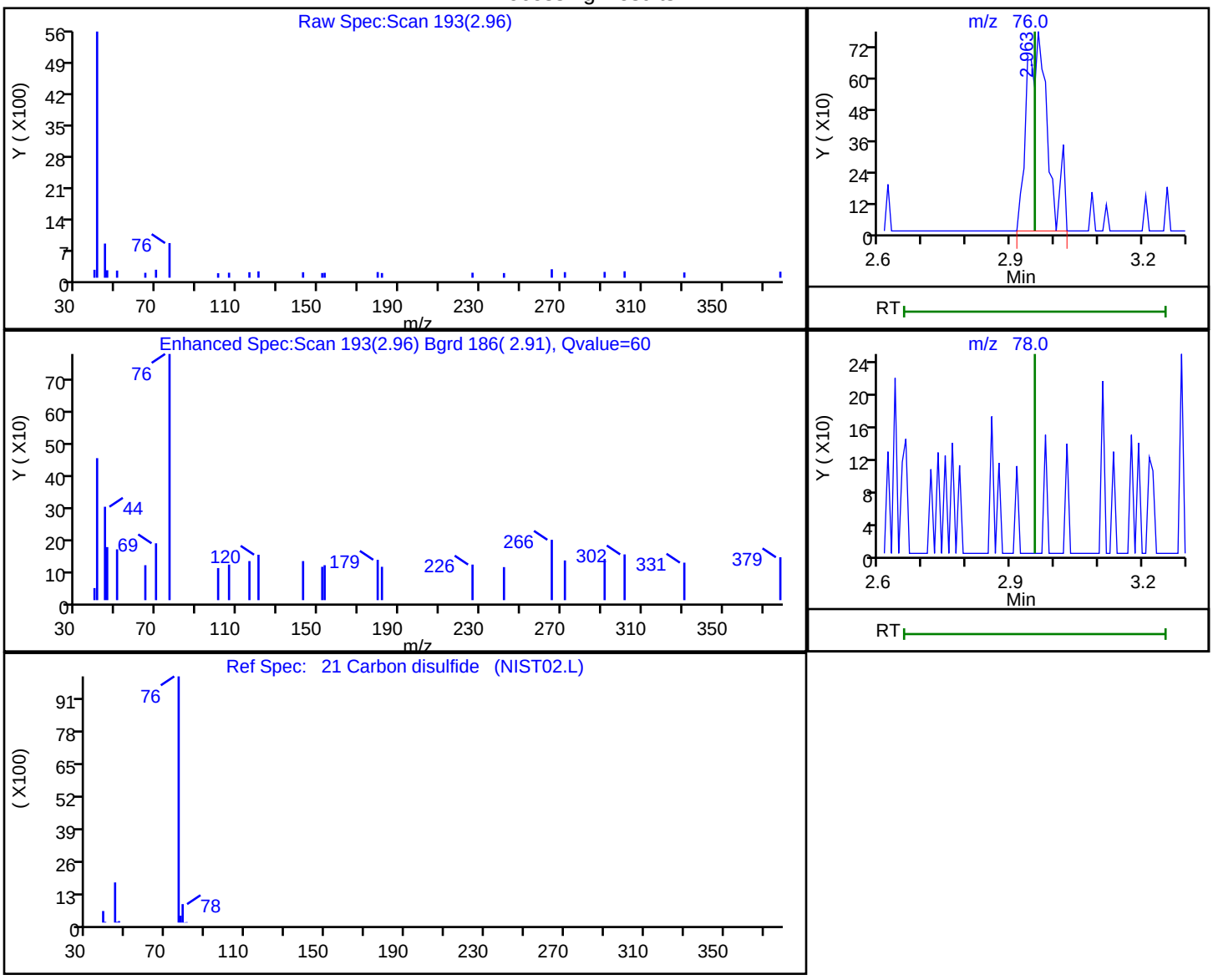
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

21 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
2.96	76.00	2561	0.167750
2.95	78.00	0	

Reviewer: delpolitov, 08-Jul-2018 17:28:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

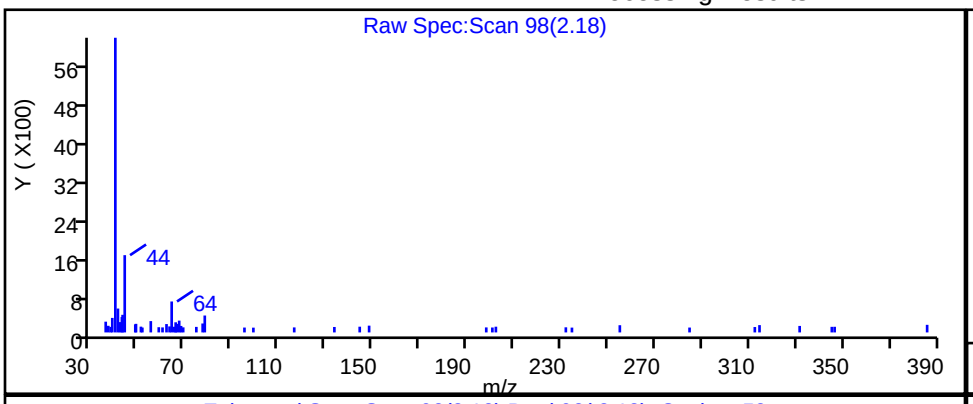
User Disabled Compound Report

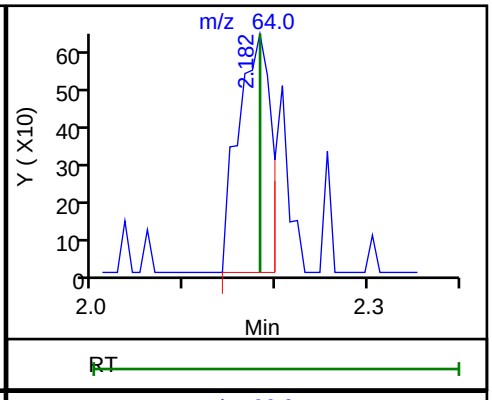
TestAmerica Edison

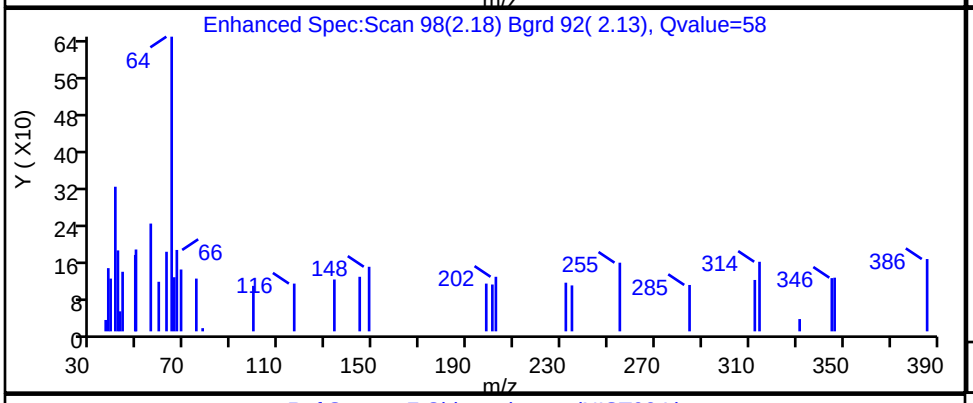
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

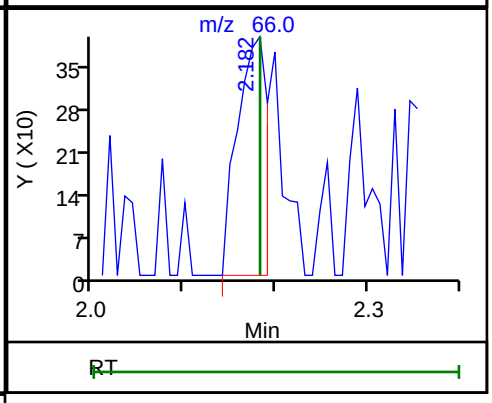
7 Chloroethane, CAS: 75-00-3

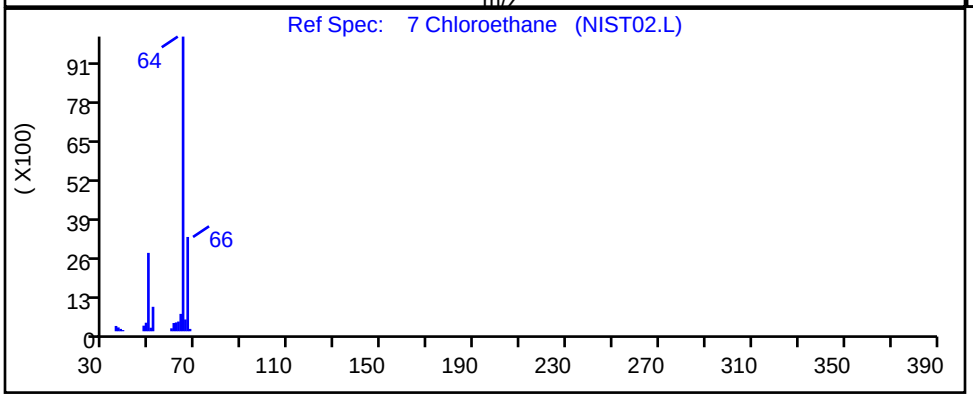
Processing Results











RT	Mass	Response	Amount
2.18	64.00	1609	0.352180
2.18	66.00	880	

Reviewer: delpolitov, 08-Jul-2018 17:28:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

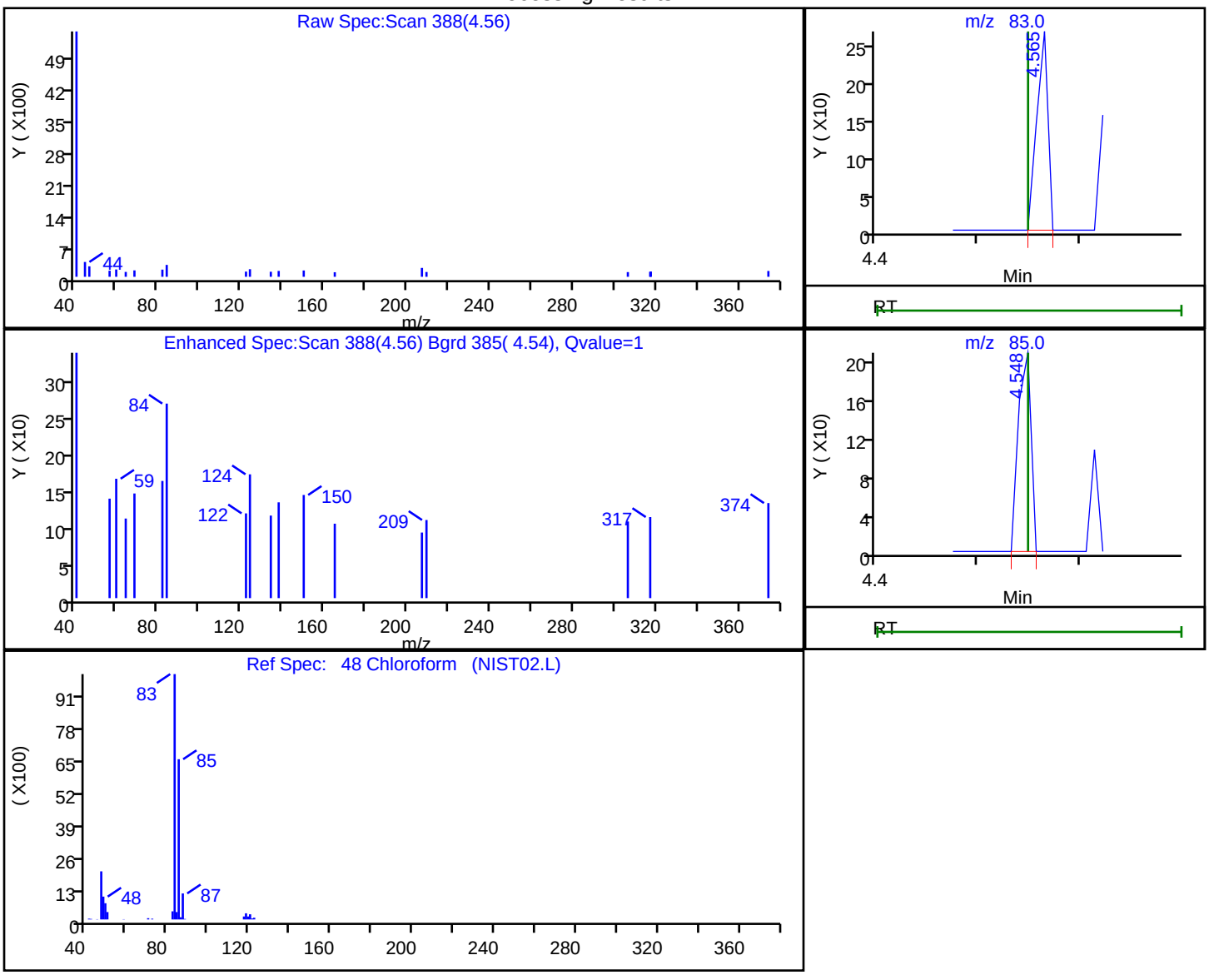
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

48 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
4.56	83.00	200	0.029537
4.55	85.00	182	

Reviewer: delpolitov, 08-Jul-2018 17:28:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

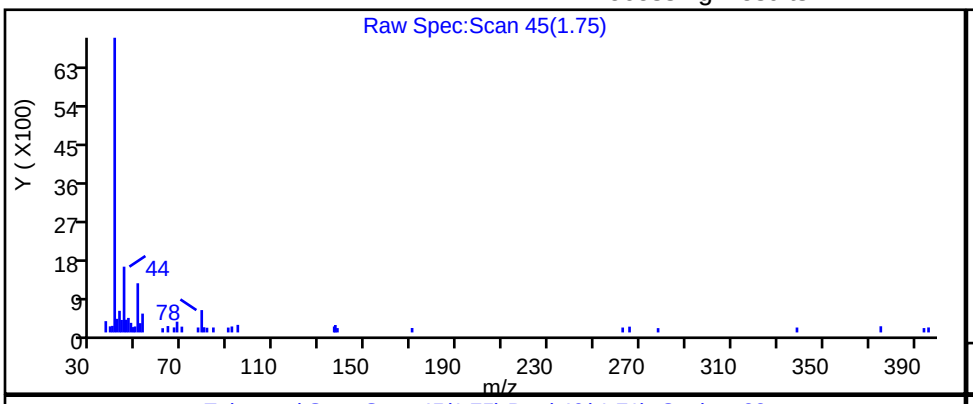
User Disabled Compound Report

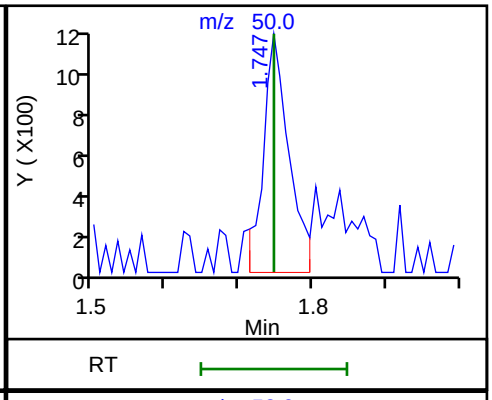
TestAmerica Edison

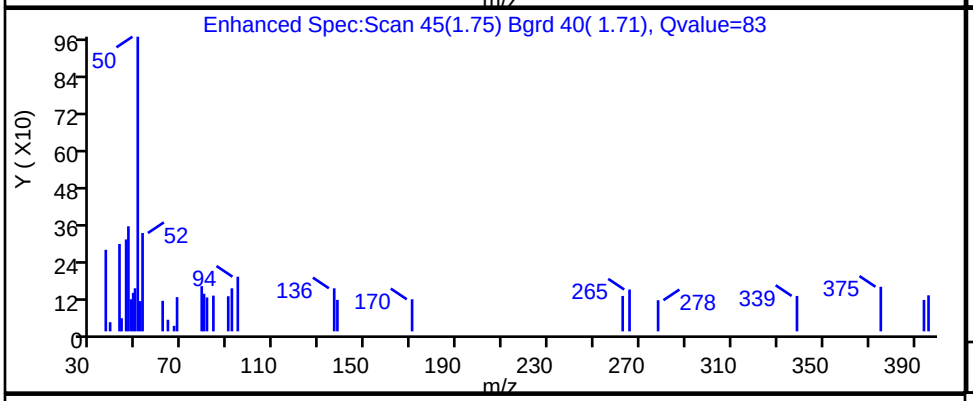
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

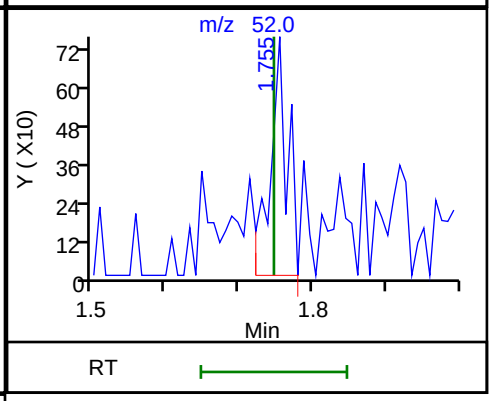
3 Chloromethane, CAS: 74-87-3

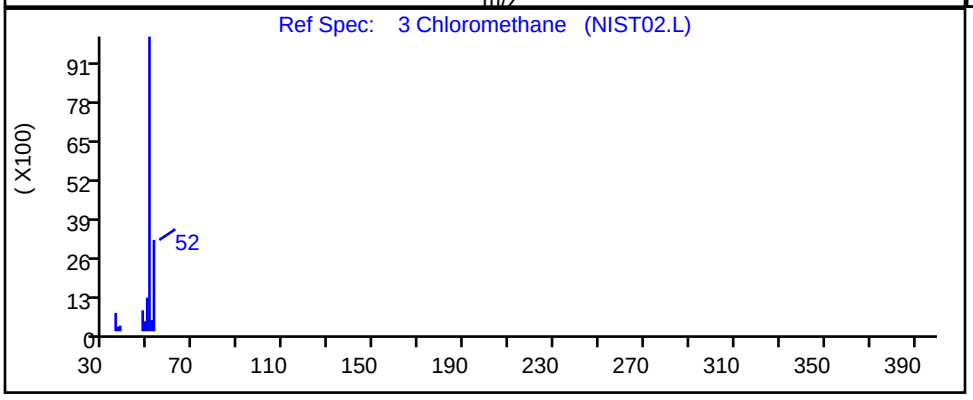
Processing Results











RT	Mass	Response	Amount
1.75	50.00	2848	0.389073
1.75	52.00	1225	

Reviewer: delpolitov, 08-Jul-2018 17:27:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

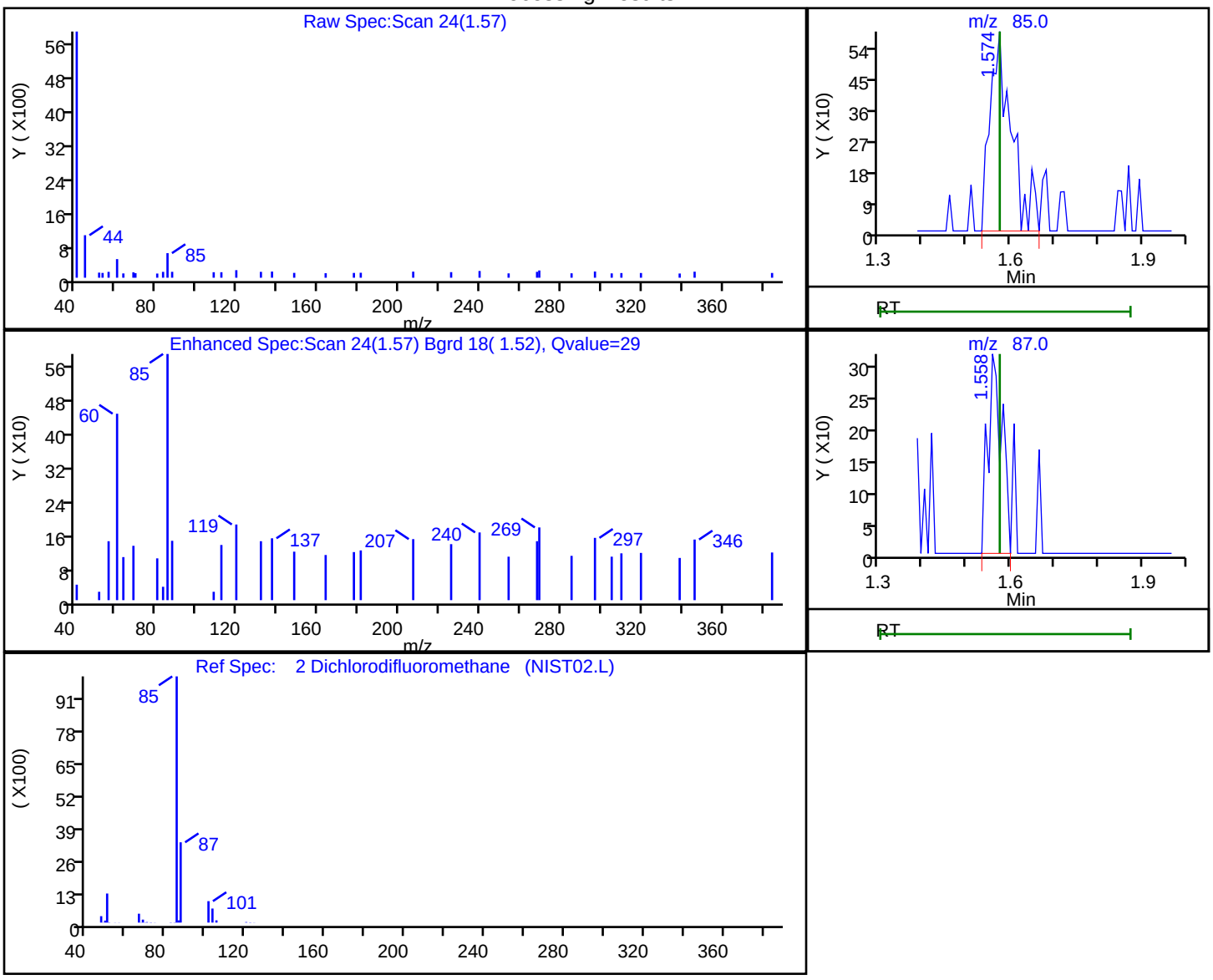
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.57	85.00	2000	0.323927
1.56	87.00	708	

Reviewer: delpolitov, 08-Jul-2018 17:27:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

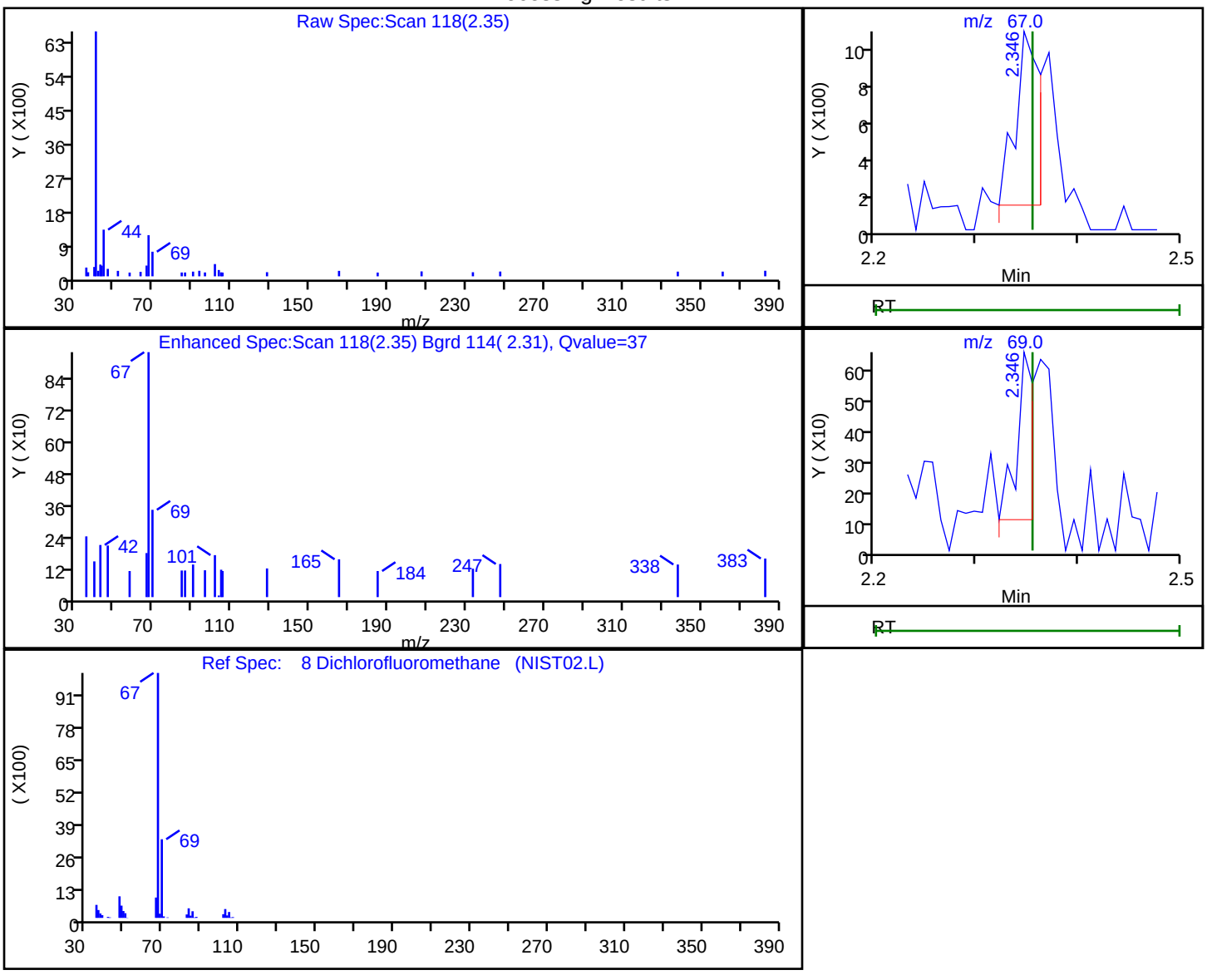
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 Dichlorofluoromethane, CAS: 75-43-4

Processing Results



RT	Mass	Response	Amount
2.35	67.00	1585	0.183216
2.35	69.00	634	

Reviewer: delpolitov, 08-Jul-2018 17:28:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

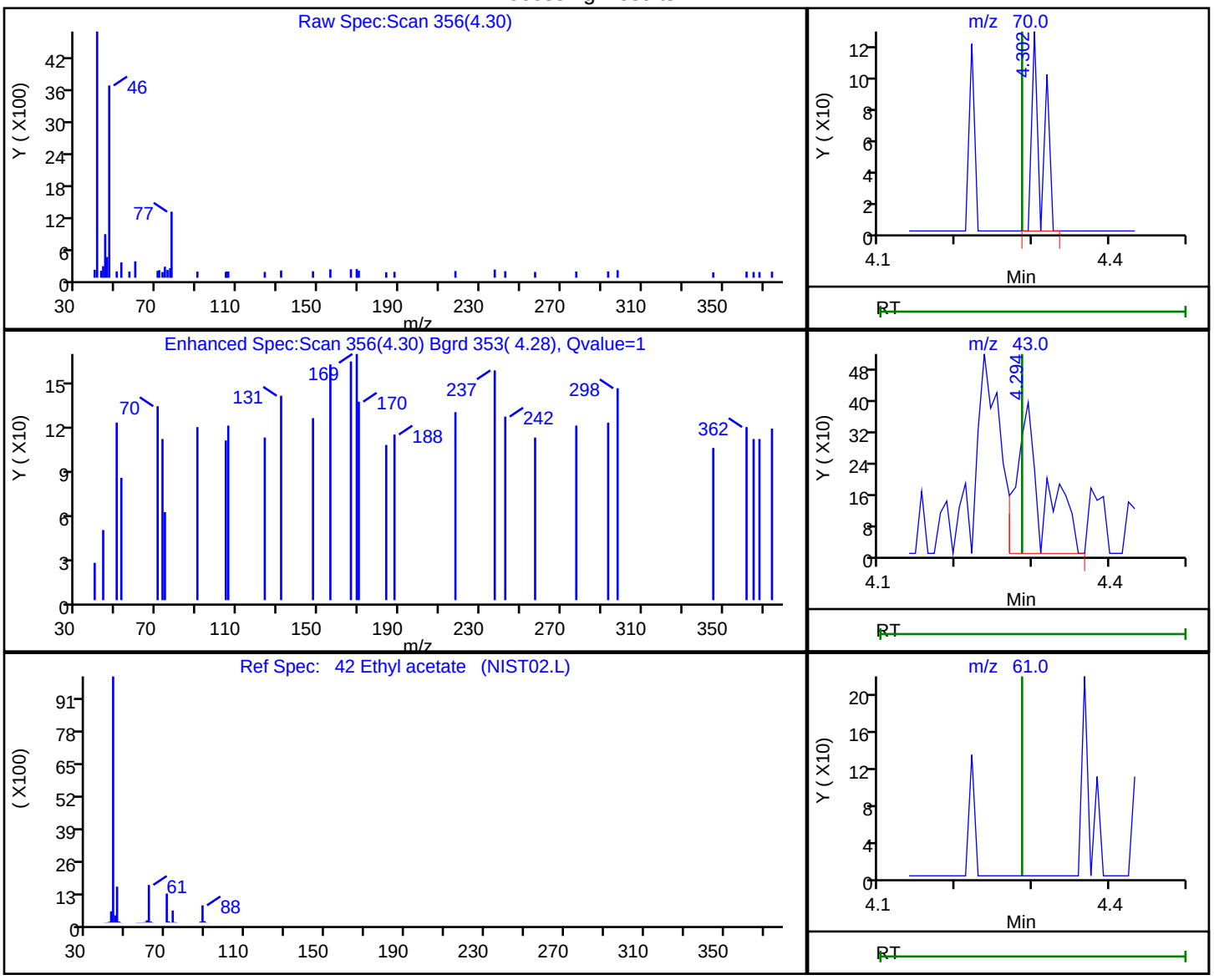
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

42 Ethyl acetate, CAS: 141-78-6

Processing Results



RT	Mass	Response	Amount
4.30	70.00	114	0.346025
4.29	43.00	966	
4.29	61.00	0	

Reviewer: delpolitov, 08-Jul-2018 17:28:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

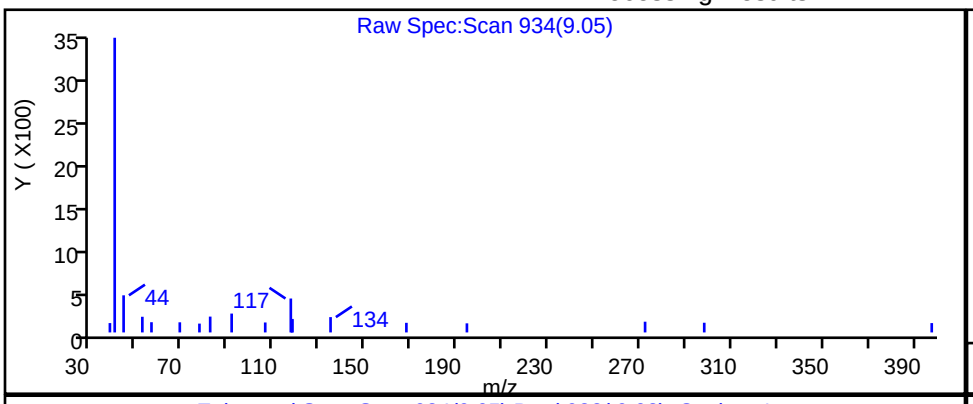
User Disabled Compound Report

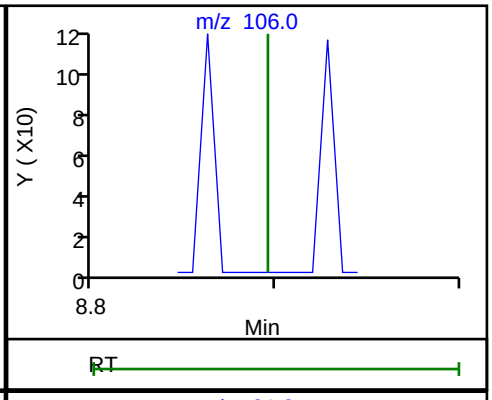
TestAmerica Edison

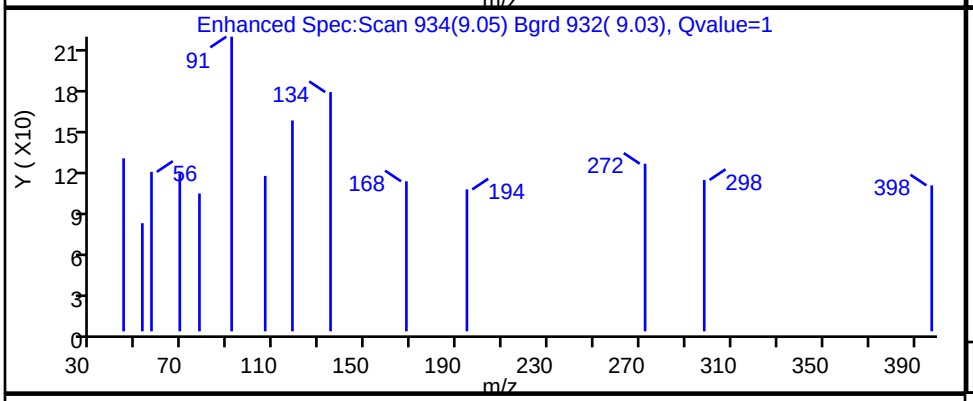
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

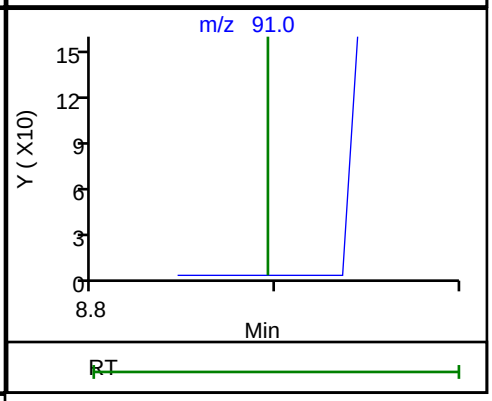
91 Ethylbenzene, CAS: 100-41-4

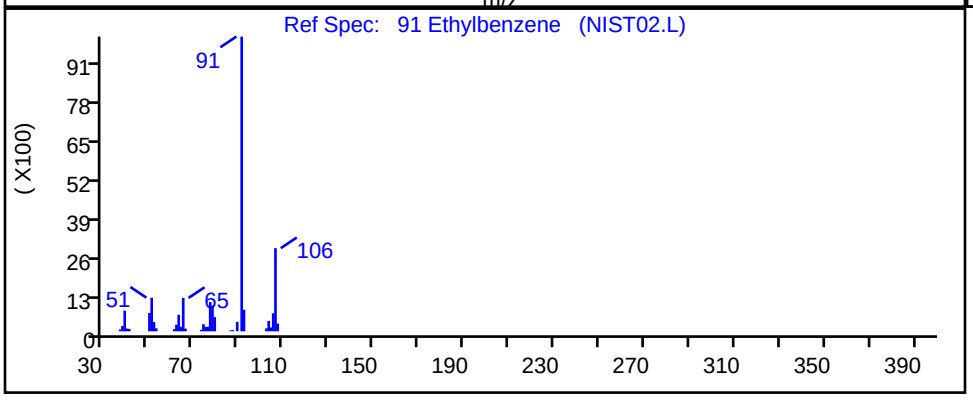
Processing Results











RT	Mass	Response	Amount
9.05	106.00	57	0.009880
9.05	91.00	196	

Reviewer: delpolitov, 08-Jul-2018 17:42:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

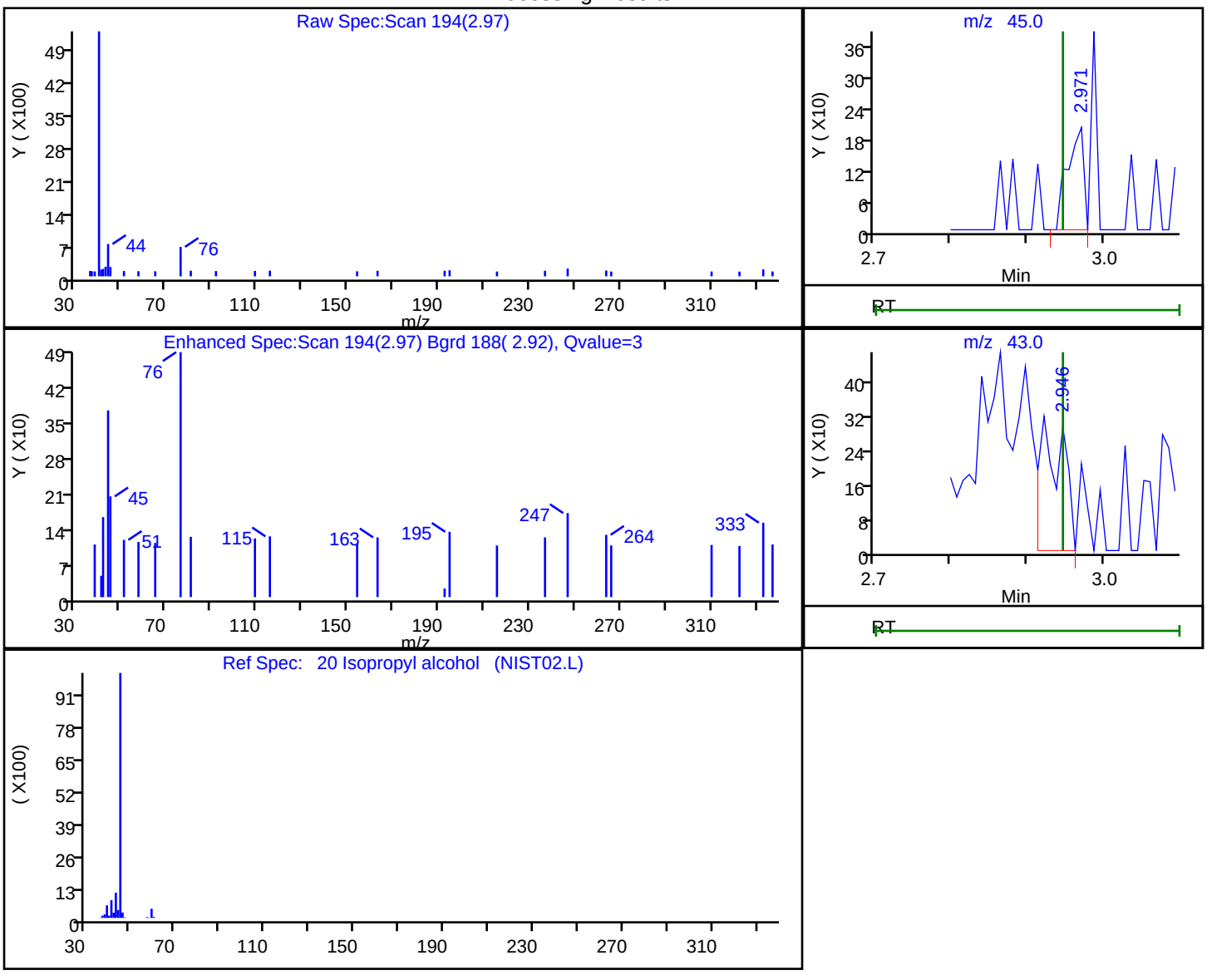
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Isopropyl alcohol, CAS: 67-63-0

Processing Results



RT	Mass	Response	Amount
2.97	45.00	296	2.726594
2.95	43.00	658	

Reviewer: delpolitov, 08-Jul-2018 17:28:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

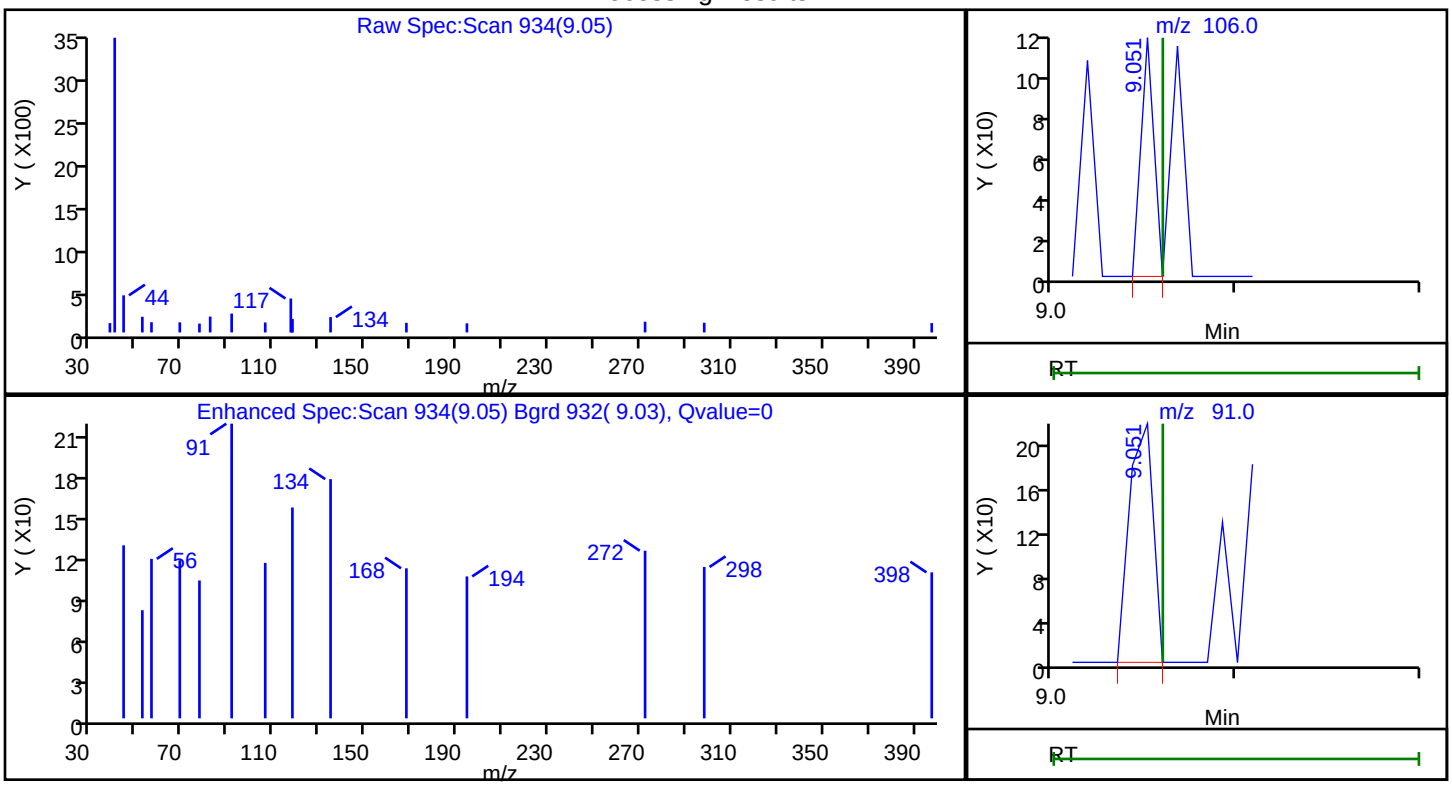
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D				
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
9.05	106.00	57	0.008293
9.05	91.00	196	

Reviewer: delpolitov, 08-Jul-2018 17:42:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

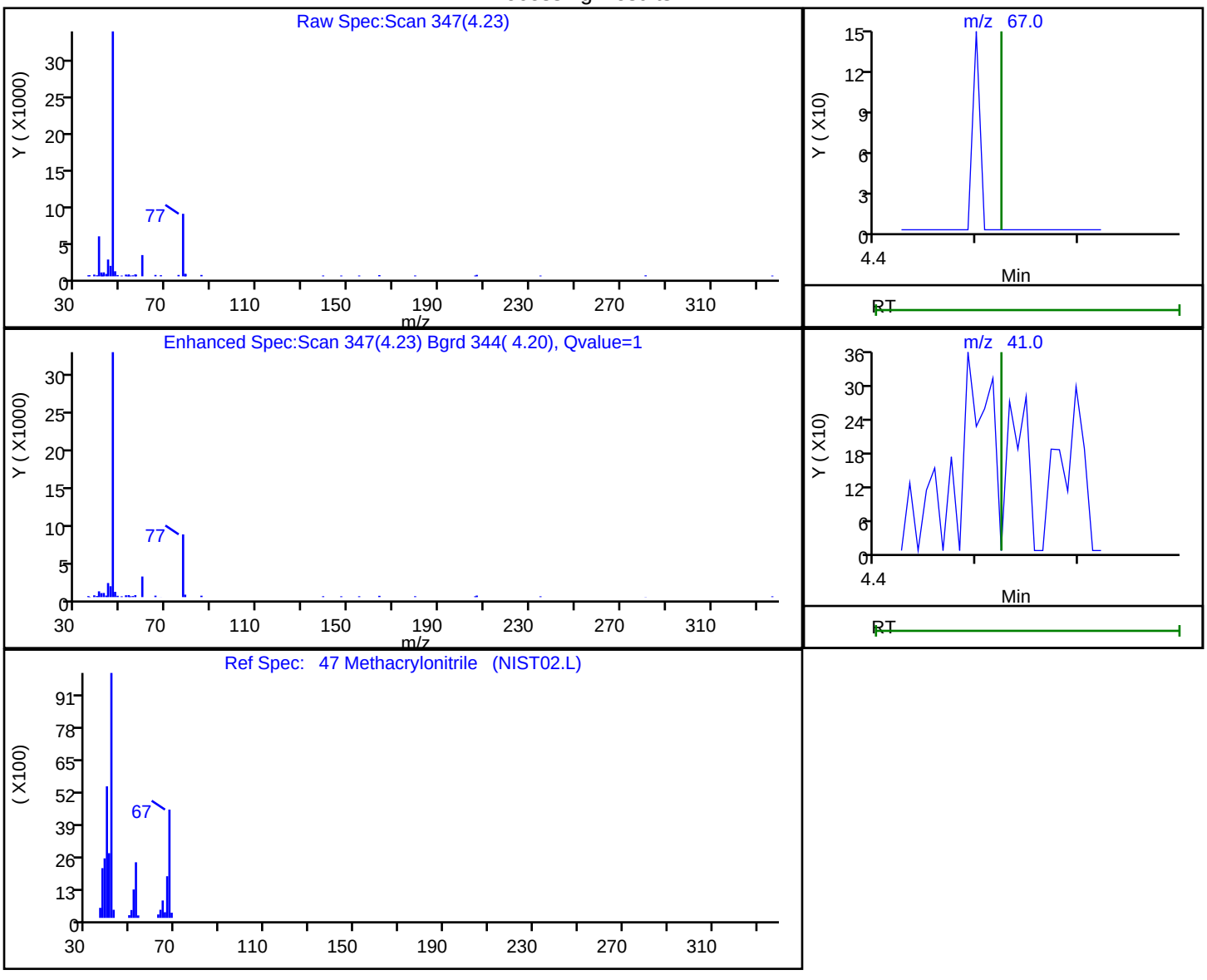
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

47 Methacrylonitrile, CAS: 126-98-7

Processing Results



RT	Mass	Response	Amount
4.23	67.00	74	0.053985
4.23	41.00	1950	

Reviewer: delpolitov, 08-Jul-2018 17:28:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

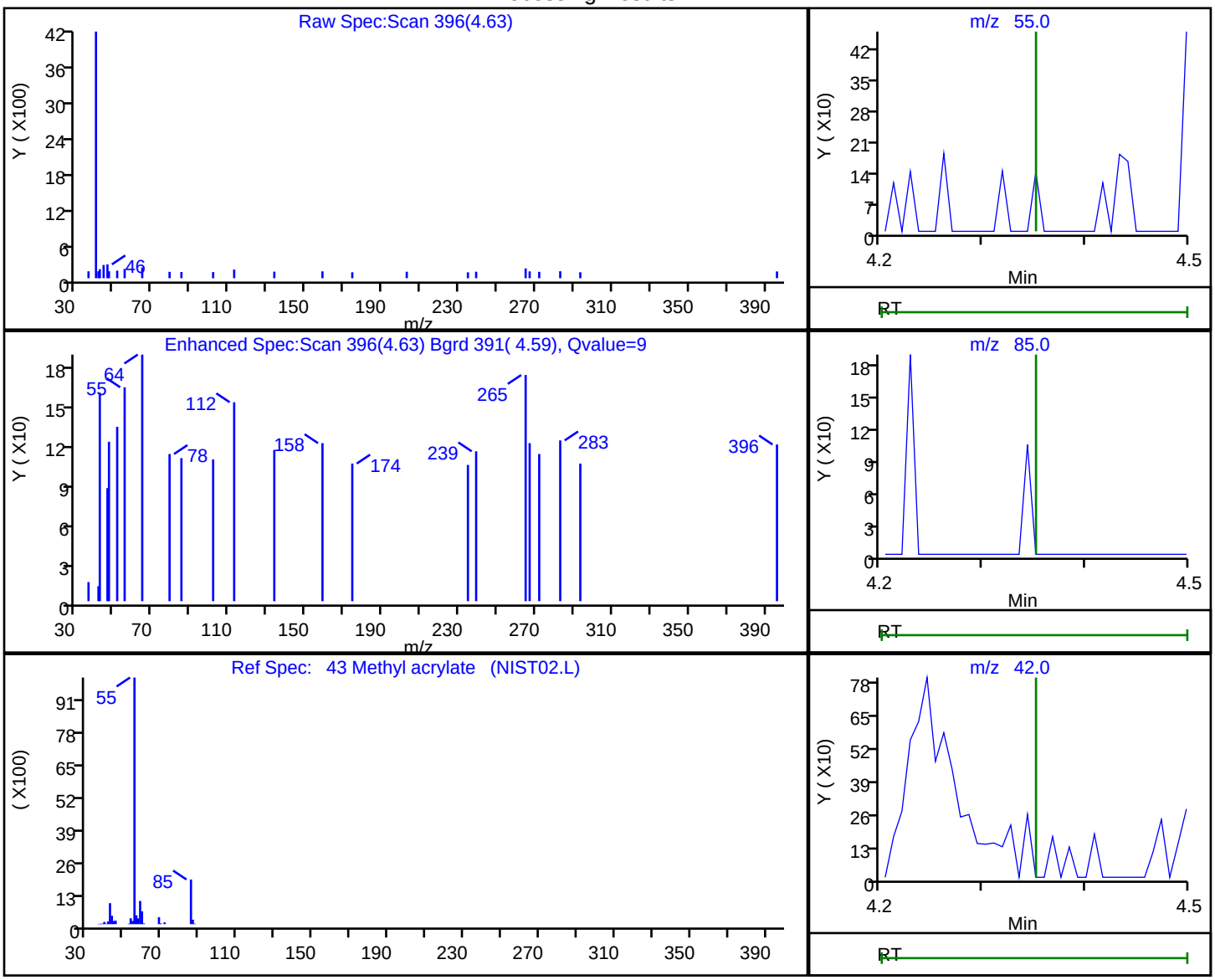
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Processing Results



RT	Mass	Response	Amount
4.63	55.00	193	0.079242
4.61	85.00	105	
4.65	42.00	309	

Reviewer: delpolitov, 08-Jul-2018 17:28:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

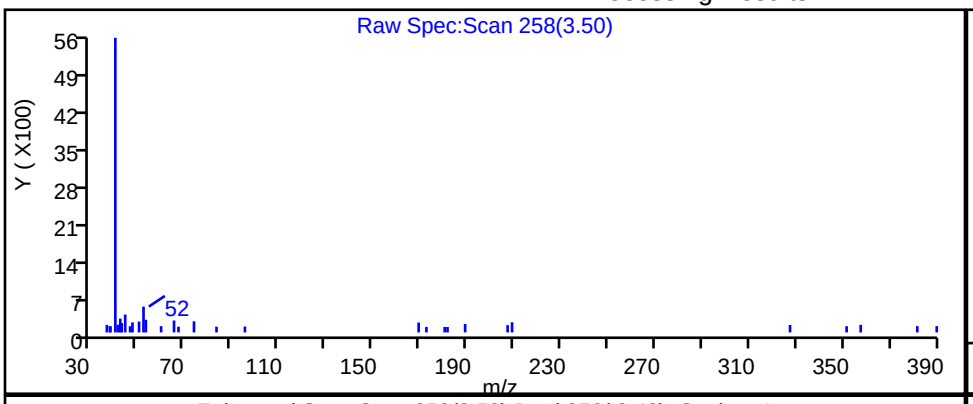
User Disabled Compound Report

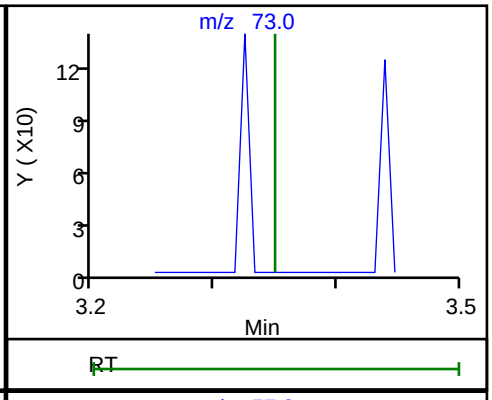
TestAmerica Edison

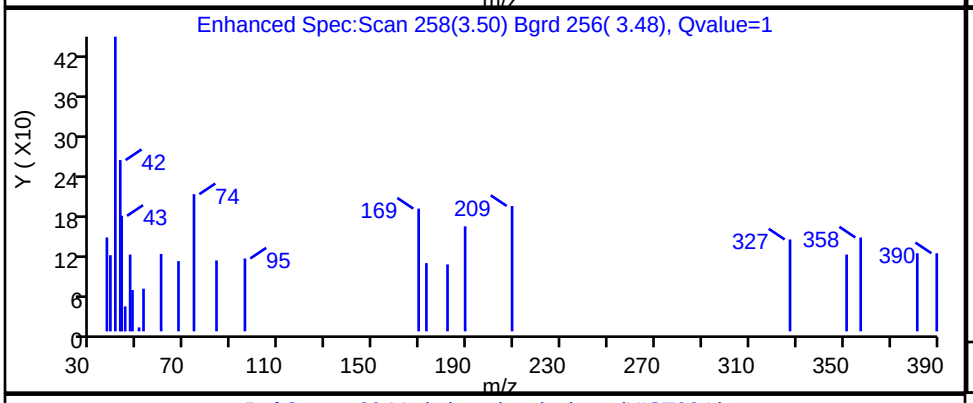
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

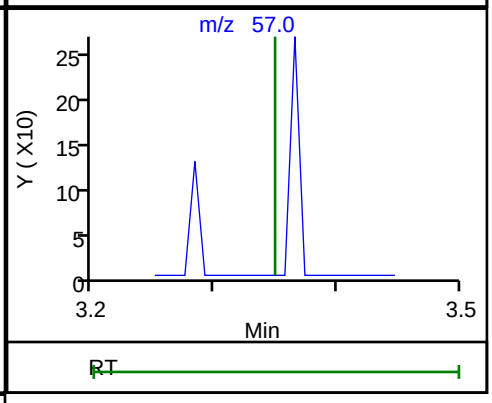
29 Methyl tert-butyl ether, CAS: 1634-04-4

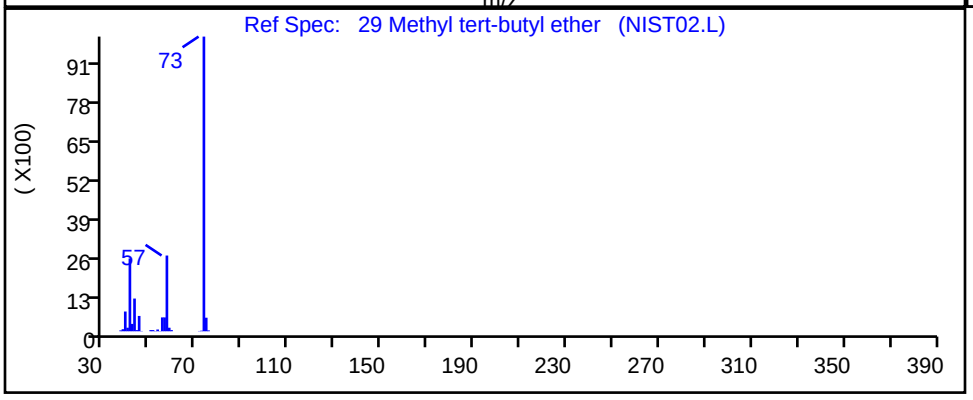
Processing Results











RT	Mass	Response	Amount
3.50	73.00	175	0.015479
3.35	57.00	0	

Reviewer: delpolitov, 08-Jul-2018 17:28:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

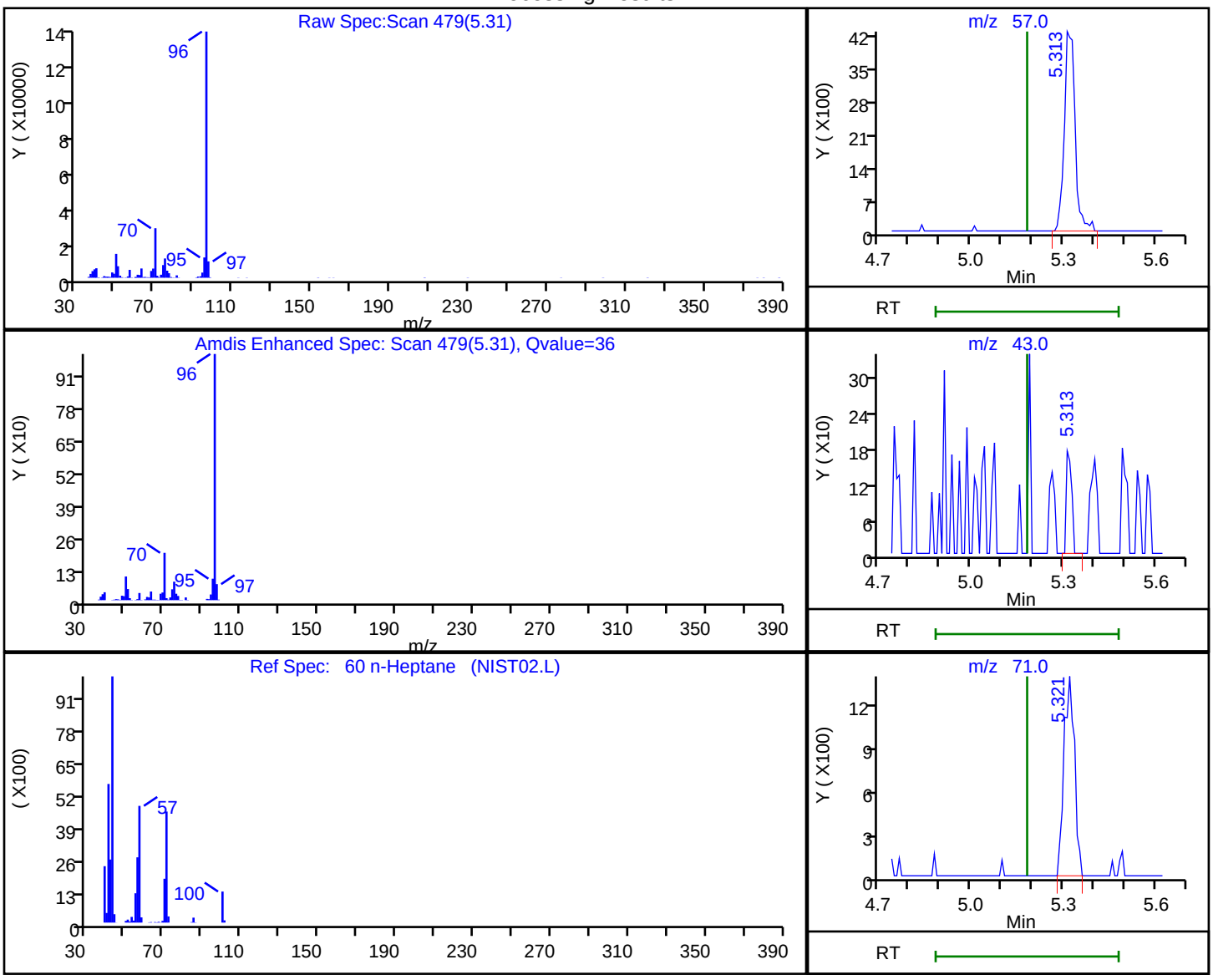
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

60 n-Heptane, CAS: 142-82-5

Processing Results



RT	Mass	Response	Amount
5.31	57.00	10516	3.554515
5.31	43.00	212	
5.32	71.00	3240	

Reviewer: delpolitov, 08-Jul-2018 17:41:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

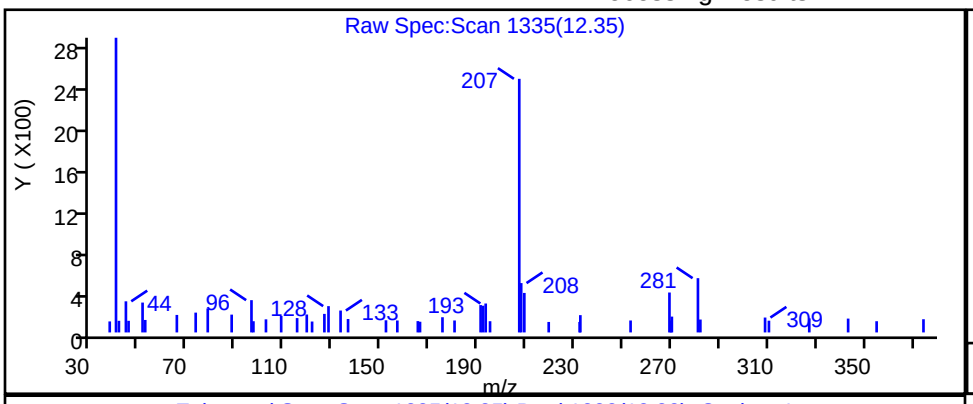
User Disabled Compound Report

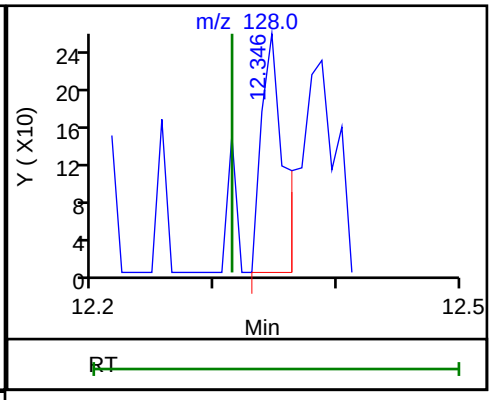
TestAmerica Edison

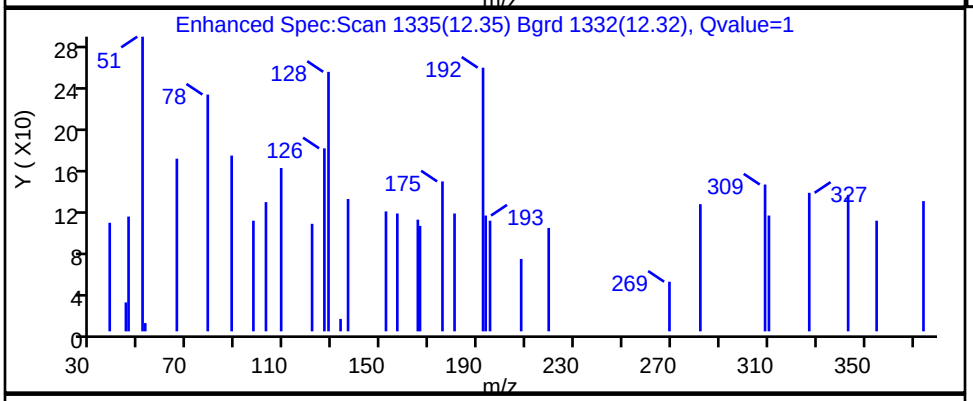
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

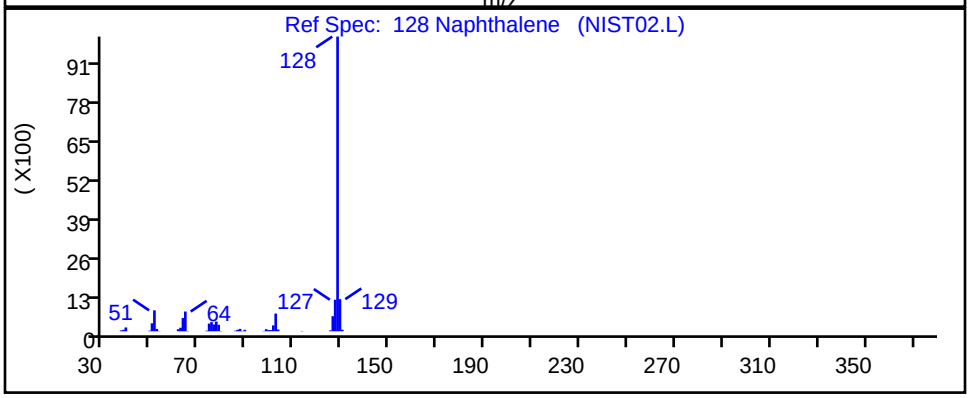
128 Naphthalene, CAS: 91-20-3

Processing Results









RT	Mass	Response	Amount
12.35	128.00	315	0.026266

Reviewer: delpolitov, 08-Jul-2018 17:42:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

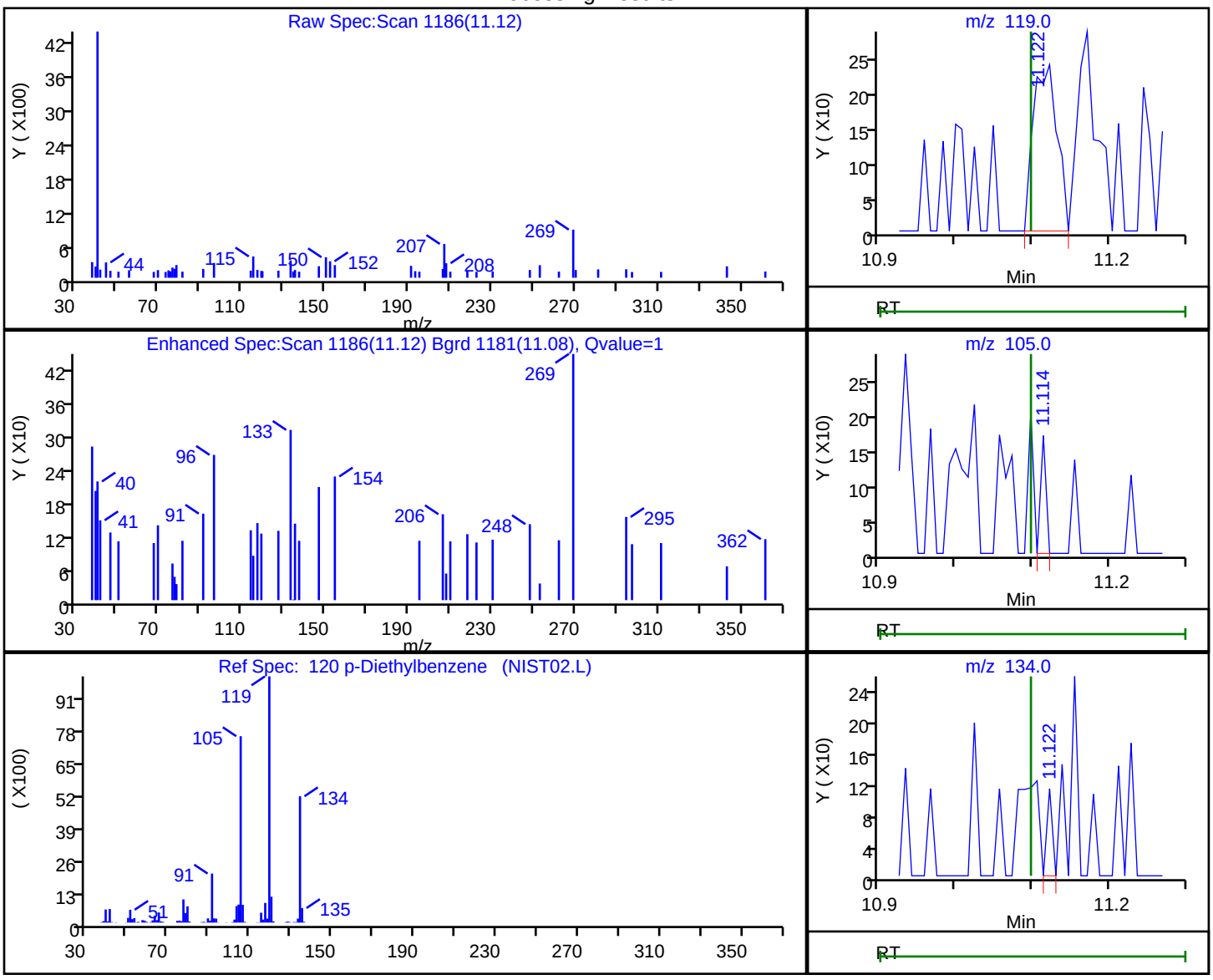
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

120 p-Diethylbenzene, CAS: 105-05-5

Processing Results



RT	Mass	Response	Amount
11.12	119.00	510	0.056918
11.11	105.00	84	
11.12	134.00	55	

Reviewer: delpolitov, 08-Jul-2018 17:42:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

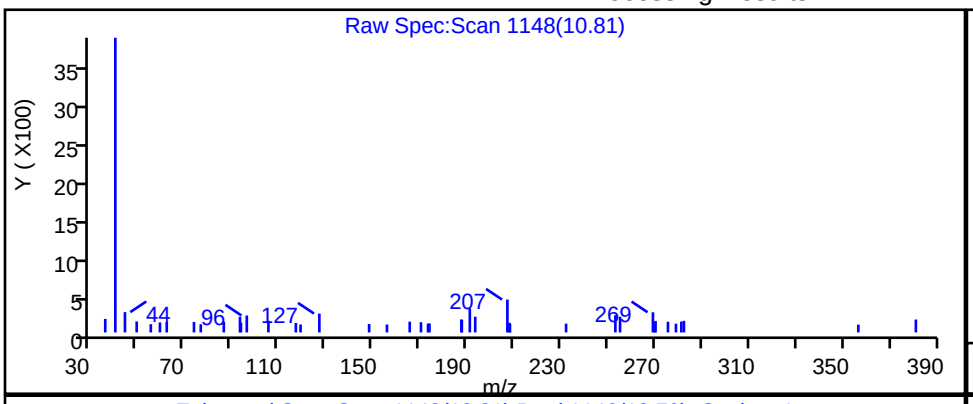
User Disabled Compound Report

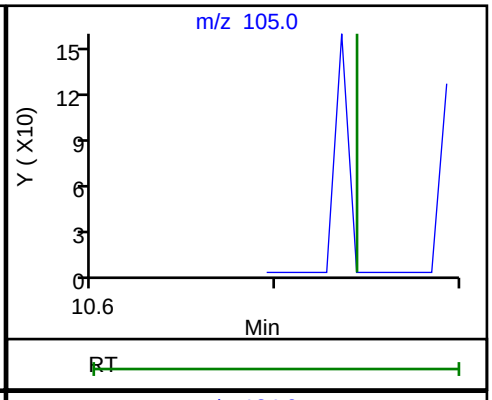
TestAmerica Edison

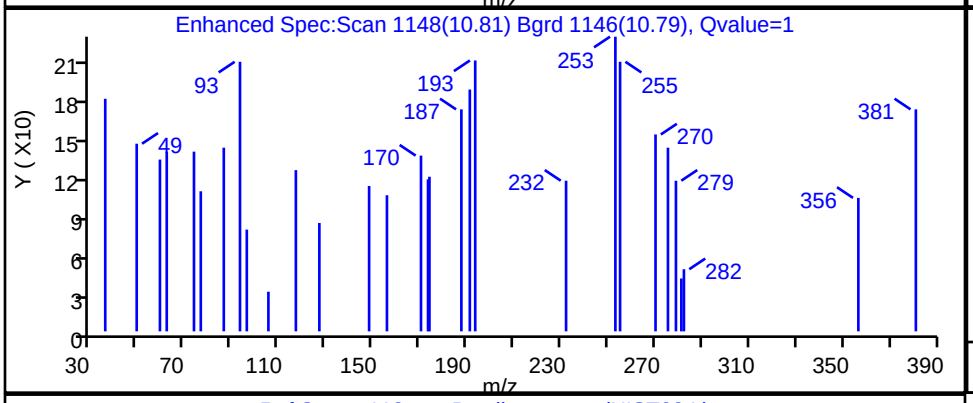
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

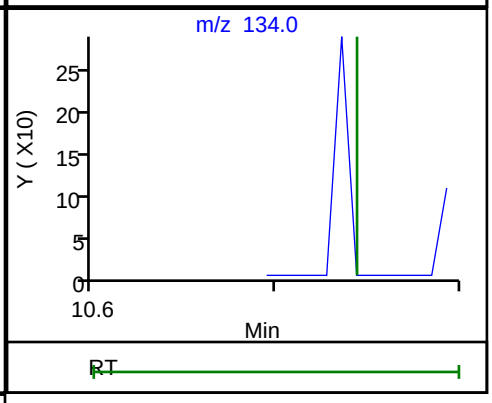
113 sec-Butylbenzene, CAS: 135-98-8

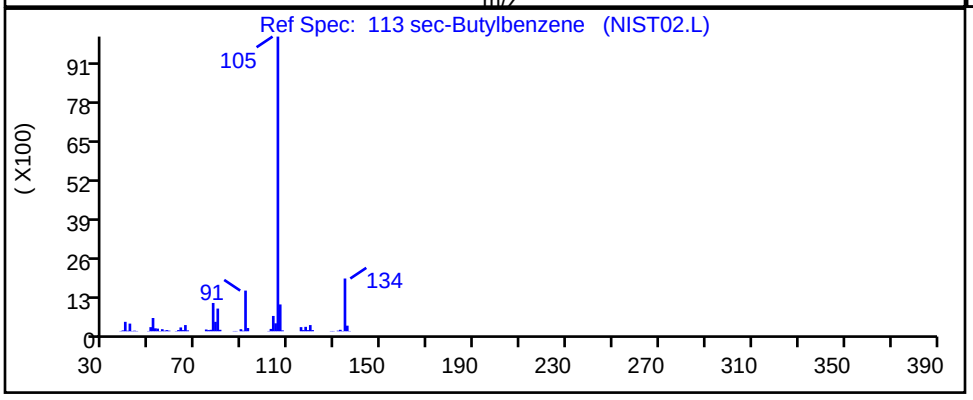
Processing Results











RT	Mass	Response	Amount
10.81	105.00	74	0.004295
10.82	134.00	89	

Reviewer: delpolitov, 08-Jul-2018 17:42:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

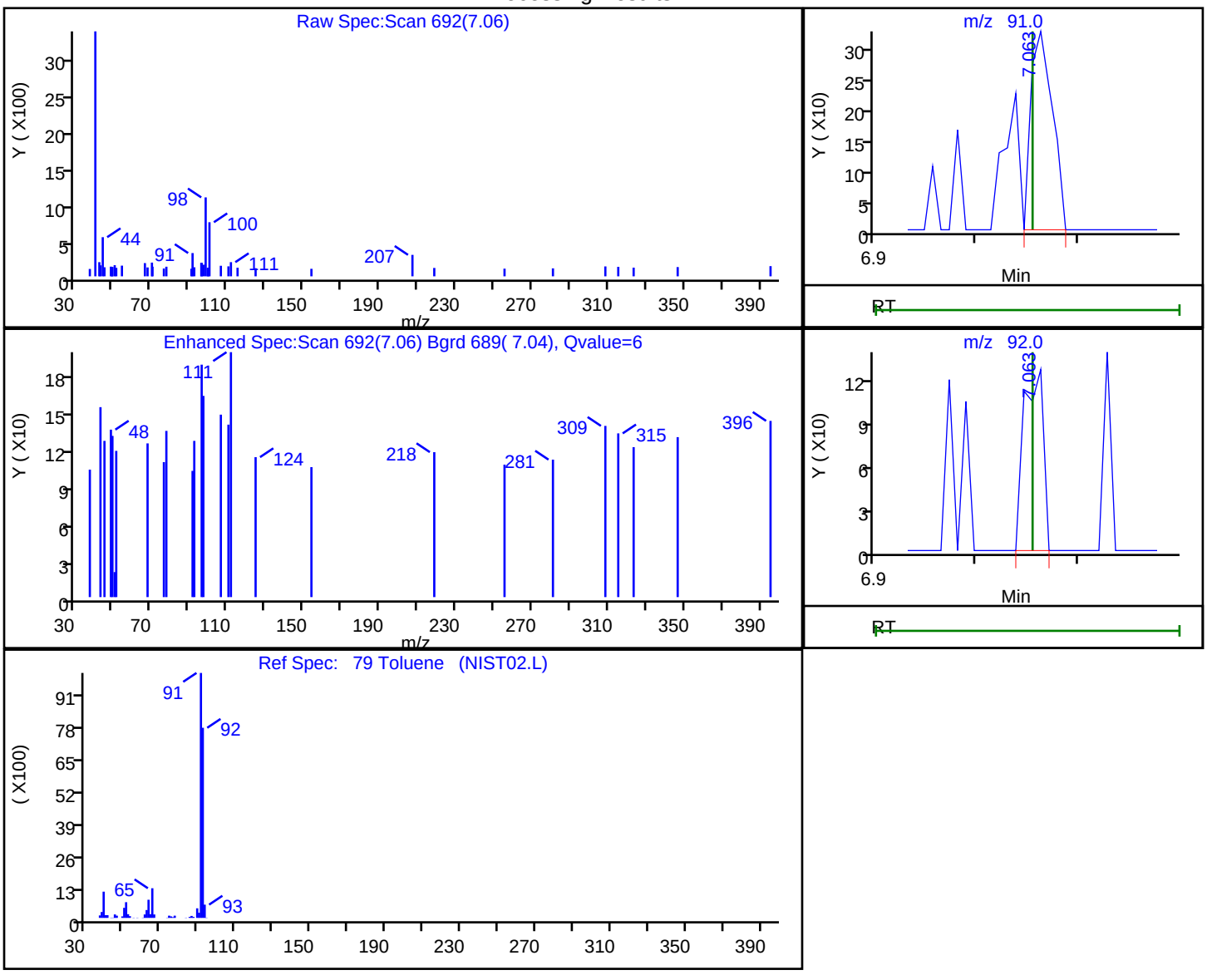
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

79 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
7.06	91.00	477	0.030064
7.06	92.00	167	

Reviewer: delpolitov, 08-Jul-2018 17:41:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

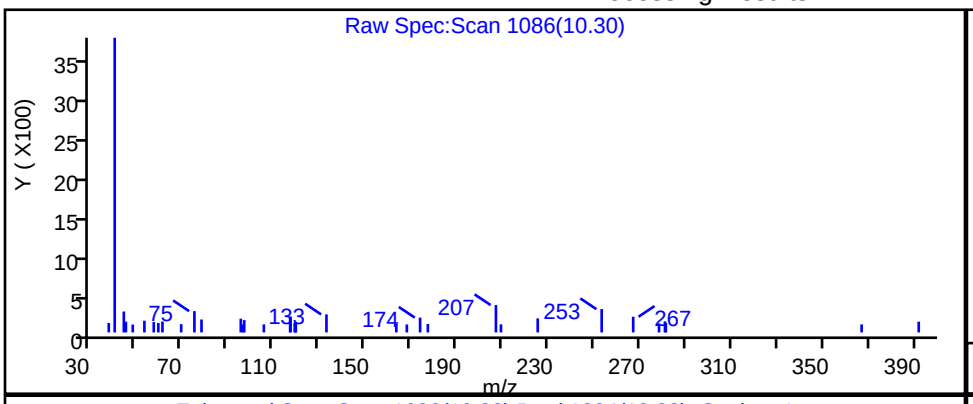
User Disabled Compound Report

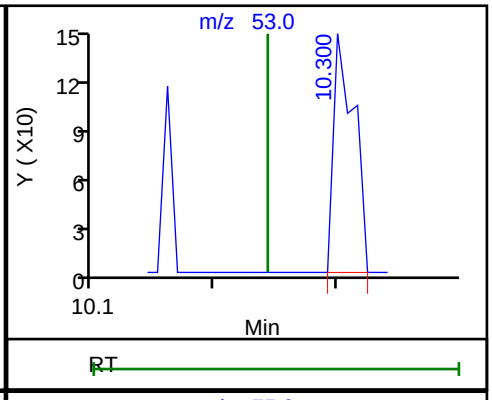
TestAmerica Edison

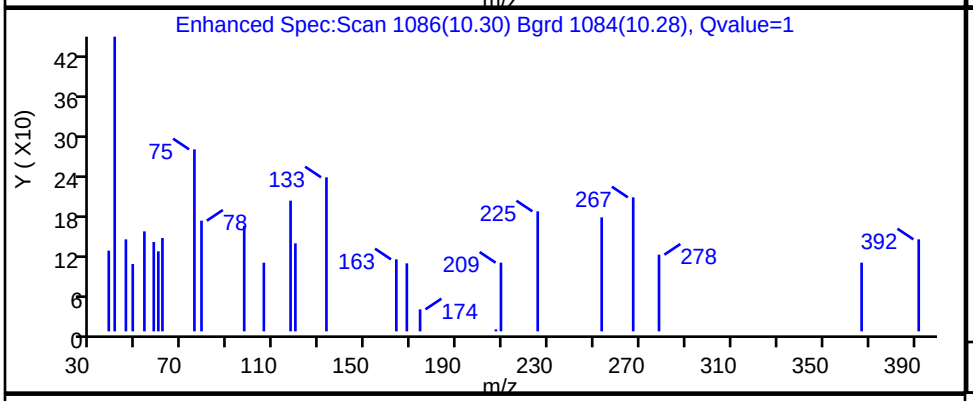
Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

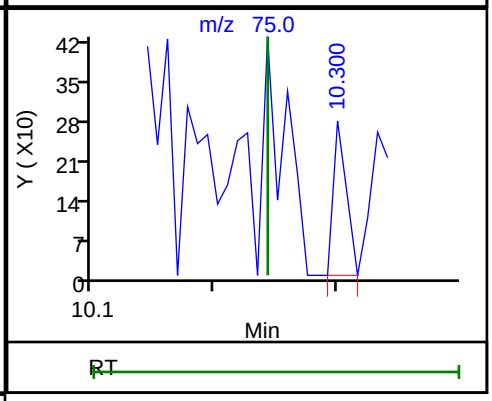
105 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

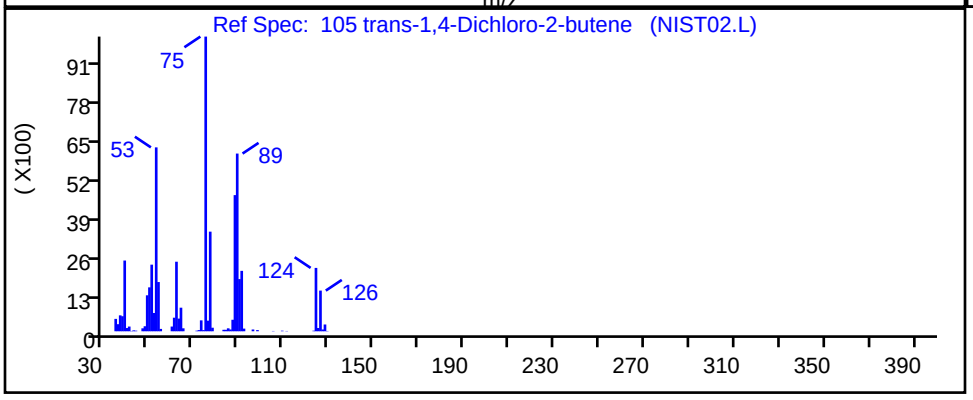
Processing Results











RT	Mass	Response	Amount
10.30	53.00	175	0.205958
10.30	75.00	202	

Reviewer: delpolitov, 08-Jul-2018 17:42:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

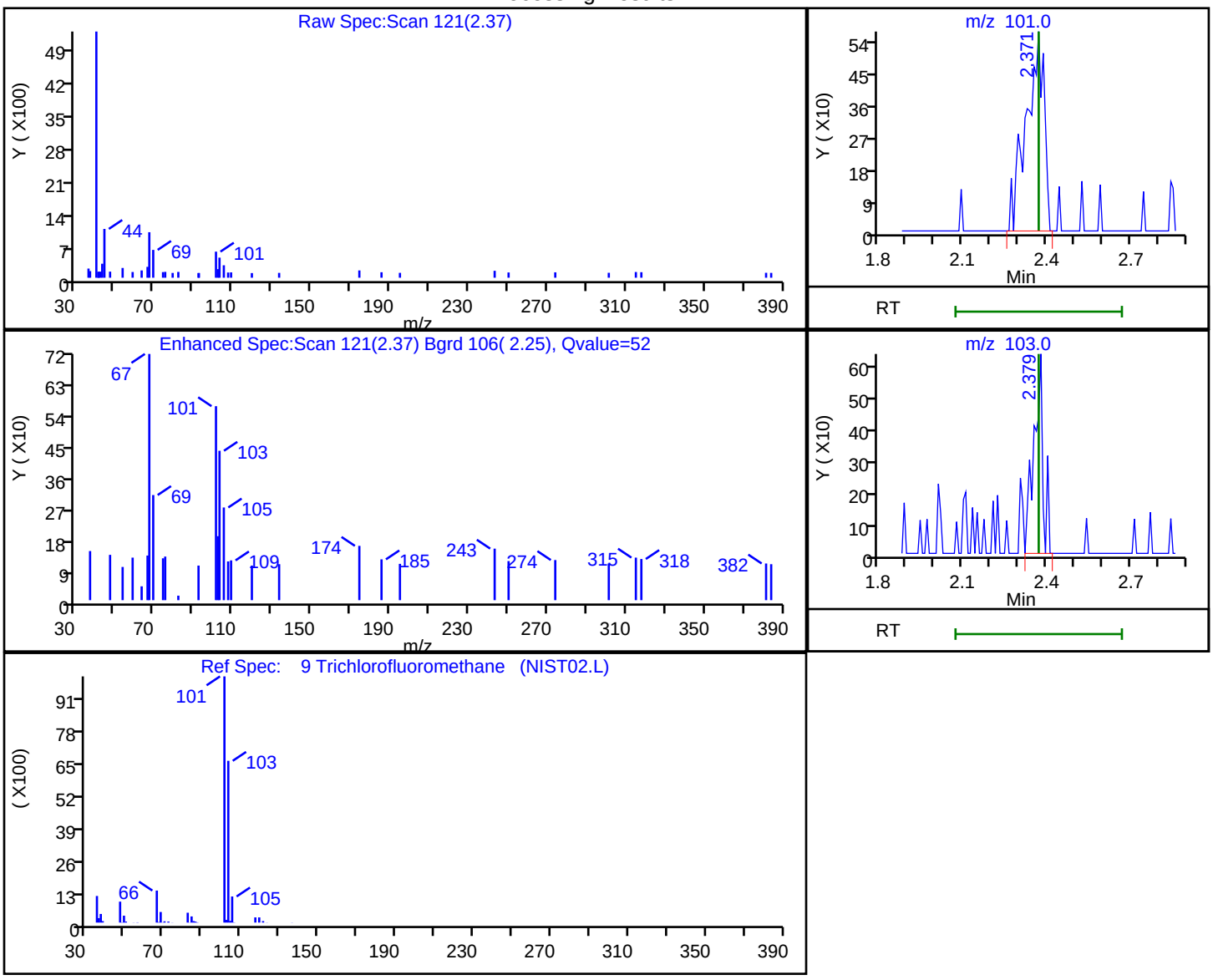
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D
Injection Date: 08-Jul-2018 08:14:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Trichlorofluoromethane, CAS: 75-69-4

Processing Results



RT	Mass	Response	Amount
2.37	101.00	2498	0.351113
2.38	103.00	1436	

Reviewer: delpolitov, 08-Jul-2018 17:28:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

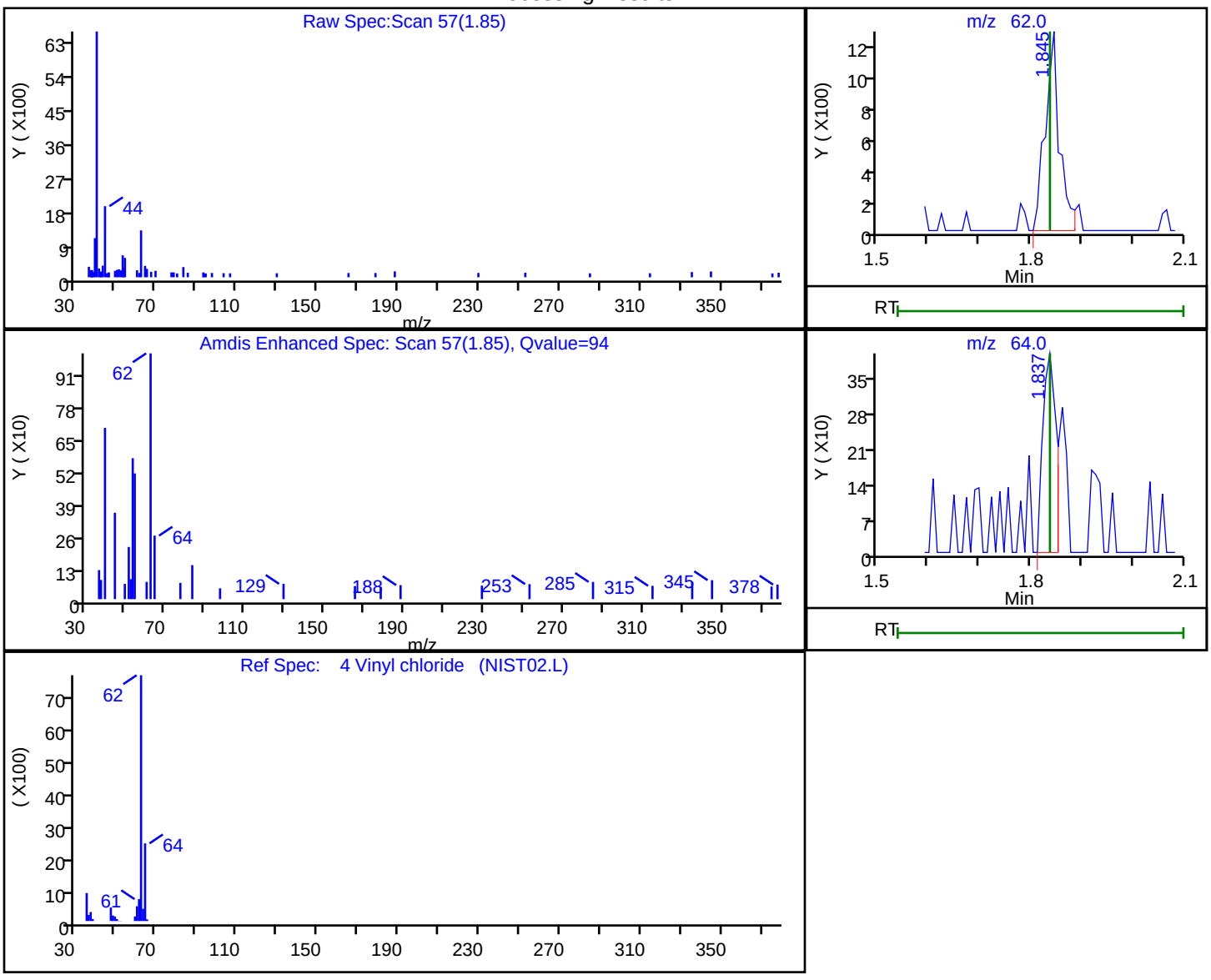
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67408.D		
Injection Date:	08-Jul-2018 08:14:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

4 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.85	62.00	2428	0.322542
1.84	64.00	714	

Reviewer: delpolitov, 08-Jul-2018 17:28:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Jul-2018 08:37:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0075068-004
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub42

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 08-Jul-2018 19:00:34 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: boykink Date: 08-Jul-2018 09:16:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.533	1.541	-0.008	45	2101	1.00	0.7611	
2 Dichlorodifluoromethane	85	1.574	1.574	0.000	66	6206	1.00	0.9311	
3 Chloromethane	50	1.746	1.747	-0.001	98	9180	1.00	1.13	
5 Butadiene	54	1.837	1.837	0.000	90	7159	1.00	0.9680	
4 Vinyl chloride	62	1.837	1.837	0.000	95	8381	1.00	1.03	
6 Bromomethane	94	2.116	2.116	0.000	95	6934	1.00	1.23	
7 Chloroethane	64	2.174	2.182	-0.008	95	5599	1.00	1.16	
8 Dichlorofluoromethane	67	2.346	2.355	-0.009	96	10001	1.00	0.9747	
10 Pentane	72	2.355	2.363	-0.008	96	1110	2.00	1.51	
9 Trichlorofluoromethane	101	2.363	2.371	-0.008	67	7738	1.00	1.03	
11 Ethanol	46	2.593	2.544	0.049	21	457	40.0	49.5	M
12 Ethyl ether	59	2.552	2.552	0.000	73	3428	1.00	1.02	
13 2-Methyl-1,3-butadiene	53	2.576	2.568	0.008	91	4319	1.00	1.10	
14 1,2-Dichloro-1,1,2-trifluo	117	2.626	2.618	0.008	72	4331	1.00	1.08	a
15 Acrolein	56	2.733	2.724	0.009	29	661	4.00	2.93	
16 1,1,2-Trichloro-1,2,2-trif	101	2.741	2.749	-0.008	67	4820	1.00	1.03	
17 1,1-Dichloroethene	96	2.757	2.757	0.000	95	4731	1.00	1.09	
18 Acetone	43	2.864	2.848	0.016	60	3274	5.00	4.20	M
19 Iodomethane	142	2.913	2.913	0.000	96	8478	1.00	1.08	
20 Isopropyl alcohol	45	2.938	2.946	-0.008	25	1489	10.0	11.0	a
21 Carbon disulfide	76	2.946	2.955	-0.009	100	20504	1.00	1.18	
22 3-Chloro-1-propene	41	3.061	3.061	0.000	95	8819	1.00	1.06	
24 Methyl acetate	43	3.078	3.078	0.000	52	4522	2.00	1.80	a
23 Cyclopentene	67	3.086	3.086	0.000	84	10911	1.00	0.99	
25 Acetonitrile	41	3.209	3.144	0.065	20	3213	10.0	8.03	M
* 26 TBA-d9 (IS)	65	3.184	3.193	-0.009	0	116109	1000.0	1000.0	
27 Methylene Chloride	84	3.193	3.193	0.000	42	5762	1.00	1.08	
28 2-Methyl-2-propanol	59	3.275	3.259	0.016	11	2288	10.0	9.37	M
29 Methyl tert-butyl ether	73	3.349	3.349	0.000	93	13690	1.00	1.07	
30 trans-1,2-Dichloroethene	96	3.373	3.374	-0.001	92	5085	1.00	1.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.456	3.448	0.008	97	11424	10.0	7.98	
32 Hexane	43	3.521	3.522	-0.001	89	4326	1.00	1.11	
33 Isopropyl ether	45	3.727	3.727	0.000	96	14507	1.00	0.9884	
34 1,1-Dichloroethane	63	3.768	3.760	0.008	97	8738	1.00	1.03	
35 Vinyl acetate	86	3.793	3.776	0.016	98	1360	2.00	1.65	
36 2-Chloro-1,3-butadiene	88	3.809	3.809	0.000	77	4717	1.00	1.12	
37 Tert-butyl ethyl ether	59	4.023	4.039	-0.016	95	13740	1.00	1.00	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	136598	250.0	250.0	
39 2,2-Dichloropropane	97	4.277	4.269	0.008	50	2112	1.00	1.18	a
40 cis-1,2-Dichloroethene	96	4.277	4.277	0.000	93	5362	1.00	0.99	
42 Ethyl acetate	70	4.310	4.286	0.024	47	900	2.00	2.49	
41 2-Butanone (MEK)	72	4.310	4.286	0.024	81	1917	5.00	5.30	
43 Methyl acrylate	55	4.351	4.351	0.000	47	2625	1.00	0.9661	Ma
44 Propionitrile	54	4.458	4.425	0.033	52	3081	10.0	7.13	
45 Chlorobromomethane	128	4.499	4.499	0.000	90	2454	1.00	0.9868	
46 Tetrahydrofuran	72	4.516	4.508	0.008	40	1292	2.00	2.01	M
47 Methacrylonitrile	67	4.532	4.524	0.008	88	14869	10.0	9.55	
48 Chloroform	83	4.548	4.549	-0.001	73	7472	1.00	0.9718	
49 Cyclohexane	84	4.672	4.688	-0.016	59	6752	1.00	0.9411	
50 1,1,1-Trichloroethane	97	4.688	4.697	-0.009	36	8085	1.00	1.18	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	96	95672	50.0	51.2	
52 Carbon tetrachloride	117	4.820	4.812	0.008	93	5667	1.00	1.02	
53 1,1-Dichloropropene	75	4.844	4.844	0.000	93	6011	1.00	0.99	
54 Isobutyl alcohol	43	5.000	4.992	0.008	34	4342	25.0	22.1	
55 Benzene	78	5.033	5.033	0.000	64	18589	1.00	1.05	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	100077	50.0	50.2	
57 Isopropyl acetate	43	5.099	5.083	0.016	84	10563	1.00	0.9620	
58 Tert-amyl methyl ether	73	5.083	5.091	-0.008	83	13557	1.00	0.9269	
59 1,2-Dichloroethane	62	5.124	5.124	0.000	97	6967	1.00	1.26	
60 n-Heptane	57	5.181	5.181	0.000	91	3068	1.00	0.9133	
* 61 Fluorobenzene	96	5.321	5.321	0.000	99	374608	50.0	50.0	
62 n-Butanol	56	5.641	5.650	-0.009	4	109	25.0	1.87	Ma
63 Trichloroethene	95	5.674	5.674	0.000	95	5186	1.00	1.12	
65 Ethyl acrylate	55	5.797	5.789	0.008	77	7287	1.00	0.7269	
64 Methylcyclohexane	83	5.797	5.798	-0.001	95	7208	1.00	0.8856	
66 1,2-Dichloropropane	63	5.962	5.962	0.000	90	4632	1.00	0.9684	
* 67 1,4-Dioxane-d8	96	6.036	6.019	0.017	0	9663	1000.0	1000.0	
68 Methyl methacrylate	100	6.036	6.028	0.008	86	1058	2.00	2.04	
69 1,4-Dioxane	88	6.093	6.085	0.008	44	953	50.0	51.7	M
70 n-Propyl acetate	43	6.143	6.085	0.058	59	4168	1.00	0.9386	Ma
71 Dibromomethane	93	6.093	6.093	0.000	88	3175	1.00	1.17	
72 Dichlorobromomethane	83	6.241	6.241	0.000	97	6161	1.00	1.06	
73 2-Nitropropane	41	6.578	6.570	0.008	75	2118	2.00	2.55	
74 2-Chloroethyl vinyl ether	63	6.578	6.570	0.008	48	1645	1.00	0.7869	
75 Epichlorohydrin	57	6.693	6.685	0.008	93	5069	20.0	18.5	a
76 cis-1,3-Dichloropropene	75	6.742	6.734	0.008	92	6269	1.00	0.9782	
77 4-Methyl-2-pentanone (MIBK	43	6.907	6.899	0.008	94	11173	5.00	4.00	
$ 78 Toluene-d8 (Surr)	98	6.972	6.981	-0.009	99	347975	50.0	49.9	
79 Toluene	91	7.055	7.055	0.000	94	18562	1.00	1.04	
80 trans-1,3-Dichloropropene	75	7.424	7.408	0.016	81	5482	1.00	1.03	
81 Ethyl methacrylate	69	7.449	7.433	0.016	50	3203	1.00	0.7320	
82 1,1,2-Trichloroethane	83	7.613	7.622	-0.009	88	2798	1.00	0.9417	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.663	7.663	0.000	94	4612	1.00	1.06	
84 1,3-Dichloropropane	76	7.835	7.827	0.008	91	5362	1.00	0.9539	
85 2-Hexanone	43	7.917	7.893	0.024	72	3093	5.00	5.06	
86 n-Butyl acetate	43	8.032	8.008	0.024	34	1864	1.00	0.99	M
87 Chlorodibromomethane	129	8.065	8.065	0.000	96	4025	1.00	1.05	
88 Ethylene Dibromide	107	8.221	8.222	-0.001	96	2979	1.00	0.9192	
* 89 Chlorobenzene-d5	117	8.764	8.764	0.000	86	252919	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	97	11664	1.00	1.04	
91 Ethylbenzene	106	8.895	8.895	0.000	97	6771	1.00	1.04	
92 1,1,1,2-Tetrachloroethane	131	8.912	8.920	-0.008	91	4385	1.00	1.03	
93 m-Xylene & p-Xylene	106	9.060	9.060	0.000	0	7136	1.00	0.9232	
94 n-Butyl acrylate	73	9.536	9.487	0.049	31	1421	1.00	1.02	
95 o-Xylene	106	9.503	9.503	0.000	91	7504	1.00	0.9387	
96 Styrene	104	9.544	9.536	0.008	97	11669	1.00	0.9393	M
97 Amyl acetate (mixed isomer	43	9.750	9.717	0.033	45	2413	1.00	1.03	Ma
98 Bromoform	173	9.750	9.742	0.008	95	2543	1.00	1.03	
99 Isopropylbenzene	105	9.848	9.849	-0.001	96	18025	1.00	0.9383	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	91	105689	50.0	51.8	
101 Bromobenzene	156	10.152	10.144	0.008	96	5396	1.00	1.09	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	94	4570	1.00	0.9765	
103 N-Propylbenzene	91	10.202	10.202	0.000	99	23444	1.00	1.03	
104 1,2,3-Trichloropropane	110	10.226	10.227	-0.001	88	1662	1.00	1.26	
105 trans-1,4-Dichloro-2-buten	53	10.259	10.243	0.016	1	432	1.00	1.01	
106 2-Chlorotoluene	91	10.300	10.292	0.008	97	16430	1.00	1.02	
107 4-Ethyltoluene	105	10.300	10.300	0.000	82	17032	1.00	0.9075	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	94	16210	1.00	0.9800	
109 4-Chlorotoluene	91	10.391	10.391	0.000	97	14193	1.00	1.00	
110 Butyl Methacrylate	87	10.440	10.432	0.008	57	3544	1.00	1.03	
111 tert-Butylbenzene	119	10.588	10.588	0.000	94	12385	1.00	0.9282	
112 1,2,4-Trimethylbenzene	105	10.637	10.637	0.000	98	15797	1.00	0.9387	
113 sec-Butylbenzene	105	10.744	10.744	0.000	99	20280	1.00	0.9869	
114 4-Isopropyltoluene	119	10.851	10.843	0.008	97	16216	1.00	0.9341	
115 1,3-Dichlorobenzene	146	10.859	10.859	0.000	96	9487	1.00	0.9744	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.909	-0.001	94	143687	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.925	10.925	0.000	89	9982	1.00	0.99	
132 1,2,3-Trimethylbenzene	105	10.933	10.933	0.000	97	18062	1.00	1.01	
118 Benzyl chloride	91	11.032	11.024	0.008	96	7060	1.00	0.7901	
119 2,3-Dihydroindene	117	11.064	11.065	-0.001	92	18019	1.00	1.00	
120 p-Diethylbenzene	119	11.106	11.098	0.008	94	9865	1.00	0.9230	
121 n-Butylbenzene	92	11.122	11.114	0.008	96	9483	1.00	0.9578	
122 1,2-Dichlorobenzene	146	11.171	11.171	0.000	93	9954	1.00	1.02	
123 1,2,4,5-Tetramethylbenzene	119	11.582	11.574	0.008	97	16200	1.00	0.9712	
124 1,2-Dibromo-3-Chloropropan	75	11.664	11.656	0.008	40	909	1.00	1.05	
125 1,3,5-Trichlorobenzene	180	11.746	11.738	0.008	95	7826	1.00	1.03	
126 1,2,4-Trichlorobenzene	180	12.149	12.141	0.008	93	6018	1.00	0.8903	
127 Hexachlorobutadiene	225	12.198	12.199	-0.001	90	3628	1.00	1.13	
128 Naphthalene	128	12.322	12.314	0.008	97	11939	1.00	0.8346	
129 1,2,3-Trichlorobenzene	180	12.486	12.478	0.008	94	7132	1.00	1.10	
S 130 1,2-Dichloroethene, Total	100				0		2.00	2.06	
S 131 Xylenes, Total	100				0		2.00	1.86	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00078	Amount Added:	4.00	Units: uL	
14DIOXINTER_00086	Amount Added:	30.00	Units: uL	
Ethanol mix_00017	Amount Added:	1.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	1.00	Units: uL	
MIX I Hi_00095	Amount Added:	1.00	Units: uL	
GAS Hi_00262	Amount Added:	1.00	Units: uL	
VOA6IS/SURR_00011	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 08-Jul-2018 19:00:38 Chrom Revision: 2.2 07-Jun-2018 07:41:54

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D

Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6 Operator ID:

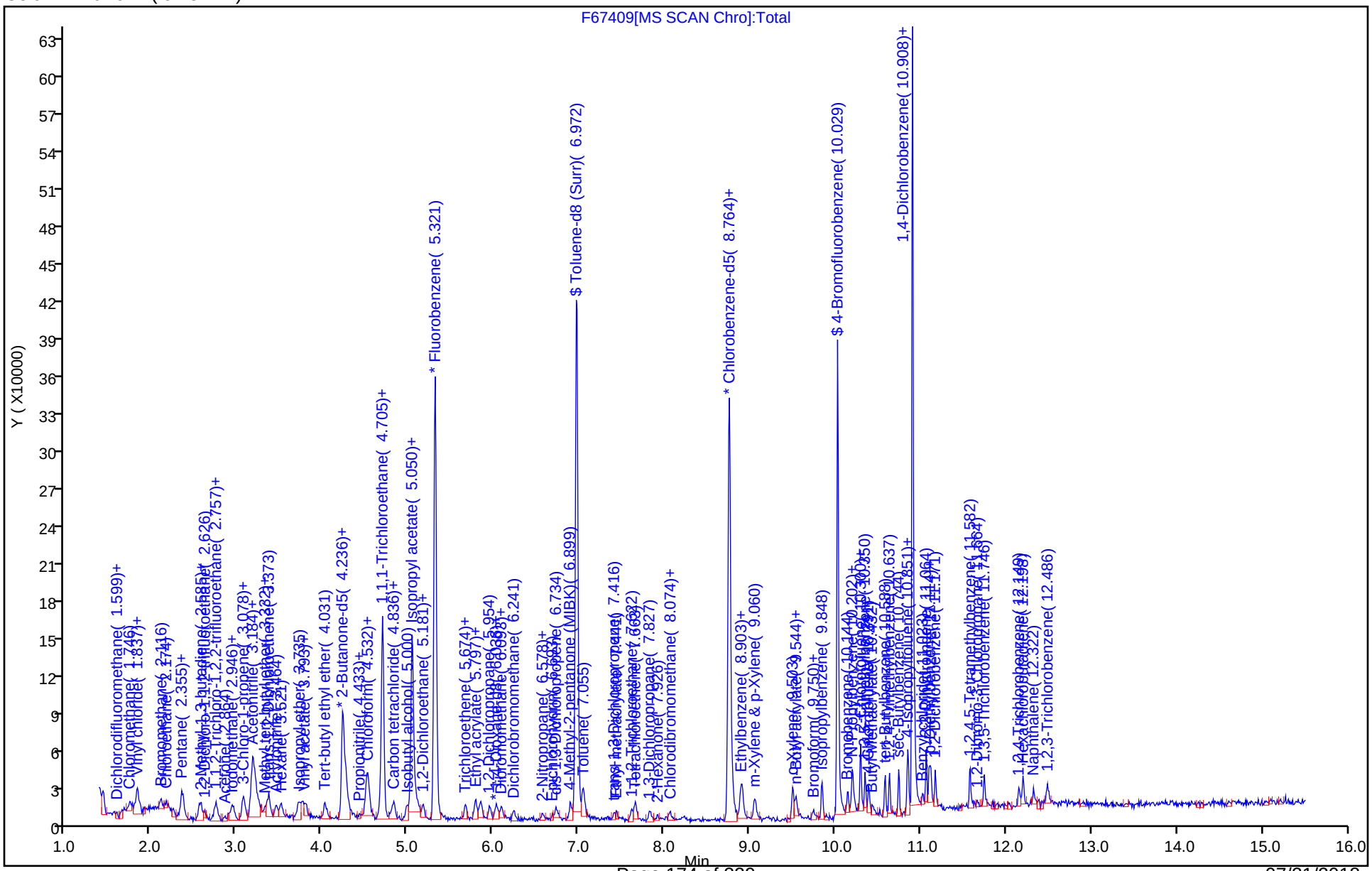
Lims ID: STD1 Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

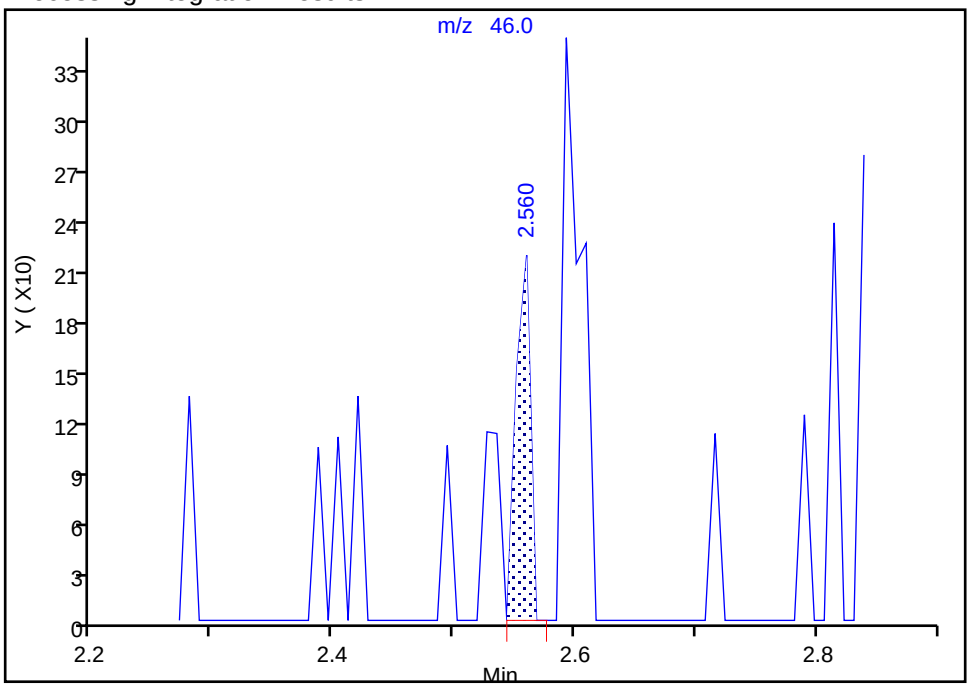
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

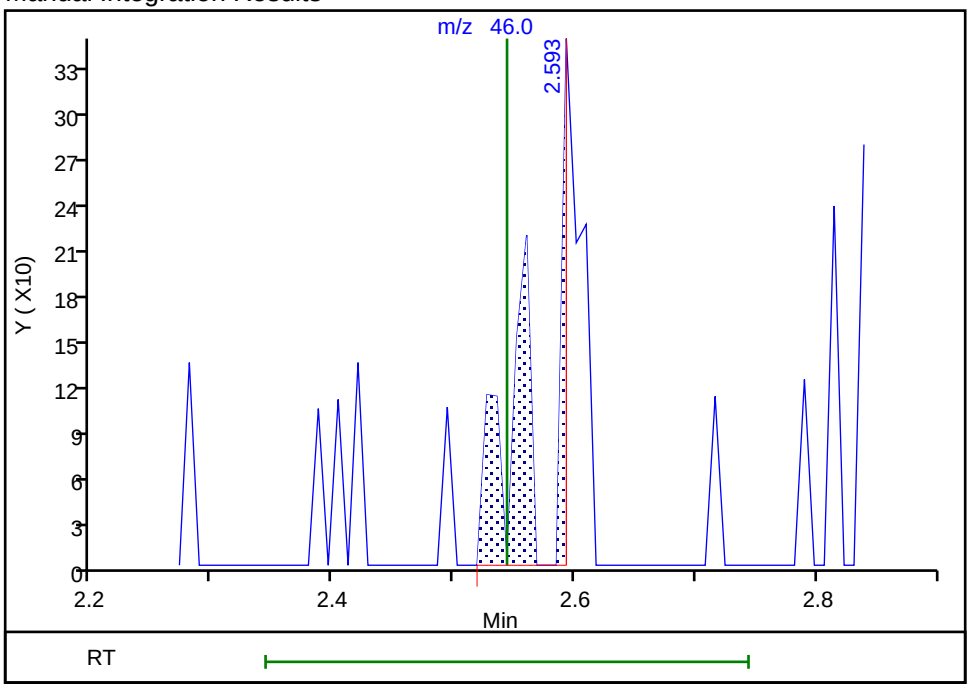
Processing Integration Results

RT: 2.56
Area: 179
Amount: 27.301764
Amount Units: ug/l



Manual Integration Results

RT: 2.59
Area: 457
Amount: 49.495510
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:50:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

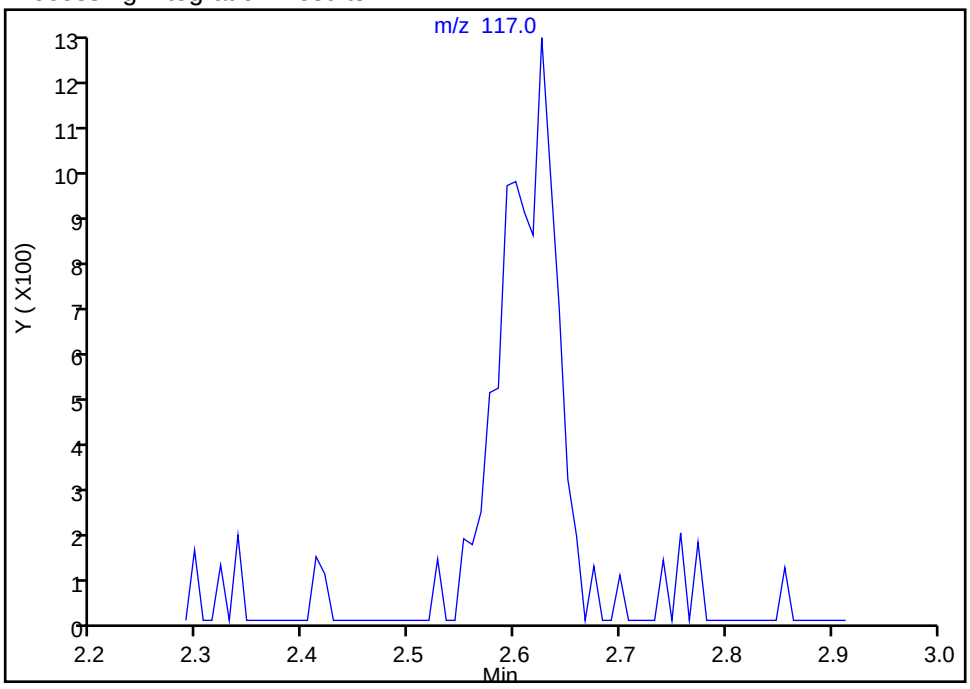
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

14 1,2-Dichloro-1,1,2-trifluoroethane, CAS: 354-23-4

Signal: 1

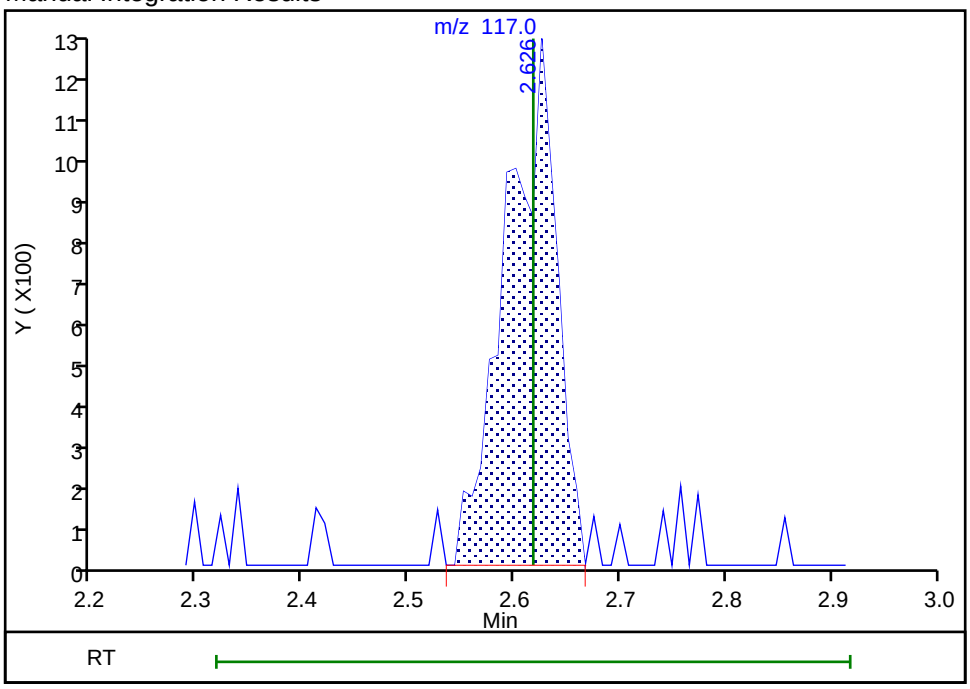
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.63
Area: 4331
Amount: 1.083085
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:43:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

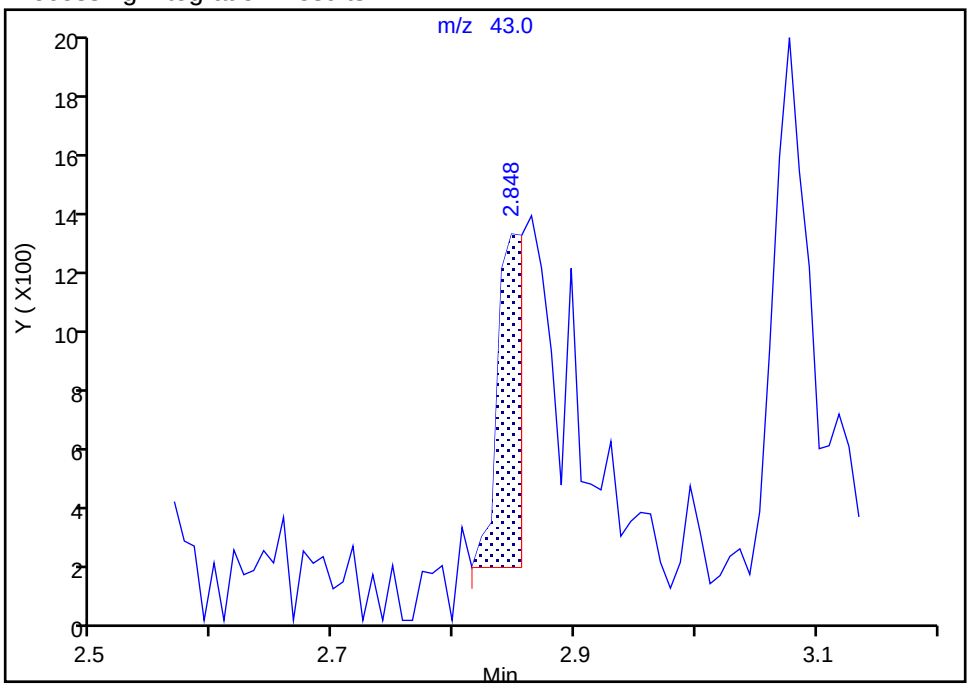
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

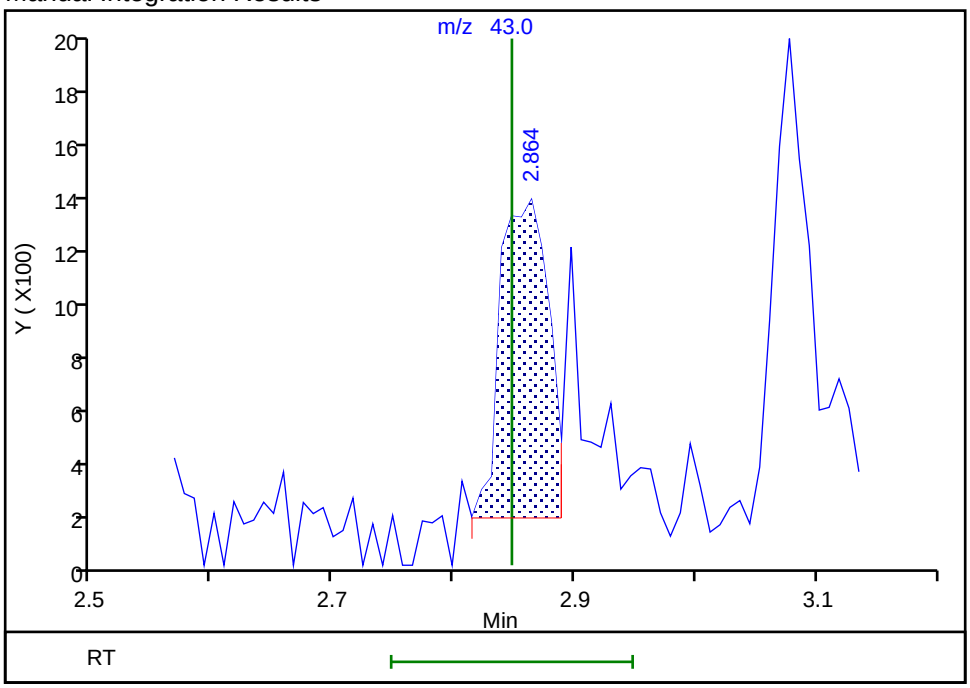
Processing Integration Results

RT: 2.85
Area: 1705
Amount: 2.046142
Amount Units: ug/l



Manual Integration Results

RT: 2.86
Area: 3274
Amount: 4.204923
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:43:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

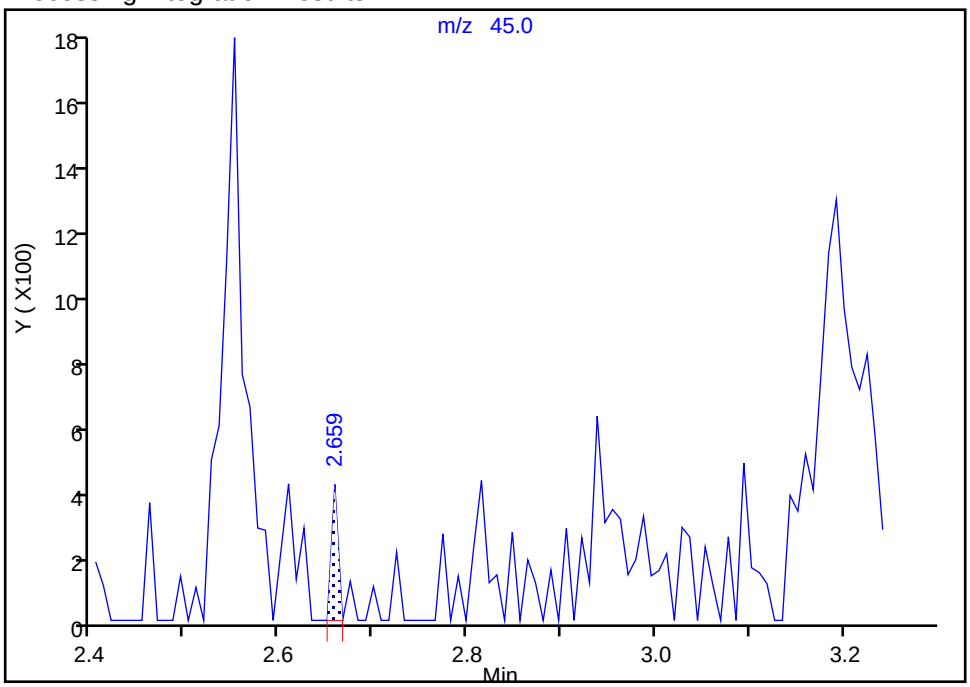
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

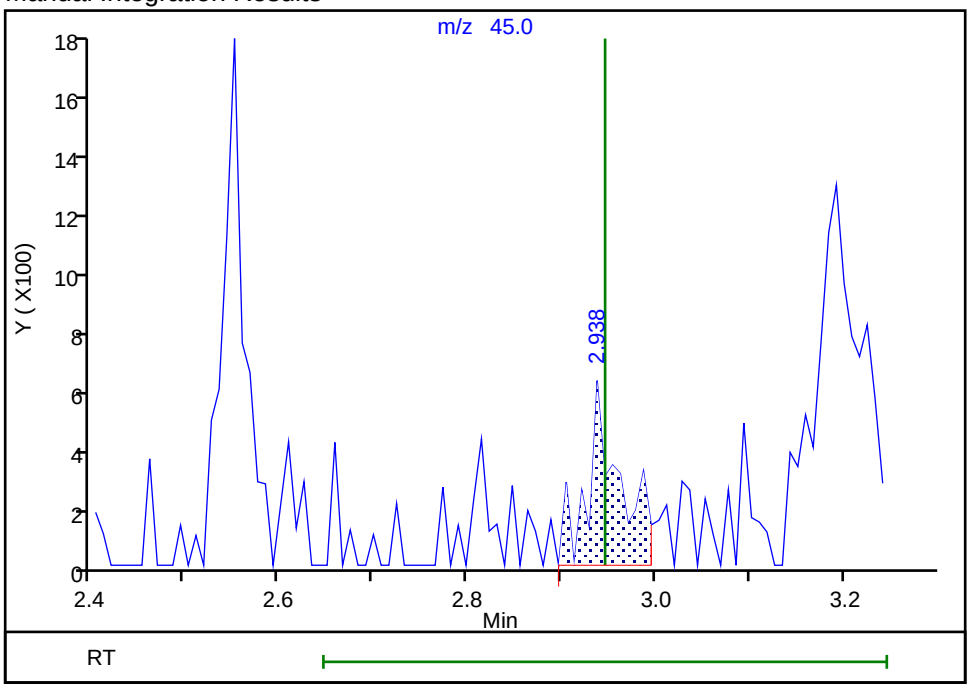
Processing Integration Results

RT: 2.66
Area: 206
Amount: 1.722006
Amount Units: ug/l



Manual Integration Results

RT: 2.94
Area: 1489
Amount: 10.963757
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:43:26
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

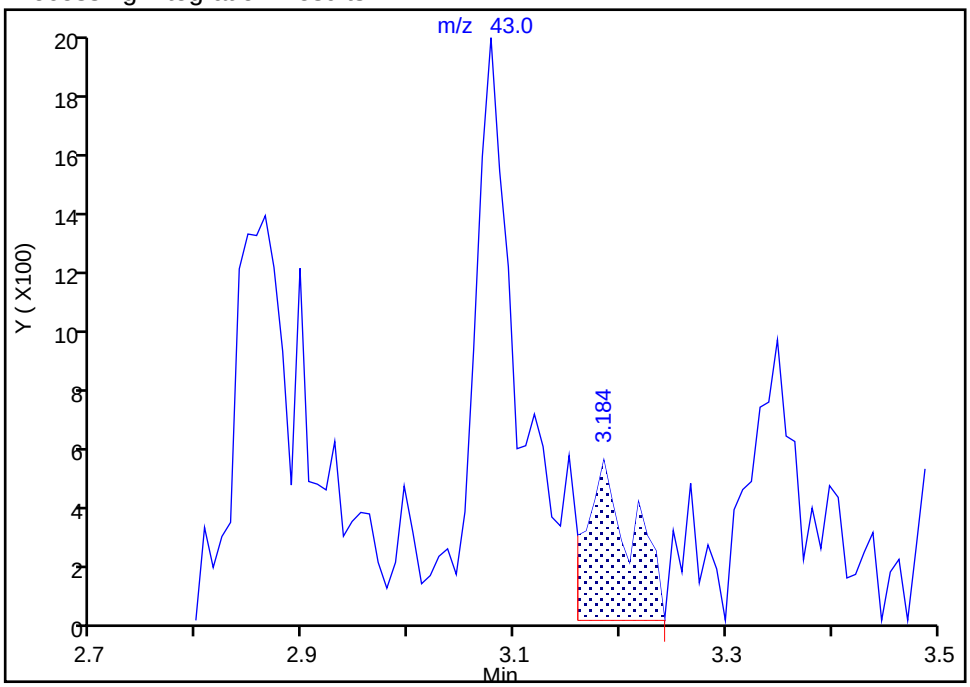
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

24 Methyl acetate, CAS: 79-20-9

Signal: 1

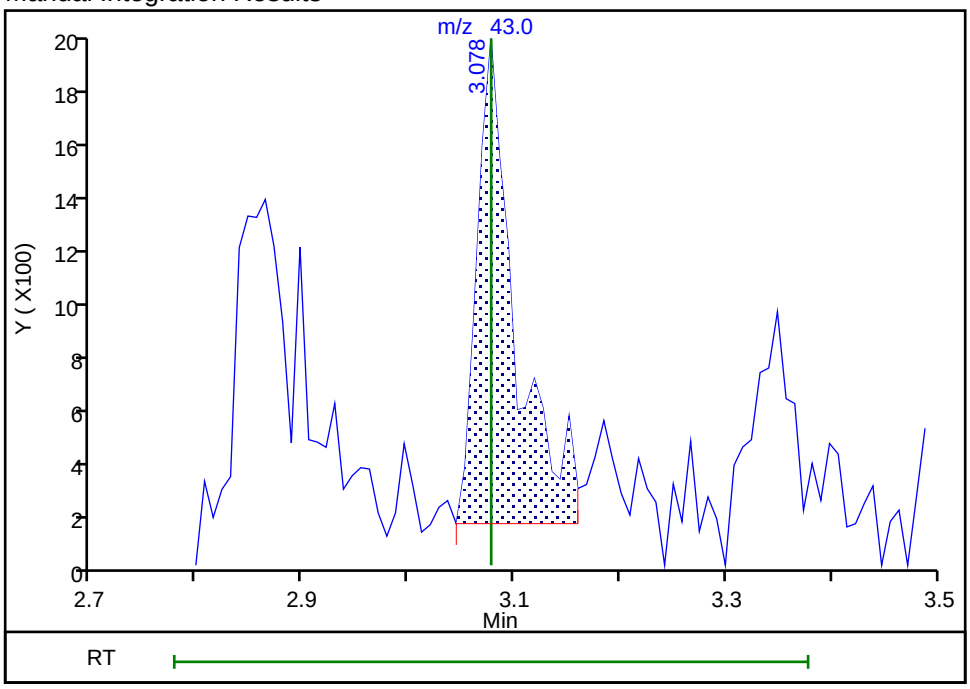
Processing Integration Results

RT: 3.18
Area: 1607
Amount: 0.648934
Amount Units: ug/l



Manual Integration Results

RT: 3.08
Area: 4522
Amount: 1.801377
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:43:34
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

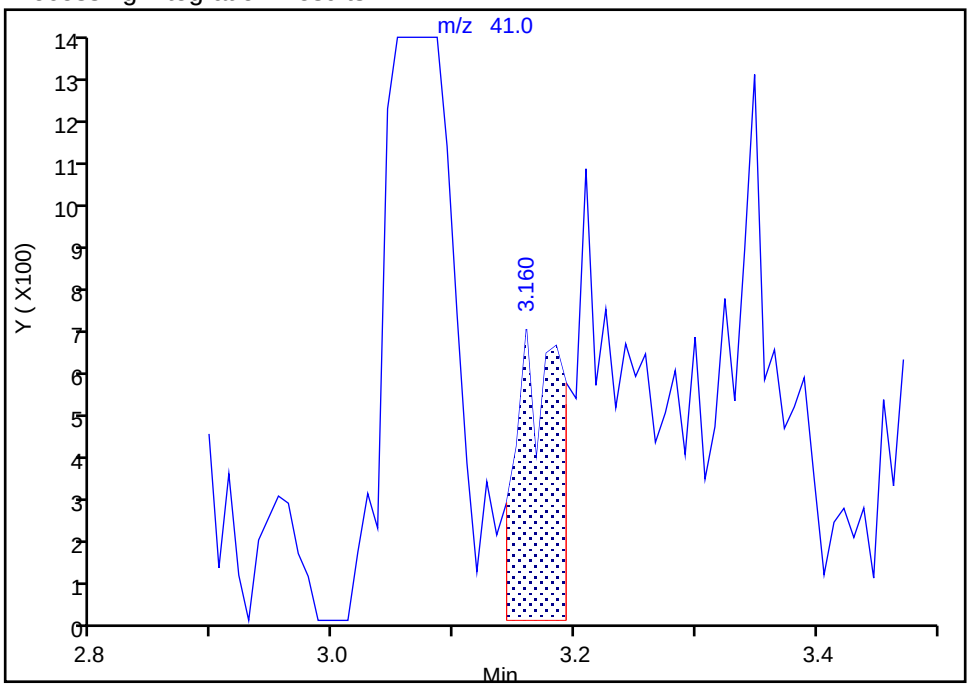
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

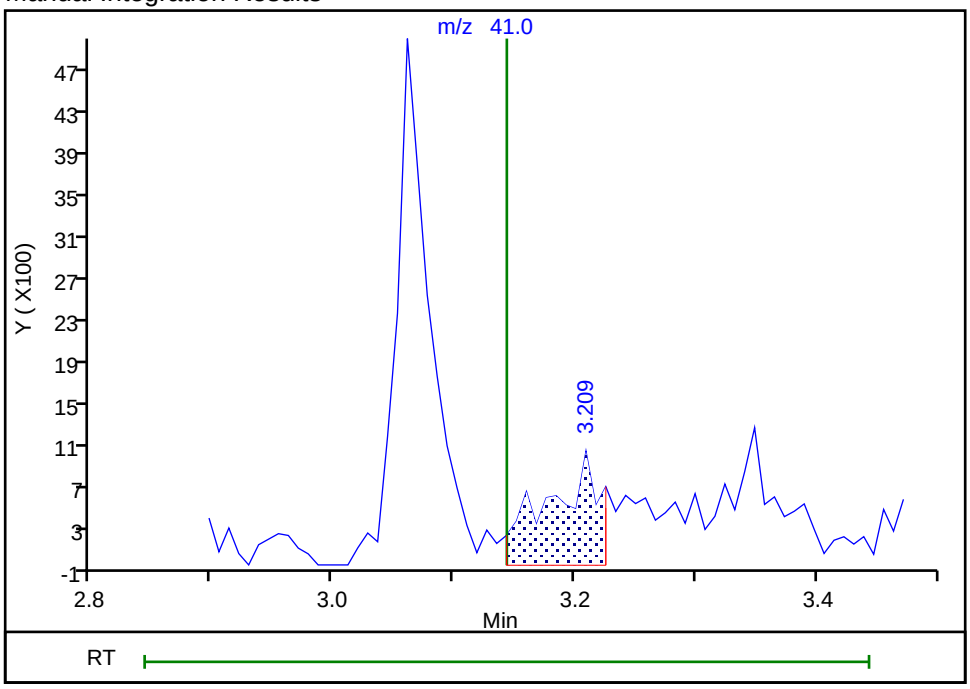
Processing Integration Results

RT: 3.16
Area: 1775
Amount: 2.376885
Amount Units: ug/l



Manual Integration Results

RT: 3.21
Area: 3213
Amount: 8.029178
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:43:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

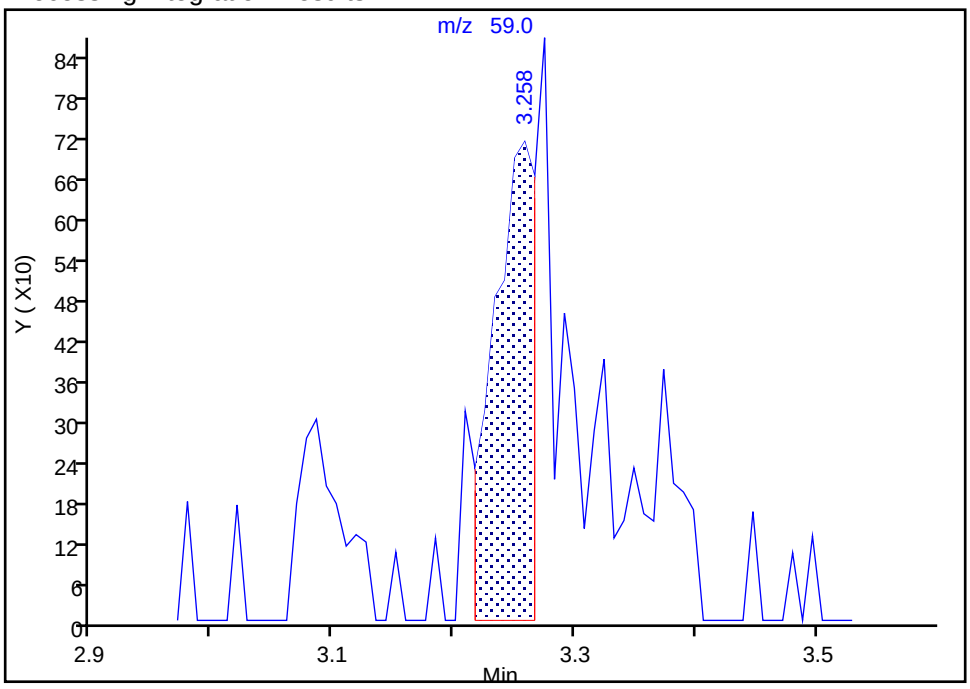
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

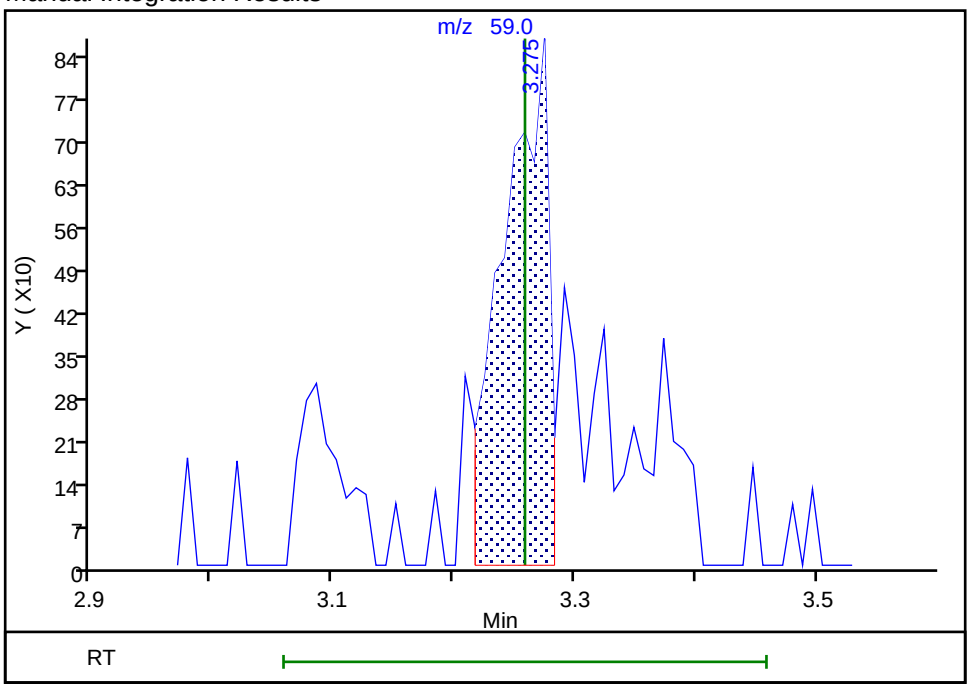
Processing Integration Results

RT: 3.26
Area: 1760
Amount: 7.577499
Amount Units: ug/l



Manual Integration Results

RT: 3.27
Area: 2288
Amount: 9.371030
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:44:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

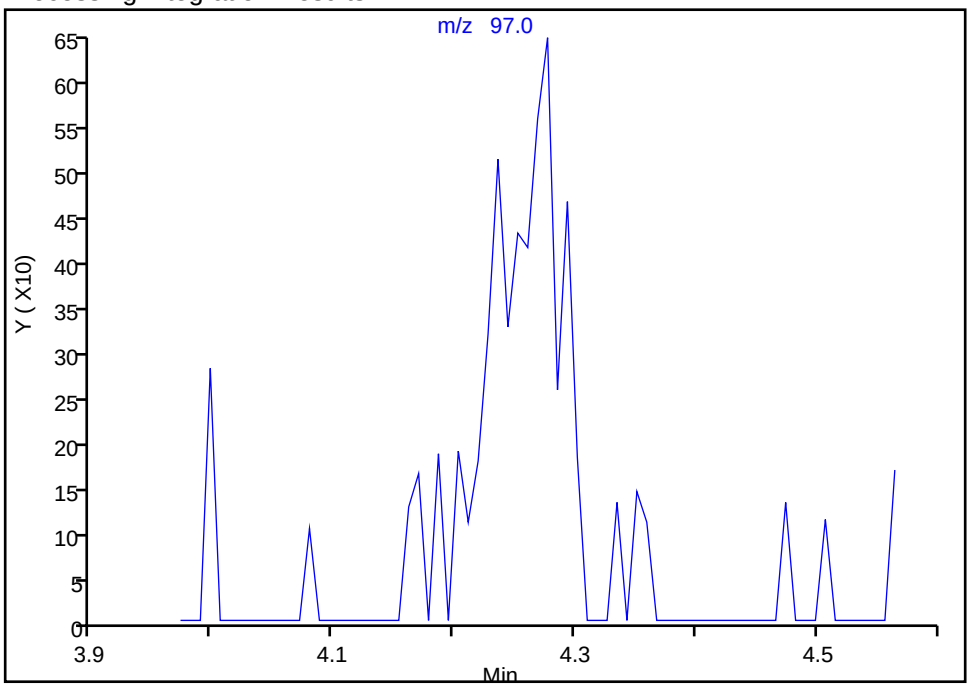
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

39 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

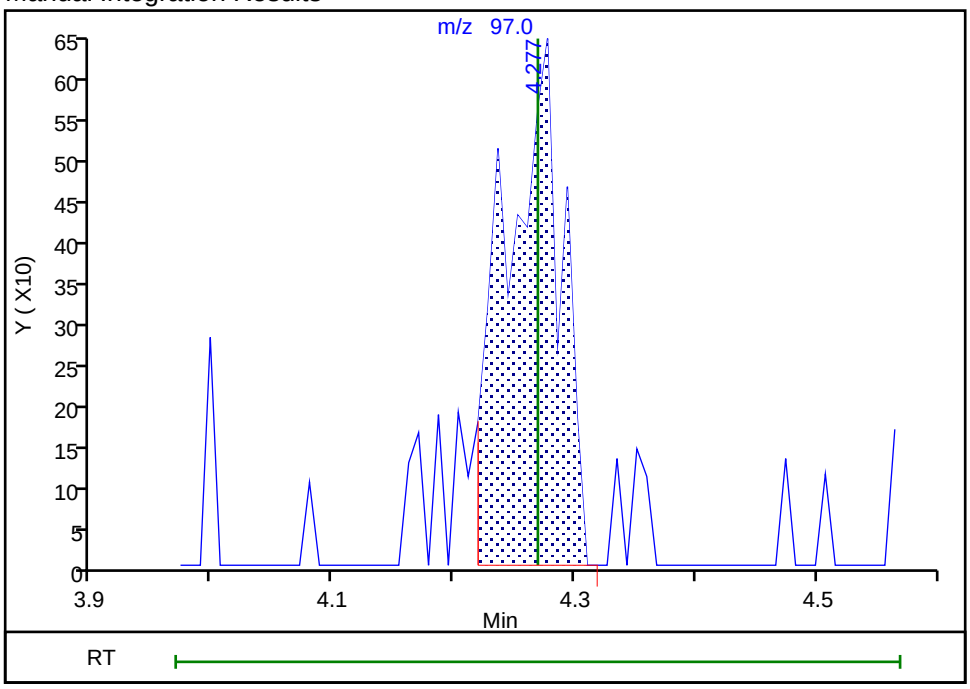
Not Detected
Expected RT: 4.27

Processing Integration Results



Manual Integration Results

RT: 4.28
Area: 2112
Amount: 1.176045
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:44:37
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

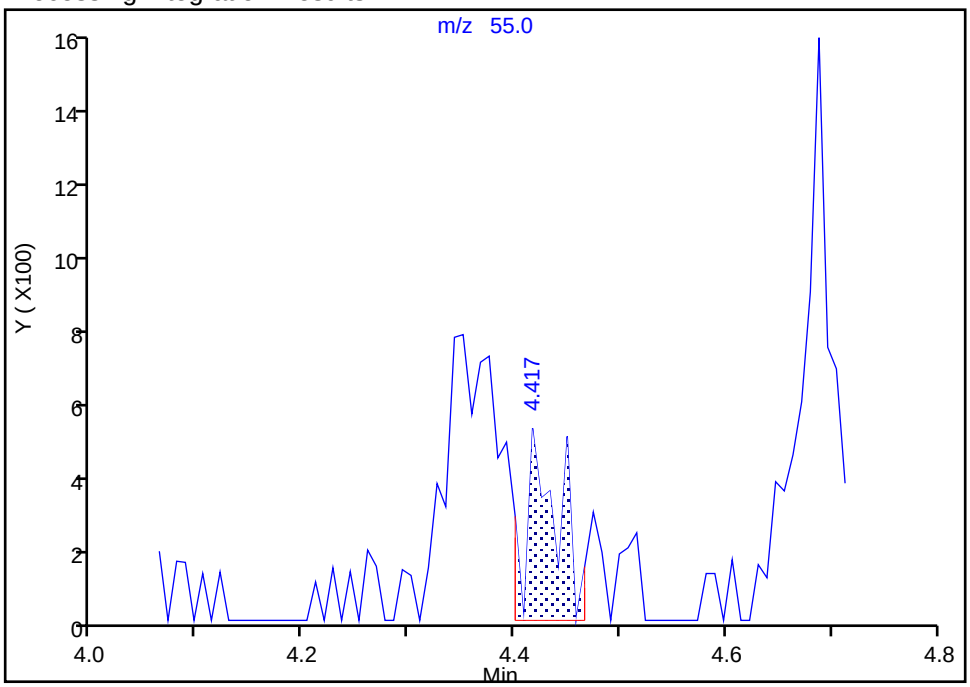
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

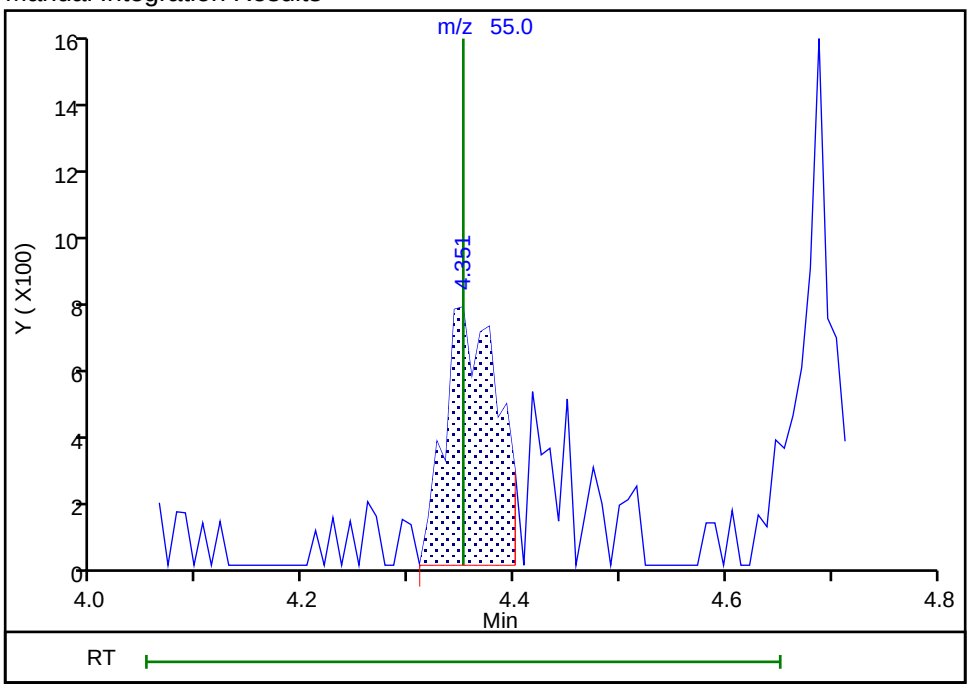
Processing Integration Results

RT: 4.42
Area: 1071
Amount: 0.391012
Amount Units: ug/l



Manual Integration Results

RT: 4.35
Area: 2625
Amount: 0.966114
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:45:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

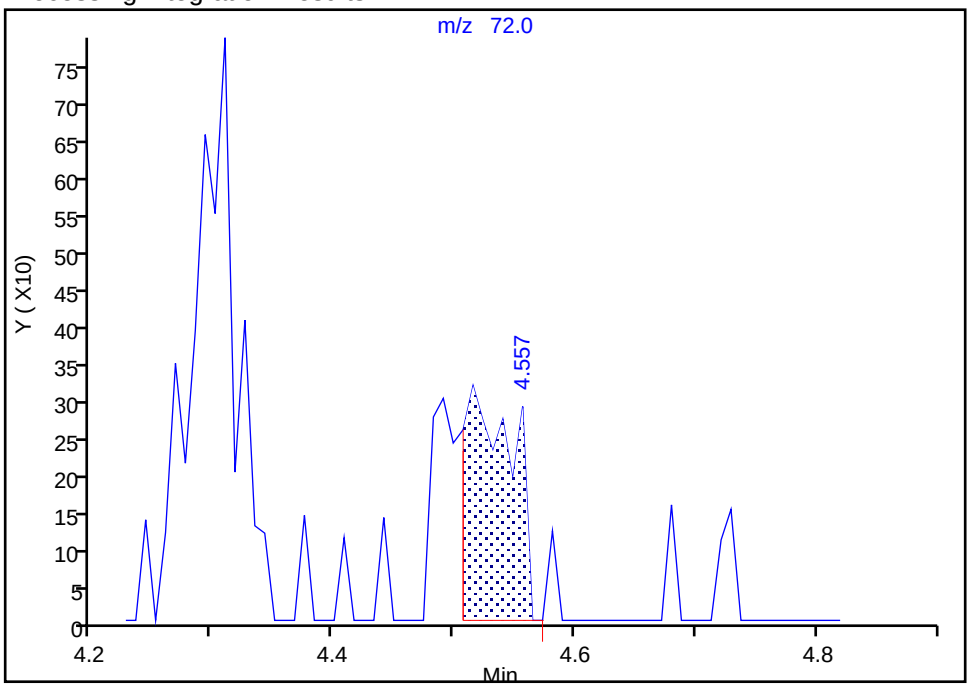
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

46 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

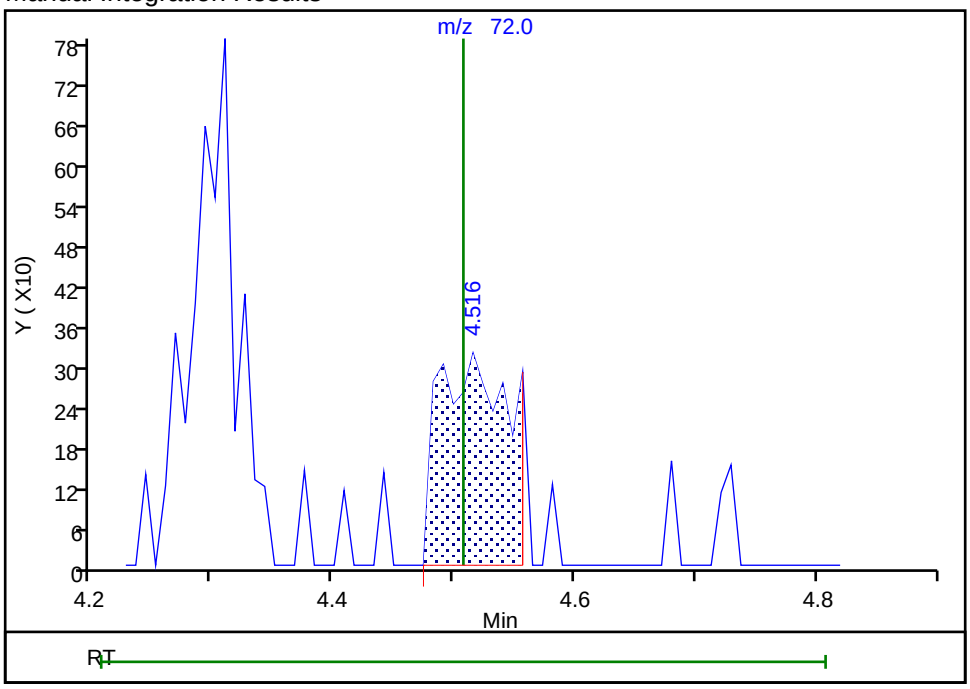
Processing Integration Results

RT: 4.56
Area: 894
Amount: 2.134241
Amount Units: ug/l



Manual Integration Results

RT: 4.52
Area: 1292
Amount: 2.011635
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:45:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

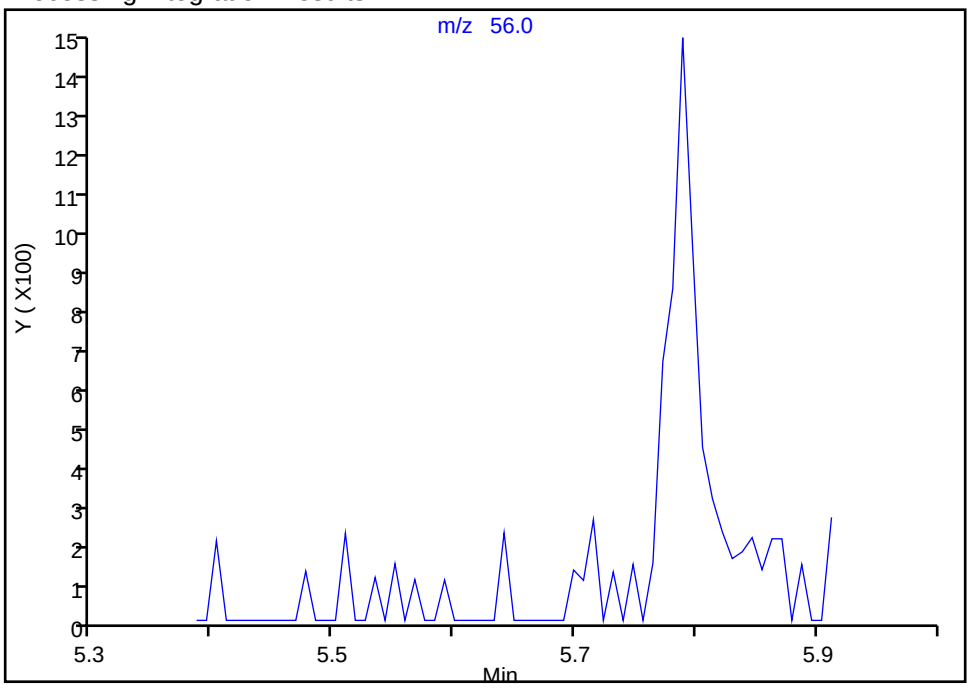
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

62 n-Butanol, CAS: 71-36-3

Signal: 1

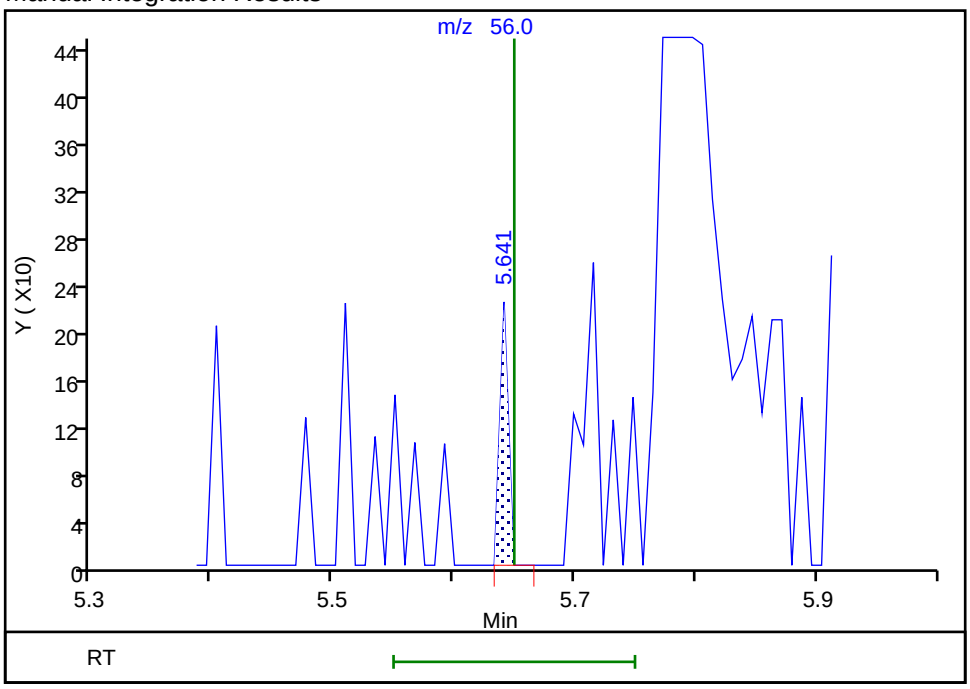
Not Detected
Expected RT: 5.65

Processing Integration Results



Manual Integration Results

RT: 5.64
Area: 109
Amount: 1.870900
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:45:49
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

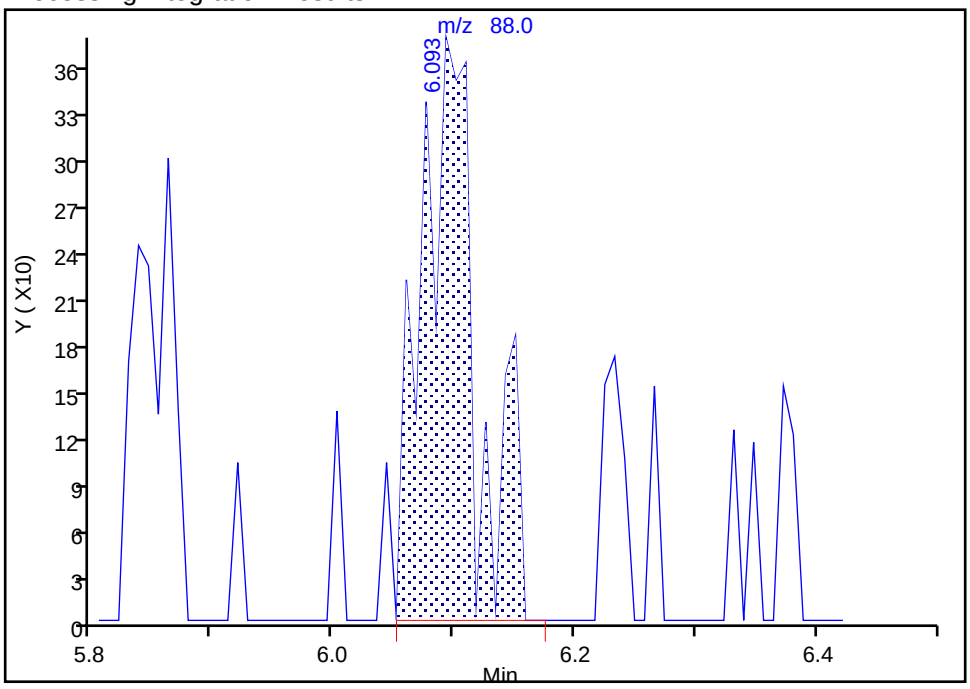
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

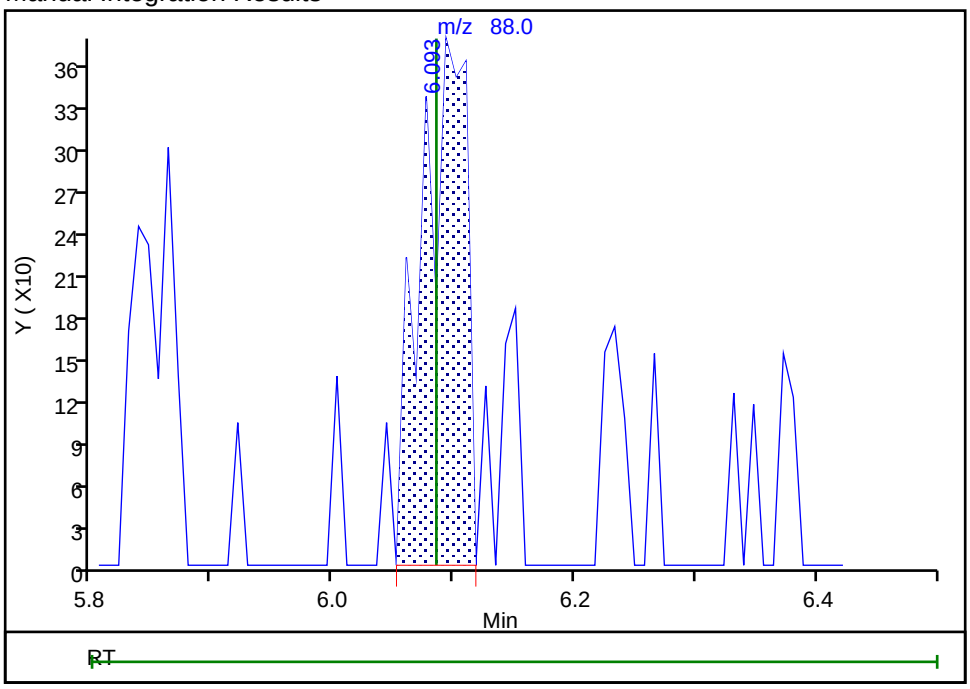
Processing Integration Results

RT: 6.09
Area: 1183
Amount: 67.510741
Amount Units: ug/l



Manual Integration Results

RT: 6.09
Area: 953
Amount: 51.669148
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 18:02:08
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

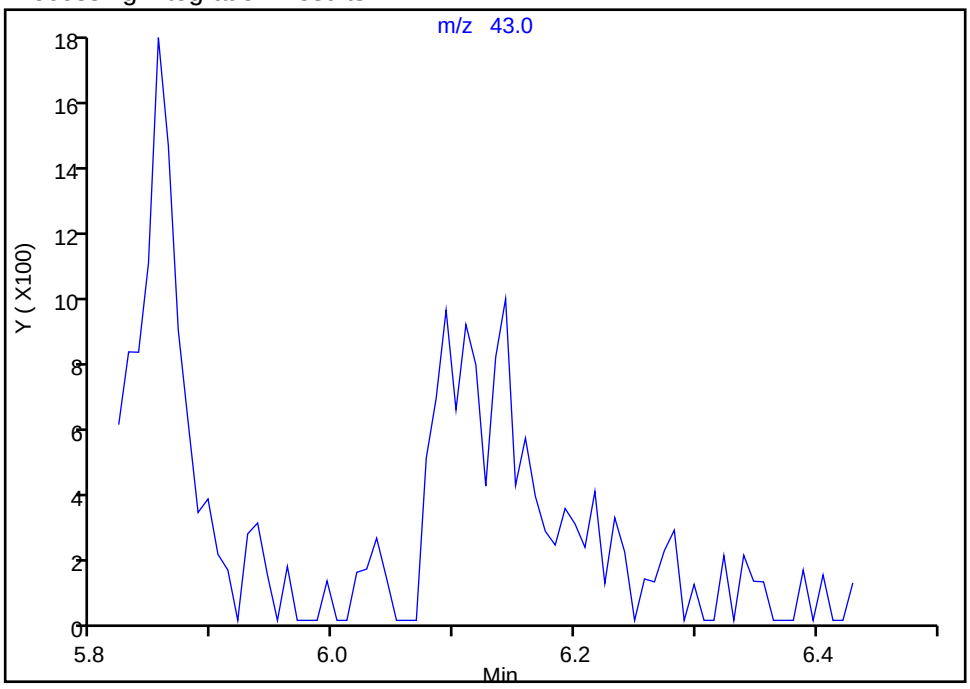
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

70 n-Propyl acetate, CAS: 109-60-4

Signal: 1

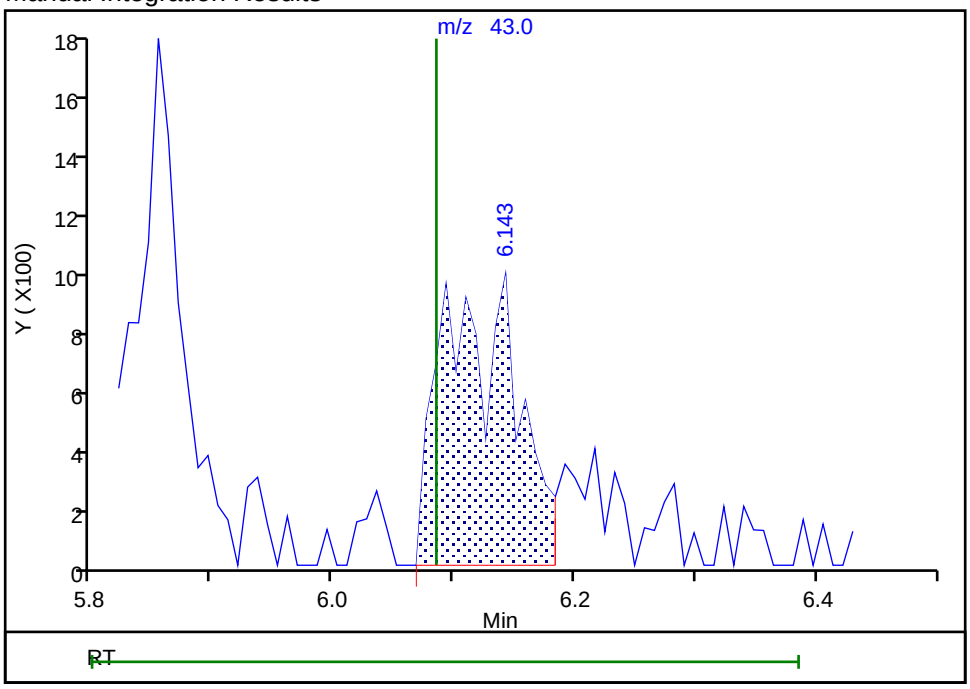
Not Detected
Expected RT: 6.09

Processing Integration Results



Manual Integration Results

RT: 6.14
Area: 4168
Amount: 0.938636
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:46:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

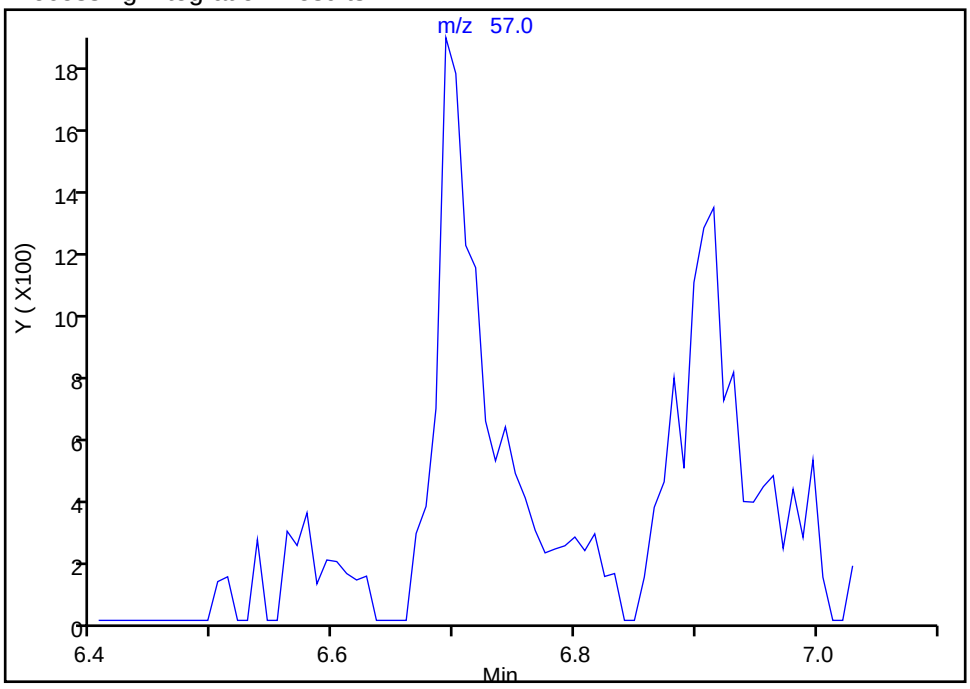
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 Epichlorohydrin, CAS: 106-89-8

Signal: 1

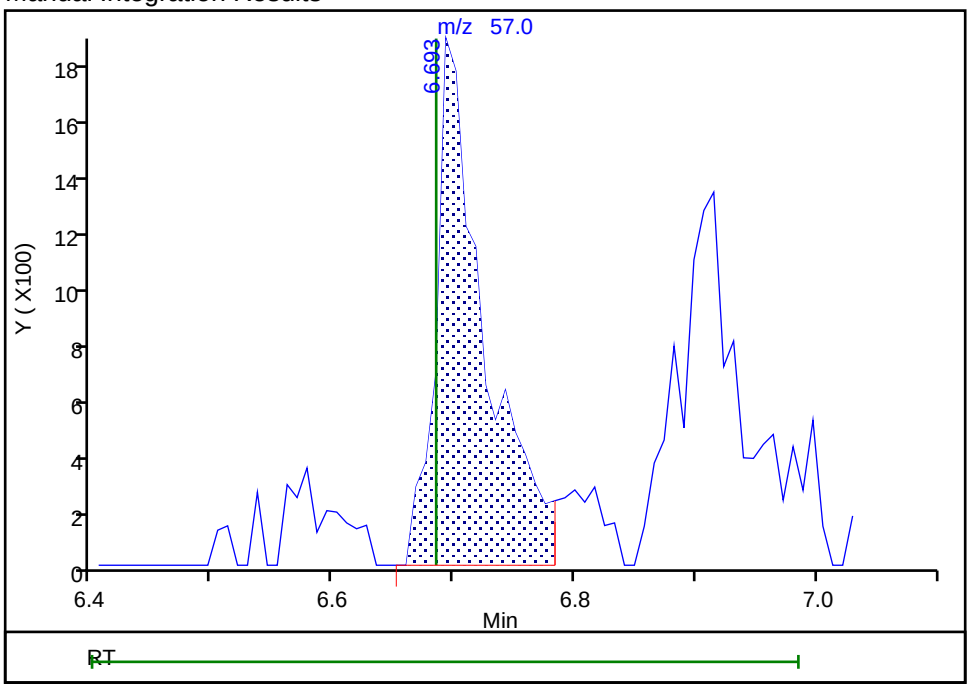
Not Detected
Expected RT: 6.69

Processing Integration Results



Manual Integration Results

RT: 6.69
Area: 5069
Amount: 18.530054
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:46:26
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

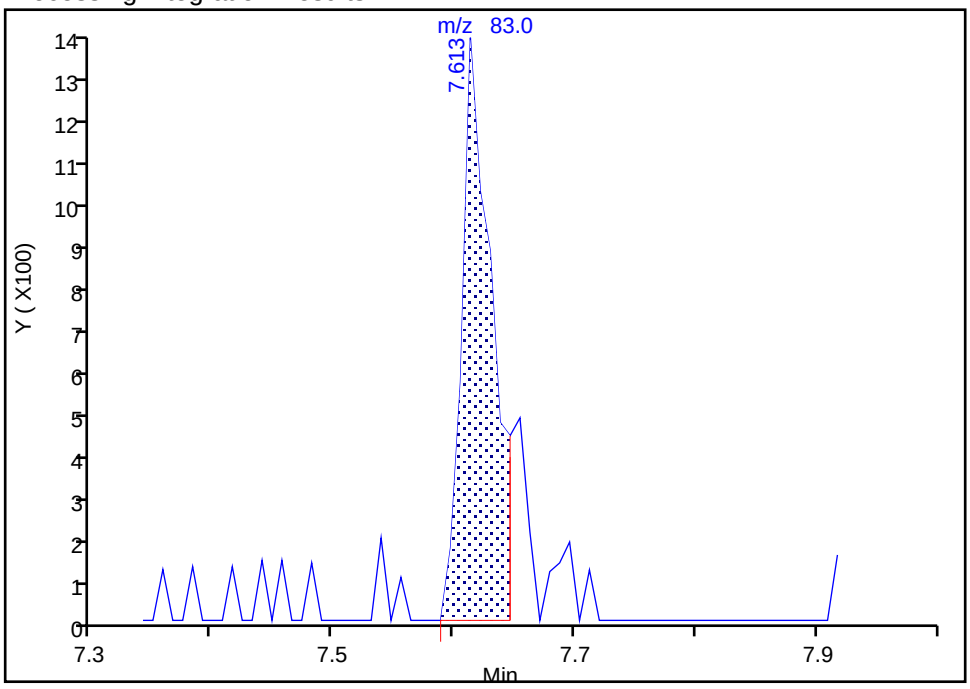
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

82 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

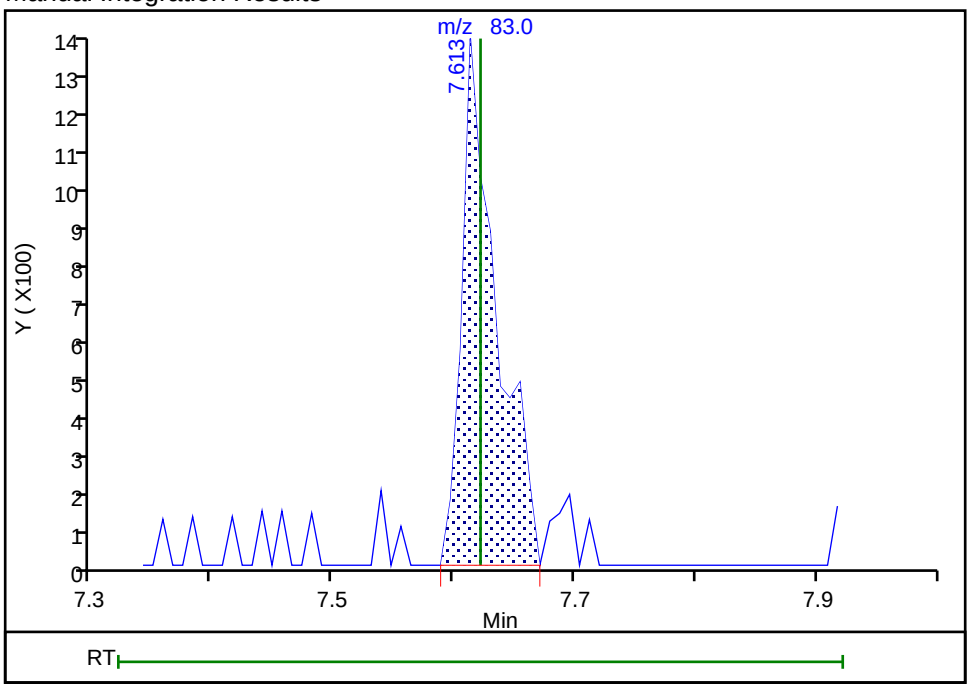
Processing Integration Results

RT: 7.61
Area: 2454
Amount: 0.842201
Amount Units: ug/l



Manual Integration Results

RT: 7.61
Area: 2798
Amount: 0.941731
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:46:47
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

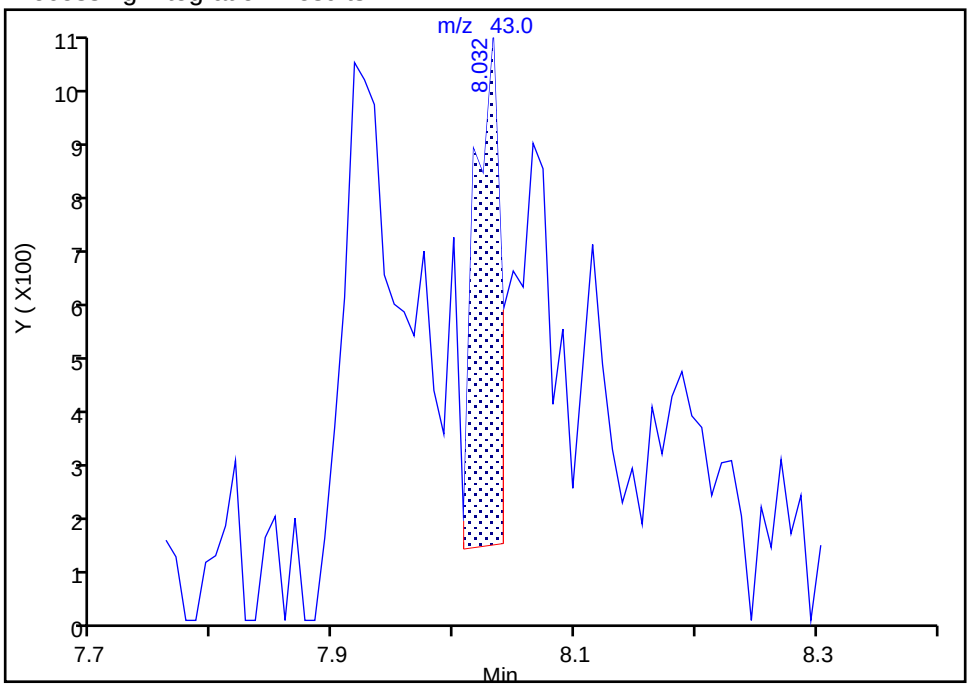
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

86 n-Butyl acetate, CAS: 123-86-4

Signal: 1

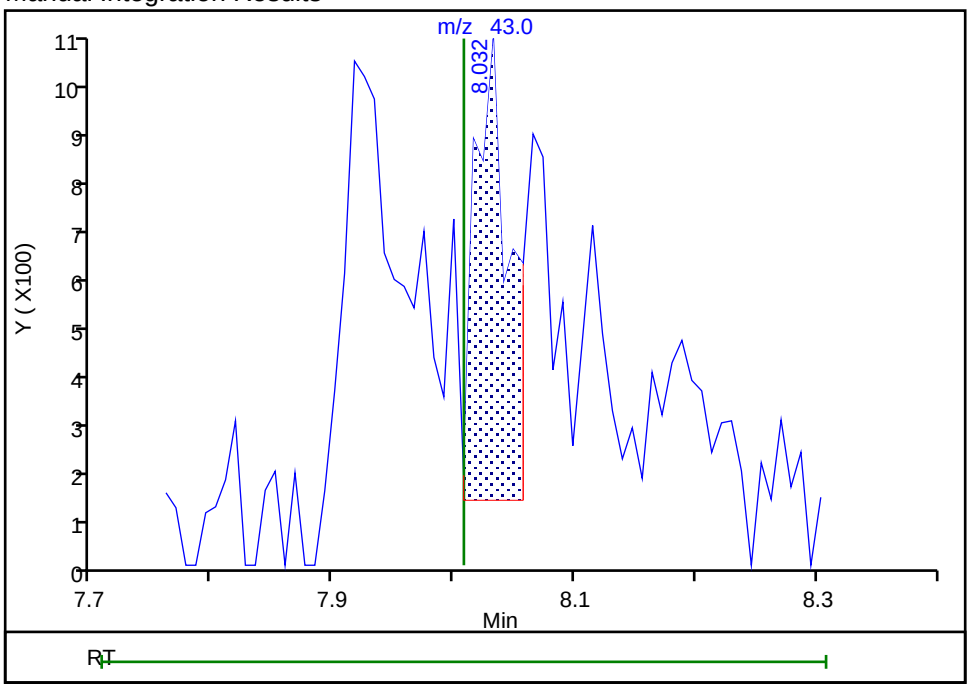
Processing Integration Results

RT: 8.03
Area: 1373
Amount: 0.278198
Amount Units: ug/l



Manual Integration Results

RT: 8.03
Area: 1864
Amount: 0.992171
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:47:00
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

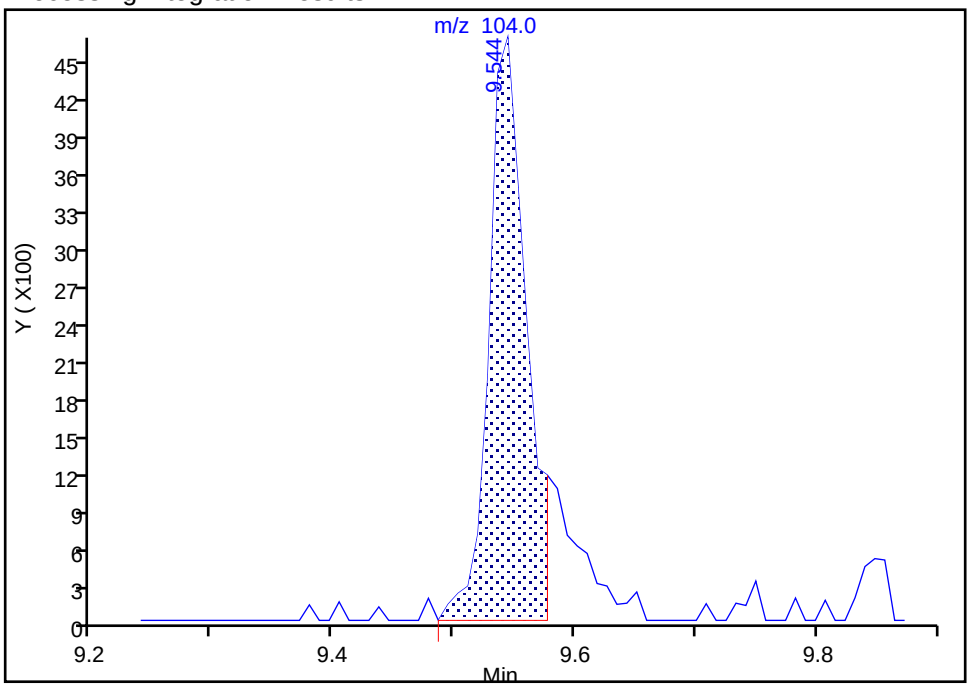
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

96 Styrene, CAS: 100-42-5

Signal: 1

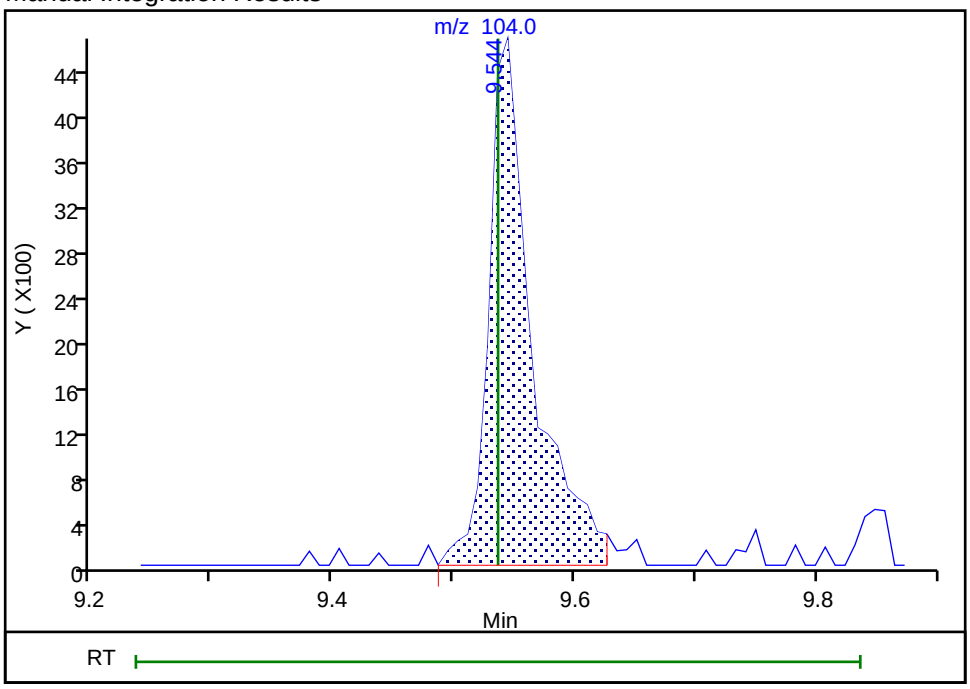
Processing Integration Results

RT: 9.54
Area: 9991
Amount: 0.822776
Amount Units: ug/l



Manual Integration Results

RT: 9.54
Area: 11669
Amount: 0.939329
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:47:19
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

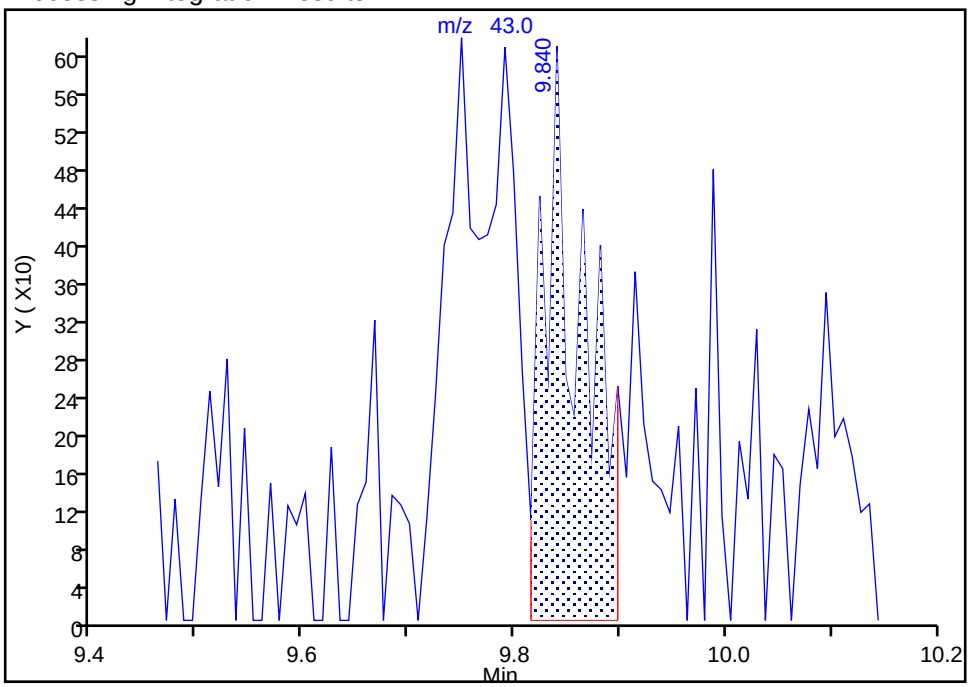
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67409.D
Injection Date: 08-Jul-2018 08:37:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

97 Amyl acetate (mixed isomers), CAS: 628-63-7

Signal: 1

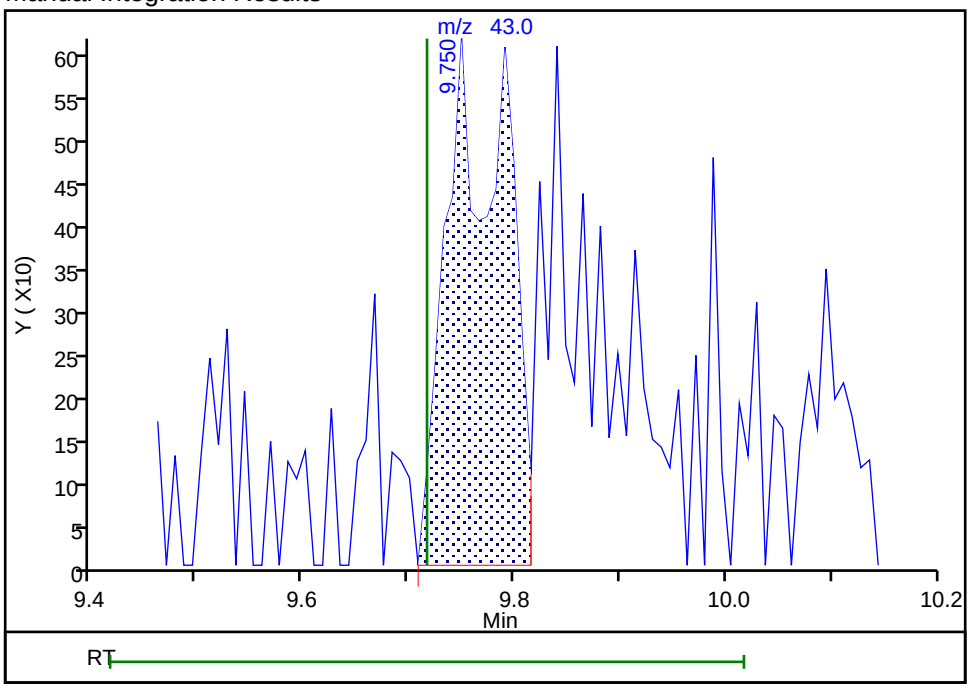
Processing Integration Results

RT: 9.84
Area: 1606
Amount: 0.253182
Amount Units: ug/l



Manual Integration Results

RT: 9.75
Area: 2413
Amount: 1.030421
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:47:33
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67410.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Jul-2018 09:01:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0075068-005
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub42

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 08-Jul-2018 19:00:59 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: boykink Date: 08-Jul-2018 09:41:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.525	1.541	-0.016	86	14256	5.00	5.16	
2 Dichlorodifluoromethane	85	1.558	1.574	-0.016	98	34244	5.00	5.13	
3 Chloromethane	50	1.738	1.747	-0.009	99	40491	5.00	4.97	
4 Vinyl chloride	62	1.821	1.837	-0.016	97	42176	5.00	5.18	
5 Butadiene	54	1.829	1.837	-0.008	88	35790	5.00	4.83	
6 Bromomethane	94	2.108	2.116	-0.008	95	28760	5.00	5.11	
7 Chloroethane	64	2.166	2.182	-0.016	98	24353	5.00	5.03	
8 Dichlorofluoromethane	67	2.346	2.355	-0.009	83	55907	5.00	5.44	
10 Pentane	72	2.346	2.363	-0.017	98	10144	10.0	12.8	
9 Trichlorofluoromethane	101	2.346	2.371	-0.025	56	41932	5.00	5.56	
11 Ethanol	46	2.576	2.544	0.032	69	1593	200.0	159.3	M
12 Ethyl ether	59	2.544	2.552	-0.008	94	16040	5.00	4.77	
13 2-Methyl-1,3-butadiene	53	2.560	2.568	-0.008	94	19820	5.00	5.06	
14 1,2-Dichloro-1,1,2-trifluo	117	2.609	2.618	-0.009	94	21483	5.00	5.36	
15 Acrolein	56	2.724	2.724	0.000	37	5038	20.0	20.6	
16 1,1,2-Trichloro-1,2,2-trif	101	2.741	2.749	-0.008	94	25985	5.00	5.56	
17 1,1-Dichloroethene	96	2.749	2.757	-0.008	98	21834	5.00	5.03	
18 Acetone	43	2.831	2.848	-0.017	88	20985	25.0	25.8	
19 Iodomethane	142	2.905	2.913	-0.008	97	40210	5.00	5.14	
20 Isopropyl alcohol	45	2.922	2.946	-0.024	26	7433	50.0	50.5	
21 Carbon disulfide	76	2.938	2.955	-0.017	99	89893	5.00	5.18	
22 3-Chloro-1-propene	41	3.061	3.061	0.000	92	42210	5.00	5.08	
24 Methyl acetate	43	3.070	3.078	-0.008	57	26571	10.0	10.6	
23 Cyclopentene	67	3.078	3.086	-0.008	90	56774	5.00	5.15	
25 Acetonitrile	41	3.135	3.144	-0.009	53	17289	50.0	39.9	
27 Methylene Chloride	84	3.185	3.193	-0.008	93	28558	5.00	5.35	
* 26 TBA-d9 (IS)	65	3.185	3.193	-0.008	0	125748	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.250	3.259	-0.009	91	12782	50.0	48.3	M
29 Methyl tert-butyl ether	73	3.341	3.349	-0.008	97	65514	5.00	5.10	
30 trans-1,2-Dichloroethene	96	3.374	3.374	0.000	95	24093	5.00	5.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.447	3.448	-0.001	99	72019	50.0	50.2	
32 Hexane	43	3.513	3.522	-0.009	94	19556	5.00	5.00	
33 Isopropyl ether	45	3.719	3.727	-0.008	99	74480	5.00	5.07	
34 1,1-Dichloroethane	63	3.760	3.760	0.000	99	47774	5.00	5.61	
35 Vinyl acetate	86	3.768	3.776	-0.008	100	7751	10.0	9.41	
36 2-Chloro-1,3-butadiene	88	3.801	3.809	-0.008	90	20482	5.00	4.84	
37 Tert-butyl ethyl ether	59	4.031	4.039	-0.008	90	66745	5.00	4.85	
* 38 2-Butanone-d5	46	4.228	4.236	-0.008	0	142843	250.0	250.0	
39 2,2-Dichloropropane	97	4.253	4.269	-0.016	65	8939	5.00	4.97	
40 cis-1,2-Dichloroethene	96	4.269	4.277	-0.008	97	28363	5.00	5.26	
41 2-Butanone (MEK)	72	4.294	4.286	0.008	84	9499	25.0	25.1	
42 Ethyl acetate	70	4.286	4.286	0.000	89	3962	10.0	10.5	
43 Methyl acrylate	55	4.351	4.351	0.000	96	12350	5.00	4.47	
44 Propionitrile	54	4.425	4.425	0.000	96	22168	50.0	47.4	
45 Chlorobromomethane	128	4.499	4.499	0.000	85	13409	5.00	5.38	
46 Tetrahydrofuran	72	4.516	4.508	0.008	50	4446	10.0	9.41	
47 Methacrylonitrile	67	4.516	4.524	-0.008	91	75501	50.0	48.4	
48 Chloroform	83	4.549	4.549	0.000	97	39973	5.00	5.19	
49 Cyclohexane	84	4.680	4.688	-0.008	88	36899	5.00	5.14	
50 1,1,1-Trichloroethane	97	4.688	4.697	-0.009	54	34126	5.00	4.97	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	97	95222	50.0	50.9	
52 Carbon tetrachloride	117	4.811	4.812	-0.001	97	29360	5.00	5.27	
53 1,1-Dichloropropene	75	4.836	4.844	-0.008	98	31815	5.00	5.24	
54 Isobutyl alcohol	43	4.976	4.992	-0.016	41	23852	125.0	112.1	
55 Benzene	78	5.033	5.033	0.000	96	97753	5.00	5.44	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	94533	50.0	47.3	
57 Isopropyl acetate	43	5.083	5.083	0.000	77	51248	5.00	4.66	
58 Tert-amyl methyl ether	73	5.091	5.091	0.000	94	73115	5.00	4.99	
59 1,2-Dichloroethane	62	5.124	5.124	0.000	95	27555	5.00	4.97	
60 n-Heptane	57	5.173	5.181	-0.008	91	16247	5.00	4.83	
* 61 Fluorobenzene	96	5.313	5.321	-0.008	99	375144	50.0	50.0	
62 n-Butanol	56	5.682	5.650	0.032	25	3506	125.0	55.5	
63 Trichloroethene	95	5.666	5.674	-0.008	97	23075	5.00	4.99	
65 Ethyl acrylate	55	5.789	5.789	0.000	90	48819	5.00	4.86	
64 Methylcyclohexane	83	5.789	5.798	-0.009	89	40143	5.00	4.93	
66 1,2-Dichloropropane	63	5.954	5.962	-0.008	92	24865	5.00	5.19	
* 67 1,4-Dioxane-d8	96	6.019	6.019	0.000	0	10982	1000.0	1000.0	
68 Methyl methacrylate	100	6.036	6.028	0.008	87	7979	10.0	9.03	
70 n-Propyl acetate	43	6.093	6.085	0.008	94	19557	5.00	4.40	
69 1,4-Dioxane	88	6.093	6.085	0.008	25	2029	100.0	96.8	
71 Dibromomethane	93	6.093	6.093	0.000	97	13049	5.00	4.78	
72 Dichlorobromomethane	83	6.241	6.241	0.000	98	27927	5.00	4.79	
74 2-Chloroethyl vinyl ether	63	6.578	6.570	0.008	80	8574	5.00	4.10	
73 2-Nitropropane	41	6.570	6.570	0.000	88	8656	10.0	10.4	
75 Epichlorohydrin	57	6.685	6.685	0.000	98	28499	100.0	99.6	
76 cis-1,3-Dichloropropene	75	6.734	6.734	0.000	90	31426	5.00	4.82	
77 4-Methyl-2-pentanone (MIBK	43	6.899	6.899	0.000	95	72940	25.0	25.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.981	-0.008	99	366322	50.0	51.7	
79 Toluene	91	7.055	7.055	0.000	92	95962	5.00	5.29	
80 trans-1,3-Dichloropropene	75	7.408	7.408	0.000	96	27107	5.00	4.99	
81 Ethyl methacrylate	69	7.441	7.433	0.008	86	20020	5.00	4.50	
82 1,1,2-Trichloroethane	83	7.622	7.622	0.000	96	16220	5.00	5.37	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.663	7.663	0.000	95	23541	5.00	5.31	
84 1,3-Dichloropropane	76	7.827	7.827	0.000	94	27661	5.00	4.84	
85 2-Hexanone	43	7.901	7.893	0.008	94	35757	25.0	23.3	
86 n-Butyl acetate	43	8.008	8.008	0.000	96	24106	5.00	5.21	
87 Chlorodibromomethane	129	8.065	8.065	0.000	98	19562	5.00	4.99	
88 Ethylene Dibromide	107	8.213	8.222	-0.009	100	17425	5.00	5.29	
* 89 Chlorobenzene-d5	117	8.764	8.764	0.000	85	257261	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	95	58106	5.00	5.09	
91 Ethylbenzene	106	8.895	8.895	0.000	98	32213	5.00	4.88	
92 1,1,1,2-Tetrachloroethane	131	8.912	8.920	-0.008	95	22718	5.00	5.24	
93 m-Xylene & p-Xylene	106	9.060	9.060	0.000	0	39690	5.00	5.05	
94 n-Butyl acrylate	73	9.495	9.487	0.008	46	12223	5.00	4.57	
95 o-Xylene	106	9.503	9.503	0.000	94	40346	5.00	4.96	
96 Styrene	104	9.536	9.536	0.000	96	59744	5.00	4.73	
97 Amyl acetate (mixed isomer	43	9.725	9.717	0.008	92	25124	5.00	4.26	
98 Bromoform	173	9.742	9.742	0.000	96	12599	5.00	5.02	
99 Isopropylbenzene	105	9.848	9.849	-0.001	96	102121	5.00	5.23	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	92	106636	50.0	51.3	
101 Bromobenzene	156	10.152	10.144	0.008	98	25405	5.00	4.73	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	98	26083	5.00	5.15	
103 N-Propylbenzene	91	10.202	10.202	0.000	99	127766	5.00	5.18	
104 1,2,3-Trichloropropane	110	10.226	10.227	-0.001	95	6415	5.00	4.49	
105 trans-1,4-Dichloro-2-buten	53	10.243	10.243	0.000	72	4806	5.00	4.72	
106 2-Chlorotoluene	91	10.292	10.292	0.000	93	87223	5.00	5.02	
107 4-Ethyltoluene	105	10.300	10.300	0.000	87	101134	5.00	4.98	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	94	89710	5.00	5.01	
109 4-Chlorotoluene	91	10.391	10.391	0.000	96	77680	5.00	5.06	
110 Butyl Methacrylate	87	10.432	10.432	0.000	87	23847	5.00	4.30	
111 tert-Butylbenzene	119	10.588	10.588	0.000	96	69427	5.00	4.81	
112 1,2,4-Trimethylbenzene	105	10.637	10.637	0.000	96	92231	5.00	5.06	
113 sec-Butylbenzene	105	10.744	10.744	0.000	99	115270	5.00	5.18	
114 4-Isopropyltoluene	119	10.843	10.843	0.000	97	92127	5.00	4.90	
115 1,3-Dichlorobenzene	146	10.859	10.859	0.000	97	54210	5.00	5.14	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.909	-0.001	95	155550	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.925	10.925	0.000	96	56793	5.00	5.23	
132 1,2,3-Trimethylbenzene	105	10.933	10.933	0.000	98	97482	5.00	5.04	
118 Benzyl chloride	91	11.023	11.024	-0.001	99	45280	5.00	4.68	
119 2,3-Dihydroindene	117	11.065	11.065	0.000	93	102646	5.00	5.27	
120 p-Diethylbenzene	119	11.097	11.098	-0.001	94	58887	5.00	5.09	
121 n-Butylbenzene	92	11.122	11.114	0.008	97	52880	5.00	4.93	
122 1,2-Dichlorobenzene	146	11.171	11.171	0.000	97	54281	5.00	5.14	
123 1,2,4,5-Tetramethylbenzene	119	11.574	11.574	0.000	97	87056	5.00	4.82	
124 1,2-Dibromo-3-Chloropropan	75	11.656	11.656	0.000	93	4759	5.00	5.10	
125 1,3,5-Trichlorobenzene	180	11.738	11.738	0.000	96	42265	5.00	5.14	
126 1,2,4-Trichlorobenzene	180	12.141	12.141	0.000	94	36082	5.00	4.93	
127 Hexachlorobutadiene	225	12.198	12.199	-0.001	96	17800	5.00	5.13	
128 Naphthalene	128	12.314	12.314	0.000	99	71630	5.00	4.63	
129 1,2,3-Trichlorobenzene	180	12.478	12.478	0.000	93	33688	5.00	4.80	
S 130 1,2-Dichloroethene, Total	100				0		10.0	10.3	
S 131 Xylenes, Total	100				0		10.0	10.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ACROLEIN W_00078	Amount Added:	4.00	Units: uL	
GAS Hi_00262	Amount Added:	1.00	Units: uL	
MIX I Hi_00095	Amount Added:	1.00	Units: uL	
Ethanol mix_00017	Amount Added:	1.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	1.00	Units: uL	
VOA6IS/SURR_00011	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 08-Jul-2018 19:01:02 Chrom Revision: 2.2 07-Jun-2018 07:41:54

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67410.D

Injection Date: 08-Jul-2018 09:01:30 Instrument ID: CVOAMS6 Operator ID:

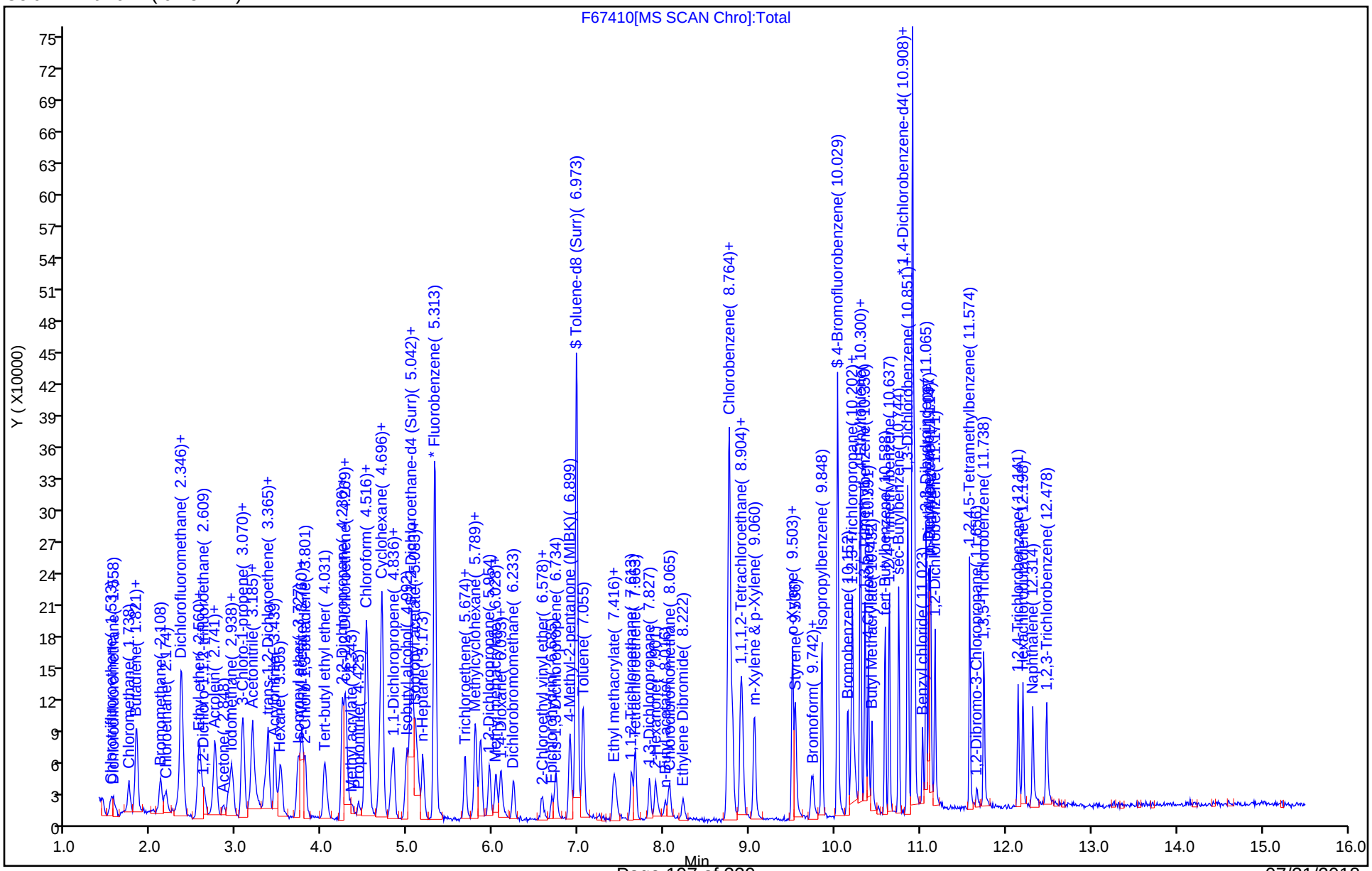
Lims ID: STD5 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

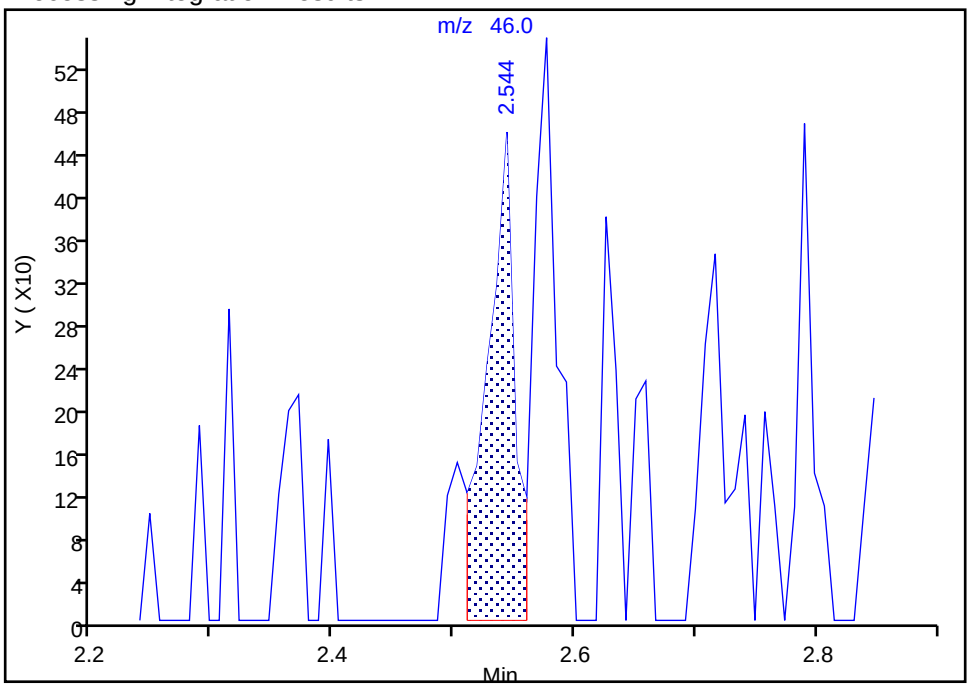
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67410.D
Injection Date: 08-Jul-2018 09:01:30 Instrument ID: CVOAMS6
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

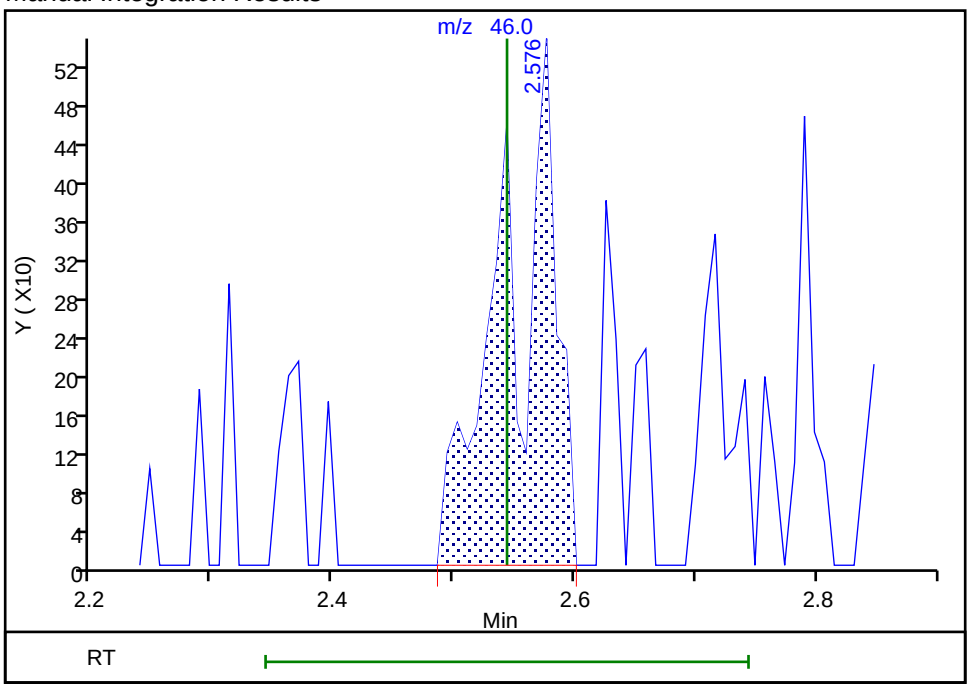
Processing Integration Results

RT: 2.54
Area: 764
Amount: 107.3294
Amount Units: ug/l



Manual Integration Results

RT: 2.58
Area: 1593
Amount: 159.3053
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:48:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

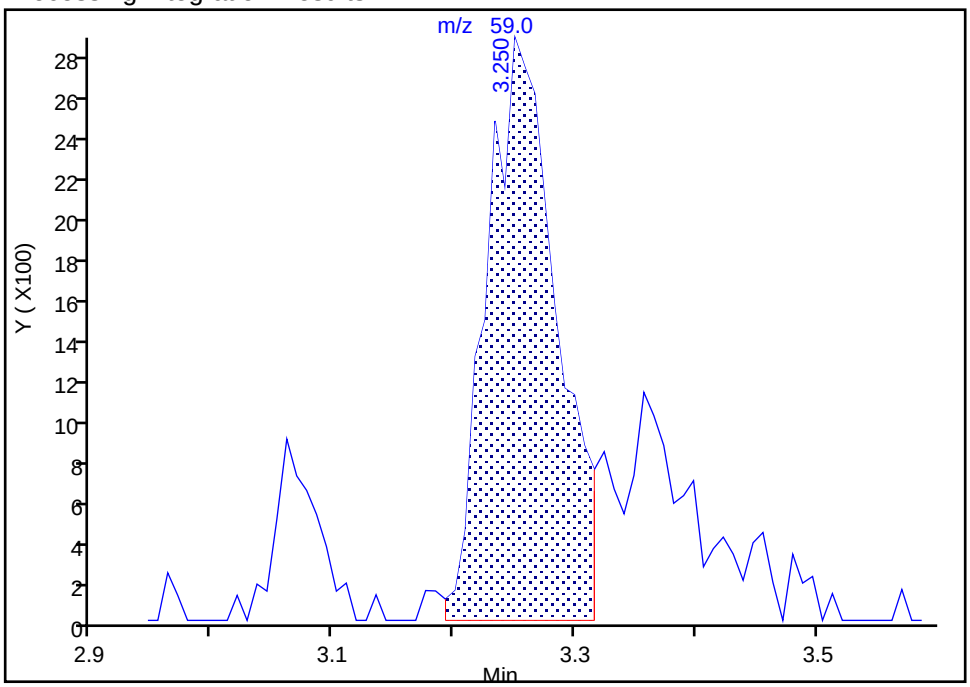
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67410.D
Injection Date: 08-Jul-2018 09:01:30 Instrument ID: CVOAMS6
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

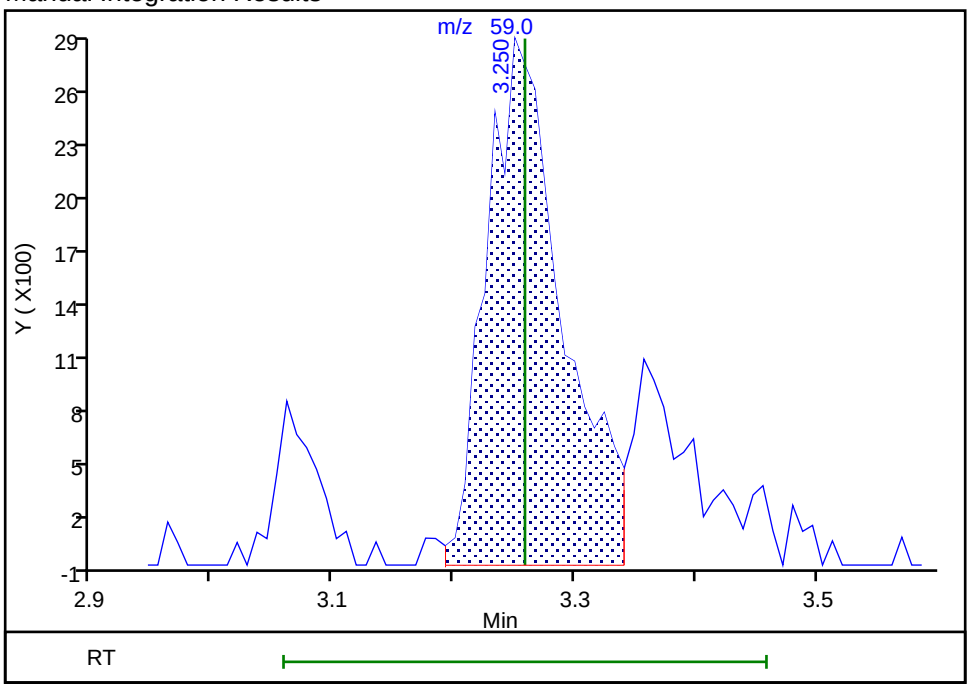
Processing Integration Results

RT: 3.25
Area: 11778
Amount: 45.112750
Amount Units: ug/l



Manual Integration Results

RT: 3.25
Area: 12782
Amount: 48.338693
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:49:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67411.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 08-Jul-2018 09:24:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0075068-006
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub42

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 08-Jul-2018 19:01:17 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: delpolitov Date: 08-Jul-2018 18:59:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.541	1.541	0.000	88	55175	20.0	19.5	
2 Dichlorodifluoromethane	85	1.574	1.574	0.000	99	129388	20.0	19.0	
3 Chloromethane	50	1.747	1.747	0.000	98	160414	20.0	19.2	
5 Butadiene	54	1.837	1.837	0.000	93	142283	20.0	18.8	
4 Vinyl chloride	62	1.837	1.837	0.000	97	162796	20.0	19.5	
6 Bromomethane	94	2.116	2.116	0.000	98	110997	20.0	19.3	
7 Chloroethane	64	2.182	2.182	0.000	99	95876	20.0	19.4	
8 Dichlorofluoromethane	67	2.355	2.355	0.000	98	222984	20.0	21.2	
10 Pentane	72	2.363	2.363	0.000	96	34097	40.0	42.9	
9 Trichlorofluoromethane	101	2.371	2.371	0.000	56	152955	20.0	19.8	
11 Ethanol	46	2.544	2.544	0.000	77	8161	800.0	814.9	
12 Ethyl ether	59	2.552	2.552	0.000	94	71323	20.0	20.7	
13 2-Methyl-1,3-butadiene	53	2.568	2.568	0.000	96	81333	20.0	20.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.618	2.618	0.000	94	82854	20.0	20.2	
15 Acrolein	56	2.724	2.724	0.000	91	10465	40.0	42.8	
16 1,1,2-Trichloro-1,2,2-trif	101	2.749	2.749	0.000	97	97594	20.0	20.4	
17 1,1-Dichloroethene	96	2.757	2.757	0.000	98	87779	20.0	19.8	
18 Acetone	43	2.848	2.848	0.000	88	87955	100.0	100.9	
19 Iodomethane	142	2.913	2.913	0.000	98	161807	20.0	20.2	
20 Isopropyl alcohol	45	2.946	2.946	0.000	27	29403	200.0	199.6	
21 Carbon disulfide	76	2.955	2.955	0.000	99	345818	20.0	19.5	
22 3-Chloro-1-propene	41	3.061	3.061	0.000	98	175027	20.0	20.6	
24 Methyl acetate	43	3.078	3.078	0.000	98	107177	40.0	41.7	
23 Cyclopentene	67	3.086	3.086	0.000	95	231916	20.0	20.6	
25 Acetonitrile	41	3.144	3.144	0.000	95	108682	200.0	250.4	
* 26 TBA-d9 (IS)	65	3.193	3.193	0.000	0	125933	1000.0	1000.0	
27 Methylene Chloride	84	3.193	3.193	0.000	91	113133	20.0	20.7	
28 2-Methyl-2-propanol	59	3.259	3.259	0.000	91	58208	200.0	219.8	
29 Methyl tert-butyl ether	73	3.349	3.349	0.000	97	273962	20.0	20.8	
30 trans-1,2-Dichloroethene	96	3.374	3.374	0.000	94	101552	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.448	3.448	0.000	96	317916	200.0	216.8	
32 Hexane	43	3.522	3.522	0.000	91	77335	20.0	19.3	
33 Isopropyl ether	45	3.727	3.727	0.000	95	321190	20.0	21.4	
34 1,1-Dichloroethane	63	3.760	3.760	0.000	99	182293	20.0	20.9	
35 Vinyl acetate	86	3.776	3.776	0.000	99	36794	40.0	43.7	
36 2-Chloro-1,3-butadiene	88	3.809	3.809	0.000	90	89837	20.0	20.8	
37 Tert-butyl ethyl ether	59	4.039	4.039	0.000	89	299751	20.0	21.3	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	152866	250.0	250.0	
39 2,2-Dichloropropane	97	4.269	4.269	0.000	95	37516	20.0	20.4	
40 cis-1,2-Dichloroethene	96	4.277	4.277	0.000	97	116397	20.0	21.1	
42 Ethyl acetate	70	4.286	4.286	0.000	95	15347	40.0	38.0	
41 2-Butanone (MEK)	72	4.286	4.286	0.000	96	42012	100.0	103.7	
43 Methyl acrylate	55	4.351	4.351	0.000	99	63052	20.0	21.6	
44 Propionitrile	54	4.425	4.425	0.000	98	108891	200.0	232.4	
45 Chlorobromomethane	128	4.499	4.499	0.000	90	54045	20.0	21.2	
46 Tetrahydrofuran	72	4.508	4.508	0.000	51	20859	40.0	45.4	
47 Methacrylonitrile	67	4.524	4.524	0.000	90	334922	200.0	210.1	
48 Chloroform	83	4.549	4.549	0.000	98	171632	20.0	21.8	
49 Cyclohexane	84	4.688	4.688	0.000	90	146994	20.0	20.0	
50 1,1,1-Trichloroethane	97	4.697	4.697	0.000	97	138900	20.0	19.8	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	97	97066	50.0	50.8	
52 Carbon tetrachloride	117	4.812	4.812	0.000	99	114190	20.0	20.0	
53 1,1-Dichloropropene	75	4.844	4.844	0.000	98	126530	20.0	20.4	
54 Isobutyl alcohol	43	4.992	4.992	0.000	91	111808	500.0	524.7	
55 Benzene	78	5.033	5.033	0.000	95	402110	20.0	21.2	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	97955	50.0	48.0	
57 Isopropyl acetate	43	5.083	5.083	0.000	97	228711	20.0	20.3	
58 Tert-amyl methyl ether	73	5.091	5.091	0.000	92	312799	20.0	20.9	
59 1,2-Dichloroethane	62	5.124	5.124	0.000	95	112597	20.0	19.8	
60 n-Heptane	57	5.181	5.181	0.000	89	68281	20.0	19.9	
* 61 Fluorobenzene	96	5.321	5.321	0.000	99	383589	50.0	50.0	
62 n-Butanol	56	5.650	5.650	0.000	80	26985	500.0	423.7	
63 Trichloroethene	95	5.674	5.674	0.000	99	95905	20.0	20.3	
65 Ethyl acrylate	55	5.789	5.789	0.000	96	215422	20.0	21.0	
64 Methylcyclohexane	83	5.798	5.798	0.000	88	168517	20.0	20.2	
66 1,2-Dichloropropane	63	5.962	5.962	0.000	95	101451	20.0	20.7	
* 67 1,4-Dioxane-d8	96	6.019	6.019	0.000	0	12235	1000.0	1000.0	
68 Methyl methacrylate	100	6.028	6.028	0.000	87	39048	40.0	39.6	
69 1,4-Dioxane	88	6.085	6.085	0.000	25	10773	400.0	461.3	
70 n-Propyl acetate	43	6.085	6.085	0.000	97	89611	20.0	19.7	
71 Dibromomethane	93	6.093	6.093	0.000	96	57505	20.0	20.6	
72 Dichlorobromomethane	83	6.241	6.241	0.000	98	121094	20.0	20.3	
73 2-Nitropropane	41	6.570	6.570	0.000	81	30596	40.0	36.0	
74 2-Chloroethyl vinyl ether	63	6.570	6.570	0.000	77	42627	20.0	19.9	
75 Epichlorohydrin	57	6.685	6.685	0.000	98	134393	400.0	439.0	a
76 cis-1,3-Dichloropropene	75	6.734	6.734	0.000	89	142629	20.0	20.7	
77 4-Methyl-2-pentanone (MIBK	43	6.899	6.899	0.000	95	344643	100.0	110.2	
$ 78 Toluene-d8 (Surr)	98	6.981	6.981	0.000	100	375578	50.0	50.1	
79 Toluene	91	7.055	7.055	0.000	93	409728	20.0	21.3	
80 trans-1,3-Dichloropropene	75	7.408	7.408	0.000	97	113666	20.0	19.8	
81 Ethyl methacrylate	69	7.433	7.433	0.000	88	98286	20.0	20.9	
82 1,1,2-Trichloroethane	83	7.622	7.622	0.000	96	68341	20.0	21.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.663	7.663	0.000	96	96096	20.0	20.5	
84 1,3-Dichloropropane	76	7.827	7.827	0.000	92	128841	20.0	21.3	
85 2-Hexanone	43	7.893	7.893	0.000	96	189724	100.0	102.8	
86 n-Butyl acetate	43	8.008	8.008	0.000	98	107797	20.0	20.0	
87 Chlorodibromomethane	129	8.065	8.065	0.000	98	86190	20.0	20.8	
88 Ethylene Dibromide	107	8.222	8.222	0.000	99	72287	20.0	20.7	
* 89 Chlorobenzene-d5	117	8.764	8.764	0.000	85	272089	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	95	254215	20.0	21.0	
91 Ethylbenzene	106	8.895	8.895	0.000	98	147681	20.0	21.2	
92 1,1,1,2-Tetrachloroethane	131	8.920	8.920	0.000	95	95501	20.0	20.8	
93 m-Xylene & p-Xylene	106	9.060	9.060	0.000	0	179024	20.0	21.5	
94 n-Butyl acrylate	73	9.487	9.487	0.000	97	56357	20.0	18.1	
95 o-Xylene	106	9.503	9.503	0.000	94	184452	20.0	21.4	
96 Styrene	104	9.536	9.536	0.000	96	293795	20.0	22.0	
97 Amyl acetate (mixed isomer	43	9.717	9.717	0.000	92	129234	20.0	19.6	
98 Bromoform	173	9.742	9.742	0.000	97	55269	20.0	20.8	
99 Isopropylbenzene	105	9.849	9.849	0.000	96	462092	20.0	22.4	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	90	111206	50.0	50.6	
101 Bromobenzene	156	10.144	10.144	0.000	98	113372	20.0	21.6	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	99	107861	20.0	21.8	
103 N-Propylbenzene	91	10.202	10.202	0.000	99	557431	20.0	23.1	
104 1,2,3-Trichloropropane	110	10.227	10.227	0.000	96	28590	20.0	20.5	
105 trans-1,4-Dichloro-2-buten	53	10.243	10.243	0.000	78	23323	20.0	21.0	
106 2-Chlorotoluene	91	10.292	10.292	0.000	96	378178	20.0	22.3	
107 4-Ethyltoluene	105	10.300	10.300	0.000	98	468686	20.0	23.6	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	93	399827	20.0	22.8	
109 4-Chlorotoluene	91	10.391	10.391	0.000	97	338320	20.0	22.5	
110 Butyl Methacrylate	87	10.432	10.432	0.000	88	119948	20.0	20.3	
111 tert-Butylbenzene	119	10.588	10.588	0.000	95	307464	20.0	21.8	
112 1,2,4-Trimethylbenzene	105	10.637	10.637	0.000	97	411165	20.0	23.1	
113 sec-Butylbenzene	105	10.744	10.744	0.000	99	491501	20.0	22.6	
114 4-Isopropyltoluene	119	10.843	10.843	0.000	98	422281	20.0	23.0	a
115 1,3-Dichlorobenzene	146	10.859	10.859	0.000	97	229685	20.0	22.3	
* 116 1,4-Dichlorobenzene-d4	152	10.909	10.909	0.000	93	152088	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.925	10.925	0.000	94	239534	20.0	22.5	
132 1,2,3-Trimethylbenzene	105	10.933	10.933	0.000	97	429601	20.0	22.7	
118 Benzyl chloride	91	11.024	11.024	0.000	99	213768	20.0	22.6	
119 2,3-Dihydroindene	117	11.065	11.065	0.000	94	442460	20.0	23.3	
120 p-Diethylbenzene	119	11.098	11.098	0.000	94	260337	20.0	23.0	
121 n-Butylbenzene	92	11.114	11.114	0.000	98	231171	20.0	22.1	
122 1,2-Dichlorobenzene	146	11.171	11.171	0.000	96	230380	20.0	22.3	
123 1,2,4,5-Tetramethylbenzene	119	11.574	11.574	0.000	97	415827	20.0	23.6	
124 1,2-Dibromo-3-Chloropropan	75	11.656	11.656	0.000	95	19141	20.0	21.0	
125 1,3,5-Trichlorobenzene	180	11.738	11.738	0.000	97	174592	20.0	21.7	
126 1,2,4-Trichlorobenzene	180	12.141	12.141	0.000	94	157425	20.0	22.0	
127 Hexachlorobutadiene	225	12.199	12.199	0.000	95	67593	20.0	19.9	
128 Naphthalene	128	12.314	12.314	0.000	99	340468	20.0	22.5	
129 1,2,3-Trichlorobenzene	180	12.478	12.478	0.000	96	149191	20.0	21.7	
S 130 1,2-Dichloroethene, Total	100				0		40.0	41.8	
S 131 Xylenes, Total	100				0		40.0	43.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00078	Amount Added:	4.00	Units: uL	
GAS Hi_00262	Amount Added:	2.00	Units: uL	
MIX I Hi_00095	Amount Added:	2.00	Units: uL	
Ethanol mix_00017	Amount Added:	2.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	2.00	Units: uL	
VOA6IS/SURR_00011	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 08-Jul-2018 19:01:20 Chrom Revision: 2.2 07-Jun-2018 07:41:54

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67411.D

Injection Date: 08-Jul-2018 09:24:30 Instrument ID: CVOAMS6 Operator ID:

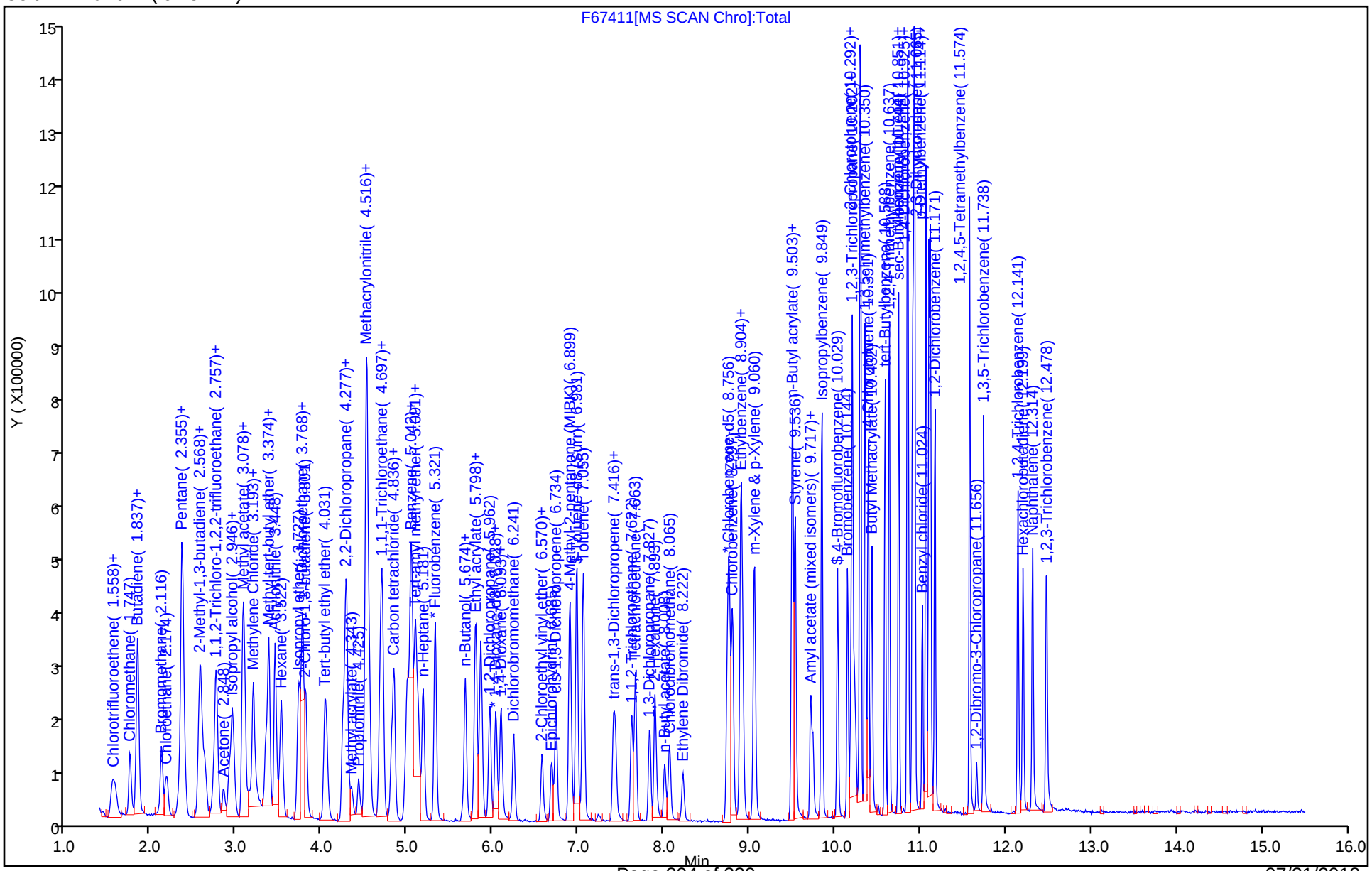
Lims ID: STD20 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

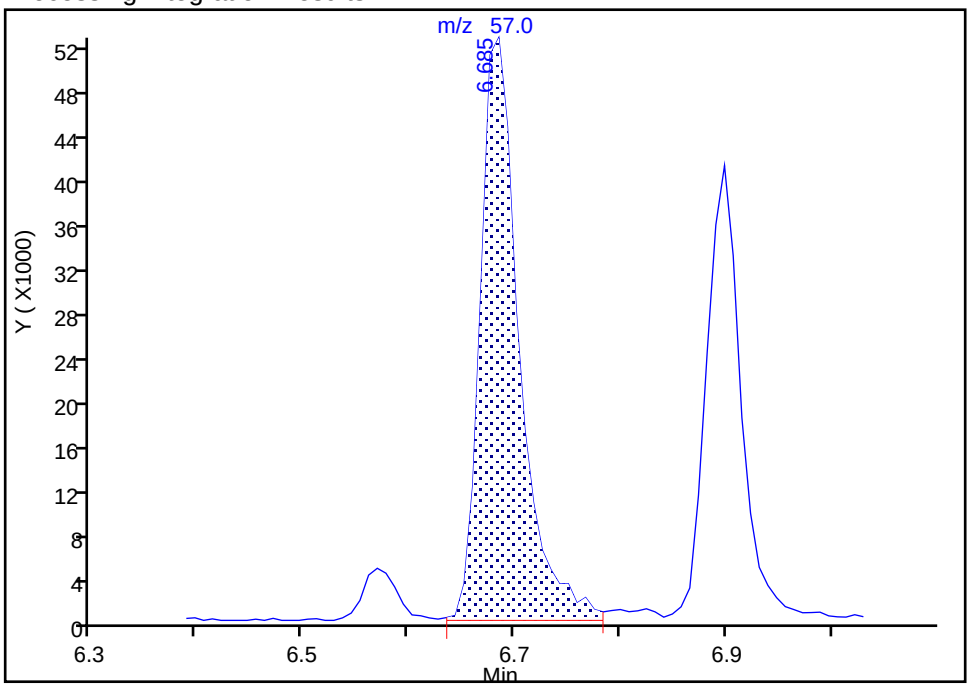
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67411.D
Injection Date: 08-Jul-2018 09:24:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 Epichlorohydrin, CAS: 106-89-8

Signal: 1

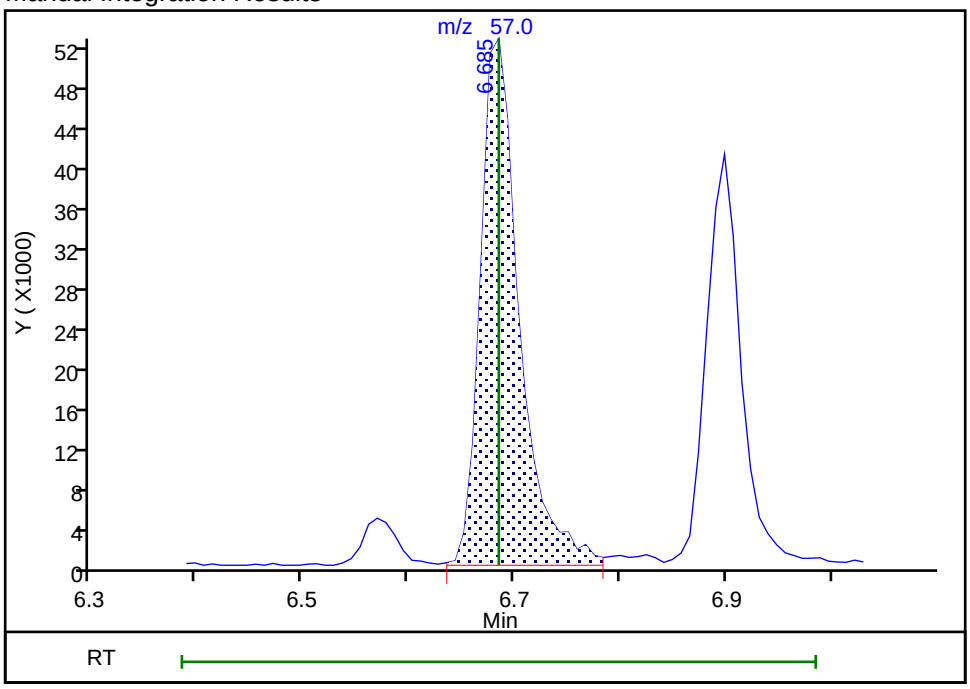
Processing Integration Results

RT: 6.69
Area: 134393
Amount: 546.8560
Amount Units: ug/l



Manual Integration Results

RT: 6.69
Area: 134393
Amount: 439.0000
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:16:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

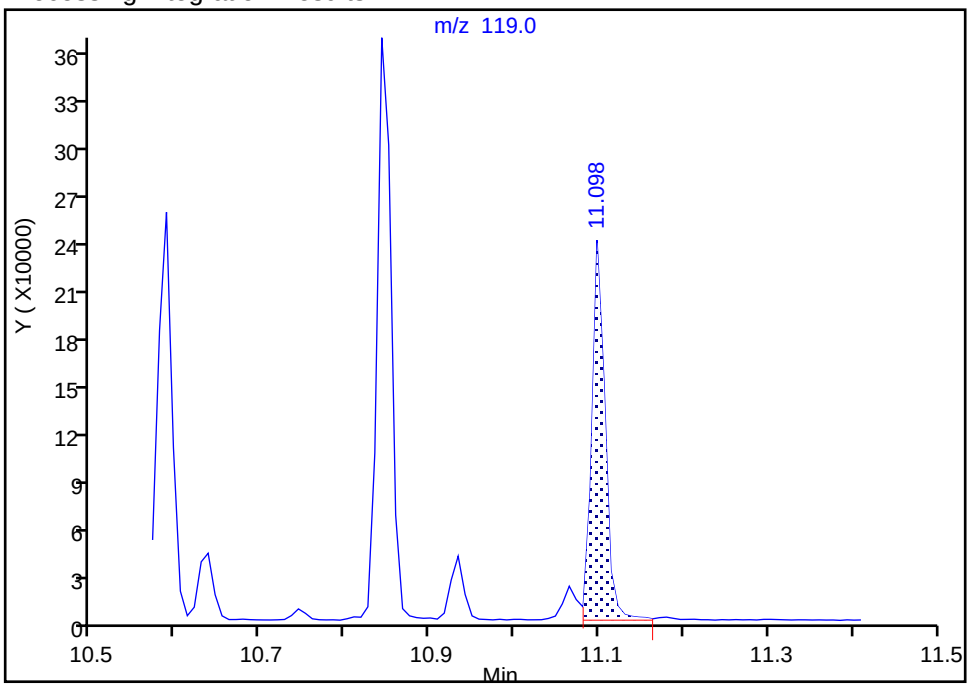
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67411.D
Injection Date: 08-Jul-2018 09:24:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

114 4-Isopropyltoluene, CAS: 99-87-6

Signal: 1

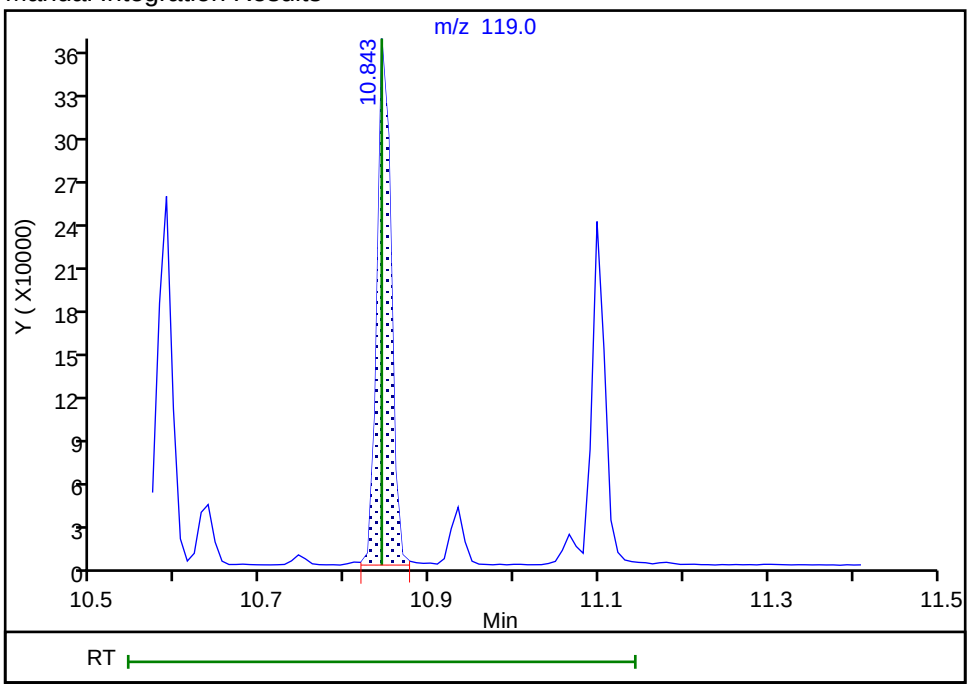
Processing Integration Results

RT: 11.10
Area: 260337
Amount: 22.700136
Amount Units: ug/l



Manual Integration Results

RT: 10.84
Area: 422281
Amount: 22.982314
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:17:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67412.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Jul-2018 09:47:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0075068-007
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub42

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 08-Jul-2018 19:18:00 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: boykink Date: 08-Jul-2018 11:16:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.533	1.541	-0.008	88	141971	50.0	49.0	
2 Dichlorodifluoromethane	85	1.565	1.574	-0.009	99	322297	50.0	46.1	
3 Chloromethane	50	1.738	1.747	-0.009	98	402640	50.0	47.1	
4 Vinyl chloride	62	1.828	1.837	-0.009	98	402833	50.0	47.2	
5 Butadiene	54	1.828	1.837	-0.009	94	362789	50.0	46.7	
6 Bromomethane	94	2.108	2.116	-0.008	98	268251	50.0	45.5	
7 Chloroethane	64	2.165	2.182	-0.017	100	240980	50.0	47.5	
8 Dichlorofluoromethane	67	2.346	2.355	-0.009	99	559613	50.0	52.0	
10 Pentane	72	2.354	2.363	-0.009	97	86045	100.0	99.7	
9 Trichlorofluoromethane	101	2.363	2.371	-0.009	98	380312	50.0	48.1	
11 Ethanol	46	2.551	2.544	0.007	68	21379	2000.0	1967.3	
12 Ethyl ether	59	2.543	2.552	-0.009	95	176623	50.0	50.1	
13 2-Methyl-1,3-butadiene	53	2.568	2.568	0.000	96	195604	50.0	47.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.609	2.618	-0.009	95	201129	50.0	47.9	
15 Acrolein	56	2.716	2.724	-0.008	93	24549	100.0	92.5	
16 1,1,2-Trichloro-1,2,2-trif	101	2.740	2.749	-0.009	97	224849	50.0	45.9	
17 1,1-Dichloroethene	96	2.749	2.757	-0.008	98	212440	50.0	46.7	
18 Acetone	43	2.839	2.848	-0.009	89	253164	250.0	283.0	
19 Iodomethane	142	2.905	2.913	-0.008	96	400327	50.0	48.8	
20 Isopropyl alcohol	45	2.929	2.946	-0.017	26	73566	500.0	460.2	
21 Carbon disulfide	76	2.946	2.955	-0.009	99	853831	50.0	46.9	
22 3-Chloro-1-propene	41	3.061	3.061	0.000	98	424625	50.0	48.8	
24 Methyl acetate	43	3.069	3.078	-0.009	100	265412	100.0	100.7	
23 Cyclopentene	67	3.077	3.086	-0.009	95	585122	50.0	50.6	
25 Acetonitrile	41	3.135	3.144	-0.009	99	267502	500.0	568.0	a
27 Methylene Chloride	84	3.184	3.193	-0.009	91	266928	50.0	47.7	
* 26 TBA-d9 (IS)	65	3.201	3.193	0.008	0	136658	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.266	3.259	0.007	94	138256	500.0	481.1	
29 Methyl tert-butyl ether	73	3.340	3.349	-0.009	97	651186	50.0	48.3	
30 trans-1,2-Dichloroethene	96	3.373	3.374	-0.001	93	251677	50.0	50.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.439	3.448	-0.009	95	797034	500.0	530.3	
32 Hexane	43	3.513	3.522	-0.009	91	190970	50.0	46.6	
33 Isopropyl ether	45	3.718	3.727	-0.009	96	778104	50.0	50.5	
34 1,1-Dichloroethane	63	3.759	3.760	-0.001	99	431590	50.0	48.3	
35 Vinyl acetate	86	3.759	3.776	-0.017	100	90865	100.0	105.2	
36 2-Chloro-1,3-butadiene	88	3.800	3.809	-0.009	89	219242	50.0	49.5	
37 Tert-butyl ethyl ether	59	4.031	4.039	-0.008	90	730944	50.0	50.6	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	156958	250.0	250.0	
39 2,2-Dichloropropane	97	4.252	4.269	-0.017	94	88442	50.0	46.9	
40 cis-1,2-Dichloroethene	96	4.269	4.277	-0.008	98	281551	50.0	49.8	
41 2-Butanone (MEK)	72	4.285	4.286	-0.001	96	101840	250.0	244.8	
42 Ethyl acetate	70	4.285	4.286	-0.001	97	39552	100.0	95.3	
43 Methyl acrylate	55	4.343	4.351	-0.008	100	148390	50.0	48.7	
44 Propionitrile	54	4.417	4.425	-0.008	99	280840	500.0	552.3	
45 Chlorobromomethane	128	4.499	4.499	0.000	89	129441	50.0	49.6	
46 Tetrahydrofuran	72	4.507	4.508	-0.001	55	45338	100.0	97.4	
47 Methacrylonitrile	67	4.515	4.524	-0.009	90	837786	500.0	512.9	
48 Chloroform	83	4.548	4.549	-0.001	99	405786	50.0	50.3	
49 Cyclohexane	84	4.680	4.688	-0.008	90	371058	50.0	49.3	
50 1,1,1-Trichloroethane	97	4.696	4.697	-0.001	98	347317	50.0	48.3	
$ 51 Dibromofluoromethane (Surr	113	4.704	4.705	-0.001	97	98684	50.0	50.4	
52 Carbon tetrachloride	117	4.811	4.812	-0.001	97	288500	50.0	49.4	
53 1,1-Dichloropropene	75	4.836	4.844	-0.008	98	314753	50.0	49.4	
54 Isobutyl alcohol	43	4.992	4.992	0.000	91	289826	1250.0	1253.4	
55 Benzene	78	5.033	5.033	0.000	96	973646	50.0	49.1	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.049	5.050	-0.001	0	100245	50.0	47.9	
57 Isopropyl acetate	43	5.082	5.083	-0.001	98	598652	50.0	51.9	
58 Tert-amyl methyl ether	73	5.091	5.091	0.000	91	780186	50.0	50.8	
59 1,2-Dichloroethane	62	5.123	5.124	-0.001	96	271491	50.0	46.7	
60 n-Heptane	57	5.181	5.181	0.000	89	176244	50.0	50.0	
* 61 Fluorobenzene	96	5.321	5.321	0.000	99	393168	50.0	50.0	
62 n-Butanol	56	5.633	5.650	-0.017	86	74557	1250.0	1066.2	
63 Trichloroethene	95	5.666	5.674	-0.008	98	232897	50.0	48.1	
65 Ethyl acrylate	55	5.789	5.789	0.000	97	551536	50.0	52.4	
64 Methylcyclohexane	83	5.789	5.798	-0.009	88	427028	50.0	50.0	
66 1,2-Dichloropropane	63	5.953	5.962	-0.009	94	247397	50.0	49.3	
* 67 1,4-Dioxane-d8	96	6.027	6.019	0.008	0	13144	1000.0	1000.0	
68 Methyl methacrylate	100	6.027	6.028	-0.001	87	100300	100.0	97.7	
70 n-Propyl acetate	43	6.085	6.085	0.000	97	232351	50.0	49.9	
69 1,4-Dioxane	88	6.077	6.085	-0.008	27	26419	1000.0	1053.0	
71 Dibromomethane	93	6.093	6.093	0.000	94	135812	50.0	47.5	
72 Dichlorobromomethane	83	6.241	6.241	0.000	99	300964	50.0	49.3	
74 2-Chloroethyl vinyl ether	63	6.570	6.570	0.000	78	117559	50.0	53.6	
73 2-Nitropropane	41	6.570	6.570	0.000	80	76847	100.0	88.3	
75 Epichlorohydrin	57	6.676	6.685	-0.009	99	346568	1000.0	1102.6	
76 cis-1,3-Dichloropropene	75	6.734	6.734	0.000	90	357305	50.0	49.7	
77 4-Methyl-2-pentanone (MIBK	43	6.890	6.899	-0.009	95	900558	250.0	280.5	
$ 78 Toluene-d8 (Surr)	98	6.972	6.981	-0.009	99	394381	50.0	50.4	
79 Toluene	91	7.054	7.055	-0.001	93	1006532	50.0	50.3	
80 trans-1,3-Dichloropropene	75	7.399	7.408	-0.009	96	289370	50.0	48.2	
81 Ethyl methacrylate	69	7.424	7.433	-0.009	88	263543	50.0	53.7	
82 1,1,2-Trichloroethane	83	7.621	7.622	-0.001	97	161457	50.0	48.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.662	7.663	-0.001	96	236993	50.0	48.4	
84 1,3-Dichloropropane	76	7.827	7.827	0.000	92	316304	50.0	50.1	
85 2-Hexanone	43	7.892	7.893	-0.001	95	495888	250.0	256.8	
86 n-Butyl acetate	43	7.999	8.008	-0.009	98	278220	50.0	48.5	
87 Chlorodibromomethane	129	8.065	8.065	0.000	98	209847	50.0	48.5	
88 Ethylene Dibromide	107	8.221	8.222	-0.001	98	180408	50.0	49.6	
* 89 Chlorobenzene-d5	117	8.763	8.764	-0.001	84	283921	50.0	50.0	
90 Chlorobenzene	112	8.796	8.797	-0.001	95	627990	50.0	49.8	
91 Ethylbenzene	106	8.895	8.895	0.000	98	363682	50.0	49.9	
92 1,1,1,2-Tetrachloroethane	131	8.920	8.920	0.000	96	237090	50.0	49.6	
93 m-Xylene & p-Xylene	106	9.051	9.060	-0.009	0	436228	50.0	50.3	
94 n-Butyl acrylate	73	9.487	9.487	0.000	99	168864	50.0	50.9	
95 o-Xylene	106	9.503	9.503	0.000	95	461789	50.0	51.5	
96 Styrene	104	9.536	9.536	0.000	96	723592	50.0	51.9	
97 Amyl acetate (mixed isomer	43	9.708	9.717	-0.009	91	361611	50.0	49.5	
98 Bromoform	173	9.741	9.742	-0.001	97	134241	50.0	48.4	
99 Isopropylbenzene	105	9.848	9.849	-0.001	95	1150898	50.0	53.4	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	91	114885	50.0	50.1	
101 Bromobenzene	156	10.144	10.144	0.000	98	280301	50.0	49.2	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	98	258315	50.0	48.1	
103 N-Propylbenzene	91	10.201	10.202	-0.001	100	1357000	50.0	51.9	
104 1,2,3-Trichloropropane	110	10.226	10.227	-0.001	97	73193	50.0	48.3	
105 trans-1,4-Dichloro-2-buten	53	10.243	10.243	0.000	81	57460	50.0	46.9	
106 2-Chlorotoluene	91	10.292	10.292	0.000	96	927450	50.0	50.4	
107 4-Ethyltoluene	105	10.300	10.300	0.000	98	1143475	50.0	53.1	
108 1,3,5-Trimethylbenzene	105	10.349	10.350	-0.001	94	967312	50.0	50.9	
109 4-Chlorotoluene	91	10.390	10.391	-0.001	97	819475	50.0	50.3	
110 Butyl Methacrylate	87	10.432	10.432	0.000	87	348236	50.0	53.1	
111 tert-Butylbenzene	119	10.588	10.588	0.000	95	794229	50.0	51.8	
112 1,2,4-Trimethylbenzene	105	10.637	10.637	0.000	97	1017023	50.0	52.6	
113 sec-Butylbenzene	105	10.744	10.744	0.000	99	1229308	50.0	52.1	
114 4-Isopropyltoluene	119	10.842	10.843	-0.001	98	1052591	50.0	52.8	
115 1,3-Dichlorobenzene	146	10.851	10.859	-0.008	96	555469	50.0	49.7	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.909	-0.001	93	164965	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.925	10.925	0.000	95	575508	50.0	49.9	
132 1,2,3-Trimethylbenzene	105	10.933	10.933	0.000	98	1072303	50.0	52.2	
118 Benzyl chloride	91	11.023	11.024	-0.001	99	548852	50.0	53.5	
119 2,3-Dihydroindene	117	11.064	11.065	-0.001	94	1083183	50.0	52.5	
120 p-Diethylbenzene	119	11.097	11.098	-0.001	94	642482	50.0	52.4	
121 n-Butylbenzene	92	11.114	11.114	0.000	98	574560	50.0	50.5	
122 1,2-Dichlorobenzene	146	11.171	11.171	0.000	97	571740	50.0	51.1	
123 1,2,4,5-Tetramethylbenzene	119	11.574	11.574	0.000	98	1031262	50.0	53.8	
124 1,2-Dibromo-3-Chloropropan	75	11.656	11.656	0.000	95	46130	50.0	46.6	
125 1,3,5-Trichlorobenzene	180	11.738	11.738	0.000	97	447000	50.0	51.2	
126 1,2,4-Trichlorobenzene	180	12.141	12.141	0.000	94	410186	50.0	52.9	
127 Hexachlorobutadiene	225	12.198	12.199	-0.001	96	176091	50.0	47.8	
128 Naphthalene	128	12.313	12.314	-0.001	99	924647	50.0	56.3	
129 1,2,3-Trichlorobenzene	180	12.478	12.478	0.000	96	378094	50.0	50.8	
S 130 1,2-Dichloroethene, Total	100				0		100.0	99.8	
S 131 Xylenes, Total	100				0		100.0	101.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00078	Amount Added:	10.00	Units: uL	
GAS Hi_00262	Amount Added:	5.00	Units: uL	
MIX I Hi_00095	Amount Added:	5.00	Units: uL	
Ethanol mix_00017	Amount Added:	5.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	5.00	Units: uL	
VOA6IS/SURR_00011	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 08-Jul-2018 19:18:02 Chrom Revision: 2.2 07-Jun-2018 07:41:54

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67412.D

Injection Date: 08-Jul-2018 09:47:30 Instrument ID: CVOAMS6 Operator ID:

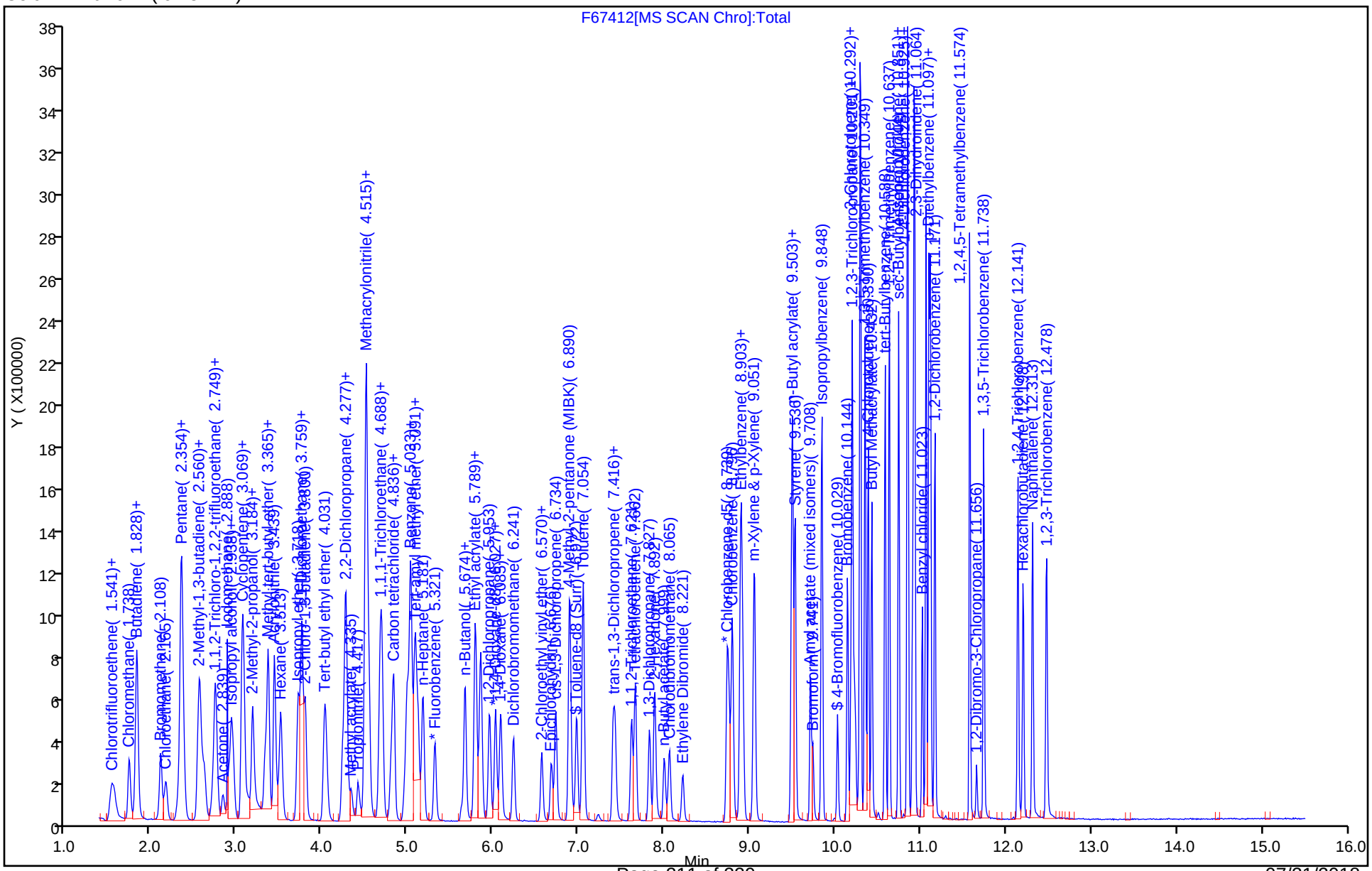
Lims ID: STD50 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

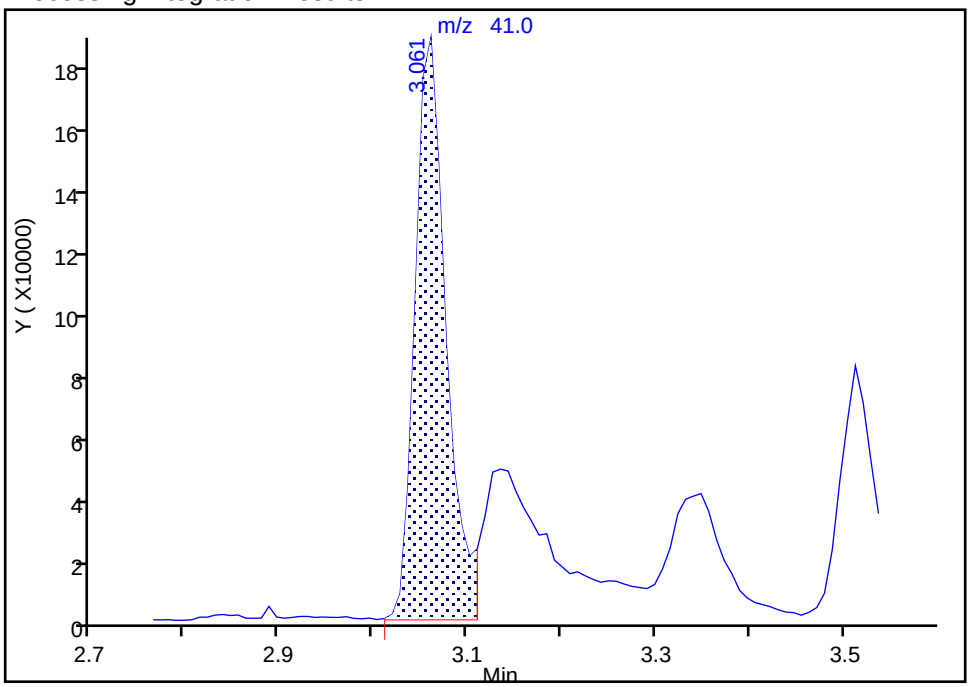
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67412.D
Injection Date: 08-Jul-2018 09:47:30 Instrument ID: CVOAMS6
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

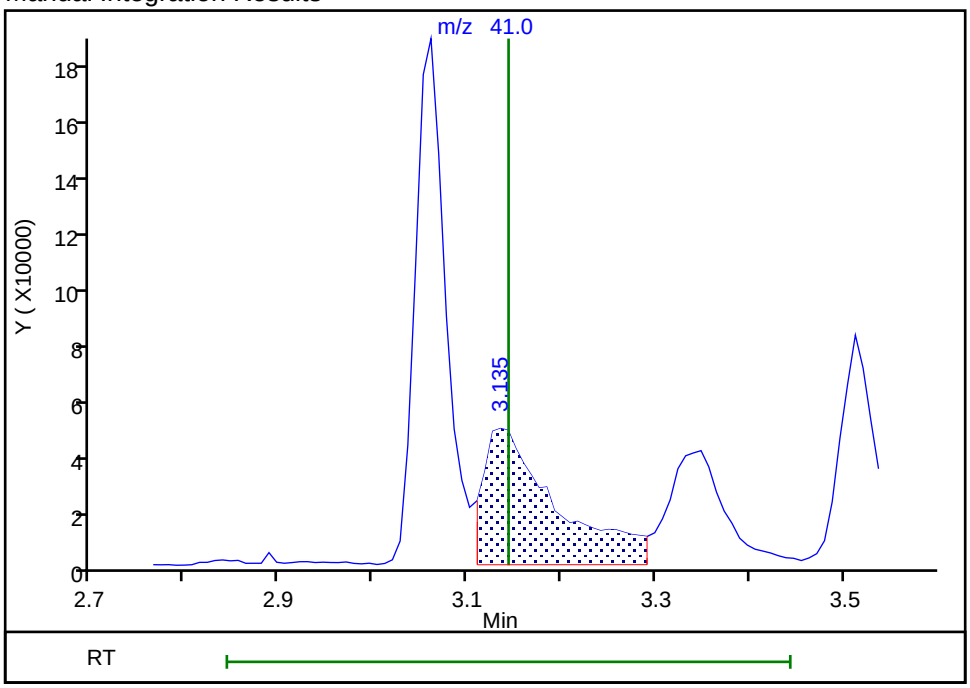
Processing Integration Results

RT: 3.06
Area: 436646
Amount: 503.1977
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 267502
Amount: 567.9606
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:52:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67413.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Jul-2018 10:11:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0075068-008
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub42

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 08-Jul-2018 19:12:02 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: boykink Date: 08-Jul-2018 11:18:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.541	1.541	0.000	88	709694	200.0	222.4	
2 Dichlorodifluoromethane	85	1.574	1.574	0.000	99	1693948	200.0	219.8	
3 Chloromethane	50	1.755	1.747	0.008	98	1896409	200.0	201.5	
4 Vinyl chloride	62	1.837	1.837	0.000	97	1926255	200.0	204.8	
5 Butadiene	54	1.837	1.837	0.000	95	1765160	200.0	206.4	
6 Bromomethane	94	2.116	2.116	0.000	99	1241756	200.0	191.0	
7 Chloroethane	64	2.182	2.182	0.000	99	1084123	200.0	194.0	
8 Dichlorofluoromethane	67	2.355	2.355	0.000	99	2202861	200.0	185.7	
10 Pentane	72	2.363	2.363	0.000	97	352397	400.0	369.2	
9 Trichlorofluoromethane	101	2.371	2.371	0.000	99	1659910	200.0	190.6	
11 Ethanol	46	2.544	2.544	0.000	72	88716	8000.0	7381.9	
12 Ethyl ether	59	2.544	2.552	-0.008	94	776872	200.0	199.9	
13 2-Methyl-1,3-butadiene	53	2.568	2.568	0.000	95	818433	200.0	180.9	
14 1,2-Dichloro-1,1,2-trifluo	117	2.618	2.618	0.000	92	863219	200.0	186.7	
15 Acrolein	56	2.724	2.724	0.000	92	60692	200.0	206.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.749	2.749	0.000	97	1011610	200.0	187.5	
17 1,1-Dichloroethene	96	2.765	2.757	0.008	98	972069	200.0	194.1	
18 Acetone	43	2.839	2.848	-0.009	89	1098210	1000.0	1043.7	
19 Iodomethane	142	2.922	2.913	0.009	97	1740678	200.0	192.6	
20 Isopropyl alcohol	45	2.938	2.946	-0.008	98	327318	2000.0	1851.6	
21 Carbon disulfide	76	2.954	2.955	-0.001	99	3761206	200.0	187.7	
22 3-Chloro-1-propene	41	3.061	3.061	0.000	99	1861456	200.0	194.2	
24 Methyl acetate	43	3.069	3.078	-0.009	98	1149470	400.0	396.0	
23 Cyclopentene	67	3.086	3.086	0.000	94	2394522	200.0	188.1	
25 Acetonitrile	41	3.135	3.144	-0.009	96	1036510	2000.0	1990.0	a
27 Methylene Chloride	84	3.193	3.193	0.000	91	1151163	200.0	186.7	
* 26 TBA-d9 (IS)	65	3.193	3.193	0.000	0	151129	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.267	3.259	0.008	96	633643	2000.0	1993.9	
29 Methyl tert-butyl ether	73	3.349	3.349	0.000	97	2851896	200.0	192.1	
30 trans-1,2-Dichloroethene	96	3.373	3.374	-0.001	94	1063814	200.0	192.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.447	3.448	-0.001	95	3392609	2000.0	2048.8	
32 Hexane	43	3.521	3.522	-0.001	91	886813	200.0	196.5	
33 Isopropyl ether	45	3.727	3.727	0.000	96	3269485	200.0	192.7	
34 1,1-Dichloroethane	63	3.760	3.760	0.000	99	1832242	200.0	186.2	
35 Vinyl acetate	86	3.768	3.776	-0.008	100	393956	400.0	414.2	
36 2-Chloro-1,3-butadiene	88	3.809	3.809	0.000	90	902621	200.0	184.8	
37 Tert-butyl ethyl ether	59	4.039	4.039	0.000	90	3116079	200.0	196.0	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	184601	250.0	250.0	
39 2,2-Dichloropropane	97	4.261	4.269	-0.008	94	385912	200.0	185.9	
40 cis-1,2-Dichloroethene	96	4.277	4.277	0.000	99	1193877	200.0	191.6	
41 2-Butanone (MEK)	72	4.286	4.286	0.000	97	494630	1000.0	1011.1	
42 Ethyl acetate	70	4.286	4.286	0.000	95	182512	400.0	373.9	
43 Methyl acrylate	55	4.343	4.351	-0.008	100	703275	200.0	206.2	
44 Propionitrile	54	4.425	4.425	0.000	99	1212845	2000.0	2156.8	
45 Chlorobromomethane	128	4.499	4.499	0.000	88	545825	200.0	189.8	
46 Tetrahydrofuran	72	4.499	4.508	-0.009	71	217035	400.0	400.0	
47 Methacrylonitrile	67	4.524	4.524	0.000	91	3671286	2000.0	2040.1	
48 Chloroform	83	4.549	4.549	-0.001	99	1703395	200.0	191.6	
49 Cyclohexane	84	4.688	4.688	0.000	90	1659263	200.0	200.0	
50 1,1,1-Trichloroethane	97	4.696	4.697	-0.001	99	1481430	200.0	187.0	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	95	101418	50.0	47.0	
52 Carbon tetrachloride	117	4.820	4.812	0.008	98	1246124	200.0	193.7	
53 1,1-Dichloropropene	75	4.836	4.844	-0.008	98	1366551	200.0	194.9	
54 Isobutyl alcohol	43	5.000	4.992	0.008	93	1374822	5000.0	5376.2	
55 Benzene	78	5.033	5.033	0.000	96	4204764	200.0	189.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	118946	50.0	51.6	
57 Isopropyl acetate	43	5.083	5.083	0.000	97	2552684	200.0	201.1	
58 Tert-amyl methyl ether	73	5.099	5.091	0.008	91	3408504	200.0	201.6	
59 1,2-Dichloroethane	62	5.132	5.124	0.008	95	1168815	200.0	182.5	
60 n-Heptane	57	5.181	5.181	0.000	89	827096	200.0	212.9	
* 61 Fluorobenzene	96	5.321	5.321	0.000	99	433129	50.0	50.0	
62 n-Butanol	56	5.625	5.650	-0.025	85	420980	5000.0	5073.6	
63 Trichloroethene	95	5.674	5.674	0.000	99	1018520	200.0	190.8	
65 Ethyl acrylate	55	5.789	5.789	0.000	99	2520560	200.0	217.5	
64 Methylcyclohexane	83	5.797	5.798	-0.001	89	1975138	200.0	209.9	
66 1,2-Dichloropropane	63	5.962	5.962	0.000	94	1087509	200.0	196.7	
* 67 1,4-Dioxane-d8	96	6.028	6.019	0.009	0	18634	1000.0	1000.0	M
68 Methyl methacrylate	100	6.028	6.028	0.000	86	477153	400.0	418.6	
70 n-Propyl acetate	43	6.085	6.085	0.000	97	1093852	200.0	213.1	
69 1,4-Dioxane	88	6.077	6.085	-0.008	28	112735	4000.0	3169.6	
71 Dibromomethane	93	6.093	6.093	0.000	97	596905	200.0	189.6	
72 Dichlorobromomethane	83	6.241	6.241	0.000	99	1337273	200.0	198.8	
74 2-Chloroethyl vinyl ether	63	6.570	6.570	0.000	79	545482	200.0	225.7	
73 2-Nitropropane	41	6.570	6.570	0.000	78	351273	400.0	366.2	
75 Epichlorohydrin	57	6.685	6.685	0.000	98	1608905	4000.0	4352.1	
76 cis-1,3-Dichloropropene	75	6.734	6.734	0.000	91	1656751	200.0	205.9	
77 4-Methyl-2-pentanone (MIBK	43	6.899	6.899	0.000	94	4041093	1000.0	1070.3	
$ 78 Toluene-d8 (Surr)	98	6.981	6.981	0.000	99	434144	50.0	49.6	
79 Toluene	91	7.055	7.055	0.000	94	4313597	200.0	192.6	
80 trans-1,3-Dichloropropene	75	7.400	7.408	-0.008	97	1357534	200.0	202.3	
81 Ethyl methacrylate	69	7.424	7.433	-0.009	88	1244261	200.0	226.5	
82 1,1,2-Trichloroethane	83	7.622	7.622	0.000	96	729655	200.0	195.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.663	7.663	0.000	97	1048499	200.0	191.6	
84 1,3-Dichloropropane	76	7.827	7.827	0.000	91	1431570	200.0	202.9	
85 2-Hexanone	43	7.885	7.893	-0.008	94	2420551	1000.0	1055.6	
86 n-Butyl acetate	43	8.000	8.008	-0.008	98	1269986	200.0	196.1	
87 Chlorodibromomethane	129	8.065	8.065	0.000	99	952604	200.0	197.0	
88 Ethylene Dibromide	107	8.221	8.222	-0.001	99	823898	200.0	202.5	
* 89 Chlorobenzene-d5	117	8.764	8.764	0.000	85	317540	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	94	2735326	200.0	194.0	
91 Ethylbenzene	106	8.895	8.895	0.000	98	1582697	200.0	194.3	
92 1,1,1,2-Tetrachloroethane	131	8.920	8.920	0.000	97	1030138	200.0	192.7	
93 m-Xylene & p-Xylene	106	9.060	9.060	0.000	0	1957917	200.0	201.8	
94 n-Butyl acrylate	73	9.487	9.487	0.000	99	786020	200.0	210.0	
95 o-Xylene	106	9.503	9.503	0.000	95	2021512	200.0	201.4	
96 Styrene	104	9.536	9.536	0.000	96	3210461	200.0	205.8	
97 Amyl acetate (mixed isomer	43	9.709	9.717	-0.008	92	1680483	200.0	207.8	
98 Bromoform	173	9.742	9.742	0.000	97	622246	200.0	200.8	
99 Isopropylbenzene	105	9.848	9.849	-0.001	96	4847598	200.0	201.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	91	126322	50.0	49.3	
101 Bromobenzene	156	10.144	10.144	0.000	98	1192585	200.0	190.8	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	99	1136664	200.0	192.9	
103 N-Propylbenzene	91	10.202	10.202	0.000	99	5512304	200.0	192.3	
104 1,2,3-Trichloropropane	110	10.226	10.227	-0.001	95	303924	200.0	182.8	
105 trans-1,4-Dichloro-2-buten	53	10.243	10.243	0.000	91	269249	200.0	198.5	
106 2-Chlorotoluene	91	10.292	10.292	0.000	94	3931428	200.0	194.7	
107 4-Ethyltoluene	105	10.300	10.300	0.000	88	4666273	200.0	197.5	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	95	4161635	200.0	199.8	
109 4-Chlorotoluene	91	10.391	10.391	0.000	97	3472777	200.0	194.4	
110 Butyl Methacrylate	87	10.432	10.432	0.000	87	1621447	200.0	211.5	
111 tert-Butylbenzene	119	10.588	10.588	0.000	94	3537058	200.0	210.6	
112 1,2,4-Trimethylbenzene	105	10.637	10.637	0.000	97	4244360	200.0	200.3	
113 sec-Butylbenzene	105	10.744	10.744	0.000	97	5255599	200.0	203.1	
114 4-Isopropyltoluene	119	10.843	10.843	0.000	96	4526133	200.0	207.1	
115 1,3-Dichlorobenzene	146	10.851	10.859	-0.008	95	2369298	200.0	193.3	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.909	-0.001	93	180897	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.925	10.925	0.000	93	2386982	200.0	188.9	
132 1,2,3-Trimethylbenzene	105	10.933	10.933	0.000	97	4429798	200.0	196.8	
118 Benzyl chloride	91	11.023	11.024	-0.001	99	2408788	200.0	214.1	
119 2,3-Dihydroindene	117	11.065	11.065	0.000	95	4322939	200.0	191.0	
120 p-Diethylbenzene	119	11.097	11.098	-0.001	93	2565032	200.0	190.6	
121 n-Butylbenzene	92	11.114	11.114	0.000	100	2490143	200.0	199.8	
122 1,2-Dichlorobenzene	146	11.171	11.171	0.000	95	2314674	200.0	188.6	
123 1,2,4,5-Tetramethylbenzene	119	11.574	11.574	0.000	98	4209686	200.0	200.5	
124 1,2-Dibromo-3-Chloropropan	75	11.656	11.656	0.000	96	210427	200.0	193.8	
125 1,3,5-Trichlorobenzene	180	11.738	11.738	0.000	97	1794877	200.0	187.6	
126 1,2,4-Trichlorobenzene	180	12.141	12.141	0.000	95	1729926	200.0	203.3	
127 Hexachlorobutadiene	225	12.198	12.199	-0.001	95	780509	200.0	193.4	
128 Naphthalene	128	12.313	12.314	-0.001	99	3874891	200.0	215.2	
129 1,2,3-Trichlorobenzene	180	12.478	12.478	0.000	95	1551295	200.0	190.1	
S 130 1,2-Dichloroethene, Total	100				0		400.0	383.7	
S 131 Xylenes, Total	100				0		400.0	403.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00078	Amount Added:	20.00	Units: uL	
GAS Hi_00262	Amount Added:	20.00	Units: uL	
MIX I Hi_00095	Amount Added:	20.00	Units: uL	
Ethanol mix_00017	Amount Added:	20.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	20.00	Units: uL	
VOA6IS/SURR_00011	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 08-Jul-2018 19:12:05 Chrom Revision: 2.2 07-Jun-2018 07:41:54

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67413.D

Injection Date: 08-Jul-2018 10:11:30 Instrument ID: CVOAMS6 Operator ID:

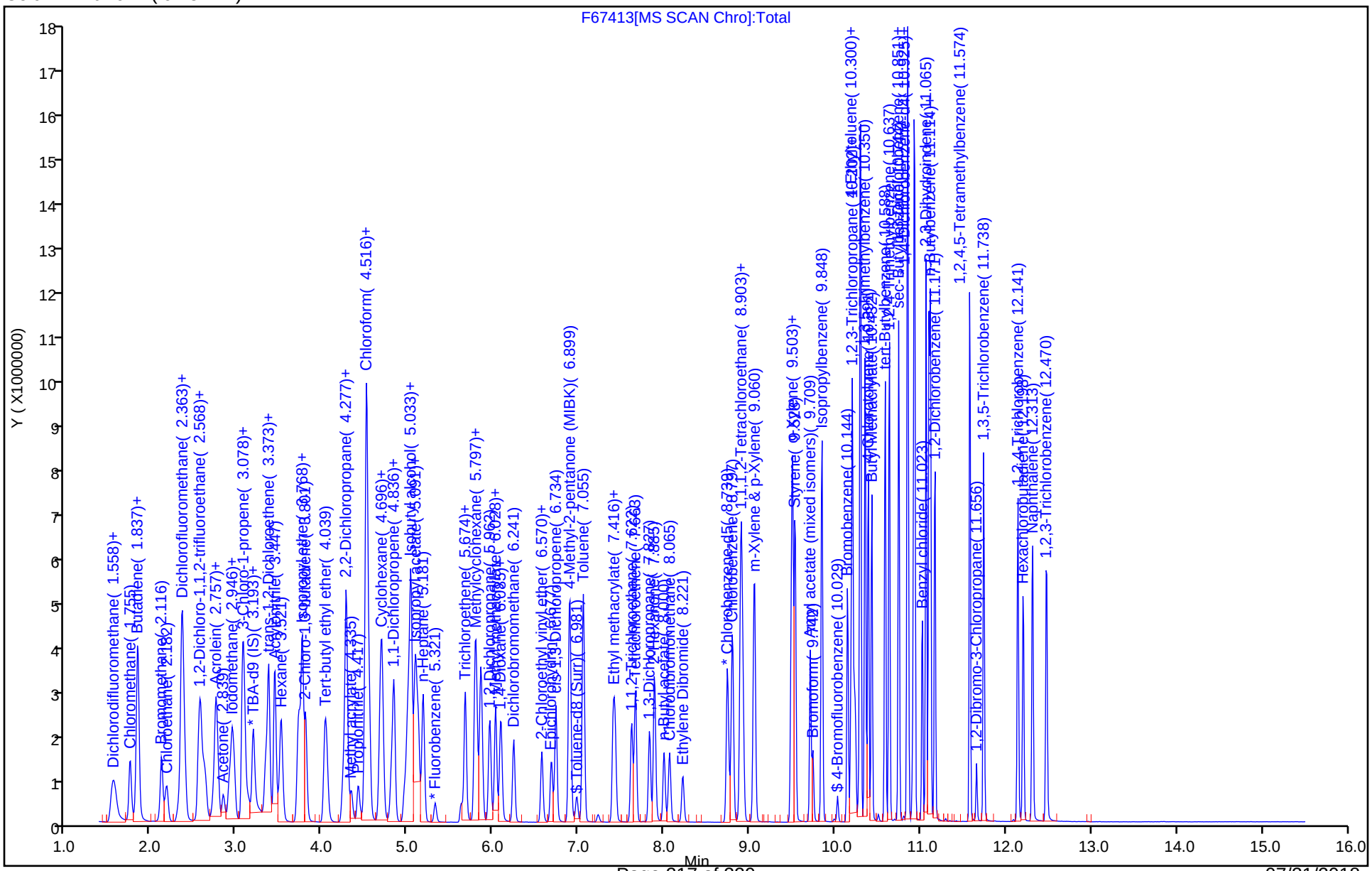
Lims ID: STD200 Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

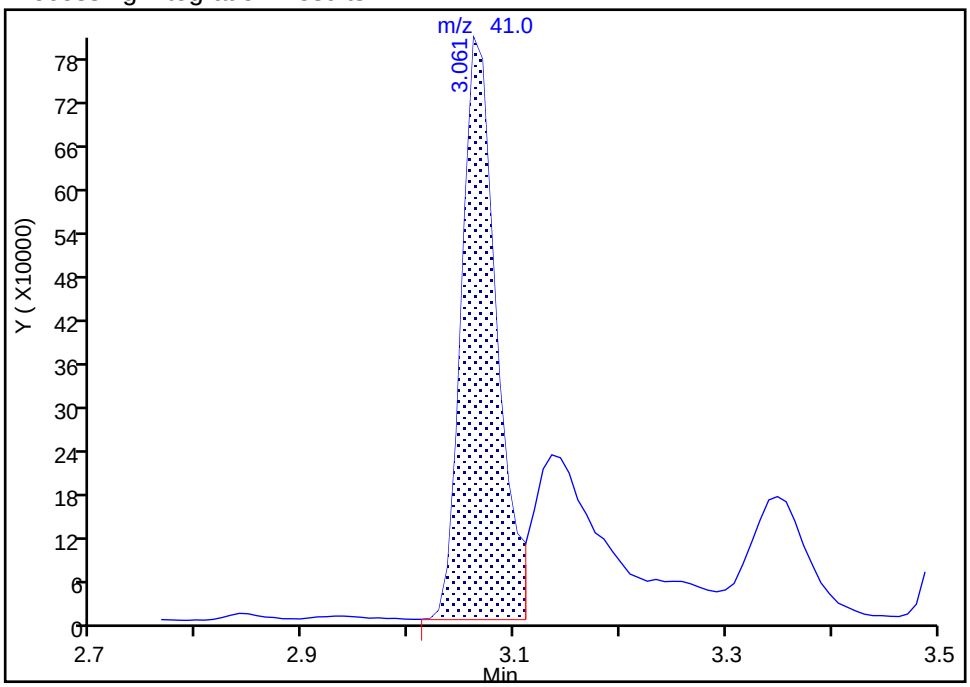
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67413.D
Injection Date: 08-Jul-2018 10:11:30 Instrument ID: CVOAMS6
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

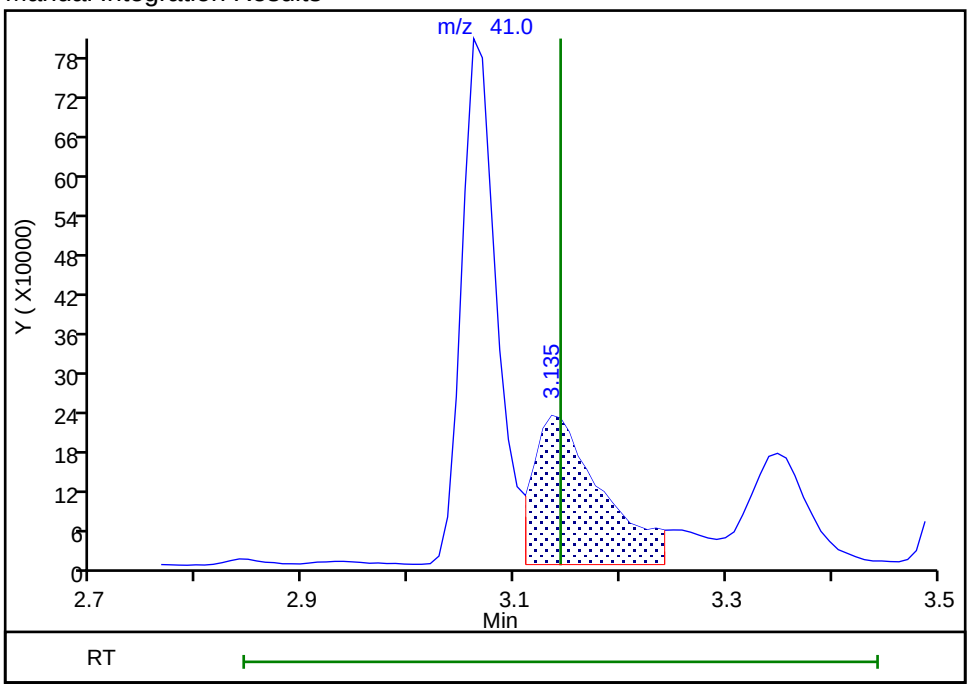
Processing Integration Results

RT: 3.06
Area: 1855304
Amount: 2081.1534
Amount Units: ug/l



Manual Integration Results

RT: 3.14
Area: 1036510
Amount: 1989.9948
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:54:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

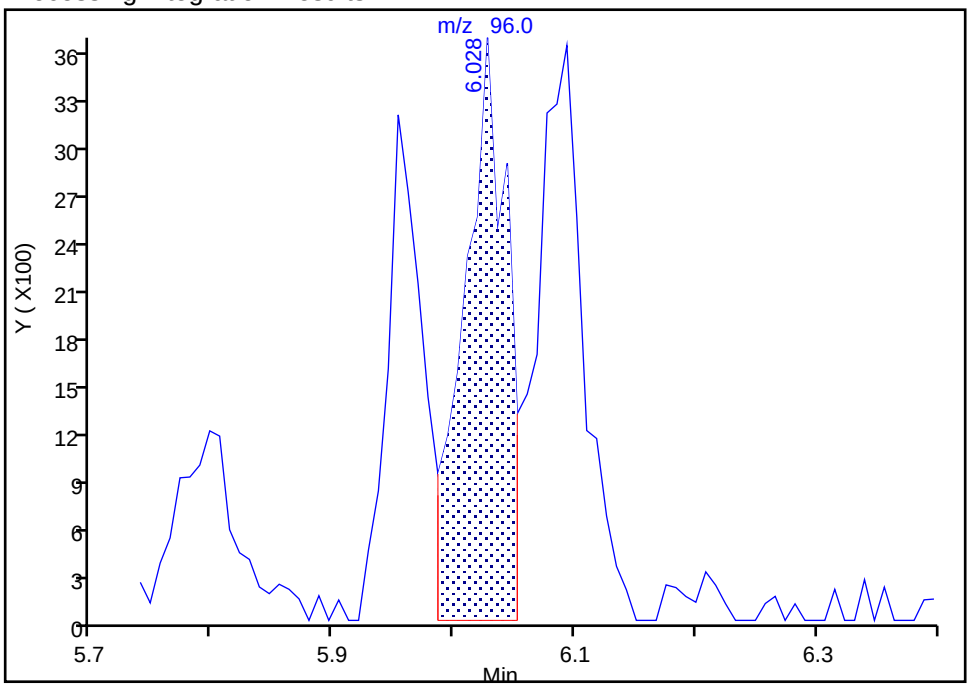
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67413.D
Injection Date: 08-Jul-2018 10:11:30 Instrument ID: CVOAMS6
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

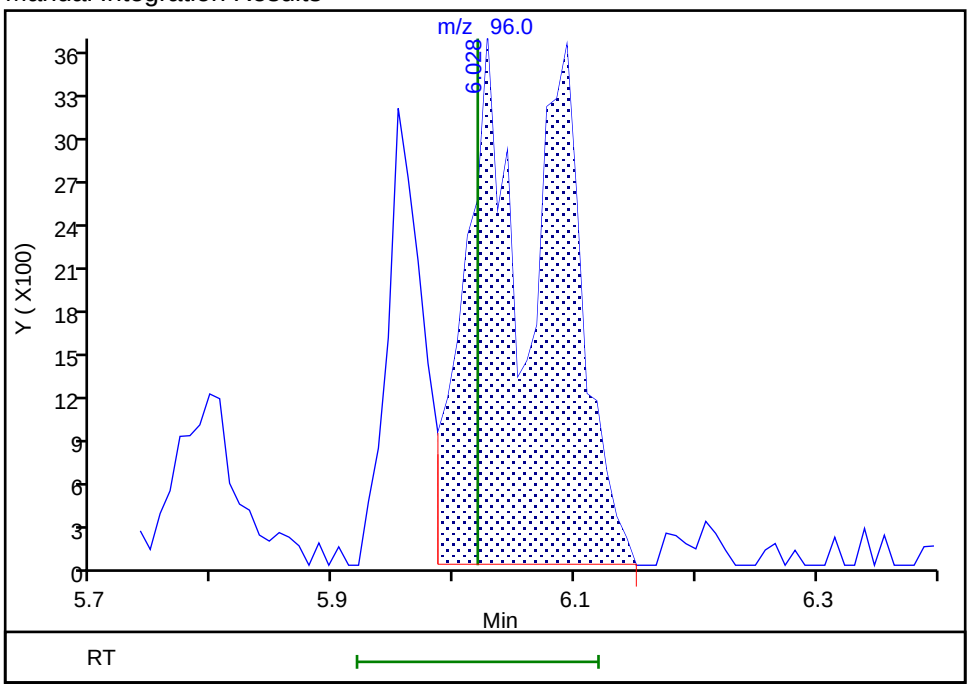
Processing Integration Results

RT: 6.03
Area: 9242
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.03
Area: 18634
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 17:56:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Jul-2018 10:34:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0075068-009
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub42

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 08-Jul-2018 19:12:16 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: boykink Date: 08-Jul-2018 11:18:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.541	1.541	0.000	88	1936409	500.0	569.7	
2 Dichlorodifluoromethane	85	1.574	1.574	0.000	99	4408691	500.0	537.2	
3 Chloromethane	50	1.747	1.747	0.000	98	4846961	500.0	483.5	
5 Butadiene	54	1.837	1.837	0.000	96	4620836	500.0	507.4	
4 Vinyl chloride	62	1.837	1.837	0.000	98	4953087	500.0	494.5	
6 Bromomethane	94	2.116	2.116	0.000	99	3175435	500.0	458.6	
7 Chloroethane	64	2.182	2.182	0.000	99	2820281	500.0	473.8	
8 Dichlorofluoromethane	67	2.355	2.355	0.000	98	5736092	500.0	454.0	
10 Pentane	72	2.371	2.363	0.008	96	1096295	1000.0	974.5	
9 Trichlorofluoromethane	101	2.371	2.371	0.000	98	4430449	500.0	477.6	
11 Ethanol	46	2.552	2.544	0.008	85	294889	20000	20821	
12 Ethyl ether	59	2.544	2.552	-0.008	94	2046129	500.0	494.5	
13 2-Methyl-1,3-butadiene	53	2.568	2.568	0.000	95	2438118	500.0	506.1	
14 1,2-Dichloro-1,1,2-trifluo	117	2.626	2.618	0.008	91	2314842	500.0	470.1	
15 Acrolein	56	2.724	2.724	0.000	91	167400	400.0	483.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.749	2.749	0.000	97	2805995	500.0	488.4	
17 1,1-Dichloroethene	96	2.774	2.757	0.017	98	2684576	500.0	503.3	
18 Acetone	43	2.839	2.848	-0.009	89	2964336	2500.0	2357.7	
19 Iodomethane	142	2.922	2.913	0.009	97	4521161	500.0	469.6	
20 Isopropyl alcohol	45	2.938	2.946	-0.008	96	1092262	5000.0	5243.0	
21 Carbon disulfide	76	2.963	2.955	0.008	99	9931387	500.0	465.3	
22 3-Chloro-1-propene	41	3.061	3.061	0.000	97	4802050	500.0	470.5	
24 Methyl acetate	43	3.069	3.078	-0.009	99	3098846	1000.0	1002.5	
23 Cyclopentene	67	3.086	3.086	0.000	94	6754156	500.0	498.3	
25 Acetonitrile	41	3.135	3.144	-0.009	96	3119121	5000.0	5081.4	a
* 26 TBA-d9 (IS)	65	3.209	3.193	0.016	0	178105	1000.0	1000.0	
27 Methylene Chloride	84	3.193	3.193	0.000	91	3042833	500.0	463.4	
28 2-Methyl-2-propanol	59	3.275	3.259	0.016	98	1943662	5000.0	5189.7	
29 Methyl tert-butyl ether	73	3.349	3.349	0.000	98	7468949	500.0	472.5	
30 trans-1,2-Dichloroethene	96	3.374	3.374	0.000	94	2764093	500.0	468.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.447	3.448	-0.001	94	8608034	5000.0	4881.2	
32 Hexane	43	3.521	3.522	-0.001	91	2425866	500.0	504.7	
33 Isopropyl ether	45	3.727	3.727	0.000	95	8637675	500.0	477.9	
34 1,1-Dichloroethane	63	3.768	3.760	0.008	100	4763691	500.0	454.5	
35 Vinyl acetate	86	3.768	3.776	-0.008	100	1066727	1000.0	1053.0	
36 2-Chloro-1,3-butadiene	88	3.809	3.809	0.000	89	2504213	500.0	481.5	
37 Tert-butyl ethyl ether	59	4.039	4.039	0.000	90	8249314	500.0	487.2	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	220581	250.0	250.0	
39 2,2-Dichloropropane	97	4.269	4.269	0.000	95	1041602	500.0	471.0	
40 cis-1,2-Dichloroethene	96	4.277	4.277	0.000	97	3137762	500.0	472.8	
42 Ethyl acetate	70	4.286	4.286	0.000	95	506767	1000.0	868.8	
41 2-Butanone (MEK)	72	4.286	4.286	0.000	97	1328915	2500.0	2273.5	
43 Methyl acrylate	55	4.343	4.351	-0.008	100	1967582	500.0	528.9	
44 Propionitrile	54	4.425	4.425	0.000	99	3294672	5000.0	4971.6	
45 Chlorobromomethane	128	4.499	4.499	0.000	90	1429859	500.0	467.0	
46 Tetrahydrofuran	72	4.499	4.508	-0.009	83	612177	1000.0	946.0	
47 Methacrylonitrile	67	4.524	4.524	0.000	88	9385838	5000.0	4897.2	
48 Chloroform	83	4.549	4.549	0.000	99	4430844	500.0	468.0	
49 Cyclohexane	84	4.688	4.688	0.000	90	4618908	500.0	522.8	
50 1,1,1-Trichloroethane	97	4.705	4.697	0.008	99	3942526	500.0	467.3	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	96	107167	50.0	46.6	
52 Carbon tetrachloride	117	4.820	4.812	0.008	98	3319730	500.0	484.5	
53 1,1-Dichloropropene	75	4.836	4.844	-0.008	98	3656797	500.0	489.6	
54 Isobutyl alcohol	43	4.968	4.992	-0.024	93	4113074	12500	13648	
55 Benzene	78	5.042	5.033	0.009	98	10481196	500.0	433.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	137011	50.0	55.8	M
57 Isopropyl acetate	43	5.083	5.083	0.000	96	7060860	500.0	522.2	
58 Tert-amyl methyl ether	73	5.099	5.091	0.008	92	9059390	500.0	503.0	
59 1,2-Dichloroethane	62	5.132	5.124	0.008	94	3106032	500.0	455.3	
60 n-Heptane	57	5.181	5.181	0.000	90	2200144	500.0	531.9	
* 61 Fluorobenzene	96	5.321	5.321	0.000	99	461281	50.0	50.0	
62 n-Butanol	56	5.625	5.650	-0.025	85	1375300	12500	12492	
63 Trichloroethene	95	5.674	5.674	0.000	99	2697116	500.0	474.4	
65 Ethyl acrylate	55	5.789	5.789	0.000	99	6886192	500.0	557.8	
64 Methylcyclohexane	83	5.798	5.798	0.000	90	5356346	500.0	534.5	
66 1,2-Dichloropropane	63	5.962	5.962	0.000	94	2911396	500.0	494.3	
* 67 1,4-Dioxane-d8	96	6.093	6.019	0.074	0	30893	1000.0	1000.0	M
68 Methyl methacrylate	100	6.028	6.028	0.000	86	1294397	1000.0	1064.7	
69 1,4-Dioxane	88	6.077	6.085	-0.008	59	350276	10000	5940.2	
70 n-Propyl acetate	43	6.085	6.085	0.000	97	3100296	500.0	567.0	
71 Dibromomethane	93	6.093	6.093	0.000	98	1590260	500.0	474.2	
72 Dichlorobromomethane	83	6.241	6.241	0.000	99	3528767	500.0	492.7	
73 2-Nitropropane	41	6.570	6.570	0.000	78	1004773	1000.0	983.5	
74 2-Chloroethyl vinyl ether	63	6.570	6.570	0.000	79	1542778	500.0	599.3	
75 Epichlorohydrin	57	6.685	6.685	0.000	98	4369507	10000	9891.5	
76 cis-1,3-Dichloropropene	75	6.734	6.734	0.000	90	4389929	500.0	500.3	
77 4-Methyl-2-pentanone (MIBK	43	6.899	6.899	0.000	93	10225528	2500.0	2266.6	
$ 78 Toluene-d8 (Surr)	98	6.981	6.981	0.000	98	462865	50.0	48.5	
79 Toluene	91	7.055	7.055	0.000	96	10589556	500.0	433.5	
80 trans-1,3-Dichloropropene	75	7.408	7.408	0.000	98	3702694	500.0	506.0	
81 Ethyl methacrylate	69	7.424	7.433	-0.009	91	3351463	500.0	559.4	
82 1,1,2-Trichloroethane	83	7.622	7.622	0.000	96	1972178	500.0	484.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.663	7.663	0.000	97	2773903	500.0	464.7	
84 1,3-Dichloropropane	76	7.827	7.827	0.000	92	3834334	500.0	498.2	
85 2-Hexanone	43	7.885	7.893	-0.008	93	6479984	2500.0	2360.9	
86 n-Butyl acetate	43	8.000	8.008	-0.008	97	3587927	500.0	507.1	
87 Chlorodibromomethane	129	8.065	8.065	0.000	98	2528593	500.0	479.6	
88 Ethylene Dibromide	107	8.221	8.222	-0.001	99	2180576	500.0	491.4	
* 89 Chlorobenzene-d5	117	8.764	8.764	0.000	86	346290	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	92	7124946	500.0	463.3	
91 Ethylbenzene	106	8.903	8.895	0.008	98	4228207	500.0	476.0	
92 1,1,1,2-Tetrachloroethane	131	8.920	8.920	0.000	97	2693250	500.0	461.9	
93 m-Xylene & p-Xylene	106	9.060	9.060	0.000	0	5166108	500.0	488.2	
94 n-Butyl acrylate	73	9.487	9.487	0.000	99	2237636	500.0	547.3	
95 o-Xylene	106	9.503	9.503	0.000	97	5253468	500.0	480.0	
96 Styrene	104	9.536	9.536	0.000	92	8069972	500.0	474.5	
97 Amyl acetate (mixed isomer	43	9.709	9.717	-0.008	92	4681947	500.0	553.7	
98 Bromoform	173	9.742	9.742	0.000	96	1611171	500.0	476.7	
99 Isopropylbenzene	105	9.848	9.849	-0.001	97	10861682	500.0	413.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	90	133441	50.0	47.7	
101 Bromobenzene	156	10.144	10.144	0.000	98	3103431	500.0	475.7	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	98	3010711	500.0	489.5	
103 N-Propylbenzene	91	10.202	10.202	0.000	96	11612551	500.0	388.2	
104 1,2,3-Trichloropropane	110	10.226	10.227	-0.001	96	816999	500.0	470.8	
105 trans-1,4-Dichloro-2-buten	53	10.243	10.243	0.000	90	755508	500.0	532.6	
106 2-Chlorotoluene	91	10.300	10.292	0.008	95	9240017	500.0	438.4	
107 4-Ethyltoluene	105	10.300	10.300	0.000	81	10708126	500.0	434.2	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	96	9326055	500.0	429.1	
109 4-Chlorotoluene	91	10.391	10.391	0.000	96	8235664	500.0	441.7	
110 Butyl Methacrylate	87	10.432	10.432	0.000	88	4294317	500.0	488.2	
111 tert-Butylbenzene	119	10.588	10.588	0.000	88	8175185	500.0	466.2	
112 1,2,4-Trimethylbenzene	105	10.637	10.637	0.000	94	9287375	500.0	420.0	
113 sec-Butylbenzene	105	10.744	10.744	0.000	91	10654597	500.0	394.6	
114 4-Isopropyltoluene	119	10.851	10.843	0.008	90	9632021	500.0	422.2	
115 1,3-Dichlorobenzene	146	10.859	10.859	0.000	92	5898093	500.0	461.0	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.909	-0.001	92	188821	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.925	10.925	0.000	90	5867301	500.0	444.8	
132 1,2,3-Trimethylbenzene	105	10.933	10.933	0.000	92	9624666	500.0	409.6	
118 Benzyl chloride	91	11.023	11.024	-0.001	99	5889342	500.0	501.5	
119 2,3-Dihydroindene	117	11.065	11.065	0.000	94	9159299	500.0	387.7	
120 p-Diethylbenzene	119	11.097	11.098	-0.001	94	6378237	500.0	454.1	
121 n-Butylbenzene	92	11.114	11.114	0.000	94	6134003	500.0	471.4	
122 1,2-Dichlorobenzene	146	11.171	11.171	0.000	91	5574171	500.0	435.0	
123 1,2,4,5-Tetramethylbenzene	119	11.582	11.574	0.008	93	8853963	500.0	403.9	
124 1,2-Dibromo-3-Chloropropan	75	11.656	11.656	0.000	97	553314	500.0	488.3	
125 1,3,5-Trichlorobenzene	180	11.738	11.738	0.000	96	4475172	500.0	448.0	
126 1,2,4-Trichlorobenzene	180	12.141	12.141	0.000	95	4218831	500.0	474.9	
127 Hexachlorobutadiene	225	12.207	12.199	0.008	95	1941946	500.0	461.0	
128 Naphthalene	128	12.314	12.314	0.000	96	8593464	500.0	457.1	
129 1,2,3-Trichlorobenzene	180	12.478	12.478	0.000	95	3769448	500.0	442.6	
S 130 1,2-Dichloroethene, Total	100				0		1000.0	941.5	
S 131 Xylenes, Total	100				0		1000.0	968.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00078	Amount Added:	40.00	Units: uL	
GAS Hi_00262	Amount Added:	50.00	Units: uL	
MIX I Hi_00095	Amount Added:	50.00	Units: uL	
Ethanol mix_00017	Amount Added:	50.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	50.00	Units: uL	
VOA6IS/SURR_00011	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 08-Jul-2018 19:12:18 Chrom Revision: 2.2 07-Jun-2018 07:41:54

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Injection Date: 08-Jul-2018 10:34:30 Instrument ID: CVOAMS6 Operator ID:

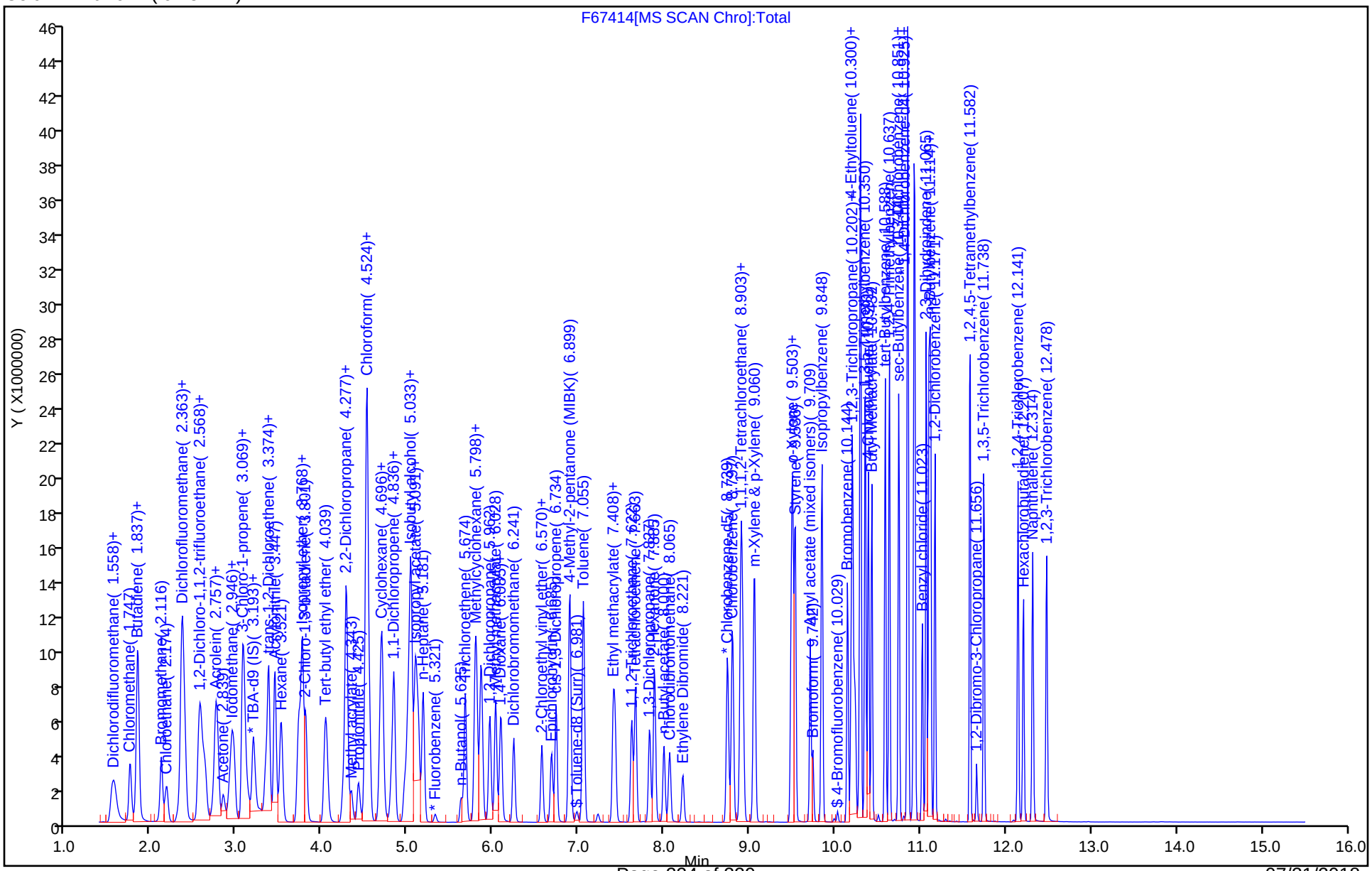
Lims ID: STD500 Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

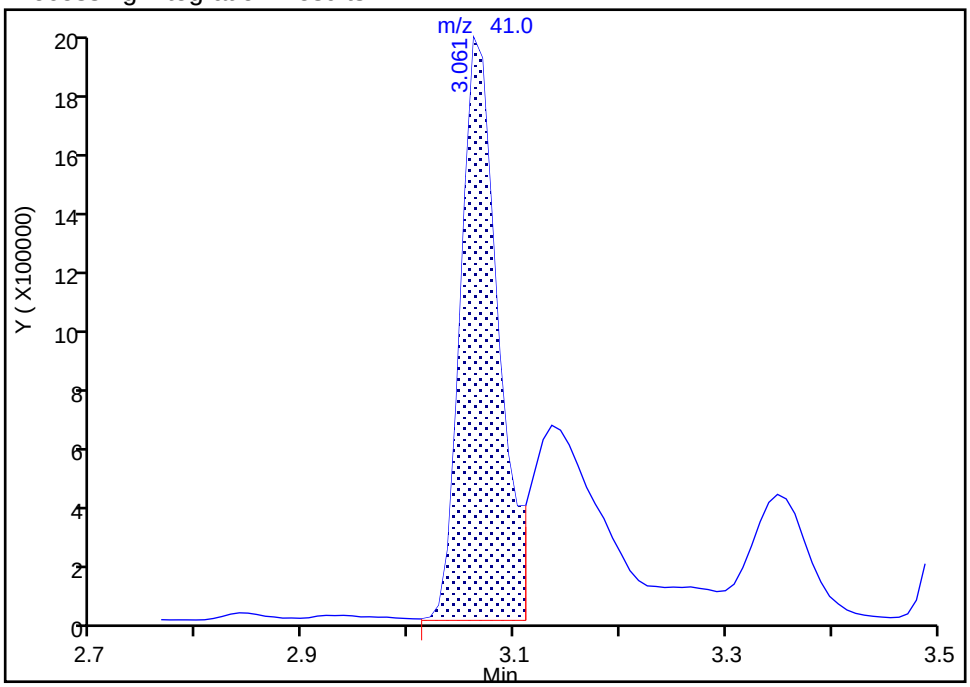
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D
Injection Date: 08-Jul-2018 10:34:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

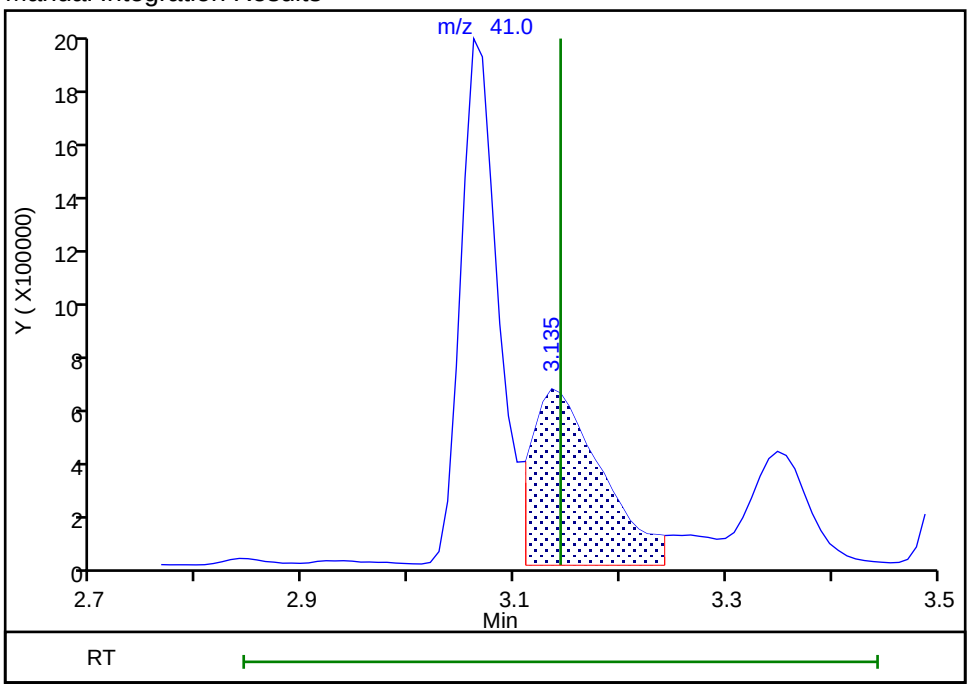
Processing Integration Results

RT: 3.06
Area: 4996979
Amount: 5004.7837
Amount Units: ug/l



Manual Integration Results

RT: 3.14
Area: 3119121
Amount: 5081.3882
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 18:00:21
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

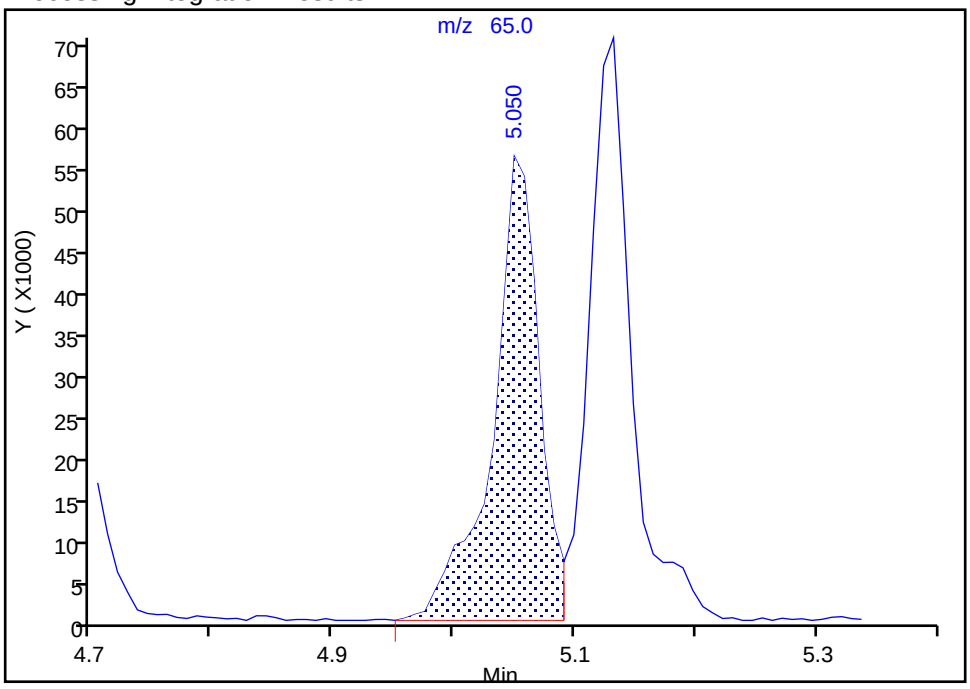
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D
Injection Date: 08-Jul-2018 10:34:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

$ 56 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

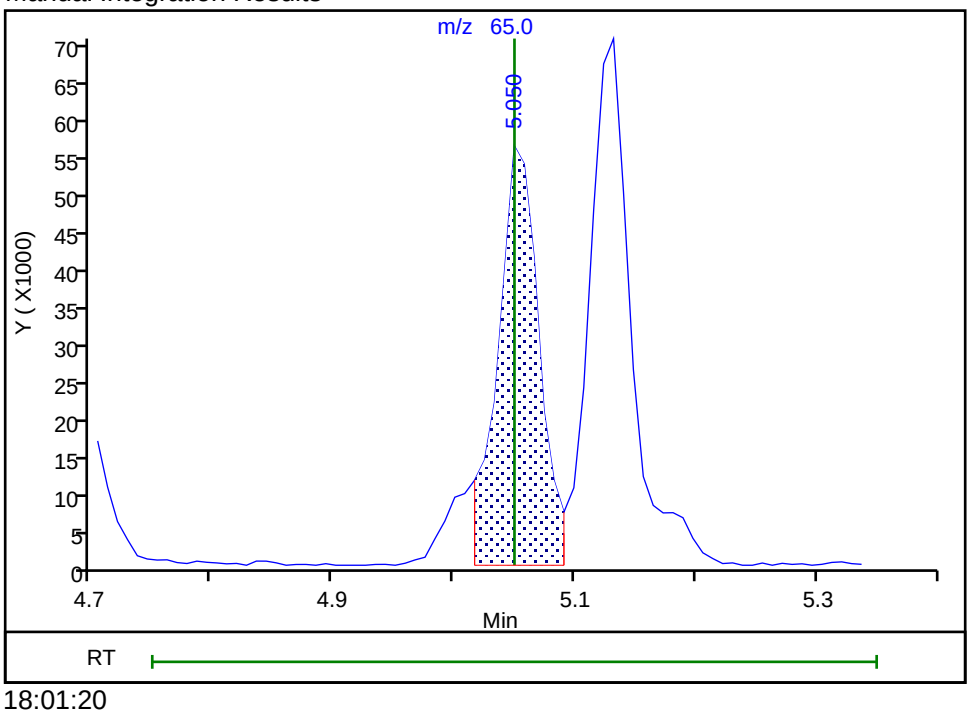
Processing Integration Results

RT: 5.05
Area: 151985
Amount: 60.834141
Amount Units: ug/l



Manual Integration Results

RT: 5.05
Area: 137011
Amount: 55.796062
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 18:01:20
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

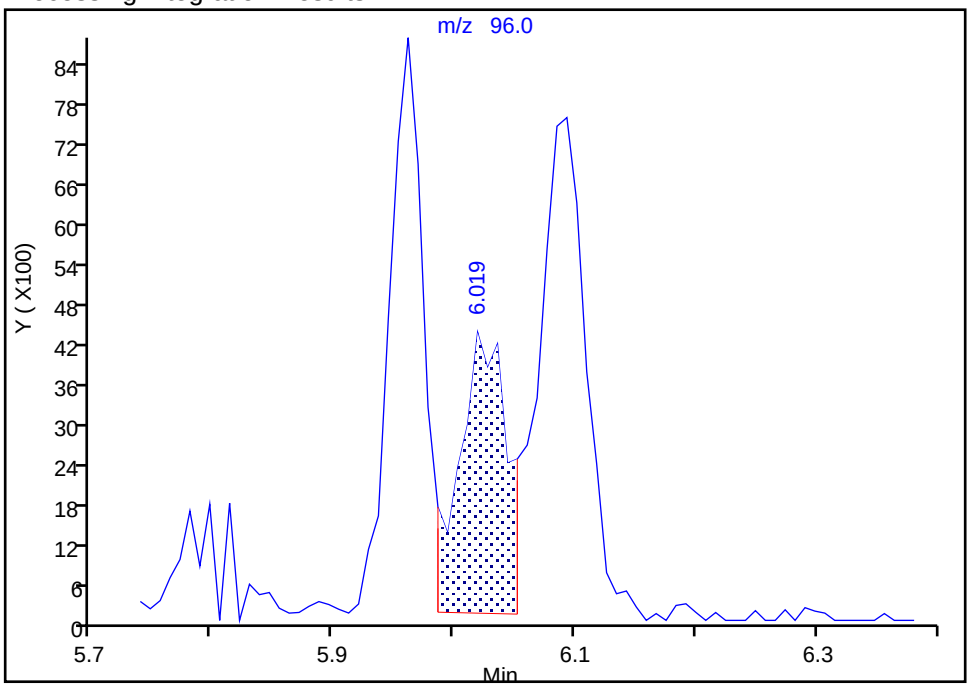
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D
Injection Date: 08-Jul-2018 10:34:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 67 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

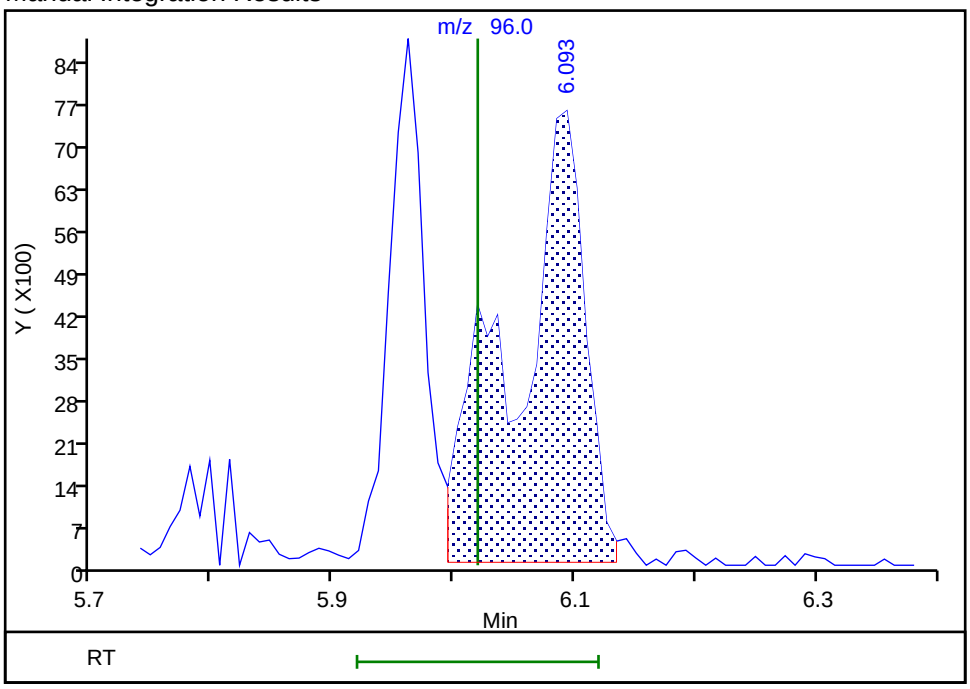
Processing Integration Results

RT: 6.02
Area: 11978
Amount: 1000.0000
Amount Units: ug/l



Manual Integration Results

RT: 6.09
Area: 30893
Amount: 1000.0000
Amount Units: ug/l



Reviewer: delpolitov, 08-Jul-2018 18:01:02
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Lab Sample ID: CCVIS 460-540460/3 Calibration Date: 07/28/2018 18:53

Instrument ID: CVOAMS6 Calib Start Date: 07/08/2018 08:14

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/08/2018 10:34

Lab File ID: F68326.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.3684	0.3029		16.4	20.0	-17.8	20.0
Dichlorodifluoromethane	Ave	0.8896	0.8324	0.1000	18.7	20.0	-6.4	20.0
Chloromethane	Ave	1.087	1.064	0.1000	19.6	20.0	-2.1	20.0
Butadiene	Ave	0.9872	0.9717		19.7	20.0	-1.6	20.0
Vinyl chloride	Ave	1.086	0.9580	0.1000	17.6	20.0	-11.8	20.0
Bromomethane	Ave	0.7505	0.5452	0.1000	14.5	20.0	-27.4	50.0
Chloroethane	Ave	0.6452	0.5491	0.1000	17.0	20.0	-14.9	50.0
Dichlorofluoromethane	Ave	1.369	1.360		19.9	20.0	-0.7	20.0
Trichlorofluoromethane	Ave	1.006	0.9020	0.1000	17.9	20.0	-10.3	20.0
Pentane	Ave	6.316	6.117		38.7	40.0	-3.1	20.0
Ethanol	Ave	0.0795	0.0463		466	800	-41.8	50.0
Ethyl ether	Ave	0.4485	0.5109		22.8	20.0	13.9	20.0
2-Methyl-1,3-butadiene	Ave	0.5222	0.5986		22.9	20.0	14.6	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.5337	0.5146		19.3	20.0	-3.6	20.0
Acrolein	Ave	1.943	2.607		53.7	40.0	34.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.6227	0.6250	0.1000	20.1	20.0	0.4	20.0
1,1-Dichloroethene	Ave	0.5782	0.5643	0.1000	19.5	20.0	-2.4	20.0
Acetone	Ave	1.425	1.571	0.0500	110	100	10.2	50.0
Iodomethane	Ave	1.044	1.004		19.2	20.0	-3.8	20.0
Carbon disulfide	Ave	2.314	2.234	0.1000	19.3	20.0	-3.4	50.0
Isopropyl alcohol	Ave	1.170	1.440		246	200	23.1	50.0
Allyl chloride	Ave	1.106	1.383		25.0	20.0	25.0*	20.0
Methyl acetate	Ave	0.3351	0.4551	0.1000	54.3	40.0	35.8*	20.0
Cyclopentene	Ave	1.469	1.630		22.2	20.0	11.0	20.0
Acetonitrile	Ave	3.446	4.352		253	200	26.3*	20.0
Methylene Chloride	Ave	0.7118	0.6775	0.1000	19.0	20.0	-4.8	20.0
2-Methyl-2-propanol	Ave	2.103	2.311		220	200	9.9	50.0
Methyl tert-butyl ether	Ave	1.713	1.789	0.1000	20.9	20.0	4.4	20.0
trans-1,2-Dichloroethene	Ave	0.6394	0.6286	0.1000	19.7	20.0	-1.7	20.0
Acrylonitrile	Ave	0.1912	0.2178		228	200	13.9	20.0
Hexane	Ave	0.5210	0.6836		26.2	20.0	31.2*	20.0
Isopropyl ether	Ave	1.959	2.429		24.8	20.0	24.0*	20.0
1,1-Dichloroethane	Ave	1.136	1.246	0.2000	21.9	20.0	9.7	20.0
Vinyl acetate	Ave	0.1098	0.0977		35.6	40.0	-11.0	20.0
2-Chloro-1,3-butadiene	Ave	0.5638	0.5680		20.1	20.0	0.7	20.0
Tert-butyl ethyl ether	Ave	1.835	2.093		22.8	20.0	14.0	20.0
2,2-Dichloropropane	Ave	0.2397	0.2383		19.9	20.0	-0.6	20.0
cis-1,2-Dichloroethene	Ave	0.7193	0.6927	0.1000	19.3	20.0	-3.7	20.0
2-Butanone (MEK)	Ave	0.6625	0.5865	0.0500	88.5	100	-11.5	50.0
Ethyl acetate	Ave	0.6611	0.6187		37.4	40.0	-6.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Lab Sample ID: CCVIS 460-540460/3 Calibration Date: 07/28/2018 18:53

Instrument ID: CVOAMS6 Calib Start Date: 07/08/2018 08:14

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/08/2018 10:34

Lab File ID: F68326.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.5371	0.6234		23.2	20.0	16.1	20.0
Propionitrile	Ave	3.721	4.117		221	200	10.7	20.0
Chlorobromomethane	Ave	0.3319	0.3097		18.7	20.0	-6.7	20.0
Tetrahydrofuran	Lin2		0.7204		38.1	40.0	-4.7	20.0
Methacrylonitrile	Ave	0.2077	0.2176		209	200	4.7	20.0
Chloroform	Ave	1.026	1.055	0.2000	20.6	20.0	2.8	20.0
Cyclohexane	Ave	0.9576	1.005	0.1000	21.0	20.0	4.9	50.0
1,1,1-Trichloroethane	Ave	0.9145	0.8538	0.1000	18.7	20.0	-6.6	20.0
Carbon tetrachloride	Ave	0.7427	0.6895	0.1000	18.6	20.0	-7.2	20.0
1,1-Dichloropropene	Ave	0.8095	0.8281		20.5	20.0	2.3	20.0
Isobutyl alcohol	Ave	1.692	2.034		601	500	20.2	50.0
Benzene	Ave	3.489	3.808	0.5000	21.8	20.0	9.1	20.0
Isopropyl acetate	Ave	1.466	1.591		21.7	20.0	8.6	20.0
Tert-amyl methyl ether	Ave	1.952	2.064		21.1	20.0	5.7	20.0
1,2-Dichloroethane	Ave	0.7395	0.7911	0.1000	21.4	20.0	7.0	20.0
n-Heptane	Ave	0.4484	0.5481		24.4	20.0	22.2*	20.0
n-Butanol	QuaF		0.3844		380	500	-23.9	50.0
Trichloroethene	Ave	0.6162	0.5953	0.2000	19.3	20.0	-3.4	20.0
Ethyl acrylate	Ave	1.338	1.514		22.6	20.0	13.1	20.0
Methylcyclohexane	Ave	1.086	1.157	0.1000	21.3	20.0	6.5	50.0
1,2-Dichloropropane	Ave	0.6384	0.6637	0.1000	20.8	20.0	4.0	20.0
Methyl methacrylate	Lin2		0.1200		37.4	40.0	-6.6	20.0
1,4-Dioxane	Ave	1.909	2.315		485	400	21.3	50.0
Dibromomethane	Ave	0.3635	0.3494		19.2	20.0	-3.9	20.0
n-Propyl acetate	Ave	0.5927	0.7056		23.8	20.0	19.0	20.0
Dichlorobromomethane	Ave	0.7764	0.7457	0.2000	19.2	20.0	-4.0	20.0
2-Chloroethyl vinyl ether	Ave	0.2790	0.3015		21.6	20.0	8.1	20.0
2-Nitropropane	Ave	0.1107	0.1165		42.1	40.0	5.2	20.0
Epichlorohydrin	Ave	0.5007	0.4955		396	400	-1.0	20.0
cis-1,3-Dichloropropene	Ave	1.267	1.392	0.2000	22.0	20.0	9.9	50.0
4-Methyl-2-pentanone (MIBK)	Ave	5.113	5.781	0.0500	113	100	13.1	50.0
Toluene	Ave	3.527	3.779	0.4000	21.4	20.0	7.1	20.0
trans-1,3-Dichloropropene	Ave	1.057	1.113	0.1000	21.1	20.0	5.3	50.0
Ethyl methacrylate	Ave	0.8650	1.020		23.6	20.0	17.9	20.0
1,1,2-Trichloroethane	Ave	0.5874	0.6250	0.1000	21.3	20.0	6.4	20.0
Tetrachloroethene	Ave	0.8618	0.8673	0.2000	20.1	20.0	0.6	20.0
1,3-Dichloropropane	Ave	1.111	1.245		22.4	20.0	12.0	20.0
2-Hexanone	Lin2		3.126	0.0500	104	100	3.6	50.0
n-Butyl acetate	Lin2		1.324		26.5	20.0	32.6*	20.0
Chlorodibromomethane	Ave	0.7612	0.7015	0.1000	18.4	20.0	-7.8	50.0
Ethylene Dibromide	Ave	0.6407	0.6295	0.1000	19.7	20.0	-1.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Lab Sample ID: CCVIS 460-540460/3 Calibration Date: 07/28/2018 18:53

Instrument ID: CVOAMS6 Calib Start Date: 07/08/2018 08:14

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/08/2018 10:34

Lab File ID: F68326.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	2.221	2.270	0.5000	20.4	20.0	2.2	20.0
Ethylbenzene	Ave	1.283	1.315	0.1000	20.5	20.0	2.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8419	0.8147		19.4	20.0	-3.2	20.0
m-Xylene & p-Xylene	Ave	1.528	1.597	0.1000	20.9	20.0	4.5	20.0
n-Butyl acrylate	Lin2		0.6089		21.2	20.0	5.8	20.0
o-Xylene	Ave	1.580	1.644	0.3000	20.8	20.0	4.0	20.0
Styrene	Ave	2.456	2.602	0.3000	21.2	20.0	5.9	20.0
Amyl acetate (mixed isomers)	Lin2		3.009		27.5	20.0	37.5*	20.0
Bromoform	Ave	0.4880	0.4290	0.1000	17.6	20.0	-12.1	20.0
Isopropylbenzene	Ave	3.798	4.141	0.1000	21.8	20.0	9.0	20.0
Bromobenzene	Ave	1.728	1.799		20.8	20.0	4.1	20.0
1,1,2,2-Tetrachloroethane	Ave	1.629	1.852	0.3000	22.7	20.0	13.7	20.0
N-Propylbenzene	Ave	7.921	9.339		23.6	20.0	17.9	20.0
1,2,3-Trichloropropane	Ave	0.4595	0.4996		21.7	20.0	8.7	20.0
trans-1,4-Dichloro-2-butene	Lin2		0.3957		21.7	20.0	8.3	20.0
2-Chlorotoluene	Ave	5.582	6.380		22.9	20.0	14.3	20.0
4-Ethyltoluene	Ave	6.531	7.729		23.7	20.0	18.4	20.0
1,3,5-Trimethylbenzene	Ave	5.756	6.576		22.8	20.0	14.2	20.0
4-Chlorotoluene	Ave	4.937	5.841		23.7	20.0	18.3	20.0
Butyl Methacrylate	Qua2		2.216		22.8	20.0	13.9	20.0
tert-Butylbenzene	Ave	4.643	5.021		21.6	20.0	8.1	20.0
1,2,4-Trimethylbenzene	Ave	5.856	6.730		23.0	20.0	14.9	20.0
sec-Butylbenzene	Ave	7.151	8.299		23.2	20.0	16.1	20.0
4-Isopropyltoluene	Ave	6.041	6.901		22.8	20.0	14.2	20.0
1,3-Dichlorobenzene	Ave	3.388	3.554	0.6000	21.0	20.0	4.9	20.0
1,4-Dichlorobenzene	Ave	3.493	3.589	0.5000	20.6	20.0	2.8	20.0
1,2,3-Trimethylbenzene	Ave	6.222	7.141		23.0	20.0	14.8	20.0
Benzyl chloride	Ave	3.109	3.533		22.7	20.0	13.6	50.0
Indan	Ave	6.256	7.104		22.7	20.0	13.6	20.0
p-Diethylbenzene	Ave	3.719	4.331		23.3	20.0	16.4	20.0
n-Butylbenzene	Ave	3.445	3.952		22.9	20.0	14.7	20.0
1,2-Dichlorobenzene	Ave	3.393	3.651	0.4000	21.5	20.0	7.6	20.0
1,2,4,5-Tetramethylbenzene	Ave	5.805	6.863		23.6	20.0	18.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.3001	0.3337	0.0500	22.2	20.0	11.2	50.0
1,3,5-Trichlorobenzene	Ave	2.645	2.904		22.0	20.0	9.8	20.0
1,2,4-Trichlorobenzene	Ave	2.352	2.583	0.2000	22.0	20.0	9.8	20.0
Hexachlorobutadiene	Ave	1.115	1.168		21.0	20.0	4.8	20.0
Naphthalene	Ave	4.978	5.736		23.0	20.0	15.2	50.0
1,2,3-Trichlorobenzene	Ave	2.255	2.353		20.9	20.0	4.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2492	0.2347		47.1	50.0	-5.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2662	0.2670		50.1	50.0	0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Lab Sample ID: CCVIS 460-540460/3 Calibration Date: 07/28/2018 18:53

Instrument ID: CVOAMS6 Calib Start Date: 07/08/2018 08:14

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/08/2018 10:34

Lab File ID: F68326.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.378	1.354		49.1	50.0	-1.7	20.0
4-Bromofluorobenzene	Ave	0.4036	0.4017		49.8	50.0	-0.5	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68326.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 28-Jul-2018 18:53:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0076265-003
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub42

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:05:14 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: colladox Date: 28-Jul-2018 19:25:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.541	1.541	0.000	77	36758	20.0	16.4	
2 Dichlorodifluoromethane	85	1.574	1.574	0.000	97	101027	20.0	18.7	
3 Chloromethane	50	1.747	1.747	0.000	99	129131	20.0	19.6	
4 Vinyl chloride	62	1.837	1.837	0.000	86	116274	20.0	17.6	
5 Butadiene	54	1.837	1.837	0.000	96	117931	20.0	19.7	
6 Bromomethane	94	2.116	2.116	0.000	98	66173	20.0	14.5	
7 Chloroethane	64	2.182	2.182	0.000	100	66644	20.0	17.0	
8 Dichlorofluoromethane	67	2.355	2.355	0.000	98	165061	20.0	19.9	
9 Trichlorofluoromethane	101	2.363	2.363	0.000	95	109478	20.0	17.9	
10 Pentane	72	2.371	2.371	0.000	98	27622	40.0	38.7	
12 Ethyl ether	59	2.552	2.552	0.000	92	62006	20.0	22.8	
11 Ethanol	46	2.552	2.552	0.000	77	4183	800.0	466.0	
13 2-Methyl-1,3-butadiene	53	2.568	2.568	0.000	99	72649	20.0	22.9	
14 1,2-Dichloro-1,1,2-trifluo	117	2.618	2.618	0.000	87	62458	20.0	19.3	
15 Acrolein	56	2.724	2.724	0.000	54	11772	40.0	53.7	
16 1,1,2-Trichloro-1,2,2-trif	101	2.741	2.741	0.000	94	75856	20.0	20.1	
17 1,1-Dichloroethene	96	2.757	2.757	0.000	96	68487	20.0	19.5	
18 Acetone	43	2.848	2.848	0.000	85	89627	100.0	110.2	
19 Iodomethane	142	2.913	2.913	0.000	97	121812	20.0	19.2	
20 Isopropyl alcohol	45	2.946	2.946	0.000	28	32516	200.0	246.3	
21 Carbon disulfide	76	2.946	2.946	0.000	100	271134	20.0	19.3	
22 3-Chloro-1-propene	41	3.061	3.061	0.000	93	167822	20.0	25.0	
24 Methyl acetate	43	3.078	3.078	0.000	99	110477	40.0	54.3	
23 Cyclopentene	67	3.086	3.086	0.000	94	197864	20.0	22.2	
25 Acetonitrile	41	3.143	3.143	0.000	19	98256	200.0	252.5	a
* 26 TBA-d9 (IS)	65	3.185	3.185	0.000	0	112886	1000.0	1000.0	
27 Methylene Chloride	84	3.193	3.193	0.000	96	82228	20.0	19.0	
28 2-Methyl-2-propanol	59	3.259	3.259	0.000	54	52168	200.0	219.8	
29 Methyl tert-butyl ether	73	3.349	3.349	0.000	97	217175	20.0	20.9	
30 trans-1,2-Dichloroethene	96	3.374	3.374	0.000	97	76288	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.448	3.448	0.000	95	264330	200.0	227.9	
32 Hexane	43	3.513	3.513	0.000	94	82963	20.0	26.2	
33 Isopropyl ether	45	3.727	3.727	0.000	97	294825	20.0	24.8	
34 1,1-Dichloroethane	63	3.760	3.760	0.000	99	151177	20.0	21.9	
35 Vinyl acetate	86	3.768	3.768	0.000	100	23711	40.0	35.6	
36 2-Chloro-1,3-butadiene	88	3.801	3.801	0.000	92	68934	20.0	20.1	
37 Tert-butyl ethyl ether	59	4.031	4.031	0.000	89	254032	20.0	22.8	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	142644	250.0	250.0	
39 2,2-Dichloropropane	97	4.261	4.261	0.000	95	28922	20.0	19.9	
40 cis-1,2-Dichloroethene	96	4.277	4.277	0.000	95	84070	20.0	19.3	
42 Ethyl acetate	70	4.294	4.294	0.000	96	14121	40.0	37.4	
41 2-Butanone (MEK)	72	4.294	4.294	0.000	95	33462	100.0	88.5	
43 Methyl acrylate	55	4.343	4.343	0.000	99	50516	20.0	23.2	
44 Propionitrile	54	4.417	4.417	0.000	98	92959	200.0	221.3	
45 Chlorobromomethane	128	4.499	4.499	0.000	95	37585	20.0	18.7	
46 Tetrahydrofuran	72	4.499	4.499	0.000	70	16441	40.0	38.1	
47 Methacrylonitrile	67	4.516	4.516	0.000	95	264034	200.0	209.4	
48 Chloroform	83	4.549	4.549	0.000	98	128095	20.0	20.6	
49 Cyclohexane	84	4.680	4.680	0.000	94	121926	20.0	21.0	
50 1,1,1-Trichloroethane	97	4.696	4.696	0.000	98	103628	20.0	18.7	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	96	71201	50.0	47.1	
52 Carbon tetrachloride	117	4.812	4.812	0.000	96	83686	20.0	18.6	
53 1,1-Dichloropropene	75	4.836	4.836	0.000	95	100506	20.0	20.5	
54 Isobutyl alcohol	43	4.984	4.984	0.000	88	114783	500.0	600.9	
55 Benzene	78	5.033	5.033	0.000	98	308538	20.0	21.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	80998	50.0	50.1	
57 Isopropyl acetate	43	5.083	5.083	0.000	96	193123	20.0	21.7	
58 Tert-amyl methyl ether	73	5.091	5.091	0.000	92	250474	20.0	21.1	
59 1,2-Dichloroethane	62	5.124	5.124	0.000	96	96011	20.0	21.4	
60 n-Heptane	57	5.181	5.181	0.000	94	66526	20.0	24.4	
* 61 Fluorobenzene	96	5.321	5.321	0.000	98	303422	50.0	50.0	
62 n-Butanol	56	5.633	5.633	0.000	91	21694	500.0	380.3	
63 Trichloroethene	95	5.666	5.666	0.000	98	72251	20.0	19.3	
65 Ethyl acrylate	55	5.789	5.789	0.000	96	183740	20.0	22.6	
64 Methylcyclohexane	83	5.789	5.789	0.000	87	140383	20.0	21.3	
66 1,2-Dichloropropane	63	5.954	5.954	0.000	89	80549	20.0	20.8	
* 67 1,4-Dioxane-d8	96	6.019	6.019	0.000	0	9265	1000.0	1000.0	
68 Methyl methacrylate	100	6.028	6.028	0.000	91	29135	40.0	37.4	
69 1,4-Dioxane	88	6.077	6.077	0.000	28	8581	400.0	485.2	
70 n-Propyl acetate	43	6.085	6.085	0.000	98	85632	20.0	23.8	
71 Dibromomethane	93	6.085	6.085	0.000	96	42401	20.0	19.2	
72 Dichlorobromomethane	83	6.233	6.233	0.000	99	90499	20.0	19.2	
74 2-Chloroethyl vinyl ether	63	6.562	6.562	0.000	75	36595	20.0	21.6	
73 2-Nitropropane	41	6.570	6.570	0.000	78	28288	40.0	42.1	
75 Epichlorohydrin	57	6.677	6.677	0.000	100	113079	400.0	395.8	
76 cis-1,3-Dichloropropene	75	6.734	6.734	0.000	95	112830	20.0	22.0	
77 4-Methyl-2-pentanone (MIBK	43	6.890	6.890	0.000	98	329875	100.0	113.1	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	98	274366	50.0	49.1	
79 Toluene	91	7.047	7.047	0.000	93	306247	20.0	21.4	
80 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	98	90175	20.0	21.1	
81 Ethyl methacrylate	69	7.424	7.424	0.000	89	82648	20.0	23.6	
82 1,1,2-Trichloroethane	83	7.613	7.613	0.000	94	50647	20.0	21.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.663	7.663	0.000	96	70278	20.0	20.1	
84 1,3-Dichloropropane	76	7.827	7.827	0.000	96	100885	20.0	22.4	
85 2-Hexanone	43	7.885	7.885	0.000	97	178358	100.0	103.6	
86 n-Butyl acetate	43	8.000	8.000	0.000	98	107261	20.0	26.5	
87 Chlorodibromomethane	129	8.057	8.057	0.000	98	56846	20.0	18.4	
88 Ethylene Dibromide	107	8.213	8.213	0.000	100	51009	20.0	19.7	
* 89 Chlorobenzene-d5	117	8.756	8.756	0.000	87	202580	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	93	183914	20.0	20.4	
91 Ethylbenzene	106	8.895	8.895	0.000	99	106560	20.0	20.5	
92 1,1,1,2-Tetrachloroethane	131	8.912	8.912	0.000	95	66020	20.0	19.4	
93 m-Xylene & p-Xylene	106	9.051	9.051	0.000	0	129401	20.0	20.9	
94 n-Butyl acrylate	73	9.487	9.487	0.000	96	49337	20.0	21.2	
95 o-Xylene	106	9.503	9.503	0.000	93	133196	20.0	20.8	
96 Styrene	104	9.528	9.528	0.000	95	210828	20.0	21.2	
97 Amyl acetate (mixed isomer	43	9.709	9.709	0.000	90	132058	20.0	27.5	
98 Bromoform	173	9.742	9.742	0.000	95	34763	20.0	17.6	
99 Isopropylbenzene	105	9.840	9.840	0.000	97	335528	20.0	21.8	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	88	81382	50.0	49.8	
101 Bromobenzene	156	10.144	10.144	0.000	95	78959	20.0	20.8	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	98	81286	20.0	22.7	
103 N-Propylbenzene	91	10.202	10.202	0.000	99	409894	20.0	23.6	
104 1,2,3-Trichloropropane	110	10.226	10.226	0.000	97	21928	20.0	21.7	
105 trans-1,4-Dichloro-2-buten	53	10.243	10.243	0.000	76	17368	20.0	21.7	
106 2-Chlorotoluene	91	10.292	10.292	0.000	93	280004	20.0	22.9	
107 4-Ethyltoluene	105	10.292	10.292	0.000	88	339219	20.0	23.7	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	93	288593	20.0	22.8	
109 4-Chlorotoluene	91	10.383	10.383	0.000	98	256342	20.0	23.7	
110 Butyl Methacrylate	87	10.424	10.424	0.000	94	97270	20.0	22.8	
111 tert-Butylbenzene	119	10.580	10.580	0.000	93	220352	20.0	21.6	
112 1,2,4-Trimethylbenzene	105	10.629	10.629	0.000	98	295387	20.0	23.0	
113 sec-Butylbenzene	105	10.744	10.744	0.000	99	364222	20.0	23.2	
114 4-Isopropyltoluene	119	10.843	10.843	0.000	97	302869	20.0	22.8	
115 1,3-Dichlorobenzene	146	10.851	10.851	0.000	94	155965	20.0	21.0	
* 116 1,4-Dichlorobenzene-d4	152	10.908	10.908	0.000	96	109721	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.925	10.925	0.000	91	157529	20.0	20.6	
132 1,2,3-Trimethylbenzene	105	10.933	10.933	0.000	98	313422	20.0	23.0	
118 Benzyl chloride	91	11.023	11.023	0.000	98	155054	20.0	22.7	
119 2,3-Dihydroindene	117	11.065	11.065	0.000	95	311763	20.0	22.7	
120 p-Diethylbenzene	119	11.106	11.106	0.000	94	190074	20.0	23.3	
121 n-Butylbenzene	92	11.122	11.122	0.000	99	173468	20.0	22.9	
122 1,2-Dichlorobenzene	146	11.171	11.171	0.000	96	160233	20.0	21.5	
123 1,2,4,5-Tetramethylbenzene	119	11.590	11.590	0.000	98	301201	20.0	23.6	
124 1,2-Dibromo-3-Chloropropan	75	11.673	11.673	0.000	94	14645	20.0	22.2	
125 1,3,5-Trichlorobenzene	180	11.755	11.755	0.000	98	127434	20.0	22.0	
126 1,2,4-Trichlorobenzene	180	12.157	12.157	0.000	94	113342	20.0	22.0	
127 Hexachlorobutadiene	225	12.223	12.223	0.000	95	51283	20.0	21.0	
128 Naphthalene	128	12.330	12.330	0.000	99	251744	20.0	23.0	
129 1,2,3-Trichlorobenzene	180	12.494	12.494	0.000	95	103272	20.0	20.9	
S 130 1,2-Dichloroethene, Total	100				0		40.0	38.9	
S 131 Xylenes, Total	100				0		40.0	41.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
GASES Li_00270	Amount Added:	20.00	Units: uL	
VOA6IS/SURR_00012	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 29-Jul-2018 08:05:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68326.D

Injection Date: 28-Jul-2018 18:53:30 Instrument ID: CVOAMS6 Operator ID:

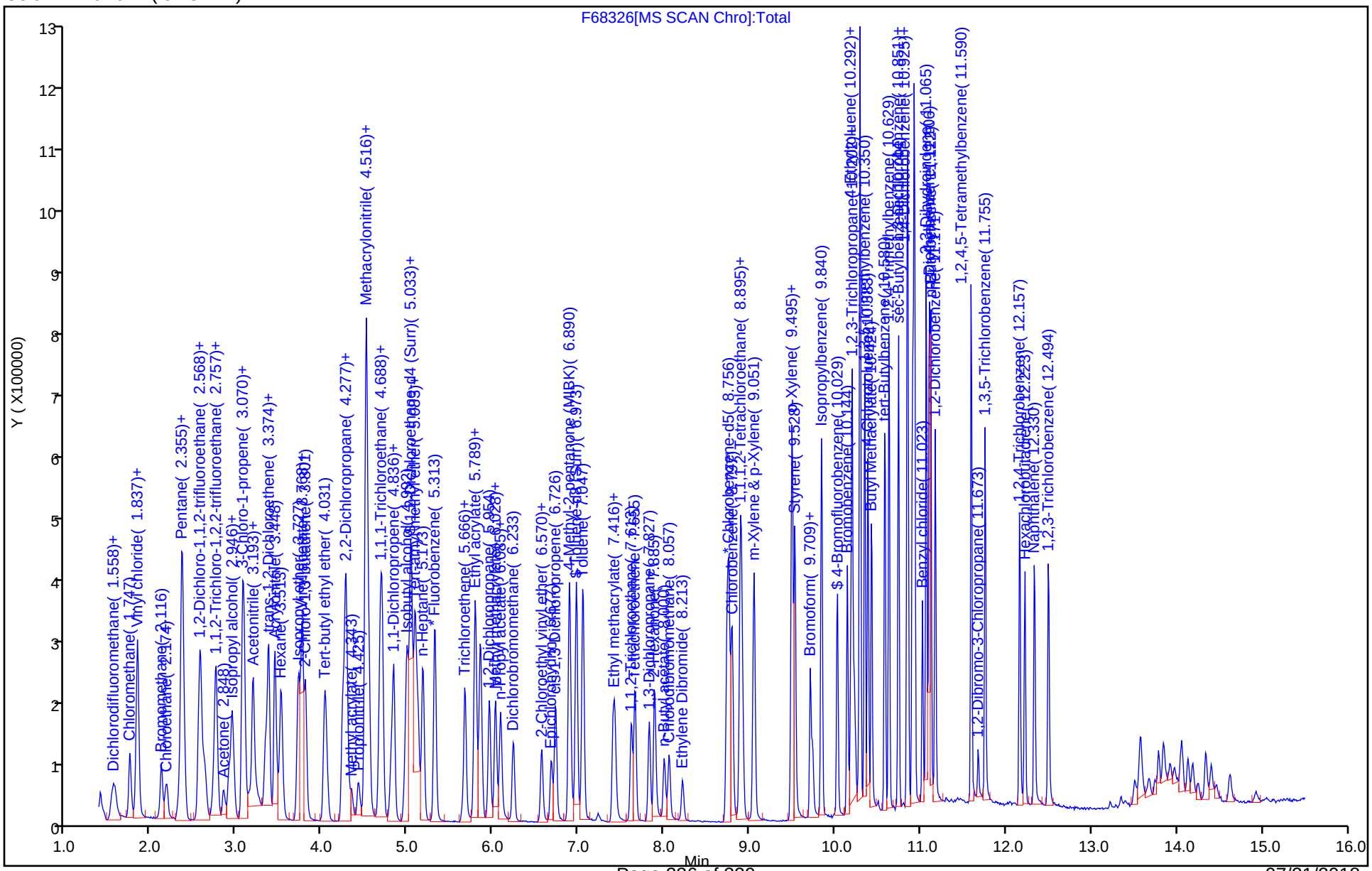
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

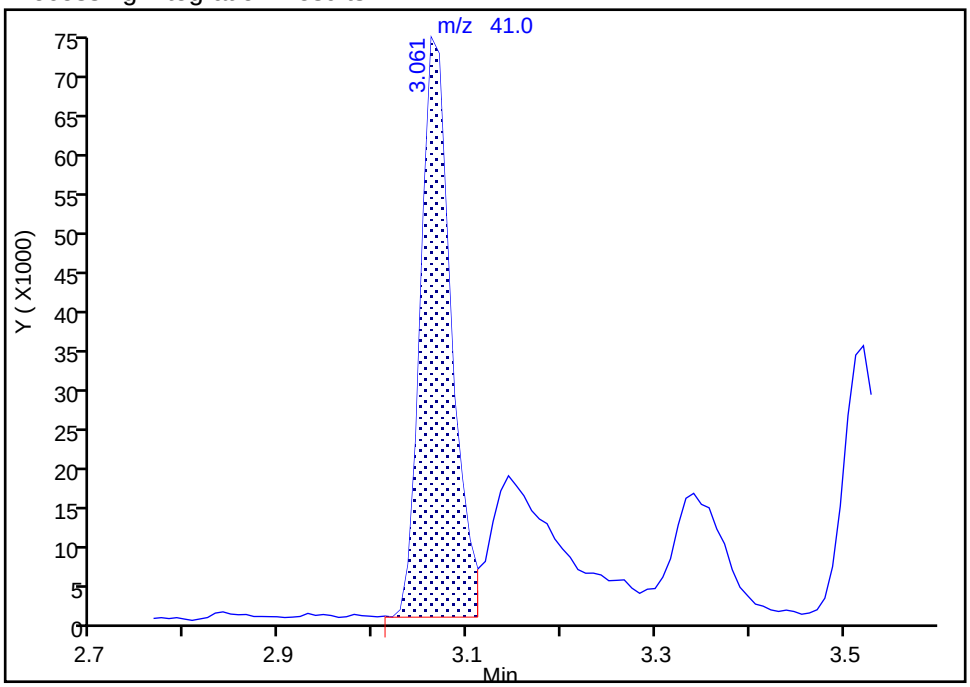
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68326.D
Injection Date: 28-Jul-2018 18:53:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

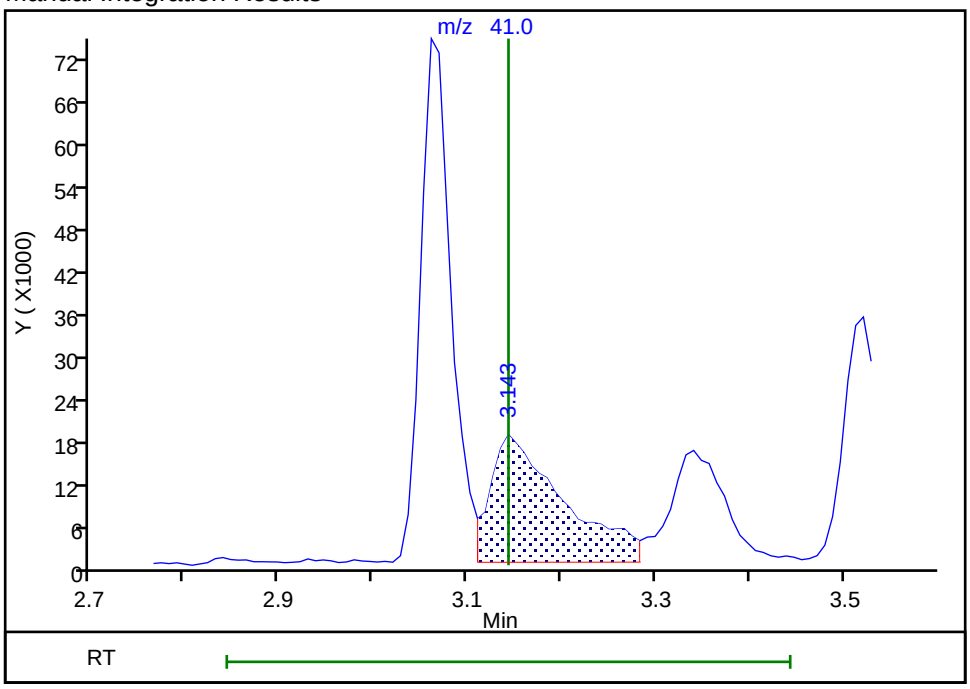
Processing Integration Results

RT: 3.06
Area: 167988
Amount: 431.7819
Amount Units: ug/l



Manual Integration Results

RT: 3.14
Area: 98256
Amount: 252.5488
Amount Units: ug/l



Reviewer: moroneyc, 29-Jul-2018 07:35:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67406.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Jul-2018 07:26:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0075068-001
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 08-Jul-2018 18:37:29 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 133 BFB	95	3.408	3.408	0.000	91	42762	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

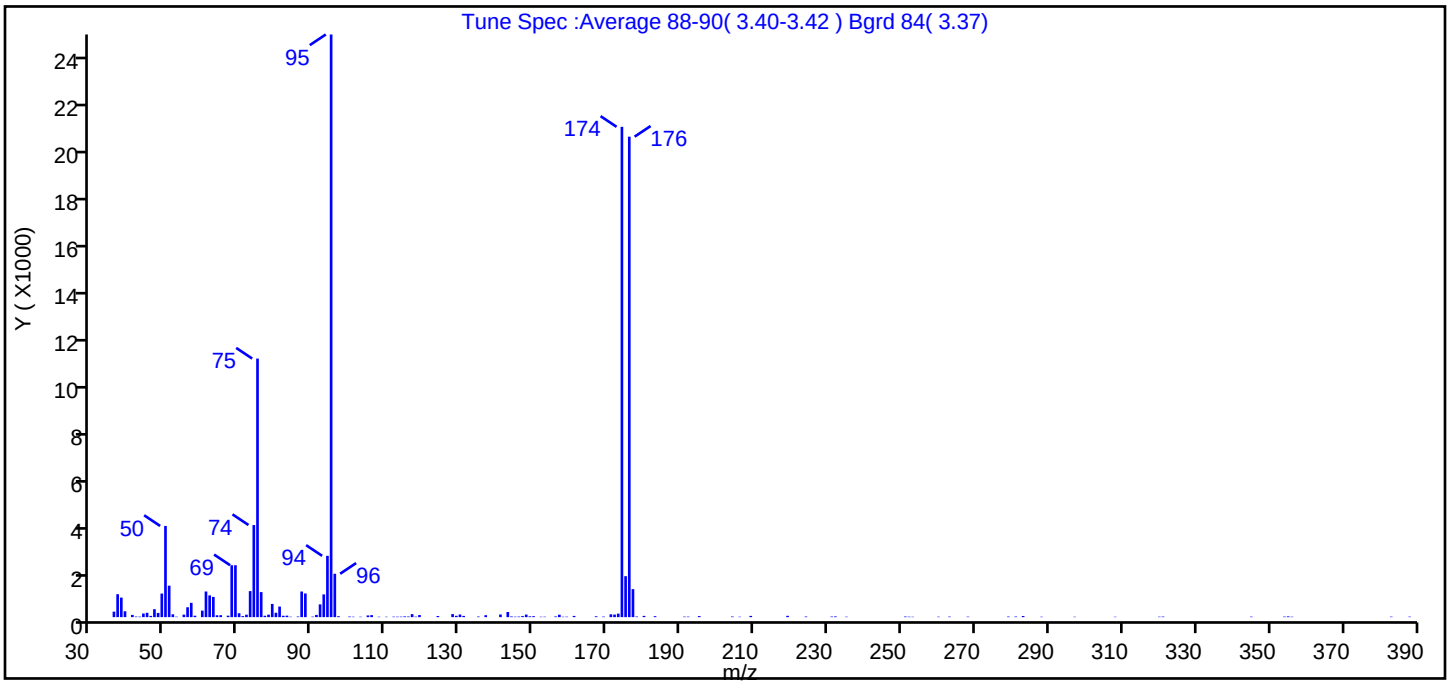
BFB_00017 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67406.D
Injection Date: 08-Jul-2018 07:26:30 Instrument ID: CVOAMS6
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 133 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.6
75	30 to 60% of m/z 95	44.4
96	5 to 9% of m/z 95	7.4
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	84.2
175	5 to 9% of m/z 174	7.0 (8.4)
176	Greater than 95% but less than 101% of m/z 174	82.5 (98.0)
177	5 to 9% of m/z 176	4.8 (5.8)

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67406.D\8260624W6.rslt\spectra.d
Injection Date: 08-Jul-2018 07:26:30
Spectrum: Tune Spec :Average 88-90(3.40-3.42) Bgrd 84(3.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 137

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	228	75.00	10708	119.00	87	183.00	40
37.00	950	76.00	1037	124.00	46	191.00	21
38.00	810	77.00	57	128.00	127	192.00	21
39.00	244	78.00	103	129.00	56	195.00	44
41.00	92	79.00	548	130.00	109	204.00	26
42.00	24	80.00	182	131.00	51	206.00	17
43.00	21	81.00	438	135.00	25	209.00	52
44.00	150	82.00	57	137.00	80	219.00	55
45.00	181	83.00	62	141.00	109	224.00	26
46.00	52	84.00	17	143.00	212	231.00	24
47.00	329	86.00	26	144.00	28	232.00	30
48.00	175	87.00	1061	145.00	19	235.00	18
49.00	977	88.00	980	146.00	23	251.00	25
50.00	3776	90.00	22	147.00	43	252.00	19
51.00	1303	91.00	92	148.00	106	253.00	16
52.00	117	92.00	529	149.00	34	260.00	18
53.00	18	93.00	942	150.00	40	263.00	22
55.00	104	94.00	2539	152.00	17	268.00	20
56.00	410	95.00	24128	153.00	18	279.00	24
57.00	592	96.00	1797	156.00	29	281.00	25
58.00	59	97.00	38	157.00	101	283.00	46
60.00	270	100.00	25	158.00	17	288.00	17
61.00	1062	101.00	17	159.00	19	297.00	16
62.00	901	103.00	17	161.00	51	308.00	16
63.00	838	105.00	70	167.00	35	320.00	19
64.00	78	106.00	83	169.00	23	321.00	24
65.00	81	108.00	17	171.00	117	345.00	21
67.00	61	110.00	17	172.00	107	354.00	22
68.00	2148	112.00	20	173.00	145	355.00	31
69.00	2150	113.00	19	174.00	20304	356.00	18
70.00	161	114.00	21	175.00	1697	383.00	21
71.00	43	115.00	31	176.00	19896	388.00	20
72.00	101	116.00	25	177.00	1161		

Report Date: 08-Jul-2018 18:37:29 Chrom Revision: 2.2 07-Jun-2018 07:41:54
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67406.D\8260624W6.rslt\spectra.d
Injection Date: 08-Jul-2018 07:26:30
Spectrum: Tune Spec :Average 88-90(3.40-3.42) Bgrd 84(3.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 137

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	1078	117.00	124	178.00	25		
74.00	3815	118.00	20	180.00	52		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68324.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	28-Jul-2018 18:09:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0076265-001				
Operator ID:		Instrument ID:	CVOAMS6		
Method:	\\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	29-Jul-2018 06:02:31	Calib Date:	08-Jul-2018 10:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK025				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 133 BFB	95	3.408	3.408	0.000	85	80626	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

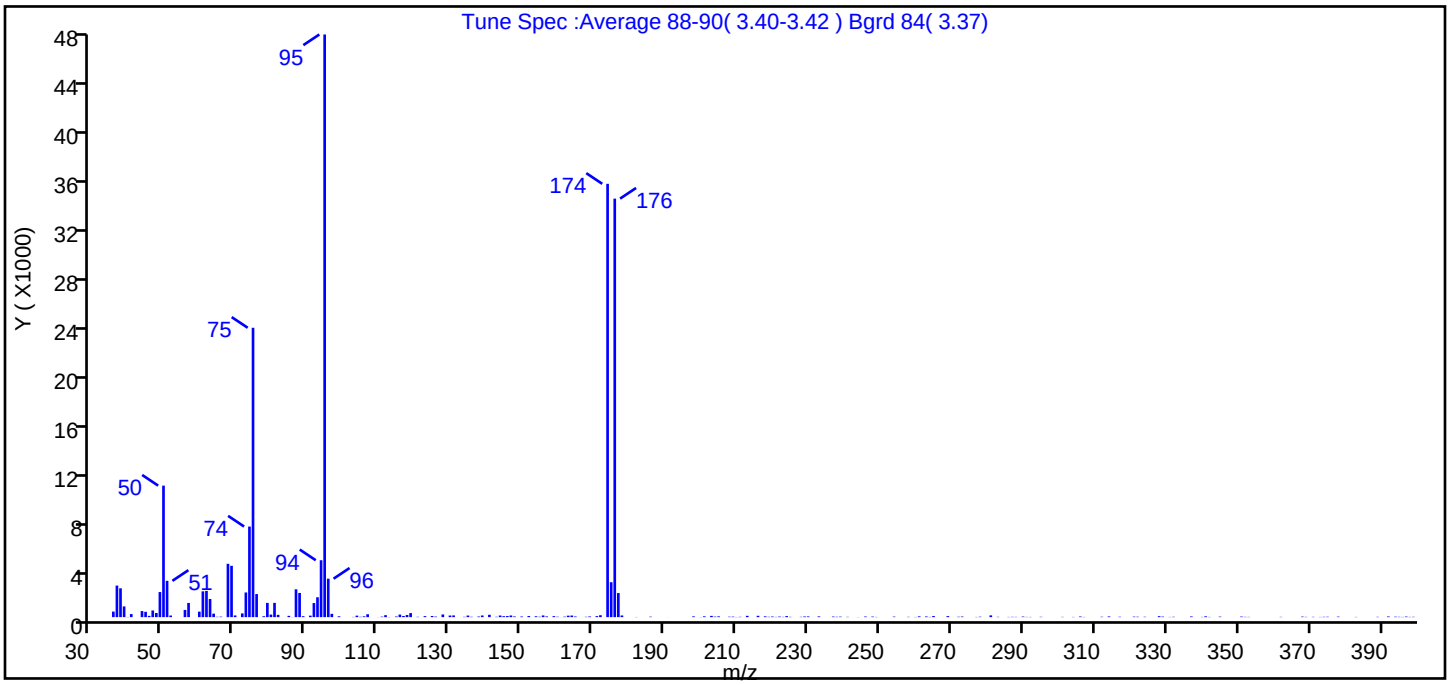
BFB_00017 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68324.D
Injection Date: 28-Jul-2018 18:09:30 Instrument ID: CVOAMS6
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 133 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.6
75	30 to 60% of m/z 95	49.7
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	74.4
175	5 to 9% of m/z 174	6.0 (8.1)
176	Greater than 95% but less than 101% of m/z 174	71.8 (96.6)
177	5 to 9% of m/z 176	4.1 (5.8)

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68324.D\8260624W6.rslt\spectra.d
Injection Date: 28-Jul-2018 18:09:30
Spectrum: Tune Spec :Average 88-90(3.40-3.42) Bgrd 84(3.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 200

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	454	103.00	18	174.00	35352	277.00	17
37.00	2575	104.00	122	175.00	2850	278.00	36
38.00	2352	105.00	29	176.00	34144	281.00	143
39.00	876	106.00	66	177.00	1965	283.00	26
40.00	15	107.00	235	178.00	136	286.00	18
41.00	252	110.00	7	182.00	13	287.00	25
44.00	495	111.00	41	186.00	38	288.00	22
45.00	434	112.00	159	191.00	3	290.00	47
46.00	105	113.00	13	198.00	63	291.00	19
47.00	544	115.00	53	200.00	10	292.00	18
48.00	340	116.00	210	201.00	66	295.00	28
49.00	2046	117.00	94	203.00	102	301.00	22
50.00	10729	118.00	173	204.00	43	304.00	18
51.00	2963	119.00	332	205.00	63	306.00	51
52.00	132	121.00	27	208.00	35	307.00	17
56.00	588	123.00	84	209.00	42	312.00	32
57.00	1158	125.00	92	210.00	14	314.00	58
60.00	450	126.00	45	211.00	27	317.00	32
61.00	2105	128.00	219	213.00	107	321.00	41
62.00	2139	130.00	132	216.00	109	322.00	34
63.00	1484	131.00	140	218.00	65	324.00	31
64.00	285	134.00	27	219.00	28	328.00	77
65.00	28	135.00	130	220.00	49	329.00	43
66.00	41	136.00	29	221.00	20	331.00	17
68.00	4352	138.00	49	222.00	48	332.00	30
69.00	4187	139.00	135	223.00	23	337.00	56
70.00	138	141.00	192	224.00	85	340.00	18
72.00	305	143.00	28	225.00	24	341.00	66
73.00	2013	144.00	133	228.00	26	342.00	17
74.00	7391	145.00	78	229.00	53	345.00	42
75.00	23608	146.00	90	230.00	58	351.00	46
76.00	1883	147.00	135	233.00	61	352.00	24
78.00	74	148.00	55	237.00	48	353.00	20

Report Date: 29-Jul-2018 06:02:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68324.D\8260624W6.rslt\spectra.d
Injection Date: 28-Jul-2018 18:09:30
Spectrum: Tune Spec :Average 88-90(3.40-3.42) Bgrd 84(3.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 200

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	1161	150.00	52	238.00	29	362.00	23
80.00	210	152.00	90	239.00	40	368.00	42
81.00	1164	154.00	71	241.00	24	369.00	23
82.00	186	155.00	31	244.00	10	371.00	25
85.00	105	156.00	138	246.00	50	373.00	17
86.00	8	157.00	59	248.00	45	374.00	29
87.00	2271	159.00	81	249.00	17	375.00	32
88.00	1975	160.00	33	254.00	43	378.00	42
89.00	78	161.00	5	258.00	24	383.00	18
91.00	122	162.00	39	260.00	15	389.00	26
92.00	1149	163.00	121	261.00	65	392.00	56
93.00	1622	164.00	130	263.00	55	394.00	38
94.00	4643	165.00	51	264.00	18	395.00	27
95.00	47536	168.00	28	265.00	89	396.00	18
96.00	3137	169.00	57	269.00	85	397.00	47
97.00	271	171.00	83	272.00	32	398.00	20
99.00	69	172.00	157	273.00	49	399.00	29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-540460/9

Matrix: Water | Lab File ID: F68332.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 21:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-540460/9

Matrix: Water | Lab File ID: F68332.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 21:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		74-132
460-00-4	4-Bromofluorobenzene	95		77-124
1868-53-7	Dibromofluoromethane (Surr)	97		72-131
2037-26-5	Toluene-d8 (Surr)	98		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-540460/9

Matrix: Water Lab File ID: F68332.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/28/2018 21:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 540460 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68332.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 28-Jul-2018 21:12:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0076265-009
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:03:22 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: colladox Date: 28-Jul-2018 21:35:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	3.193	3.185	0.008	0	113628	1000.0	1000.0	
* 38 2-Butanone-d5	46	4.228	4.236	-0.008	0	140298	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	4.697	4.705	-0.008	97	65568	50.0	48.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	78345	50.0	54.5	
* 61 Fluorobenzene	96	5.313	5.321	-0.008	97	269937	50.0	50.0	
* 67 1,4-Dioxane-d8	96	6.028	6.019	0.009	0	8141	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	238826	50.0	49.1	
* 89 Chlorobenzene-d5	117	8.756	8.756	0.000	89	176547	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	87	67437	50.0	47.3	
* 116 1,4-Dichlorobenzene-d4	152	10.909	10.908	0.001	97	96560	50.0	50.0	

Reagents:

VOA6IS/SURR_00012 Amount Added: 5.00 Units: uL Run Reagent

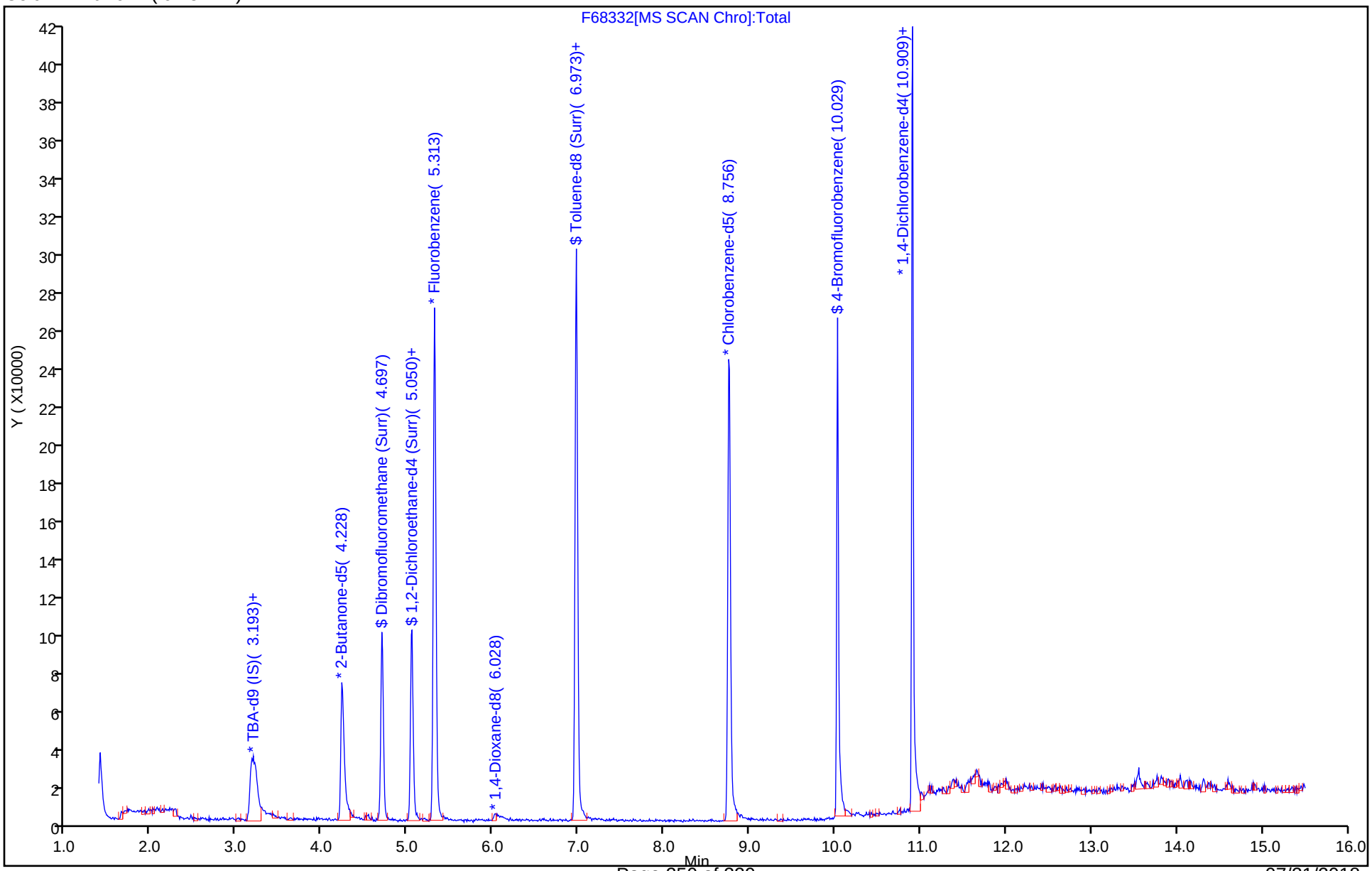
Report Date: 29-Jul-2018 08:04:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68332.D

Injection Date:	28-Jul-2018 21:12:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260624W6	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-540460/4

Matrix: Water | Lab File ID: F68327.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 19:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	19.2		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	21.5		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20.5		1.0	0.31
79-00-5	1,1,2-Trichloroethane	21.3		1.0	0.43
75-34-3	1,1-Dichloroethane	21.0		1.0	0.26
75-35-4	1,1-Dichloroethene	19.4		1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	21.5		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	22.8		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	21.8		1.0	0.38
95-50-1	1,2-Dichlorobenzene	20.9		1.0	0.43
107-06-2	1,2-Dichloroethane	20.4		1.0	0.43
78-87-5	1,2-Dichloropropane	20.6		1.0	0.35
541-73-1	1,3-Dichlorobenzene	20.5		1.0	0.34
106-46-7	1,4-Dichlorobenzene	19.8		1.0	0.76
123-91-1	1,4-Dioxane	550		50	28
78-93-3	2-Butanone (MEK)	92.0		5.0	1.9
591-78-6	2-Hexanone	103		5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	112		5.0	2.7
67-64-1	Acetone	125		5.0	5.0
71-43-2	Benzene	21.0		1.0	0.43
75-25-2	Bromoform	17.8		1.0	0.54
74-83-9	Bromomethane	13.8		1.0	1.0
75-15-0	Carbon disulfide	19.5		1.0	0.16
56-23-5	Carbon tetrachloride	18.9		1.0	0.21
108-90-7	Chlorobenzene	20.0		1.0	0.38
74-97-5	Chlorobromomethane	18.6		1.0	0.41
124-48-1	Chlorodibromomethane	18.1		1.0	0.28
75-00-3	Chloroethane	16.8		1.0	0.32
67-66-3	Chloroform	20.0		1.0	0.33
74-87-3	Chloromethane	19.9		1.0	0.14
156-59-2	cis-1,2-Dichloroethene	19.0		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	20.6		1.0	0.46
110-82-7	Cyclohexane	21.2		1.0	0.32
75-27-4	Dichlorobromomethane	19.1		1.0	0.34
75-71-8	Dichlorodifluoromethane	19.6		1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-540460/4

Matrix: Water | Lab File ID: F68327.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 19:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.9		1.0	0.30
106-93-4	Ethylene Dibromide	19.4		1.0	0.50
98-82-8	Isopropylbenzene	21.3		1.0	0.34
79-20-9	Methyl acetate	55.1		5.0	0.31
1634-04-4	Methyl tert-butyl ether	21.2		1.0	0.47
108-87-2	Methylcyclohexane	21.2		1.0	0.26
75-09-2	Methylene Chloride	19.9		1.0	0.32
179601-23-1	m-Xylene & p-Xylene	20.7		1.0	0.30
95-47-6	o-Xylene	20.0		1.0	0.36
100-42-5	Styrene	19.8		1.0	0.42
127-18-4	Tetrachloroethene	18.7		1.0	0.25
108-88-3	Toluene	20.4		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	19.9		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	20.4		1.0	0.49
79-01-6	Trichloroethene	18.6		1.0	0.31
75-69-4	Trichlorofluoromethane	18.6		1.0	0.14
75-01-4	Vinyl chloride	17.5		1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		74-132
460-00-4	4-Bromofluorobenzene	95		77-124
1868-53-7	Dibromofluoromethane (Surr)	92		72-131
2037-26-5	Toluene-d8 (Surr)	97		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68327.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 28-Jul-2018 19:16:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0076265-004
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:05:14 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:40:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.533	1.541	-0.008	90	38793	20.0	17.3	
2 Dichlorodifluoromethane	85	1.566	1.574	-0.008	99	106025	20.0	19.6	
3 Chloromethane	50	1.738	1.747	-0.009	99	131465	20.0	19.9	
4 Vinyl chloride	62	1.829	1.837	-0.008	84	115350	20.0	17.5	
5 Butadiene	54	1.829	1.837	-0.008	95	116994	20.0	19.5	
6 Bromomethane	94	2.108	2.116	-0.008	98	63017	20.0	13.8	
7 Chloroethane	64	2.166	2.182	-0.016	100	65886	20.0	16.8	
8 Dichlorofluoromethane	67	2.346	2.355	-0.009	99	163359	20.0	19.6	
9 Trichlorofluoromethane	101	2.355	2.363	-0.008	57	113685	20.0	18.6	
10 Pentane	72	2.346	2.371	-0.025	97	28655	40.0	37.4	
12 Ethyl ether	59	2.535	2.552	-0.017	90	62007	20.0	22.7	
11 Ethanol	46	2.544	2.552	-0.008	80	5225	800.0	542.1	
13 2-Methyl-1,3-butadiene	53	2.560	2.568	-0.008	97	70037	20.0	22.1	
14 1,2-Dichloro-1,1,2-trifluo	117	2.609	2.618	-0.009	96	65373	20.0	20.1	
15 Acrolein	56	2.716	2.724	-0.008	45	13933	40.0	59.2	
16 1,1,2-Trichloro-1,2,2-trif	101	2.741	2.741	0.000	97	77801	20.0	20.5	
17 1,1-Dichloroethene	96	2.749	2.757	-0.008	98	68088	20.0	19.4	
18 Acetone	43	2.840	2.848	-0.008	87	103116	100.0	124.8	
19 Iodomethane	142	2.905	2.913	-0.008	97	125578	20.0	19.8	
20 Isopropyl alcohol	45	2.922	2.946	-0.024	96	36923	200.0	260.4	
21 Carbon disulfide	76	2.938	2.946	-0.008	100	274681	20.0	19.5	
22 3-Chloro-1-propene	41	3.053	3.061	-0.008	96	164536	20.0	24.5	
24 Methyl acetate	43	3.061	3.078	-0.017	99	112230	40.0	55.1	
23 Cyclopentene	67	3.078	3.086	-0.008	95	193247	20.0	21.6	
25 Acetonitrile	41	3.135	3.143	-0.008	93	111453	200.0	266.8	a
* 26 TBA-d9 (IS)	65	3.185	3.185	0.000	0	121210	1000.0	1000.0	
27 Methylene Chloride	84	3.185	3.193	-0.008	96	86299	20.0	19.9	
28 2-Methyl-2-propanol	59	3.267	3.259	0.009	54	57715	200.0	226.4	
29 Methyl tert-butyl ether	73	3.341	3.349	-0.008	97	220954	20.0	21.2	
30 trans-1,2-Dichloroethene	96	3.365	3.374	-0.009	98	77558	20.0	19.9	
31 Acrylonitrile	53	3.439	3.448	-0.009	95	267434	200.0	230.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.505	3.513	-0.008	94	79904	20.0	25.2	
33 Isopropyl ether	45	3.711	3.727	-0.017	98	289977	20.0	24.3	
34 1,1-Dichloroethane	63	3.752	3.760	-0.008	99	145351	20.0	21.0	
35 Vinyl acetate	86	3.768	3.768	0.000	100	25035	40.0	37.5	
36 2-Chloro-1,3-butadiene	88	3.793	3.801	-0.008	93	67359	20.0	19.6	
37 Tert-butyl ethyl ether	59	4.023	4.031	-0.008	89	250757	20.0	22.5	
* 38 2-Butanone-d5	46	4.228	4.236	-0.008	0	144916	250.0	250.0	
39 2,2-Dichloropropane	97	4.245	4.261	-0.016	95	28180	20.0	19.3	
40 cis-1,2-Dichloroethene	96	4.269	4.277	-0.008	93	83301	20.0	19.0	
42 Ethyl acetate	70	4.277	4.294	-0.017	96	13620	40.0	35.5	
41 2-Butanone (MEK)	72	4.286	4.294	-0.008	96	35348	100.0	92.0	
43 Methyl acrylate	55	4.335	4.343	-0.008	99	49511	20.0	22.3	
44 Propionitrile	54	4.417	4.417	0.000	98	98263	200.0	217.9	
45 Chlorobromomethane	128	4.491	4.499	-0.008	95	37466	20.0	18.6	
46 Tetrahydrofuran	72	4.491	4.499	-0.008	57	16291	40.0	37.2	
47 Methacrylonitrile	67	4.508	4.516	-0.008	94	268489	200.0	212.5	
48 Chloroform	83	4.540	4.549	-0.009	97	125027	20.0	20.0	
49 Cyclohexane	84	4.672	4.680	-0.008	93	123386	20.0	21.2	
50 1,1,1-Trichloroethane	97	4.688	4.696	-0.008	96	106571	20.0	19.2	
$ 51 Dibromofluoromethane (Surr	113	4.697	4.705	-0.008	95	69780	50.0	46.0	
52 Carbon tetrachloride	117	4.803	4.812	-0.009	97	85223	20.0	18.9	
53 1,1-Dichloropropene	75	4.836	4.836	0.000	94	97787	20.0	19.9	
54 Isobutyl alcohol	43	4.984	4.984	0.000	46	119477	500.0	582.5	a
55 Benzene	78	5.025	5.033	-0.008	97	303175	20.0	21.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.042	5.050	-0.008	0	81317	50.0	50.2	
57 Isopropyl acetate	43	5.083	5.083	0.000	95	193665	20.0	21.7	
58 Tert-amyl methyl ether	73	5.083	5.091	-0.008	90	248385	20.0	20.9	
59 1,2-Dichloroethane	62	5.116	5.124	-0.008	95	91617	20.0	20.4	
60 n-Heptane	57	5.173	5.181	-0.008	94	64933	20.0	23.8	
* 61 Fluorobenzene	96	5.313	5.321	-0.008	98	304095	50.0	50.0	
62 n-Butanol	56	5.633	5.633	0.000	92	24196	500.0	394.9	
63 Trichloroethene	95	5.666	5.666	0.000	98	69760	20.0	18.6	
65 Ethyl acrylate	55	5.781	5.789	-0.008	93	179010	20.0	22.0	
64 Methylcyclohexane	83	5.789	5.789	0.000	88	140235	20.0	21.2	
66 1,2-Dichloropropane	63	5.954	5.954	0.000	90	79853	20.0	20.6	
* 67 1,4-Dioxane-d8	96	6.019	6.019	0.000	0	10687	1000.0	1000.0	
68 Methyl methacrylate	100	6.019	6.028	-0.009	91	28747	40.0	36.8	
69 1,4-Dioxane	88	6.077	6.077	0.000	27	11229	400.0	550.5	
70 n-Propyl acetate	43	6.077	6.085	-0.008	98	85863	20.0	23.8	
71 Dibromomethane	93	6.085	6.085	0.000	92	41564	20.0	18.8	
72 Dichlorobromomethane	83	6.233	6.233	0.000	99	90281	20.0	19.1	
74 2-Chloroethyl vinyl ether	63	6.562	6.562	0.000	74	36664	20.0	21.6	
73 2-Nitropropane	41	6.562	6.570	-0.008	80	27734	40.0	41.2	
75 Epichlorohydrin	57	6.677	6.677	0.000	99	113835	400.0	392.2	
76 cis-1,3-Dichloropropene	75	6.726	6.734	-0.008	96	107925	20.0	20.6	
77 4-Methyl-2-pentanone (MIBK	43	6.890	6.890	0.000	98	331457	100.0	111.8	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	276005	50.0	48.4	
79 Toluene	91	7.047	7.047	0.001	93	297030	20.0	20.4	
80 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	98	88930	20.0	20.4	
81 Ethyl methacrylate	69	7.425	7.424	0.001	91	80314	20.0	22.5	
82 1,1,2-Trichloroethane	83	7.614	7.613	0.001	95	51659	20.0	21.3	
83 Tetrachloroethene	166	7.663	7.663	0.000	95	66614	20.0	18.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	7.827	7.827	0.000	96	98831	20.0	21.5	
85 2-Hexanone	43	7.885	7.885	0.000	98	179966	100.0	102.9	
86 n-Butyl acetate	43	8.000	8.000	0.000	98	102442	20.0	24.9	
87 Chlorodibromomethane	129	8.057	8.057	0.000	97	57050	20.0	18.1	
88 Ethylene Dibromide	107	8.213	8.213	0.000	99	51272	20.0	19.4	
* 89 Chlorobenzene-d5	117	8.756	8.756	0.000	87	206709	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	93	183762	20.0	20.0	
91 Ethylbenzene	106	8.895	8.895	0.000	99	105398	20.0	19.9	
92 1,1,1,2-Tetrachloroethane	131	8.912	8.912	0.000	94	66150	20.0	19.0	
93 m-Xylene & p-Xylene	106	9.051	9.051	0.000	0	130517	20.0	20.7	
94 n-Butyl acrylate	73	9.487	9.487	0.000	98	50233	20.0	21.1	
95 o-Xylene	106	9.495	9.503	-0.008	93	130396	20.0	20.0	
96 Styrene	104	9.528	9.528	0.000	96	201010	20.0	19.8	
97 Amyl acetate (mixed isomer	43	9.709	9.709	0.000	90	131158	20.0	26.6	
98 Bromoform	173	9.733	9.742	-0.009	96	35874	20.0	17.8	
99 Isopropylbenzene	105	9.840	9.840	0.000	96	334952	20.0	21.3	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	89	79505	50.0	47.6	
101 Bromobenzene	156	10.144	10.144	0.000	96	78442	20.0	20.2	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	98	78997	20.0	21.5	
103 N-Propylbenzene	91	10.202	10.202	0.000	99	401869	20.0	22.5	
104 1,2,3-Trichloropropane	110	10.218	10.226	-0.008	94	21613	20.0	20.9	
105 trans-1,4-Dichloro-2-buten	53	10.235	10.243	-0.008	80	17856	20.0	21.7	
106 2-Chlorotoluene	91	10.292	10.292	0.000	92	274732	20.0	21.8	
107 4-Ethyltoluene	105	10.292	10.292	0.000	88	338874	20.0	23.0	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	93	286622	20.0	22.1	
109 4-Chlorotoluene	91	10.383	10.383	0.000	98	254139	20.0	22.8	
110 Butyl Methacrylate	87	10.424	10.424	0.000	94	96122	20.0	22.0	
111 tert-Butylbenzene	119	10.580	10.580	0.000	94	218905	20.0	20.9	
112 1,2,4-Trimethylbenzene	105	10.629	10.629	0.000	98	294839	20.0	22.3	
113 sec-Butylbenzene	105	10.744	10.744	0.000	98	358284	20.0	22.2	
114 4-Isopropyltoluene	119	10.843	10.843	0.000	97	304395	20.0	22.4	
115 1,3-Dichlorobenzene	146	10.851	10.851	0.000	94	156788	20.0	20.5	
* 116 1,4-Dichlorobenzene-d4	152	10.900	10.908	-0.008	97	112643	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.917	10.925	-0.008	92	155435	20.0	19.8	
132 1,2,3-Trimethylbenzene	105	10.925	10.933	-0.008	98	305151	20.0	21.8	
118 Benzyl chloride	91	11.015	11.023	-0.008	98	154064	20.0	22.0	
119 2,3-Dihydroindene	117	11.065	11.065	0.000	95	313212	20.0	22.2	
120 p-Diethylbenzene	119	11.098	11.106	-0.008	93	186084	20.0	22.2	
121 n-Butylbenzene	92	11.114	11.122	-0.008	98	175497	20.0	22.6	
122 1,2-Dichlorobenzene	146	11.163	11.171	-0.008	95	159764	20.0	20.9	
123 1,2,4,5-Tetramethylbenzene	119	11.574	11.590	-0.016	98	297622	20.0	22.8	
124 1,2-Dibromo-3-Chloropropan	75	11.656	11.673	-0.017	94	14718	20.0	21.8	
125 1,3,5-Trichlorobenzene	180	11.738	11.755	-0.017	97	128894	20.0	21.6	
126 1,2,4-Trichlorobenzene	180	12.141	12.157	-0.016	94	121044	20.0	22.8	
127 Hexachlorobutadiene	225	12.207	12.223	-0.016	96	52945	20.0	21.1	
128 Naphthalene	128	12.314	12.330	-0.016	99	271313	20.0	24.2	
129 1,2,3-Trichlorobenzene	180	12.478	12.494	-0.016	95	109072	20.0	21.5	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.0	
S 131 Xylenes, Total	100				0		40.0	40.6	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
GASES Li_00270	Amount Added:	20.00	Units: uL	
VOA6IS/SURR_00012	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 29-Jul-2018 08:05:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68327.D

Injection Date: 28-Jul-2018 19:16:30 Instrument ID: CVOAMS6 Operator ID:

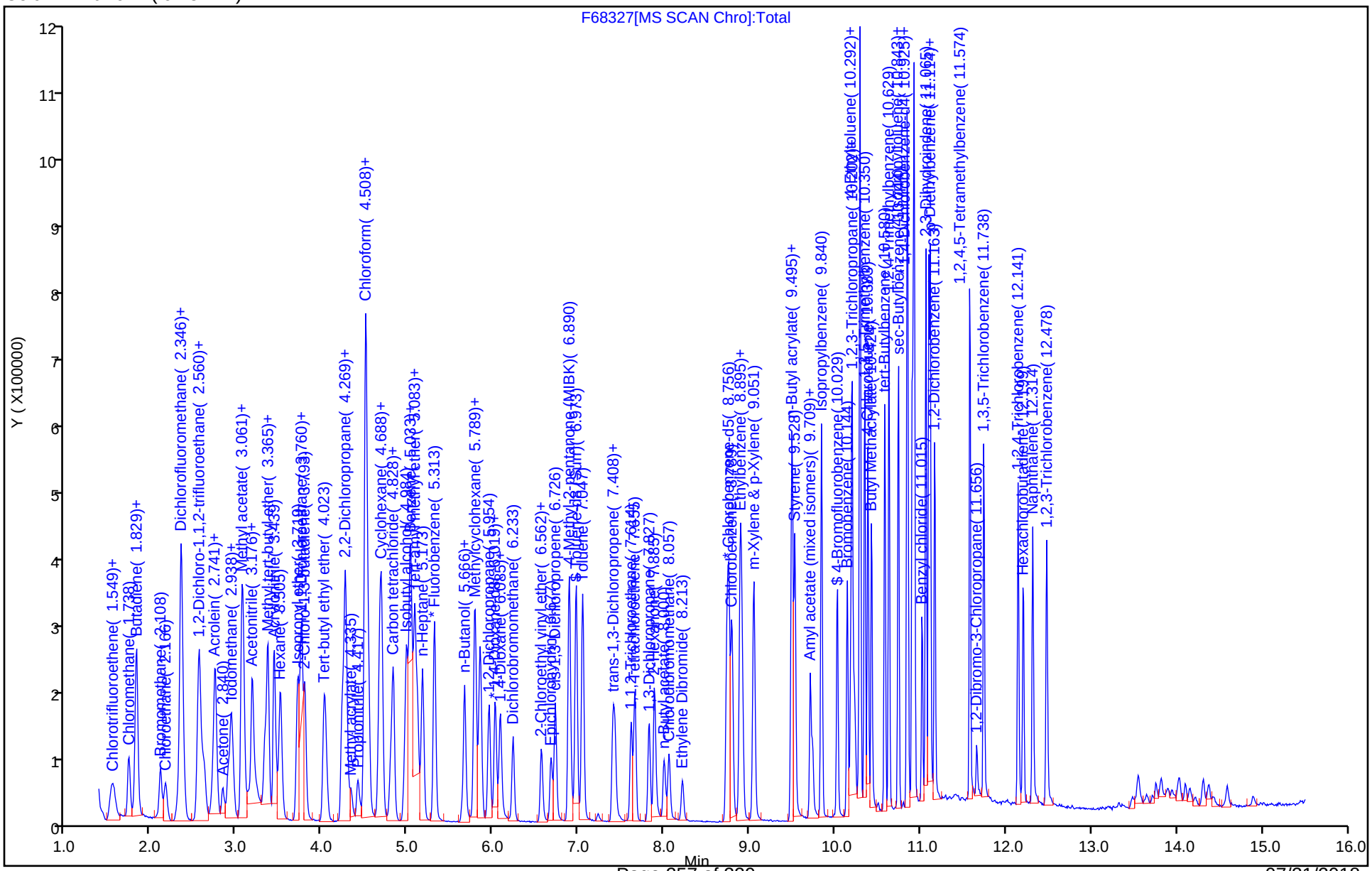
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) MS | Lab Sample ID: 460-161054-1 MS

Matrix: Water | Lab File ID: F68342.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 01:06

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	185		10	2.4
79-34-5	1,1,2,2-Tetrachloroethane	204		10	3.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	209		10	3.1
79-00-5	1,1,2-Trichloroethane	199		10	4.3
75-34-3	1,1-Dichloroethane	206		10	2.6
75-35-4	1,1-Dichloroethene	193		10	1.2
87-61-6	1,2,3-Trichlorobenzene	192		10	3.6
120-82-1	1,2,4-Trichlorobenzene	205		10	3.7
96-12-8	1,2-Dibromo-3-Chloropropane	204		10	3.8
95-50-1	1,2-Dichlorobenzene	201		10	4.3
107-06-2	1,2-Dichloroethane	201		10	4.3
78-87-5	1,2-Dichloropropane	200		10	3.5
541-73-1	1,3-Dichlorobenzene	192		10	3.4
106-46-7	1,4-Dichlorobenzene	191		10	7.6
123-91-1	1,4-Dioxane	4400		500	280
78-93-3	2-Butanone (MEK)	864		50	19
591-78-6	2-Hexanone	969		50	29
108-10-1	4-Methyl-2-pentanone (MIBK)	1080		50	27
67-64-1	Acetone	1040		50	50
71-43-2	Benzene	208		10	4.3
75-25-2	Bromoform	168		10	5.4
74-83-9	Bromomethane	145		10	10
75-15-0	Carbon disulfide	176		10	1.6
56-23-5	Carbon tetrachloride	181		10	2.1
108-90-7	Chlorobenzene	192		10	3.8
74-97-5	Chlorobromomethane	183		10	4.1
124-48-1	Chlorodibromomethane	172		10	2.8
75-00-3	Chloroethane	172		10	3.2
67-66-3	Chloroform	195		10	3.3
74-87-3	Chloromethane	200		10	1.4
156-59-2	cis-1,2-Dichloroethene	188		10	2.2
10061-01-5	cis-1,3-Dichloropropene	200		10	4.6
110-82-7	Cyclohexane	210		10	3.2
75-27-4	Dichlorobromomethane	179		10	3.4
75-71-8	Dichlorodifluoromethane	195		10	1.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) MS | Lab Sample ID: 460-161054-1 MS

Matrix: Water | Lab File ID: F68342.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 01:06

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	191		10	3.0
106-93-4	Ethylene Dibromide	194		10	5.0
98-82-8	Isopropylbenzene	213		10	3.4
79-20-9	Methyl acetate	527		50	3.1
1634-04-4	Methyl tert-butyl ether	202		10	4.7
108-87-2	Methylcyclohexane	207		10	2.6
75-09-2	Methylene Chloride	190		10	3.2
179601-23-1	m-Xylene & p-Xylene	198		10	3.0
95-47-6	o-Xylene	200		10	3.6
100-42-5	Styrene	199		10	4.2
127-18-4	Tetrachloroethene	189		10	2.5
108-88-3	Toluene	205		10	3.8
156-60-5	trans-1,2-Dichloroethene	190		10	2.4
10061-02-6	trans-1,3-Dichloropropene	196		10	4.9
79-01-6	Trichloroethene	183		10	3.1
75-69-4	Trichlorofluoromethane	183		10	1.4
75-01-4	Vinyl chloride	176		10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		74-132
460-00-4	4-Bromofluorobenzene	95		77-124
1868-53-7	Dibromofluoromethane (Surr)	95		72-131
2037-26-5	Toluene-d8 (Surr)	98		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68342.D
Lims ID: 460-161054-A-1 MS
Client ID:
Sample Type: MS
Inject. Date: 29-Jul-2018 01:06:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 460-161054-A-1 MS
Misc. Info.: 460-0076265-019
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 13:37:31 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:48:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.525	1.541	-0.016	90	38003	20.0	18.3	
2 Dichlorodifluoromethane	85	1.549	1.574	-0.025	98	97933	20.0	19.5	
3 Chloromethane	50	1.730	1.747	-0.017	99	122868	20.0	20.0	
4 Vinyl chloride	62	1.821	1.837	-0.016	95	107828	20.0	17.6	
5 Butadiene	54	1.821	1.837	-0.016	95	109537	20.0	19.6	
6 Bromomethane	94	2.100	2.116	-0.016	98	61612	20.0	14.5	
7 Chloroethane	64	2.166	2.182	-0.016	100	62616	20.0	17.2	
8 Dichlorofluoromethane	67	2.338	2.355	-0.017	98	151813	20.0	19.6	
9 Trichlorofluoromethane	101	2.346	2.363	-0.017	52	103908	20.0	18.3	
10 Pentane	72	2.346	2.371	-0.025	97	25303	40.0	41.2	
12 Ethyl ether	59	2.535	2.552	-0.017	92	55431	20.0	21.9	
11 Ethanol	46	2.544	2.552	-0.008	73	3088	800.0	399.3	
13 2-Methyl-1,3-butadiene	53	2.560	2.568	-0.008	97	65295	20.0	22.1	
14 1,2-Dichloro-1,1,2-trifluo	117	2.601	2.618	-0.017	94	56793	20.0	18.8	
15 Acrolein	56	2.716	2.724	-0.008	54	10084	40.0	53.4	
16 1,1,2-Trichloro-1,2,2-trif	101	2.733	2.741	-0.008	96	73628	20.0	20.9	
17 1,1-Dichloroethene	96	2.741	2.757	-0.016	95	62993	20.0	19.3	
18 Acetone	43	2.831	2.848	-0.017	86	78499	100.0	103.8	
19 Iodomethane	142	2.897	2.913	-0.016	97	110208	20.0	18.7	
20 Isopropyl alcohol	45	2.946	2.946	0.000	26	23978	200.0	210.8	
21 Carbon disulfide	76	2.938	2.946	-0.008	100	229869	20.0	17.6	
22 3-Chloro-1-propene	41	3.053	3.061	-0.008	96	146876	20.0	23.5	
24 Methyl acetate	43	3.061	3.078	-0.017	98	99808	40.0	52.7	
23 Cyclopentene	67	3.070	3.086	-0.016	95	174688	20.0	21.0	
25 Acetonitrile	41	3.135	3.143	-0.008	96	30404	200.0	90.7	a
* 26 TBA-d9 (IS)	65	3.176	3.185	-0.009	0	97242	1000.0	1000.0	
27 Methylene Chloride	84	3.185	3.193	-0.008	94	76591	20.0	19.0	
28 2-Methyl-2-propanol	59	3.242	3.259	-0.016	91	35589	200.0	174.0	
29 Methyl tert-butyl ether	73	3.332	3.349	-0.017	98	195438	20.0	20.2	
30 trans-1,2-Dichloroethene	96	3.365	3.374	-0.009	97	68784	20.0	19.0	
31 Acrylonitrile	53	3.439	3.448	-0.009	95	239838	200.0	222.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.505	3.513	-0.008	93	71794	20.0	24.4	
33 Isopropyl ether	45	3.719	3.727	-0.008	98	260567	20.0	23.5	
34 1,1-Dichloroethane	63	3.752	3.760	-0.008	99	132533	20.0	20.6	
35 Vinyl acetate	86	3.760	3.768	-0.008	100	21093	40.0	34.0	
36 2-Chloro-1,3-butadiene	88	3.793	3.801	-0.008	93	59835	20.0	18.8	
37 Tert-butyl ethyl ether	59	4.023	4.031	-0.008	88	222606	20.0	21.5	
* 38 2-Butanone-d5	46	4.228	4.236	-0.008	0	132681	250.0	250.0	
39 2,2-Dichloropropane	97	4.253	4.261	-0.008	95	23197	20.0	17.1	
40 cis-1,2-Dichloroethene	96	4.269	4.277	-0.008	92	76325	20.0	18.8	
42 Ethyl acetate	70	4.277	4.294	-0.017	95	10997	40.0	31.3	
41 2-Butanone (MEK)	72	4.286	4.294	-0.008	95	30394	100.0	86.4	
43 Methyl acrylate	55	4.343	4.343	0.000	99	43682	20.0	21.6	
44 Propionitrile	54	4.417	4.417	0.000	97	80103	200.0	221.4	
45 Chlorobromomethane	128	4.491	4.499	-0.008	93	34296	20.0	18.3	
46 Tetrahydrofuran	72	4.491	4.499	-0.008	52	13617	40.0	33.8	
47 Methacrylonitrile	67	4.508	4.516	-0.008	94	238968	200.0	203.5	
48 Chloroform	83	4.540	4.549	-0.009	97	112863	20.0	19.5	
49 Cyclohexane	84	4.672	4.680	-0.008	94	113640	20.0	21.0	
50 1,1,1-Trichloroethane	97	4.688	4.696	-0.008	97	95493	20.0	18.5	
$ 51 Dibromofluoromethane (Surr	113	4.697	4.705	-0.009	97	66612	50.0	47.3	
52 Carbon tetrachloride	117	4.803	4.812	-0.009	96	75883	20.0	18.1	
53 1,1-Dichloropropene	75	4.836	4.836	0.000	93	90612	20.0	19.8	
54 Isobutyl alcohol	43	4.984	4.984	0.000	41	88593	500.0	538.4	
55 Benzene	78	5.025	5.033	-0.008	97	273085	20.0	20.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.042	5.050	-0.008	0	74837	50.0	49.7	
57 Isopropyl acetate	43	5.083	5.083	0.000	94	164149	20.0	19.8	
58 Tert-amyl methyl ether	73	5.083	5.091	-0.008	88	219620	20.0	19.9	
59 1,2-Dichloroethane	62	5.116	5.124	-0.008	96	83800	20.0	20.1	
60 n-Heptane	57	5.173	5.181	-0.008	92	55067	20.0	21.7	
* 61 Fluorobenzene	96	5.313	5.321	-0.008	98	282578	50.0	50.0	
62 n-Butanol	56	5.641	5.633	0.008	94	15823	500.0	322.4	
63 Trichloroethene	95	5.666	5.666	0.000	98	63614	20.0	18.3	
65 Ethyl acrylate	55	5.781	5.789	-0.008	93	164804	20.0	21.8	
64 Methylcyclohexane	83	5.789	5.789	0.000	88	126892	20.0	20.7	
66 1,2-Dichloropropane	63	5.954	5.954	0.000	88	72039	20.0	20.0	
* 67 1,4-Dioxane-d8	96	6.019	6.019	0.000	0	8274	1000.0	1000.0	
68 Methyl methacrylate	100	6.028	6.028	0.000	91	25155	40.0	34.7	
69 1,4-Dioxane	88	6.077	6.077	0.000	28	6955	400.0	440.4	
70 n-Propyl acetate	43	6.085	6.085	0.000	99	75447	20.0	22.5	
71 Dibromomethane	93	6.085	6.085	0.000	77	37026	20.0	18.0	
72 Dichlorobromomethane	83	6.233	6.233	0.000	97	78652	20.0	17.9	
73 2-Nitropropane	41	6.562	6.570	-0.008	98	25028	40.0	40.0	
75 Epichlorohydrin	57	6.677	6.677	0.000	99	100141	400.0	376.9	
76 cis-1,3-Dichloropropene	75	6.726	6.734	-0.008	94	95287	20.0	20.0	
77 4-Methyl-2-pentanone (MIBK	43	6.890	6.890	0.000	98	292180	100.0	107.7	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	253911	50.0	48.9	
79 Toluene	91	7.047	7.047	0.001	93	272753	20.0	20.5	
80 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	98	77974	20.0	19.6	
81 Ethyl methacrylate	69	7.425	7.424	0.000	92	72184	20.0	22.2	
82 1,1,2-Trichloroethane	83	7.614	7.613	0.001	95	43998	20.0	19.9	
83 Tetrachloroethene	166	7.655	7.663	-0.008	95	61311	20.0	18.9	
84 1,3-Dichloropropane	76	7.827	7.827	0.000	96	89647	20.0	21.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 2-Hexanone	43	7.885	7.885	0.000	98	154849	100.0	96.9	
86 n-Butyl acetate	43	8.000	8.000	0.000	98	93635	20.0	25.0	
87 Chlorodibromomethane	129	8.057	8.057	0.000	96	49149	20.0	17.2	
88 Ethylene Dibromide	107	8.213	8.213	0.000	98	46906	20.0	19.4	
* 89 Chlorobenzene-d5	117	8.756	8.756	0.000	87	188207	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	93	160798	20.0	19.2	
91 Ethylbenzene	106	8.895	8.895	0.000	99	92334	20.0	19.1	
92 1,1,1,2-Tetrachloroethane	131	8.912	8.912	0.000	94	60186	20.0	19.0	
93 m-Xylene & p-Xylene	106	9.051	9.051	0.000	0	113757	20.0	19.8	
94 n-Butyl acrylate	73	9.487	9.487	0.000	97	43672	20.0	20.2	
95 o-Xylene	106	9.495	9.503	-0.008	93	118698	20.0	20.0	
96 Styrene	104	9.528	9.528	0.000	95	183941	20.0	19.9	
97 Amyl acetate (mixed isomer	43	9.709	9.709	0.000	89	117131	20.0	25.0	
98 Bromoform	173	9.742	9.742	0.000	96	30842	20.0	16.8	
99 Isopropylbenzene	105	9.840	9.840	0.000	97	305163	20.0	21.3	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	87	71987	50.0	47.4	
101 Bromobenzene	156	10.144	10.144	0.000	96	71080	20.0	19.2	
102 1,1,2,2-Tetrachloroethane	83	10.185	10.185	0.000	98	71308	20.0	20.4	
103 N-Propylbenzene	91	10.202	10.202	0.000	99	363604	20.0	21.4	
104 1,2,3-Trichloropropane	110	10.226	10.226	0.000	95	18211	20.0	18.5	
105 trans-1,4-Dichloro-2-buten	53	10.243	10.243	0.000	80	15614	20.0	19.9	
106 2-Chlorotoluene	91	10.292	10.292	0.000	93	248074	20.0	20.7	
107 4-Ethyltoluene	105	10.292	10.292	0.000	87	299504	20.0	21.4	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	94	255810	20.0	20.7	
109 4-Chlorotoluene	91	10.383	10.383	0.000	98	228909	20.0	21.6	
110 Butyl Methacrylate	87	10.432	10.424	0.008	94	82681	20.0	19.9	
111 tert-Butylbenzene	119	10.580	10.580	0.000	94	197945	20.0	19.9	
112 1,2,4-Trimethylbenzene	105	10.629	10.629	0.000	98	264114	20.0	21.0	
113 sec-Butylbenzene	105	10.744	10.744	0.000	98	320386	20.0	20.9	
114 4-Isopropyltoluene	119	10.843	10.843	0.000	97	267276	20.0	20.6	
115 1,3-Dichlorobenzene	146	10.851	10.851	0.000	95	139773	20.0	19.2	
* 116 1,4-Dichlorobenzene-d4	152	10.900	10.908	-0.008	97	107358	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.917	10.925	-0.008	93	142923	20.0	19.1	
132 1,2,3-Trimethylbenzene	105	10.925	10.933	-0.008	98	277031	20.0	20.7	
118 Benzyl chloride	91	11.015	11.023	-0.008	98	127269	20.0	19.1	
119 2,3-Dihydroindene	117	11.065	11.065	0.000	95	276375	20.0	20.6	
120 p-Diethylbenzene	119	11.097	11.106	-0.009	93	165234	20.0	20.7	
121 n-Butylbenzene	92	11.114	11.122	-0.008	98	151887	20.0	20.5	
122 1,2-Dichlorobenzene	146	11.163	11.171	-0.008	94	146747	20.0	20.1	
123 1,2,4,5-Tetramethylbenzene	119	11.574	11.590	-0.016	98	257751	20.0	20.7	
124 1,2-Dibromo-3-Chloropropan	75	11.656	11.673	-0.017	94	13117	20.0	20.4	
125 1,3,5-Trichlorobenzene	180	11.738	11.755	-0.017	97	114553	20.0	20.2	
126 1,2,4-Trichlorobenzene	180	12.141	12.157	-0.016	94	103506	20.0	20.5	
127 Hexachlorobutadiene	225	12.199	12.223	-0.024	95	46630	20.0	19.5	
128 Naphthalene	128	12.305	12.330	-0.025	99	230753	20.0	21.6	
129 1,2,3-Trichlorobenzene	180	12.470	12.494	-0.024	95	93038	20.0	19.2	
S 130 1,2-Dichloroethene, Total	100				0		40.0	37.8	
S 131 Xylenes, Total	100				0		40.0	39.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
GASES Li_00270	Amount Added:	20.00	Units: uL	
VOA6IS/SURR_00012	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 29-Jul-2018 13:37:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68342.D

Injection Date: 29-Jul-2018 01:06:30 Instrument ID: CVOAMS6 Operator ID:

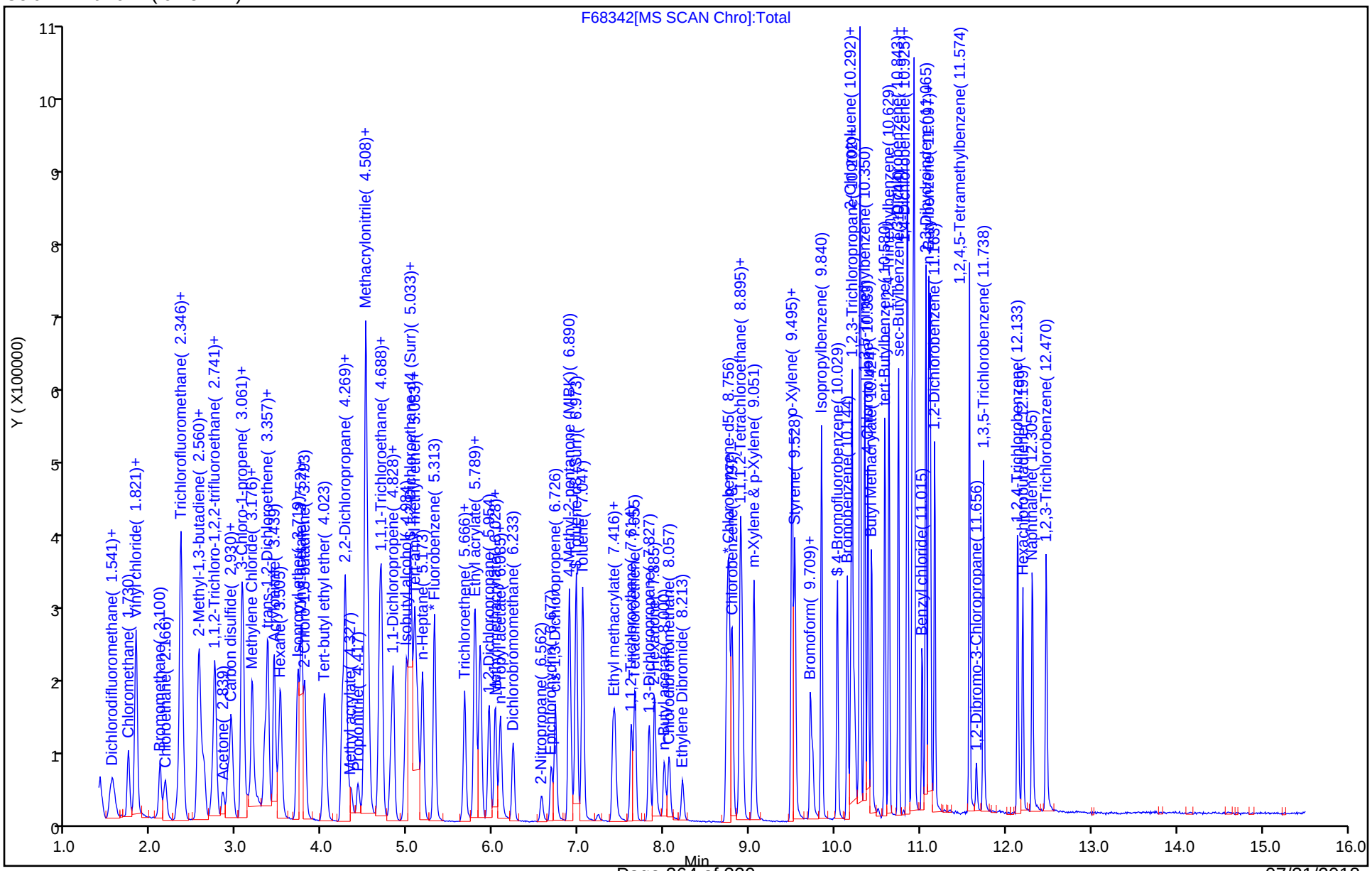
Lims ID: 460-161054-A-1 MS Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 10.0000 ALS Bottle#: 18

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) MSD | Lab Sample ID: 460-161054-1 MSD

Matrix: Water | Lab File ID: F68343.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 01:30

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	195		10	2.4
79-34-5	1,1,2,2-Tetrachloroethane	221		10	3.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	213		10	3.1
79-00-5	1,1,2-Trichloroethane	210		10	4.3
75-34-3	1,1-Dichloroethane	220		10	2.6
75-35-4	1,1-Dichloroethene	205		10	1.2
87-61-6	1,2,3-Trichlorobenzene	209		10	3.6
120-82-1	1,2,4-Trichlorobenzene	223		10	3.7
96-12-8	1,2-Dibromo-3-Chloropropane	218		10	3.8
95-50-1	1,2-Dichlorobenzene	214		10	4.3
107-06-2	1,2-Dichloroethane	210		10	4.3
78-87-5	1,2-Dichloropropane	217		10	3.5
541-73-1	1,3-Dichlorobenzene	204		10	3.4
106-46-7	1,4-Dichlorobenzene	206		10	7.6
123-91-1	1,4-Dioxane	5700		500	280
78-93-3	2-Butanone (MEK)	892		50	19
591-78-6	2-Hexanone	990		50	29
108-10-1	4-Methyl-2-pentanone (MIBK)	1100		50	27
67-64-1	Acetone	1250		50	50
71-43-2	Benzene	219		10	4.3
75-25-2	Bromoform	176		10	5.4
74-83-9	Bromomethane	140		10	10
75-15-0	Carbon disulfide	181		10	1.6
56-23-5	Carbon tetrachloride	192		10	2.1
108-90-7	Chlorobenzene	206		10	3.8
74-97-5	Chlorobromomethane	192		10	4.1
124-48-1	Chlorodibromomethane	181		10	2.8
75-00-3	Chloroethane	172		10	3.2
67-66-3	Chloroform	207		10	3.3
74-87-3	Chloromethane	208		10	1.4
156-59-2	cis-1,2-Dichloroethene	201		10	2.2
10061-01-5	cis-1,3-Dichloropropene	209		10	4.6
110-82-7	Cyclohexane	219		10	3.2
75-27-4	Dichlorobromomethane	195		10	3.4
75-71-8	Dichlorodifluoromethane	202		10	1.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161054-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) MSD | Lab Sample ID: 460-161054-1 MSD

Matrix: Water | Lab File ID: F68343.D

Analysis Method: 8260C | Date Collected: 07/23/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 07/29/2018 01:30

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540460 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	206		10	3.0
106-93-4	Ethylene Dibromide	203		10	5.0
98-82-8	Isopropylbenzene	218		10	3.4
79-20-9	Methyl acetate	575		50	3.1
1634-04-4	Methyl tert-butyl ether	214		10	4.7
108-87-2	Methylcyclohexane	212		10	2.6
75-09-2	Methylene Chloride	201		10	3.2
179601-23-1	m-Xylene & p-Xylene	205		10	3.0
95-47-6	o-Xylene	209		10	3.6
100-42-5	Styrene	209		10	4.2
127-18-4	Tetrachloroethene	197		10	2.5
108-88-3	Toluene	211		10	3.8
156-60-5	trans-1,2-Dichloroethene	200		10	2.4
10061-02-6	trans-1,3-Dichloropropene	206		10	4.9
79-01-6	Trichloroethene	187		10	3.1
75-69-4	Trichlorofluoromethane	190		10	1.4
75-01-4	Vinyl chloride	187		10	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		74-132
460-00-4	4-Bromofluorobenzene	97		77-124
1868-53-7	Dibromofluoromethane (Surr)	97		72-131
2037-26-5	Toluene-d8 (Surr)	98		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68343.D
Lims ID: 460-161054-A-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 29-Jul-2018 01:30:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 460-161054-A-1 MSD
Misc. Info.: 460-0076265-020
Operator ID: Instrument ID: CVOAMS6

Method: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\8260624W6.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 29-Jul-2018 08:03:22 Calib Date: 08-Jul-2018 10:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS6\20180708-75068.b\F67414.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: moroneyc Date: 29-Jul-2018 07:49:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.533	1.541	-0.008	89	35883	20.0	18.0	
2 Dichlorodifluoromethane	85	1.558	1.574	-0.016	99	97115	20.0	20.2	
3 Chloromethane	50	1.739	1.747	-0.008	99	122110	20.0	20.8	
4 Vinyl chloride	62	1.829	1.837	-0.008	84	109659	20.0	18.7	
5 Butadiene	54	1.829	1.837	-0.008	96	110023	20.0	20.6	
6 Bromomethane	94	2.108	2.116	-0.008	97	56929	20.0	14.0	
7 Chloroethane	64	2.166	2.182	-0.016	100	59935	20.0	17.2	
8 Dichlorofluoromethane	67	2.347	2.355	-0.008	99	152574	20.0	20.6	
9 Trichlorofluoromethane	101	2.355	2.363	-0.008	52	103470	20.0	19.0	
10 Pentane	72	2.355	2.371	-0.016	97	25508	40.0	33.8	
12 Ethyl ether	59	2.544	2.552	-0.008	93	54862	20.0	22.6	
11 Ethanol	46	2.544	2.552	-0.008	73	4893	800.0	515.5	
13 2-Methyl-1,3-butadiene	53	2.568	2.568	0.000	95	65949	20.0	23.4	
14 1,2-Dichloro-1,1,2-trifluo	117	2.610	2.618	-0.008	96	57567	20.0	19.9	
15 Acrolein	56	2.716	2.724	-0.008	51	10661	40.0	46.0	
16 1,1,2-Trichloro-1,2,2-trif	101	2.741	2.741	0.000	95	71776	20.0	21.3	
17 1,1-Dichloroethene	96	2.749	2.757	-0.008	96	63993	20.0	20.5	
18 Acetone	43	2.840	2.848	-0.008	87	96173	100.0	124.6	
19 Iodomethane	142	2.905	2.913	-0.008	97	111658	20.0	19.8	
20 Isopropyl alcohol	45	2.930	2.946	-0.016	27	31420	200.0	225.1	
21 Carbon disulfide	76	2.938	2.946	-0.008	100	226170	20.0	18.1	
22 3-Chloro-1-propene	41	3.061	3.061	0.000	94	152610	20.0	25.5	
24 Methyl acetate	43	3.070	3.078	-0.008	99	104248	40.0	57.5	
23 Cyclopentene	67	3.078	3.086	-0.008	95	176661	20.0	22.2	
25 Acetonitrile	41	3.144	3.143	0.001	95	97931	200.0	238.1	a
* 26 TBA-d9 (IS)	65	3.185	3.185	0.000	0	119350	1000.0	1000.0	
27 Methylene Chloride	84	3.185	3.193	-0.008	98	77425	20.0	20.1	
28 2-Methyl-2-propanol	59	3.250	3.259	-0.008	91	54052	200.0	215.4	
29 Methyl tert-butyl ether	73	3.341	3.349	-0.008	98	198022	20.0	21.4	
30 trans-1,2-Dichloroethene	96	3.374	3.374	0.000	98	69101	20.0	20.0	
31 Acrylonitrile	53	3.439	3.448	-0.009	94	252719	200.0	244.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	43	3.513	3.513	0.000	94	70722	20.0	25.1	
33 Isopropyl ether	45	3.719	3.727	-0.008	96	268120	20.0	25.3	
34 1,1-Dichloroethane	63	3.760	3.760	0.000	99	135038	20.0	22.0	
35 Vinyl acetate	86	3.768	3.768	0.000	100	22442	40.0	37.8	
36 2-Chloro-1,3-butadiene	88	3.801	3.801	0.000	93	61508	20.0	20.2	
37 Tert-butyl ethyl ether	59	4.031	4.031	0.000	88	227199	20.0	22.9	
* 38 2-Butanone-d5	46	4.236	4.236	0.000	0	135395	250.0	250.0	
39 2,2-Dichloropropane	97	4.253	4.261	-0.008	94	23783	20.0	18.3	
40 cis-1,2-Dichloroethene	96	4.269	4.277	-0.008	93	78271	20.0	20.1	
42 Ethyl acetate	70	4.286	4.294	-0.008	96	11844	40.0	33.1	
41 2-Butanone (MEK)	72	4.286	4.294	-0.008	96	31989	100.0	89.2	
43 Methyl acrylate	55	4.343	4.343	0.000	99	44698	20.0	22.9	
44 Propionitrile	54	4.425	4.417	0.008	98	92428	200.0	208.1	
45 Chlorobromomethane	128	4.499	4.499	0.000	95	34524	20.0	19.2	
46 Tetrahydrofuran	72	4.499	4.499	0.000	53	15746	40.0	38.5	
47 Methacrylonitrile	67	4.516	4.516	0.000	94	243949	200.0	217.1	
48 Chloroform	83	4.549	4.549	0.000	97	114980	20.0	20.7	
49 Cyclohexane	84	4.672	4.680	-0.008	95	113515	20.0	21.9	
50 1,1,1-Trichloroethane	97	4.697	4.696	0.001	97	96336	20.0	19.5	
$ 51 Dibromofluoromethane (Surr	113	4.705	4.705	0.000	96	65340	50.0	48.5	
52 Carbon tetrachloride	117	4.812	4.812	0.000	97	77065	20.0	19.2	
53 1,1-Dichloropropene	75	4.836	4.836	0.000	94	91280	20.0	20.8	
54 Isobutyl alcohol	43	4.984	4.984	0.000	46	100648	500.0	498.4	
55 Benzene	78	5.034	5.033	0.001	97	277546	20.0	21.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.050	5.050	0.000	0	72281	50.0	50.2	
57 Isopropyl acetate	43	5.083	5.083	0.000	96	178687	20.0	22.5	
58 Tert-amyl methyl ether	73	5.083	5.091	-0.008	91	228259	20.0	21.6	
59 1,2-Dichloroethane	62	5.124	5.124	0.000	96	84017	20.0	21.0	
60 n-Heptane	57	5.173	5.181	-0.008	93	54277	20.0	22.4	
* 61 Fluorobenzene	96	5.313	5.321	-0.008	98	270418	50.0	50.0	
62 n-Butanol	56	5.650	5.633	0.017	89	22348	500.0	370.6	
63 Trichloroethene	95	5.666	5.666	0.000	97	62171	20.0	18.7	
65 Ethyl acrylate	55	5.789	5.789	0.000	93	165676	20.0	22.9	
64 Methylcyclohexane	83	5.789	5.789	0.000	88	124538	20.0	21.2	
66 1,2-Dichloropropane	63	5.954	5.954	0.000	91	74992	20.0	21.7	
* 67 1,4-Dioxane-d8	96	6.028	6.019	0.009	0	10123	1000.0	1000.0	
68 Methyl methacrylate	100	6.028	6.028	0.000	91	26094	40.0	37.5	
69 1,4-Dioxane	88	6.085	6.077	0.008	25	11010	400.0	569.8	
70 n-Propyl acetate	43	6.085	6.085	0.000	98	79603	20.0	24.8	
71 Dibromomethane	93	6.085	6.085	0.000	74	37834	20.0	19.2	
72 Dichlorobromomethane	83	6.233	6.233	0.000	98	82058	20.0	19.5	
73 2-Nitropropane	41	6.562	6.570	-0.008	97	26539	40.0	44.3	
75 Epichlorohydrin	57	6.677	6.677	0.000	99	103777	400.0	382.7	
76 cis-1,3-Dichloropropene	75	6.734	6.734	0.000	95	96407	20.0	20.9	
77 4-Methyl-2-pentanone (MIBK	43	6.891	6.890	0.001	98	304172	100.0	109.8	
$ 78 Toluene-d8 (Surr)	98	6.973	6.973	0.000	99	246641	50.0	49.2	
79 Toluene	91	7.047	7.047	0.001	93	270218	20.0	21.1	
80 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	98	79246	20.0	20.6	
81 Ethyl methacrylate	69	7.425	7.424	0.001	91	73612	20.0	23.4	
82 1,1,2-Trichloroethane	83	7.614	7.613	0.001	95	44784	20.0	21.0	
83 Tetrachloroethene	166	7.663	7.663	0.000	94	61656	20.0	19.7	
84 1,3-Dichloropropane	76	7.827	7.827	0.000	96	90826	20.0	22.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 2-Hexanone	43	7.893	7.885	0.008	98	161472	100.0	99.0	
86 n-Butyl acetate	43	8.000	8.000	0.000	99	90468	20.0	25.0	
87 Chlorodibromomethane	129	8.057	8.057	0.000	97	50107	20.0	18.1	
88 Ethylene Dibromide	107	8.222	8.213	0.009	99	47170	20.0	20.3	
* 89 Chlorobenzene-d5	117	8.756	8.756	0.000	87	181714	50.0	50.0	
90 Chlorobenzene	112	8.797	8.797	0.000	93	166635	20.0	20.6	
91 Ethylbenzene	106	8.895	8.895	0.000	99	95855	20.0	20.6	
92 1,1,1,2-Tetrachloroethane	131	8.912	8.912	0.000	95	59670	20.0	19.5	
93 m-Xylene & p-Xylene	106	9.052	9.051	0.001	0	113991	20.0	20.5	
94 n-Butyl acrylate	73	9.487	9.487	0.000	95	43695	20.0	20.9	
95 o-Xylene	106	9.495	9.503	-0.008	93	120110	20.0	20.9	
96 Styrene	104	9.528	9.528	0.000	94	186819	20.0	20.9	
97 Amyl acetate (mixed isomer	43	9.709	9.709	0.000	89	114695	20.0	26.0	
98 Bromoform	173	9.742	9.742	0.000	95	31231	20.0	17.6	
99 Isopropylbenzene	105	9.840	9.840	0.000	97	301032	20.0	21.8	
$ 100 4-Bromofluorobenzene	174	10.029	10.029	0.000	87	71427	50.0	48.7	
101 Bromobenzene	156	10.144	10.144	0.000	96	72733	20.0	20.8	
102 1,1,2,2-Tetrachloroethane	83	10.186	10.185	0.001	98	72795	20.0	22.1	
103 N-Propylbenzene	91	10.202	10.202	0.000	99	363421	20.0	22.7	
104 1,2,3-Trichloropropane	110	10.227	10.226	0.001	94	19832	20.0	21.4	
105 trans-1,4-Dichloro-2-buten	53	10.243	10.243	0.000	79	15830	20.0	21.4	
106 2-Chlorotoluene	91	10.292	10.292	0.000	94	255005	20.0	22.6	
107 4-Ethyltoluene	105	10.292	10.292	0.000	87	300345	20.0	22.8	
108 1,3,5-Trimethylbenzene	105	10.350	10.350	0.000	93	262682	20.0	22.6	
109 4-Chlorotoluene	91	10.383	10.383	0.000	98	228686	20.0	22.9	
110 Butyl Methacrylate	87	10.432	10.424	0.008	95	86328	20.0	22.0	
111 tert-Butylbenzene	119	10.580	10.580	0.000	94	197188	20.0	21.0	
112 1,2,4-Trimethylbenzene	105	10.629	10.629	0.000	98	262701	20.0	22.2	
113 sec-Butylbenzene	105	10.744	10.744	0.000	99	321739	20.0	22.3	
114 4-Isopropyltoluene	119	10.843	10.843	0.000	97	268960	20.0	22.0	
115 1,3-Dichlorobenzene	146	10.851	10.851	0.000	94	139909	20.0	20.4	
* 116 1,4-Dichlorobenzene-d4	152	10.900	10.908	-0.008	97	101034	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.917	10.925	-0.008	93	145465	20.0	20.6	
132 1,2,3-Trimethylbenzene	105	10.925	10.933	-0.008	98	283583	20.0	22.6	
118 Benzyl chloride	91	11.015	11.023	-0.008	98	124288	20.0	19.8	
119 2,3-Dihydroindene	117	11.065	11.065	0.000	95	278096	20.0	22.0	
120 p-Diethylbenzene	119	11.098	11.106	-0.008	94	168847	20.0	22.5	
121 n-Butylbenzene	92	11.114	11.122	-0.008	98	149295	20.0	21.4	
122 1,2-Dichlorobenzene	146	11.163	11.171	-0.008	94	146680	20.0	21.4	
123 1,2,4,5-Tetramethylbenzene	119	11.574	11.590	-0.016	98	268690	20.0	22.9	
124 1,2-Dibromo-3-Chloropropan	75	11.656	11.673	-0.017	95	13209	20.0	21.8	
125 1,3,5-Trichlorobenzene	180	11.739	11.755	-0.017	97	114872	20.0	21.5	
126 1,2,4-Trichlorobenzene	180	12.141	12.157	-0.016	95	106206	20.0	22.3	
127 Hexachlorobutadiene	225	12.199	12.223	-0.024	94	44826	20.0	19.9	
128 Naphthalene	128	12.305	12.330	-0.025	99	242814	20.0	24.1	
129 1,2,3-Trichlorobenzene	180	12.470	12.494	-0.024	95	95036	20.0	20.9	
S 130 1,2-Dichloroethene, Total	100				0		40.0	40.1	
S 131 Xylenes, Total	100				0		40.0	41.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
GASES Li_00270	Amount Added:	20.00	Units: uL	
VOA6IS/SURR_00012	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 29-Jul-2018 08:05:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS6\20180728-76265.b\F68343.D

Injection Date: 29-Jul-2018 01:30:30 Instrument ID: CVOAMS6 Operator ID:

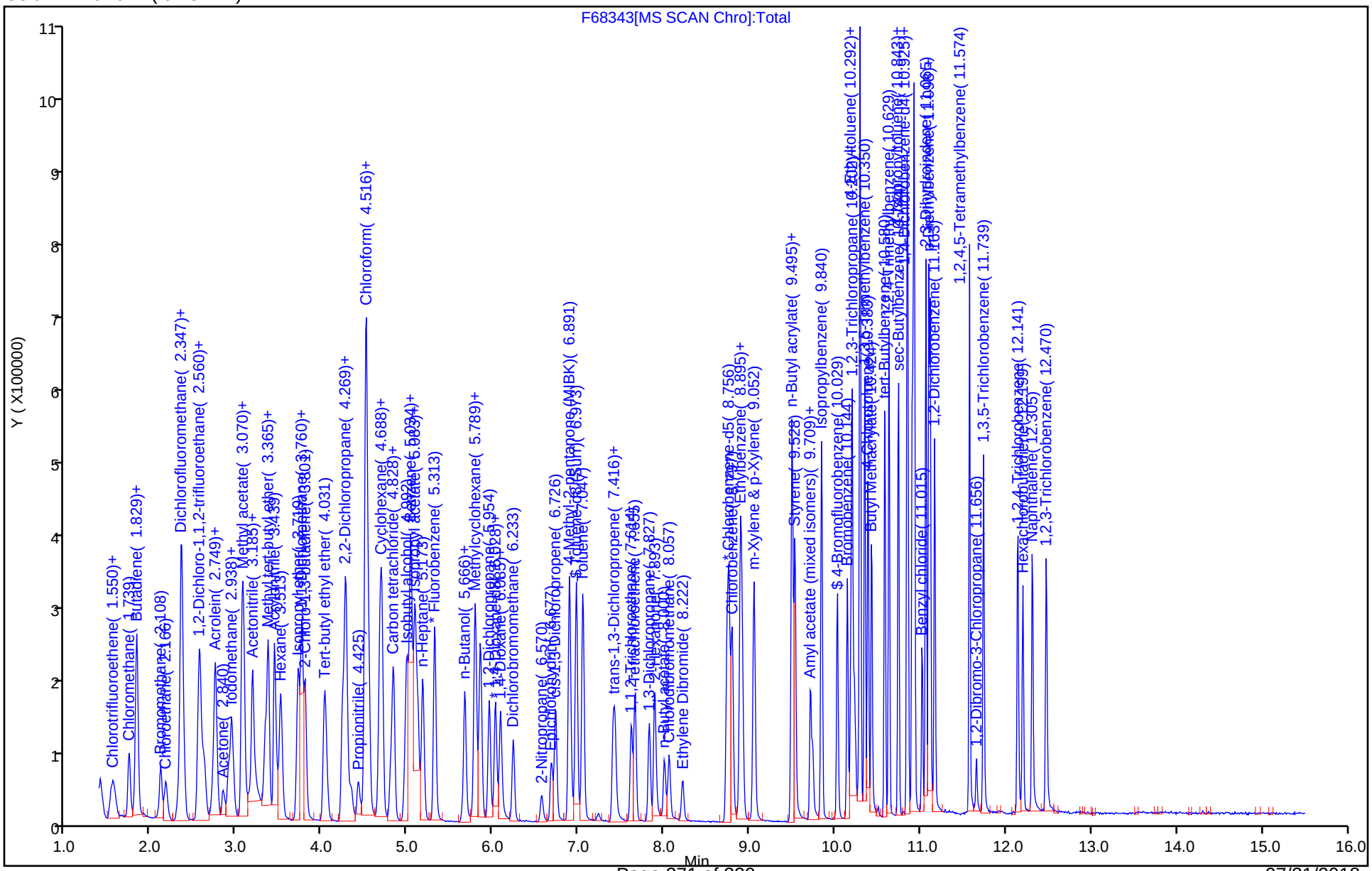
Lims ID: 460-161054-A-1 MSD Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 10.0000 ALS Bottle#: 19

Method: 8260624W6 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Instrument ID: CVOAMS6 Start Date: 07/08/2018 07:26

Analysis Batch Number: 534406 End Date: 07/08/2018 16:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-534406/1		07/08/2018 07:26	1	F67406.D	Rtx-624 0.25(mm)
STD7 460-534406/3 IC		07/08/2018 08:14	1	F67408.D	Rtx-624 0.25(mm)
STD1 460-534406/4 IC		07/08/2018 08:37	1	F67409.D	Rtx-624 0.25(mm)
STD5 460-534406/5 IC		07/08/2018 09:01	1	F67410.D	Rtx-624 0.25(mm)
STD20 460-534406/6 ICIS		07/08/2018 09:24	1	F67411.D	Rtx-624 0.25(mm)
STD50 460-534406/7 IC		07/08/2018 09:47	1	F67412.D	Rtx-624 0.25(mm)
STD200 460-534406/8 IC		07/08/2018 10:11	1	F67413.D	Rtx-624 0.25(mm)
STD500 460-534406/9 IC		07/08/2018 10:34	1	F67414.D	Rtx-624 0.25(mm)
ICV 460-534406/13		07/08/2018 12:09	1		Rtx-624 0.25(mm)
ZZZZZ		07/08/2018 12:32	1		Rtx-624 0.25(mm)
ZZZZZ		07/08/2018 12:56	1		Rtx-624 0.25(mm)
ZZZZZ		07/08/2018 13:43	1		Rtx-624 0.25(mm)
ZZZZZ		07/08/2018 16:28	10		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Instrument ID: CVOAMS6 Start Date: 07/28/2018 18:09

Analysis Batch Number: 540460 End Date: 07/29/2018 05:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-540460/1		07/28/2018 18:09	1	F68324.D	Rtx-624 0.25(mm)
CCVIS 460-540460/3		07/28/2018 18:53	1	F68326.D	Rtx-624 0.25(mm)
LCS 460-540460/4		07/28/2018 19:16	1	F68327.D	Rtx-624 0.25(mm)
ZZZZZ		07/28/2018 19:39	1		Rtx-624 0.25(mm)
MB 460-540460/9		07/28/2018 21:12	1	F68332.D	Rtx-624 0.25(mm)
ZZZZZ		07/28/2018 21:36	1		Rtx-624 0.25(mm)
460-161054-8		07/28/2018 22:00	1	F68334.D	Rtx-624 0.25(mm)
460-161054-1		07/28/2018 22:23	1	F68335.D	Rtx-624 0.25(mm)
460-161054-2		07/28/2018 22:46	1	F68336.D	Rtx-624 0.25(mm)
460-161054-3		07/28/2018 23:10	1	F68337.D	Rtx-624 0.25(mm)
460-161054-4		07/28/2018 23:33	1	F68338.D	Rtx-624 0.25(mm)
460-161054-5		07/28/2018 23:57	1	F68339.D	Rtx-624 0.25(mm)
460-161054-6		07/29/2018 00:20	1	F68340.D	Rtx-624 0.25(mm)
460-161054-7		07/29/2018 00:44	1	F68341.D	Rtx-624 0.25(mm)
460-161054-1 MS		07/29/2018 01:06	10	F68342.D	Rtx-624 0.25(mm)
460-161054-1 MSD		07/29/2018 01:30	10	F68343.D	Rtx-624 0.25(mm)
ZZZZZ		07/29/2018 02:16	1		Rtx-624 0.25(mm)
ZZZZZ		07/29/2018 02:39	1		Rtx-624 0.25(mm)
ZZZZZ		07/29/2018 03:03	1		Rtx-624 0.25(mm)
ZZZZZ		07/29/2018 03:27	1		Rtx-624 0.25(mm)
ZZZZZ		07/29/2018 03:49	1		Rtx-624 0.25(mm)
ZZZZZ		07/29/2018 04:13	1		Rtx-624 0.25(mm)
ZZZZZ		07/29/2018 04:36	1		Rtx-624 0.25(mm)
ZZZZZ		07/29/2018 05:00	1		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Batch Number: 540460 Batch Start Date: 07/28/18 18:09 Batch Analyst: Collado, Ximena X

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260MIX1COMB 00084	ACROLEIN W 00079	BFB 00017	GASES Li 00270
BFB 460-540460/1		8260C		5 mL	5 mL			1 uL	
CCVIS 460-540460/3		8260C		5 mL	5 mL	20 uL	4 uL		20 uL
LCS 460-540460/4		8260C		5 mL	5 mL	20 uL	4 uL		20 uL
MB 460-540460/9		8260C		5 mL	5 mL				
460-161054-A-8	GC-TB (072318)	8260C	T	5 mL	5 mL				
460-161054-A-1	GC-MW-101 (WG)	8260C	T	5 mL	5 mL				
460-161054-A-2	GC-MW-102 (WG)	8260C	T	5 mL	5 mL				
460-161054-A-3	GC-MW-103 (WG)	8260C	T	5 mL	5 mL				
460-161054-A-4	GC-MW-104 (WG)	8260C	T	5 mL	5 mL				
460-161054-A-5	GC-MW-105 (WG)	8260C	T	5 mL	5 mL				
460-161054-A-6	GC-MW-106 (WG)	8260C	T	5 mL	5 mL				
460-161054-A-7	GC-EQUIPMENT BLANK (072318)	8260C	T	5 mL	5 mL				
460-161054-A-1 MS	GC-MW-101 (WG)	8260C	T	5 mL	5 mL	20 uL	4 uL		20 uL
460-161054-A-1 MSD	GC-MW-101 (WG)	8260C	T	5 mL	5 mL	20 uL	4 uL		20 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOA6IS/SURR 00012					
BFB 460-540460/1		8260C							
CCVIS 460-540460/3		8260C		5 uL					
LCS 460-540460/4		8260C		5 uL					
MB 460-540460/9		8260C		5 uL					
460-161054-A-8	GC-TB (072318)	8260C	T	5 uL					
460-161054-A-1	GC-MW-101 (WG)	8260C	T	5 uL					
460-161054-A-2	GC-MW-102 (WG)	8260C	T	5 uL					
460-161054-A-3	GC-MW-103 (WG)	8260C	T	5 uL					
460-161054-A-4	GC-MW-104 (WG)	8260C	T	5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Batch Number: 540460 Batch Start Date: 07/28/18 18:09 Batch Analyst: Collado, Ximena X

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOA6IS/SURR 00012					
460-161054-A-5	GC-MW-105 (WG)	8260C	T	5 uL					
460-161054-A-6	GC-MW-106 (WG)	8260C	T	5 uL					
460-161054-A-7	GC-EQUIPMENT BLANK (072318)	8260C	T	5 uL					
460-161054-A-1 MS	GC-MW-101 (WG)	8260C	T	5 uL					
460-161054-A-1 MSD	GC-MW-101 (WG)	8260C	T	5 uL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG No.:

Project: GEM Cleaners

Client Sample ID	Lab Sample ID
GC-MW-101 (WG)	460-161054-1
GC-MW-104 (WG)	460-161054-4

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GC-MW-101 (WG) Lab Sample ID: 460-161054-1

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG ID.:

Matrix: Water Date Sampled: 07/23/2018 09:30

Reporting Basis: WET Date Received: 07/23/2018 19:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon	0.35	1.0	0.34	mg/L	J		1	9060A_ASP
14808-79-8	Sulfate	10.3	5.0	1.4	mg/L			1	D516-90, 02
	Bicarbonate Alkalinity as CaCO3	40.3	5.0	5.0	mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Alkalinity	40.3	5.0	5.0	mg/L			1	SM 2320B
	Hydroxide Alkalinity	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Total Dissolved Solids	300	10.0	10.0	mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GC-MW-104 (WG) Lab Sample ID: 460-161054-4

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG ID.:

Matrix: Water Date Sampled: 07/23/2018 12:20

Reporting Basis: WET Date Received: 07/23/2018 19:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon	0.56	1.0	0.34	mg/L	J		1	9060A_ASP
14808-79-8	Sulfate	11.7	5.0	1.4	mg/L			1	D516-90, 02
	Bicarbonate Alkalinity as CaCO3	67.7	5.0	5.0	mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Alkalinity	67.7	5.0	5.0	mg/L			1	SM 2320B
	Hydroxide Alkalinity	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Total Dissolved Solids	758	20.0	20.0	mg/L			1	SM 2540C

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Analyst: JXT Batch Start Date: 07/30/2018

Reporting Units: mg/L Analytical Batch No.: 540990

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	15:07	Total Organic Carbon	47.42	50.0	95	90-110		WTtocSP2_00033
2	ICB	15:30	Total Organic Carbon	1.0				U	
13	CCV	19:42	Total Organic Carbon	48.22	50.0	96	90-110		WTtocSP2_00033
14	CCB	20:05	Total Organic Carbon	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Analyst: HTV Batch Start Date: 07/27/2018

Reporting Units: mg/L Analytical Batch No.: 540298

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	14:04	Sulfate	20.11	20.0	101	90-110		WT-SO4SS1_00004
2	ICB	14:04	Sulfate	5.0				U	
28	CCV	15:08	Sulfate	19.64	20.0	98	90-110		WT-SO4SS1_00004
29	CCB	15:08	Sulfate	5.0				U	
40	CCV	15:20	Sulfate	19.06	20.0	95	90-110		WT-SO4SS1_00004
41	CCB	15:20	Sulfate	5.0				U	
44	CCV	15:21	Sulfate	18.95	20.0	95	90-110		WT-SO4SS1_00004
45	CCB	15:21	Sulfate	5.0				U	
55	CCV	15:38	Sulfate	19.14	20.0	96	90-110		WT-SO4SS1_00004
56	CCB	15:38	Sulfate	5.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 540990 Date: 07/30/2018 15:52							
9060A_ASP	MB 460-540990/3	Total Organic Carbon	1.0	U	mg/L	1.0	1
Batch ID: 540298 Date: 07/27/2018 15:08							
D516-90, 02	MB 460-540298/30	Sulfate	5.0	U	mg/L	5.0	1
Batch ID: 540834 Date: 07/30/2018 10:56							
SM 2320B	MB 460-540834/2	Bicarbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1
SM 2320B	MB 460-540834/2	Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1
SM 2320B	MB 460-540834/2	Alkalinity	5.0	U	mg/L	5.0	1
SM 2320B	MB 460-540834/2	Hydroxide Alkalinity	5.0	U	mg/L	5.0	1
Batch ID: 539612 Date: 07/25/2018 15:49							
SM 2540C	MB 460-539612/1	Total Dissolved Solids	10.0	U	mg/L	10.0	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 540990 Date: 07/30/2018 17:02											
9060A_ASP	460-161054-1	Total Organic Carbon	0.35	J	mg/L						
9060A_ASP	460-161054-1 MS	Total Organic Carbon	51.66		mg/L	50.0	103	85-115			
Batch ID: 540298 Date: 07/27/2018 15:30											
D516-90, 02	460-161054-1	Sulfate	10.3		mg/L						
D516-90, 02	460-161054-1 MS	Sulfate	28.76		mg/L	20.0	92	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 540990 Date: 07/30/2018 17:24											
9060A_ASP	460-161054-1 MSD	Total Organic Carbon	51.62		mg/L	50.0	103	85-115	0	10	
Batch ID: 540298 Date: 07/27/2018 15:30											
D516-90, 02	460-161054-1 MSD	Sulfate	29.13		mg/L	20.0	94	85-115	1	13	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 540834	Date: 07/30/2018 12:00							
SM 2320B	GC-MW-101 (WG)	460-161054-1	Bicarbonate Alkalinity as CaCO3	40.3	mg/L			
SM 2320B	GC-MW-101 (WG)	460-161054-1 DU	Bicarbonate Alkalinity as CaCO3	40.37	mg/L	0.1	10	
SM 2320B	GC-MW-101 (WG)	460-161054-1	Carbonate Alkalinity as CaCO3	5.0	mg/L			U
SM 2320B	GC-MW-101 (WG)	460-161054-1 DU	Carbonate Alkalinity as CaCO3	5.0	mg/L	NC	10	U
SM 2320B	GC-MW-101 (WG)	460-161054-1	Alkalinity	40.3	mg/L			
SM 2320B	GC-MW-101 (WG)	460-161054-1 DU	Alkalinity	40.37	mg/L	0.1	10	
SM 2320B	GC-MW-101 (WG)	460-161054-1	Hydroxide Alkalinity	5.0	mg/L			U
SM 2320B	GC-MW-101 (WG)	460-161054-1 DU	Hydroxide Alkalinity	5.0	mg/L	NC	10	U
Batch ID: 539612	Date: 07/25/2018 15:49							
SM 2540C	GC-MW-104 (WG)	460-161054-4	Total Dissolved Solids	758	mg/L			
SM 2540C	GC-MW-104 (WG)	460-161054-4 DU	Total Dissolved Solids	774.0	mg/L	2	5	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 540990	Date: 07/30/2018 16:16										
						LCS Source: WTtocLCS_00045					
9060A_ASP	LCSSRM 460-540990/4	Total Organic Carbon	44.97		mg/L	45.4	99.2	84.0-11 4.7			
Batch ID: 540298	Date: 07/27/2018 15:08										
						LCS Source: WTsfateLCS_00045					
D516-90, 02	LCSSRM 460-540298/31	Sulfate	18.86		mg/L	19.8	95.3	83.8-11 2.1			
Batch ID: 540834	Date: 07/30/2018 11:04										
						LCS Source: WTalkLCS_00142					
SM 2320B	LCSSRM 460-540834/3	Alkalinity	54.33		mg/L	53.9	100.8	85.0-11 4.8			
Batch ID: 539612	Date: 07/25/2018 15:49										
						LCS Source: WTtdsLCS_00111					
SM 2540C	LCSSRM 460-539612/2	Total Dissolved Solids	521.0		mg/L	528	98.7	90.0-10 9.8			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG Number:

Matrix: Water Instrument ID: TOC_Shimadzu

Method: 9060A_ASP MDL Date: 12/13/2017 10:01

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Organic Carbon		1	0.335

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG Number:

Matrix: Water Instrument ID: TOC_Shimadzu

Method: 9060A_ASP XMDL Date: 12/13/2017 10:01

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon		1	0.335

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG Number:

Matrix: Water Instrument ID: Konelab1

Method: D516-90, 02 MDL Date: 12/05/2016 08:19

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Sulfate		5	1.36

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG Number:

Matrix: Water Instrument ID: Konelab1

Method: D516-90, 02 XMDL Date: 12/05/2016 08:20

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.36

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG Number:

Matrix: Water Instrument ID: Auto_Titrator

Method: SM 2320B MDL Date: 02/11/2014 10:14

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Alkalinity		5	5
Bicarbonate Alkalinity as CaCO3		5	5
Carbonate Alkalinity as CaCO3		5	5
Hydroxide Alkalinity		5	5

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG Number:

Matrix: Water Instrument ID: Auto_Titrator

Method: SM 2320B XMDL Date: 02/11/2014 10:48

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		5	5
Bicarbonate Alkalinity as CaCO3		5	5
Carbonate Alkalinity as CaCO3		5	5
Hydroxide Alkalinity		5	5

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2540C MDL Date: 02/11/2014 10:19

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Dissolved Solids		10	10

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161054-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2540C XMDL Date: 02/11/2014 10:55

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Dissolved Solids		10	10

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Instrument ID: TOC_Shimadzu Method: 9060A_ASP

Start Date: 07/30/2018 15:07 End Date: 07/30/2018 23:10

Lab Sample ID	D / F	Type	Time	Analytes																			
				TOC																			
ICV 460-540990/1	1		15:07	X																			
ICB 460-540990/2	1		15:30	X																			
MB 460-540990/3	1	T	15:52	X																			
LCSSRM 460-540990/4	1	T	16:16	X																			
460-161054-1	1	T	16:39	X																			
460-161054-1 MS	1	T	17:02	X																			
460-161054-1 MSD	1	T	17:24	X																			
460-161054-4	1	T	17:47	X																			
ZZZZZZ			18:10																				
ZZZZZZ			18:33																				
ZZZZZZ			18:56																				
ZZZZZZ			19:19																				
CCV 460-540990/13	1		19:42	X																			
CCB 460-540990/14	1		20:05	X																			
ZZZZZZ			20:28																				
ZZZZZZ			20:50																				
ZZZZZZ			21:15																				
ZZZZZZ			21:38																				
ZZZZZZ			22:01																				
ZZZZZZ			22:24																				
CCV 460-540990/21			22:47																				
CCB 460-540990/22			23:10																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Instrument ID: Konelab1 Method: D516-90, 02

Start Date: 07/27/2018 14:04 End Date: 07/27/2018 16:43

Lab Sample ID	D/F	Type	Time	Analytes																			
				SO4																			
ICV 460-540298/1	1		14:04	X																			
ICB 460-540298/2	1		14:04	X																			
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
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ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
CCV 460-540298/13			14:15																				
CCB 460-540298/14			14:15																				
ZZZZZZ			14:15																				
ZZZZZZ			14:15																				
CCV 460-540298/17			14:25																				
CCB 460-540298/18			14:25																				
ZZZZZZ			14:29																				
ZZZZZZ			14:29																				
ZZZZZZ			14:35																				
ZZZZZZ			14:35																				
ZZZZZZ			14:35																				
ZZZZZZ			14:36																				
ZZZZZZ			14:36																				
CCV 460-540298/26			14:36																				
CCB 460-540298/27			14:36																				
CCV 460-540298/28	1		15:08	X																			
CCB 460-540298/29	1		15:08	X																			
MB 460-540298/30	1	T	15:08	X																			
LCSSRM 460-540298/31	1	T	15:08	X																			
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
460-161054-1	1	T	15:08	X																			
460-161054-4	1	T	15:08	X																			
CCV 460-540298/40	1		15:20	X																			
CCB 460-540298/41	1		15:20	X																			
ZZZZZZ			15:20																				

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Instrument ID: Konelab1 Method: D516-90, 02

Start Date: 07/27/2018 14:04 End Date: 07/27/2018 16:43

Lab Sample ID	D/F	Type	Time	Analytes																				
				SO4																				
ZZZZZZ			15:20																					
CCV 460-540298/44	1		15:21	X																				
CCB 460-540298/45	1		15:21	X																				
460-161054-1 MS	1	T	15:30	X																				
460-161054-1 MSD	1	T	15:30	X																				
ZZZZZZ			15:31																					
ZZZZZZ			15:31																					
ZZZZZZ			15:31																					
ZZZZZZ			15:31																					
ZZZZZZ			15:33																					
ZZZZZZ			15:33																					
ZZZZZZ			15:33																					
CCV 460-540298/55	1		15:38	X																				
CCB 460-540298/56	1		15:38	X																				
CCV 460-540298/57			15:56																					
CCB 460-540298/58			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
ZZZZZZ			15:56																					
CCV 460-540298/69			16:07																					
CCB 460-540298/70			16:07																					
ZZZZZZ			16:07																					
ZZZZZZ			16:07																					
CCV 460-540298/73			16:17																					
CCB 460-540298/74			16:17																					
CCV 460-540298/75			16:33																					
CCB 460-540298/76			16:33																					
ZZZZZZ			16:33																					
ZZZZZZ			16:33																					
CCV 460-540298/79			16:43																					
CCB 460-540298/80			16:43																					

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Instrument ID: Auto_Titrator Method: SM 2320B

Start Date: 07/30/2018 10:49 End Date: 07/30/2018 14:37

Lab Sample ID	D/F	Type	Time	Analytes																				
				Alk	BALKCC	CarAlk	OHAlk																	
RINSE 460-540834/1			10:49																					
MB 460-540834/2	1	T	10:56	X	X	X	X																	
LCSSRM 460-540834/3	1	T	11:04	X	X	X	X																	
ZZZZZZ			11:12																					
ZZZZZZ			11:19																					
ZZZZZZ			11:25																					
ZZZZZZ			11:31																					
ZZZZZZ			11:39																					
ZZZZZZ			11:47																					
460-161054-1	1	T	11:54	X	X	X	X																	
460-161054-1 DU	1	T	12:00	X	X	X	X																	
460-161054-4	1	T	12:07	X	X	X	X																	
ZZZZZZ			12:14																					
ZZZZZZ			12:21																					
ZZZZZZ			12:29																					
ZZZZZZ			12:37																					
ZZZZZZ			12:45																					
ZZZZZZ			12:53																					
ZZZZZZ			13:03																					
ZZZZZZ			13:12																					
ZZZZZZ			13:20																					
ZZZZZZ			13:28																					
ZZZZZZ			13:35																					
ZZZZZZ			13:42																					
ZZZZZZ			13:48																					
ZZZZZZ			13:56																					
ZZZZZZ			14:02																					
ZZZZZZ			14:09																					
ZZZZZZ			14:16																					
ZZZZZZ			14:23																					
ZZZZZZ			14:29																					
ZZZZZZ			14:37																					

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 2540C

Start Date: 07/25/2018 15:49 End Date: 07/25/2018 15:49

Lab Sample ID	D / F	Type	Time	Analytes																			
				TDS																			
MB 460-539612/1	1	T	15:49	X																			
LCSSRM 460-539612/2	1	T	15:49	X																			
460-161054-4	1	T	15:49	X																			
460-161054-4 DU	1	T	15:49	X																			
460-161054-1	1	T	15:49	X																			
ZZZZZZ			15:49																				
ZZZZZZ			15:49																				
ZZZZZZ			15:49																				
ZZZZZZ			15:49																				
ZZZZZZ			15:49																				

Prep Types
T = Total/NA

Instr.Information

System	Shimadzu TOC-V
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Sample

Sample Name:	Untitled
Sample ID:	ICV
Origin:	9060.met
Status	Completed
Chk. Result	

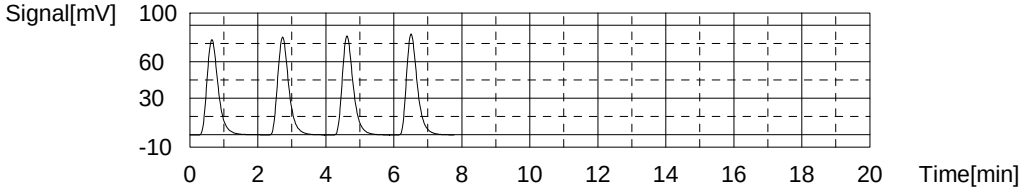
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:47.42mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	181.4	46.70mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:07:11 PM
2	184.6	47.53mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:09:14 PM
3	184.6	47.53mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:11:17 PM
4	186.1	47.91mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:13:20 PM

Mean Area 184.2
Mean Conc. 47.42mg/L



Sample

Sample Name:	Untitled
Sample ID:	ICB
Origin:	9060.met
Status	Completed
Chk. Result	

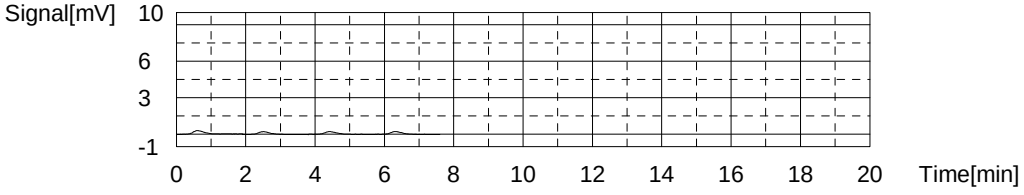
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03258mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6313	0.06696mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:30:00 PM
2	0.4690	0.02509mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:32:03 PM
3	0.4223	0.01304mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:34:06 PM
4	0.4695	0.02522mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:36:09 PM

Mean Area 0.4980
Mean Conc. 0.03258mg/L



Sample

Sample Name: Untitled
Sample ID: MB
Origin: 9060.met
Status Completed
Chk. Result

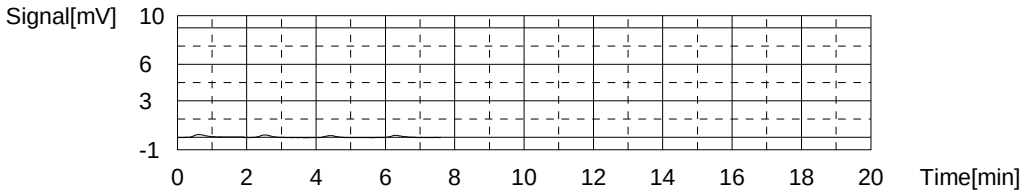
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.00203mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4664	0.02442mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:52:49 PM
2	0.3891	0.00448mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:54:52 PM
3	0.3142	-0.01484mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:56:55 PM
4	0.3488	-0.00592mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:58:58 PM

Mean Area 0.3796
Mean Conc. 0.00203mg/L



Sample

Sample Name: Untitled
Sample ID: LCSSRM
Origin: 9060.met
Status Completed
Chk. Result

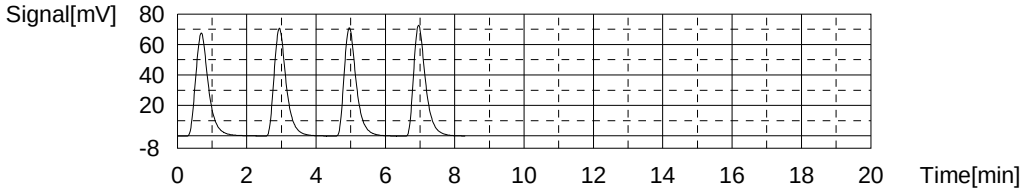
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:44.97mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	174.4	44.90mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:16:00 PM
2	174.2	44.84mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:18:11 PM
3	174.2	44.84mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:20:20 PM
4	175.9	45.28mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:22:29 PM

Mean Area 174.7
Mean Conc. 44.97mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161054-f-1
Origin: 9060.met
Status Completed
Chk. Result

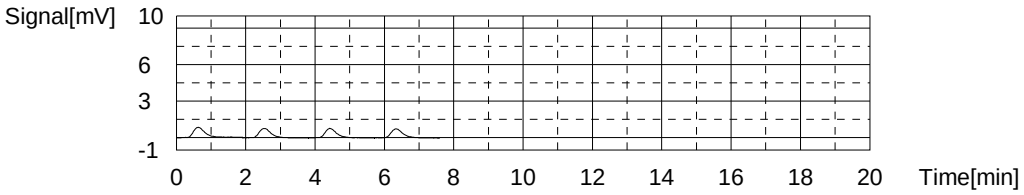
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3545mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.862	0.3845mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:39:09 PM
2	1.759	0.3579mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:41:12 PM
3	1.683	0.3383mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:43:15 PM
4	1.680	0.3375mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:45:18 PM

Mean Area 1.746
Mean Conc. 0.3545mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161054-f-1 MS
Origin: 9060.met
Status Completed
Chk. Result

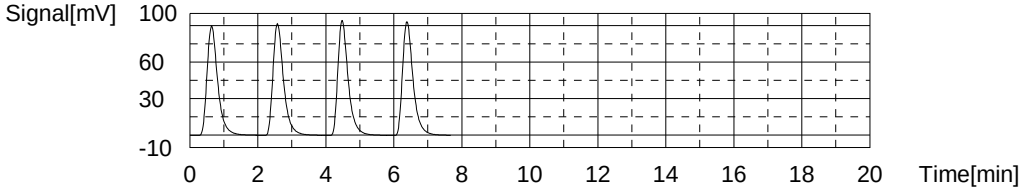
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:51.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	197.9	50.96mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:02:01 PM
2	200.7	51.68mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:04:05 PM
3	200.8	51.71mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:06:08 PM
4	203.0	52.27mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:08:11 PM

Mean Area 200.6
Mean Conc. 51.65mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161054-f-1 MSD
Origin: 9060.met
Status Completed
Chk. Result

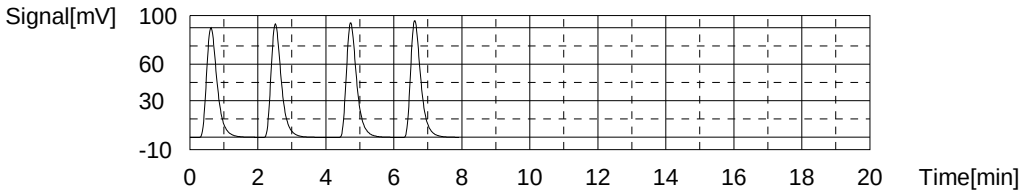
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:51.62mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	197.6	50.88mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:24:51 PM
2	199.9	51.47mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:27:13 PM
3	200.9	51.73mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:29:16 PM
4	203.4	52.38mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:31:19 PM

Mean Area 200.4
Mean Conc. 51.62mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161054-f-4
Origin: 9060.met
Status Completed
Chk. Result

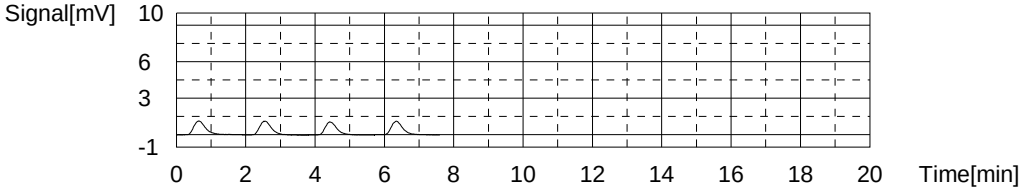
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5610mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.611	0.5777mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:47:58 PM
2	2.645	0.5865mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:50:01 PM
3	2.448	0.5356mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:52:04 PM
4	2.481	0.5441mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:54:07 PM

Mean Area 2.546
Mean Conc. 0.5610mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161168-a-1
Origin: 9060.met
Status Completed
Chk. Result

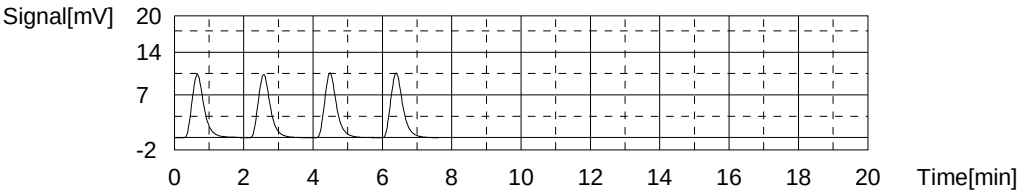
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.483mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.07	6.372mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:10:46 PM
2	25.33	6.439mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:12:50 PM
3	25.48	6.477mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:14:53 PM
4	26.12	6.642mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:16:56 PM

Mean Area 25.50
Mean Conc. 6.483mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161178-f-1
Origin: 9060.met
Status Completed
Chk. Result

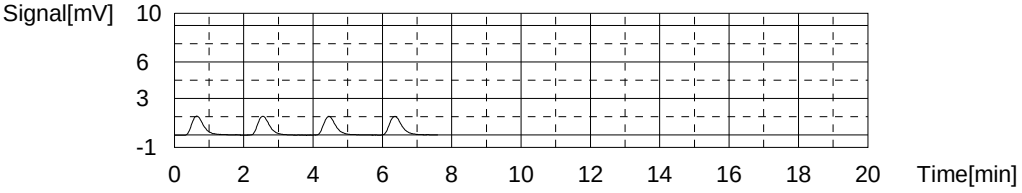
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8616mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.757	0.8733mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:33:36 PM
2	3.677	0.8527mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:35:39 PM
3	3.625	0.8393mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:37:42 PM
4	3.787	0.8811mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:39:45 PM

Mean Area 3.712
Mean Conc. 0.8616mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161178-f-2
Origin: 9060.met
Status Completed
Chk. Result

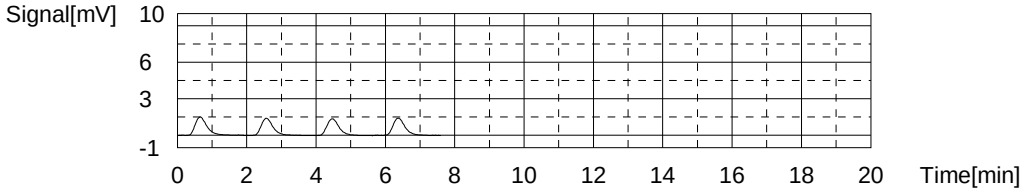
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7766mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.576	0.8266mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:56:25 PM
2	3.265	0.7464mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:58:28 PM
3	3.318	0.7601mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:00:31 PM
4	3.370	0.7735mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:02:34 PM

Mean Area 3.382
Mean Conc. 0.7766mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161178-f-3
Origin: 9060.met
Status Completed
Chk. Result

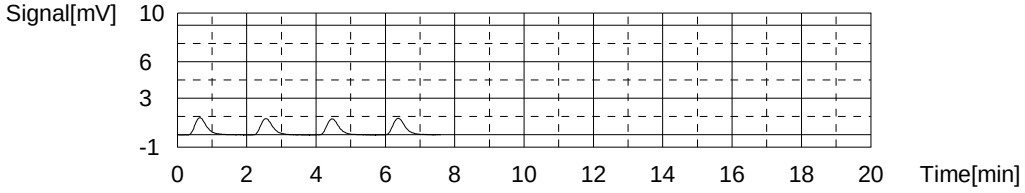
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7381mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.252	0.7430mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:19:14 PM
2	3.216	0.7338mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:21:17 PM
3	3.160	0.7193mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:23:20 PM
4	3.304	0.7565mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:25:23 PM

Mean Area 3.233
Mean Conc. 0.7381mg/L



Sample

Sample Name: Untitled
Sample ID: CCV
Origin: 9060.met
Status Completed
Chk. Result

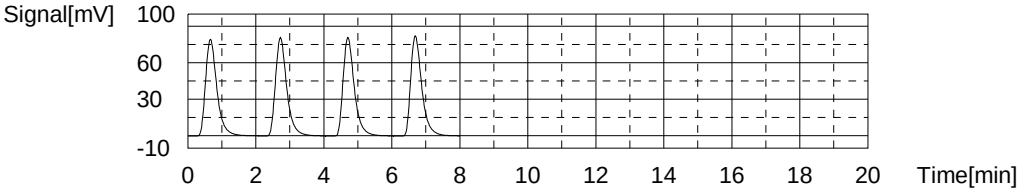
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:48.22mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	185.6	47.78mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:42:12 PM
2	188.1	48.43mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:44:21 PM
3	187.3	48.22mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:46:30 PM
4	188.2	48.46mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:48:36 PM

Mean Area 187.3
Mean Conc. 48.22mg/L



Sample

Sample Name: Untitled
Sample ID: CCB
Origin: 9060.met
Status Completed
Chk. Result

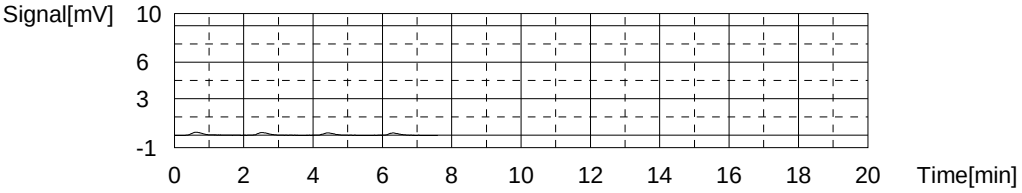
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.01509mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5219	0.03874mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:05:16 PM
2	0.4732	0.02618mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:07:19 PM
3	0.3732	0.00038mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:09:22 PM
4	0.3527	-0.00491mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:11:25 PM

Mean Area 0.4303
Mean Conc. 0.01509mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161178-f-4
Origin: 9060.met
Status Completed
Chk. Result

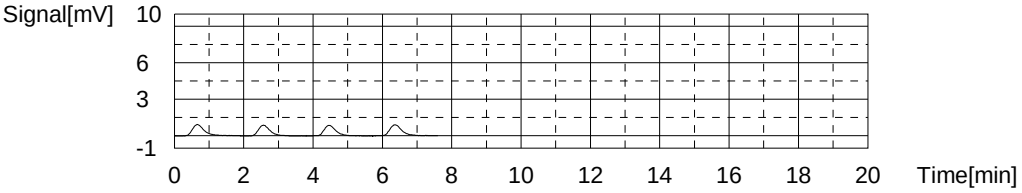
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4293mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.081	0.4410mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:28:05 PM
2	2.000	0.4201mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:30:08 PM
3	1.974	0.4133mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:32:11 PM
4	2.088	0.4428mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:34:14 PM

Mean Area 2.036
Mean Conc. 0.4293mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161259-a-1
Origin: 9060.met
Status Completed
Chk. Result

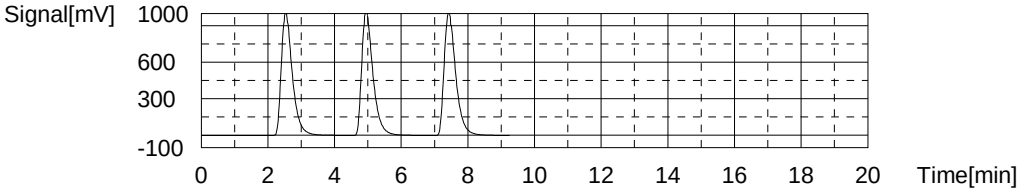
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:466.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.09590mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:50:54 PM
2	2350	606.2mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:53:28 PM
3	2411	621.9mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:56:05 PM
4	2468	636.6mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:58:42 PM

Mean Area 1807
Mean Conc. 466.1mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161277-o-12
Origin: 9060.met
Status Completed
Chk. Result

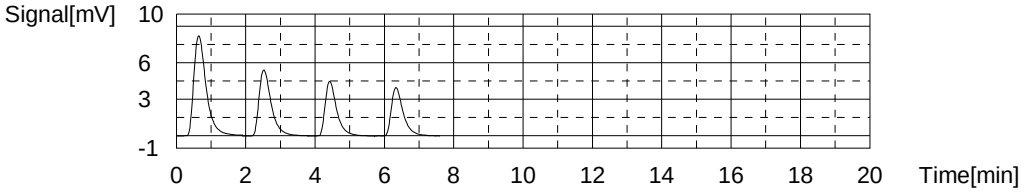
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.364mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.40	5.167mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:15:22 PM
2	13.35	3.348mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:17:25 PM
3	10.40	2.587mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:19:28 PM
4	9.504	2.356mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:21:31 PM

Mean Area 13.41
Mean Conc. 3.364mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161292-e-1
Origin: 9060.met
Status Completed
Chk. Result

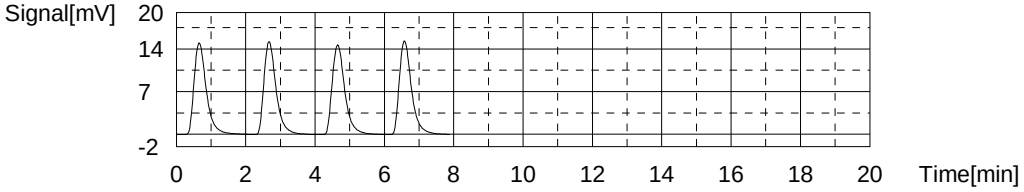
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.571mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.12	9.480mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:38:17 PM
2	37.42	9.558mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:40:24 PM
3	37.49	9.576mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:42:29 PM
4	37.86	9.671mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:44:36 PM

Mean Area 37.47
Mean Conc. 9.571mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161373-o-3
Origin: 9060.met
Status Completed
Chk. Result

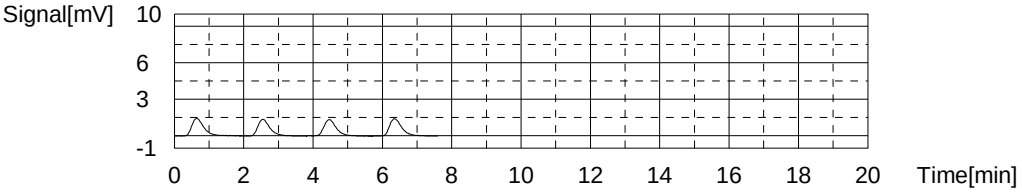
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7510mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.310	0.7580mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:01:16 PM
2	3.256	0.7441mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:03:19 PM
3	3.212	0.7327mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:05:22 PM
4	3.354	0.7694mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:07:25 PM

Mean Area 3.283
Mean Conc. 0.7510mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161429-a-1
Origin: 9060.met
Status Completed
Chk. Result

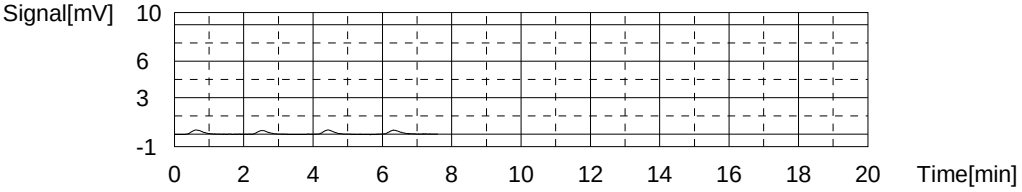
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.09088mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8375	0.1202mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:24:04 PM
2	0.6332	0.06745mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:26:07 PM
3	0.7185	0.08946mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:28:10 PM
4	0.7068	0.08644mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:30:13 PM

Mean Area 0.7240
Mean Conc. 0.09088mg/L



Sample

Sample Name: Untitled
Sample ID: CCV
Origin: 9060.met
Status Completed
Chk. Result

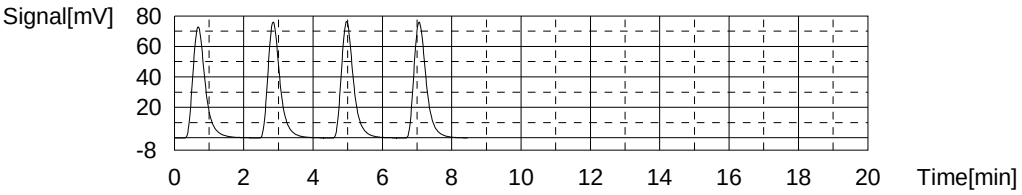
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:48.13mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	183.5	47.24mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:47:09 PM
2	186.9	48.12mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:49:25 PM
3	187.8	48.35mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:51:40 PM
4	189.5	48.79mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:53:53 PM

Mean Area 186.9
Mean Conc. 48.13mg/L



Sample

Sample Name: Untitled
Sample ID: CCB
Origin: 9060.met
Status Completed
Chk. Result

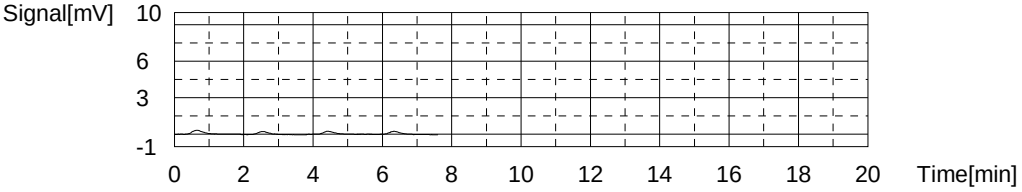
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05206mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7309	0.09266mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 11:10:33 PM
2	0.5205	0.03838mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 11:12:36 PM
3	0.4835	0.02883mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 11:14:39 PM
4	0.5592	0.04836mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 11:16:42 PM

Mean Area 0.5735
Mean Conc. 0.05206mg/L



	Sample ID	Origin	Result	Status	Date / Time	Vial
1	ICV	9060.met	NPOC:47.42mg/	Completed	7/30/2018 3:13:20 PM	1
2	ICB	9060.met	NPOC:0.03258	Completed	7/30/2018 3:36:09 PM	2
3	MB	9060.met	NPOC:0.00203	Completed	7/30/2018 3:58:58 PM	3
4	LCSSRM	9060.met	NPOC:44.97mg/	Completed	7/30/2018 4:22:29 PM	4
5	460-161054-f-1	9060.met	NPOC:0.3545m	Completed	7/30/2018 4:45:18 PM	5
6	460-161054-f-1 MS	9060.met	NPOC:51.65mg/	Completed	7/30/2018 5:08:11 PM	6
7	460-161054-f-1 MSD	9060.met	NPOC:51.62mg/	Completed	7/30/2018 5:31:19 PM	7
8	460-161054-f-4	9060.met	NPOC:0.5610m	Completed	7/30/2018 5:54:07 PM	8
9	460-161168-a-1	9060.met	NPOC:6.483mg/	Completed	7/30/2018 6:16:56 PM	9
10	460-161178-f-1	9060.met	NPOC:0.8616m	Completed	7/30/2018 6:39:45 PM	10
11	460-161178-f-2	9060.met	NPOC:0.7766m	Completed	7/30/2018 7:02:34 PM	11
12	460-161178-f-3	9060.met	NPOC:0.7381m	Completed	7/30/2018 7:25:23 PM	12
13	CCV	9060.met	NPOC:48.22mg/	Completed	7/30/2018 7:48:36 PM	13
14	CCB	9060.met	NPOC:0.01509	Completed	7/30/2018 8:11:25 PM	14
15	460-161178-f-4	9060.met	NPOC:0.4293m	Completed	7/30/2018 8:34:14 PM	15
16	460-161259-a-1	9060.met	NPOC:466.1mg/	Completed	7/30/2018 8:58:42 PM	16
17	460-161277-o-12	9060.met	NPOC:3.364mg/	Completed	7/30/2018 9:21:31 PM	17
18	460-161292-e-1	9060.met	NPOC:9.571mg/	Completed	7/30/2018 9:44:36 PM	18
19	460-161373-o-3	9060.met	NPOC:0.7510m	Completed	7/30/2018 10:07:25 P	19
20	460-161429-a-1	9060.met	NPOC:0.09088	Completed	7/30/2018 10:30:13 P	20
21	CCV	9060.met	NPOC:48.13mg/	Completed	7/30/2018 10:53:53 P	21
22	CCB	9060.met	NPOC:0.05206	Completed	7/30/2018 11:16:42 P	22

Instr.Information

System	Shimadzu TOC-V
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Cal. Curve

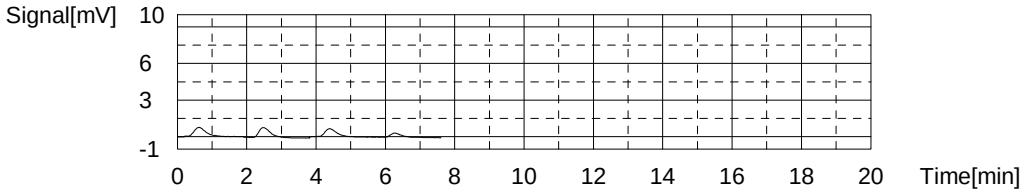
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	JT180607.2018_06_07_09_17_06.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.766	50uL	1	*******		6/7/2018 9:32:56 AM
2	1.842	50uL	1	*******		6/7/2018 9:34:59 AM
3	1.469	50uL	1	*******		6/7/2018 9:37:02 AM
4	0.6810	50uL	1	*******		6/7/2018 9:39:07 AM

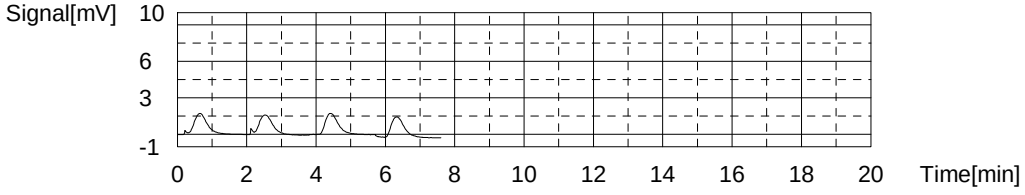
Acid Add. 1.500%
Sp. Time 600.0sec
Mean Area 1.440



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.956	50uL	1	*******		6/7/2018 9:55:47 AM
2	3.467	50uL	1	*******		6/7/2018 9:57:51 AM
3	4.415	50uL	1	*******		6/7/2018 9:59:53 AM
4	4.312	50uL	1	*******		6/7/2018 10:01:56 AM

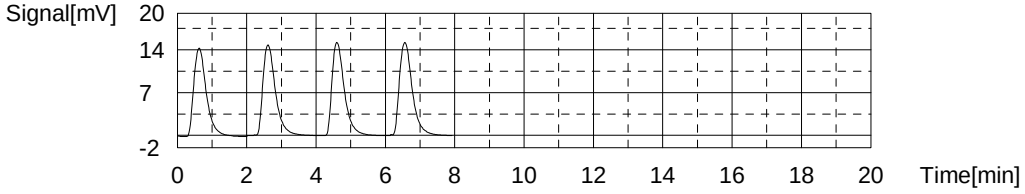
Acid Add. 1.500%
Sp. Time 600.0sec
Mean Area 4.038



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	37.22	50uL	1	*******		6/7/2018 10:18:43 AM
2	37.57	50uL	1	*******		6/7/2018 10:20:52 AM
3	38.16	50uL	1	*******		6/7/2018 10:22:56 AM
4	39.77	50uL	1	*******		6/7/2018 10:25:04 AM

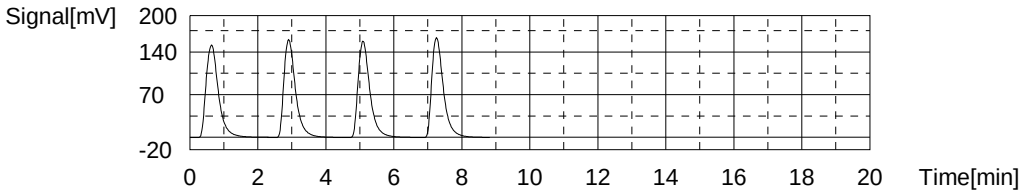
Acid Add. 1.500%
Sp. Time 600.0sec
Mean Area 38.18



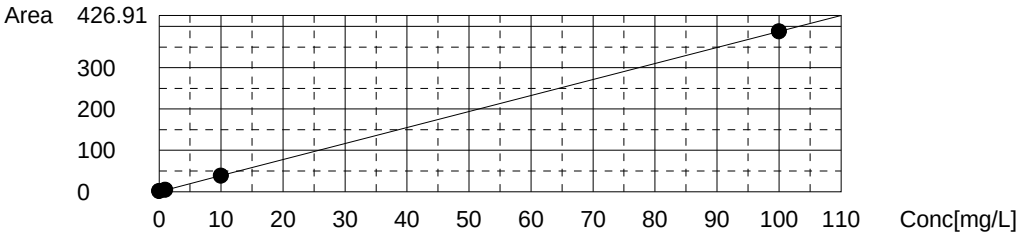
Conc: 100.0mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	387.2	50uL	1	*******		6/7/2018 10:42:08 AM
2	385.8	50uL	1	*******		6/7/2018 10:44:27 AM
3	385.7	50uL	1	*******		6/7/2018 10:46:47 AM
4	393.7	50uL	1	*******		6/7/2018 10:49:06 AM

Acid Add. 1.500%
Sp. Time 600.0sec
Mean Area 388.1



Slope: 3.876
Intercept 0.3717
r^2 1.0000
r 1.0000
Zero Shift No



Laboratory
Analyzer User

7/27/2018 16:49

Test: Sulfate

Sample Id	Result	Dil. 1 +	Response	Errors
CCV-SO4	20.1137	0.0	0.164	
CCB-SO4	-0.6132	0.0	0.014	
MB	-0.5298	0.0	0.014	
LCSSRM	19.4729	0.0	0.159	
460-161308-a-1	46.1797	0.0	0.351	R
460-161308-a-2	107.5354	0.0	0.745	R
460-161308-a-3	9.1387	0.0	0.073	
460-161308-a-4	27.1067	0.0	0.220	
460-161308-a-5	39.4604	0.0	0.308	
460-161308-a-6	115.9583	0.0	0.799	R
460-161308-a-7	166.9422	0.0	1.126	R
460-161308-a-8	0.1142	0.0	0.017	
CCV-SO4	19.9512	0.0	0.162	
CCB-SO4	-0.7188	0.0	0.013	
460-160839-d-1	50.8920	0.0	0.381	R
460-161092-g-5	14.8997	0.0	0.122	
CCV-SO4	19.9605	0.0	0.162	
CCB-SO4	-0.5927	0.0	0.014	
460-161308-a-1	45.9548	1.0	0.186	R
460-161308-a-2	135.2661	9.0	0.110	R
460-161308-a-6	128.9286	9.0	0.105	R
460-161308-a-7	221.4382	19.0	0.089	R
460-160839-d-1	58.0818	4.0	0.094	R
460-161308-A-3M	27.1616	0.0	0.220	
460-161308-A-3MS	27.7063	0.0	0.224	
CCV-SO4	20.0196	0.0	0.163	
CCB-SO4	-0.9369	0.0	0.012	
CCV-SO4	19.6396	0.0	0.160	
CCB-SO4	-1.2012	0.0	0.011	
MB	-1.2086	0.0	0.011	
LCSSRM	18.8643	0.0	0.154	
460-161255-a-1	153.5867	0.0	1.040	R
460-161255-a-2	50.9484	0.0	0.381	R
460-161255-a-3	23.4432	0.0	0.190	
460-161255-a-4	181.1698	0.0	1.217	R
460-161255-a-5	49.2038	0.0	0.370	R
460-161255-a-6	129.6524	0.0	0.887	R
460-161054-e-1	10.3184	0.0	0.083	
460-161054-e-4	11.7128	0.0	0.095	
CCV-SO4	19.0628	0.0	0.155	
CCB-SO4	-0.9167	0.0	0.012	
460-161307-a-1	43.7042	0.0	0.335	R
460-161307-a-2	125.4643	0.0	0.860	R
CCV-SO4	18.9475	0.0	0.154	
CCB-SO4	-1.0044	0.0	0.012	
460-161054-E-1M	28.7573	0.0	0.233	
460-161054-E-1MS	29.1299	0.0	0.236	
460-161255-a-1	168.7729	9.0	0.138	R
460-161255-a-2	50.3318	1.0	0.204	R
460-161255-a-4	240.7669	19.0	0.098	R
460-161255-a-5	47.9545	1.0	0.194	R
460-161255-a-6	144.5328	9.0	0.118	R
460-161307-a-1	44.3813	1.0	0.180	R
460-161307-a-2	138.1050	9.0	0.113	R
CCV-SO4	19.1434	0.0	0.156	
CCB-SO4	-1.0743	0.0	0.011	
CCV-SO4	19.3095	0.0	0.157	
CCB-SO4	-1.2254	0.0	0.011	

Laboratory
Analyzer User

7/27/2018 16:49

Test: Sulfate

Sample Id	Result	Dil. 1 +	Response	Errors
MB	-1.4202	0.0	0.010	
LCSSRM	18.5081	0.0	0.151	
460-161178-e-1	14.8976	0.0	0.122	
460-161178-e-2	21.9551	0.0	0.178	
460-161178-d-3	16.8556	0.0	0.138	
460-161178-e-4	15.5854	0.0	0.127	
460-160863-e-1	16.8694	0.0	0.138	
460-160863-e-2	33.5586	0.0	0.269	
460-161176-g-1	-2.0598	0.0	0.007	
460-161176-g-2	-0.8743	0.0	0.012	
CCV-SO4	19.4272	0.0	0.158	
CCB-SO4	-1.3305	0.0	0.010	
460-161277-k-12	17.9068	0.0	0.146	
460-160780-d-1	16.4873	0.0	0.135	
CCV-SO4	19.5177	0.0	0.159	
CCB-SO4	-1.5128	0.0	0.009	
CCV-SO4	19.1371	0.0	0.156	
CCB-SO4	-1.4376	0.0	0.010	
460-160780-D-1M	32.8633	0.0	0.264	
460-160780-D-1MS	33.1720	0.0	0.266	
CCV-SO4	19.4116	0.0	0.158	
CCB-SO4	-1.3985	0.0	0.010	

N	54
Mean	58.6223
SD	61.98710
CV%	105.74
Mean response	0.267
Response SD	0.2895
Response CV%	108.26

Laboratory
Analyzer User

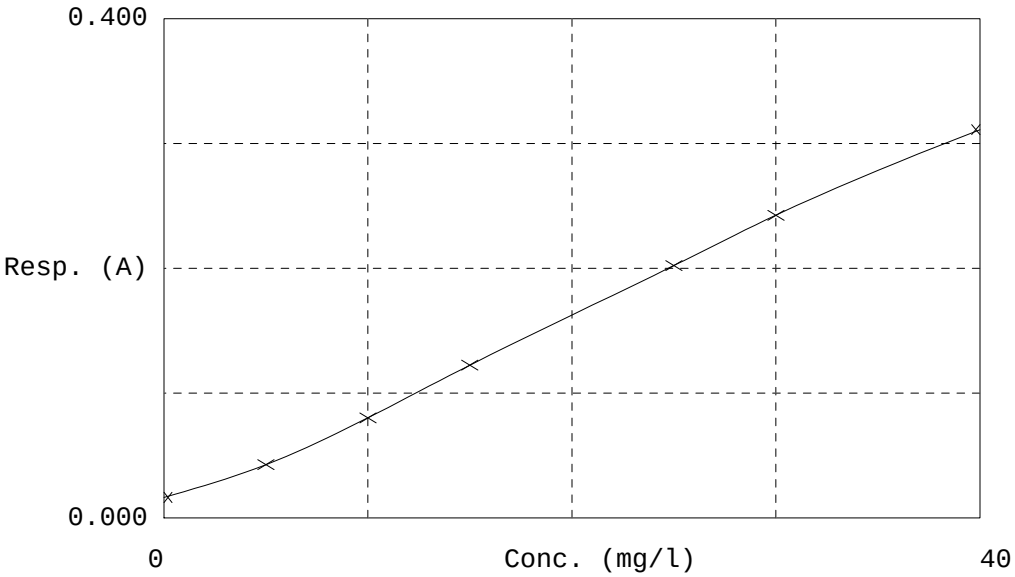
7/27/2018 16:50

Test Sulfate

Accepted 6/28/2018 14:15

Coeff. of det. 1.000000

Errors

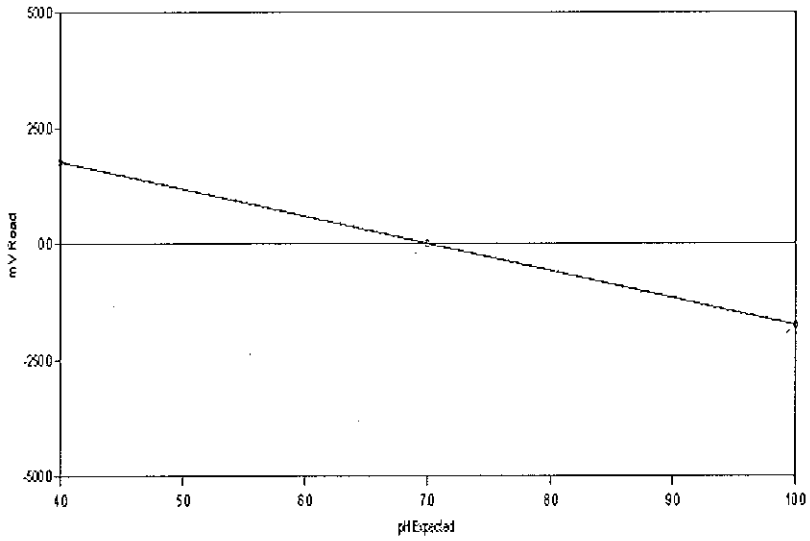


	Calibrator	Response	Calc. con.	Conc.	Errors
1	SO4-0	0.017	-0.00000	0.00000	
2	SO4-5.0	0.043	5.00000	5.00000	
3	SO4-10.0	0.080	10.00000	10.00000	
4	SO4-15.0	0.123	15.00000	15.00000	
5	SO4-25.0	0.202	25.00000	25.00000	
6	SO4-30.0	0.243	30.00000	30.00000	
7	SO4-40.0	0.311	40.00000	40.00000	

PC-TitratION PLUS

Calibration Report

Calibration Record # 1560



Calibration Settings

Calibration ID	PH CAL 4-7-10	Date	7/30/2018
Channel	1	Time	9:28 AM
Probe Type	pH	Temperature	295.37 K 22.22 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-58.897	CorrCoeff	1.0000
Intercept	1.787	Equation: Y = (-58.897) X + 1.787)	

Calibration Validity True Operator

	Result	Minimum	Maximum
Slope	-58.897	-65.00	-53.00
Intercept	1.787	-100.00	100.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified

Calibration Data	Standard	Reading
	4.00	178.58
	7.00	1.58
	10.00	-174.80

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TESTAMERICA- EDISON

Total Alkalinity (SM 2320B), Free Co2 (4500CO2-D)

Run Number 5676 **Order Number** 20180730-2

Job# Sample#	Analysis amt Batch#	RunDate	RunTime	Temp	pH	pH2	palk (mg/L) as CaCO3	talk (mg/L) as CaCO3	bcarb (mg/L) as CaCO3	carb (mg/L) as CaCO3	hydr (mg/L) as CaCO3	Free CO2 (mg/L) as CaCO3	(mL) H2S04 @ 8.3	(mL) H2S04 @ 4.5	(mL) H2S04 @ 4.2
Rinse	ALKALINITY 25ML	7/30/2018	10:49 AM	22.03	5.964	.00	0.000	32.350	32.350	0.000	0.000	70.212	0.000	0.789	0.911
MB	ALKALINITY 25ML	7/30/2018	10:56 AM	21.85	5.665	.00	0.000	0.417	0.417	0.000	0.000	1.804	0.000	0.055	0.100
LCSSRM	ALKALINITY 25ML	7/30/2018	11:04 AM	21.56	7.905	.00	0.000	54.333	54.333	0.000	0.000	1.353	0.000	1.325	1.390
460-161092-g-1	ALKALINITY 25ML	7/30/2018	11:12 AM	19.93	7.924	.00	0.000	81.689	81.689	0.000	0.000	1.944	0.000	1.992	2.050
460-161092-g-1 DU	ALKALINITY 25ML	7/30/2018	11:19 AM	19.63	7.946	.00	0.000	82.367	82.367	0.000	0.000	1.864	0.000	2.008	2.070
460-161092-g-2	ALKALINITY 25ML	7/30/2018	11:25 AM	20.07	7.060	.00	0.000	66.881	66.881	0.000	0.000	11.660	0.000	1.631	1.707
460-161092-g-4	ALKALINITY 25ML	7/30/2018	11:31 AM	20.19	6.398	.00	0.000	69.223	69.223	0.000	0.000	55.326	0.000	1.688	1.750
460-161092-g-3	ALKALINITY 25ML	7/30/2018	11:39 AM	19.72	6.521	.00	0.000	315.163	315.163	0.000	0.000	190.070	0.000	7.684	8.285
460-161092-j-5	ALKALINITY 25ML	7/30/2018	11:47 AM	19.61	6.556	.00	0.000	333.146	333.146	0.000	0.000	185.164	0.000	8.122	8.289
460-161054-d-1	ALKALINITY 25ML	7/30/2018	11:54 AM	19.84	6.774	.00	0.000	40.312	40.312	0.000	0.000	13.577	0.000	0.983	1.041
460-161054-d-1 DU	ALKALINITY 25ML	7/30/2018	12:00 PM	19.76	6.797	.00	0.000	40.370	40.370	0.000	0.000	12.899	0.000	0.984	1.039
460-161054-d-4	ALKALINITY 25ML	7/30/2018	12:07 PM	20.08	6.981	.00	0.000	67.707	67.707	0.000	0.000	14.160	0.000	1.651	1.705
460-161132-i-1	ALKALINITY 25ML	7/30/2018	12:14 PM	20.58	6.941	.00	0.000	271.089	271.089	0.000	0.000	62.102	0.000	6.609	6.739
460-161132-h-2	ALKALINITY 25ML	7/30/2018	12:21 PM	20.84	7.524	.00	0.000	115.585	115.585	0.000	0.000	6.918	0.000	2.818	2.884
460-161132-h-3	ALKALINITY 25ML	7/30/2018	12:29 PM	20.41	9.389	.00	23.874	85.208	37.459	47.749	0.000	0.031	0.582	2.077	2.163
460-161258-c-3	ALKALINITY 25ML	7/30/2018	12:37 PM	20.41	8.300	.00	0.000	62.608	62.608	0.000	0.000	0.627	0.000	1.526	1.592
460-161258-c-1	ALKALINITY 25ML	7/30/2018	12:45 PM	20.45	8.488	.00	2.764	62.634	57.105	5.528	0.000	0.371	0.067	1.527	1.590
460-161397-a-1	ALKALINITY 25ML	7/30/2018	12:53 PM	20.80	10.590	.00	34.235	44.983	0.000	21.496	23.487	0.000	0.835	1.097	1.184
460-161397-a-2	ALKALINITY 25ML	7/30/2018	1:03 PM	20.95	10.581	.00	34.420	45.297	0.000	21.755	23.542	0.000	0.839	1.104	1.201
460-161397-a-3	ALKALINITY 25ML	7/30/2018	1:12 PM	21.35	10.549	.00	32.512	43.478	0.000	21.933	21.546	0.000	0.793	1.060	1.155
460-161397-a-4	ALKALINITY 25ML	7/30/2018	1:20 PM	21.71	7.344	.00	0.000	29.378	29.378	0.000	0.000	2.662	0.000	0.716	0.781
460-161397-a-5	ALKALINITY 25ML	7/30/2018	1:28 PM	21.44	7.440	.00	0.000	29.762	29.762	0.000	0.000	2.163	0.000	0.726	0.795
460-161397-a-6	ALKALINITY 25ML	7/30/2018	1:35 PM	21.30	7.434	.00	0.000	30.003	30.003	0.000	0.000	2.210	0.000	0.731	0.793
460-161373-k-3	ALKALINITY 25ML	7/30/2018	1:42 PM	21.48	5.736	.00	0.000	14.163	14.163	0.000	0.000	52.001	0.000	0.392	0.438
MB	ALKALINITY 25ML	7/30/2018	1:48 PM	21.57	5.703	.00	0.000	0.229	0.229	0.000	0.000	0.908	0.000	0.050	0.095
LCSSRM	ALKALINITY 25ML	7/30/2018	1:56 PM	21.67	7.888	.00	0.000	54.157	54.157	0.000	0.000	1.402	0.000	1.320	1.382
460-161277-l-12	ALKALINITY 25ML	7/30/2018	2:02 PM	22.08	5.421	.00	0.000	4.300	4.300	0.000	0.000	32.597	0.000	0.158	0.212

PC-TitratION PLUS by Man-Tech Associates, Inc.

GENERAL RESULTS REPORT.SRW

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Run Number 5676 **Order Number** 20180730-2

Job# Sample#	Analysis amt Batch#	RunDate	RunTime	Temp	pH	pH2	palk (mg/L) as CaCO3	talk (mg/L) as CaCO3	bcarb (mg/L) as CaCO3	carb (mg/L) as CaCO3	hydr (mg/L) as CaCO3	Free CO2 (mg/L) as CaCO3	(mL) H2S04 @ 8.3	(mL) H2S04 @ 4.5	(mL) H2S04 @ 4.2
460-161277-I-12 DU	ALKALINITY 25ML	7/30/2018	2:09 PM	22.32	5.468	.00	0.000	4.024	4.024	0.000	0.000	27.387	0.000	0.154	0.2
460-161176-h-1	ALKALINITY 25ML	7/30/2018	2:16 PM	22.17	6.734	.00	0.000	191.989	191.989	0.000	0.000	70.842	0.000	4.681	5.213
460-161176-h-2	ALKALINITY 25ML	7/30/2018	2:23 PM	22.14	7.211	.00	0.000	213.205	213.205	0.000	0.000	26.250	0.000	5.198	5.288
460-161258-c-2	ALKALINITY 25ML	7/30/2018	2:29 PM	22.10	8.063	.00	0.000	61.926	61.926	0.000	0.000	1.071	0.000	1.510	1.562
460-160817-d-1-c	ALKALINITY 25ML	7/30/2018	2:37 PM	22.11	7.399	.00	0.000	49.467	49.467	0.000	0.000	3.946	0.000	1.206	1.273

07/31/2018

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Batch Number: 540990 Batch Start Date: 07/30/18 15:07 Batch Analyst: Tewira, Jovan X

Batch Method: 9060A_ASP Batch End Date: 07/31/18 08:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WTtocLCS 00045	WTtocSP1 00036	WTtocSP2 00033		
ICV 460-540990/1		9060A_ASP		50 mL			1.25 mL		
ICB 460-540990/2		9060A_ASP		50 mL					
MB 460-540990/3		9060A_ASP		50 mL					
LCSSRM 460-540990/4		9060A_ASP		50 mL	50 mL				
460-161054-F-1	GC-MW-101 (WG)	9060A_ASP	T	50 mL					
460-161054-F-1 MS	GC-MW-101 (WG)	9060A_ASP	T	50 mL		1.25 mL			
460-161054-F-1 MSD	GC-MW-101 (WG)	9060A_ASP	T	50 mL		1.25 mL			
460-161054-F-4	GC-MW-104 (WG)	9060A_ASP	T	50 mL					
CCV 460-540990/13		9060A_ASP		50 mL			1.25 mL		
CCB 460-540990/14		9060A_ASP		50 mL					

Batch Notes	
Acid ID	H2SO4: MACRON/186983
Batch Comment	T(1841-1844)-18 CAL exp: 09/07/18
Pipette/Syringe/Dispenser ID	P-72 CAL: 07/19/18 exp: 10/19/18

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Batch Number: 540298 Batch Start Date: 07/27/18 14:04 Batch Analyst: Vu, Huan

Batch Method: D516-90, 02 Batch End Date: 07/27/18 17:09

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WT-SO4SP1 00005	WT-SO4SS1 00004	WTsfateLCS 00045		
ICV 460-540298/1		D516-90, 02		100 mL		2 mL			
CCV 460-540298/28		D516-90, 02		100 mL		2 mL			
LCSSRM 460-540298/31		D516-90, 02					2 mL		
CCV 460-540298/40		D516-90, 02		100 mL		2 mL			
CCV 460-540298/44		D516-90, 02		100 mL		2 mL			
460-161054-E-1 MS	GC-MW-101 (WG)	D516-90, 02	T	50 mL	1 mL				
460-161054-E-1 MSD	GC-MW-101 (WG)	D516-90, 02	T	50 mL	1 mL				
CCV 460-540298/55		D516-90, 02		100 mL		2 mL			

Batch Notes	
Batch Comment	A(0999-1005)-18 CAL / A(1006)-18 CCV exp:07/28/18
Conditioning Reagent ID	C-6129-18 exp:10/11/18

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Batch Number: 540834 Batch Start Date: 07/30/18 10:49 Batch Analyst: Mariani, Paul H

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	WTalkLCS 00142				
MB 460-540834/2		SM 2320B		InitialAmount is blank					
LCSSRM 460-540834/3		SM 2320B		InitialAmount is blank	25 mL				
460-161054-D-1	GC-MW-101 (WG)	SM 2320B	T	InitialAmount is blank					
460-161054-D-1 DU	GC-MW-101 (WG)	SM 2320B	T	InitialAmount is blank					
460-161054-D-4	GC-MW-104 (WG)	SM 2320B	T	InitialAmount is blank					

Batch Notes	
Acid ID	Hach/A 8081 exp: 1/20
pH Buffer 1 ID	PH:4.01 Orion/WX2 exp 3/20
pH Buffer 2 ID	PH=7.00 Fisher/178054 exp 11/19
pH Buffer 3 ID	PH=10.00 Fisher/178053 exp 11/19
Sodium Carbonate ID	Exp: 8/19/18
Nominal Amount Used	25 mL
Normality of First Titrant	0.205086 N
Titrant Standardization Date	07/19/2018

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Batch Number: 539612 Batch Start Date: 07/25/18 15:49 Batch Analyst: Vu, Huan

Batch Method: SM 2540C Batch End Date: 07/26/18 13:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Conductivity	CrucibleID	TareWeight	InitialAmount	Weight1	Weight2
MB 460-539612/1		SM 2540C			QA	65.0538 g	100 mL	65.0538 g	65.0538 g
LCSSRM 460-539612/2		SM 2540C			QJ	65.8691 g	100 mL	65.9203 g	65.9208 g
460-161054-G-4	GC-MW-104 (WG)	SM 2540C	T	1024 umhos/cm	T3	64.1545 g	50 mL	64.1929 g	64.1924 g
460-161054-G-4 DU	GC-MW-104 (WG)	SM 2540C	T		TL	64.8634 g	50 mL	64.9014 g	64.9020 g
460-161054-G-1	GC-MW-101 (WG)	SM 2540C	T	432 umhos/cm	DR	65.6139 g	100 mL	65.6437 g	65.6439 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Weight3	WeightOne%Diff	WeightTwo%Diff	Weight4OK	Residue	Residue2
MB 460-539612/1		SM 2540C		65.0540 g	Pass No Unit	Pass No Unit	N/A	0 g	0 g
LCSSRM 460-539612/2		SM 2540C		65.9212 g	Pass No Unit	Pass No Unit	N/A	0.0512 g	0.0517 g
460-161054-G-4	GC-MW-104 (WG)	SM 2540C	T	0 g	Pass No Unit	N/A No Unit	N/A	0.0384 g	0.0379 g
460-161054-G-4 DU	GC-MW-104 (WG)	SM 2540C	T	64.9021 g	Fail >0.5mg No Unit	Pass No Unit	N/A	0.038 g	0.0386 g
460-161054-G-1	GC-MW-101 (WG)	SM 2540C	T	0 g	Pass No Unit	N/A No Unit	N/A	0.0298 g	0.03 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue3	Residue4	FinalAmount	CalcMsg	WTtdsLCS 00111	
MB 460-539612/1		SM 2540C		0.0002 g	N/A g	100 mL	OK		
LCSSRM 460-539612/2		SM 2540C		0.0521 g	N/A g	100 mL	OK	100 mL	
460-161054-G-4	GC-MW-104 (WG)	SM 2540C	T	N/A g	N/A g	100 mL	OK		
460-161054-G-4 DU	GC-MW-104 (WG)	SM 2540C	T	0.0387 g	N/A g	100 mL	OK		
460-161054-G-1	GC-MW-101 (WG)	SM 2540C	T	N/A g	N/A g	100 mL	OK		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Batch Number: 539612 Batch Start Date: 07/25/18 15:49 Batch Analyst: Vu, Huan

Batch Method: SM 2540C Batch End Date: 07/26/18 13:45

Batch Notes	
Balance ID	27
Date/Time - In - CW (WT2)	07/26/2018 09:35
Date/Time - Out - CW (WT2)	07/26/2018 10:36
Temperature - Start - CW (WT2) - Correct	180C Celsius
Temperature - End - CW (WT2) - Correct	180C Celsius
Temperature - Start-CW(WT2) -Uncorrected	179C0 Celsius
Temperature - End-CW(WT2) -Uncorrected	179C Celsius
Date/Time - In - CW (WT3)	07/26/2018 12:15
Date/Time - Out - CW (WT3)	07/26/2018 13:20
Temperature - Start - CW (WT3) - Correct	180C Celsius
Temperature - End - CW (WT3) - Correct	180C Celsius
Temperature - Start-CW(WT3) -Uncorrected	179C Celsius
Temperature - End-CW(WT3) -Uncorrected	179C Celsius
Temperature - Start - Corrected	104 Celsius
Temperature - End - Corrected	104 Celsius
Date/Time - In	07/25/2018 15:49
Date/Time - Out	07/26/2018 07:00
Filter ID	Whatman/1541080
Nominal Amount Used	100 mL
Oven ID	TSS A
Thermometer ID	104-6407482
Temperature - Start - Uncorrected	103 Celsius
Temperature - End - Uncorrected	103 Celsius
Weight(WT1) Start Date/Time	07/26/2018 07:05 No Unit
Weight(WT1) Date/Time Out	07/26/2018 08:35
Weight(WT1) Start Temp	180C Celsius
Weight(WT1) Temp Out	180C Celsius
Uncorrected Weight(WT1) Start Temp	179C Celsius
Uncorrected Weight(WT1) Temp Out	179C Celsius

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161054-1

SDG No.:

Batch Number: 539612 Batch Start Date: 07/25/18 15:49 Batch Analyst: Vu, Huan

Batch Method: SM 2540C Batch End Date: 07/26/18 13:45

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

7/23/18

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817-2859
phone 732.549.3900 fax 732.549.3679

Chain of Custo
NYSC
460501

460-161054 Chain of Custody

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TestAmerica Laboratories, Inc.

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☑

Client Contact	Project Manager: Lindsay O'Hara	Site Contact: Sanjay Sharma	Date: 7-23-18	COC No:
TRC Engineers, Inc.	Tel/Fax: 203-278-5305	Lab Contact: Jannel Franklin	Carrier:	01 of 01 COCs
1430 Broadway, 10th Floor	Analysis Turnaround Time			Sampler:
New York, New York 10024	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
212-221-7822	TAT if different from Below Standard			Walk-in Client:
FAX 212-2217840	☑ 2 weeks			Lab Sampling:
Project Name: Gem Cleaners	☐ 1 week			
Site: 84 N Village Avenue, Rockville Centre, NY	☐ 2 days			Job / SDG No.:
PO#: 120097; Project No. 279191.0000.0000 Phase 2	☐ 1 day			161054

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TCL VOCs+10	Alkalinity	Sulfate	Total Dissolved Solids	Total Organic Carbon	Sample Specific Notes:
GC-MW-101 (WG)	7-23-18	0930	G	GW	7	-	-	x	x	x	x	x	1
GC-MW-102 (WG)		1045	G	GW	3	-	-	x					2
GC-MW-103 (WG)		1130	G	GW	3	-	-	x					3
GC-MW-104 (WG)		1220	G	GW	7	-	-	x	x	x	x	x	4
GC-MW-105 (WG)		1310	G	GW	3	-	-	x					5
GC-MW-106 (WG)		0925	G	GW	3	-	-	x					6
GC-EQUIPMENT BLANK (072318)		0915	AQ	AQ	2	-	-	x					7
GC-TB (072318)	↓	—	AQ	AQ	3	-	-	x					8

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Please provide Category B Deliverable Data packages, EDD in EQUIS format, and EDD with tabulated results in mg/kg with RLs shown.
NYSDEC Project. 1 Ind Batch & Samples on 7-24-18

Custody Seals Intact: ☐ Yes ☑ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:
Relinquished by:	Company: TRC	Date/Time: 7/23/18 1345	Received by:	Company:	Date/Time: 7/23/18 1341
Relinquished by:	Company: TRC	Date/Time: 7/23/18 1600	Received by:	Company: TAEdi 7/23/18	Date/Time: 1940
Relinquished by:	Company: TAEdi	Date/Time: 7/23/18 19:45	Received in Laboratory by:	Company: TAEdi	Date/Time: 7/23/18 1945

Form No. CA-C-WI-002, Rev. 4.15, dated 9/27/2017

3.2 / 3.0 TRC, 11 Nec

07/31/2018

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TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 161064

Number of Coolers: 1 IR Gun # 14

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3.0 °C	3.2 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1											<2				
4											<2				

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 7/23/18

07/31/2018

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-161054-1

Login Number: 161054
List Number: 1
Creator: Pinilla, Angela C

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	N/A	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	N/A	
Samples are received within Holding Time (excluding tests with immediate HTs)	N/A	
Sample containers have legible labels.	N/A	
Containers are not broken or leaking.	N/A	
Sample collection date/times are provided.	N/A	
Appropriate sample containers are used.	N/A	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	True	No analysis requiring residual chlorine check assigned.

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ANALYTICAL REPORT

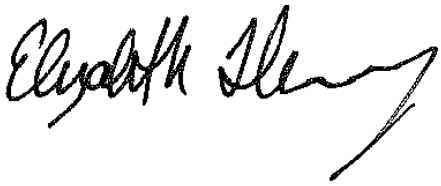
Job Number: 460-161178-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Emily Ebert



Approved for release.
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8/7/2018 11:51 AM

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08/07/2018

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 460-161178-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 7/25/2018 7:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples GC-MW-107 (WG) (460-161178-1), GC-MW-108 (WG) (460-161178-2), GC-MW-109 (WG) (460-161178-3), GC-MW-109M (WG) (460-161178-4), GC-MW-110 (WG) (460-161178-5), GC-Equipment Blank (072418) (460-161178-6) and GC-TB (072418) (460-161178-7) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 07/28/2018 and 08/06/2018.

The continuing calibration verification (CCV) analyzed in batch 460-540359 was outside the method criteria for the following analyte(s): 1,2-Dibromo-3-Chloropropane. The minimum response factor for 1,2-Dibromo-3-Chloropropane was below required control limit. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-542406 was outside the method criteria for the following analytes: Dichlorodifluoromethane (biased low) and Carbon tetrachloride, Bromoform, Chloromethane and Methyl acetate (biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-542406 recovered outside control limits for the following analytes: Chlorodibromomethane and Bromoform. These analytes were biased high in the LCS/LCSD; the data have been flagged and reported.

2-Butanone (MEK), Bromoform and Chlorodibromomethane failed the recovery criteria high for LCS 460-542406/30. 2-Butanone (MEK), Bromoform, Chlorodibromomethane and Methyl acetate failed the recovery criteria high for LCSD 460-542406/31. Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY
Samples GC-MW-107 (WG) (460-161178-1), GC-MW-108 (WG) (460-161178-2), GC-MW-109 (WG) (460-161178-3) and GC-MW-109M (WG) (460-161178-4) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 07/31/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL DISSOLVED SOLIDS
Samples GC-MW-107 (WG) (460-161178-1), GC-MW-108 (WG) (460-161178-2), GC-MW-109 (WG) (460-161178-3) and GC-MW-109M (WG) (460-161178-4) were analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 07/26/2018.

No difficulties were encountered during the TDS analysis.

All quality control parameters were within the acceptance limits.

TOTAL ORGANIC CARBON
Samples GC-MW-107 (WG) (460-161178-1), GC-MW-108 (WG) (460-161178-2), GC-MW-109 (WG) (460-161178-3) and GC-MW-109M (WG) (460-161178-4) were analyzed for Total Organic Carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 07/30/2018.

No difficulties were encountered during the TOC analysis.

All quality control parameters were within the acceptance limits.

SULFATE
Samples GC-MW-107 (WG) (460-161178-1), GC-MW-108 (WG) (460-161178-2), GC-MW-109 (WG) (460-161178-3) and GC-MW-109M (WG) (460-161178-4) were analyzed for sulfate in accordance with ASTM Method D516-90. The samples were analyzed on 07/27/2018.

No difficulties were encountered during the sulfate analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161178-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-161178-1	GC-MW-107 (WG)	Water	07/24/18 07:45	07/25/18 19:05
460-161178-2	GC-MW-108 (WG)	Water	07/24/18 08:50	07/25/18 19:05
460-161178-3	GC-MW-109 (WG)	Water	07/24/18 09:50	07/25/18 19:05
460-161178-4	GC-MW-109M (WG)	Water	07/24/18 10:50	07/25/18 19:05
460-161178-5	GC-MW-110 (WG)	Water	07/24/18 11:40	07/25/18 19:05
460-161178-6	GC-Equipment Blank (072418)	Water	07/24/18 07:00	07/25/18 19:05
460-161178-7	GC-TB (072418)	Water	07/24/18 00:00	07/25/18 19:05

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161178-1

Client Sample ID: GC-MW-107 (WG) — Lab Sample ID: 460-161178-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	9.2		1.0	0.25	ug/L	1		8260C	Total/NA
Total Organic Carbon	0.86	J	1.0	0.34	mg/L	1		9060A_ASP	Total/NA
Sulfate	14.9		5.0	1.4	mg/L	1		D516-90, 02	Total/NA
Bicarbonate Alkalinity as CaCO3	64.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	64.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	598		20.0	20.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: GC-MW-108 (WG) — Lab Sample ID: 460-161178-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	6.0		1.0	0.25	ug/L	1		8260C	Total/NA
Total Organic Carbon	0.78	J	1.0	0.34	mg/L	1		9060A_ASP	Total/NA
Sulfate	22.0		5.0	1.4	mg/L	1		D516-90, 02	Total/NA
Bicarbonate Alkalinity as CaCO3	66.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	66.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	904		40.0	40.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: GC-MW-109 (WG) — Lab Sample ID: 460-161178-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	3.1		1.0	0.25	ug/L	1		8260C	Total/NA
Total Organic Carbon	0.74	J	1.0	0.34	mg/L	1		9060A_ASP	Total/NA
Sulfate	16.9		5.0	1.4	mg/L	1		D516-90, 02	Total/NA
Bicarbonate Alkalinity as CaCO3	56.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	56.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	908		20.0	20.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: GC-MW-109M (WG) — Lab Sample ID: 460-161178-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	16		1.0	0.25	ug/L	1		8260C	Total/NA
Total Organic Carbon	0.43	J	1.0	0.34	mg/L	1		9060A_ASP	Total/NA
Sulfate	15.6		5.0	1.4	mg/L	1		D516-90, 02	Total/NA
Bicarbonate Alkalinity as CaCO3	47.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	47.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	746		20.0	20.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: GC-MW-110 (WG) — Lab Sample ID: 460-161178-5

No Detections.

Client Sample ID: GC-Equipment Blank (072418) — Lab Sample ID: 460-161178-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	10		5.0	1.9	ug/L	1		8260C	Total/NA
Ethylbenzene	0.49	J	1.0	0.30	ug/L	1		8260C	Total/NA
Methylene Chloride	0.54	J	1.0	0.32	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	1.9		1.0	0.30	ug/L	1		8260C	Total/NA
o-Xylene	0.77	J	1.0	0.36	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161178-1

Client Sample ID: GC-TB (072418)

Lab Sample ID: 460-161178-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	16	*	5.0	1.9	ug/L	1		8260C	Total/NA
Ethylbenzene	0.43	J	1.0	0.30	ug/L	1		8260C	Total/NA
Methylene Chloride	0.60	J	1.0	0.32	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.0		1.0	0.30	ug/L	1		8260C	Total/NA
o-Xylene	0.81	J	1.0	0.36	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161178-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
9060A_ASP	Organic Carbon, Total (TOC)	SW846	TAL EDI
D516-90, 02	Sulfate	ASTM	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

ASTM = ASTM International

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: GC-MW-107 (WG)

Date Collected: 07/24/18 07:45
Date Received: 07/25/18 19:05

Lab Sample ID: 460-161178-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 14:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 14:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 14:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 14:00	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 14:00	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 14:00	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 14:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 14:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 14:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 14:00	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 14:00	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 14:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 14:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 14:00	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 14:00	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 14:00	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 14:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 14:00	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 14:00	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 14:00	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 14:00	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 14:00	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 14:00	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 14:00	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 14:00	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 14:00	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 14:00	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 14:00	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 14:00	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 14:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 14:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 14:00	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 14:00	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 14:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 14:00	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 14:00	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 14:00	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 14:00	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 14:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 14:00	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 14:00	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 14:00	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 14:00	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 14:00	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 14:00	1
Tetrachloroethene	**9.2**		1.0	0.25	ug/L			07/28/18 14:00	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 14:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 14:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 14:00	1

Client Sample ID: GC-MW-107 (WG)

Lab Sample ID: 460-161178-1

Date Collected: 07/24/18 07:45

Matrix: Water

Date Received: 07/25/18 19:05

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 14:00	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 14:00	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 14:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 14:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*74 - 132*		*07/28/18 14:00*	*1*
4-Bromofluorobenzene	*95*		*77 - 124*		*07/28/18 14:00*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*07/28/18 14:00*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/28/18 14:00*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.86**	**J**	1.0	0.34	mg/L			07/30/18 18:33	1
Sulfate	**14.9**		5.0	1.4	mg/L			07/27/18 15:56	1
Bicarbonate Alkalinity as CaCO3	**64.4**		5.0	5.0	mg/L			07/31/18 11:28	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/31/18 11:28	1
Alkalinity	**64.4**		5.0	5.0	mg/L			07/31/18 11:28	1
Hydroxide Alkalinity	5.0	U	5.0	5.0	mg/L			07/31/18 11:28	1
Total Dissolved Solids	**598**		20.0	20.0	mg/L			07/26/18 11:01	1

Client Sample ID: GC-MW-108 (WG)

Lab Sample ID: 460-161178-2

Date Collected: 07/24/18 08:50

Matrix: Water

Date Received: 07/25/18 19:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 14:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 14:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 14:22	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 14:22	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 14:22	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 14:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 14:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 14:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 14:22	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 14:22	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 14:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 14:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 14:22	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 14:22	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 14:22	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 14:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 14:22	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 14:22	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 14:22	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 14:22	1

Client Sample ID: GC-MW-108 (WG)

Date Collected: 07/24/18 08:50
Date Received: 07/25/18 19:05

Lab Sample ID: 460-161178-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 14:22	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 14:22	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 14:22	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 14:22	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 14:22	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 14:22	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 14:22	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 14:22	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 14:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 14:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 14:22	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 14:22	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 14:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 14:22	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 14:22	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 14:22	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 14:22	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 14:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 14:22	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 14:22	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 14:22	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 14:22	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 14:22	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 14:22	1
Tetrachloroethene	**6.0**		1.0	0.25	ug/L			07/28/18 14:22	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 14:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 14:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 14:22	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 14:22	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 14:22	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 14:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 14:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*74 - 132*		*07/28/18 14:22*	*1*
4-Bromofluorobenzene	*97*		*77 - 124*		*07/28/18 14:22*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 131*		*07/28/18 14:22*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/28/18 14:22*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.78**	**J**	1.0	0.34	mg/L			07/30/18 18:56	1
Sulfate	**22.0**		5.0	1.4	mg/L			07/27/18 15:56	1
Bicarbonate Alkalinity as CaCO3	**66.3**		5.0	5.0	mg/L			07/31/18 11:21	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/31/18 11:21	1
Alkalinity	**66.3**		5.0	5.0	mg/L			07/31/18 11:21	1
Hydroxide Alkalinity	5.0	U	5.0	5.0	mg/L			07/31/18 11:21	1
Total Dissolved Solids	**904**		40.0	40.0	mg/L			07/26/18 11:01	1

Client Sample ID: GC-MW-109 (WG)

Date Collected: 07/24/18 09:50
Date Received: 07/25/18 19:05

Lab Sample ID: 460-161178-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 14:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 14:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 14:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 14:44	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 14:44	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 14:44	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 14:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 14:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 14:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 14:44	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 14:44	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 14:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 14:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 14:44	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 14:44	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 14:44	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 14:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 14:44	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 14:44	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 14:44	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 14:44	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 14:44	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 14:44	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 14:44	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 14:44	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 14:44	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 14:44	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 14:44	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 14:44	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 14:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 14:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 14:44	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 14:44	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 14:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 14:44	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 14:44	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 14:44	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 14:44	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 14:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 14:44	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 14:44	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 14:44	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 14:44	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 14:44	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 14:44	1
Tetrachloroethene	**3.1**		1.0	0.25	ug/L			07/28/18 14:44	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 14:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 14:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 14:44	1

Client Sample ID: GC-MW-109 (WG)

Date Collected: 07/24/18 09:50
Date Received: 07/25/18 19:05

Lab Sample ID: 460-161178-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 14:44	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 14:44	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 14:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 14:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*74 - 132*		*07/28/18 14:44*	*1*
4-Bromofluorobenzene	*96*		*77 - 124*		*07/28/18 14:44*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*07/28/18 14:44*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/28/18 14:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.74**	**J**	1.0	0.34	mg/L			07/30/18 19:19	1
Sulfate	**16.9**		5.0	1.4	mg/L			07/27/18 15:56	1
Bicarbonate Alkalinity as CaCO3	**56.8**		5.0	5.0	mg/L			07/31/18 11:14	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/31/18 11:14	1
Alkalinity	**56.8**		5.0	5.0	mg/L			07/31/18 11:14	1
Hydroxide Alkalinity	5.0	U	5.0	5.0	mg/L			07/31/18 11:14	1
Total Dissolved Solids	**908**		20.0	20.0	mg/L			07/26/18 11:01	1

Client Sample ID: GC-MW-109M (WG)

Date Collected: 07/24/18 10:50
Date Received: 07/25/18 19:05

Lab Sample ID: 460-161178-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 13:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 13:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 13:37	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 13:37	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 13:37	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 13:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 13:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 13:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 13:37	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 13:37	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 13:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 13:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 13:37	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 13:37	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 13:37	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 13:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 13:37	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 13:37	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 13:37	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 13:37	1

Client Sample ID: GC-MW-109M (WG)

Date Collected: 07/24/18 10:50
Date Received: 07/25/18 19:05

Lab Sample ID: 460-161178-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 13:37	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 13:37	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 13:37	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 13:37	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 13:37	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 13:37	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 13:37	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 13:37	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 13:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 13:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 13:37	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 13:37	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 13:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 13:37	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 13:37	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 13:37	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 13:37	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 13:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 13:37	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 13:37	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 13:37	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 13:37	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 13:37	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 13:37	1
Tetrachloroethene	**16**		1.0	0.25	ug/L			07/28/18 13:37	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 13:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 13:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 13:37	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 13:37	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 13:37	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 13:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 13:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*74 - 132*		*07/28/18 13:37*	*1*
4-Bromofluorobenzene	*97*		*77 - 124*		*07/28/18 13:37*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*07/28/18 13:37*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/28/18 13:37*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.43**	**J**	1.0	0.34	mg/L			07/30/18 20:28	1
Sulfate	**15.6**		5.0	1.4	mg/L			07/27/18 15:56	1
Bicarbonate Alkalinity as CaCO3	**47.8**		5.0	5.0	mg/L			07/31/18 11:01	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/31/18 11:01	1
Alkalinity	**47.8**		5.0	5.0	mg/L			07/31/18 11:01	1
Hydroxide Alkalinity	5.0	U	5.0	5.0	mg/L			07/31/18 11:01	1
Total Dissolved Solids	**746**		20.0	20.0	mg/L			07/26/18 11:01	1

Client Sample ID: GC-MW-110 (WG)

Date Collected: 07/24/18 11:40
Date Received: 07/25/18 19:05

Lab Sample ID: 460-161178-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 15:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 15:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 15:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 15:06	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 15:06	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 15:06	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 15:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 15:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 15:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 15:06	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 15:06	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 15:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 15:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 15:06	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 15:06	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 15:06	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 15:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 15:06	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 15:06	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 15:06	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 15:06	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 15:06	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 15:06	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 15:06	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 15:06	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 15:06	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 15:06	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 15:06	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 15:06	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 15:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 15:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 15:06	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 15:06	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 15:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 15:06	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 15:06	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 15:06	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 15:06	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 15:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 15:06	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 15:06	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 15:06	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 15:06	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 15:06	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 15:06	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/28/18 15:06	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 15:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 15:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 15:06	1

Client Sample ID: GC-MW-110 (WG)

Lab Sample ID: 460-161178-5

Date Collected: 07/24/18 11:40
Matrix: Water
Date Received: 07/25/18 19:05

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 15:06	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 15:06	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 15:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 15:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*74 - 132*		*07/28/18 15:06*	*1*
4-Bromofluorobenzene	*97*		*77 - 124*		*07/28/18 15:06*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*07/28/18 15:06*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/28/18 15:06*	*1*

Client Sample ID: GC-Equipment Blank (072418)

Lab Sample ID: 460-161178-6

Date Collected: 07/24/18 07:00
Matrix: Water
Date Received: 07/25/18 19:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 13:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 13:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 13:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 13:15	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 13:15	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 13:15	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 13:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 13:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 13:15	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 13:15	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 13:15	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 13:15	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 13:15	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 13:15	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 13:15	1
2-Butanone (MEK)	**10**		5.0	1.9	ug/L			07/28/18 13:15	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 13:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 13:15	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 13:15	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 13:15	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 13:15	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 13:15	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 13:15	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 13:15	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 13:15	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 13:15	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 13:15	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 13:15	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 13:15	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 13:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 13:15	1

Client Sample ID: GC-Equipment Blank (072418)

Lab Sample ID: 460-161178-6

Date Collected: 07/24/18 07:00
Matrix: Water
Date Received: 07/25/18 19:05

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 13:15	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 13:15	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 13:15	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 13:15	1
Ethylbenzene	**0.49**	**J**	1.0	0.30	ug/L			07/28/18 13:15	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 13:15	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 13:15	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 13:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 13:15	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 13:15	1
Methylene Chloride	**0.54**	**J**	1.0	0.32	ug/L			07/28/18 13:15	1
m-Xylene & p-Xylene	**1.9**		1.0	0.30	ug/L			07/28/18 13:15	1
o-Xylene	**0.77**	**J**	1.0	0.36	ug/L			07/28/18 13:15	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 13:15	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/28/18 13:15	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 13:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 13:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 13:15	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 13:15	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 13:15	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 13:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/28/18 13:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*74 - 132*		*07/28/18 13:15*	*1*
4-Bromofluorobenzene	*96*		*77 - 124*		*07/28/18 13:15*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*07/28/18 13:15*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/28/18 13:15*	*1*

Client Sample ID: GC-TB (072418)

Lab Sample ID: 460-161178-7

Date Collected: 07/24/18 00:00
Matrix: Water
Date Received: 07/25/18 19:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/06/18 10:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			08/06/18 10:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			08/06/18 10:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			08/06/18 10:04	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			08/06/18 10:04	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			08/06/18 10:04	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			08/06/18 10:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			08/06/18 10:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			08/06/18 10:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/06/18 10:04	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/06/18 10:04	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			08/06/18 10:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			08/06/18 10:04	1

Client Sample ID: GC-TB (072418)

Date Collected: 07/24/18 00:00
Date Received: 07/25/18 19:05

Lab Sample ID: 460-161178-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			08/06/18 10:04	1
1,4-Dioxane	50	U	50	28	ug/L			08/06/18 10:04	1
2-Butanone (MEK)	**16**	*	5.0	1.9	ug/L			08/06/18 10:04	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			08/06/18 10:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			08/06/18 10:04	1
Acetone	5.0	U	5.0	5.0	ug/L			08/06/18 10:04	1
Benzene	1.0	U	1.0	0.43	ug/L			08/06/18 10:04	1
Bromoform	1.0	U *	1.0	0.54	ug/L			08/06/18 10:04	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/06/18 10:04	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			08/06/18 10:04	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			08/06/18 10:04	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			08/06/18 10:04	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			08/06/18 10:04	1
Chlorodibromomethane	1.0	U *	1.0	0.28	ug/L			08/06/18 10:04	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/06/18 10:04	1
Chloroform	1.0	U	1.0	0.33	ug/L			08/06/18 10:04	1
Chloromethane	1.0	U	1.0	0.14	ug/L			08/06/18 10:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			08/06/18 10:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			08/06/18 10:04	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			08/06/18 10:04	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			08/06/18 10:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			08/06/18 10:04	1
Ethylbenzene	**0.43**	**J**	1.0	0.30	ug/L			08/06/18 10:04	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			08/06/18 10:04	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			08/06/18 10:04	1
Methyl acetate	5.0	U *	5.0	0.31	ug/L			08/06/18 10:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			08/06/18 10:04	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			08/06/18 10:04	1
Methylene Chloride	**0.60**	**J**	1.0	0.32	ug/L			08/06/18 10:04	1
m-Xylene & p-Xylene	**2.0**		1.0	0.30	ug/L			08/06/18 10:04	1
o-Xylene	**0.81**	**J**	1.0	0.36	ug/L			08/06/18 10:04	1
Styrene	1.0	U	1.0	0.42	ug/L			08/06/18 10:04	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			08/06/18 10:04	1
Toluene	1.0	U	1.0	0.38	ug/L			08/06/18 10:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			08/06/18 10:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			08/06/18 10:04	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			08/06/18 10:04	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			08/06/18 10:04	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			08/06/18 10:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/06/18 10:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*74 - 132*		*08/06/18 10:04*	*1*
4-Bromofluorobenzene	*118*		*77 - 124*		*08/06/18 10:04*	*1*
Dibromofluoromethane (Surr)	*100*		*72 - 131*		*08/06/18 10:04*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*08/06/18 10:04*	*1*

Surrogate Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161178-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(74-132)	(77-124)	(72-131)	(80-120)
460-161178-1	GC-MW-107 (WG)	94	95	97	100
460-161178-2	GC-MW-108 (WG)	97	97	96	103
460-161178-3	GC-MW-109 (WG)	95	96	99	103
460-161178-4	GC-MW-109M (WG)	95	97	97	103
460-161178-4 MS	GC-MW-109M (WG)	90	101	96	103
460-161178-4 MSD	GC-MW-109M (WG)	88	100	92	100
460-161178-5	GC-MW-110 (WG)	95	97	99	103
460-161178-6	GC-Equipment Blank (072418)	96	96	95	102
460-161178-7	GC-TB (072418)	86	118	100	101
LCS 460-540359/4	Lab Control Sample	89	101	95	99
LCS 460-542406/30	Lab Control Sample	89	113	104	100
LCSD 460-542406/31	Lab Control Sample Dup	87	116	104	102
MB 460-540359/8	Method Blank	97	98	98	100
MB 460-542406/32	Method Blank	88	116	103	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-540359/8
Matrix: Water
Analysis Batch: 540359

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			07/28/18 07:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			07/28/18 07:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/28/18 07:18	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 07:18	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			07/28/18 07:18	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			07/28/18 07:18	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			07/28/18 07:18	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			07/28/18 07:18	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			07/28/18 07:18	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			07/28/18 07:18	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			07/28/18 07:18	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			07/28/18 07:18	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			07/28/18 07:18	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			07/28/18 07:18	1
1,4-Dioxane	50	U	50	28	ug/L			07/28/18 07:18	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			07/28/18 07:18	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			07/28/18 07:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			07/28/18 07:18	1
Acetone	5.0	U	5.0	5.0	ug/L			07/28/18 07:18	1
Benzene	1.0	U	1.0	0.43	ug/L			07/28/18 07:18	1
Bromoform	1.0	U	1.0	0.54	ug/L			07/28/18 07:18	1
Bromomethane	1.0	U	1.0	1.0	ug/L			07/28/18 07:18	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			07/28/18 07:18	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			07/28/18 07:18	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			07/28/18 07:18	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			07/28/18 07:18	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			07/28/18 07:18	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/28/18 07:18	1
Chloroform	1.0	U	1.0	0.33	ug/L			07/28/18 07:18	1
Chloromethane	1.0	U	1.0	0.14	ug/L			07/28/18 07:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			07/28/18 07:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			07/28/18 07:18	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			07/28/18 07:18	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			07/28/18 07:18	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			07/28/18 07:18	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			07/28/18 07:18	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			07/28/18 07:18	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			07/28/18 07:18	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			07/28/18 07:18	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			07/28/18 07:18	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			07/28/18 07:18	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			07/28/18 07:18	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			07/28/18 07:18	1
o-Xylene	1.0	U	1.0	0.36	ug/L			07/28/18 07:18	1
Styrene	1.0	U	1.0	0.42	ug/L			07/28/18 07:18	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			07/28/18 07:18	1
Toluene	1.0	U	1.0	0.38	ug/L			07/28/18 07:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			07/28/18 07:18	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-540359/8
Matrix: Water
Analysis Batch: 540359

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			07/28/18 07:18	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			07/28/18 07:18	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			07/28/18 07:18	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			07/28/18 07:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*74 - 132*		*07/28/18 07:18*	*1*
4-Bromofluorobenzene	*98*		*77 - 124*		*07/28/18 07:18*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*07/28/18 07:18*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/28/18 07:18*	*1*

Lab Sample ID: LCS 460-540359/4
Matrix: Water
Analysis Batch: 540359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.3		ug/L		97	75 - 125
1,1,2,2-Tetrachloroethane	20.0	18.1		ug/L		90	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.3		ug/L		101	59 - 150
1,1,2-Trichloroethane	20.0	17.3		ug/L		86	78 - 120
1,1-Dichloroethane	20.0	18.5		ug/L		93	77 - 123
1,1-Dichloroethene	20.0	20.1		ug/L		101	74 - 123
1,2,3-Trichlorobenzene	20.0	17.6		ug/L		88	78 - 131
1,2,4-Trichlorobenzene	20.0	18.1		ug/L		90	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	15.9		ug/L		79	55 - 134
1,2-Dichlorobenzene	20.0	19.3		ug/L		97	80 - 120
1,2-Dichloroethane	20.0	17.0		ug/L		85	76 - 121
1,2-Dichloropropane	20.0	19.1		ug/L		95	77 - 123
1,3-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120
1,4-Dichlorobenzene	20.0	19.7		ug/L		99	80 - 120
1,4-Dioxane	400	387		ug/L		97	10 - 150
2-Butanone (MEK)	100	99.0		ug/L		99	64 - 120
2-Hexanone	100	93.3		ug/L		93	71 - 125
4-Methyl-2-pentanone (MIBK)	100	95.5		ug/L		96	78 - 124
Acetone	100	98.4		ug/L		98	39 - 150
Benzene	20.0	19.1		ug/L		96	77 - 121
Bromoform	20.0	17.4		ug/L		87	53 - 120
Bromomethane	20.0	17.9		ug/L		90	10 - 150
Carbon disulfide	20.0	18.1		ug/L		90	69 - 133
Carbon tetrachloride	20.0	19.8		ug/L		99	70 - 132
Chlorobenzene	20.0	19.7		ug/L		98	80 - 120
Chlorobromomethane	20.0	18.3		ug/L		91	77 - 127
Chlorodibromomethane	20.0	19.3		ug/L		97	73 - 120
Chloroethane	20.0	18.1		ug/L		91	52 - 150
Chloroform	20.0	19.4		ug/L		97	80 - 120
Chloromethane	20.0	20.0		ug/L		100	56 - 131
cis-1,2-Dichloroethene	20.0	18.7		ug/L		94	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-540359/4
Matrix: Water
Analysis Batch: 540359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	20.0	18.2		ug/L		91	77 - 120
Cyclohexane	20.0	18.4		ug/L		92	56 - 150
Dichlorobromomethane	20.0	19.3		ug/L		97	76 - 120
Dichlorodifluoromethane	20.0	16.9		ug/L		85	50 - 131
Ethylbenzene	20.0	19.9		ug/L		100	80 - 120
Ethylene Dibromide	20.0	17.5		ug/L		87	80 - 120
Isopropylbenzene	20.0	19.8		ug/L		99	80 - 123
Methyl acetate	40.0	41.9		ug/L		105	66 - 144
Methyl tert-butyl ether	20.0	18.0		ug/L		90	79 - 122
Methylcyclohexane	20.0	18.3		ug/L		92	61 - 145
Methylene Chloride	20.0	18.3		ug/L		92	77 - 123
m-Xylene & p-Xylene	20.0	19.6		ug/L		98	80 - 120
o-Xylene	20.0	19.6		ug/L		98	80 - 120
Styrene	20.0	19.2		ug/L		96	80 - 120
Tetrachloroethene	20.0	20.4		ug/L		102	78 - 122
Toluene	20.0	19.4		ug/L		97	80 - 120
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	79 - 120
trans-1,3-Dichloropropene	20.0	17.5		ug/L		87	76 - 120
Trichloroethene	20.0	18.8		ug/L		94	77 - 120
Trichlorofluoromethane	20.0	19.2		ug/L		96	71 - 143
Vinyl chloride	20.0	17.4		ug/L		87	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*
4-Bromofluorobenzene	*101*		*77 - 124*
Dibromofluoromethane (Surr)	*95*		*72 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 460-161178-4 MS
Matrix: Water
Analysis Batch: 540359

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	20.0	18.5		ug/L		92	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	20.0	17.6		ug/L		88	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	20.0	18.2		ug/L		91	59 - 150
1,1,2-Trichloroethane	1.0	U	20.0	16.8		ug/L		84	78 - 120
1,1-Dichloroethane	1.0	U	20.0	17.8		ug/L		89	77 - 123
1,1-Dichloroethene	1.0	U	20.0	18.1		ug/L		91	74 - 123
1,2,3-Trichlorobenzene	1.0	U	20.0	15.6		ug/L		78	78 - 131
1,2,4-Trichlorobenzene	1.0	U	20.0	16.8		ug/L		84	80 - 124
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	16.3		ug/L		81	55 - 134
1,2-Dichlorobenzene	1.0	U	20.0	18.4		ug/L		92	80 - 120
1,2-Dichloroethane	1.0	U	20.0	15.8		ug/L		79	76 - 121
1,2-Dichloropropane	1.0	U	20.0	17.5		ug/L		88	77 - 123
1,3-Dichlorobenzene	1.0	U	20.0	18.7		ug/L		94	80 - 120
1,4-Dichlorobenzene	1.0	U	20.0	18.8		ug/L		94	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-161178-4 MS
Matrix: Water
Analysis Batch: 540359

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	50	U	400	319		ug/L		80	10 - 150
2-Butanone (MEK)	5.0	U	100	94.4		ug/L		94	64 - 120
2-Hexanone	5.0	U	100	88.6		ug/L		89	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U	100	92.1		ug/L		92	78 - 124
Acetone	5.0	U	100	94.1		ug/L		94	39 - 150
Benzene	1.0	U	20.0	18.2		ug/L		91	77 - 121
Bromoform	1.0	U	20.0	16.5		ug/L		82	53 - 120
Bromomethane	1.0	U	20.0	19.7		ug/L		98	10 - 150
Carbon disulfide	1.0	U	20.0	16.9		ug/L		84	69 - 133
Carbon tetrachloride	1.0	U	20.0	17.7		ug/L		88	70 - 132
Chlorobenzene	1.0	U	20.0	18.9		ug/L		94	80 - 120
Chlorobromomethane	1.0	U	20.0	17.2		ug/L		86	77 - 127
Chlorodibromomethane	1.0	U	20.0	17.7		ug/L		89	73 - 120
Chloroethane	1.0	U	20.0	19.9		ug/L		99	52 - 150
Chloroform	1.0	U	20.0	18.2		ug/L		91	80 - 120
Chloromethane	1.0	U	20.0	23.2		ug/L		116	56 - 131
cis-1,2-Dichloroethene	1.0	U	20.0	17.6		ug/L		88	80 - 120
cis-1,3-Dichloropropene	1.0	U	20.0	16.7		ug/L		83	77 - 120
Cyclohexane	1.0	U	20.0	17.8		ug/L		89	56 - 150
Dichlorobromomethane	1.0	U	20.0	17.3		ug/L		87	76 - 120
Dichlorodifluoromethane	1.0	U	20.0	19.4		ug/L		97	50 - 131
Ethylbenzene	1.0	U	20.0	19.5		ug/L		97	80 - 120
Ethylene Dibromide	1.0	U	20.0	17.2		ug/L		86	80 - 120
Isopropylbenzene	1.0	U	20.0	19.5		ug/L		98	80 - 123
Methyl acetate	5.0	U	40.0	40.4		ug/L		101	66 - 144
Methyl tert-butyl ether	1.0	U	20.0	17.3		ug/L		86	79 - 122
Methylcyclohexane	1.0	U	20.0	17.2		ug/L		86	61 - 145
Methylene Chloride	1.0	U	20.0	17.7		ug/L		88	77 - 123
m-Xylene & p-Xylene	1.0	U	20.0	19.8		ug/L		99	80 - 120
o-Xylene	1.0	U	20.0	19.1		ug/L		96	80 - 120
Styrene	1.0	U	20.0	18.6		ug/L		93	80 - 120
Tetrachloroethene	16		20.0	33.2		ug/L		87	78 - 122
Toluene	1.0	U	20.0	18.7		ug/L		93	80 - 120
trans-1,2-Dichloroethene	1.0	U	20.0	19.1		ug/L		95	79 - 120
trans-1,3-Dichloropropene	1.0	U	20.0	16.2		ug/L		81	76 - 120
Trichloroethene	1.0	U	20.0	18.1		ug/L		91	77 - 120
Trichlorofluoromethane	1.0	U	20.0	19.4		ug/L		97	71 - 143
Vinyl chloride	1.0	U	20.0	19.1		ug/L		96	62 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*74 - 132*
4-Bromofluorobenzene	*101*		*77 - 124*
Dibromofluoromethane (Surr)	*96*		*72 - 131*
Toluene-d8 (Surr)	*103*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-161178-4 MSD
Matrix: Water
Analysis Batch: 540359

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	20.0	18.5		ug/L		92	75 - 125	0	30
1,1,2,2-Tetrachloroethane	1.0	U	20.0	17.2		ug/L		86	74 - 120	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	20.0	18.6		ug/L		93	59 - 150	2	30
1,1,2-Trichloroethane	1.0	U	20.0	16.8		ug/L		84	78 - 120	0	30
1,1-Dichloroethane	1.0	U	20.0	17.5		ug/L		87	77 - 123	2	30
1,1-Dichloroethene	1.0	U	20.0	17.8		ug/L		89	74 - 123	2	30
1,2,3-Trichlorobenzene	1.0	U	20.0	16.4		ug/L		82	78 - 131	5	30
1,2,4-Trichlorobenzene	1.0	U	20.0	17.3		ug/L		87	80 - 124	3	30
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	16.8		ug/L		84	55 - 134	3	30
1,2-Dichlorobenzene	1.0	U	20.0	18.2		ug/L		91	80 - 120	1	30
1,2-Dichloroethane	1.0	U	20.0	15.7		ug/L		78	76 - 121	0	30
1,2-Dichloropropane	1.0	U	20.0	17.6		ug/L		88	77 - 123	1	30
1,3-Dichlorobenzene	1.0	U	20.0	18.8		ug/L		94	80 - 120	1	30
1,4-Dichlorobenzene	1.0	U	20.0	18.5		ug/L		93	80 - 120	2	30
1,4-Dioxane	50	U	400	357		ug/L		89	10 - 150	11	30
2-Butanone (MEK)	5.0	U	100	92.8		ug/L		93	64 - 120	2	30
2-Hexanone	5.0	U	100	90.2		ug/L		90	71 - 125	2	30
4-Methyl-2-pentanone (MIBK)	5.0	U	100	88.5		ug/L		89	78 - 124	4	30
Acetone	5.0	U	100	87.9		ug/L		88	39 - 150	7	30
Benzene	1.0	U	20.0	18.0		ug/L		90	77 - 121	2	30
Bromoform	1.0	U	20.0	16.3		ug/L		82	53 - 120	1	30
Bromomethane	1.0	U	20.0	19.5		ug/L		97	10 - 150	1	30
Carbon disulfide	1.0	U	20.0	16.6		ug/L		83	69 - 133	2	30
Carbon tetrachloride	1.0	U	20.0	18.2		ug/L		91	70 - 132	3	30
Chlorobenzene	1.0	U	20.0	19.1		ug/L		96	80 - 120	1	30
Chlorobromomethane	1.0	U	20.0	16.9		ug/L		85	77 - 127	1	30
Chlorodibromomethane	1.0	U	20.0	18.4		ug/L		92	73 - 120	3	30
Chloroethane	1.0	U	20.0	19.4		ug/L		97	52 - 150	3	30
Chloroform	1.0	U	20.0	17.8		ug/L		89	80 - 120	2	30
Chloromethane	1.0	U	20.0	22.8		ug/L		114	56 - 131	2	30
cis-1,2-Dichloroethene	1.0	U	20.0	17.3		ug/L		86	80 - 120	2	30
cis-1,3-Dichloropropene	1.0	U	20.0	17.0		ug/L		85	77 - 120	2	30
Cyclohexane	1.0	U	20.0	17.8		ug/L		89	56 - 150	0	30
Dichlorobromomethane	1.0	U	20.0	18.0		ug/L		90	76 - 120	4	30
Dichlorodifluoromethane	1.0	U	20.0	19.1		ug/L		96	50 - 131	1	30
Ethylbenzene	1.0	U	20.0	19.2		ug/L		96	80 - 120	2	30
Ethylene Dibromide	1.0	U	20.0	17.1		ug/L		86	80 - 120	0	30
Isopropylbenzene	1.0	U	20.0	19.2		ug/L		96	80 - 123	2	30
Methyl acetate	5.0	U	40.0	35.6		ug/L		89	66 - 144	13	30
Methyl tert-butyl ether	1.0	U	20.0	17.1		ug/L		85	79 - 122	1	30
Methylcyclohexane	1.0	U	20.0	17.7		ug/L		89	61 - 145	3	30
Methylene Chloride	1.0	U	20.0	17.3		ug/L		87	77 - 123	2	30
m-Xylene & p-Xylene	1.0	U	20.0	19.2		ug/L		96	80 - 120	3	30
o-Xylene	1.0	U	20.0	18.8		ug/L		94	80 - 120	2	30
Styrene	1.0	U	20.0	18.3		ug/L		91	80 - 120	2	30
Tetrachloroethene	16		20.0	33.4		ug/L		88	78 - 122	1	30
Toluene	1.0	U	20.0	18.8		ug/L		94	80 - 120	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-161178-4 MSD
Matrix: Water
Analysis Batch: 540359

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	1.0	U	20.0	18.2		ug/L		91	79 - 120	5	30
trans-1,3-Dichloropropene	1.0	U	20.0	16.4		ug/L		82	76 - 120	1	30
Trichloroethene	1.0	U	20.0	18.1		ug/L		91	77 - 120	0	30
Trichlorofluoromethane	1.0	U	20.0	19.5		ug/L		97	71 - 143	0	30
Vinyl chloride	1.0	U	20.0	19.3		ug/L		96	62 - 138	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*
4-Bromofluorobenzene	*100*		*77 - 124*
Dibromofluoromethane (Surr)	*92*		*72 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 460-542406/32
Matrix: Water
Analysis Batch: 542406

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/06/18 07:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			08/06/18 07:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			08/06/18 07:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			08/06/18 07:57	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			08/06/18 07:57	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			08/06/18 07:57	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			08/06/18 07:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			08/06/18 07:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			08/06/18 07:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/06/18 07:57	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/06/18 07:57	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			08/06/18 07:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			08/06/18 07:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			08/06/18 07:57	1
1,4-Dioxane	50	U	50	28	ug/L			08/06/18 07:57	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			08/06/18 07:57	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			08/06/18 07:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			08/06/18 07:57	1
Acetone	5.0	U	5.0	5.0	ug/L			08/06/18 07:57	1
Benzene	1.0	U	1.0	0.43	ug/L			08/06/18 07:57	1
Bromoform	1.0	U	1.0	0.54	ug/L			08/06/18 07:57	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/06/18 07:57	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			08/06/18 07:57	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			08/06/18 07:57	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			08/06/18 07:57	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			08/06/18 07:57	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			08/06/18 07:57	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/06/18 07:57	1
Chloroform	1.0	U	1.0	0.33	ug/L			08/06/18 07:57	1
Chloromethane	1.0	U	1.0	0.14	ug/L			08/06/18 07:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			08/06/18 07:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-542406/32
Matrix: Water
Analysis Batch: 542406

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			08/06/18 07:57	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			08/06/18 07:57	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			08/06/18 07:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			08/06/18 07:57	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			08/06/18 07:57	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			08/06/18 07:57	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			08/06/18 07:57	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			08/06/18 07:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			08/06/18 07:57	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			08/06/18 07:57	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			08/06/18 07:57	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			08/06/18 07:57	1
o-Xylene	1.0	U	1.0	0.36	ug/L			08/06/18 07:57	1
Styrene	1.0	U	1.0	0.42	ug/L			08/06/18 07:57	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			08/06/18 07:57	1
Toluene	1.0	U	1.0	0.38	ug/L			08/06/18 07:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			08/06/18 07:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			08/06/18 07:57	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			08/06/18 07:57	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			08/06/18 07:57	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			08/06/18 07:57	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/06/18 07:57*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*		*08/06/18 07:57*	*1*
4-Bromofluorobenzene	*116*		*77 - 124*		*08/06/18 07:57*	*1*
Dibromofluoromethane (Surr)	*103*		*72 - 131*		*08/06/18 07:57*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/06/18 07:57*	*1*

Lab Sample ID: LCS 460-542406/30
Matrix: Water
Analysis Batch: 542406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.6		ug/L		108	75 - 125
1,1,2,2-Tetrachloroethane	20.0	17.3		ug/L		86	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.5		ug/L		108	59 - 150
1,1,2-Trichloroethane	20.0	18.0		ug/L		90	78 - 120
1,1-Dichloroethane	20.0	19.2		ug/L		96	77 - 123
1,1-Dichloroethene	20.0	21.0		ug/L		105	74 - 123
1,2,3-Trichlorobenzene	20.0	19.0		ug/L		95	78 - 131
1,2,4-Trichlorobenzene	20.0	19.6		ug/L		98	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	20.7		ug/L		104	55 - 134
1,2-Dichlorobenzene	20.0	20.5		ug/L		103	80 - 120
1,2-Dichloroethane	20.0	17.4		ug/L		87	76 - 121

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-542406/30
Matrix: Water
Analysis Batch: 542406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	20.0	19.5		ug/L		98	77 - 123
1,3-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 120
1,4-Dichlorobenzene	20.0	20.5		ug/L		103	80 - 120
1,4-Dioxane	400	412		ug/L		103	10 - 150
2-Butanone (MEK)	100	121	*	ug/L		121	64 - 120
2-Hexanone	100	124		ug/L		124	71 - 125
4-Methyl-2-pentanone (MIBK)	100	115		ug/L		115	78 - 124
Acetone	100	103		ug/L		103	39 - 150
Benzene	20.0	18.7		ug/L		94	77 - 121
Bromoform	20.0	28.4	*	ug/L		142	53 - 120
Bromomethane	20.0	19.8		ug/L		99	10 - 150
Carbon disulfide	20.0	19.2		ug/L		96	69 - 133
Carbon tetrachloride	20.0	25.5		ug/L		127	70 - 132
Chlorobenzene	20.0	20.9		ug/L		104	80 - 120
Chlorobromomethane	20.0	22.8		ug/L		114	77 - 127
Chlorodibromomethane	20.0	27.4	*	ug/L		137	73 - 120
Chloroethane	20.0	18.1		ug/L		91	52 - 150
Chloroform	20.0	20.2		ug/L		101	80 - 120
Chloromethane	20.0	23.9		ug/L		120	56 - 131
cis-1,2-Dichloroethene	20.0	20.9		ug/L		104	80 - 120
cis-1,3-Dichloropropene	20.0	20.0		ug/L		100	77 - 120
Cyclohexane	20.0	20.0		ug/L		100	56 - 150
Dichlorobromomethane	20.0	22.5		ug/L		113	76 - 120
Dichlorodifluoromethane	20.0	14.6		ug/L		73	50 - 131
Ethylbenzene	20.0	21.2		ug/L		106	80 - 120
Ethylene Dibromide	20.0	18.8		ug/L		94	80 - 120
Isopropylbenzene	20.0	20.7		ug/L		104	80 - 123
Methyl acetate	40.0	55.2		ug/L		138	66 - 144
Methyl tert-butyl ether	20.0	19.6		ug/L		98	79 - 122
Methylcyclohexane	20.0	18.7		ug/L		93	61 - 145
Methylene Chloride	20.0	20.4		ug/L		102	77 - 123
m-Xylene & p-Xylene	20.0	21.1		ug/L		105	80 - 120
o-Xylene	20.0	21.5		ug/L		107	80 - 120
Styrene	20.0	21.0		ug/L		105	80 - 120
Tetrachloroethene	20.0	23.4		ug/L		117	78 - 122
Toluene	20.0	19.9		ug/L		99	80 - 120
trans-1,2-Dichloroethene	20.0	21.9		ug/L		109	79 - 120
trans-1,3-Dichloropropene	20.0	19.5		ug/L		97	76 - 120
Trichloroethene	20.0	20.9		ug/L		105	77 - 120
Trichlorofluoromethane	20.0	20.1		ug/L		101	71 - 143
Vinyl chloride	20.0	18.1		ug/L		91	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*
4-Bromofluorobenzene	*113*		*77 - 124*
Dibromofluoromethane (Surr)	*104*		*72 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-542406/31
Matrix: Water
Analysis Batch: 542406

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	21.9		ug/L		110	75 - 125	2	30
1,1,2,2-Tetrachloroethane	20.0	17.0		ug/L		85	74 - 120	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.2		ug/L		106	59 - 150	1	30
1,1,2-Trichloroethane	20.0	17.9		ug/L		89	78 - 120	1	30
1,1-Dichloroethane	20.0	19.4		ug/L		97	77 - 123	1	30
1,1-Dichloroethene	20.0	21.7		ug/L		108	74 - 123	3	30
1,2,3-Trichlorobenzene	20.0	18.6		ug/L		93	78 - 131	2	30
1,2,4-Trichlorobenzene	20.0	19.5		ug/L		97	80 - 124	1	30
1,2-Dibromo-3-Chloropropane	20.0	21.4		ug/L		107	55 - 134	3	30
1,2-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 120	1	30
1,2-Dichloroethane	20.0	17.3		ug/L		86	76 - 121	1	30
1,2-Dichloropropane	20.0	19.8		ug/L		99	77 - 123	2	30
1,3-Dichlorobenzene	20.0	20.7		ug/L		104	80 - 120	0	30
1,4-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120	0	30
1,4-Dioxane	400	450		ug/L		113	10 - 150	9	30
2-Butanone (MEK)	100	123	*	ug/L		123	64 - 120	2	30
2-Hexanone	100	123		ug/L		123	71 - 125	1	30
4-Methyl-2-pentanone (MIBK)	100	117		ug/L		117	78 - 124	2	30
Acetone	100	103		ug/L		103	39 - 150	0	30
Benzene	20.0	19.0		ug/L		95	77 - 121	1	30
Bromoform	20.0	27.4	*	ug/L		137	53 - 120	4	30
Bromomethane	20.0	20.3		ug/L		102	10 - 150	3	30
Carbon disulfide	20.0	19.4		ug/L		97	69 - 133	1	30
Carbon tetrachloride	20.0	25.5		ug/L		128	70 - 132	0	30
Chlorobenzene	20.0	20.8		ug/L		104	80 - 120	0	30
Chlorobromomethane	20.0	22.3		ug/L		112	77 - 127	2	30
Chlorodibromomethane	20.0	26.6	*	ug/L		133	73 - 120	3	30
Chloroethane	20.0	19.1		ug/L		96	52 - 150	5	30
Chloroform	20.0	20.2		ug/L		101	80 - 120	0	30
Chloromethane	20.0	25.1		ug/L		126	56 - 131	5	30
cis-1,2-Dichloroethene	20.0	20.8		ug/L		104	80 - 120	0	30
cis-1,3-Dichloropropene	20.0	19.5		ug/L		97	77 - 120	3	30
Cyclohexane	20.0	20.5		ug/L		103	56 - 150	2	30
Dichlorobromomethane	20.0	22.5		ug/L		113	76 - 120	0	30
Dichlorodifluoromethane	20.0	14.9		ug/L		75	50 - 131	2	30
Ethylbenzene	20.0	21.1		ug/L		105	80 - 120	1	30
Ethylene Dibromide	20.0	19.0		ug/L		95	80 - 120	1	30
Isopropylbenzene	20.0	21.0		ug/L		105	80 - 123	1	30
Methyl acetate	40.0	58.6	*	ug/L		147	66 - 144	6	30
Methyl tert-butyl ether	20.0	19.6		ug/L		98	79 - 122	0	30
Methylcyclohexane	20.0	18.6		ug/L		93	61 - 145	0	30
Methylene Chloride	20.0	20.4		ug/L		102	77 - 123	0	30
m-Xylene & p-Xylene	20.0	21.2		ug/L		106	80 - 120	0	30
o-Xylene	20.0	21.3		ug/L		106	80 - 120	1	30
Styrene	20.0	21.0		ug/L		105	80 - 120	0	30
Tetrachloroethene	20.0	23.5		ug/L		117	78 - 122	0	30
Toluene	20.0	20.2		ug/L		101	80 - 120	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-542406/31
Matrix: Water
Analysis Batch: 542406

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	20.0	22.2		ug/L		111	79 - 120	2	30
trans-1,3-Dichloropropene	20.0	19.0		ug/L		95	76 - 120	2	30
Trichloroethene	20.0	20.8		ug/L		104	77 - 120	1	30
Trichlorofluoromethane	20.0	20.0		ug/L		100	71 - 143	1	30
Vinyl chloride	20.0	18.5		ug/L		93	62 - 138	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*74 - 132*
4-Bromofluorobenzene	*116*		*77 - 124*
Dibromofluoromethane (Surr)	*104*		*72 - 131*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 9060A_ASP - Organic Carbon, Total (TOC)

Lab Sample ID: MB 460-540990/3
Matrix: Water
Analysis Batch: 540990

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.34	mg/L			07/30/18 15:52	1

Lab Sample ID: LCSSRM 460-540990/4
Matrix: Water
Analysis Batch: 540990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	45.4	44.97		mg/L		99.2	84.0 - 114.7

Lab Sample ID: 460-161054-F-1 MS
Matrix: Water
Analysis Batch: 540990

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	0.35	J	50.0	51.66		mg/L		103	85 - 115

Lab Sample ID: 460-161054-F-1 MSD
Matrix: Water
Analysis Batch: 540990

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	0.35	J	50.0	51.62		mg/L		103	85 - 115	0	10

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 460-540298/30
Matrix: Water
Analysis Batch: 540298

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	5.0	U	5.0	1.4	mg/L			07/27/18 15:08	1

Lab Sample ID: MB 460-540298/59
Matrix: Water
Analysis Batch: 540298

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	5.0	U	5.0	1.4	mg/L			07/27/18 15:56	1

Lab Sample ID: LCSSRM 460-540298/60
Matrix: Water
Analysis Batch: 540298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			19.8	18.51		mg/L		93.5	83.8 - 112.1		

Lab Sample ID: 460-161054-E-1 MS
Matrix: Water
Analysis Batch: 540298

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	10.3		20.0	28.76		mg/L		92	85 - 115		

Lab Sample ID: 460-161054-E-1 MSD
Matrix: Water
Analysis Batch: 540298

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.3		20.0	29.13		mg/L		94	85 - 115	1	13

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-541268/2
Matrix: Water
Analysis Batch: 541268

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/31/18 10:45	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/31/18 10:45	1
Alkalinity	5.0	U	5.0	5.0	mg/L			07/31/18 10:45	1
Hydroxide Alkalinity	5.0	U	5.0	5.0	mg/L			07/31/18 10:45	1

Lab Sample ID: LCSSRM 460-541268/3
Matrix: Water
Analysis Batch: 541268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			53.9	54.26		mg/L		100.7	85.0 - 114.8		

Lab Sample ID: 460-161178-4 DU
Matrix: Water
Analysis Batch: 541268

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	47.8			47.63		mg/L				0.3	10
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	10
Alkalinity	47.8			47.63		mg/L				0.3	10
Hydroxide Alkalinity	5.0	U		5.0	U	mg/L				NC	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 460-539903/1
Matrix: Water
Analysis Batch: 539903

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			07/26/18 11:01	1

Lab Sample ID: LCSSRM 460-539903/2
Matrix: Water
Analysis Batch: 539903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			528	516.0		mg/L		97.7	90.0 - 109.8		

Lab Sample ID: 460-161178-1 DU
Matrix: Water
Analysis Batch: 539903

Client Sample ID: GC-MW-107 (WG)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	598			606.0		mg/L				1	5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
J	Indicates an estimated value.
*	LCS or LCSD is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
J	Sample result is greater than the MDL but below the CRDL
U	Indicates analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Analysis Batch: 540359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161178-1	GC-MW-107 (WG)	Total/NA	Water	8260C	
460-161178-2	GC-MW-108 (WG)	Total/NA	Water	8260C	
460-161178-3	GC-MW-109 (WG)	Total/NA	Water	8260C	
460-161178-4	GC-MW-109M (WG)	Total/NA	Water	8260C	
460-161178-5	GC-MW-110 (WG)	Total/NA	Water	8260C	
460-161178-6	GC-Equipment Blank (072418)	Total/NA	Water	8260C	
MB 460-540359/8	Method Blank	Total/NA	Water	8260C	
LCS 460-540359/4	Lab Control Sample	Total/NA	Water	8260C	
460-161178-4 MS	GC-MW-109M (WG)	Total/NA	Water	8260C	
460-161178-4 MSD	GC-MW-109M (WG)	Total/NA	Water	8260C	

Analysis Batch: 542406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161178-7	GC-TB (072418)	Total/NA	Water	8260C	
MB 460-542406/32	Method Blank	Total/NA	Water	8260C	
LCS 460-542406/30	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-542406/31	Lab Control Sample Dup	Total/NA	Water	8260C	

General Chemistry

Analysis Batch: 539903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161178-1	GC-MW-107 (WG)	Total/NA	Water	SM 2540C	
460-161178-2	GC-MW-108 (WG)	Total/NA	Water	SM 2540C	
460-161178-3	GC-MW-109 (WG)	Total/NA	Water	SM 2540C	
460-161178-4	GC-MW-109M (WG)	Total/NA	Water	SM 2540C	
MB 460-539903/1	Method Blank	Total/NA	Water	SM 2540C	
LCSSRM 460-539903/2	Lab Control Sample	Total/NA	Water	SM 2540C	
460-161178-1 DU	GC-MW-107 (WG)	Total/NA	Water	SM 2540C	

Analysis Batch: 540298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161178-1	GC-MW-107 (WG)	Total/NA	Water	D516-90, 02	
460-161178-2	GC-MW-108 (WG)	Total/NA	Water	D516-90, 02	
460-161178-3	GC-MW-109 (WG)	Total/NA	Water	D516-90, 02	
460-161178-4	GC-MW-109M (WG)	Total/NA	Water	D516-90, 02	
MB 460-540298/30	Method Blank	Total/NA	Water	D516-90, 02	
MB 460-540298/59	Method Blank	Total/NA	Water	D516-90, 02	
LCSSRM 460-540298/60	Lab Control Sample	Total/NA	Water	D516-90, 02	
460-161054-E-1 MS	Matrix Spike	Total/NA	Water	D516-90, 02	
460-161054-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	D516-90, 02	

Analysis Batch: 540990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161178-1	GC-MW-107 (WG)	Total/NA	Water	9060A_ASP	
460-161178-2	GC-MW-108 (WG)	Total/NA	Water	9060A_ASP	
460-161178-3	GC-MW-109 (WG)	Total/NA	Water	9060A_ASP	
460-161178-4	GC-MW-109M (WG)	Total/NA	Water	9060A_ASP	
MB 460-540990/3	Method Blank	Total/NA	Water	9060A_ASP	
LCSSRM 460-540990/4	Lab Control Sample	Total/NA	Water	9060A_ASP	

General Chemistry (Continued)

Analysis Batch: 540990 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161054-F-1 MS	Matrix Spike	Total/NA	Water	9060A_ASP	
460-161054-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9060A_ASP	

Analysis Batch: 541268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-161178-1	GC-MW-107 (WG)	Total/NA	Water	SM 2320B	
460-161178-2	GC-MW-108 (WG)	Total/NA	Water	SM 2320B	
460-161178-3	GC-MW-109 (WG)	Total/NA	Water	SM 2320B	
460-161178-4	GC-MW-109M (WG)	Total/NA	Water	SM 2320B	
MB 460-541268/2	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-541268/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-161178-4 DU	GC-MW-109M (WG)	Total/NA	Water	SM 2320B	

Client Sample ID: GC-MW-107 (WG)

Lab Sample ID: 460-161178-1

Date Collected: 07/24/18 07:45

Matrix: Water

Date Received: 07/25/18 19:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540359	07/28/18 14:00	DAS	TAL EDI
Total/NA	Analysis	9060A_ASP		1	540990	07/30/18 18:33	JXT	TAL EDI
Total/NA	Analysis	D516-90, 02		1	540298	07/27/18 15:56	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	541268	07/31/18 11:28	PHM	TAL EDI
Total/NA	Analysis	SM 2540C		1	539903	07/26/18 11:01	PLS	TAL EDI

Client Sample ID: GC-MW-108 (WG)

Lab Sample ID: 460-161178-2

Date Collected: 07/24/18 08:50

Matrix: Water

Date Received: 07/25/18 19:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540359	07/28/18 14:22	DAS	TAL EDI
Total/NA	Analysis	9060A_ASP		1	540990	07/30/18 18:56	JXT	TAL EDI
Total/NA	Analysis	D516-90, 02		1	540298	07/27/18 15:56	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	541268	07/31/18 11:21	PHM	TAL EDI
Total/NA	Analysis	SM 2540C		1	539903	07/26/18 11:01	PLS	TAL EDI

Client Sample ID: GC-MW-109 (WG)

Lab Sample ID: 460-161178-3

Date Collected: 07/24/18 09:50

Matrix: Water

Date Received: 07/25/18 19:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540359	07/28/18 14:44	DAS	TAL EDI
Total/NA	Analysis	9060A_ASP		1	540990	07/30/18 19:19	JXT	TAL EDI
Total/NA	Analysis	D516-90, 02		1	540298	07/27/18 15:56	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	541268	07/31/18 11:14	PHM	TAL EDI
Total/NA	Analysis	SM 2540C		1	539903	07/26/18 11:01	PLS	TAL EDI

Client Sample ID: GC-MW-109M (WG)

Lab Sample ID: 460-161178-4

Date Collected: 07/24/18 10:50

Matrix: Water

Date Received: 07/25/18 19:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540359	07/28/18 13:37	DAS	TAL EDI
Total/NA	Analysis	9060A_ASP		1	540990	07/30/18 20:28	JXT	TAL EDI
Total/NA	Analysis	D516-90, 02		1	540298	07/27/18 15:56	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	541268	07/31/18 11:01	PHM	TAL EDI
Total/NA	Analysis	SM 2540C		1	539903	07/26/18 11:01	PLS	TAL EDI

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 460-161178-1

Client Sample ID: GC-MW-110 (WG)

Lab Sample ID: 460-161178-5

Date Collected: 07/24/18 11:40

Matrix: Water

Date Received: 07/25/18 19:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540359	07/28/18 15:06	DAS	TAL EDI

Client Sample ID: GC-Equipment Blank (072418)

Lab Sample ID: 460-161178-6

Date Collected: 07/24/18 07:00

Matrix: Water

Date Received: 07/25/18 19:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540359	07/28/18 13:15	DAS	TAL EDI

Client Sample ID: GC-TB (072418)

Lab Sample ID: 460-161178-7

Date Collected: 07/24/18 00:00

Matrix: Water

Date Received: 07/25/18 19:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	542406	08/06/18 10:04	AAT	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: TRC Environmental Corporation
TestAmerica Job ID: 460-161178-1
Project/Site: GEM Cleaners

Laboratory: TestAmerica Edison

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19
New York	NELAP	2	11452	04-01-19

8260C

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
GC-MW-107 (WG)	460-161178-1	97	94	100	95
GC-MW-108 (WG)	460-161178-2	96	97	103	97
GC-MW-109 (WG)	460-161178-3	99	95	103	96
GC-MW-109M (WG)	460-161178-4	97	95	103	97
GC-MW-110 (WG)	460-161178-5	99	95	103	97
GC-Equipment Blank (072418)	460-161178-6	95	96	102	96
GC-TB (072418)	460-161178-7	100	86	101	118
	MB 460-540359/8	98	97	100	98
	MB 460-542406/32	103	88	99	116
	LCS 460-540359/4	95	89	99	101
	LCS 460-542406/30	104	89	100	113
	LCSD 460-542406/31	104	87	102	116
GC-MW-109M (WG) MS	460-161178-4 MS	96	90	103	101
GC-MW-109M (WG) MSD	460-161178-4 MSD	92	88	100	100

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	72-131
DCA = 1,2-Dichloroethane-d4 (Surr)	74-132
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene	77-124

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N69685.D

Lab ID: LCS 460-540359/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	19.3	97	75-125	
1,1,2,2-Tetrachloroethane	20.0	18.1	90	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.3	101	59-150	
1,1,2-Trichloroethane	20.0	17.3	86	78-120	
1,1-Dichloroethane	20.0	18.5	93	77-123	
1,1-Dichloroethene	20.0	20.1	101	74-123	
1,2,3-Trichlorobenzene	20.0	17.6	88	78-131	
1,2,4-Trichlorobenzene	20.0	18.1	90	80-124	
1,2-Dibromo-3-Chloropropane	20.0	15.9	79	55-134	
1,2-Dichlorobenzene	20.0	19.3	97	80-120	
1,2-Dichloroethane	20.0	17.0	85	76-121	
1,2-Dichloropropane	20.0	19.1	95	77-123	
1,3-Dichlorobenzene	20.0	20.0	100	80-120	
1,4-Dichlorobenzene	20.0	19.7	99	80-120	
1,4-Dioxane	400	387	97	10-150	
2-Butanone (MEK)	100	99.0	99	64-120	
2-Hexanone	100	93.3	93	71-125	
4-Methyl-2-pentanone (MIBK)	100	95.5	96	78-124	
Acetone	100	98.4	98	39-150	
Benzene	20.0	19.1	96	77-121	
Bromoform	20.0	17.4	87	53-120	
Bromomethane	20.0	17.9	90	10-150	
Carbon disulfide	20.0	18.1	90	69-133	
Carbon tetrachloride	20.0	19.8	99	70-132	
Chlorobenzene	20.0	19.7	98	80-120	
Chlorobromomethane	20.0	18.3	91	77-127	
Chlorodibromomethane	20.0	19.3	97	73-120	
Chloroethane	20.0	18.1	91	52-150	
Chloroform	20.0	19.4	97	80-120	
Chloromethane	20.0	20.0	100	56-131	
cis-1,2-Dichloroethene	20.0	18.7	94	80-120	
cis-1,3-Dichloropropene	20.0	18.2	91	77-120	
Cyclohexane	20.0	18.4	92	56-150	
Dichlorobromomethane	20.0	19.3	97	76-120	
Dichlorodifluoromethane	20.0	16.9	85	50-131	
Ethylbenzene	20.0	19.9	100	80-120	
Ethylene Dibromide	20.0	17.5	87	80-120	
Isopropylbenzene	20.0	19.8	99	80-123	
Methyl acetate	40.0	41.9	105	66-144	
Methyl tert-butyl ether	20.0	18.0	90	79-122	
Methylcyclohexane	20.0	18.3	92	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N69685.D

Lab ID: LCS 460-540359/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	18.3	92	77-123	
m-Xylene & p-Xylene	20.0	19.6	98	80-120	
o-Xylene	20.0	19.6	98	80-120	
Styrene	20.0	19.2	96	80-120	
Tetrachloroethene	20.0	20.4	102	78-122	
Toluene	20.0	19.4	97	80-120	
trans-1,2-Dichloroethene	20.0	19.4	97	79-120	
trans-1,3-Dichloropropene	20.0	17.5	87	76-120	
Trichloroethene	20.0	18.8	94	77-120	
Trichlorofluoromethane	20.0	19.2	96	71-143	
Vinyl chloride	20.0	17.4	87	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N70088a.D

Lab ID: LCS 460-542406/30 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	21.6	108	75-125	
1,1,2,2-Tetrachloroethane	20.0	17.3	86	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.5	108	59-150	
1,1,2-Trichloroethane	20.0	18.0	90	78-120	
1,1-Dichloroethane	20.0	19.2	96	77-123	
1,1-Dichloroethene	20.0	21.0	105	74-123	
1,2,3-Trichlorobenzene	20.0	19.0	95	78-131	
1,2,4-Trichlorobenzene	20.0	19.6	98	80-124	
1,2-Dibromo-3-Chloropropane	20.0	20.7	104	55-134	
1,2-Dichlorobenzene	20.0	20.5	103	80-120	
1,2-Dichloroethane	20.0	17.4	87	76-121	
1,2-Dichloropropane	20.0	19.5	98	77-123	
1,3-Dichlorobenzene	20.0	20.8	104	80-120	
1,4-Dichlorobenzene	20.0	20.5	103	80-120	
1,4-Dioxane	400	412	103	10-150	
2-Butanone (MEK)	100	121	121	64-120	*
2-Hexanone	100	124	124	71-125	
4-Methyl-2-pentanone (MIBK)	100	115	115	78-124	
Acetone	100	103	103	39-150	
Benzene	20.0	18.7	94	77-121	
Bromoform	20.0	28.4	142	53-120	*
Bromomethane	20.0	19.8	99	10-150	
Carbon disulfide	20.0	19.2	96	69-133	
Carbon tetrachloride	20.0	25.5	127	70-132	
Chlorobenzene	20.0	20.9	104	80-120	
Chlorobromomethane	20.0	22.8	114	77-127	
Chlorodibromomethane	20.0	27.4	137	73-120	*
Chloroethane	20.0	18.1	91	52-150	
Chloroform	20.0	20.2	101	80-120	
Chloromethane	20.0	23.9	120	56-131	
cis-1,2-Dichloroethene	20.0	20.9	104	80-120	
cis-1,3-Dichloropropene	20.0	20.0	100	77-120	
Cyclohexane	20.0	20.0	100	56-150	
Dichlorobromomethane	20.0	22.5	113	76-120	
Dichlorodifluoromethane	20.0	14.6	73	50-131	
Ethylbenzene	20.0	21.2	106	80-120	
Ethylene Dibromide	20.0	18.8	94	80-120	
Isopropylbenzene	20.0	20.7	104	80-123	
Methyl acetate	40.0	55.2	138	66-144	
Methyl tert-butyl ether	20.0	19.6	98	79-122	
Methylcyclohexane	20.0	18.7	93	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N70088a.D

Lab ID: LCS 460-542406/30 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	20.4	102	77-123	
m-Xylene & p-Xylene	20.0	21.1	105	80-120	
o-Xylene	20.0	21.5	107	80-120	
Styrene	20.0	21.0	105	80-120	
Tetrachloroethene	20.0	23.4	117	78-122	
Toluene	20.0	19.9	99	80-120	
trans-1,2-Dichloroethene	20.0	21.9	109	79-120	
trans-1,3-Dichloropropene	20.0	19.5	97	76-120	
Trichloroethene	20.0	20.9	105	77-120	
Trichlorofluoromethane	20.0	20.1	101	71-143	
Vinyl chloride	20.0	18.1	91	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N70089a.D

Lab ID: LCSD 460-542406/31 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	21.9	110	2	30	75-125	
1,1,2,2-Tetrachloroethane	20.0	17.0	85	1	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.2	106	1	30	59-150	
1,1,2-Trichloroethane	20.0	17.9	89	1	30	78-120	
1,1-Dichloroethane	20.0	19.4	97	1	30	77-123	
1,1-Dichloroethene	20.0	21.7	108	3	30	74-123	
1,2,3-Trichlorobenzene	20.0	18.6	93	2	30	78-131	
1,2,4-Trichlorobenzene	20.0	19.5	97	1	30	80-124	
1,2-Dibromo-3-Chloropropane	20.0	21.4	107	3	30	55-134	
1,2-Dichlorobenzene	20.0	20.4	102	1	30	80-120	
1,2-Dichloroethane	20.0	17.3	86	1	30	76-121	
1,2-Dichloropropane	20.0	19.8	99	2	30	77-123	
1,3-Dichlorobenzene	20.0	20.7	104	0	30	80-120	
1,4-Dichlorobenzene	20.0	20.6	103	0	30	80-120	
1,4-Dioxane	400	450	113	9	30	10-150	
2-Butanone (MEK)	100	123	123	2	30	64-120	*
2-Hexanone	100	123	123	1	30	71-125	
4-Methyl-2-pentanone (MIBK)	100	117	117	2	30	78-124	
Acetone	100	103	103	0	30	39-150	
Benzene	20.0	19.0	95	1	30	77-121	
Bromoform	20.0	27.4	137	4	30	53-120	*
Bromomethane	20.0	20.3	102	3	30	10-150	
Carbon disulfide	20.0	19.4	97	1	30	69-133	
Carbon tetrachloride	20.0	25.5	128	0	30	70-132	
Chlorobenzene	20.0	20.8	104	0	30	80-120	
Chlorobromomethane	20.0	22.3	112	2	30	77-127	
Chlorodibromomethane	20.0	26.6	133	3	30	73-120	*
Chloroethane	20.0	19.1	96	5	30	52-150	
Chloroform	20.0	20.2	101	0	30	80-120	
Chloromethane	20.0	25.1	126	5	30	56-131	
cis-1,2-Dichloroethene	20.0	20.8	104	0	30	80-120	
cis-1,3-Dichloropropene	20.0	19.5	97	3	30	77-120	
Cyclohexane	20.0	20.5	103	2	30	56-150	
Dichlorobromomethane	20.0	22.5	113	0	30	76-120	
Dichlorodifluoromethane	20.0	14.9	75	2	30	50-131	
Ethylbenzene	20.0	21.1	105	1	30	80-120	
Ethylene Dibromide	20.0	19.0	95	1	30	80-120	
Isopropylbenzene	20.0	21.0	105	1	30	80-123	
Methyl acetate	40.0	58.6	147	6	30	66-144	*
Methyl tert-butyl ether	20.0	19.6	98	0	30	79-122	
Methylcyclohexane	20.0	18.6	93	0	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N70089a.D

Lab ID: LCSD 460-542406/31 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	20.0	20.4	102	0	30	77-123	
m-Xylene & p-Xylene	20.0	21.2	106	0	30	80-120	
o-Xylene	20.0	21.3	106	1	30	80-120	
Styrene	20.0	21.0	105	0	30	80-120	
Tetrachloroethene	20.0	23.5	117	0	30	78-122	
Toluene	20.0	20.2	101	1	30	80-120	
trans-1,2-Dichloroethene	20.0	22.2	111	2	30	79-120	
trans-1,3-Dichloropropene	20.0	19.0	95	2	30	76-120	
Trichloroethene	20.0	20.8	104	1	30	77-120	
Trichlorofluoromethane	20.0	20.0	100	1	30	71-143	
Vinyl chloride	20.0	18.5	93	2	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N69701.D

Lab ID: 460-161178-4 MS Client ID: GC-MW-109M (WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	1.0 U	18.5	92	75-125	
1,1,2,2-Tetrachloroethane	20.0	1.0 U	17.6	88	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	1.0 U	18.2	91	59-150	
1,1,2-Trichloroethane	20.0	1.0 U	16.8	84	78-120	
1,1-Dichloroethane	20.0	1.0 U	17.8	89	77-123	
1,1-Dichloroethene	20.0	1.0 U	18.1	91	74-123	
1,2,3-Trichlorobenzene	20.0	1.0 U	15.6	78	78-131	
1,2,4-Trichlorobenzene	20.0	1.0 U	16.8	84	80-124	
1,2-Dibromo-3-Chloropropane	20.0	1.0 U	16.3	81	55-134	
1,2-Dichlorobenzene	20.0	1.0 U	18.4	92	80-120	
1,2-Dichloroethane	20.0	1.0 U	15.8	79	76-121	
1,2-Dichloropropane	20.0	1.0 U	17.5	88	77-123	
1,3-Dichlorobenzene	20.0	1.0 U	18.7	94	80-120	
1,4-Dichlorobenzene	20.0	1.0 U	18.8	94	80-120	
1,4-Dioxane	400	50 U	319	80	10-150	
2-Butanone (MEK)	100	5.0 U	94.4	94	64-120	
2-Hexanone	100	5.0 U	88.6	89	71-125	
4-Methyl-2-pentanone (MIBK)	100	5.0 U	92.1	92	78-124	
Acetone	100	5.0 U	94.1	94	39-150	
Benzene	20.0	1.0 U	18.2	91	77-121	
Bromoform	20.0	1.0 U	16.5	82	53-120	
Bromomethane	20.0	1.0 U	19.7	98	10-150	
Carbon disulfide	20.0	1.0 U	16.9	84	69-133	
Carbon tetrachloride	20.0	1.0 U	17.7	88	70-132	
Chlorobenzene	20.0	1.0 U	18.9	94	80-120	
Chlorobromomethane	20.0	1.0 U	17.2	86	77-127	
Chlorodibromomethane	20.0	1.0 U	17.7	89	73-120	
Chloroethane	20.0	1.0 U	19.9	99	52-150	
Chloroform	20.0	1.0 U	18.2	91	80-120	
Chloromethane	20.0	1.0 U	23.2	116	56-131	
cis-1,2-Dichloroethene	20.0	1.0 U	17.6	88	80-120	
cis-1,3-Dichloropropene	20.0	1.0 U	16.7	83	77-120	
Cyclohexane	20.0	1.0 U	17.8	89	56-150	
Dichlorobromomethane	20.0	1.0 U	17.3	87	76-120	
Dichlorodifluoromethane	20.0	1.0 U	19.4	97	50-131	
Ethylbenzene	20.0	1.0 U	19.5	97	80-120	
Ethylene Dibromide	20.0	1.0 U	17.2	86	80-120	
Isopropylbenzene	20.0	1.0 U	19.5	98	80-123	
Methyl acetate	40.0	5.0 U	40.4	101	66-144	
Methyl tert-butyl ether	20.0	1.0 U	17.3	86	79-122	
Methylcyclohexane	20.0	1.0 U	17.2	86	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N69701.D

Lab ID: 460-161178-4 MS Client ID: GC-MW-109M (WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	1.0 U	17.7	88	77-123	
m-Xylene & p-Xylene	20.0	1.0 U	19.8	99	80-120	
o-Xylene	20.0	1.0 U	19.1	96	80-120	
Styrene	20.0	1.0 U	18.6	93	80-120	
Tetrachloroethene	20.0	16	33.2	87	78-122	
Toluene	20.0	1.0 U	18.7	93	80-120	
trans-1,2-Dichloroethene	20.0	1.0 U	19.1	95	79-120	
trans-1,3-Dichloropropene	20.0	1.0 U	16.2	81	76-120	
Trichloroethene	20.0	1.0 U	18.1	91	77-120	
Trichlorofluoromethane	20.0	1.0 U	19.4	97	71-143	
Vinyl chloride	20.0	1.0 U	19.1	96	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N69702.D

Lab ID: 460-161178-4 MSD Client ID: GC-MW-109M (WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	18.5	92	0	30	75-125	
1,1,2,2-Tetrachloroethane	20.0	17.2	86	2	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.6	93	2	30	59-150	
1,1,2-Trichloroethane	20.0	16.8	84	0	30	78-120	
1,1-Dichloroethane	20.0	17.5	87	2	30	77-123	
1,1-Dichloroethene	20.0	17.8	89	2	30	74-123	
1,2,3-Trichlorobenzene	20.0	16.4	82	5	30	78-131	
1,2,4-Trichlorobenzene	20.0	17.3	87	3	30	80-124	
1,2-Dibromo-3-Chloropropane	20.0	16.8	84	3	30	55-134	
1,2-Dichlorobenzene	20.0	18.2	91	1	30	80-120	
1,2-Dichloroethane	20.0	15.7	78	0	30	76-121	
1,2-Dichloropropane	20.0	17.6	88	1	30	77-123	
1,3-Dichlorobenzene	20.0	18.8	94	1	30	80-120	
1,4-Dichlorobenzene	20.0	18.5	93	2	30	80-120	
1,4-Dioxane	400	357	89	11	30	10-150	
2-Butanone (MEK)	100	92.8	93	2	30	64-120	
2-Hexanone	100	90.2	90	2	30	71-125	
4-Methyl-2-pentanone (MIBK)	100	88.5	89	4	30	78-124	
Acetone	100	87.9	88	7	30	39-150	
Benzene	20.0	18.0	90	2	30	77-121	
Bromoform	20.0	16.3	82	1	30	53-120	
Bromomethane	20.0	19.5	97	1	30	10-150	
Carbon disulfide	20.0	16.6	83	2	30	69-133	
Carbon tetrachloride	20.0	18.2	91	3	30	70-132	
Chlorobenzene	20.0	19.1	96	1	30	80-120	
Chlorobromomethane	20.0	16.9	85	1	30	77-127	
Chlorodibromomethane	20.0	18.4	92	3	30	73-120	
Chloroethane	20.0	19.4	97	3	30	52-150	
Chloroform	20.0	17.8	89	2	30	80-120	
Chloromethane	20.0	22.8	114	2	30	56-131	
cis-1,2-Dichloroethene	20.0	17.3	86	2	30	80-120	
cis-1,3-Dichloropropene	20.0	17.0	85	2	30	77-120	
Cyclohexane	20.0	17.8	89	0	30	56-150	
Dichlorobromomethane	20.0	18.0	90	4	30	76-120	
Dichlorodifluoromethane	20.0	19.1	96	1	30	50-131	
Ethylbenzene	20.0	19.2	96	2	30	80-120	
Ethylene Dibromide	20.0	17.1	86	0	30	80-120	
Isopropylbenzene	20.0	19.2	96	2	30	80-123	
Methyl acetate	40.0	35.6	89	13	30	66-144	
Methyl tert-butyl ether	20.0	17.1	85	1	30	79-122	
Methylcyclohexane	20.0	17.7	89	3	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N69702.D

Lab ID: 460-161178-4 MSD Client ID: GC-MW-109M (WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	20.0	17.3	87	2	30	77-123	
m-Xylene & p-Xylene	20.0	19.2	96	3	30	80-120	
o-Xylene	20.0	18.8	94	2	30	80-120	
Styrene	20.0	18.3	91	2	30	80-120	
Tetrachloroethene	20.0	33.4	88	1	30	78-122	
Toluene	20.0	18.8	94	0	30	80-120	
trans-1,2-Dichloroethene	20.0	18.2	91	5	30	79-120	
trans-1,3-Dichloropropene	20.0	16.4	82	1	30	76-120	
Trichloroethene	20.0	18.1	91	0	30	77-120	
Trichlorofluoromethane	20.0	19.5	97	0	30	71-143	
Vinyl chloride	20.0	19.3	96	1	30	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab File ID: N69689.D Lab Sample ID: MB 460-540359/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS11 Date Analyzed: 07/28/2018 07:18

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-540359/4	N69685.D	07/28/2018 05:50
GC-MW-109M (WG) MS	460-161178-4 MS	N69701.D	07/28/2018 11:46
GC-MW-109M (WG) MSD	460-161178-4 MSD	N69702.D	07/28/2018 12:08
GC-Equipment Blank (072418)	460-161178-6	N69705.D	07/28/2018 13:15
GC-MW-109M (WG)	460-161178-4	N69706.D	07/28/2018 13:37
GC-MW-107 (WG)	460-161178-1	N69707.D	07/28/2018 14:00
GC-MW-108 (WG)	460-161178-2	N69708.D	07/28/2018 14:22
GC-MW-109 (WG)	460-161178-3	N69709.D	07/28/2018 14:44
GC-MW-110 (WG)	460-161178-5	N69710.D	07/28/2018 15:06

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab File ID: N70092a.D Lab Sample ID: MB 460-542406/32

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS11 Date Analyzed: 08/06/2018 07:57

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-542406/30	N70088a.D	08/06/2018 06:28
	LCSD 460-542406/31	N70089a.D	08/06/2018 06:50
GC-TB (072418)	460-161178-7	N70097.D	08/06/2018 10:04

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab File ID: N69450.D BFB Injection Date: 07/24/2018

Instrument ID: CVOAMS11 BFB Injection Time: 05:45

Analysis Batch No.: 539131

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.4	
75	30.0 - 60.0 % of mass 95	48.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	65.5	
175	5.0 - 9.0 % of mass 174	5.1	(7.7) 1
176	95.0 - 101.0 % of mass 174	63.6	(97.1) 1
177	5.0 - 9.0 % of mass 176	4.9	(7.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8 460-539131/3	N69452.D	07/24/2018	06:28
	STD1 460-539131/5	N69454.D	07/24/2018	07:13
	STD5 460-539131/6	N69455.D	07/24/2018	07:35
	STD20 460-539131/7	N69456.D	07/24/2018	07:58
	STD50 460-539131/8	N69457.D	07/24/2018	08:20
	STD200 460-539131/9	N69458.D	07/24/2018	08:42
	STD500 460-539131/10	N69459.D	07/24/2018	09:04

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab File ID: N69682.D BFB Injection Date: 07/28/2018

Instrument ID: CVOAMS11 BFB Injection Time: 04:30

Analysis Batch No.: 540359

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	47.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	70.1	
175	5.0 - 9.0 % of mass 174	5.5	(7.8) 1
176	95.0 - 101.0 % of mass 174	69.1	(98.5) 1
177	5.0 - 9.0 % of mass 176	4.7	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-540359/3	N69684.D	07/28/2018	05:27
	LCS 460-540359/4	N69685.D	07/28/2018	05:50
	MB 460-540359/8	N69689.D	07/28/2018	07:18
GC-MW-109M (WG) MS	460-161178-4 MS	N69701.D	07/28/2018	11:46
GC-MW-109M (WG) MSD	460-161178-4 MSD	N69702.D	07/28/2018	12:08
GC-Equipment Blank (072418)	460-161178-6	N69705.D	07/28/2018	13:15
GC-MW-109M (WG)	460-161178-4	N69706.D	07/28/2018	13:37
GC-MW-107 (WG)	460-161178-1	N69707.D	07/28/2018	14:00
GC-MW-108 (WG)	460-161178-2	N69708.D	07/28/2018	14:22
GC-MW-109 (WG)	460-161178-3	N69709.D	07/28/2018	14:44
GC-MW-110 (WG)	460-161178-5	N69710.D	07/28/2018	15:06

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab File ID: N70085.D BFB Injection Date: 08/06/2018

Instrument ID: CVOAMS11 BFB Injection Time: 05:19

Analysis Batch No.: 542406

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	44.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	93.1	
175	5.0 - 9.0 % of mass 174	6.3	(6.8) 1
176	95.0 - 101.0 % of mass 174	90.6	(97.3) 1
177	5.0 - 9.0 % of mass 176	7.0	(7.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-542406/3	N70087.D	08/06/2018	06:06
	LCS 460-542406/30	N70088a.D	08/06/2018	06:28
	LCSD 460-542406/31	N70089a.D	08/06/2018	06:50
	MB 460-542406/32	N70092a.D	08/06/2018	07:57
GC-TB (072418)	460-161178-7	N70097.D	08/06/2018	10:04

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Sample No.: CCVIS 460-540359/3 Date Analyzed: 07/28/2018 05:27

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N69684.D Heated Purge: (Y/N) N

Calibration ID: 70382

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		128410	3.28	144804	4.66	629603	5.39
UPPER LIMIT		256820	3.78	289608	5.16	1259206	5.89
LOWER LIMIT		64205	2.78	72402	4.16	314802	4.89
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-540359/4		131221	3.28	151355	4.66	661867	5.38
MB 460-540359/8		125849	3.28	151737	4.66	635651	5.39
460-161178-4 MS	GC-MW-109M (WG) MS	142987	3.29	158180	4.66	690184	5.39
460-161178-4 MSD	GC-MW-109M (WG) MSD	148294	3.29	163609	4.66	699616	5.39
460-161178-6	GC-Equipment Blank (072418)	126969	3.28	149375	4.66	649449	5.39
460-161178-4	GC-MW-109M (WG)	127360	3.29	149011	4.66	643318	5.39
460-161178-1	GC-MW-107 (WG)	131159	3.27	150265	4.66	650914	5.39
460-161178-2	GC-MW-108 (WG)	129367	3.29	150061	4.66	635153	5.39
460-161178-3	GC-MW-109 (WG)	129900	3.29	146811	4.66	635806	5.39
460-161178-5	GC-MW-110 (WG)	129064	3.29	152150	4.66	635220	5.39

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Sample No.: CCVIS 460-540359/3 Date Analyzed: 07/28/2018 05:27

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N69684.D Heated Purge: (Y/N) N

Calibration ID: 70382

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		19613	6.38	477696	9.16	230078	11.45
UPPER LIMIT		39226	6.88	955392	9.66	460156	11.95
LOWER LIMIT		9807	5.88	238848	8.66	115039	10.95
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-540359/4		18146	6.38	498535	9.16	243013	11.45
MB 460-540359/8		16926	6.39	472668	9.16	224290	11.45
460-161178-4 MS	GC-MW-109M (WG) MS	19673	6.39	506843	9.16	248965	11.46
460-161178-4 MSD	GC-MW-109M (WG) MSD	19717	6.40	518259	9.16	256201	11.46
460-161178-6	GC-Equipment Blank (072418)	17156	6.39	472772	9.16	230208	11.45
460-161178-4	GC-MW-109M (WG)	17838	6.40	469352	9.16	226515	11.45
460-161178-1	GC-MW-107 (WG)	17724	6.40	479846	9.16	228504	11.46
460-161178-2	GC-MW-108 (WG)	17603	6.39	461652	9.16	227196	11.45
460-161178-3	GC-MW-109 (WG)	18255	6.39	465384	9.16	226267	11.46
460-161178-5	GC-MW-110 (WG)	17283	6.39	463030	9.16	227990	11.46

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Sample No.: CCVIS 460-542406/3 Date Analyzed: 08/06/2018 06:06

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N70087.D Heated Purge: (Y/N) N

Calibration ID: 70382

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		106165	3.28	126134	4.65	679638	5.38
UPPER LIMIT		212330	3.78	252268	5.15	1359276	5.88
LOWER LIMIT		53083	2.78	63067	4.15	339819	4.88
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-542406/30		111898	3.28	126834	4.66	672172	5.38
LCSD 460-542406/31		103265	3.28	118973	4.66	648882	5.39
MB 460-542406/32		104017	3.27	126977	4.66	665628	5.38
460-161178-7	GC-TB (072418)	96976	3.28	118691	4.66	656814	5.39

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Sample No.: CCVIS 460-542406/3 Date Analyzed: 08/06/2018 06:06

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): N70087.D Heated Purge: (Y/N) N

Calibration ID: 70382

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		16930	6.38	545115	9.16	289099	11.45
UPPER LIMIT		33860	6.88	1090230	9.66	578198	11.95
LOWER LIMIT		8465	5.88	272558	8.66	144550	10.95
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-542406/30		18716	6.39	538641	9.16	285363	11.45
LCSD 460-542406/31		16845	6.40	519511	9.16	277206	11.45
MB 460-542406/32		17807	6.38	531627	9.16	286714	11.45
460-161178-7	GC-TB (072418)	17784	6.38	518722	9.16	287003	11.45

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-107 (WG) | Lab Sample ID: 460-161178-1

Matrix: Water | Lab File ID: N69707.D

Analysis Method: 8260C | Date Collected: 07/24/2018 07:45

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 14:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-107 (WG) | Lab Sample ID: 460-161178-1

Matrix: Water | Lab File ID: N69707.D

Analysis Method: 8260C | Date Collected: 07/24/2018 07:45

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 14:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	9.2		1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		74-132
460-00-4	4-Bromofluorobenzene	95		77-124
1868-53-7	Dibromofluoromethane (Surr)	97		72-131
2037-26-5	Toluene-d8 (Surr)	100		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-107 (WG) | Lab Sample ID: 460-161178-1

Matrix: Water | Lab File ID: N69707.D

Analysis Method: 8260C | Date Collected: 07/24/2018 07:45

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 14:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69707.D
Lims ID: 460-161178-B-1
Client ID: GC-MW-107 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 14:00:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161178-B-1
Misc. Info.: 460-0076243-026
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 20:04:07 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: sarmientod Date: 28-Jul-2018 18:20:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.274	3.281	-0.007	39	131159	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.589	4.595	-0.006	96	129803	48.5	
* 39 2-Butanone-d5	46	4.662	4.662	0.000	0	150265	250.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	97	126837	47.2	
* 62 Fluorobenzene	96	5.385	5.385	0.000	99	650914	50.0	
* 68 1,4-Dioxane-d8	96	6.395	6.383	0.012	30	17724	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	100	584036	50.2	
84 Tetrachloroethene	166	7.697	7.697	0.000	95	29938	9.16	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	85	479846	50.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	145436	47.3	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.451	0.006	96	228504	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00179 Amount Added: 1.00 Units: uL Run Reagent

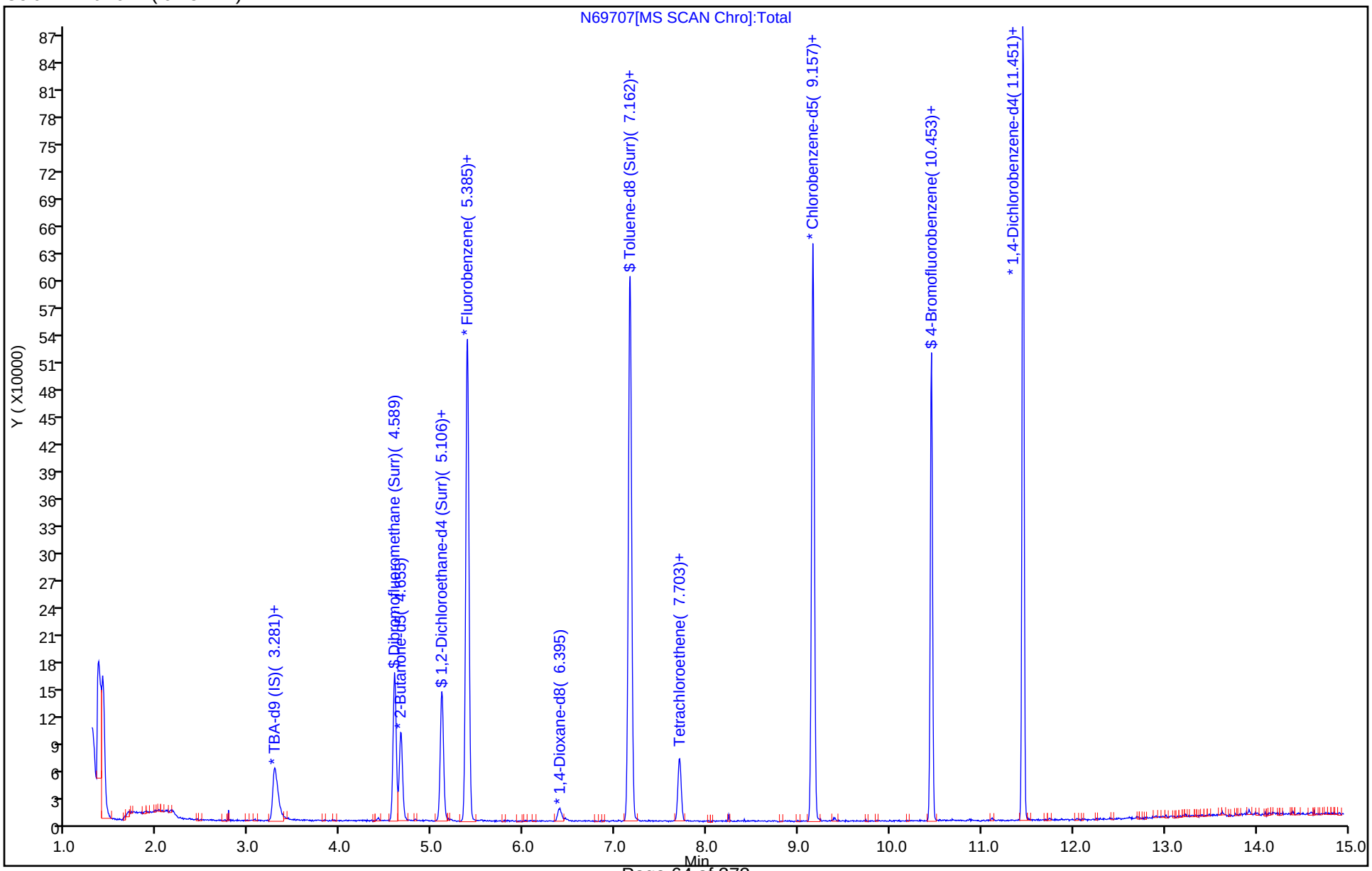
Report Date: 31-Jul-2018 20:04:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69707.D

Injection Date:	28-Jul-2018 14:00:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-161178-B-1	Lab Sample ID:	460-161178-1	Worklist Smp#:	26
Client ID:	GC-MW-107 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



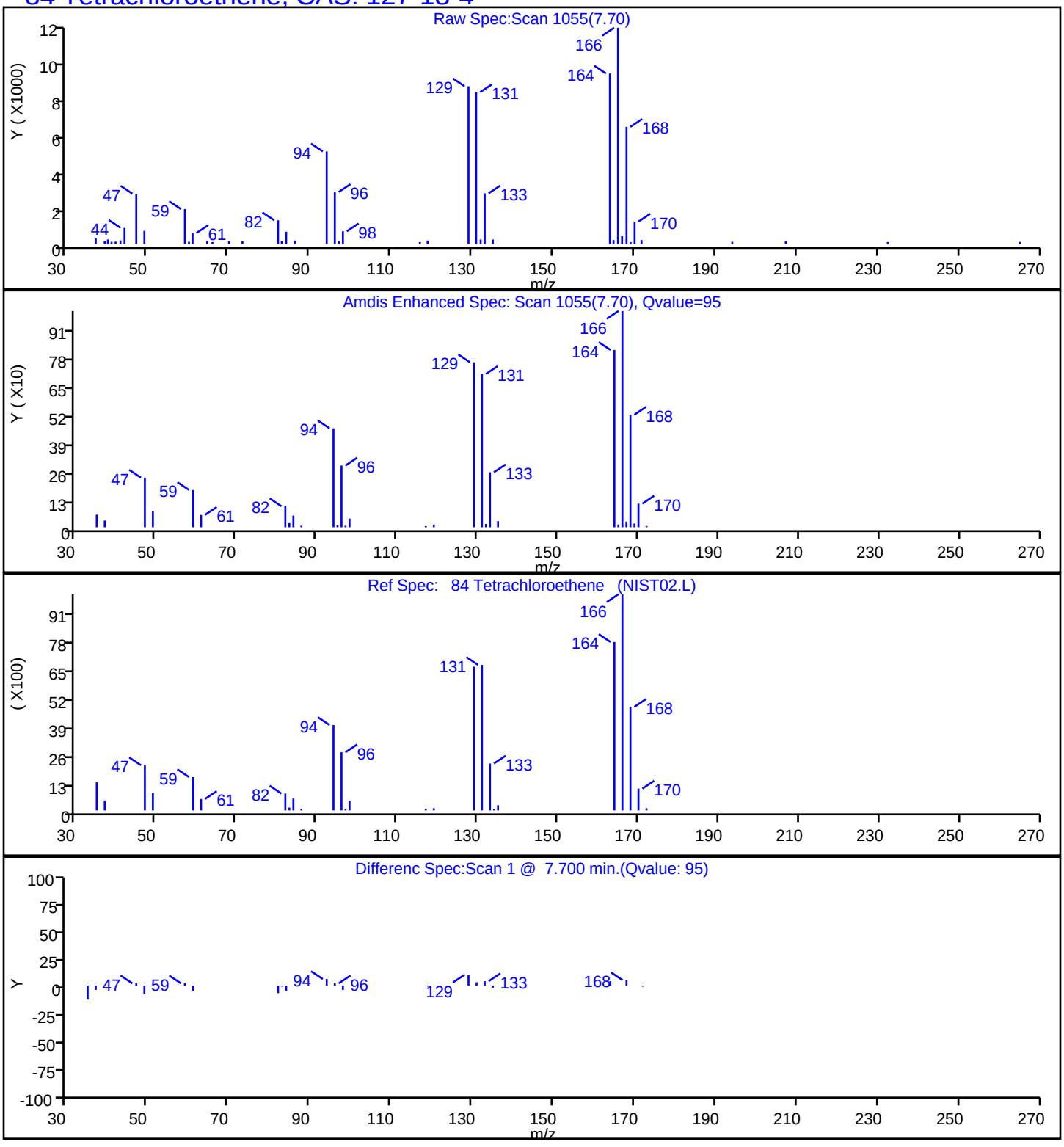
Report Date: 31-Jul-2018 20:04:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69707.D

Injection Date:	28-Jul-2018 14:00:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-1	Lab Sample ID:	460-161178-1
Client ID:	GC-MW-107 (WG)		
Operator ID:		ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

84 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-108 (WG) | Lab Sample ID: 460-161178-2

Matrix: Water | Lab File ID: N69708.D

Analysis Method: 8260C | Date Collected: 07/24/2018 08:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 14:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-108 (WG) | Lab Sample ID: 460-161178-2

Matrix: Water | Lab File ID: N69708.D

Analysis Method: 8260C | Date Collected: 07/24/2018 08:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 14:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	6.0		1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		74-132
460-00-4	4-Bromofluorobenzene	97		77-124
1868-53-7	Dibromofluoromethane (Surr)	96		72-131
2037-26-5	Toluene-d8 (Surr)	103		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-108 (WG) Lab Sample ID: 460-161178-2

Matrix: Water Lab File ID: N69708.D

Analysis Method: 8260C Date Collected: 07/24/2018 08:50

Sample wt/vol: 5(mL) Date Analyzed: 07/28/2018 14:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 540359 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69708.D
Lims ID: 460-161178-B-2
Client ID: GC-MW-108 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 14:22:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161178-B-2
Misc. Info.: 460-0076243-027
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 20:04:07 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: sarmientod Date: 28-Jul-2018 18:20:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.287	3.281	0.006	39	129367	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.588	4.595	-0.007	97	125390	48.0	
* 39 2-Butanone-d5	46	4.661	4.662	-0.001	0	150061	250.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	98	127110	48.5	
* 62 Fluorobenzene	96	5.385	5.385	0.000	99	635153	50.0	
* 68 1,4-Dioxane-d8	96	6.389	6.383	0.006	30	17603	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	100	576438	51.5	
84 Tetrachloroethene	166	7.697	7.697	0.000	95	18915	6.02	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	85	461652	50.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	142933	48.3	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	97	227196	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00179 Amount Added: 1.00 Units: uL Run Reagent

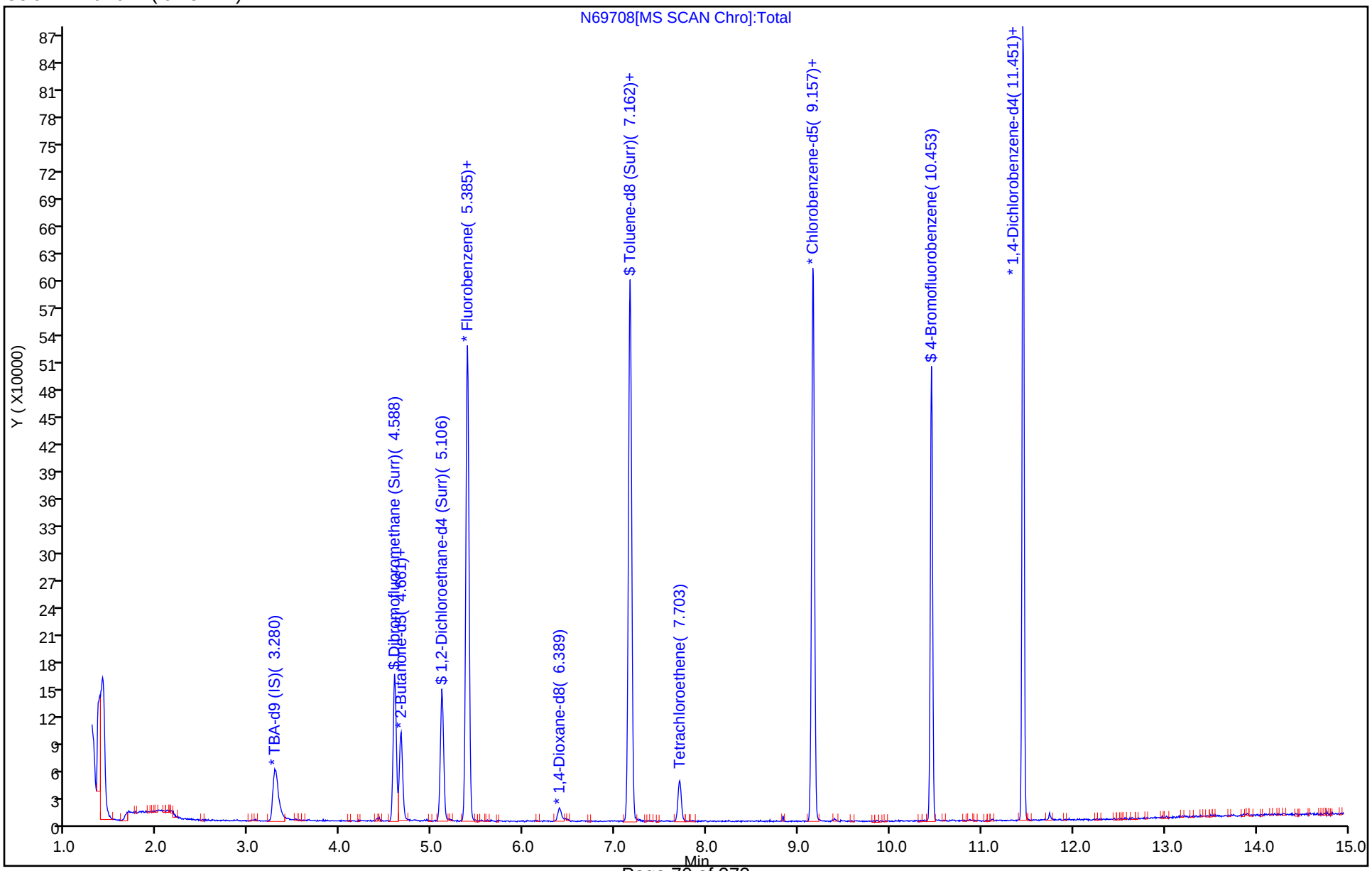
Report Date: 31-Jul-2018 20:04:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69708.D

Injection Date:	28-Jul-2018 14:22:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-161178-B-2	Lab Sample ID:	460-161178-2	Worklist Smp#:	27
Client ID:	GC-MW-108 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



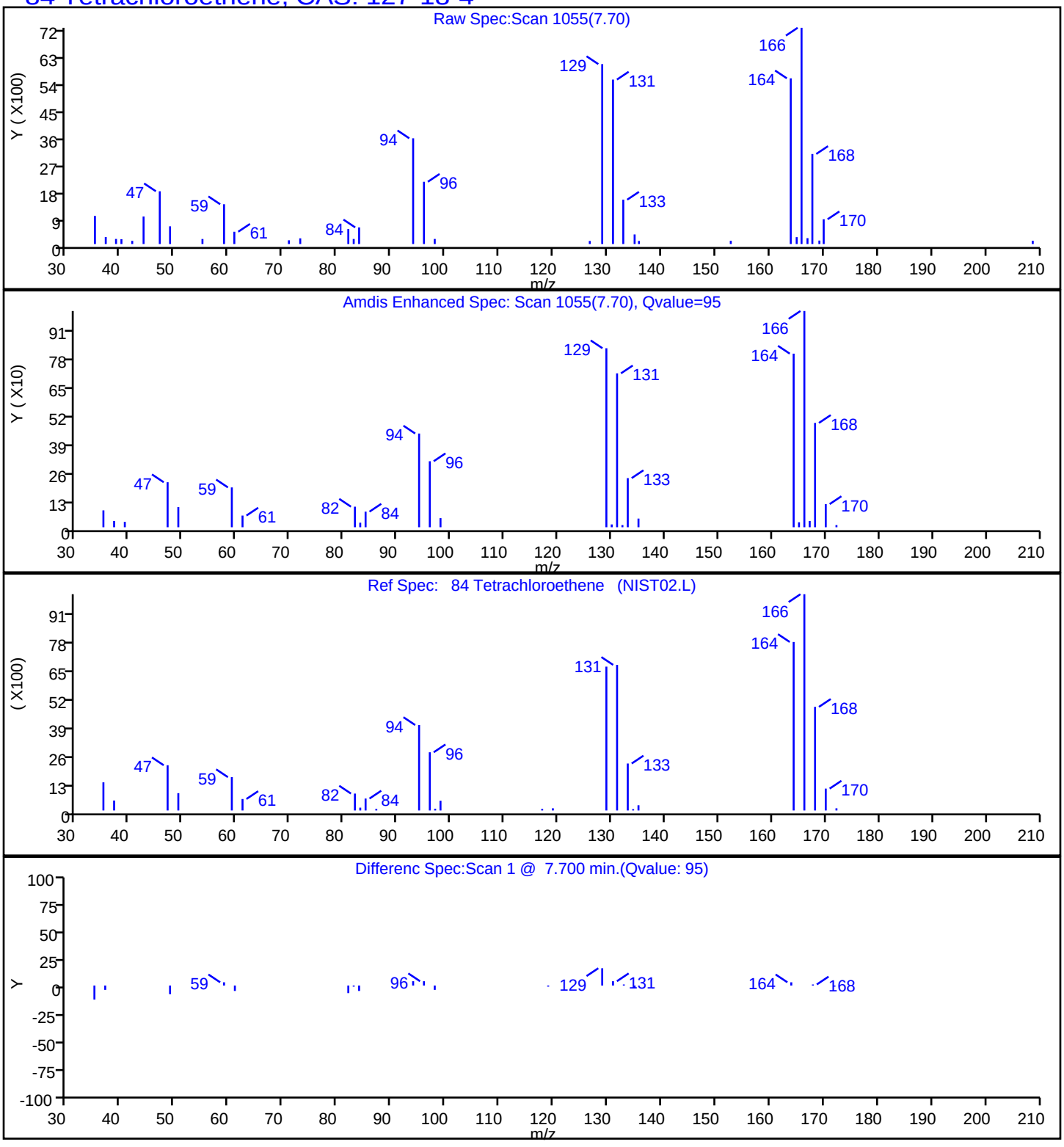
Report Date: 31-Jul-2018 20:04:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69708.D

Injection Date:	28-Jul-2018 14:22:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-B-2	Lab Sample ID:	460-161178-2		
Client ID:	GC-MW-108 (WG)				
Operator ID:		ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

84 Tetrachloroethene, CAS: 127-18-4



User Disabled Compound Report

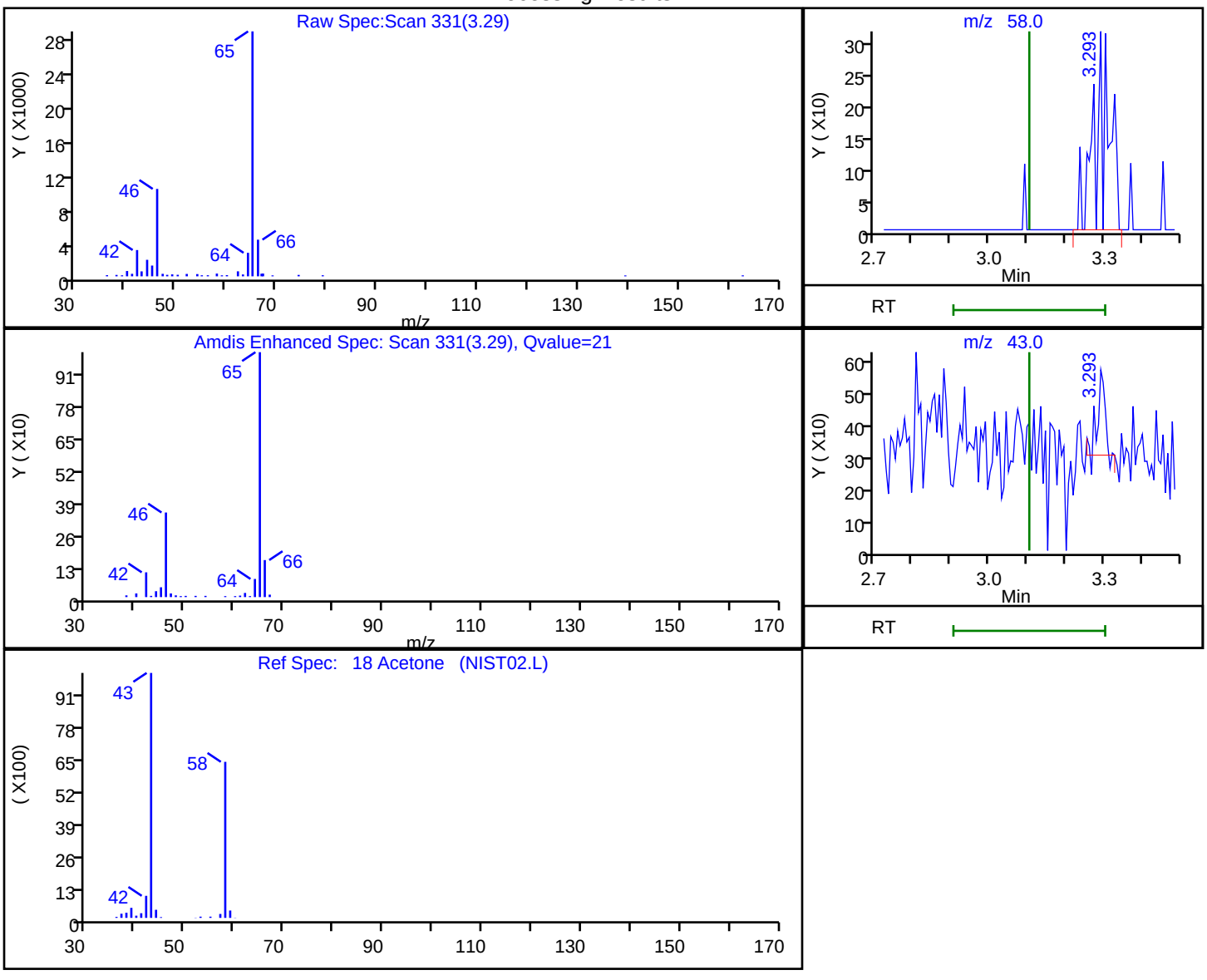
TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69708.D

Injection Date:	28-Jul-2018 14:22:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-2	Lab Sample ID:	460-161178-2
Client ID:	GC-MW-108 (WG)		
Operator ID:		ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

18 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
3.29	58.00	834	5.660358
3.29	43.00	351	

Reviewer: sarmientod, 28-Jul-2018 18:20:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) | Lab Sample ID: 460-161178-3

Matrix: Water | Lab File ID: N69709.D

Analysis Method: 8260C | Date Collected: 07/24/2018 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 14:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) | Lab Sample ID: 460-161178-3

Matrix: Water | Lab File ID: N69709.D

Analysis Method: 8260C | Date Collected: 07/24/2018 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 14:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	3.1		1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		74-132
460-00-4	4-Bromofluorobenzene	96		77-124
1868-53-7	Dibromofluoromethane (Surr)	99		72-131
2037-26-5	Toluene-d8 (Surr)	103		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) Lab Sample ID: 460-161178-3

Matrix: Water Lab File ID: N69709.D

Analysis Method: 8260C Date Collected: 07/24/2018 09:50

Sample wt/vol: 5(mL) Date Analyzed: 07/28/2018 14:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 540359 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69709.D
Lims ID: 460-161178-B-3
Client ID: GC-MW-109 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 14:44:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161178-B-3
Misc. Info.: 460-0076243-028
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 20:04:07 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: sarmientod Date: 28-Jul-2018 18:20:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.287	3.281	0.006	38	129900	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.595	4.595	0.000	97	129082	49.4	
* 39 2-Butanone-d5	46	4.661	4.662	-0.001	0	146811	250.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.112	5.106	0.006	96	124764	47.5	
* 62 Fluorobenzene	96	5.391	5.385	0.006	99	635806	50.0	
* 68 1,4-Dioxane-d8	96	6.389	6.383	0.006	30	18255	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	100	581611	51.6	
84 Tetrachloroethene	166	7.703	7.697	0.006	96	9687	3.06	
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	85	465384	50.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	142456	47.8	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.451	0.006	96	226267	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00179 Amount Added: 1.00 Units: uL Run Reagent

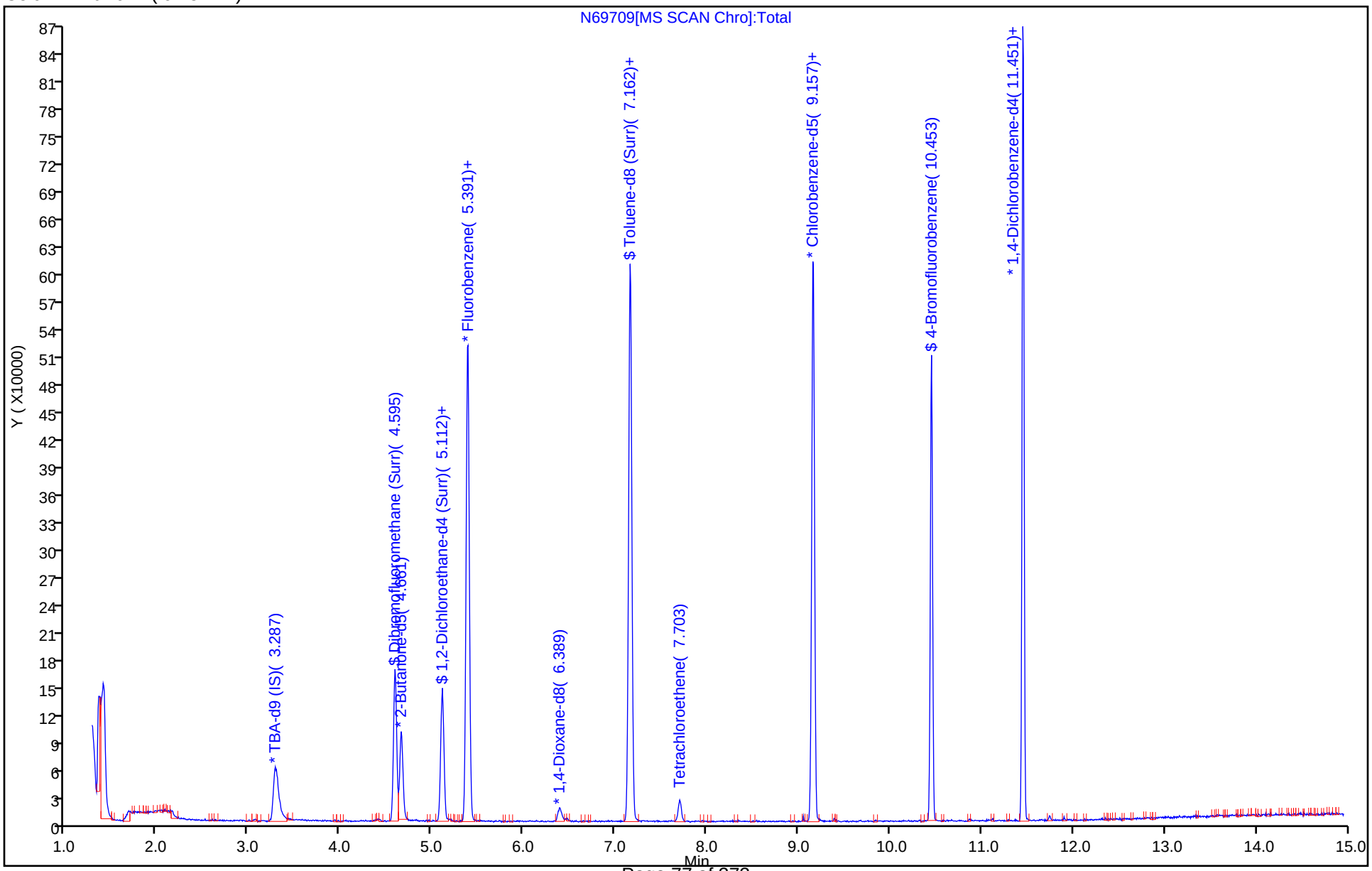
Report Date: 31-Jul-2018 20:04:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69709.D

Injection Date:	28-Jul-2018 14:44:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-161178-B-3	Lab Sample ID:	460-161178-3	Worklist Smp#:	28
Client ID:	GC-MW-109 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



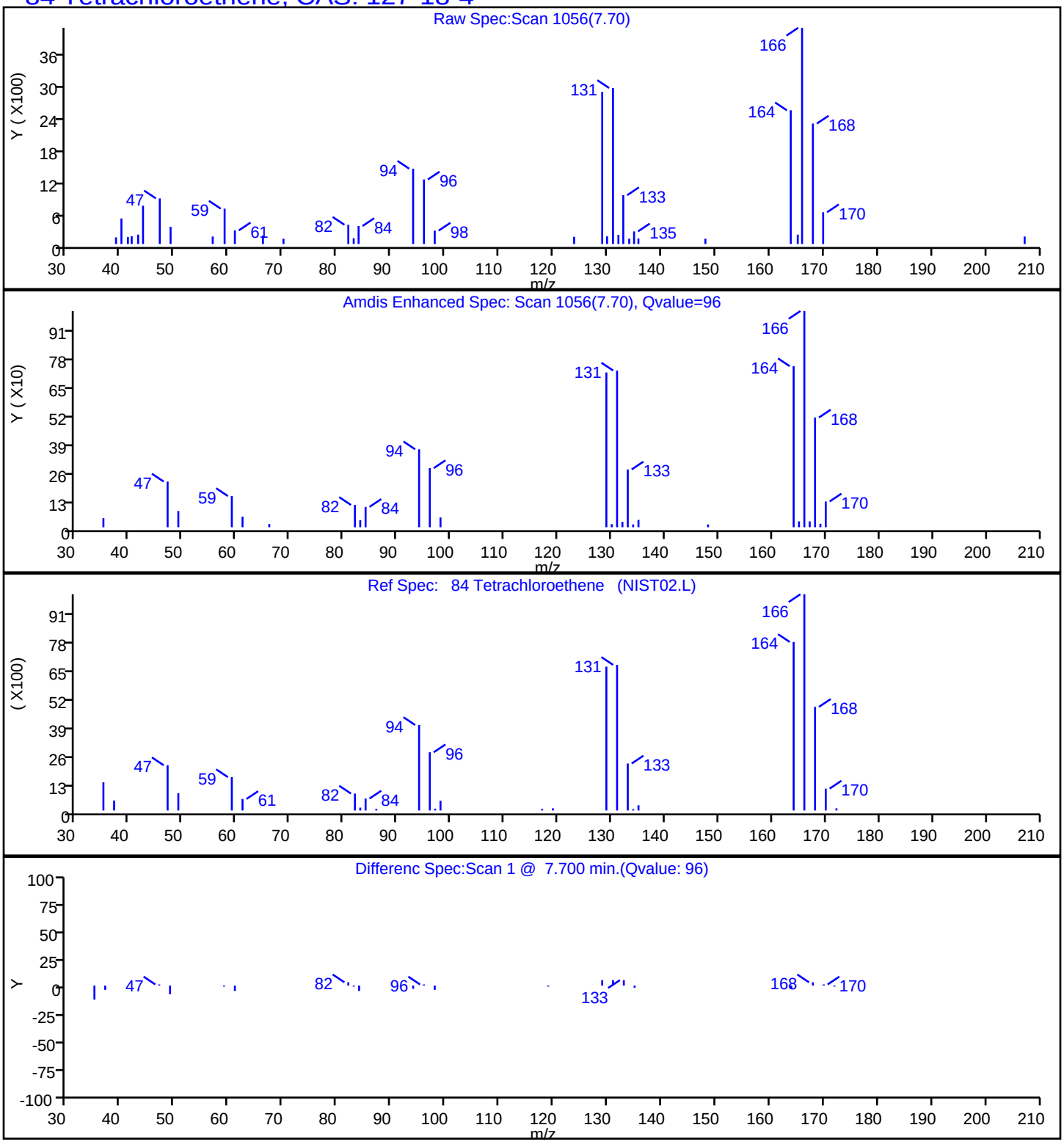
Report Date: 31-Jul-2018 20:04:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69709.D

Injection Date:	28-Jul-2018 14:44:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-3	Lab Sample ID:	460-161178-3
Client ID:	GC-MW-109 (WG)		
Operator ID:		ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

84 Tetrachloroethene, CAS: 127-18-4



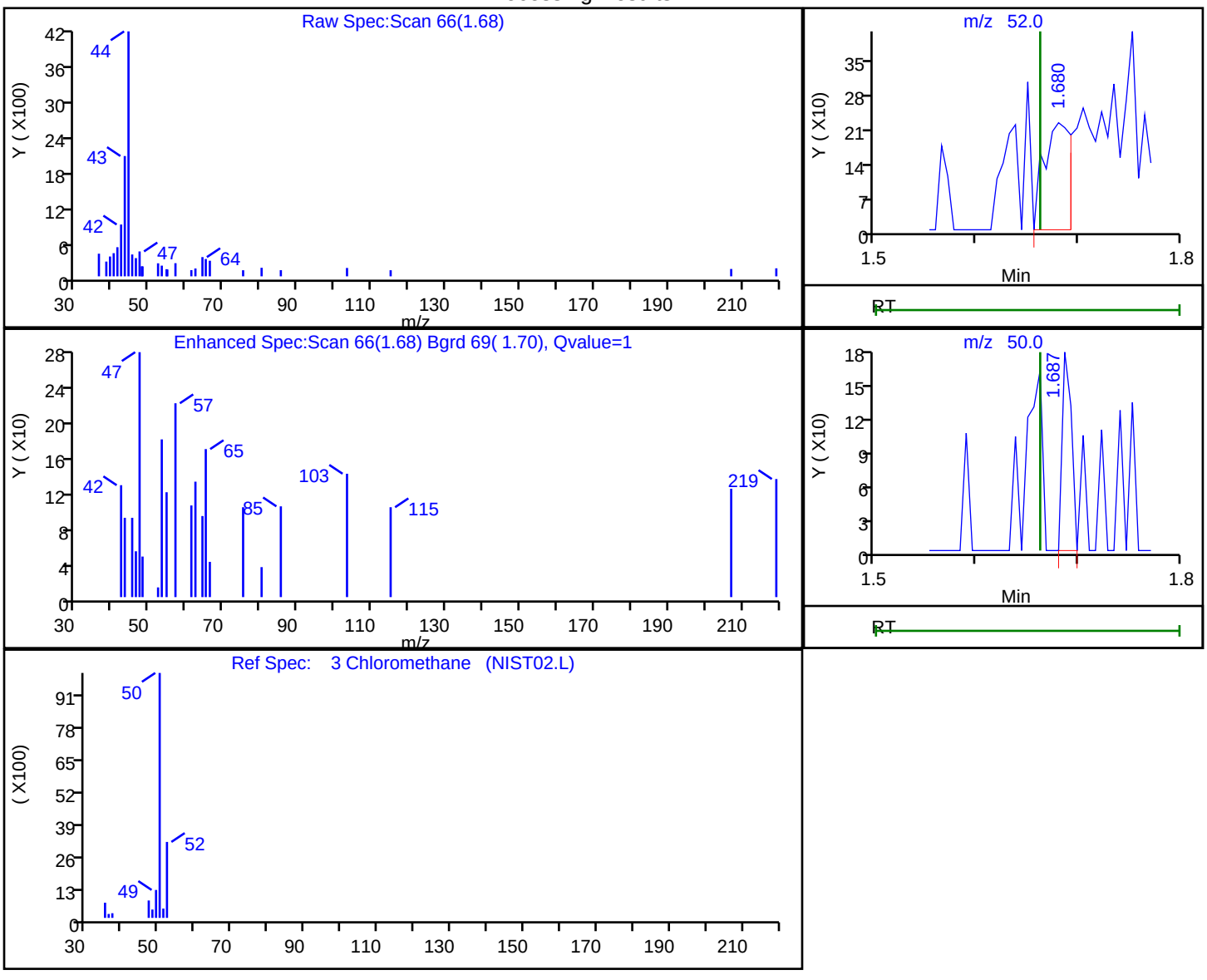
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69709.D		
Injection Date:	28-Jul-2018 14:44:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-3	Lab Sample ID:	460-161178-3
Client ID:	GC-MW-109 (WG)		
Operator ID:		ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.68	52.00	401	0.263930
1.69	50.00	110	

Reviewer: sarmientod, 28-Jul-2018 18:20:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) | Lab Sample ID: 460-161178-4

Matrix: Water | Lab File ID: N69706.D

Analysis Method: 8260C | Date Collected: 07/24/2018 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 13:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) | Lab Sample ID: 460-161178-4

Matrix: Water | Lab File ID: N69706.D

Analysis Method: 8260C | Date Collected: 07/24/2018 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 13:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	16		1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		74-132
460-00-4	4-Bromofluorobenzene	97		77-124
1868-53-7	Dibromofluoromethane (Surr)	97		72-131
2037-26-5	Toluene-d8 (Surr)	103		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) Lab Sample ID: 460-161178-4

Matrix: Water Lab File ID: N69706.D

Analysis Method: 8260C Date Collected: 07/24/2018 10:50

Sample wt/vol: 5(mL) Date Analyzed: 07/28/2018 13:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 540359 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69706.D				
Lims ID:	460-161178-B-4				
Client ID:	GC-MW-109M (WG)				
Sample Type:	Client				
Inject. Date:	28-Jul-2018 13:37:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-161178-B-4				
Misc. Info.:	460-0076243-025				
Operator ID:		Instrument ID:	CVOAMS11		
Method:	\\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m				
Limit Group:	VOA - 8260C Water and Solid				
Last Update:	31-Jul-2018 20:04:07	Calib Date:	24-Jul-2018 09:04:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK026				
First Level Reviewer: sarmientod		Date:	28-Jul-2018 18:19:42		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.287	3.281	0.006	39	127360	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.594	4.595	-0.001	97	127724	48.3	
* 39 2-Butanone-d5	46	4.655	4.662	-0.007	0	149011	250.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	97	125868	47.4	
* 62 Fluorobenzene	96	5.385	5.385	0.000	99	643318	50.0	
* 68 1,4-Dioxane-d8	96	6.395	6.383	0.012	30	17838	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	99	585588	51.5	
84 Tetrachloroethene	166	7.703	7.697	0.006	97	50661	15.8	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	85	469352	50.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	145534	48.4	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	96	226515	50.0	

Reagents:

8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

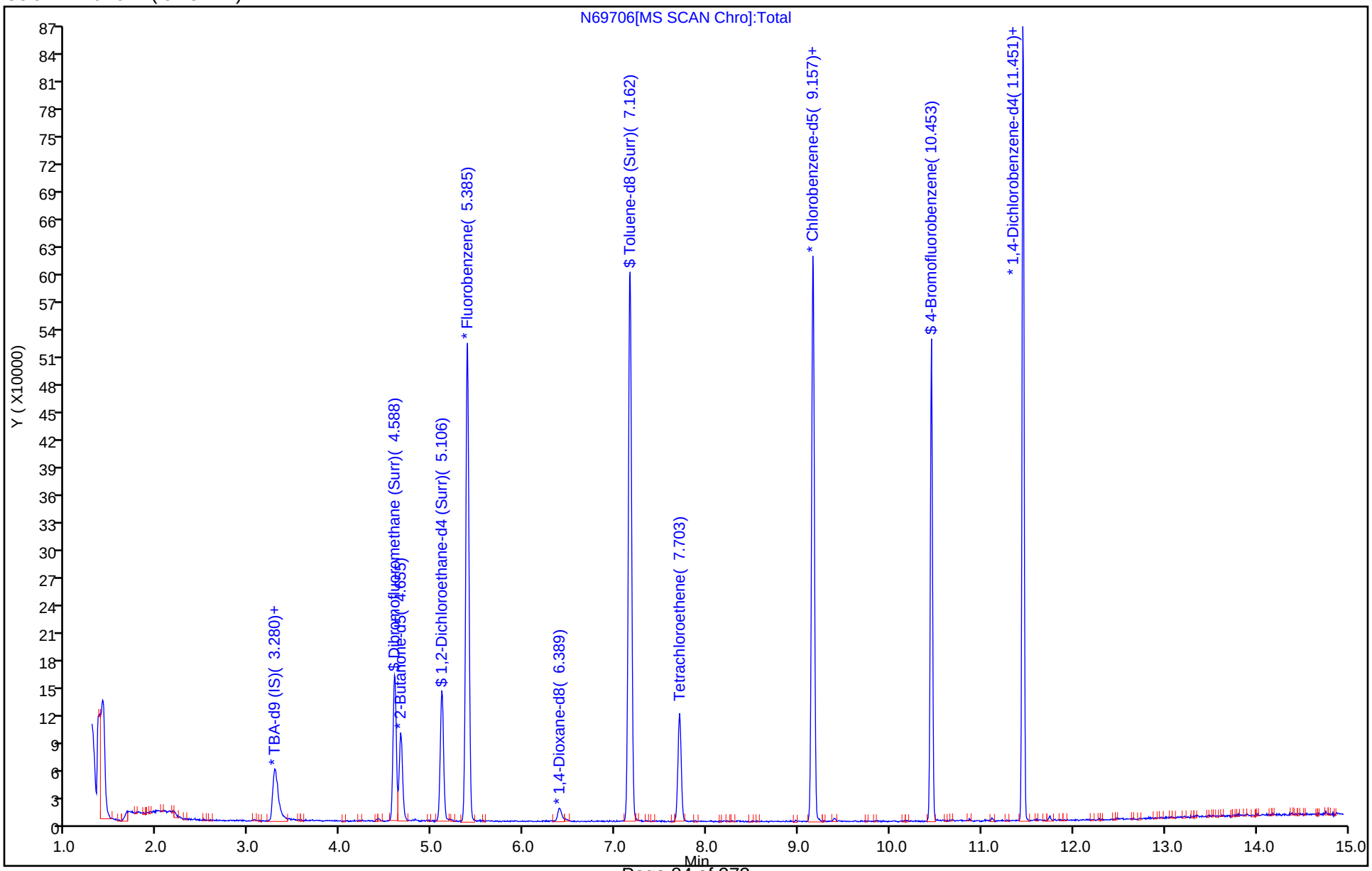
Report Date: 31-Jul-2018 20:04:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69706.D

Injection Date:	28-Jul-2018 13:37:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-161178-B-4	Lab Sample ID:	460-161178-4	Worklist Smp#:	25
Client ID:	GC-MW-109M (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



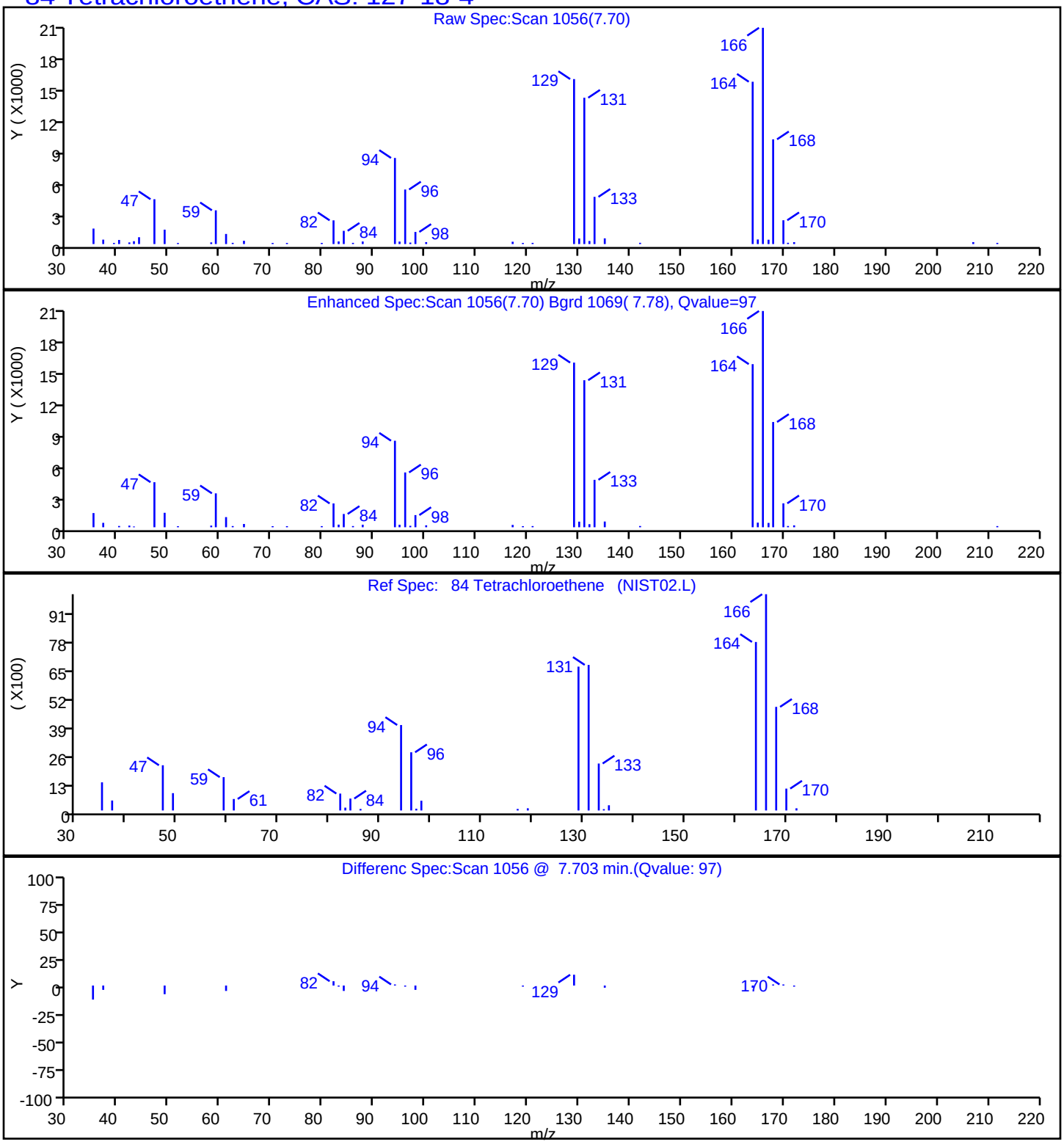
Report Date: 31-Jul-2018 20:04:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69706.D

Injection Date:	28-Jul-2018 13:37:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-B-4	Lab Sample ID:	460-161178-4		
Client ID:	GC-MW-109M (WG)				
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

84 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-110 (WG) | Lab Sample ID: 460-161178-5

Matrix: Water | Lab File ID: N69710.D

Analysis Method: 8260C | Date Collected: 07/24/2018 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 15:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-110 (WG) | Lab Sample ID: 460-161178-5

Matrix: Water | Lab File ID: N69710.D

Analysis Method: 8260C | Date Collected: 07/24/2018 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 15:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		74-132
460-00-4	4-Bromofluorobenzene	97		77-124
1868-53-7	Dibromofluoromethane (Surr)	99		72-131
2037-26-5	Toluene-d8 (Surr)	103		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-110 (WG) | Lab Sample ID: 460-161178-5

Matrix: Water | Lab File ID: N69710.D

Analysis Method: 8260C | Date Collected: 07/24/2018 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 15:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69710.D
Lims ID: 460-161178-B-5
Client ID: GC-MW-110 (WG)
Sample Type: Client
Inject. Date: 28-Jul-2018 15:06:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161178-B-5
Misc. Info.: 460-0076243-029
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 20:04:07 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: sarmientod Date: 28-Jul-2018 18:21:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.293	3.281	0.012	39	129064	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.594	4.595	-0.001	97	129014	49.4	
* 39 2-Butanone-d5	46	4.661	4.662	-0.001	0	152150	250.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.112	5.106	0.006	97	125052	47.7	
* 62 Fluorobenzene	96	5.385	5.385	0.000	99	635220	50.0	
* 68 1,4-Dioxane-d8	96	6.389	6.383	0.006	30	17283	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	100	577156	51.5	
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	85	463030	50.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	85	144557	48.7	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.451	0.006	96	227990	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00179 Amount Added: 1.00 Units: uL Run Reagent

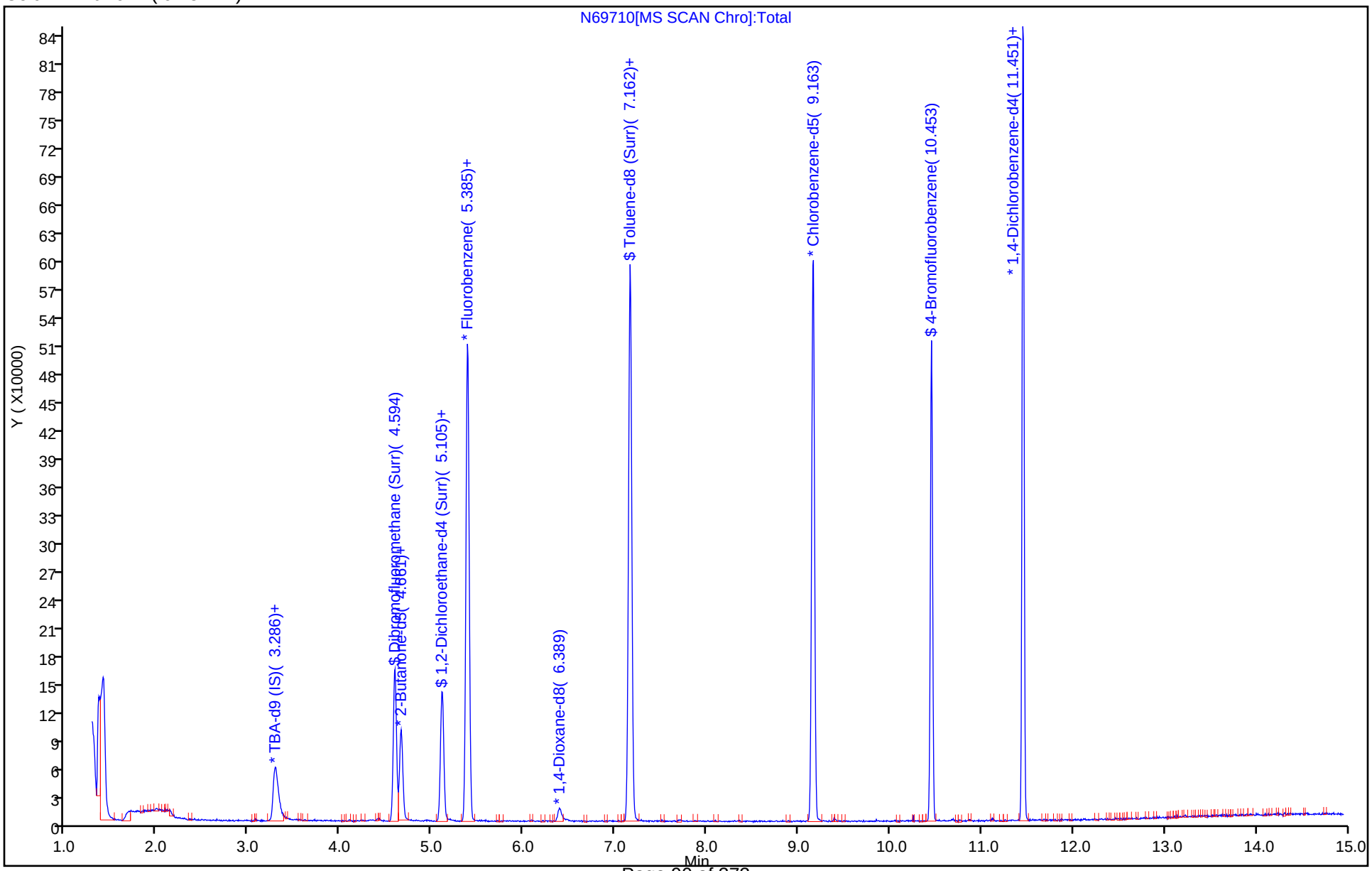
Report Date: 31-Jul-2018 20:05:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69710.D

Injection Date:	28-Jul-2018 15:06:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-161178-B-5	Lab Sample ID:	460-161178-5	Worklist Smp#:	29
Client ID:	GC-MW-110 (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



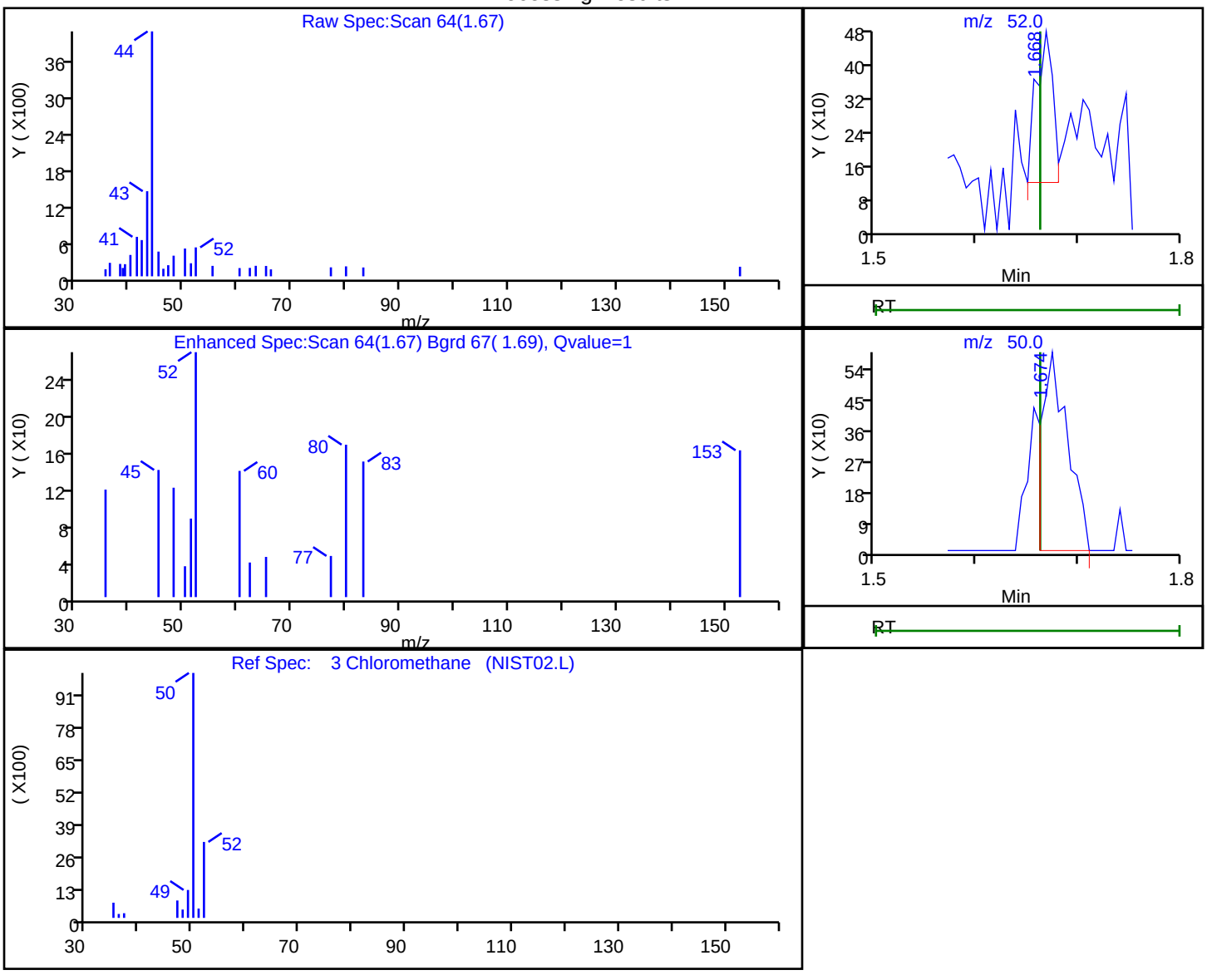
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69710.D		
Injection Date:	28-Jul-2018 15:06:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-5	Lab Sample ID:	460-161178-5
Client ID:	GC-MW-110 (WG)		
Operator ID:		ALS Bottle#:	28 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.67	52.00	415	0.263560
1.67	50.00	1033	

Reviewer: sarmientod, 28-Jul-2018 18:20:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-Equipment Blank (072418) | Lab Sample ID: 460-161178-6

Matrix: Water | Lab File ID: N69705.D

Analysis Method: 8260C | Date Collected: 07/24/2018 07:00

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 13:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	10		5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-Equipment Blank (072418) | Lab Sample ID: 460-161178-6

Matrix: Water | Lab File ID: N69705.D

Analysis Method: 8260C | Date Collected: 07/24/2018 07:00

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 13:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12
100-41-4	Ethylbenzene	0.49	J	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	0.54	J	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.9		1.0	0.30
95-47-6	o-Xylene	0.77	J	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		74-132
460-00-4	4-Bromofluorobenzene	96		77-124
1868-53-7	Dibromofluoromethane (Surr)	95		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-Equipment Blank (072418) Lab Sample ID: 460-161178-6

Matrix: Water Lab File ID: N69705.D

Analysis Method: 8260C Date Collected: 07/24/2018 07:00

Sample wt/vol: 5(mL) Date Analyzed: 07/28/2018 13:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 540359 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69705.D
Lims ID: 460-161178-B-6
Client ID: GC-Equipment Blank (072418)
Sample Type: Client
Inject. Date: 28-Jul-2018 13:15:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161178-B-6
Misc. Info.: 460-0076243-024
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 20:03:36 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: delpolitov Date: 31-Jul-2018 20:03:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
26 Methylene Chloride	84	3.062	3.062	0.000	90	2047	0.5394	
* 27 TBA-d9 (IS)	65	3.281	3.281	-0.001	38	126969	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.588	4.595	-0.007	96	126859	47.5	
* 39 2-Butanone-d5	46	4.655	4.662	-0.007	0	149375	250.0	
41 2-Butanone (MEK)	72	4.710	4.704	0.006	99	2264	10.5	M
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	98	128212	47.8	
* 62 Fluorobenzene	96	5.385	5.385	0.000	99	649449	50.0	
* 68 1,4-Dioxane-d8	96	6.389	6.383	0.006	30	17156	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	100	586136	51.2	
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	85	472772	50.0	
92 Ethylbenzene	106	9.224	9.218	0.006	95	2626	0.4943	
94 m-Xylene & p-Xylene	106	9.395	9.395	-0.001	0	12594	1.94	
96 o-Xylene	106	9.857	9.857	0.000	92	4930	0.7698	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	144970	47.8	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	97	230208	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

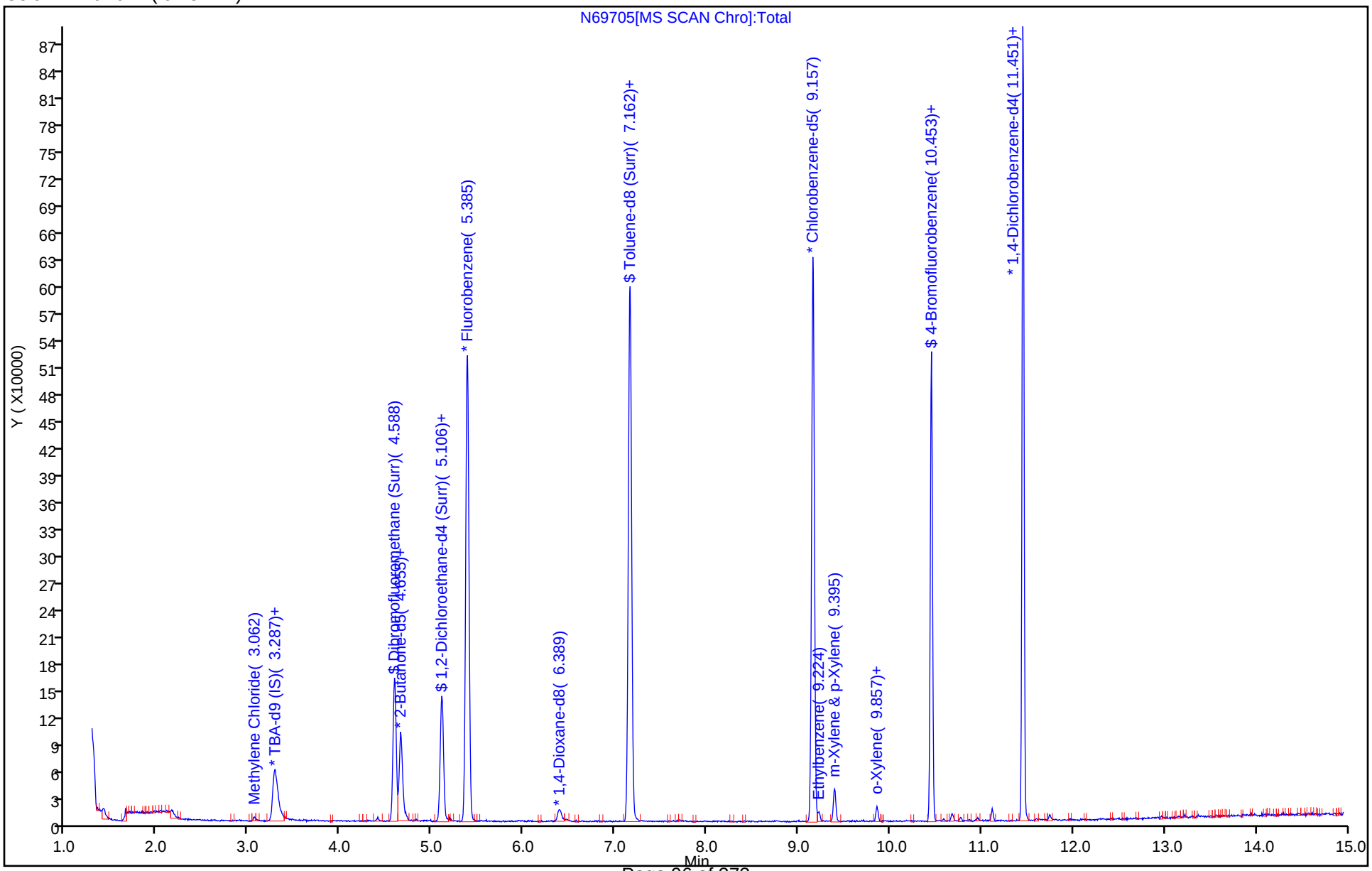
Report Date: 31-Jul-2018 20:03:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69705.D

Injection Date:	28-Jul-2018 13:15:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-161178-B-6	Lab Sample ID:	460-161178-6	Worklist Smp#:	24
Client ID:	GC-Equipment Blank (072418)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



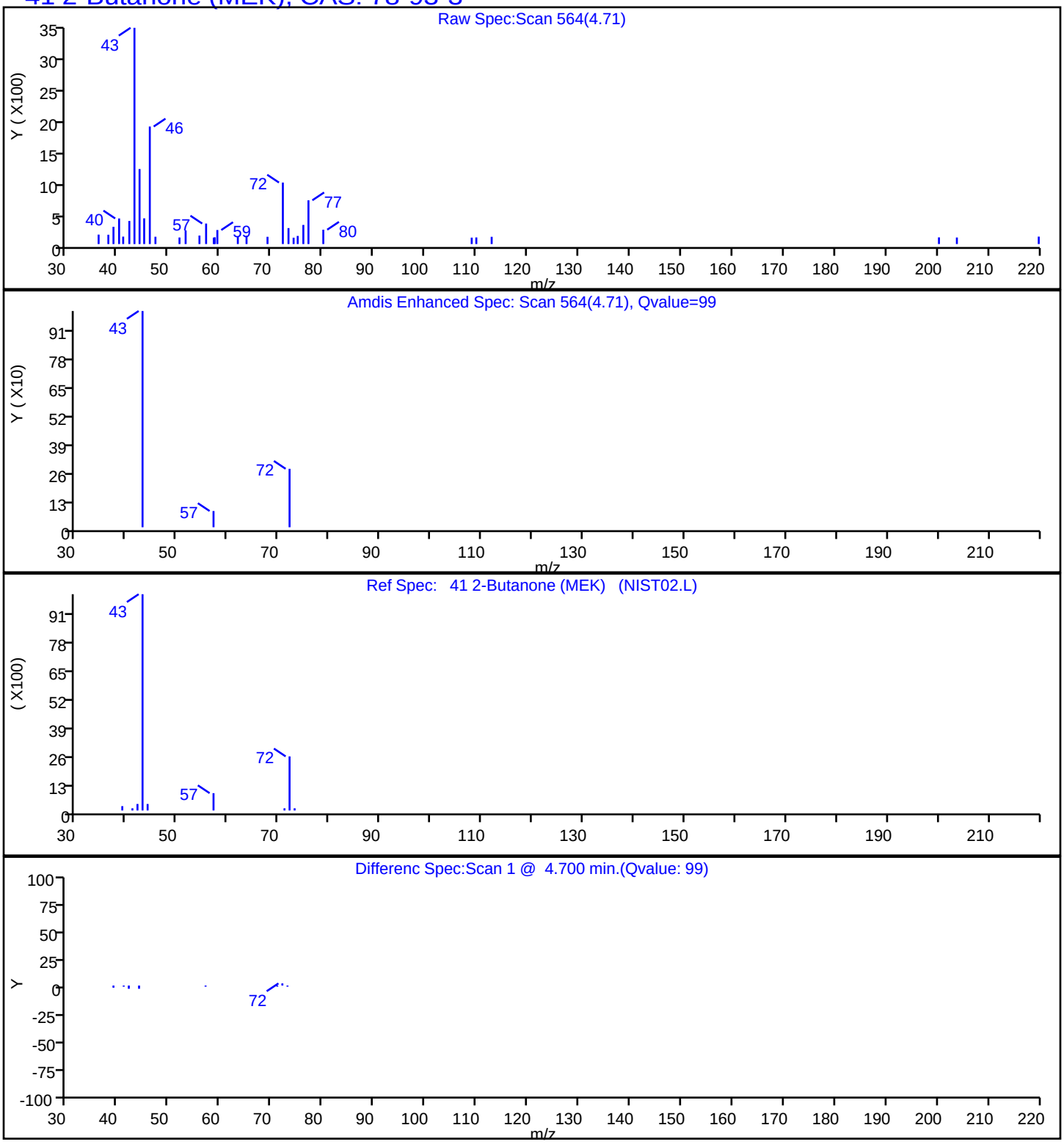
Report Date: 31-Jul-2018 20:03:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69705.D

Injection Date:	28-Jul-2018 13:15:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-B-6	Lab Sample ID:	460-161178-6		
Client ID:	GC-Equipment Blank (072418)				
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

41 2-Butanone (MEK), CAS: 78-93-3



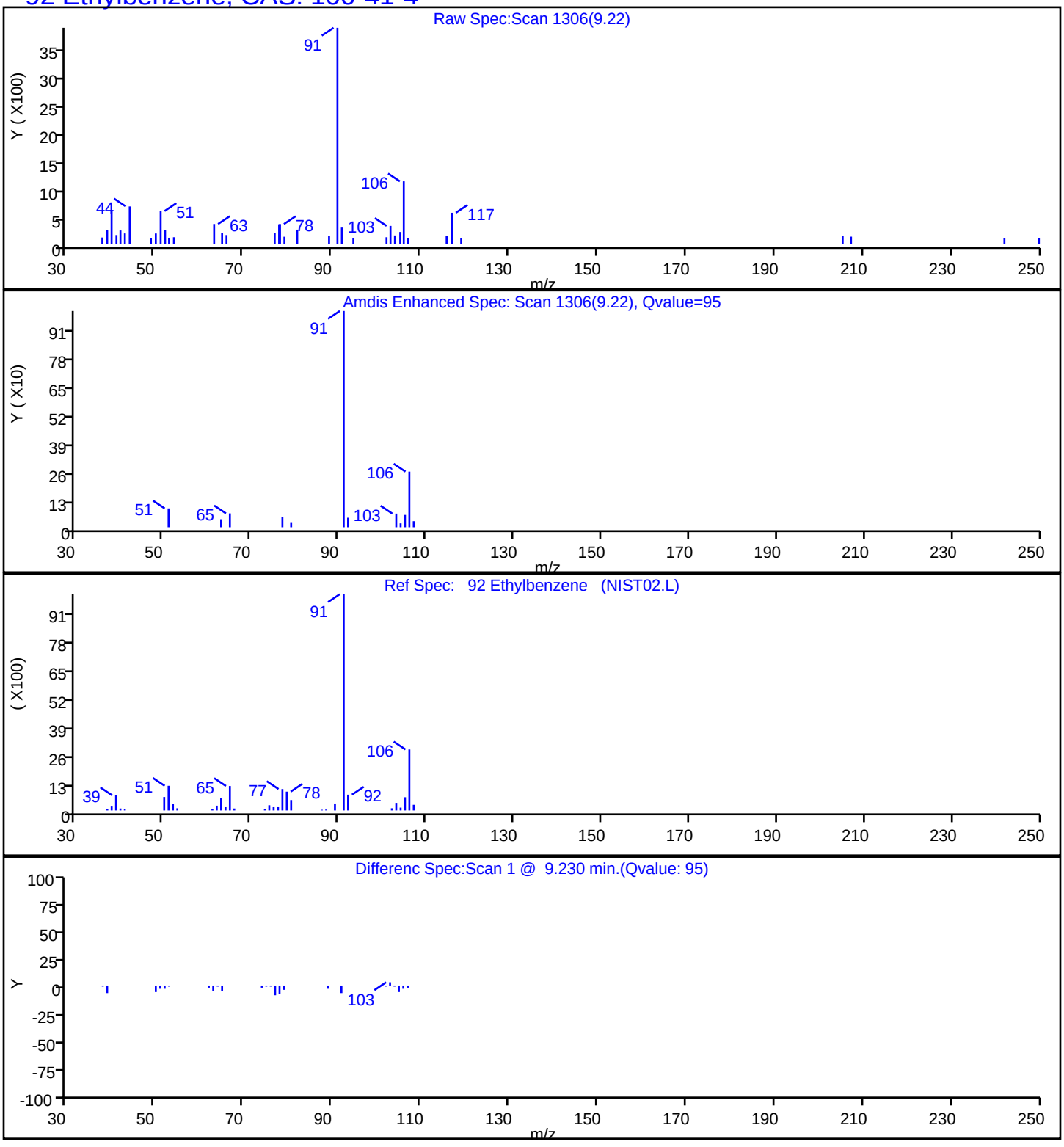
Report Date: 31-Jul-2018 20:03:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69705.D

Injection Date:	28-Jul-2018 13:15:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-6	Lab Sample ID:	460-161178-6
Client ID:	GC-Equipment Blank (072418)		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4



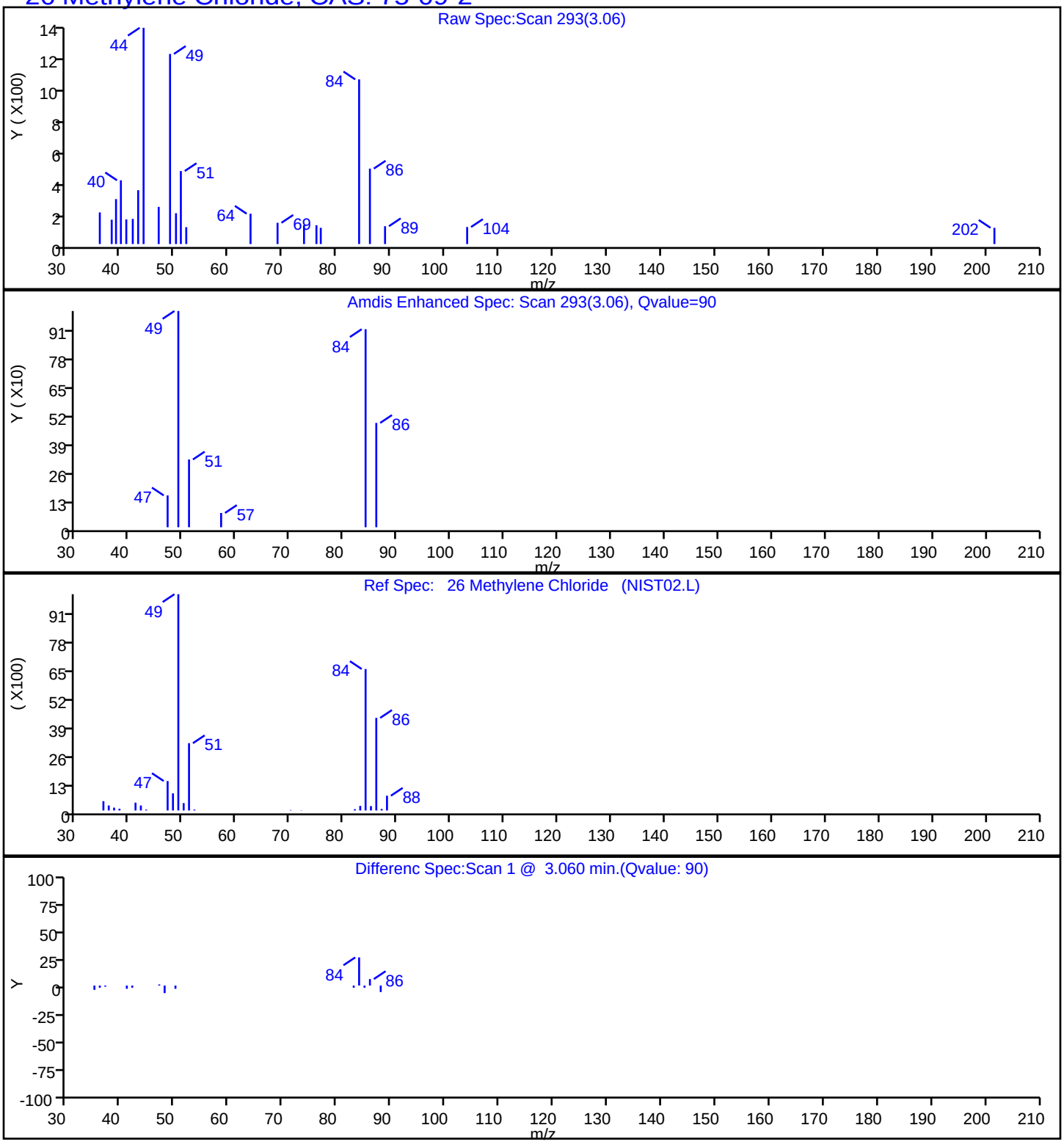
Report Date: 31-Jul-2018 20:03:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69705.D

Injection Date:	28-Jul-2018 13:15:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-6	Lab Sample ID:	460-161178-6
Client ID:	GC-Equipment Blank (072418)		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

26 Methylene Chloride, CAS: 75-09-2

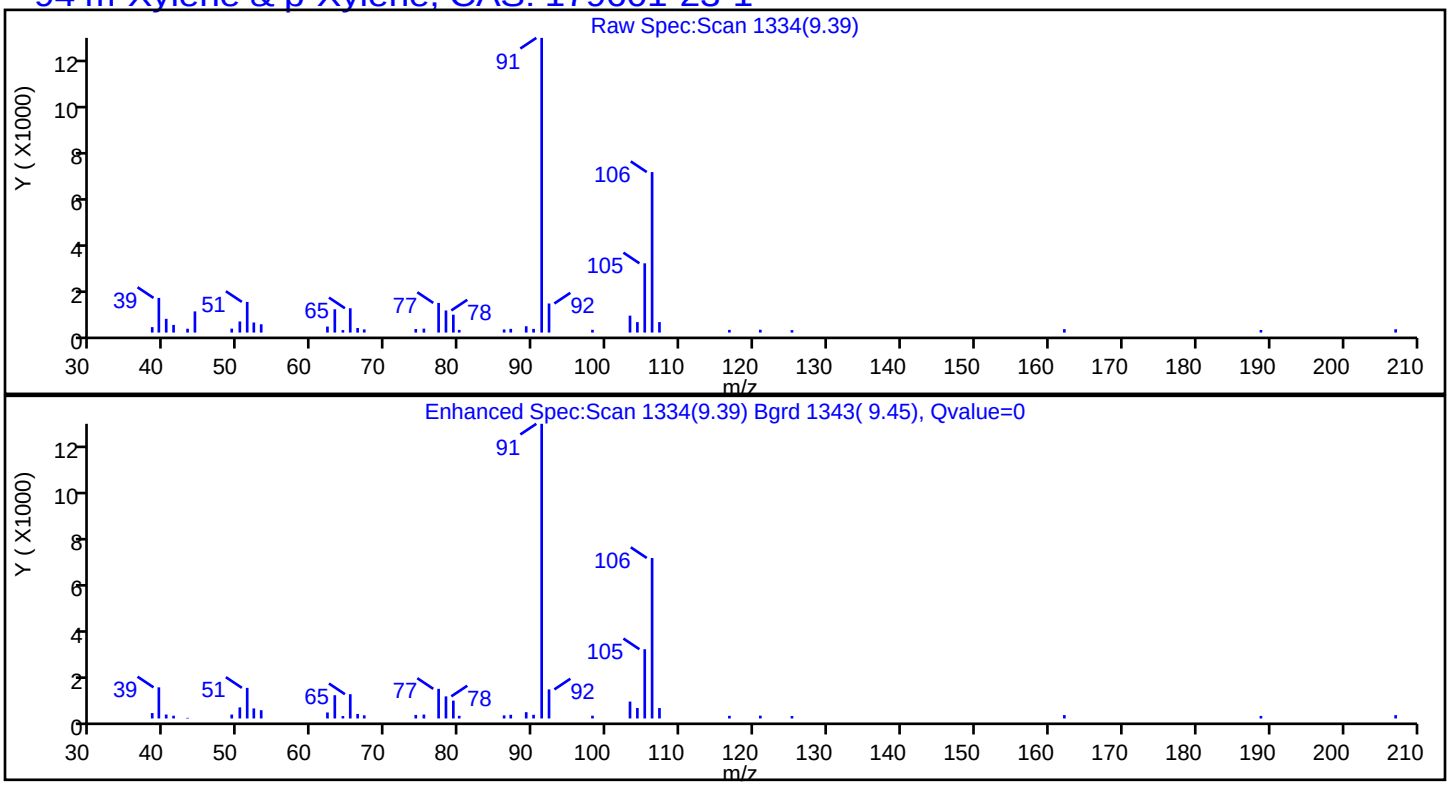


Report Date: 31-Jul-2018 20:03:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69705.D				
Injection Date:	28-Jul-2018 13:15:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-B-6	Lab Sample ID:	460-161178-6		
Client ID:	GC-Equipment Blank (072418)				
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

94 m-Xylene & p-Xylene, CAS: 179601-23-1



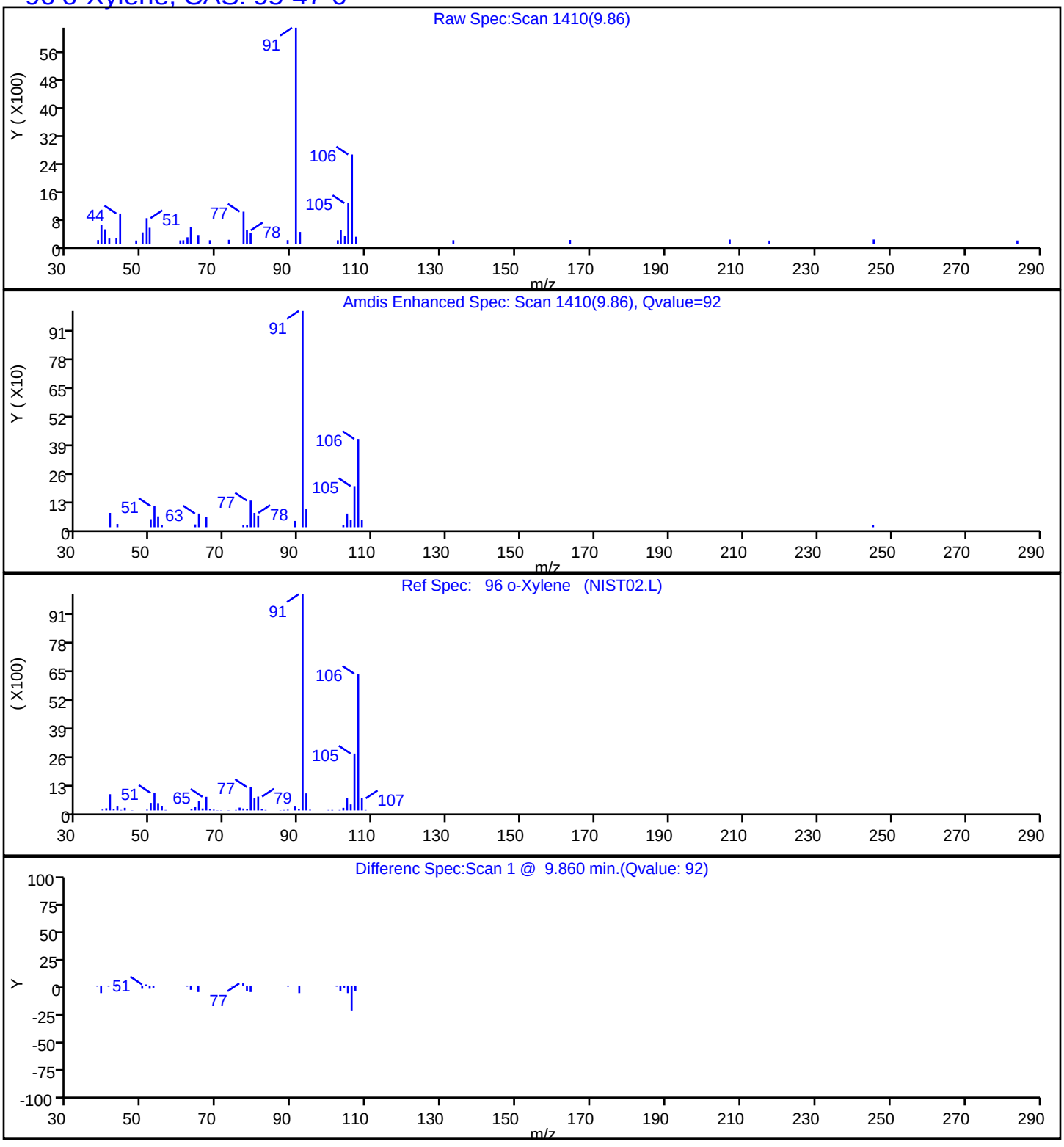
Report Date: 31-Jul-2018 20:03:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69705.D

Injection Date:	28-Jul-2018 13:15:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-6	Lab Sample ID:	460-161178-6
Client ID:	GC-Equipment Blank (072418)		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

96 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

TestAmerica Edison

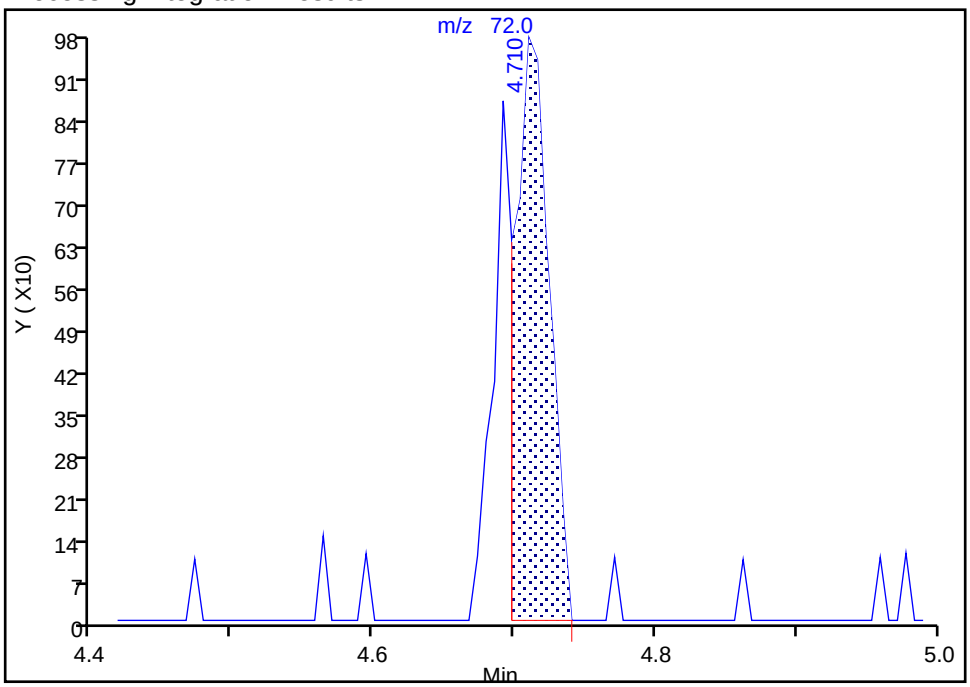
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69705.D		
Injection Date:	28-Jul-2018 13:15:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-B-6	Lab Sample ID:	460-161178-6
Client ID:	GC-Equipment Blank (072418)		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

41 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

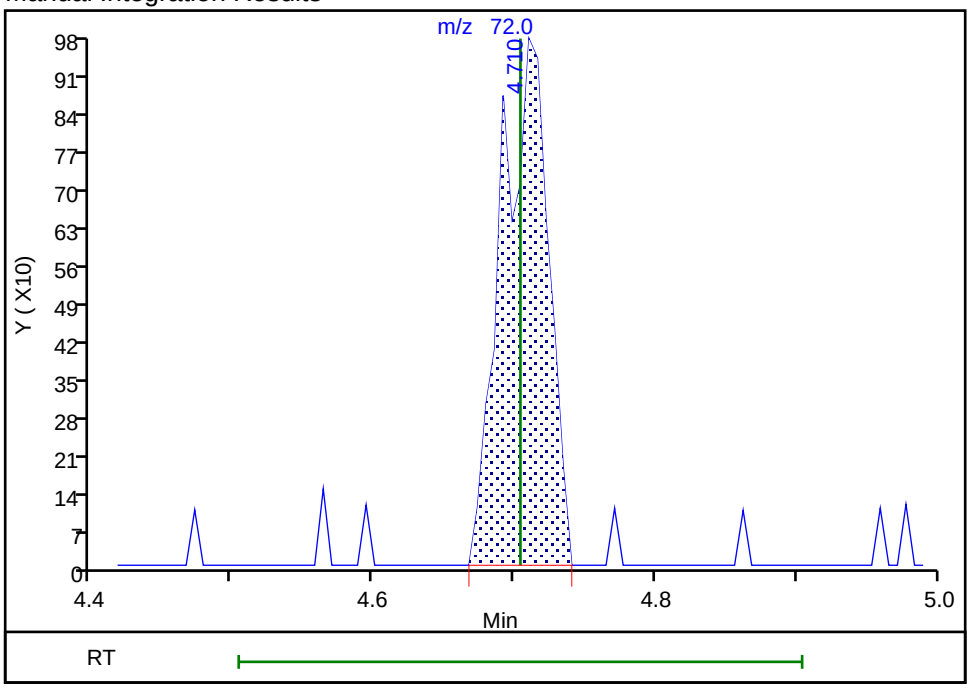
Processing Integration Results

RT: 4.71
Area: 1650
Amount: 7.616196
Amount Units: ug/l



Manual Integration Results

RT: 4.71
Area: 2264
Amount: 10.450344
Amount Units: ug/l



Reviewer: delpolitov, 31-Jul-2018 20:03:26

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-TB (072418) | Lab Sample ID: 460-161178-7

Matrix: Water | Lab File ID: N70097.D

Analysis Method: 8260C | Date Collected: 07/24/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 10:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	16	*	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U *	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U *	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-TB (072418) | Lab Sample ID: 460-161178-7

Matrix: Water | Lab File ID: N70097.D

Analysis Method: 8260C | Date Collected: 07/24/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 10:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.43	J	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U *	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	0.60	J	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0		1.0	0.30
95-47-6	o-Xylene	0.81	J	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		74-132
460-00-4	4-Bromofluorobenzene	118		77-124
1868-53-7	Dibromofluoromethane (Surr)	100		72-131
2037-26-5	Toluene-d8 (Surr)	101		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-TB (072418) | Lab Sample ID: 460-161178-7

Matrix: Water | Lab File ID: N70097.D

Analysis Method: 8260C | Date Collected: 07/24/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 10:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70097.D
Lims ID: 460-161178-C-7
Client ID: GC-TB (072418)
Sample Type: Client
Inject. Date: 06-Aug-2018 10:04:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161178-C-7
Misc. Info.: 460-0076670-013
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 06-Aug-2018 15:12:59 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: delpolitov Date: 06-Aug-2018 15:12:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
26 Methylene Chloride	84	3.062	3.055	0.007	86	2309	0.6016	
* 27 TBA-d9 (IS)	65	3.281	3.281	0.000	40	96976	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.589	4.582	0.007	98	135424	50.2	
* 39 2-Butanone-d5	46	4.655	4.649	0.006	0	118691	250.0	
41 2-Butanone (MEK)	72	4.710	4.698	0.012	34	2814	16.3	M
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	96	116753	43.1	
* 62 Fluorobenzene	96	5.385	5.379	0.006	100	656814	50.0	
* 68 1,4-Dioxane-d8	96	6.383	6.377	0.006	30	17784	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.156	0.006	99	631600	50.3	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	83	518722	50.0	
92 Ethylbenzene	106	9.218	9.224	-0.006	96	2501	0.4290	
94 m-Xylene & p-Xylene	106	9.401	9.395	0.006	0	14373	2.01	
96 o-Xylene	106	9.863	9.857	0.006	97	5717	0.8136	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	93	196340	59.1	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	94	287003	50.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8260SURR250_00181 Amount Added: 1.00 Units: uL
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

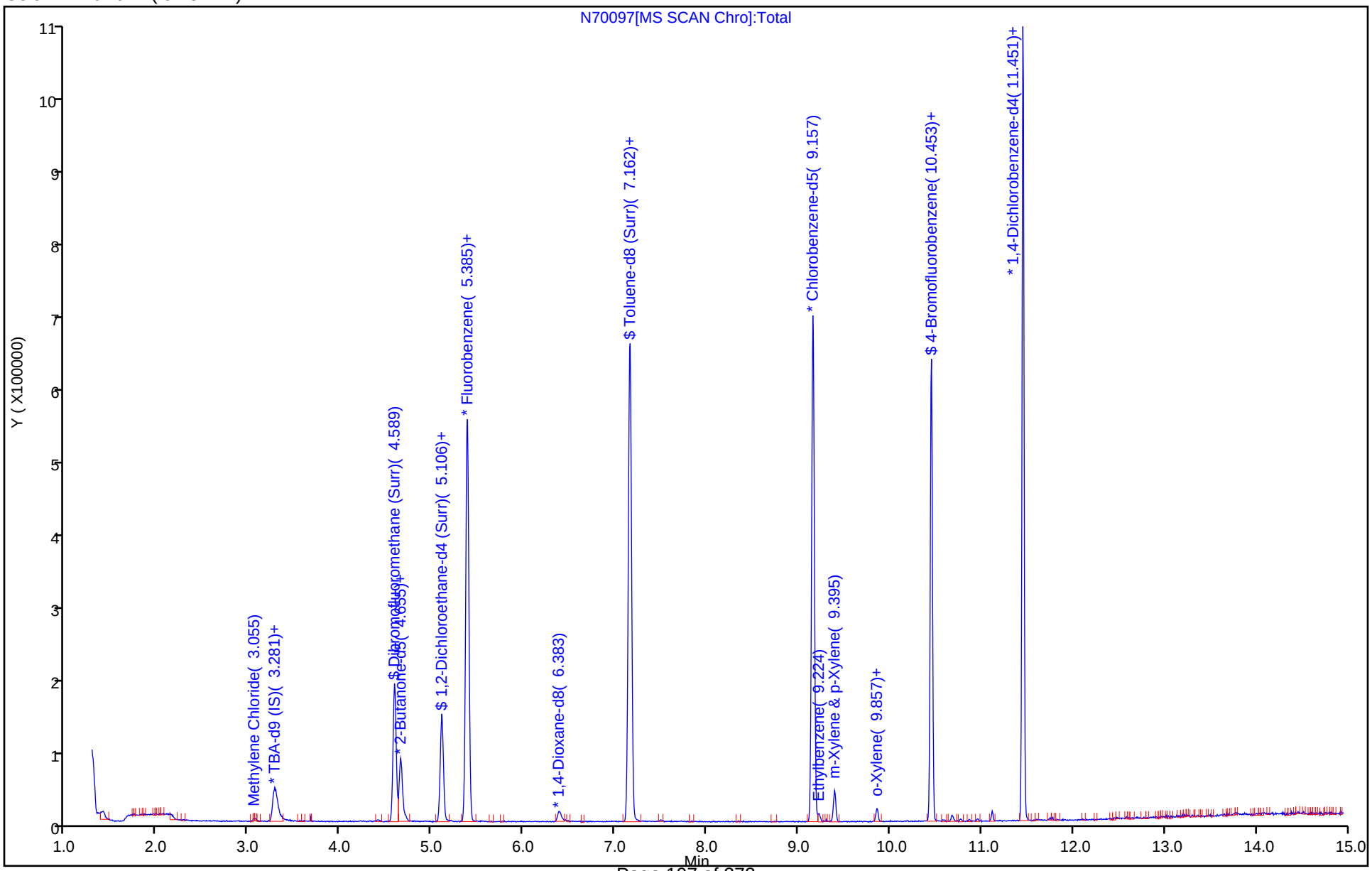
Report Date: 06-Aug-2018 15:13:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70097.D

Injection Date:	06-Aug-2018 10:04:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-161178-C-7	Lab Sample ID:	460-161178-7	Worklist Smp#:	13
Client ID:	GC-TB (072418)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



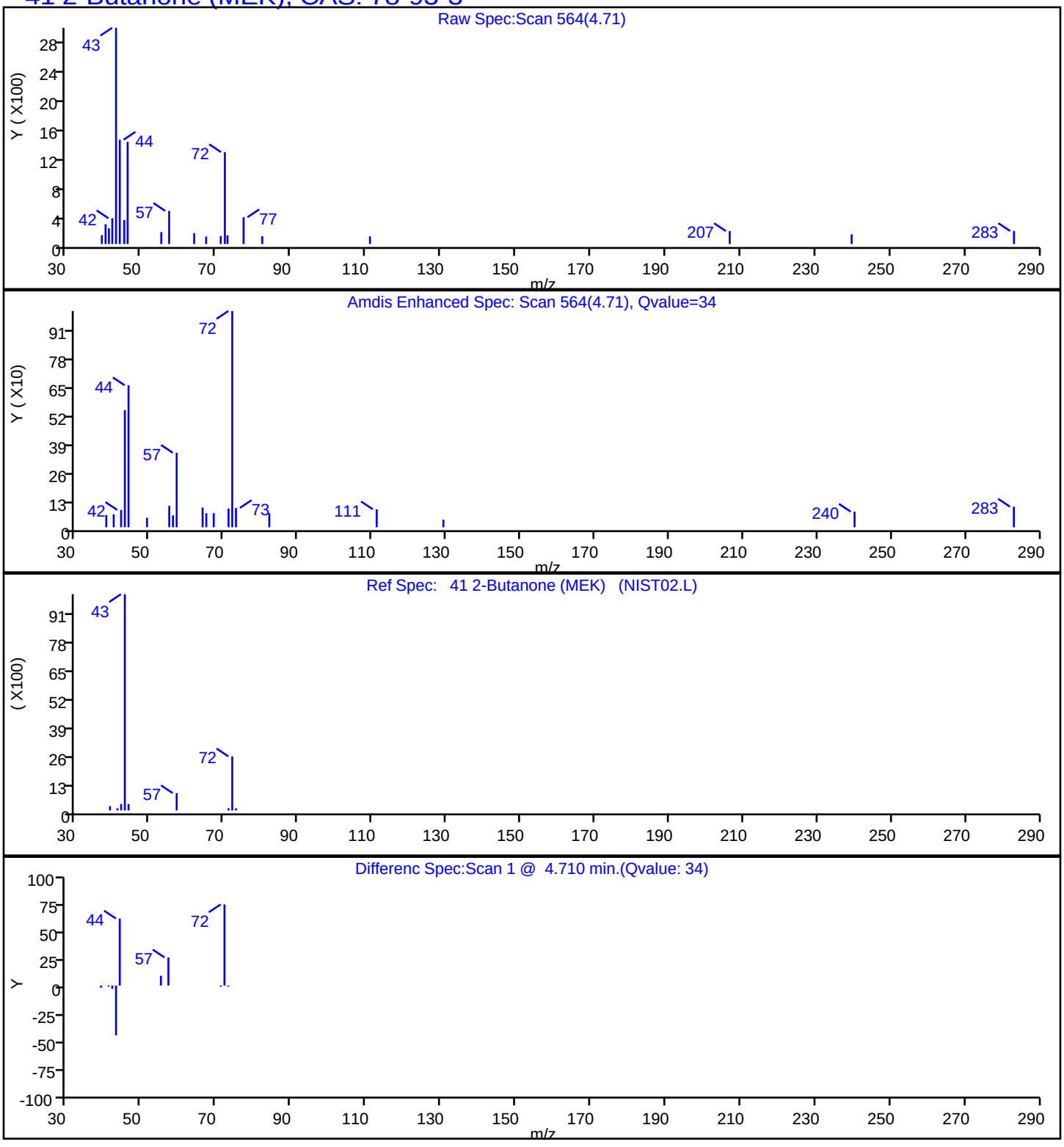
Report Date: 06-Aug-2018 15:13:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70097.D

Injection Date:	06-Aug-2018 10:04:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-C-7	Lab Sample ID:	460-161178-7		
Client ID:	GC-TB (072418)				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

41 2-Butanone (MEK), CAS: 78-93-3



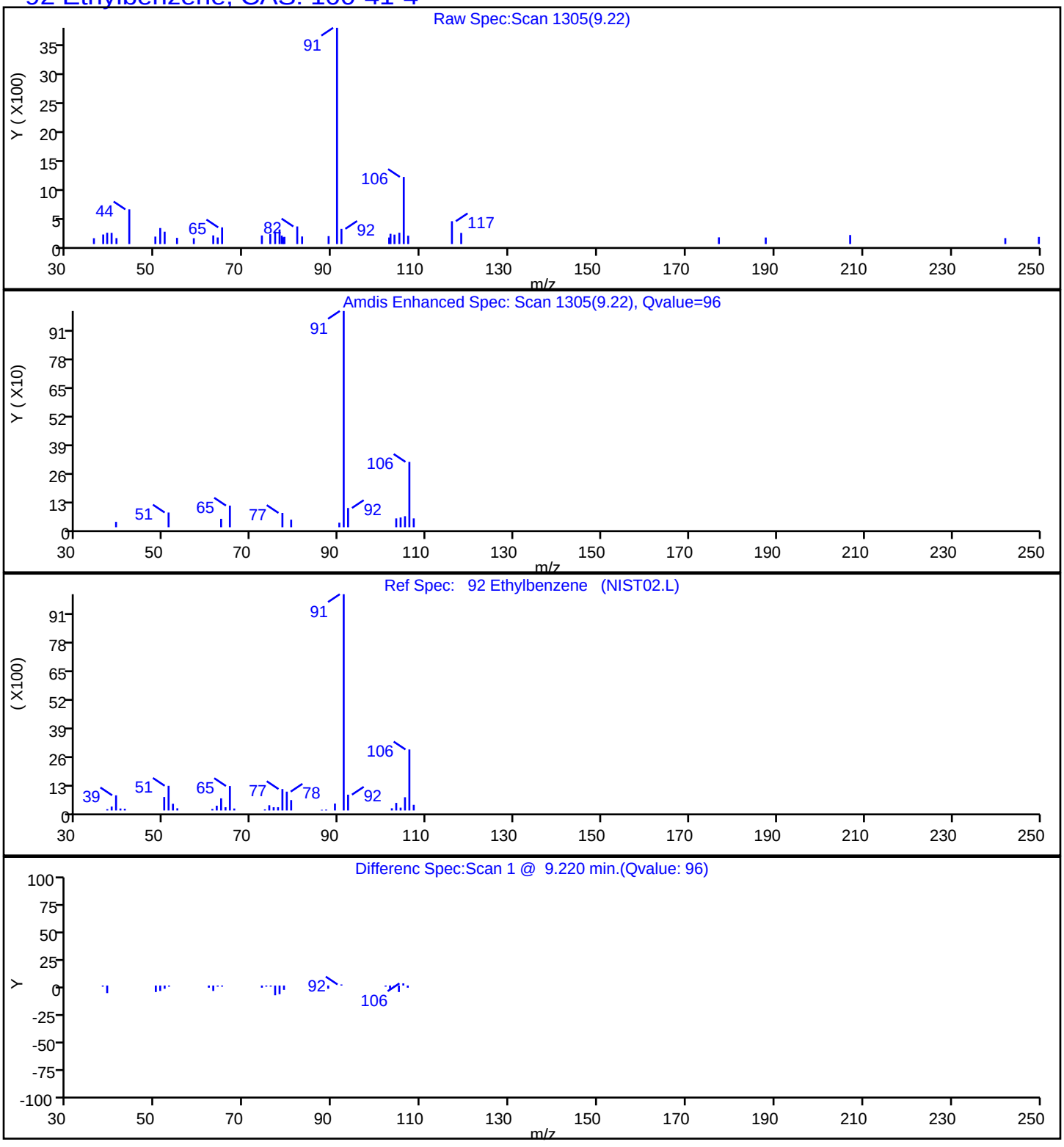
Report Date: 06-Aug-2018 15:13:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70097.D

Injection Date:	06-Aug-2018 10:04:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-C-7	Lab Sample ID:	460-161178-7
Client ID:	GC-TB (072418)		
Operator ID:		ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

92 Ethylbenzene, CAS: 100-41-4



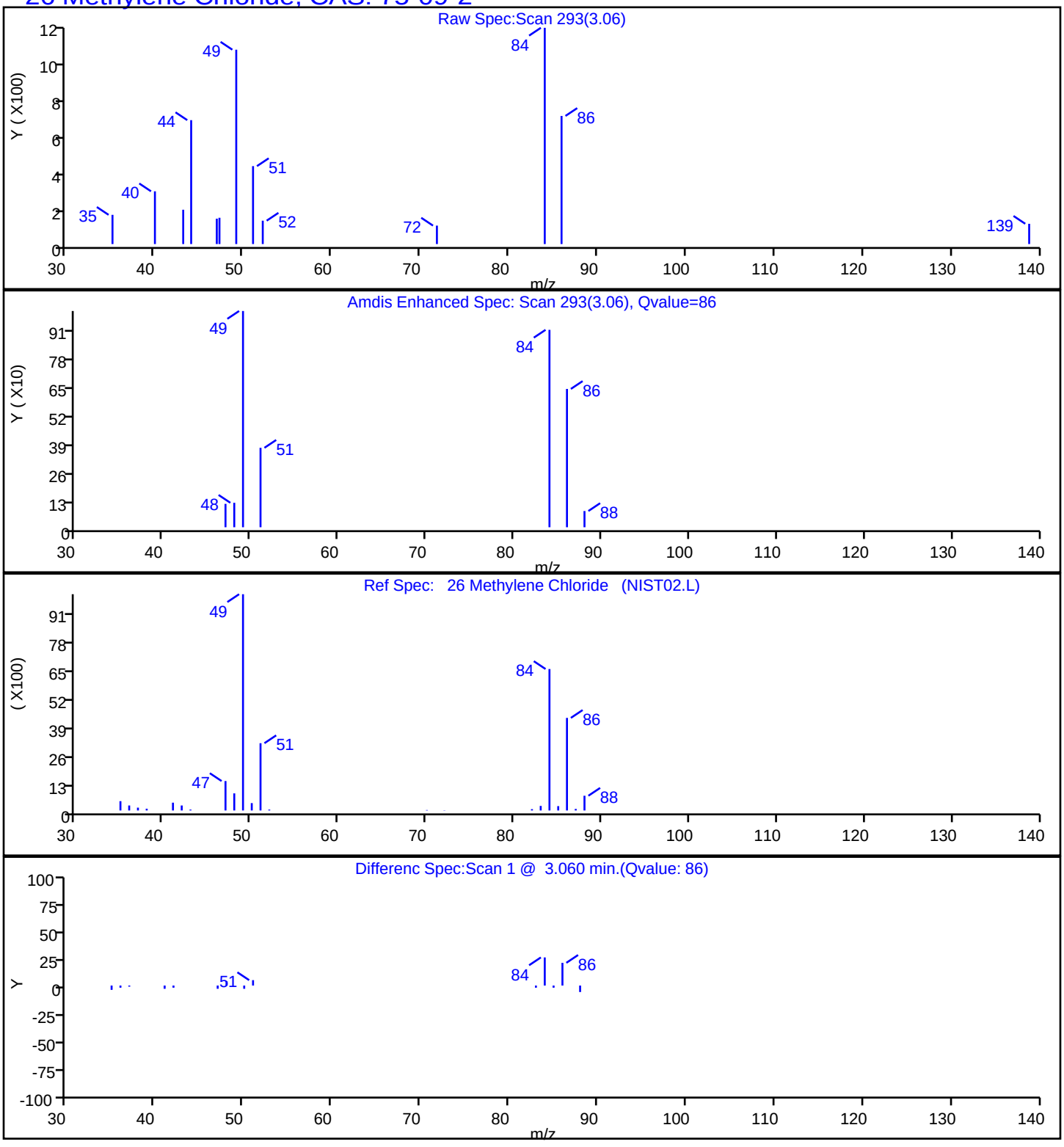
Report Date: 06-Aug-2018 15:13:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70097.D

Injection Date:	06-Aug-2018 10:04:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-C-7	Lab Sample ID:	460-161178-7		
Client ID:	GC-TB (072418)				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

26 Methylene Chloride, CAS: 75-09-2

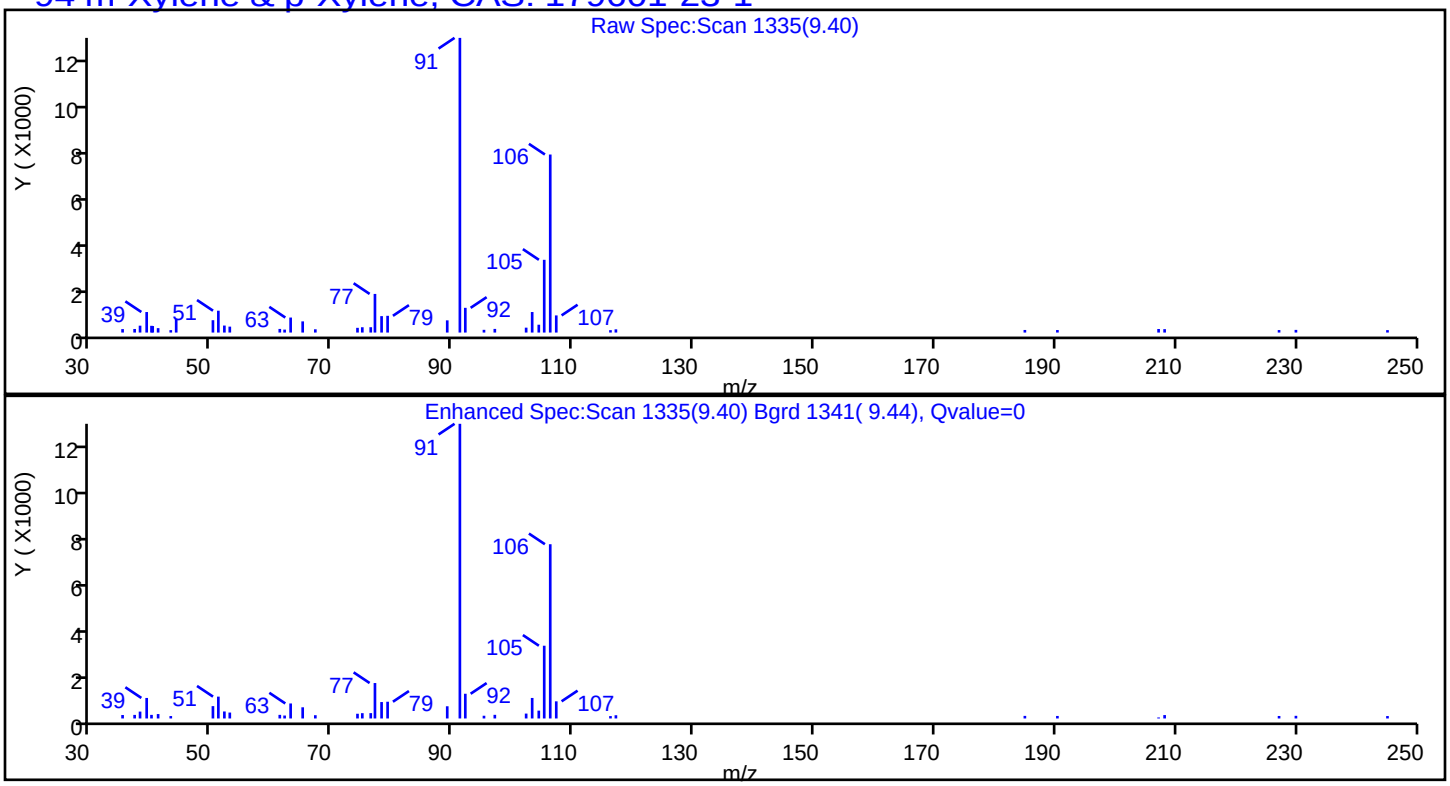


Report Date: 06-Aug-2018 15:13:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70097.D				
Injection Date:	06-Aug-2018 10:04:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-C-7	Lab Sample ID:	460-161178-7		
Client ID:	GC-TB (072418)				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

94 m-Xylene & p-Xylene, CAS: 179601-23-1



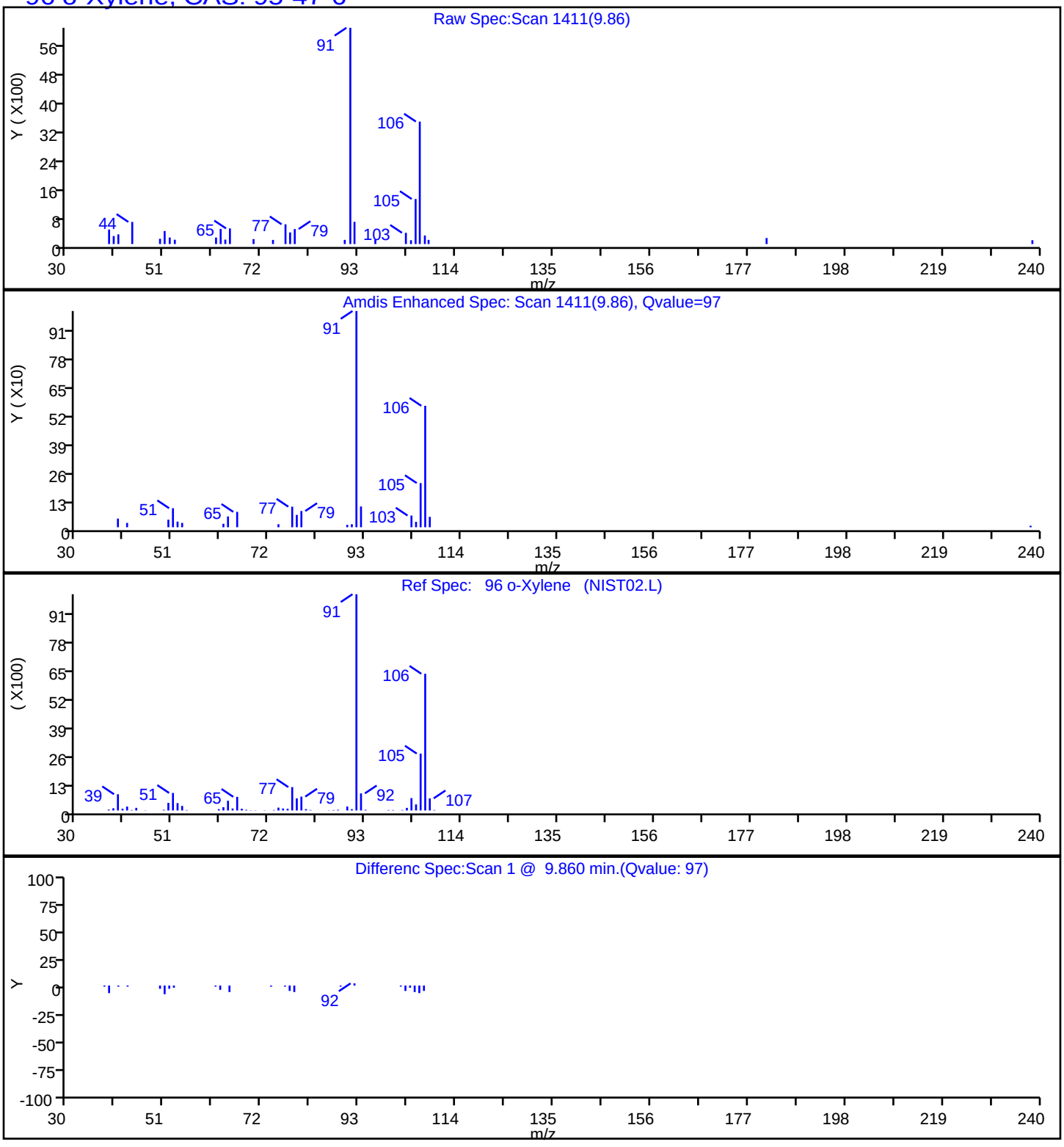
Report Date: 06-Aug-2018 15:13:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70097.D

Injection Date:	06-Aug-2018 10:04:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-C-7	Lab Sample ID:	460-161178-7		
Client ID:	GC-TB (072418)				
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

96 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

TestAmerica Edison

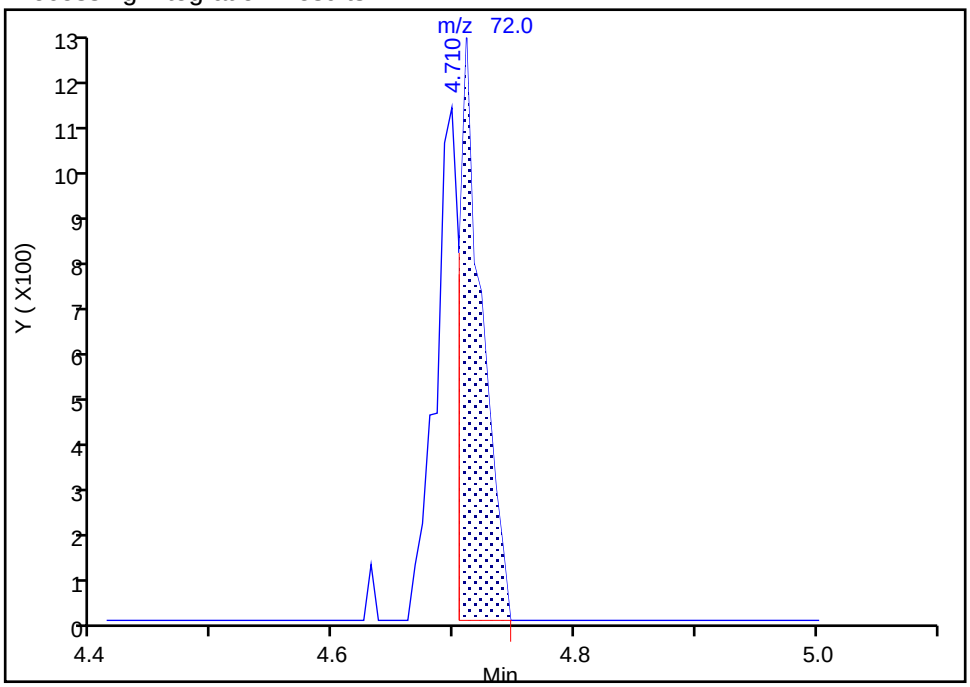
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70097.D		
Injection Date:	06-Aug-2018 10:04:30	Instrument ID:	CVOAMS11
Lims ID:	460-161178-C-7	Lab Sample ID:	460-161178-7
Client ID:	GC-TB (072418)		
Operator ID:		ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

41 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

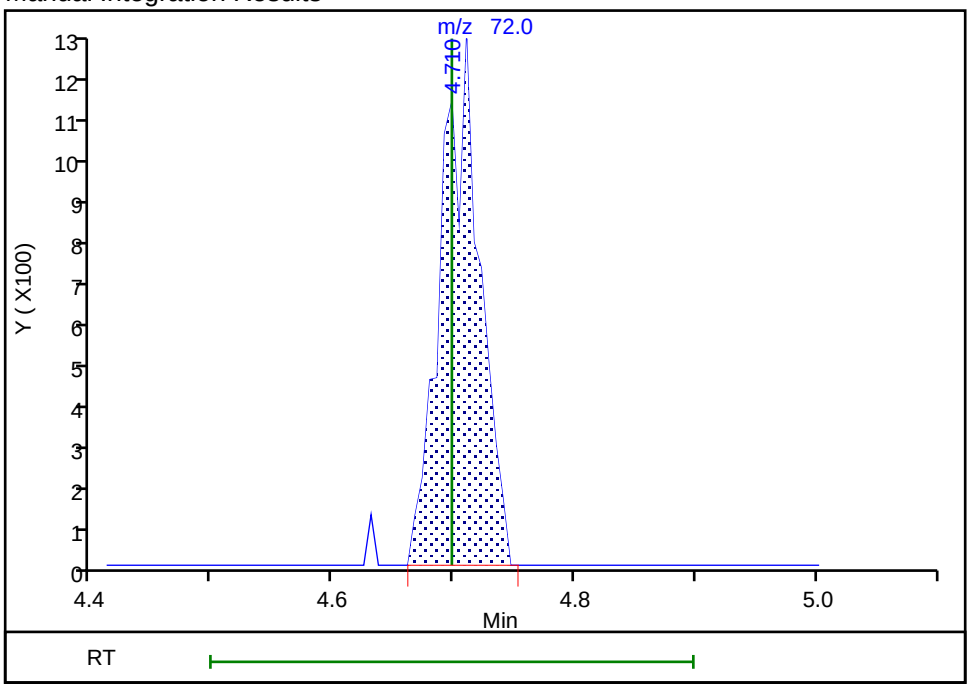
Processing Integration Results

RT: 4.71
Area: 1606
Amount: 9.329531
Amount Units: ug/l



Manual Integration Results

RT: 4.71
Area: 2814
Amount: 16.347012
Amount Units: ug/l



Reviewer: delpolitov, 06-Aug-2018 15:12:48

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8 460-539131/3	N69452.D
Level 2	STD1 460-539131/5	N69454.D
Level 3	STD5 460-539131/6	N69455.D
Level 4	STD20 460-539131/7	N69456.D
Level 5	STD50 460-539131/8	N69457.D
Level 6	STD200 460-539131/9	N69458.D
Level 7	STD500 460-539131/10	N69459.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	+++++ 0.2145	0.1377 0.2076	0.1644	0.1568	0.2162	Ave		0.1829				18.6		20.0			
Dichlorodifluoromethane	+++++ 0.1434	0.1360 0.1422	0.1406	0.1428	0.1506	Ave		0.1426			0.1000	3.3		20.0			
Chloromethane	+++++ 2.4017	2.9256 2.2970	2.7608	2.4622	2.6762	Ave		2.5872			0.1000	9.3		20.0			
Butadiene	0.4262 0.3490	0.3576 0.3524	0.3484	0.3380	0.3771	Ave		0.3641				8.2		20.0			
Vinyl chloride	+++++ 0.4271	0.4483 0.4294	0.4002	0.4156	0.4607	Ave		0.4302			0.1000	5.1		20.0			
Bromomethane	+++++ 0.2800	0.3528 0.2883	0.2744	0.2882	0.3058	Ave		0.2983			0.1000	9.6		20.0			
Chloroethane	+++++ 0.2381	0.3161 0.2327	0.2447	0.2510	0.2651	Ave		0.2580			0.1000	11.9		20.0			
Pentane	+++++ 4.2720	3.0806 3.9157	4.8023	4.1905	4.2753	Ave		4.0894				14.0		20.0			
Trichlorofluoromethane	+++++ 0.4438	0.5024 0.4520	0.4233	0.4416	0.4710	Ave		0.4557			0.1000	6.1		20.0			
Dichlorofluoromethane	+++++ 0.5216	0.6509 0.5125	0.5520	0.5721	0.5750	Ave		0.5640				8.8		20.0			
Ethyl ether	+++++ 0.1856	0.1868 0.1739	0.1832	0.1797	0.1909	Ave		0.1834				3.2		20.0			
2-Methyl-1,3-butadiene	+++++ 0.2379	0.2390 0.2266	0.2438	0.2206	0.2315	Ave		0.2332				3.7		20.0			
Ethanol	+++++ 0.0772	0.0512 0.0738	0.0497	0.0717	0.0660	Ave		0.0649				18.2		20.0			
1,1-Dichloroethene	+++++ 0.2549	0.2556 0.2463	0.2531	0.2388	0.2632	Ave		0.2520			0.1000	3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloro-1,1,2-trifluoroethane	+++++ 0.2582	0.2586 0.2477	0.2715	0.2485	0.2614	Ave		0.2576				3.4		20.0			
Carbon disulfide	+++++ 0.9175	0.8213 0.8785	0.8715	0.8247	0.9226	Ave		0.8727			0.1000	5.0		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.2959	0.2277 0.2817	0.2992	0.2845	0.2980	Ave		0.2812			0.1000	9.7		20.0			
Iodomethane	+++++ 0.4229	0.4425 0.4105	0.4269	0.4089	0.4360	Ave		0.4246				3.2		20.0			
Cyclopentene	+++++ 0.6910	0.6868 0.6535	0.7128	0.6569	0.6635	Ave		0.6774				3.4		20.0			
Acrolein	+++++ 2.2964	1.2378 +++++	2.4894	2.4766	2.1742	Lin2	-4.616	2.4488							0.9920		0.9900
Allyl chloride	+++++ 0.1602	0.1597 0.1532	0.1563	0.1438	0.1591	Ave		0.1554				4.0		20.0			
Isopropyl alcohol	+++++ 0.6162	0.8823 0.5892	0.6681	0.5899	0.5681	Lin2	2.9577	0.5894							0.9990		0.9900
Methylene Chloride	+++++ 0.2815	0.3162 0.2659	0.3103	0.2864	0.2926	Ave		0.2922			0.1000	6.4		20.0			
Acetone	+++++ 0.2308	0.2882 0.2091	0.2678	0.2346	0.2423	Ave		0.2455			0.0500	11.5		20.0			
trans-1,2-Dichloroethene	+++++ 0.2847	0.2913 0.2676	0.3080	0.2807	0.2894	Ave		0.2870			0.1000	4.6		20.0			
Methyl acetate	+++++ 1.9139	2.8144 1.7835	2.5365	2.2755	1.9625	Ave		2.2144			0.1000	18.1		20.0			
Hexane	+++++ 0.2265	0.1932 0.2101	0.2385	0.2157	0.2389	Ave		0.2205				8.1		20.0			
Methyl tert-butyl ether	+++++ 0.6365	0.6364 0.5807	0.6533	0.6522	0.6465	Ave		0.6343			0.1000	4.3		20.0			
2-Methyl-2-propanol	+++++ 1.1304	1.3982 1.0849	1.0701	1.1584	1.0489	Ave		1.1485				11.2		20.0			
Acetonitrile	+++++ 1.3895	1.7564 1.2359	1.7127	1.6022	1.4746	Ave		1.5285				13.1		20.0			
Isopropyl ether	+++++ 0.9202	0.8969 0.8553	0.9219	0.9095	0.9190	Ave		0.9038				2.8		20.0			
2-Chloro-1,3-butadiene	+++++ 0.2558	0.2404 0.2454	0.2437	0.2391	0.2394	Ave		0.2439				2.6		20.0			
1,1-Dichloroethane	+++++ 0.4865	0.5483 0.4524	0.5059	0.4839	0.4929	Ave		0.4950			0.2000	6.4		20.0			
Acrylonitrile	4.5471 4.4437	5.0451 3.9490	4.9650	4.9908	4.7552	Ave		4.6708				8.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	+++++ 0.7748	0.8257 0.6873	0.7854	0.8071	0.8133	Ave		0.7823				6.4		20.0			
Vinyl acetate	+++++ 0.6957	0.1875 0.7441	0.5741	0.5867	0.6473	Lin2	-0.990	0.6779							0.9950		0.9900
cis-1,2-Dichloroethene	+++++ 0.3138	0.3528 0.2985	0.3400	0.3173	0.3156	Ave		0.3230			0.1000	6.1		20.0			
2,2-Dichloropropane	+++++ 0.1306	0.0693 0.1240	0.1310	0.1284	0.1285	Lin2	-0.060	0.1314							0.9970		0.9900
Chlorobromomethane	+++++ 0.1250	0.1329 0.1213	0.1330	0.1276	0.1292	Ave		0.1282				3.6		20.0			
Cyclohexane	+++++ 0.5263	0.4883 0.5072	0.5567	0.4934	0.5199	Ave		0.5153			0.1000	4.9		20.0			
Chloroform	+++++ 0.4634	0.4749 0.4325	0.4784	0.4531	0.4564	Ave		0.4598			0.2000	3.6		20.0			
Ethyl acetate	+++++ 0.3182	0.2266 0.3086	0.3243	0.3329	0.3345	Ave		0.3075				13.3		20.0			
Methyl acrylate	+++++ 0.1352	0.1505 0.1343	0.1362	0.1350	0.1329	Ave		0.1373				4.7		20.0			
Carbon tetrachloride	+++++ 0.2813	0.2273 0.3079	0.2413	0.2259	0.2522	Ave		0.2560			0.1000	12.7		20.0			
Tetrahydrofuran	+++++ 0.3735	0.3742 0.3543	0.3775	0.3779	0.3576	Ave		0.3692				2.8		20.0			
1,1,1-Trichloroethane	+++++ 0.4233	0.4031 0.4096	0.3883	0.3902	0.4067	Ave		0.4035			0.1000	3.2		20.0			
2-Butanone (MEK)	+++++ 0.3599	0.3662 0.3398	0.3885	0.3613	0.3598	Ave		0.3626			0.0500	4.3		20.0			
1,1-Dichloropropene	+++++ 0.3657	0.3997 0.3572	0.3905	0.3541	0.3672	Ave		0.3724				5.0		20.0			
2,2,4-Trimethylpentane	+++++ 0.8271	0.4912 +++++	0.7398	0.7043	0.7305	Ave		0.6986				17.9		20.0			
n-Heptane	+++++ 0.1810	0.1240 0.1749	0.1771	0.1644	0.1894	Ave		0.1685				13.8		20.0			
Benzene	+++++ 1.5269	1.6216 1.5068	1.6497	1.5085	1.5450	Ave		1.5597			0.5000	3.9		20.0			
Propionitrile	+++++ 1.5987	2.0136 1.4187	1.8106	1.7813	1.6960	Ave		1.7198				11.8		20.0			
Methacrylonitrile	+++++ 0.0692	0.0652 0.0667	0.0724	0.0713	0.0696	Ave		0.0690				3.9		20.0			
Tert-amyl methyl ether	+++++ 0.7120	0.7049 0.6280	0.7101	0.7304	0.7271	Ave		0.7021				5.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	+++++ 0.4482	0.4710 0.4406	0.3551	0.3707	0.3928	Ave		0.4131				11.3		20.0			
1,2-Dichloroethane	+++++ 0.2672	0.3675 0.2536	0.3167	0.2812	0.2743	Ave		0.2934			0.1000	14.3		20.0			
Isopropyl acetate	+++++ 0.3099	0.3781 0.3045	0.2773	0.3084	0.3055	Ave		0.3140				10.7		20.0			
Ethyl acrylate	+++++ 0.4031	0.3620 0.3742	0.4135	0.3756	0.4134	Ave		0.3903				5.7		20.0			
Methylcyclohexane	+++++ 0.5551	0.4692 0.5313	0.5438	0.5017	0.5549	Ave		0.5260			0.1000	6.5		20.0			
Trichloroethene	+++++ 0.2651	0.3222 0.2519	0.2889	0.2726	0.2696	Ave		0.2784			0.2000	8.8		20.0			
n-Butanol	+++++ 0.2430	0.2589 0.2603	0.1611	0.2019	0.2004	Ave		0.2209				17.9		20.0			
Dibromomethane	+++++ 0.1211	0.1316 0.1145	0.1260	0.1232	0.1254	Ave		0.1236				4.6		20.0			
1,2-Dichloropropane	+++++ 0.2626	0.2692 0.2479	0.2798	0.2695	0.2642	Ave		0.2655			0.1000	4.0		20.0			
Dichlorobromomethane	+++++ 0.2758	0.2286 0.2799	0.2392	0.2431	0.2520	Ave		0.2531			0.2000	8.2		20.0			
Methyl methacrylate	+++++ 0.0516	0.0529 0.0505	0.0445	0.0487	0.0499	Ave		0.0497				5.9		20.0			
1,4-Dioxane	+++++ 1.1497	1.1671 1.1173	1.2445	1.1074	1.1494	Ave		1.1559				4.2		20.0			
n-Propyl acetate	+++++ 0.2152	0.2010 0.2084	0.2028	0.2061	0.2056	Ave		0.2065				2.4		20.0			
2-Chloroethyl vinyl ether	+++++ 0.1213	0.1331 0.1185	0.1129	0.1183	0.1166	Ave		0.1201				5.8		20.0			
cis-1,3-Dichloropropene	+++++ 0.4987	0.3991 0.5011	0.4478	0.4488	0.4725	Ave		0.4613			0.2000	8.3		20.0			
Toluene	+++++ 1.5927	1.7315 1.5430	1.7411	1.6376	1.6123	Ave		1.6430			0.4000	4.8		20.0			
Epichlorohydrin	0.1061 0.2490	0.2265 0.2312	0.2331	0.2408	0.2407	Lin2	-0.666	0.2433							0.9980		0.9900
2-Nitropropane	+++++ 0.9932	1.3138 1.0797	0.9031	0.9521	0.9224	Ave		1.0274				15.0		20.0			
Tetrachloroethene	+++++ 0.3348	0.3400 0.3338	0.3672	0.3317	0.3358	Ave		0.3405			0.2000	3.9		20.0			
4-Methyl-2-pentanone (MIBK)	+++++ 2.7896	2.8039 2.5434	2.6445	2.8074	2.7480	Ave		2.7228			0.0500	3.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	+++++ 0.4107	0.3114 0.4075	0.3332	0.3609	0.3831	Ave		0.3678			0.1000	10.9		20.0			
1,1,2-Trichloroethane	+++++ 0.2031	0.2455 0.1923	0.2083	0.2062	0.2061	Ave		0.2103			0.1000	8.6		20.0			
Ethyl methacrylate	+++++ 0.2544	0.2168 0.2478	0.2144	0.2276	0.2400	Ave		0.2335				7.1		20.0			
Chlorodibromomethane	+++++ 0.1991	0.1289 +++++	0.1435	0.1495	0.1664	Ave		0.1575			0.1000	17.1		20.0			
1,3-Dichloropropane	+++++ 0.4443	0.4986 0.4267	0.4522	0.4539	0.4471	Ave		0.4538				5.3		20.0			
Ethylene Dibromide	+++++ 0.2281	0.2223 0.2203	0.2188	0.2289	0.2282	Ave		0.2244			0.1000	2.0		20.0			
n-Butyl acetate	+++++ 0.3398	0.3490 0.3445	0.2917	0.2979	0.3243	Ave		0.3245				7.6		20.0			
2-Hexanone	+++++ 1.0325	0.9131 0.9441	0.9046	1.0040	1.0046	Ave		0.9671			0.0500	5.5		20.0			
Chlorobenzene	+++++ 1.0179	1.0452 0.9862	1.0652	1.0267	1.0234	Ave		1.0274			0.5000	2.6		20.0			
Ethylbenzene	+++++ 0.5608	0.5453 0.5407	0.5834	0.5687	0.5724	Ave		0.5619			0.1000	2.9		20.0			
1,1,1,2-Tetrachloroethane	+++++ 0.2922	0.2241 0.3115	0.2216	0.2346	0.2536	Ave		0.2563				14.7		20.0			
m-Xylene & p-Xylene	+++++ 0.6858	0.6808 0.6733	0.7090	0.6821	0.6961	Ave		0.6879			0.1000	1.9		20.0			
o-Xylene	+++++ 0.6948	0.6606 0.6846	0.6380	0.6792	0.7065	Ave		0.6773			0.3000	3.6		20.0			
Styrene	+++++ 1.1226	0.9835 1.0838	1.0463	1.0967	1.1323	Ave		1.0775			0.3000	5.1		20.0			
Bromoform	+++++ 0.1775	0.1362 +++++	0.1111	0.1226	0.1385	Ave		0.1372			0.1000	18.3		20.0			
n-Butyl acrylate	+++++ 0.1995	0.1802 0.2062	0.1462	0.1618	0.1804	Ave		0.1791				12.6		20.0			
Isopropylbenzene	+++++ 1.8439	1.7285 1.7776	1.7749	1.7890	1.8696	Ave		1.7972			0.1000	2.8		20.0			
Amyl acetate (mixed isomers)	+++++ 0.9535	0.6448 0.9502	0.7240	0.7936	0.8452	Ave		0.8185				15.1		20.0			
Bromobenzene	+++++ 0.7771	0.8155 0.7629	0.7786	0.7874	0.7779	Ave		0.7832				2.3		20.0			
N-Propylbenzene	+++++ 4.2518	3.7223 3.9949	4.1569	4.0903	4.2348	Ave		4.0752				4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.5596	0.3923 0.5386	0.5510	0.5453	0.5342	Ave		0.5202			0.3000	12.2		20.0			
4-Ethyltoluene	+++++ 3.6063	2.9963 3.5040	3.5203	3.4983	3.5142	Ave		3.4399				6.4		20.0			
2-Chlorotoluene	+++++ 2.8516	2.6732 2.7032	2.8982	2.8553	2.9081	Ave		2.8149				3.6		20.0			
1,3,5-Trimethylbenzene	+++++ 3.1275	2.5758 3.0779	2.8569	2.9418	3.0668	Ave		2.9411				7.0		20.0			
1,2,3-Trichloropropane	+++++ 0.1695	0.2023 0.1631	0.1877	0.1694	0.1685	Ave		0.1767				8.5		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1302	0.0713 0.1320	0.1150	0.1182	0.1185	Lin2	-0.055	0.1259							0.9980		0.9900
4-Chlorotoluene	+++++ 2.5234	2.3813 2.3703	2.5541	2.5716	2.5266	Ave		2.4879				3.6		20.0			
tert-Butylbenzene	+++++ 2.6852	2.1052 2.7268	2.2824	2.3499	2.5531	Ave		2.4504				10.0		20.0			
Butyl Methacrylate	+++++ 1.0030	0.5321 1.0088	0.6358	0.7592	0.8684	Qua2	-0.283	0.7940	0.0005218						0.9920		0.9900
1,2,4-Trimethylbenzene	+++++ 3.1996	2.7758 3.0912	3.0354	3.1153	3.1967	Ave		3.0690				5.1		20.0			
sec-Butylbenzene	+++++ 3.9308	3.2163 3.7762	3.5038	3.6721	3.8364	Ave		3.6559				7.1		20.0			
4-Isopropyltoluene	+++++ 3.4492	2.6060 3.3912	2.9188	3.1495	3.3827	Ave		3.1496				10.5		20.0			
1,3-Dichlorobenzene	+++++ 1.5725	1.6291 1.5397	1.6293	1.5786	1.5845	Ave		1.5890			0.6000	2.2		20.0			
1,4-Dichlorobenzene	+++++ 1.5868	1.6101 1.5711	1.6545	1.6296	1.5943	Ave		1.6077			0.5000	1.9		20.0			
1,2,3-Trimethylbenzene	+++++ 3.3548	2.8893 3.2502	3.1734	3.3277	3.3249	Ave		3.2201				5.4		20.0			
Indan	+++++ 3.1620	2.8844 3.0704	3.0502	3.1301	3.1903	Ave		3.0812				3.6		20.0			
p-Diethylbenzene	+++++ 1.7999	1.4609 1.7510	1.7905	1.8553	1.7552	Ave		1.7355				8.0		20.0			
Benzyl chloride	+++++ 0.1936	0.0418 0.2132	0.1111	0.1213	0.1468	Qua2	-0.096	0.1361	0.0001729						0.9930		0.9900
n-Butylbenzene	+++++ 1.6099	1.3583 1.5098	1.5537	1.5803	1.6684	Ave		1.5467				6.9		20.0			
1,2-Dichlorobenzene	+++++ 1.4594	1.4427 1.4365	1.5416	1.4709	1.4595	Ave		1.4684			0.4000	2.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4,5-Tetramethylbenzene	+++++ 3.3729	2.3692 3.3686	2.7318	2.9899	3.2106	Ave		3.0072				13.2		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0690	0.0218 0.0807	0.0528	0.0504	0.0572	Qua2	-0.033	0.0557	0.0000522		0.0500				0.9980		0.9900
1,3,5-Trichlorobenzene	+++++ 1.1222	0.9512 1.1515	1.1499	1.0950	1.1164	Ave		1.0977				6.8		20.0			
Hexachlorobutadiene	+++++ 0.3075	0.2783 0.3241	0.2971	0.2679	0.3006	Ave		0.2959				6.8		20.0			
1,2,4-Trichlorobenzene	+++++ 1.0207	0.8713 1.0602	1.0126	0.9874	1.0226	Ave		0.9958			0.2000	6.6		20.0			
Naphthalene	+++++ 2.2063	1.6514 2.3169	1.8889	1.9952	2.1315	Ave		2.0317				11.8		20.0			
1,2,3-Trichlorobenzene	+++++ 0.8908	0.7505 0.8971	0.8947	0.8542	0.8857	Ave		0.8622				6.6		20.0			
Dibromofluoromethane (Surr)	0.2039 0.2113	0.2004 0.2082	0.2046	0.2031	0.2065	Ave		0.2054				1.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2069 0.2020	0.2124 0.2029	0.2084	0.2079	0.2041	Ave		0.2064				1.8		20.0			
Toluene-d8 (Surr)	1.2058 1.2207	1.2003 1.2180	1.2289	1.1894	1.2148	Ave		1.2111				1.1		20.0			
4-Bromofluorobenzene	0.3255 0.3132	0.3128 0.3095	0.3309	0.3287	0.3226	Ave		0.3205				2.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8 460-539131/3	N69452.D
Level 2	STD1 460-539131/5	N69454.D
Level 3	STD5 460-539131/6	N69455.D
Level 4	STD20 460-539131/7	N69456.D
Level 5	STD50 460-539131/8	N69457.D
Level 6	STD200 460-539131/9	N69458.D
Level 7	STD500 460-539131/10	N69459.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Ave	+++++ 530143	1625 1386552	9658	37386	132134	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorodifluoromethane	FB	Ave	+++++ 354524	1604 950010	8259	34065	92042	+++++ 200	1.00 500	5.00	20.0	50.0
Chloromethane	BUT	Ave	+++++ 337029	1943 892790	8947	32645	92124	+++++ 200	1.00 500	5.00	20.0	50.0
Butadiene	FB	Ave	1242 862748	4218 2354027	20469	80604	230431	0.250 200	1.00 500	5.00	20.0	50.0
Vinyl chloride	FB	Ave	+++++ 1055665	5288 2868176	23514	99108	281517	+++++ 200	1.00 500	5.00	20.0	50.0
Bromomethane	FB	Ave	+++++ 692257	4162 1925535	16118	68742	186880	+++++ 200	1.00 500	5.00	20.0	50.0
Chloroethane	FB	Ave	+++++ 588449	3729 1554543	14375	59867	161993	+++++ 200	1.00 500	5.00	20.0	50.0
Pentane	TBAd9	Ave	+++++ 282942	891 737465	6886	24198	67190	+++++ 400	2.00 1000	10.0	40.0	100
Trichlorofluoromethane	FB	Ave	+++++ 1096996	5927 3019262	24871	105326	287796	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorofluoromethane	FB	Ave	+++++ 1289373	7679 3423280	32430	136451	351369	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl ether	FB	Ave	+++++ 458813	2204 1161399	10762	42861	116647	+++++ 200	1.00 500	5.00	20.0	50.0
2-Methyl-1,3-butadiene	FB	Ave	+++++ 588153	2820 1513481	14321	52604	141467	+++++ 200	1.00 500	5.00	20.0	50.0
Ethanol	TBAd9	Ave	+++++ 102307	296 277828	1426	8283	20757	+++++ 8000	40.0 20000	200	800	2000
1,1-Dichloroethene	FB	Ave	+++++ 630036	3015 1645075	14869	56960	160803	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	+++++ 638140	3051 1654574	15948	59270	159730	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Carbon disulfide	FB	Ave	+++++ 2268086	9689 5867594	51201	196693	563735	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 731456	2686 1881512	17577	67860	182121	+++++ 200	1.00 500	5.00	20.0	50.0
Iodomethane	FB	Ave	+++++ 1045307	5220 2742186	25082	97522	266412	+++++ 200	1.00 500	5.00	20.0	50.0
Cyclopentene	FB	Ave	+++++ 1708137	8102 4365356	41878	156657	405407	+++++ 200	1.00 500	5.00	20.0	50.0
Acrolein	TBAd9	Lin2	+++++ 76047	716 +++++	7139	14301	34169	+++++ 200	4.00 +++++	20.0	40.0	100
Allyl chloride	FB	Ave	+++++ 396033	1884 1023547	9180	34307	97195	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl alcohol	TBAd9	Lin2	+++++ 204053	1276 554866	4790	17031	44644	+++++ 2000	10.0 5000	50.0	200	500
Methylene Chloride	FB	Ave	+++++ 695849	3730 1775874	18232	68317	178817	+++++ 200	1.00 500	5.00	20.0	50.0
Acetone	BUT	Ave	+++++ 161958	957 406440	4339	15550	41705	+++++ 1000	5.00 2500	25.0	100	250
trans-1,2-Dichloroethene	FB	Ave	+++++ 703806	3437 1787235	18096	66953	176861	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl acetate	TBAd9	Ave	+++++ 126759	814 335897	3637	13140	30842	+++++ 400	2.00 1000	10.0	40.0	100
Hexane	FB	Ave	+++++ 559915	2279 1403265	14012	51445	145957	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl tert-butyl ether	FB	Ave	+++++ 1573296	7508 3878996	38379	155542	395021	+++++ 200	1.00 500	5.00	20.0	50.0
2-Methyl-2-propanol	TBAd9	Ave	+++++ 374338	2022 1021643	7672	33446	82421	+++++ 2000	10.0 5000	50.0	200	500
Acetonitrile	TBAd9	Ave	+++++ 460145	2540 1163776	12279	46259	115873	+++++ 2000	10.0 5000	50.0	200	500
Isopropyl ether	FB	Ave	+++++ 2274764	10581 5712815	54160	216912	561524	+++++ 200	1.00 500	5.00	20.0	50.0
2-Chloro-1,3-butadiene	FB	Ave	+++++ 632202	2836 1638921	14316	57033	146259	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloroethane	FB	Ave	+++++ 1202633	6468 3021837	29723	115417	301168	+++++ 200	1.00 500	5.00	20.0	50.0
Acrylonitrile	TBAd9	Ave	1268 1471569	7296 3718718	35596	144096	373657	2.00 2000	10.0 5000	50.0	200	500
Tert-butyl ethyl ether	FB	Ave	+++++ 1915223	9741 4590997	46140	192488	496980	+++++ 200	1.00 500	5.00	20.0	50.0
Vinyl acetate	BUT	Lin2	+++++ 195255	249 578441	3721	15557	44562	+++++ 400	2.00 1000	10.0	40.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	+++++ 775581	4162 1993667	19976	75667	192836	+++++ 200	1.00 500	5.00	20.0	50.0
2,2-Dichloropropane	FB	Lin2	+++++ 322848	817 828239	7695	30628	78544	+++++ 200	1.00 500	5.00	20.0	50.0
Chlorobromomethane	FB	Ave	+++++ 309006	1568 810160	7815	30442	78928	+++++ 200	1.00 500	5.00	20.0	50.0
Cyclohexane	FB	Ave	+++++ 1300858	5760 3387782	32708	117670	317684	+++++ 200	1.00 500	5.00	20.0	50.0
Chloroform	FB	Ave	+++++ 1145491	5602 2888642	28104	108064	278861	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl acetate	BUT	Ave	+++++ 89316	301 239918	2102	8827	23032	+++++ 400	2.00 1000	10.0	40.0	100
Methyl acrylate	FB	Ave	+++++ 334109	1775 897120	8004	32187	81207	+++++ 200	1.00 500	5.00	20.0	50.0
Carbon tetrachloride	FB	Ave	+++++ 695462	2681 2056528	14175	53869	154075	+++++ 200	1.00 500	5.00	20.0	50.0
Tetrahydrofuran	BUT	Ave	+++++ 104825	497 275440	2447	10020	24620	+++++ 400	2.00 1000	10.0	40.0	100
1,1,1-Trichloroethane	FB	Ave	+++++ 1046465	4755 2735905	22811	93056	248489	+++++ 200	1.00 500	5.00	20.0	50.0
2-Butanone (MEK)	BUT	Ave	+++++ 252547	1216 660381	6295	23949	61931	+++++ 1000	5.00 2500	25.0	100	250
1,1-Dichloropropene	FB	Ave	+++++ 903864	4715 2386084	22941	84446	224363	+++++ 200	1.00 500	5.00	20.0	50.0
2,2,4-Trimethylpentane	FB	Ave	+++++ 2044491	5795 +++++	43462	167964	446353	+++++ 200	1.00 +++++	5.00	20.0	50.0
n-Heptane	FB	Ave	+++++ 447379	1463 1168454	10403	39210	115742	+++++ 200	1.00 500	5.00	20.0	50.0
Benzene	CBNZ d5	Ave	+++++ 2825439	14242 7329418	71102	273667	699012	+++++ 200	1.00 500	5.00	20.0	50.0
Propionitrile	TBAd 9	Ave	+++++ 529417	2912 1335939	12981	51431	133267	+++++ 2000	10.0 5000	50.0	200	500
Methacrylonitrile	FB	Ave	+++++ 1709932	7691 4452048	42525	169934	425067	+++++ 2000	10.0 5000	50.0	200	500
Tert-amyl methyl ether	FB	Ave	+++++ 1760040	8316 4194618	41715	174202	444300	+++++ 200	1.00 500	5.00	20.0	50.0
Isobutyl alcohol	TBAd 9	Ave	+++++ 371035	1703 1037280	6365	26758	77165	+++++ 5000	25.0 12500	125	500	1250
1,2-Dichloroethane	FB	Ave	+++++ 660516	4335 1694088	18603	67066	167622	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl acetate	FB	Ave	+++++ 766156	4461 2034155	16290	73551	186649	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethyl acrylate	FB	Ave	+++++ 996523	4271 2499454	24291	89576	252610	+++++ 200	1.00 500	5.00	20.0	50.0
Methylcyclohexane	FB	Ave	+++++ 1372185	5535 3549039	31948	119662	339098	+++++ 200	1.00 500	5.00	20.0	50.0
Trichloroethene	FB	Ave	+++++ 655413	3801 1682711	16972	65011	164739	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butanol	TBAd9	Ave	+++++ 201201	936 612836	2887	14571	39369	+++++ 5000	25.0 12500	125	500	1250
Dibromomethane	FB	Ave	+++++ 299389	1553 764741	7403	29384	76628	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloropropane	FB	Ave	+++++ 649045	3176 1656041	16440	64270	161434	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorobromomethane	FB	Ave	+++++ 681821	2697 1869470	14052	57967	153996	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl methacrylate	FB	Ave	+++++ 255266	1249 675248	5229	23234	60979	+++++ 400	2.00 1000	10.0	40.0	100
1,4-Dioxane	DXE	Ave	+++++ 90092	1000 226939	2114	8091	21411	+++++ 4000	50.0 10000	100	400	1000
n-Propyl acetate	FB	Ave	+++++ 531968	2371 1392318	11912	49161	125629	+++++ 200	1.00 500	5.00	20.0	50.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 299925	1570 791792	6633	28206	71266	+++++ 200	1.00 500	5.00	20.0	50.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 922752	3505 2437559	19299	81426	213787	+++++ 200	1.00 500	5.00	20.0	50.0
Toluene	CBNZ d5	Ave	+++++ 2947165	15207 7505318	75044	297094	729468	+++++ 200	1.00 500	5.00	20.0	50.0
Epichlorohydrin	BUT	Lin2	342 698761	3009 1796912	15110	63853	165721	5.00 4000	20.0 10000	100	400	1000
2-Nitropropane	TBAd9	Ave	+++++ 65784	380 203337	1295	5498	14497	+++++ 400	2.00 1000	10.0	40.0	100
Tetrachloroethene	CBNZ d5	Ave	+++++ 619451	2986 1623528	15826	60179	151950	+++++ 200	1.00 500	5.00	20.0	50.0
4-Methyl-2-pentanone (MIBK)	BUT	Ave	+++++ 1957354	9311 4942720	42850	186110	472980	+++++ 1000	5.00 2500	25.0	100	250
trans-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 759952	2735 1982007	14360	65465	173350	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 375738	2156 935614	8979	37416	93235	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl methacrylate	FB	Ave	+++++ 628907	2557 1655300	12593	54282	146649	+++++ 200	1.00 500	5.00	20.0	50.0
Chlorodibromomethane	CBNZ d5	Ave	+++++ 368346	1132 +++++	6186	27121	75277	+++++ 200	1.00 +++++	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,3-Dichloropropane	CBNZ d5	Ave	+++++ 822160	4379 2075663	19491	82348	202303	+++++ 200	1.00 500	5.00	20.0	50.0
Ethylene Dibromide	CBNZ d5	Ave	+++++ 422129	1952 1071467	9431	41531	103252	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butyl acetate	CBNZ d5	Ave	+++++ 628871	3065 1675681	12572	54038	146740	+++++ 200	1.00 500	5.00	20.0	50.0
2-Hexanone	BUT	Ave	+++++ 724433	3032 1834688	14657	66557	172918	+++++ 1000	5.00 2500	25.0	100	250
Chlorobenzene	CBNZ d5	Ave	+++++ 1883605	9180 4797282	45909	186253	463039	+++++ 200	1.00 500	5.00	20.0	50.0
Ethylbenzene	CBNZ d5	Ave	+++++ 1037778	4789 2630034	25146	103181	259004	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 540684	1968 1515018	9553	42553	114730	+++++ 200	1.00 500	5.00	20.0	50.0
m-Xylene & p-Xylene	CBNZ d5	Ave	+++++ 1269044	5979 3275008	30560	123751	314957	+++++ 200	1.00 500	5.00	20.0	50.0
o-Xylene	CBNZ d5	Ave	+++++ 1285683	5802 3330025	27499	123223	319634	+++++ 200	1.00 500	5.00	20.0	50.0
Styrene	CBNZ d5	Ave	+++++ 2077360	8638 5271655	45097	198970	512303	+++++ 200	1.00 500	5.00	20.0	50.0
Bromoform	DCBd 4	Ave	+++++ 157807	600 +++++	2431	11169	31584	+++++ 200	1.00 +++++	5.00	20.0	50.0
n-Butyl acrylate	CBNZ d5	Ave	+++++ 369211	1583 1002810	6302	29357	81627	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropylbenzene	CBNZ d5	Ave	+++++ 3412005	15181 8646450	76498	324554	845903	+++++ 200	1.00 500	5.00	20.0	50.0
Amyl acetate (mixed isomers)	DCBd 4	Ave	+++++ 847885	2840 2213897	15837	72274	192795	+++++ 200	1.00 500	5.00	20.0	50.0
Bromobenzene	DCBd 4	Ave	+++++ 691037	3592 1777563	17032	71712	177452	+++++ 200	1.00 500	5.00	20.0	50.0
N-Propylbenzene	DCBd 4	Ave	+++++ 3781005	16396 9308225	90934	372515	965975	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	+++++ 497632	1728 1254909	12053	49662	121861	+++++ 200	1.00 500	5.00	20.0	50.0
4-Ethyltoluene	DCBd 4	Ave	+++++ 3206952	13198 8164451	77008	318601	801612	+++++ 200	1.00 500	5.00	20.0	50.0
2-Chlorotoluene	DCBd 4	Ave	+++++ 2535873	11775 6298545	63399	260044	663352	+++++ 200	1.00 500	5.00	20.0	50.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++ 2781229	11346 7171594	62495	267917	699566	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 150753	891 379923	4106	15429	38425	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
trans-1,4-Dichloro-2-butene	DCBd 4	Lin2	+++++ 115806	314 307549	2516	10767	27033	+++++ 200	1.00 500	5.00	20.0	50.0
4-Chlorotoluene	DCBd 4	Ave	+++++ 2244022	10489 5522861	55872	234201	576335	+++++ 200	1.00 500	5.00	20.0	50.0
tert-Butylbenzene	DCBd 4	Ave	+++++ 2387852	9273 6353477	49929	214012	582386	+++++ 200	1.00 500	5.00	20.0	50.0
Butyl Methacrylate	DCBd 4	Qua2	+++++ 891972	2344 2350583	13908	69146	198089	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	+++++ 2845304	12227 7202715	66400	283720	729192	+++++ 200	1.00 500	5.00	20.0	50.0
sec-Butylbenzene	DCBd 4	Ave	+++++ 3495546	14167 8798809	76647	334428	875100	+++++ 200	1.00 500	5.00	20.0	50.0
4-Isopropyltoluene	DCBd 4	Ave	+++++ 3067267	11479 7901572	63849	286840	771617	+++++ 200	1.00 500	5.00	20.0	50.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 1398391	7176 3587552	35641	143768	361442	+++++ 200	1.00 500	5.00	20.0	50.0
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 1411091	7092 3660745	36192	148418	363672	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	+++++ 2983306	12727 7573200	69420	303063	758421	+++++ 200	1.00 500	5.00	20.0	50.0
Indan	DCBd 4	Ave	+++++ 2811870	12705 7154109	66724	285066	727721	+++++ 200	1.00 500	5.00	20.0	50.0
p-Diethylbenzene	DCBd 4	Ave	+++++ 1600629	6435 4079952	39167	168969	400364	+++++ 200	1.00 500	5.00	20.0	50.0
Benzyl chloride	DCBd 4	Qua2	+++++ 172204	184 496762	2430	11048	33493	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butylbenzene	DCBd 4	Ave	+++++ 1431646	5983 3517950	33988	143928	380565	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichlorobenzene	DCBd 4	Ave	+++++ 1297766	6355 3347023	33723	133964	332917	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	+++++ 2999435	10436 7848945	59760	272297	732353	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Qua2	+++++ 61397	96 187971	1154	4588	13051	+++++ 200	1.00 500	5.00	20.0	50.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	+++++ 997899	4190 2683067	25154	99727	254659	+++++ 200	1.00 500	5.00	20.0	50.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 273488	1226 755100	6499	24399	68572	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 907716	3838 2470402	22150	89925	233257	+++++ 200	1.00 500	5.00	20.0	50.0
Naphthalene	DCBd 4	Ave	+++++ 1961976	7274 5398562	41320	181714	486202	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-161178-1 Analy Batch No.: 539131

SDG No.:

Instrument ID: CVOAMS11 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 06:28 Calibration End Date: 07/24/2018 09:04 Calibration ID: 70382

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 792194	3306 2090263	19572	77796	202037	+++++ 200	1.00 500	5.00	20.0	50.0
Dibromofluoromethane (Surr)	FB	Ave	118845 130583	118224 139055	120192	121091	126193	50.0 50.0	50.0 50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	120610 124846	125285 135515	122452	123984	124690	50.0 50.0	50.0 50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	523402 564698	527079 592457	529664	539424	549625	50.0 50.0	50.0 50.0	50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	141309 144897	137352 150563	142613	149062	145966	50.0 50.0	50.0 50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua2 = Quadratic 1/conc^2 ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Lims ID: STD8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Jul-2018 06:28:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD8
Misc. Info.: 460-0076012-003
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Jul-2018 18:19:45 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 24-Jul-2018 10:09:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Butadiene	54	1.741	1.735	0.006	41	1242	0.2500	0.2926	a
* 27 TBA-d9 (IS)	65	3.287	3.281	0.006	39	139431	1000.0	1000.0	
31 Acrylonitrile	53	3.761	3.749	0.012	79	1268	2.00	1.95	
$ 51 Dibromofluoromethane (Surr	113	4.595	4.595	0.000	96	118845	50.0	49.6	
* 39 2-Butanone-d5	46	4.662	4.655	0.007	0	161101	250.0	250.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	97	120610	50.0	50.1	
* 62 Fluorobenzene	96	5.386	5.386	0.000	99	582848	50.0	50.0	
* 68 1,4-Dioxane-d8	96	6.389	6.395	-0.006	30	17459	1000.0	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.156	0.006	99	523402	50.0	49.8	
76 Epichlorohydrin	57	7.259	7.253	0.006	1	342	5.00	4.92	a
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	86	434087	50.0	50.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	141309	50.0	50.8	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.457	-0.006	97	217902	50.0	50.0	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

MIX I Hi_00096	Amount Added:	0.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	0.00	Units: uL	
Ethanol mix_00017	Amount Added:	0.00	Units: uL	
ACRY/EPIH MIX_00051	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	0.00	Units: uL	
14DIOXINTER_00086	Amount Added:	0.00	Units: uL	
GAS Hi_00264	Amount Added:	0.00	Units: uL	
GASES Li_00270	Amount Added:	2.50	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

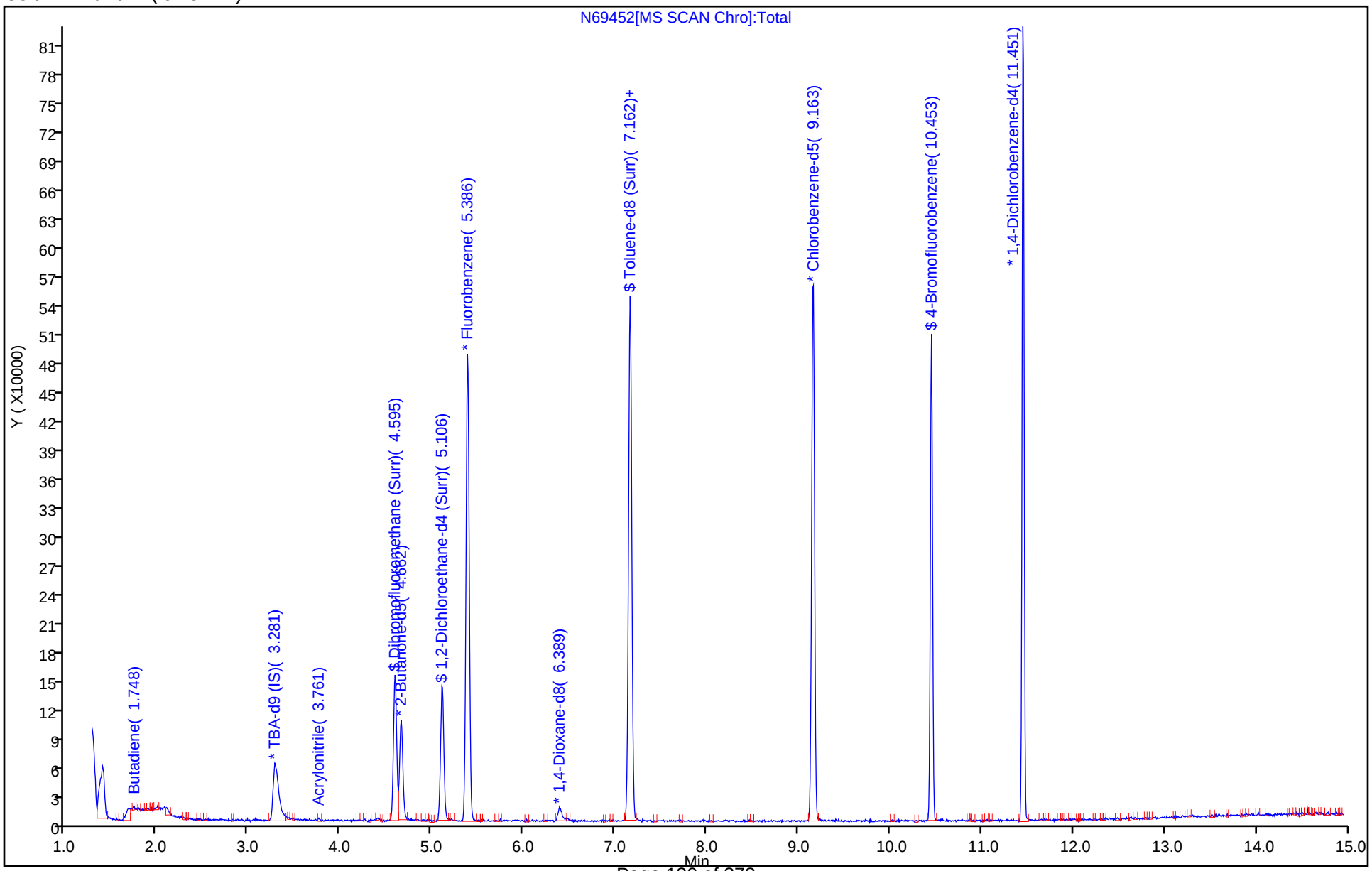
Report Date: 25-Jul-2018 18:19:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D

Injection Date:	24-Jul-2018 06:28:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	STD8			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

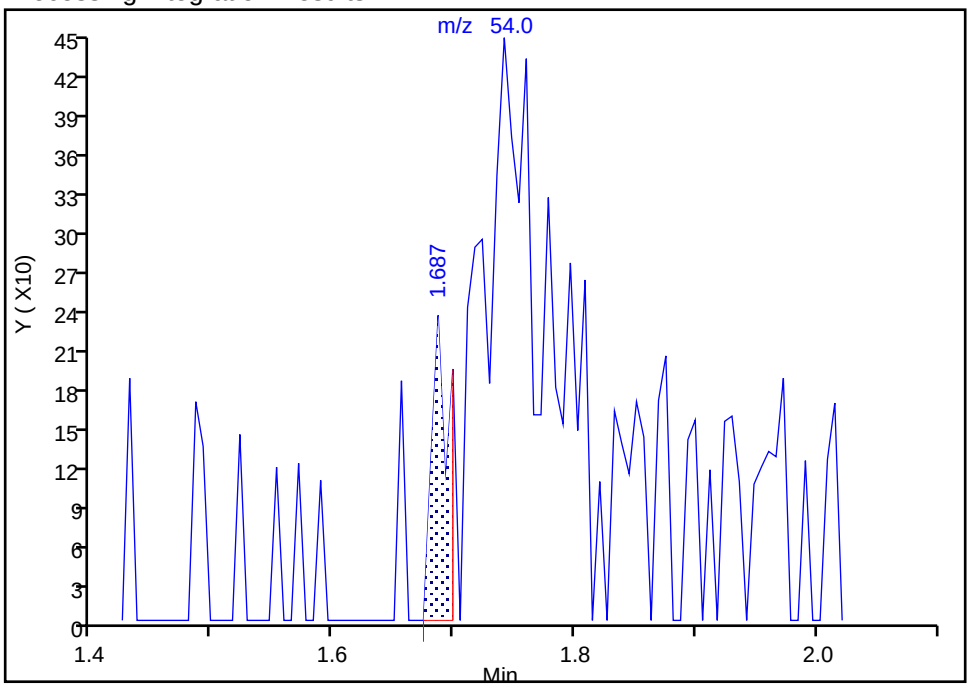
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

5 Butadiene, CAS: 106-99-0

Signal: 1

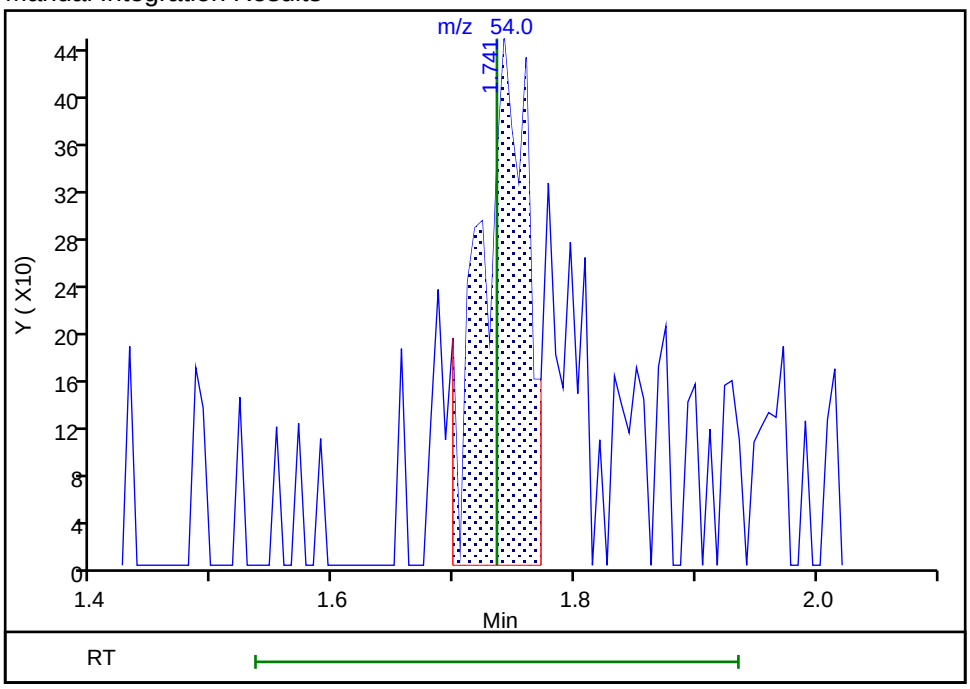
Processing Integration Results

RT: 1.69
Area: 238
Amount: 0.058238
Amount Units: ug/l



Manual Integration Results

RT: 1.74
Area: 1242
Amount: 0.292631
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:05:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

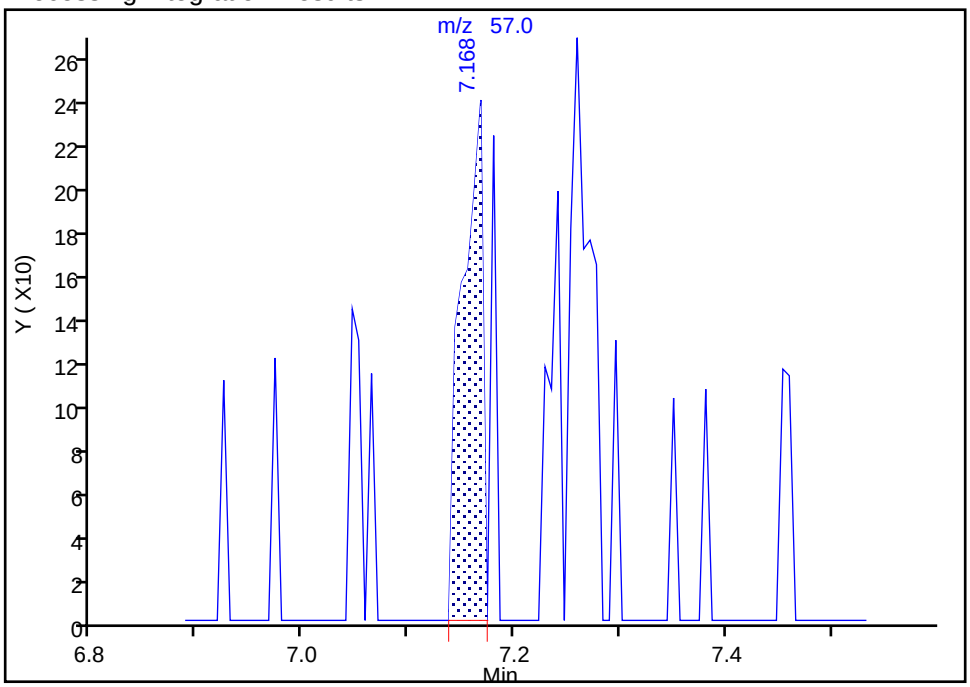
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

76 Epichlorohydrin, CAS: 106-89-8

Signal: 1

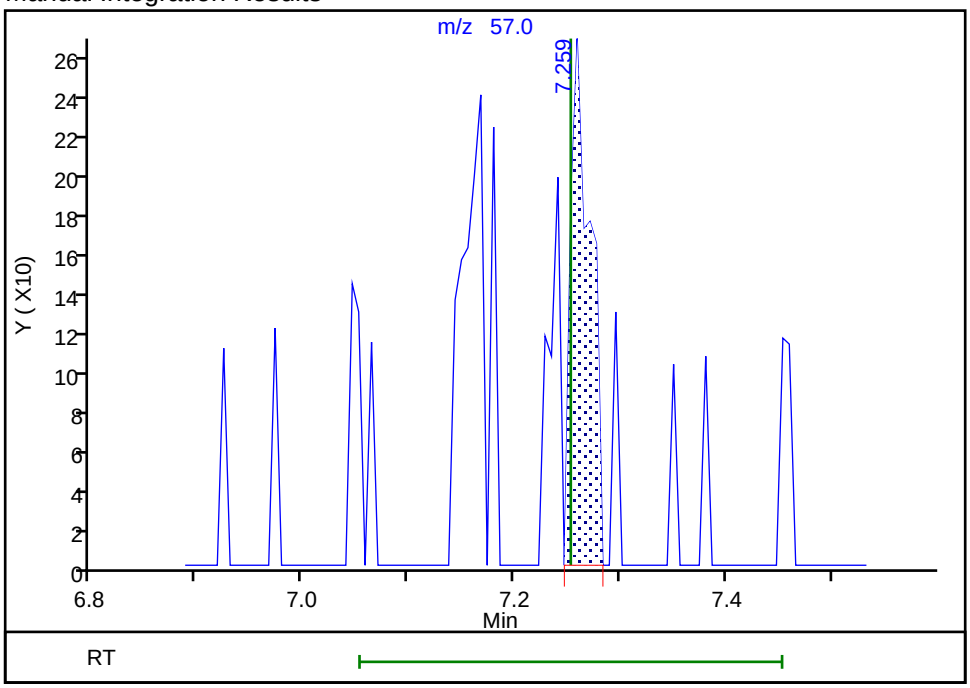
Processing Integration Results

RT: 7.17
Area: 318
Amount: 1.912644
Amount Units: ug/l



Manual Integration Results

RT: 7.26
Area: 342
Amount: 4.919115
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:04:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

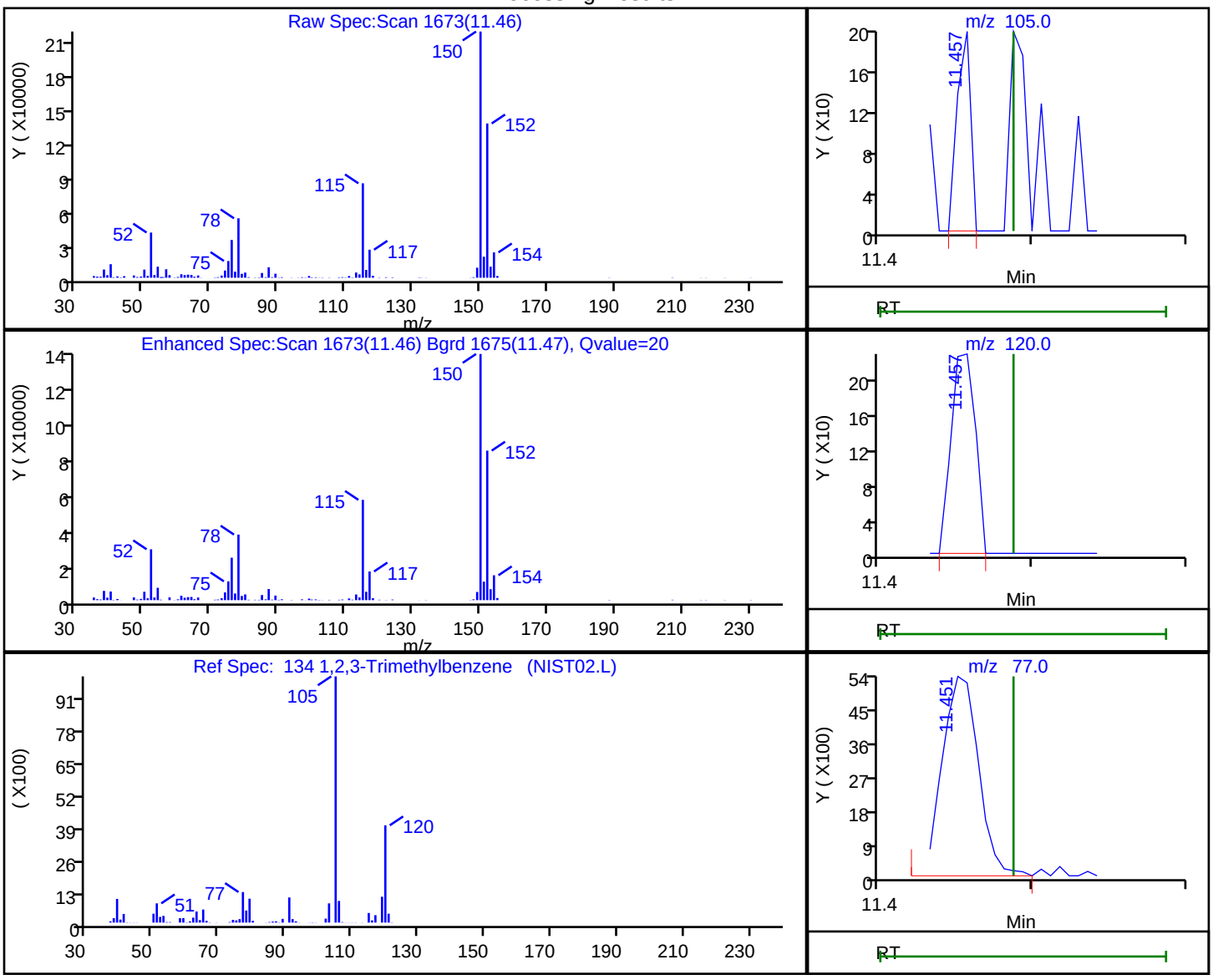
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

134 1,2,3-Trimethylbenzene, CAS: 526-73-8

Processing Results



RT	Mass	Response	Amount
11.46	105.00	118	0.008489
11.46	120.00	254	
11.45	77.00	8836	

Reviewer: delpolitov, 25-Jul-2018 17:06:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

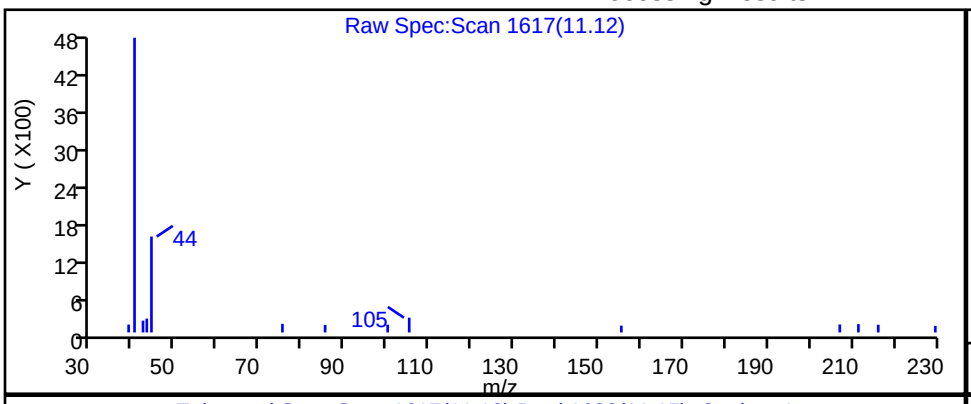
User Disabled Compound Report

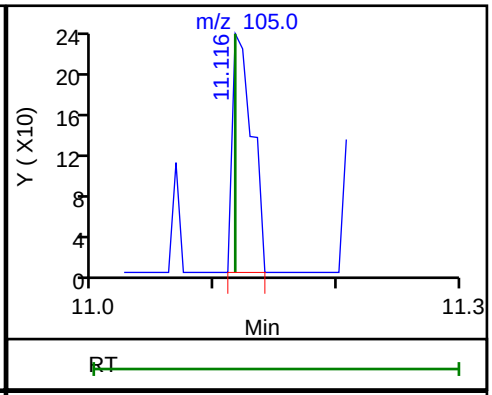
TestAmerica Edison

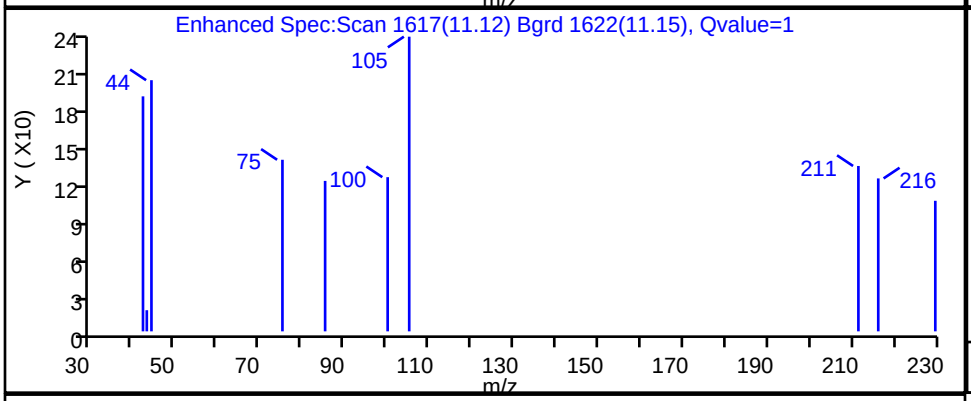
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

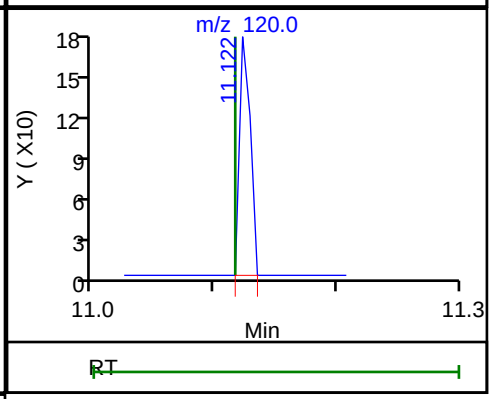
113 1,2,4-Trimethylbenzene, CAS: 95-63-6

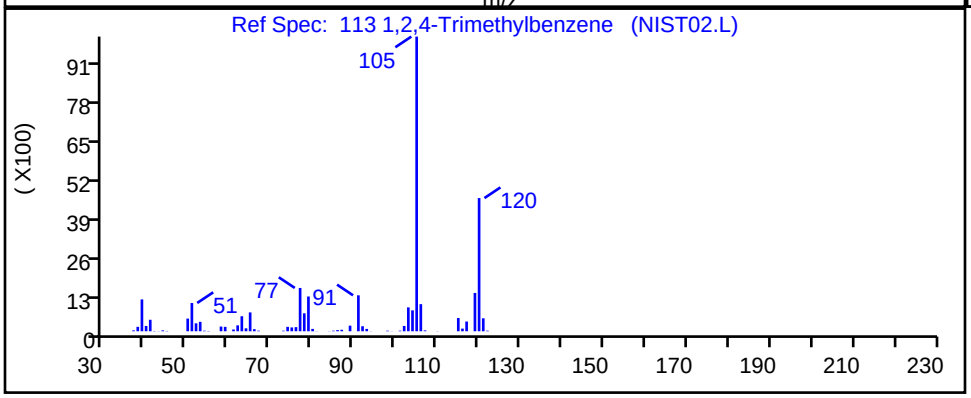
Processing Results











RT	Mass	Response	Amount
11.12	105.00	266	0.020439
11.12	120.00	105	

Reviewer: delpolitov, 25-Jul-2018 17:06:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

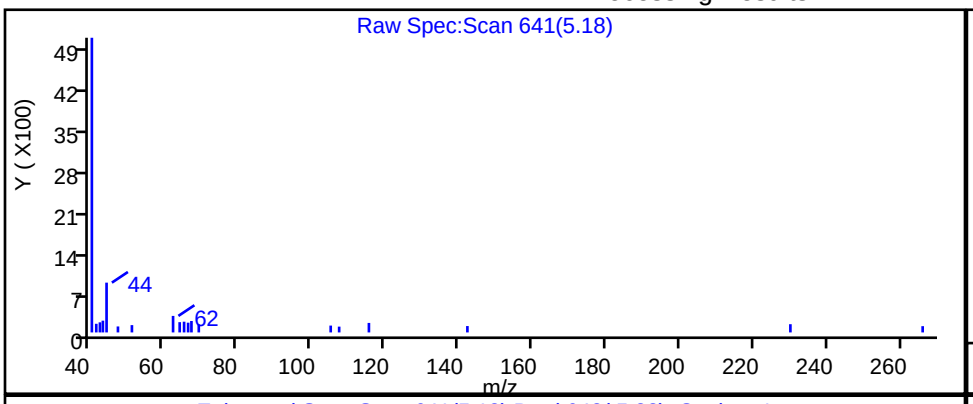
User Disabled Compound Report

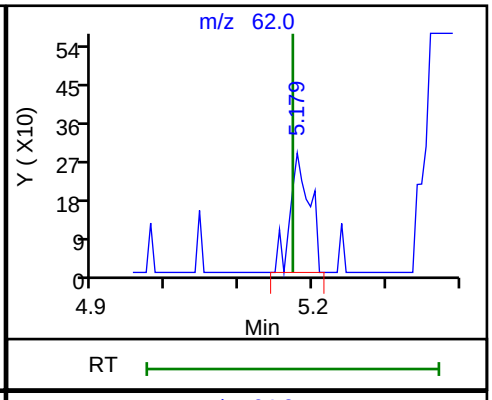
TestAmerica Edison

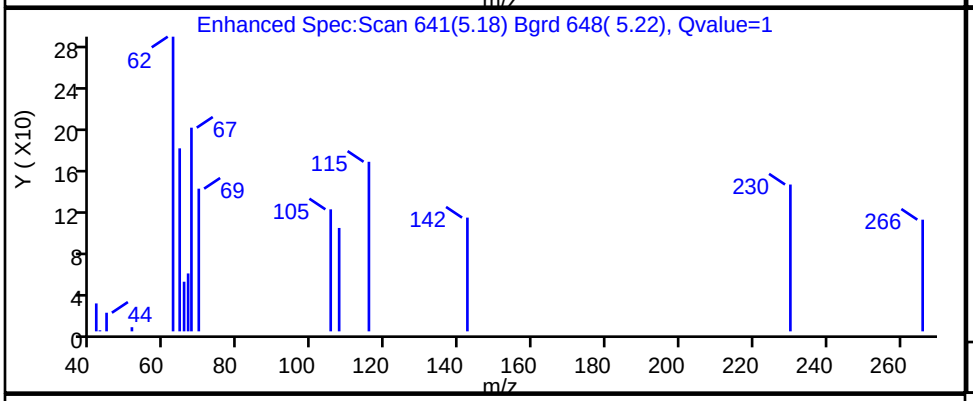
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

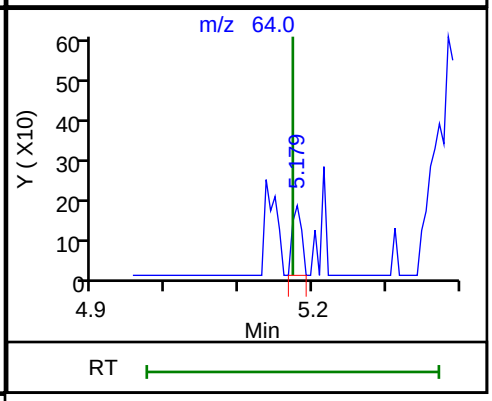
60 1,2-Dichloroethane, CAS: 107-06-2

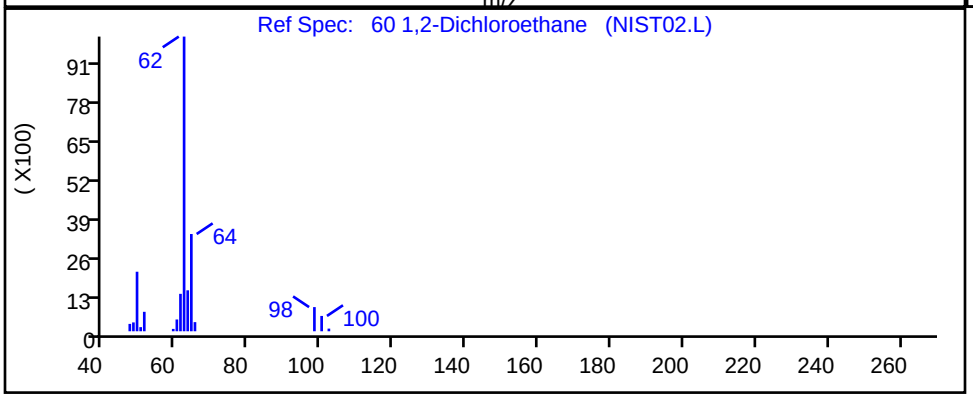
Processing Results











RT	Mass	Response	Amount
5.18	62.00	524	0.162572
5.18	64.00	156	

Reviewer: delpolitov, 25-Jul-2018 17:04:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

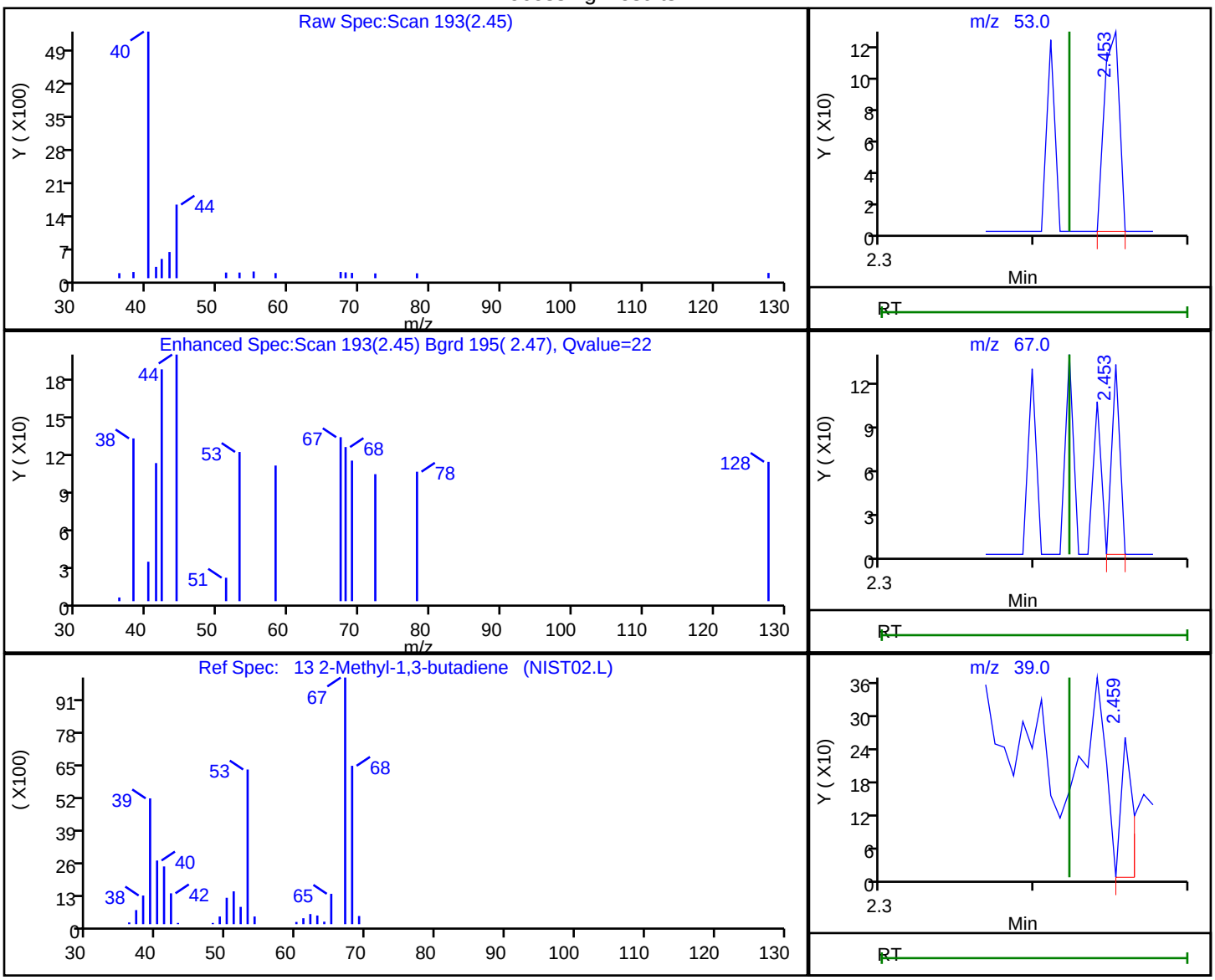
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

13 2-Methyl-1,3-butadiene, CAS: 78-79-5

Processing Results



RT	Mass	Response	Amount
2.45	53.00	82	0.029751
2.45	67.00	49	
2.46	39.00	134	

Reviewer: delpolitov, 25-Jul-2018 17:05:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

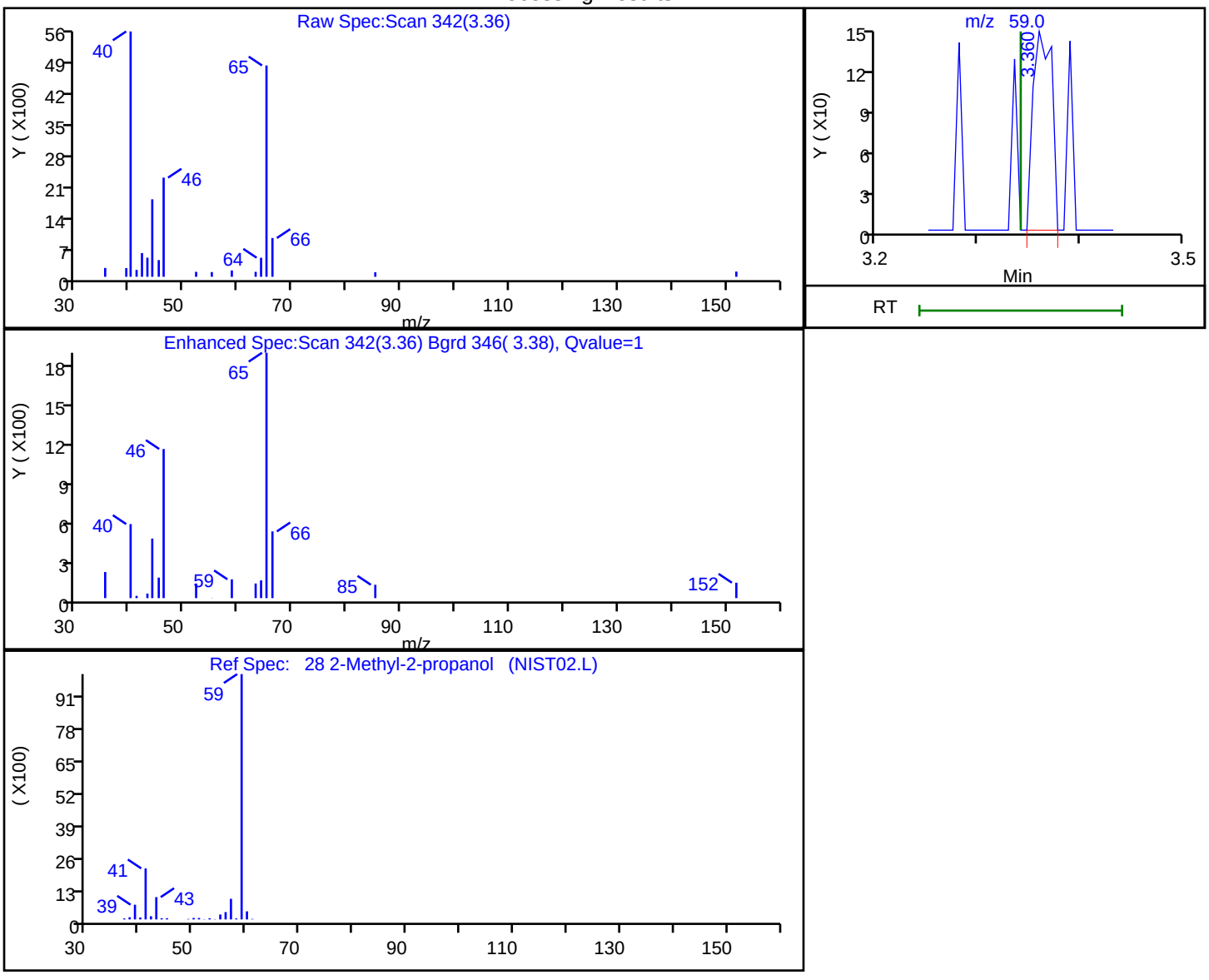
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Processing Results



RT	Mass	Response	Amount
3.36	59.00	184	1.151220

Reviewer: delpolitov, 25-Jul-2018 17:05:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

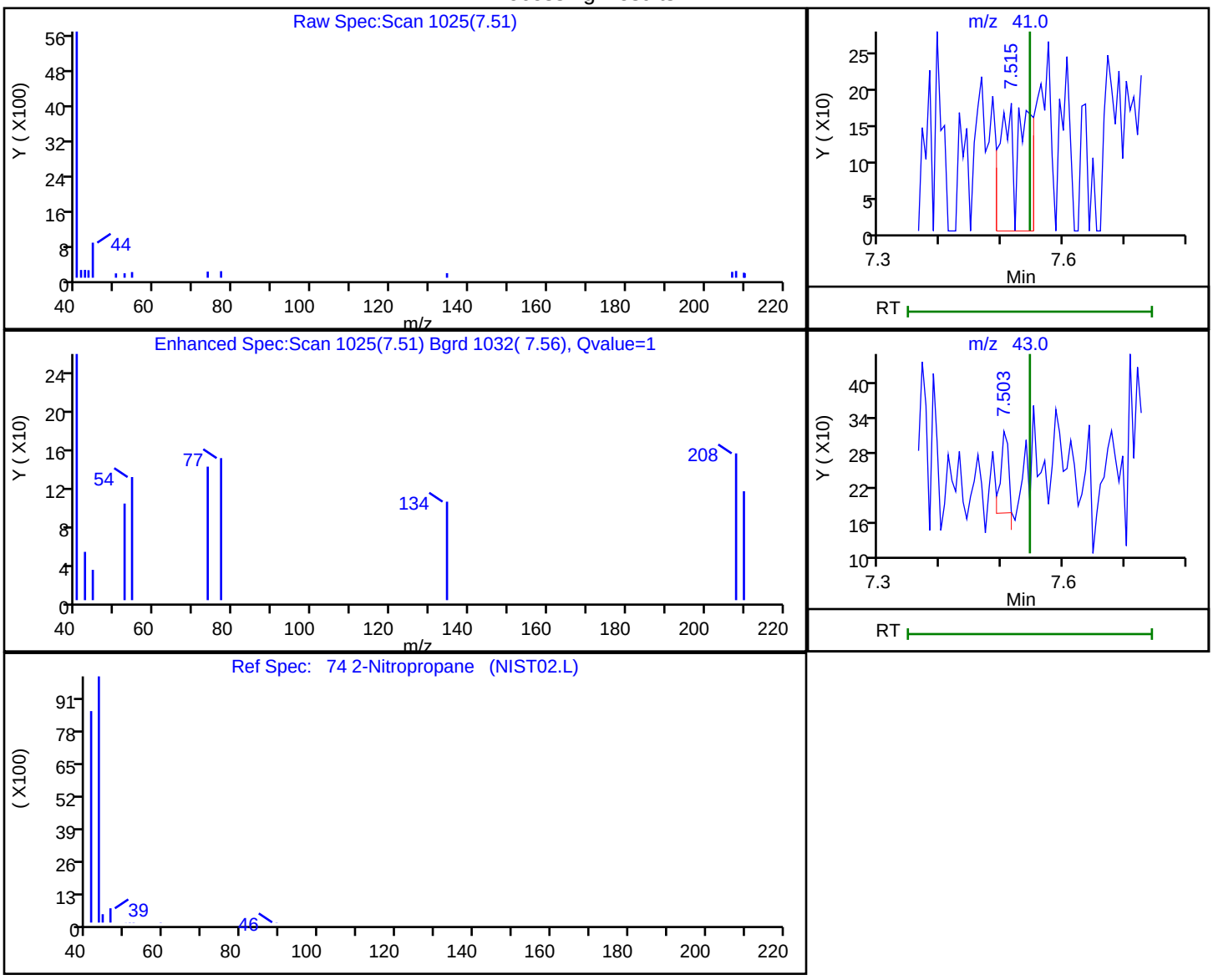
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Processing Results



RT	Mass	Response	Amount
7.51	41.00	544	4.132337
7.50	43.00	126	

Reviewer: delpolitov, 25-Jul-2018 17:04:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

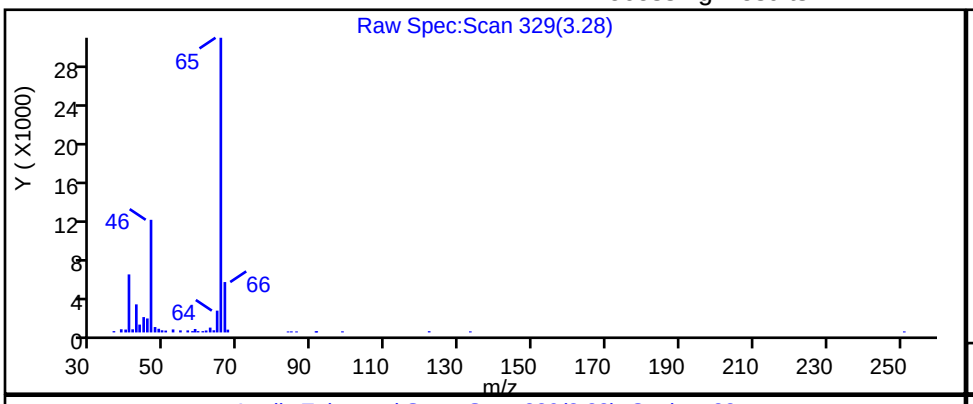
User Disabled Compound Report

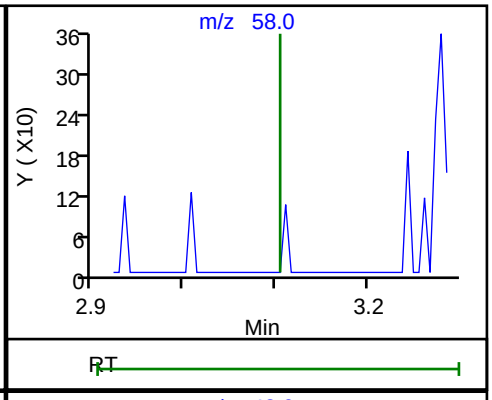
TestAmerica Edison

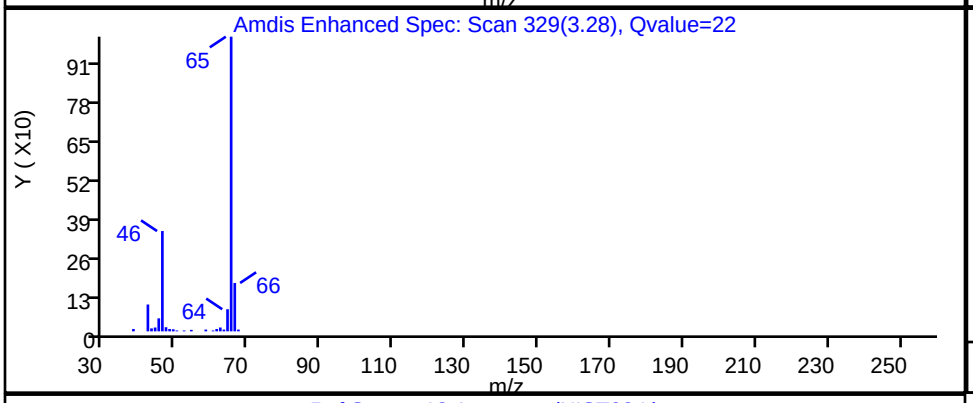
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

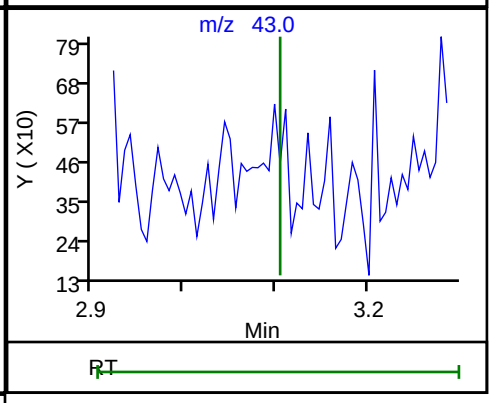
18 Acetone, CAS: 67-64-1

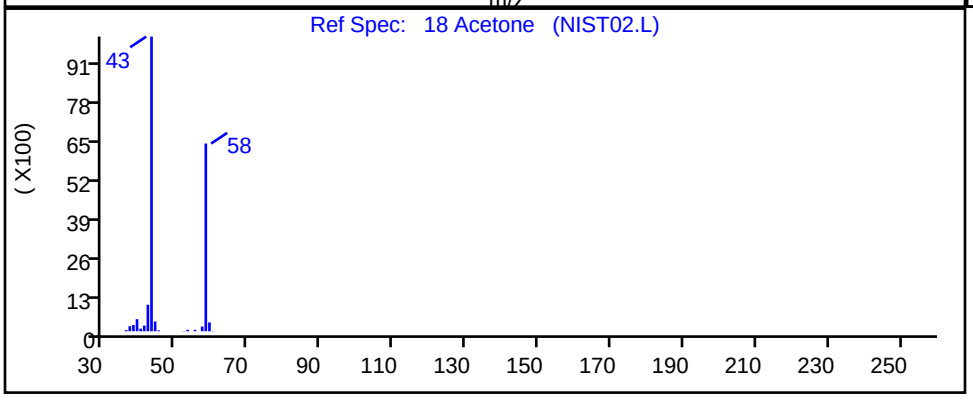
Processing Results











RT	Mass	Response	Amount
3.28	58.00	696	4.406506
3.28	43.00	1198	

Reviewer: delpolitov, 25-Jul-2018 17:05:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

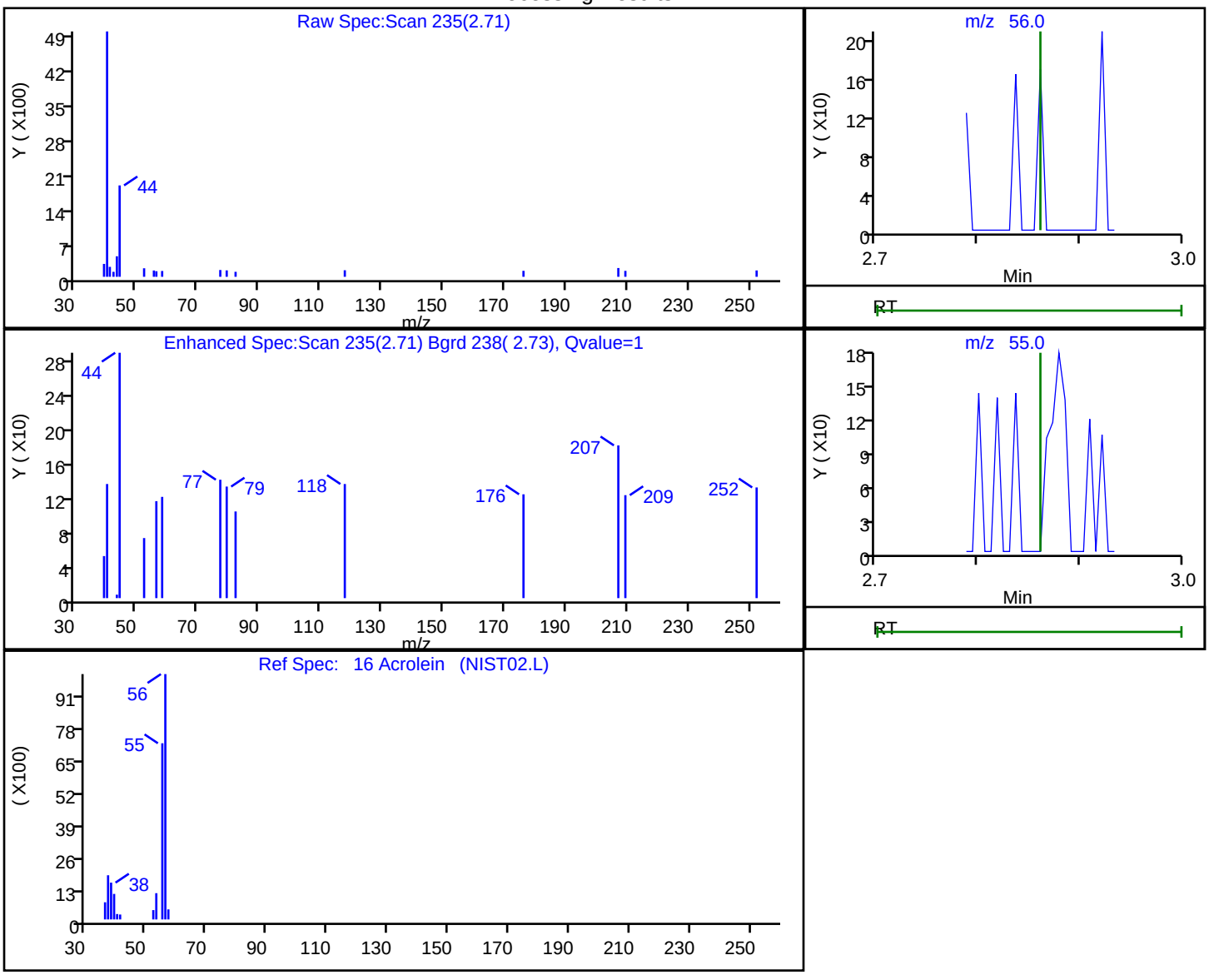
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

16 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
2.71	56.00	139	0.409235
2.71	55.00	131	

Reviewer: delpolitov, 25-Jul-2018 17:05:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

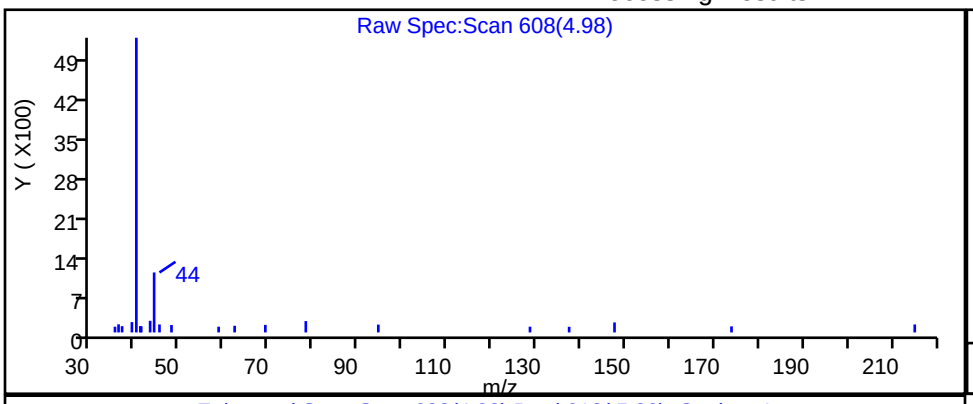
User Disabled Compound Report

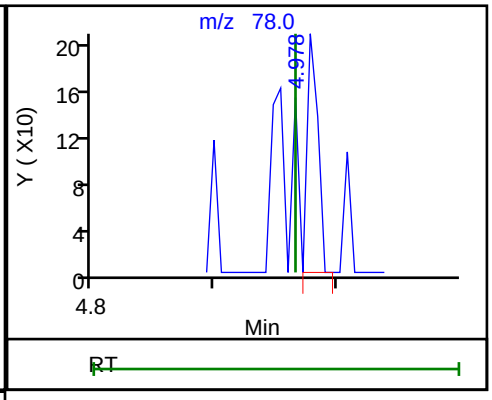
TestAmerica Edison

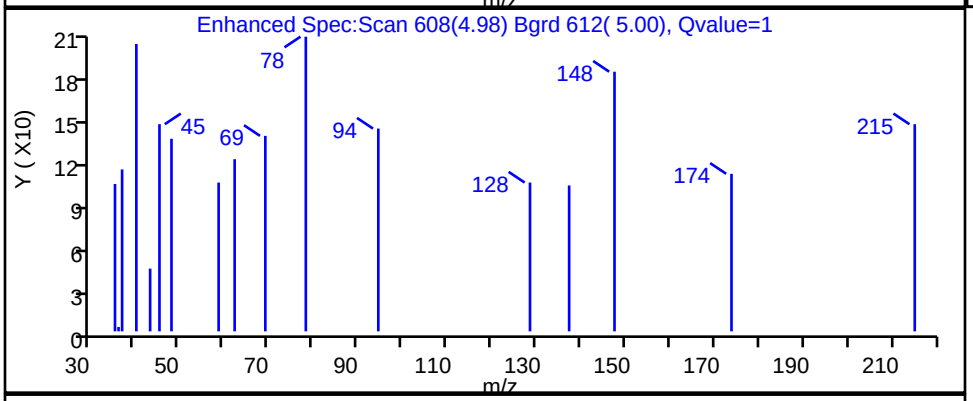
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

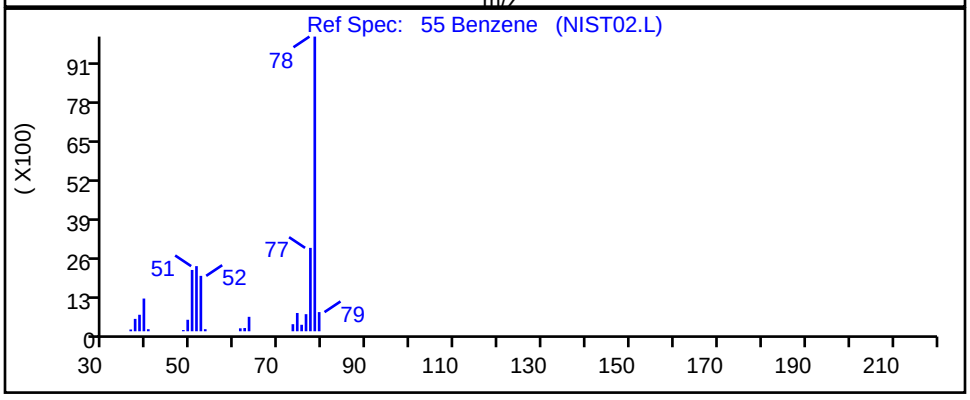
55 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
4.98	78.00	122	0.009075

Reviewer: delpolitov, 25-Jul-2018 17:04:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

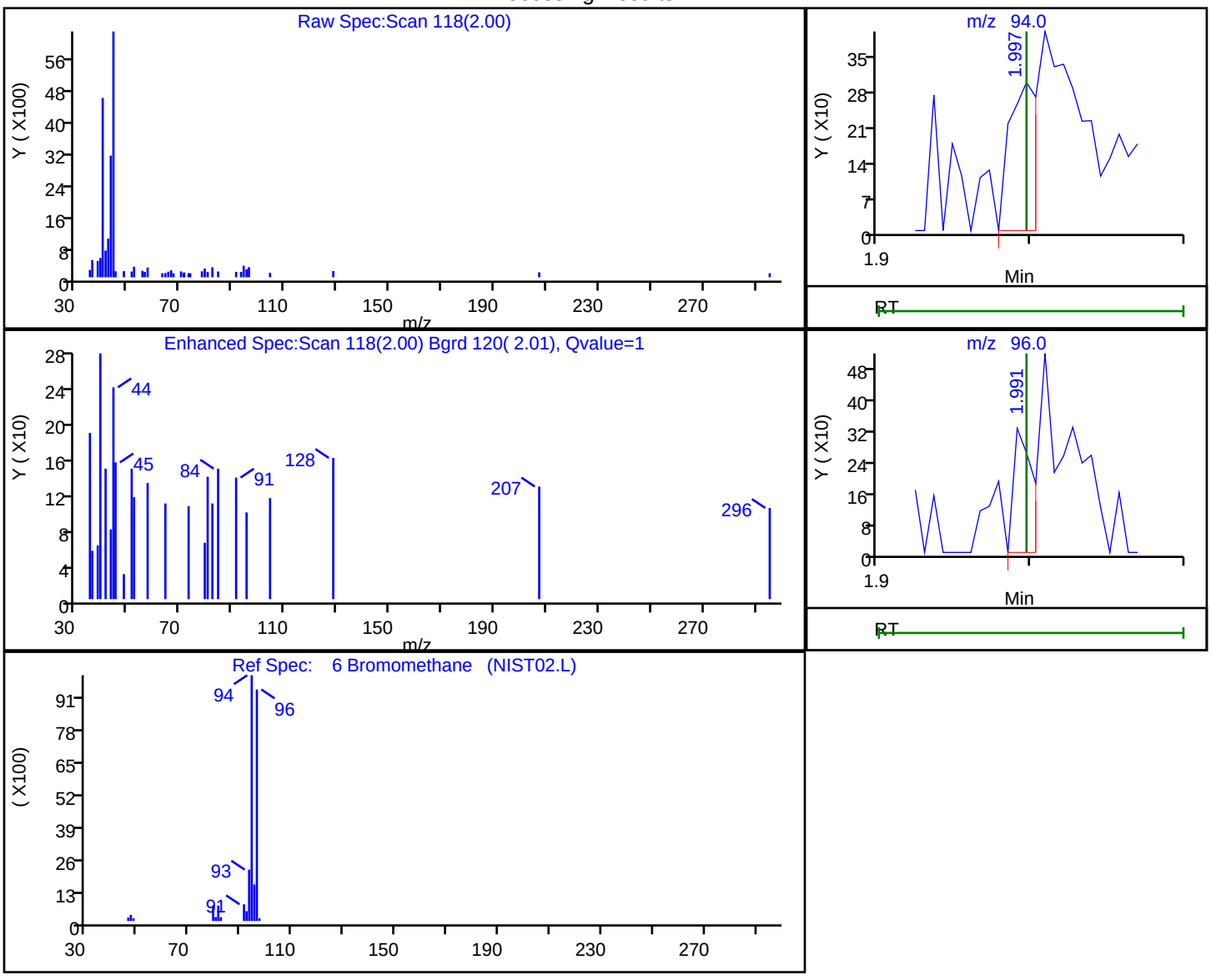
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

6 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.00	94.00	373	0.114710
1.99	96.00	275	

Reviewer: delpolitov, 25-Jul-2018 17:05:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

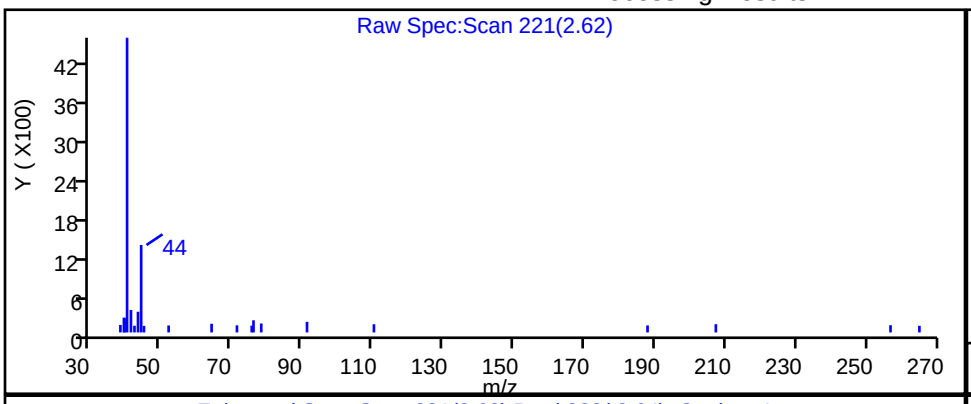
User Disabled Compound Report

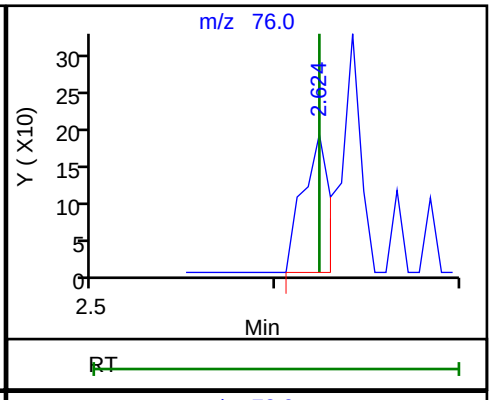
TestAmerica Edison

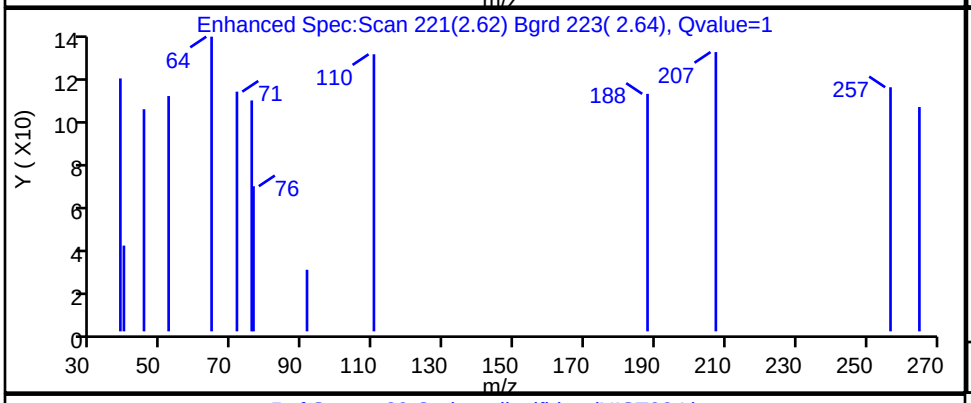
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

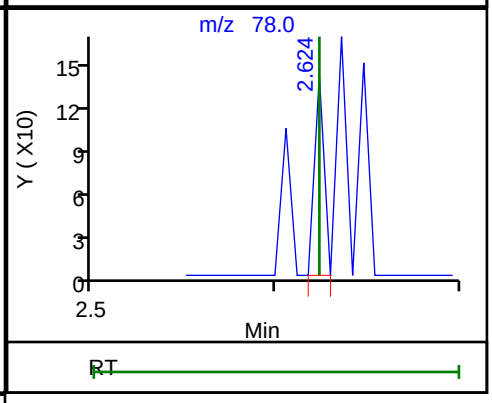
20 Carbon disulfide, CAS: 75-15-0

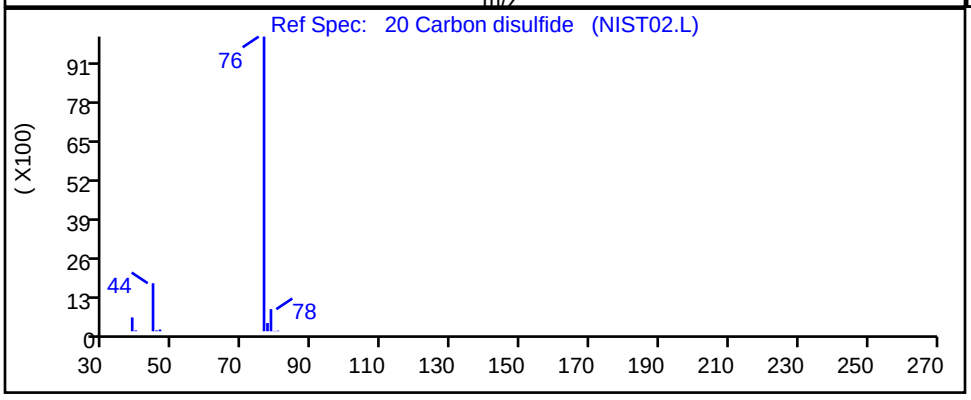
Processing Results











RT	Mass	Response	Amount
2.62	76.00	185	0.018181
2.62	78.00	50	

Reviewer: delpolitov, 25-Jul-2018 17:05:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

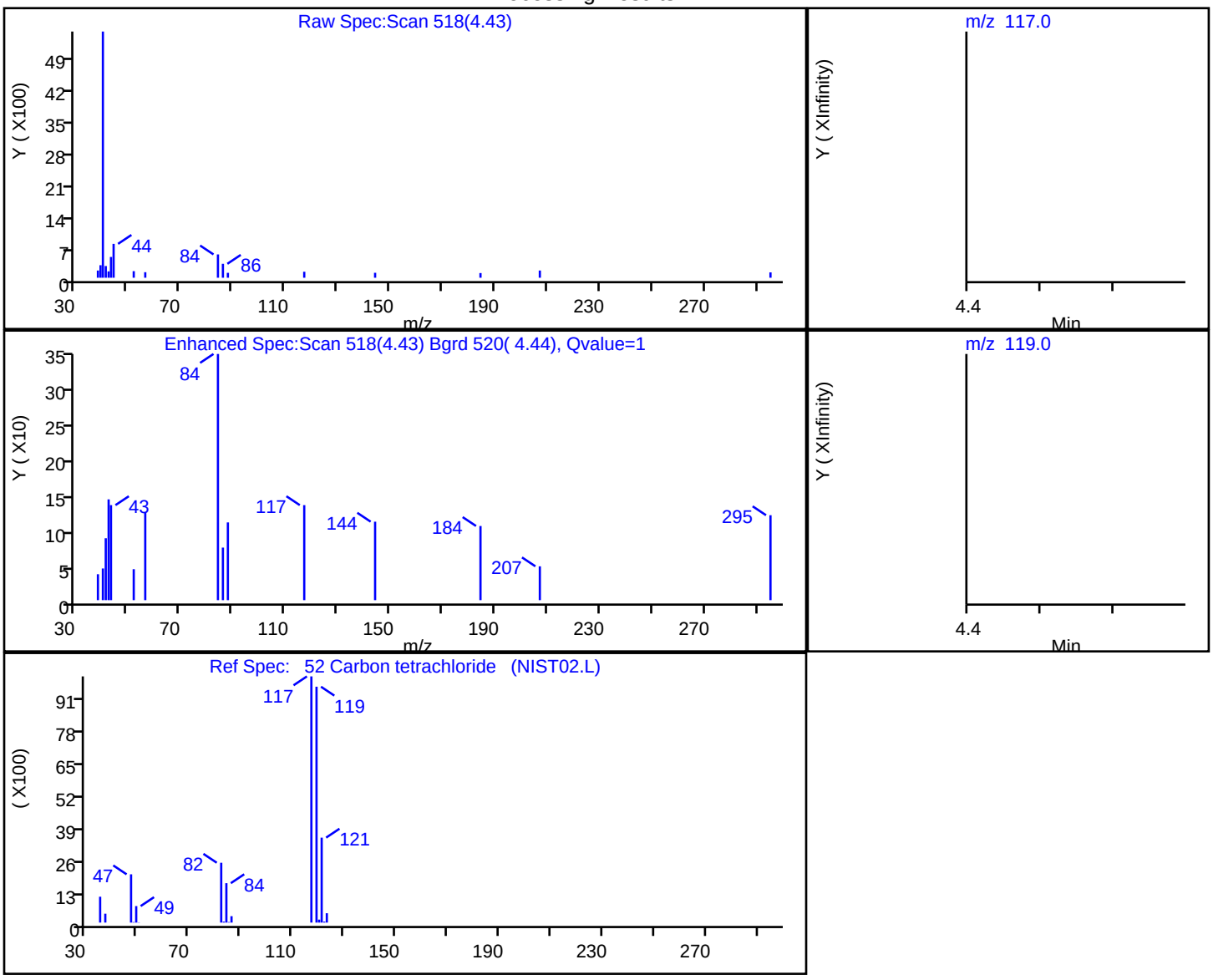
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
4.43	117.00	93	0.030625
4.42	119.00	37	

Reviewer: delpolitov, 25-Jul-2018 17:04:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

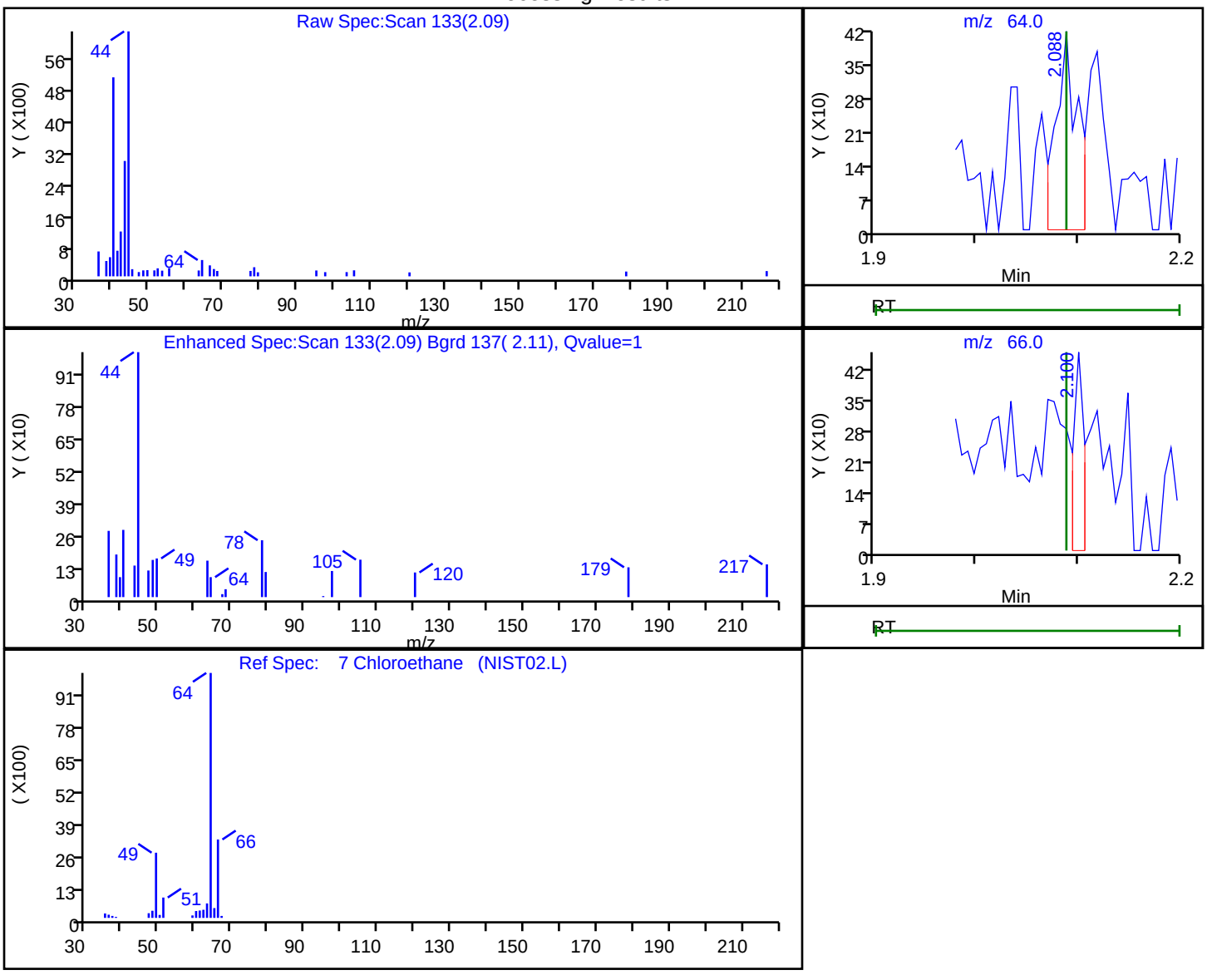
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

7 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.09	64.00	622	0.236654
2.10	66.00	335	

Reviewer: delpolitov, 25-Jul-2018 17:05:07
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

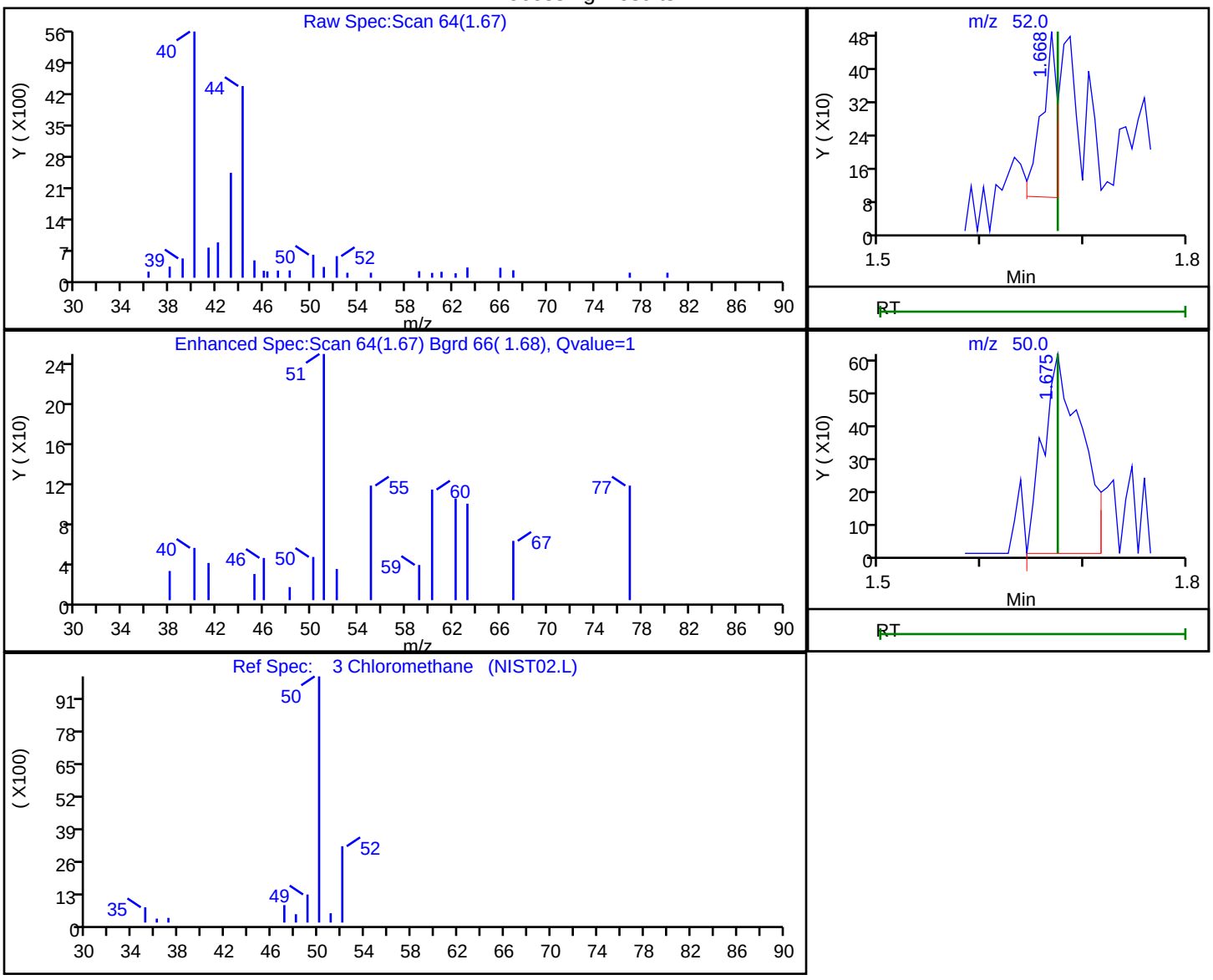
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.67	52.00	424	0.242666
1.67	50.00	1609	

Reviewer: delpolitov, 25-Jul-2018 17:05:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

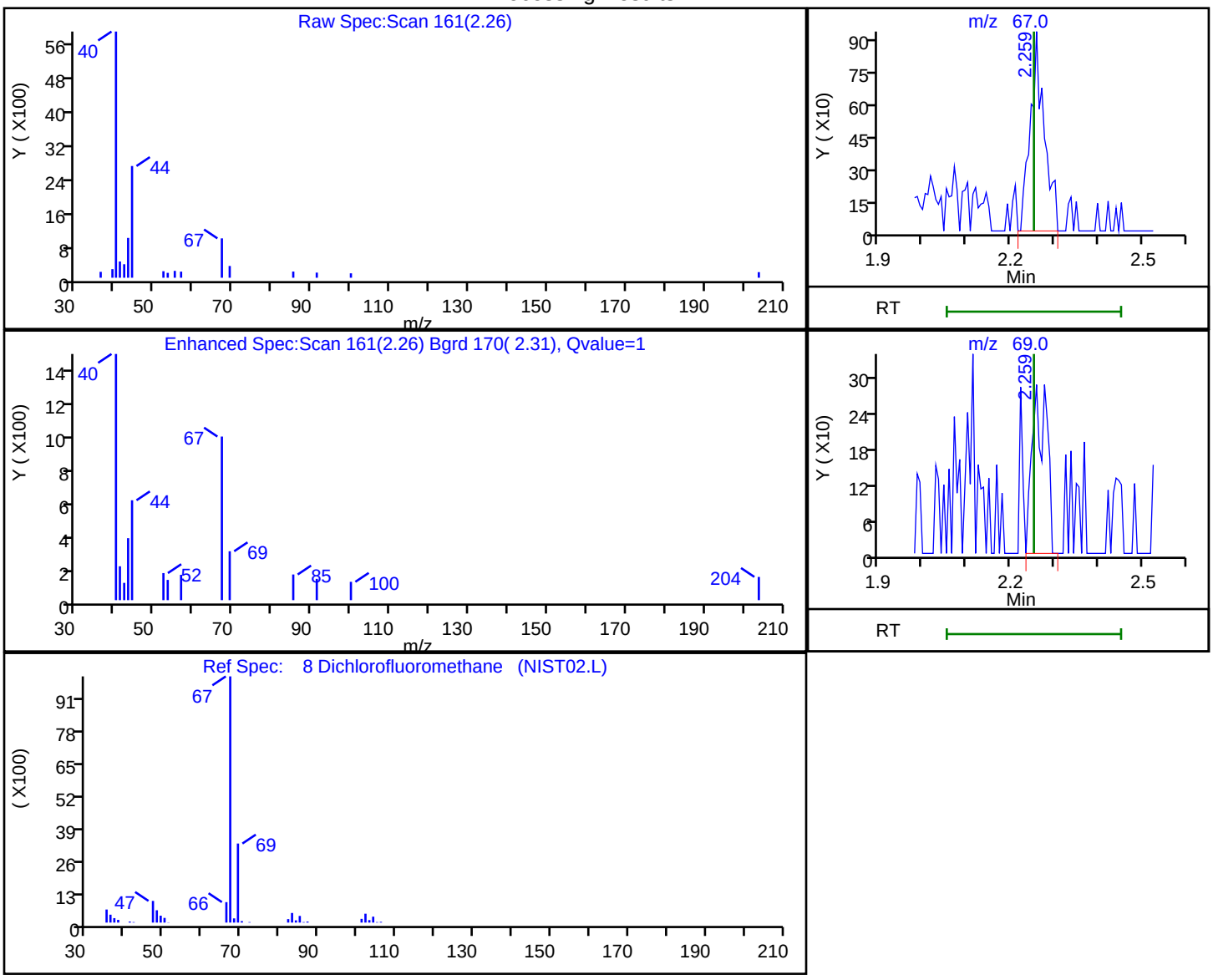
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 Dichlorofluoromethane, CAS: 75-43-4

Processing Results



RT	Mass	Response	Amount
2.26	67.00	2075	0.301250
2.26	69.00	640	

Reviewer: delpolitov, 25-Jul-2018 17:05:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

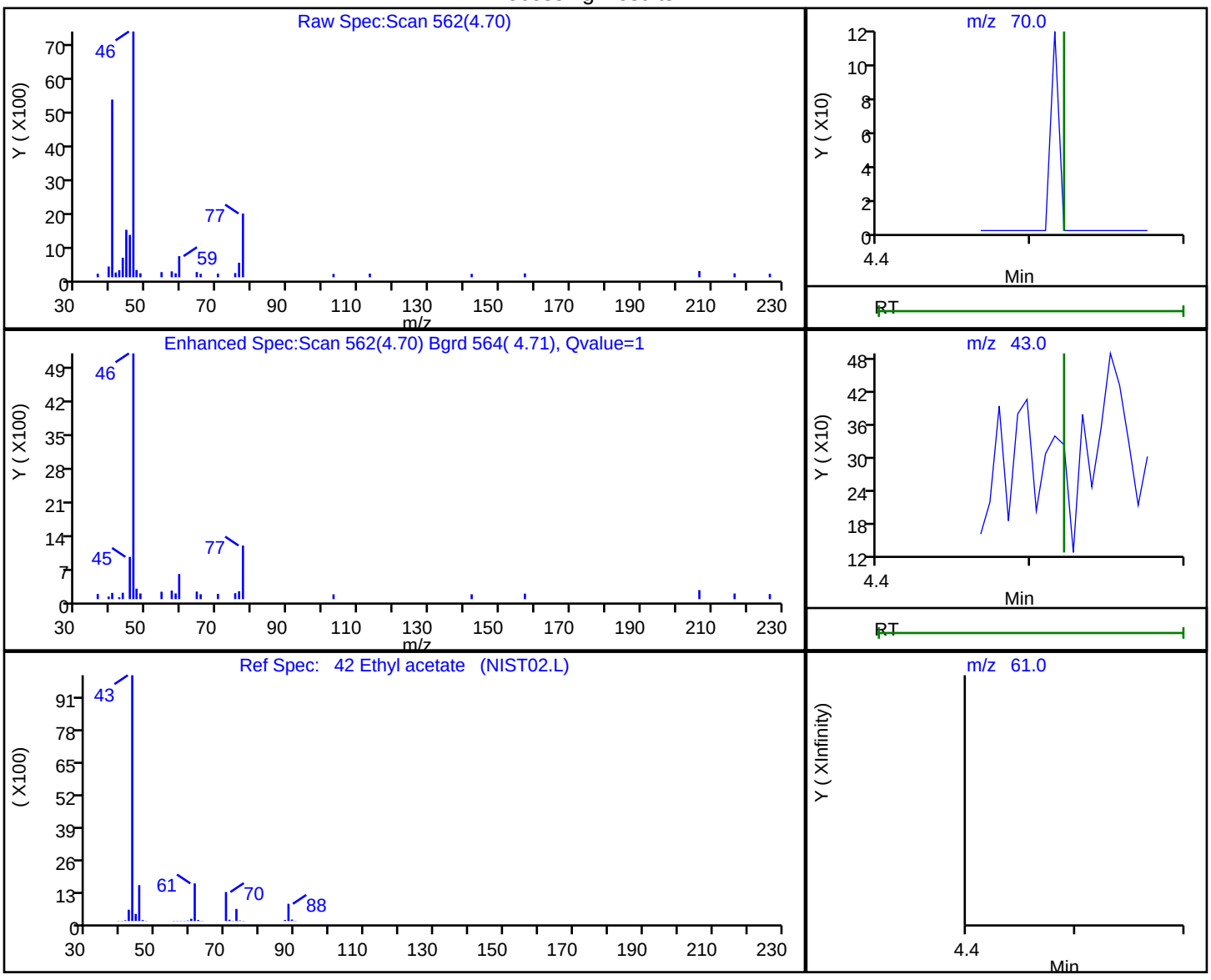
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

42 Ethyl acetate, CAS: 141-78-6

Processing Results



RT	Mass	Response	Amount
4.70	70.00	79	0.375608
4.69	43.00	661	
4.52	61.00	0	

Reviewer: delpolitov, 25-Jul-2018 17:04:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

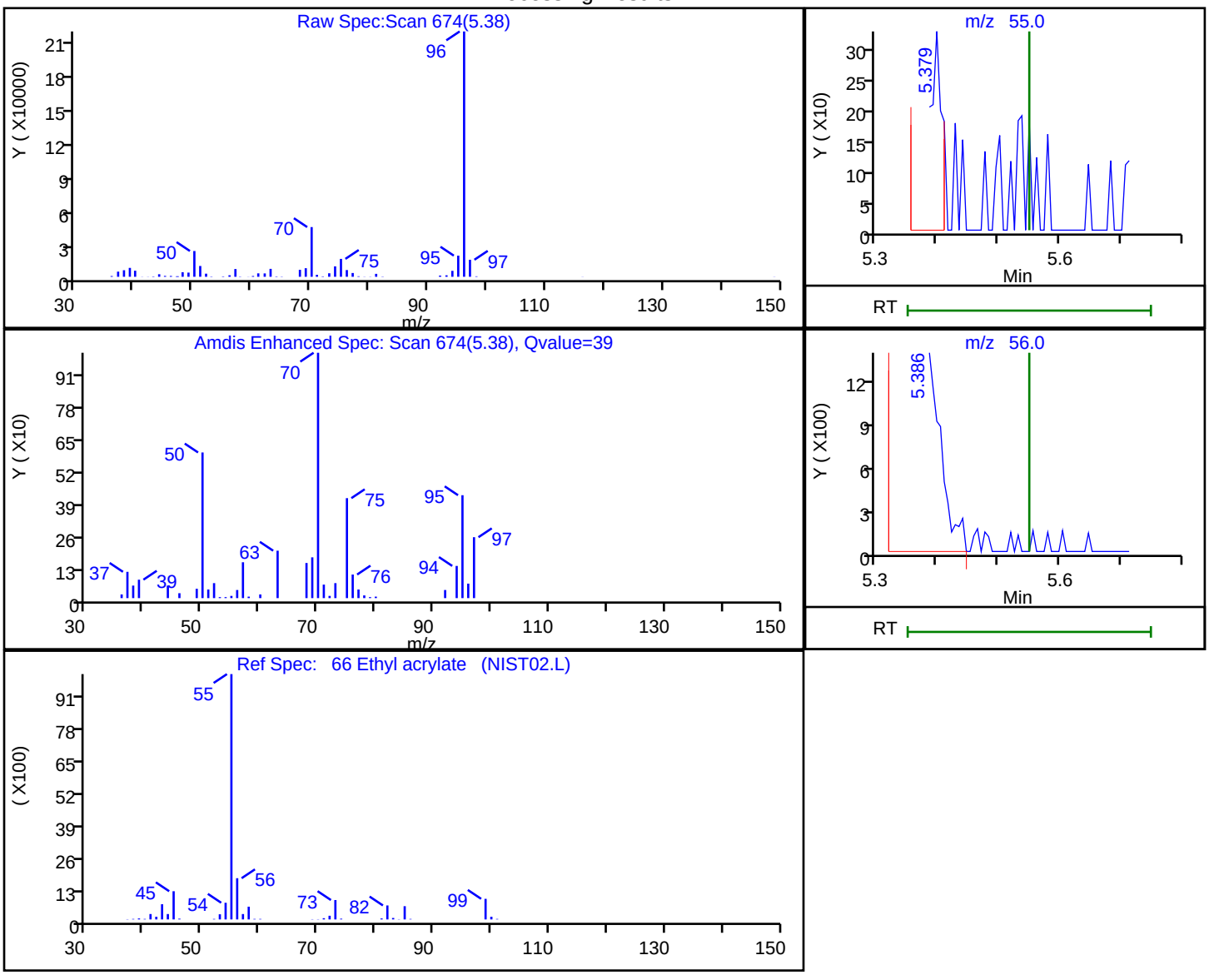
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

66 Ethyl acrylate, CAS: 140-88-5

Processing Results



RT	Mass	Response	Amount
5.38	55.00	789	0.174003
5.39	56.00	3543	

Reviewer: delpolitov, 25-Jul-2018 17:04:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

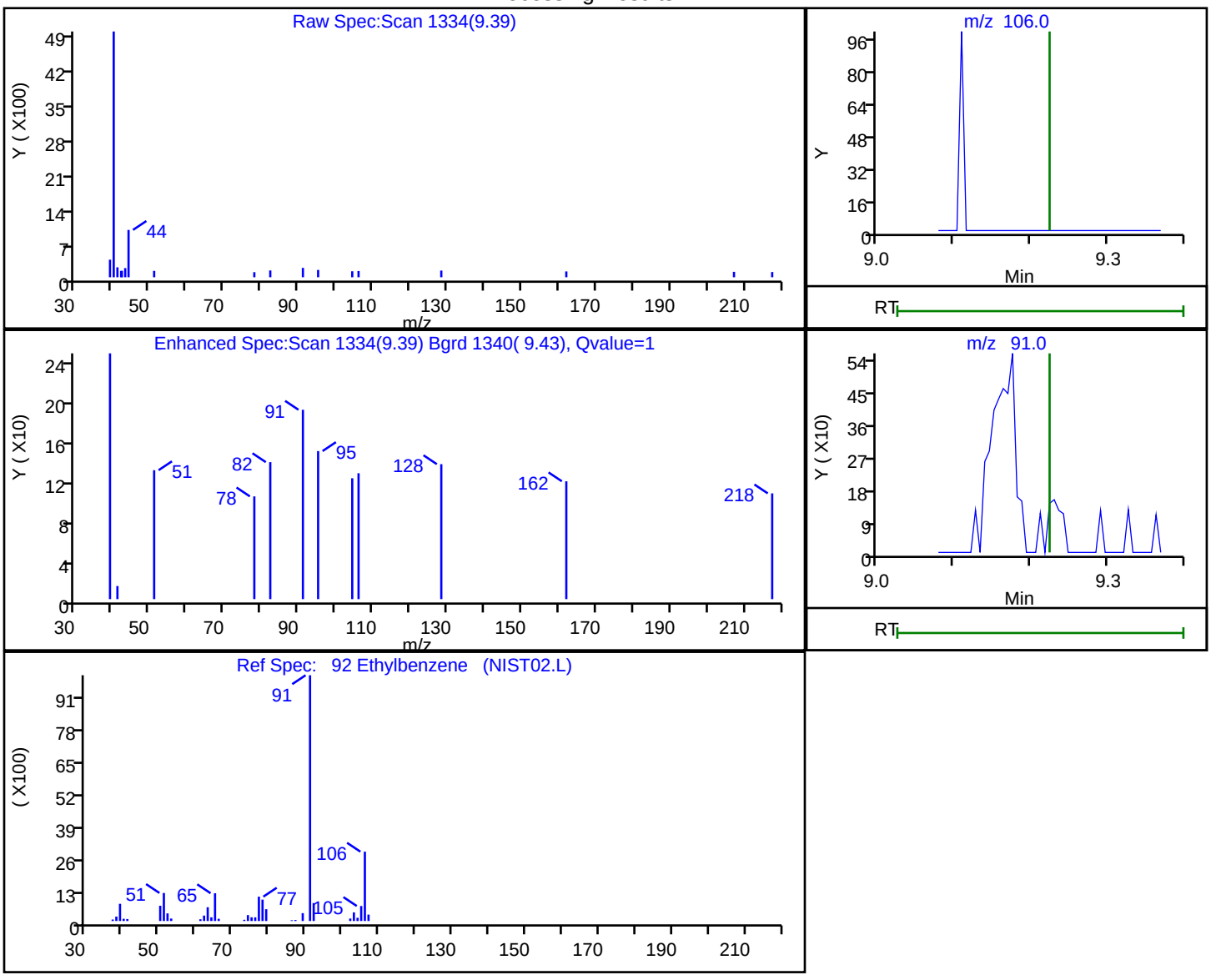
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
9.39	106.00	173	0.035130
9.41	91.00	459	

Reviewer: delpolitov, 25-Jul-2018 17:06:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

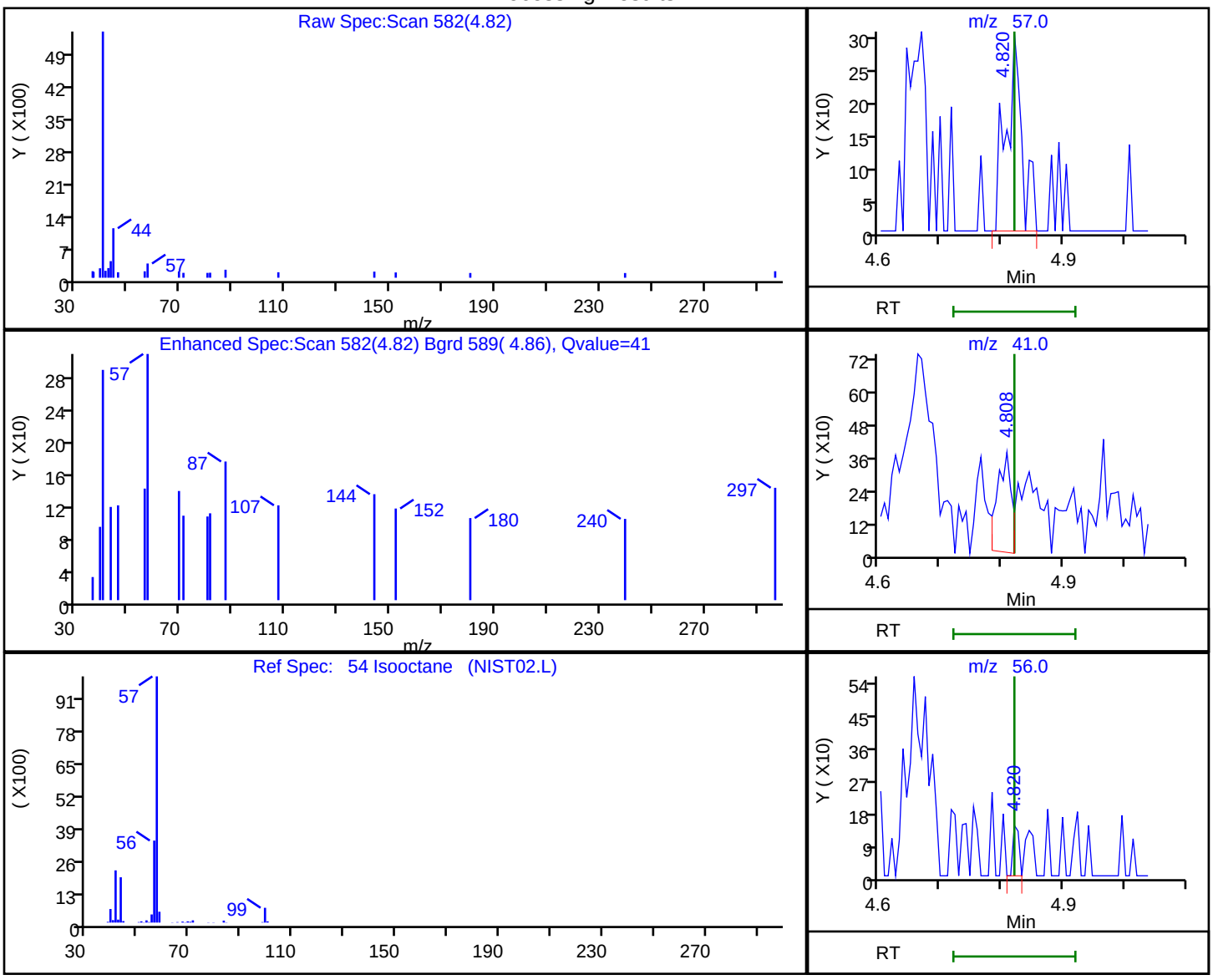
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

54 Isooctane, CAS: 540-84-1

Processing Results



RT	Mass	Response	Amount
4.82	57.00	555	0.056155
4.81	41.00	593	
4.82	56.00	96	

Reviewer: delpolitov, 25-Jul-2018 17:04:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

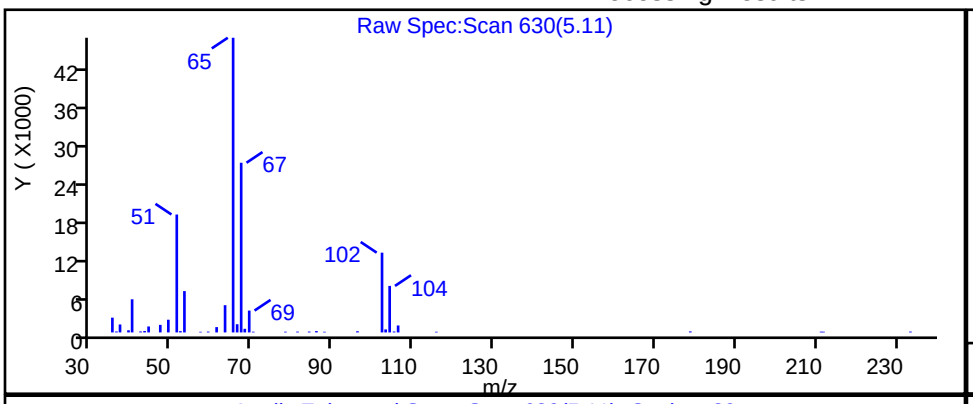
User Disabled Compound Report

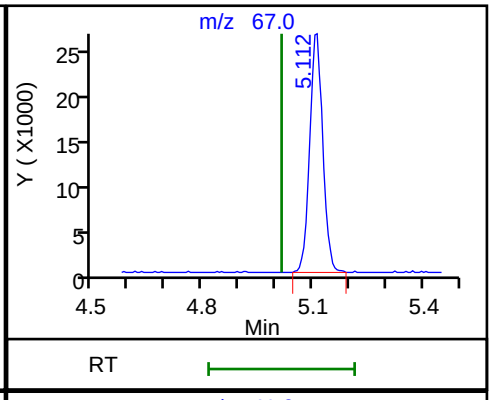
TestAmerica Edison

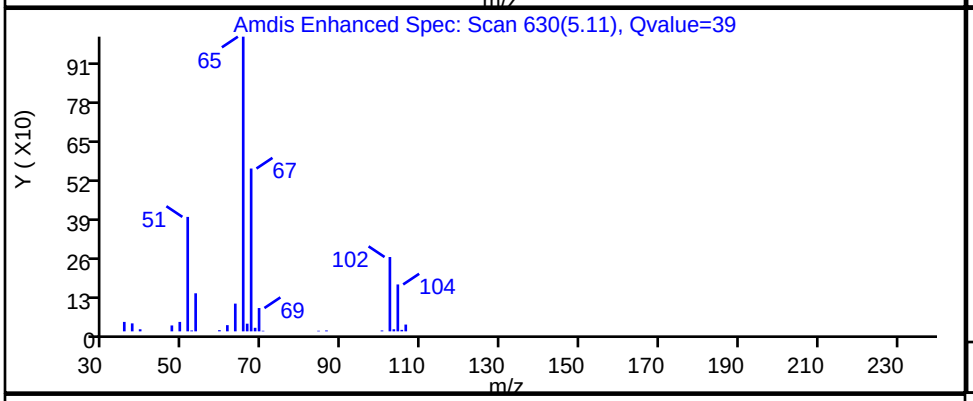
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

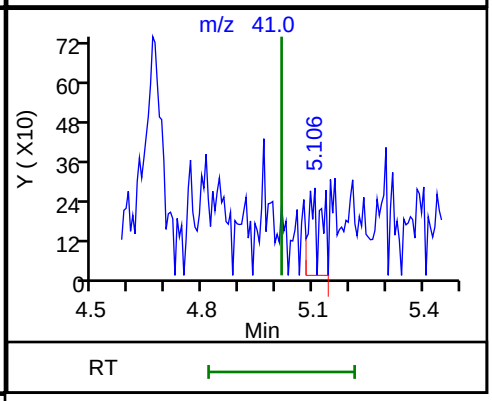
47 Methacrylonitrile, CAS: 126-98-7

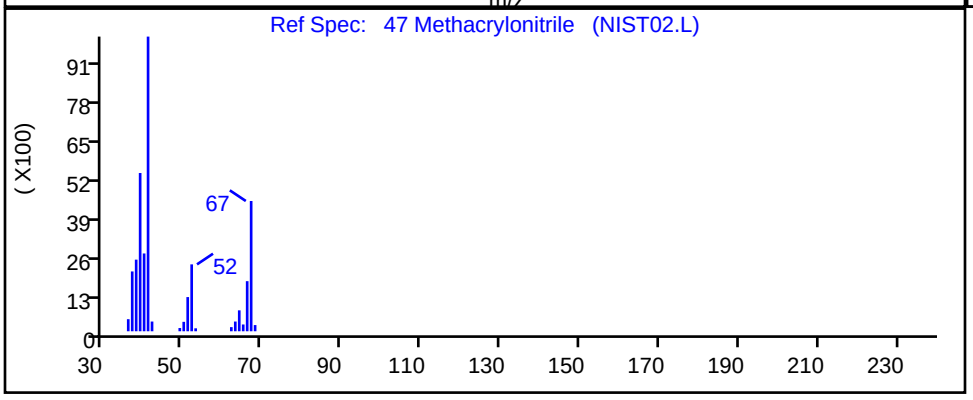
Processing Results











RT	Mass	Response	Amount
5.11	67.00	66466	81.967944
5.11	41.00	636	

Reviewer: delpolitov, 25-Jul-2018 17:04:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

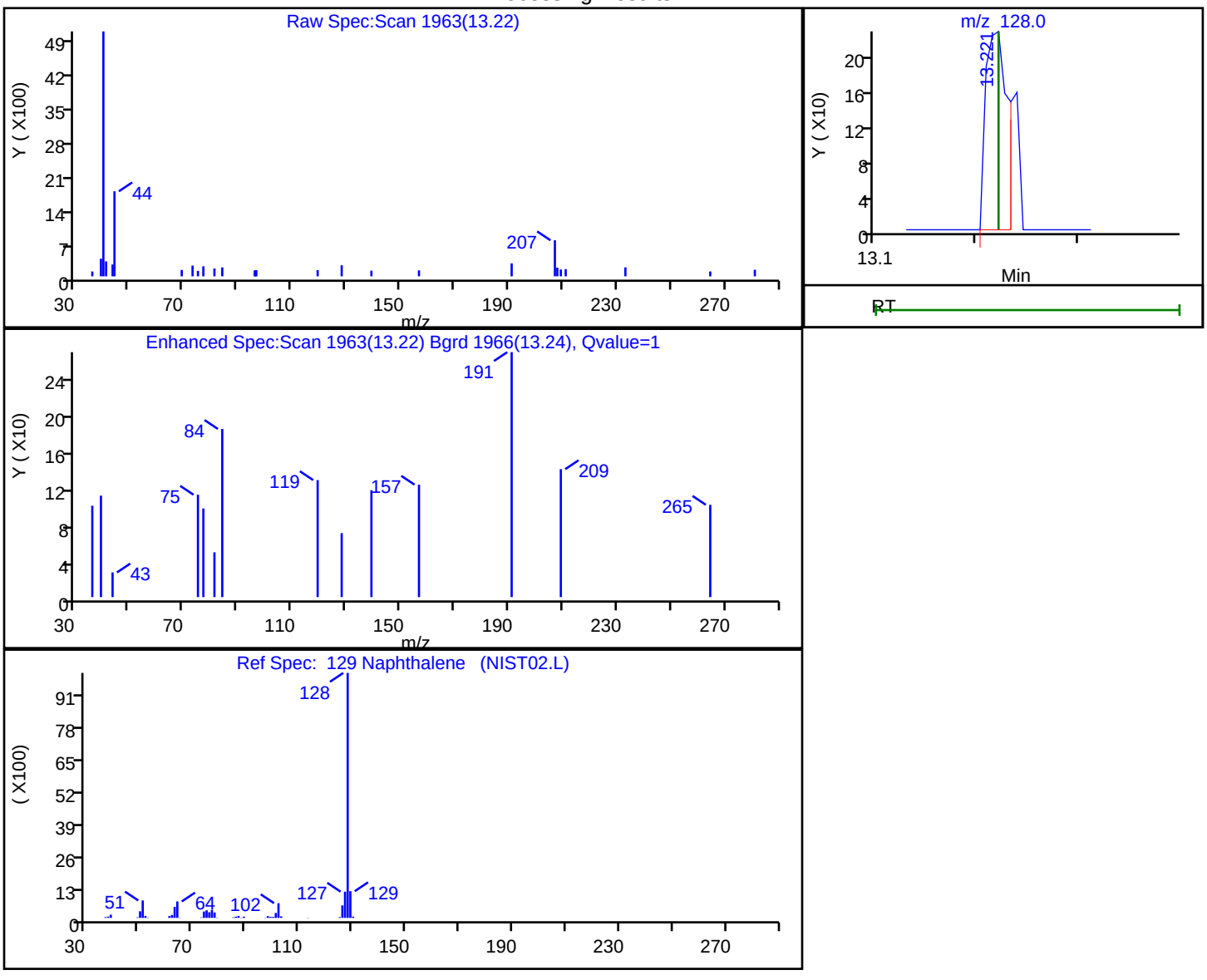
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

129 Naphthalene, CAS: 91-20-3

Processing Results



RT	Mass	Response	Amount
13.22	128.00	344	0.039519

Reviewer: delpolitov, 25-Jul-2018 17:06:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

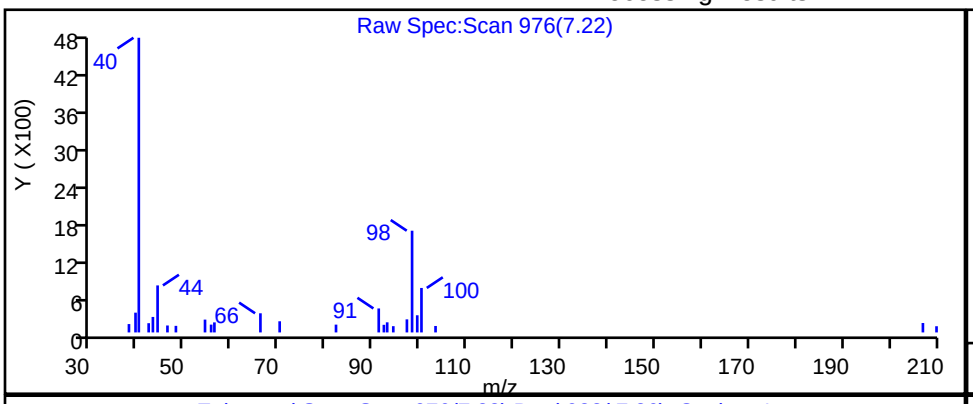
User Disabled Compound Report

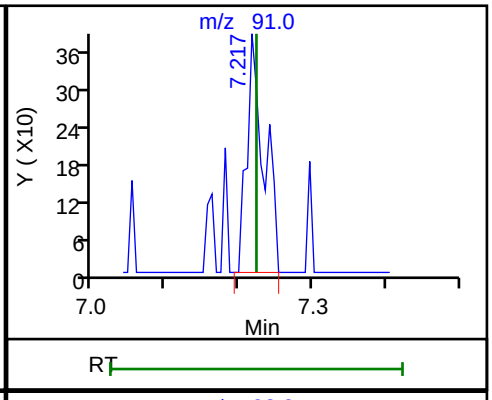
TestAmerica Edison

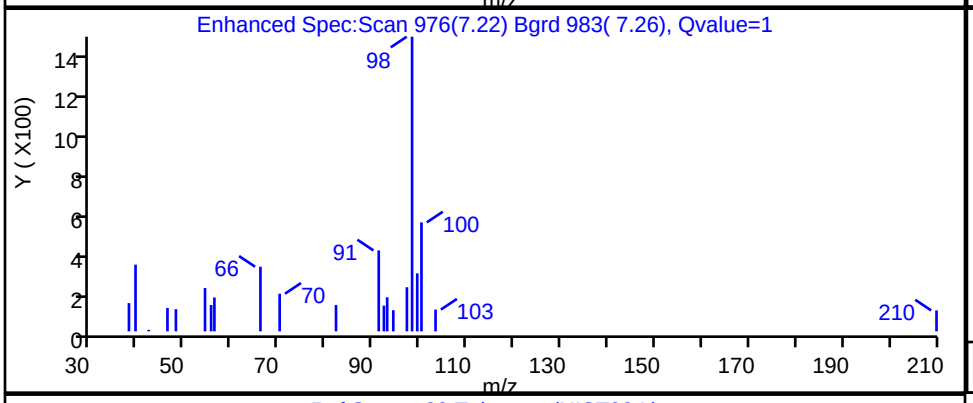
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

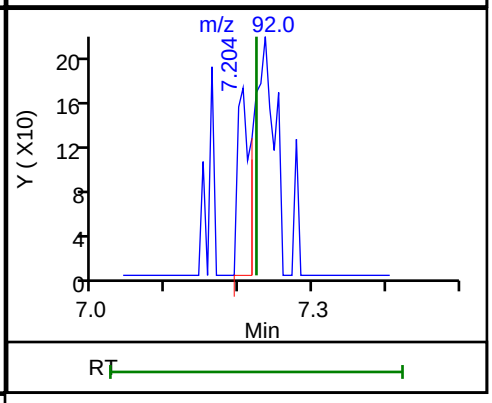
80 Toluene, CAS: 108-88-3

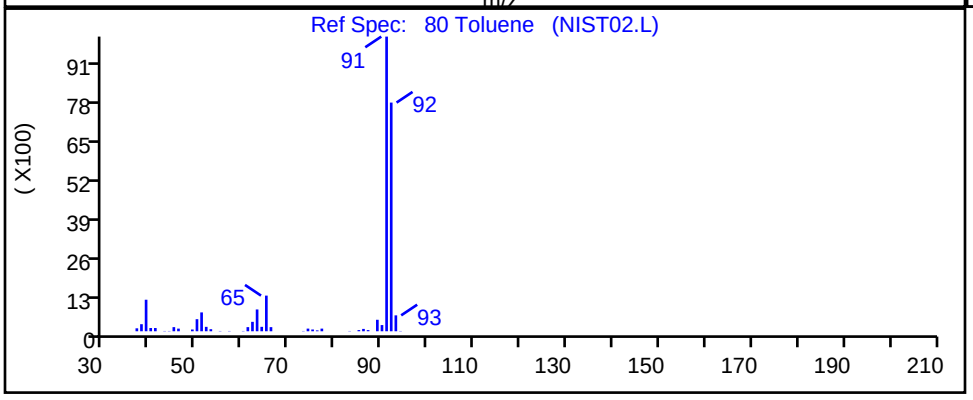
Processing Results











RT	Mass	Response	Amount
7.22	91.00	625	0.043119
7.20	92.00	199	

Reviewer: delpolitov, 25-Jul-2018 17:04:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

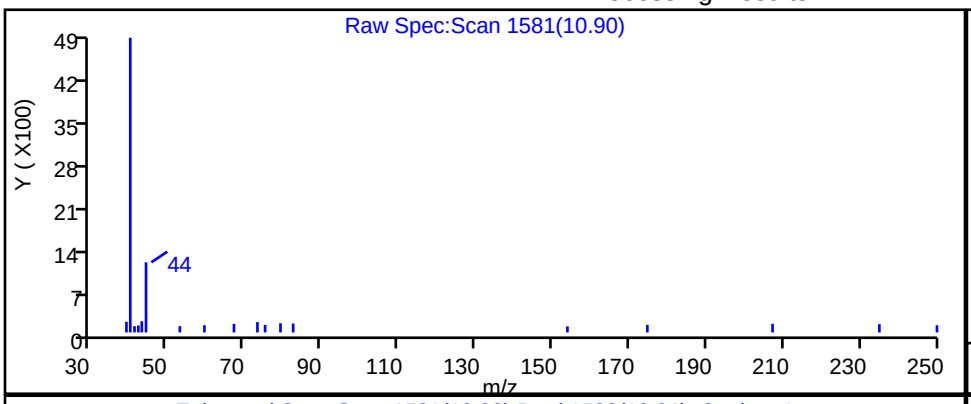
User Disabled Compound Report

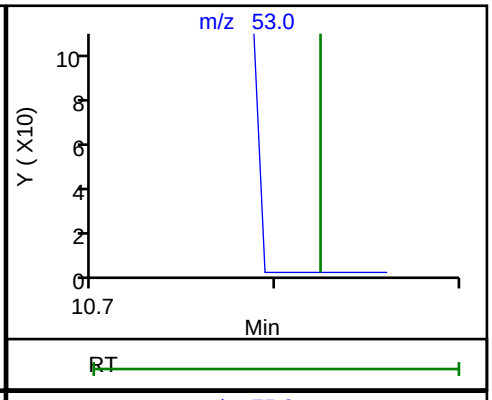
TestAmerica Edison

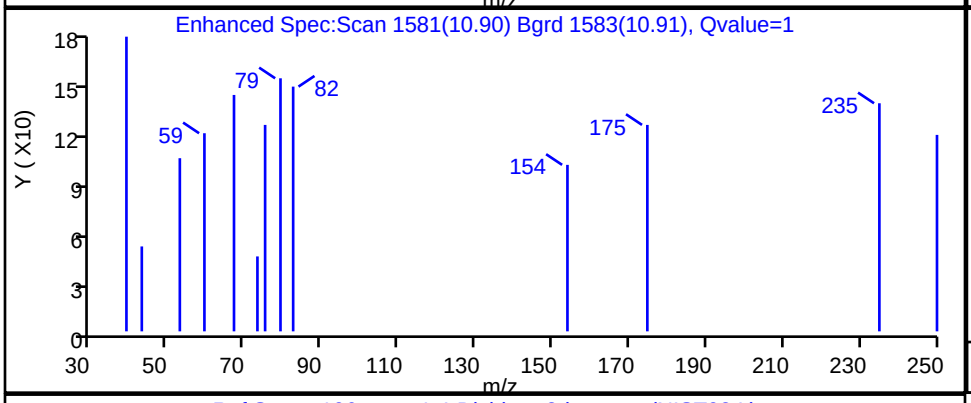
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

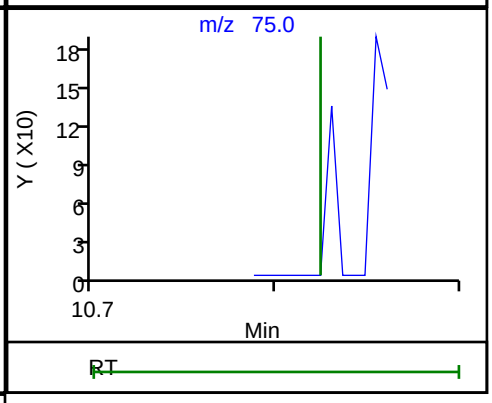
106 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

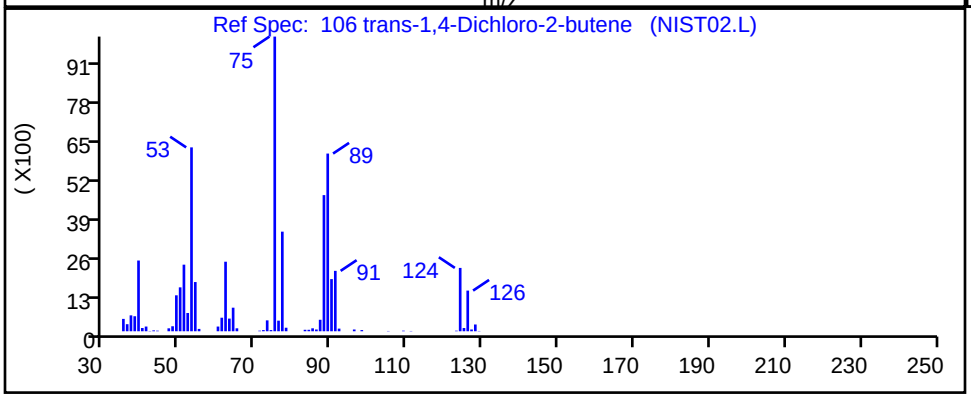
Processing Results











RT	Mass	Response	Amount
10.90	53.00	38	0.068501
10.90	75.00	45	

Reviewer: delpolitov, 25-Jul-2018 17:06:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

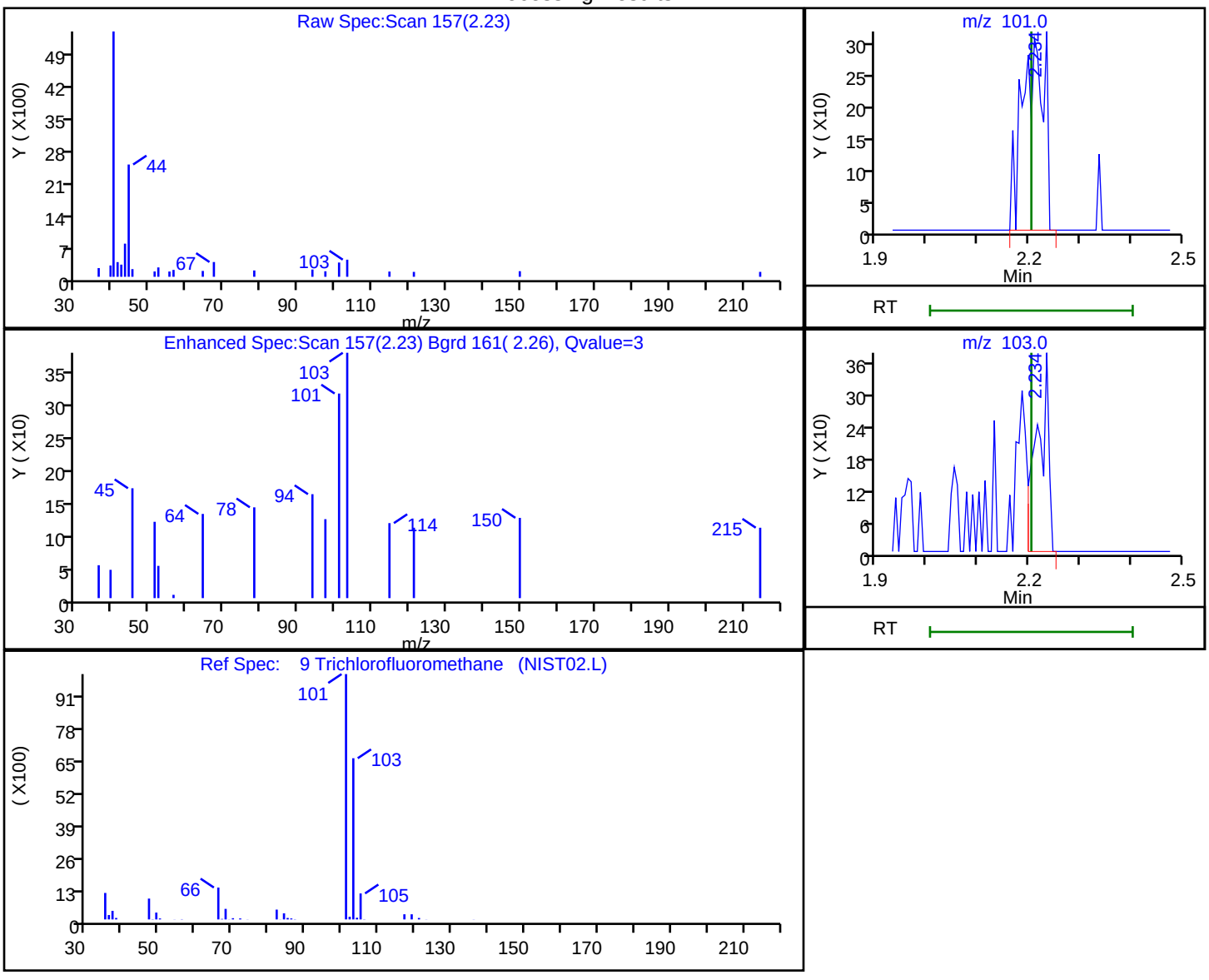
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Trichlorofluoromethane, CAS: 75-69-4

Processing Results



RT	Mass	Response	Amount
2.23	101.00	913	0.176589
2.23	103.00	582	

Reviewer: delpolitov, 25-Jul-2018 17:05:08
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

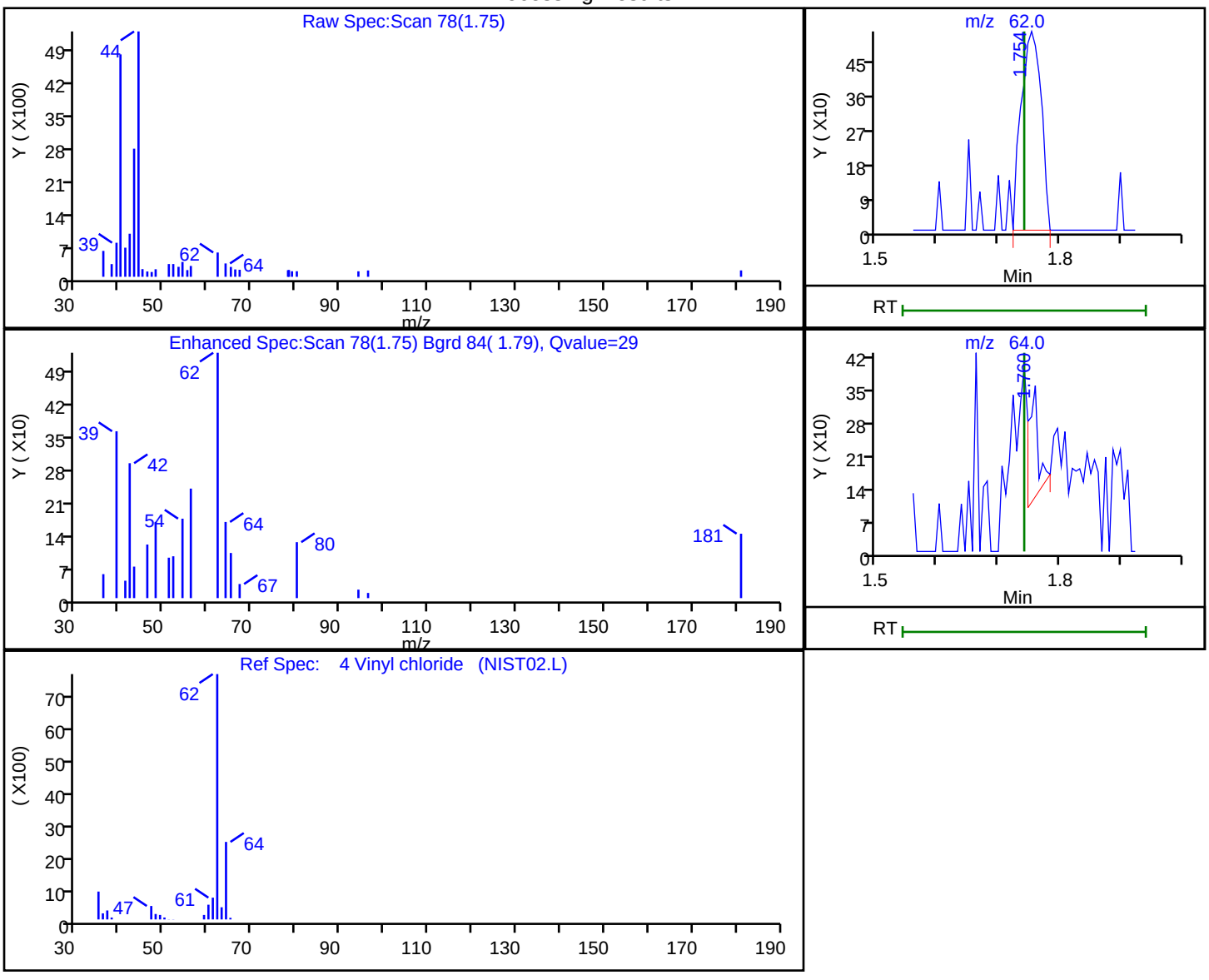
User Disabled Compound Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69452.D
Injection Date: 24-Jul-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: STD8
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

4 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.75	62.00	1190	0.237436
1.76	64.00	254	

Reviewer: delpolitov, 25-Jul-2018 17:05:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jul-2018 07:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0076012-005
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Jul-2018 18:17:17 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 24-Jul-2018 09:50:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.516	1.504	0.012	67	1625	1.00	0.7533	
2 Dichlorodifluoromethane	87	1.528	1.529	-0.001	97	1604	1.00	0.9534	
3 Chloromethane	52	1.680	1.675	0.005	98	1943	1.00	1.13	
5 Butadiene	54	1.747	1.735	0.012	73	4218	1.00	0.9820	a
4 Vinyl chloride	62	1.735	1.741	-0.006	96	5288	1.00	1.04	a
6 Bromomethane	94	2.009	1.997	0.012	93	4162	1.00	1.18	
7 Chloroethane	64	2.100	2.088	0.012	87	3729	1.00	1.23	M
10 Pentane	72	2.185	2.179	0.006	95	891	2.00	1.51	
9 Trichlorofluoromethane	101	2.222	2.204	0.018	79	5927	1.00	1.10	
8 Dichlorofluoromethane	67	2.258	2.252	0.006	97	7679	1.00	1.15	
12 Ethyl ether	59	2.417	2.417	0.000	58	2204	1.00	1.02	
13 2-Methyl-1,3-butadiene	53	2.423	2.423	0.000	91	2820	1.00	1.02	
11 Ethanol	46	2.550	2.538	0.012	10	296	40.0	31.5	M
17 1,1-Dichloroethene	96	2.593	2.593	0.000	97	3015	1.00	1.01	
14 1,2-Dichloro-1,1,2-trifluo	117	2.599	2.599	0.000	75	3051	1.00	1.00	
20 Carbon disulfide	76	2.629	2.624	0.005	99	9689	1.00	0.9411	
15 1,1,2-Trichloro-1,2,2-trif	101	2.648	2.642	0.006	38	2686	1.00	0.8098	M
19 Iodomethane	142	2.715	2.715	0.000	98	5220	1.00	1.04	
23 Cyclopentene	67	2.836	2.830	0.006	96	8102	1.00	1.01	
16 Acrolein	56	2.867	2.861	0.006	31	716	4.00	3.91	
21 Isopropyl alcohol	45	3.007	2.970	0.037	8	1276	10.0	9.95	M
22 3-Chloro-1-propene	76	2.970	2.976	-0.006	91	1884	1.00	1.03	
26 Methylene Chloride	84	3.068	3.062	0.006	91	3730	1.00	1.08	
18 Acetone	58	3.110	3.104	0.006	20	957	5.00	5.87	a
30 trans-1,2-Dichloroethene	96	3.189	3.189	0.000	93	3437	1.00	1.02	
24 Methyl acetate	74	3.195	3.189	0.006	60	814	2.00	2.54	
32 Hexane	56	3.256	3.238	0.018	79	2279	1.00	0.8762	
29 Methyl tert-butyl ether	73	3.268	3.275	-0.006	37	7508	1.00	1.00	
* 27 TBA-d9 (IS)	65	3.280	3.281	-0.001	41	144615	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.329	3.341	-0.012	2	2022	10.0	12.2	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
25 Acetonitrile	41	3.493	3.494	-0.001	25	2540	10.0	11.5	Ma
33 Isopropyl ether	45	3.572	3.579	-0.007	97	10581	1.00	0.99	
36 2-Chloro-1,3-butadiene	88	3.682	3.676	0.006	90	2836	1.00	0.9855	
34 1,1-Dichloroethane	63	3.706	3.706	0.000	98	6468	1.00	1.11	
31 Acrylonitrile	53	3.761	3.749	0.012	94	7296	10.0	10.8	
37 Tert-butyl ethyl ether	59	3.883	3.889	-0.006	91	9741	1.00	1.06	
35 Vinyl acetate	86	3.925	3.907	0.018	35	249	2.00	2.01	a
40 cis-1,2-Dichloroethene	96	4.175	4.175	0.000	99	4162	1.00	1.09	
38 2,2-Dichloropropane	79	4.272	4.278	-0.006	33	817	1.00	0.9827	M
46 Chlorobromomethane	128	4.357	4.357	0.000	82	1568	1.00	1.04	
49 Cyclohexane	84	4.357	4.357	0.000	88	5760	1.00	0.9475	
48 Chloroform	83	4.412	4.418	-0.006	94	5602	1.00	1.03	
42 Ethyl acetate	70	4.521	4.522	-0.001	57	301	2.00	1.47	
43 Methyl acrylate	55	4.540	4.534	0.006	55	1775	1.00	1.10	
52 Carbon tetrachloride	117	4.552	4.552	0.000	91	2681	1.00	0.8879	M
45 Tetrahydrofuran	72	4.570	4.564	0.006	75	497	2.00	2.03	
$ 51 Dibromofluoromethane (Surr	113	4.594	4.595	-0.001	97	118224	50.0	48.8	
50 1,1,1-Trichloroethane	97	4.619	4.619	0.000	35	4755	1.00	1.00	
* 39 2-Butanone-d5	46	4.661	4.655	0.006	0	166034	250.0	250.0	
41 2-Butanone (MEK)	72	4.710	4.704	0.006	89	1216	5.00	5.05	
53 1,1-Dichloropropene	75	4.728	4.722	0.006	90	4715	1.00	1.07	a
54 Isooctane	57	4.826	4.820	0.006	98	5795	1.00	0.7032	
61 n-Heptane	57	4.911	4.917	-0.006	68	1463	1.00	0.7361	
55 Benzene	78	4.966	4.966	0.000	94	14242	1.00	1.04	
44 Propionitrile	54	5.002	4.996	0.006	40	2912	10.0	11.7	
47 Methacrylonitrile	67	5.026	5.014	0.012	88	7691	10.0	9.44	
57 Tert-amyl methyl ether	73	5.069	5.075	-0.006	95	8316	1.00	1.00	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.112	5.106	0.006	97	125285	50.0	51.5	
58 Isobutyl alcohol	43	5.166	5.173	-0.007	34	1703	25.0	28.5	Ma
60 1,2-Dichloroethane	62	5.179	5.173	0.005	94	4335	1.00	1.25	
* 62 Fluorobenzene	96	5.385	5.386	-0.001	99	589846	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.416	0.000	95	4461	1.00	1.20	a
65 Methylcyclohexane	83	5.544	5.544	0.000	91	5535	1.00	0.8920	
66 Ethyl acrylate	55	5.550	5.550	0.000	79	4271	1.00	0.9276	
64 Trichloroethene	95	5.556	5.556	0.000	94	3801	1.00	1.16	
63 n-Butanol	56	5.921	5.915	0.006	34	936	25.0	29.3	
71 Dibromomethane	93	6.018	6.012	0.006	94	1553	1.00	1.06	
67 1,2-Dichloropropane	63	6.121	6.128	-0.007	80	3176	1.00	1.01	
73 Dichlorobromomethane	83	6.201	6.195	0.006	91	2697	1.00	0.9033	
69 Methyl methacrylate	100	6.383	6.383	0.000	50	1249	2.00	2.13	
* 68 1,4-Dioxane-d8	96	6.389	6.395	-0.006	45	17137	1000.0	1000.0	
70 1,4-Dioxane	88	6.407	6.420	-0.013	27	1000	50.0	50.5	a
72 n-Propyl acetate	43	6.553	6.547	0.006	72	2371	1.00	0.9732	
75 2-Chloroethyl vinyl ether	63	6.876	6.876	0.000	63	1570	1.00	1.11	
77 cis-1,3-Dichloropropene	75	6.937	6.937	0.000	90	3505	1.00	0.8651	
$ 79 Toluene-d8 (Surr)	98	7.162	7.156	0.006	100	527079	50.0	49.6	
80 Toluene	91	7.223	7.223	0.000	92	15207	1.00	1.05	
76 Epichlorohydrin	57	7.259	7.253	0.006	79	3009	20.0	21.4	
74 2-Nitropropane	41	7.502	7.545	-0.043	1	380	2.00	2.56	a
84 Tetrachloroethene	166	7.703	7.703	0.000	91	2986	1.00	1.00	
78 4-Methyl-2-pentanone (MIBK	43	7.721	7.728	-0.007	96	9311	5.00	5.15	
81 trans-1,3-Dichloropropene	75	7.776	7.770	0.006	77	2735	1.00	0.8467	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.965	7.971	-0.006	85	2156	1.00	1.17	a
82 Ethyl methacrylate	69	7.995	7.995	0.000	85	2557	1.00	0.9283	a
88 Chlorodibromomethane	129	8.190	8.202	-0.012	1	1132	1.00	0.8185	M
85 1,3-Dichloropropane	76	8.336	8.336	0.000	93	4379	1.00	1.10	
89 Ethylene Dibromide	107	8.506	8.506	0.000	41	1952	1.00	0.99	
87 n-Butyl acetate	43	8.743	8.744	-0.001	55	3065	1.00	1.08	
86 2-Hexanone	58	8.853	8.853	0.000	95	3032	5.00	4.72	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	85	439137	50.0	50.0	
91 Chlorobenzene	112	9.181	9.176	0.005	92	9180	1.00	1.02	
92 Ethylbenzene	106	9.224	9.224	0.000	97	4789	1.00	0.9704	
93 1,1,1,2-Tetrachloroethane	131	9.261	9.267	-0.006	85	1968	1.00	0.8744	
94 m-Xylene & p-Xylene	106	9.394	9.395	-0.001	0	5979	1.00	0.9897	
96 o-Xylene	106	9.857	9.857	0.000	96	5802	1.00	0.9754	
97 Styrene	104	9.918	9.918	0.000	96	8638	1.00	0.9127	
99 Bromoform	173	9.936	9.936	0.000	37	600	1.00	0.99	
95 n-Butyl acrylate	73	10.076	10.082	-0.006	96	1583	1.00	1.01	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	15181	1.00	0.9618	
98 Amyl acetate (mixed isomer	43	10.343	10.338	0.005	90	2840	1.00	0.7877	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	85	137352	50.0	48.8	
102 Bromobenzene	156	10.544	10.544	0.000	96	3592	1.00	1.04	
104 N-Propylbenzene	91	10.587	10.587	0.000	99	16396	1.00	0.9134	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	91	1728	1.00	0.7542	
108 4-Ethyltoluene	105	10.690	10.690	0.000	97	13198	1.00	0.8710	
107 2-Chlorotoluene	91	10.721	10.721	0.000	97	11775	1.00	0.9497	
109 1,3,5-Trimethylbenzene	105	10.775	10.776	-0.001	93	11346	1.00	0.8758	
105 1,2,3-Trichloropropane	110	10.781	10.782	-0.001	58	891	1.00	1.14	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	1	314	1.00	1.00	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	10489	1.00	0.9571	
112 tert-Butylbenzene	119	11.055	11.055	0.000	90	9273	1.00	0.8591	
111 Butyl Methacrylate	87	11.055	11.055	0.000	51	2344	1.00	1.03	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	96	12227	1.00	0.9045	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	14167	1.00	0.8797	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	97	11479	1.00	0.8274	
116 1,3-Dichlorobenzene	146	11.384	11.390	-0.006	93	7176	1.00	1.03	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.457	0.000	96	220240	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	92	7092	1.00	1.00	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	97	12727	1.00	0.8973	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	93	12705	1.00	0.9361	
121 p-Diethylbenzene	119	11.645	11.646	-0.001	95	6435	1.00	0.8418	
119 Benzyl chloride	126	11.676	11.688	-0.012	87	184	1.00	1.01	
122 n-Butylbenzene	92	11.694	11.688	0.006	97	5983	1.00	0.8782	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	95	6355	1.00	0.9825	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	96	10436	1.00	0.7879	
125 1,2-Dibromo-3-Chloropropan	155	12.461	12.455	0.006	1	96	1.00	0.99	
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	92	4190	1.00	0.8666	
128 Hexachlorobutadiene	225	12.947	12.941	0.006	85	1226	1.00	0.9405	
127 1,2,4-Trichlorobenzene	180	12.965	12.966	-0.001	95	3838	1.00	0.8750	
129 Naphthalene	128	13.221	13.221	0.000	98	7274	1.00	0.8128	
130 1,2,3-Trichlorobenzene	180	13.361	13.367	-0.006	90	3306	1.00	0.8705	
S 131 1,2-Dichloroethene, Total	100				0		2.00	2.11	
S 132 Xylenes, Total	100				0		2.00	1.97	
S 133 Total BTEX	1				0		5.00	5.03	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MIX I Hi_00096	Amount Added:	1.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	1.00	Units: uL	
Ethanol mix_00017	Amount Added:	1.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
14DIOXINTER_00086	Amount Added:	30.00	Units: uL	
GAS Hi_00264	Amount Added:	1.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 25-Jul-2018 18:17:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D

Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11 Operator ID:

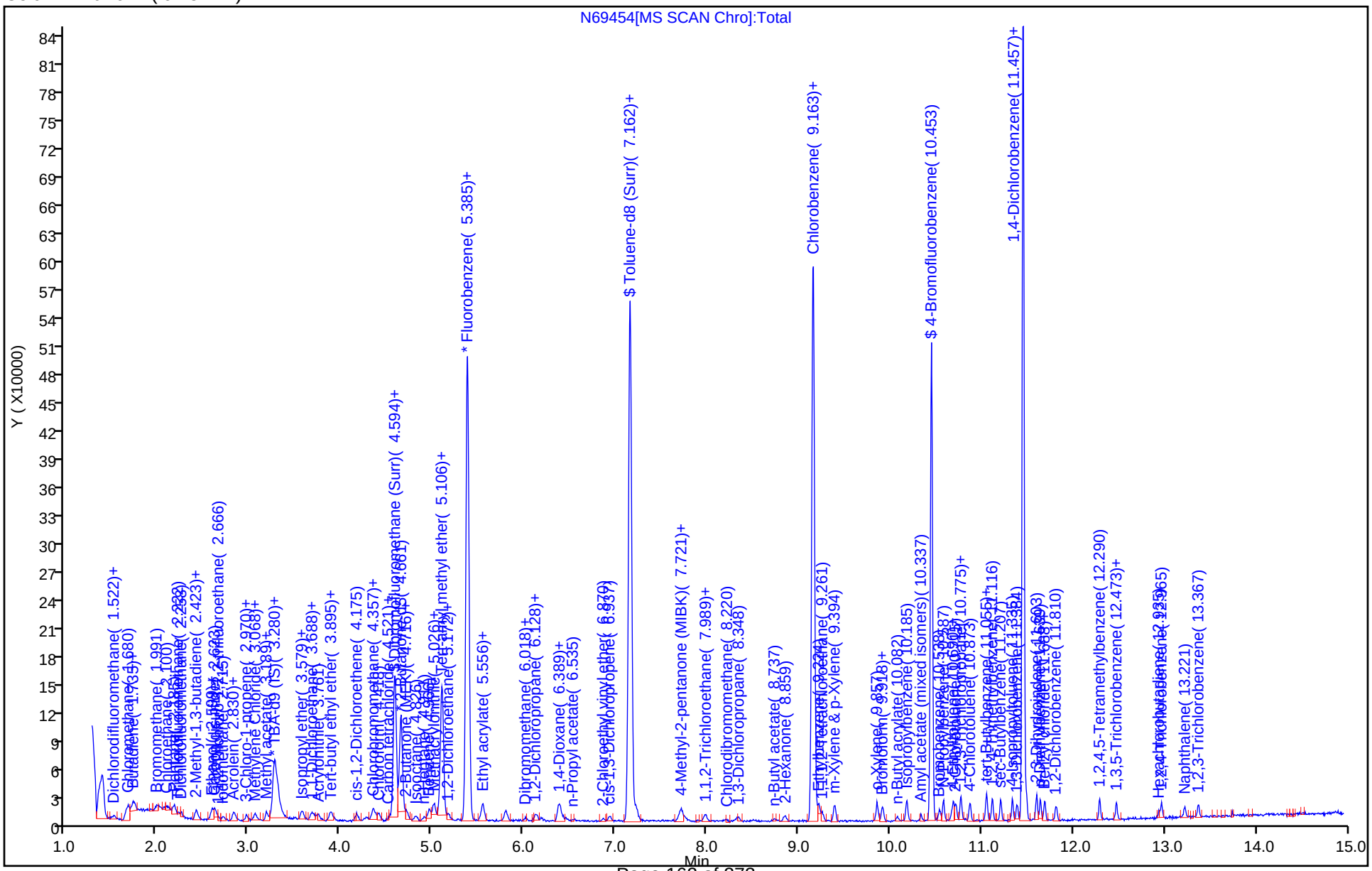
Lims ID: STD1 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

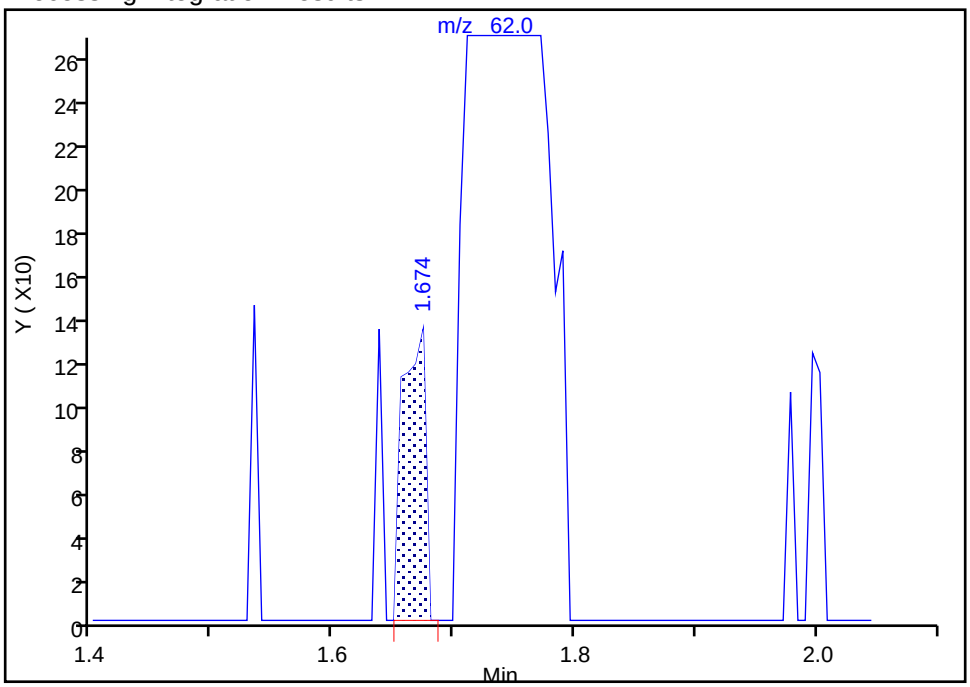
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

4 Vinyl chloride, CAS: 75-01-4

Signal: 1

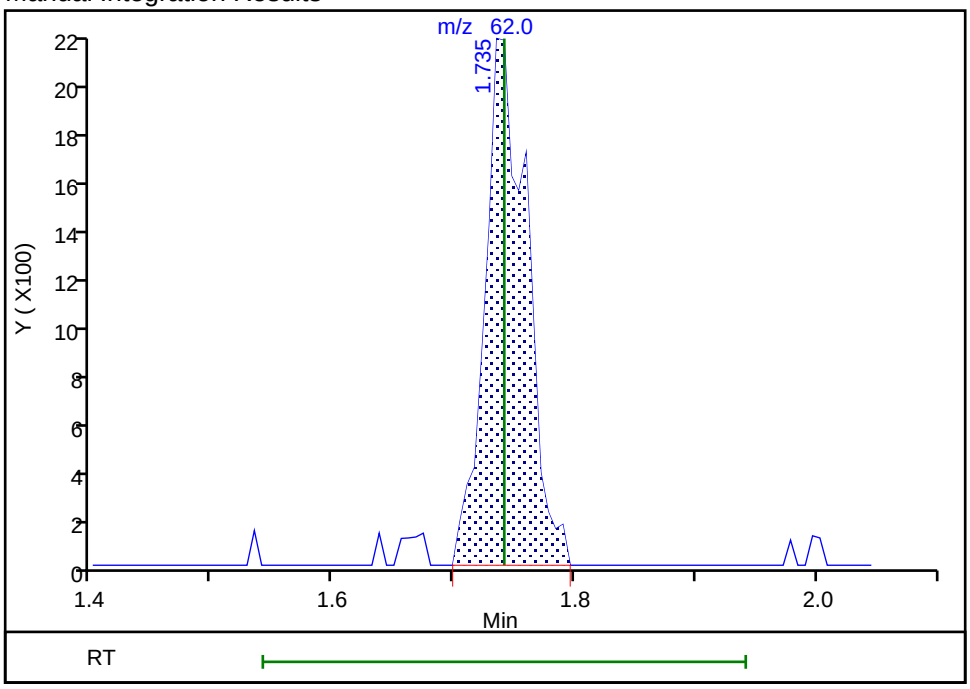
Processing Integration Results

RT: 1.67
Area: 174
Amount: 0.034306
Amount Units: ug/l



Manual Integration Results

RT: 1.74
Area: 5288
Amount: 1.041950
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:10:05
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

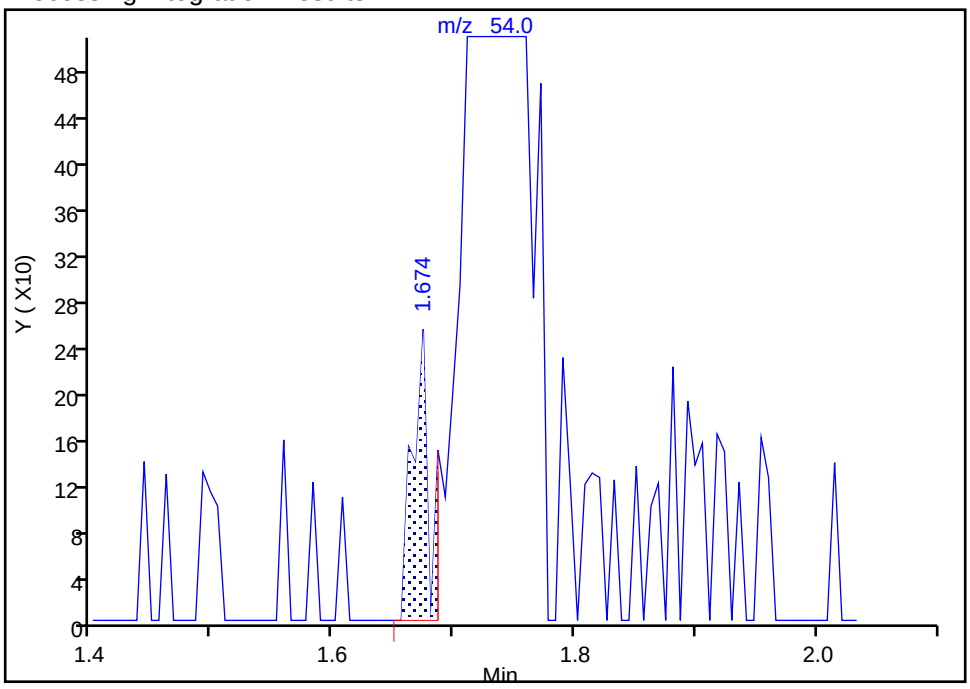
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

5 Butadiene, CAS: 106-99-0

Signal: 1

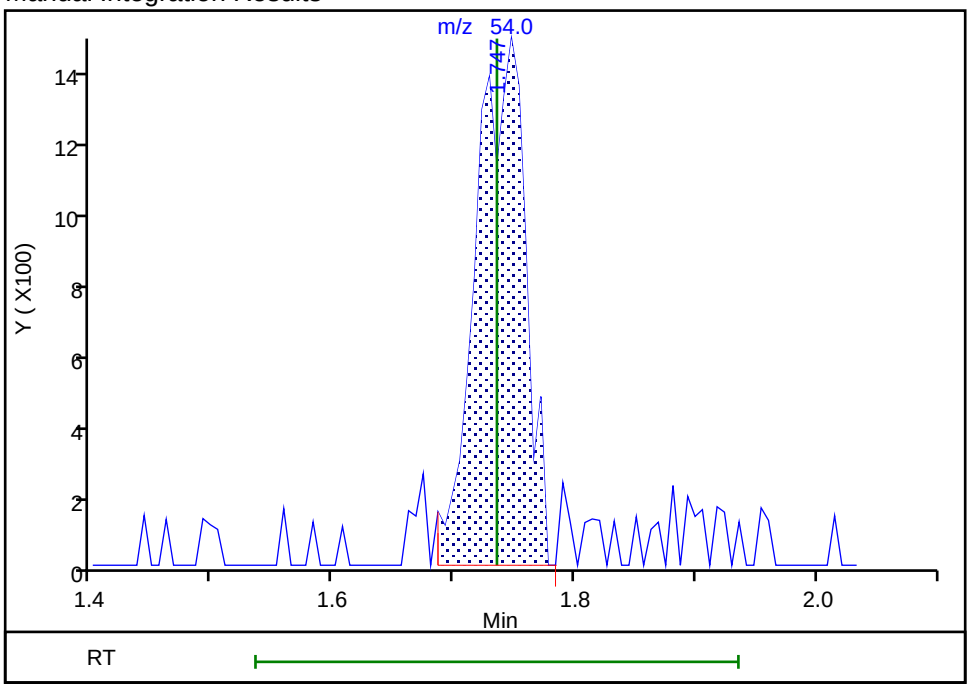
Processing Integration Results

RT: 1.67
Area: 253
Amount: 0.061174
Amount Units: ug/l



Manual Integration Results

RT: 1.75
Area: 4218
Amount: 0.982023
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:10:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

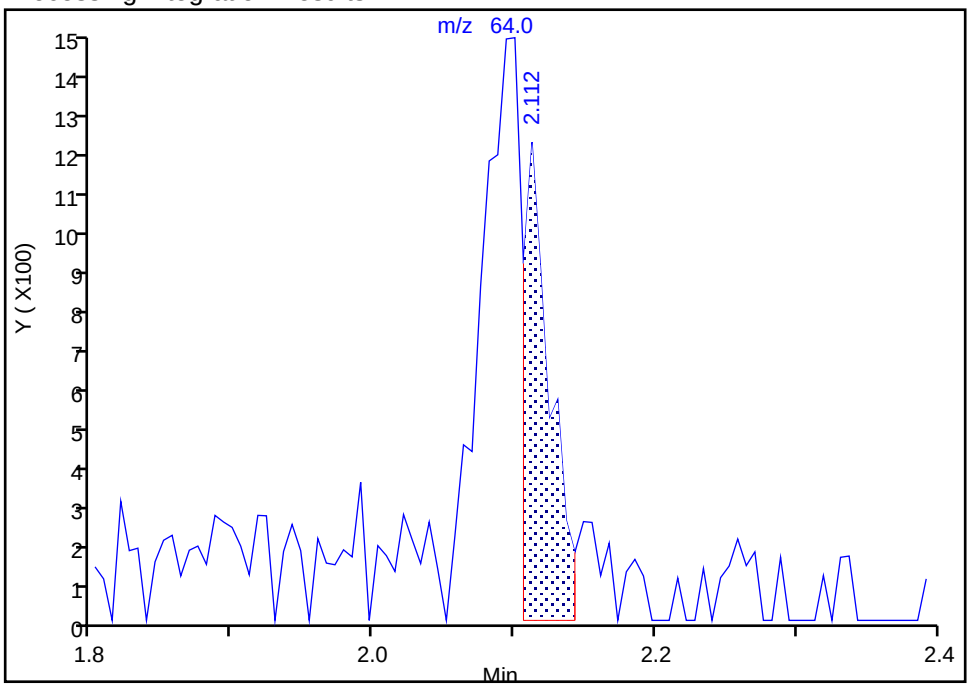
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

7 Chloroethane, CAS: 75-00-3

Signal: 1

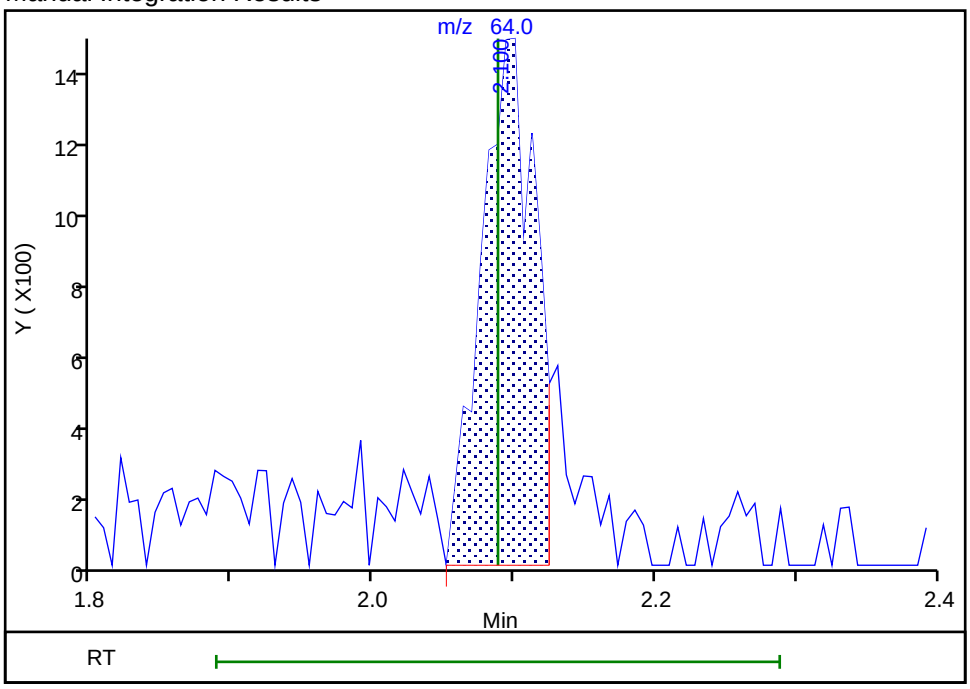
Processing Integration Results

RT: 2.11
Area: 1562
Amount: 0.582803
Amount Units: ug/l



Manual Integration Results

RT: 2.10
Area: 3729
Amount: 1.225428
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:34:52
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Edison

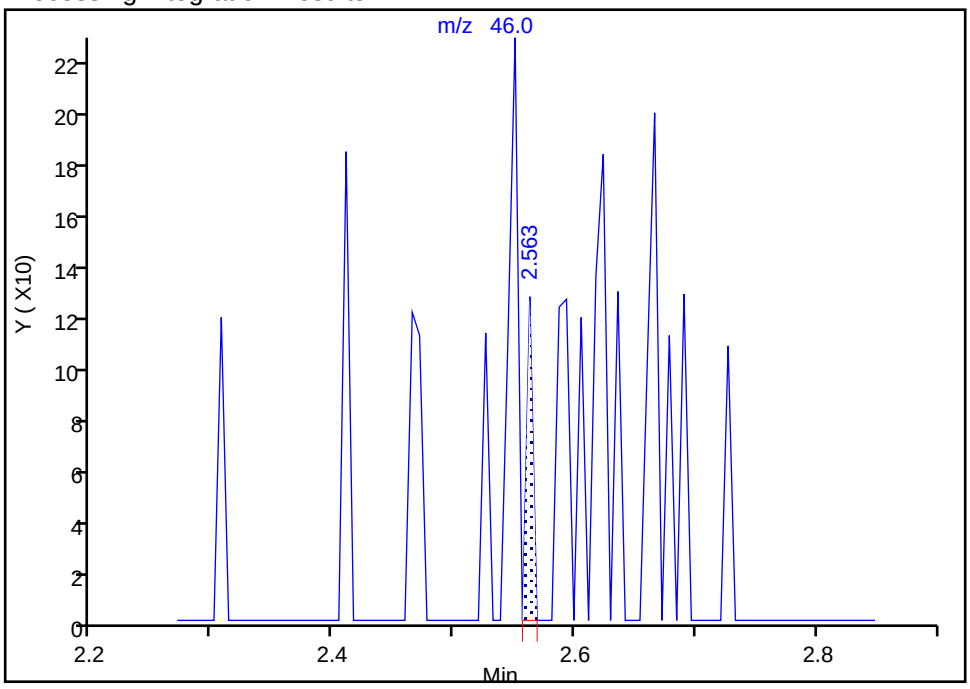
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

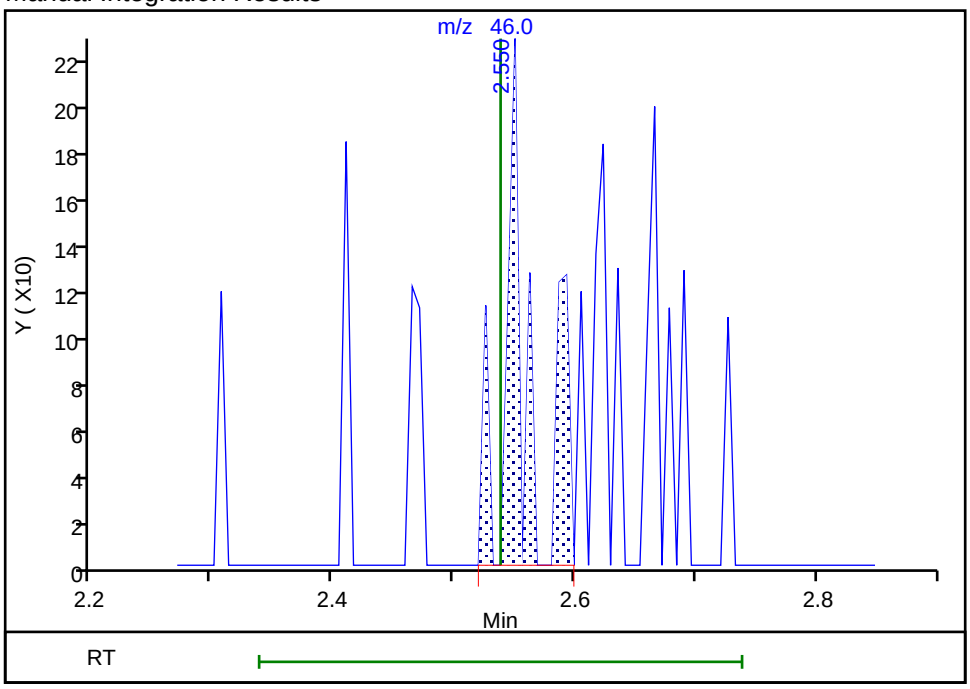
Processing Integration Results

RT: 2.56
Area: 46
Amount: 4.102394
Amount Units: ug/l



Manual Integration Results

RT: 2.55
Area: 296
Amount: 31.518050
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:10:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

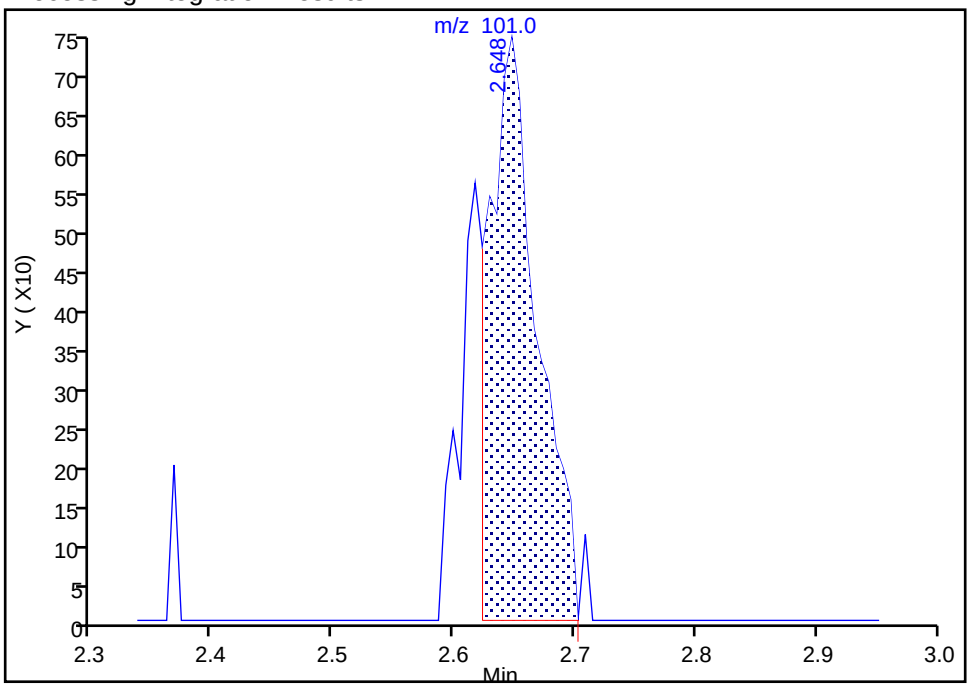
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

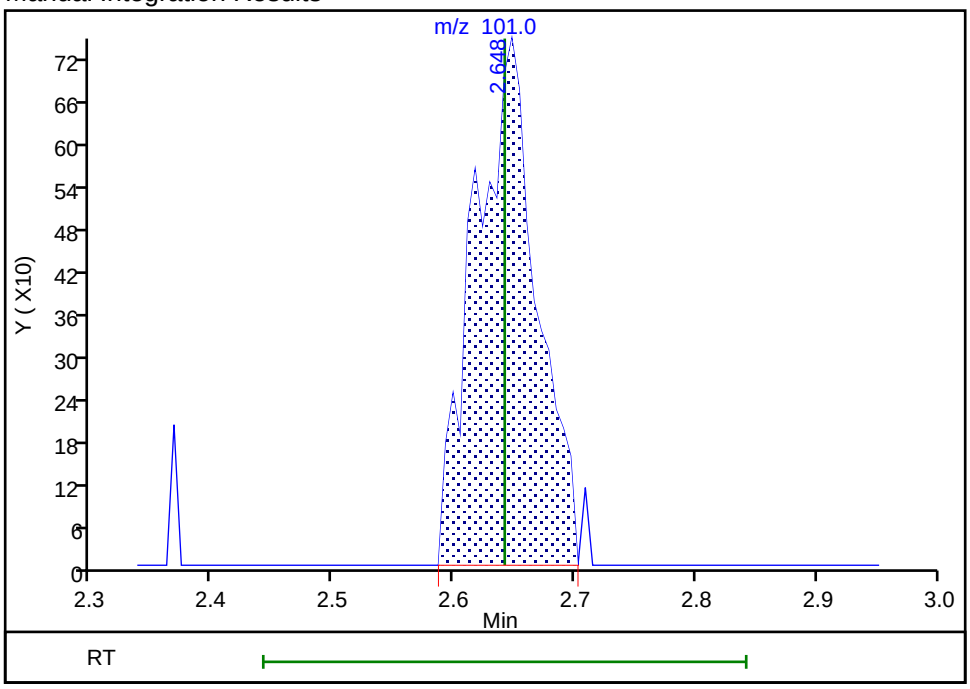
Processing Integration Results

RT: 2.65
Area: 2086
Amount: 0.653401
Amount Units: ug/l



Manual Integration Results

RT: 2.65
Area: 2686
Amount: 0.809768
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:10:51
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

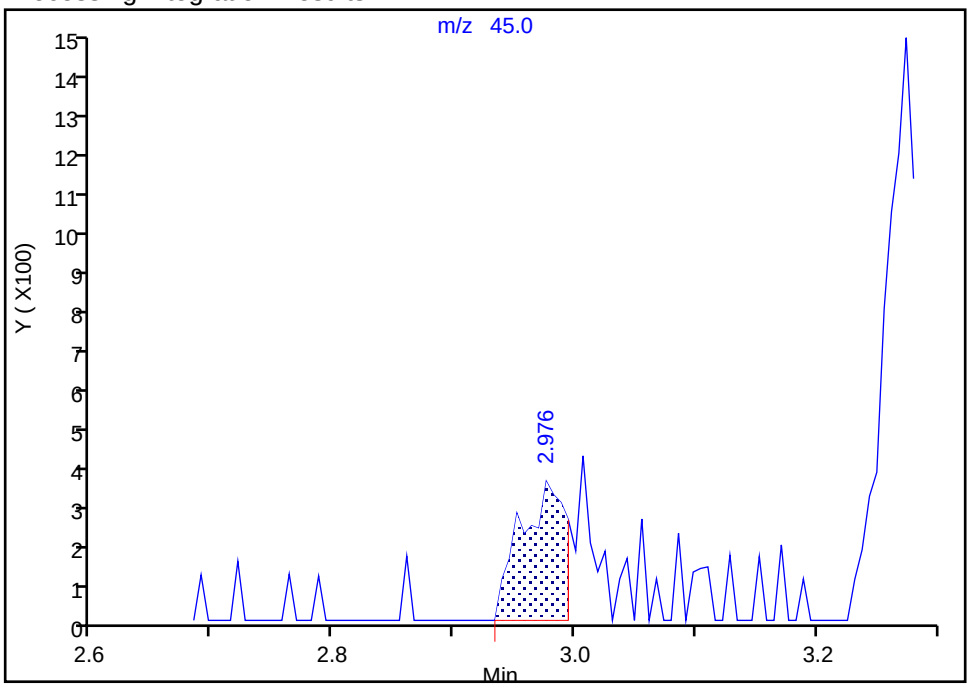
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

21 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

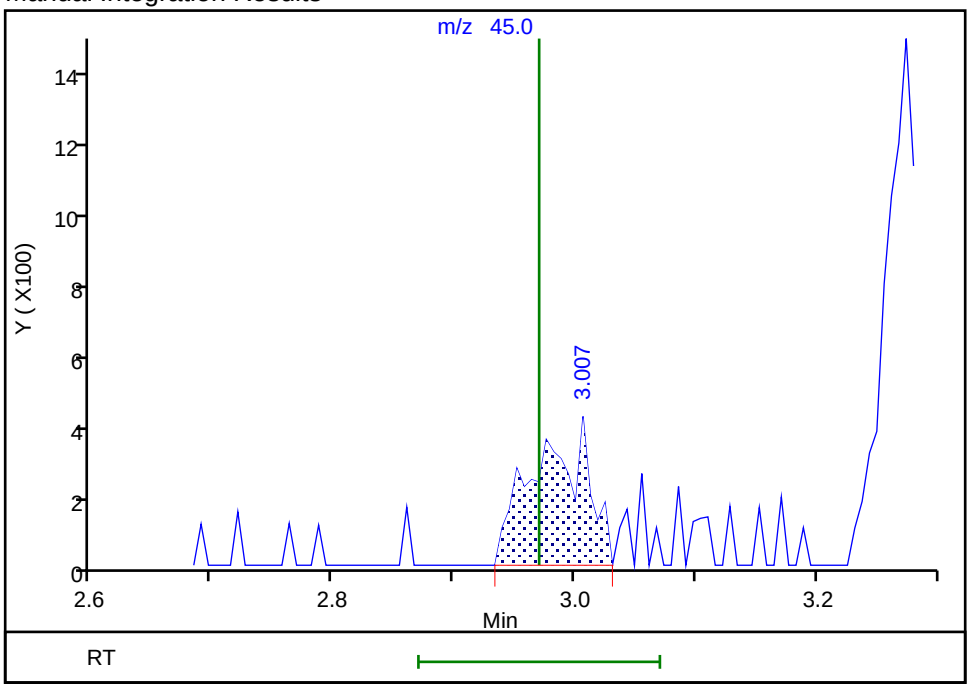
Processing Integration Results

RT: 2.98
Area: 883
Amount: 9.773239
Amount Units: ug/l



Manual Integration Results

RT: 3.01
Area: 1276
Amount: 9.952698
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:11:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

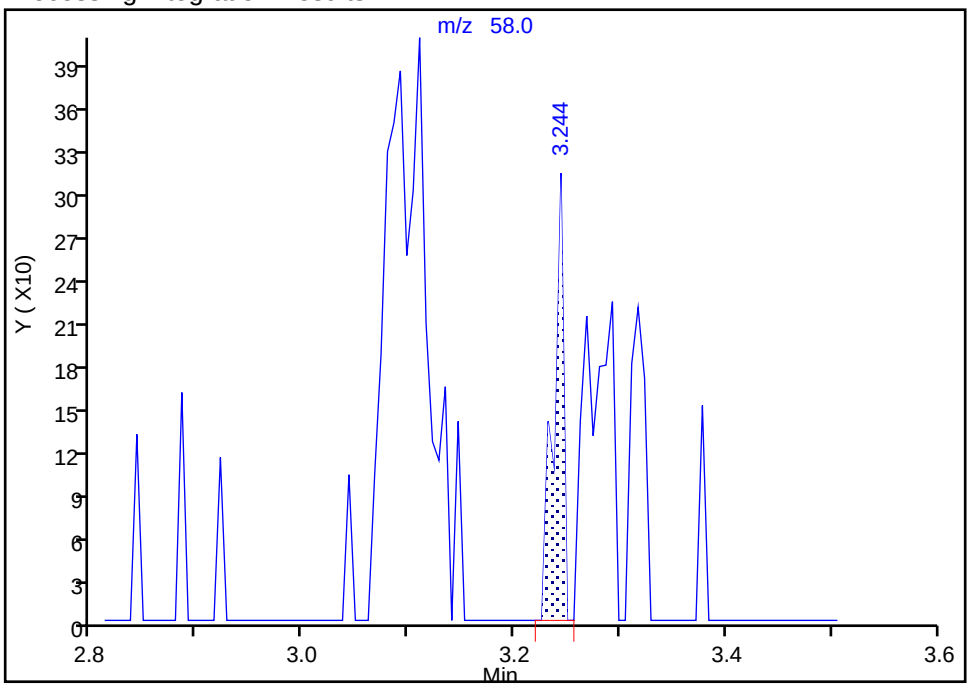
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

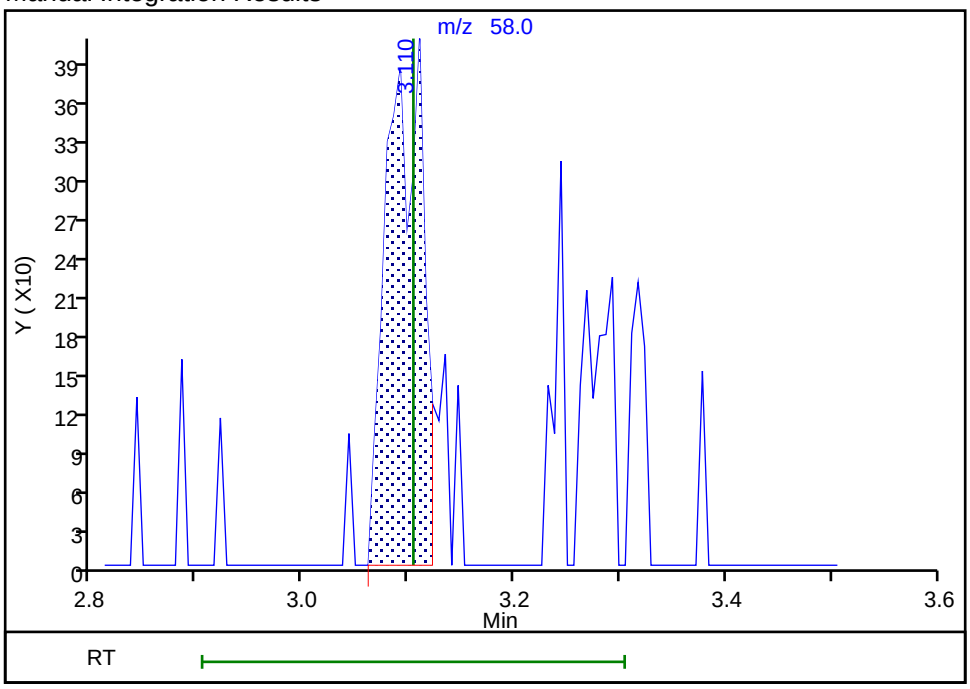
Processing Integration Results

RT: 3.24
Area: 200
Amount: 1.228387
Amount Units: ug/l



Manual Integration Results

RT: 3.11
Area: 957
Amount: 5.870304
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:11:30
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

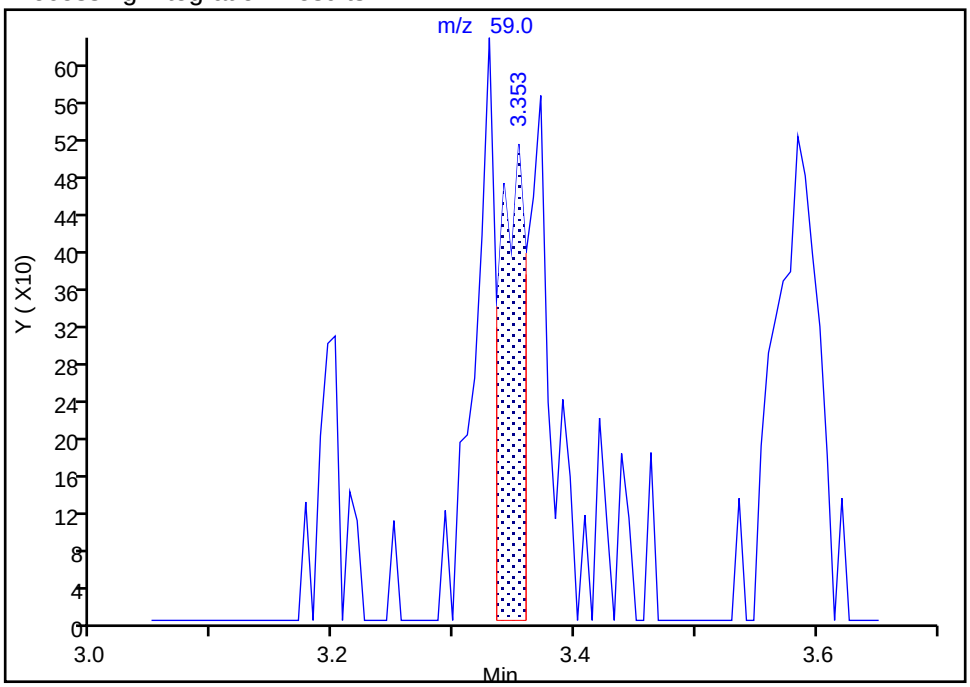
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

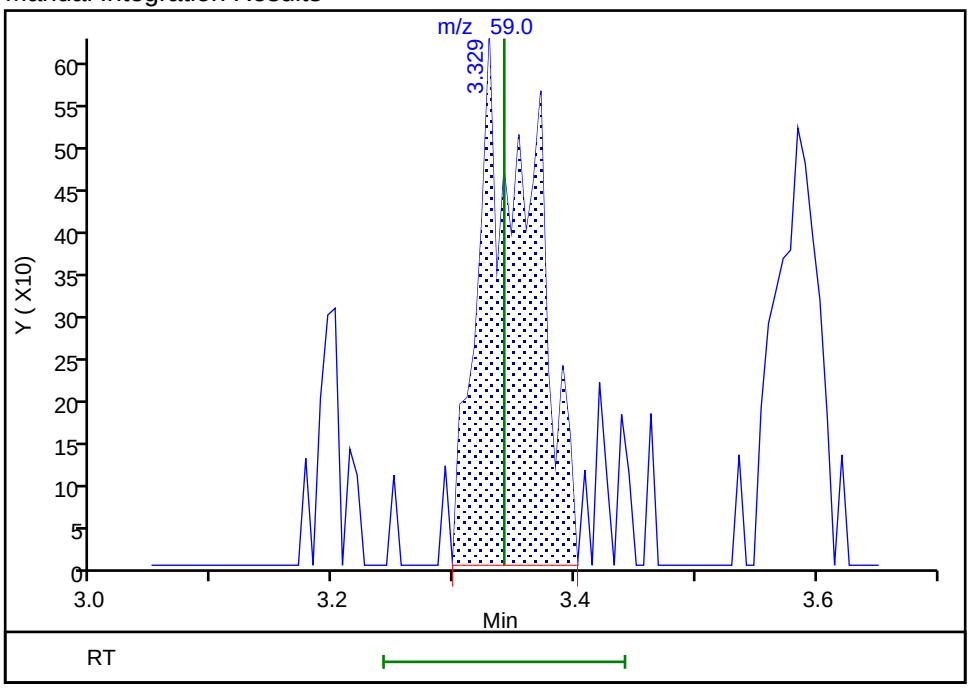
Processing Integration Results

RT: 3.35
Area: 766
Amount: 4.620951
Amount Units: ug/l



Manual Integration Results

RT: 3.33
Area: 2022
Amount: 12.174317
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:11:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

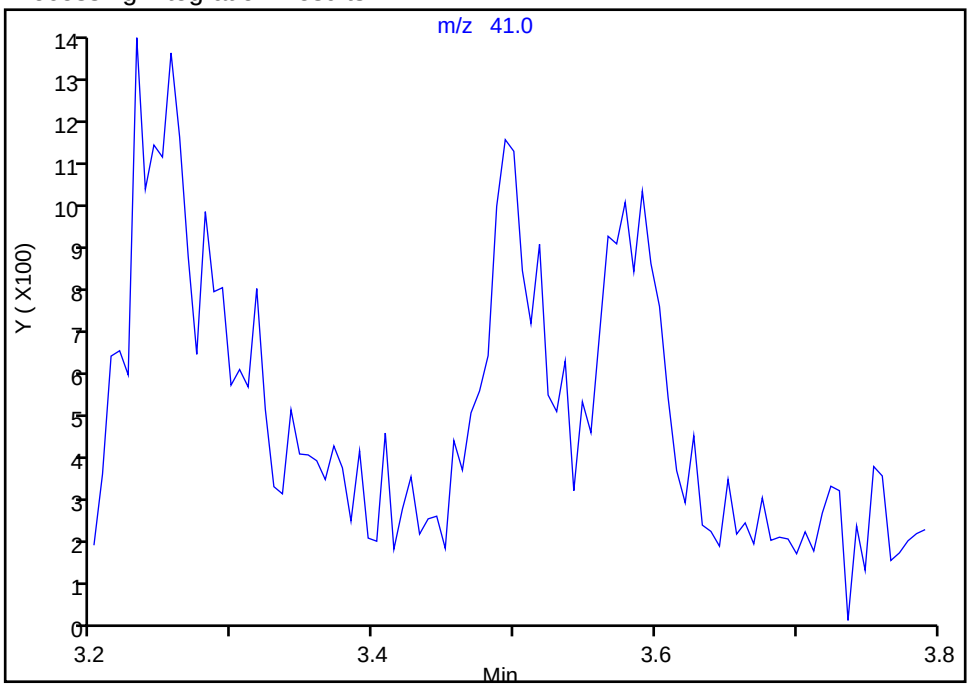
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

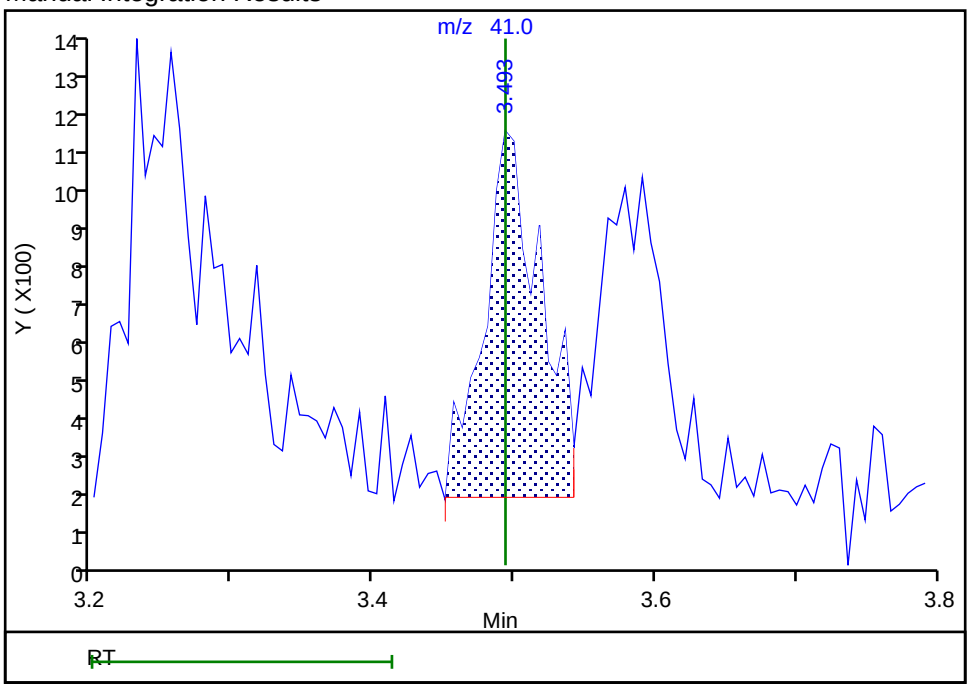
Not Detected
Expected RT: 3.49

Processing Integration Results



Manual Integration Results

RT: 3.49
Area: 2540
Amount: 11.490686
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:11:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

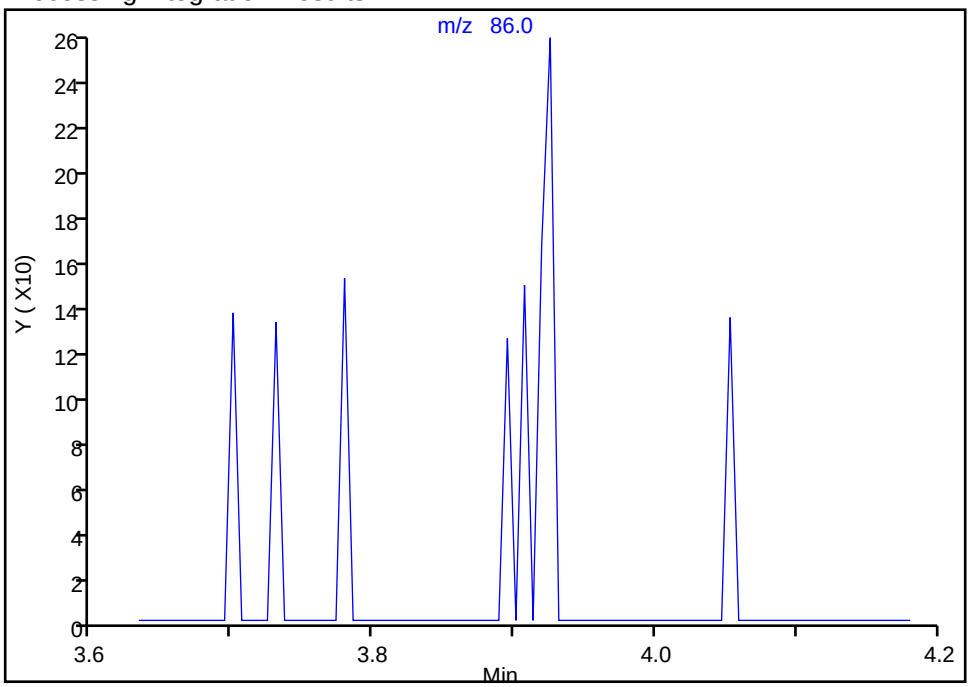
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

35 Vinyl acetate, CAS: 108-05-4

Signal: 1

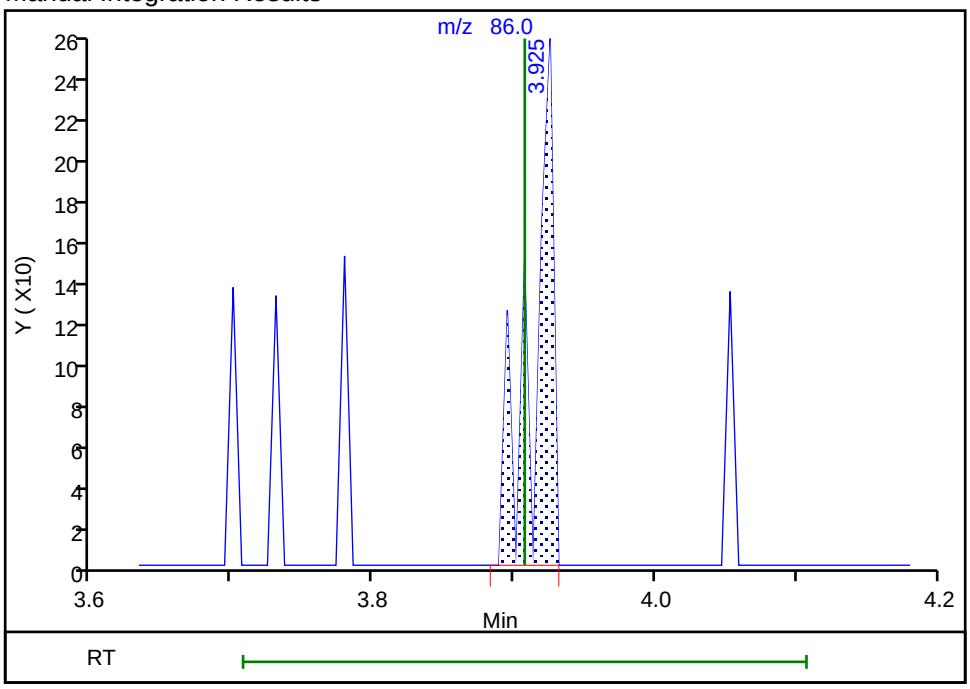
Not Detected
Expected RT: 3.91

Processing Integration Results



Manual Integration Results

RT: 3.93
Area: 249
Amount: 2.013163
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:12:07
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

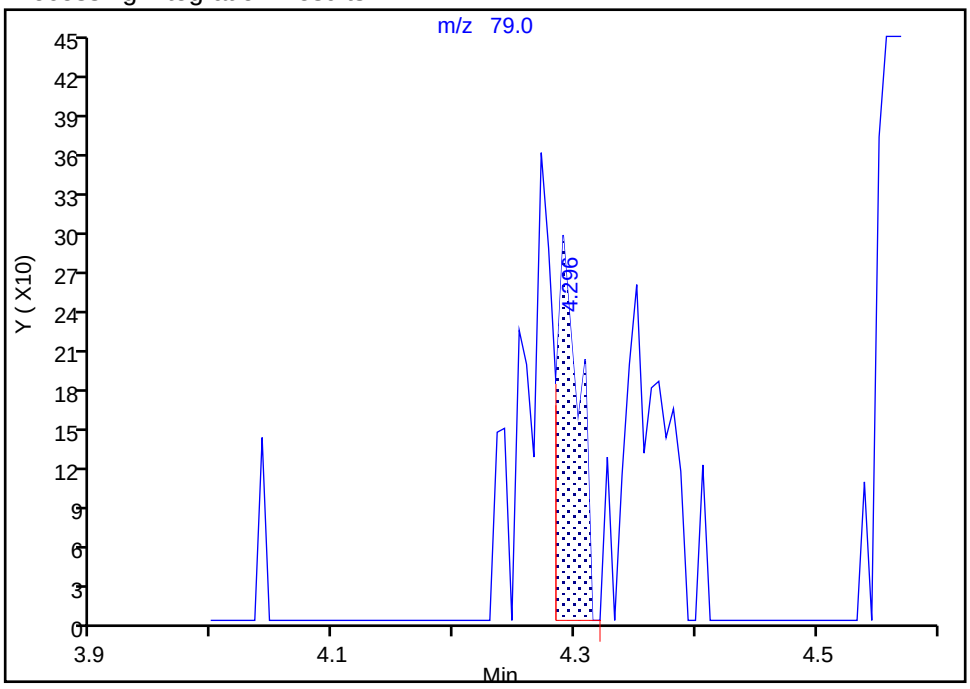
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

38 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

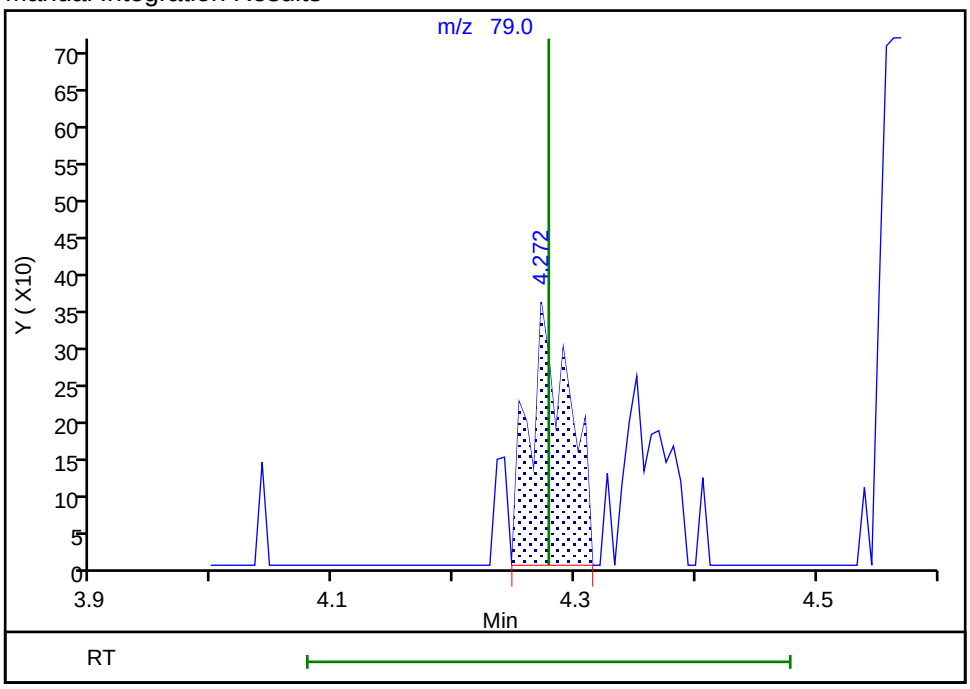
Processing Integration Results

RT: 4.30
Area: 384
Amount: 0.242702
Amount Units: ug/l



Manual Integration Results

RT: 4.27
Area: 817
Amount: 0.982730
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:12:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

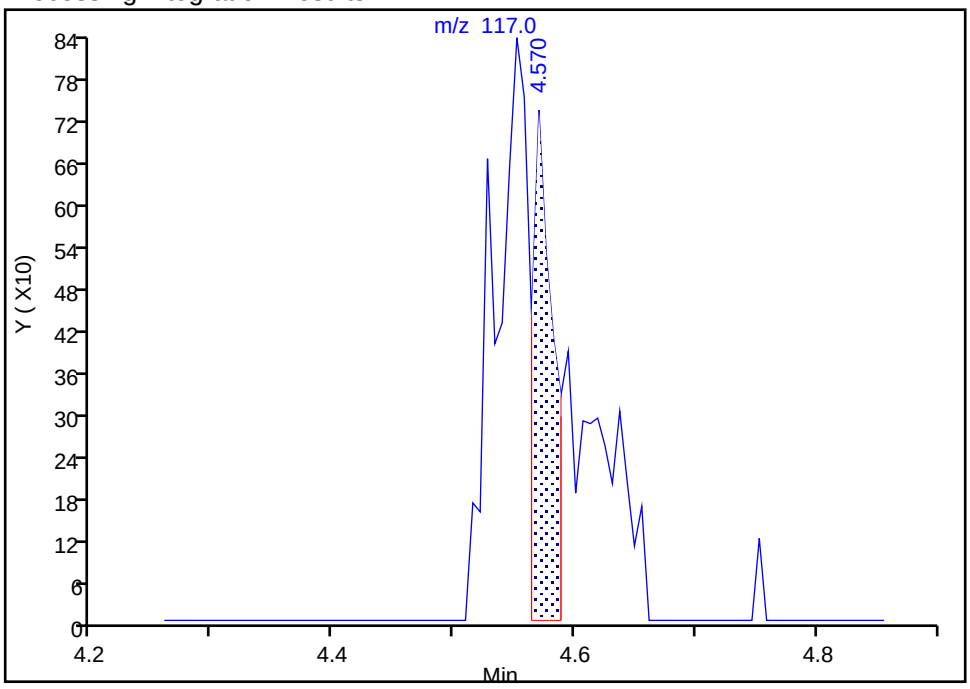
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

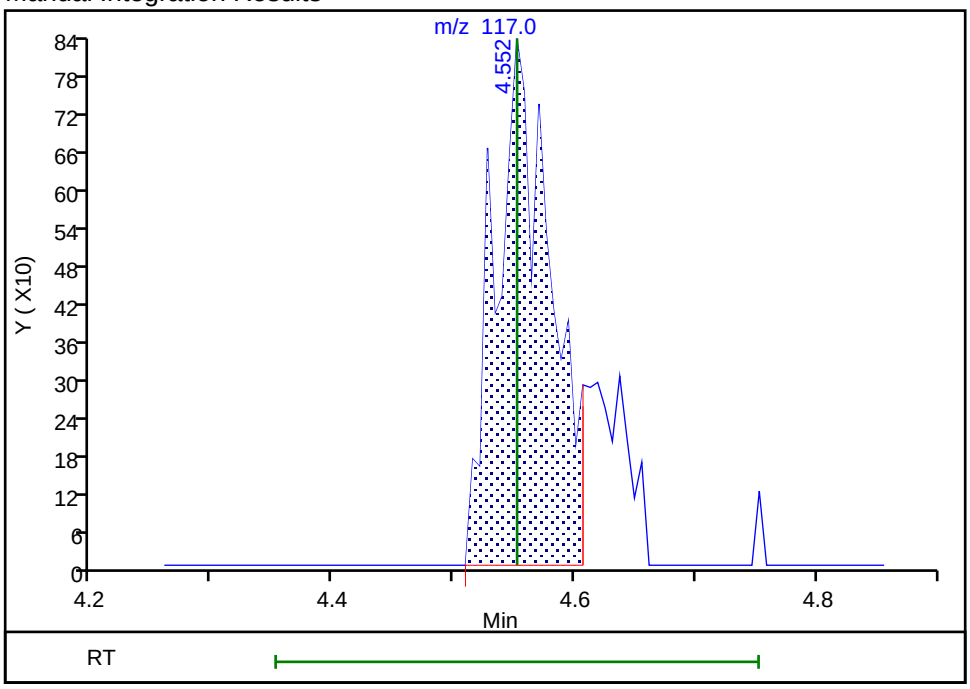
Processing Integration Results

RT: 4.57
Area: 887
Amount: 0.288595
Amount Units: ug/l



Manual Integration Results

RT: 4.55
Area: 2681
Amount: 0.887862
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:12:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

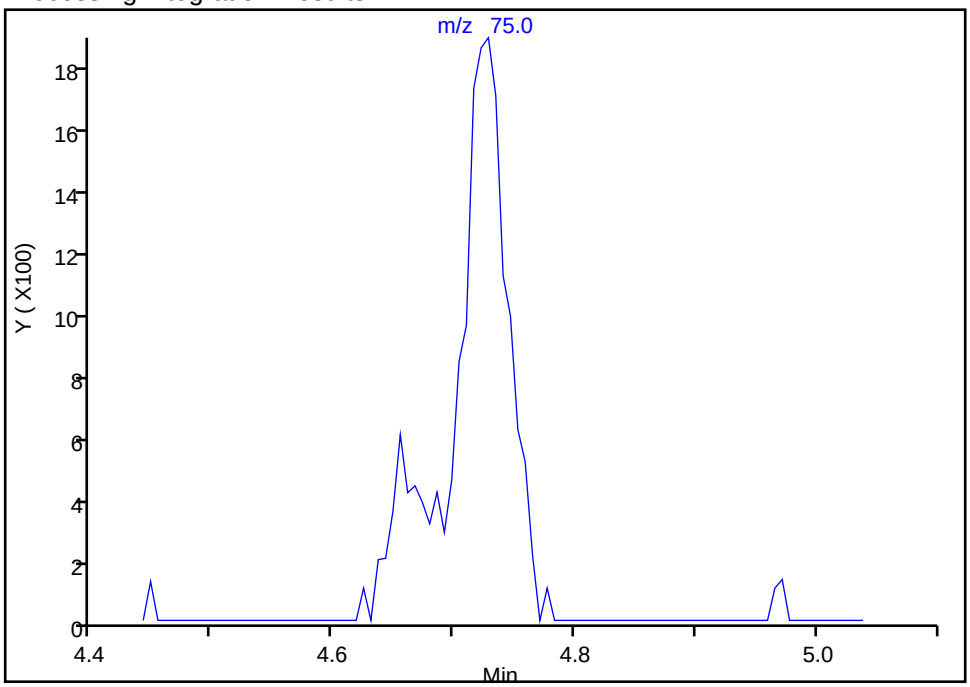
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

53 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

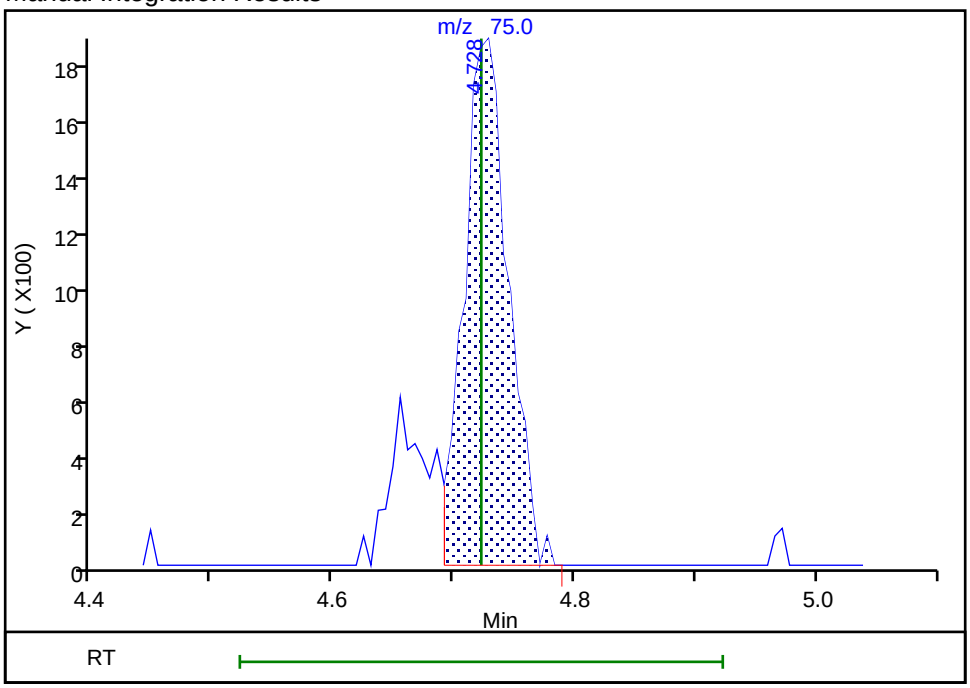
Not Detected
Expected RT: 4.72

Processing Integration Results



Manual Integration Results

RT: 4.73
Area: 4715
Amount: 1.073299
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:14:21
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

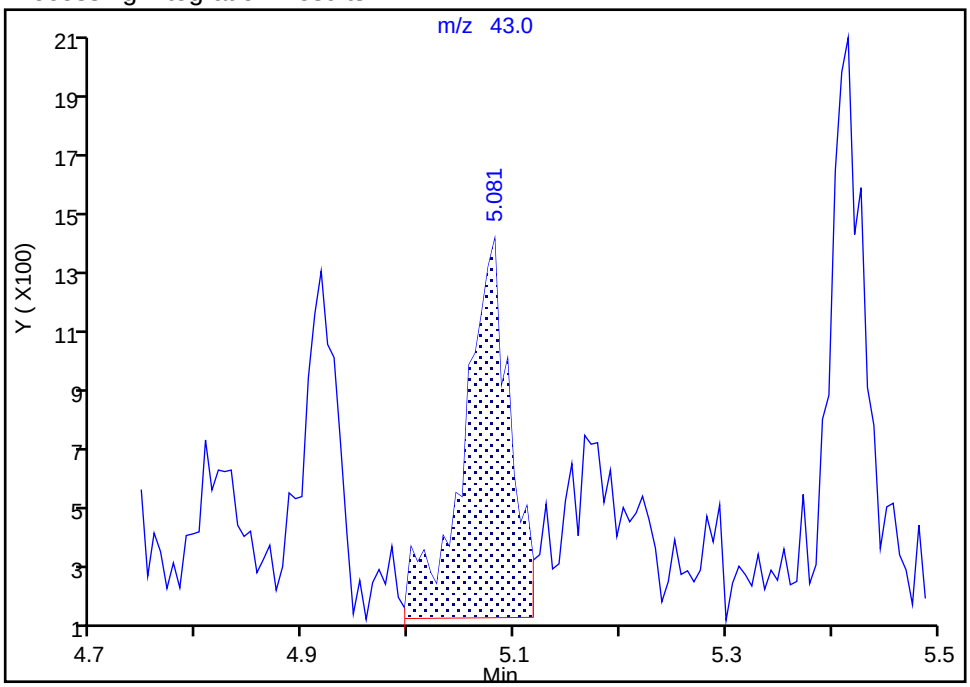
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

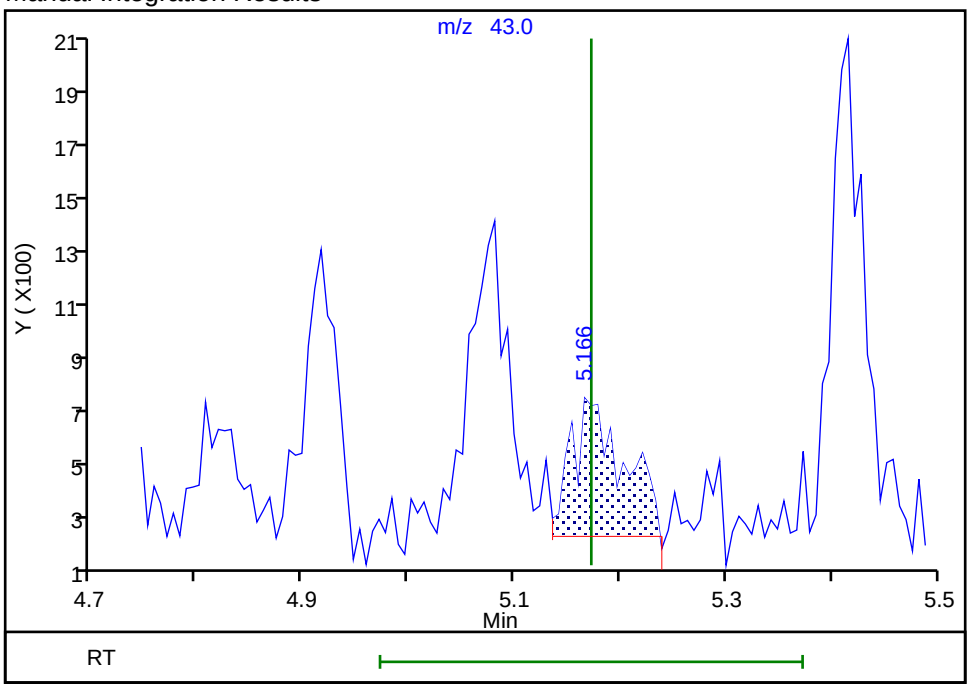
Processing Integration Results

RT: 5.08
Area: 3753
Amount: 58.567808
Amount Units: ug/l



Manual Integration Results

RT: 5.17
Area: 1703
Amount: 28.508510
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:15:38
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

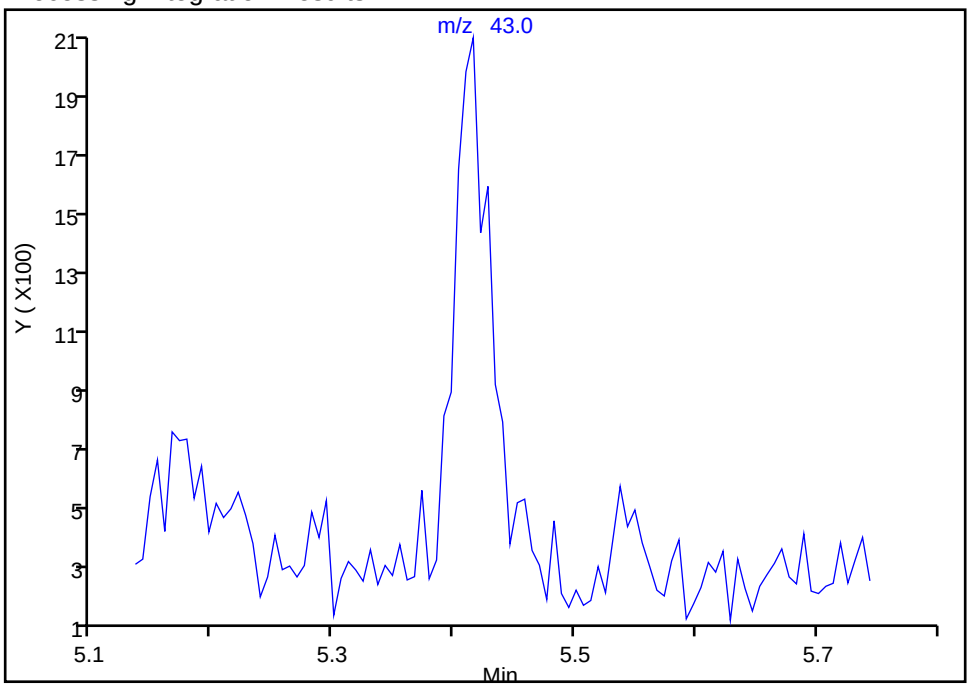
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

59 Isopropyl acetate, CAS: 108-21-4

Signal: 1

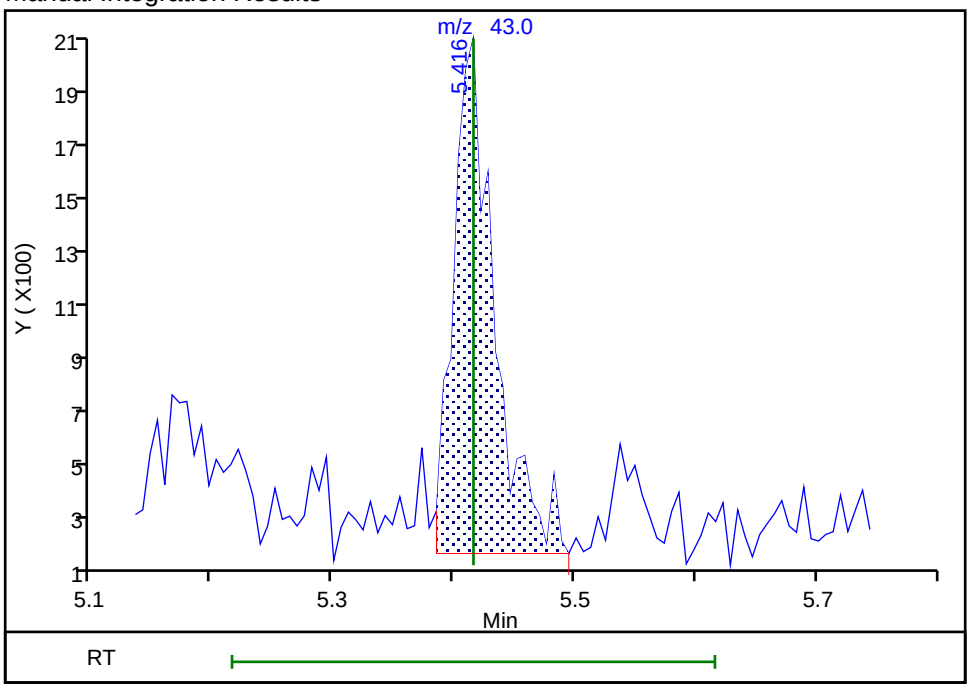
Not Detected
Expected RT: 5.42

Processing Integration Results



Manual Integration Results

RT: 5.42
Area: 4461
Amount: 1.204446
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:15:49
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

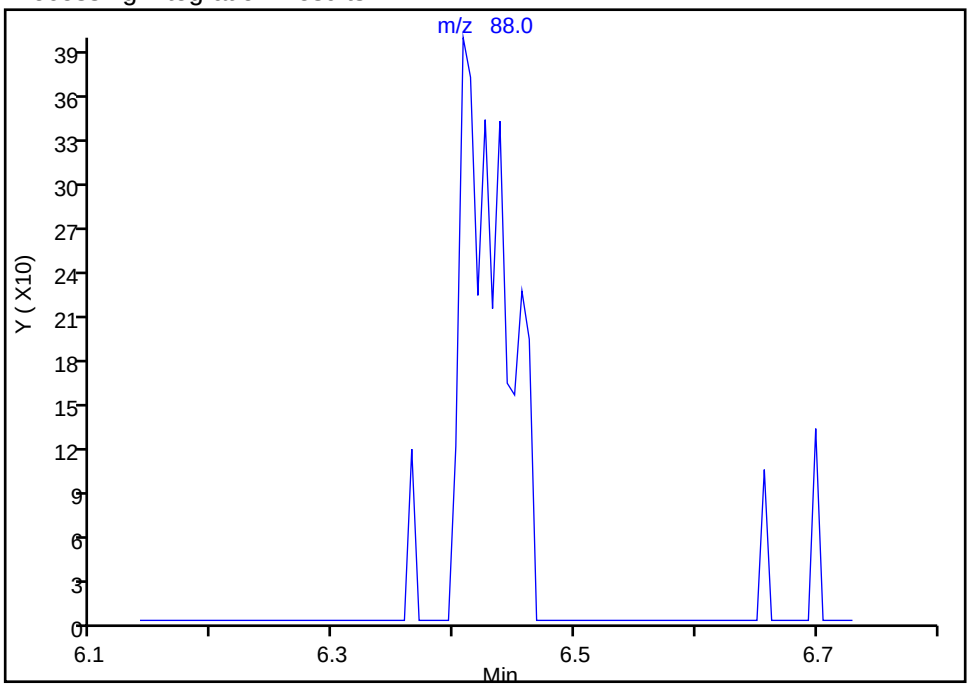
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

Signal: 1

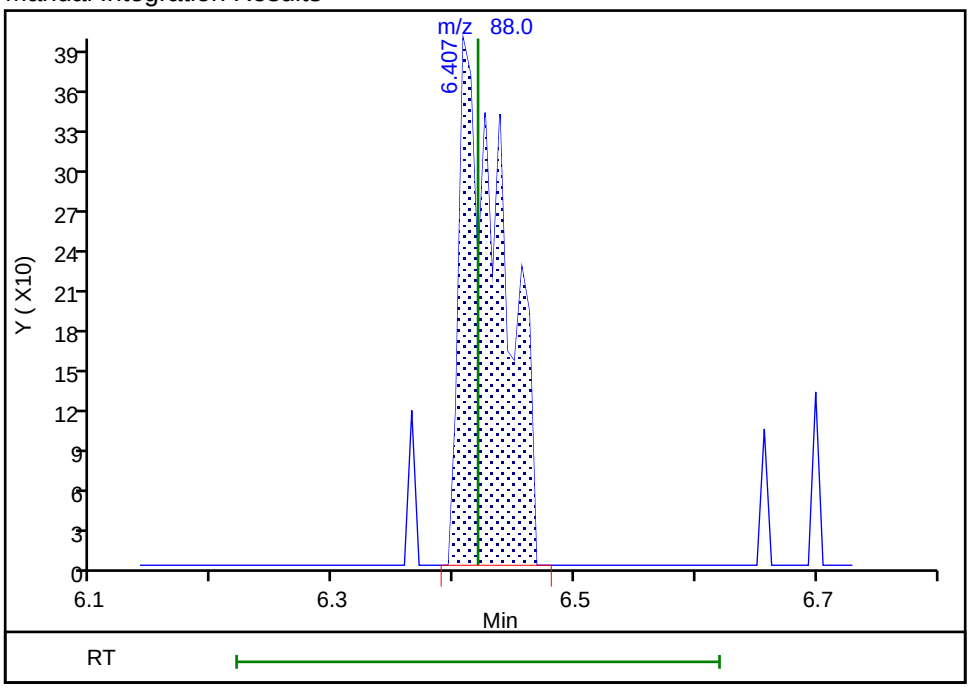
Not Detected
Expected RT: 6.42

Processing Integration Results



Manual Integration Results

RT: 6.41
Area: 1000
Amount: 50.482759
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:16:22
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

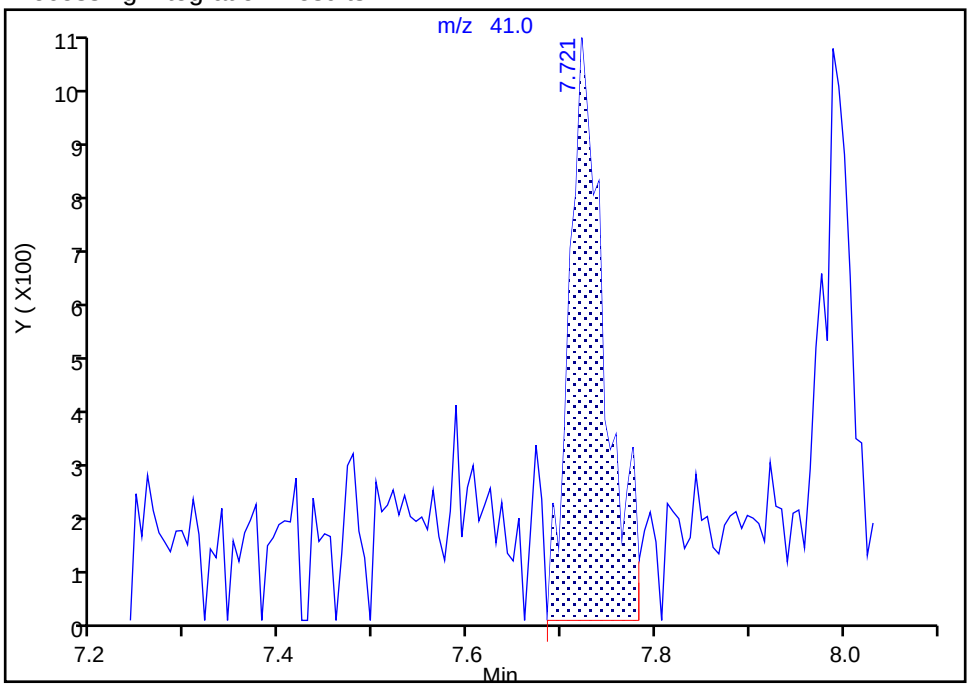
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Signal: 1

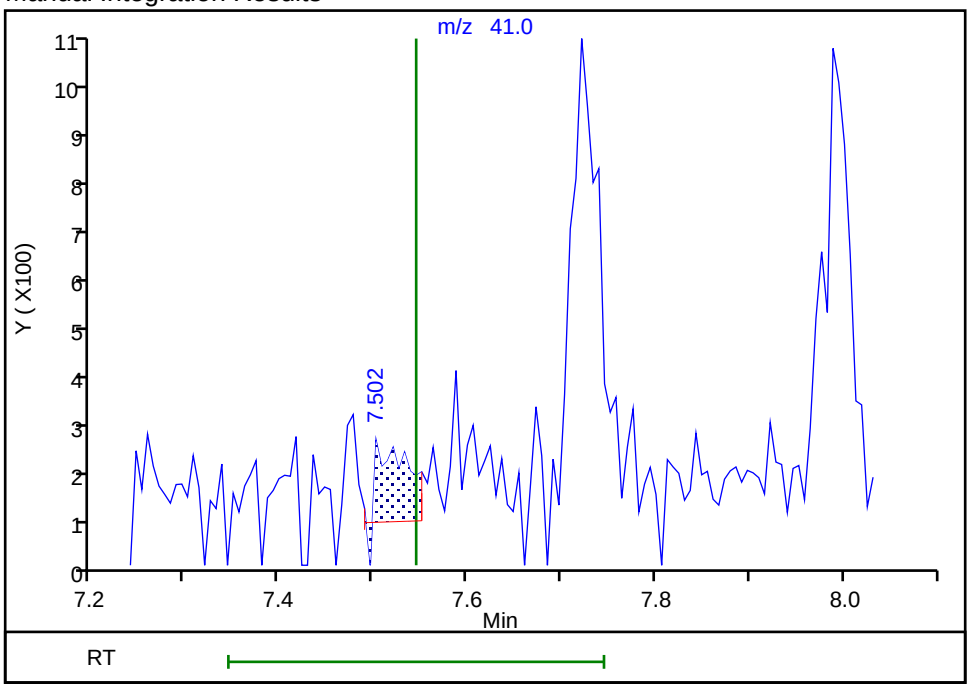
Processing Integration Results

RT: 7.72
Area: 2779
Amount: 20.305925
Amount Units: ug/l



Manual Integration Results

RT: 7.50
Area: 380
Amount: 2.557584
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:16:32
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

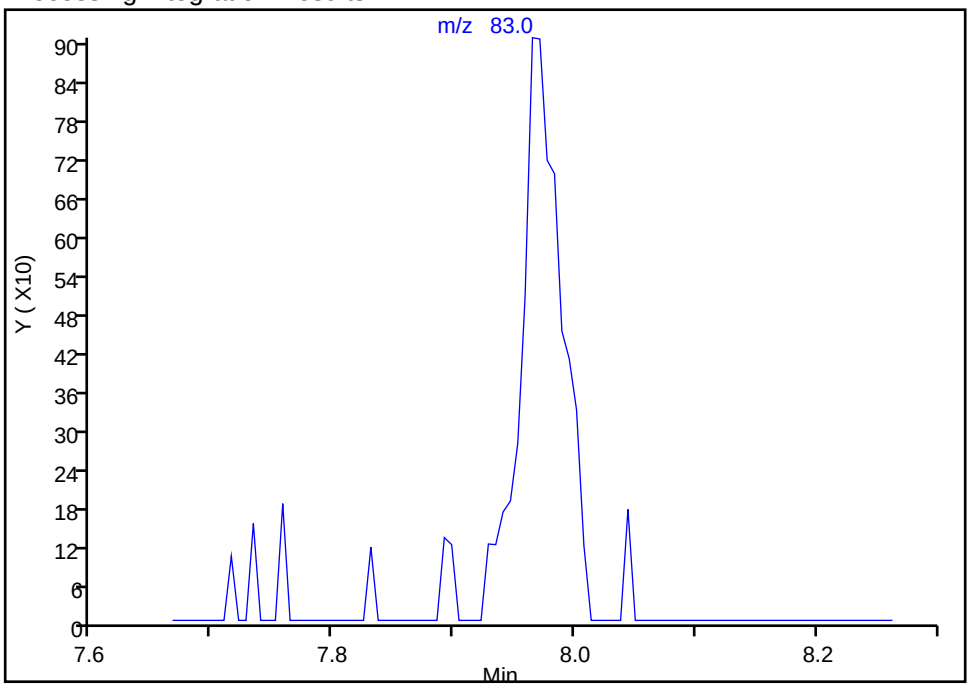
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

83 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

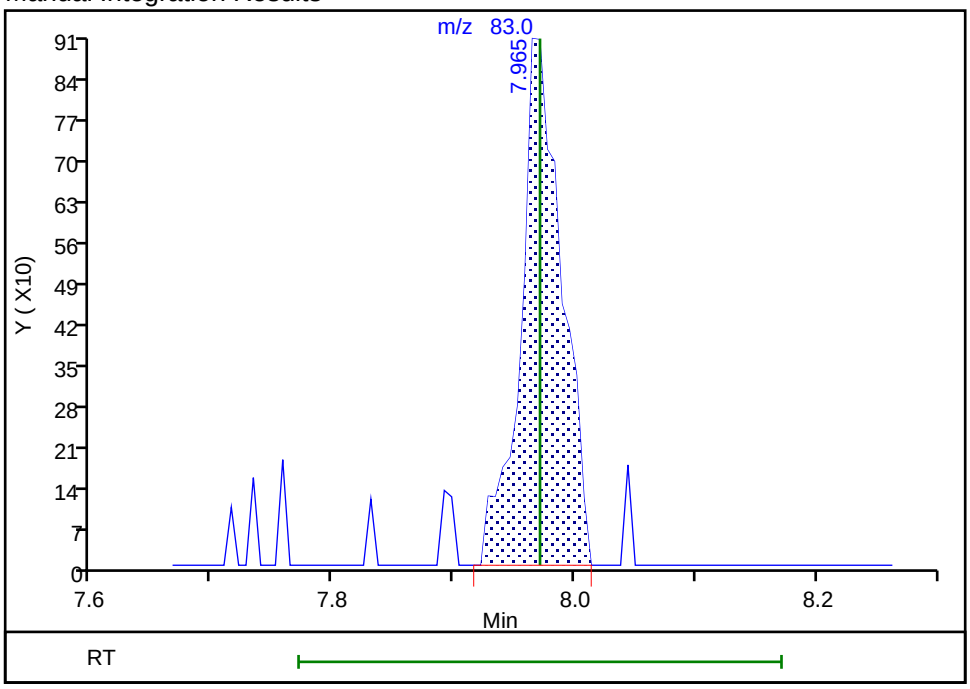
Not Detected
Expected RT: 7.97

Processing Integration Results



Manual Integration Results

RT: 7.96
Area: 2156
Amount: 1.167554
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:16:40
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

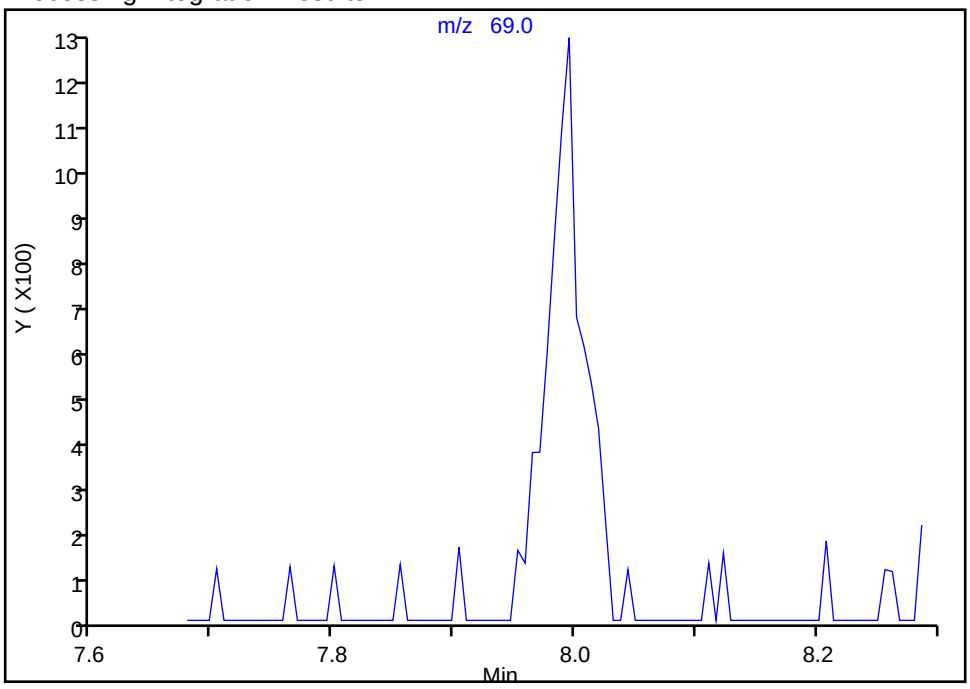
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

82 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

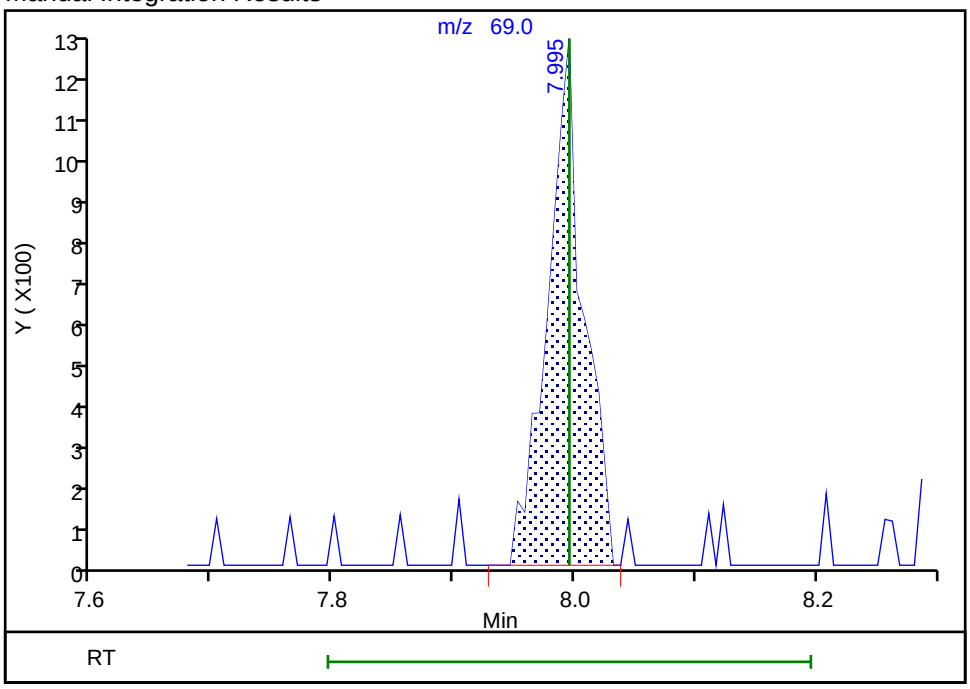
Not Detected
Expected RT: 8.00

Processing Integration Results



Manual Integration Results

RT: 8.00
Area: 2557
Amount: 0.928309
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:16:43
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

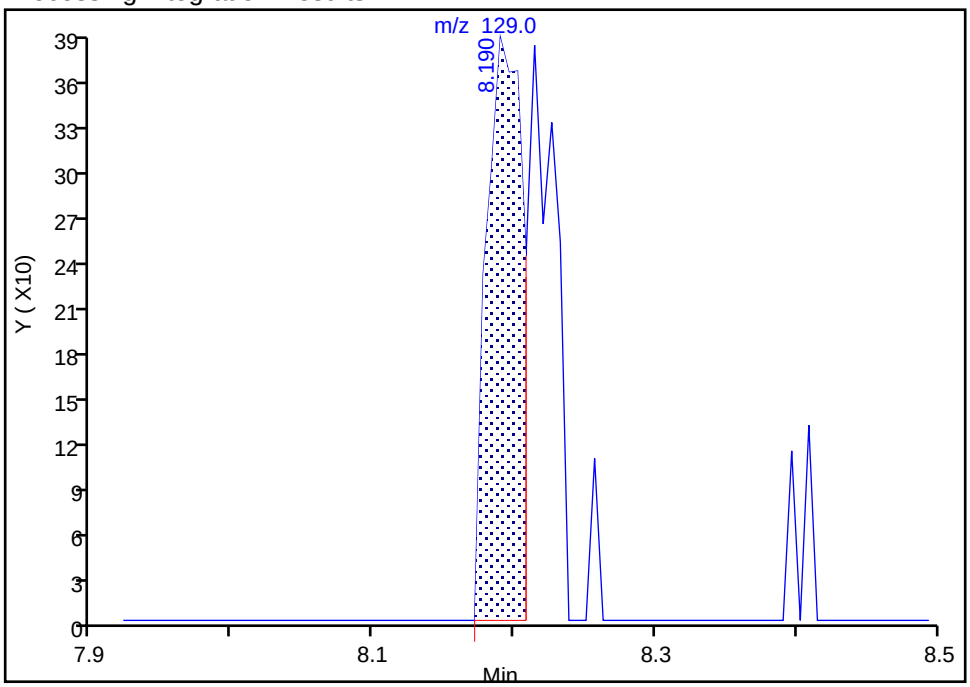
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69454.D
Injection Date: 24-Jul-2018 07:13:30 Instrument ID: CVOAMS11
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

88 Chlorodibromomethane, CAS: 124-48-1

Signal: 1

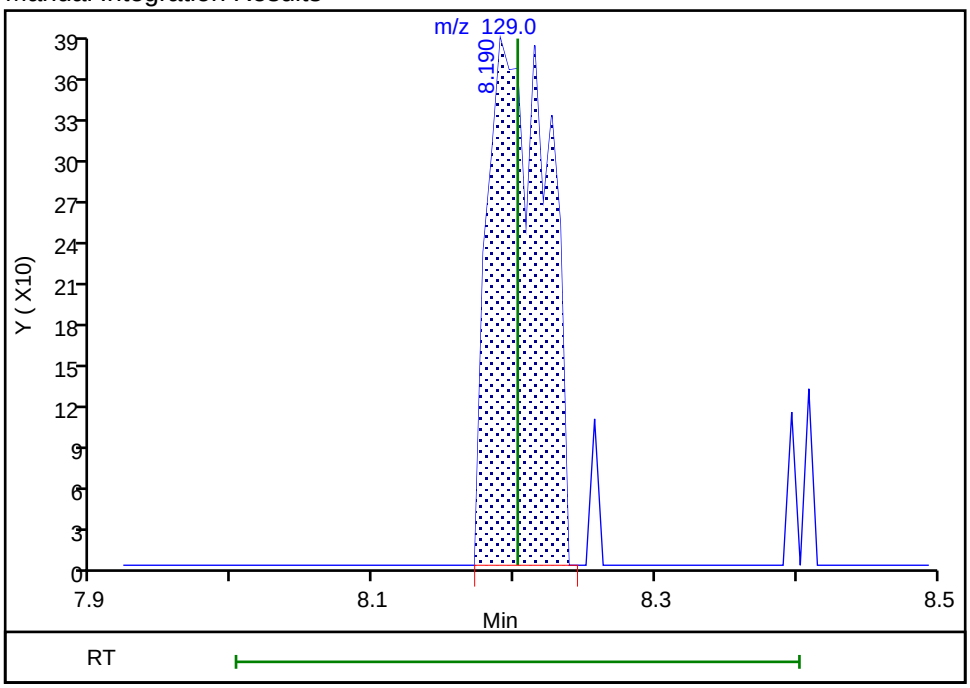
Processing Integration Results

RT: 8.19
Area: 686
Amount: 0.439413
Amount Units: ug/l



Manual Integration Results

RT: 8.19
Area: 1132
Amount: 0.818507
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:16:55
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jul-2018 07:35:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0076012-006
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Jul-2018 18:17:52 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 24-Jul-2018 09:23:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.510	1.504	0.006	73	9658	5.00	4.50	
2 Dichlorodifluoromethane	87	1.528	1.529	-0.001	98	8259	5.00	4.93	
3 Chloromethane	52	1.681	1.675	0.006	98	8947	5.00	5.34	
5 Butadiene	54	1.735	1.735	0.000	90	20469	5.00	4.78	
4 Vinyl chloride	62	1.747	1.741	0.006	98	23514	5.00	4.65	
6 Bromomethane	94	2.009	1.997	0.012	99	16118	5.00	4.60	
7 Chloroethane	64	2.100	2.088	0.012	98	14375	5.00	4.74	
10 Pentane	72	2.192	2.179	0.013	94	6886	10.0	11.7	
9 Trichlorofluoromethane	101	2.222	2.204	0.018	95	24871	5.00	4.65	
8 Dichlorofluoromethane	67	2.258	2.252	0.006	97	32430	5.00	4.89	
12 Ethyl ether	59	2.429	2.417	0.012	62	10762	5.00	5.00	
13 2-Methyl-1,3-butadiene	53	2.429	2.423	0.006	96	14321	5.00	5.23	
11 Ethanol	46	2.538	2.538	0.000	42	1426	200.0	153.1	M
17 1,1-Dichloroethene	96	2.605	2.593	0.012	98	14869	5.00	5.02	
14 1,2-Dichloro-1,1,2-trifluo	117	2.599	2.599	0.000	79	15948	5.00	5.27	
20 Carbon disulfide	76	2.636	2.624	0.012	99	51201	5.00	4.99	
15 1,1,2-Trichloro-1,2,2-trif	101	2.648	2.642	0.006	48	17577	5.00	5.32	
19 Iodomethane	142	2.721	2.715	0.006	98	25082	5.00	5.03	
23 Cyclopentene	67	2.836	2.830	0.006	96	41878	5.00	5.26	
16 Acrolein	56	2.867	2.861	0.006	94	7139	20.0	22.2	
21 Isopropyl alcohol	45	2.982	2.970	0.012	24	4790	50.0	51.7	
22 3-Chloro-1-propene	76	2.982	2.976	0.006	94	9180	5.00	5.03	
26 Methylene Chloride	84	3.068	3.062	0.006	90	18232	5.00	5.31	
18 Acetone	58	3.104	3.104	0.000	86	4339	25.0	27.3	
24 Methyl acetate	74	3.201	3.189	0.012	45	3637	10.0	11.5	
30 trans-1,2-Dichloroethene	96	3.195	3.189	0.006	92	18096	5.00	5.37	
32 Hexane	56	3.250	3.238	0.012	89	14012	5.00	5.41	
29 Methyl tert-butyl ether	73	3.268	3.275	-0.006	91	38379	5.00	5.15	
* 27 TBA-d9 (IS)	65	3.287	3.281	0.006	73	143389	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.341	3.341	0.000	93	7672	50.0	46.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
25 Acetonitrile	41	3.500	3.494	0.006	96	12279	50.0	56.0	a
33 Isopropyl ether	45	3.585	3.579	0.006	96	54160	5.00	5.10	
36 2-Chloro-1,3-butadiene	88	3.682	3.676	0.006	90	14316	5.00	4.99	
34 1,1-Dichloroethane	63	3.706	3.706	0.000	99	29723	5.00	5.11	
31 Acrylonitrile	53	3.755	3.749	0.006	99	35596	50.0	53.1	
37 Tert-butyl ethyl ether	59	3.901	3.889	0.012	87	46140	5.00	5.02	
35 Vinyl acetate	86	3.907	3.907	0.000	99	3721	10.0	9.93	
40 cis-1,2-Dichloroethene	96	4.181	4.175	0.006	98	19976	5.00	5.26	
38 2,2-Dichloropropane	79	4.278	4.278	0.000	96	7695	5.00	5.44	
49 Cyclohexane	84	4.357	4.357	0.000	87	32708	5.00	5.40	
46 Chlorobromomethane	128	4.363	4.357	0.006	72	7815	5.00	5.19	
48 Chloroform	83	4.424	4.418	0.006	98	28104	5.00	5.20	M
42 Ethyl acetate	70	4.522	4.522	0.000	99	2102	10.0	10.5	
43 Methyl acrylate	55	4.540	4.534	0.006	72	8004	5.00	4.96	
52 Carbon tetrachloride	117	4.552	4.552	0.000	95	14175	5.00	4.71	
45 Tetrahydrofuran	72	4.564	4.564	0.000	44	2447	10.0	10.2	a
$ 51 Dibromofluoromethane (Surr	113	4.595	4.595	0.000	96	120192	50.0	49.8	
50 1,1,1-Trichloroethane	97	4.619	4.619	0.000	97	22811	5.00	4.81	
* 39 2-Butanone-d5	46	4.662	4.655	0.007	0	162036	250.0	250.0	
41 2-Butanone (MEK)	72	4.704	4.704	0.000	98	6295	25.0	26.8	M
53 1,1-Dichloropropene	75	4.735	4.722	0.012	96	22941	5.00	5.24	
54 Isooctane	57	4.820	4.820	0.000	99	43462	5.00	5.30	
61 n-Heptane	57	4.923	4.917	0.006	92	10403	5.00	5.26	
55 Benzene	78	4.972	4.966	0.006	93	71102	5.00	5.29	
44 Propionitrile	54	5.008	4.996	0.012	98	12981	50.0	52.6	
47 Methacrylonitrile	67	5.027	5.014	0.013	91	42525	50.0	52.4	
57 Tert-amyl methyl ether	73	5.075	5.075	0.000	97	41715	5.00	5.06	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.112	5.106	0.006	98	122452	50.0	50.5	
60 1,2-Dichloroethane	62	5.179	5.173	0.006	95	18603	5.00	5.40	
58 Isobutyl alcohol	43	5.185	5.173	0.012	53	6365	125.0	107.5	
* 62 Fluorobenzene	96	5.385	5.386	-0.001	99	587483	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.416	0.000	98	16290	5.00	4.42	a
65 Methylcyclohexane	83	5.550	5.544	0.006	93	31948	5.00	5.17	
66 Ethyl acrylate	55	5.550	5.550	0.000	77	24291	5.00	5.30	
64 Trichloroethene	95	5.556	5.556	0.000	83	16972	5.00	5.19	
63 n-Butanol	56	5.921	5.915	0.006	89	2887	125.0	91.1	M
71 Dibromomethane	93	6.012	6.012	0.000	96	7403	5.00	5.10	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	91	16440	5.00	5.27	
73 Dichlorobromomethane	83	6.207	6.195	0.012	99	14052	5.00	4.73	
69 Methyl methacrylate	100	6.383	6.383	0.000	94	5229	10.0	8.95	
* 68 1,4-Dioxane-d8	96	6.395	6.395	0.000	94	16987	1000.0	1000.0	
70 1,4-Dioxane	88	6.432	6.420	0.012	85	2114	100.0	107.7	
72 n-Propyl acetate	43	6.547	6.547	0.000	97	11912	5.00	4.91	
75 2-Chloroethyl vinyl ether	63	6.876	6.876	0.000	95	6633	5.00	4.70	
77 cis-1,3-Dichloropropene	75	6.943	6.937	0.006	90	19299	5.00	4.85	
$ 79 Toluene-d8 (Surr)	98	7.162	7.156	0.006	99	529664	50.0	50.7	
80 Toluene	91	7.223	7.223	0.000	94	75044	5.00	5.30	
76 Epichlorohydrin	57	7.253	7.253	0.000	98	15110	100.0	98.6	
74 2-Nitropropane	41	7.551	7.545	0.006	54	1295	10.0	8.79	Ma
84 Tetrachloroethene	166	7.709	7.703	0.006	96	15826	5.00	5.39	
78 4-Methyl-2-pentanone (MIBK	43	7.728	7.728	0.000	95	42850	25.0	24.3	
81 trans-1,3-Dichloropropene	75	7.770	7.770	0.000	95	14360	5.00	4.53	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.977	7.971	0.006	91	8979	5.00	4.95	
82 Ethyl methacrylate	69	7.989	7.995	-0.006	81	12593	5.00	4.59	
88 Chlorodibromomethane	129	8.208	8.202	0.006	95	6186	5.00	4.56	
85 1,3-Dichloropropane	76	8.336	8.336	0.000	94	19491	5.00	4.98	
89 Ethylene Dibromide	107	8.506	8.506	0.000	98	9431	5.00	4.87	
87 n-Butyl acetate	43	8.750	8.744	0.006	96	12572	5.00	4.49	
86 2-Hexanone	58	8.847	8.853	-0.006	98	14657	25.0	23.4	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	86	431007	50.0	50.0	
91 Chlorobenzene	112	9.182	9.176	0.006	95	45909	5.00	5.18	
92 Ethylbenzene	106	9.224	9.224	0.000	97	25146	5.00	5.19	
93 1,1,1,2-Tetrachloroethane	131	9.267	9.267	0.000	89	9553	5.00	4.32	
94 m-Xylene & p-Xylene	106	9.395	9.395	0.000	0	30560	5.00	5.15	
96 o-Xylene	106	9.863	9.857	0.006	94	27499	5.00	4.71	
97 Styrene	104	9.918	9.918	0.000	96	45097	5.00	4.86	
99 Bromoform	173	9.936	9.936	0.000	89	2431	5.00	4.05	
95 n-Butyl acrylate	73	10.082	10.082	0.000	98	6302	5.00	4.08	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	76498	5.00	4.94	
98 Amyl acetate (mixed isomer	43	10.337	10.338	-0.001	92	15837	5.00	4.42	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	85	142613	50.0	51.6	
102 Bromobenzene	156	10.538	10.544	-0.006	97	17032	5.00	4.97	
104 N-Propylbenzene	91	10.587	10.587	0.000	99	90934	5.00	5.10	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	96	12053	5.00	5.30	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	77008	5.00	5.12	
107 2-Chlorotoluene	91	10.721	10.721	0.000	97	63399	5.00	5.15	
109 1,3,5-Trimethylbenzene	105	10.775	10.776	-0.001	92	62495	5.00	4.86	
105 1,2,3-Trichloropropane	110	10.782	10.782	0.000	55	4106	5.00	5.31	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	66	2516	5.00	5.00	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	55872	5.00	5.13	
111 Butyl Methacrylate	87	11.061	11.055	0.006	89	13908	5.00	4.35	
112 tert-Butylbenzene	119	11.055	11.055	0.000	93	49929	5.00	4.66	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	97	66400	5.00	4.95	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	76647	5.00	4.79	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	97	63849	5.00	4.63	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	96	35641	5.00	5.13	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.457	0.000	96	218754	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	94	36192	5.00	5.15	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	98	69420	5.00	4.93	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	66724	5.00	4.95	
121 p-Diethylbenzene	119	11.645	11.646	-0.001	94	39167	5.00	5.16	
122 n-Butylbenzene	92	11.688	11.688	0.000	97	33988	5.00	5.02	
119 Benzyl chloride	126	11.676	11.688	-0.012	89	2430	5.00	4.76	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	95	33723	5.00	5.25	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	98	59760	5.00	4.54	
125 1,2-Dibromo-3-Chloropropan	155	12.455	12.455	0.000	41	1154	5.00	5.31	a
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	96	25154	5.00	5.24	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	89	6499	5.00	5.02	
127 1,2,4-Trichlorobenzene	180	12.972	12.966	0.006	94	22150	5.00	5.08	
129 Naphthalene	128	13.221	13.221	0.000	99	41320	5.00	4.65	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	95	19572	5.00	5.19	
S 131 1,2-Dichloroethene, Total	100				0		10.0	10.6	
S 132 Xylenes, Total	100				0		10.0	9.86	
S 133 Total BTEX	1				0		25.0	25.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
Ethanol mix_00017	Amount Added:	1.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	1.00	Units: uL	
MIX I Hi_00096	Amount Added:	1.00	Units: uL	
GAS Hi_00264	Amount Added:	1.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 25-Jul-2018 18:17:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D

Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11 Operator ID:

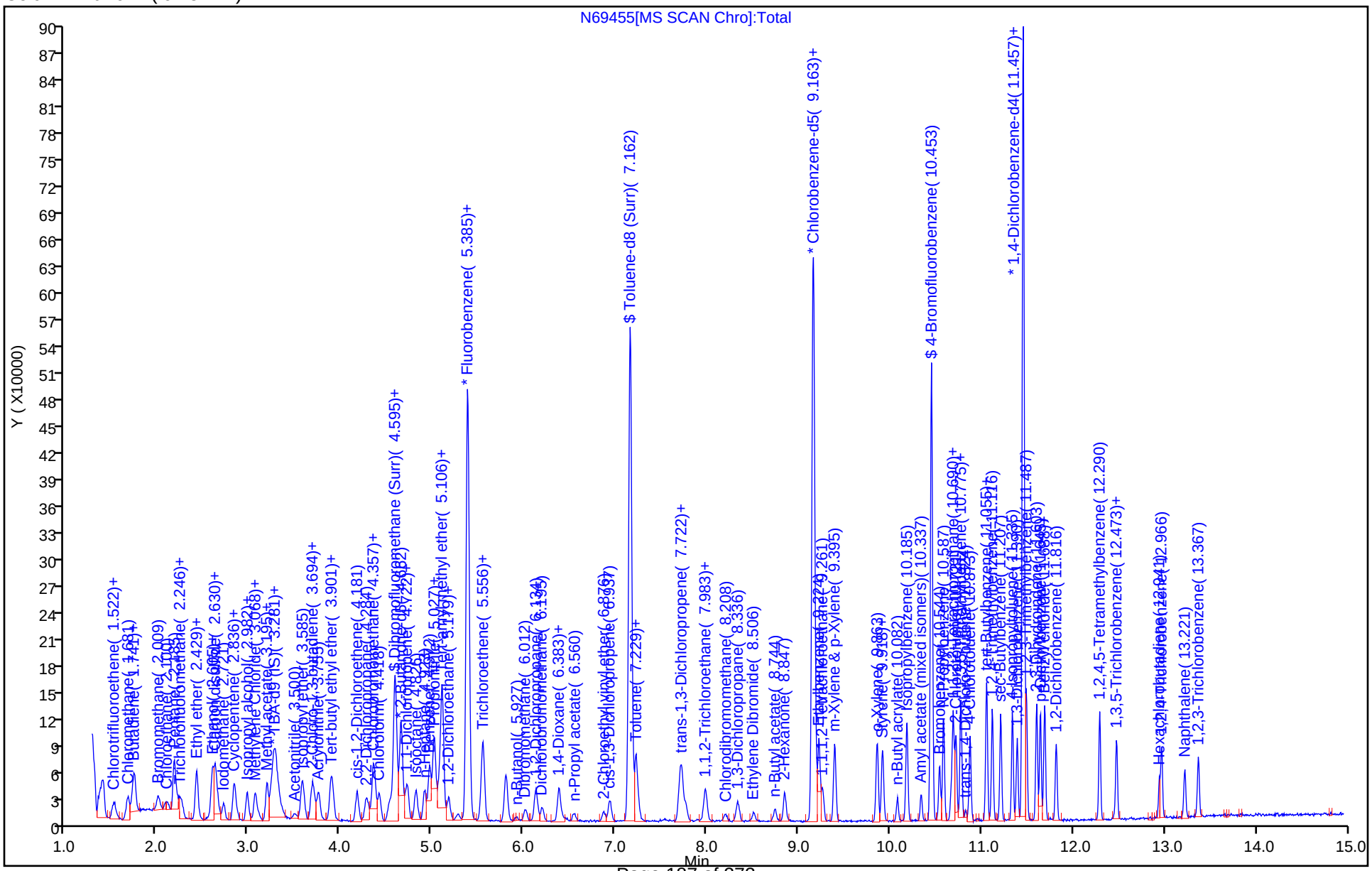
Lims ID: STD5 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

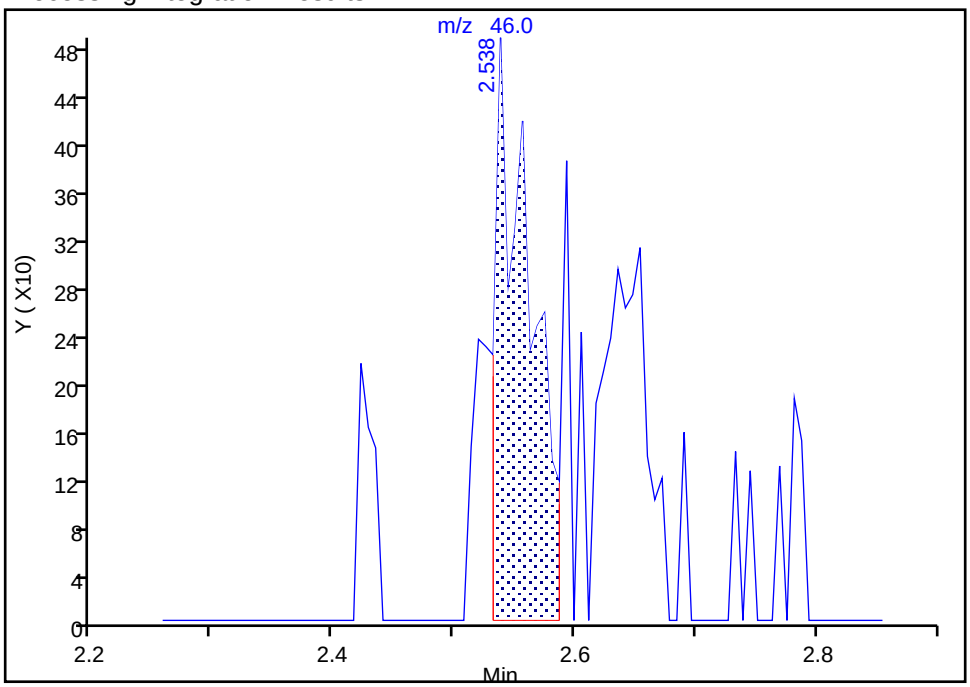
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

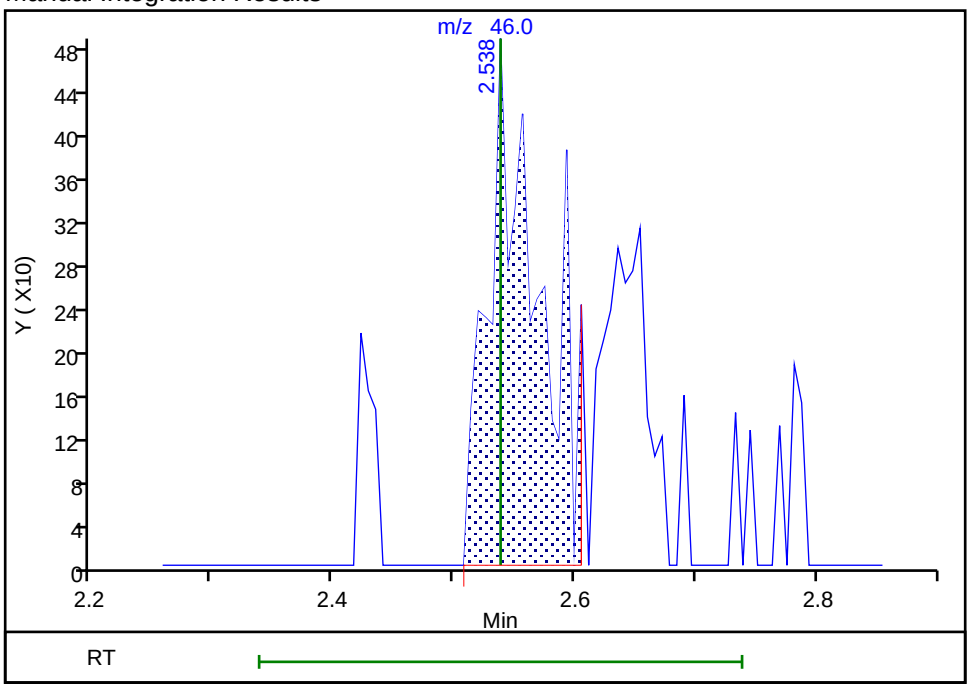
Processing Integration Results

RT: 2.54
Area: 979
Amount: 88.070904
Amount Units: ug/l



Manual Integration Results

RT: 2.54
Area: 1426
Amount: 153.1386
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:21:29
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

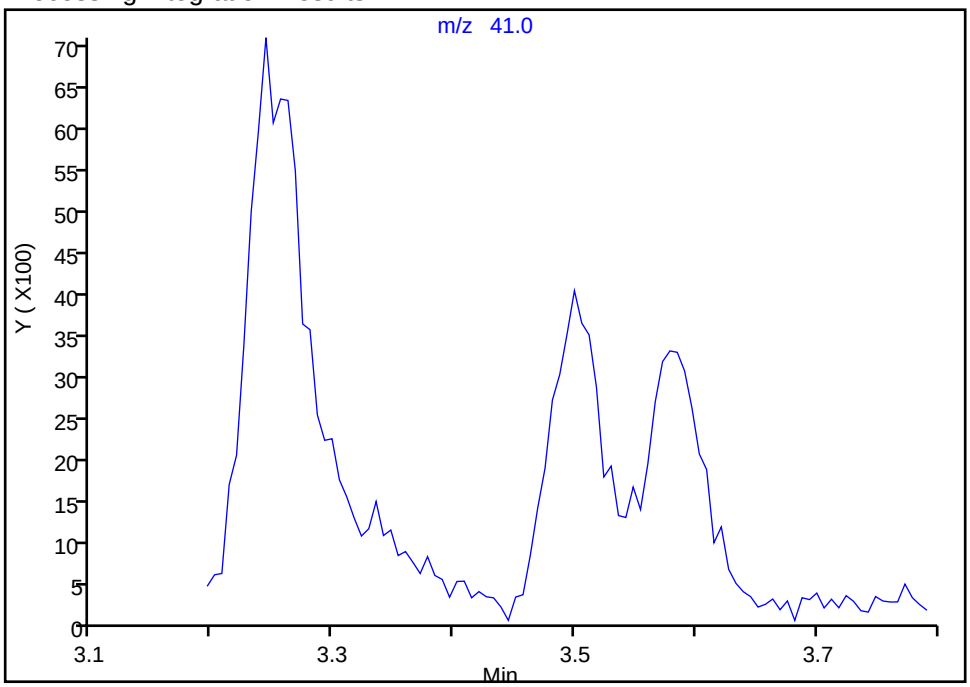
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

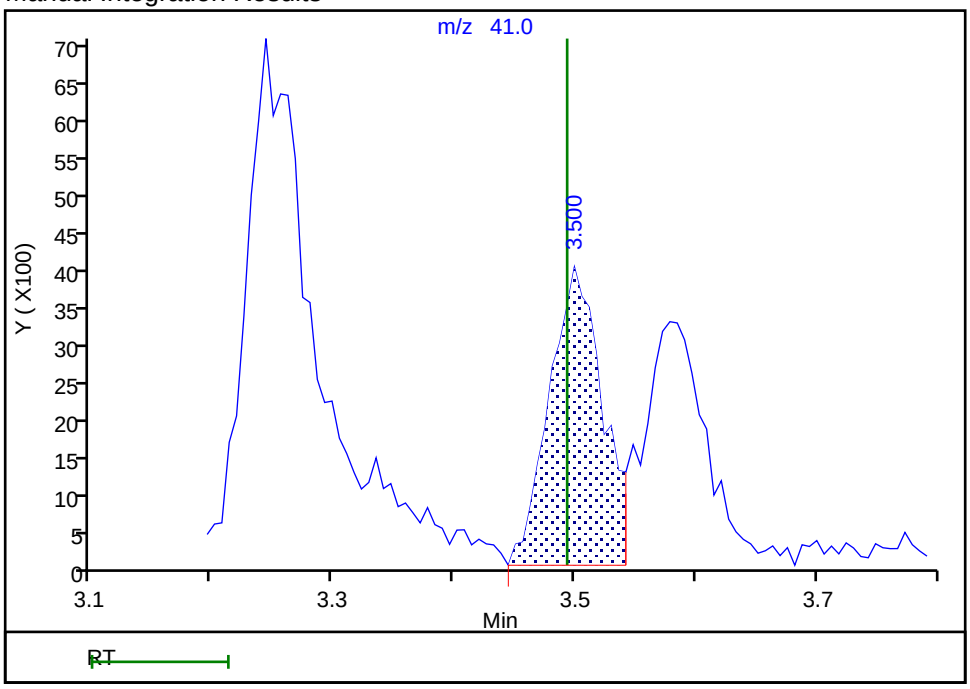
Not Detected
Expected RT: 3.49

Processing Integration Results



Manual Integration Results

RT: 3.50
Area: 12279
Amount: 56.023821
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:21:44
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

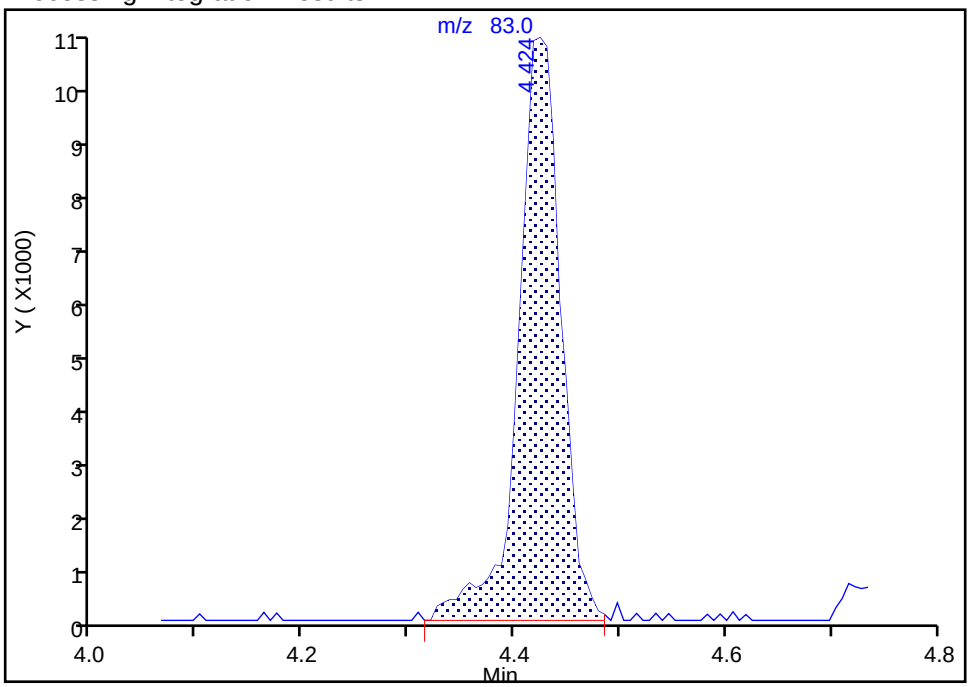
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

48 Chloroform, CAS: 67-66-3

Signal: 1

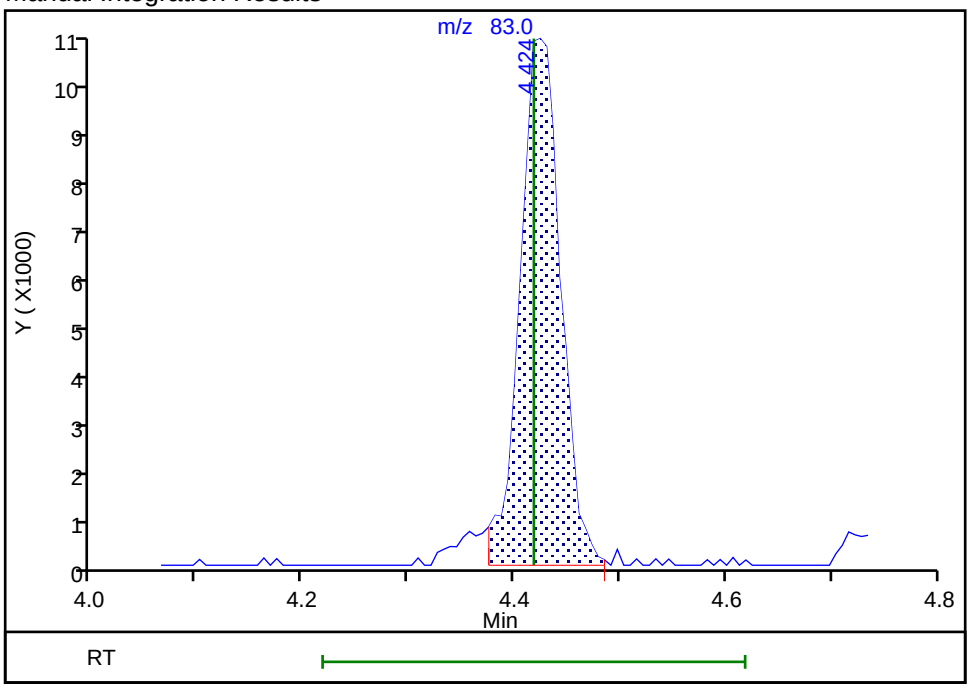
Processing Integration Results

RT: 4.42
Area: 29478
Amount: 5.447263
Amount Units: ug/l



Manual Integration Results

RT: 4.42
Area: 28104
Amount: 5.202442
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:21:59
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

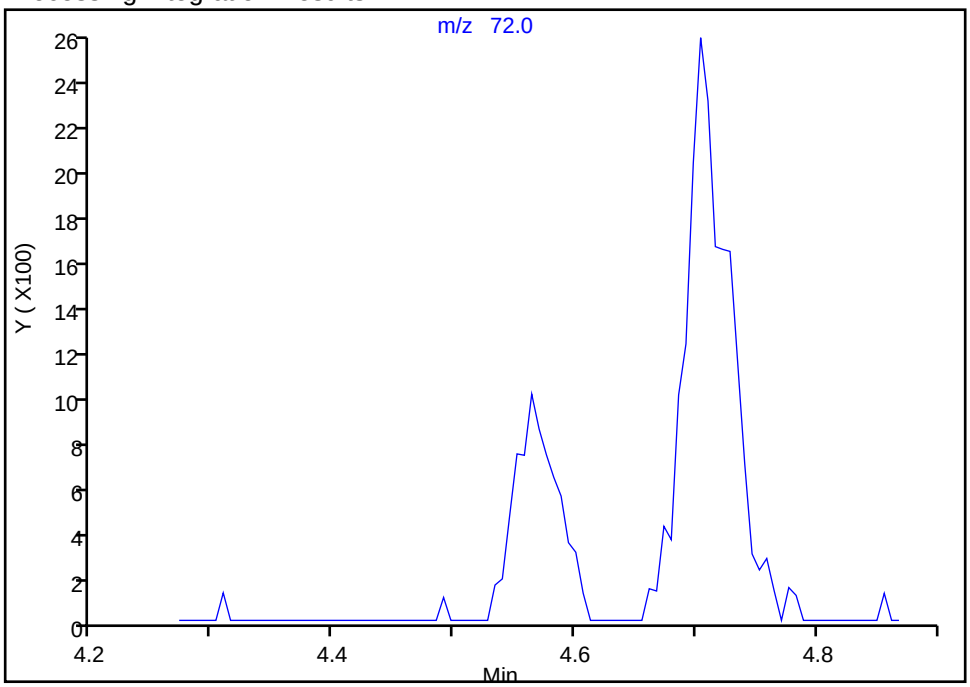
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

45 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

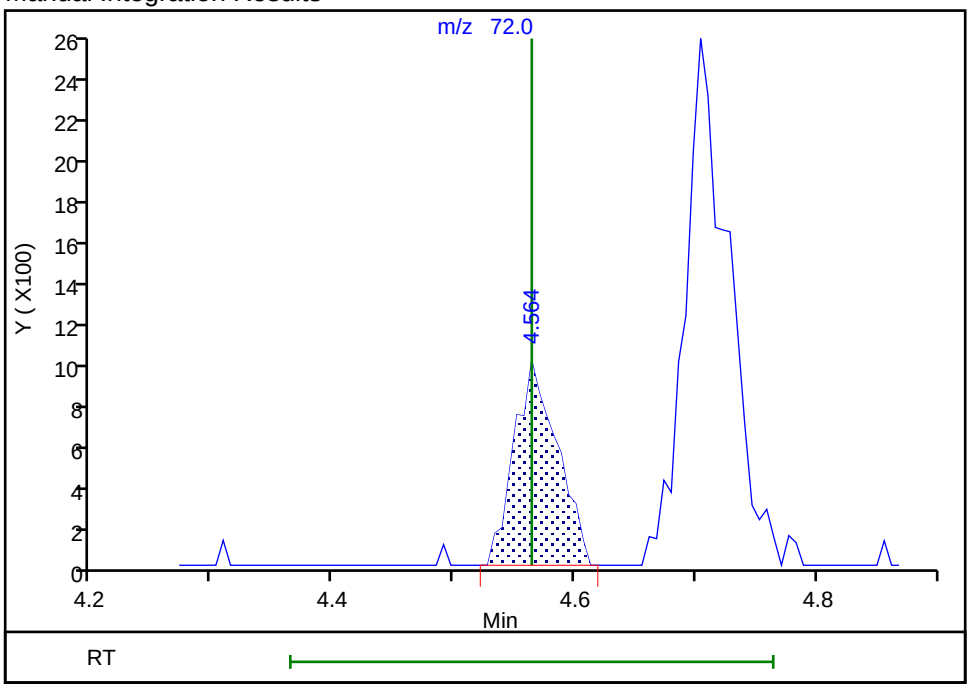
Not Detected
Expected RT: 4.56

Processing Integration Results



Manual Integration Results

RT: 4.56
Area: 2447
Amount: 10.226792
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:22:07
Audit Action: Assigned Compound ID Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

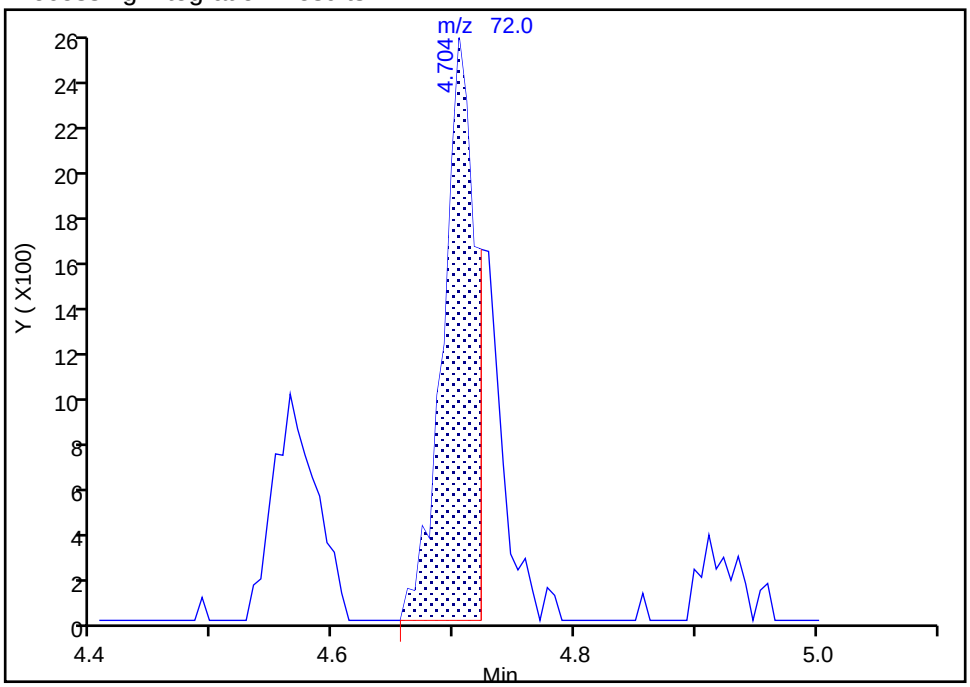
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

41 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

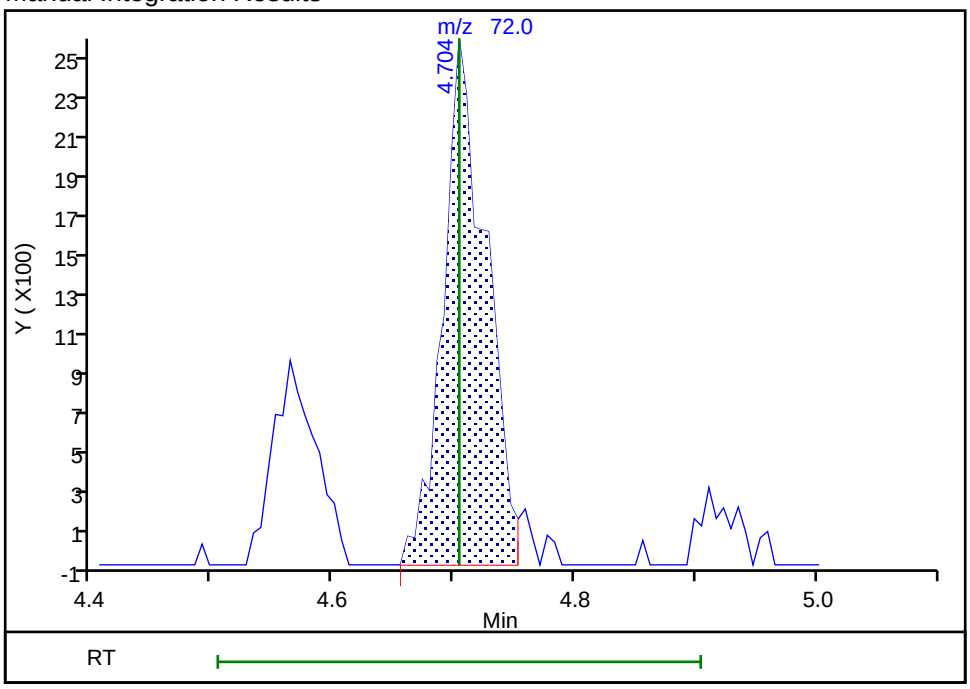
Processing Integration Results

RT: 4.70
Area: 4842
Amount: 21.048353
Amount Units: ug/l



Manual Integration Results

RT: 4.70
Area: 6295
Amount: 26.786520
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:22:20
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

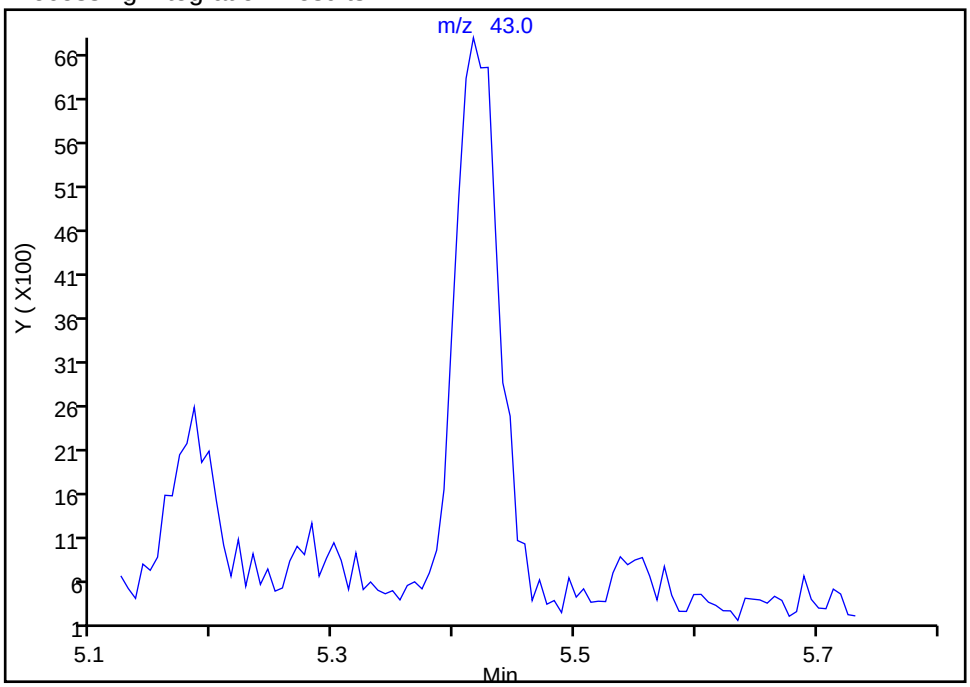
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

59 Isopropyl acetate, CAS: 108-21-4

Signal: 1

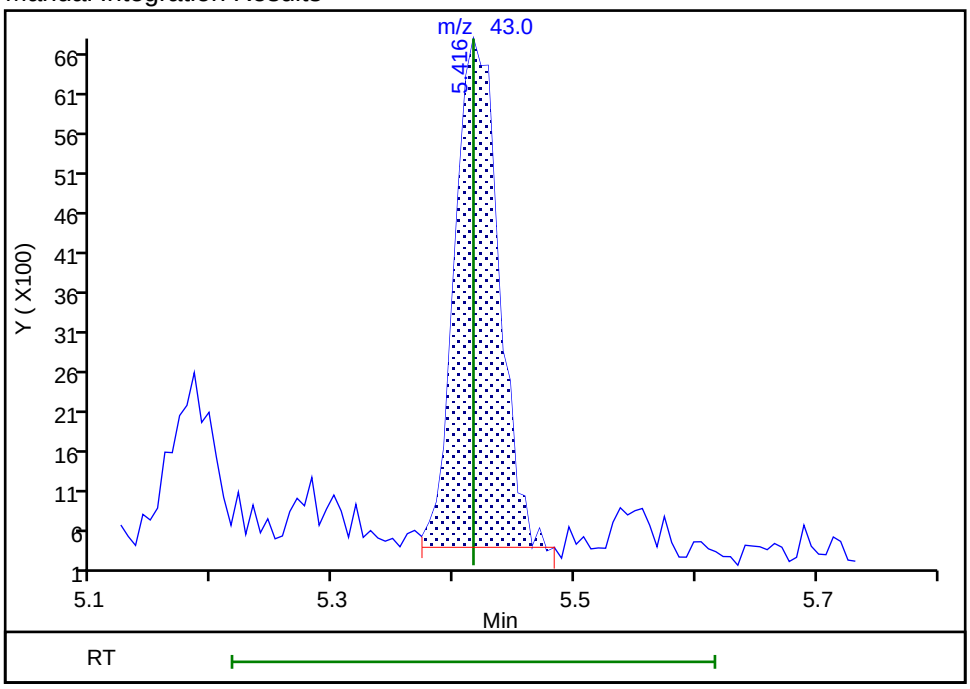
Not Detected
Expected RT: 5.42

Processing Integration Results



Manual Integration Results

RT: 5.42
Area: 16290
Amount: 4.415903
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:22:27
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

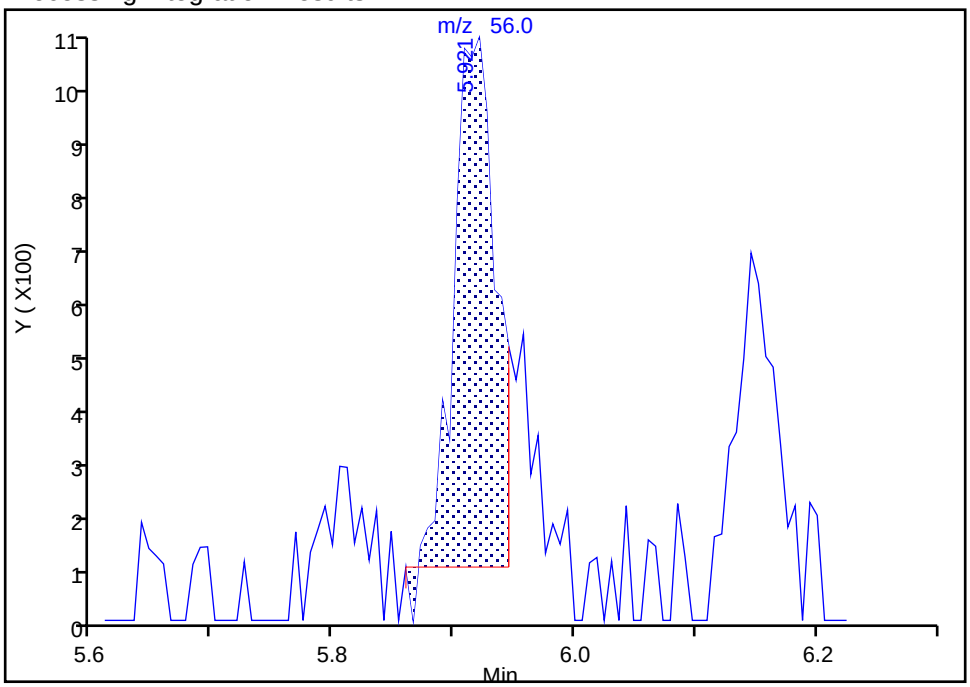
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

63 n-Butanol, CAS: 71-36-3

Signal: 1

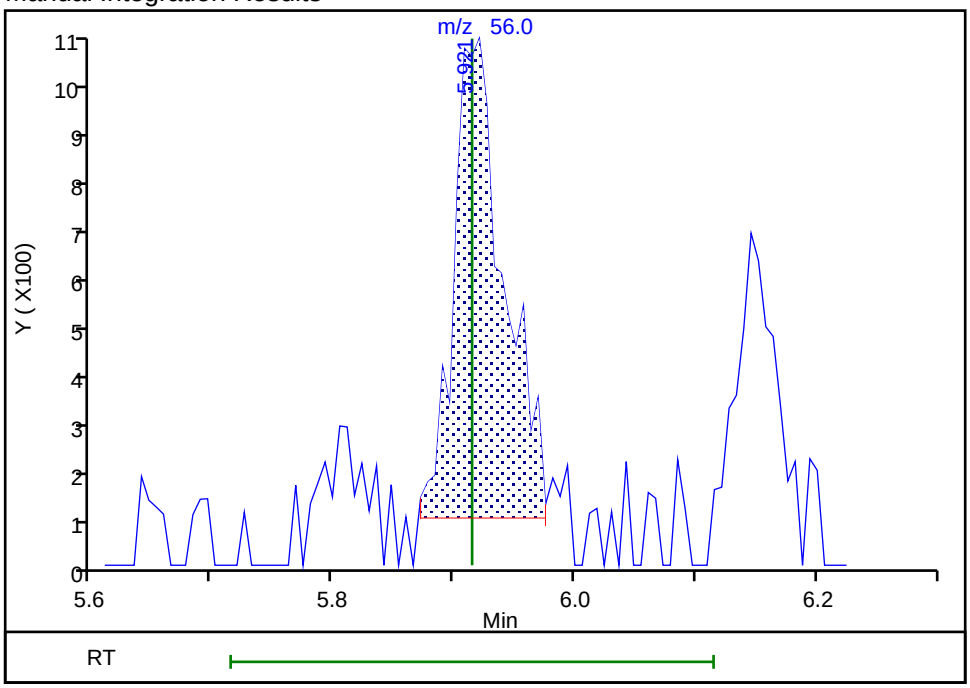
Processing Integration Results

RT: 5.92
Area: 2387
Amount: 73.592477
Amount Units: ug/l



Manual Integration Results

RT: 5.92
Area: 2887
Amount: 91.133279
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:22:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

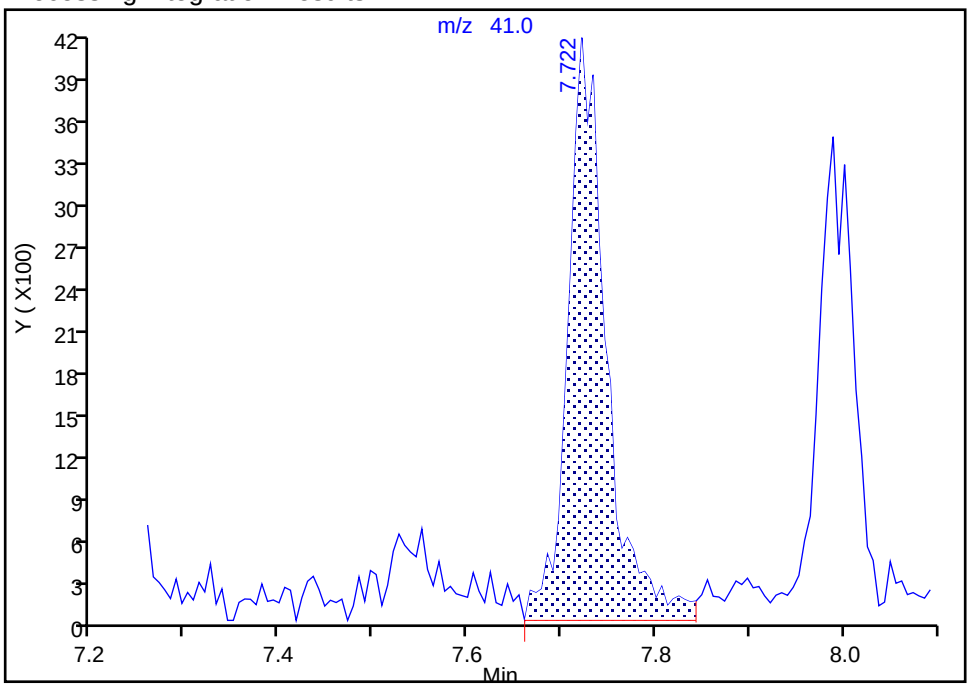
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

74 2-Nitropropane, CAS: 79-46-9

Signal: 1

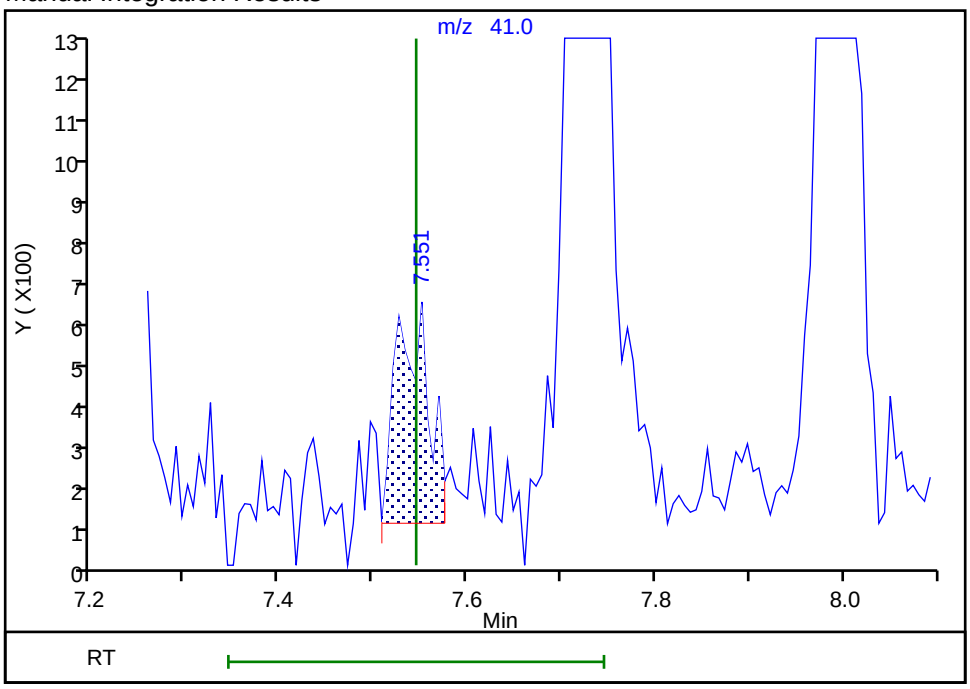
Processing Integration Results

RT: 7.72
Area: 11632
Amount: 84.973871
Amount Units: ug/l



Manual Integration Results

RT: 7.55
Area: 1295
Amount: 8.790499
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:23:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

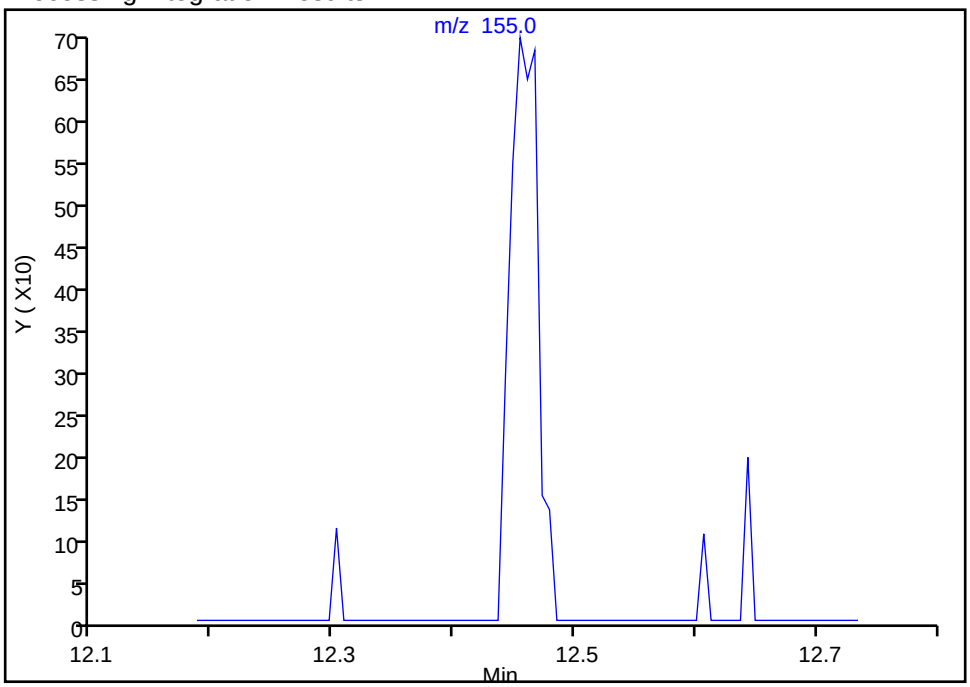
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69455.D
Injection Date: 24-Jul-2018 07:35:30 Instrument ID: CVOAMS11
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

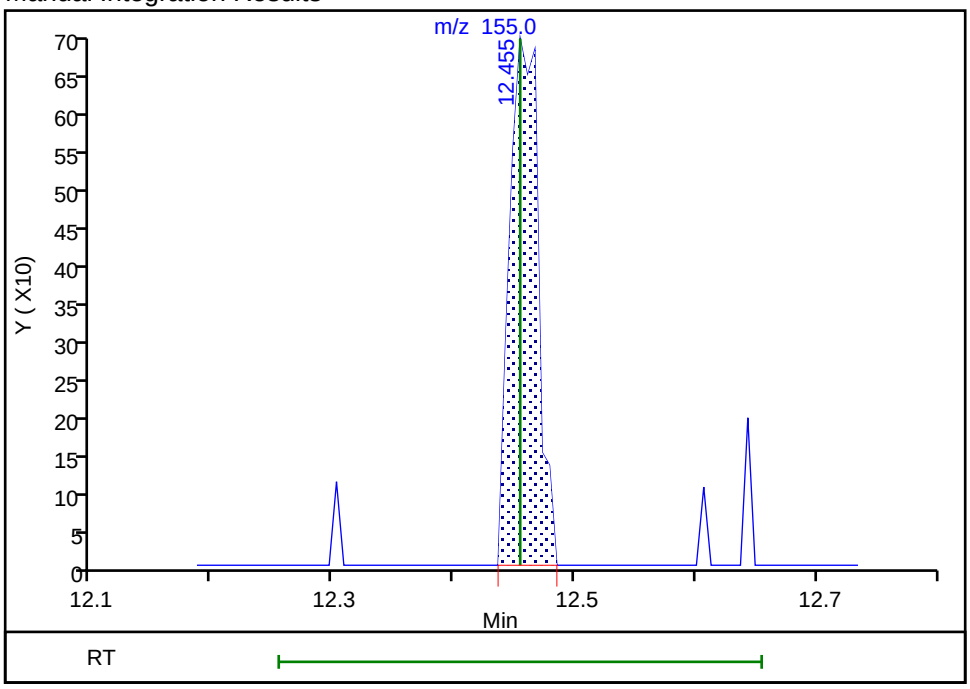
Not Detected
Expected RT: 12.45

Processing Integration Results



Manual Integration Results

RT: 12.45
Area: 1154
Amount: 5.311788
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:23:32
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69456.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 24-Jul-2018 07:58:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0076012-007
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Jul-2018 18:18:20 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 24-Jul-2018 09:13:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.504	1.504	0.000	88	37386	20.0	17.1	
2 Dichlorodifluoromethane	87	1.529	1.529	0.000	99	34065	20.0	20.0	
3 Chloromethane	52	1.675	1.675	0.000	99	32645	20.0	19.0	
5 Butadiene	54	1.735	1.735	0.000	79	80604	20.0	18.6	
4 Vinyl chloride	62	1.741	1.741	0.000	98	99108	20.0	19.3	
6 Bromomethane	94	1.997	1.997	0.000	99	68742	20.0	19.3	
7 Chloroethane	64	2.088	2.088	0.000	99	59867	20.0	19.5	
10 Pentane	72	2.179	2.179	0.000	96	24198	40.0	41.0	
9 Trichlorofluoromethane	101	2.204	2.204	0.000	91	105326	20.0	19.4	
8 Dichlorofluoromethane	67	2.252	2.252	0.000	98	136451	20.0	20.3	
12 Ethyl ether	59	2.417	2.417	0.000	61	42861	20.0	19.6	
13 2-Methyl-1,3-butadiene	53	2.423	2.423	0.000	97	52604	20.0	18.9	
11 Ethanol	46	2.538	2.538	0.000	98	8283	800.0	883.5	
17 1,1-Dichloroethene	96	2.593	2.593	0.000	97	56960	20.0	19.0	
14 1,2-Dichloro-1,1,2-trifluo	117	2.599	2.599	0.000	68	59270	20.0	19.3	
20 Carbon disulfide	76	2.624	2.624	0.000	99	196693	20.0	18.9	
15 1,1,2-Trichloro-1,2,2-trif	101	2.642	2.642	0.000	50	67860	20.0	20.2	
19 Iodomethane	142	2.715	2.715	0.000	97	97522	20.0	19.3	
23 Cyclopentene	67	2.830	2.830	0.000	96	156657	20.0	19.4	
16 Acrolein	56	2.861	2.861	0.000	91	14301	40.0	42.3	
21 Isopropyl alcohol	45	2.970	2.970	0.000	11	17031	200.0	195.2	
22 3-Chloro-1-propene	76	2.976	2.976	0.000	94	34307	20.0	18.5	
26 Methylene Chloride	84	3.062	3.062	0.000	92	68317	20.0	19.6	
18 Acetone	58	3.104	3.104	0.000	86	15550	100.0	95.6	
30 trans-1,2-Dichloroethene	96	3.189	3.189	0.000	92	66953	20.0	19.6	
24 Methyl acetate	74	3.189	3.189	0.000	47	13140	40.0	41.1	
32 Hexane	56	3.238	3.238	0.000	95	51445	20.0	19.6	
29 Methyl tert-butyl ether	73	3.275	3.275	0.000	94	155542	20.0	20.6	
* 27 TBA-d9 (IS)	65	3.281	3.281	0.000	99	144363	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.341	3.341	0.000	98	33446	200.0	201.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
25 Acetonitrile	41	3.494	3.494	0.000	100	46259	200.0	209.6	a
33 Isopropyl ether	45	3.579	3.579	0.000	95	216912	20.0	20.1	
36 2-Chloro-1,3-butadiene	88	3.676	3.676	0.000	89	57033	20.0	19.6	
34 1,1-Dichloroethane	63	3.706	3.706	0.000	100	115417	20.0	19.6	
31 Acrylonitrile	53	3.749	3.749	0.000	96	144096	200.0	213.7	
37 Tert-butyl ethyl ether	59	3.889	3.889	0.000	90	192488	20.0	20.6	
35 Vinyl acetate	86	3.907	3.907	0.000	99	15557	40.0	36.1	
40 cis-1,2-Dichloroethene	96	4.175	4.175	0.000	99	75667	20.0	19.6	
38 2,2-Dichloropropane	79	4.278	4.278	0.000	97	30628	20.0	20.0	
46 Chlorobromomethane	128	4.357	4.357	0.000	91	30442	20.0	19.9	
49 Cyclohexane	84	4.357	4.357	0.000	89	117670	20.0	19.1	
48 Chloroform	83	4.418	4.418	0.000	98	108064	20.0	19.7	
42 Ethyl acetate	70	4.522	4.522	0.000	99	8827	40.0	43.3	
43 Methyl acrylate	55	4.534	4.534	0.000	92	32187	20.0	19.7	a
52 Carbon tetrachloride	117	4.552	4.552	0.000	98	53869	20.0	17.6	
45 Tetrahydrofuran	72	4.564	4.564	0.000	69	10020	40.0	40.9	
$ 51 Dibromofluoromethane (Surr	113	4.595	4.595	0.000	96	121091	50.0	49.4	
50 1,1,1-Trichloroethane	97	4.619	4.619	0.000	94	93056	20.0	19.3	
* 39 2-Butanone-d5	46	4.655	4.655	0.000	0	165732	250.0	250.0	
41 2-Butanone (MEK)	72	4.704	4.704	0.000	99	23949	100.0	99.6	
53 1,1-Dichloropropene	75	4.722	4.722	0.000	97	84446	20.0	19.0	
54 Isooctane	57	4.820	4.820	0.000	99	167964	20.0	20.2	
61 n-Heptane	57	4.917	4.917	0.000	91	39210	20.0	19.5	
55 Benzene	78	4.966	4.966	0.000	95	273667	20.0	19.3	
44 Propionitrile	54	4.996	4.996	0.000	96	51431	200.0	207.2	
47 Methacrylonitrile	67	5.014	5.014	0.000	90	169934	200.0	206.4	
57 Tert-amyl methyl ether	73	5.075	5.075	0.000	98	174202	20.0	20.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	98	123984	50.0	50.4	
58 Isobutyl alcohol	43	5.173	5.173	0.000	49	26758	500.0	448.7	
60 1,2-Dichloroethane	62	5.173	5.173	0.000	97	67066	20.0	19.2	
* 62 Fluorobenzene	96	5.386	5.386	0.000	99	596240	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.416	0.000	97	73551	20.0	19.6	
65 Methylcyclohexane	83	5.544	5.544	0.000	95	119662	20.0	19.1	
66 Ethyl acrylate	55	5.550	5.550	0.000	78	89576	20.0	19.2	a
64 Trichloroethene	95	5.556	5.556	0.000	98	65011	20.0	19.6	
63 n-Butanol	56	5.915	5.915	0.000	90	14571	500.0	456.9	
71 Dibromomethane	93	6.012	6.012	0.000	97	29384	20.0	19.9	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	90	64270	20.0	20.3	
73 Dichlorobromomethane	83	6.195	6.195	0.000	99	57967	20.0	19.2	
69 Methyl methacrylate	100	6.383	6.383	0.000	90	23234	40.0	39.2	
* 68 1,4-Dioxane-d8	96	6.395	6.395	0.000	93	18265	1000.0	1000.0	
70 1,4-Dioxane	88	6.420	6.420	0.000	90	8091	400.0	383.2	
72 n-Propyl acetate	43	6.547	6.547	0.000	98	49161	20.0	20.0	
75 2-Chloroethyl vinyl ether	63	6.876	6.876	0.000	98	28206	20.0	19.7	
77 cis-1,3-Dichloropropene	75	6.937	6.937	0.000	91	81426	20.0	19.5	
$ 79 Toluene-d8 (Surr)	98	7.156	7.156	0.000	100	539424	50.0	49.1	
80 Toluene	91	7.223	7.223	0.000	92	297094	20.0	19.9	
76 Epichlorohydrin	57	7.253	7.253	0.000	99	63853	400.0	398.6	a
74 2-Nitropropane	41	7.545	7.545	0.000	73	5498	40.0	37.1	
84 Tetrachloroethene	166	7.703	7.703	0.000	97	60179	20.0	19.5	
78 4-Methyl-2-pentanone (MIBK	43	7.728	7.728	0.000	96	186110	100.0	103.1	
81 trans-1,3-Dichloropropene	75	7.770	7.770	0.000	92	65465	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.971	7.971	0.000	93	37416	20.0	19.6	
82 Ethyl methacrylate	69	7.995	7.995	0.000	91	54282	20.0	19.5	
88 Chlorodibromomethane	129	8.202	8.202	0.000	97	27121	20.0	19.0	
85 1,3-Dichloropropane	76	8.336	8.336	0.000	93	82348	20.0	20.0	
89 Ethylene Dibromide	107	8.506	8.506	0.000	98	41531	20.0	20.4	
87 n-Butyl acetate	43	8.744	8.744	0.000	98	54038	20.0	18.4	
86 2-Hexanone	58	8.853	8.853	0.000	94	66557	100.0	103.8	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	87	453545	50.0	50.0	
91 Chlorobenzene	112	9.176	9.176	0.000	97	186253	20.0	20.0	
92 Ethylbenzene	106	9.224	9.224	0.000	97	103181	20.0	20.2	
93 1,1,1,2-Tetrachloroethane	131	9.267	9.267	0.000	89	42553	20.0	18.3	
94 m-Xylene & p-Xylene	106	9.395	9.395	0.000	0	123751	20.0	19.8	
96 o-Xylene	106	9.857	9.857	0.000	95	123223	20.0	20.1	
97 Styrene	104	9.918	9.918	0.000	97	198970	20.0	20.4	
99 Bromoform	173	9.936	9.936	0.000	96	11169	20.0	17.9	
95 n-Butyl acrylate	73	10.082	10.082	0.000	97	29357	20.0	18.1	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	324554	20.0	19.9	
98 Amyl acetate (mixed isomer	43	10.338	10.338	0.000	93	72274	20.0	19.4	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	149062	50.0	51.3	
102 Bromobenzene	156	10.544	10.544	0.000	98	71712	20.0	20.1	
104 N-Propylbenzene	91	10.587	10.587	0.000	99	372515	20.0	20.1	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	98	49662	20.0	21.0	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	318601	20.0	20.3	
107 2-Chlorotoluene	91	10.721	10.721	0.000	95	260044	20.0	20.3	
109 1,3,5-Trimethylbenzene	105	10.776	10.776	0.000	94	267917	20.0	20.0	
105 1,2,3-Trichloropropane	110	10.782	10.782	0.000	95	15429	20.0	19.2	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	74	10767	20.0	19.2	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	234201	20.0	20.7	
112 tert-Butylbenzene	119	11.055	11.055	0.000	95	214012	20.0	19.2	
111 Butyl Methacrylate	87	11.055	11.055	0.000	91	69146	20.0	19.2	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	97	283720	20.0	20.3	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	334428	20.0	20.1	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	286840	20.0	20.0	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	97	143768	20.0	19.9	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.457	0.000	94	227684	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	94	148418	20.0	20.3	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	98	303063	20.0	20.7	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	285066	20.0	20.3	
121 p-Diethylbenzene	119	11.646	11.646	0.000	96	168969	20.0	21.4	
119 Benzyl chloride	126	11.688	11.688	0.000	88	11048	20.0	18.1	
122 n-Butylbenzene	92	11.688	11.688	0.000	97	143928	20.0	20.4	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	95	133964	20.0	20.0	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	97	272297	20.0	19.9	
125 1,2-Dibromo-3-Chloropropan	155	12.455	12.455	0.000	86	4588	20.0	18.4	a
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	97	99727	20.0	20.0	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	89	24399	20.0	18.1	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	93	89925	20.0	19.8	
129 Naphthalene	128	13.221	13.221	0.000	99	181714	20.0	19.6	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	95	77796	20.0	19.8	
S 131 1,2-Dichloroethene, Total	100				0		40.0	39.2	
S 132 Xylenes, Total	100				0		40.0	39.9	
S 133 Total BTEX	1				0		100.0	99.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
Ethanol mix_00017	Amount Added:	2.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	2.00	Units: uL	
MIX I Hi_00096	Amount Added:	2.00	Units: uL	
GAS Hi_00264	Amount Added:	2.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 25-Jul-2018 18:18:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69456.D

Injection Date: 24-Jul-2018 07:58:30 Instrument ID: CVOAMS11 Operator ID:

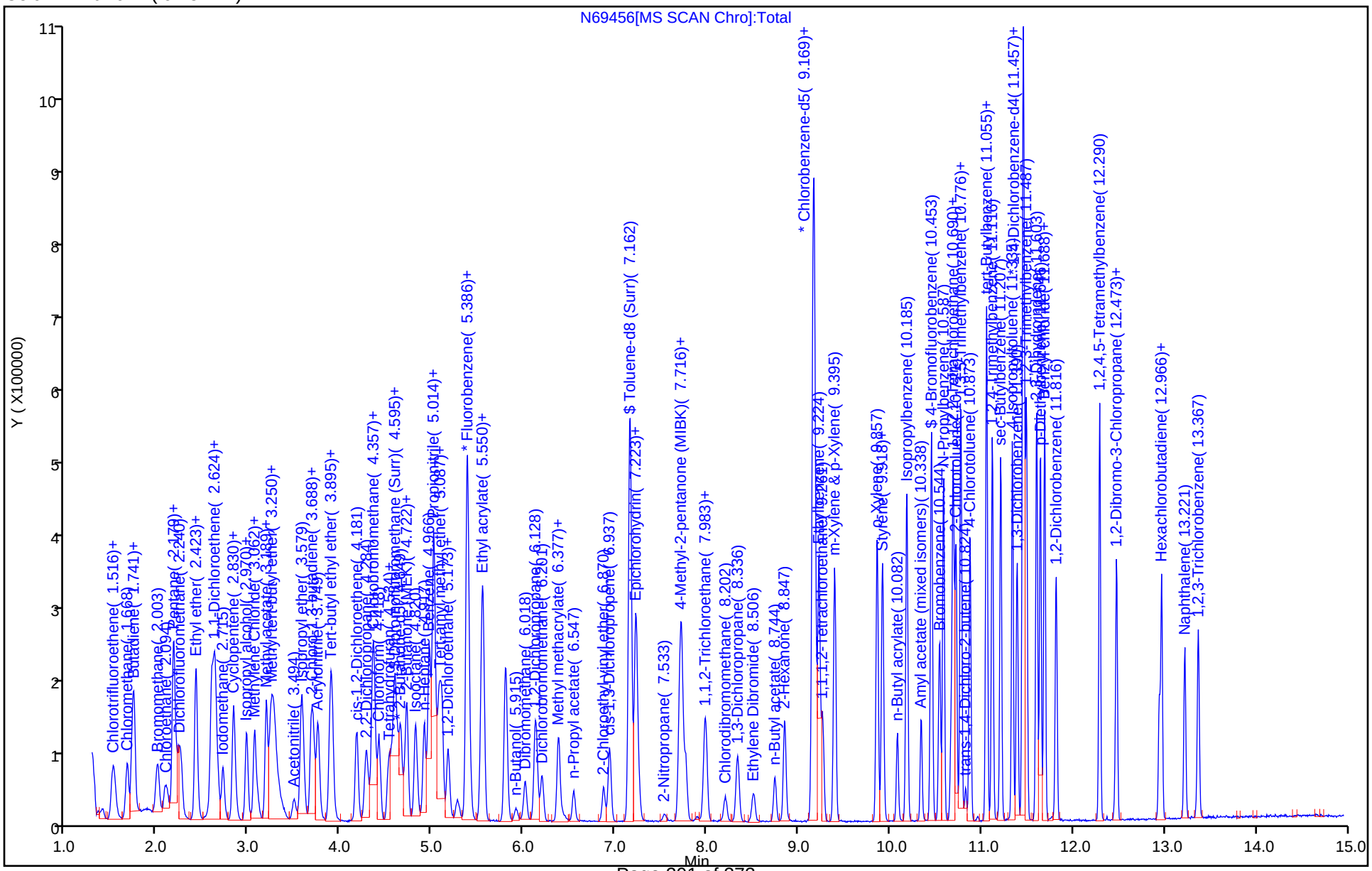
Lims ID: STD20 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

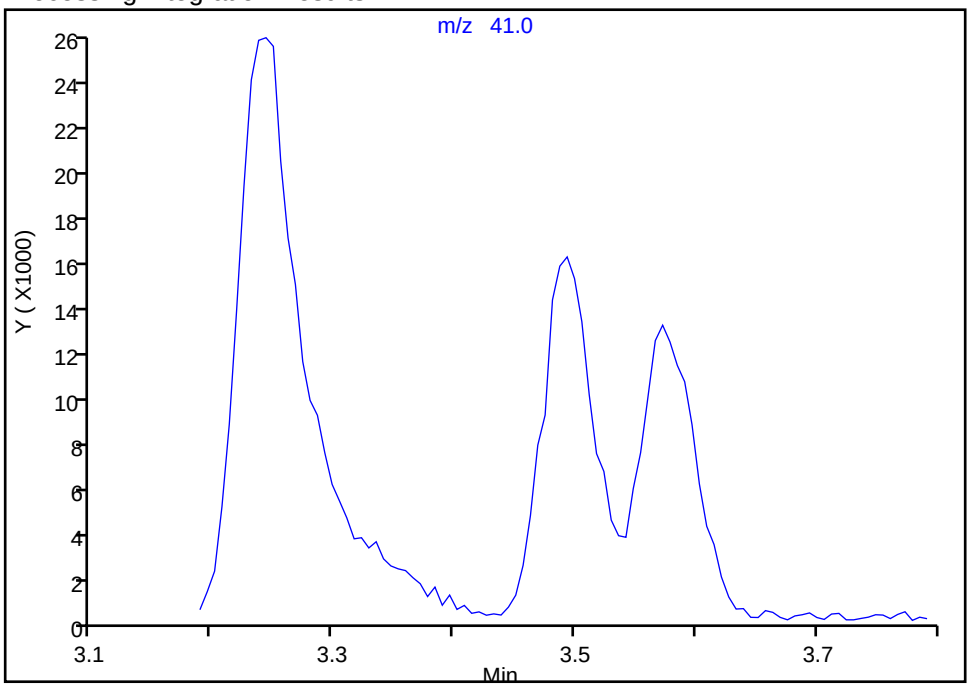
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69456.D
Injection Date: 24-Jul-2018 07:58:30 Instrument ID: CVOAMS11
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

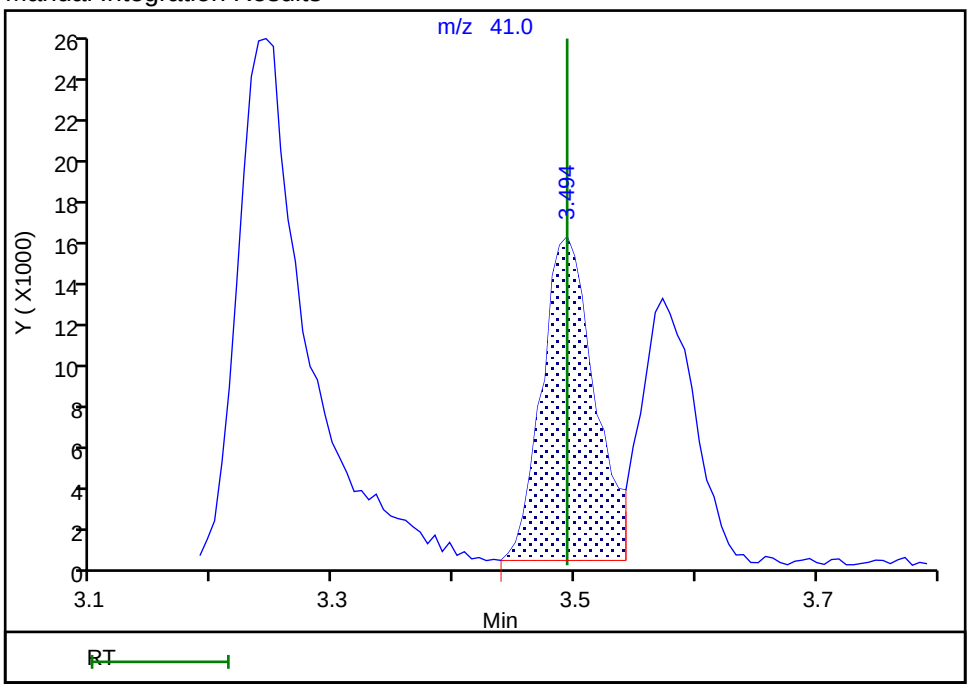
Not Detected
Expected RT: 3.49

Processing Integration Results



Manual Integration Results

RT: 3.49
Area: 46259
Amount: 209.6360
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 16:45:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

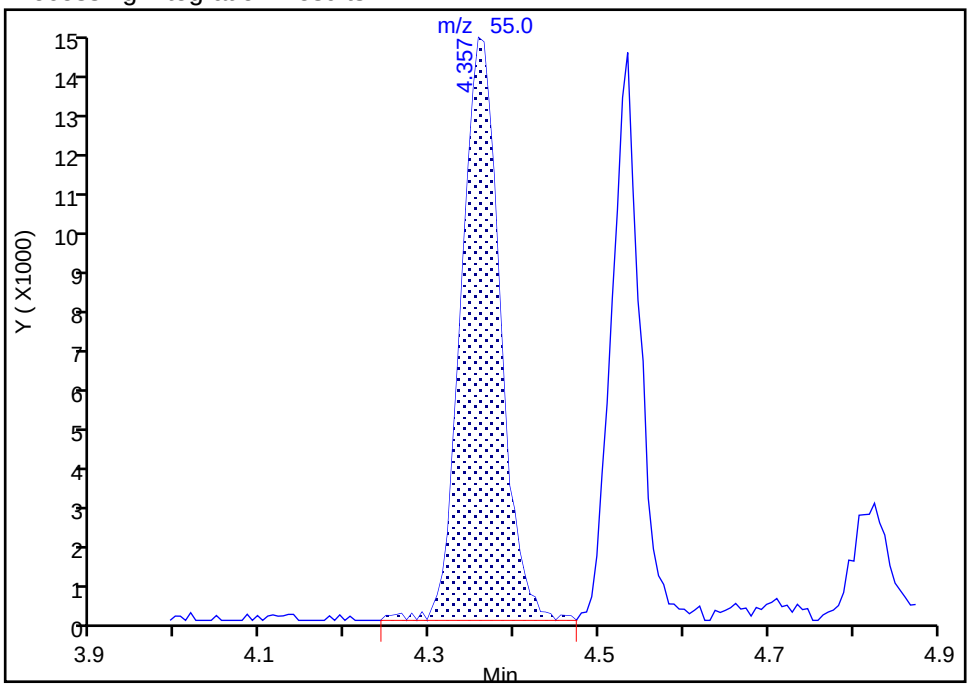
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69456.D
Injection Date: 24-Jul-2018 07:58:30 Instrument ID: CVOAMS11
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

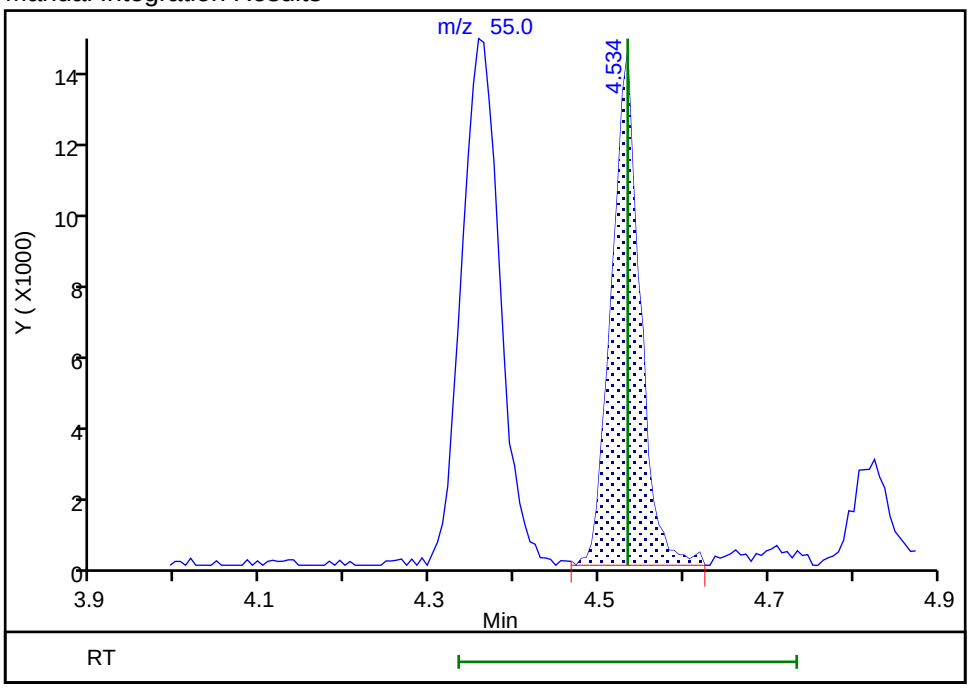
Processing Integration Results

RT: 4.36
Area: 45010
Amount: 18.745385
Amount Units: ug/l



Manual Integration Results

RT: 4.53
Area: 32187
Amount: 19.653321
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 16:45:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

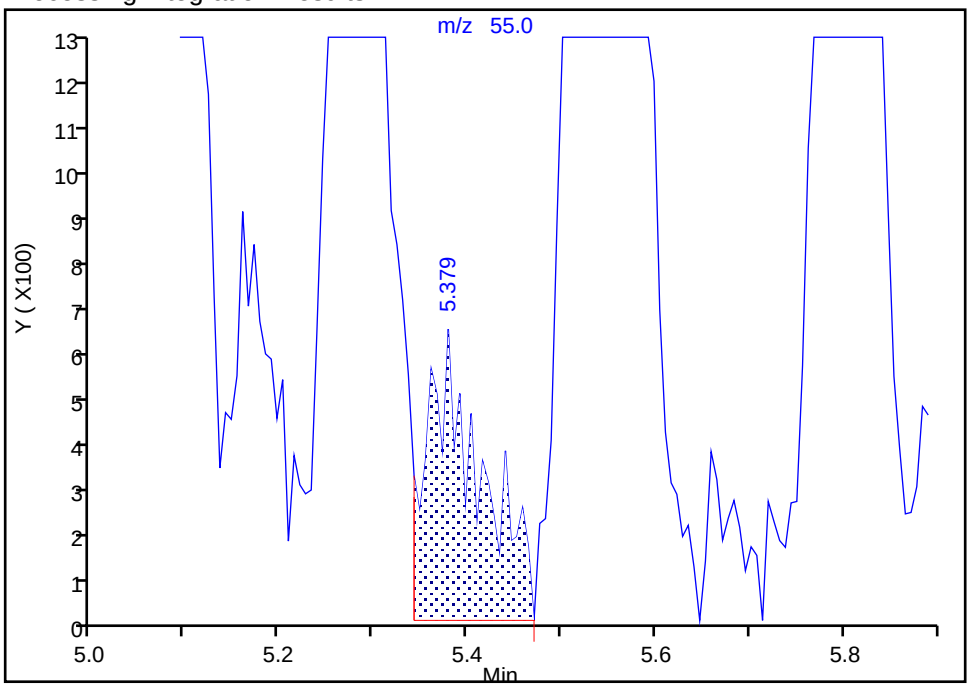
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69456.D
Injection Date: 24-Jul-2018 07:58:30 Instrument ID: CVOAMS11
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

66 Ethyl acrylate, CAS: 140-88-5

Signal: 1

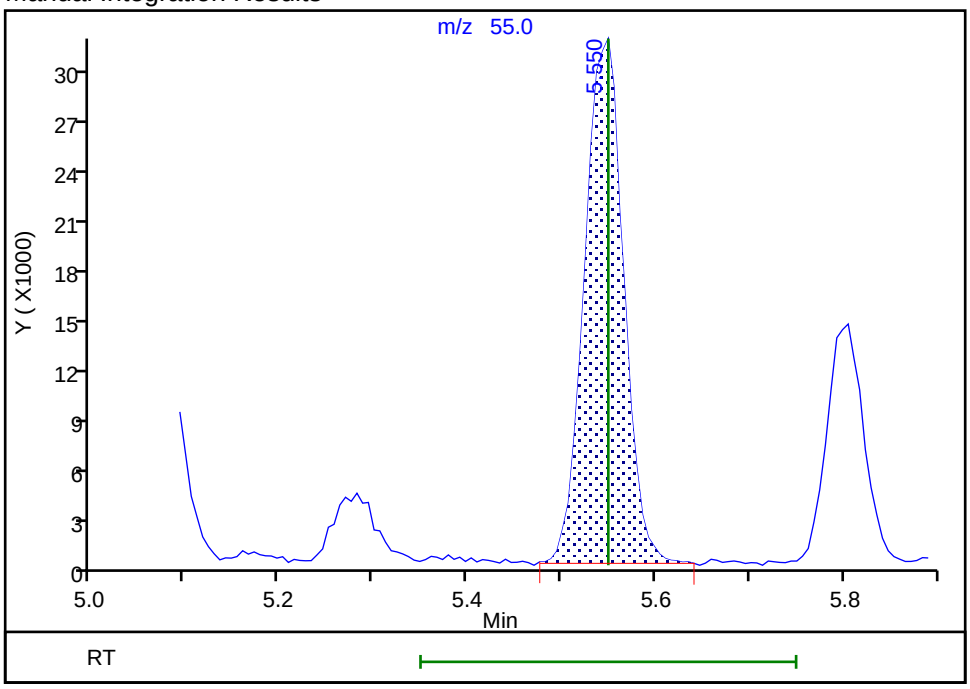
Processing Integration Results

RT: 5.38
Area: 2389
Amount: 2.997252
Amount Units: ug/l



Manual Integration Results

RT: 5.55
Area: 89576
Amount: 19.245675
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 16:46:19
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

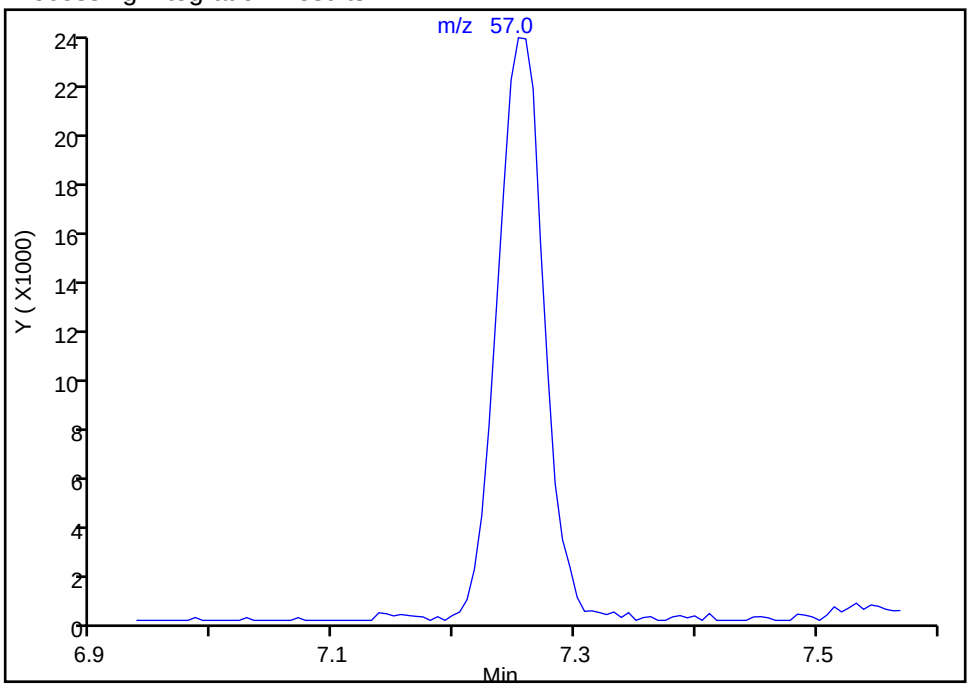
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69456.D
Injection Date: 24-Jul-2018 07:58:30 Instrument ID: CVOAMS11
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

76 Epichlorohydrin, CAS: 106-89-8

Signal: 1

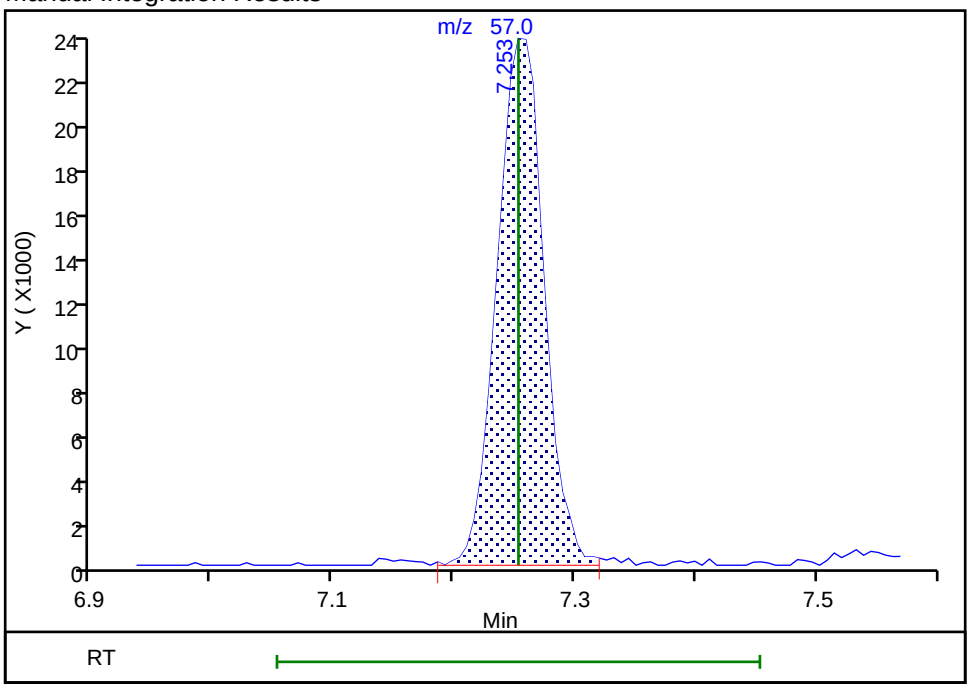
Not Detected
Expected RT: 7.25

Processing Integration Results



Manual Integration Results

RT: 7.25
Area: 63853
Amount: 398.6017
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 16:46:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

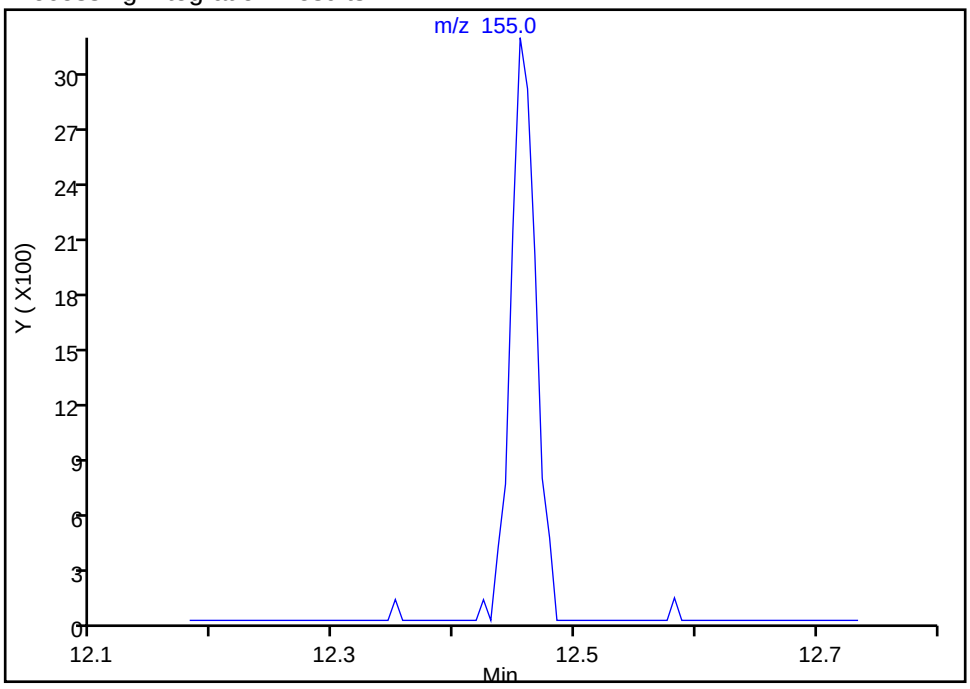
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69456.D
Injection Date: 24-Jul-2018 07:58:30 Instrument ID: CVOAMS11
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

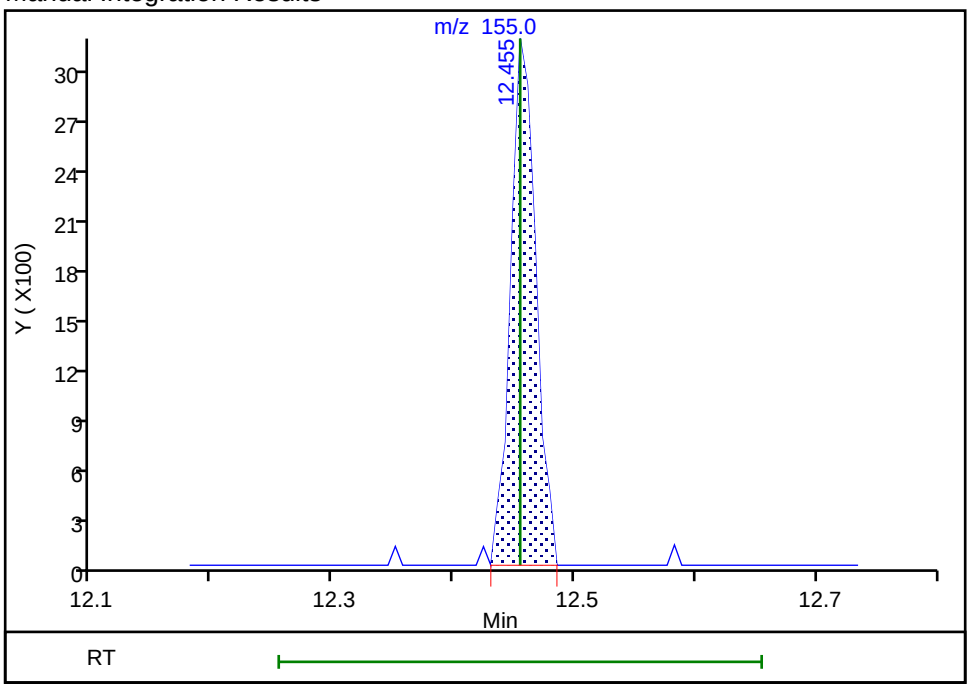
Not Detected
Expected RT: 12.45

Processing Integration Results



Manual Integration Results

RT: 12.45
Area: 4588
Amount: 18.379548
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 16:44:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69457.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jul-2018 08:20:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0076012-008
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Jul-2018 18:18:47 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 24-Jul-2018 09:15:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.516	1.504	0.012	89	132134	50.0	59.1	
2 Dichlorodifluoromethane	87	1.535	1.529	0.006	99	92042	50.0	52.8	
3 Chloromethane	52	1.681	1.675	0.006	99	92124	50.0	51.7	
5 Butadiene	54	1.748	1.735	0.013	94	230431	50.0	51.8	
4 Vinyl chloride	62	1.754	1.741	0.013	98	281517	50.0	53.5	
6 Bromomethane	94	2.009	1.997	0.012	99	186880	50.0	51.3	
7 Chloroethane	64	2.100	2.088	0.012	99	161993	50.0	51.4	
10 Pentane	72	2.186	2.179	0.007	96	67190	100.0	104.5	
9 Trichlorofluoromethane	101	2.216	2.204	0.012	86	287796	50.0	51.7	
8 Dichlorofluoromethane	67	2.259	2.252	0.007	99	351369	50.0	51.0	
12 Ethyl ether	59	2.429	2.417	0.012	61	116647	50.0	52.1	
13 2-Methyl-1,3-butadiene	53	2.429	2.423	0.006	96	141467	50.0	49.6	
11 Ethanol	46	2.551	2.538	0.013	97	20757	2000.0	2033.8	
17 1,1-Dichloroethene	96	2.599	2.593	0.006	98	160803	50.0	52.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.599	2.599	0.000	88	159730	50.0	50.7	
20 Carbon disulfide	76	2.636	2.624	0.012	99	563735	50.0	52.9	
15 1,1,2-Trichloro-1,2,2-trif	101	2.654	2.642	0.012	96	182121	50.0	53.0	
19 Iodomethane	142	2.721	2.715	0.006	97	266412	50.0	51.3	
23 Cyclopentene	67	2.843	2.830	0.013	96	405407	50.0	49.0	
16 Acrolein	56	2.873	2.861	0.012	95	34169	100.0	90.7	
21 Isopropyl alcohol	45	2.982	2.970	0.012	26	44644	500.0	477.0	
22 3-Chloro-1-propene	76	2.982	2.976	0.006	94	97195	50.0	51.2	
26 Methylene Chloride	84	3.068	3.062	0.006	91	178817	50.0	50.1	
18 Acetone	58	3.098	3.104	-0.006	87	41705	250.0	246.8	
24 Methyl acetate	74	3.195	3.189	0.006	40	30842	100.0	88.6	
30 trans-1,2-Dichloroethene	96	3.195	3.189	0.006	94	176861	50.0	50.4	
32 Hexane	56	3.244	3.238	0.006	94	145957	50.0	54.2	
29 Methyl tert-butyl ether	73	3.274	3.275	0.000	86	395021	50.0	51.0	
* 27 TBA-d9 (IS)	65	3.293	3.281	0.012	94	157158	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.341	3.341	0.000	98	82421	500.0	456.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
25 Acetonitrile	41	3.493	3.494	-0.001	99	115873	500.0	482.4	a
33 Isopropyl ether	45	3.585	3.579	0.006	96	561524	50.0	50.8	
36 2-Chloro-1,3-butadiene	88	3.688	3.676	0.012	89	146259	50.0	49.1	
34 1,1-Dichloroethane	63	3.713	3.706	0.006	100	301168	50.0	49.8	
31 Acrylonitrile	53	3.755	3.749	0.006	93	373657	500.0	509.0	
37 Tert-butyl ethyl ether	59	3.895	3.889	0.006	89	496980	50.0	52.0	
35 Vinyl acetate	86	3.907	3.907	0.000	99	44562	100.0	96.9	
40 cis-1,2-Dichloroethene	96	4.187	4.175	0.012	99	192836	50.0	48.9	
38 2,2-Dichloropropane	79	4.290	4.278	0.012	97	78544	50.0	49.4	
49 Cyclohexane	84	4.363	4.357	0.006	90	317684	50.0	50.4	
46 Chlorobromomethane	128	4.363	4.357	0.006	90	78928	50.0	50.4	
48 Chloroform	83	4.424	4.418	0.006	99	278861	50.0	49.6	
42 Ethyl acetate	70	4.522	4.522	0.000	100	23032	100.0	108.8	
43 Methyl acrylate	55	4.540	4.534	0.006	90	81207	50.0	48.4	
52 Carbon tetrachloride	117	4.558	4.552	0.006	98	154075	50.0	49.3	
45 Tetrahydrofuran	72	4.570	4.564	0.006	63	24620	100.0	96.9	
$ 51 Dibromofluoromethane (Surr	113	4.595	4.595	0.000	96	126193	50.0	50.3	
50 1,1,1-Trichloroethane	97	4.625	4.619	0.006	95	248489	50.0	50.4	
* 39 2-Butanone-d5	46	4.662	4.655	0.007	0	172118	250.0	250.0	
41 2-Butanone (MEK)	72	4.704	4.704	0.000	99	61931	250.0	248.1	
53 1,1-Dichloropropene	75	4.728	4.722	0.006	98	224363	50.0	49.3	
54 Isooctane	57	4.826	4.820	0.006	99	446353	50.0	52.3	
61 n-Heptane	57	4.917	4.917	0.000	91	115742	50.0	56.2	
55 Benzene	78	4.972	4.966	0.006	93	699012	50.0	49.5	
44 Propionitrile	54	5.008	4.996	0.012	98	133267	500.0	493.1	
47 Methacrylonitrile	67	5.027	5.014	0.013	90	425067	500.0	503.8	
57 Tert-amyl methyl ether	73	5.081	5.075	0.006	99	444300	50.0	51.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.112	5.106	0.006	98	124690	50.0	49.4	
60 1,2-Dichloroethane	62	5.179	5.173	0.006	97	167622	50.0	46.7	
58 Isobutyl alcohol	43	5.179	5.173	0.006	52	77165	1250.0	1188.7	
* 62 Fluorobenzene	96	5.385	5.386	-0.001	99	611044	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.416	0.000	98	186649	50.0	48.6	
65 Methylcyclohexane	83	5.550	5.544	0.006	95	339098	50.0	52.7	
66 Ethyl acrylate	55	5.544	5.550	-0.006	89	252610	50.0	53.0	
64 Trichloroethene	95	5.562	5.556	0.006	97	164739	50.0	48.4	
63 n-Butanol	56	5.915	5.915	0.000	89	39369	1250.0	1133.9	
71 Dibromomethane	93	6.018	6.012	0.006	97	76628	50.0	50.7	
67 1,2-Dichloropropane	63	6.134	6.128	0.006	90	161434	50.0	49.7	
73 Dichlorobromomethane	83	6.207	6.195	0.012	99	153996	50.0	49.8	
69 Methyl methacrylate	100	6.377	6.383	-0.006	88	60979	100.0	100.4	
* 68 1,4-Dioxane-d8	96	6.395	6.395	0.000	92	18628	1000.0	1000.0	
70 1,4-Dioxane	88	6.432	6.420	0.012	85	21411	1000.0	994.4	
72 n-Propyl acetate	43	6.547	6.547	0.000	99	125629	50.0	49.8	
75 2-Chloroethyl vinyl ether	63	6.876	6.876	0.000	97	71266	50.0	48.5	
77 cis-1,3-Dichloropropene	75	6.943	6.937	0.006	92	213787	50.0	51.2	
$ 79 Toluene-d8 (Surr)	98	7.162	7.156	0.006	99	549625	50.0	50.2	
80 Toluene	91	7.229	7.223	0.006	93	729468	50.0	49.1	
76 Epichlorohydrin	57	7.253	7.253	0.000	99	165721	1000.0	992.0	
74 2-Nitropropane	41	7.533	7.545	-0.012	68	14497	100.0	89.8	
84 Tetrachloroethene	166	7.709	7.703	0.006	96	151950	50.0	49.3	
78 4-Methyl-2-pentanone (MIBK	43	7.728	7.728	0.000	96	472980	250.0	252.3	
81 trans-1,3-Dichloropropene	75	7.770	7.770	0.000	97	173350	50.0	52.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.977	7.971	0.006	94	93235	50.0	49.0	
82 Ethyl methacrylate	69	7.995	7.995	0.000	89	146649	50.0	51.4	
88 Chlorodibromomethane	129	8.202	8.202	0.000	99	75277	50.0	52.8	
85 1,3-Dichloropropane	76	8.336	8.336	0.000	94	202303	50.0	49.3	
89 Ethylene Dibromide	107	8.512	8.506	0.006	99	103252	50.0	50.8	
87 n-Butyl acetate	43	8.744	8.744	0.000	99	146740	50.0	50.0	
86 2-Hexanone	58	8.847	8.853	-0.006	96	172918	250.0	259.7	
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	85	452449	50.0	50.0	
91 Chlorobenzene	112	9.182	9.176	0.006	97	463039	50.0	49.8	
92 Ethylbenzene	106	9.224	9.224	0.000	97	259004	50.0	50.9	
93 1,1,1,2-Tetrachloroethane	131	9.267	9.267	0.000	92	114730	50.0	49.5	
94 m-Xylene & p-Xylene	106	9.395	9.395	0.000	0	314957	50.0	50.6	
96 o-Xylene	106	9.863	9.857	0.006	95	319634	50.0	52.2	
97 Styrene	104	9.918	9.918	0.000	96	512303	50.0	52.5	
99 Bromoform	173	9.930	9.936	-0.006	95	31584	50.0	50.5	
95 n-Butyl acrylate	73	10.082	10.082	0.000	97	81627	50.0	50.4	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	845903	50.0	52.0	
98 Amyl acetate (mixed isomer	43	10.338	10.338	0.000	92	192795	50.0	51.6	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	85	145966	50.0	50.3	
102 Bromobenzene	156	10.544	10.544	0.000	98	177452	50.0	49.7	
104 N-Propylbenzene	91	10.587	10.587	0.000	99	965975	50.0	52.0	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	98	121861	50.0	51.4	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	801612	50.0	51.1	
107 2-Chlorotoluene	91	10.721	10.721	0.000	96	663352	50.0	51.7	
109 1,3,5-Trimethylbenzene	105	10.776	10.776	0.000	94	699566	50.0	52.1	
105 1,2,3-Trichloropropane	110	10.782	10.782	0.000	96	38425	50.0	47.7	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	78	27033	50.0	47.5	
110 4-Chlorotoluene	91	10.873	10.873	0.000	98	576335	50.0	50.8	
111 Butyl Methacrylate	87	11.055	11.055	0.000	90	198089	50.0	53.2	
112 tert-Butylbenzene	119	11.055	11.055	0.000	93	582386	50.0	52.1	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	97	729192	50.0	52.1	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	875100	50.0	52.5	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	771617	50.0	53.7	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	96	361442	50.0	49.9	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.457	0.000	93	228106	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	95	363672	50.0	49.6	
134 1,2,3-Trimethylbenzene	105	11.493	11.487	0.006	98	758421	50.0	51.6	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	727721	50.0	51.8	
121 p-Diethylbenzene	119	11.645	11.646	-0.001	96	400364	50.0	50.6	
122 n-Butylbenzene	92	11.688	11.688	0.000	96	380565	50.0	53.9	
119 Benzyl chloride	126	11.682	11.688	-0.006	97	33493	50.0	51.3	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	96	332917	50.0	49.7	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	97	732353	50.0	53.4	
125 1,2-Dibromo-3-Chloropropan	155	12.461	12.455	0.006	90	13051	50.0	49.7	
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	97	254659	50.0	50.9	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	90	68572	50.0	50.8	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	94	233257	50.0	51.3	
129 Naphthalene	128	13.221	13.221	0.000	99	486202	50.0	52.5	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	96	202037	50.0	51.4	
S 131 1,2-Dichloroethene, Total	100				0		100.0	99.3	
S 132 Xylenes, Total	100				0		100.0	102.8	
S 133 Total BTEX	1				0		250.0	252.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00079	Amount Added:	10.00	Units: uL	
Ethanol mix_00017	Amount Added:	5.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	5.00	Units: uL	
MIX I Hi_00096	Amount Added:	5.00	Units: uL	
GAS Hi_00264	Amount Added:	5.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 25-Jul-2018 18:18:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69457.D

Injection Date: 24-Jul-2018 08:20:30 Instrument ID: CVOAMS11 Operator ID:

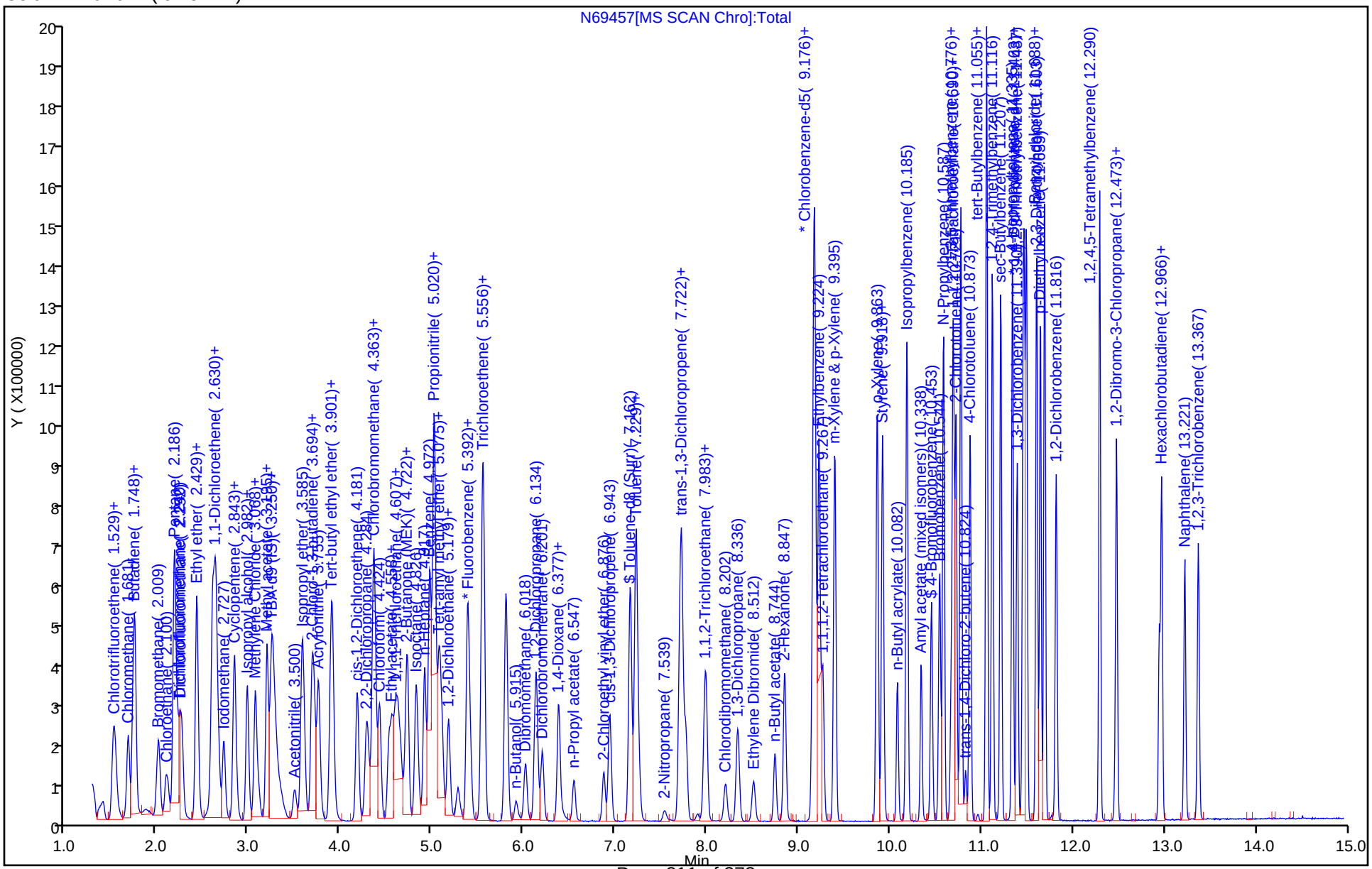
Lims ID: STD50 Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

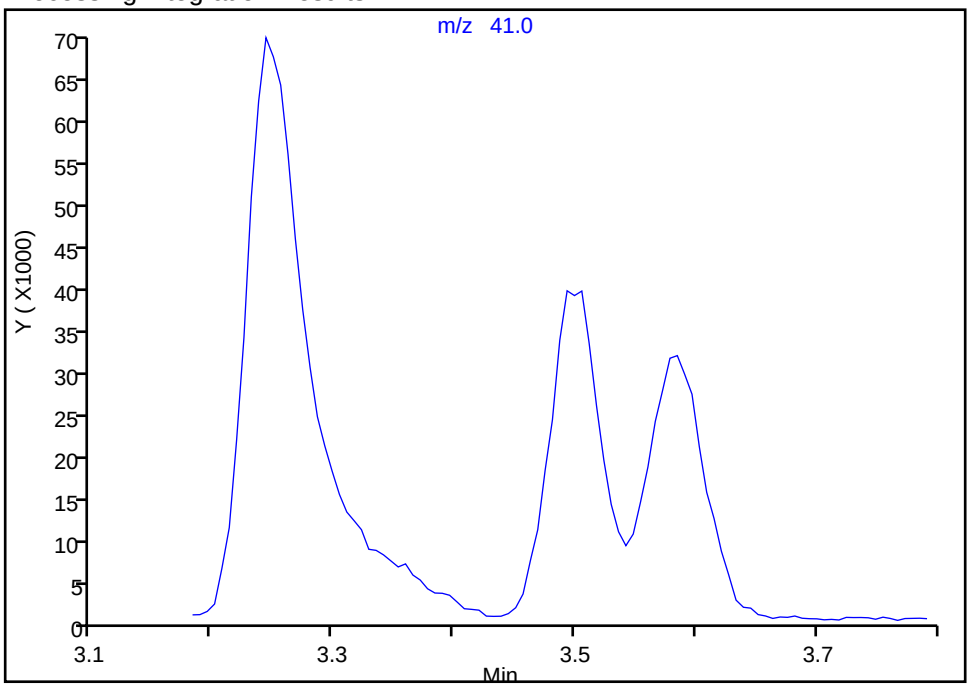
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69457.D
Injection Date: 24-Jul-2018 08:20:30 Instrument ID: CVOAMS11
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

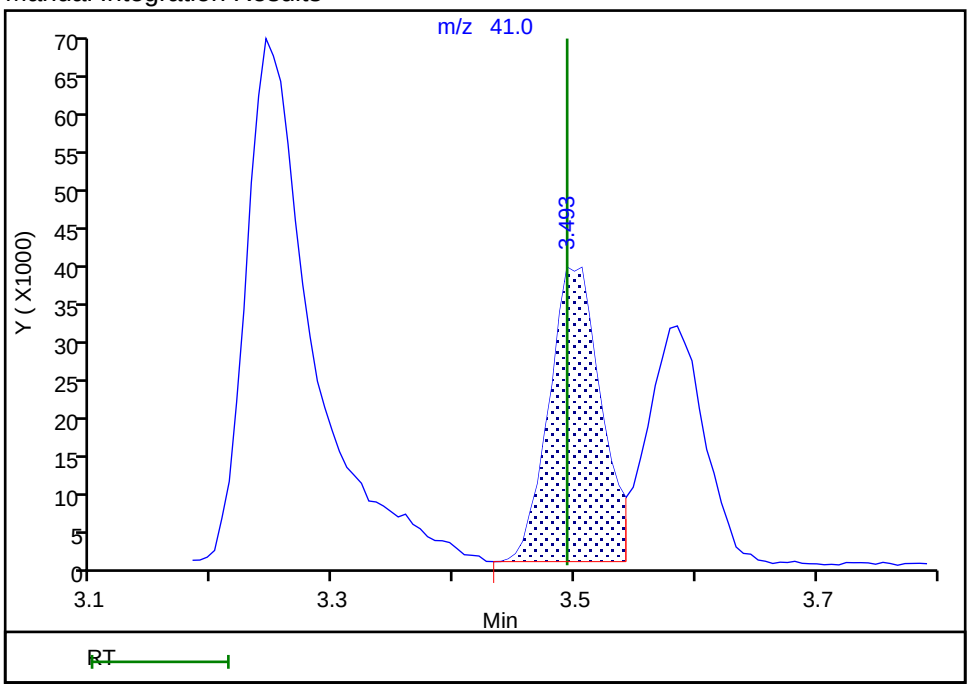
Not Detected
Expected RT: 3.49

Processing Integration Results



Manual Integration Results

RT: 3.49
Area: 115873
Amount: 482.3600
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:24:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69458.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Jul-2018 08:42:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0076012-009
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Jul-2018 18:19:08 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 24-Jul-2018 09:19:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.510	1.504	0.006	89	530143	200.0	234.6	
2 Dichlorodifluoromethane	87	1.528	1.529	-0.001	99	354524	200.0	201.1	
3 Chloromethane	52	1.674	1.675	-0.001	99	337029	200.0	185.7	
5 Butadiene	54	1.741	1.735	0.006	92	862748	200.0	191.7	
4 Vinyl chloride	62	1.747	1.741	0.006	98	1055665	200.0	198.5	
6 Bromomethane	94	2.003	1.997	0.006	99	692257	200.0	187.8	
7 Chloroethane	64	2.100	2.088	0.012	99	588449	200.0	184.6	
10 Pentane	72	2.179	2.179	0.000	97	282942	400.0	417.9	
9 Trichlorofluoromethane	101	2.216	2.204	0.012	98	1096996	200.0	194.8	
8 Dichlorofluoromethane	67	2.258	2.252	0.006	99	1289373	200.0	185.0	
12 Ethyl ether	59	2.423	2.417	0.006	60	458813	200.0	202.5	
13 2-Methyl-1,3-butadiene	53	2.423	2.423	0.000	97	588153	200.0	204.0	
11 Ethanol	46	2.538	2.538	0.000	98	102307	8000.0	9514.3	
17 1,1-Dichloroethene	96	2.599	2.593	0.006	97	630036	200.0	202.3	
14 1,2-Dichloro-1,1,2-trifluo	117	2.593	2.599	-0.006	92	638140	200.0	200.4	
20 Carbon disulfide	76	2.630	2.624	0.006	99	2268086	200.0	210.3	
15 1,1,2-Trichloro-1,2,2-trif	101	2.648	2.642	0.006	95	731456	200.0	210.5	
19 Iodomethane	142	2.721	2.715	0.006	97	1045307	200.0	199.2	
23 Cyclopentene	67	2.836	2.830	0.006	96	1708137	200.0	204.0	
16 Acrolein	56	2.867	2.861	0.006	94	76047	200.0	189.4	
21 Isopropyl alcohol	45	2.982	2.970	0.012	25	204053	2000.0	2086.0	
22 3-Chloro-1-propene	76	2.976	2.976	0.000	94	396033	200.0	206.2	
26 Methylene Chloride	84	3.068	3.062	0.006	90	695849	200.0	192.7	
18 Acetone	58	3.098	3.104	-0.006	87	161958	1000.0	940.3	
30 trans-1,2-Dichloroethene	96	3.195	3.189	0.006	94	703806	200.0	198.4	
24 Methyl acetate	74	3.195	3.189	0.006	42	126759	400.0	345.7	
32 Hexane	56	3.244	3.238	0.006	90	559915	200.0	205.5	
29 Methyl tert-butyl ether	73	3.274	3.275	0.000	89	1573296	200.0	200.7	
* 27 TBA-d9 (IS)	65	3.287	3.281	0.006	74	165581	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.341	3.341	0.000	91	374338	2000.0	1968.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
25 Acetonitrile	41	3.493	3.494	-0.001	99	460145	2000.0	1818.1	a
33 Isopropyl ether	45	3.579	3.579	0.000	96	2274764	200.0	203.6	
36 2-Chloro-1,3-butadiene	88	3.688	3.676	0.012	89	632202	200.0	209.7	
34 1,1-Dichloroethane	63	3.712	3.706	0.006	100	1202633	200.0	196.6	
31 Acrylonitrile	53	3.755	3.749	0.006	95	1471569	2000.0	1902.7	
37 Tert-butyl ethyl ether	59	3.895	3.889	0.006	90	1915223	200.0	198.1	
35 Vinyl acetate	86	3.913	3.907	0.006	99	195255	400.0	412.0	
40 cis-1,2-Dichloroethene	96	4.181	4.175	0.006	99	775581	200.0	194.3	
38 2,2-Dichloropropane	79	4.284	4.278	0.006	98	322848	200.0	199.3	
46 Chlorobromomethane	128	4.363	4.357	0.006	91	309006	200.0	195.1	
49 Cyclohexane	84	4.363	4.357	0.006	89	1300858	200.0	204.3	
48 Chloroform	83	4.424	4.418	0.006	99	1145491	200.0	201.6	
42 Ethyl acetate	70	4.515	4.522	-0.007	100	89316	400.0	413.9	
43 Methyl acrylate	55	4.534	4.534	0.000	99	334109	200.0	196.8	
52 Carbon tetrachloride	117	4.558	4.552	0.006	99	695462	200.0	219.8	
45 Tetrahydrofuran	72	4.564	4.564	0.000	94	104825	400.0	404.7	
$ 51 Dibromofluoromethane (Surr	113	4.595	4.595	0.000	96	130583	50.0	51.4	
50 1,1,1-Trichloroethane	97	4.625	4.619	0.006	96	1046465	200.0	209.8	
* 39 2-Butanone-d5	46	4.661	4.655	0.006	0	175415	250.0	250.0	
41 2-Butanone (MEK)	72	4.710	4.704	0.006	99	252547	1000.0	992.7	
53 1,1-Dichloropropene	75	4.728	4.722	0.006	98	903864	200.0	196.4	
54 Isooctane	57	4.832	4.820	0.012	99	2044491	200.0	236.8	
61 n-Heptane	57	4.917	4.917	0.000	90	447379	200.0	214.9	
55 Benzene	78	4.972	4.966	0.006	92	2825439	200.0	195.8	
44 Propionitrile	54	5.008	4.996	0.012	97	529417	2000.0	1859.1	
47 Methacrylonitrile	67	5.020	5.014	0.006	90	1709932	2000.0	2004.0	
57 Tert-amyl methyl ether	73	5.075	5.075	0.000	98	1760040	200.0	202.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	94	124846	50.0	48.9	
58 Isobutyl alcohol	43	5.179	5.173	0.006	57	371035	5000.0	5424.7	
60 1,2-Dichloroethane	62	5.179	5.173	0.006	97	660516	200.0	182.1	
* 62 Fluorobenzene	96	5.385	5.386	-0.001	99	617983	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.416	0.000	99	766156	200.0	197.4	
65 Methylcyclohexane	83	5.550	5.544	0.006	96	1372185	200.0	211.1	
66 Ethyl acrylate	55	5.550	5.550	0.000	77	996523	200.0	206.6	
64 Trichloroethene	95	5.556	5.556	0.000	97	655413	200.0	190.5	
63 n-Butanol	56	5.915	5.915	0.000	89	201201	5000.0	5500.0	
71 Dibromomethane	93	6.018	6.012	0.006	98	299389	200.0	195.9	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	93	649045	200.0	197.8	
73 Dichlorobromomethane	83	6.201	6.195	0.006	99	681821	200.0	218.0	
69 Methyl methacrylate	100	6.383	6.383	0.000	89	255266	400.0	415.5	
* 68 1,4-Dioxane-d8	96	6.395	6.395	0.000	92	19590	1000.0	1000.0	
70 1,4-Dioxane	88	6.426	6.420	0.006	92	90092	4000.0	3978.6	
72 n-Propyl acetate	43	6.547	6.547	0.000	98	531968	200.0	208.4	
75 2-Chloroethyl vinyl ether	63	6.876	6.876	0.000	97	299925	200.0	202.0	
77 cis-1,3-Dichloropropene	75	6.937	6.937	0.000	92	922752	200.0	216.2	
$ 79 Toluene-d8 (Surr)	98	7.162	7.156	0.006	99	564698	50.0	50.4	
80 Toluene	91	7.229	7.223	0.006	93	2947165	200.0	193.9	
76 Epichlorohydrin	57	7.253	7.253	0.000	99	698761	4000.0	4095.7	
74 2-Nitropropane	41	7.539	7.545	-0.006	61	65784	400.0	386.7	
84 Tetrachloroethene	166	7.703	7.703	0.000	96	619451	200.0	196.6	
78 4-Methyl-2-pentanone (MIBK	43	7.721	7.728	-0.007	96	1957354	1000.0	1024.5	
81 trans-1,3-Dichloropropene	75	7.770	7.770	0.000	96	759952	200.0	223.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.977	7.971	0.006	95	375738	200.0	193.2	
82 Ethyl methacrylate	69	7.995	7.995	0.000	88	628907	200.0	217.9	
88 Chlorodibromomethane	129	8.202	8.202	0.000	98	368346	200.0	252.8	
85 1,3-Dichloropropane	76	8.336	8.336	0.000	93	822160	200.0	195.8	
89 Ethylene Dibromide	107	8.506	8.506	0.000	98	422129	200.0	203.3	
87 n-Butyl acetate	43	8.744	8.744	0.000	99	628871	200.0	209.4	
86 2-Hexanone	58	8.847	8.853	-0.006	95	724433	1000.0	1067.5	
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	86	462611	50.0	50.0	
91 Chlorobenzene	112	9.182	9.176	0.006	97	1883605	200.0	198.1	
92 Ethylbenzene	106	9.224	9.224	0.000	97	1037778	200.0	199.6	
93 1,1,1,2-Tetrachloroethane	131	9.267	9.267	0.000	94	540684	200.0	228.1	
94 m-Xylene & p-Xylene	106	9.394	9.395	-0.001	0	1269044	200.0	199.4	
96 o-Xylene	106	9.863	9.857	0.006	95	1285683	200.0	205.2	
97 Styrene	104	9.918	9.918	0.000	96	2077360	200.0	208.4	
99 Bromoform	173	9.936	9.936	0.000	95	157807	200.0	258.7	
95 n-Butyl acrylate	73	10.082	10.082	0.000	98	369211	200.0	222.9	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	3412005	200.0	205.2	
98 Amyl acetate (mixed isomer	43	10.337	10.338	-0.001	92	847885	200.0	233.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	144897	50.0	48.9	
102 Bromobenzene	156	10.544	10.544	0.000	99	691037	200.0	198.4	
104 N-Propylbenzene	91	10.587	10.587	0.000	99	3781005	200.0	208.7	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	98	497632	200.0	215.2	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	3206952	200.0	209.7	
107 2-Chlorotoluene	91	10.721	10.721	0.000	96	2535873	200.0	202.6	
109 1,3,5-Trimethylbenzene	105	10.775	10.776	-0.001	94	2781229	200.0	212.7	
105 1,2,3-Trichloropropane	110	10.782	10.782	0.000	95	150753	200.0	191.8	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	88	115806	200.0	207.3	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	2244022	200.0	202.9	
112 tert-Butylbenzene	119	11.055	11.055	0.000	94	2387852	200.0	219.2	
111 Butyl Methacrylate	87	11.055	11.055	0.000	88	891972	200.0	220.9	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	97	2845304	200.0	208.5	
114 sec-Butylbenzene	105	11.213	11.207	0.006	99	3495546	200.0	215.0	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	3067267	200.0	219.0	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	96	1398391	200.0	197.9	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.457	0.000	93	222318	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	95	1411091	200.0	197.4	
134 1,2,3-Trimethylbenzene	105	11.493	11.487	0.006	98	2983306	200.0	208.4	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	2811870	200.0	205.2	
121 p-Diethylbenzene	119	11.645	11.646	-0.001	97	1600629	200.0	207.4	
119 Benzyl chloride	126	11.682	11.688	-0.006	99	172204	200.0	222.4	
122 n-Butylbenzene	92	11.688	11.688	0.000	96	1431646	200.0	208.2	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	96	1297766	200.0	198.8	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	97	2999435	200.0	224.3	
125 1,2-Dibromo-3-Chloropropan	155	12.461	12.455	0.006	96	61397	200.0	208.0	
126 1,3,5-Trichlorobenzene	180	12.479	12.473	0.006	97	997899	200.0	204.5	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	90	273488	200.0	207.9	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	94	907716	200.0	205.0	
129 Naphthalene	128	13.221	13.221	0.000	99	1961976	200.0	217.2	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	96	792194	200.0	206.6	
S 131 1,2-Dichloroethene, Total	100				0		400.0	392.7	
S 132 Xylenes, Total	100				0		400.0	404.6	
S 133 Total BTEX	1				0		1000.0	993.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00079	Amount Added:	20.00	Units: uL	
Ethanol mix_00017	Amount Added:	20.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	20.00	Units: uL	
MIX I Hi_00096	Amount Added:	20.00	Units: uL	
GAS Hi_00264	Amount Added:	20.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 25-Jul-2018 18:19:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69458.D

Injection Date: 24-Jul-2018 08:42:30 Instrument ID: CVOAMS11 Operator ID:

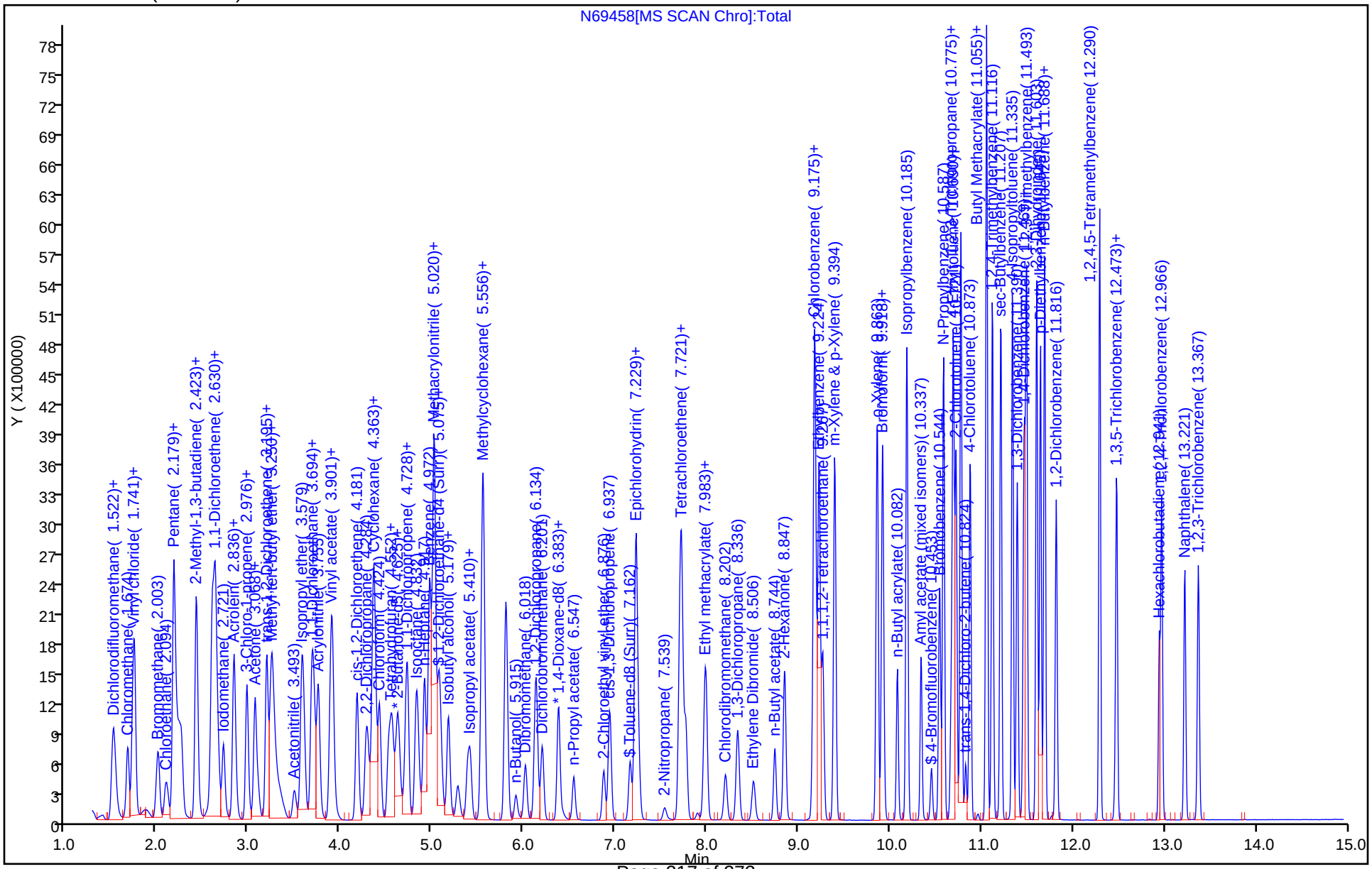
Lims ID: STD200 Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

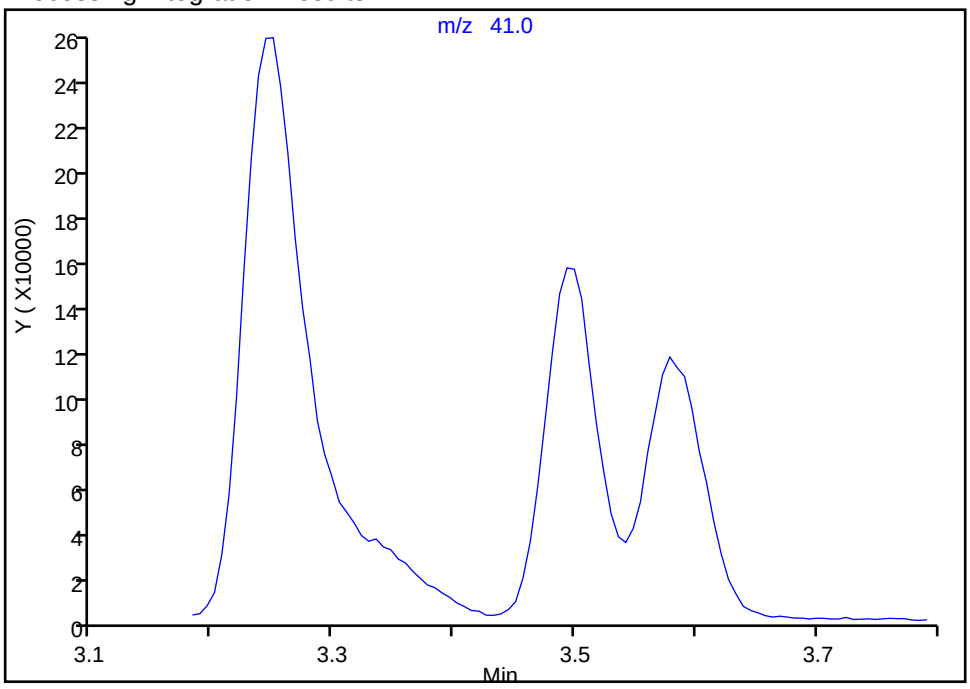
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69458.D
Injection Date: 24-Jul-2018 08:42:30 Instrument ID: CVOAMS11
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

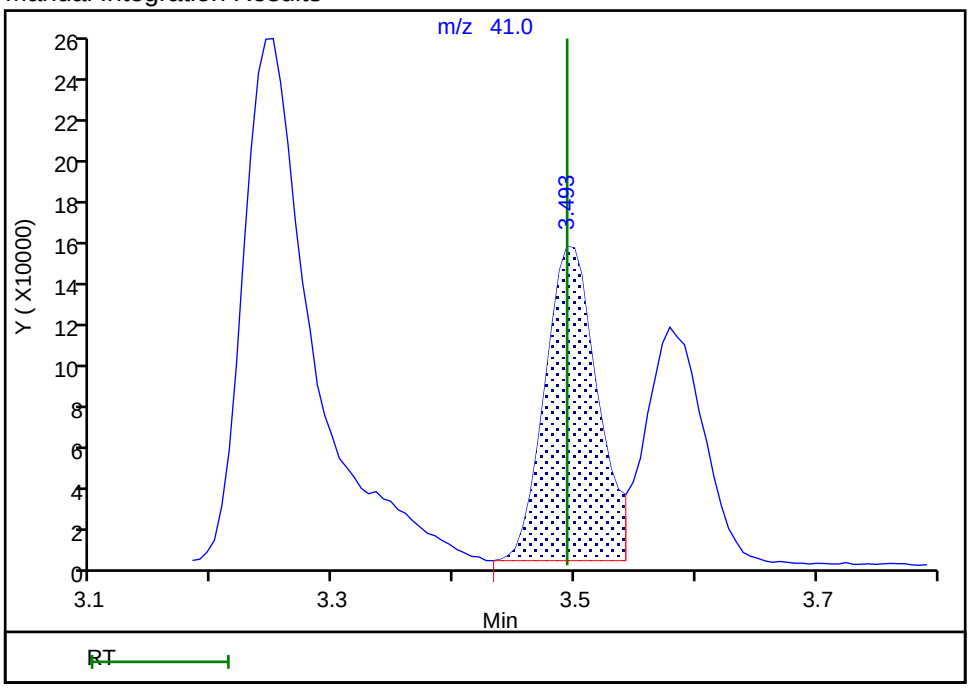
Not Detected
Expected RT: 3.49

Processing Integration Results



Manual Integration Results

RT: 3.49
Area: 460145
Amount: 1818.0665
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:26:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jul-2018 09:04:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0076012-010
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Jul-2018 18:19:27 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 24-Jul-2018 10:03:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.504	1.504	0.000	88	1386552	500.0	567.6	
2 Dichlorodifluoromethane	87	1.522	1.529	-0.007	99	950010	500.0	498.7	
3 Chloromethane	52	1.675	1.675	-0.001	99	892790	500.0	443.9	
5 Butadiene	54	1.741	1.735	0.006	92	2354027	500.0	484.0	
4 Vinyl chloride	62	1.741	1.741	0.000	98	2868176	500.0	499.1	
6 Bromomethane	94	2.003	1.997	0.006	99	1925535	500.0	483.3	
7 Chloroethane	64	2.094	2.088	0.006	98	1554543	500.0	451.1	
10 Pentane	72	2.173	2.179	-0.006	97	737465	1000.0	957.5	
9 Trichlorofluoromethane	101	2.216	2.204	0.012	99	3019262	500.0	496.0	
8 Dichlorofluoromethane	67	2.252	2.252	0.000	99	3423280	500.0	454.3	
12 Ethyl ether	59	2.423	2.417	0.006	73	1161399	500.0	474.2	
13 2-Methyl-1,3-butadiene	53	2.423	2.423	0.000	96	1513481	500.0	485.7	
11 Ethanol	46	2.544	2.538	0.006	97	277828	20000	22716	
17 1,1-Dichloroethene	96	2.593	2.593	0.000	97	1645075	500.0	488.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.599	2.599	0.000	86	1654574	500.0	480.7	
20 Carbon disulfide	76	2.630	2.624	0.006	99	5867594	500.0	503.3	
15 1,1,2-Trichloro-1,2,2-trif	101	2.642	2.642	0.000	96	1881512	500.0	500.9	
19 Iodomethane	142	2.715	2.715	0.000	97	2742186	500.0	483.4	
23 Cyclopentene	67	2.830	2.830	0.000	96	4365356	500.0	482.4	
16 Acrolein	56	2.861	2.861	0.000	94	153687	400.0	335.1	
21 Isopropyl alcohol	45	2.976	2.970	0.006	24	554866	5000.0	4993.9	
22 3-Chloro-1-propene	76	2.976	2.976	0.000	94	1023547	500.0	493.1	
26 Methylene Chloride	84	3.062	3.062	0.000	90	1775874	500.0	455.0	
18 Acetone	58	3.098	3.104	-0.006	87	406440	2500.0	2130.0	
24 Methyl acetate	74	3.189	3.189	0.000	45	335897	1000.0	805.4	
30 trans-1,2-Dichloroethene	96	3.189	3.189	0.000	93	1787235	500.0	466.2	
32 Hexane	56	3.244	3.238	0.006	90	1403265	500.0	476.4	
29 Methyl tert-butyl ether	73	3.268	3.275	-0.006	93	3878996	500.0	457.8	
* 27 TBA-d9 (IS)	65	3.281	3.281	0.000	71	188336	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.341	3.341	0.000	91	1021643	5000.0	4723.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
25 Acetonitrile	41	3.493	3.494	-0.001	99	1163776	5000.0	4042.6	a
33 Isopropyl ether	45	3.579	3.579	0.000	96	5712815	500.0	473.2	
36 2-Chloro-1,3-butadiene	88	3.682	3.676	0.006	89	1638921	500.0	502.9	
34 1,1-Dichloroethane	63	3.706	3.706	0.000	100	3021837	500.0	457.0	
31 Acrylonitrile	53	3.755	3.749	0.006	94	3718718	5000.0	4227.3	
37 Tert-butyl ethyl ether	59	3.895	3.889	0.006	90	4590997	500.0	439.3	
35 Vinyl acetate	86	3.907	3.907	0.000	99	578441	1000.0	1099.2	
40 cis-1,2-Dichloroethene	96	4.181	4.175	0.006	99	1993667	500.0	462.1	
38 2,2-Dichloropropane	79	4.290	4.278	0.012	95	828239	500.0	472.4	
49 Cyclohexane	84	4.363	4.357	0.006	88	3387782	500.0	492.1	
46 Chlorobromomethane	128	4.357	4.357	0.000	94	810160	500.0	473.1	
48 Chloroform	83	4.424	4.418	0.006	99	2888642	500.0	470.3	M
42 Ethyl acetate	70	4.522	4.522	0.000	100	239918	1000.0	1003.6	
43 Methyl acrylate	55	4.528	4.534	-0.006	99	897120	500.0	489.0	a
52 Carbon tetrachloride	117	4.558	4.552	0.006	98	2056528	500.0	601.4	
45 Tetrahydrofuran	72	4.564	4.564	0.000	92	275440	1000.0	959.8	
$ 51 Dibromofluoromethane (Surr	113	4.595	4.595	0.000	97	139055	50.0	50.7	
50 1,1,1-Trichloroethane	97	4.625	4.619	0.006	98	2735905	500.0	507.5	
* 39 2-Butanone-d5	46	4.662	4.655	0.007	0	194338	250.0	250.0	
41 2-Butanone (MEK)	72	4.704	4.704	0.000	99	660381	2500.0	2343.0	
53 1,1-Dichloropropene	75	4.728	4.722	0.006	98	2386084	500.0	479.6	
54 Isooctane	57	4.832	4.820	0.012	99	5101387	500.0	546.6	
61 n-Heptane	57	4.917	4.917	0.000	91	1168454	500.0	519.2	
55 Benzene	78	4.972	4.966	0.006	93	7329418	500.0	483.0	
44 Propionitrile	54	5.008	4.996	0.012	93	1335939	5000.0	4124.5	
47 Methacrylonitrile	67	5.020	5.014	0.006	91	4452048	5000.0	4827.3	
57 Tert-amyl methyl ether	73	5.075	5.075	0.000	98	4194618	500.0	447.2	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.112	5.106	0.006	90	135515	50.0	49.2	
60 1,2-Dichloroethane	62	5.179	5.173	0.006	97	1694088	500.0	432.2	
58 Isobutyl alcohol	43	5.179	5.173	0.006	60	1037280	12500	13333	
* 62 Fluorobenzene	96	5.385	5.386	-0.001	99	667948	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.416	0.000	99	2034155	500.0	485.0	
65 Methylcyclohexane	83	5.556	5.544	0.012	95	3549039	500.0	505.1	
66 Ethyl acrylate	55	5.550	5.550	0.000	77	2499454	500.0	479.4	
64 Trichloroethene	95	5.562	5.556	0.006	98	1682711	500.0	452.5	
63 n-Butanol	56	5.915	5.915	0.000	87	612836	12500	14728	
71 Dibromomethane	93	6.018	6.012	0.006	97	764741	500.0	463.0	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	93	1656041	500.0	466.8	
73 Dichlorobromomethane	83	6.201	6.195	0.006	99	1869470	500.0	552.9	
69 Methyl methacrylate	100	6.377	6.383	-0.006	88	675248	1000.0	1016.9	
* 68 1,4-Dioxane-d8	96	6.389	6.395	-0.006	91	20311	1000.0	1000.0	
70 1,4-Dioxane	88	6.426	6.420	0.006	92	226939	10000	9666.2	
72 n-Propyl acetate	43	6.547	6.547	0.000	98	1392318	500.0	504.7	
75 2-Chloroethyl vinyl ether	63	6.876	6.876	0.000	96	791792	500.0	493.4	
77 cis-1,3-Dichloropropene	75	6.943	6.937	0.006	91	2437559	500.0	543.1	
$ 79 Toluene-d8 (Surr)	98	7.162	7.156	0.006	99	592457	50.0	50.3	
80 Toluene	91	7.229	7.223	0.006	93	7505318	500.0	469.6	
76 Epichlorohydrin	57	7.259	7.253	0.006	99	1796912	10000	9503.1	
74 2-Nitropropane	41	7.539	7.545	-0.006	100	203337	1000.0	1050.9	
84 Tetrachloroethene	166	7.703	7.703	0.000	96	1623528	500.0	490.1	
78 4-Methyl-2-pentanone (MIBK	43	7.728	7.728	0.000	95	4942720	2500.0	2335.2	
81 trans-1,3-Dichloropropene	75	7.770	7.770	0.000	95	1982007	500.0	553.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.977	7.971	0.006	93	935614	500.0	457.4	
82 Ethyl methacrylate	69	7.995	7.995	0.000	88	1655300	500.0	530.7	
88 Chlorodibromomethane	129	8.202	8.202	0.000	98	1098673	500.0	717.2	
85 1,3-Dichloropropane	76	8.336	8.336	0.000	93	2075663	500.0	470.2	
89 Ethylene Dibromide	107	8.512	8.506	0.006	99	1071467	500.0	490.7	
87 n-Butyl acetate	43	8.744	8.744	0.000	99	1675681	500.0	530.8	
86 2-Hexanone	58	8.847	8.853	-0.006	95	1834688	2500.0	2440.4	
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	85	486420	50.0	50.0	
91 Chlorobenzene	112	9.182	9.176	0.006	97	4797282	500.0	480.0	
92 Ethylbenzene	106	9.230	9.224	0.006	97	2630034	500.0	481.1	
93 1,1,1,2-Tetrachloroethane	131	9.267	9.267	0.000	95	1515018	500.0	607.7	
94 m-Xylene & p-Xylene	106	9.401	9.395	0.006	0	3275008	500.0	489.4	
96 o-Xylene	106	9.863	9.857	0.006	95	3330025	500.0	505.4	
97 Styrene	104	9.918	9.918	0.000	97	5271655	500.0	502.9	
99 Bromoform	173	9.936	9.936	0.000	96	496660	500.0	776.9	
95 n-Butyl acrylate	73	10.082	10.082	0.000	98	1002810	500.0	575.7	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	8646450	500.0	494.5	
98 Amyl acetate (mixed isomer	43	10.338	10.338	0.000	92	2213897	500.0	580.4	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	150563	50.0	48.3	
102 Bromobenzene	156	10.544	10.544	0.000	98	1777563	500.0	487.0	
104 N-Propylbenzene	91	10.587	10.587	0.000	100	9308225	500.0	490.2	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	98	1254909	500.0	517.7	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	8164451	500.0	509.3	
107 2-Chlorotoluene	91	10.721	10.721	0.000	96	6298545	500.0	480.2	
109 1,3,5-Trimethylbenzene	105	10.776	10.776	0.000	94	7171594	500.0	523.3	
105 1,2,3-Trichloropropane	110	10.782	10.782	0.000	94	379923	500.0	461.3	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	93	307549	500.0	524.6	
110 4-Chlorotoluene	91	10.879	10.873	0.006	97	5522861	500.0	476.4	
111 Butyl Methacrylate	87	11.061	11.055	0.006	87	2350583	500.0	482.6	
112 tert-Butylbenzene	119	11.055	11.055	0.000	95	6353477	500.0	556.4	
113 1,2,4-Trimethylbenzene	105	11.122	11.116	0.006	96	7202715	500.0	503.6	
114 sec-Butylbenzene	105	11.214	11.207	0.007	99	8798809	500.0	516.5	
115 4-Isopropyltoluene	119	11.341	11.335	0.006	98	7901572	500.0	538.4	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	97	3587552	500.0	484.5	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.457	0.000	94	233004	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	95	3660745	500.0	488.6	
134 1,2,3-Trimethylbenzene	105	11.493	11.487	0.006	98	7573200	500.0	504.7	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	7154109	500.0	498.2	
121 p-Diethylbenzene	119	11.645	11.646	-0.001	96	4079952	500.0	504.5	
122 n-Butylbenzene	92	11.694	11.688	0.006	96	3517950	500.0	488.1	
119 Benzyl chloride	126	11.682	11.688	-0.006	99	496762	500.0	485.0	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	97	3347023	500.0	489.1	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	98	7848945	500.0	560.1	
125 1,2-Dibromo-3-Chloropropan	155	12.461	12.455	0.006	97	187971	500.0	495.2	
126 1,3,5-Trichlorobenzene	180	12.479	12.473	0.006	98	2683067	500.0	524.5	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	91	755100	500.0	547.6	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	94	2470402	500.0	532.4	
129 Naphthalene	128	13.221	13.221	0.000	99	5398562	500.0	570.2	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	96	2090263	500.0	520.2	
S 131 1,2-Dichloroethene, Total	100				0		1000.0	928.3	
S 132 Xylenes, Total	100				0		1000.0	994.8	
S 133 Total BTEX	1				0		2500.0	2428.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00079	Amount Added:	40.00	Units: uL	
Ethanol mix_00017	Amount Added:	50.00	Units: uL	
MIX 2 Hi_00072	Amount Added:	50.00	Units: uL	
MIX I Hi_00096	Amount Added:	50.00	Units: uL	
GAS Hi_00264	Amount Added:	50.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 25-Jul-2018 18:19:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Injection Date: 24-Jul-2018 09:04:30 Instrument ID: CVOAMS11 Operator ID:

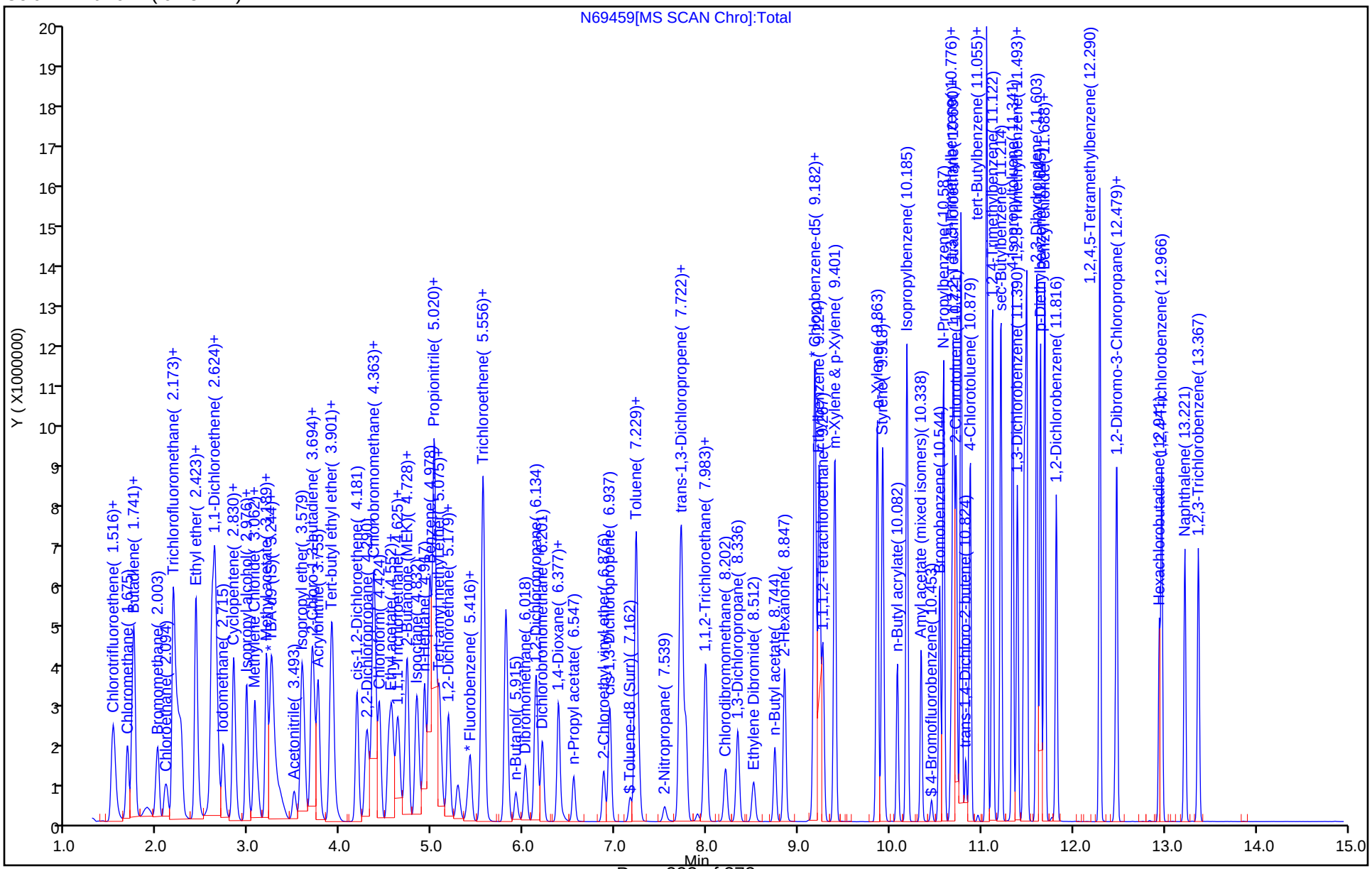
Lims ID: STD500 Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

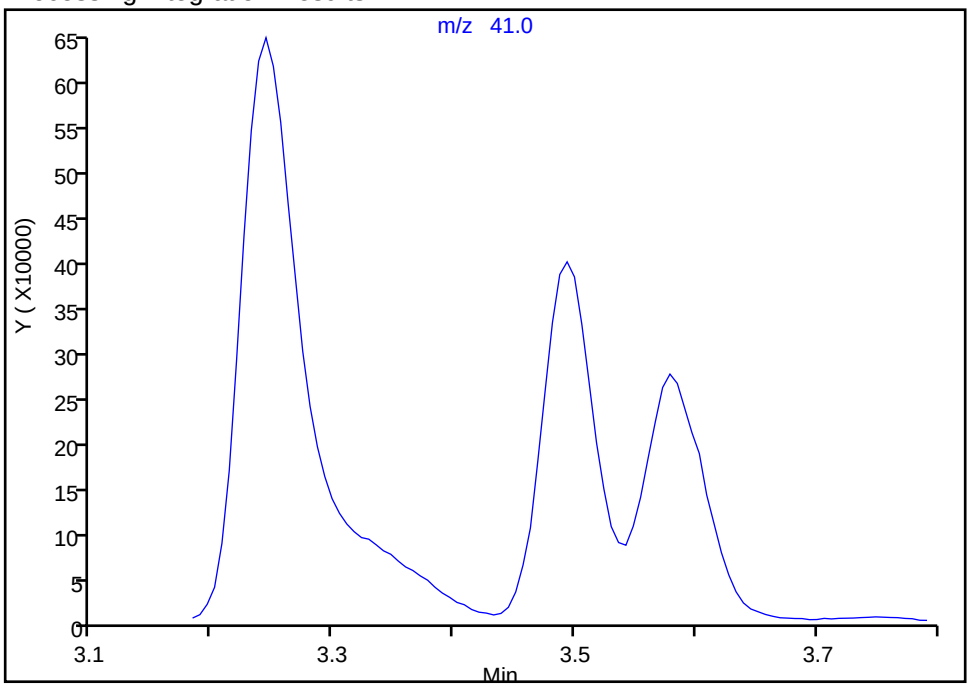
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D
Injection Date: 24-Jul-2018 09:04:30 Instrument ID: CVOAMS11
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

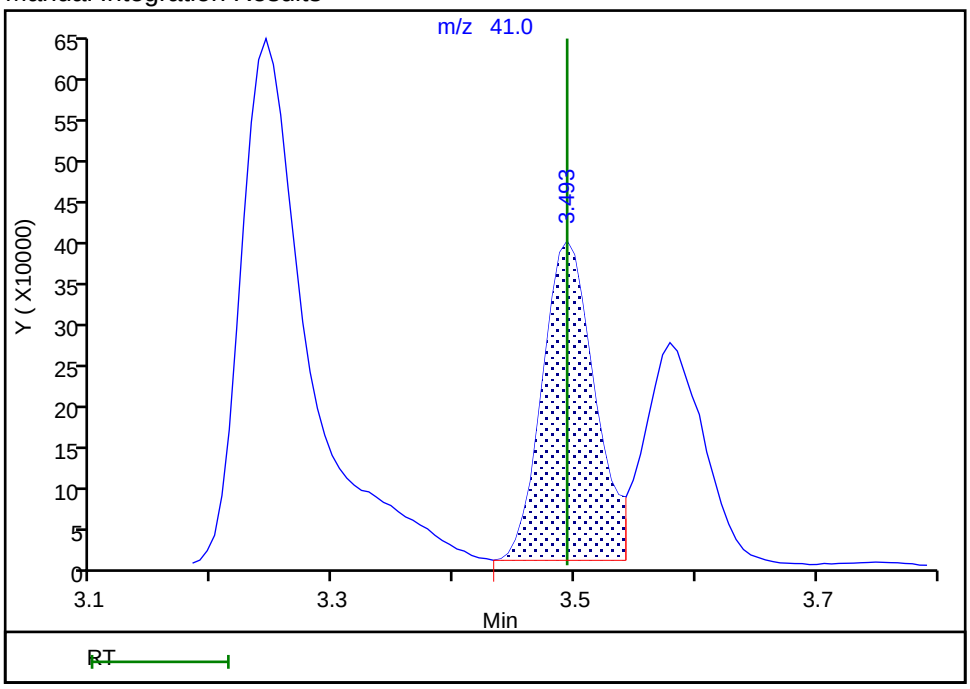
Not Detected
Expected RT: 3.49

Processing Integration Results



Manual Integration Results

RT: 3.49
Area: 1163776
Amount: 4042.6079
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:28:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

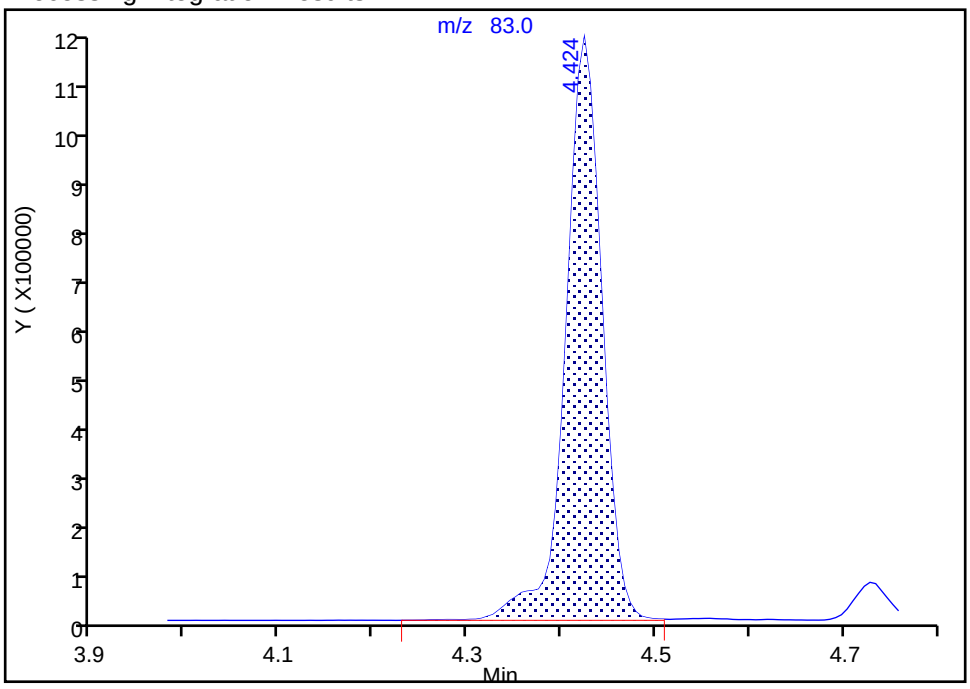
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D
Injection Date: 24-Jul-2018 09:04:30 Instrument ID: CVOAMS11
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

48 Chloroform, CAS: 67-66-3

Signal: 1

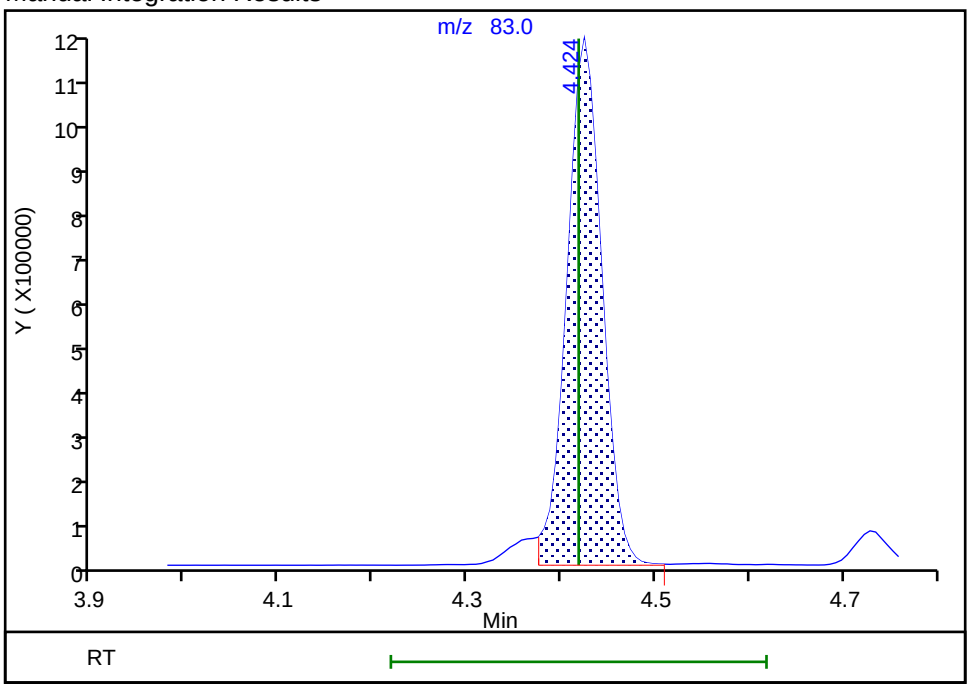
Processing Integration Results

RT: 4.42
Area: 3009026
Amount: 492.6301
Amount Units: ug/l



Manual Integration Results

RT: 4.42
Area: 2888642
Amount: 470.3114
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:29:03
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

TestAmerica Edison

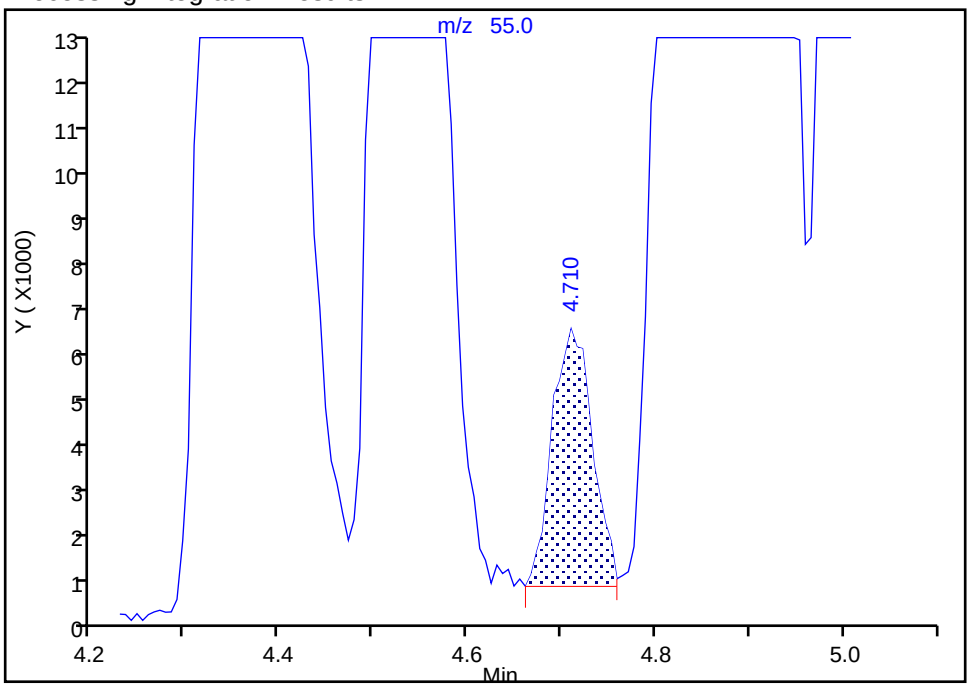
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D
Injection Date: 24-Jul-2018 09:04:30 Instrument ID: CVOAMS11
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

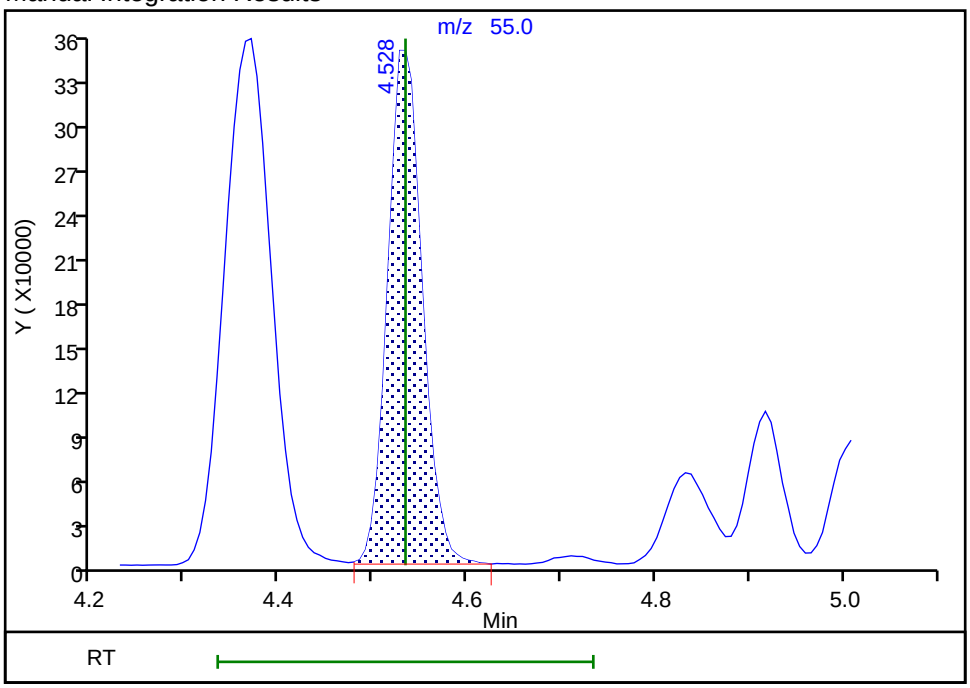
Processing Integration Results

RT: 4.71
Area: 16855
Amount: 10.783911
Amount Units: ug/l



Manual Integration Results

RT: 4.53
Area: 897120
Amount: 488.9725
Amount Units: ug/l



Reviewer: delpolitov, 25-Jul-2018 17:29:11
Audit Action: Assigned Compound ID Audit Reason: Shouldering

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab Sample ID: CCVIS 460-540359/3 Calibration Date: 07/28/2018 05:27

Instrument ID: CVOAMS11 Calib Start Date: 07/24/2018 06:28

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/24/2018 09:04

Lab File ID: N69684.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1829	0.1772		19.4	20.0	-3.1	20.0
Dichlorodifluoromethane	Ave	0.1426	0.1204	0.1000	16.9	20.0	-15.6	20.0
Chloromethane	Ave	2.587	2.703	0.1000	20.9	20.0	4.5	20.0
Butadiene	Ave	0.3641	0.3313		18.2	20.0	-9.0	20.0
Vinyl chloride	Ave	0.4302	0.3788	0.1000	17.6	20.0	-11.9	20.0
Bromomethane	Ave	0.2983	0.2809	0.1000	18.8	20.0	-5.8	50.0
Chloroethane	Ave	0.2580	0.2413	0.1000	18.7	20.0	-6.4	50.0
Pentane	Ave	4.089	5.350		52.3	40.0	30.8*	20.0
Trichlorofluoromethane	Ave	0.4557	0.4453	0.1000	19.5	20.0	-2.3	20.0
Dichlorofluoromethane	Ave	0.5640	0.5499		19.5	20.0	-2.5	20.0
2-Methyl-1,3-butadiene	Ave	0.2332	0.2366		20.3	20.0	1.5	20.0
Ethyl ether	Ave	0.1834	0.1678		18.3	20.0	-8.5	20.0
Ethanol	Ave	0.0649	0.0763		940	800	17.5	50.0
1,1-Dichloroethene	Ave	0.2520	0.2482	0.1000	19.7	20.0	-1.5	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2576	0.2636		20.5	20.0	2.3	20.0
Carbon disulfide	Ave	0.8727	0.8151	0.1000	18.7	20.0	-6.6	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2812	0.2945	0.1000	20.9	20.0	4.7	20.0
Iodomethane	Ave	0.4246	0.4120		19.4	20.0	-3.0	20.0
Cyclopentene	Ave	0.6774	0.6688		19.7	20.0	-1.3	20.0
Acrolein	Lin2		2.228		38.3	40.0	-4.3	50.0
Allyl chloride	Ave	0.1554	0.1478		19.0	20.0	-4.9	20.0
Isopropyl alcohol	Lin2		0.6311		209	200	4.6	50.0
Methylene Chloride	Ave	0.2922	0.2791	0.1000	19.1	20.0	-4.5	20.0
Acetone	Ave	0.2455	0.2475	0.0500	101	100	0.8	50.0
Methyl acetate	Ave	2.214	2.169	0.1000	39.2	40.0	-2.0	20.0
trans-1,2-Dichloroethene	Ave	0.2870	0.2874	0.1000	20.0	20.0	0.2	20.0
Hexane	Ave	0.2205	0.2050		18.6	20.0	-7.0	20.0
Methyl tert-butyl ether	Ave	0.6343	0.5630	0.1000	17.8	20.0	-11.2	20.0
2-Methyl-2-propanol	Ave	1.148	1.037		181	200	-9.7	50.0
Acetonitrile	Ave	1.529	1.519		199	200	-0.6	20.0
Isopropyl ether	Ave	0.9038	0.8060		17.8	20.0	-10.8	20.0
2-Chloro-1,3-butadiene	Ave	0.2439	0.2300		18.9	20.0	-5.7	20.0
1,1-Dichloroethane	Ave	0.4950	0.4598	0.2000	18.6	20.0	-7.1	20.0
Acrylonitrile	Ave	4.671	4.707		202	200	0.8	20.0
Tert-butyl ethyl ether	Ave	0.7823	0.7075		18.1	20.0	-9.6	20.0
Vinyl acetate	Lin2		0.6354		39.0	40.0	-2.6	20.0
cis-1,2-Dichloroethene	Ave	0.3230	0.3019	0.1000	18.7	20.0	-6.5	20.0
2,2-Dichloropropane	Lin2		0.1252		19.5	20.0	-2.4	20.0
Cyclohexane	Ave	0.5153	0.5047	0.1000	19.6	20.0	-2.1	50.0
Chlorobromomethane	Ave	0.1282	0.1169		18.2	20.0	-8.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab Sample ID: CCVIS 460-540359/3 Calibration Date: 07/28/2018 05:27

Instrument ID: CVOAMS11 Calib Start Date: 07/24/2018 06:28

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/24/2018 09:04

Lab File ID: N69684.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	0.4598	0.4339	0.2000	18.9	20.0	-5.6	20.0
Ethyl acetate	Ave	0.3075	0.3109		40.4	40.0	1.1	20.0
Methyl acrylate	Ave	0.1373	0.1036		15.1	20.0	-24.6*	20.0
Carbon tetrachloride	Ave	0.2560	0.2598	0.1000	20.3	20.0	1.5	20.0
Tetrahydrofuran	Ave	0.3692	0.3726		40.4	40.0	0.9	20.0
1,1,1-Trichloroethane	Ave	0.4035	0.3981	0.1000	19.7	20.0	-1.3	20.0
2-Butanone (MEK)	Ave	0.3626	0.3525	0.0500	97.2	100	-2.8	50.0
1,1-Dichloropropene	Ave	0.3724	0.3565		19.1	20.0	-4.3	20.0
2,2,4-Trimethylpentane	Ave	0.6986	0.5881		16.8	20.0	-15.8	20.0
n-Heptane	Ave	0.1685	0.1464		17.4	20.0	-13.1	20.0
Benzene	Ave	1.560	1.497	0.5000	19.2	20.0	-4.0	20.0
Propionitrile	Ave	1.720	1.703		198	200	-1.0	20.0
Methacrylonitrile	Ave	0.0690	0.0577		167	200	-16.4	20.0
Tert-amyl methyl ether	Ave	0.7021	0.6218		17.7	20.0	-11.4	20.0
1,2-Dichloroethane	Ave	0.2934	0.2508	0.1000	17.1	20.0	-14.5	20.0
Isobutyl alcohol	Ave	0.4131	0.3609		437	500	-12.6	50.0
Isopropyl acetate	Ave	0.3140	0.2392		15.2	20.0	-23.8*	20.0
Ethyl acrylate	Ave	0.3903	0.3608		18.5	20.0	-7.6	20.0
Methylcyclohexane	Ave	0.5260	0.4796	0.1000	18.2	20.0	-8.8	50.0
Trichloroethene	Ave	0.2784	0.2712	0.2000	19.5	20.0	-2.6	20.0
n-Butanol	Ave	0.2209	0.2037		461	500	-7.8	50.0
Dibromomethane	Ave	0.1236	0.1101		17.8	20.0	-10.9	20.0
1,2-Dichloropropane	Ave	0.2655	0.2487	0.1000	18.7	20.0	-6.3	20.0
Dichlorobromomethane	Ave	0.2531	0.2403	0.2000	19.0	20.0	-5.1	20.0
Methyl methacrylate	Ave	0.0497	0.0420		33.8	40.0	-15.5	20.0
1,4-Dioxane	Ave	1.156	1.053		364	400	-8.9	50.0
n-Propyl acetate	Ave	0.2065	0.1634		15.8	20.0	-20.9*	20.0
2-Chloroethyl vinyl ether	Ave	0.1201	0.0915		15.2	20.0	-23.8*	20.0
cis-1,3-Dichloropropene	Ave	0.4613	0.4054	0.2000	17.6	20.0	-12.1	50.0
Toluene	Ave	1.643	1.568	0.4000	19.1	20.0	-4.5	20.0
Epichlorohydrin	Lin2		0.2303		381	400	-4.7	20.0
2-Nitropropane	Ave	1.027	1.166		45.4	40.0	13.5	20.0
Tetrachloroethene	Ave	0.3405	0.3394	0.2000	19.9	20.0	-0.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.723	2.581	0.0500	94.8	100	-5.2	50.0
trans-1,3-Dichloropropene	Ave	0.3678	0.3053	0.1000	16.6	20.0	-17.0	50.0
1,1,2-Trichloroethane	Ave	0.2103	0.1841	0.1000	17.5	20.0	-12.4	20.0
Ethyl methacrylate	Ave	0.2335	0.1875		16.1	20.0	-19.7	20.0
Chlorodibromomethane	Ave	0.1575	0.1458	0.1000	18.5	20.0	-7.4	50.0
1,3-Dichloropropane	Ave	0.4538	0.3956		17.4	20.0	-12.8	20.0
Ethylene Dibromide	Ave	0.2244	0.1966	0.1000	17.5	20.0	-12.4	20.0
n-Butyl acetate	Ave	0.3245	0.2341		14.4	20.0	-27.9*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab Sample ID: CCVIS 460-540359/3 Calibration Date: 07/28/2018 05:27

Instrument ID: CVOAMS11 Calib Start Date: 07/24/2018 06:28

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/24/2018 09:04

Lab File ID: N69684.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Hexanone	Ave	0.9671	0.8682	0.0500	89.8	100	-10.2	50.0
Chlorobenzene	Ave	1.027	1.000	0.5000	19.5	20.0	-2.6	20.0
Ethylbenzene	Ave	0.5619	0.5508	0.1000	19.6	20.0	-2.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2563	0.2461		19.2	20.0	-4.0	20.0
m-Xylene & p-Xylene	Ave	0.6879	0.6691	0.1000	19.5	20.0	-2.7	20.0
o-Xylene	Ave	0.6773	0.6535	0.3000	19.3	20.0	-3.5	20.0
Styrene	Ave	1.078	0.998	0.3000	18.5	20.0	-7.4	20.0
Bromoform	Ave	0.1372	0.1239	0.1000	18.1	20.0	-9.7	20.0
n-Butyl acrylate	Ave	0.1791	0.1348		15.1	20.0	-24.7*	20.0
Isopropylbenzene	Ave	1.797	1.769	0.1000	19.7	20.0	-1.6	20.0
Amyl acetate (mixed isomers)	Ave	0.8185	0.6271		15.3	20.0	-23.4*	20.0
Bromobenzene	Ave	0.7832	0.7706		19.7	20.0	-1.6	20.0
N-Propylbenzene	Ave	4.075	4.016		19.7	20.0	-1.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5202	0.4755	0.3000	18.3	20.0	-8.6	20.0
4-Ethyltoluene	Ave	3.440	3.458		20.1	20.0	0.5	20.0
2-Chlorotoluene	Ave	2.815	2.862		20.3	20.0	1.7	20.0
1,3,5-Trimethylbenzene	Ave	2.941	2.976		20.2	20.0	1.2	20.0
1,2,3-Trichloropropane	Ave	0.1767	0.1517		17.2	20.0	-14.1	20.0
trans-1,4-Dichloro-2-butene	Lin2		0.0990		16.2	20.0	-19.2	20.0
4-Chlorotoluene	Ave	2.488	2.477		19.9	20.0	-0.4	20.0
Butyl Methacrylate	Qua2		0.7136		18.1	20.0	-9.4	20.0
tert-Butylbenzene	Ave	2.450	2.370		19.3	20.0	-3.3	20.0
1,2,4-Trimethylbenzene	Ave	3.069	3.112		20.3	20.0	1.4	20.0
sec-Butylbenzene	Ave	3.656	3.596		19.7	20.0	-1.6	20.0
4-Isopropyltoluene	Ave	3.150	3.090		19.6	20.0	-1.9	20.0
1,3-Dichlorobenzene	Ave	1.589	1.556	0.6000	19.6	20.0	-2.1	20.0
1,4-Dichlorobenzene	Ave	1.608	1.571	0.5000	19.5	20.0	-2.3	20.0
1,2,3-Trimethylbenzene	Ave	3.220	3.232		20.1	20.0	0.4	20.0
Indan	Ave	3.081	2.991		19.4	20.0	-2.9	20.0
p-Diethylbenzene	Ave	1.735	1.763		20.3	20.0	1.6	20.0
Benzyl chloride	Qua2		0.1078		16.2	20.0	-18.9	50.0
n-Butylbenzene	Ave	1.547	1.501		19.4	20.0	-3.0	20.0
1,2-Dichlorobenzene	Ave	1.468	1.434	0.4000	19.5	20.0	-2.3	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.007	2.807		18.7	20.0	-6.6	20.0
1,2-Dibromo-3-Chloropropane	Qua2		0.0484*	0.0500	17.7	20.0	-11.6	50.0
1,3,5-Trichlorobenzene	Ave	1.098	1.044		19.0	20.0	-4.9	20.0
Hexachlorobutadiene	Ave	0.2959	0.2619		17.7	20.0	-11.5	20.0
1,2,4-Trichlorobenzene	Ave	0.996	0.9011	0.2000	18.1	20.0	-9.5	20.0
Naphthalene	Ave	2.032	1.629		16.0	20.0	-19.8	50.0
1,2,3-Trichlorobenzene	Ave	0.8622	0.7383		17.1	20.0	-14.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2054	0.2035		49.5	50.0	-0.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab Sample ID: CCVIS 460-540359/3 Calibration Date: 07/28/2018 05:27

Instrument ID: CVOAMS11 Calib Start Date: 07/24/2018 06:28

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/24/2018 09:04

Lab File ID: N69684.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.2064	0.1900		46.0	50.0	-7.9	20.0
Toluene-d8 (Surr)	Ave	1.211	1.223		50.5	50.0	0.9	20.0
4-Bromofluorobenzene	Ave	0.3205	0.3177		49.6	50.0	-0.9	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69684.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 28-Jul-2018 05:27:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0076243-003
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 19:56:11 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: delpolitov Date: 31-Jul-2018 19:56:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.510	1.510	0.000	88	44618	20.0	19.4	
2 Dichlorodifluoromethane	87	1.529	1.529	0.000	99	30317	20.0	16.9	
3 Chloromethane	52	1.662	1.662	0.000	99	31307	20.0	20.9	
5 Butadiene	54	1.741	1.741	0.000	77	83424	20.0	18.2	
4 Vinyl chloride	62	1.741	1.741	0.000	98	95405	20.0	17.6	
6 Bromomethane	94	2.003	2.003	0.000	99	70736	20.0	18.8	
7 Chloroethane	64	2.088	2.088	0.000	99	60778	20.0	18.7	
10 Pentane	72	2.179	2.179	0.000	96	27479	40.0	52.3	
9 Trichlorofluoromethane	101	2.204	2.204	0.000	99	112137	20.0	19.5	
8 Dichlorofluoromethane	67	2.246	2.246	0.000	98	138488	20.0	19.5	
13 2-Methyl-1,3-butadiene	53	2.417	2.417	0.000	96	59593	20.0	20.3	
12 Ethyl ether	59	2.423	2.423	0.000	56	42249	20.0	18.3	
11 Ethanol	46	2.544	2.544	0.000	23	7837	800.0	939.8	M
17 1,1-Dichloroethene	96	2.593	2.593	0.000	96	62516	20.0	19.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.599	2.599	0.000	77	66377	20.0	20.5	
20 Carbon disulfide	76	2.630	2.630	0.000	99	205265	20.0	18.7	
15 1,1,2-Trichloro-1,2,2-trif	101	2.642	2.642	0.000	51	74173	20.0	20.9	
19 Iodomethane	142	2.721	2.721	0.000	97	103752	20.0	19.4	
23 Cyclopentene	67	2.836	2.836	0.000	96	168431	20.0	19.7	
16 Acrolein	56	2.867	2.867	0.000	92	11442	40.0	38.3	
22 3-Chloro-1-propene	76	2.976	2.976	0.000	94	37233	20.0	19.0	
21 Isopropyl alcohol	45	2.976	2.976	0.000	10	16207	200.0	209.1	
26 Methylene Chloride	84	3.062	3.062	0.000	89	70278	20.0	19.1	
18 Acetone	58	3.104	3.104	0.000	89	14334	100.0	100.8	
24 Methyl acetate	74	3.189	3.189	0.000	41	11142	40.0	39.2	
30 trans-1,2-Dichloroethene	96	3.195	3.195	0.000	92	72381	20.0	20.0	
32 Hexane	56	3.244	3.244	0.000	92	51634	20.0	18.6	
29 Methyl tert-butyl ether	73	3.274	3.274	0.000	93	141785	20.0	17.8	
* 27 TBA-d9 (IS)	65	3.281	3.281	0.000	99	128410	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.341	3.341	0.000	91	26639	200.0	180.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
25 Acetonitrile	41	3.493	3.493	0.000	99	39016	200.0	198.8	a
33 Isopropyl ether	45	3.579	3.579	0.000	96	202981	20.0	17.8	
36 2-Chloro-1,3-butadiene	88	3.682	3.682	0.000	89	57921	20.0	18.9	
34 1,1-Dichloroethane	63	3.706	3.706	0.000	100	115788	20.0	18.6	
31 Acrylonitrile	53	3.755	3.755	0.000	95	120875	200.0	201.5	
37 Tert-butyl ethyl ether	59	3.889	3.889	0.000	91	178171	20.0	18.1	
35 Vinyl acetate	86	3.907	3.907	0.000	99	14722	40.0	39.0	
40 cis-1,2-Dichloroethene	96	4.181	4.181	0.000	98	76031	20.0	18.7	
38 2,2-Dichloropropane	79	4.284	4.284	0.000	96	31524	20.0	19.5	
49 Cyclohexane	84	4.357	4.357	0.000	88	127111	20.0	19.6	
43 Methyl acrylate	55	4.534	4.534	0.000	69	26083	20.0	15.1	a
46 Chlorobromomethane	128	4.363	4.363	0.000	86	29445	20.0	18.2	
48 Chloroform	83	4.424	4.424	0.000	99	109265	20.0	18.9	
42 Ethyl acetate	70	4.522	4.522	0.000	99	7203	40.0	40.4	
52 Carbon tetrachloride	117	4.558	4.558	0.000	98	65420	20.0	20.3	
45 Tetrahydrofuran	72	4.564	4.564	0.000	64	8633	40.0	40.4	
$ 51 Dibromofluoromethane (Surr	113	4.595	4.595	0.000	97	128116	50.0	49.5	
50 1,1,1-Trichloroethane	97	4.625	4.625	0.000	96	100265	20.0	19.7	
* 39 2-Butanone-d5	46	4.662	4.662	0.000	0	144804	250.0	250.0	
41 2-Butanone (MEK)	72	4.704	4.704	0.000	99	20418	100.0	97.2	
53 1,1-Dichloropropene	75	4.722	4.722	0.000	99	89786	20.0	19.1	
54 Isooctane	57	4.820	4.820	0.000	99	148116	20.0	16.8	
61 n-Heptane	57	4.917	4.917	0.000	87	36866	20.0	17.4	
55 Benzene	78	4.972	4.972	0.000	91	285980	20.0	19.2	
44 Propionitrile	54	5.008	5.008	0.000	93	43728	200.0	198.0	
47 Methacrylonitrile	67	5.020	5.020	0.000	89	145417	200.0	167.3	
57 Tert-amyl methyl ether	73	5.075	5.075	0.000	98	156586	20.0	17.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	96	119622	50.0	46.0	
60 1,2-Dichloroethane	62	5.173	5.173	0.000	97	63150	20.0	17.1	
58 Isobutyl alcohol	43	5.179	5.179	0.000	46	23172	500.0	436.9	
* 62 Fluorobenzene	96	5.385	5.385	0.000	99	629603	50.0	50.0	
59 Isopropyl acetate	43	5.410	5.410	0.000	98	60242	20.0	15.2	
66 Ethyl acrylate	55	5.544	5.544	0.000	80	90857	20.0	18.5	
65 Methylcyclohexane	83	5.544	5.544	0.000	95	120778	20.0	18.2	
64 Trichloroethene	95	5.556	5.556	0.000	98	68288	20.0	19.5	
63 n-Butanol	56	5.915	5.915	0.000	84	13079	500.0	461.0	
71 Dibromomethane	93	6.012	6.012	0.000	98	27734	20.0	17.8	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	91	62639	20.0	18.7	
73 Dichlorobromomethane	83	6.195	6.195	0.000	98	60520	20.0	19.0	
69 Methyl methacrylate	100	6.377	6.377	0.000	88	21144	40.0	33.8	
* 68 1,4-Dioxane-d8	96	6.383	6.383	0.000	91	19613	1000.0	1000.0	
70 1,4-Dioxane	88	6.420	6.420	0.000	84	8261	400.0	364.4	
72 n-Propyl acetate	43	6.554	6.554	0.000	98	41142	20.0	15.8	
75 2-Chloroethyl vinyl ether	63	6.870	6.870	0.000	95	23050	20.0	15.2	
77 cis-1,3-Dichloropropene	75	6.937	6.937	0.000	91	77458	20.0	17.6	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	99	583989	50.0	50.5	
80 Toluene	91	7.223	7.223	0.000	93	299671	20.0	19.1	
76 Epichlorohydrin	57	7.253	7.253	0.000	99	53362	400.0	381.4	a
74 2-Nitropropane	41	7.545	7.545	0.000	98	5991	40.0	45.4	
84 Tetrachloroethene	166	7.697	7.697	0.000	96	64848	20.0	19.9	
78 4-Methyl-2-pentanone (MIBK	43	7.728	7.728	0.000	96	149485	100.0	94.8	
81 trans-1,3-Dichloropropene	75	7.770	7.770	0.000	97	58335	20.0	16.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.971	7.971	0.000	93	35179	20.0	17.5	
82 Ethyl methacrylate	69	7.989	7.989	0.000	88	47215	20.0	16.1	
88 Chlorodibromomethane	129	8.196	8.196	0.000	97	27857	20.0	18.5	
85 1,3-Dichloropropane	76	8.336	8.336	0.000	93	75597	20.0	17.4	
89 Ethylene Dibromide	107	8.506	8.506	0.000	99	37568	20.0	17.5	
87 n-Butyl acetate	43	8.744	8.744	0.000	98	44738	20.0	14.4	
86 2-Hexanone	58	8.847	8.847	0.000	95	50290	100.0	89.8	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	85	477696	50.0	50.0	
91 Chlorobenzene	112	9.182	9.182	0.000	97	191140	20.0	19.5	
92 Ethylbenzene	106	9.218	9.218	0.000	97	105241	20.0	19.6	
93 1,1,1,2-Tetrachloroethane	131	9.261	9.261	0.000	92	47027	20.0	19.2	
94 m-Xylene & p-Xylene	106	9.395	9.395	0.000	0	127852	20.0	19.5	
96 o-Xylene	106	9.857	9.857	0.000	95	124873	20.0	19.3	
97 Styrene	104	9.918	9.918	0.000	96	190704	20.0	18.5	
99 Bromoform	173	9.930	9.930	0.000	97	11403	20.0	18.1	
95 n-Butyl acrylate	73	10.082	10.082	0.000	98	25749	20.0	15.1	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	338089	20.0	19.7	
98 Amyl acetate (mixed isomer	43	10.338	10.338	0.000	93	57715	20.0	15.3	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	151739	50.0	49.6	
102 Bromobenzene	156	10.544	10.544	0.000	97	70918	20.0	19.7	
104 N-Propylbenzene	91	10.581	10.581	0.000	99	369633	20.0	19.7	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	98	43762	20.0	18.3	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	318274	20.0	20.1	
107 2-Chlorotoluene	91	10.721	10.721	0.000	96	263419	20.0	20.3	
109 1,3,5-Trimethylbenzene	105	10.769	10.769	0.000	94	273890	20.0	20.2	
105 1,2,3-Trichloropropane	110	10.782	10.782	0.000	92	13965	20.0	17.2	
106 trans-1,4-Dichloro-2-buten	53	10.830	10.830	0.000	71	9115	20.0	16.2	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	227995	20.0	19.9	
111 Butyl Methacrylate	87	11.055	11.055	0.000	90	65673	20.0	18.1	
112 tert-Butylbenzene	119	11.055	11.055	0.000	95	218077	20.0	19.3	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	97	286355	20.0	20.3	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	330960	20.0	19.7	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	284384	20.0	19.6	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	96	143226	20.0	19.6	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	95	230078	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	96	144569	20.0	19.5	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	98	297490	20.0	20.1	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	275287	20.0	19.4	
121 p-Diethylbenzene	119	11.639	11.639	0.000	97	162278	20.0	20.3	
119 Benzyl chloride	126	11.682	11.682	0.000	90	9921	20.0	16.2	
122 n-Butylbenzene	92	11.688	11.688	0.000	96	138117	20.0	19.4	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	96	131975	20.0	19.5	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	98	258355	20.0	18.7	
125 1,2-Dibromo-3-Chloropropan	155	12.461	12.461	0.000	90	4452	20.0	17.7	
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	97	96040	20.0	19.0	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	91	24101	20.0	17.7	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	94	82931	20.0	18.1	
129 Naphthalene	128	13.221	13.221	0.000	99	149899	20.0	16.0	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	96	67944	20.0	17.1	
S 131 1,2-Dichloroethene, Total	100				0		40.0	38.7	
S 132 Xylenes, Total	100				0		40.0	38.8	
S 133 Total BTEX	1				0		100.0	96.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00270	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 31-Jul-2018 19:56:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69684.D

Injection Date: 28-Jul-2018 05:27:30 Instrument ID: CVOAMS11 Operator ID:

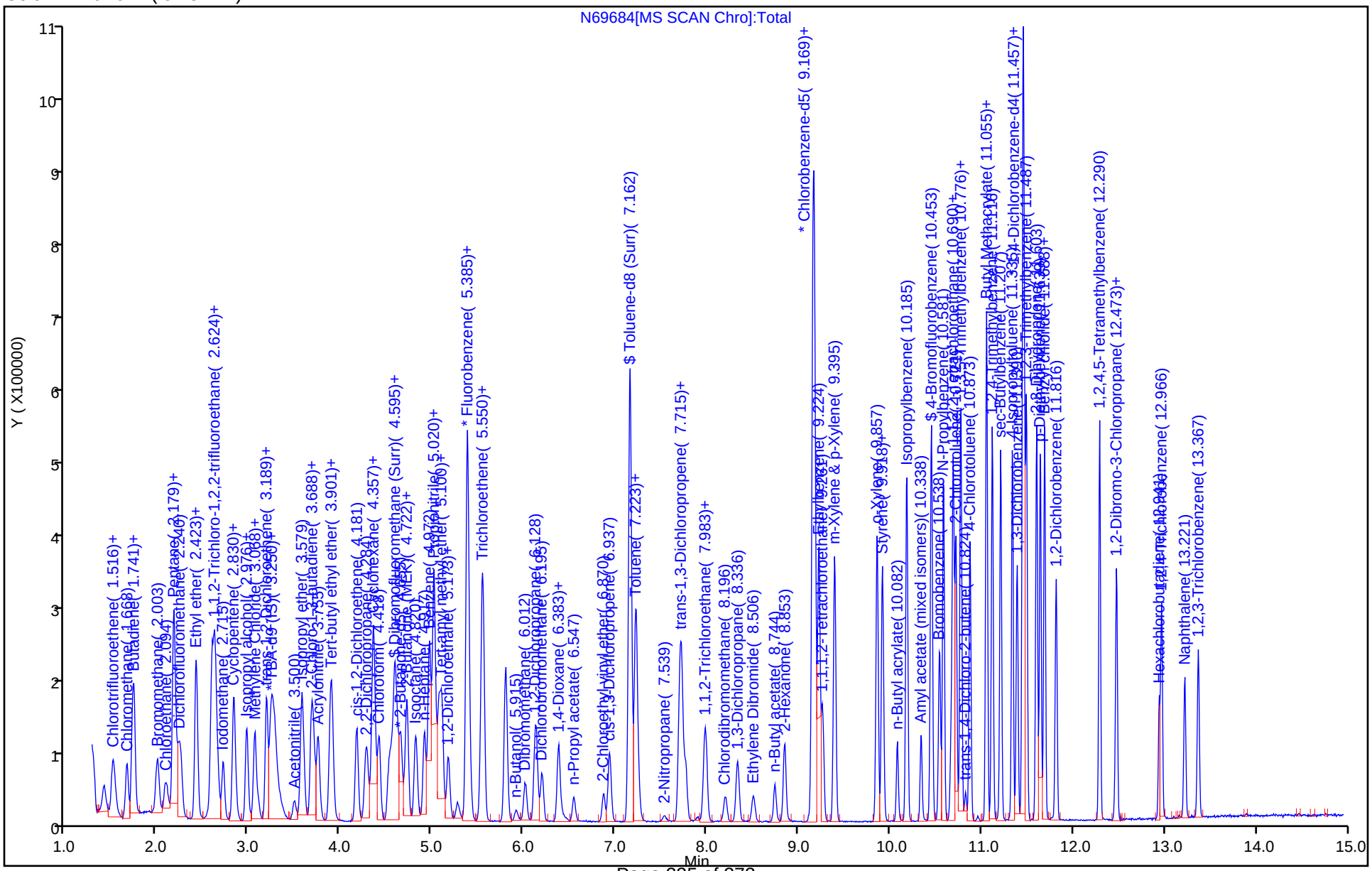
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

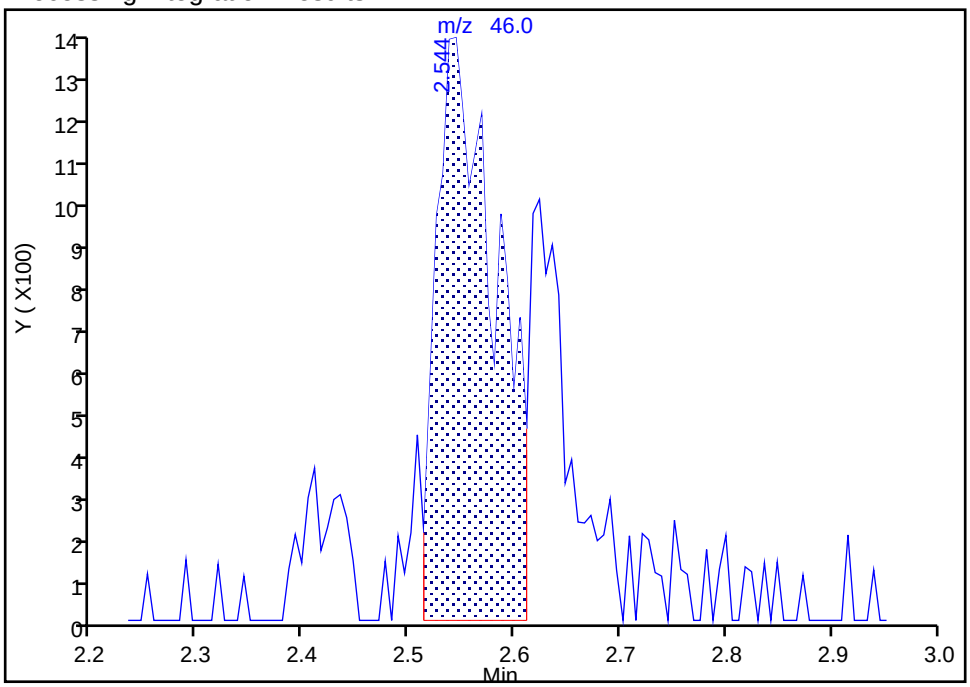
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69684.D
Injection Date: 28-Jul-2018 05:27:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

11 Ethanol, CAS: 64-17-5

Signal: 1

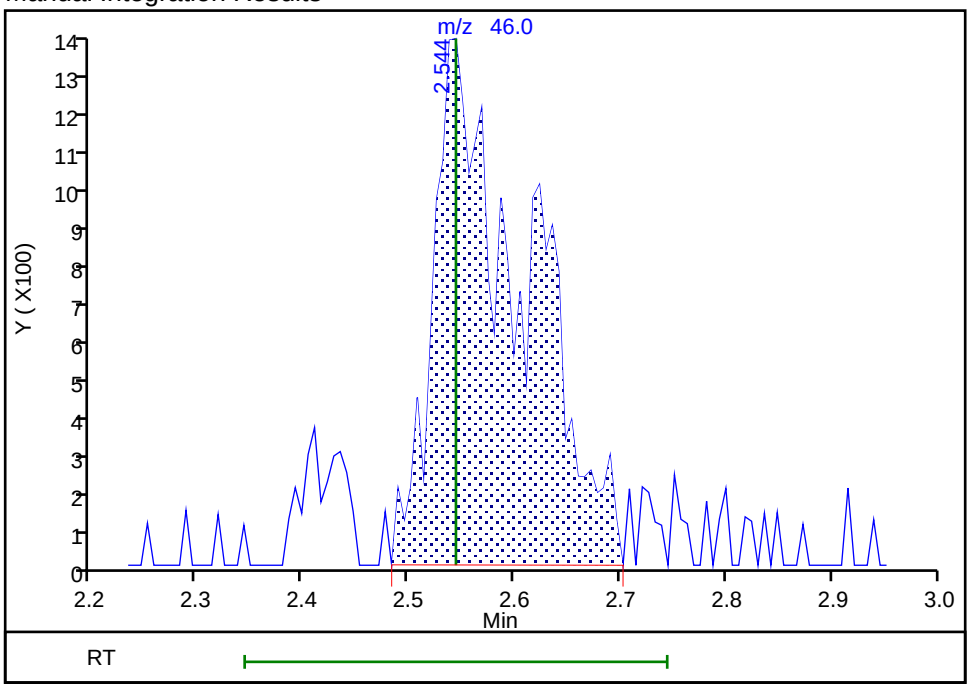
Processing Integration Results

RT: 2.54
Area: 5193
Amount: 622.7309
Amount Units: ug/l



Manual Integration Results

RT: 2.54
Area: 7837
Amount: 939.7925
Amount Units: ug/l



Reviewer: delpolitov, 31-Jul-2018 19:55:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

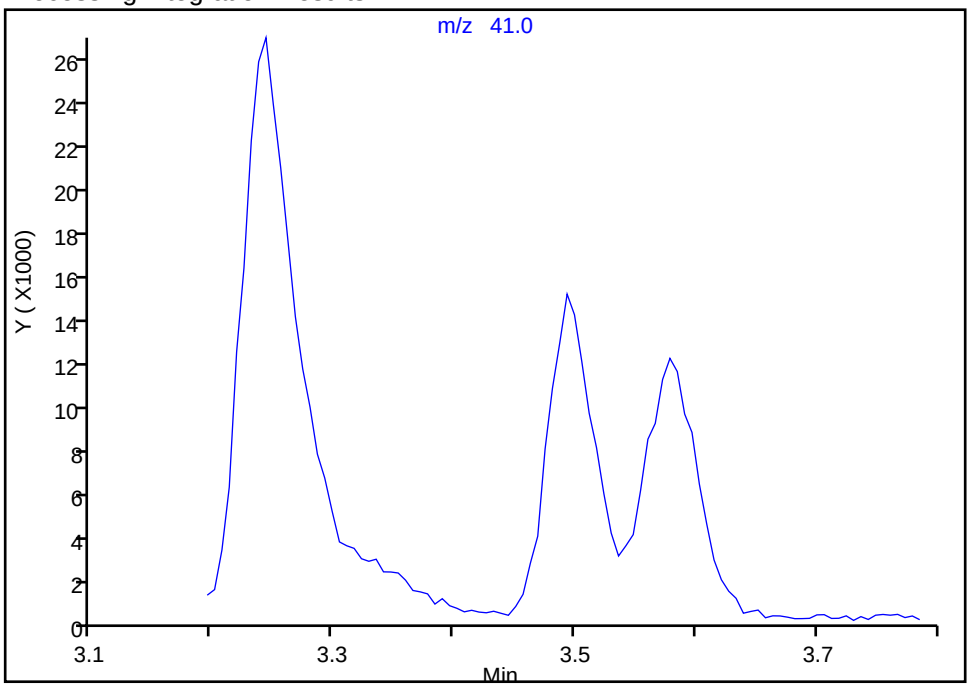
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69684.D
Injection Date: 28-Jul-2018 05:27:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

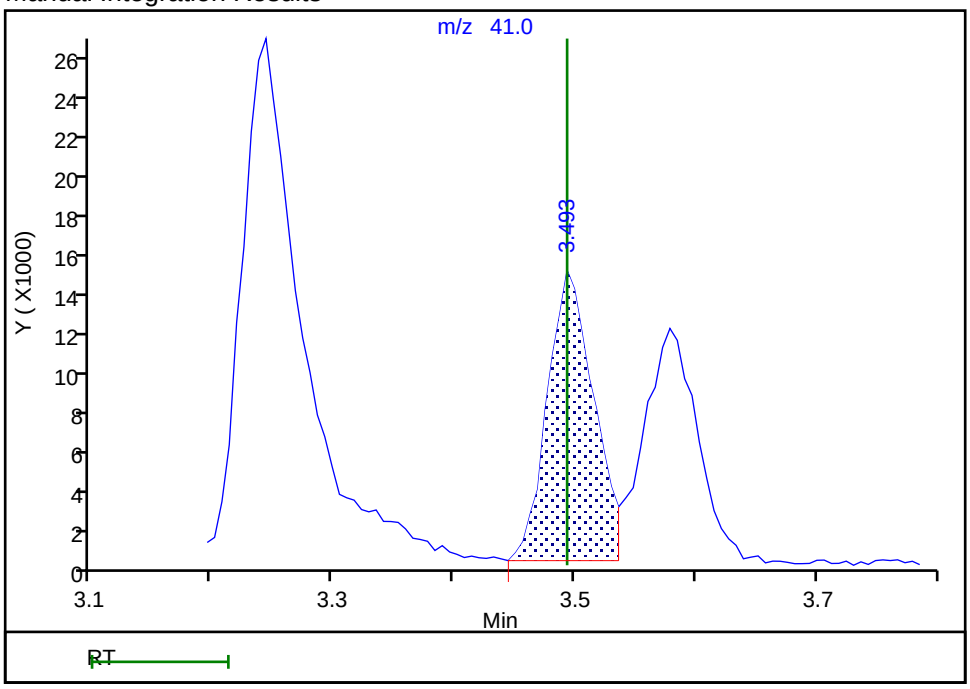
Not Detected
Expected RT: 3.49

Processing Integration Results



Manual Integration Results

RT: 3.49
Area: 39016
Amount: 198.7785
Amount Units: ug/l



Reviewer: tupayachia, 28-Jul-2018 06:02:05
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Edison

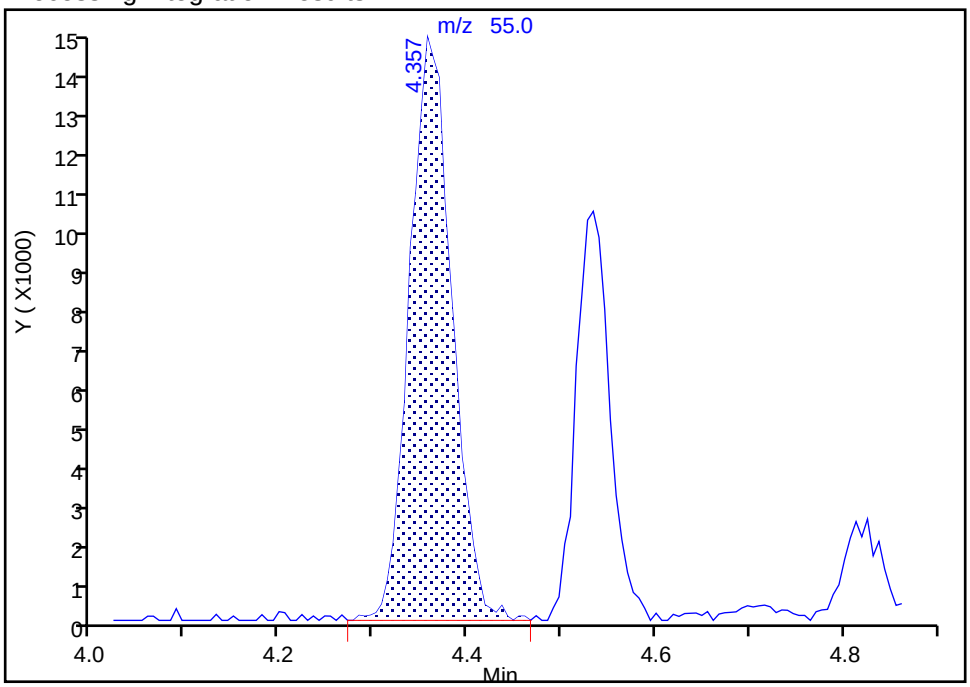
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69684.D
Injection Date: 28-Jul-2018 05:27:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

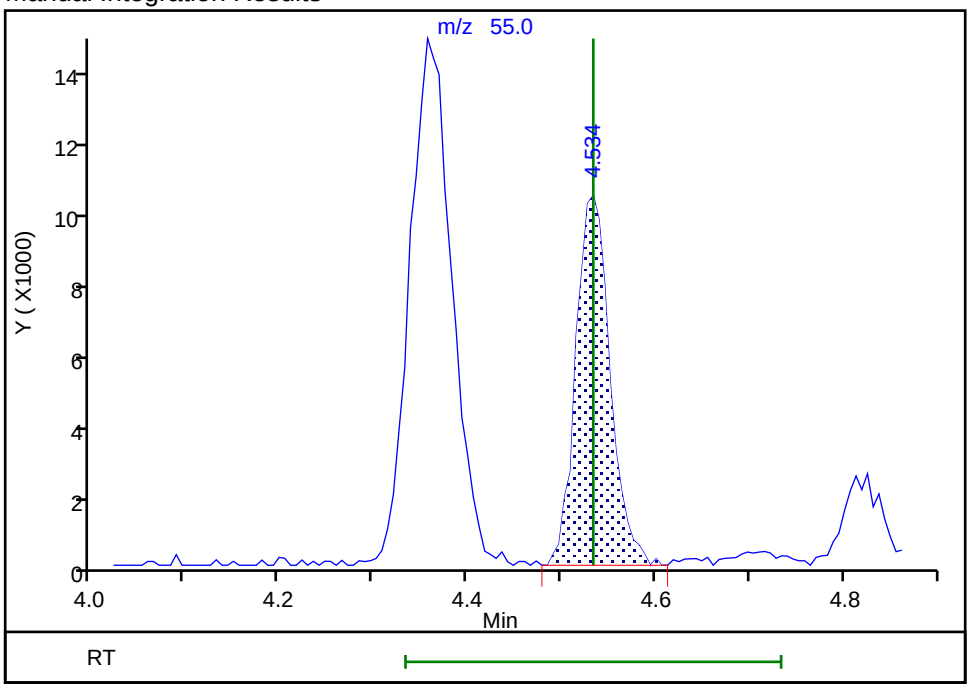
Processing Integration Results

RT: 4.36
Area: 46333
Amount: 26.791694
Amount Units: ug/l



Manual Integration Results

RT: 4.53
Area: 26083
Amount: 15.082290
Amount Units: ug/l



Reviewer: delpolitov, 31-Jul-2018 19:55:37
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Edison

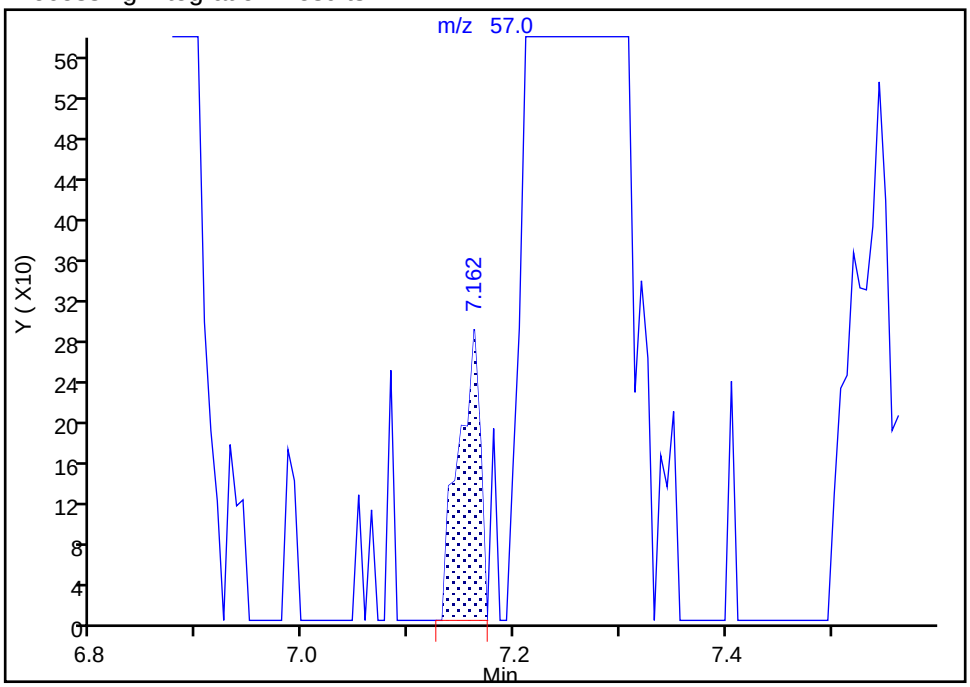
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69684.D
Injection Date: 28-Jul-2018 05:27:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

76 Epichlorohydrin, CAS: 106-89-8

Signal: 1

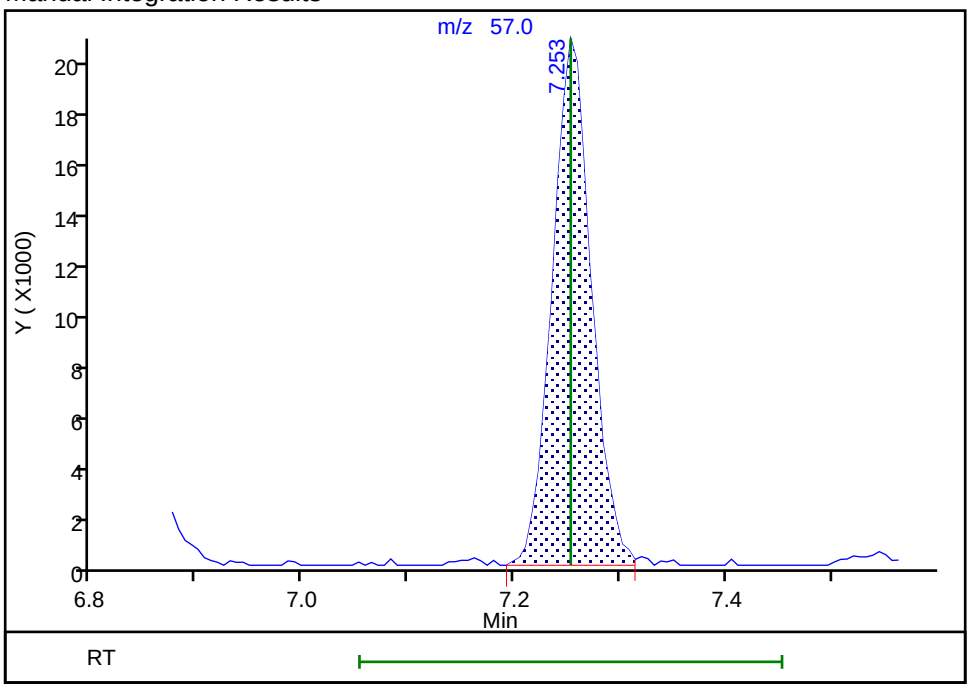
Processing Integration Results

RT: 7.16
Area: 411
Amount: 5.654198
Amount Units: ug/l



Manual Integration Results

RT: 7.25
Area: 53362
Amount: 381.3743
Amount Units: ug/l



Reviewer: tupayachia, 28-Jul-2018 06:02:28
Audit Action: Assigned Compound ID Audit Reason: Baseline

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab Sample ID: CCVIS 460-542406/3 Calibration Date: 08/06/2018 06:06

Instrument ID: CVOAMS11 Calib Start Date: 07/24/2018 06:28

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/24/2018 09:04

Lab File ID: N70087.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1829	0.1706		18.7	20.0	-6.7	20.0
Dichlorodifluoromethane	Ave	0.1426	0.1074	0.1000	15.1	20.0	-24.7*	20.0
Chloromethane	Ave	2.587	3.296	0.1000	25.5	20.0	27.4*	20.0
Butadiene	Ave	0.3641	0.3015		16.6	20.0	-17.2	20.0
Vinyl chloride	Ave	0.4302	0.3954	0.1000	18.4	20.0	-8.1	20.0
Bromomethane	Ave	0.2983	0.3054	0.1000	20.5	20.0	2.4	50.0
Chloroethane	Ave	0.2580	0.2430	0.1000	18.8	20.0	-5.8	50.0
Pentane	Ave	4.089	6.811		66.6	40.0	66.6*	20.0
Trichlorofluoromethane	Ave	0.4557	0.4755	0.1000	20.9	20.0	4.3	20.0
Dichlorofluoromethane	Ave	0.5640	0.5329		18.9	20.0	-5.5	20.0
2-Methyl-1,3-butadiene	Ave	0.2332	0.2179		18.7	20.0	-6.6	20.0
Ethyl ether	Ave	0.1834	0.1691		18.4	20.0	-7.8	20.0
Ethanol	Ave	0.0649	0.0818		1010	800	26.0	50.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2576	0.2927		22.7	20.0	13.6	20.0
1,1-Dichloroethene	Ave	0.2520	0.2684	0.1000	21.3	20.0	6.5	20.0
Carbon disulfide	Ave	0.8727	0.8296	0.1000	19.0	20.0	-4.9	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2812	0.2963	0.1000	21.1	20.0	5.4	20.0
Iodomethane	Ave	0.4246	0.4938		23.3	20.0	16.3	20.0
Cyclopentene	Ave	0.6774	0.6759		20.0	20.0	-0.2	20.0
Acrolein	Lin2		2.175		37.4	40.0	-6.5	50.0
Isopropyl alcohol	Lin2		0.6359		211	200	5.4	50.0
Allyl chloride	Ave	0.1554	0.1669		21.5	20.0	7.4	20.0
Methylene Chloride	Ave	0.2922	0.2881	0.1000	19.7	20.0	-1.4	20.0
Acetone	Ave	0.2455	0.2394	0.0500	97.5	100	-2.5	50.0
Methyl acetate	Ave	2.214	3.041	0.1000	54.9	40.0	37.3*	20.0
trans-1,2-Dichloroethene	Ave	0.2870	0.3070	0.1000	21.4	20.0	7.0	20.0
Hexane	Ave	0.2205	0.1769		16.0	20.0	-19.8	20.0
Methyl tert-butyl ether	Ave	0.6343	0.6165	0.1000	19.4	20.0	-2.8	20.0
2-Methyl-2-propanol	Ave	1.148	1.177		205	200	2.5	50.0
Acetonitrile	Ave	1.529	1.426		187	200	-6.7	20.0
Isopropyl ether	Ave	0.9038	0.8129		18.0	20.0	-10.1	20.0
2-Chloro-1,3-butadiene	Ave	0.2439	0.2632		21.6	20.0	7.9	20.0
1,1-Dichloroethane	Ave	0.4950	0.4710	0.2000	19.0	20.0	-4.9	20.0
Acrylonitrile	Ave	4.671	5.760		247	200	23.3*	20.0
Tert-butyl ethyl ether	Ave	0.7823	0.7488		19.1	20.0	-4.3	20.0
Vinyl acetate	Lin2		0.8807		53.4	40.0	33.6*	20.0
cis-1,2-Dichloroethene	Ave	0.3230	0.3378	0.1000	20.9	20.0	4.6	20.0
2,2-Dichloropropane	Lin2		0.1312		20.4	20.0	2.1	20.0
Chlorobromomethane	Ave	0.1282	0.1402		21.9	20.0	9.4	20.0
Cyclohexane	Ave	0.5153	0.5137	0.1000	19.9	20.0	-0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab Sample ID: CCVIS 460-542406/3 Calibration Date: 08/06/2018 06:06

Instrument ID: CVOAMS11 Calib Start Date: 07/24/2018 06:28

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/24/2018 09:04

Lab File ID: N70087.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	0.4598	0.4586	0.2000	19.9	20.0	-0.3	20.0
Ethyl acetate	Ave	0.3075	0.4265		55.5	40.0	38.7*	20.0
Methyl acrylate	Ave	0.1373	0.1099		16.0	20.0	-20.0	20.0
Carbon tetrachloride	Ave	0.2560	0.3343	0.1000	26.1	20.0	30.6*	20.0
Tetrahydrofuran	Ave	0.3692	0.4629		50.2	40.0	25.4*	20.0
1,1,1-Trichloroethane	Ave	0.4035	0.4373	0.1000	21.7	20.0	8.4	20.0
2-Butanone (MEK)	Ave	0.3626	0.4277	0.0500	118	100	18.0	50.0
1,1-Dichloropropene	Ave	0.3724	0.3707		19.9	20.0	-0.4	20.0
2,2,4-Trimethylpentane	Ave	0.6986	0.5290		15.1	20.0	-24.3*	20.0
n-Heptane	Ave	0.1685	0.1239		14.7	20.0	-26.5*	20.0
Benzene	Ave	1.560	1.444	0.5000	18.5	20.0	-7.4	20.0
Propionitrile	Ave	1.720	1.878		218	200	9.2	20.0
Methacrylonitrile	Ave	0.0690	0.0583		169	200	-15.6	20.0
Tert-amyl methyl ether	Ave	0.7021	0.6847		19.5	20.0	-2.5	20.0
Isobutyl alcohol	Ave	0.4131	0.3879		470	500	-6.1	50.0
1,2-Dichloroethane	Ave	0.2934	0.2537	0.1000	17.3	20.0	-13.5	20.0
Isopropyl acetate	Ave	0.3140	0.2330		14.8	20.0	-25.8*	20.0
Methylcyclohexane	Ave	0.5260	0.4810	0.1000	18.3	20.0	-8.6	50.0
Ethyl acrylate	Ave	0.3903	0.3188		16.3	20.0	-18.3	20.0
Trichloroethene	Ave	0.2784	0.2825	0.2000	20.3	20.0	1.5	20.0
n-Butanol	Ave	0.2209	0.2668		604	500	20.8	50.0
Dibromomethane	Ave	0.1236	0.1183		19.1	20.0	-4.3	20.0
1,2-Dichloropropane	Ave	0.2655	0.2636	0.1000	19.9	20.0	-0.7	20.0
Dichlorobromomethane	Ave	0.2531	0.2854	0.2000	22.6	20.0	12.8	20.0
Methyl methacrylate	Ave	0.0497	0.0477		38.4	40.0	-4.0	20.0
1,4-Dioxane	Ave	1.156	1.180		408	400	2.1	50.0
n-Propyl acetate	Ave	0.2065	0.1612		15.6	20.0	-22.0*	20.0
2-Chloroethyl vinyl ether	Ave	0.1201	0.1066		17.7	20.0	-11.3	20.0
cis-1,3-Dichloropropene	Ave	0.4613	0.4637	0.2000	20.1	20.0	0.5	50.0
Toluene	Ave	1.643	1.612	0.4000	19.6	20.0	-1.9	20.0
Epichlorohydrin	Lin2		0.2508		415	400	3.8	20.0
2-Nitropropane	Ave	1.027	2.178		84.8	40.0	112.0*	20.0
Tetrachloroethene	Ave	0.3405	0.3936	0.2000	23.1	20.0	15.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.723	3.136	0.0500	115	100	15.2	50.0
trans-1,3-Dichloropropene	Ave	0.3678	0.3605	0.1000	19.6	20.0	-2.0	50.0
1,1,2-Trichloroethane	Ave	0.2103	0.1824	0.1000	17.4	20.0	-13.2	20.0
Ethyl methacrylate	Ave	0.2335	0.2125		18.2	20.0	-9.0	20.0
Chlorodibromomethane	Ave	0.1575	0.2172	0.1000	27.6	20.0	37.9	50.0
1,3-Dichloropropane	Ave	0.4538	0.3936		17.3	20.0	-13.3	20.0
Ethylene Dibromide	Ave	0.2244	0.2136	0.1000	19.0	20.0	-4.8	20.0
n-Butyl acetate	Ave	0.3245	0.2327		14.3	20.0	-28.3*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab Sample ID: CCVIS 460-542406/3 Calibration Date: 08/06/2018 06:06

Instrument ID: CVOAMS11 Calib Start Date: 07/24/2018 06:28

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/24/2018 09:04

Lab File ID: N70087.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Hexanone	Ave	0.9671	1.162	0.0500	120	100	20.2	50.0
Chlorobenzene	Ave	1.027	1.073	0.5000	20.9	20.0	4.5	20.0
Ethylbenzene	Ave	0.5619	0.5848	0.1000	20.8	20.0	4.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2563	0.3122		24.4	20.0	21.8*	20.0
m-Xylene & p-Xylene	Ave	0.6879	0.7152	0.1000	20.8	20.0	4.0	20.0
o-Xylene	Ave	0.6773	0.7166	0.3000	21.2	20.0	5.8	20.0
Styrene	Ave	1.078	1.107	0.3000	20.5	20.0	2.7	20.0
Bromoform	Ave	0.1372	0.1986	0.1000	29.0	20.0	44.8*	20.0
n-Butyl acrylate	Ave	0.1791	0.1497		16.7	20.0	-16.4	20.0
Isopropylbenzene	Ave	1.797	1.837	0.1000	20.4	20.0	2.2	20.0
Amyl acetate (mixed isomers)	Ave	0.8185	0.5982		14.6	20.0	-26.9*	20.0
Bromobenzene	Ave	0.7832	0.8316		21.2	20.0	6.2	20.0
N-Propylbenzene	Ave	4.075	3.672		18.0	20.0	-9.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5202	0.4537	0.3000	17.4	20.0	-12.8	20.0
4-Ethyltoluene	Ave	3.440	3.379		19.6	20.0	-1.8	20.0
2-Chlorotoluene	Ave	2.815	2.623		18.6	20.0	-6.8	20.0
1,3,5-Trimethylbenzene	Ave	2.941	2.837		19.3	20.0	-3.5	20.0
1,2,3-Trichloropropane	Ave	0.1767	0.1452		16.4	20.0	-17.8	20.0
trans-1,4-Dichloro-2-butene	Lin2		0.0933		15.3	20.0	-23.7*	20.0
4-Chlorotoluene	Ave	2.488	2.371		19.1	20.0	-4.7	20.0
Butyl Methacrylate	Qua2		0.7558		19.2	20.0	-4.2	20.0
tert-Butylbenzene	Ave	2.450	2.326		19.0	20.0	-5.1	20.0
1,2,4-Trimethylbenzene	Ave	3.069	2.974		19.4	20.0	-3.1	20.0
sec-Butylbenzene	Ave	3.656	3.239		17.7	20.0	-11.4	20.0
4-Isopropyltoluene	Ave	3.150	2.933		18.6	20.0	-6.9	20.0
1,3-Dichlorobenzene	Ave	1.589	1.639	0.6000	20.6	20.0	3.2	20.0
1,4-Dichlorobenzene	Ave	1.608	1.665	0.5000	20.7	20.0	3.6	20.0
1,2,3-Trimethylbenzene	Ave	3.220	3.136		19.5	20.0	-2.6	20.0
Indan	Ave	3.081	3.023		19.6	20.0	-1.9	20.0
p-Diethylbenzene	Ave	1.735	1.666		19.2	20.0	-4.0	20.0
Benzyl chloride	Qua2		0.1475		21.8	20.0	8.9	50.0
n-Butylbenzene	Ave	1.547	1.296		16.8	20.0	-16.2	20.0
1,2-Dichlorobenzene	Ave	1.468	1.481	0.4000	20.2	20.0	0.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.007	2.796		18.6	20.0	-7.0	20.0
1,2-Dibromo-3-Chloropropane	Qua2		0.0593	0.0500	21.5	20.0	7.3	50.0
1,3,5-Trichlorobenzene	Ave	1.098	1.110		20.2	20.0	1.2	20.0
Hexachlorobutadiene	Ave	0.2959	0.2903		19.6	20.0	-1.9	20.0
1,2,4-Trichlorobenzene	Ave	0.996	0.9740	0.2000	19.6	20.0	-2.2	20.0
Naphthalene	Ave	2.032	1.819		17.9	20.0	-10.5	50.0
1,2,3-Trichlorobenzene	Ave	0.8622	0.8111		18.8	20.0	-5.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2054	0.2128		51.8	50.0	3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Lab Sample ID: CCVIS 460-542406/3 Calibration Date: 08/06/2018 06:06

Instrument ID: CVOAMS11 Calib Start Date: 07/24/2018 06:28

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 07/24/2018 09:04

Lab File ID: N70087.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.2064	0.1748		42.3	50.0	-15.3	20.0
Toluene-d8 (Surr)	Ave	1.211	1.209		49.9	50.0	-0.2	20.0
4-Bromofluorobenzene	Ave	0.3205	0.3632		56.7	50.0	13.3	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70087.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Aug-2018 06:06:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0076670-003
Operator ID: Instrument ID: CVOAMS11
Sublist: chrom-8260W_11*sub1

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 06-Aug-2018 14:53:41 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: delpolitov Date: 06-Aug-2018 14:53:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.492	1.492	0.000	87	46386	20.0	18.7	
2 Dichlorodifluoromethane	87	1.522	1.522	0.000	99	29205	20.0	15.1	
3 Chloromethane	52	1.656	1.656	0.000	99	33264	20.0	25.5	
5 Butadiene	54	1.723	1.723	0.000	73	81961	20.0	16.6	
4 Vinyl chloride	62	1.729	1.729	0.000	98	107488	20.0	18.4	
6 Bromomethane	94	1.991	1.991	0.000	99	83013	20.0	20.5	
7 Chloroethane	64	2.082	2.082	0.000	98	66067	20.0	18.8	
10 Pentane	72	2.167	2.167	0.000	97	28925	40.0	66.6	
9 Trichlorofluoromethane	101	2.186	2.186	0.000	97	129255	20.0	20.9	
8 Dichlorofluoromethane	67	2.234	2.234	0.000	98	144858	20.0	18.9	
12 Ethyl ether	59	2.417	2.417	0.000	60	45973	20.0	18.4	
13 2-Methyl-1,3-butadiene	53	2.417	2.417	0.000	96	59245	20.0	18.7	
11 Ethanol	46	2.520	2.520	0.000	93	6947	800.0	1007.6	
14 1,2-Dichloro-1,1,2-trifluo	117	2.581	2.581	0.000	79	79559	20.0	22.7	
17 1,1-Dichloroethene	96	2.587	2.587	0.000	94	72978	20.0	21.3	
20 Carbon disulfide	76	2.617	2.617	0.000	99	225520	20.0	19.0	
15 1,1,2-Trichloro-1,2,2-trif	101	2.630	2.630	0.000	55	80561	20.0	21.1	
19 Iodomethane	142	2.709	2.709	0.000	96	134244	20.0	23.3	
23 Cyclopentene	67	2.824	2.824	0.000	95	183735	20.0	20.0	
16 Acrolein	56	2.849	2.849	0.000	93	9235	40.0	37.4	
21 Isopropyl alcohol	45	2.964	2.964	0.000	10	13502	200.0	210.8	
22 3-Chloro-1-propene	76	2.970	2.970	0.000	93	45366	20.0	21.5	
26 Methylene Chloride	84	3.055	3.055	0.000	85	78326	20.0	19.7	
18 Acetone	58	3.080	3.080	0.000	88	12076	100.0	97.5	
24 Methyl acetate	74	3.183	3.183	0.000	40	12915	40.0	54.9	
30 trans-1,2-Dichloroethene	96	3.183	3.183	0.000	90	83459	20.0	21.4	
32 Hexane	56	3.232	3.232	0.000	90	48085	20.0	16.0	
29 Methyl tert-butyl ether	73	3.262	3.262	0.000	92	167592	20.0	19.4	
* 27 TBA-d9 (IS)	65	3.281	3.281	0.000	97	106165	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.329	3.329	0.000	98	24988	200.0	204.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
25 Acetonitrile	41	3.487	3.487	0.000	100	30282	200.0	186.6	a
33 Isopropyl ether	45	3.566	3.566	0.000	95	221001	20.0	18.0	
36 2-Chloro-1,3-butadiene	88	3.676	3.676	0.000	87	71546	20.0	21.6	
34 1,1-Dichloroethane	63	3.700	3.700	0.000	100	128039	20.0	19.0	
31 Acrylonitrile	53	3.749	3.749	0.000	96	122296	200.0	246.6	
37 Tert-butyl ethyl ether	59	3.883	3.883	0.000	91	203570	20.0	19.1	
35 Vinyl acetate	86	3.901	3.901	0.000	99	17774	40.0	53.4	
40 cis-1,2-Dichloroethene	96	4.169	4.169	0.000	96	91831	20.0	20.9	
38 2,2-Dichloropropane	79	4.278	4.278	0.000	96	35666	20.0	20.4	
46 Chlorobromomethane	128	4.345	4.345	0.000	71	38124	20.0	21.9	
49 Cyclohexane	84	4.357	4.357	0.000	84	139662	20.0	19.9	
48 Chloroform	83	4.418	4.418	0.000	99	124673	20.0	19.9	
42 Ethyl acetate	70	4.509	4.509	0.000	99	8608	40.0	55.5	
43 Methyl acrylate	55	4.528	4.528	0.000	98	29878	20.0	16.0	
52 Carbon tetrachloride	117	4.546	4.546	0.000	98	90886	20.0	26.1	
45 Tetrahydrofuran	72	4.558	4.558	0.000	76	9341	40.0	50.2	
$ 51 Dibromofluoromethane (Surr	113	4.582	4.582	0.000	98	144655	50.0	51.8	
50 1,1,1-Trichloroethane	97	4.619	4.619	0.000	94	118874	20.0	21.7	
* 39 2-Butanone-d5	46	4.649	4.649	0.000	0	126134	250.0	250.0	
41 2-Butanone (MEK)	72	4.698	4.698	0.000	98	21581	100.0	118.0	
53 1,1-Dichloropropene	75	4.722	4.722	0.000	98	100786	20.0	19.9	
54 Isooctane	57	4.814	4.814	0.000	99	143817	20.0	15.1	
61 n-Heptane	57	4.911	4.911	0.000	89	33681	20.0	14.7	
55 Benzene	78	4.966	4.966	0.000	91	314830	20.0	18.5	
44 Propionitrile	54	4.996	4.996	0.000	97	39868	200.0	218.4	
47 Methacrylonitrile	67	5.014	5.014	0.000	87	158431	200.0	168.8	
57 Tert-amyl methyl ether	73	5.069	5.069	0.000	98	186149	20.0	19.5	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	95	118778	50.0	42.3	
58 Isobutyl alcohol	43	5.166	5.166	0.000	44	20593	500.0	469.6	
60 1,2-Dichloroethane	62	5.173	5.173	0.000	97	68964	20.0	17.3	
* 62 Fluorobenzene	96	5.379	5.379	0.000	100	679638	50.0	50.0	
59 Isopropyl acetate	43	5.410	5.410	0.000	98	63329	20.0	14.8	
65 Methylcyclohexane	83	5.538	5.538	0.000	92	130763	20.0	18.3	
66 Ethyl acrylate	55	5.544	5.544	0.000	75	86656	20.0	16.3	
64 Trichloroethene	95	5.550	5.550	0.000	95	76810	20.0	20.3	
63 n-Butanol	56	5.915	5.915	0.000	80	14162	500.0	603.8	
71 Dibromomethane	93	6.012	6.012	0.000	93	32171	20.0	19.1	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	94	71647	20.0	19.9	
73 Dichlorobromomethane	83	6.195	6.195	0.000	98	77580	20.0	22.6	
69 Methyl methacrylate	100	6.371	6.371	0.000	86	25931	40.0	38.4	
* 68 1,4-Dioxane-d8	96	6.377	6.377	0.000	87	16930	1000.0	1000.0	
70 1,4-Dioxane	88	6.420	6.420	0.000	83	7989	400.0	408.2	
72 n-Propyl acetate	43	6.547	6.547	0.000	96	43815	20.0	15.6	
75 2-Chloroethyl vinyl ether	63	6.870	6.870	0.000	95	28970	20.0	17.7	
77 cis-1,3-Dichloropropene	75	6.937	6.937	0.000	89	101099	20.0	20.1	
$ 79 Toluene-d8 (Surr)	98	7.156	7.156	0.000	99	659175	50.0	49.9	
80 Toluene	91	7.223	7.223	0.000	93	351578	20.0	19.6	
76 Epichlorohydrin	57	7.253	7.253	0.000	98	50612	400.0	415.0	a
74 2-Nitropropane	41	7.539	7.539	0.000	97	9250	40.0	84.8	
84 Tetrachloroethene	166	7.703	7.703	0.000	96	85814	20.0	23.1	
78 4-Methyl-2-pentanone (MIBK	43	7.722	7.722	0.000	93	158224	100.0	115.2	
81 trans-1,3-Dichloropropene	75	7.764	7.764	0.000	91	78597	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 1,1,2-Trichloroethane	83	7.983	7.983	0.000	93	39773	20.0	17.4	
82 Ethyl methacrylate	69	7.989	7.989	0.000	88	57781	20.0	18.2	
88 Chlorodibromomethane	129	8.202	8.202	0.000	98	47348	20.0	27.6	
85 1,3-Dichloropropane	76	8.330	8.330	0.000	91	85816	20.0	17.3	
89 Ethylene Dibromide	107	8.500	8.500	0.000	98	46576	20.0	19.0	
87 n-Butyl acetate	43	8.744	8.744	0.000	97	50742	20.0	14.3	
86 2-Hexanone	58	8.847	8.847	0.000	93	58645	100.0	120.2	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	84	545115	50.0	50.0	
91 Chlorobenzene	112	9.176	9.176	0.000	98	234005	20.0	20.9	
92 Ethylbenzene	106	9.224	9.224	0.000	96	127506	20.0	20.8	
93 1,1,1,2-Tetrachloroethane	131	9.261	9.261	0.000	93	68083	20.0	24.4	
94 m-Xylene & p-Xylene	106	9.395	9.395	0.000	0	155952	20.0	20.8	
96 o-Xylene	106	9.857	9.857	0.000	95	156256	20.0	21.2	
97 Styrene	104	9.918	9.918	0.000	98	241356	20.0	20.5	
99 Bromoform	173	9.930	9.930	0.000	97	22963	20.0	29.0	
95 n-Butyl acrylate	73	10.082	10.082	0.000	99	32634	20.0	16.7	
100 Isopropylbenzene	105	10.179	10.179	0.000	94	400578	20.0	20.4	
98 Amyl acetate (mixed isomer	43	10.338	10.338	0.000	93	69171	20.0	14.6	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	93	198007	50.0	56.7	
102 Bromobenzene	156	10.544	10.544	0.000	93	96168	20.0	21.2	
104 N-Propylbenzene	91	10.581	10.581	0.000	100	424644	20.0	18.0	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	98	52462	20.0	17.4	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	390796	20.0	19.6	
107 2-Chlorotoluene	91	10.721	10.721	0.000	96	303298	20.0	18.6	
109 1,3,5-Trimethylbenzene	105	10.769	10.769	0.000	94	328058	20.0	19.3	
105 1,2,3-Trichloropropane	110	10.776	10.776	0.000	91	16795	20.0	16.4	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	88	10793	20.0	15.3	
110 4-Chlorotoluene	91	10.873	10.873	0.000	96	274155	20.0	19.1	
112 tert-Butylbenzene	119	11.055	11.055	0.000	96	268964	20.0	19.0	
111 Butyl Methacrylate	87	11.055	11.055	0.000	86	87405	20.0	19.2	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	96	343893	20.0	19.4	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	374514	20.0	17.7	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	339164	20.0	18.6	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	97	189536	20.0	20.6	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	93	289099	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.463	11.463	0.000	97	192585	20.0	20.7	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	97	362650	20.0	19.5	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	93	349523	20.0	19.6	
121 p-Diethylbenzene	119	11.639	11.639	0.000	97	192602	20.0	19.2	
119 Benzyl chloride	126	11.682	11.682	0.000	98	17061	20.0	21.8	
122 n-Butylbenzene	92	11.688	11.688	0.000	97	149872	20.0	16.8	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	98	171205	20.0	20.2	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	97	323332	20.0	18.6	
125 1,2-Dibromo-3-Chloropropan	155	12.455	12.455	0.000	95	6853	20.0	21.5	a
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	97	128402	20.0	20.2	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	94	33573	20.0	19.6	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	94	112631	20.0	19.6	
129 Naphthalene	128	13.221	13.221	0.000	99	210345	20.0	17.9	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	96	93794	20.0	18.8	
S 131 1,2-Dichloroethene, Total	100				0		40.0	42.3	
S 132 Xylenes, Total	100				0		40.0	42.0	
S 133 Total BTEX	1				0		100.0	100.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00271	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
8260SURR250_00181	Amount Added:	1.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 06-Aug-2018 14:53:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70087.D

Injection Date: 06-Aug-2018 06:06:30 Instrument ID: CVOAMS11 Operator ID:

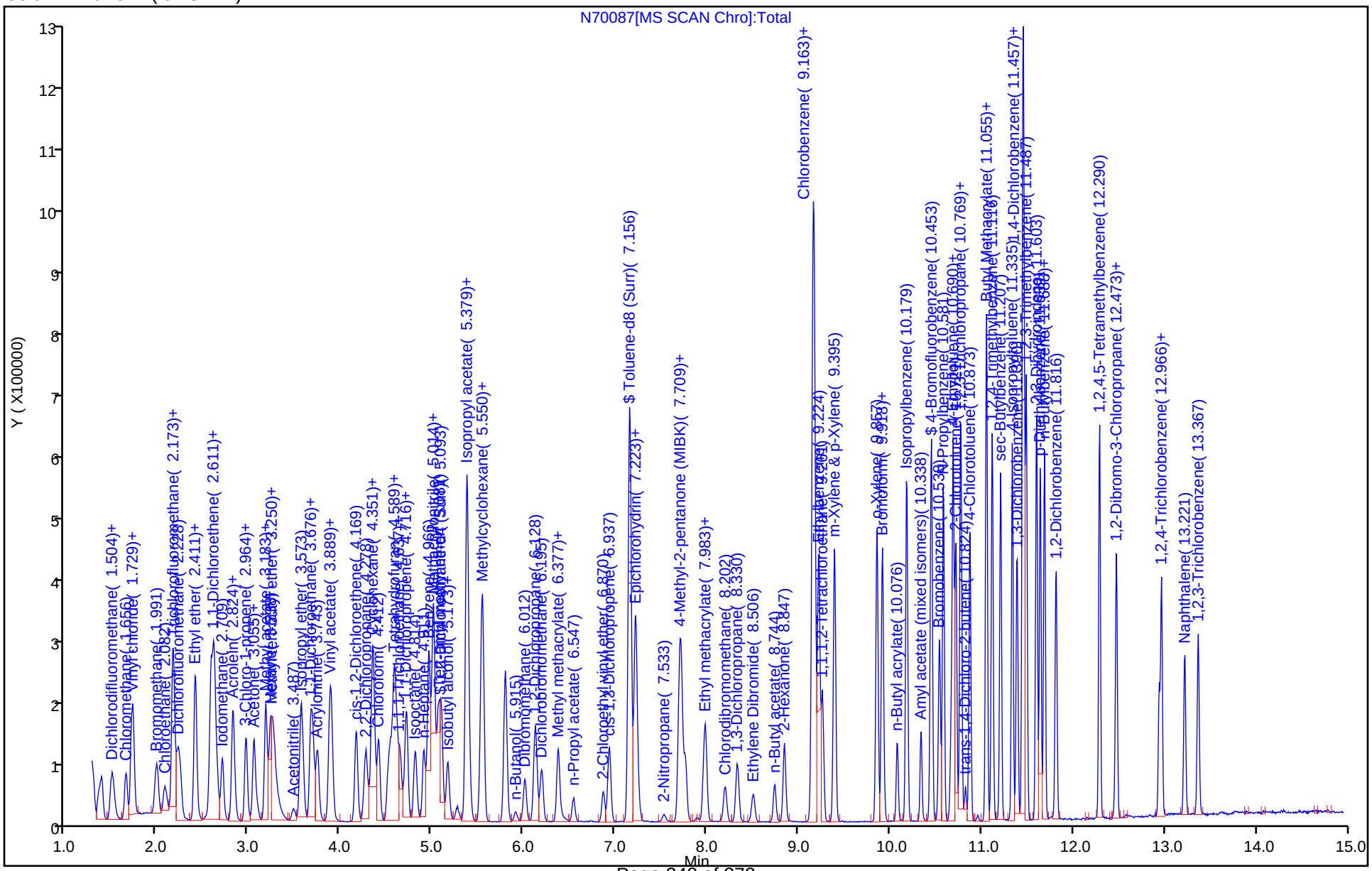
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

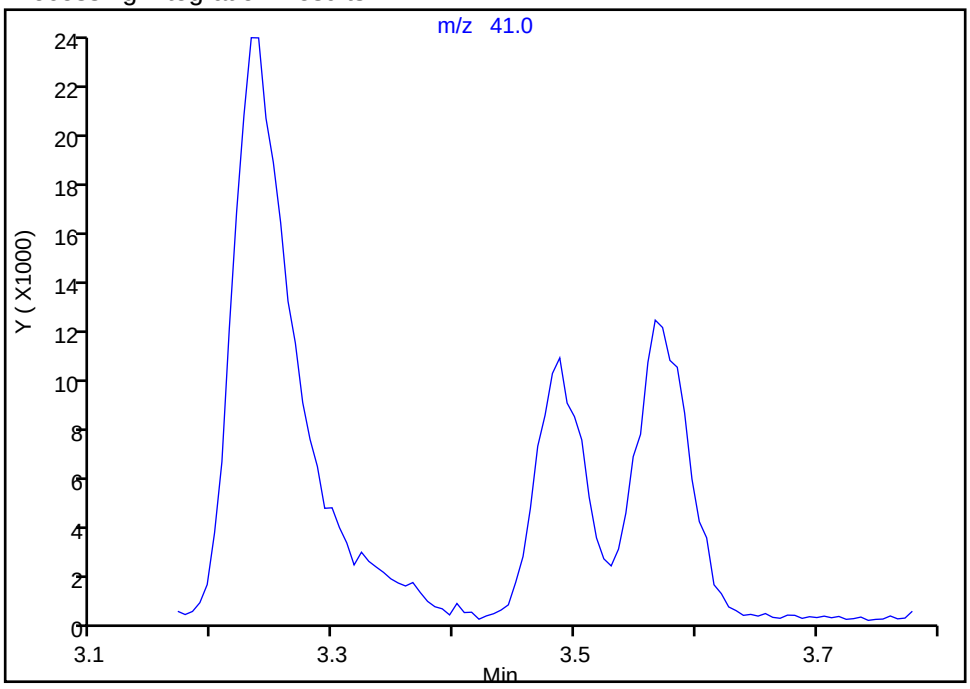
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70087.D
Injection Date: 06-Aug-2018 06:06:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

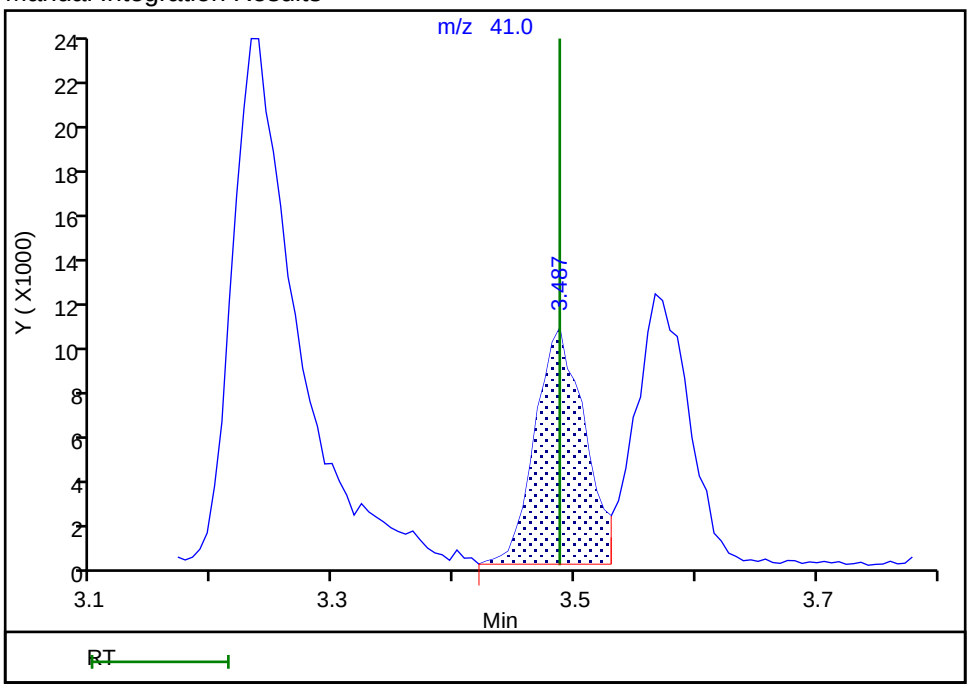
Not Detected
Expected RT: 3.49

Processing Integration Results



Manual Integration Results

RT: 3.49
Area: 30282
Amount: 186.6074
Amount Units: ug/l



Reviewer: tupayachia, 06-Aug-2018 07:45:23
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

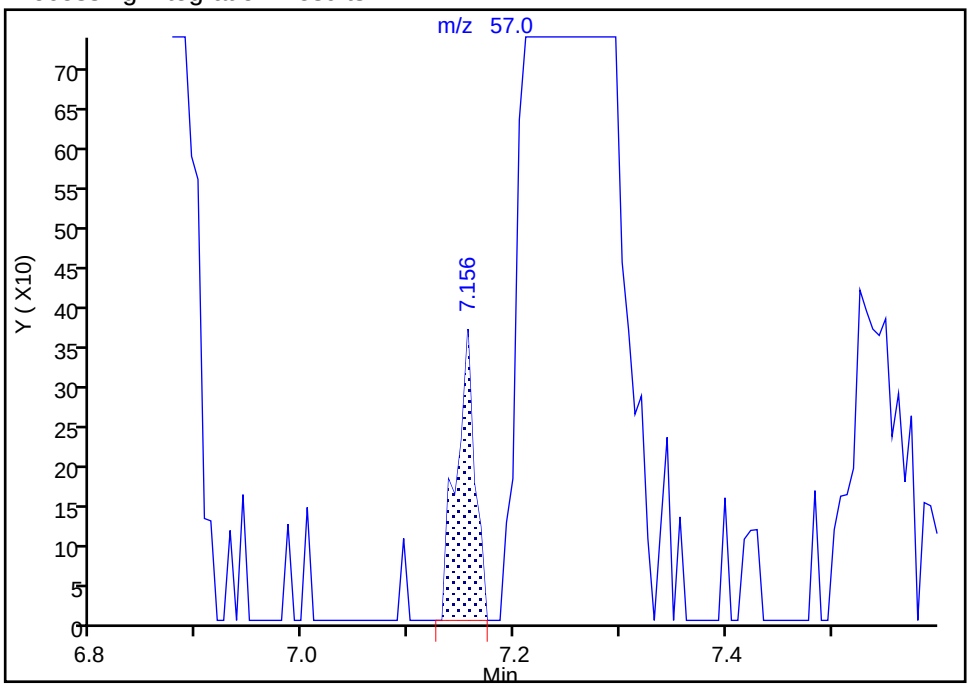
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70087.D
Injection Date: 06-Aug-2018 06:06:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

76 Epichlorohydrin, CAS: 106-89-8

Signal: 1

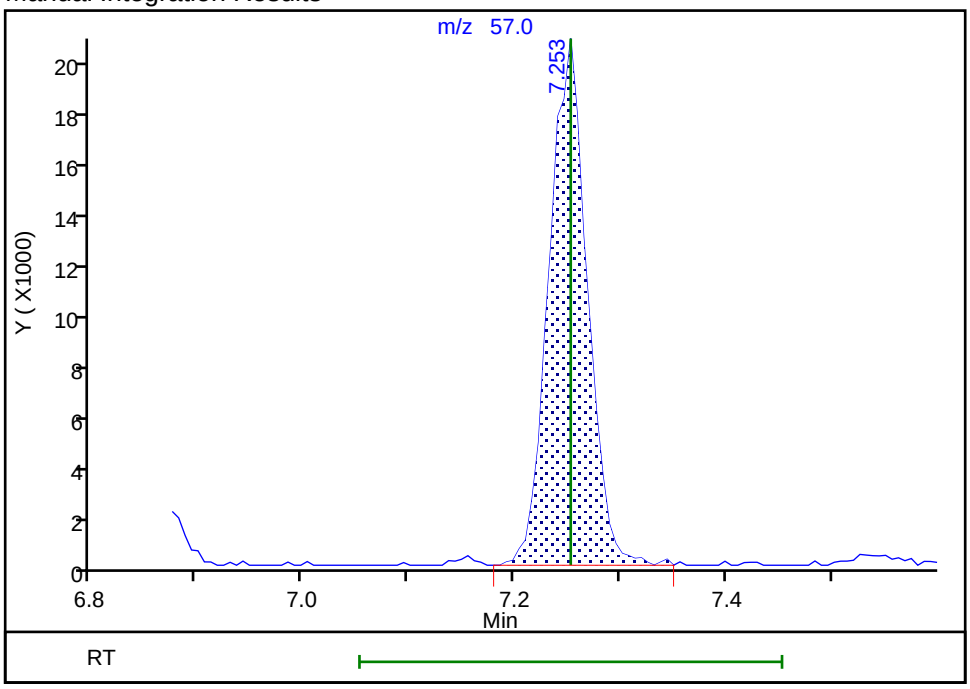
Processing Integration Results

RT: 7.16
Area: 444
Amount: 6.354675
Amount Units: ug/l



Manual Integration Results

RT: 7.25
Area: 50612
Amount: 415.0178
Amount Units: ug/l



Reviewer: tupayachia, 06-Aug-2018 07:45:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

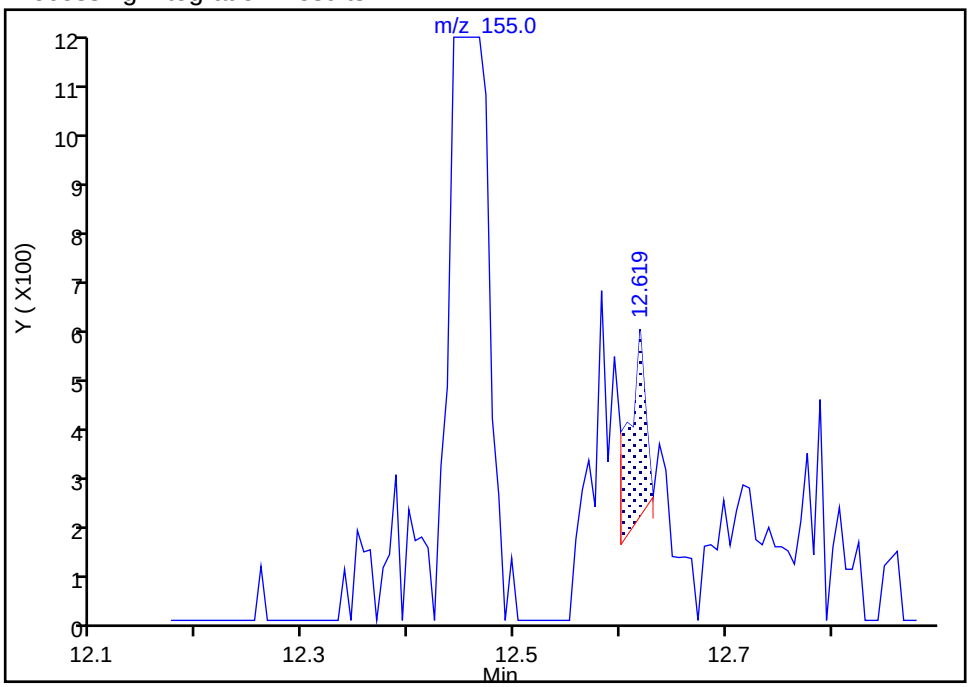
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70087.D
Injection Date: 06-Aug-2018 06:06:30 Instrument ID: CVOAMS11
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

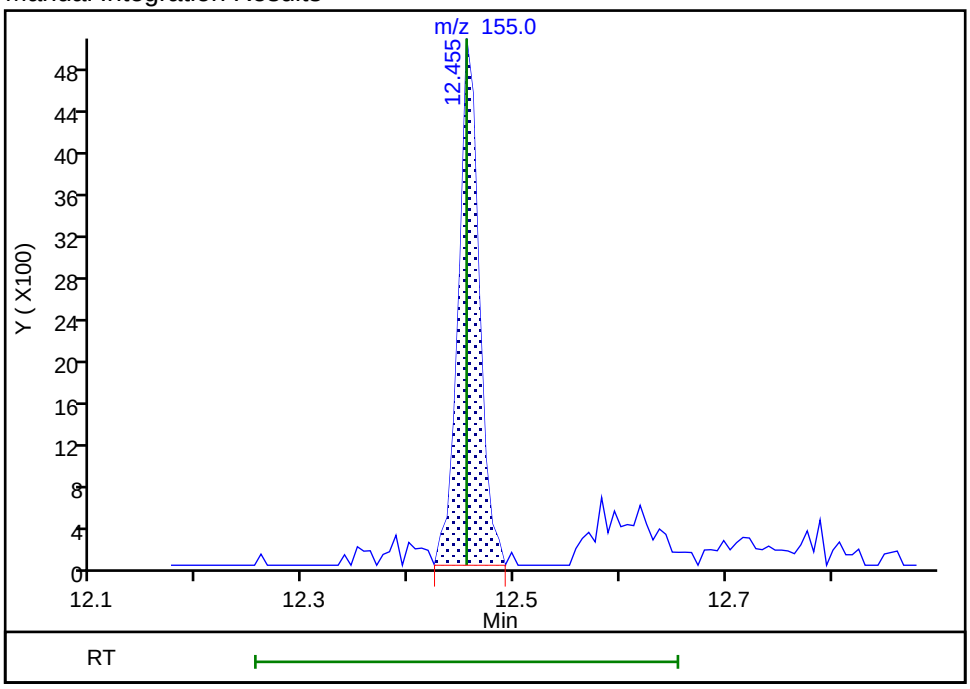
Processing Integration Results

RT: 12.62
Area: 426
Amount: 1.920798
Amount Units: ug/l



Manual Integration Results

RT: 12.45
Area: 6853
Amount: 21.456067
Amount Units: ug/l



Reviewer: tupayachia, 06-Aug-2018 07:46:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69450.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 24-Jul-2018 05:45:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0076012-001
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 25-Jul-2018 18:22:27 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tupayachia Date: 24-Jul-2018 05:51:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 135 BFB	95	3.202	3.202	0.000	82	55744	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

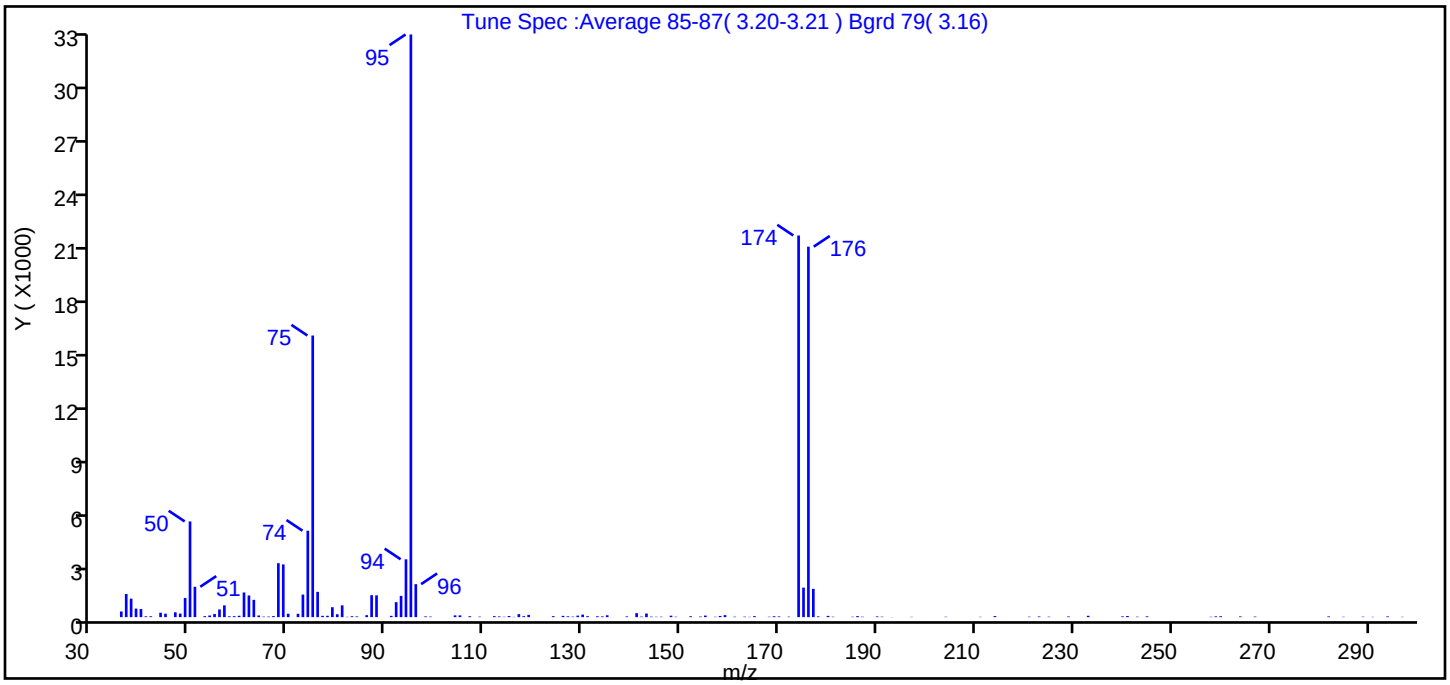
BFB_00017 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69450.D
Injection Date: 24-Jul-2018 05:45:30 Instrument ID: CVOAMS11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 135 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.4
75	30 to 60% of m/z 95	48.3
96	5 to 9% of m/z 95	5.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	65.5
175	5 to 9% of m/z 174	5.1 (7.7)
176	Greater than 95% but less than 101% of m/z 174	63.6 (97.1)
177	5 to 9% of m/z 176	4.9 (7.6)

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69450.D\8260W_11.rslt\spectra.d
Injection Date: 24-Jul-2018 05:45:30
Spectrum: Tune Spec :Average 85-87(3.20-3.21) Bgrd 79(3.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	321	75.00	15950	126.00	72	177.00	1601
37.00	1312	76.00	1433	127.00	46	178.00	43
38.00	1048	77.00	75	128.00	28	180.00	72
39.00	483	78.00	77	129.00	85	181.00	24
40.00	460	79.00	563	130.00	145	185.00	23
41.00	47	80.00	165	131.00	54	186.00	59
42.00	49	81.00	669	133.00	49	187.00	25
44.00	250	82.00	18	134.00	42	190.00	41
45.00	195	83.00	52	135.00	105	191.00	26
47.00	274	84.00	41	139.00	41	193.00	8
48.00	202	86.00	111	141.00	226	197.00	17
49.00	1085	87.00	1244	142.00	31	204.00	22
50.00	5420	88.00	1235	143.00	205	211.00	19
51.00	1720	91.00	73	144.00	29	214.00	61
53.00	57	92.00	848	145.00	20	221.00	26
54.00	93	93.00	1204	146.00	24	223.00	39
55.00	177	94.00	3277	148.00	83	225.00	26
56.00	435	95.00	33000	149.00	23	229.00	38
57.00	667	96.00	1869	152.00	50	233.00	77
58.00	48	98.00	42	154.00	35	240.00	43
59.00	54	99.00	30	155.00	89	241.00	63
60.00	78	104.00	101	157.00	21	243.00	26
61.00	1397	105.00	100	158.00	67	245.00	45
62.00	1228	107.00	52	159.00	115	258.00	22
63.00	979	109.00	28	161.00	26	259.00	44
64.00	94	111.00	1	163.00	28	260.00	52
65.00	29	112.00	56	164.00	17	264.00	41
66.00	31	113.00	40	165.00	57	267.00	33
67.00	59	114.00	20	168.00	22	282.00	41
68.00	3056	115.00	65	169.00	49	285.00	19
69.00	2987	116.00	16	170.00	40	289.00	25
70.00	194	117.00	171	172.00	28	291.00	17
72.00	192	118.00	55	174.00	21616	294.00	41

Report Date: 25-Jul-2018 18:22:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69450.D\8260W_11.rslt\spectra.d
Injection Date: 24-Jul-2018 05:45:30
Spectrum: Tune Spec :Average 85-87(3.20-3.21) Bgrd 79(3.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	1279	119.00	127	175.00	1671	297.00	18
74.00	4895	124.00	56	176.00	20984		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69682.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 28-Jul-2018 04:30:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0076243-001
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 28-Jul-2018 10:35:50 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: tupayachia Date: 28-Jul-2018 04:37:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 135 BFB	95	3.202	3.202	0.000	84	70795	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

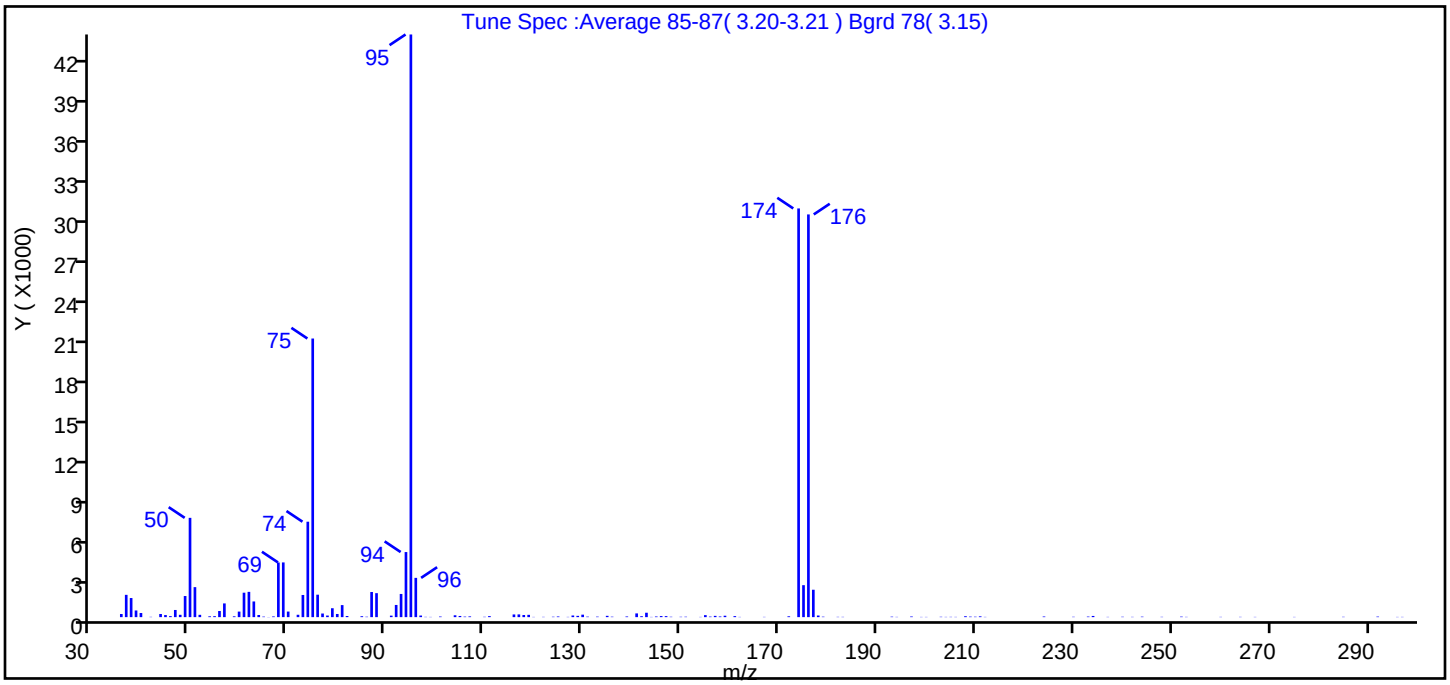
BFB_00017 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69682.D
Injection Date: 28-Jul-2018 04:30:30 Instrument ID: CVOAMS11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 135 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.0
75	30 to 60% of m/z 95	47.8
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	70.1
175	5 to 9% of m/z 174	5.5 (7.8)
176	Greater than 95% but less than 101% of m/z 174	69.1 (98.5)
177	5 to 9% of m/z 176	4.7 (6.8)

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69682.D\8260W_11.rslt\spectra.d
Injection Date: 28-Jul-2018 04:30:30
Spectrum: Tune Spec :Average 85-87(3.20-3.21) Bgrd 78(3.15)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	235	76.00	1682	127.00	19	182.00	22
37.00	1670	77.00	272	128.00	123	183.00	21
38.00	1432	78.00	120	129.00	97	193.00	36
39.00	500	79.00	668	130.00	186	194.00	19
40.00	309	80.00	237	131.00	38	197.00	48
42.00	22	81.00	902	133.00	38	199.00	17
44.00	236	82.00	85	135.00	98	200.00	17
45.00	156	85.00	69	136.00	34	203.00	28
46.00	76	86.00	31	139.00	51	204.00	19
47.00	537	87.00	1883	141.00	280	205.00	22
48.00	175	88.00	1796	142.00	69	206.00	19
49.00	1582	91.00	113	143.00	330	208.00	68
50.00	7439	92.00	913	144.00	17	209.00	40
51.00	2248	93.00	1737	145.00	49	210.00	33
52.00	174	94.00	4876	146.00	81	211.00	60
54.00	62	95.00	43648	147.00	76	212.00	18
55.00	73	96.00	2942	148.00	29	224.00	48
56.00	460	97.00	120	150.00	27	230.00	27
57.00	1028	98.00	21	151.00	32	233.00	43
59.00	61	99.00	17	154.00	17	234.00	89
60.00	416	101.00	45	155.00	149	237.00	19
61.00	1831	104.00	139	156.00	41	240.00	29
62.00	1894	105.00	87	157.00	96	242.00	21
63.00	1175	106.00	39	158.00	50	244.00	36
64.00	161	107.00	56	159.00	106	248.00	23
65.00	39	110.00	26	161.00	76	252.00	39
66.00	11	111.00	77	162.00	17	253.00	20
67.00	53	116.00	202	167.00	19	260.00	20
68.00	4094	117.00	204	172.00	63	264.00	21
69.00	4099	118.00	160	174.00	30616	267.00	18
70.00	418	119.00	173	175.00	2395	275.00	17
72.00	178	120.00	17	176.00	30168	285.00	25
73.00	1660	122.00	21	177.00	2053	292.00	41

Report Date: 28-Jul-2018 10:35:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69682.D\8260W_11.rslt\spectra.d
Injection Date: 28-Jul-2018 04:30:30
Spectrum: Tune Spec :Average 85-87(3.20-3.21) Bgrd 78(3.15)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	7149	124.00	31	178.00	122	296.00	17
75.00	20872	125.00	50	179.00	35	297.00	19

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70085.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Aug-2018 05:19:30 ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 460-0076670-001
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 06-Aug-2018 14:52:07 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: delpolitov Date: 06-Aug-2018 14:52:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 135 BFB	95	3.208	3.208	0.000	96	51121	NR	NR	a

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
a - User Assigned ID

Reagents:

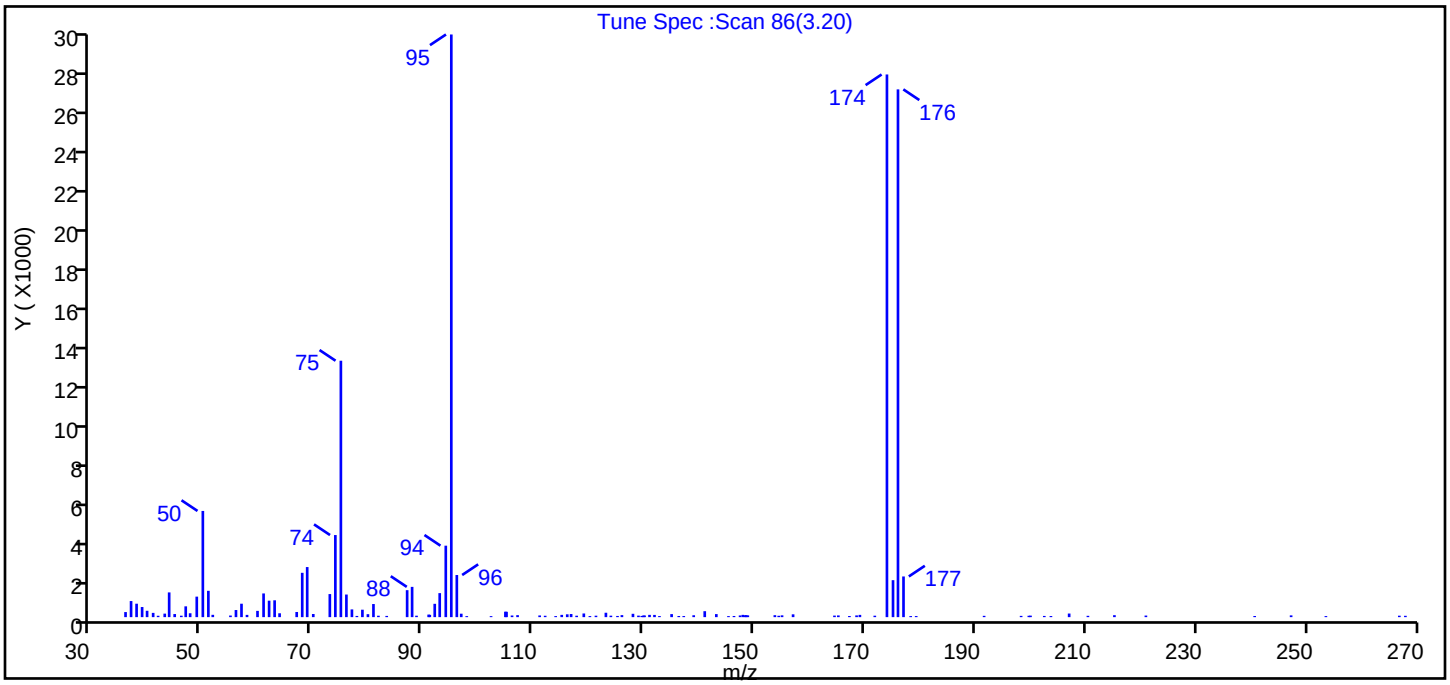
BFB_00017 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70085.D
Injection Date: 06-Aug-2018 05:19:30 Instrument ID: CVOAMS11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 99 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Tune Method: BFB Method 8260

$ 135 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.2
75	30 to 60% of m/z 95	44.0
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	93.1
175	5 to 9% of m/z 174	6.3 (6.8)
176	Greater than 95% but less than 101% of m/z 174	90.6 (97.3)
177	5 to 9% of m/z 176	7.0 (7.7)

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70085.D\8260W_11.rslt\spectra.d
Injection Date: 06-Aug-2018 05:19:30
Spectrum: Tune Spec :Scan 86(3.20)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 124

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	256	74.10	4139	116.10	143	153.70	99
37.10	811	75.10	12928	116.80	157	154.40	69
38.10	677	76.10	1140	117.80	72	155.00	91
39.10	510	77.10	390	119.10	185	157.00	142
40.00	321	78.00	61	120.20	54	164.50	79
41.10	215	79.00	375	121.30	73	165.20	86
42.00	70	80.00	149	123.10	222	167.20	57
43.20	177	81.00	661	124.00	74	168.50	87
44.00	1247	81.90	72	125.20	60	169.10	114
45.00	156	83.40	62	126.00	102	171.80	73
46.20	73	87.10	1360	128.00	169	174.00	27360
47.00	545	88.00	1526	129.00	77	175.10	1864
47.80	196	88.80	73	129.60	62	176.00	26608
49.00	1034	91.00	128	129.90	80	177.00	2051
50.10	5354	91.20	116	130.10	83	178.30	54
51.10	1328	92.10	672	131.00	115	179.30	55
51.90	117	93.00	1211	131.90	112	191.60	66
55.10	81	94.10	3603	132.80	54	198.30	64
56.10	359	95.10	29376	135.00	153	199.70	70
57.10	677	96.10	2124	136.30	57	200.00	76
58.10	114	96.90	174	137.20	55	202.50	61
60.00	316	97.90	51	139.00	95	203.70	56
61.10	1195	102.30	51	141.00	300	207.00	182
62.10	830	104.90	275	143.10	154	210.40	67
63.10	849	105.10	270	145.30	52	215.20	99
64.00	195	106.10	83	146.30	58	220.90	80
67.10	260	107.10	100	147.40	85	240.60	57
68.10	2235	111.10	85	147.90	115	247.20	89
69.00	2525	112.10	70	148.30	96	253.50	54
70.10	158	114.00	53	148.50	99	266.80	73
73.10	1163	115.10	115	148.80	89	267.90	68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-540359/8

Matrix: Water | Lab File ID: N69689.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 07:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-540359/8

Matrix: Water | Lab File ID: N69689.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 07:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		74-132
460-00-4	4-Bromofluorobenzene	98		77-124
1868-53-7	Dibromofluoromethane (Surr)	98		72-131
2037-26-5	Toluene-d8 (Surr)	100		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69689.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 28-Jul-2018 07:18:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0076243-008
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 19:58:11 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: delpolitov Date: 31-Jul-2018 19:58:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.281	3.281	0.000	38	125849	1000.0	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.589	4.595	-0.006	96	127628	50.0	48.9	
* 39 2-Butanone-d5	46	4.656	4.662	-0.006	0	151737	250.0	250.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.100	5.106	-0.006	97	126667	50.0	48.3	
* 62 Fluorobenzene	96	5.386	5.385	0.001	99	635651	50.0	50.0	
* 68 1,4-Dioxane-d8	96	6.389	6.383	0.006	30	16926	1000.0	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	99	572192	50.0	50.0	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	85	472668	50.0	50.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	148681	50.0	49.1	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	96	224290	50.0	50.0	

Reagents:

8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00179 Amount Added: 1.00 Units: uL Run Reagent

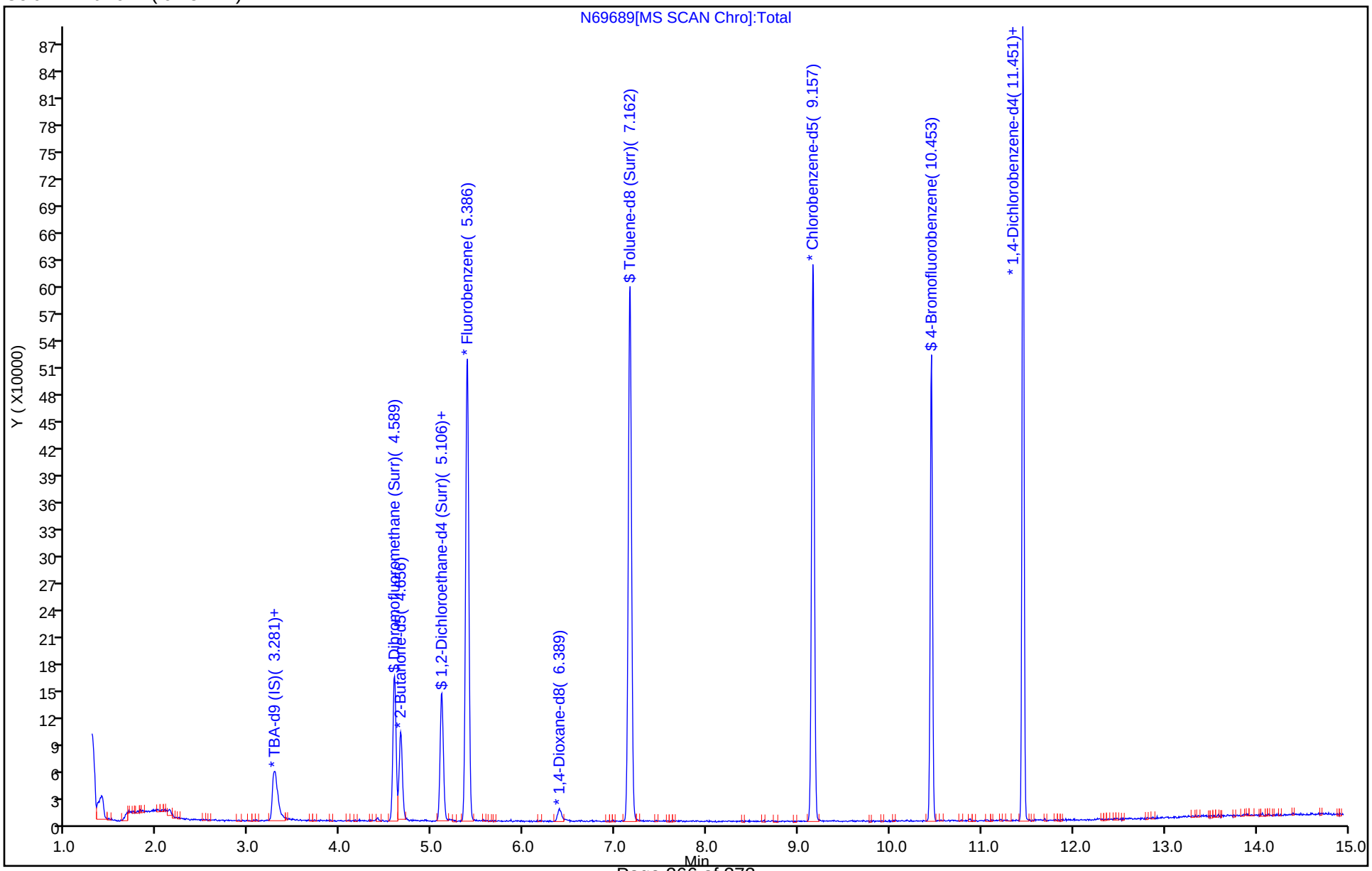
Report Date: 31-Jul-2018 19:58:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69689.D

Injection Date:	28-Jul-2018 07:18:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-542406/32

Matrix: Water | Lab File ID: N70092a.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 07:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.43
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.76
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
591-78-6	2-Hexanone	5.0	U	5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7
67-64-1	Acetone	5.0	U	5.0	5.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.54
74-83-9	Bromomethane	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	1.0	U	1.0	0.16
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
74-97-5	Chlorobromomethane	1.0	U	1.0	0.41
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.28
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.33
74-87-3	Chloromethane	1.0	U	1.0	0.14
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
110-82-7	Cyclohexane	1.0	U	1.0	0.32
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.34
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-542406/32

Matrix: Water | Lab File ID: N70092a.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 07:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.34
79-20-9	Methyl acetate	5.0	U	5.0	0.31
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.47
108-87-2	Methylcyclohexane	1.0	U	1.0	0.26
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.30
95-47-6	o-Xylene	1.0	U	1.0	0.36
100-42-5	Styrene	1.0	U	1.0	0.42
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.49
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.14
75-01-4	Vinyl chloride	1.0	U	1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		74-132
460-00-4	4-Bromofluorobenzene	116		77-124
1868-53-7	Dibromofluoromethane (Surr)	103		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-542406/32

Matrix: Water Lab File ID: N70092a.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2018 07:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 542406 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70092a.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 06-Aug-2018 07:57:30 ALS Bottle#: 7 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0076670-008
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 06-Aug-2018 15:09:43 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: delpolitov Date: 06-Aug-2018 15:09:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 27 TBA-d9 (IS)	65	3.274	3.281	-0.007	40	104017	1000.0	1000.0	
$ 51 Dibromofluoromethane (Surr	113	4.588	4.582	0.006	97	140352	50.0	51.3	
* 39 2-Butanone-d5	46	4.655	4.649	0.006	0	126977	250.0	250.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.105	5.106	-0.001	95	120469	50.0	43.8	
* 62 Fluorobenzene	96	5.379	5.379	0.000	99	665628	50.0	50.0	
* 68 1,4-Dioxane-d8	96	6.383	6.377	0.006	30	17807	1000.0	1000.0	
$ 79 Toluene-d8 (Surr)	98	7.156	7.156	0.000	100	639826	50.0	49.7	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	83	531627	50.0	50.0	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	93	196977	50.0	57.8	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	93	286714	50.0	50.0	

Reagents:

8260SURR250_00181 Amount Added: 1.00 Units: uL
8260ISNEW_00120 Amount Added: 1.00 Units: uL Run Reagent

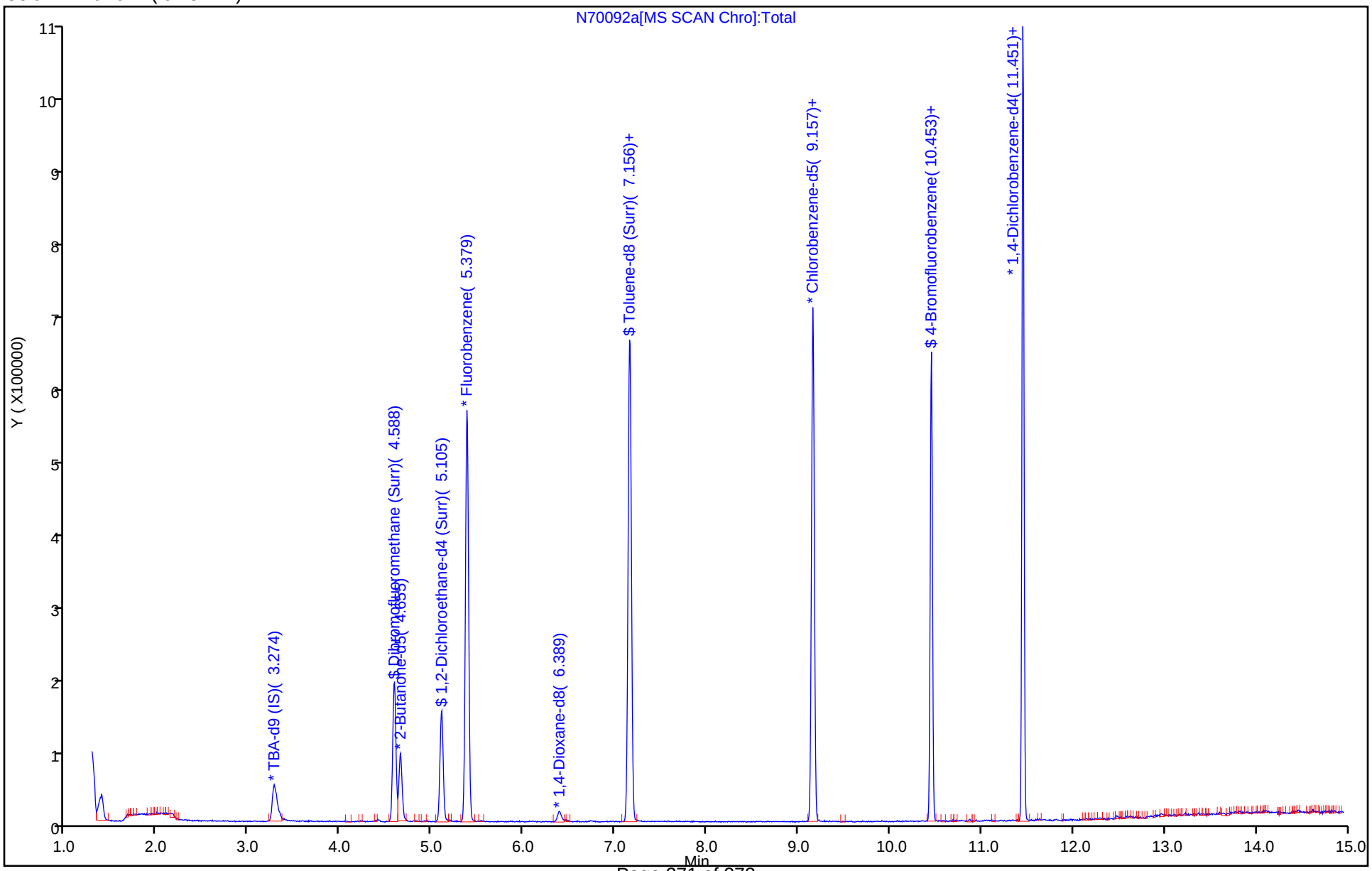
Report Date: 06-Aug-2018 15:09:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70092a.D

Injection Date:	06-Aug-2018 07:57:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	32
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



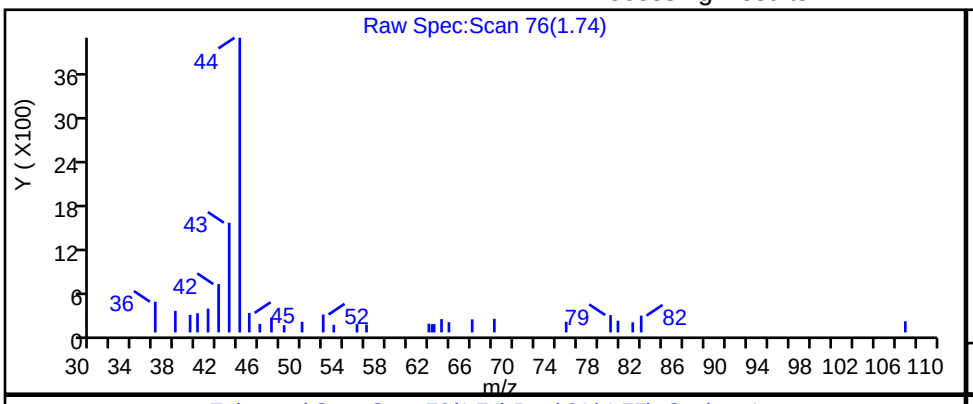
User Disabled Compound Report

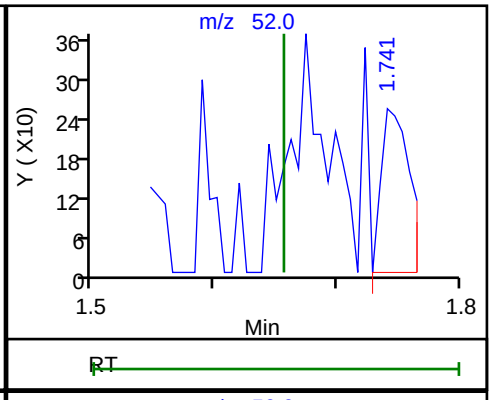
TestAmerica Edison

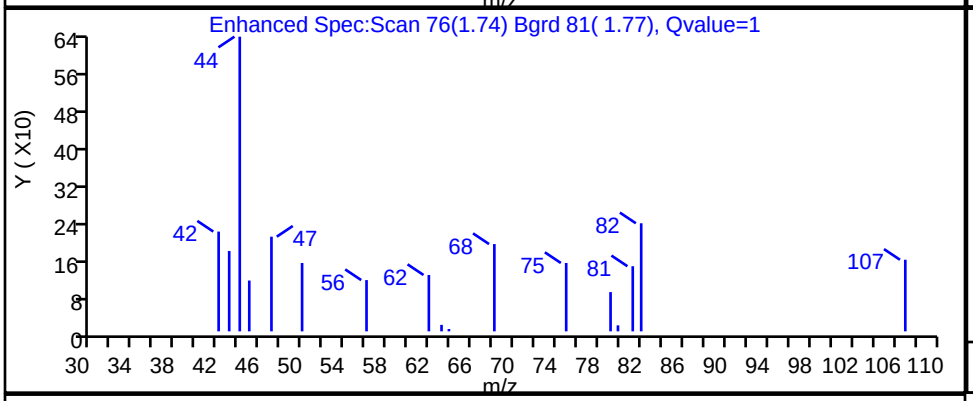
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70092a.D		
Injection Date:	06-Aug-2018 07:57:30	Instrument ID:	CVOAMS11
Lims ID:	MB		
Client ID:			
Operator ID:		ALS Bottle#:	7 Worklist Smp#: 32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

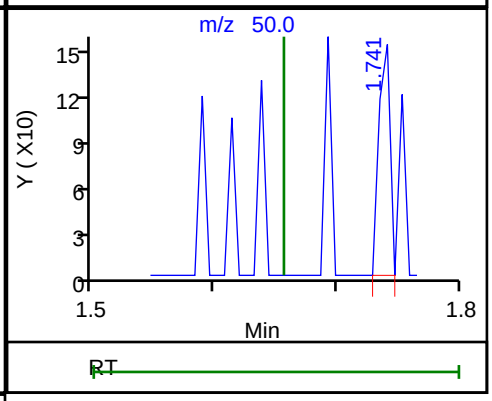
3 Chloromethane, CAS: 74-87-3

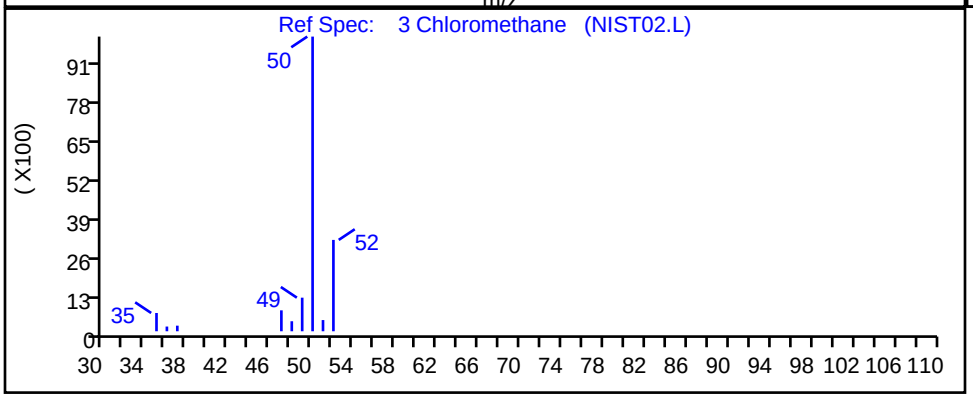
Processing Results











RT	Mass	Response	Amount
1.74	52.00	400	0.304395
1.74	50.00	95	

Reviewer: delpolitov, 06-Aug-2018 15:09:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-540359/4

Matrix: Water | Lab File ID: N69685.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 05:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	19.3		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	18.1		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20.3		1.0	0.31
79-00-5	1,1,2-Trichloroethane	17.3		1.0	0.43
75-34-3	1,1-Dichloroethane	18.5		1.0	0.26
75-35-4	1,1-Dichloroethene	20.1		1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	17.6		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	18.1		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	15.9		1.0	0.38
95-50-1	1,2-Dichlorobenzene	19.3		1.0	0.43
107-06-2	1,2-Dichloroethane	17.0		1.0	0.43
78-87-5	1,2-Dichloropropane	19.1		1.0	0.35
541-73-1	1,3-Dichlorobenzene	20.0		1.0	0.34
106-46-7	1,4-Dichlorobenzene	19.7		1.0	0.76
123-91-1	1,4-Dioxane	387		50	28
78-93-3	2-Butanone (MEK)	99.0		5.0	1.9
591-78-6	2-Hexanone	93.3		5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	95.5		5.0	2.7
67-64-1	Acetone	98.4		5.0	5.0
71-43-2	Benzene	19.1		1.0	0.43
75-25-2	Bromoform	17.4		1.0	0.54
74-83-9	Bromomethane	17.9		1.0	1.0
75-15-0	Carbon disulfide	18.1		1.0	0.16
56-23-5	Carbon tetrachloride	19.8		1.0	0.21
108-90-7	Chlorobenzene	19.7		1.0	0.38
74-97-5	Chlorobromomethane	18.3		1.0	0.41
124-48-1	Chlorodibromomethane	19.3		1.0	0.28
75-00-3	Chloroethane	18.1		1.0	0.32
67-66-3	Chloroform	19.4		1.0	0.33
74-87-3	Chloromethane	20.0		1.0	0.14
156-59-2	cis-1,2-Dichloroethene	18.7		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	18.2		1.0	0.46
110-82-7	Cyclohexane	18.4		1.0	0.32
75-27-4	Dichlorobromomethane	19.3		1.0	0.34
75-71-8	Dichlorodifluoromethane	16.9		1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-540359/4

Matrix: Water | Lab File ID: N69685.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 05:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.9		1.0	0.30
106-93-4	Ethylene Dibromide	17.5		1.0	0.50
98-82-8	Isopropylbenzene	19.8		1.0	0.34
79-20-9	Methyl acetate	41.9		5.0	0.31
1634-04-4	Methyl tert-butyl ether	18.0		1.0	0.47
108-87-2	Methylcyclohexane	18.3		1.0	0.26
75-09-2	Methylene Chloride	18.3		1.0	0.32
179601-23-1	m-Xylene & p-Xylene	19.6		1.0	0.30
95-47-6	o-Xylene	19.6		1.0	0.36
100-42-5	Styrene	19.2		1.0	0.42
127-18-4	Tetrachloroethene	20.4		1.0	0.25
108-88-3	Toluene	19.4		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	19.4		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	17.5		1.0	0.49
79-01-6	Trichloroethene	18.8		1.0	0.31
75-69-4	Trichlorofluoromethane	19.2		1.0	0.14
75-01-4	Vinyl chloride	17.4		1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		74-132
460-00-4	4-Bromofluorobenzene	101		77-124
1868-53-7	Dibromofluoromethane (Surr)	95		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69685.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 28-Jul-2018 05:50:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0076243-004
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 19:57:21 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: tupayachia Date: 28-Jul-2018 06:54:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.504	1.510	-0.006	89	46811	20.0	19.3	
2 Dichlorodifluoromethane	87	1.522	1.529	-0.006	99	31994	20.0	16.9	
3 Chloromethane	52	1.656	1.662	-0.006	99	31379	20.0	20.0	
5 Butadiene	54	1.729	1.741	-0.012	81	84393	20.0	17.5	
4 Vinyl chloride	62	1.729	1.741	-0.012	98	99061	20.0	17.4	
6 Bromomethane	94	1.997	2.003	-0.006	98	70845	20.0	17.9	
7 Chloroethane	64	2.082	2.088	-0.006	98	61863	20.0	18.1	
10 Pentane	72	2.173	2.179	-0.006	97	28669	40.0	53.4	
9 Trichlorofluoromethane	101	2.192	2.204	-0.012	71	115805	20.0	19.2	
8 Dichlorofluoromethane	67	2.234	2.246	-0.012	98	140645	20.0	18.8	a
13 2-Methyl-1,3-butadiene	53	2.417	2.417	0.000	96	60598	20.0	19.6	
12 Ethyl ether	59	2.417	2.423	-0.006	57	43618	20.0	18.0	
11 Ethanol	46	2.550	2.544	0.006	92	5779	800.0	678.2	
17 1,1-Dichloroethene	96	2.587	2.593	-0.006	96	67098	20.0	20.1	
14 1,2-Dichloro-1,1,2-trifluo	117	2.587	2.599	-0.012	71	66821	20.0	19.6	
20 Carbon disulfide	76	2.623	2.630	-0.007	99	208930	20.0	18.1	
15 1,1,2-Trichloro-1,2,2-trif	101	2.636	2.642	-0.006	97	75410	20.0	20.3	
19 Iodomethane	142	2.709	2.721	-0.012	97	109415	20.0	19.5	
23 Cyclopentene	67	2.824	2.836	-0.012	96	175668	20.0	19.6	
16 Acrolein	56	2.867	2.867	0.000	94	14466	40.0	46.9	
22 3-Chloro-1-propene	76	2.970	2.976	-0.006	94	39011	20.0	19.0	
21 Isopropyl alcohol	45	2.970	2.976	-0.006	10	15495	200.0	195.3	
26 Methylene Chloride	84	3.055	3.062	-0.007	91	70847	20.0	18.3	
18 Acetone	58	3.092	3.104	-0.012	88	14630	100.0	98.4	
24 Methyl acetate	74	3.189	3.189	0.000	40	12173	40.0	41.9	
30 trans-1,2-Dichloroethene	96	3.183	3.195	-0.012	93	73868	20.0	19.4	
32 Hexane	56	3.232	3.244	-0.012	93	54829	20.0	18.8	
29 Methyl tert-butyl ether	73	3.268	3.274	-0.006	93	151094	20.0	18.0	
* 27 TBA-d9 (IS)	65	3.280	3.281	-0.001	98	131221	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.335	3.341	-0.006	98	28707	200.0	190.5	M
25 Acetonitrile	41	3.487	3.493	-0.006	99	41084	200.0	204.8	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Isopropyl ether	45	3.572	3.579	-0.007	95	221141	20.0	18.5	
36 2-Chloro-1,3-butadiene	88	3.676	3.682	-0.006	89	62037	20.0	19.2	
34 1,1-Dichloroethane	63	3.700	3.706	-0.006	100	121373	20.0	18.5	
31 Acrylonitrile	53	3.755	3.755	0.000	96	129726	200.0	211.7	
37 Tert-butyl ethyl ether	59	3.889	3.889	0.000	91	191005	20.0	18.4	
35 Vinyl acetate	86	3.901	3.907	-0.006	99	15401	40.0	39.0	
40 cis-1,2-Dichloroethene	96	4.175	4.181	-0.006	98	79954	20.0	18.7	
38 2,2-Dichloropropane	79	4.278	4.284	-0.006	97	33108	20.0	19.5	
49 Cyclohexane	84	4.357	4.357	0.000	89	125741	20.0	18.4	
46 Chlorobromomethane	128	4.357	4.363	-0.006	73	30978	20.0	18.3	
48 Chloroform	83	4.418	4.424	-0.006	98	118285	20.0	19.4	
42 Ethyl acetate	70	4.515	4.522	-0.007	99	8013	40.0	43.0	
43 Methyl acrylate	55	4.528	4.534	-0.006	47	28728	20.0	15.8	a
52 Carbon tetrachloride	117	4.546	4.558	-0.012	98	67057	20.0	19.8	
45 Tetrahydrofuran	72	4.564	4.564	0.000	54	8489	40.0	38.0	
$ 51 Dibromofluoromethane (Surr	113	4.588	4.595	-0.007	97	129409	50.0	47.6	
50 1,1,1-Trichloroethane	97	4.613	4.625	-0.012	94	103342	20.0	19.3	
* 39 2-Butanone-d5	46	4.655	4.662	-0.007	0	151355	250.0	250.0	
41 2-Butanone (MEK)	72	4.710	4.704	0.006	99	21728	100.0	99.0	
53 1,1-Dichloropropene	75	4.722	4.722	0.000	98	94384	20.0	19.1	
54 Isooctane	57	4.820	4.820	0.000	99	162690	20.0	17.6	
61 n-Heptane	57	4.911	4.917	-0.006	90	41546	20.0	18.6	
55 Benzene	78	4.966	4.972	-0.006	91	297476	20.0	19.1	
44 Propionitrile	54	4.996	5.008	-0.012	98	48002	200.0	212.7	
47 Methacrylonitrile	67	5.014	5.020	-0.006	91	154896	200.0	169.5	
57 Tert-amyl methyl ether	73	5.069	5.075	-0.006	98	167363	20.0	18.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.099	5.106	-0.007	97	121799	50.0	44.6	
60 1,2-Dichloroethane	62	5.172	5.173	-0.001	97	66057	20.0	17.0	
58 Isobutyl alcohol	43	5.172	5.179	-0.007	46	23774	500.0	438.6	
* 62 Fluorobenzene	96	5.379	5.385	-0.006	99	661867	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.410	0.006	98	64415	20.0	15.5	
66 Ethyl acrylate	55	5.544	5.544	0.000	77	92152	20.0	17.8	
65 Methylcyclohexane	83	5.544	5.544	0.000	95	127725	20.0	18.3	
64 Trichloroethene	95	5.556	5.556	0.000	96	69438	20.0	18.8	
63 n-Butanol	56	5.915	5.915	0.000	93	12891	500.0	444.7	
71 Dibromomethane	93	6.018	6.012	0.006	97	29754	20.0	18.2	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	91	67086	20.0	19.1	
73 Dichlorobromomethane	83	6.195	6.195	-0.001	99	64674	20.0	19.3	
69 Methyl methacrylate	100	6.377	6.377	0.000	88	23931	40.0	36.4	
* 68 1,4-Dioxane-d8	96	6.383	6.383	0.000	92	18146	1000.0	1000.0	
70 1,4-Dioxane	88	6.420	6.420	0.000	80	8113	400.0	386.8	
72 n-Propyl acetate	43	6.547	6.554	-0.007	97	41794	20.0	15.3	
75 2-Chloroethyl vinyl ether	63	6.876	6.870	0.006	96	24112	20.0	15.2	
77 cis-1,3-Dichloropropene	75	6.937	6.937	0.000	91	83699	20.0	18.2	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	100	596076	50.0	49.4	
80 Toluene	91	7.223	7.223	0.000	93	318108	20.0	19.4	
76 Epichlorohydrin	57	7.253	7.253	0.000	98	55603	400.0	380.2	a
74 2-Nitropropane	41	7.533	7.545	-0.012	98	6237	40.0	46.3	
84 Tetrachloroethene	166	7.703	7.697	0.006	97	69169	20.0	20.4	
78 4-Methyl-2-pentanone (MIBK	43	7.721	7.728	-0.007	95	157430	100.0	95.5	
81 trans-1,3-Dichloropropene	75	7.770	7.770	0.000	93	64145	20.0	17.5	
83 1,1,2-Trichloroethane	83	7.977	7.971	0.006	94	36251	20.0	17.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
82 Ethyl methacrylate	69	7.989	7.989	0.000	88	50481	20.0	16.3	
88 Chlorodibromomethane	129	8.202	8.196	0.006	98	30327	20.0	19.3	
85 1,3-Dichloropropane	76	8.336	8.336	0.000	93	81284	20.0	18.0	
89 Ethylene Dibromide	107	8.500	8.506	-0.006	100	39104	20.0	17.5	
87 n-Butyl acetate	43	8.744	8.744	0.000	98	46124	20.0	14.3	
86 2-Hexanone	58	8.847	8.847	0.000	95	54641	100.0	93.3	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	86	498535	50.0	50.0	
91 Chlorobenzene	112	9.175	9.182	-0.007	97	201535	20.0	19.7	
92 Ethylbenzene	106	9.224	9.218	0.006	97	111612	20.0	19.9	
93 1,1,1,2-Tetrachloroethane	131	9.267	9.261	0.006	91	48180	20.0	18.9	
94 m-Xylene & p-Xylene	106	9.394	9.395	-0.001	0	134442	20.0	19.6	
96 o-Xylene	106	9.857	9.857	0.000	95	132445	20.0	19.6	
97 Styrene	104	9.918	9.918	0.000	97	206502	20.0	19.2	
99 Bromoform	173	9.936	9.930	0.006	95	11613	20.0	17.4	
95 n-Butyl acrylate	73	10.082	10.082	0.000	98	28042	20.0	15.7	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	355067	20.0	19.8	
98 Amyl acetate (mixed isomer	43	10.337	10.338	-0.001	94	60581	20.0	15.2	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	87	161641	50.0	50.6	
102 Bromobenzene	156	10.544	10.544	0.000	98	74407	20.0	19.5	
104 N-Propylbenzene	91	10.581	10.581	0.000	99	390783	20.0	19.7	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	97	45647	20.0	18.1	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	339245	20.0	20.3	
107 2-Chlorotoluene	91	10.721	10.721	0.000	96	279584	20.0	20.4	
109 1,3,5-Trimethylbenzene	105	10.775	10.769	0.006	94	291262	20.0	20.4	
105 1,2,3-Trichloropropane	110	10.775	10.782	-0.007	94	14999	20.0	17.5	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.830	-0.006	75	9184	20.0	15.4	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	242802	20.0	20.1	
111 Butyl Methacrylate	87	11.055	11.055	0.000	95	71629	20.0	18.7	
112 tert-Butylbenzene	119	11.055	11.055	0.000	94	238444	20.0	20.0	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	97	301846	20.0	20.2	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	350126	20.0	19.7	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	301993	20.0	19.7	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	96	154184	20.0	20.0	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	95	243013	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	96	154187	20.0	19.7	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	98	315354	20.0	20.2	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	291273	20.0	19.5	
121 p-Diethylbenzene	119	11.639	11.639	0.000	95	174331	20.0	20.7	
119 Benzyl chloride	126	11.682	11.682	0.000	89	10772	20.0	16.6	
122 n-Butylbenzene	92	11.688	11.688	0.000	97	149553	20.0	19.9	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	96	138035	20.0	19.3	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	97	273974	20.0	18.7	
125 1,2-Dibromo-3-Chloropropan	155	12.455	12.461	-0.006	89	4199	20.0	15.9	a
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	97	105762	20.0	19.8	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	91	26784	20.0	18.6	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	94	87572	20.0	18.1	
129 Naphthalene	128	13.221	13.221	0.000	99	160298	20.0	16.2	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	96	73582	20.0	17.6	
S 131 1,2-Dichloroethene, Total	100				0		40.0	38.1	
S 132 Xylenes, Total	100				0		40.0	39.2	
S 133 Total BTEX	1				0		100.0	97.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00270	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 31-Jul-2018 19:57:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69685.D

Injection Date: 28-Jul-2018 05:50:30 Instrument ID: CVOAMS11 Operator ID:

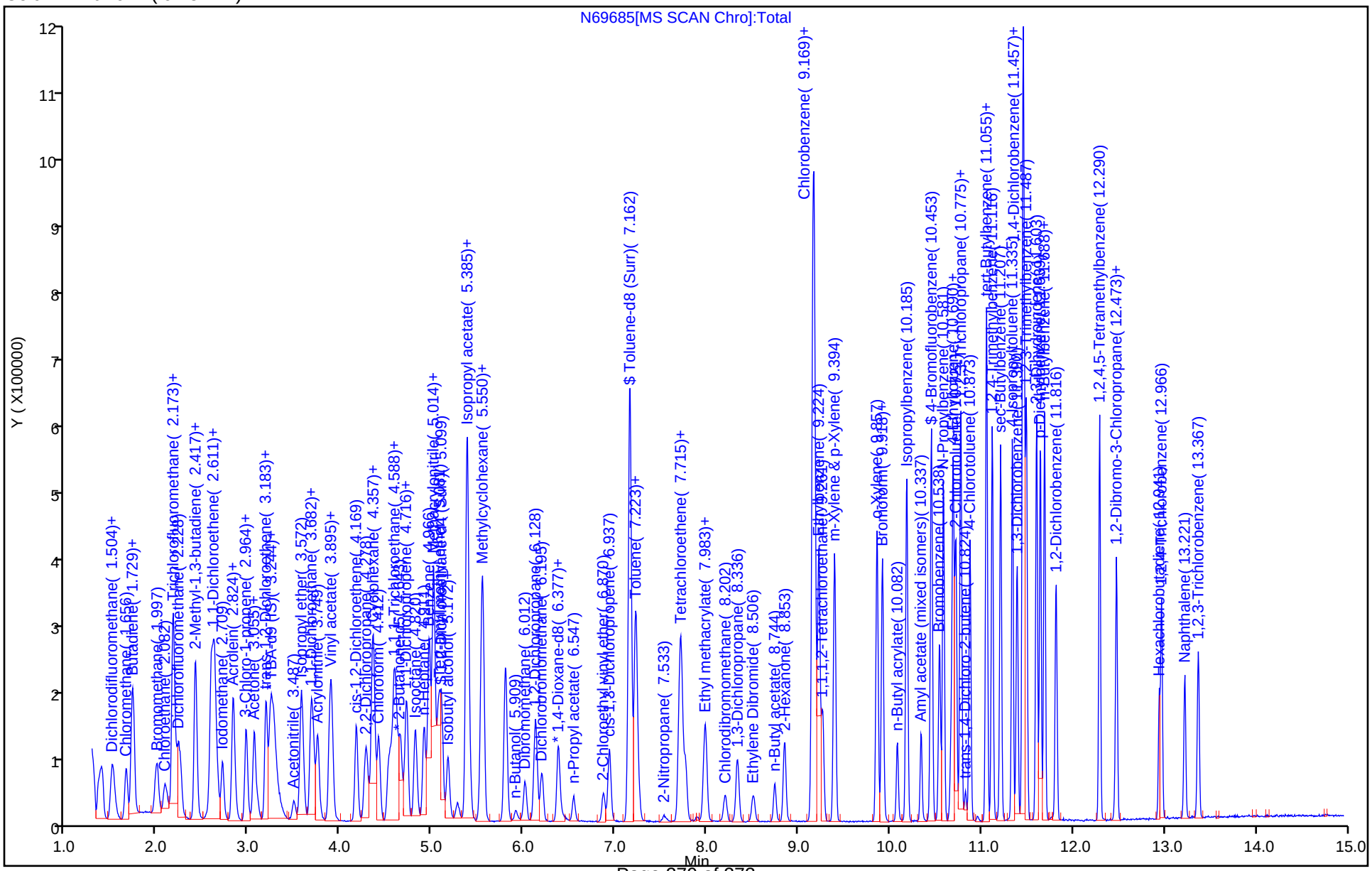
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

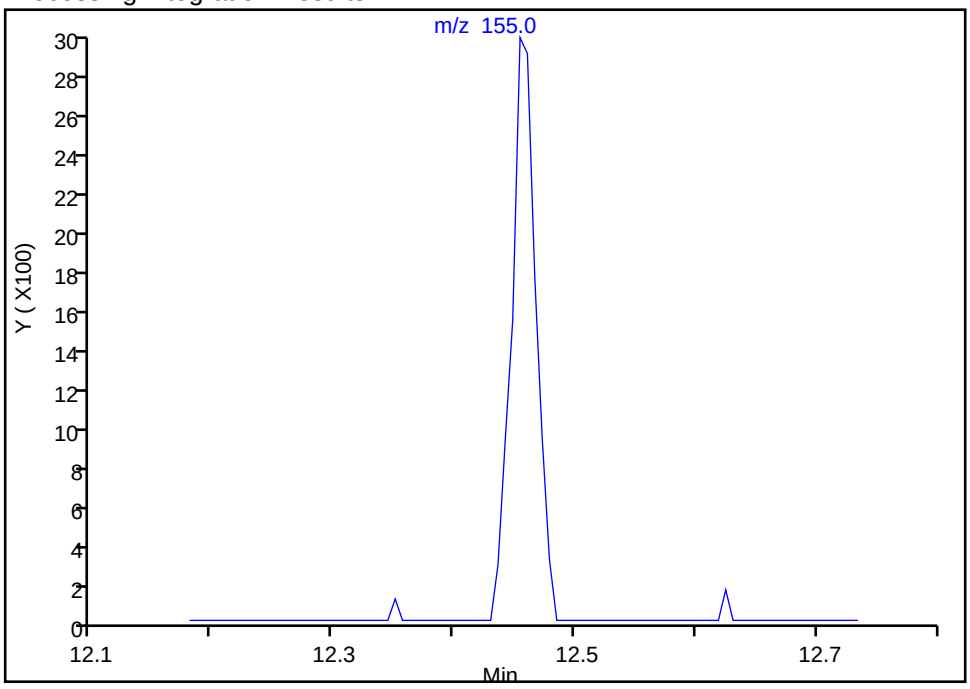
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69685.D
Injection Date: 28-Jul-2018 05:50:30 Instrument ID: CVOAMS11
Lims ID: LCS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

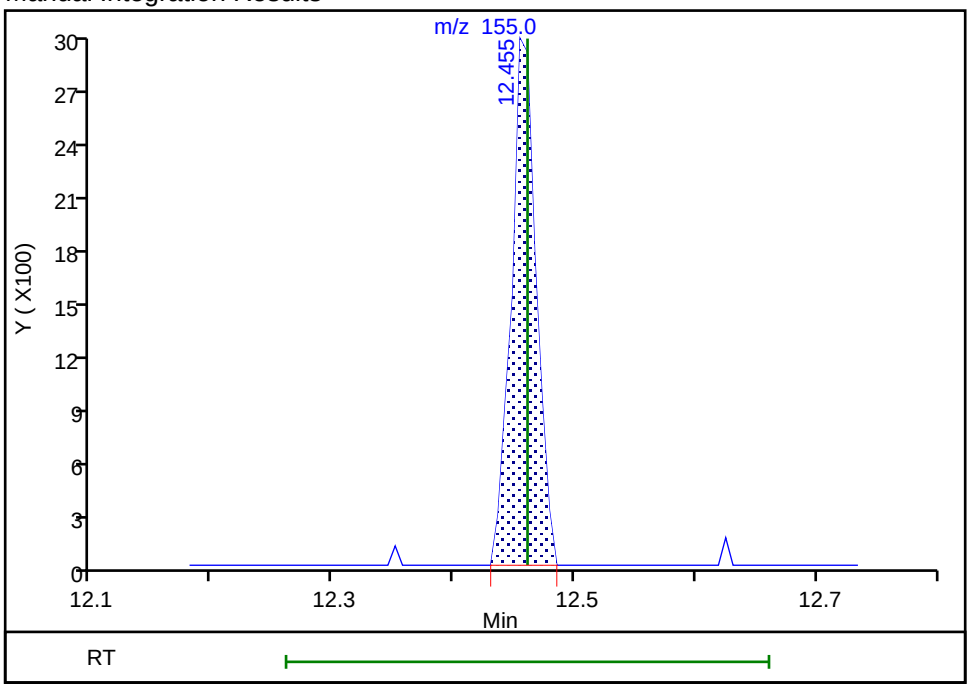
Not Detected
Expected RT: 12.46

Processing Integration Results



Manual Integration Results

RT: 12.45
Area: 4199
Amount: 15.880927
Amount Units: ug/l



Reviewer: tupayachia, 28-Jul-2018 06:54:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-542406/30

Matrix: Water | Lab File ID: N70088a.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 06:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	21.6		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	17.3		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	21.5		1.0	0.31
79-00-5	1,1,2-Trichloroethane	18.0		1.0	0.43
75-34-3	1,1-Dichloroethane	19.2		1.0	0.26
75-35-4	1,1-Dichloroethene	21.0		1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	19.0		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	19.6		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	20.7		1.0	0.38
95-50-1	1,2-Dichlorobenzene	20.5		1.0	0.43
107-06-2	1,2-Dichloroethane	17.4		1.0	0.43
78-87-5	1,2-Dichloropropane	19.5		1.0	0.35
541-73-1	1,3-Dichlorobenzene	20.8		1.0	0.34
106-46-7	1,4-Dichlorobenzene	20.5		1.0	0.76
123-91-1	1,4-Dioxane	412		50	28
78-93-3	2-Butanone (MEK)	121		5.0	1.9
591-78-6	2-Hexanone	124		5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	115		5.0	2.7
67-64-1	Acetone	103		5.0	5.0
71-43-2	Benzene	18.7		1.0	0.43
75-25-2	Bromoform	28.4		1.0	0.54
74-83-9	Bromomethane	19.8		1.0	1.0
75-15-0	Carbon disulfide	19.2		1.0	0.16
56-23-5	Carbon tetrachloride	25.5		1.0	0.21
108-90-7	Chlorobenzene	20.9		1.0	0.38
74-97-5	Chlorobromomethane	22.8		1.0	0.41
124-48-1	Chlorodibromomethane	27.4		1.0	0.28
75-00-3	Chloroethane	18.1		1.0	0.32
67-66-3	Chloroform	20.2		1.0	0.33
74-87-3	Chloromethane	23.9		1.0	0.14
156-59-2	cis-1,2-Dichloroethene	20.9		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	20.0		1.0	0.46
110-82-7	Cyclohexane	20.0		1.0	0.32
75-27-4	Dichlorobromomethane	22.5		1.0	0.34
75-71-8	Dichlorodifluoromethane	14.6		1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-542406/30

Matrix: Water | Lab File ID: N70088a.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 06:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	21.2		1.0	0.30
106-93-4	Ethylene Dibromide	18.8		1.0	0.50
98-82-8	Isopropylbenzene	20.7		1.0	0.34
79-20-9	Methyl acetate	55.2		5.0	0.31
1634-04-4	Methyl tert-butyl ether	19.6		1.0	0.47
108-87-2	Methylcyclohexane	18.7		1.0	0.26
75-09-2	Methylene Chloride	20.4		1.0	0.32
179601-23-1	m-Xylene & p-Xylene	21.1		1.0	0.30
95-47-6	o-Xylene	21.5		1.0	0.36
100-42-5	Styrene	21.0		1.0	0.42
127-18-4	Tetrachloroethene	23.4		1.0	0.25
108-88-3	Toluene	19.9		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	21.9		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	19.5		1.0	0.49
79-01-6	Trichloroethene	20.9		1.0	0.31
75-69-4	Trichlorofluoromethane	20.1		1.0	0.14
75-01-4	Vinyl chloride	18.1		1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		74-132
460-00-4	4-Bromofluorobenzene	113		77-124
1868-53-7	Dibromofluoromethane (Surr)	104		72-131
2037-26-5	Toluene-d8 (Surr)	100		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70088a.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Aug-2018 06:28:30 ALS Bottle#: 3 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0076670-004
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 06-Aug-2018 15:04:57 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: delpolitov Date: 06-Aug-2018 15:04:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.498	1.492	0.006	87	45921	20.0	18.7	
2 Dichlorodifluoromethane	87	1.516	1.522	-0.006	98	27923	20.0	14.6	
3 Chloromethane	52	1.662	1.656	0.006	99	31405	20.0	23.9	
5 Butadiene	54	1.717	1.723	-0.006	89	77628	20.0	15.9	
4 Vinyl chloride	62	1.729	1.729	0.000	98	104772	20.0	18.1	
6 Bromomethane	94	1.985	1.991	-0.006	98	79547	20.0	19.8	M
7 Chloroethane	64	2.082	2.082	0.000	98	62917	20.0	18.1	
10 Pentane	72	2.167	2.167	0.000	96	29805	40.0	65.1	
9 Trichlorofluoromethane	101	2.192	2.186	0.006	93	123440	20.0	20.1	
8 Dichlorofluoromethane	67	2.240	2.234	0.006	98	140617	20.0	18.5	
12 Ethyl ether	59	2.417	2.417	0.000	57	46223	20.0	18.8	
13 2-Methyl-1,3-butadiene	53	2.411	2.417	-0.006	94	59706	20.0	19.0	
11 Ethanol	46	2.532	2.520	0.012	87	7301	800.0	1004.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.581	2.581	0.000	71	78395	20.0	22.6	
17 1,1-Dichloroethene	96	2.587	2.587	0.000	94	71264	20.0	21.0	
20 Carbon disulfide	76	2.624	2.617	0.007	98	225795	20.0	19.2	
15 1,1,2-Trichloro-1,2,2-trif	101	2.636	2.630	0.006	94	81321	20.0	21.5	
19 Iodomethane	142	2.709	2.709	0.000	96	130023	20.0	22.8	
23 Cyclopentene	67	2.824	2.824	0.000	95	183359	20.0	20.1	
16 Acrolein	56	2.861	2.849	0.012	94	8050	40.0	31.3	
21 Isopropyl alcohol	45	2.970	2.964	0.006	24	15326	200.0	227.4	
22 3-Chloro-1-propene	76	2.970	2.970	0.000	93	43381	20.0	20.8	
26 Methylene Chloride	84	3.062	3.055	0.007	86	80126	20.0	20.4	
18 Acetone	58	3.092	3.080	0.012	88	12802	100.0	102.8	
24 Methyl acetate	74	3.189	3.183	0.006	40	13679	40.0	55.2	
30 trans-1,2-Dichloroethene	96	3.189	3.183	0.006	91	84344	20.0	21.9	
32 Hexane	56	3.232	3.232	0.000	89	50253	20.0	17.0	
29 Methyl tert-butyl ether	73	3.262	3.262	0.000	93	167441	20.0	19.6	
* 27 TBA-d9 (IS)	65	3.281	3.281	0.000	98	111898	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.335	3.329	0.006	98	27430	200.0	213.4	M
25 Acetonitrile	41	3.487	3.487	0.000	97	29644	200.0	173.3	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Isopropyl ether	45	3.579	3.566	0.013	95	220765	20.0	18.2	
36 2-Chloro-1,3-butadiene	88	3.676	3.676	0.000	87	70636	20.0	21.5	
34 1,1-Dichloroethane	63	3.700	3.700	0.000	99	127686	20.0	19.2	
31 Acrylonitrile	53	3.749	3.749	0.000	94	125889	200.0	240.9	
37 Tert-butyl ethyl ether	59	3.889	3.883	0.006	91	206226	20.0	19.6	
35 Vinyl acetate	86	3.901	3.901	0.000	99	16265	40.0	48.8	
40 cis-1,2-Dichloroethene	96	4.169	4.169	0.000	95	90599	20.0	20.9	
38 2,2-Dichloropropane	79	4.284	4.278	0.006	96	34557	20.0	20.0	
46 Chlorobromomethane	128	4.357	4.345	0.012	71	39299	20.0	22.8	
49 Cyclohexane	84	4.351	4.357	-0.006	85	138788	20.0	20.0	
48 Chloroform	83	4.418	4.418	0.000	99	124969	20.0	20.2	
42 Ethyl acetate	70	4.516	4.509	0.007	99	8567	40.0	54.9	
43 Methyl acrylate	55	4.528	4.528	0.000	98	30752	20.0	16.7	
52 Carbon tetrachloride	117	4.552	4.546	0.006	98	87617	20.0	25.5	
45 Tetrahydrofuran	72	4.558	4.558	0.000	51	9254	40.0	49.4	
$ 51 Dibromofluoromethane (Surr	113	4.589	4.582	0.007	98	143906	50.0	52.1	
50 1,1,1-Trichloroethane	97	4.613	4.619	-0.006	94	116947	20.0	21.6	
* 39 2-Butanone-d5	46	4.655	4.649	0.006	0	126834	250.0	250.0	
41 2-Butanone (MEK)	72	4.704	4.698	0.006	98	22209	100.0	120.7	
53 1,1-Dichloropropene	75	4.722	4.722	0.000	98	100101	20.0	20.0	
54 Isooctane	57	4.814	4.814	0.000	99	144434	20.0	15.4	
61 n-Heptane	57	4.911	4.911	0.000	85	34234	20.0	15.1	
55 Benzene	78	4.966	4.966	0.000	91	314359	20.0	18.7	
44 Propionitrile	54	5.002	4.996	0.006	93	40399	200.0	209.9	
47 Methacrylonitrile	67	5.014	5.014	0.000	88	163999	200.0	176.7	
57 Tert-amyl methyl ether	73	5.069	5.069	0.000	98	187414	20.0	19.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	95	124002	50.0	44.7	
58 Isobutyl alcohol	43	5.173	5.166	0.007	45	22710	500.0	491.3	
60 1,2-Dichloroethane	62	5.173	5.173	0.000	97	68752	20.0	17.4	
* 62 Fluorobenzene	96	5.379	5.379	0.000	99	672172	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.410	0.006	98	65966	20.0	15.6	
65 Methylcyclohexane	83	5.544	5.538	0.006	91	132160	20.0	18.7	
66 Ethyl acrylate	55	5.544	5.544	0.000	73	86257	20.0	16.4	
64 Trichloroethene	95	5.550	5.550	0.000	95	78295	20.0	20.9	
63 n-Butanol	56	5.915	5.915	0.000	84	14711	500.0	595.1	
71 Dibromomethane	93	6.006	6.012	-0.006	92	32855	20.0	19.8	
67 1,2-Dichloropropane	63	6.122	6.128	-0.006	92	69661	20.0	19.5	
73 Dichlorobromomethane	83	6.195	6.195	0.000	98	76632	20.0	22.5	
69 Methyl methacrylate	100	6.377	6.371	0.006	83	26462	40.0	39.6	
* 68 1,4-Dioxane-d8	96	6.389	6.377	0.012	86	18716	1000.0	1000.0	
70 1,4-Dioxane	88	6.420	6.420	0.000	85	8907	400.0	411.7	a
72 n-Propyl acetate	43	6.547	6.547	0.000	98	46215	20.0	16.6	
75 2-Chloroethyl vinyl ether	63	6.870	6.870	0.000	95	29177	20.0	18.1	
77 cis-1,3-Dichloropropene	75	6.937	6.937	0.000	89	99404	20.0	20.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.156	0.006	99	654498	50.0	50.2	
80 Toluene	91	7.223	7.223	0.000	93	351929	20.0	19.9	
76 Epichlorohydrin	57	7.253	7.253	0.000	98	52458	400.0	427.7	a
74 2-Nitropropane	41	7.533	7.539	-0.006	99	8904	40.0	77.5	
84 Tetrachloroethene	166	7.703	7.703	0.000	97	85941	20.0	23.4	
78 4-Methyl-2-pentanone (MIBK	43	7.722	7.722	0.000	93	159248	100.0	115.3	
81 trans-1,3-Dichloropropene	75	7.764	7.764	0.000	91	77205	20.0	19.5	
83 1,1,2-Trichloroethane	83	7.977	7.983	-0.006	94	40849	20.0	18.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
82 Ethyl methacrylate	69	7.989	7.989	0.000	87	57756	20.0	18.4	
88 Chlorodibromomethane	129	8.196	8.202	-0.006	97	46470	20.0	27.4	
85 1,3-Dichloropropane	76	8.330	8.330	0.000	90	88859	20.0	18.2	
89 Ethylene Dibromide	107	8.512	8.500	0.012	99	45534	20.0	18.8	
87 n-Butyl acetate	43	8.738	8.744	-0.006	97	52591	20.0	15.0	
86 2-Hexanone	58	8.847	8.847	0.000	94	60717	100.0	123.7	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	84	538641	50.0	50.0	
91 Chlorobenzene	112	9.176	9.176	0.000	98	230808	20.0	20.9	
92 Ethylbenzene	106	9.224	9.224	0.000	96	128239	20.0	21.2	
93 1,1,1,2-Tetrachloroethane	131	9.261	9.261	0.000	94	69194	20.0	25.1	
94 m-Xylene & p-Xylene	106	9.395	9.395	0.000	0	156286	20.0	21.1	
96 o-Xylene	106	9.857	9.857	0.000	95	156746	20.0	21.5	
97 Styrene	104	9.918	9.918	0.000	98	243353	20.0	21.0	
99 Bromoform	173	9.930	9.930	0.000	97	22260	20.0	28.4	
95 n-Butyl acrylate	73	10.082	10.082	0.000	99	32483	20.0	16.8	
100 Isopropylbenzene	105	10.185	10.179	0.006	94	401477	20.0	20.7	
98 Amyl acetate (mixed isomer	43	10.338	10.338	0.000	94	68549	20.0	14.7	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	94	194405	50.0	56.3	
102 Bromobenzene	156	10.538	10.544	-0.006	92	95206	20.0	21.3	
104 N-Propylbenzene	91	10.581	10.581	0.000	100	427378	20.0	18.4	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	97	51236	20.0	17.3	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	383152	20.0	19.5	
107 2-Chlorotoluene	91	10.721	10.721	0.000	95	301113	20.0	18.7	
109 1,3,5-Trimethylbenzene	105	10.776	10.769	0.007	94	327602	20.0	19.5	
105 1,2,3-Trichloropropane	110	10.782	10.776	0.006	91	18033	20.0	17.9	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	86	10853	20.0	15.5	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	268037	20.0	18.9	
112 tert-Butylbenzene	119	11.055	11.055	0.000	96	267737	20.0	19.1	
111 Butyl Methacrylate	87	11.055	11.055	0.000	85	88584	20.0	19.7	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	96	343756	20.0	19.6	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	373463	20.0	17.9	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	338789	20.0	18.8	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	98	188704	20.0	20.8	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	93	285363	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.463	11.463	0.000	96	188555	20.0	20.5	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	97	359669	20.0	19.6	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	346258	20.0	19.7	
121 p-Diethylbenzene	119	11.639	11.639	0.000	97	187694	20.0	18.9	
119 Benzyl chloride	126	11.682	11.682	0.000	89	16827	20.0	21.8	
122 n-Butylbenzene	92	11.688	11.688	0.000	95	151055	20.0	17.1	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	98	171865	20.0	20.5	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	97	324365	20.0	18.9	
125 1,2-Dibromo-3-Chloropropan	155	12.461	12.455	0.006	90	6529	20.0	20.7	
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	97	126938	20.0	20.3	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	95	34143	20.0	20.2	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	94	111114	20.0	19.6	
129 Naphthalene	128	13.221	13.221	0.000	99	211773	20.0	18.3	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	96	93394	20.0	19.0	
S 131 1,2-Dichloroethene, Total	100				0		40.0	42.7	
S 132 Xylenes, Total	100				0		40.0	42.6	
S 133 Total BTEX	1				0		100.0	102.4	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260SURR250_00181	Amount Added:	1.00	Units: uL	
GASES Li_00271	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

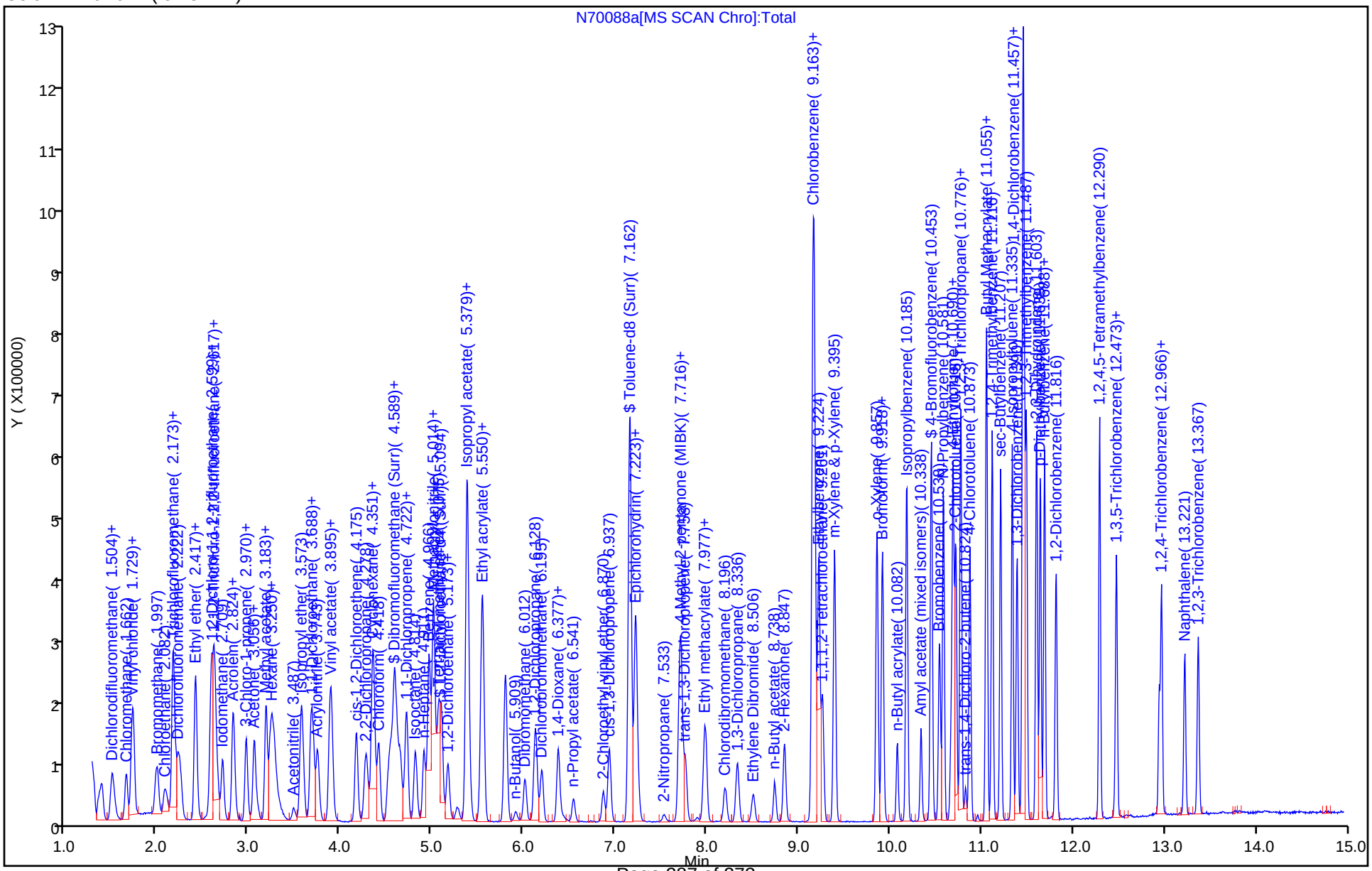
Report Date: 06-Aug-2018 15:05:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70088a.D

Injection Date:	06-Aug-2018 06:28:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	30
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

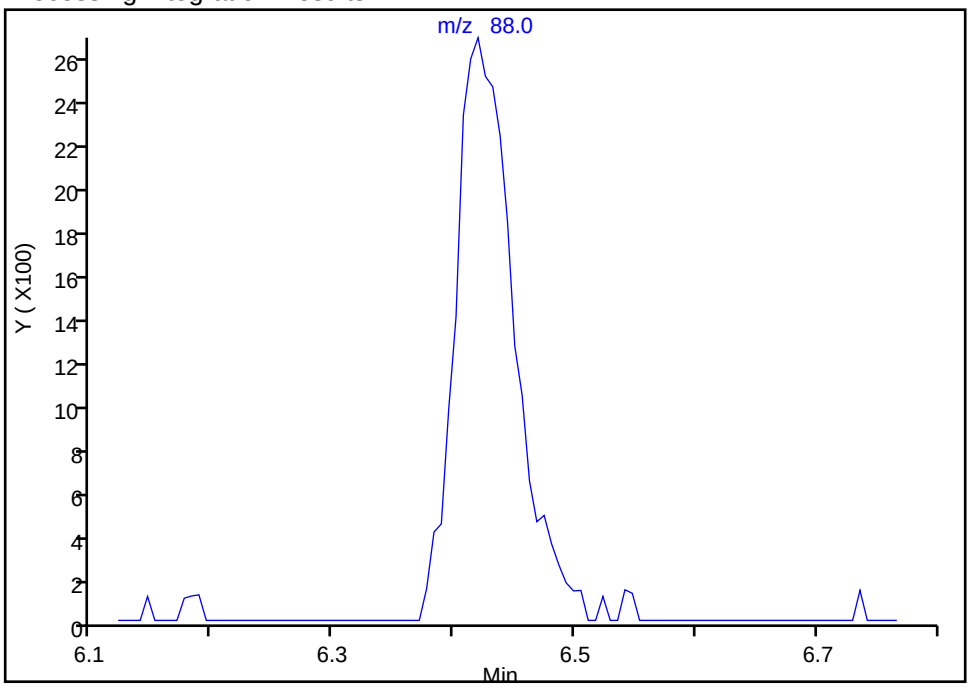
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70088a.D
Injection Date: 06-Aug-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: LCS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

Signal: 1

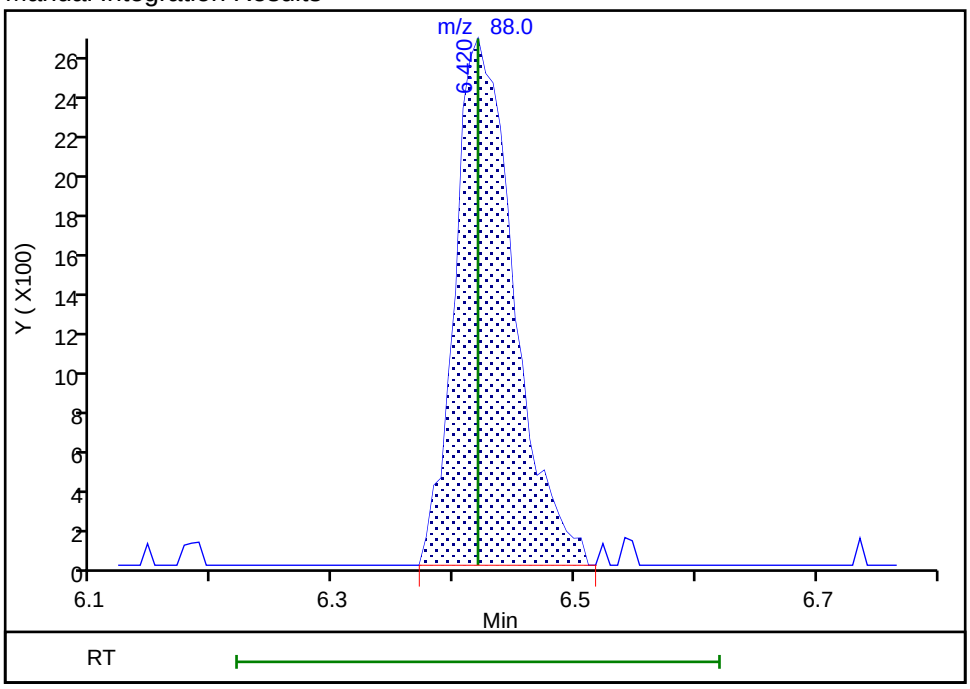
Not Detected
Expected RT: 6.42

Processing Integration Results



Manual Integration Results

RT: 6.42
Area: 8907
Amount: 411.7146
Amount Units: ug/l



Reviewer: delpolitov, 06-Aug-2018 15:04:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Edison

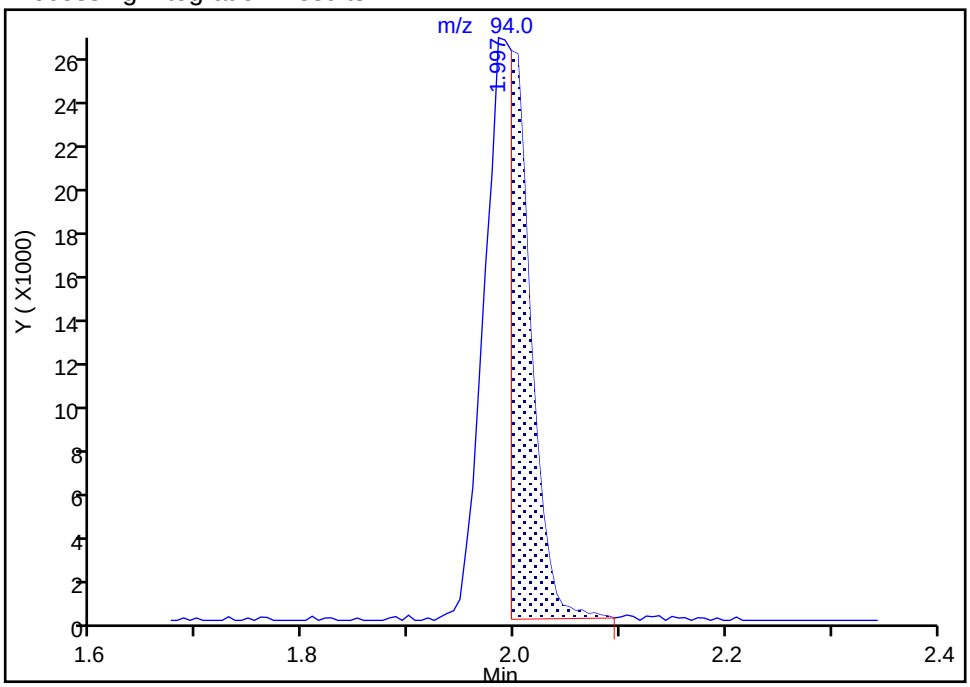
Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70088a.D
Injection Date: 06-Aug-2018 06:28:30 Instrument ID: CVOAMS11
Lims ID: LCS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

6 Bromomethane, CAS: 74-83-9

Signal: 1

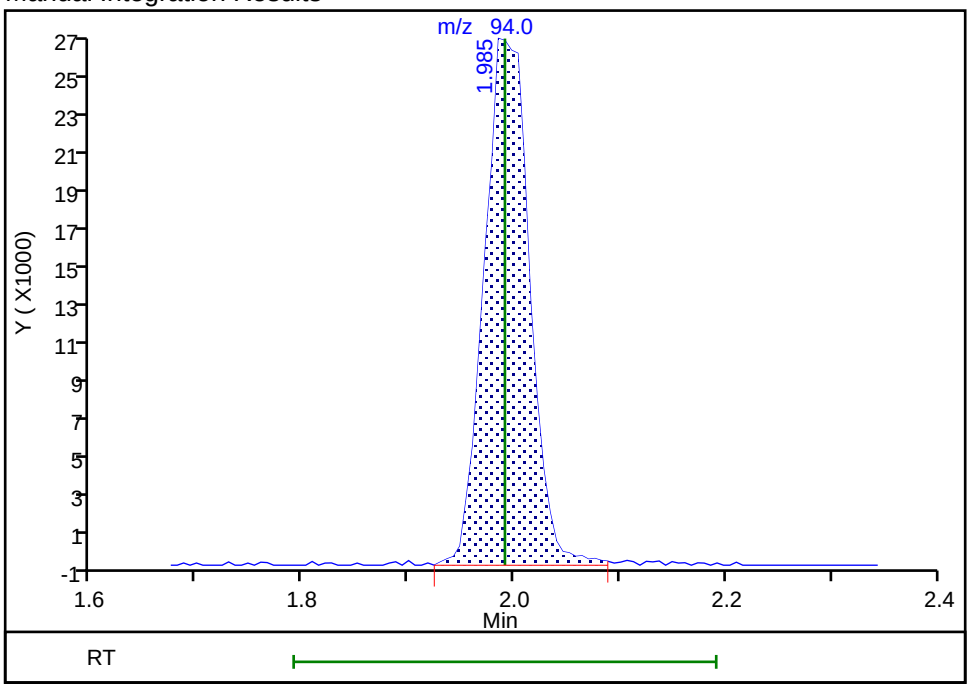
Processing Integration Results

RT: 2.00
Area: 38190
Amount: 9.524585
Amount Units: ug/l



Manual Integration Results

RT: 1.98
Area: 79547
Amount: 19.839020
Amount Units: ug/l



Reviewer: delpolitov, 06-Aug-2018 15:02:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-542406/31

Matrix: Water | Lab File ID: N70089a.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 06:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	21.9		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	17.0		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	21.2		1.0	0.31
79-00-5	1,1,2-Trichloroethane	17.9		1.0	0.43
75-34-3	1,1-Dichloroethane	19.4		1.0	0.26
75-35-4	1,1-Dichloroethene	21.7		1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	18.6		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	19.5		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	21.4		1.0	0.38
95-50-1	1,2-Dichlorobenzene	20.4		1.0	0.43
107-06-2	1,2-Dichloroethane	17.3		1.0	0.43
78-87-5	1,2-Dichloropropane	19.8		1.0	0.35
541-73-1	1,3-Dichlorobenzene	20.7		1.0	0.34
106-46-7	1,4-Dichlorobenzene	20.6		1.0	0.76
123-91-1	1,4-Dioxane	450		50	28
78-93-3	2-Butanone (MEK)	123		5.0	1.9
591-78-6	2-Hexanone	123		5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	117		5.0	2.7
67-64-1	Acetone	103		5.0	5.0
71-43-2	Benzene	19.0		1.0	0.43
75-25-2	Bromoform	27.4		1.0	0.54
74-83-9	Bromomethane	20.3		1.0	1.0
75-15-0	Carbon disulfide	19.4		1.0	0.16
56-23-5	Carbon tetrachloride	25.5		1.0	0.21
108-90-7	Chlorobenzene	20.8		1.0	0.38
74-97-5	Chlorobromomethane	22.3		1.0	0.41
124-48-1	Chlorodibromomethane	26.6		1.0	0.28
75-00-3	Chloroethane	19.1		1.0	0.32
67-66-3	Chloroform	20.2		1.0	0.33
74-87-3	Chloromethane	25.1		1.0	0.14
156-59-2	cis-1,2-Dichloroethene	20.8		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	19.5		1.0	0.46
110-82-7	Cyclohexane	20.5		1.0	0.32
75-27-4	Dichlorobromomethane	22.5		1.0	0.34
75-71-8	Dichlorodifluoromethane	14.9		1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-542406/31

Matrix: Water | Lab File ID: N70089a.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2018 06:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 542406 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	21.1		1.0	0.30
106-93-4	Ethylene Dibromide	19.0		1.0	0.50
98-82-8	Isopropylbenzene	21.0		1.0	0.34
79-20-9	Methyl acetate	58.6		5.0	0.31
1634-04-4	Methyl tert-butyl ether	19.6		1.0	0.47
108-87-2	Methylcyclohexane	18.6		1.0	0.26
75-09-2	Methylene Chloride	20.4		1.0	0.32
179601-23-1	m-Xylene & p-Xylene	21.2		1.0	0.30
95-47-6	o-Xylene	21.3		1.0	0.36
100-42-5	Styrene	21.0		1.0	0.42
127-18-4	Tetrachloroethene	23.5		1.0	0.25
108-88-3	Toluene	20.2		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	22.2		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	19.0		1.0	0.49
79-01-6	Trichloroethene	20.8		1.0	0.31
75-69-4	Trichlorofluoromethane	20.0		1.0	0.14
75-01-4	Vinyl chloride	18.5		1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		74-132
460-00-4	4-Bromofluorobenzene	116		77-124
1868-53-7	Dibromofluoromethane (Surr)	104		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70089a.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 06-Aug-2018 06:50:30 ALS Bottle#: 4 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0076670-005
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 06-Aug-2018 15:08:09 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: delpolitov Date: 06-Aug-2018 15:08:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.510	1.492	0.018	87	44058	20.0	18.6	
2 Dichlorodifluoromethane	87	1.522	1.522	0.000	98	27578	20.0	14.9	
3 Chloromethane	52	1.668	1.656	0.012	99	30934	20.0	25.1	
5 Butadiene	54	1.735	1.723	0.012	92	78249	20.0	16.6	
4 Vinyl chloride	62	1.741	1.729	0.012	98	103387	20.0	18.5	
6 Bromomethane	94	2.003	1.991	0.012	99	78752	20.0	20.3	
7 Chloroethane	64	2.088	2.082	0.006	98	64022	20.0	19.1	
10 Pentane	72	2.179	2.167	0.012	97	27104	40.0	64.2	
9 Trichlorofluoromethane	101	2.198	2.186	0.012	96	118187	20.0	20.0	
8 Dichlorofluoromethane	67	2.252	2.234	0.018	98	138401	20.0	18.9	
12 Ethyl ether	59	2.423	2.417	0.006	57	42909	20.0	18.0	
13 2-Methyl-1,3-butadiene	53	2.423	2.417	0.006	94	57528	20.0	19.0	
11 Ethanol	46	2.544	2.520	0.024	92	7130	800.0	1063.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.593	2.581	0.012	72	77723	20.0	23.2	
17 1,1-Dichloroethene	96	2.599	2.587	0.012	93	70909	20.0	21.7	
20 Carbon disulfide	76	2.623	2.617	0.006	99	220014	20.0	19.4	
15 1,1,2-Trichloro-1,2,2-trif	101	2.642	2.630	0.012	93	77392	20.0	21.2	
19 Iodomethane	142	2.715	2.709	0.006	96	129717	20.0	23.5	
23 Cyclopentene	67	2.830	2.824	0.006	95	180245	20.0	20.5	
16 Acrolein	56	2.855	2.849	0.006	86	8075	40.0	33.8	
21 Isopropyl alcohol	45	2.982	2.964	0.018	9	12653	200.0	202.9	
22 3-Chloro-1-propene	76	2.976	2.970	0.006	94	42121	20.0	20.9	
26 Methylene Chloride	84	3.061	3.055	0.006	84	77519	20.0	20.4	
18 Acetone	58	3.092	3.080	0.012	88	12029	100.0	103.0	
24 Methyl acetate	74	3.183	3.183	0.000	37	13401	40.0	58.6	
30 trans-1,2-Dichloroethene	96	3.189	3.183	0.006	90	82765	20.0	22.2	
32 Hexane	56	3.244	3.232	0.012	90	46905	20.0	16.4	
29 Methyl tert-butyl ether	73	3.268	3.262	0.006	92	161568	20.0	19.6	
* 27 TBA-d9 (IS)	65	3.280	3.281	-0.001	96	103265	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.335	3.329	0.006	91	25390	200.0	214.1	M
25 Acetonitrile	41	3.493	3.487	0.006	98	29375	200.0	186.1	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Isopropyl ether	45	3.579	3.566	0.013	95	213657	20.0	18.2	
36 2-Chloro-1,3-butadiene	88	3.682	3.676	0.006	87	68816	20.0	21.7	
34 1,1-Dichloroethane	63	3.706	3.700	0.006	100	124490	20.0	19.4	
31 Acrylonitrile	53	3.749	3.749	0.000	95	118752	200.0	246.2	
37 Tert-butyl ethyl ether	59	3.889	3.883	0.006	91	199500	20.0	19.7	
35 Vinyl acetate	86	3.901	3.901	0.000	99	16986	40.0	54.1	
40 cis-1,2-Dichloroethene	96	4.175	4.169	0.006	97	87216	20.0	20.8	
38 2,2-Dichloropropane	79	4.284	4.278	0.006	97	35239	20.0	21.1	
46 Chlorobromomethane	128	4.351	4.345	0.006	88	37151	20.0	22.3	
49 Cyclohexane	84	4.357	4.357	0.000	84	137338	20.0	20.5	
48 Chloroform	83	4.418	4.418	0.000	100	120359	20.0	20.2	
42 Ethyl acetate	70	4.515	4.509	0.006	99	7977	40.0	54.5	
43 Methyl acrylate	55	4.534	4.528	0.006	98	29372	20.0	16.5	
52 Carbon tetrachloride	117	4.552	4.546	0.006	97	84747	20.0	25.5	
45 Tetrahydrofuran	72	4.564	4.558	0.006	43	8646	40.0	49.2	
$ 51 Dibromofluoromethane (Surr	113	4.588	4.582	0.006	98	138992	50.0	52.1	
50 1,1,1-Trichloroethane	97	4.619	4.619	0.000	94	114907	20.0	21.9	
* 39 2-Butanone-d5	46	4.655	4.649	0.006	0	118973	250.0	250.0	
41 2-Butanone (MEK)	72	4.710	4.698	0.012	99	21301	100.0	123.4	
53 1,1-Dichloropropene	75	4.722	4.722	0.000	98	97430	20.0	20.2	
54 Isooctane	57	4.820	4.814	0.006	99	141633	20.0	15.6	
61 n-Heptane	57	4.917	4.911	0.006	85	34429	20.0	15.7	
55 Benzene	78	4.966	4.966	0.000	91	307130	20.0	19.0	
44 Propionitrile	54	5.002	4.996	0.006	97	37937	200.0	213.6	
47 Methacrylonitrile	67	5.020	5.014	0.006	89	154126	200.0	172.0	
57 Tert-amyl methyl ether	73	5.075	5.069	0.006	98	181121	20.0	19.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.105	5.106	-0.001	95	116884	50.0	43.6	
58 Isobutyl alcohol	43	5.172	5.166	0.006	46	20109	500.0	471.4	
60 1,2-Dichloroethane	62	5.172	5.173	-0.001	97	65774	20.0	17.3	
* 62 Fluorobenzene	96	5.385	5.379	0.006	100	648882	50.0	50.0	
59 Isopropyl acetate	43	5.416	5.410	0.006	98	61202	20.0	15.0	
65 Methylcyclohexane	83	5.544	5.538	0.006	92	127311	20.0	18.6	
66 Ethyl acrylate	55	5.544	5.544	0.000	75	86412	20.0	17.1	
64 Trichloroethene	95	5.556	5.550	0.006	94	75098	20.0	20.8	
63 n-Butanol	56	5.921	5.915	0.006	86	12939	500.0	567.1	
71 Dibromomethane	93	6.018	6.012	0.006	93	30718	20.0	19.1	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	93	68366	20.0	19.8	
73 Dichlorobromomethane	83	6.194	6.195	-0.001	98	74006	20.0	22.5	
69 Methyl methacrylate	100	6.383	6.371	0.012	84	26122	40.0	40.5	
* 68 1,4-Dioxane-d8	96	6.395	6.377	0.018	87	16845	1000.0	1000.0	
70 1,4-Dioxane	88	6.426	6.420	0.006	87	8765	400.0	450.2	
72 n-Propyl acetate	43	6.547	6.547	0.000	98	42467	20.0	15.8	
75 2-Chloroethyl vinyl ether	63	6.870	6.870	0.000	95	27132	20.0	17.4	
77 cis-1,3-Dichloropropene	75	6.931	6.937	-0.006	89	93416	20.0	19.5	
$ 79 Toluene-d8 (Surr)	98	7.156	7.156	0.000	99	641456	50.0	51.0	
80 Toluene	91	7.223	7.223	0.000	93	344223	20.0	20.2	
76 Epichlorohydrin	57	7.253	7.253	0.000	98	47699	400.0	414.7	
74 2-Nitropropane	41	7.527	7.539	-0.012	96	8984	40.0	84.7	
84 Tetrachloroethene	166	7.703	7.703	0.000	96	83027	20.0	23.5	
78 4-Methyl-2-pentanone (MIBK	43	7.721	7.722	-0.001	94	151802	100.0	117.2	
81 trans-1,3-Dichloropropene	75	7.770	7.764	0.006	94	72649	20.0	19.0	
83 1,1,2-Trichloroethane	83	7.971	7.983	-0.012	95	39038	20.0	17.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
82 Ethyl methacrylate	69	7.989	7.989	0.000	87	55489	20.0	18.3	
88 Chlorodibromomethane	129	8.202	8.202	0.000	97	43574	20.0	26.6	
85 1,3-Dichloropropane	76	8.330	8.330	0.000	90	82393	20.0	17.5	
89 Ethylene Dibromide	107	8.506	8.500	0.006	98	44303	20.0	19.0	
87 n-Butyl acetate	43	8.743	8.744	-0.001	97	48449	20.0	14.4	
86 2-Hexanone	58	8.847	8.847	0.000	93	56413	100.0	122.6	
* 90 Chlorobenzene-d5	117	9.157	9.157	0.000	84	519511	50.0	50.0	
91 Chlorobenzene	112	9.175	9.176	-0.001	98	222032	20.0	20.8	
92 Ethylbenzene	106	9.224	9.224	0.000	97	122923	20.0	21.1	
93 1,1,1,2-Tetrachloroethane	131	9.261	9.261	0.000	92	66697	20.0	25.1	
94 m-Xylene & p-Xylene	106	9.394	9.395	-0.001	0	151479	20.0	21.2	
96 o-Xylene	106	9.857	9.857	0.000	95	149760	20.0	21.3	
97 Styrene	104	9.918	9.918	0.000	98	235585	20.0	21.0	
99 Bromoform	173	9.930	9.930	0.000	97	20856	20.0	27.4	
95 n-Butyl acrylate	73	10.076	10.082	-0.006	99	31167	20.0	16.8	
100 Isopropylbenzene	105	10.185	10.179	0.006	94	391663	20.0	21.0	
98 Amyl acetate (mixed isomer	43	10.337	10.338	-0.001	93	64316	20.0	14.2	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	93	192502	50.0	57.8	
102 Bromobenzene	156	10.544	10.544	0.000	94	91303	20.0	21.0	
104 N-Propylbenzene	91	10.581	10.581	0.000	100	410960	20.0	18.2	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	97	49068	20.0	17.0	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	377256	20.0	19.8	
107 2-Chlorotoluene	91	10.721	10.721	0.000	95	292778	20.0	18.8	
109 1,3,5-Trimethylbenzene	105	10.775	10.769	0.006	94	315077	20.0	19.3	
105 1,2,3-Trichloropropane	110	10.781	10.776	0.005	91	16359	20.0	16.7	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.824	0.000	84	10906	20.0	16.1	
110 4-Chlorotoluene	91	10.873	10.873	0.000	96	256405	20.0	18.6	
112 tert-Butylbenzene	119	11.055	11.055	0.000	97	258904	20.0	19.1	
111 Butyl Methacrylate	87	11.055	11.055	0.000	89	81046	20.0	18.5	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	96	332749	20.0	19.6	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	362910	20.0	17.9	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	327081	20.0	18.7	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	98	182462	20.0	20.7	
* 117 1,4-Dichlorobenzene-d4	152	11.451	11.451	0.000	93	277206	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.463	11.463	0.000	96	183431	20.0	20.6	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	98	352205	20.0	19.7	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	339991	20.0	19.9	
121 p-Diethylbenzene	119	11.639	11.639	0.000	97	185612	20.0	19.3	
119 Benzyl chloride	126	11.682	11.682	0.000	89	15901	20.0	21.2	
122 n-Butylbenzene	92	11.688	11.688	0.000	96	146844	20.0	17.1	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	98	165859	20.0	20.4	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	97	316995	20.0	19.0	
125 1,2-Dibromo-3-Chloropropan	155	12.461	12.455	0.006	97	6544	20.0	21.4	
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	98	122553	20.0	20.1	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	95	33030	20.0	20.1	
127 1,2,4-Trichlorobenzene	180	12.965	12.966	-0.001	95	107392	20.0	19.5	
129 Naphthalene	128	13.221	13.221	0.000	99	207200	20.0	18.4	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	97	89056	20.0	18.6	
S 131 1,2-Dichloroethene, Total	100				0		40.0	43.0	
S 132 Xylenes, Total	100				0		40.0	42.5	
S 133 Total BTEX	1				0		100.0	102.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260SURR250_00181	Amount Added:	1.00	Units: uL	
GASES Li_00271	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent

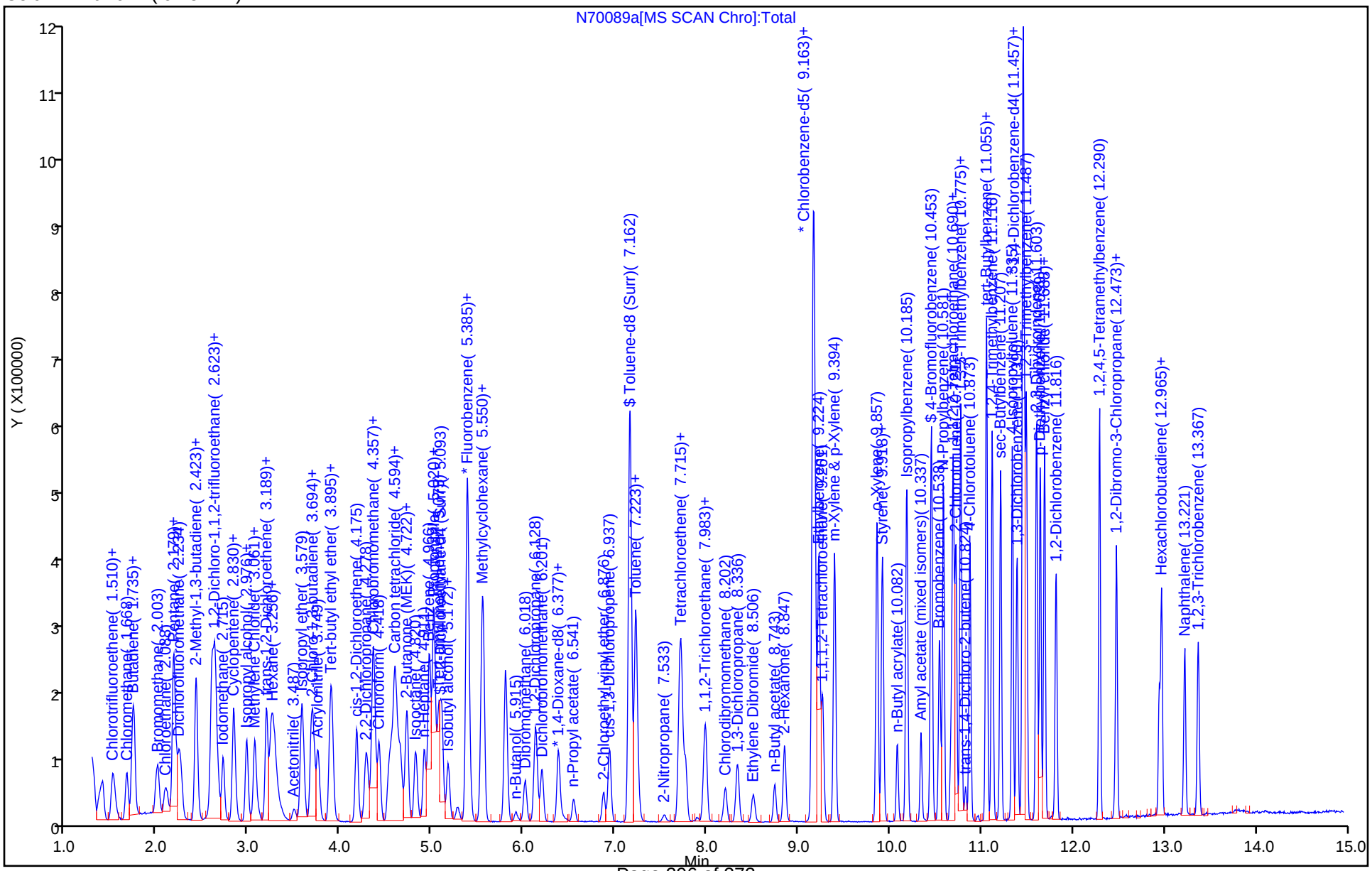
Report Date: 06-Aug-2018 15:08:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180806-76670.b\N70089a.D

Injection Date:	06-Aug-2018 06:50:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	31
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MS | Lab Sample ID: 460-161178-4 MS

Matrix: Water | Lab File ID: N69701.D

Analysis Method: 8260C | Date Collected: 07/24/2018 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 11:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	18.5		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	17.6		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18.2		1.0	0.31
79-00-5	1,1,2-Trichloroethane	16.8		1.0	0.43
75-34-3	1,1-Dichloroethane	17.8		1.0	0.26
75-35-4	1,1-Dichloroethene	18.1		1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	15.6		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	16.8		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	16.3		1.0	0.38
95-50-1	1,2-Dichlorobenzene	18.4		1.0	0.43
107-06-2	1,2-Dichloroethane	15.8		1.0	0.43
78-87-5	1,2-Dichloropropane	17.5		1.0	0.35
541-73-1	1,3-Dichlorobenzene	18.7		1.0	0.34
106-46-7	1,4-Dichlorobenzene	18.8		1.0	0.76
123-91-1	1,4-Dioxane	319		50	28
78-93-3	2-Butanone (MEK)	94.4		5.0	1.9
591-78-6	2-Hexanone	88.6		5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	92.1		5.0	2.7
67-64-1	Acetone	94.1		5.0	5.0
71-43-2	Benzene	18.2		1.0	0.43
75-25-2	Bromoform	16.5		1.0	0.54
74-83-9	Bromomethane	19.7		1.0	1.0
75-15-0	Carbon disulfide	16.9		1.0	0.16
56-23-5	Carbon tetrachloride	17.7		1.0	0.21
108-90-7	Chlorobenzene	18.9		1.0	0.38
74-97-5	Chlorobromomethane	17.2		1.0	0.41
124-48-1	Chlorodibromomethane	17.7		1.0	0.28
75-00-3	Chloroethane	19.9		1.0	0.32
67-66-3	Chloroform	18.2		1.0	0.33
74-87-3	Chloromethane	23.2		1.0	0.14
156-59-2	cis-1,2-Dichloroethene	17.6		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	16.7		1.0	0.46
110-82-7	Cyclohexane	17.8		1.0	0.32
75-27-4	Dichlorobromomethane	17.3		1.0	0.34
75-71-8	Dichlorodifluoromethane	19.4		1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MS | Lab Sample ID: 460-161178-4 MS

Matrix: Water | Lab File ID: N69701.D

Analysis Method: 8260C | Date Collected: 07/24/2018 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 11:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.5		1.0	0.30
106-93-4	Ethylene Dibromide	17.2		1.0	0.50
98-82-8	Isopropylbenzene	19.5		1.0	0.34
79-20-9	Methyl acetate	40.4		5.0	0.31
1634-04-4	Methyl tert-butyl ether	17.3		1.0	0.47
108-87-2	Methylcyclohexane	17.2		1.0	0.26
75-09-2	Methylene Chloride	17.7		1.0	0.32
179601-23-1	m-Xylene & p-Xylene	19.8		1.0	0.30
95-47-6	o-Xylene	19.1		1.0	0.36
100-42-5	Styrene	18.6		1.0	0.42
127-18-4	Tetrachloroethene	33.2		1.0	0.25
108-88-3	Toluene	18.7		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	19.1		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	16.2		1.0	0.49
79-01-6	Trichloroethene	18.1		1.0	0.31
75-69-4	Trichlorofluoromethane	19.4		1.0	0.14
75-01-4	Vinyl chloride	19.1		1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		74-132
460-00-4	4-Bromofluorobenzene	101		77-124
1868-53-7	Dibromofluoromethane (Surr)	96		72-131
2037-26-5	Toluene-d8 (Surr)	103		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69701.D
Lims ID: 460-161178-B-4 MS
Client ID: GC-MW-109M (WG)
Sample Type: MS
Inject. Date: 28-Jul-2018 11:46:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161178-B-4 MS
Misc. Info.: 460-0076243-020
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 20:00:59 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: delpolitov Date: 31-Jul-2018 20:00:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.516	1.510	0.006	92	36642	20.0	14.5	
2 Dichlorodifluoromethane	87	1.541	1.529	0.013	99	38126	20.0	19.4	
3 Chloromethane	52	1.675	1.662	0.012	99	37902	20.0	23.2	
5 Butadiene	54	1.735	1.741	-0.006	85	89087	20.0	17.7	
4 Vinyl chloride	62	1.748	1.741	0.007	98	113431	20.0	19.1	
6 Bromomethane	94	2.009	2.003	0.006	99	80926	20.0	19.7	
7 Chloroethane	64	2.094	2.088	0.006	98	70719	20.0	19.9	
10 Pentane	72	2.192	2.179	0.013	96	26350	40.0	45.1	
9 Trichlorofluoromethane	101	2.216	2.204	0.012	97	121941	20.0	19.4	
8 Dichlorofluoromethane	67	2.259	2.246	0.013	99	158399	20.0	20.3	
13 2-Methyl-1,3-butadiene	53	2.429	2.417	0.012	96	57639	20.0	17.9	
12 Ethyl ether	59	2.429	2.423	0.006	57	42168	20.0	16.7	
11 Ethanol	46	2.551	2.544	0.007	95	6885	800.0	741.5	
17 1,1-Dichloroethene	96	2.605	2.593	0.012	96	62958	20.0	18.1	
14 1,2-Dichloro-1,1,2-trifluo	117	2.593	2.599	-0.006	82	67347	20.0	18.9	
20 Carbon disulfide	76	2.636	2.630	0.006	99	203189	20.0	16.9	
15 1,1,2-Trichloro-1,2,2-trif	101	2.648	2.642	0.006	46	70695	20.0	18.2	
19 Iodomethane	142	2.727	2.721	0.006	98	105207	20.0	17.9	
23 Cyclopentene	67	2.843	2.836	0.007	96	167069	20.0	17.9	
16 Acrolein	56	2.879	2.867	0.012	93	8176	40.0	25.2	
22 3-Chloro-1-propene	76	2.976	2.976	0.000	93	37654	20.0	17.6	
21 Isopropyl alcohol	45	2.982	2.976	0.006	10	16316	200.0	188.6	
26 Methylene Chloride	84	3.068	3.062	0.006	90	71228	20.0	17.7	
18 Acetone	58	3.110	3.104	0.006	88	14612	100.0	94.1	
24 Methyl acetate	74	3.195	3.189	0.006	40	12795	40.0	40.4	
30 trans-1,2-Dichloroethene	96	3.195	3.195	0.000	93	75525	20.0	19.1	
32 Hexane	56	3.244	3.244	0.000	93	52250	20.0	17.2	
29 Methyl tert-butyl ether	73	3.274	3.274	0.000	88	151160	20.0	17.3	
* 27 TBA-d9 (IS)	65	3.293	3.281	0.012	98	142987	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.341	3.341	0.000	98	27028	200.0	164.6	M
25 Acetonitrile	41	3.500	3.493	0.007	97	41329	200.0	189.1	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Isopropyl ether	45	3.585	3.579	0.006	94	217770	20.0	17.5	
36 2-Chloro-1,3-butadiene	88	3.682	3.682	0.000	89	61531	20.0	18.3	
34 1,1-Dichloroethane	63	3.713	3.706	0.006	99	121776	20.0	17.8	
31 Acrylonitrile	53	3.761	3.755	0.006	93	126986	200.0	190.1	
37 Tert-butyl ethyl ether	59	3.895	3.889	0.006	91	188752	20.0	17.5	
35 Vinyl acetate	86	3.913	3.907	0.006	99	13645	40.0	33.3	
40 cis-1,2-Dichloroethene	96	4.181	4.181	0.000	99	78513	20.0	17.6	
38 2,2-Dichloropropane	79	4.284	4.284	0.000	98	32969	20.0	18.6	
49 Cyclohexane	84	4.370	4.357	0.013	89	126591	20.0	17.8	
46 Chlorobromomethane	128	4.357	4.363	-0.006	88	30381	20.0	17.2	
48 Chloroform	83	4.424	4.424	0.000	99	115286	20.0	18.2	
42 Ethyl acetate	70	4.528	4.522	0.006	99	8266	40.0	42.5	
43 Methyl acrylate	55	4.534	4.534	0.000	45	28431	20.0	15.0	a
52 Carbon tetrachloride	117	4.552	4.558	-0.006	97	62527	20.0	17.7	
45 Tetrahydrofuran	72	4.564	4.564	0.000	67	8501	40.0	36.4	
$ 51 Dibromofluoromethane (Surr	113	4.601	4.595	0.006	97	135553	50.0	47.8	
50 1,1,1-Trichloroethane	97	4.625	4.625	0.000	83	102842	20.0	18.5	
* 39 2-Butanone-d5	46	4.662	4.662	0.000	0	158180	250.0	250.0	
41 2-Butanone (MEK)	72	4.710	4.704	0.006	99	21663	100.0	94.4	
53 1,1-Dichloropropene	75	4.728	4.722	0.006	97	90185	20.0	17.5	
54 Isooctane	57	4.826	4.820	0.006	99	153981	20.0	16.0	
61 n-Heptane	57	4.917	4.917	0.000	89	37407	20.0	16.1	
55 Benzene	78	4.972	4.972	0.000	94	288328	20.0	18.2	
44 Propionitrile	54	5.008	5.008	0.000	96	46761	200.0	190.2	
47 Methacrylonitrile	67	5.027	5.020	0.007	89	154217	200.0	161.8	
57 Tert-amyl methyl ether	73	5.075	5.075	0.000	98	168349	20.0	17.4	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.112	5.106	0.006	97	127550	50.0	44.8	
60 1,2-Dichloroethane	62	5.179	5.173	0.006	97	63798	20.0	15.8	
58 Isobutyl alcohol	43	5.185	5.179	0.006	48	24509	500.0	415.0	
* 62 Fluorobenzene	96	5.392	5.385	0.007	99	690184	50.0	50.0	
59 Isopropyl acetate	43	5.422	5.410	0.012	98	62043	20.0	14.3	
66 Ethyl acrylate	55	5.550	5.544	0.006	80	89229	20.0	16.6	
65 Methylcyclohexane	83	5.550	5.544	0.006	94	124711	20.0	17.2	
64 Trichloroethene	95	5.562	5.556	0.006	96	69677	20.0	18.1	
63 n-Butanol	56	5.921	5.915	0.006	86	12618	500.0	399.4	
71 Dibromomethane	93	6.018	6.012	0.006	96	29687	20.0	17.4	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	90	64217	20.0	17.5	
73 Dichlorobromomethane	83	6.201	6.195	0.006	98	60453	20.0	17.3	
69 Methyl methacrylate	100	6.383	6.377	0.006	87	21927	40.0	32.0	
* 68 1,4-Dioxane-d8	96	6.389	6.383	0.006	90	19673	1000.0	1000.0	
70 1,4-Dioxane	88	6.426	6.420	0.006	74	7253	400.0	319.0	
72 n-Propyl acetate	43	6.547	6.554	-0.007	97	43008	20.0	15.1	
77 cis-1,3-Dichloropropene	75	6.943	6.937	0.006	91	78025	20.0	16.7	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	99	630373	50.0	51.3	
80 Toluene	91	7.223	7.223	0.000	93	311161	20.0	18.7	
76 Epichlorohydrin	57	7.253	7.253	0.000	98	49350	400.0	323.3	a
74 2-Nitropropane	41	7.533	7.545	-0.012	89	5106	40.0	34.8	
84 Tetrachloroethene	166	7.703	7.697	0.006	95	114626	20.0	33.2	
78 4-Methyl-2-pentanone (MIBK	43	7.728	7.728	0.000	95	158598	100.0	92.1	
81 trans-1,3-Dichloropropene	75	7.764	7.770	-0.006	97	60460	20.0	16.2	
83 1,1,2-Trichloroethane	83	7.977	7.971	0.006	95	35764	20.0	16.8	
82 Ethyl methacrylate	69	7.995	7.989	0.006	86	49792	20.0	15.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 Chlorodibromomethane	129	8.202	8.196	0.006	98	28330	20.0	17.7	
85 1,3-Dichloropropane	76	8.342	8.336	0.006	92	79496	20.0	17.3	
89 Ethylene Dibromide	107	8.512	8.506	0.006	100	39028	20.0	17.2	
87 n-Butyl acetate	43	8.744	8.744	0.000	98	44961	20.0	13.7	
86 2-Hexanone	58	8.853	8.847	0.006	95	54239	100.0	88.6	
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	85	506843	50.0	50.0	
91 Chlorobenzene	112	9.182	9.182	0.000	97	196532	20.0	18.9	
92 Ethylbenzene	106	9.224	9.218	0.006	97	111019	20.0	19.5	
93 1,1,1,2-Tetrachloroethane	131	9.267	9.261	0.006	90	48261	20.0	18.6	
94 m-Xylene & p-Xylene	106	9.395	9.395	0.000	0	138064	20.0	19.8	
96 o-Xylene	106	9.863	9.857	0.006	95	131376	20.0	19.1	
97 Styrene	104	9.918	9.918	0.000	96	202955	20.0	18.6	
99 Bromoform	173	9.930	9.930	0.000	38	11261	20.0	16.5	
95 n-Butyl acrylate	73	10.082	10.082	0.000	98	26137	20.0	14.4	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	356022	20.0	19.5	
98 Amyl acetate (mixed isomer	43	10.344	10.338	0.006	93	61656	20.0	15.1	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	86	163436	50.0	50.3	
102 Bromobenzene	156	10.544	10.544	0.000	98	70880	20.0	18.2	
104 N-Propylbenzene	91	10.587	10.581	0.006	99	391246	20.0	19.3	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	97	45499	20.0	17.6	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	342319	20.0	20.0	
107 2-Chlorotoluene	91	10.721	10.721	0.000	96	280165	20.0	20.0	
109 1,3,5-Trimethylbenzene	105	10.776	10.769	0.007	93	289357	20.0	19.8	
105 1,2,3-Trichloropropane	110	10.782	10.782	0.000	96	14418	20.0	16.4	
106 trans-1,4-Dichloro-2-buten	53	10.830	10.830	0.000	84	9074	20.0	14.9	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	236099	20.0	19.1	
111 Butyl Methacrylate	87	11.061	11.055	0.006	96	70314	20.0	17.9	
112 tert-Butylbenzene	119	11.055	11.055	0.000	96	232562	20.0	19.1	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	97	302371	20.0	19.8	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	344508	20.0	18.9	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	294462	20.0	18.8	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	96	148130	20.0	18.7	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.451	0.006	95	248965	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.463	11.469	-0.006	94	150598	20.0	18.8	
134 1,2,3-Trimethylbenzene	105	11.487	11.487	0.000	98	312411	20.0	19.5	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	289658	20.0	18.9	
121 p-Diethylbenzene	119	11.645	11.639	0.006	96	172020	20.0	19.9	
119 Benzyl chloride	126	11.682	11.682	0.000	90	9678	20.0	14.7	
122 n-Butylbenzene	92	11.688	11.688	0.000	97	145803	20.0	18.9	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	96	134526	20.0	18.4	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	98	267192	20.0	17.8	
125 1,2-Dibromo-3-Chloropropan	155	12.455	12.461	-0.006	86	4415	20.0	16.3	a
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	97	98781	20.0	18.1	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	92	25108	20.0	17.0	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	95	83228	20.0	16.8	
129 Naphthalene	128	13.221	13.221	0.000	100	152066	20.0	15.0	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	94	66846	20.0	15.6	
S 131 1,2-Dichloroethene, Total	100				0		40.0	36.7	
S 132 Xylenes, Total	100				0		40.0	38.9	
S 133 Total BTEX	1				0		100.0	95.3	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00270	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

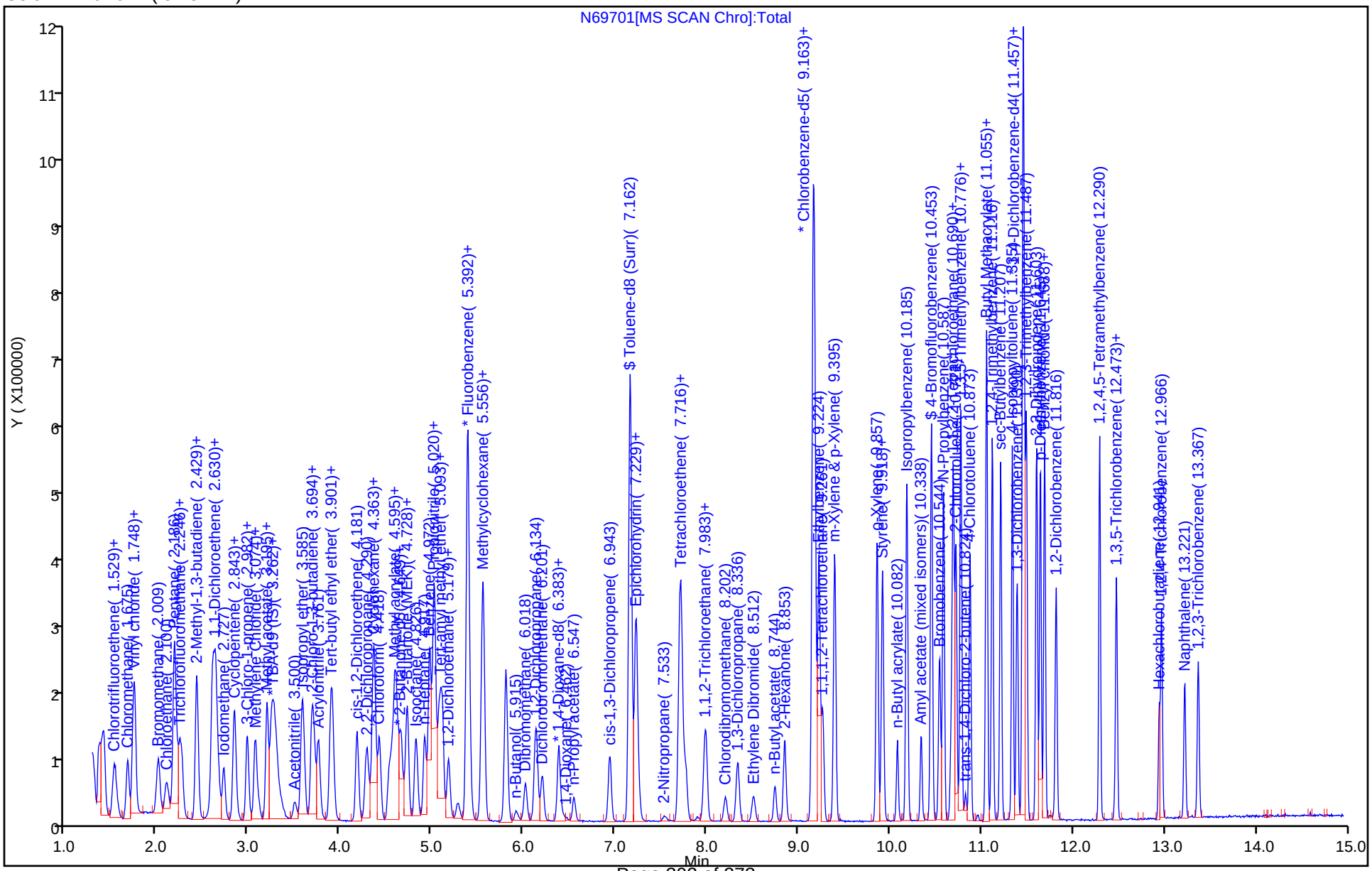
Report Date: 31-Jul-2018 20:01:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69701.D

Injection Date:	28-Jul-2018 11:46:30	Instrument ID:	CVOAMS11	Operator ID:	
Lims ID:	460-161178-B-4 MS			Worklist Smp#:	20
Client ID:	GC-MW-109M (WG)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Edison

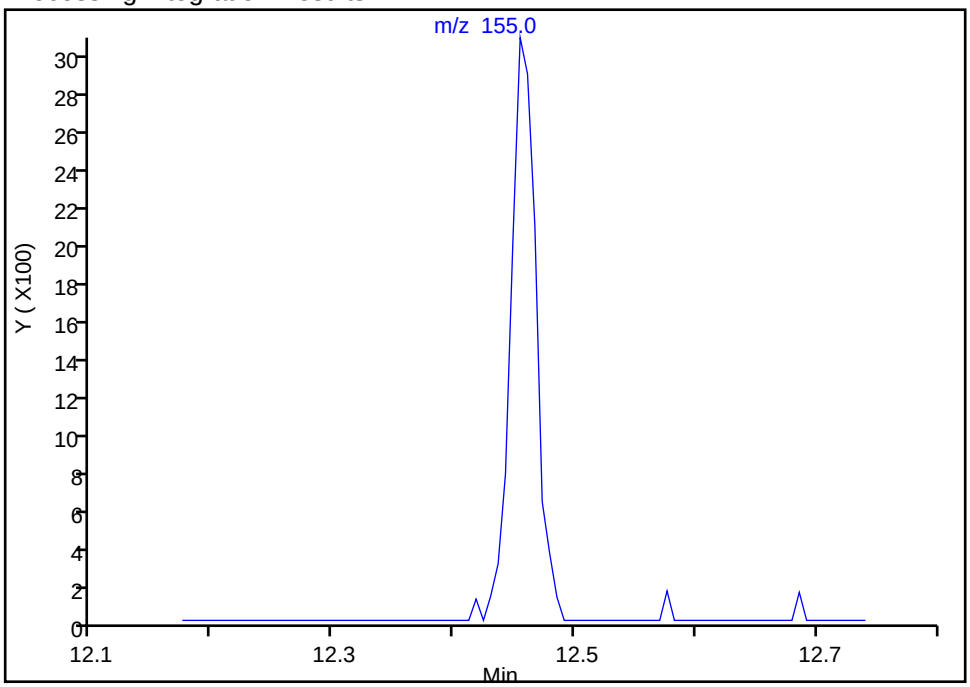
Data File:	\\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69701.D				
Injection Date:	28-Jul-2018 11:46:30	Instrument ID:	CVOAMS11		
Lims ID:	460-161178-B-4 MS				
Client ID:	GC-MW-109M (WG)				
Operator ID:		ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260W_11	Limit Group:	VOA - 8260C Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

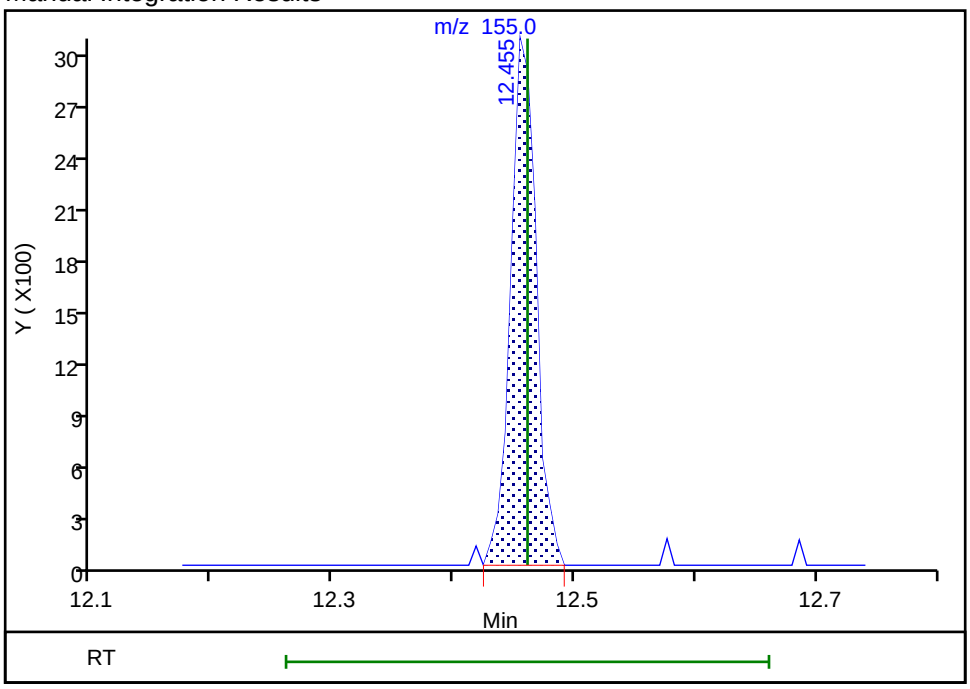
Not Detected
Expected RT: 12.46

Processing Integration Results



Manual Integration Results

RT: 12.45
Area: 4415
Amount: 16.277125
Amount Units: ug/l



Reviewer: sarmientod, 28-Jul-2018 18:16:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MSD | Lab Sample ID: 460-161178-4 MSD

Matrix: Water | Lab File ID: N69702.D

Analysis Method: 8260C | Date Collected: 07/24/2018 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 12:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	18.5		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	17.2		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18.6		1.0	0.31
79-00-5	1,1,2-Trichloroethane	16.8		1.0	0.43
75-34-3	1,1-Dichloroethane	17.5		1.0	0.26
75-35-4	1,1-Dichloroethene	17.8		1.0	0.12
87-61-6	1,2,3-Trichlorobenzene	16.4		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	17.3		1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	16.8		1.0	0.38
95-50-1	1,2-Dichlorobenzene	18.2		1.0	0.43
107-06-2	1,2-Dichloroethane	15.7		1.0	0.43
78-87-5	1,2-Dichloropropane	17.6		1.0	0.35
541-73-1	1,3-Dichlorobenzene	18.8		1.0	0.34
106-46-7	1,4-Dichlorobenzene	18.5		1.0	0.76
123-91-1	1,4-Dioxane	357		50	28
78-93-3	2-Butanone (MEK)	92.8		5.0	1.9
591-78-6	2-Hexanone	90.2		5.0	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	88.5		5.0	2.7
67-64-1	Acetone	87.9		5.0	5.0
71-43-2	Benzene	18.0		1.0	0.43
75-25-2	Bromoform	16.3		1.0	0.54
74-83-9	Bromomethane	19.5		1.0	1.0
75-15-0	Carbon disulfide	16.6		1.0	0.16
56-23-5	Carbon tetrachloride	18.2		1.0	0.21
108-90-7	Chlorobenzene	19.1		1.0	0.38
74-97-5	Chlorobromomethane	16.9		1.0	0.41
124-48-1	Chlorodibromomethane	18.4		1.0	0.28
75-00-3	Chloroethane	19.4		1.0	0.32
67-66-3	Chloroform	17.8		1.0	0.33
74-87-3	Chloromethane	22.8		1.0	0.14
156-59-2	cis-1,2-Dichloroethene	17.3		1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	17.0		1.0	0.46
110-82-7	Cyclohexane	17.8		1.0	0.32
75-27-4	Dichlorobromomethane	18.0		1.0	0.34
75-71-8	Dichlorodifluoromethane	19.1		1.0	0.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-161178-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MSD | Lab Sample ID: 460-161178-4 MSD

Matrix: Water | Lab File ID: N69702.D

Analysis Method: 8260C | Date Collected: 07/24/2018 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 07/28/2018 12:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 540359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	19.2		1.0	0.30
106-93-4	Ethylene Dibromide	17.1		1.0	0.50
98-82-8	Isopropylbenzene	19.2		1.0	0.34
79-20-9	Methyl acetate	35.6		5.0	0.31
1634-04-4	Methyl tert-butyl ether	17.1		1.0	0.47
108-87-2	Methylcyclohexane	17.7		1.0	0.26
75-09-2	Methylene Chloride	17.3		1.0	0.32
179601-23-1	m-Xylene & p-Xylene	19.2		1.0	0.30
95-47-6	o-Xylene	18.8		1.0	0.36
100-42-5	Styrene	18.3		1.0	0.42
127-18-4	Tetrachloroethene	33.4		1.0	0.25
108-88-3	Toluene	18.8		1.0	0.38
156-60-5	trans-1,2-Dichloroethene	18.2		1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	16.4		1.0	0.49
79-01-6	Trichloroethene	18.1		1.0	0.31
75-69-4	Trichlorofluoromethane	19.5		1.0	0.14
75-01-4	Vinyl chloride	19.3		1.0	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		74-132
460-00-4	4-Bromofluorobenzene	100		77-124
1868-53-7	Dibromofluoromethane (Surr)	92		72-131
2037-26-5	Toluene-d8 (Surr)	100		80-120

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69702.D
Lims ID: 460-161178-B-4 MSD
Client ID: GC-MW-109M (WG)
Sample Type: MSD
Inject. Date: 28-Jul-2018 12:08:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-161178-B-4 MSD
Misc. Info.: 460-0076243-021
Operator ID: Instrument ID: CVOAMS11

Method: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\8260W_11.m
Limit Group: VOA - 8260C Water and Solid
Last Update: 31-Jul-2018 20:02:04 Calib Date: 24-Jul-2018 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS11\20180724-76012.b\N69459.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: sarmientod Date: 28-Jul-2018 18:18:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.510	1.510	0.000	89	37529	20.0	14.7	
2 Dichlorodifluoromethane	87	1.528	1.529	0.000	99	38126	20.0	19.1	
3 Chloromethane	52	1.668	1.662	0.006	99	38574	20.0	22.8	
5 Butadiene	54	1.735	1.741	-0.006	74	89428	20.0	17.6	
4 Vinyl chloride	62	1.741	1.741	0.000	98	115948	20.0	19.3	
6 Bromomethane	94	2.003	2.003	0.000	99	81189	20.0	19.5	
7 Chloroethane	64	2.088	2.088	0.000	98	69862	20.0	19.4	
10 Pentane	72	2.179	2.179	0.000	97	26392	40.0	43.5	
9 Trichlorofluoromethane	101	2.216	2.204	0.012	98	124172	20.0	19.5	
8 Dichlorofluoromethane	67	2.246	2.246	0.000	98	159377	20.0	20.2	
13 2-Methyl-1,3-butadiene	53	2.423	2.417	0.006	96	56129	20.0	17.2	
12 Ethyl ether	59	2.423	2.423	0.000	57	42750	20.0	16.7	
11 Ethanol	46	2.550	2.544	0.006	95	7643	800.0	793.6	
17 1,1-Dichloroethene	96	2.599	2.593	0.006	96	62868	20.0	17.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.593	2.599	-0.006	70	67729	20.0	18.8	
20 Carbon disulfide	76	2.630	2.630	0.000	99	202528	20.0	16.6	
15 1,1,2-Trichloro-1,2,2-trif	101	2.648	2.642	0.006	94	73122	20.0	18.6	
19 Iodomethane	142	2.721	2.721	0.000	97	103266	20.0	17.4	
23 Cyclopentene	67	2.836	2.836	0.000	97	166586	20.0	17.6	
16 Acrolein	56	2.879	2.867	0.012	27	7960	40.0	23.8	a
22 3-Chloro-1-propene	76	2.976	2.976	0.000	93	37909	20.0	17.4	
21 Isopropyl alcohol	45	2.988	2.976	0.012	24	15848	200.0	176.3	
26 Methylene Chloride	84	3.061	3.062	-0.001	89	70916	20.0	17.3	
18 Acetone	58	3.104	3.104	0.000	87	14116	100.0	87.9	
24 Methyl acetate	74	3.189	3.189	0.000	39	11680	40.0	35.6	
30 trans-1,2-Dichloroethene	96	3.195	3.195	0.000	92	73051	20.0	18.2	
32 Hexane	56	3.244	3.244	0.000	92	53313	20.0	17.3	
29 Methyl tert-butyl ether	73	3.274	3.274	0.000	92	151640	20.0	17.1	
* 27 TBA-d9 (IS)	65	3.287	3.281	0.006	99	148294	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.341	3.341	0.000	98	29641	200.0	174.0	
25 Acetonitrile	41	3.493	3.493	0.000	98	39931	200.0	176.2	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Isopropyl ether	45	3.579	3.579	0.000	95	217796	20.0	17.2	
36 2-Chloro-1,3-butadiene	88	3.682	3.682	0.000	89	61437	20.0	18.0	
34 1,1-Dichloroethane	63	3.706	3.706	0.000	100	121043	20.0	17.5	
31 Acrylonitrile	53	3.755	3.755	0.000	94	130358	200.0	188.2	
37 Tert-butyl ethyl ether	59	3.889	3.889	0.000	90	193999	20.0	17.7	
35 Vinyl acetate	86	3.907	3.907	0.000	99	14307	40.0	33.7	
40 cis-1,2-Dichloroethene	96	4.175	4.181	-0.006	99	78159	20.0	17.3	
38 2,2-Dichloropropane	79	4.284	4.284	0.000	97	34335	20.0	19.1	
49 Cyclohexane	84	4.357	4.357	0.000	89	128150	20.0	17.8	
46 Chlorobromomethane	128	4.357	4.363	-0.006	75	30376	20.0	16.9	
48 Chloroform	83	4.418	4.424	-0.006	98	114459	20.0	17.8	
42 Ethyl acetate	70	4.515	4.522	-0.007	99	8467	40.0	42.1	
43 Methyl acrylate	55	4.534	4.534	0.000	98	29168	20.0	15.2	a
52 Carbon tetrachloride	117	4.558	4.558	0.000	96	65017	20.0	18.2	
45 Tetrahydrofuran	72	4.570	4.564	0.006	48	8786	40.0	36.4	
$ 51 Dibromofluoromethane (Surr	113	4.588	4.595	-0.007	96	132460	50.0	46.1	
50 1,1,1-Trichloroethane	97	4.619	4.625	-0.006	94	104231	20.0	18.5	
* 39 2-Butanone-d5	46	4.655	4.662	-0.007	0	163609	250.0	250.0	
41 2-Butanone (MEK)	72	4.704	4.704	0.000	99	22030	100.0	92.8	
53 1,1-Dichloropropene	75	4.722	4.722	0.000	98	93205	20.0	17.9	
54 Isooctane	57	4.820	4.820	0.000	99	157506	20.0	16.1	
61 n-Heptane	57	4.917	4.917	0.000	88	38409	20.0	16.3	
55 Benzene	78	4.972	4.972	0.000	91	290293	20.0	18.0	
44 Propionitrile	54	5.002	5.008	-0.006	93	46584	200.0	182.7	
47 Methacrylonitrile	67	5.020	5.020	0.000	89	150472	200.0	155.8	
57 Tert-amyl methyl ether	73	5.069	5.075	-0.006	97	164987	20.0	16.8	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.106	5.106	0.000	96	126387	50.0	43.8	
60 1,2-Dichloroethane	62	5.172	5.173	-0.001	97	64438	20.0	15.7	
58 Isobutyl alcohol	43	5.172	5.179	-0.007	48	21778	500.0	355.5	
* 62 Fluorobenzene	96	5.385	5.385	0.000	99	699616	50.0	50.0	
59 Isopropyl acetate	43	5.422	5.410	0.012	99	62984	20.0	14.3	a
66 Ethyl acrylate	55	5.550	5.544	0.006	77	92288	20.0	16.9	
65 Methylcyclohexane	83	5.544	5.544	0.000	94	130344	20.0	17.7	
64 Trichloroethene	95	5.556	5.556	0.000	98	70522	20.0	18.1	
63 n-Butanol	56	5.915	5.915	0.000	88	13494	500.0	411.9	
71 Dibromomethane	93	6.018	6.012	0.006	98	29029	20.0	16.8	
67 1,2-Dichloropropane	63	6.128	6.128	0.000	89	65473	20.0	17.6	
73 Dichlorobromomethane	83	6.201	6.195	0.006	98	63708	20.0	18.0	
69 Methyl methacrylate	100	6.377	6.377	0.000	88	22257	40.0	32.0	
* 68 1,4-Dioxane-d8	96	6.395	6.383	0.012	91	19717	1000.0	1000.0	
70 1,4-Dioxane	88	6.438	6.420	0.018	62	8138	400.0	357.1	
72 n-Propyl acetate	43	6.547	6.554	-0.007	99	41459	20.0	14.3	
77 cis-1,3-Dichloropropene	75	6.937	6.937	0.000	91	81288	20.0	17.0	
$ 79 Toluene-d8 (Surr)	98	7.162	7.162	0.000	100	628351	50.0	50.1	
80 Toluene	91	7.223	7.223	0.000	94	319346	20.0	18.8	
76 Epichlorohydrin	57	7.253	7.253	0.000	99	49388	400.0	312.9	a
74 2-Nitropropane	41	7.551	7.545	0.006	80	4588	40.0	30.1	a
84 Tetrachloroethene	166	7.703	7.697	0.006	96	117900	20.0	33.4	
78 4-Methyl-2-pentanone (MIBK	43	7.721	7.728	-0.007	96	157716	100.0	88.5	
81 trans-1,3-Dichloropropene	75	7.770	7.770	0.000	97	62553	20.0	16.4	
83 1,1,2-Trichloroethane	83	7.977	7.971	0.006	94	36668	20.0	16.8	
82 Ethyl methacrylate	69	7.989	7.989	0.000	90	48806	20.0	14.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 Chlorodibromomethane	129	8.202	8.196	0.006	98	29999	20.0	18.4	
85 1,3-Dichloropropane	76	8.336	8.336	0.000	93	79959	20.0	17.0	
89 Ethylene Dibromide	107	8.506	8.506	0.000	96	39892	20.0	17.1	
87 n-Butyl acetate	43	8.744	8.744	0.000	98	46934	20.0	14.0	
86 2-Hexanone	58	8.847	8.847	0.000	94	57081	100.0	90.2	
* 90 Chlorobenzene-d5	117	9.163	9.157	0.006	86	518259	50.0	50.0	
91 Chlorobenzene	112	9.182	9.182	0.000	98	203783	20.0	19.1	
92 Ethylbenzene	106	9.224	9.218	0.006	97	111599	20.0	19.2	
93 1,1,1,2-Tetrachloroethane	131	9.267	9.261	0.006	91	47680	20.0	18.0	
94 m-Xylene & p-Xylene	106	9.394	9.395	-0.001	0	136699	20.0	19.2	
96 o-Xylene	106	9.863	9.857	0.006	95	131641	20.0	18.8	
97 Styrene	104	9.918	9.918	0.000	97	203988	20.0	18.3	
99 Bromoform	173	9.936	9.930	0.006	96	11480	20.0	16.3	
95 n-Butyl acrylate	73	10.082	10.082	0.000	98	26992	20.0	14.5	
100 Isopropylbenzene	105	10.185	10.185	0.000	95	357814	20.0	19.2	
98 Amyl acetate (mixed isomer	43	10.343	10.338	0.005	94	63918	20.0	15.2	
$ 101 4-Bromofluorobenzene	174	10.453	10.453	0.000	87	165272	50.0	49.8	
102 Bromobenzene	156	10.544	10.544	0.000	98	73999	20.0	18.4	
104 N-Propylbenzene	91	10.587	10.581	0.006	99	397108	20.0	19.0	
103 1,1,2,2-Tetrachloroethane	83	10.666	10.666	0.000	97	45817	20.0	17.2	
108 4-Ethyltoluene	105	10.690	10.690	0.000	98	340878	20.0	19.3	
107 2-Chlorotoluene	91	10.721	10.721	0.000	95	280084	20.0	19.4	
109 1,3,5-Trimethylbenzene	105	10.775	10.769	0.006	93	292457	20.0	19.4	
105 1,2,3-Trichloropropane	110	10.782	10.782	0.000	94	14531	20.0	16.0	
106 trans-1,4-Dichloro-2-buten	53	10.824	10.830	-0.006	76	9233	20.0	14.7	
110 4-Chlorotoluene	91	10.873	10.873	0.000	97	243794	20.0	19.1	
111 Butyl Methacrylate	87	11.061	11.055	0.006	93	72036	20.0	17.9	
112 tert-Butylbenzene	119	11.055	11.055	0.000	95	234676	20.0	18.7	
113 1,2,4-Trimethylbenzene	105	11.116	11.116	0.000	97	307681	20.0	19.6	
114 sec-Butylbenzene	105	11.207	11.207	0.000	99	359029	20.0	19.2	
115 4-Isopropyltoluene	119	11.335	11.335	0.000	98	301371	20.0	18.7	
116 1,3-Dichlorobenzene	146	11.390	11.390	0.000	96	153439	20.0	18.8	
* 117 1,4-Dichlorobenzene-d4	152	11.457	11.451	0.006	95	256201	50.0	50.0	
118 1,4-Dichlorobenzene	146	11.469	11.469	0.000	94	152471	20.0	18.5	
134 1,2,3-Trimethylbenzene	105	11.493	11.487	0.006	98	315515	20.0	19.1	
120 2,3-Dihydroindene	117	11.603	11.603	0.000	94	289880	20.0	18.4	
121 p-Diethylbenzene	119	11.645	11.639	0.006	96	176905	20.0	19.9	
119 Benzyl chloride	126	11.682	11.682	0.000	87	10315	20.0	15.2	
122 n-Butylbenzene	92	11.688	11.688	0.000	97	148487	20.0	18.7	
123 1,2-Dichlorobenzene	146	11.816	11.816	0.000	95	136909	20.0	18.2	
124 1,2,4,5-Tetramethylbenzene	119	12.290	12.290	0.000	97	272544	20.0	17.7	
125 1,2-Dibromo-3-Chloropropan	155	12.461	12.461	0.000	90	4692	20.0	16.8	
126 1,3,5-Trichlorobenzene	180	12.473	12.473	0.000	96	101670	20.0	18.1	
128 Hexachlorobutadiene	225	12.941	12.941	0.000	90	25088	20.0	16.5	
127 1,2,4-Trichlorobenzene	180	12.966	12.966	0.000	93	88371	20.0	17.3	
129 Naphthalene	128	13.221	13.221	0.000	99	158350	20.0	15.2	
130 1,2,3-Trichlorobenzene	180	13.367	13.367	0.000	96	72519	20.0	16.4	
S 131 1,2-Dichloroethene, Total	100				0		40.0	35.5	
S 132 Xylenes, Total	100				0		40.0	37.9	
S 133 Total BTEX	1				0		100.0	93.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00270	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00084	Amount Added:	20.00	Units: uL	
ACROLEIN W_00079	Amount Added:	4.00	Units: uL	
8260ISNEW_00120	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00179	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 31-Jul-2018 20:02:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS11\20180728-76243.b\N69702.D

Injection Date: 28-Jul-2018 12:08:30 Instrument ID: CVOAMS11 Operator ID:

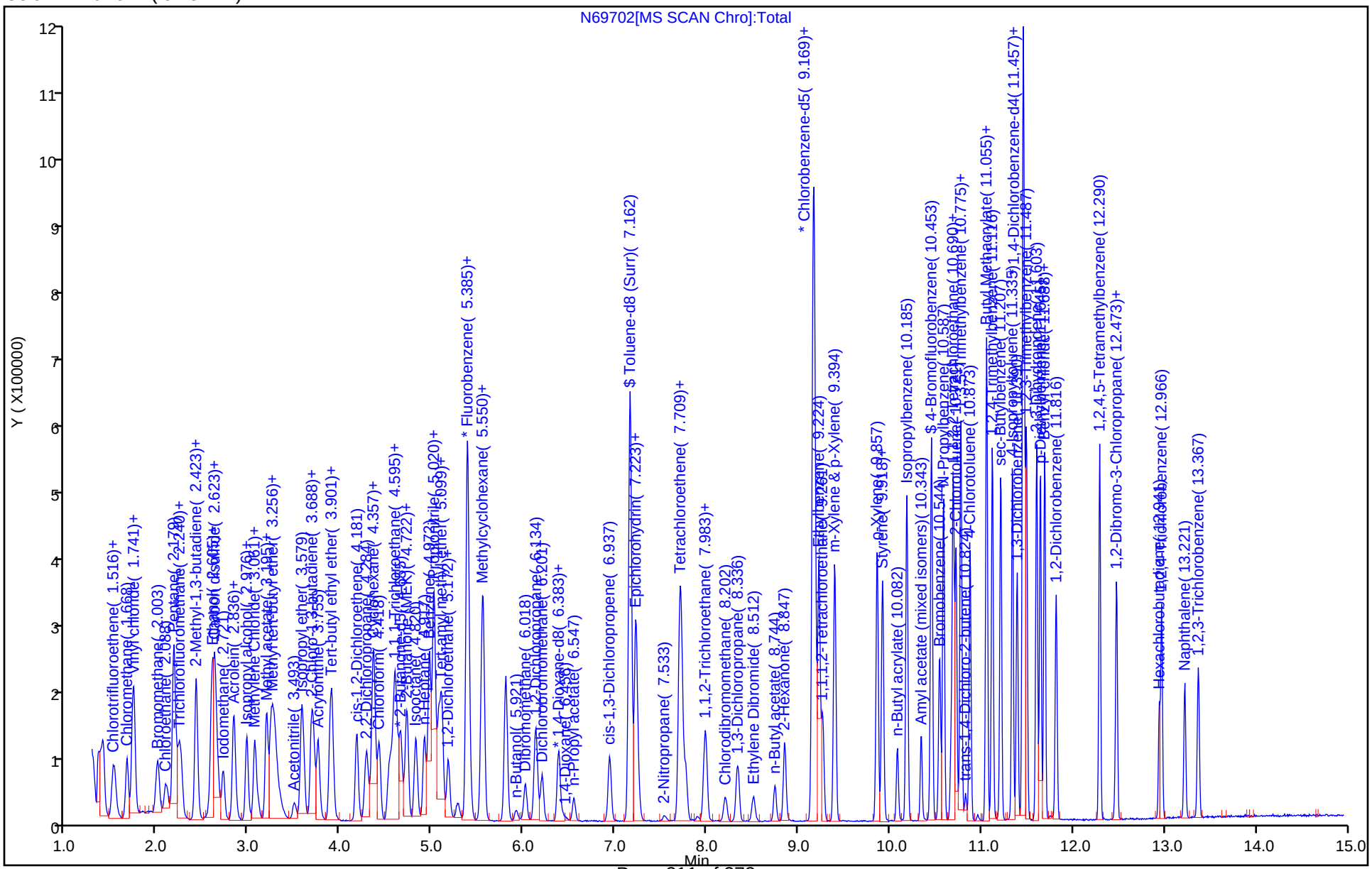
Lims ID: 460-161178-B-4 MSD Worklist Smp#: 21

Client ID: GC-MW-109M (WG)

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 20

Method: 8260W_11 Limit Group: VOA - 8260C Water and Solid

Column: Rtx-624 (0.25 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Instrument ID: CVOAMS11 Start Date: 07/24/2018 05:45

Analysis Batch Number: 539131 End Date: 07/24/2018 13:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-539131/1		07/24/2018 05:45	1	N69450.D	Rtx-624 0.25(mm)
STD8 460-539131/3 IC		07/24/2018 06:28	1	N69452.D	Rtx-624 0.25(mm)
STD1 460-539131/5 IC		07/24/2018 07:13	1	N69454.D	Rtx-624 0.25(mm)
STD5 460-539131/6 IC		07/24/2018 07:35	1	N69455.D	Rtx-624 0.25(mm)
STD20 460-539131/7 ICIS		07/24/2018 07:58	1	N69456.D	Rtx-624 0.25(mm)
STD50 460-539131/8 IC		07/24/2018 08:20	1	N69457.D	Rtx-624 0.25(mm)
STD200 460-539131/9 IC		07/24/2018 08:42	1	N69458.D	Rtx-624 0.25(mm)
STD500 460-539131/10 IC		07/24/2018 09:04	1	N69459.D	Rtx-624 0.25(mm)
ICV 460-539131/14		07/24/2018 10:34	1		Rtx-624 0.25(mm)
ZZZZZ		07/24/2018 10:56	1		Rtx-624 0.25(mm)
ZZZZZ		07/24/2018 11:19	1		Rtx-624 0.25(mm)
ZZZZZ		07/24/2018 12:37	1		Rtx-624 0.25(mm)
ZZZZZ		07/24/2018 12:59	1		Rtx-624 0.25(mm)
ZZZZZ		07/24/2018 13:21	1		Rtx-624 0.25(mm)
ZZZZZ		07/24/2018 13:44	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Instrument ID: CVOAMS11 Start Date: 07/28/2018 04:30

Analysis Batch Number: 540359 End Date: 07/28/2018 15:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-540359/1		07/28/2018 04:30	1	N69682.D	Rtx-624 0.25(mm)
CCVIS 460-540359/3		07/28/2018 05:27	1	N69684.D	Rtx-624 0.25(mm)
LCS 460-540359/4		07/28/2018 05:50	1	N69685.D	Rtx-624 0.25(mm)
ZZZZZ		07/28/2018 06:12	1		Rtx-624 0.25(mm)
MB 460-540359/8		07/28/2018 07:18	1	N69689.D	Rtx-624 0.25(mm)
ZZZZZ		07/28/2018 07:41	1		Rtx-624 0.25(mm)
ZZZZZ		07/28/2018 08:03	1		Rtx-624 0.25(mm)
ZZZZZ		07/28/2018 08:25	1		Rtx-624 0.25(mm)
460-161178-4 MS		07/28/2018 11:46	1	N69701.D	Rtx-624 0.25(mm)
460-161178-4 MSD		07/28/2018 12:08	1	N69702.D	Rtx-624 0.25(mm)
ZZZZZ		07/28/2018 12:53	1		Rtx-624 0.25(mm)
460-161178-6		07/28/2018 13:15	1	N69705.D	Rtx-624 0.25(mm)
460-161178-4		07/28/2018 13:37	1	N69706.D	Rtx-624 0.25(mm)
460-161178-1		07/28/2018 14:00	1	N69707.D	Rtx-624 0.25(mm)
460-161178-2		07/28/2018 14:22	1	N69708.D	Rtx-624 0.25(mm)
460-161178-3		07/28/2018 14:44	1	N69709.D	Rtx-624 0.25(mm)
460-161178-5		07/28/2018 15:06	1	N69710.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Instrument ID: CVOAMS11 Start Date: 08/06/2018 05:19

Analysis Batch Number: 542406 End Date: 08/06/2018 16:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-542406/1		08/06/2018 05:19	1	N70085.D	Rtx-624 0.25(mm)
CCVIS 460-542406/3		08/06/2018 06:06	1	N70087.D	Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 06:28	50		Rtx-624 0.25(mm)
LCS 460-542406/30		08/06/2018 06:28	1	N70088a.D	Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 06:50	50		Rtx-624 0.25(mm)
LCSD 460-542406/31		08/06/2018 06:50	1	N70089a.D	Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 07:57	50		Rtx-624 0.25(mm)
MB 460-542406/32		08/06/2018 07:57	1	N70092a.D	Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 08:57	50		Rtx-624 0.25(mm)
460-161178-7		08/06/2018 10:04	1	N70097.D	Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 10:29	1		Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 10:51	10		Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 11:13	10		Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 11:36	500		Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 11:58	50		Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 13:27	10		Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 13:49	10		Rtx-624 0.25(mm)
ZZZZZ		08/06/2018 16:26	50		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 540359 Batch Start Date: 07/28/18 04:30 Batch Analyst: Sarmiento, Daniel

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260ISNEW 00120	8260MIX1COMB 00084	8260SURR250 00179	ACROLEIN W 00079
BFB 460-540359/1		8260C		5 mL	0				
CCVIS 460-540359/3		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCS 460-540359/4		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
MB 460-540359/8		8260C		5 mL	5 mL	1 uL		1 uL	
460-161178-B-4 MS	GC-MW-109M (WG)	8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-161178-B-4 MSD	GC-MW-109M (WG)	8260C	T	5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-161178-B-6	GC-Equipment Blank (072418)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-161178-B-4	GC-MW-109M (WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-161178-B-1	GC-MW-107 (WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-161178-B-2	GC-MW-108 (WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-161178-B-3	GC-MW-109 (WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	
460-161178-B-5	GC-MW-110 (WG)	8260C	T	5 mL	5 mL	1 uL		1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00017	GASES Li 00270				
BFB 460-540359/1		8260C		1 uL					
CCVIS 460-540359/3		8260C			20 uL				
LCS 460-540359/4		8260C			20 uL				
MB 460-540359/8		8260C							
460-161178-B-4 MS	GC-MW-109M (WG)	8260C	T		20 uL				
460-161178-B-4 MSD	GC-MW-109M (WG)	8260C	T		20 uL				
460-161178-B-6	GC-Equipment Blank (072418)	8260C	T						
460-161178-B-4	GC-MW-109M (WG)	8260C	T						
460-161178-B-1	GC-MW-107 (WG)	8260C	T						
460-161178-B-2	GC-MW-108 (WG)	8260C	T						
460-161178-B-3	GC-MW-109 (WG)	8260C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 540359 Batch Start Date: 07/28/18 04:30 Batch Analyst: Sarmiento, Daniel

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00017	GASES Li 00270				
460-161178-B-5	GC-MW-110 (WG)	8260C	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 542406 Batch Start Date: 08/06/18 05:19 Batch Analyst: Tupayachi, Audberto

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8260ISNEW 00120	8260MIX1COMB 00084	8260SURR250 00181	ACROLEIN W 00079
BFB 460-542406/1		8260C		5 mL	0				
CCVIS 460-542406/3		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
460-161178-C-7	GC-TB (072418)	8260C	T	5 mL	5 mL	1 uL		1 uL	
LCS 460-542406/30		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
LCSD 460-542406/31		8260C		5 mL	5 mL	1 uL	20 uL	1 uL	4 uL
MB 460-542406/32		8260C		5 mL	5 mL	1 uL		1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	BFB 00017	GASES Li 00271				
BFB 460-542406/1		8260C		1 uL					
CCVIS 460-542406/3		8260C			20 uL				
460-161178-C-7	GC-TB (072418)	8260C	T						
LCS 460-542406/30		8260C			20 uL				
LCSD 460-542406/31		8260C			20 uL				
MB 460-542406/32		8260C							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG No.:

Project: GEM Cleaners

Client Sample ID	Lab Sample ID
GC-MW-107 (WG)	460-161178-1
GC-MW-108 (WG)	460-161178-2
GC-MW-109 (WG)	460-161178-3
GC-MW-109M (WG)	460-161178-4

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GC-MW-107 (WG) Lab Sample ID: 460-161178-1

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG ID.:

Matrix: Water Date Sampled: 07/24/2018 07:45

Reporting Basis: WET Date Received: 07/25/2018 19:05

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon	0.86	1.0	0.34	mg/L	J		1	9060A_ASP
14808-79-8	Sulfate	14.9	5.0	1.4	mg/L			1	D516-90, 02
	Bicarbonate Alkalinity as CaCO3	64.4	5.0	5.0	mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Alkalinity	64.4	5.0	5.0	mg/L			1	SM 2320B
	Hydroxide Alkalinity	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Total Dissolved Solids	598	20.0	20.0	mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GC-MW-108 (WG) Lab Sample ID: 460-161178-2

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG ID.:

Matrix: Water Date Sampled: 07/24/2018 08:50

Reporting Basis: WET Date Received: 07/25/2018 19:05

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon	0.78	1.0	0.34	mg/L	J		1	9060A_ASP
14808-79-8	Sulfate	22.0	5.0	1.4	mg/L			1	D516-90, 02
	Bicarbonate Alkalinity as CaCO3	66.3	5.0	5.0	mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Alkalinity	66.3	5.0	5.0	mg/L			1	SM 2320B
	Hydroxide Alkalinity	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Total Dissolved Solids	904	40.0	40.0	mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GC-MW-109 (WG) Lab Sample ID: 460-161178-3

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG ID.:

Matrix: Water Date Sampled: 07/24/2018 09:50

Reporting Basis: WET Date Received: 07/25/2018 19:05

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon	0.74	1.0	0.34	mg/L	J		1	9060A_ASP
14808-79-8	Sulfate	16.9	5.0	1.4	mg/L			1	D516-90, 02
	Bicarbonate Alkalinity as CaCO3	56.8	5.0	5.0	mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Alkalinity	56.8	5.0	5.0	mg/L			1	SM 2320B
	Hydroxide Alkalinity	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Total Dissolved Solids	908	20.0	20.0	mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GC-MW-109M (WG) Lab Sample ID: 460-161178-4

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG ID.:

Matrix: Water Date Sampled: 07/24/2018 10:50

Reporting Basis: WET Date Received: 07/25/2018 19:05

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon	0.43	1.0	0.34	mg/L	J		1	9060A_ASP
14808-79-8	Sulfate	15.6	5.0	1.4	mg/L			1	D516-90, 02
	Bicarbonate Alkalinity as CaCO3	47.8	5.0	5.0	mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Alkalinity	47.8	5.0	5.0	mg/L			1	SM 2320B
	Hydroxide Alkalinity	5.0	5.0	5.0	mg/L	U		1	SM 2320B
	Total Dissolved Solids	746	20.0	20.0	mg/L			1	SM 2540C

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Analyst: JXT Batch Start Date: 07/30/2018

Reporting Units: mg/L Analytical Batch No.: 540990

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	15:07	Total Organic Carbon	47.42	50.0	95	90-110		WTtocSP2_00033
2	ICB	15:30	Total Organic Carbon	1.0				U	
13	CCV	19:42	Total Organic Carbon	48.22	50.0	96	90-110		WTtocSP2_00033
14	CCB	20:05	Total Organic Carbon	1.0				U	
21	CCV	22:47	Total Organic Carbon	48.13	50.0	96	90-110		WTtocSP2_00033
22	CCB	23:10	Total Organic Carbon	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Analyst: HTV Batch Start Date: 07/27/2018

Reporting Units: mg/L Analytical Batch No.: 540298

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	14:04	Sulfate	20.11	20.0	101	90-110		WT-SO4SS1_00004
2	ICB	14:04	Sulfate	5.0				U	
28	CCV	15:08	Sulfate	19.64	20.0	98	90-110		WT-SO4SS1_00004
29	CCB	15:08	Sulfate	5.0				U	
40	CCV	15:20	Sulfate	19.06	20.0	95	90-110		WT-SO4SS1_00004
41	CCB	15:20	Sulfate	5.0				U	
44	CCV	15:21	Sulfate	18.95	20.0	95	90-110		WT-SO4SS1_00004
45	CCB	15:21	Sulfate	5.0				U	
55	CCV	15:38	Sulfate	19.14	20.0	96	90-110		WT-SO4SS1_00004
56	CCB	15:38	Sulfate	5.0				U	
57	CCV	15:56	Sulfate	19.31	20.0	97	90-110		WT-SO4SS1_00004
58	CCB	15:56	Sulfate	5.0				U	
69	CCV	16:07	Sulfate	19.43	20.0	97	90-110		WT-SO4SS1_00004
70	CCB	16:07	Sulfate	5.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 540990 Date: 07/30/2018 15:52							
9060A_ASP	MB 460-540990/3	Total Organic Carbon	1.0	U	mg/L	1.0	1
Batch ID: 540298 Date: 07/27/2018 15:08							
D516-90, 02	MB 460-540298/30	Sulfate	5.0	U	mg/L	5.0	1
Batch ID: 540298 Date: 07/27/2018 15:56							
D516-90, 02	MB 460-540298/59	Sulfate	5.0	U	mg/L	5.0	1
Batch ID: 541268 Date: 07/31/2018 10:45							
SM 2320B	MB 460-541268/2	Bicarbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1
SM 2320B	MB 460-541268/2	Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1
SM 2320B	MB 460-541268/2	Alkalinity	5.0	U	mg/L	5.0	1
SM 2320B	MB 460-541268/2	Hydroxide Alkalinity	5.0	U	mg/L	5.0	1
Batch ID: 539903 Date: 07/26/2018 11:01							
SM 2540C	MB 460-539903/1	Total Dissolved Solids	10.0	U	mg/L	10.0	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 540990 Date: 07/30/2018 17:02											
9060A_ASP	460-161054-F-1	Total Organic Carbon	0.35	J	mg/L						
9060A_ASP	460-161054-F-1 MS	Total Organic Carbon	51.66		mg/L	50.0	103	85-115			
Batch ID: 540298 Date: 07/27/2018 15:30											
D516-90, 02	460-161054-E-1	Sulfate	10.3		mg/L						
D516-90, 02	460-161054-E-1 MS	Sulfate	28.76		mg/L	20.0	92	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 540990 Date: 07/30/2018 17:24											
9060A_ASP	460-161054-F-1 MSD	Total Organic Carbon	51.62		mg/L	50.0	103	85-115	0	10	
Batch ID: 540298 Date: 07/27/2018 15:30											
D516-90, 02	460-161054-E-1 MSD	Sulfate	29.13		mg/L	20.0	94	85-115	1	13	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 541268 Date: 07/31/2018 11:08								
SM 2320B	GC-MW-109M (WG)	460-161178-4	Bicarbonate Alkalinity as CaCO3	47.8	mg/L			
SM 2320B	GC-MW-109M (WG)	460-161178-4 DU	Bicarbonate Alkalinity as CaCO3	47.63	mg/L	0.3	10	
SM 2320B	GC-MW-109M (WG)	460-161178-4	Carbonate Alkalinity as CaCO3	5.0	mg/L			U
SM 2320B	GC-MW-109M (WG)	460-161178-4 DU	Carbonate Alkalinity as CaCO3	5.0	mg/L	NC	10	U
SM 2320B	GC-MW-109M (WG)	460-161178-4	Alkalinity	47.8	mg/L			
SM 2320B	GC-MW-109M (WG)	460-161178-4 DU	Alkalinity	47.63	mg/L	0.3	10	
SM 2320B	GC-MW-109M (WG)	460-161178-4	Hydroxide Alkalinity	5.0	mg/L			U
SM 2320B	GC-MW-109M (WG)	460-161178-4 DU	Hydroxide Alkalinity	5.0	mg/L	NC	10	U
Batch ID: 539903 Date: 07/26/2018 11:01								
SM 2540C	GC-MW-107 (WG)	460-161178-1	Total Dissolved Solids	598	mg/L			
SM 2540C	GC-MW-107 (WG)	460-161178-1 DU	Total Dissolved Solids	606.0	mg/L	1	5	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 540990	Date: 07/30/2018 16:16										
						LCS Source: WTtocLCS_00045					
9060A_ASP	LCSSRM 460-540990/4	Total Organic Carbon	44.97		mg/L	45.4	99.2	84.0-11	4.7		
Batch ID: 540298	Date: 07/27/2018 15:56										
						LCS Source: WTsfateLCS_00045					
D516-90, 02	LCSSRM 460-540298/60	Sulfate	18.51		mg/L	19.8	93.5	83.8-11	2.1		
Batch ID: 541268	Date: 07/31/2018 10:53										
						LCS Source: WTalkLCS_00142					
SM 2320B	LCSSRM 460-541268/3	Alkalinity	54.26		mg/L	53.9	100.7	85.0-11	4.8		
Batch ID: 539903	Date: 07/26/2018 11:01										
						LCS Source: WTtdsLCS_00111					
SM 2540C	LCSSRM 460-539903/2	Total Dissolved Solids	516.0		mg/L	528	97.7	90.0-10	9.8		

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG Number:

Matrix: Water Instrument ID: TOC_Shimadzu

Method: 9060A_ASP MDL Date: 12/13/2017 10:01

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Organic Carbon		1	0.335

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG Number:

Matrix: Water Instrument ID: TOC_Shimadzu

Method: 9060A_ASP XMDL Date: 12/13/2017 10:01

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon		1	0.335

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG Number:

Matrix: Water Instrument ID: Konelab1

Method: D516-90, 02 MDL Date: 12/05/2016 08:19

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Sulfate		5	1.36

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG Number:

Matrix: Water Instrument ID: Konelab1

Method: D516-90, 02 XMDL Date: 12/05/2016 08:20

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.36

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG Number:

Matrix: Water Instrument ID: Auto_Titrator

Method: SM 2320B MDL Date: 02/11/2014 10:14

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Alkalinity		5	5
Bicarbonate Alkalinity as CaCO3		5	5
Carbonate Alkalinity as CaCO3		5	5
Hydroxide Alkalinity		5	5

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG Number:

Matrix: Water Instrument ID: Auto_Titrator

Method: SM 2320B XMDL Date: 02/11/2014 10:48

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		5	5
Bicarbonate Alkalinity as CaCO3		5	5
Carbonate Alkalinity as CaCO3		5	5
Hydroxide Alkalinity		5	5

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2540C MDL Date: 02/11/2014 10:19

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Dissolved Solids		10	10

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-161178-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2540C XMDL Date: 02/11/2014 10:55

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Dissolved Solids		10	10

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Instrument ID: TOC_Shimadzu Method: 9060A_ASP

Start Date: 07/30/2018 15:07 End Date: 07/30/2018 23:10

Lab Sample ID	D / F	Type	Time	Analytes																			
				TOC																			
ICV 460-540990/1	1		15:07	X																			
ICB 460-540990/2	1		15:30	X																			
MB 460-540990/3	1	T	15:52	X																			
LCSSRM 460-540990/4	1	T	16:16	X																			
ZZZZZZ			16:39																				
460-161054-F-1 MS	1	T	17:02	X																			
460-161054-F-1 MSD	1	T	17:24	X																			
ZZZZZZ			17:47																				
ZZZZZZ			18:10																				
460-161178-1	1	T	18:33	X																			
460-161178-2	1	T	18:56	X																			
460-161178-3	1	T	19:19	X																			
CCV 460-540990/13	1		19:42	X																			
CCB 460-540990/14	1		20:05	X																			
460-161178-4	1	T	20:28	X																			
ZZZZZZ			20:50																				
ZZZZZZ			21:15																				
ZZZZZZ			21:38																				
ZZZZZZ			22:01																				
ZZZZZZ			22:24																				
CCV 460-540990/21	1		22:47	X																			
CCB 460-540990/22	1		23:10	X																			

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Instrument ID: Konelab1 Method: D516-90, 02

Start Date: 07/27/2018 14:04 End Date: 07/27/2018 16:43

Lab Sample ID	D/F	Type	Time	Analytes																			
				SO4																			
ICV 460-540298/1	1		14:04	X																			
ICB 460-540298/2	1		14:04	X																			
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
ZZZZZZ			14:04																				
CCV 460-540298/13			14:15																				
CCB 460-540298/14			14:15																				
ZZZZZZ			14:15																				
ZZZZZZ			14:15																				
CCV 460-540298/17			14:25																				
CCB 460-540298/18			14:25																				
ZZZZZZ			14:29																				
ZZZZZZ			14:29																				
ZZZZZZ			14:35																				
ZZZZZZ			14:35																				
ZZZZZZ			14:35																				
ZZZZZZ			14:36																				
ZZZZZZ			14:36																				
CCV 460-540298/26			14:36																				
CCB 460-540298/27			14:36																				
CCV 460-540298/28	1		15:08	X																			
CCB 460-540298/29	1		15:08	X																			
MB 460-540298/30	1	T	15:08	X																			
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
ZZZZZZ			15:08																				
CCV 460-540298/40	1		15:20	X																			
CCB 460-540298/41	1		15:20	X																			
ZZZZZZ			15:20																				

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Instrument ID: Konelab1 Method: D516-90, 02

Start Date: 07/27/2018 14:04 End Date: 07/27/2018 16:43

Lab Sample ID	D/F	Type	Time	Analytes																			
				SO4																			
ZZZZZZ			15:20																				
CCV 460-540298/44	1		15:21	X																			
CCB 460-540298/45	1		15:21	X																			
460-161054-E-1 MS	1	T	15:30	X																			
460-161054-E-1 MSD	1	T	15:30	X																			
ZZZZZZ			15:31																				
ZZZZZZ			15:31																				
ZZZZZZ			15:31																				
ZZZZZZ			15:31																				
ZZZZZZ			15:33																				
ZZZZZZ			15:33																				
ZZZZZZ			15:33																				
CCV 460-540298/55	1		15:38	X																			
CCB 460-540298/56	1		15:38	X																			
CCV 460-540298/57	1		15:56	X																			
CCB 460-540298/58	1		15:56	X																			
MB 460-540298/59	1	T	15:56	X																			
LCSSRM 460-540298/60	1	T	15:56	X																			
460-161178-1	1	T	15:56	X																			
460-161178-2	1	T	15:56	X																			
460-161178-3	1	T	15:56	X																			
460-161178-4	1	T	15:56	X																			
ZZZZZZ			15:56																				
ZZZZZZ			15:56																				
ZZZZZZ			15:56																				
ZZZZZZ			15:56																				
CCV 460-540298/69	1		16:07	X																			
CCB 460-540298/70	1		16:07	X																			
ZZZZZZ			16:07																				
ZZZZZZ			16:07																				
CCV 460-540298/73			16:17																				
CCB 460-540298/74			16:17																				
CCV 460-540298/75			16:33																				
CCB 460-540298/76			16:33																				
ZZZZZZ			16:33																				
ZZZZZZ			16:33																				
CCV 460-540298/79			16:43																				
CCB 460-540298/80			16:43																				

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Instrument ID: Auto_Titrator Method: SM 2320B

Start Date: 07/31/2018 10:39 End Date: 07/31/2018 14:17

Lab Sample ID	D/F	Type	Time	Analytes																				
				Alk	BALKCC	CarAlk	OHAlk																	
RINSE 460-541268/1			10:39																					
MB 460-541268/2	1	T	10:45	X	X	X	X																	
LCSSRM 460-541268/3	1	T	10:53	X	X	X	X																	
460-161178-4	1	T	11:01	X	X	X	X																	
460-161178-4 DU	1	T	11:08	X	X	X	X																	
460-161178-3	1	T	11:14	X	X	X	X																	
460-161178-2	1	T	11:21	X	X	X	X																	
460-161178-1	1	T	11:28	X	X	X	X																	
ZZZZZZ			11:35																					
ZZZZZZ			11:42																					
ZZZZZZ			11:50																					
ZZZZZZ			12:00																					
ZZZZZZ			12:07																					
ZZZZZZ			12:12																					
ZZZZZZ			12:20																					
ZZZZZZ			12:27																					
ZZZZZZ			12:35																					
ZZZZZZ			12:43																					
ZZZZZZ			12:51																					
ZZZZZZ			12:58																					
ZZZZZZ			13:06																					
ZZZZZZ			13:14																					
ZZZZZZ			13:23																					
ZZZZZZ			13:32																					
ZZZZZZ			13:39																					
ZZZZZZ			13:47																					
ZZZZZZ			13:55																					
ZZZZZZ			14:02																					
ZZZZZZ			14:10																					
ZZZZZZ			14:17																					

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 2540C

Start Date: 07/26/2018 11:01 End Date: 07/26/2018 11:01

Lab Sample ID	D / F	Type	Time	Analytes																			
				TDS																			
MB 460-539903/1	1	T	11:01	X																			
LCSSRM 460-539903/2	1	T	11:01	X																			
460-161178-1	1	T	11:01	X																			
460-161178-1 DU	1	T	11:01	X																			
460-161178-2	1	T	11:01	X																			
460-161178-3	1	T	11:01	X																			
460-161178-4	1	T	11:01	X																			
ZZZZZZ			11:01																				
ZZZZZZ			11:01																				
ZZZZZZ			11:01																				
ZZZZZZ			11:01																				
ZZZZZZ			11:01																				
ZZZZZZ			11:01																				

Prep Types
T = Total/NA

Instr.Information

System	Shimadzu TOC-V
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Sample

Sample Name:	Untitled
Sample ID:	ICV
Origin:	9060.met
Status	Completed
Chk. Result	

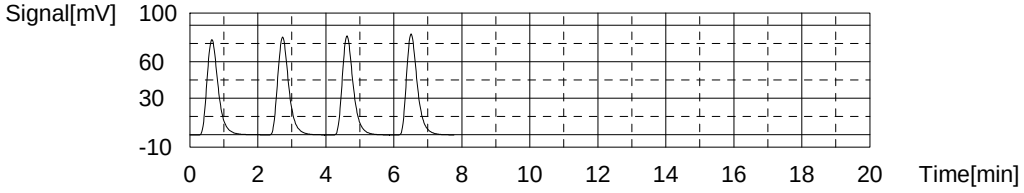
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:47.42mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	181.4	46.70mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:07:11 PM
2	184.6	47.53mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:09:14 PM
3	184.6	47.53mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:11:17 PM
4	186.1	47.91mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:13:20 PM

Mean Area 184.2
Mean Conc. 47.42mg/L



Sample

Sample Name:	Untitled
Sample ID:	ICB
Origin:	9060.met
Status	Completed
Chk. Result	

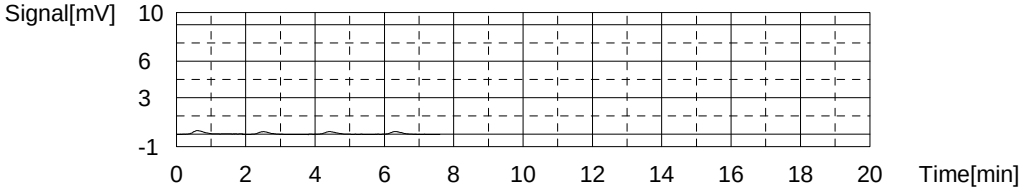
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03258mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6313	0.06696mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:30:00 PM
2	0.4690	0.02509mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:32:03 PM
3	0.4223	0.01304mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:34:06 PM
4	0.4695	0.02522mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:36:09 PM

Mean Area 0.4980
Mean Conc. 0.03258mg/L



Sample

Sample Name: Untitled
Sample ID: MB
Origin: 9060.met
Status Completed
Chk. Result

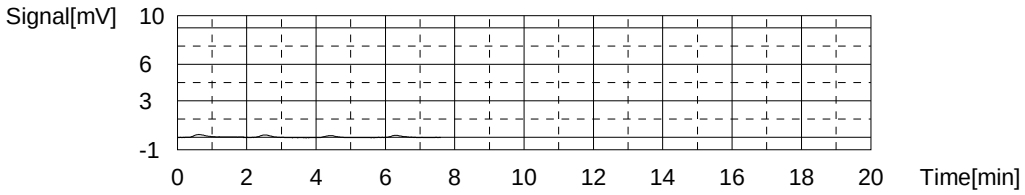
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.00203mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4664	0.02442mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:52:49 PM
2	0.3891	0.00448mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:54:52 PM
3	0.3142	-0.01484mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:56:55 PM
4	0.3488	-0.00592mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 3:58:58 PM

Mean Area 0.3796
Mean Conc. 0.00203mg/L



Sample

Sample Name: Untitled
Sample ID: LCSSRM
Origin: 9060.met
Status Completed
Chk. Result

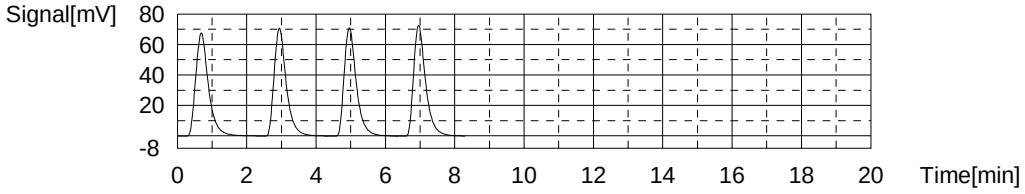
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:44.97mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	174.4	44.90mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:16:00 PM
2	174.2	44.84mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:18:11 PM
3	174.2	44.84mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:20:20 PM
4	175.9	45.28mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:22:29 PM

Mean Area 174.7
Mean Conc. 44.97mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161054-f-1
Origin: 9060.met
Status Completed
Chk. Result

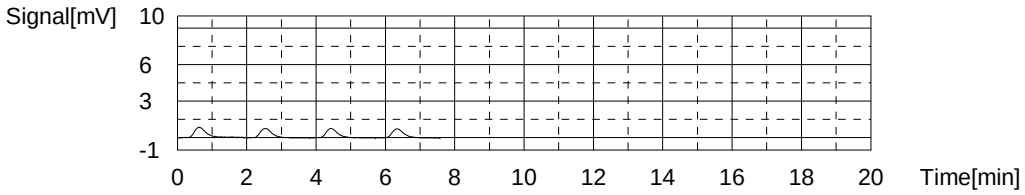
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3545mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.862	0.3845mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:39:09 PM
2	1.759	0.3579mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:41:12 PM
3	1.683	0.3383mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:43:15 PM
4	1.680	0.3375mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 4:45:18 PM

Mean Area 1.746
Mean Conc. 0.3545mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161054-f-1 MS
Origin: 9060.met
Status Completed
Chk. Result

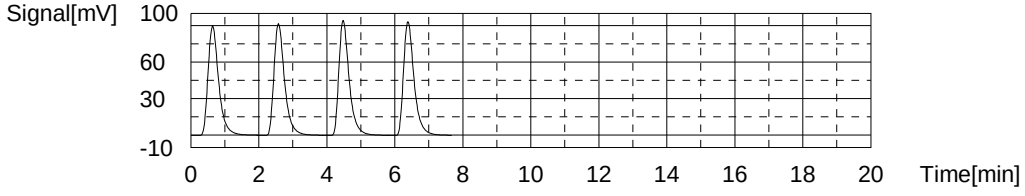
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:51.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	197.9	50.96mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:02:01 PM
2	200.7	51.68mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:04:05 PM
3	200.8	51.71mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:06:08 PM
4	203.0	52.27mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:08:11 PM

Mean Area 200.6
Mean Conc. 51.65mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161054-f-1 MSD
Origin: 9060.met
Status Completed
Chk. Result

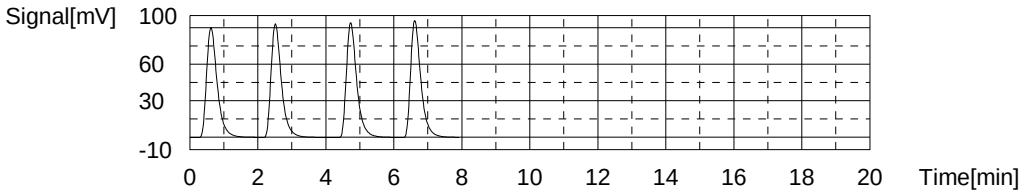
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:51.62mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	197.6	50.88mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:24:51 PM
2	199.9	51.47mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:27:13 PM
3	200.9	51.73mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:29:16 PM
4	203.4	52.38mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:31:19 PM

Mean Area 200.4
Mean Conc. 51.62mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161054-f-4
Origin: 9060.met
Status Completed
Chk. Result

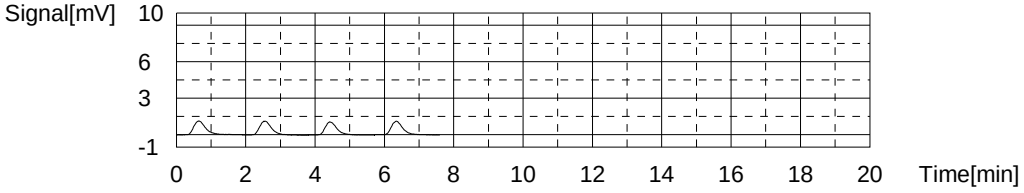
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5610mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.611	0.5777mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:47:58 PM
2	2.645	0.5865mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:50:01 PM
3	2.448	0.5356mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:52:04 PM
4	2.481	0.5441mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 5:54:07 PM

Mean Area 2.546
Mean Conc. 0.5610mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161168-a-1
Origin: 9060.met
Status Completed
Chk. Result

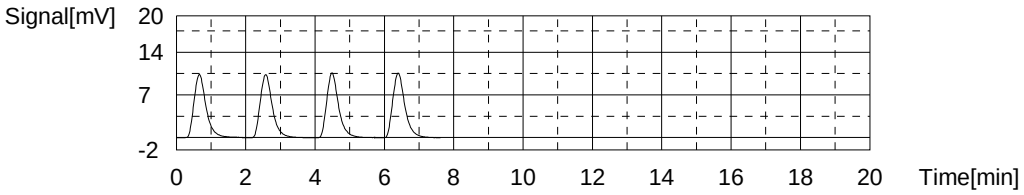
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.483mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.07	6.372mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:10:46 PM
2	25.33	6.439mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:12:50 PM
3	25.48	6.477mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:14:53 PM
4	26.12	6.642mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:16:56 PM

Mean Area 25.50
Mean Conc. 6.483mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161178-f-1
Origin: 9060.met
Status Completed
Chk. Result

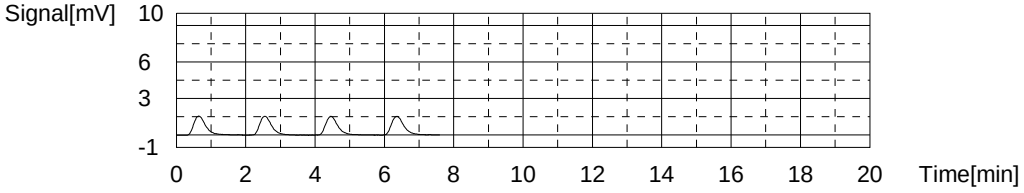
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8616mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.757	0.8733mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:33:36 PM
2	3.677	0.8527mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:35:39 PM
3	3.625	0.8393mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:37:42 PM
4	3.787	0.8811mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:39:45 PM

Mean Area 3.712
Mean Conc. 0.8616mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161178-f-2
Origin: 9060.met
Status Completed
Chk. Result

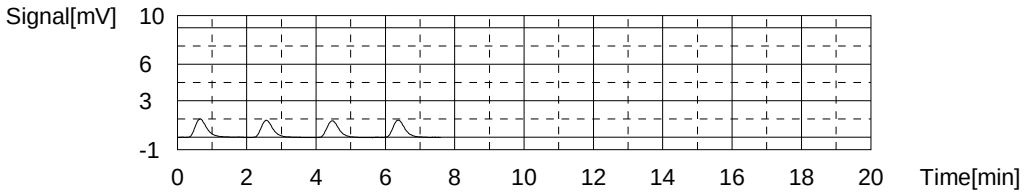
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7766mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.576	0.8266mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:56:25 PM
2	3.265	0.7464mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 6:58:28 PM
3	3.318	0.7601mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:00:31 PM
4	3.370	0.7735mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:02:34 PM

Mean Area 3.382
Mean Conc. 0.7766mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161178-f-3
Origin: 9060.met
Status Completed
Chk. Result

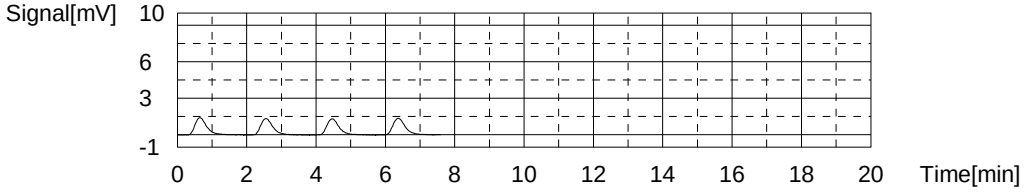
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7381mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.252	0.7430mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:19:14 PM
2	3.216	0.7338mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:21:17 PM
3	3.160	0.7193mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:23:20 PM
4	3.304	0.7565mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:25:23 PM

Mean Area 3.233
Mean Conc. 0.7381mg/L



Sample

Sample Name: Untitled
Sample ID: CCV
Origin: 9060.met
Status Completed
Chk. Result

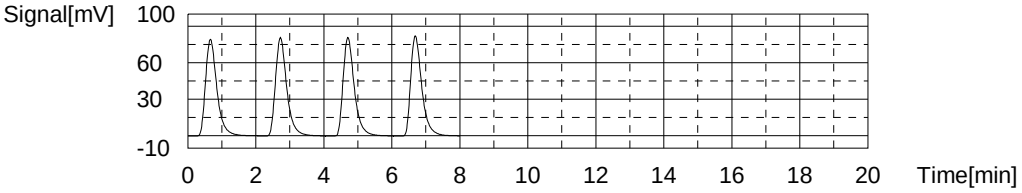
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:48.22mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	185.6	47.78mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:42:12 PM
2	188.1	48.43mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:44:21 PM
3	187.3	48.22mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:46:30 PM
4	188.2	48.46mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 7:48:36 PM

Mean Area 187.3
Mean Conc. 48.22mg/L



Sample

Sample Name: Untitled
Sample ID: CCB
Origin: 9060.met
Status Completed
Chk. Result

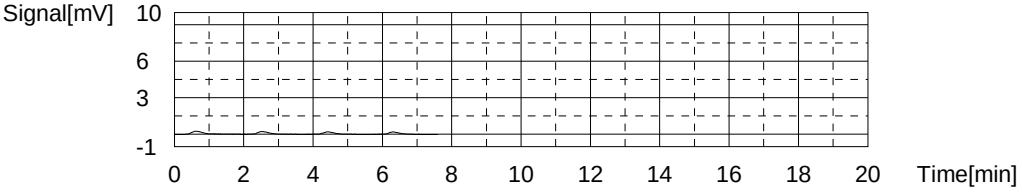
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.01509mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5219	0.03874mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:05:16 PM
2	0.4732	0.02618mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:07:19 PM
3	0.3732	0.00038mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:09:22 PM
4	0.3527	-0.00491mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:11:25 PM

Mean Area 0.4303
Mean Conc. 0.01509mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161178-f-4
Origin: 9060.met
Status Completed
Chk. Result

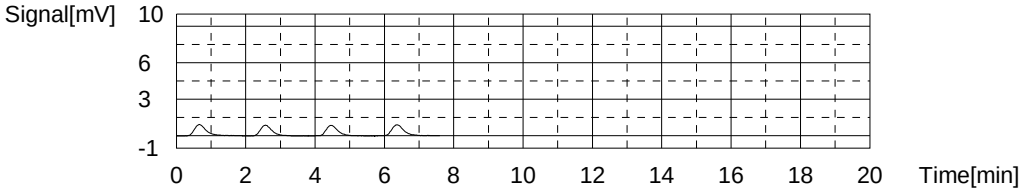
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4293mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.081	0.4410mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:28:05 PM
2	2.000	0.4201mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:30:08 PM
3	1.974	0.4133mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:32:11 PM
4	2.088	0.4428mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:34:14 PM

Mean Area 2.036
Mean Conc. 0.4293mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161259-a-1
Origin: 9060.met
Status Completed
Chk. Result

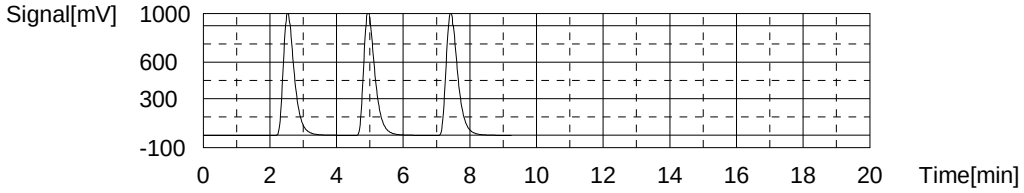
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:466.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.09590mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:50:54 PM
2	2350	606.2mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:53:28 PM
3	2411	621.9mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:56:05 PM
4	2468	636.6mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 8:58:42 PM

Mean Area 1807
Mean Conc. 466.1mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161277-o-12
Origin: 9060.met
Status Completed
Chk. Result

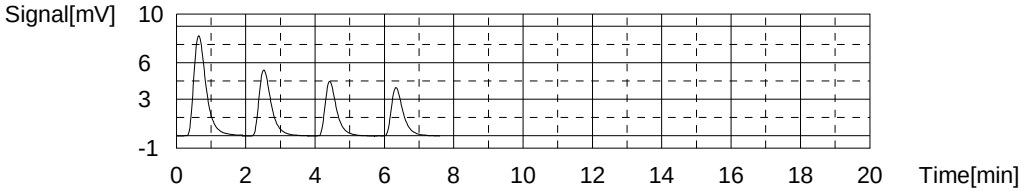
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.364mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.40	5.167mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:15:22 PM
2	13.35	3.348mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:17:25 PM
3	10.40	2.587mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:19:28 PM
4	9.504	2.356mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:21:31 PM

Mean Area 13.41
Mean Conc. 3.364mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161292-e-1
Origin: 9060.met
Status Completed
Chk. Result

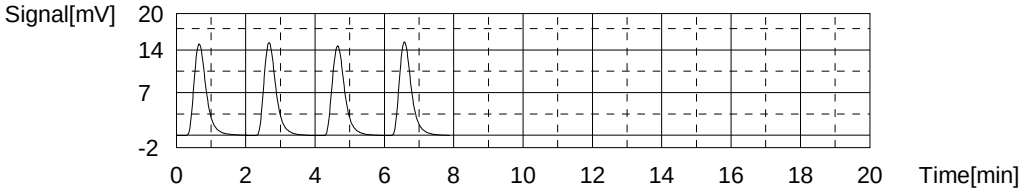
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.571mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.12	9.480mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:38:17 PM
2	37.42	9.558mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:40:24 PM
3	37.49	9.576mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:42:29 PM
4	37.86	9.671mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 9:44:36 PM

Mean Area 37.47
Mean Conc. 9.571mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161373-o-3
Origin: 9060.met
Status Completed
Chk. Result

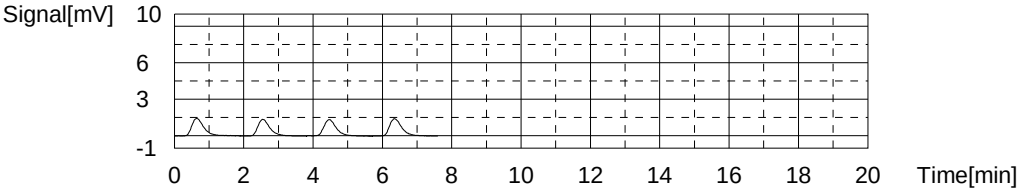
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7510mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.310	0.7580mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:01:16 PM
2	3.256	0.7441mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:03:19 PM
3	3.212	0.7327mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:05:22 PM
4	3.354	0.7694mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:07:25 PM

Mean Area 3.283
Mean Conc. 0.7510mg/L



Sample

Sample Name: Untitled
Sample ID: 460-161429-a-1
Origin: 9060.met
Status Completed
Chk. Result

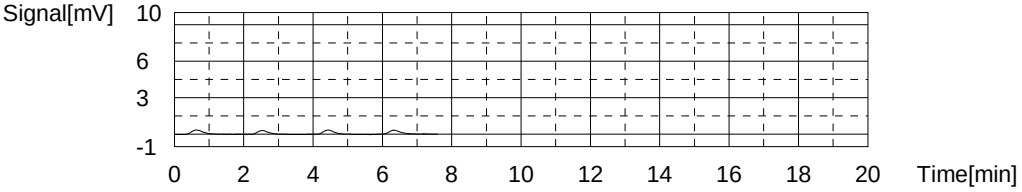
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.09088mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8375	0.1202mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:24:04 PM
2	0.6332	0.06745mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:26:07 PM
3	0.7185	0.08946mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:28:10 PM
4	0.7068	0.08644mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:30:13 PM

Mean Area 0.7240
Mean Conc. 0.09088mg/L



Sample

Sample Name: Untitled
Sample ID: CCV
Origin: 9060.met
Status Completed
Chk. Result

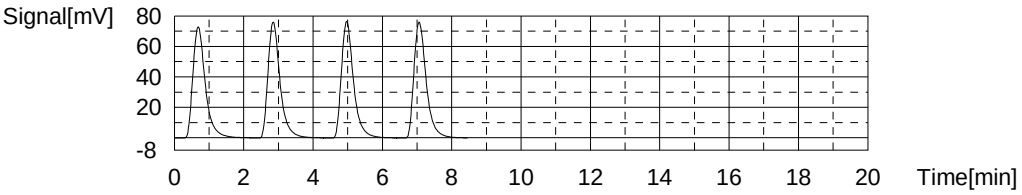
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:48.13mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	183.5	47.24mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:47:09 PM
2	186.9	48.12mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:49:25 PM
3	187.8	48.35mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:51:40 PM
4	189.5	48.79mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 10:53:53 PM

Mean Area 186.9
Mean Conc. 48.13mg/L



Sample

Sample Name: Untitled
Sample ID: CCB
Origin: 9060.met
Status Completed
Chk. Result

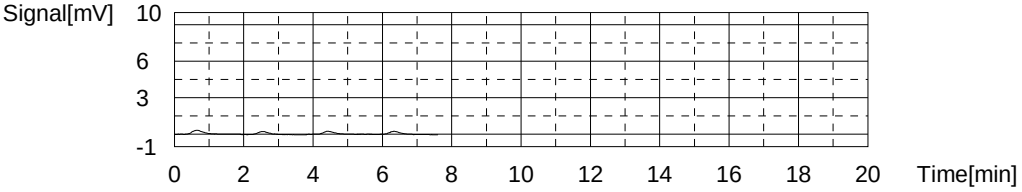
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05206mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7309	0.09266mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 11:10:33 PM
2	0.5205	0.03838mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 11:12:36 PM
3	0.4835	0.02883mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 11:14:39 PM
4	0.5592	0.04836mg/L	50uL	1		JT180607.2018_06_07_09_17_06.cal	7/30/2018 11:16:42 PM

Mean Area 0.5735
Mean Conc. 0.05206mg/L



	Sample ID	Origin	Result	Status	Date / Time	Vial
1	ICV	9060.met	NPOC:47.42mg/	Completed	7/30/2018 3:13:20 PM	1
2	ICB	9060.met	NPOC:0.03258	Completed	7/30/2018 3:36:09 PM	2
3	MB	9060.met	NPOC:0.00203	Completed	7/30/2018 3:58:58 PM	3
4	LCSSRM	9060.met	NPOC:44.97mg/	Completed	7/30/2018 4:22:29 PM	4
5	460-161054-f-1	9060.met	NPOC:0.3545m	Completed	7/30/2018 4:45:18 PM	5
6	460-161054-f-1 MS	9060.met	NPOC:51.65mg/	Completed	7/30/2018 5:08:11 PM	6
7	460-161054-f-1 MSD	9060.met	NPOC:51.62mg/	Completed	7/30/2018 5:31:19 PM	7
8	460-161054-f-4	9060.met	NPOC:0.5610m	Completed	7/30/2018 5:54:07 PM	8
9	460-161168-a-1	9060.met	NPOC:6.483mg/	Completed	7/30/2018 6:16:56 PM	9
10	460-161178-f-1	9060.met	NPOC:0.8616m	Completed	7/30/2018 6:39:45 PM	10
11	460-161178-f-2	9060.met	NPOC:0.7766m	Completed	7/30/2018 7:02:34 PM	11
12	460-161178-f-3	9060.met	NPOC:0.7381m	Completed	7/30/2018 7:25:23 PM	12
13	CCV	9060.met	NPOC:48.22mg/	Completed	7/30/2018 7:48:36 PM	13
14	CCB	9060.met	NPOC:0.01509	Completed	7/30/2018 8:11:25 PM	14
15	460-161178-f-4	9060.met	NPOC:0.4293m	Completed	7/30/2018 8:34:14 PM	15
16	460-161259-a-1	9060.met	NPOC:466.1mg/	Completed	7/30/2018 8:58:42 PM	16
17	460-161277-o-12	9060.met	NPOC:3.364mg/	Completed	7/30/2018 9:21:31 PM	17
18	460-161292-e-1	9060.met	NPOC:9.571mg/	Completed	7/30/2018 9:44:36 PM	18
19	460-161373-o-3	9060.met	NPOC:0.7510m	Completed	7/30/2018 10:07:25 P	19
20	460-161429-a-1	9060.met	NPOC:0.09088	Completed	7/30/2018 10:30:13 P	20
21	CCV	9060.met	NPOC:48.13mg/	Completed	7/30/2018 10:53:53 P	21
22	CCB	9060.met	NPOC:0.05206	Completed	7/30/2018 11:16:42 P	22

Instr.Information

System	Shimadzu TOC-V
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Cal. Curve

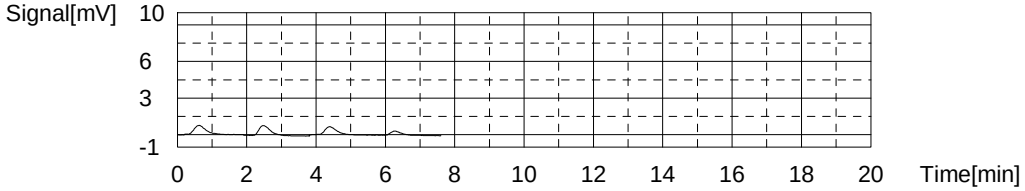
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	JT180607.2018_06_07_09_17_06.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.766	50uL	1	*******		6/7/2018 9:32:56 AM
2	1.842	50uL	1	*******		6/7/2018 9:34:59 AM
3	1.469	50uL	1	*******		6/7/2018 9:37:02 AM
4	0.6810	50uL	1	*******		6/7/2018 9:39:07 AM

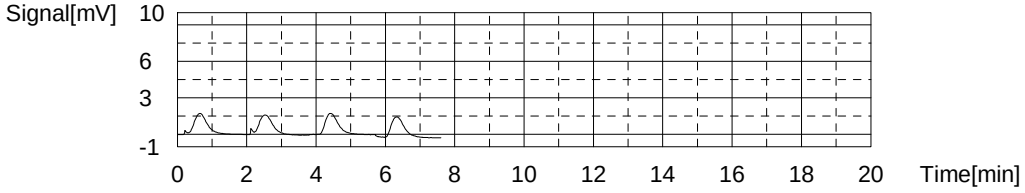
Acid Add. 1.500%
Sp. Time 600.0sec
Mean Area 1.440



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.956	50uL	1	*******		6/7/2018 9:55:47 AM
2	3.467	50uL	1	*******		6/7/2018 9:57:51 AM
3	4.415	50uL	1	*******		6/7/2018 9:59:53 AM
4	4.312	50uL	1	*******		6/7/2018 10:01:56 AM

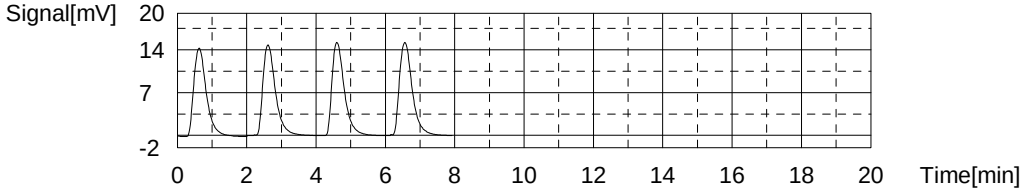
Acid Add. 1.500%
Sp. Time 600.0sec
Mean Area 4.038



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	37.22	50uL	1	*******		6/7/2018 10:18:43 AM
2	37.57	50uL	1	*******		6/7/2018 10:20:52 AM
3	38.16	50uL	1	*******		6/7/2018 10:22:56 AM
4	39.77	50uL	1	*******		6/7/2018 10:25:04 AM

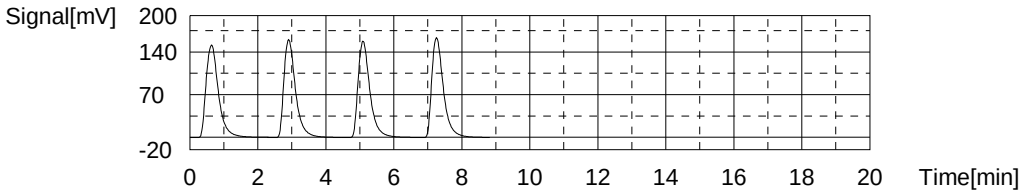
Acid Add. 1.500%
Sp. Time 600.0sec
Mean Area 38.18



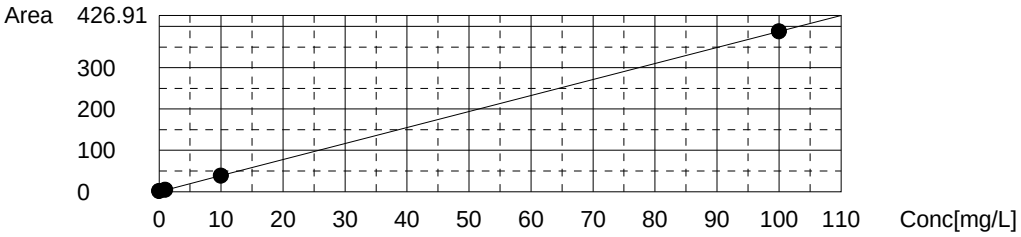
Conc: 100.0mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	387.2	50uL	1	*******		6/7/2018 10:42:08 AM
2	385.8	50uL	1	*******		6/7/2018 10:44:27 AM
3	385.7	50uL	1	*******		6/7/2018 10:46:47 AM
4	393.7	50uL	1	*******		6/7/2018 10:49:06 AM

Acid Add. 1.500%
Sp. Time 600.0sec
Mean Area 388.1



Slope: 3.876
Intercept 0.3717
r^2 1.0000
r 1.0000
Zero Shift No



Laboratory
Analyzer User

7/27/2018 16:49

Test: Sulfate

Sample Id	Result	Dil. 1 +	Response	Errors
CCV-SO4	20.1137	0.0	0.164	
CCB-SO4	-0.6132	0.0	0.014	
MB	-0.5298	0.0	0.014	
LCSSRM	19.4729	0.0	0.159	
460-161308-a-1	46.1797	0.0	0.351	R
460-161308-a-2	107.5354	0.0	0.745	R
460-161308-a-3	9.1387	0.0	0.073	
460-161308-a-4	27.1067	0.0	0.220	
460-161308-a-5	39.4604	0.0	0.308	
460-161308-a-6	115.9583	0.0	0.799	R
460-161308-a-7	166.9422	0.0	1.126	R
460-161308-a-8	0.1142	0.0	0.017	
CCV-SO4	19.9512	0.0	0.162	
CCB-SO4	-0.7188	0.0	0.013	
460-160839-d-1	50.8920	0.0	0.381	R
460-161092-g-5	14.8997	0.0	0.122	
CCV-SO4	19.9605	0.0	0.162	
CCB-SO4	-0.5927	0.0	0.014	
460-161308-a-1	45.9548	1.0	0.186	R
460-161308-a-2	135.2661	9.0	0.110	R
460-161308-a-6	128.9286	9.0	0.105	R
460-161308-a-7	221.4382	19.0	0.089	R
460-160839-d-1	58.0818	4.0	0.094	R
460-161308-A-3M	27.1616	0.0	0.220	
460-161308-A-3MS	27.7063	0.0	0.224	
CCV-SO4	20.0196	0.0	0.163	
CCB-SO4	-0.9369	0.0	0.012	
CCV-SO4	19.6396	0.0	0.160	
CCB-SO4	-1.2012	0.0	0.011	
MB	-1.2086	0.0	0.011	
LCSSRM	18.8643	0.0	0.154	
460-161255-a-1	153.5867	0.0	1.040	R
460-161255-a-2	50.9484	0.0	0.381	R
460-161255-a-3	23.4432	0.0	0.190	
460-161255-a-4	181.1698	0.0	1.217	R
460-161255-a-5	49.2038	0.0	0.370	R
460-161255-a-6	129.6524	0.0	0.887	R
460-161054-e-1	10.3184	0.0	0.083	
460-161054-e-4	11.7128	0.0	0.095	
CCV-SO4	19.0628	0.0	0.155	
CCB-SO4	-0.9167	0.0	0.012	
460-161307-a-1	43.7042	0.0	0.335	R
460-161307-a-2	125.4643	0.0	0.860	R
CCV-SO4	18.9475	0.0	0.154	
CCB-SO4	-1.0044	0.0	0.012	
460-161054-E-1M	28.7573	0.0	0.233	
460-161054-E-1MS	29.1299	0.0	0.236	
460-161255-a-1	168.7729	9.0	0.138	R
460-161255-a-2	50.3318	1.0	0.204	R
460-161255-a-4	240.7669	19.0	0.098	R
460-161255-a-5	47.9545	1.0	0.194	R
460-161255-a-6	144.5328	9.0	0.118	R
460-161307-a-1	44.3813	1.0	0.180	R
460-161307-a-2	138.1050	9.0	0.113	R
CCV-SO4	19.1434	0.0	0.156	
CCB-SO4	-1.0743	0.0	0.011	
CCV-SO4	19.3095	0.0	0.157	
CCB-SO4	-1.2254	0.0	0.011	

Laboratory
Analyzer User

7/27/2018 16:49

Test: Sulfate

Sample Id	Result	Dil. 1 +	Response	Errors
MB	-1.4202	0.0	0.010	
LCSSRM	18.5081	0.0	0.151	
460-161178-e-1	14.8976	0.0	0.122	
460-161178-e-2	21.9551	0.0	0.178	
460-161178-d-3	16.8556	0.0	0.138	
460-161178-e-4	15.5854	0.0	0.127	
460-160863-e-1	16.8694	0.0	0.138	
460-160863-e-2	33.5586	0.0	0.269	
460-161176-g-1	-2.0598	0.0	0.007	
460-161176-g-2	-0.8743	0.0	0.012	
CCV-SO4	19.4272	0.0	0.158	
CCB-SO4	-1.3305	0.0	0.010	
460-161277-k-12	17.9068	0.0	0.146	
460-160780-d-1	16.4873	0.0	0.135	
CCV-SO4	19.5177	0.0	0.159	
CCB-SO4	-1.5128	0.0	0.009	
CCV-SO4	19.1371	0.0	0.156	
CCB-SO4	-1.4376	0.0	0.010	
460-160780-D-1M	32.8633	0.0	0.264	
460-160780-D-1MS	33.1720	0.0	0.266	
CCV-SO4	19.4116	0.0	0.158	
CCB-SO4	-1.3985	0.0	0.010	

N	54
Mean	58.6223
SD	61.98710
CV%	105.74
Mean response	0.267
Response SD	0.2895
Response CV%	108.26

Laboratory
Analyzer User

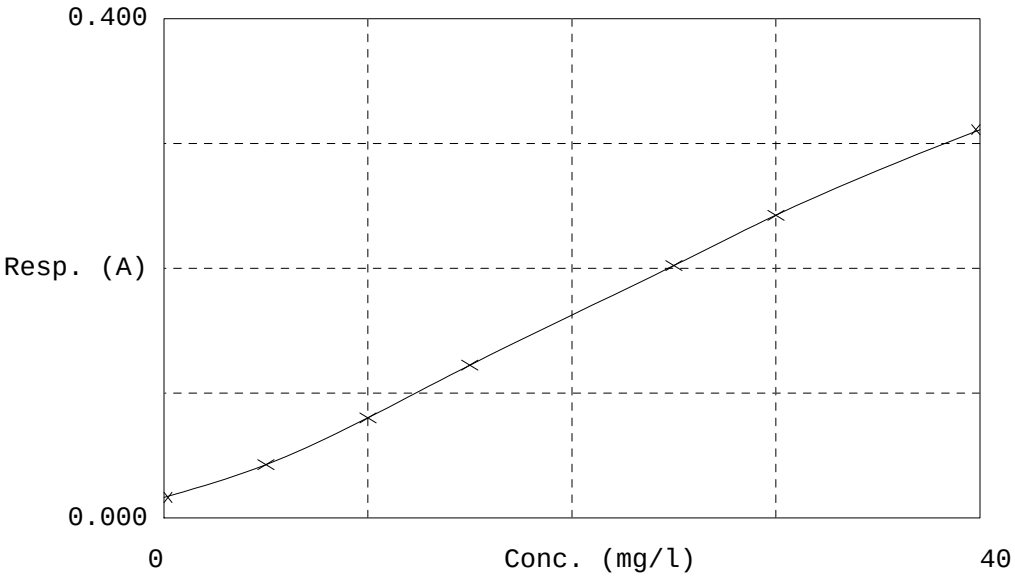
7/27/2018 16:50

Test Sulfate

Accepted 6/28/2018 14:15

Coeff. of det. 1.000000

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	SO4-0	0.017	-0.00000	0.00000	
2	SO4-5.0	0.043	5.00000	5.00000	
3	SO4-10.0	0.080	10.00000	10.00000	
4	SO4-15.0	0.123	15.00000	15.00000	
5	SO4-25.0	0.202	25.00000	25.00000	
6	SO4-30.0	0.243	30.00000	30.00000	
7	SO4-40.0	0.311	40.00000	40.00000	

TESTAMERICA- EDISON

Total Alkalinity (SM 2320B), Free Co2 (4500CO2-D)

Run Number *5678*

SampleID	Analysis	Amount	RunDate	RunTime	Temp	pH	pH2	palk (mg/L) as CaCO3	talk (mg/L) as CaCO3	bcarb (mg/L) as CaCO3	carb (mg/L) as CaCO3	hydr (mg/L) as CaCO3	Free CO2 (mg/L) as CaCO3	(mL) H2S04 @ 8.3	(mL) H2S04 @ 4.5	(mL) H2S04 @ 4.2
RINSE	Alkalinity	25mL	7/31/2018	10:39 AM	21.77	5.887	.00	0.000	26.909	26.909	0.000	0.000	69.790	0.0000	0.6561	0.8403
MB	Alkalinity	25mL	7/31/2018	10:45 AM	21.67	5.624	.00	0.000	0.241	0.241	0.000	0.000	1.145	0.0000	0.0500	0.0940
LCSSRM	Alkalinity	25mL	7/31/2018	10:53 AM	21.35	7.878	.00	0.000	54.259	54.259	0.000	0.000	1.436	0.0000	1.3229	1.3900
460-161178-d-4	Alkalinity	25mL	7/31/2018	11:01 AM	19.81	6.677	.00	0.000	47.746	47.746	0.000	0.000	20.077	0.0000	1.1641	1.2176
460-161178-d-4 DU	Alkalinity	25mL	7/31/2018	11:08 AM	19.81	6.715	.00	0.000	47.631	47.631	0.000	0.000	18.370	0.0000	1.1613	1.2215
460-161178-e-3	Alkalinity	25mL	7/31/2018	11:14 AM	20.09	6.798	.00	0.000	56.840	56.840	0.000	0.000	18.090	0.0000	1.3858	1.4414
460-161178-d-2	Alkalinity	25mL	7/31/2018	11:21 AM	20.20	7.093	.00	0.000	66.318	66.318	0.000	0.000	10.697	0.0000	1.6169	1.6797
460-161178-d-1	Alkalinity	25mL	7/31/2018	11:28 AM	19.65	6.919	.00	0.000	64.382	64.382	0.000	0.000	15.524	0.0000	1.5697	1.6249
460-161342-f-1	Alkalinity	25mL	7/31/2018	11:35 AM	19.65	7.715	.00	0.000	293.362	293.362	0.000	0.000	11.320	0.0000	7.1524	7.2604
460-161341-a-4	Alkalinity	25mL	7/31/2018	11:42 AM	19.72	8.058	.00	0.000	167.803	167.803	0.000	0.000	2.935	0.0000	4.0912	4.1689
460-161341-a-3	Alkalinity	25mL	7/31/2018	11:50 AM	20.08	8.042	.00	0.000	197.747	197.747	0.000	0.000	3.588	0.0000	4.8212	4.9057
460-161341-a-2	Alkalinity	25mL	7/31/2018	12:00 PM	20.44	8.039	.00	0.000	169.024	169.024	0.000	0.000	3.091	0.0000	4.1209	4.1997
460-161341-a-1	Alkalinity	25mL	7/31/2018	12:07 PM	20.80	8.116	.00	0.000	167.610	167.610	0.000	0.000	2.563	0.0000	4.0865	4.1705
460-161301-d-7	Alkalinity	25mL	7/31/2018	12:12 PM	21.08	4.632	.00	0.000	-0.905	-0.905	0.000	0.000	-42.229	0.0000	0.0140	0.0500
460-161301-d-6	Alkalinity	25mL	7/31/2018	12:20 PM	20.73	7.025	.00	0.000	11.022	11.022	0.000	0.000	2.082	0.0000	0.3109	0.3531
460-161301-d-4	Alkalinity	25mL	7/31/2018	12:27 PM	20.70	7.228	.00	0.000	89.682	89.682	0.000	0.000	10.603	0.0000	2.1865	2.2575
460-161301-d-3	Alkalinity	25mL	7/31/2018	12:35 PM	20.84	7.564	.00	0.000	98.905	98.905	0.000	0.000	5.395	0.0000	2.4114	2.4749
460-161301-d-2	Alkalinity	25mL	7/31/2018	12:43 PM	21.09	7.464	.00	0.000	100.095	100.095	0.000	0.000	6.873	0.0000	2.4404	2.5039
460-161301-d-1	Alkalinity	25mL	7/31/2018	12:51 PM	21.22	7.773	.00	0.000	147.273	147.273	0.000	0.000	4.969	0.0000	3.5906	3.6644
460-161203-d-1	Alkalinity	25mL	7/31/2018	12:58 PM	21.57	7.108	.00	0.000	72.410	72.410	0.000	0.000	11.305	0.0000	1.7654	1.8249
460-161203-d-2	Alkalinity	25mL	7/31/2018	1:06 PM	21.79	7.219	.00	0.000	72.785	72.785	0.000	0.000	8.788	0.0000	1.7745	1.8397
460-161203-d-3	Alkalinity	25mL	7/31/2018	1:14 PM	21.58	7.985	.00	0.000	82.905	82.905	0.000	0.000	1.715	0.0000	2.0213	2.0830
460-161204-e-4	Alkalinity	25mL	7/31/2018	1:23 PM	21.51	7.702	.00	0.000	228.066	228.066	0.000	0.000	9.064	0.0000	5.5604	5.6936
460-161204-d-6	Alkalinity	25mL	7/31/2018	1:32 PM	21.69	9.832	.00	4.602	12.150	2.946	9.204	0.000	0.001	0.1122	0.3260	0.3559
MB	Alkalinity	25mL	7/31/2018	1:39 PM	21.87	5.650	.00	0.000	0.158	0.158	0.000	0.000	0.707	0.0000	0.0400	0.0761
LCSSRM	Alkalinity	25mL	7/31/2018	1:47 PM	21.87	7.937	.00	0.000	53.743	53.743	0.000	0.000	1.243	0.0000	1.3103	1.3691
460-161204-e-3	Alkalinity	25mL	7/31/2018	1:55 PM	21.89	7.593	.00	0.000	134.958	134.958	0.000	0.000	6.886	0.0000	3.2904	3.3716

PC-TitratION PLUS by Man-Tech Associates, Inc.

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Run Number	5678														
SampleID	Analysis Amount	RunDate	RunTime	Temp	pH	pH2	palk (mg/L) as CaCO3	talk (mg/L) as CaCO3	bcarb (mg/L) as CaCO3	carb (mg/L) as CaCO3	hydr (mg/L) as CaCO3	Free CO2 (mg/L) as CaCO3	(mL) H2S04 @ 8.3	(mL) H2S04 @ 4.5	(mL) H2S04 @ 4.2
460-161204-e-3 DU	Alkalinity 25mL	7/31/2018	2:02 PM	22.34	7.611	.00	0.000	134.759	134.759	0.000	0.000	6.600	0.0000	3.2855	3.3644
460-161204-e-2	Alkalinity 25mL	7/31/2018	2:10 PM	22.23	6.977	.00	0.000	50.016	50.016	0.000	0.000	10.538	0.0000	1.2194	1.2746
460-161204-e-1	Alkalinity 25mL	7/31/2018	2:17 PM	22.11	7.021	.00	0.000	75.573	75.573	0.000	0.000	14.411	0.0000	1.8425	1.9006

PC-TitratION PLUS by Man-Tech Associates, Inc.

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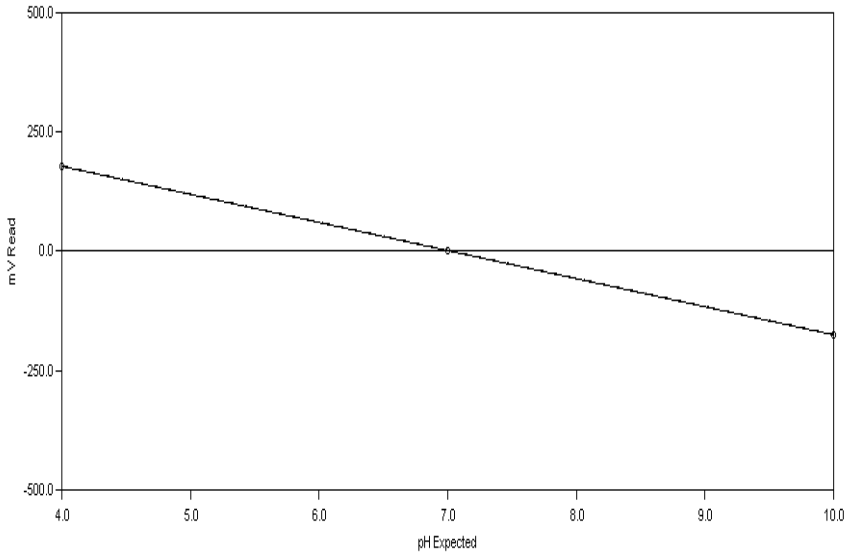
PC-TitratION PLUS

Calibration Report

Calibration Record # 1561



Calibration Settings

Calibration ID	PH CAL 4-7-10	Date	7/31/2018
Channel	1	Time	8:50 AM
Probe Type	pH	Temperature	294.98 K 21.83 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-59.018	CorrCoeff	1.0000
Intercept	1.463	Equation: Y = (-59.018) X + 1.463	

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-59.018	-65.00	-53.00
Intercept	1.463	-100.00	100.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	4.00	178.46
	7.00	1.58
	10.00	-175.65

PC-TitratION PLUS by Man-Tech Associates, Inc.
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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 540990 Batch Start Date: 07/30/18 15:07 Batch Analyst: Tewira, Jovan X

Batch Method: 9060A_ASP Batch End Date: 07/31/18 08:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WTtocLCS 00045	WTtocSP1 00036	WTtocSP2 00033		
ICV 460-540990/1		9060A_ASP		50 mL			1.25 mL		
ICB 460-540990/2		9060A_ASP		50 mL					
MB 460-540990/3		9060A_ASP		50 mL					
LCSSRM 460-540990/4		9060A_ASP		50 mL	50 mL				
460-161054-F-1 MS		9060A_ASP	T	50 mL		1.25 mL			
460-161054-F-1 MSD		9060A_ASP	T	50 mL		1.25 mL			
460-161178-F-1	GC-MW-107 (WG)	9060A_ASP	T	50 mL					
460-161178-F-2	GC-MW-108 (WG)	9060A_ASP	T	50 mL					
460-161178-F-3	GC-MW-109 (WG)	9060A_ASP	T	50 mL					
CCV 460-540990/13		9060A_ASP		50 mL			1.25 mL		
CCB 460-540990/14		9060A_ASP		50 mL					
460-161178-F-4	GC-MW-109M (WG)	9060A_ASP	T	50 mL					
CCV 460-540990/21		9060A_ASP		50 mL			1.25 mL		
CCB 460-540990/22		9060A_ASP		50 mL					

Batch Notes	
Acid ID	H2SO4: MACRON/186983
Batch Comment	T(1841-1844)-18 CAL exp: 09/07/18
Pipette/Syringe/Dispenser ID	P-72 CAL: 07/19/18 exp: 10/19/18

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 540298 Batch Start Date: 07/27/18 14:04 Batch Analyst: Vu, Huan

Batch Method: D516-90, 02 Batch End Date: 07/27/18 17:09

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WT-SO4SP1 00005	WT-SO4SS1 00004	WTsfateLCS 00045		
ICV 460-540298/1		D516-90, 02		100 mL		2 mL			
CCV 460-540298/28		D516-90, 02		100 mL		2 mL			
CCV 460-540298/40		D516-90, 02		100 mL		2 mL			
CCV 460-540298/44		D516-90, 02		100 mL		2 mL			
460-161054-E-1 MS		D516-90, 02	T	50 mL	1 mL				
460-161054-E-1 MSD		D516-90, 02	T	50 mL	1 mL				
CCV 460-540298/55		D516-90, 02		100 mL		2 mL			
CCV 460-540298/57		D516-90, 02		100 mL		2 mL			
LCSSRM 460-540298/60		D516-90, 02					2 mL		
CCV 460-540298/69		D516-90, 02		100 mL		2 mL			

Batch Notes	
Batch Comment	A(0999-1005)-18 CAL / A(1006)-18 CCV exp:07/28/18
Conditioning Reagent ID	C-6129-18 exp:10/11/18

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 541268 Batch Start Date: 07/31/18 10:39 Batch Analyst: Mariani, Paul H

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	WTalkLCS 00142				
MB 460-541268/2		SM 2320B		InitialAmount is blank					
LCSSRM 460-541268/3		SM 2320B		InitialAmount is blank	25 mL				
460-161178-D-4	GC-MW-109M (WG)	SM 2320B	T	InitialAmount is blank					
460-161178-D-4 DU	GC-MW-109M (WG)	SM 2320B	T	InitialAmount is blank					
460-161178-E-3	GC-MW-109 (WG)	SM 2320B	T	InitialAmount is blank					
460-161178-D-2	GC-MW-108 (WG)	SM 2320B	T	InitialAmount is blank					
460-161178-D-1	GC-MW-107 (WG)	SM 2320B	T	InitialAmount is blank					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 539903 Batch Start Date: 07/26/18 11:01 Batch Analyst: Staib, Patricia L

Batch Method: SM 2540C Batch End Date: 07/27/18 16:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	Conductivity	CrucibleID	TareWeight	InitialAmount	Weight1	Weight2
MB 460-539903/1		SM 2540C			JT	64.0802 g	100 mL	64.0800 g	64.0804 g
LCSSRM 460-539903/2		SM 2540C			LC	67.8719 g	50 mL	67.8967 g	67.8982 g
460-161178-G-1	GC-MW-107 (WG)	SM 2540C	T	1027 umhos/cm	QD	65.6845 g	50 mL	65.7149 g	65.7145 g
460-161178-G-1 DU	GC-MW-107 (WG)	SM 2540C	T		P	65.5100 g	50 mL	65.5419 g	65.5402 g
460-161178-G-2	GC-MW-108 (WG)	SM 2540C	T	1565 umhos/cm	W	65.0320 g	25 mL	65.0555 g	65.0545 g
460-161178-G-3	GC-MW-109 (WG)	SM 2540C	T	1380 umhos/cm	B	64.1115 g	50 mL	64.1586 g	64.1568 g
460-161178-G-4	GC-MW-109M (WG)	SM 2540C	T	1278 umhos/cm	Z	76.7114 g	50 mL	76.7486 g	76.7487 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Weight3	WeightOne%Diff	WeightTwo%Diff	Weight4OK	Residue	Residue2
MB 460-539903/1		SM 2540C		64.0805 g	Pass No Unit	Pass No Unit	N/A	-0.0002 g	0.0002 g
LCSSRM 460-539903/2		SM 2540C		67.8977 g	Fail >0.5mg No Unit	Pass No Unit	N/A	0.0248 g	0.0263 g
460-161178-G-1	GC-MW-107 (WG)	SM 2540C	T	65.7144 g	Pass No Unit	Pass No Unit	N/A	0.0304 g	0.03 g
460-161178-G-1 DU	GC-MW-107 (WG)	SM 2540C	T	65.5403 g	Fail >0.5mg No Unit	Pass No Unit	N/A	0.0319 g	0.0302 g
460-161178-G-2	GC-MW-108 (WG)	SM 2540C	T	65.0546 g	Fail >0.5mg No Unit	Pass No Unit	N/A	0.0235 g	0.0225 g
460-161178-G-3	GC-MW-109 (WG)	SM 2540C	T	64.1569 g	Fail >0.5mg No Unit	Pass No Unit	N/A	0.0471 g	0.0453 g
460-161178-G-4	GC-MW-109M (WG)	SM 2540C	T		Pass No Unit	N/A No Unit	N/A	0.0372 g	0.0373 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue3	Residue4	FinalAmount	CalcMsg	WTtdsLCS 00111	
MB 460-539903/1		SM 2540C		0.0003 g	N/A g	100 mL	OK		
LCSSRM 460-539903/2		SM 2540C		0.0258 g	N/A g	100 mL	OK	50 mL	
460-161178-G-1	GC-MW-107 (WG)	SM 2540C	T	0.0299 g	N/A g	100 mL	OK		
460-161178-G-1 DU	GC-MW-107 (WG)	SM 2540C	T	0.0303 g	N/A g	100 mL	OK		
460-161178-G-2	GC-MW-108 (WG)	SM 2540C	T	0.0226 g	N/A g	100 mL	OK		
460-161178-G-3	GC-MW-109 (WG)	SM 2540C	T	0.0454 g	N/A g	100 mL	OK		
460-161178-G-4	GC-MW-109M (WG)	SM 2540C	T	N/A g	N/A g	100 mL	OK		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 539903 Batch Start Date: 07/26/18 11:01 Batch Analyst: Staib, Patricia L

Batch Method: SM 2540C Batch End Date: 07/27/18 16:05

Batch Notes	
Balance ID	27
Date/Time - In - CW (WT2)	07/27/2018 10:34
Date/Time - Out - CW (WT2)	07/27/2018 11:51
Temperature - Start - CW (WT2) - Correct	180C Celsius
Temperature - End - CW (WT2) - Correct	180C Celsius
Temperature - Start-CW(WT2) -Uncorrected	179C Celsius
Temperature - End-CW(WT2) -Uncorrected	179C Celsius
Date/Time - In - CW (WT3)	07/27/2018 14:31
Date/Time - Out - CW (WT3)	07/27/2018 15:45
Temperature - Start - CW (WT3) - Correct	180C Celsius
Temperature - End - CW (WT3) - Correct	180C Celsius
Temperature - Start-CW(WT3) -Uncorrected	179C0 Celsius
Temperature - End-CW(WT3) -Uncorrected	179C Celsius
Temperature - Start - Corrected	104 Celsius
Temperature - End - Corrected	104 Celsius
Date/Time - In	07/24/2018 11:29
Date/Time - Out	07/27/2018 07:33
Filter ID	Whatman 15491080
Nominal Amount Used	100 mL
Oven ID	TSS A
Thermometer ID	6407482
Temperature - Start - Uncorrected	102 Celsius
Temperature - End - Uncorrected	102 Celsius
Weight(WT1) Start Date/Time	07/27/2018 07:35 No Unit
Weight(WT1) Date/Time Out	07/27/2018 10:00
Weight(WT1) Start Temp	180C Celsius
Weight(WT1) Temp Out	180C Celsius
Uncorrected Weight(WT1) Start Temp	179C Celsius
Uncorrected Weight(WT1) Temp Out	179C Celsius

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-161178-1

SDG No.:

Batch Number: 539903 Batch Start Date: 07/26/18 11:01 Batch Analyst: Staib, Patricia L

Batch Method: SM 2540C Batch End Date: 07/27/18 16:05

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Edison
777 New Durham Road

Edison, NJ 08817-2859
phone 732.549.3900 fax 732.549.3679

7/24/18

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☑Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Lindsay O'Hara	Site Contact: Sanjay Sharma	Date: 7-24-18	COC No:
TRC Engineers, Inc.	Tel/Fax: 203-278-5305	Lab Contact: Jannel Franklin	Carrier:	1 of 1 COCs
1430 Broadway, 10th Floor	Analysis Turnaround Time			Sampler:
New York, New York 10024	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
212-221-7822	TAT if different from Below Standard			Walk-in Client:
FAX 212-2217840	☑ 2 weeks			Lab Sampling:
Project Name: Gem Cleaners	☐ 1 week			
Site: 84 N Village Avenue, Rockville Centre, NY	☐ 2 days			Job / SDG No.: 161178
PO#: 120097; Project No. 279191.0000.0000 Phase 2	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOCs+10	Alkalinity	Sulfate	Total Dissolved Solids	Total Organic Carbon	Sample Specific Notes:
GC-MW-107 (WG)	7-24	0745	G	GW	7	—		X	X	X	X	X	1
GC-MW-108 (WG)		0850			7	—		X	X	X	X	X	2
GC-MW-109 (WG)		0950			7	—		X	X	X	X	X	3
GC-MW-109M (WG)		1050			7	—		X	X	X	X	X	4
GC-MW-109M (WG) - MS		1150			3	—		X					4
GC-MW-109M (WG) - MSD		1150			3	—		X					4
GC-MW-110 (WG)		1140	↓	↓	3	—		X					5
GC-EQUIPMENT BLANK (072418)		0700	—	AQ	3	—		X					6
GC-TB (072418)	↓	—	—	AQ	2	—		X					7

460-161178 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Please provide Category B Deliverable Data packages, EDD in EQUIS format, and EDD with tabulated results in mg/kg with RLs shown.
NYSDEC Project.
final batch of samples

Custody Seals Intact: ☑ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____	
Relinquished by:	Company: TRC	Date/Time: 7/24/18 1300	Received by:	Company: TA	Date/Time: 7/24/18 11:05
Relinquished by:	Company: TA	Date/Time: 7/24/18 1752	Received by:	Company: TA	Date/Time: 7/24/18 17:50
Relinquished by:	Company: TA	Date/Time: 7/24/18 1905	Received in Laboratory by:	Company: TA	Date/Time: 07/24/18 1905

Form No. CA-C-WI-002, Rev. 4.15, dated 9/27/2017

2.7 (2.7 TRIP BLANKS)

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 161178

Number of Coolers: 1 IR Gun # 11

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.7 °C	2.7 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1											<2				
2											<2				
3											<2				
4											<2				

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 7/24/18

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 460-161178-1

Login Number: 161178
List Number: 1
Creator: DiGuardia, Joseph L

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 320-41460-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Lindsay O'Hara

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
8/17/2018 9:28 AM

Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
08/17/2018

Job Number: 320-41460-1

Job Description: GEM Cleaners

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
8/17/2018 9:28 AM

Jannel O Franklin

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 320-41460-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 7/25/2018 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

Receipt Exceptions

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC). Received 2 250ml poly marked as Trip Blank not listed on COC. Did not enter sample in TALS.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): GC-EQUIPMENT BLANK (072418) (320-41460-5). The container labels list GC-EQB072418, while COC list GC-EQUIPMENT BLANK (072418). Labeled according to COC.

PFOA/PFOS

Samples GC-MW-107 (WG) (320-41460-1), GC-MW-108 (WG) (320-41460-2), GC-MW-109 (WG) (320-41460-3), GC-MW-109M (WG) (320-41460-4) and GC-EQUIPMENT BLANK (072418) (320-41460-5) were analyzed for PFOA/PFOS in accordance with PFOA/PFOS. The samples were prepared on 08/06/2018 and 08/10/2018 and analyzed on 08/08/2018 and 08/12/2018.

The following samples were re-prepared outside of preparation holding time due to high 6:2FTS recovery in the LCS: GC-MW-109M (WG) (320-41460-4), GC-MW-109M (WG) (320-41460-4[MS]) and GC-MW-109M (WG) (320-41460-4[MSD]). Method Code: 3535-PFC-Water

6:2 FTS and Perfluorohexanesulfonic acid (PFHxS) were detected in method blank MB 320-238149/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Perfluorobutanoic acid (PFBA), Perfluorohexanesulfonic acid (PFHxS) and Perfluorotetradecanoic acid (PFTeA) were detected in method blank MB 320-239187/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

6:2 FTS failed the recovery criteria high for the MS/MSD of sample GC-MW-109M (WG) (320-41460-4) in batch 320-238718.

6:2 FTS failed the recovery criteria high for LCS 320-238149/2-A.

The laboratory control sample (LCS) for preparation batch 320-238149 and 320-238149 and analytical batch 320-238718 recovered outside control limits for the following analytes: M2-6:2FTS. These analytes were biased high in the LCS and were below the reporting limit (RL) in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for preparation batch 320-238149 and analytical batch 320-238718 recovered outside control limits for the following analyte: M2-6:2FTS. This analyte was biased high in the LCS, The samples were re-extracted outside of holding time with a good LCS for this analyte. Both sets of data are reported for M2-6:2FTS.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41460-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-41460-1	GC-MW-107 (WG)	Water	07/24/18 07:45	07/25/18 09:15
320-41460-2	GC-MW-108 (WG)	Water	07/24/18 08:50	07/25/18 09:15
320-41460-3	GC-MW-109 (WG)	Water	07/24/18 09:50	07/25/18 09:15
320-41460-4	GC-MW-109M (WG)	Water	07/24/18 10:50	07/25/18 09:15
320-41460-5	GC-EQUIPMENT BLANK (072418)	Water	07/24/18 07:00	07/25/18 09:15

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41460-1

Client Sample ID: GC-MW-107 (WG) — Lab Sample ID: 320-41460-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.2		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	17		1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	13		1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	8.2		1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	29		1.9	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.5		1.9	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.9		1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.86	J	1.9	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.7		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3	B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.56	J	1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		1.9	0.50	ng/L	1		537 (modified)	Total/NA
6:2 FTS	5.5	J B *	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-108 (WG) — Lab Sample ID: 320-41460-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.0		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	16		1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	13		1.8	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	8.2		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	24		1.8	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.3		1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.7	J	1.8	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.35	J	1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.5		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.2	B	1.8	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.55	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		1.8	0.50	ng/L	1		537 (modified)	Total/NA
6:2 FTS	2.7	J B *	18	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-109 (WG) — Lab Sample ID: 320-41460-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.5		1.9	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	8.8		1.9	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	9.9		1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	9.3		1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	43		1.9	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	9.2		1.9	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	5.3		1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.7		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.2	B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.50	J	1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	20		1.9	0.50	ng/L	1		537 (modified)	Total/NA
6:2 FTS	3.8	J B *	19	1.9	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41460-1

Client Sample ID: GC-MW-109M (WG) — Lab Sample ID: 320-41460-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	9.2		1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	17		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	14		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	10		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	30		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.6		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	3.2		1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.9		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.2	B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.44	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		1.8	0.48	ng/L	1		537 (modified)	Total/NA
6:2 FTS	2.3	J F1 B *	18	1.8	ng/L	1		537 (modified)	Total/NA
6:2 FTS - RE	3.4	J H	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-EQUIPMENT BLANK (072418) — Lab Sample ID: 320-41460-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.55	J	1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.29	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
6:2 FTS	8.3	J B *	18	1.8	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41460-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Client Sample ID: GC-MW-107 (WG)

Date Collected: 07/24/18 07:45
Date Received: 07/25/18 09:15

Lab Sample ID: 320-41460-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**2.2**		1.9	0.33	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluoropentanoic acid (PFPeA)	**17**		1.9	0.46	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorohexanoic acid (PFHxA)	**13**		1.9	0.54	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluoroheptanoic acid (PFHpA)	**8.2**		1.9	0.23	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorooctanoic acid (PFOA)	**29**		1.9	0.79	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorononanoic acid (PFNA)	**2.5**		1.9	0.25	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorodecanoic acid (PFDA)	**1.9**		1.9	0.29	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorotetradecanoic acid (PFTeA)	**0.86**	**J**	1.9	0.27	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorobutanesulfonic acid (PFBS)	**6.7**		1.9	0.19	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorohexanesulfonic acid (PFHxS)	**2.3**	**B**	1.9	0.16	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.56**	**J**	1.9	0.18	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorooctanesulfonic acid (PFOS)	**14**		1.9	0.50	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		08/06/18 10:25	08/08/18 08:29	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.33	ng/L		08/06/18 10:25	08/08/18 08:29	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		19	2.9	ng/L		08/06/18 10:25	08/08/18 08:29	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8	ng/L		08/06/18 10:25	08/08/18 08:29	1
6:2 FTS	**5.5**	**J B ***	19	1.9	ng/L		08/06/18 10:25	08/08/18 08:29	1
8:2 FTS	ND		19	1.9	ng/L		08/06/18 10:25	08/08/18 08:29	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*86*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C5 PFPeA	*85*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C2 PFHxA	*91*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C4-PFHpA	*92*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C4 PFOA	*99*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C5 PFNA	*103*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C2 PFDA	*105*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C2 PFUnA	*94*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C2 PFDoA	*97*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C2-PFTeDA	*112*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C3-PFBS	*80*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
18O2 PFHxS	*83*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C4 PFOS	*89*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
13C8 FOSA	*79*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
d3-NMeFOSAA	*113*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
d5-NEtFOSAA	*115*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
M2-6:2FTS	*103*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*
M2-8:2FTS	*110*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:29*	*1*

Client Sample ID: GC-MW-108 (WG)

Date Collected: 07/24/18 08:50
Date Received: 07/25/18 09:15

Lab Sample ID: 320-41460-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**7.0**		1.8	0.32	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluoropentanoic acid (PFPeA)	**16**		1.8	0.45	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorohexanoic acid (PFHxA)	**13**		1.8	0.54	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluoroheptanoic acid (PFHpA)	**8.2**		1.8	0.23	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorooctanoic acid (PFOA)	**24**		1.8	0.79	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorononanoic acid (PFNA)	**2.3**		1.8	0.25	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorodecanoic acid (PFDA)	**1.7**	**J**	1.8	0.29	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.51	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorotetradecanoic acid (PFTeA)	**0.35**	**J**	1.8	0.27	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorobutanesulfonic acid (PFBS)	**5.5**		1.8	0.18	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorohexanesulfonic acid (PFHxS)	**2.2**	**B**	1.8	0.16	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.55**	**J**	1.8	0.18	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorooctanesulfonic acid (PFOS)	**14**		1.8	0.50	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.30	ng/L		08/06/18 10:25	08/08/18 08:36	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.32	ng/L		08/06/18 10:25	08/08/18 08:36	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.9	ng/L		08/06/18 10:25	08/08/18 08:36	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.8	ng/L		08/06/18 10:25	08/08/18 08:36	1
6:2 FTS	**2.7**	**J B ***	18	1.8	ng/L		08/06/18 10:25	08/08/18 08:36	1
8:2 FTS	ND		18	1.8	ng/L		08/06/18 10:25	08/08/18 08:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*83*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C5 PFPeA	*84*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C2 PFHxA	*85*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C4-PFHpA	*88*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C4 PFOA	*95*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C5 PFNA	*104*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C2 PFDA	*102*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C2 PFUnA	*95*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C2 PFDoA	*100*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C2-PFTeDA	*122*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C3-PFBS	*82*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
18O2 PFHxS	*82*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C4 PFOS	*88*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
13C8 FOSA	*88*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
d3-NMeFOSAA	*119*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
d5-NEtFOSAA	*123*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
M2-6:2FTS	*116*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*
M2-8:2FTS	*103*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:36*	*1*

Client Sample ID: GC-MW-109 (WG)

Date Collected: 07/24/18 09:50
Date Received: 07/25/18 09:15

Lab Sample ID: 320-41460-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**7.5**		1.9	0.32	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluoropentanoic acid (PFPeA)	**8.8**		1.9	0.45	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorohexanoic acid (PFHxA)	**9.9**		1.9	0.54	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluoroheptanoic acid (PFHpA)	**9.3**		1.9	0.23	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorooctanoic acid (PFOA)	**43**		1.9	0.79	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorononanoic acid (PFNA)	**9.2**		1.9	0.25	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorodecanoic acid (PFDA)	**5.3**		1.9	0.29	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.27	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorobutanesulfonic acid (PFBS)	**6.7**		1.9	0.19	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorohexanesulfonic acid (PFHxS)	**2.2**	**B**	1.9	0.16	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.50**	**J**	1.9	0.18	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorooctanesulfonic acid (PFOS)	**20**		1.9	0.50	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		08/06/18 10:25	08/08/18 08:44	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.32	ng/L		08/06/18 10:25	08/08/18 08:44	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		19	2.9	ng/L		08/06/18 10:25	08/08/18 08:44	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8	ng/L		08/06/18 10:25	08/08/18 08:44	1
6:2 FTS	**3.8**	**J B ***	19	1.9	ng/L		08/06/18 10:25	08/08/18 08:44	1
8:2 FTS	ND		19	1.9	ng/L		08/06/18 10:25	08/08/18 08:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*82*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C5 PFPeA	*84*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C2 PFHxA	*88*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C4-PFHpA	*89*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C4 PFOA	*96*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C5 PFNA	*103*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C2 PFDA	*99*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C2 PFUnA	*100*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C2 PFDoA	*97*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C2-PFTeDA	*117*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C3-PFBS	*82*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
18O2 PFHxS	*80*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C4 PFOS	*83*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
13C8 FOSA	*82*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
d3-NMeFOSAA	*123*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
d5-NEtFOSAA	*110*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
M2-6:2FTS	*111*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*
M2-8:2FTS	*106*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:44*	*1*

Client Sample ID: GC-MW-109M (WG)

Date Collected: 07/24/18 10:50
Date Received: 07/25/18 09:15

Lab Sample ID: 320-41460-4

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**9.2**		1.8	0.31	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluoropentanoic acid (PFPeA)	**17**		1.8	0.43	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorohexanoic acid (PFHxA)	**14**		1.8	0.51	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluoroheptanoic acid (PFHpA)	**10**		1.8	0.22	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorooctanoic acid (PFOA)	**30**		1.8	0.75	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorononanoic acid (PFNA)	**3.6**		1.8	0.24	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorodecanoic acid (PFDA)	**3.2**		1.8	0.27	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.1	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorobutanesulfonic acid (PFBS)	**5.9**		1.8	0.18	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorohexanesulfonic acid (PFHxS)	**2.2**	**B**	1.8	0.15	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.44**	**J**	1.8	0.17	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorooctanesulfonic acid (PFOS)	**14**		1.8	0.48	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		08/06/18 10:25	08/08/18 08:51	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31	ng/L		08/06/18 10:25	08/08/18 08:51	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7	ng/L		08/06/18 10:25	08/08/18 08:51	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		08/06/18 10:25	08/08/18 08:51	1
6:2 FTS	**2.3**	**J F1 B ***	18	1.8	ng/L		08/06/18 10:25	08/08/18 08:51	1
8:2 FTS	ND		18	1.8	ng/L		08/06/18 10:25	08/08/18 08:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*88*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C5 PFPeA	*84*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C2 PFHxA	*88*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C4-PFHpA	*87*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C4 PFOA	*97*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C5 PFNA	*102*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C2 PFDA	*95*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C2 PFUnA	*88*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C2 PFDoA	*95*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C2-PFTeDA	*99*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C3-PFBS	*81*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
18O2 PFHxS	*80*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C4 PFOS	*81*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
13C8 FOSA	*83*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
d3-NMeFOSAA	*109*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
d5-NEtFOSAA	*103*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
M2-6:2FTS	*114*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*
M2-8:2FTS	*104*		*25 - 150*	*08/06/18 10:25*	*08/08/18 08:51*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	**3.4**	**J H**	19	1.9	ng/L		08/10/18 09:01	08/12/18 16:22	1

Client Sample ID: GC-MW-109M (WG)

Lab Sample ID: 320-41460-4

Date Collected: 07/24/18 10:50
Matrix: Water
Date Received: 07/25/18 09:15

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-6:2FTS	119		25 - 150	08/10/18 09:01	08/12/18 16:22	1

Client Sample ID: GC-EQUIPMENT BLANK (072418)

Lab Sample ID: 320-41460-5

Date Collected: 07/24/18 07:00
Matrix: Water
Date Received: 07/25/18 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.55**	**J**	1.8	0.31	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.44	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.52	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.76	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.99	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorohexanesulfonic acid (PFHxS)	**0.29**	**J B**	1.8	0.15	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		08/06/18 10:25	08/08/18 09:14	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31	ng/L		08/06/18 10:25	08/08/18 09:14	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		08/06/18 10:25	08/08/18 09:14	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		08/06/18 10:25	08/08/18 09:14	1
6:2 FTS	**8.3**	**J B ***	18	1.8	ng/L		08/06/18 10:25	08/08/18 09:14	1
8:2 FTS	ND		18	1.8	ng/L		08/06/18 10:25	08/08/18 09:14	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	93		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C5 PFPeA	86		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C2 PFHxA	86		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C4-PFHpA	93		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C4 PFOA	101		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C5 PFNA	102		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C2 PFDA	96		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C2 PFUnA	96		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C2 PFDoA	91		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C2-PFTeDA	110		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C3-PFBS	77		25 - 150	08/06/18 10:25	08/08/18 09:14	1
18O2 PFHxS	82		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C4 PFOS	86		25 - 150	08/06/18 10:25	08/08/18 09:14	1
13C8 FOSA	81		25 - 150	08/06/18 10:25	08/08/18 09:14	1
d3-NMeFOSAA	117		25 - 150	08/06/18 10:25	08/08/18 09:14	1
d5-NEtFOSAA	109		25 - 150	08/06/18 10:25	08/08/18 09:14	1
M2-6:2FTS	122		25 - 150	08/06/18 10:25	08/08/18 09:14	1

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41460-1

Client Sample ID: GC-EQUIPMENT BLANK (072418)
Date Collected: 07/24/18 07:00
Date Received: 07/25/18 09:15

Lab Sample ID: 320-41460-5
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-8:2FTS	111		25 - 150	08/06/18 10:25	08/08/18 09:14	1

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41460-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-41460-1	GC-MW-107 (WG)	86	85	91	92	99	103	105	94
320-41460-2	GC-MW-108 (WG)	83	84	85	88	95	104	102	95
320-41460-3	GC-MW-109 (WG)	82	84	88	89	96	103	99	100
320-41460-4	GC-MW-109M (WG)	88	84	88	87	97	102	95	88
320-41460-4 - RE	GC-MW-109M (WG)								
320-41460-4 MS	GC-MW-109M (WG)	85	88	87	94	98	103	101	99
320-41460-4 MS - RE	GC-MW-109M (WG)								
320-41460-4 MSD	GC-MW-109M (WG)	92	90	90	94	100	103	101	100
320-41460-4 MSD - RE	GC-MW-109M (WG)								
320-41460-5	GC-EQUIPMENT BLANK (0724	93	86	86	93	101	102	96	96
LCS 320-238149/2-A	Lab Control Sample	98	89	94	97	100	106	101	95
LCS 320-239187/2-A	Lab Control Sample	94	87	87	81	88	88	90	91
MB 320-238149/1-A	Method Blank	95	85	92	93	102	97	102	90
MB 320-239187/1-A	Method Blank	92	87	87	89	93	89	89	93

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOSA (25-150)	-NEtFOSA (25-150)
320-41460-1	GC-MW-107 (WG)	97	112	80	83	89	79	113	115
320-41460-2	GC-MW-108 (WG)	100	122	82	82	88	88	119	123
320-41460-3	GC-MW-109 (WG)	97	117	82	80	83	82	123	110
320-41460-4	GC-MW-109M (WG)	95	99	81	80	81	83	109	103
320-41460-4 - RE	GC-MW-109M (WG)								
320-41460-4 MS	GC-MW-109M (WG)	103	124	82	85	85	81	114	109
320-41460-4 MS - RE	GC-MW-109M (WG)								
320-41460-4 MSD	GC-MW-109M (WG)	94	113	87	88	86	83	119	112
320-41460-4 MSD - RE	GC-MW-109M (WG)								
320-41460-5	GC-EQUIPMENT BLANK (0724	91	110	77	82	86	81	117	109
LCS 320-238149/2-A	Lab Control Sample	96	108	80	83	84	77	117	103
LCS 320-239187/2-A	Lab Control Sample	95	98	84	84	87	84	102	99
MB 320-238149/1-A	Method Blank	99	113	75	83	85	77	120	113
MB 320-239187/1-A	Method Blank	97	101	87	85	92	88	105	100

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)						
320-41460-1	GC-MW-107 (WG)	103	110						
320-41460-2	GC-MW-108 (WG)	116	103						
320-41460-3	GC-MW-109 (WG)	111	106						
320-41460-4	GC-MW-109M (WG)	114	104						
320-41460-4 - RE	GC-MW-109M (WG)	119							
320-41460-4 MS	GC-MW-109M (WG)	112	103						
320-41460-4 MS - RE	GC-MW-109M (WG)	116							
320-41460-4 MSD	GC-MW-109M (WG)	112	102						
320-41460-4 MSD - RE	GC-MW-109M (WG)	117							
320-41460-5	GC-EQUIPMENT BLANK (0724	122	111						
LCS 320-238149/2-A	Lab Control Sample	114	95						
LCS 320-239187/2-A	Lab Control Sample	100	99						
MB 320-238149/1-A	Method Blank	108	96						
MB 320-239187/1-A	Method Blank	107	98						

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41460-1

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
PFHpA = 13C4-PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2-PFTeDA
13C3-PFBS = 13C3-PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3-NMeFOSAA = d3-NMeFOSAA
d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2FTS
M282FTS = M2-8:2FTS

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-238149/1-A
Matrix: Water
Analysis Batch: 238718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 238149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorohexanesulfonic acid (PFHxS)	0.249	J	2.0	0.17	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		08/06/18 10:24	08/08/18 08:06	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		08/06/18 10:24	08/08/18 08:06	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		08/06/18 10:24	08/08/18 08:06	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		08/06/18 10:24	08/08/18 08:06	1
6:2 FTS	4.66	J	20	2.0	ng/L		08/06/18 10:24	08/08/18 08:06	1
8:2 FTS	ND		20	2.0	ng/L		08/06/18 10:24	08/08/18 08:06	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C5 PFPeA	*85*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C2 PFHxA	*92*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C4-PFHpA	*93*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C4 PFOA	*102*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C5 PFNA	*97*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C2 PFDA	*102*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C2 PFUnA	*90*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C2 PFDoA	*99*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C2-PFTeDA	*113*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C3-PFBS	*75*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
18O2 PFHxS	*83*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C4 PFOS	*85*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
13C8 FOSA	*77*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
d3-NMeFOSAA	*120*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
d5-NEtFOSAA	*113*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
M2-6:2FTS	*108*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*
M2-8:2FTS	*96*		*25 - 150*	*08/06/18 10:24*	*08/08/18 08:06*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-238149/2-A
Matrix: Water
Analysis Batch: 238718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 238149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	41.7		ng/L		104	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	40.3		ng/L		101	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	38.9		ng/L		97	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	43.1		ng/L		108	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	41.9		ng/L		105	64 - 124
Perfluorononanoic acid (PFNA)	40.0	41.2		ng/L		103	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	41.8		ng/L		104	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	41.3		ng/L		103	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	45.7		ng/L		114	71 - 131
Perfluorotridecanoic Acid (PFTriA)	40.0	42.6		ng/L		106	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	40.7		ng/L		102	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	39.4		ng/L		111	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.9		ng/L		101	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	41.3		ng/L		108	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	38.4		ng/L		104	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	38.5		ng/L		100	68 - 128
Perfluorooctane Sulfonamide (FOSA)	40.0	44.9		ng/L		112	70 - 130
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	38.0		ng/L		95	67 - 127
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	43.4		ng/L		109	65 - 125
6:2 FTS	37.9	53.6	*	ng/L		141	66 - 126
8:2 FTS	38.3	40.4		ng/L		105	67 - 127

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*98*		*25 - 150*
13C5 PFPeA	*89*		*25 - 150*
13C2 PFHxA	*94*		*25 - 150*
13C4-PFHpA	*97*		*25 - 150*
13C4 PFOA	*100*		*25 - 150*
13C5 PFNA	*106*		*25 - 150*
13C2 PFDA	*101*		*25 - 150*
13C2 PFUnA	*95*		*25 - 150*
13C2 PFDoA	*96*		*25 - 150*
13C2-PFTeDA	*108*		*25 - 150*
13C3-PFBS	*80*		*25 - 150*
18O2 PFHxS	*83*		*25 - 150*
13C4 PFOS	*84*		*25 - 150*
13C8 FOSA	*77*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-238149/2-A
Matrix: Water
Analysis Batch: 238718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 238149

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
d3-NMeFOSAA	*117*		*25 - 150*
d5-NEtFOSAA	*103*		*25 - 150*
M2-6:2FTS	*114*		*25 - 150*
M2-8:2FTS	*95*		*25 - 150*

Lab Sample ID: 320-41460-4 MS
Matrix: Water
Analysis Batch: 238718

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA
Prep Batch: 238149

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	9.2		36.9	46.2		ng/L		100	70 - 130
Perfluoropentanoic acid (PFPeA)	17		36.9	56.4		ng/L		107	66 - 126
Perfluorohexanoic acid (PFHxA)	14		36.9	52.8		ng/L		104	66 - 126
Perfluoroheptanoic acid (PFHpA)	10		36.9	46.3		ng/L		97	66 - 126
Perfluorooctanoic acid (PFOA)	30		37.0	69.6		ng/L		106	64 - 124
Perfluorononanoic acid (PFNA)	3.6		36.9	43.2		ng/L		107	68 - 128
Perfluorodecanoic acid (PFDA)	3.2		36.9	39.6		ng/L		99	69 - 129
Perfluoroundecanoic acid (PFUnA)	ND		36.9	37.3		ng/L		101	60 - 120
Perfluorododecanoic acid (PFDoA)	ND		36.9	38.9		ng/L		105	71 - 131
Perfluorotridecanoic Acid (PFTriA)	ND		36.9	38.1		ng/L		103	72 - 132
Perfluorotetradecanoic acid (PFTeA)	ND		36.9	33.7		ng/L		91	68 - 128
Perfluorobutanesulfonic acid (PFBS)	5.9		32.7	41.8		ng/L		110	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	2.2	B	33.6	33.9		ng/L		94	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	0.44	J	35.2	38.8		ng/L		109	68 - 128
Perfluorooctanesulfonic acid (PFOS)	14		34.3	49.2		ng/L		104	67 - 127
Perfluorodecanesulfonic acid (PFDS)	ND		35.6	35.0		ng/L		98	68 - 128
Perfluorooctane Sulfonamide (FOSA)	ND		36.9	41.1		ng/L		111	70 - 130
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		36.9	37.7		ng/L		102	67 - 127
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		36.9	40.0		ng/L		108	65 - 125
6:2 FTS	2.3	J F1 B *	35.0	57.4	F1	ng/L		157	66 - 126
8:2 FTS	ND		35.4	41.3		ng/L		117	67 - 127

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	*85*		*25 - 150*
13C5 PFPeA	*88*		*25 - 150*
13C2 PFHxA	*87*		*25 - 150*
13C4-PFHpA	*94*		*25 - 150*
13C4 PFOA	*98*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 320-41460-4 MS
Matrix: Water
Analysis Batch: 238718

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA
Prep Batch: 238149

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C5 PFNA	*103*		*25 - 150*
13C2 PFDA	*101*		*25 - 150*
13C2 PFUnA	*99*		*25 - 150*
13C2 PFDoA	*103*		*25 - 150*
13C2-PFTeDA	*124*		*25 - 150*
13C3-PFBS	*82*		*25 - 150*
18O2 PFHxS	*85*		*25 - 150*
13C4 PFOS	*85*		*25 - 150*
13C8 FOSA	*81*		*25 - 150*
d3-NMeFOSAA	*114*		*25 - 150*
d5-NEtFOSAA	*109*		*25 - 150*
M2-6:2FTS	*112*		*25 - 150*
M2-8:2FTS	*103*		*25 - 150*

Lab Sample ID: 320-41460-4 MSD
Matrix: Water
Analysis Batch: 238718

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA
Prep Batch: 238149

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	9.2		37.0	46.9		ng/L		102	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	17		37.0	55.1		ng/L		104	66 - 126	2	30
Perfluorohexanoic acid (PFHxA)	14		37.0	50.5		ng/L		98	66 - 126	4	30
Perfluoroheptanoic acid (PFHpA)	10		37.0	48.6		ng/L		103	66 - 126	5	30
Perfluorooctanoic acid (PFOA)	30		37.0	67.9		ng/L		102	64 - 124	3	30
Perfluorononanoic acid (PFNA)	3.6		37.0	42.2		ng/L		105	68 - 128	2	30
Perfluorodecanoic acid (PFDA)	3.2		37.0	39.8		ng/L		99	69 - 129	0	30
Perfluoroundecanoic acid (PFUnA)	ND		37.0	38.1		ng/L		103	60 - 120	2	30
Perfluorododecanoic acid (PFDoA)	ND		37.0	39.7		ng/L		107	71 - 131	2	30
Perfluorotridecanoic Acid (PFTriA)	ND		37.0	40.1		ng/L		109	72 - 132	5	30
Perfluorotetradecanoic acid (PFTeA)	ND		37.0	35.6		ng/L		96	68 - 128	5	30
Perfluorobutanesulfonic acid (PFBS)	5.9		32.7	40.3		ng/L		105	73 - 133	4	30
Perfluorohexanesulfonic acid (PFHxS)	2.2	B	33.6	34.2		ng/L		95	63 - 123	1	30
Perfluoroheptanesulfonic Acid (PFHpS)	0.44	J	35.2	38.0		ng/L		107	68 - 128	2	30
Perfluorooctanesulfonic acid (PFOS)	14		34.3	48.9		ng/L		103	67 - 127	1	30
Perfluorodecanesulfonic acid (PFDS)	ND		35.6	33.8		ng/L		95	68 - 128	3	30
Perfluorooctane Sulfonamide (FOSA)	ND		37.0	39.8		ng/L		108	70 - 130	3	30
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		37.0	35.7		ng/L		97	67 - 127	5	30
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		37.0	40.0		ng/L		108	65 - 125	0	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 320-41460-4 MSD
Matrix: Water
Analysis Batch: 238718

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA
Prep Batch: 238149

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
6:2 FTS	2.3	J F1 B *	35.0	74.5	F1	ng/L		206	66 - 126	26	30
8:2 FTS	ND		35.4	36.1		ng/L		102	67 - 127	13	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*92*		*25 - 150*
13C5 PFPeA	*90*		*25 - 150*
13C2 PFHxA	*90*		*25 - 150*
13C4-PFHpA	*94*		*25 - 150*
13C4 PFOA	*100*		*25 - 150*
13C5 PFNA	*103*		*25 - 150*
13C2 PFDA	*101*		*25 - 150*
13C2 PFUnA	*100*		*25 - 150*
13C2 PFDoA	*94*		*25 - 150*
13C2-PFTeDA	*113*		*25 - 150*
13C3-PFBS	*87*		*25 - 150*
18O2 PFHxS	*88*		*25 - 150*
13C4 PFOS	*86*		*25 - 150*
13C8 FOSA	*83*		*25 - 150*
d3-NMeFOSAA	*119*		*25 - 150*
d5-NEtFOSAA	*112*		*25 - 150*
M2-6:2FTS	*112*		*25 - 150*
M2-8:2FTS	*102*		*25 - 150*

Lab Sample ID: MB 320-239187/1-A
Matrix: Water
Analysis Batch: 239440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 239187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.393	J	2.0	0.35	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorotetradecanoic acid (PFTeA)	0.865	J	2.0	0.29	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorohexanesulfonic acid (PFHxS)	0.261	J	2.0	0.17	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		08/10/18 09:01	08/12/18 15:12	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		08/10/18 09:01	08/12/18 15:12	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		08/10/18 09:01	08/12/18 15:12	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-239187/1-A
Matrix: Water
Analysis Batch: 239440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 239187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		08/10/18 09:01	08/12/18 15:12	1
6:2 FTS	ND		20	2.0	ng/L		08/10/18 09:01	08/12/18 15:12	1
8:2 FTS	ND		20	2.0	ng/L		08/10/18 09:01	08/12/18 15:12	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*92*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C5 PFPeA	*87*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C2 PFHxA	*87*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C4-PFHpA	*89*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C4 PFOA	*93*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C5 PFNA	*89*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C2 PFDA	*89*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C2 PFUnA	*93*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C2 PFDoA	*97*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C2-PFTeDA	*101*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C3-PFBS	*87*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
18O2 PFHxS	*85*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C4 PFOS	*92*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
13C8 FOSA	*88*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
d3-NMeFOSAA	*105*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
d5-NEtFOSAA	*100*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
M2-6:2FTS	*107*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*
M2-8:2FTS	*98*		*25 - 150*	*08/10/18 09:01*	*08/12/18 15:12*	*1*

Lab Sample ID: LCS 320-239187/2-A
Matrix: Water
Analysis Batch: 239440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 239187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	40.1		ng/L		100	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	38.0		ng/L		95	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	38.6		ng/L		97	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	42.9		ng/L		107	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	40.3		ng/L		101	64 - 124
Perfluorononanoic acid (PFNA)	40.0	40.2		ng/L		100	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	40.0		ng/L		100	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	31.1		ng/L		78	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	38.1		ng/L		95	71 - 131
Perfluorotridecanoic Acid (PFTriA)	40.0	44.1		ng/L		110	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	41.9		ng/L		105	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	37.2		ng/L		105	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.4		ng/L		100	63 - 123

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-239187/2-A
Matrix: Water
Analysis Batch: 239440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 239187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	40.5		ng/L		106	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	40.0		ng/L		108	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	40.4		ng/L		105	68 - 128
Perfluorooctane Sulfonamide (FOSA)	40.0	42.5		ng/L		106	70 - 130
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	40.6		ng/L		102	67 - 127
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	37.4		ng/L		93	65 - 125
6:2 FTS	37.9	38.6		ng/L		102	66 - 126
8:2 FTS	38.3	37.8		ng/L		99	67 - 127

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*94*		*25 - 150*
13C5 PFPeA	*87*		*25 - 150*
13C2 PFHxA	*87*		*25 - 150*
13C4-PFHpA	*81*		*25 - 150*
13C4 PFOA	*88*		*25 - 150*
13C5 PFNA	*88*		*25 - 150*
13C2 PFDA	*90*		*25 - 150*
13C2 PFUnA	*91*		*25 - 150*
13C2 PFDoA	*95*		*25 - 150*
13C2-PFTeDA	*98*		*25 - 150*
13C3-PFBS	*84*		*25 - 150*
18O2 PFHxS	*84*		*25 - 150*
13C4 PFOS	*87*		*25 - 150*
13C8 FOSA	*84*		*25 - 150*
d3-NMeFOSAA	*102*		*25 - 150*
d5-NEtFOSAA	*99*		*25 - 150*
M2-6:2FTS	*100*		*25 - 150*
M2-8:2FTS	*99*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE

Lab Sample ID: 320-41460-4 MS
Matrix: Water
Analysis Batch: 239440

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA
Prep Batch: 239187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
6:2 FTS - RE	3.4	J H	34.7	35.2	H	ng/L		92	66 - 126

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
M2-6:2FTS - RE	*116*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances - RE (Continued)

Lab Sample ID: 320-41460-4 MSD
Matrix: Water
Analysis Batch: 239440

Client Sample ID: GC-MW-109M (WG)
Prep Type: Total/NA
Prep Batch: 239187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
6:2 FTS - RE	3.4	J H	35.9	35.8	H	ng/L		90	66 - 126	2	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
M2-6:2FTS - RE	*117*		*25 - 150*

Qualifiers

LCMS

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

LCMS

Prep Batch: 238149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41460-1	GC-MW-107 (WG)	Total/NA	Water	3535	
320-41460-2	GC-MW-108 (WG)	Total/NA	Water	3535	
320-41460-3	GC-MW-109 (WG)	Total/NA	Water	3535	
320-41460-4	GC-MW-109M (WG)	Total/NA	Water	3535	
320-41460-5	GC-EQUIPMENT BLANK (072418)	Total/NA	Water	3535	
MB 320-238149/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-238149/2-A	Lab Control Sample	Total/NA	Water	3535	
320-41460-4 MS	GC-MW-109M (WG)	Total/NA	Water	3535	
320-41460-4 MSD	GC-MW-109M (WG)	Total/NA	Water	3535	

Analysis Batch: 238718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41460-1	GC-MW-107 (WG)	Total/NA	Water	537 (modified)	238149
320-41460-2	GC-MW-108 (WG)	Total/NA	Water	537 (modified)	238149
320-41460-3	GC-MW-109 (WG)	Total/NA	Water	537 (modified)	238149
320-41460-4	GC-MW-109M (WG)	Total/NA	Water	537 (modified)	238149
320-41460-5	GC-EQUIPMENT BLANK (072418)	Total/NA	Water	537 (modified)	238149
MB 320-238149/1-A	Method Blank	Total/NA	Water	537 (modified)	238149
LCS 320-238149/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	238149
320-41460-4 MS	GC-MW-109M (WG)	Total/NA	Water	537 (modified)	238149
320-41460-4 MSD	GC-MW-109M (WG)	Total/NA	Water	537 (modified)	238149

Prep Batch: 239187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41460-4 - RE	GC-MW-109M (WG)	Total/NA	Water	3535	
MB 320-239187/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-239187/2-A	Lab Control Sample	Total/NA	Water	3535	
320-41460-4 MS - RE	GC-MW-109M (WG)	Total/NA	Water	3535	
320-41460-4 MSD - RE	GC-MW-109M (WG)	Total/NA	Water	3535	

Analysis Batch: 239440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41460-4 - RE	GC-MW-109M (WG)	Total/NA	Water	537 (modified)	239187
MB 320-239187/1-A	Method Blank	Total/NA	Water	537 (modified)	239187
LCS 320-239187/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	239187
320-41460-4 MS - RE	GC-MW-109M (WG)	Total/NA	Water	537 (modified)	239187
320-41460-4 MSD - RE	GC-MW-109M (WG)	Total/NA	Water	537 (modified)	239187

Client Sample ID: GC-MW-107 (WG)

Lab Sample ID: 320-41460-1

Date Collected: 07/24/18 07:45

Matrix: Water

Date Received: 07/25/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			238149	08/06/18 10:25	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	238718	08/08/18 08:29	AAR	TAL SAC

Client Sample ID: GC-MW-108 (WG)

Lab Sample ID: 320-41460-2

Date Collected: 07/24/18 08:50

Matrix: Water

Date Received: 07/25/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			238149	08/06/18 10:25	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	238718	08/08/18 08:36	AAR	TAL SAC

Client Sample ID: GC-MW-109 (WG)

Lab Sample ID: 320-41460-3

Date Collected: 07/24/18 09:50

Matrix: Water

Date Received: 07/25/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			238149	08/06/18 10:25	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	238718	08/08/18 08:44	AAR	TAL SAC

Client Sample ID: GC-MW-109M (WG)

Lab Sample ID: 320-41460-4

Date Collected: 07/24/18 10:50

Matrix: Water

Date Received: 07/25/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		239187	08/10/18 09:01	SK	TAL SAC
Total/NA	Analysis	537 (modified)	RE	1	239440	08/12/18 16:22	JRB	TAL SAC
Total/NA	Prep	3535			238149	08/06/18 10:25	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	238718	08/08/18 08:51	AAR	TAL SAC

Client Sample ID: GC-EQUIPMENT BLANK (072418)

Lab Sample ID: 320-41460-5

Date Collected: 07/24/18 07:00

Matrix: Water

Date Received: 07/25/18 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			238149	08/06/18 10:25	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	238718	08/08/18 09:14	AAR	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41460-1

Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD ELAP		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	10-31-18
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	M262FTS #
GC-MW-109M (WG) RE	320-41460-4 RE	119
GC-MW-109M (WG) MS RE	320-41460-4 MS RE	116
GC-MW-109M (WG) MSD RE	320-41460-4 MSD RE	117

	QC LIMITS
M262FTS = M2-6:2FTS	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
GC-MW-107 (WG)	320-41460-1	86	85	80	91	92	83	103	99
GC-MW-108 (WG)	320-41460-2	83	84	82	85	88	82	116	95
GC-MW-109 (WG)	320-41460-3	82	84	82	88	89	80	111	96
GC-MW-109M (WG)	320-41460-4	88	84	81	88	87	80	114	97
GC-EQUIPMENT BLANK (072418)	320-41460-5	93	86	77	86	93	82	122	101
	MB 320-238149/1-A	95	85	75	92	93	83	108	102
	MB 320-239187/1-A	92	87	87	87	89	85	107	93
	LCS 320-238149/2-A	98	89	80	94	97	83	114	100
	LCS 320-239187/2-A	94	87	84	87	81	84	100	88
GC-MW-109M (WG) MS	320-41460-4 MS	85	88	82	87	94	85	112	98
GC-MW-109M (WG) MSD	320-41460-4 MSD	92	90	87	90	94	88	112	100

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5 PFPeA	25-150
PFBS = 13C3-PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4-PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFNA #	PFOS #	PFOSA #	M282FTS #	PFDA #	d3NMFOS #	d5NEFOS #	PFUnA #
GC-MW-107 (WG)	320-41460-1	103	89	79	110	105	113	115	94
GC-MW-108 (WG)	320-41460-2	104	88	88	103	102	119	123	95
GC-MW-109 (WG)	320-41460-3	103	83	82	106	99	123	110	100
GC-MW-109M (WG)	320-41460-4	102	81	83	104	95	109	103	88
GC-EQUIPMENT BLANK (072418)	320-41460-5	102	86	81	111	96	117	109	96
	MB 320-238149/1-A	97	85	77	96	102	120	113	90
	MB 320-239187/1-A	89	92	88	98	89	105	100	93
	LCS 320-238149/2-A	106	84	77	95	101	117	103	95
	LCS 320-239187/2-A	88	87	84	99	90	102	99	91
GC-MW-109M (WG) MS	320-41460-4 MS	103	85	81	103	101	114	109	99
GC-MW-109M (WG) MSD	320-41460-4 MSD	103	86	83	102	101	119	112	100

	QC LIMITS
PFNA = 13C5 PFNA	25-150
PFOS = 13C4 PFOS	25-150
PFOSA = 13C8 FOSA	25-150
M282FTS = M2-8:2FTS	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFDoA #	PFTDA #
GC-MW-107 (WG)	320-41460-1	97	112
GC-MW-108 (WG)	320-41460-2	100	122
GC-MW-109 (WG)	320-41460-3	97	117
GC-MW-109M (WG)	320-41460-4	95	99
GC-EQUIPMENT BLANK (072418)	320-41460-5	91	110
	MB 320-238149/1-A	99	113
	MB 320-239187/1-A	97	101
	LCS 320-238149/2-A	96	108
	LCS 320-239187/2-A	95	98
GC-MW-109M (WG) MS	320-41460-4 MS	103	124
GC-MW-109M (WG) MSD	320-41460-4 MSD	94	113

	QC LIMITS
PFDoA = 13C2 PFDoA	25-150
PFTDA = 13C2-PFTeDA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.08LLA_007.d

Lab ID: LCS 320-238149/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	41.7	104	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	40.3	101	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	38.9	97	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	43.1	108	66-126	
Perfluorooctanoic acid (PFOA)	40.0	41.9	105	64-124	
Perfluorononanoic acid (PFNA)	40.0	41.2	103	68-128	
Perfluorodecanoic acid (PFDA)	40.0	41.8	104	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	41.3	103	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	45.7	114	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	42.6	106	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	40.7	102	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	39.4	111	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.9	101	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	41.3	108	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	38.4	104	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	38.5	100	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	44.9	112	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	38.0	95	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	43.4	109	65-125	
6:2 FTS	37.9	53.6	141	66-126	*
8:2 FTS	38.3	40.4	105	67-127	
13C4 PFBA	100	98.0	98	25-150	
13C5 PFPeA	100	89.0	89	25-150	
13C2 PFHxA	100	93.5	94	25-150	
13C4-PFHpA	100	97.4	97	25-150	
13C4 PFOA	100	99.9	100	25-150	
13C5 PFNA	100	106	106	25-150	
13C2 PFDA	100	101	101	25-150	
13C2 PFUnA	100	95.3	95	25-150	
13C2 PFDoA	100	96.4	96	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.08LLA_007.d

Lab ID: LCS 320-238149/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
13C2-PFTeDA	100	108	108	25-150	
13C3-PFBS	93.0	74.1	80	25-150	
18O2 PFHxS	94.6	78.6	83	25-150	
13C4 PFOS	95.6	80.3	84	25-150	
13C8 FOSA	100	76.9	77	25-150	
d3-NMeFOSAA	100	117	117	25-150	
d5-NEtFOSAA	100	103	103	25-150	
M2-6:2FTS	95.0	108	114	25-150	
M2-8:2FTS	95.8	90.9	95	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.12LLA_034.d

Lab ID: LCS 320-239187/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	40.1	100	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	38.0	95	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	38.6	97	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	42.9	107	66-126	
Perfluorooctanoic acid (PFOA)	40.0	40.3	101	64-124	
Perfluorononanoic acid (PFNA)	40.0	40.2	100	68-128	
Perfluorodecanoic acid (PFDA)	40.0	40.0	100	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	31.1	78	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	38.1	95	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	44.1	110	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	41.9	105	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	37.2	105	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.4	100	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	40.5	106	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	40.0	108	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	40.4	105	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	42.5	106	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	40.6	102	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	37.4	93	65-125	
6:2 FTS	37.9	38.6	102	66-126	
8:2 FTS	38.3	37.8	99	67-127	
13C4 PFBA	100	94.1	94	25-150	
13C5 PFPeA	100	87.4	87	25-150	
13C2 PFHxA	100	86.8	87	25-150	
13C4-PFHpA	100	80.8	81	25-150	
13C4 PFOA	100	88.2	88	25-150	
13C5 PFNA	100	88.1	88	25-150	
13C2 PFDA	100	90.2	90	25-150	
13C2 PFUnA	100	90.7	91	25-150	
13C2 PFDoA	100	94.6	95	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.12LLA_034.d

Lab ID: LCS 320-239187/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
13C2-PFTeDA	100	97.7	98	25-150	
13C3-PFBS	93.0	78.1	84	25-150	
18O2 PFHxS	94.6	79.6	84	25-150	
13C4 PFOS	95.6	83.3	87	25-150	
13C8 FOSA	100	83.8	84	25-150	
d3-NMeFOSAA	100	102	102	25-150	
d5-NEtFOSAA	100	98.7	99	25-150	
M2-6:2FTS	95.0	95.2	100	25-150	
M2-8:2FTS	95.8	94.6	99	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.08LLA_013.d

Lab ID: 320-41460-4 MS Client ID: GC-MW-109M (WG) MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	36.9	9.2	46.2	100	70-130	
Perfluoropentanoic acid (PFPeA)	36.9	17	56.4	107	66-126	
Perfluorohexanoic acid (PFHxA)	36.9	14	52.8	104	66-126	
Perfluoroheptanoic acid (PFHpA)	36.9	10	46.3	97	66-126	
Perfluorooctanoic acid (PFOA)	37.0	30	69.6	106	64-124	
Perfluorononanoic acid (PFNA)	36.9	3.6	43.2	107	68-128	
Perfluorodecanoic acid (PFDA)	36.9	3.2	39.6	99	69-129	
Perfluoroundecanoic acid (PFUnA)	36.9	ND	37.3	101	60-120	
Perfluorododecanoic acid (PFDoA)	36.9	ND	38.9	105	71-131	
Perfluorotridecanoic Acid (PFTriA)	36.9	ND	38.1	103	72-132	
Perfluorotetradecanoic acid (PFTeA)	36.9	ND	33.7	91	68-128	
Perfluorobutanesulfonic acid (PFBS)	32.7	5.9	41.8	110	73-133	
Perfluorohexanesulfonic acid (PFHxS)	33.6	2.2	33.9	94	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	35.2	0.44 J	38.8	109	68-128	
Perfluorooctanesulfonic acid (PFOS)	34.3	14	49.2	104	67-127	
Perfluorodecanesulfonic acid (PFDS)	35.6	ND	35.0	98	68-128	
Perfluorooctane Sulfonamide (FOSA)	36.9	ND	41.1	111	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	36.9	ND	37.7	102	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	36.9	ND	40.0	108	65-125	
6:2 FTS	35.0	2.3 J	57.4	157	66-126	F1
8:2 FTS	35.4	ND	41.3	117	67-127	
13C4 PFBA	92.4	78	78.6	85	25-150	
13C5 PFPeA	92.4	75	80.9	88	25-150	
13C2 PFHxA	92.4	78	80.2	87	25-150	
13C4-PFHpA	92.4	77	87.1	94	25-150	
13C4 PFOA	92.4	85	90.5	98	25-150	
13C5 PFNA	92.4	90	94.9	103	25-150	
13C2 PFDA	92.4	84	93.6	101	25-150	
13C2 PFUnA	92.4	78	91.0	99	25-150	
13C2 PFDoA	92.4	84	95.0	103	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.08LLA_013.d

Lab ID: 320-41460-4 MS Client ID: GC-MW-109M (WG) MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
13C2-PFTeDA	92.4	87	114	124	25-150	
13C3-PFBS	85.9	67	70.3	82	25-150	
18O2 PFHxS	87.4	67	74.4	85	25-150	
13C4 PFOS	88.3	68	74.9	85	25-150	
13C8 FOSA	92.4	73	75.2	81	25-150	
d3-NMeFOSAA	92.4	97	105	114	25-150	
d5-NEtFOSAA	92.4	91	101	109	25-150	
M2-6:2FTS	87.7	95	98.2	112	25-150	
M2-8:2FTS	88.5	88	91.4	103	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.12LLA_044.d

Lab ID: 320-41460-4 MS RE Client ID: GC-MW-109M (WG) MS RE

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
6:2 FTS	34.7	3.4 J	35.2	92	66-126	H
M2-6:2FTS	86.9	110	100	116	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.08LLA_014.d

Lab ID: 320-41460-4 MSD Client ID: GC-MW-109M (WG) MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	37.0	46.9	102	2	30	70-130	
Perfluoropentanoic acid (PFPeA)	37.0	55.1	104	2	30	66-126	
Perfluorohexanoic acid (PFHxA)	37.0	50.5	98	4	30	66-126	
Perfluoroheptanoic acid (PFHpA)	37.0	48.6	103	5	30	66-126	
Perfluorooctanoic acid (PFOA)	37.0	67.9	102	3	30	64-124	
Perfluorononanoic acid (PFNA)	37.0	42.2	105	2	30	68-128	
Perfluorodecanoic acid (PFDA)	37.0	39.8	99	0	30	69-129	
Perfluoroundecanoic acid (PFUnA)	37.0	38.1	103	2	30	60-120	
Perfluorododecanoic acid (PFDoA)	37.0	39.7	107	2	30	71-131	
Perfluorotridecanoic Acid (PFTriA)	37.0	40.1	109	5	30	72-132	
Perfluorotetradecanoic acid (PFTeA)	37.0	35.6	96	5	30	68-128	
Perfluorobutanesulfonic acid (PFBS)	32.7	40.3	105	4	30	73-133	
Perfluorohexanesulfonic acid (PFHxS)	33.6	34.2	95	1	30	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	35.2	38.0	107	2	30	68-128	
Perfluorooctanesulfonic acid (PFOS)	34.3	48.9	103	1	30	67-127	
Perfluorodecanesulfonic acid (PFDS)	35.6	33.8	95	3	30	68-128	
Perfluorooctane Sulfonamide (FOSA)	37.0	39.8	108	3	30	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	37.0	35.7	97	5	30	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	37.0	40.0	108	0	30	65-125	
6:2 FTS	35.0	74.5	206	26	30	66-126	F1
8:2 FTS	35.4	36.1	102	13	30	67-127	
13C4 PFBA	92.4	84.8	92			25-150	
13C5 PFPeA	92.4	82.7	90			25-150	
13C2 PFHxA	92.4	83.5	90			25-150	
13C4-PFHpA	92.4	86.7	94			25-150	
13C4 PFOA	92.4	92.3	100			25-150	
13C5 PFNA	92.4	95.4	103			25-150	
13C2 PFDA	92.4	93.1	101			25-150	
13C2 PFUnA	92.4	92.1	100			25-150	
13C2 PFDoA	92.4	86.7	94			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.08LLA_014.d

Lab ID: 320-41460-4 MSD Client ID: GC-MW-109M (WG) MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
13C2-PFTeDA	92.4	104	113			25-150	
13C3-PFBS	86.0	74.5	87			25-150	
18O2 PFHxS	87.4	77.0	88			25-150	
13C4 PFOS	88.4	75.7	86			25-150	
13C8 FOSA	92.4	76.5	83			25-150	
d3-NMeFOSAA	92.4	110	119			25-150	
d5-NEtFOSAA	92.4	104	112			25-150	
M2-6:2FTS	87.8	98.7	112			25-150	
M2-8:2FTS	88.5	90.4	102			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.12LLA_045.d

Lab ID: 320-41460-4 MSD RE Client ID: GC-MW-109M (WG) MSD RE

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
6:2 FTS	35.9	35.8	90	2	30	66-126	H
M2-6:2FTS	89.9	106	117			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab File ID: 2018.08.08LLA_006.d Lab Sample ID: MB 320-238149/1-A

Matrix: Water Date Extracted: 08/06/2018 10:24

Instrument ID: A9 Date Analyzed: 08/08/2018 08:06

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-238149/2-A	2018.08.08LLA_007.d	08/08/2018 08:14
GC-MW-107 (WG)	320-41460-1	2018.08.08LLA_009.d	08/08/2018 08:29
GC-MW-108 (WG)	320-41460-2	2018.08.08LLA_010.d	08/08/2018 08:36
GC-MW-109 (WG)	320-41460-3	2018.08.08LLA_011.d	08/08/2018 08:44
GC-MW-109M (WG)	320-41460-4	2018.08.08LLA_012.d	08/08/2018 08:51
GC-MW-109M (WG) MS	320-41460-4 MS	2018.08.08LLA_013.d	08/08/2018 08:59
GC-MW-109M (WG) MSD	320-41460-4 MSD	2018.08.08LLA_014.d	08/08/2018 09:06
GC-EQUIPMENT BLANK (072418)	320-41460-5	2018.08.08LLA_015.d	08/08/2018 09:14

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab File ID: 2018.08.12LLA_033.d Lab Sample ID: MB 320-239187/1-A

Matrix: Water Date Extracted: 08/10/2018 09:01

Instrument ID: A8_N Date Analyzed: 08/12/2018 15:12

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-239187/2-A	2018.08.12LLA_034.d	08/12/2018 15:20
GC-MW-109M (WG) RE	320-41460-4 RE	2018.08.12LLA_042.d	08/12/2018 16:22
GC-MW-109M (WG) MS RE	320-41460-4 MS RE	2018.08.12LLA_044.d	08/12/2018 16:38
GC-MW-109M (WG) MSD RE	320-41460-4 MSD RE	2018.08.12LLA_045.d	08/12/2018 16:46

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Sample No.: IC 320-238192/5 Date Analyzed: 08/06/2018 11:33

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.08.06LLICAL_00 Heated Purge: (Y/N) N

Calibration ID: 40492

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		3997336	2.57				
UPPER LIMIT		5996004	2.77				
LOWER LIMIT		1998668	2.37				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-238192/9		4092642	2.57				
ICV 320-238192/10		3797956	2.57				
CCV 320-239433/3 CCVIS		3461869	2.65				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Sample No.: CCV 320-239433/3 Date Analyzed: 08/12/2018 11:40

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.08.12LLA_006.d Heated Purge: (Y/N) N

Calibration ID: 40492

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		3461869	2.65				
UPPER LIMIT		5192804	2.85				
LOWER LIMIT		1730935	2.45				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-239433/1		4233225	2.67				
CCVL 320-239433/2		3798304	2.66				
CCV 320-239440/1		3096286	2.65				
MB 320-239187/1-A		4462003	2.64				
LCS 320-239187/2-A		4699572	2.65				
320-41460-4 RE	GC-MW-109M (WG) RE	4330333	2.65				
CCV 320-239440/12		3712018	2.64				
320-41460-4 MS RE	GC-MW-109M (WG) MS RE	4434155	2.64				
320-41460-4 MSD RE	GC-MW-109M (WG) MSD RE	4213268	2.64				
CCV 320-239440/22		3169537	2.65				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Sample No.: IC 320-237920/5 Date Analyzed: 08/03/2018 16:34

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm)

Lab File ID (Standard): 2018.08.03LLICAL_00 Heated Purge: (Y/N) N

Calibration ID: 40485

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		5673875	2.75				
UPPER LIMIT		8510813	2.95				
LOWER LIMIT		2836938	2.55				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-237920/9		5600406	2.75				
ICV 320-237920/10		5483729	2.75				
CCV 320-238708/3 CCVIS		7430110	2.74				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Sample No.: CCV 320-238708/3 Date Analyzed: 08/08/2018 06:21

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm)

Lab File ID (Standard): 2018.08.07_LLB_030. Heated Purge: (Y/N) N

Calibration ID: 40485

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		7430110	2.74				
UPPER LIMIT		11145165	2.94				
LOWER LIMIT		3715055	2.54				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-238708/1		6405473	2.74				
CCVL 320-238708/2		7733449	2.74				
CCV 320-238718/1		6474993	2.77				
MB 320-238149/1-A		8526067	2.78				
LCS 320-238149/2-A		7005134	2.78				
320-41460-1	GC-MW-107 (WG)	6999720	2.80				
320-41460-2	GC-MW-108 (WG)	8437523	2.78				
320-41460-3	GC-MW-109 (WG)	8384701	2.80				
320-41460-4	GC-MW-109M (WG)	7267192	2.78				
320-41460-4 MS	GC-MW-109M (WG) MS	8122306	2.81				
320-41460-4 MSD	GC-MW-109M (WG) MSD	6974783	2.82				
320-41460-5	GC-EQUIPMENT BLANK (072418)	8670081	2.80				
CCV 320-238718/12		6140146	2.81				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-107 (WG) | Lab Sample ID: 320-41460-1

Matrix: Water | Lab File ID: 2018.08.08LLA_009.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 07:45

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 268.7(mL) | Date Analyzed: 08/08/2018 08:29

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.2		1.9	0.33
2706-90-3	Perfluoropentanoic acid (PFPeA)	17		1.9	0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	13		1.9	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.2		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	29		1.9	0.79
375-95-1	Perfluorononanoic acid (PFNA)	2.5		1.9	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	1.9		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.86	J	1.9	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.7		1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.3	B	1.9	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.56	J	1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14		1.9	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.33
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		19	2.9
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8
27619-97-2	6:2 FTS	5.5	J B *	19	1.9
39108-34-4	8:2 FTS	ND		19	1.9

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-107 (WG) | Lab Sample ID: 320-41460-1

Matrix: Water | Lab File ID: 2018.08.08LLA_009.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 07:45

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 268.7(mL) | Date Analyzed: 08/08/2018 08:29

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	86		25-150
STL01893	13C5 PFPeA	85		25-150
STL00993	13C2 PFHxA	91		25-150
STL01892	13C4-PFHpA	92		25-150
STL00990	13C4 PFOA	99		25-150
STL00995	13C5 PFNA	103		25-150
STL00996	13C2 PFDA	105		25-150
STL00997	13C2 PFUnA	94		25-150
STL00998	13C2 PFDoA	97		25-150
STL02116	13C2-PFTeDA	112		25-150
STL02337	13C3-PFBS	80		25-150
STL00994	18O2 PFHxS	83		25-150
STL00991	13C4 PFOS	89		25-150
STL01056	13C8 FOSA	79		25-150
STL02118	d3-NMeFOSAA	113		25-150
STL02117	d5-NEtFOSAA	115		25-150
STL02279	M2-6:2FTS	103		25-150
STL02280	M2-8:2FTS	110		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_009.d
Lims ID: 320-41460-A-1-A
Client ID: GC-MW-107 (WG)
Sample Type: Client
Inject. Date: 08-Aug-2018 08:29:17 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-a-1-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 15:08:07 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 13:35:48

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.517	1.516	0.001	0.542	6712257	2.15		85.8	1875	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.523	1.523	0.0	1.004	149904	0.0601			5.9	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.797	1.805	-0.008	0.642	5966013	2.13		85.4	4631	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.797	1.805	-0.008	1.000	1143745	0.4698			18.0	M
D 47 13C3-PFBS										
301.90 > 83.00	1.831	1.838	-0.007	0.654	80544	1.86		80.0	192	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.839	1.847	-0.008	1.005	643402	0.1798			18.0	
298.90 > 99.00	1.839	1.847	-0.008	1.005	205604		3.13(1.35-4.05)		44.8	
D 7 13C2 PFHxA										
315.00 > 270.00	2.089	2.098	-0.009	0.746	6616670	2.28		91.2	6328	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.089	2.098	-0.009	1.000	860063	0.3474			32.7	
313.00 > 119.00	2.089	2.098	-0.009	1.000	67222		12.79(6.96-20.87)		62.1	
D 9 13C4-PFHpA										
367.00 > 322.00	2.426	2.439	-0.013	0.867	7603621	2.31		92.3	11735	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.426	2.439	-0.013	1.000	697351	0.2208			20.5	
363.00 > 169.00	2.426	2.439	-0.013	1.000	156336		4.46(2.17-6.52)		248	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.439	2.452	-0.013	1.000	162782	0.0621			49.7	
399.00 > 99.00	2.439	2.452	-0.013	1.000	45772		3.56(1.90-5.70)		21.3	
D 11 18O2 PFHxS										
403.00 > 84.00	2.439	2.465	-0.026	0.872	4848378	1.95		82.6	10615	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.767	2.782	-0.015	0.989	786208	2.45		103	575	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.767	2.782	-0.015	1.000	105478	0.1491			191	
D 14 13C4 PFOA										
417.00 > 372.00	2.799	2.814	-0.015	1.000	6859201	2.48		99.3	14682	
* 62 13C2-PFOA										
415.00 > 370.00	2.799	2.814	-0.015		6999720	2.50			8569	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.799	2.814	-0.015	1.000	2369812	0.7884			135	
413.00 > 169.00	2.799	2.814	-0.015	1.000	841333		2.82(1.36-4.08)		1069	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.814	2.814	0.0	0.887	35200	0.0151			11.9	
449.00 > 99.00	2.799	2.814	-0.015	0.882	8525		4.13(1.84-5.53)		15.9	
D 18 13C4 PFOS										
503.00 > 80.00	3.173	3.190	-0.017	1.134	5497210	2.13		89.1	2310	
D 19 13C5 PFNA										
468.00 > 423.00	3.173	3.190	-0.017	1.134	6084244	2.57		103	13233	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.173	3.190	-0.017	1.000	171382	0.0668			20.7	M
463.00 > 169.00	3.173	3.190	-0.017	1.000	31542		5.43(2.68-8.03)		71.5	M
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.173	3.190	-0.017	1.000	954130	0.3868			182	
499.00 > 99.00	3.173	3.190	-0.017	1.000	176112		5.42(2.04-6.12)		271	
D 21 13C8 FOSA										
506.00 > 78.00	3.514	3.527	-0.013	1.256	3054110	1.98		79.2	5144	
D 26 M2-8:2FTS										
529.00 > 81.00	3.514	3.542	-0.028	1.256	97880	2.63		110	458	
D 23 13C2 PFDA										
515.00 > 470.00	3.529	3.542	-0.013	1.261	6224571	2.62		105	10888	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.514	3.542	-0.028	1.000	12719	0.003390			30.4	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.529	3.556	-0.027	1.000	159535	0.0521			25.3	R
513.00 > 169.00	3.529	3.556	-0.027	1.000	7190		22.19(7.12-21.35)		16.6	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.685	3.697	-0.012	1.317	1301052	2.82		113	3648	
D 30 13C2 PFUnA										
565.00 > 520.00	3.857	3.870	-0.013	1.378	4507542	2.35		94.0	6815	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.841	3.870	-0.029	1.373	1089326	2.87		115	1724	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.841	3.870	-0.029	1.000	4346	0.0111			11.0	
D 36 13C2 PFDoA										
615.00 > 570.00	4.142	4.176	-0.034	1.480	5016266	2.43		97.1	4321	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.160	4.176	-0.016	1.004	19669	0.0100			2.5	
613.00 > 169.00	4.142	4.176	-0.034	1.000	2832		6.95(4.68-14.05)		8.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.406	4.435	-0.029	1.064	34253	0.0227			7.9	
663.00 > 169.00	4.406	4.435	-0.029	1.064	6298		5.44(3.09-9.27)		25.3	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.645	4.676	-0.031	1.660	3682582	2.79		112	9227	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.645	4.676	-0.031	1.000	5459	0.0230			22.1	
713.00 > 219.00	4.645	4.676	-0.031	1.000	3452		1.58(0.70-2.09)		14.6	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 08-Aug-2018 15:08:13 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_009.d

Injection Date: 08-Aug-2018 08:29:17 Instrument ID: A9

Lims ID: 320-41460-A-1-A Lab Sample ID: 320-41460-1

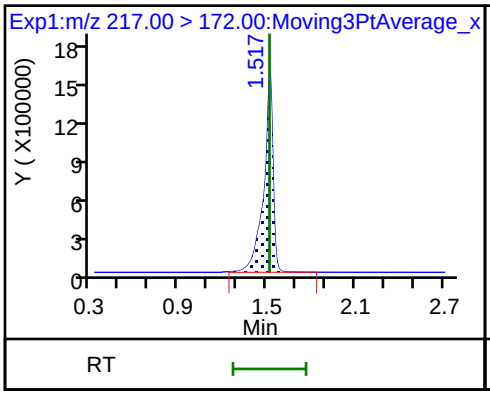
Client ID: GC-MW-107 (WG)

Operator ID: A9\Administrator ALS Bottle#: 4 Worklist Smp#: 5

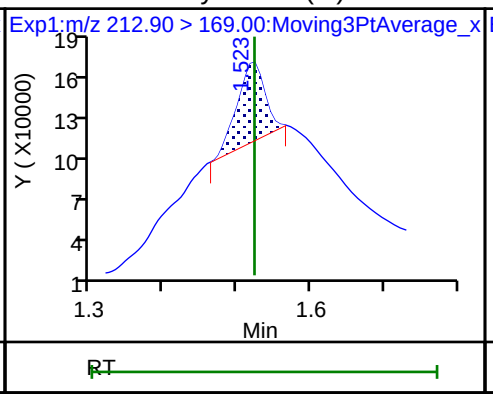
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

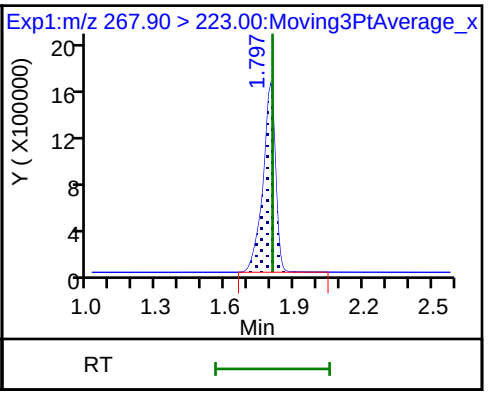
D 1 13C4 PFBA



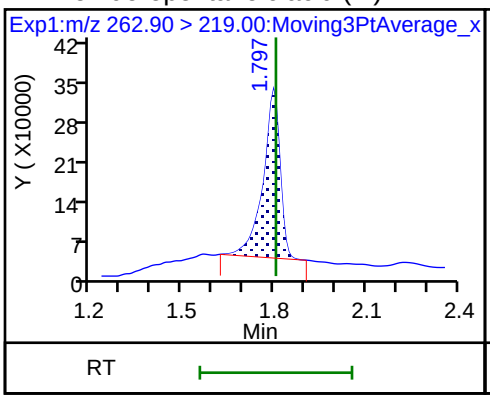
2 Perfluorobutyric acid (M)



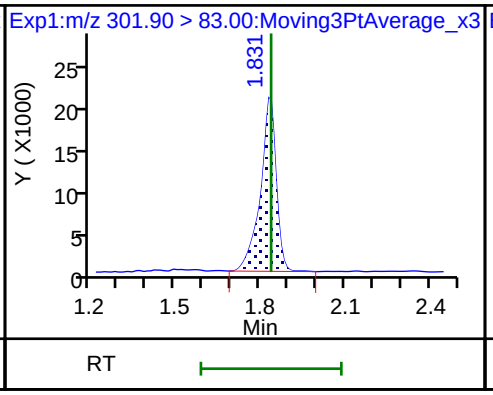
D 3 13C5-PFPeA



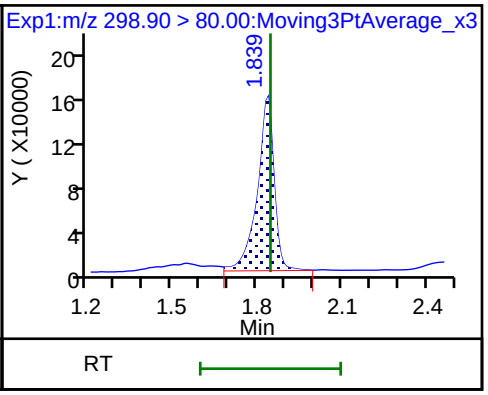
4 Perfluoropentanoic acid (M)



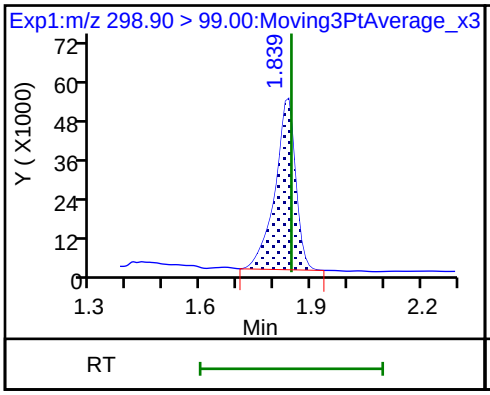
D 47 13C3-PFBS



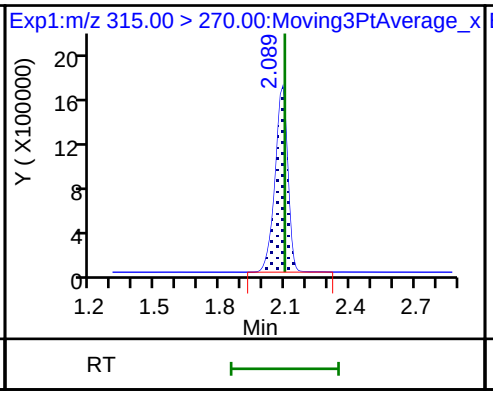
5 Perfluorobutanesulfonic acid



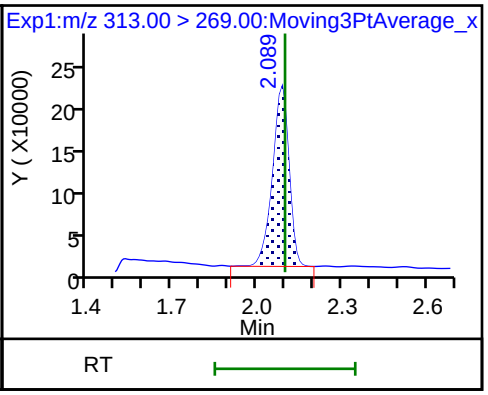
5 Perfluorobutanesulfonic acid



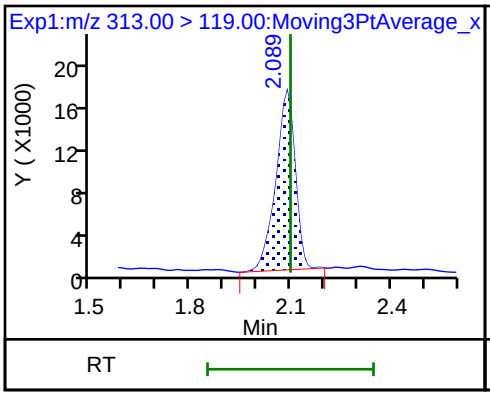
D 7 13C2 PFHxA



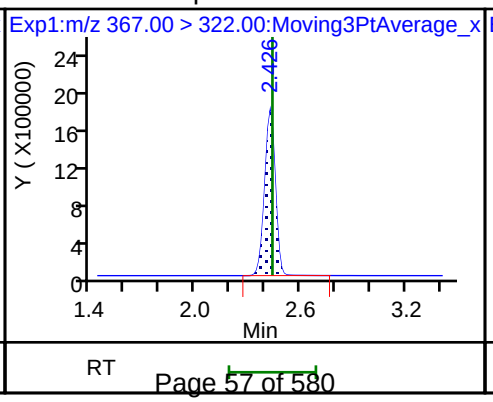
6 Perfluorohexanoic acid



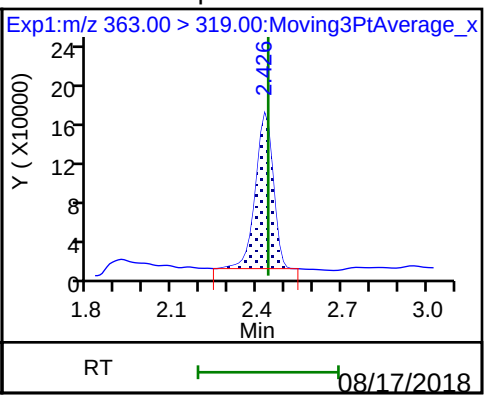
6 Perfluorohexanoic acid



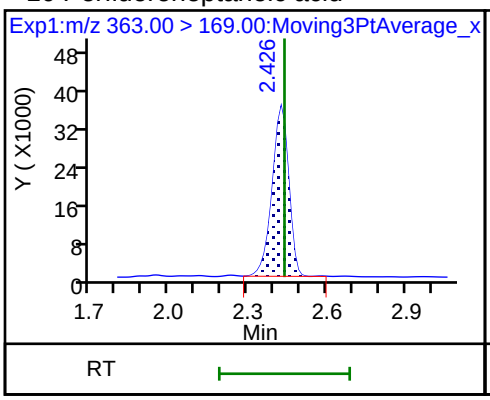
D 9 13C4-PFHpA



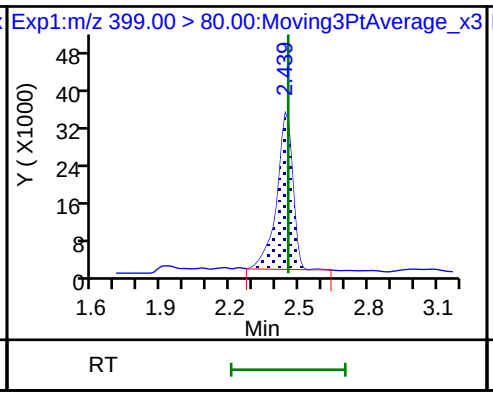
10 Perfluoroheptanoic acid



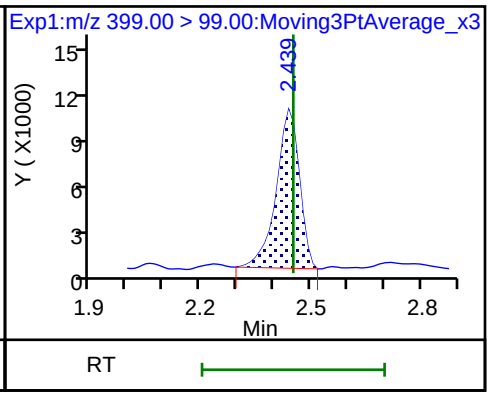
10 Perfluoroheptanoic acid



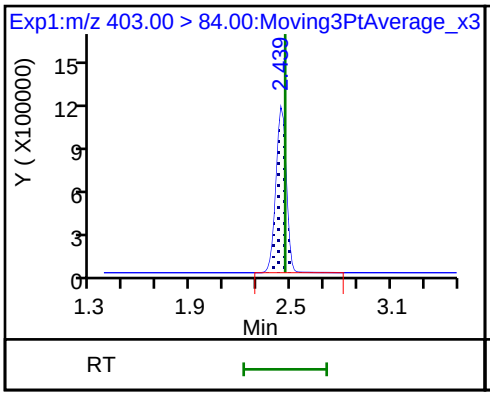
8 Perfluorohexanesulfonic acid



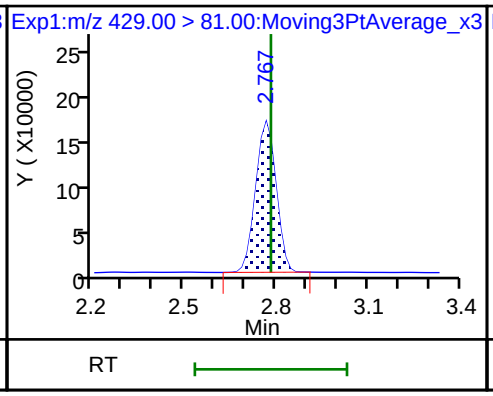
8 Perfluorohexanesulfonic acid



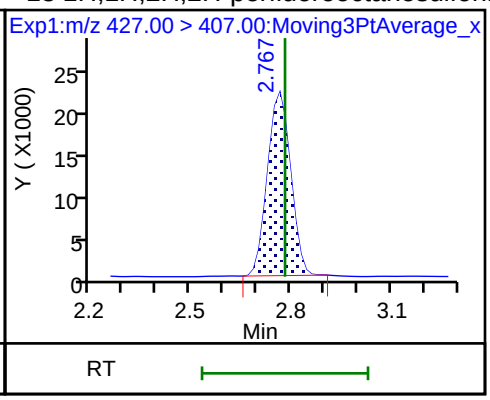
D 11 18O2 PFHxS



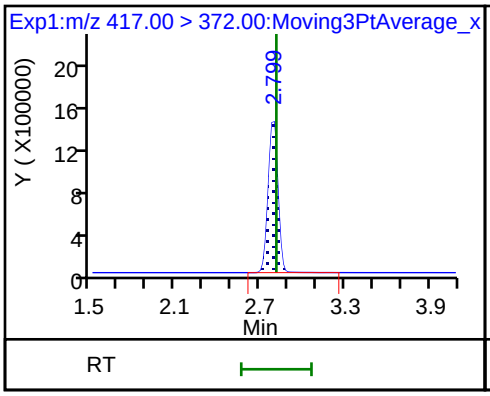
D 12 M2-6:2FTS



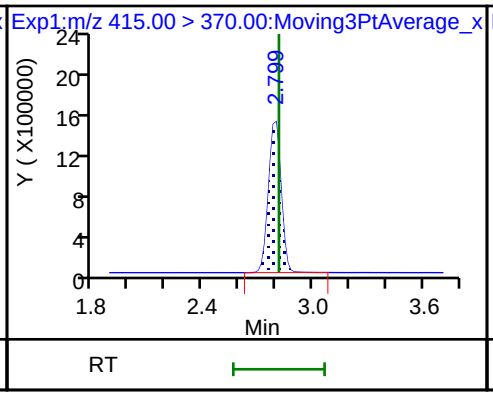
13 1H,1H,2H,2H-perfluorooctanesulfoni



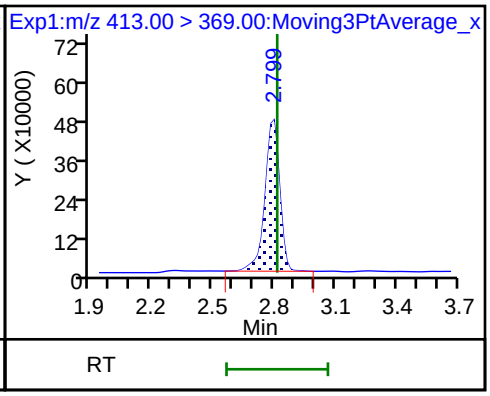
D 14 13C4 PFOA



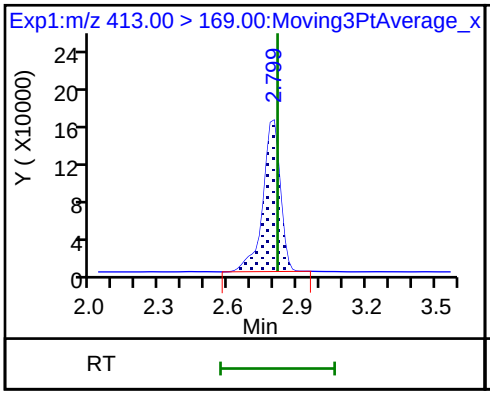
* 62 13C2-PFOA



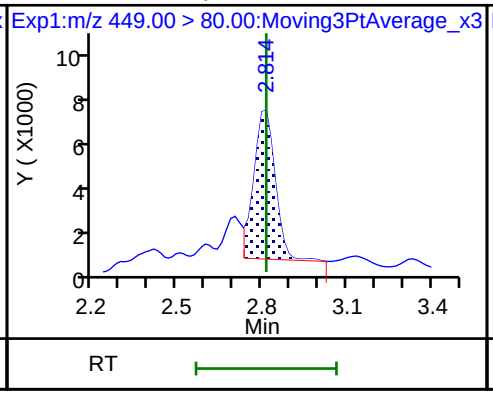
15 Perfluorooctanoic acid



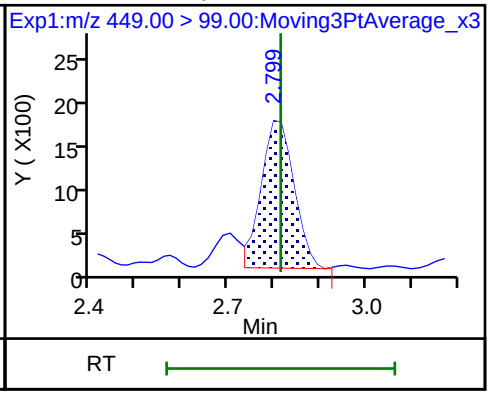
15 Perfluorooctanoic acid



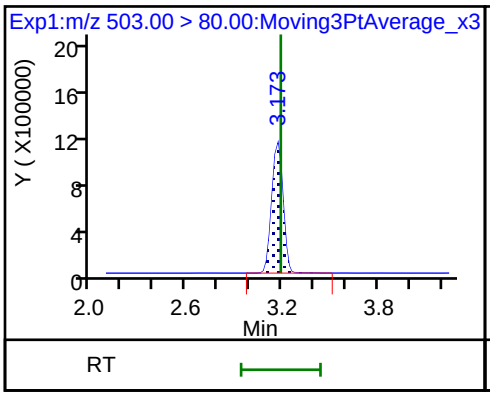
16 Perfluoroheptanesulfonic acid



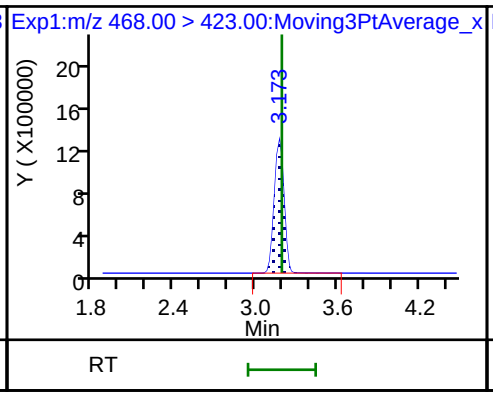
16 Perfluoroheptanesulfonic acid



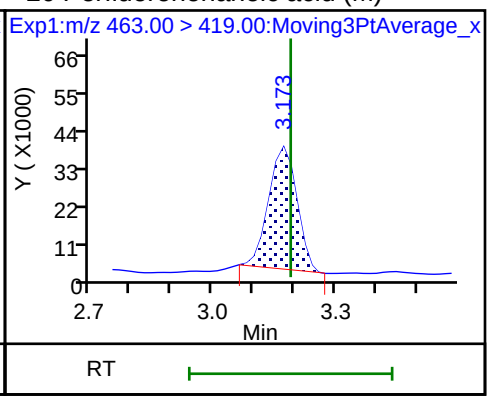
D 18 13C4 PFOS



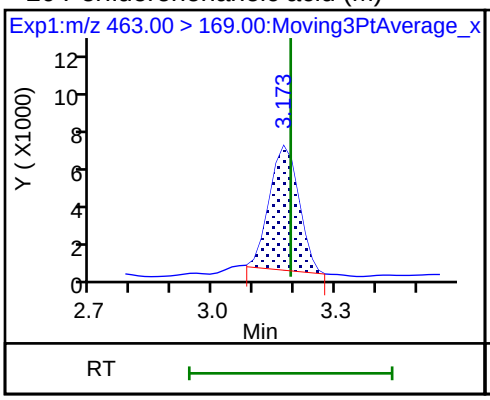
D 19 13C5 PFNA



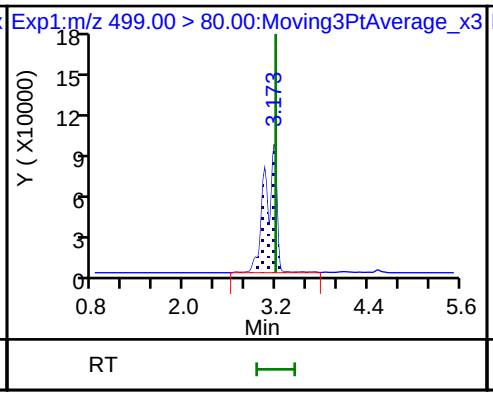
20 Perfluorononanoic acid (M)



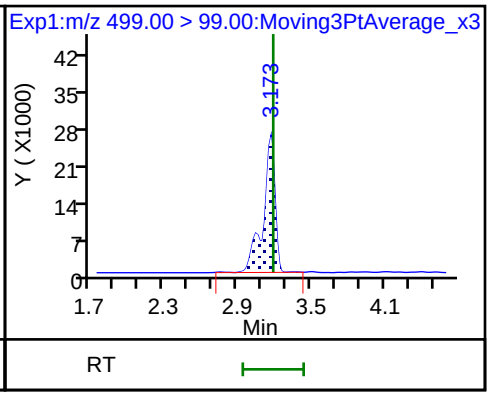
20 Perfluorononanoic acid (M)



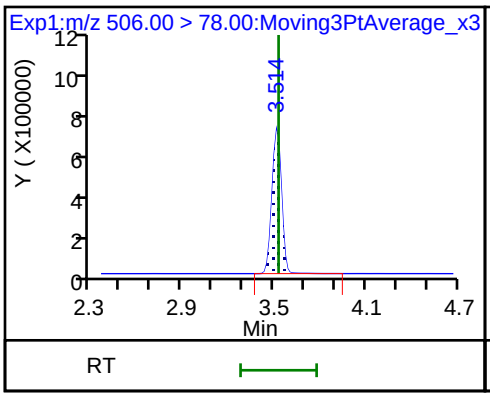
17 Perfluorooctane sulfonic acid



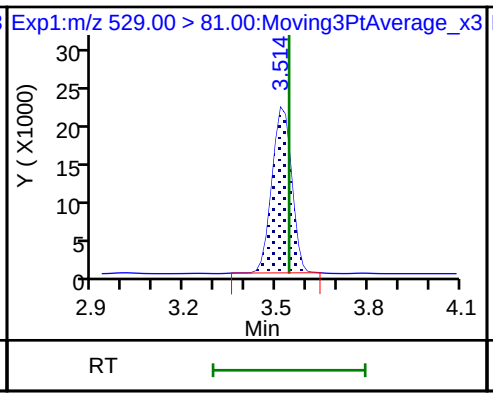
17 Perfluorooctane sulfonic acid



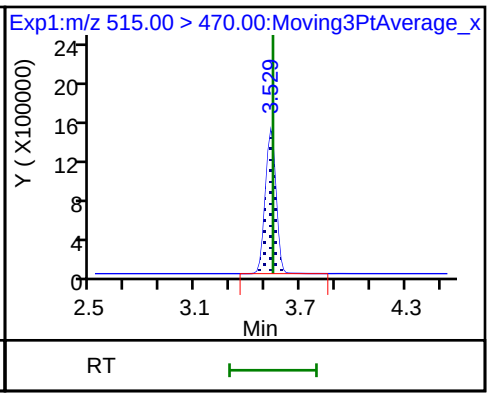
D 21 13C8 FOSA



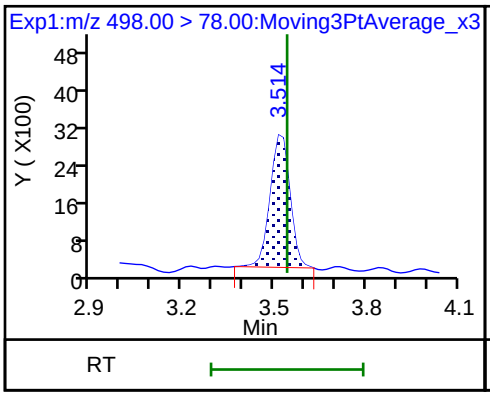
D 26 M2-8:2FTS



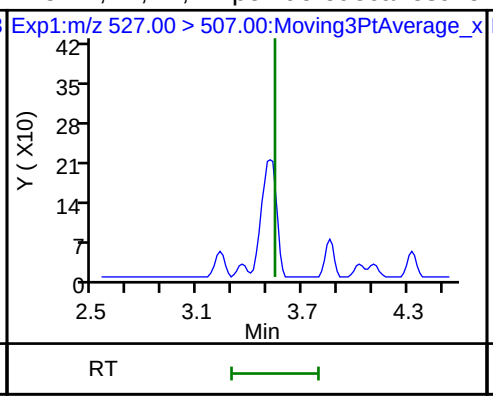
D 23 13C2 PFDA



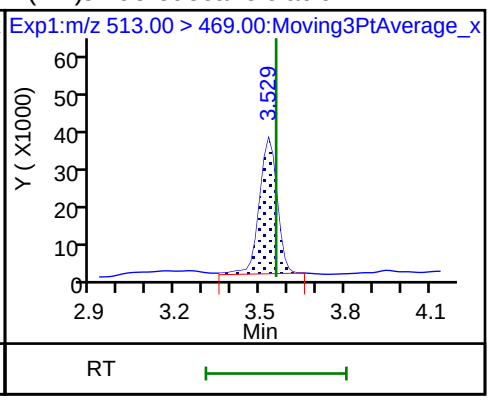
22 Perfluorooctane Sulfonamide



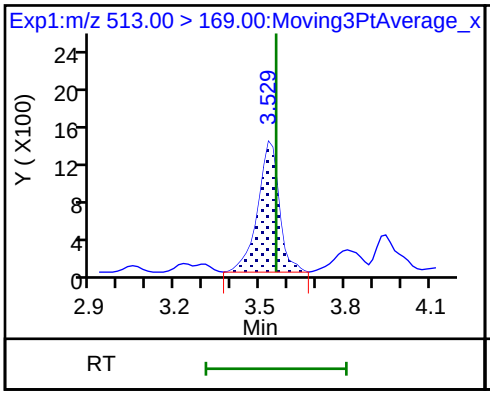
25 1H,1H,2H,2H-perfluorodecanesulfoni



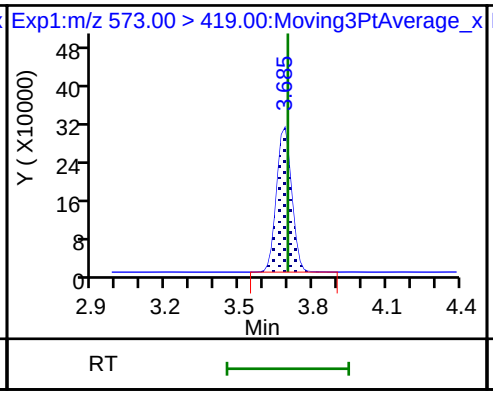
(24D) erfluorodecanoic acid



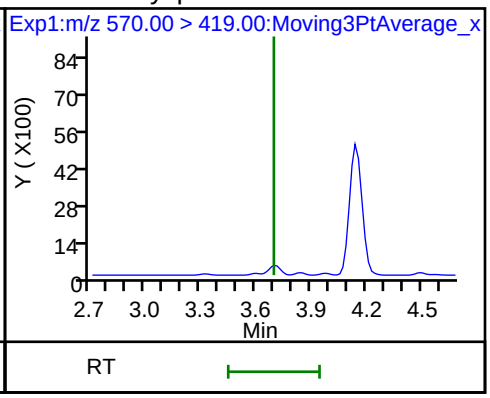
24 Perfluorodecanoic acid



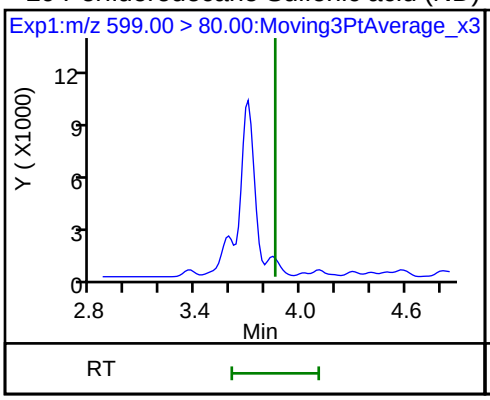
D 27 d3-NMeFOSAA



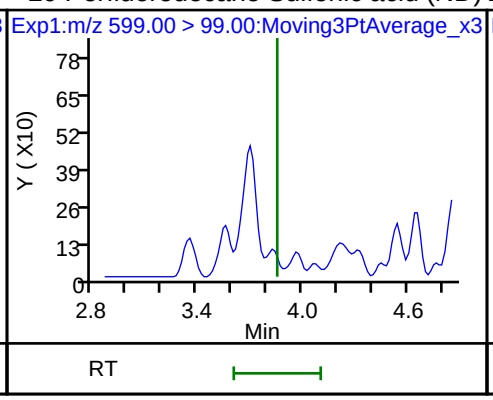
28 N-methyl perfluorooctane sulfonami (ND)



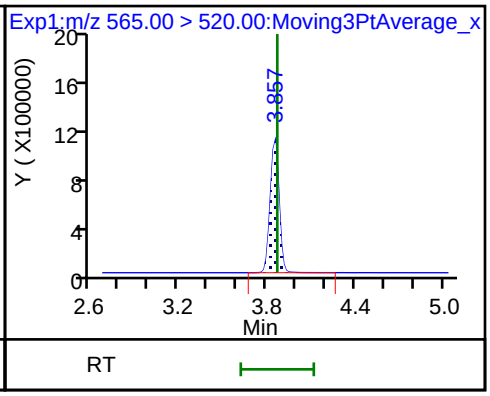
29 Perfluorodecane Sulfonic acid (ND)



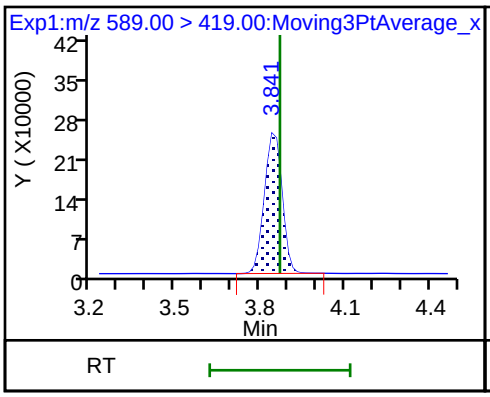
29 Perfluorodecane Sulfonic acid (ND)



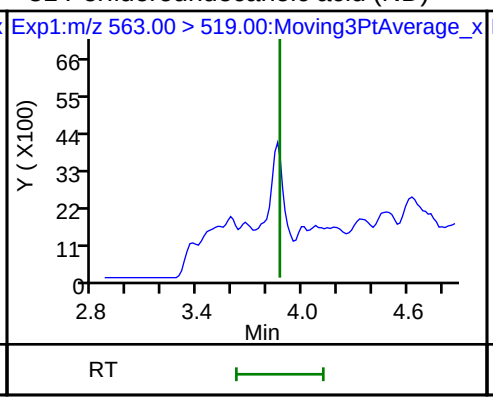
D 30 13C2 PFUnA



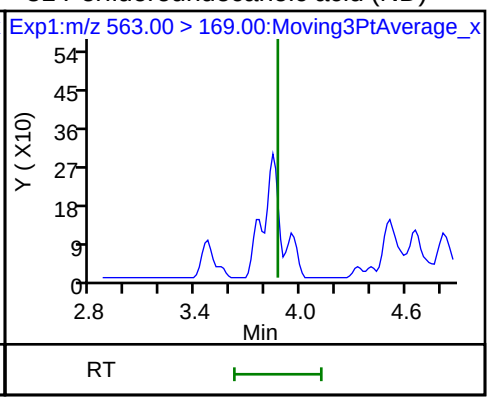
D 32 d5-NEtFOSAA



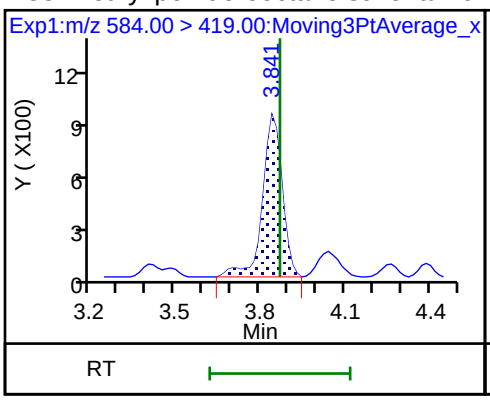
31 Perfluoroundecanoic acid (ND)



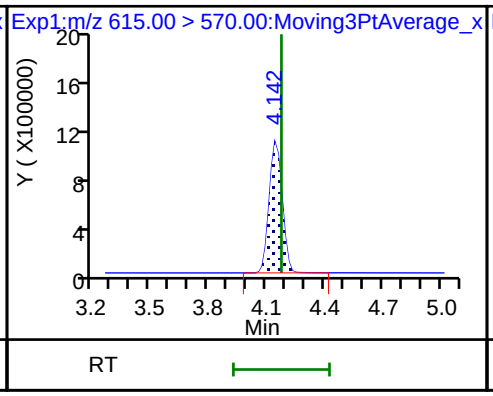
31 Perfluoroundecanoic acid (ND)



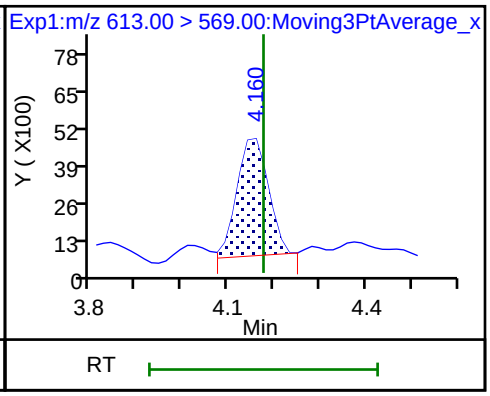
33 N-ethyl perfluorooctane sulfonamid



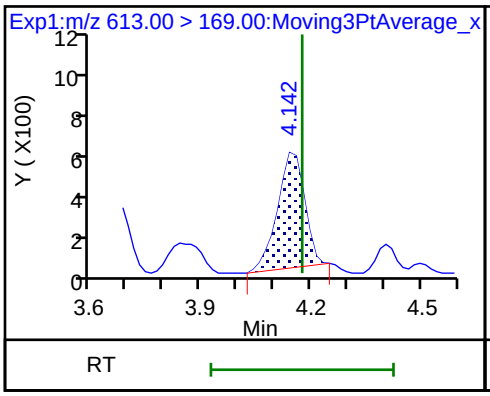
D 36 13C2 PFDoA



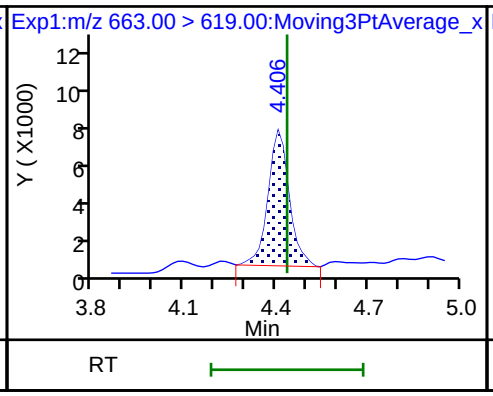
37 Perfluorododecanoic acid



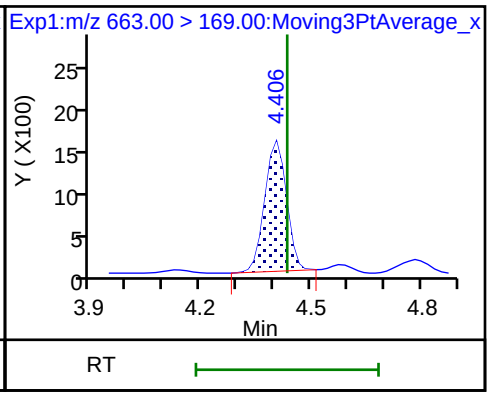
37 Perfluorododecanoic acid



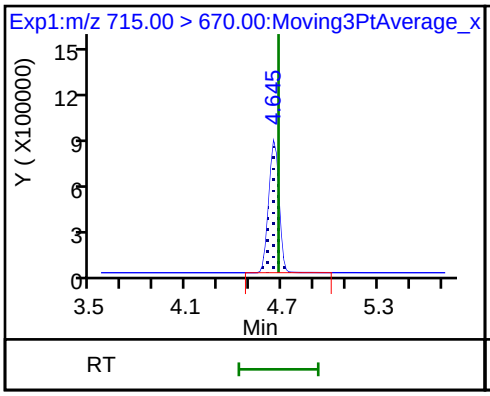
41 Perfluorotridecanoic acid



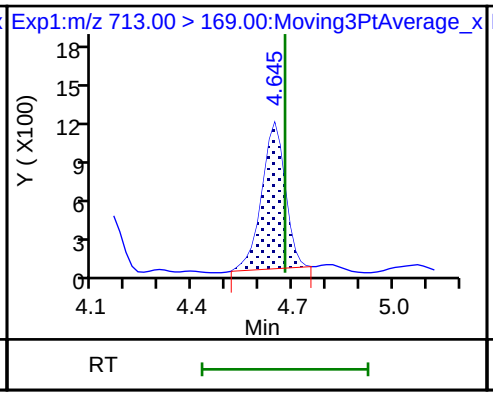
41 Perfluorotridecanoic acid



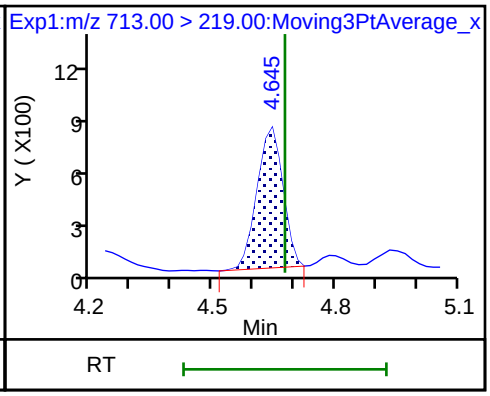
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

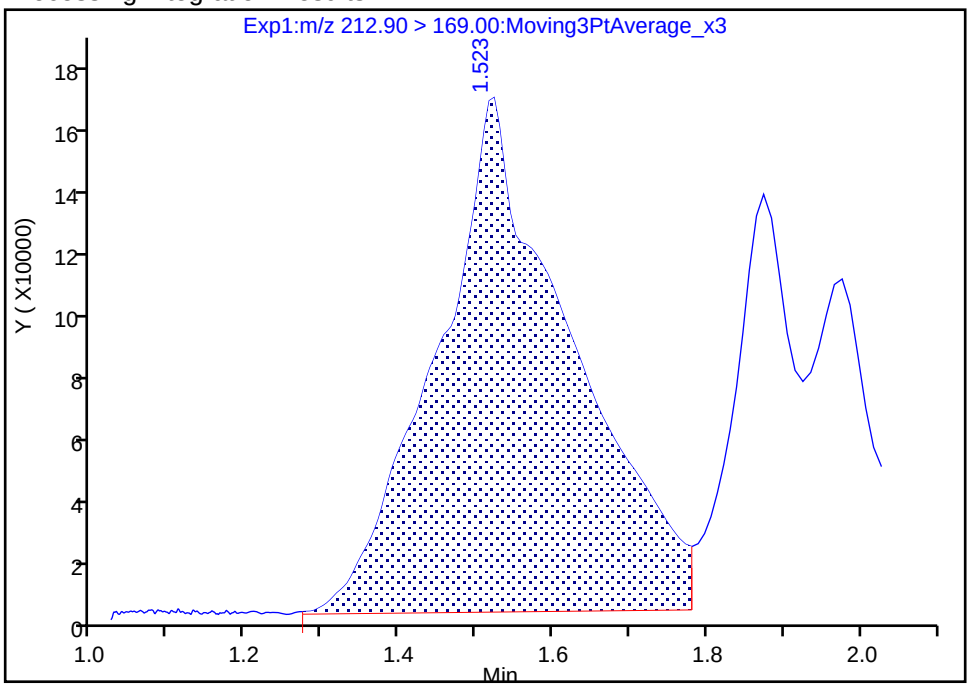
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_009.d				
Injection Date:	08-Aug-2018 08:29:17	Instrument ID:	A9		
Lims ID:	320-41460-A-1-A	Lab Sample ID:	320-41460-1		
Client ID:	GC-MW-107 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

Processing Integration Results

RT: 1.52
Area: 1936914
Amount: 0.776292
Amount Units: ng/ml



Manual Integration Results

RT: 1.52
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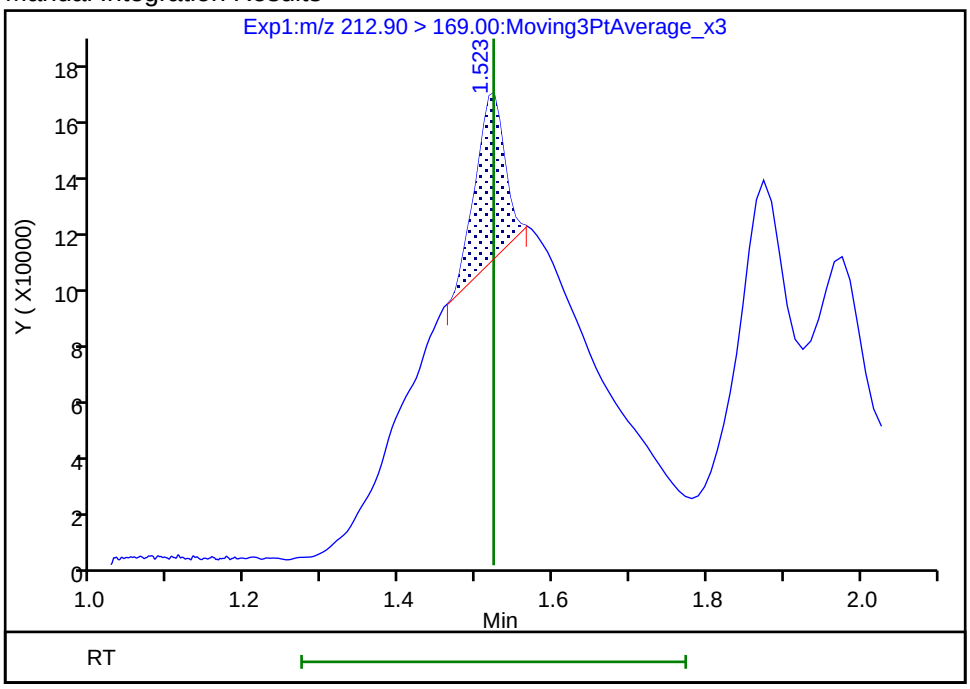
Amount: 0.060080
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 13:34:18

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

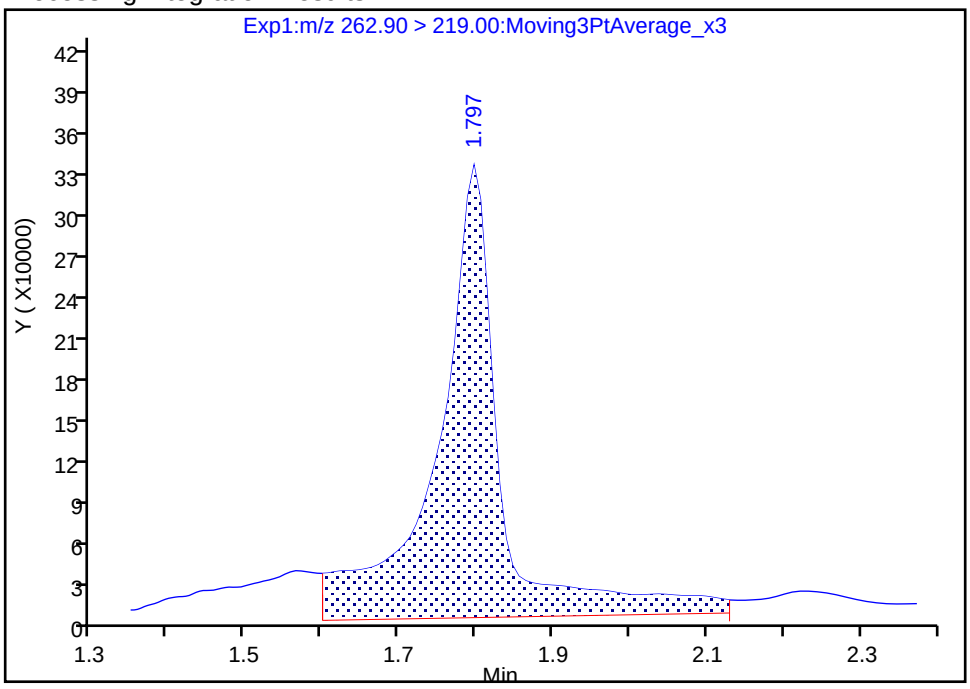
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_009.d				
Injection Date:	08-Aug-2018 08:29:17	Instrument ID:	A9		
Lims ID:	320-41460-A-1-A	Lab Sample ID:	320-41460-1		
Client ID:	GC-MW-107 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

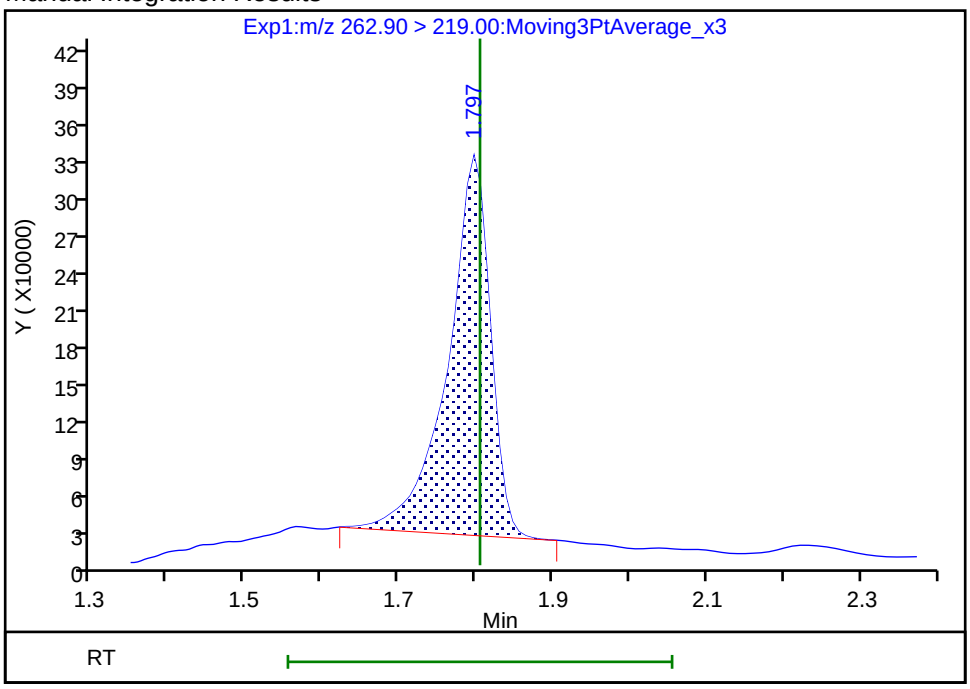
Processing Integration Results

RT: 1.80
Area: 1875396
Amount: 0.770324
Amount Units: ng/ml



Manual Integration Results

RT: 1.80
Area: 1143745
Amount: 0.469796
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 13:33:49

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

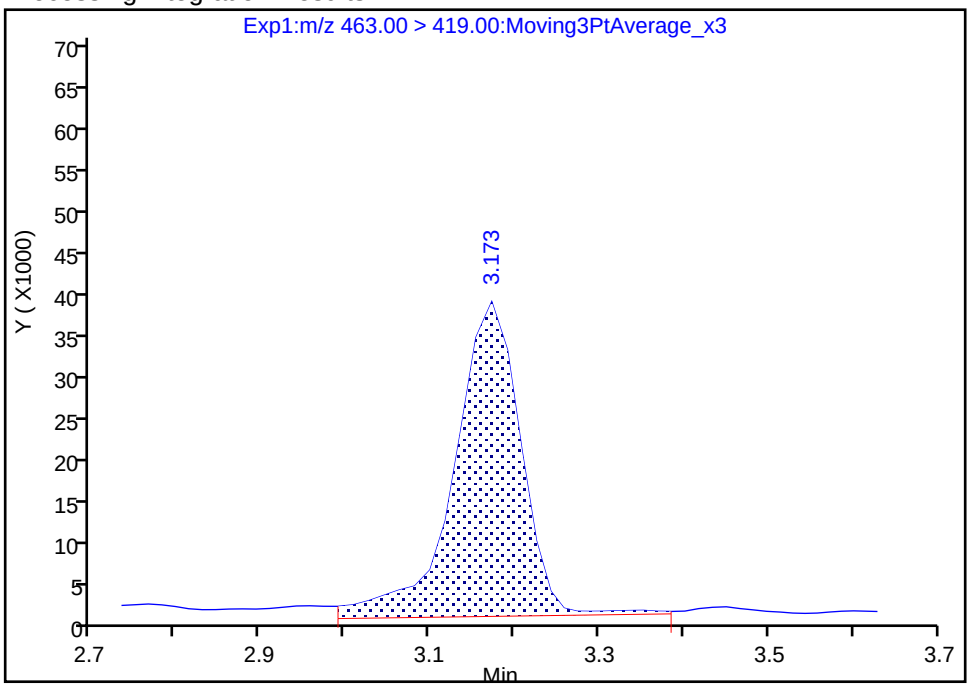
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_009.d				
Injection Date:	08-Aug-2018 08:29:17	Instrument ID:	A9		
Lims ID:	320-41460-A-1-A	Lab Sample ID:	320-41460-1		
Client ID:	GC-MW-107 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

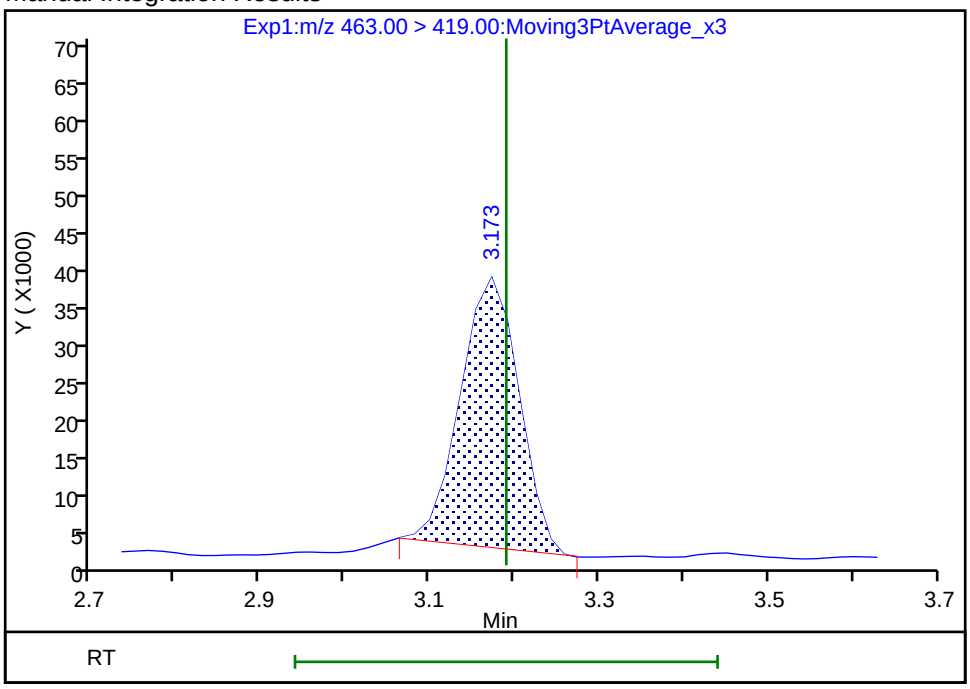
Processing Integration Results

RT: 3.17
Area: 208076
Amount: 0.081061
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 171382
Amount: 0.066766
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 13:35:24

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

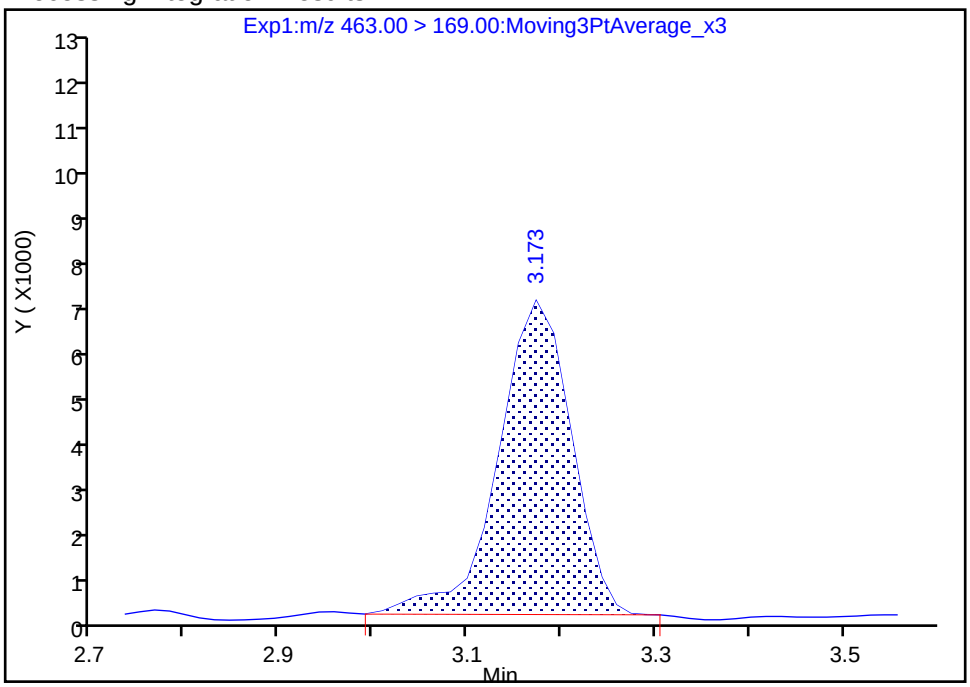
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_009.d				
Injection Date:	08-Aug-2018 08:29:17	Instrument ID:	A9		
Lims ID:	320-41460-A-1-A	Lab Sample ID:	320-41460-1		
Client ID:	GC-MW-107 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

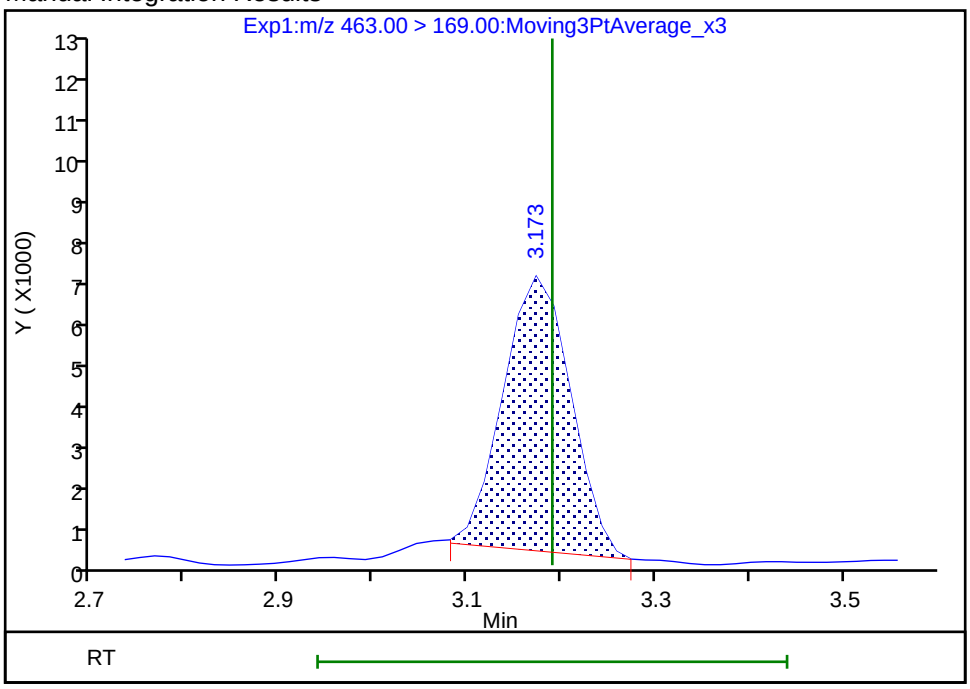
Processing Integration Results

RT: 3.17
Area: 35300
Amount: 0.081061
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 31542
Amount: 0.066766
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 13:35:30
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-108 (WG) | Lab Sample ID: 320-41460-2

Matrix: Water | Lab File ID: 2018.08.08LLA_010.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 08:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 270.7(mL) | Date Analyzed: 08/08/2018 08:36

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.0		1.8	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	16		1.8	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	13		1.8	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.2		1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	24		1.8	0.79
375-95-1	Perfluorononanoic acid (PFNA)	2.3		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	1.7	J	1.8	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.51
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.35	J	1.8	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.5		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.2	B	1.8	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.55	J	1.8	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14		1.8	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.30
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.9
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.8
27619-97-2	6:2 FTS	2.7	J B *	18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-108 (WG) | Lab Sample ID: 320-41460-2

Matrix: Water | Lab File ID: 2018.08.08LLA_010.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 08:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 270.7(mL) | Date Analyzed: 08/08/2018 08:36

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	83		25-150
STL01893	13C5 PFPeA	84		25-150
STL00993	13C2 PFHxA	85		25-150
STL01892	13C4-PFHpA	88		25-150
STL00990	13C4 PFOA	95		25-150
STL00995	13C5 PFNA	104		25-150
STL00996	13C2 PFDA	102		25-150
STL00997	13C2 PFUnA	95		25-150
STL00998	13C2 PFDoA	100		25-150
STL02116	13C2-PFTeDA	122		25-150
STL02337	13C3-PFBS	82		25-150
STL00994	18O2 PFHxS	82		25-150
STL00991	13C4 PFOS	88		25-150
STL01056	13C8 FOSA	88		25-150
STL02118	d3-NMeFOSAA	119		25-150
STL02117	d5-NEtFOSAA	123		25-150
STL02279	M2-6:2FTS	116		25-150
STL02280	M2-8:2FTS	103		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_010.d
Lims ID: 320-41460-A-2-A
Client ID: GC-MW-108 (WG)
Sample Type: Client
Inject. Date: 08-Aug-2018 08:36:47 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-a-2-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 15:08:07 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 14:56:43

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.511	1.516	-0.006	0.543	7799603	2.07		82.8	1899	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.511	1.523	-0.013	1.000	546420	0.1885			19.1	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.789	1.805	-0.016	0.643	7061850	2.10		83.8	7995	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.789	1.805	-0.016	1.000	1244072	0.4317			28.8	
D 47 13C3-PFBS										
301.90 > 83.00	1.830	1.838	-0.008	0.658	99976	1.92		82.4	241	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.830	1.847	-0.017	1.000	662418	0.1491			40.1	M
298.90 > 99.00	1.830	1.847	-0.017	1.000	229834		2.88(1.35-4.05)		45.3	
D 7 13C2 PFHxA										
315.00 > 270.00	2.078	2.098	-0.020	0.747	7469120	2.13		85.4	8842	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.078	2.098	-0.020	1.000	1018318	0.3644			36.2	
313.00 > 119.00	2.078	2.098	-0.020	1.000	74497		13.67(6.96-20.87)		59.6	
D 9 13C4-PFHpA										
367.00 > 322.00	2.426	2.439	-0.013	0.872	8715123	2.19		87.7	6934	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.426	2.439	-0.013	1.000	805084	0.2224			28.3	
363.00 > 169.00	2.426	2.439	-0.013	1.000	172235		4.67(2.17-6.52)		233	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.439	2.452	-0.013	1.000	185655	0.0589			37.0	
399.00 > 99.00	2.439	2.452	-0.013	1.000	48217		3.85(1.90-5.70)		14.6	
D 11 18O2 PFHxS										
403.00 > 84.00	2.439	2.465	-0.026	0.877	5832020	1.95		82.4	9573	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.767	2.782	-0.015	0.994	1061090	2.75		116	605	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.767	2.782	-0.015	1.000	69718	0.0730			150	
D 14 13C4 PFOA										
417.00 > 372.00	2.782	2.814	-0.032	1.000	7919774	2.38		95.1	8091	
* 62 13C2-PFOA										
415.00 > 370.00	2.782	2.814	-0.032		8437523	2.50			9552	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.782	2.814	-0.032	1.000	2273106	0.6549			126	
413.00 > 169.00	2.782	2.814	-0.032	1.000	811724		2.80(1.36-4.08)		849	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.798	2.814	-0.016	0.882	41070	0.0148			9.8	
449.00 > 99.00	2.798	2.814	-0.016	0.882	9120		4.50(1.84-5.53)		14.8	
D 18 13C4 PFOS										
503.00 > 80.00	3.173	3.190	-0.017	1.140	6566093	2.11		88.3	2015	
D 19 13C5 PFNA										
468.00 > 423.00	3.173	3.190	-0.017	1.140	7426027	2.60		104	10443	
20 Perfluorononanoic acid										
463.00 > 419.00	3.173	3.190	-0.017	1.000	193091	0.0616			23.6	
463.00 > 169.00	3.173	3.190	-0.017	1.000	33428		5.78(2.68-8.03)		50.9	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.173	3.190	-0.017	1.000	1155796	0.3923			207	
499.00 > 99.00	3.173	3.190	-0.017	1.000	196283		5.89(2.04-6.12)		399	
D 21 13C8 FOSA										
506.00 > 78.00	3.514	3.527	-0.013	1.263	4084666	2.20		87.8	4809	
D 26 M2-8:2FTS										
529.00 > 81.00	3.514	3.542	-0.028	1.263	110952	2.47		103	494	
D 23 13C2 PFDA										
515.00 > 470.00	3.529	3.542	-0.013	1.268	7269096	2.54		102	8414	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.514	3.542	-0.028	1.000	9849	0.001963			22.3	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.529	3.556	-0.027	1.000	164021	0.0459			26.2	
513.00 > 169.00	3.529	3.556	-0.027	1.000	10724		15.29(7.12-21.35)		21.9	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.684	3.697	-0.013	1.324	1658463	2.98		119	5730	
D 30 13C2 PFUnA										
565.00 > 520.00	3.856	3.870	-0.014	1.386	5488622	2.37		95.0	3547	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.841	3.870	-0.029	1.380	1406516	3.08		123	2643	
D 36 13C2 PFDoA										
615.00 > 570.00	4.141	4.176	-0.035	1.488	6200249	2.49		99.5	8194	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.645	4.676	-0.031	1.669	4865971	3.06		122	11170	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.645	4.676	-0.031	1.000	2929	0.009342			15.2	M
713.00 > 219.00	4.645	4.676	-0.031	1.000	2598		1.13(0.70-2.09)		10.3	M

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 08-Aug-2018 15:08:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_010.d

Injection Date: 08-Aug-2018 08:36:47 Instrument ID: A9

Lims ID: 320-41460-A-2-A Lab Sample ID: 320-41460-2

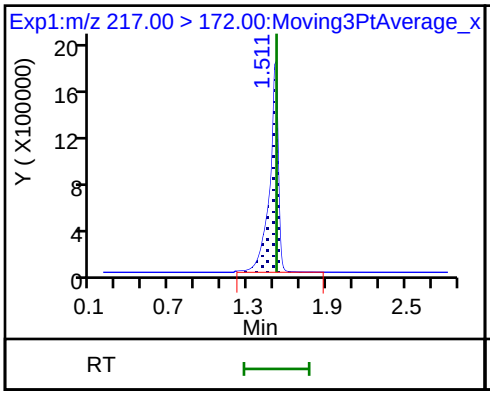
Client ID: GC-MW-108 (WG)

Operator ID: A9\Administrator ALS Bottle#: 5 Worklist Smp#: 6

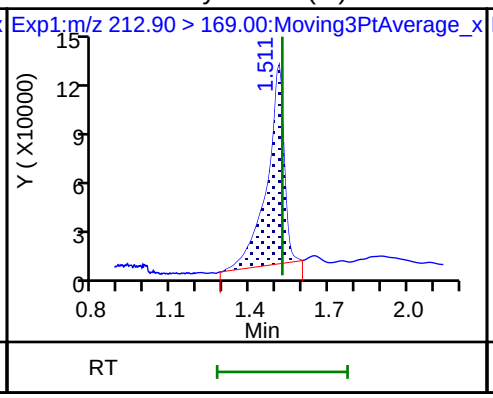
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

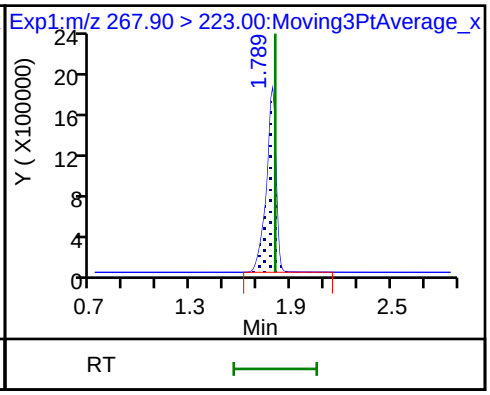
D 1 13C4 PFBA



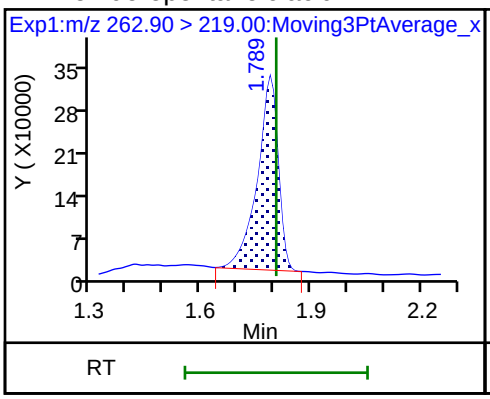
2 Perfluorobutyric acid (M)



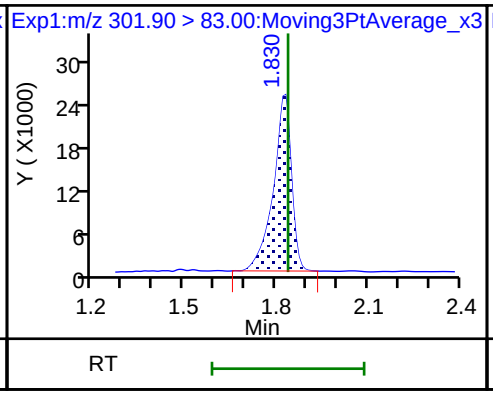
D 3 13C5-PFPeA



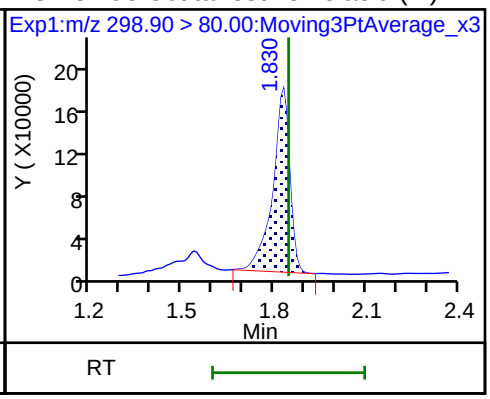
4 Perfluoropentanoic acid



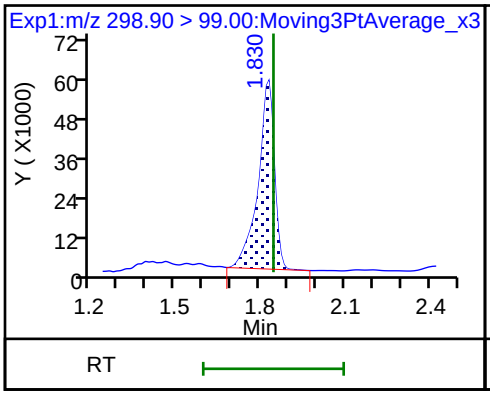
D 47 13C3-PFBS



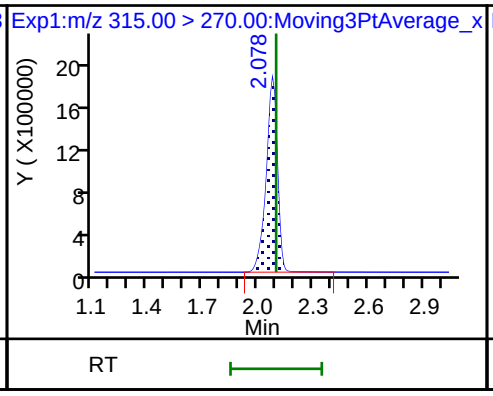
5 Perfluorobutanesulfonic acid (M)



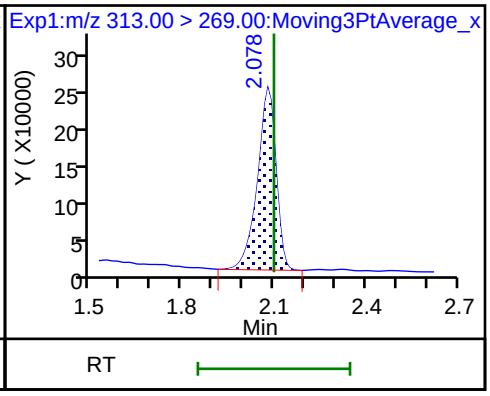
5 Perfluorobutanesulfonic acid



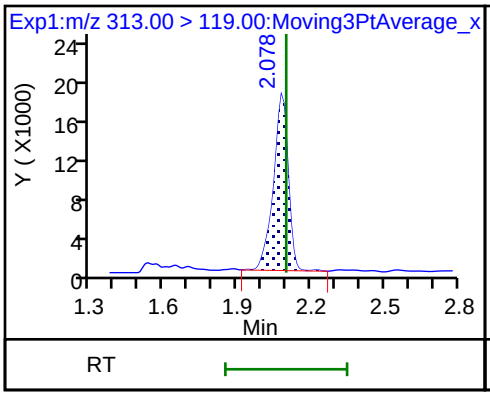
D 7 13C2 PFHxA



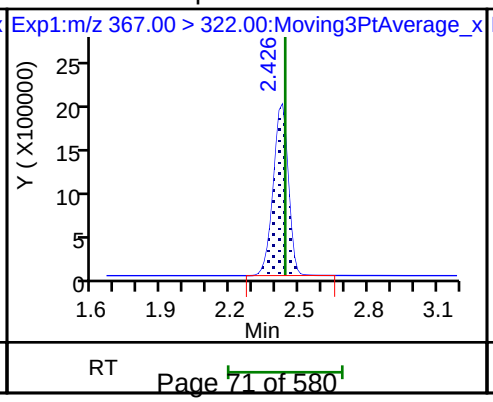
6 Perfluorohexanoic acid



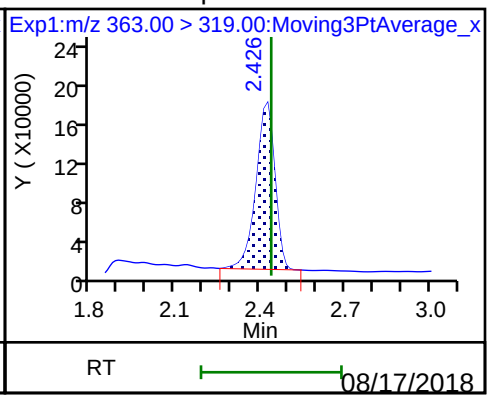
6 Perfluorohexanoic acid



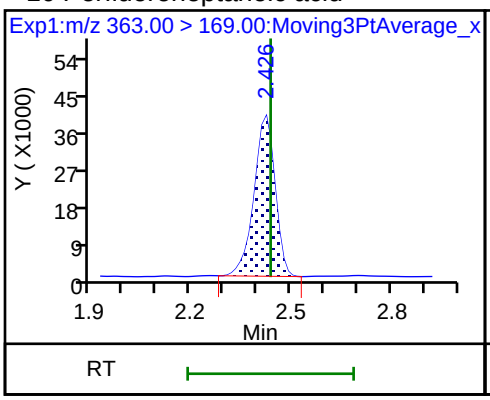
D 9 13C4-PFHpA



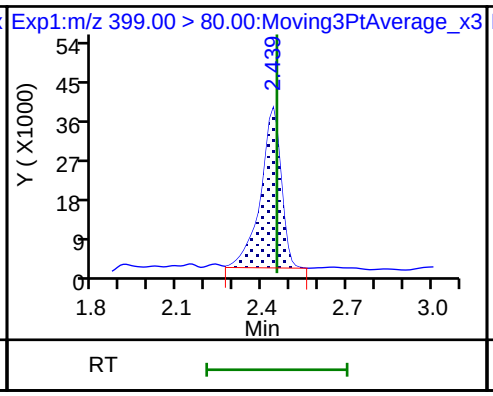
10 Perfluoroheptanoic acid



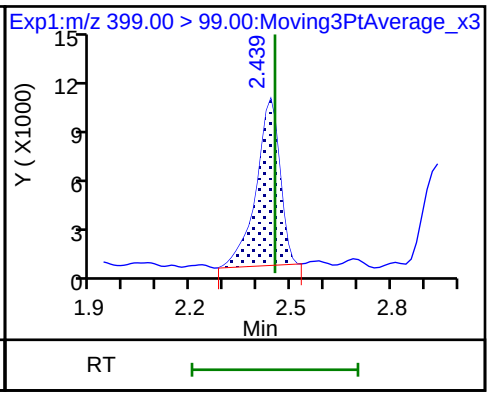
10 Perfluoroheptanoic acid



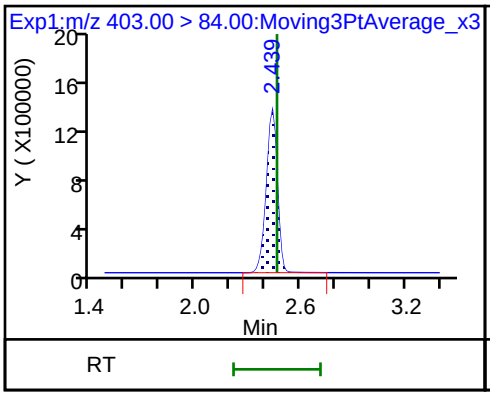
8 Perfluorohexanesulfonic acid



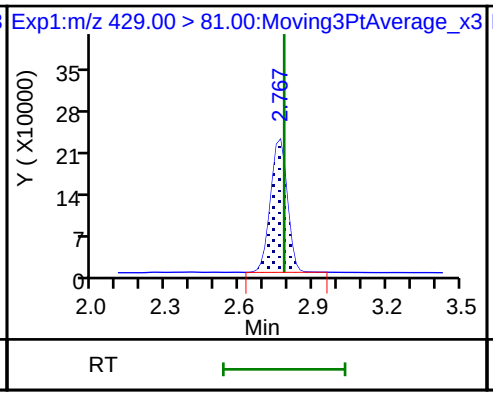
8 Perfluorohexanesulfonic acid



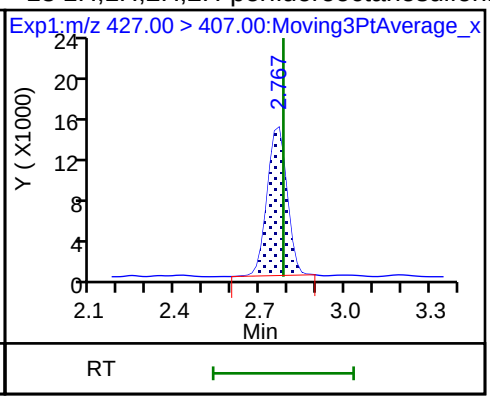
D 11 18O2 PFHxS



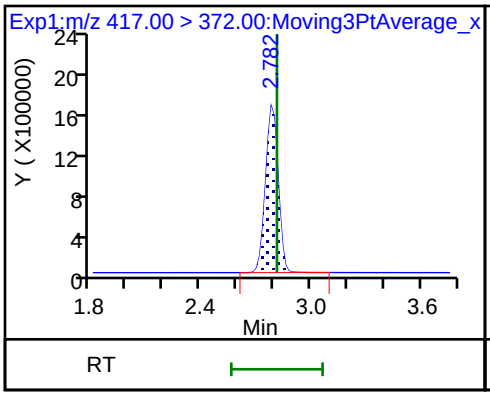
D 12 M2-6:2FTS



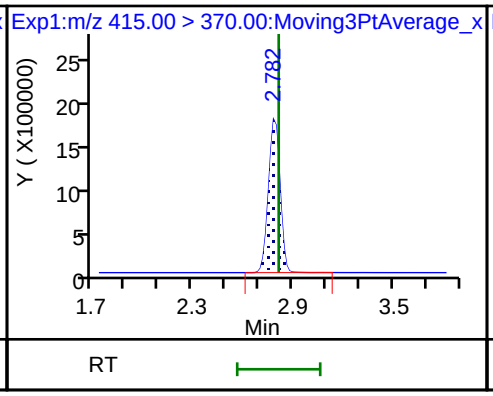
13 1H,1H,2H,2H-perfluorooctanesulfoni



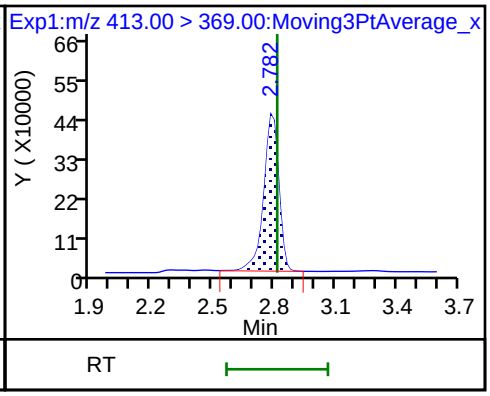
D 14 13C4 PFOA



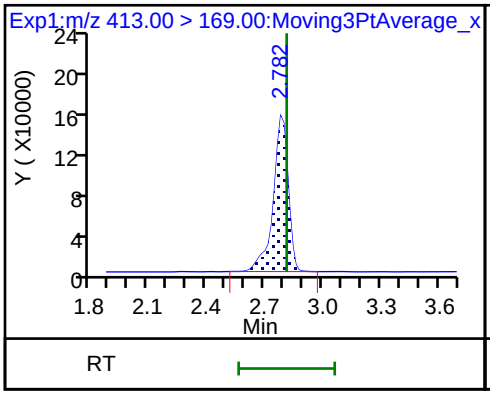
* 62 13C2-PFOA



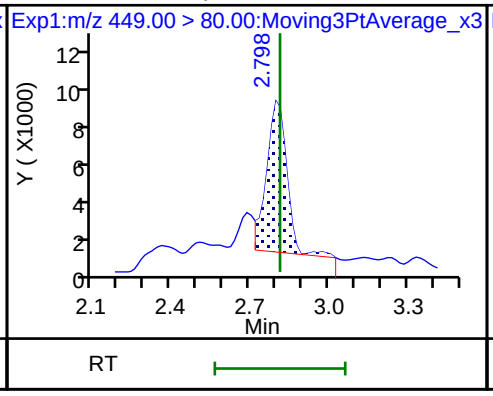
15 Perfluorooctanoic acid



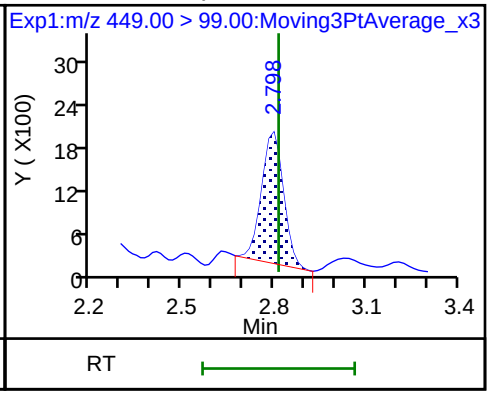
15 Perfluorooctanoic acid



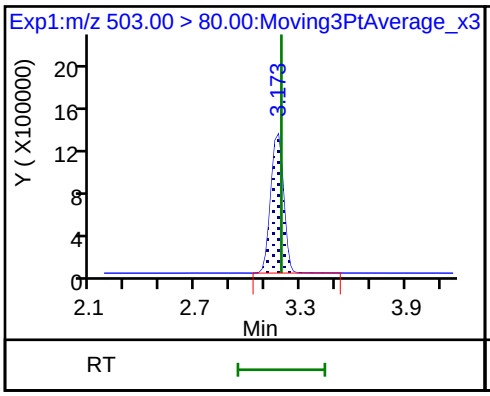
16 Perfluoroheptanesulfonic acid



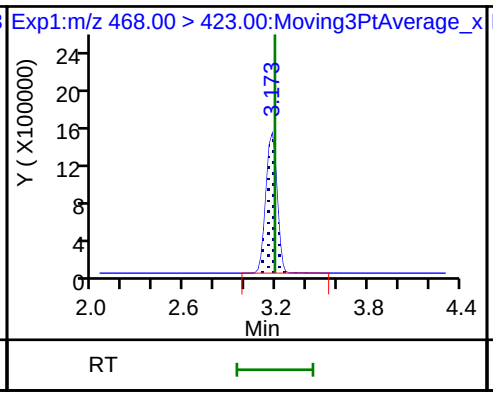
16 Perfluoroheptanesulfonic acid



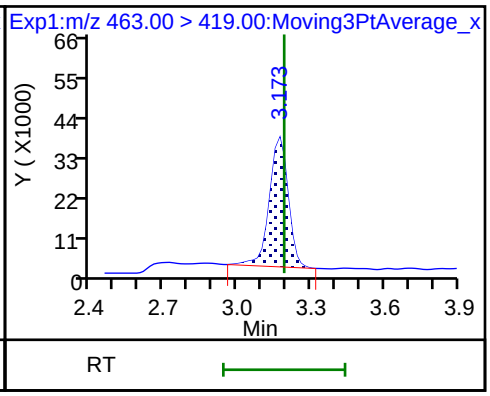
D 18 13C4 PFOS



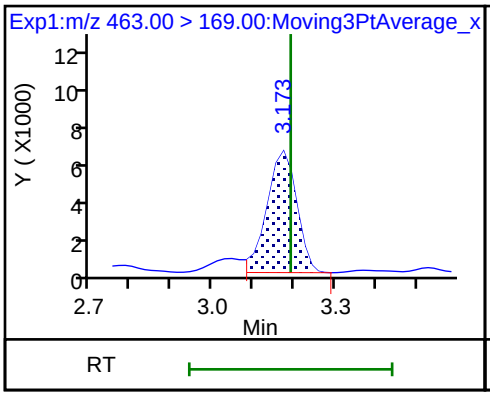
D 19 13C5 PFNA



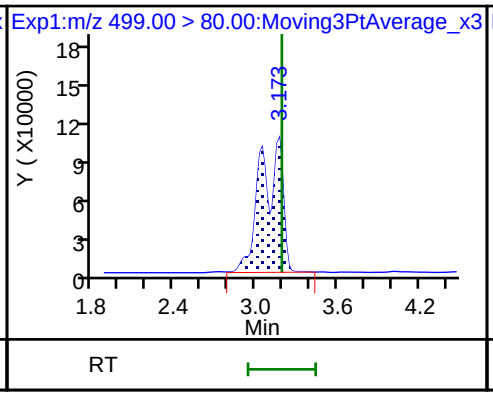
20 Perfluorononanoic acid



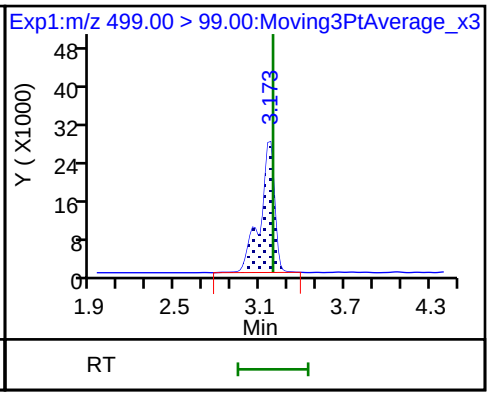
20 Perfluorononanoic acid



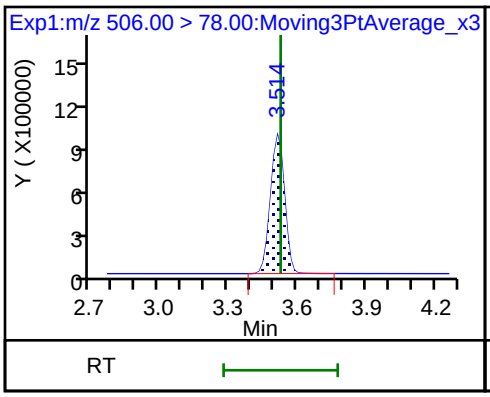
17 Perfluorooctane sulfonic acid



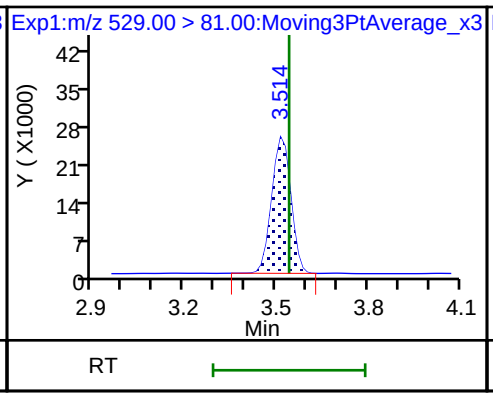
17 Perfluorooctane sulfonic acid



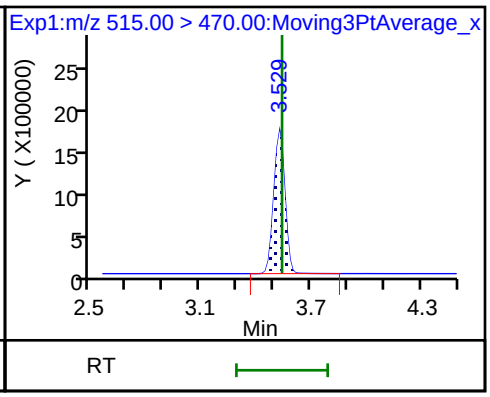
D 21 13C8 FOSA



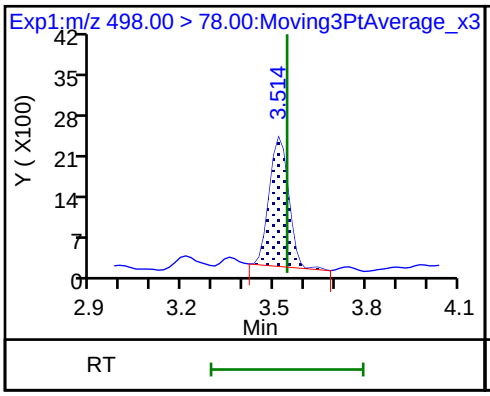
D 26 M2-8:2FTS



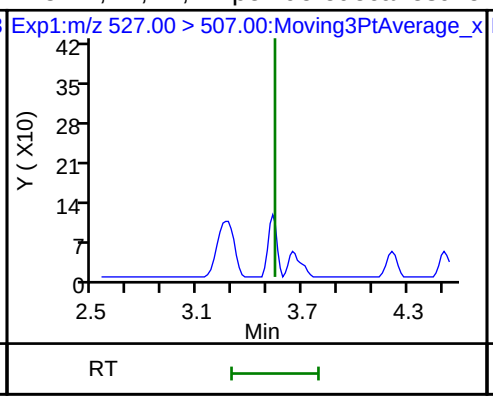
D 23 13C2 PFDA



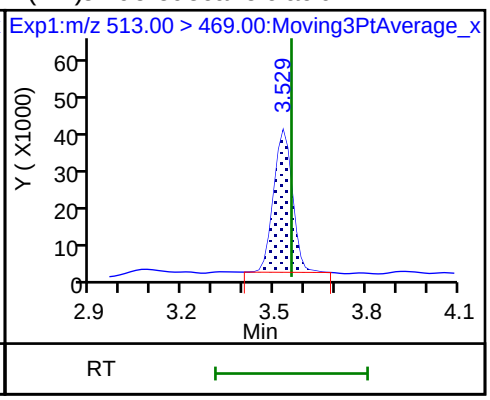
22 Perfluorooctane Sulfonamide



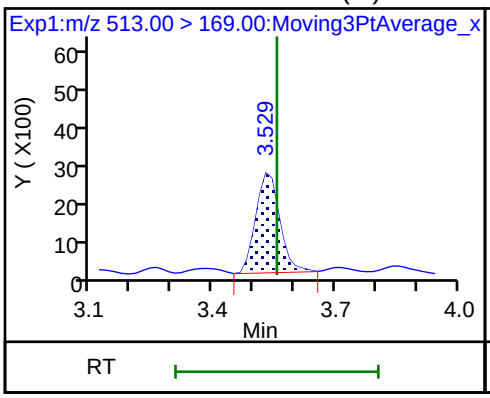
25 1H,1H,2H,2H-perfluorodecanesulfoni



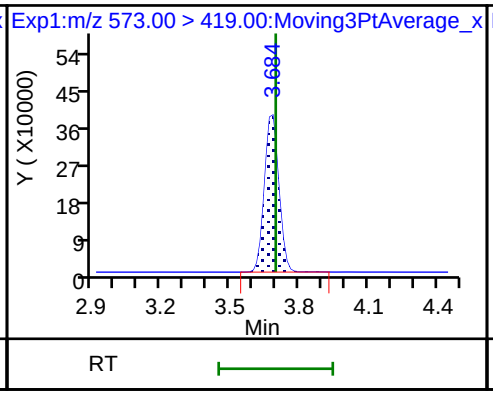
(4D) erfluorodecanoic acid



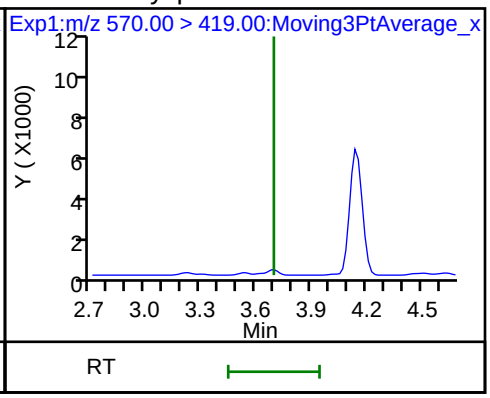
24 Perfluorodecanoic acid (M)



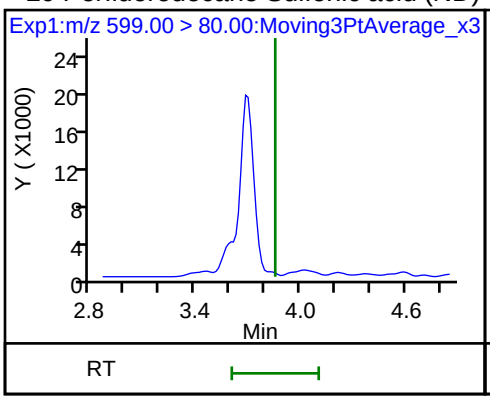
D 27 d3-NMeFOSAA



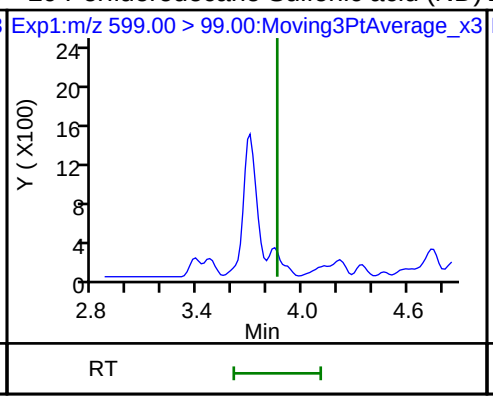
28 N-methyl perfluorooctane sulfonami (ND)



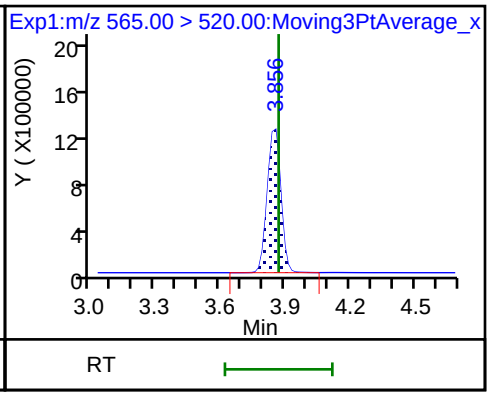
29 Perfluorodecane Sulfonic acid (ND)



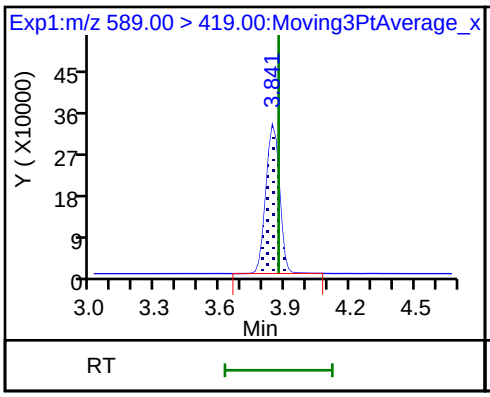
29 Perfluorodecane Sulfonic acid (ND)



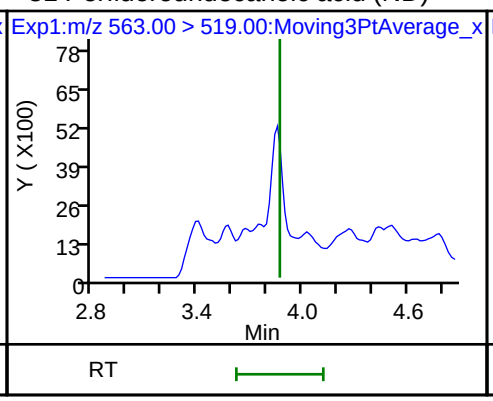
D 30 13C2 PFUnA



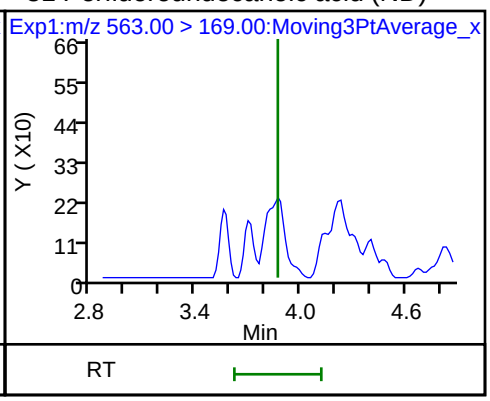
D 32 d5-NEtFOSAA



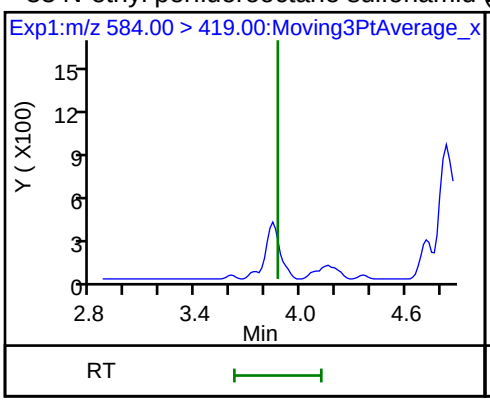
31 Perfluoroundecanoic acid (ND)



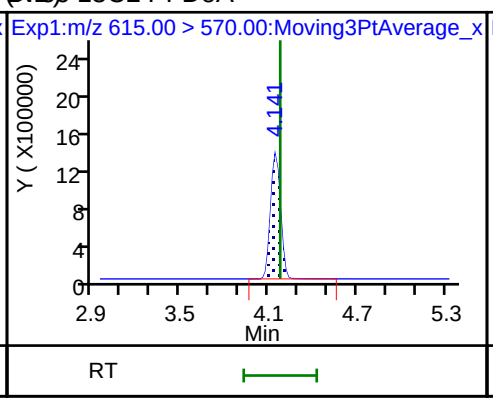
31 Perfluoroundecanoic acid (ND)



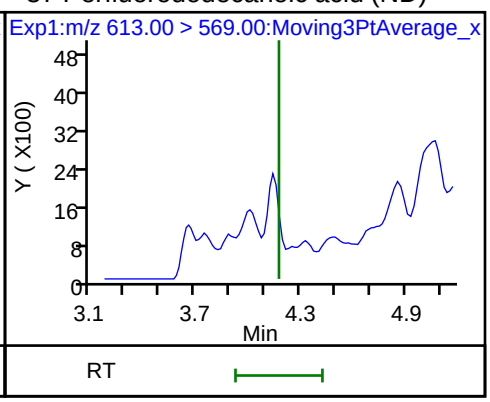
33 N-ethyl perfluorooctane sulfonamid (ND)



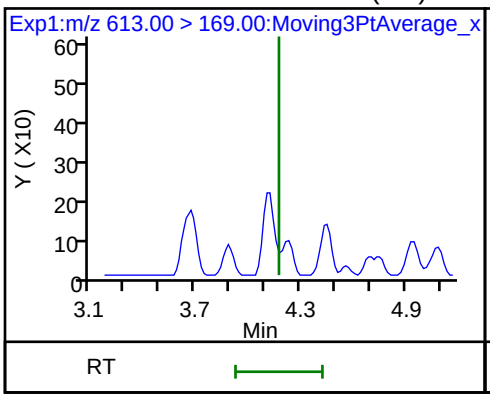
D 36 13C2 PFDoA



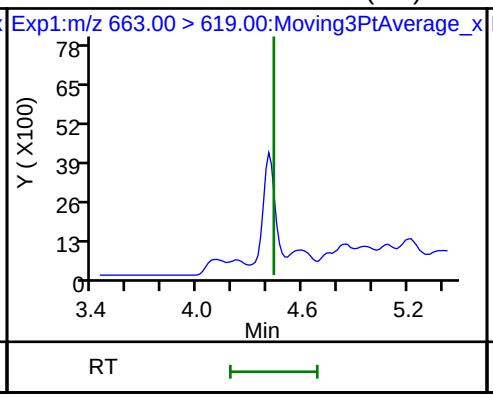
37 Perfluorododecanoic acid (ND)



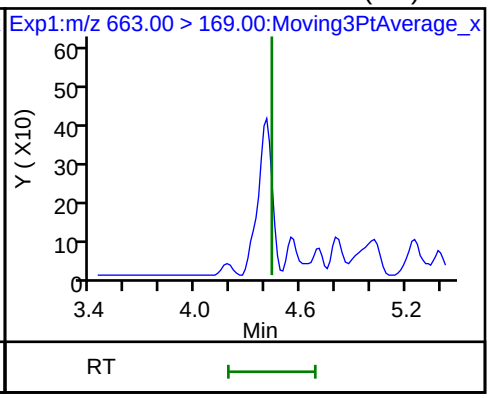
37 Perfluorododecanoic acid (ND)



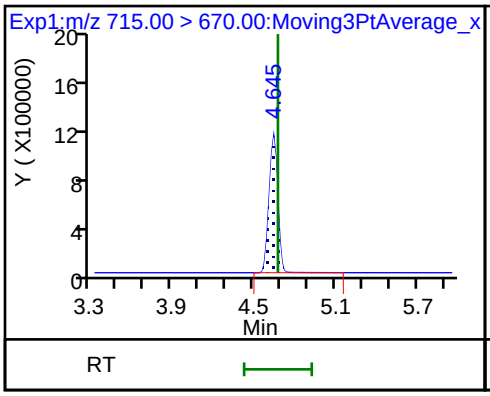
41 Perfluorotridecanoic acid (ND)



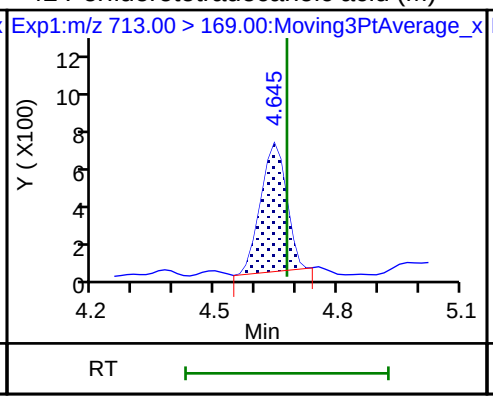
41 Perfluorotridecanoic acid (ND)



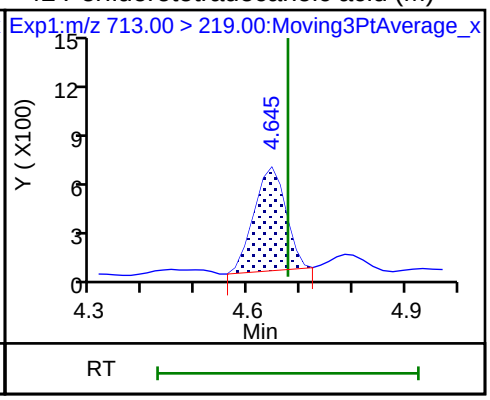
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (M)



42 Perfluorotetradecanoic acid (M)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

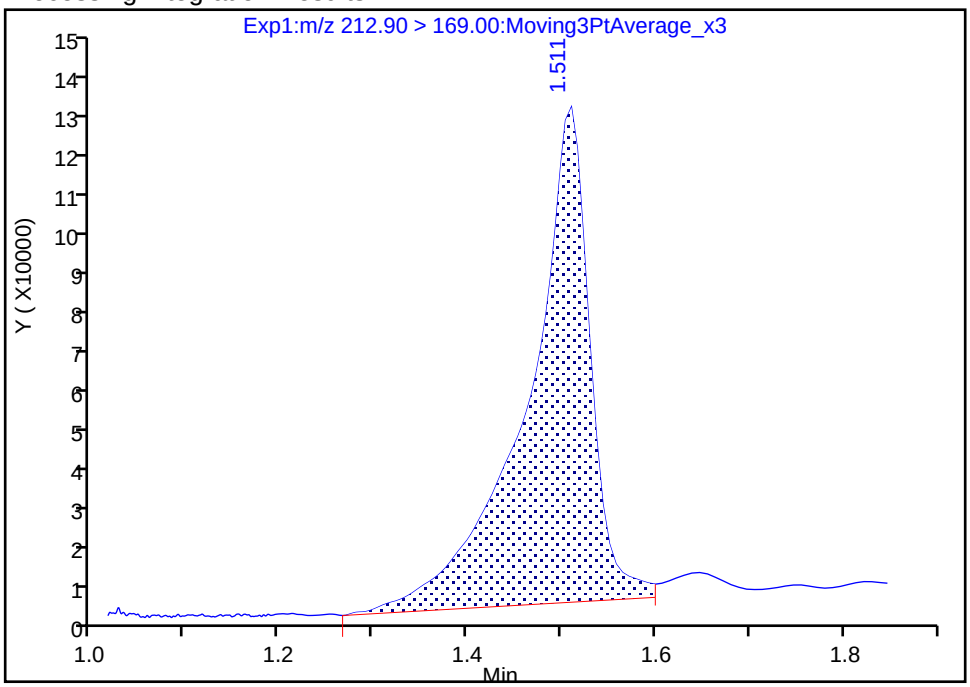
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_010.d				
Injection Date:	08-Aug-2018 08:36:47	Instrument ID:	A9		
Lims ID:	320-41460-A-2-A	Lab Sample ID:	320-41460-2		
Client ID:	GC-MW-108 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

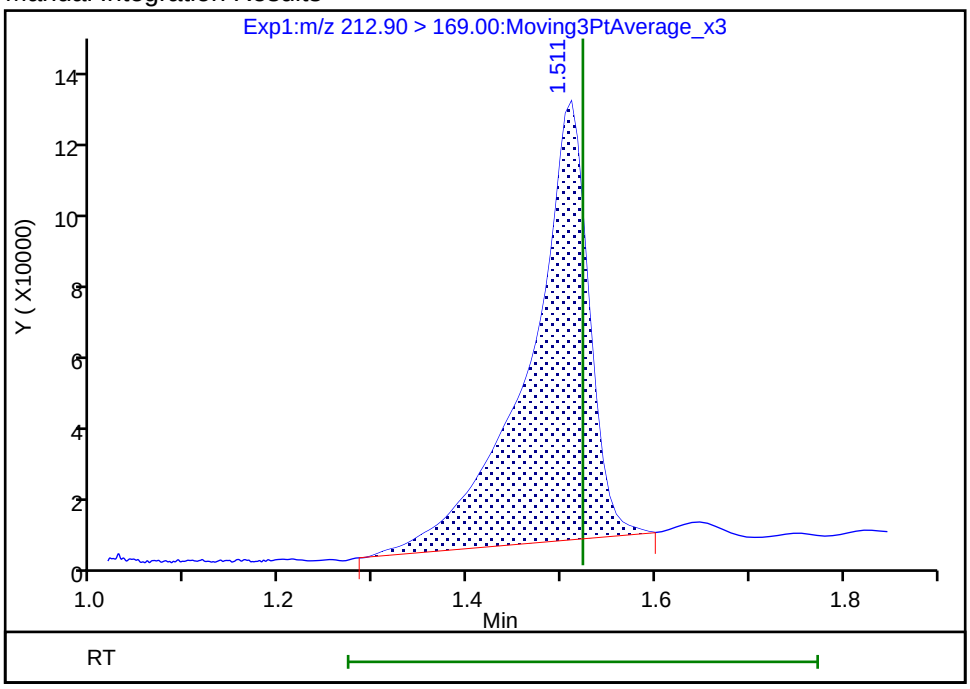
Processing Integration Results

RT: 1.51
Area: 583601
Amount: 0.201292
Amount Units: ng/ml



Manual Integration Results

RT: 1.51
Area: 546420
Amount: 0.188468
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:55:42

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

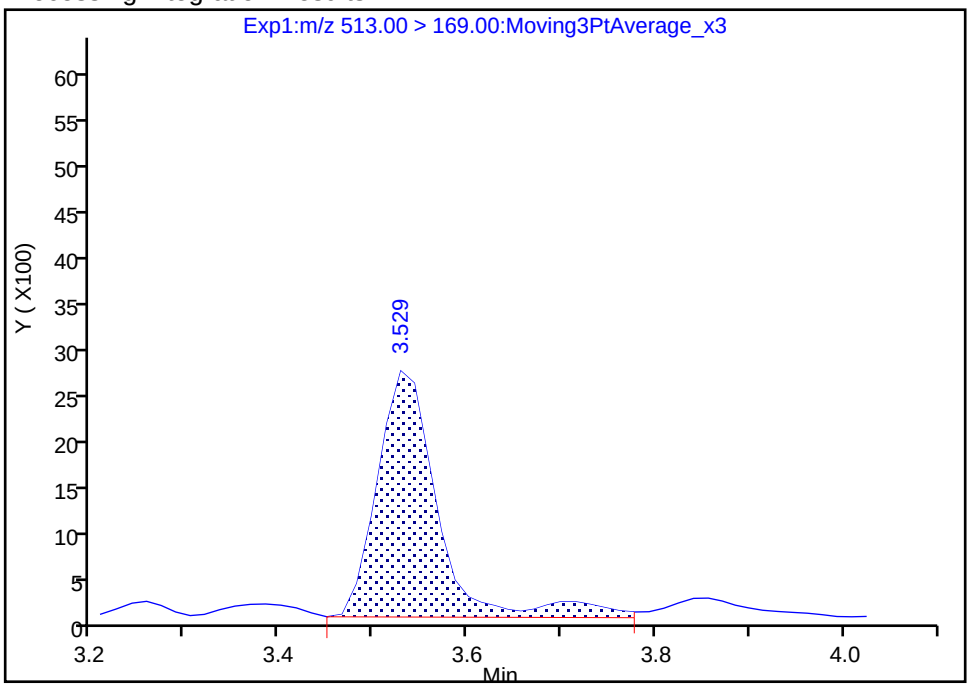
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_010.d				
Injection Date:	08-Aug-2018 08:36:47	Instrument ID:	A9		
Lims ID:	320-41460-A-2-A	Lab Sample ID:	320-41460-2		
Client ID:	GC-MW-108 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

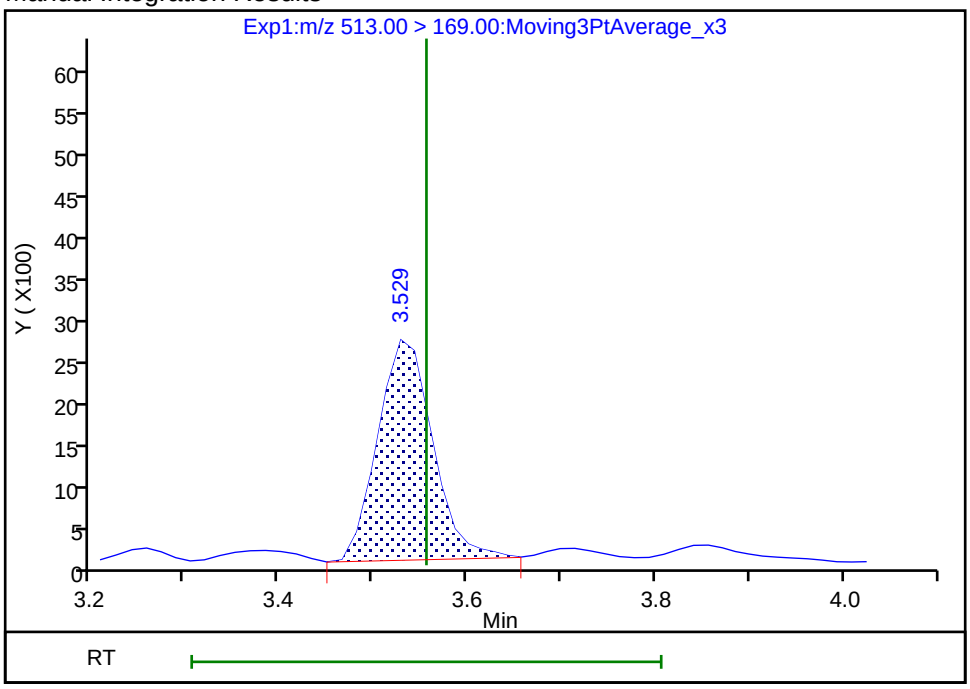
Processing Integration Results

RT: 3.53
Area: 11964
Amount: 0.045891
Amount Units: ng/ml



Manual Integration Results

RT: 3.53
Area: 10724
Amount: 0.045891
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:56:08

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

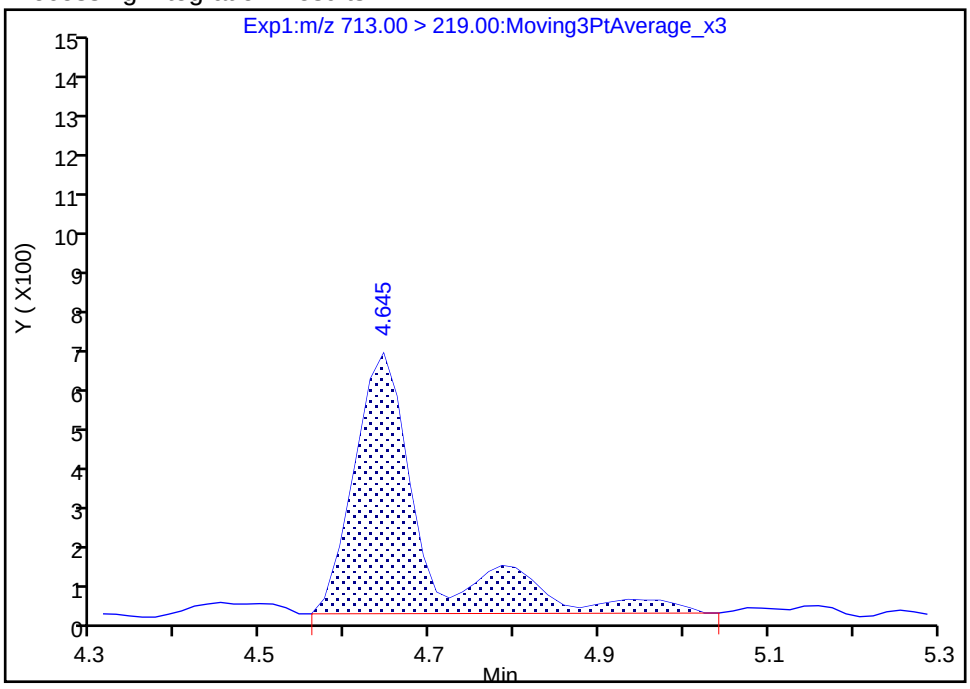
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_010.d				
Injection Date:	08-Aug-2018 08:36:47	Instrument ID:	A9		
Lims ID:	320-41460-A-2-A	Lab Sample ID:	320-41460-2		
Client ID:	GC-MW-108 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

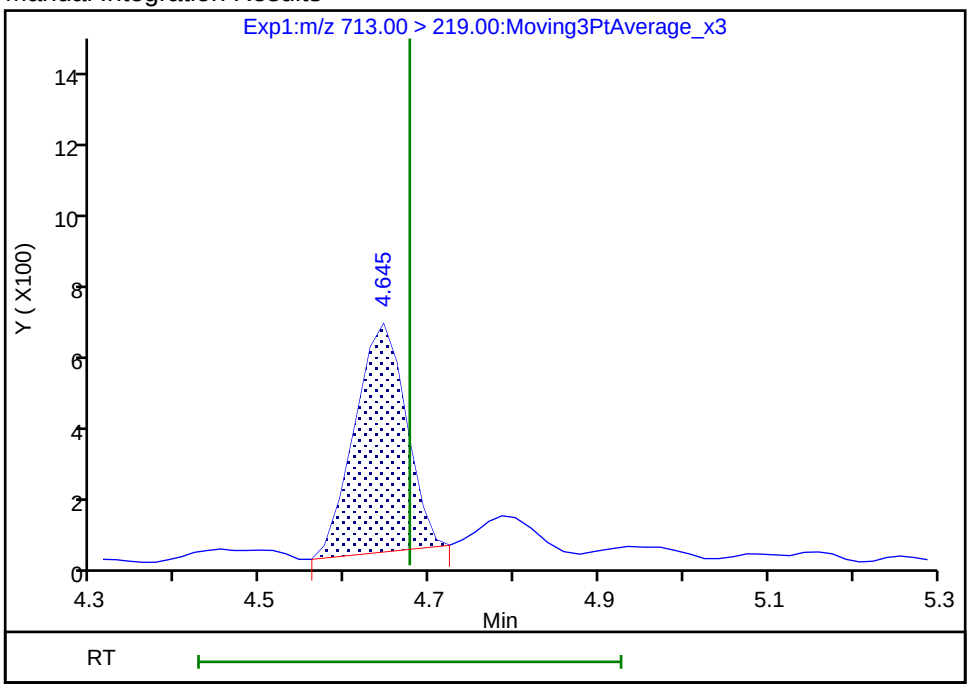
Processing Integration Results

RT: 4.64
Area: 3620
Amount: 0.010372
Amount Units: ng/ml



Manual Integration Results

RT: 4.64
Area: 2598
Amount: 0.009342
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:56:32

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

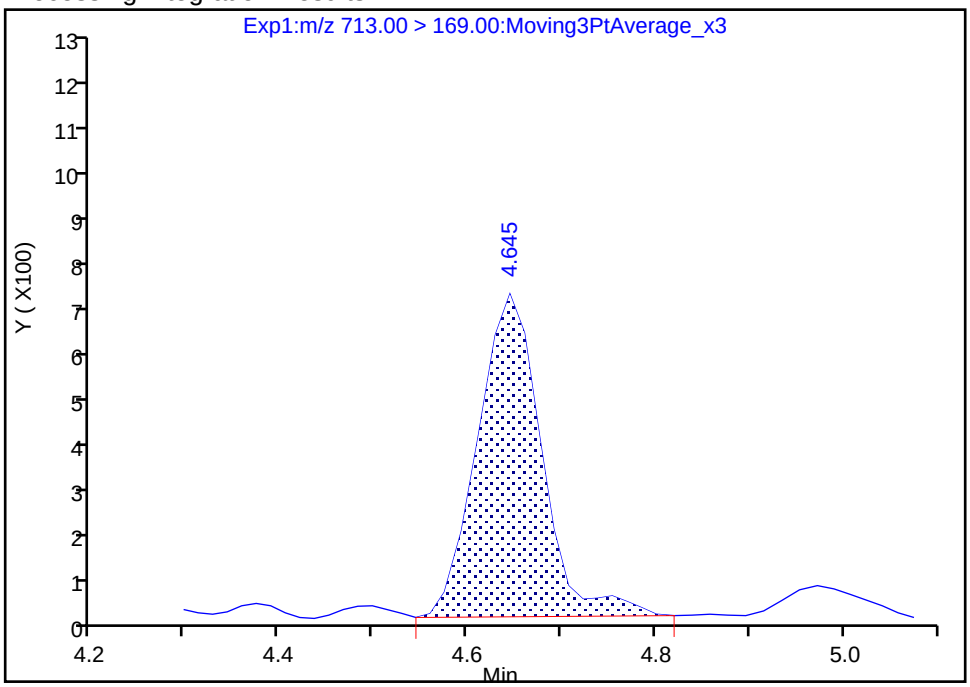
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_010.d				
Injection Date:	08-Aug-2018 08:36:47	Instrument ID:	A9		
Lims ID:	320-41460-A-2-A	Lab Sample ID:	320-41460-2		
Client ID:	GC-MW-108 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

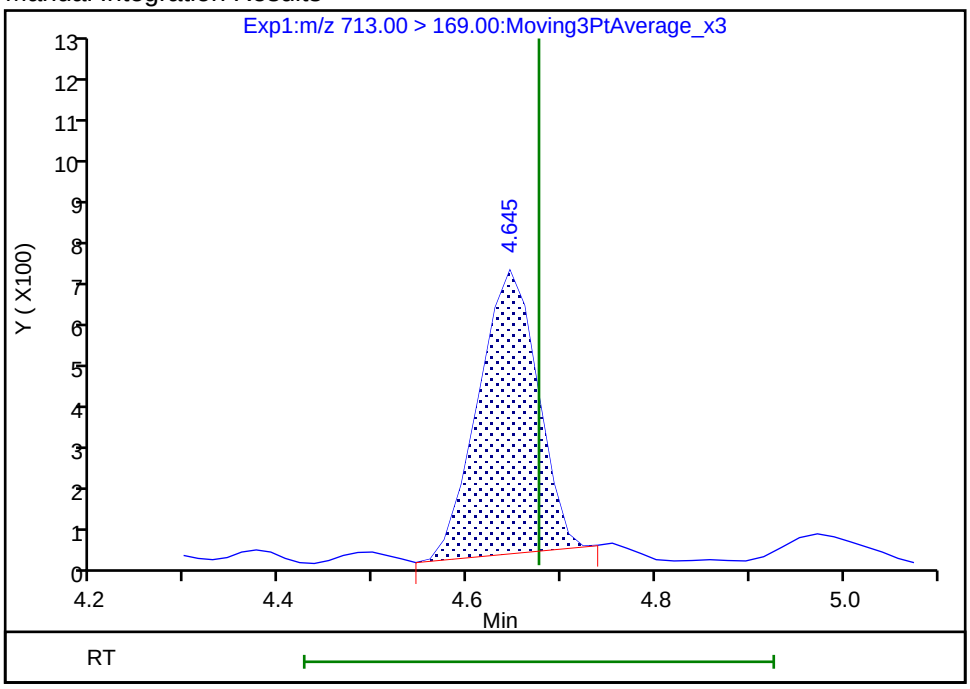
Processing Integration Results

RT: 4.64
Area: 3252
Amount: 0.010372
Amount Units: ng/ml



Manual Integration Results

RT: 4.64
Area: 2929
Amount: 0.009342
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:56:38
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

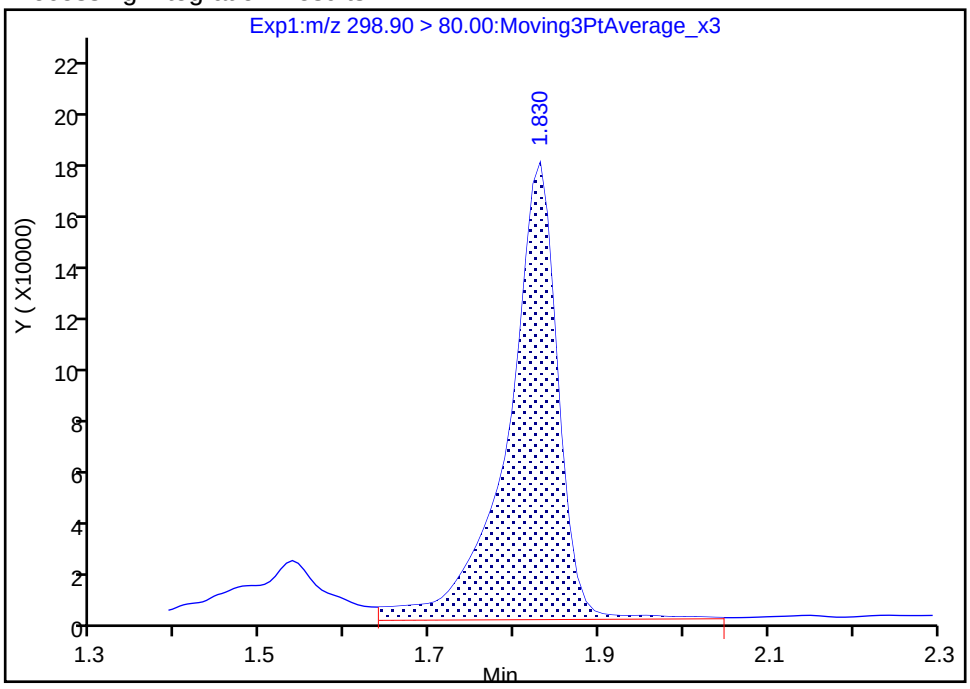
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_010.d				
Injection Date:	08-Aug-2018 08:36:47	Instrument ID:	A9		
Lims ID:	320-41460-A-2-A	Lab Sample ID:	320-41460-2		
Client ID:	GC-MW-108 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

Processing Integration Results

RT: 1.83
Area: 728905
Amount: 0.164110
Amount Units: ng/ml



Manual Integration Results

RT: 1.83
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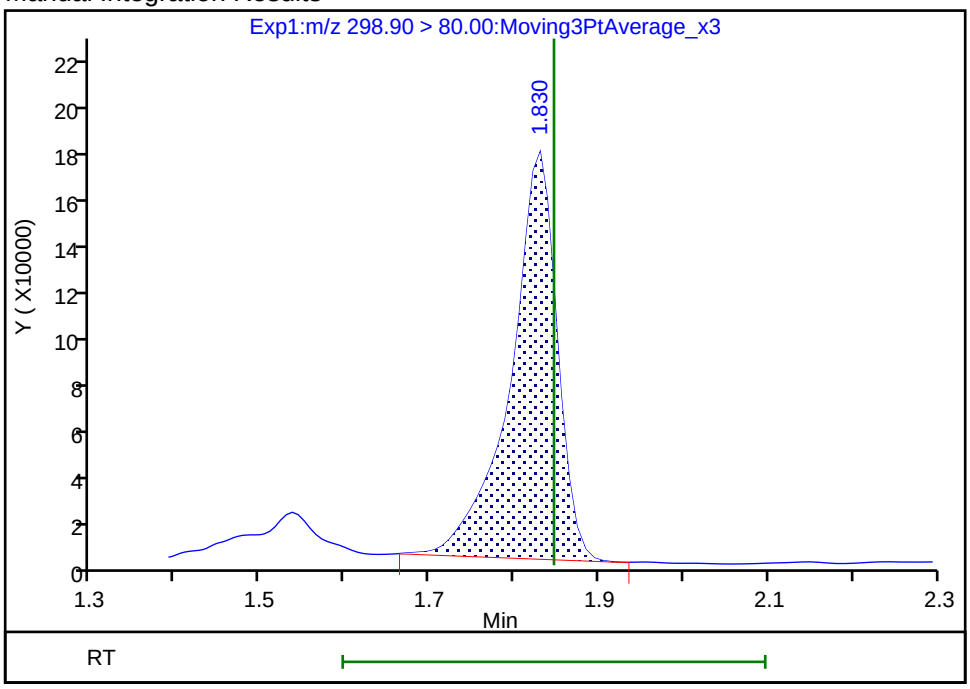
Amount: 0.149141
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:55:51

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) | Lab Sample ID: 320-41460-3

Matrix: Water | Lab File ID: 2018.08.08LLA_011.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 09:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 269.6(mL) | Date Analyzed: 08/08/2018 08:44

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.5		1.9	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	8.8		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	9.9		1.9	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	9.3		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	43		1.9	0.79
375-95-1	Perfluorononanoic acid (PFNA)	9.2		1.9	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	5.3		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.7		1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.2	B	1.9	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.50	J	1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	20		1.9	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		19	2.9
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8
27619-97-2	6:2 FTS	3.8	J B *	19	1.9
39108-34-4	8:2 FTS	ND		19	1.9

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) | Lab Sample ID: 320-41460-3

Matrix: Water | Lab File ID: 2018.08.08LLA_011.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 09:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 269.6(mL) | Date Analyzed: 08/08/2018 08:44

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	82		25-150
STL01893	13C5 PFPeA	84		25-150
STL00993	13C2 PFHxA	88		25-150
STL01892	13C4-PFHpA	89		25-150
STL00990	13C4 PFOA	96		25-150
STL00995	13C5 PFNA	103		25-150
STL00996	13C2 PFDA	99		25-150
STL00997	13C2 PFUnA	100		25-150
STL00998	13C2 PFDoA	97		25-150
STL02116	13C2-PFTeDA	117		25-150
STL02337	13C3-PFBS	82		25-150
STL00994	18O2 PFHxS	80		25-150
STL00991	13C4 PFOS	83		25-150
STL01056	13C8 FOSA	82		25-150
STL02118	d3-NMeFOSAA	123		25-150
STL02117	d5-NEtFOSAA	110		25-150
STL02279	M2-6:2FTS	111		25-150
STL02280	M2-8:2FTS	106		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_011.d
Lims ID: 320-41460-A-3-A
Client ID: GC-MW-109 (WG)
Sample Type: Client
Inject. Date: 08-Aug-2018 08:44:17 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-a-3-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 15:08:07 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 15:00:12

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.517	1.516	0.001	0.542	7690831	2.05		82.1	937	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.517	1.523	-0.006	1.000	578783	0.2025			20.0	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.797	1.805	-0.008	0.642	7066093	2.11		84.4	7177	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.797	1.805	-0.008	1.000	682654	0.2367			17.9	
D 47 13C3-PFBS										
301.90 > 83.00	1.839	1.838	0.001	0.657	98876	1.91		82.0	248	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.839	1.847	-0.008	1.000	788873	0.1796			50.7	
298.90 > 99.00	1.839	1.847	-0.008	1.000	272985		2.89(1.35-4.05)		47.1	
D 7 13C2 PFHxA										
315.00 > 270.00	2.089	2.098	-0.009	0.746	7618178	2.19		87.6	6408	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.089	2.098	-0.009	1.000	760277	0.2667			27.6	
313.00 > 119.00	2.089	2.098	-0.009	1.000	55209		13.77(6.96-20.87)		43.4	
D 9 13C4-PFHpA										
367.00 > 322.00	2.426	2.439	-0.013	0.867	8796218	2.23		89.1	12775	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.439	2.439	0.0	1.005	914292	0.2503			30.6	
363.00 > 169.00	2.426	2.439	-0.013	1.000	196177		4.66(2.17-6.52)		225	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.452	2.452	0.0	1.000	181395	0.0594			35.7	
399.00 > 99.00	2.452	2.452	0.0	1.000	43921		4.13(1.90-5.70)		22.2	M
D 11 18O2 PFHxS										
403.00 > 84.00	2.452	2.465	-0.013	0.876	5641286	1.90		80.3	10140	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.766	2.782	-0.016	0.989	1010186	2.63		111	578	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.766	2.782	-0.016	1.000	93745	0.1031			185	
D 14 13C4 PFOA										
417.00 > 372.00	2.798	2.814	-0.016	1.000	7948558	2.40		96.1	13429	
* 62 13C2-PFOA										
415.00 > 370.00	2.798	2.814	-0.016		8384701	2.50			11142	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.798	2.814	-0.016	1.000	4052167	1.16			238	
413.00 > 169.00	2.798	2.814	-0.016	1.000	1394332		2.91(1.36-4.08)		1380	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.814	2.814	0.0	0.887	34657	0.0134			8.2	M
449.00 > 99.00	2.798	2.814	-0.016	0.882	8584		4.04(1.84-5.53)		14.5	M
D 18 13C4 PFOS										
503.00 > 80.00	3.173	3.190	-0.017	1.134	6133362	1.98		83.0	2074	
D 19 13C5 PFNA										
468.00 > 423.00	3.173	3.190	-0.017	1.134	7332530	2.58		103	12740	
20 Perfluorononanoic acid										
463.00 > 419.00	3.173	3.190	-0.017	1.000	770368	0.2490			87.8	
463.00 > 169.00	3.173	3.190	-0.017	1.000	140322		5.49(2.68-8.03)		294	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.173	3.190	-0.017	1.000	1509010	0.5483			240	
499.00 > 99.00	3.173	3.190	-0.017	1.000	271642		5.56(2.04-6.12)		478	
D 21 13C8 FOSA										
506.00 > 78.00	3.514	3.527	-0.013	1.256	3766727	2.04		81.5	4030	
D 26 M2-8:2FTS										
529.00 > 81.00	3.529	3.542	-0.013	1.261	113092	2.54		106	388	
D 23 13C2 PFDA										
515.00 > 470.00	3.529	3.542	-0.013	1.261	7045128	2.48		99.2	9066	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.529	3.542	-0.013	1.004	5283	0.001142			13.2	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.529	3.556	-0.027	1.000	493818	0.1426			91.8	
513.00 > 169.00	3.529	3.556	-0.027	1.000	32604		15.15(7.12-21.35)		89.3	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.684	3.697	-0.013	1.317	1692678	3.06		123	3099	
D 30 13C2 PFUnA										
565.00 > 520.00	3.856	3.870	-0.014	1.378	5716881	2.49		99.6	8088	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.856	3.870	-0.014	1.378	1248925	2.75		110	2093	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	3.856	3.870	-0.014	1.000	21266	0.0110			3.3	M
563.00 > 169.00	3.856	3.870	-0.014	1.000	2197		9.68(5.24-15.72)		9.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.141	4.176	-0.035	1.480	6010347	2.43		97.1	8425	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.661	4.676	-0.015	1.666	4640102	2.93		117	11786	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 08-Aug-2018 15:08:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_011.d

Injection Date: 08-Aug-2018 08:44:17 Instrument ID: A9

Lims ID: 320-41460-A-3-A Lab Sample ID: 320-41460-3

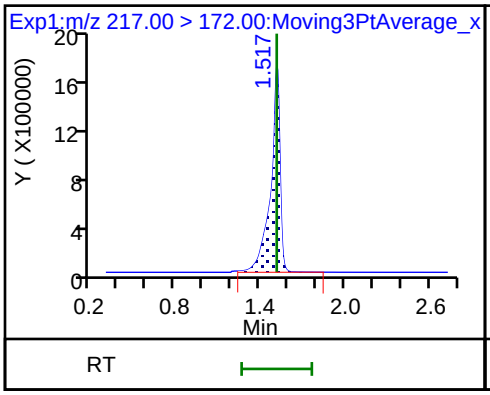
Client ID: GC-MW-109 (WG)

Operator ID: A9\Administrator ALS Bottle#: 6 Worklist Smp#: 7

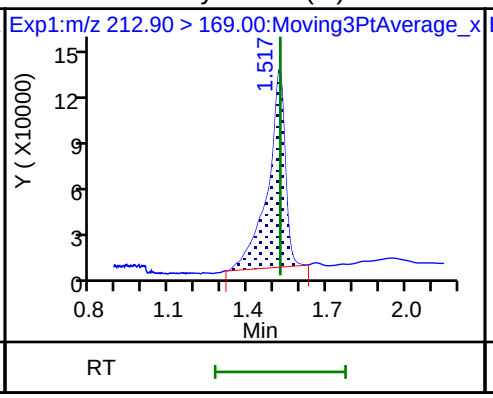
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

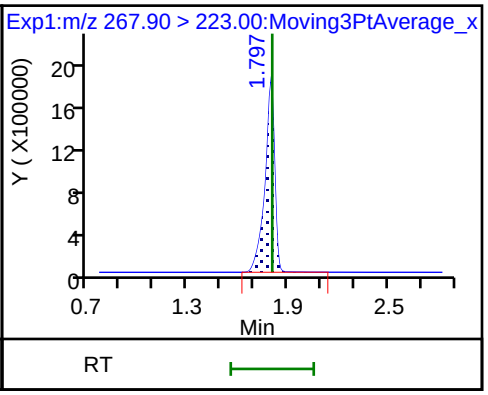
D 1 13C4 PFBA



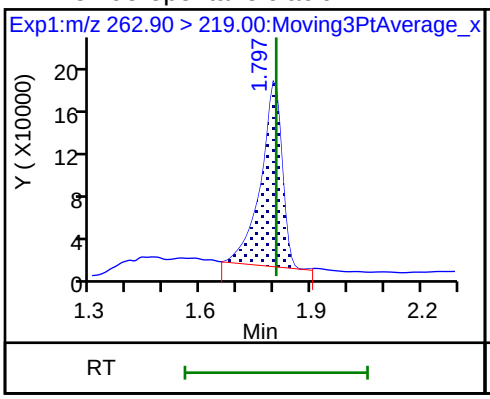
2 Perfluorobutyric acid (M)



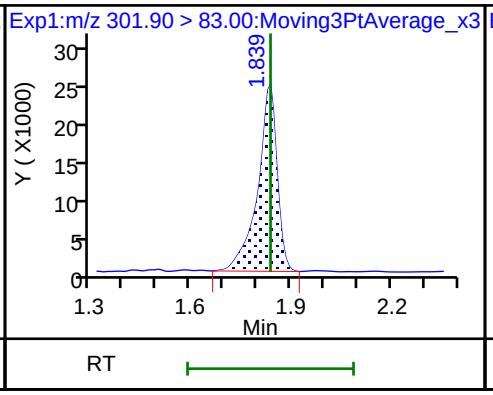
D 3 13C5-PFPeA



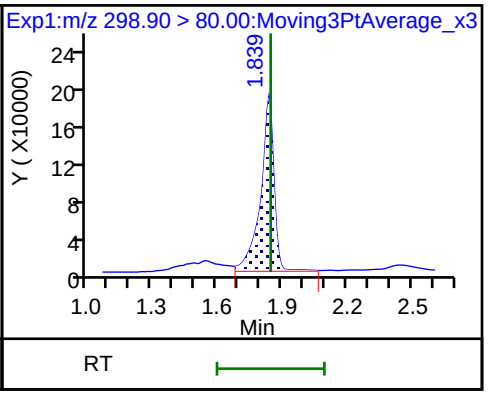
4 Perfluoropentanoic acid



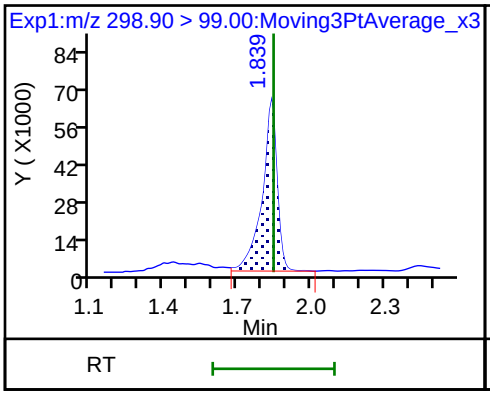
D 47 13C3-PFBS



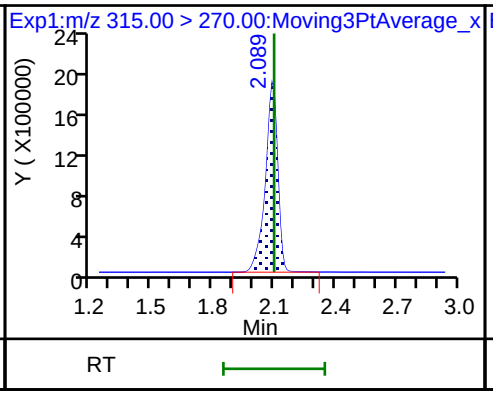
5 Perfluorobutanesulfonic acid



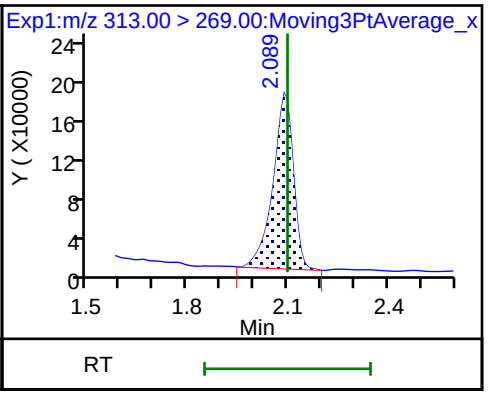
5 Perfluorobutanesulfonic acid



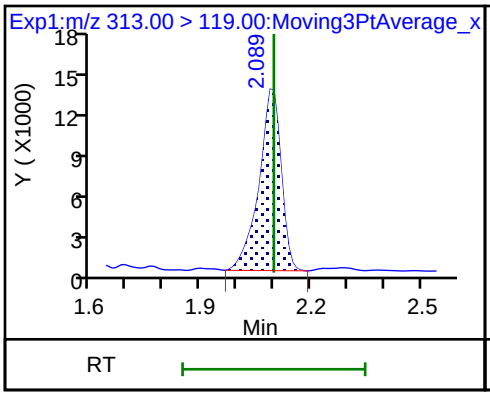
D 7 13C2 PFHxA



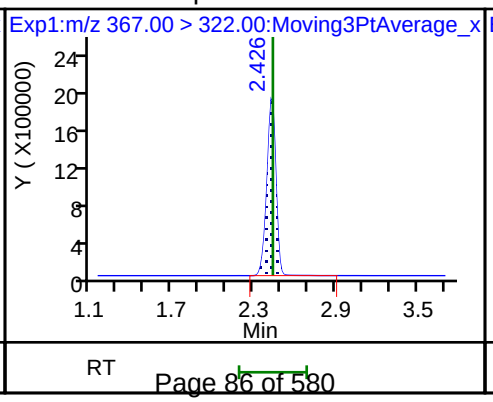
6 Perfluorohexanoic acid



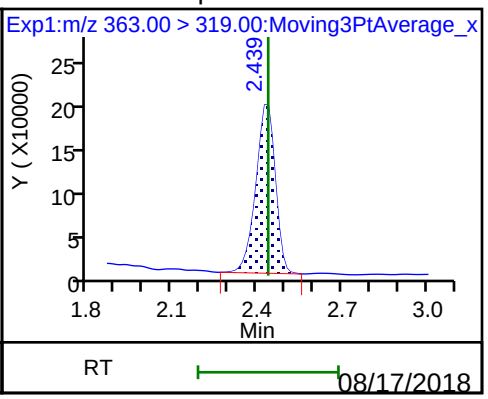
6 Perfluorohexanoic acid



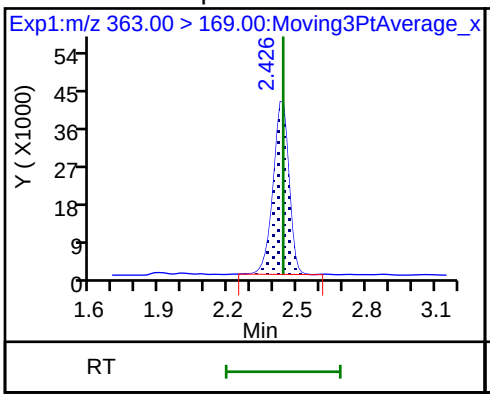
D 9 13C4-PFHpA



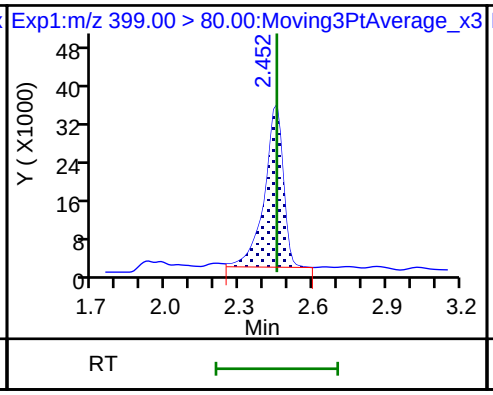
10 Perfluoroheptanoic acid



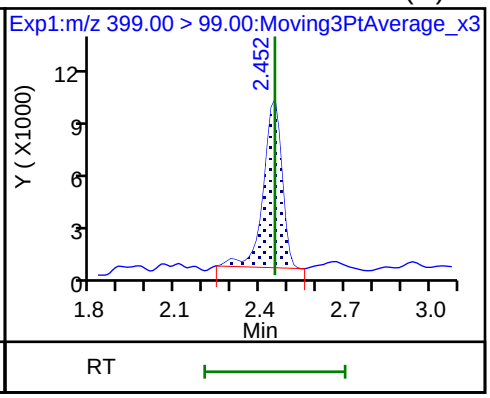
10 Perfluoroheptanoic acid



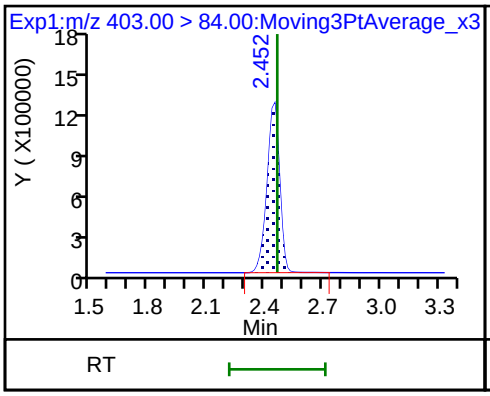
8 Perfluorohexanesulfonic acid



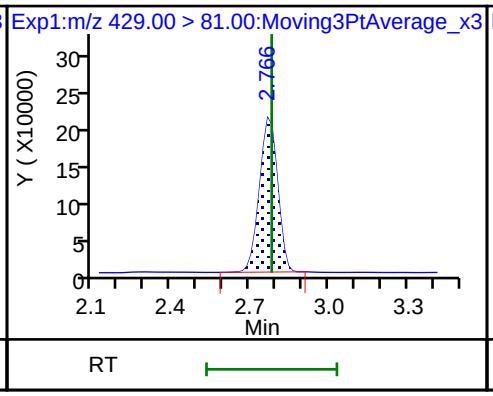
8 Perfluorohexanesulfonic acid (M)



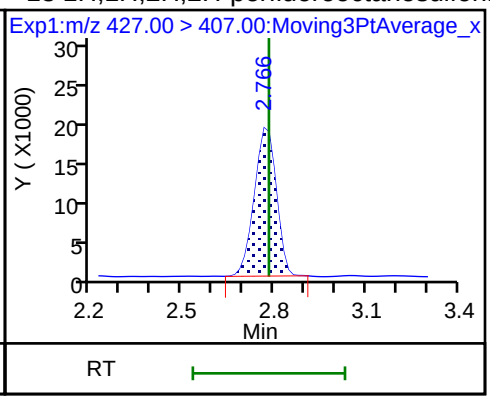
D 11 18O2 PFHxS



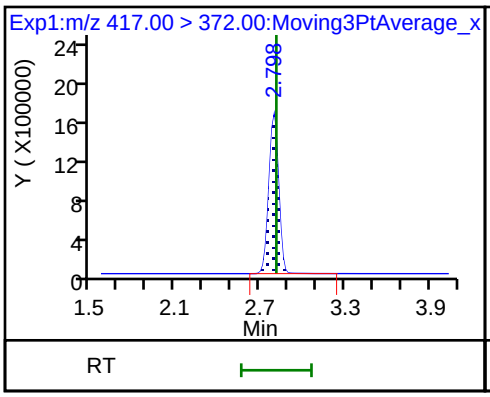
D 12 M2-6:2FTS



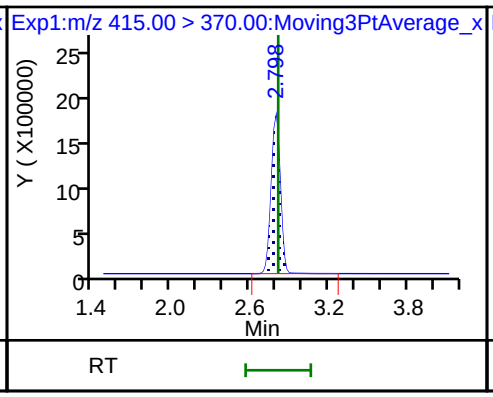
13 1H,1H,2H,2H-perfluorooctanesulfoni



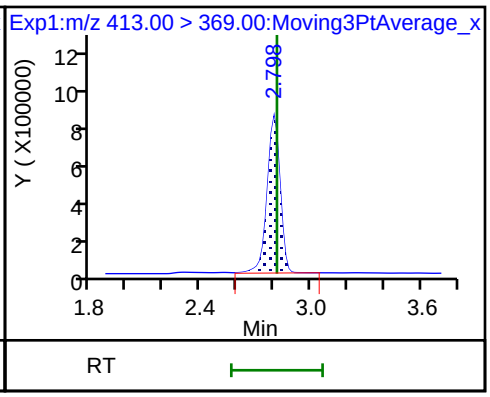
D 14 13C4 PFOA



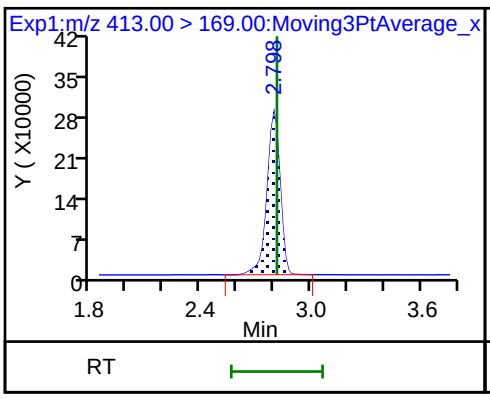
* 62 13C2-PFOA



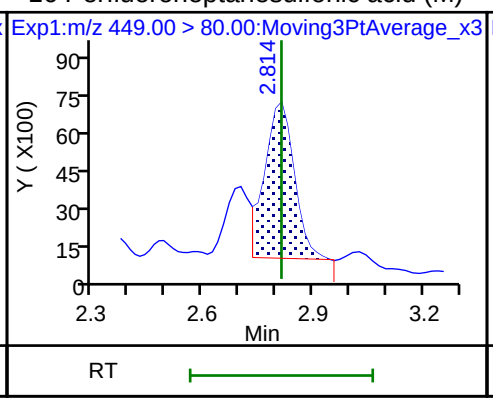
15 Perfluorooctanoic acid



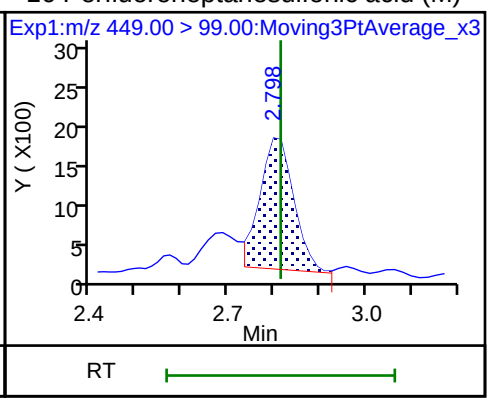
15 Perfluorooctanoic acid



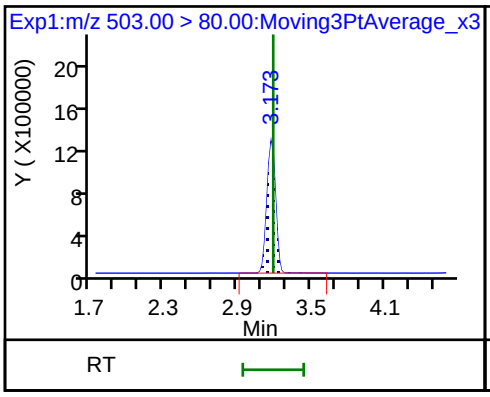
16 Perfluoroheptanesulfonic acid (M)



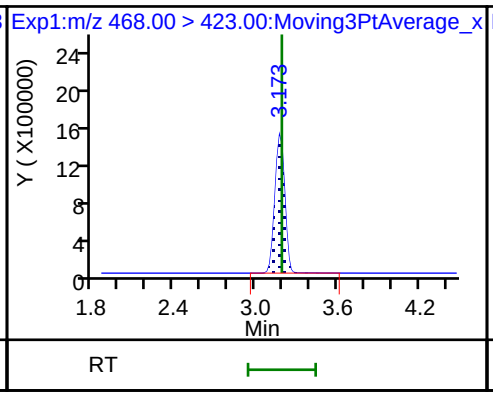
16 Perfluoroheptanesulfonic acid (M)



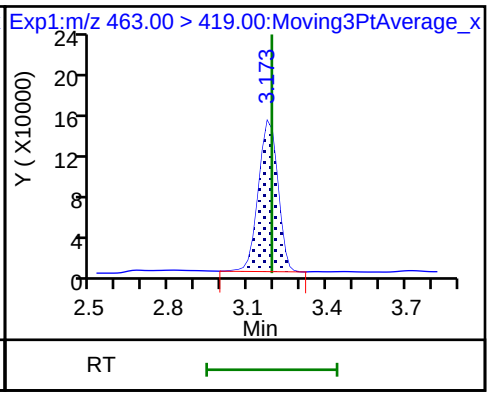
D 18 13C4 PFOS



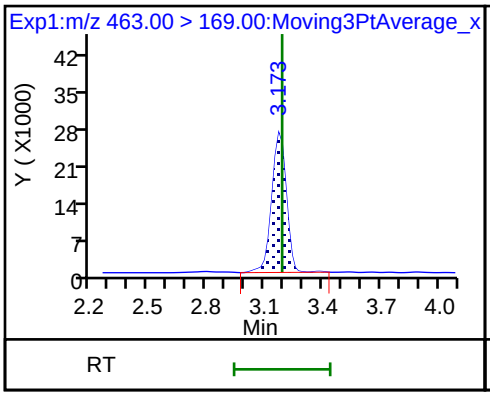
D 19 13C5 PFNA



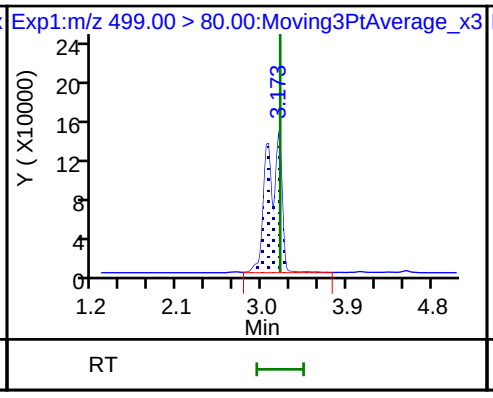
20 Perfluorononanoic acid



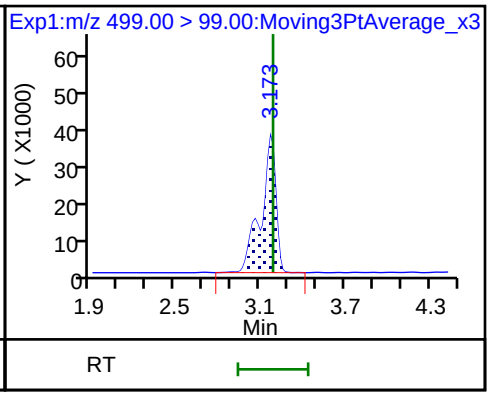
20 Perfluorononanoic acid



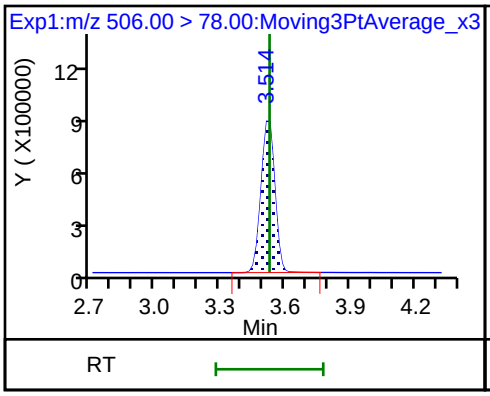
17 Perfluorooctane sulfonic acid



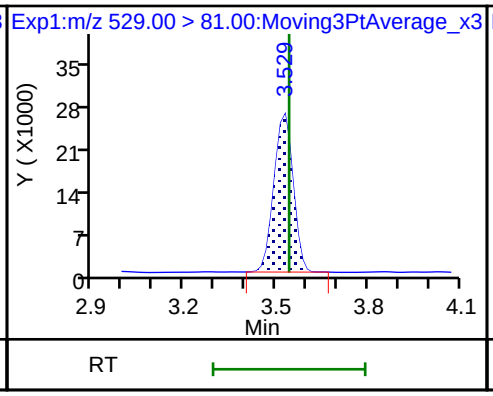
17 Perfluorooctane sulfonic acid



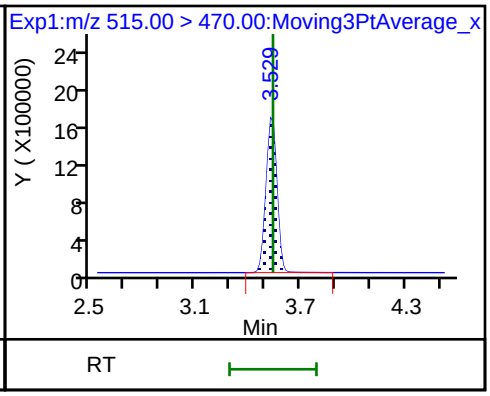
D 21 13C8 FOSA



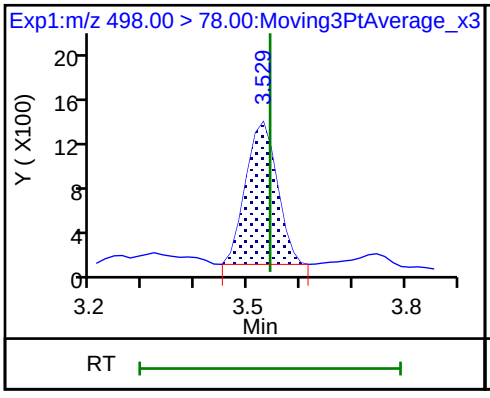
D 26 M2-8:2FTS



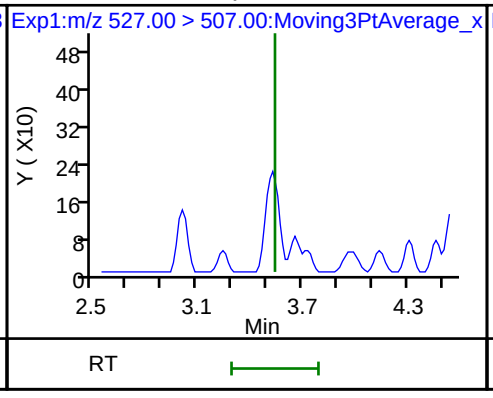
D 23 13C2 PFDA



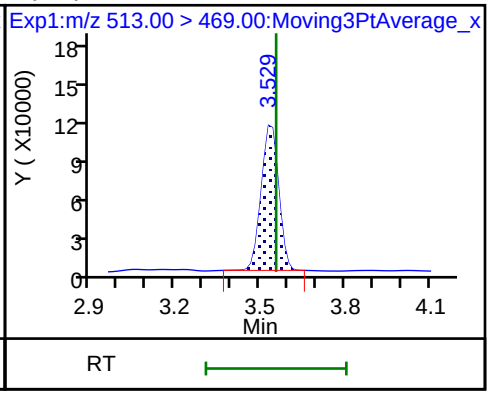
22 Perfluorooctane Sulfonamide



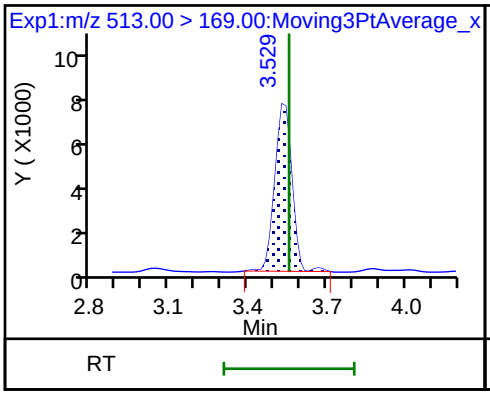
25 1H,1H,2H,2H-perfluorodecanesulfoni



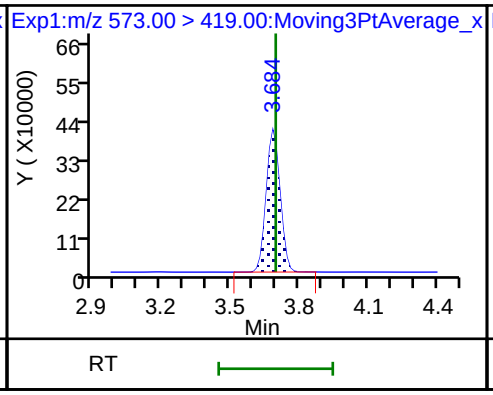
(4D) erfluorodecanoic acid



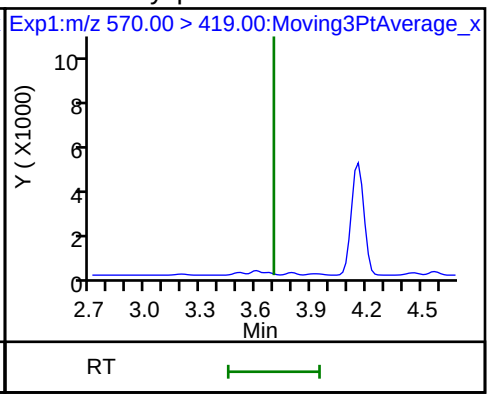
24 Perfluorodecanoic acid



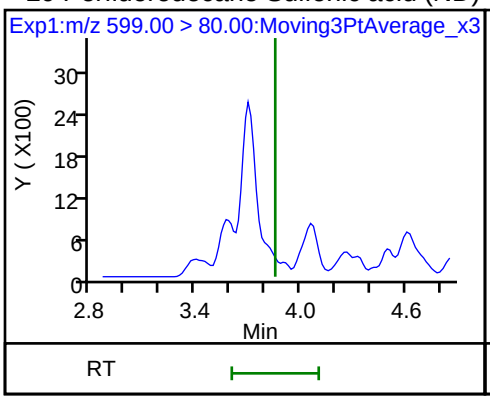
D 27 d3-NMeFOSAA



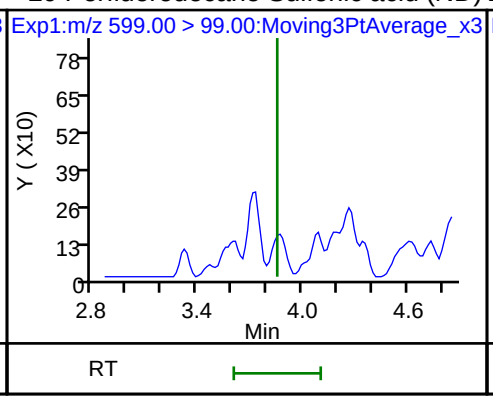
28 N-methyl perfluorooctane sulfonami (ND)



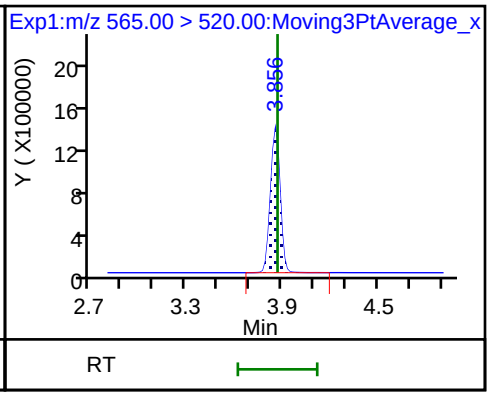
29 Perfluorodecane Sulfonic acid (ND)



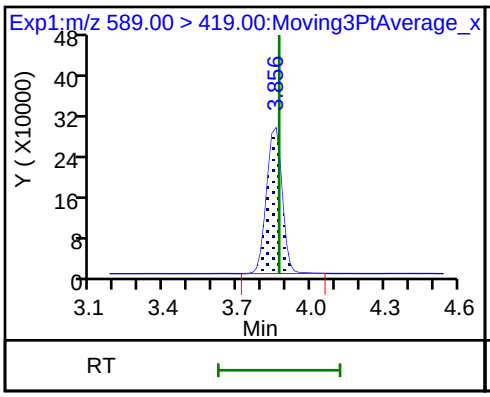
29 Perfluorodecane Sulfonic acid (ND)



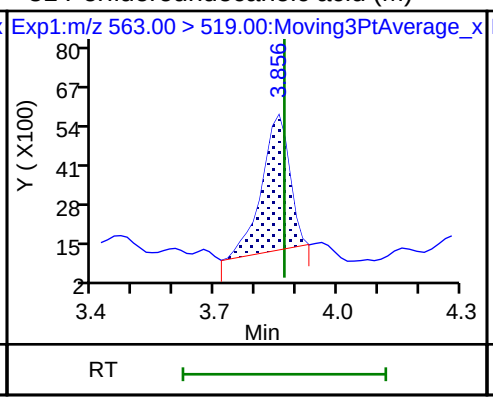
D 30 13C2 PFUnA



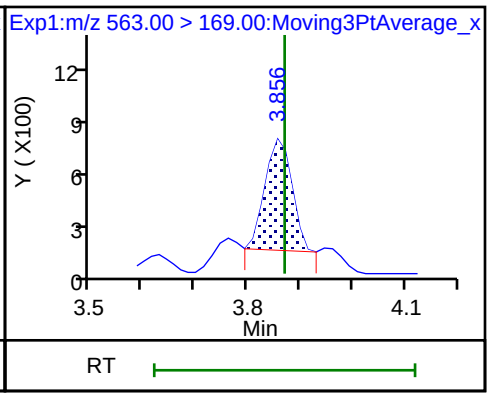
D 32 d5-NEtFOSAA



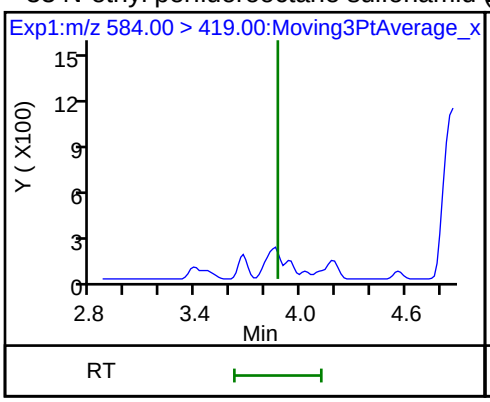
31 Perfluoroundecanoic acid (M)



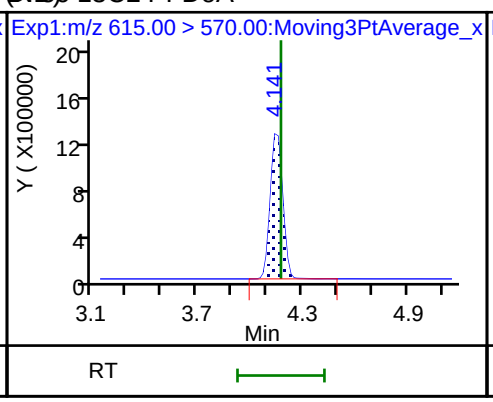
31 Perfluoroundecanoic acid



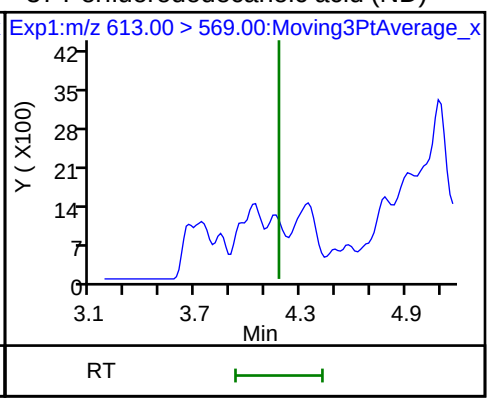
33 N-ethyl perfluorooctane sulfonamid (ND)



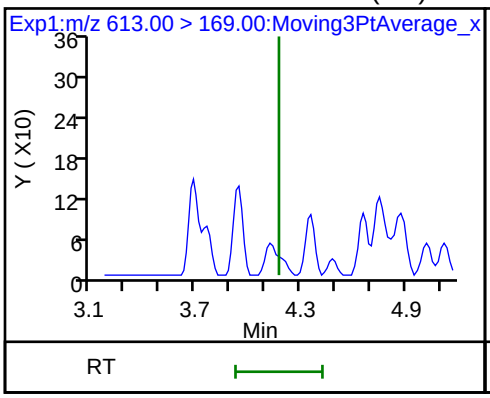
D 36 13C2 PFDoA



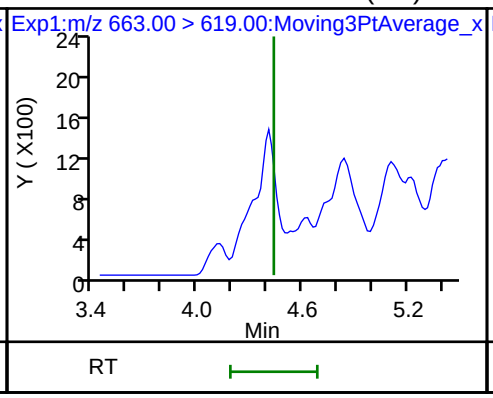
37 Perfluorododecanoic acid (ND)



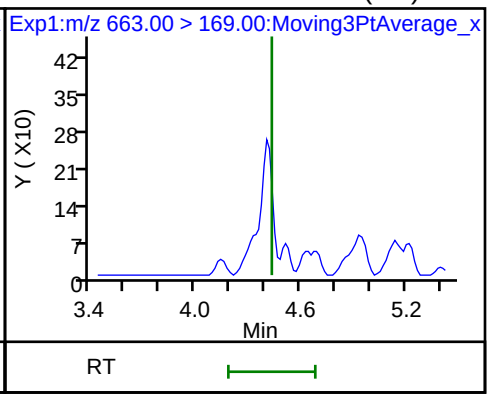
37 Perfluorododecanoic acid (ND)



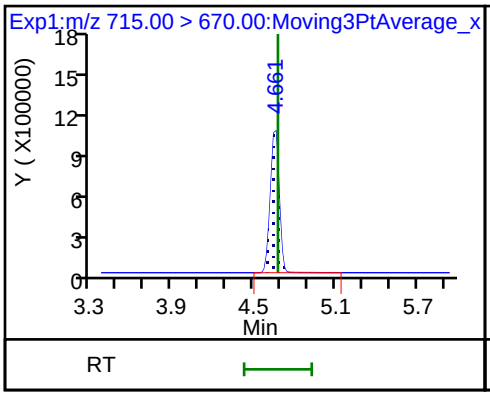
41 Perfluorotridecanoic acid (ND)



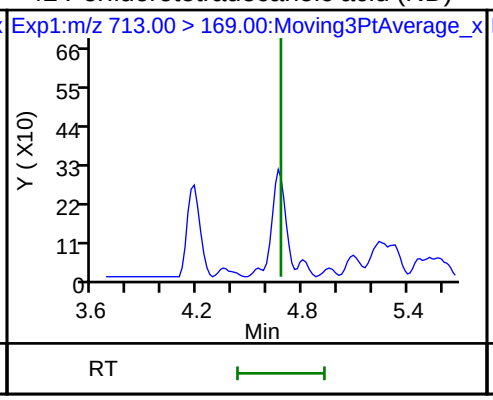
41 Perfluorotridecanoic acid (ND)



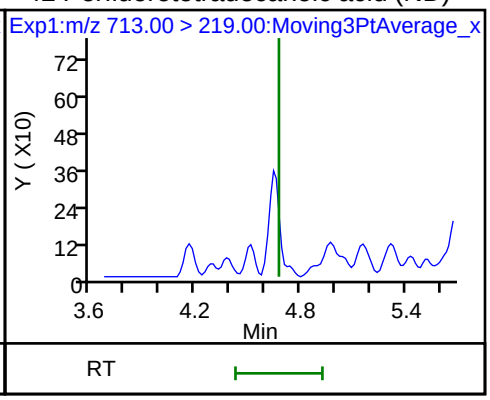
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

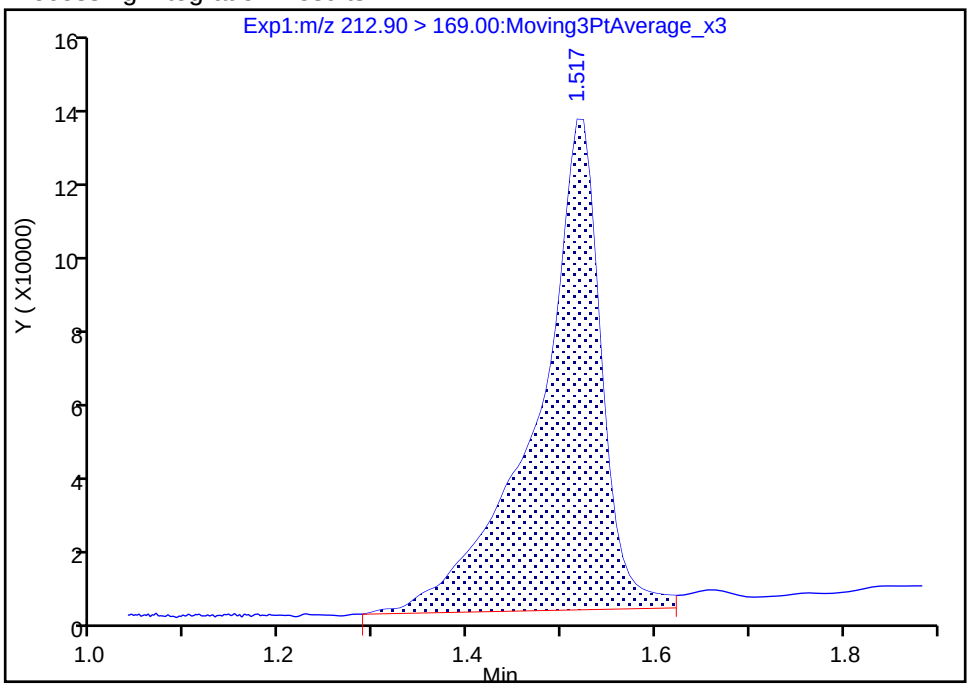
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_011.d				
Injection Date:	08-Aug-2018 08:44:17	Instrument ID:	A9		
Lims ID:	320-41460-A-3-A	Lab Sample ID:	320-41460-3		
Client ID:	GC-MW-109 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

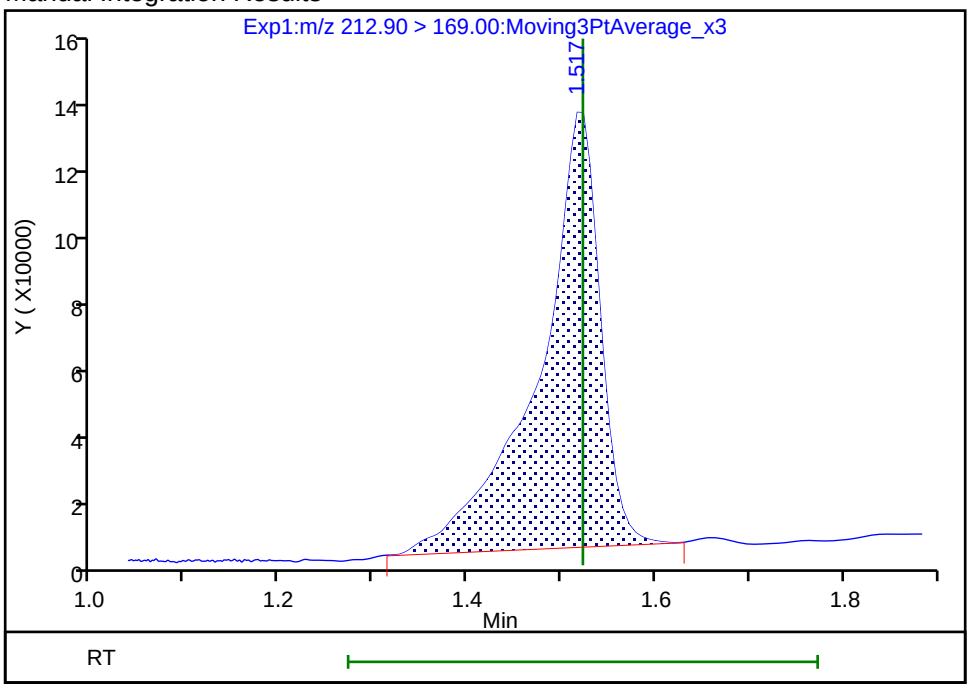
Processing Integration Results

RT: 1.52
Area: 618228
Amount: 0.216251
Amount Units: ng/ml



Manual Integration Results

RT: 1.52
Area: 578783
Amount: 0.202454
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:58:40

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

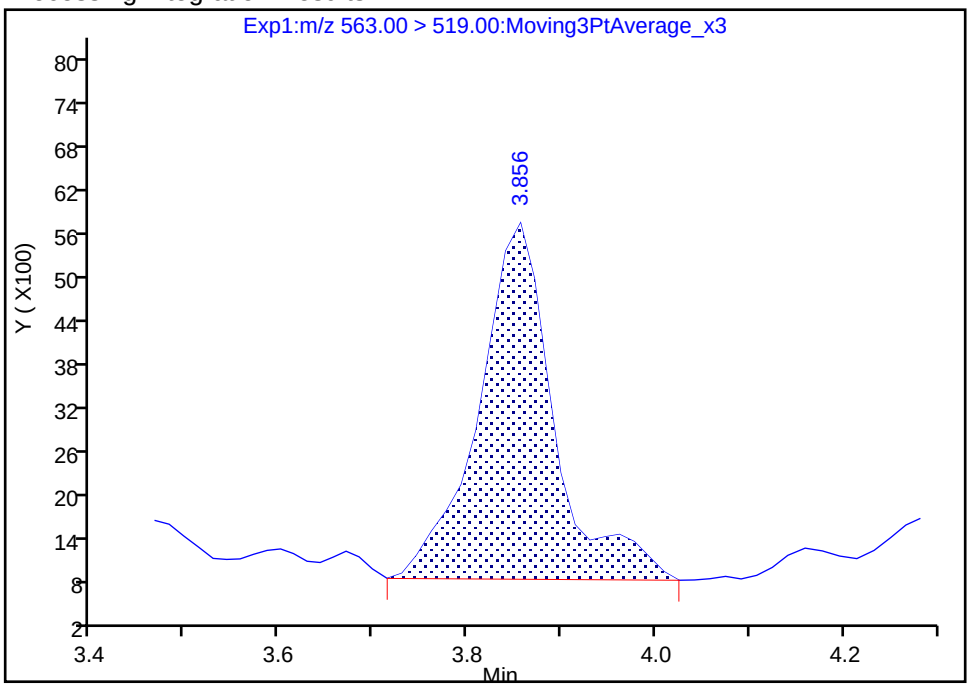
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_011.d				
Injection Date:	08-Aug-2018 08:44:17	Instrument ID:	A9		
Lims ID:	320-41460-A-3-A	Lab Sample ID:	320-41460-3		
Client ID:	GC-MW-109 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

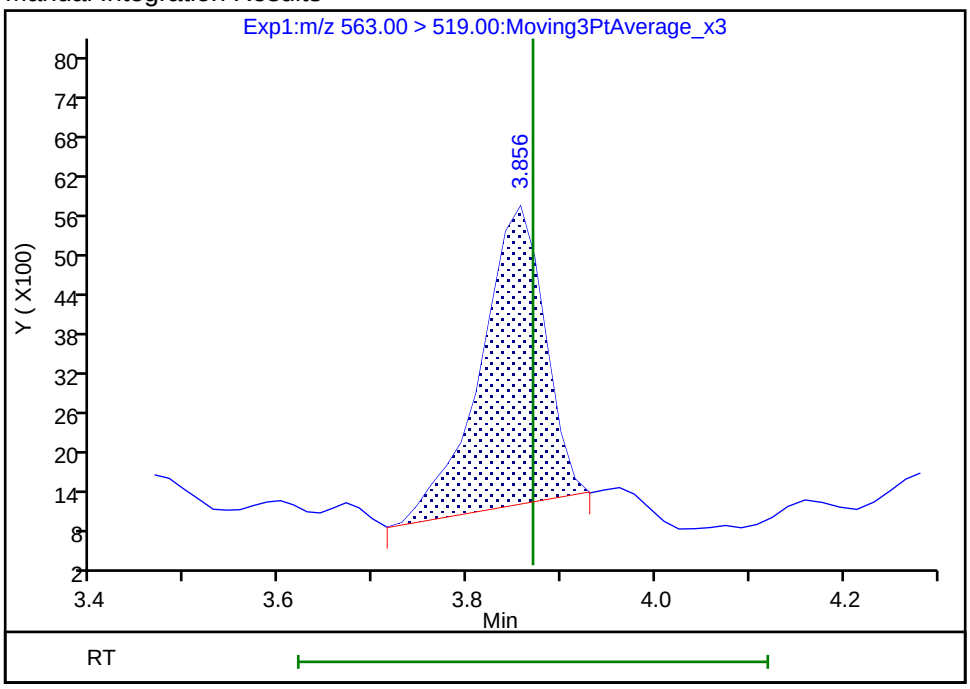
Processing Integration Results

RT: 3.86
Area: 27108
Amount: 0.014079
Amount Units: ng/ml



Manual Integration Results

RT: 3.86
Area: 21266
Amount: 0.011045
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:59:55

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

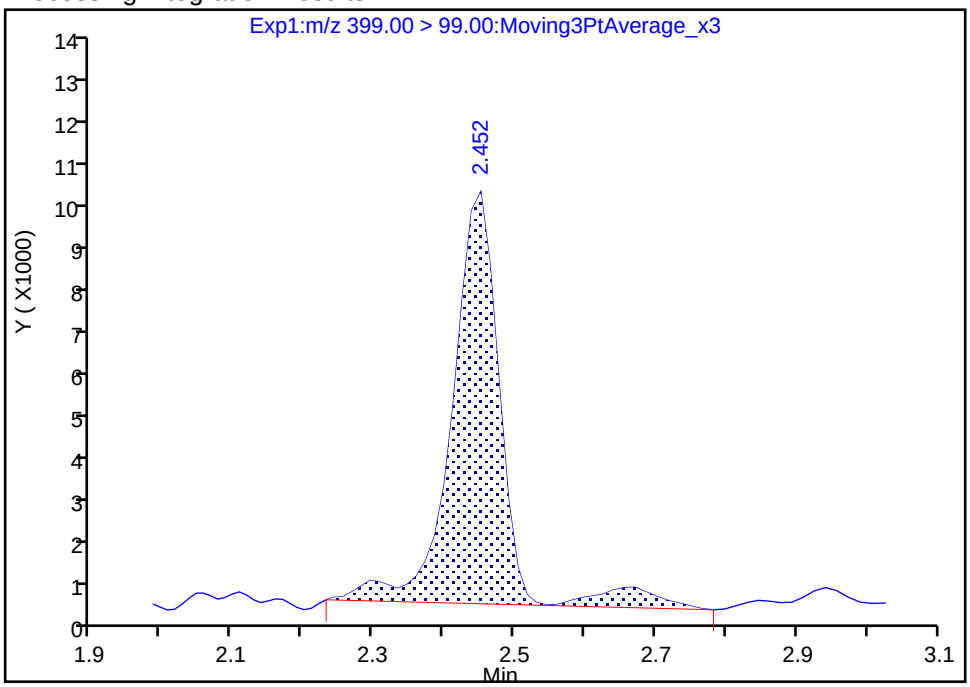
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_011.d				
Injection Date:	08-Aug-2018 08:44:17	Instrument ID:	A9		
Lims ID:	320-41460-A-3-A	Lab Sample ID:	320-41460-3		
Client ID:	GC-MW-109 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

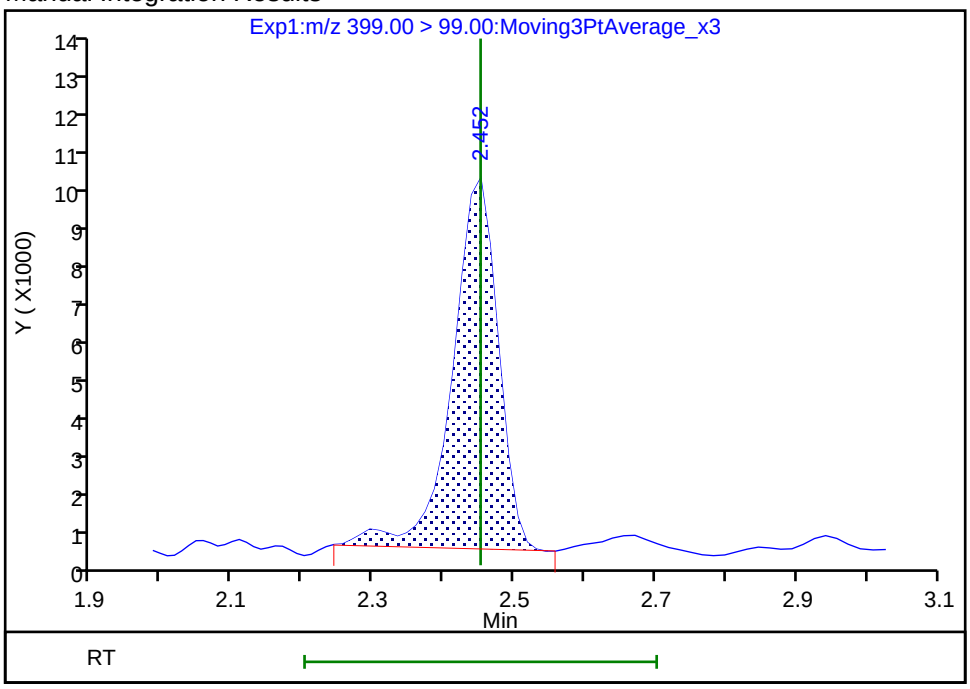
Processing Integration Results

RT: 2.45
Area: 47738
Amount: 0.059445
Amount Units: ng/ml



Manual Integration Results

RT: 2.45
Area: 43921
Amount: 0.059445
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:58:50

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

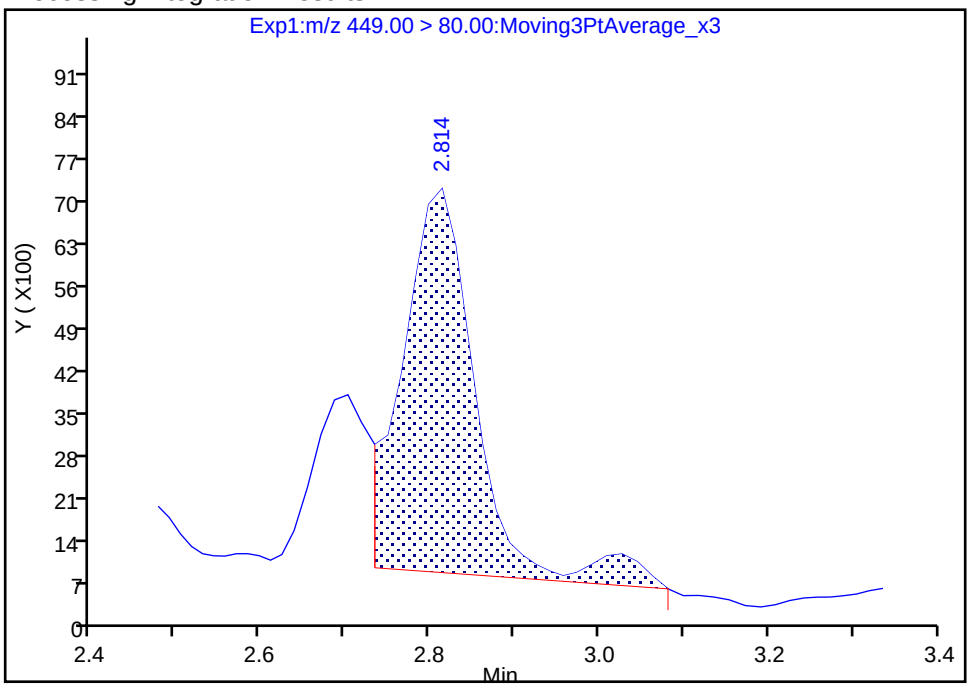
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_011.d				
Injection Date:	08-Aug-2018 08:44:17	Instrument ID:	A9		
Lims ID:	320-41460-A-3-A	Lab Sample ID:	320-41460-3		
Client ID:	GC-MW-109 (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

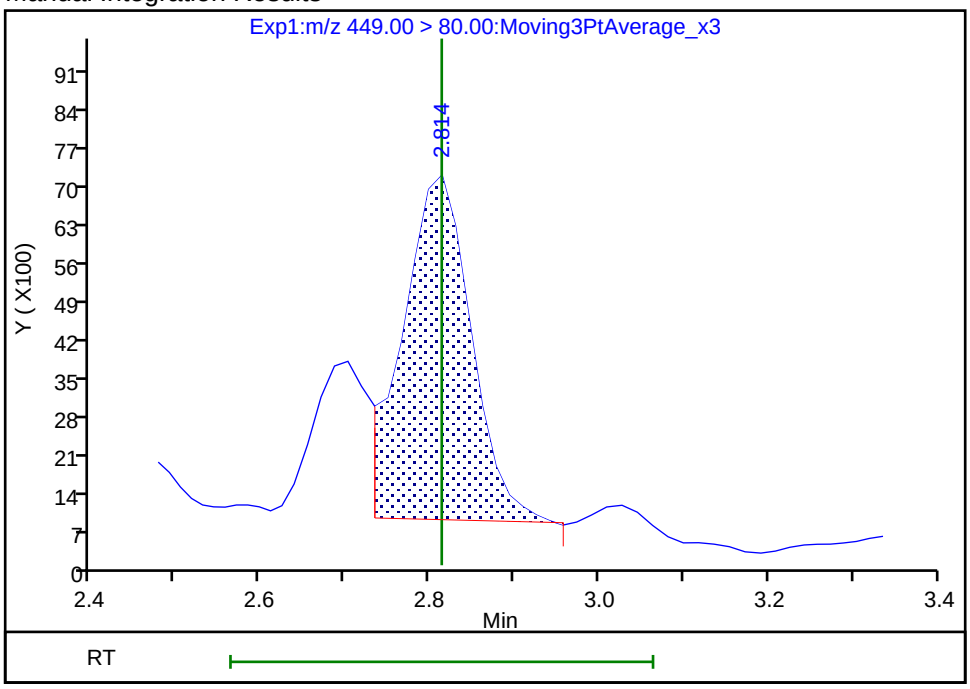
Processing Integration Results

RT: 2.81
Area: 37736
Amount: 0.014550
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 34657
Amount: 0.013363
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:59:21

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

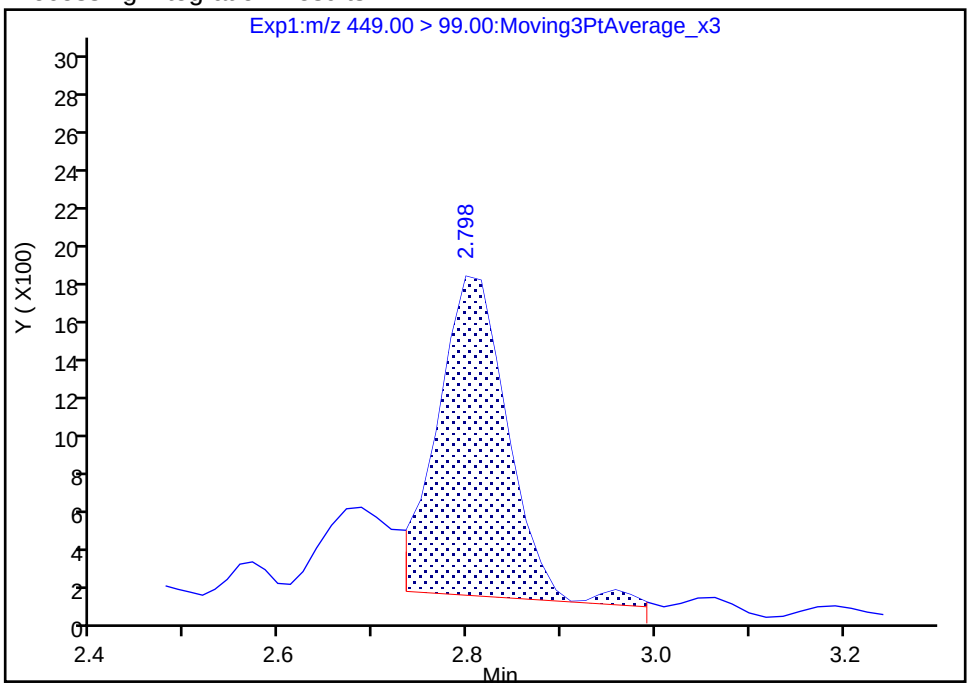
Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_011.d
Injection Date: 08-Aug-2018 08:44:17 Instrument ID: A9
Lims ID: 320-41460-A-3-A Lab Sample ID: 320-41460-3
Client ID: GC-MW-109 (WG)
Operator ID: A9\Administrator ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

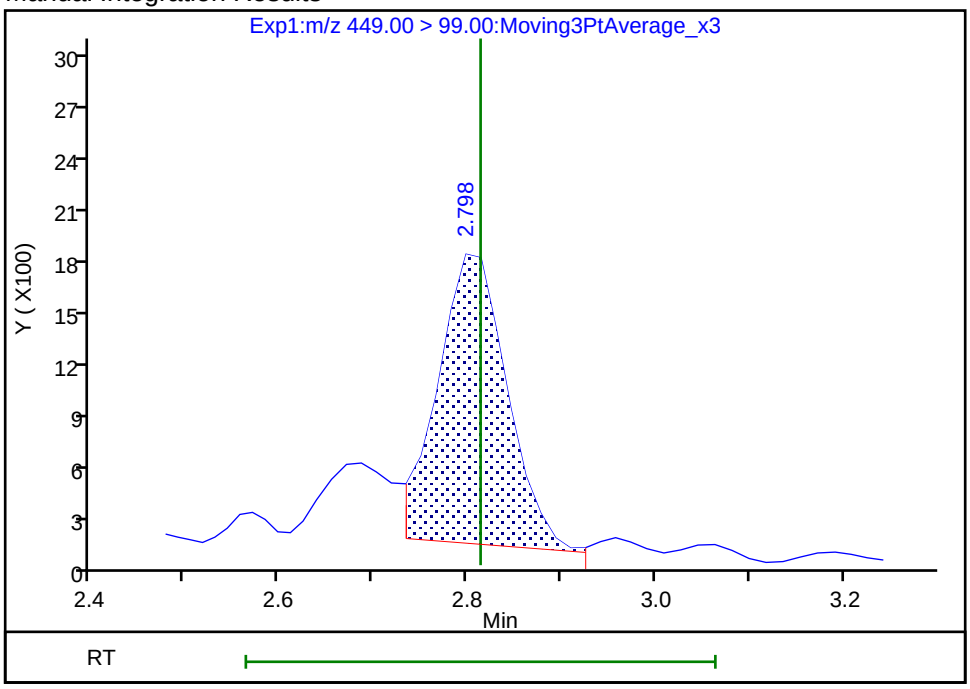
Processing Integration Results

RT: 2.80
Area: 8700
Amount: 0.014550
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 8584
Amount: 0.013363
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 14:59:26
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) | Lab Sample ID: 320-41460-4

Matrix: Water | Lab File ID: 2018.08.08LLA_012.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 283.2(mL) | Date Analyzed: 08/08/2018 08:51

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	9.2		1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	17		1.8	0.43
307-24-4	Perfluorohexanoic acid (PFHxA)	14		1.8	0.51
375-85-9	Perfluoroheptanoic acid (PFHpA)	10		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	30		1.8	0.75
375-95-1	Perfluorononanoic acid (PFNA)	3.6		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	3.2		1.8	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.9		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.2	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.44	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2 FTS	2.3	J F1 B *	18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) | Lab Sample ID: 320-41460-4

Matrix: Water | Lab File ID: 2018.08.08LLA_012.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 283.2(mL) | Date Analyzed: 08/08/2018 08:51

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	88		25-150
STL01893	13C5 PFPeA	84		25-150
STL00993	13C2 PFHxA	88		25-150
STL01892	13C4-PFHpA	87		25-150
STL00990	13C4 PFOA	97		25-150
STL00995	13C5 PFNA	102		25-150
STL00996	13C2 PFDA	95		25-150
STL00997	13C2 PFUnA	88		25-150
STL00998	13C2 PFDoA	95		25-150
STL02116	13C2-PFTeDA	99		25-150
STL02337	13C3-PFBS	81		25-150
STL00994	18O2 PFHxS	80		25-150
STL00991	13C4 PFOS	81		25-150
STL01056	13C8 FOSA	83		25-150
STL02118	d3-NMeFOSAA	109		25-150
STL02117	d5-NEtFOSAA	103		25-150
STL02279	M2-6:2FTS	114		25-150
STL02280	M2-8:2FTS	104		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_012.d
Lims ID: 320-41460-A-4-A
Client ID: GC-MW-109M (WG)
Sample Type: Client
Inject. Date: 08-Aug-2018 08:51:49 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-a-4-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 15:08:07 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 15:03:59

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.505	1.516	-0.011	0.541	7170212	2.21		88.3	2445	
2 Perfluorobutyric acid										
212.90 > 169.00	1.505	1.523	-0.018	1.000	694603	0.2606			26.8	
D 3 13C5-PFPeA										
267.90 > 223.00	1.789	1.805	-0.016	0.643	6129505	2.11		84.5	4963	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.789	1.805	-0.016	1.000	1187443	0.4747			31.6	M
D 47 13C3-PFBS										
301.90 > 83.00	1.823	1.838	-0.015	0.655	85003	1.89		81.3	235	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.823	1.847	-0.024	1.000	632902	0.1676			50.7	
298.90 > 99.00	1.823	1.847	-0.024	1.000	211474		2.99(1.35-4.05)		44.8	
D 60 M2-4:2FTS										
329.00 > 81.00	2.048	2.058	-0.010	0.736	1348	0.004408		0.0	0.2	
D 7 13C2 PFHxA										
315.00 > 270.00	2.079	2.098	-0.019	0.747	6635388	2.20		88.1	9819	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.079	2.098	-0.019	1.000	1001177	0.4032			48.8	
313.00 > 119.00	2.079	2.098	-0.019	1.000	73766		13.57(6.96-20.87)		72.6	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.110	2.119	-0.009	1.158	18876	0.0106			4.4	
349.00 > 99.00	2.110	2.119	-0.009	1.158	7364		2.56(1.15-3.45)		2.5	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.181	2.201	-0.020	0.784	762637	2.96		118	2406	
D 9 13C4-PFHpA										
367.00 > 322.00	2.427	2.439	-0.012	0.872	7475839	2.18		87.4	9299	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.427	2.439	-0.012	1.000	908273	0.2925			42.5	
363.00 > 169.00	2.427	2.439	-0.012	1.000	167335		5.43(2.17-6.52)		237	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.440	2.452	-0.012	1.000	167268	0.0636			49.5	
399.00 > 99.00	2.440	2.452	-0.012	1.000	47861		3.49(1.90-5.70)		3.2	
D 11 18O2 PFHxS										
403.00 > 84.00	2.440	2.465	-0.025	0.877	4861344	1.89		79.8	8216	
D 12 M2-6:2FTS										
429.00 > 81.00	2.767	2.782	-0.015	0.994	898442	2.70		114	633	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.767	2.782	-0.015	1.000	53129	0.0657			118	
D 14 13C4 PFOA										
417.00 > 372.00	2.783	2.814	-0.031	1.000	6924793	2.41		96.6	7362	
* 62 13C2-PFOA										
415.00 > 370.00	2.783	2.814	-0.031		7267192	2.50			7421	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.783	2.814	-0.031	1.000	2601296	0.8572			174	
413.00 > 169.00	2.783	2.814	-0.031	1.000	907077		2.87(1.36-4.08)		1070	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.799	2.814	-0.015	0.882	27107	0.0124			9.4	M
449.00 > 99.00	2.799	2.814	-0.015	0.882	5019		5.40(1.84-5.53)		9.6	
D 18 13C4 PFOS										
503.00 > 80.00	3.173	3.190	-0.017	1.140	5185524	1.93		80.9	2662	
D 19 13C5 PFNA										
468.00 > 423.00	3.173	3.190	-0.017	1.140	6282402	2.55		102	4506	
20 Perfluorononanoic acid										
463.00 > 419.00	3.173	3.190	-0.017	1.000	269518	0.1017			39.2	
463.00 > 169.00	3.173	3.190	-0.017	1.000	49008		5.50(2.68-8.03)		93.5	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.173	3.190	-0.017	1.000	901406	0.3874			168	
499.00 > 99.00	3.173	3.190	-0.017	1.000	171956		5.24(2.04-6.12)		324	
D 21 13C8 FOSA										
506.00 > 78.00	3.514	3.527	-0.013	1.263	3331014	2.08		83.2	5034	
D 26 M2-8:2FTS										
529.00 > 81.00	3.514	3.542	-0.028	1.263	96382	2.49		104	463	
D 23 13C2 PFDA										
515.00 > 470.00	3.530	3.542	-0.012	1.268	5832467	2.37		94.7	8808	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.530	3.542	-0.012	1.004	2163	0.000529			5.0	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.530	3.556	-0.026	1.000	260936	0.0910			45.4	
513.00 > 169.00	3.530	3.556	-0.026	1.000	20239		12.89(7.12-21.35)		57.0	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.685	3.697	-0.012	1.324	1310196	2.74		109	4566	
D 30 13C2 PFUnA										
565.00 > 520.00	3.857	3.870	-0.013	1.386	4393289	2.21		88.3	5073	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.841	3.870	-0.029	1.380	1012025	2.57		103	1754	
D 36 13C2 PFDoA										
615.00 > 570.00	4.142	4.176	-0.034	1.488	5120713	2.39		95.4	3361	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.645	4.676	-0.031	1.669	3382155	2.47		98.7	4946	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.058	5.092	-0.034	1.818	2847455	2.26		90.6	4668	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.075	5.092	-0.017	1.003	23370	-0.004682			1.8	
813.00 > 169.00	5.075	5.092	-0.017	1.003	4110		5.69(2.77-8.32)		18.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 08-Aug-2018 15:08:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_012.d

Injection Date: 08-Aug-2018 08:51:49 Instrument ID: A9

Lims ID: 320-41460-A-4-A Lab Sample ID: 320-41460-4

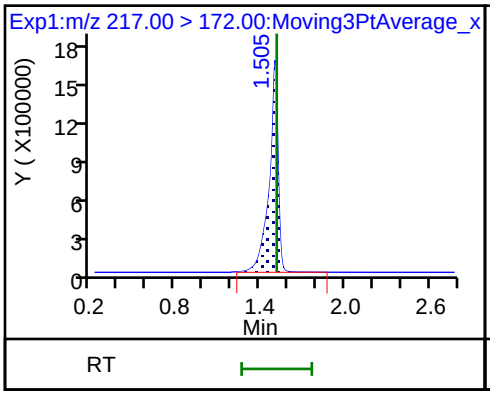
Client ID: GC-MW-109M (WG)

Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 8

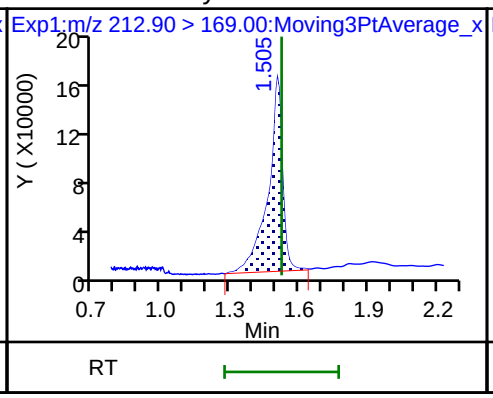
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

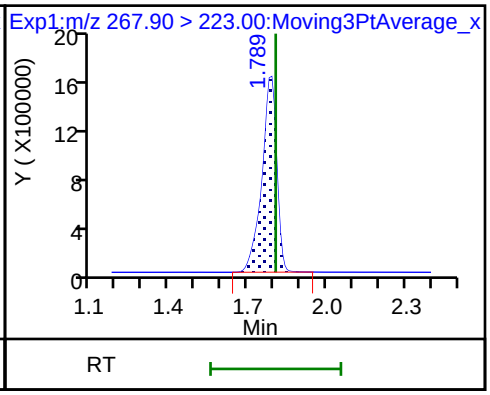
D 1 13C4 PFBA



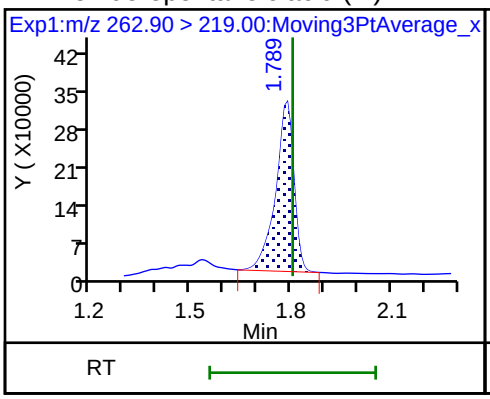
2 Perfluorobutyric acid



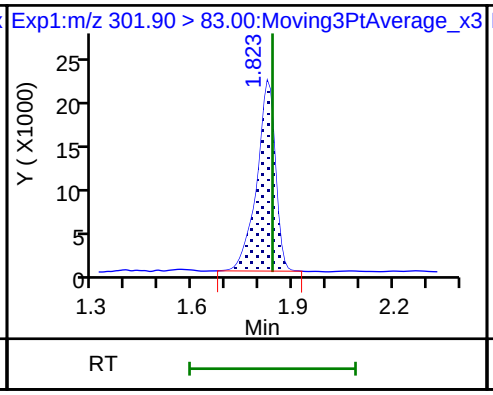
D 3 13C5-PFPeA



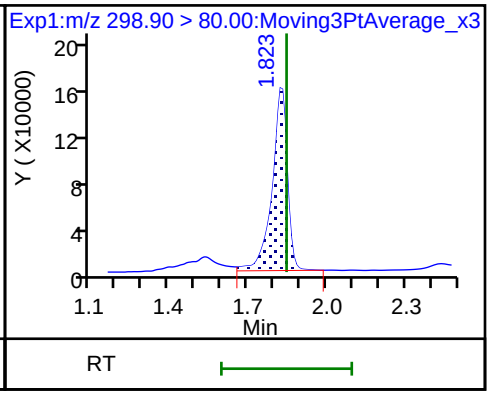
4 Perfluoropentanoic acid (M)



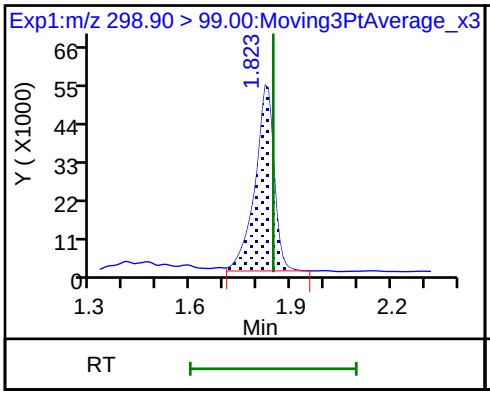
D 47 13C3-PFBS



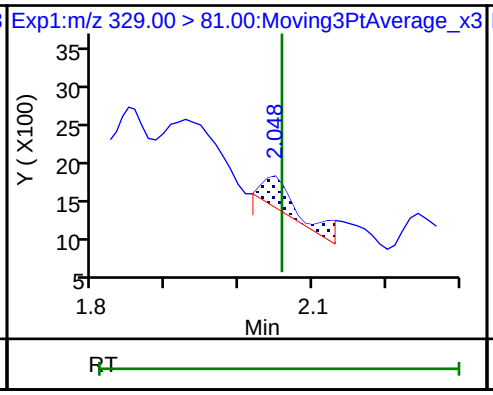
5 Perfluorobutanesulfonic acid



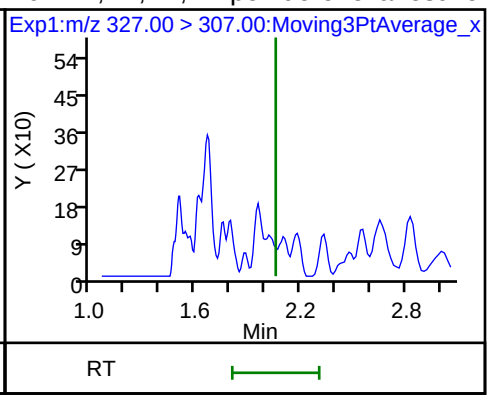
5 Perfluorobutanesulfonic acid



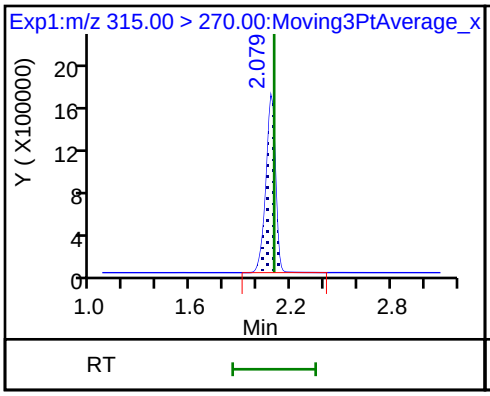
D 60 M2-4:2FTS



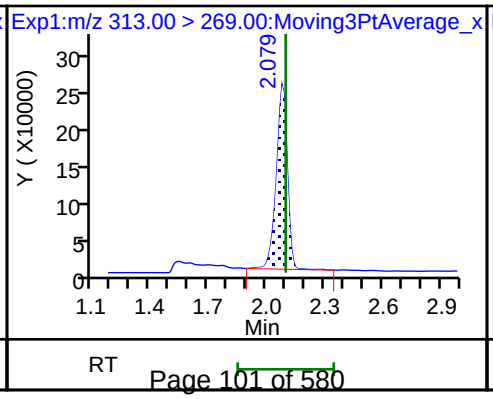
61 1H,1H,2H,2H-perfluorohexanesulfoni (ND)



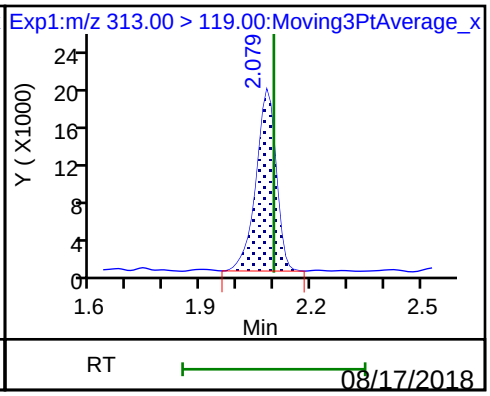
D 7 13C2 PFHxA



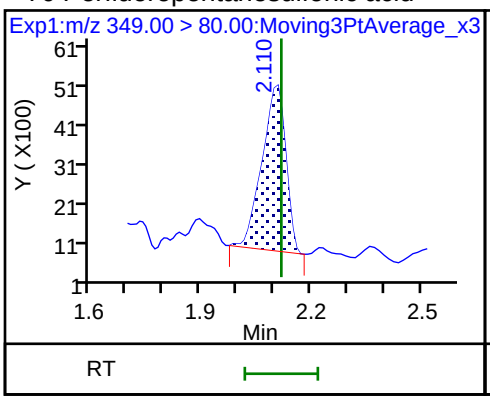
6 Perfluorohexanoic acid



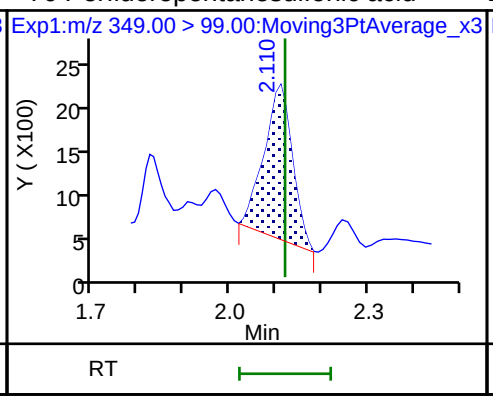
6 Perfluorohexanoic acid



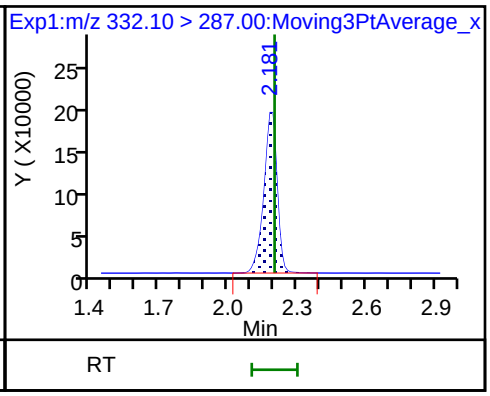
70 Perfluoropentanesulfonic acid



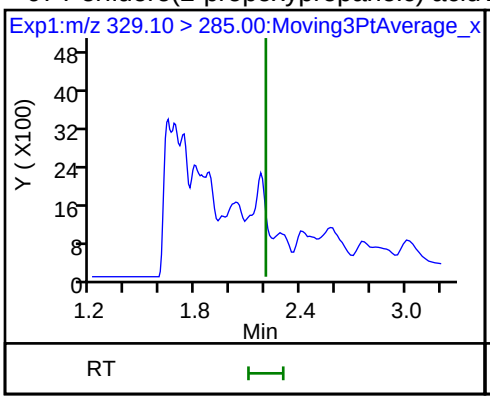
70 Perfluoropentanesulfonic acid



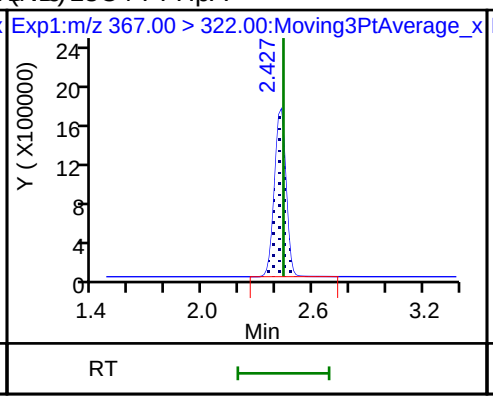
D 64 13C3 HFPO-DA



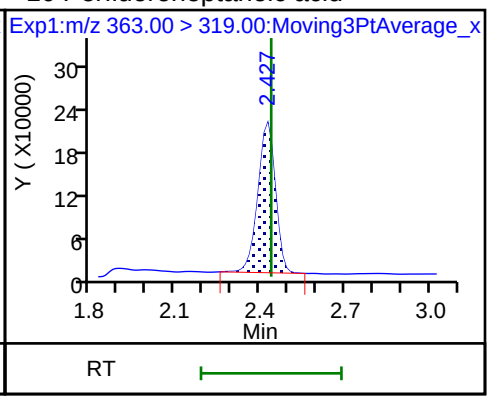
67 Perfluoro(2-propoxypropanoic) acid (ND)



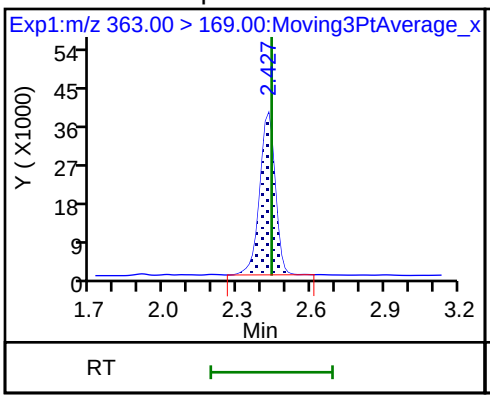
D 9 13C4-PFHpA



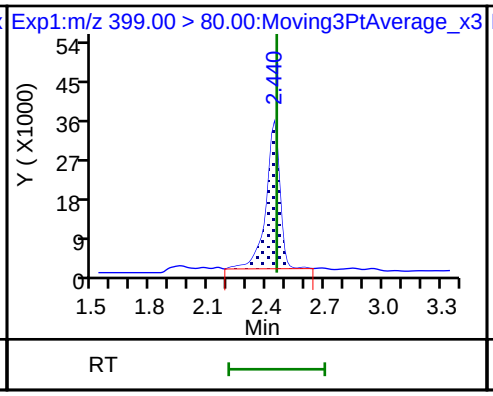
10 Perfluoroheptanoic acid



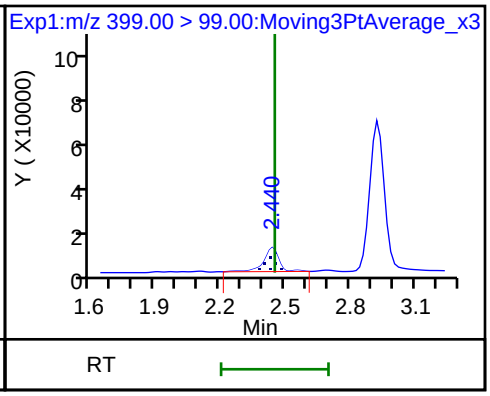
10 Perfluoroheptanoic acid



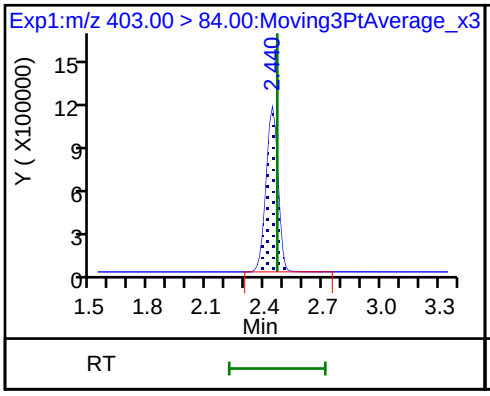
8 Perfluorohexanesulfonic acid



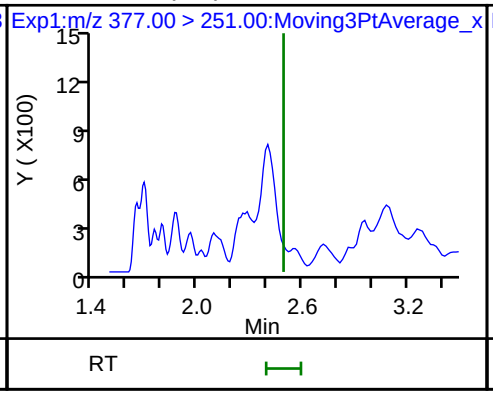
8 Perfluorohexanesulfonic acid



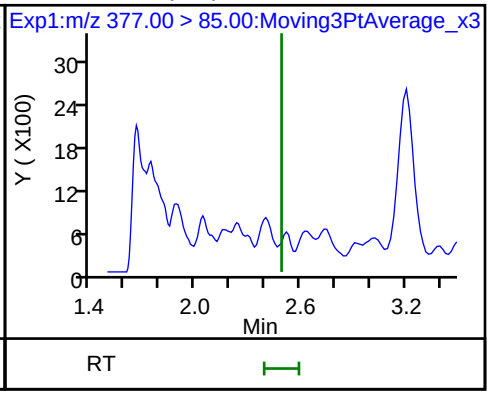
D 11 18O2 PFHxS



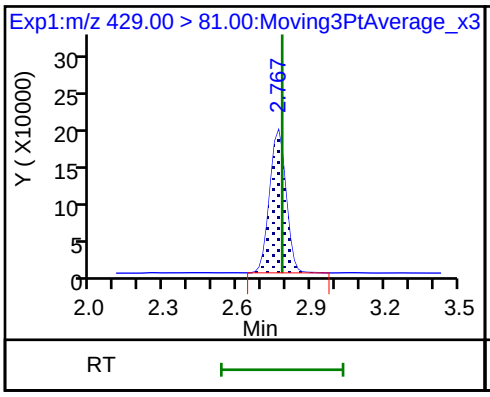
65 ADONA (ND)



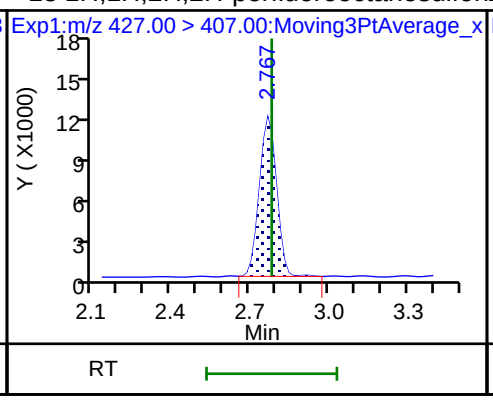
65 ADONA (ND)



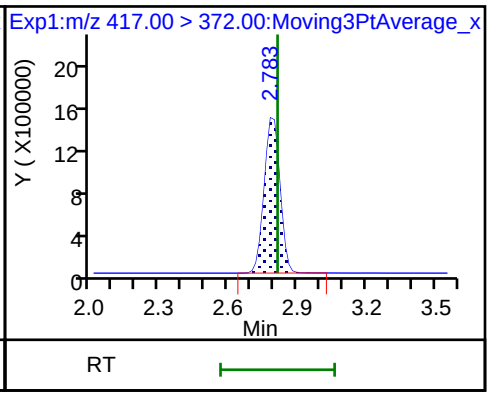
D 12 M2-6:2FTS



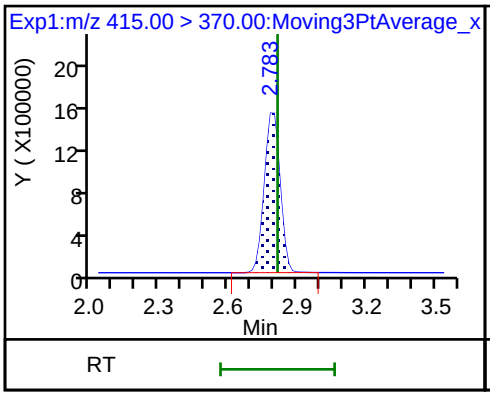
13 1H,1H,2H,2H-perfluorooctanesulfon



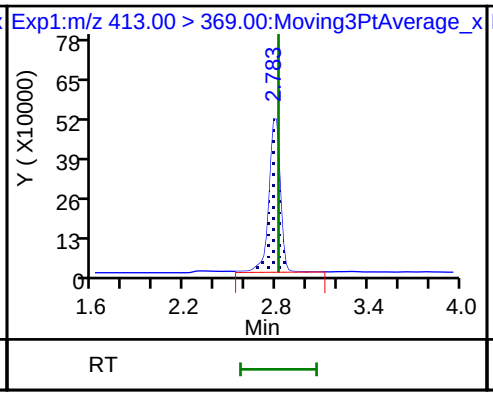
D 14 13C4 PFOA



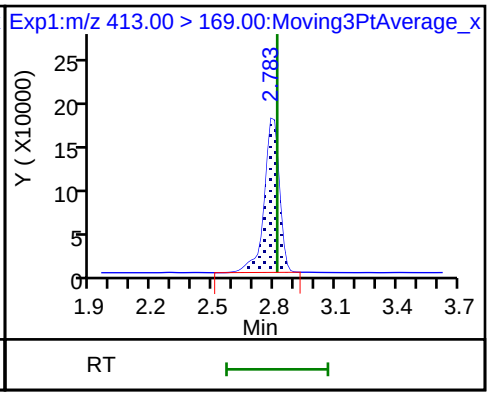
* 62 13C2-PFOA



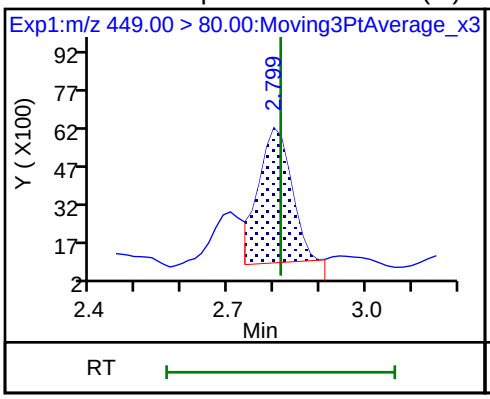
15 Perfluorooctanoic acid



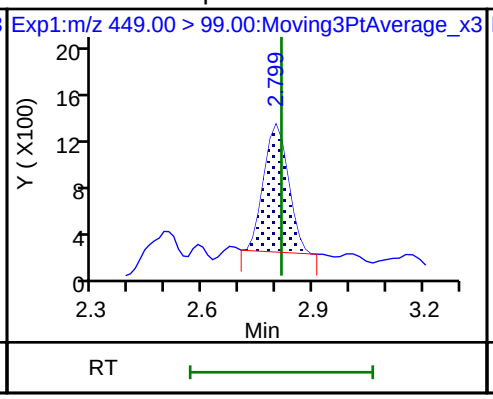
15 Perfluorooctanoic acid



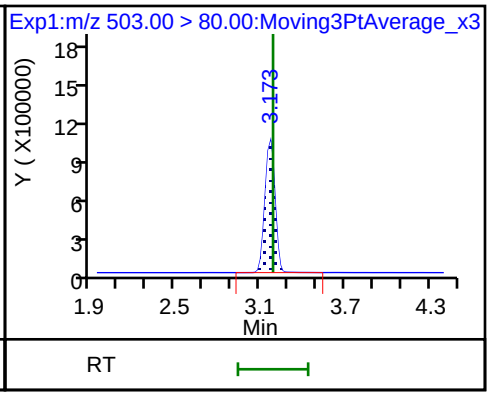
16 Perfluoroheptanesulfonic acid (M)



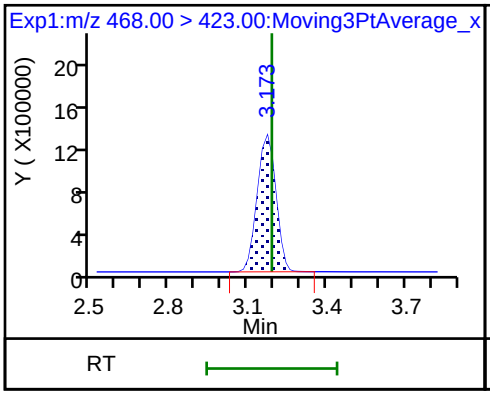
16 Perfluoroheptanesulfonic acid



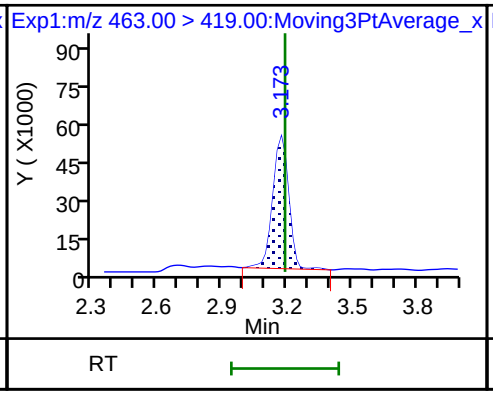
D 18 13C4 PFOS



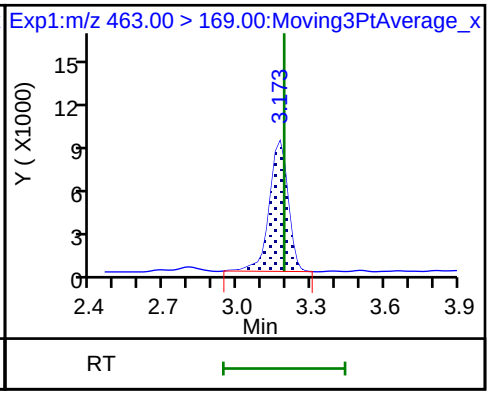
D 19 13C5 PFNA



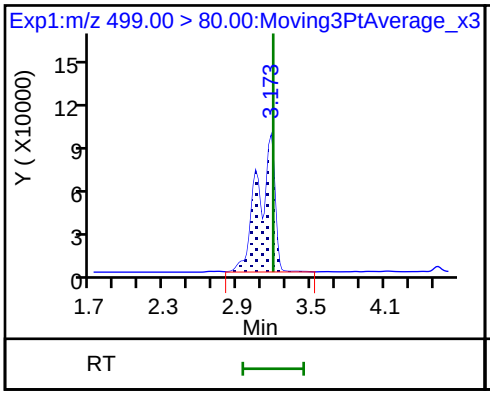
20 Perfluorononanoic acid



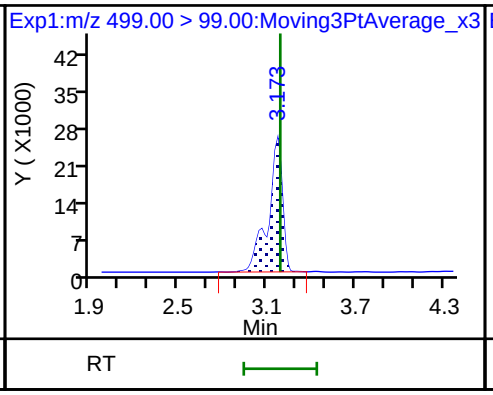
20 Perfluorononanoic acid



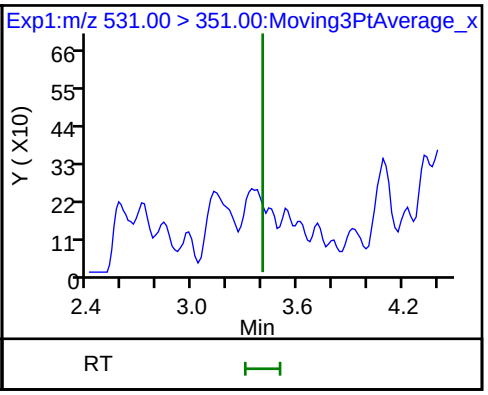
17 Perfluorooctane sulfonic acid



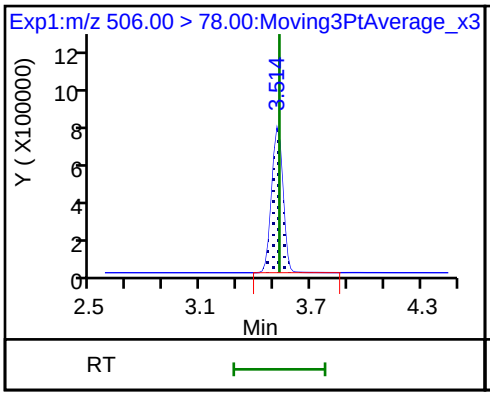
17 Perfluorooctane sulfonic acid



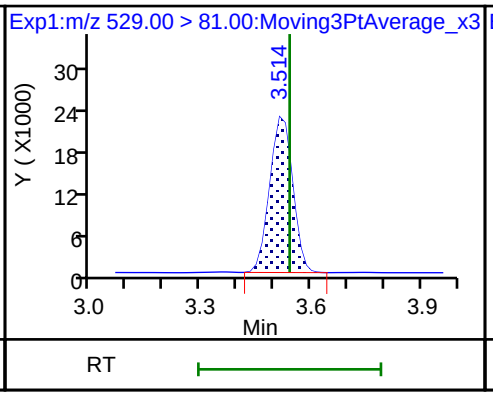
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



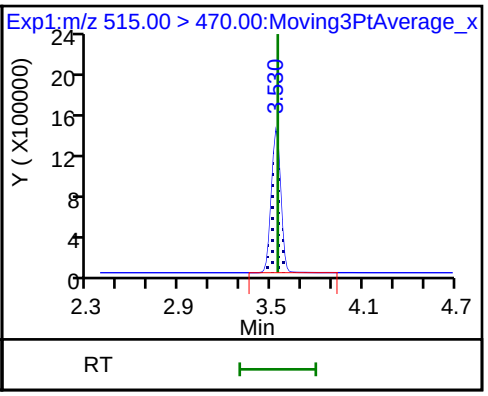
D 21 13C8 FOSA



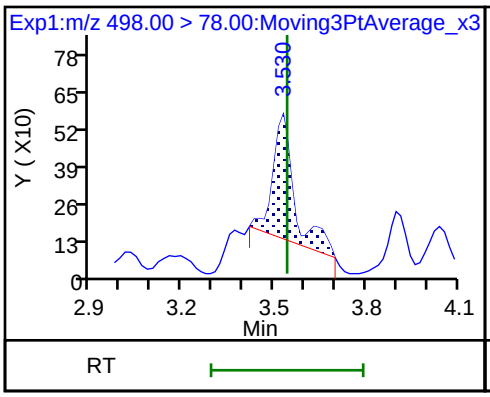
D 26 M2-8:2FTS



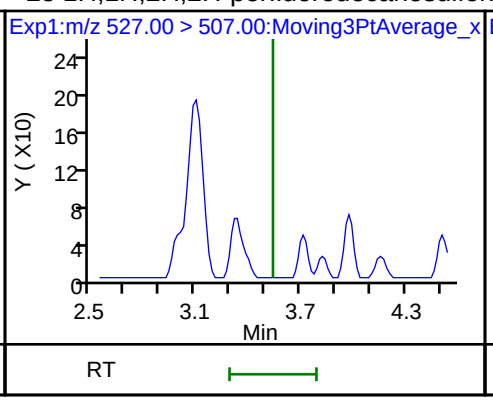
D 23 13C2 PFDA



22 Perfluorooctane Sulfonamide

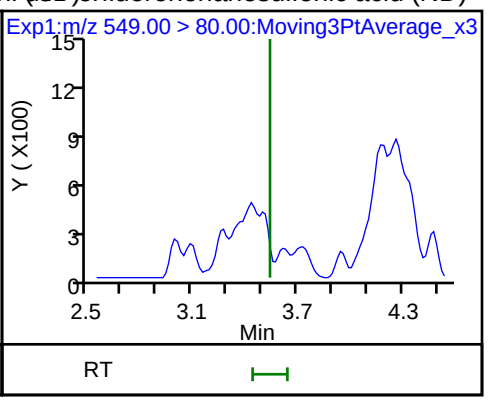


25 1H,1H,2H,2H-perfluorodecanesulfoni

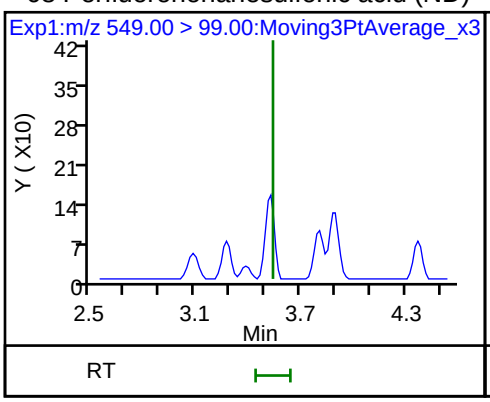


(ND)

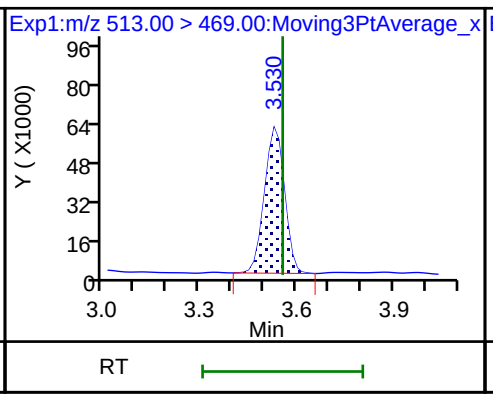
68 Perfluorononanesulfonic acid (ND)



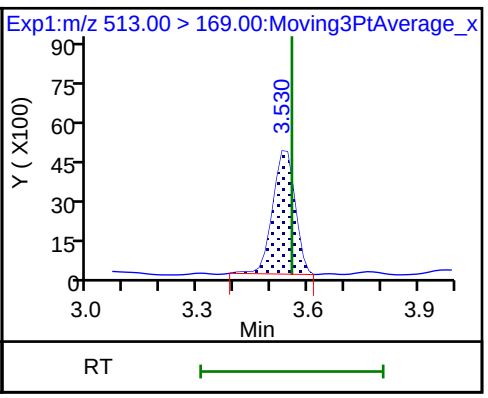
68 Perfluorononanesulfonic acid (ND)



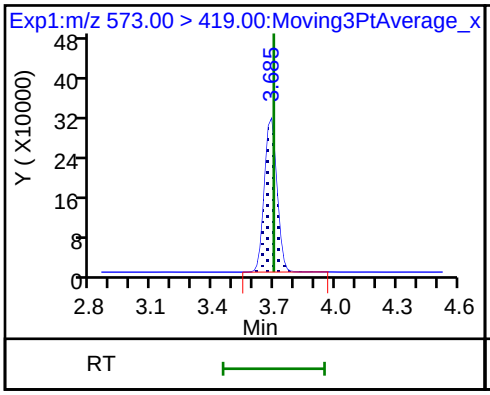
24 Perfluorodecanoic acid



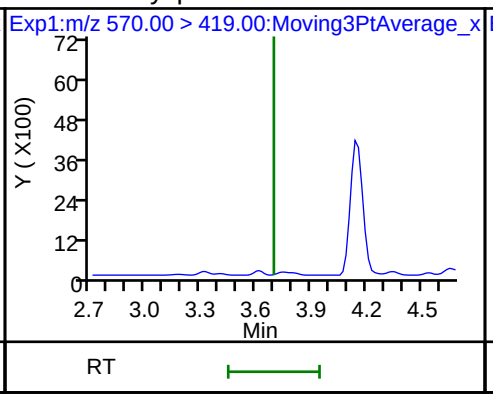
24 Perfluorodecanoic acid



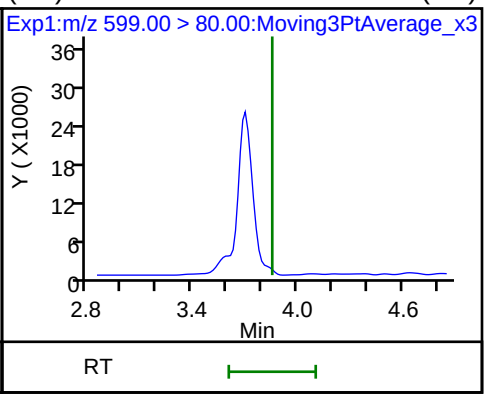
D 27 d3-NMeFOSAA



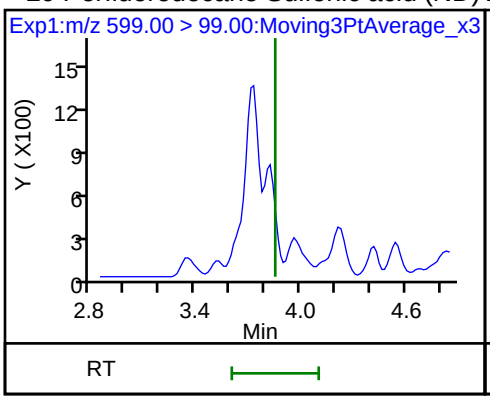
28 N-methyl perfluorooctane sulfonami (ND)



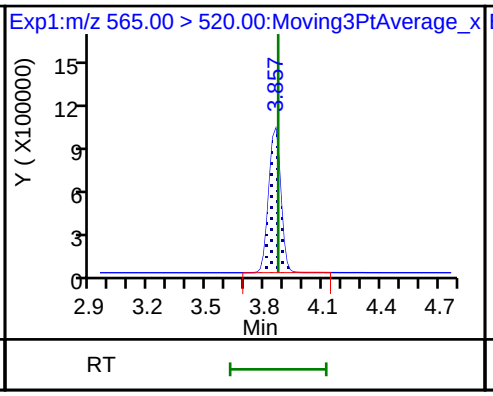
29 Perfluorodecane Sulfonic acid (ND)



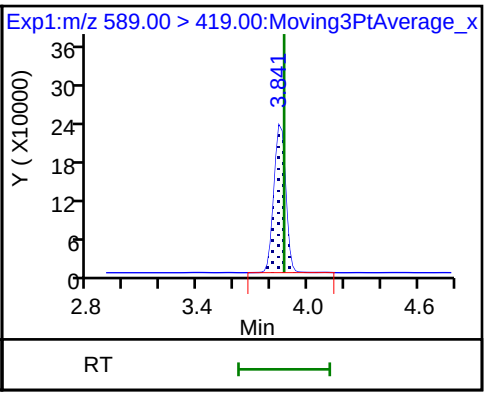
29 Perfluorodecane Sulfonic acid (ND)



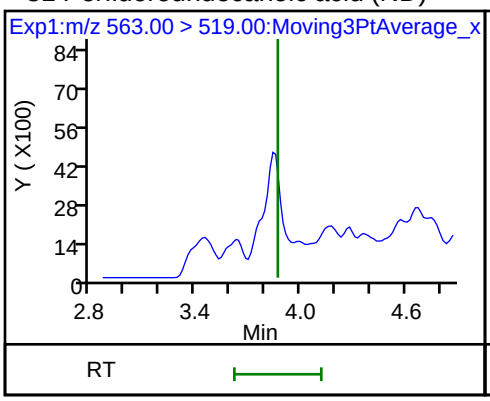
D 30 13C2 PFUnA



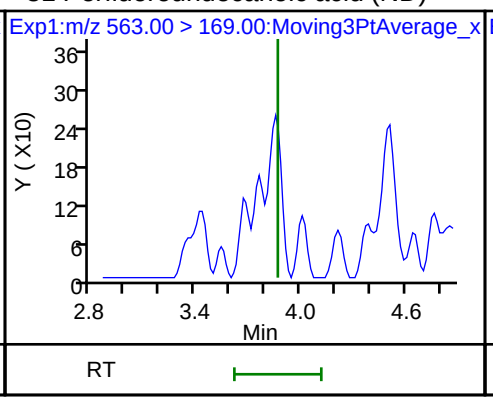
D 32 d5-NEtFOSAA



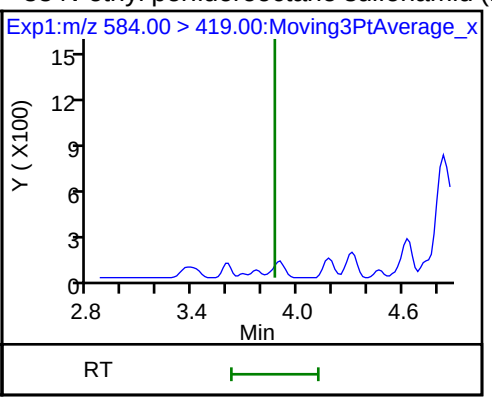
31 Perfluoroundecanoic acid (ND)



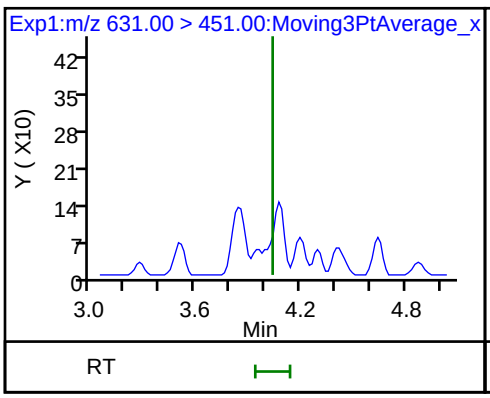
31 Perfluoroundecanoic acid (ND)



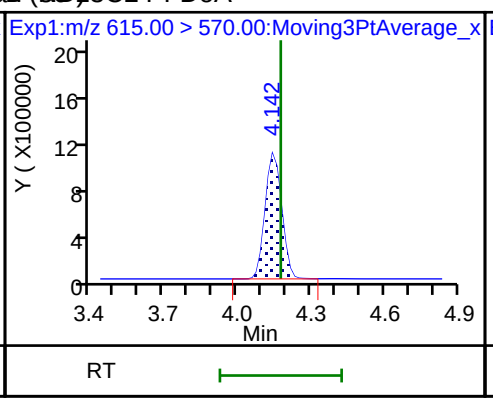
33 N-ethyl perfluorooctane sulfonamid (ND)



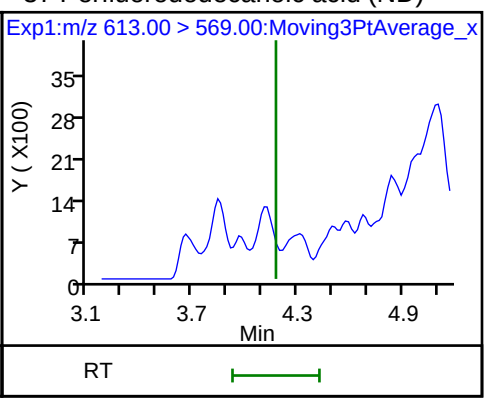
66 11-Chloroeicosafluoro-3-oxaundecan (ND)



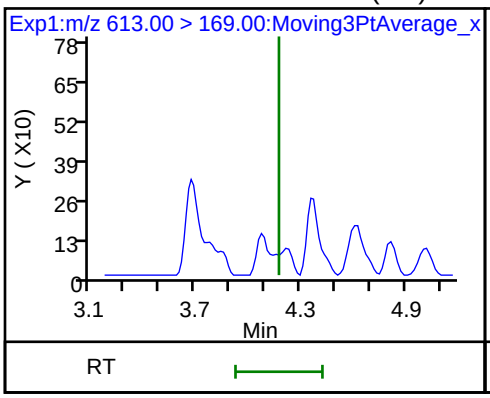
D 36 13C2 PFDoA



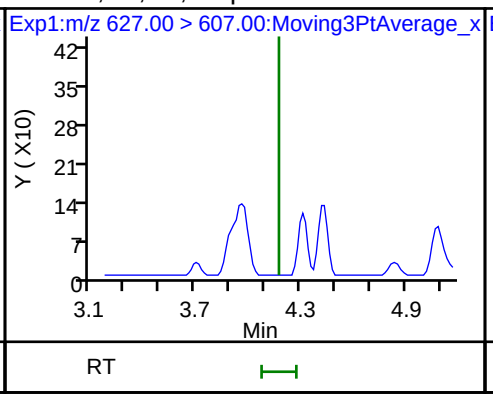
37 Perfluorododecanoic acid (ND)



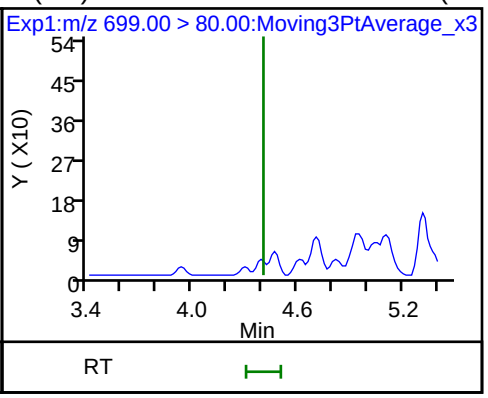
37 Perfluorododecanoic acid (ND)



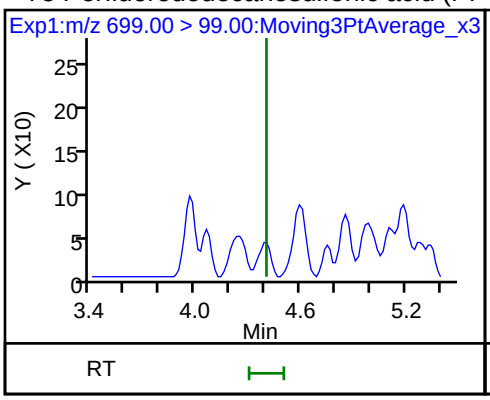
74 1H,1H,2H,2H-perfluorododecanesulfonic acid (ND)



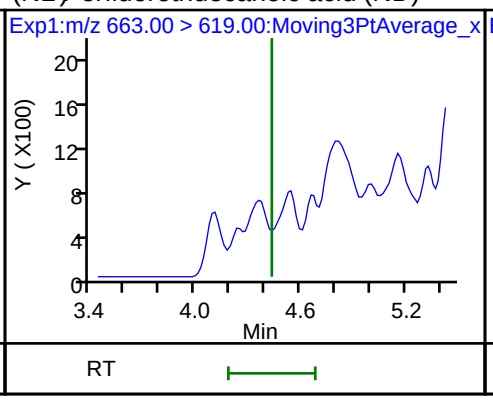
75 Perfluorododecanesulfonic acid (PF (ND)



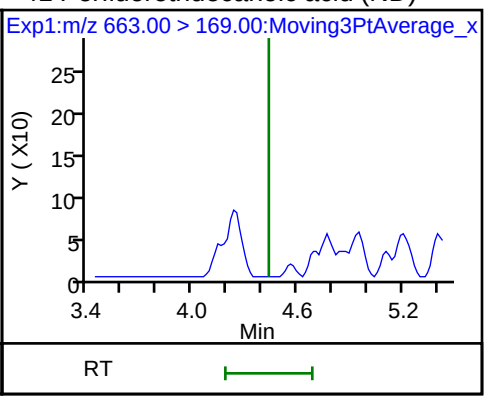
75 Perfluorododecanesulfonic acid (PF (ND)



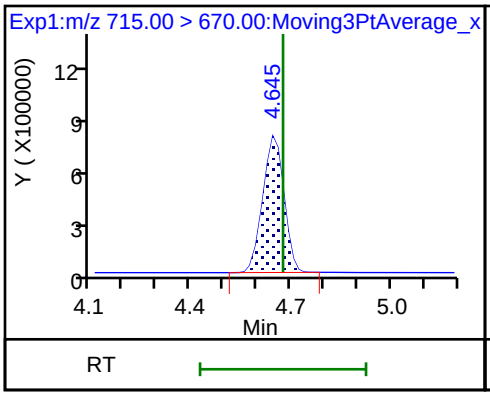
41 Perfluorotridecanoic acid (ND)



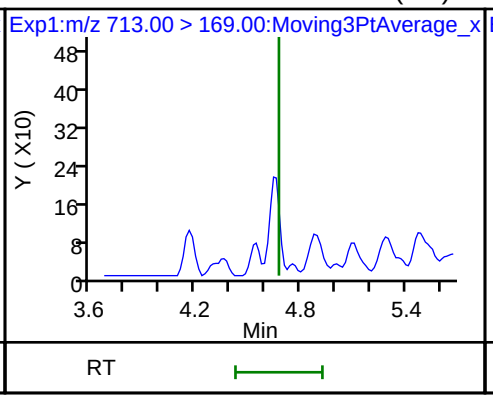
41 Perfluorotridecanoic acid (ND)



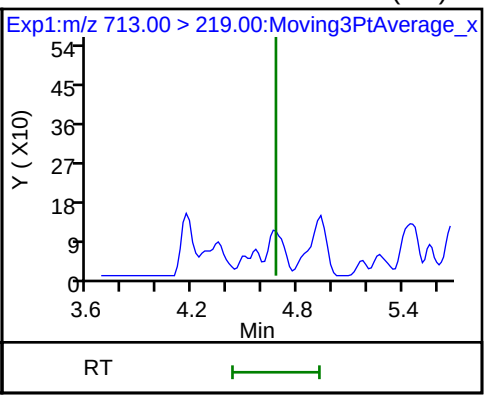
D 43 13C2-PFTeDA



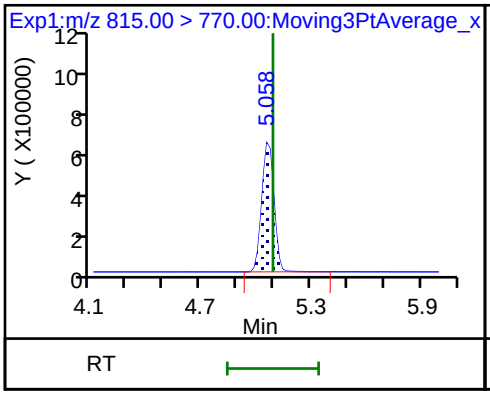
42 Perfluorotetradecanoic acid (ND)



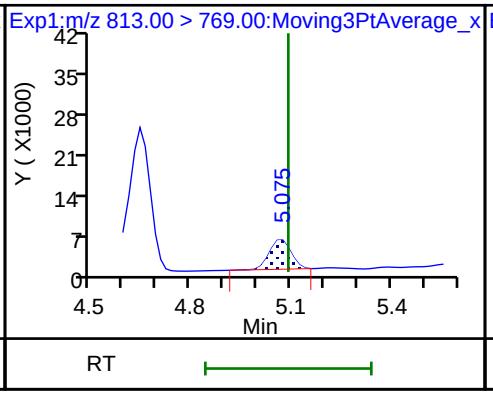
42 Perfluorotetradecanoic acid (ND)



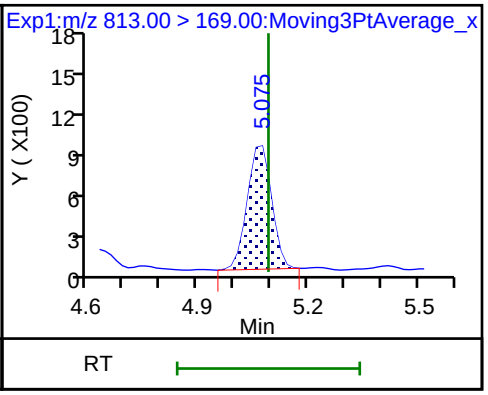
D 44 13C2-PFHxDA



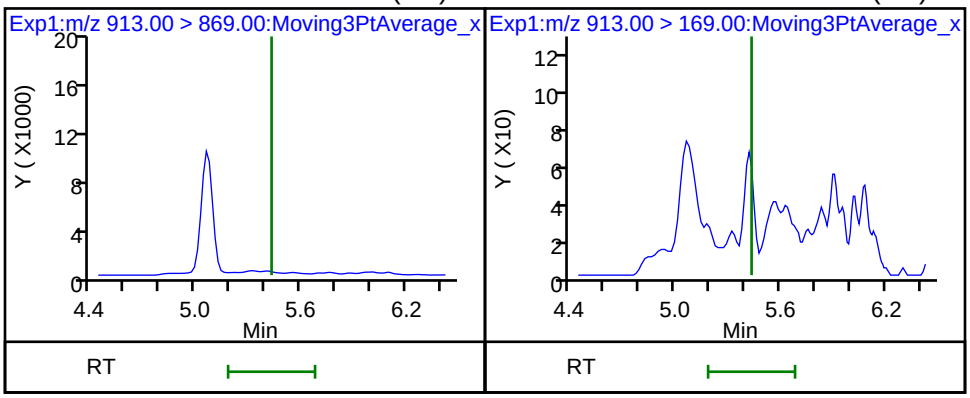
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

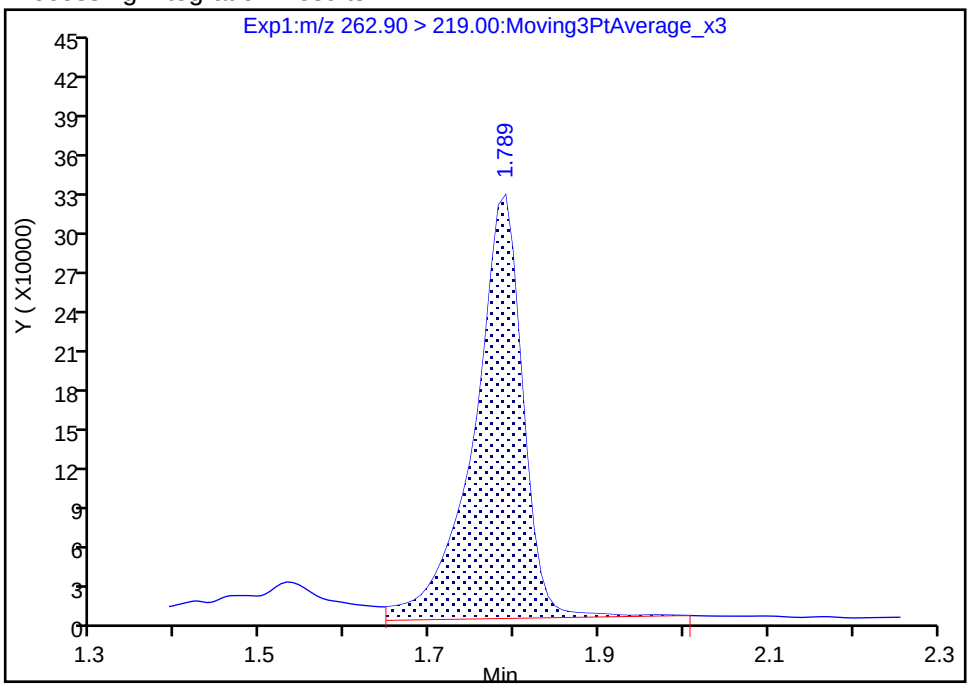
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_012.d				
Injection Date:	08-Aug-2018 08:51:49	Instrument ID:	A9		
Lims ID:	320-41460-A-4-A	Lab Sample ID:	320-41460-4		
Client ID:	GC-MW-109M (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

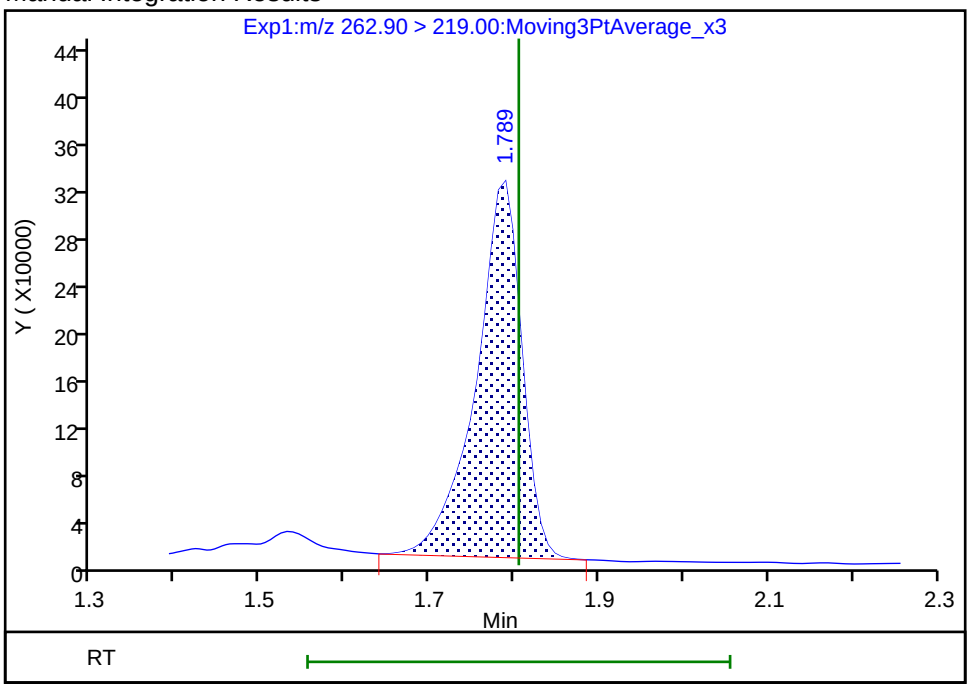
Processing Integration Results

RT: 1.79
Area: 1287376
Amount: 0.514689
Amount Units: ng/ml



Manual Integration Results

RT: 1.79
Area: 1187443
Amount: 0.474736
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 15:01:34
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

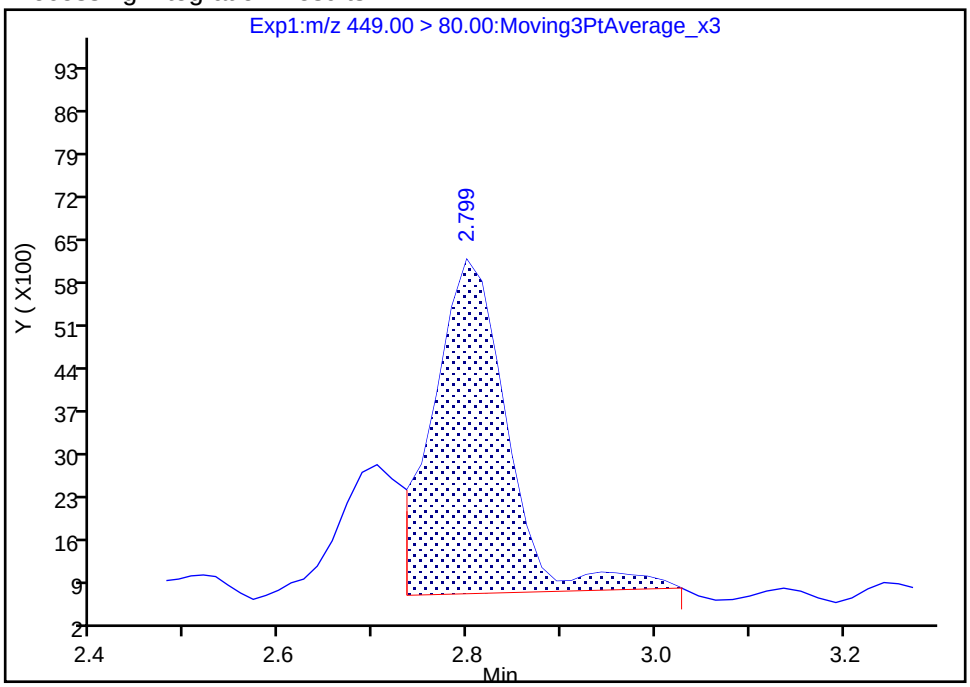
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_012.d				
Injection Date:	08-Aug-2018 08:51:49	Instrument ID:	A9		
Lims ID:	320-41460-A-4-A	Lab Sample ID:	320-41460-4		
Client ID:	GC-MW-109M (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

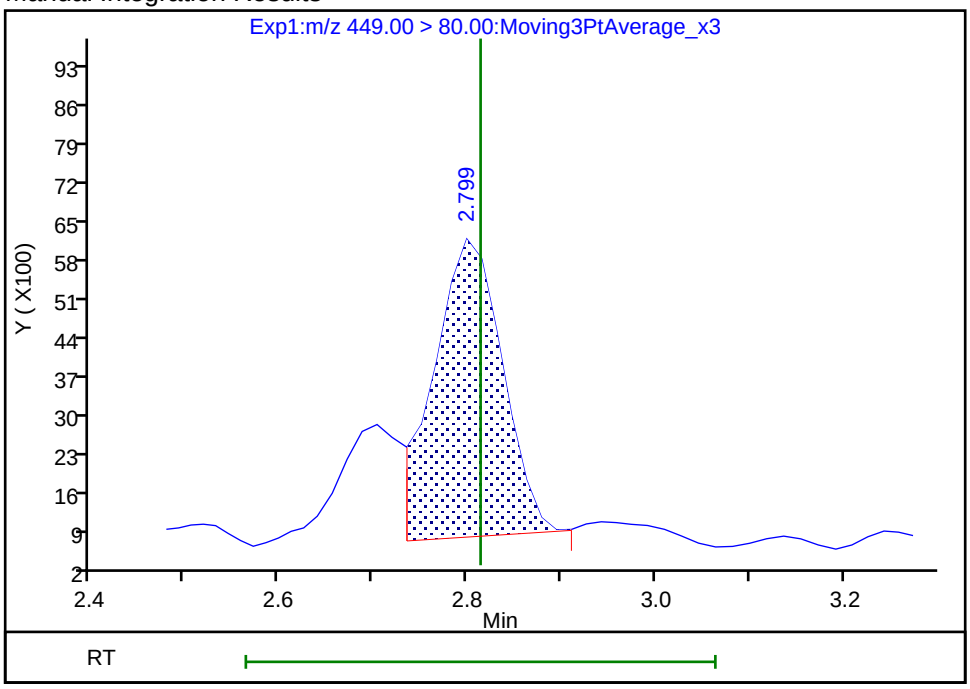
Processing Integration Results

RT: 2.80
Area: 29510
Amount: 0.013458
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 27107
Amount: 0.012362
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 15:03:32

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) RE | Lab Sample ID: 320-41460-4 RE

Matrix: Water | Lab File ID: 2018.08.12LLA_042.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/10/2018 09:01

Sample wt/vol: 267.3(mL) | Date Analyzed: 08/12/2018 16:22

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 239440 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
27619-97-2	*6:2 FTS*	*3.4*	*J H*	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02279	M2-6:2FTS	119		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_042.d
Lims ID: 320-41460-B-4-A
Client ID: GC-MW-109M (WG)
Sample Type: Client
Inject. Date: 12-Aug-2018 16:22:41 ALS Bottle#: 29 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-b-4-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:27:39 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 11:20:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.414	1.411	0.003	0.534	4746184	1.98		79.1	6890	
2 Perfluorobutyric acid										
212.90 > 169.00	1.419	1.418	0.001	1.004	432260	0.2425			35.1	
D 3 13C5-PFPeA										
267.90 > 223.00	1.676	1.670	0.006	0.633	3635090	2.20		88.0	6286	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.676	1.676	0.0	1.000	737179	0.4456			34.1	
D 47 13C3-PFBS										
301.90 > 83.00	1.708	1.702	0.006	0.645	72979	1.91		82.2	236	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.708	1.716	-0.008	1.000	417115	0.1749			29.1	
298.90 > 99.00	1.708	1.716	-0.008	1.000	179976		2.32(1.25-3.74)		57.2	
D 60 M2-4:2FTS										
329.00 > 81.00	1.949	1.912	0.037	0.736	1271	0.004668		0.0	0.3	
D 7 13C2 PFHxA										
315.00 > 270.00	1.960	1.954	0.006	0.740	4176456	2.23		89.1	8380	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.960	1.960	0.0	1.000	702071	0.4118			70.1	
313.00 > 119.00	1.960	1.960	0.0	1.000	65903		10.65(5.03-15.10)		162	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.981	1.980	0.001	1.160	22025	0.0102			8.6	
349.00 > 99.00	1.981	1.980	0.001	1.160	8336		2.64(1.36-4.07)		6.5	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.054	2.048	0.006	0.776	254648	1.75		69.9	1076	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.054	2.054	0.0	1.000	4775	0.0194			1.0	
D 9 13C4-PFHpA										
367.00 > 322.00	2.292	2.288	0.004	0.866	4275586	2.32		92.7	10606	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.292	2.292	0.0	1.000	423162	0.2330			74.3	
363.00 > 169.00	2.292	2.292	0.0	1.000	181848		2.33(1.13-3.40)		316	
D 11 18O2 PFHxS										
403.00 > 84.00	2.303	2.299	0.004	0.870	5106104	2.16		91.3	9485	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.303	2.303	0.0	1.000	135786	0.0580			74.2	M
399.00 > 99.00	2.314	2.303	0.011	1.005	50638		2.68(1.50-4.49)		51.6	
D 12 M2-6:2FTS										
429.00 > 81.00	2.624	2.612	0.012	0.991	1095528	2.82		119	1619	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.624	2.624	0.0	1.000	65860	0.0907			338	
D 73 13C8 PFOA										
421.00 > 376.00	2.639	2.635	0.004	0.997	9732	0.002915		0.0	145	
D 14 13C4 PFOA										
417.00 > 372.00	2.647	2.643	0.004	1.000	3795550	2.24		89.7	6850	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.655	2.647	0.008	1.003	1444024	0.8412			147	M
413.00 > 169.00	2.647	2.647	0.0	1.000	830449		1.74(0.84-2.52)		1000	M
* 62 13C2-PFOA										
415.00 > 370.00	2.647	2.647	0.0		4330333	2.50			9020	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.655	2.655	0.0	0.877	18692	0.0103			17.4	
449.00 > 99.00	2.663	2.655	0.008	0.879	5564		3.36(1.94-5.82)		10.7	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.028	3.014	0.014	1.000	621326	0.3961			627	
499.00 > 99.00	3.028	3.014	0.014	1.000	111805		5.56(2.31-6.93)		237	
D 18 13C4 PFOS										
503.00 > 80.00	3.028	3.016	0.012	1.144	3491709	2.25		94.0	4751	
D 19 13C5 PFNA										
468.00 > 423.00	3.028	3.016	0.012	1.144	3561467	2.34		93.8	8476	
20 Perfluorononanoic acid										
463.00 > 419.00	3.028	3.022	0.006	1.000	144496	0.0963			34.0	
463.00 > 169.00	3.028	3.022	0.006	1.000	37574		3.85(1.90-5.69)		98.9	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.240	3.234	0.006	1.070	3049	0.001198			17.5	
D 21 13C8 FOSA										
506.00 > 78.00	3.347	3.335	0.012	1.264	4822742	2.34		93.7	8040	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.347	3.340	0.007	1.000	3017	0.001606			15.8	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.377	3.369	0.008	1.115	2076	0.001889			6.7	
549.00 > 99.00	3.370	3.369	0.001	1.113	768		2.70(1.33-3.97)		6.3	
D 26 M2-8:2FTS										
529.00 > 81.00	3.377	3.372	0.005	1.276	1171259	2.50		104	2644	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.384	3.377	0.007	1.000	108425	0.0870			83.9	
513.00 > 169.00	3.384	3.377	0.007	1.000	17000		6.38(2.36-7.09)		109	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.384	3.380	0.004	1.278	3104426	2.33		93.2	7079	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.545	3.540	0.005	1.339	1730653	2.54		102	6631	
29 Perfluorodecane Sulfonic acid										R
599.00 > 80.00	3.561	3.699	-0.138	1.176	77176	0.0836			48.0	R
599.00 > 99.00	3.569	3.699	-0.130	1.179	9950		7.76(1.39-4.16)		21.9	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.707	3.702	0.005	1.400	1719429	2.43		97.4	1814	
D 30 13C2 PFUnA										
565.00 > 520.00	3.716	3.711	0.005	1.404	2447813	2.28		91.3	5651	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.716	3.716	0.0	1.000	10641	0.009672			7.7	
563.00 > 169.00	3.716	3.716	0.0	1.000	3278		3.25(2.12-6.36)		12.5	
35 MeFOSA										
512.00 > 169.00	3.840	3.832	0.008		706	NC			7.8	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.878	3.878	0.0	1.281	19641	0.005028			109	
37 Perfluorododecanoic acid										R
613.00 > 569.00	4.012	4.012	0.0	1.000	10332	0.008980			6.2	R
613.00 > 169.00	4.012	4.012	0.0	1.000	1601		6.45(2.13-6.40)		15.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.012	4.017	-0.005	1.515	2584982	2.28		91.3	4110	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.012	4.020	-0.008	1.188	1837	0.004170			23.0	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.263	4.253	0.010	1.408	3465	0.008539			15.5	
699.00 > 99.00	4.253	4.253	0.0	1.405	5845		0.59(0.00-0.00)		49.5	
41 Perfluorotridecanoic acid										R
663.00 > 619.00	4.282	4.281	0.001	1.067	13751	0.0124			7.8	R
663.00 > 169.00	4.290	4.281	0.009	1.069	3347		4.11(1.25-3.76)		34.7	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.523	4.523	0.0	1.708	3379183	2.34		93.6	4563	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.523	4.524	-0.001	1.000	5549	0.0170			60.0	
713.00 > 219.00	4.523	4.524	-0.001	1.000	3156		1.76(0.71-2.13)		37.2	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.944	4.944	0.0	1.867	5522083	1.93		77.1	6872	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.944	4.953	-0.009	1.000	60989	0.007275			8.6	
813.00 > 169.00	4.944	4.953	-0.009	1.000	12201		5.00(2.86-8.58)		72.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 13-Aug-2018 13:28:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_042.d

Injection Date: 12-Aug-2018 16:22:41 Instrument ID: A8_N

Lims ID: 320-41460-B-4-A Lab Sample ID: 320-41460-4

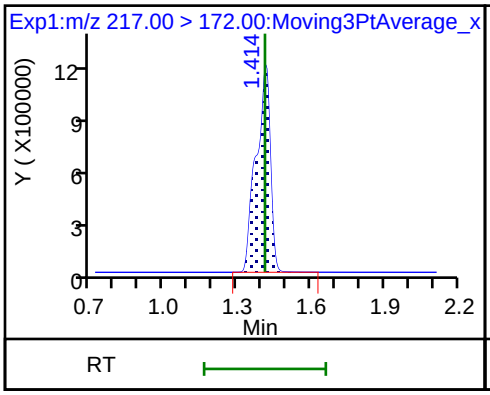
Client ID: GC-MW-109M (WG)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 29 Worklist Smp#: 11

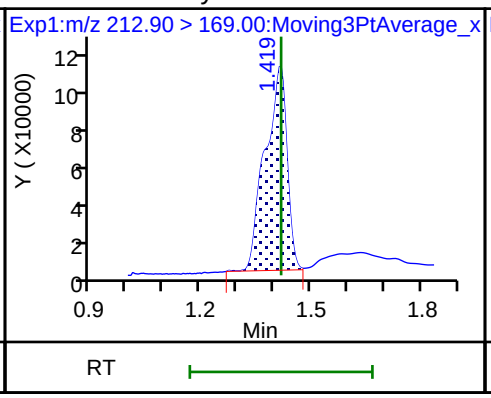
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

D 1 13C4 PFBA



2 Perfluorobutyric acid



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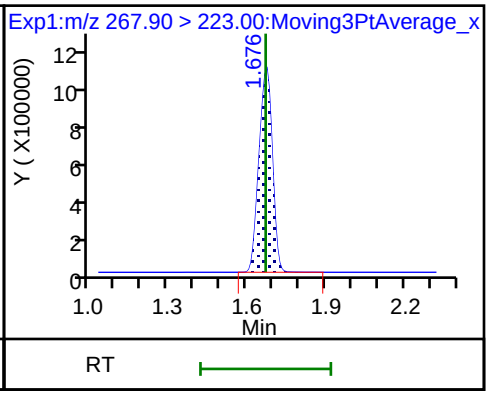
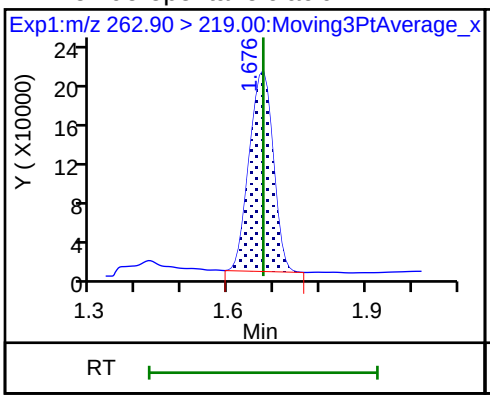
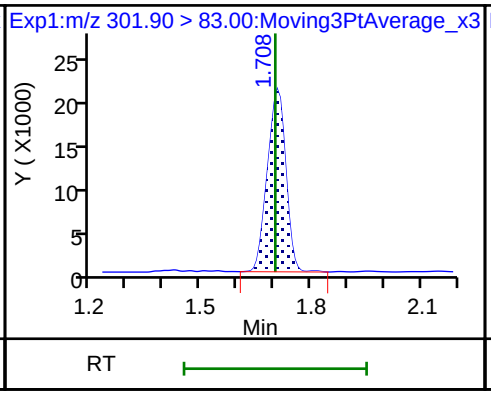


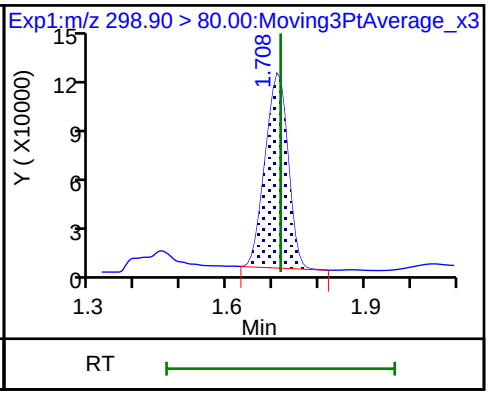
4 Perfluoropentanoic acid



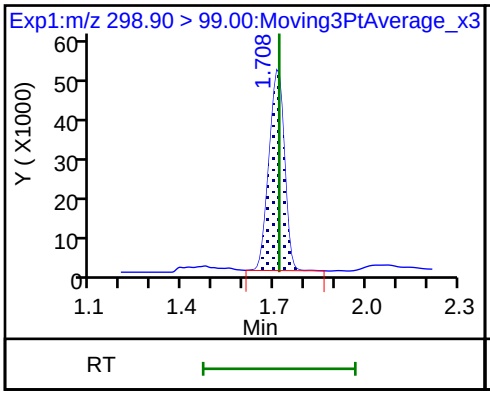
D 47 13C3-PFBS



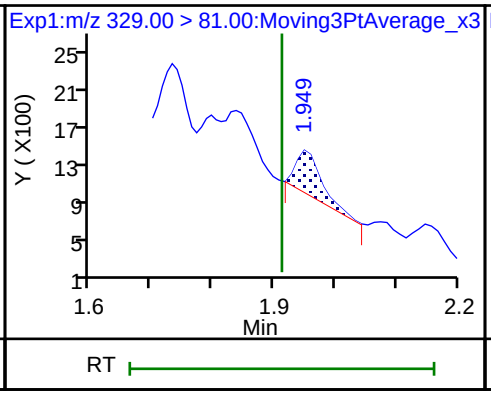
5 Perfluorobutanesulfonic acid



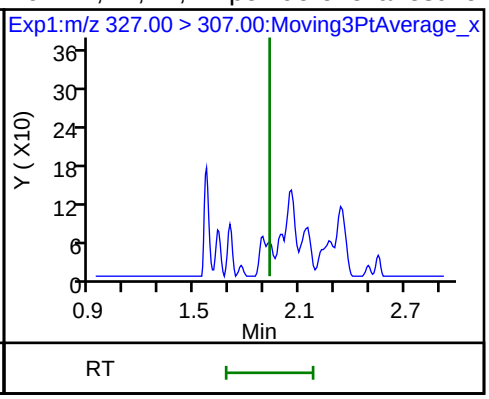
5 Perfluorobutanesulfonic acid



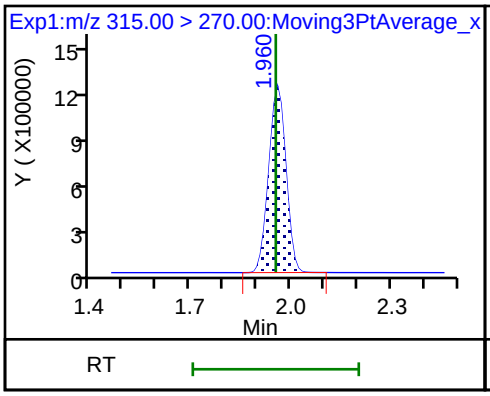
D 60 M2-4:2FTS



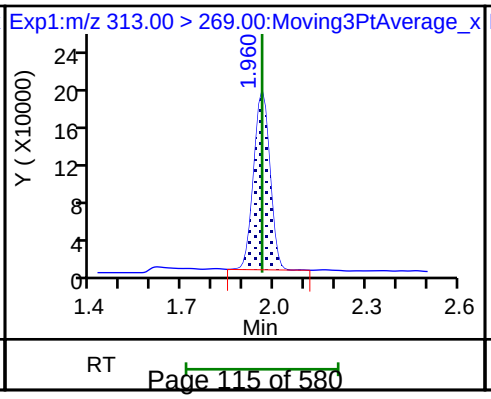
61 1H,1H,2H,2H-perfluorohexanesulfoni (ND)



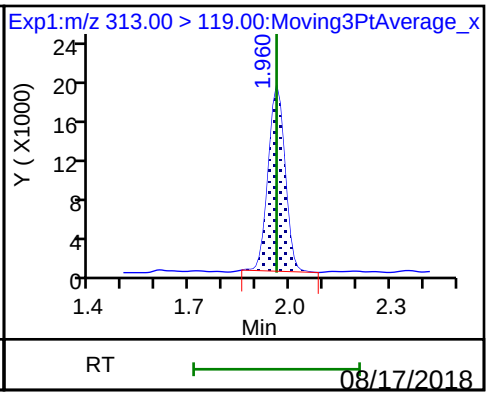
D 7 13C2 PFHxA



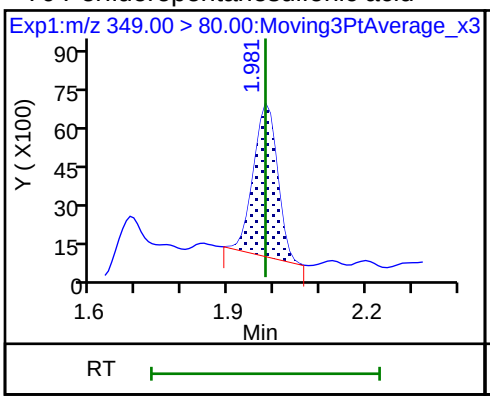
6 Perfluorohexanoic acid



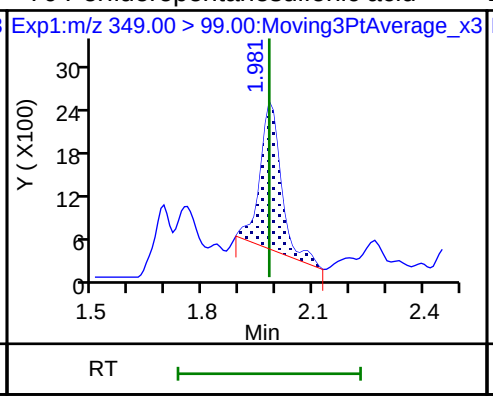
6 Perfluorohexanoic acid



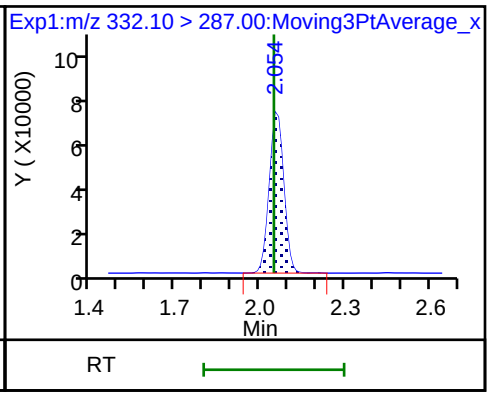
70 Perfluoropentanesulfonic acid



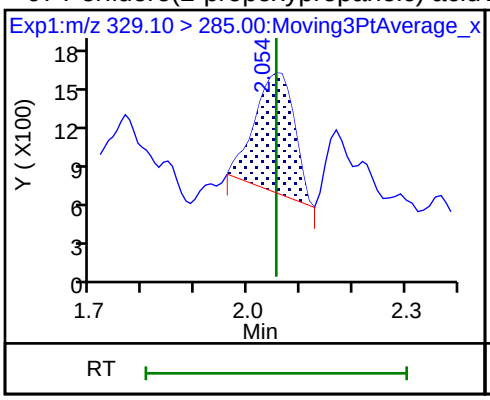
70 Perfluoropentanesulfonic acid



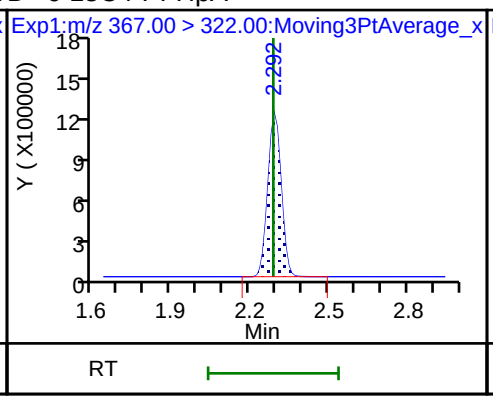
D 64 13C3 HFPO-DA



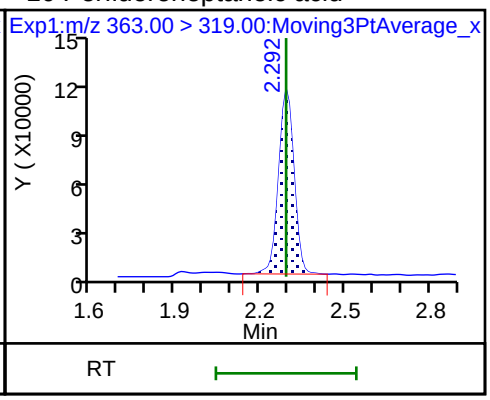
67 Perfluoro(2-propoxypropanoic) acid



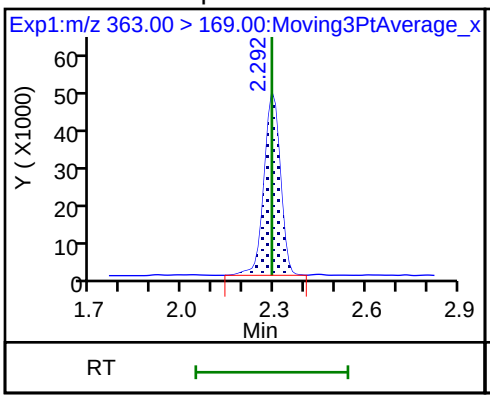
D 9 13C4-PFHpA



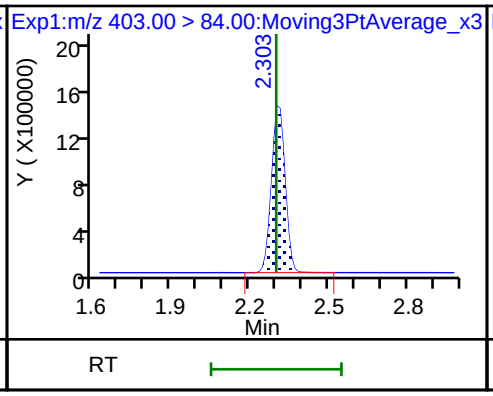
10 Perfluoroheptanoic acid



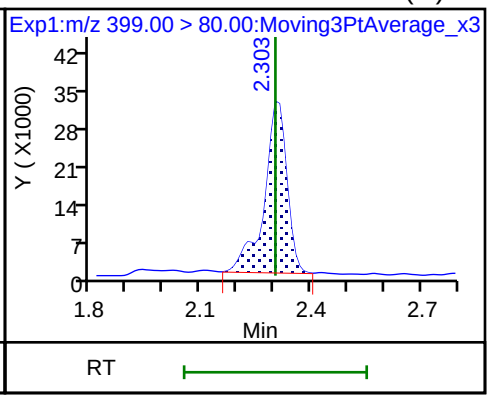
10 Perfluoroheptanoic acid



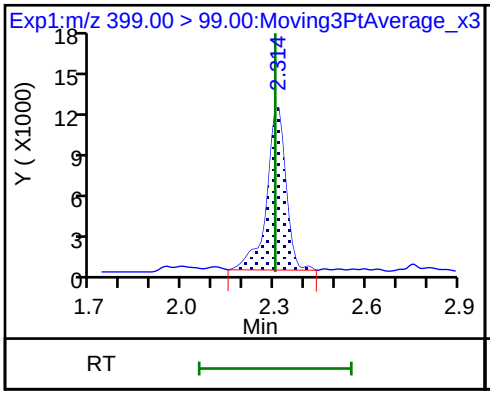
D 11 18O2 PFHxS



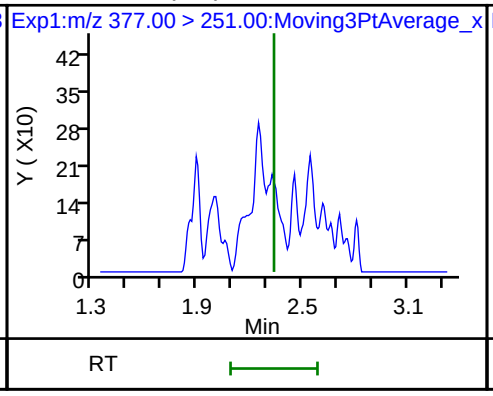
8 Perfluorohexanesulfonic acid (M)



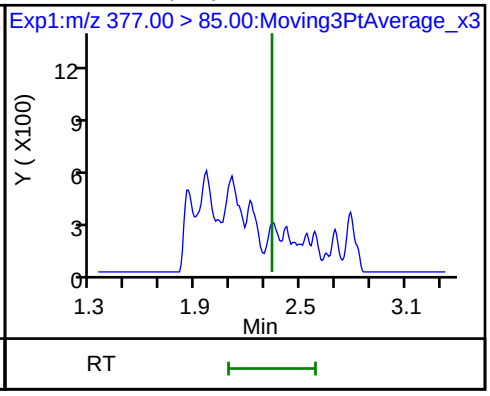
8 Perfluorohexanesulfonic acid



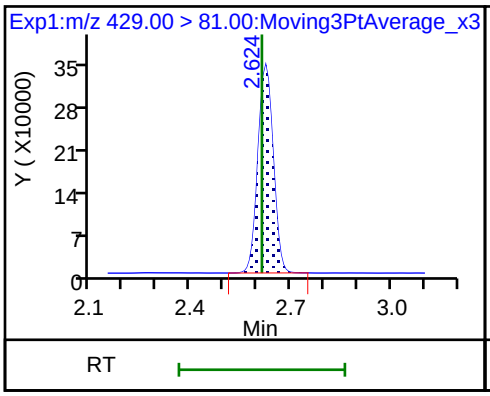
65 ADONA (ND)



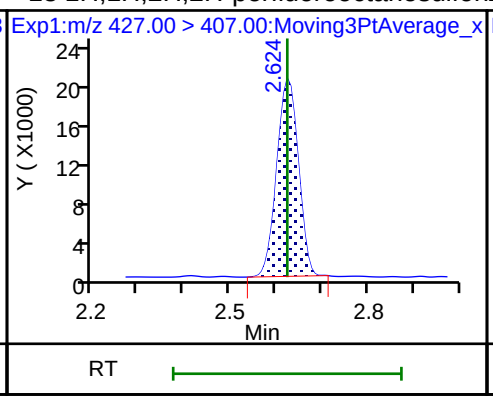
65 ADONA (ND)



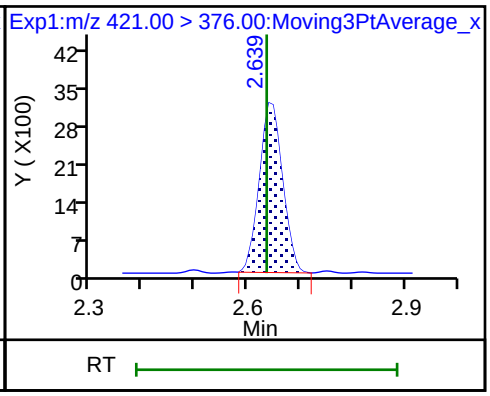
D 12 M2-6:2FTS



13 1H,1H,2H,2H-perfluorooctanesulfon



D 73 13C8 PFOA



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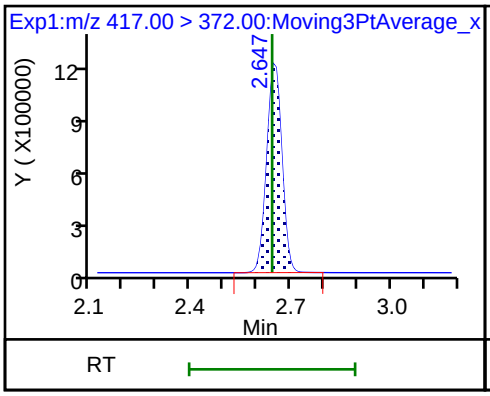
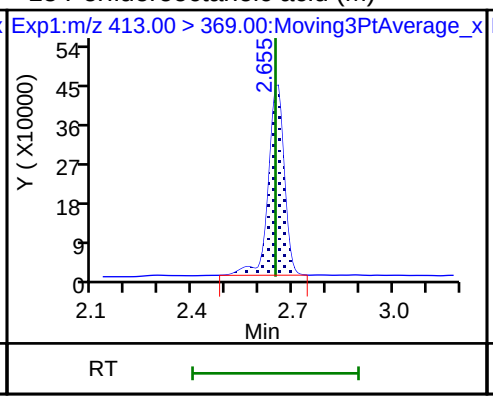
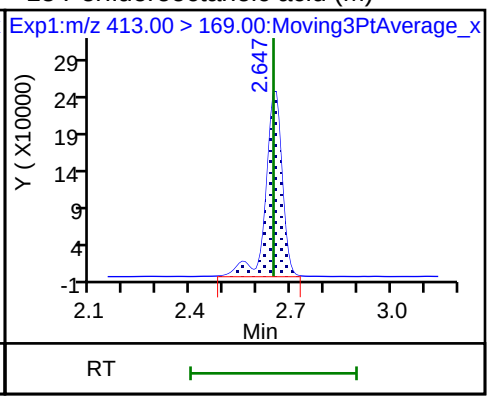


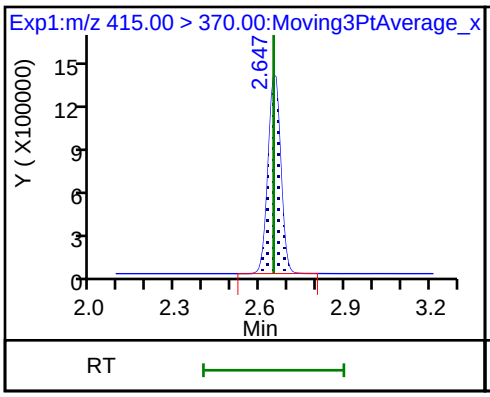
15 Perfluorooctanoic acid (M)



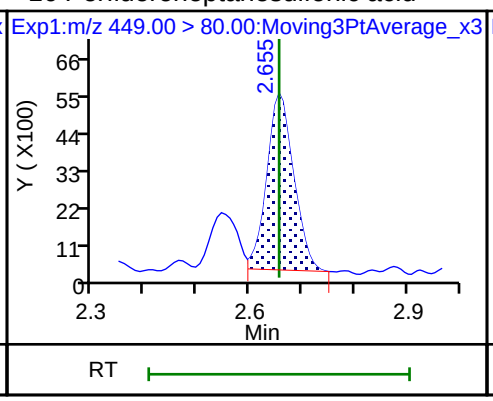
15 Perfluorooctanoic acid (M)



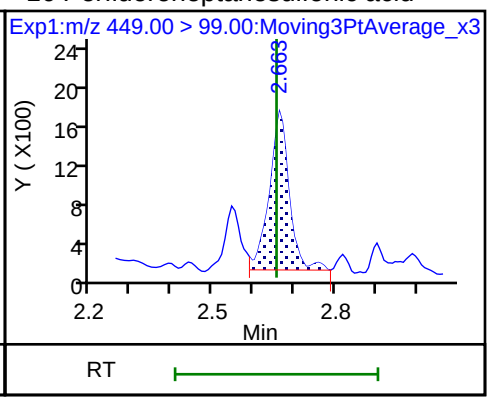
* 62 13C2-PFOA



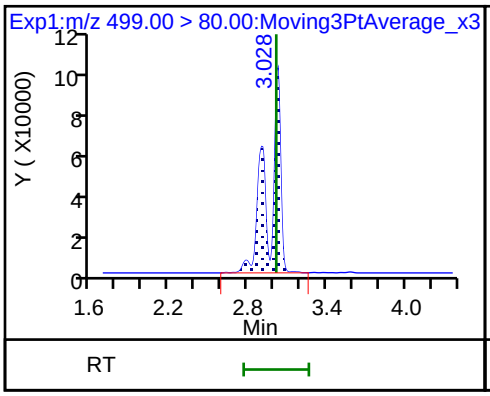
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



17 Perfluorooctane sulfonic acid



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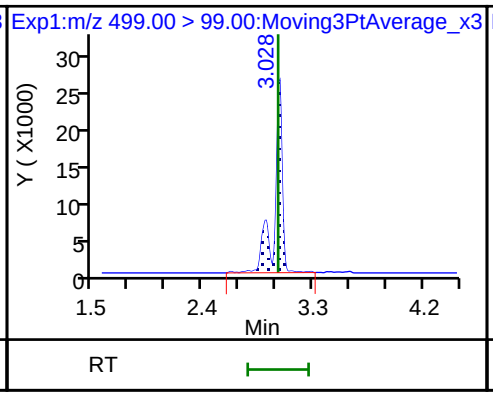
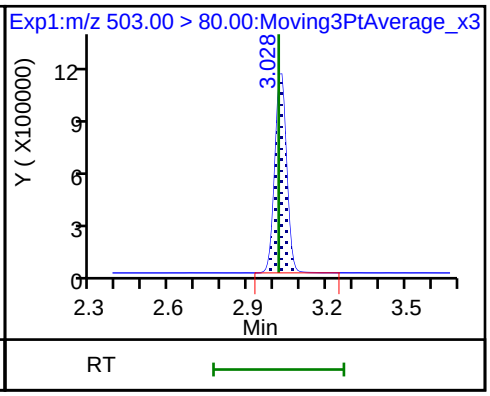
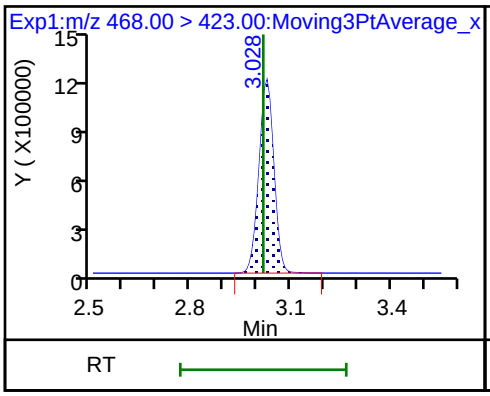


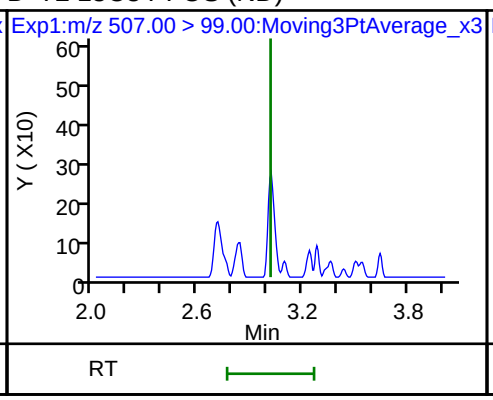
D 18 13C4 PFOS



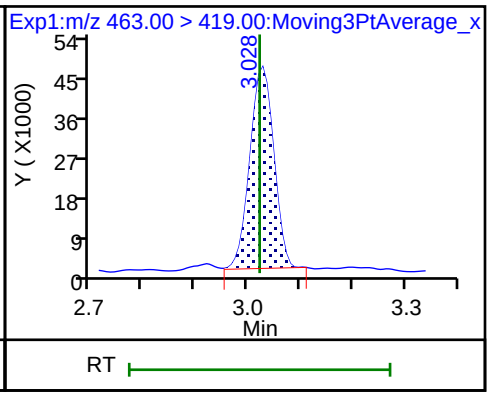
D 19 13C5 PFNA



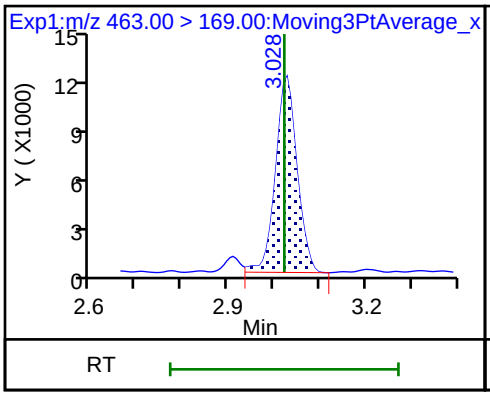
D 72 13C8 PFOS (ND)



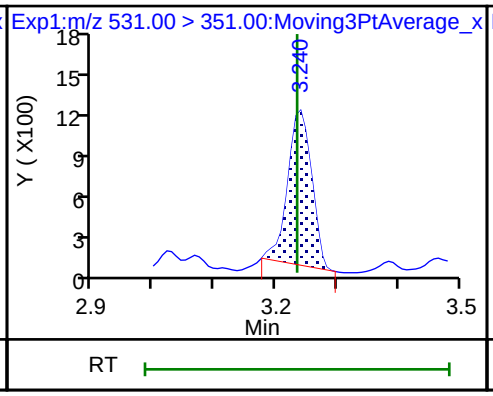
20 Perfluorononanoic acid



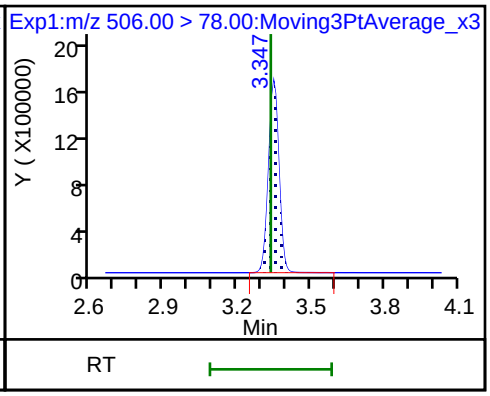
20 Perfluorononanoic acid



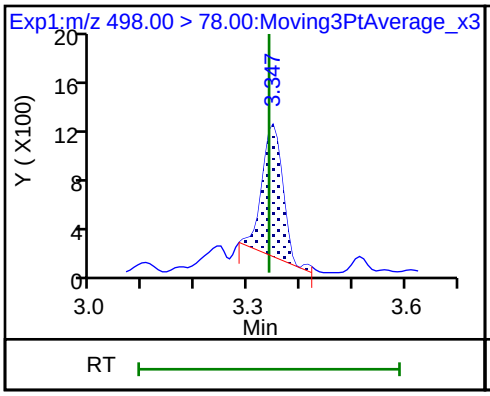
69 9-Chlorohexadecafluoro-3-oxanonane



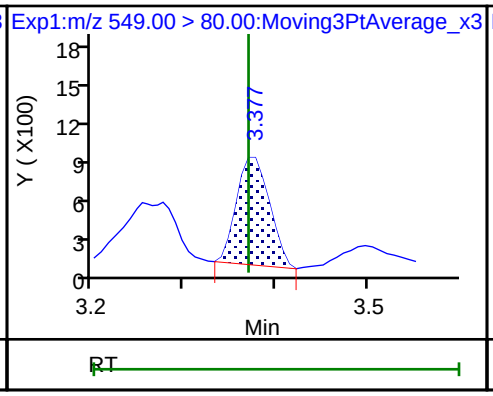
D 21 13C8 FOSA



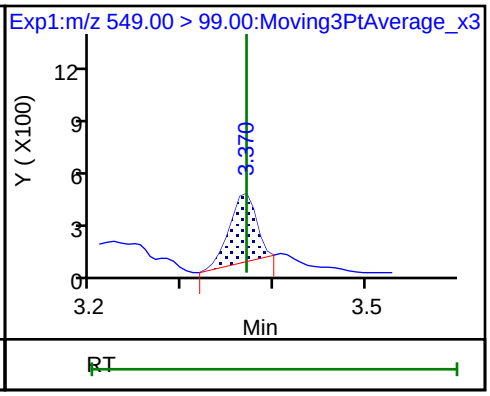
22 Perfluorooctane Sulfonamide



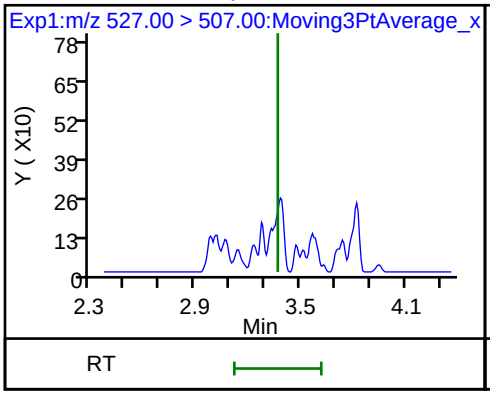
68 Perfluorononanesulfonic acid



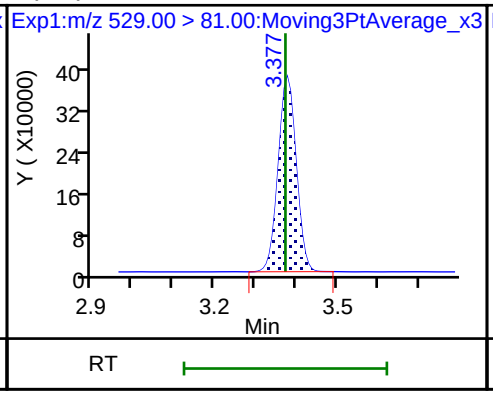
68 Perfluorononanesulfonic acid



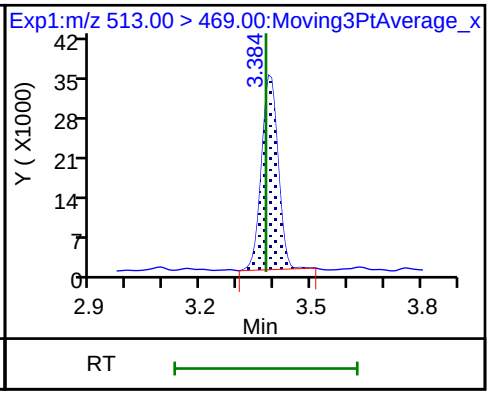
25 1H,1H,2H,2H-perfluorodecanesulfonic acid



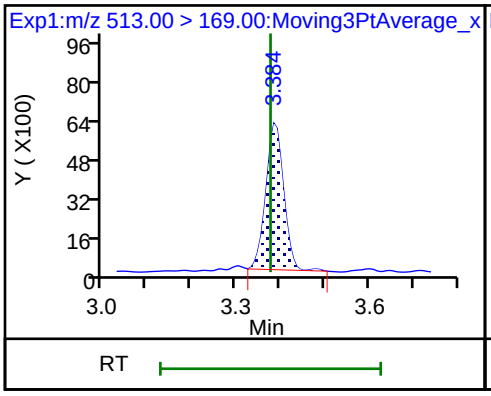
D 26 M2-8:2FTS



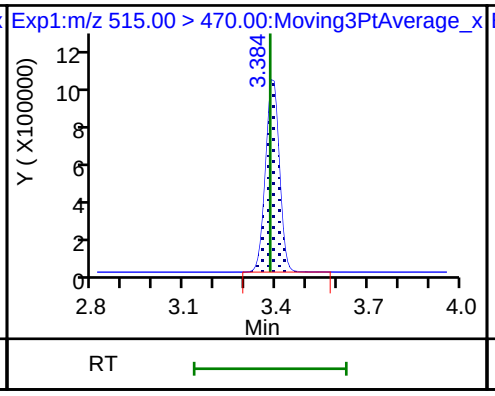
24 Perfluorodecanoic acid



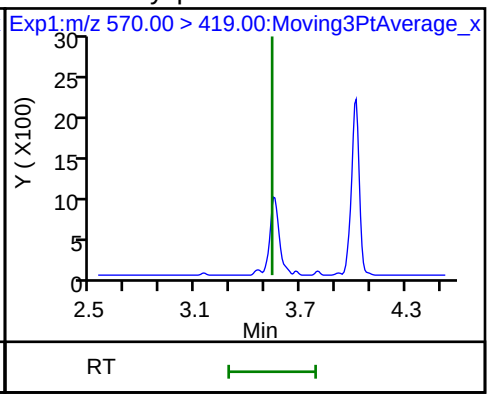
24 Perfluorodecanoic acid



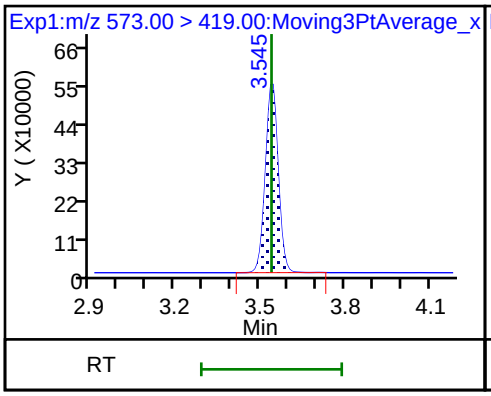
D 23 13C2 PFDA



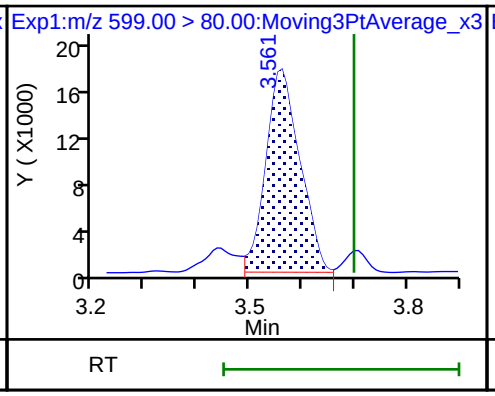
28 N-methyl perfluorooctane sulfonami (ND)



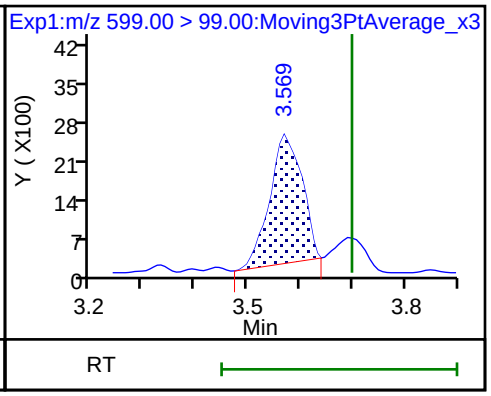
D 27 d3-NMeFOSAA



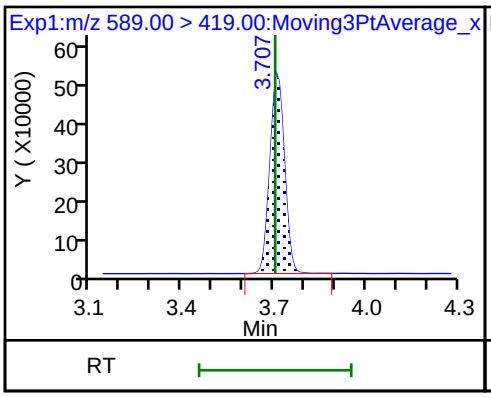
29 Perfluorodecane Sulfonic acid



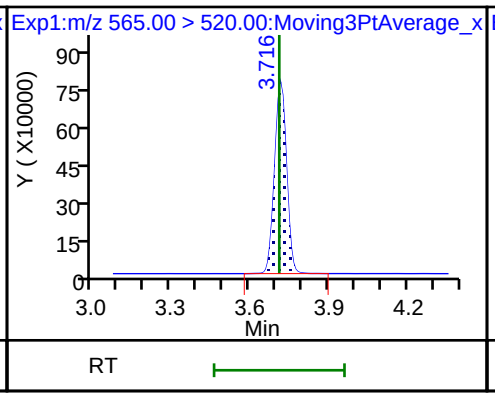
29 Perfluorodecane Sulfonic acid



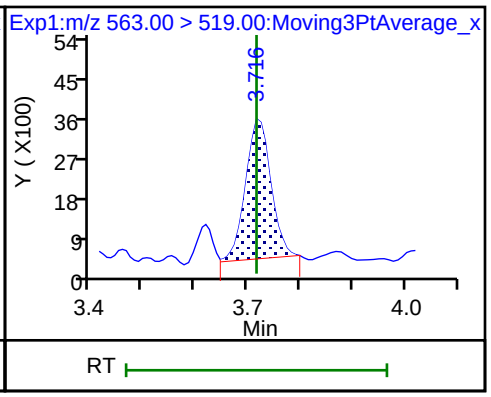
D 32 d5-NEtFOSAA



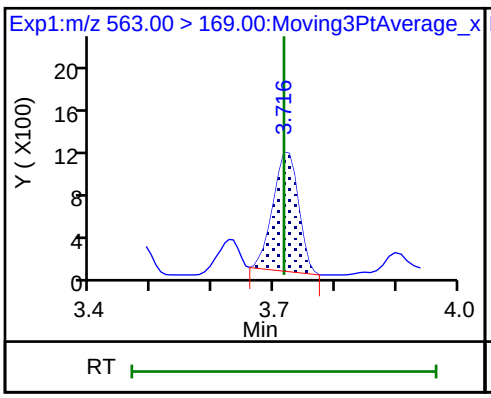
D 30 13C2 PFUnA



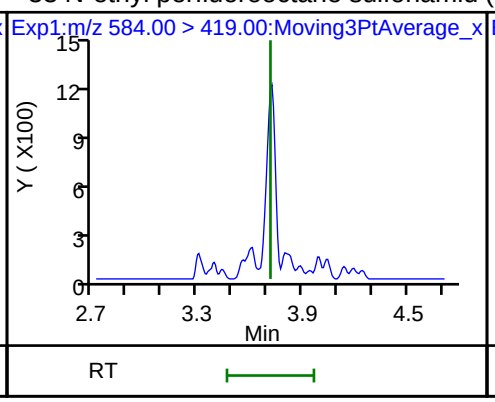
31 Perfluoroundecanoic acid



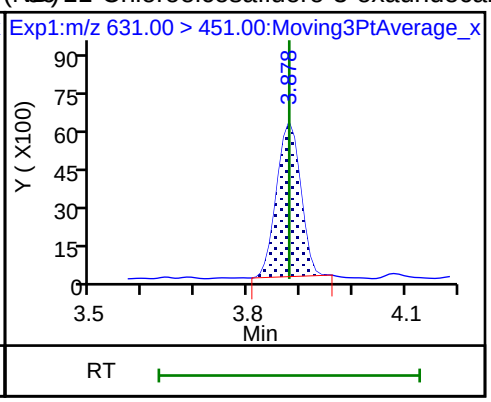
31 Perfluoroundecanoic acid



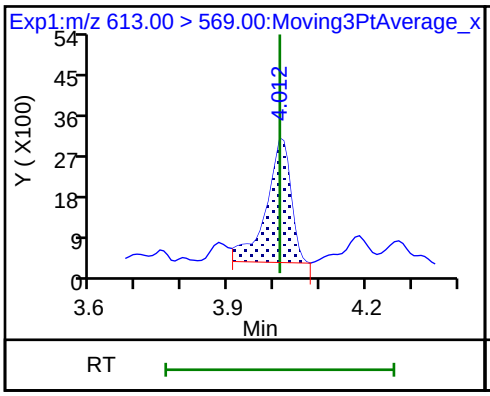
33 N-ethyl perfluorooctane sulfonamid (ND)



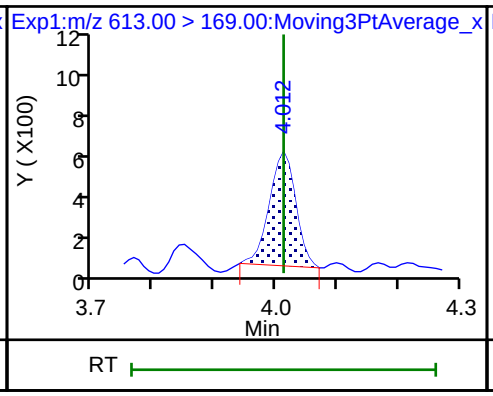
11-Chloroeicosafluoro-3-oxaundecan



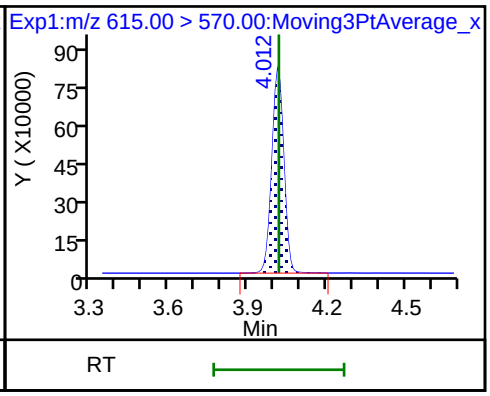
37 Perfluorododecanoic acid



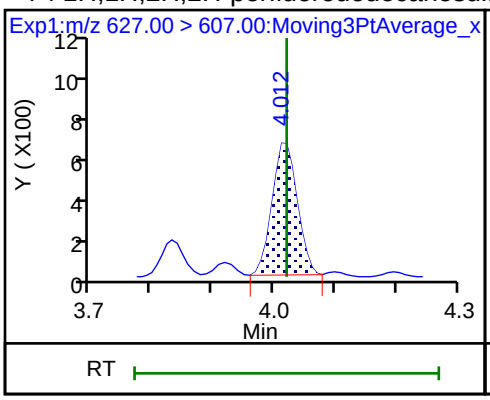
37 Perfluorododecanoic acid



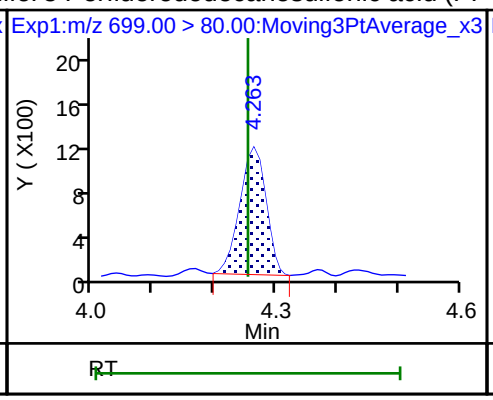
D 36 13C2 PFDoA



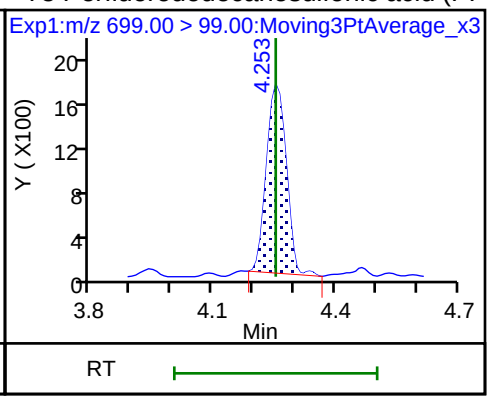
74 1H,1H,2H,2H-perfluorododecanesulfo



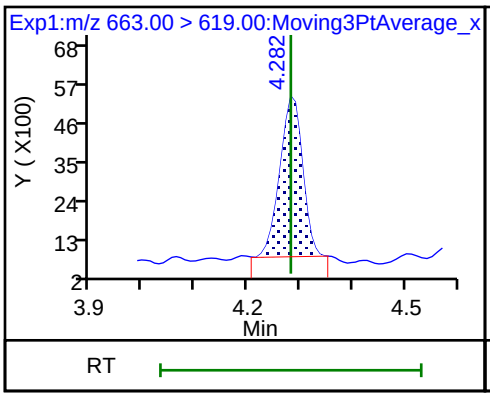
75 Perfluorododecanesulfonic acid (PF



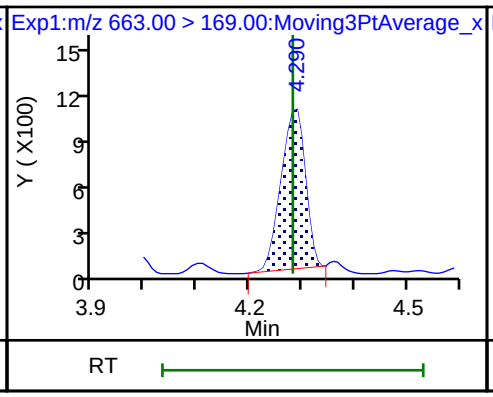
75 Perfluorododecanesulfonic acid (PF



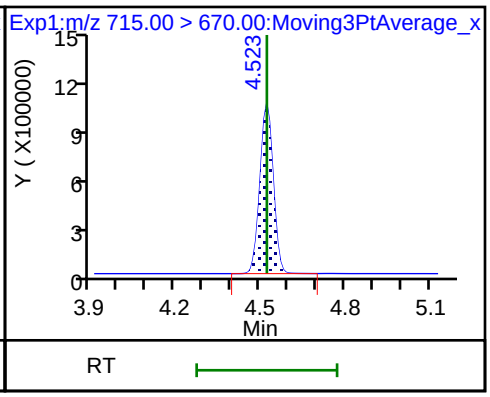
41 Perfluorotridecanoic acid



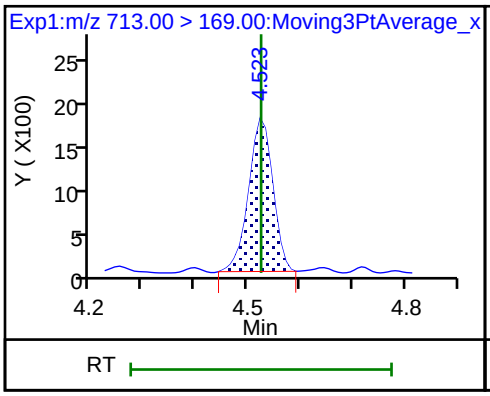
41 Perfluorotridecanoic acid



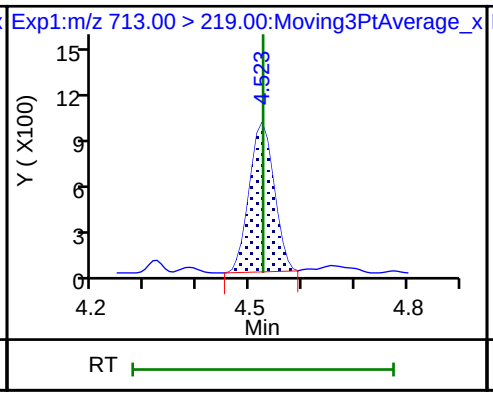
D 43 13C2-PFTeDA



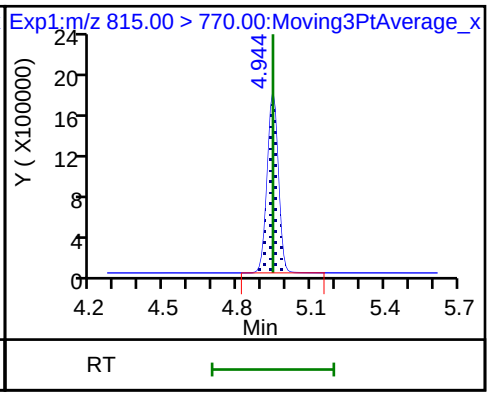
42 Perfluorotetradecanoic acid



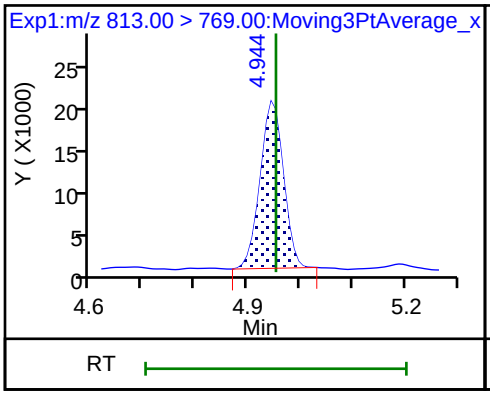
42 Perfluorotetradecanoic acid



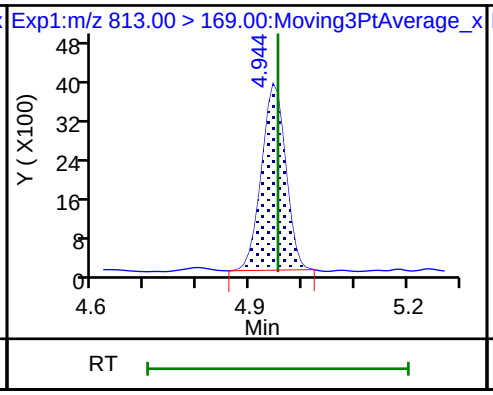
D 44 13C2-PFHxDA



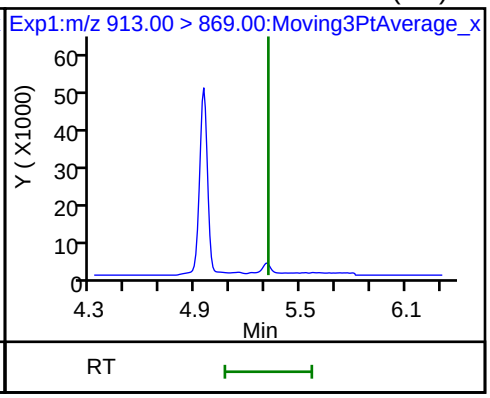
45 Perfluorohexadecanoic acid



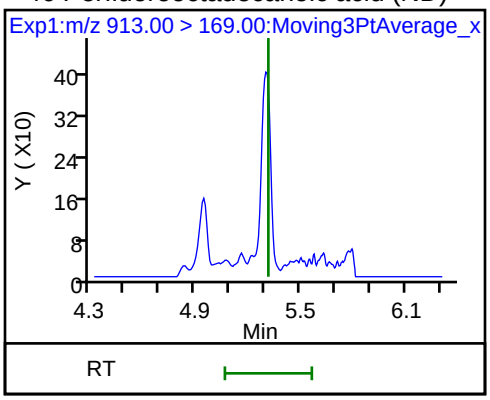
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK (072418) Lab Sample ID: 320-41460-5

Matrix: Water Lab File ID: 2018.08.08LLA_015.d

Analysis Method: 537 (modified) Date Collected: 07/24/2018 07:00

Extraction Method: 3535 Date Extracted: 08/06/2018 10:25

Sample wt/vol: 278.9(mL) Date Analyzed: 08/08/2018 09:14

Con. Extract Vol.: 10.00(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: Acquity ID: 2.1(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.55	J	1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.8	0.76
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.99
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.29	J B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2 FTS	8.3	J B *	18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK (072418) | Lab Sample ID: 320-41460-5

Matrix: Water | Lab File ID: 2018.08.08LLA_015.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 07:00

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 278.9(mL) | Date Analyzed: 08/08/2018 09:14

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	93		25-150
STL01893	13C5 PFPeA	86		25-150
STL00993	13C2 PFHxA	86		25-150
STL01892	13C4-PFHpA	93		25-150
STL00990	13C4 PFOA	101		25-150
STL00995	13C5 PFNA	102		25-150
STL00996	13C2 PFDA	96		25-150
STL00997	13C2 PFUnA	96		25-150
STL00998	13C2 PFDoA	91		25-150
STL02116	13C2-PFTeDA	110		25-150
STL02337	13C3-PFBS	77		25-150
STL00994	18O2 PFHxS	82		25-150
STL00991	13C4 PFOS	86		25-150
STL01056	13C8 FOSA	81		25-150
STL02118	d3-NMeFOSAA	117		25-150
STL02117	d5-NEtFOSAA	109		25-150
STL02279	M2-6:2FTS	122		25-150
STL02280	M2-8:2FTS	111		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_015.d
Lims ID: 320-41460-A-5-A
Client ID: GC-EQUIPMENT BLANK (072418)
Sample Type: Client
Inject. Date: 08-Aug-2018 09:14:19 ALS Bottle#: 10 Worklist Smp#: 11
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-a-5-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 15:08:07 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 15:07:50

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.517	1.516	0.001	0.542	8973383	2.32		92.7	5392	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.517	1.523	-0.006	1.000	50978	0.0153			1.8	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.797	1.805	-0.008	0.642	7440073	2.15		85.9	9196	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.797	1.805	-0.008	1.000	14037	0.004623			0.6	
D 47 13C3-PFBS										
301.90 > 83.00	1.839	1.838	0.001	0.657	95456	1.78		76.5	444	
D 7 13C2 PFHxA										
315.00 > 270.00	2.089	2.098	-0.009	0.746	7728693	2.15		86.0	12318	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.099	2.098	0.001	1.005	11694	0.004044			2.6	
313.00 > 119.00	2.078	2.098	-0.020	0.995	788		14.84(6.96-20.87)		2.5	
D 9 13C4-PFHpA										
367.00 > 322.00	2.439	2.439	0.0	0.872	9516880	2.33		93.3	8761	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.452	2.452	0.0	1.000	26073	0.008076			33.3	
399.00 > 99.00	2.452	2.452	0.0	1.000	6691		3.90(1.90-5.70)		2.7	
D 11 18O2 PFHxS										
403.00 > 84.00	2.452	2.465	-0.013	0.876	5968105	1.94		82.1	10837	
D 12 M2-6:2FTS										
429.00 > 81.00	2.782	2.782	0.0	0.994	1151543	2.90		122	1653	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.782	2.782	0.0	1.000	238952	0.2306			512	
D 14 13C4 PFOA										
417.00 > 372.00	2.798	2.814	-0.016	1.000	8601270	2.51		101	10219	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 62 13C2-PFOA										s
415.00 > 370.00	2.798	2.814	-0.016		8670081	2.50			13504	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.798	2.814	-0.016	1.000	28968	0.007685			2.9	
413.00 > 169.00	2.798	2.814	-0.016	1.000	8173		3.54(1.36-4.08)		8.7	
D 18 13C4 PFOS										
503.00 > 80.00	3.191	3.190	0.001	1.140	6570492	2.05		85.9	5093	
D 19 13C5 PFNA										
468.00 > 423.00	3.191	3.190	0.001	1.140	7459389	2.54		102	12165	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.191	3.190	0.001	1.000	6397	0.002170			2.8	M
499.00 > 99.00	3.172	3.190	-0.018	0.994	1685		3.80(2.04-6.12)		4.5	M
D 21 13C8 FOSA										
506.00 > 78.00	3.528	3.527	0.001	1.261	3884575	2.03		81.3	4065	
D 26 M2-8:2FTS										
529.00 > 81.00	3.542	3.542	0.0	1.266	122792	2.66		111	431	
D 23 13C2 PFDA										
515.00 > 470.00	3.542	3.542	0.0	1.266	7032378	2.39		95.7	7594	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.528	3.542	-0.014	1.000	4272	0.000895			9.8	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.697	3.697	0.0	1.321	1669148	2.92		117	4258	
D 30 13C2 PFUnA										
565.00 > 520.00	3.870	3.870	0.0	1.383	5710538	2.40		96.2	4991	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.870	3.870	0.0	1.383	1280169	2.73		109	2335	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.870	3.870	0.0	1.000	9181	0.004774			1.7	
563.00 > 169.00	3.870	3.870	0.0	1.000	1093		8.40(5.24-15.72)		4.8	
D 36 13C2 PFDoA										
615.00 > 570.00	4.158	4.176	-0.018	1.486	5837577	2.28		91.2	5355	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.661	4.676	-0.015	1.666	4496465	2.75		110	9062	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.661	4.676	-0.015	1.000	1294	0.004466			5.6	
713.00 > 219.00	4.661	4.676	-0.015	1.000	1629		0.79(0.70-2.09)		5.7	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

Report Date: 08-Aug-2018 15:08:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_015.d

Injection Date: 08-Aug-2018 09:14:19 Instrument ID: A9

Lims ID: 320-41460-A-5-A Lab Sample ID: 320-41460-5

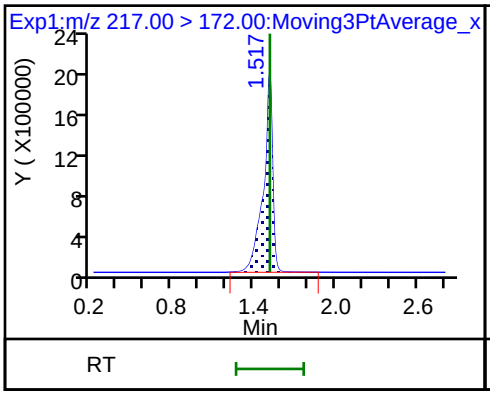
Client ID: GC-EQUIPMENT BLANK (072418)

Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 11

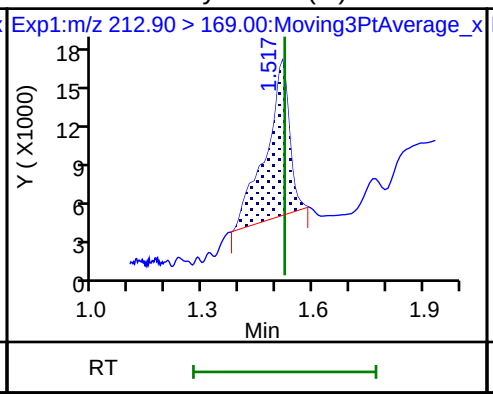
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

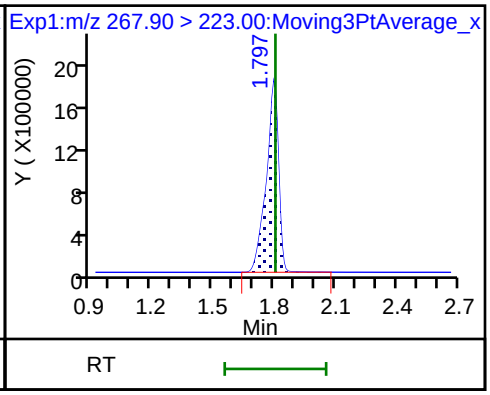
D 1 13C4 PFBA



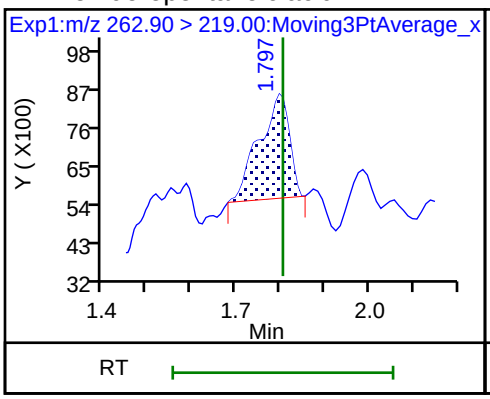
2 Perfluorobutyric acid (M)



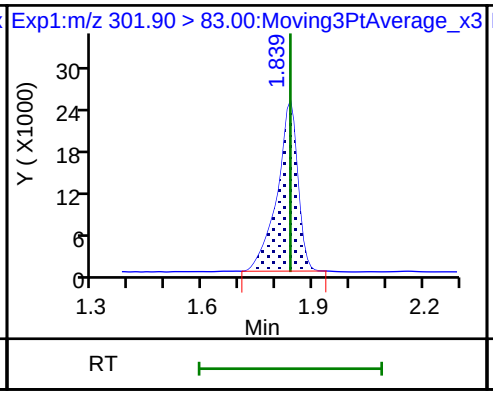
D 3 13C5-PFPeA



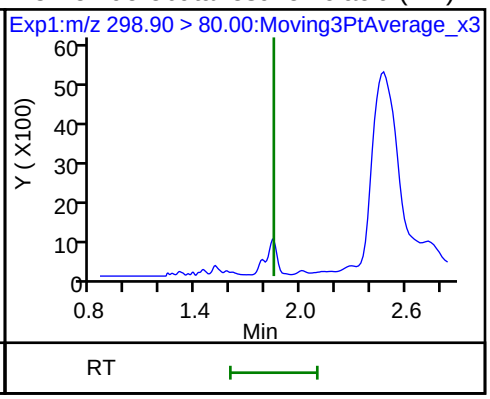
4 Perfluoropentanoic acid



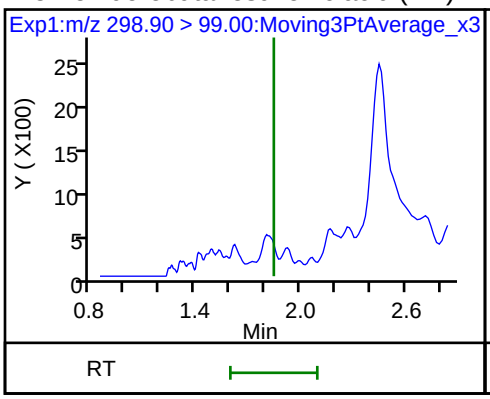
D 47 13C3-PFBS



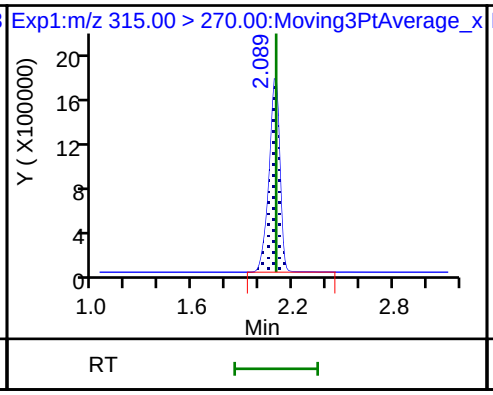
5 Perfluorobutanesulfonic acid (ND)



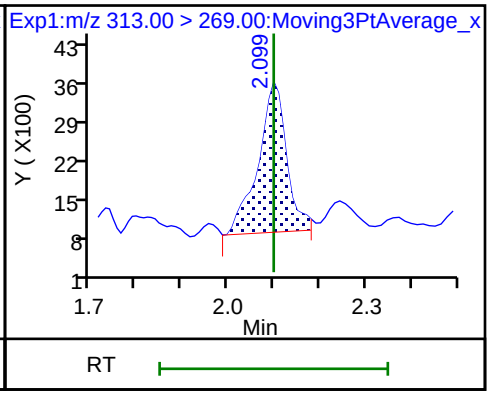
5 Perfluorobutanesulfonic acid (ND)



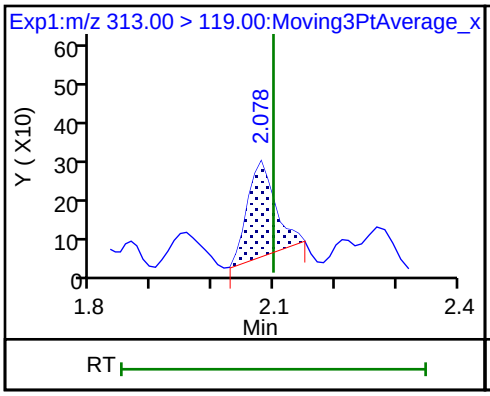
D 7 13C2 PFHxA



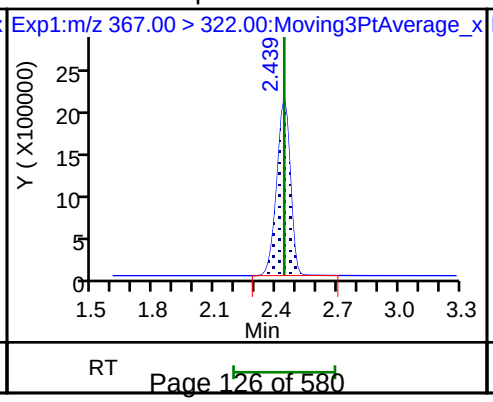
6 Perfluorohexanoic acid



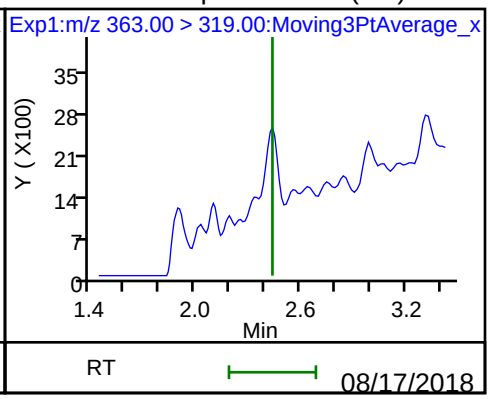
6 Perfluorohexanoic acid



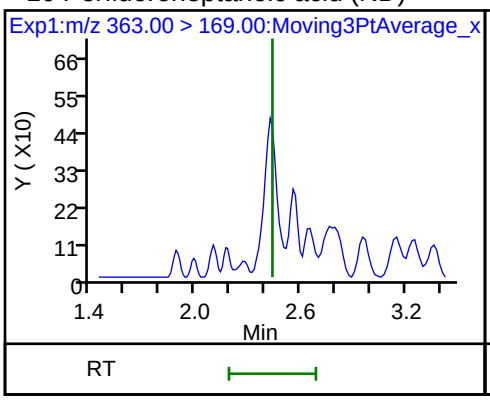
D 9 13C4-PFHpA



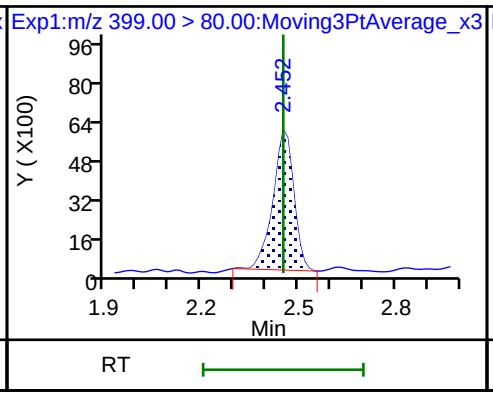
10 Perfluoroheptanoic acid (ND)



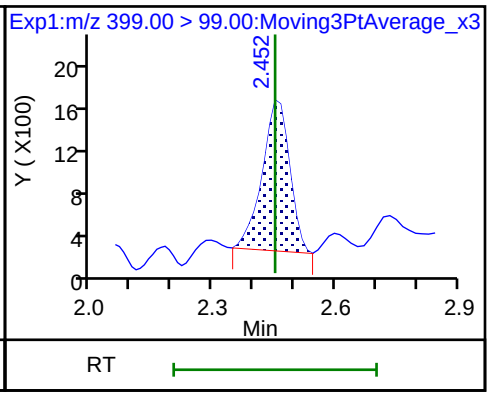
10 Perfluoroheptanoic acid (ND)



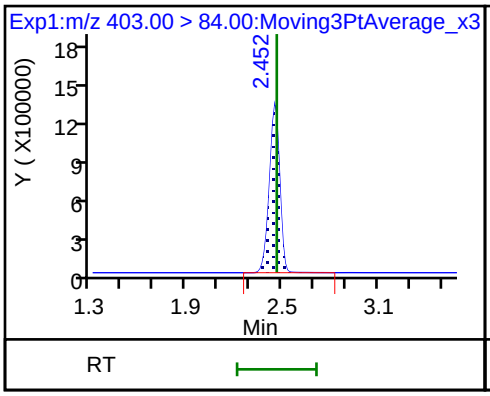
8 Perfluorohexanesulfonic acid



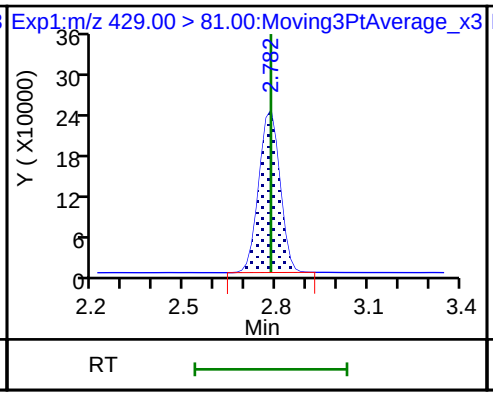
8 Perfluorohexanesulfonic acid



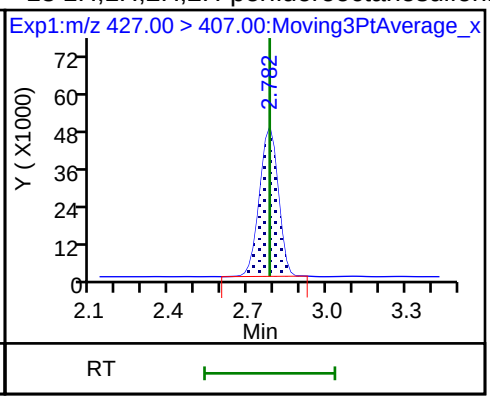
D 11 18O2 PFHxS



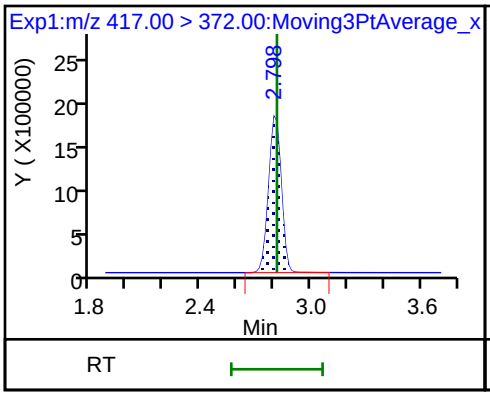
D 12 M2-6:2FTS



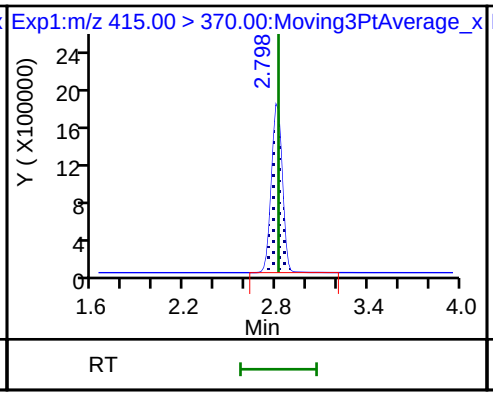
13 1H,1H,2H,2H-perfluorooctanesulfoni



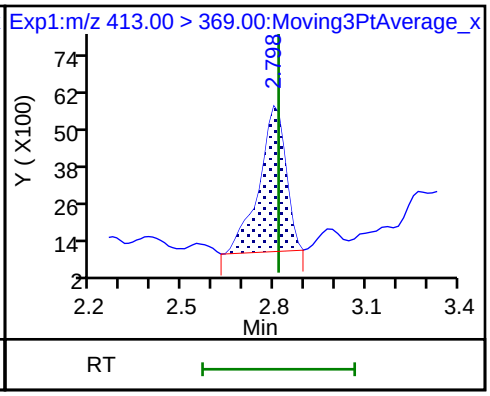
D 14 13C4 PFOA



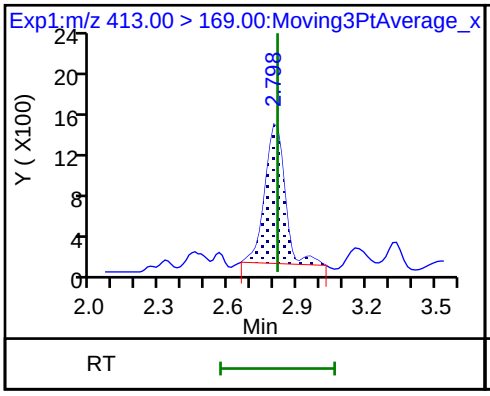
* 62 13C2-PFOA



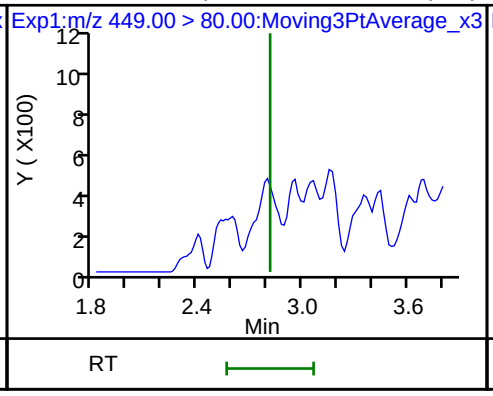
15 Perfluorooctanoic acid



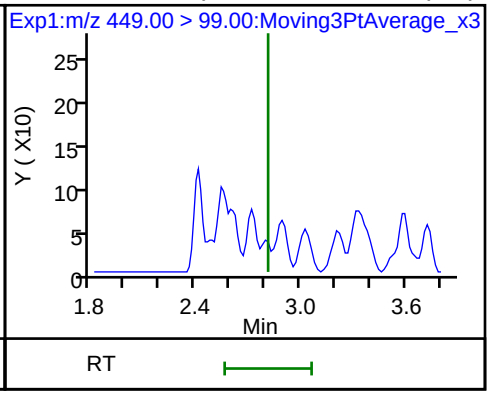
15 Perfluorooctanoic acid



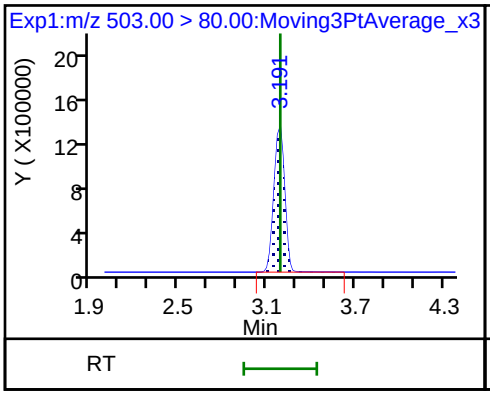
16 Perfluoroheptanesulfonic acid (ND)



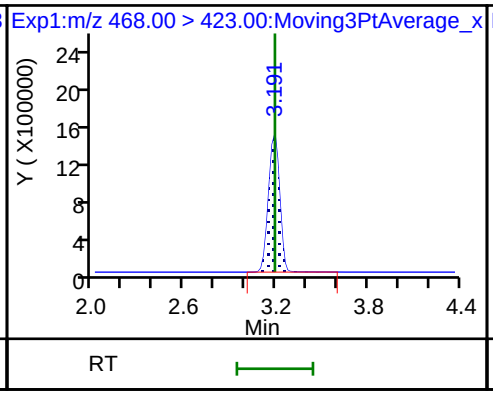
16 Perfluoroheptanesulfonic acid (ND)



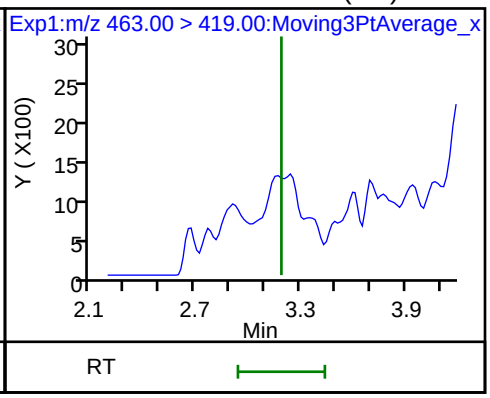
D 18 13C4 PFOS



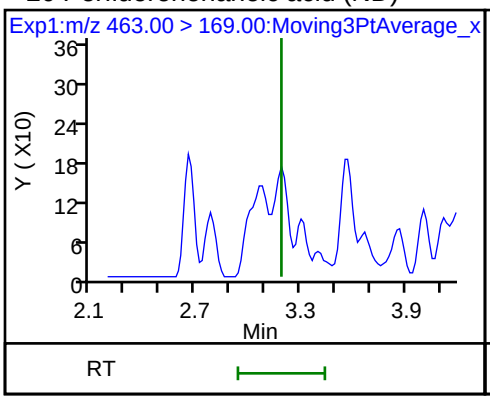
D 19 13C5 PFNA



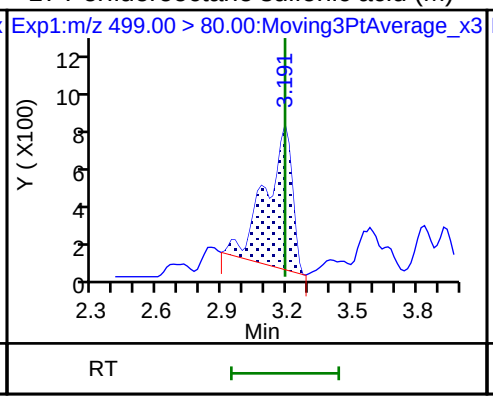
20 Perfluorononanoic acid (ND)



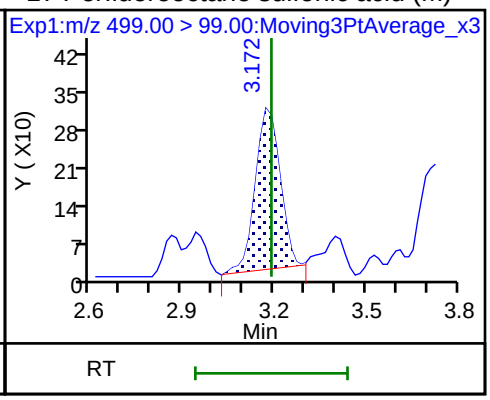
20 Perfluorononanoic acid (ND)



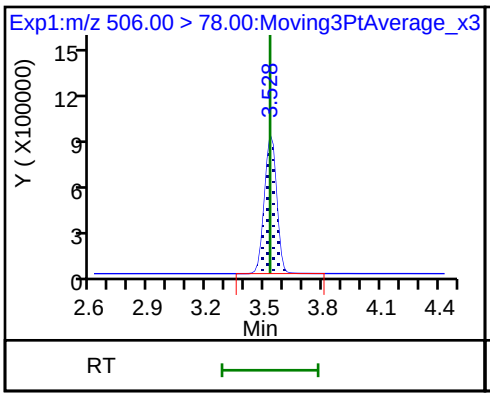
17 Perfluorooctane sulfonic acid (M)



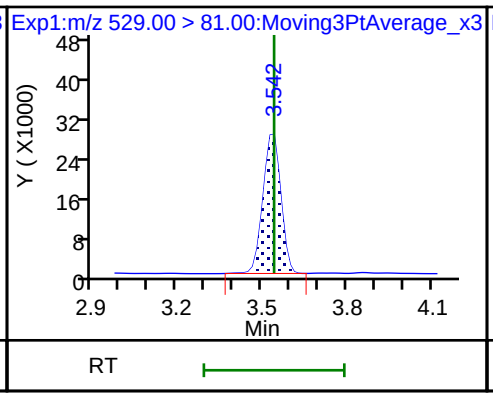
17 Perfluorooctane sulfonic acid (M)



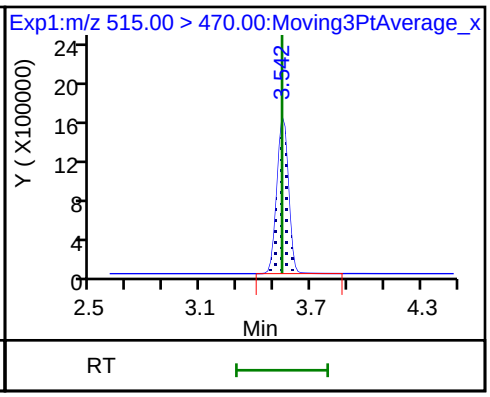
D 21 13C8 FOSA



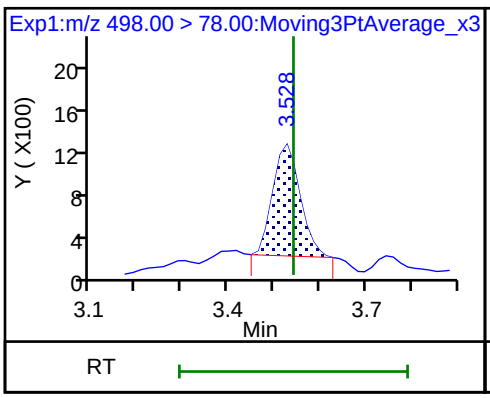
D 26 M2-8:2FTS



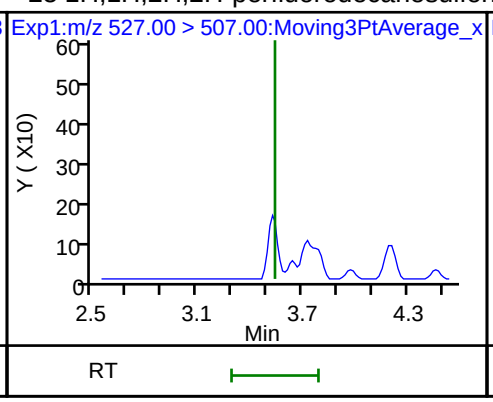
D 23 13C2 PFDA



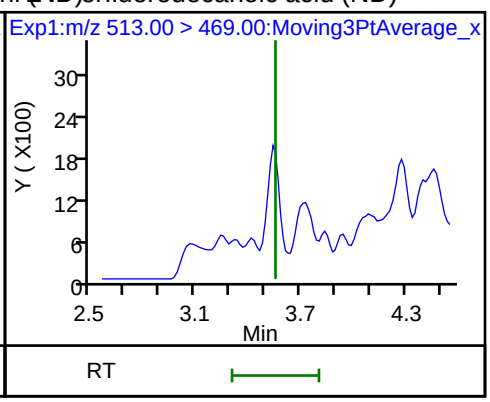
22 Perfluorooctane Sulfonamide



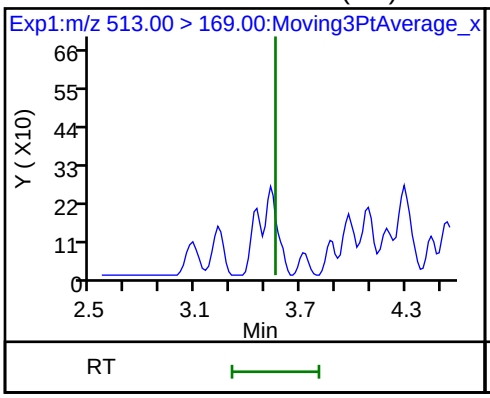
25 1H,1H,2H,2H-perfluorodecanesulfoni



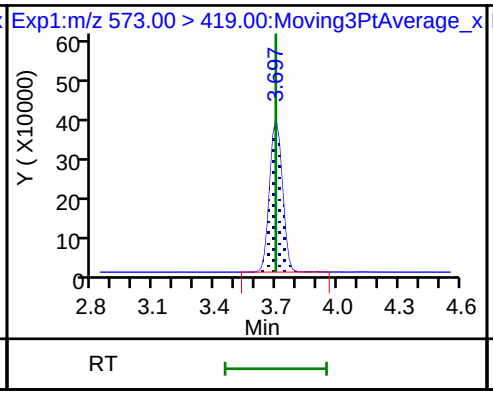
24 Perfluorodecanoic acid (ND)



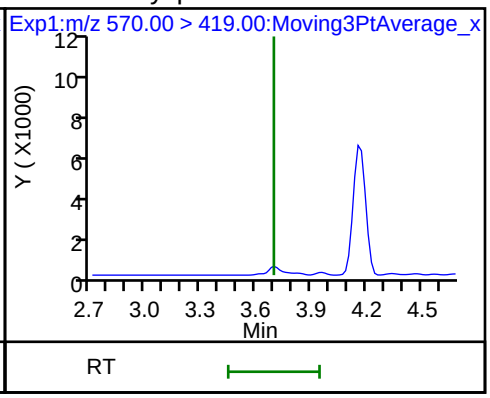
24 Perfluorodecanoic acid (ND)



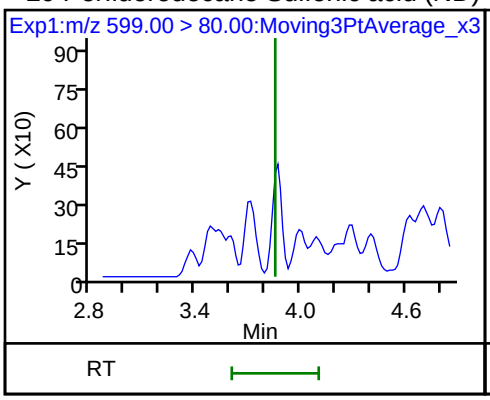
D 27 d3-NMeFOSAA



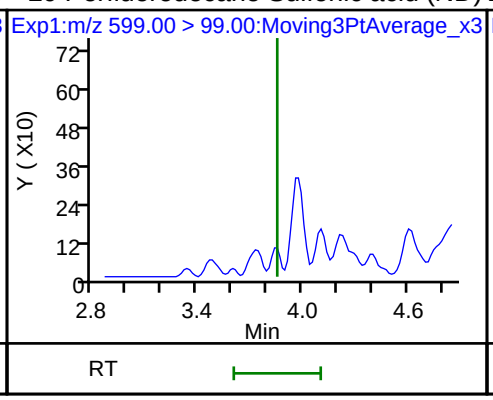
28 N-methyl perfluorooctane sulfonami (ND)



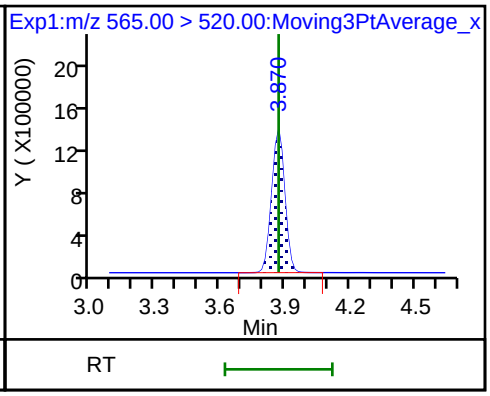
29 Perfluorodecane Sulfonic acid (ND)



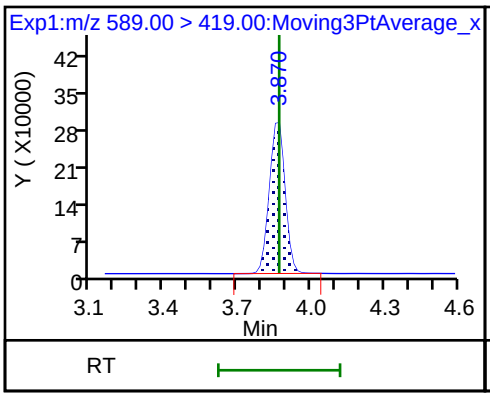
29 Perfluorodecane Sulfonic acid (ND)



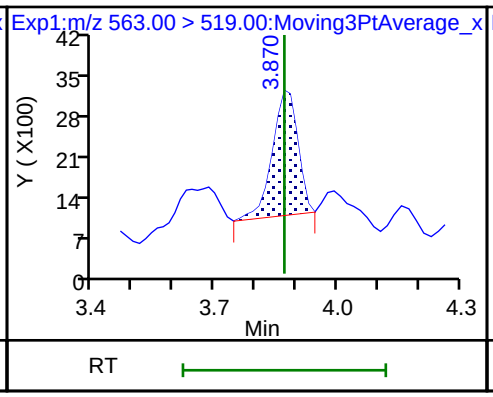
D 30 13C2 PFUnA



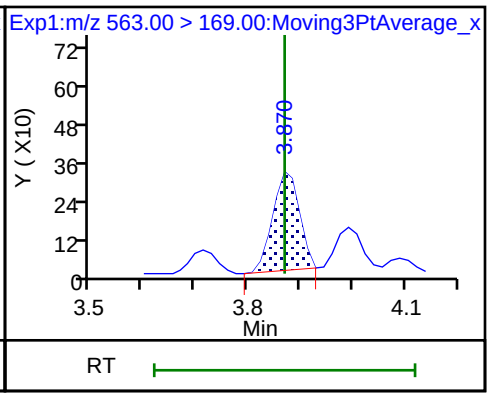
D 32 d5-NEtFOSAA



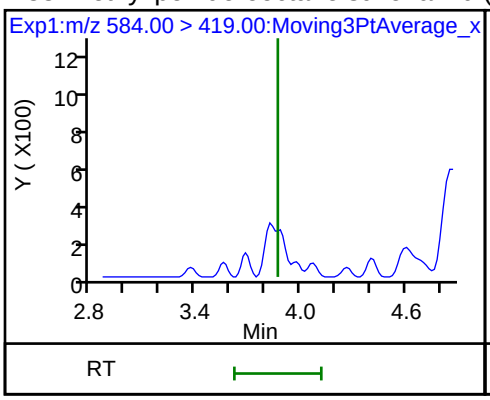
31 Perfluoroundecanoic acid



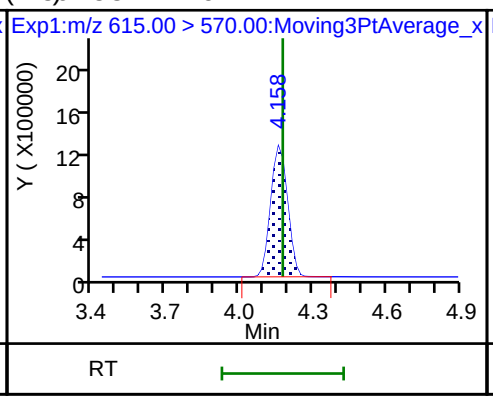
31 Perfluoroundecanoic acid



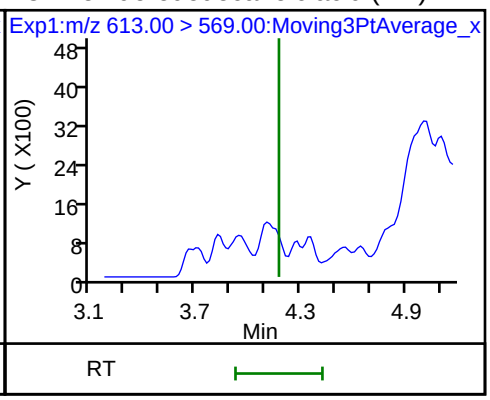
33 N-ethyl perfluorooctane sulfonamid (ND)



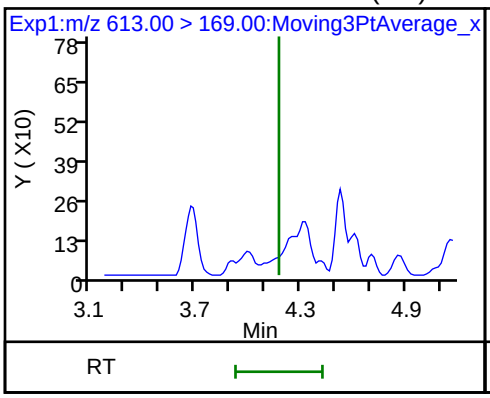
D 36 13C2 PFDoA



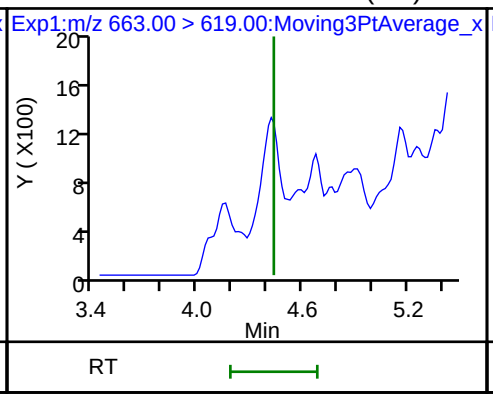
37 Perfluorododecanoic acid (ND)



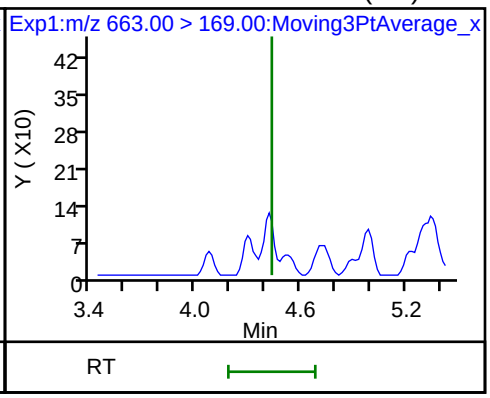
37 Perfluorododecanoic acid (ND)



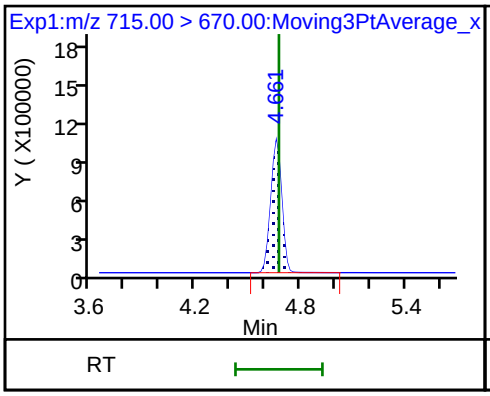
41 Perfluorotridecanoic acid (ND)



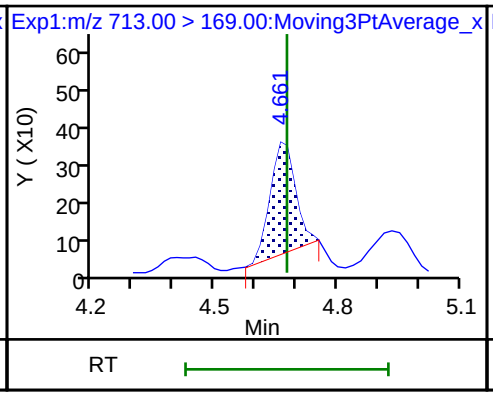
41 Perfluorotridecanoic acid (ND)



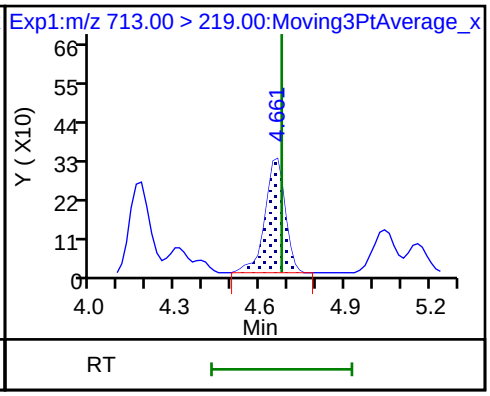
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

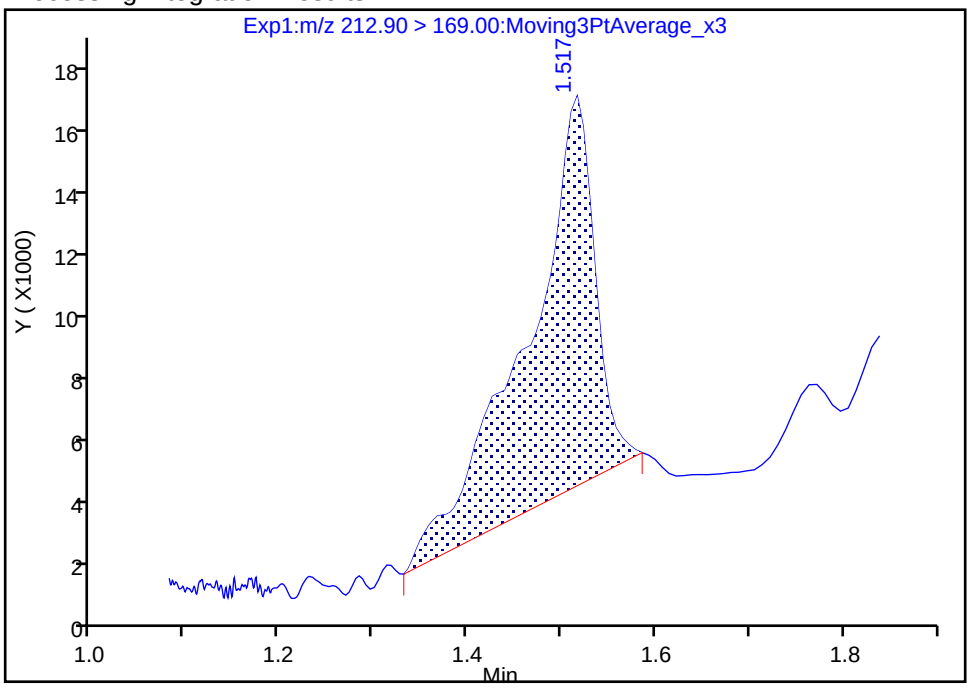
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_015.d				
Injection Date:	08-Aug-2018 09:14:19	Instrument ID:	A9		
Lims ID:	320-41460-A-5-A	Lab Sample ID:	320-41460-5		
Client ID:	GC-EQUIPMENT BLANK (072418)				
Operator ID:	A9\Administrator	ALS Bottle#:	10	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

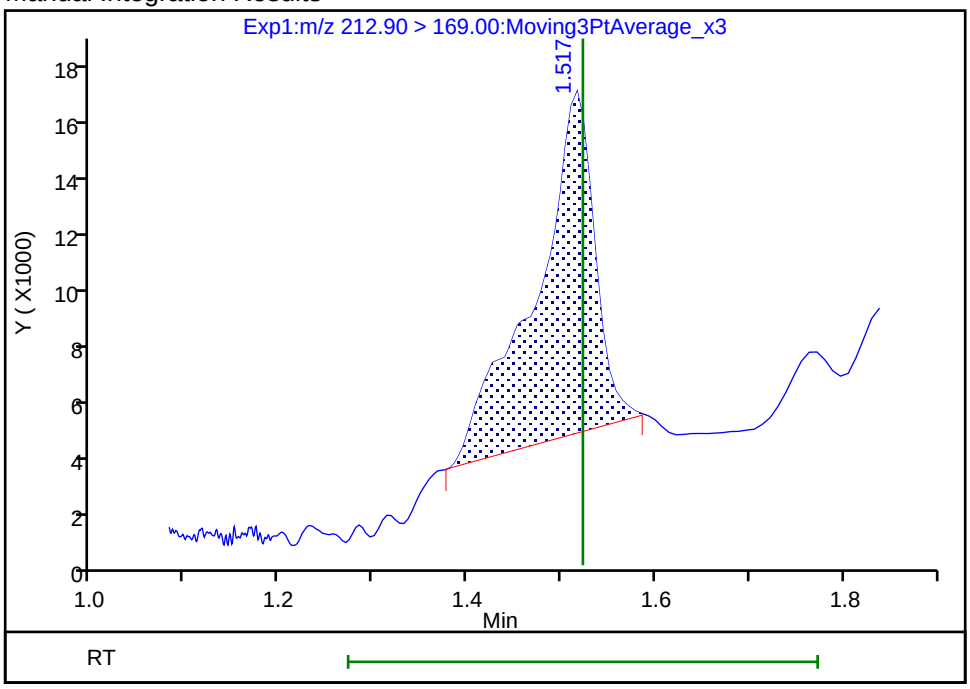
Processing Integration Results

RT: 1.52
Area: 60273
Amount: 0.018070
Amount Units: ng/ml



Manual Integration Results

RT: 1.52
Area: 50978
Amount: 0.015283
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 15:06:40
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

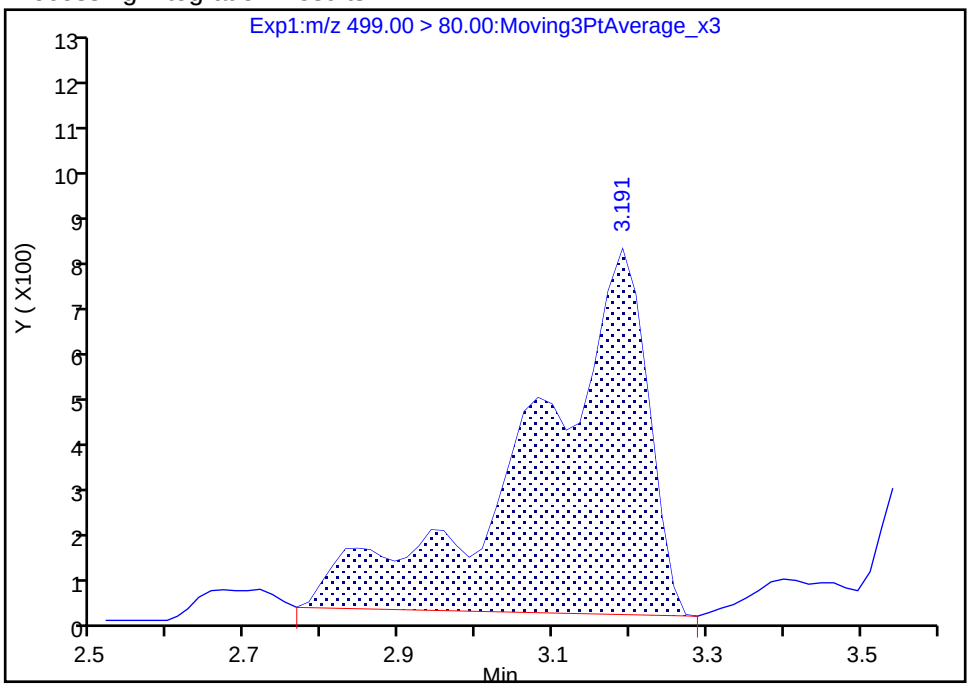
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_015.d				
Injection Date:	08-Aug-2018 09:14:19	Instrument ID:	A9		
Lims ID:	320-41460-A-5-A	Lab Sample ID:	320-41460-5		
Client ID:	GC-EQUIPMENT BLANK (072418)				
Operator ID:	A9\Administrator	ALS Bottle#:	10	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

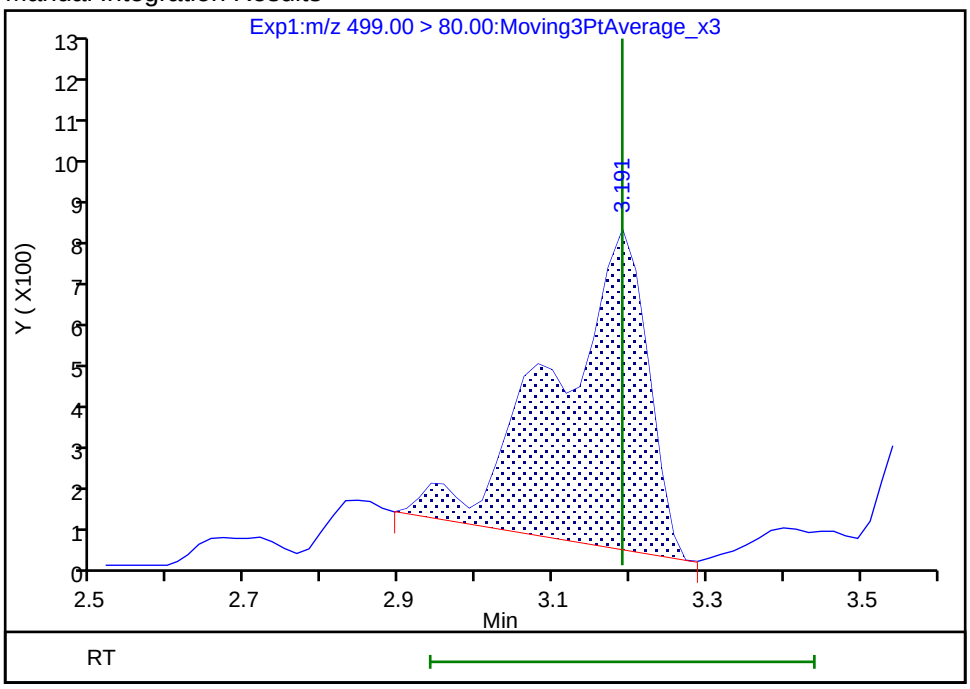
Processing Integration Results

RT: 3.19
Area: 8286
Amount: 0.002810
Amount Units: ng/ml



Manual Integration Results

RT: 3.19
Area: 6397
Amount: 0.002170
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 15:07:32

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

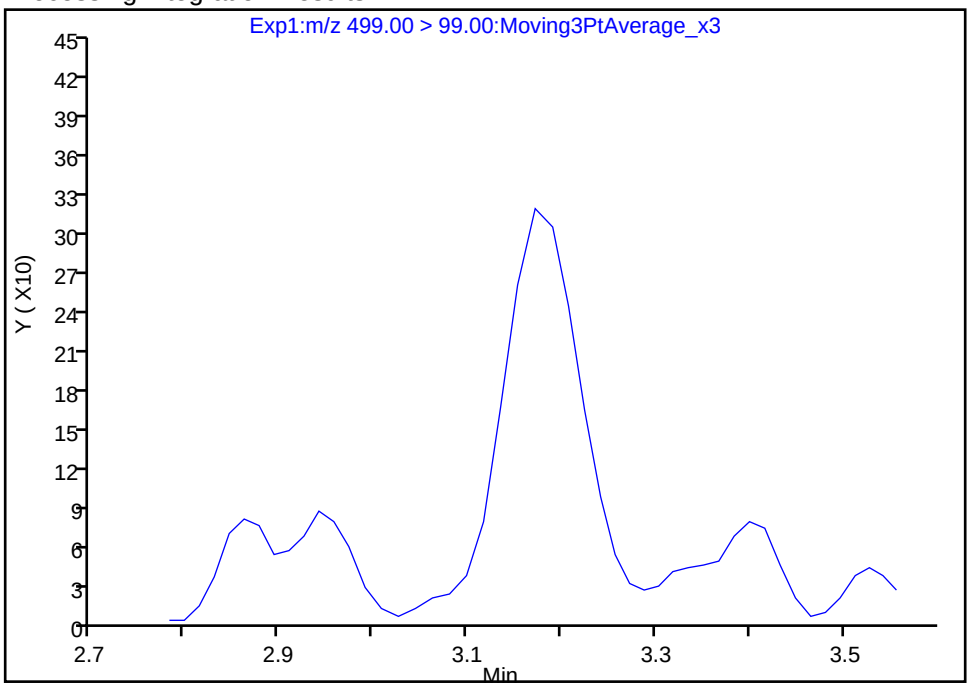
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_015.d				
Injection Date:	08-Aug-2018 09:14:19	Instrument ID:	A9		
Lims ID:	320-41460-A-5-A	Lab Sample ID:	320-41460-5		
Client ID:	GC-EQUIPMENT BLANK (072418)				
Operator ID:	A9\Administrator	ALS Bottle#:	10	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

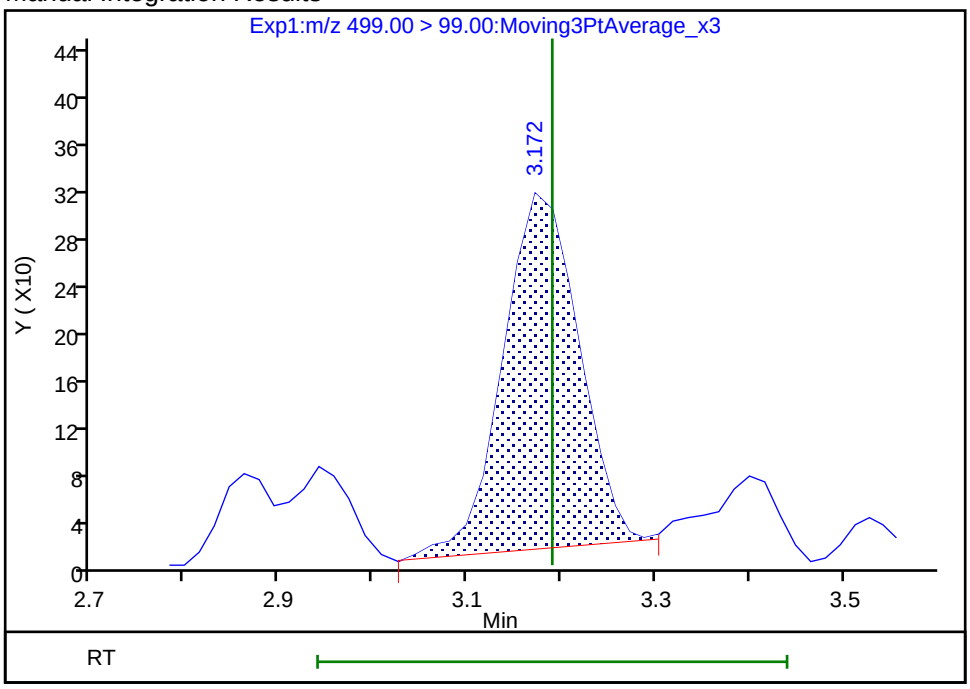
Processing Integration Results

RT: 3.15
Area: 0
Amount: 0.002810
Amount Units: ng/ml



Manual Integration Results

RT: 3.17
Area: 1685
Amount: 0.002170
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 15:07:39
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-238192/2	2018.08.06LLICAL_002.d
Level 2	IC 320-238192/3	2018.08.06LLICAL_003.d
Level 3	IC 320-238192/4	2018.08.06LLICAL_004.d
Level 4	IC 320-238192/5	2018.08.06LLICAL_005.d
Level 5	IC 320-238192/6	2018.08.06LLICAL_006.d
Level 6	IC 320-238192/7	2018.08.06LLICAL_007.d
Level 7	IC 320-238192/8	2018.08.06LLICAL_008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	1.0356 0.9385	0.9092 0.9295	0.9181	0.9138	0.9275	AveID		0.9389				4.7		35.0			
Perfluoropentanoic acid (PFPeA)	1.3867 1.1127	1.0717 1.1007	1.0769	1.1120	1.1037	AveID		1.1378				9.8		35.0			
Perfluorobutanesulfonic acid (PFBS)	76.063 79.702	72.042 71.920	75.499	79.131	77.346	AveID		75.957				4.1		50.0			
4:2 FTS	16.899 16.409	15.948 15.581	16.354	17.979	16.820	AveID		16.570				4.7		50.0			
Perfluorohexanoic acid (PFHxA)	1.1713 1.0157	0.9838 0.9930	0.9663	1.0078	1.0064	AveID		1.0206				6.7		35.0			
Perfluoropentanesulfonic acid (PFPeS)	68.597 72.591	70.149 63.027	67.160	70.677	70.259	AveID		68.923				4.5		50.0			
HFPO-DA (GenX)	2.9114 2.4100	2.3352 2.4009	2.3481	2.3226	2.2150	AveID		2.4205				9.3		35.0			
Perfluoroheptanoic acid (PFHpA)	+++++ 1.0462	1.0598 1.0766	1.0410	1.0735	1.0740	AveID		1.0619				1.4		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.2251 1.0319	1.1827 1.0319	1.0717	1.0213	1.0237	AveID		1.0841				7.8		35.0			
ADONA	3.3483 3.1468	3.3029 2.7439	3.3386	3.4719	3.3638	AveID		3.2452				7.4		50.0			
6:2 FTS	1.7499 1.5710	1.5746 1.6133	1.4237	1.5556	1.5255	AveID		1.5734				6.2		35.0			
Perfluorooctanoic acid (PFOA)	1.2008 1.0886	1.2853 1.0557	1.0978	1.0896	1.0969	AveID		1.1307				7.2		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.2610 1.2616	1.2442 1.2011	1.1885	1.2551	1.2619	AveID		1.2391				2.5		50.0			
Perfluorononanoic acid (PFNA)	1.1473 1.0799	1.0748 1.0323	1.0182	0.9962	1.0249	AveID		1.0534				4.9		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid (PFOS)	1.1452 1.0892	1.0806 1.0719	1.0331	1.0486	1.0477	AveID		1.0738				3.5		35.0			
F-53B Major	1.8459 1.7643	1.6935 1.6823	1.6722	1.7599	1.7762	AveID		1.7420				3.6		50.0			
Perfluorononanesulfonic acid (PFNS)	0.7326 0.7691	0.7576 0.7460	0.7565	0.7459	0.7575	AveID		0.7522				1.6		50.0			
8:2 FTS	1.3250 1.2730	1.4395 1.3051	1.2793	1.2063	1.2657	AveID		1.2991				5.6		35.0			
Perfluorodecanoic acid (PFDA)	1.0978 0.9968	1.0000 0.9777	1.0353	0.9399	0.9748	AveID		1.0032				5.1		35.0			
Perfluorooctane Sulfonamide (FOSA)	0.9400 1.0032	0.9765 0.9376	0.9545	0.9847	1.0189	AveID		0.9736				3.2		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.9510 0.9835	1.0084 0.9888	0.9336	0.9540	0.9328	AveID		0.9646				3.0		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.6051 0.6390	0.6643 0.6091	0.6429	0.6182	0.6451	AveID		0.6320				3.4		50.0			
Perfluoroundecanoic acid (PFUnA)	+++++ 1.0924	1.2343 1.0863	1.0961	1.1589	1.0738	AveID		1.1236				5.5		35.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.9845 0.8814	0.9491 0.9072	0.8112	0.8526	0.8566	AveID		0.8918				6.7		35.0			
F-53B Minor	2.5393 2.7364	2.7548 2.3608	2.6747	2.7935	2.8554	AveID		2.6736				6.4		50.0			
10:2 FTS	0.8639 0.9340	0.8804 0.9326	0.9235	0.8718	0.8993	AveID		0.9008				3.3		50.0			
Perfluorododecanoic acid (PFDoA)	1.1896 1.0745	1.1772 1.0999	1.0449	1.1145	1.0884	AveID		1.1127				4.8		35.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2456 0.2793	0.2716 0.2774	0.3060	0.2852	0.2790	AveID		0.2777				6.5		50.0			
Perfluorotridecanoic Acid (PFTriA)	1.0415 1.1188	1.0997 1.0389	1.0944	1.0656	1.0680	AveID		1.0753				2.8		50.0			
Perfluorotetradecanoic acid (PFTeA)	+++++ 0.2376	0.2550 0.2466	0.2390	0.2330	0.2410	AveID		0.2420				3.2		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.7308 0.8791	1.2721 0.8280	0.9785	0.9010	0.9010	L2ID	0.0213	0.8703							0.9990		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	0.9036 0.9237	0.9066 0.8652	0.9539	0.9377	0.9501	AveID		0.9201				3.4		50.0			
13C4 PFBA	1.3454 1.4071	1.3544 1.4354	1.3670	1.3767	1.4083	Ave		1.3849				2.4		50.0			
13C5 PFPeA	0.9142 0.9681	0.9515 0.9792	0.9416	0.9284	0.9928	Ave		0.9537				2.9		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C3-PFBS	0.0217 0.0217	0.0221 0.0231	0.0222	0.0212	0.0224	Ave		0.0221				2.7		50.0			
M2-4:2FTS	0.1581 0.1611	0.1549 0.1507	0.1547	0.1588	0.1621	Ave		0.1572				2.6		50.0			
13C2 PFHxA	1.0908 1.0709	1.0832 1.0771	1.0664	1.0648	1.1220	Ave		1.0822				1.8		50.0			
13C3 HFPO-DA	0.0795 0.0831	0.0820 0.0870	0.0833	0.0832	0.0911	Ave		0.0842				4.5		50.0			
13C4-PFHpA	1.0528 1.0755	1.0748 1.0417	1.0614	1.0647	1.0848	Ave		1.0651				1.4		50.0			
18O2 PFHxS	1.3540 1.3675	1.4005 1.3474	1.3411	1.3518	1.3975	Ave		1.3657				1.8		50.0			
M2-6:2FTS	0.2197 0.2237	0.2210 0.2189	0.2309	0.2274	0.2275	Ave		0.2242				2.0		50.0			
13C8 PFOA	1.9506 1.8835	1.9359 1.8807	1.8897	1.9738	1.9781	Ave		1.9275				2.2		50.0			
13C4 PFOA	0.9700 0.9794	0.9570 0.9943	0.9864	0.9624	0.9914	Ave		0.9773				1.5		50.0			
13C8 PFOS	0.4256 0.4433	0.4430 0.4308	0.4347	0.4293	0.4450	Ave		0.4359				1.8		50.0			
13C4 PFOS	0.8675 0.8973	0.8804 0.9183	0.9045	0.8918	0.9213	Ave		0.8973				2.2		50.0			
13C5 PFNA	0.8612 0.8554	0.8748 0.8585	0.8921	0.8848	0.9123	Ave		0.8770				2.4		50.0			
M2-8:2FTS	0.2727 0.2715	0.2729 0.2567	0.2676	0.2731	0.2806	Ave		0.2707				2.7		50.0			
13C2 PFDA	0.7423 0.7808	0.7526 0.7805	0.7387	0.7911	0.8001	Ave		0.7695				3.2		50.0			
13C8 FOSA	1.1730 1.1817	1.1961 1.2106	1.1997	1.1702	1.1882	Ave		1.1885				1.2		50.0			
d3-NMeFOSAA	0.3925 0.3861	0.3877 0.3984	0.3885	0.3872	0.4143	Ave		0.3935				2.6		50.0			
d5-NEtFOSAA	0.4192 0.3947	0.4132 0.3750	0.4229	0.4161	0.4128	Ave		0.4077				4.2		50.0			
13C2 PFUnA	0.6182 0.6069	0.6026 0.6096	0.6343	0.6068	0.6538	Ave		0.6189				3.0		50.0			
13C2 PFDoA	0.6320 0.6494	0.6378 0.6472	0.6693	0.6531	0.6902	Ave		0.6541				3.0		50.0			
13C2-PFTeDA	0.8409 0.8358	0.8205 0.8213	0.8511	0.8289	0.8364	Ave		0.8335				1.3		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2-PFHxDA	1.6553 1.6633	1.6811 1.6556	1.6239	1.6406	1.6546	Ave		1.6535				1.1		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-238192/2	2018.08.06LLICAL_002.d
Level 2	IC 320-238192/3	2018.08.06LLICAL_003.d
Level 3	IC 320-238192/4	2018.08.06LLICAL_004.d
Level 4	IC 320-238192/5	2018.08.06LLICAL_005.d
Level 5	IC 320-238192/6	2018.08.06LLICAL_006.d
Level 6	IC 320-238192/7	2018.08.06LLICAL_007.d
Level 7	IC 320-238192/8	2018.08.06LLICAL_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	57127 10686384	100389 19976933	522272	2011540	5049773	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	51978 8717868	83129 16137329	421991	1650773	4235935	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	59862 12353528	114549 21980500	616670	2375205	5929736	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	14052 2687262	26792 5031154	141135	570176	1362407	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	52384 8802526	86871 16015982	428854	1715767	4365425	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	57284 11938702	118353 20439230	582073	2251038	5715419	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	9494 1620535	15610 3129271	81354	308918	779751	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	+++++ 9106263	92858 16791846	459833	1827459	4504362	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	61896 10391537	122877 18945578	544267	2008773	5033358	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
ADONA		AveID	119095 22851214	237055 37729670	1256630	4950939	11980639	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
6:2 FTS		AveID	14940 2696182	26890 5013052	129666	536262	1272183	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	47808 8637324	100379 15733520	451059	1678386	4208258	0.0250 5.01	0.0501 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	42699 8721667	85012 15722427	425894	1703787	4278634	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorononanoic acid (PFNA)		AveID	40510 7475851	76644 13269892	377996	1409363	3614991	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctanesulfonic acid (PFOS)		AveID	37801 7339820	71970 13677354	360873	1387650	3462772	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
F-53B Major		AveID	61193 11940295	113277 21558959	586624	2339008	5895997	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorononanesulfonic acid (PFNS)		AveID	25016 5361178	52199 9847776	273347	1021056	2589883	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
8:2 FTS		AveID	14190 2679186	30677 4806399	136487	504558	1315230	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorodecanoic acid (PFDA)		AveID	33414 6298810	61353 11426488	318256	1188927	3015215	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctane Sulfonamide (FOSA)		AveID	45210 9594151	95215 16995473	476525	1842464	4680280	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	15304 3073336	31870 5898014	150940	590682	1493989	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	20747 4472904	45962 8074266	233277	849835	2214864	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluoroundecanoic acid (PFUnA)		AveID	+++++ 5365541	60636 9915678	289310	1124406	2714159	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	16923 2815576	31965 5094367	142770	567205	1366918	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
F-53B Minor		AveID	85084 18718037	186244 30579411	948354	3752452	9579999	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
10:2 FTS		AveID	9310 1978025	18880 3456093	99141	366950	940315	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluorododecanoic acid (PFDoA)		AveID	30826 5646629	61213 10658790	291016	1163733	2903966	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorododecanesulfonic acid (PFDoS)		AveID	8457 1963594	18872 3692356	111497	393708	961771	0.0242 4.84	0.0484 9.68	0.242	0.968	2.42
Perfluorotridecanoic Acid (PFTriA)		AveID	26989 5879570	57183 10067689	304796	1112653	2849697	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	+++++ 1606848	17056 3032661	84652	308839	779223	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	117463 11833130	174341 20527532	661220	2363491	5763175	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	61329 12433827	124240 21448602	644655	2459730	6077489	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PFOA	Ave	5516377 5693569	5520570 5373122	5688815	5503224	5444583	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PFOA	Ave	3748386 3917323	3878229 3665379	3918495	3711287	3838069	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3-PFBS	13PFOA	Ave	82796 81531	83639 80382	85930	78945	80654	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2FTS	13PFOA	Ave	605486 609022	589543 526817	601195	592717	585341	2.34 2.34	2.34 2.34	2.34	2.34	2.34

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C2 PFHxA	13PF OA	Ave	4472467 4333101	4415087 4032113	4437948	4256324	4337626	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PF OA	Ave	326098 336215	334230 325849	346469	332511	352025	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4-PFHpA	13PF OA	Ave	4316698 4351928	4381099 3899256	4417214	4255889	4193874	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	5251983 5234562	5400125 4771422	5279483	5111728	5111206	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2FTS	13PF OA	Ave	855574 859900	855666 778460	912690	863649	835688	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C8 PFOA	13PF OA	Ave	7829980 7461246	7724966 6892356	7698803	7724133	7486707	2.45 2.45	2.45 2.45	2.45	2.45	2.45
13C4 PFOA	13PF OA	Ave	3977347 3963063	3900845 3722009	4104790	3847208	3832692	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 PFOS	13PF OA	Ave	1668266 1714648	1726052 1541520	1729501	1640677	1644552	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C4 PFOS	13PF OA	Ave	3400422 3471061	3430647 3286355	3598367	3408113	3404908	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	3530907 3461355	3565521 3213782	3712571	3536917	3527035	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2FTS	13PF OA	Ave	1070959 1052330	1065531 920670	1066887	1045687	1039099	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	3043654 3159574	3067735 2921735	3074087	3162481	3093053	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	4809407 4781606	4875140 4531636	4992636	4677735	4593505	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	1609182 1562466	1580220 1491160	1616798	1547904	1601576	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	1718969 1597197	1684036 1403844	1760050	1663128	1595779	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	2534521 2455806	2456263 2281933	2639555	2425508	2527555	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	2591339 2627551	2599869 2422707	2785129	2610480	2668181	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFTeDA	13PF OA	Ave	3447891 3382019	3344339 3074334	3541707	3313318	3233399	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFHxDA	13PF OA	Ave	6786819 6730439	6852227 6197635	6757749	6558204	6396595	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_002.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Aug-2018 11:10:09 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L1-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:16:53 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:22:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.401	1.395	0.006	0.543	5516377	2.43		97.1	8663	
2 Perfluorobutyric acid										
212.90 > 169.00	1.401	1.397	0.004	1.000	57127	0.0276		110	6.0	
D 3 13C5-PFPeA										
267.90 > 223.00	1.646	1.639	0.007	0.638	3748386	2.40		95.9	8167	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.646	1.643	0.003	1.000	51978	0.0305		122	3.1	
D 47 13C3-PFBS										
301.90 > 83.00	1.678	1.675	0.003	0.651	82796	2.29		98.4	394	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.678	1.676	0.002	1.000	59862	0.0221		100	27.4	
298.90 > 99.00	1.686	1.676	0.010	1.005	26611		2.25(1.25-3.74)	100	16.7	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.875	1.875	0.0	1.117	14052	0.0238		102	121	
D 60 M2-4:2FTS										
329.00 > 81.00	1.883	1.875	0.008	0.730	605486	2.35		101	831	
D 7 13C2 PFHxA										
315.00 > 270.00	1.912	1.908	0.004	0.741	4472467	2.52		101	8390	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.912	1.908	0.004	1.000	52384	0.0287		115	14.5	
313.00 > 119.00	1.923	1.908	0.015	1.005	4815		10.88(5.03-15.10)	115	12.0	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.933	1.930	0.003	1.152	57284	0.0233		99.5	135	
349.00 > 99.00	1.933	1.930	0.003	1.152	21167		2.71(1.36-4.07)	99.5	28.8	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.006	2.003	0.003	1.000	9494	0.0301		120	3.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.006	2.003	0.003	0.778	326098	2.36		94.5	976	
D 9 13C4-PFHpA										
367.00 > 322.00	2.233	2.227	0.006	0.866	4316698	2.47		98.8	9522	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.233	2.228	0.005	1.000	70955	0.0387		155	13.9	
363.00 > 169.00	2.233	2.228	0.005	1.000	28093		2.53(1.13-3.40)	155	60.1	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.243	2.239	0.004	1.000	61896	0.0257		113	144	
399.00 > 99.00	2.243	2.239	0.004	1.000	21470		2.88(1.50-4.49)	113	24.0	
D 11 18O2 PFHxS										
403.00 > 84.00	2.243	2.239	0.004	0.870	5251983	2.34		99.1	5490	
65 ADONA										
377.00 > 251.00	2.277	2.271	0.006	0.773	119095	0.0258		103	369	
377.00 > 85.00	2.277	2.271	0.006	0.773	70717		1.68(0.84-2.53)	103	160	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.557	2.548	0.009	1.000	14940	0.0264		111	29.3	
D 12 M2-6:2FTS										
429.00 > 81.00	2.557	2.549	0.008	0.992	855574	2.33		98.0	2284	
D 73 13C8 PFOA										
421.00 > 376.00	2.579	2.571	0.008	1.000	7829980	2.48		101	11714	
D 14 13C4 PFOA										
417.00 > 372.00	2.579	2.573	0.006	1.000	3977347	2.48		99.3	6149	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.579	2.574	0.005	1.000	47808	0.0266		106	5.0	
413.00 > 169.00	2.579	2.574	0.005	1.000	27163		1.76(0.84-2.52)	106	59.5	
* 62 13C2-PFOA										
415.00 > 370.00	2.579	2.575	0.004		4100164	2.50			7067	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.586	2.583	0.003	0.878	42699	0.0242		102	133	
449.00 > 99.00	2.586	2.583	0.003	0.878	10587		4.03(1.94-5.82)	102	22.5	
D 72 13C8 PFOS										
507.00 > 99.00	2.944	2.938	0.006	1.141	1668266	2.33		97.6	5837	
D 18 13C4 PFOS										
503.00 > 80.00	2.944	2.939	0.005	1.141	3400422	2.31		96.7	4592	
D 19 13C5 PFNA										
468.00 > 423.00	2.944	2.939	0.005	1.141	3530907	2.45		98.2	7876	
20 Perfluorononanoic acid										
463.00 > 419.00	2.944	2.939	0.005	1.000	40510	0.0272		109	12.3	
463.00 > 169.00	2.944	2.939	0.005	1.000	8595		4.71(1.90-5.69)	109	72.2	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.950	2.940	0.010	1.002	37801	0.0247		107	105	
499.00 > 99.00	2.950	2.940	0.010	1.002	10855		3.48(2.31-6.93)	107	29.5	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.154	3.150	0.004	1.071	61193	0.0247		106	259	
D 26 M2-8:2FTS										
529.00 > 81.00	3.284	3.284	0.0	1.273	1070959	2.41		101	2863	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.284	3.285	0.0	1.115	25016	0.0234		97.4	162	
549.00 > 99.00	3.291	3.285	0.007	1.118	10319		2.42(1.33-3.97)	97.4	44.8	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.298	3.286	0.012	1.004	14190	0.0244		102	42.6	
D 23 13C2 PFDA										
515.00 > 470.00	3.298	3.294	0.004	1.279	3043654	2.41		96.5	5778	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.298	3.296	0.002	1.000	33414	0.0274		109	26.5	
513.00 > 169.00	3.298	3.296	0.002	1.000	4888		6.84(2.36-7.09)	109	34.8	
D 21 13C8 FOSA										
506.00 > 78.00	3.320	3.317	0.003	1.287	4809407	2.47		98.7	5689	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.320	3.319	0.001	1.000	45210	0.0241		96.5	291	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.453	3.448	0.005	1.339	1609182	2.49		99.7	4803	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.460	3.453	0.007	1.002	15304	0.0246		98.6	9.3	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.613	3.608	0.005	1.227	20747	0.0231		95.7	187	
599.00 > 99.00	3.620	3.608	0.012	1.230	9035		2.30(1.39-4.16)	95.7	58.0	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.620	3.616	0.004	1.404	1718969	2.57		103	1292	
D 30 13C2 PFUnA										
565.00 > 520.00	3.620	3.620	0.0	1.404	2534521	2.50		99.9	7331	
31 Perfluoroundecanoic acid										R
563.00 > 519.00	3.627	3.622	0.005	1.002	39159	0.0344		138	28.2	R
563.00 > 169.00	3.620	3.622	-0.002	1.000	5282		7.41(2.12-6.36)	138	39.3	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.627	3.623	0.004	1.002	16923	0.0276		110	56.6	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.783	3.781	0.002	1.285	85084	0.0224		95.0	354	
35 MeFOSA										
512.00 > 169.00	3.824	3.826	-0.002		15364	NC			107	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.919	3.913	0.006	1.000	30826	0.0267		107	19.8	
613.00 > 169.00	3.919	3.913	0.006	1.000	5801		5.31(2.13-6.40)	107	54.6	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.919	3.913	0.006	1.194	9310	0.0231		95.9	66.5	
D 36 13C2 PFDoA										
615.00 > 570.00	3.919	3.913	0.006	1.520	2591339	2.42		96.6	4078	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.148	4.148	0.0	1.409	8457	0.0214		88.4	56.6	
699.00 > 99.00	4.148	4.148	0.0	1.409	12505		0.68(0.00-0.00)	88.4	138	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.177	4.173	0.004	1.066	26989	0.0242		96.9	12.7	
663.00 > 169.00	4.177	4.173	0.004	1.066	9362		2.88(1.25-3.76)	96.9	74.8	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.405	4.399	0.006	1.708	3447891	2.52		101	9514	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.405	4.400	0.005	1.000	8064	0.0242		96.6	88.6	
713.00 > 219.00	4.413	4.400	0.013	1.002	5513		1.46(0.71-2.13)	96.6	97.0	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.803	4.799	0.004	1.862	6786819	2.50		100	7400	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.814	4.801	0.013	1.002	117463	0.0253		101	50.8	
813.00 > 169.00	4.803	4.801	0.002	1.000	21885		5.37(2.86-8.58)	101	197	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.147	5.136	0.011	1.072	61329	0.0246		98.2	14.1	
913.00 > 169.00	5.140	5.136	0.004	1.070	7812		7.85(3.83-11.48)	98.2	103	

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Reagents:

LCPFC_LL1_00007 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:16:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_002.d

Injection Date: 06-Aug-2018 11:10:09 Instrument ID: A8_N

Lims ID: IC L1 Full

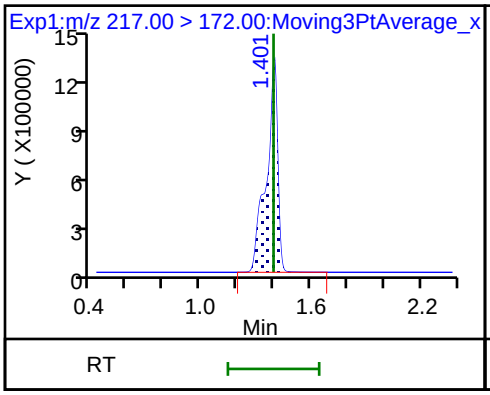
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2

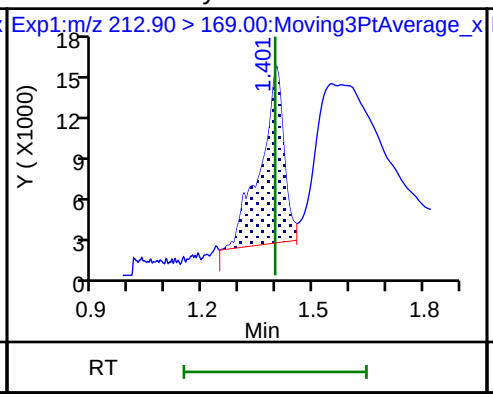
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

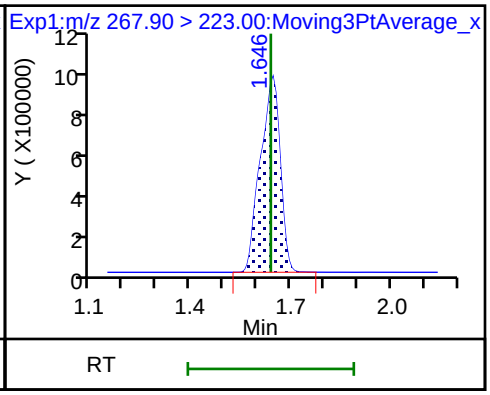
D 1 13C4 PFBA



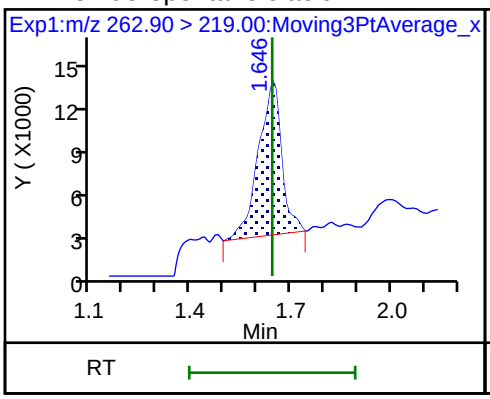
2 Perfluorobutyric acid



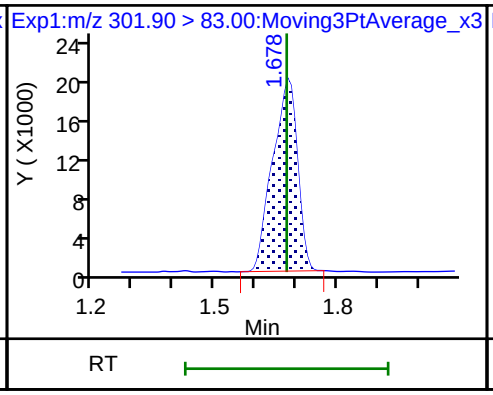
D 3 13C5-PFPeA



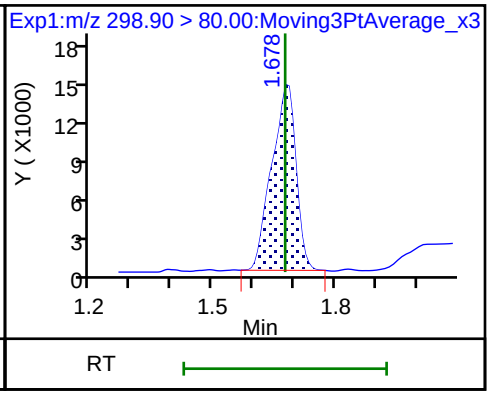
4 Perfluoropentanoic acid



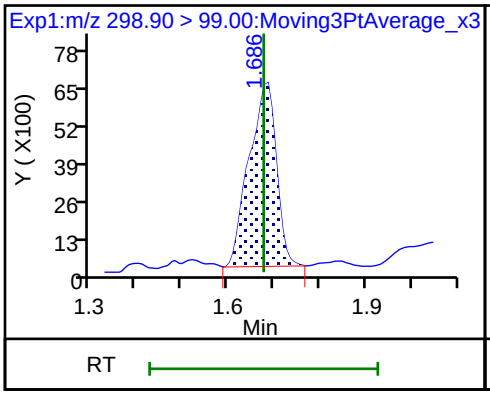
D 47 13C3-PFBS



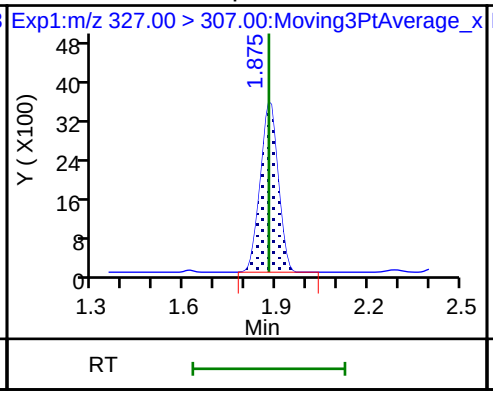
5 Perfluorobutanesulfonic acid



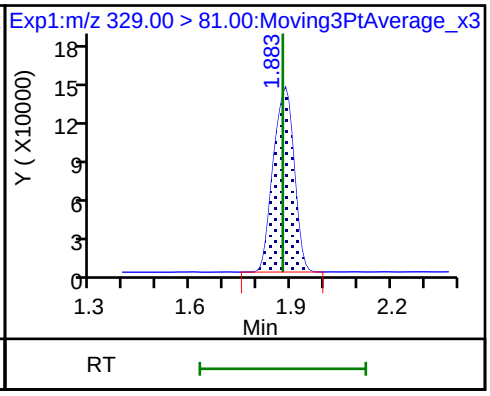
5 Perfluorobutanesulfonic acid



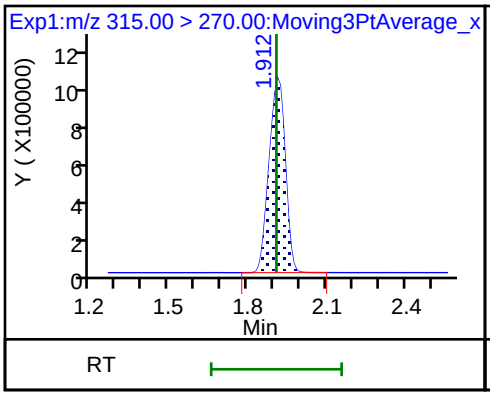
61 1H,1H,2H,2H-perfluorohexanesulfon



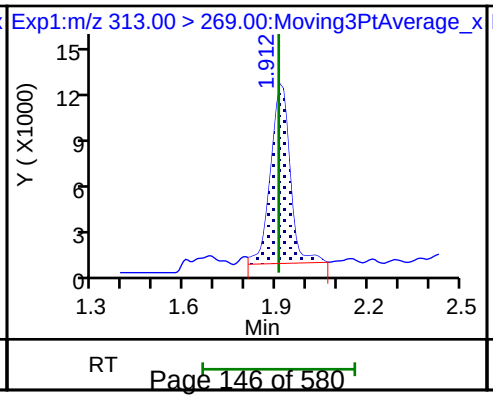
D 60 M2-4:2FTS



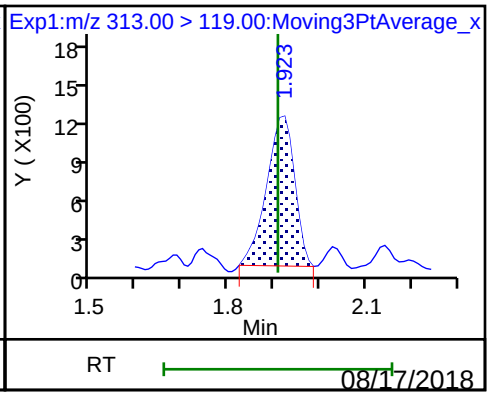
D 7 13C2 PFHxA



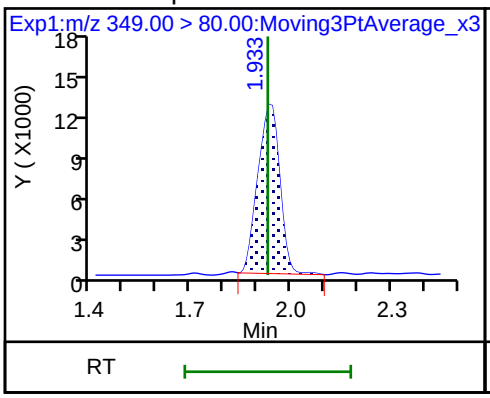
6 Perfluorohexanoic acid



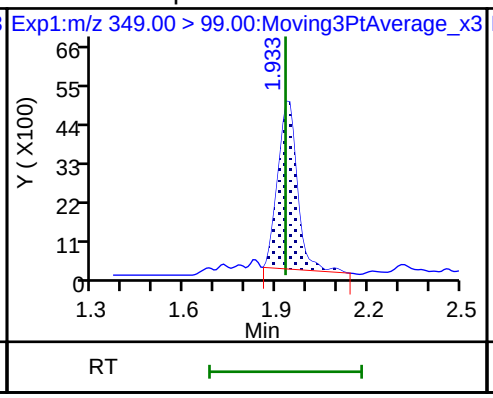
6 Perfluorohexanoic acid



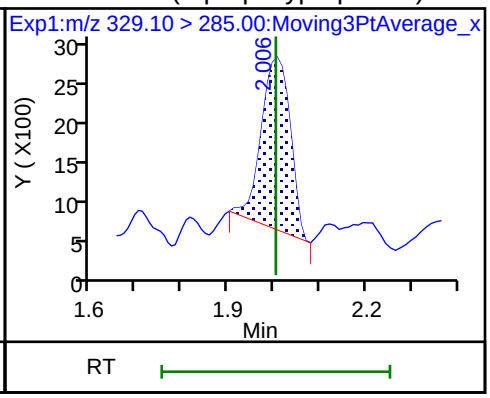
70 Perfluoropentanesulfonic acid



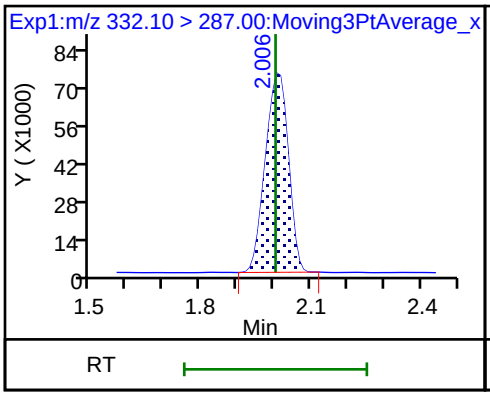
70 Perfluoropentanesulfonic acid



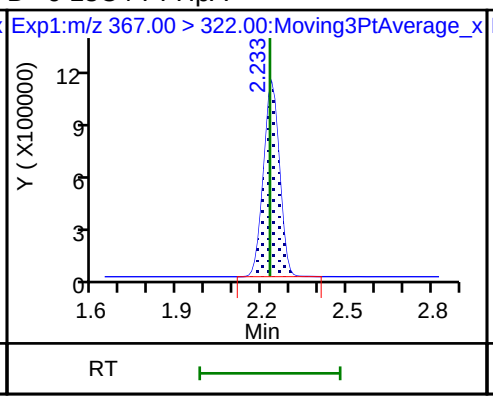
67 Perfluoro(2-propoxypropanoic) acid



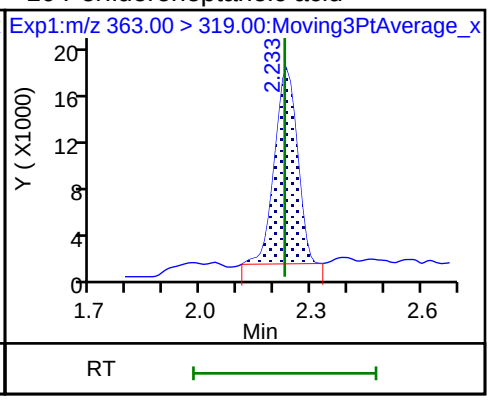
D 64 13C3 HFPO-DA



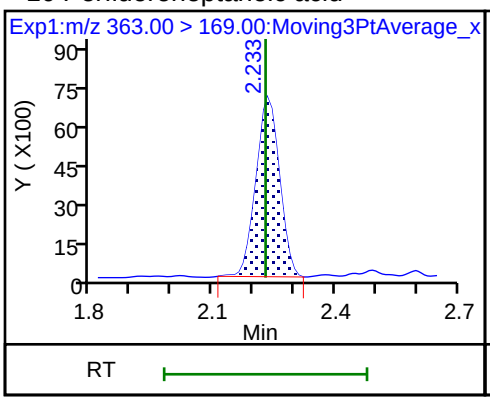
D 9 13C4-PFHpA



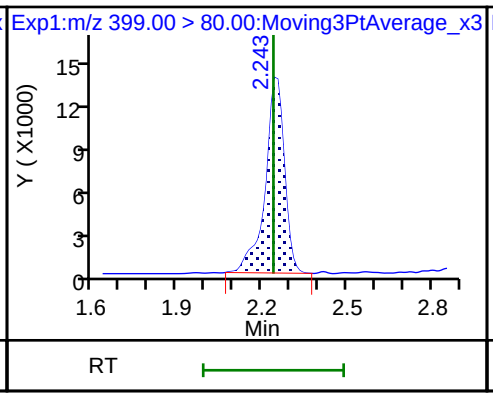
10 Perfluoroheptanoic acid



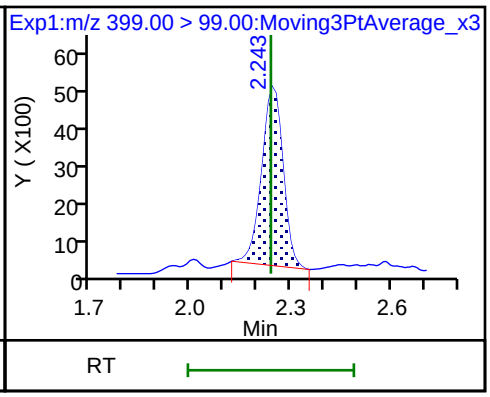
10 Perfluoroheptanoic acid



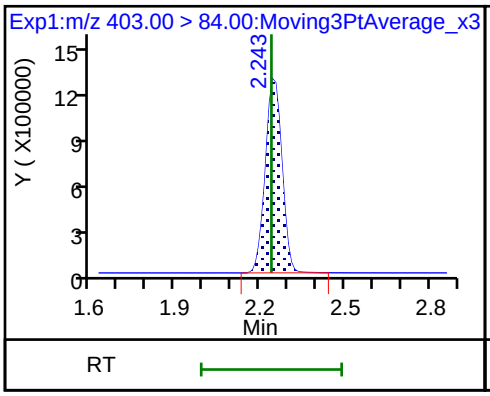
8 Perfluorohexanesulfonic acid



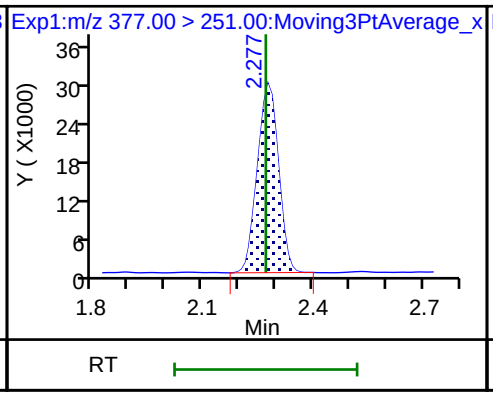
8 Perfluorohexanesulfonic acid



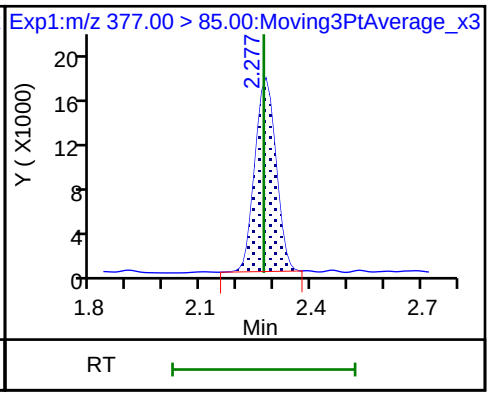
D 11 18O2 PFHxS



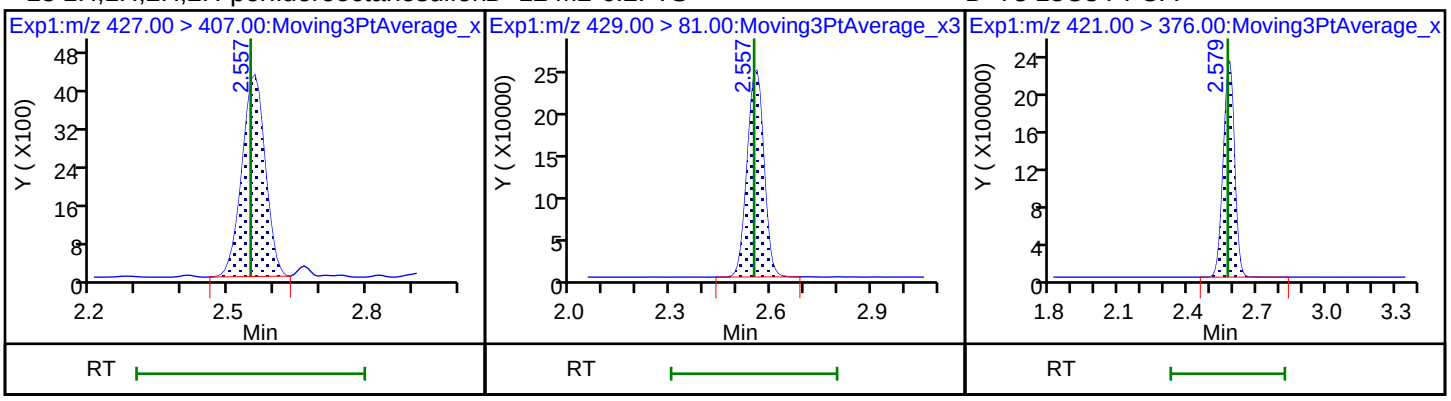
65 ADONA



65 ADONA

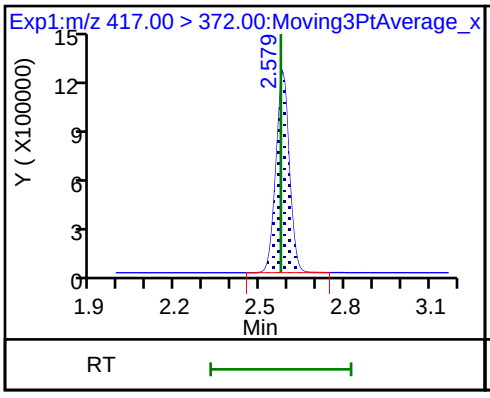


13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS

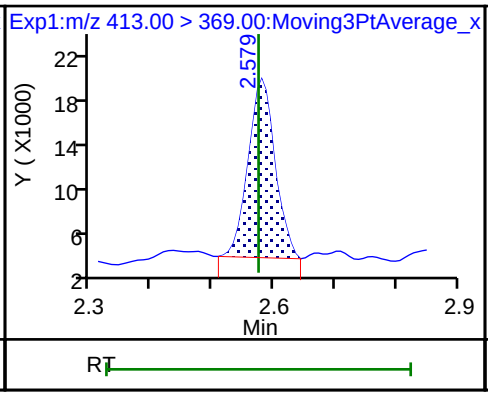


D 73 13C8 PFOA

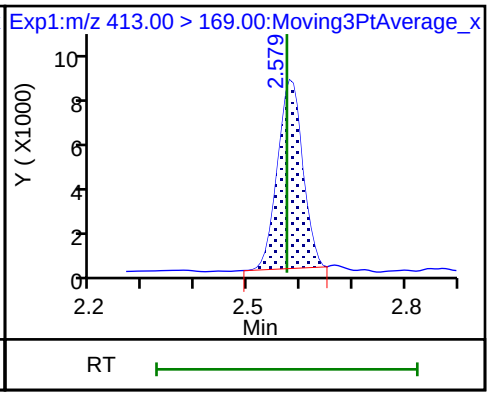
D 14 13C4 PFOA



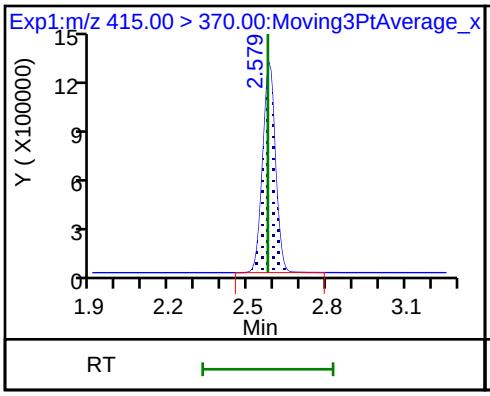
15 Perfluorooctanoic acid



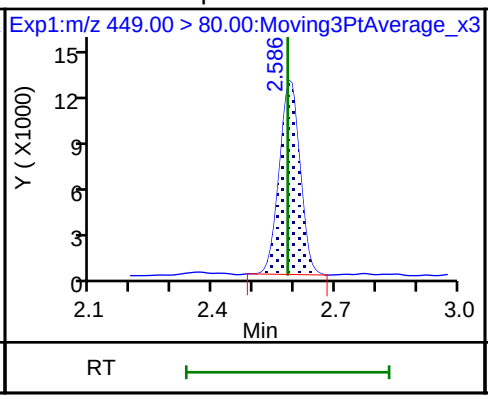
15 Perfluorooctanoic acid



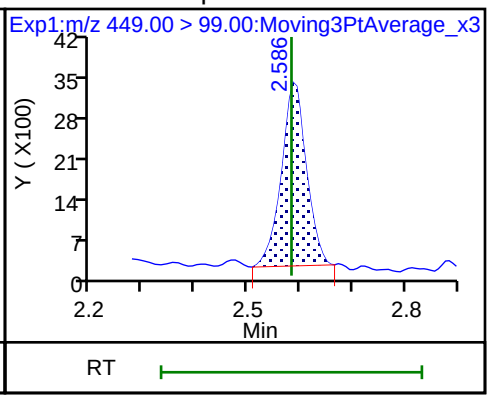
* 62 13C2-PFOA



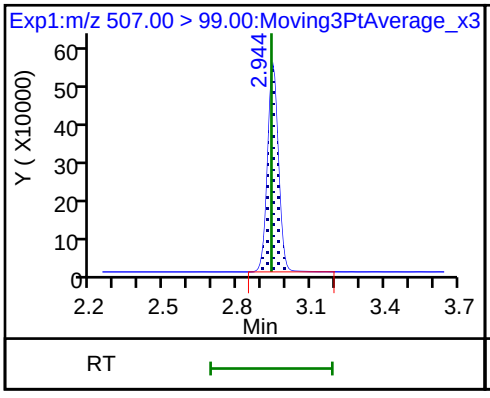
16 Perfluoroheptanesulfonic acid



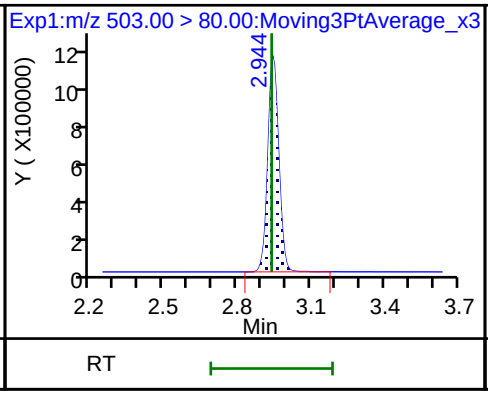
16 Perfluoroheptanesulfonic acid



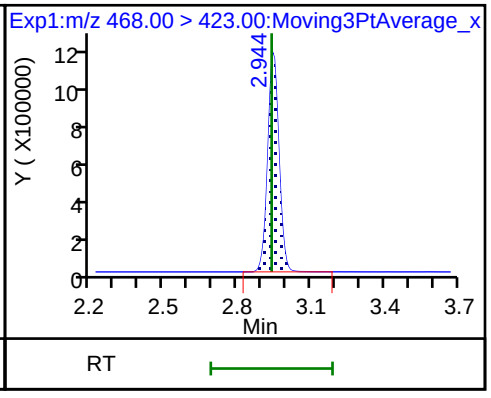
D 72 13C8 PFOS



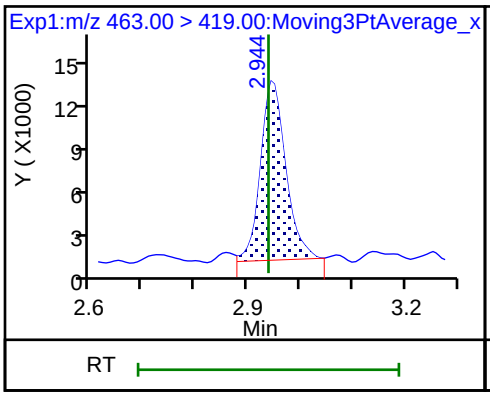
D 18 13C4 PFOS



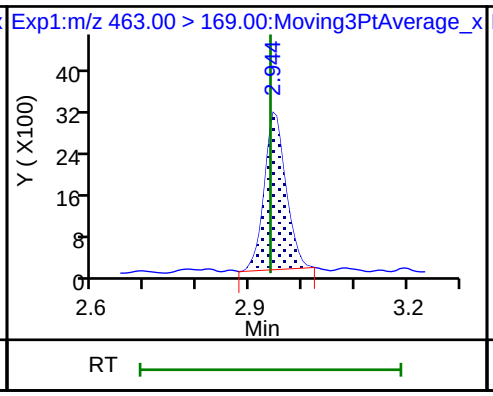
D 19 13C5 PFNA



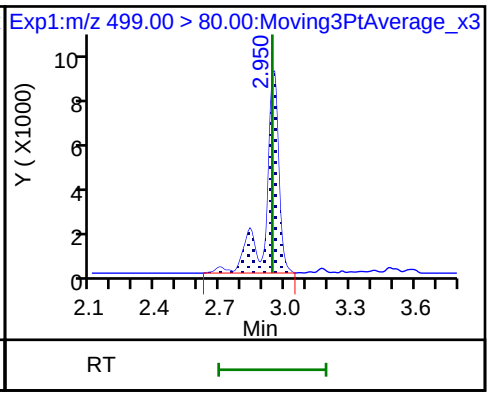
20 Perfluorononanoic acid



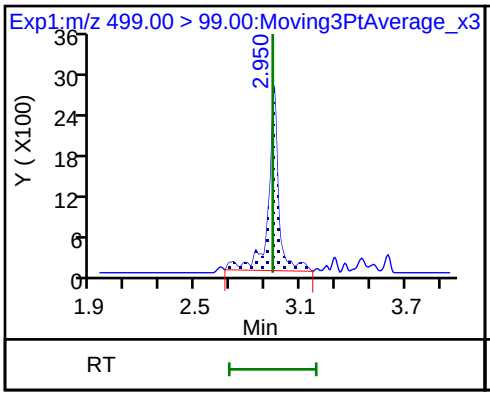
20 Perfluorononanoic acid



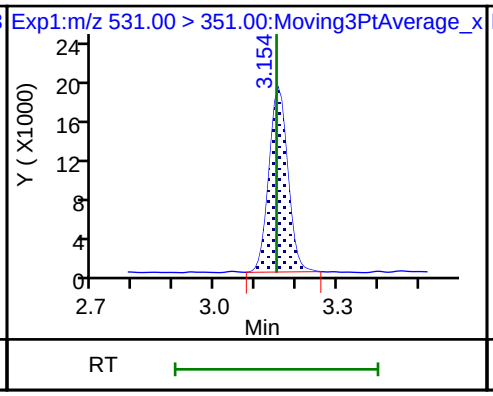
17 Perfluorooctane sulfonic acid



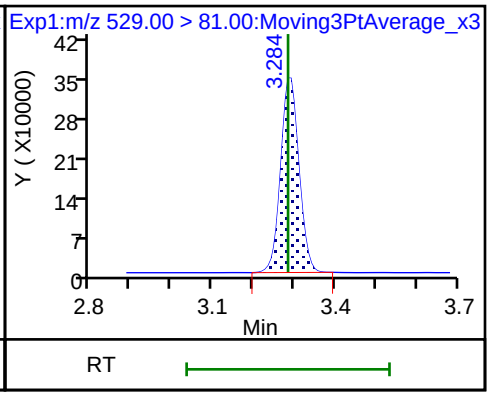
17 Perfluorooctane sulfonic acid



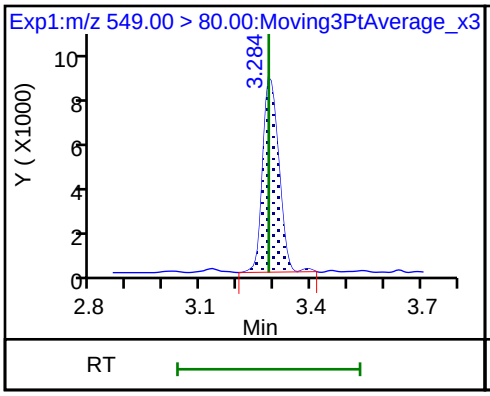
69 9-Chlorohexadecafluoro-3-oxanonane



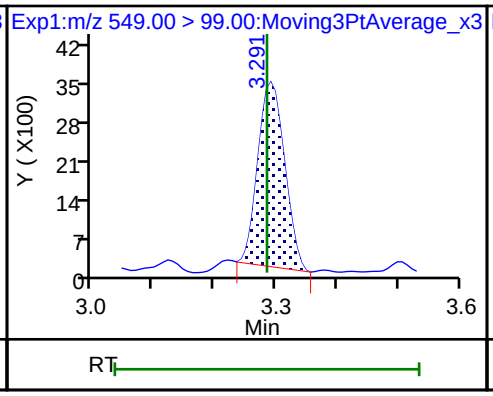
D 26 M2-8:2FTS



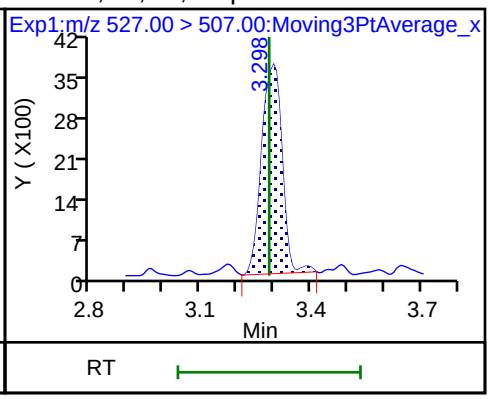
68 Perfluorononanesulfonic acid



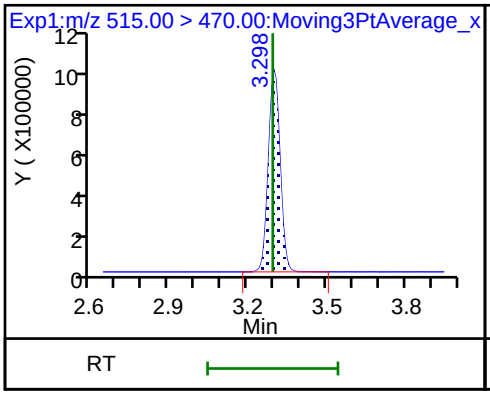
68 Perfluorononanesulfonic acid



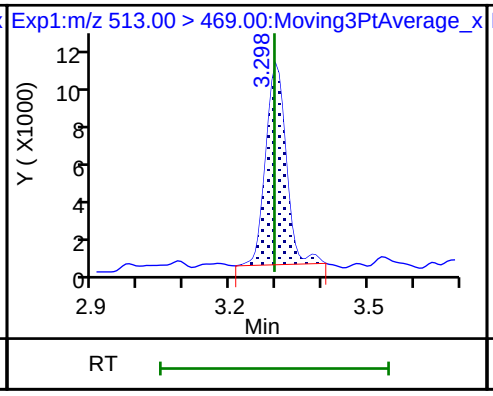
25 1H,1H,2H,2H-perfluorodecanesulfoni



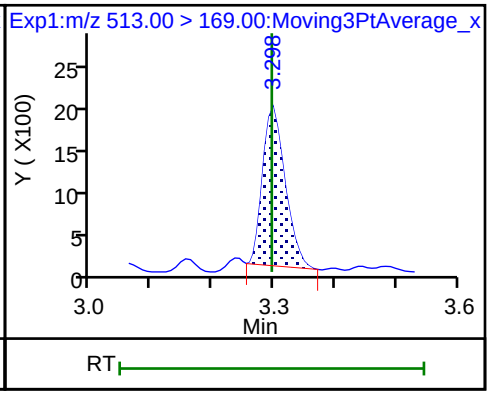
D 23 13C2 PFDA



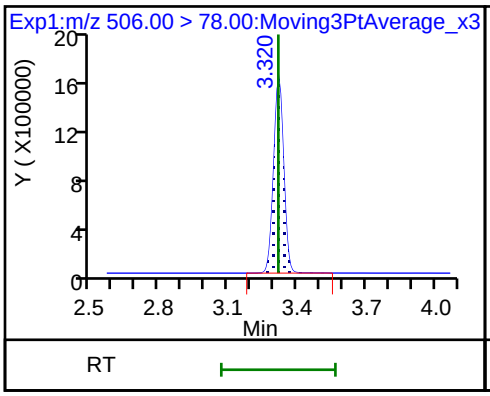
24 Perfluorodecanoic acid



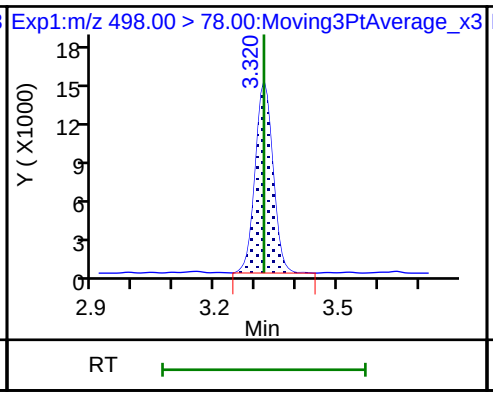
24 Perfluorodecanoic acid



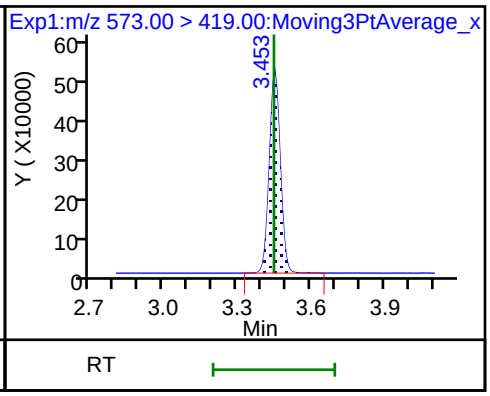
D 21 13C8 FOSA



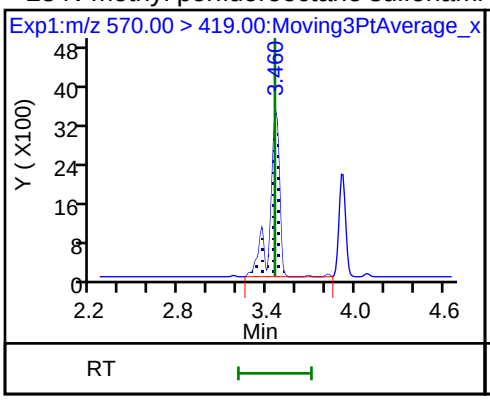
22 Perfluorooctane Sulfonamide



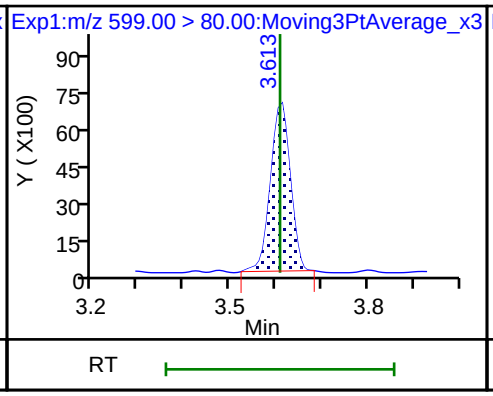
D 27 d3-NMeFOSAA



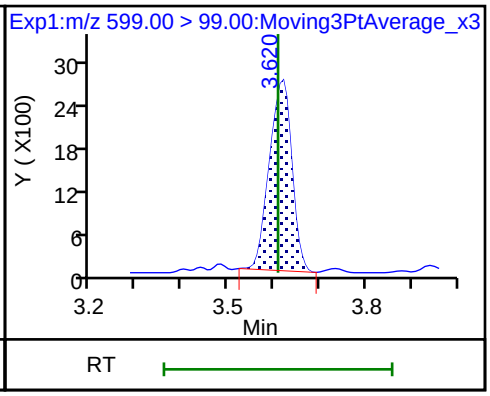
28 N-methyl perfluorooctane sulfonami



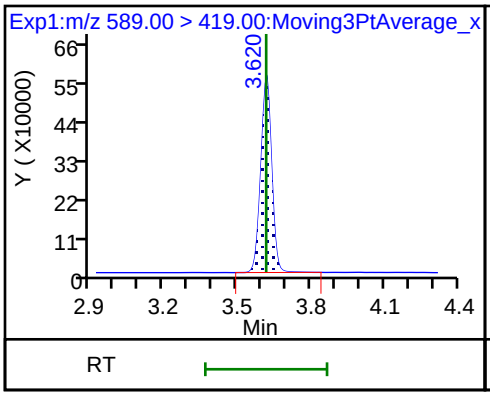
29 Perfluorodecane Sulfonic acid



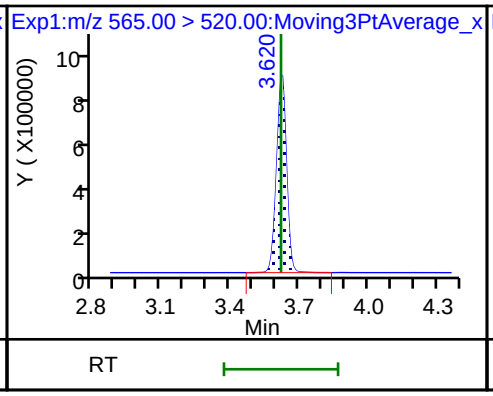
29 Perfluorodecane Sulfonic acid



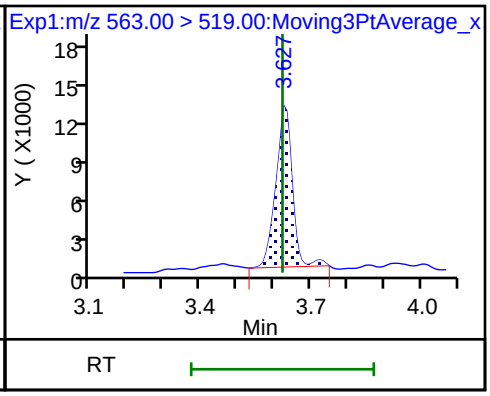
D 32 d5-NEtFOSAA



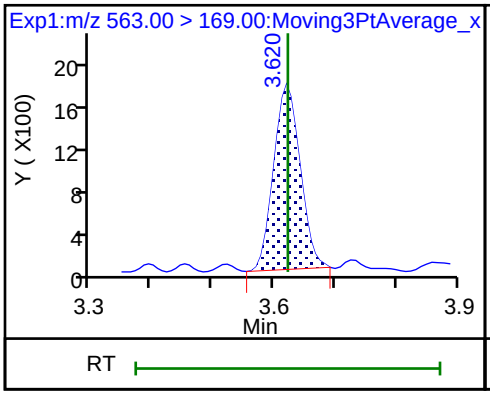
D 30 13C2 PFUnA



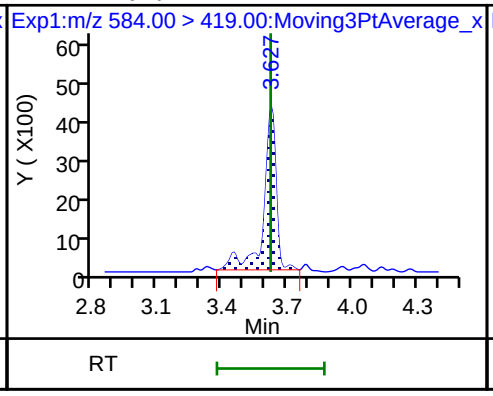
31 Perfluoroundecanoic acid



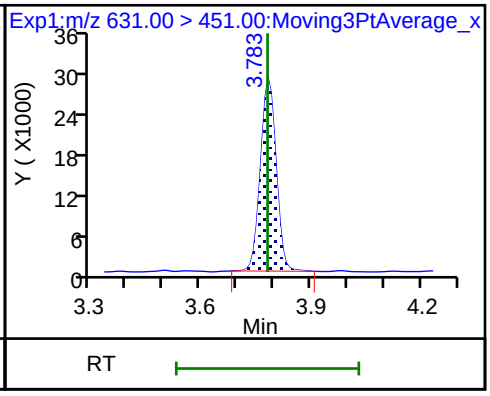
31 Perfluoroundecanoic acid



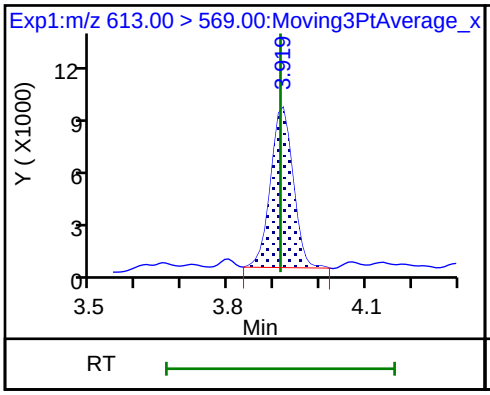
33 N-ethyl perfluorooctane sulfonamid



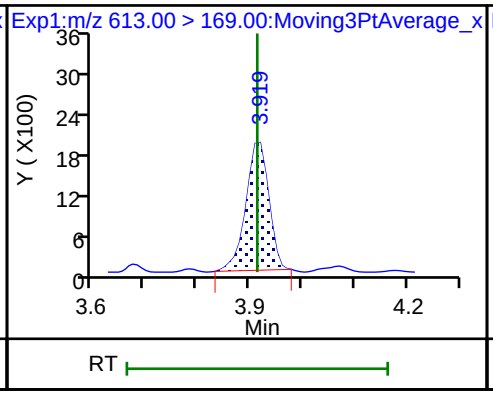
66 11-Chloroeicosafluoro-3-oxaundecan



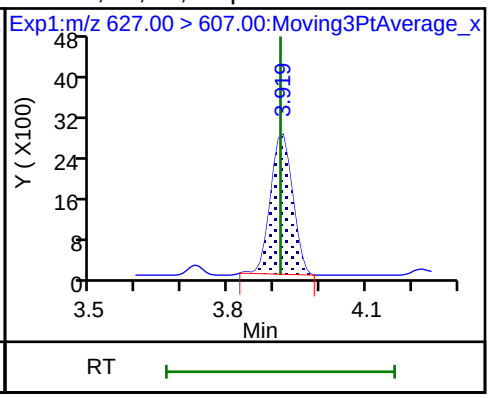
37 Perfluorododecanoic acid



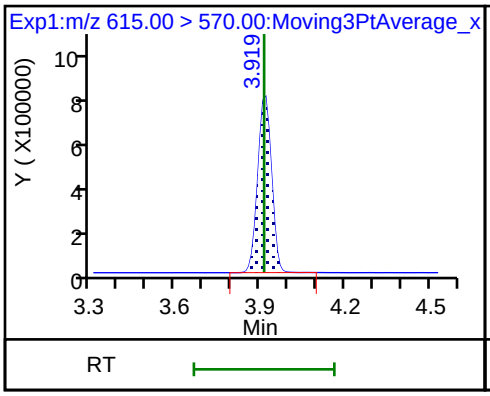
37 Perfluorododecanoic acid



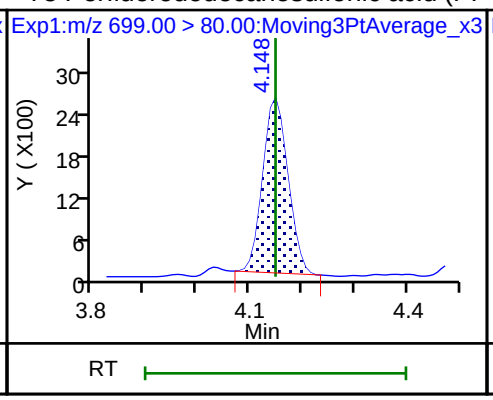
74 1H,1H,2H,2H-perfluorododecanesulfo



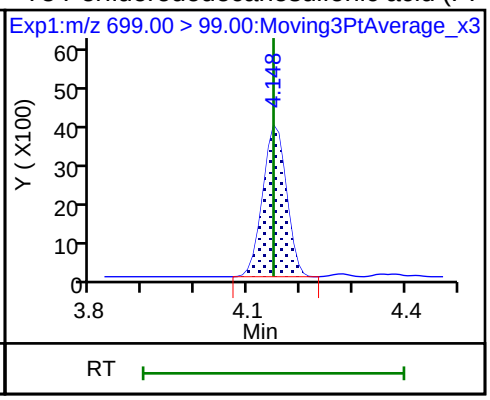
D 36 13C2 PFDoA



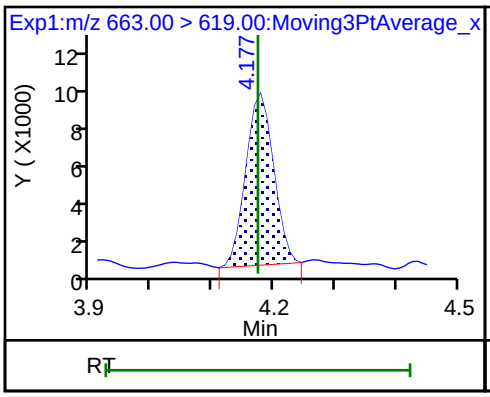
75 Perfluorododecanesulfonic acid (PF



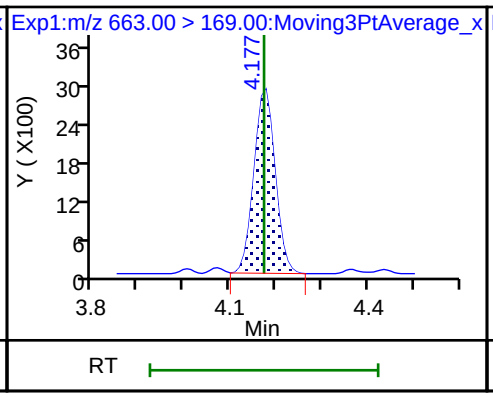
75 Perfluorododecanesulfonic acid (PF



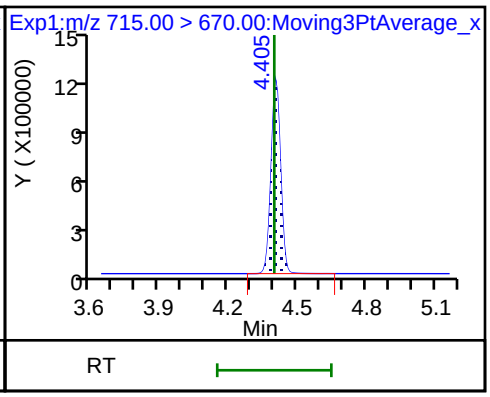
41 Perfluorotridecanoic acid



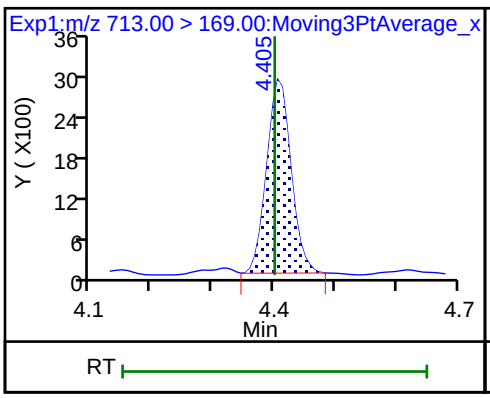
41 Perfluorotridecanoic acid



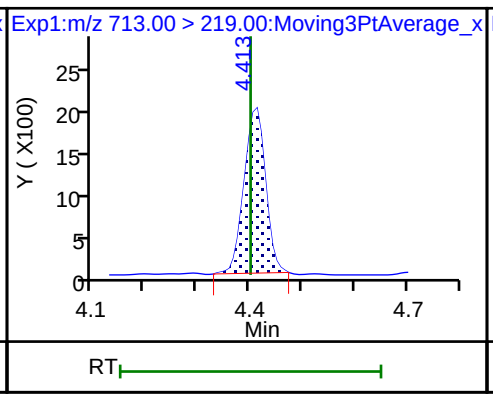
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



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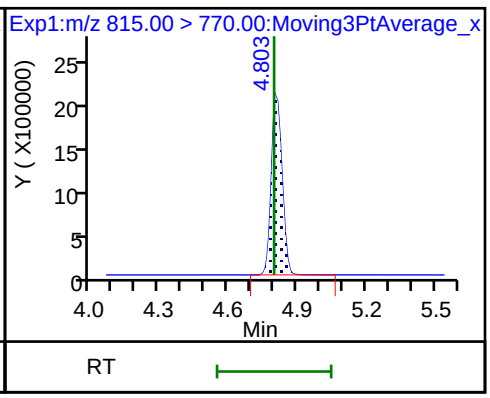
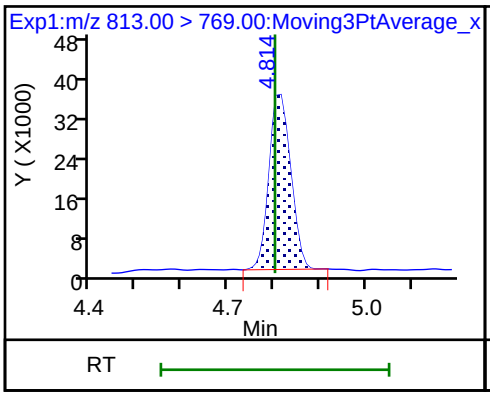
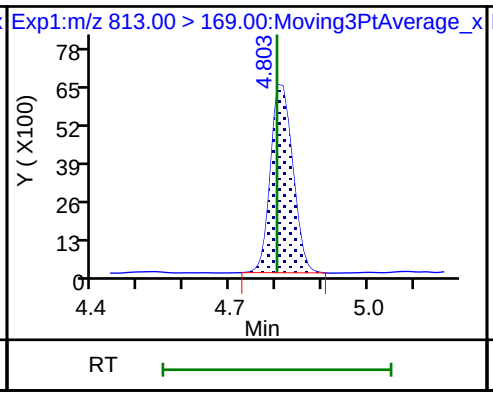


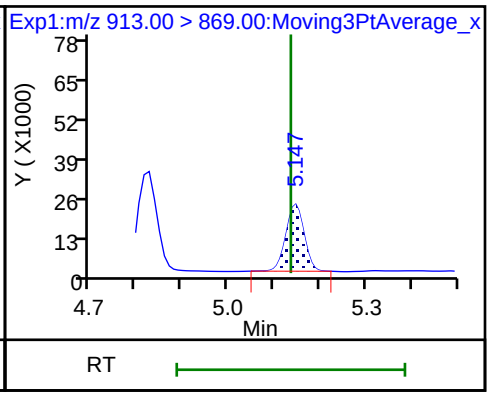
45 Perfluorohexadecanoic acid



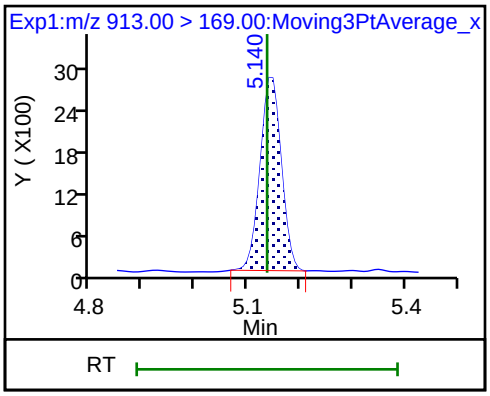
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_003.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Aug-2018 11:17:57 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L2-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:16:59 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:29:16

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.394	1.395	-0.001	0.541	5520570	2.44		97.8	9922	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.394	1.397	-0.003	1.000	100389	0.0484		96.8	10.2	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.644	1.639	0.005	0.638	3878229	2.49		99.8	8401	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.644	1.643	0.001	1.000	83129	0.0471		94.2	5.4	
D 47 13C3-PFBS										
301.90 > 83.00	1.676	1.675	0.001	0.651	83639	2.33		100	351	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.676	1.676	0.0	1.000	114549	0.0419		94.8	51.2	
298.90 > 99.00	1.676	1.676	0.0	1.000	46700		2.45(1.25-3.74)	94.8	30.6	
D 60 M2-4:2FTS										
329.00 > 81.00	1.880	1.875	0.005	0.730	589543	2.30		98.5	1139	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.880	1.875	0.005	1.122	26792	0.0449		96.2	390	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.907	1.908	-0.001	1.000	86871	0.0482		96.4	22.2	
313.00 > 119.00	1.898	1.908	-0.010	0.995	8895		9.77(5.03-15.10)	96.4	23.2	
D 7 13C2 PFHxA										
315.00 > 270.00	1.907	1.908	-0.001	0.741	4415087	2.50		100	10413	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.928	1.930	-0.002	1.151	118353	0.0477		102	348	
349.00 > 99.00	1.939	1.930	0.009	1.157	42210		2.80(1.36-4.07)	102	57.1	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.001	2.003	-0.002	0.777	334230	2.44		97.4	816	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.001	2.003	-0.002	1.000	15610	0.0482		96.5	6.2	
D 9 13C4-PFHpA										
367.00 > 322.00	2.227	2.227	0.0	0.865	4381099	2.52		101	6167	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.227	2.228	-0.001	1.000	92858	0.0499		99.8	18.9	
363.00 > 169.00	2.227	2.228	-0.001	1.000	37320		2.49(1.13-3.40)	99.8	83.7	
D 11 18O2 PFHxS										
403.00 > 84.00	2.236	2.239	-0.003	0.869	5400125	2.43		103	4645	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.236	2.239	-0.003	1.000	122877	0.0496		109	251	
399.00 > 99.00	2.236	2.239	-0.003	1.000	41779		2.94(1.50-4.49)	109	38.1	
65 ADONA										
377.00 > 251.00	2.269	2.271	-0.002	0.772	237055	0.0509		102	440	
377.00 > 85.00	2.269	2.271	-0.002	0.772	142844		1.66(0.84-2.53)	102	244	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.544	2.548	-0.004	0.997	26890	0.0474		100	38.6	
D 12 M2-6:2FTS										
429.00 > 81.00	2.553	2.549	0.004	0.991	855666	2.34		98.6	2444	
D 73 13C8 PFOA										
421.00 > 376.00	2.568	2.571	-0.003	0.997	7724966	2.46		100	14507	
D 14 13C4 PFOA										
417.00 > 372.00	2.574	2.573	0.001	1.000	3900845	2.45		97.9	7238	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.574	2.574	0.0	1.000	100379	0.0569		114	9.5	
413.00 > 169.00	2.574	2.574	0.0	1.000	49130		2.04(0.84-2.52)	114	101	
* 62 13C2-PFOA										
415.00 > 370.00	2.574	2.575	-0.001		4076020	2.50			7362	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.002	0.878	85012	0.0478		100	401	
449.00 > 99.00	2.581	2.583	-0.002	0.878	21336		3.98(1.94-5.82)	100	49.1	
D 72 13C8 PFOS										
507.00 > 99.00	2.933	2.938	-0.005	1.139	1726052	2.43		102	3374	
20 Perfluorononanoic acid										
463.00 > 419.00	2.939	2.939	0.0	1.000	76644	0.0510		102	24.0	
463.00 > 169.00	2.933	2.939	-0.006	0.998	17838		4.30(1.90-5.69)	102	95.9	
D 19 13C5 PFNA										
468.00 > 423.00	2.939	2.939	0.0	1.141	3565521	2.49		99.7	4849	
D 18 13C4 PFOS										
503.00 > 80.00	2.939	2.939	0.0	1.141	3430647	2.34		98.1	4945	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.939	2.940	-0.001	1.000	71970	0.0467		101	155	
499.00 > 99.00	2.939	2.940	-0.001	1.000	19079		3.77(2.31-6.93)	101	32.7	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.147	3.150	-0.003	1.071	113277	0.0453		97.2	601	
D 26 M2-8:2FTS										
529.00 > 81.00	3.285	3.284	0.001	1.276	1065531	2.41		101	3535	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.285	3.285	0.001	1.118	52199	0.0483		101	318	
549.00 > 99.00	3.285	3.285	0.001	1.118	19699		2.65(1.33-3.97)	101	87.3	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.285	3.286	-0.001	1.000	30677	0.0531		111	130	
D 23 13C2 PFDA										
515.00 > 470.00	3.292	3.294	-0.002	1.279	3067735	2.45		97.8	7563	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.299	3.296	0.003	1.002	61353	0.0498		99.7	43.1	
513.00 > 169.00	3.299	3.296	0.003	1.002	12066		5.08(2.36-7.09)	99.7	64.7	
D 21 13C8 FOSA										
506.00 > 78.00	3.313	3.317	-0.004	1.287	4875140	2.52		101	5256	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.321	3.319	0.002	1.002	95215	0.0501		100	663	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.339	1580220	2.46		98.5	3859	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.454	3.453	0.001	1.002	31870	0.0523		105	38.4	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.606	3.608	-0.002	1.227	45962	0.0507		105	238	
599.00 > 99.00	3.606	3.608	-0.002	1.227	14657		3.14(1.39-4.16)	105	83.7	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.615	3.616	-0.001	1.404	1684036	2.53		101	1215	
D 30 13C2 PFUnA										
565.00 > 520.00	3.622	3.620	0.002	1.407	2456263	2.43		97.4	5363	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.622	3.622	0.0	1.000	60636	0.0549		110	38.2	
563.00 > 169.00	3.629	3.622	0.007	1.002	11793		5.14(2.12-6.36)	110	69.7	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.622	3.623	-0.001	1.002	31965	0.0532		106	133	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.785	3.781	0.004	1.288	186244	0.0485		103	799	
35 MeFOSA										
512.00 > 169.00	3.826	3.826	0.0		27155	NC			156	
D 36 13C2 PFDoA										
615.00 > 570.00	3.913	3.913	0.0	1.520	2599869	2.44		97.5	4097	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.913	3.913	0.0	1.191	18880	0.0471		97.7	179	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.913	3.913	0.0	1.000	61213	0.0529		106	37.0	
613.00 > 169.00	3.913	3.913	0.0	1.000	13716		4.46(2.13-6.40)	106	77.9	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.153	4.148	0.005	1.413	18872	0.0473		97.8	117	
699.00 > 99.00	4.153	4.148	0.005	1.413	25750		0.73(0.00-0.00)	97.8	251	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.173	4.173	0.0	1.066	57183	0.0511		102	26.7	
663.00 > 169.00	4.173	4.173	0.0	1.066	17627		3.24(1.25-3.76)	102	142	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.403	4.399	0.004	1.710	3344339	2.46		98.4	7399	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.403	4.400	0.003	1.000	17056	0.0527		105	165	
713.00 > 219.00	4.403	4.400	0.003	1.000	14716		1.16(0.71-2.13)	105	310	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.801	4.799	0.002	1.865	6852227	2.54		102	6967	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.801	4.801	0.0	1.000	174341	0.0486		97.3	76.1	
813.00 > 169.00	4.801	4.801	0.0	1.000	29566		5.90(2.86-8.58)	97.3	282	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.136	5.136	0.0	1.070	124240	0.0493		98.5	40.2	
913.00 > 169.00	5.136	5.136	0.0	1.070	15061		8.25(3.83-11.48)	98.5	225	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_003.d

Injection Date: 06-Aug-2018 11:17:57 Instrument ID: A8_N

Lims ID: IC L2 Full

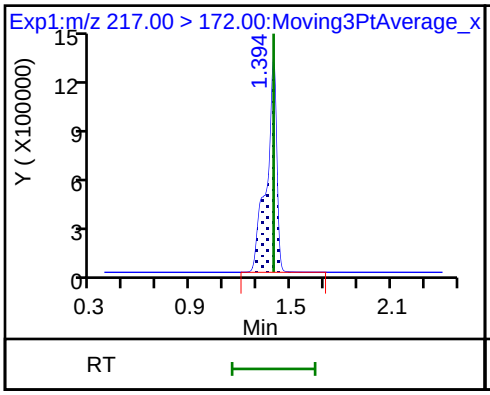
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 11 Worklist Smp#: 3

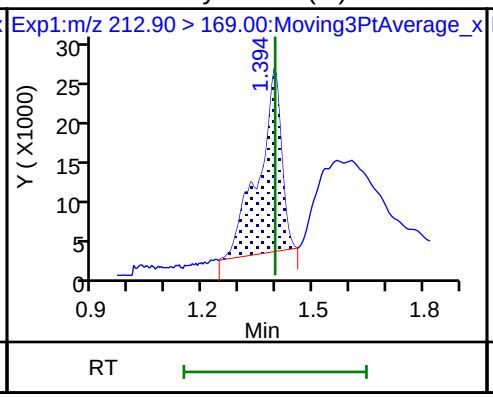
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

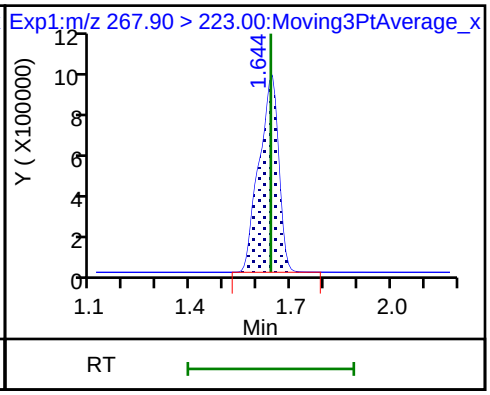
D 1 13C4 PFBA



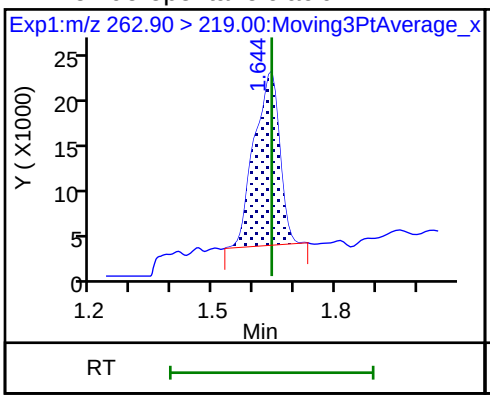
2 Perfluorobutyric acid (M)



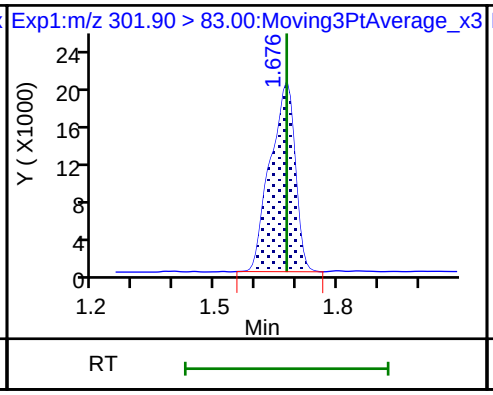
D 3 13C5-PFPeA



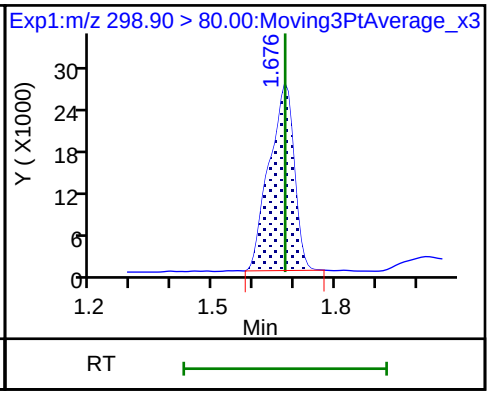
4 Perfluoropentanoic acid



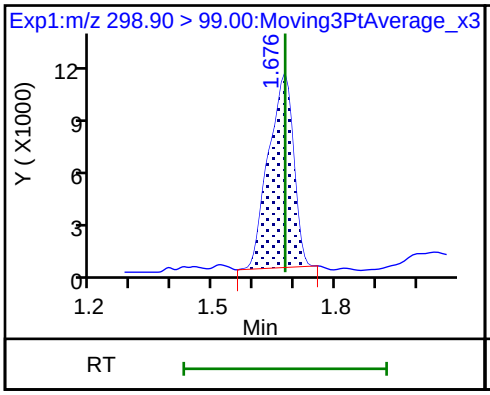
D 47 13C3-PFBS



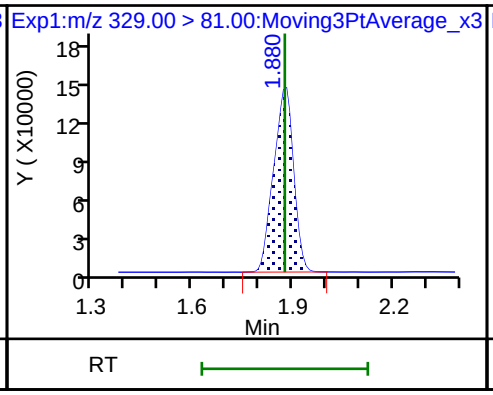
5 Perfluorobutanesulfonic acid



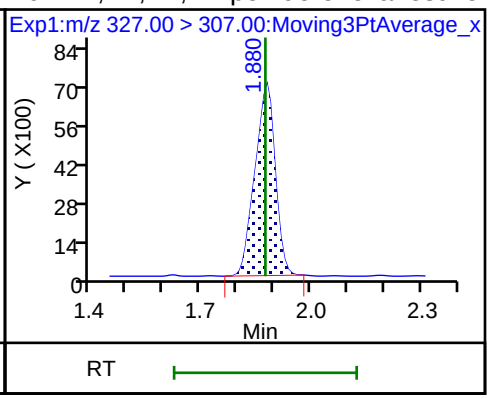
5 Perfluorobutanesulfonic acid



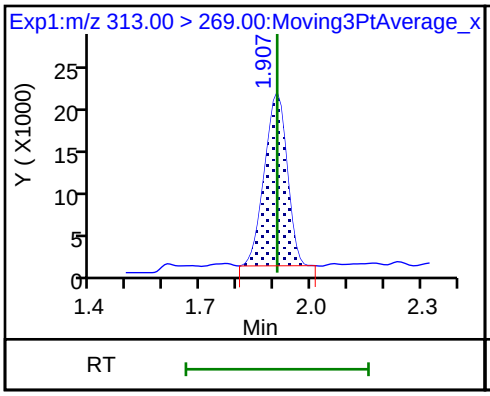
D 60 M2-4:2FTS



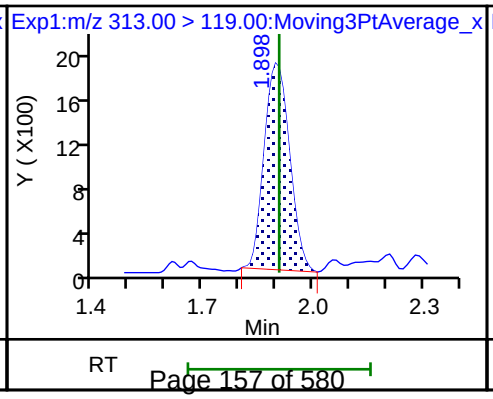
61 1H,1H,2H,2H-perfluorohexanesulfoni



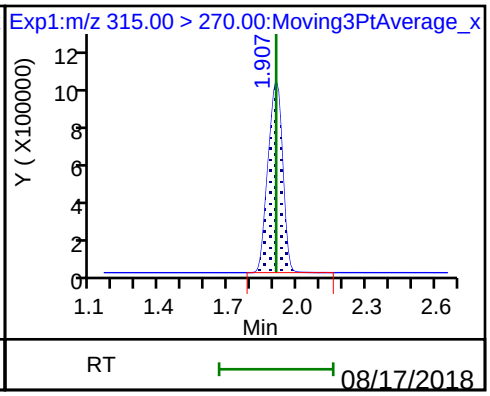
6 Perfluorohexanoic acid



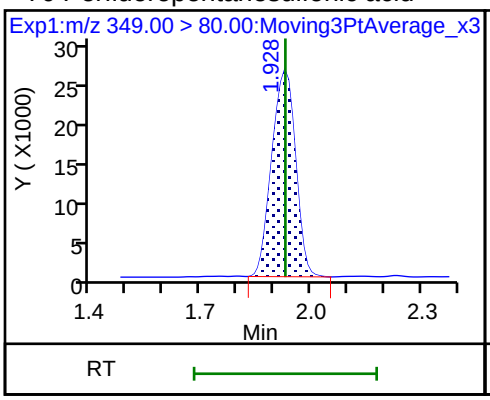
6 Perfluorohexanoic acid



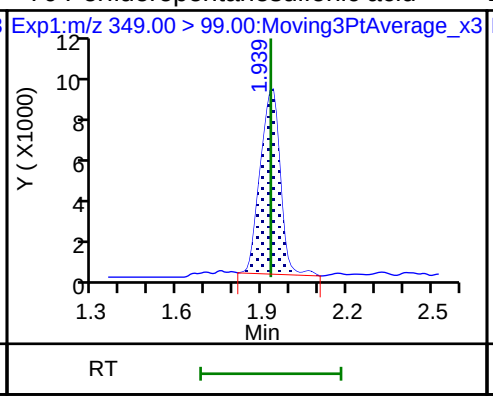
D 7 13C2 PFHxA



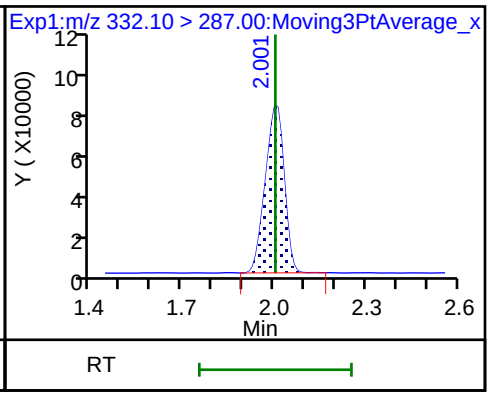
70 Perfluoropentanesulfonic acid



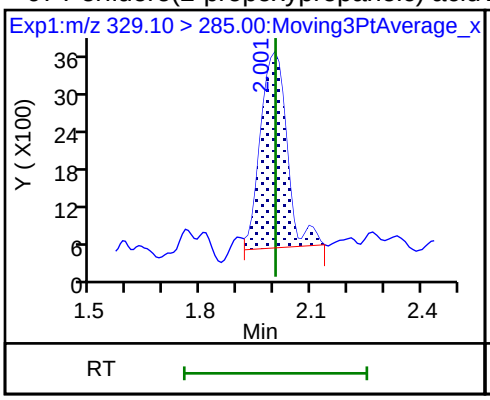
70 Perfluoropentanesulfonic acid



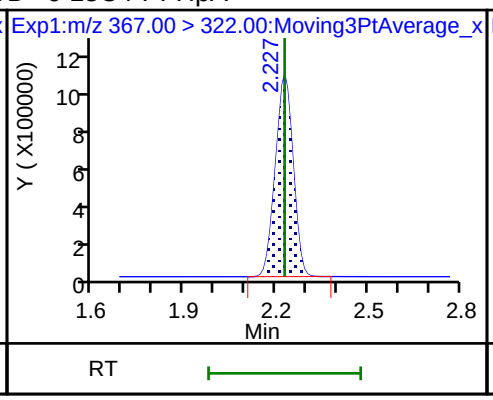
D 64 13C3 HFPO-DA



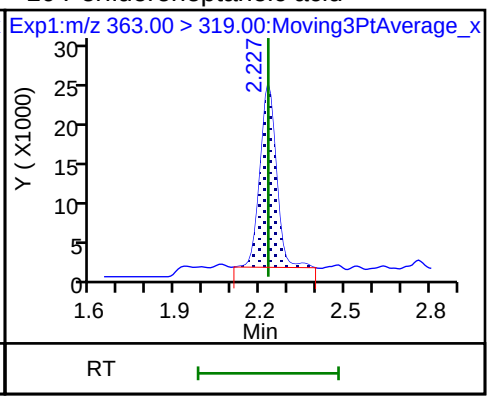
67 Perfluoro(2-propoxypropanoic) acid



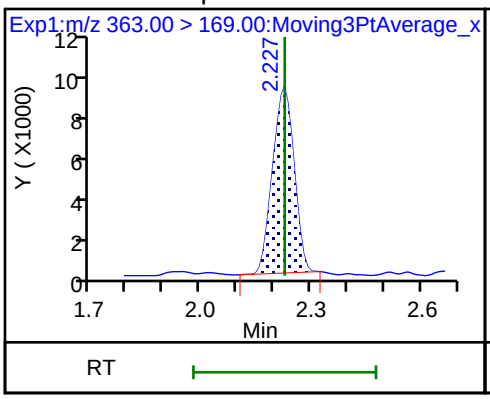
D 9 13C4-PFHpA



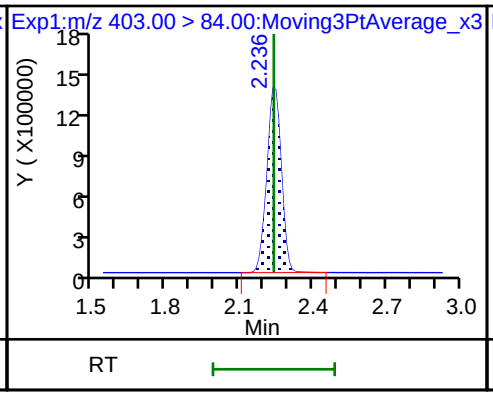
10 Perfluoroheptanoic acid



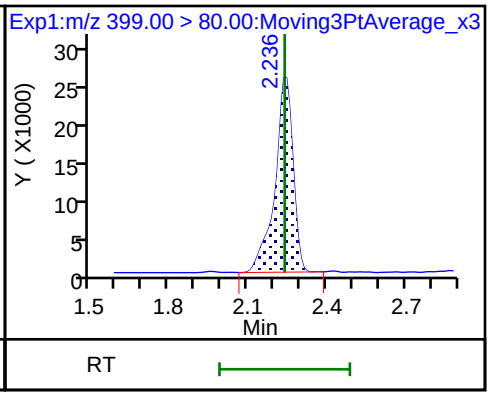
10 Perfluoroheptanoic acid



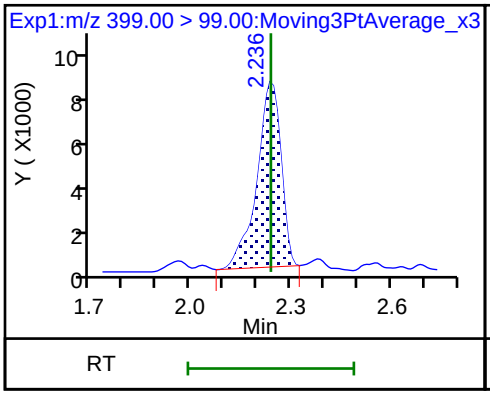
D 11 18O2 PFHxS



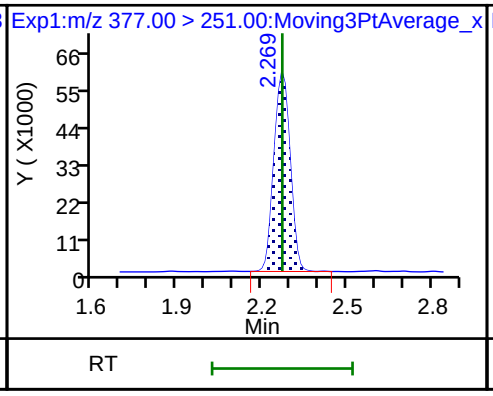
8 Perfluorohexanesulfonic acid



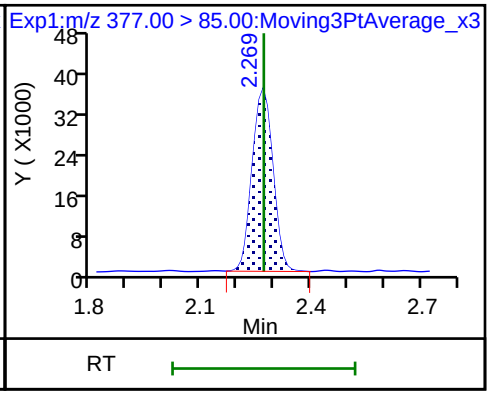
8 Perfluorohexanesulfonic acid



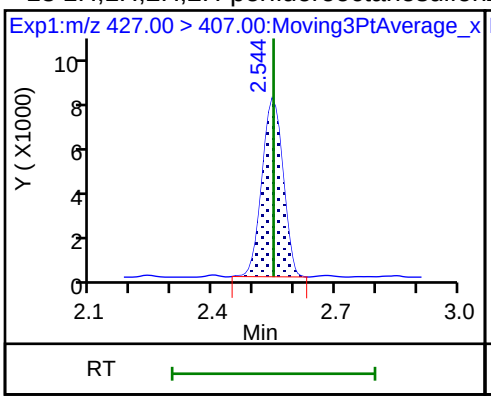
65 ADONA

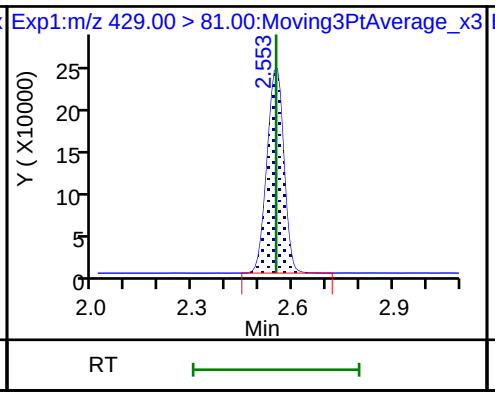


65 ADONA

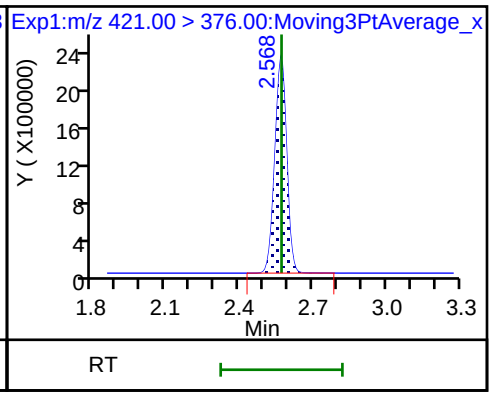


13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS

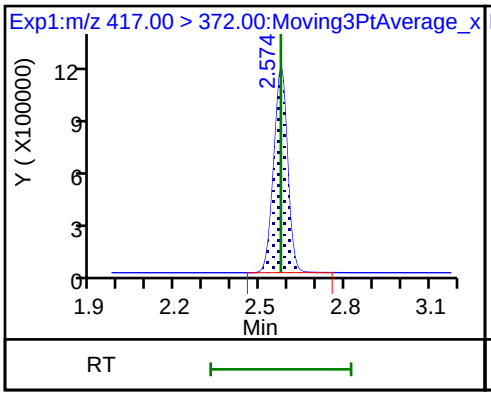




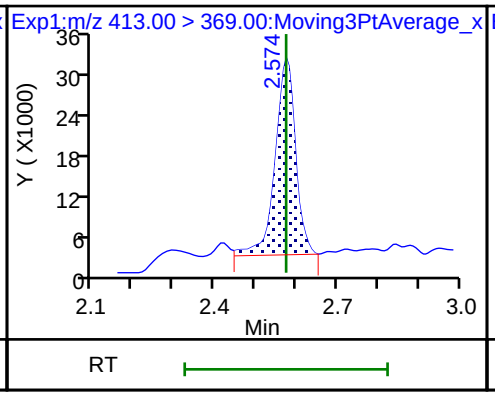
D 73 13C8 PFOA



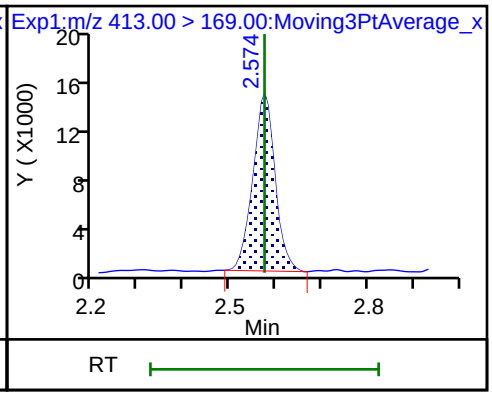
D 14 13C4 PFOA



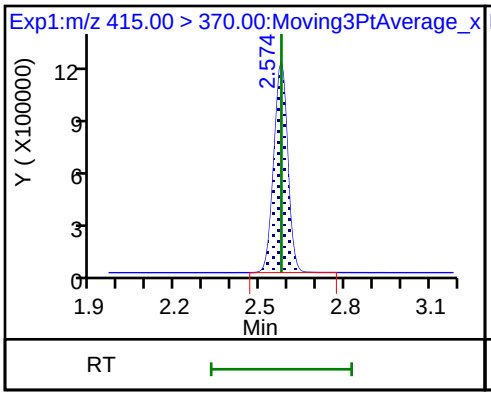
15 Perfluorooctanoic acid



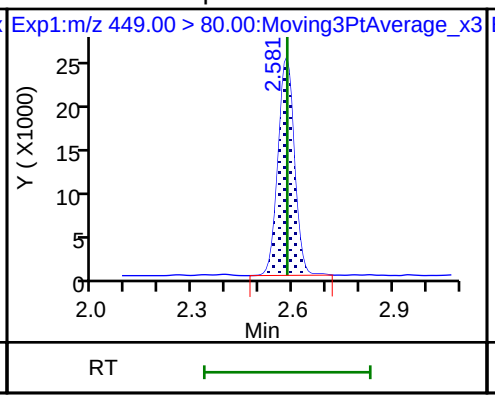
15 Perfluorooctanoic acid



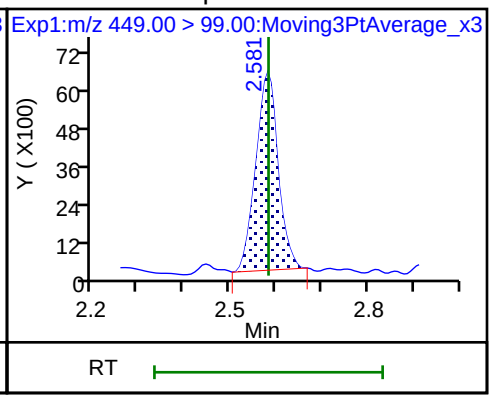
* 62 13C2-PFOA



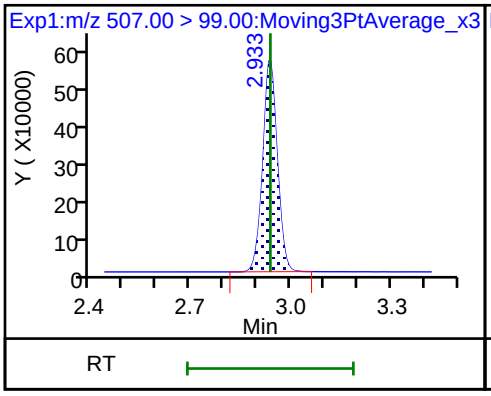
16 Perfluoroheptanesulfonic acid



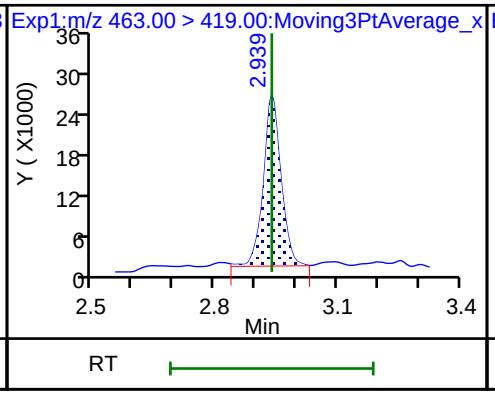
16 Perfluoroheptanesulfonic acid



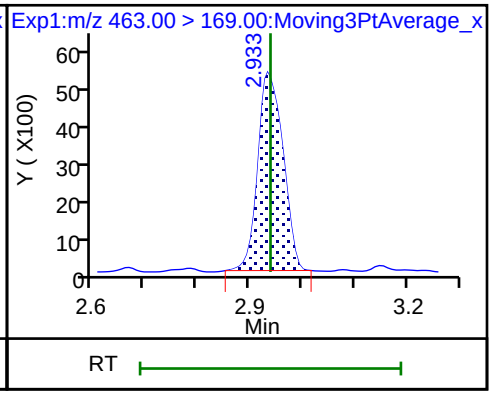
D 72 13C8 PFOS



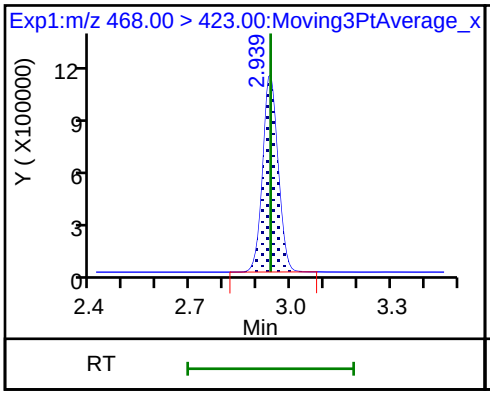
20 Perfluorononanoic acid



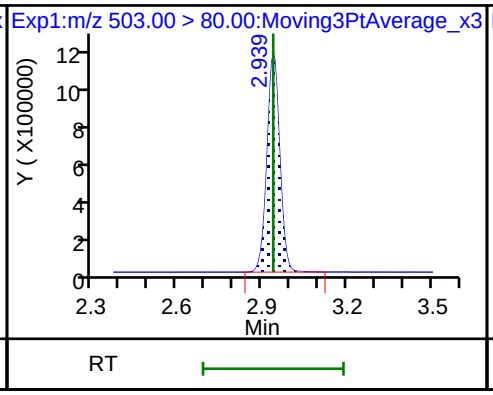
20 Perfluorononanoic acid



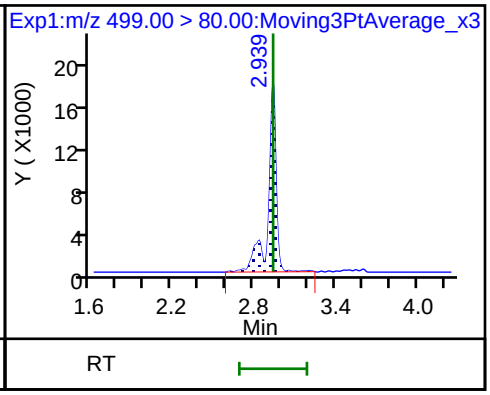
D 19 13C5 PFNA



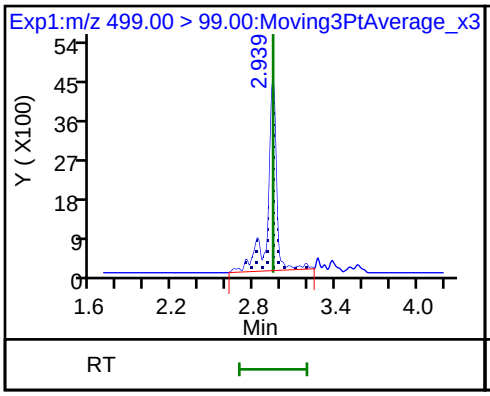
D 18 13C4 PFOS



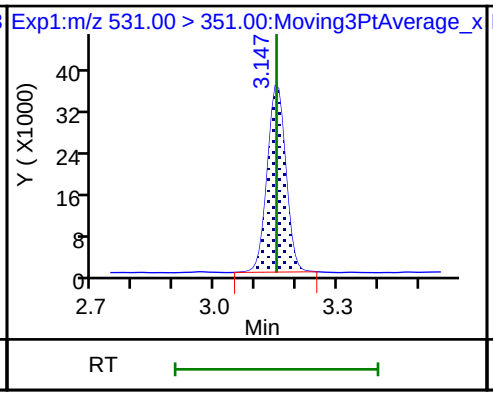
17 Perfluorooctane sulfonic acid



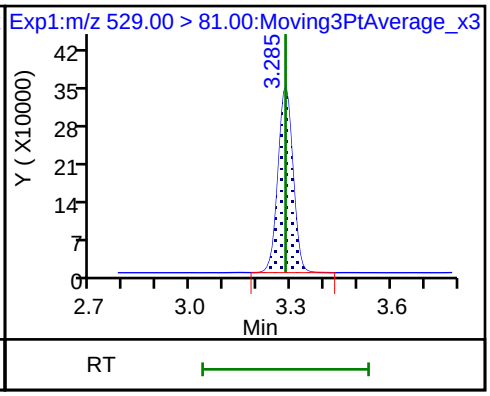
17 Perfluorooctane sulfonic acid



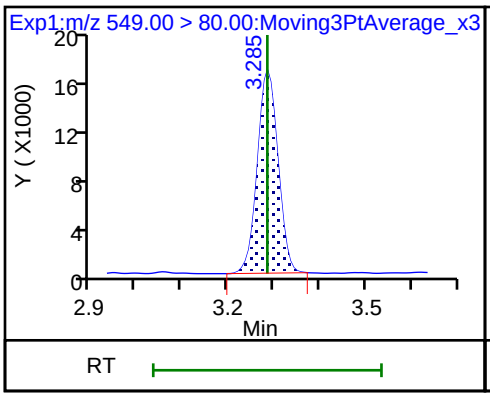
69 9-Chlorohexadecafluoro-3-oxanonane



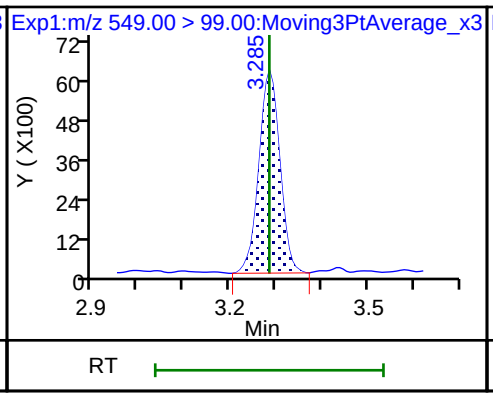
D 26 M2-8:2FTS



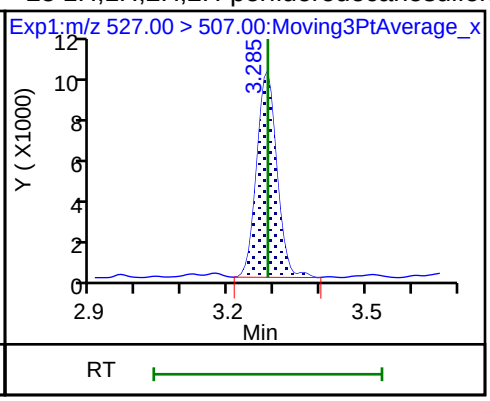
68 Perfluorononanesulfonic acid



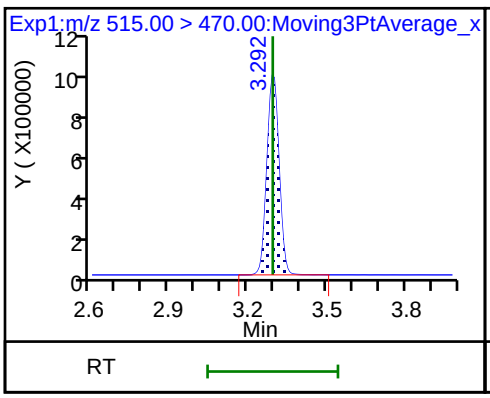
68 Perfluorononanesulfonic acid



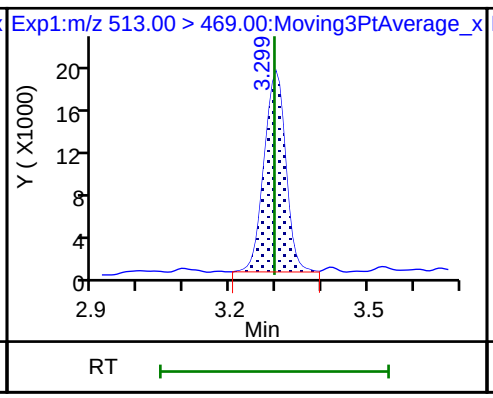
25 1H,1H,2H,2H-perfluorodecanesulfoni



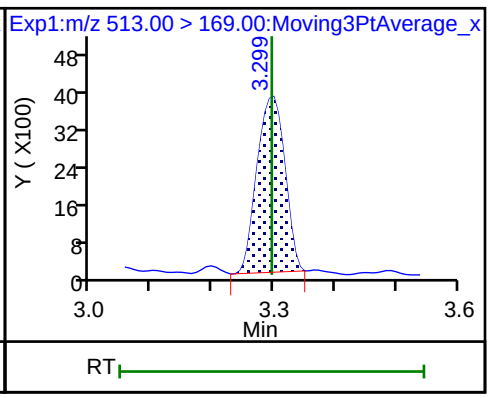
D 23 13C2 PFDA



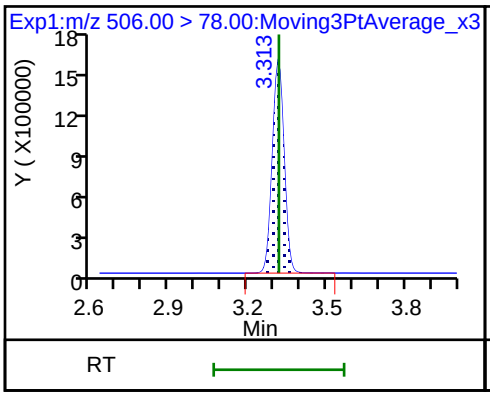
24 Perfluorodecanoic acid



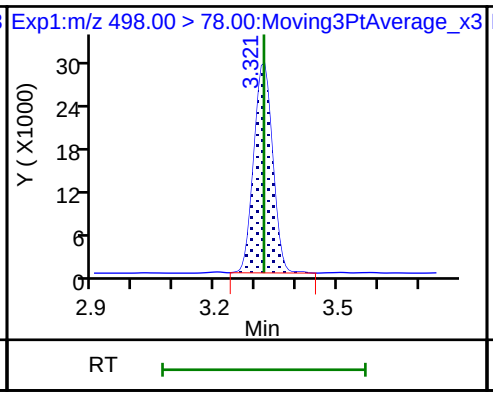
24 Perfluorodecanoic acid



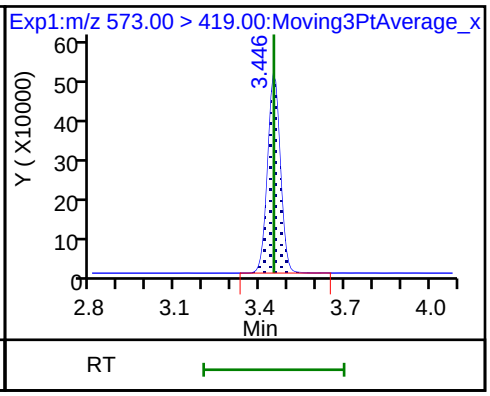
D 21 13C8 FOSA



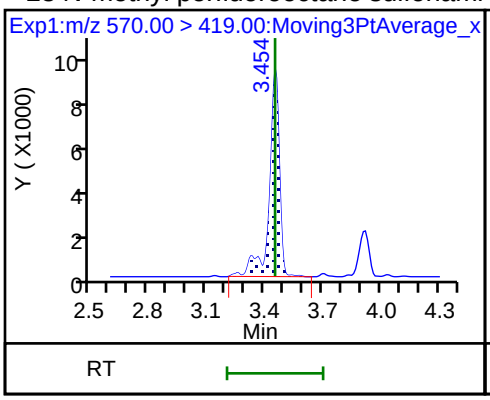
22 Perfluorooctane Sulfonamide



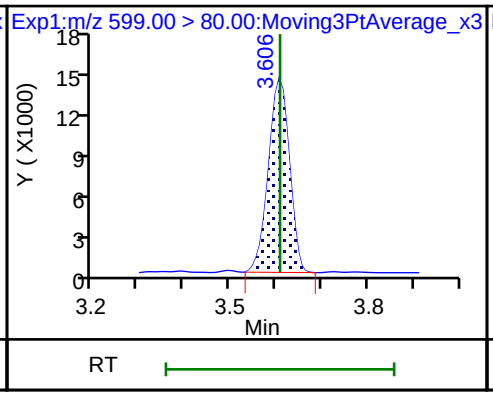
D 27 d3-NMeFOSAA



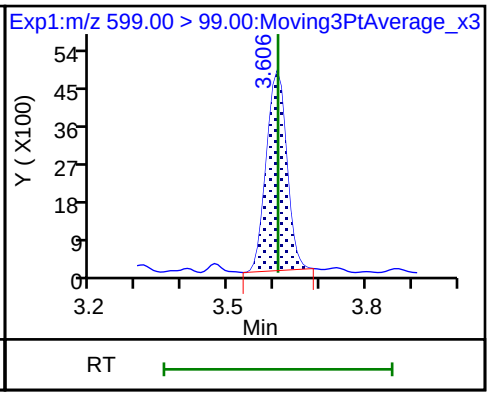
28 N-methyl perfluorooctane sulfonami



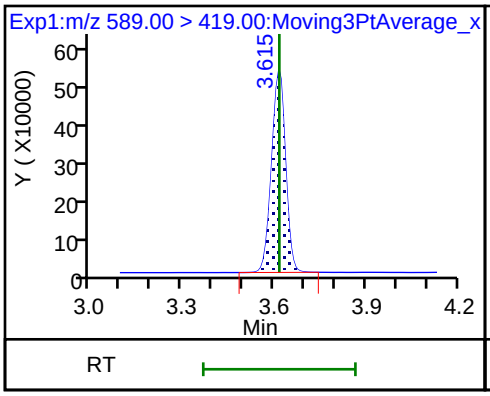
29 Perfluorodecane Sulfonic acid



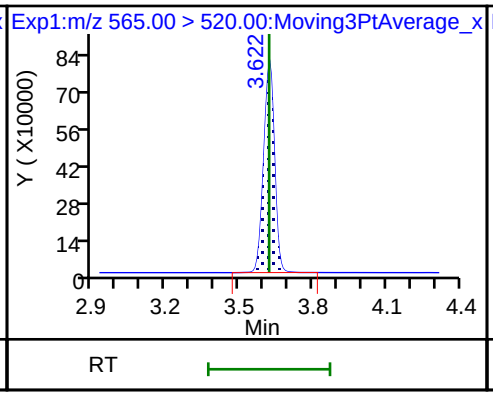
29 Perfluorodecane Sulfonic acid



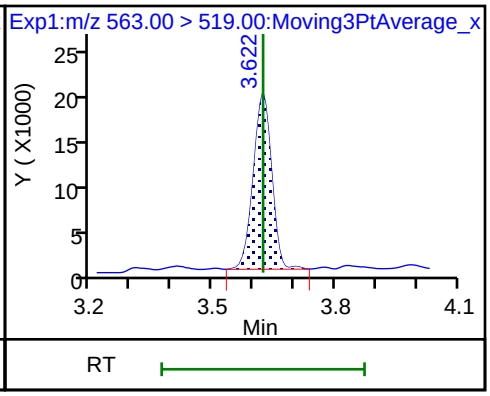
D 32 d5-NEtFOSAA



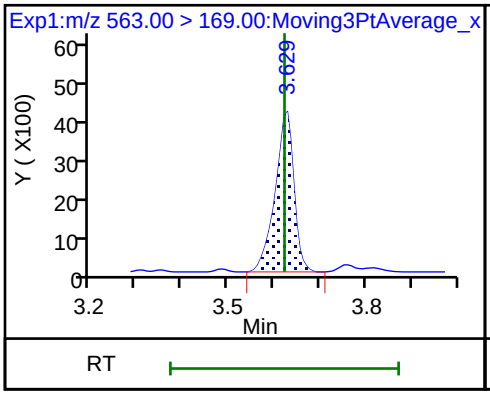
D 30 13C2 PFUnA



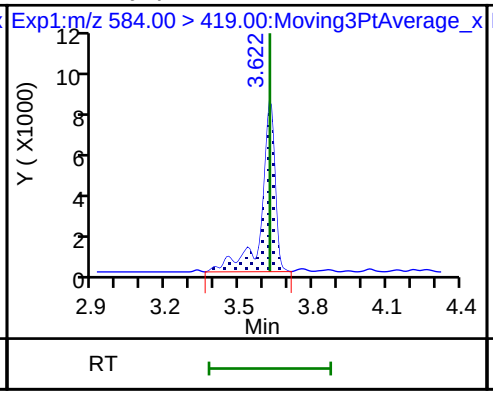
31 Perfluoroundecanoic acid



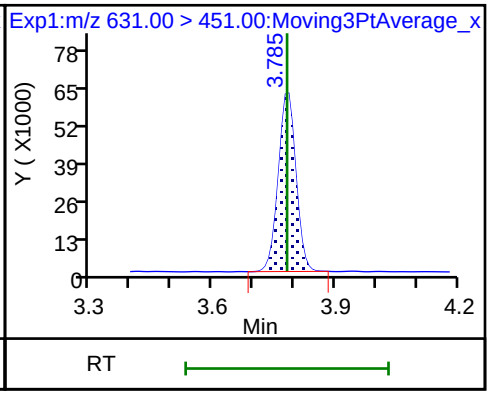
31 Perfluoroundecanoic acid



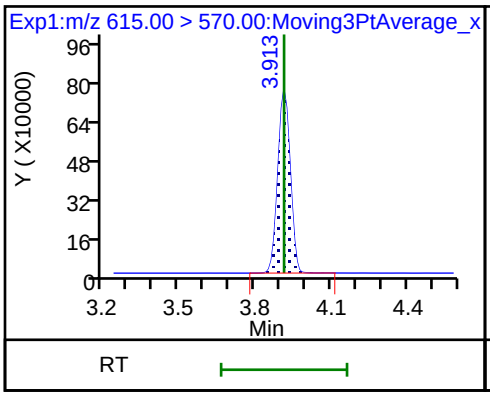
33 N-ethyl perfluorooctane sulfonamid



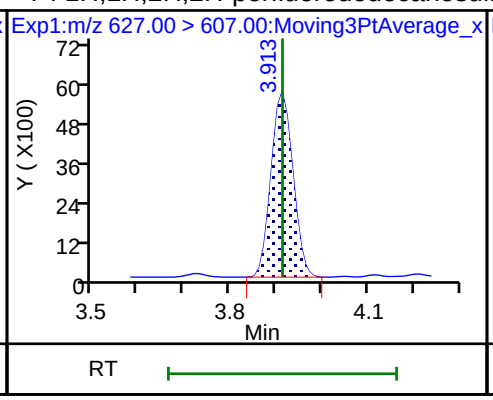
66 11-Chloroeicosafluoro-3-oxaundecan



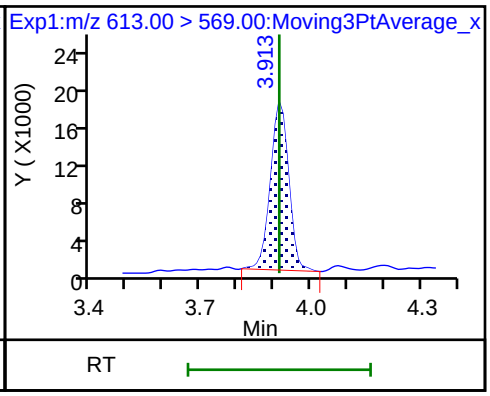
D 36 13C2 PFDoA



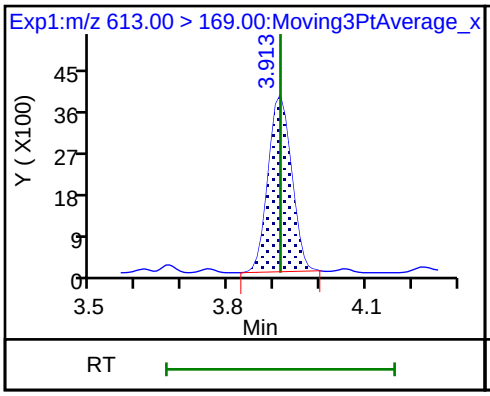
74 1H,1H,2H,2H-perfluorododecanesulfo



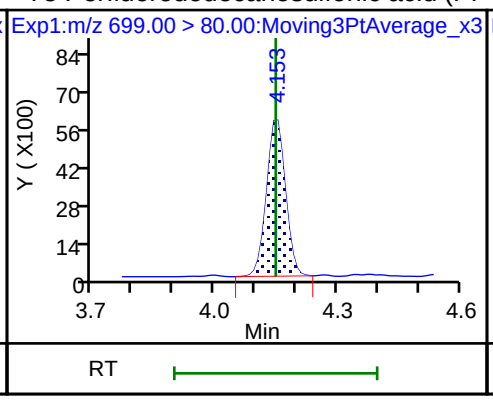
37 Perfluorododecanoic acid



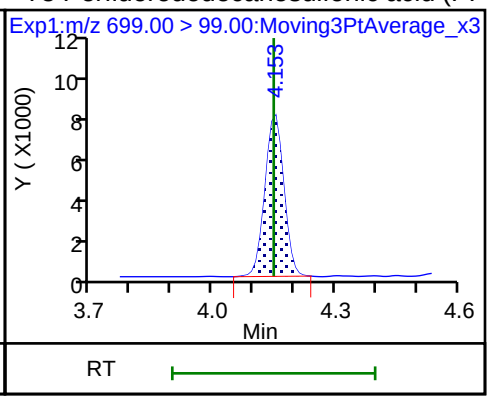
37 Perfluorododecanoic acid



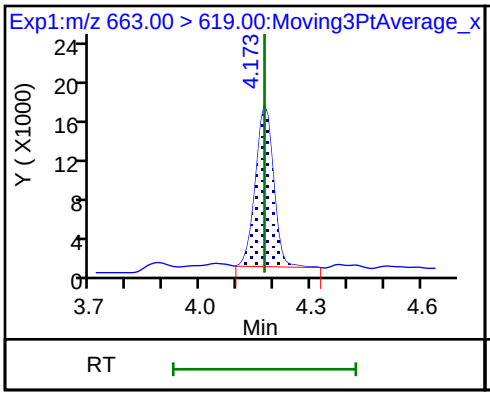
75 Perfluorododecanesulfonic acid (PF



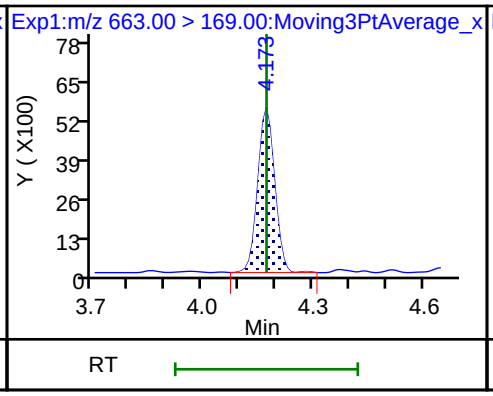
75 Perfluorododecanesulfonic acid (PF



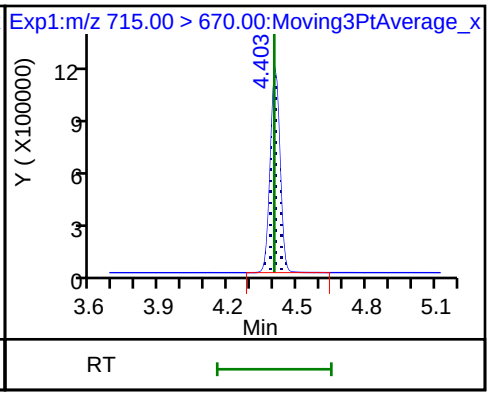
41 Perfluorotridecanoic acid



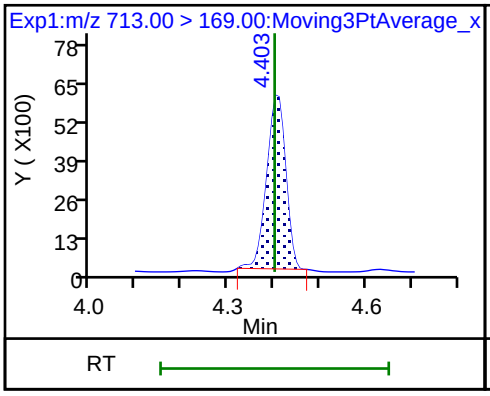
41 Perfluorotridecanoic acid



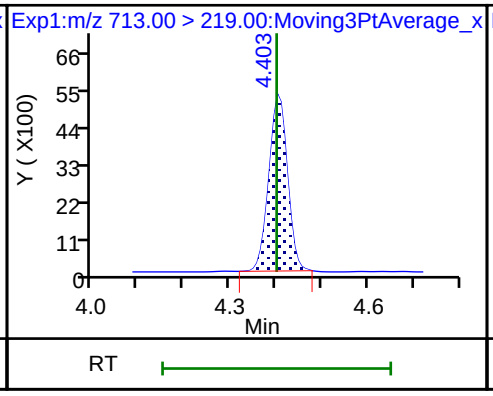
D 43 13C2-PFTeDA



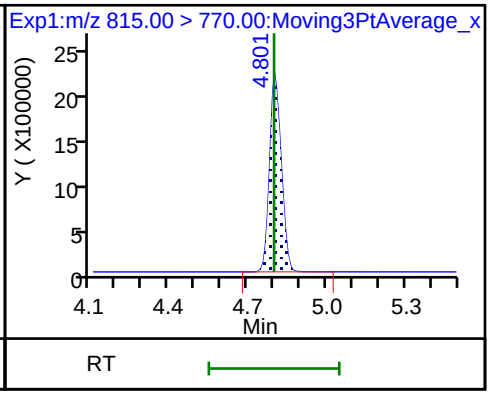
42 Perfluorotetradecanoic acid



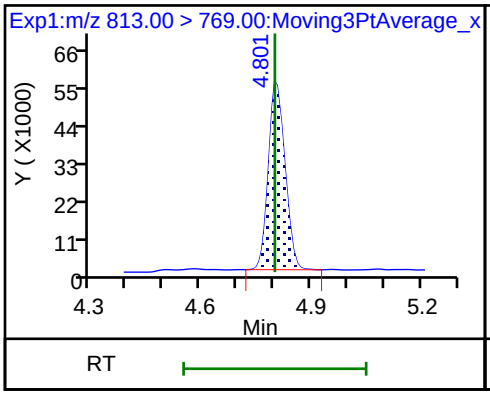
42 Perfluorotetradecanoic acid



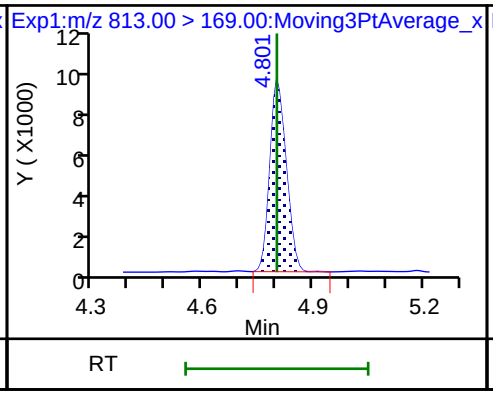
D 44 13C2-PFHxDA



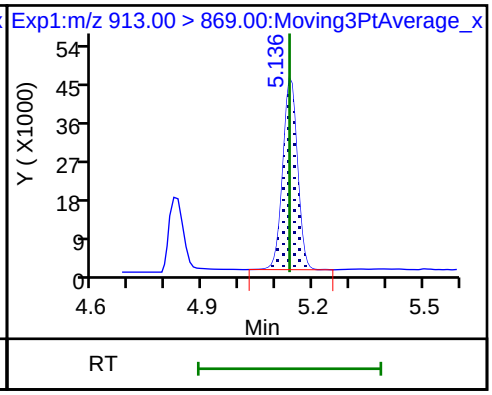
45 Perfluorohexadecanoic acid



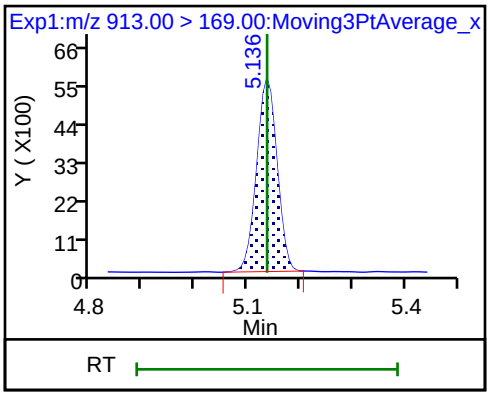
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

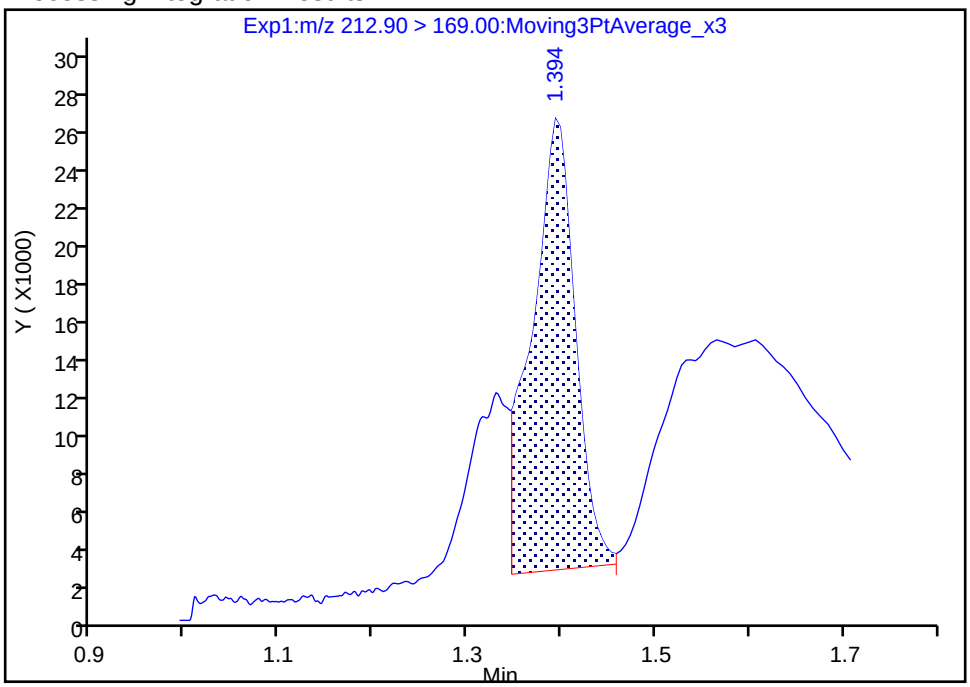
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_003.d
Injection Date: 06-Aug-2018 11:17:57 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

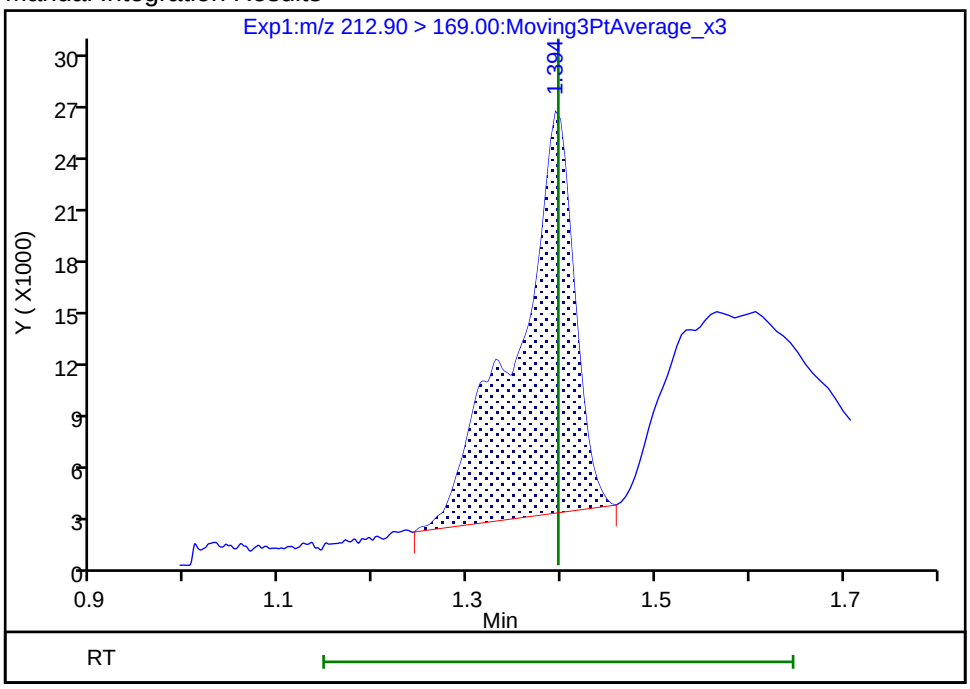
Processing Integration Results

RT: 1.39
Area: 75241
Amount: 0.037594
Amount Units: ng/ml



Manual Integration Results

RT: 1.39
Area: 100389
Amount: 0.048421
Amount Units: ng/ml



Reviewer: westendorfc, 06-Aug-2018 15:52:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_004.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Aug-2018 11:25:44 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L3-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:05 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:28:13

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.396	1.395	0.001	0.541	5688815	2.47		98.7	8052	
2 Perfluorobutyric acid										
212.90 > 169.00	1.401	1.397	0.004	1.004	522272	0.2445		97.8	52.9	
D 3 13C5-PFPeA										
267.90 > 223.00	1.640	1.639	0.001	0.635	3918495	2.47		98.7	11150	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.647	1.643	0.004	1.005	421991	0.2366		94.7	28.3	
D 47 13C3-PFBS										
301.90 > 83.00	1.679	1.675	0.004	0.651	85930	2.34		101	402	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.679	1.676	0.003	1.000	616670	0.2197		99.4	231	
298.90 > 99.00	1.679	1.676	0.003	1.000	251343		2.45(1.25-3.74)	99.4	142	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.885	1.875	0.010	1.122	141135	0.2305		98.7	1346	
D 60 M2-4:2FTS										
329.00 > 81.00	1.876	1.875	0.001	0.727	601195	2.30		98.4	964	
D 7 13C2 PFHxA										
315.00 > 270.00	1.913	1.908	0.005	0.741	4437948	2.46		98.5	14259	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.913	1.908	0.005	1.000	428854	0.2367		94.7	119	
313.00 > 119.00	1.913	1.908	0.005	1.000	41462		10.34(5.03-15.10)	94.7	91.4	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.934	1.930	0.004	1.152	582073	0.2285		97.4	1268	
349.00 > 99.00	1.934	1.930	0.004	1.152	218098		2.67(1.36-4.07)	97.4	288	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.007	2.003	0.004	1.000	81354	0.2425		97.0	37.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.007	2.003	0.004	0.778	346469	2.47		98.9	940	
D 9 13C4-PFHpA										
367.00 > 322.00	2.225	2.227	-0.002	0.862	4417214	2.49		99.7	7046	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.234	2.228	0.006	1.004	459833	0.2451		98.0	94.8	
363.00 > 169.00	2.225	2.228	-0.003	1.000	172415		2.67(1.13-3.40)	98.0	347	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.245	2.239	0.006	1.000	544267	0.2249		98.9	1144	
399.00 > 99.00	2.245	2.239	0.006	1.000	172368		3.16(1.50-4.49)	98.9	186	
D 11 18O2 PFHxS										
403.00 > 84.00	2.245	2.239	0.006	0.870	5279483	2.32		98.2	5983	
65 ADONA										
377.00 > 251.00	2.278	2.271	0.007	0.774	1256630	0.2572		103	3231	
377.00 > 85.00	2.278	2.271	0.007	0.774	754513		1.67(0.84-2.53)	103	1041	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.553	2.548	0.005	1.000	129666	0.2145		90.5	183	
D 12 M2-6:2FTS										
429.00 > 81.00	2.553	2.549	0.004	0.989	912690	2.45		103	2504	
D 73 13C8 PFOA										
421.00 > 376.00	2.575	2.571	0.004	0.997	7698803	2.40		98.0	11913	
D 14 13C4 PFOA										
417.00 > 372.00	2.575	2.573	0.002	0.997	4104790	2.52		101	6871	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.575	2.574	0.001	1.000	451059	0.2430		97.1	42.9	
413.00 > 169.00	2.581	2.574	0.007	1.003	229069		1.97(0.84-2.52)	97.1	434	
* 62 13C2-PFOA										
415.00 > 370.00	2.581	2.575	0.006		4161520	2.50			6277	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.588	2.583	0.005	0.879	425894	0.2283		95.9	1142	
449.00 > 99.00	2.588	2.583	0.005	0.879	119281		3.57(1.94-5.82)	95.9	308	
D 72 13C8 PFOS										
507.00 > 99.00	2.945	2.938	0.007	1.141	1729501	2.38		99.7	4106	
D 18 13C4 PFOS										
503.00 > 80.00	2.945	2.939	0.006	1.141	3598367	2.41		101	4581	
D 19 13C5 PFNA										
468.00 > 423.00	2.945	2.939	0.006	1.141	3712571	2.54		102	9104	
20 Perfluorononanoic acid										
463.00 > 419.00	2.945	2.939	0.006	1.000	377996	0.2416		96.7	111	
463.00 > 169.00	2.945	2.939	0.006	1.000	90259		4.19(1.90-5.69)	96.7	548	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.945	2.940	0.005	1.000	360873	0.2232		96.2	732	
499.00 > 99.00	2.945	2.940	0.005	1.000	85319		4.23(2.31-6.93)	96.2	158	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.155	3.150	0.005	1.072	586624	0.2237		96.0	2466	
D 26 M2-8:2FTS										
529.00 > 81.00	3.292	3.284	0.008	1.275	1066887	2.37		98.9	2644	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.292	3.285	0.008	1.118	273347	0.2414		101	1085	
549.00 > 99.00	3.292	3.285	0.008	1.118	98712		2.77(1.33-3.97)	101	413	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.292	3.286	0.006	1.000	136487	0.2358		98.5	563	
D 23 13C2 PFDA										
515.00 > 470.00	3.299	3.294	0.005	1.278	3074087	2.40		96.0	5313	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.299	3.296	0.003	1.000	318256	0.2580		103	203	
513.00 > 169.00	3.299	3.296	0.003	1.000	54367		5.85(2.36-7.09)	103	170	
D 21 13C8 FOSA										
506.00 > 78.00	3.321	3.317	0.004	1.286	4992636	2.52		101	5246	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.321	3.319	0.002	1.000	476525	0.2451		98.0	1873	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.454	3.448	0.006	1.338	1616798	2.47		98.7	4005	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.461	3.453	0.008	1.002	150940	0.2420		96.8	179	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.615	3.608	0.007	1.228	233277	0.2452		102	968	
599.00 > 99.00	3.606	3.608	-0.002	1.225	79055		2.95(1.39-4.16)	102	375	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.622	3.616	0.006	1.403	1760050	2.59		104	1377	
D 30 13C2 PFUnA										
565.00 > 520.00	3.622	3.620	0.002	1.403	2639555	2.56		102	7745	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.622	3.622	0.0	1.000	289310	0.2439		97.5	194	
563.00 > 169.00	3.629	3.622	0.007	1.002	49327		5.87(2.12-6.36)	97.5	296	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.629	3.623	0.006	1.002	142770	0.2274		91.0	559	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.786	3.781	0.005	1.286	948354	0.2356		100	2037	
35 MeFOSA										
512.00 > 169.00	3.827	3.826	0.001		147856	NC			551	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.913	3.913	0.0	1.000	291016	0.2348		93.9	163	
613.00 > 169.00	3.913	3.913	0.0	1.000	60342		4.82(2.13-6.40)	93.9	418	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.913	3.913	0.0	1.189	99141	0.2471		103	902	
D 36 13C2 PFDoA										
615.00 > 570.00	3.913	3.913	0.0	1.516	2785129	2.56		102	5994	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.154	4.148	0.006	1.411	111497	0.2666		110	728	
699.00 > 99.00	4.154	4.148	0.006	1.411	133931		0.83(0.00-0.00)	110	1049	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.173	4.173	0.0	1.066	304796	0.2544		102	138	
663.00 > 169.00	4.173	4.173	0.0	1.066	95463		3.19(1.25-3.76)	102	719	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.403	4.399	0.004	1.706	3541707	2.55		102	7360	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.403	4.400	0.003	1.000	84652	0.2469		98.8	893	
713.00 > 219.00	4.403	4.400	0.003	1.000	58906		1.44(0.71-2.13)	98.8	634	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.801	4.799	0.002	1.860	6757749	2.46		98.2	5754	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.808	4.801	0.007	1.001	661220	0.2566		103	299	
813.00 > 169.00	4.801	4.801	0.0	1.000	112805		5.86(2.86-8.58)	103	1161	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.142	5.136	0.006	1.071	644655	0.2592		104	182	
913.00 > 169.00	5.135	5.136	-0.001	1.070	77077		8.36(3.83-11.48)	104	768	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL3_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_004.d

Injection Date: 06-Aug-2018 11:25:44 Instrument ID: A8_N

Lims ID: IC L3 Full

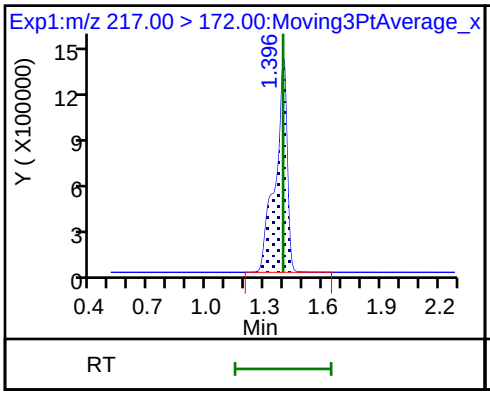
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 12 Worklist Smp#: 4

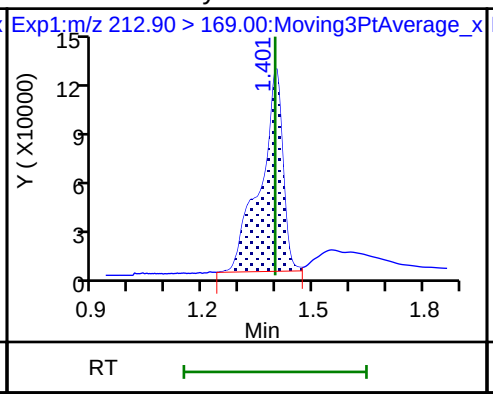
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

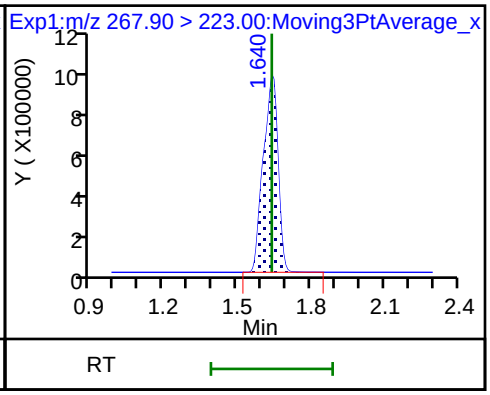
D 1 13C4 PFBA



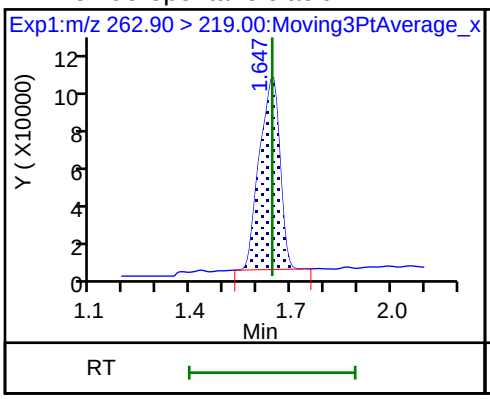
2 Perfluorobutyric acid



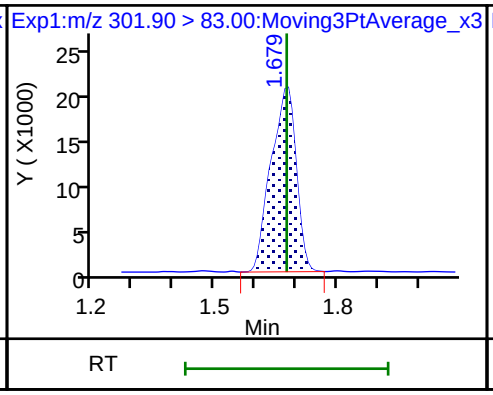
D 3 13C5-PFPeA



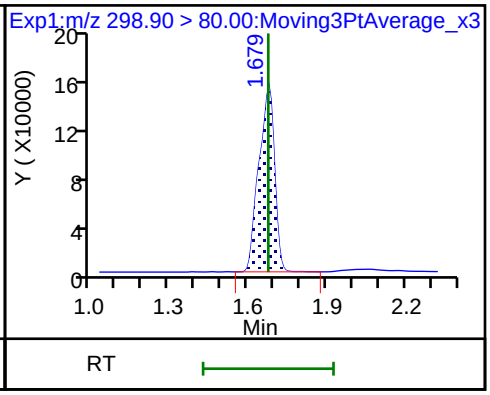
4 Perfluoropentanoic acid



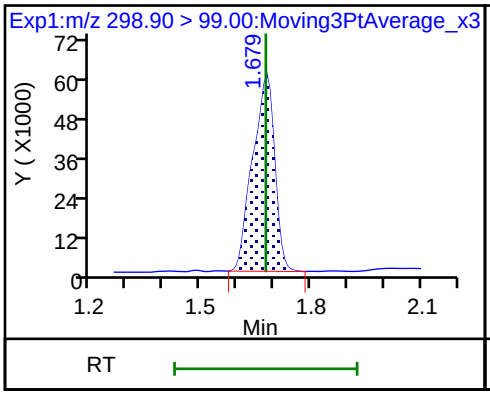
D 47 13C3-PFBS



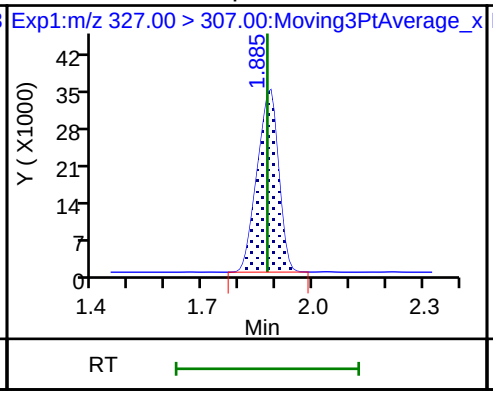
5 Perfluorobutanesulfonic acid



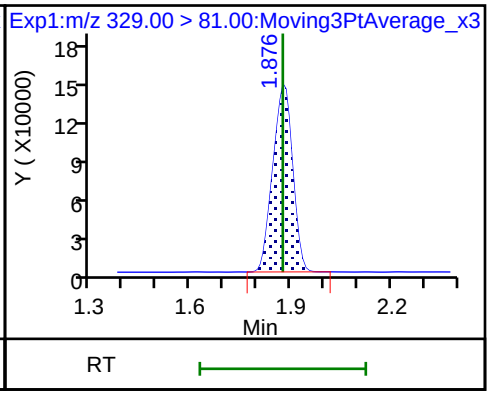
5 Perfluorobutanesulfonic acid



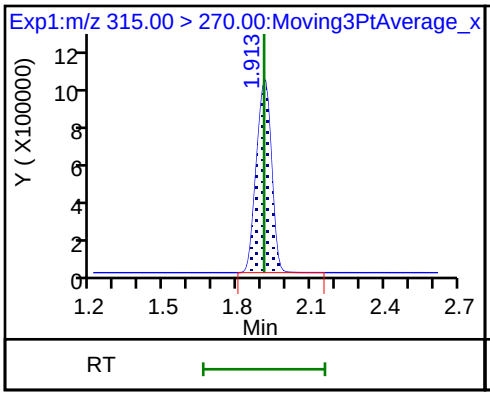
61 1H,1H,2H,2H-perfluorohexanesulfon



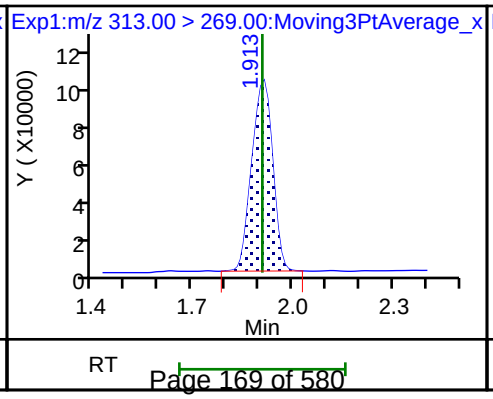
D 60 M2-4:2FTS



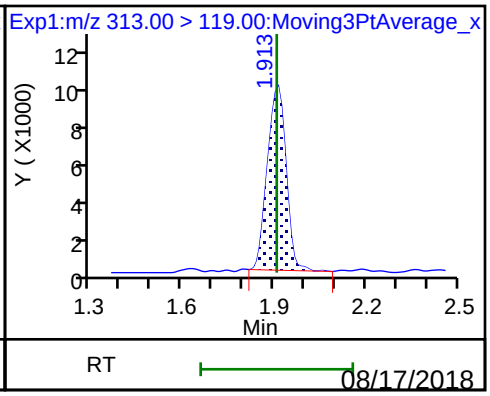
D 7 13C2 PFHxA



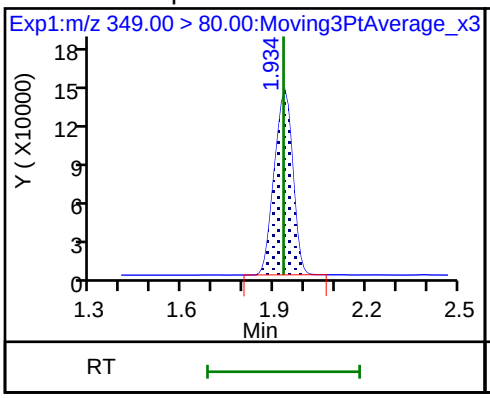
6 Perfluorohexanoic acid



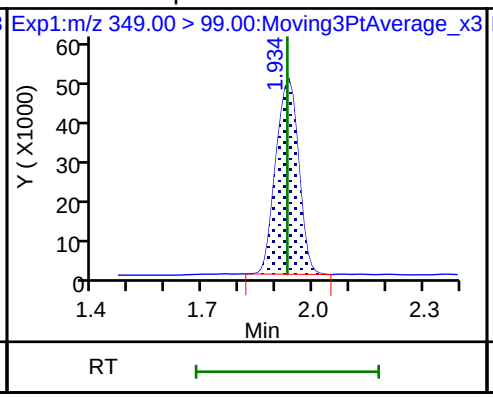
6 Perfluorohexanoic acid



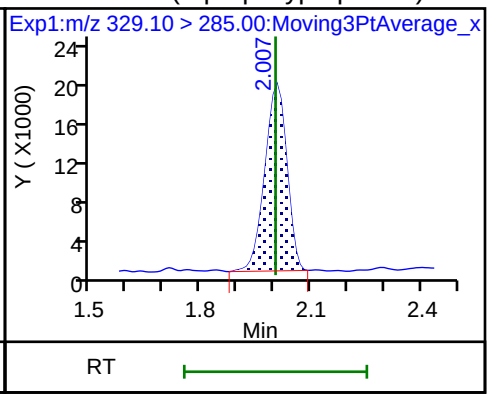
70 Perfluoropentanesulfonic acid



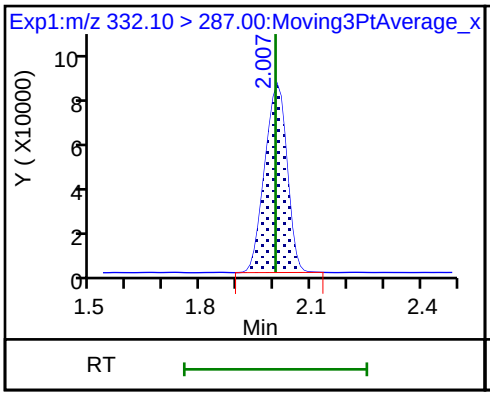
70 Perfluoropentanesulfonic acid



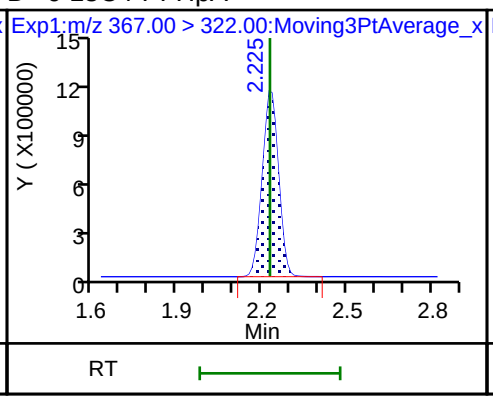
67 Perfluoro(2-propoxypropanoic) acid



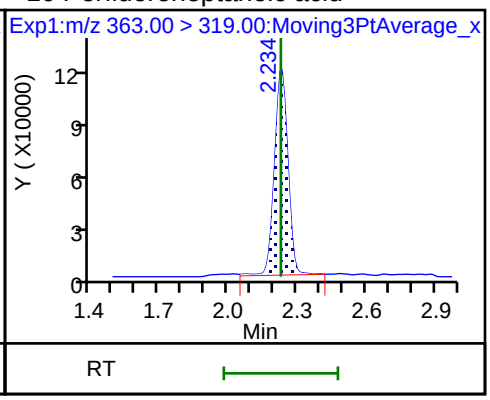
D 64 13C3 HFPO-DA



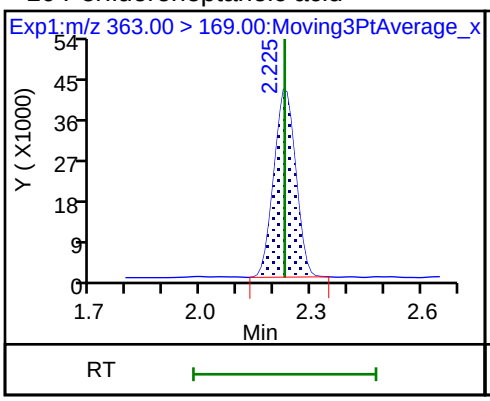
D 9 13C4-PFHpA



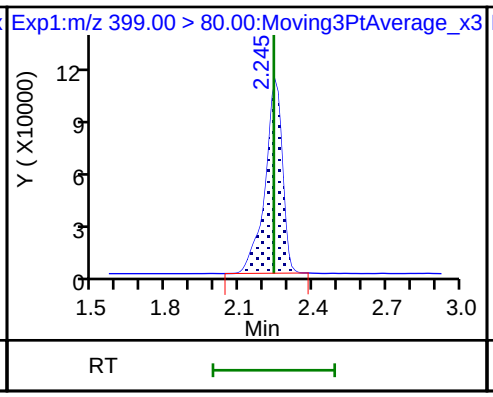
10 Perfluoroheptanoic acid



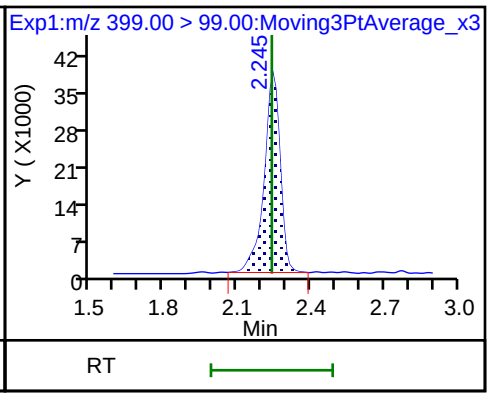
10 Perfluoroheptanoic acid



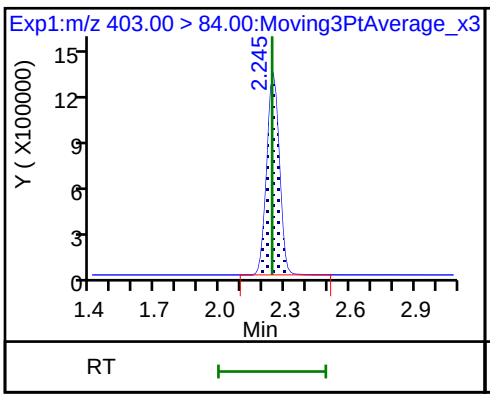
8 Perfluorohexanesulfonic acid



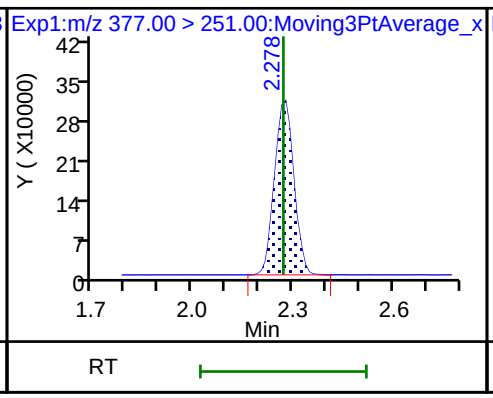
8 Perfluorohexanesulfonic acid



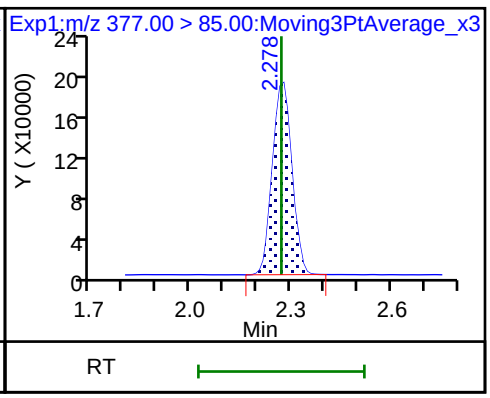
D 11 18O2 PFHxS



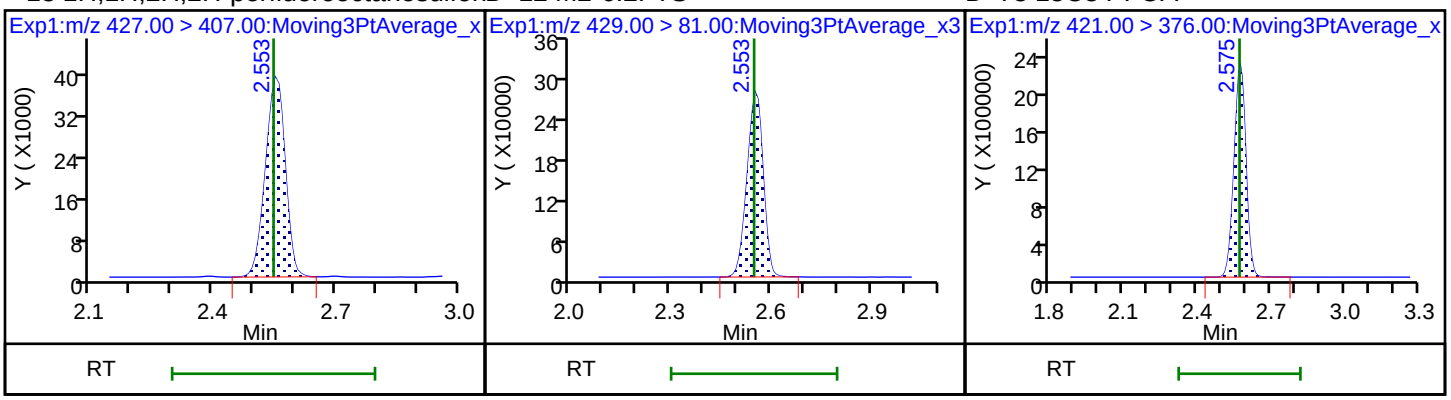
65 ADONA



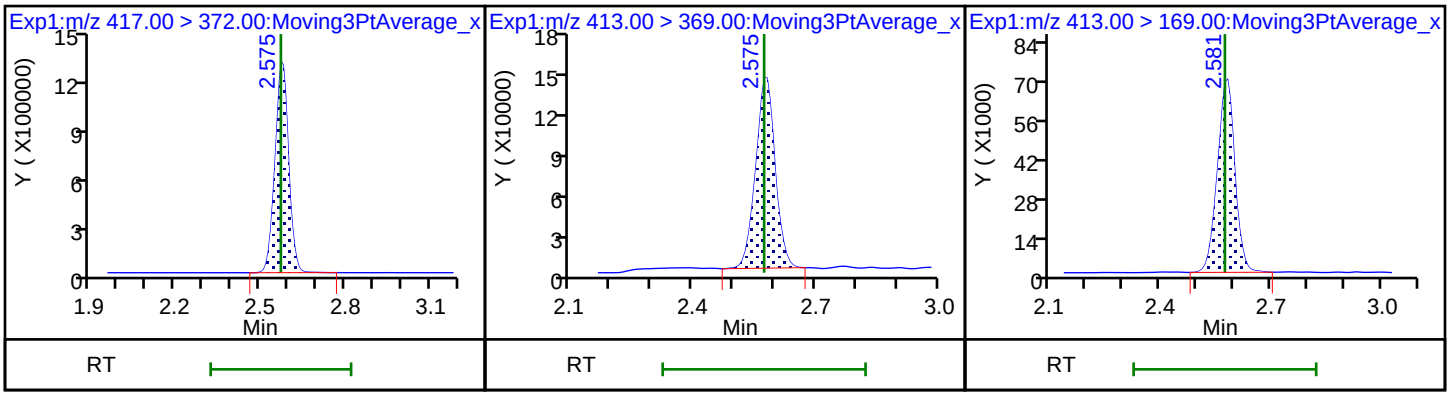
65 ADONA



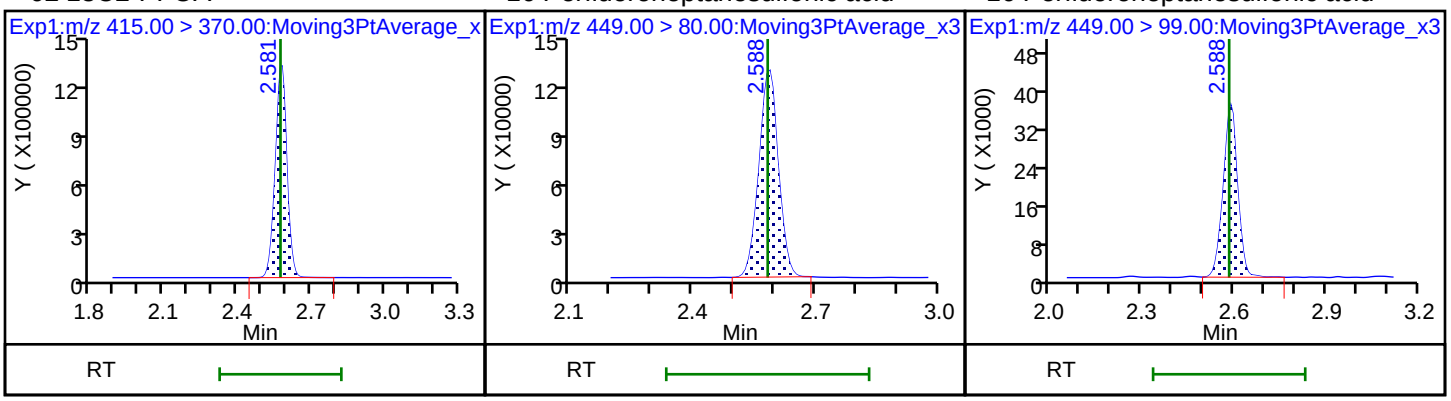
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



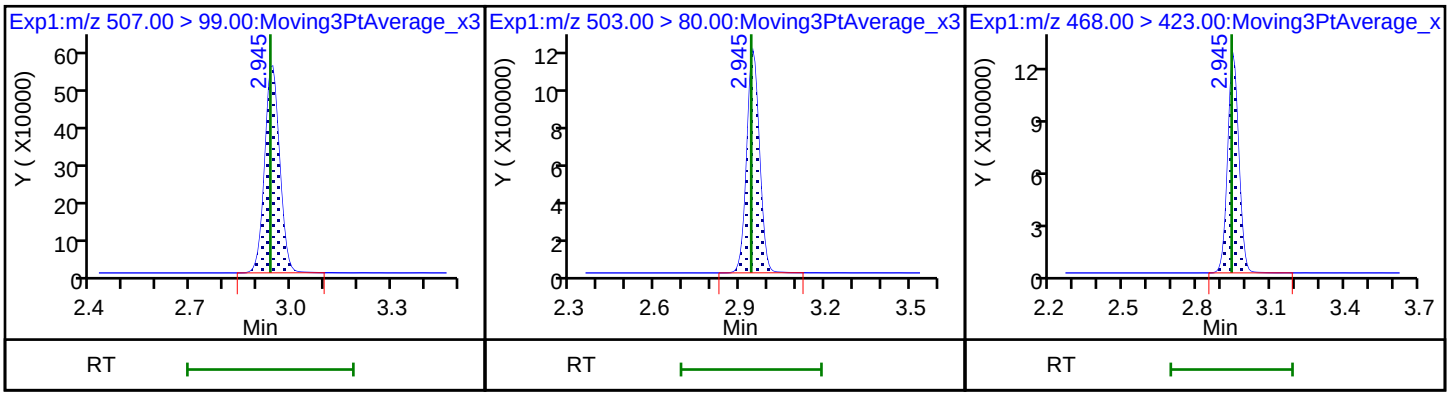
D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



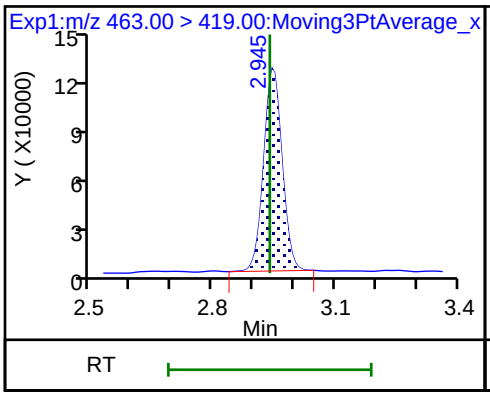
* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



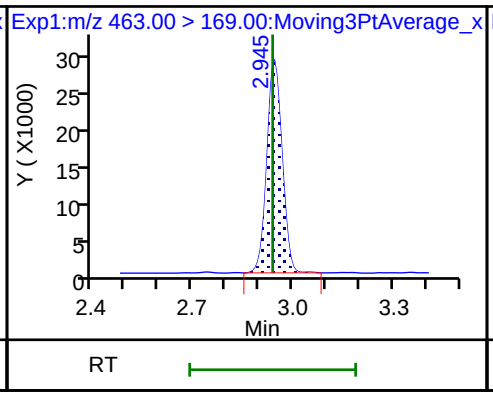
D 72 13C8 PFOS D 18 13C4 PFOS D 19 13C5 PFNA



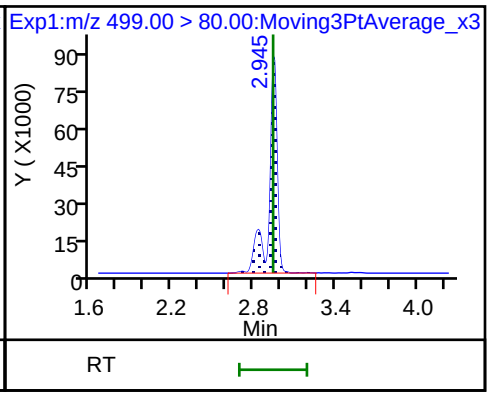
20 Perfluorononanoic acid



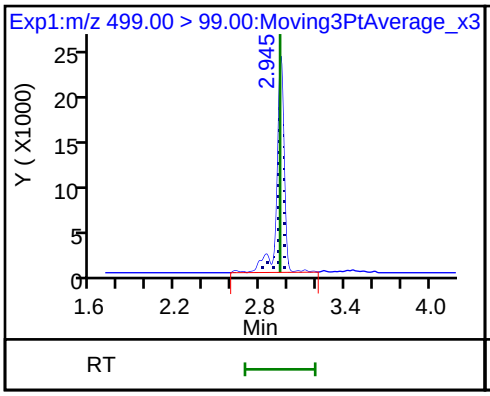
20 Perfluorononanoic acid



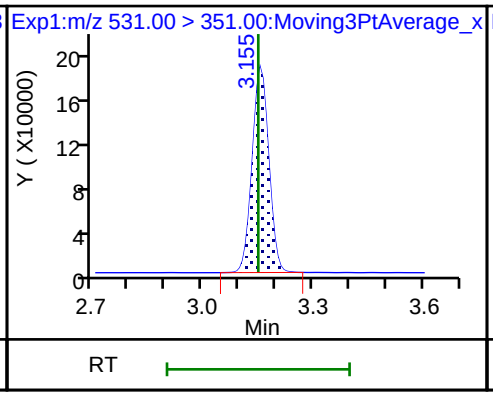
17 Perfluorooctane sulfonic acid



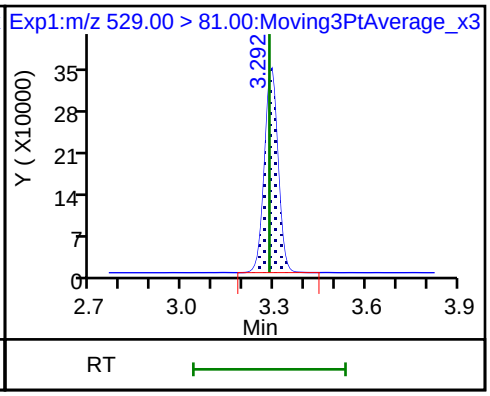
17 Perfluorooctane sulfonic acid



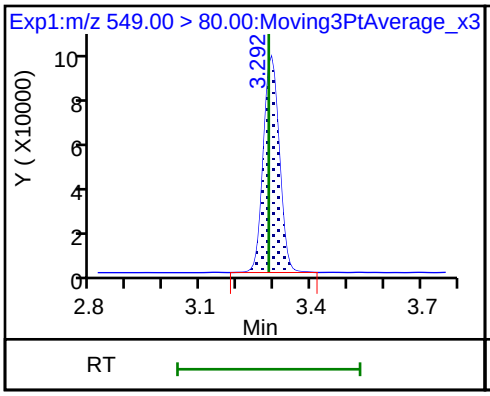
69 9-Chlorohexadecafluoro-3-oxanonane



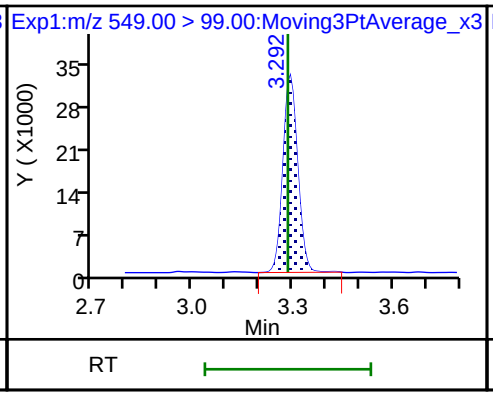
D 26 M2-8:2FTS



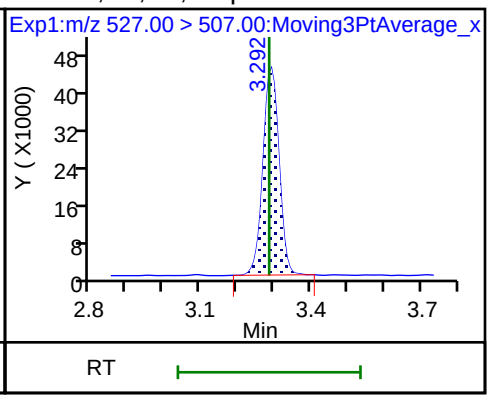
68 Perfluorononanesulfonic acid



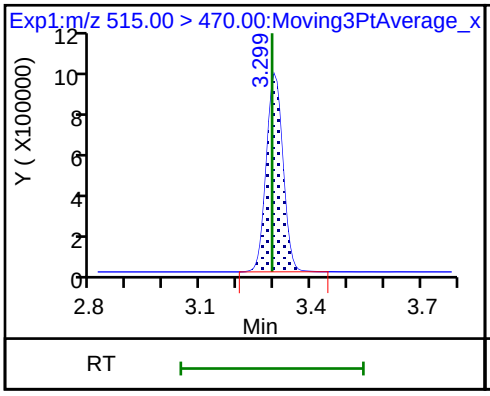
68 Perfluorononanesulfonic acid



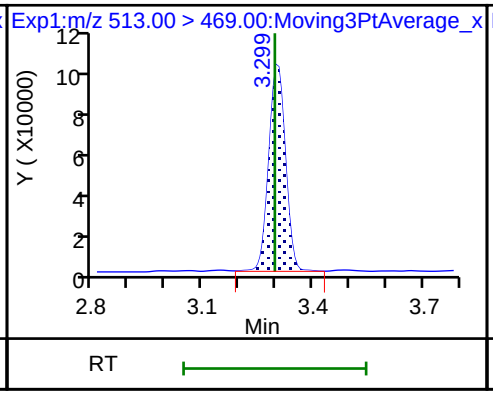
25 1H,1H,2H,2H-perfluorodecanesulfoni



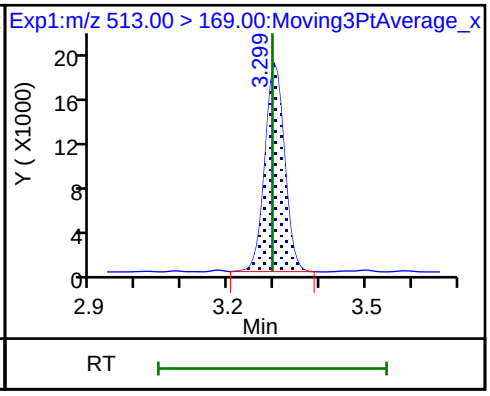
D 23 13C2 PFDA



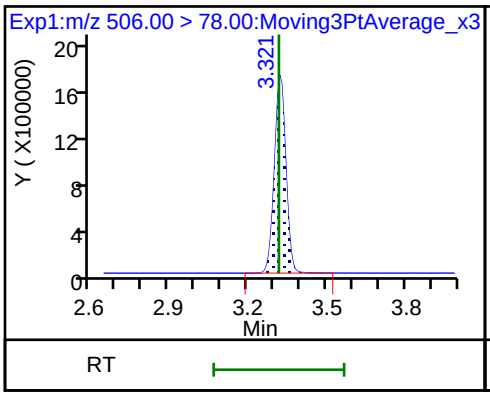
24 Perfluorodecanoic acid



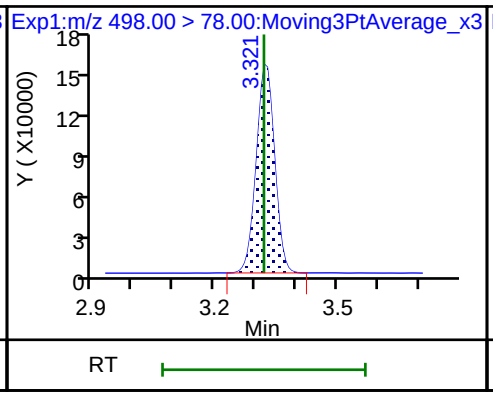
24 Perfluorodecanoic acid



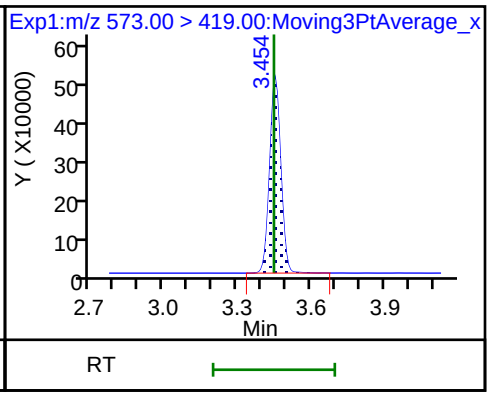
D 21 13C8 FOSA



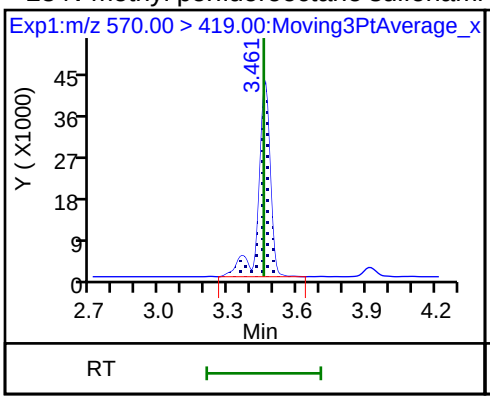
22 Perfluorooctane Sulfonamide



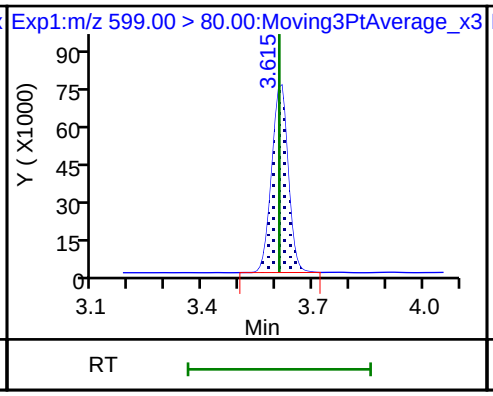
D 27 d3-NMeFOSAA



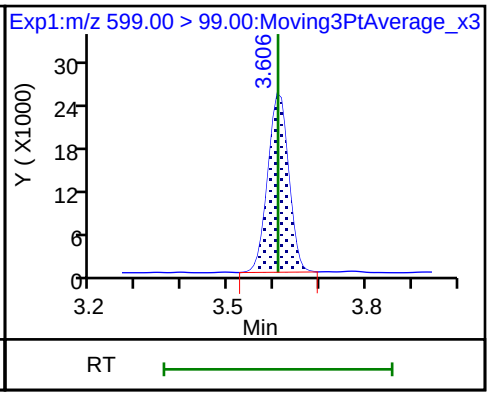
28 N-methyl perfluorooctane sulfonami



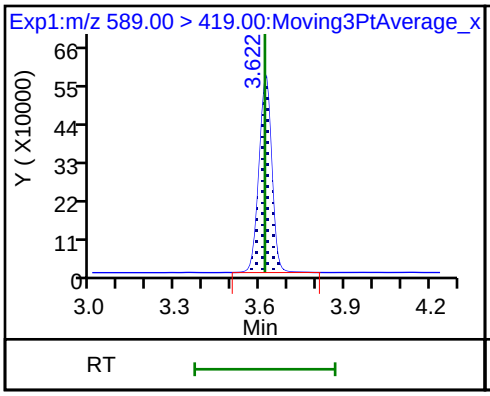
29 Perfluorodecane Sulfonic acid



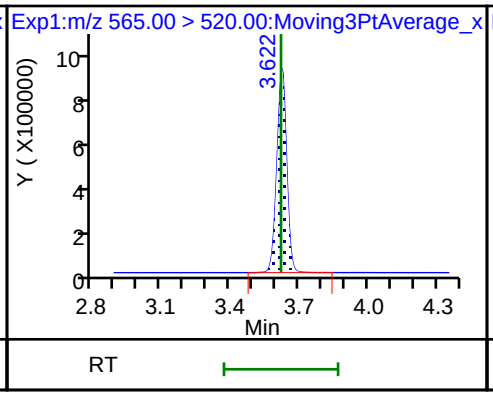
29 Perfluorodecane Sulfonic acid



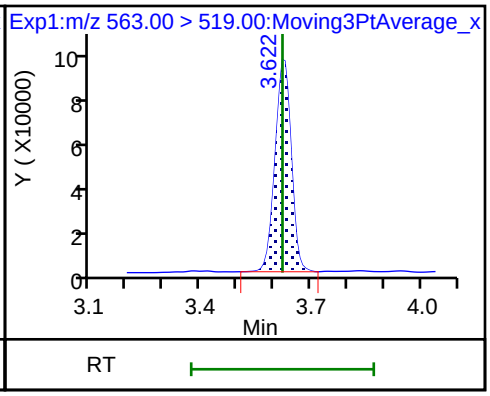
D 32 d5-NEtFOSAA



D 30 13C2 PFUnA



31 Perfluoroundecanoic acid



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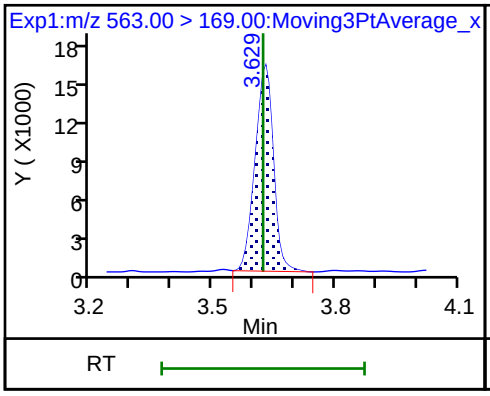
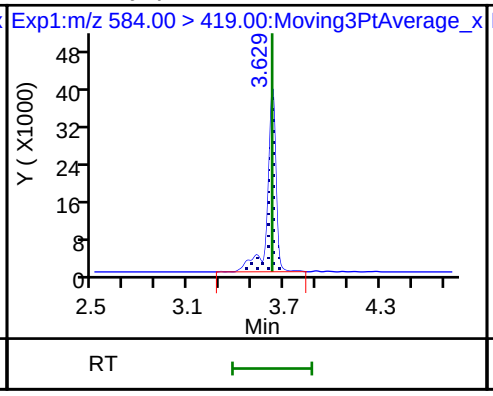
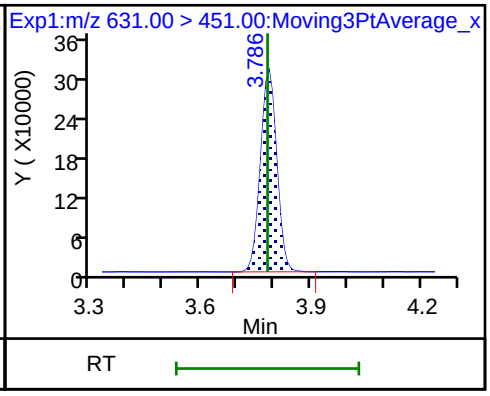


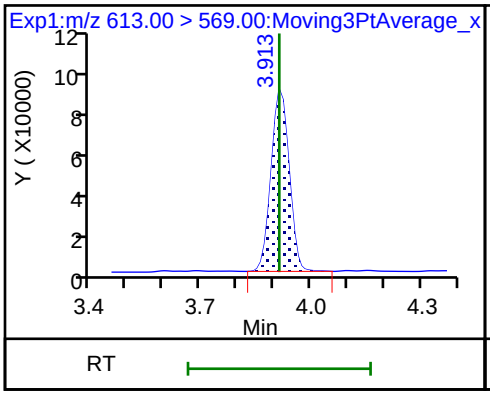
33 N-ethyl perfluorooctane sulfonamid



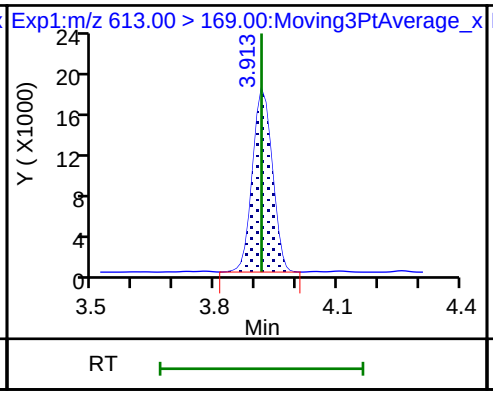
66 11-Chloroeicosafluoro-3-oxaundecan



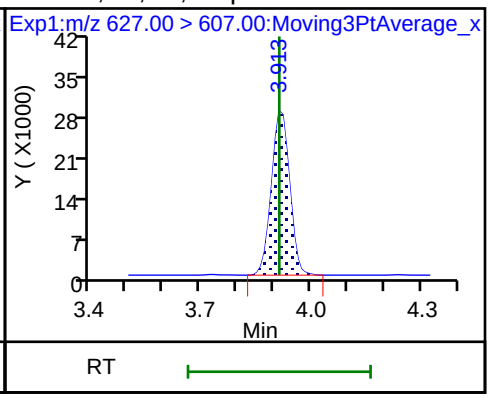
37 Perfluorododecanoic acid



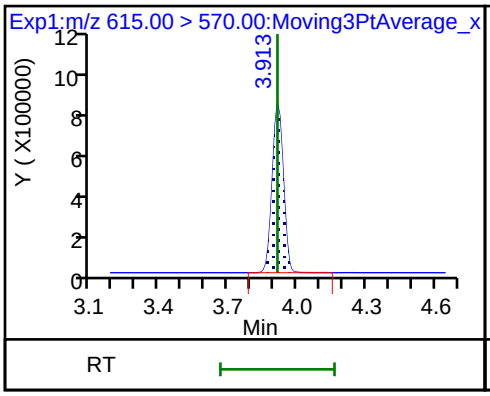
37 Perfluorododecanoic acid



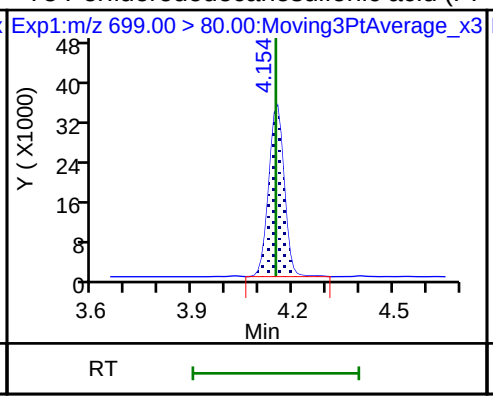
74 1H,1H,2H,2H-perfluorododecanesulfo



D 36 13C2 PFDoA



75 Perfluorododecanesulfonic acid (PF



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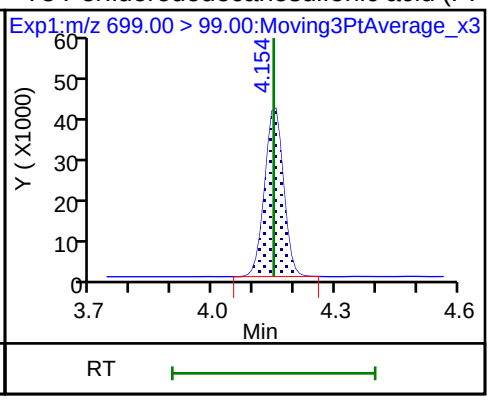
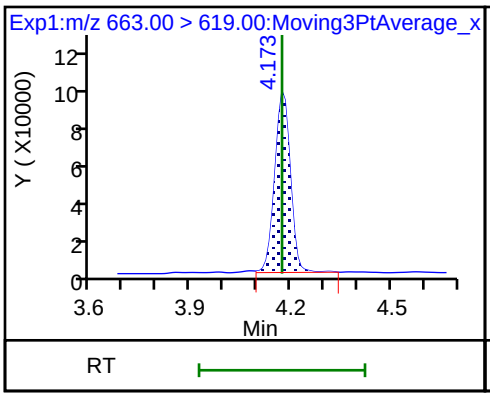
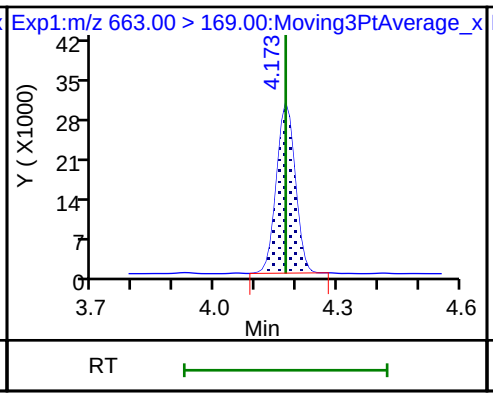


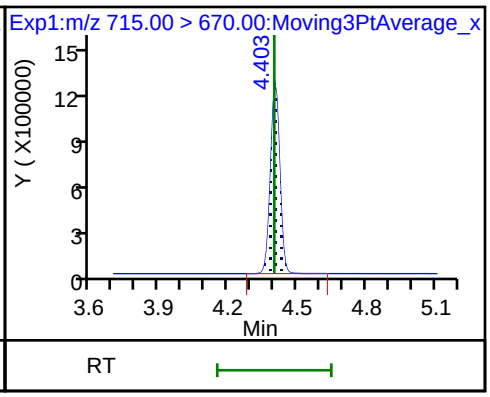
41 Perfluorotridecanoic acid



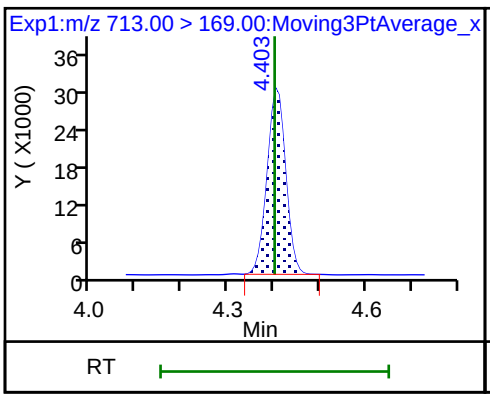
41 Perfluorotridecanoic acid



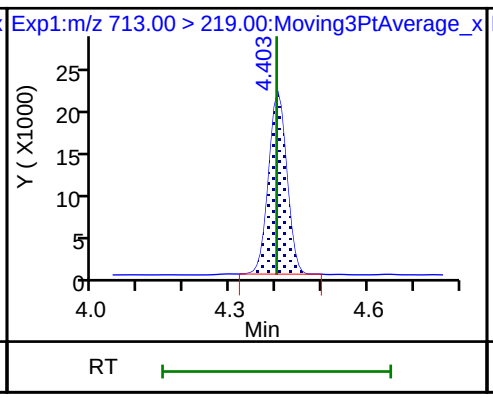
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



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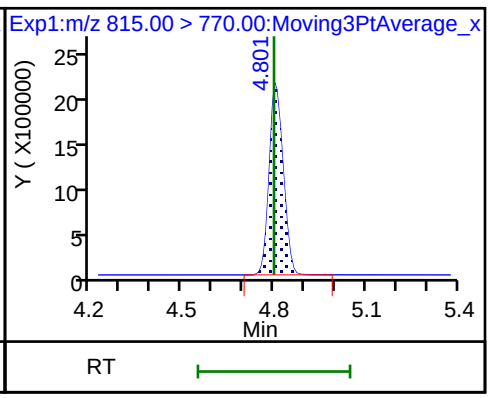
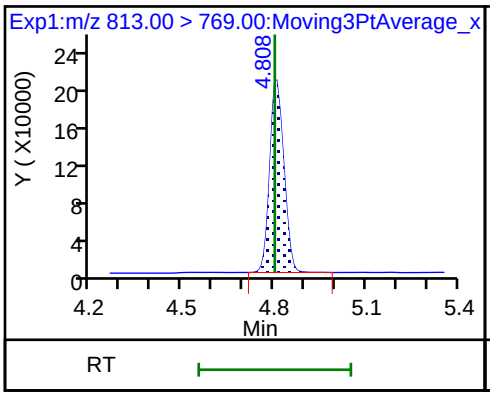
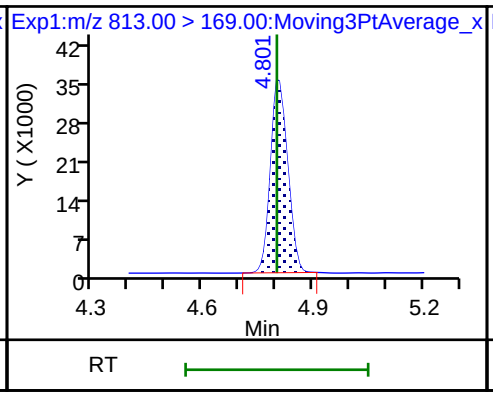


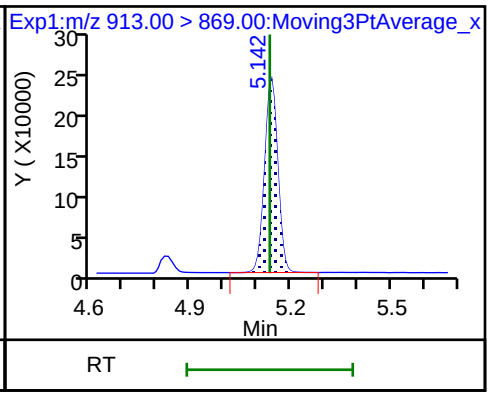
45 Perfluorohexadecanoic acid



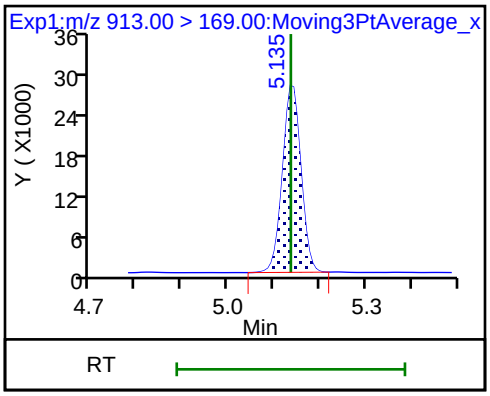
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_005.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 06-Aug-2018 11:33:34 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L4-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:10 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:00:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.397	1.395	0.002	0.543	5503224	2.49		99.4	10421	
2 Perfluorobutyric acid										
212.90 > 169.00	1.397	1.397	0.0	1.000	2011540	0.9733		97.3	198	
D 3 13C5-PFPeA										
267.90 > 223.00	1.640	1.639	0.001	0.637	3711287	2.43		97.4	9635	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.640	1.643	-0.003	1.000	1650773	0.9773		97.7	114	
D 47 13C3-PFBS										
301.90 > 83.00	1.672	1.675	-0.003	0.649	78945	2.24		96.3	323	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.680	1.676	0.004	1.005	2375205	0.9209		104	901	
298.90 > 99.00	1.680	1.676	0.004	1.005	1015406		2.34(1.25-3.74)	104	513	
D 60 M2-4:2FTS										
329.00 > 81.00	1.876	1.875	0.001	0.729	592717	2.36		101	872	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.876	1.875	0.001	1.122	570176	1.01		109	3930	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.903	1.908	-0.005	1.000	1715767	0.9874		98.7	433	
313.00 > 119.00	1.903	1.908	-0.005	1.000	156736		10.95(5.03-15.10)	98.7	462	
D 7 13C2 PFHxA										
315.00 > 270.00	1.903	1.908	-0.005	0.739	4256324	2.46		98.4	8880	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.934	1.930	0.004	1.157	2251038	0.9619		103	2681	
349.00 > 99.00	1.934	1.930	0.004	1.157	845080		2.66(1.36-4.07)	103	824	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.008	2.003	0.005	0.780	332511	2.47		98.8	1022	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.008	2.003	0.005	1.000	308918	0.9596		96.0	152	
D 9 13C4-PFHpA										
367.00 > 322.00	2.225	2.227	-0.002	0.864	4255889	2.50		100.0	6181	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.225	2.228	-0.003	1.000	1827459	1.01		101	379	
363.00 > 169.00	2.225	2.228	-0.003	1.000	719613		2.54(1.13-3.40)	101	1239	
D 11 18O2 PFHxS										
403.00 > 84.00	2.245	2.239	0.006	0.872	5111728	2.34		99.0	4756	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.245	2.239	0.006	1.000	2008773	0.8573		94.2	1987	
399.00 > 99.00	2.245	2.239	0.006	1.000	689420		2.91(1.50-4.49)	94.2	645	
65 ADONA										
377.00 > 251.00	2.267	2.271	-0.004	0.771	4950939	1.07		107	7395	
377.00 > 85.00	2.267	2.271	-0.004	0.771	2850758		1.74(0.84-2.53)	107	3276	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.550	2.548	0.002	1.000	536262	0.9373		98.9	1106	
D 12 M2-6:2FTS										
429.00 > 81.00	2.550	2.549	0.001	0.991	863649	2.41		101	2238	
D 73 13C8 PFOA										
421.00 > 376.00	2.574	2.571	0.003	1.000	7724133	2.51		102	11158	
D 14 13C4 PFOA										
417.00 > 372.00	2.574	2.573	0.001	1.000	3847208	2.46		98.5	6637	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.574	2.574	0.0	1.000	1678386	0.9646		96.4	158	
413.00 > 169.00	2.574	2.574	0.0	1.000	874632		1.92(0.84-2.52)	96.4	1551	
* 62 13C2-PFOA										
415.00 > 370.00	2.574	2.575	-0.001		3997336	2.50			9177	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.003	0.878	1703787	0.9643		101	2000	
449.00 > 99.00	2.581	2.583	-0.003	0.878	442374		3.85(1.94-5.82)	101	761	
D 72 13C8 PFOS										
507.00 > 99.00	2.939	2.938	0.001	1.142	1640677	2.35		98.5	3589	
20 Perfluorononanoic acid										
463.00 > 419.00	2.939	2.939	0.0	1.000	1409363	0.9457		94.6	412	
463.00 > 169.00	2.939	2.939	0.0	1.000	338359		4.17(1.90-5.69)	94.6	1435	
D 19 13C5 PFNA										
468.00 > 423.00	2.939	2.939	0.0	1.142	3536917	2.52		101	6788	
D 18 13C4 PFOS										
503.00 > 80.00	2.939	2.939	0.0	1.142	3408113	2.38		99.4	4275	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.939	2.940	-0.001	1.000	1387650	0.9063		97.7	2200	
499.00 > 99.00	2.939	2.940	-0.001	1.000	324621		4.27(2.31-6.93)	97.7	823	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.155	3.150	0.005	1.074	2339008	0.9416		101	3500	
D 26 M2-8:2FTS										
529.00 > 81.00	3.285	3.284	0.001	1.276	1045687	2.42		101	3279	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.285	3.285	0.001	1.118	1021056	0.9520		99.2	2447	
549.00 > 99.00	3.285	3.285	0.001	1.118	375050		2.72(1.33-3.97)	99.2	1043	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.285	3.286	-0.001	1.000	504558	0.8895		92.9	1402	
D 23 13C2 PFDA										
515.00 > 470.00	3.292	3.294	-0.002	1.279	3162481	2.57		103	5418	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.299	3.296	0.003	1.002	1188927	0.9369		93.7	777	
513.00 > 169.00	3.299	3.296	0.003	1.002	213587		5.57(2.36-7.09)	93.7	390	
D 21 13C8 FOSA										
506.00 > 78.00	3.321	3.317	0.004	1.290	4677735	2.46		98.5	7100	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.321	3.319	0.002	1.000	1842464	1.01		101	3243	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.339	1547904	2.46		98.4	3369	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.454	3.453	0.001	1.002	590682	0.9890		98.9	742	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.606	3.608	-0.002	1.227	849835	0.9430		97.8	3617	
599.00 > 99.00	3.606	3.608	-0.002	1.227	299784		2.83(1.39-4.16)	97.8	2220	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.615	3.616	-0.001	1.405	1663128	2.55		102	1489	
D 30 13C2 PFUnA										
565.00 > 520.00	3.622	3.620	0.002	1.407	2425508	2.45		98.0	5922	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.622	3.622	0.0	1.000	1124406	1.03		103	798	
563.00 > 169.00	3.622	3.622	0.0	1.000	177923		6.32(2.12-6.36)	103	940	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.622	3.623	-0.001	1.002	567205	0.9561		95.6	1327	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.785	3.781	0.004	1.288	3752452	0.9843		104	5976	
35 MeFOSA										
512.00 > 169.00	3.826	3.826	0.0		540488	NC			861	
D 36 13C2 PFDoA										
615.00 > 570.00	3.913	3.913	0.0	1.520	2610480	2.50		99.8	3794	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.913	3.913	0.0	1.191	366950	0.9330		96.8	2916	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.913	3.913	0.0	1.000	1163733	1.00		100	624	
613.00 > 169.00	3.913	3.913	0.0	1.000	259339		4.49(2.13-6.40)	100	1676	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.153	4.148	0.005	1.413	393708	0.99		103	1564	
699.00 > 99.00	4.153	4.148	0.005	1.413	556205		0.71(0.00-0.00)	103	3372	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.172	4.173	-0.001	1.066	1112653	0.99		99.1	487	
663.00 > 169.00	4.172	4.173	-0.001	1.066	335552		3.32(1.25-3.76)	99.1	2095	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.402	4.399	0.003	1.711	3313318	2.49		99.4	6184	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.402	4.400	0.002	1.000	308839	0.9628		96.3	3431	
713.00 > 219.00	4.402	4.400	0.002	1.000	221323		1.40(0.71-2.13)	96.3	1043	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.800	4.799	0.001	1.865	6558204	2.48		99.2	7387	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.800	4.801	-0.001	1.000	2363491	1.01		101	902	
813.00 > 169.00	4.800	4.801	-0.001	1.000	402071		5.88(2.86-8.58)	101	2430	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.135	5.136	-0.001	1.070	2459730	1.02		102	668	
913.00 > 169.00	5.135	5.136	-0.001	1.070	301046		8.17(3.83-11.48)	102	2004	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_005.d

Injection Date: 06-Aug-2018 11:33:34 Instrument ID: A8_N

Lims ID: IC L4 Full

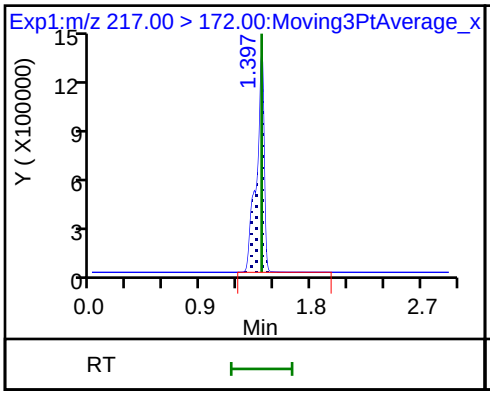
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 5

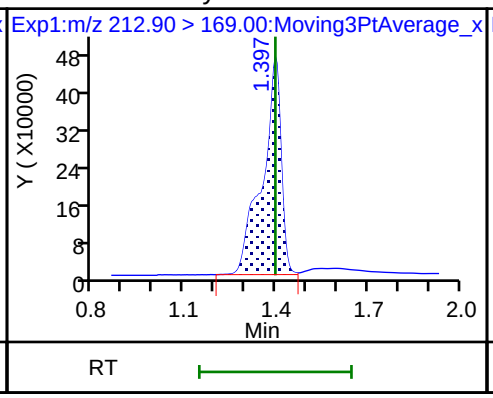
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

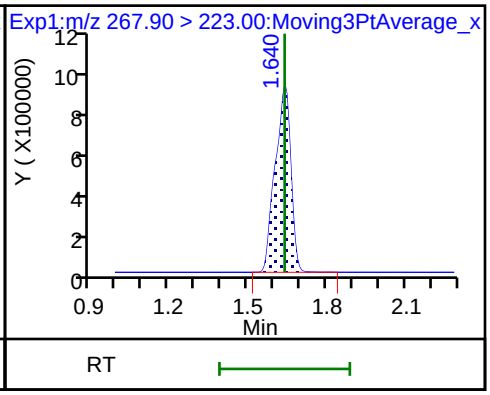
D 1 13C4 PFBA



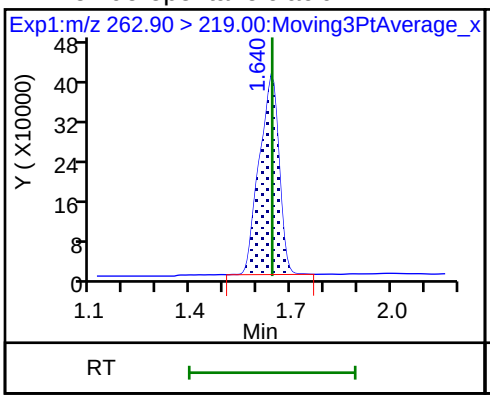
2 Perfluorobutyric acid



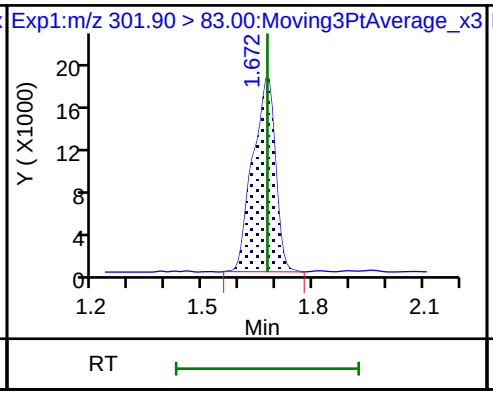
D 3 13C5-PFPeA



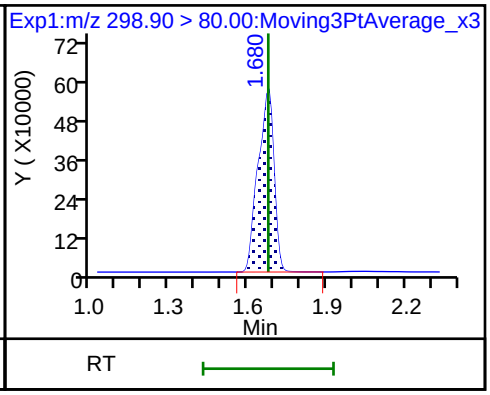
4 Perfluoropentanoic acid



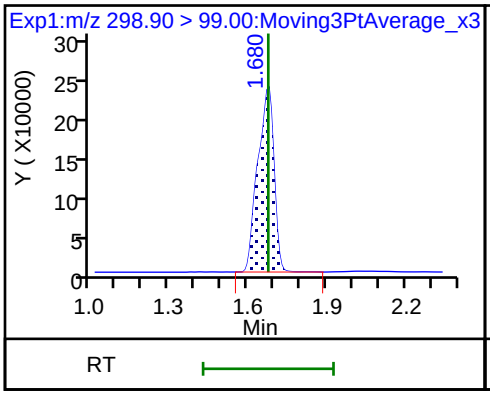
D 47 13C3-PFBS



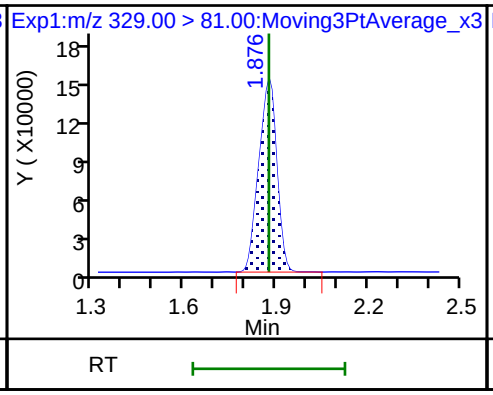
5 Perfluorobutanesulfonic acid



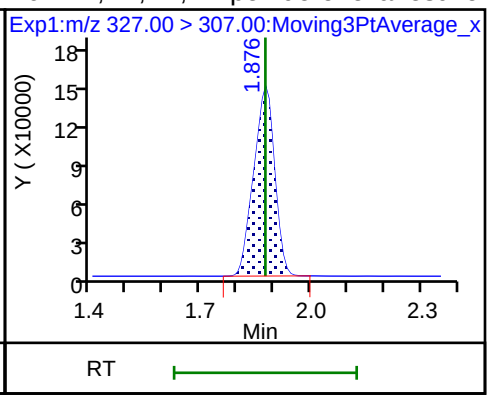
5 Perfluorobutanesulfonic acid



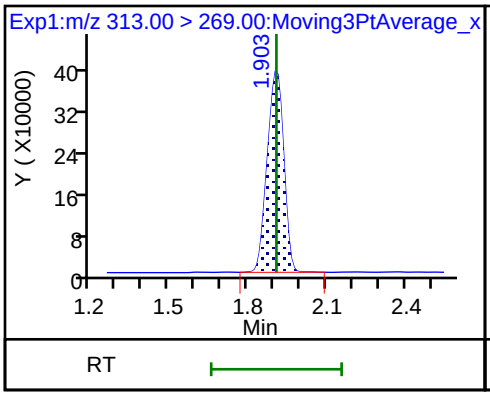
D 60 M2-4:2FTS



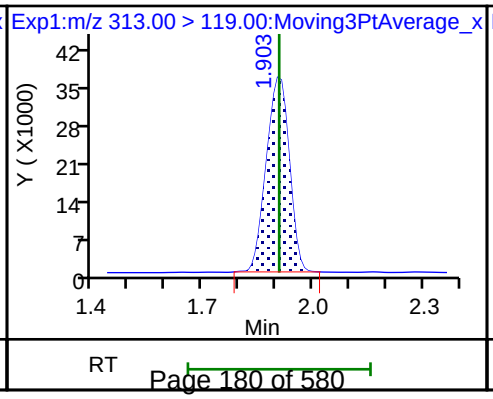
61 1H,1H,2H,2H-perfluorohexanesulfoni



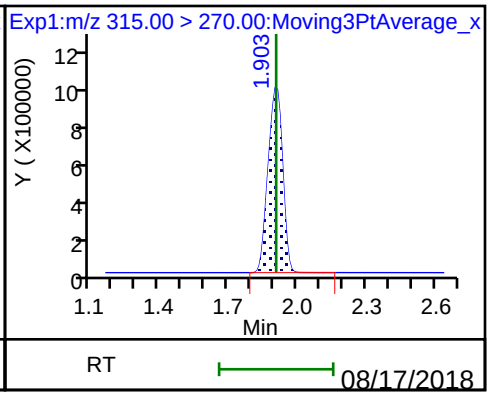
6 Perfluorohexanoic acid



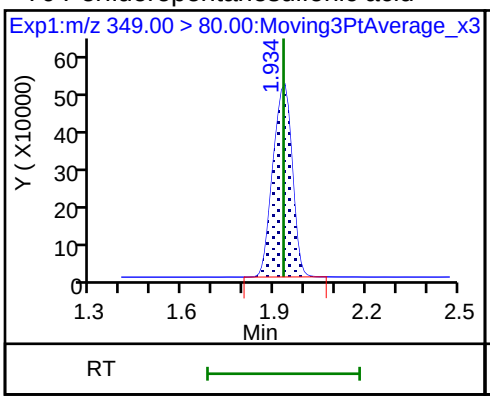
6 Perfluorohexanoic acid



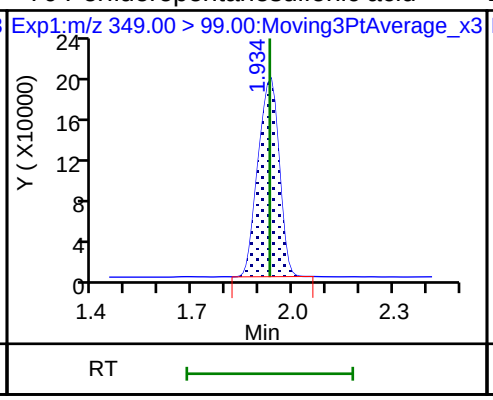
D 7 13C2 PFHxA



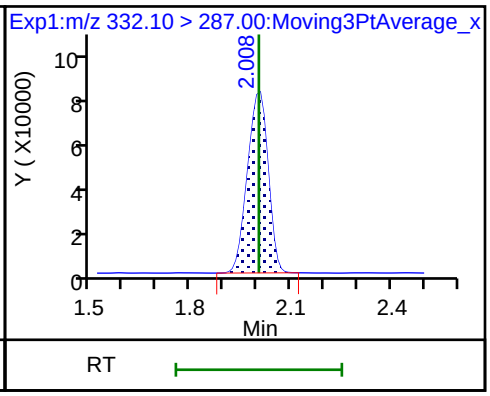
70 Perfluoropentanesulfonic acid



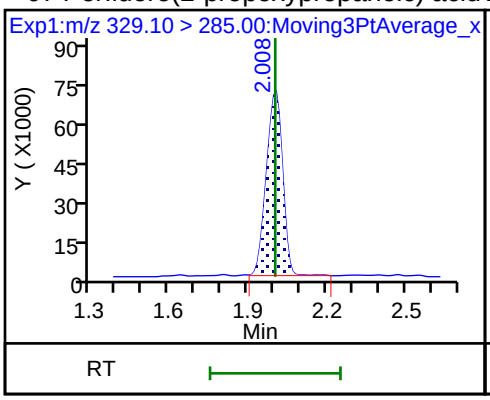
70 Perfluoropentanesulfonic acid



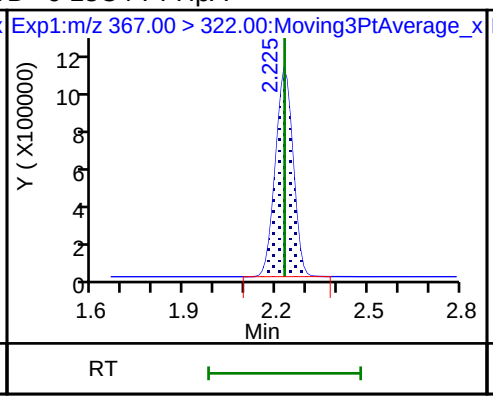
D 64 13C3 HFPO-DA



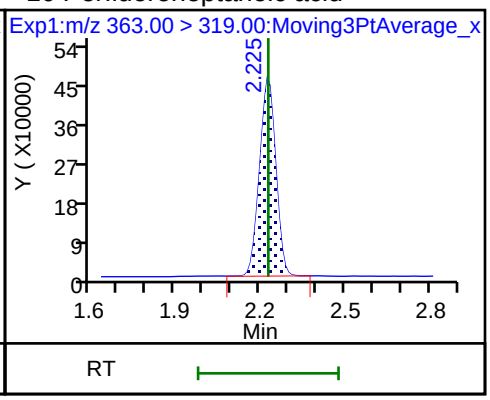
67 Perfluoro(2-propoxypropanoic) acid



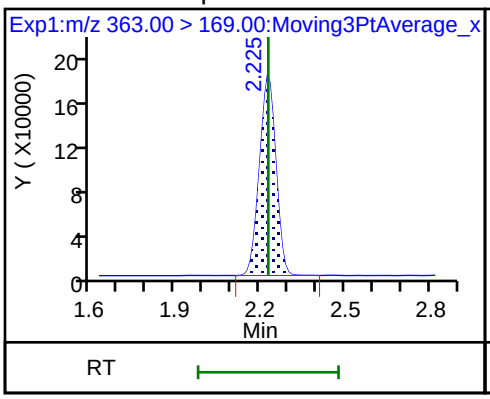
D 9 13C4-PFHpA



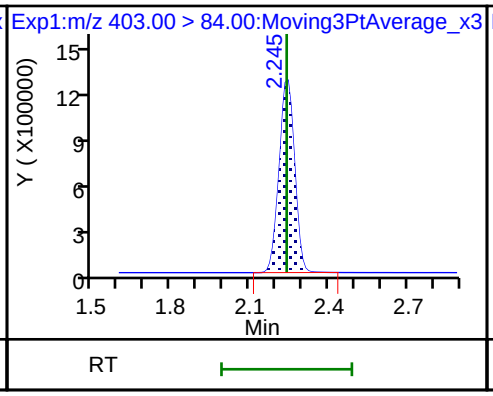
10 Perfluoroheptanoic acid



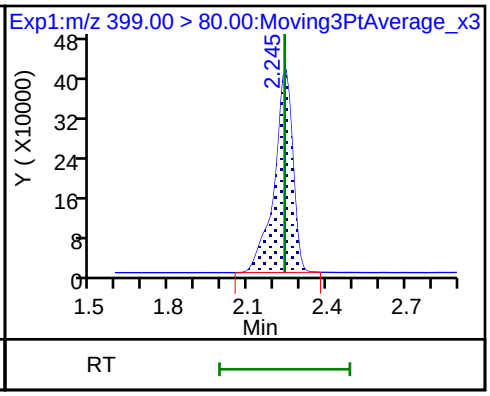
10 Perfluoroheptanoic acid



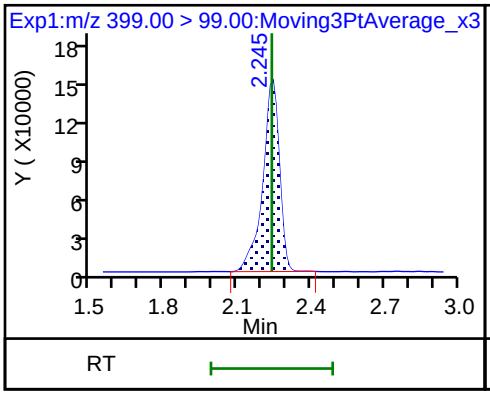
D 11 18O2 PFHxS



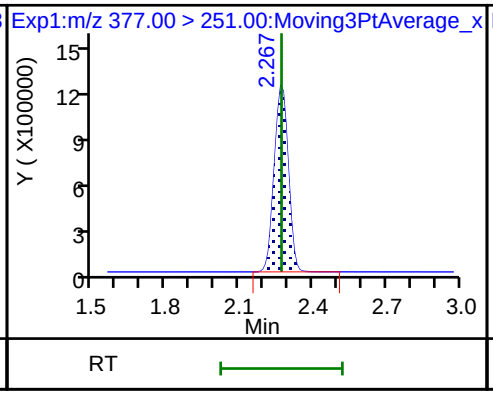
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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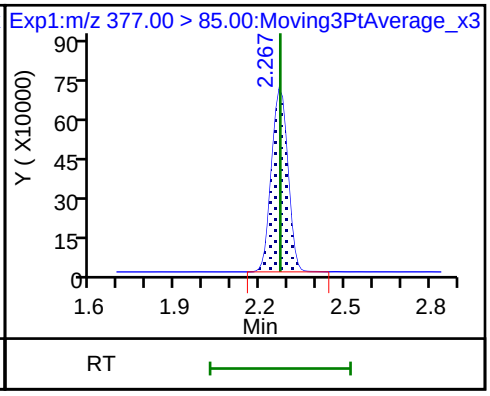
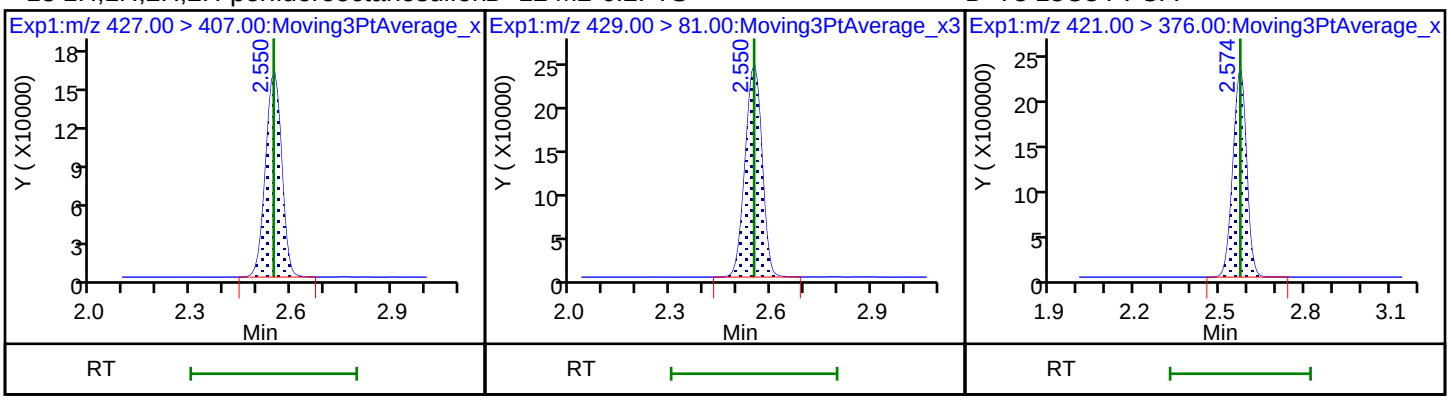
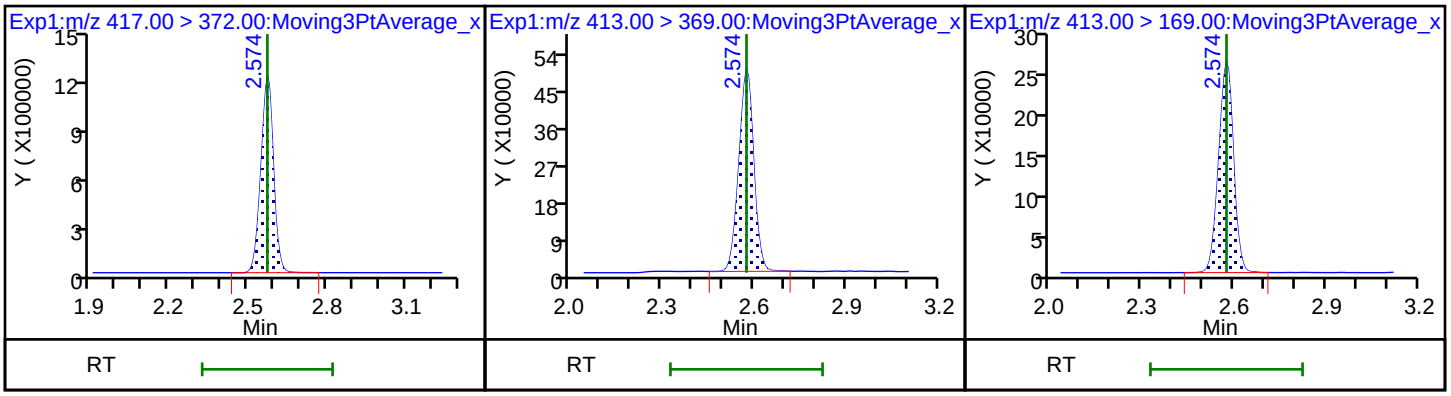


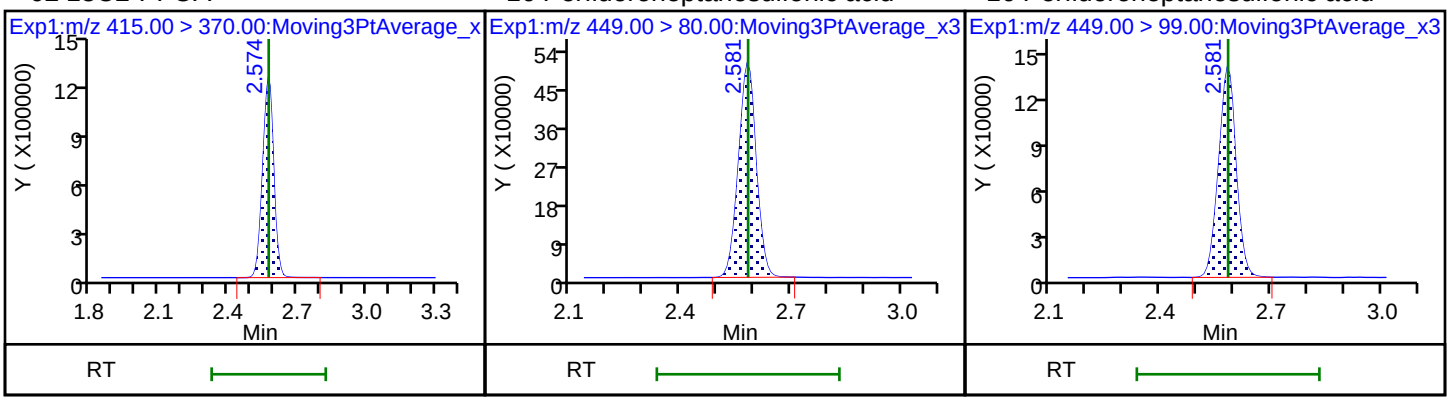
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



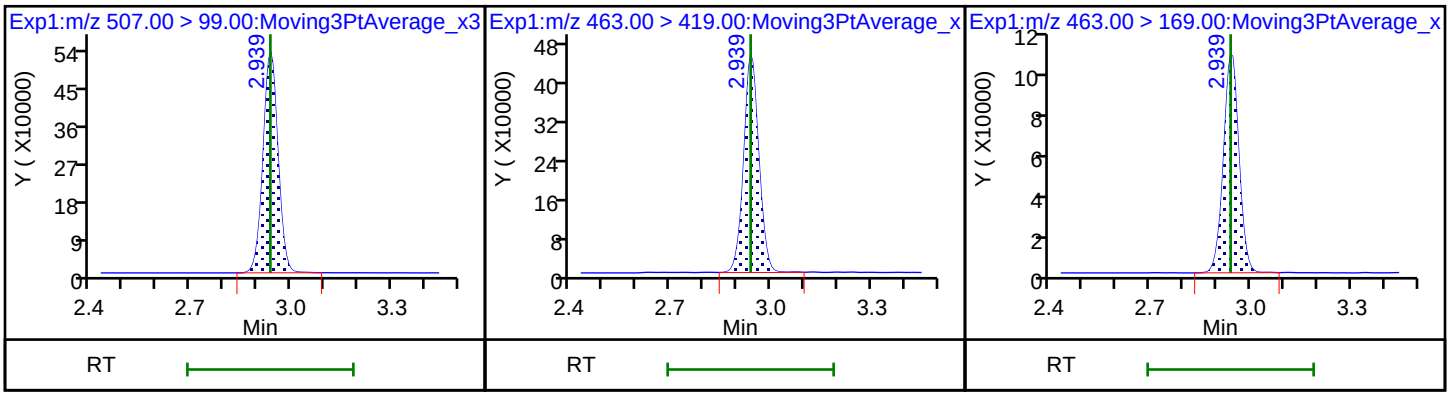
D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



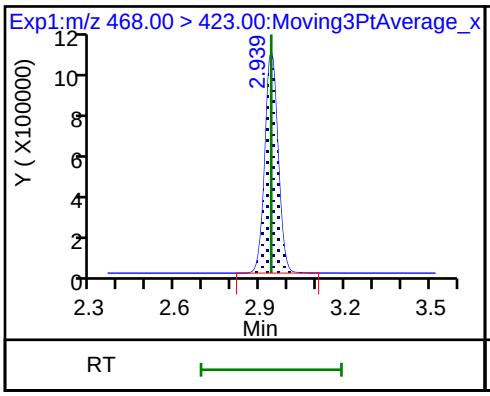
* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



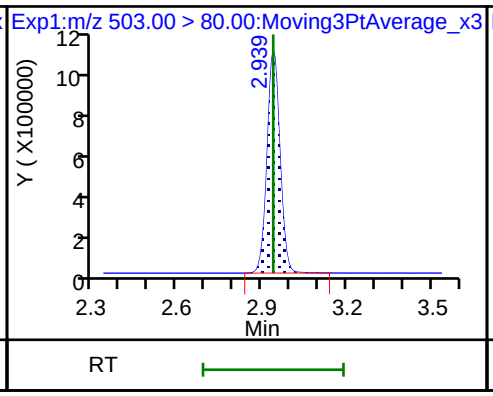
D 72 13C8 PFOS 20 Perfluorononanoic acid 20 Perfluorononanoic acid



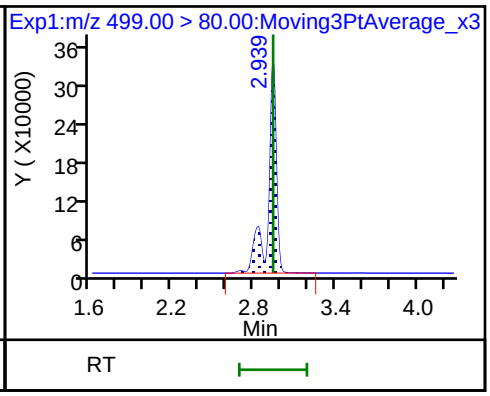
D 19 13C5 PFNA



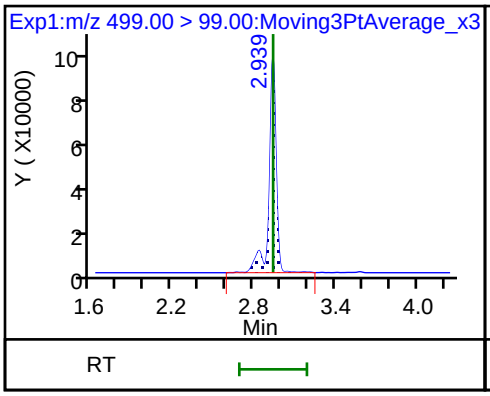
D 18 13C4 PFOS



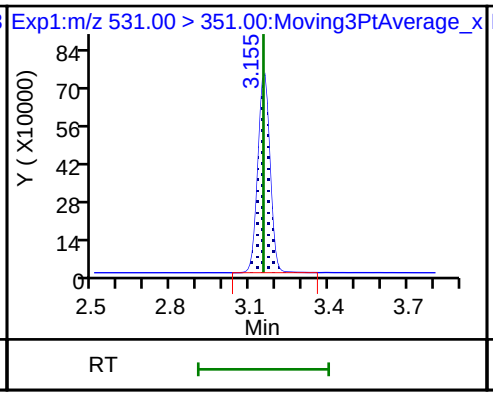
17 Perfluorooctane sulfonic acid



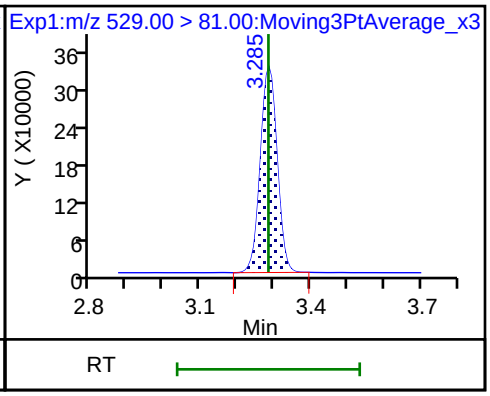
17 Perfluorooctane sulfonic acid



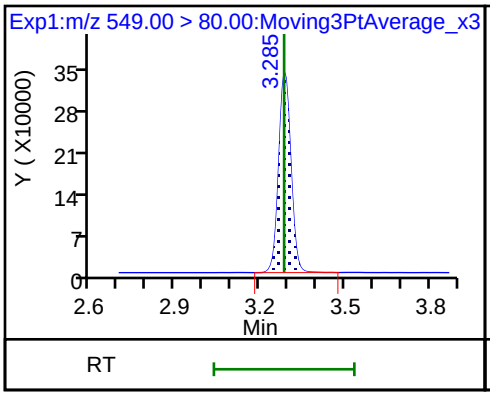
69 9-Chlorohexadecafluoro-3-oxanonane



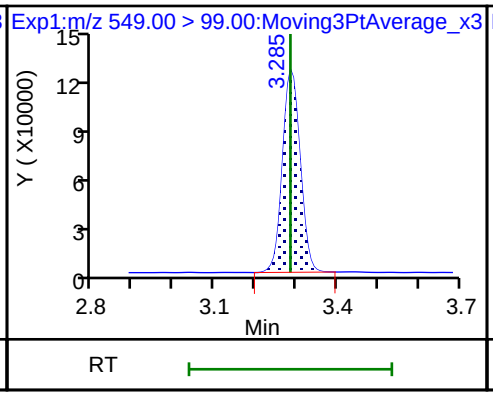
D 26 M2-8:2FTS



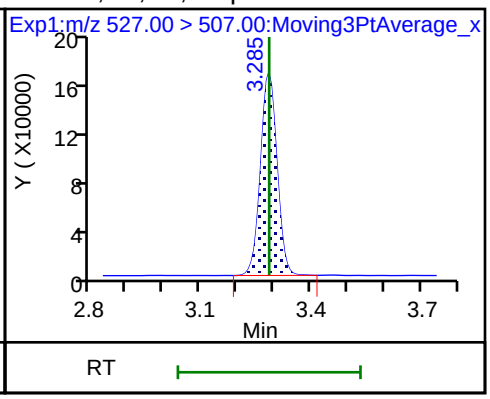
68 Perfluorononanesulfonic acid



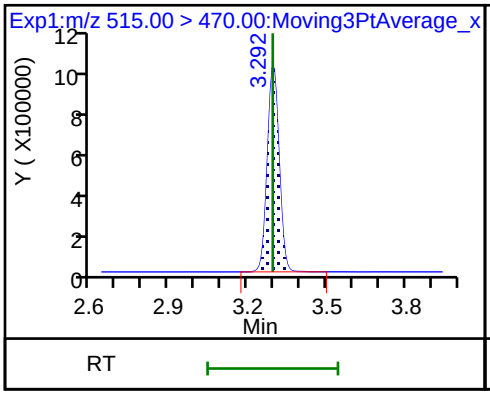
68 Perfluorononanesulfonic acid



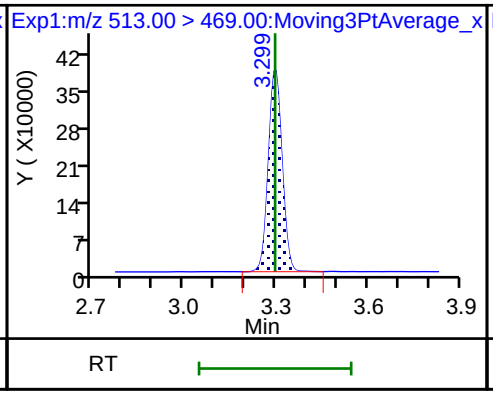
25 1H,1H,2H,2H-perfluorodecanesulfoni



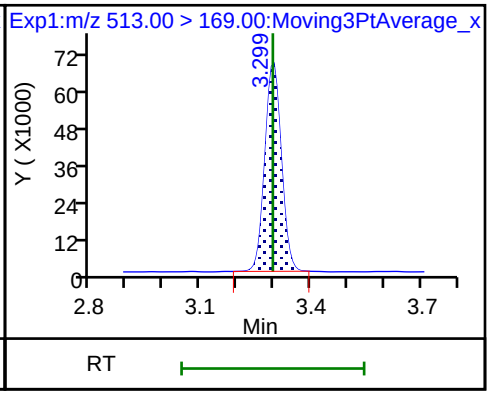
D 23 13C2 PFDA



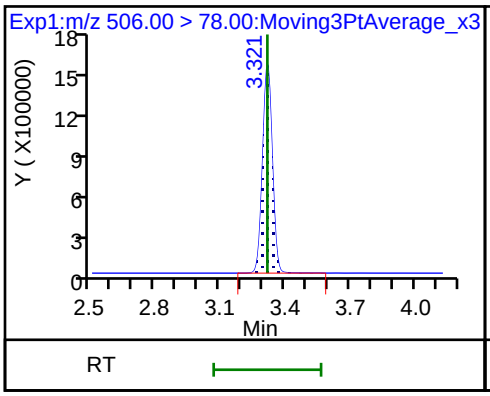
24 Perfluorodecanoic acid



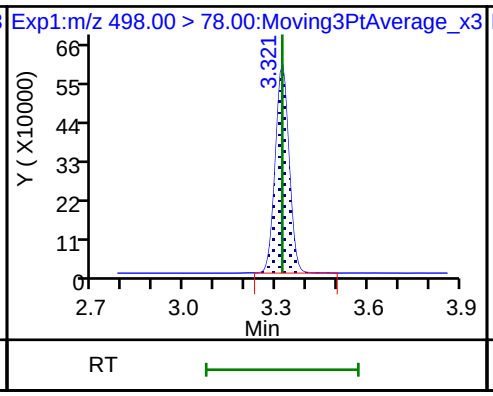
24 Perfluorodecanoic acid



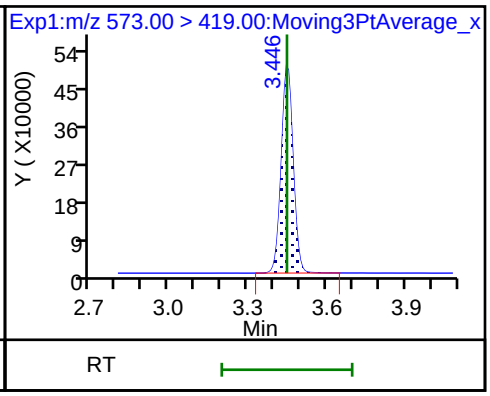
D 21 13C8 FOSA



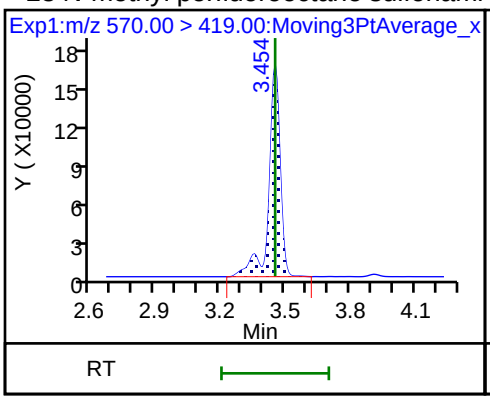
22 Perfluorooctane Sulfonamide



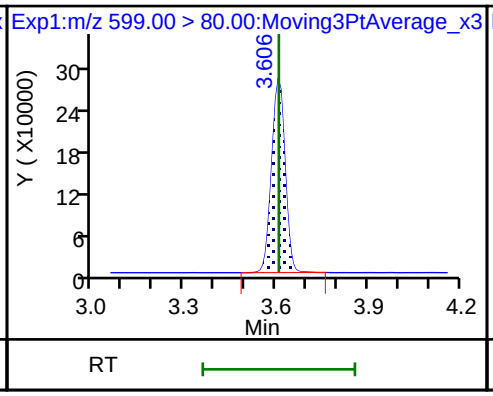
D 27 d3-NMeFOSAA



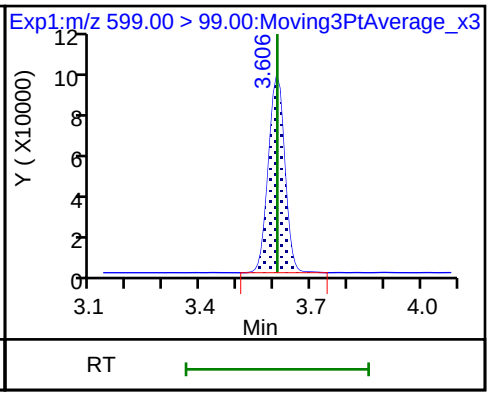
28 N-methyl perfluorooctane sulfonami



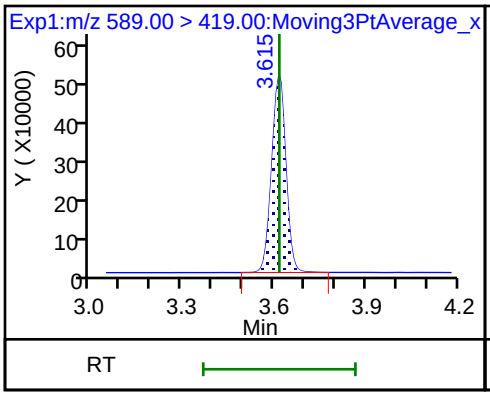
29 Perfluorodecane Sulfonic acid



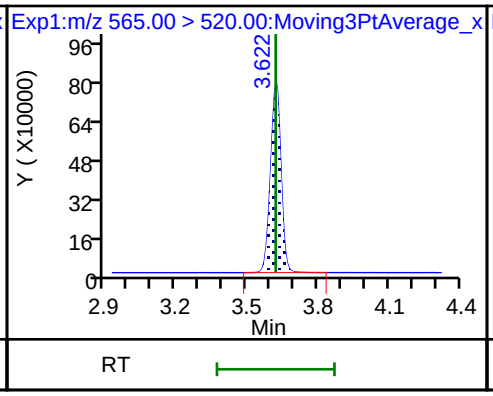
29 Perfluorodecane Sulfonic acid



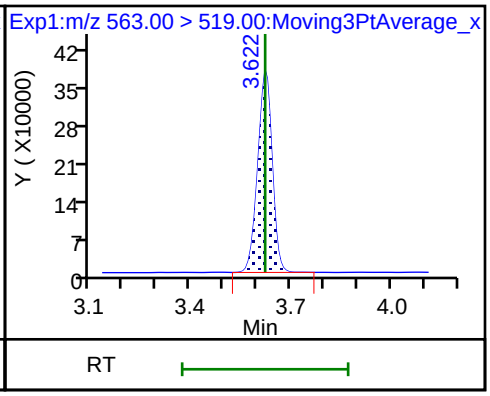
D 32 d5-NEtFOSAA



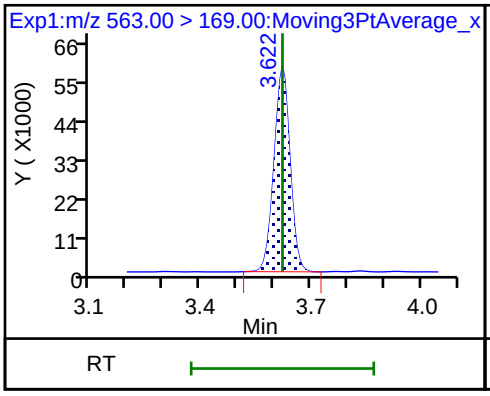
D 30 13C2 PFUnA



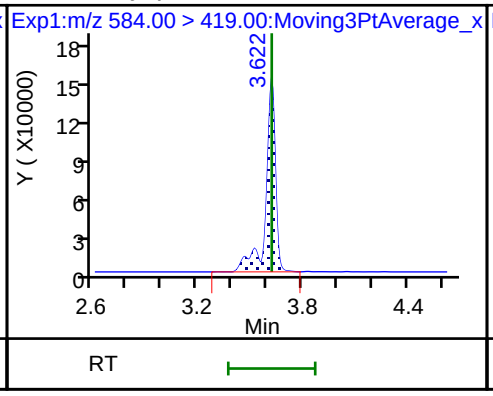
31 Perfluoroundecanoic acid



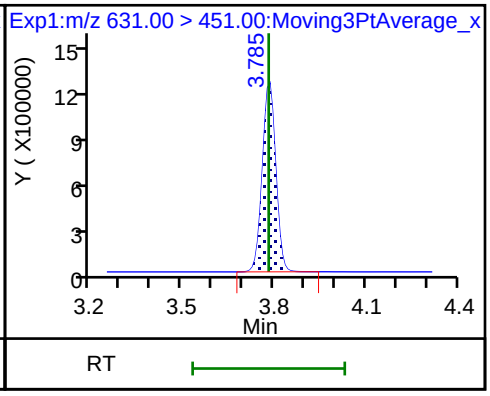
31 Perfluoroundecanoic acid



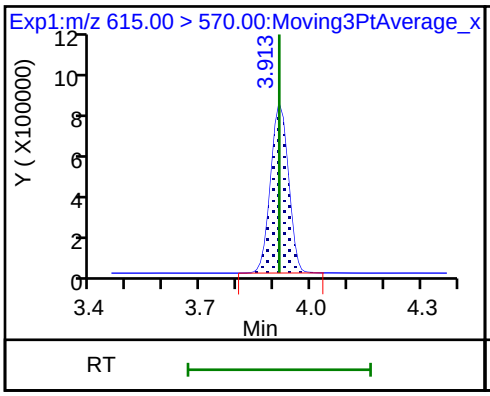
33 N-ethyl perfluorooctane sulfonamid



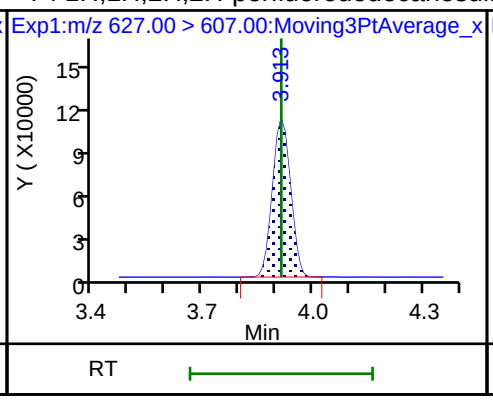
66 11-Chloroeicosafluoro-3-oxaundecan



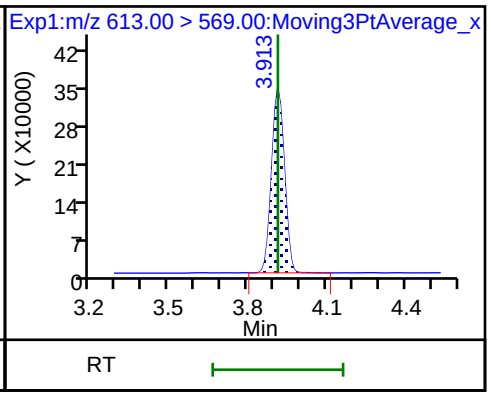
D 36 13C2 PFDoA



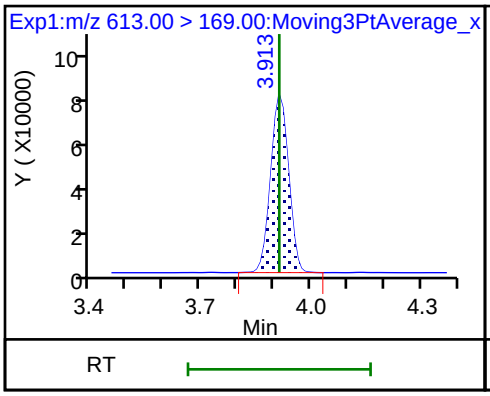
74 1H,1H,2H,2H-perfluorododecanesulfo



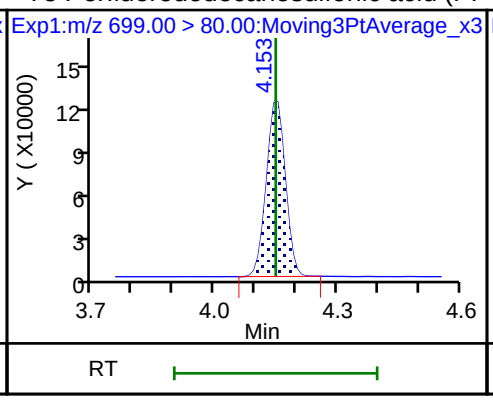
37 Perfluorododecanoic acid



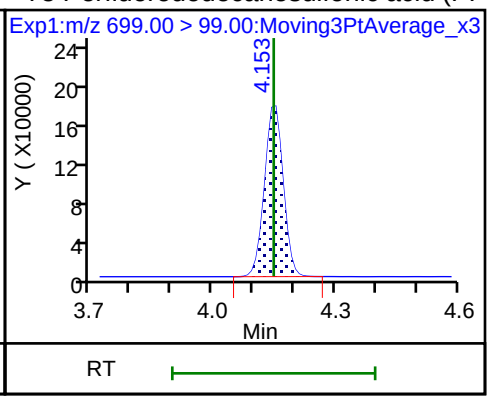
37 Perfluorododecanoic acid



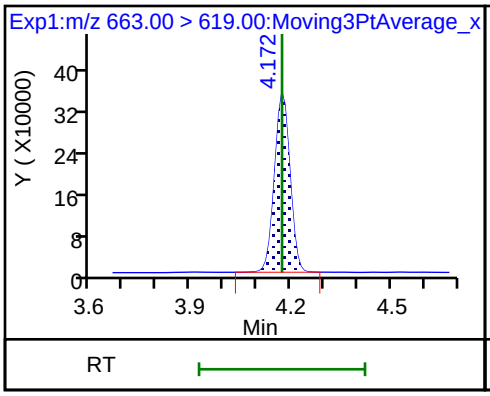
75 Perfluorododecanesulfonic acid (PF



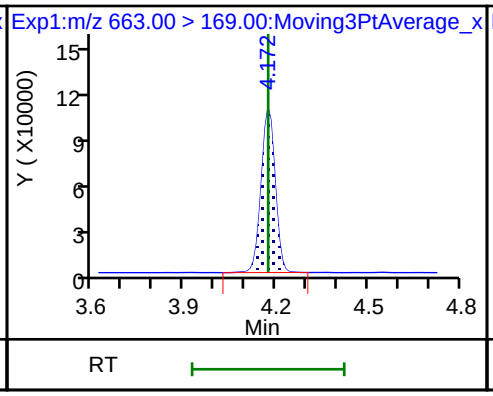
75 Perfluorododecanesulfonic acid (PF



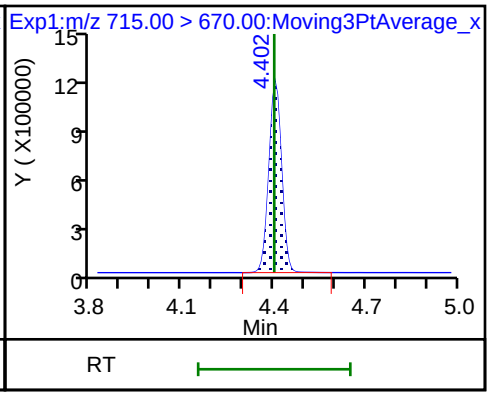
41 Perfluorotridecanoic acid



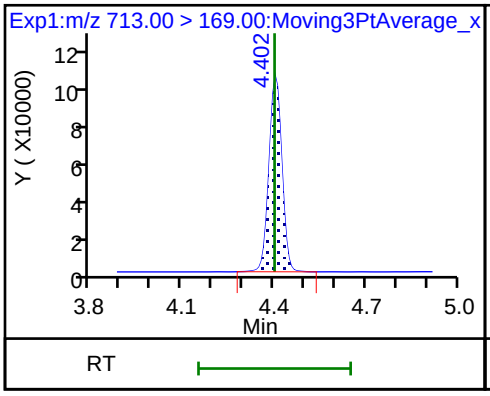
41 Perfluorotridecanoic acid



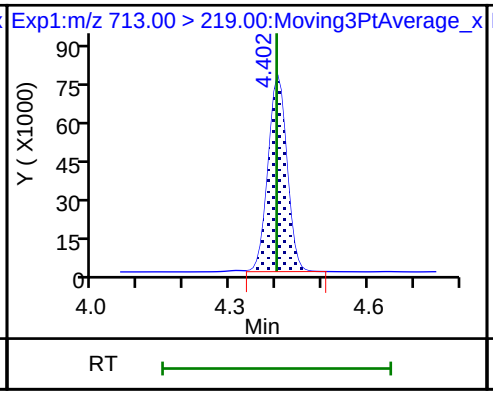
D 43 13C2-PFTeDA



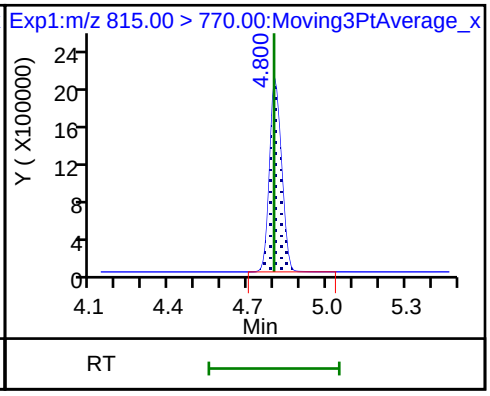
42 Perfluorotetradecanoic acid



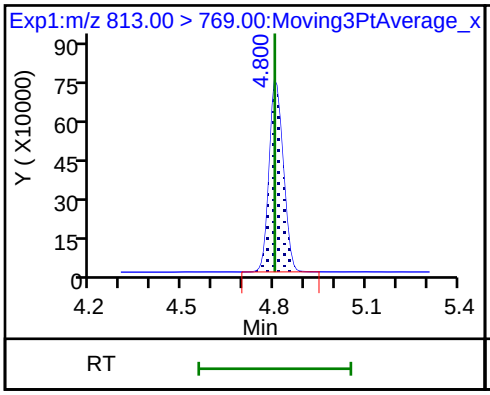
42 Perfluorotetradecanoic acid



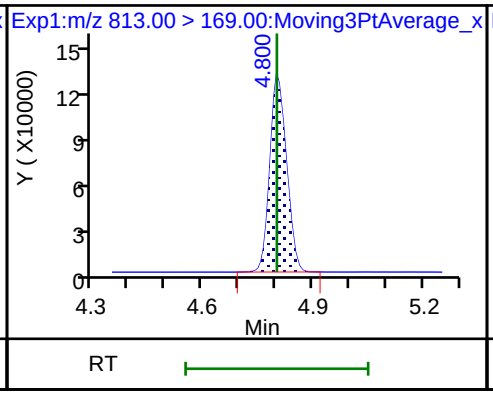
D 44 13C2-PFHxDA



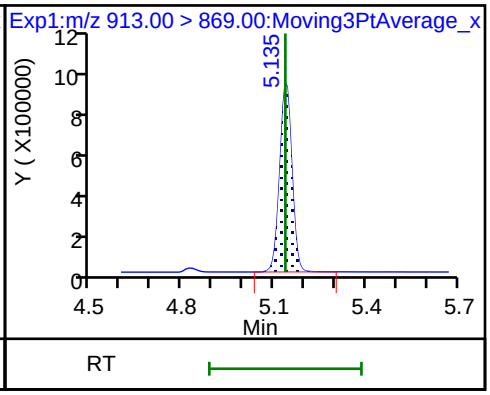
45 Perfluorohexadecanoic acid



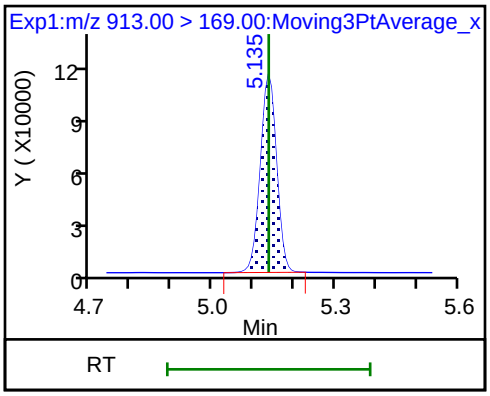
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_006.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Aug-2018 11:41:23 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L5-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:16 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:07:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.392	1.395	-0.003	0.541	5444583	2.54		102	8249	
2 Perfluorobutyric acid										
212.90 > 169.00	1.392	1.397	-0.005	1.000	5049773	2.47		98.8	508	
D 3 13C5-PFPeA										
267.90 > 223.00	1.633	1.639	-0.006	0.634	3838069	2.60		104	8427	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.640	1.643	-0.003	1.005	4235935	2.43		97.0	293	
D 47 13C3-PFBS										
301.90 > 83.00	1.672	1.675	-0.003	0.649	80654	2.36		102	261	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.672	1.676	-0.004	1.000	5929736	2.25		102	2174	
298.90 > 99.00	1.672	1.676	-0.004	1.000	2454638		2.42(1.25-3.74)	102	1269	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.868	1.875	-0.007	1.117	1362407	2.37		102	7811	
D 60 M2-4:2FTS										
329.00 > 81.00	1.868	1.875	-0.007	0.726	585341	2.41		103	782	
D 7 13C2 PFHxA										
315.00 > 270.00	1.903	1.908	-0.005	0.739	4337626	2.59		104	12580	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.903	1.908	-0.005	1.000	4365425	2.47		98.6	1122	
313.00 > 119.00	1.903	1.908	-0.005	1.000	395592		11.04(5.03-15.10)	98.6	758	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.924	1.930	-0.006	1.151	5715419	2.39		102	6693	
349.00 > 99.00	1.924	1.930	-0.006	1.151	2110213		2.71(1.36-4.07)	102	2084	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.997	2.003	-0.006	1.000	779751	2.29		91.5	346	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.997	2.003	-0.006	0.776	352025	2.70		108	762	
D 9 13C4-PFHpA										
367.00 > 322.00	2.225	2.227	-0.002	0.865	4193874	2.55		102	5912	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.225	2.228	-0.003	1.000	4504362	2.53		101	823	
363.00 > 169.00	2.225	2.228	-0.003	1.000	1708808		2.64(1.13-3.40)	101	2518	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.234	2.239	-0.005	1.000	5033358	2.15		94.4	2983	
399.00 > 99.00	2.234	2.239	-0.005	1.000	1700813		2.96(1.50-4.49)	94.4	1217	
D 11 18O2 PFHxS										
403.00 > 84.00	2.234	2.239	-0.005	0.868	5111206	2.42		102	4580	
65 ADONA										
377.00 > 251.00	2.267	2.271	-0.004	0.771	11980639	2.59		104	8272	
377.00 > 85.00	2.267	2.271	-0.004	0.771	7225332		1.66(0.84-2.53)	104	5651	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.542	2.548	-0.006	1.000	1272183	2.30		97.0	1798	
D 12 M2-6:2FTS										
429.00 > 81.00	2.542	2.549	-0.007	0.988	835688	2.41		102	2359	
D 73 13C8 PFOA										
421.00 > 376.00	2.567	2.571	-0.004	0.997	7486707	2.51		103	12368	
D 14 13C4 PFOA										
417.00 > 372.00	2.574	2.573	0.001	1.000	3832692	2.54		101	8027	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.574	2.574	0.0	1.000	4208258	2.43		97.0	382	
413.00 > 169.00	2.574	2.574	0.0	1.000	2127673		1.98(0.84-2.52)	97.0	2867	
* 62 13C2-PFOA										
415.00 > 370.00	2.574	2.575	-0.001		3866051	2.50			7379	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.002	0.878	4278634	2.42		102	4054	
449.00 > 99.00	2.581	2.583	-0.002	0.878	1138164		3.76(1.94-5.82)	102	1763	
D 72 13C8 PFOS										
507.00 > 99.00	2.939	2.938	0.001	1.142	1644552	2.44		102	3344	
D 18 13C4 PFOS										
503.00 > 80.00	2.939	2.939	0.0	1.142	3404908	2.45		103	4842	
D 19 13C5 PFNA										
468.00 > 423.00	2.939	2.939	0.0	1.142	3527035	2.60		104	6184	
20 Perfluorononanoic acid										
463.00 > 419.00	2.939	2.939	0.0	1.000	3614991	2.43		97.3	1002	
463.00 > 169.00	2.939	2.939	0.0	1.000	865774		4.18(1.90-5.69)	97.3	3370	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.939	2.940	-0.001	1.000	3462772	2.26		97.6	2634	
499.00 > 99.00	2.939	2.940	-0.001	1.000	797490		4.34(2.31-6.93)	97.6	1200	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.147	3.150	-0.003	1.071	5895997	2.38		102	4521	
D 26 M2-8:2FTS										
529.00 > 81.00	3.285	3.284	0.001	1.276	1039099	2.48		104	4478	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.285	3.285	0.001	1.118	2589883	2.42		101	3256	
549.00 > 99.00	3.285	3.285	0.001	1.118	921596		2.81(1.33-3.97)	101	2355	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.285	3.286	-0.001	1.000	1315230	2.33		97.4	3552	
D 23 13C2 PFDA										
515.00 > 470.00	3.292	3.294	-0.002	1.279	3093053	2.60		104	7014	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.292	3.296	-0.004	1.000	3015215	2.43		97.2	1428	
513.00 > 169.00	3.299	3.296	0.003	1.002	521331		5.78(2.36-7.09)	97.2	351	
D 21 13C8 FOSA										
506.00 > 78.00	3.321	3.317	0.004	1.290	4593505	2.50		100.0	4893	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.321	3.319	0.002	1.000	4680280	2.62		105	6720	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.339	1601576	2.63		105	3113	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.454	3.453	0.001	1.002	1493989	2.42		96.7	1186	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.606	3.608	-0.002	1.227	2214864	2.46		102	4654	
599.00 > 99.00	3.606	3.608	-0.002	1.227	732667		3.02(1.39-4.16)	102	3079	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.615	3.616	-0.001	1.405	1595779	2.53		101	1266	
D 30 13C2 PFUnA										
565.00 > 520.00	3.622	3.620	0.002	1.407	2527555	2.64		106	4544	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.622	3.622	0.0	1.000	2714159	2.39		95.6	1491	
563.00 > 169.00	3.622	3.622	0.0	1.000	457550		5.93(2.12-6.36)	95.6	2345	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.622	3.623	-0.001	1.002	1366918	2.40		96.1	2485	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.777	3.781	-0.004	1.285	9579999	2.52		107	13064	
35 MeFOSA										
512.00 > 169.00	3.827	3.826	0.001		1352810	NC			1222	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.913	3.913	0.0	1.000	2903966	2.45		97.8	1268	
613.00 > 169.00	3.913	3.913	0.0	1.000	683851		4.25(2.13-6.40)	97.8	2694	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.913	3.913	0.0	1.191	940315	2.41		99.8	5393	
D 36 13C2 PFDoA										
615.00 > 570.00	3.913	3.913	0.0	1.520	2668181	2.64		106	5732	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.144	4.148	-0.004	1.410	961771	2.43		100	3921	
699.00 > 99.00	4.144	4.148	-0.004	1.410	1365105		0.70(0.00-0.00)	100	3564	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.173	4.173	0.0	1.066	2849697	2.48		99.3	1172	
663.00 > 169.00	4.173	4.173	0.0	1.066	828238		3.44(1.25-3.76)	99.3	3194	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.395	4.399	-0.004	1.708	3233399	2.51		100	5729	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.395	4.400	-0.005	1.000	779223	2.49		99.6	2925	
713.00 > 219.00	4.395	4.400	-0.005	1.000	544891		1.43(0.71-2.13)	99.6	5524	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.794	4.799	-0.005	1.863	6396595	2.50		100	7999	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.794	4.801	-0.007	1.000	5763175	2.56		103	2066	
813.00 > 169.00	4.794	4.801	-0.007	1.000	944162		6.10(2.86-8.58)	103	4213	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.131	5.136	-0.005	1.070	6077489	2.58		103	1462	
913.00 > 169.00	5.131	5.136	-0.005	1.070	729623		8.33(3.83-11.48)	103	3111	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_006.d

Injection Date: 06-Aug-2018 11:41:23 Instrument ID: A8_N

Lims ID: IC L5 Full

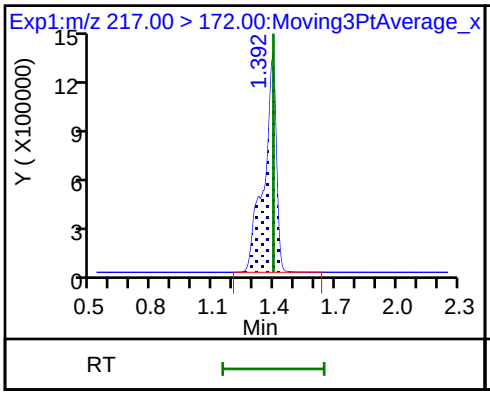
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 14 Worklist Smp#: 6

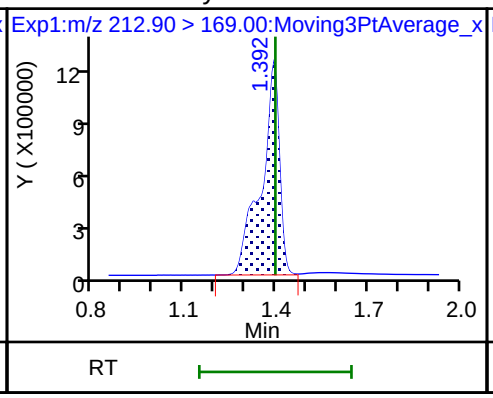
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

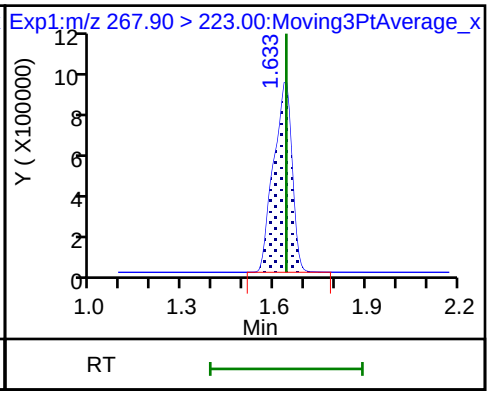
D 1 13C4 PFBA



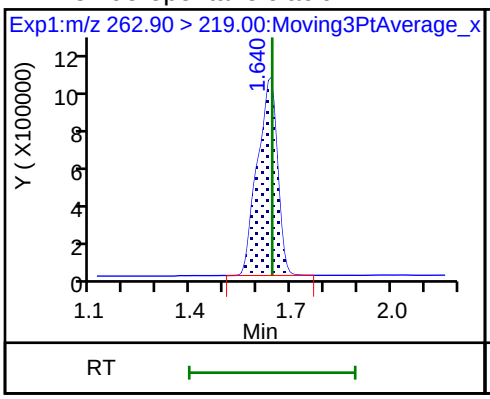
2 Perfluorobutyric acid



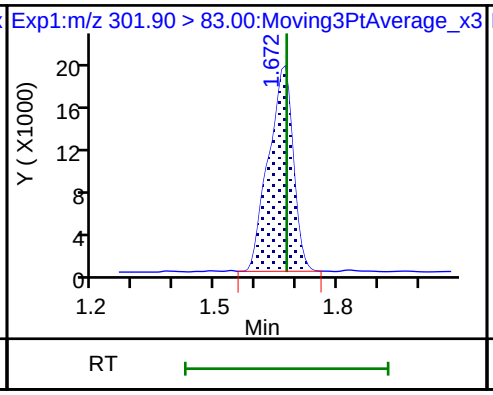
D 3 13C5-PFPeA



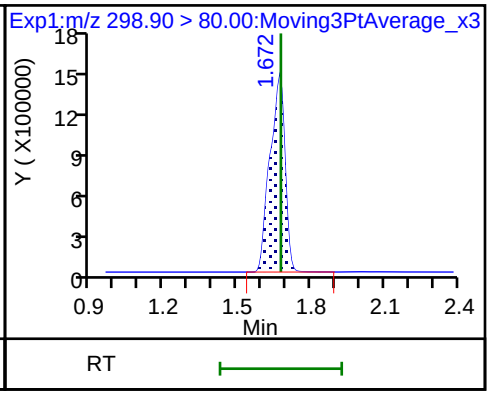
4 Perfluoropentanoic acid



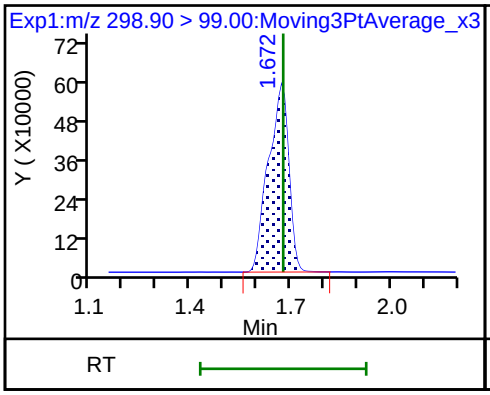
D 47 13C3-PFBS



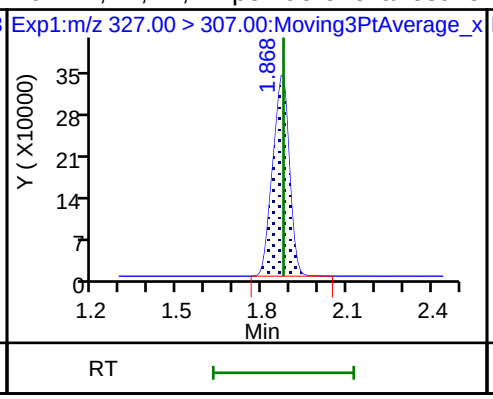
5 Perfluorobutanesulfonic acid



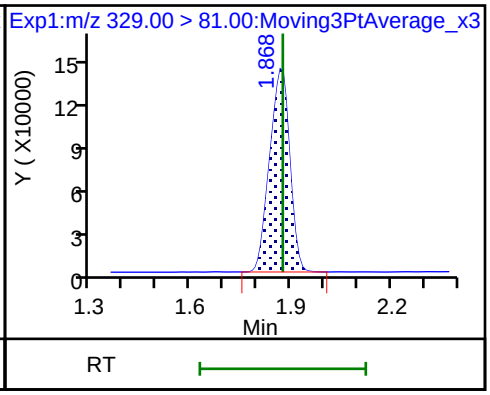
5 Perfluorobutanesulfonic acid



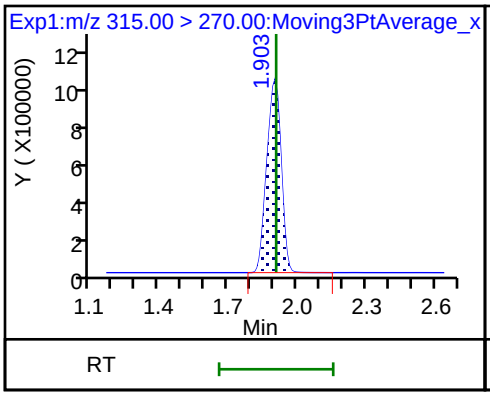
61 1H,1H,2H,2H-perfluorohexanesulfon



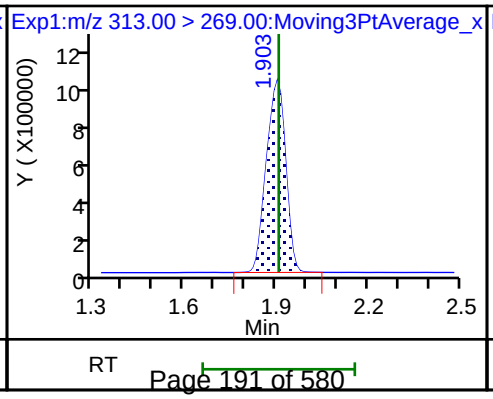
D 60 M2-4:2FTS



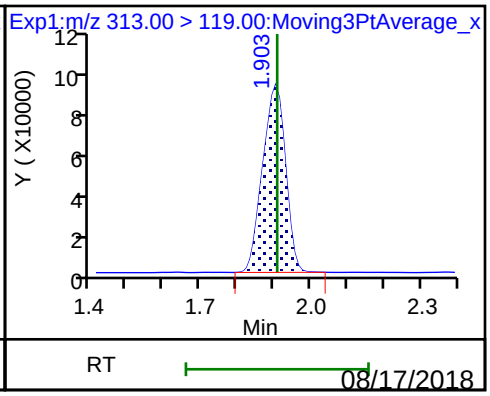
D 7 13C2 PFHxA



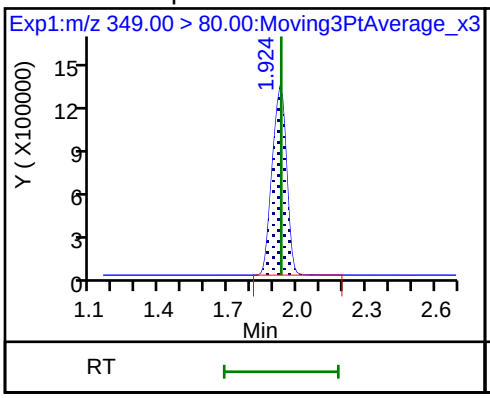
6 Perfluorohexanoic acid



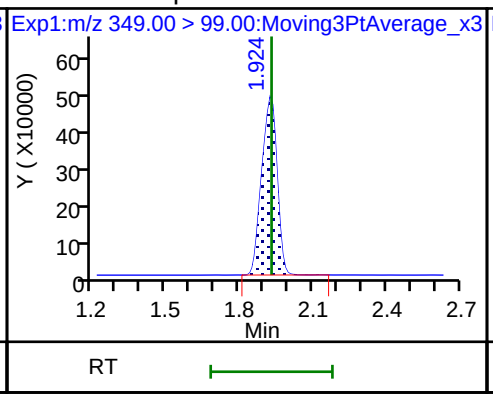
6 Perfluorohexanoic acid



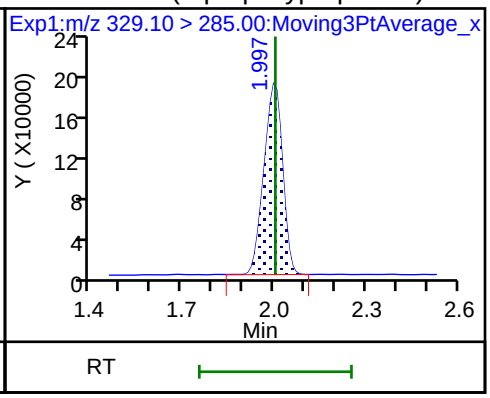
70 Perfluoropentanesulfonic acid



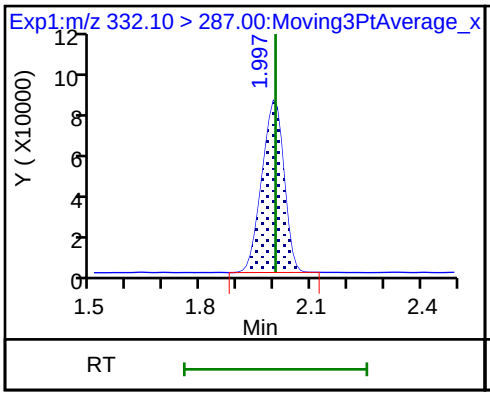
70 Perfluoropentanesulfonic acid



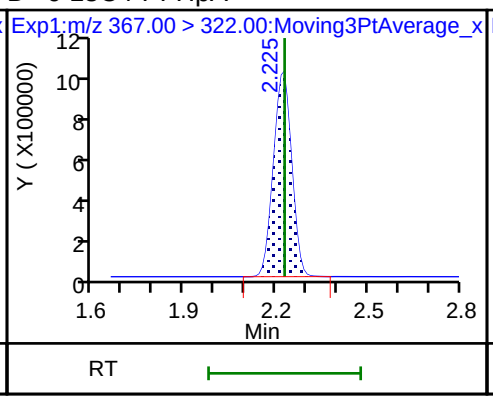
67 Perfluoro(2-propoxypropanoic) acid



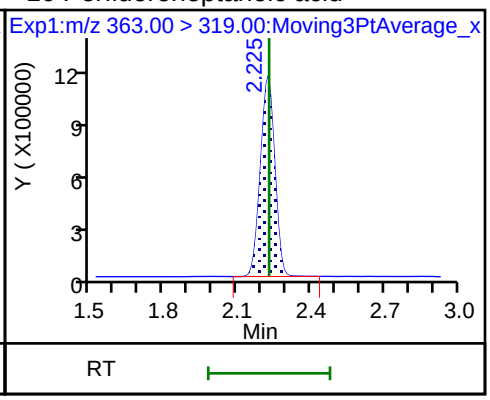
D 64 13C3 HFPO-DA



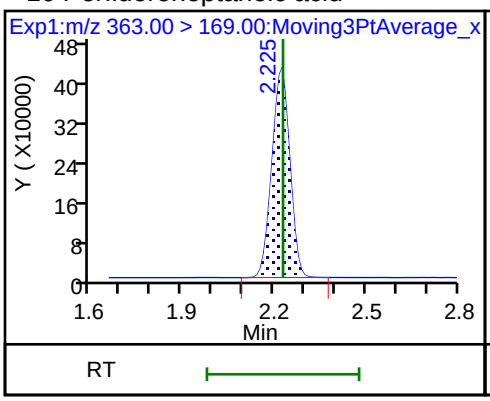
D 9 13C4-PFHpA



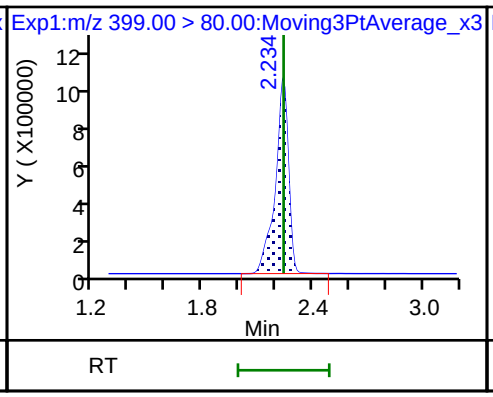
10 Perfluoroheptanoic acid



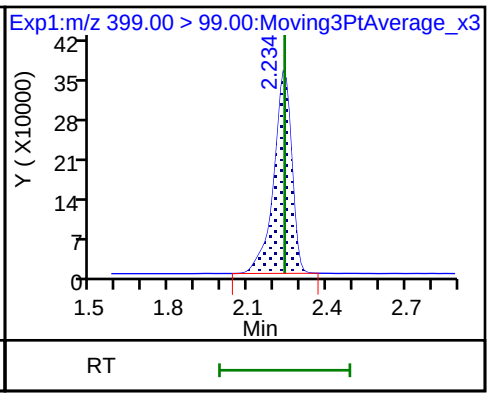
10 Perfluoroheptanoic acid



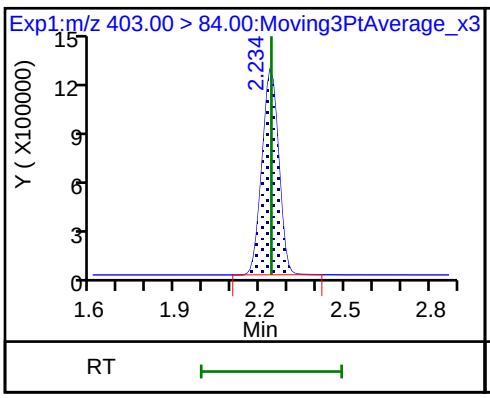
8 Perfluorohexanesulfonic acid



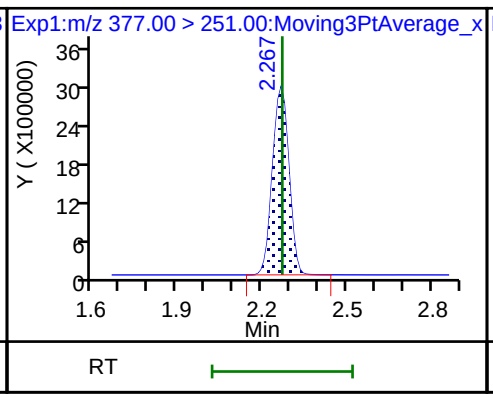
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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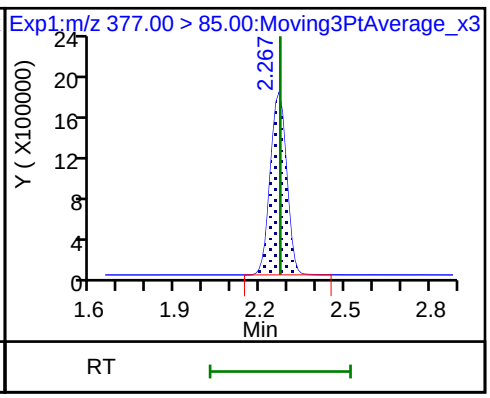
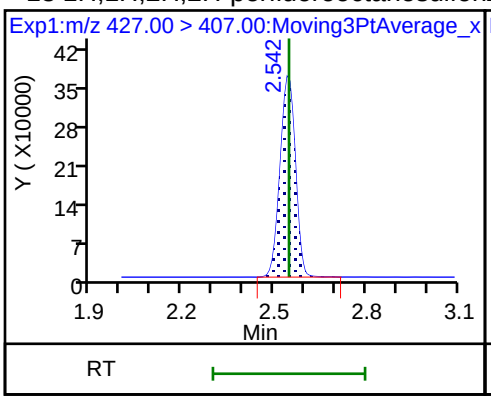
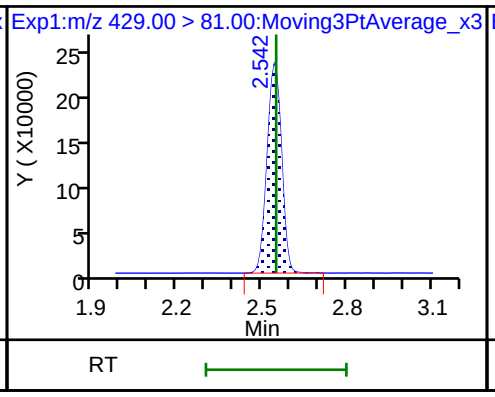
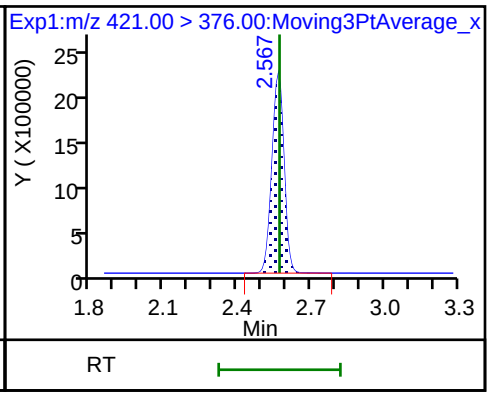


13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS





D 73 13C8 PFOA



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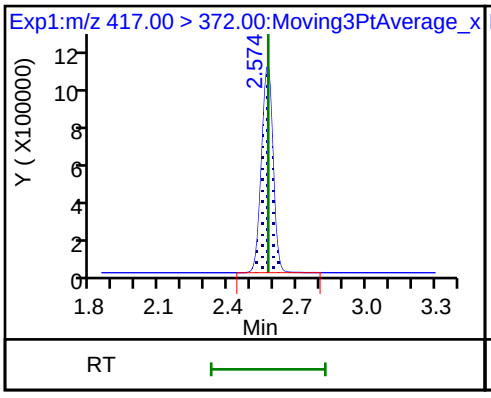
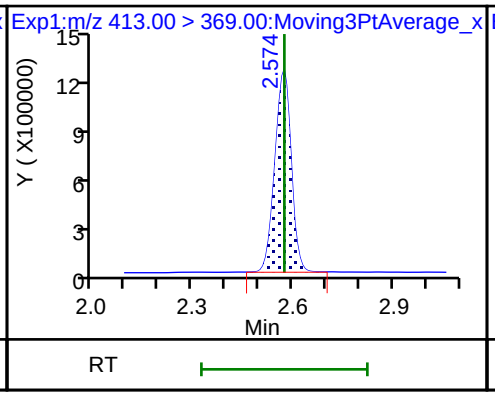
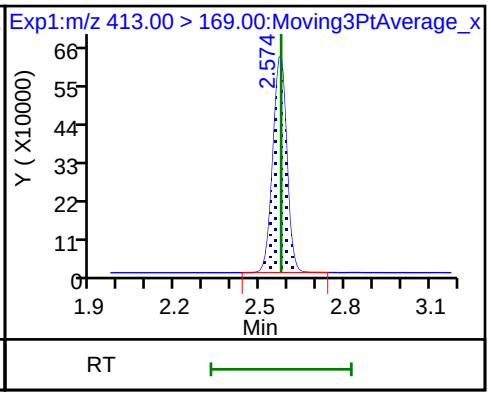


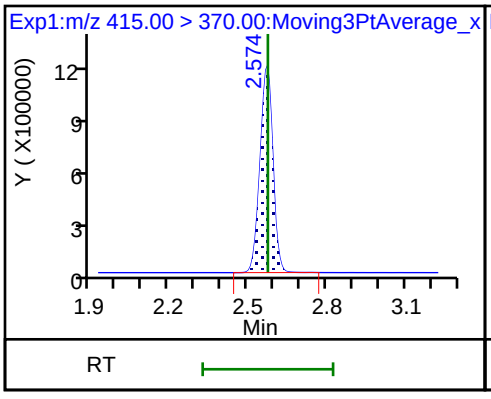
15 Perfluorooctanoic acid



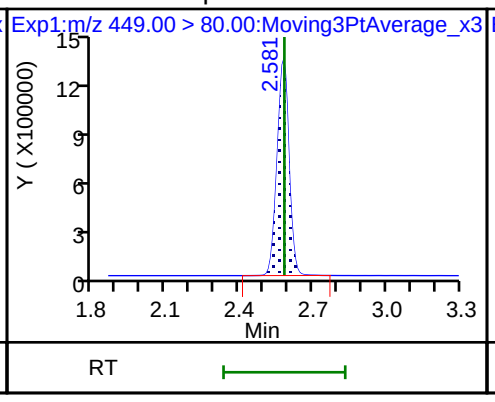
15 Perfluorooctanoic acid



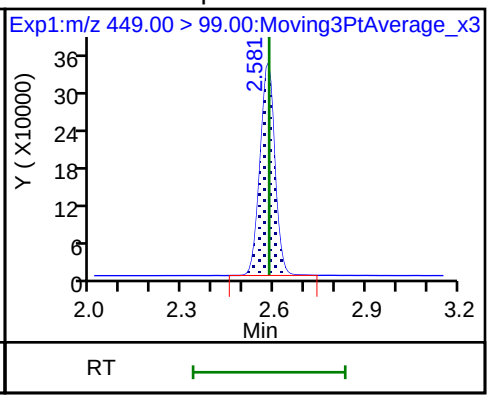
* 62 13C2-PFOA



16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



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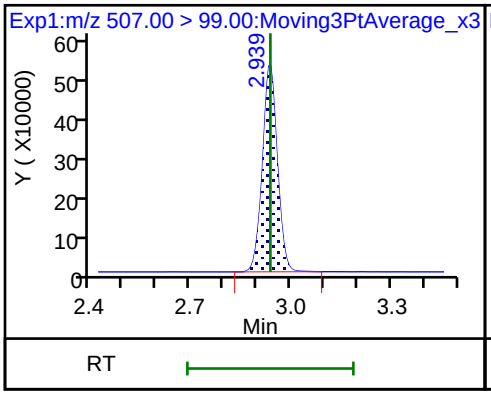

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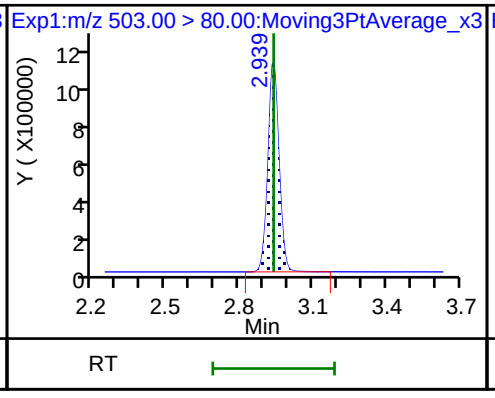

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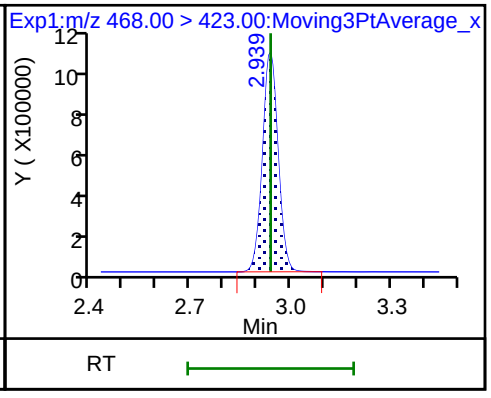
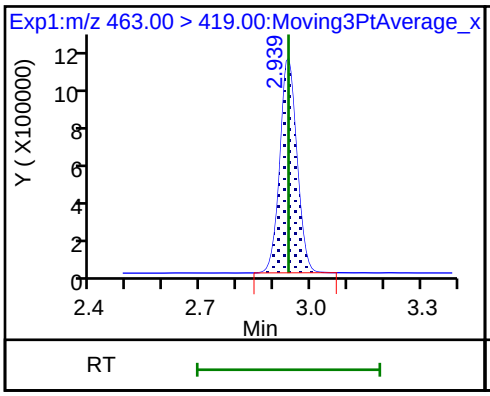
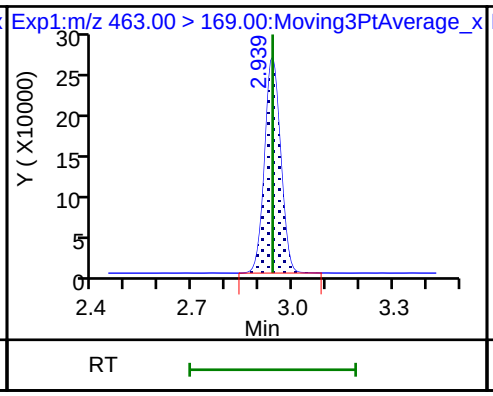


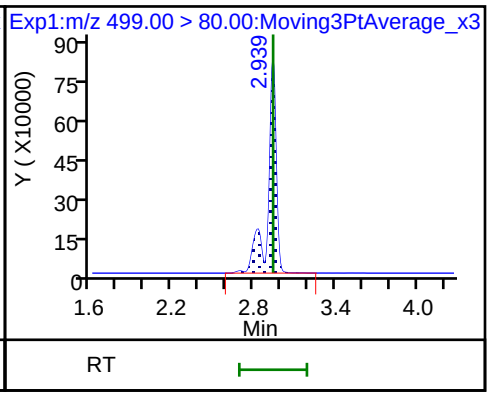
20 Perfluorononanoic acid



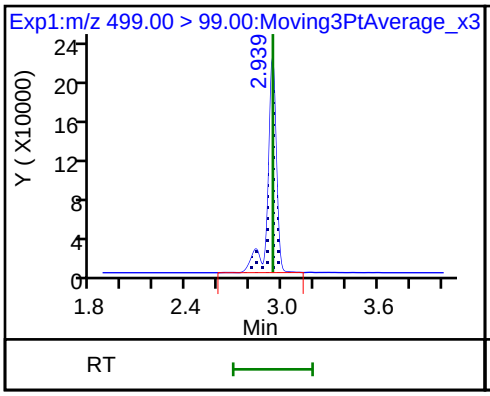
20 Perfluorononanoic acid



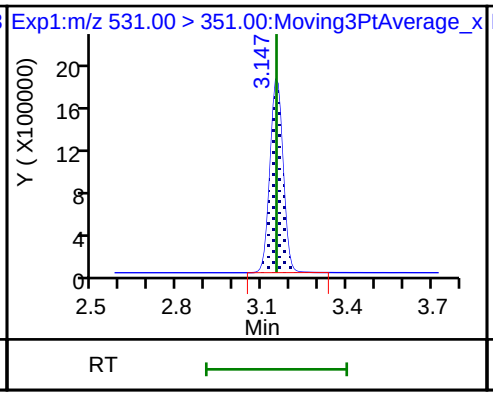
17 Perfluorooctane sulfonic acid



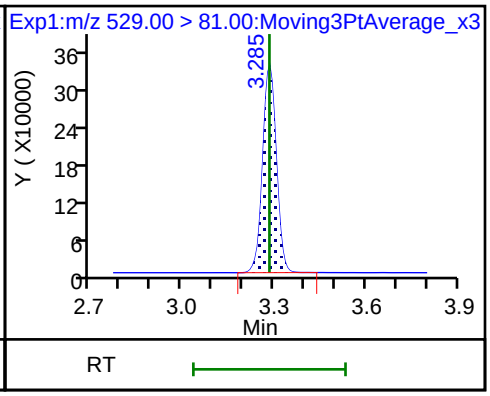
17 Perfluorooctane sulfonic acid



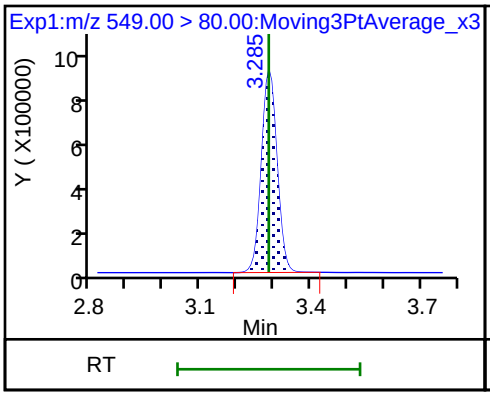
69 9-Chlorohexadecafluoro-3-oxanonane



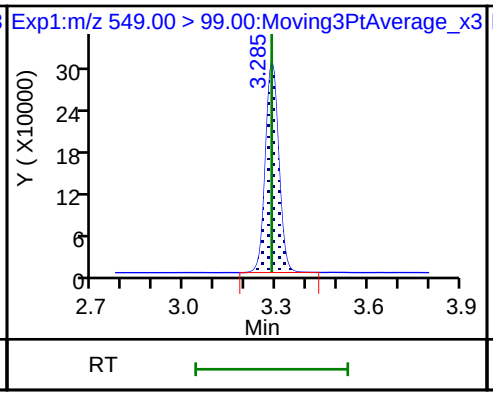
D 26 M2-8:2FTS



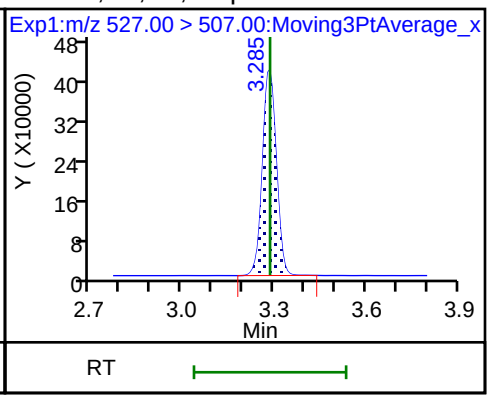
68 Perfluorononanesulfonic acid



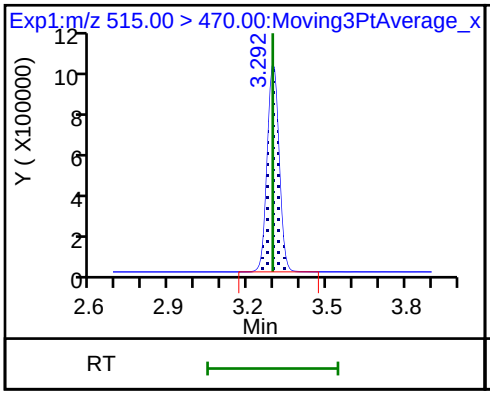
68 Perfluorononanesulfonic acid



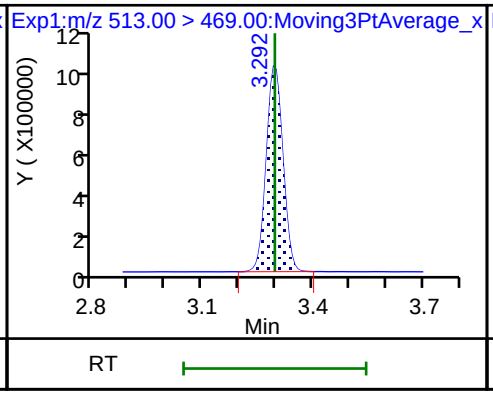
25 1H,1H,2H,2H-perfluorodecanesulfoni



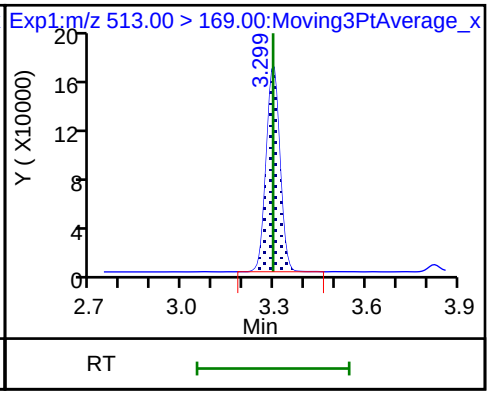
D 23 13C2 PFDA



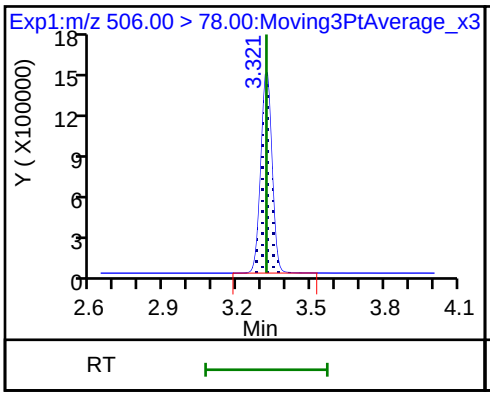
24 Perfluorodecanoic acid



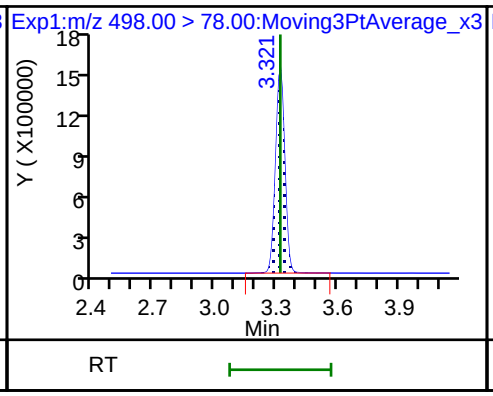
24 Perfluorodecanoic acid



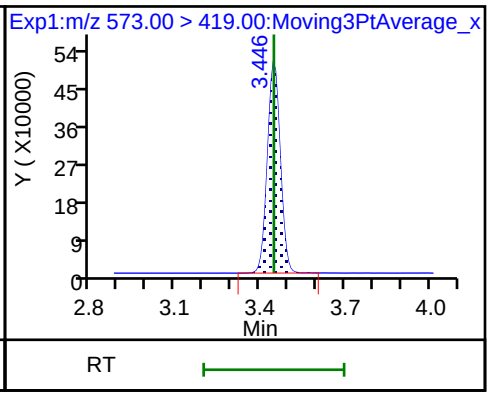
D 21 13C8 FOSA



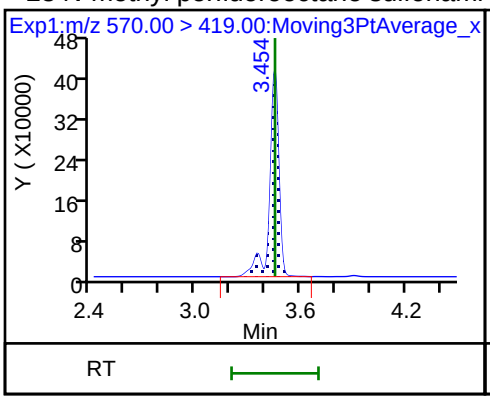
22 Perfluorooctane Sulfonamide



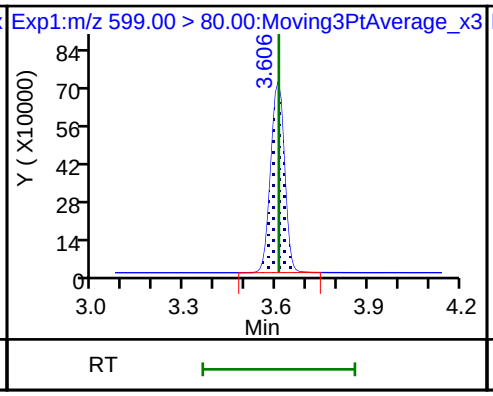
D 27 d3-NMeFOSAA



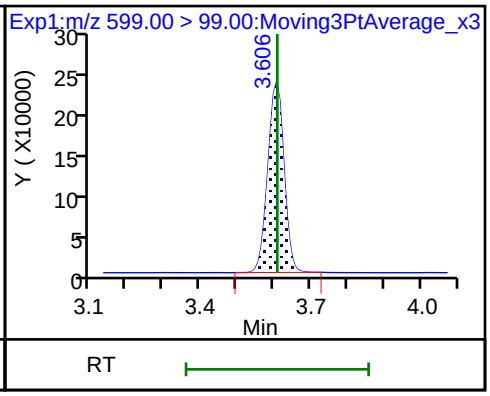
28 N-methyl perfluorooctane sulfonami



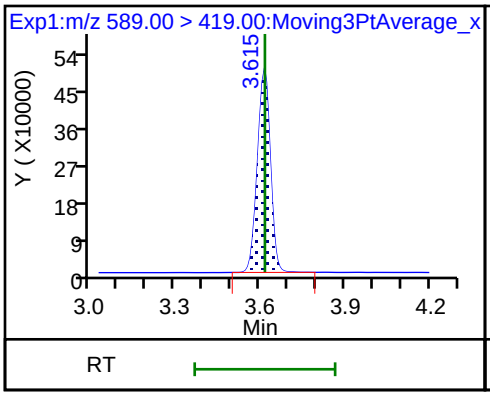
29 Perfluorodecane Sulfonic acid



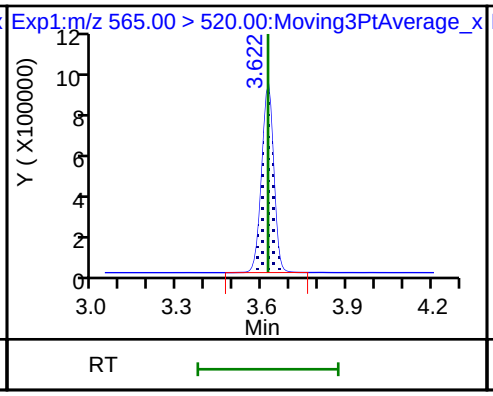
29 Perfluorodecane Sulfonic acid



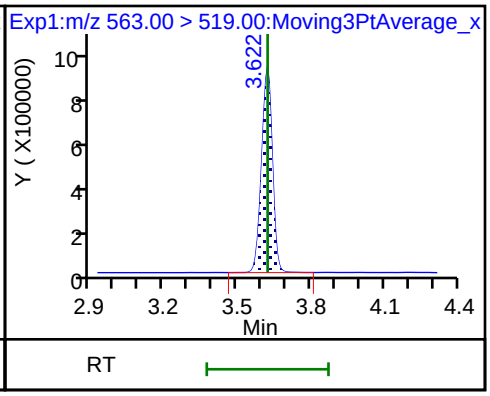
D 32 d5-NEtFOSAA



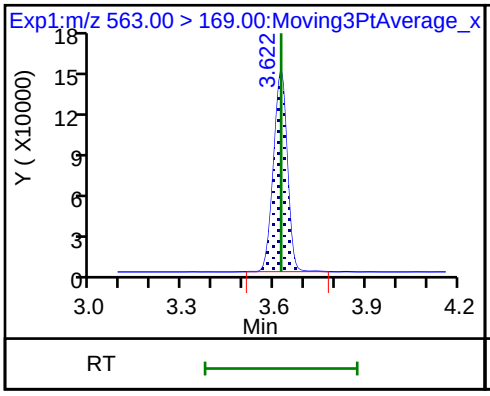
D 30 13C2 PFUnA



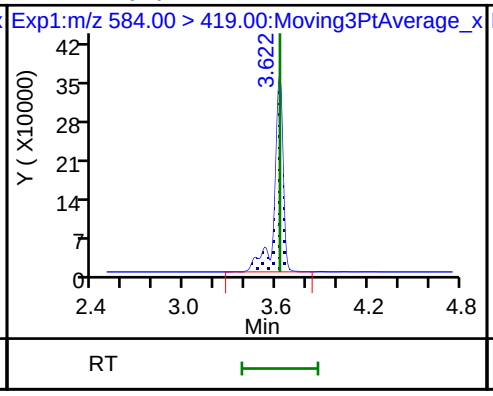
31 Perfluoroundecanoic acid



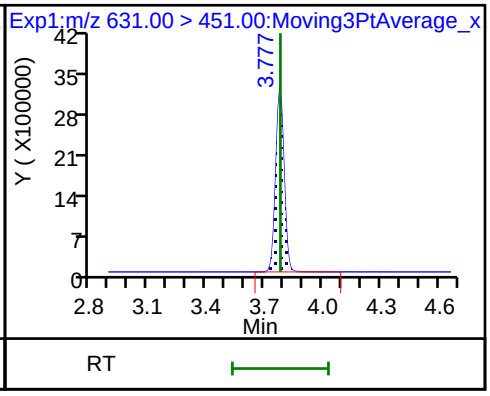
31 Perfluoroundecanoic acid



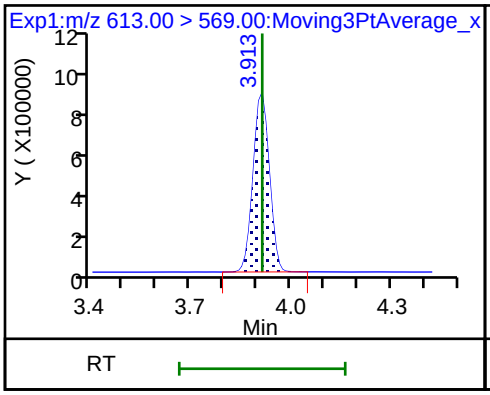
33 N-ethyl perfluorooctane sulfonamid



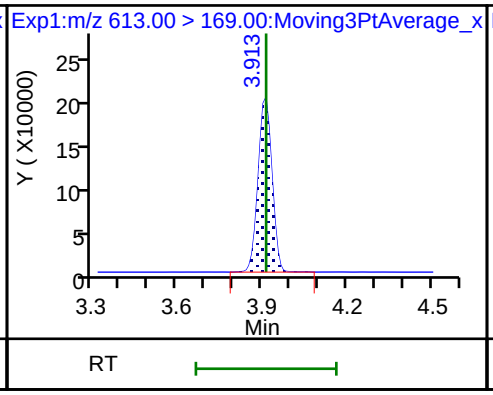
66 11-Chloroeicosafluoro-3-oxaundecan



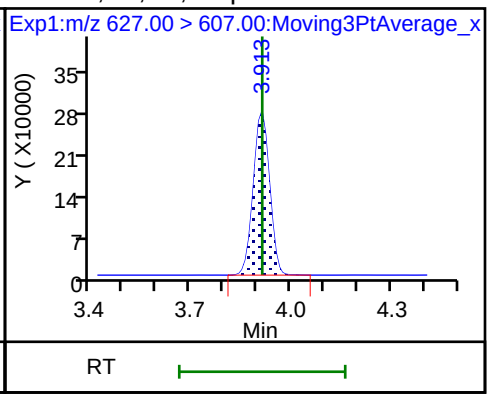
37 Perfluorododecanoic acid



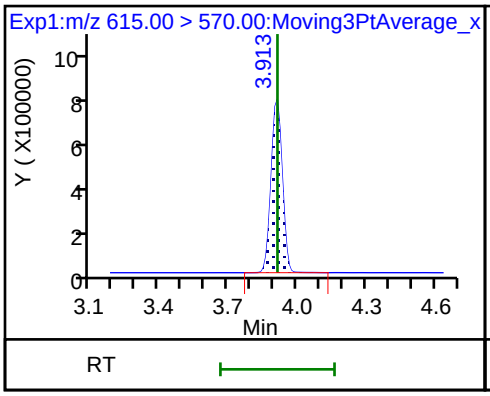
37 Perfluorododecanoic acid



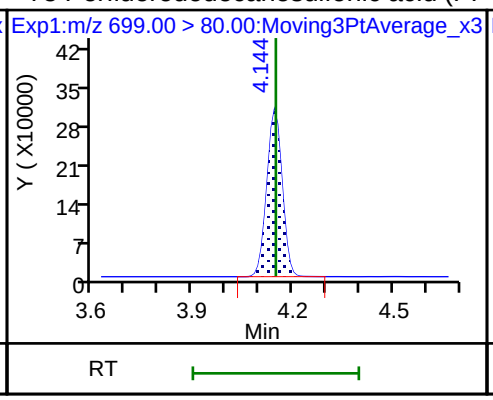
74 1H,1H,2H,2H-perfluorododecanesulfo



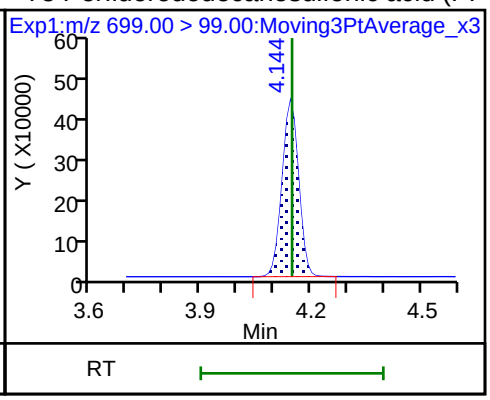
D 36 13C2 PFDoA



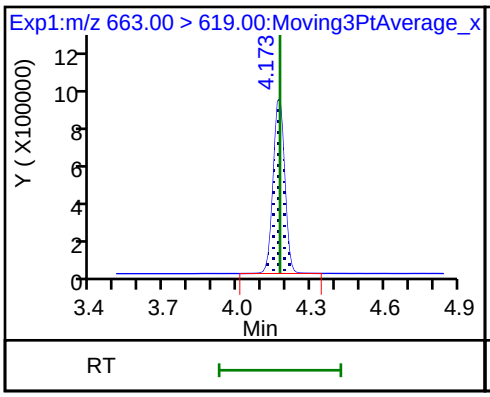
75 Perfluorododecanesulfonic acid (PF



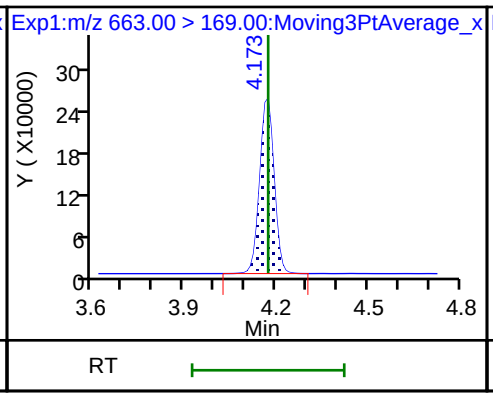
75 Perfluorododecanesulfonic acid (PF



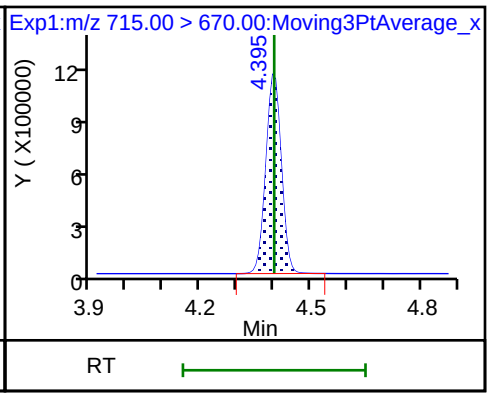
41 Perfluorotridecanoic acid



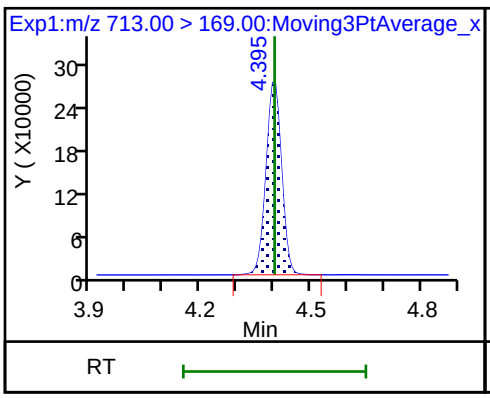
41 Perfluorotridecanoic acid



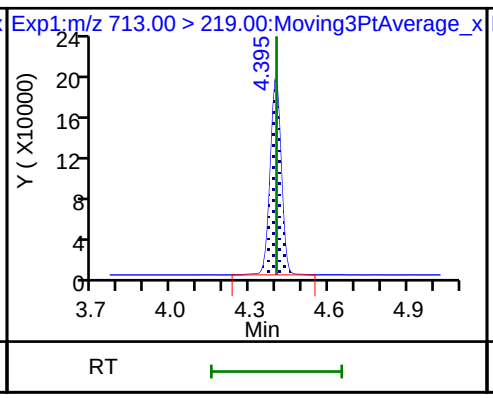
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



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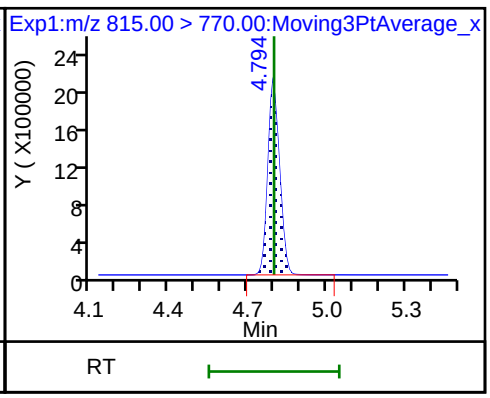
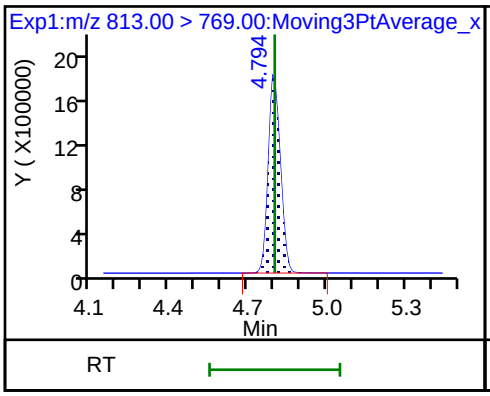
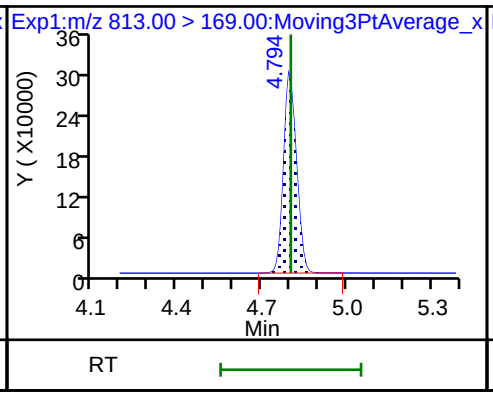


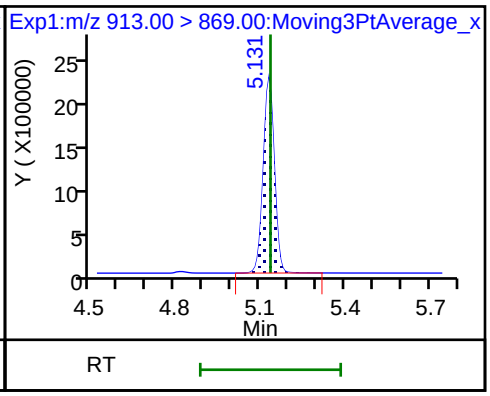
45 Perfluorohexadecanoic acid



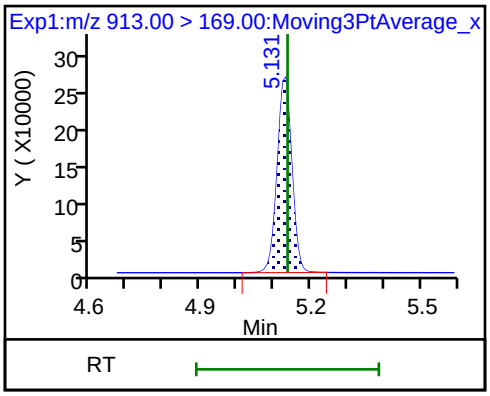
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_007.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Aug-2018 11:49:11 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L6-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:22 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:40:35

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.394	1.395	-0.001	0.541	5693569	2.54		102	7704	
2 Perfluorobutyric acid										
212.90 > 169.00	1.394	1.397	-0.003	1.000	10686384	5.00		100.0	1220	
D 3 13C5-PFPeA										
267.90 > 223.00	1.636	1.639	-0.003	0.636	3917323	2.54		102	8427	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.643	1.643	0.0	1.005	8717868	4.89		97.8	602	
D 47 13C3-PFBS										
301.90 > 83.00	1.676	1.675	0.001	0.651	81531	2.28		98.2	279	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.676	1.676	0.0	1.000	12353528	4.64		105	4081	
298.90 > 99.00	1.676	1.676	0.0	1.000	5231288		2.36(1.25-3.74)	105	2506	
D 60 M2-4:2FTS										
329.00 > 81.00	1.872	1.875	-0.003	0.727	609022	2.39		103	998	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.872	1.875	-0.003	1.117	2687262	4.62		99.0	10818	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.907	1.908	-0.001	1.000	8802526	4.98		99.5	1994	
313.00 > 119.00	1.907	1.908	-0.001	1.000	793855		11.09(5.03-15.10)	99.5	1839	
D 7 13C2 PFHxA										
315.00 > 270.00	1.907	1.908	-0.001	0.741	4333101	2.47		99.0	9810	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.928	1.930	-0.002	1.151	11938702	4.94		105	10425	
349.00 > 99.00	1.928	1.930	-0.002	1.151	4318494		2.76(1.36-4.07)	105	3576	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.001	2.003	-0.002	0.777	336215	2.47		98.7	800	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.001	2.003	-0.002	1.000	1620535	4.98		99.6	795	
D 9 13C4-PFHpA										
367.00 > 322.00	2.227	2.227	0.0	0.865	4351928	2.52		101	6506	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.227	2.228	-0.001	1.000	9106263	4.93		98.5	1787	
363.00 > 169.00	2.227	2.228	-0.001	1.000	3813206		2.39(1.13-3.40)	98.5	5503	
D 11 18O2 PFHxS										
403.00 > 84.00	2.236	2.239	-0.003	0.869	5234562	2.37		100	5690	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.236	2.239	-0.003	1.000	10391537	4.33		95.2	4424	
399.00 > 99.00	2.236	2.239	-0.003	1.000	3502068		2.97(1.50-4.49)	95.2	2351	
65 ADONA										
377.00 > 251.00	2.269	2.271	-0.002	0.774	22851214	4.85		97.0	14304	
377.00 > 85.00	2.269	2.271	-0.002	0.774	14239580		1.60(0.84-2.53)	97.0	11126	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.544	2.548	-0.004	1.000	2696182	4.73		99.9	2996	
D 12 M2-6:2FTS										
429.00 > 81.00	2.544	2.549	-0.005	0.988	859900	2.37		99.8	3069	
D 73 13C8 PFOA										
421.00 > 376.00	2.568	2.571	-0.003	0.997	7461246	2.39		97.7	9011	
D 14 13C4 PFOA										
417.00 > 372.00	2.568	2.573	-0.005	0.997	3963063	2.51		100	5629	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.568	2.574	-0.006	1.000	8637324	4.82		96.3	834	
413.00 > 169.00	2.574	2.574	0.0	1.003	4333301		1.99(0.84-2.52)	96.3	3910	
* 62 13C2-PFOA										
415.00 > 370.00	2.574	2.575	-0.001		4046341	2.50			5779	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.002	0.880	8721667	4.85		102	5365	
449.00 > 99.00	2.581	2.583	-0.002	0.880	2296888		3.80(1.94-5.82)	102	2733	
D 72 13C8 PFOS										
507.00 > 99.00	2.933	2.938	-0.005	1.139	1714648	2.43		102	3239	
20 Perfluorononanoic acid										
463.00 > 419.00	2.933	2.939	-0.006	1.000	7475851	5.13		103	1834	
463.00 > 169.00	2.933	2.939	-0.006	1.000	1732734		4.31(1.90-5.69)	103	4946	
D 19 13C5 PFNA										
468.00 > 423.00	2.933	2.939	-0.006	1.139	3461355	2.44		97.5	7405	
D 18 13C4 PFOS										
503.00 > 80.00	2.933	2.939	-0.006	1.139	3471061	2.39		100	4088	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.933	2.940	-0.007	1.000	7339820	4.71		101	4397	
499.00 > 99.00	2.933	2.940	-0.007	1.000	1648492		4.45(2.31-6.93)	101	2215	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.147	3.150	-0.003	1.073	11940295	4.72		101	9089	
D 26 M2-8:2FTS										
529.00 > 81.00	3.278	3.284	-0.006	1.273	1052330	2.40		100	2990	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.278	3.285	-0.006	1.118	5361178	4.91		102	6489	
549.00 > 99.00	3.278	3.285	-0.006	1.118	1913317		2.80(1.33-3.97)	102	4125	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.278	3.286	-0.008	1.000	2679186	4.69		98.0	7666	
D 23 13C2 PFDA										
515.00 > 470.00	3.291	3.294	-0.003	1.279	3159574	2.54		101	5723	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.291	3.296	-0.005	1.000	6298810	4.97		99.4	3082	
513.00 > 169.00	3.291	3.296	-0.005	1.000	1066541		5.91(2.36-7.09)	99.4	375	
D 21 13C8 FOSA										
506.00 > 78.00	3.313	3.317	-0.004	1.287	4781606	2.49		99.4	7259	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.313	3.319	-0.006	1.000	9594151	5.15		103	5632	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.338	1562466	2.45		98.1	3298	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.446	3.453	-0.007	1.000	3073336	5.10		102	1851	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.605	3.608	-0.003	1.229	4472904	4.87		101	6207	
599.00 > 99.00	3.605	3.608	-0.003	1.229	1485053		3.01(1.39-4.16)	101	3079	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.614	3.616	-0.002	1.404	1597197	2.42		96.8	1213	
D 30 13C2 PFUnA										
565.00 > 520.00	3.620	3.620	0.0	1.406	2455806	2.45		98.1	4433	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.620	3.622	-0.002	1.000	5365541	4.86		97.2	2645	
563.00 > 169.00	3.620	3.622	-0.002	1.000	966969		5.55(2.12-6.36)	97.2	3828	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.620	3.623	-0.003	1.002	2815576	4.94		98.8	3781	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.776	3.781	-0.005	1.287	18718037	4.82		102	15847	
35 MeFOSA										
512.00 > 169.00	3.825	3.826	-0.001		2815632	NC			1284	
D 36 13C2 PFDoA										
615.00 > 570.00	3.912	3.913	-0.001	1.519	2627551	2.48		99.3	5544	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.912	3.913	-0.001	1.193	1978025	5.00		104	5592	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.912	3.913	-0.001	1.000	5646629	4.83		96.6	2368	
613.00 > 169.00	3.912	3.913	-0.001	1.000	1341283		4.21(2.13-6.40)	96.6	4604	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.143	4.148	-0.005	1.413	1963594	4.87		101	4220	
699.00 > 99.00	4.143	4.148	-0.005	1.413	2852468		0.69(0.00-0.00)	101	6658	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.172	4.173	-0.001	1.066	5879570	5.20		104	1968	
663.00 > 169.00	4.172	4.173	-0.001	1.066	1735255		3.39(1.25-3.76)	104	3374	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.399	-0.005	1.707	3382019	2.51		100	6979	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.402	4.400	0.002	1.002	1606848	4.91		98.2	5145	
713.00 > 219.00	4.394	4.400	-0.006	1.000	1111841		1.45(0.71-2.13)	98.2	2346	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.800	4.799	0.001	1.864	6730439	2.51		101	7597	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.800	4.801	-0.001	1.000	11833130	5.03		101	3519	
813.00 > 169.00	4.800	4.801	-0.001	1.000	2057982		5.75(2.86-8.58)	101	6089	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.135	5.136	-0.001	1.070	12433827	5.02		100	2663	
913.00 > 169.00	5.128	5.136	-0.008	1.068	1501219		8.28(3.83-11.48)	100	4432	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL6_00007 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_007.d

Injection Date: 06-Aug-2018 11:49:11 Instrument ID: A8_N

Lims ID: IC L6 Full

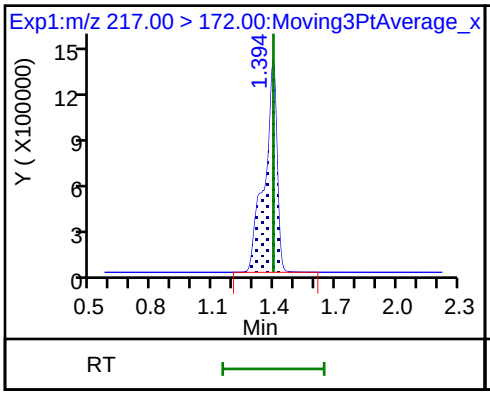
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 15 Worklist Smp#: 7

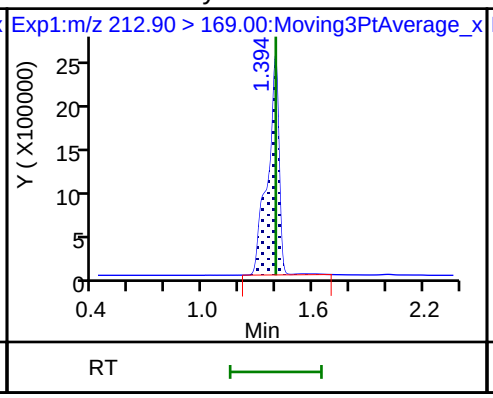
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

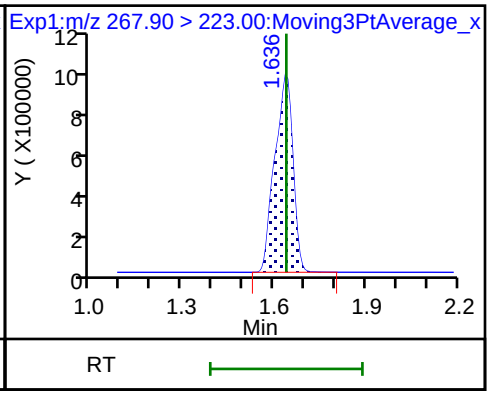
D 1 13C4 PFBA



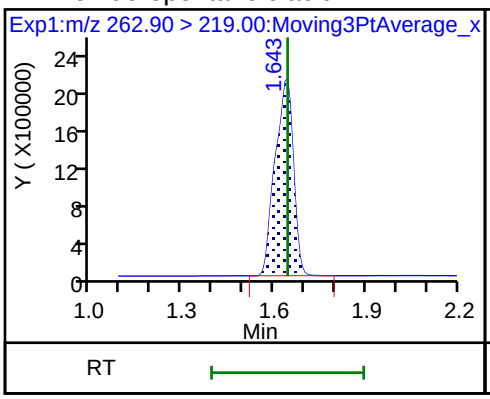
2 Perfluorobutyric acid



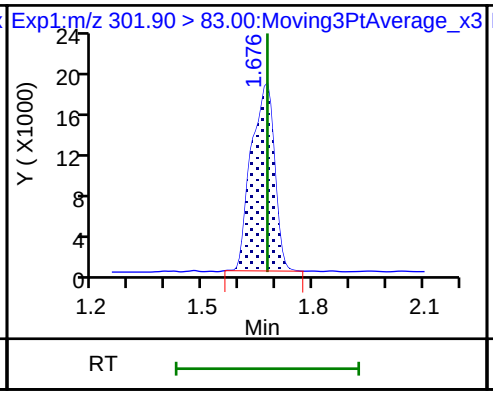
D 3 13C5-PFPeA



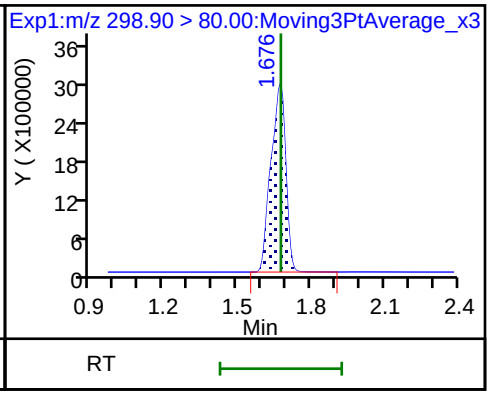
4 Perfluoropentanoic acid



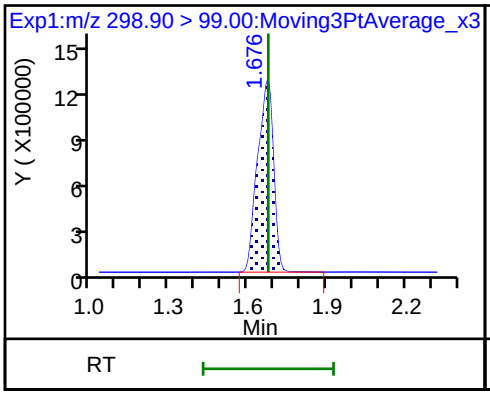
D 47 13C3-PFBS



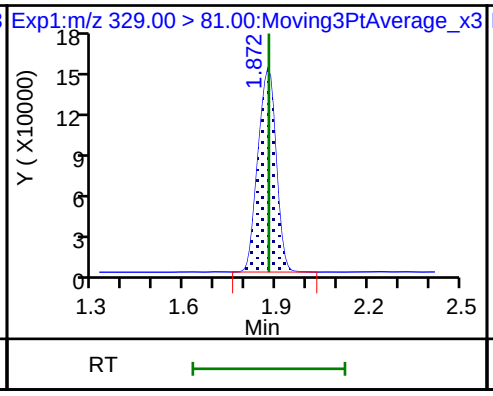
5 Perfluorobutanesulfonic acid



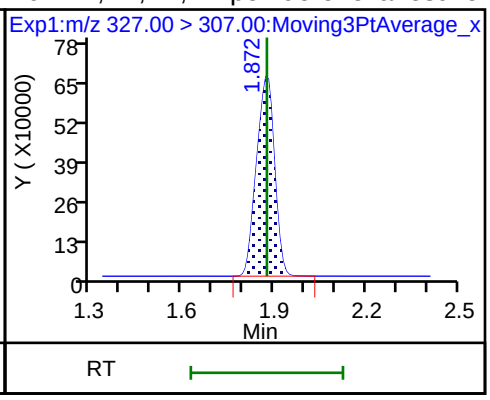
5 Perfluorobutanesulfonic acid



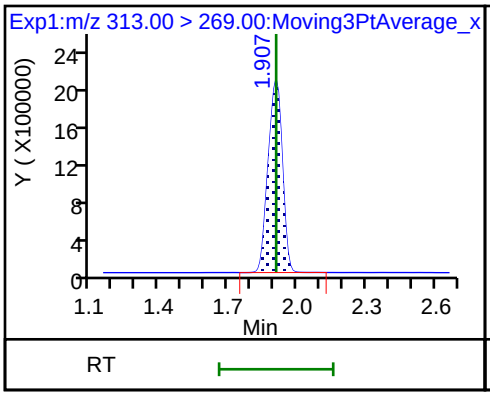
D 60 M2-4:2FTS



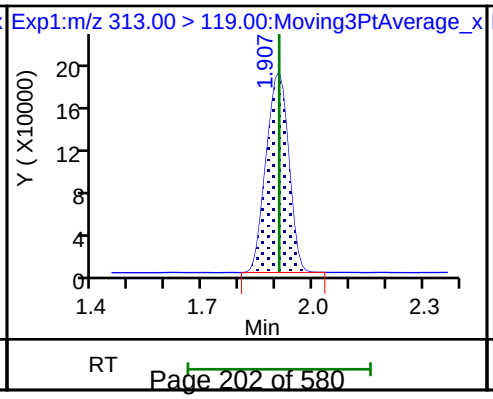
61 1H,1H,2H,2H-perfluorohexanesulfoni



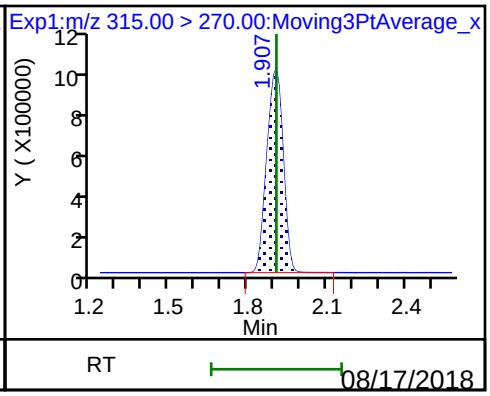
6 Perfluorohexanoic acid



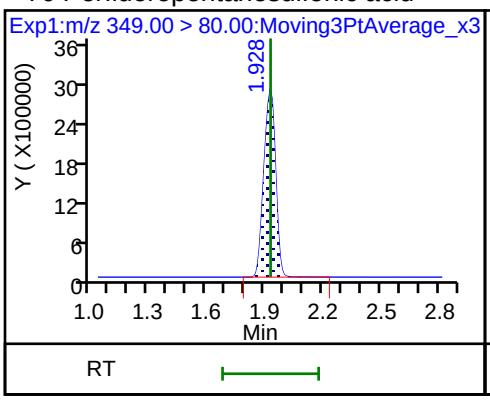
6 Perfluorohexanoic acid



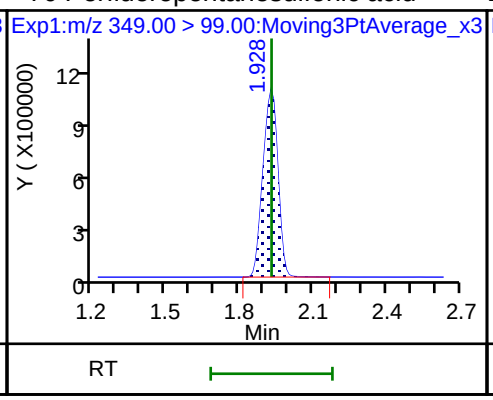
D 7 13C2 PFHxA



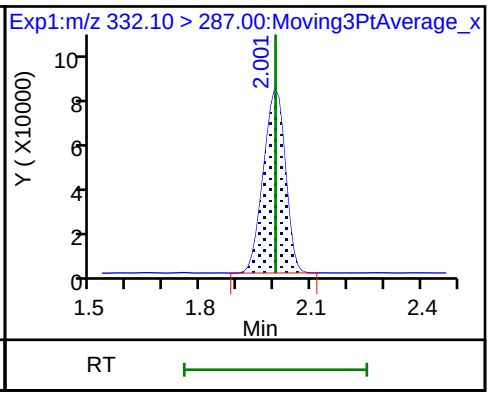
70 Perfluoropentanesulfonic acid



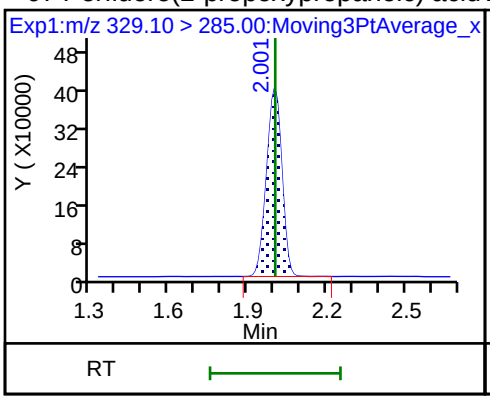
70 Perfluoropentanesulfonic acid



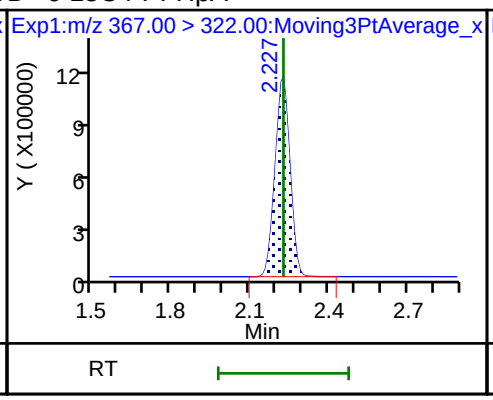
D 64 13C3 HFPO-DA



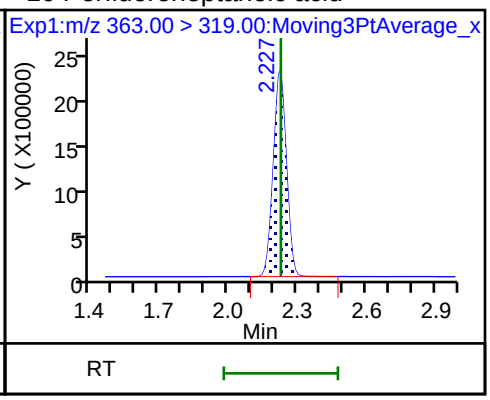
67 Perfluoro(2-propoxypropanoic) acid



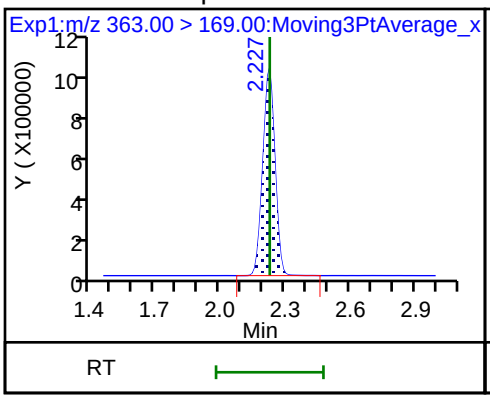
D 9 13C4-PFHpA



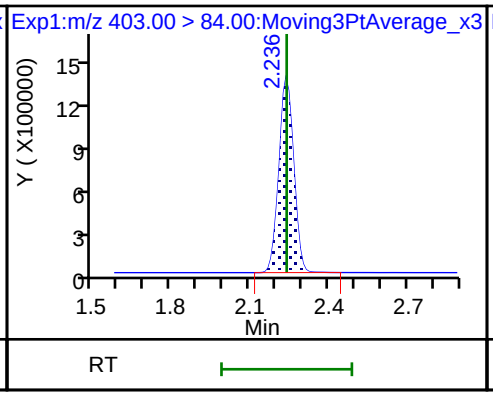
10 Perfluoroheptanoic acid



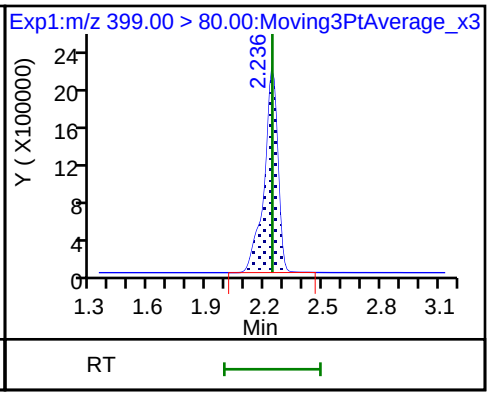
10 Perfluoroheptanoic acid



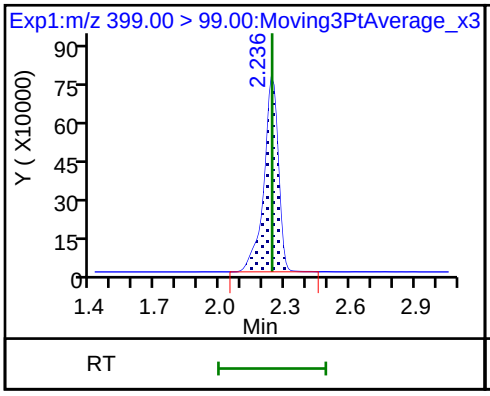
D 11 18O2 PFHxS



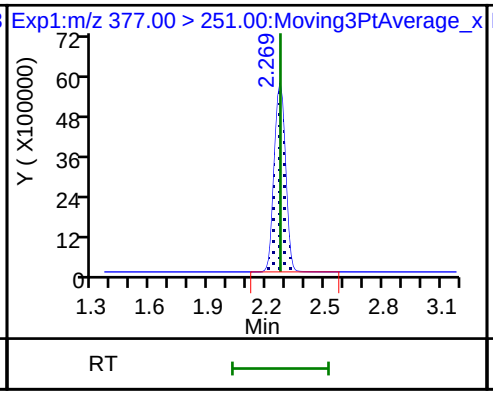
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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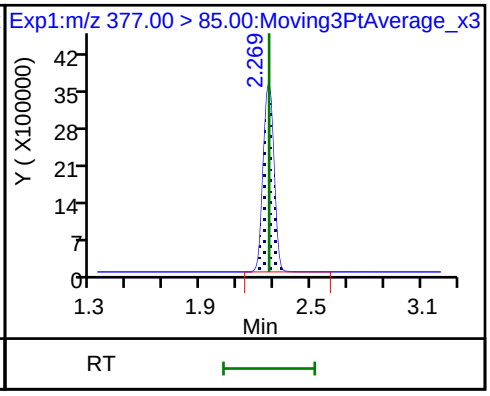
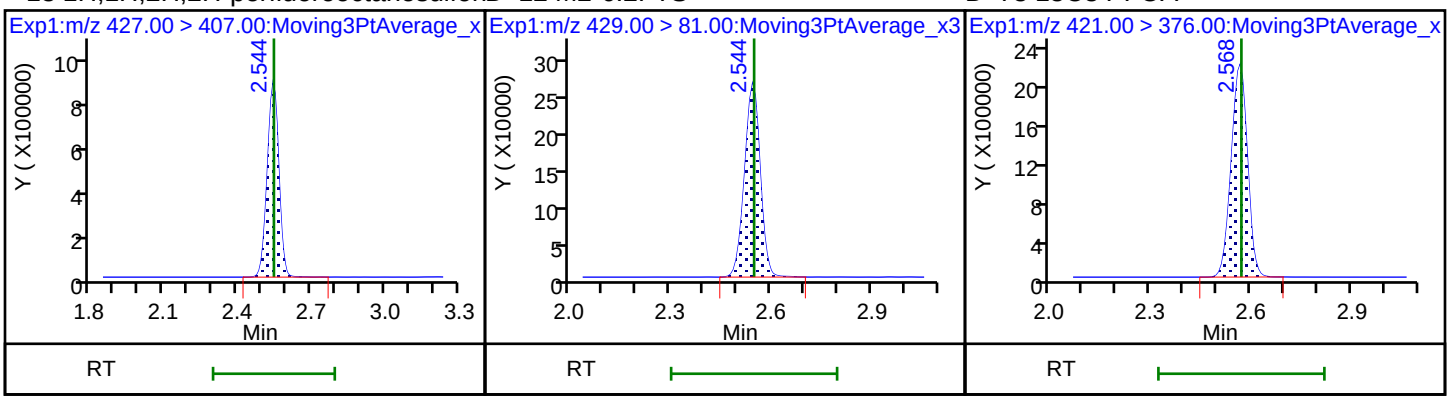
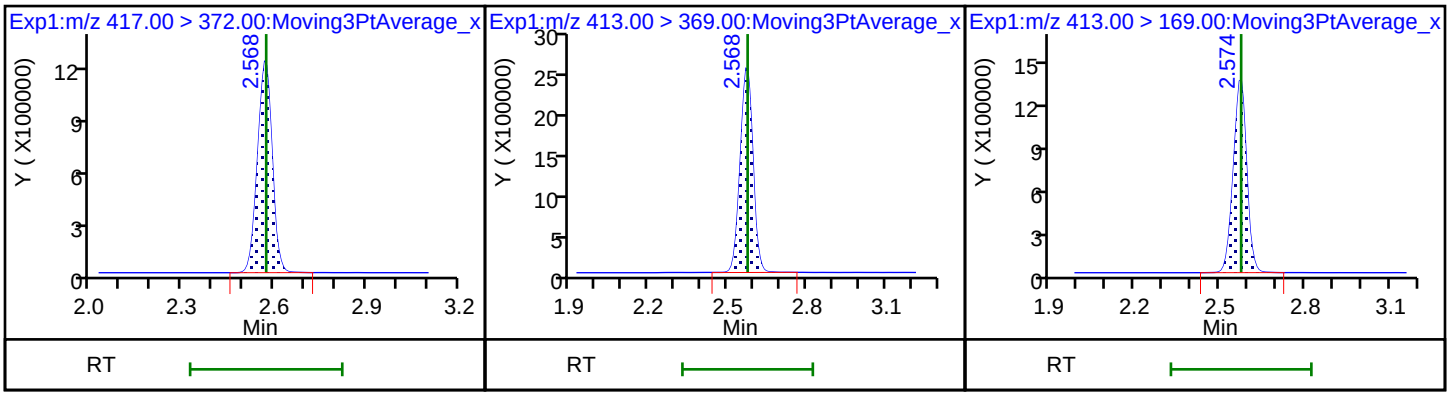


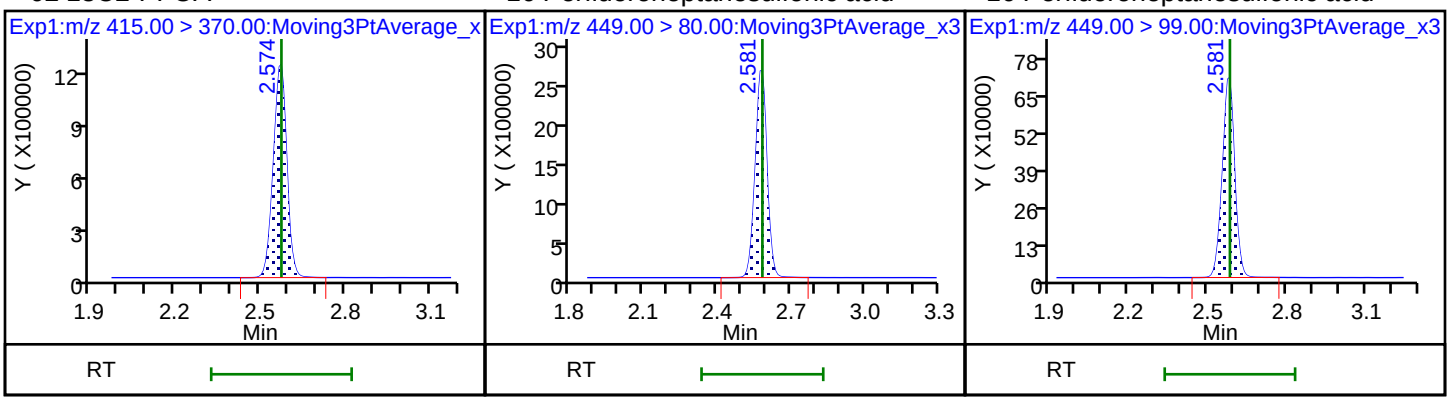
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



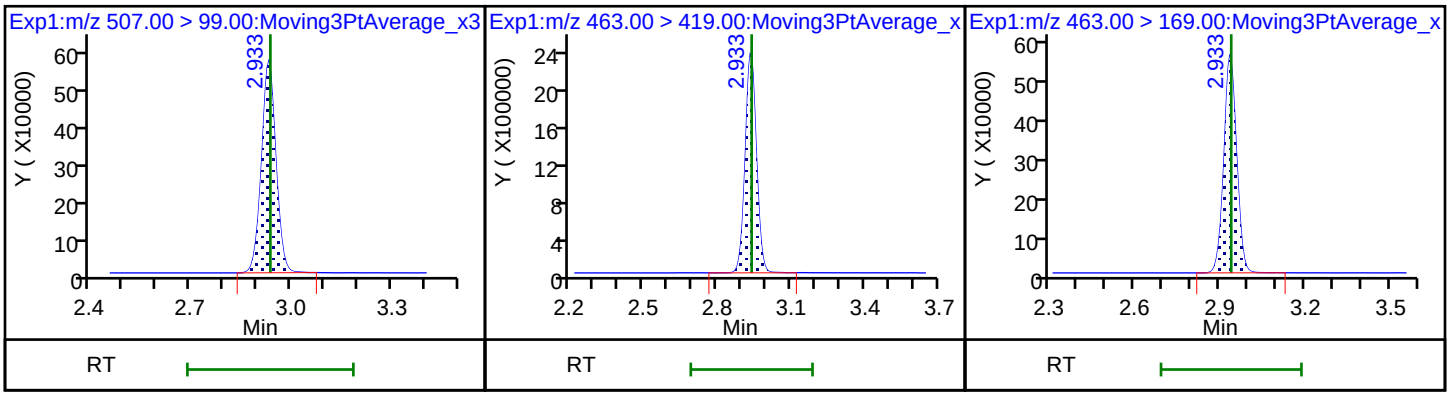
D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



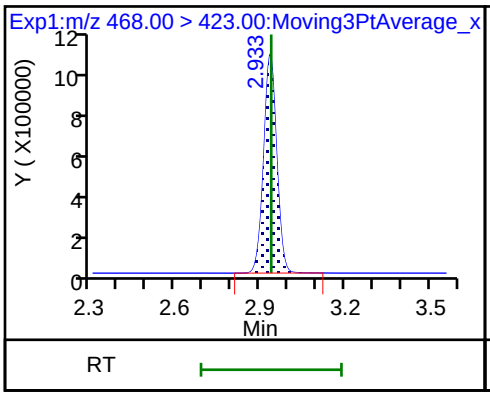
* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



D 72 13C8 PFOS 20 Perfluorononanoic acid 20 Perfluorononanoic acid



D 19 13C5 PFNA



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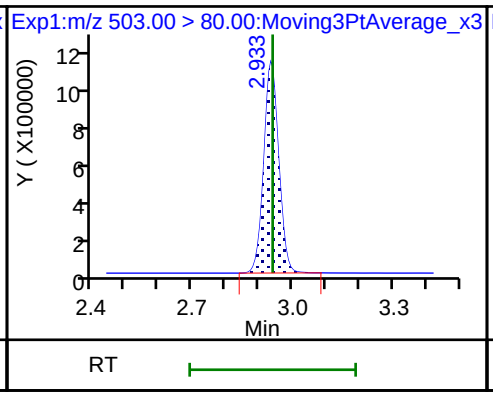
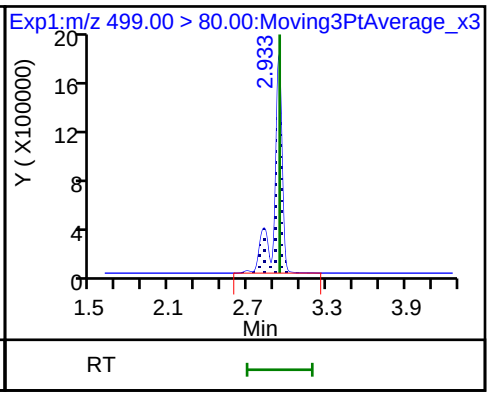
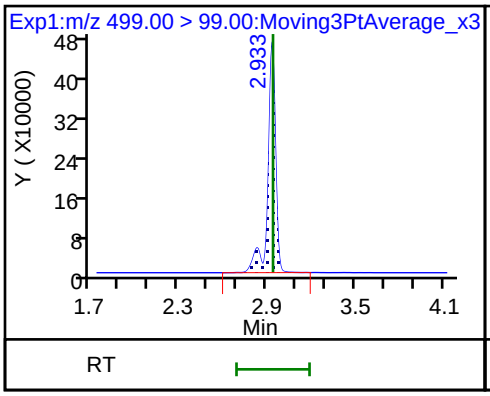


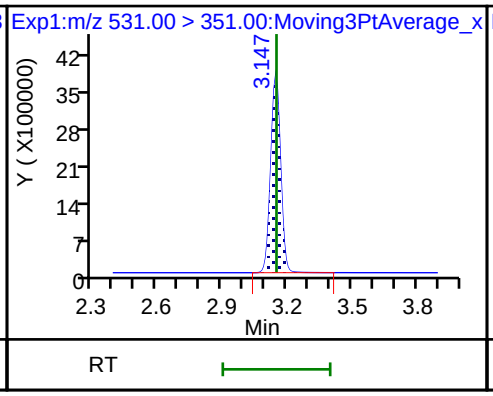
17 Perfluorooctane sulfonic acid



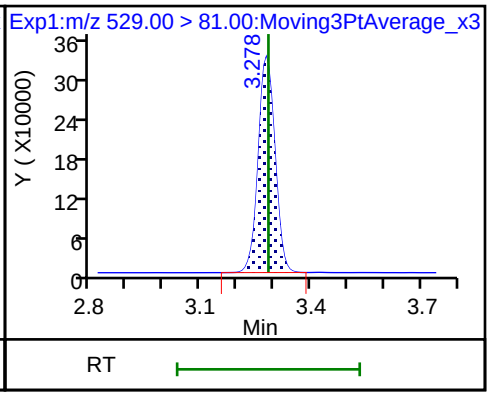
17 Perfluorooctane sulfonic acid



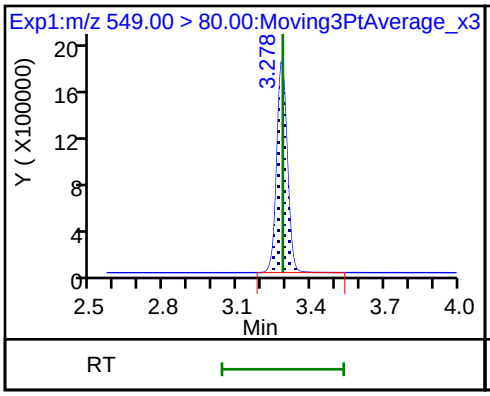
69 9-Chlorohexadecafluoro-3-oxanonane



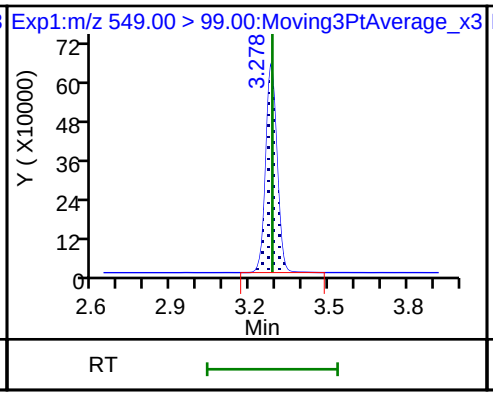
D 26 M2-8:2FTS



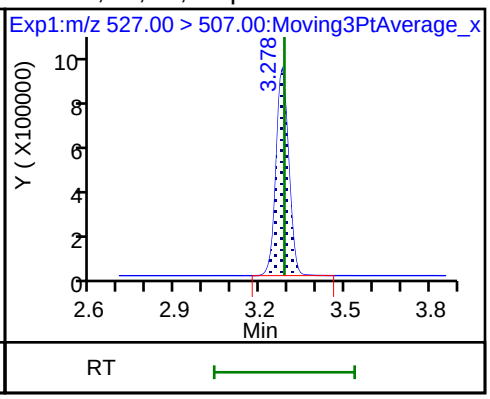
68 Perfluorononanesulfonic acid



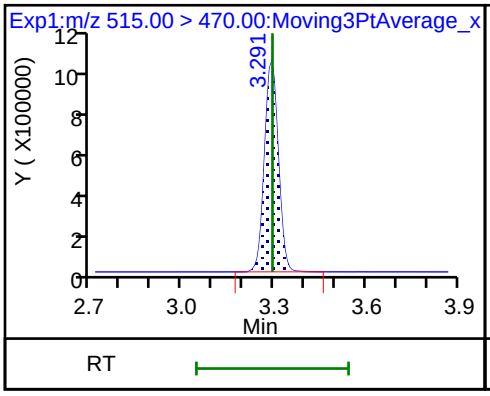
68 Perfluorononanesulfonic acid



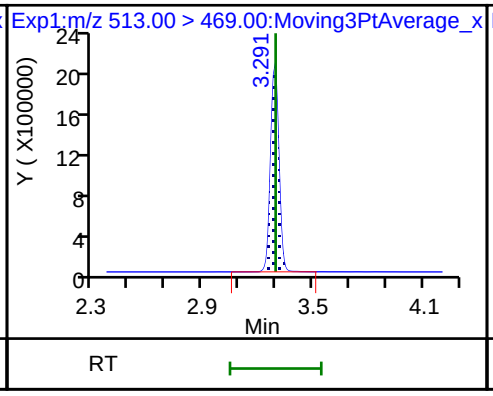
25 1H,1H,2H,2H-perfluorodecanesulfoni



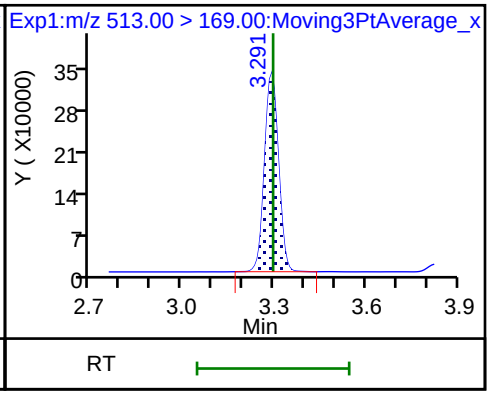
D 23 13C2 PFDA



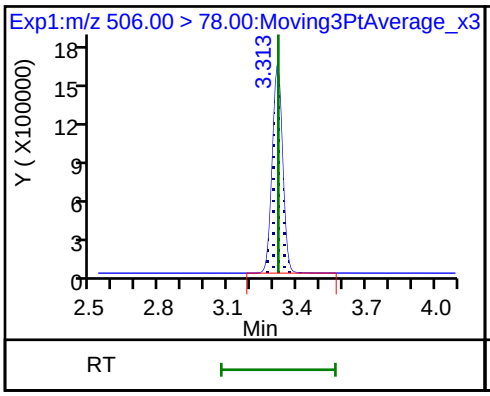
24 Perfluorodecanoic acid



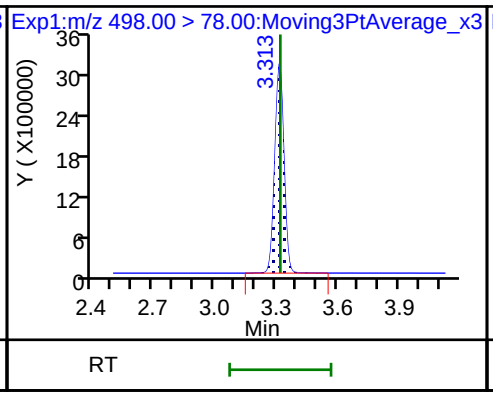
24 Perfluorodecanoic acid



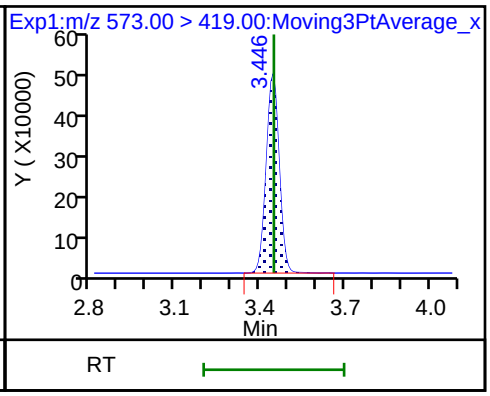
D 21 13C8 FOSA



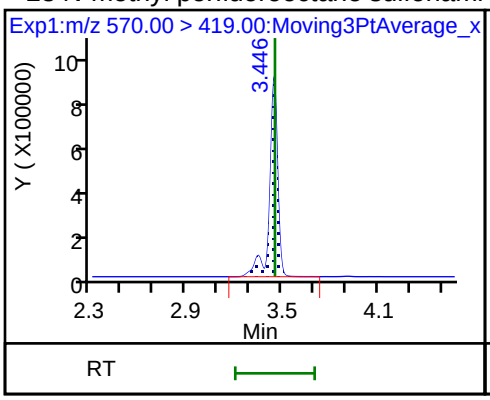
22 Perfluorooctane Sulfonamide



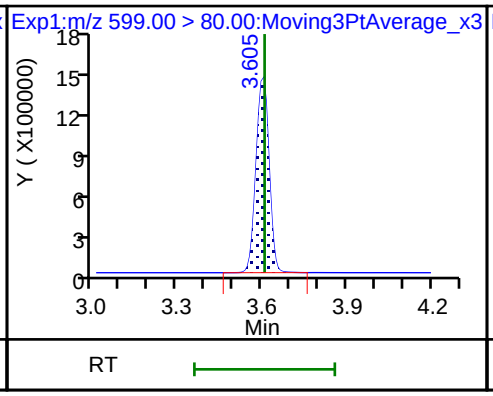
D 27 d3-NMeFOSAA



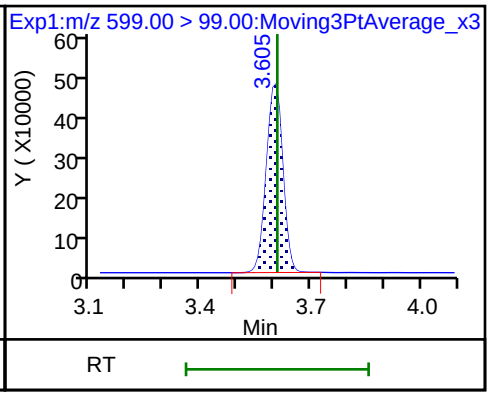
28 N-methyl perfluorooctane sulfonami



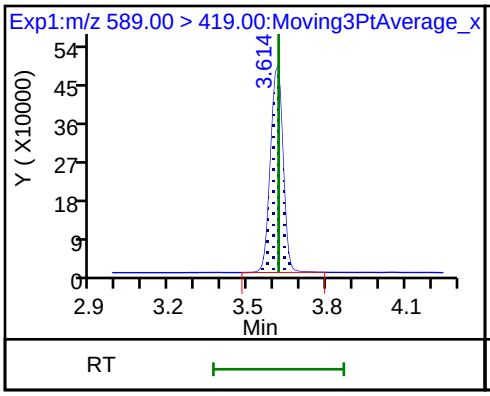
29 Perfluorodecane Sulfonic acid



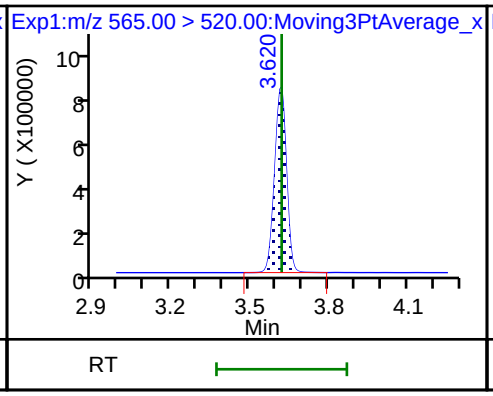
29 Perfluorodecane Sulfonic acid



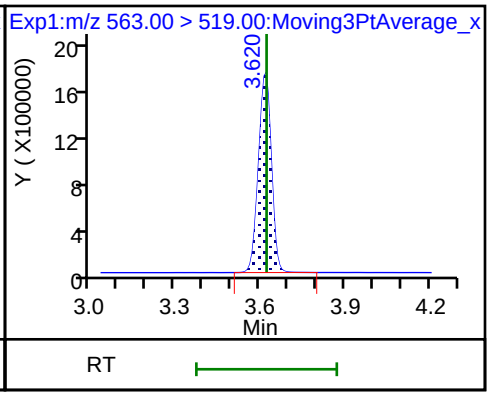
D 32 d5-NEtFOSAA



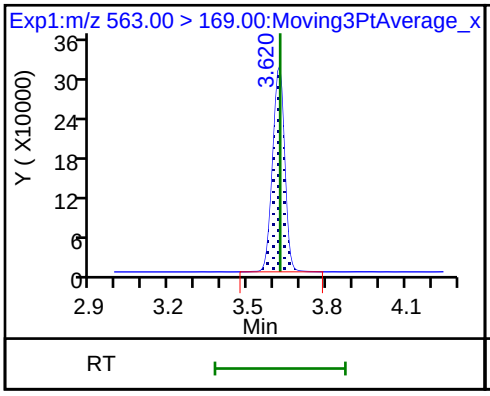
D 30 13C2 PFUnA



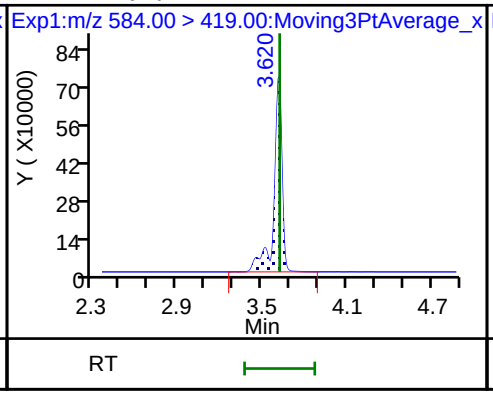
31 Perfluoroundecanoic acid



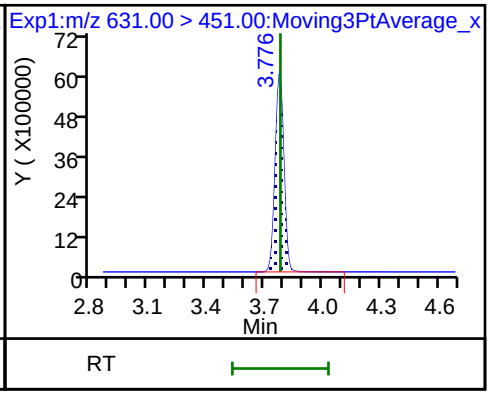
31 Perfluoroundecanoic acid



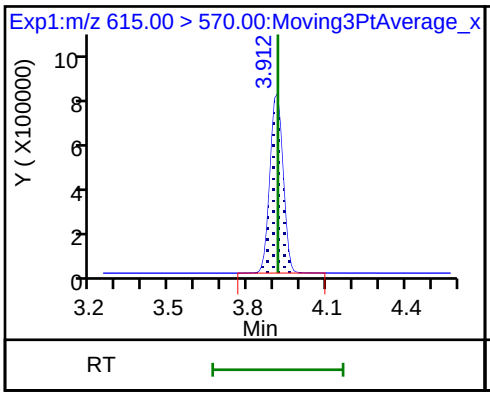
33 N-ethyl perfluorooctane sulfonamid



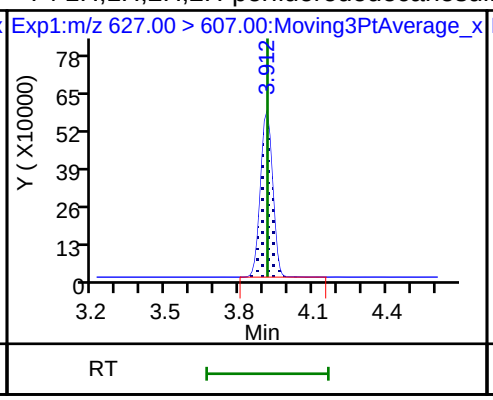
66 11-Chloroeicosafluoro-3-oxaundecan



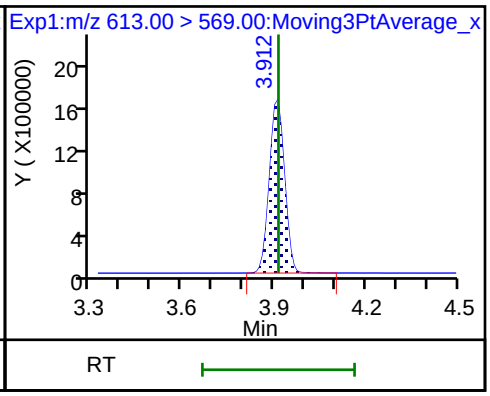
D 36 13C2 PFDoA



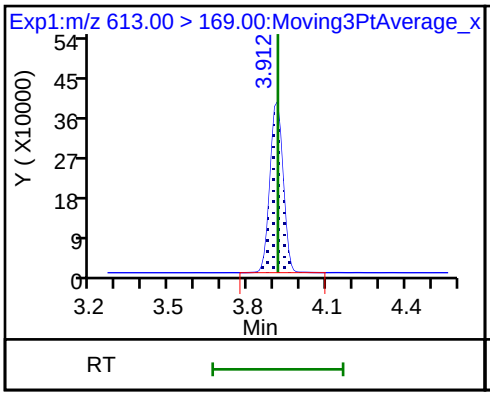
74 1H,1H,2H,2H-perfluorododecanesulfo



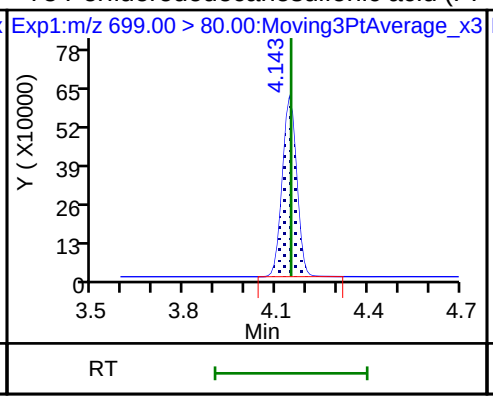
37 Perfluorododecanoic acid



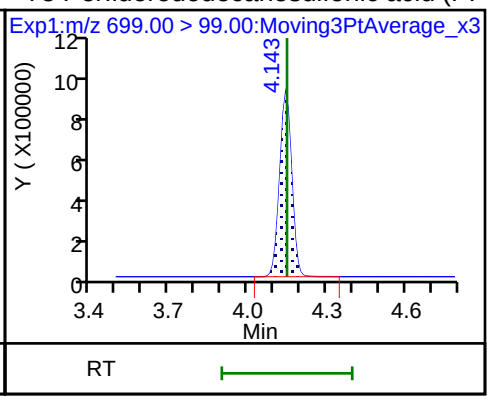
37 Perfluorododecanoic acid



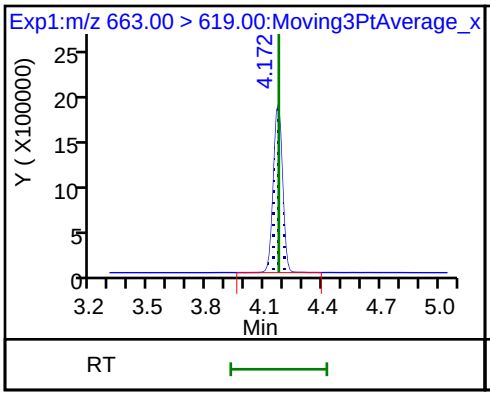
75 Perfluorododecanesulfonic acid (PF



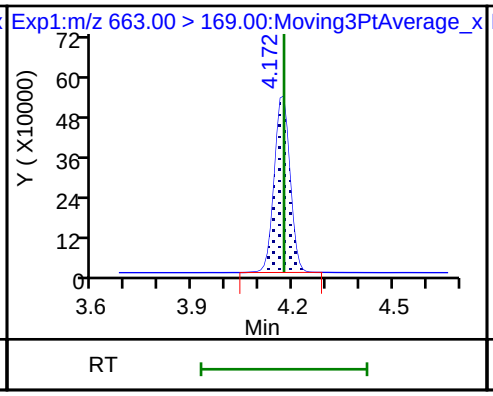
75 Perfluorododecanesulfonic acid (PF



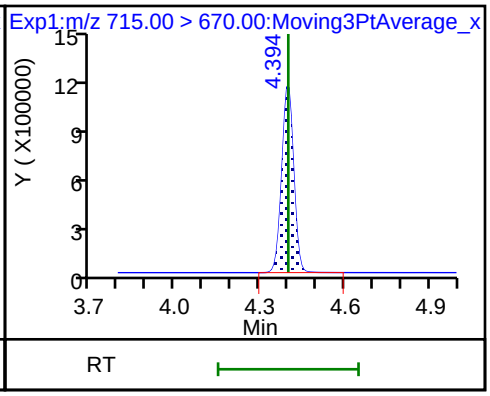
41 Perfluorotridecanoic acid



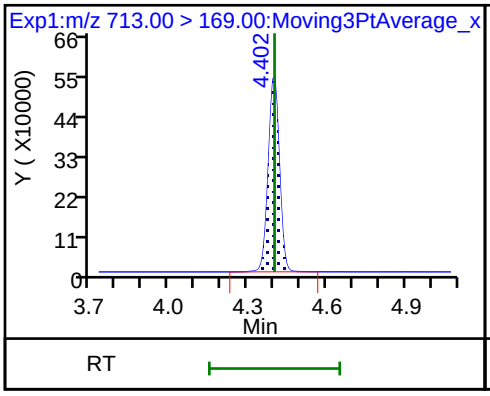
41 Perfluorotridecanoic acid



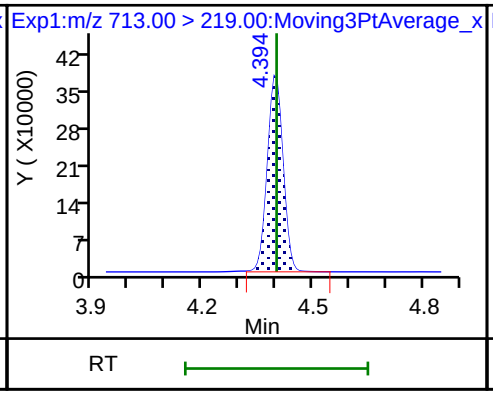
D 43 13C2-PFTeDA



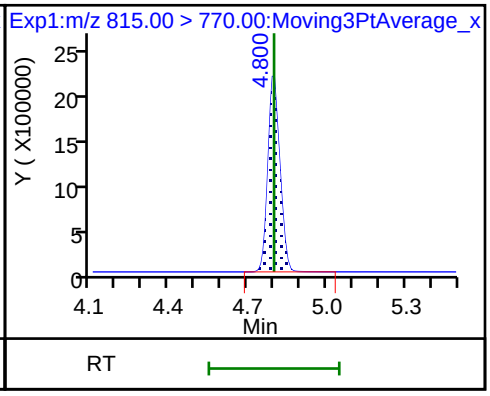
42 Perfluorotetradecanoic acid



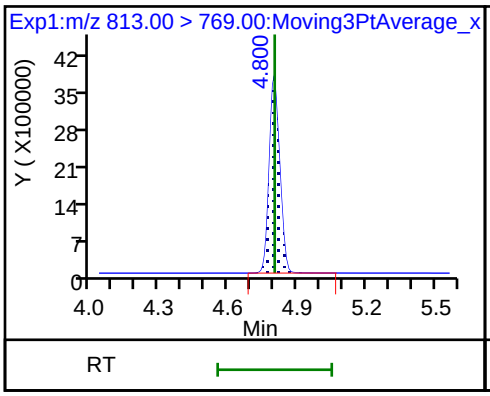
42 Perfluorotetradecanoic acid



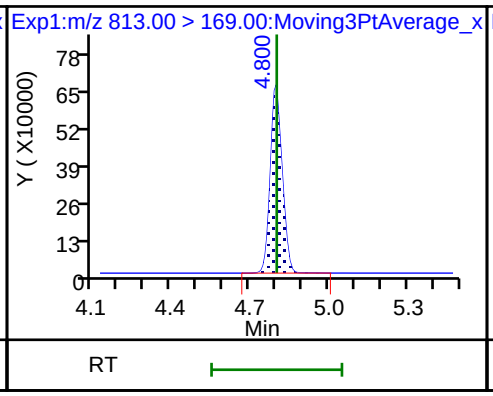
D 44 13C2-PFHxDA



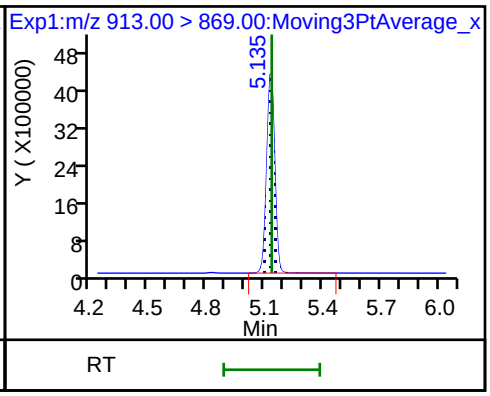
45 Perfluorohexadecanoic acid



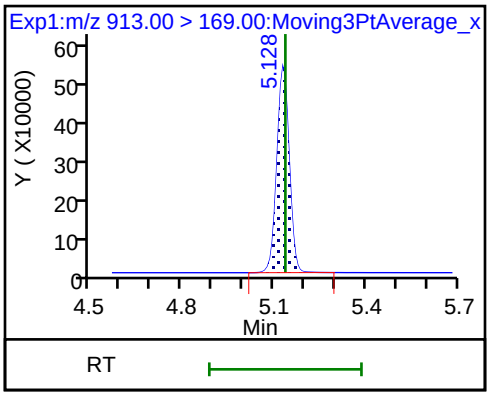
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Aug-2018 11:56:59 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L7-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:27 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:40:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.393	1.395	-0.002	0.543	5373122	2.59		104	8955	
2 Perfluorobutyric acid										
212.90 > 169.00	1.398	1.397	0.001	1.004	19976933	9.90		99.0	2232	
D 3 13C5-PFPeA										
267.90 > 223.00	1.636	1.639	-0.003	0.637	3665379	2.57		103	10131	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.643	1.643	0.0	1.005	16137329	9.67		96.7	1088	
D 47 13C3-PFBS										
301.90 > 83.00	1.675	1.675	0.0	0.653	80382	2.43		105	383	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.675	1.676	-0.001	1.000	21980500	8.37		94.7	5584	
298.90 > 99.00	1.675	1.676	-0.001	1.000	9699800		2.27(1.25-3.74)	94.7	4353	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.872	1.875	-0.003	1.117	5031154	8.78		94.0	19015	
D 60 M2-4:2FTS										
329.00 > 81.00	1.872	1.875	-0.003	0.729	526817	2.24		95.9	662	
D 7 13C2 PFHxA										
315.00 > 270.00	1.907	1.908	-0.001	0.743	4032113	2.49		99.5	6971	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.907	1.908	-0.001	1.000	16015982	9.73		97.3	3097	
313.00 > 119.00	1.907	1.908	-0.001	1.000	1512000		10.59(5.03-15.10)	97.3	4252	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.928	1.930	-0.002	1.151	20439230	8.58		91.4	14928	
349.00 > 99.00	1.928	1.930	-0.002	1.151	8089990		2.53(1.36-4.07)	91.4	6469	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.001	2.003	-0.002	1.000	3129271	9.92		99.2	1411	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.001	2.003	-0.002	0.779	325849	2.59		103	928	
D 9 13C4-PFHpA										
367.00 > 322.00	2.227	2.227	0.0	0.867	3899256	2.44		97.8	10839	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.227	2.228	-0.001	1.000	16791846	10.1		101	2753	
363.00 > 169.00	2.227	2.228	-0.001	1.000	6618023		2.54(1.13-3.40)	101	6159	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.236	2.239	-0.003	1.000	18945578	8.66		95.2	5842	
399.00 > 99.00	2.236	2.239	-0.003	1.000	6725945		2.82(1.50-4.49)	95.2	3280	
D 11 18O2 PFHxS										
403.00 > 84.00	2.236	2.239	-0.003	0.871	4771422	2.33		98.7	7147	
65 ADONA										
377.00 > 251.00	2.269	2.271	-0.002	0.774	37729670	8.46		84.6	19741	
377.00 > 85.00	2.269	2.271	-0.002	0.774	24564041		1.54(0.84-2.53)	84.6	8345	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.544	2.548	-0.004	1.000	5013052	9.72		103	5460	
D 12 M2-6:2FTS										
429.00 > 81.00	2.544	2.549	-0.005	0.991	778460	2.32		97.7	2269	
D 73 13C8 PFOA										
421.00 > 376.00	2.567	2.571	-0.004	1.000	6892356	2.39		97.6	15661	
D 14 13C4 PFOA										
417.00 > 372.00	2.567	2.573	-0.006	1.000	3722009	2.54		102	8195	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.574	2.574	0.0	1.003	15733520	9.35		93.4	1426	
413.00 > 169.00	2.567	2.574	-0.007	1.000	8441832		1.86(0.84-2.52)	93.4	6654	
* 62 13C2-PFOA										
415.00 > 370.00	2.567	2.575	-0.008		3743332	2.50			5893	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.002	0.880	15722427	9.23		96.9	5659	
449.00 > 99.00	2.581	2.583	-0.002	0.880	4425328		3.55(1.94-5.82)	96.9	3345	
D 72 13C8 PFOS										
507.00 > 99.00	2.933	2.938	-0.005	1.142	1541520	2.36		98.8	4287	
D 18 13C4 PFOS										
503.00 > 80.00	2.933	2.939	-0.006	1.142	3286355	2.45		102	3679	
D 19 13C5 PFNA										
468.00 > 423.00	2.933	2.939	-0.006	1.142	3213782	2.45		97.9	5714	
20 Perfluorononanoic acid										
463.00 > 419.00	2.933	2.939	-0.006	1.000	13269892	9.80		98.0	3367	
463.00 > 169.00	2.939	2.939	0.0	1.002	3365018		3.94(1.90-5.69)	98.0	6693	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.939	2.940	-0.001	1.002	13677354	9.26		99.8	4268	
499.00 > 99.00	2.939	2.940	-0.001	1.002	3143905		4.35(2.31-6.93)	99.8	4772	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.146	3.150	-0.004	1.073	21558959	9.00		96.6	9734	
D 26 M2-8:2FTS										
529.00 > 81.00	3.278	3.284	-0.006	1.277	920670	2.27		94.8	3125	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.284	3.285	0.0	1.120	9847776	9.52		99.2	6966	
549.00 > 99.00	3.278	3.285	-0.006	1.118	3544459		2.78(1.33-3.97)	99.2	4072	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.278	3.286	-0.008	1.000	4806399	9.62		100	8267	
D 23 13C2 PFDA										
515.00 > 470.00	3.291	3.294	-0.003	1.282	2921735	2.54		101	4151	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.291	3.296	-0.005	1.000	11426488	9.75		97.5	5078	
513.00 > 169.00	3.291	3.296	-0.005	1.000	1895278		6.03(2.36-7.09)	97.5	380	
D 21 13C8 FOSA										
506.00 > 78.00	3.313	3.317	-0.004	1.290	4531636	2.55		102	5690	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.320	3.319	0.001	1.002	16995473	9.63		96.3	5922	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.342	1491160	2.53		101	3267	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.446	3.453	-0.007	1.000	5898014	10.3		103	2718	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.605	3.608	-0.003	1.229	8074266	9.29		96.4	7721	
599.00 > 99.00	3.605	3.608	-0.003	1.229	2686974		3.00(1.39-4.16)	96.4	3936	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.613	3.616	-0.003	1.407	1403844	2.30		92.0	1026	
D 30 13C2 PFUnA										
565.00 > 520.00	3.613	3.620	-0.007	1.407	2281933	2.46		98.5	3233	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.620	3.622	-0.002	1.002	9915678	9.67		96.7	4400	
563.00 > 169.00	3.613	3.622	-0.009	1.000	1720527		5.76(2.12-6.36)	96.7	3803	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.620	3.623	-0.003	1.002	5094367	10.2		102	3513	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.776	3.781	-0.005	1.287	30579411	8.32		88.3	12956	
35 MeFOSA										
512.00 > 169.00	3.825	3.826	-0.001		5720935	NC			1392	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.911	3.913	-0.002	1.000	10658790	9.88		98.8	3649	
613.00 > 169.00	3.911	3.913	-0.002	1.000	2518515		4.23(2.13-6.40)	98.8	5134	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.911	3.913	-0.002	1.193	3456093	9.98		104	4921	
D 36 13C2 PFDoA										
615.00 > 570.00	3.911	3.913	-0.002	1.523	2422707	2.47		98.9	3347	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.142	4.148	-0.006	1.412	3692356	9.67		99.9	8127	
699.00 > 99.00	4.142	4.148	-0.006	1.412	5250911		0.70(0.00-0.00)	99.9	7654	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.171	4.173	-0.002	1.066	10067689	9.66		96.6	2777	
663.00 > 169.00	4.171	4.173	-0.002	1.066	3084095		3.26(1.25-3.76)	96.6	5037	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.399	-0.005	1.711	3074334	2.46		98.5	5617	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.394	4.400	-0.006	1.000	3032661	10.2		102	6149	
713.00 > 219.00	4.394	4.400	-0.006	1.000	2077180		1.46(0.71-2.13)	102	5141	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.792	4.799	-0.007	1.866	6197635	2.50		100	8201	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.792	4.801	-0.009	1.000	20527532	9.49		94.9	4806	
813.00 > 169.00	4.792	4.801	-0.009	1.000	3783975		5.42(2.86-8.58)	94.9	8314	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.127	5.136	-0.009	1.070	21448602	9.40		94.0	3703	
913.00 > 169.00	5.127	5.136	-0.009	1.070	2812581		7.63(3.83-11.48)	94.0	4640	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

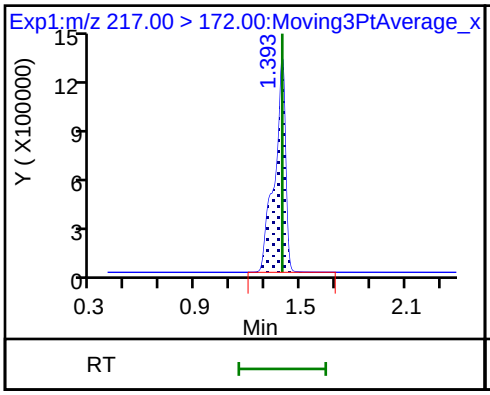
LCPFC_LL7_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

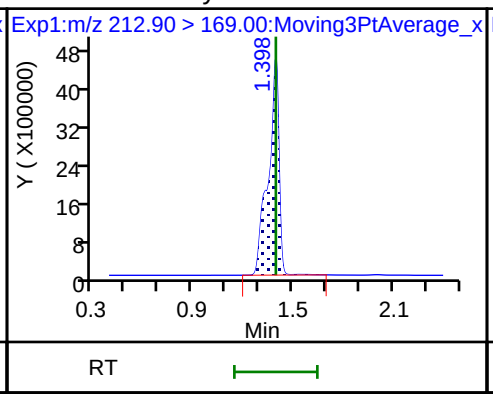
TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d
Injection Date: 06-Aug-2018 11:56:59 Instrument ID: A8_N
Lims ID: IC L7 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL

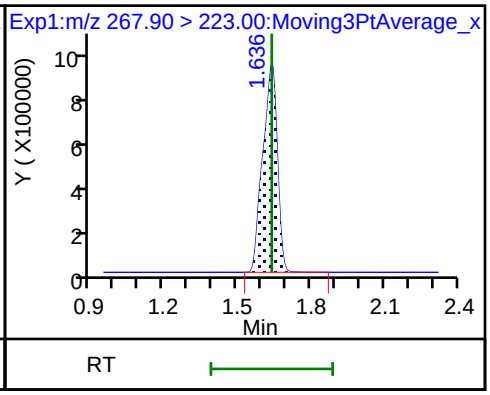
D 1 13C4 PFBA



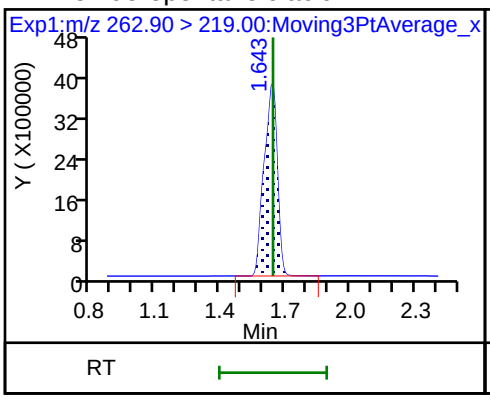
2 Perfluorobutyric acid



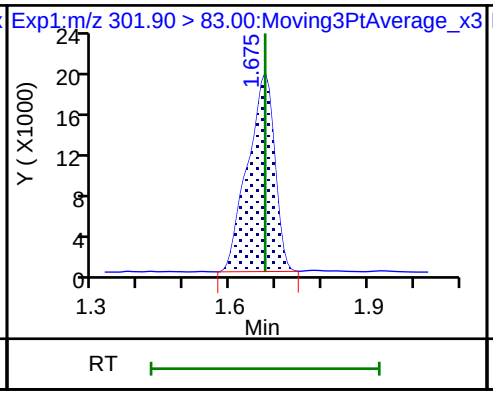
D 3 13C5-PFPeA



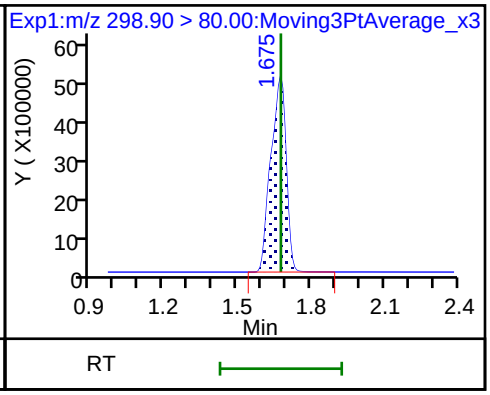
4 Perfluoropentanoic acid



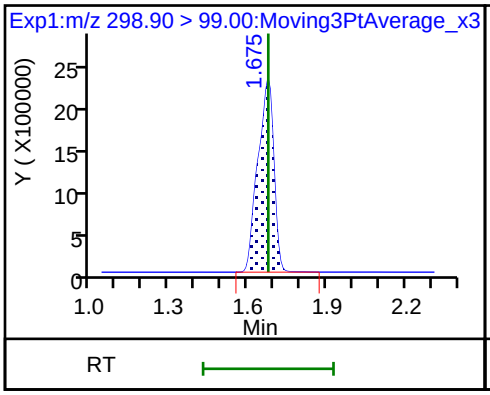
D 47 13C3-PFBS



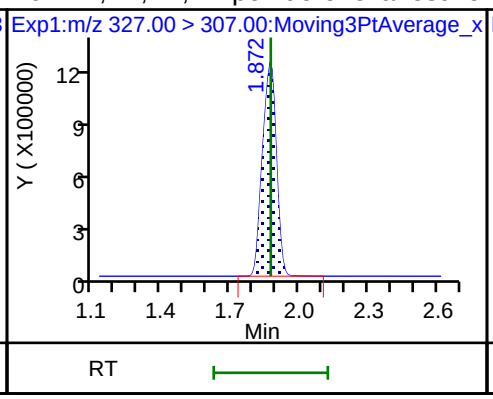
5 Perfluorobutanesulfonic acid



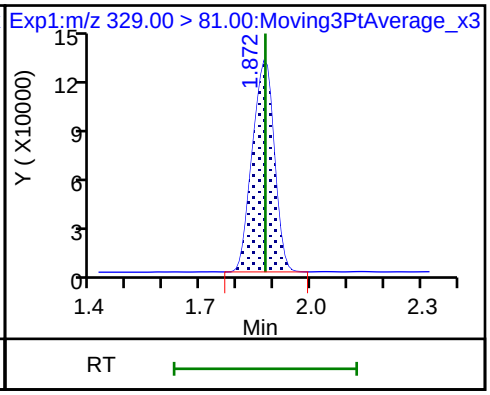
5 Perfluorobutanesulfonic acid



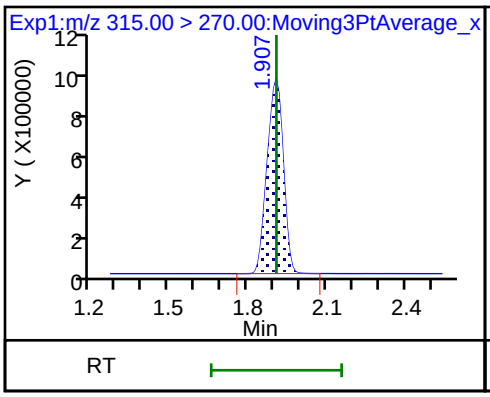
61 1H,1H,2H,2H-perfluorohexanesulfon



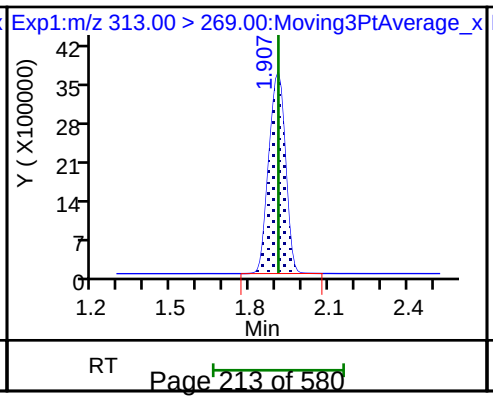
D 60 M2-4:2FTS



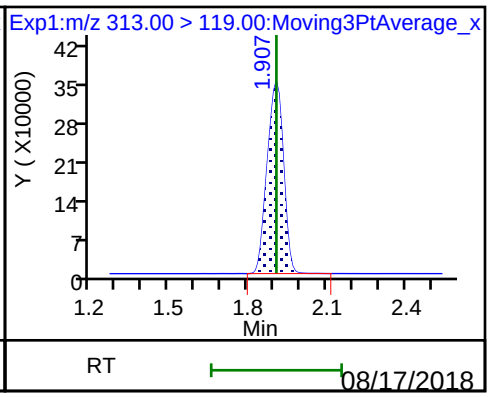
D 7 13C2 PFHxA



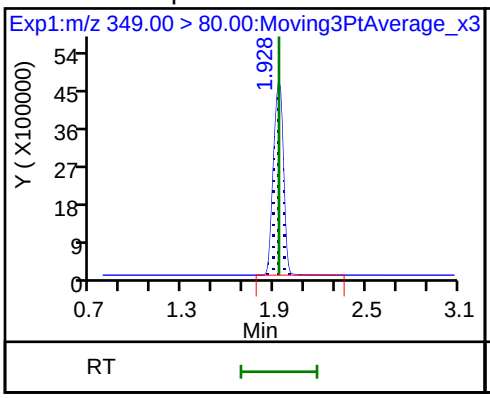
6 Perfluorohexanoic acid



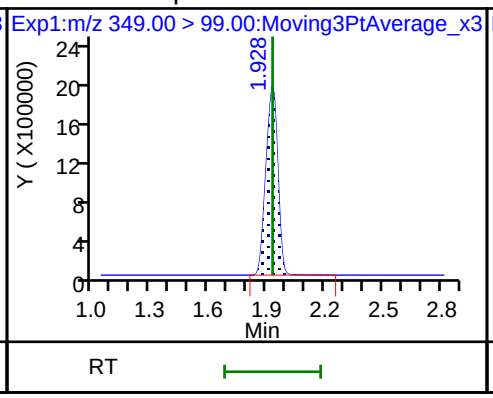
6 Perfluorohexanoic acid



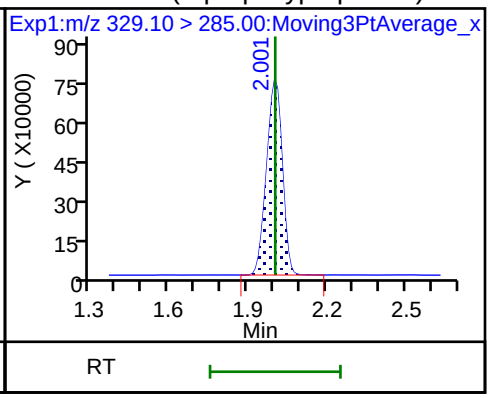
70 Perfluoropentanesulfonic acid



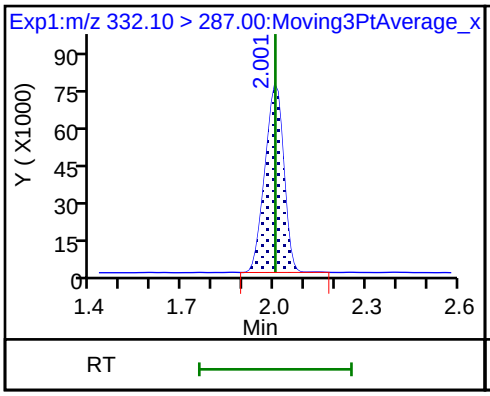
70 Perfluoropentanesulfonic acid



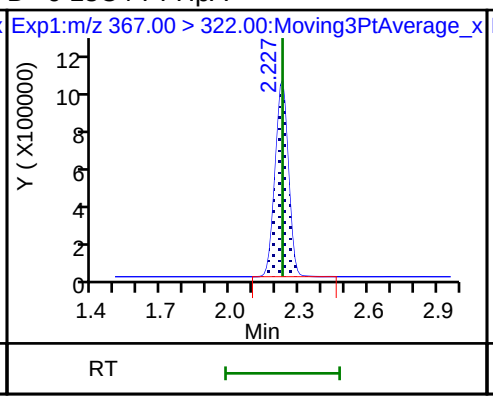
67 Perfluoro(2-propoxypropanoic) acid



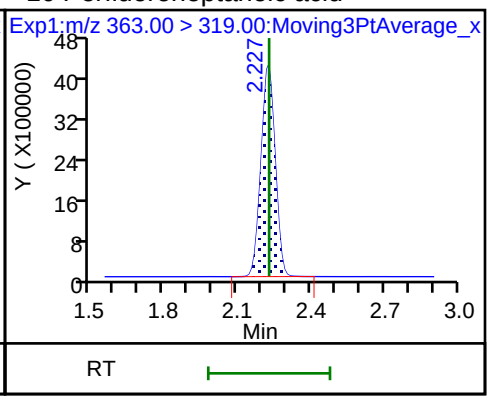
D 64 13C3 HFPO-DA



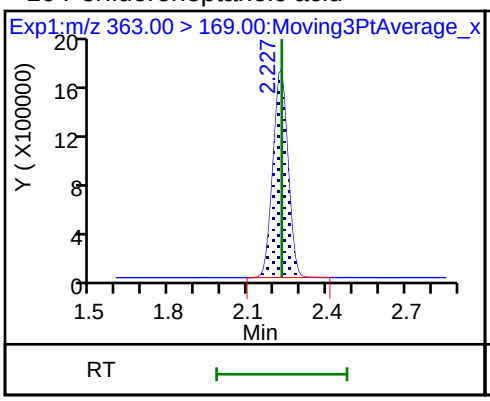
D 9 13C4-PFHpA



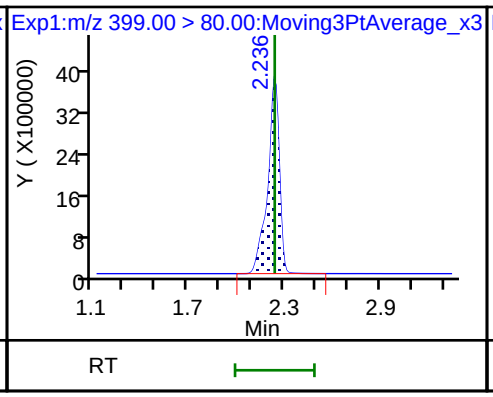
10 Perfluoroheptanoic acid



10 Perfluoroheptanoic acid



8 Perfluorohexanesulfonic acid



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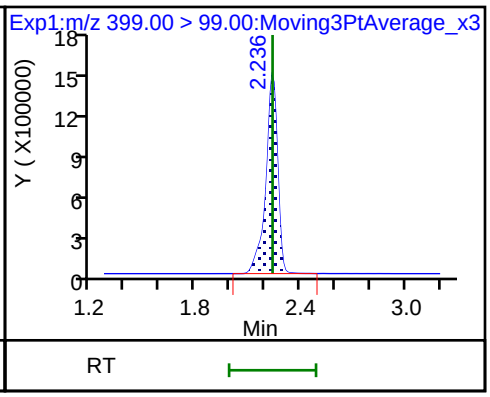
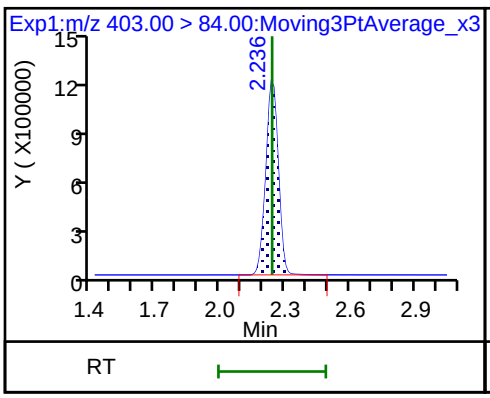
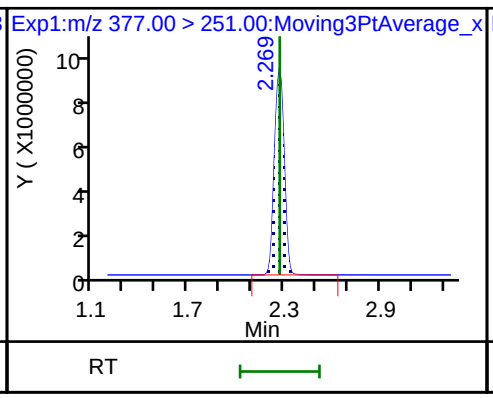


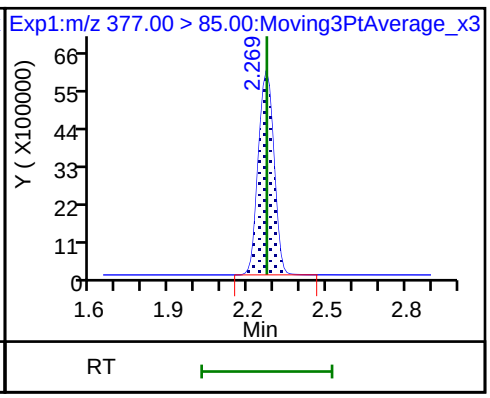
D 11 18O2 PFHxS



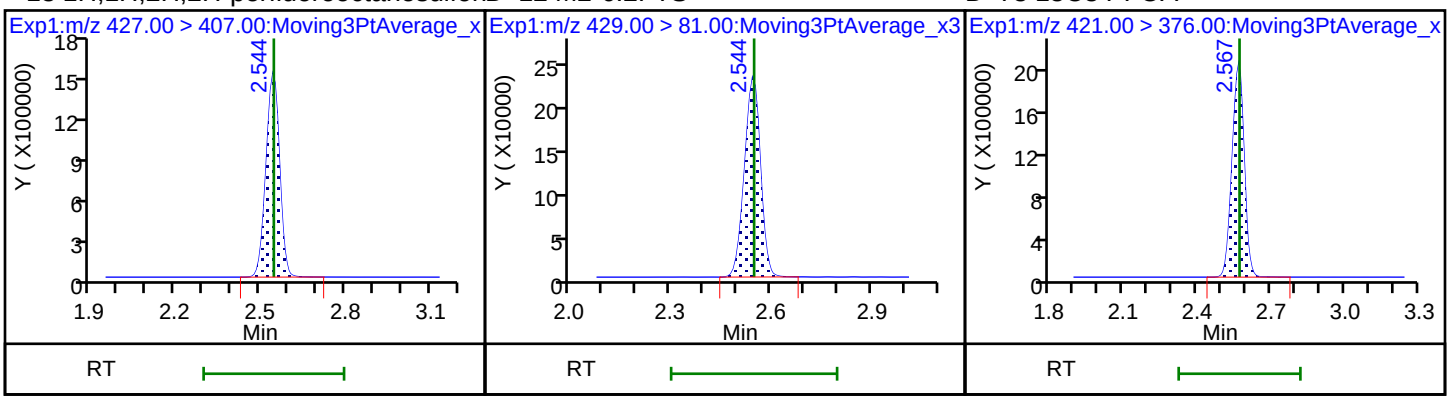
65 ADONA



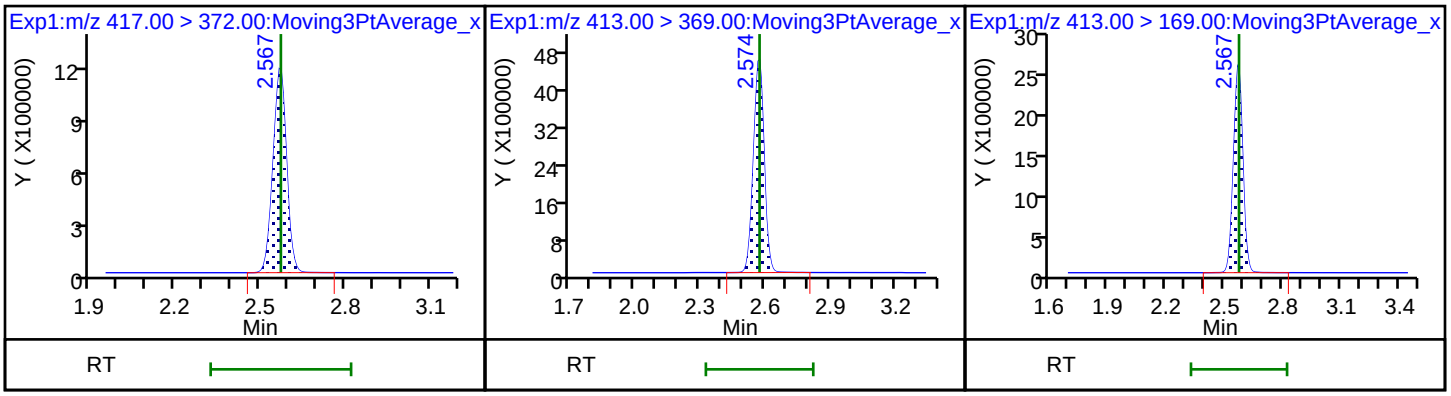
65 ADONA



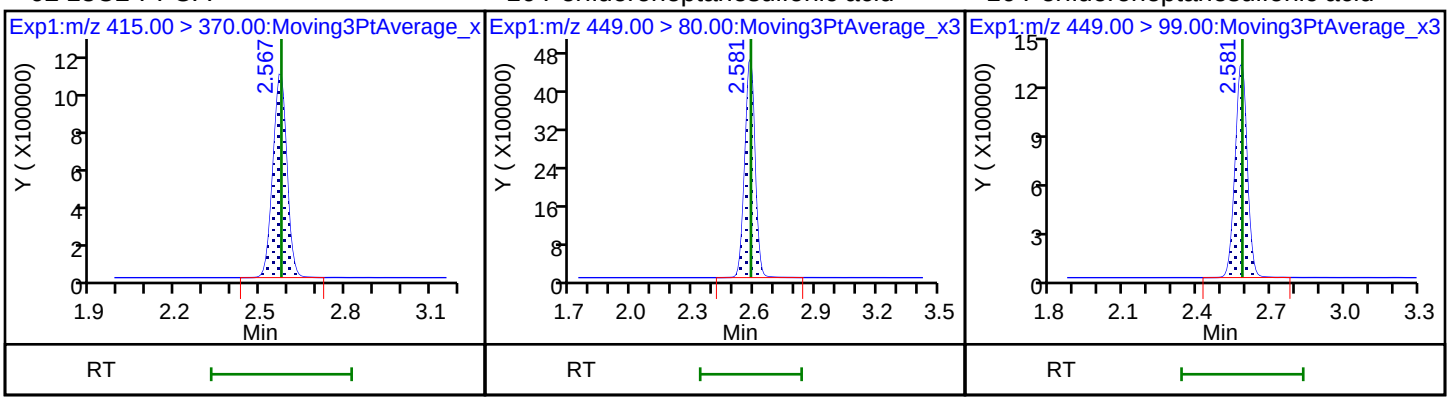
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



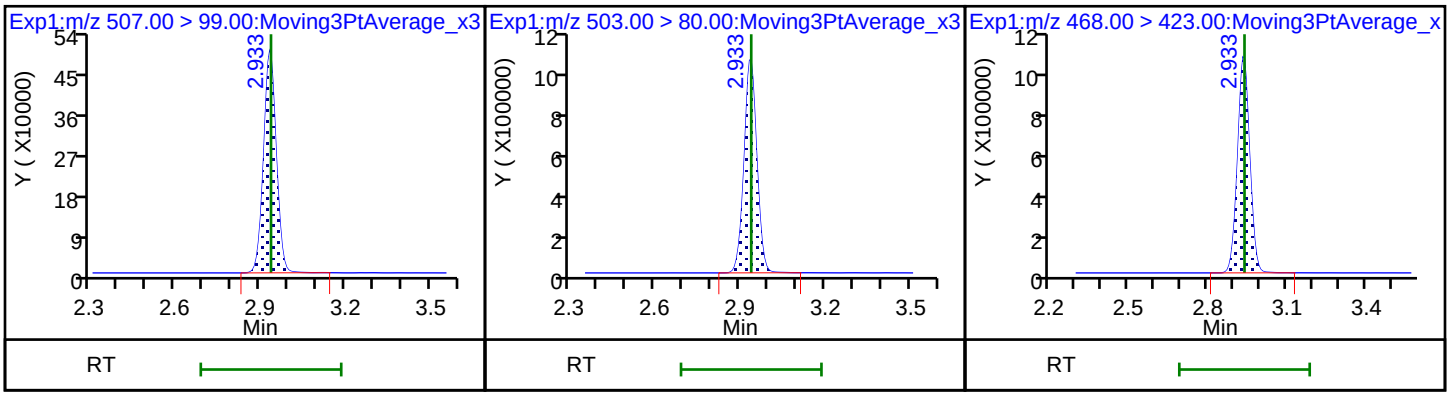
D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



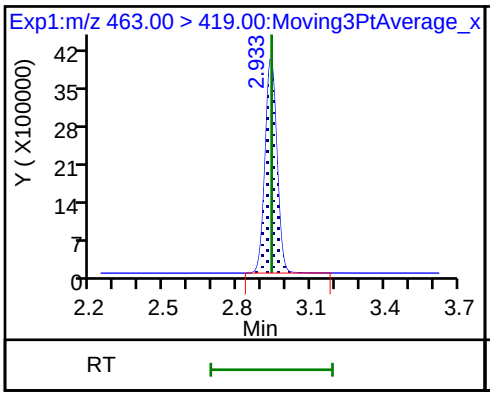
* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



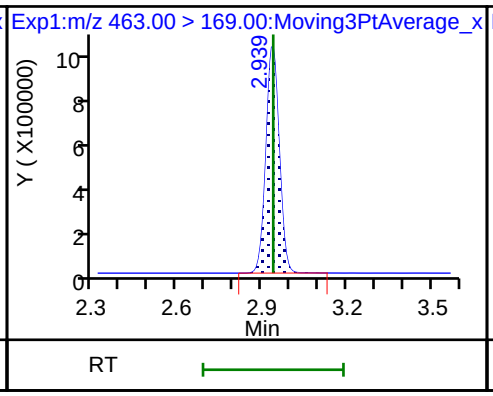
D 72 13C8 PFOS D 18 13C4 PFOS D 19 13C5 PFNA



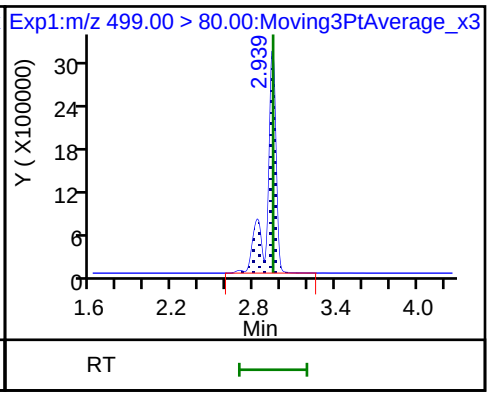
20 Perfluorononanoic acid



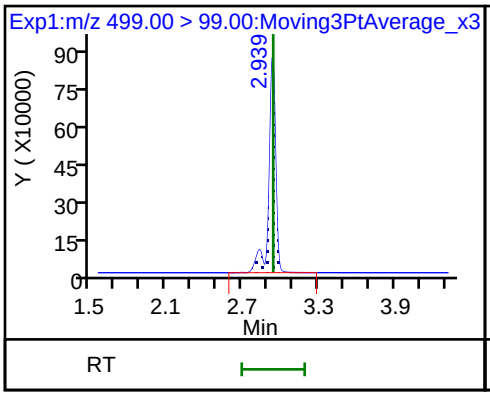
20 Perfluorononanoic acid



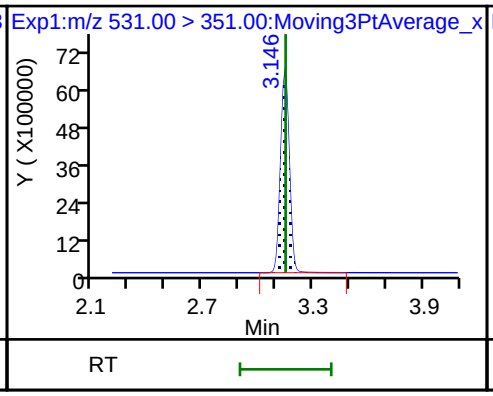
17 Perfluorooctane sulfonic acid



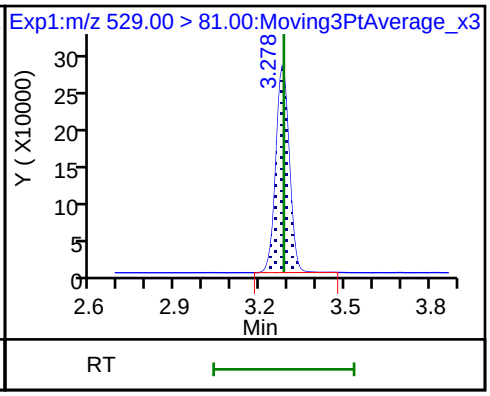
17 Perfluorooctane sulfonic acid



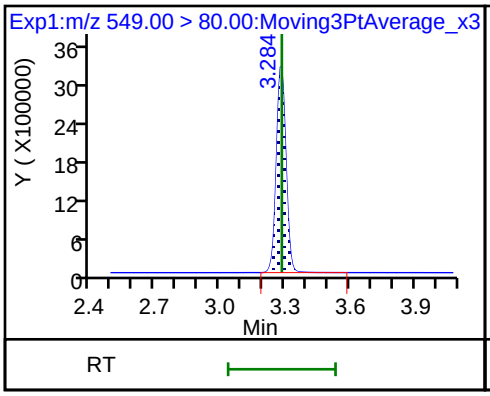
69 9-Chlorohexadecafluoro-3-oxanonane



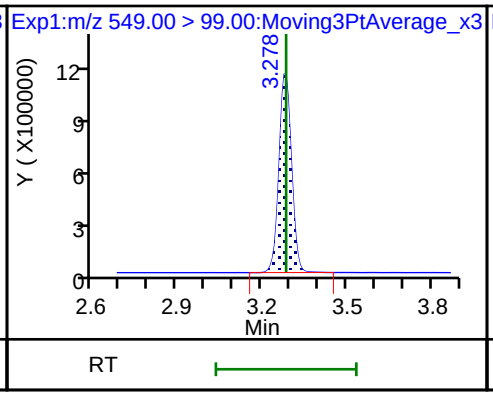
D 26 M2-8:2FTS



68 Perfluorononanesulfonic acid



68 Perfluorononanesulfonic acid



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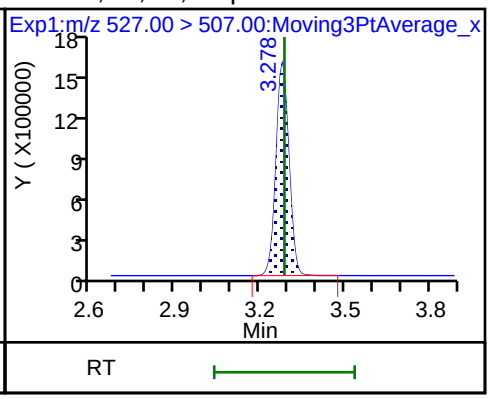
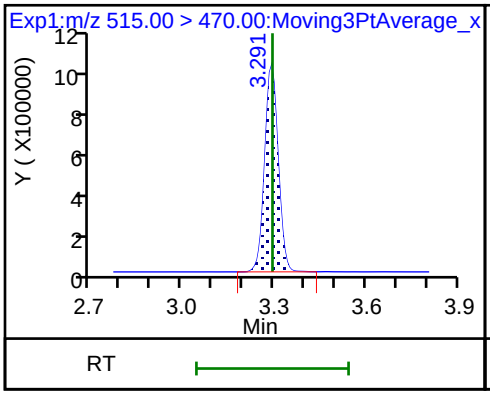
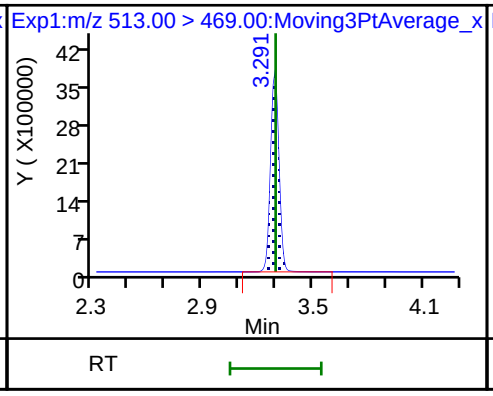


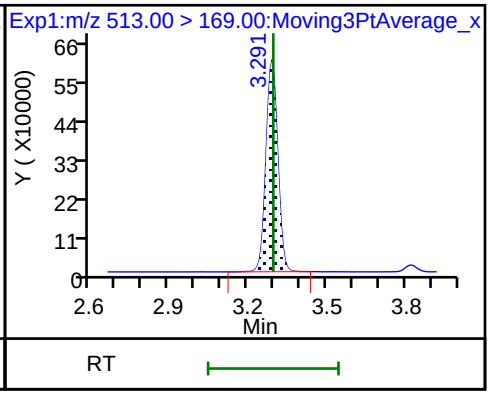
D 23 13C2 PFDA



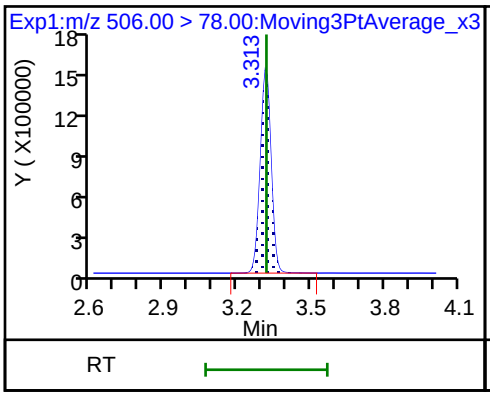
24 Perfluorodecanoic acid



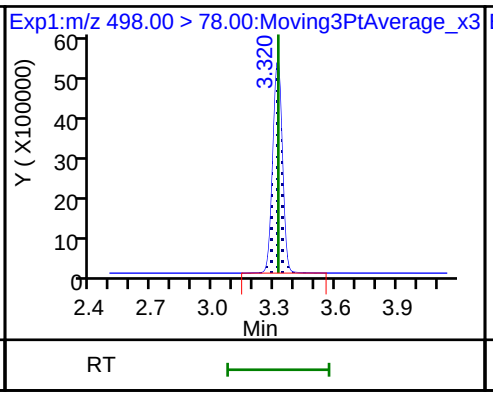
24 Perfluorodecanoic acid



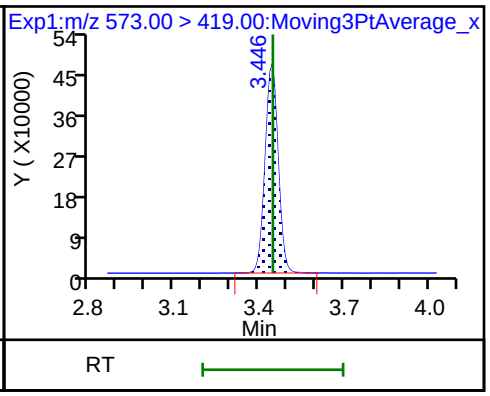
D 21 13C8 FOSA



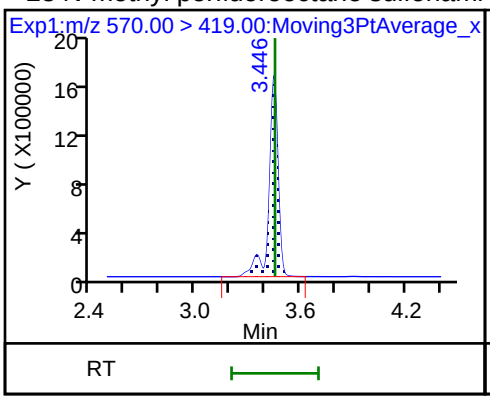
22 Perfluorooctane Sulfonamide



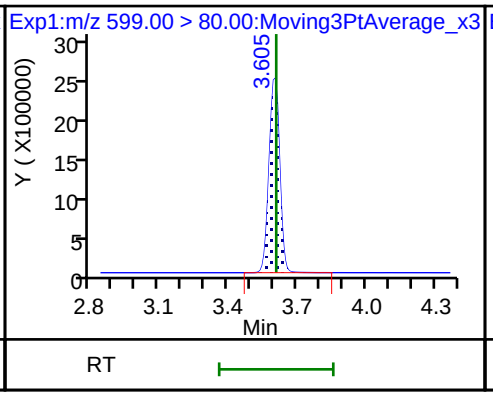
D 27 d3-NMeFOSAA



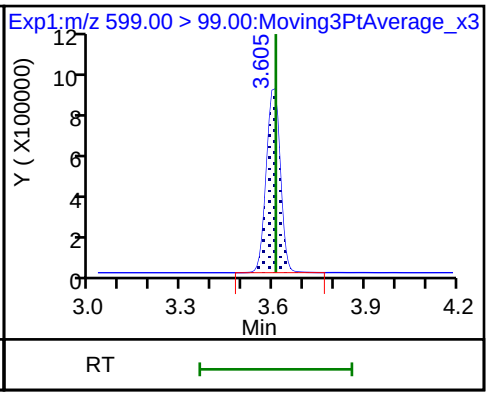
28 N-methyl perfluorooctane sulfonami



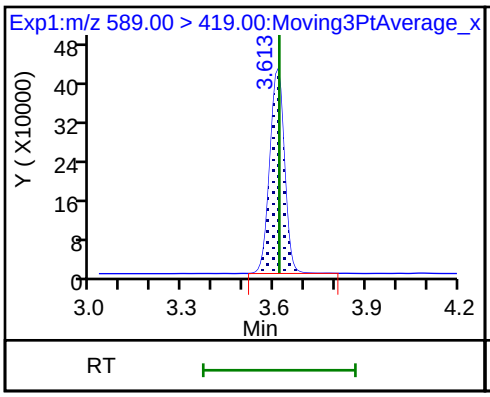
29 Perfluorodecane Sulfonic acid



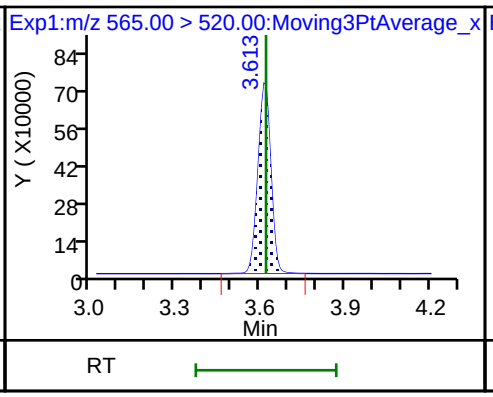
29 Perfluorodecane Sulfonic acid



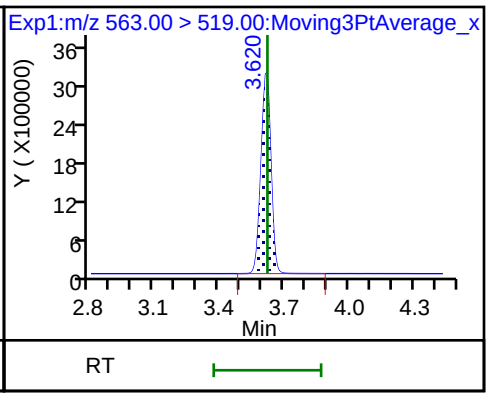
D 32 d5-NEtFOSAA



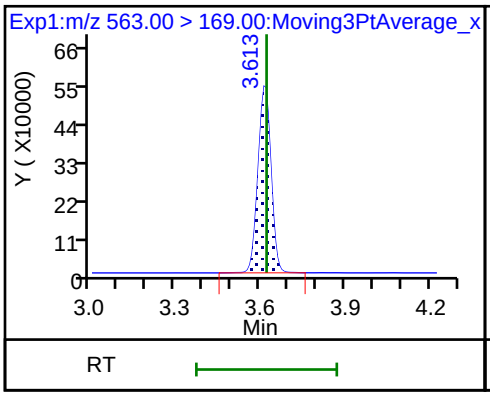
D 30 13C2 PFUnA



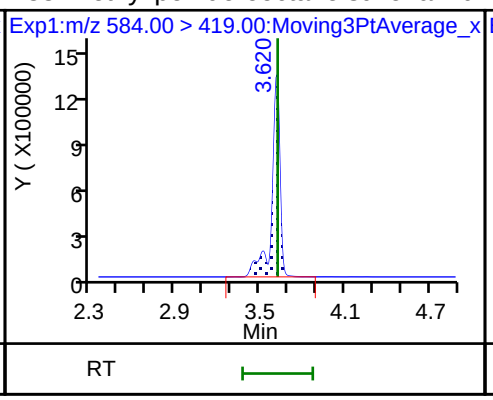
31 Perfluoroundecanoic acid



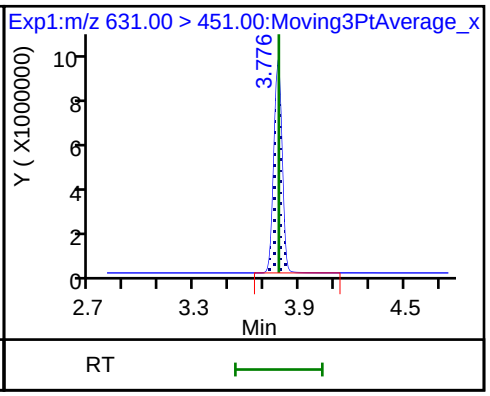
31 Perfluoroundecanoic acid



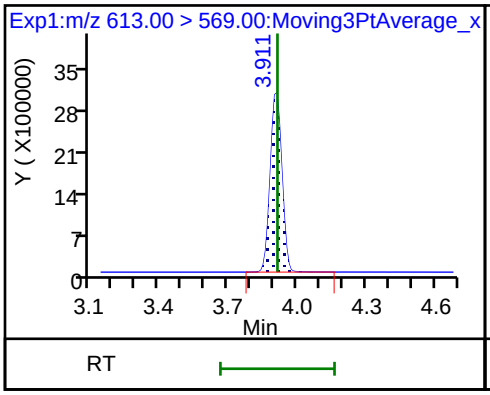
33 N-ethyl perfluorooctane sulfonamid



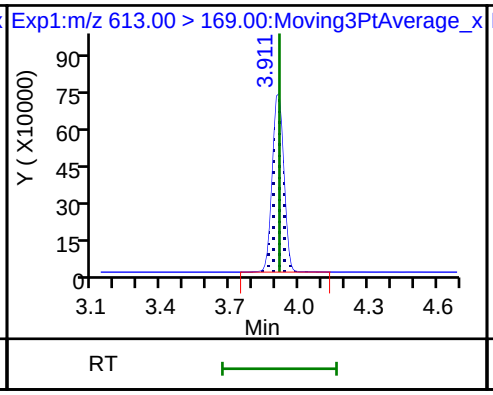
66 11-Chloroeicosafluoro-3-oxaundecan



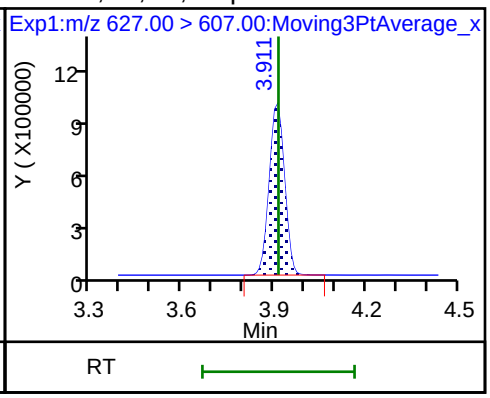
37 Perfluorododecanoic acid



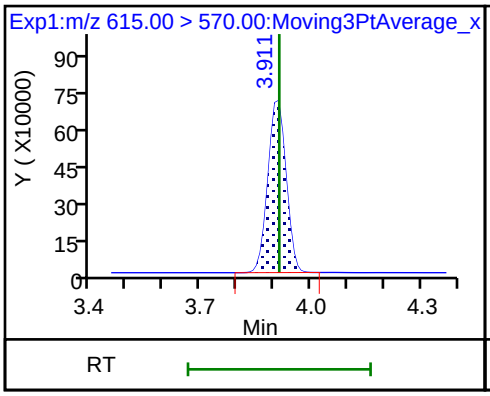
37 Perfluorododecanoic acid



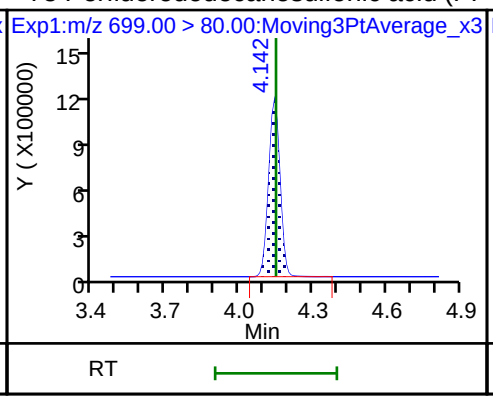
74 1H,1H,2H,2H-perfluorododecanesulfo



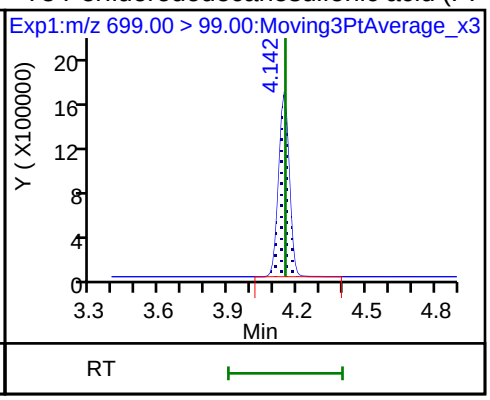
D 36 13C2 PFDoA



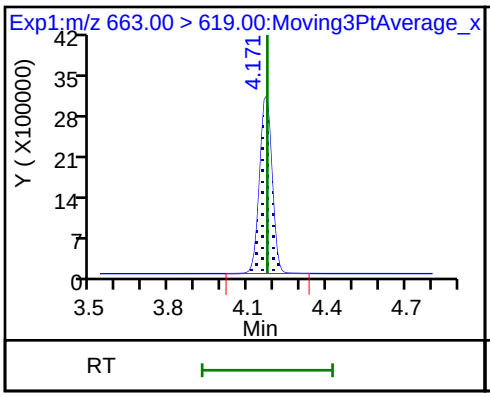
75 Perfluorododecanesulfonic acid (PF



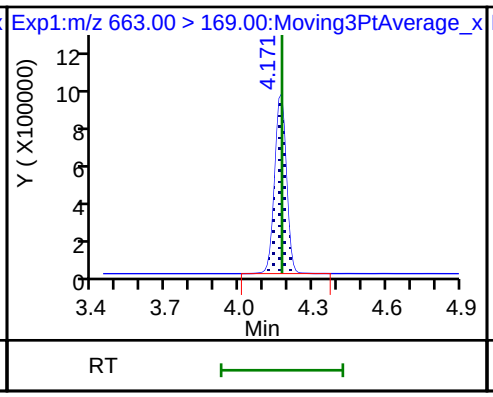
75 Perfluorododecanesulfonic acid (PF



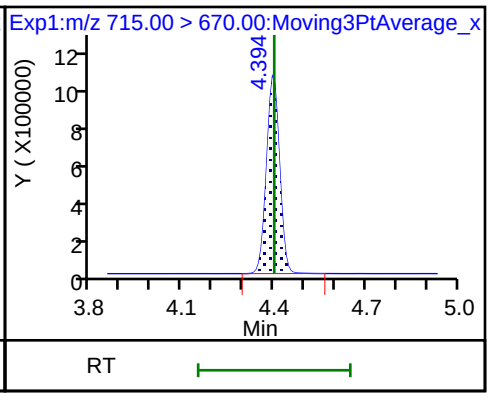
41 Perfluorotridecanoic acid



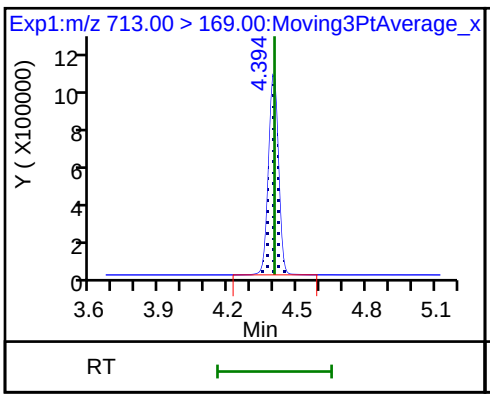
41 Perfluorotridecanoic acid



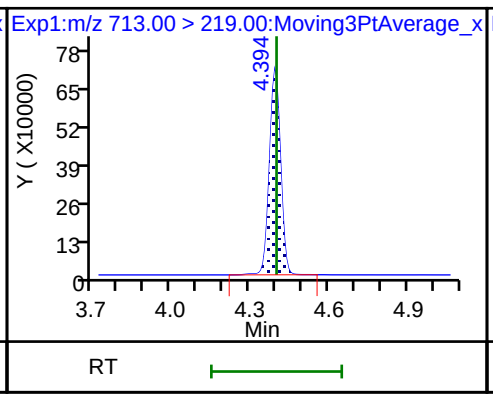
D 43 13C2-PFTeDA



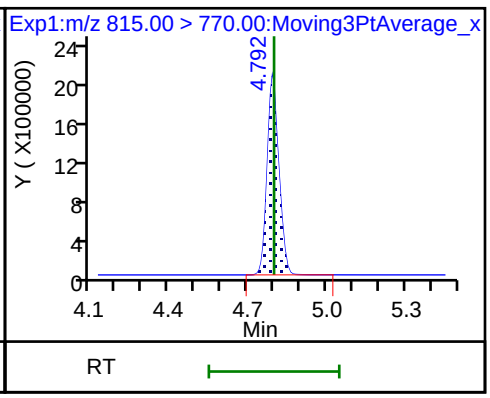
42 Perfluorotetradecanoic acid



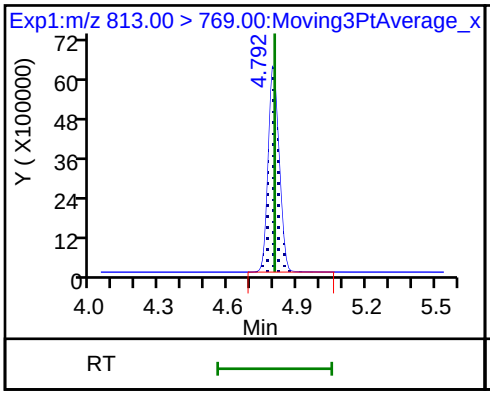
42 Perfluorotetradecanoic acid



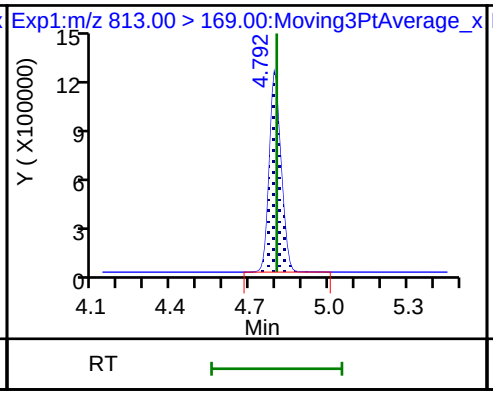
D 44 13C2-PFHxDA



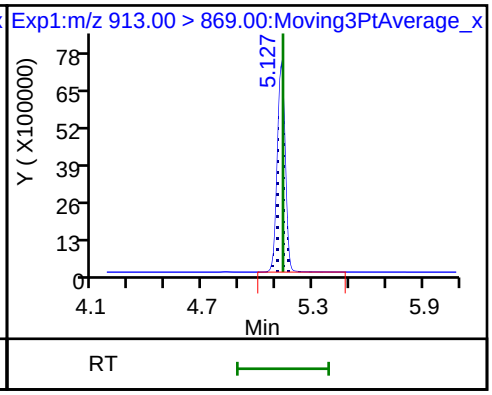
45 Perfluorohexadecanoic acid



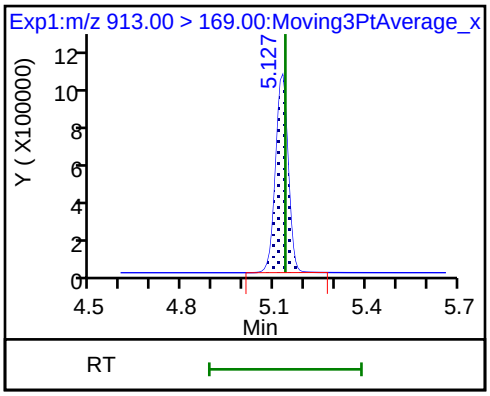
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 237920

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/03/2018 16:12 Calibration End Date: 08/03/2018 16:57 Calibration ID: 40485

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-237920/2	2018.08.03LLICAL_005.d
Level 2	IC 320-237920/3	2018.08.03LLICAL_006.d
Level 3	IC 320-237920/4	2018.08.03LLICAL_007.d
Level 4	IC 320-237920/5	2018.08.03LLICAL_008.d
Level 5	IC 320-237920/6	2018.08.03LLICAL_009.d
Level 6	IC 320-237920/7	2018.08.03LLICAL_010.d
Level 7	IC 320-237920/8	2018.08.03LLICAL_011.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.9302 0.9633	0.9070 0.8682	0.9200	0.9450	0.9713	AveID		0.9293				3.8		35.0			
Perfluoropentanoic acid (PFPeA)	1.1968 0.9699	1.0682 0.9164	1.0398	0.9776	0.9725	AveID		1.0202				9.1		35.0			
Perfluorobutanesulfonic acid (PFBS)	107.26 99.171	102.64 90.988	101.14	111.54	110.31	AveID		103.29				6.9		50.0			
4:2 FTS	19.730 16.792	15.486 15.586	16.160	17.333	18.072	AveID		17.023				8.9		50.0			
Perfluorohexanoic acid (PFHxA)	1.0991 0.9178	0.9496 0.8546	0.9037	0.9170	0.9065	AveID		0.9355				8.3		35.0			
Perfluoropentanesulfonic acid (PFPeS)	47.817 50.392	47.776 47.268	47.251	50.854	50.991	AveID		48.907				3.6		50.0			
HFPO-DA (GenX)	2.3085 2.2984	1.8022 2.2338	2.4442	2.0006	2.3469	AveID		2.2049				10.2		35.0			
Perfluoroheptanoic acid (PFHpA)	1.1086 1.0022	1.1043 0.9095	1.0391	1.1050	0.9999	AveID		1.0384				7.2		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.6052 1.2292	1.3464 1.1362	1.2202	1.2093	1.2084	AveID		1.2793				12.2		35.0			
ADONA	2.1632 1.8870	1.9813 1.5482	2.2043	2.1312	2.1665	AveID		2.0117				11.7		50.0			
6:2 FTS	2.6202 2.0867	2.1081 1.9121	2.1713	2.0615	1.9969	AveID		2.1367				10.7		35.0			
Perfluorooctanoic acid (PFOA)	1.3580 0.9799	1.1724 0.9281	1.1007	1.0623	1.0679	AveID		1.0956				12.8		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	0.9171 1.0840	0.9941 0.9514	1.0471	1.0619	1.0187	AveID		1.0106				6.0		50.0			
Perfluorononanoic acid (PFNA)	1.0419 0.9561	1.1933 0.9460	1.0588	1.1154	1.0716	AveID		1.0547				8.2		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 237920

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/03/2018 16:12 Calibration End Date: 08/03/2018 16:57 Calibration ID: 40485

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid (PFOS)	1.0808 1.1086	1.0366 1.0289	1.0685	1.0832	1.1005	AveID		1.0724				2.8		35.0			
F-53B Major	1.1639 1.1818	1.2213 0.9879	1.2019	1.2589	1.2513	AveID		1.1810				7.8		50.0			
Perfluorononanesulfonic acid (PFNS)	0.6230 0.7062	0.6185 0.5740	0.7116	0.6588	0.6915	AveID		0.6548				7.9		50.0			
Perfluorooctane Sulfonamide (FOSA)	3.0339 2.8667	3.0912 2.6738	3.1605	3.4085	3.2648	AveID		3.0714				8.0		35.0			
8:2 FTS	15.860 13.820	14.456 13.585	13.653	13.139	13.618	AveID		14.019				6.4		35.0			
Perfluorodecanoic acid (PFDA)	1.3256 1.1544	1.3362 1.0481	1.2845	1.2331	1.2227	AveID		1.2292				8.3		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.9808 0.9767	1.1209 0.9638	1.0321	1.0443	0.9560	AveID		1.0107				5.8		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.7835 0.8355	0.8480 0.7331	0.8766	0.8739	0.8832	AveID		0.8334				6.7		50.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.8729 0.9862	0.8019 0.9623	0.8871	0.8637	0.9040	AveID		0.8969				6.9		35.0			
Perfluoroundecanoic acid (PFUnA)	0.7971 0.8280	0.8855 0.7737	0.8531	0.8863	0.8701	AveID		0.8420				5.2		35.0			
F-53B Minor	1.2636 1.1985	1.2318 0.9956	1.3105	1.4032	1.3547	AveID		1.2511				10.6		50.0			
10:2 FTS	5.7585 8.3918	7.2340 9.5992	7.5288	7.8051	7.2500	AveID		7.6525				15.4		50.0			
Perfluorododecanoic acid (PFDoA)	0.9320 0.9442	1.1044 0.8729	0.9621	1.0460	1.0223	AveID		0.9834				8.0		35.0			
Perfluorododecanesulfonic acid (PFDoS)	0.0691 0.0835	0.0669 0.0823	0.0911	0.0874	0.0826	AveID		0.0804				11.2		50.0			
Perfluorotridecanoic Acid (PFTriA)	0.7952 0.7278	0.7292 0.6976	0.7294	0.8027	0.7715	AveID		0.7505				5.3		50.0			
Perfluorotetradecanoic acid (PFTeA)	0.1616 0.1742	0.1556 0.1629	0.1453	0.1621	0.1660	AveID		0.1611				5.6		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.8424 0.9193	1.4019 0.9018	1.0373	0.9520	0.8922	L1ID	0.0247	0.9030							1.0000		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	0.8032 0.7220	0.6683 0.6743	0.7109	0.7155	0.6754	AveID		0.7099				6.6		50.0			
13C4 PFBA	1.0662 1.1913	1.0422 1.2377	1.0367	1.1129	1.1322	Ave		1.1170				6.8		50.0			
13C5 PFPeA	1.0098 1.0621	0.9616 1.0265	0.9385	0.9850	1.0062	Ave		0.9985				4.1		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 237920

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/03/2018 16:12 Calibration End Date: 08/03/2018 16:57 Calibration ID: 40485

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C3-PFBS	0.0146 0.0166	0.0149 0.0171	0.0148	0.0150	0.0153	Ave		0.0155				6.3		50.0			
M2-4:2FTS	0.1073 0.1166	0.0987 0.1060	0.0992	0.1018	0.1067	Ave		0.1052				5.9		50.0			
13C2 PFHxA	1.0447 1.0704	1.0186 1.0507	0.9721	1.0549	1.0448	Ave		1.0366				3.1		50.0			
13C3 HFPO-DA	0.0853 0.0905	0.0913 0.0967	0.0797	0.0930	0.0840	Ave		0.0886				6.6		50.0			
13C4-PFHpA	1.1727 1.2067	1.1157 1.1893	1.1513	1.1706	1.2335	Ave		1.1771				3.2		50.0			
18O2 PFHxS	0.8240 0.9444	0.8171 0.9925	0.8304	0.8693	0.9259	Ave		0.8862				7.7		50.0			
M2-6:2FTS	0.1189 0.1110	0.1150 0.1112	0.1056	0.1209	0.1185	Ave		0.1144				4.8		50.0			
13C4 PFOA	1.0029 1.0323	0.9799 0.9866	0.9233	1.0154	0.9650	Ave		0.9865				3.6		50.0			
13C4 PFOS	0.8950 0.9600	0.8778 1.0308	0.8413	0.9382	0.9134	Ave		0.9223				6.7		50.0			
13C5 PFNA	0.8451 0.8739	0.8457 0.8283	0.8045	0.8511	0.8757	Ave		0.8463				2.9		50.0			
13C8 FOSA	0.5313 0.5701	0.5475 0.5494	0.5428	0.5513	0.5661	Ave		0.5512				2.4		50.0			
M2-8:2FTS	0.0139 0.0127	0.0131 0.0119	0.0130	0.0145	0.0140	Ave		0.0133				6.7		50.0			
13C2 PFDA	0.8485 0.8499	0.8624 0.8082	0.8392	0.8595	0.8640	Ave		0.8474				2.3		50.0			
d3-NMeFOSAA	0.1600 0.1764	0.1508 0.1899	0.1428	0.1601	0.1732	Ave		0.1647				9.8		50.0			
d5-NEtFOSAA	0.1264 0.1380	0.1372 0.1388	0.1305	0.1398	0.1366	Ave		0.1353				3.7		50.0			
13C2 PFUnA	0.7179 0.6934	0.6924 0.6649	0.6597	0.6940	0.6719	Ave		0.6849				3.0		50.0			
13C2 PFDoA	0.6859 0.7849	0.7318 0.7383	0.7342	0.7294	0.7643	Ave		0.7384				4.2		50.0			
13C2-PFTeDA	0.4584 0.4719	0.4560 0.4944	0.4587	0.4753	0.4857	Ave		0.4715				3.1		50.0			
13C2-PFHxDA	0.4110 0.4421	0.4054 0.4565	0.4117	0.4453	0.4558	Ave		0.4325				5.2		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 237920

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/03/2018 16:12 Calibration End Date: 08/03/2018 16:57 Calibration ID: 40485

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-237920/2	2018.08.03LLICAL_005.d
Level 2	IC 320-237920/3	2018.08.03LLICAL_006.d
Level 3	IC 320-237920/4	2018.08.03LLICAL_007.d
Level 4	IC 320-237920/5	2018.08.03LLICAL_008.d
Level 5	IC 320-237920/6	2018.08.03LLICAL_009.d
Level 6	IC 320-237920/7	2018.08.03LLICAL_010.d
Level 7	IC 320-237920/8	2018.08.03LLICAL_011.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	59849 12603718	113801 22190566	587057	2386844	5937685	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	72932 11314842	123668 19426688	600625	2185438	5283276	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	83599 16018083	162604 28367522	813836	3350358	8055489	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	16248 2865640	25922 5133972	137395	550071	1394366	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	69288 10791075	116451 18541720	540737	2195434	5113515	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	39547 8636453	80313 15637004	403451	1620789	3951171	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	11880 2285140	19803 4459473	119832	422442	1064398	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	78450 13282534	148328 22336263	736383	2935816	6659148	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	72636 11602279	120529 21190483	567484	2171268	5497093	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
ADONA		AveID	116832 19896553	209386 32954362	1141401	4537801	10684495	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
6:2 FTS		AveID	17816 2412122	27660 4160680	133796	536402	1210888	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	82270 11122158	138455 18927627	626191	2450512	5569567	0.0250 5.01	0.0501 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	47155 10881371	100013 19279404	516142	2152553	4782579	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorononanoic acid (PFNA)		AveID	53134 9176653	121498 16180234	524304	2154625	5067037	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctanesulfonic acid (PFOS)		AveID	54170 10846850	101664 20323268	513415	2140357	5036535	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 237920

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/03/2018 16:12 Calibration End Date: 08/03/2018 16:57 Calibration ID: 40485

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
F-53B Major		AveID	58586 11613434	120294 19597962	580044	2498276	5751276	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorononanesulfonic acid (PFNS)		AveID	32302 7148701	62749 11730197	353704	1346579	3273769	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
Perfluorooctane Sulfonamide (FOSA)		AveID	97270 17949426	203734 30333745	1055835	4264515	9979434	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
8:2 FTS		AveID	12727 1847076	21801 3196523	104586	413075	988723	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorodecanoic acid (PFDA)		AveID	67874 10776223	138721 17490817	663493	2405357	5703670	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	9469 1892335	20353 3779673	90688	379517	894063	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	40791 8492671	86393 15042348	437557	1793635	4198724	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	6656 1494790	13246 2757725	71271	274140	666629	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroundecanoic acid (PFUnA)		AveID	34534 6306082	73811 10624244	346386	1396013	3156582	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
F-53B Minor		AveID	64287 11903789	122627 19963188	639205	2814480	6293388	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
10:2 FTS		AveID	4650 1128569	10978 2272763	58035	246912	529680	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluorododecanoic acid (PFDoA)		AveID	38579 8139691	97295 13309612	434793	1731609	4218718	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorododecanesulfonic acid (PFDoS)		AveID	3615 852398	6843 1696460	45649	180099	394353	0.0242 4.84	0.0484 9.68	0.242	0.968	2.42
Perfluorotridecanoic Acid (PFTriA)		AveID	32917 6273910	64240 10635642	329625	1328828	3183456	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	4471 902731	8543 1662766	41015	174884	435218	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L1ID	45692 4463963	68430 8500467	262895	962190	2195568	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	19919 3505499	32618 6355971	180156	723135	1661947	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PFOA	Ave	6433939 6541983	6273415 6389618	6381009	6314247	6112850	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PFOA	Ave	6093776 5832978	5788542 5299526	5776616	5588563	5432869	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3-PFBS	13PFOA	Ave	82000 84962	83335 81999	84657	78999	76827	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2FTS	13PFOA	Ave	605018 598286	555044 510976	570224	539553	538018	2.34 2.34	2.34 2.34	2.34	2.34	2.34

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1 Analy Batch No.: 237920

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/03/2018 16:12 Calibration End Date: 08/03/2018 16:57 Calibration ID: 40485

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C2 PFHxA	13PF OA	Ave	6304069 5878468	6131410 5424292	5983609	5985637	5640948	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PF OA	Ave	514626 497113	549410 499092	490263	527888	453541	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4-PFHpA	13PF OA	Ave	7076705 6626960	6715731 6139851	7086577	6641878	6660043	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	4703926 4906340	4652927 4846975	4834908	4666163	4729117	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2FTS	13PF OA	Ave	681382 579189	657438 545128	617490	651860	607653	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C4 PFOA	13PF OA	Ave	6052329 5669239	5898675 5093432	5683176	5761212	5210338	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFOS	13PF OA	Ave	5163172 5039962	5051590 5087246	4950130	5088829	4714686	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	5099845 4799148	5090764 4275948	4951980	4829107	4728270	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	3206073 3130628	3295383 2836181	3340672	3127842	3056647	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2FTS	13PF OA	Ave	80247 66824	75406 58823	76604	78595	72605	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	5120170 4667480	5190946 4172222	5165264	4876594	4664987	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	965422 968788	907888 980371	878656	908545	935170	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	762525 757844	825934 716421	803397	793459	737400	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	4332288 3808061	4167691 3432823	4060489	3937669	3627913	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	4139411 4310482	4405021 3811691	4519004	4138570	4126518	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFTeDA	13PF OA	Ave	2766432 2591620	2744799 2552499	2823583	2697006	2622464	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFHxDA	13PF OA	Ave	2480005 2427794	2440530 2356463	2534296	2526670	2460813	2.50 2.50	2.50 2.50	2.50	2.50	2.50

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L1ID = Linear 1/conc IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Aug-2018 16:12:27 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC PFC STD1
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 03-Aug-2018 18:17:16 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK018

First Level Reviewer: roycea Date: 03-Aug-2018 17:16:30

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.485	1.485	0.0	0.537	6433939	2.39		95.4	9300	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.485	1.486	-0.001	1.000	59849	0.0250		100	1.3	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.753	1.753	0.0	0.634	6093776	2.53		101	9268	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.761	1.754	0.007	1.005	72932	0.0293		117	2.7	
D 47 13C3-PFBS										
301.90 > 83.00	1.795	1.792	0.003	0.649	82000	2.20		94.5	251	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.795	1.794	0.001	1.000	83599	0.0229		104	32.5	
298.90 > 99.00	1.795	1.794	0.001	1.000	34037		2.46(1.35-4.05)	104	10.4	
D 60 M2-4:2FTS										
329.00 > 81.00	2.006	2.006	0.0	0.726	605018	2.38		102	412	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.016	2.009	0.007	1.123	16248	0.0271		116	79.5	
6 Perfluorohexanoic acid										RM
313.00 > 269.00	2.047	2.044	0.003	1.000	69288	0.0294		117	6.8	RM
313.00 > 119.00	2.047	2.044	0.003	1.000	2754		25.16(6.96-20.87)	117	3.1	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.047	2.046	0.001	0.740	6304069	2.52		101	7078	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.078	2.069	0.009	1.158	39547	0.0229		97.8	101	
349.00 > 99.00	2.078	2.069	0.009	1.158	18467		2.14(1.15-3.45)	97.8	10.3	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.150	2.146	0.004	0.778	514626	2.41		96.2	1751	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.150	2.147	0.003	1.000	11880	0.0262		105	4.5	
D 9 13C4-PFHpA										
367.00 > 322.00	2.384	2.384	0.0	0.862	7076705	2.49		99.6	15822	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.384	2.384	0.0	1.000	78450	0.0267		107	5.8	
363.00 > 169.00	2.397	2.384	0.013	1.005	19752		3.97(2.17-6.52)	107	20.2	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.397	2.398	-0.001	0.995	72636	0.0285		125	71.9	
399.00 > 99.00	2.410	2.398	0.012	1.000	21289		3.41(1.90-5.70)	125	6.8	M
D 11 18O2 PFHxS										
403.00 > 84.00	2.410	2.400	0.010	0.872	4703926	2.20		93.0	6316	
65 ADONA										
377.00 > 251.00	2.435	2.435	0.0	0.776	116832	0.0269		108	168	
377.00 > 85.00	2.435	2.435	0.0	0.776	47672		2.45(1.05-3.16)	108	21.6	
D 12 M2-6:2FTS										
429.00 > 81.00	2.733	2.732	0.001	0.988	681382	2.47		104	920	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.733	2.732	0.001	1.000	17816	0.0291		123	80.8	
* 62 13C2-PFOA										
415.00 > 370.00	2.765	2.755	0.010		6034591	2.50			7992	
D 14 13C4 PFOA										
417.00 > 372.00	2.765	2.757	0.008	1.000	6052329	2.54		102	5589	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.765	2.757	0.008	1.000	82270	0.0310		124	7.7	
413.00 > 169.00	2.765	2.757	0.008	1.000	29433		2.80(1.36-4.08)	124	21.7	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.765	2.767	-0.002	0.881	47155	0.0216		90.7	77.6	
449.00 > 99.00	2.765	2.767	-0.002	0.881	12808		3.68(1.84-5.53)	90.7	24.5	
D 19 13C5 PFNA										
468.00 > 423.00	3.138	3.140	-0.002	1.135	5099845	2.50		99.9	5153	
D 18 13C4 PFOS										
503.00 > 80.00	3.138	3.140	-0.002	1.135	5163172	2.32		97.0	6374	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.138	3.140	-0.002	1.000	54170	0.0234		101	59.2	
499.00 > 99.00	3.138	3.140	-0.002	1.000	13179		4.11(2.04-6.12)	101	25.0	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.138	3.140	-0.002	1.000	53134	0.0247		98.8	7.7	M
463.00 > 169.00	3.138	3.140	-0.002	1.000	11817		4.50(2.68-8.03)	98.8	19.6	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.346	3.348	-0.002	1.066	58586	0.0230		98.6	81.5	
D 21 13C8 FOSA										
506.00 > 78.00	3.492	3.485	0.007	1.263	3206073	2.41		96.4	3862	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.492	3.492	0.0	1.113	32302	0.0228		95.1	63.4	
549.00 > 99.00	3.492	3.492	0.0	1.113	5822		5.55(3.02-9.05)	95.1	37.8	
D 26 M2-8:2FTS										
529.00 > 81.00	3.492	3.492	0.0	1.263	80247	2.50		104	319	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.492	3.492	0.0	1.000	97270	0.0247		98.8	120	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.492	3.494	-0.002	1.000	12727	0.0271		113	108	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.508	3.505	0.003	1.000	67874	0.0270		108	8.8	
513.00 > 169.00	3.492	3.505	-0.013	0.995	3795		17.89(7.12-21.35)	108	6.0	
D 23 13C2 PFDA										
515.00 > 470.00	3.508	3.505	0.003	1.269	5120170	2.50		100	5615	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.650	3.650	0.0	1.320	965422	2.43		97.1	2901	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.664	3.662	0.002	1.004	9469	0.0243		97.0	5.9	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.816	3.816	0.0	1.216	40791	0.0227		94.0	102	
599.00 > 99.00	3.816	3.816	0.0	1.216	8450		4.83(2.14-6.43)	94.0	15.5	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.831	3.825	0.006	1.386	762525	2.33		93.4	1622	
D 30 13C2 PFUnA										
565.00 > 520.00	3.831	3.831	0.0	1.386	4332288	2.62		105	6676	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.831	3.831	0.0	1.000	34534	0.0237		94.7	7.4	
563.00 > 169.00	3.831	3.831	0.0	1.000	4816		7.17(5.24-15.72)	94.7	10.3	
33 N-ethyl perfluorooctane sulfonamid										M
584.00 > 419.00	3.831	3.831	0.0	1.000	6656	0.0243		97.3	17.8	M
35 MeFOSA										M
512.00 > 169.00	3.966	3.971	-0.005		10399	NC			30.4	M
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.997	3.993	0.004	1.274	64287	0.0238		101	279	
D 36 13C2 PFDoA										
615.00 > 570.00	4.126	4.127	-0.001	1.492	4139411	2.32		92.9	6427	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.126	4.127	-0.001	1.000	38579	0.0237		94.8	8.0	M
613.00 > 169.00	4.126	4.127	-0.001	1.000	7418		5.20(4.68-14.05)	94.8	30.7	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.126	4.127	-0.001	1.182	4650	0.0181		75.3	18.0	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.361	4.361	0.0	1.390	3615	0.0208		86.0	28.3	
699.00 > 99.00	4.361	4.361	0.0	1.390	6678		0.54(0.28-0.83)	86.0	30.7	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.392	4.392	0.0	1.064	32917	0.0265		106	9.5	
663.00 > 169.00	4.392	4.392	0.0	1.064	6027		5.46(3.09-9.27)	106	14.0	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.635	4.635	0.0	1.676	2766432	2.43		97.2	6765	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.635	4.635	0.0	1.000	4471	0.0251		100	17.6	
713.00 > 219.00	4.635	4.635	0.0	1.000	2613		1.71(0.70-2.09)	100	10.1	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.050	5.049	0.001	1.827	2480005	2.38		95.0	4466	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.050	5.049	0.001	1.000	45692	0.0236		94.4	5.9	
813.00 > 169.00	5.050	5.049	0.001	1.000	8248		5.54(2.77-8.32)	94.4	36.2	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.412	5.401	0.011	1.072	19919	0.0283		113	19.6	
913.00 > 169.00	5.398	5.401	-0.003	1.069	3914		5.09(2.55-7.64)	113	40.9	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- R - Failed Signal Ratio Test

Review Flags
- M - Manually Integrated

Reagents:

LCPFC_LL1_00007 Amount Added: 1.00 Units: mL

Report Date: 03-Aug-2018 18:17:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d

Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9

Lims ID: IC L1 Full

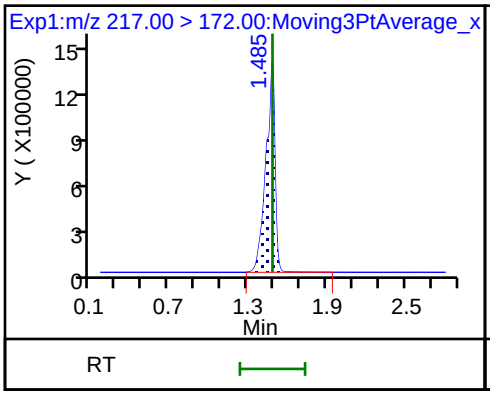
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2

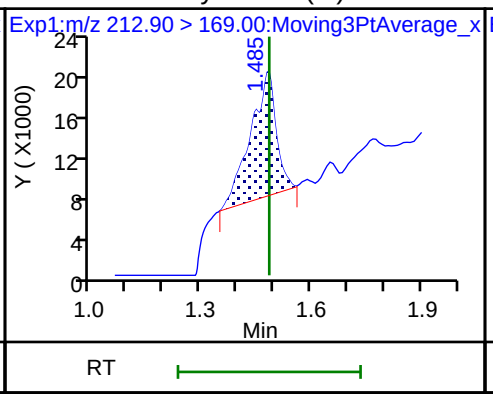
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

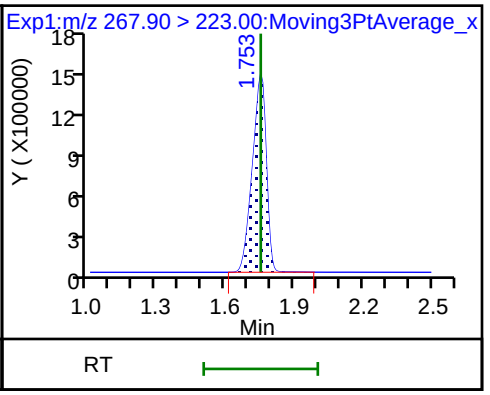
D 1 13C4 PFBA



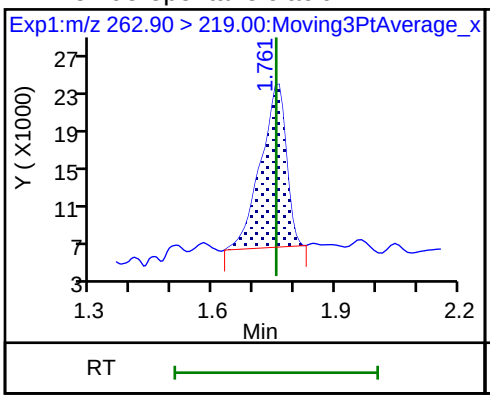
2 Perfluorobutyric acid (M)



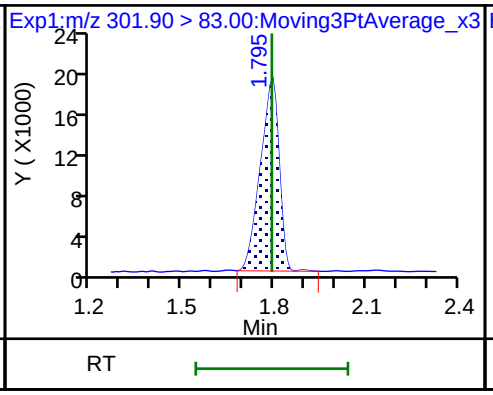
D 3 13C5-PFPeA



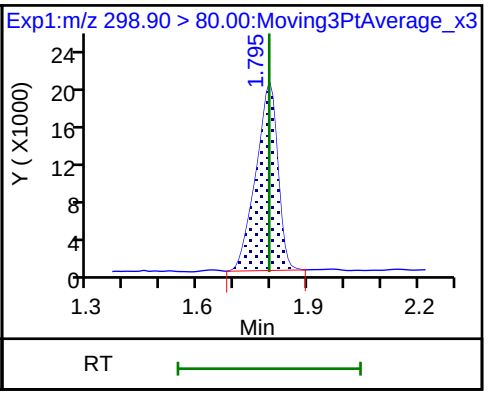
4 Perfluoropentanoic acid



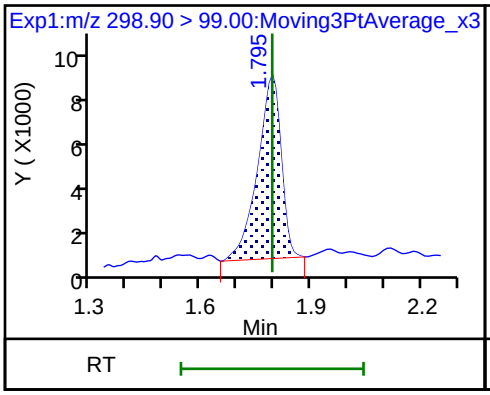
D 47 13C3-PFBS



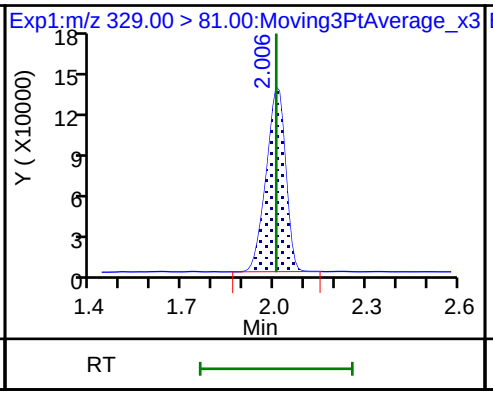
5 Perfluorobutanesulfonic acid



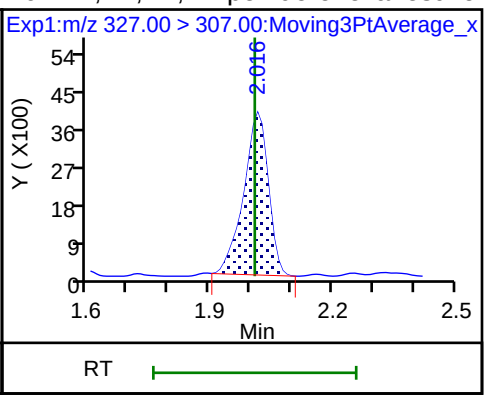
5 Perfluorobutanesulfonic acid



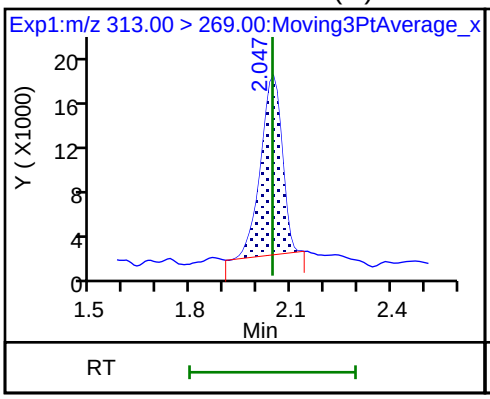
D 60 M2-4:2FTS



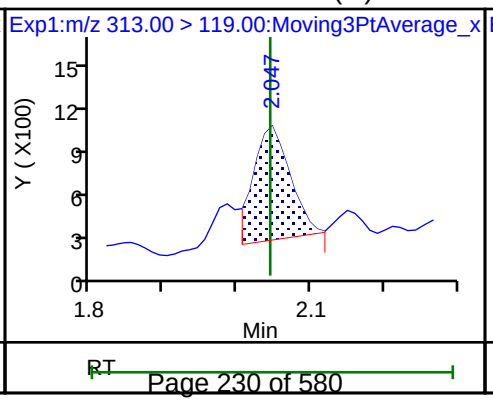
61 1H,1H,2H,2H-perfluorohexanesulfoni



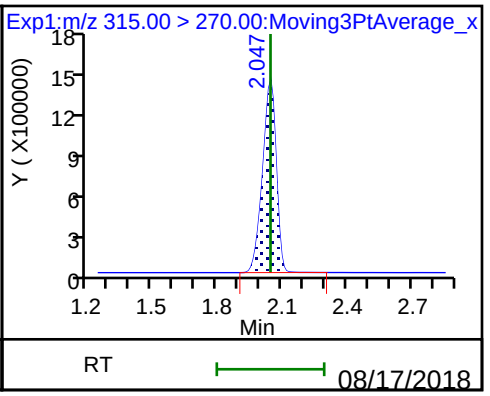
6 Perfluorohexanoic acid (M)



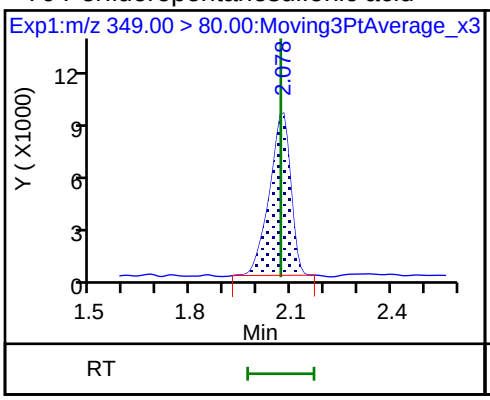
6 Perfluorohexanoic acid (M)



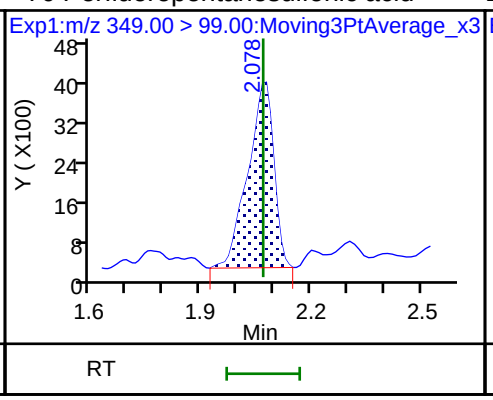
D 7 13C2 PFHxA



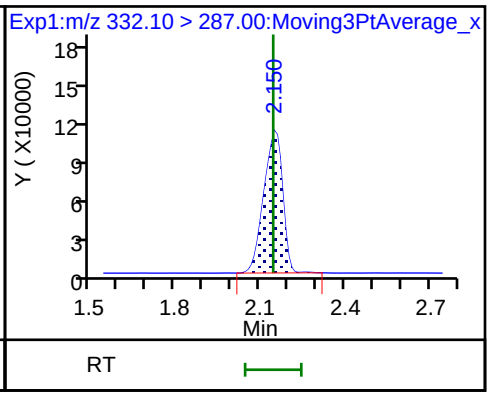
70 Perfluoropentanesulfonic acid



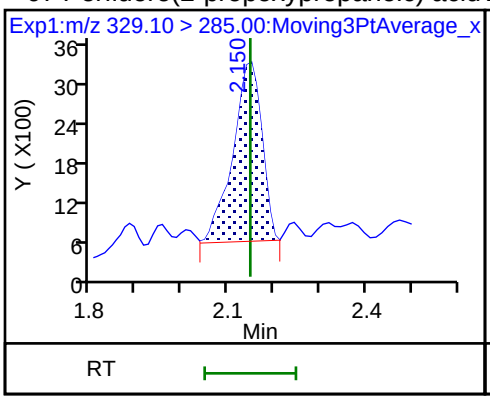
70 Perfluoropentanesulfonic acid



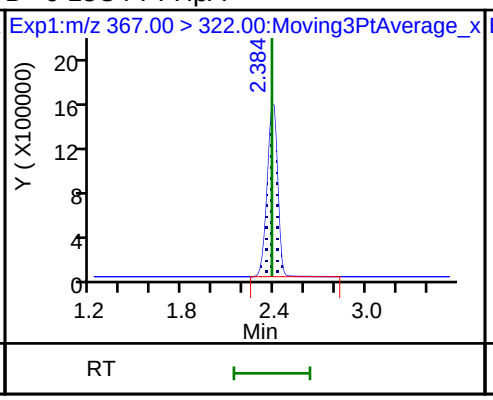
D 64 13C3 HFPO-DA



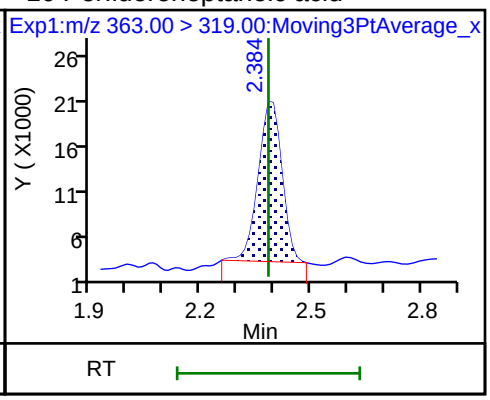
67 Perfluoro(2-propoxypropanoic) acid



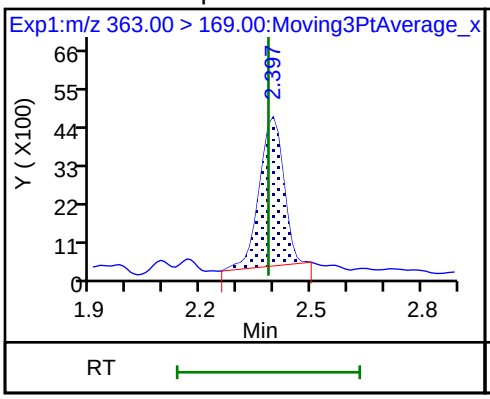
D 9 13C4-PFHpA



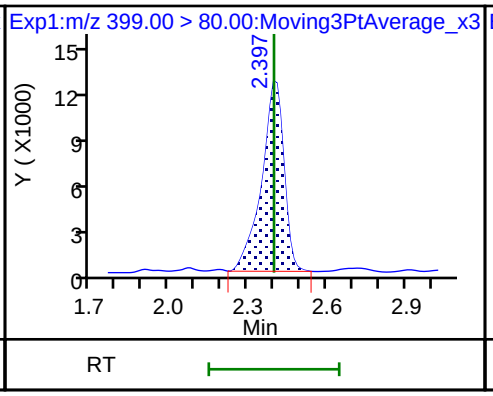
10 Perfluoroheptanoic acid



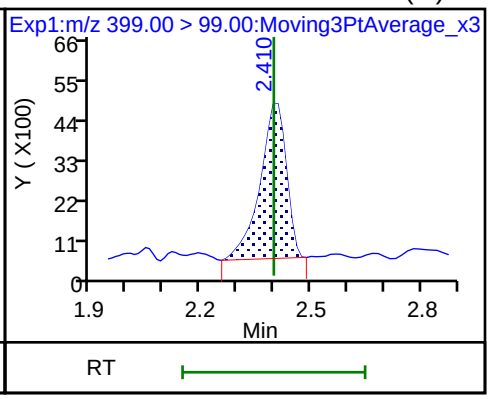
10 Perfluoroheptanoic acid



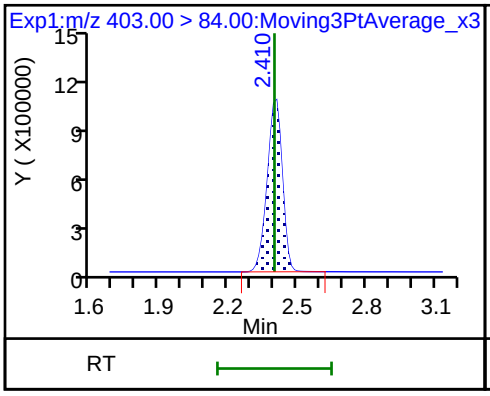
8 Perfluorohexanesulfonic acid



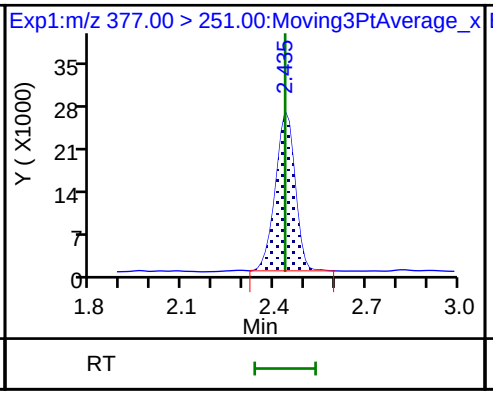
8 Perfluorohexanesulfonic acid (M)



D 11 18O2 PFHxS



65 ADONA



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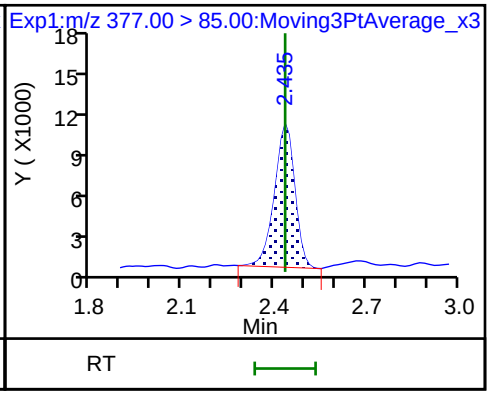
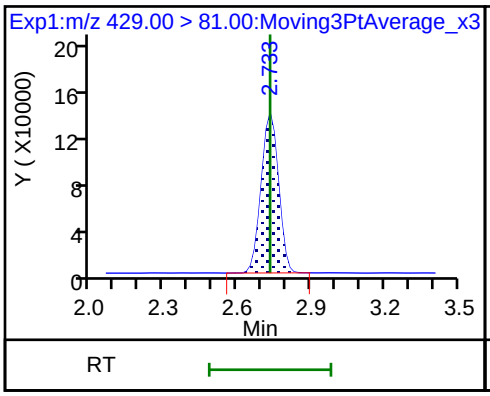
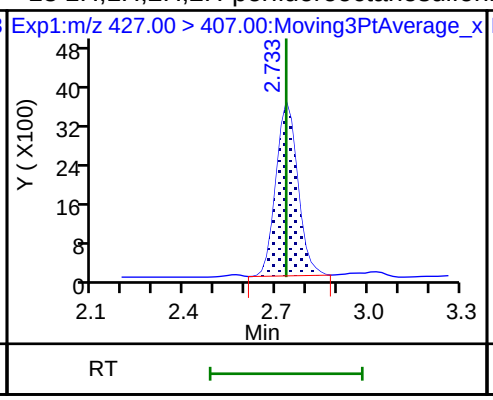
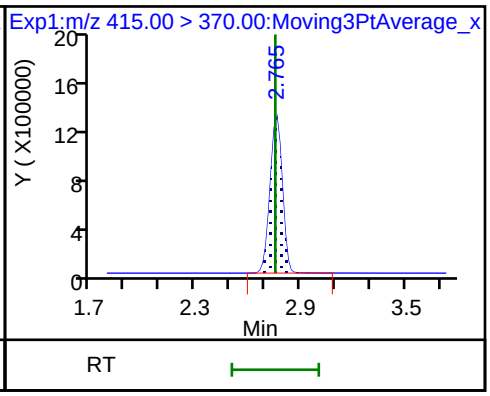


D 12 M2-6:2FTS

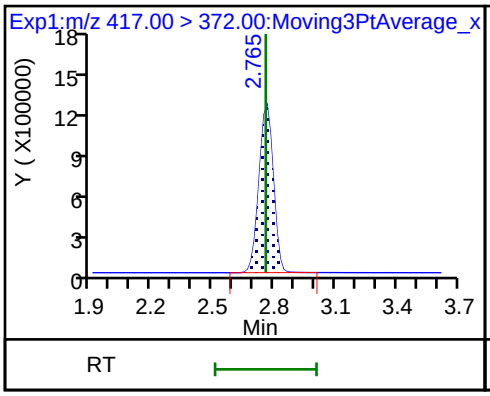


13 1H,1H,2H,2H-perfluorooctanesulfoni* 62 13C2-PFOA

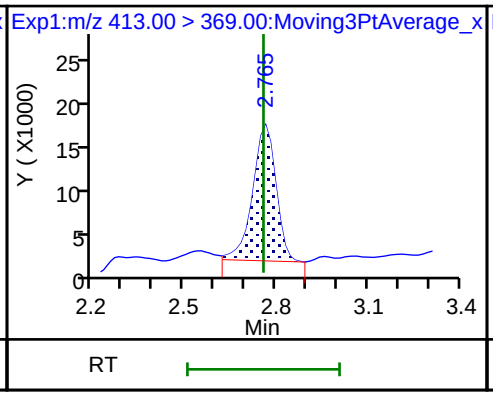




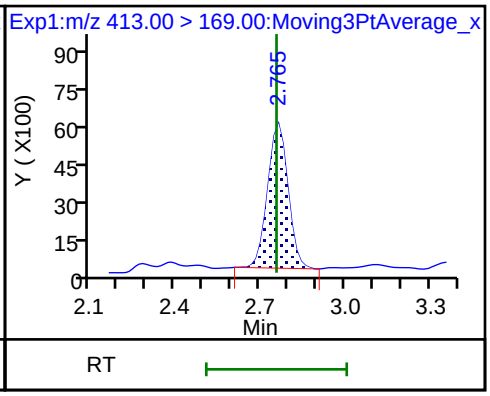
D 14 13C4 PFOA



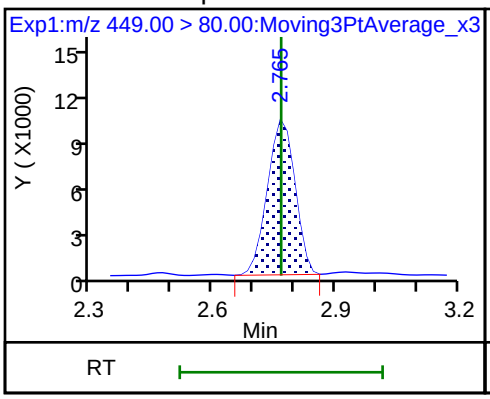
15 Perfluorooctanoic acid



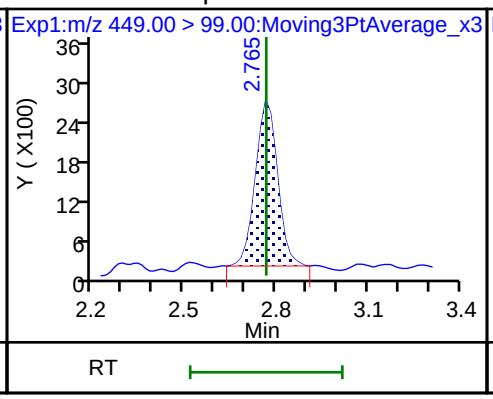
15 Perfluorooctanoic acid



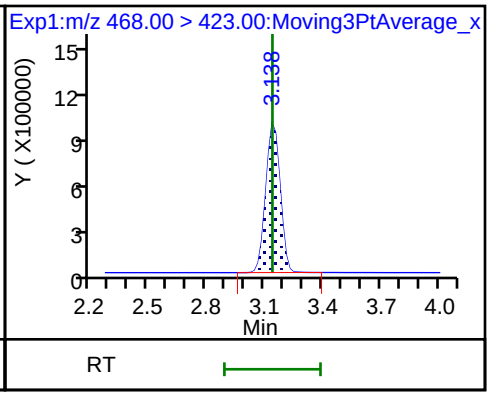
16 Perfluoroheptanesulfonic acid



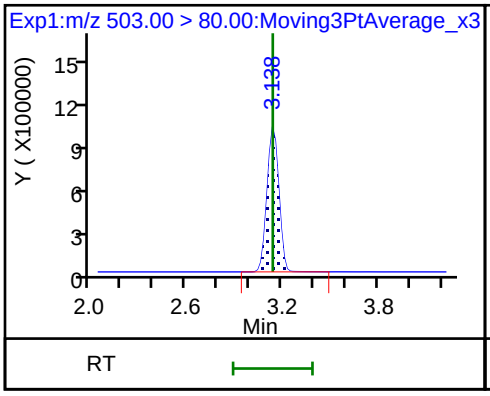
16 Perfluoroheptanesulfonic acid



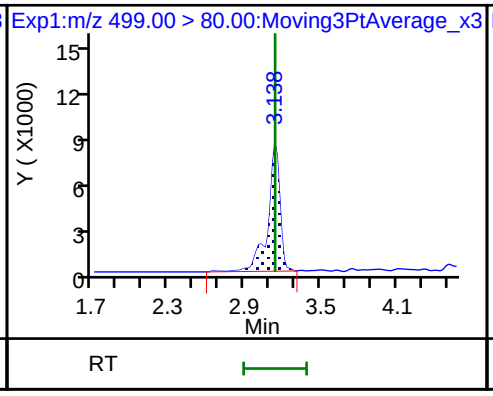
D 19 13C5 PFNA



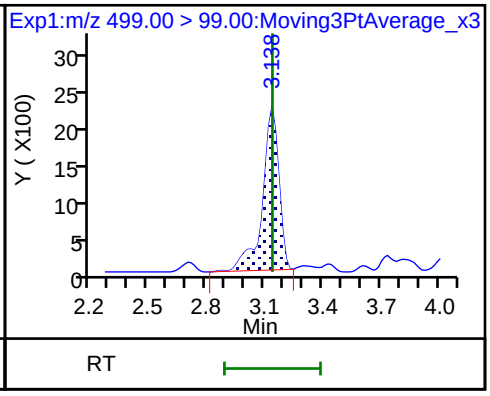
D 18 13C4 PFOS



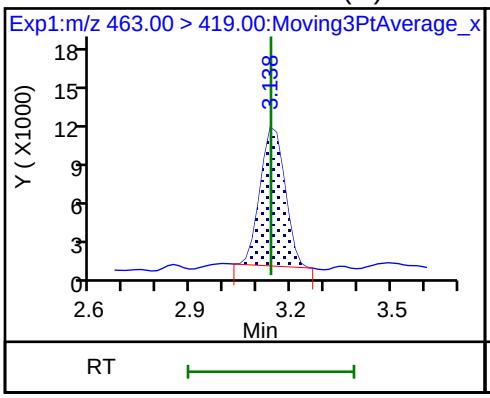
17 Perfluorooctane sulfonic acid



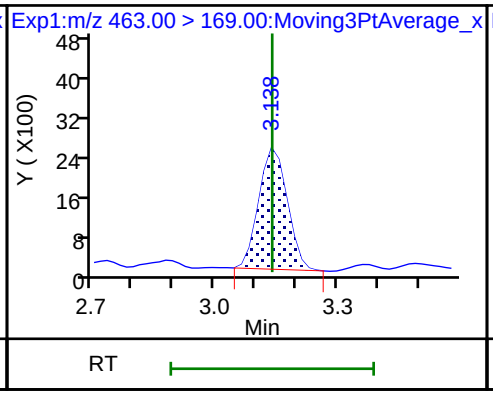
17 Perfluorooctane sulfonic acid



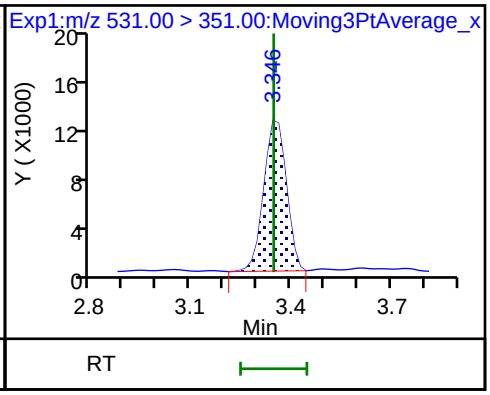
20 Perfluorononanoic acid (M)



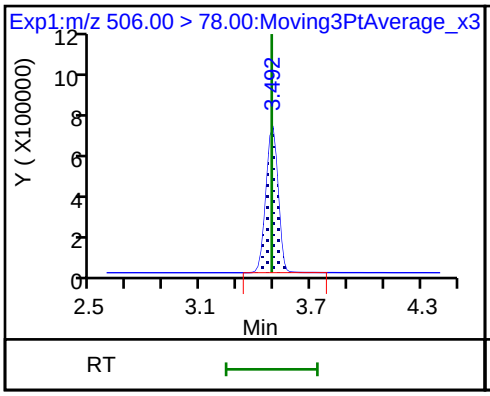
20 Perfluorononanoic acid



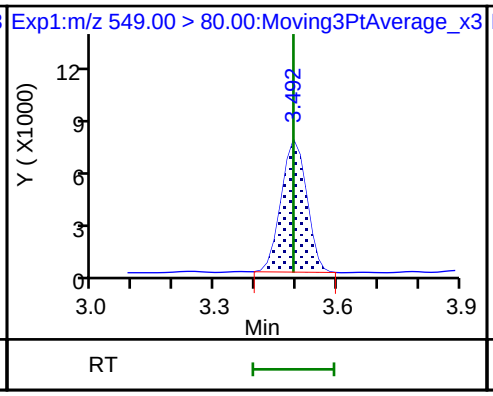
69 9-Chlorohexadecafluoro-3-oxanonane



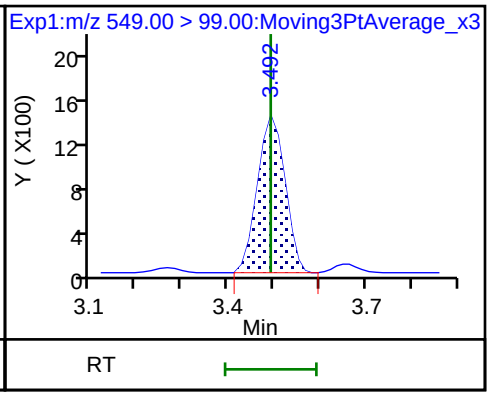
D 21 13C8 FOSA



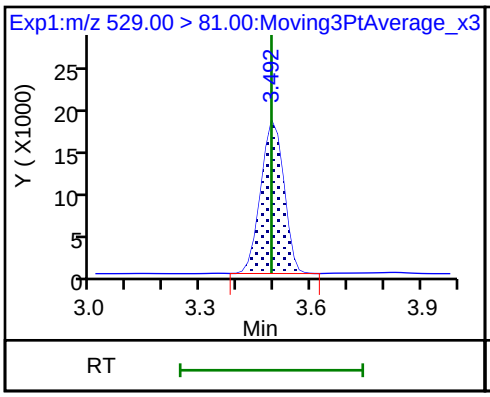
68 Perfluorononanesulfonic acid



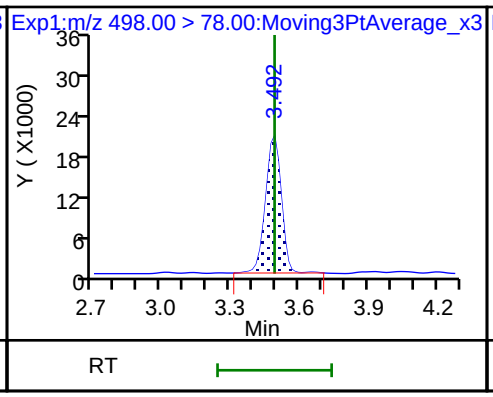
68 Perfluorononanesulfonic acid



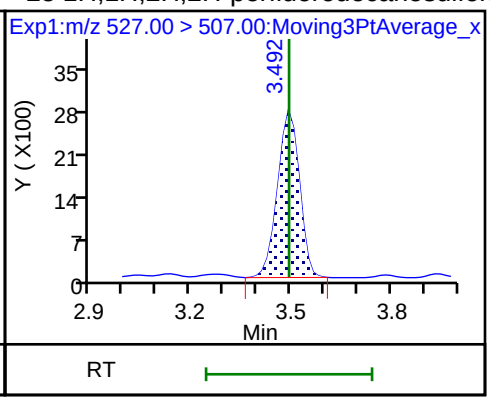
D 26 M2-8:2FTS



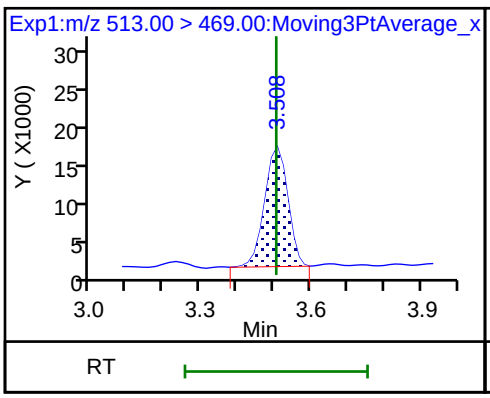
22 Perfluorooctane Sulfonamide



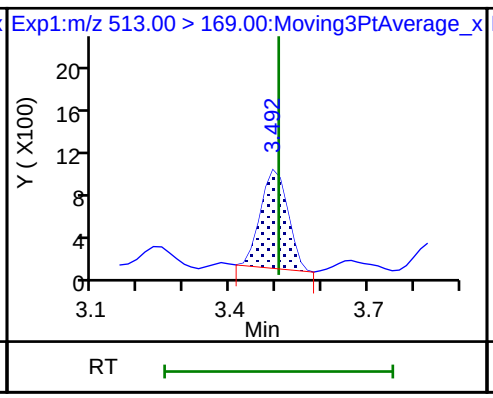
25 1H,1H,2H,2H-perfluorodecanesulfoni



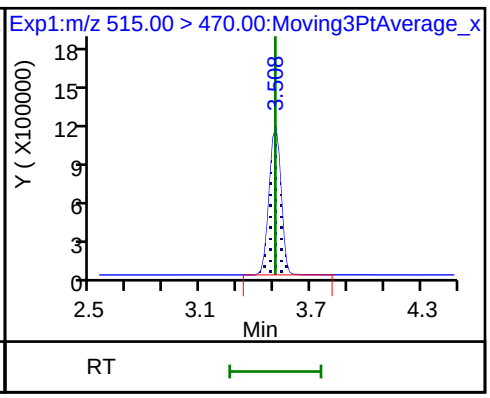
24 Perfluorodecanoic acid



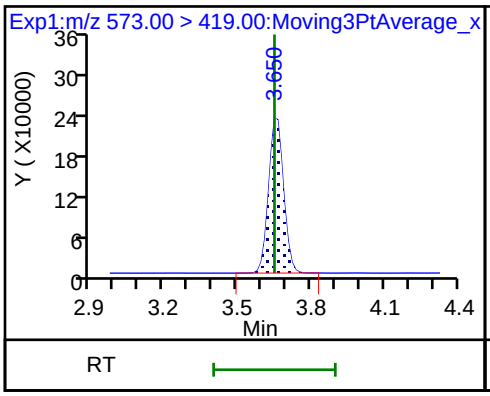
24 Perfluorodecanoic acid



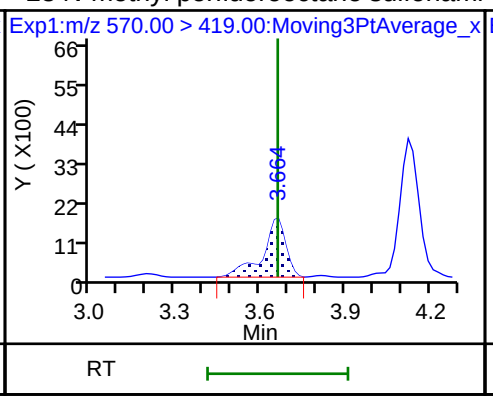
D 23 13C2 PFDA



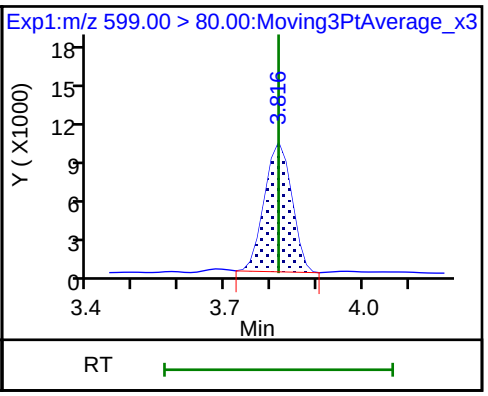
D 27 d3-NMeFOSAA



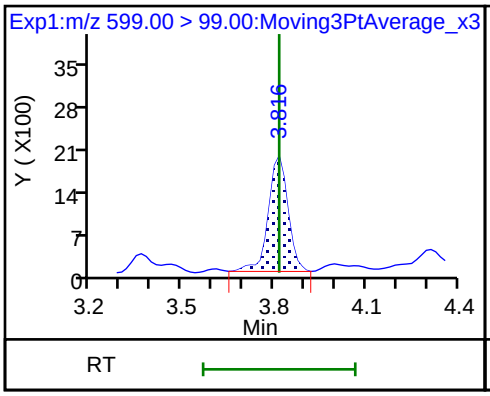
28 N-methyl perfluorooctane sulfonami



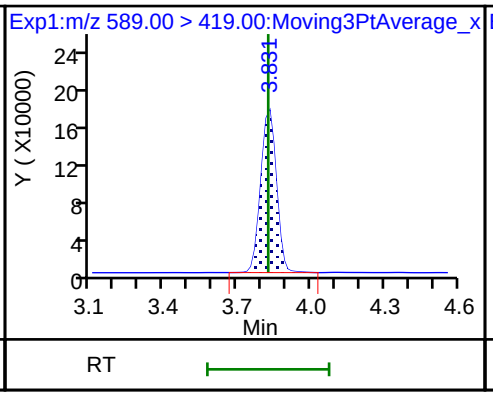
29 Perfluorodecane Sulfonic acid



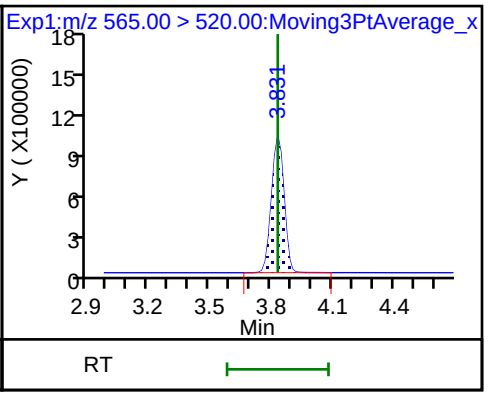
29 Perfluorodecane Sulfonic acid



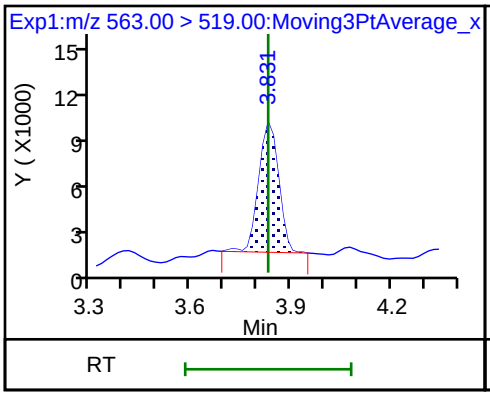
D 32 d5-NEtFOSAA



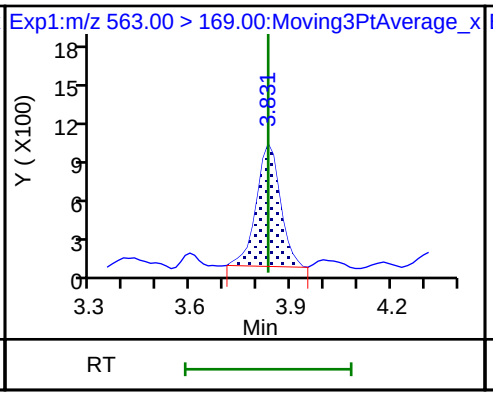
D 30 13C2 PFUnA



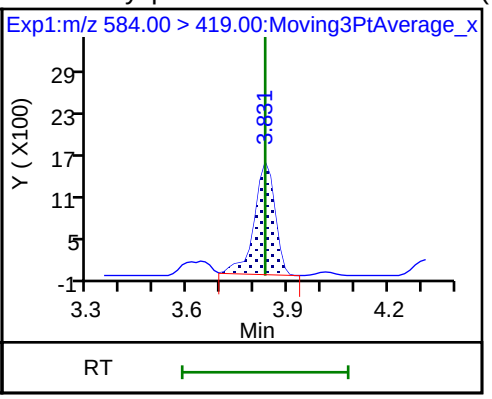
31 Perfluoroundecanoic acid



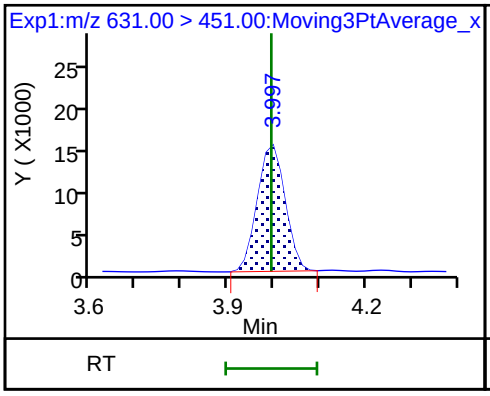
31 Perfluoroundecanoic acid



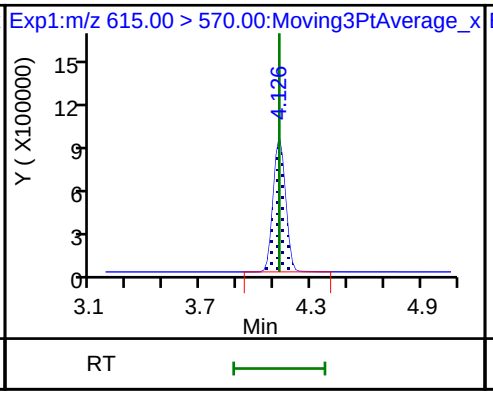
33 N-ethyl perfluorooctane sulfonamid (M)



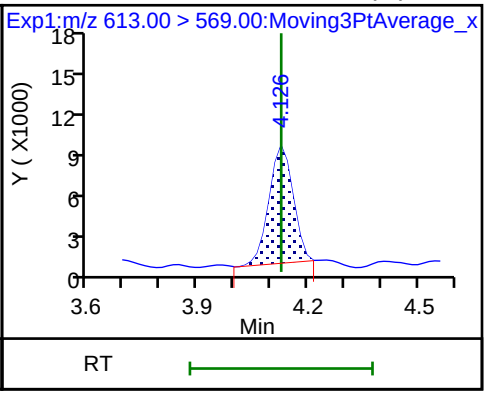
66 11-Chloroeicosafluoro-3-oxaundecan



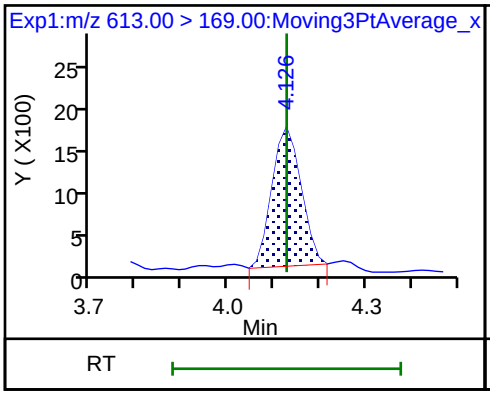
D 36 13C2 PFDoA



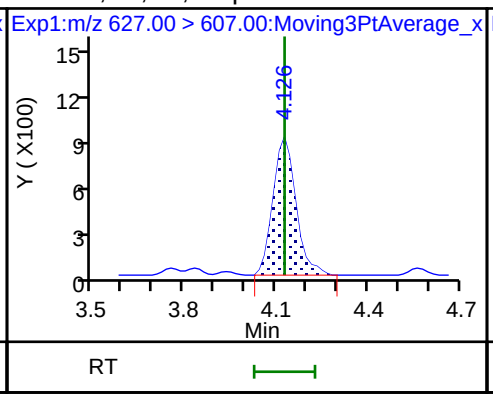
37 Perfluorododecanoic acid (M)



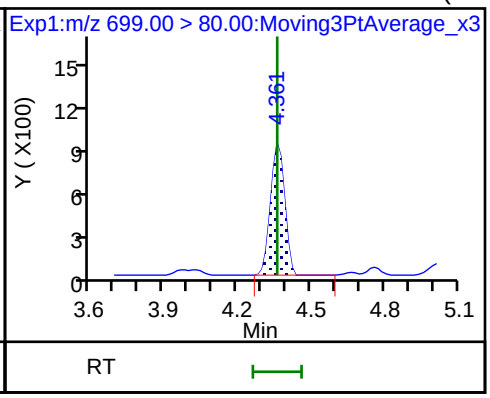
37 Perfluorododecanoic acid



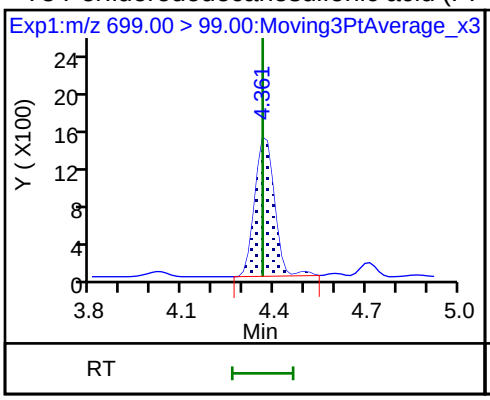
74 1H,1H,2H,2H-perfluorododecanesulfo



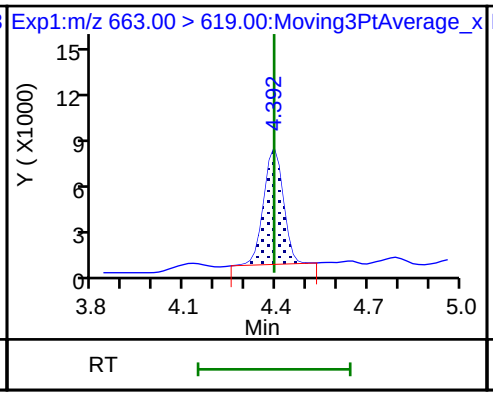
75 Perfluorododecanesulfonic acid (PF



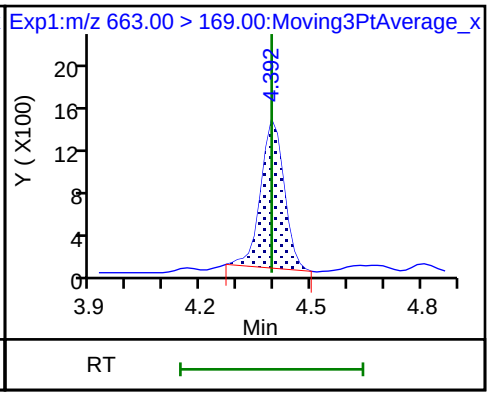
75 Perfluorododecanesulfonic acid (PF



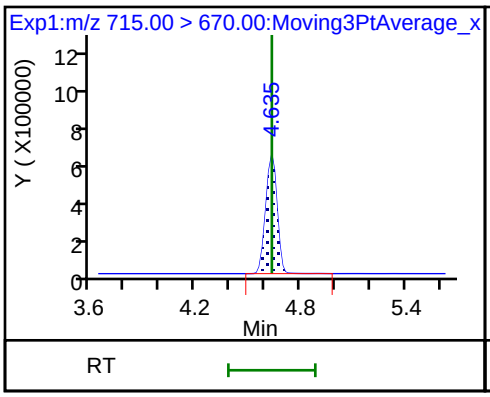
41 Perfluorotridecanoic acid



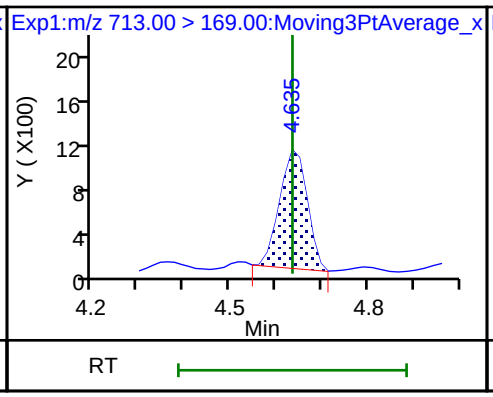
41 Perfluorotridecanoic acid



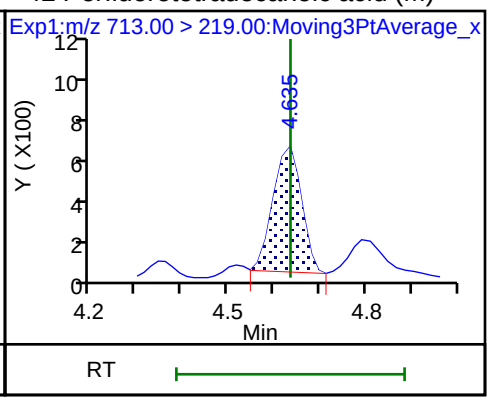
D 43 13C2-PFTeDA



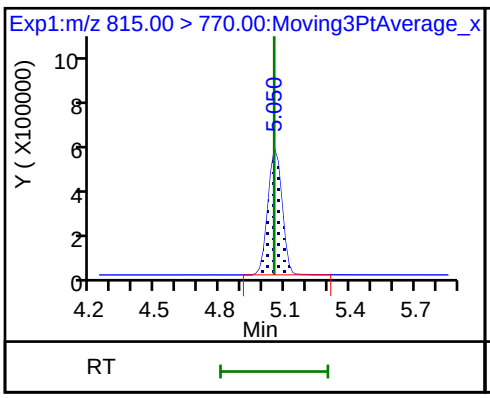
42 Perfluorotetradecanoic acid



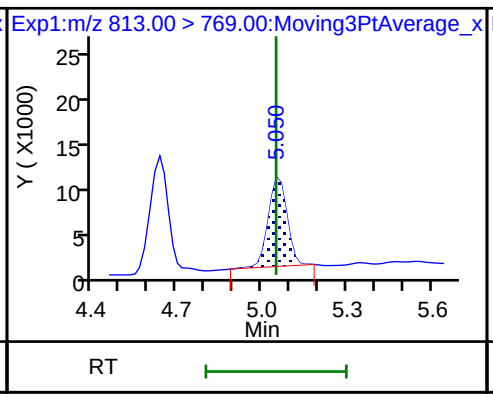
42 Perfluorotetradecanoic acid (M)



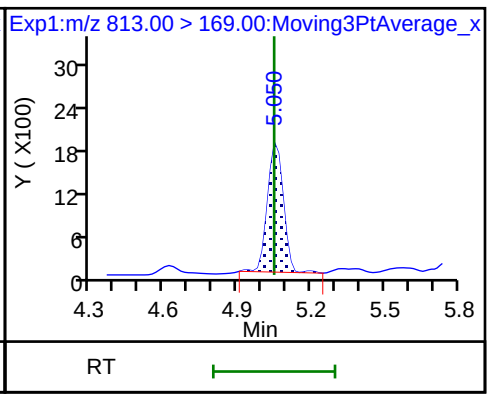
D 44 13C2-PFHxDA



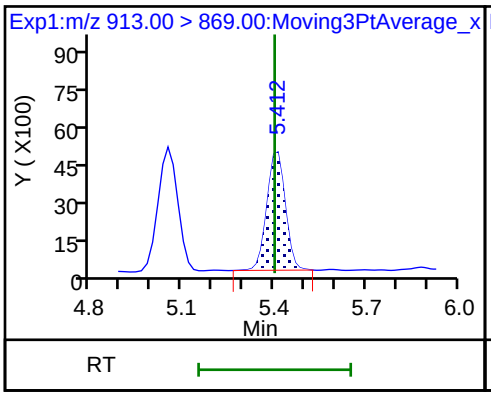
45 Perfluorohexadecanoic acid



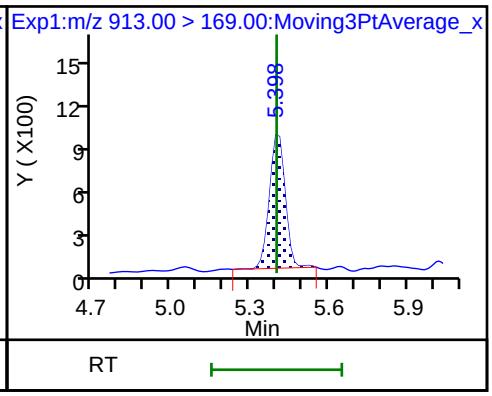
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

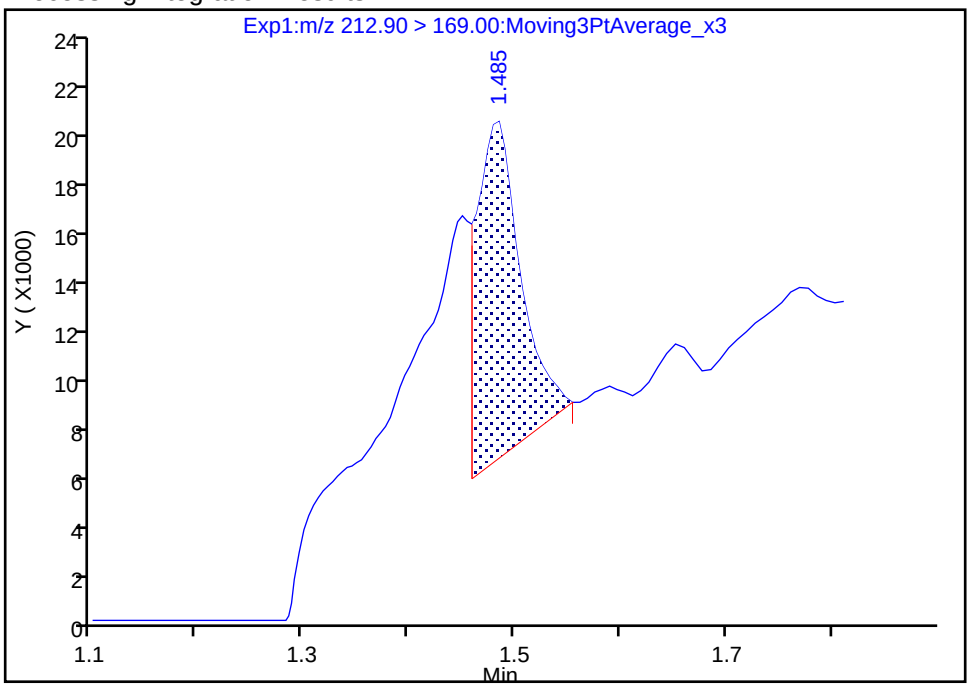
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

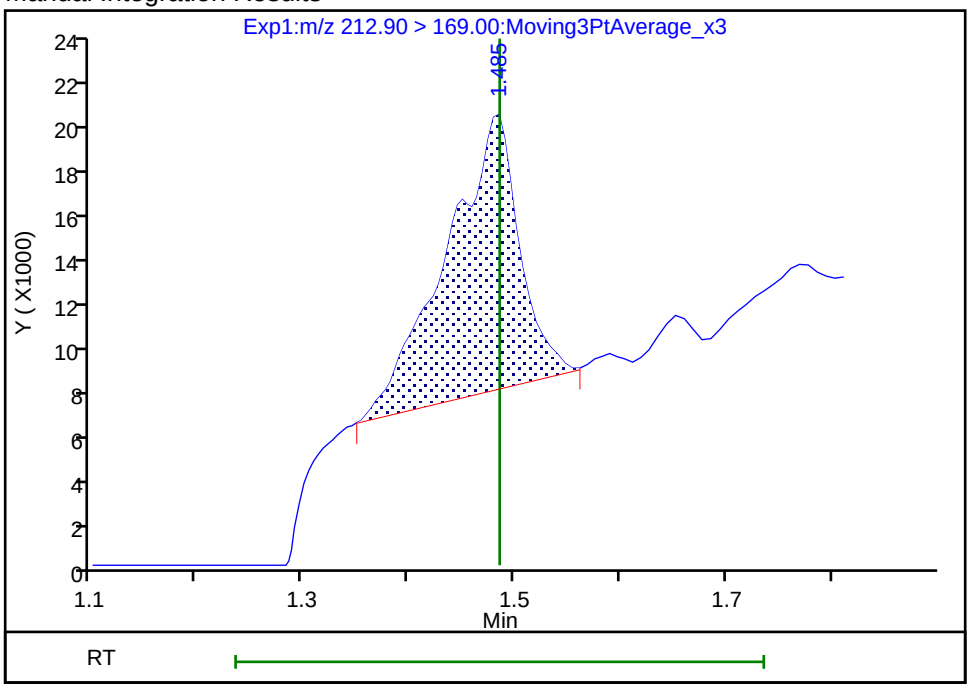
Processing Integration Results

RT: 1.49
Area: 38682
Amount: 0.017177
Amount Units: ng/ml



Manual Integration Results

RT: 1.49
Area: 59849
Amount: 0.025024
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:12:02
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

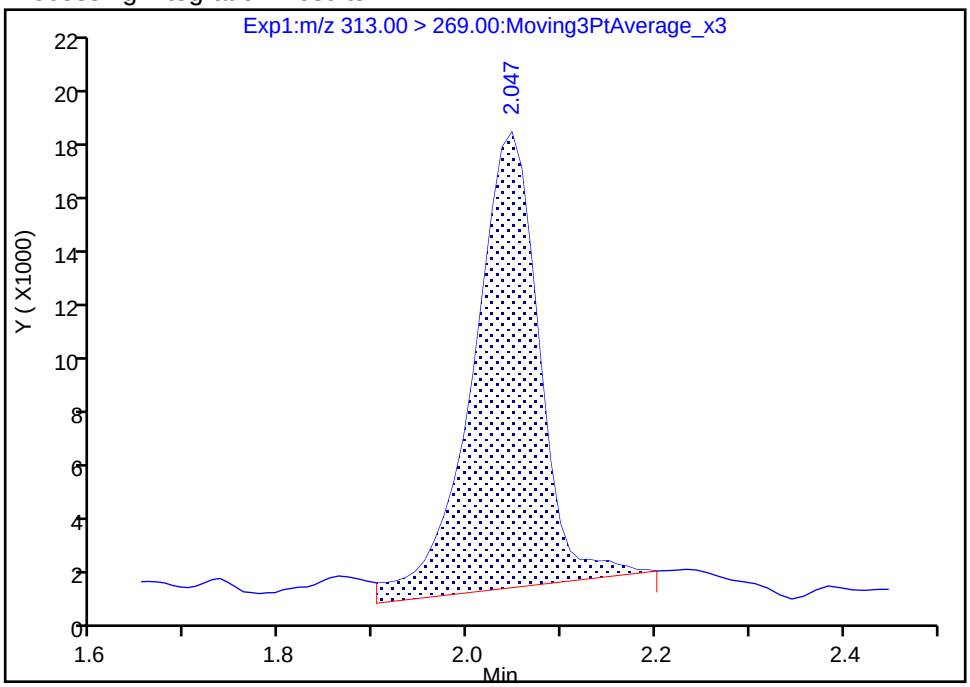
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

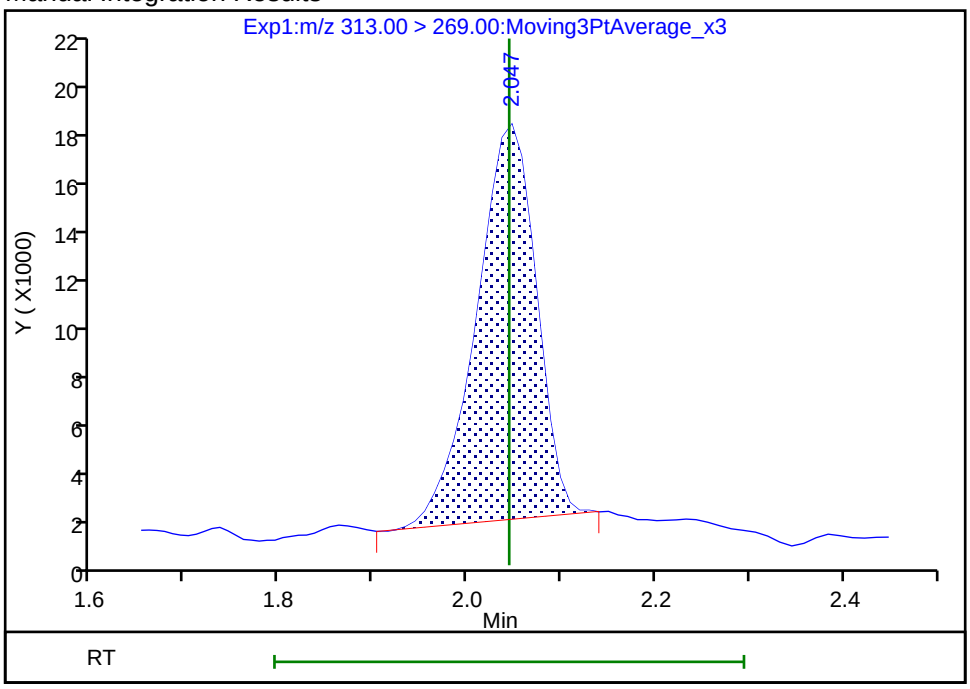
Processing Integration Results

RT: 2.05
Area: 79766
Amount: 0.032978
Amount Units: ng/ml



Manual Integration Results

RT: 2.05
Area: 69288
Amount: 0.029373
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:12:20
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

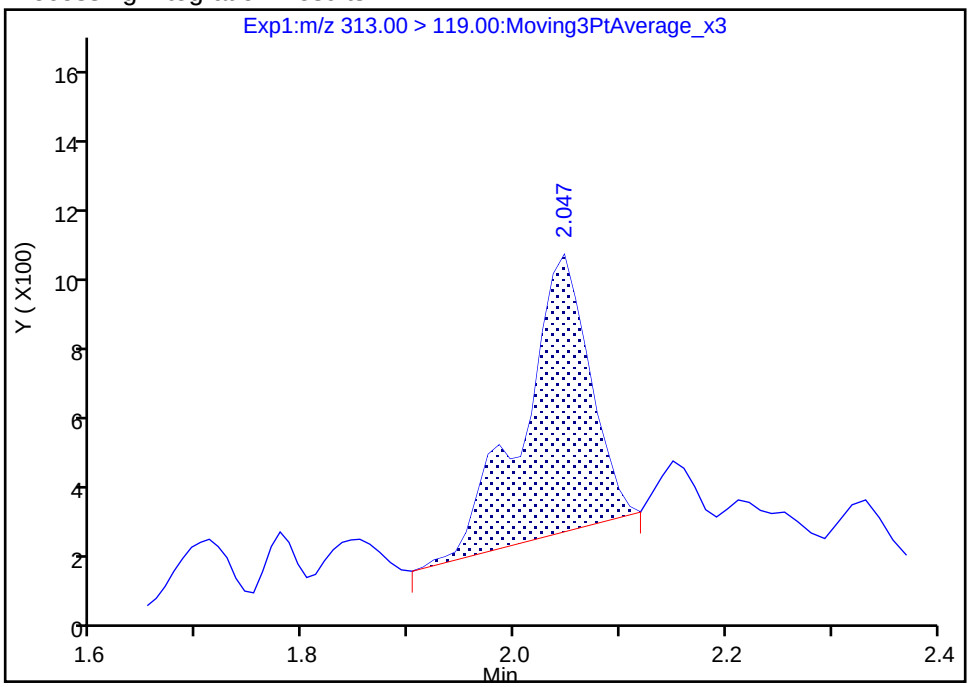
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

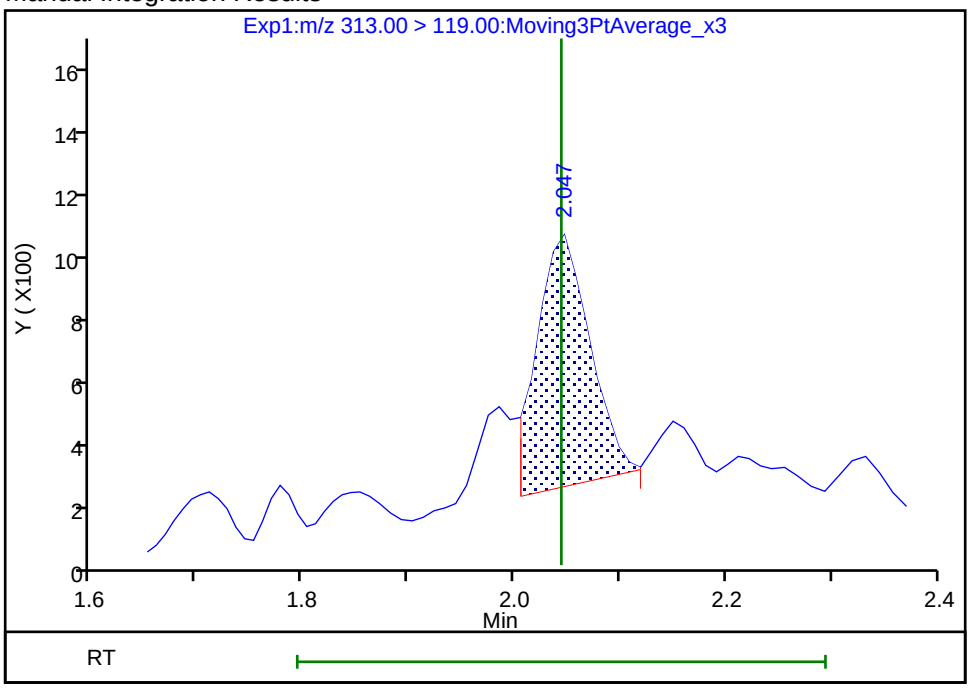
Processing Integration Results

RT: 2.05
Area: 3495
Amount: 0.032978
Amount Units: ng/ml



Manual Integration Results

RT: 2.05
Area: 2754
Amount: 0.029373
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:12:39
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

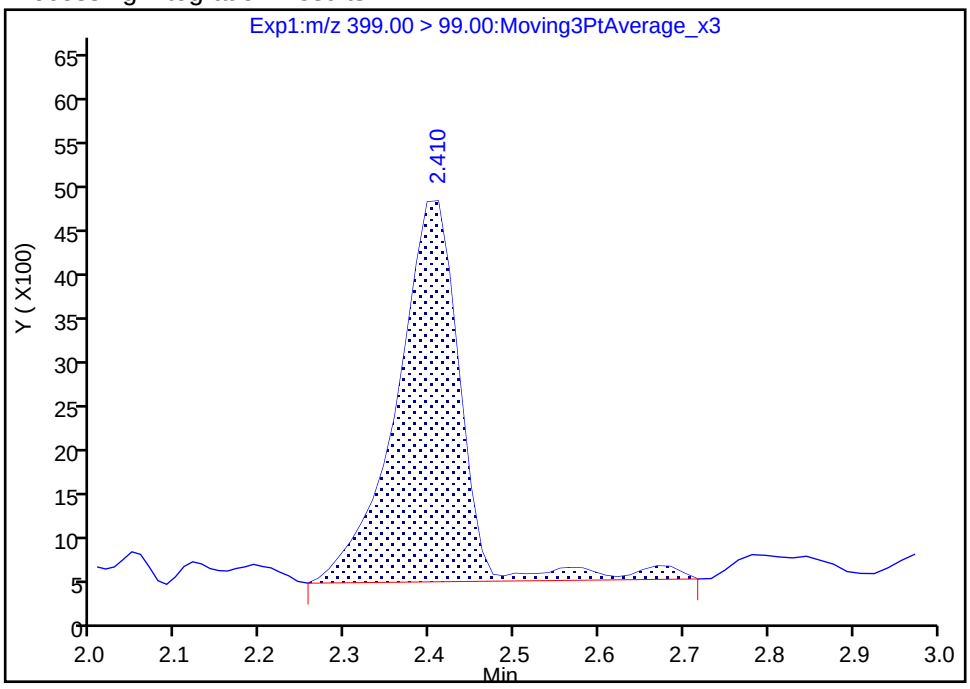
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

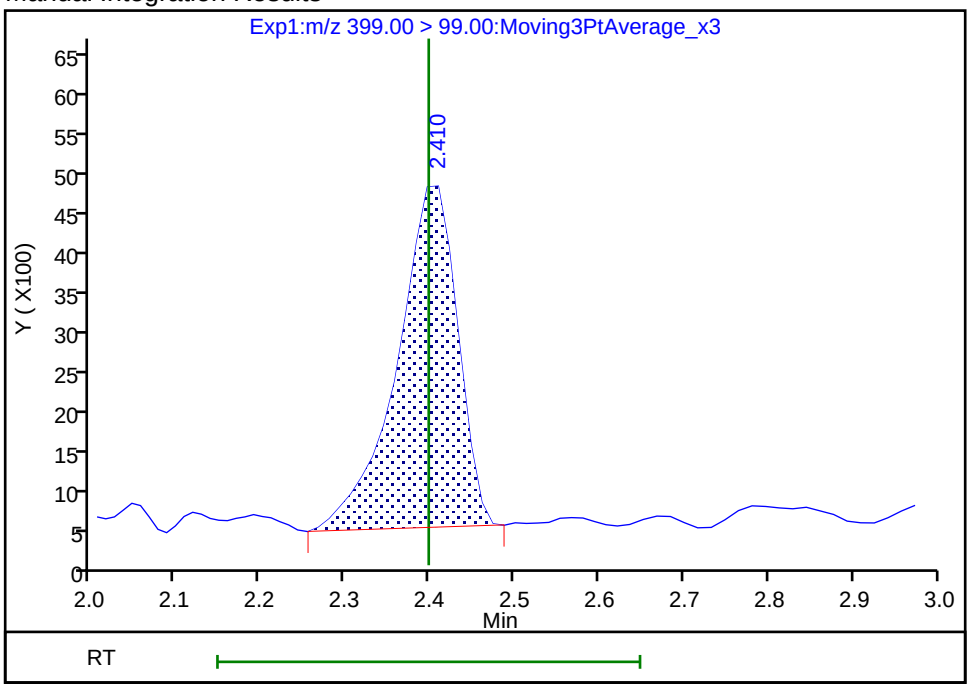
Processing Integration Results

RT: 2.41
Area: 23005
Amount: 0.028547
Amount Units: ng/ml



Manual Integration Results

RT: 2.41
Area: 21289
Amount: 0.028547
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:12:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

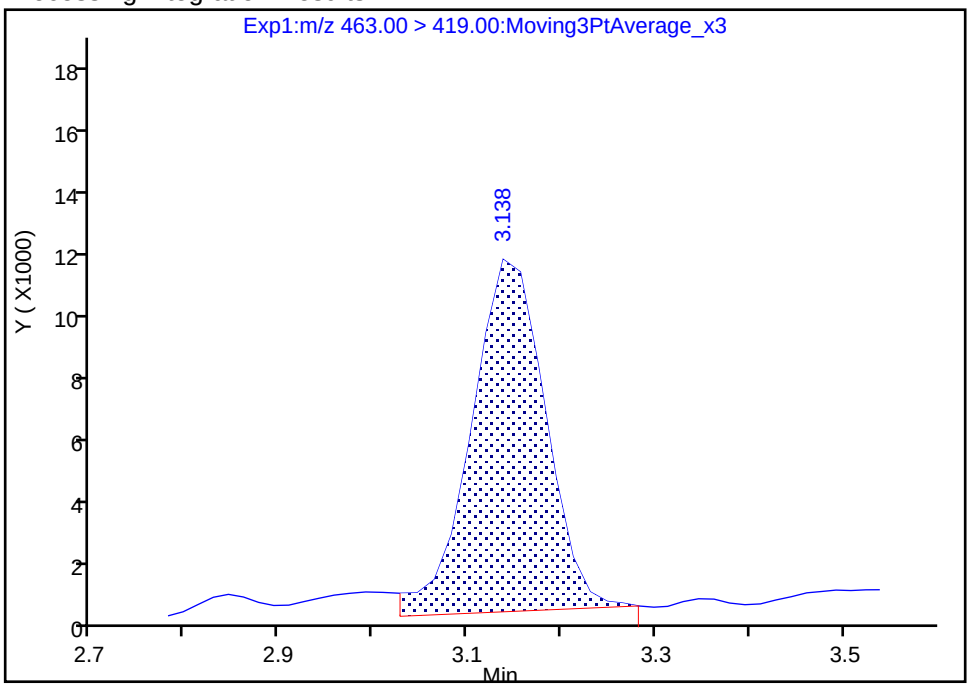
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

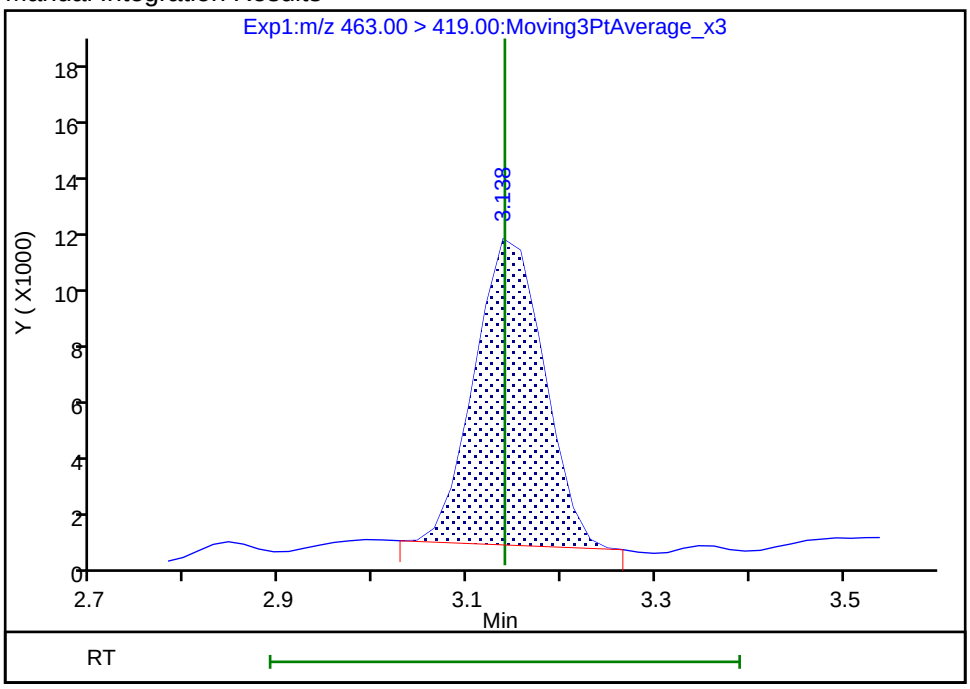
Processing Integration Results

RT: 3.14
Area: 58921
Amount: 0.026970
Amount Units: ng/ml



Manual Integration Results

RT: 3.14
Area: 53134
Amount: 0.024695
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:13:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

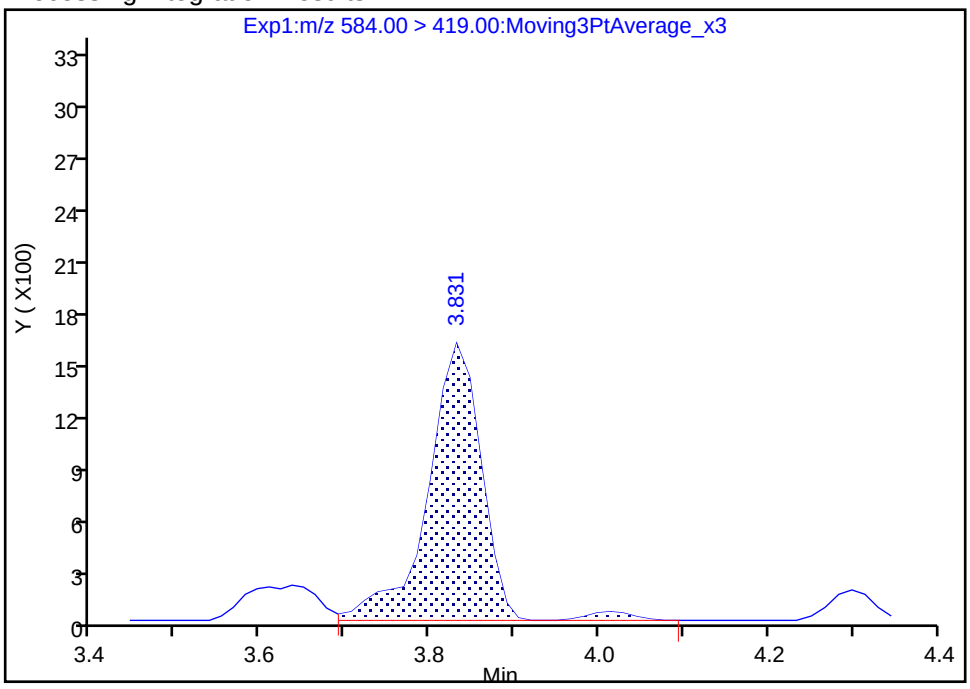
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

33 N-ethyl perfluorooctane sulfonamidoacetic ac, CAS: 2991-50-6

Signal: 1

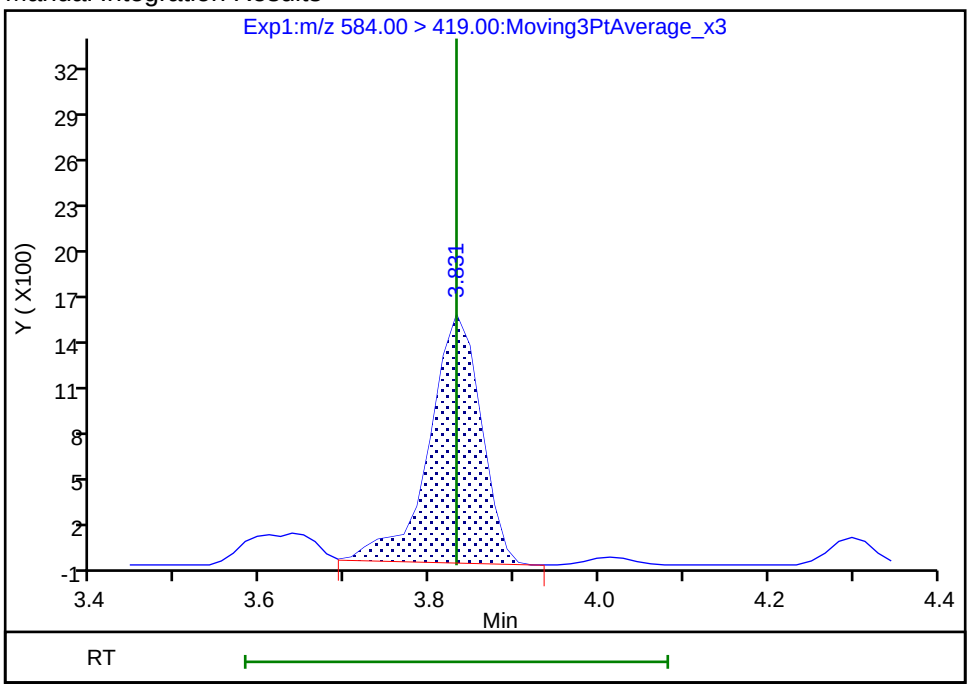
Processing Integration Results

RT: 3.83
Area: 7038
Amount: 0.025524
Amount Units: ng/ml



Manual Integration Results

RT: 3.83
Area: 6656
Amount: 0.024331
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:13:22
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

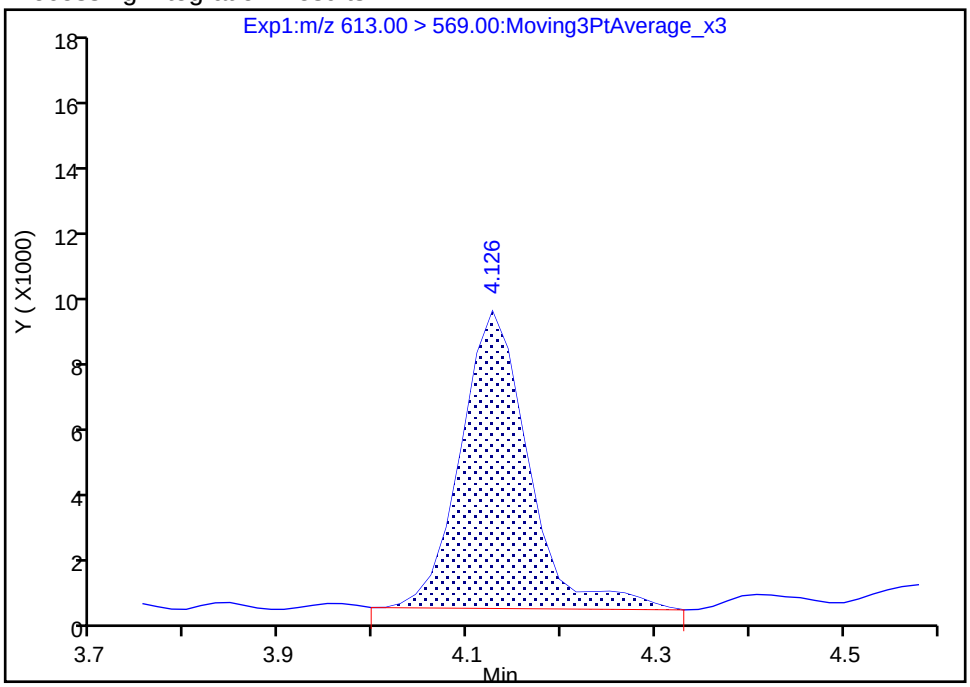
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

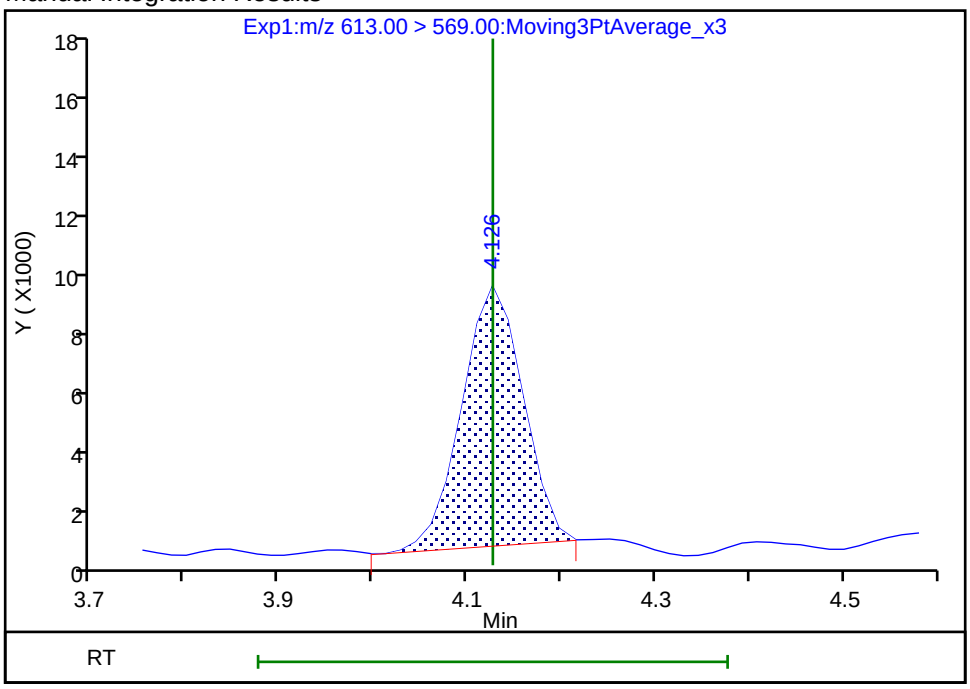
Processing Integration Results

RT: 4.13
Area: 43905
Amount: 0.026469
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 38579
Amount: 0.023692
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:13:42
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

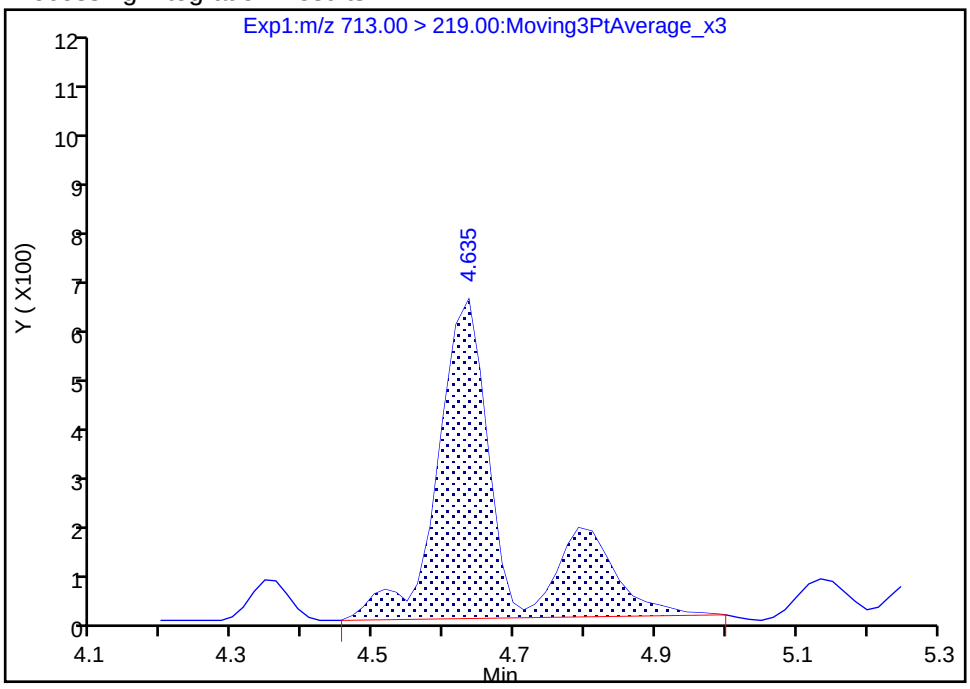
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_005.d
Injection Date: 03-Aug-2018 16:12:27 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

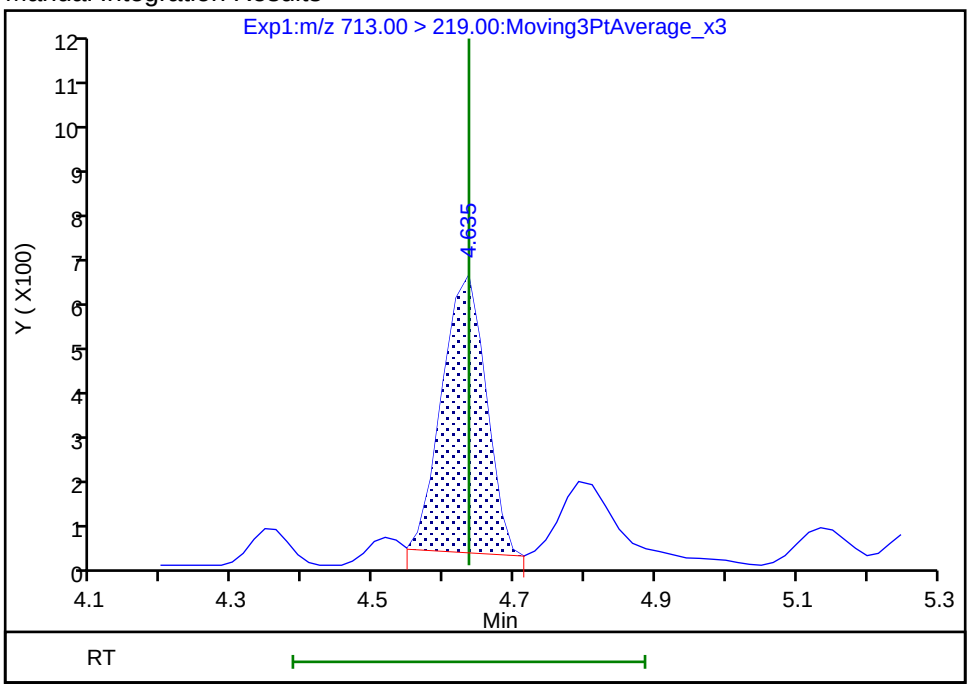
Processing Integration Results

RT: 4.63
Area: 4073
Amount: 0.025083
Amount Units: ng/ml



Manual Integration Results

RT: 4.63
Area: 2613
Amount: 0.025083
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:13:55
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Aug-2018 16:19:58 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC PFC STD2
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 03-Aug-2018 18:17:22 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK018

First Level Reviewer: roycea Date: 03-Aug-2018 17:51:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.485	1.485	0.0	0.537	6273415	2.33		93.3	5326	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.491	1.486	0.005	1.004	113801	0.0488		97.6	2.8	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.753	1.753	0.0	0.634	5788542	2.41		96.3	9412	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.753	1.754	-0.001	1.000	123668	0.0524		105	5.1	
D 47 13C3-PFBS										
301.90 > 83.00	1.795	1.792	0.003	0.649	83335	2.24		96.2	290	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.795	1.794	0.001	1.000	162604	0.0439		99.4	154	
298.90 > 99.00	1.795	1.794	0.001	1.000	55514		2.93(1.35-4.05)	99.4	17.6	
D 60 M2-4:2FTS										
329.00 > 81.00	2.006	2.006	0.0	0.726	555044	2.19		93.8	365	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.006	2.009	-0.003	1.118	25922	0.0425		91.0	136	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.047	2.044	0.003	1.000	116451	0.0508		102	10.4	
313.00 > 119.00	2.047	2.044	0.003	1.000	10685		10.90(6.96-20.87)	102	10.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.047	2.046	0.001	0.740	6131410	2.46		98.3	9222	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.068	2.069	-0.001	1.152	80313	0.0458		97.7	218	
349.00 > 99.00	2.068	2.069	-0.001	1.152	39507		2.03(1.15-3.45)	97.7	19.1	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.150	2.146	0.004	0.778	549410	2.57		103	1415	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.150	2.147	0.003	1.000	19803	0.0409		81.7	6.0	
D 9 13C4-PFHpA										
367.00 > 322.00	2.384	2.384	0.0	0.862	6715731	2.37		94.8	9957	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.384	2.384	0.0	1.000	148328	0.0532		106	11.0	
363.00 > 169.00	2.384	2.384	0.0	1.000	37904		3.91(2.17-6.52)	106	33.2	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.397	2.398	-0.001	1.000	120529	0.0479		105	150	
399.00 > 99.00	2.397	2.398	-0.001	1.000	26753		4.51(1.90-5.70)	105	9.2	M
D 11 18O2 PFHxS										
403.00 > 84.00	2.397	2.400	-0.003	0.867	4652927	2.18		92.2	8159	
65 ADONA										
377.00 > 251.00	2.435	2.435	0.0	0.776	209386	0.0492		98.5	315	
377.00 > 85.00	2.435	2.435	0.0	0.776	90202		2.32(1.05-3.16)	98.5	40.6	
D 12 M2-6:2FTS										
429.00 > 81.00	2.733	2.732	0.001	0.988	657438	2.39		100	915	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.733	2.732	0.001	1.000	27660	0.0468		98.7	74.5	
* 62 13C2-PFOA										
415.00 > 370.00	2.765	2.755	0.010		6019497	2.50			6167	
D 14 13C4 PFOA										
417.00 > 372.00	2.765	2.757	0.008	1.000	5898675	2.48		99.3	9425	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.765	2.757	0.008	1.000	138455	0.0536		107	14.1	
413.00 > 169.00	2.765	2.757	0.008	1.000	49438		2.80(1.36-4.08)	107	34.3	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.765	2.767	-0.002	0.881	100013	0.0468		98.4	155	
449.00 > 99.00	2.765	2.767	-0.002	0.881	22674		4.41(1.84-5.53)	98.4	52.2	
D 19 13C5 PFNA										
468.00 > 423.00	3.138	3.140	-0.002	1.135	5090764	2.50		99.9	7662	
D 18 13C4 PFOS										
503.00 > 80.00	3.138	3.140	-0.002	1.135	5051590	2.27		95.2	5920	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	3.138	3.140	-0.002	1.000	101664	0.0449		96.7	127	
499.00 > 99.00	3.138	3.140	-0.002	1.000	22561		4.51(2.04-6.12)	96.7	40.7	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.138	3.140	-0.002	1.000	121498	0.0566		113	17.2	
463.00 > 169.00	3.138	3.140	-0.002	1.000	18668		6.51(2.68-8.03)	113	25.7	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.346	3.348	-0.002	1.066	120294	0.0482		103	164	
D 21 13C8 FOSA										
506.00 > 78.00	3.492	3.485	0.007	1.263	3295383	2.48		99.3	3470	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.492	3.492	0.0	1.113	62749	0.0453		94.5	149	
549.00 > 99.00	3.492	3.492	0.0	1.113	12606		4.98(3.02-9.05)	94.5	221	
D 26 M2-8:2FTS										
529.00 > 81.00	3.492	3.492	0.0	1.263	75406	2.36		98.4	332	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.492	3.492	0.0	1.000	203734	0.0503		101	242	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.492	3.494	-0.002	1.000	21801	0.0494		103	144	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.508	3.505	0.003	1.000	138721	0.0544		109	16.2	
513.00 > 169.00	3.508	3.505	0.003	1.000	10789		12.86(7.12-21.35)	109	15.0	M
D 23 13C2 PFDA										
515.00 > 470.00	3.508	3.505	0.003	1.269	5190946	2.54		102	9688	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.650	3.650	0.0	1.320	907888	2.29		91.6	2014	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.664	3.662	0.002	1.004	20353	0.0555		111	14.0	M
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.816	3.816	0.0	1.216	86393	0.0490		102	263	
599.00 > 99.00	3.816	3.816	0.0	1.216	16795		5.14(2.14-6.43)	102	29.4	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.831	3.825	0.006	1.386	825934	2.53		101	1874	
D 30 13C2 PFUnA										
565.00 > 520.00	3.831	3.831	0.0	1.386	4167691	2.53		101	5625	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.831	3.831	0.0	1.000	73811	0.0526		105	17.2	
563.00 > 169.00	3.831	3.831	0.0	1.000	13455		5.49(5.24-15.72)	105	32.3	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.831	3.831	0.0	1.000	13246	0.0447		89.4	29.6	
35 MeFOSA										
512.00 > 169.00	3.983	3.971	0.012		23081	NC			90.6	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.998	3.993	0.005	1.274	122627	0.0464		98.5	696	
D 36 13C2 PFDoA										
615.00 > 570.00	4.128	4.127	0.001	1.493	4405021	2.48		99.1	5735	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.128	4.127	0.001	1.000	97295	0.0561		112	24.0	
613.00 > 169.00	4.128	4.127	0.001	1.000	9798		9.93(4.68-14.05)	112	34.2	M
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.128	4.127	0.001	1.182	10978	0.0456		94.5	48.9	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.362	4.361	0.001	1.390	6843	0.0403		83.2	38.6	
699.00 > 99.00	4.362	4.361	0.001	1.390	12704		0.54(0.28-0.83)	83.2	39.0	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.393	4.392	0.001	1.064	64240	0.0486		97.2	20.0	
663.00 > 169.00	4.393	4.392	0.001	1.064	12853		5.00(3.09-9.27)	97.2	26.7	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.636	4.635	0.001	1.677	2744799	2.42		96.7	5725	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.636	4.635	0.001	1.000	8543	0.0483		96.6	33.4	
713.00 > 219.00	4.636	4.635	0.001	1.000	7000		1.22(0.70-2.09)	96.6	23.8	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.051	5.049	0.002	1.827	2440530	2.34		93.7	5924	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.051	5.049	0.002	1.000	68430	0.0502		100	9.5	
813.00 > 169.00	5.051	5.049	0.002	1.000	13393		5.11(2.77-8.32)	100	55.8	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.398	5.401	-0.003	1.069	32618	0.0471		94.1	34.6	
913.00 > 169.00	5.398	5.401	-0.003	1.069	7087		4.60(2.55-7.64)	94.1	61.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00006 Amount Added: 1.00 Units: mL

Report Date: 03-Aug-2018 18:17:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d

Injection Date: 03-Aug-2018 16:19:58 Instrument ID: A9

Lims ID: IC L2 Full

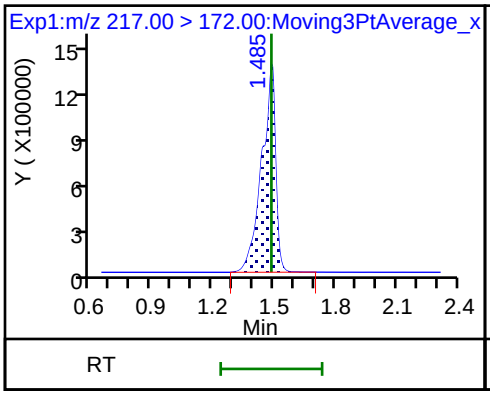
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3

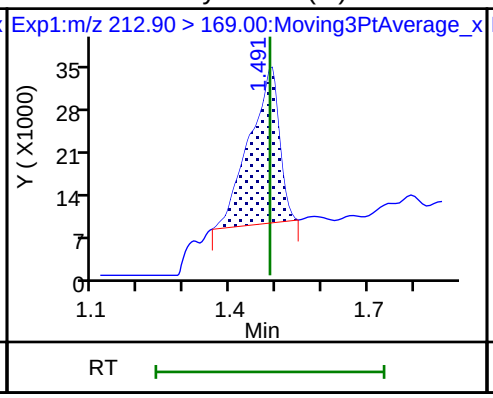
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

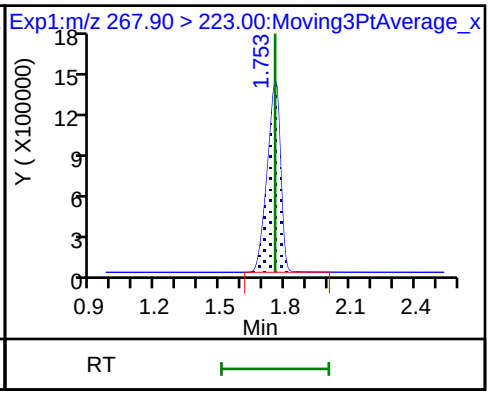
D 1 13C4 PFBA



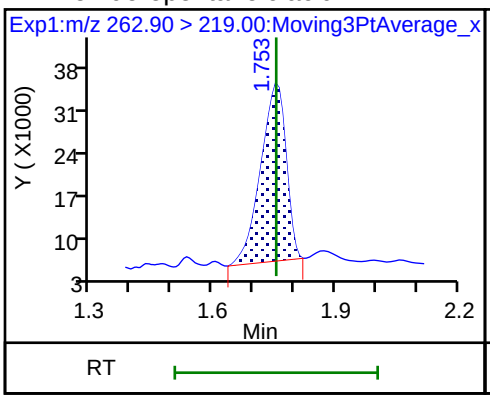
2 Perfluorobutyric acid (M)



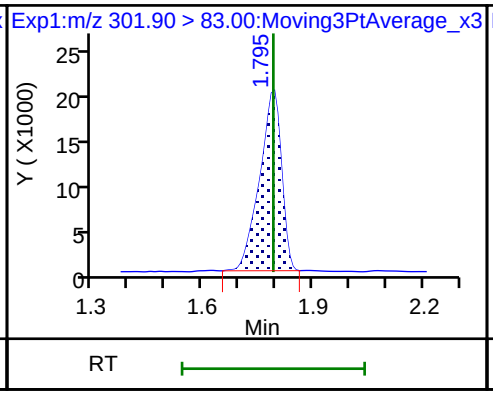
D 3 13C5-PFPeA



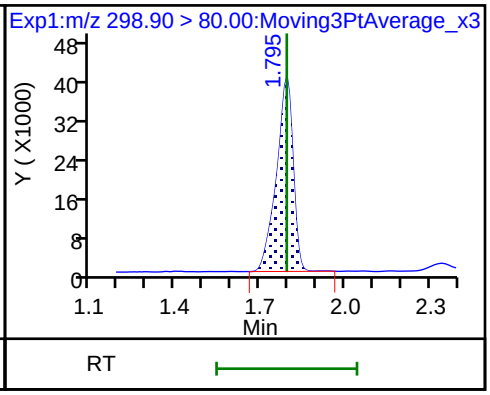
4 Perfluoropentanoic acid



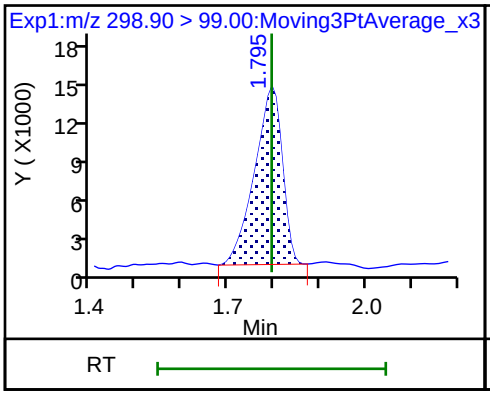
D 47 13C3-PFBS



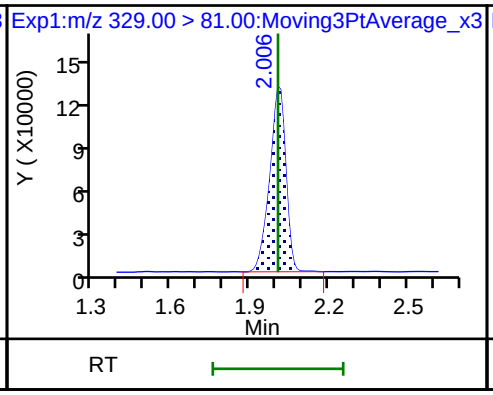
5 Perfluorobutanesulfonic acid



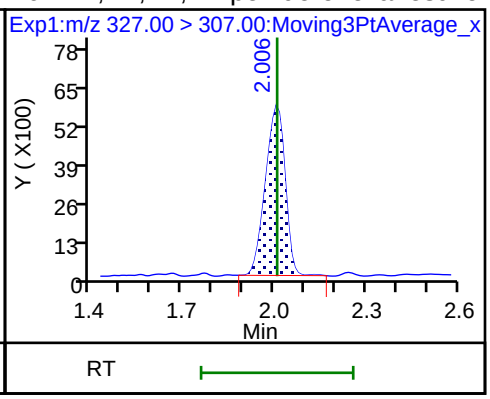
5 Perfluorobutanesulfonic acid



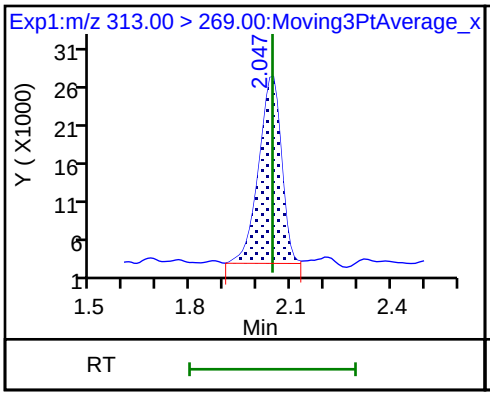
D 60 M2-4:2FTS



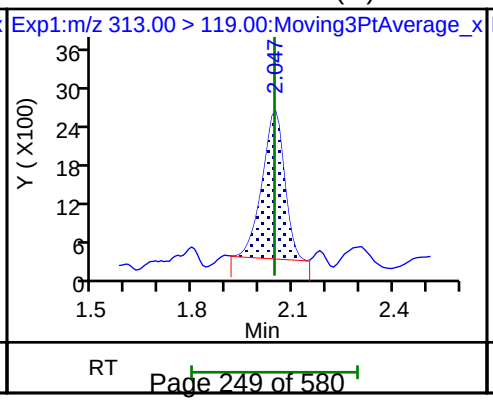
61 1H,1H,2H,2H-perfluorohexanesulfoni



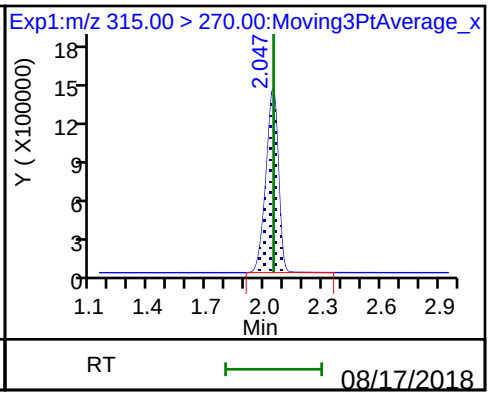
6 Perfluorohexanoic acid



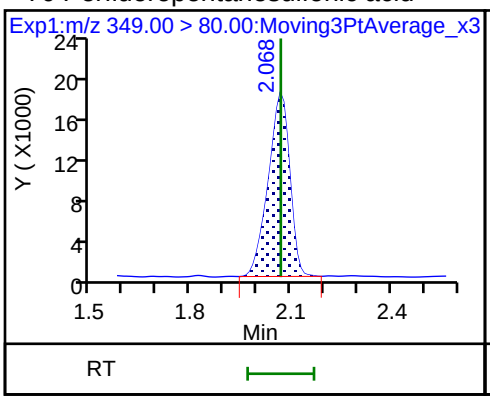
6 Perfluorohexanoic acid (M)



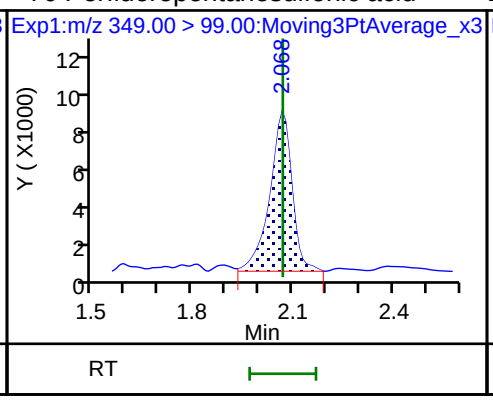
D 7 13C2 PFHxA



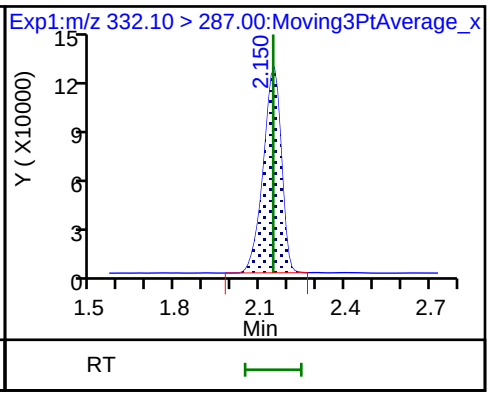
70 Perfluoropentanesulfonic acid



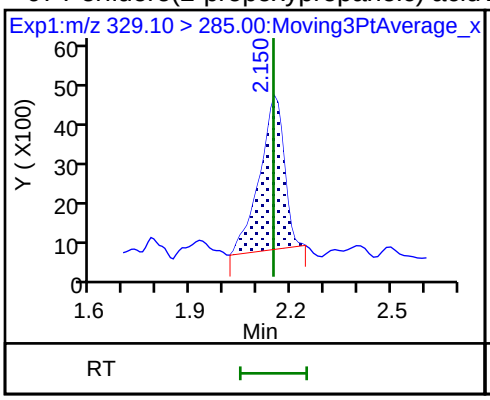
70 Perfluoropentanesulfonic acid



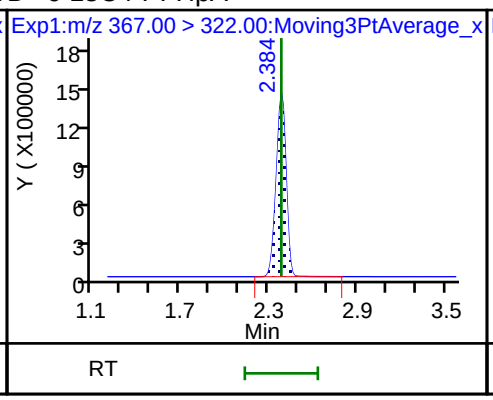
D 64 13C3 HFPO-DA



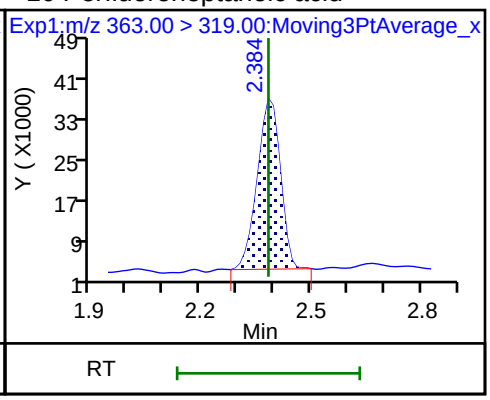
67 Perfluoro(2-propoxypropanoic) acid



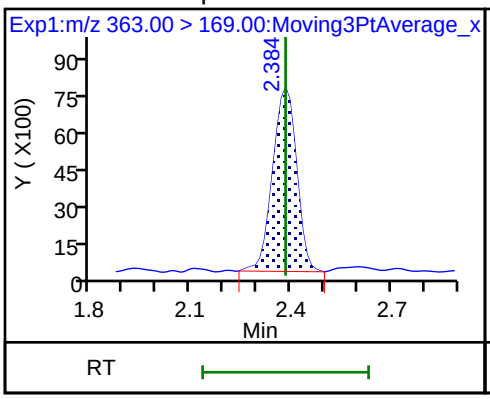
D 9 13C4-PFHpA



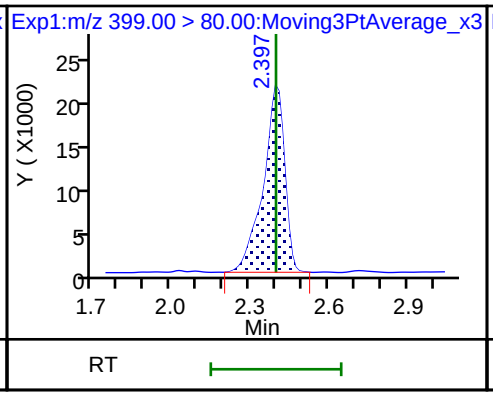
10 Perfluoroheptanoic acid



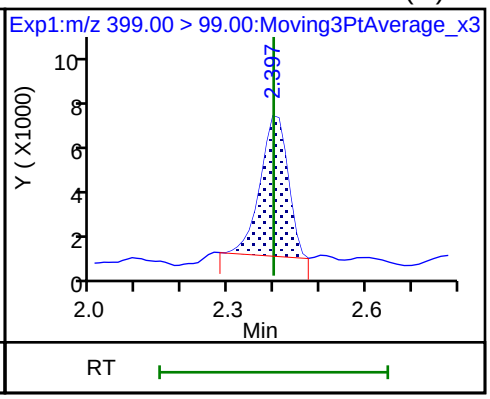
10 Perfluoroheptanoic acid



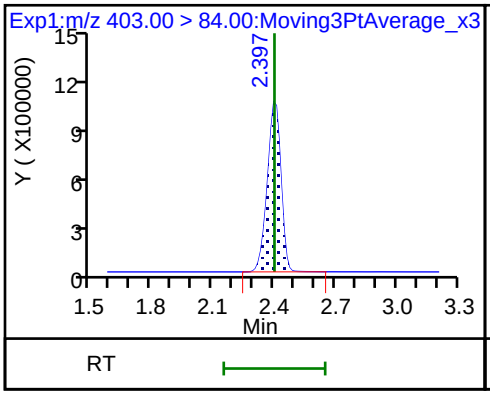
8 Perfluorohexanesulfonic acid



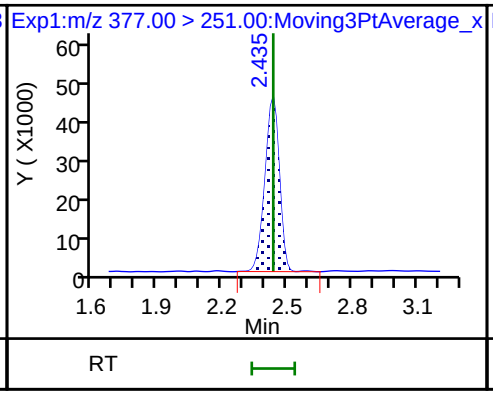
8 Perfluorohexanesulfonic acid (M)



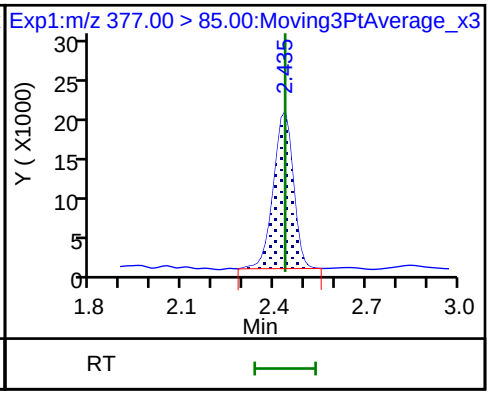
D 11 18O2 PFHxS



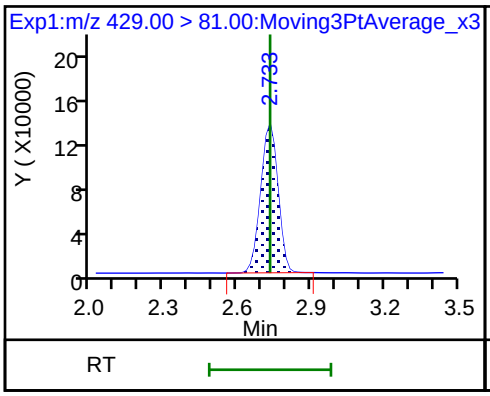
65 ADONA



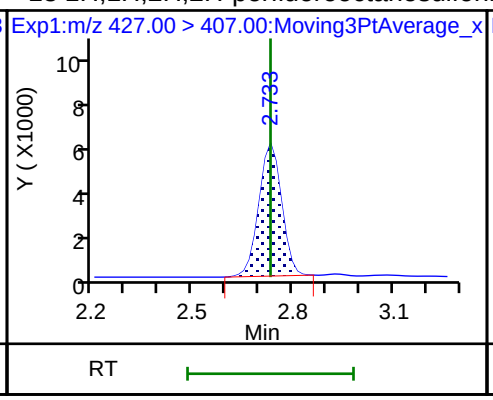
65 ADONA

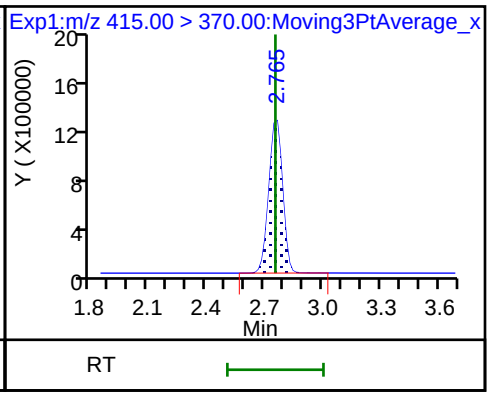


D 12 M2-6:2FTS

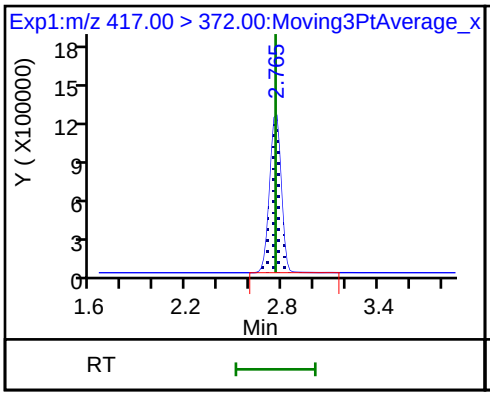


13 1H,1H,2H,2H-perfluorooctanesulfoni* 62 13C2-PFOA

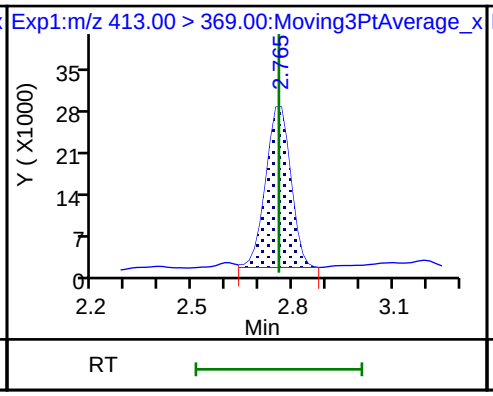




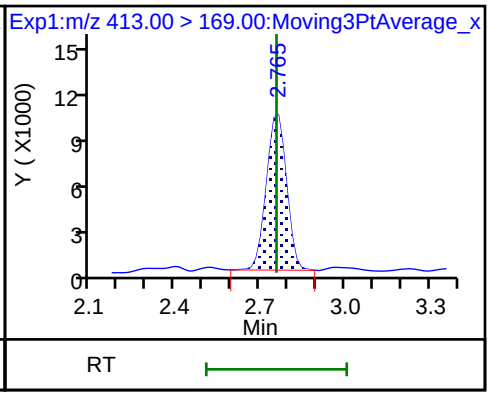
D 14 13C4 PFOA



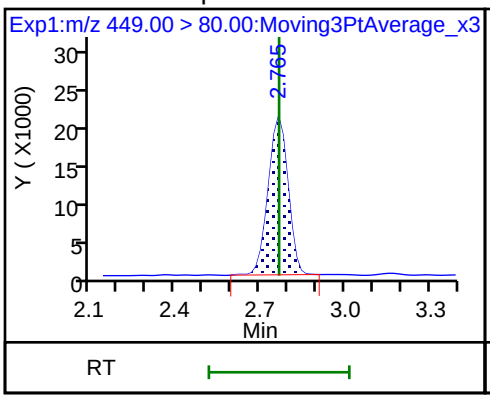
15 Perfluorooctanoic acid



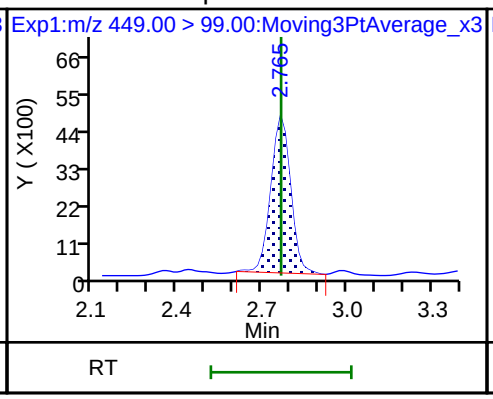
15 Perfluorooctanoic acid



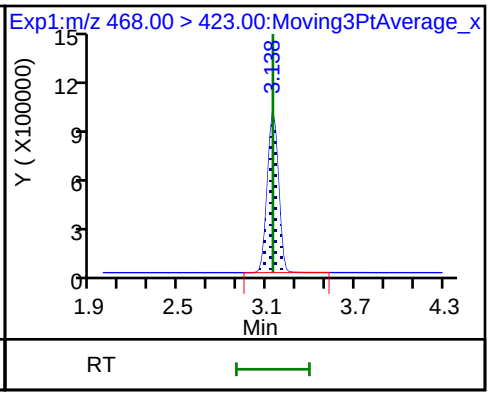
16 Perfluoroheptanesulfonic acid



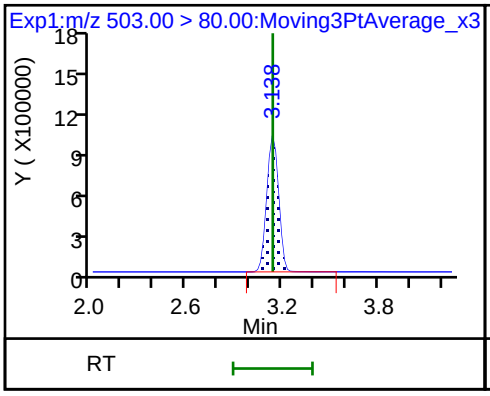
16 Perfluoroheptanesulfonic acid



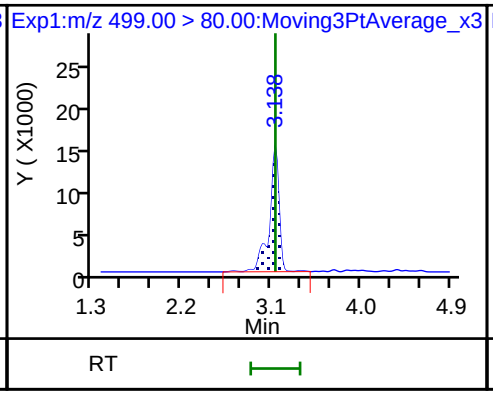
D 19 13C5 PFNA



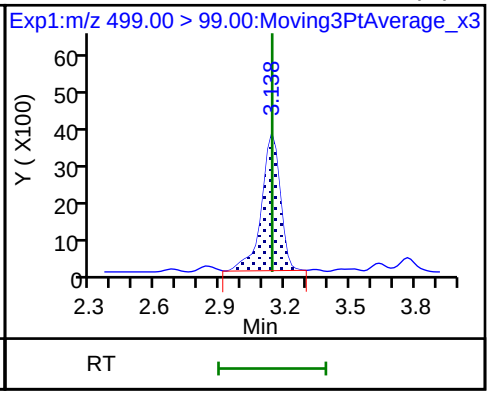
D 18 13C4 PFOS



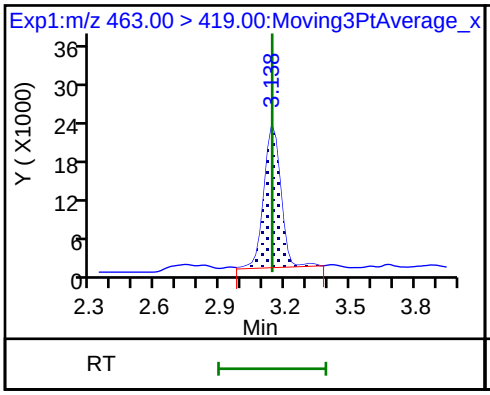
17 Perfluorooctane sulfonic acid



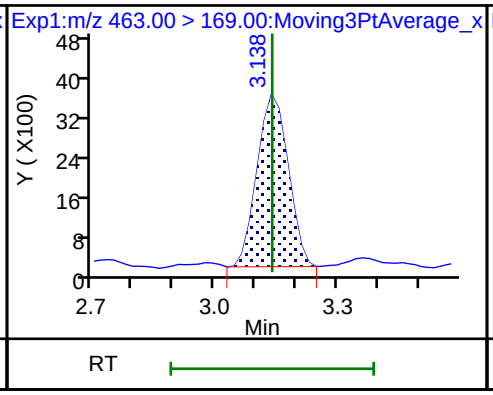
17 Perfluorooctane sulfonic acid (M)



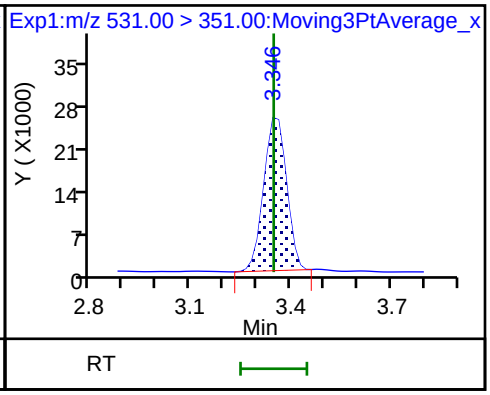
20 Perfluorononanoic acid



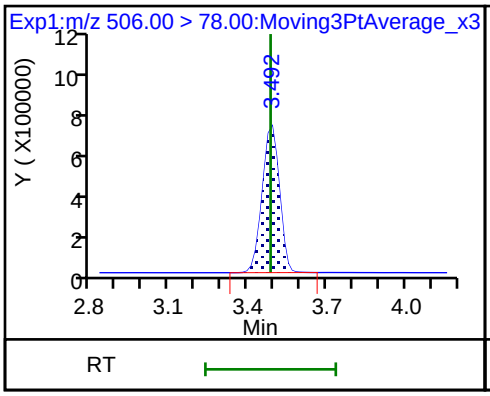
20 Perfluorononanoic acid



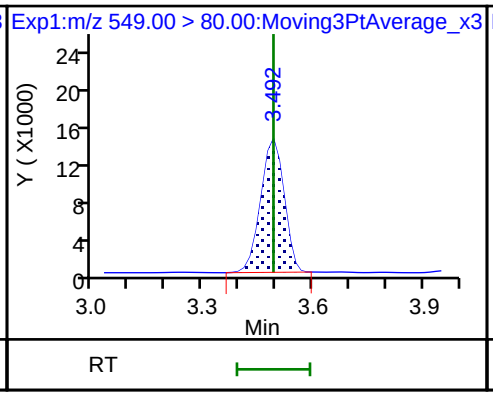
69 9-Chlorohexadecafluoro-3-oxanonane



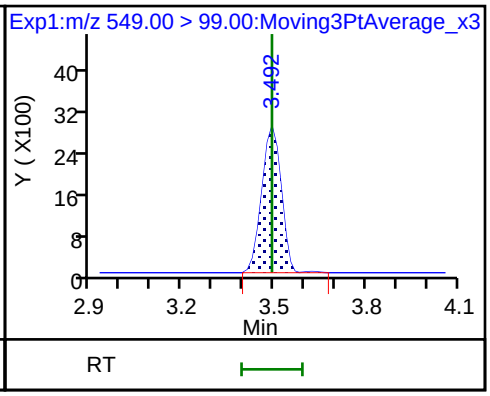
D 21 13C8 FOSA



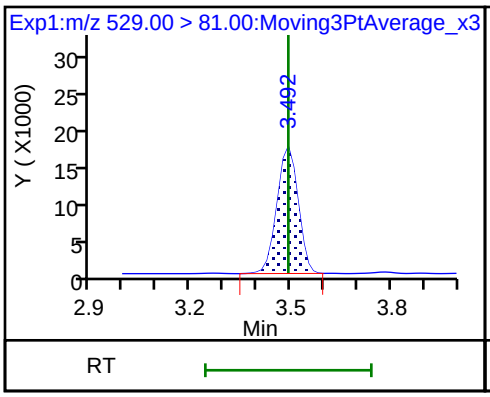
68 Perfluorononanesulfonic acid



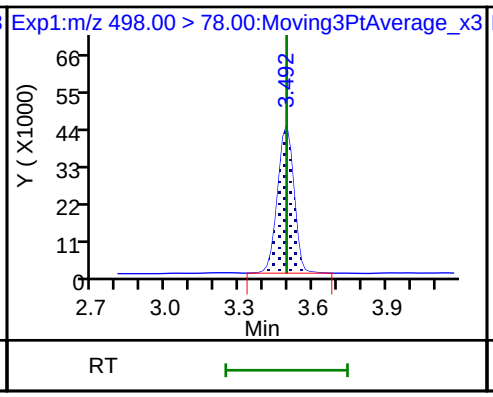
68 Perfluorononanesulfonic acid



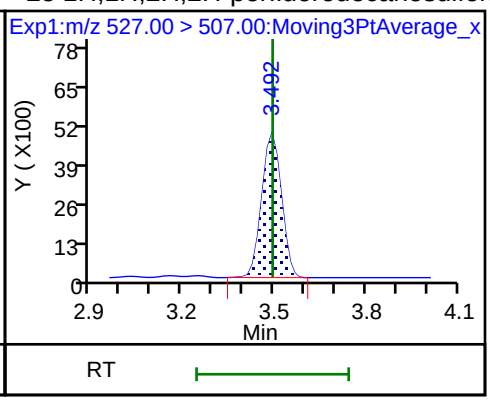
D 26 M2-8:2FTS



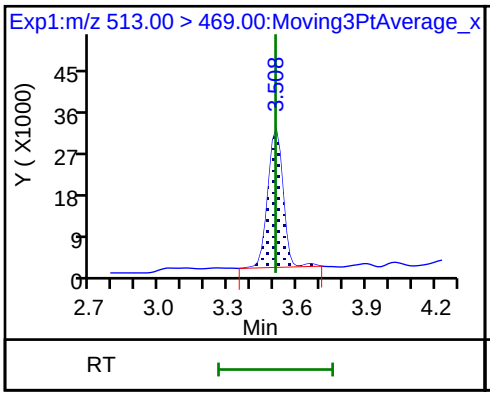
22 Perfluorooctane Sulfonamide



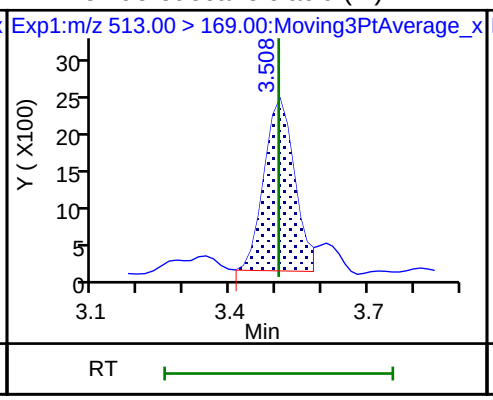
25 1H,1H,2H,2H-perfluorodecanesulfoni



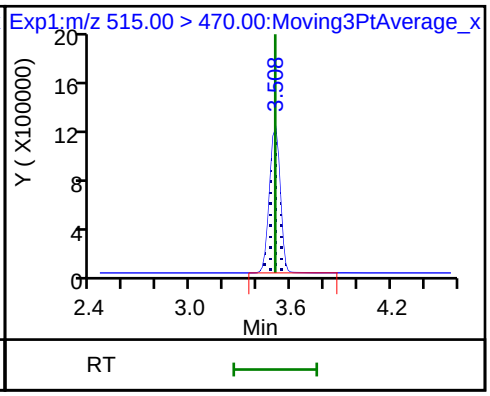
24 Perfluorodecanoic acid



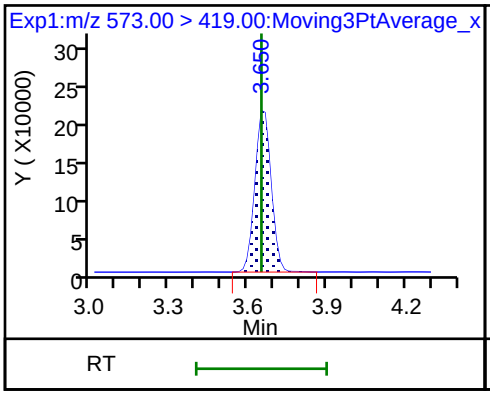
24 Perfluorodecanoic acid (M)



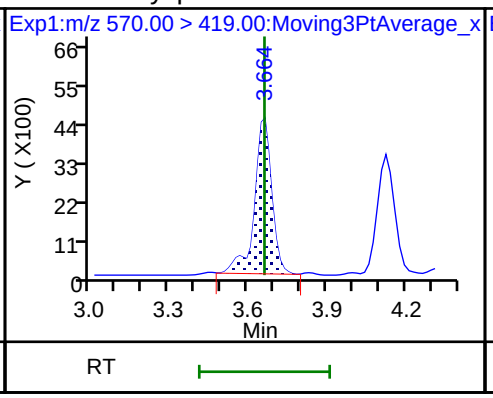
D 23 13C2 PFDA



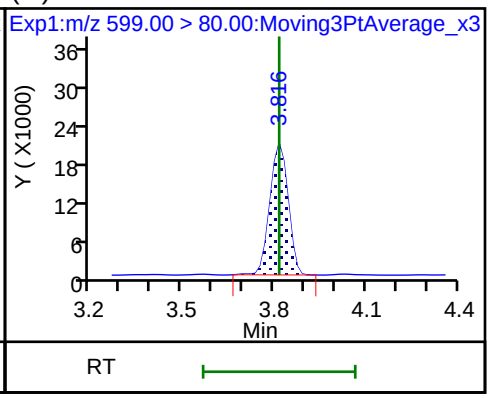
D 27 d3-NMeFOSAA



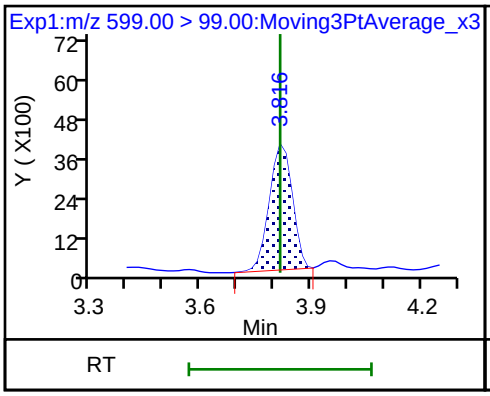
28 N-methyl perfluorooctane sulfonami (M)



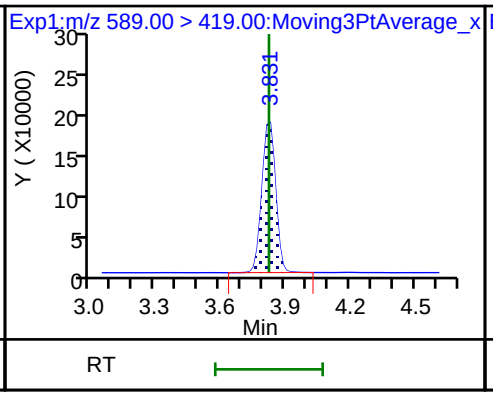
29 Perfluorodecane Sulfonic acid



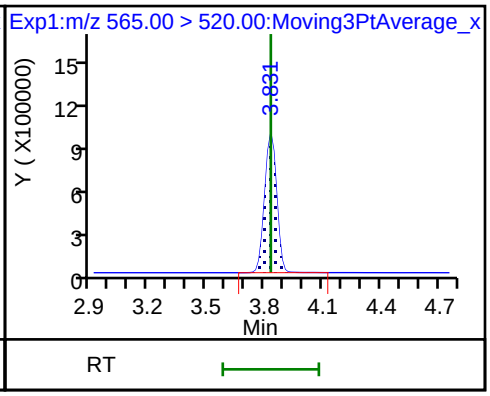
29 Perfluorodecane Sulfonic acid



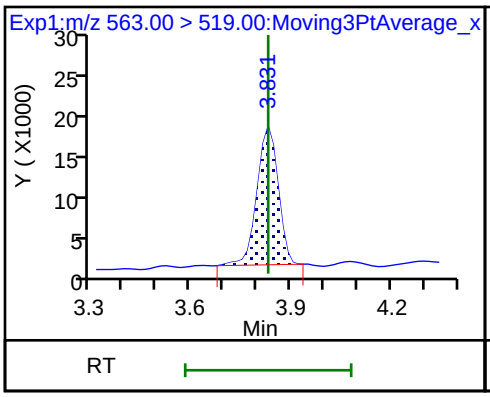
D 32 d5-NEtFOSAA



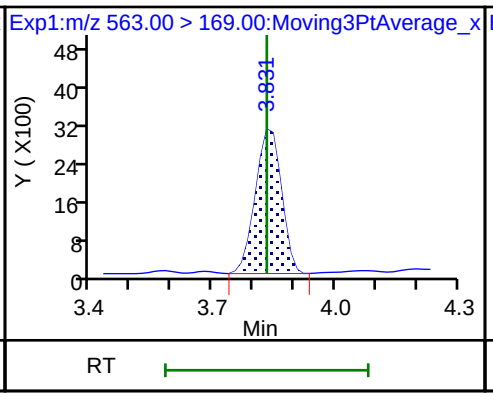
D 30 13C2 PFUnA



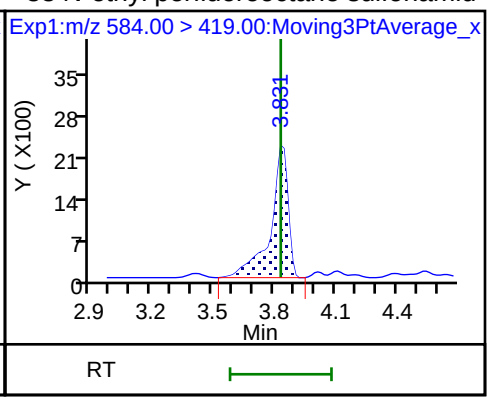
31 Perfluoroundecanoic acid



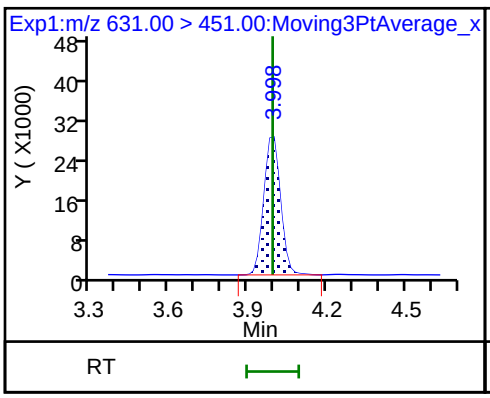
31 Perfluoroundecanoic acid



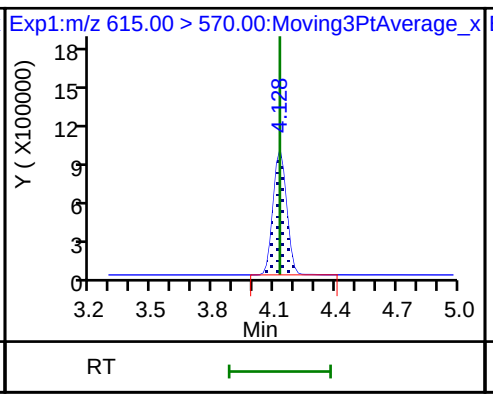
33 N-ethyl perfluorooctane sulfonamid



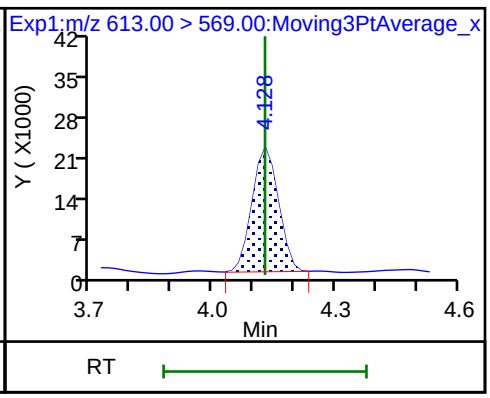
66 11-Chloroeicosafluoro-3-oxaundecan



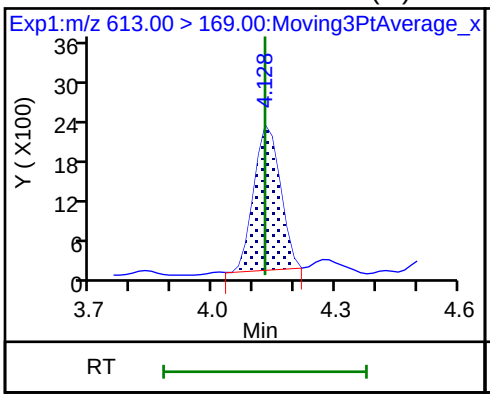
D 36 13C2 PFDoA



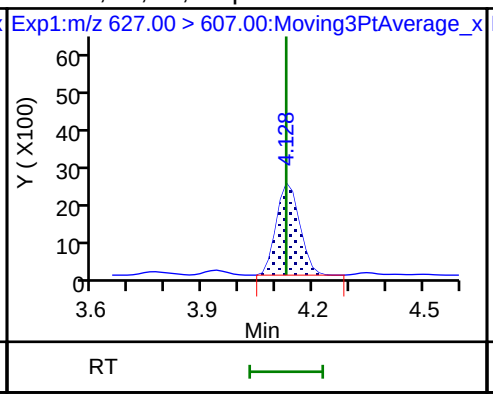
37 Perfluorododecanoic acid



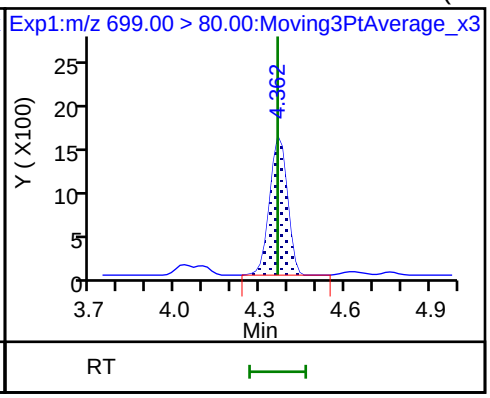
37 Perfluorododecanoic acid (M)



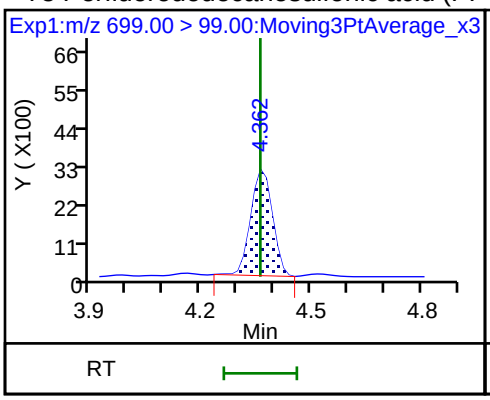
74 1H,1H,2H,2H-perfluorododecanesulfo



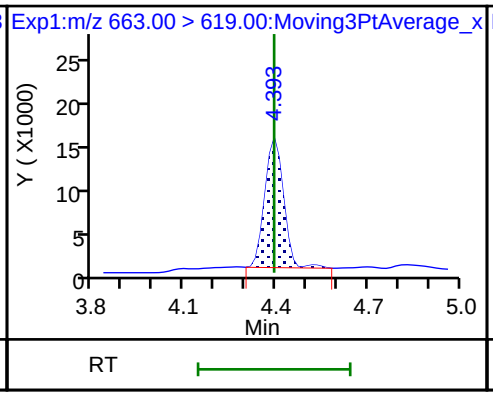
75 Perfluorododecanesulfonic acid (PF



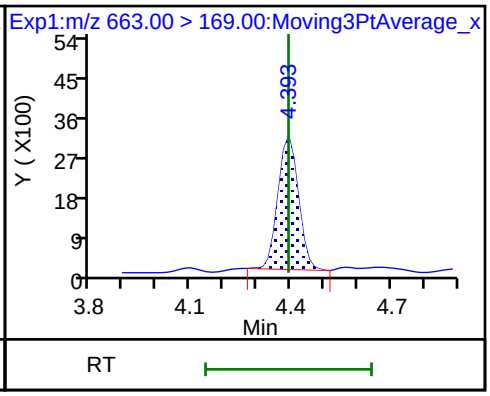
75 Perfluorododecanesulfonic acid (PF



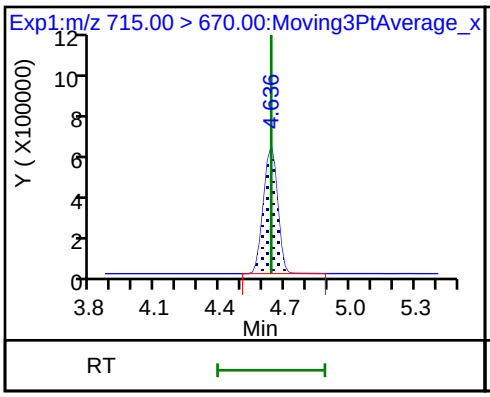
41 Perfluorotridecanoic acid



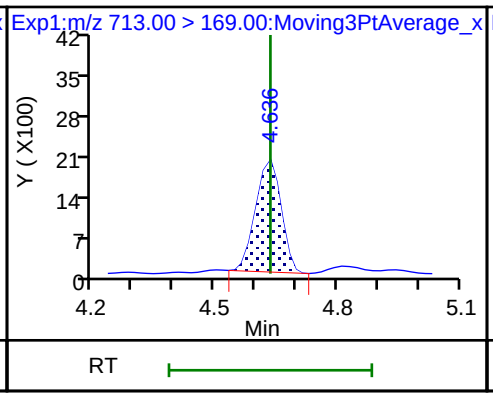
41 Perfluorotridecanoic acid



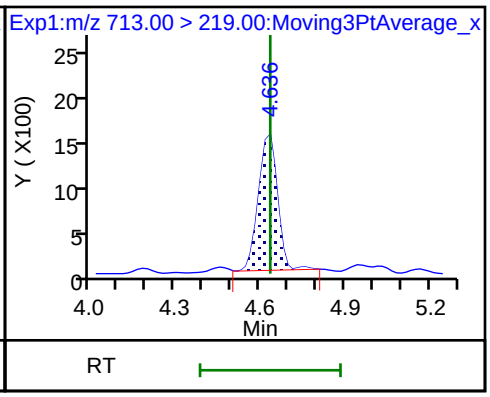
D 43 13C2-PFTeDA



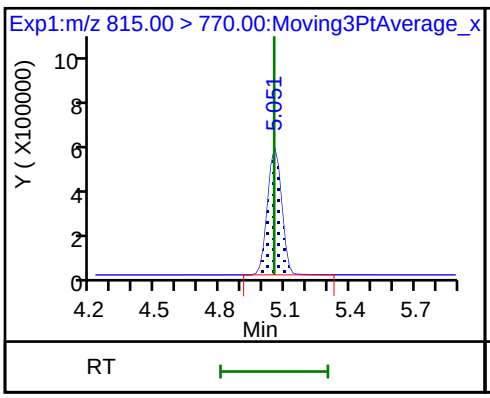
42 Perfluorotetradecanoic acid



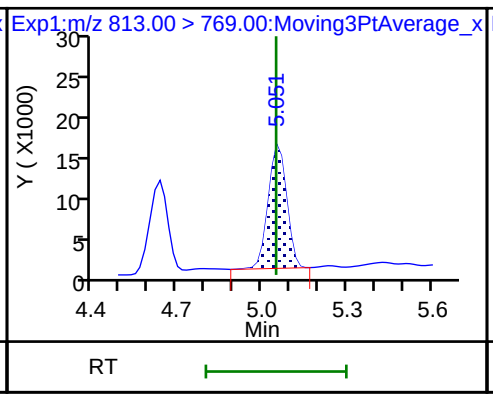
42 Perfluorotetradecanoic acid



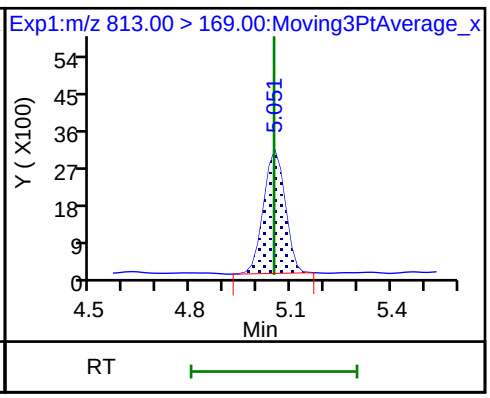
D 44 13C2-PFHxDA



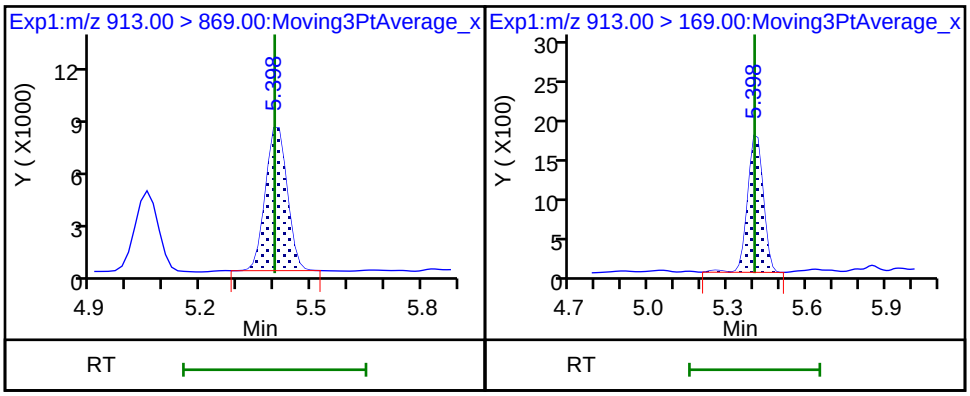
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

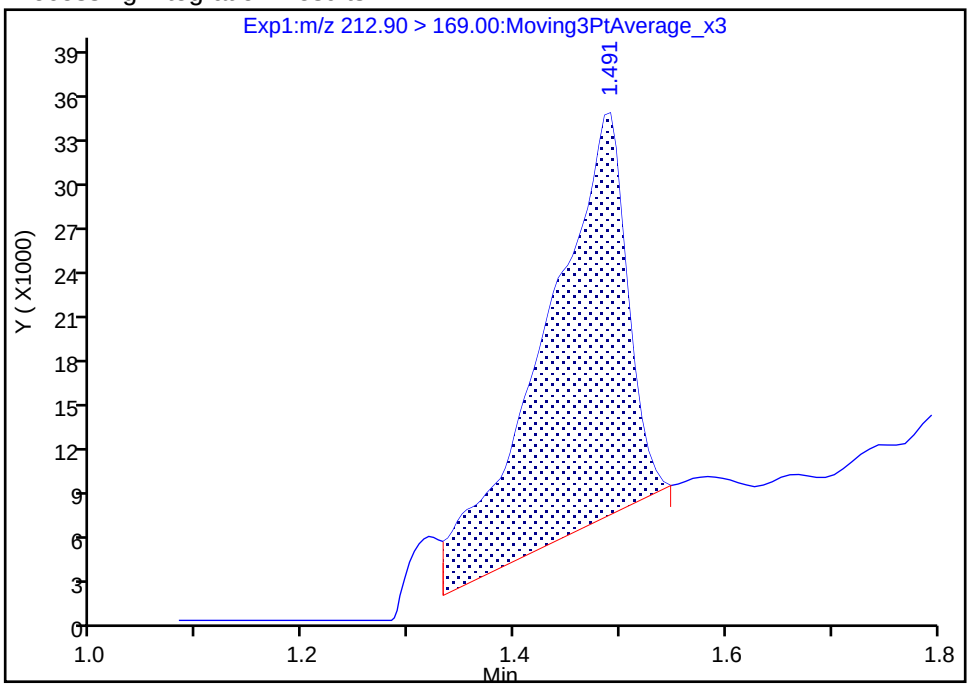
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d
Injection Date: 03-Aug-2018 16:19:58 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

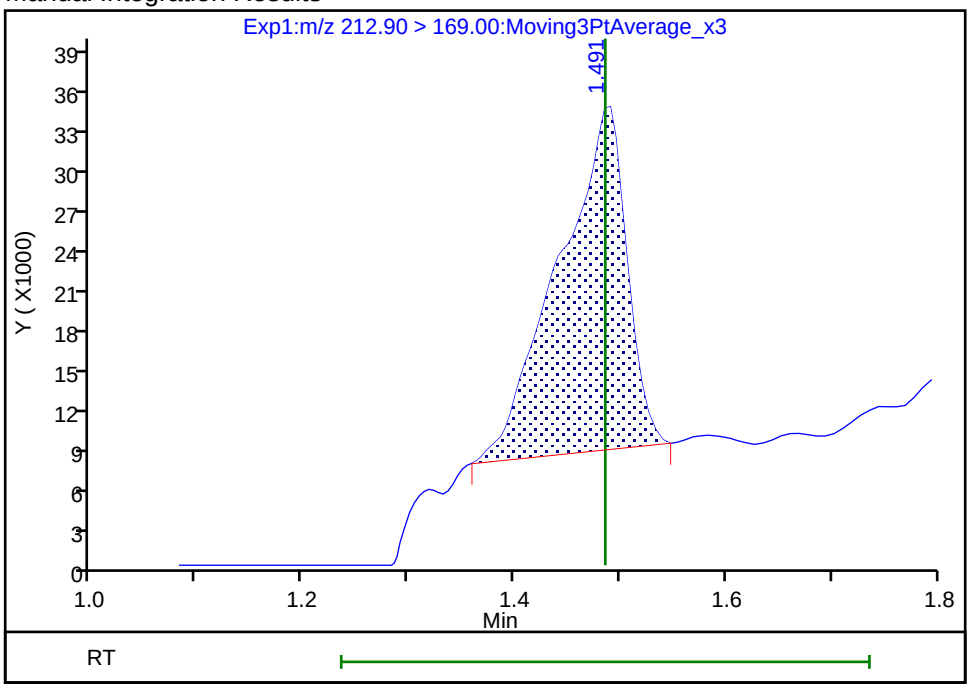
Processing Integration Results

RT: 1.49
Area: 148820
Amount: 0.064321
Amount Units: ng/ml



Manual Integration Results

RT: 1.49
Area: 113801
Amount: 0.048801
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:49:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

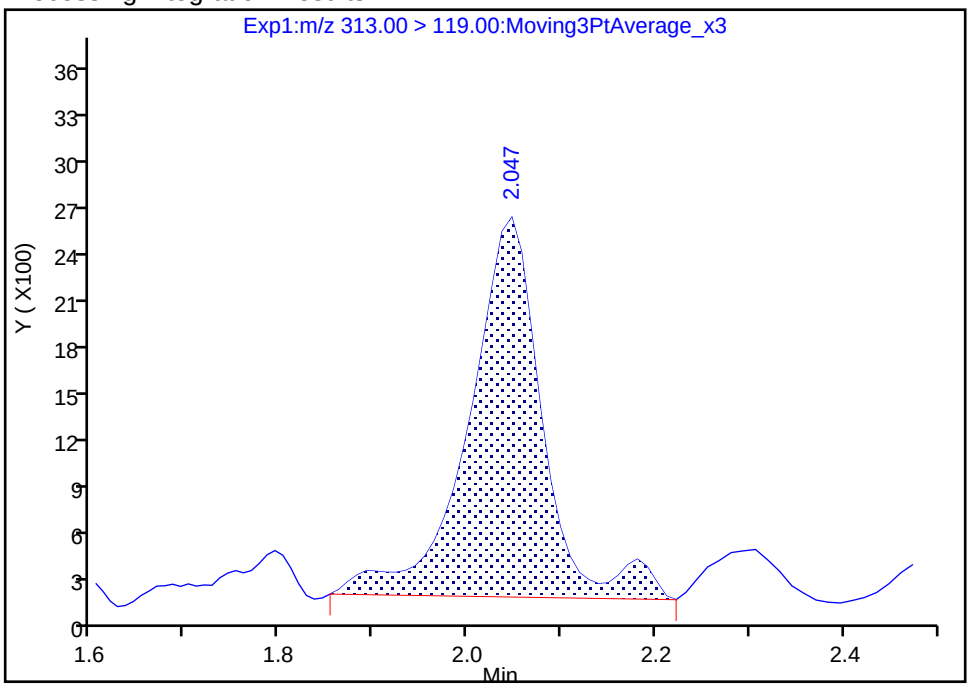
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d
Injection Date: 03-Aug-2018 16:19:58 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

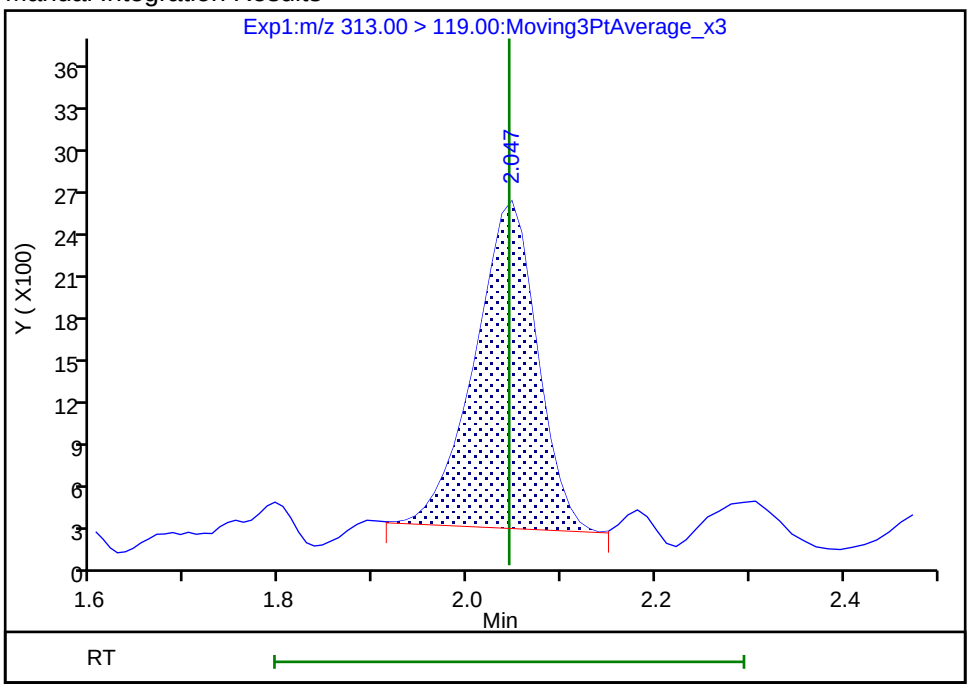
Processing Integration Results

RT: 2.05
Area: 13294
Amount: 0.050757
Amount Units: ng/ml



Manual Integration Results

RT: 2.05
Area: 10685
Amount: 0.050757
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:50:03
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

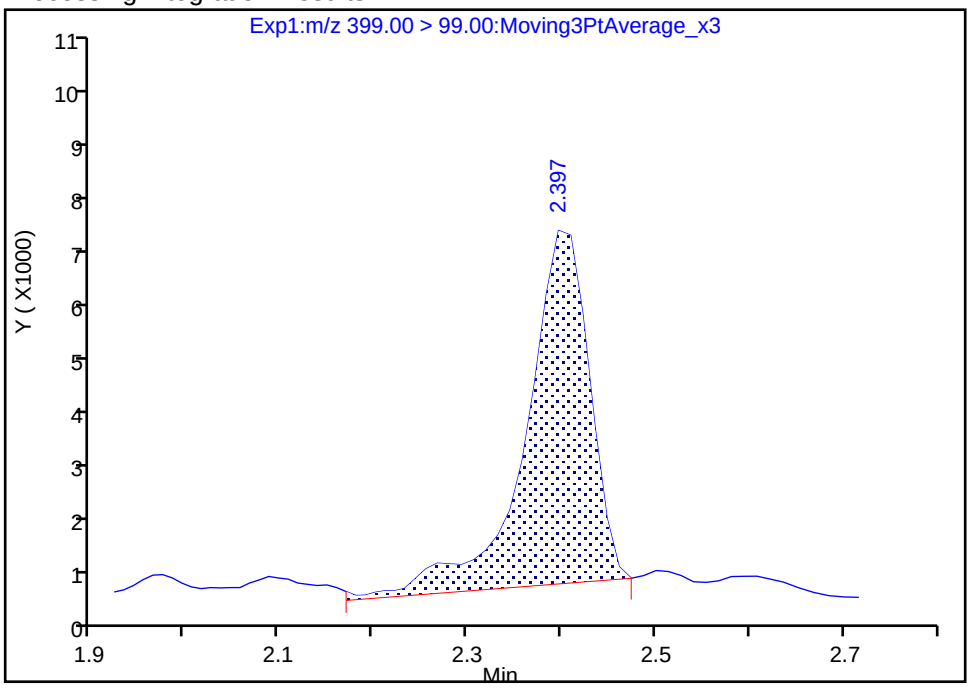
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d
Injection Date: 03-Aug-2018 16:19:58 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

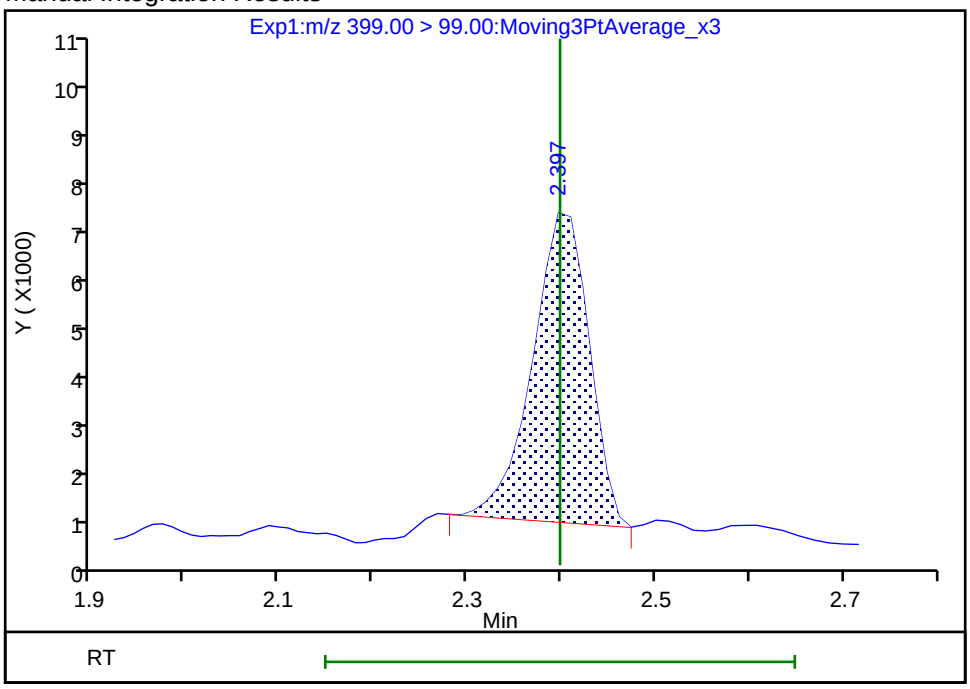
Processing Integration Results

RT: 2.40
Area: 31377
Amount: 0.047889
Amount Units: ng/ml



Manual Integration Results

RT: 2.40
Area: 26753
Amount: 0.047889
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:50:14
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

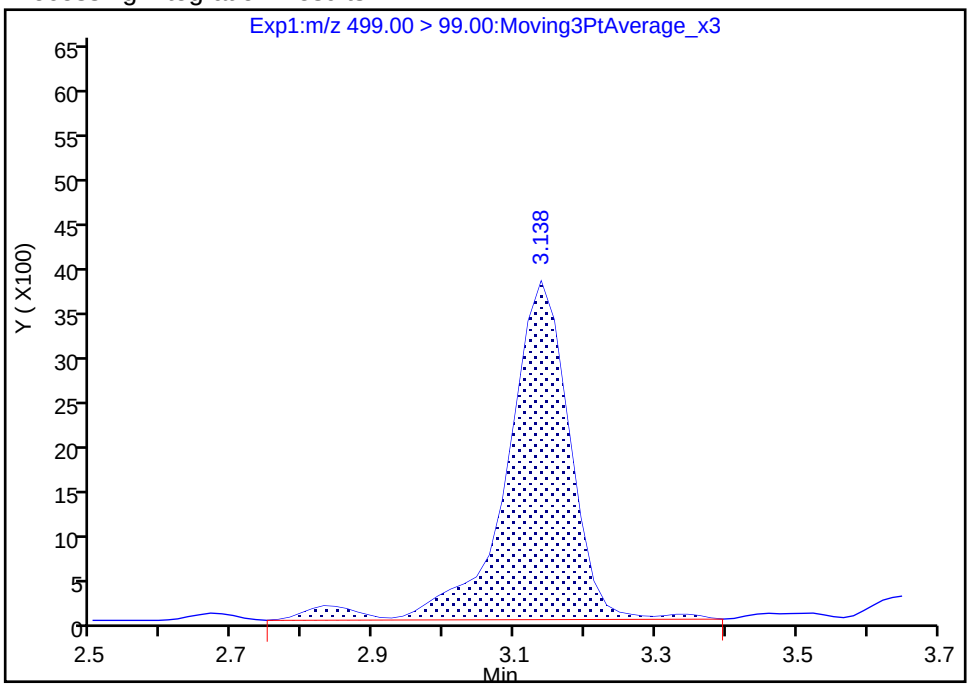
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d
Injection Date: 03-Aug-2018 16:19:58 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

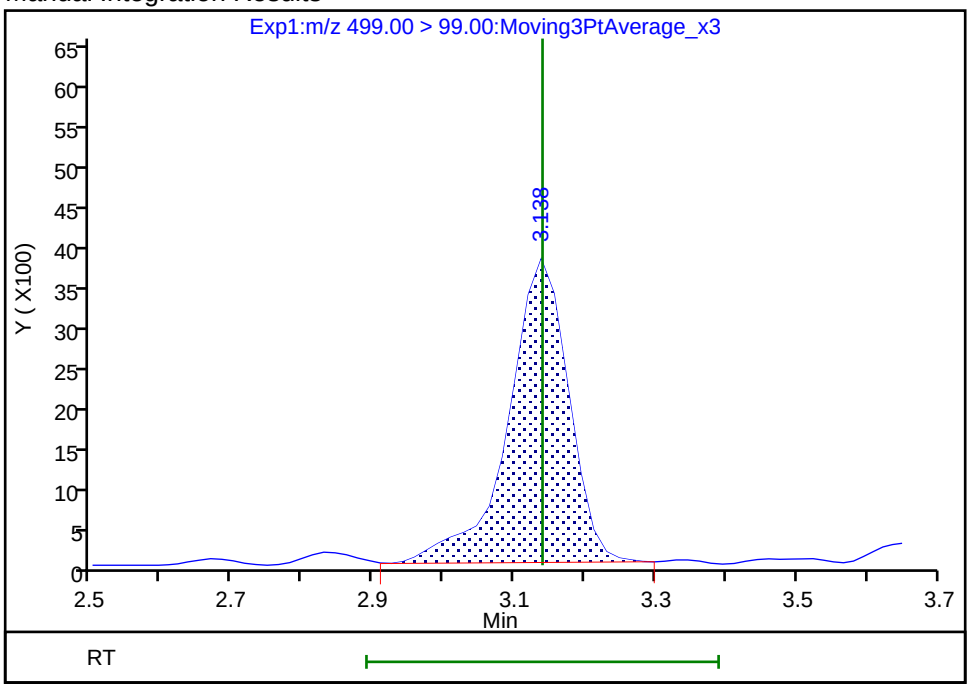
Processing Integration Results

RT: 3.14
Area: 24160
Amount: 0.044850
Amount Units: ng/ml



Manual Integration Results

RT: 3.14
Area: 22561
Amount: 0.044850
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:50:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

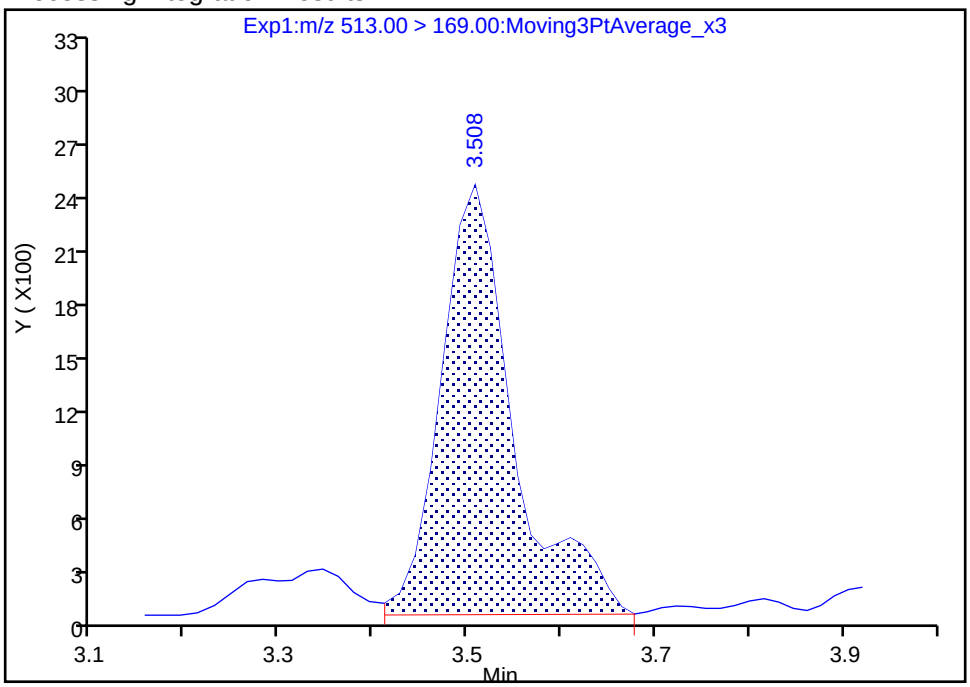
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d
Injection Date: 03-Aug-2018 16:19:58 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

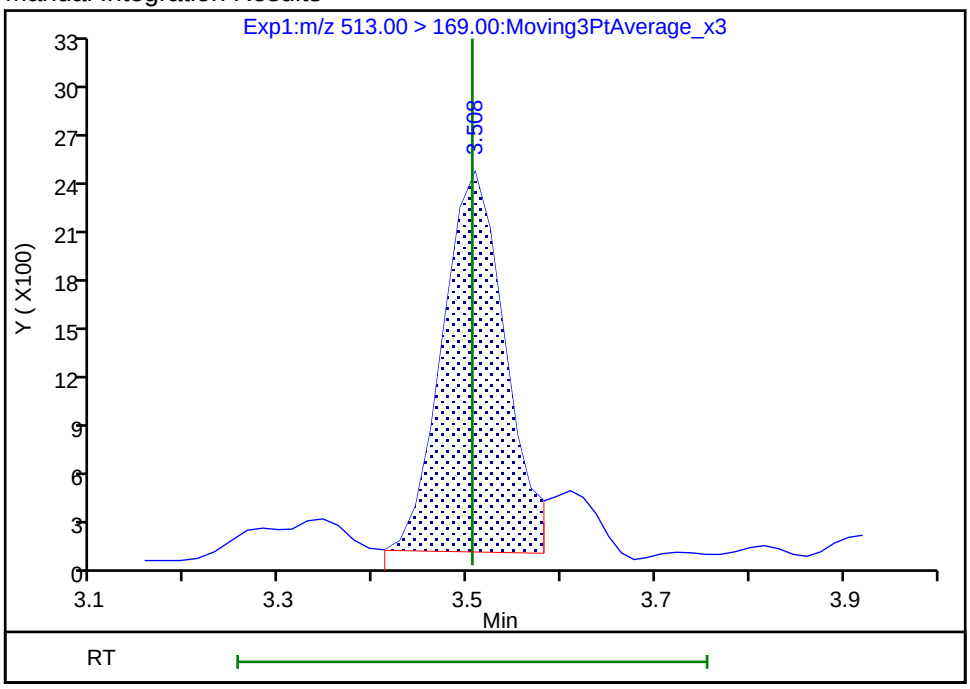
Processing Integration Results

RT: 3.51
Area: 12850
Amount: 0.054351
Amount Units: ng/ml



Manual Integration Results

RT: 3.51
Area: 10789
Amount: 0.054351
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:50:39
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

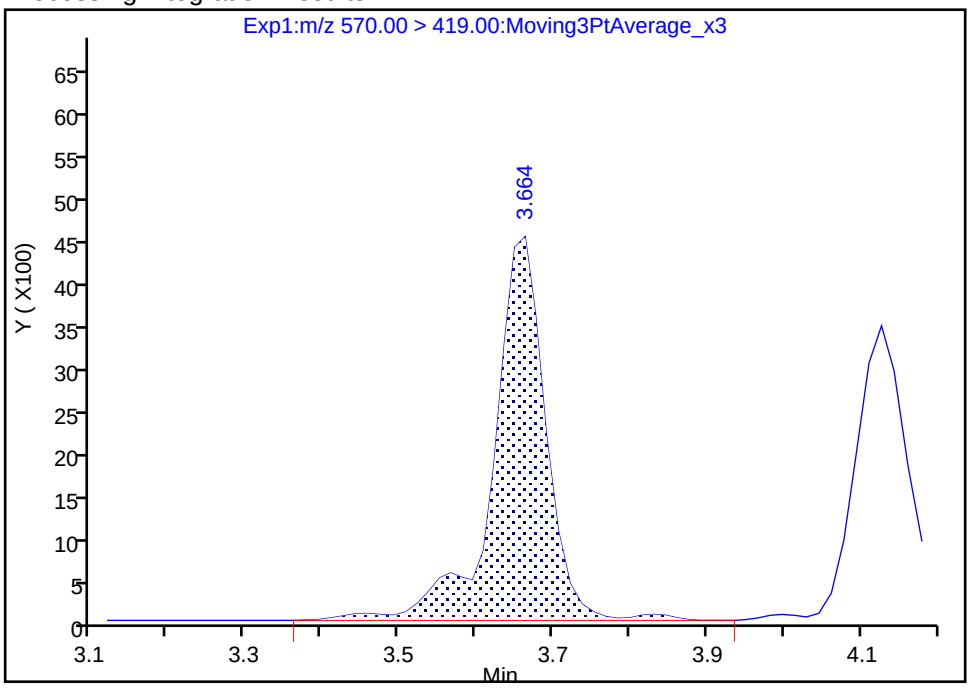
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d
Injection Date: 03-Aug-2018 16:19:58 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

28 N-methyl perfluorooctane sulfonamidoacetic a, CAS: 2355-31-9

Signal: 1

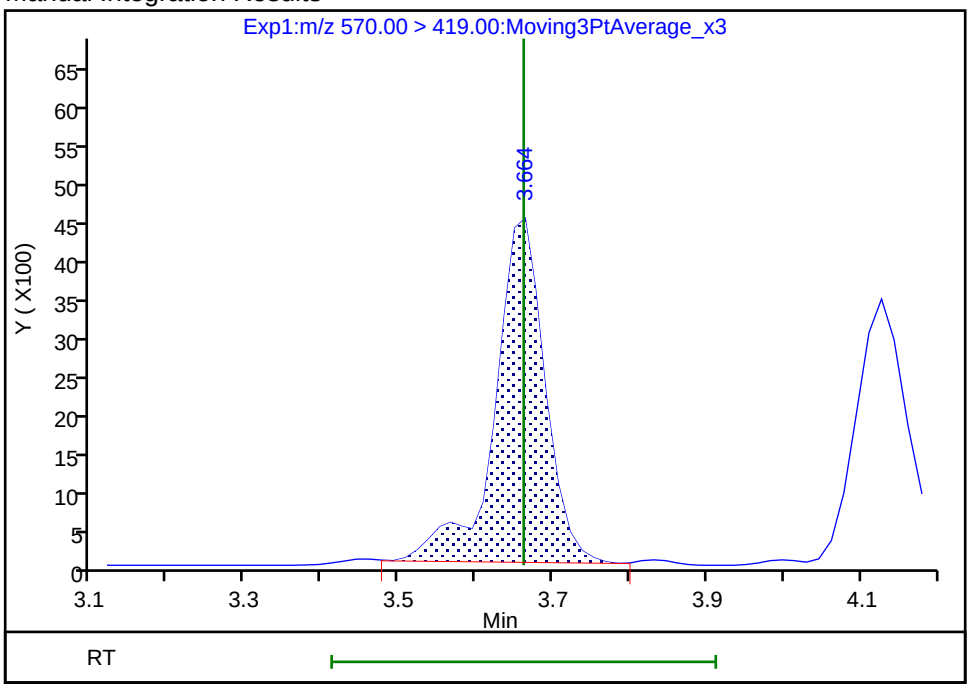
Processing Integration Results

RT: 3.66
Area: 21638
Amount: 0.058371
Amount Units: ng/ml



Manual Integration Results

RT: 3.66
Area: 20353
Amount: 0.055453
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:50:48
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

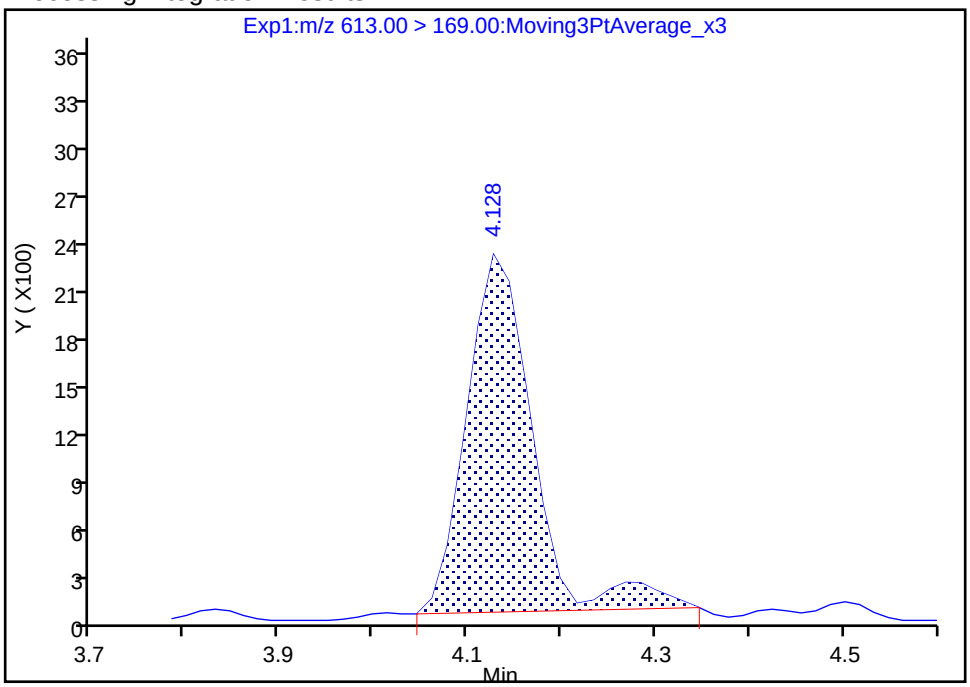
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_006.d
Injection Date: 03-Aug-2018 16:19:58 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

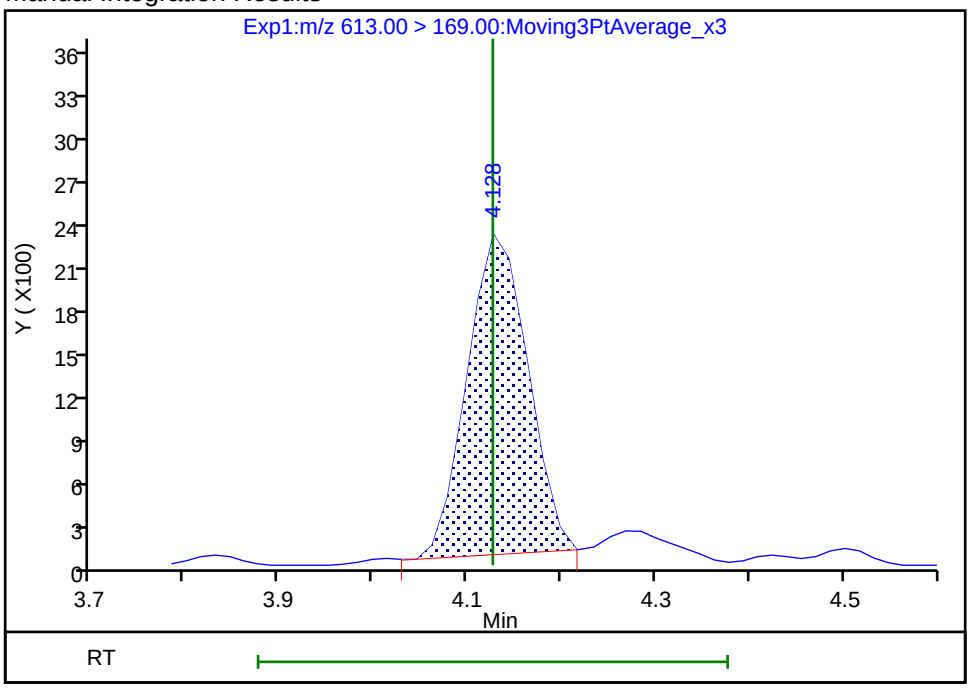
Processing Integration Results

RT: 4.13
Area: 10774
Amount: 0.056149
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Area: 9798
Amount: 0.056149
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:50:59
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_007.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Aug-2018 16:27:29 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC PFC STD3
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 03-Aug-2018 18:17:31 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK018

First Level Reviewer: roycea Date: 03-Aug-2018 17:52:51

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.486	1.485	0.001	0.540	6381009	2.32		92.8	6416	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.486	1.486	0.0	1.000	587057	0.2475		99.0	13.1	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.753	0.002	0.638	5776616	2.35		94.0	9315	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.755	1.754	0.001	1.000	600625	0.2548		102	26.6	
D 47 13C3-PFBS										
301.90 > 83.00	1.788	1.792	-0.004	0.650	84657	2.22		95.6	249	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.797	1.794	0.003	1.005	813836	0.2164		97.9	639	
298.90 > 99.00	1.797	1.794	0.003	1.005	299311		2.72(1.35-4.05)	97.9	98.9	
D 60 M2-4:2FTS										
329.00 > 81.00	2.008	2.006	0.002	0.730	570224	2.20		94.3	338	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.008	2.009	-0.001	1.123	137395	0.2217		94.9	570	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.039	2.044	-0.005	0.995	540737	0.2415		96.6	49.5	
313.00 > 119.00	2.049	2.044	0.005	1.000	41947		12.89(6.96-20.87)	96.6	34.5	
D 7 13C2 PFHxA										
315.00 > 270.00	2.049	2.046	0.003	0.745	5983609	2.34		93.8	5772	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.070	2.069	0.001	1.157	403451	0.2266		96.6	1243	
349.00 > 99.00	2.070	2.069	0.001	1.157	187921		2.15(1.15-3.45)	96.6	105	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.152	2.146	0.006	0.782	490263	2.25		89.9	1528	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.142	2.147	-0.005	0.995	119832	0.2771		111	38.8	
D 9 13C4-PFHpA										
367.00 > 322.00	2.386	2.384	0.002	0.867	7086577	2.45		97.8	9339	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.386	2.384	0.002	1.000	736383	0.2502		100	49.4	
363.00 > 169.00	2.386	2.384	0.002	1.000	169669		4.34(2.17-6.52)	100	152	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.399	2.398	0.001	1.000	567484	0.2170		95.4	654	
399.00 > 99.00	2.399	2.398	0.001	1.000	148745		3.82(1.90-5.70)	95.4	41.7	
D 11 18O2 PFHxS										
403.00 > 84.00	2.399	2.400	-0.001	0.872	4834908	2.22		93.7	8456	
65 ADONA										
377.00 > 251.00	2.438	2.435	0.003	0.776	1141401	0.2739		110	1515	
377.00 > 85.00	2.438	2.435	0.003	0.776	459439		2.48(1.05-3.16)	110	204	
D 12 M2-6:2FTS										
429.00 > 81.00	2.735	2.732	0.003	0.994	617490	2.19		92.3	894	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.735	2.732	0.003	1.000	133796	0.2408		102	581	
* 62 13C2-PFOA										
415.00 > 370.00	2.751	2.755	-0.004		6155062	2.50			9778	
D 14 13C4 PFOA										
417.00 > 372.00	2.751	2.757	-0.006	1.000	5683176	2.34		93.6	8449	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.751	2.757	-0.006	1.000	626191	0.2514		100	61.1	
413.00 > 169.00	2.751	2.757	-0.006	1.000	235691		2.66(1.36-4.08)	100	168	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.767	2.767	0.0	0.881	516142	0.2466		104	682	
449.00 > 99.00	2.767	2.767	0.0	0.881	129463		3.99(1.84-5.53)	104	266	
D 19 13C5 PFNA										
468.00 > 423.00	3.140	3.140	0.0	1.141	4951980	2.38		95.1	4991	
D 18 13C4 PFOS										
503.00 > 80.00	3.140	3.140	0.0	1.141	4950130	2.18		91.2	5227	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.140	3.140	0.0	1.000	513415	0.2311		99.6	429	
499.00 > 99.00	3.140	3.140	0.0	1.000	117750		4.36(2.04-6.12)	99.6	200	
20 Perfluorononanoic acid										
463.00 > 419.00	3.140	3.140	0.0	1.000	524304	0.2510		100	76.9	
463.00 > 169.00	3.140	3.140	0.0	1.000	108494		4.83(2.68-8.03)	100	153	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.348	3.348	0.0	1.066	580044	0.2371		102	792	
D 21 13C8 FOSA										
506.00 > 78.00	3.479	3.485	-0.006	1.265	3340672	2.46		98.5	3592	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.494	3.492	0.002	1.113	353704	0.2608		109	745	
549.00 > 99.00	3.494	3.492	0.002	1.113	57339		6.17(3.02-9.05)	109	324	
D 26 M2-8:2FTS										
529.00 > 81.00	3.494	3.492	0.002	1.270	76604	2.34		97.7	461	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.494	3.492	0.002	1.004	1055835	0.2573		103	941	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.494	3.494	0.0	1.000	104586	0.2332		97.4	532	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.509	3.505	0.004	1.000	663493	0.2612		104	79.1	
513.00 > 169.00	3.509	3.505	0.004	1.000	46893		14.15(7.12-21.35)	104	66.5	
D 23 13C2 PFDA										
515.00 > 470.00	3.509	3.505	0.004	1.276	5165264	2.48		99.0	8513	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.650	3.650	0.0	1.327	878656	2.17		86.7	1827	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.663	3.662	0.001	1.004	90688	0.2553		102	53.0	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.815	3.816	-0.001	1.215	437557	0.2535		105	951	
599.00 > 99.00	3.815	3.816	-0.001	1.215	87751		4.99(2.14-6.43)	105	156	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.831	3.825	0.006	1.392	803397	2.41		96.5	1664	
D 30 13C2 PFUnA										
565.00 > 520.00	3.831	3.831	0.0	1.392	4060489	2.41		96.3	6789	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.831	3.831	0.0	1.000	346386	0.2533		101	70.5	
563.00 > 169.00	3.831	3.831	0.0	1.000	31214		11.10(5.24-15.72)	101	74.2	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.831	3.831	0.0	1.000	71271	0.2473		98.9	159	
35 MeFOSA										
512.00 > 169.00	3.965	3.971	-0.006		134737	NC			341	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.997	3.993	0.004	1.273	639205	0.2467		105	2191	
D 36 13C2 PFDoA										
615.00 > 570.00	4.126	4.127	-0.001	1.500	4519004	2.49		99.4	5597	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.126	4.127	-0.001	1.000	434793	0.2446		97.8	97.4	
613.00 > 169.00	4.126	4.127	-0.001	1.000	45472		9.56(4.68-14.05)	97.8	115	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.126	4.127	-0.001	1.181	58035	0.2371		98.4	322	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.360	4.361	-0.001	1.389	45649	0.2741		113	242	
699.00 > 99.00	4.360	4.361	-0.001	1.389	75939		0.60(0.28-0.83)	113	333	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.391	4.392	-0.001	1.064	329625	0.2430		97.2	93.3	
663.00 > 169.00	4.391	4.392	-0.001	1.064	53186		6.20(3.09-9.27)	97.2	121	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.634	4.635	-0.001	1.684	2823583	2.43		97.3	6689	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.634	4.635	-0.001	1.000	41015	0.2254		90.2	177	
713.00 > 219.00	4.634	4.635	-0.001	1.000	29011		1.41(0.70-2.09)	90.2	111	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.046	5.049	-0.003	1.834	2534296	2.38		95.2	4734	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.046	5.049	-0.003	1.000	262895	0.2598		104	34.1	
813.00 > 169.00	5.046	5.049	-0.003	1.000	46447		5.66(2.77-8.32)	104	153	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.409	5.401	0.008	1.072	180156	0.2503		100	186	
913.00 > 169.00	5.395	5.401	-0.006	1.069	34023		5.30(2.55-7.64)	100	271	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL3_00006 Amount Added: 1.00 Units: mL

Report Date: 03-Aug-2018 18:17:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_007.d

Injection Date: 03-Aug-2018 16:27:29 Instrument ID: A9

Lims ID: IC L3 Full

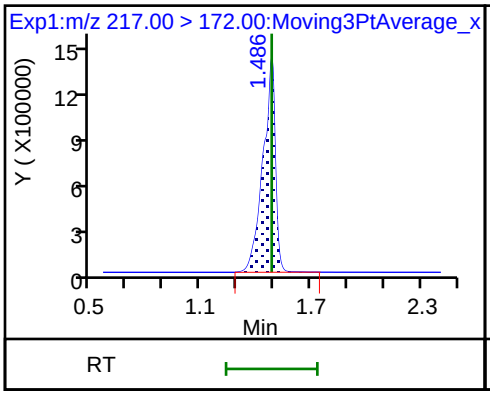
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 12 Worklist Smp#: 4

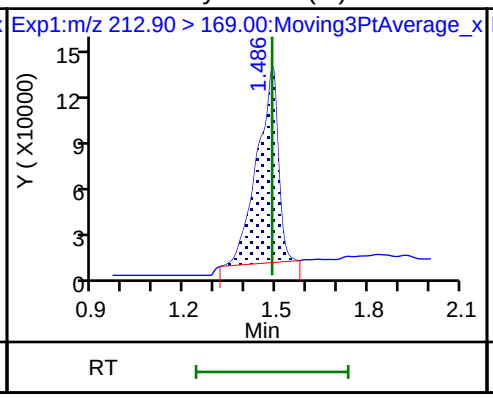
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

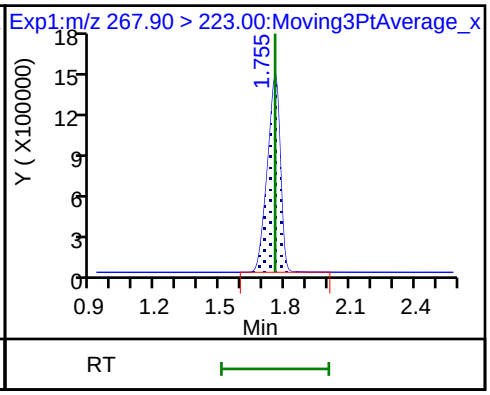
D 1 13C4 PFBA



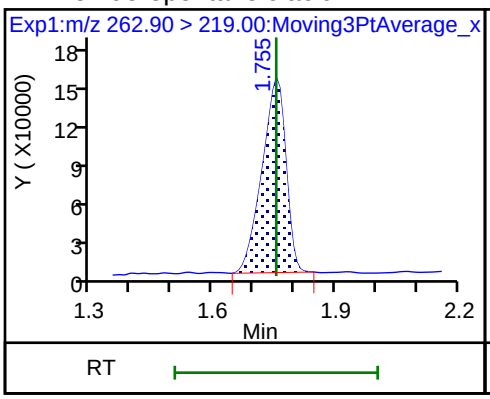
2 Perfluorobutyric acid (M)



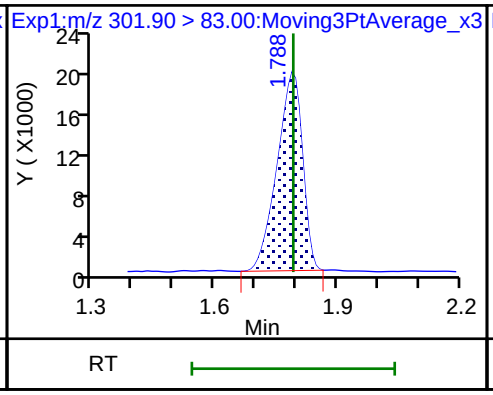
D 3 13C5-PFPeA



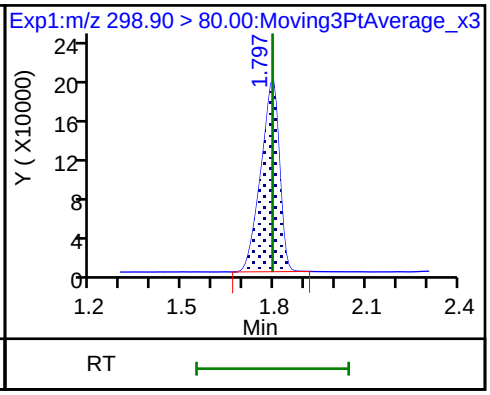
4 Perfluoropentanoic acid



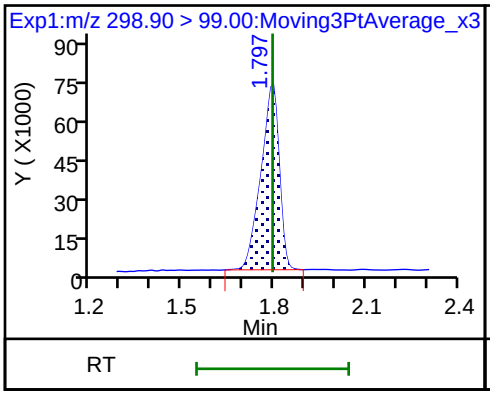
D 47 13C3-PFBS



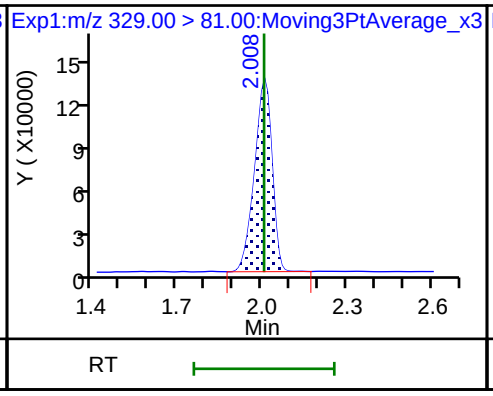
5 Perfluorobutanesulfonic acid



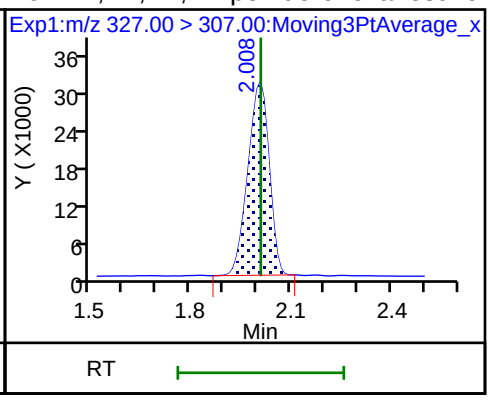
5 Perfluorobutanesulfonic acid



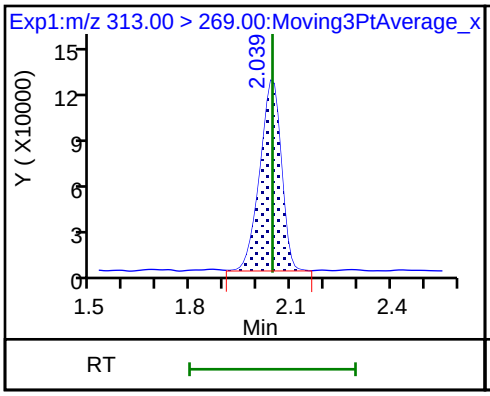
D 60 M2-4:2FTS



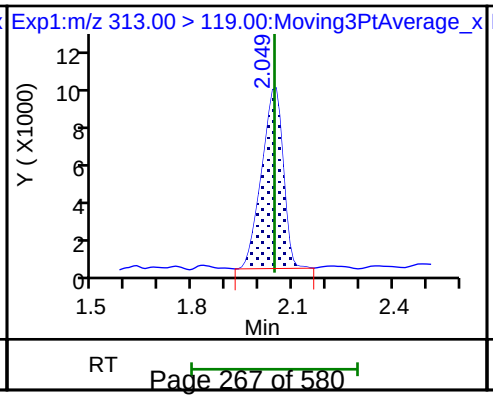
61 1H,1H,2H,2H-perfluorohexanesulfoni



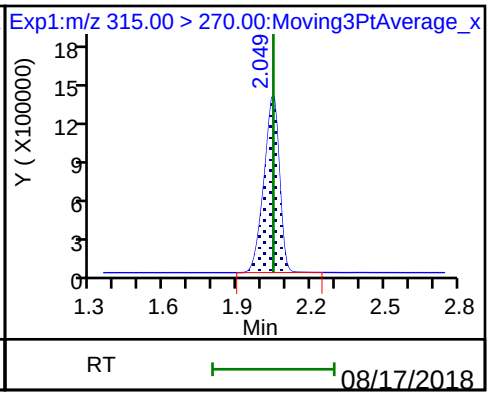
6 Perfluorohexanoic acid



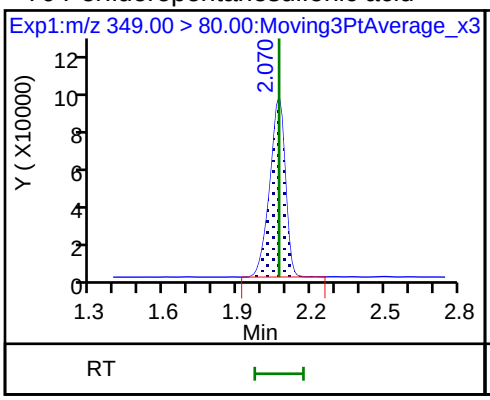
6 Perfluorohexanoic acid



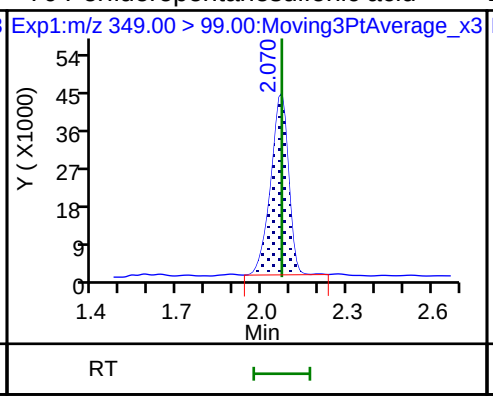
D 7 13C2 PFHxA



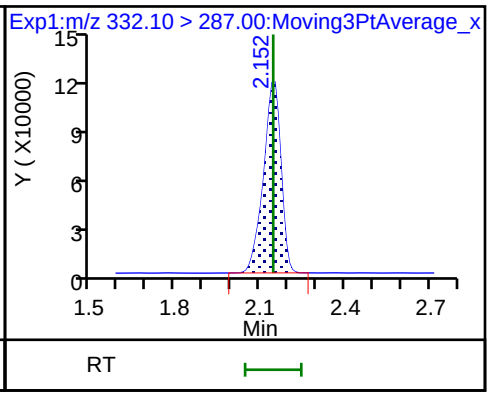
70 Perfluoropentanesulfonic acid



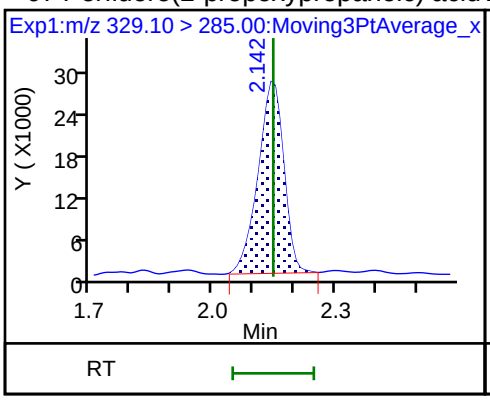
70 Perfluoropentanesulfonic acid



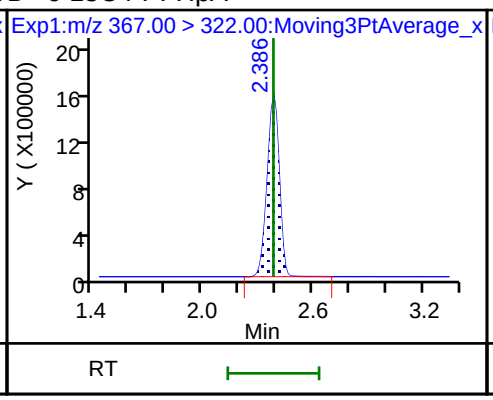
D 64 13C3 HFPO-DA



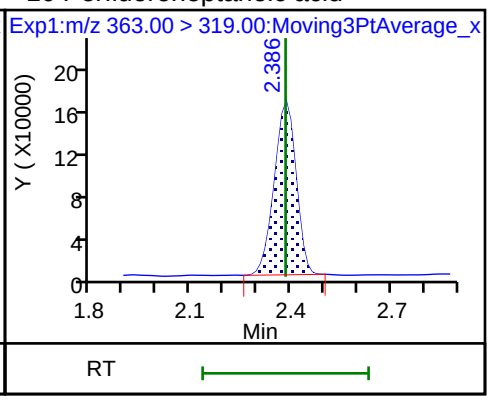
67 Perfluoro(2-propoxypropanoic) acid



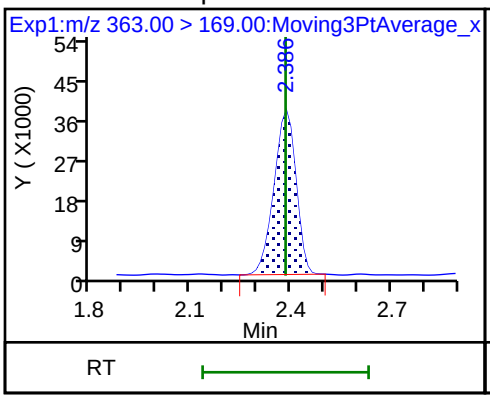
D 9 13C4-PFHpA



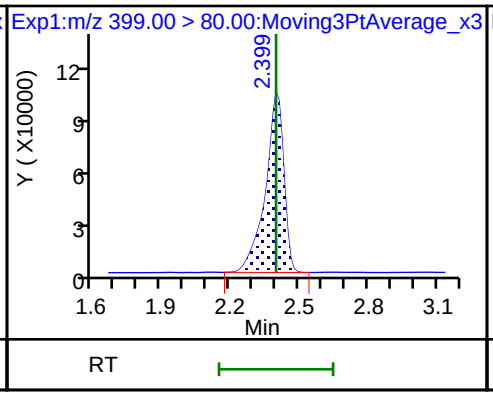
10 Perfluoroheptanoic acid



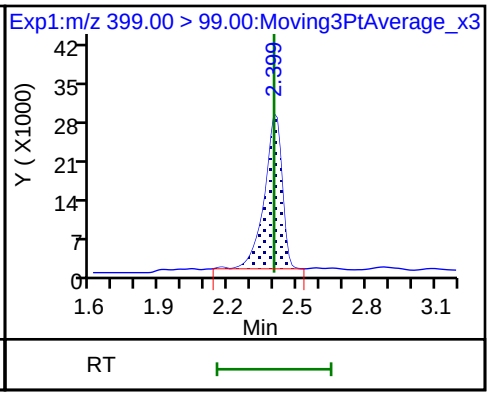
10 Perfluoroheptanoic acid



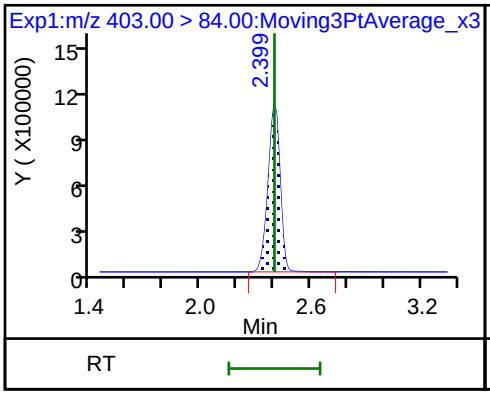
8 Perfluorohexanesulfonic acid



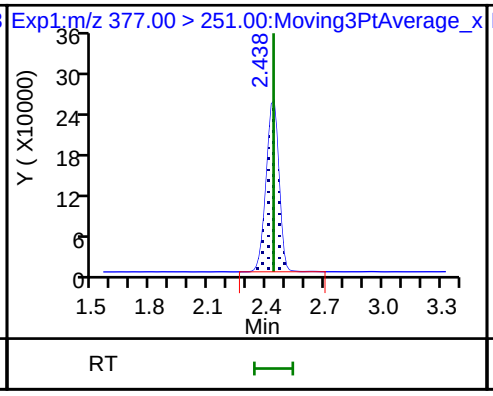
8 Perfluorohexanesulfonic acid



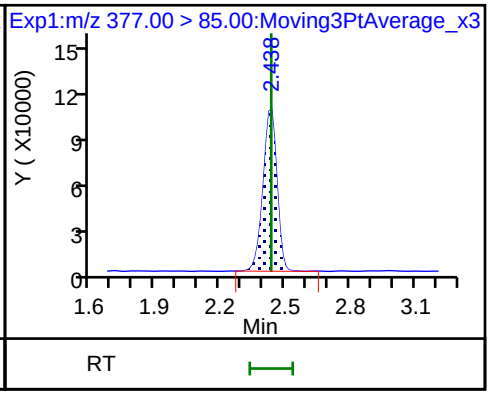
D 11 18O2 PFHxS



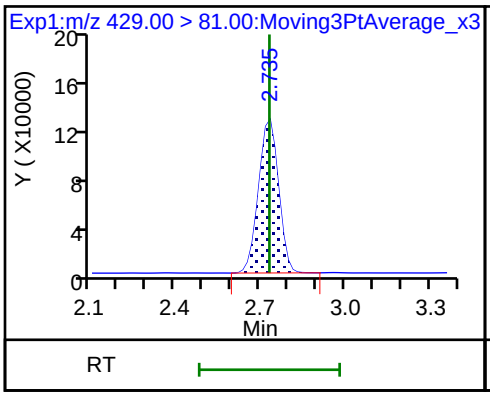
65 ADONA



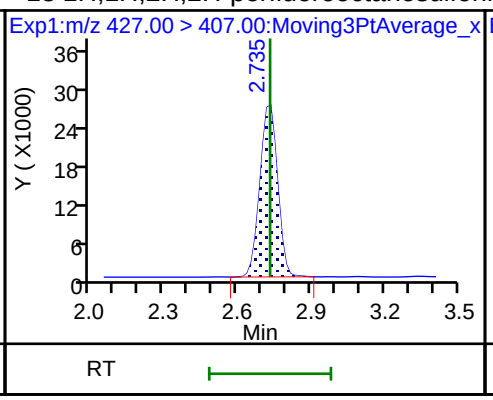
65 ADONA

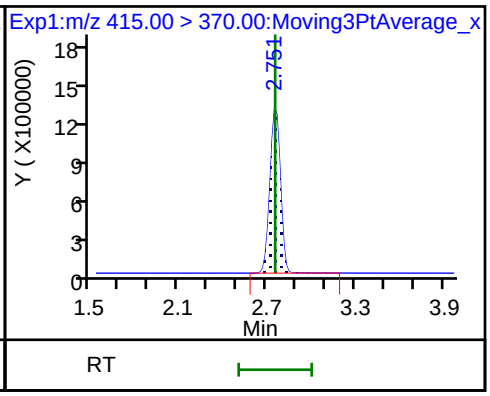


D 12 M2-6:2FTS

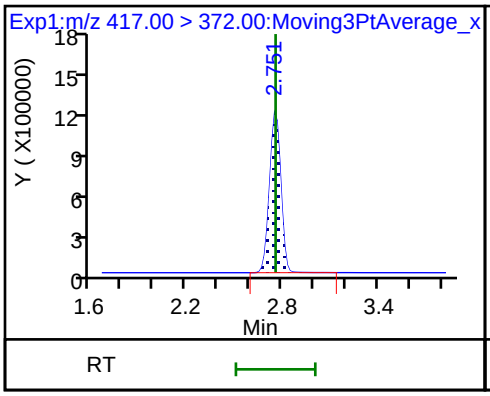


13 1H,1H,2H,2H-perfluorooctanesulfoni* 62 13C2-PFOA

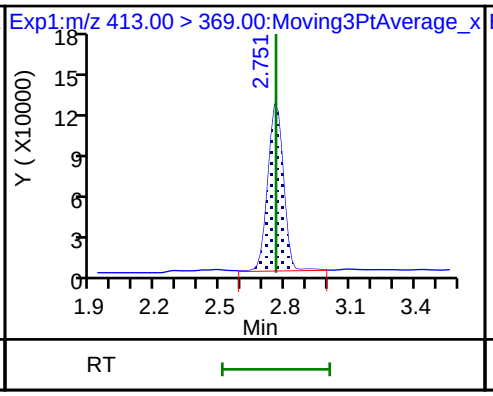




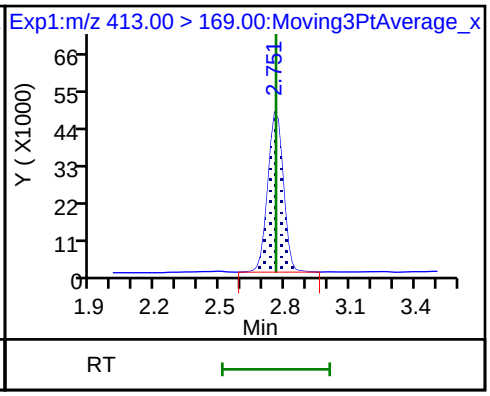
D 14 13C4 PFOA



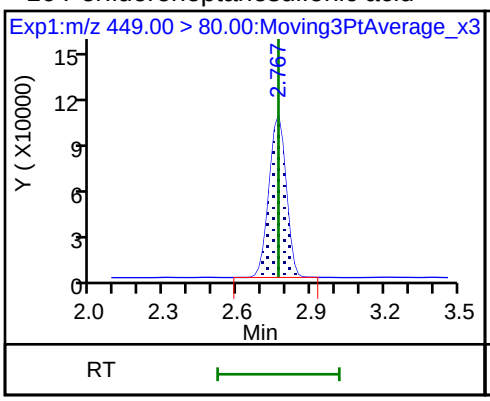
15 Perfluorooctanoic acid



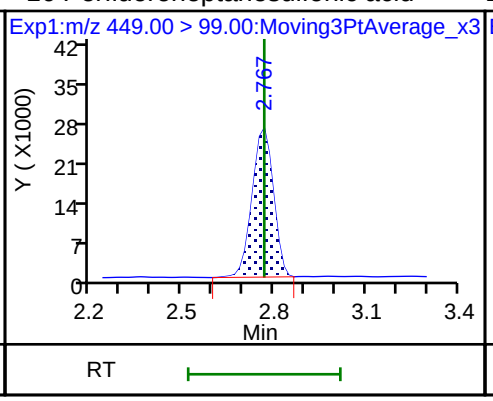
15 Perfluorooctanoic acid



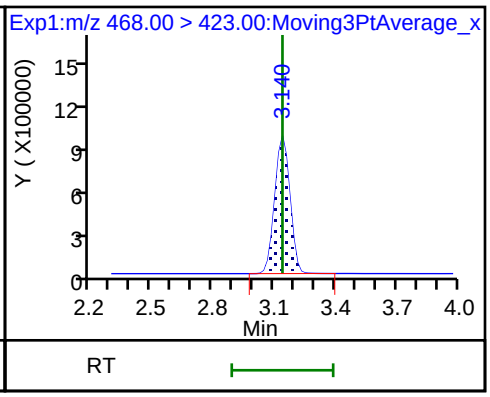
16 Perfluoroheptanesulfonic acid



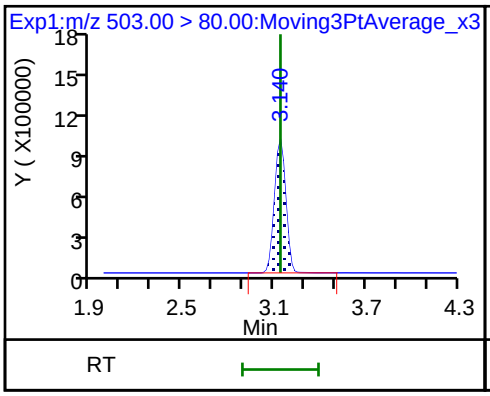
16 Perfluoroheptanesulfonic acid



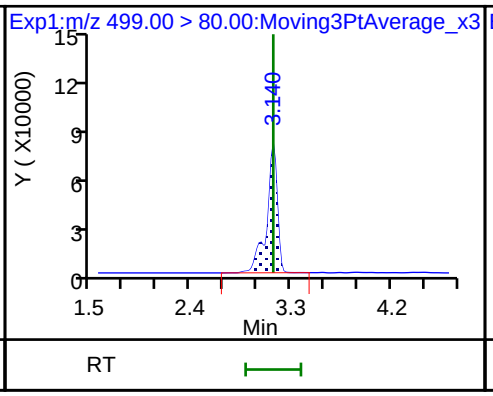
D 19 13C5 PFNA



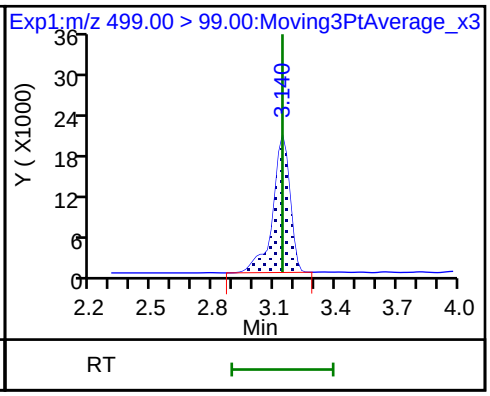
D 18 13C4 PFOS



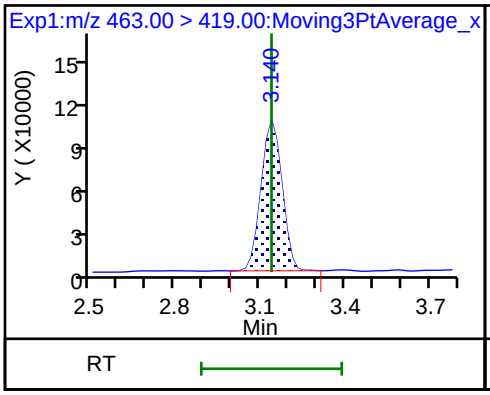
17 Perfluorooctane sulfonic acid



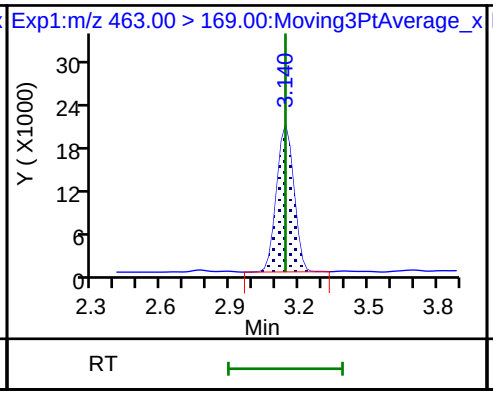
17 Perfluorooctane sulfonic acid



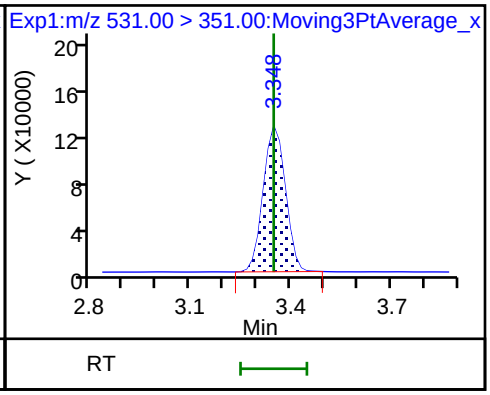
20 Perfluorononanoic acid



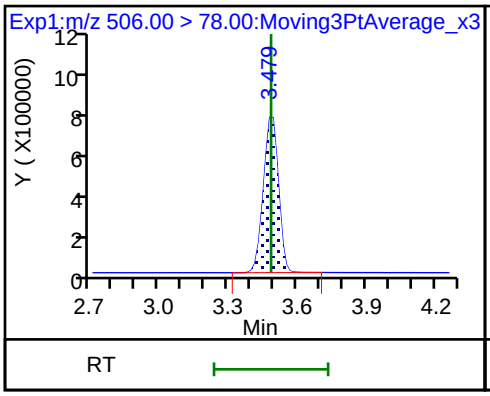
20 Perfluorononanoic acid



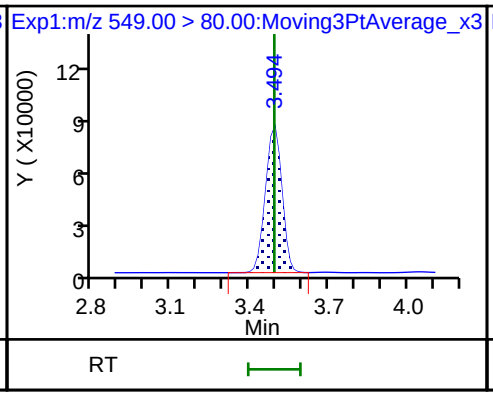
69 9-Chlorohexadecafluoro-3-oxanonane



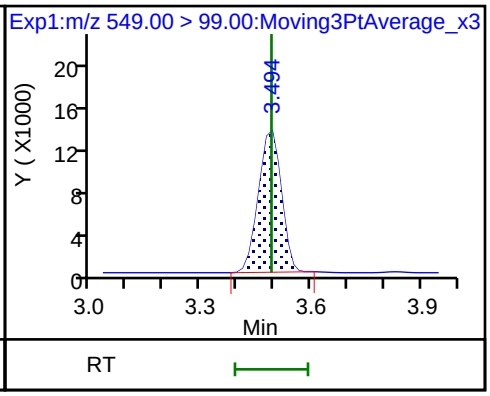
D 21 13C8 FOSA



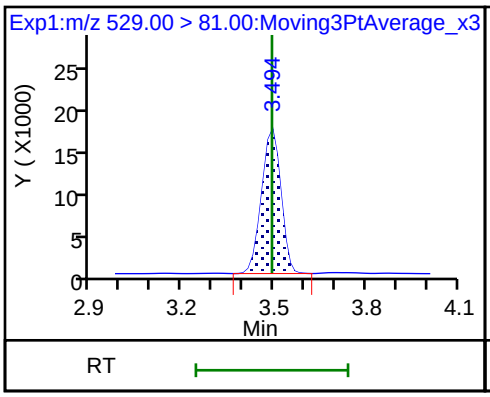
68 Perfluorononanesulfonic acid



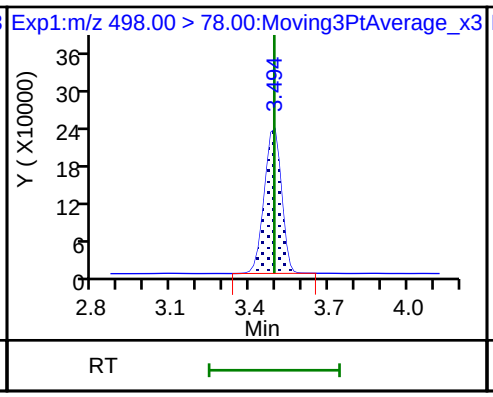
68 Perfluorononanesulfonic acid



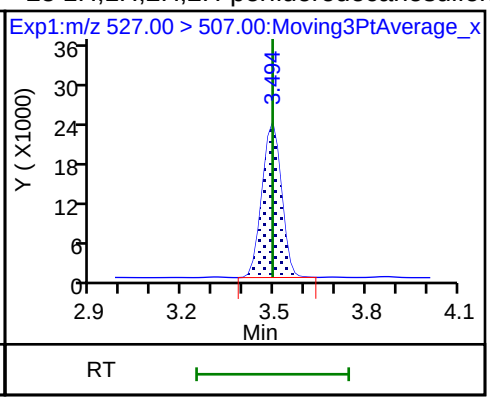
D 26 M2-8:2FTS



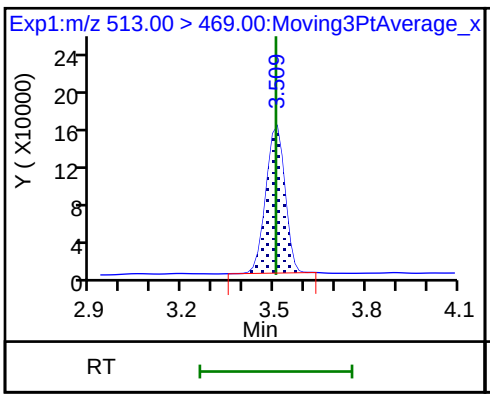
22 Perfluorooctane Sulfonamide



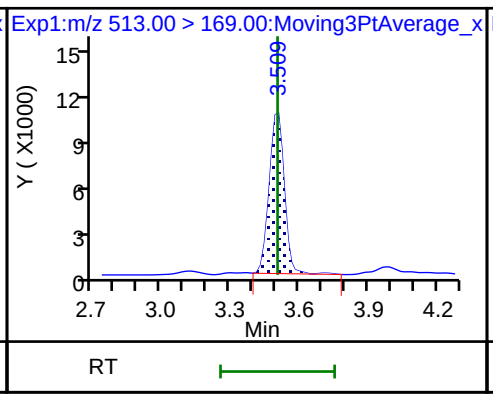
25 1H,1H,2H,2H-perfluorodecanesulfoni



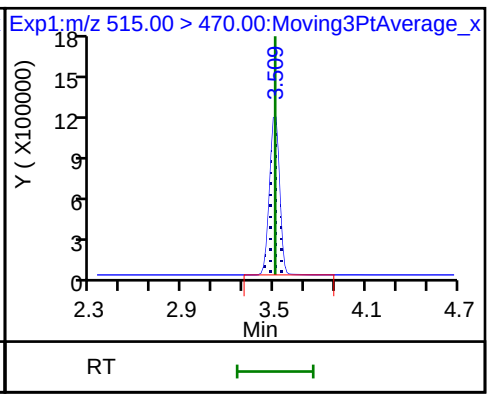
24 Perfluorodecanoic acid



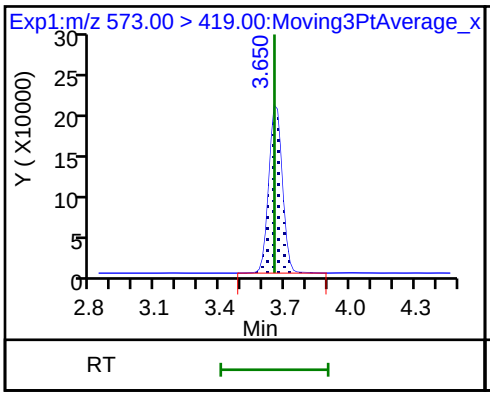
24 Perfluorodecanoic acid



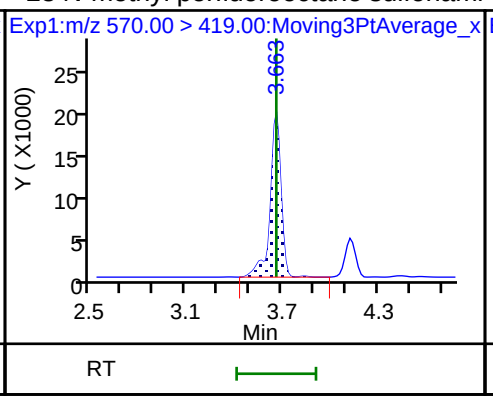
D 23 13C2 PFDA



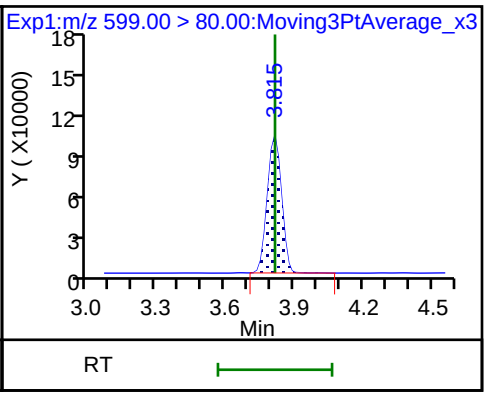
D 27 d3-NMeFOSAA



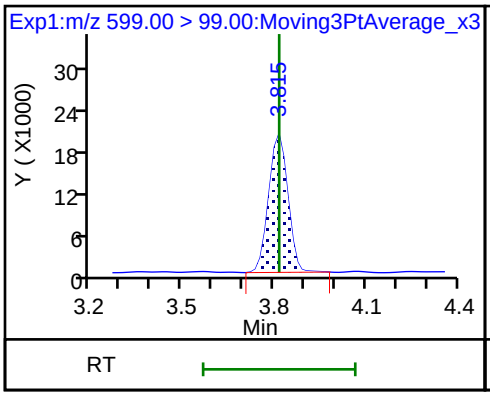
28 N-methyl perfluorooctane sulfonami



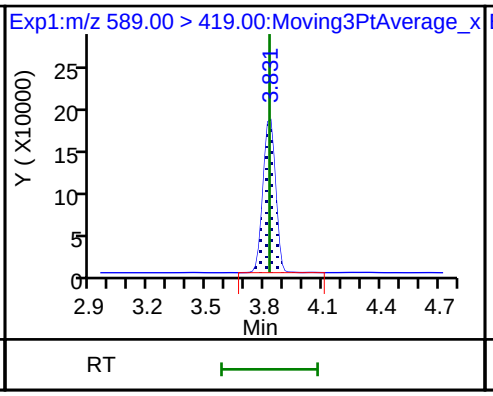
29 Perfluorodecane Sulfonic acid



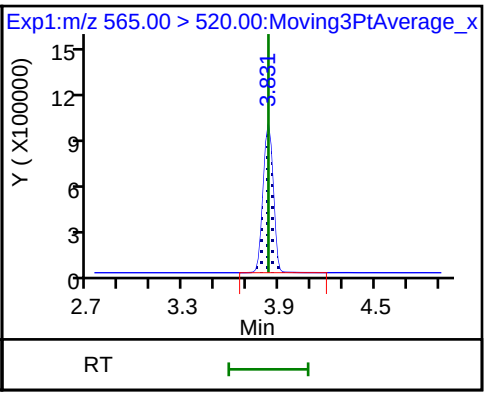
29 Perfluorodecane Sulfonic acid



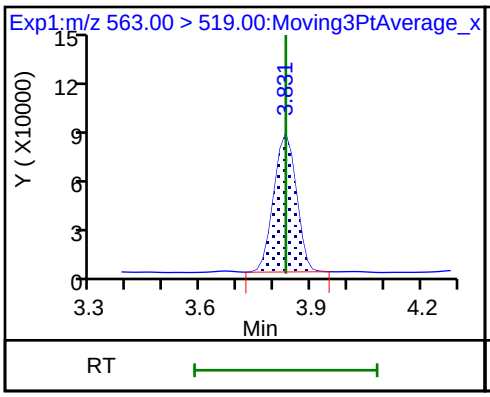
D 32 d5-NEtFOSAA



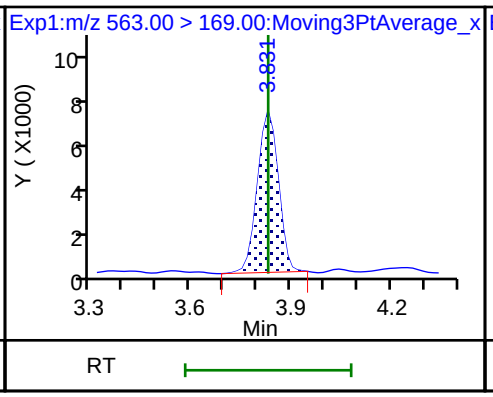
D 30 13C2 PFUnA



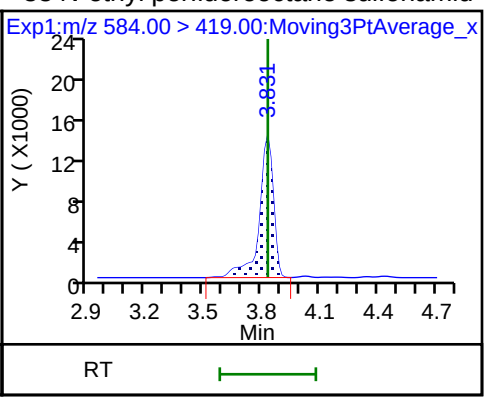
31 Perfluoroundecanoic acid



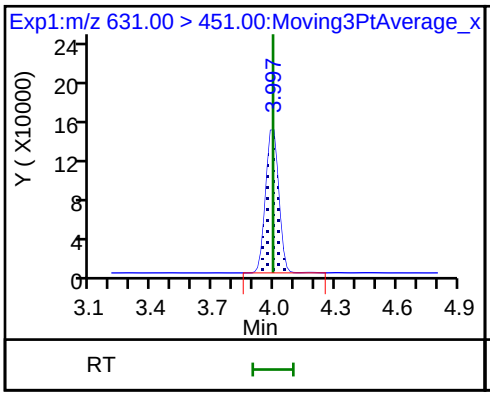
31 Perfluoroundecanoic acid



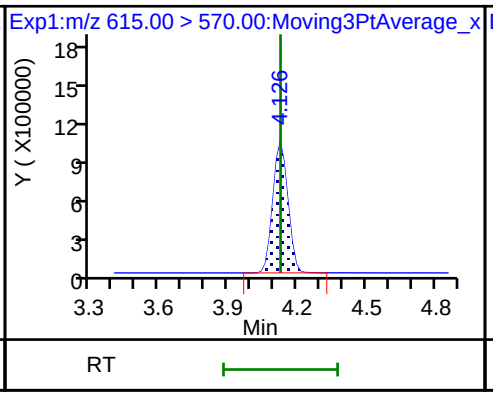
33 N-ethyl perfluorooctane sulfonamid



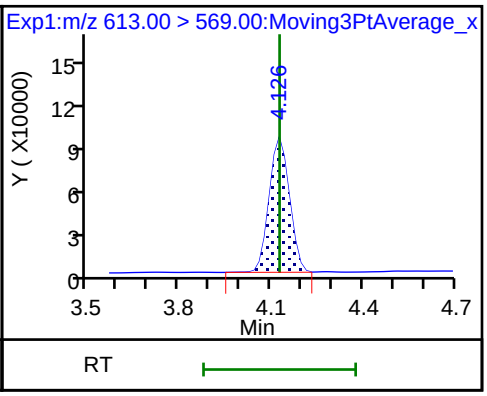
66 11-Chloroeicosafluoro-3-oxaundecan



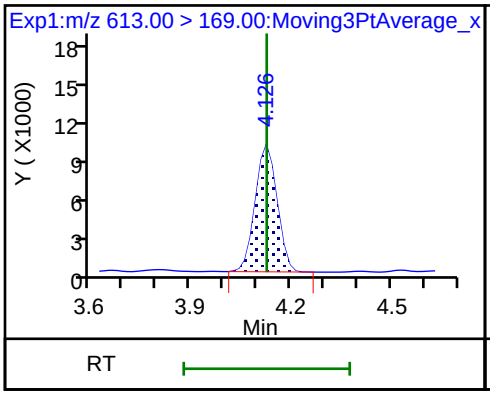
D 36 13C2 PFDoA



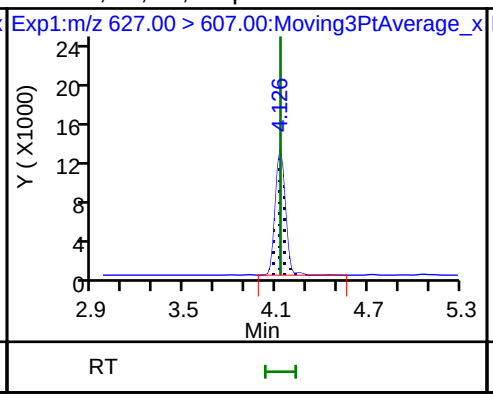
37 Perfluorododecanoic acid



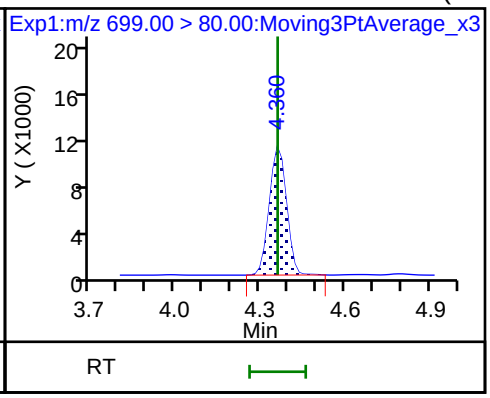
37 Perfluorododecanoic acid



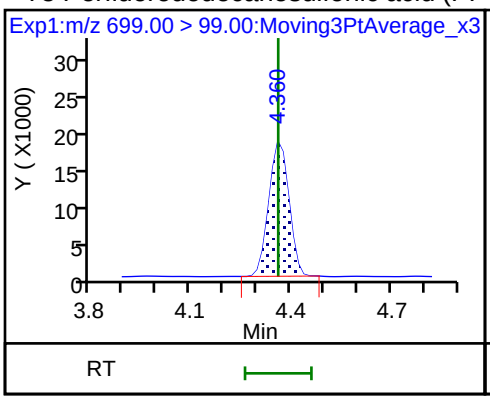
74 1H,1H,2H,2H-perfluorododecanesulfo



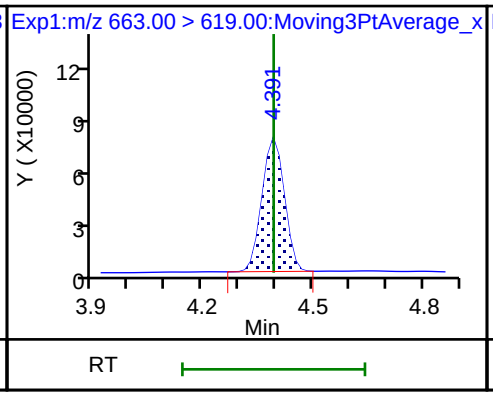
75 Perfluorododecanesulfonic acid (PF



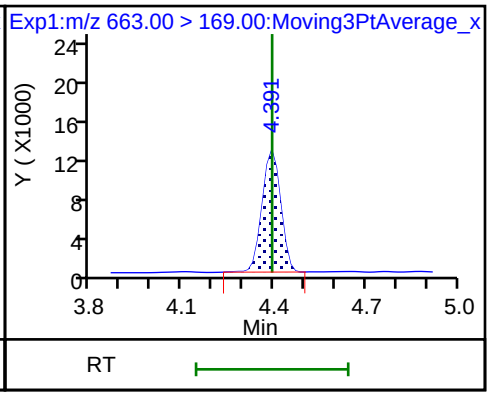
75 Perfluorododecanesulfonic acid (PF



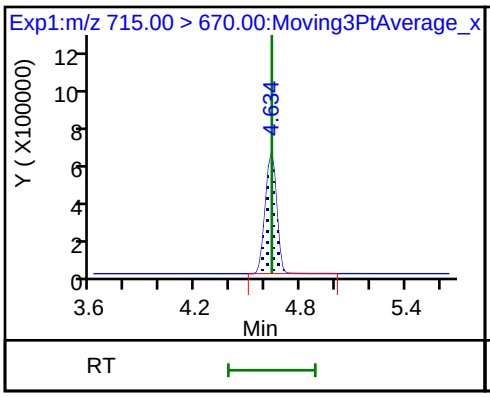
41 Perfluorotridecanoic acid



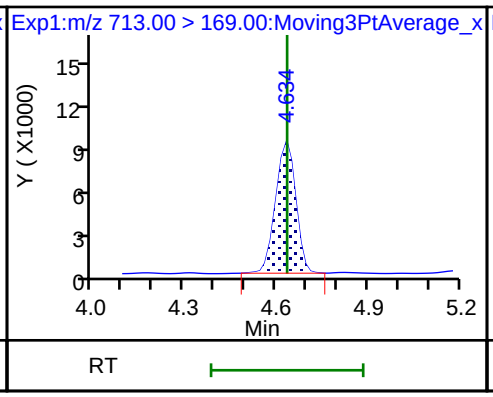
41 Perfluorotridecanoic acid



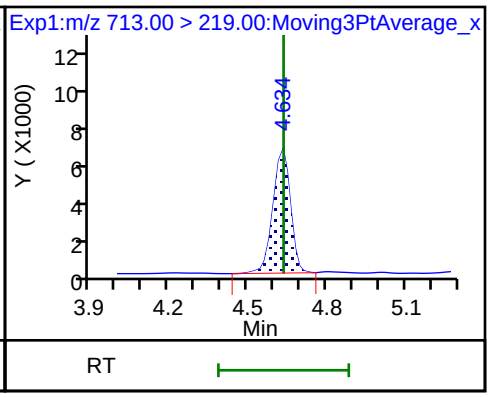
D 43 13C2-PFTeDA



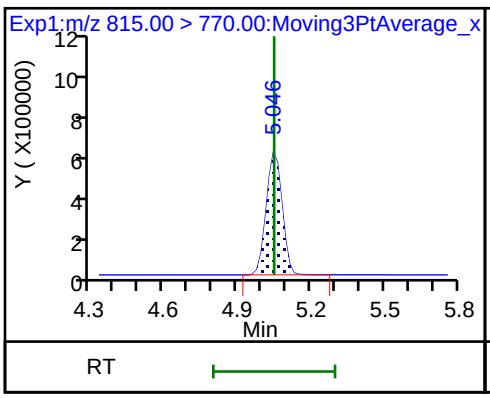
42 Perfluorotetradecanoic acid



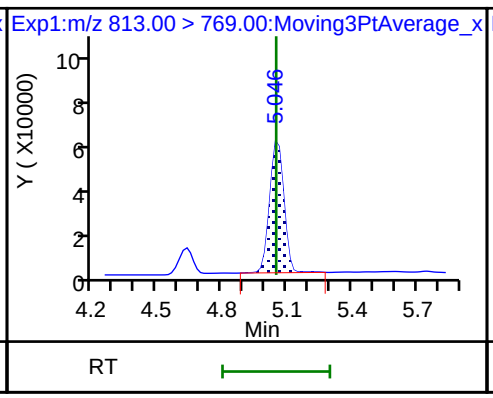
42 Perfluorotetradecanoic acid



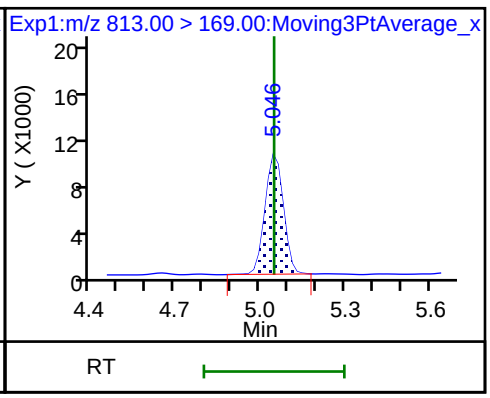
D 44 13C2-PFHxDA



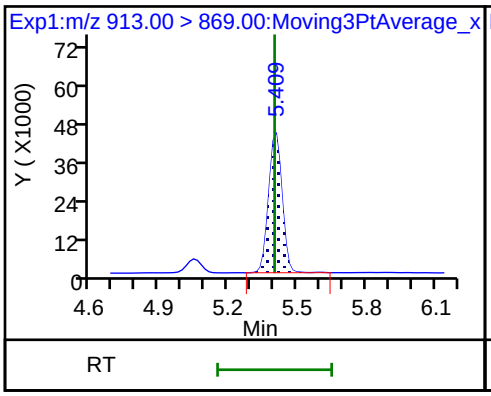
45 Perfluorohexadecanoic acid



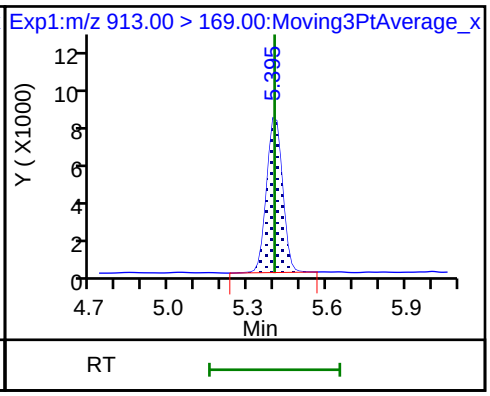
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

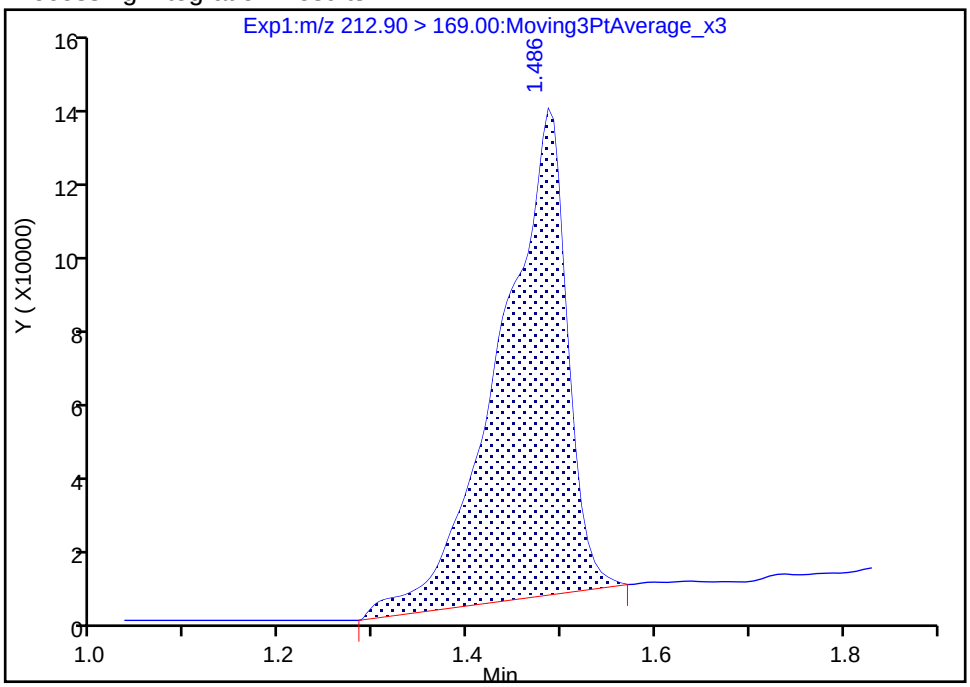
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_007.d
Injection Date: 03-Aug-2018 16:27:29 Instrument ID: A9
Lims ID: IC L3 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

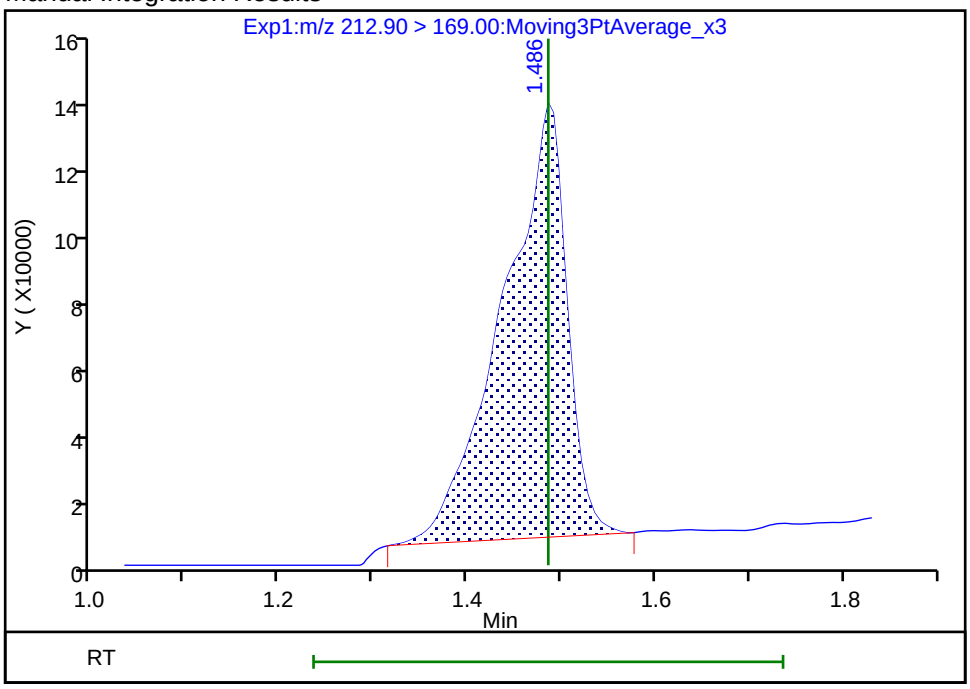
Processing Integration Results

RT: 1.49
Area: 627297
Amount: 0.278600
Amount Units: ng/ml



Manual Integration Results

RT: 1.49
Area: 587057
Amount: 0.247499
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:52:16
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_008.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 03-Aug-2018 16:34:58 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC PFC STD4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 03-Aug-2018 18:17:36 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK018

First Level Reviewer: roycea Date: 03-Aug-2018 17:53:42

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.486	1.485	0.001	0.540	6314247	2.49		99.6	9480	
2 Perfluorobutyric acid										
212.90 > 169.00	1.486	1.486	0.0	1.000	2386844	1.02		102	49.4	
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.753	0.002	0.638	5588563	2.47		98.6	8819	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.755	1.754	0.001	1.000	2185438	0.9583		95.8	93.8	
D 47 13C3-PFBS										
301.90 > 83.00	1.797	1.792	0.005	0.653	78999	2.25		96.8	287	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.797	1.794	0.003	1.000	3350358	0.9546		108	2523	
298.90 > 99.00	1.797	1.794	0.003	1.000	1171432		2.86(1.35-4.05)	108	395	
D 60 M2-4:2FTS										
329.00 > 81.00	2.008	2.006	0.002	0.730	539553	2.26		96.8	331	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.008	2.009	-0.001	1.118	550071	0.9510		102	1668	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.049	2.044	0.005	1.000	2195434	0.9802		98.0	201	
313.00 > 119.00	2.049	2.044	0.005	1.000	160466		13.68(6.96-20.87)	98.0	123	
D 7 13C2 PFHxA										
315.00 > 270.00	2.049	2.046	0.003	0.745	5985637	2.54		102	8358	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.070	2.069	0.001	1.152	1620789	0.9753		104	2752	
349.00 > 99.00	2.070	2.069	0.001	1.152	725110		2.24(1.15-3.45)	104	368	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.142	2.146	-0.004	0.779	527888	2.62		105	1877	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.152	2.147	0.005	1.005	422442	0.9073		90.7	137	
D 9 13C4-PFHpA										
367.00 > 322.00	2.386	2.384	0.002	0.867	6641878	2.49		99.4	10816	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.386	2.384	0.002	1.000	2935816	1.06		106	186	
363.00 > 169.00	2.386	2.384	0.002	1.000	655684		4.48(2.17-6.52)	106	510	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.399	2.398	0.001	1.000	2171268	0.8602		94.5	1889	
399.00 > 99.00	2.399	2.398	0.001	1.000	572541		3.79(1.90-5.70)	94.5	139	
D 11 18O2 PFHxS										
403.00 > 84.00	2.399	2.400	-0.001	0.872	4666163	2.32		98.1	8321	
65 ADONA										
377.00 > 251.00	2.438	2.435	0.003	0.776	4537801	1.06		106	4438	
377.00 > 85.00	2.438	2.435	0.003	0.776	1754054		2.59(1.05-3.16)	106	683	
D 12 M2-6:2FTS										
429.00 > 81.00	2.735	2.732	0.003	0.994	651860	2.51		106	975	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.735	2.732	0.003	1.000	536402	0.9146		96.5	1245	
* 62 13C2-PFOA										
415.00 > 370.00	2.751	2.755	-0.004		5673875	2.50			9458	
D 14 13C4 PFOA										
417.00 > 372.00	2.767	2.757	0.010	1.006	5761212	2.57		103	7321	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.767	2.757	0.010	1.000	2450512	0.9706		97.0	249	
413.00 > 169.00	2.767	2.757	0.010	1.000	887911		2.76(1.36-4.08)	97.0	571	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.767	2.767	0.0	0.881	2152553	1.00		105	2630	
449.00 > 99.00	2.767	2.767	0.0	0.881	526243		4.09(1.84-5.53)	105	820	
D 19 13C5 PFNA										
468.00 > 423.00	3.141	3.140	0.001	1.141	4829107	2.51		101	7281	
D 18 13C4 PFOS										
503.00 > 80.00	3.141	3.140	0.001	1.141	5088829	2.43		102	4351	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.141	3.140	0.001	1.000	2140357	0.9373		101	2589	
499.00 > 99.00	3.141	3.140	0.001	1.000	487086		4.39(2.04-6.12)	101	979	
20 Perfluorononanoic acid										
463.00 > 419.00	3.141	3.140	0.001	1.000	2154625	1.06		106	293	
463.00 > 169.00	3.141	3.140	0.001	1.000	400316		5.38(2.68-8.03)	106	487	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.349	3.348	0.001	1.066	2498276	0.99		107	2413	
D 21 13C8 FOSA										
506.00 > 78.00	3.480	3.485	-0.005	1.265	3127842	2.50		100	3628	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.495	3.492	0.003	1.113	1346579	0.9658		101	1915	
549.00 > 99.00	3.495	3.492	0.003	1.113	233042		5.78(3.02-9.05)	101	1196	
D 26 M2-8:2FTS										
529.00 > 81.00	3.495	3.492	0.003	1.270	78595	2.61		109	327	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.495	3.492	0.003	1.004	4264515	1.11		111	3081	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.495	3.494	0.001	1.000	413075	0.8979		93.7	2093	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.510	3.505	0.005	1.000	2405357	1.00		100	270	
513.00 > 169.00	3.510	3.505	0.005	1.000	166101		14.48(7.12-21.35)	100	192	
D 23 13C2 PFDA										
515.00 > 470.00	3.510	3.505	0.005	1.276	4876594	2.54		101	8462	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.651	3.650	0.001	1.327	908545	2.43		97.2	2591	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.664	3.662	0.002	1.004	379517	1.03		103	227	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.816	3.816	0.0	1.215	1793635	1.01		105	2391	
599.00 > 99.00	3.816	3.816	0.0	1.215	380202		4.72(2.14-6.43)	105	688	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.832	3.825	0.007	1.393	793459	2.58		103	2024	
D 30 13C2 PFUnA										
565.00 > 520.00	3.832	3.831	0.001	1.393	3937669	2.53		101	9080	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.832	3.831	0.001	1.000	1396013	1.05		105	279	
563.00 > 169.00	3.832	3.831	0.001	1.000	124491		11.21(5.24-15.72)	105	307	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.832	3.831	0.001	1.000	274140	0.9631		96.3	484	
35 MeFOSA										
512.00 > 169.00	3.968	3.971	-0.003		548680	NC			924	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.999	3.993	0.006	1.273	2814480	1.06		112	5390	
D 36 13C2 PFDoA										
615.00 > 570.00	4.128	4.127	0.001	1.500	4138570	2.47		98.8	6359	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.128	4.127	0.001	1.000	1731609	1.06		106	388	
613.00 > 169.00	4.128	4.127	0.001	1.000	184832		9.37(4.68-14.05)	106	574	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.128	4.127	0.001	1.181	246912	0.9832		102	800	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.363	4.361	0.002	1.389	180099	1.05		109	1080	
699.00 > 99.00	4.363	4.361	0.002	1.389	275623		0.65(0.28-0.83)	109	734	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.394	4.392	0.002	1.064	1328828	1.07		107	370	
663.00 > 169.00	4.394	4.392	0.002	1.064	211451		6.28(3.09-9.27)	107	416	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.636	4.635	0.001	1.685	2697006	2.52		101	7165	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.636	4.635	0.001	1.000	174884	1.01		101	744	
713.00 > 219.00	4.636	4.635	0.001	1.000	121127		1.44(0.70-2.09)	101	411	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.052	5.049	0.003	1.836	2526670	2.57		103	5456	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.052	5.049	0.003	1.000	962190	1.03		103	132	
813.00 > 169.00	5.052	5.049	0.003	1.000	172625		5.57(2.77-8.32)	103	617	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.399	5.401	-0.002	1.069	723135	1.01		101	647	
913.00 > 169.00	5.399	5.401	-0.002	1.069	146097		4.95(2.55-7.64)	101	1008	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00006 Amount Added: 1.00 Units: mL

Report Date: 03-Aug-2018 18:17:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_008.d

Injection Date: 03-Aug-2018 16:34:58 Instrument ID: A9

Lims ID: IC L4 Full

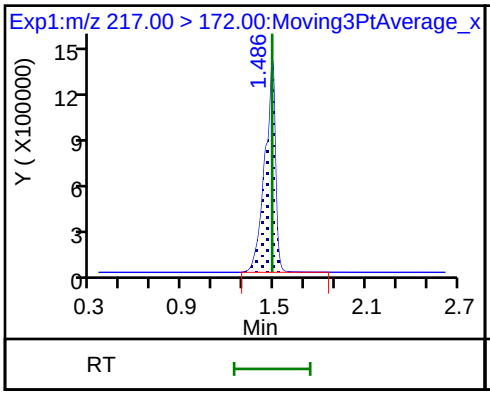
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 13 Worklist Smp#: 5

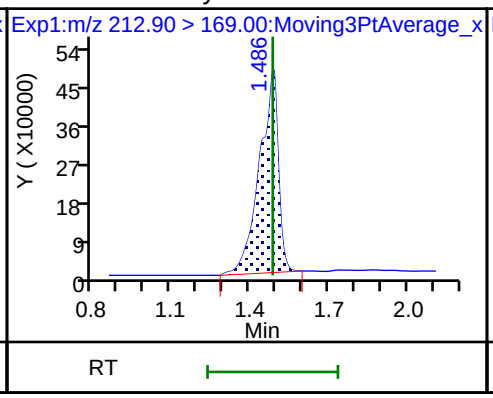
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

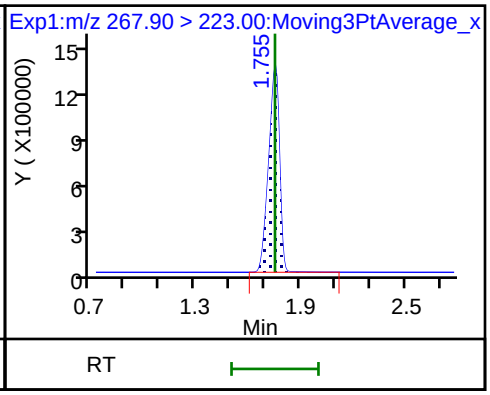
D 1 13C4 PFBA



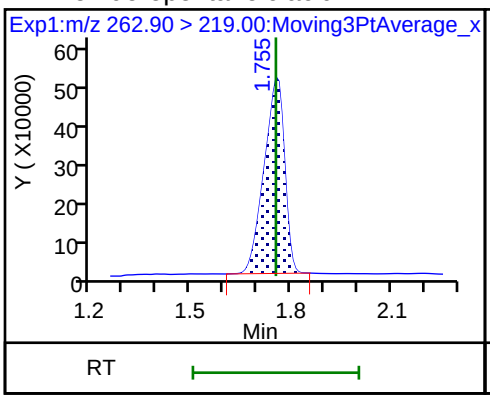
2 Perfluorobutyric acid



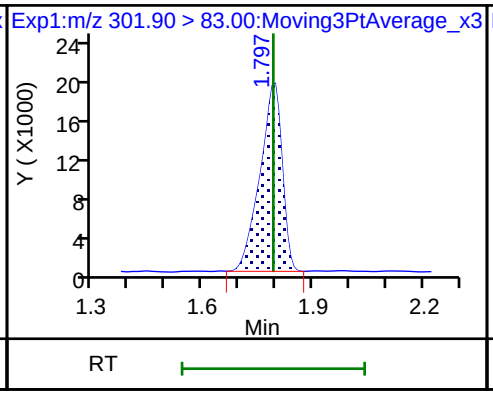
D 3 13C5-PFPeA



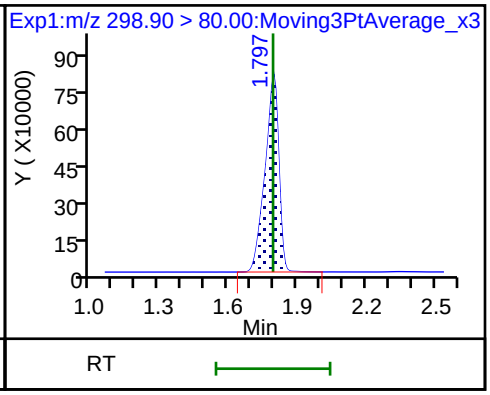
4 Perfluoropentanoic acid



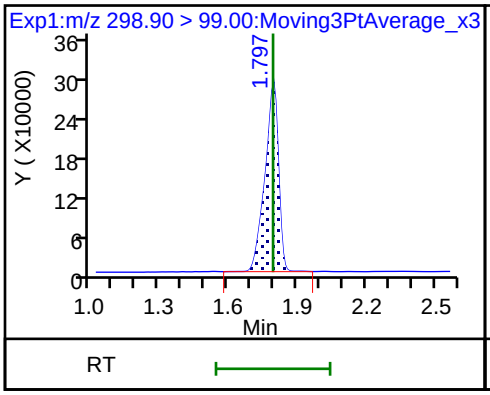
D 47 13C3-PFBS



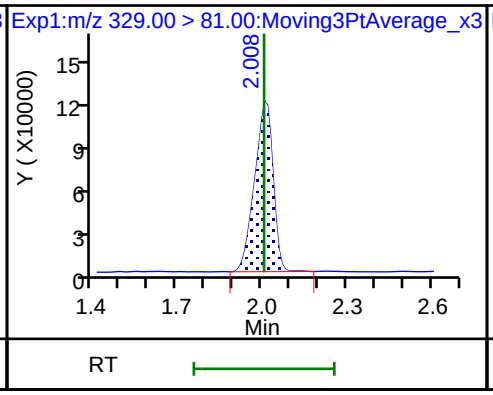
5 Perfluorobutanesulfonic acid



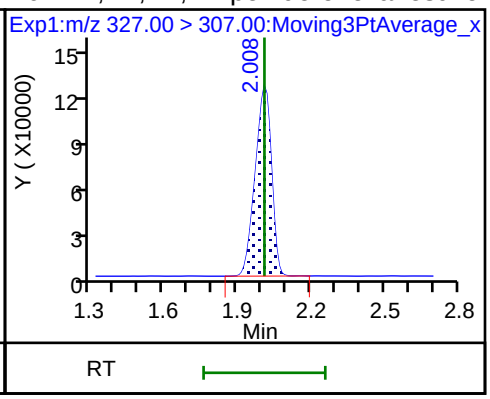
5 Perfluorobutanesulfonic acid



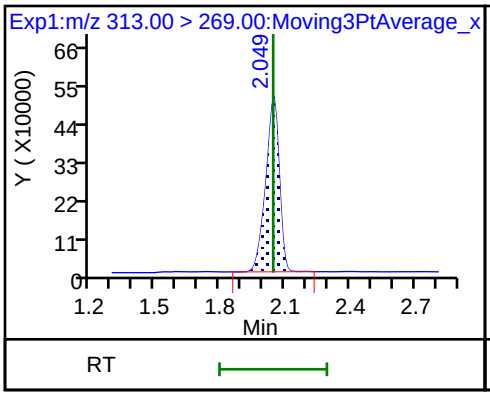
D 60 M2-4:2FTS



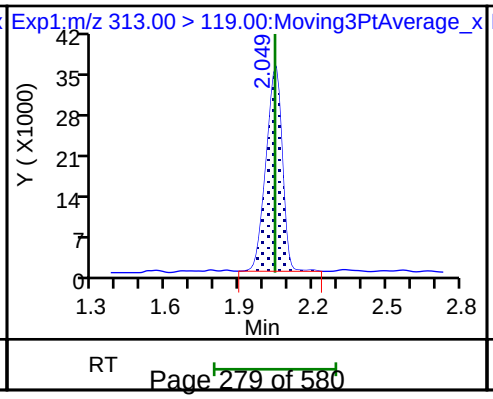
61 1H,1H,2H,2H-perfluorohexanesulfoni



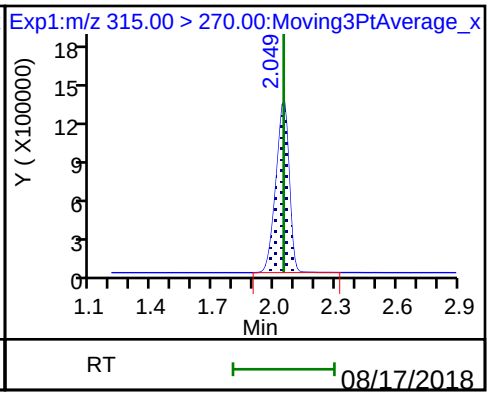
6 Perfluorohexanoic acid



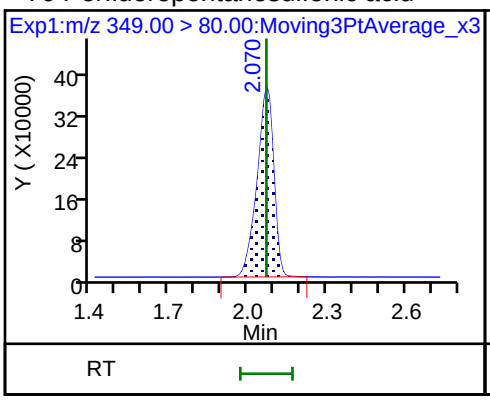
6 Perfluorohexanoic acid



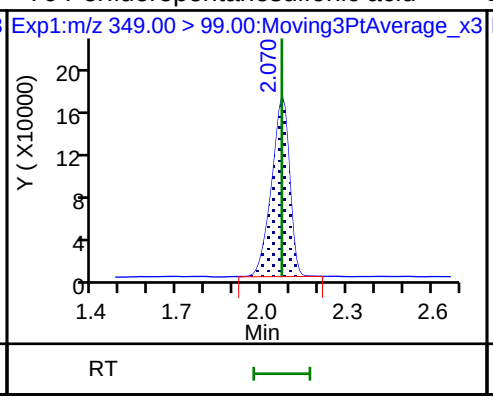
D 7 13C2 PFHxA



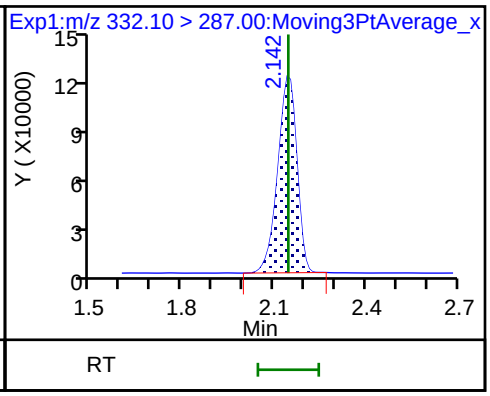
70 Perfluoropentanesulfonic acid



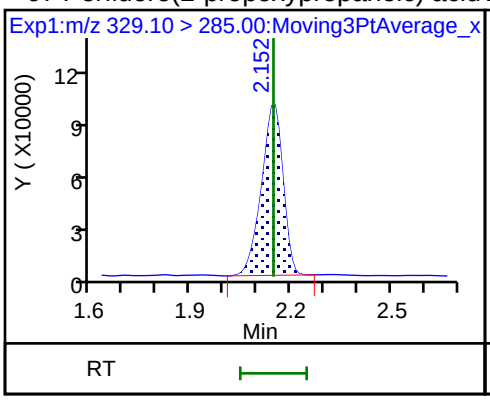
70 Perfluoropentanesulfonic acid



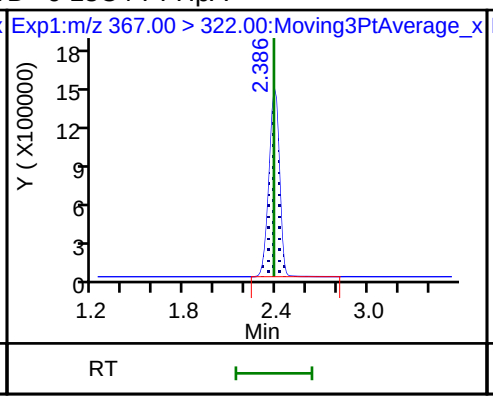
D 64 13C3 HFPO-DA



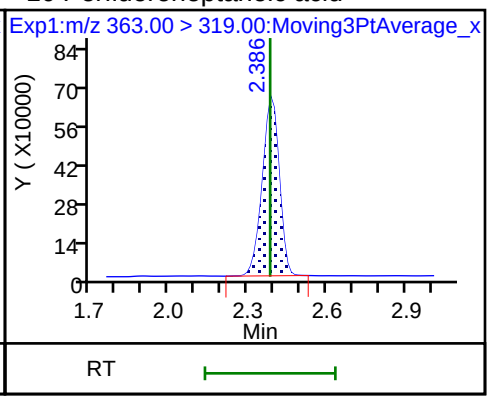
67 Perfluoro(2-propoxypropanoic) acid



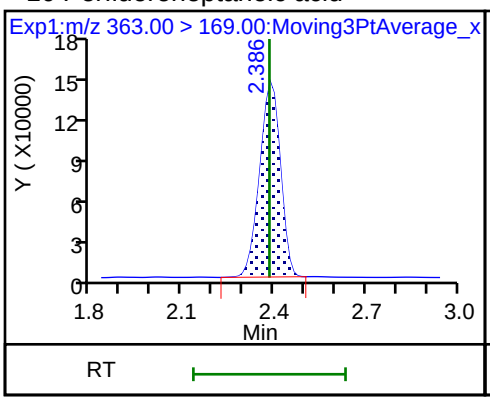
D 9 13C4-PFHpA



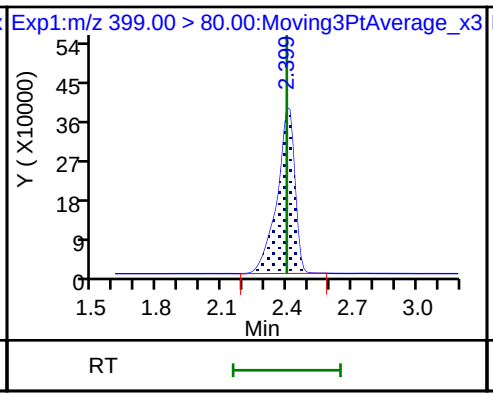
10 Perfluoroheptanoic acid



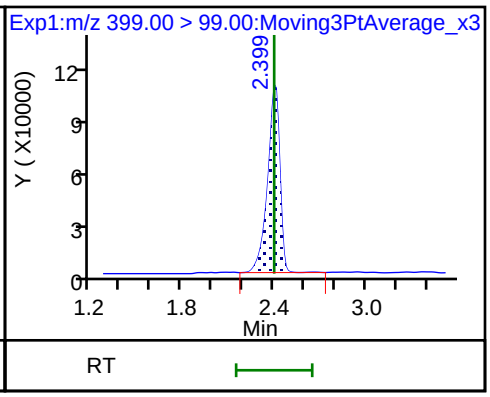
10 Perfluoroheptanoic acid



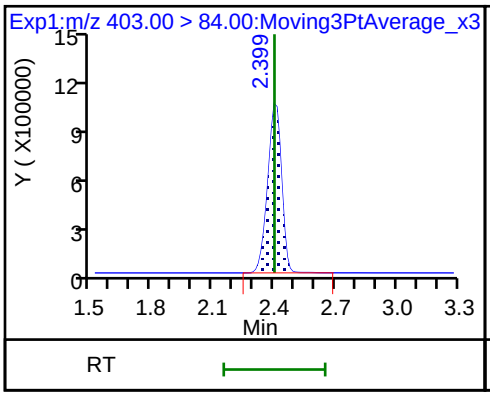
8 Perfluorohexanesulfonic acid



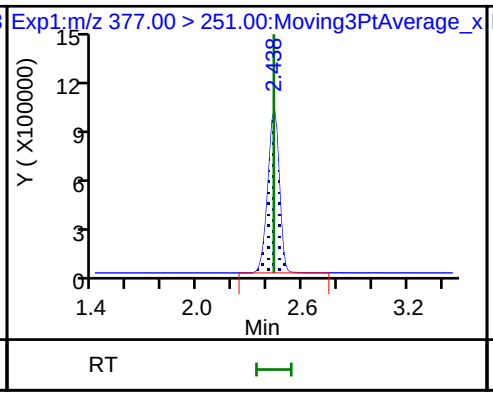
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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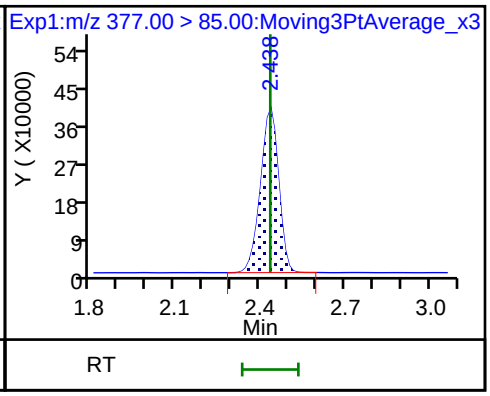
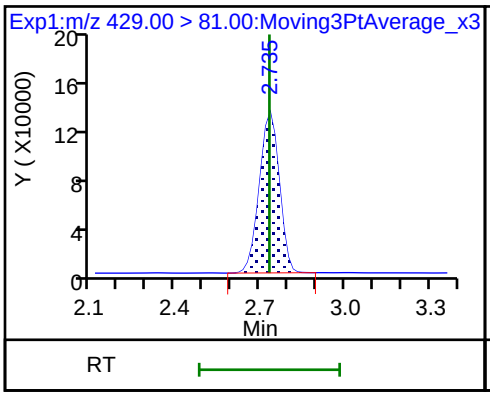
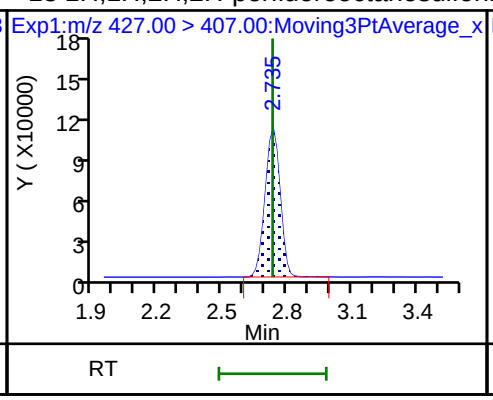


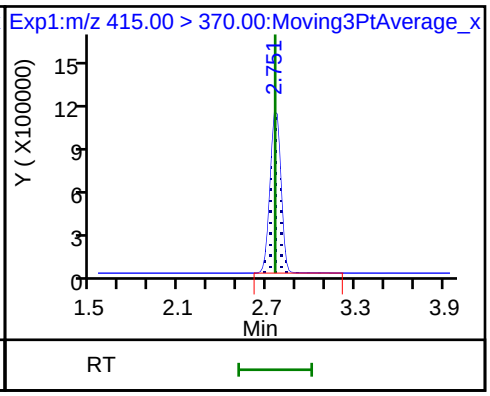
D 12 M2-6:2FTS



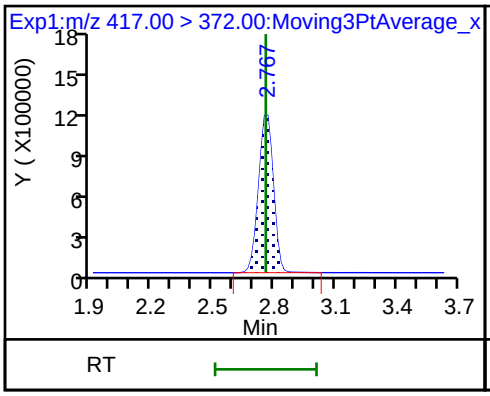
13 1H,1H,2H,2H-perfluorooctanesulfonic



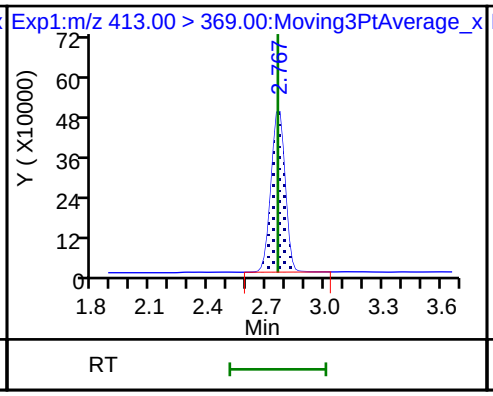
62 13C2-PFOA



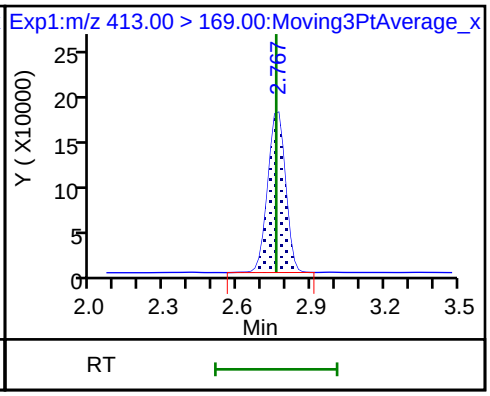
D 14 13C4 PFOA



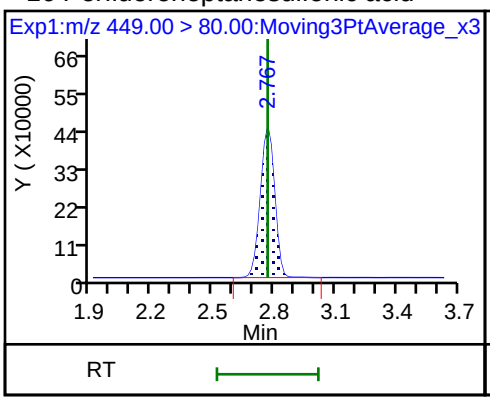
15 Perfluorooctanoic acid



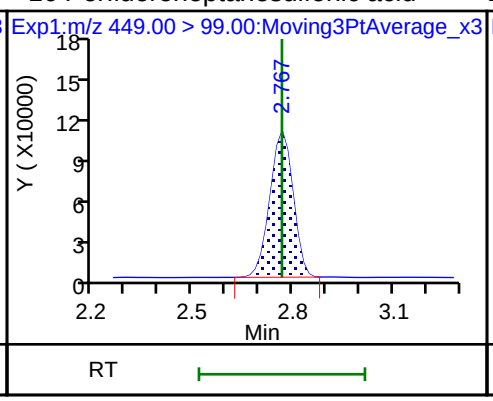
15 Perfluorooctanoic acid



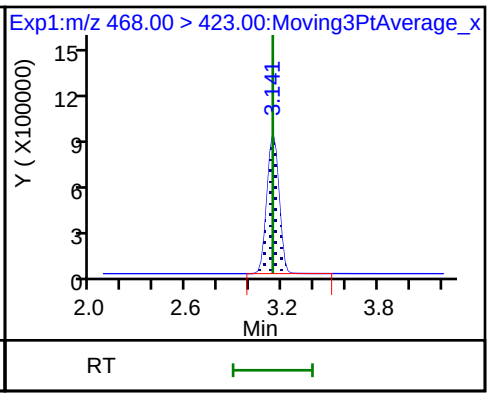
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 19 13C5 PFNA



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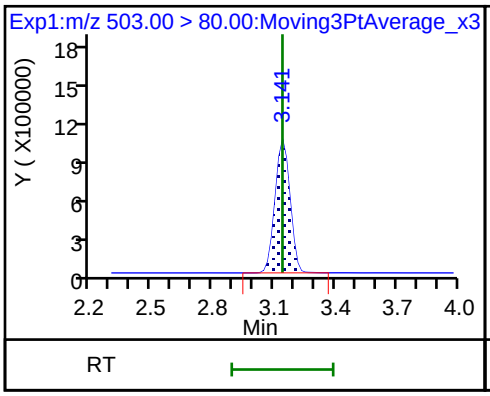
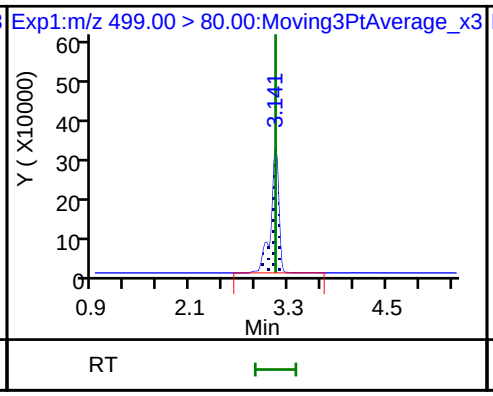
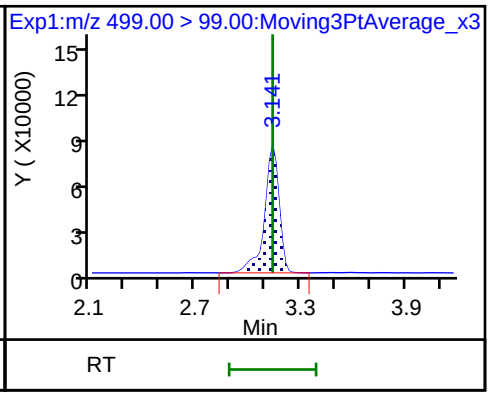


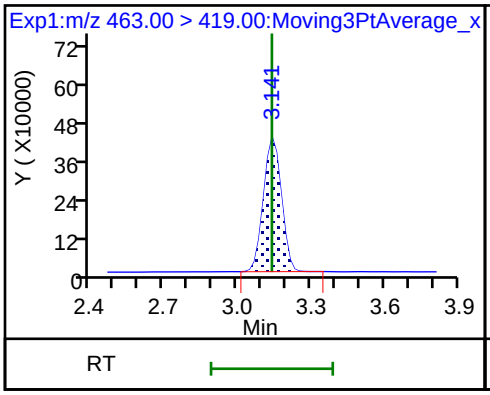
17 Perfluorooctane sulfonic acid



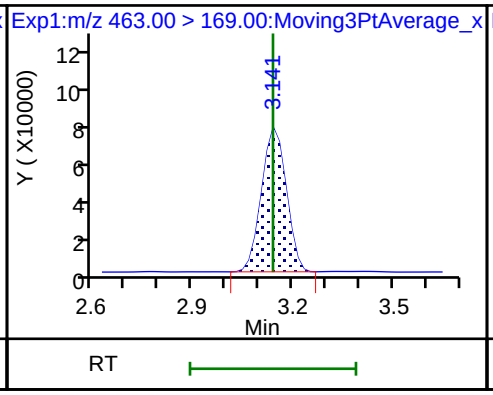
17 Perfluorooctane sulfonic acid



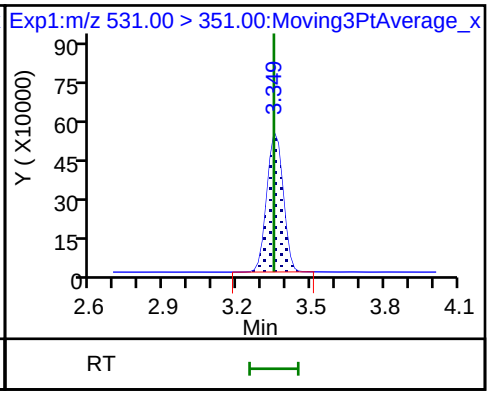
20 Perfluorononanoic acid



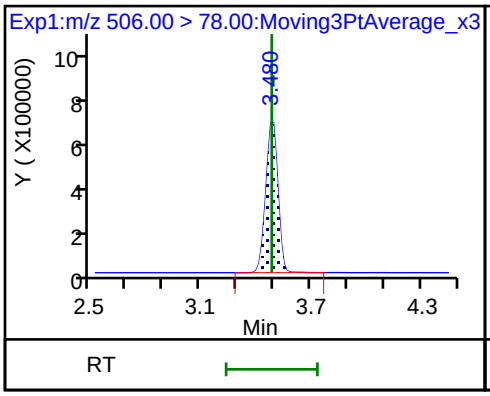
20 Perfluorononanoic acid



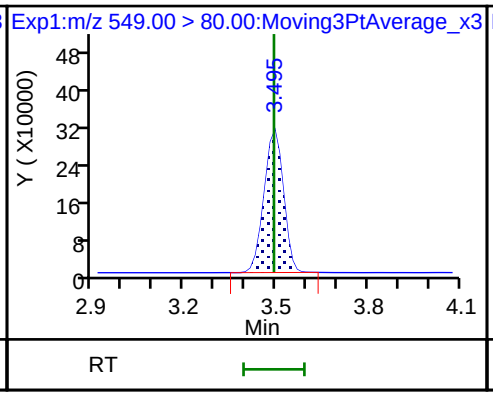
69 9-Chlorohexadecafluoro-3-oxanonane



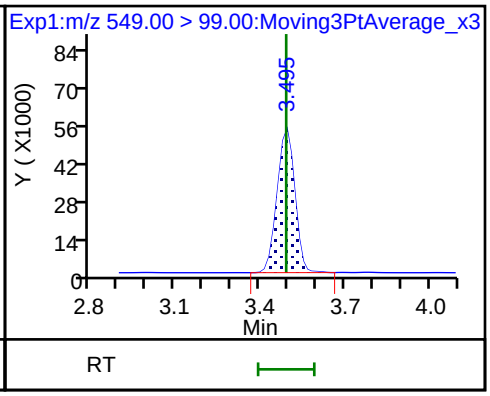
D 21 13C8 FOSA



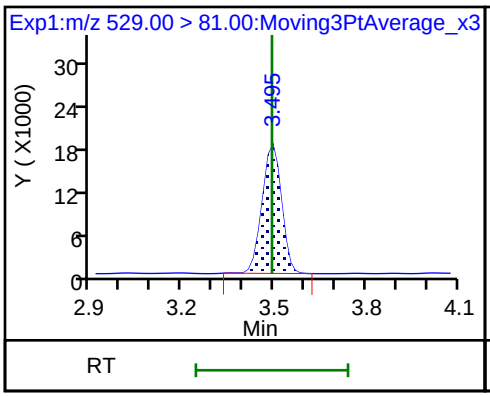
68 Perfluorononanesulfonic acid



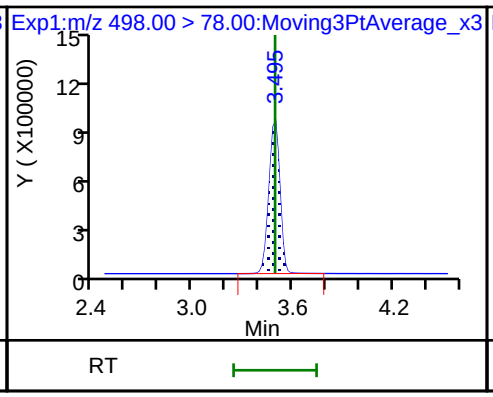
68 Perfluorononanesulfonic acid



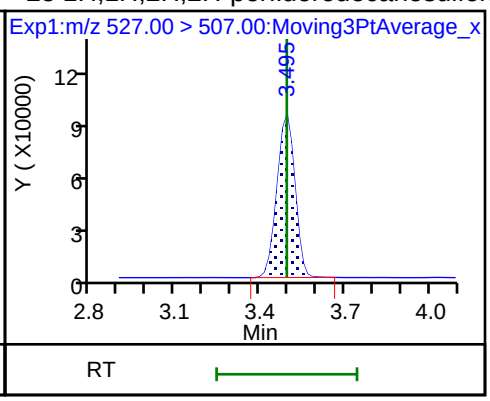
D 26 M2-8:2FTS



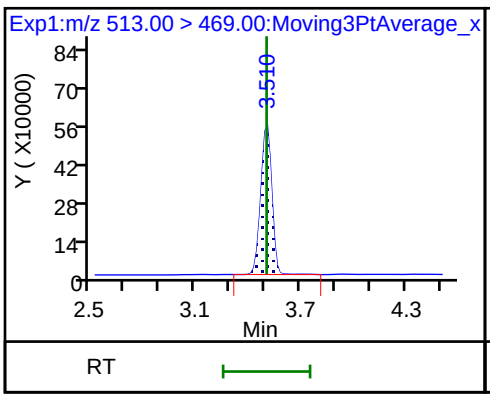
22 Perfluorooctane Sulfonamide



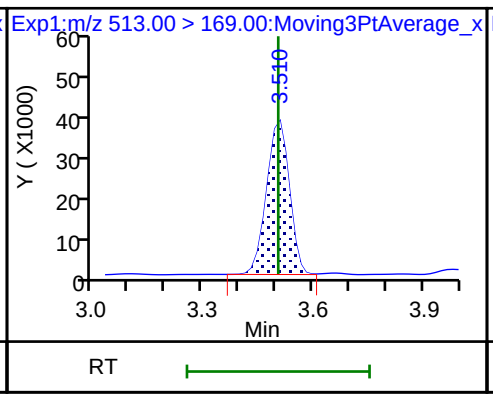
25 1H,1H,2H,2H-perfluorodecanesulfoni



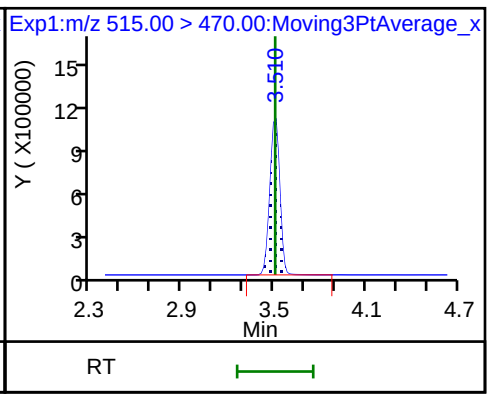
24 Perfluorodecanoic acid



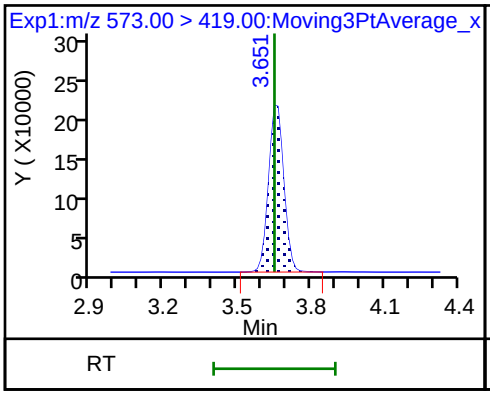
24 Perfluorodecanoic acid



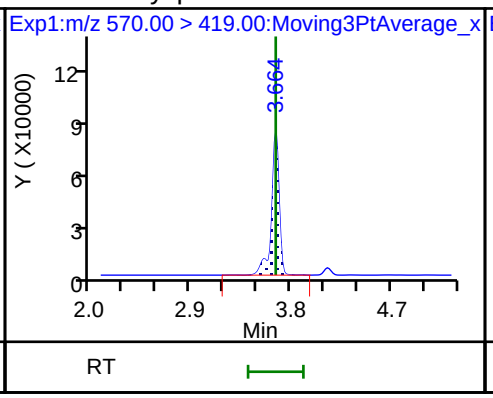
D 23 13C2 PFDA



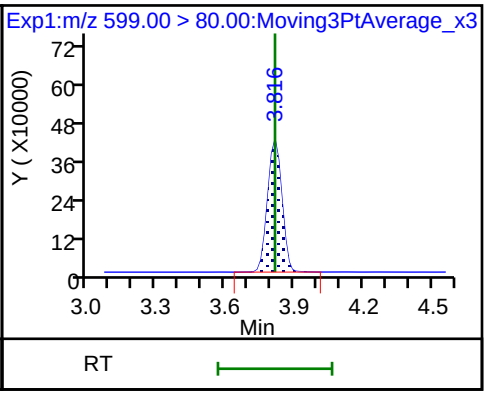
D 27 d3-NMeFOSAA



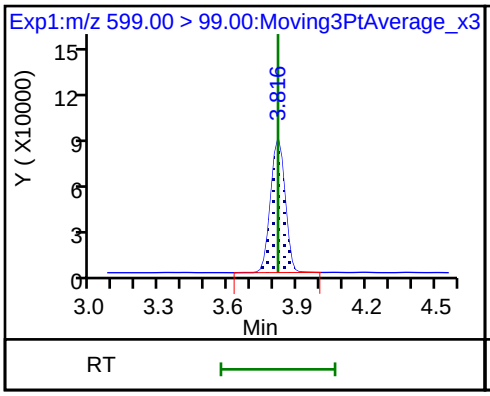
28 N-methyl perfluorooctane sulfonami



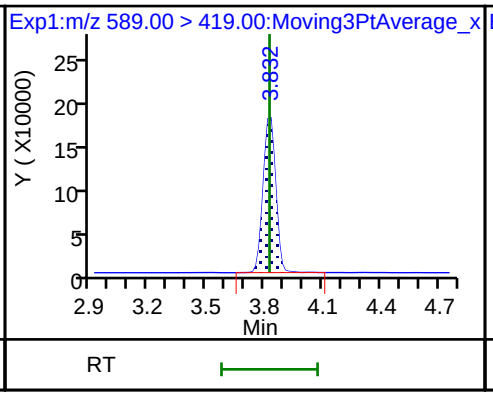
29 Perfluorodecane Sulfonic acid



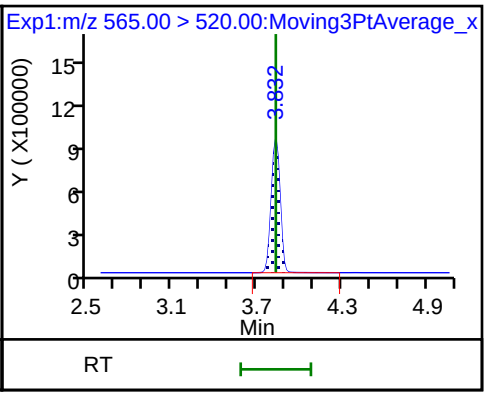
29 Perfluorodecane Sulfonic acid



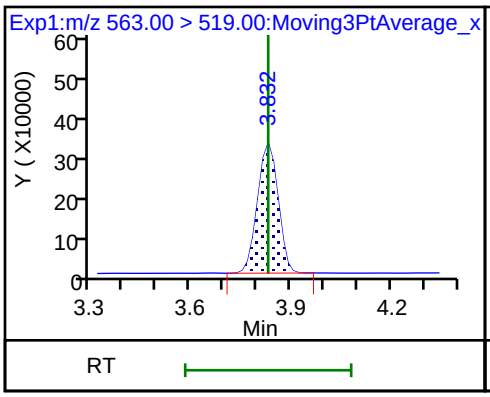
D 32 d5-NEtFOSAA



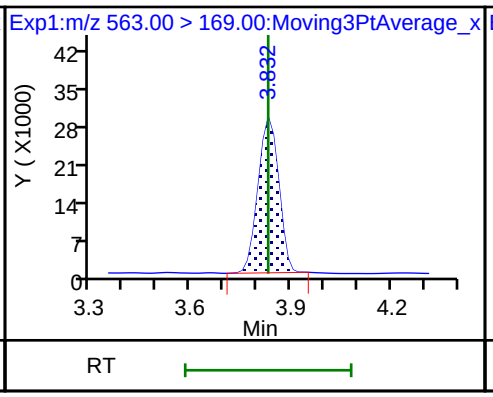
D 30 13C2 PFUnA



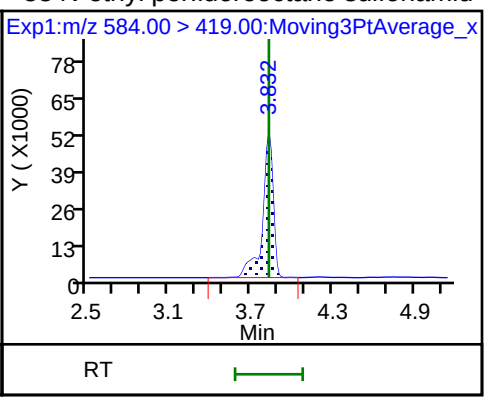
31 Perfluoroundecanoic acid



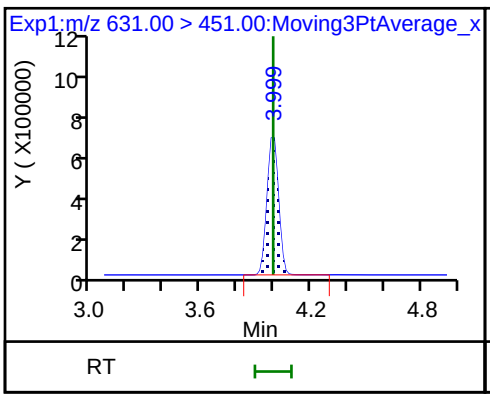
31 Perfluoroundecanoic acid



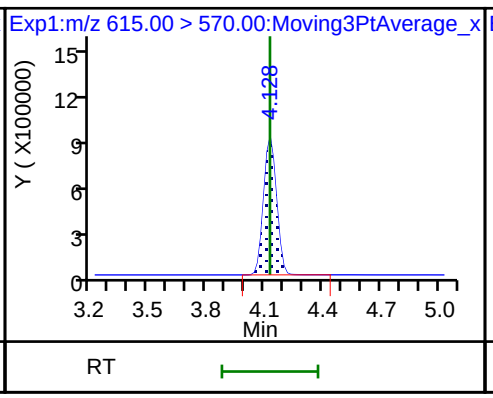
33 N-ethyl perfluorooctane sulfonamid



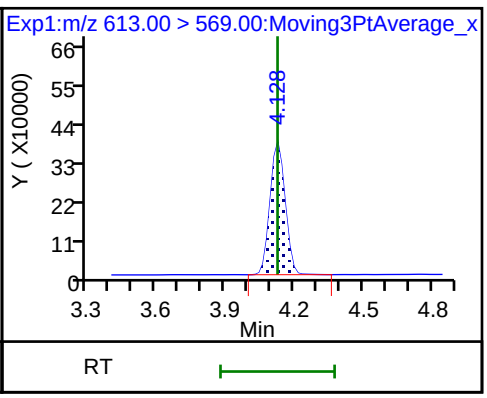
66 11-Chloroeicosafluoro-3-oxaundecan



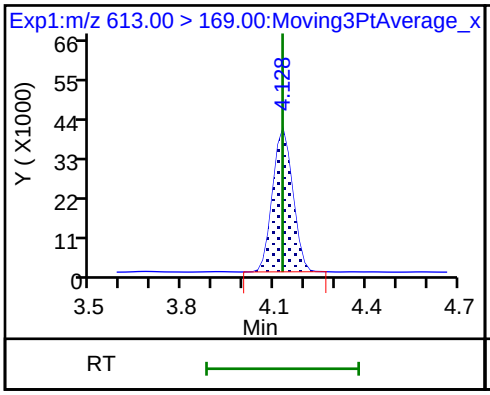
D 36 13C2 PFDoA



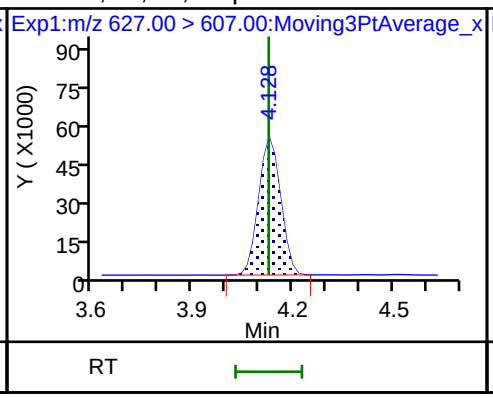
37 Perfluorododecanoic acid



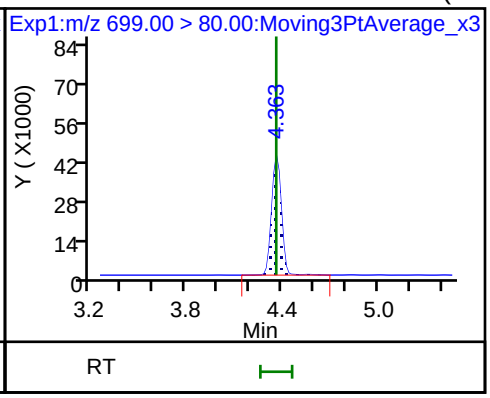
37 Perfluorododecanoic acid



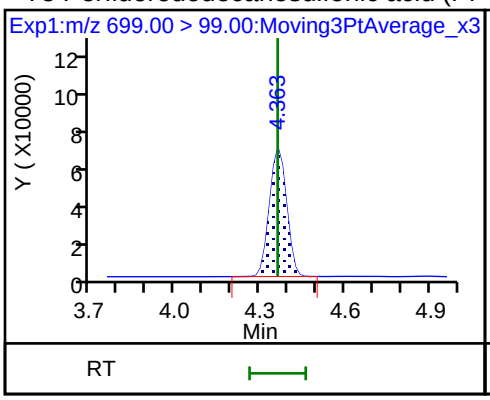
74 1H,1H,2H,2H-perfluorododecanesulfo



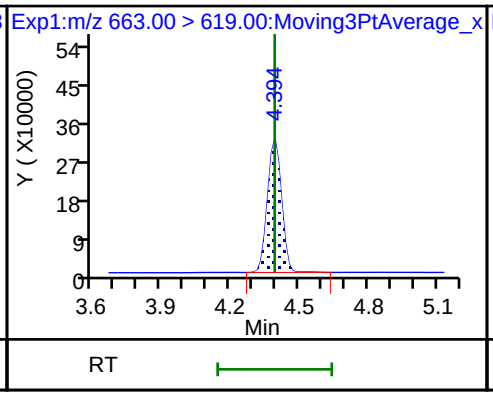
75 Perfluorododecanesulfonic acid (PF



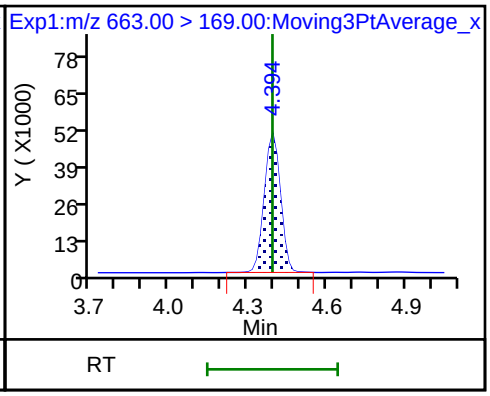
75 Perfluorododecanesulfonic acid (PF



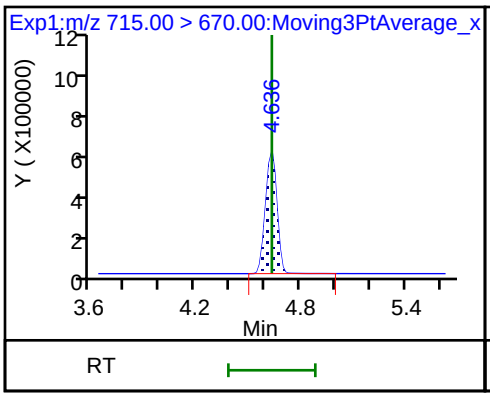
41 Perfluorotridecanoic acid



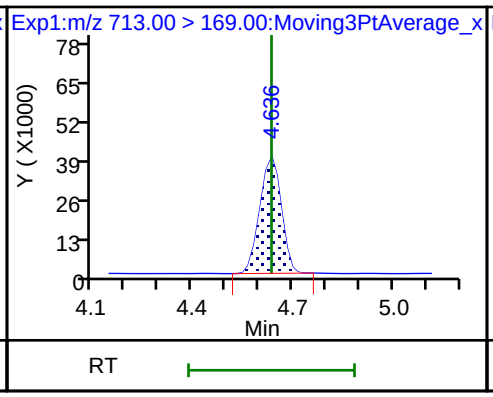
41 Perfluorotridecanoic acid



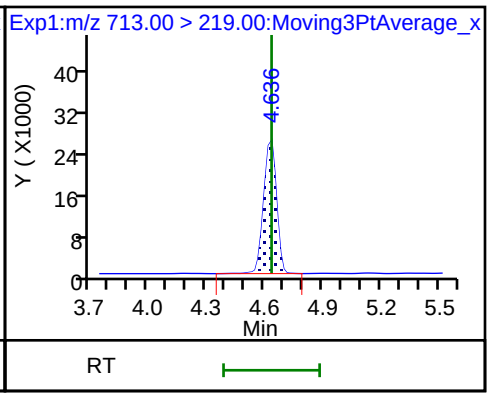
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



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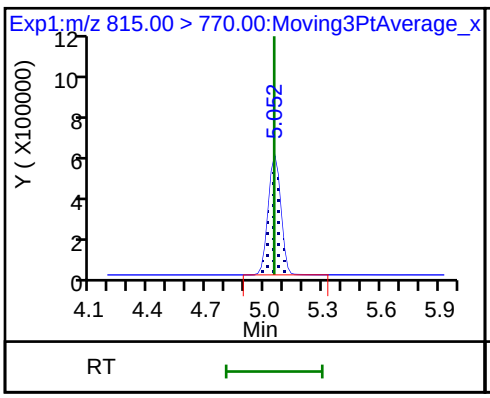
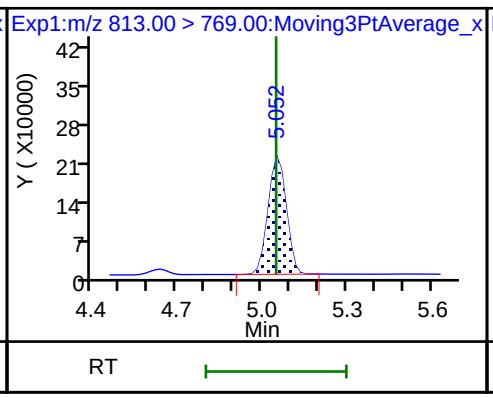
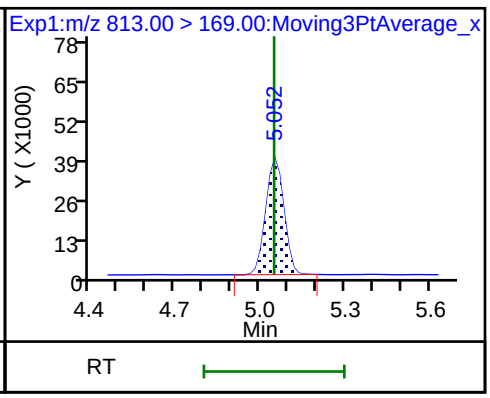


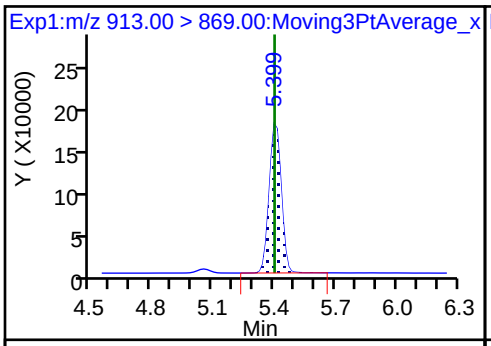
45 Perfluorohexadecanoic acid



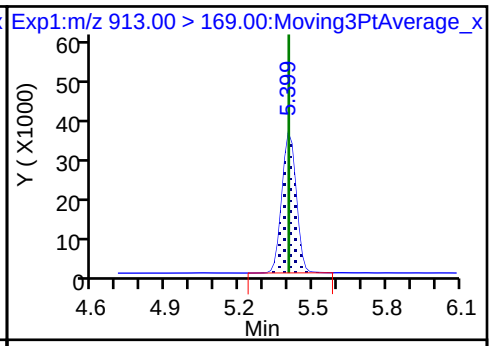
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_009.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Aug-2018 16:42:29 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC PFC STD5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 03-Aug-2018 18:17:41 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK018

First Level Reviewer: roycea Date: 03-Aug-2018 17:54:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.486	1.485	0.001	0.540	6112850	2.53		101	6038	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.486	1.486	0.0	1.000	5937685	2.61		105	130	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.753	0.002	0.638	5432869	2.52		101	8378	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.755	1.754	0.001	1.000	5283276	2.38		95.3	215	
D 47 13C3-PFBS										
301.90 > 83.00	1.789	1.792	-0.003	0.650	76827	2.30		98.9	259	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.797	1.794	0.003	1.005	8055489	2.36		107	5091	
298.90 > 99.00	1.789	1.794	-0.005	1.000	2823944		2.85(1.35-4.05)	107	790	
D 60 M2-4:2FTS										
329.00 > 81.00	2.008	2.006	0.002	0.730	538018	2.37		101	343	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.008	2.009	-0.001	1.123	1394366	2.48		106	4213	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.039	2.044	-0.005	1.000	5113515	2.42		96.9	462	
313.00 > 119.00	2.039	2.044	-0.005	1.000	364030		14.05(6.96-20.87)	96.9	262	
D 7 13C2 PFHxA										
315.00 > 270.00	2.039	2.046	-0.007	0.741	5640948	2.52		101	7753	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.070	2.069	0.001	1.157	3951171	2.44		104	4936	
349.00 > 99.00	2.070	2.069	0.001	1.157	1779954		2.22(1.15-3.45)	104	844	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.142	2.146	-0.004	0.779	453541	2.37		94.8	1754	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.142	2.147	-0.005	1.000	1064398	2.66		106	346	
D 9 13C4-PFHpA										
367.00 > 322.00	2.386	2.384	0.002	0.867	6660043	2.62		105	8848	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.386	2.384	0.002	1.000	6659148	2.41		96.3	429	
363.00 > 169.00	2.386	2.384	0.002	1.000	1577218		4.22(2.17-6.52)	96.3	1235	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.399	2.398	0.001	1.000	5497093	2.15		94.5	4187	
399.00 > 99.00	2.399	2.398	0.001	1.000	1438857		3.82(1.90-5.70)	94.5	382	
D 11 18O2 PFHxS										
403.00 > 84.00	2.399	2.400	-0.001	0.872	4729117	2.47		104	7873	
65 ADONA										
377.00 > 251.00	2.438	2.435	0.003	0.776	10684495	2.69		108	10473	
377.00 > 85.00	2.438	2.435	0.003	0.776	4554648		2.35(1.05-3.16)	108	1778	
D 12 M2-6:2FTS										
429.00 > 81.00	2.735	2.732	0.003	0.994	607653	2.46		104	812	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.735	2.732	0.003	1.000	1210888	2.21		93.5	1150	
* 62 13C2-PFOA										
415.00 > 370.00	2.752	2.755	-0.003		5399296	2.50			7822	
D 14 13C4 PFOA										
417.00 > 372.00	2.752	2.757	-0.005	1.000	5210338	2.45		97.8	12940	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.752	2.757	-0.005	1.000	5569567	2.44		97.5	533	
413.00 > 169.00	2.752	2.757	-0.005	1.000	2186956		2.55(1.36-4.08)	97.5	1409	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.768	2.767	0.001	0.881	4782579	2.40		101	5372	
449.00 > 99.00	2.768	2.767	0.001	0.881	1267120		3.77(1.84-5.53)	101	1902	
D 19 13C5 PFNA										
468.00 > 423.00	3.141	3.140	0.001	1.141	4728270	2.59		103	7338	
D 18 13C4 PFOS										
503.00 > 80.00	3.141	3.140	0.001	1.141	4714686	2.37		99.0	4063	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.141	3.140	0.001	1.000	5036535	2.38		103	2607	
499.00 > 99.00	3.141	3.140	0.001	1.000	1192726		4.22(2.04-6.12)	103	1774	
20 Perfluorononanoic acid										
463.00 > 419.00	3.141	3.140	0.001	1.000	5067037	2.54		102	628	
463.00 > 169.00	3.141	3.140	0.001	1.000	917503		5.52(2.68-8.03)	102	1244	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.349	3.348	0.001	1.066	5751276	2.47		106	4551	
D 21 13C8 FOSA										
506.00 > 78.00	3.480	3.485	-0.005	1.265	3056647	2.57		103	5309	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.495	3.492	0.003	1.113	3273769	2.53		106	2823	
549.00 > 99.00	3.495	3.492	0.003	1.113	560356		5.84(3.02-9.05)	106	5055	
D 26 M2-8:2FTS										
529.00 > 81.00	3.495	3.492	0.003	1.270	72605	2.53		106	262	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.495	3.492	0.003	1.004	9979434	2.66		106	3332	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.495	3.494	0.001	1.000	988723	2.33		97.1	3684	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.495	3.505	-0.010	1.000	5703670	2.49		99.5	618	
513.00 > 169.00	3.495	3.505	-0.010	1.000	391848		14.56(7.12-21.35)	99.5	254	
D 23 13C2 PFDA										
515.00 > 470.00	3.495	3.505	-0.010	1.270	4664987	2.55		102	5748	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.651	3.650	0.001	1.327	935170	2.63		105	2120	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.664	3.662	0.002	1.004	894063	2.36		94.6	630	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.816	3.816	0.0	1.215	4198724	2.55		106	5898	
599.00 > 99.00	3.816	3.816	0.0	1.215	831821		5.05(2.14-6.43)	106	1186	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.816	3.825	-0.009	1.387	737400	2.52		101	1389	
D 30 13C2 PFUnA										
565.00 > 520.00	3.832	3.831	0.001	1.393	3627913	2.45		98.1	7063	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.832	3.831	0.001	1.000	3156582	2.58		103	568	
563.00 > 169.00	3.832	3.831	0.001	1.000	311310		10.14(5.24-15.72)	103	625	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.832	3.831	0.001	1.004	666629	2.52		101	1051	
35 MeFOSA										
512.00 > 169.00	3.968	3.971	-0.003		1349625	NC			1186	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.983	3.993	-0.010	1.268	6293388	2.55		108	9426	
D 36 13C2 PFDoA										
615.00 > 570.00	4.128	4.127	0.001	1.500	4126518	2.59		104	6138	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.128	4.127	0.001	1.000	4218718	2.60		104	788	
613.00 > 169.00	4.128	4.127	0.001	1.000	466237		9.05(4.68-14.05)	104	1580	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.128	4.127	0.001	1.181	529680	2.28		94.7	1885	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.363	4.361	0.002	1.389	394353	2.49		103	2254	
699.00 > 99.00	4.363	4.361	0.002	1.389	646161		0.61(0.28-0.83)	103	1731	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.394	4.392	0.002	1.064	3183456	2.57		103	837	
663.00 > 169.00	4.394	4.392	0.002	1.064	514227		6.19(3.09-9.27)	103	1016	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.636	4.635	0.001	1.685	2622464	2.58		103	6437	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.636	4.635	0.001	1.000	435218	2.58		103	1443	
713.00 > 219.00	4.636	4.635	0.001	1.000	292533		1.49(0.70-2.09)	103	988	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.051	5.049	0.002	1.836	2460813	2.63		105	4565	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.051	5.049	0.002	1.000	2195568	2.44		97.7	292	
813.00 > 169.00	5.051	5.049	0.002	1.000	409391		5.36(2.77-8.32)	97.7	1275	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.399	5.401	-0.002	1.069	1661947	2.38		95.1	1382	
913.00 > 169.00	5.399	5.401	-0.002	1.069	326432		5.09(2.55-7.64)	95.1	1835	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL5_00006 Amount Added: 1.00 Units: mL

Report Date: 03-Aug-2018 18:17:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_009.d

Injection Date: 03-Aug-2018 16:42:29 Instrument ID: A9

Lims ID: IC L5 Full

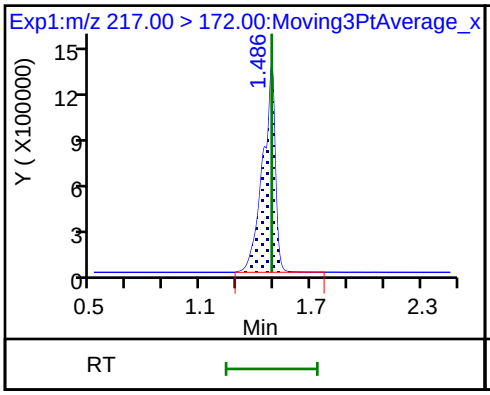
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 14 Worklist Smp#: 6

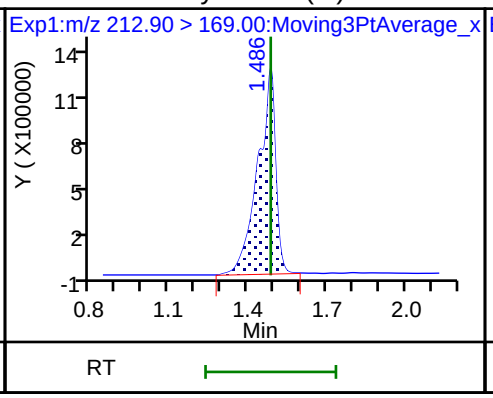
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

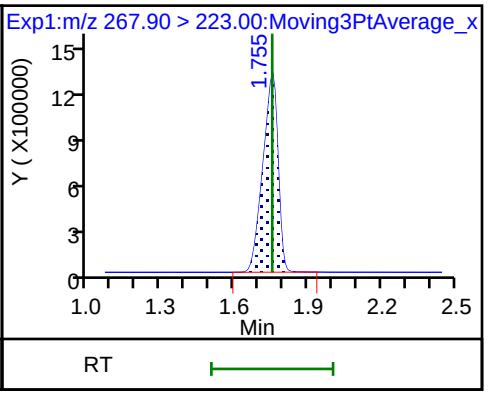
D 1 13C4 PFBA



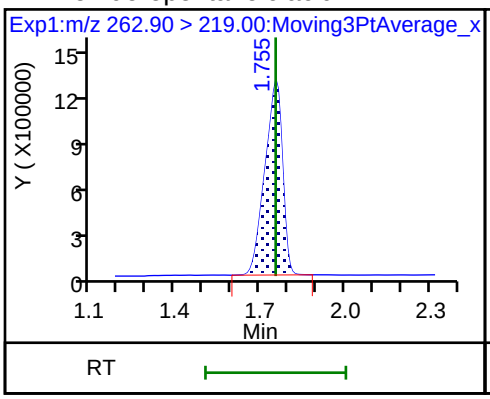
2 Perfluorobutyric acid (M)



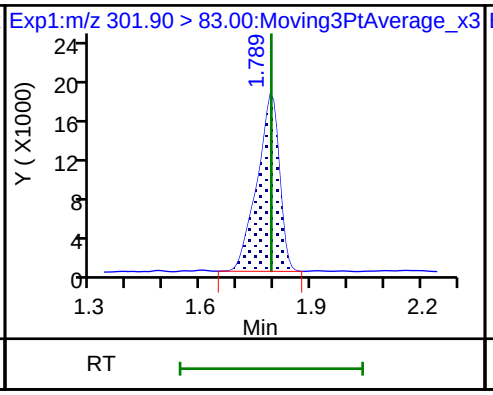
D 3 13C5-PFPeA



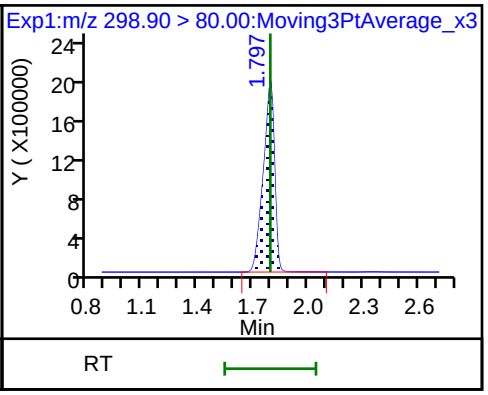
4 Perfluoropentanoic acid



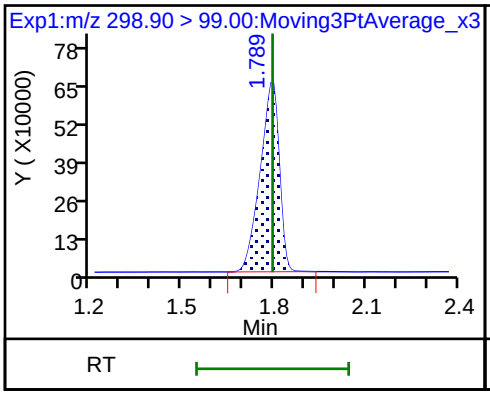
D 47 13C3-PFBS



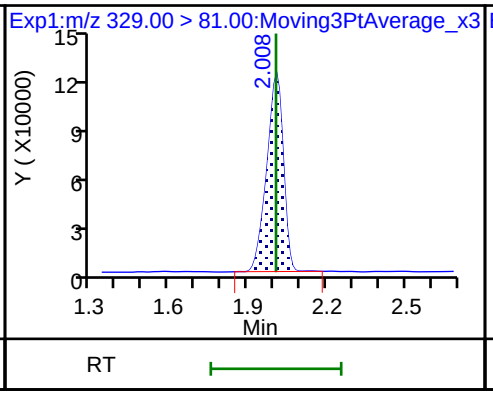
5 Perfluorobutanesulfonic acid



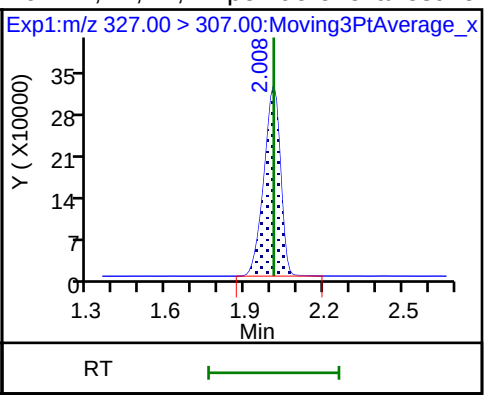
5 Perfluorobutanesulfonic acid



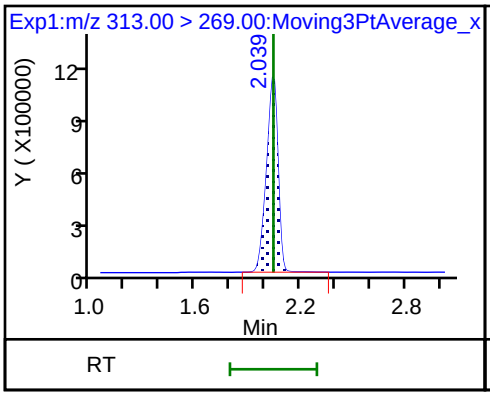
D 60 M2-4:2FTS



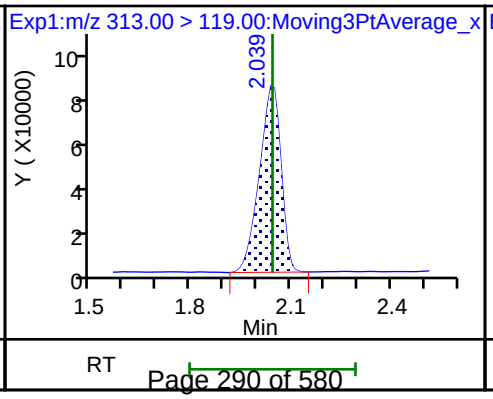
61 1H,1H,2H,2H-perfluorohexanesulfoni



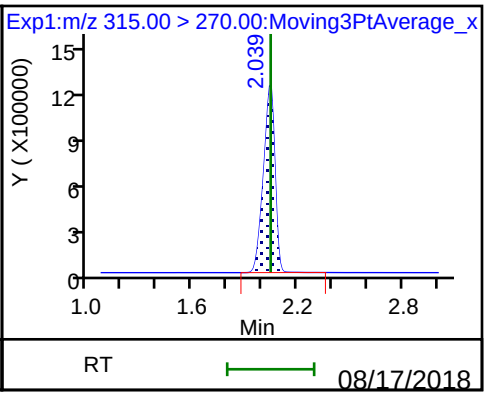
6 Perfluorohexanoic acid



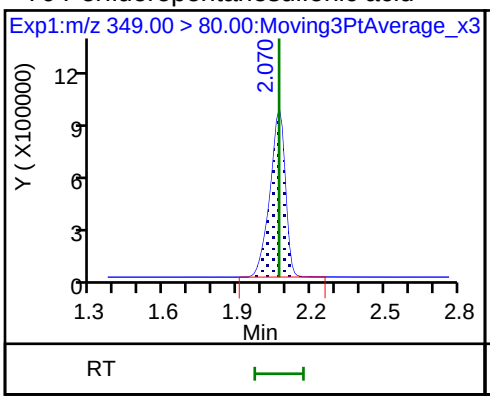
6 Perfluorohexanoic acid



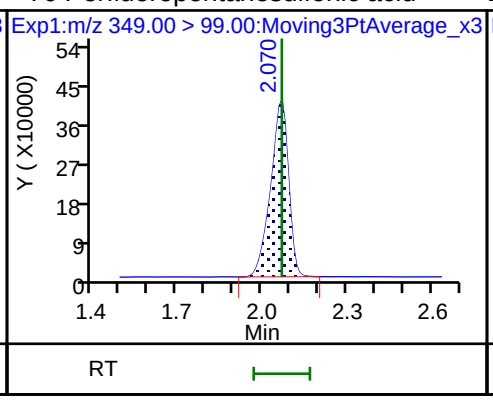
D 7 13C2 PFHxA



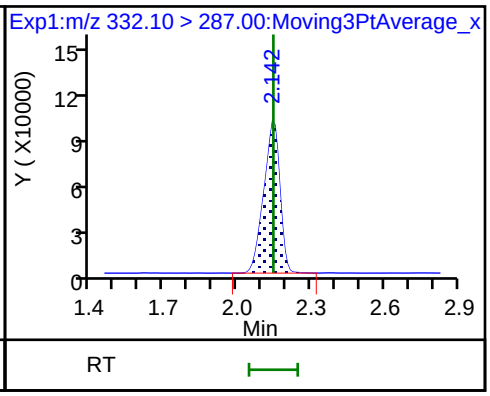
70 Perfluoropentanesulfonic acid



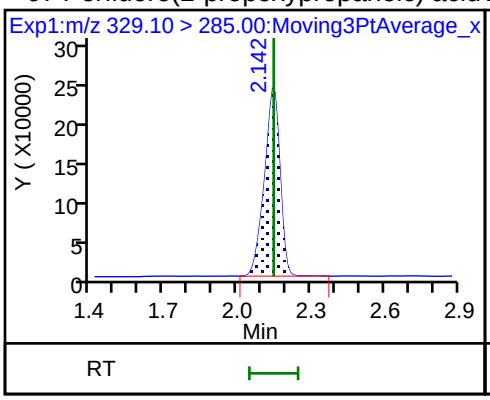
70 Perfluoropentanesulfonic acid



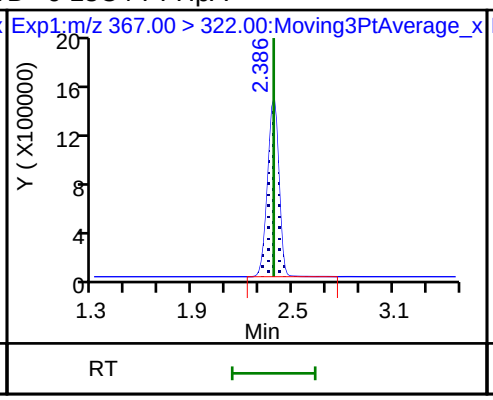
D 64 13C3 HFPO-DA



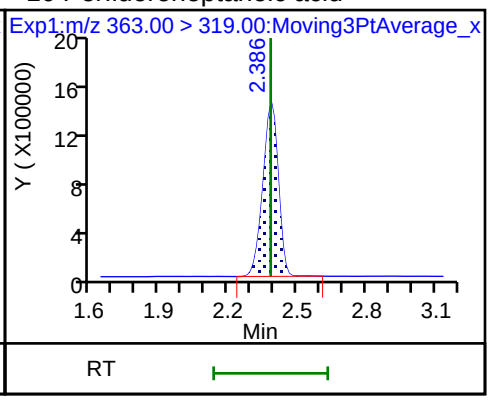
67 Perfluoro(2-propoxypropanoic) acid



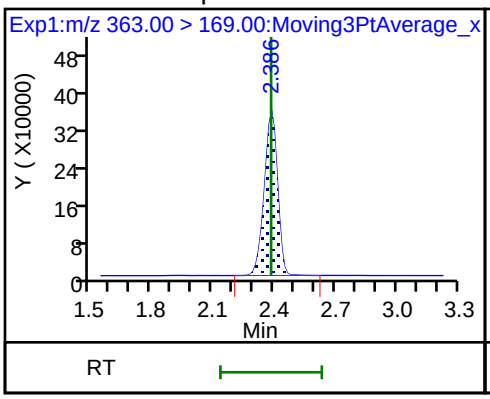
D 9 13C4-PFHpA



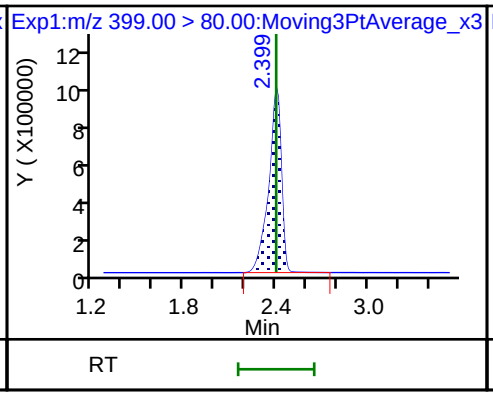
10 Perfluoroheptanoic acid



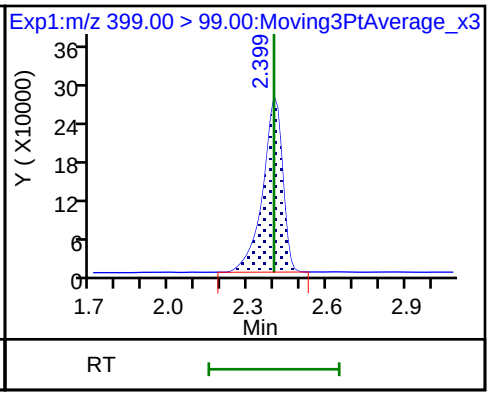
10 Perfluoroheptanoic acid



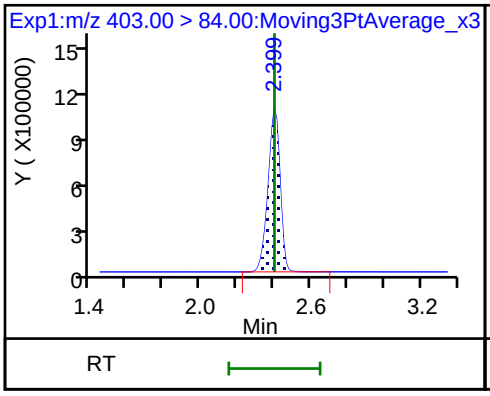
8 Perfluorohexanesulfonic acid



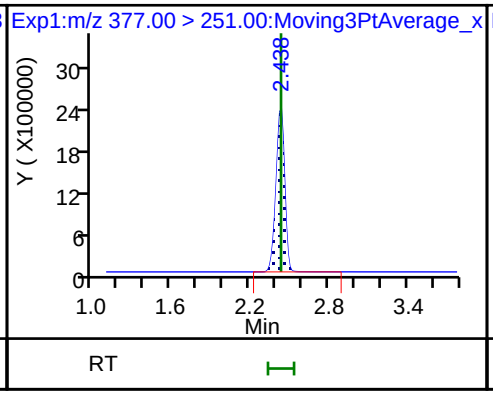
8 Perfluorohexanesulfonic acid



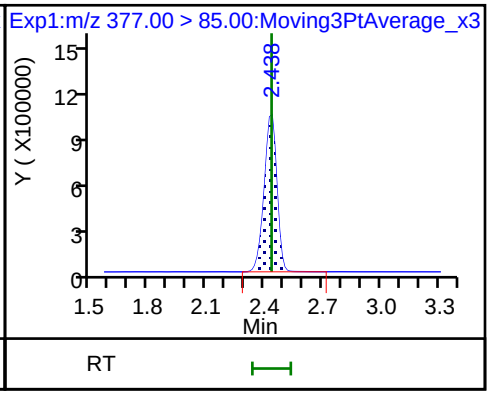
D 11 18O2 PFHxS



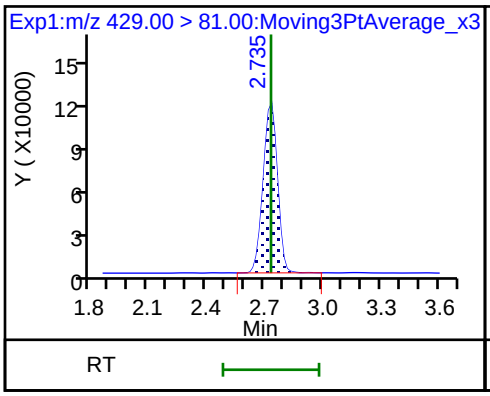
65 ADONA



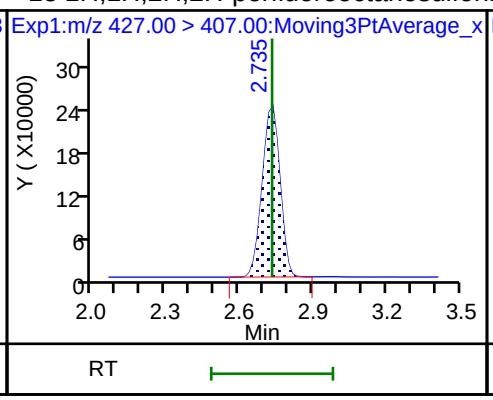
65 ADONA



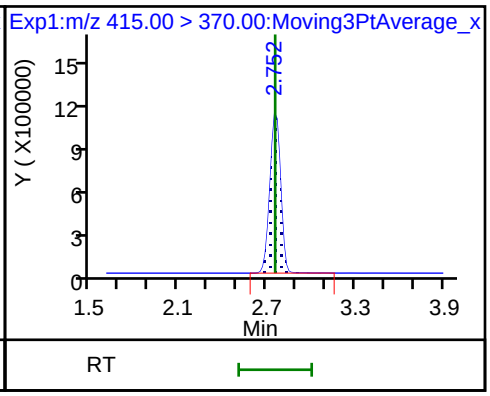
D 12 M2-6:2FTS



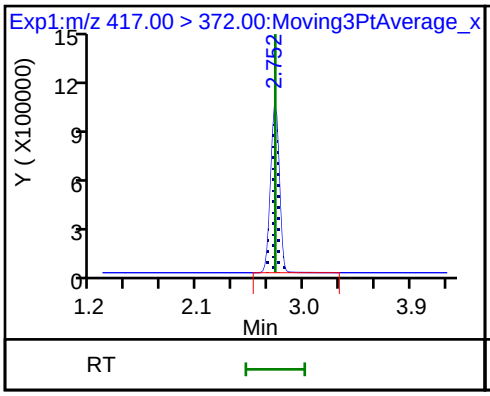
13 1H,1H,2H,2H-perfluorooctanesulfonic



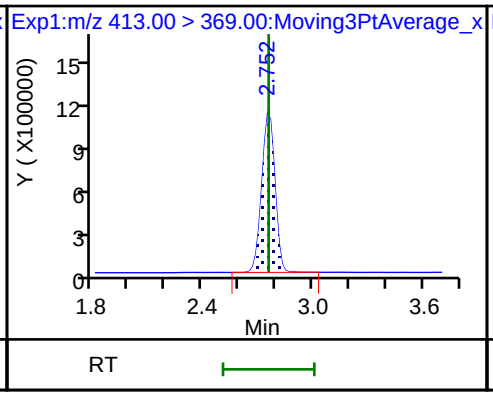
D 62 13C2-PFOA



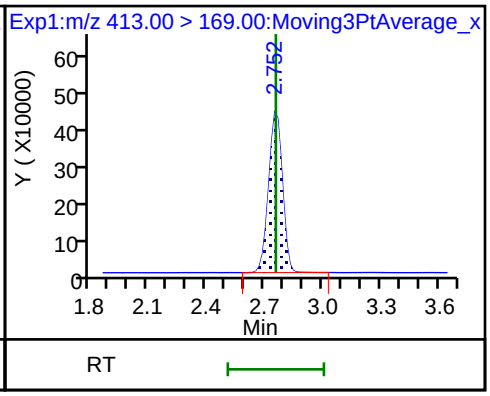
D 14 13C4 PFOA



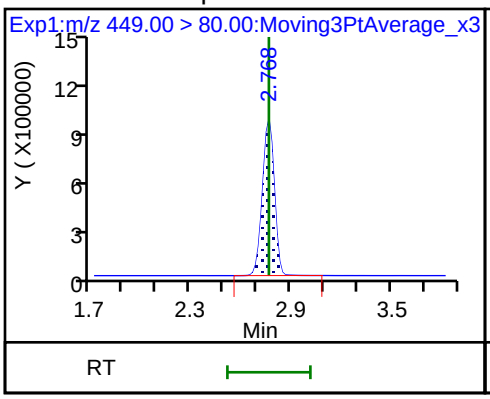
15 Perfluorooctanoic acid



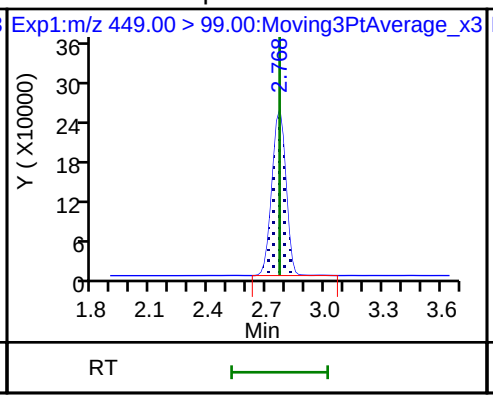
15 Perfluorooctanoic acid



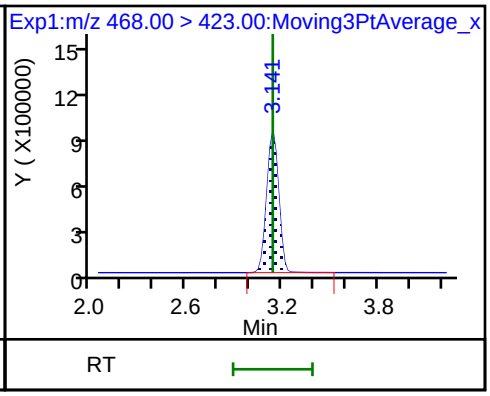
16 Perfluoroheptanesulfonic acid



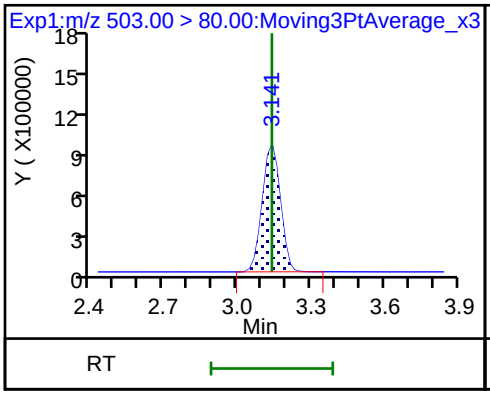
16 Perfluoroheptanesulfonic acid



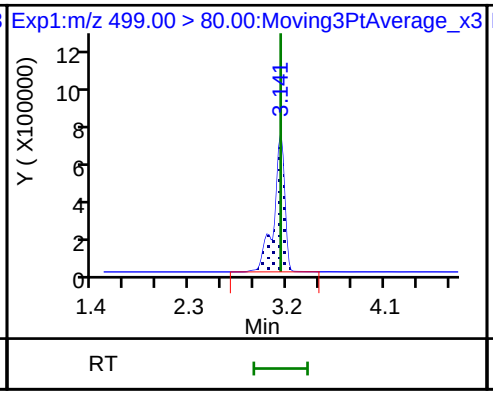
D 19 13C5 PFNA



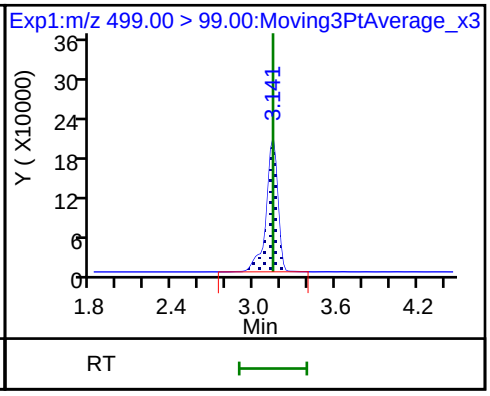
D 18 13C4 PFOS



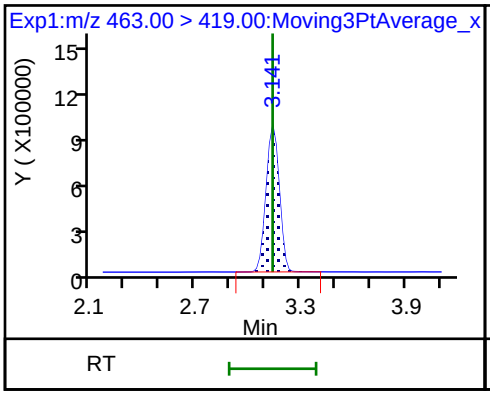
17 Perfluorooctane sulfonic acid



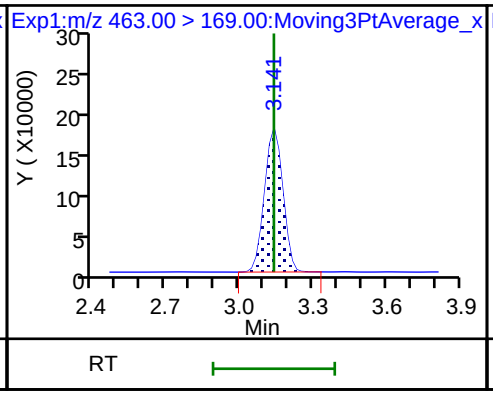
17 Perfluorooctane sulfonic acid



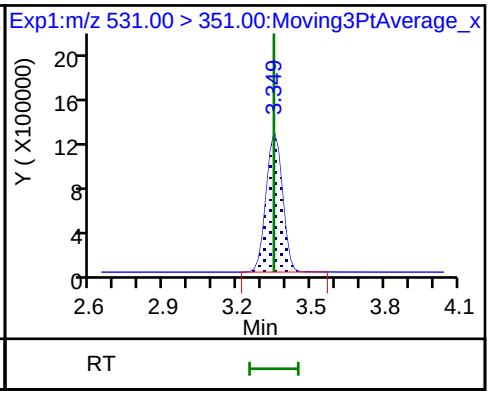
20 Perfluorononanoic acid



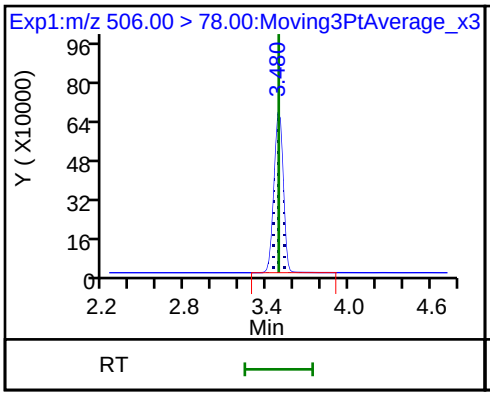
20 Perfluorononanoic acid



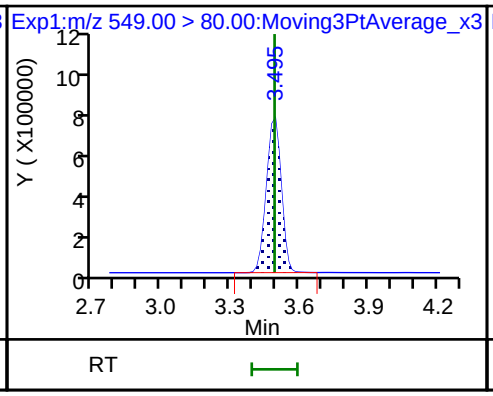
69 9-Chlorohexadecafluoro-3-oxanonane



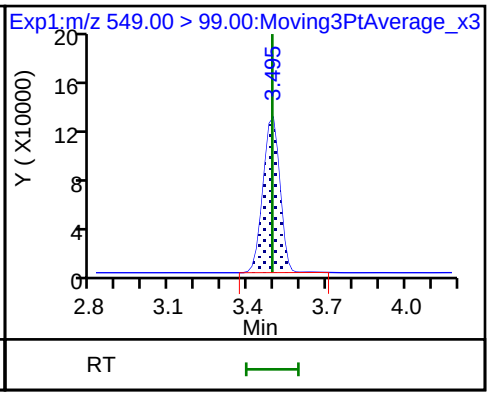
D 21 13C8 FOSA



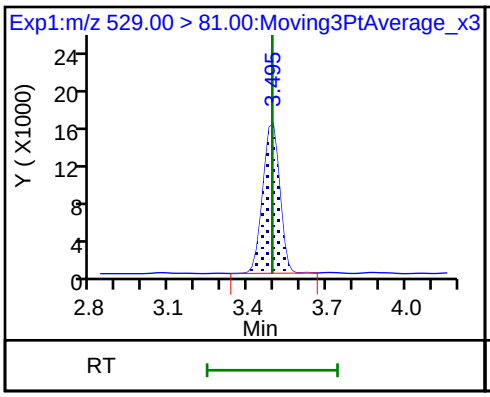
68 Perfluorononanesulfonic acid



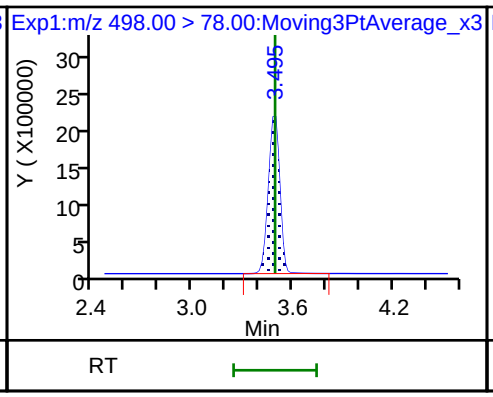
68 Perfluorononanesulfonic acid



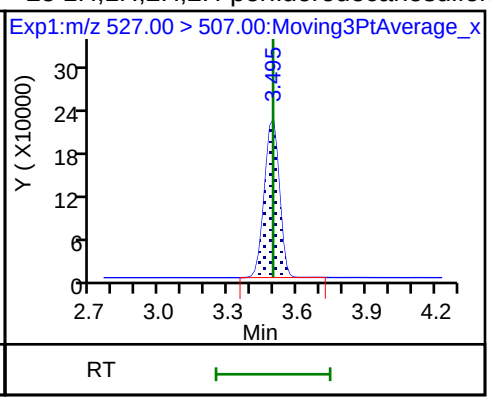
D 26 M2-8:2FTS



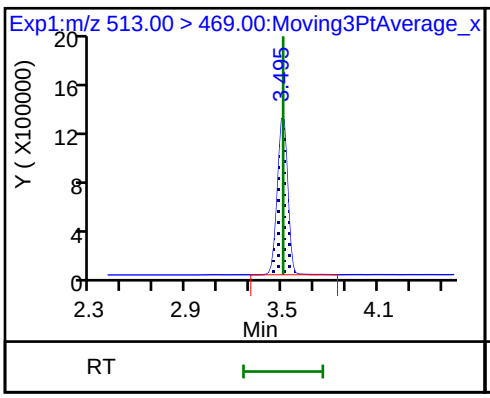
22 Perfluorooctane Sulfonamide



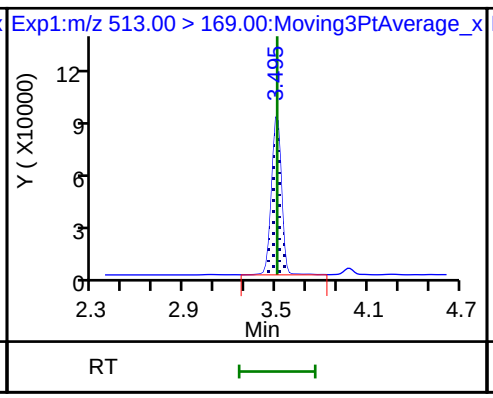
25 1H,1H,2H,2H-perfluorodecanesulfoni



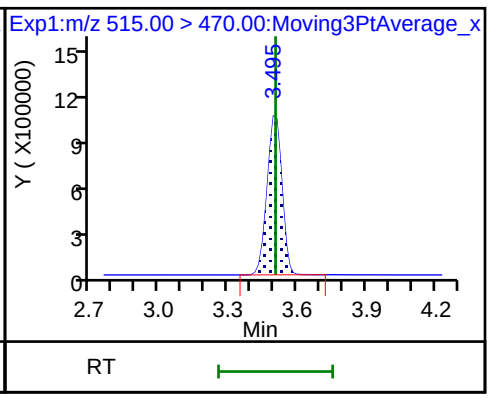
24 Perfluorodecanoic acid



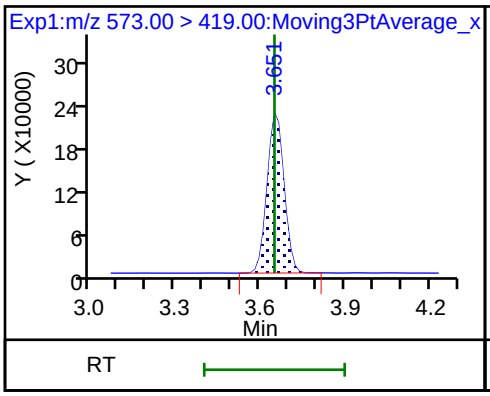
24 Perfluorodecanoic acid



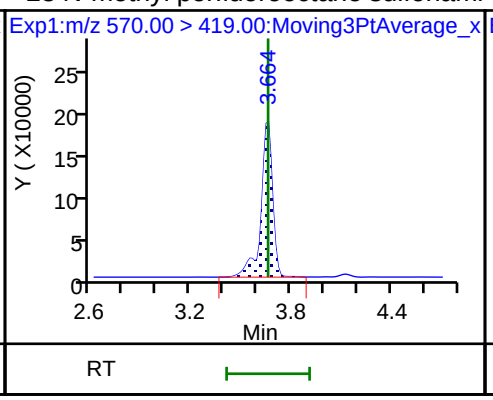
D 23 13C2 PFDA



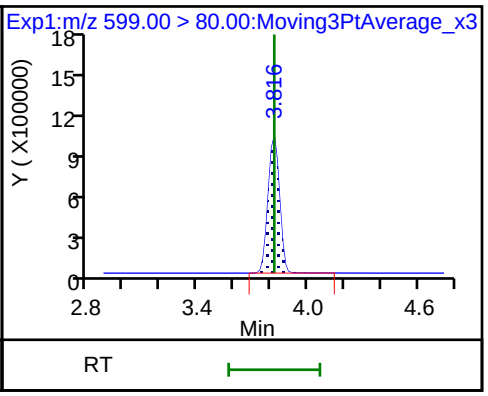
D 27 d3-NMeFOSAA



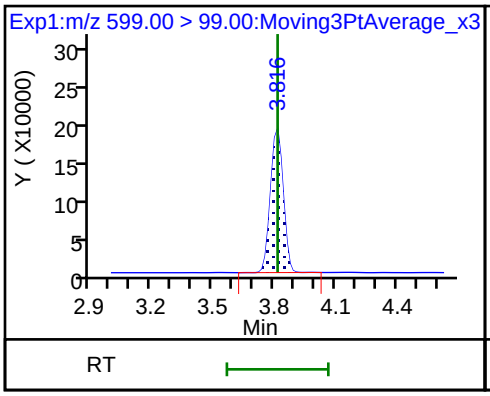
28 N-methyl perfluorooctane sulfonami



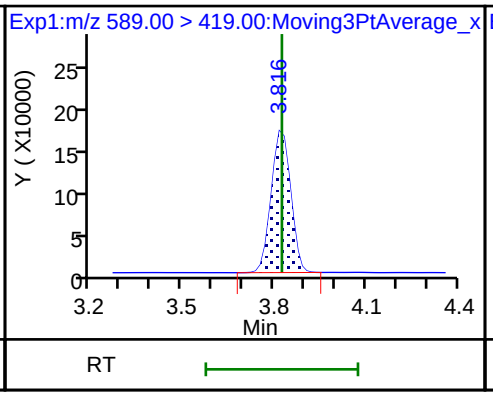
29 Perfluorodecane Sulfonic acid



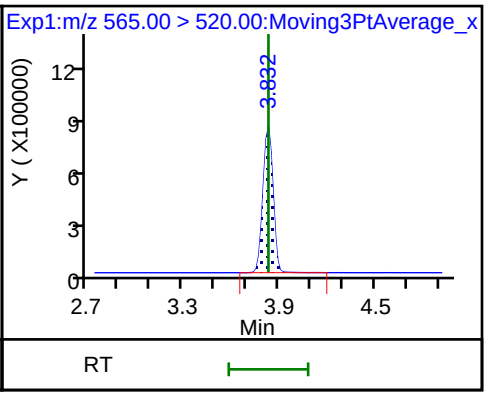
29 Perfluorodecane Sulfonic acid



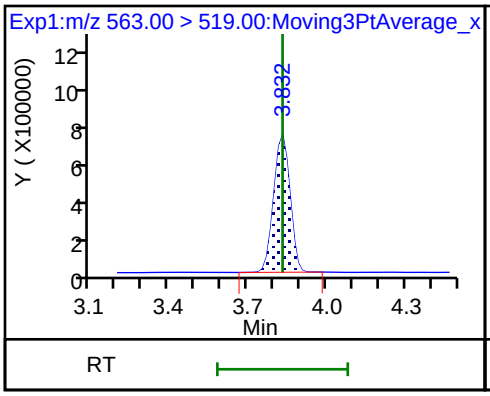
D 32 d5-NEtFOSAA



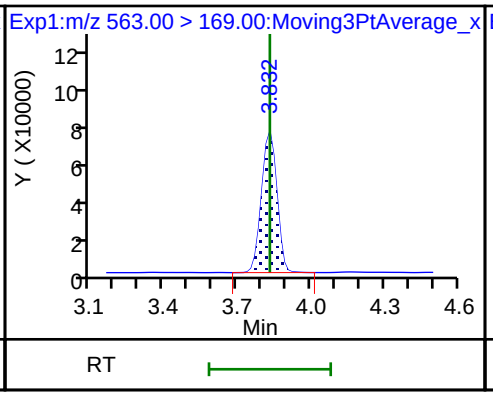
D 30 13C2 PFUnA



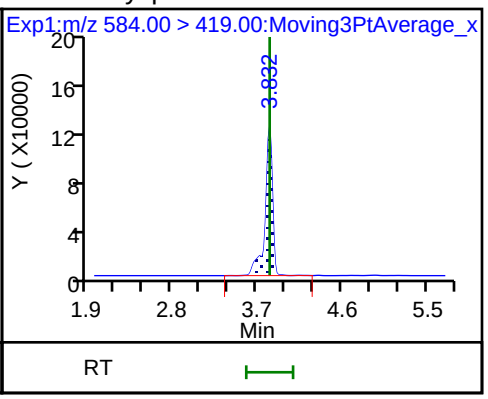
31 Perfluoroundecanoic acid



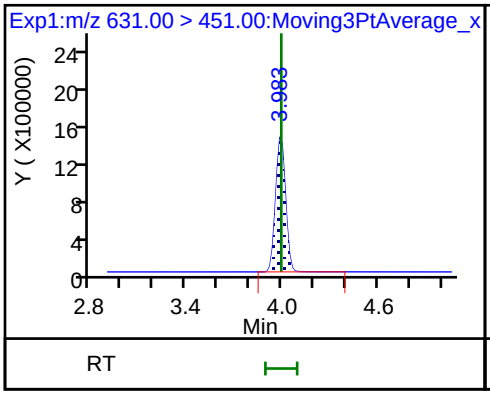
31 Perfluoroundecanoic acid



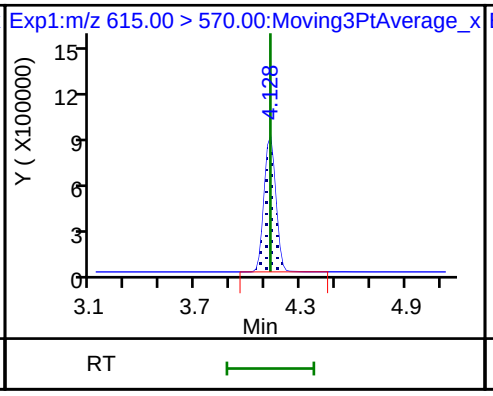
33 N-ethyl perfluorooctane sulfonamid



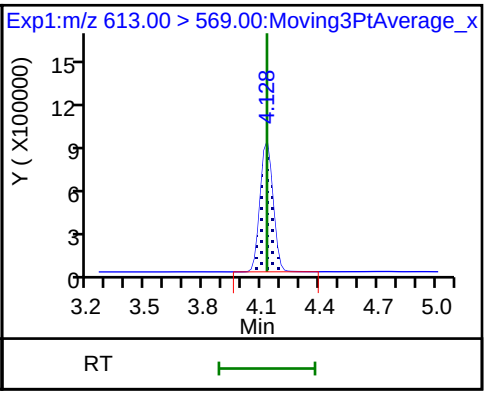
66 11-Chloroeicosafluoro-3-oxaundecan



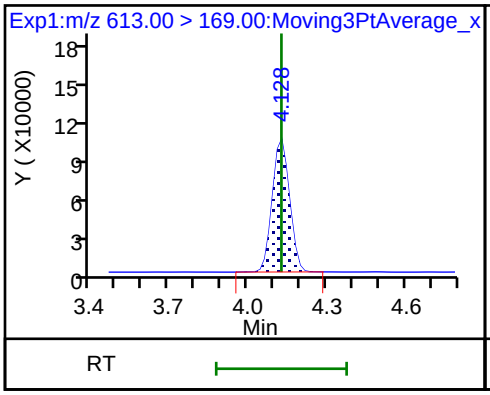
D 36 13C2 PFDoA



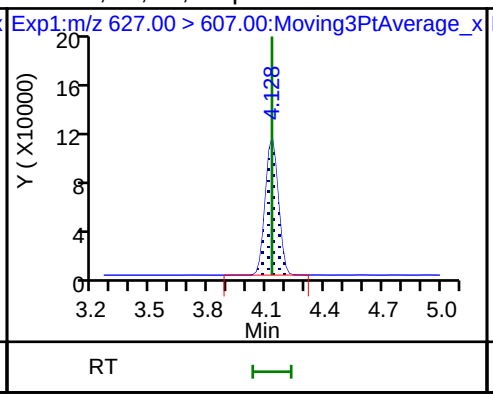
37 Perfluorododecanoic acid



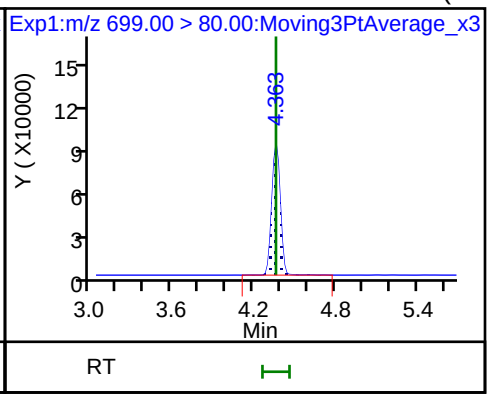
37 Perfluorododecanoic acid



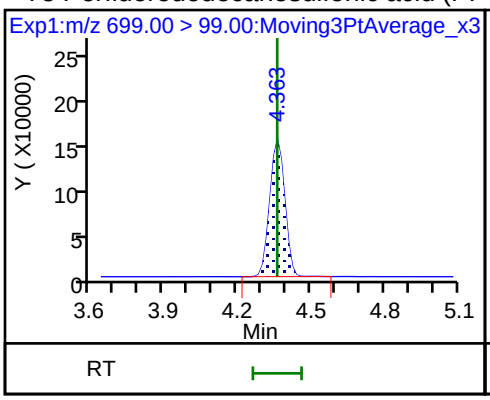
74 1H,1H,2H,2H-perfluorododecanesulfo



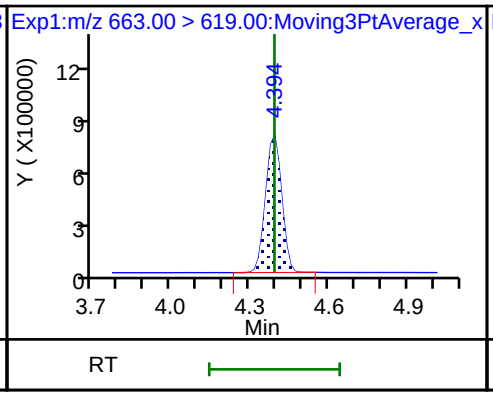
75 Perfluorododecanesulfonic acid (PF



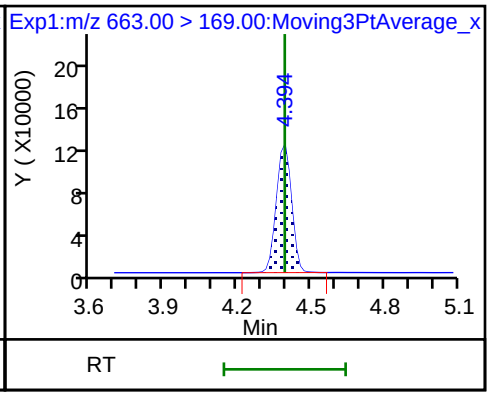
75 Perfluorododecanesulfonic acid (PF



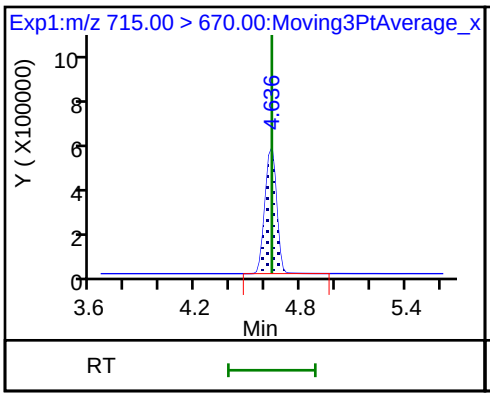
41 Perfluorotridecanoic acid



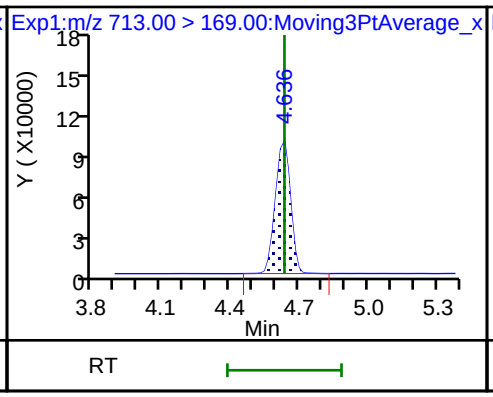
41 Perfluorotridecanoic acid



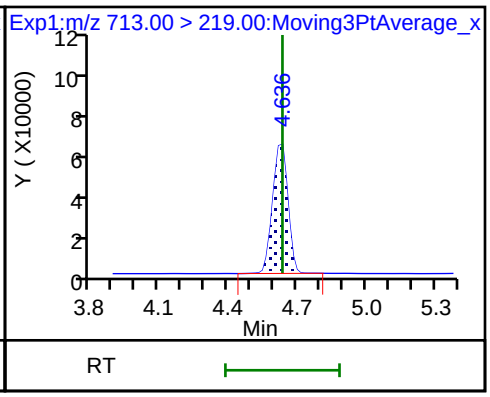
D 43 13C2-PFTeDA



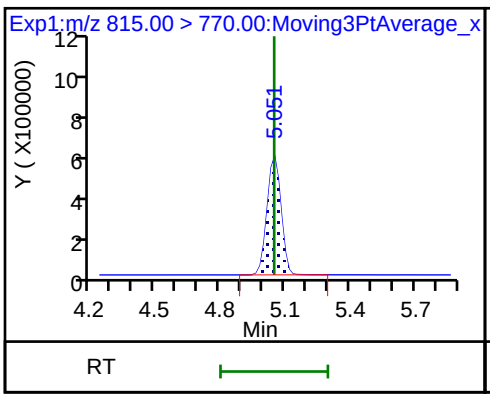
42 Perfluorotetradecanoic acid



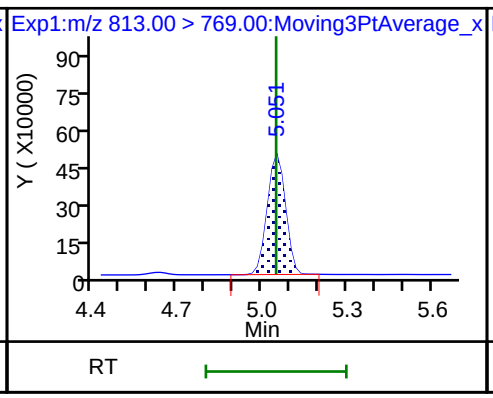
42 Perfluorotetradecanoic acid



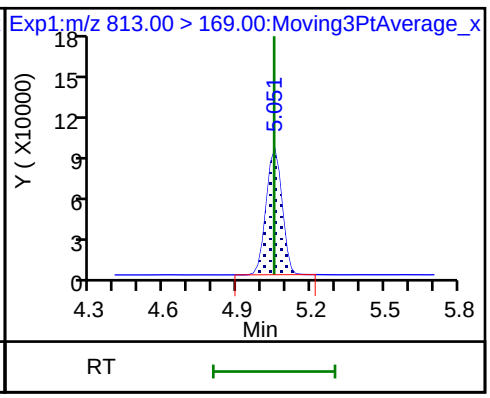
D 44 13C2-PFHxDA



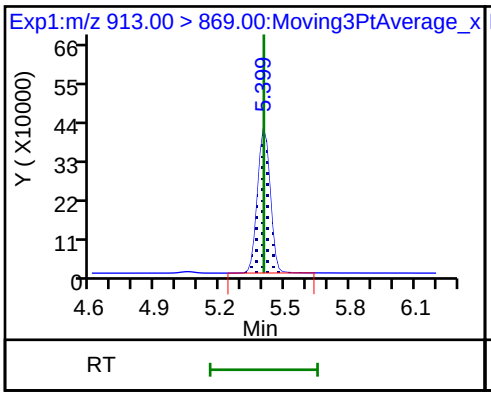
45 Perfluorohexadecanoic acid



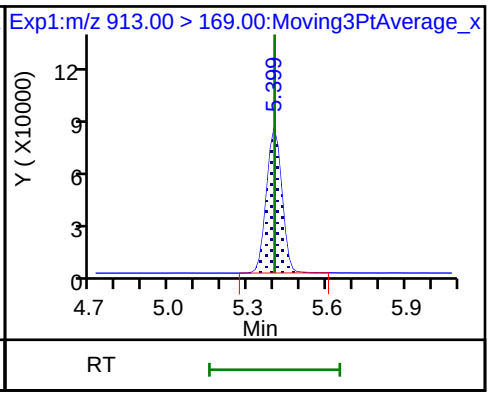
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

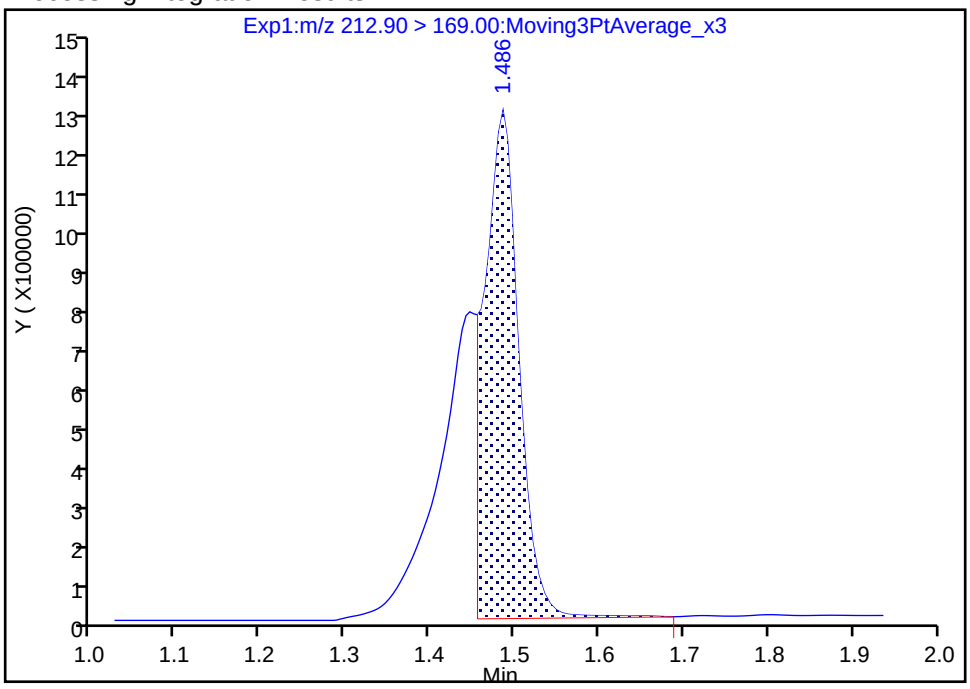
Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_009.d
Injection Date: 03-Aug-2018 16:42:29 Instrument ID: A9
Lims ID: IC L5 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

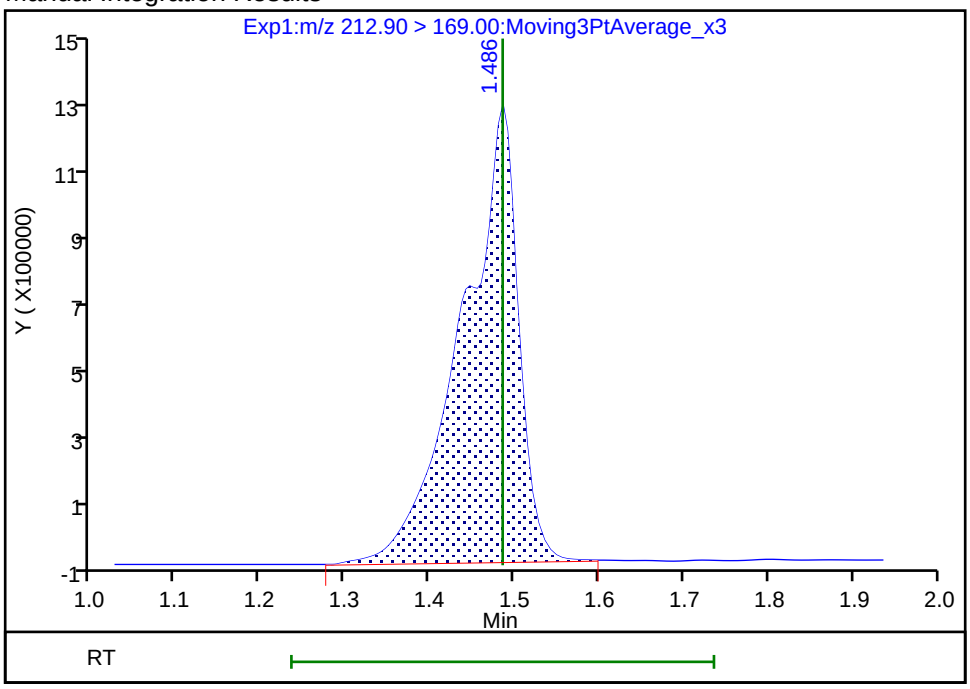
Processing Integration Results

RT: 1.49
Area: 3534540
Amount: 1.655560
Amount Units: ng/ml



Manual Integration Results

RT: 1.49
Area: 5937685
Amount: 2.613103
Amount Units: ng/ml



Reviewer: roycea, 03-Aug-2018 17:54:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_010.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Aug-2018 16:50:01 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC PFC STD6
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 03-Aug-2018 18:17:45 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK018

First Level Reviewer: roycea Date: 03-Aug-2018 17:55:33

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.486	1.485	0.001	0.540	6541983	2.67		107	8530	
2 Perfluorobutyric acid										
212.90 > 169.00	1.486	1.486	0.0	1.000	12603718	5.18		104	259	
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.753	0.002	0.638	5832978	2.66		106	8912	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.755	1.754	0.001	1.000	11314842	4.75		95.1	459	
D 47 13C3-PFBS										
301.90 > 83.00	1.788	1.792	-0.004	0.650	84962	2.50		108	256	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.788	1.794	-0.006	1.000	16018083	4.24		96.0	7684	
298.90 > 99.00	1.788	1.794	-0.006	1.000	6232269		2.57(1.35-4.05)	96.0	1810	
D 60 M2-4:2FTS										
329.00 > 81.00	2.008	2.006	0.002	0.730	598286	2.59		111	394	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.008	2.009	-0.001	1.123	2865640	4.61		98.6	7006	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.049	2.044	0.005	1.000	10791075	4.91		98.1	857	
313.00 > 119.00	2.049	2.044	0.005	1.000	804320		13.42(6.96-20.87)	98.1	741	
D 7 13C2 PFHxA										
315.00 > 270.00	2.049	2.046	0.003	0.745	5878468	2.58		103	6088	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.070	2.069	0.001	1.157	8636453	4.83		103	9595	
349.00 > 99.00	2.070	2.069	0.001	1.157	3947341		2.19(1.15-3.45)	103	1888	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.142	2.146	-0.004	0.778	497113	2.55		102	2001	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.152	2.147	0.005	1.005	2285140	5.21		104	724	
D 9 13C4-PFHpA										
367.00 > 322.00	2.386	2.384	0.002	0.867	6626960	2.56		103	12049	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.386	2.384	0.002	1.000	13282534	4.83		96.5	751	
363.00 > 169.00	2.386	2.384	0.002	1.000	3253794		4.08(2.17-6.52)	96.5	1850	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.399	2.398	0.001	1.000	11602279	4.37		96.1	8421	
399.00 > 99.00	2.399	2.398	0.001	1.000	3173103		3.66(1.90-5.70)	96.1	816	
D 11 18O2 PFHxS										
403.00 > 84.00	2.399	2.400	-0.001	0.872	4906340	2.52		107	9501	
65 ADONA										
377.00 > 251.00	2.438	2.435	0.003	0.776	19896553	4.69		93.8	10232	
377.00 > 85.00	2.438	2.435	0.003	0.776	9227938		2.16(1.05-3.16)	93.8	3485	
D 12 M2-6:2FTS										
429.00 > 81.00	2.735	2.732	0.003	0.994	579189	2.30		97.0	709	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.735	2.732	0.003	1.000	2412122	4.63		97.7	3704	
* 62 13C2-PFOA										
415.00 > 370.00	2.751	2.755	-0.004		5491691	2.50			8197	
D 14 13C4 PFOA										
417.00 > 372.00	2.751	2.757	-0.006	1.000	5669239	2.62		105	7134	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.751	2.757	-0.006	1.000	11122158	4.48		89.4	934	
413.00 > 169.00	2.751	2.757	-0.006	1.000	4237582		2.62(1.36-4.08)	89.4	2130	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.767	2.767	0.0	0.881	10881371	5.11		107	8477	
449.00 > 99.00	2.767	2.767	0.0	0.881	2750325		3.96(1.84-5.53)	107	4020	
D 19 13C5 PFNA										
468.00 > 423.00	3.140	3.140	0.0	1.141	4799148	2.58		103	4797	
D 18 13C4 PFOS										
503.00 > 80.00	3.140	3.140	0.0	1.141	5039962	2.49		104	4493	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.140	3.140	0.0	1.000	10846850	4.80		103	6910	
499.00 > 99.00	3.140	3.140	0.0	1.000	2597888		4.18(2.04-6.12)	103	2641	
20 Perfluorononanoic acid										
463.00 > 419.00	3.140	3.140	0.0	1.000	9176653	4.53		90.6	1068	
463.00 > 169.00	3.140	3.140	0.0	1.000	1956007		4.69(2.68-8.03)	90.6	2172	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.348	3.348	0.0	1.066	11613434	4.66		100	5095	
D 21 13C8 FOSA										
506.00 > 78.00	3.495	3.485	0.010	1.270	3130628	2.59		103	4904	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.495	3.492	0.003	1.113	7148701	5.18		108	4781	
549.00 > 99.00	3.495	3.492	0.003	1.113	1169271		6.11(3.02-9.05)	108	4585	
D 26 M2-8:2FTS										
529.00 > 81.00	3.495	3.492	0.003	1.270	66824	2.29		95.6	291	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.495	3.492	0.003	1.000	17949426	4.67		93.3	4722	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.495	3.494	0.001	1.000	1847076	4.72		98.6	3644	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.509	3.505	0.004	1.000	10776223	4.70		93.9	1049	
513.00 > 169.00	3.509	3.505	0.004	1.000	810665		13.29(7.12-21.35)	93.9	337	
D 23 13C2 PFDA										
515.00 > 470.00	3.509	3.505	0.004	1.276	4667480	2.51		100	6729	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.650	3.650	0.0	1.327	968788	2.68		107	1904	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.663	3.662	0.001	1.004	1892335	4.83		96.6	1283	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.815	3.816	-0.001	1.215	8492671	4.83		100	10916	
599.00 > 99.00	3.815	3.816	-0.001	1.215	1845378		4.60(2.14-6.43)	100	2211	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.815	3.825	-0.010	1.387	757844	2.55		102	1447	
D 30 13C2 PFUnA										
565.00 > 520.00	3.831	3.831	0.0	1.392	3808061	2.53		101	7476	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.831	3.831	0.0	1.000	6306082	4.92		98.3	1159	
563.00 > 169.00	3.831	3.831	0.0	1.000	587672		10.73(5.24-15.72)	98.3	1432	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.831	3.831	0.0	1.004	1494790	5.50		110	2181	
35 MeFOSA										
512.00 > 169.00	3.981	3.971	0.010		2925684	NC			1857	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.997	3.993	0.004	1.273	11903789	4.51		95.8	12021	
D 36 13C2 PFDoA										
615.00 > 570.00	4.126	4.127	-0.001	1.500	4310482	2.66		106	5503	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.126	4.127	-0.001	1.000	8139691	4.80		96.0	1097	
613.00 > 169.00	4.126	4.127	-0.001	1.000	906848		8.98(4.68-14.05)	96.0	2618	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.126	4.127	-0.001	1.181	1128569	5.29		110	3154	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.360	4.361	-0.001	1.389	852398	5.03		104	4042	
699.00 > 99.00	4.360	4.361	-0.001	1.389	1606737		0.53(0.28-0.83)	104	3252	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.392	4.392	0.0	1.064	6273910	4.85		97.0	1535	
663.00 > 169.00	4.392	4.392	0.0	1.064	1149600		5.46(3.09-9.27)	97.0	1722	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.562	4.547	0.015		5406	NC			0.0	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.634	4.635	-0.001	1.684	2591620	2.50		100	4696	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.634	4.635	-0.001	1.000	902731	5.41		108	2262	
713.00 > 219.00	4.634	4.635	-0.001	1.000	598166		1.51(0.70-2.09)	108	1942	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.046	5.049	-0.003	1.834	2427794	2.56		102	4766	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.046	5.049	-0.003	1.000	4463963	5.06		101	602	
813.00 > 169.00	5.046	5.049	-0.003	1.000	861053		5.18(2.77-8.32)	101	1892	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.394	5.401	-0.007	1.069	3505499	5.08		102	2299	
913.00 > 169.00	5.394	5.401	-0.007	1.069	709466		4.94(2.55-7.64)	102	2750	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL6_00007 Amount Added: 1.00 Units: mL

Report Date: 03-Aug-2018 18:17:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_010.d

Injection Date: 03-Aug-2018 16:50:01 Instrument ID: A9

Lims ID: IC L6 Full

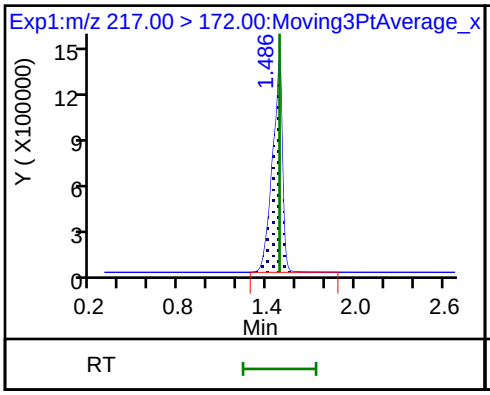
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 15 Worklist Smp#: 7

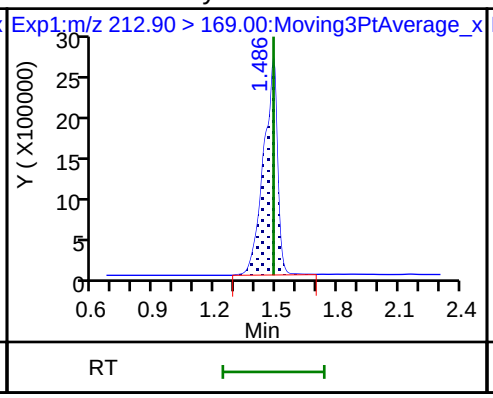
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

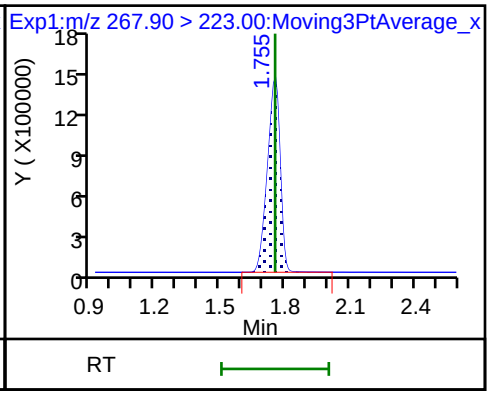
D 1 13C4 PFBA



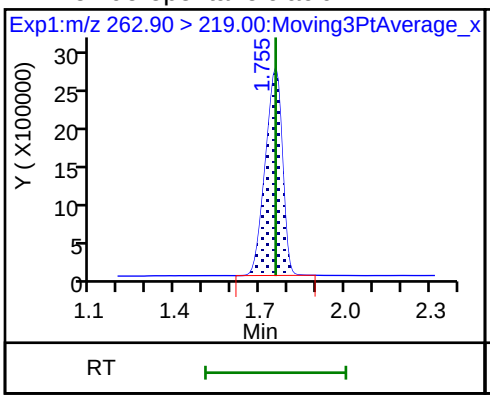
2 Perfluorobutyric acid



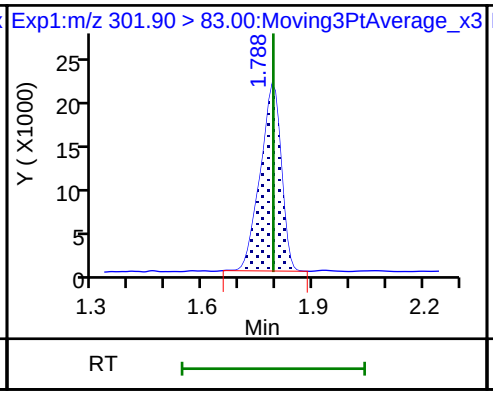
D 3 13C5-PFPeA



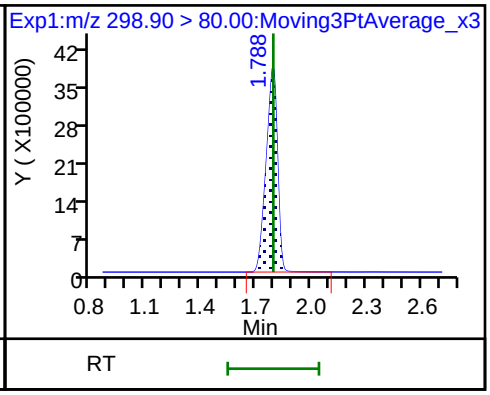
4 Perfluoropentanoic acid



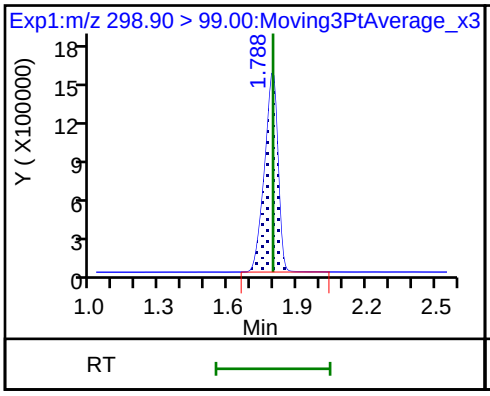
D 47 13C3-PFBS



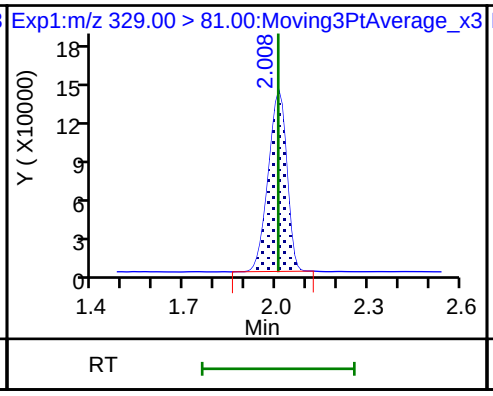
5 Perfluorobutanesulfonic acid



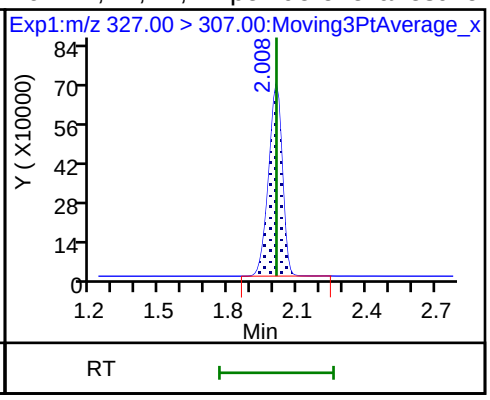
5 Perfluorobutanesulfonic acid



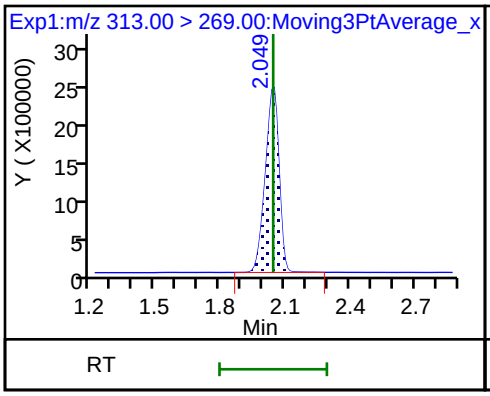
D 60 M2-4:2FTS



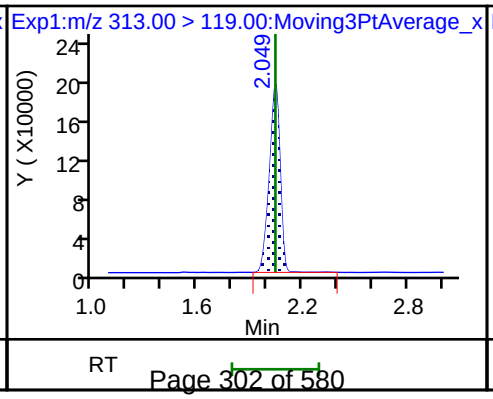
61 1H,1H,2H,2H-perfluorohexanesulfoni



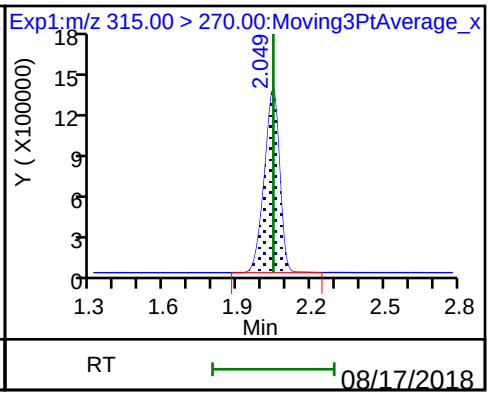
6 Perfluorohexanoic acid



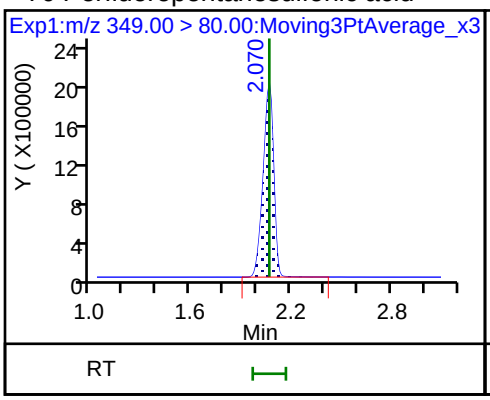
6 Perfluorohexanoic acid



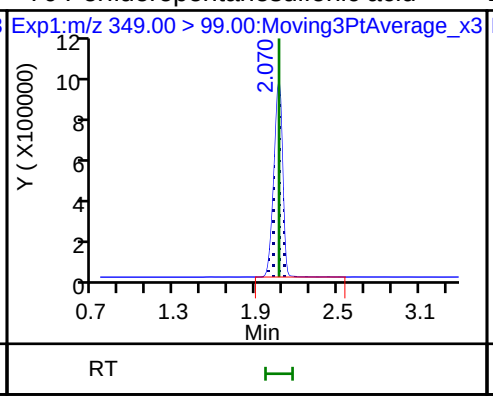
D 7 13C2 PFHxA



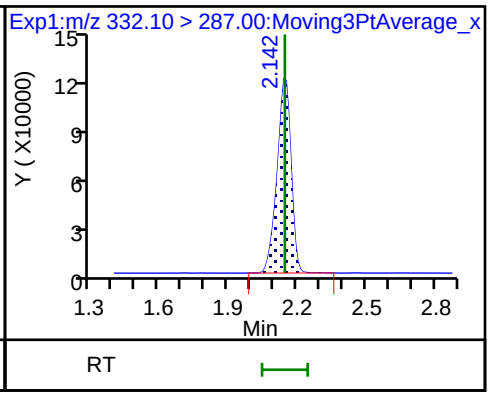
70 Perfluoropentanesulfonic acid



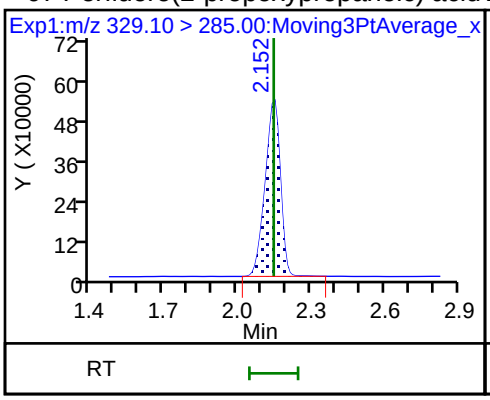
70 Perfluoropentanesulfonic acid



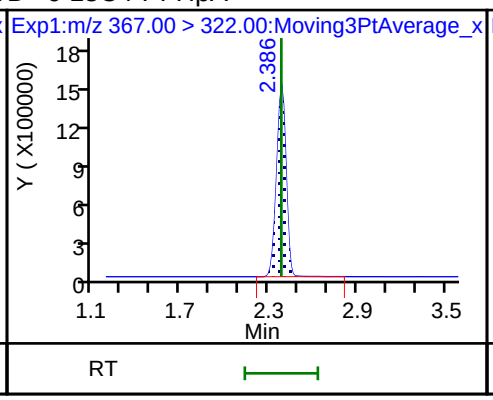
D 64 13C3 HFPO-DA



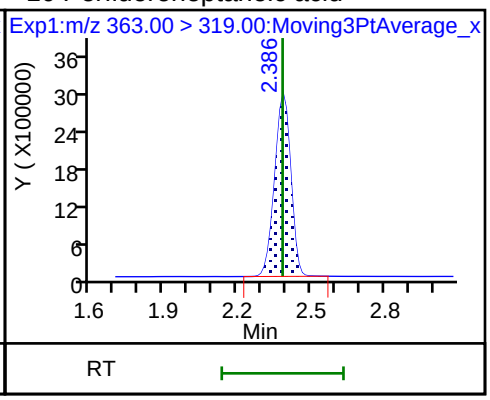
67 Perfluoro(2-propoxypropanoic) acid



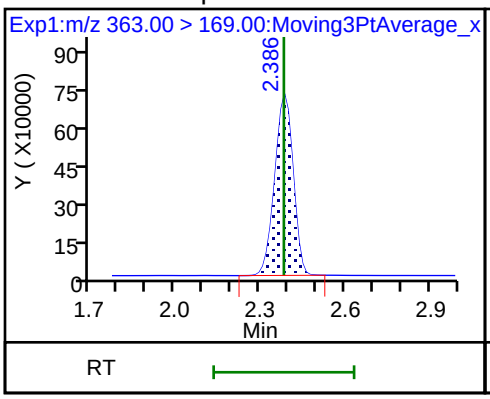
D 9 13C4-PFHpA



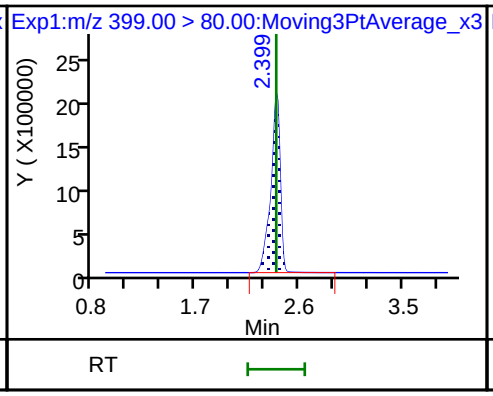
10 Perfluoroheptanoic acid



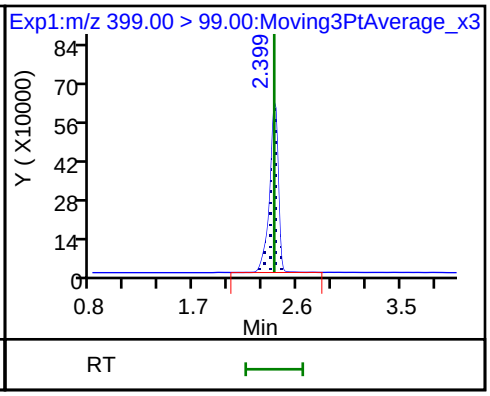
10 Perfluoroheptanoic acid



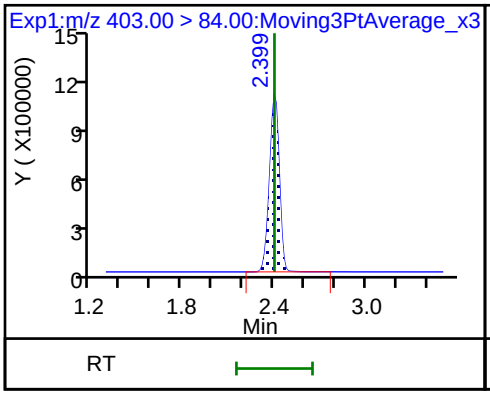
8 Perfluorohexanesulfonic acid



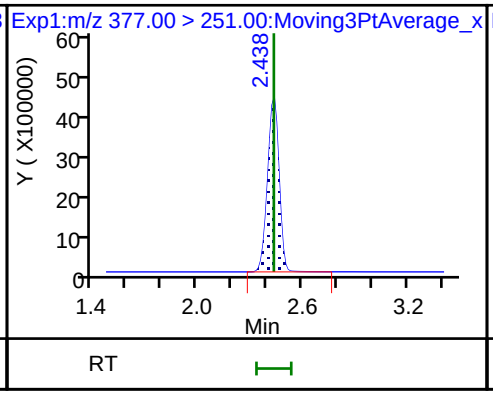
8 Perfluorohexanesulfonic acid



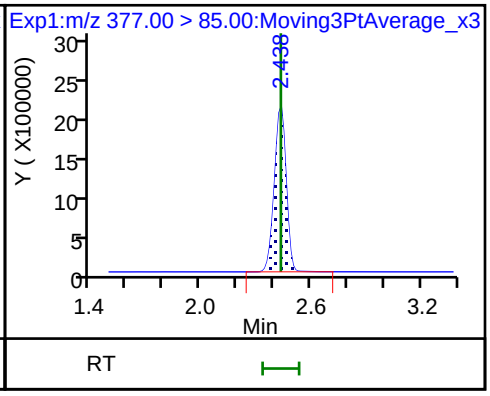
D 11 18O2 PFHxS



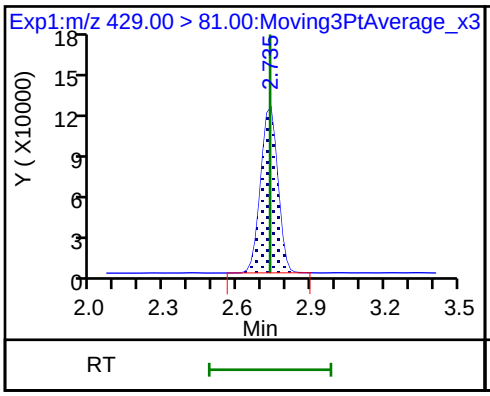
65 ADONA



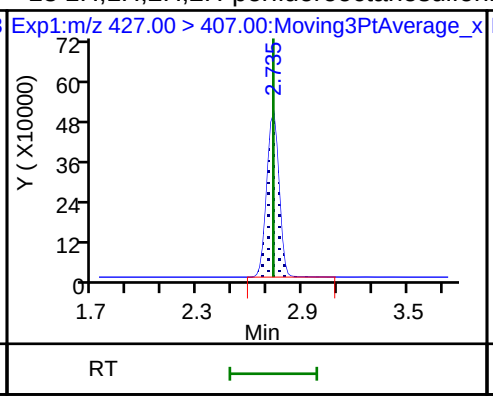
65 ADONA

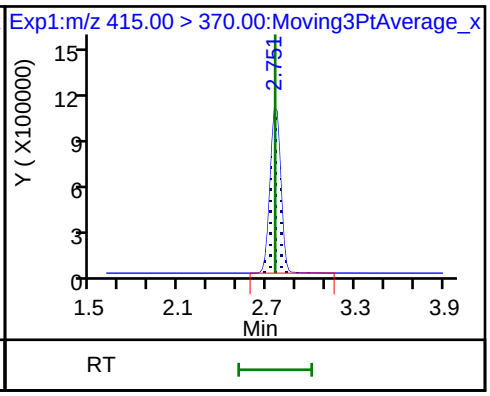


D 12 M2-6:2FTS

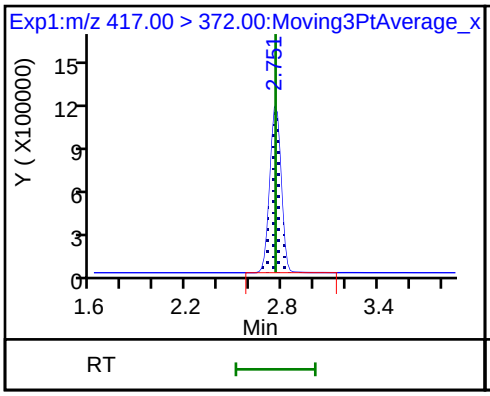


13 1H,1H,2H,2H-perfluorooctanesulfonic* 62 13C2-PFOA

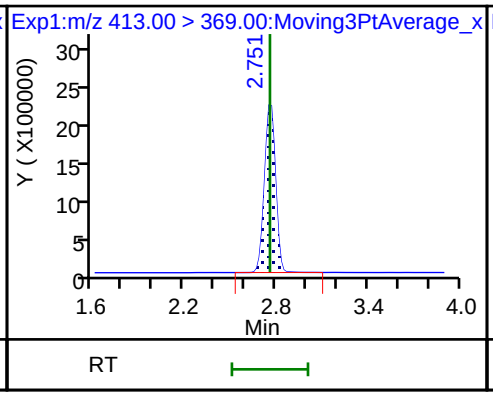




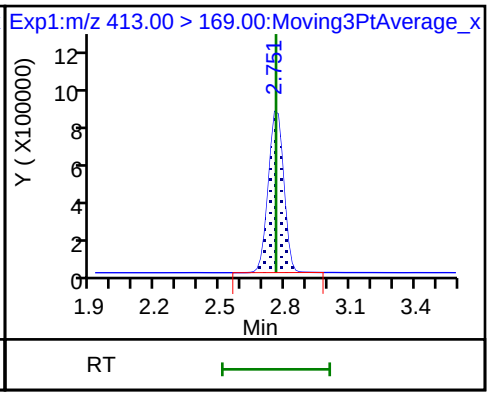
D 14 13C4 PFOA



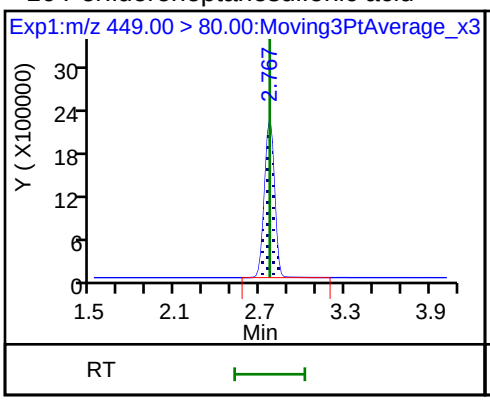
15 Perfluorooctanoic acid



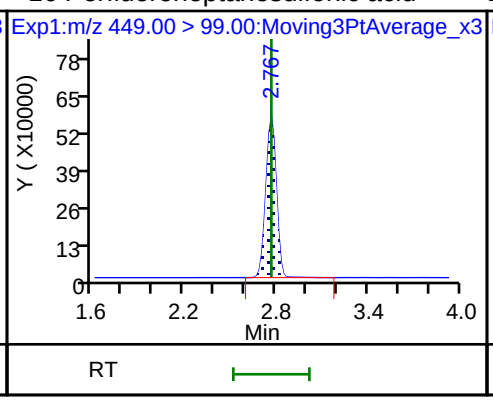
15 Perfluorooctanoic acid



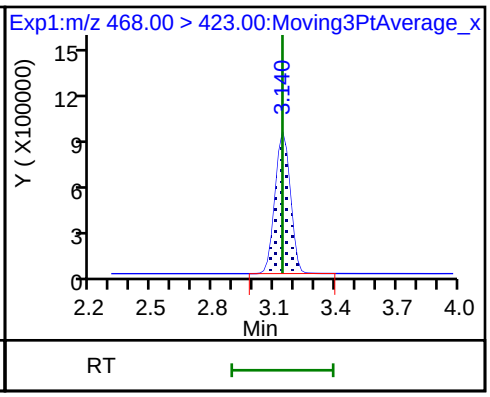
16 Perfluoroheptanesulfonic acid



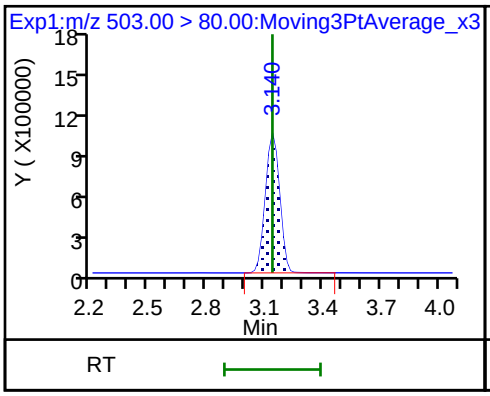
16 Perfluoroheptanesulfonic acid



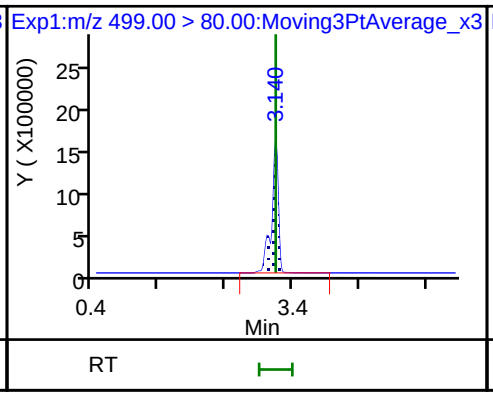
D 19 13C5 PFNA



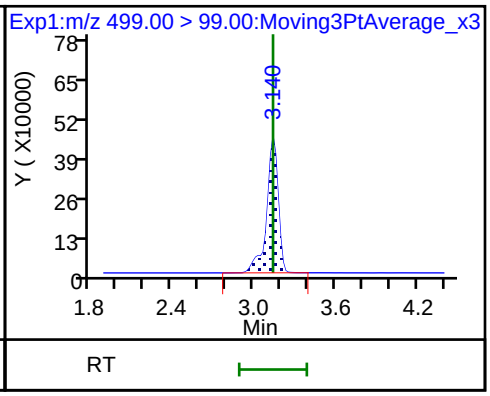
D 18 13C4 PFOS



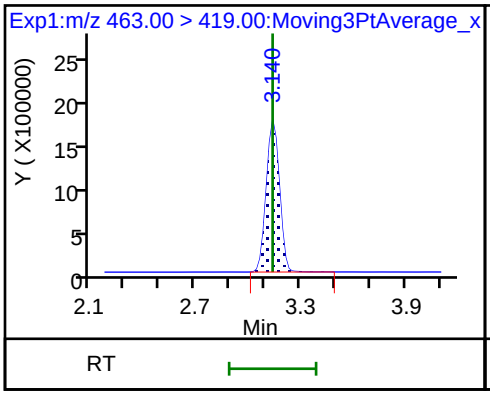
17 Perfluorooctane sulfonic acid



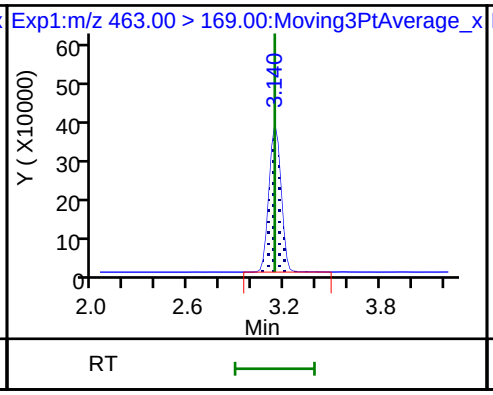
17 Perfluorooctane sulfonic acid



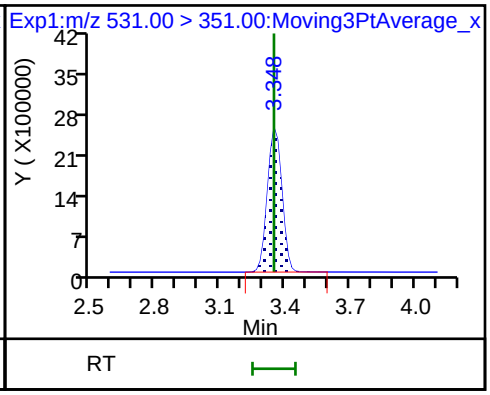
20 Perfluorononanoic acid



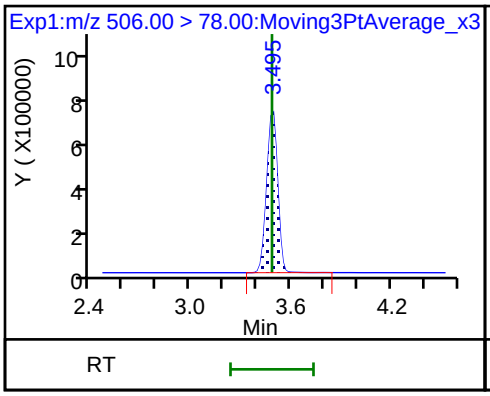
20 Perfluorononanoic acid



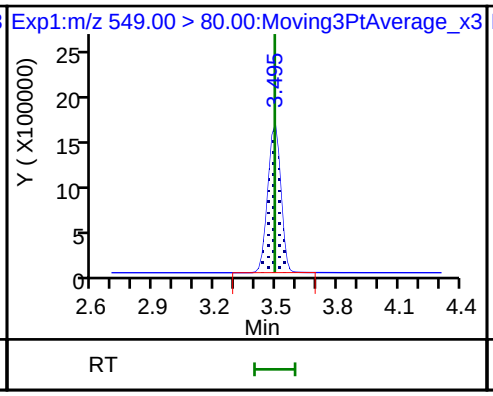
69 9-Chlorohexadecafluoro-3-oxanonane



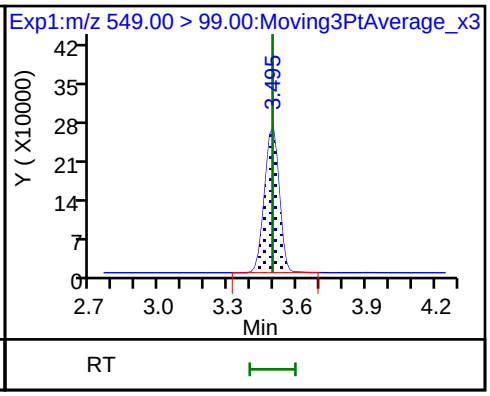
D 21 13C8 FOSA



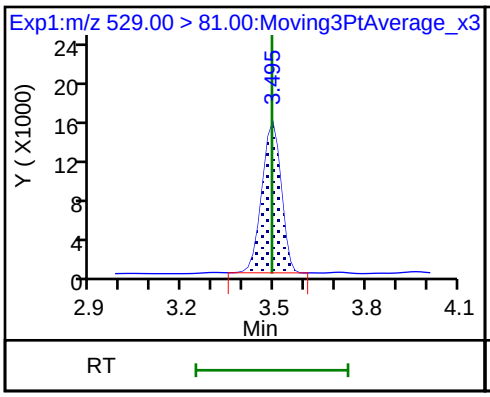
68 Perfluorononanesulfonic acid



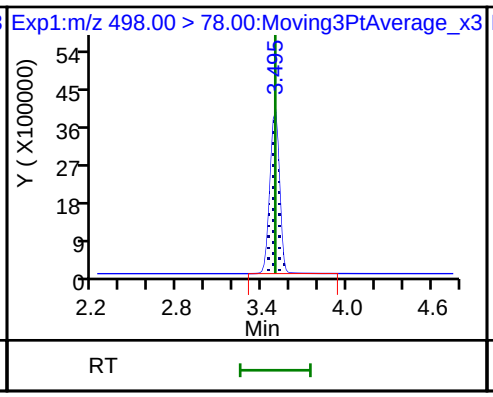
68 Perfluorononanesulfonic acid



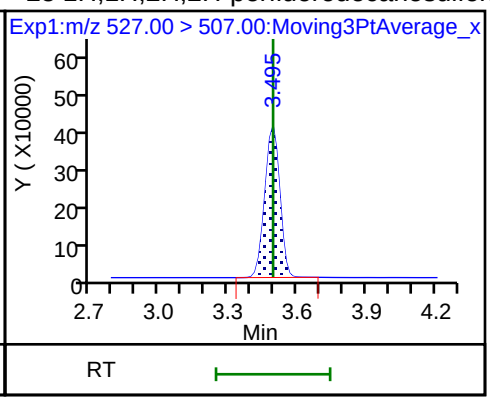
D 26 M2-8:2FTS



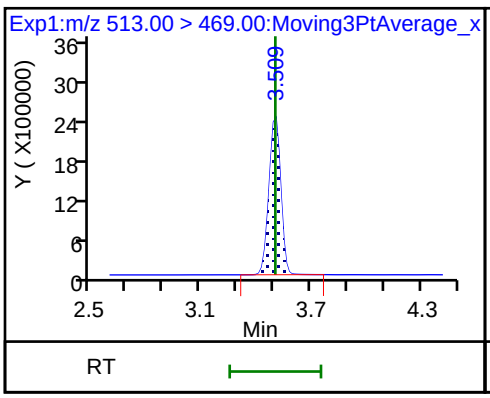
22 Perfluorooctane Sulfonamide



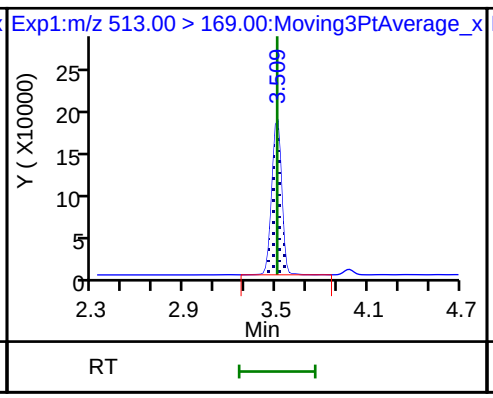
25 1H,1H,2H,2H-perfluorodecanesulfoni



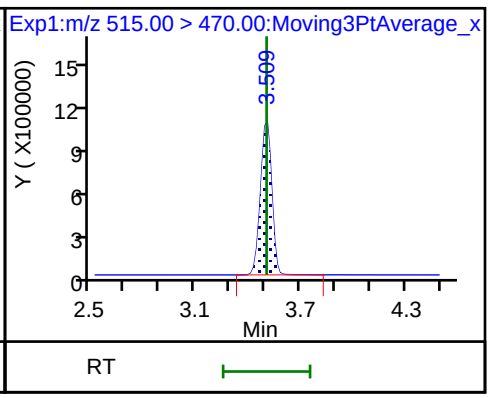
24 Perfluorodecanoic acid



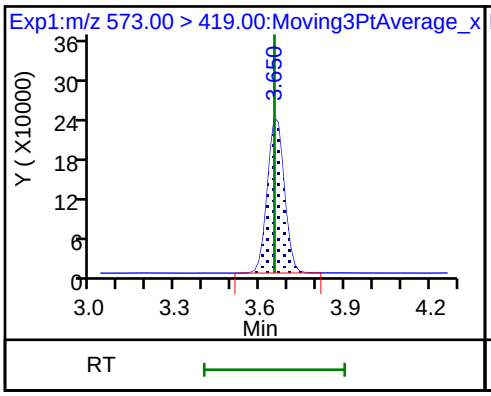
24 Perfluorodecanoic acid



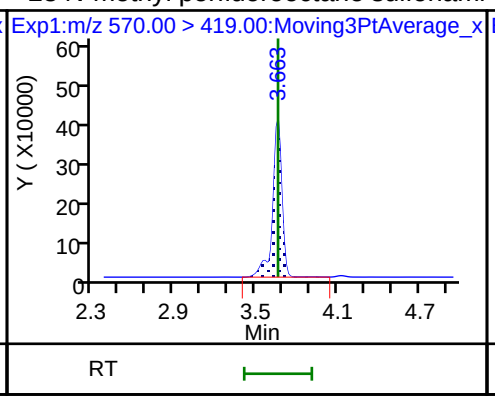
D 23 13C2 PFDA



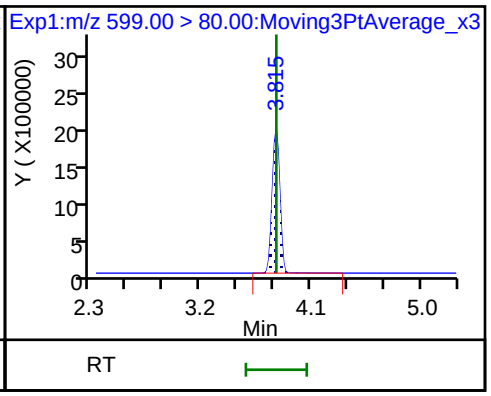
D 27 d3-NMeFOSAA



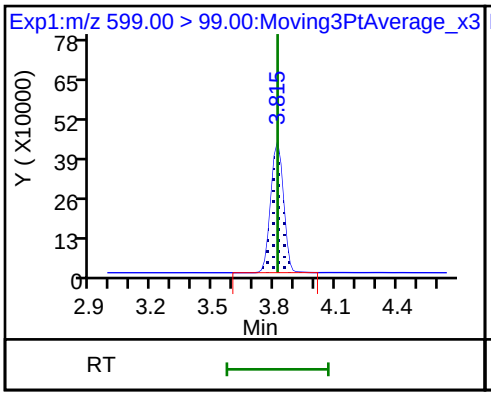
28 N-methyl perfluorooctane sulfonami



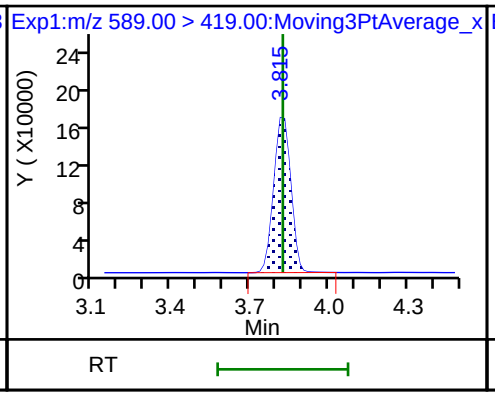
29 Perfluorodecane Sulfonic acid



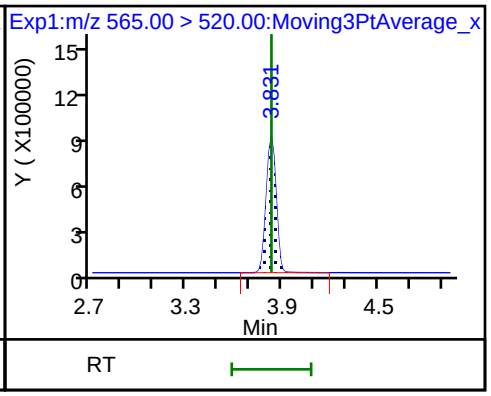
29 Perfluorodecane Sulfonic acid



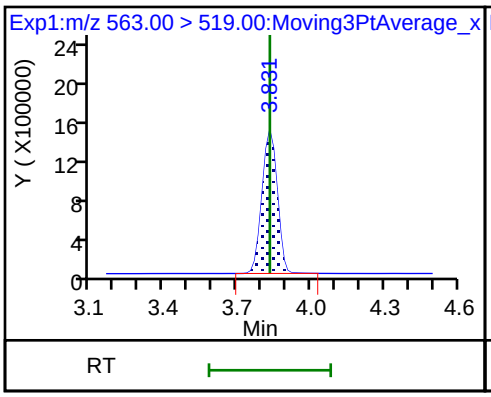
D 32 d5-NEtFOSAA



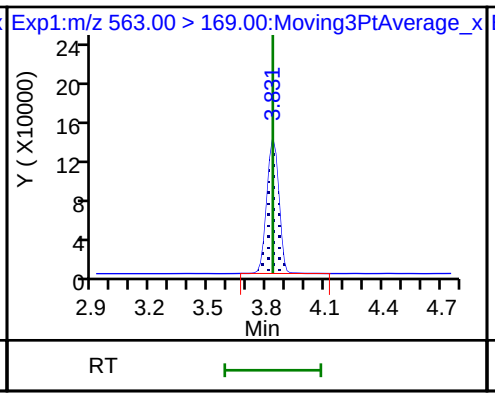
D 30 13C2 PFUnA



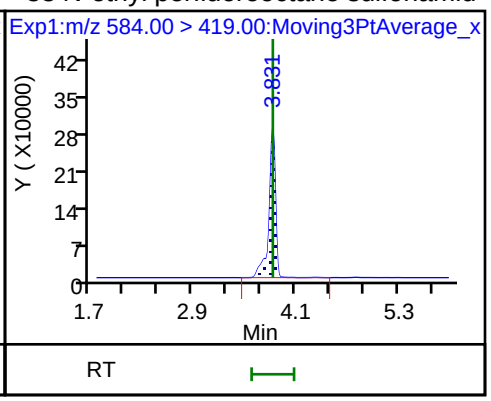
31 Perfluoroundecanoic acid



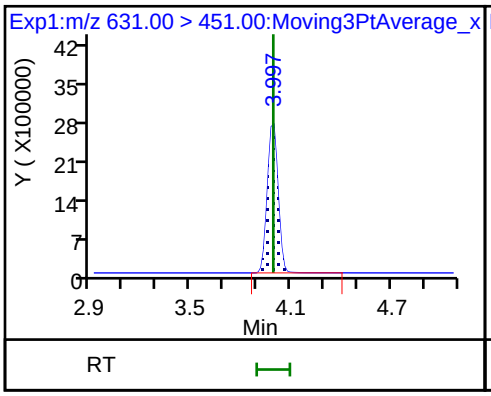
31 Perfluoroundecanoic acid



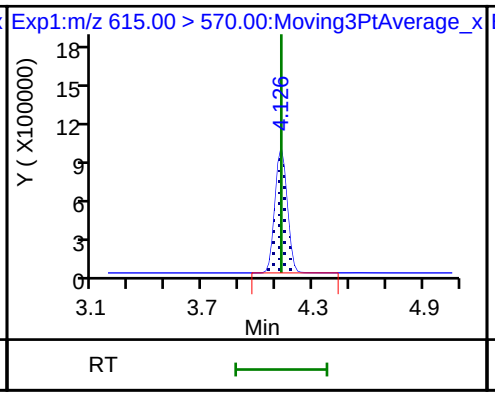
33 N-ethyl perfluorooctane sulfonamid



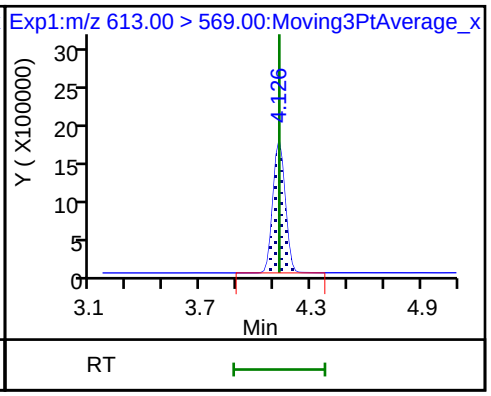
66 11-Chloroeicosafluoro-3-oxaundecan



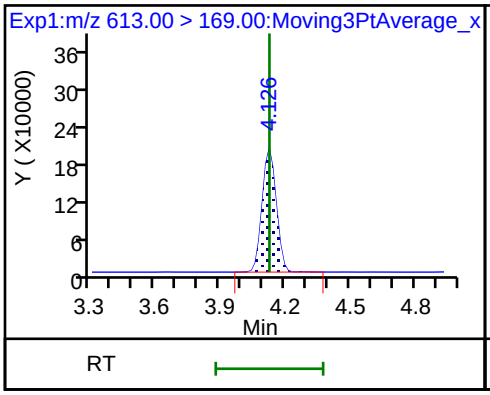
D 36 13C2 PFDoA



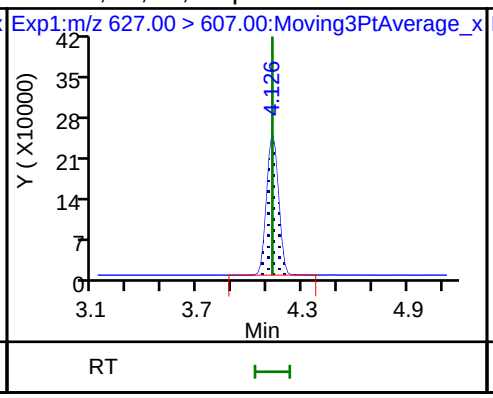
37 Perfluorododecanoic acid



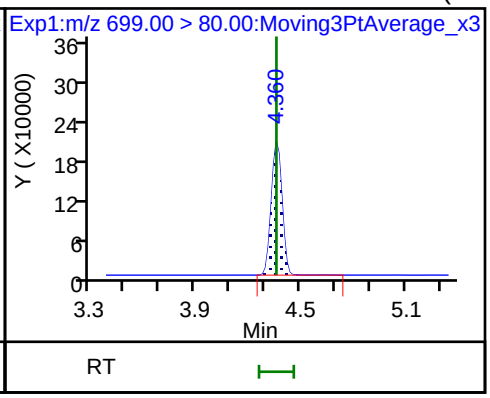
37 Perfluorododecanoic acid



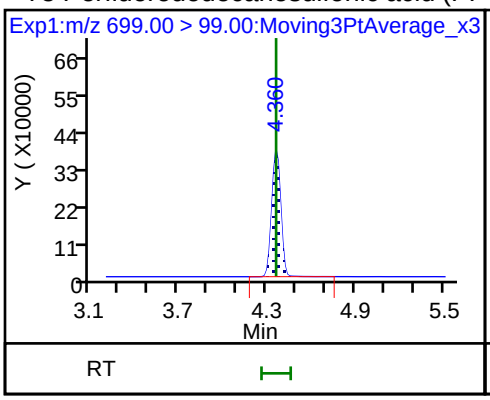
74 1H,1H,2H,2H-perfluorododecanesulfo



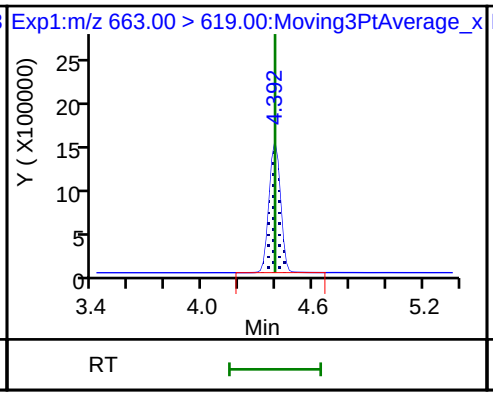
75 Perfluorododecanesulfonic acid (PF



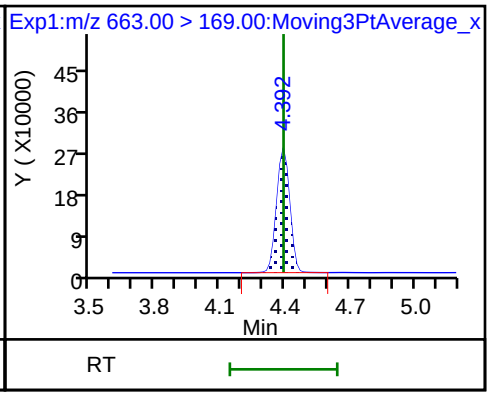
75 Perfluorododecanesulfonic acid (PF



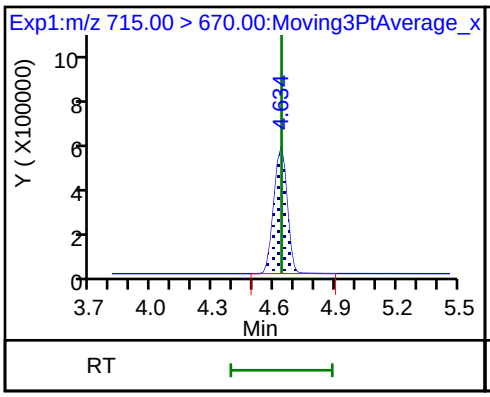
41 Perfluorotridecanoic acid



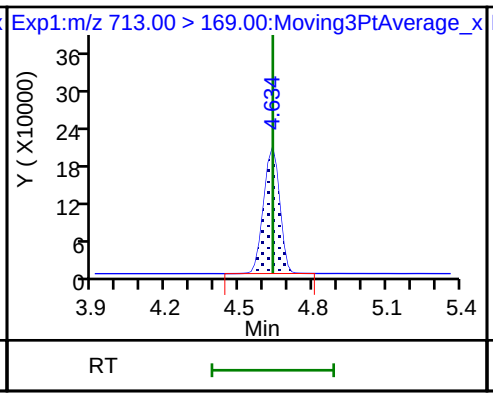
41 Perfluorotridecanoic acid



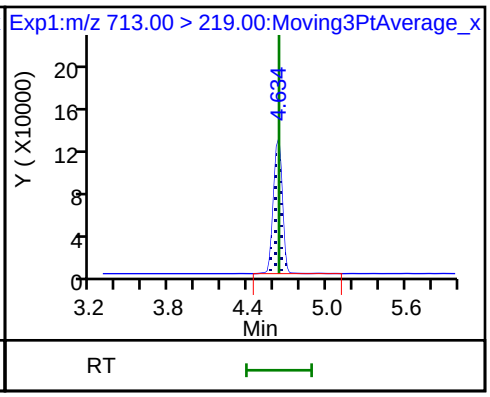
D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



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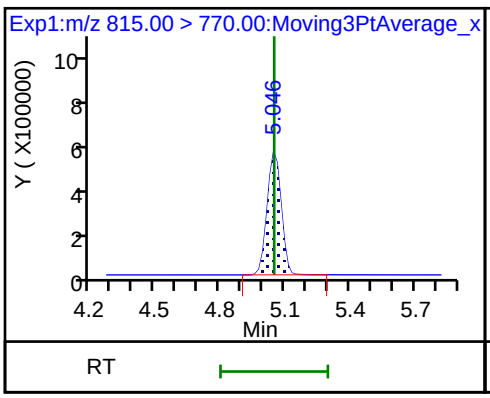
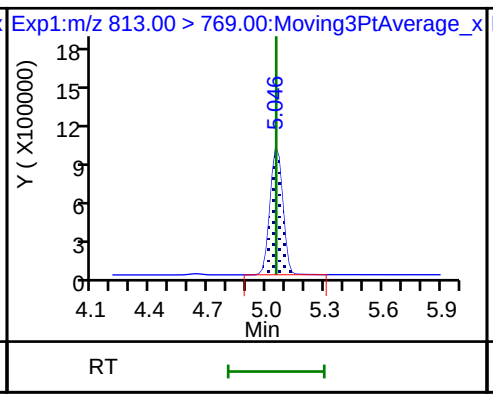
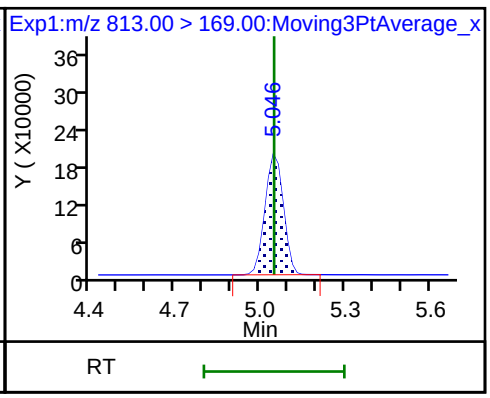


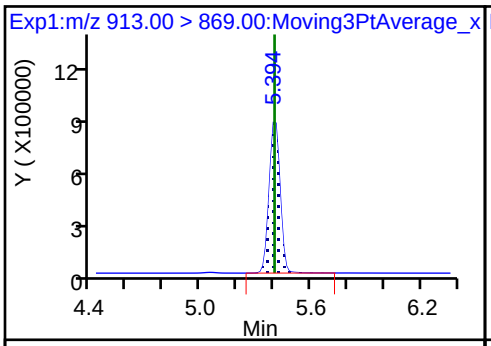
45 Perfluorohexadecanoic acid



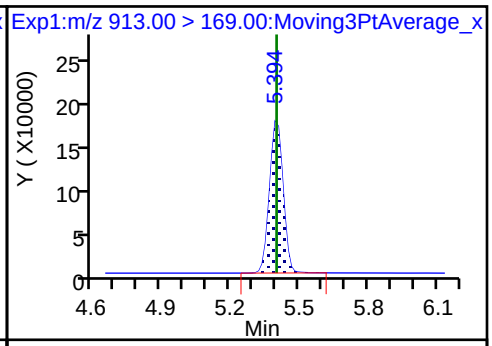
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Aug-2018 16:57:30 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC PFC STD7
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 03-Aug-2018 18:17:52 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK018

First Level Reviewer: roycea Date: 03-Aug-2018 17:56:21

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.481	1.485	-0.004	0.538	6389618	2.77		111	10673	
2 Perfluorobutyric acid										
212.90 > 169.00	1.481	1.486	-0.005	1.000	22190566	9.34		93.4	395	
D 3 13C5-PFPeA										
267.90 > 223.00	1.747	1.753	-0.006	0.635	5299526	2.57		103	7345	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.747	1.754	-0.007	1.000	19426688	8.98		89.8	694	
D 47 13C3-PFBS										
301.90 > 83.00	1.789	1.792	-0.003	0.650	81999	2.57		110	264	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.789	1.794	-0.005	1.000	28367522	7.79		88.1	12332	
298.90 > 99.00	1.789	1.794	-0.005	1.000	11602722		2.44(1.35-4.05)	88.1	2915	
D 60 M2-4:2FTS										
329.00 > 81.00	1.998	2.006	-0.008	0.726	510976	2.35		101	336	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.008	2.009	-0.001	1.123	5133972	8.55		91.6	5723	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.039	2.044	-0.005	1.000	18541720	9.14		91.4	1471	
313.00 > 119.00	2.039	2.044	-0.005	1.000	1466504		12.64(6.96-20.87)	91.4	970	
D 7 13C2 PFHxA										
315.00 > 270.00	2.039	2.046	-0.007	0.741	5424292	2.53		101	6827	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.060	2.069	-0.009	1.152	15637004	9.07		96.6	8225	
349.00 > 99.00	2.060	2.069	-0.009	1.152	7694253		2.03(1.15-3.45)	96.6	3055	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.142	2.146	-0.004	0.778	499092	2.73		109	1442	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.142	2.147	-0.005	1.000	4459473	10.1		101	1317	
D 9 13C4-PFHpA										
367.00 > 322.00	2.373	2.384	-0.011	0.863	6139851	2.53		101	8105	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.373	2.384	-0.011	1.000	22336263	8.76		87.6	1107	
363.00 > 169.00	2.386	2.384	0.002	1.005	5996606		3.72(2.17-6.52)	87.6	3802	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.399	2.398	0.001	1.000	21190483	8.08		88.8	10664	
399.00 > 99.00	2.399	2.398	0.001	1.000	6058552		3.50(1.90-5.70)	88.8	1358	
D 11 18O2 PFHxS										
403.00 > 84.00	2.399	2.400	-0.001	0.872	4846975	2.65		112	9586	
65 ADONA										
377.00 > 251.00	2.425	2.435	-0.010	0.772	32954362	7.70		77.0	11938	
377.00 > 85.00	2.425	2.435	-0.010	0.772	16139119		2.04(1.05-3.16)	77.0	5721	
D 12 M2-6:2FTS										
429.00 > 81.00	2.719	2.732	-0.013	0.988	545128	2.31		97.1	784	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.719	2.732	-0.013	1.000	4160680	8.48		89.5	2457	
* 62 13C2-PFOA										
415.00 > 370.00	2.751	2.755	-0.004		5162538	2.50			5349	
D 14 13C4 PFOA										
417.00 > 372.00	2.751	2.757	-0.006	1.000	5093432	2.50		100	8251	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.751	2.757	-0.006	1.000	18927627	8.48		84.7	1618	
413.00 > 169.00	2.751	2.757	-0.006	1.000	7976014		2.37(1.36-4.08)	84.7	4374	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.767	2.767	0.0	0.881	19279404	8.96		94.1	17385	
449.00 > 99.00	2.767	2.767	0.0	0.881	5426206		3.55(1.84-5.53)	94.1	8463	
D 19 13C5 PFNA										
468.00 > 423.00	3.140	3.140	0.0	1.141	4275948	2.45		97.9	8469	
D 18 13C4 PFOS										
503.00 > 80.00	3.140	3.140	0.0	1.141	5087246	2.67		112	4120	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.140	3.140	0.0	1.000	20323268	8.90		95.9	8981	
499.00 > 99.00	3.140	3.140	0.0	1.000	5140497		3.95(2.04-6.12)	95.9	3345	
20 Perfluorononanoic acid										
463.00 > 419.00	3.140	3.140	0.0	1.000	16180234	8.97		89.7	1683	
463.00 > 169.00	3.140	3.140	0.0	1.000	3390408		4.77(2.68-8.03)	89.7	2829	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.348	3.348	0.0	1.066	19597962	7.80		83.6	8782	
D 21 13C8 FOSA										
506.00 > 78.00	3.479	3.485	-0.006	1.265	2836181	2.49		99.7	4069	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.479	3.492	-0.013	1.108	11730197	8.42		87.7	4528	
549.00 > 99.00	3.479	3.492	-0.013	1.108	2255764		5.20(3.02-9.05)	87.7	5332	
D 26 M2-8:2FTS										
529.00 > 81.00	3.479	3.492	-0.013	1.265	58823	2.14		89.5	181	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.479	3.492	-0.013	1.000	30333745	8.71		87.1	3491	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.495	3.494	0.001	1.004	3196523	9.28		96.9	4249	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.495	3.505	-0.010	1.000	17490817	8.53		85.3	1579	
513.00 > 169.00	3.495	3.505	-0.010	1.000	1410250		12.40(7.12-21.35)	85.3	380	
D 23 13C2 PFDA										
515.00 > 470.00	3.495	3.505	-0.010	1.270	4172222	2.38		95.4	5685	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.650	3.650	0.0	1.327	980371	2.88		115	2858	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.650	3.662	-0.012	1.000	3779673	9.54		95.4	2074	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.815	3.816	-0.001	1.215	15042348	8.48		88.0	9051	
599.00 > 99.00	3.800	3.816	-0.016	1.210	3670491		4.10(2.14-6.43)	88.0	4285	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.815	3.825	-0.010	1.387	716421	2.56		103	1487	
D 30 13C2 PFUnA										
565.00 > 520.00	3.831	3.831	0.0	1.392	3432823	2.43		97.1	5892	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.831	3.831	0.0	1.000	10624244	9.19		91.9	1602	
563.00 > 169.00	3.831	3.831	0.0	1.000	1137229		9.34(5.24-15.72)	91.9	2229	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.831	3.831	0.0	1.004	2757725	10.7		107	3008	
35 MeFOSA										
512.00 > 169.00	3.966	3.971	-0.005		5607041	NC			1770	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.981	3.993	-0.012	1.268	19963188	7.50		79.6	14573	
D 36 13C2 PFDoA										
615.00 > 570.00	4.126	4.127	-0.001	1.500	3811691	2.50		100	5493	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.126	4.127	-0.001	1.000	13309612	8.88		88.8	1750	
613.00 > 169.00	4.126	4.127	-0.001	1.000	1728821		7.70(4.68-14.05)	88.8	2624	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.126	4.127	-0.001	1.186	2272763	12.1		125	5871	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.361	4.361	0.0	1.389	1696460	9.91		102	5623	
699.00 > 99.00	4.361	4.361	0.0	1.389	2936663		0.58(0.28-0.83)	102	4081	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.392	4.392	0.0	1.064	10635642	9.30		93.0	2179	
663.00 > 169.00	4.392	4.392	0.0	1.064	2019559		5.27(3.09-9.27)	93.0	3100	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.531	4.547	-0.016		8415	NC			0.0	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.634	4.635	-0.001	1.684	2552499	2.62		105	5884	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.634	4.635	-0.001	1.000	1662766	10.1		101	3865	
713.00 > 219.00	4.616	4.635	-0.019	0.996	1223656		1.36(0.70-2.09)	101	2523	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.046	5.049	-0.003	1.834	2356463	2.64		106	5489	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.046	5.049	-0.003	1.000	8500467	9.96		99.6	1114	
813.00 > 169.00	5.046	5.049	-0.003	1.000	1709925		4.97(2.77-8.32)	99.6	3224	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.394	5.401	-0.007	1.069	6355971	9.50		95.0	3453	
913.00 > 169.00	5.394	5.401	-0.007	1.069	1389603		4.57(2.55-7.64)	95.0	4199	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL7_00006 Amount Added: 1.00 Units: mL

Report Date: 03-Aug-2018 18:17:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Injection Date: 03-Aug-2018 16:57:30 Instrument ID: A9

Lims ID: IC L7 Full

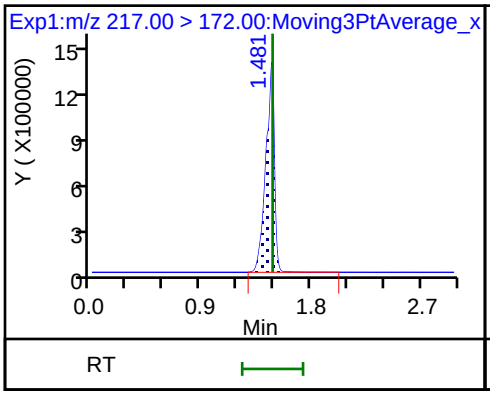
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 16 Worklist Smp#: 8

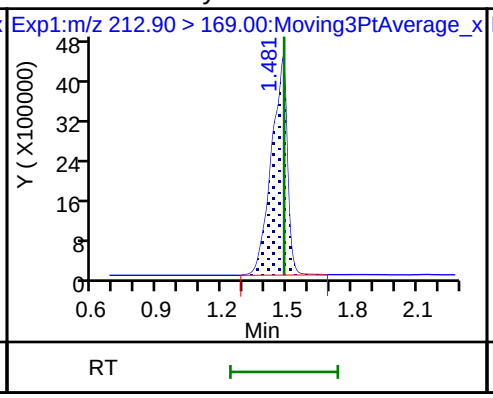
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

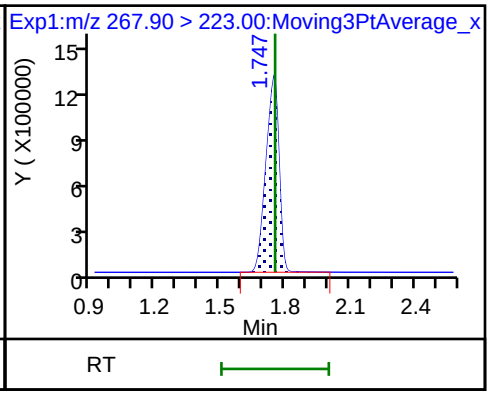
D 1 13C4 PFBA



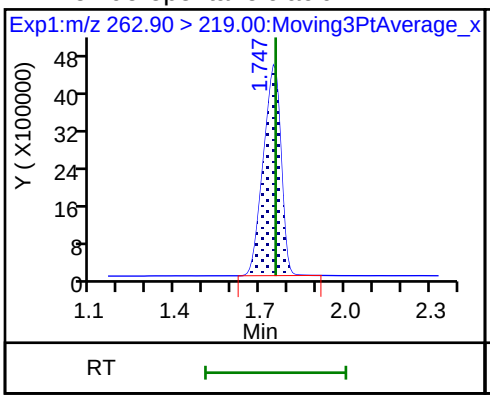
2 Perfluorobutyric acid



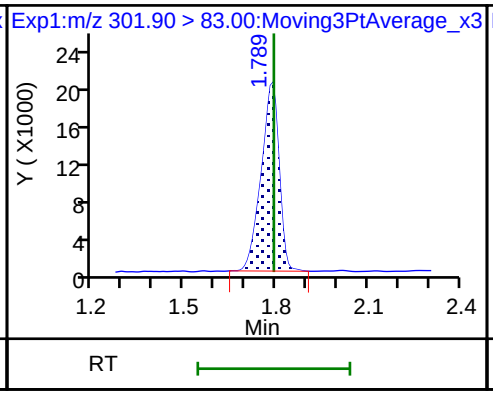
D 3 13C5-PFPeA



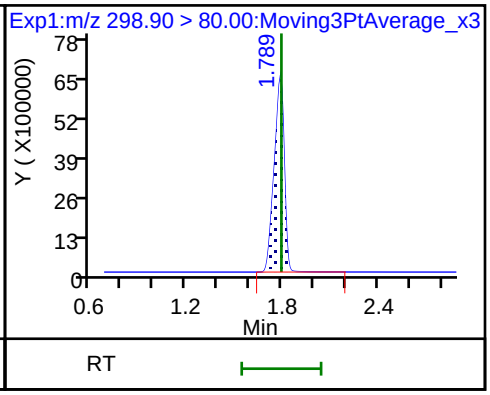
4 Perfluoropentanoic acid



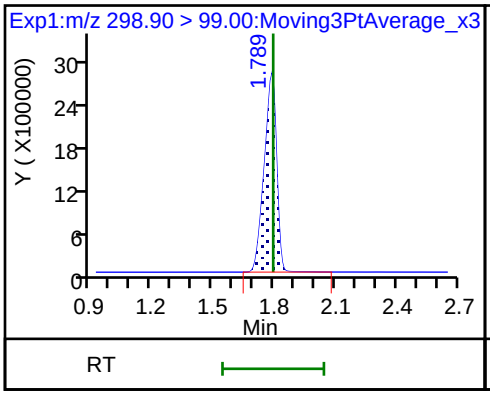
D 47 13C3-PFBS



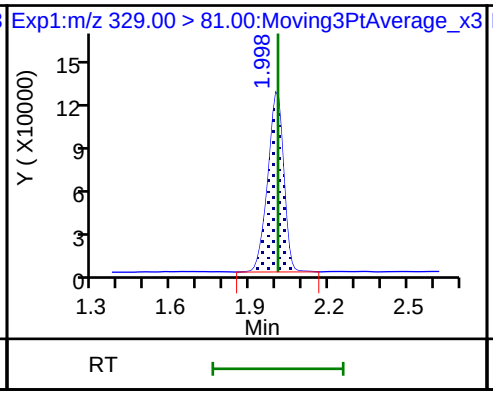
5 Perfluorobutanesulfonic acid



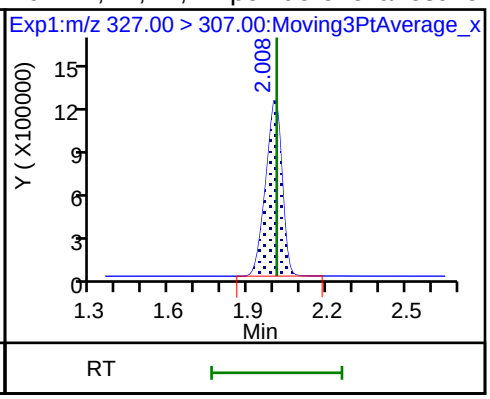
5 Perfluorobutanesulfonic acid



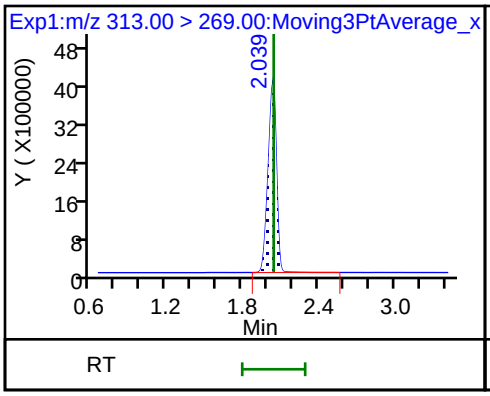
D 60 M2-4:2FTS



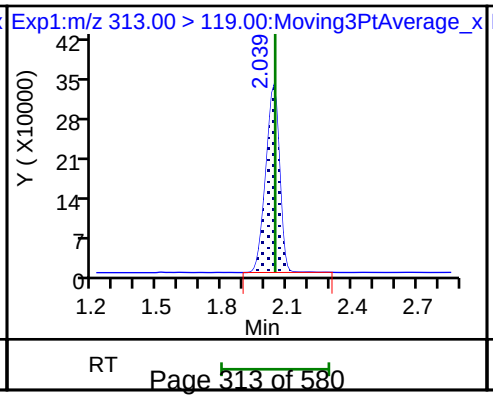
61 1H,1H,2H,2H-perfluorohexanesulfoni



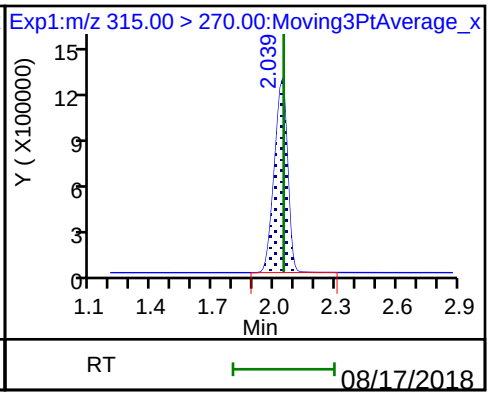
6 Perfluorohexanoic acid



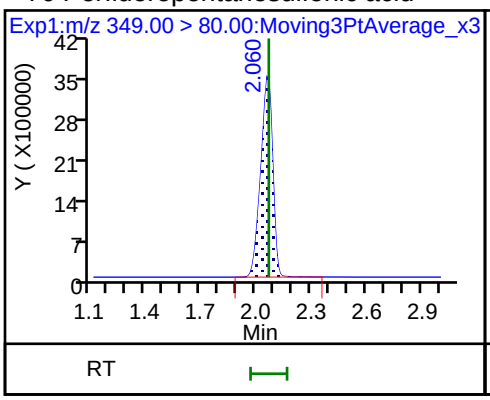
6 Perfluorohexanoic acid



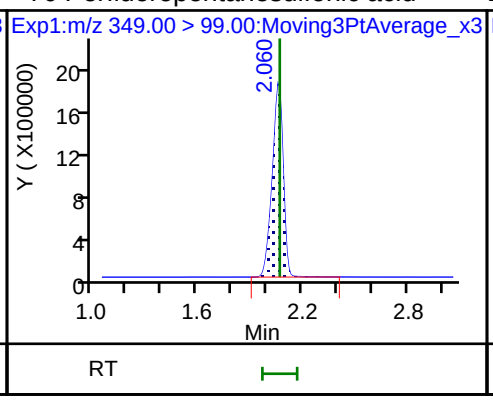
D 7 13C2 PFHxA



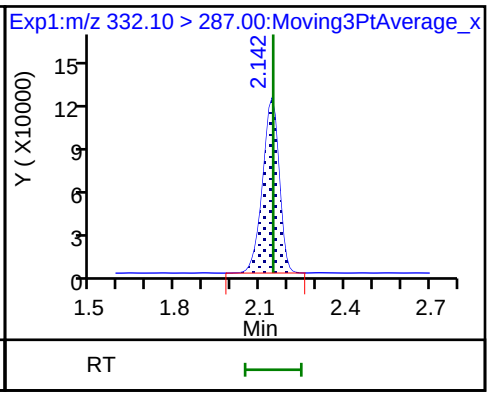
70 Perfluoropentanesulfonic acid



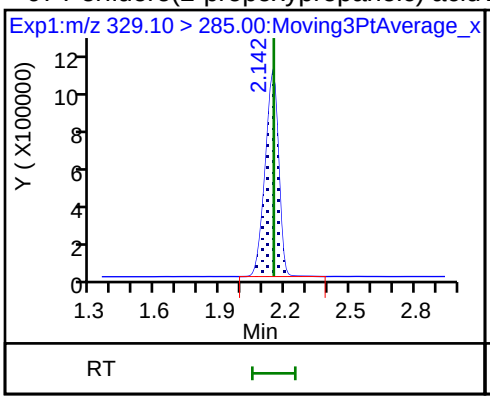
70 Perfluoropentanesulfonic acid



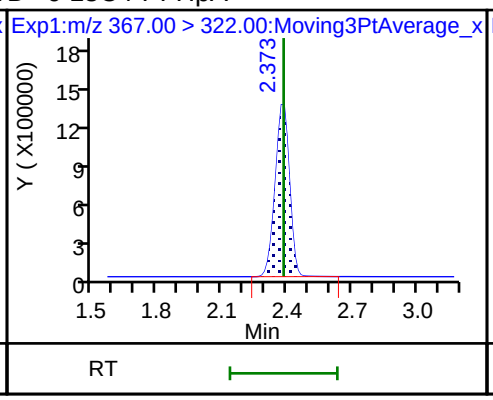
D 64 13C3 HFPO-DA



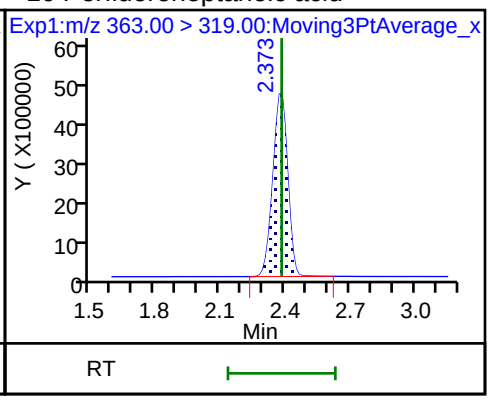
67 Perfluoro(2-propoxypropanoic) acid



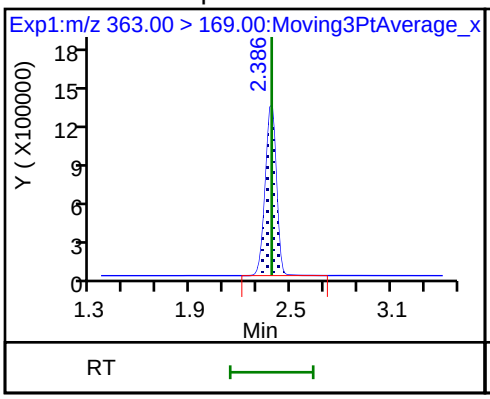
D 9 13C4-PFHpA



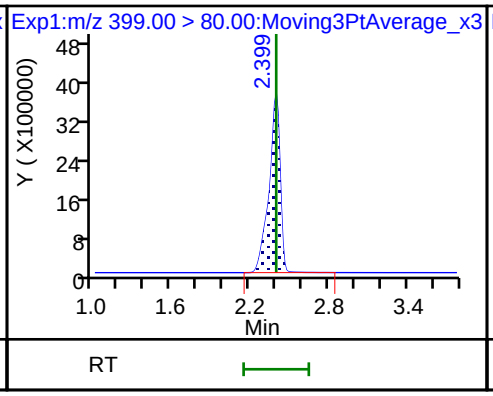
10 Perfluoroheptanoic acid



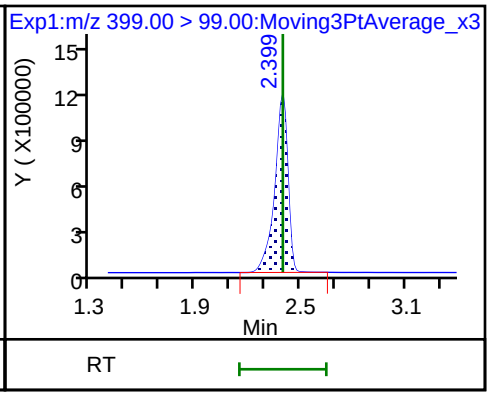
10 Perfluoroheptanoic acid



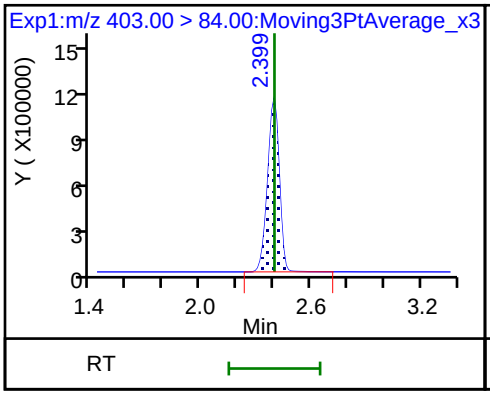
8 Perfluorohexanesulfonic acid



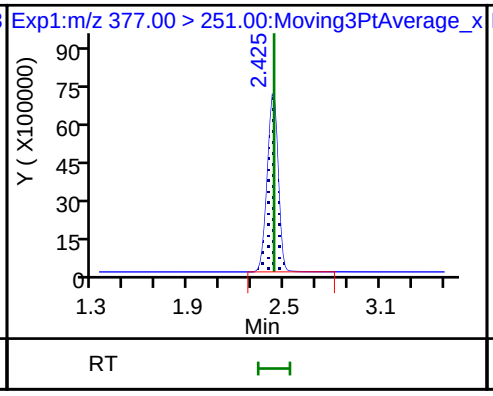
8 Perfluorohexanesulfonic acid



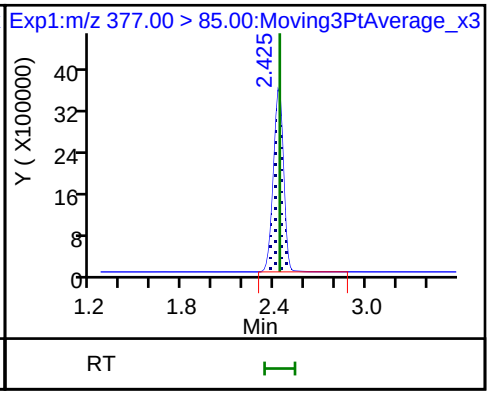
D 11 18O2 PFHxS



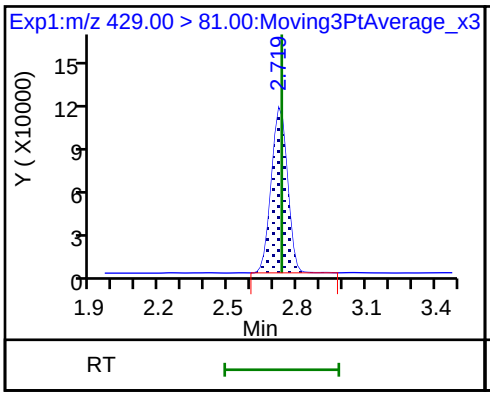
65 ADONA



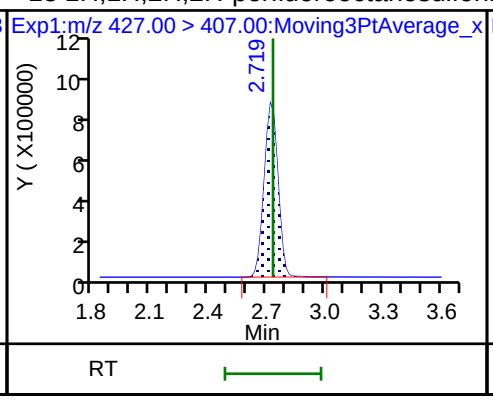
65 ADONA



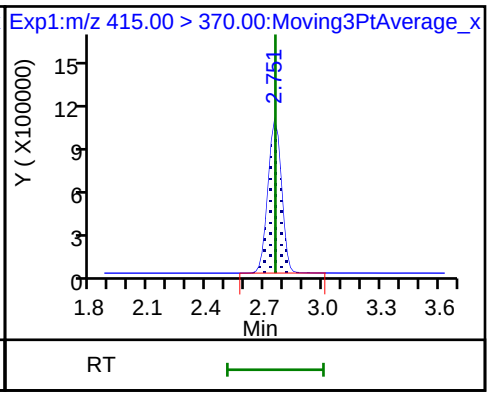
D 12 M2-6:2FTS



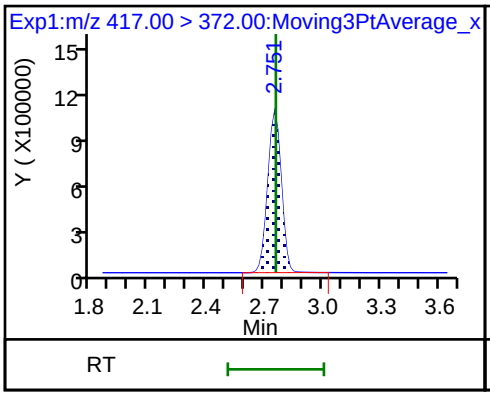
13 1H,1H,2H,2H-perfluorooctanesulfonic acid



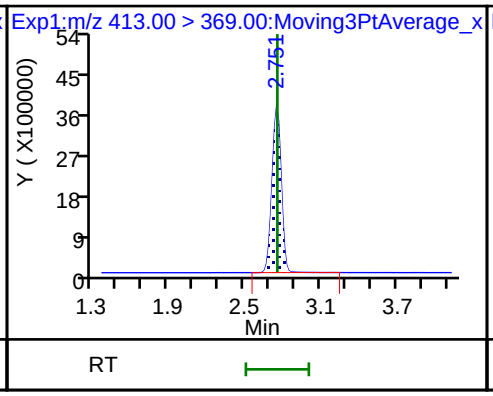
D 62 13C2-PFOA



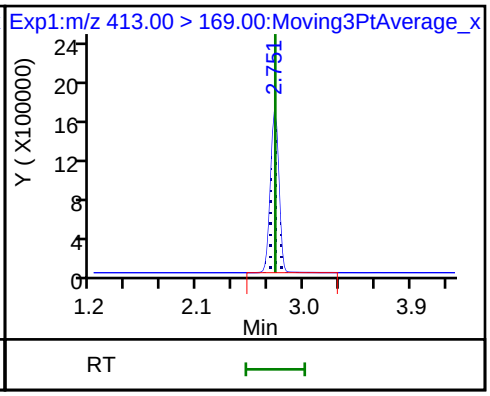
D 14 13C4 PFOA



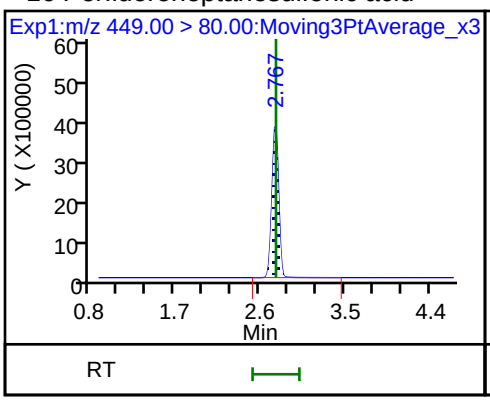
15 Perfluorooctanoic acid



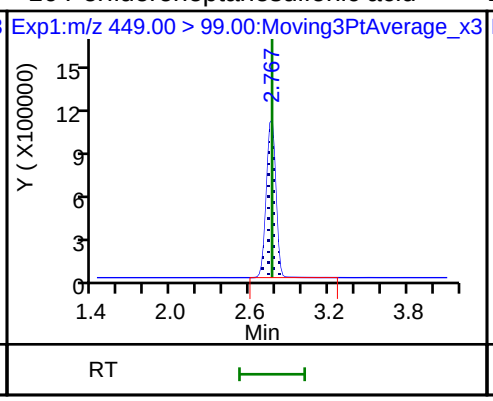
15 Perfluorooctanoic acid



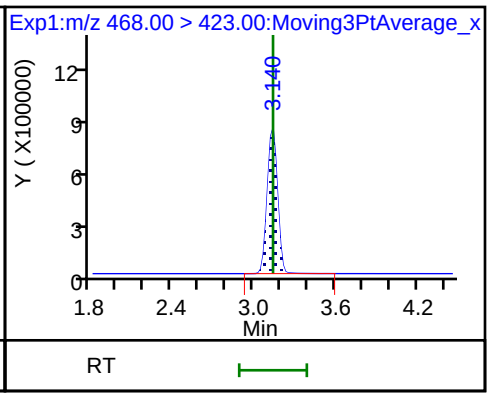
16 Perfluoroheptanesulfonic acid



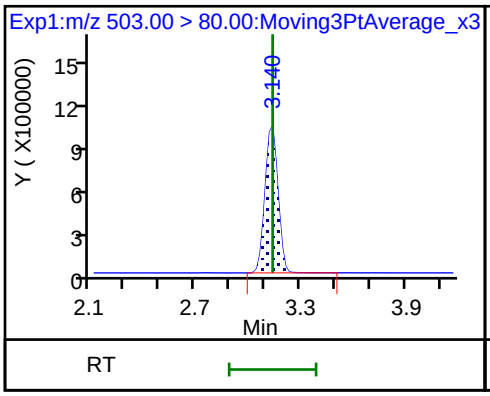
16 Perfluoroheptanesulfonic acid



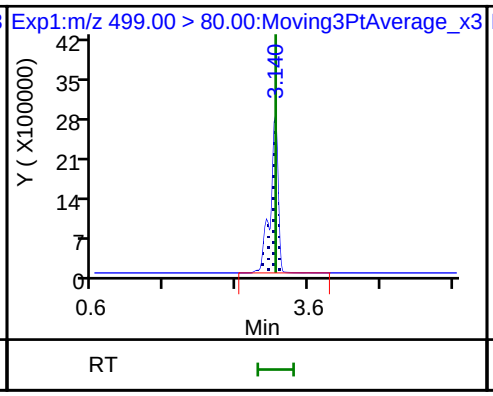
D 19 13C5 PFNA



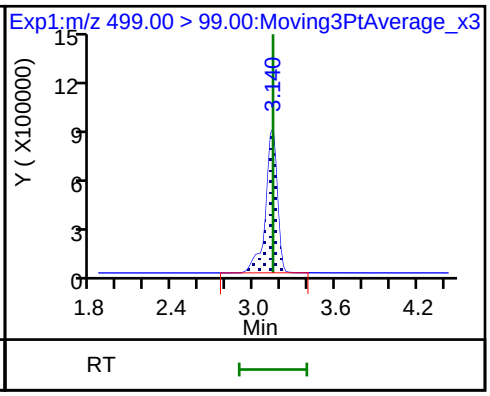
D 18 13C4 PFOS



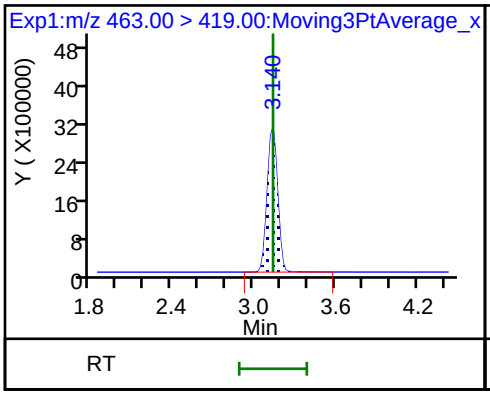
17 Perfluorooctane sulfonic acid



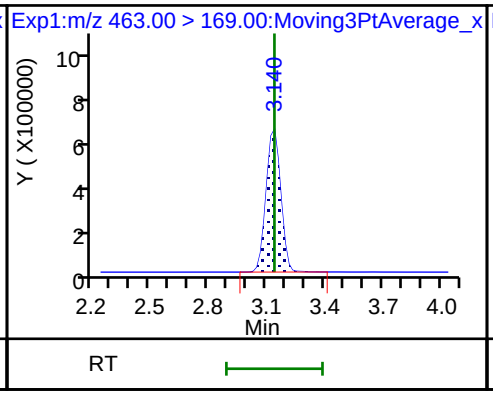
17 Perfluorooctane sulfonic acid



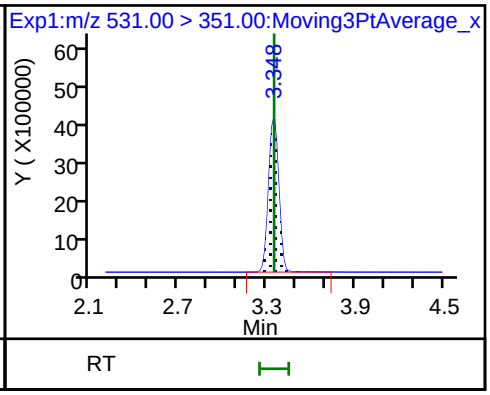
20 Perfluorononanoic acid



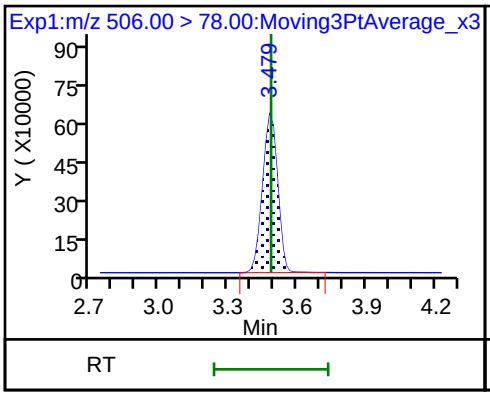
20 Perfluorononanoic acid



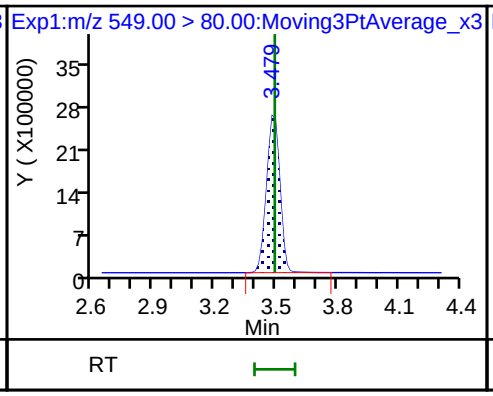
69 9-Chlorohexadecafluoro-3-oxanonane



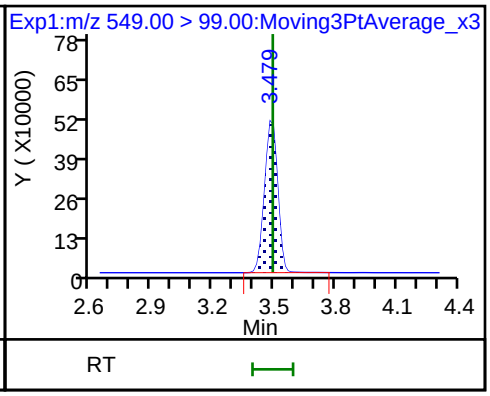
D 21 13C8 FOSA



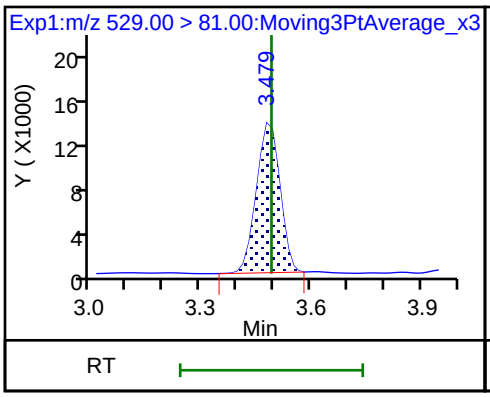
68 Perfluorononanesulfonic acid



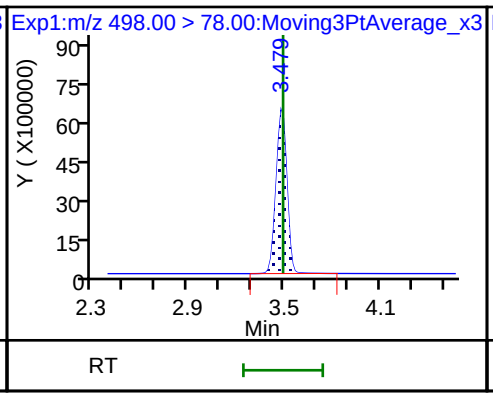
68 Perfluorononanesulfonic acid



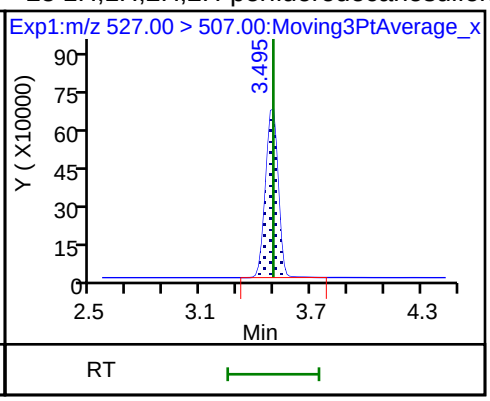
D 26 M2-8:2FTS



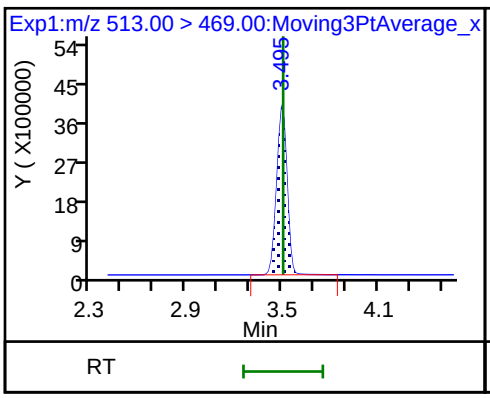
22 Perfluorooctane Sulfonamide



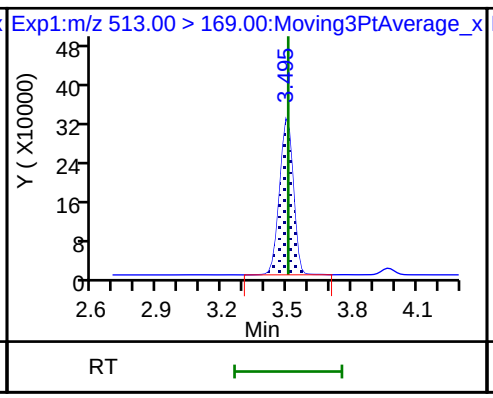
25 1H,1H,2H,2H-perfluorodecanesulfoni



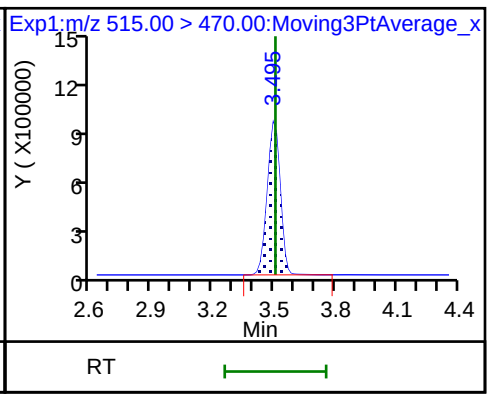
24 Perfluorodecanoic acid



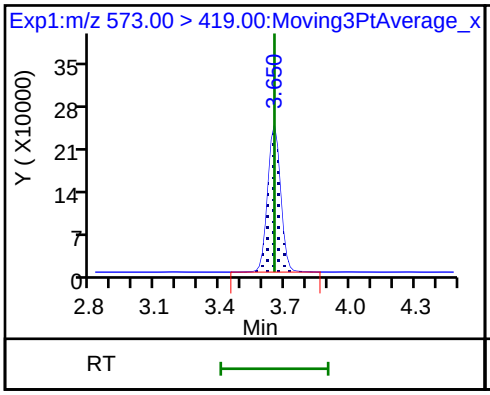
24 Perfluorodecanoic acid



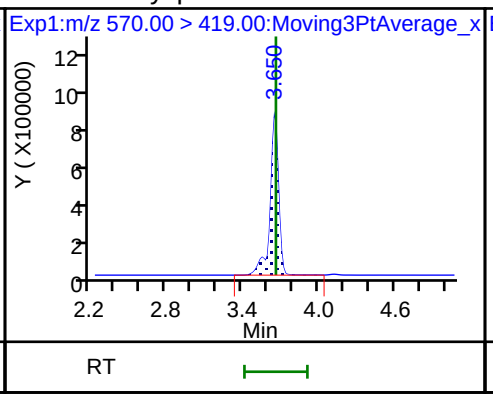
D 23 13C2 PFDA



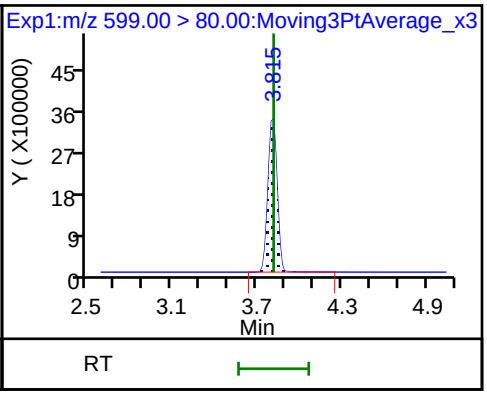
D 27 d3-NMeFOSAA



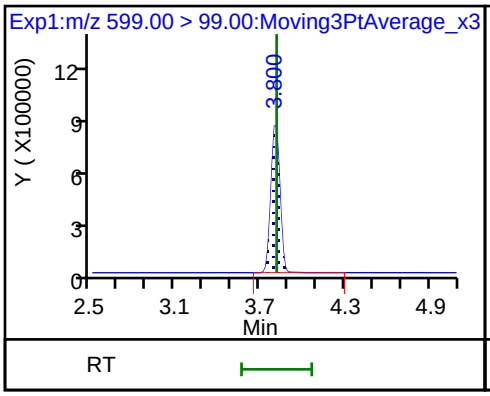
28 N-methyl perfluorooctane sulfonami



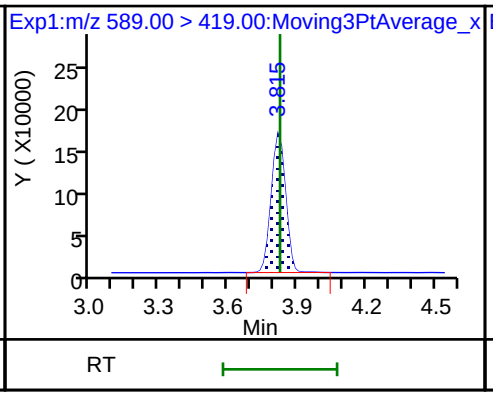
29 Perfluorodecane Sulfonic acid



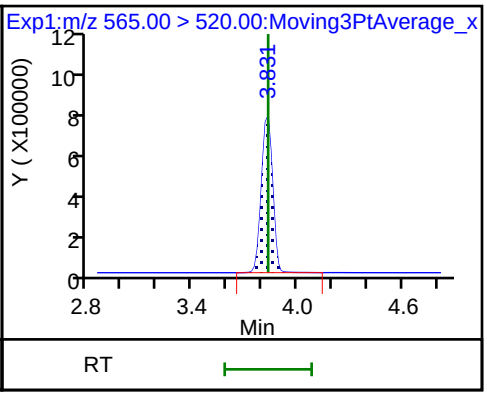
29 Perfluorodecane Sulfonic acid



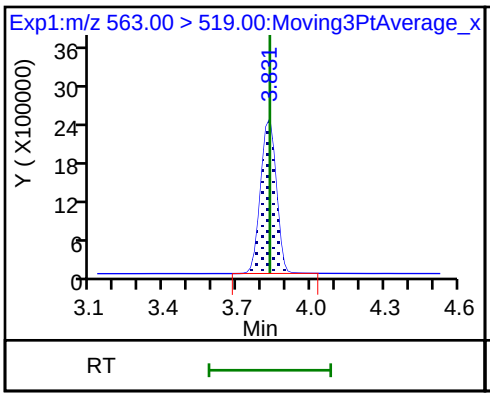
D 32 d5-NEtFOSAA



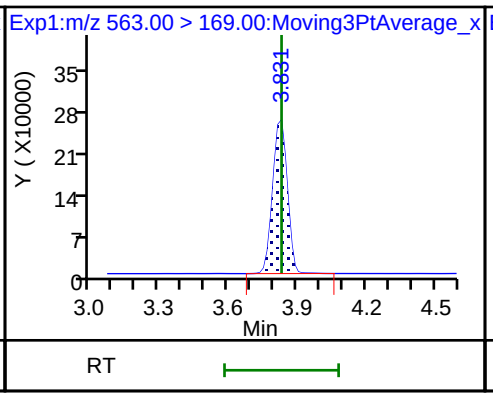
D 30 13C2 PFUnA



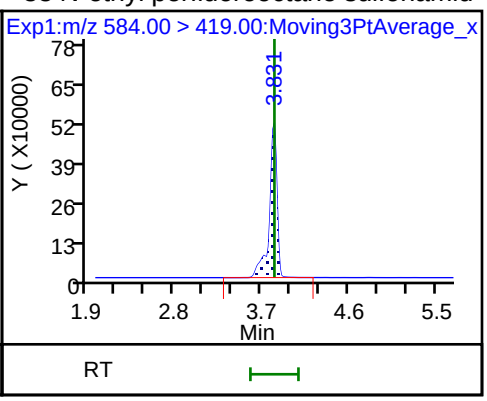
31 Perfluoroundecanoic acid



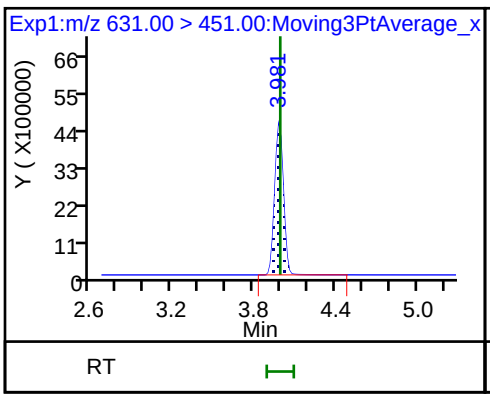
31 Perfluoroundecanoic acid



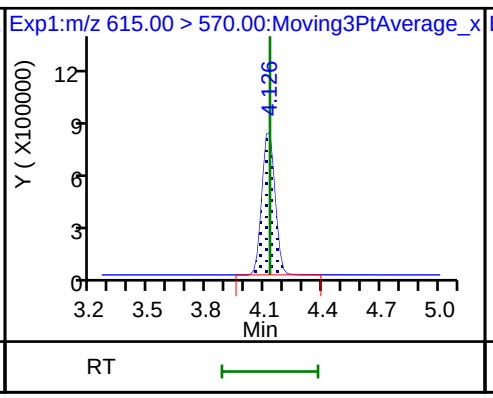
33 N-ethyl perfluorooctane sulfonamid



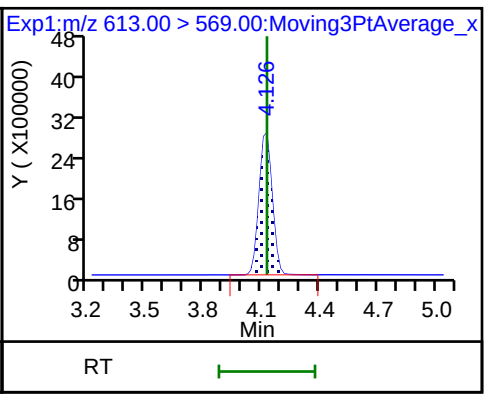
66 11-Chloroeicosafluoro-3-oxaundecan



D 36 13C2 PFDoA



37 Perfluorododecanoic acid



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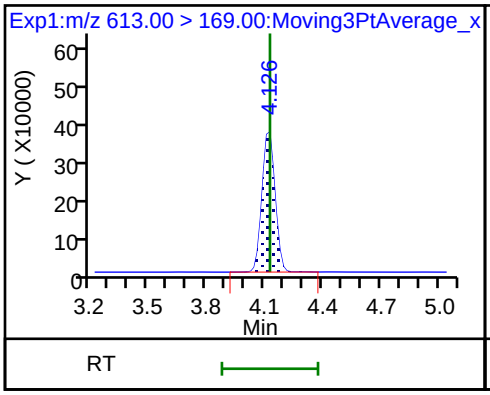
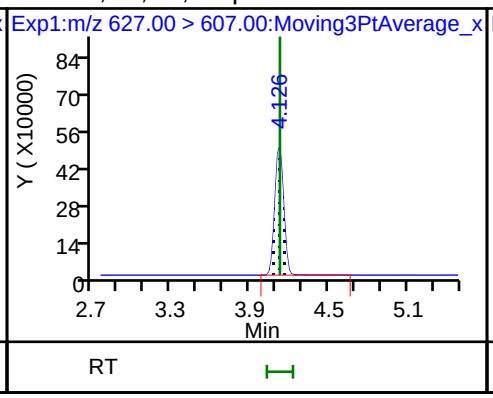
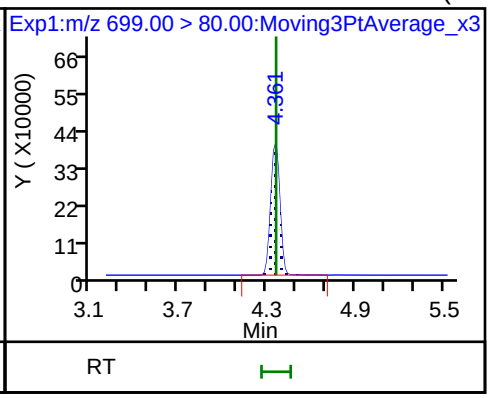


74 1H,1H,2H,2H-perfluorododecanesulfo



75 Perfluorododecanesulfonic acid (PF



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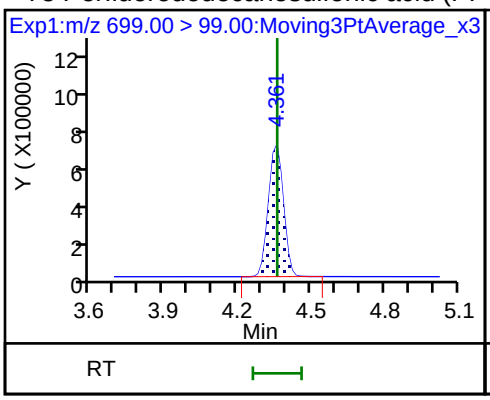
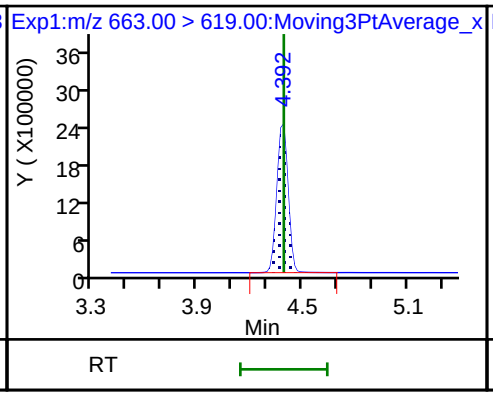


41 Perfluorotridecanoic acid



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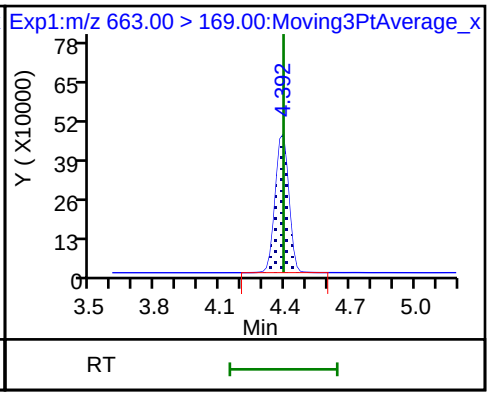
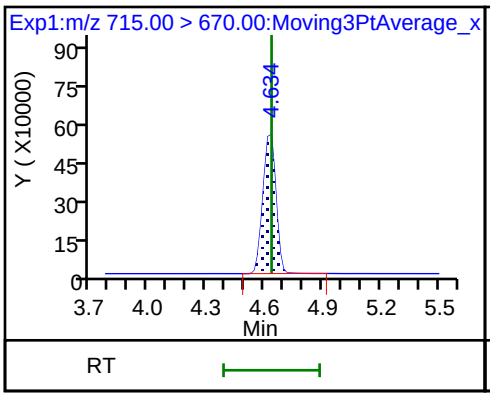
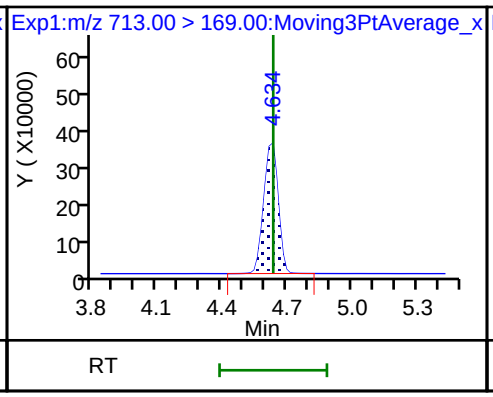


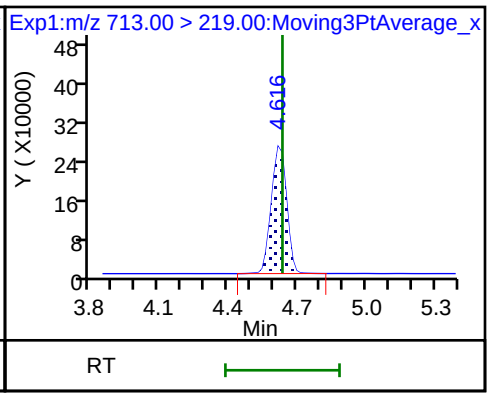
D 43 13C2-PFTeDA



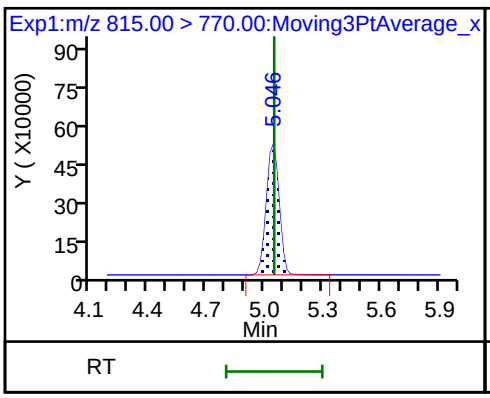
42 Perfluorotetradecanoic acid



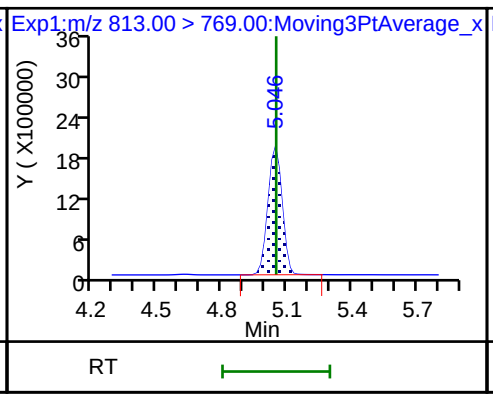
42 Perfluorotetradecanoic acid



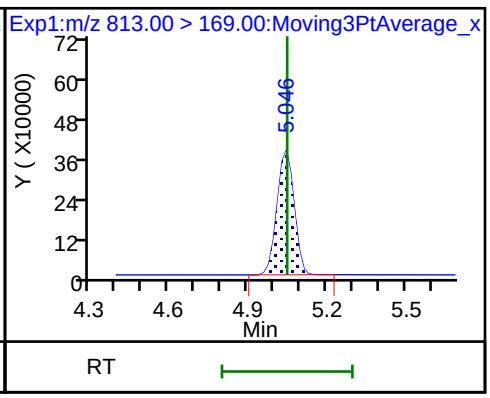
D 44 13C2-PFHxDA



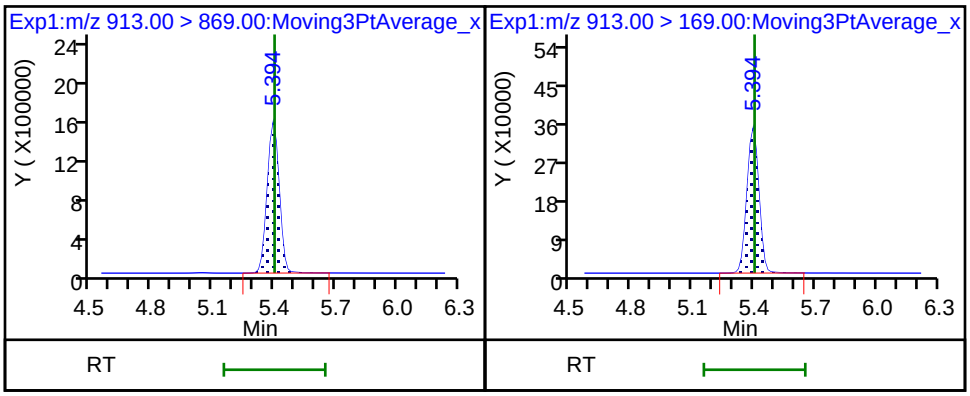
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: ICV 320-238192/10 Calibration Date: 08/06/2018 12:12

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.06LLICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9111		2.43	2.50	-3.0	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.131		2.49	2.50	-0.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	75.88		2.21	2.21	-0.1	50.0
4:2 FTS	AveID	16.57	16.30		2.30	2.34	-1.6	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	0.9745		2.39	2.50	-4.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	67.78		2.31	2.35	-1.7	50.0
HFPO-DA (GenX)	AveID	2.420	2.301		2.38	2.50	-4.9	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.095		2.58	2.50	3.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.006		2.12	2.28	-7.2	40.0
6:2 FTS	AveID	1.573	1.480		2.23	2.38	-5.9	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.105		2.44	2.50	-2.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.268		2.43	2.38	2.3	50.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.063		2.52	2.50	0.9	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.062		2.29	2.31	-1.1	40.0
F-53B Major	AveID	1.742	1.892		2.53	2.33	8.6	50.0
8:2 FTS	AveID	1.299	1.302		2.41	2.40	0.2	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.7949		2.54	2.40	5.7	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	0.9537		2.38	2.50	-4.9	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	1.033		2.65	2.50	6.1	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	1.046		2.71	2.50	8.5	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6548		2.50	2.41	3.6	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.9360		2.62	2.50	5.0	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	1.111		2.47	2.50	-1.1	40.0
F-53B Minor	AveID	2.674	2.930		2.58	2.36	9.6	50.0
10:2 FTS	AveID	0.9008	0.9660		2.58	2.41	7.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.112		2.50	2.50	-0.1	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2846		2.48	2.42	2.5	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.081		2.51	2.50	0.6	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2415		2.49	2.50	-0.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9410		2.68	2.50	7.1	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: ICV 320-238192/10 Calibration Date: 08/06/2018 12:12

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.06LLICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.9891		2.69	2.50	7.5	50.0
13C4 PFBA	Ave	1.385	1.395		2.52	2.50	0.7	50.0
13C5 PFPeA	Ave	0.9537	0.9739		2.55	2.50	2.1	50.0
13C3-PFBS	Ave	0.0221	0.0228		2.41	2.33	3.5	50.0
M2-4:2FTS	Ave	0.1572	0.1582		2.35	2.34	0.6	50.0
13C2 PFHxA	Ave	1.082	1.136		2.62	2.50	5.0	50.0
13C3 HFPO-DA	Ave	0.0842	0.0848		2.52	2.50	0.8	50.0
13C4-PFHpA	Ave	1.065	1.049		2.46	2.50	-1.5	50.0
18O2 PFHxS	Ave	1.366	1.389		2.41	2.37	1.7	50.0
M2-6:2FTS	Ave	0.2242	0.2398		2.54	2.38	7.0	40.0
13C4 PFOA	Ave	0.9773	1.001		2.56	2.50	2.4	50.0
13C8 PFOA	Ave	1.927	1.974		2.51	2.45	2.4	50.0
13C5 PFNA	Ave	0.8770	0.8835		2.52	2.50	0.7	50.0
13C8 PFOS	Ave	0.4359	0.4509		2.47	2.39	3.4	50.0
13C4 PFOS	Ave	0.8973	0.9046		2.41	2.39	0.8	50.0
M2-8:2FTS	Ave	0.2707	0.2722		2.41	2.40	0.5	40.0
13C2 PFDA	Ave	0.7695	0.8085		2.63	2.50	5.1	50.0
13C8 FOSA	Ave	1.188	1.221		2.57	2.50	2.7	50.0
d3-NMeFOSAA	Ave	0.3935	0.4029		2.56	2.50	2.4	50.0
d5-NEtFOSAA	Ave	0.4077	0.4067		2.49	2.50	-0.2	50.0
13C2 PFUnA	Ave	0.6189	0.6228		2.52	2.50	0.6	50.0
13C2 PFDoA	Ave	0.6541	0.6517		2.49	2.50	-0.4	50.0
13C2-PFTeDA	Ave	0.8335	0.8309		2.49	2.50	-0.3	50.0
13C2-PFHxDA	Ave	1.653	1.653		2.50	2.50	-0.0	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_010.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 06-Aug-2018 12:12:35 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist:

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:35 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:44:08

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.395	-0.004	0.542	5296521	2.52		101	7091	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.397	-0.006	1.000	4825878	2.43			504	
D 3 13C5-PFPeA										
267.90 > 223.00	1.639	1.639	0.0	0.639	3698626	2.55		102	7119	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.639	1.643	-0.004	1.000	4183399	2.49			284	
D 47 13C3-PFBS										
301.90 > 83.00	1.670	1.675	-0.005	0.651	80665	2.41		104	325	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.670	1.676	-0.006	1.000	5824451	2.21			1937	
298.90 > 99.00	1.670	1.676	-0.006	1.000	2407614		2.42(1.25-3.74)		1183	
D 60 M2-4:2FTS										
329.00 > 81.00	1.875	1.875	0.0	0.731	561057	2.35		101	886	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.875	1.875	0.0	1.123	1321953	2.30			6725	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.902	1.908	-0.006	1.000	4205198	2.39			977	
313.00 > 119.00	1.902	1.908	-0.006	1.000	400387		10.50(5.03-15.10)		846	
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.908	-0.006	0.741	4315219	2.62		105	15192	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.923	1.930	-0.007	1.151	5526564	2.31			5906	
349.00 > 99.00	1.923	1.930	-0.007	1.151	2095463		2.64(1.36-4.07)		2107	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.996	2.003	-0.007	0.778	322162	2.52		101	933	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.996	2.003	-0.007	1.000	741324	2.38			344	
D 9 13C4-PFHpA										
367.00 > 322.00	2.224	2.227	-0.003	0.867	3985248	2.46		98.5	13174	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.224	2.228	-0.004	1.000	4365036	2.58			796	
363.00 > 169.00	2.224	2.228	-0.004	1.000	1653058		2.64(1.13-3.40)		2332	
D 11 18O2 PFHxS										
403.00 > 84.00	2.233	2.239	-0.006	0.870	4991823	2.41		102	6129	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.233	2.239	-0.006	1.000	4839695	2.12			4067	
399.00 > 99.00	2.233	2.239	-0.006	1.000	1675306		2.89(1.50-4.49)		1317	
65 ADONA										
377.00 > 251.00	2.266	2.271	-0.005	0.773	11858483	2.66			9196	
377.00 > 85.00	2.266	2.271	-0.005	0.773	7230959		1.64(0.84-2.53)		6790	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.541	2.548	-0.007	1.000	1280328	2.23			1590	
D 12 M2-6:2FTS										
429.00 > 81.00	2.541	2.549	-0.008	0.990	865191	2.54		107	2048	
D 73 13C8 PFOA										
421.00 > 376.00	2.565	2.571	-0.006	1.000	7338024	2.51		102	10284	
D 14 13C4 PFOA										
417.00 > 372.00	2.565	2.573	-0.008	1.000	3800480	2.56		102	6853	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.565	2.574	-0.009	1.000	4200537	2.44			410	
413.00 > 169.00	2.565	2.574	-0.009	1.000	2114411		1.99(0.84-2.52)		2903	
* 62 13C2-PFOA										
415.00 > 370.00	2.565	2.575	-0.010		3797956	2.50			5989	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.572	2.583	-0.011	0.877	4137002	2.43			2987	
449.00 > 99.00	2.572	2.583	-0.011	0.877	1077824		3.84(1.94-5.82)		1432	
D 72 13C8 PFOS										
507.00 > 99.00	2.927	2.938	-0.011	1.141	1637179	2.47		103	4240	
20 Perfluorononanoic acid										
463.00 > 419.00	2.932	2.939	-0.007	1.002	3565093	2.52			1099	
463.00 > 169.00	2.927	2.939	-0.012	1.000	836654		4.26(1.90-5.69)		3309	
D 19 13C5 PFNA										
468.00 > 423.00	2.927	2.939	-0.012	1.141	3355305	2.52		101	5903	
D 18 13C4 PFOS										
503.00 > 80.00	2.932	2.939	-0.007	1.143	3284321	2.41		101	4465	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.932	2.940	-0.008	1.000	3376348	2.29			2781	
499.00 > 99.00	2.932	2.940	-0.008	1.000	758026		4.45(2.31-6.93)		1161	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.138	3.150	-0.012	1.070	6059178	2.53			6074	
D 26 M2-8:2FTS										
529.00 > 81.00	3.271	3.284	-0.013	1.275	990254	2.41		101	3137	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.277	3.285	-0.007	1.118	2621562	2.54			5053	
549.00 > 99.00	3.277	3.285	-0.007	1.118	925714		2.83(1.33-3.97)		2112	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.271	3.286	-0.015	1.000	1292056	2.41			2763	
D 23 13C2 PFDA										
515.00 > 470.00	3.283	3.294	-0.011	1.280	3070618	2.63		105	4701	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.283	3.296	-0.013	1.000	2928556	2.38			1743	
513.00 > 169.00	3.283	3.296	-0.013	1.000	492806		5.94(2.36-7.09)		1454	
D 21 13C8 FOSA										
506.00 > 78.00	3.305	3.317	-0.012	1.288	4636545	2.57		103	4566	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.312	3.319	-0.007	1.002	4790545	2.65			4274	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.438	3.448	-0.010	1.340	1530216	2.56		102	2513	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.445	3.453	-0.008	1.002	1600813	2.71			1423	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.595	3.608	-0.013	1.226	2170741	2.50			5861	
599.00 > 99.00	3.595	3.608	-0.013	1.226	719544		3.02(1.39-4.16)		2645	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.604	3.616	-0.012	1.405	1544621	2.49		99.8	1098	
D 30 13C2 PFUnA										
565.00 > 520.00	3.613	3.620	-0.007	1.408	2365503	2.52		101	5330	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.613	3.622	-0.009	1.000	2627473	2.47			1492	
563.00 > 169.00	3.613	3.622	-0.009	1.000	445341		5.90(2.12-6.36)		1665	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.613	3.623	-0.010	1.002	1445786	2.62			2945	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.766	3.781	-0.015	1.284	9482077	2.58			7397	
D 36 13C2 PFDoA										
615.00 > 570.00	3.899	3.913	-0.014	1.520	2474996	2.49		99.6	5677	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.899	3.913	-0.014	1.192	962597	2.58			4544	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.899	3.913	-0.014	1.000	2751158	2.50			1368	
613.00 > 169.00	3.899	3.913	-0.014	1.000	638644		4.31(2.13-6.40)		3219	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.139	4.148	-0.009	1.411	946435	2.48			6010	
699.00 > 99.00	4.139	4.148	-0.009	1.411	1287773		0.73(0.00-0.00)		3741	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.158	4.173	-0.015	1.066	2676685	2.51			1031	
663.00 > 169.00	4.158	4.173	-0.015	1.066	835828		3.20(1.25-3.76)		3211	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.390	4.399	-0.009	1.711	3155599	2.49		99.7	7430	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.390	4.400	-0.010	1.000	762188	2.49			3740	
713.00 > 219.00	4.390	4.400	-0.010	1.000	546353		1.40(0.71-2.13)		2085	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.789	4.799	-0.010	1.867	6279185	2.50		100.0	7044	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.796	4.801	-0.005	1.001	5908591	2.68			1969	
813.00 > 169.00	4.789	4.801	-0.012	1.000	999181		5.91(2.86-8.58)		4590	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.126	5.136	-0.010	1.070	6210892	2.69			1785	
913.00 > 169.00	5.126	5.136	-0.010	1.070	740263		8.39(3.83-11.48)		2920	

Reagents:

LCPFCIC_FULL_00013 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_010.d

Injection Date: 06-Aug-2018 12:12:35 Instrument ID: A8_N

Lims ID: ICV Full

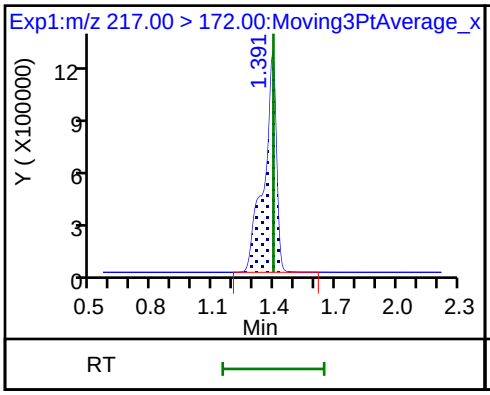
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 17 Worklist Smp#: 10

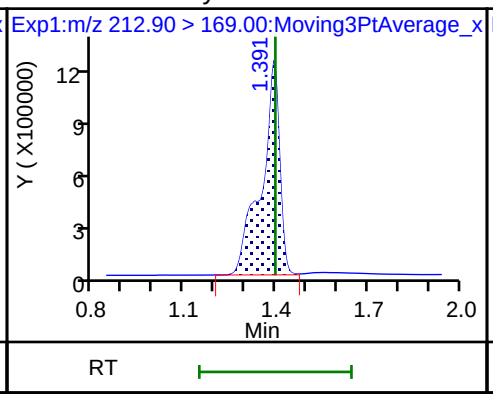
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

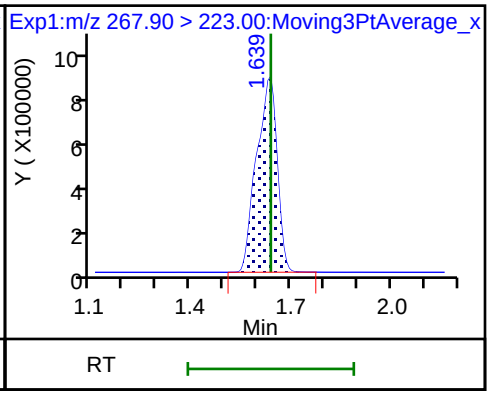
D 1 13C4 PFBA



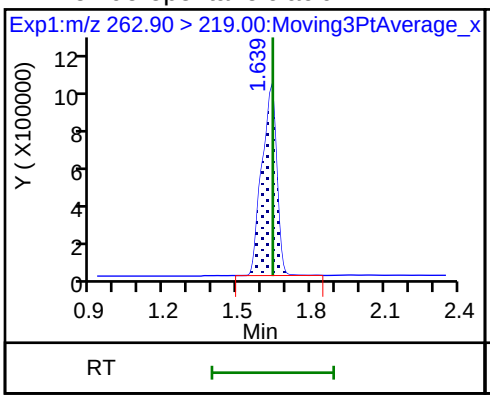
2 Perfluorobutyric acid



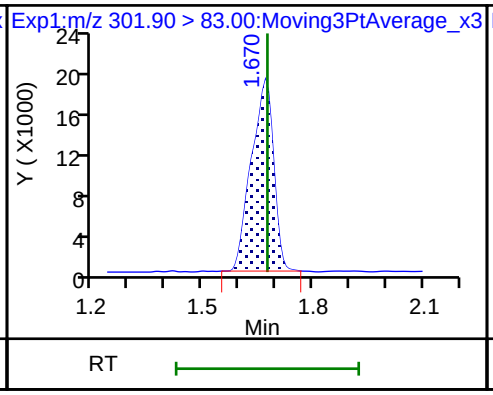
D 3 13C5-PFPeA



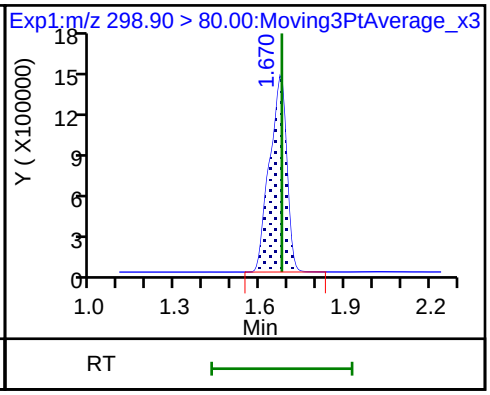
4 Perfluoropentanoic acid



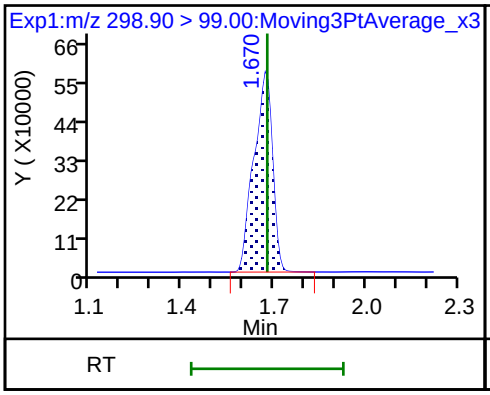
D 47 13C3-PFBS



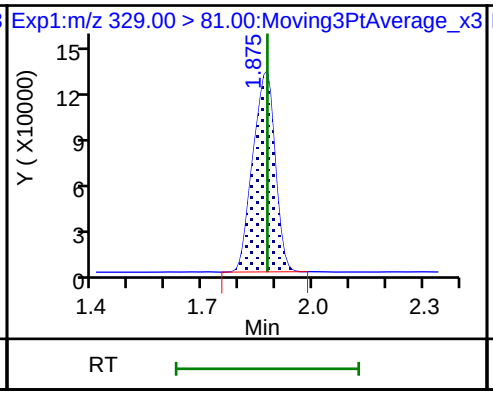
5 Perfluorobutanesulfonic acid



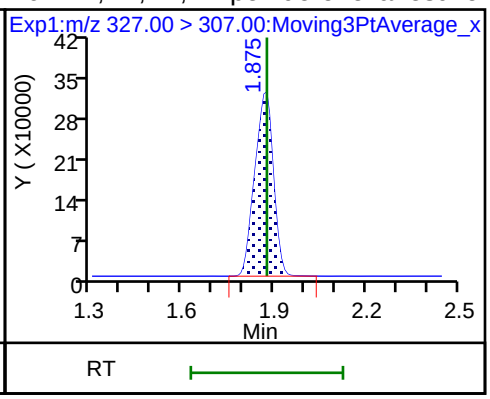
5 Perfluorobutanesulfonic acid



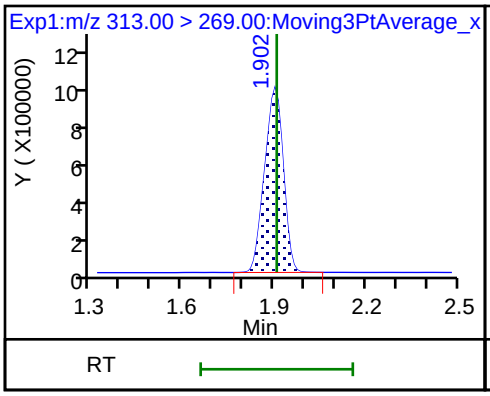
D 60 M2-4:2FTS



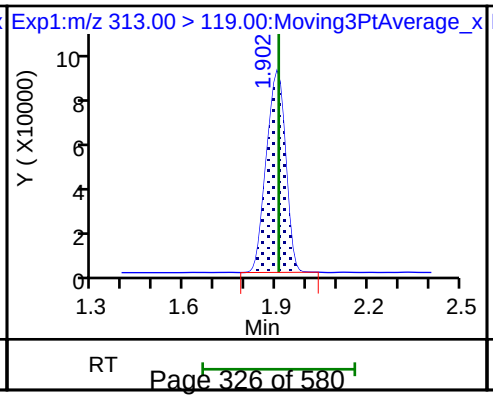
61 1H,1H,2H,2H-perfluorohexanesulfoni



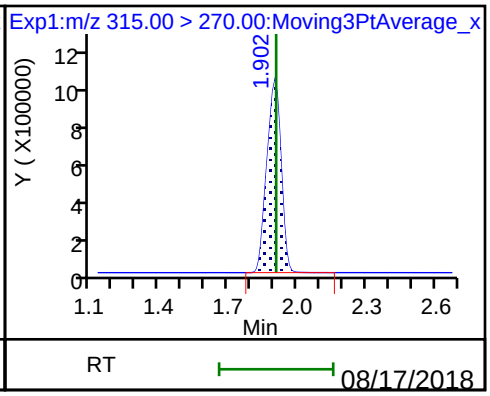
6 Perfluorohexanoic acid



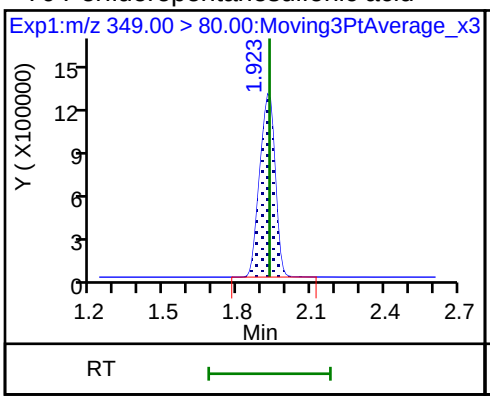
6 Perfluorohexanoic acid



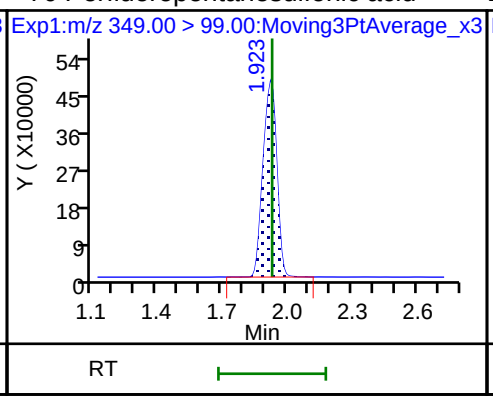
D 7 13C2 PFHxA



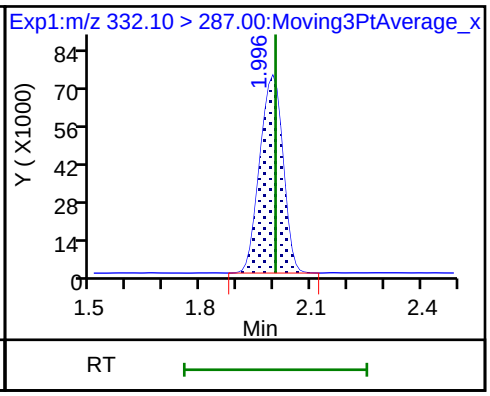
70 Perfluoropentanesulfonic acid



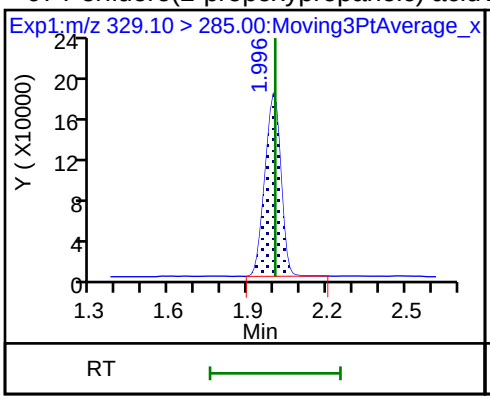
70 Perfluoropentanesulfonic acid



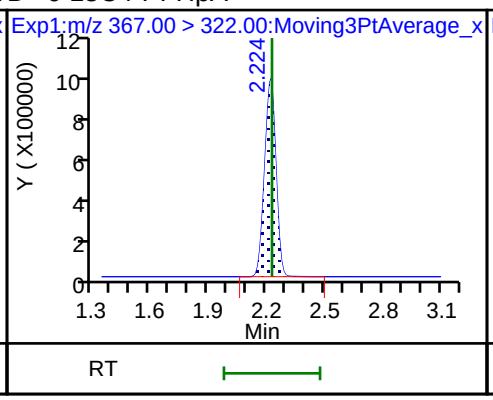
D 64 13C3 HFPO-DA



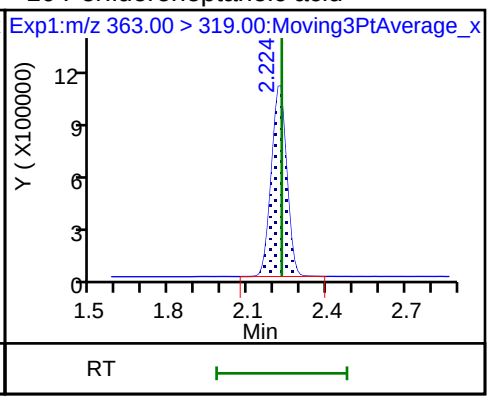
67 Perfluoro(2-propoxypropanoic) acid



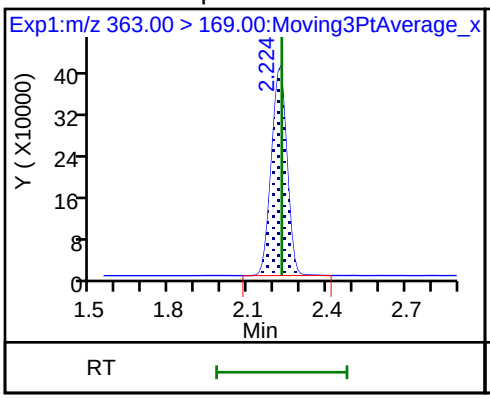
D 9 13C4-PFHpA



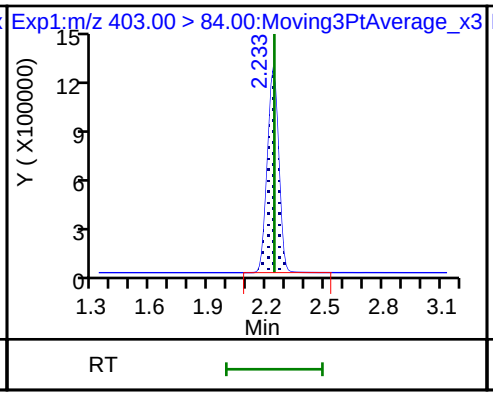
10 Perfluoroheptanoic acid



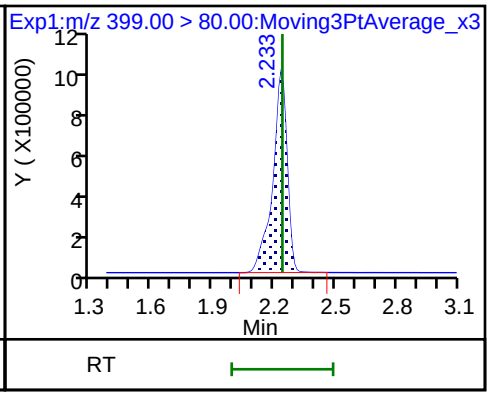
10 Perfluoroheptanoic acid



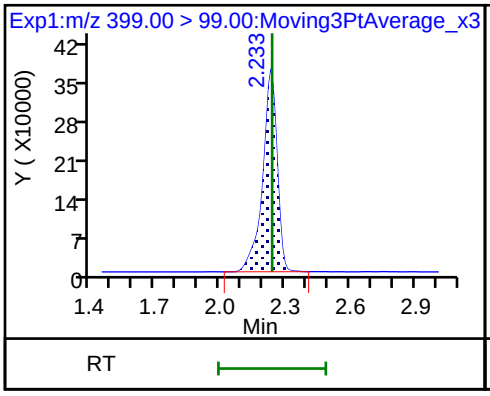
D 11 18O2 PFHxS



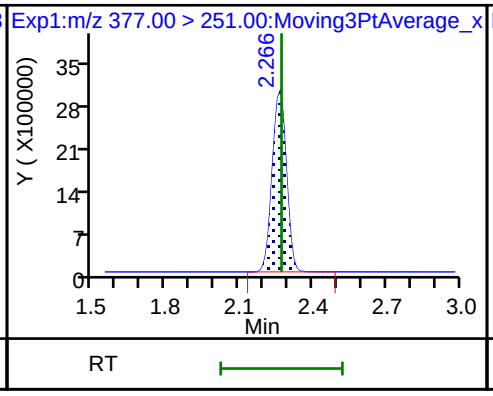
8 Perfluorohexanesulfonic acid



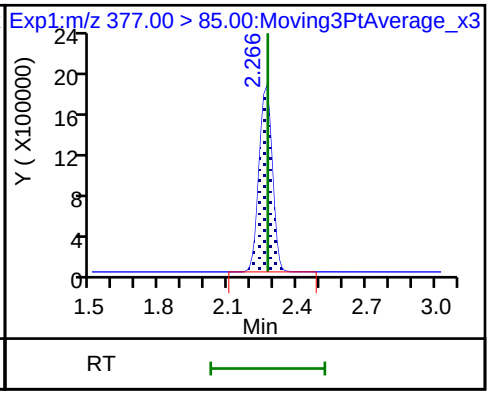
8 Perfluorohexanesulfonic acid



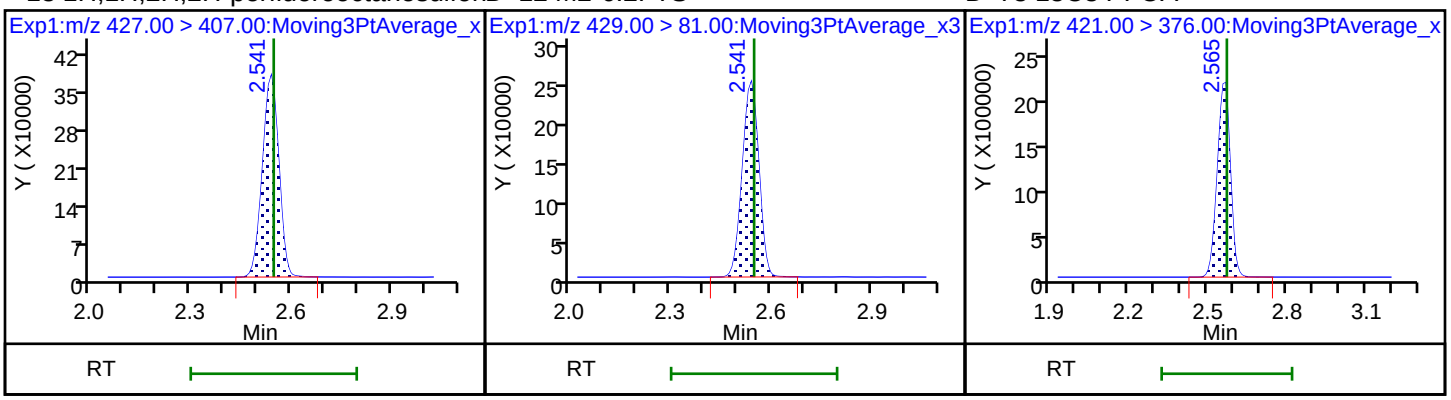
65 ADONA



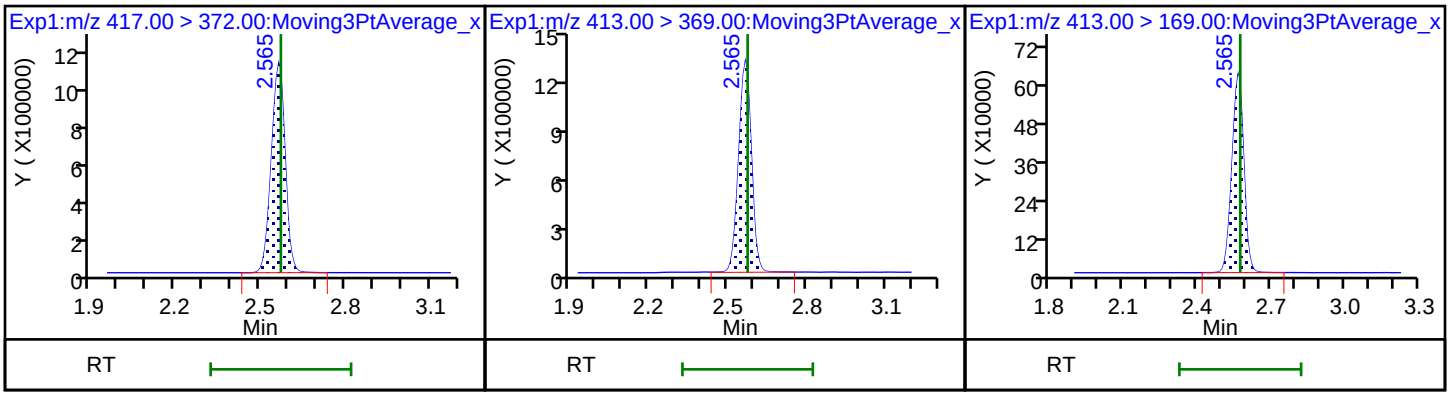
65 ADONA



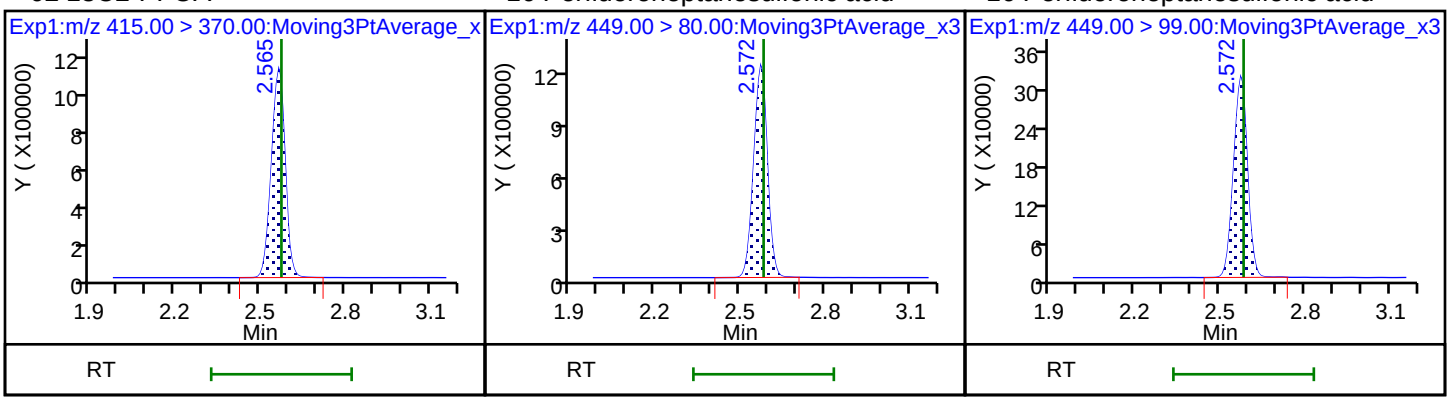
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



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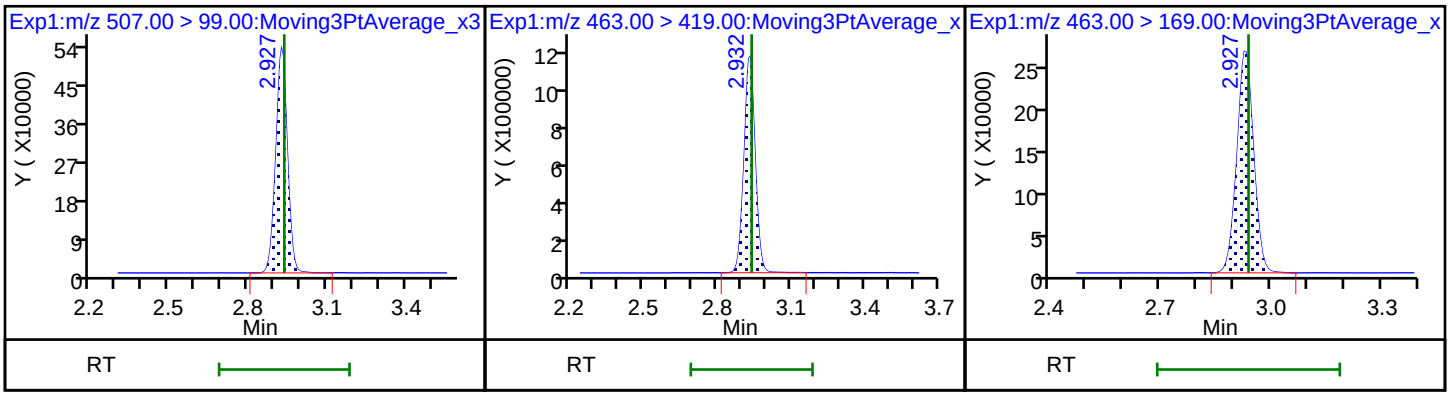

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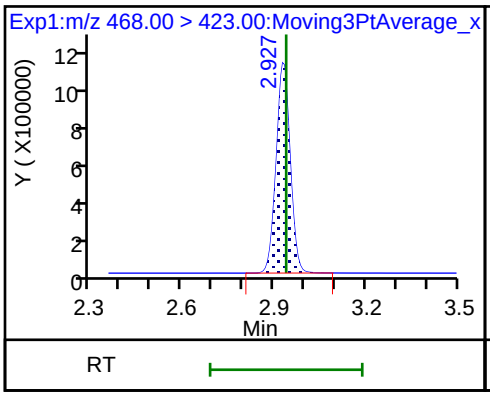

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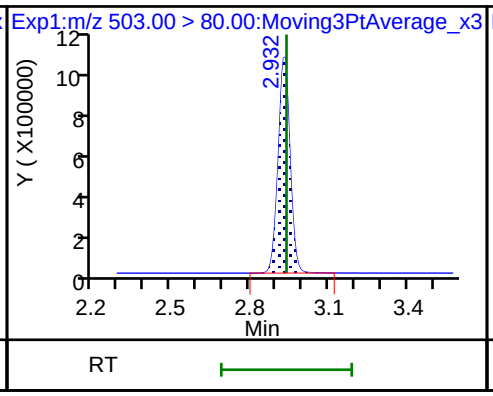
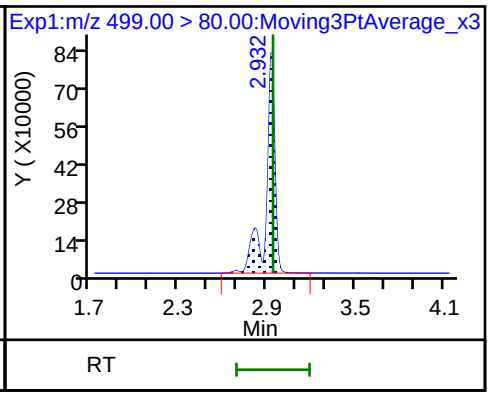


17 Perfluorooctane sulfonic acid



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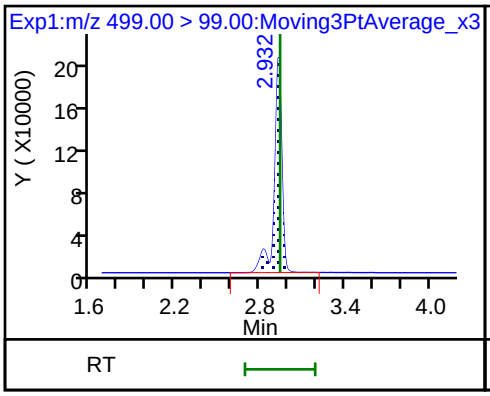
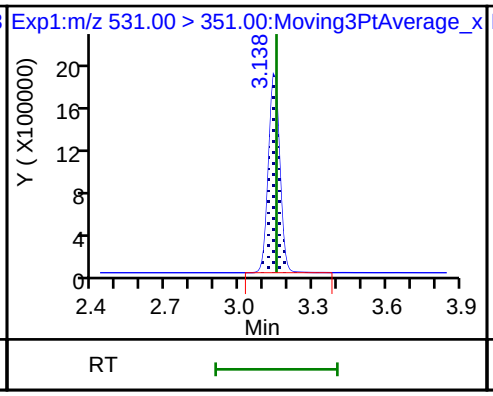
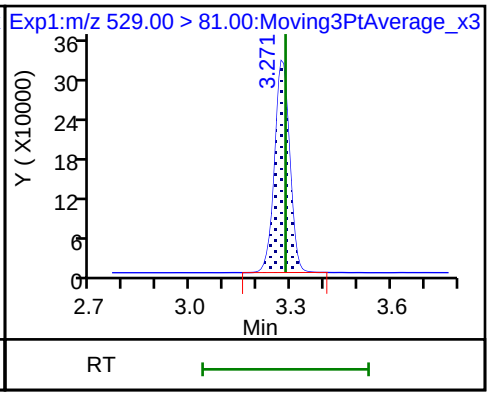


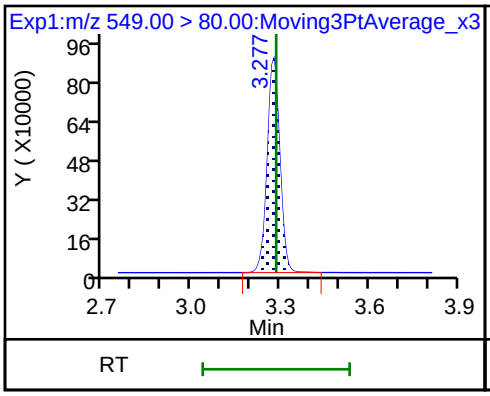
69 9-Chlorohexadecafluoro-3-oxanonane



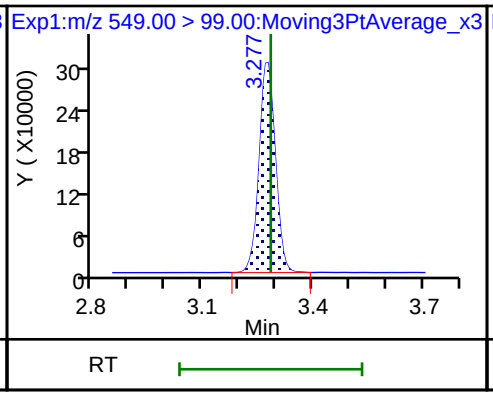
D 26 M2-8:2FTS



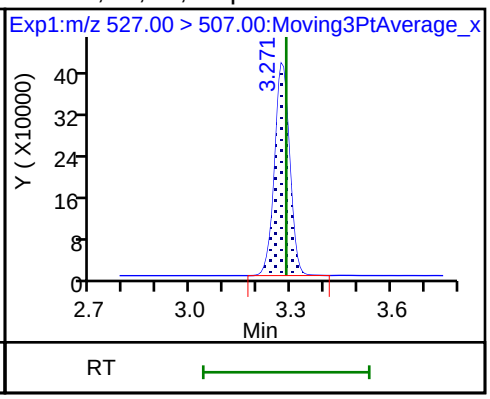
68 Perfluorononanesulfonic acid



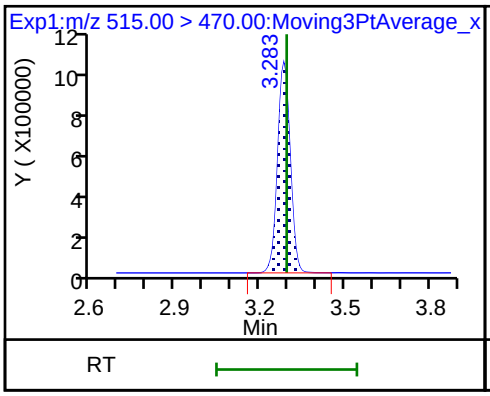
68 Perfluorononanesulfonic acid



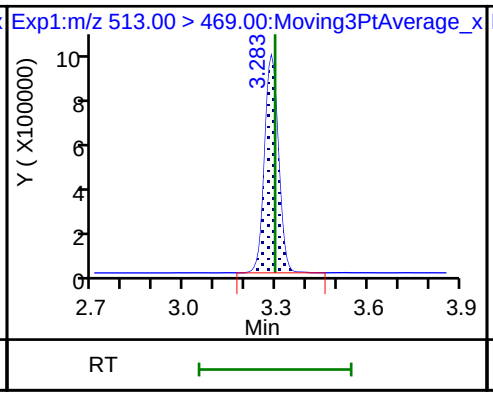
25 1H,1H,2H,2H-perfluorodecanesulfoni



D 23 13C2 PFDA



24 Perfluorodecanoic acid



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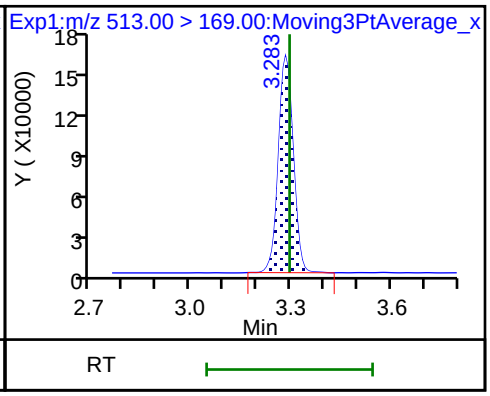
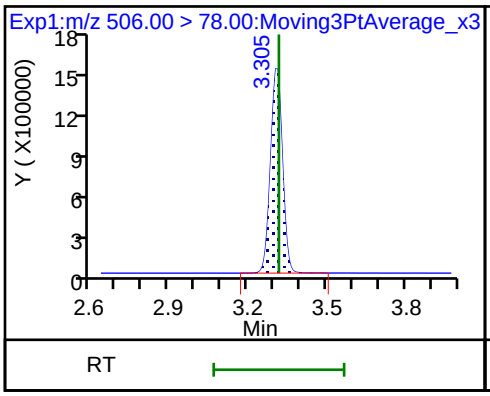
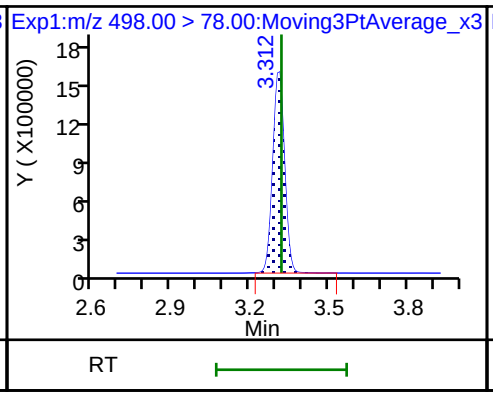


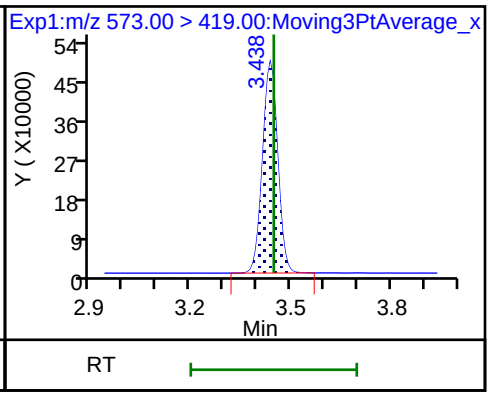
D 21 13C8 FOSA



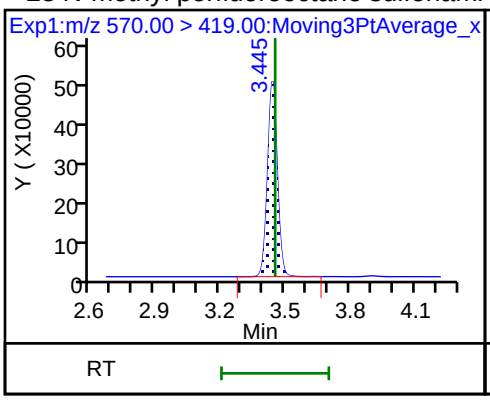
22 Perfluorooctane Sulfonamide



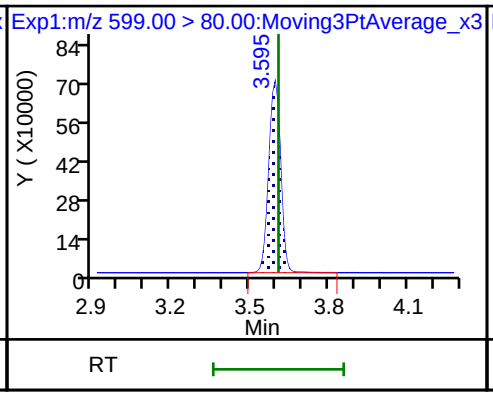
D 27 d3-NMeFOSAA



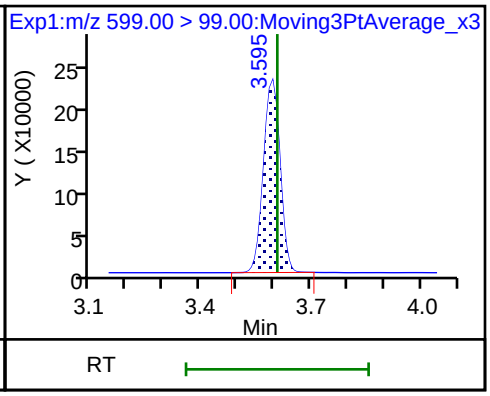
28 N-methyl perfluorooctane sulfonami



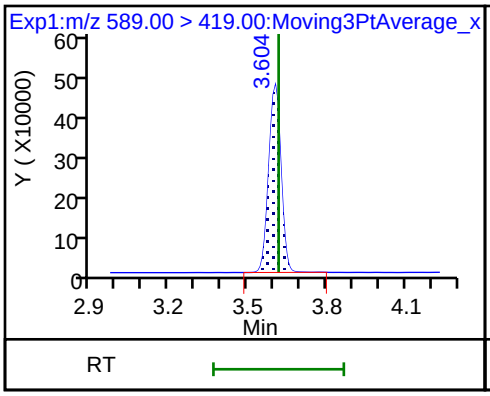
29 Perfluorodecane Sulfonic acid



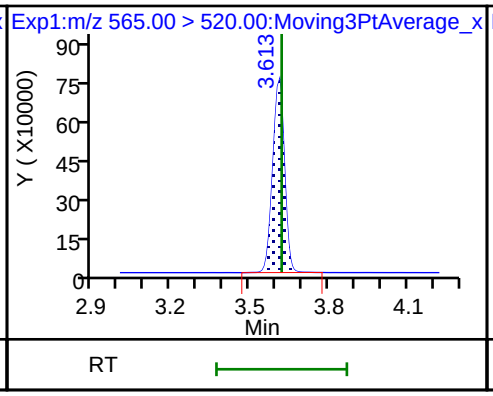
29 Perfluorodecane Sulfonic acid



D 32 d5-NEtFOSAA



D 30 13C2 PFUnA



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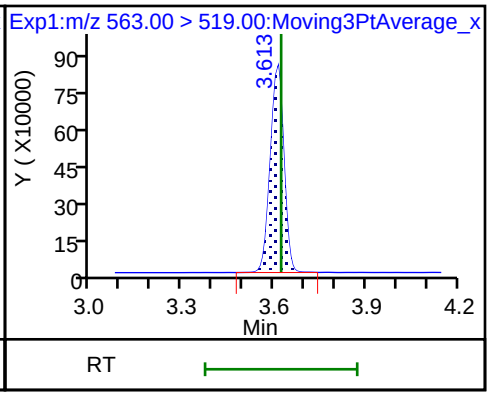

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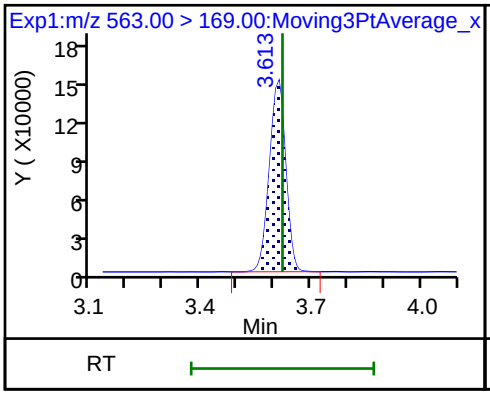
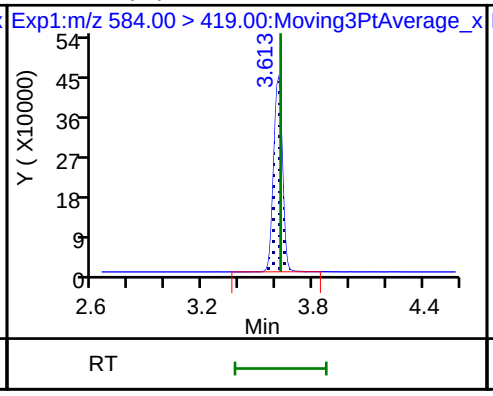
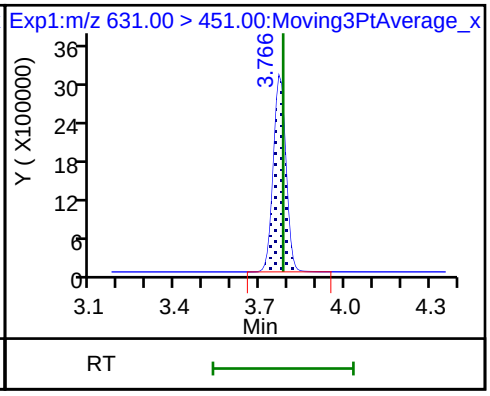


33 N-ethyl perfluorooctane sulfonamid



66 11-Chloroeicosafluoro-3-oxaundecan



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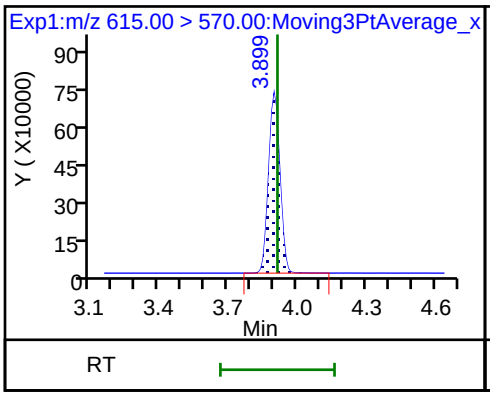
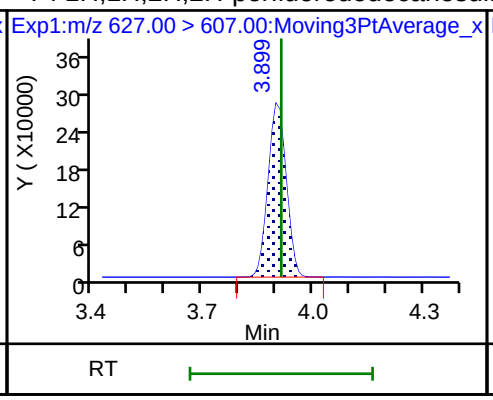


74 1H,1H,2H,2H-perfluorododecanesulfo



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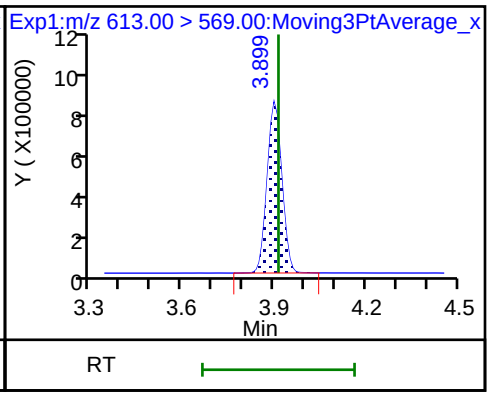
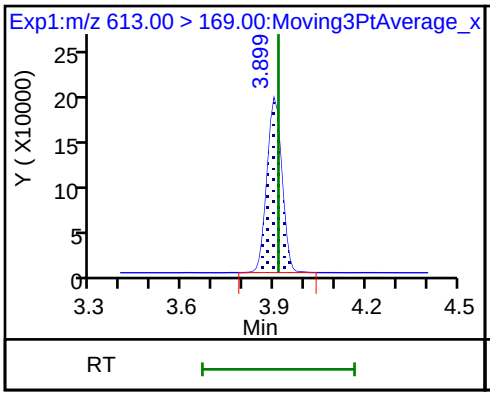
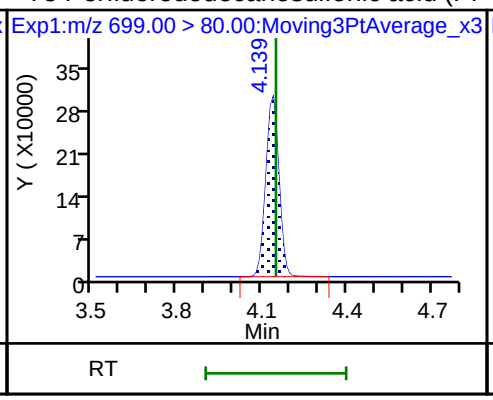


37 Perfluorododecanoic acid



75 Perfluorododecanesulfonic acid (PF



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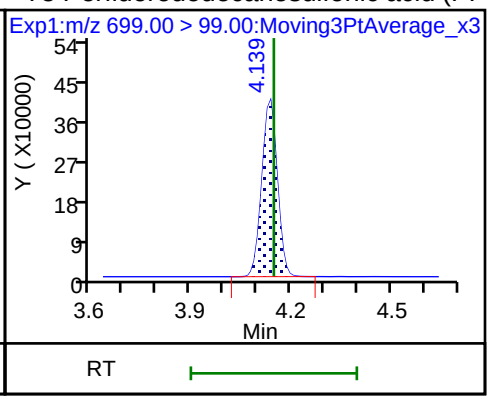

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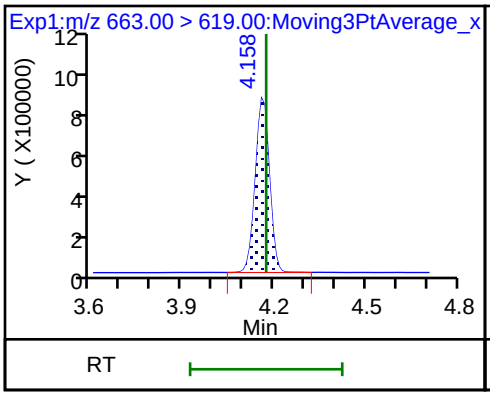

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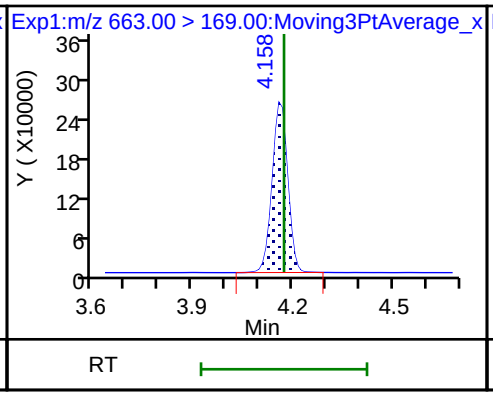

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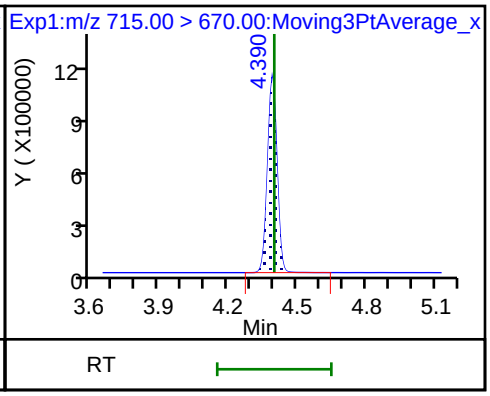

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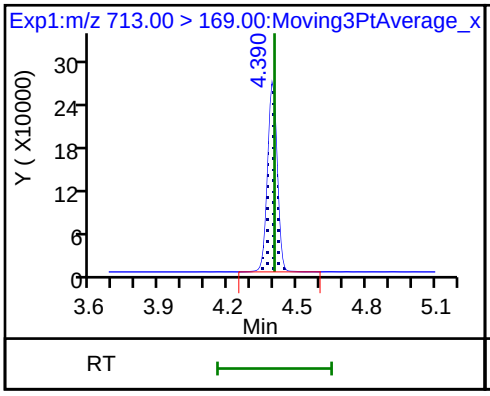

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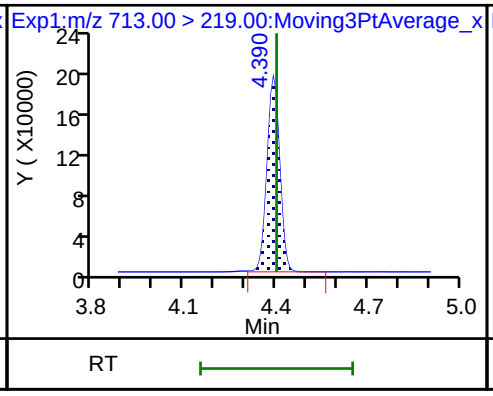

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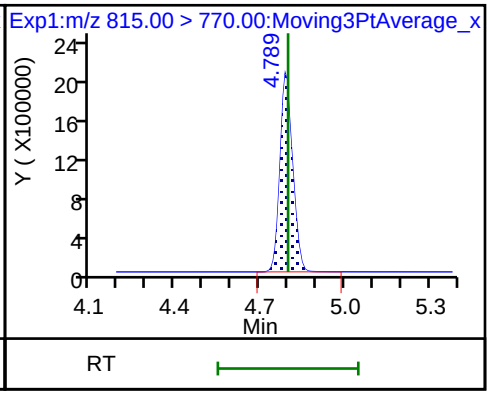

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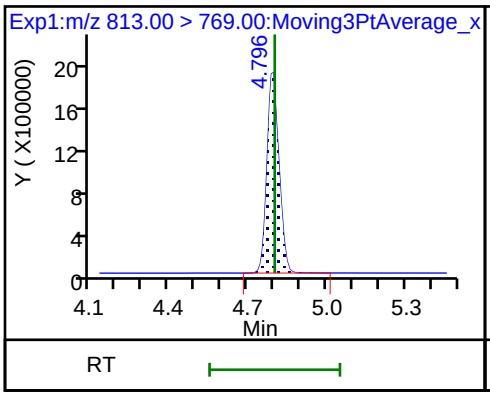

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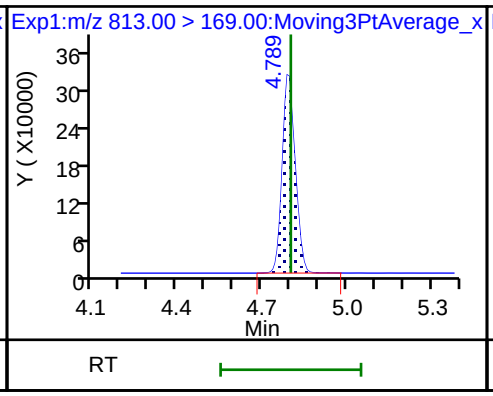
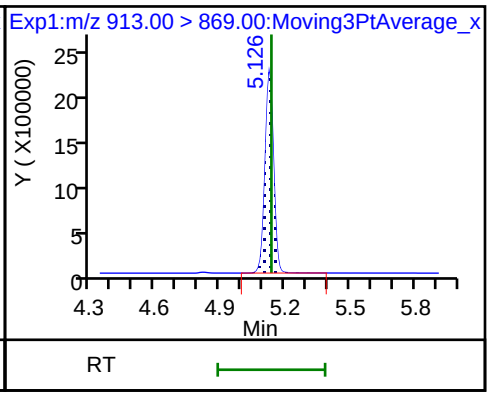
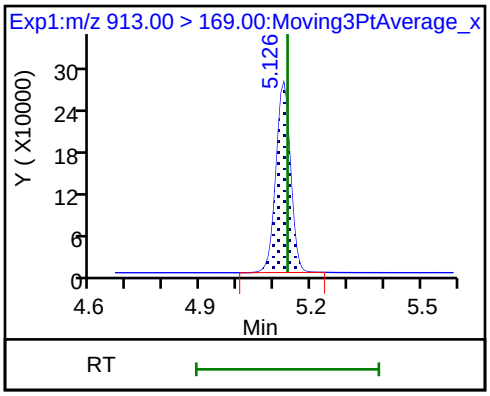


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCVL 320-239433/2 Calibration Date: 08/12/2018 11:33

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9276		0.0494	0.0500	-1.2	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.097		0.0482	0.0500	-3.6	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	77.18		0.0449	0.0442	1.6	50.0
4:2 FTS	AveID	16.57	16.90			0.0467	2.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	1.075		0.0526	0.0500	5.3	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	67.92		0.0462	0.0469	-1.5	50.0
HFPO-DA (GenX)	AveID	2.420	2.459		0.0508	0.0500	1.6	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.045		0.0492	0.0500	-1.6	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.206		0.0506	0.0455	11.3	50.0
6:2 FTS	AveID	1.573	1.575			0.0474	0.1	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.212		0.0537	0.0501	7.2	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.312		0.0504	0.0476	5.9	50.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.043		0.0495	0.0500	-1.0	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.106		0.0478	0.0464	3.0	50.0
F-53B Major	AveID	1.742	1.713		0.0458	0.0466	-1.6	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.9595		0.0493	0.0500	-1.5	50.0
8:2 FTS	AveID	1.299	1.189			0.0479	-8.5	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.7323		0.0467	0.0480	-2.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	1.061		0.0529	0.0500	5.8	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	0.9766			0.0500	1.2	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6449		0.0492	0.0482	2.0	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8849		0.0496	0.0500	-0.8	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	0.9790		0.0436	0.0500	-12.9	50.0
F-53B Minor	AveID	2.674	2.877		0.0507	0.0471	7.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.047		0.0470	0.0500	-5.9	50.0
10:2 FTS	AveID	0.9008	1.120		0.0599	0.0482	24.3	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2923		0.0509	0.0484	5.2	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.120		0.0521	0.0500	4.1	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2816		0.0582	0.0500	16.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.324		0.0516	0.0500	3.2	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCVL 320-239433/2 Calibration Date: 08/12/2018 11:33

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.9446		0.0513	0.0500	2.7	50.0
13C4 PFBA	Ave	1.385	1.464		2.64	2.50	5.7	50.0
13C5 PFPeA	Ave	0.9537	0.9453		2.48	2.50	-0.9	50.0
13C3-PFBS	Ave	0.0221	0.0216		2.28	2.33	-2.1	50.0
M2-4:2FTS	Ave	0.1572	0.1652		2.45	2.34	5.1	50.0
13C2 PFHxA	Ave	1.082	1.057		2.44	2.50	-2.3	50.0
13C3 HFPO-DA	Ave	0.0842	0.0821		2.44	2.50	-2.5	50.0
13C4-PFHpA	Ave	1.065	1.005		2.36	2.50	-5.7	50.0
18O2 PFHxS	Ave	1.366	1.341		2.32	2.37	-1.8	50.0
M2-6:2FTS	Ave	0.2242	0.2422		2.57	2.38	8.1	50.0
13C8 PFOA	Ave	1.927	1.510		1.92	2.45	-21.7	50.0
13C4 PFOA	Ave	0.9773	0.996		2.55	2.50	1.9	50.0
13C8 PFOS	Ave	0.4359	0.4492		2.46	2.39	3.0	50.0
13C4 PFOS	Ave	0.8973	0.8710		2.32	2.39	-2.9	50.0
13C5 PFNA	Ave	0.8770	0.8139		2.32	2.50	-7.2	50.0
13C8 FOSA	Ave	1.188	1.236		2.60	2.50	4.0	50.0
M2-8:2FTS	Ave	0.2707	0.2741		2.42	2.40	1.2	50.0
13C2 PFDA	Ave	0.7695	0.7467		2.43	2.50	-3.0	50.0
d3-NMeFOSAA	Ave	0.3935	0.4155		2.64	2.50	5.6	50.0
d5-NEtFOSAA	Ave	0.4077	0.4492		2.75	2.50	10.2	50.0
13C2 PFUnA	Ave	0.6189	0.6632		2.68	2.50	7.2	50.0
13C2 PFDoA	Ave	0.6541	0.7054		2.70	2.50	7.8	50.0
13C2-PFTeDA	Ave	0.8335	0.9328		2.80	2.50	11.9	50.0
13C2-PFHxDA	Ave	1.653	1.644		2.49	2.50	-0.5	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62562.b\2018.08.12LLA_005.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 12-Aug-2018 11:33:00 ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62562.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:32:17 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 13:31:16

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.414	1.411	0.003	0.532	5560321	2.64		106	9718	
2 Perfluorobutyric acid										
212.90 > 169.00	1.414	1.416	-0.002	1.000	103154	0.0494		98.8	8.4	
D 3 13C5-PFPeA										
267.90 > 223.00	1.676	1.670	0.006	0.631	3590480	2.48		99.1	6931	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.676	1.678	-0.002	1.000	78791	0.0482		96.4	7.6	
D 47 13C3-PFBS										
301.90 > 83.00	1.708	1.702	0.006	0.643	76295	2.28		97.9	390	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.708	1.710	-0.002	1.000	111941	0.0449		102	30.6	
298.90 > 99.00	1.708	1.710	-0.002	1.000	46129		2.43(1.25-3.74)		26.8	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.918	1.922	-0.004	1.123	25901	0.0476		102	358	
D 60 M2-4:2FTS										
329.00 > 81.00	1.929	1.922	0.007	0.726	586005	2.45		105	1157	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.960	1.954	0.006	1.000	86314	0.0526		105	31.6	
313.00 > 119.00	1.950	1.954	-0.004	0.995	8996		9.59(5.03-15.10)		33.5	
D 7 13C2 PFHxA										
315.00 > 270.00	1.960	1.954	0.006	0.738	4016204	2.44		97.7	6522	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.981	1.985	-0.004	1.160	104534	0.0462		98.5	245	
349.00 > 99.00	1.981	1.985	-0.004	1.160	40331		2.59(1.36-4.07)		94.0	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.065	2.058	0.006	1.000	15332	0.0508		102	8.5	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.065	2.058	0.006	0.777	311713	2.44		97.5	1191	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.303	2.288	0.015	1.005	79734	0.0492		98.4	20.6	
363.00 > 169.00	2.292	2.288	0.004	1.000	32318		2.47(1.13-3.40)		97.1	
D 9 13C4-PFHpA										
367.00 > 322.00	2.292	2.288	0.004	0.863	3816200	2.36		94.3	5385	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.314	2.310	0.004	1.000	111789	0.0506		111	216	
399.00 > 99.00	2.303	2.310	-0.007	0.995	34431		3.25(1.50-4.49)		49.4	
D 11 18O2 PFHxS										
403.00 > 84.00	2.314	2.310	0.004	0.871	4817064	2.32		98.2	5259	
65 ADONA										
377.00 > 251.00	2.336	2.332	0.004	0.770	225835	0.0526		105	508	
377.00 > 85.00	2.336	2.332	0.004	0.770	138622		1.63(0.84-2.53)		471	
D 12 M2-6:2FTS										
429.00 > 81.00	2.632	2.620	0.012	0.991	874028	2.57		108	2915	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.632	2.627	0.005	1.000	27472	0.0474		100	238	
D 73 13C8 PFOA										
421.00 > 376.00	2.648	2.643	0.005	0.997	5613125	1.92		78.3	7534	
* 62 13C2-PFOA										
415.00 > 370.00	2.656	2.651	0.005		3798304	2.50			5641	
D 14 13C4 PFOA										
417.00 > 372.00	2.656	2.651	0.005	1.000	3784183	2.55		102	5759	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.656	2.658	-0.002	1.000	91832	0.0537		107	9.5	
413.00 > 169.00	2.656	2.658	-0.002	1.000	45622		2.01(0.84-2.52)		95.7	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.663	2.658	0.005	0.877	82676	0.0504		106	281	
449.00 > 99.00	2.663	2.658	0.005	0.877	20452		4.04(1.94-5.82)		86.3	
D 72 13C8 PFOS										
507.00 > 99.00	3.028	3.025	0.003	1.140	1631139	2.46		103	4220	
D 18 13C4 PFOS										
503.00 > 80.00	3.036	3.025	0.011	1.143	3162875	2.32		97.1	4100	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.036	3.033	0.003	1.000	67905	0.0478		103	178	
499.00 > 99.00	3.028	3.033	-0.005	0.998	16085		4.22(2.31-6.93)		38.0	
20 Perfluorononanoic acid										
463.00 > 419.00	3.036	3.033	0.003	1.000	64487	0.0495		99.0	16.7	
463.00 > 169.00	3.043	3.033	0.010	1.002	16157		3.99(1.90-5.69)		126	
D 19 13C5 PFNA										
468.00 > 423.00	3.036	3.033	0.003	1.143	3091585	2.32		92.8	6172	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.246	3.245	0.001	1.069	105665	0.0458		98.4	568	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.337	3.336	0.001	1.000	90062	0.0493		98.5	340	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.337	3.336	0.001	1.257	4693437	2.60		104	5797	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.389	3.381	0.008	1.000	23717	0.0438		91.5	143	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.389	3.381	0.008	1.117	46517	0.0467		97.4	212	
549.00 > 99.00	3.389	3.381	0.008	1.117	18789		2.48(1.33-3.97)		124	
D 26 M2-8:2FTS										
529.00 > 81.00	3.389	3.381	0.008	1.276	997348	2.42		101	2403	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.397	3.396	0.001	1.000	60182	0.0529		106	40.5	
513.00 > 169.00	3.397	3.396	0.001	1.000	9005		6.68(2.36-7.09)		52.0	
D 23 13C2 PFDA										
515.00 > 470.00	3.397	3.396	0.001	1.279	2836108	2.43		97.0	5043	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.558	3.549	0.009	1.002	30827	0.0506		101	19.5	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.550	3.549	0.001	1.337	1578342	2.64		106	3456	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.715	3.714	0.001	1.224	41134	0.0492		102	171	
599.00 > 99.00	3.724	3.714	0.010	1.227	12960		3.17(1.39-4.16)		113	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.724	3.722	0.002	1.402	1706124	2.75		110	1497	
D 30 13C2 PFUnA										
565.00 > 520.00	3.732	3.722	0.010	1.405	2519192	2.68		107	5039	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.732	3.722	0.010	1.002	30196	0.0496		99.2	77.4	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.732	3.731	0.001	1.000	49328	0.0436		87.1	32.3	
563.00 > 169.00	3.732	3.731	0.001	1.000	12936		3.81(2.12-6.36)		71.7	
35 MeFOSA										
512.00 > 169.00	3.822	3.829	-0.007		27715	NC			190	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.887	3.885	0.002	1.281	179348	0.0507		108	673	
D 36 13C2 PFDoA										
615.00 > 570.00	4.028	4.027	0.001	1.517	2679382	2.70		108	5247	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.037	4.027	0.010	1.191	22474	0.0599		124	185	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.028	4.027	0.001	1.000	56104	0.0470		94.1	41.4	
613.00 > 169.00	4.028	4.027	0.001	1.000	14200		3.95(2.13-6.40)		106	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.272	4.271	0.001	1.407	18720	0.0509		105	39.2	
699.00 > 99.00	4.272	4.271	0.001	1.407	25117		0.75(0.00-0.00)		134	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.298	4.297	0.001	1.067	60004	0.0521		104	26.2	
663.00 > 169.00	4.306	4.297	0.009	1.069	19776		3.03(1.25-3.76)		172	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.542	4.534	0.008	1.711	3542985	2.80		112	4582	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.542	4.544	-0.002	1.000	19957	0.0582		116	234	
713.00 > 219.00	4.542	4.544	-0.002	1.000	12295		1.62(0.71-2.13)		190	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.978	4.970	0.008	1.000	165407	0.0516		103	20.3	
813.00 > 169.00	4.978	4.970	0.008	1.000	27722		5.97(2.86-8.58)		122	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.978	4.970	0.008	1.875	6246106	2.49		99.5	6350	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.356	5.342	0.014	1.076	118003	0.0513		103	14.9	
913.00 > 169.00	5.349	5.342	0.007	1.074	13861		8.51(3.83-11.48)		69.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL2_00006 Amount Added: 1.00 Units: mL

Report Date: 13-Aug-2018 13:32:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62562.b\2018.08.12LLA_005.d

Injection Date: 12-Aug-2018 11:33:00 Instrument ID: A8_N

Lims ID: CCVL

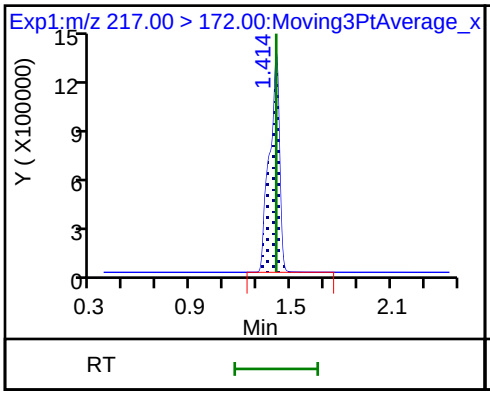
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 21 Worklist Smp#: 2

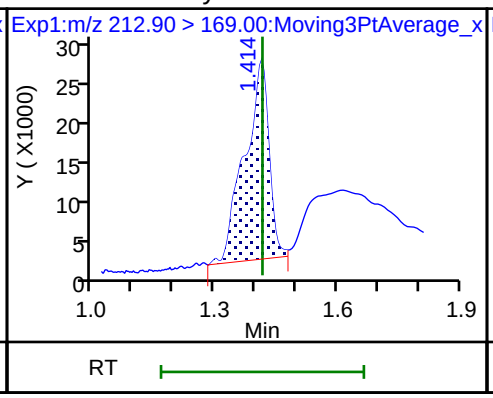
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

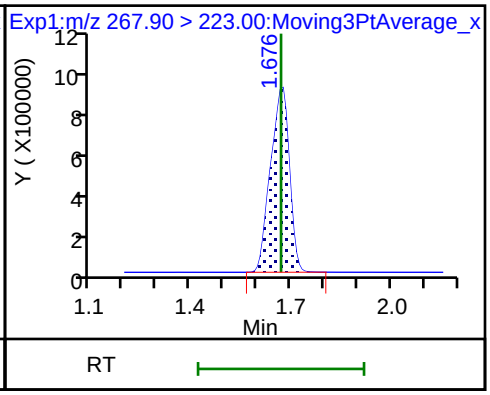
D 1 13C4 PFBA



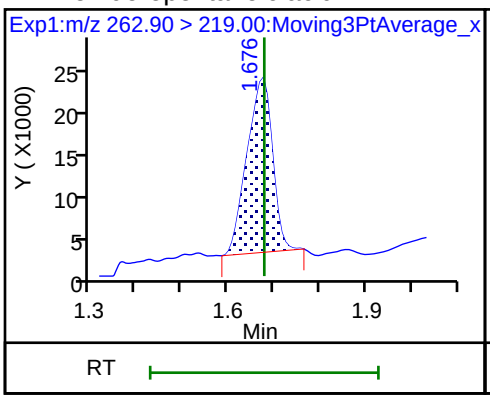
2 Perfluorobutyric acid



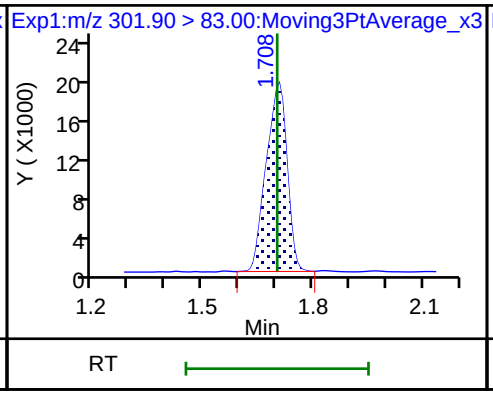
D 3 13C5-PFPeA



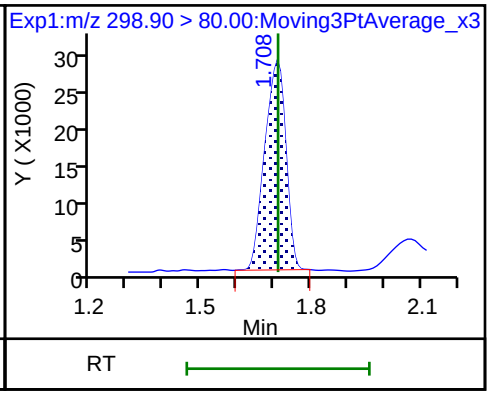
4 Perfluoropentanoic acid



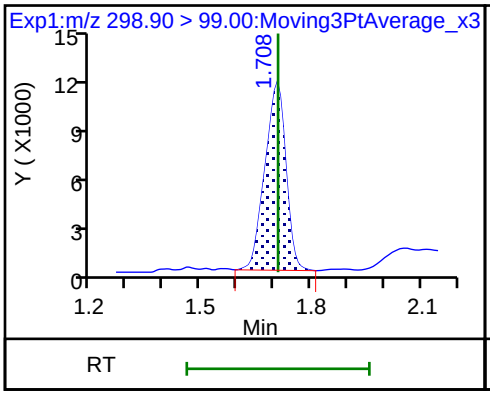
D 47 13C3-PFBS



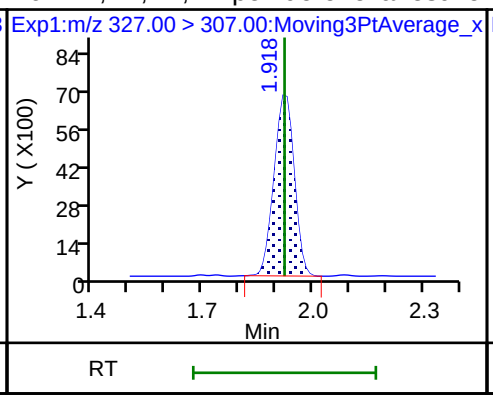
5 Perfluorobutanesulfonic acid



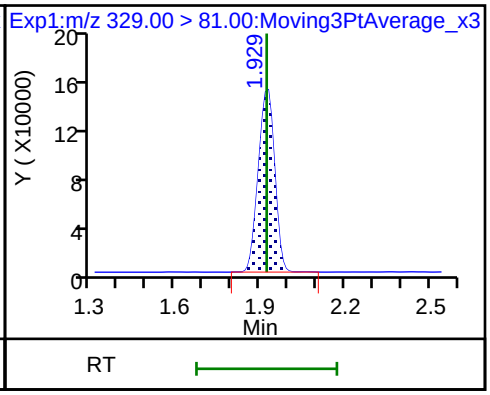
5 Perfluorobutanesulfonic acid



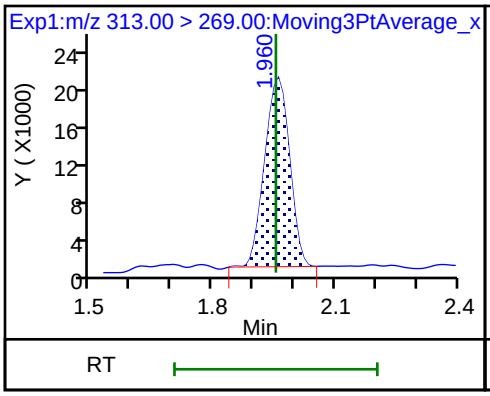
61 1H,1H,2H,2H-perfluorohexanesulfon



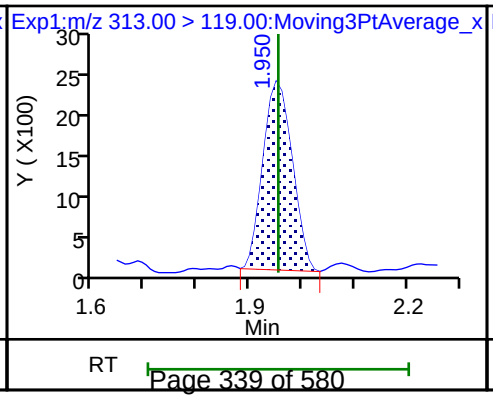
D 60 M2-4:2FTS



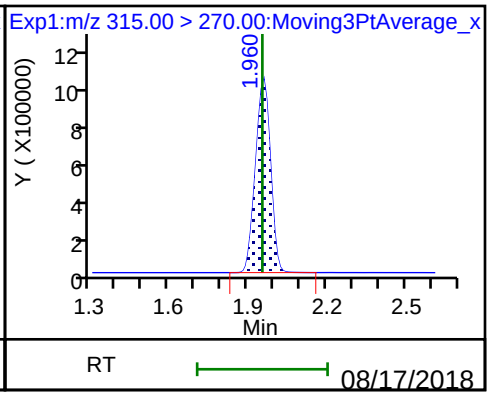
6 Perfluorohexanoic acid



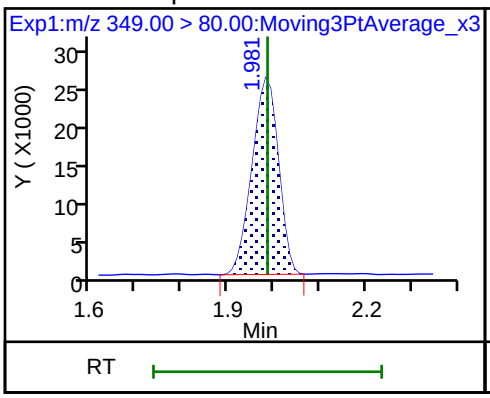
6 Perfluorohexanoic acid



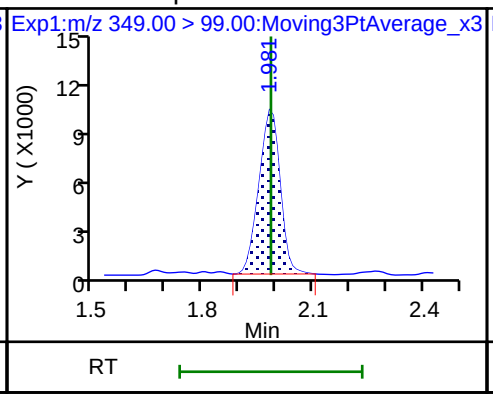
D 7 13C2 PFHxA



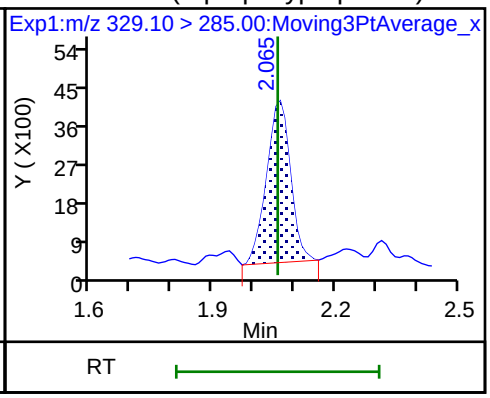
70 Perfluoropentanesulfonic acid



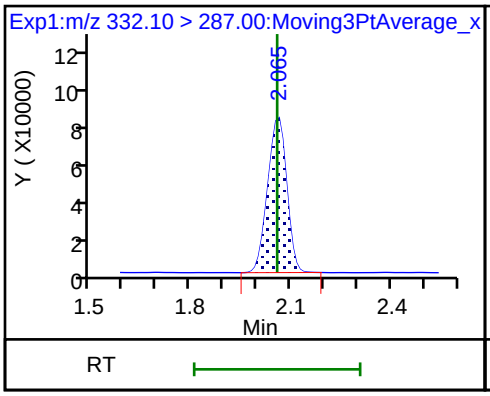
70 Perfluoropentanesulfonic acid



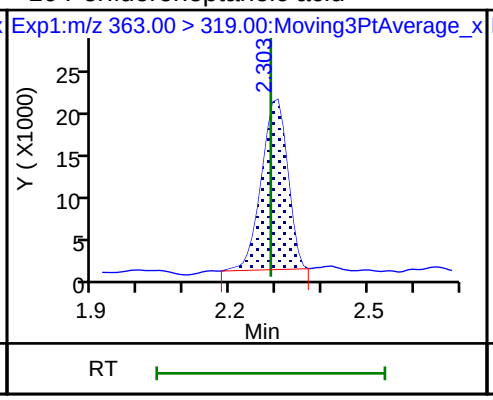
67 Perfluoro(2-propoxypropanoic) acid



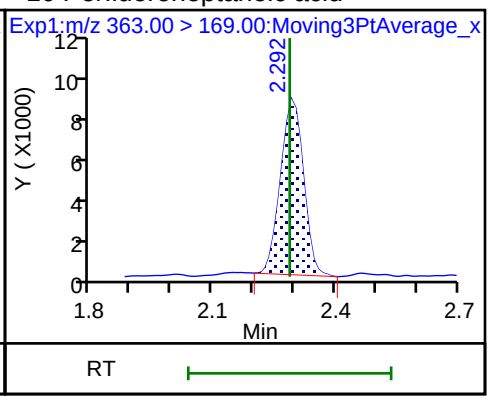
D 64 13C3 HFPO-DA



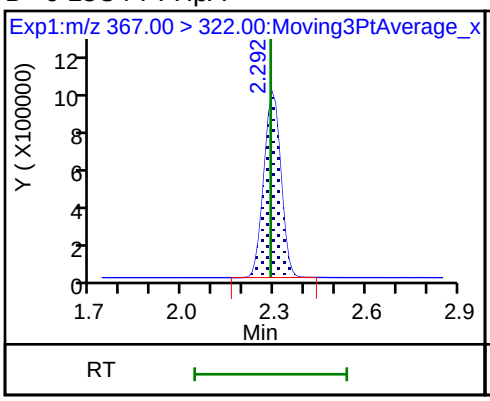
10 Perfluoroheptanoic acid



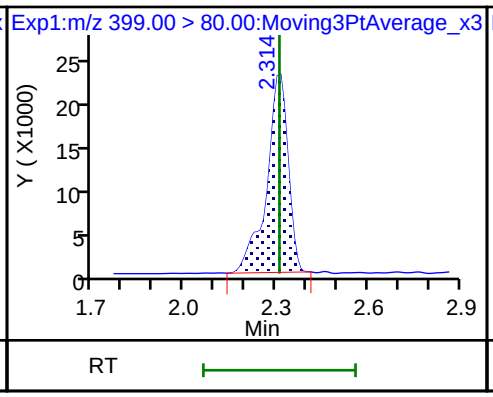
10 Perfluoroheptanoic acid



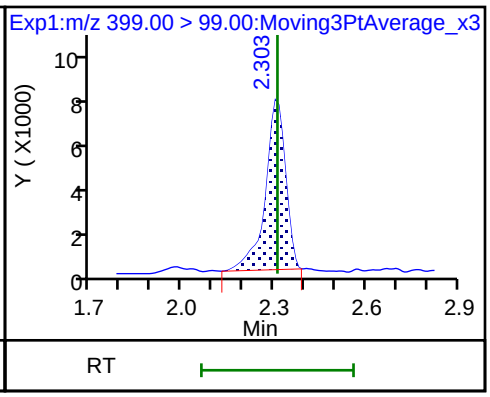
D 9 13C4-PFHpA



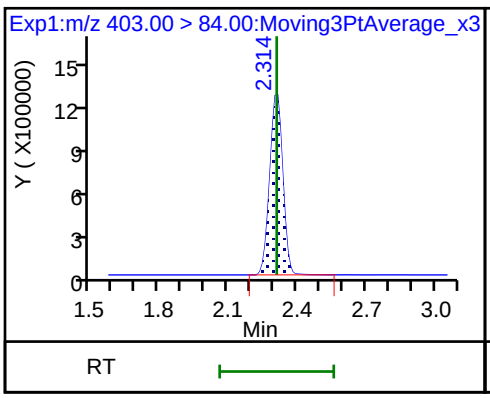
8 Perfluorohexanesulfonic acid



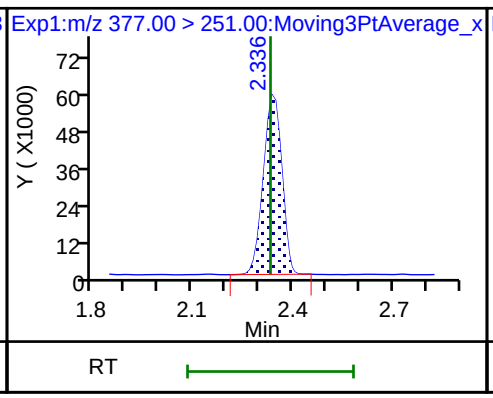
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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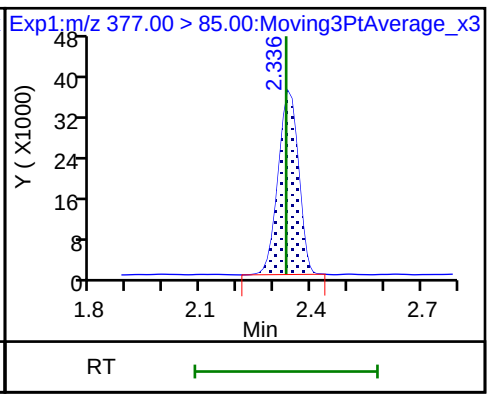
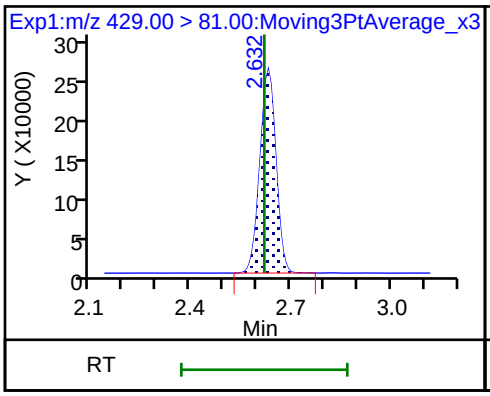
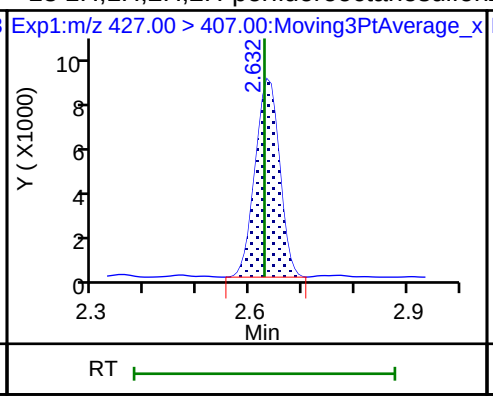


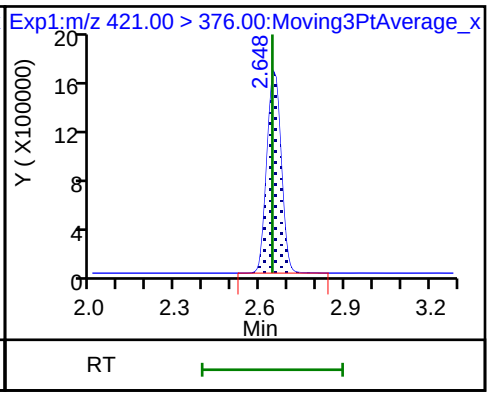
D 12 M2-6:2FTS



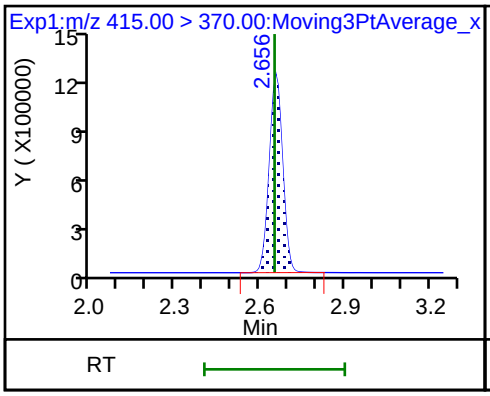
13 1H,1H,2H,2H-perfluorooctanesulfon



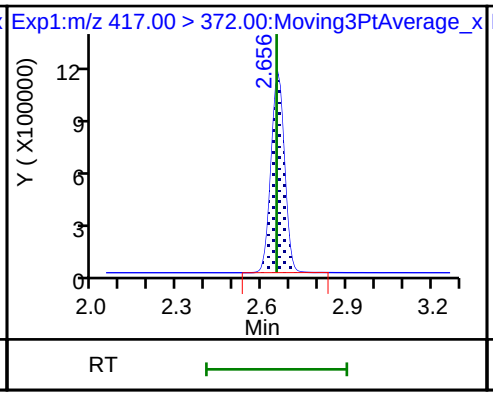
D 73 13C8 PFOA



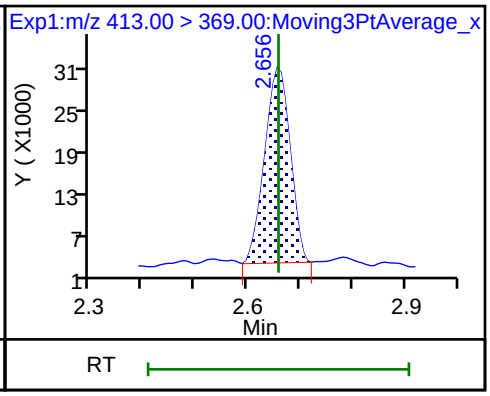
* 62 13C2-PFOA



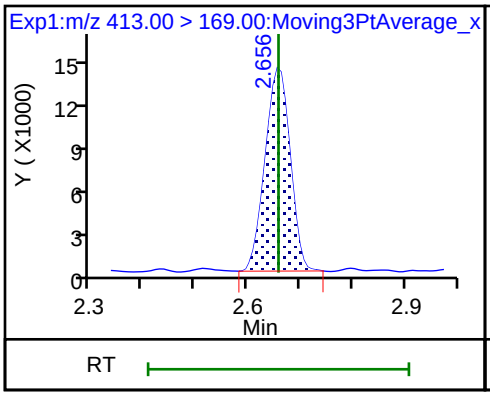
D 14 13C4 PFOA



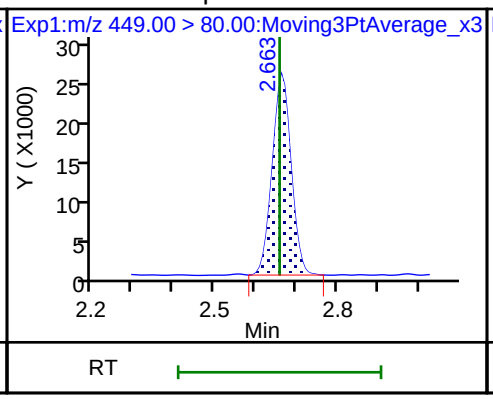
15 Perfluorooctanoic acid



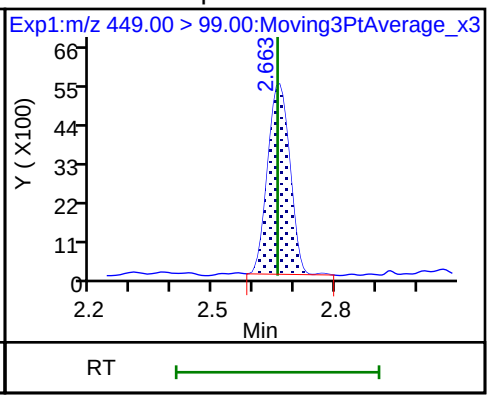
15 Perfluorooctanoic acid



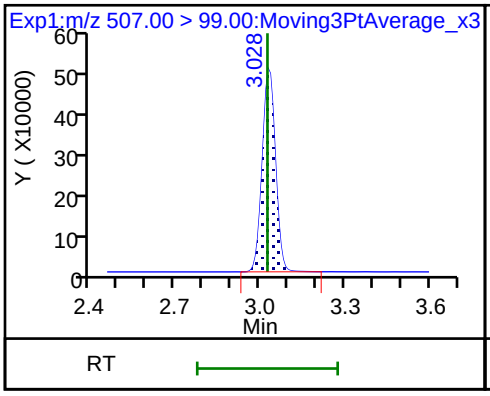
16 Perfluoroheptanesulfonic acid



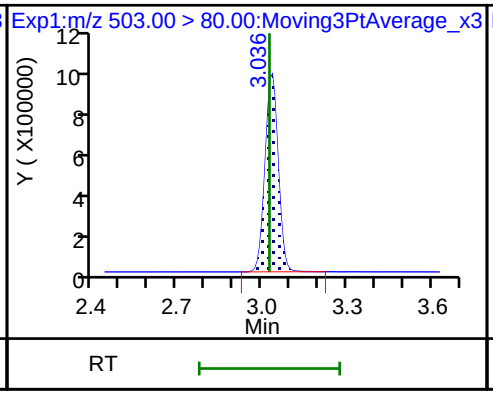
16 Perfluoroheptanesulfonic acid



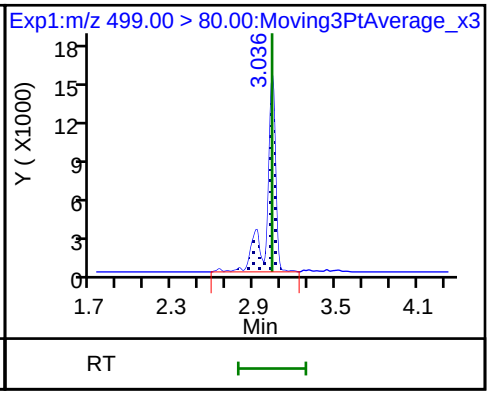
D 72 13C8 PFOS



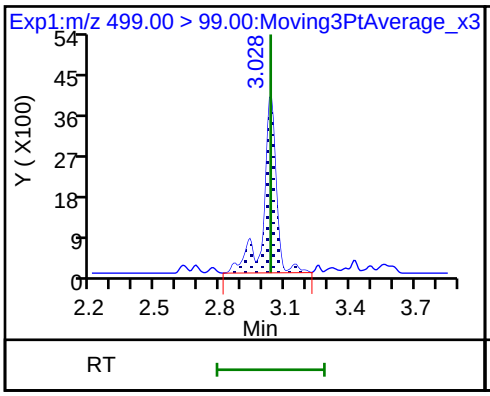
D 18 13C4 PFOS



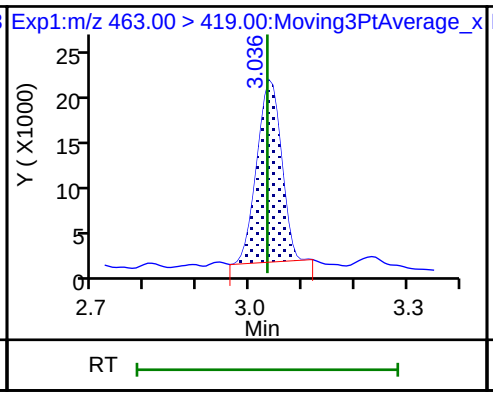
17 Perfluorooctane sulfonic acid



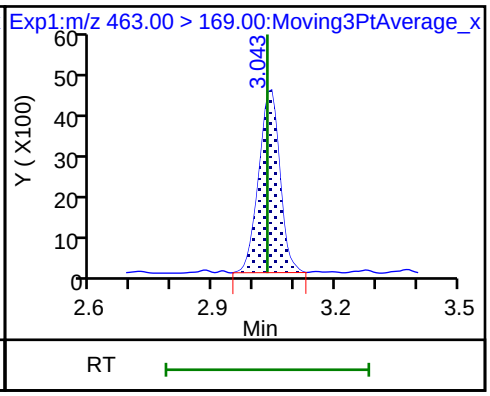
17 Perfluorooctane sulfonic acid



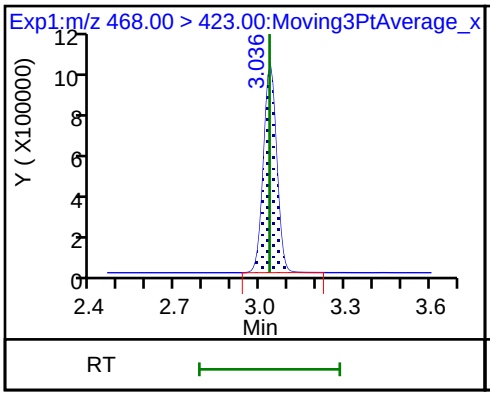
20 Perfluorononanoic acid



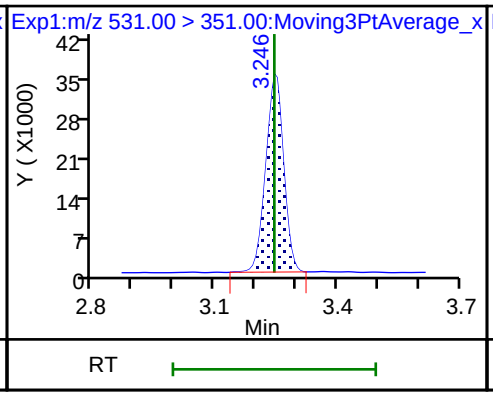
20 Perfluorononanoic acid



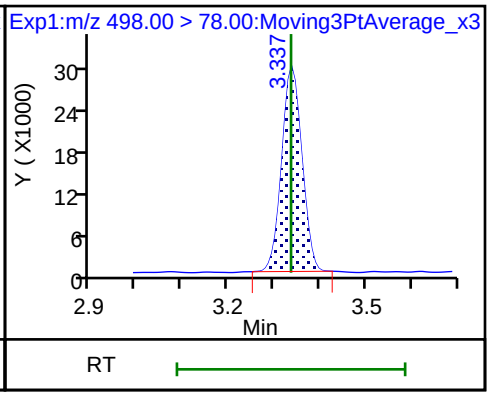
D 19 13C5 PFNA



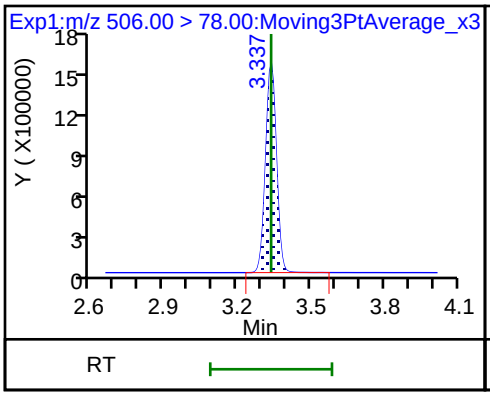
69 9-Chlorohexadecafluoro-3-oxanonane



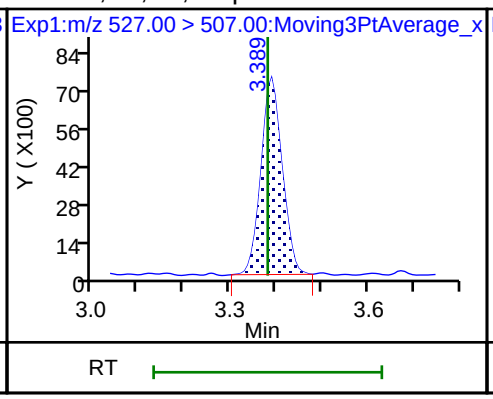
22 Perfluorooctane Sulfonamide



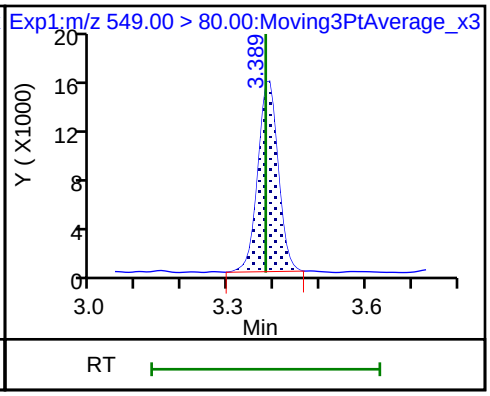
D 21 13C8 FOSA



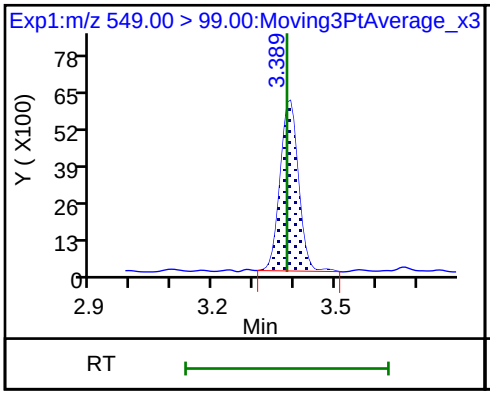
25 1H,1H,2H,2H-perfluorodecanesulfoni



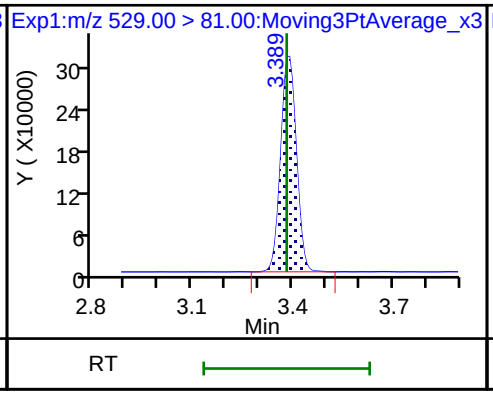
68 Perfluorononanesulfonic acid



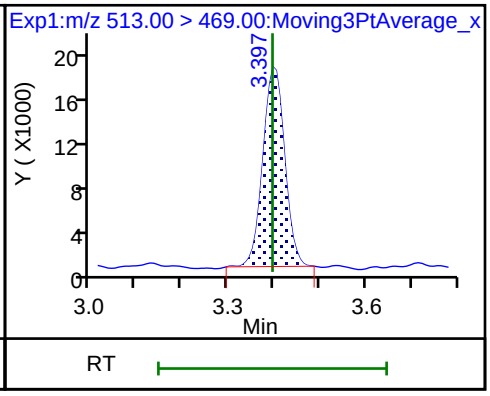
68 Perfluorononanesulfonic acid



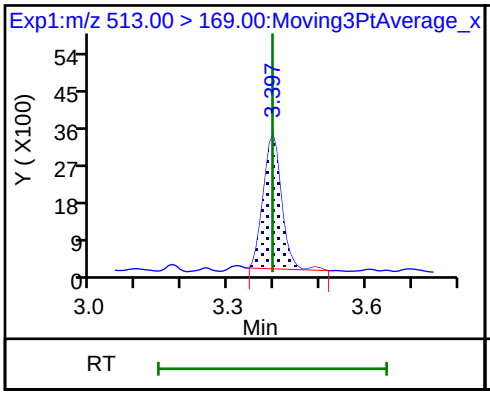
D 26 M2-8:2FTS



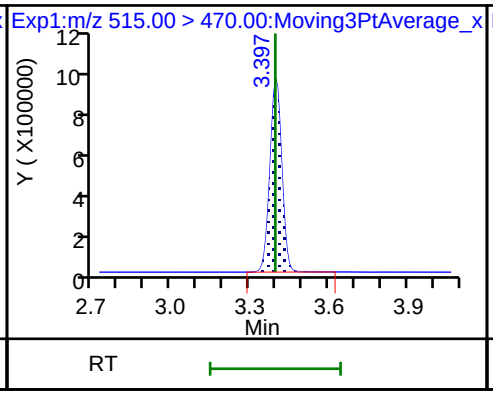
24 Perfluorodecanoic acid



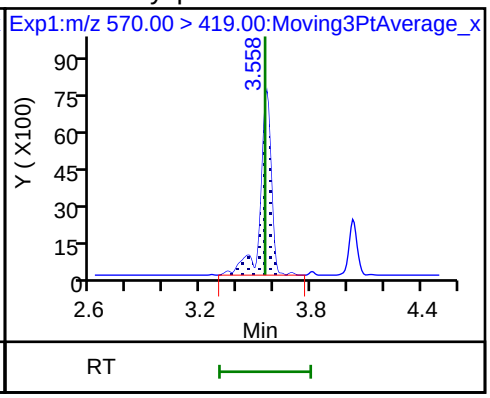
24 Perfluorodecanoic acid



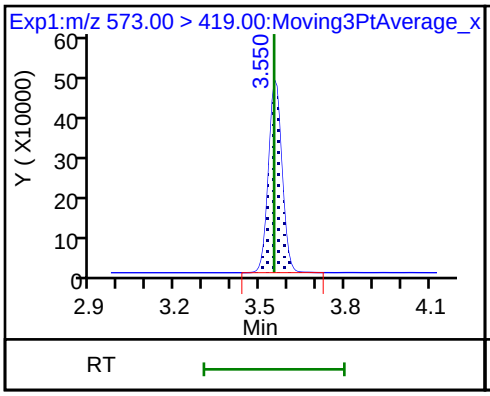
D 23 13C2 PFDA



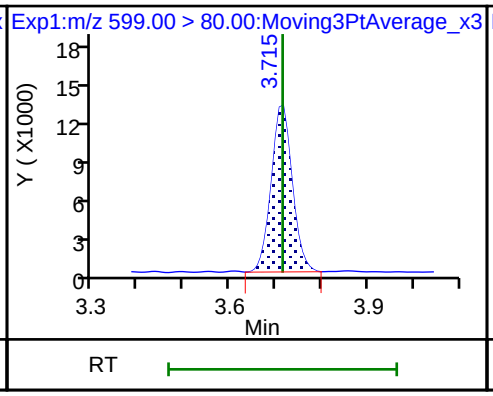
28 N-methyl perfluorooctane sulfonami



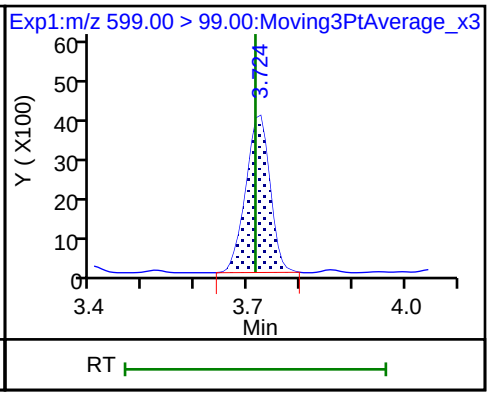
D 27 d3-NMeFOSAA



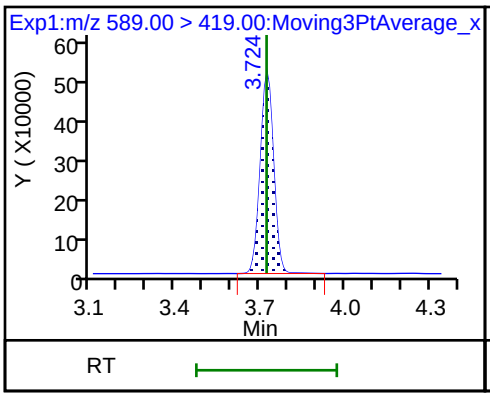
29 Perfluorodecane Sulfonic acid



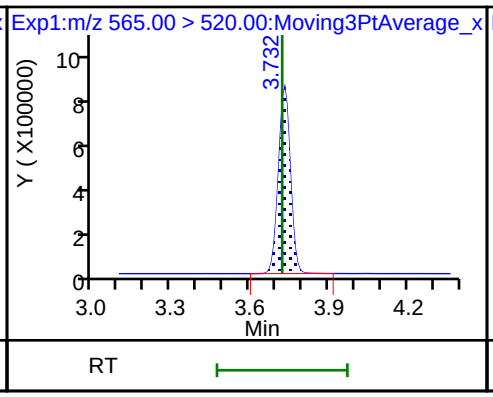
29 Perfluorodecane Sulfonic acid



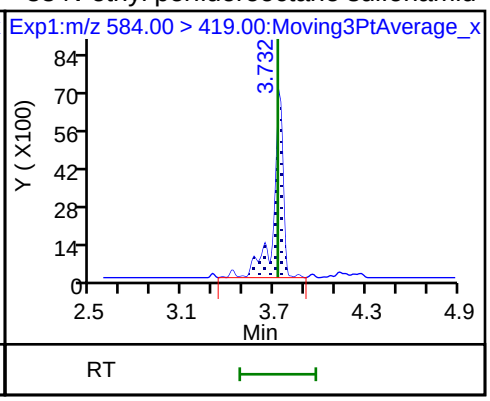
D 32 d5-NEtFOSAA



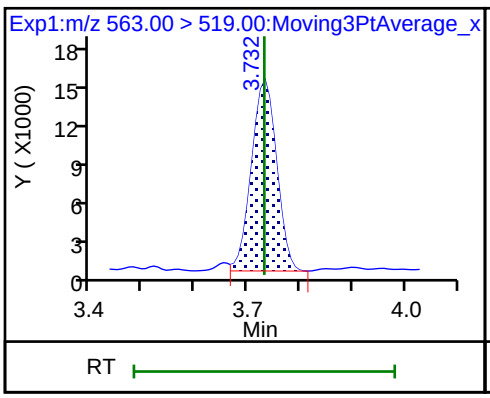
D 30 13C2 PFUnA



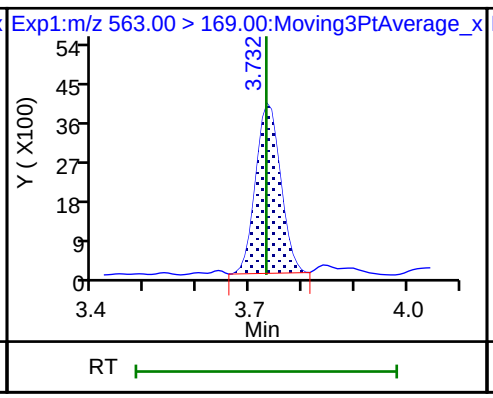
33 N-ethyl perfluorooctane sulfonamid



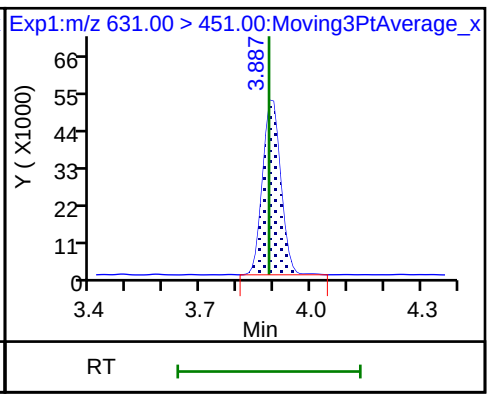
31 Perfluoroundecanoic acid



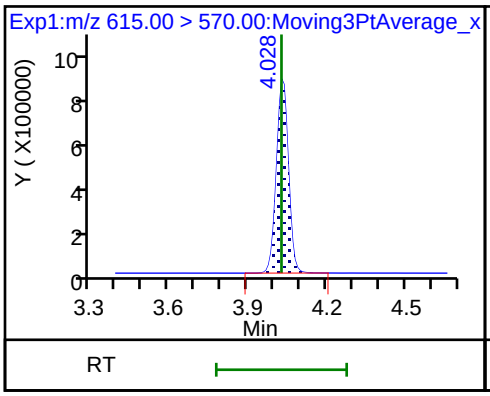
31 Perfluoroundecanoic acid



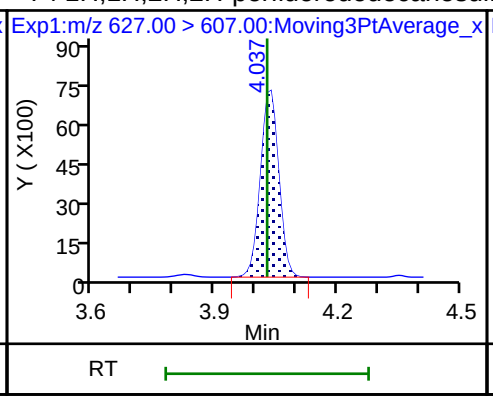
66 11-Chloroeicosafluoro-3-oxaundecan



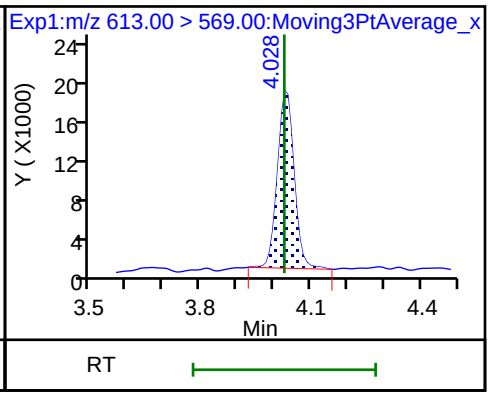
D 36 13C2 PFDoA



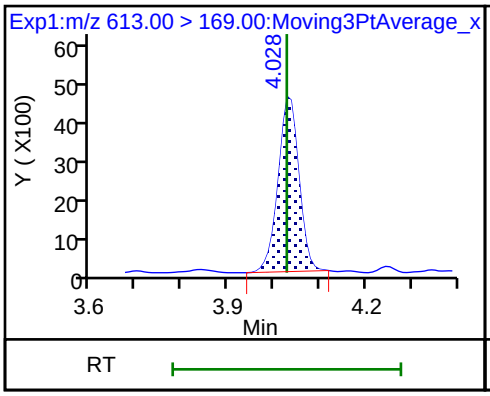
74 1H,1H,2H,2H-perfluorododecanesulfo



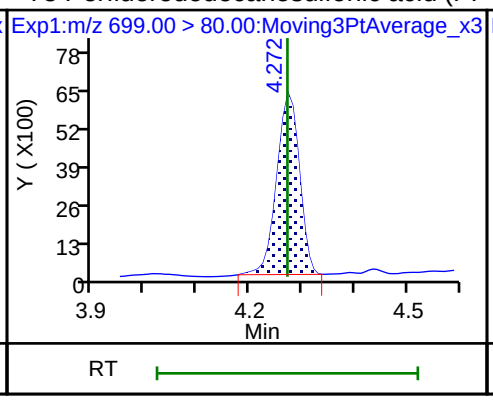
37 Perfluorododecanoic acid



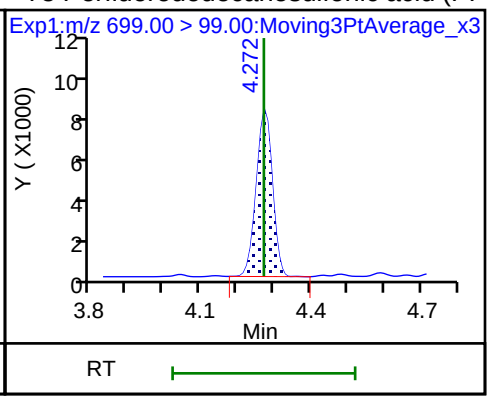
37 Perfluorododecanoic acid



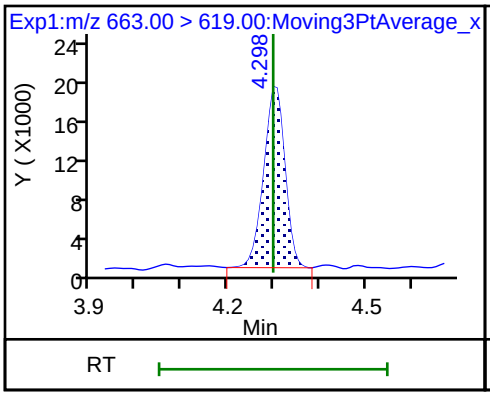
75 Perfluorododecanesulfonic acid (PF



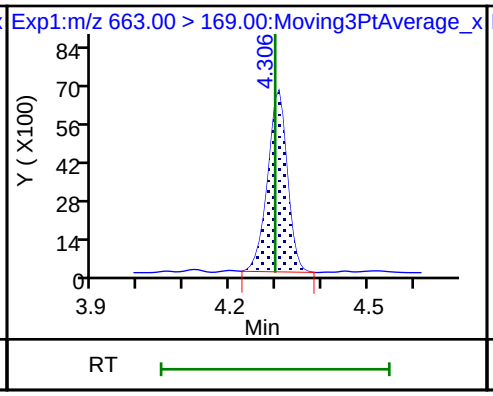
75 Perfluorododecanesulfonic acid (PF



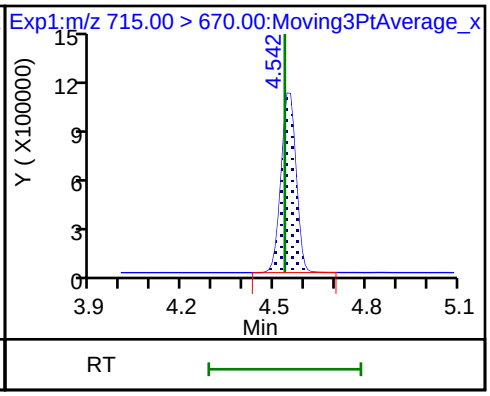
41 Perfluorotridecanoic acid



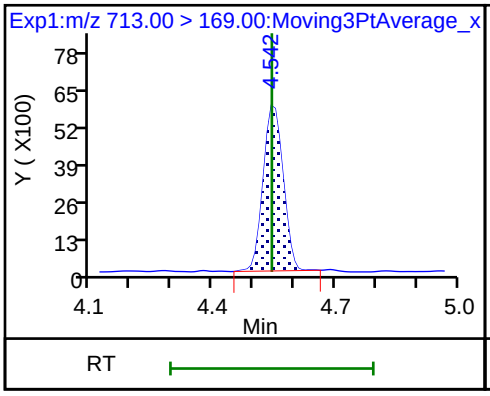
41 Perfluorotridecanoic acid



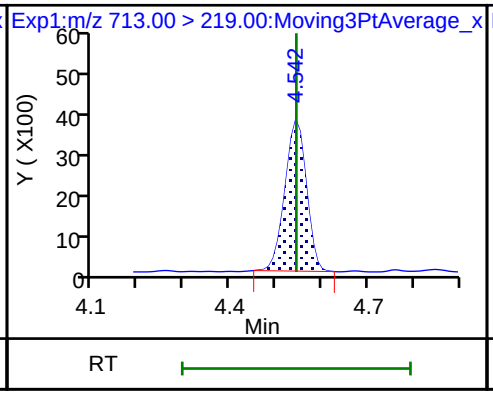
D 43 13C2-PFTeDA



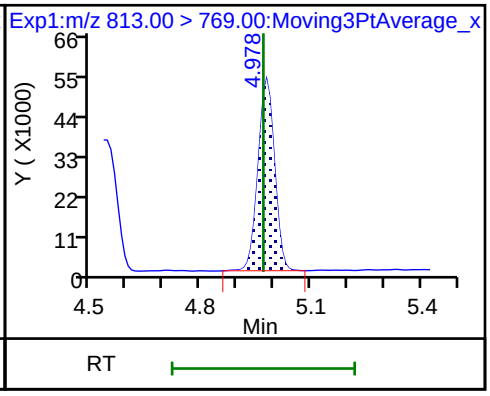
42 Perfluorotetradecanoic acid



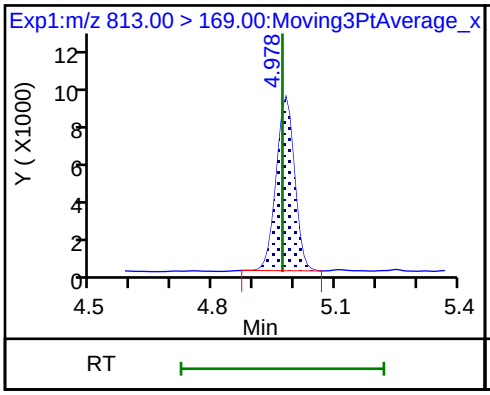
42 Perfluorotetradecanoic acid



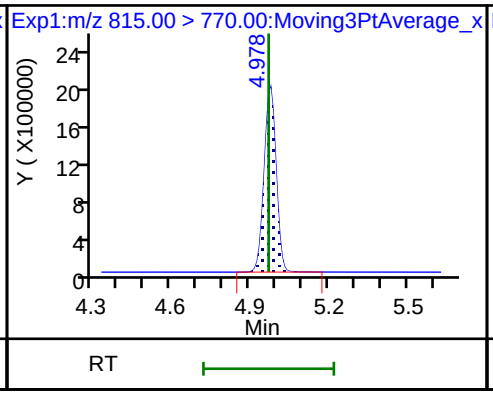
45 Perfluorohexadecanoic acid



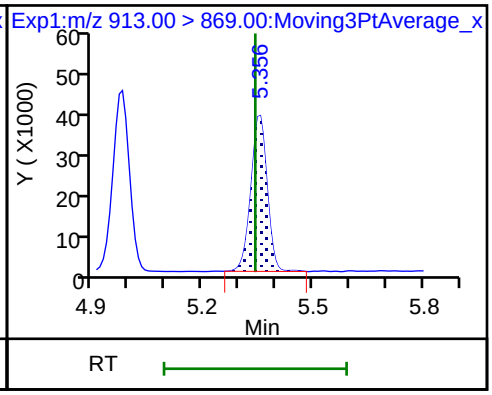
45 Perfluorohexadecanoic acid



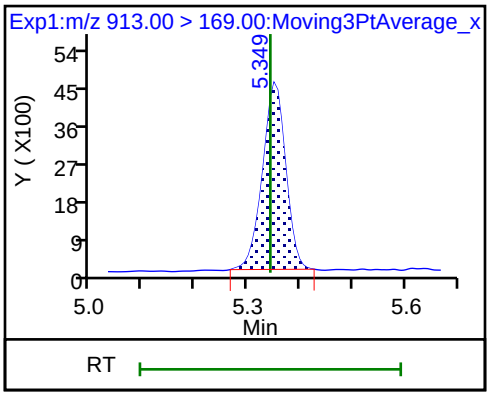
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-239433/3 Calibration Date: 08/12/2018 11:40

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.8918		0.950	1.00	-5.0	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.119		0.984	1.00	-1.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	76.32		0.888	0.884	0.5	50.0
4:2 FTS	AveID	16.57	16.86		0.950	0.934	1.7	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	0.999		0.979	1.00	-2.1	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	70.36		0.958	0.938	2.1	50.0
HFPO-DA (GenX)	AveID	2.420	2.179		0.900	1.00	-10.0	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	0.996		0.938	1.00	-6.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.028		0.863	0.910	-5.2	40.0
6:2 FTS	AveID	1.573	1.516		0.913	0.948	-3.7	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.284		0.987	0.952	3.7	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.076		0.952	1.00	-4.9	40.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.057		1.00	1.00	0.3	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.103		0.953	0.928	2.7	40.0
F-53B Major	AveID	1.742	1.857		0.993	0.932	6.6	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.9706		0.997	1.00	-0.3	40.0
8:2 FTS	AveID	1.299	1.303		0.961	0.958	0.3	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.8246		1.05	0.960	9.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	1.027		1.02	1.00	2.4	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	0.9265		0.961	1.00	-3.9	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6848		1.04	0.964	8.4	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8625		0.967	1.00	-3.3	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	0.8595		0.765	1.00	-23.5	40.0
F-53B Minor	AveID	2.674	3.118		1.10	0.942	16.6	50.0
10:2 FTS	AveID	0.9008	1.011		1.08	0.964	12.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.063		0.955	1.00	-4.5	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.3171		1.11	0.968	14.2	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.157		1.08	1.00	7.6	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2374		0.981	1.00	-1.9	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9098		1.02	1.00	2.1	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-239433/3 Calibration Date: 08/12/2018 11:40

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.9453		1.03	1.00	2.7	50.0
13C4 PFBA	Ave	1.385	1.448		2.61	2.50	4.6	50.0
13C5 PFPeA	Ave	0.9537	0.9361		2.45	2.50	-1.8	50.0
13C3-PFBS	Ave	0.0221	0.0218		2.29	2.33	-1.3	50.0
M2-4:2FTS	Ave	0.1572	0.1604		2.38	2.34	2.1	50.0
13C2 PFHxA	Ave	1.082	1.026		2.37	2.50	-5.2	50.0
13C3 HFPO-DA	Ave	0.0842	0.0861		2.56	2.50	2.3	50.0
13C4-PFHpA	Ave	1.065	1.047		2.46	2.50	-1.7	50.0
18O2 PFHxS	Ave	1.366	1.323		2.29	2.37	-3.2	50.0
M2-6:2FTS	Ave	0.2242	0.2365		2.51	2.38	5.5	40.0
13C8 PFOA	Ave	1.927	1.625		2.06	2.45	-15.7	50.0
13C4 PFOA	Ave	0.9773	0.9865		2.52	2.50	0.9	50.0
13C8 PFOS	Ave	0.4359	0.4531		2.48	2.39	3.9	50.0
13C4 PFOS	Ave	0.8973	0.8614		2.29	2.39	-4.0	50.0
13C5 PFNA	Ave	0.8770	0.8304		2.37	2.50	-5.3	50.0
13C8 FOSA	Ave	1.188	1.236		2.60	2.50	4.0	50.0
M2-8:2FTS	Ave	0.2707	0.2648		2.34	2.40	-2.2	40.0
13C2 PFDA	Ave	0.7695	0.7569		2.46	2.50	-1.6	50.0
d3-NMeFOSAA	Ave	0.3935	0.4254		2.70	2.50	8.1	50.0
13C2 PFUnA	Ave	0.6189	0.6529		2.64	2.50	5.5	50.0
d5-NEtFOSAA	Ave	0.4077	0.4443		2.72	2.50	9.0	50.0
13C2 PFDoA	Ave	0.6541	0.7138		2.73	2.50	9.1	50.0
13C2-PFTeDA	Ave	0.8335	0.9607		2.88	2.50	15.3	50.0
13C2-PFHxDA	Ave	1.653	1.684		2.55	2.50	1.8	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62562.b\2018.08.12LLA_006.d
Lims ID: CCV L4
Client ID:
Sample Type: CCVIS
Inject. Date: 12-Aug-2018 11:40:49 ALS Bottle#: 13 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62562.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:32:22 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 13:31:59

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.416	1.411	0.005	0.534	5013348	2.61		105	7708	
2 Perfluorobutyric acid										
212.90 > 169.00	1.416	1.416	0.0	1.000	1788443	0.9499		95.0	156	
D 3 13C5-PFPeA										
267.90 > 223.00	1.670	1.670	0.0	0.630	3240685	2.45		98.2	7054	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.678	1.678	0.0	1.005	1450704	0.9836		98.4	136	
D 47 13C3-PFBS										
301.90 > 83.00	1.710	1.702	0.008	0.645	70062	2.29		98.7	285	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.710	1.710	0.0	1.000	2033161	0.8883		100	509	
298.90 > 99.00	1.710	1.710	0.0	1.000	841798		2.42(1.25-3.74)		481	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.922	1.922	0.0	1.124	474415	0.9501		102	3716	
D 60 M2-4:2FTS										
329.00 > 81.00	1.922	1.922	0.0	0.725	518680	2.38		102	956	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.954	1.954	0.0	1.000	1419193	0.9787		97.9	518	
313.00 > 119.00	1.964	1.954	0.010	1.005	131744		10.77(5.03-15.10)		406	
D 7 13C2 PFHxA										
315.00 > 270.00	1.954	1.954	0.0	0.737	3551816	2.37		94.8	7424	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.985	1.985	0.0	1.161	1988883	0.9576		102	2685	
349.00 > 99.00	1.985	1.985	0.0	1.161	729407		2.73(1.36-4.07)		1546	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.058	2.058	0.0	1.000	259964	0.9004		90.0	161	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.058	2.058	0.0	0.776	298207	2.56		102	981	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.288	2.288	0.0	0.995	1443734	0.9377		93.8	345	
363.00 > 169.00	2.288	2.288	0.0	0.995	579857		2.49(1.13-3.40)		1183	
D 9 13C4-PFHpA										
367.00 > 322.00	2.299	2.288	0.011	0.867	3625066	2.46		98.3	7398	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.310	2.310	0.0	1.000	1713281	0.8630		94.8	1947	
399.00 > 99.00	2.310	2.310	0.0	1.000	569826		3.01(1.50-4.49)		789	
D 11 18O2 PFHxS										
403.00 > 84.00	2.310	2.310	0.0	0.871	4331099	2.29		96.8	3595	
65 ADONA										
377.00 > 251.00	2.332	2.332	0.0	0.769	4101027	1.06		106	5699	
377.00 > 85.00	2.332	2.332	0.0	0.769	2478087		1.65(0.84-2.53)		4459	
D 12 M2-6:2FTS										
429.00 > 81.00	2.627	2.620	0.007	0.991	777656	2.51		105	2037	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.627	2.627	0.0	1.000	470489	0.9133		96.3	2898	
D 73 13C8 PFOA										
421.00 > 376.00	2.643	2.643	0.0	0.997	5506184	2.06		84.3	11595	
* 62 13C2-PFOA										
415.00 > 370.00	2.651	2.651	0.0		3461869	2.50			5287	
D 14 13C4 PFOA										
417.00 > 372.00	2.651	2.651	0.0	1.000	3414950	2.52		101	6403	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.658	2.658	0.0	1.003	1470982	0.9524		95.1	144	
413.00 > 169.00	2.651	2.658	-0.007	1.000	780166		1.89(0.84-2.52)		1284	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.658	2.658	0.0	0.876	1458452	0.9868		104	2323	
449.00 > 99.00	2.658	2.658	0.0	0.876	396407		3.68(1.94-5.82)		1003	
D 72 13C8 PFOS										
507.00 > 99.00	3.025	3.025	0.0	1.141	1499525	2.48		104	3607	
D 18 13C4 PFOS										
503.00 > 80.00	3.033	3.025	0.008	1.144	2850817	2.29		96.0	3777	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.033	3.033	0.0	1.000	1220851	0.9532		103	1698	
499.00 > 99.00	3.025	3.033	-0.008	0.998	284997		4.28(2.31-6.93)		1065	
20 Perfluorononanoic acid										
463.00 > 419.00	3.033	3.033	0.0	1.000	1215143	1.00		100	334	
463.00 > 169.00	3.033	3.033	0.0	1.000	287316		4.23(1.90-5.69)		1558	
D 19 13C5 PFNA										
468.00 > 423.00	3.033	3.033	0.0	1.144	2874867	2.37		94.7	7070	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.245	3.245	0.0	1.070	2064028	0.99		107	4404	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.336	3.336	0.0	1.000	1660689	1.00		99.7	3539	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.336	3.336	0.0	1.259	4277525	2.60		104	7219	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.381	3.381	0.0	1.000	457479	0.9605		100	1620	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.381	3.381	0.0	1.115	944242	1.05		110	2247	
549.00 > 99.00	3.381	3.381	0.0	1.115	341864		2.76(1.33-3.97)		1996	
D 26 M2-8:2FTS										
529.00 > 81.00	3.381	3.381	0.0	1.276	878060	2.34		97.8	2346	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.396	3.396	0.0	1.000	1076463	1.02		102	769	
513.00 > 169.00	3.396	3.396	0.0	1.000	181069		5.95(2.36-7.09)		302	
D 23 13C2 PFDA										
515.00 > 470.00	3.396	3.396	0.0	1.281	2620268	2.46		98.4	6162	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.549	3.549	0.0	1.000	545831	0.9605		96.1	379	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.549	3.549	0.0	1.339	1472831	2.70		108	3599	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.714	3.714	0.0	1.225	787463	1.04		108	2621	
599.00 > 99.00	3.714	3.714	0.0	1.225	267719		2.94(1.39-4.16)		1578	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.722	3.722	0.0	1.404	1538060	2.72		109	1505	
D 30 13C2 PFUnA										
565.00 > 520.00	3.722	3.722	0.0	1.404	2260389	2.64		106	4075	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.722	3.722	0.0	1.000	530599	0.9671		96.7	1371	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.731	3.731	0.0	1.002	777147	0.7649		76.5	622	
563.00 > 169.00	3.731	3.731	0.0	1.002	166979		4.65(2.12-6.36)		938	
35 MeFOSA										
512.00 > 169.00	3.829	3.829	0.0		477160	NC			485	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.885	3.885	0.0	1.281	3502940	1.10		117	6083	
D 36 13C2 PFDoA										
615.00 > 570.00	4.027	4.027	0.0	1.519	2471033	2.73		109	5057	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.027	4.027	0.0	1.191	357199	1.08		112	1878	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.027	4.027	0.0	1.000	1050824	0.9555		95.5	753	
613.00 > 169.00	4.027	4.027	0.0	1.000	237283		4.43(2.13-6.40)		3157	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.271	4.271	0.0	1.408	366113	1.11		114	802	
699.00 > 99.00	4.271	4.271	0.0	1.408	496394		0.74(0.00-0.00)		2177	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.297	4.297	0.0	1.067	1143228	1.08		108	522	
663.00 > 169.00	4.297	4.297	0.0	1.067	346457		3.30(1.25-3.76)		2155	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.544	4.534	0.010	1.714	3325730	2.88		115	4180	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.544	4.544	0.0	1.000	315796	0.9808		98.1	1419	
713.00 > 219.00	4.534	4.544	-0.010	0.998	228338		1.38(0.71-2.13)		2429	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.970	4.970	0.0	1.000	2121354	1.02		102	261	
813.00 > 169.00	4.970	4.970	0.0	1.000	367000		5.78(2.86-8.58)		1671	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.970	4.970	0.0	1.875	5829101	2.55		102	5462	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.342	5.342	0.0	1.075	2204200	1.03		103	266	
913.00 > 169.00	5.342	5.342	0.0	1.075	269616		8.18(3.83-11.48)		1024	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00006 Amount Added: 1.00 Units: mL

Report Date: 13-Aug-2018 13:32:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62562.b\2018.08.12LLA_006.d

Injection Date: 12-Aug-2018 11:40:49 Instrument ID: A8_N

Lims ID: CCV L4

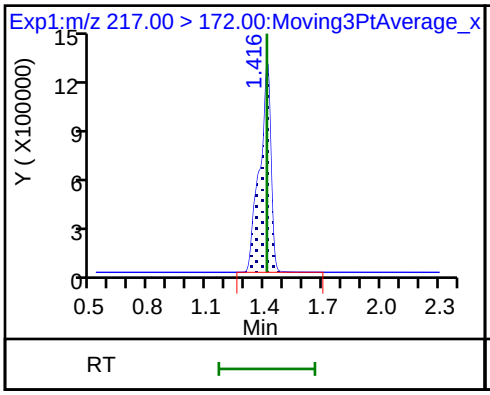
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 3

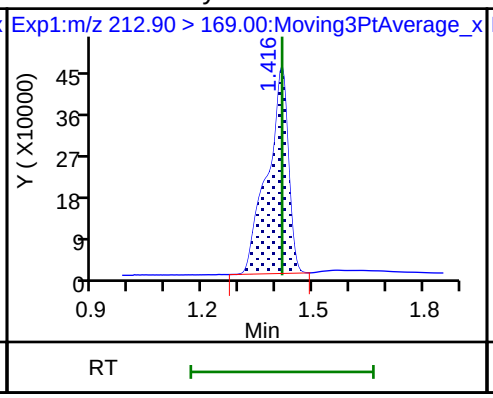
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

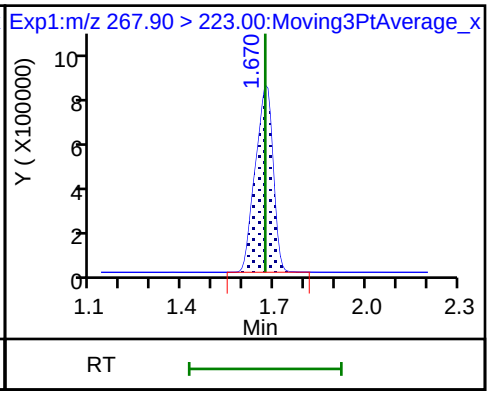
D 1 13C4 PFBA



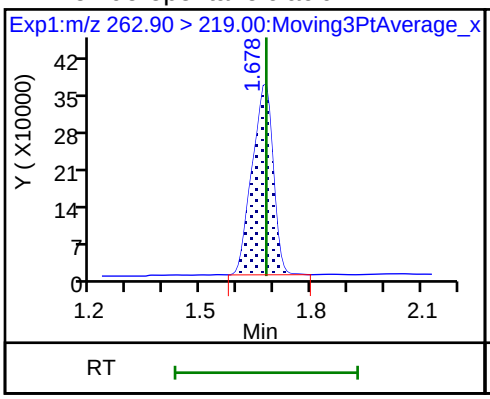
2 Perfluorobutyric acid



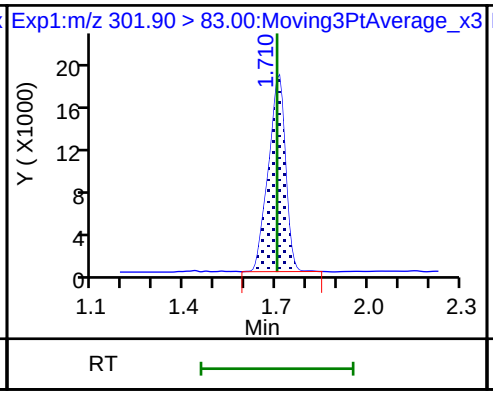
D 3 13C5-PFPeA



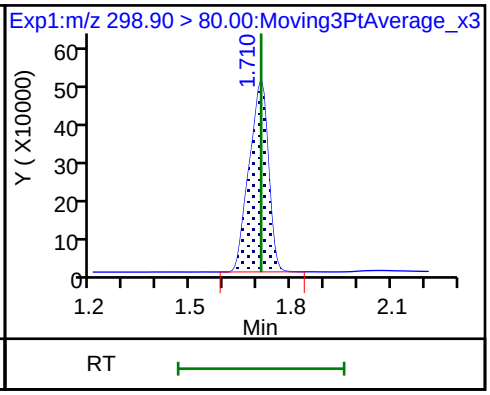
4 Perfluoropentanoic acid



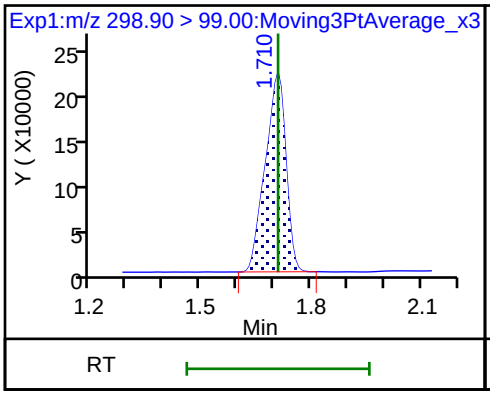
D 47 13C3-PFBS



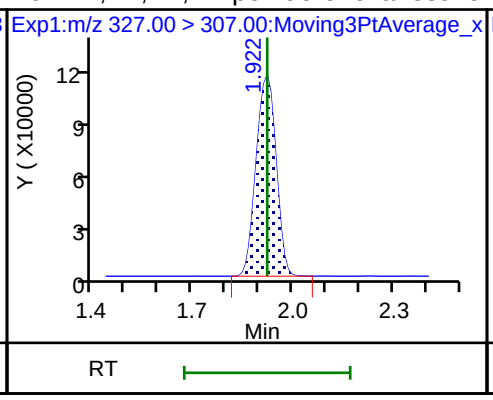
5 Perfluorobutanesulfonic acid



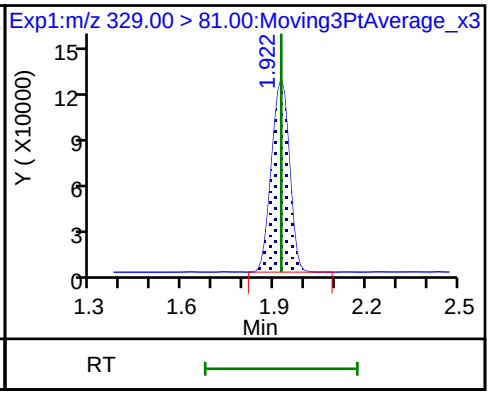
5 Perfluorobutanesulfonic acid



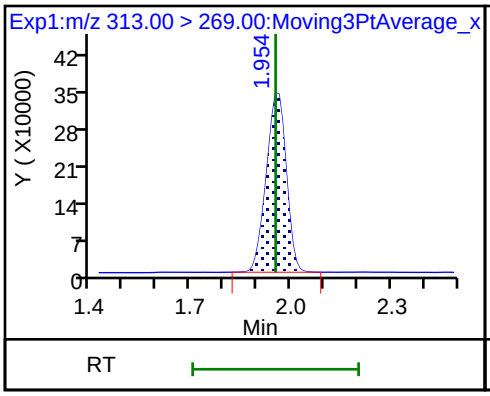
61 1H,1H,2H,2H-perfluorohexanesulfon



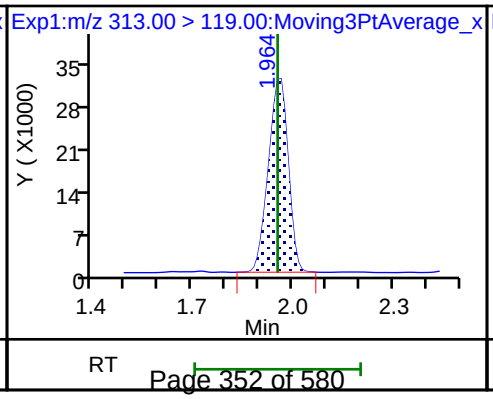
D 60 M2-4:2FTS



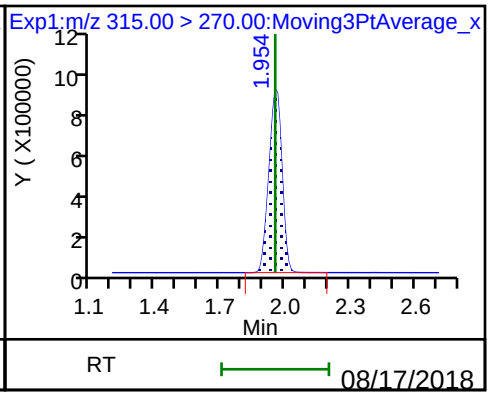
6 Perfluorohexanoic acid



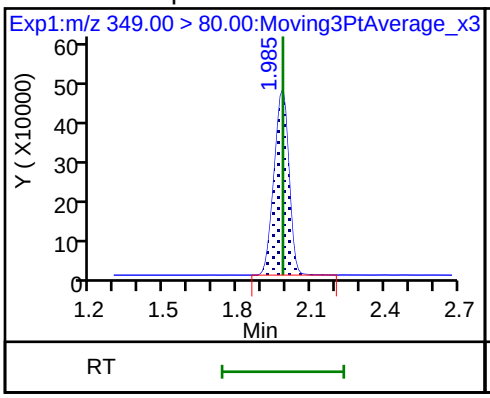
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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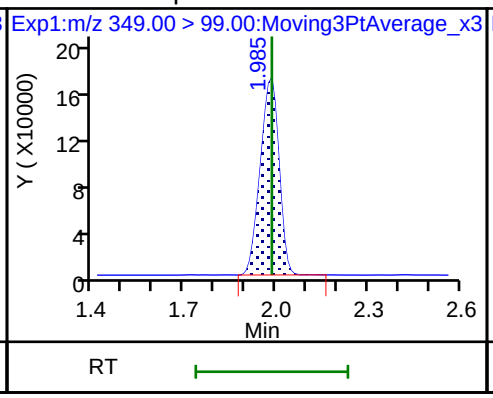
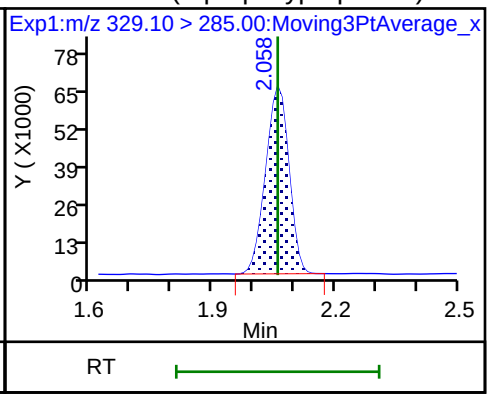
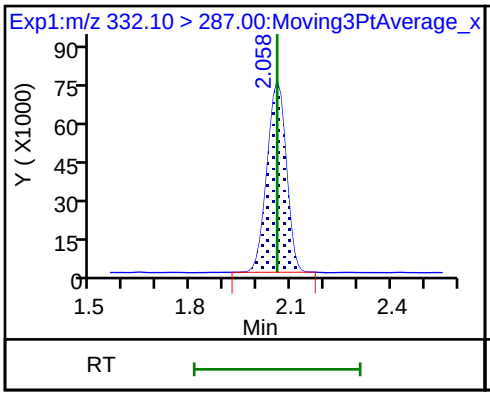


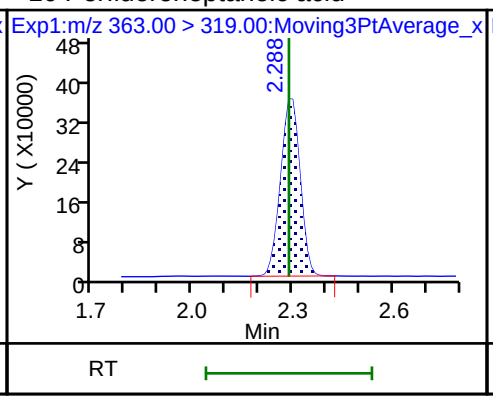
67 Perfluoro(2-propoxypropanoic) acid



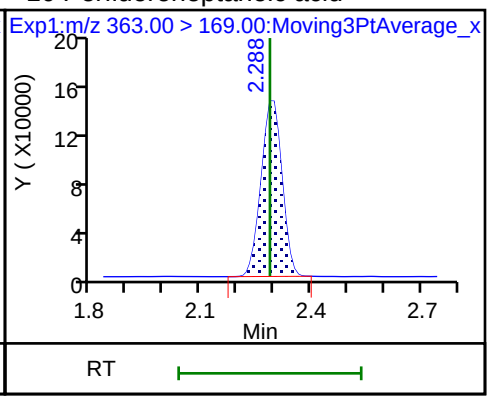
D 64 13C3 HFPO-DA



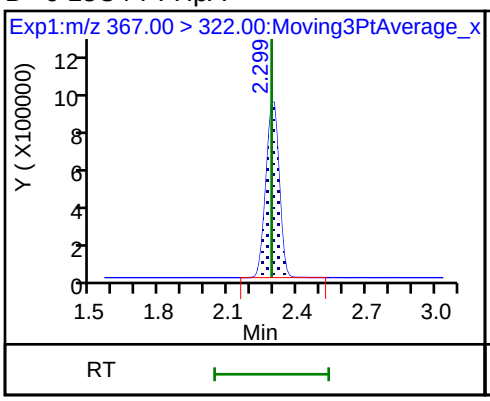
10 Perfluoroheptanoic acid



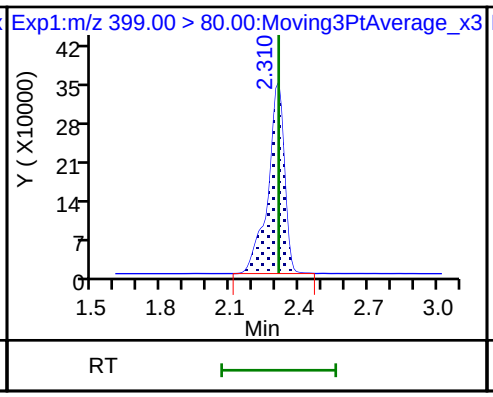
10 Perfluoroheptanoic acid



D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid



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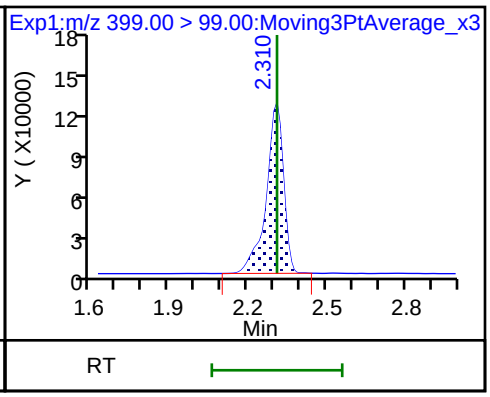
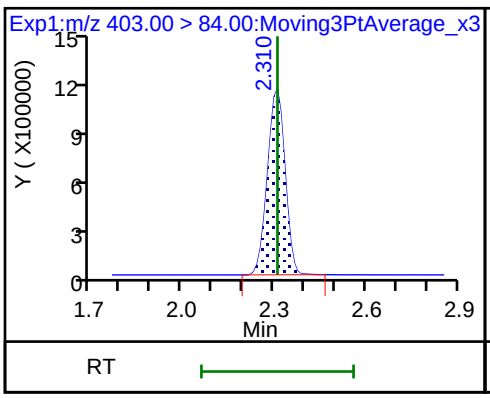


D 11 18O2 PFHxS



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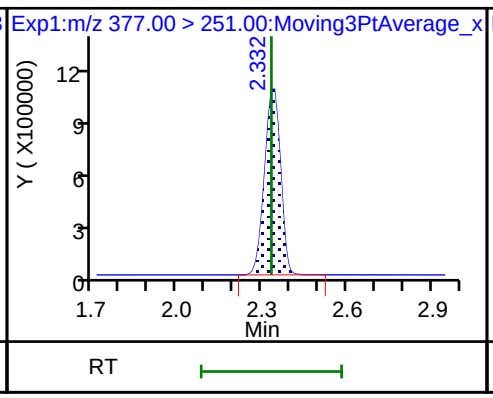

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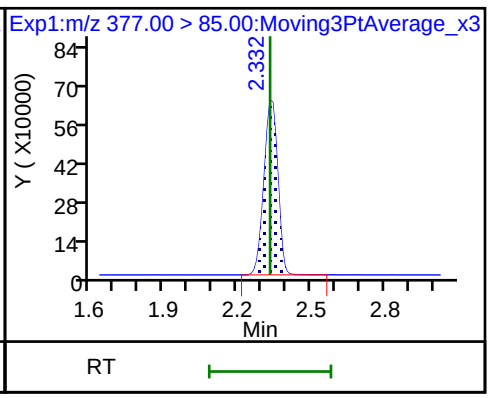
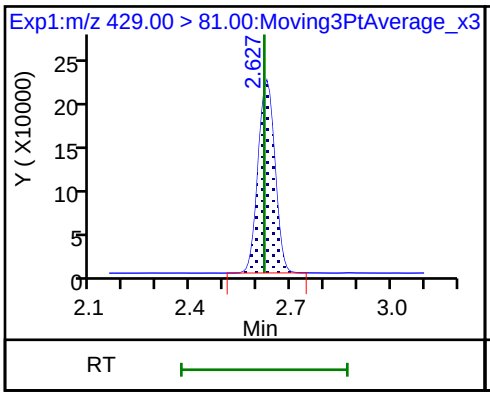
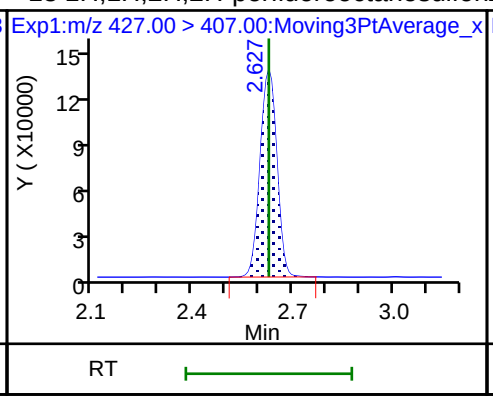


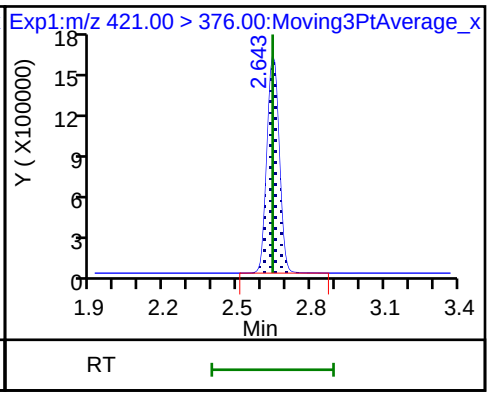
D 12 M2-6:2FTS



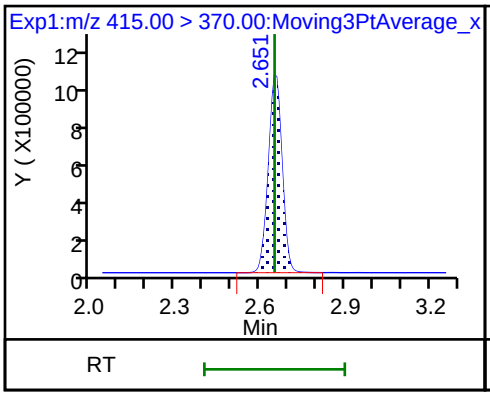
13 1H,1H,2H,2H-perfluorooctanesulfon



D 73 13C8 PFOA



* 62 13C2-PFOA



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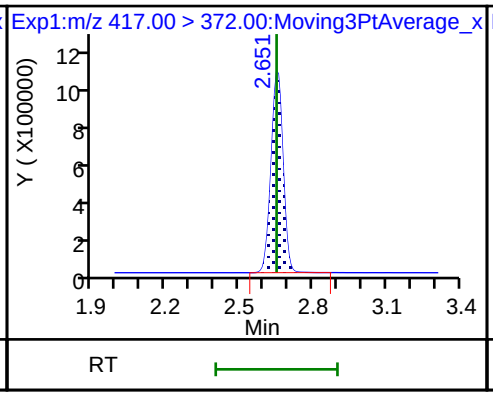
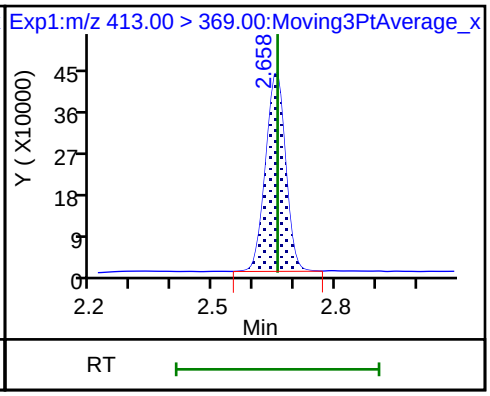
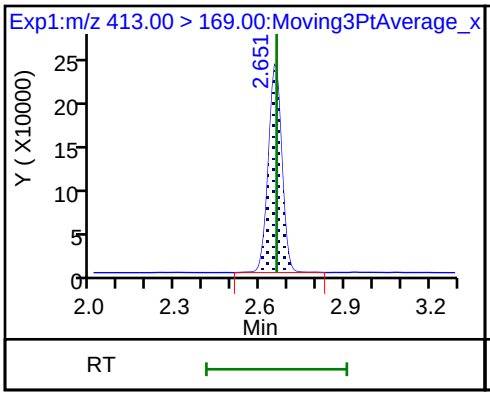


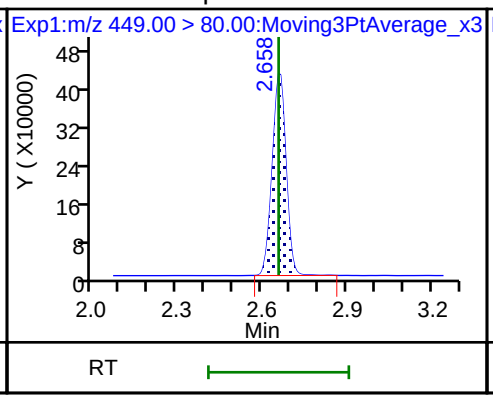
15 Perfluorooctanoic acid



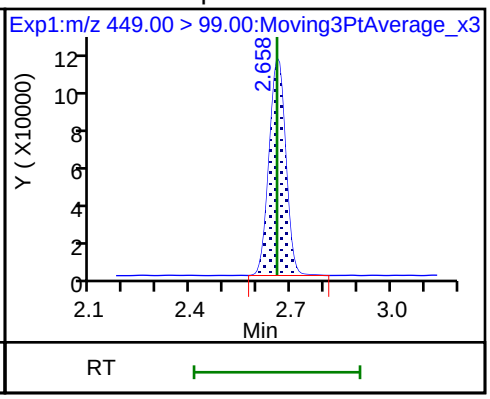
15 Perfluorooctanoic acid



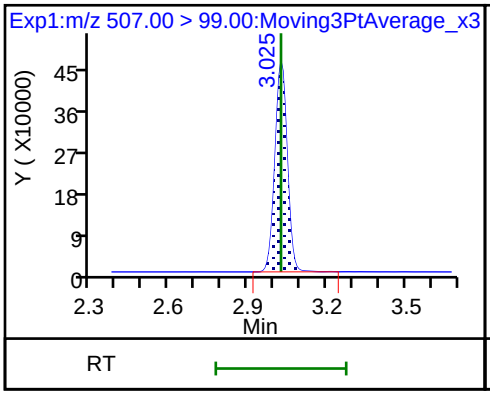
16 Perfluoroheptanesulfonic acid



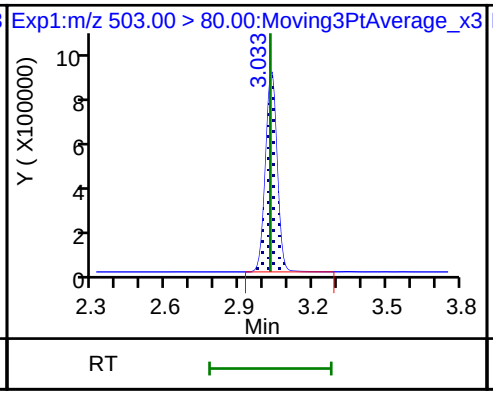
16 Perfluoroheptanesulfonic acid



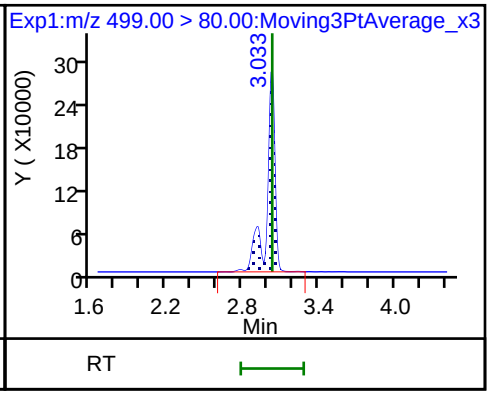
D 72 13C8 PFOS



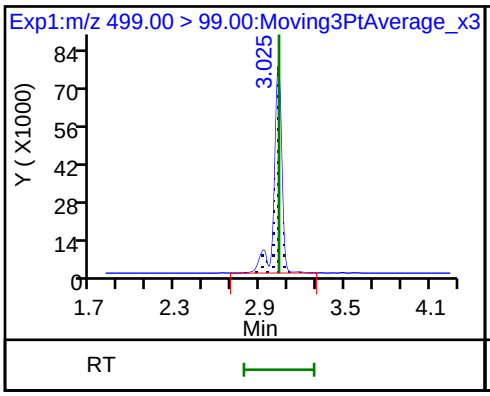
D 18 13C4 PFOS



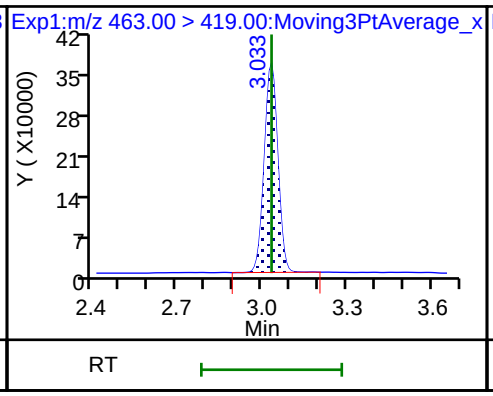
17 Perfluorooctane sulfonic acid



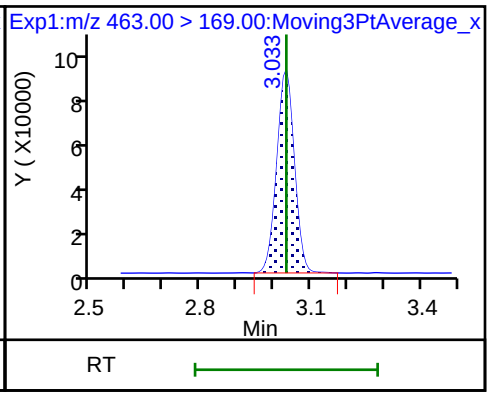
17 Perfluorooctane sulfonic acid



20 Perfluorononanoic acid



20 Perfluorononanoic acid



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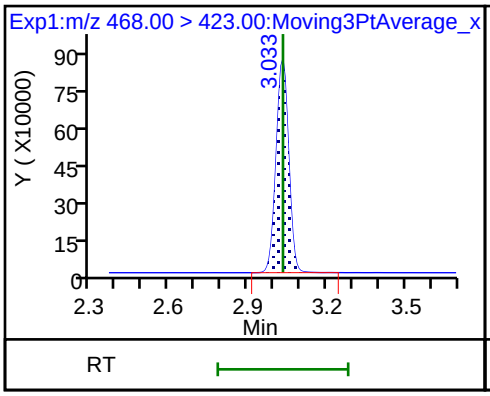
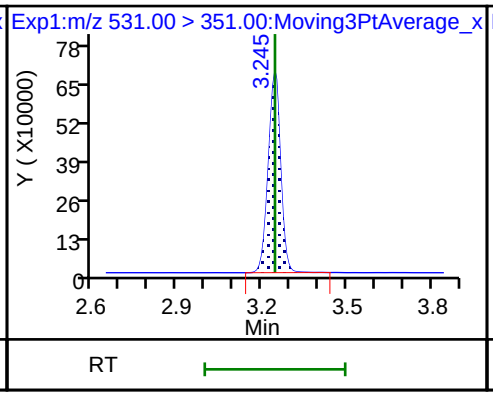
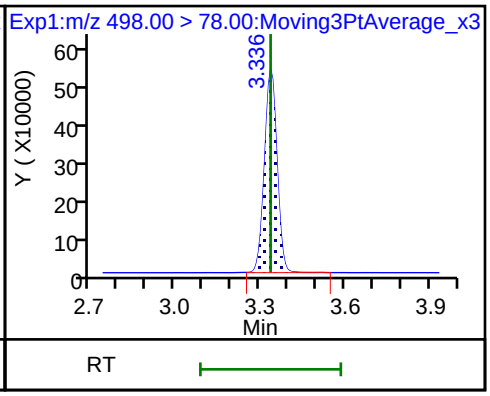


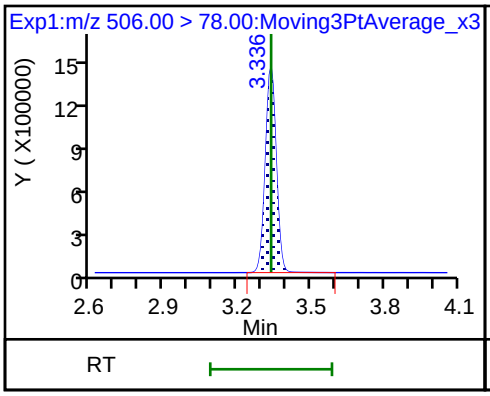
69 9-Chlorohexadecafluoro-3-oxanonane



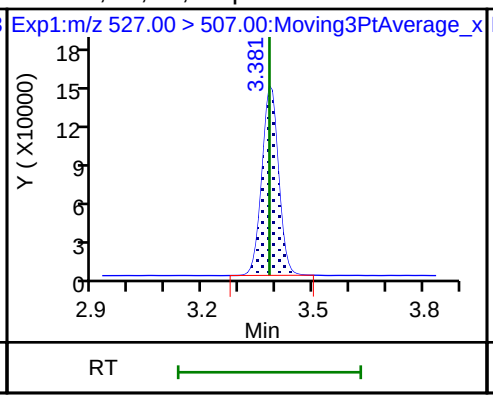
22 Perfluorooctane Sulfonamide



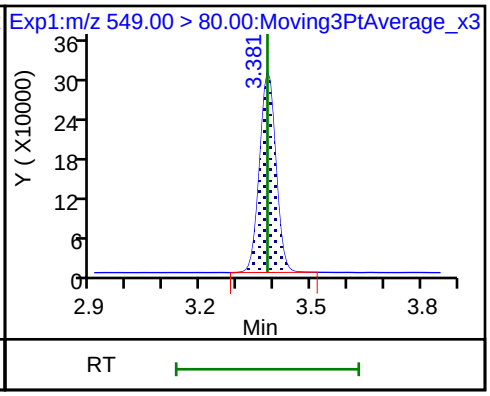
D 21 13C8 FOSA



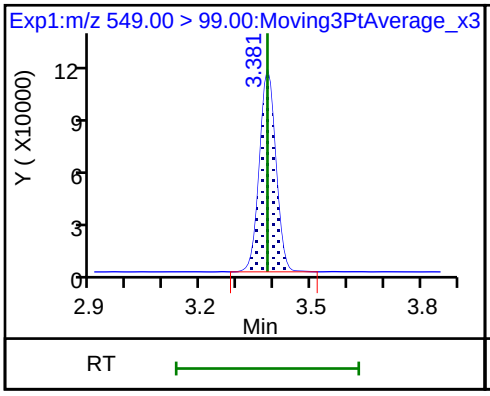
25 1H,1H,2H,2H-perfluorodecanesulfoni



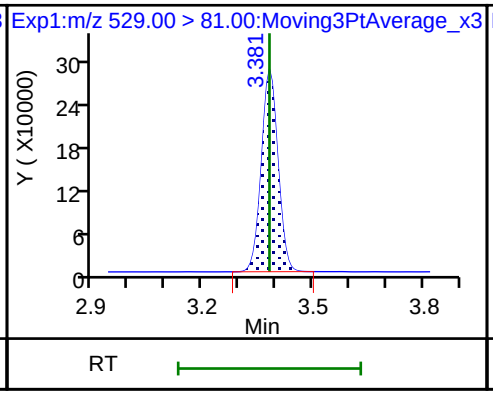
68 Perfluorononanesulfonic acid



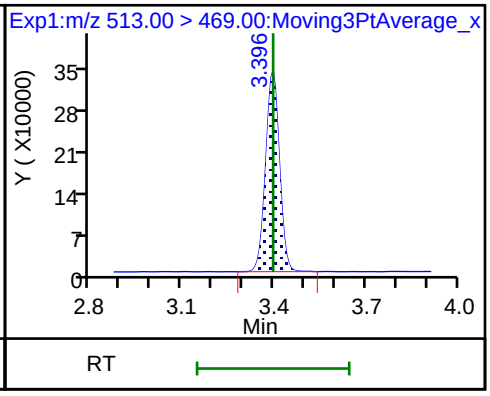
68 Perfluorononanesulfonic acid



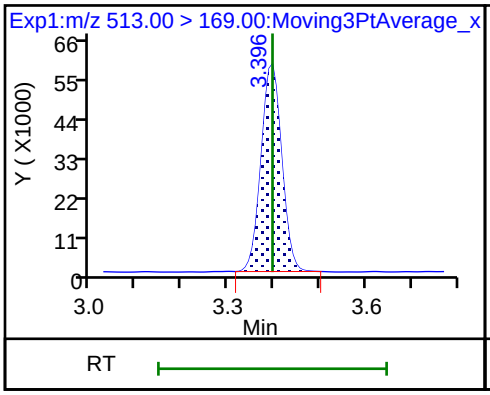
D 26 M2-8:2FTS



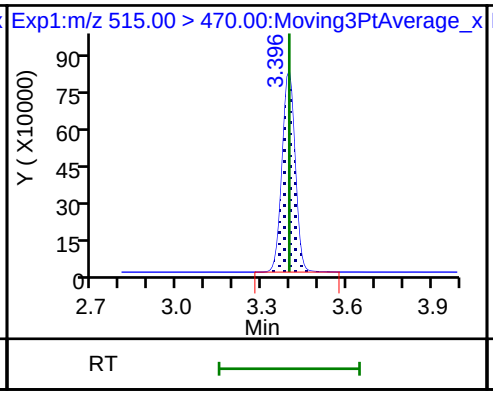
24 Perfluorodecanoic acid



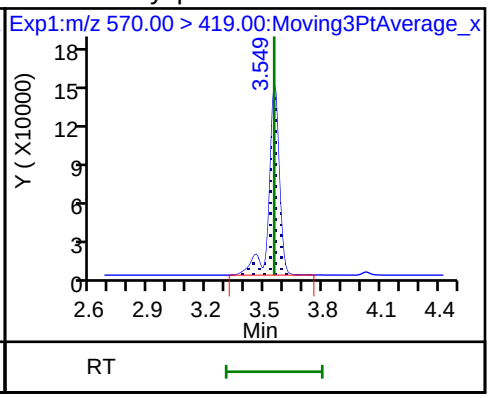
24 Perfluorodecanoic acid



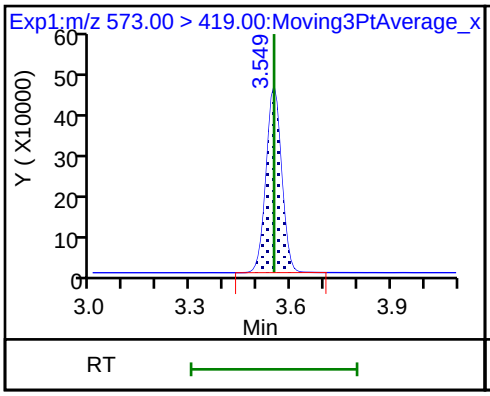
D 23 13C2 PFDA



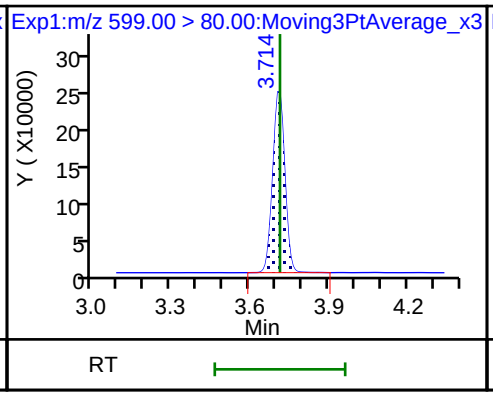
28 N-methyl perfluorooctane sulfonami



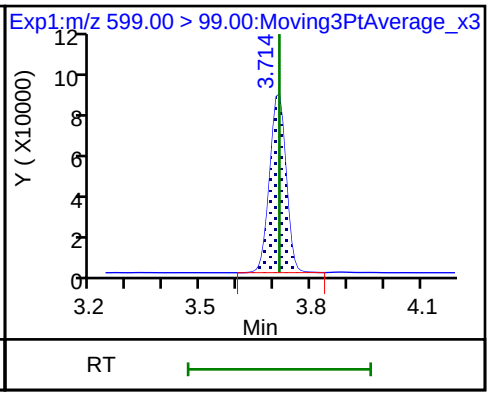
D 27 d3-NMeFOSAA



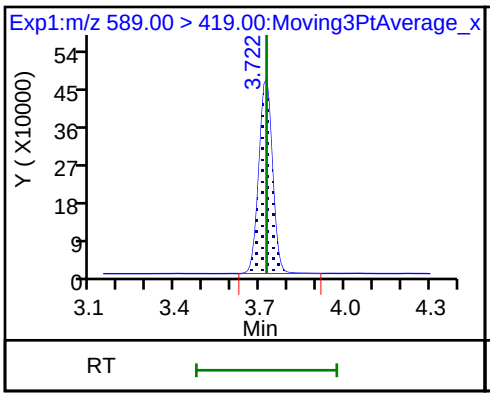
29 Perfluorodecane Sulfonic acid



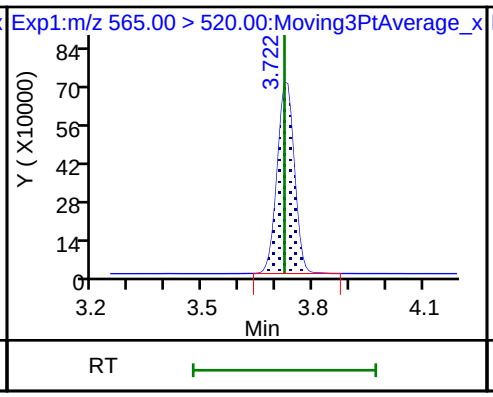
29 Perfluorodecane Sulfonic acid



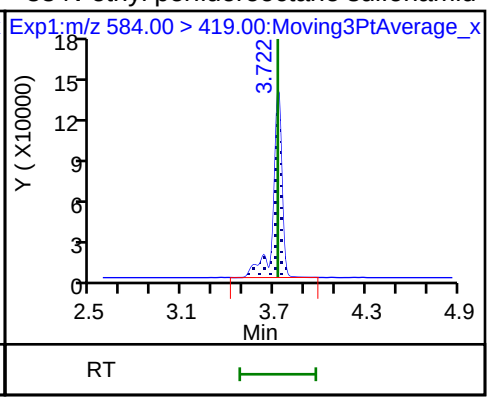
D 32 d5-NEtFOSAA



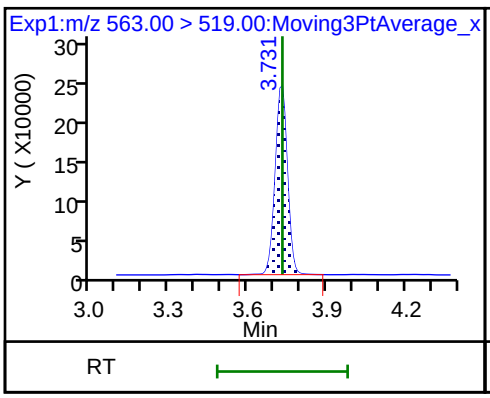
D 30 13C2 PFUnA



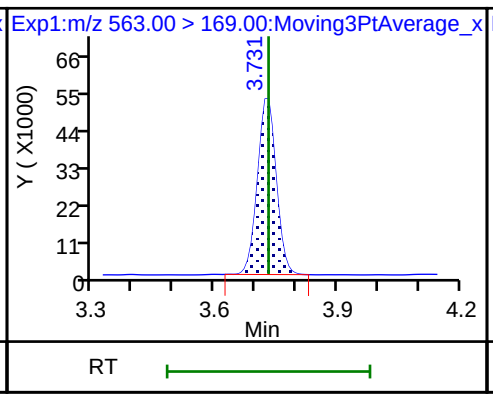
33 N-ethyl perfluorooctane sulfonamid



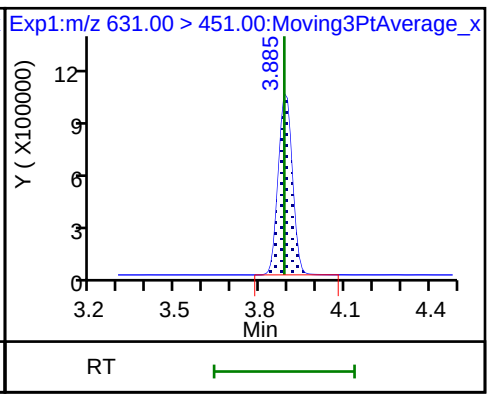
31 Perfluoroundecanoic acid



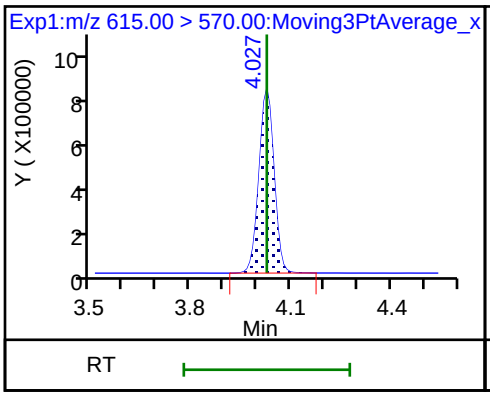
31 Perfluoroundecanoic acid



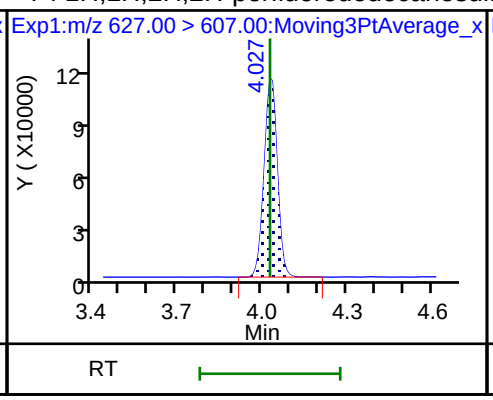
66 11-Chloroeicosafluoro-3-oxaundecan



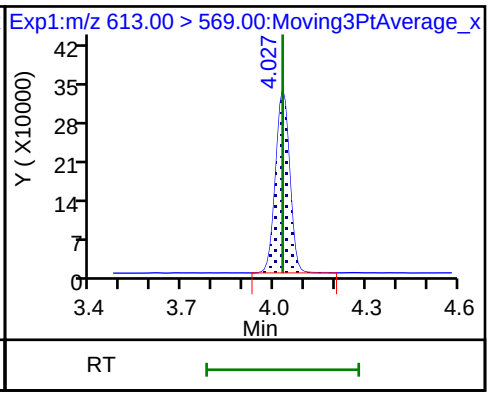
D 36 13C2 PFDoA



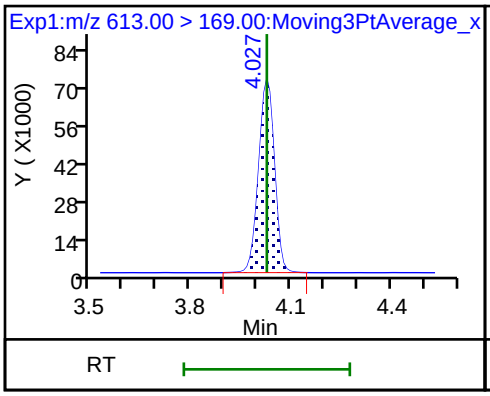
74 1H,1H,2H,2H-perfluorododecanesulfo



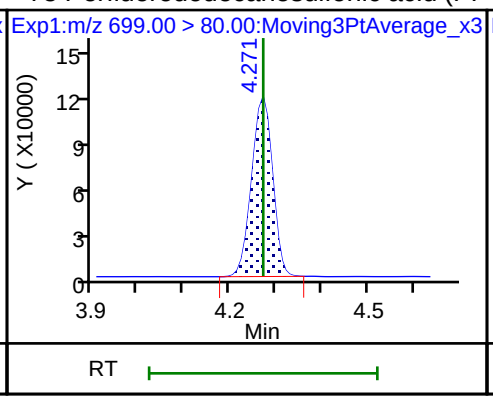
37 Perfluorododecanoic acid



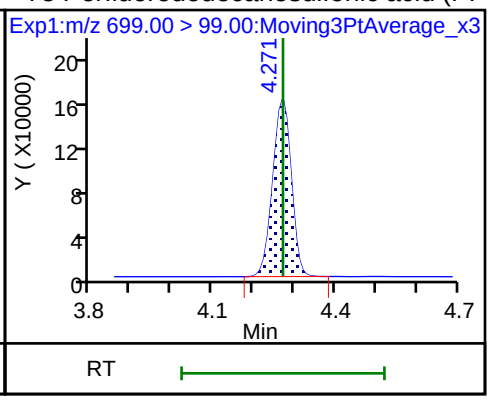
37 Perfluorododecanoic acid



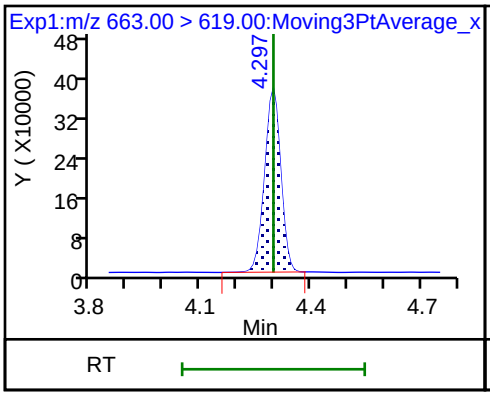
75 Perfluorododecanesulfonic acid (PF



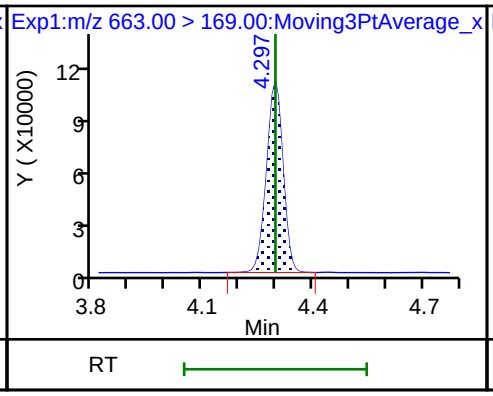
75 Perfluorododecanesulfonic acid (PF



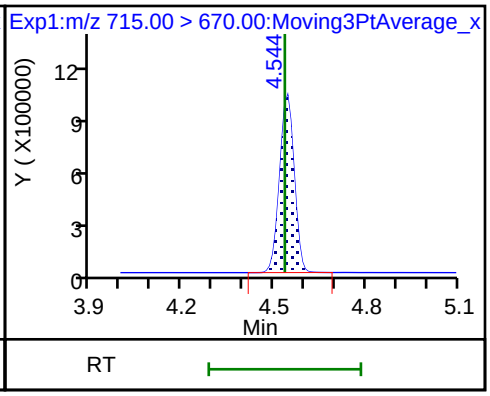
41 Perfluorotridecanoic acid



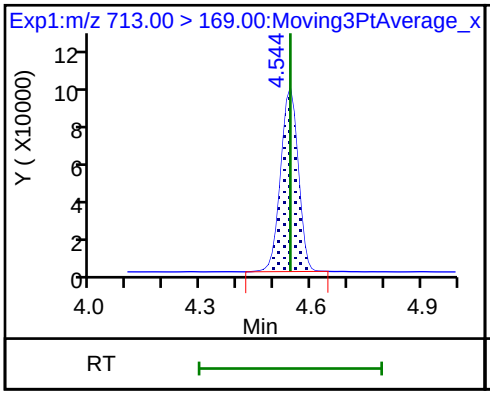
41 Perfluorotridecanoic acid



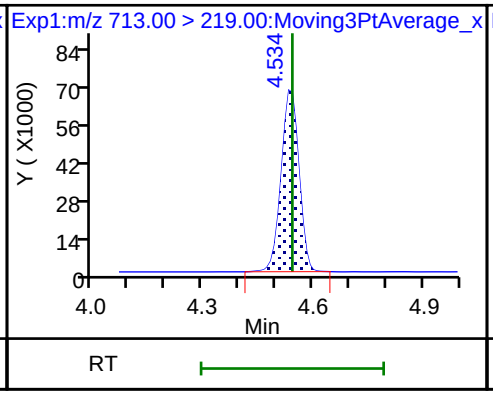
D 43 13C2-PFTeDA



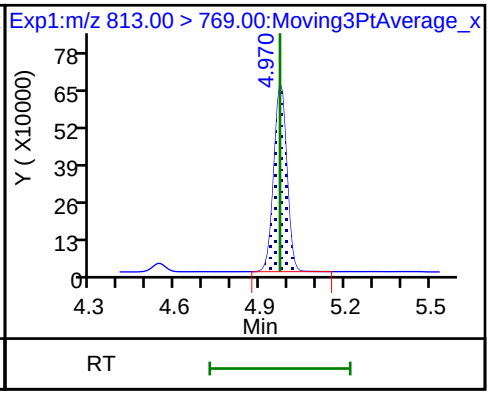
42 Perfluorotetradecanoic acid



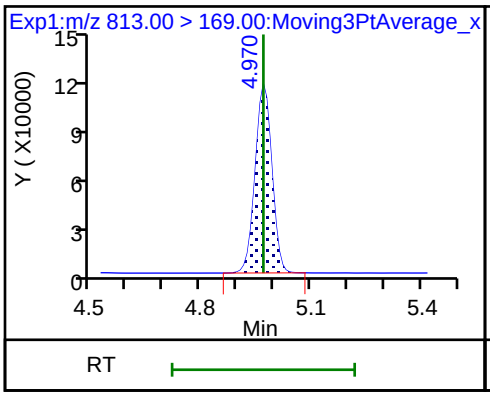
42 Perfluorotetradecanoic acid



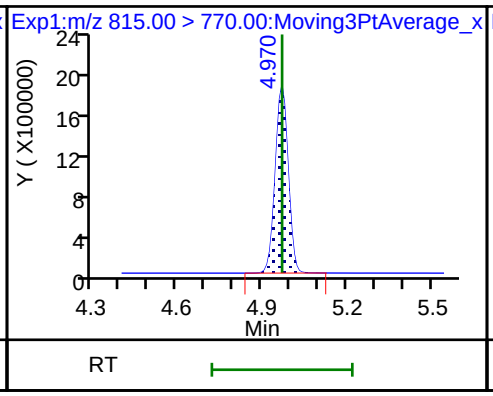
45 Perfluorohexadecanoic acid



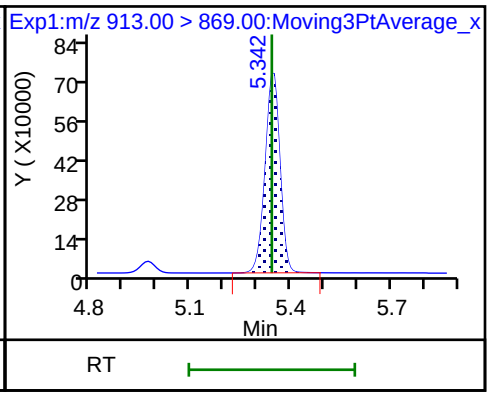
45 Perfluorohexadecanoic acid



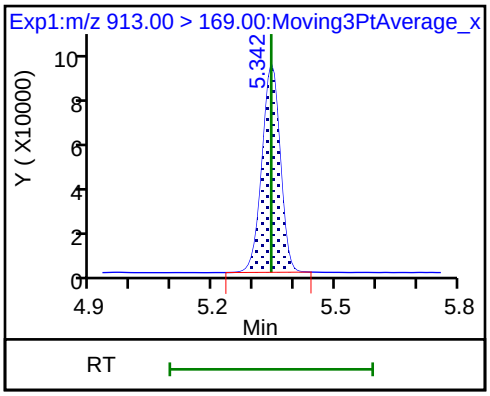
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-239440/1 Calibration Date: 08/12/2018 15:04

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_032.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9185		2.45	2.50	-2.2	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.167		2.56	2.50	2.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	75.63		2.20	2.21	-0.4	50.0
4:2 FTS	AveID	16.57	19.33		2.72	2.34	16.6	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	1.032		2.53	2.50	1.1	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	71.44		2.43	2.35	3.7	50.0
HFPO-DA (GenX)	AveID	2.420	2.426		2.51	2.50	0.2	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.074		2.53	2.50	1.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.052		2.21	2.28	-2.9	40.0
6:2 FTS	AveID	1.573	1.497		2.26	2.37	-4.8	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.105		2.45	2.50	-2.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.248		2.40	2.38	0.7	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.083		2.34	2.32	0.9	40.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.053		2.50	2.50	-0.0	40.0
F-53B Major	AveID	1.742	1.788		2.39	2.33	2.6	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	1.001		2.57	2.50	2.8	40.0
8:2 FTS	AveID	1.299	1.136		2.09	2.40	-12.6	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.8002		2.55	2.40	6.4	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	0.9800		2.44	2.50	-2.3	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	1.017		2.64	2.50	5.5	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6940		2.65	2.41	9.8	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8427		2.36	2.50	-5.5	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	0.8791		1.96	2.50	-21.8	40.0
F-53B Minor	AveID	2.674	2.983		2.63	2.36	11.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.042		2.34	2.50	-6.3	40.0
10:2 FTS	AveID	0.9008	0.9128		2.44	2.41	1.3	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2948		2.57	2.42	6.1	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.127		2.62	2.50	4.8	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2581		2.67	2.50	6.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.8984		2.56	2.50	2.2	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-239440/1 Calibration Date: 08/12/2018 15:04

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_032.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.8350		2.27	2.50	-9.3	50.0
13C4 PFBA	Ave	1.385	1.362		2.46	2.50	-1.6	50.0
13C5 PFPeA	Ave	0.9537	0.8729		2.29	2.50	-8.5	50.0
13C3-PFBS	Ave	0.0221	0.0196		2.07	2.33	-11.0	50.0
M2-4:2FTS	Ave	0.1572	0.1673		2.48	2.34	6.4	50.0
13C2 PFHxA	Ave	1.082	1.001		2.31	2.50	-7.5	50.0
13C3 HFPO-DA	Ave	0.0842	0.0757		2.25	2.50	-10.0	50.0
13C4-PFHpA	Ave	1.065	0.9621		2.26	2.50	-9.7	50.0
18O2 PFHxS	Ave	1.366	1.235		2.14	2.37	-9.6	50.0
M2-6:2FTS	Ave	0.2242	0.2483		2.63	2.38	10.8	40.0
13C8 PFOA	Ave	1.927	1.567		1.99	2.45	-18.7	50.0
13C4 PFOA	Ave	0.9773	0.9566		2.45	2.50	-2.1	50.0
13C4 PFOS	Ave	0.8973	0.8679		2.31	2.39	-3.3	50.0
13C8 PFOS	Ave	0.4359	0.4505		2.47	2.39	3.3	50.0
13C5 PFNA	Ave	0.8770	0.8454		2.41	2.50	-3.6	50.0
13C8 FOSA	Ave	1.188	1.306		2.75	2.50	9.9	50.0
M2-8:2FTS	Ave	0.2707	0.2979		2.64	2.40	10.1	40.0
13C2 PFDA	Ave	0.7695	0.7672		2.49	2.50	-0.3	50.0
d3-NMeFOSAA	Ave	0.3935	0.4001		2.54	2.50	1.7	50.0
d5-NEtFOSAA	Ave	0.4077	0.4268		2.62	2.50	4.7	50.0
13C2 PFUnA	Ave	0.6189	0.6397		2.58	2.50	3.4	50.0
13C2 PFDoA	Ave	0.6541	0.7019		2.68	2.50	7.3	50.0
13C2-PFTeDA	Ave	0.8335	0.8658		2.60	2.50	3.9	50.0
13C2-PFHxDA	Ave	1.653	1.487		2.25	2.50	-10.1	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_032.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 12-Aug-2018 15:04:24 ALS Bottle#: 14 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:27:39 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 10:45:35

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.418	1.411	0.007	0.536	4217955	2.46		98.4	6850	
2 Perfluorobutyric acid										
212.90 > 169.00	1.418	1.418	0.0	1.000	3874303	2.45		97.8	274	
D 3 13C5-PFPeA										
267.90 > 223.00	1.676	1.670	0.006	0.633	2702716	2.29		91.5	6863	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.676	1.676	0.0	1.000	3154423	2.56		103	219	
D 47 13C3-PFBS										
301.90 > 83.00	1.708	1.702	0.006	0.645	56515	2.07		89.0	292	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.716	1.716	0.0	1.005	4062693	2.20		99.6	923	
298.90 > 99.00	1.716	1.716	0.0	1.005	1692260		2.40(1.25-3.74)		751	
D 60 M2-4:2FTS										
329.00 > 81.00	1.928	1.912	0.016	0.728	483690	2.48		106	734	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.928	1.928	0.0	1.129	1096987	2.72		117	5443	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.960	1.960	0.0	1.000	3198765	2.53		101	665	
313.00 > 119.00	1.960	1.960	0.0	1.000	295409		10.83(5.03-15.10)		621	
D 7 13C2 PFHxA										
315.00 > 270.00	1.960	1.954	0.006	0.740	3099586	2.31		92.5	7956	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.980	1.980	0.0	1.160	4072126	2.43		104	4121	
349.00 > 99.00	1.980	1.980	0.0	1.160	1553851		2.62(1.36-4.07)		1921	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.054	2.048	0.006	0.776	234478	2.25		90.0	707	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.054	2.054	0.0	1.000	568771	2.51		100	264	
D 9 13C4-PFHpA										
367.00 > 322.00	2.292	2.288	0.004	0.866	2978932	2.26		90.3	3419	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.292	2.292	0.0	1.000	3198199	2.53		101	674	
363.00 > 169.00	2.292	2.292	0.0	1.000	1258908		2.54(1.13-3.40)		1546	
D 11 18O2 PFHxS										
403.00 > 84.00	2.303	2.299	0.004	0.870	3616536	2.14		90.4	3575	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.303	2.303	0.0	1.000	3661078	2.21		97.1	3629	
399.00 > 99.00	2.303	2.303	0.0	1.000	1233318		2.97(1.50-4.49)		896	
65 ADONA										
377.00 > 251.00	2.336	2.336	0.0	0.775	9750919	2.80		112	10197	
377.00 > 85.00	2.336	2.336	0.0	0.775	5771082		1.69(0.84-2.53)		5124	
D 12 M2-6:2FTS										
429.00 > 81.00	2.616	2.612	0.004	0.988	730259	2.63		111	2382	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.624	2.624	0.0	1.003	1091085	2.26		95.2	2645	
D 73 13C8 PFOA										
421.00 > 376.00	2.631	2.635	-0.004	0.994	4749282	1.99		81.3	9035	
D 14 13C4 PFOA										
417.00 > 372.00	2.647	2.643	0.004	1.000	2961746	2.45		97.9	4663	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.647	2.647	0.0	1.000	3276815	2.45		97.8	276	
413.00 > 169.00	2.647	2.647	0.0	1.000	1737475		1.89(0.84-2.52)		1714	
* 62 13C2-PFOA										
415.00 > 370.00	2.647	2.647	0.0		3096286	2.50			6744	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.655	2.655	0.0	0.881	3192909	2.40		101	3346	
449.00 > 99.00	2.655	2.655	0.0	0.881	852629		3.74(1.94-5.82)		1197	
D 72 13C8 PFOS										
507.00 > 99.00	3.014	3.016	-0.002	1.139	1333460	2.47		103	2987	
D 18 13C4 PFOS										
503.00 > 80.00	3.014	3.016	-0.002	1.139	2569148	2.31		96.7	3853	
D 19 13C5 PFNA										
468.00 > 423.00	3.022	3.016	0.006	1.141	2617721	2.41		96.4	6664	
20 Perfluorononanoic acid										
463.00 > 419.00	3.022	3.022	0.0	1.000	2755192	2.50		99.9	621	
463.00 > 169.00	3.022	3.022	0.0	1.000	672399		4.10(1.90-5.69)		2781	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.014	3.014	0.0	1.000	2702066	2.34		101	2242	
499.00 > 99.00	3.014	3.014	0.0	1.000	607220		4.45(2.31-6.93)		786	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.234	3.234	0.0	1.073	4478019	2.39		103	7783	
D 21 13C8 FOSA										
506.00 > 78.00	3.340	3.335	0.005	1.262	4044266	2.75		110	4184	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.340	3.340	0.0	1.000	4047310	2.57		103	5398	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.369	3.369	0.0	1.118	2064490	2.55		106	5146	
549.00 > 99.00	3.369	3.369	0.0	1.118	728262		2.83(1.33-3.97)		1804	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.369	3.369	0.0	1.000	1003671	2.09		87.4	3025	
D 26 M2-8:2FTS										
529.00 > 81.00	3.369	3.372	-0.003	1.273	883721	2.64		110	2553	
D 23 13C2 PFDA										
515.00 > 470.00	3.377	3.380	-0.003	1.276	2375533	2.49		99.7	3829	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.377	3.377	0.0	1.000	2328074	2.44		97.7	1515	
513.00 > 169.00	3.377	3.377	0.0	1.000	414196		5.62(2.36-7.09)		323	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.537	3.537	0.0	1.000	1260135	2.64		105	1080	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.537	3.540	-0.003	1.336	1238838	2.54		102	3213	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.699	3.699	0.0	1.227	1797859	2.65		110	3203	
599.00 > 99.00	3.699	3.699	0.0	1.227	583992		3.08(1.39-4.16)		2042	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.707	3.702	0.005	1.400	1321380	2.62		105	1228	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.716	3.716	0.0	1.000	1741111	1.96		78.2	1132	
563.00 > 169.00	3.716	3.716	0.0	1.000	392357		4.44(2.12-6.36)		1721	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.716	3.716	0.0	1.002	1113510	2.36		94.5	2187	
D 30 13C2 PFUnA										
565.00 > 520.00	3.716	3.711	0.005	1.404	1980552	2.58		103	3387	
35 MeFOSA										
512.00 > 169.00	3.832	3.832	0.0		1156258	NC			666	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.878	3.878	0.0	1.287	7552673	2.63		112	9259	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.012	4.012	0.0	1.000	2265495	2.34		93.7	1377	
613.00 > 169.00	4.012	4.012	0.0	1.000	545438		4.15(2.13-6.40)		1815	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.020	4.020	0.0	1.193	811752	2.44		101	2187	
D 36 13C2 PFDoA										
615.00 > 570.00	4.012	4.017	-0.005	1.515	2173306	2.68		107	3999	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.253	4.253	0.0	1.411	766911	2.57		106	1940	
699.00 > 99.00	4.253	4.253	0.0	1.411	1101345		0.70(0.00-0.00)		3430	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.281	4.281	0.0	1.067	2449182	2.62		105	1063	
663.00 > 169.00	4.281	4.281	0.0	1.067	744108		3.29(1.25-3.76)		4111	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.524	4.524	0.0	1.000	691923	2.67		107	2563	
713.00 > 219.00	4.524	4.524	0.0	1.000	479994		1.44(0.71-2.13)		1313	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.524	4.523	0.001	1.709	2680842	2.60		104	4392	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.953	4.953	0.0	1.000	4135255	2.56		102	592	
813.00 > 169.00	4.953	4.953	0.0	1.000	714052		5.79(2.86-8.58)		1926	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.953	4.944	0.009	1.871	4602934	2.25		89.9	6323	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.315	5.315	0.0	1.073	3843223	2.27		90.7	494	
913.00 > 169.00	5.315	5.315	0.0	1.073	470476		8.17(3.83-11.48)		1702	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL5_00006 Amount Added: 1.00 Units: mL

Report Date: 13-Aug-2018 13:27:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_032.d

Injection Date: 12-Aug-2018 15:04:24 Instrument ID: A8_N

Lims ID: CCV L5

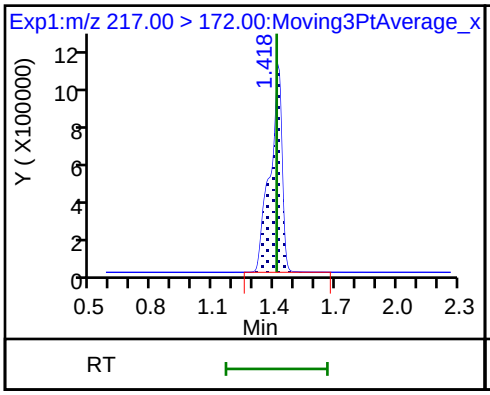
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 14 Worklist Smp#: 1

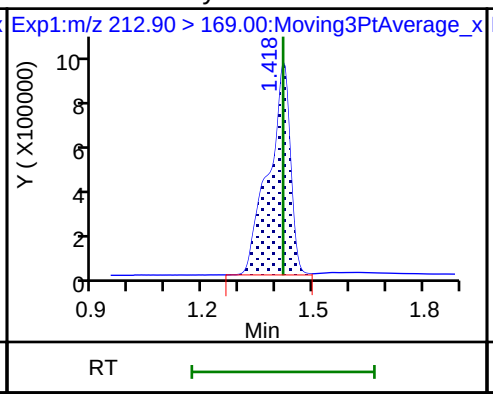
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

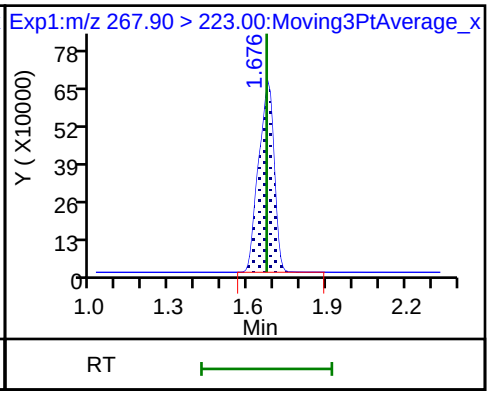
D 1 13C4 PFBA



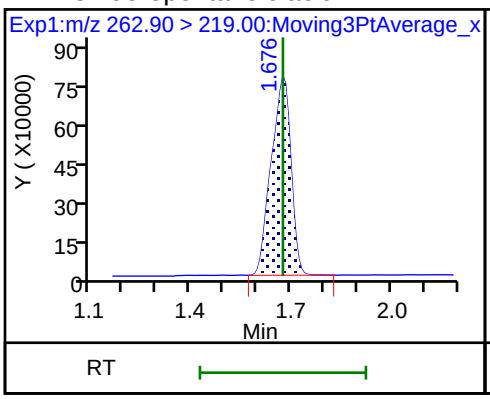
2 Perfluorobutyric acid



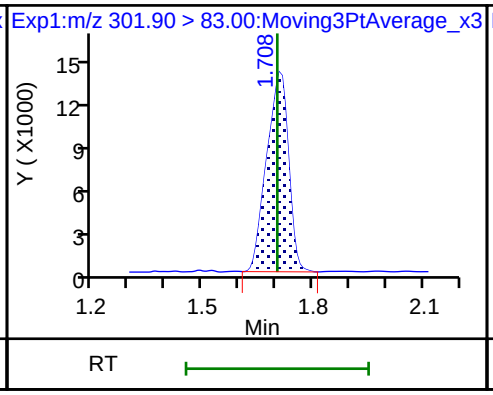
D 3 13C5-PFPeA



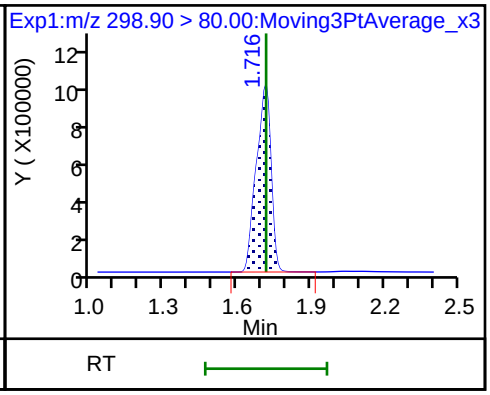
4 Perfluoropentanoic acid



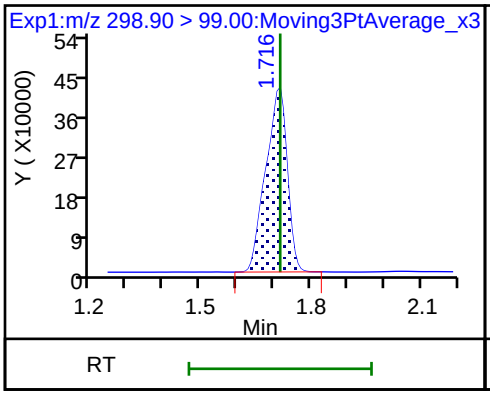
D 47 13C3-PFBS



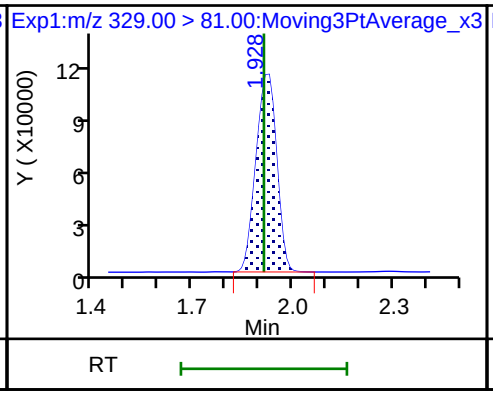
5 Perfluorobutanesulfonic acid



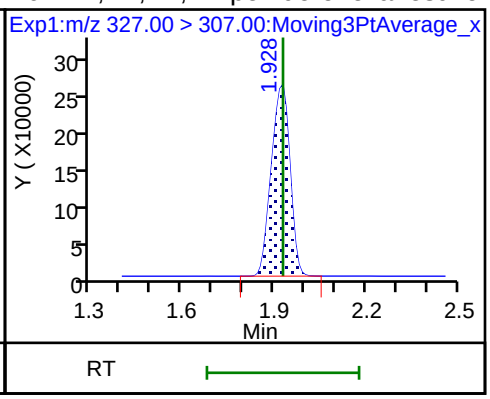
5 Perfluorobutanesulfonic acid



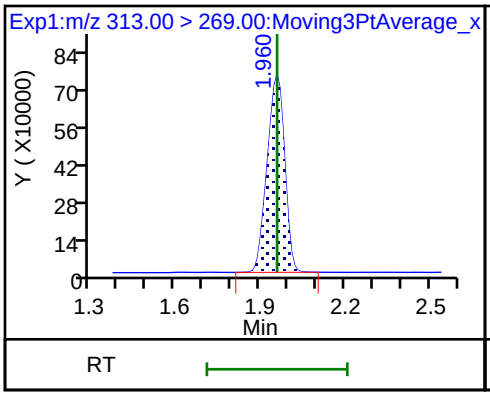
D 60 M2-4:2FTS



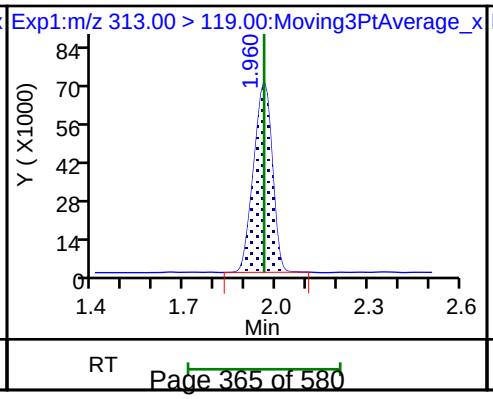
61 1H,1H,2H,2H-perfluorohexanesulfoni



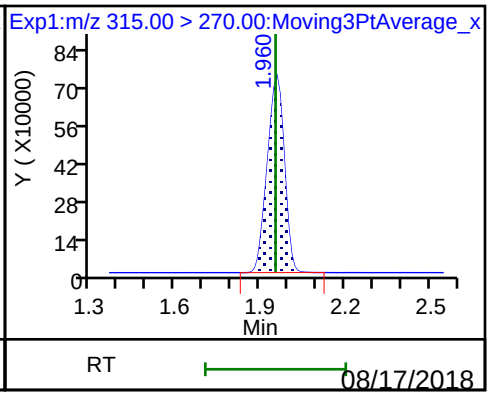
6 Perfluorohexanoic acid



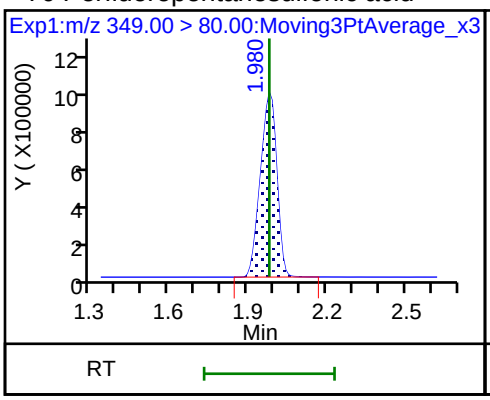
6 Perfluorohexanoic acid



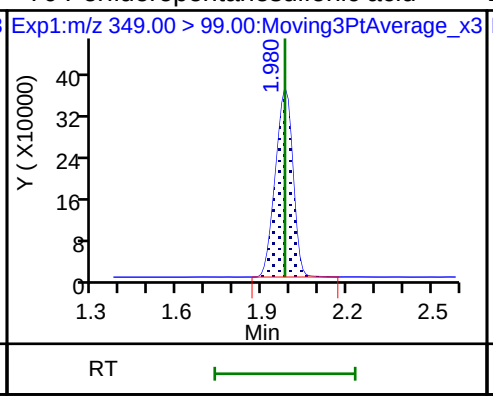
D 7 13C2 PFHxA



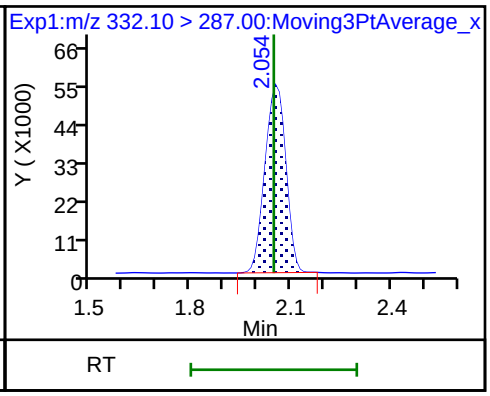
70 Perfluoropentanesulfonic acid



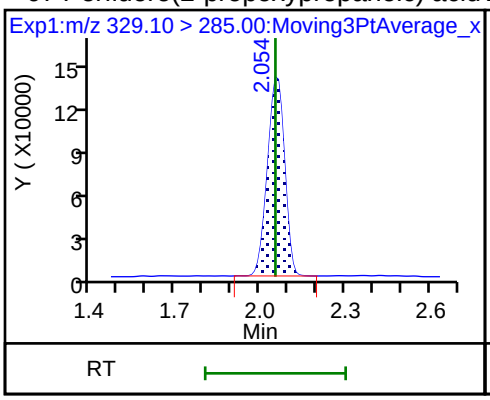
70 Perfluoropentanesulfonic acid



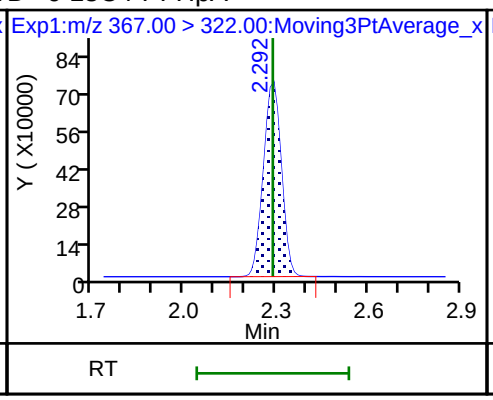
D 64 13C3 HFPO-DA



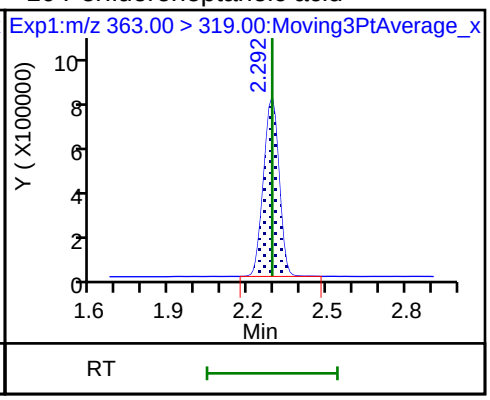
67 Perfluoro(2-propoxypropanoic) acid



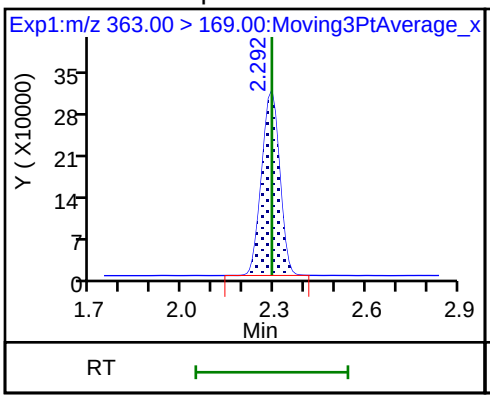
D 9 13C4-PFHpA



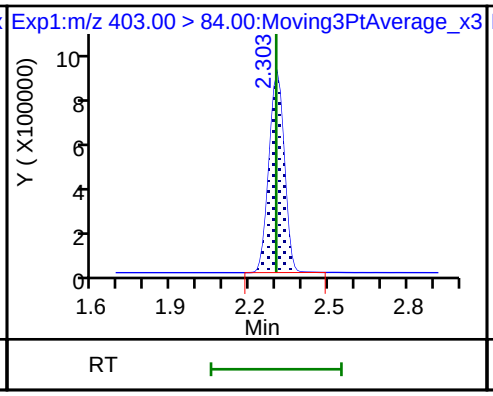
10 Perfluoroheptanoic acid



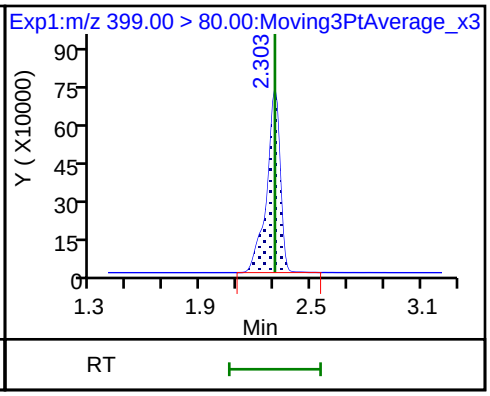
10 Perfluoroheptanoic acid



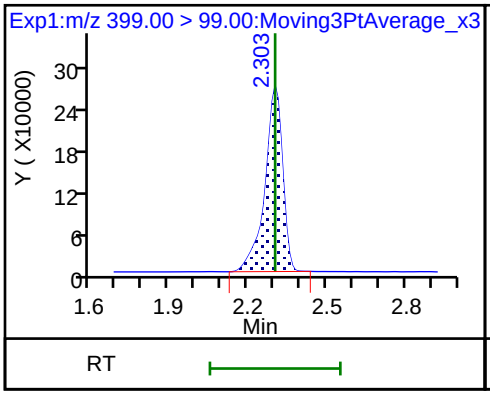
D 11 18O2 PFHxS



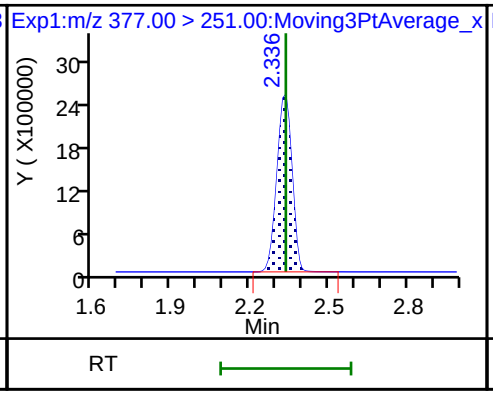
8 Perfluorohexanesulfonic acid



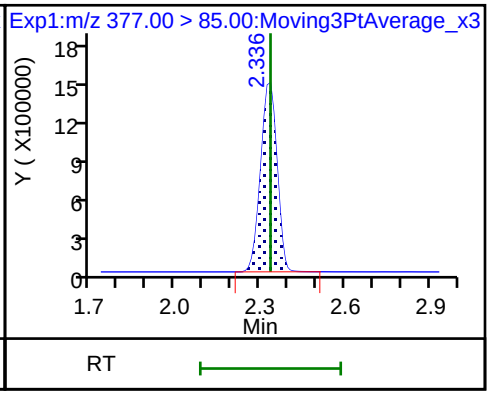
8 Perfluorohexanesulfonic acid



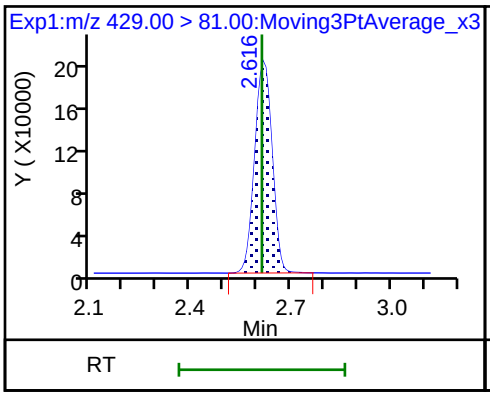
65 ADONA



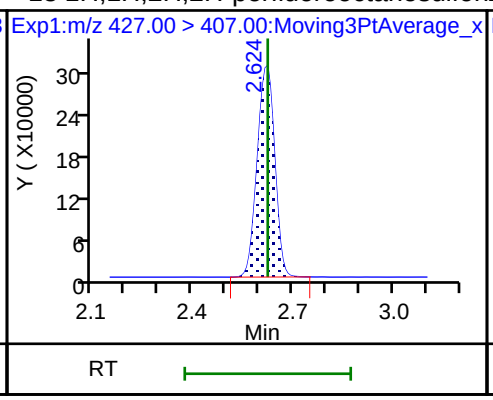
65 ADONA



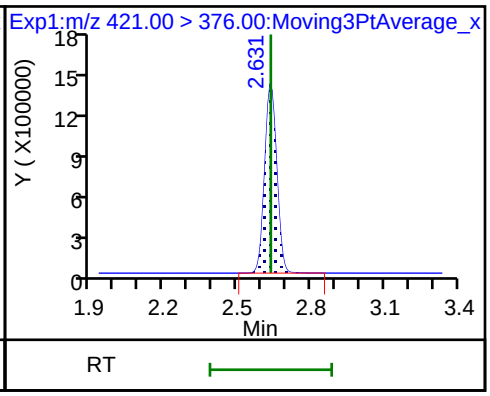
D 12 M2-6:2FTS



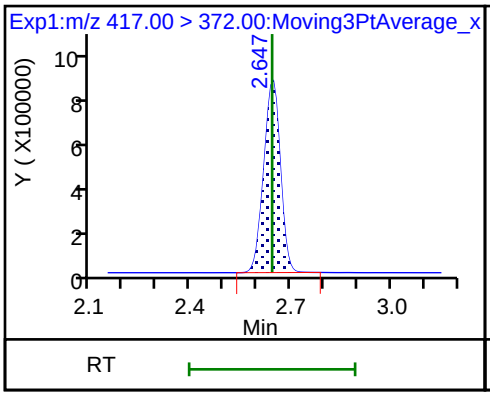
13 1H,1H,2H,2H-perfluorooctanesulfon



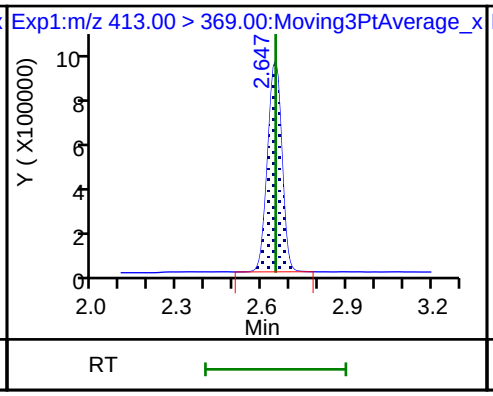
D 73 13C8 PFOA



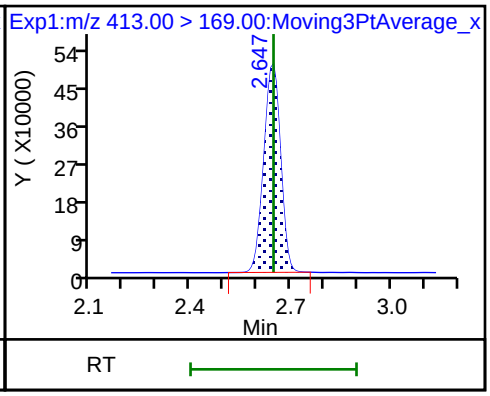
D 14 13C4 PFOA



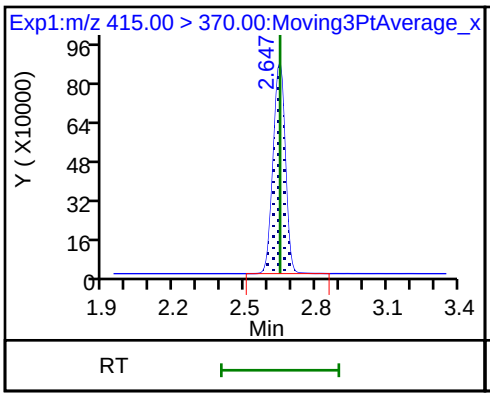
15 Perfluorooctanoic acid



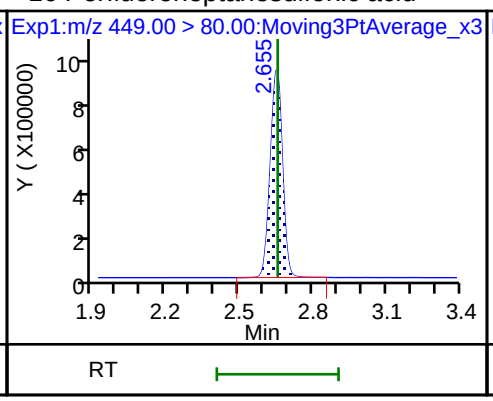
15 Perfluorooctanoic acid



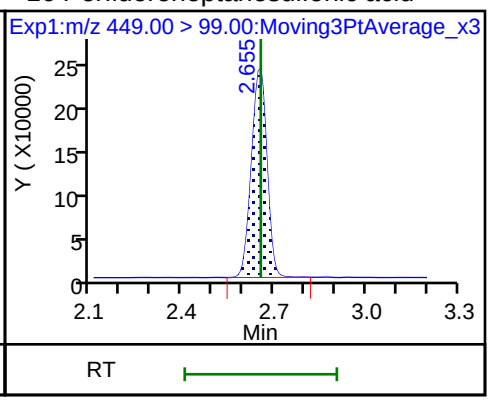
* 62 13C2-PFOA



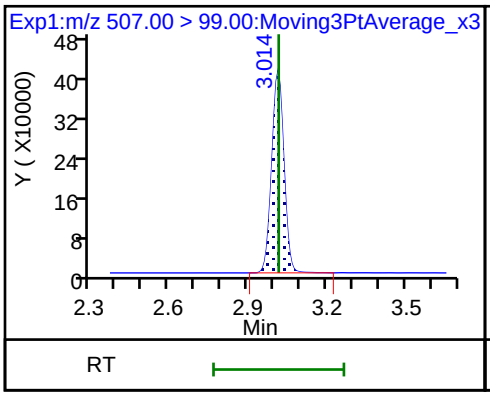
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 72 13C8 PFOS



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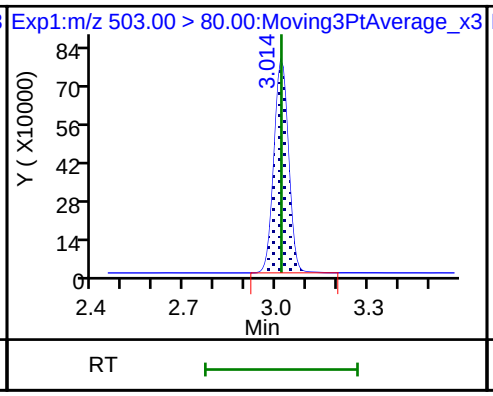

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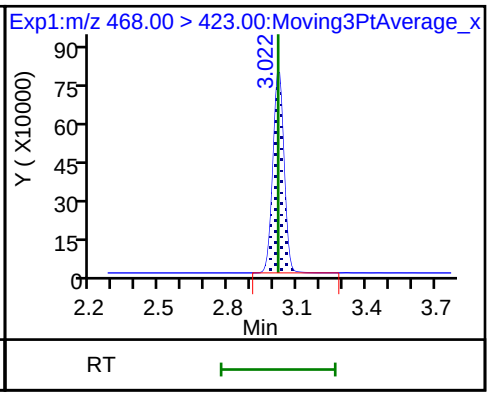
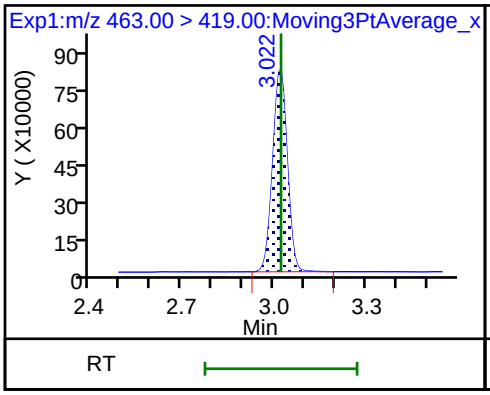
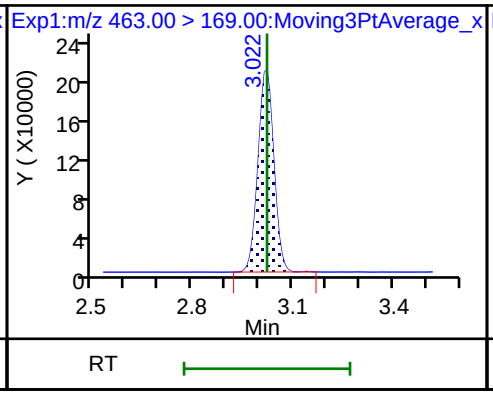


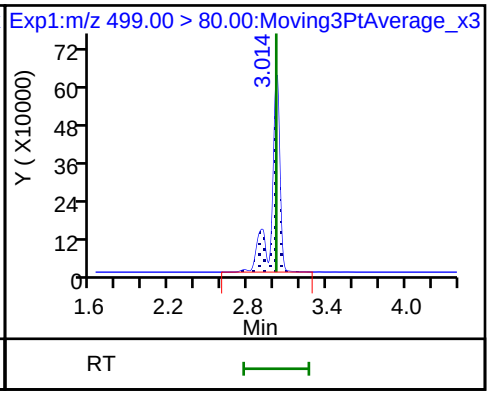
20 Perfluorononanoic acid



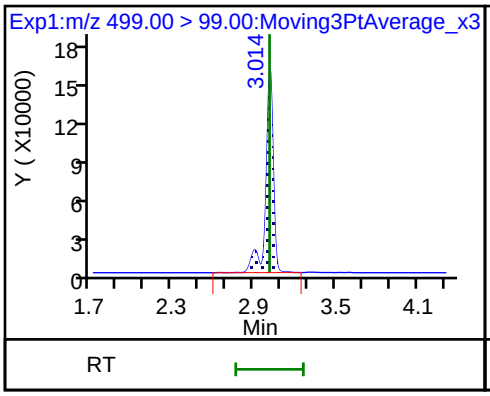
20 Perfluorononanoic acid



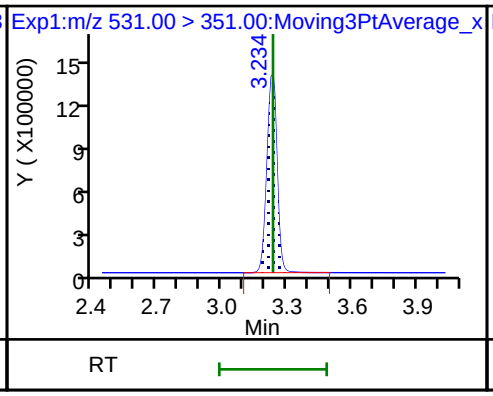
17 Perfluorooctane sulfonic acid



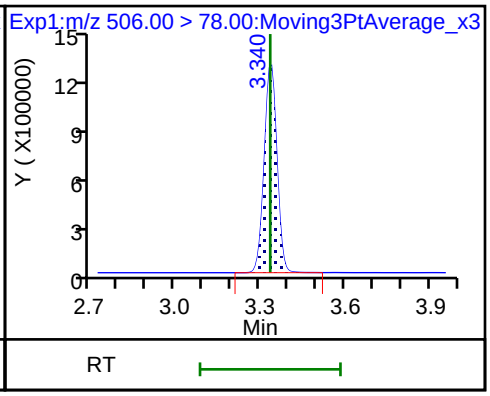
17 Perfluorooctane sulfonic acid



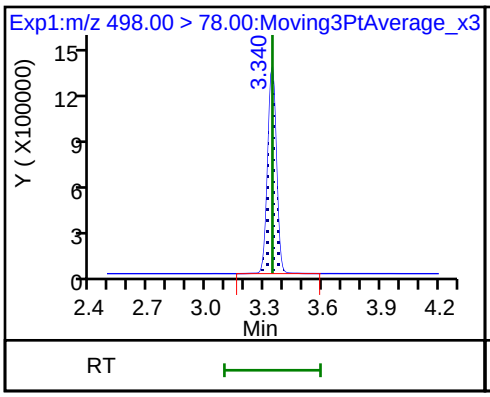
69 9-Chlorohexadecafluoro-3-oxanonane



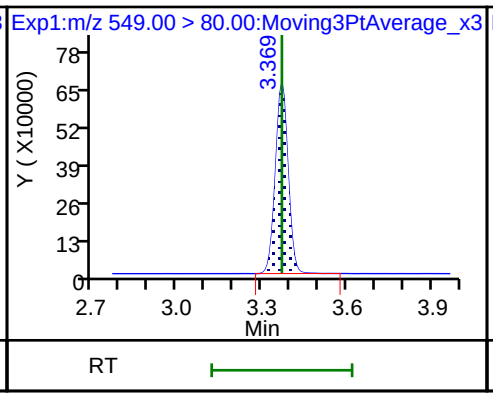
D 21 13C8 FOSA



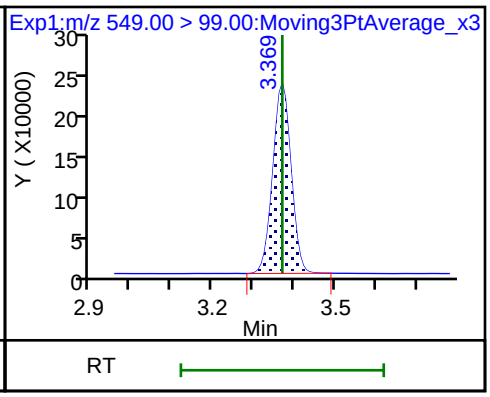
22 Perfluorooctane Sulfonamide



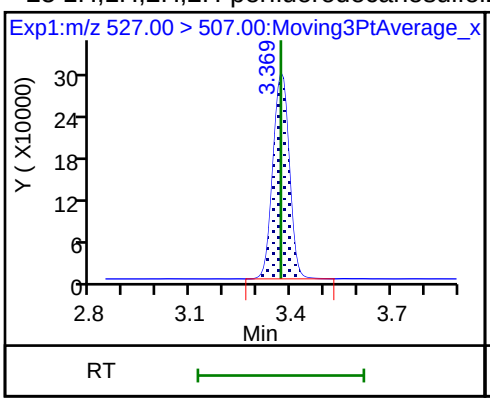
68 Perfluorononanesulfonic acid



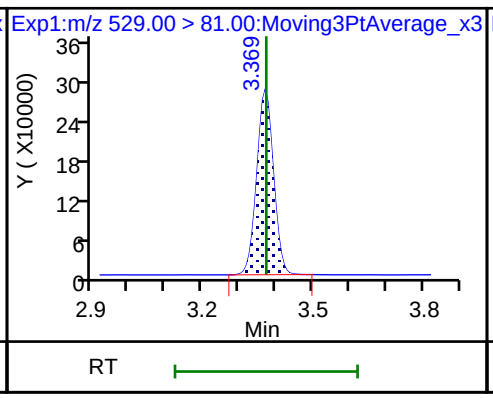
68 Perfluorononanesulfonic acid



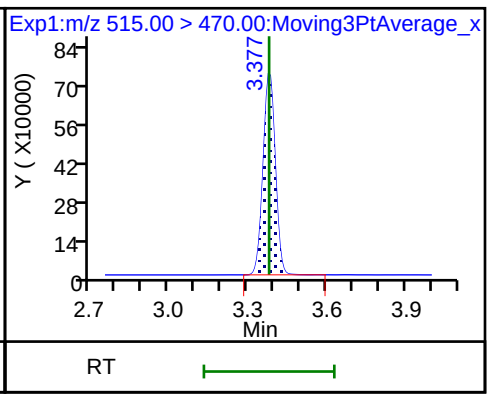
25 1H,1H,2H,2H-perfluorodecanesulfon



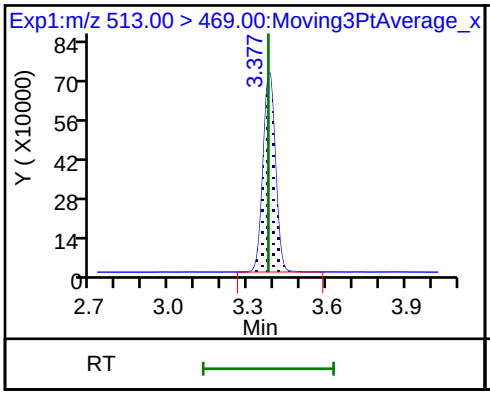
D 26 M2-8:2FTS



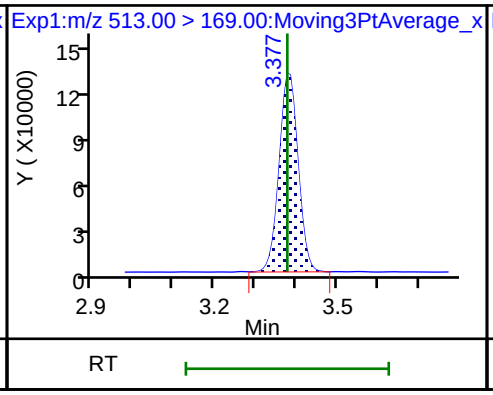
D 23 13C2 PFDA



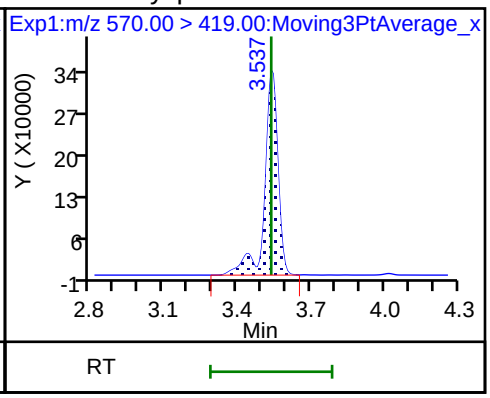
24 Perfluorodecanoic acid



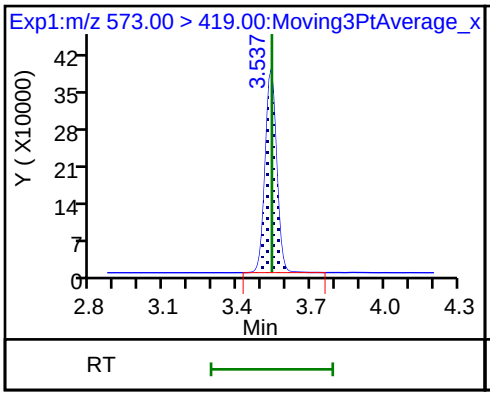
24 Perfluorodecanoic acid



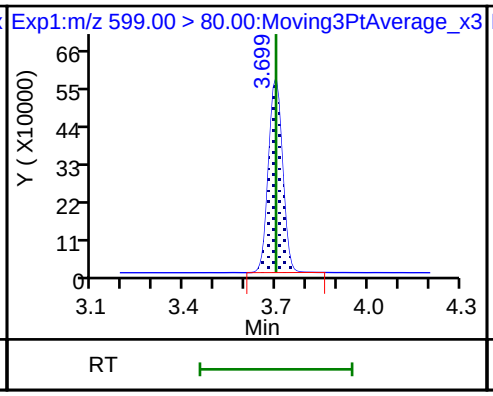
28 N-methyl perfluorooctane sulfonami (M)



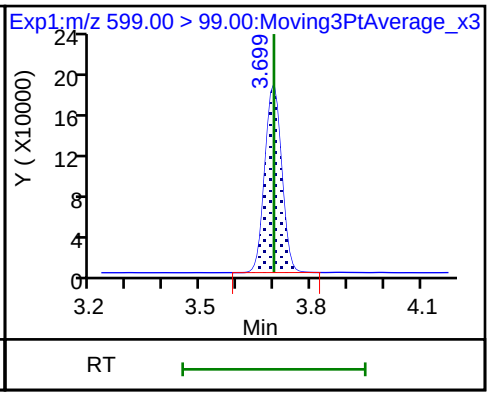
D 27 d3-NMeFOSAA



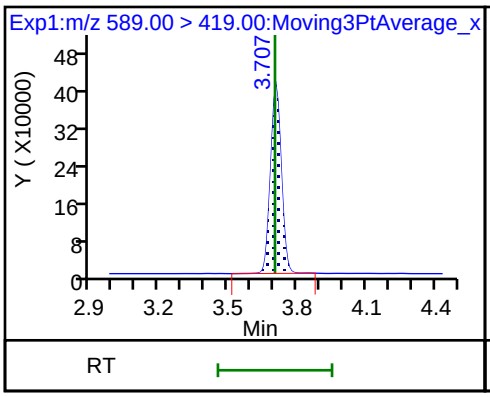
29 Perfluorodecane Sulfonic acid



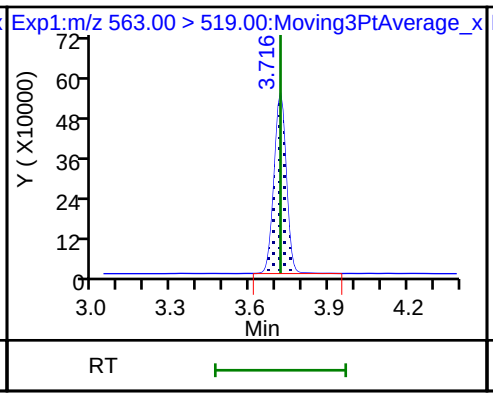
29 Perfluorodecane Sulfonic acid



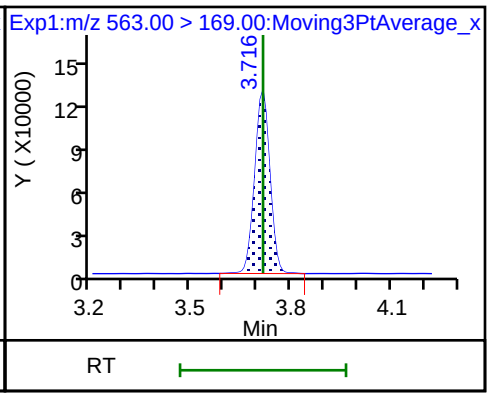
D 32 d5-NEtFOSAA



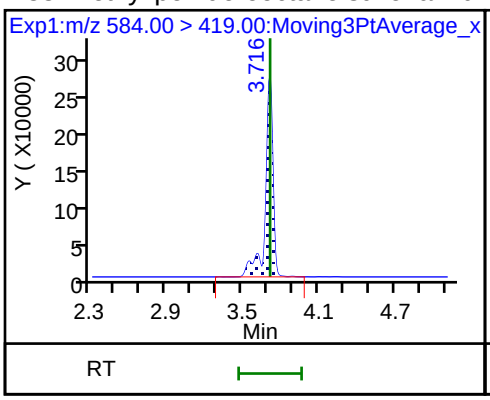
31 Perfluoroundecanoic acid



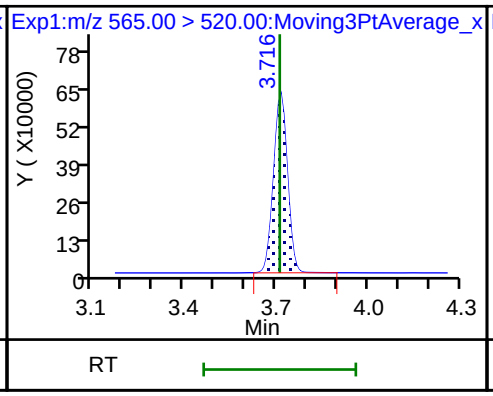
31 Perfluoroundecanoic acid



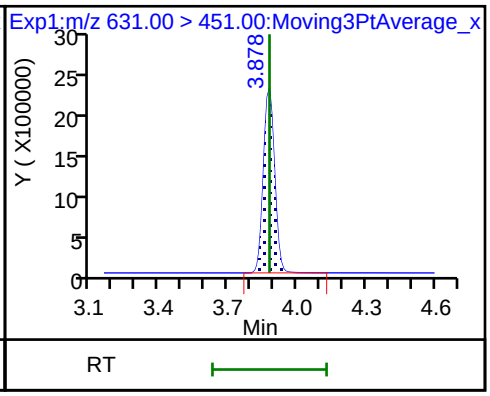
33 N-ethyl perfluorooctane sulfonamid



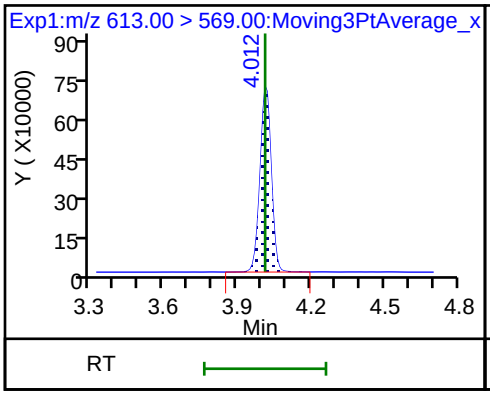
D 30 13C2 PFUnA



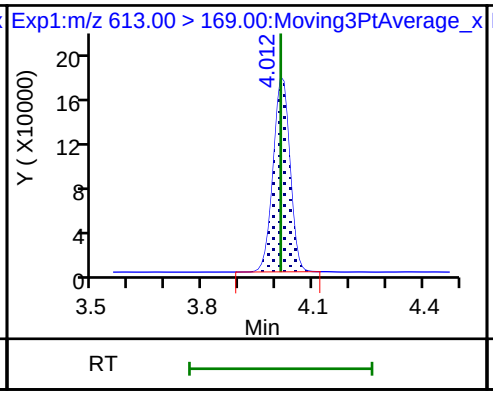
66 11-Chloroeicosafluoro-3-oxaundecan



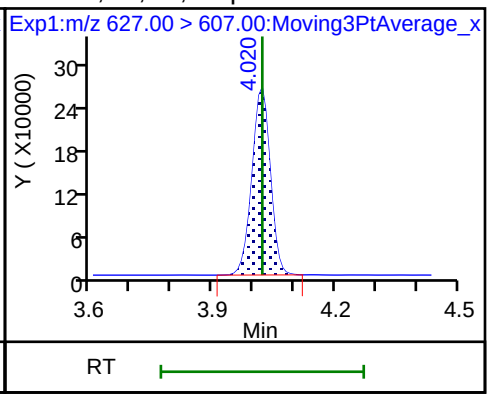
37 Perfluorododecanoic acid



37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfo



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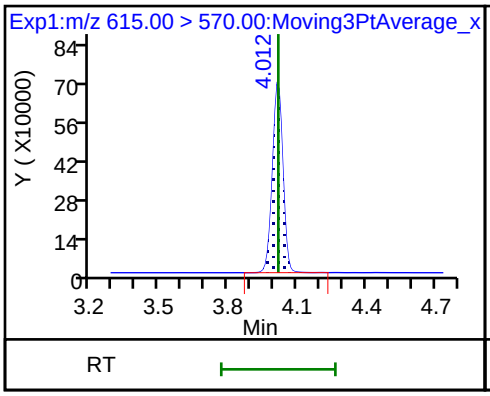
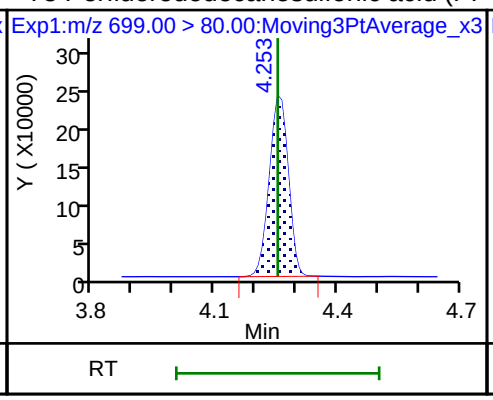
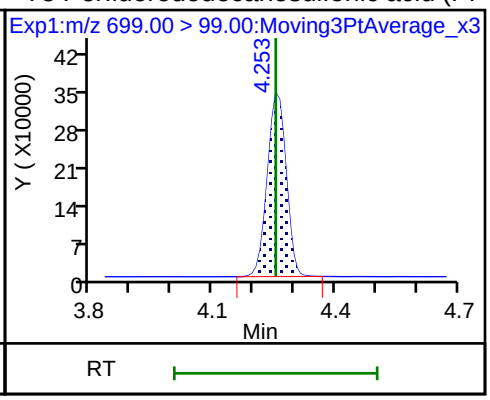


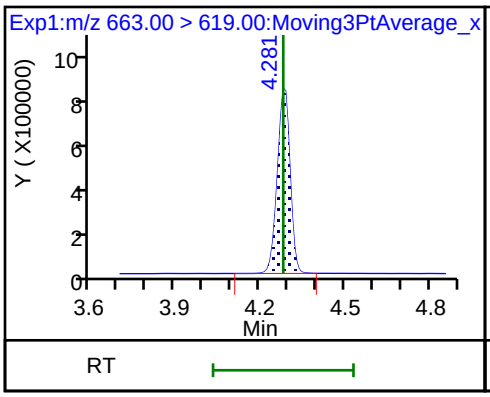
75 Perfluorododecanesulfonic acid (PF



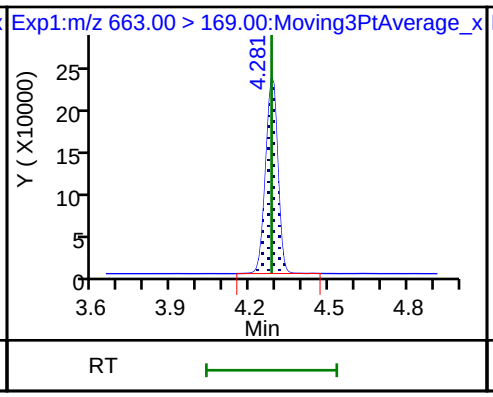
75 Perfluorododecanesulfonic acid (PF



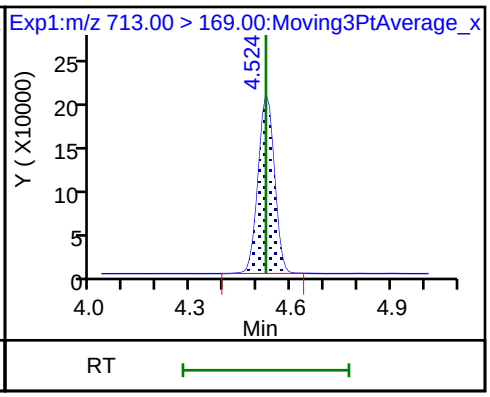
41 Perfluorotridecanoic acid



41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid



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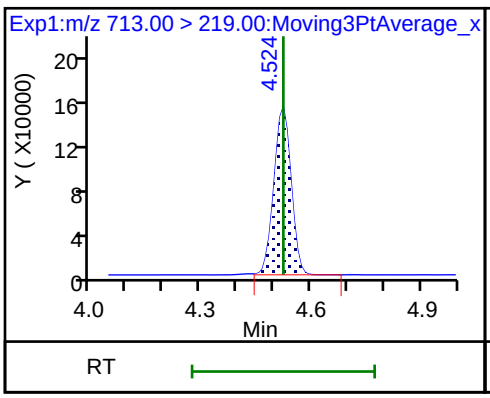
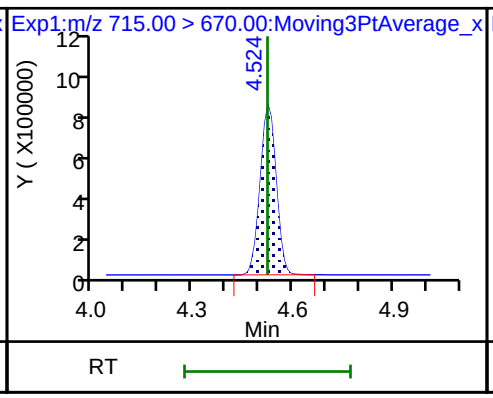
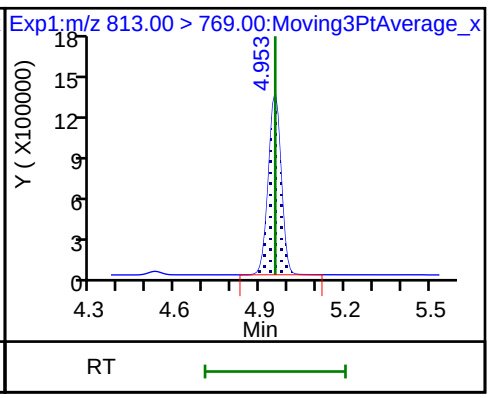


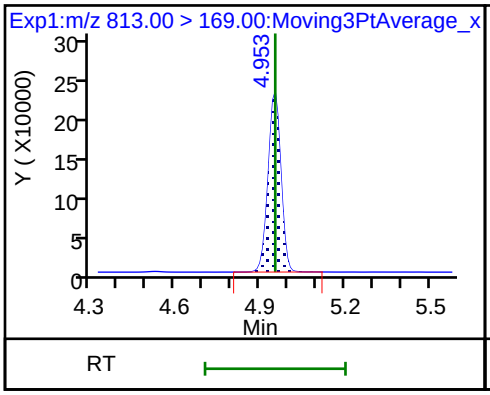
D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



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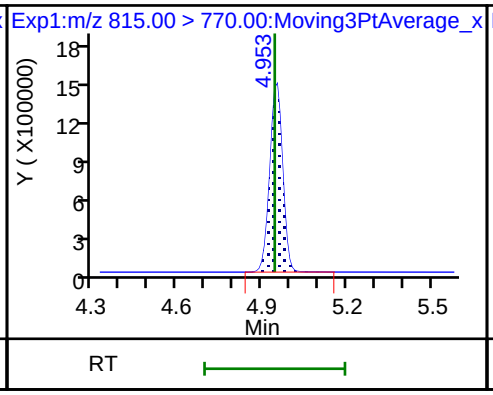
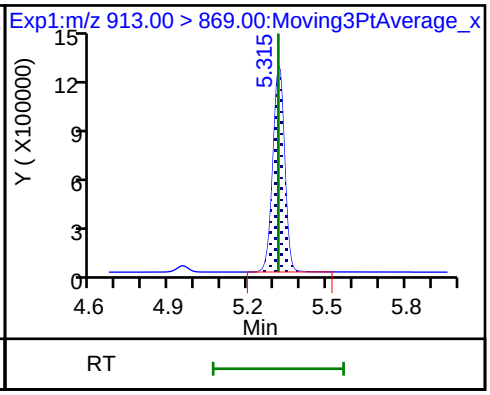
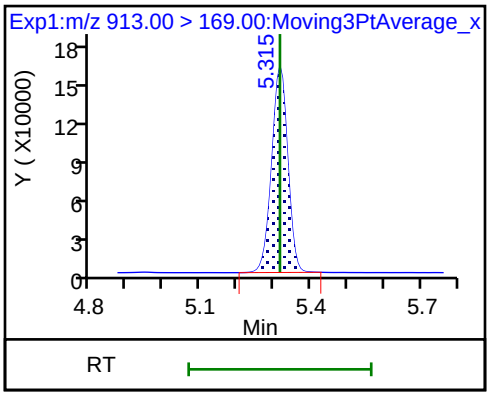


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

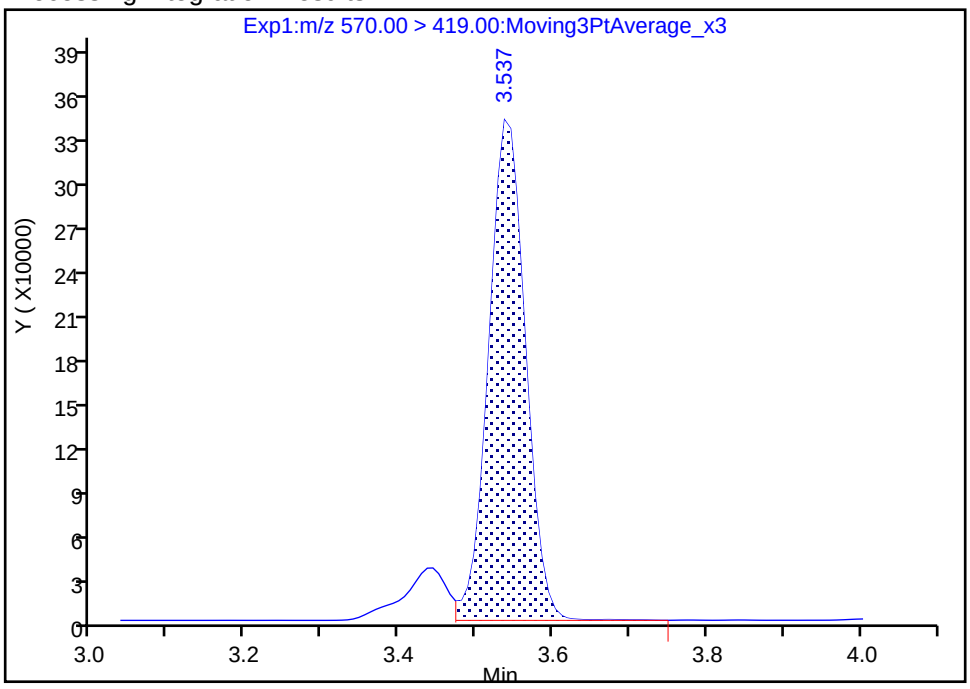
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_032.d
Injection Date: 12-Aug-2018 15:04:24 Instrument ID: A8_N
Lims ID: CCV L5
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 14 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

28 N-methyl perfluorooctane sulfonamidoacetic a, CAS: 2355-31-9

Signal: 1

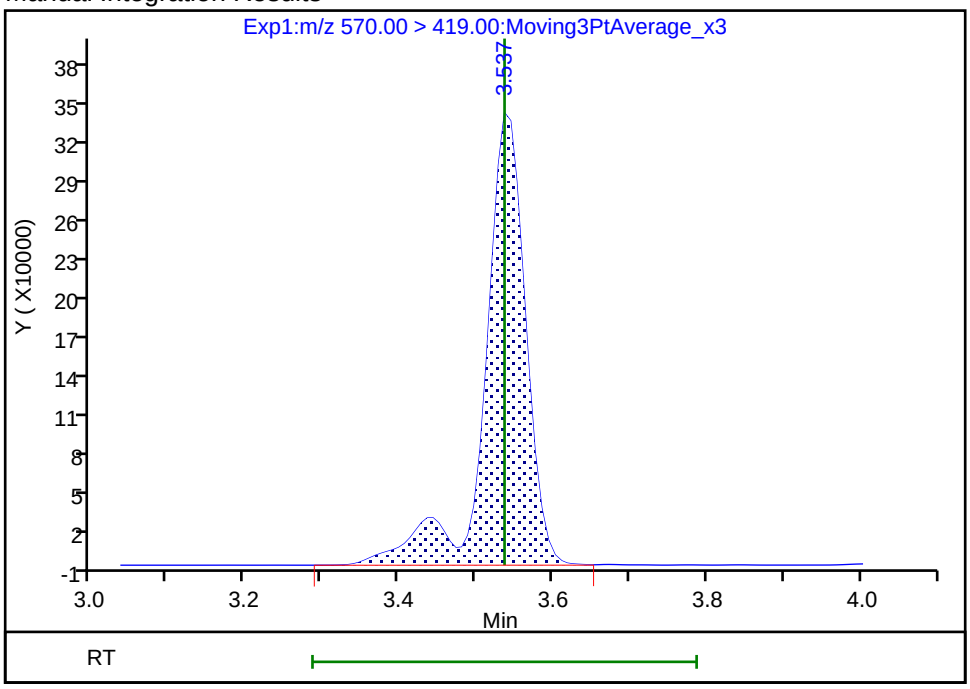
Processing Integration Results

RT: 3.54
Area: 1123164
Amount: 2.349761
Amount Units: ng/ml



Manual Integration Results

RT: 3.54
Area: 1260135
Amount: 2.636316
Amount Units: ng/ml



Reviewer: barnettj, 13-Aug-2018 10:45:22
Audit Action: Manually Integrated Audit Reason: Isomers

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-239440/12 Calibration Date: 08/12/2018 16:30

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_043.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9059		0.965	1.00	-3.5	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.097		0.964	1.00	-3.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	79.11		0.921	0.884	4.1	50.0
4:2 FTS	AveID	16.57	19.10		1.08	0.934	15.3	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	0.9408		0.922	1.00	-7.8	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	74.88		1.02	0.938	8.6	50.0
HFPO-DA (GenX)	AveID	2.420	2.670		1.10	1.00	10.3	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.074		1.01	1.00	1.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.049		0.881	0.910	-3.2	40.0
6:2 FTS	AveID	1.573	1.513		0.911	0.948	-3.9	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.107		0.980	1.00	-2.1	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.227		0.943	0.952	-1.0	50.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.017		0.965	1.00	-3.5	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.067		0.922	0.928	-0.6	40.0
F-53B Major	AveID	1.742	1.786		0.955	0.932	2.5	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.9477		0.973	1.00	-2.7	40.0
8:2 FTS	AveID	1.299	1.249		0.921	0.958	-3.9	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.7686		0.981	0.960	2.2	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	0.9615		0.958	1.00	-4.2	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	0.9767		1.01	1.00	1.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6499		0.991	0.964	2.8	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8435		0.946	1.00	-5.4	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	0.8173		0.727	1.00	-27.3	40.0
F-53B Minor	AveID	2.674	2.866		1.01	0.942	7.2	50.0
10:2 FTS	AveID	0.9008	0.9281		0.993	0.964	3.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.019		0.916	1.00	-8.4	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2978		1.04	0.968	7.2	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.076		1.00	1.00	0.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2583		1.07	1.00	6.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9106		1.02	1.00	2.2	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-239440/12 Calibration Date: 08/12/2018 16:30

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_043.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	1.013		1.10	1.00	10.1	50.0
13C4 PFBA	Ave	1.385	1.434		2.59	2.50	3.6	50.0
13C5 PFPeA	Ave	0.9537	0.9170		2.40	2.50	-3.8	50.0
13C3-PFBS	Ave	0.0221	0.0198		2.08	2.33	-10.5	50.0
M2-4:2FTS	Ave	0.1572	0.1661		2.47	2.34	5.7	50.0
13C2 PFHxA	Ave	1.082	1.048		2.42	2.50	-3.2	50.0
13C3 HFPO-DA	Ave	0.0842	0.0680		2.02	2.50	-19.2	50.0
13C4-PFHpA	Ave	1.065	0.9489		2.23	2.50	-10.9	50.0
18O2 PFHxS	Ave	1.366	1.272		2.20	2.37	-6.9	50.0
M2-6:2FTS	Ave	0.2242	0.2545		2.70	2.38	13.5	40.0
13C8 PFOA	Ave	1.927	1.629		2.07	2.45	-15.5	50.0
13C4 PFOA	Ave	0.9773	0.9650		2.47	2.50	-1.3	50.0
13C4 PFOS	Ave	0.8973	0.8775		2.34	2.39	-2.2	50.0
13C5 PFNA	Ave	0.8770	0.8287		2.36	2.50	-5.5	50.0
13C8 PFOS	Ave	0.4359	0.4416		2.42	2.39	1.3	50.0
13C8 FOSA	Ave	1.188	1.193		2.51	2.50	0.4	50.0
M2-8:2FTS	Ave	0.2707	0.2878		2.55	2.40	6.3	40.0
13C2 PFDA	Ave	0.7695	0.7469		2.43	2.50	-2.9	50.0
d3-NMeFOSAA	Ave	0.3935	0.3956		2.51	2.50	0.5	50.0
d5-NEtFOSAA	Ave	0.4077	0.4391		2.69	2.50	7.7	50.0
13C2 PFUnA	Ave	0.6189	0.6317		2.55	2.50	2.1	50.0
13C2 PFDoA	Ave	0.6541	0.6935		2.65	2.50	6.0	50.0
13C2-PFTeDA	Ave	0.8335	0.8868		2.66	2.50	6.4	50.0
13C2-PFHxDA	Ave	1.653	1.537		2.32	2.50	-7.1	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_043.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 12-Aug-2018 16:30:29 ALS Bottle#: 13 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:28:05 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 10:47:15

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.415	1.411	0.004	0.536	5324580	2.59		104	8038	
2 Perfluorobutyric acid										
212.90 > 169.00	1.415	1.415	0.0	1.000	1929444	0.9649		96.5	166	
D 3 13C5-PFPeA										
267.90 > 223.00	1.669	1.670	-0.001	0.632	3404048	2.40		96.2	7547	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.669	1.669	0.0	1.000	1493237	0.9639		96.4	118	
D 47 13C3-PFBS										
301.90 > 83.00	1.701	1.702	-0.001	0.644	68181	2.08		89.5	357	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.709	1.709	0.0	1.005	2050735	0.9207		104	586	
298.90 > 99.00	1.709	1.709	0.0	1.005	860861		2.38(1.25-3.74)		479	
D 60 M2-4:2FTS										
329.00 > 81.00	1.919	1.912	0.007	0.727	575816	2.47		106	1112	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.919	1.919	0.0	1.128	523117	1.08		115	4515	
D 7 13C2 PFHxA										
315.00 > 270.00	1.951	1.954	-0.003	0.739	3888617	2.42		96.8	8903	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.951	1.951	0.0	1.000	1463328	0.9218		92.2	447	
313.00 > 119.00	1.951	1.951	0.0	1.000	146287		10.00(5.03-15.10)		422	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.972	1.972	0.0	1.159	2059729	1.02		109	3462	
349.00 > 99.00	1.972	1.972	0.0	1.159	765450		2.69(1.36-4.07)		1818	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.055	2.048	0.007	0.779	252374	2.02		80.8	692	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.055	2.055	0.0	1.000	269517	1.10		110	136	
D 9 13C4-PFHpA										
367.00 > 322.00	2.282	2.288	-0.006	0.865	3522192	2.23		89.1	5687	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.282	2.282	0.0	1.000	1513532	1.01		101	363	
363.00 > 169.00	2.282	2.282	0.0	1.000	584447		2.59(1.13-3.40)		922	
D 11 18O2 PFHxS										
403.00 > 84.00	2.293	2.299	-0.006	0.869	4466675	2.20		93.1	3853	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.293	2.293	0.0	1.000	1803076	0.8807		96.8	2810	
399.00 > 99.00	2.293	2.293	0.0	1.000	610822		2.95(1.50-4.49)		887	
65 ADONA										
377.00 > 251.00	2.327	2.327	0.0	0.772	4324558	1.02		102	7261	
377.00 > 85.00	2.327	2.327	0.0	0.772	2689196		1.61(0.84-2.53)		5393	
D 12 M2-6:2FTS										
429.00 > 81.00	2.609	2.612	-0.003	0.988	897346	2.70		114	2722	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.616	2.616	0.0	1.003	541770	0.9113		96.1	1819	
D 73 13C8 PFOA										
421.00 > 376.00	2.632	2.635	-0.003	0.997	5920173	2.07		84.5	9078	
D 14 13C4 PFOA										
417.00 > 372.00	2.640	2.643	-0.003	1.000	3582155	2.47		98.7	7077	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.640	2.640	0.0	1.000	1587977	0.9802		97.9	147	
413.00 > 169.00	2.640	2.640	0.0	1.000	843763		1.88(0.84-2.52)		1154	
* 62 13C2-PFOA										
415.00 > 370.00	2.640	2.640	0.0		3712018	2.50			6761	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.647	2.647	0.0	0.878	1521607	0.9426		99.0	2171	
449.00 > 99.00	2.647	2.647	0.0	0.878	404440		3.76(1.94-5.82)		701	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.014	3.014	0.0	1.000	1289994	0.9221		99.4	1936	
499.00 > 99.00	3.014	3.014	0.0	1.000	293453		4.40(2.31-6.93)		888	
D 18 13C4 PFOS										
503.00 > 80.00	3.014	3.016	-0.002	1.142	3113879	2.34		97.8	3281	
D 19 13C5 PFNA										
468.00 > 423.00	3.014	3.016	-0.002	1.142	3076091	2.36		94.5	5534	
D 72 13C8 PFOS										
507.00 > 99.00	3.014	3.016	-0.002	1.142	1567039	2.42		101	2729	
20 Perfluorononanoic acid										
463.00 > 419.00	3.014	3.014	0.0	1.000	1250803	0.9651		96.5	294	
463.00 > 169.00	3.014	3.014	0.0	1.000	312068		4.01(1.90-5.69)		1243	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.226	3.226	0.0	1.070	2168329	0.9553		103	3013	
D 21 13C8 FOSA										
506.00 > 78.00	3.339	3.335	0.004	1.265	4428095	2.51		100	6446	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.339	3.339	0.0	1.000	1678554	0.9733		97.3	2551	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.369	3.369	0.0	1.118	961314	0.9810		102	2439	
549.00 > 99.00	3.369	3.369	0.0	1.118	353136		2.72(1.33-3.97)		2073	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.369	3.369	0.0	1.000	511324	0.9211		96.1	1301	
D 26 M2-8:2FTS										
529.00 > 81.00	3.369	3.372	-0.003	1.276	1023414	2.55		106	2822	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.376	3.376	0.0	1.000	1066266	0.9584		95.8	807	
513.00 > 169.00	3.376	3.376	0.0	1.000	193435		5.51(2.36-7.09)		366	
D 23 13C2 PFDA										
515.00 > 470.00	3.376	3.380	-0.004	1.279	2772451	2.43		97.1	4927	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.536	3.536	0.0	1.000	573713	1.01		101	726	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.536	3.540	-0.004	1.340	1468501	2.51		101	3715	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.690	3.690	0.0	1.224	816298	0.99		103	2696	
599.00 > 99.00	3.690	3.690	0.0	1.224	279723		2.92(1.39-4.16)		1484	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.698	3.702	-0.004	1.401	1629925	2.69		108	1525	
D 30 13C2 PFUnA										
565.00 > 520.00	3.707	3.711	-0.004	1.404	2344738	2.55		102	4151	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.707	3.707	0.0	1.000	766499	0.7273		72.7	559	
563.00 > 169.00	3.707	3.707	0.0	1.000	177559		4.32(2.12-6.36)		1149	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.707	3.707	0.0	1.002	549946	0.9459		94.6	1719	
35 MeFOSA										
512.00 > 169.00	3.840	3.840	0.0		495343	NC			621	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.867	3.867	0.0	1.283	3517514	1.01		107	6942	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.012	4.012	0.0	1.002	1049103	0.9157		91.6	754	
613.00 > 169.00	4.004	4.012	-0.008	1.000	258213		4.06(2.13-6.40)		1370	
D 36 13C2 PFDoA										
615.00 > 570.00	4.004	4.017	-0.013	1.517	2574119	2.65		106	4088	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.012	4.012	0.0	1.191	382304	0.99		103	3242	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.254	4.254	0.0	1.411	375620	1.04		107	1059	
699.00 > 99.00	4.254	4.254	0.0	1.411	512733		0.73(0.00-0.00)		2177	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.273	4.273	0.0	1.067	1108101	1.00		100	563	
663.00 > 169.00	4.273	4.273	0.0	1.067	361335		3.07(1.25-3.76)		2343	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.514	4.523	-0.009	1.710	3291884	2.66		106	4923	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.514	4.514	0.0	1.000	340163	1.07		107	2178	
713.00 > 219.00	4.514	4.514	0.0	1.000	229751		1.48(0.71-2.13)		1397	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.944	4.944	0.0	1.873	5703924	2.32		92.9	6797	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.944	4.944	0.0	1.000	2077544	1.02		102	237	
813.00 > 169.00	4.944	4.944	0.0	1.000	373308		5.57(2.86-8.58)		1776	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.301	5.301	0.0	1.072	2310942	1.10		110	233	
913.00 > 169.00	5.301	5.301	0.0	1.072	292528		7.90(3.83-11.48)		1697	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00006 Amount Added: 1.00 Units: mL

Report Date: 13-Aug-2018 13:28:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_043.d

Injection Date: 12-Aug-2018 16:30:29 Instrument ID: A8_N

Lims ID: CCV L4

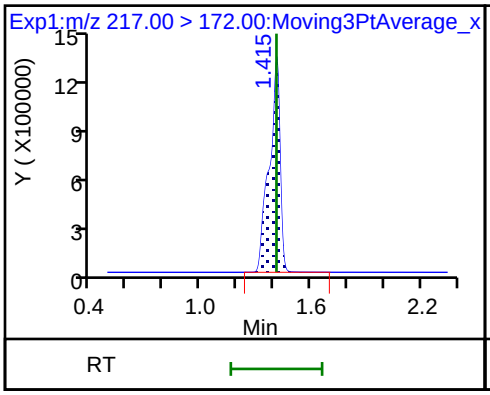
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 12

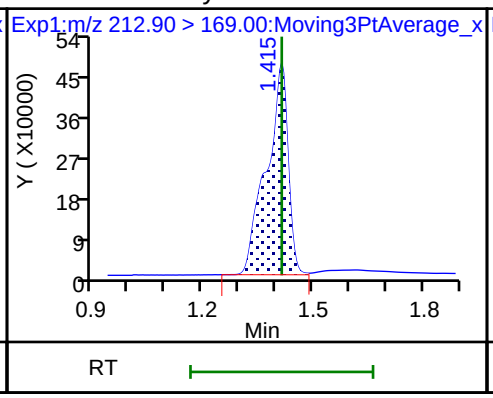
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

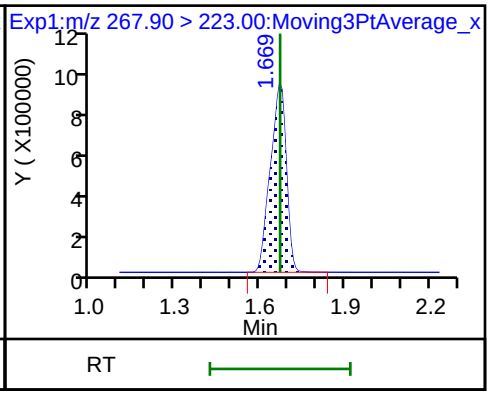
D 1 13C4 PFBA



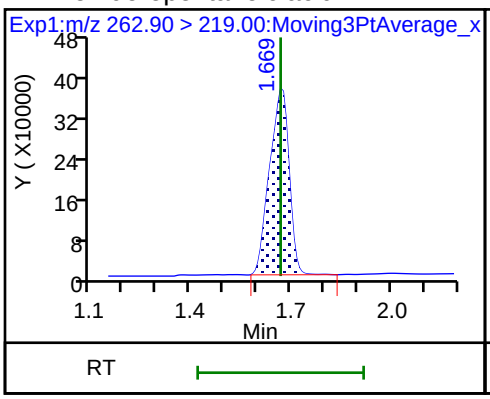
2 Perfluorobutyric acid



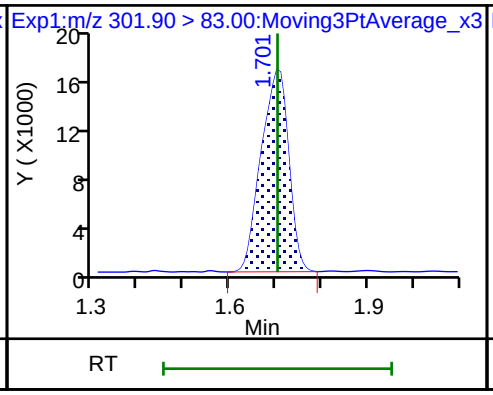
D 3 13C5-PFPeA



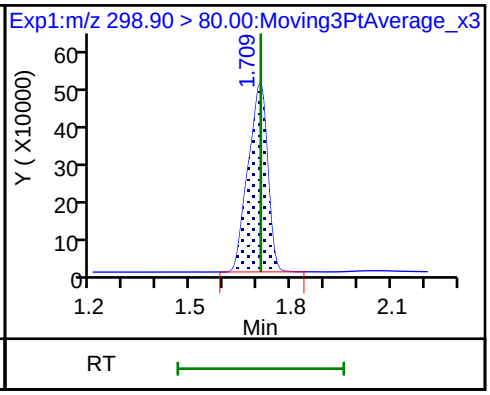
4 Perfluoropentanoic acid



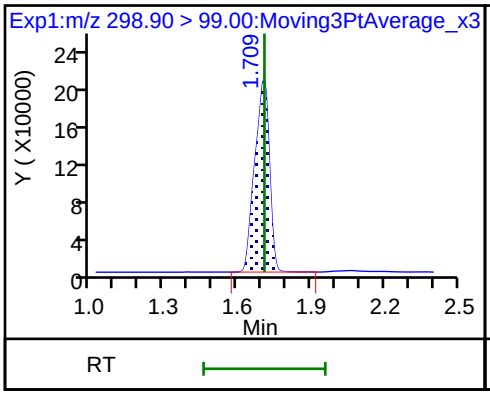
D 47 13C3-PFBS



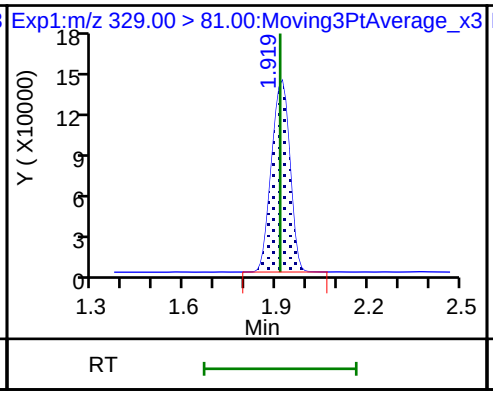
5 Perfluorobutanesulfonic acid



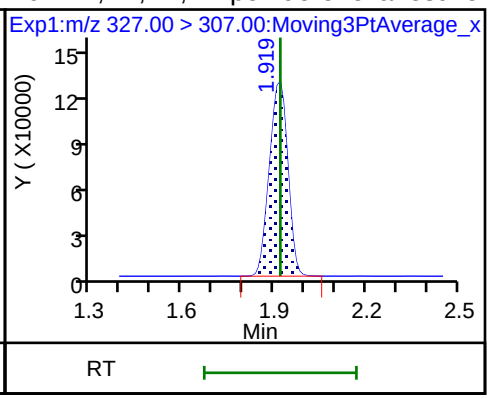
5 Perfluorobutanesulfonic acid



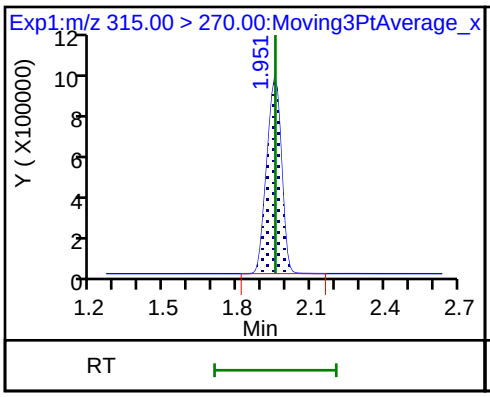
D 60 M2-4:2FTS



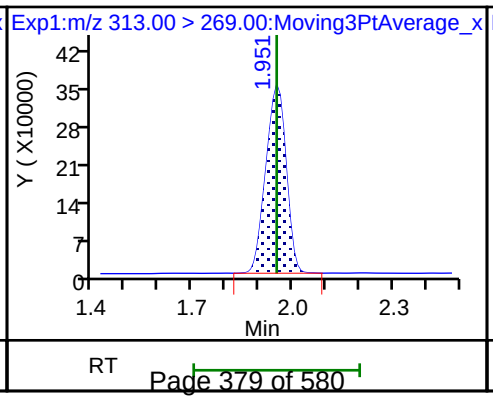
61 1H,1H,2H,2H-perfluorohexanesulfoni



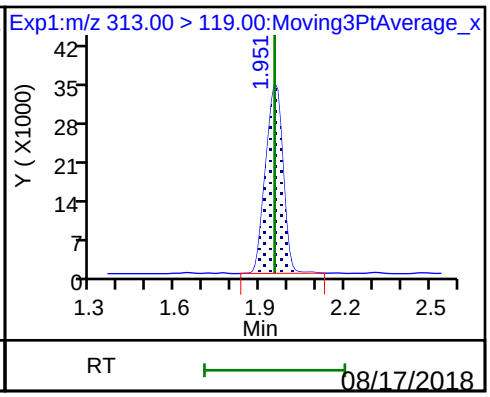
D 7 13C2 PFHxA



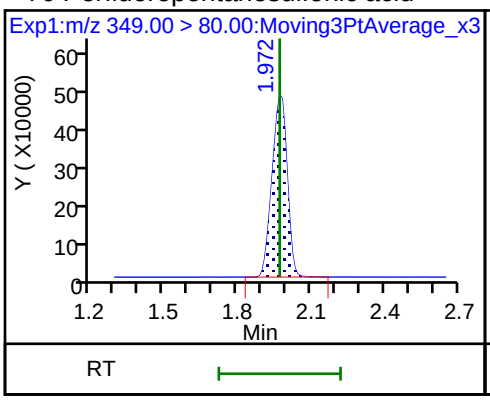
6 Perfluorohexanoic acid



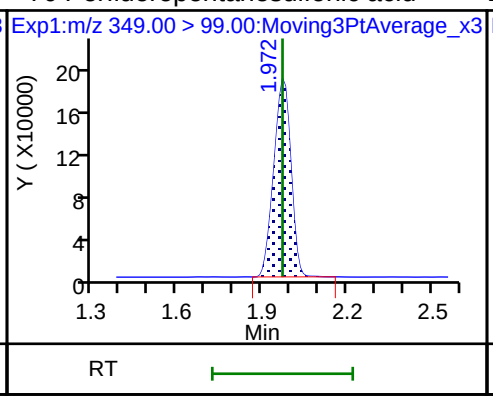
6 Perfluorohexanoic acid



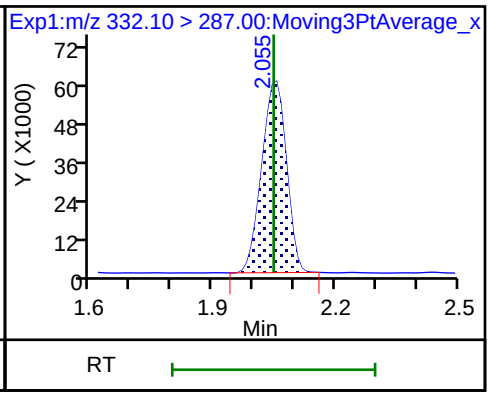
70 Perfluoropentanesulfonic acid



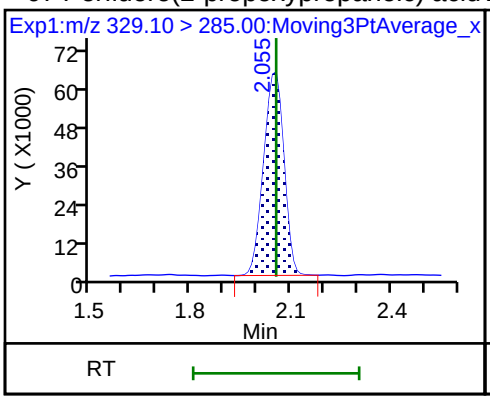
70 Perfluoropentanesulfonic acid



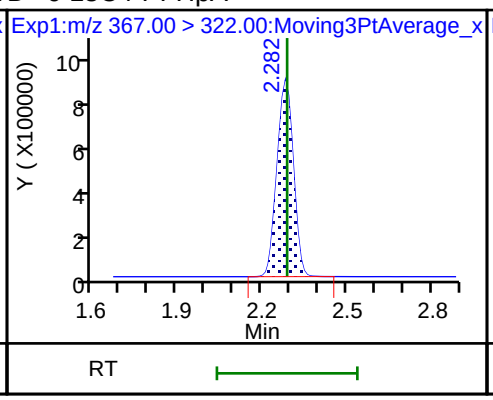
D 64 13C3 HFPO-DA



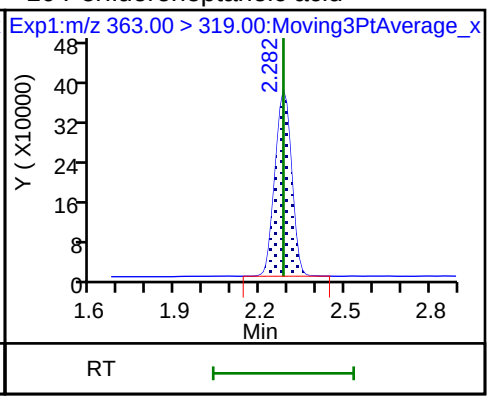
67 Perfluoro(2-propoxypropanoic) acid



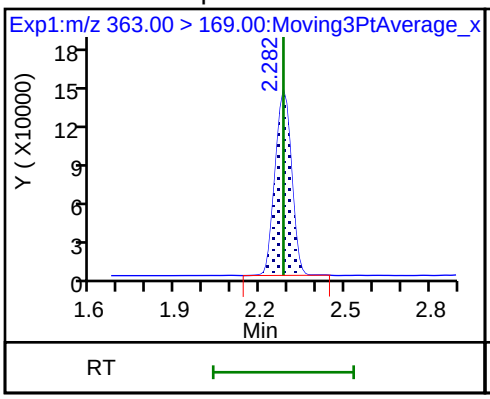
D 9 13C4-PFHpA



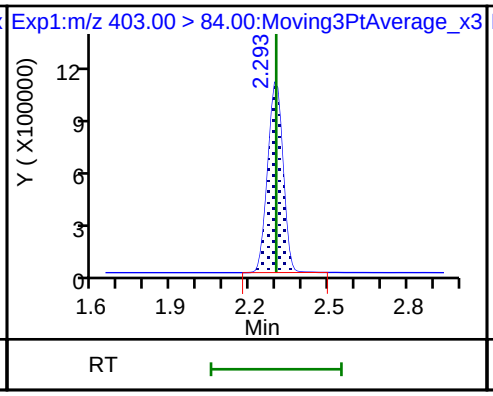
10 Perfluoroheptanoic acid



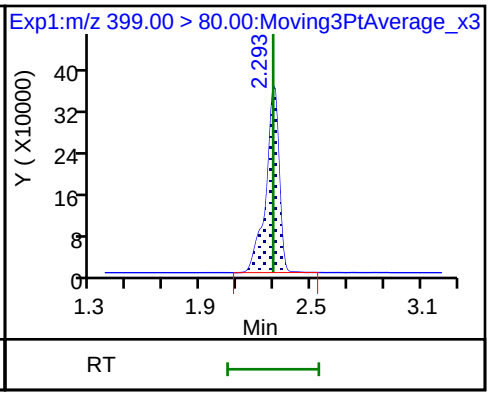
10 Perfluoroheptanoic acid



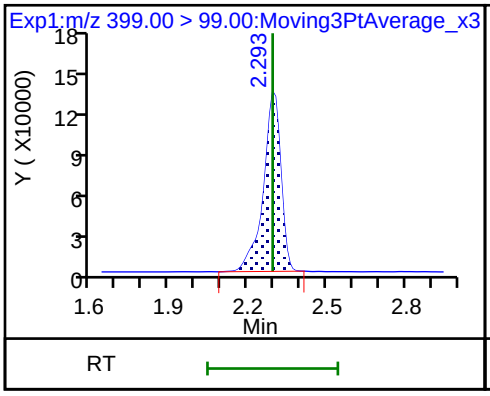
D 11 18O2 PFHxS



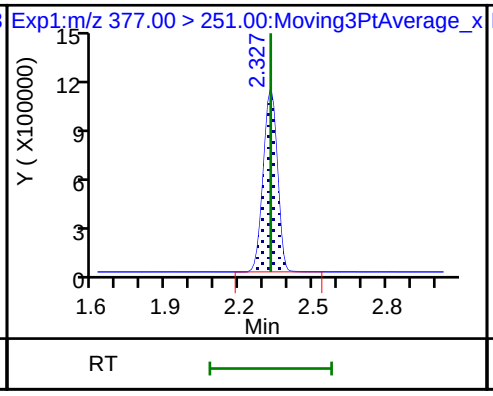
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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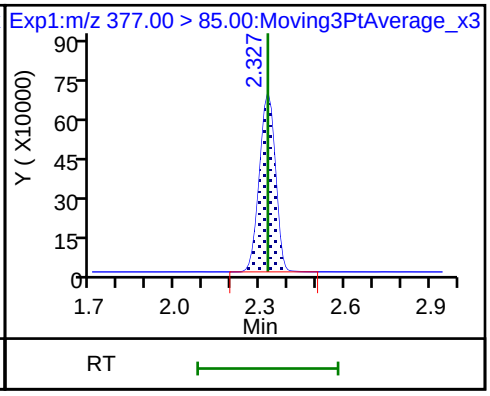
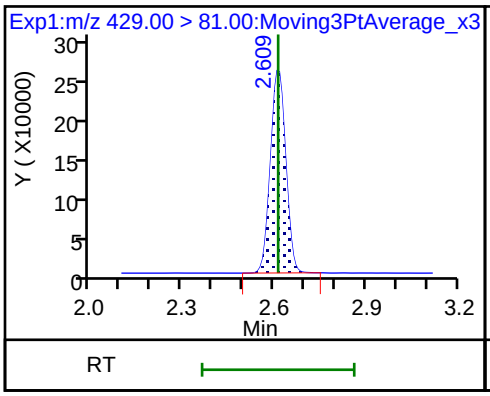
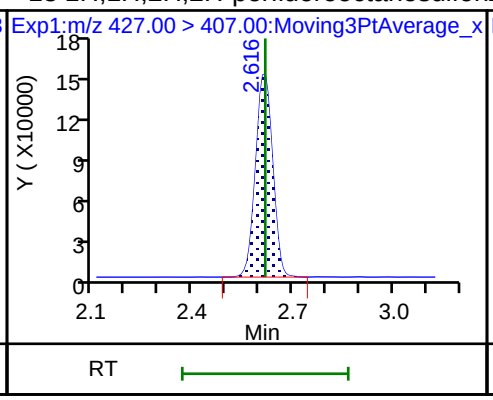


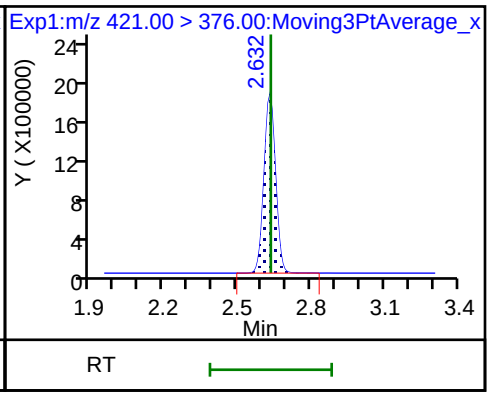
D 12 M2-6:2FTS



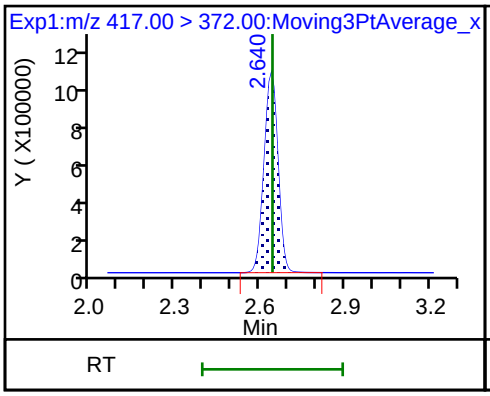
13 1H,1H,2H,2H-perfluorooctanesulfon



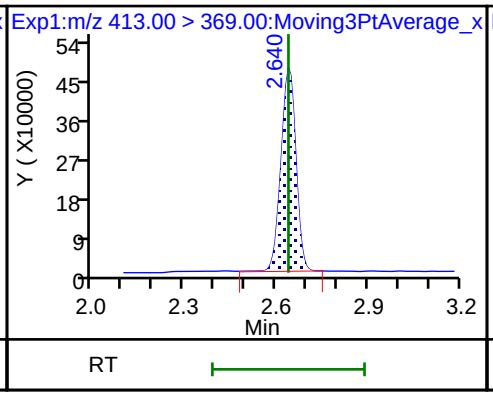
D 73 13C8 PFOA



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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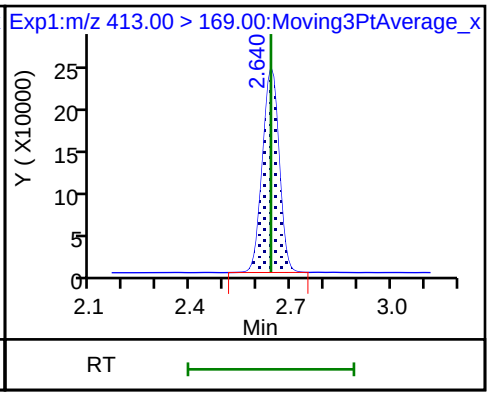
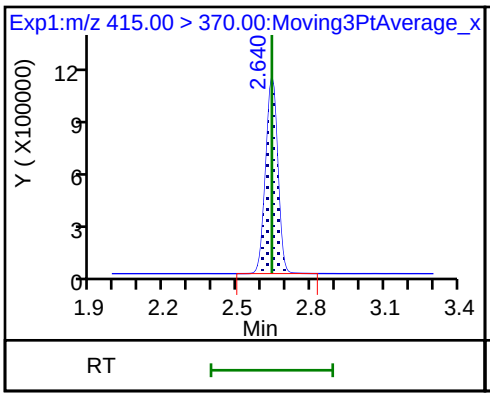
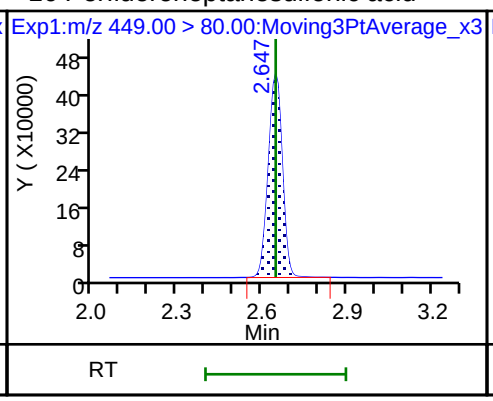


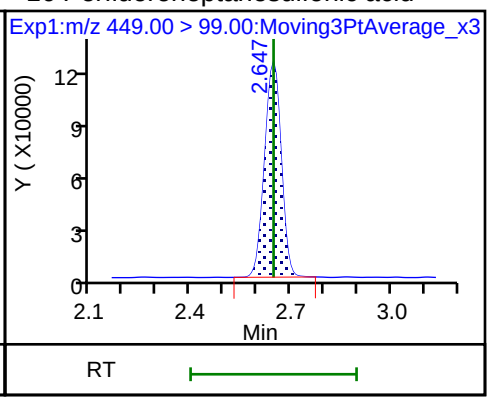
* 62 13C2-PFOA



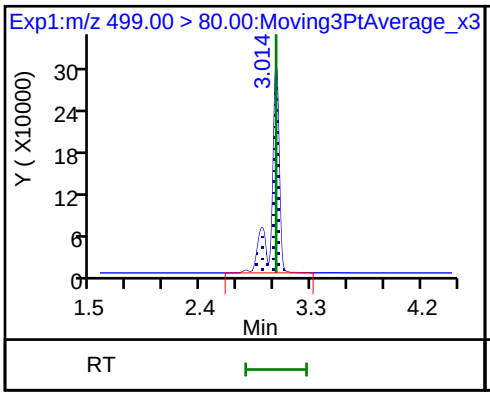
16 Perfluoroheptanesulfonic acid



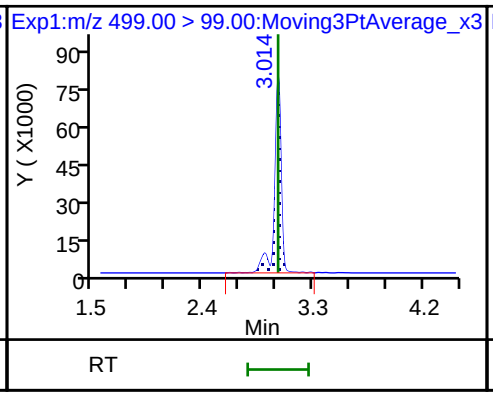
16 Perfluoroheptanesulfonic acid



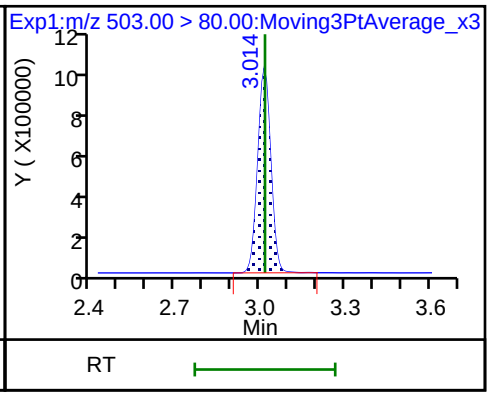
17 Perfluorooctane sulfonic acid



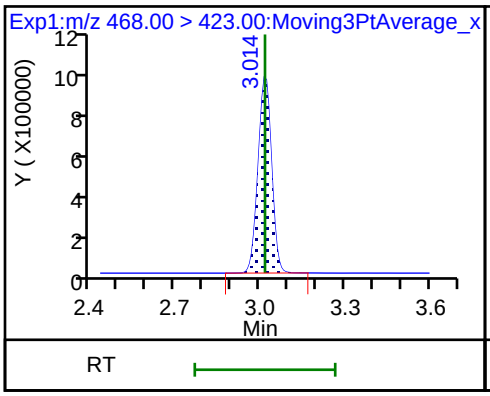
17 Perfluorooctane sulfonic acid



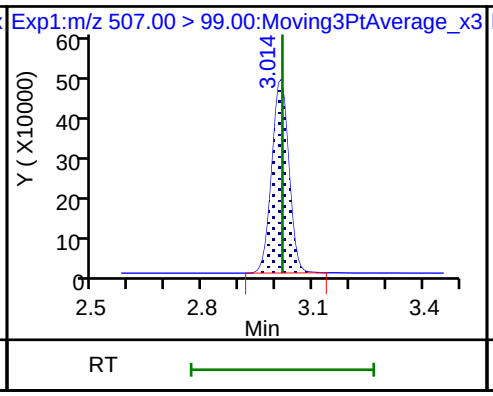
D 18 13C4 PFOS



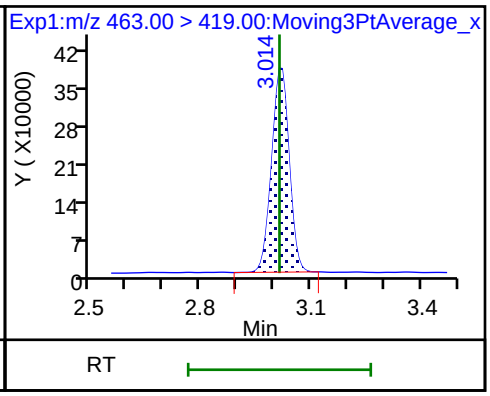
D 19 13C5 PFNA



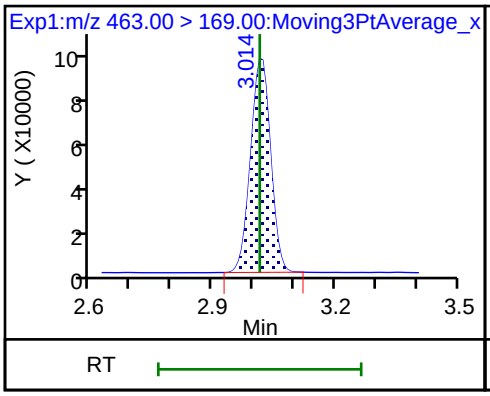
D 72 13C8 PFOS



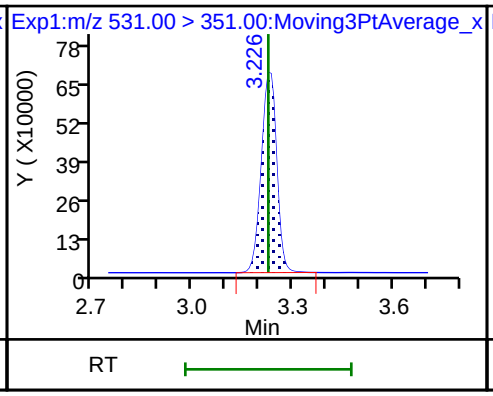
20 Perfluorononanoic acid



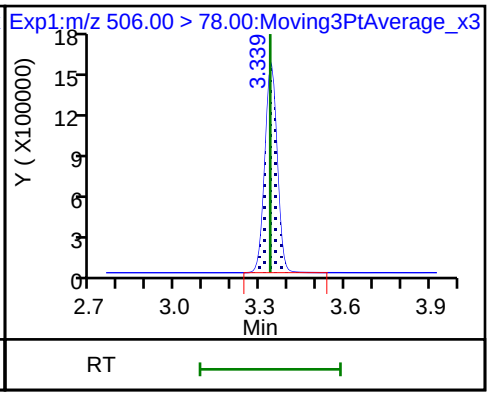
20 Perfluorononanoic acid



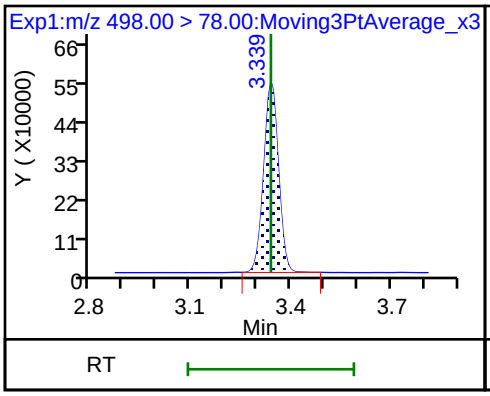
69 9-Chlorohexadecafluoro-3-oxanonane



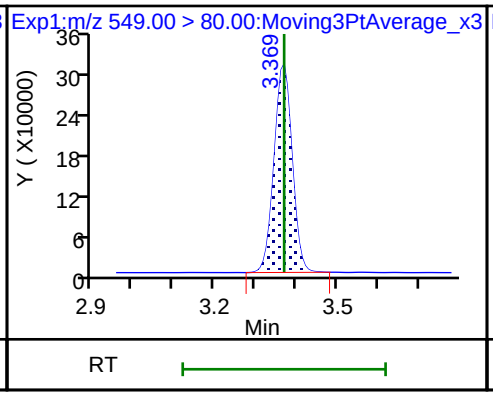
D 21 13C8 FOSA



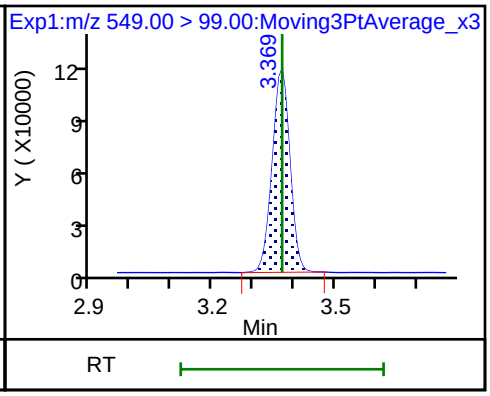
22 Perfluorooctane Sulfonamide



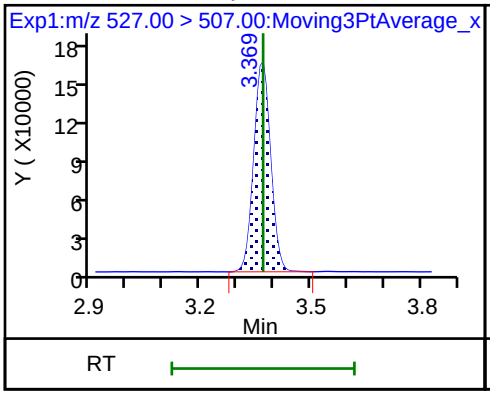
68 Perfluorononanesulfonic acid



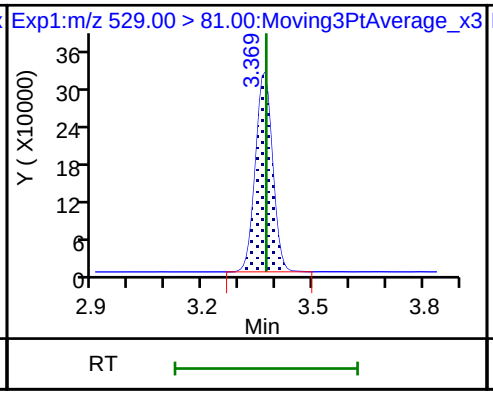
68 Perfluorononanesulfonic acid



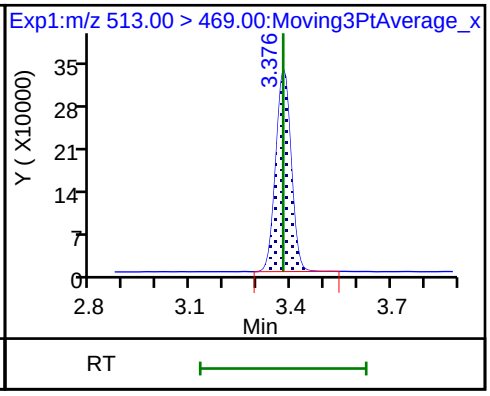
25 1H,1H,2H,2H-perfluorodecanesulfon



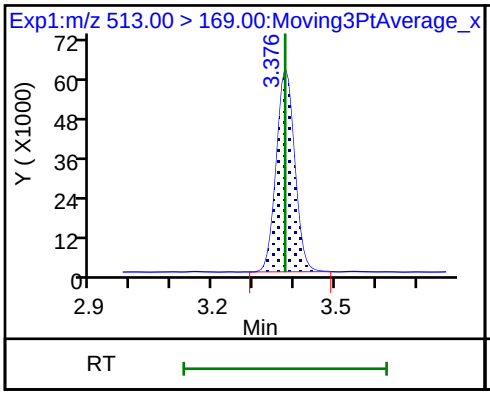
D 26 M2-8:2FTS



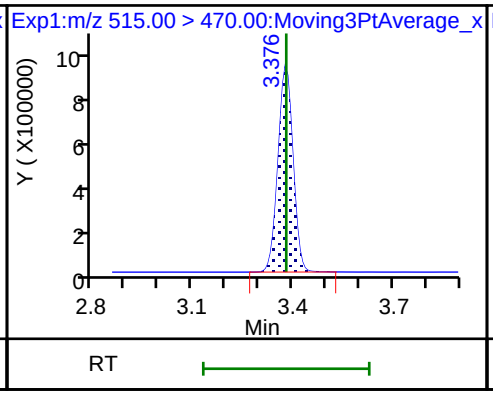
24 Perfluorodecanoic acid



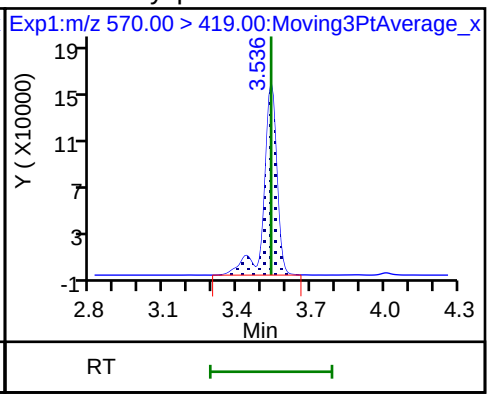
24 Perfluorodecanoic acid



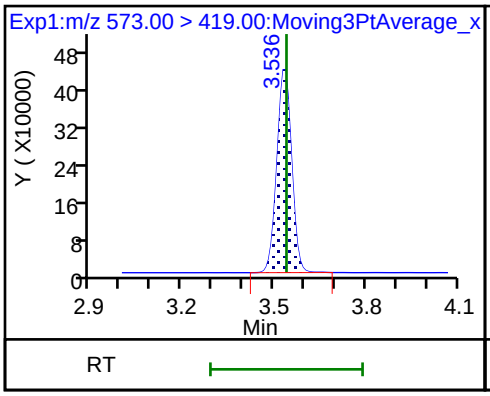
D 23 13C2 PFDA



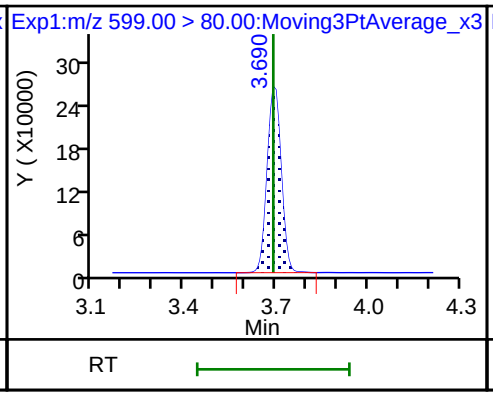
28 N-methyl perfluorooctane sulfonami (M)



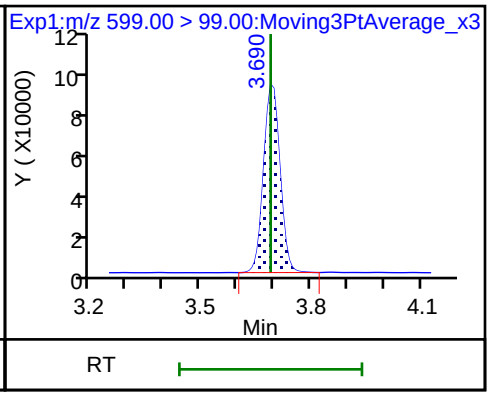
D 27 d3-NMeFOSAA



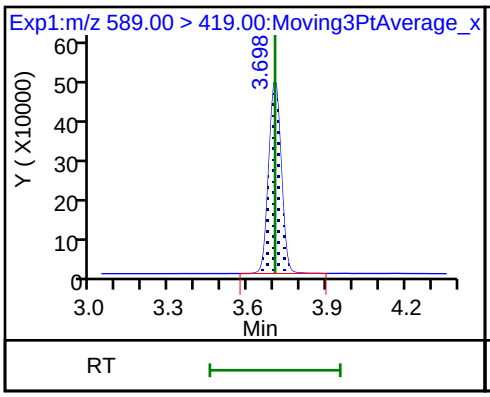
29 Perfluorodecane Sulfonic acid



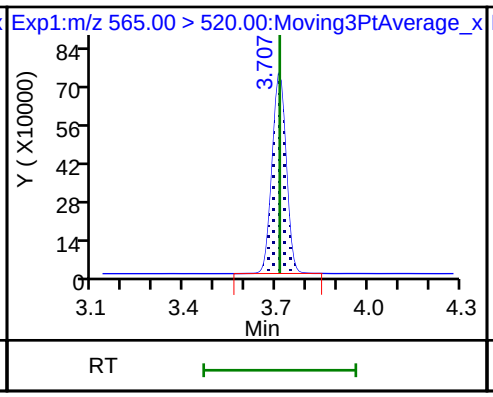
29 Perfluorodecane Sulfonic acid



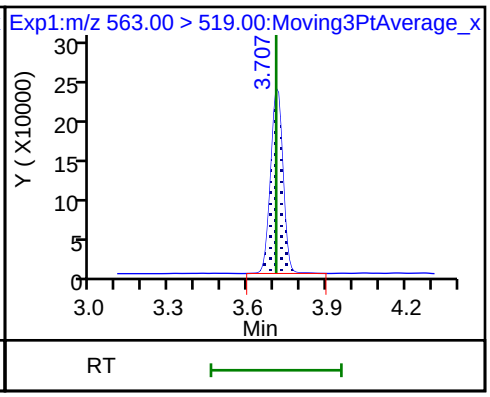
D 32 d5-NEtFOSAA



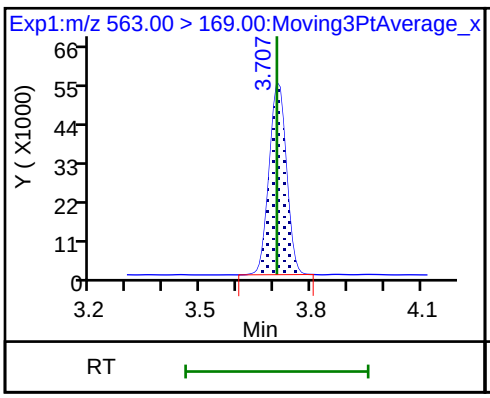
D 30 13C2 PFUnA



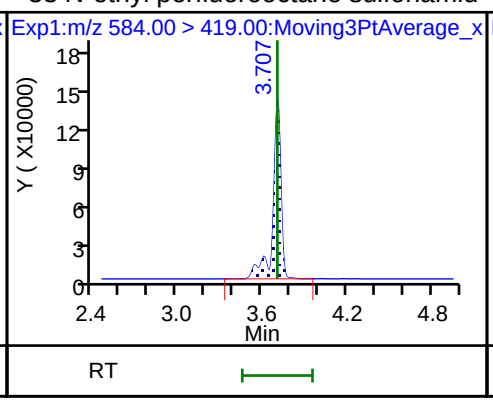
31 Perfluoroundecanoic acid



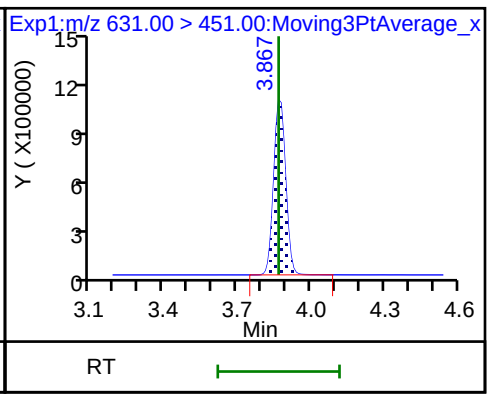
31 Perfluoroundecanoic acid



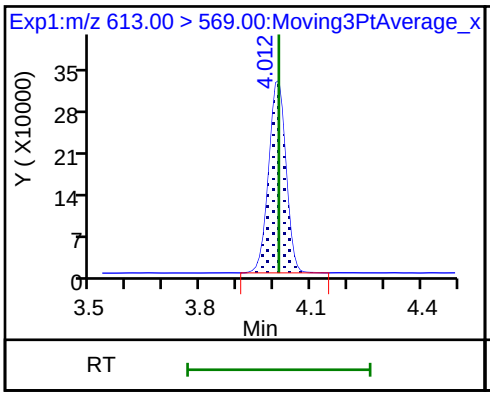
33 N-ethyl perfluorooctane sulfonamid



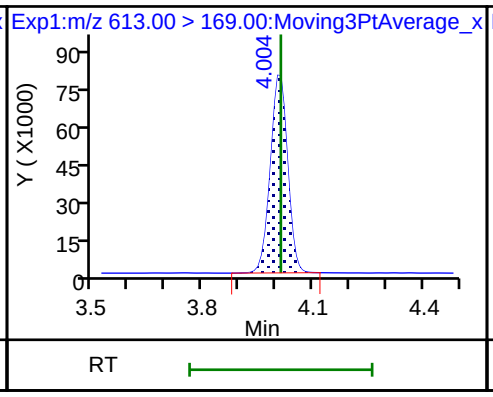
66 11-Chloroeicosafluoro-3-oxaundecan



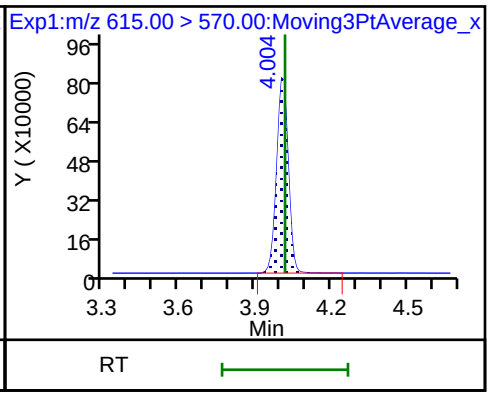
37 Perfluorododecanoic acid



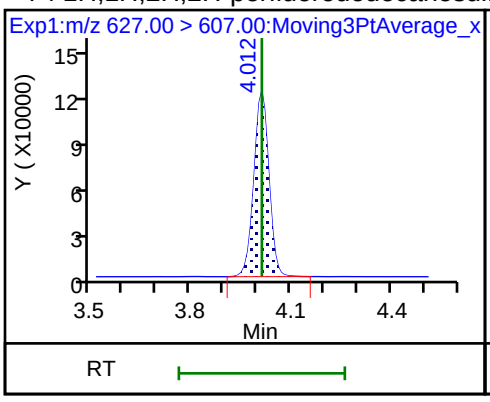
37 Perfluorododecanoic acid



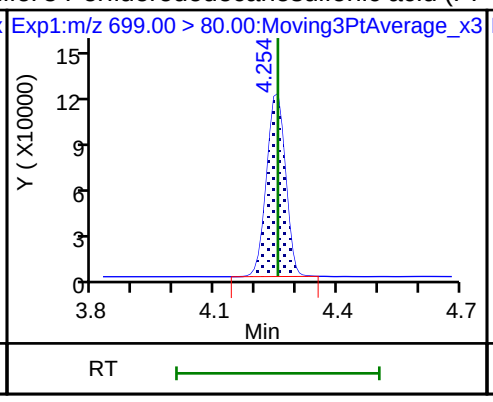
D 36 13C2 PFDoA



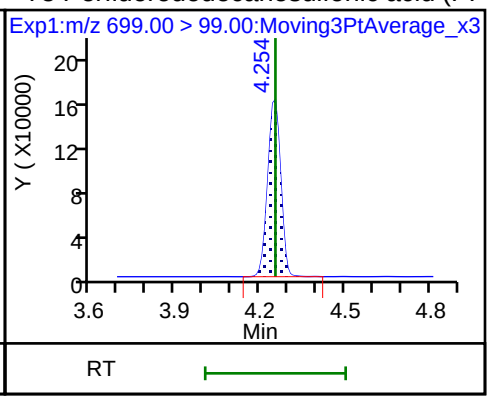
74 1H,1H,2H,2H-perfluorododecanesulfo



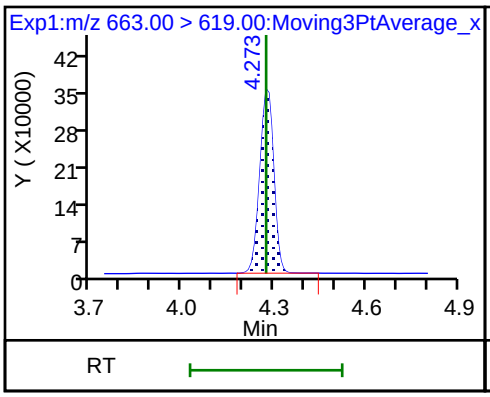
75 Perfluorododecanesulfonic acid (PF



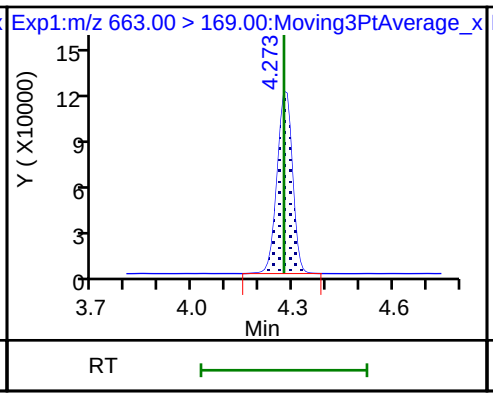
75 Perfluorododecanesulfonic acid (PF



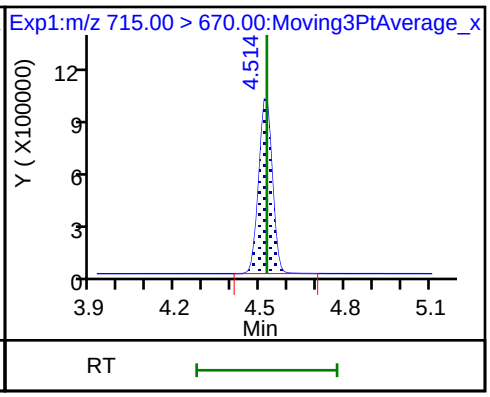
41 Perfluorotridecanoic acid



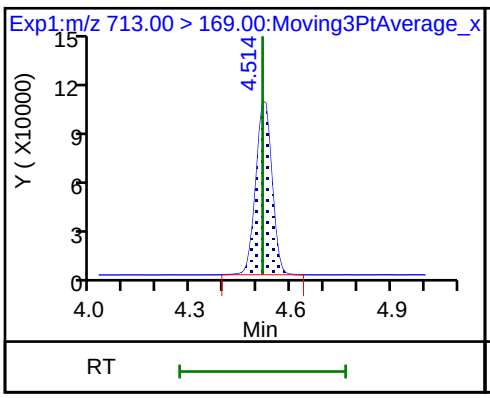
41 Perfluorotridecanoic acid



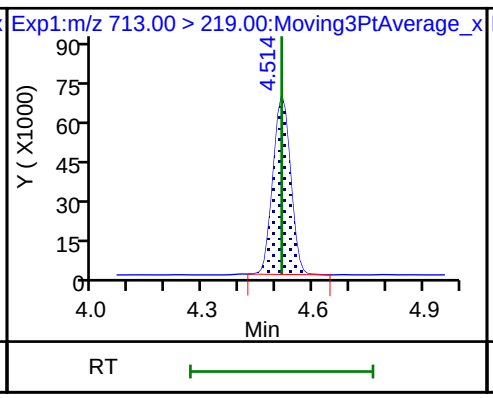
D 43 13C2-PFTeDA



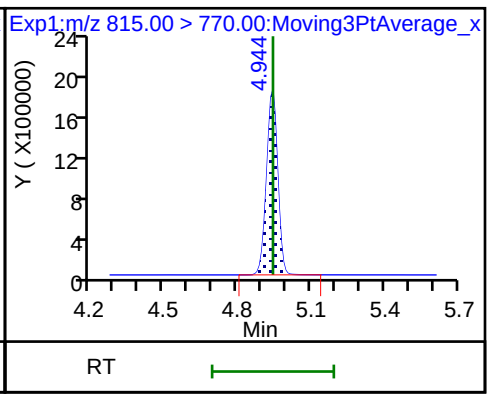
42 Perfluorotetradecanoic acid



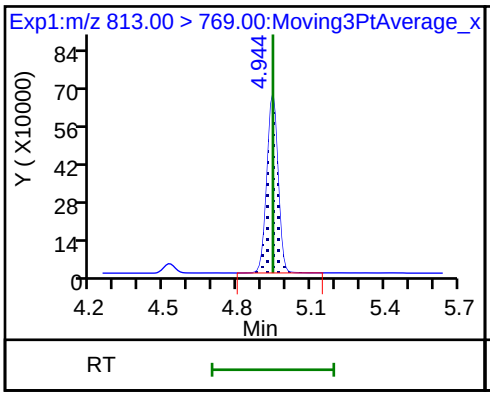
42 Perfluorotetradecanoic acid



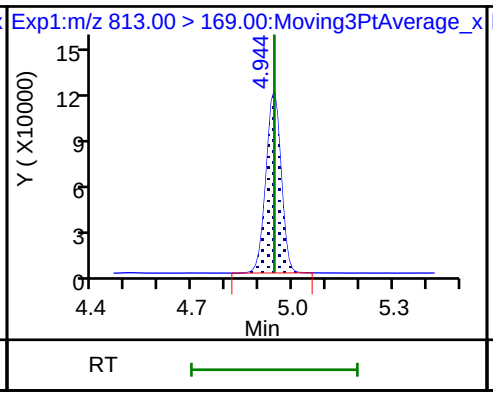
D 44 13C2-PFHxDA



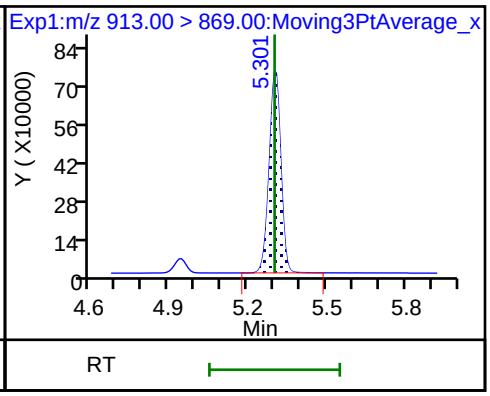
45 Perfluorohexadecanoic acid



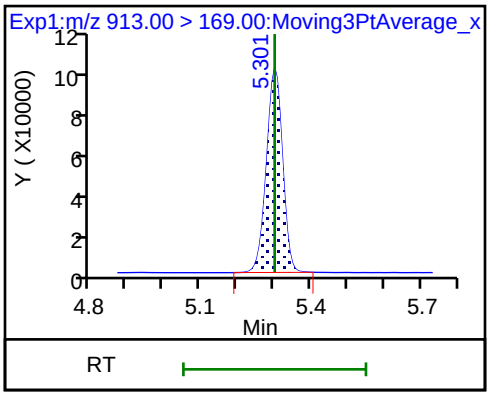
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

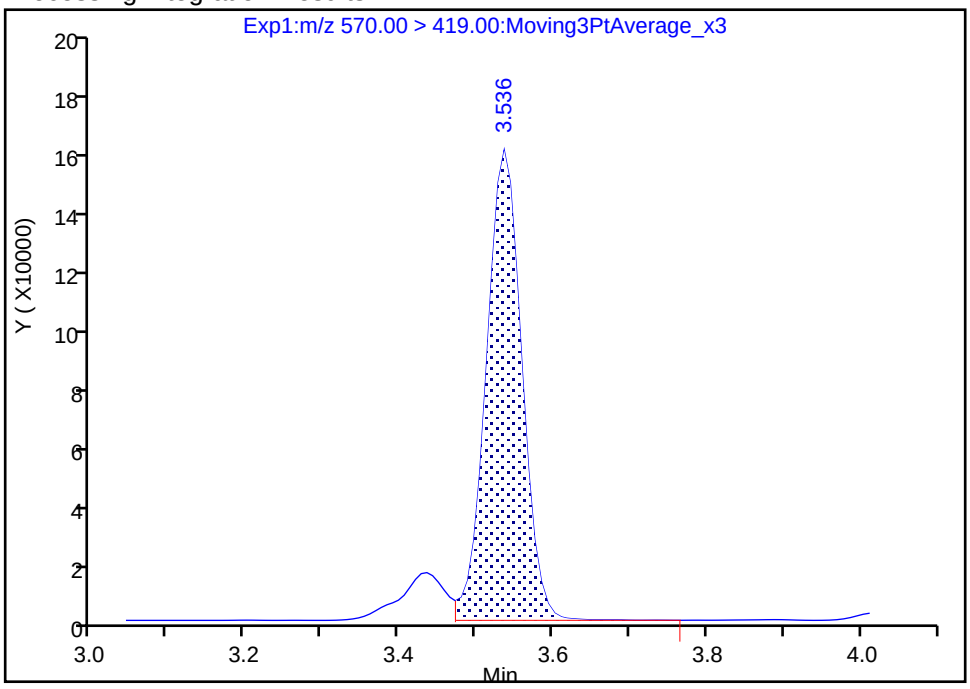
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_043.d
Injection Date: 12-Aug-2018 16:30:29 Instrument ID: A8_N
Lims ID: CCV L4
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

28 N-methyl perfluorooctane sulfonamidoacetic a, CAS: 2355-31-9

Signal: 1

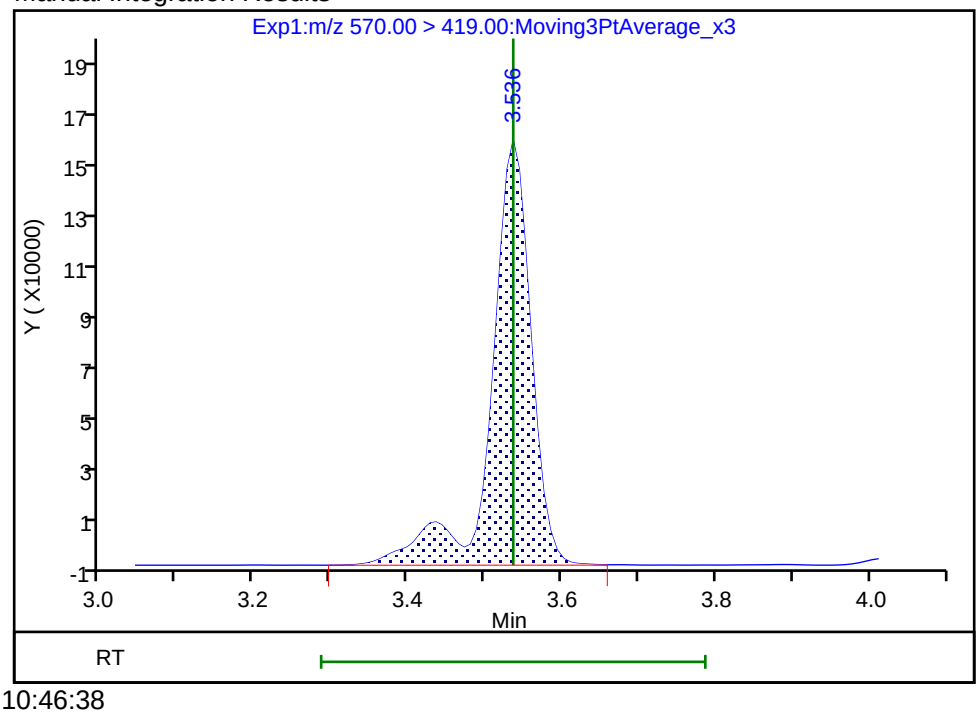
Processing Integration Results

RT: 3.54
Area: 509010
Amount: 0.898353
Amount Units: ng/ml



Manual Integration Results

RT: 3.54
Area: 573713
Amount: 1.012547
Amount Units: ng/ml



Reviewer: barnettj, 13-Aug-2018 10:46:38
Audit Action: Manually Integrated Audit Reason: Isomers

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-239440/22 Calibration Date: 08/12/2018 17:48

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_053.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9114		2.43	2.50	-2.9	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.138		2.50	2.50	0.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	75.93		2.21	2.21	-0.0	50.0
4:2 FTS	AveID	16.57	17.10		2.41	2.34	3.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	1.002		2.45	2.50	-1.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	71.10		2.42	2.35	3.2	50.0
HFPO-DA (GenX)	AveID	2.420	2.585		2.67	2.50	6.8	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.055		2.48	2.50	-0.6	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.040		2.18	2.28	-4.1	40.0
6:2 FTS	AveID	1.573	1.499		2.26	2.37	-4.7	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.124		2.49	2.50	-0.6	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.304		2.50	2.38	5.2	50.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.048		2.49	2.50	-0.6	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.108		2.39	2.32	3.1	40.0
F-53B Major	AveID	1.742	1.897		2.54	2.33	8.9	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.9878		2.54	2.50	1.5	40.0
8:2 FTS	AveID	1.299	1.240		2.29	2.40	-4.5	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.8111		2.59	2.40	7.8	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	0.9758		2.43	2.50	-2.7	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	0.9324		2.42	2.50	-3.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6805		2.60	2.41	7.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8406		2.36	2.50	-5.7	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	0.8417		1.87	2.50	-25.1	40.0
F-53B Minor	AveID	2.674	2.916		2.57	2.36	9.1	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.110		2.49	2.50	-0.2	40.0
10:2 FTS	AveID	0.9008	0.9271		2.48	2.41	2.9	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.3024		2.63	2.42	8.9	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.113		2.59	2.50	3.5	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2570		2.65	2.50	6.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9173		2.61	2.50	4.4	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-239440/22 Calibration Date: 08/12/2018 17:48

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.12LLA_053.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	1.037		2.82	2.50	12.7	50.0
13C4 PFBA	Ave	1.385	1.492		2.69	2.50	7.7	50.0
13C5 PFPeA	Ave	0.9537	0.9203		2.41	2.50	-3.5	50.0
13C3-PFBS	Ave	0.0221	0.0221		2.33	2.33	0.2	50.0
M2-4:2FTS	Ave	0.1572	0.1646		2.45	2.34	4.7	50.0
13C2 PFHxA	Ave	1.082	1.057		2.44	2.50	-2.3	50.0
13C3 HFPO-DA	Ave	0.0842	0.0736		2.19	2.50	-12.5	50.0
13C4-PFHpA	Ave	1.065	1.009		2.37	2.50	-5.3	50.0
18O2 PFHxS	Ave	1.366	1.331		2.30	2.37	-2.5	50.0
M2-6:2FTS	Ave	0.2242	0.2674		2.83	2.38	19.3	40.0
13C8 PFOA	Ave	1.927	1.599		2.03	2.45	-17.0	50.0
13C4 PFOA	Ave	0.9773	0.9846		2.52	2.50	0.7	50.0
13C8 PFOS	Ave	0.4359	0.4579		2.51	2.39	5.0	50.0
13C4 PFOS	Ave	0.8973	0.8986		2.39	2.39	0.1	50.0
13C5 PFNA	Ave	0.8770	0.8482		2.42	2.50	-3.3	50.0
13C8 FOSA	Ave	1.188	1.242		2.61	2.50	4.5	50.0
M2-8:2FTS	Ave	0.2707	0.3056		2.70	2.40	12.9	40.0
13C2 PFDA	Ave	0.7695	0.7602		2.47	2.50	-1.2	50.0
d3-NMeFOSAA	Ave	0.3935	0.4264		2.71	2.50	8.3	50.0
d5-NEtFOSAA	Ave	0.4077	0.4347		2.67	2.50	6.6	50.0
13C2 PFUnA	Ave	0.6189	0.6164		2.49	2.50	-0.4	50.0
13C2 PFDoA	Ave	0.6541	0.6738		2.58	2.50	3.0	50.0
13C2-PFTeDA	Ave	0.8335	0.8884		2.66	2.50	6.6	50.0
13C2-PFHxDA	Ave	1.653	1.560		2.36	2.50	-5.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_053.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 12-Aug-2018 17:48:35 ALS Bottle#: 14 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:33:34 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 10:49:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.421	1.411	0.010	0.536	4728470	2.69		108	8073	
2 Perfluorobutyric acid										
212.90 > 169.00	1.421	1.421	0.0	1.000	4309697	2.43		97.1	412	
D 3 13C5-PFPeA										
267.90 > 223.00	1.678	1.670	0.008	0.633	2916887	2.41		96.5	7473	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.678	1.678	0.0	1.000	3320205	2.50		100	270	
D 47 13C3-PFBS										
301.90 > 83.00	1.718	1.702	0.016	0.648	65132	2.33		100	299	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.718	1.718	0.0	1.000	4700838	2.21		100.0	1175	
298.90 > 99.00	1.718	1.718	0.0	1.000	1974181		2.38(1.25-3.74)		1002	
D 60 M2-4:2FTS										
329.00 > 81.00	1.928	1.912	0.016	0.727	487355	2.45		105	787	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.928	1.928	0.0	1.122	1118808	2.41		103	9544	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.959	1.959	0.0	1.000	3355755	2.45		98.1	1083	
313.00 > 119.00	1.959	1.959	0.0	1.000	305199		11.00(5.03-15.10)		890	
D 7 13C2 PFHxA										
315.00 > 270.00	1.959	1.954	0.005	0.739	3350123	2.44		97.7	9947	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.991	1.991	0.0	1.158	4670949	2.42		103	5207	
349.00 > 99.00	1.991	1.991	0.0	1.158	1680407		2.78(1.36-4.07)		1922	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.064	2.048	0.016	0.778	233328	2.19		87.5	612	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.064	2.064	0.0	1.000	603253	2.67		107	317	
D 9 13C4-PFHpA										
367.00 > 322.00	2.291	2.288	0.003	0.864	3197612	2.37		94.7	4392	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.291	2.291	0.0	1.000	3374517	2.48		99.4	795	
363.00 > 169.00	2.291	2.291	0.0	1.000	1368973		2.46(1.13-3.40)		1944	
D 11 18O2 PFHxS										
403.00 > 84.00	2.314	2.299	0.015	0.872	3990924	2.30		97.5	3309	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.314	2.314	0.0	1.000	3990841	2.18		95.9	2593	
399.00 > 99.00	2.314	2.314	0.0	1.000	1352122		2.95(1.50-4.49)		1427	
65 ADONA										
377.00 > 251.00	2.336	2.336	0.0	0.771	10306566	2.79		112	10337	
377.00 > 85.00	2.336	2.336	0.0	0.771	6030308		1.71(0.84-2.53)		10638	
D 12 M2-6:2FTS										
429.00 > 81.00	2.622	2.612	0.010	0.988	805040	2.83		119	2878	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.622	2.622	0.0	1.000	1204410	2.26		95.3	3042	
D 73 13C8 PFOA										
421.00 > 376.00	2.645	2.635	0.010	0.997	4962790	2.03		83.0	7633	
D 14 13C4 PFOA										
417.00 > 372.00	2.653	2.643	0.010	1.000	3120577	2.52		101	3913	
* 62 13C2-PFOA										
415.00 > 370.00	2.653	2.653	0.0		3169537	2.50			5257	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.653	2.653	0.0	1.000	3512355	2.49		99.4	312	
413.00 > 169.00	2.653	2.653	0.0	1.000	1872741		1.88(0.84-2.52)		2732	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.660	2.660	0.0	0.879	3534350	2.50		105	4545	
449.00 > 99.00	2.660	2.660	0.0	0.879	922009		3.83(1.94-5.82)		1704	
D 19 13C5 PFNA										
468.00 > 423.00	3.028	3.016	0.012	1.141	2688297	2.42		96.7	6448	
D 72 13C8 PFOS										
507.00 > 99.00	3.020	3.016	0.004	1.139	1387374	2.51		105	2540	
D 18 13C4 PFOS										
503.00 > 80.00	3.028	3.016	0.012	1.141	2722680	2.39		100	4453	
20 Perfluorononanoic acid										
463.00 > 419.00	3.028	3.028	0.0	1.000	2816023	2.49		99.4	760	
463.00 > 169.00	3.028	3.028	0.0	1.000	717999		3.92(1.90-5.69)		3921	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.028	3.028	0.0	1.000	2927140	2.39		103	2962	
499.00 > 99.00	3.028	3.028	0.0	1.000	645277		4.54(2.31-6.93)		1384	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.240	3.240	0.0	1.070	5034129	2.54		109	8406	
D 21 13C8 FOSA										
506.00 > 78.00	3.352	3.335	0.017	1.264	3937827	2.61		105	6479	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.352	3.352	0.0	1.000	3889862	2.54		101	3719	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.374	3.374	0.0	1.114	2217631	2.59		108	3591	
549.00 > 99.00	3.374	3.374	0.0	1.114	792047		2.80(1.33-3.97)		2110	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.374	3.374	0.0	1.000	1150872	2.29		95.5	3781	
D 26 M2-8:2FTS										
529.00 > 81.00	3.374	3.372	0.002	1.272	927886	2.70		113	2854	
D 23 13C2 PFDA										
515.00 > 470.00	3.389	3.380	0.009	1.278	2409506	2.47		98.8	5237	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.389	3.389	0.0	1.000	2351081	2.43		97.3	1583	
513.00 > 169.00	3.389	3.389	0.0	1.000	430475		5.46(2.36-7.09)		330	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.542	3.542	0.0	1.000	1260020	2.42		96.7	953	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.542	3.540	0.002	1.335	1351424	2.71		108	4782	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.698	3.698	0.0	1.221	1868282	2.60		108	3217	
599.00 > 99.00	3.698	3.698	0.0	1.221	607784		3.07(1.39-4.16)		3221	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.706	3.702	0.004	1.397	1377719	2.67		107	1201	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.715	3.715	0.0	1.002	1158076	2.36		94.3	1743	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.715	3.715	0.0	1.000	1644396	1.87		74.9	1043	
563.00 > 169.00	3.715	3.715	0.0	1.000	437961		3.75(2.12-6.36)		1986	
D 30 13C2 PFUnA										
565.00 > 520.00	3.715	3.711	0.004	1.400	1953755	2.49		99.6	4925	
35 MeFOSA										
512.00 > 169.00	3.849	3.849	0.0		1147643	NC			706	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.878	3.878	0.0	1.281	7822665	2.57		109	9528	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.012	4.012	0.0	1.000	2371650	2.49		99.8	1619	
613.00 > 169.00	4.012	4.012	0.0	1.000	595660		3.98(2.13-6.40)		3664	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.021	4.021	0.0	1.191	865622	2.48		103	5088	
D 36 13C2 PFDoA										
615.00 > 570.00	4.012	4.017	-0.005	1.512	2135728	2.58		103	4558	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.254	4.254	0.0	1.405	833638	2.63		109	2281	
699.00 > 99.00	4.254	4.254	0.0	1.405	1166325		0.71(0.00-0.00)		4247	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.282	4.282	0.0	1.067	2377839	2.59		104	1071	
663.00 > 169.00	4.282	4.282	0.0	1.067	793116		3.00(1.25-3.76)		3625	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.525	4.525	0.0	1.000	723787	2.65		106	3023	
713.00 > 219.00	4.525	4.525	0.0	1.000	505508		1.43(0.71-2.13)		1276	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.525	4.523	0.002	1.706	2815859	2.66		107	6055	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.944	4.944	0.0	1.000	4534048	2.61		104	581	
813.00 > 169.00	4.944	4.944	0.0	1.000	818480		5.54(2.86-8.58)		3307	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.944	4.944	0.0	1.864	4942949	2.36		94.3	5692	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.301	5.301	0.0	1.072	5125654	2.82		113	567	
913.00 > 169.00	5.301	5.301	0.0	1.072	648890		7.90(3.83-11.48)		2622	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00006 Amount Added: 1.00 Units: mL

Report Date: 13-Aug-2018 13:33:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_053.d

Injection Date: 12-Aug-2018 17:48:35 Instrument ID: A8_N

Lims ID: CCV L5

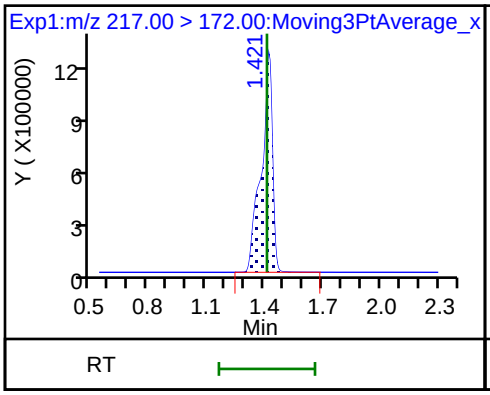
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 14 Worklist Smp#: 22

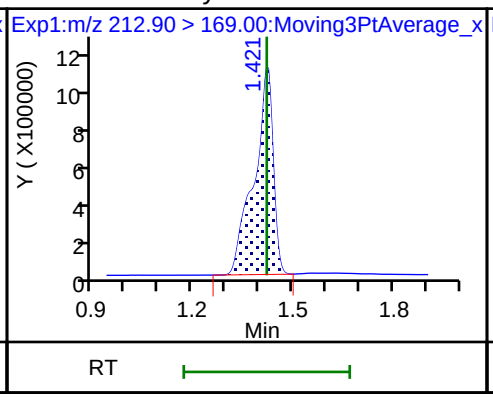
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

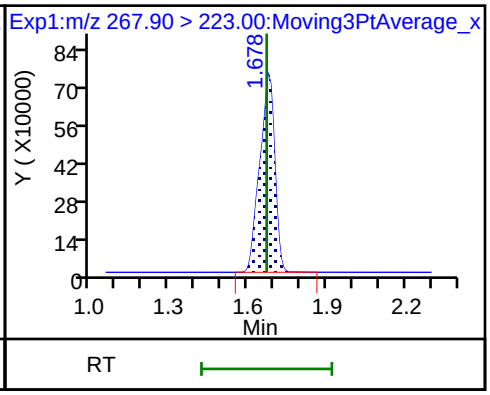
D 1 13C4 PFBA



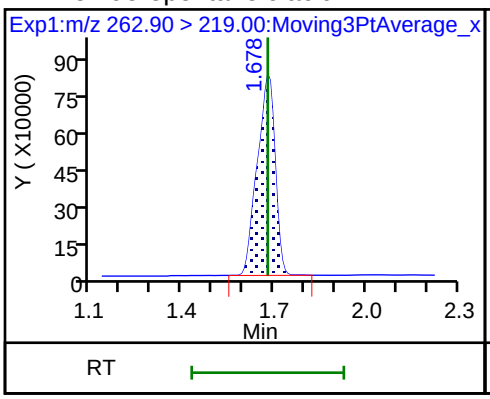
2 Perfluorobutyric acid



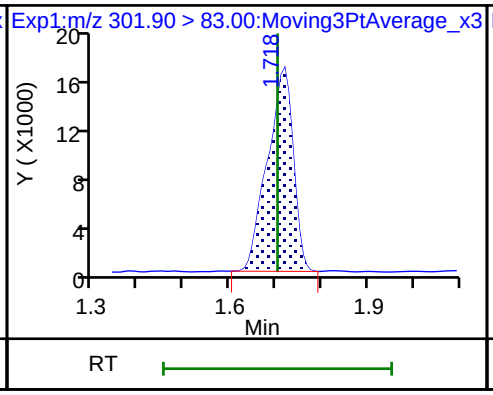
D 3 13C5-PFPeA



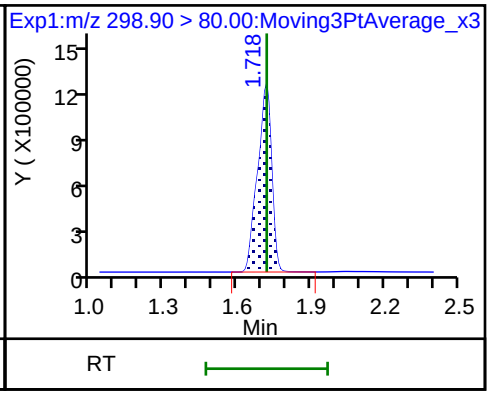
4 Perfluoropentanoic acid



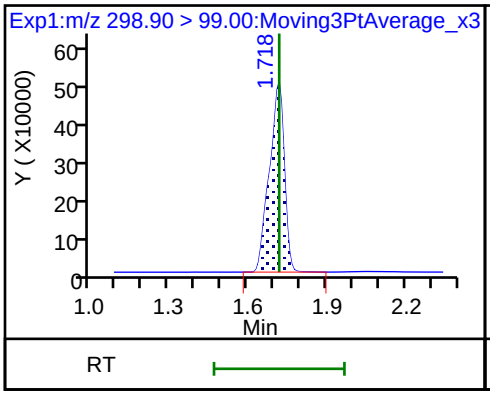
D 47 13C3-PFBS



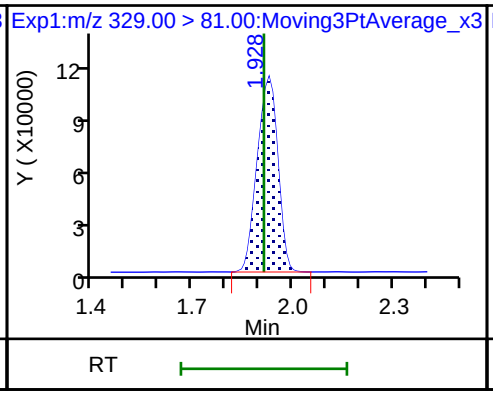
5 Perfluorobutanesulfonic acid



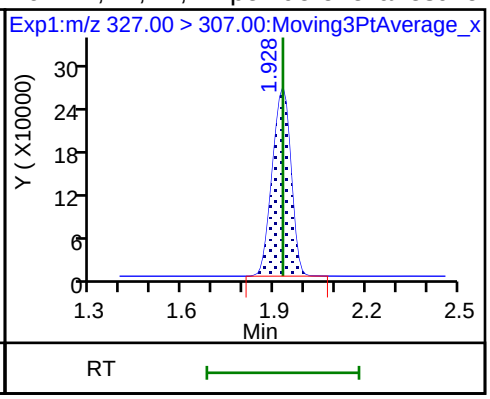
5 Perfluorobutanesulfonic acid



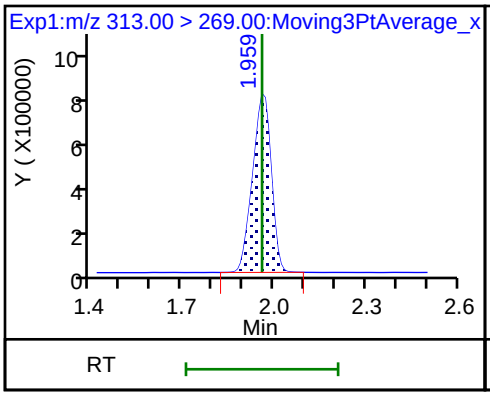
D 60 M2-4:2FTS



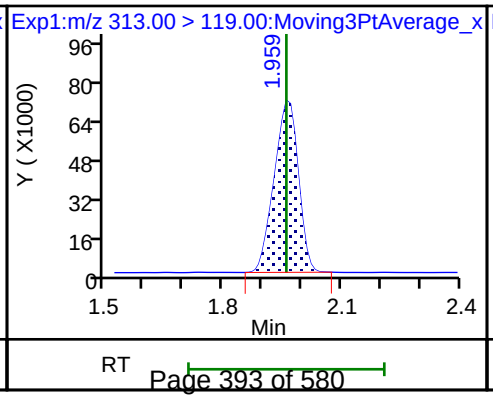
61 1H,1H,2H,2H-perfluorohexanesulfoni



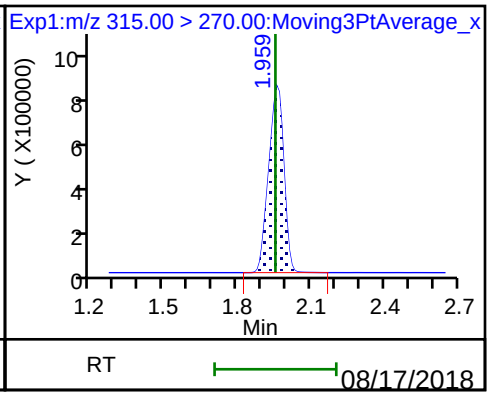
6 Perfluorohexanoic acid



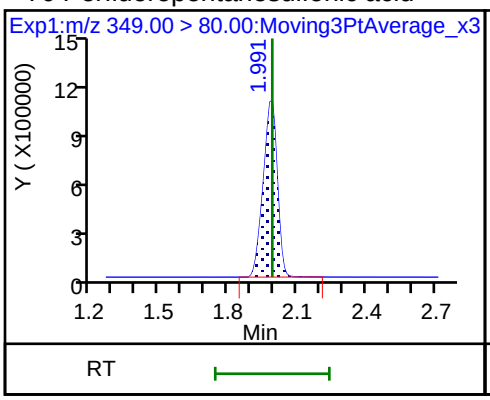
6 Perfluorohexanoic acid



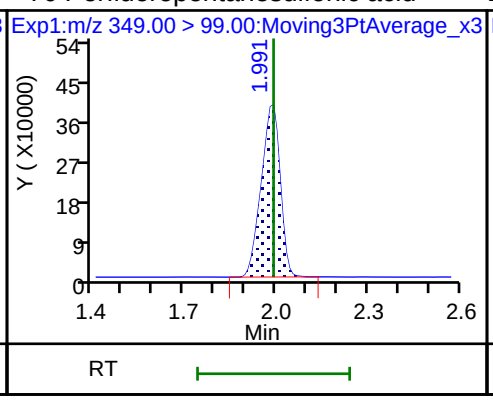
D 7 13C2 PFHxA



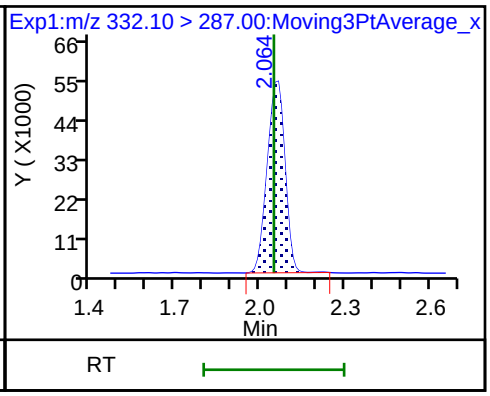
70 Perfluoropentanesulfonic acid



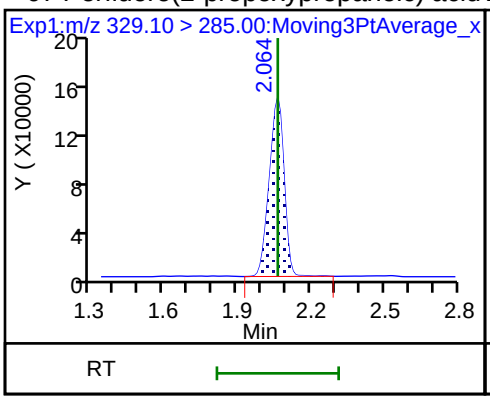
70 Perfluoropentanesulfonic acid



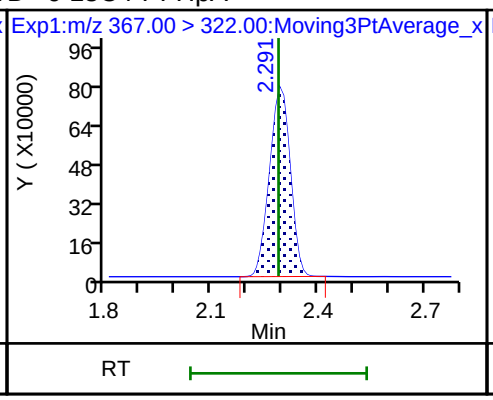
D 64 13C3 HFPO-DA



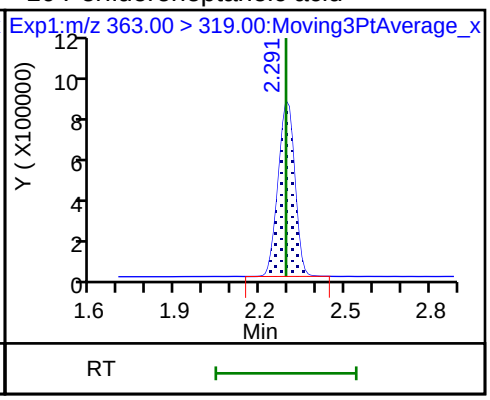
67 Perfluoro(2-propoxypropanoic) acid



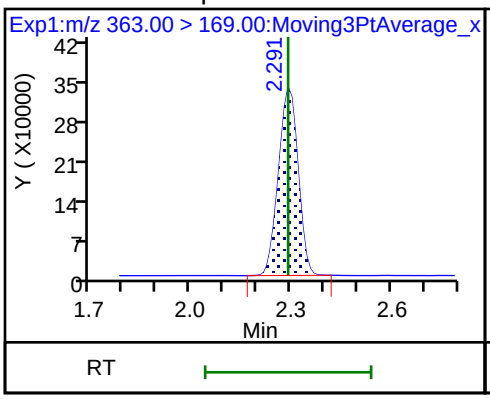
D 9 13C4-PFHpA



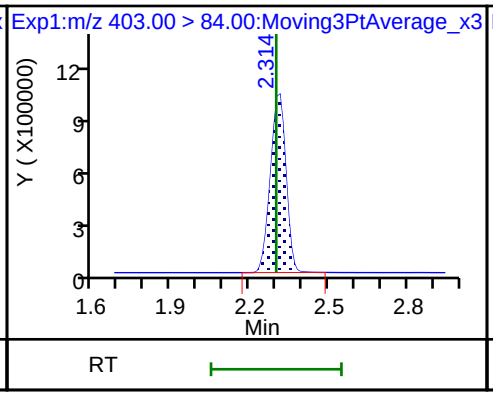
10 Perfluoroheptanoic acid



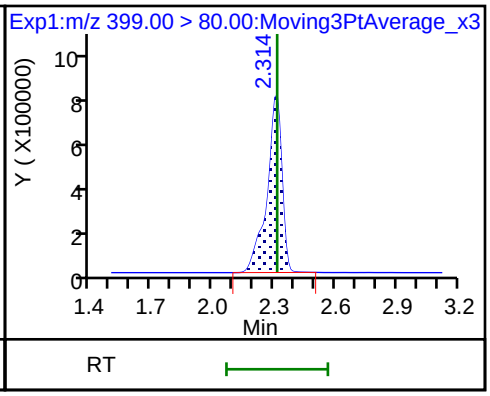
10 Perfluoroheptanoic acid



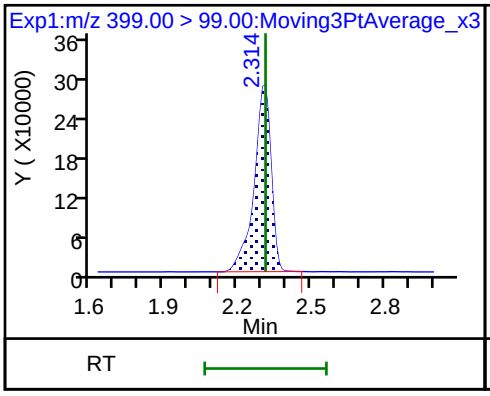
D 11 18O2 PFHxS



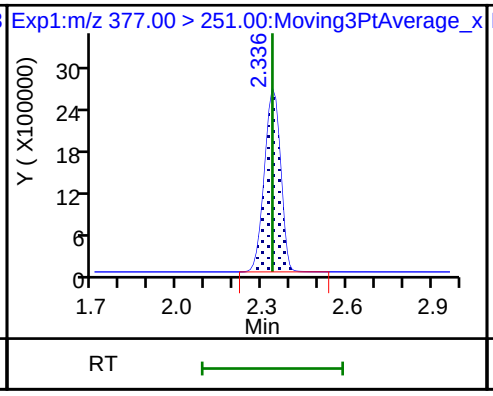
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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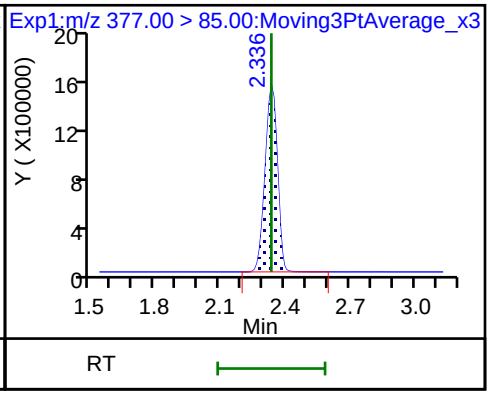
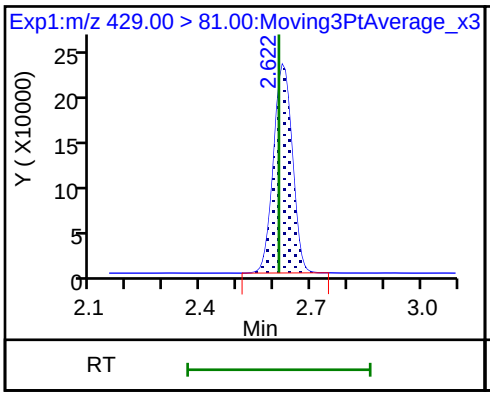
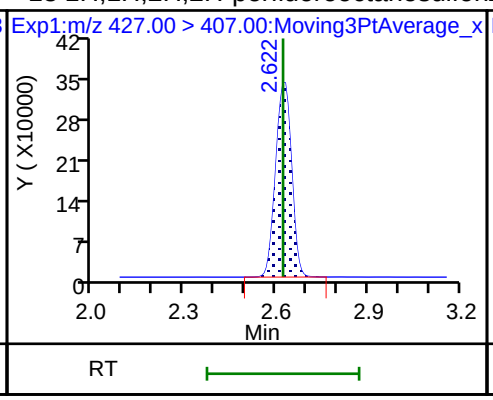


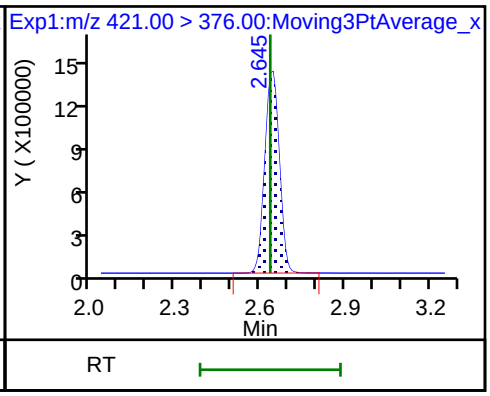
D 12 M2-6:2FTS



13 1H,1H,2H,2H-perfluorooctanesulfon



D 73 13C8 PFOA



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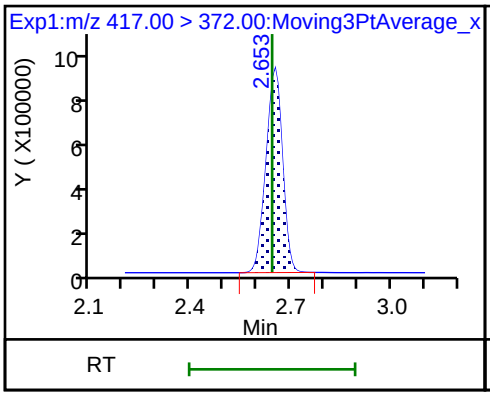

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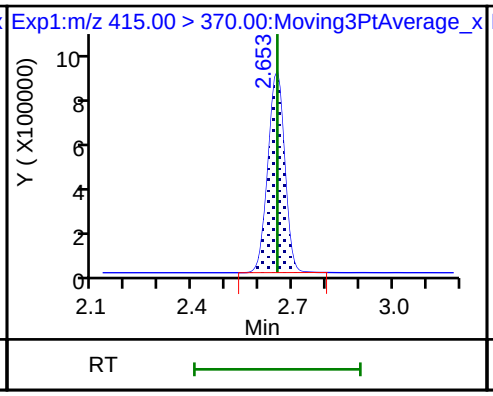
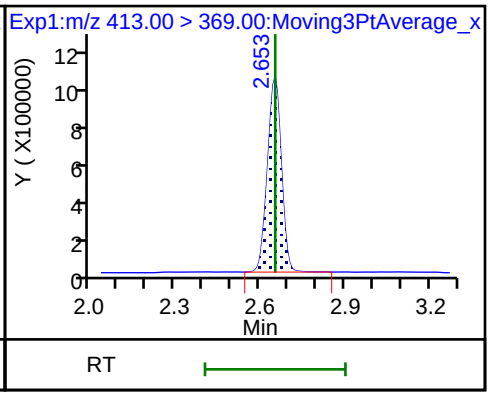
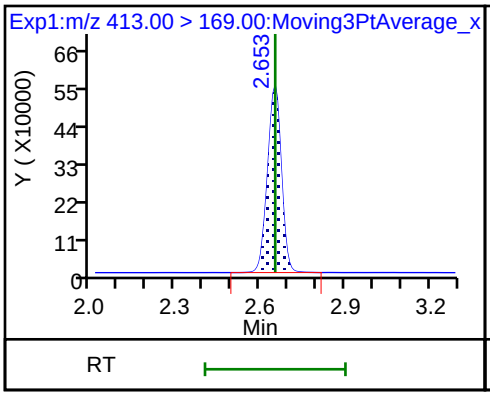


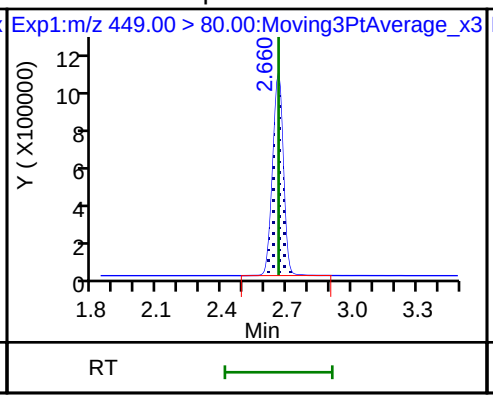
15 Perfluorooctanoic acid



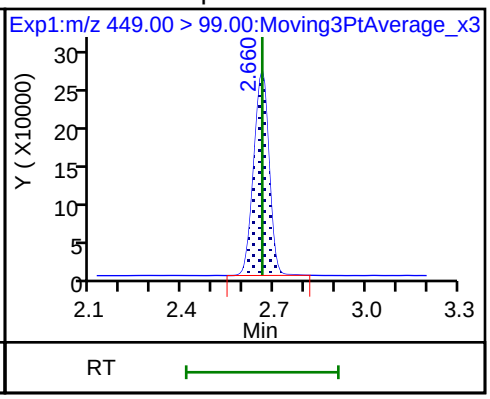
15 Perfluorooctanoic acid



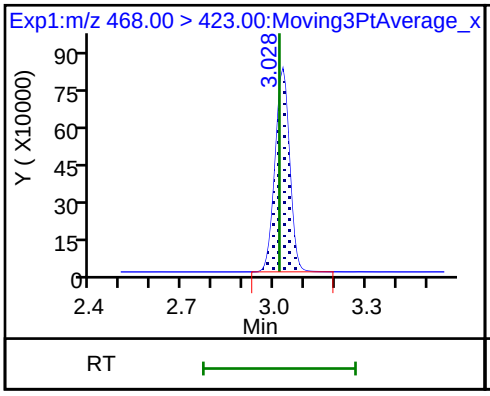
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 19 13C5 PFNA



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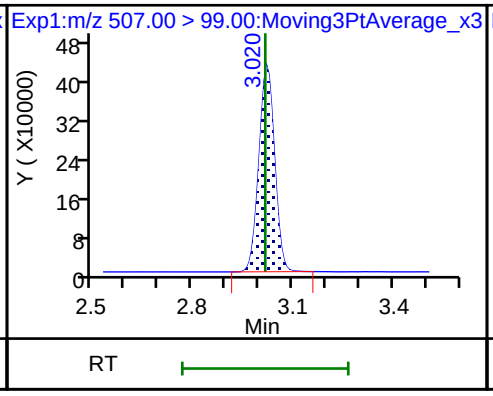

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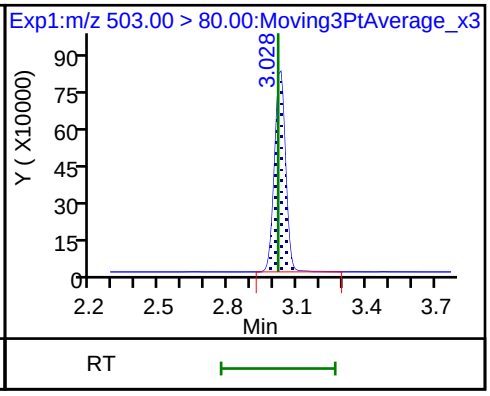
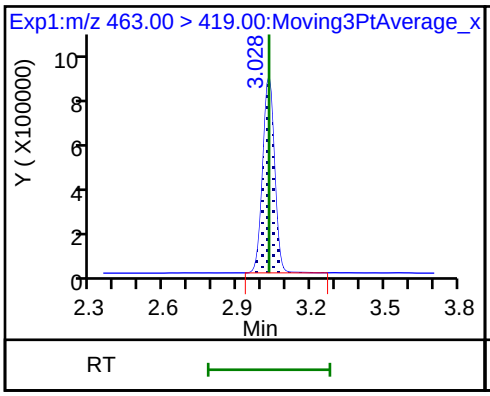
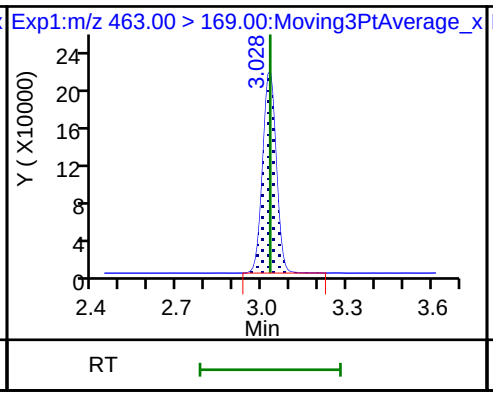


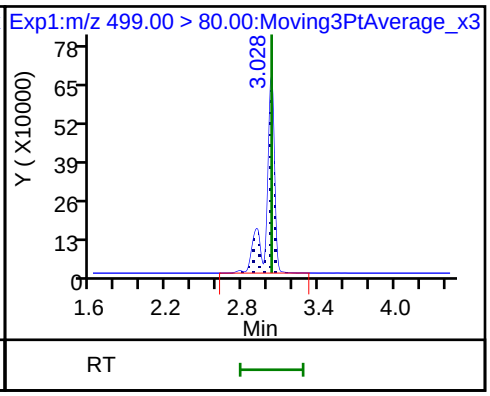
20 Perfluorononanoic acid



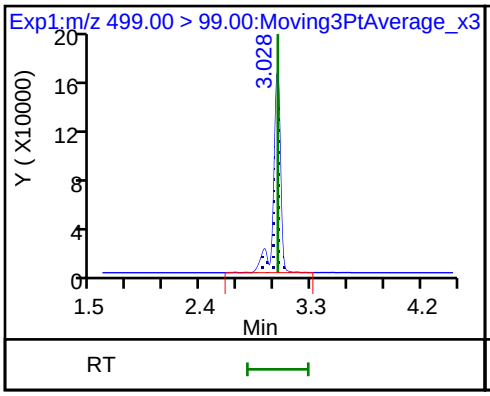
20 Perfluorononanoic acid



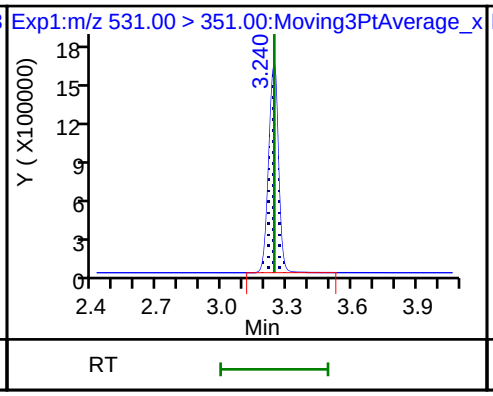
17 Perfluorooctane sulfonic acid



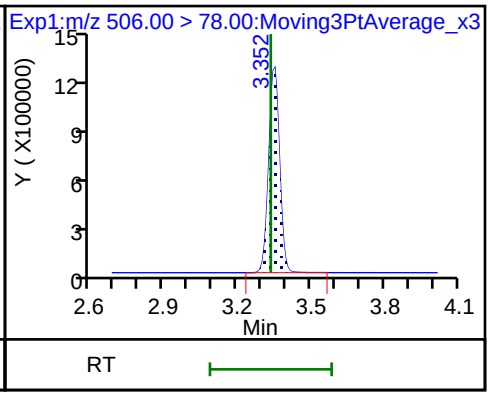
17 Perfluorooctane sulfonic acid



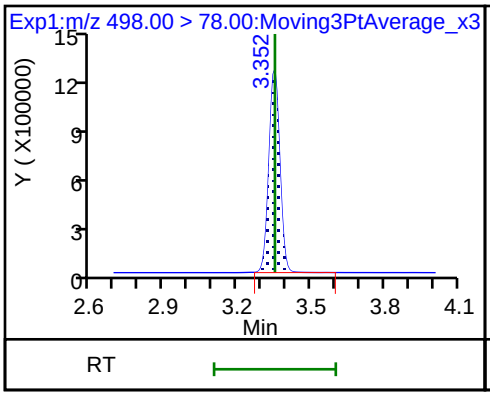
69 9-Chlorohexadecafluoro-3-oxanonane



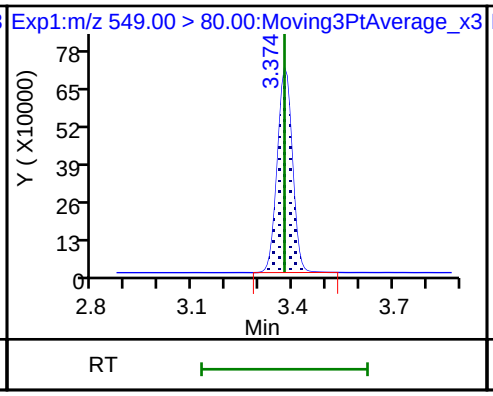
D 21 13C8 FOSA



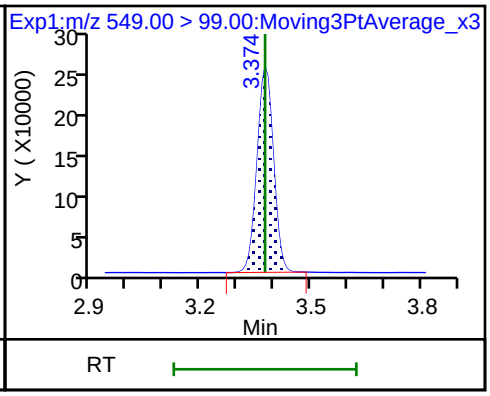
22 Perfluorooctane Sulfonamide



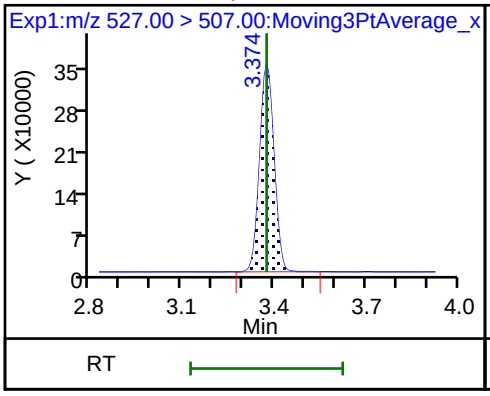
68 Perfluorononanesulfonic acid



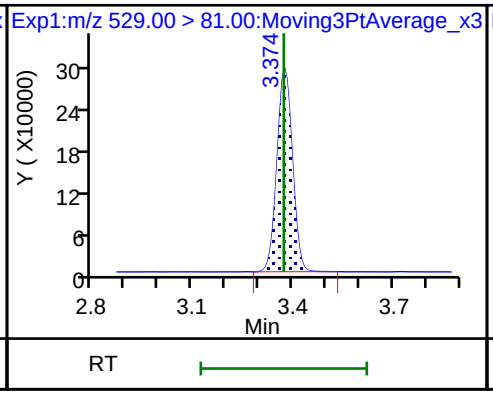
68 Perfluorononanesulfonic acid



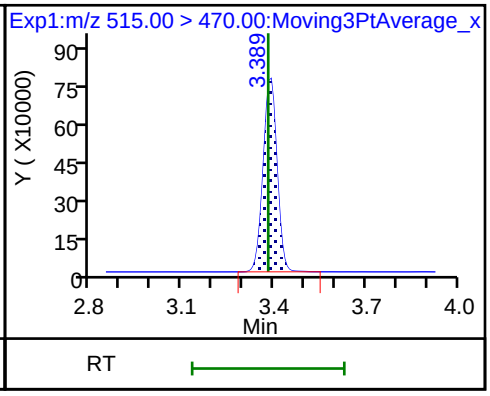
25 1H,1H,2H,2H-perfluorodecanesulfon



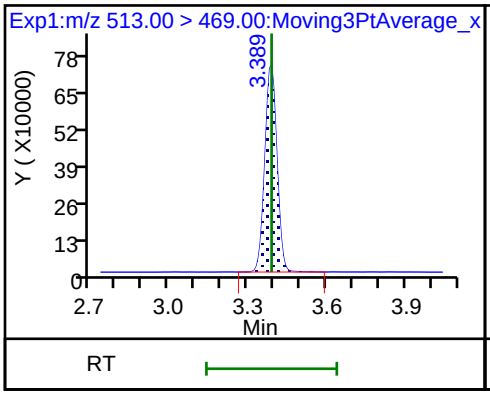
D 26 M2-8:2FTS



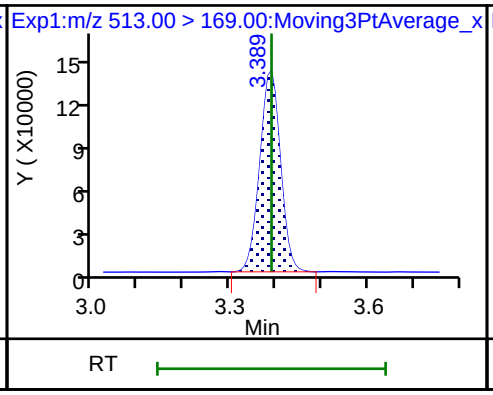
D 23 13C2 PFDA



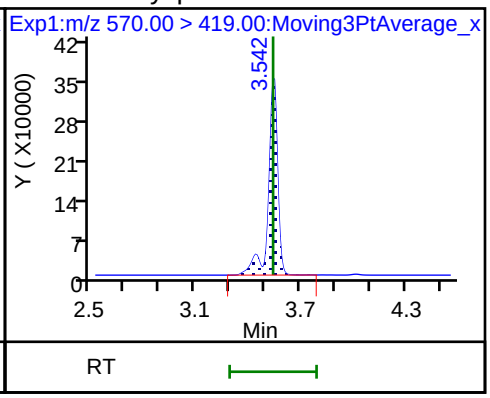
24 Perfluorodecanoic acid



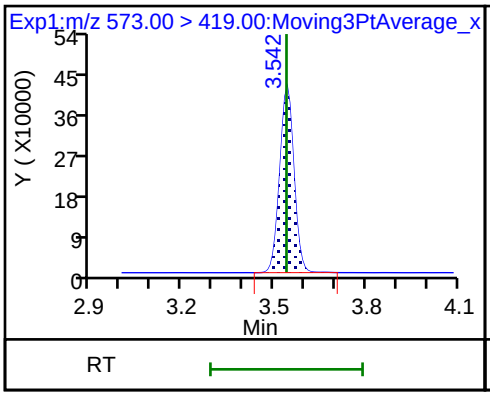
24 Perfluorodecanoic acid



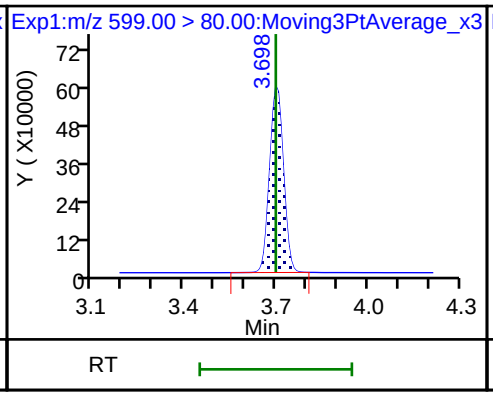
28 N-methyl perfluorooctane sulfonami



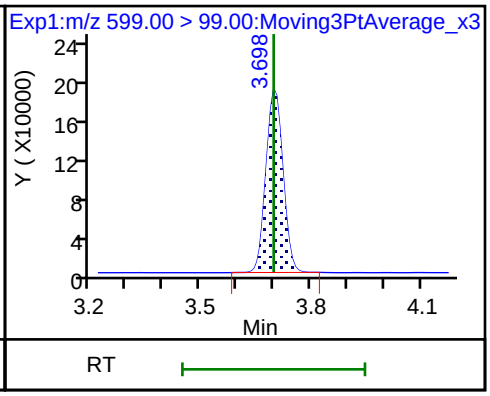
D 27 d3-NMeFOSAA



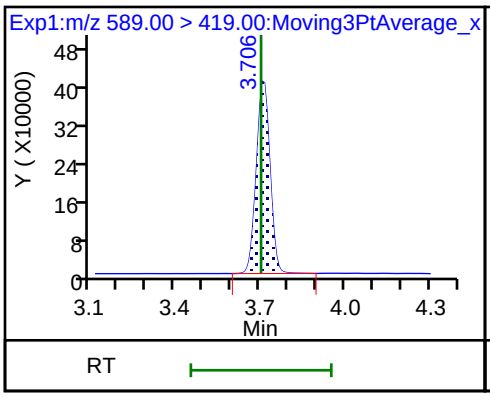
29 Perfluorodecane Sulfonic acid



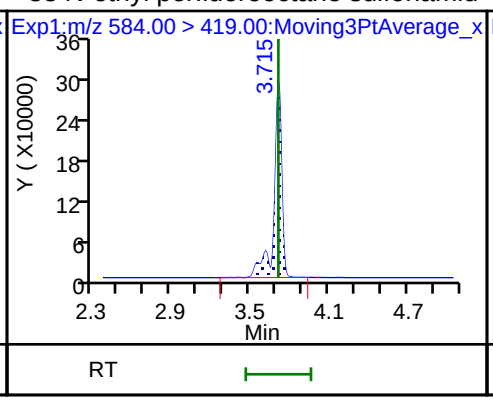
29 Perfluorodecane Sulfonic acid



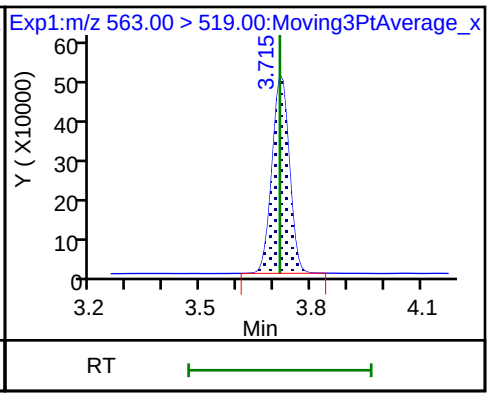
D 32 d5-NEtFOSAA



33 N-ethyl perfluorooctane sulfonamid



31 Perfluoroundecanoic acid



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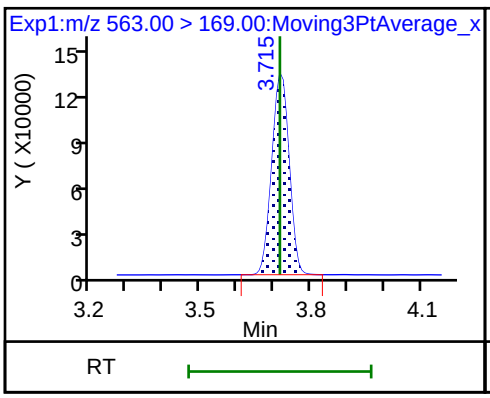
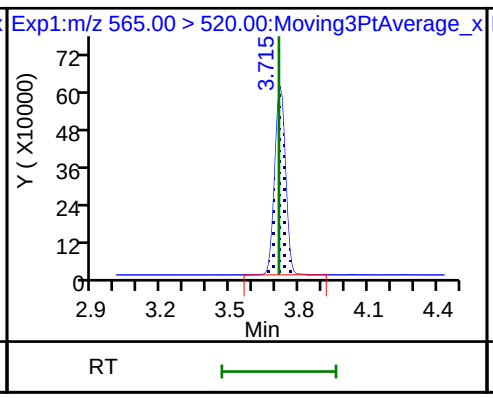
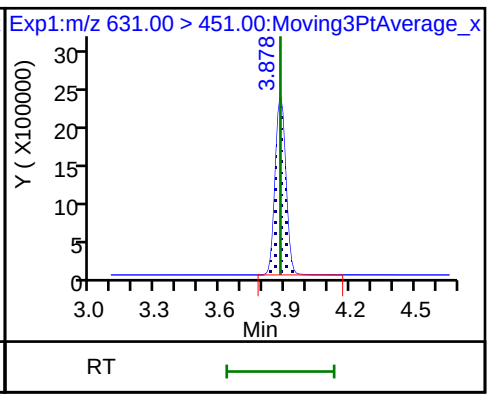


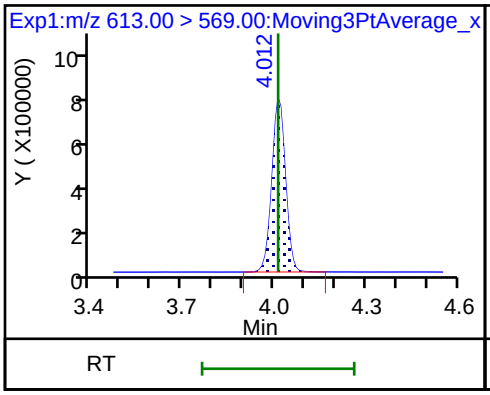
D 30 13C2 PFUnA



66 11-Chloroeicosafluoro-3-oxaundecan



37 Perfluorododecanoic acid



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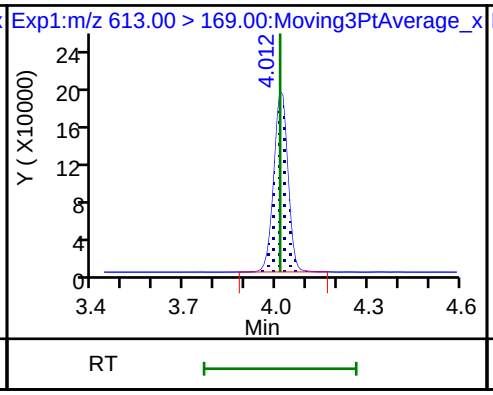
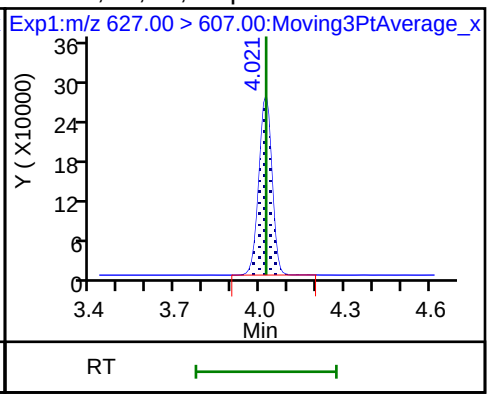
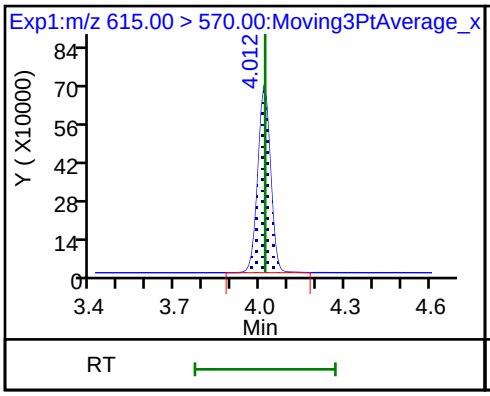


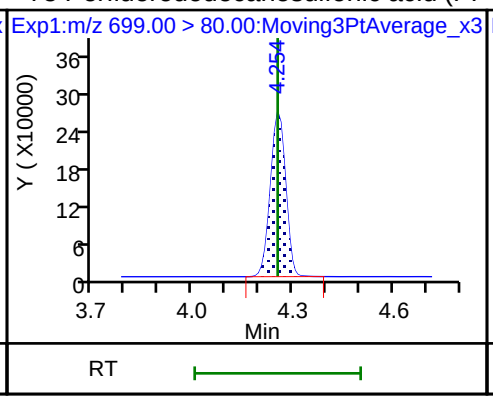
74 1H,1H,2H,2H-perfluorododecanesulfo



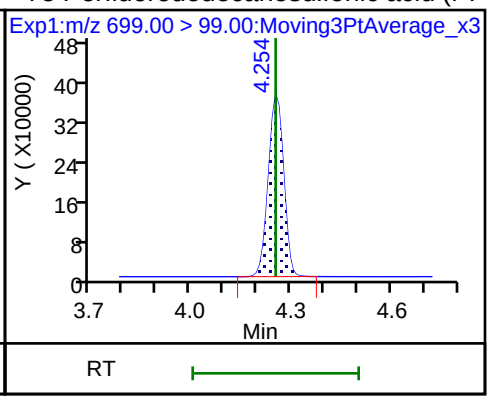
D 36 13C2 PFDoA



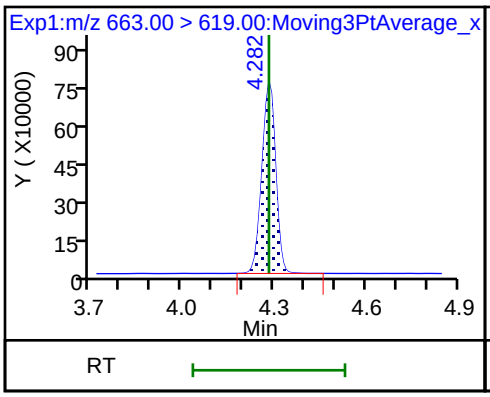
75 Perfluorododecanesulfonic acid (PF



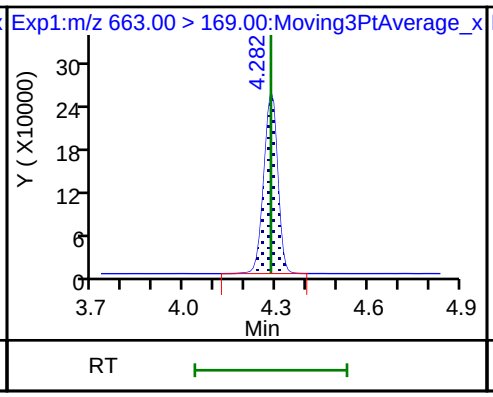
75 Perfluorododecanesulfonic acid (PF



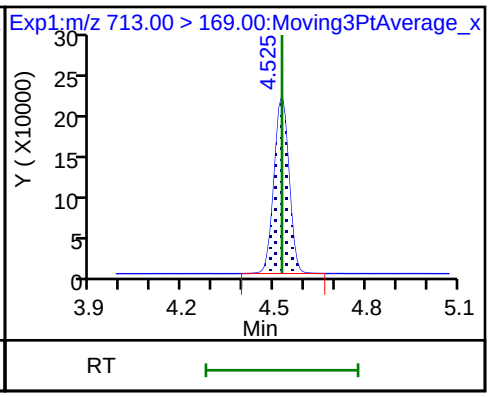
41 Perfluorotridecanoic acid



41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid



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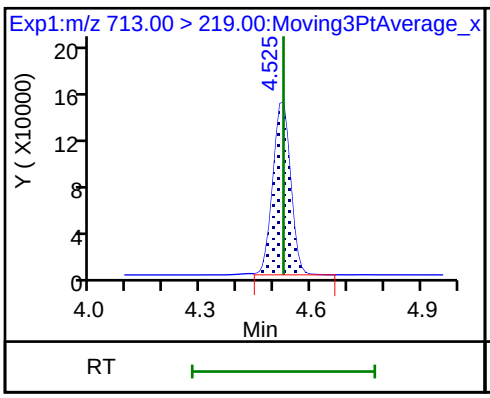
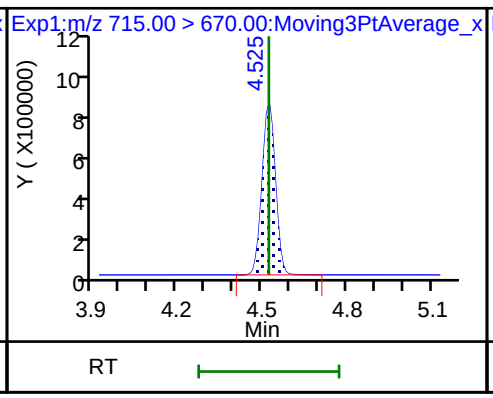
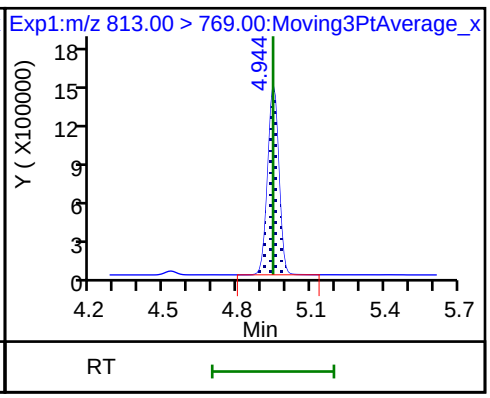


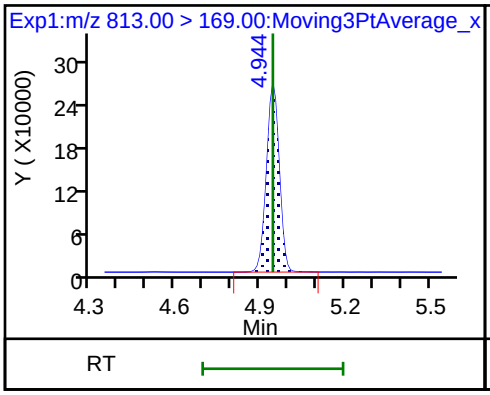
D 43 13C2-PFTeDA



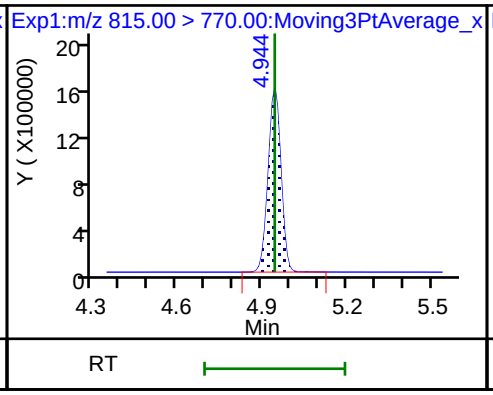
45 Perfluorohexadecanoic acid



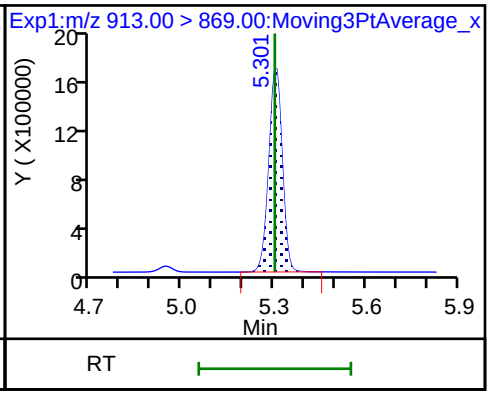
45 Perfluorohexadecanoic acid



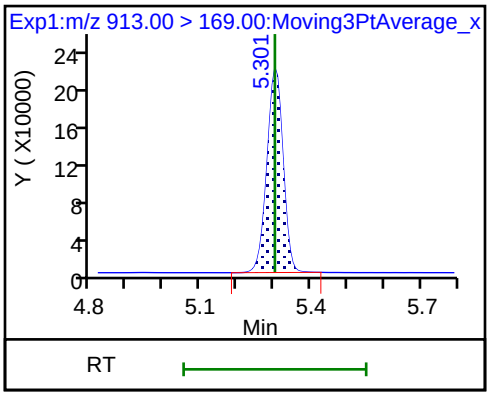
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: ICV 320-237920/10 Calibration Date: 08/03/2018 17:12

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.03LLICAL_013.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9293	0.9479		2.55	2.50	2.0	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.020	1.007		2.47	2.50	-1.3	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	109.5		2.35	2.21	6.0	50.0
4:2 FTS	AveID	17.02	16.76		2.30	2.34	-1.5	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9355	0.9172		2.45	2.50	-1.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	48.91	52.28		2.51	2.35	6.9	50.0
HFPO-DA (GenX)	AveID	2.205	2.165		2.45	2.50	-1.8	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.038	1.088		2.62	2.50	4.8	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.279	1.195		2.13	2.28	-6.6	40.0
6:2 FTS	AveID	2.137	2.109		2.34	2.38	-1.3	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.096	1.040		2.37	2.50	-5.1	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.011	1.166		2.74	2.38	15.3	50.0
Perfluorononanoic acid (PFNA)	AveID	1.055	0.9934		2.35	2.50	-5.8	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.072	1.093		2.36	2.31	1.9	40.0
F-53B Major	AveID	1.181	1.272		2.51	2.33	7.7	50.0
8:2 FTS	AveID	14.02	14.62		2.50	2.40	4.3	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6548	0.7374		2.70	2.40	12.6	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	3.071	3.311		2.69	2.50	7.8	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.229	1.181		2.40	2.50	-3.9	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.011	1.130		2.79	2.50	11.8	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8334	0.9212		2.67	2.41	10.5	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8969	1.049		2.92	2.50	16.9	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8420	0.7968		2.37	2.50	-5.4	40.0
F-53B Minor	AveID	1.251	1.414		2.66	2.36	13.0	50.0
10:2 FTS	AveID	7.652	8.464		2.67	2.41	10.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9834	1.069		2.72	2.50	8.7	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0804	0.0868		2.61	2.42	7.9	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.7505	0.8383		2.79	2.50	11.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1611	0.1476		2.29	2.50	-8.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9394		2.57	2.50	2.9	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: ICV 320-237920/10 Calibration Date: 08/03/2018 17:12

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.03LLICAL_013.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7099	0.6707		2.36	2.50	-5.5	50.0
13C4 PFBA	Ave	1.117	1.102		2.47	2.50	-1.4	50.0
13C5 PFPeA	Ave	0.999	1.000		2.50	2.50	0.2	50.0
13C3-PFBS	Ave	0.0155	0.0152		2.28	2.33	-2.0	50.0
M2-4:2FTS	Ave	0.1052	0.1003		2.23	2.34	-4.7	50.0
13C2 PFHxA	Ave	1.037	1.022		2.46	2.50	-1.4	50.0
13C3 HFPO-DA	Ave	0.0886	0.0856		2.41	2.50	-3.4	50.0
13C4-PFHpA	Ave	1.177	1.130		2.40	2.50	-4.0	50.0
18O2 PFHxS	Ave	0.8862	0.8996		2.40	2.37	1.5	50.0
M2-6:2FTS	Ave	0.1144	0.1131		2.35	2.38	-1.1	40.0
13C4 PFOA	Ave	0.9865	1.010		2.56	2.50	2.4	50.0
13C4 PFOS	Ave	0.9223	0.8972		2.32	2.39	-2.7	50.0
13C5 PFNA	Ave	0.8463	0.8515		2.52	2.50	0.6	50.0
13C2 PFDA	Ave	0.8474	0.8599		2.54	2.50	1.5	50.0
13C8 FOSA	Ave	0.5512	0.5716		2.59	2.50	3.7	50.0
M2-8:2FTS	Ave	0.0133	0.0130		2.34	2.40	-2.1	40.0
d3-NMeFOSAA	Ave	0.1647	0.1565		2.37	2.50	-5.0	50.0
d5-NEtFOSAA	Ave	0.1353	0.1412		2.61	2.50	4.3	50.0
13C2 PFUnA	Ave	0.6849	0.6756		2.47	2.50	-1.4	50.0
13C2 PFDoA	Ave	0.7384	0.6756		2.29	2.50	-8.5	50.0
13C2-PFTeDA	Ave	0.4715	0.4924		2.61	2.50	4.4	50.0
13C2-PFHxDA	Ave	0.4325	0.4290		2.48	2.50	-0.8	50.0
13C8 PFOA	None				0.000000	2.45	-100.0*	50.0
13C8 PFOS	None				0.000000	2.39	-100.0*	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_013.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 03-Aug-2018 17:12:28 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist:

Method: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 03-Aug-2018 18:16:42 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK018

First Level Reviewer: roycea Date: 03-Aug-2018 17:58:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.486	1.485	0.001	0.540	6041779	2.47		98.6	6070	
2 Perfluorobutyric acid										
212.90 > 169.00	1.486	1.486	0.0	1.000	5727114	2.55			107	
D 3 13C5-PFPeA										
267.90 > 223.00	1.753	1.753	0.0	0.638	5486390	2.50		100	7354	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.753	1.754	-0.001	1.000	5522443	2.47			206	
D 47 13C3-PFBS										
301.90 > 83.00	1.787	1.792	-0.005	0.650	77315	2.28		98.0	270	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.795	1.794	0.001	1.005	8055428	2.35			5065	
298.90 > 99.00	1.787	1.794	-0.007	1.000	2841969		2.83(1.35-4.05)		765	
D 60 M2-4:2FTS										
329.00 > 81.00	2.006	2.006	0.0	0.730	513519	2.23		95.3	321	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.006	2.009	-0.003	1.123	1302896	2.30			4344	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.037	2.044	-0.007	1.000	5140529	2.45			387	
313.00 > 119.00	2.037	2.044	-0.007	1.000	373141		13.78(6.96-20.87)		259	
D 7 13C2 PFHxA										
315.00 > 270.00	2.037	2.046	-0.009	0.741	5604405	2.46		98.6	6822	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.068	2.069	-0.001	1.157	4085598	2.51			5139	
349.00 > 99.00	2.068	2.069	-0.001	1.157	1890840		2.16(1.15-3.45)		734	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.140	2.146	-0.006	0.778	469410	2.41		96.6	1517	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.140	2.147	-0.007	1.000	1016128	2.45			269	
D 9 13C4-PFHpA										
367.00 > 322.00	2.384	2.384	0.0	0.867	6196682	2.40		96.0	8077	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.384	2.384	0.0	1.000	6740712	2.62			379	
363.00 > 169.00	2.384	2.384	0.0	1.000	1519780		4.44(2.17-6.52)		1095	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.397	2.398	-0.001	1.000	5374811	2.13			3767	
399.00 > 99.00	2.397	2.398	-0.001	1.000	1409278		3.81(1.90-5.70)		361	
D 11 18O2 PFHxS										
403.00 > 84.00	2.397	2.400	-0.003	0.872	4666935	2.40		102	7459	
65 ADONA										
377.00 > 251.00	2.436	2.435	0.001	0.776	10765824	2.72			7409	
377.00 > 85.00	2.436	2.435	0.001	0.776	4411435		2.44(1.05-3.16)		1606	
D 12 M2-6:2FTS										
429.00 > 81.00	2.733	2.732	0.001	0.994	589398	2.35		98.9	681	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.733	2.732	0.001	1.000	1242765	2.34			2045	
* 62 13C2-PFOA										
415.00 > 370.00	2.749	2.755	-0.006		5483729	2.50			13538	
D 14 13C4 PFOA										
417.00 > 372.00	2.749	2.757	-0.008	1.000	5538192	2.56		102	5087	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.749	2.757	-0.008	1.000	5758083	2.37			527	
413.00 > 169.00	2.749	2.757	-0.008	1.000	2075858		2.77(1.36-4.08)		1033	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.766	2.767	-0.001	0.881	5448213	2.74			6270	
449.00 > 99.00	2.766	2.767	-0.001	0.881	1267468		4.30(1.84-5.53)		1792	
D 19 13C5 PFNA										
468.00 > 423.00	3.139	3.140	-0.001	1.142	4669513	2.52		101	5555	
D 18 13C4 PFOS										
503.00 > 80.00	3.139	3.140	-0.001	1.142	4703282	2.32		97.3	5180	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.139	3.140	-0.001	1.000	4976226	2.36			3755	
499.00 > 99.00	3.139	3.140	-0.001	1.000	1124775		4.42(2.04-6.12)		1278	
20 Perfluorononanoic acid										
463.00 > 419.00	3.139	3.140	-0.001	1.000	4638610	2.35			519	
463.00 > 169.00	3.139	3.140	-0.001	1.000	866766		5.35(2.68-8.03)		966	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.347	3.348	-0.001	1.066	5833805	2.51			4066	
D 21 13C8 FOSA										
506.00 > 78.00	3.493	3.485	0.008	1.270	3134561	2.59		104	3718	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.493	3.492	0.001	1.113	3482909	2.70			3769	
549.00 > 99.00	3.493	3.492	0.001	1.113	604699		5.76(3.02-9.05)		2534	
D 26 M2-8:2FTS										
529.00 > 81.00	3.493	3.492	0.001	1.270	68330	2.34		97.9	232	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.493	3.492	0.001	1.000	10377049	2.69			2751	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.493	3.494	-0.001	1.000	1000981	2.50			5378	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.508	3.505	0.003	1.004	5569297	2.40			566	
513.00 > 169.00	3.493	3.505	-0.012	1.000	374850		14.86(7.12-21.35)		442	
D 23 13C2 PFDA										
515.00 > 470.00	3.493	3.505	-0.012	1.270	4715650	2.54		101	12412	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.649	3.650	-0.001	1.327	857903	2.37		95.0	1804	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.662	3.662	0.0	1.004	969177	2.79			762	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.813	3.816	-0.003	1.215	4373252	2.67			6040	
599.00 > 99.00	3.813	3.816	-0.003	1.215	887182		4.93(2.14-6.43)		1300	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.813	3.825	-0.012	1.387	774216	2.61		104	1529	
D 30 13C2 PFUnA										
565.00 > 520.00	3.828	3.831	-0.003	1.392	3704545	2.47		98.6	9101	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.828	3.831	-0.003	1.000	2951672	2.37			524	
563.00 > 169.00	3.828	3.831	-0.003	1.000	303791		9.72(5.24-15.72)		849	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.828	3.831	-0.003	1.004	812049	2.92			1419	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.979	3.993	-0.014	1.268	6552822	2.66			8965	
D 36 13C2 PFDoA										
615.00 > 570.00	4.124	4.127	-0.003	1.500	3704792	2.29		91.5	6862	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.124	4.127	-0.003	1.000	3959122	2.72			771	
613.00 > 169.00	4.124	4.127	-0.003	1.000	414687		9.55(4.68-14.05)		1057	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.124	4.127	-0.003	1.181	581958	2.67			2912	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.359	4.361	-0.002	1.389	413127	2.61			2389	
699.00 > 99.00	4.359	4.361	-0.002	1.389	719350		0.57(0.28-0.83)		1705	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.390	4.392	-0.002	1.064	3105723	2.79			791	
663.00 > 169.00	4.390	4.392	-0.002	1.064	510772		6.08(3.09-9.27)		1097	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.630	4.635	-0.005	1.684	2700289	2.61		104	6302	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.630	4.635	-0.005	1.000	398628	2.29			1085	
713.00 > 219.00	4.630	4.635	-0.005	1.000	291985		1.37(0.70-2.09)		1078	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.042	5.049	-0.007	1.834	2352290	2.48		99.2	5187	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.042	5.049	-0.007	1.000	2209749	2.57			312	
813.00 > 169.00	5.042	5.049	-0.007	1.000	423681		5.22(2.77-8.32)		1115	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.391	5.401	-0.010	1.069	1577565	2.36			1279	
913.00 > 169.00	5.391	5.401	-0.010	1.069	316379		4.99(2.55-7.64)		1932	

Reagents:

LCPFCIC_FULL_00013 Amount Added: 1.00 Units: mL

Report Date: 03-Aug-2018 18:16:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_013.d

Injection Date: 03-Aug-2018 17:12:28 Instrument ID: A9

Lims ID: ICV Full

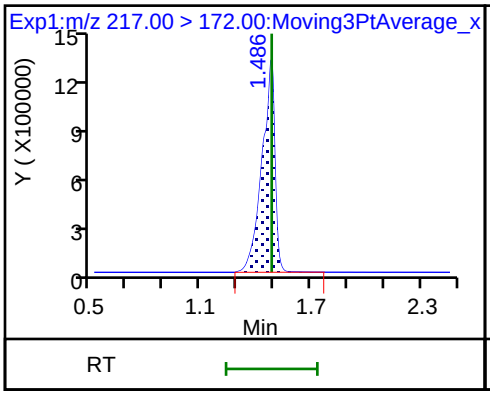
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 17 Worklist Smp#: 10

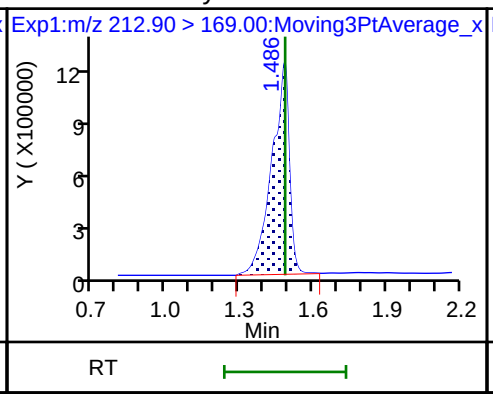
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

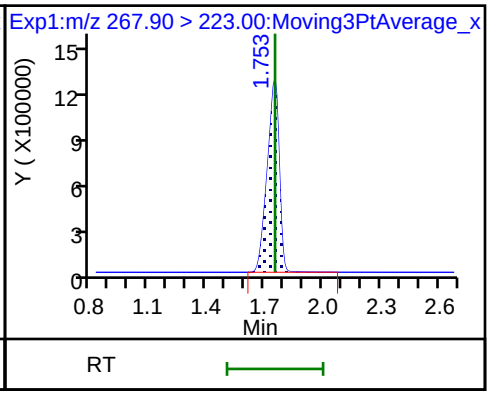
D 1 13C4 PFBA



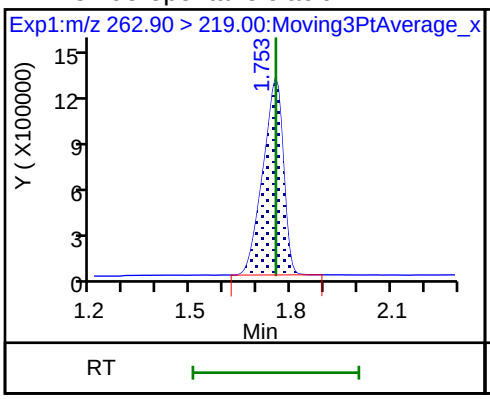
2 Perfluorobutyric acid



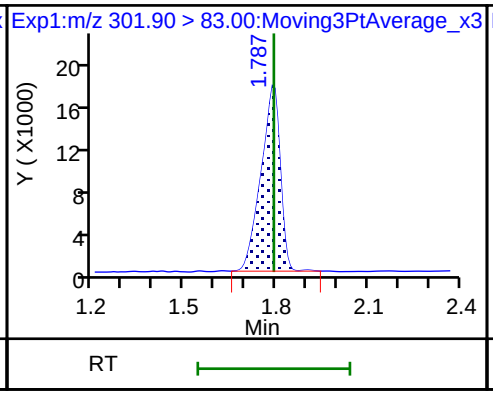
D 3 13C5-PFPeA



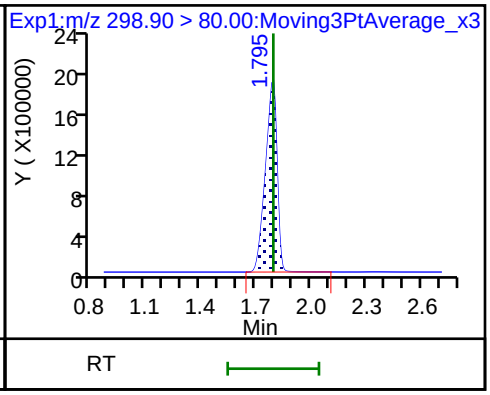
4 Perfluoropentanoic acid



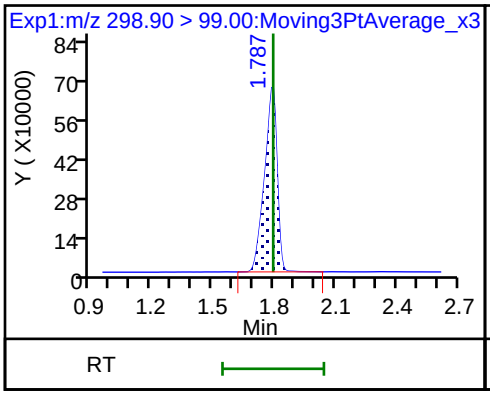
D 47 13C3-PFBS



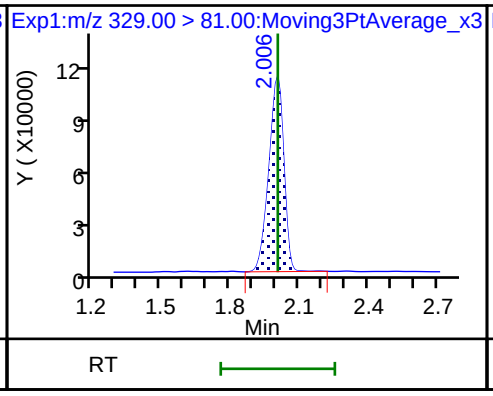
5 Perfluorobutanesulfonic acid



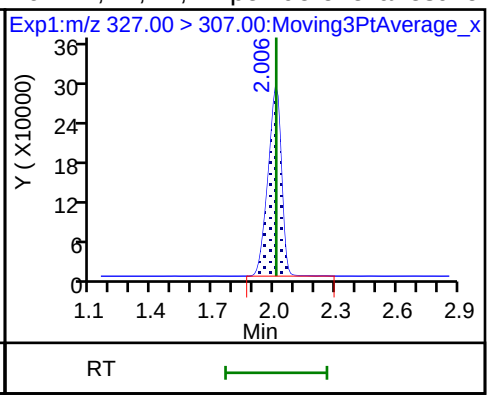
5 Perfluorobutanesulfonic acid



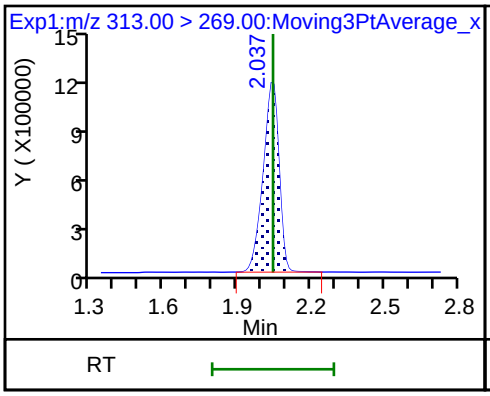
D 60 M2-4:2FTS



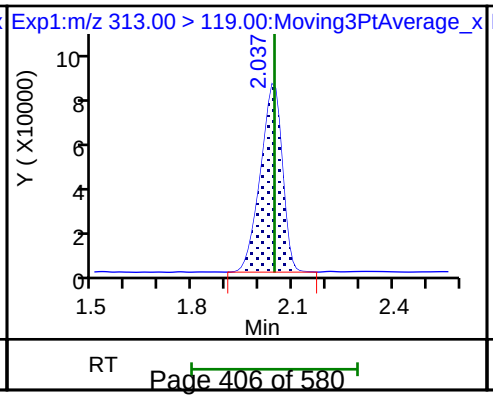
61 1H,1H,2H,2H-perfluorohexanesulfoni



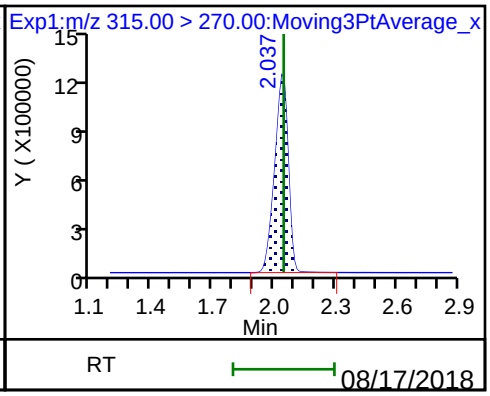
6 Perfluorohexanoic acid



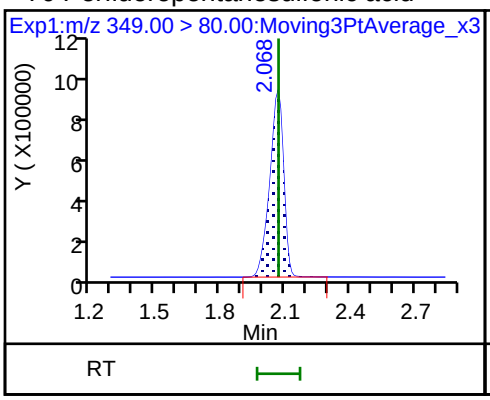
6 Perfluorohexanoic acid



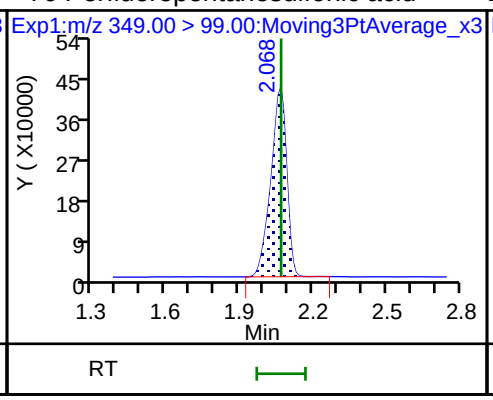
D 7 13C2 PFHxA



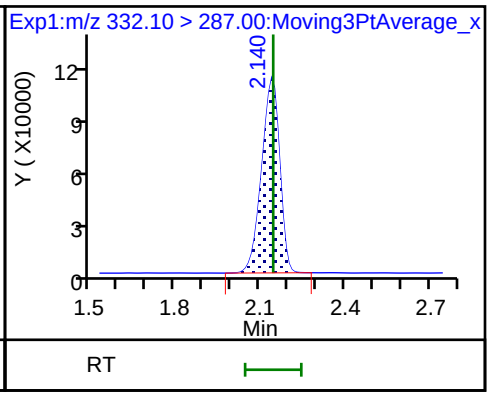
70 Perfluoropentanesulfonic acid



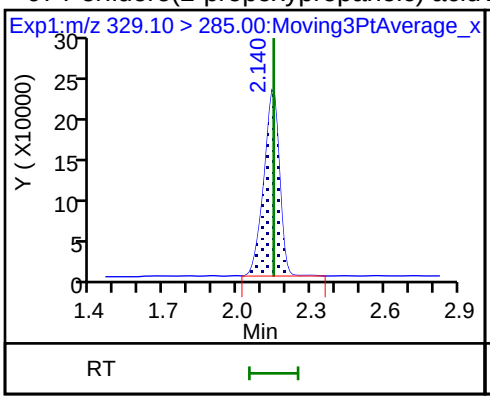
70 Perfluoropentanesulfonic acid



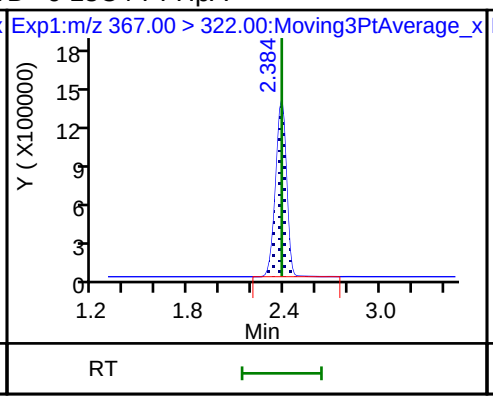
D 64 13C3 HFPO-DA



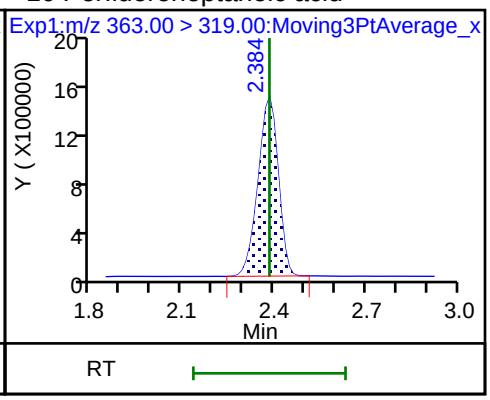
67 Perfluoro(2-propoxypropanoic) acid



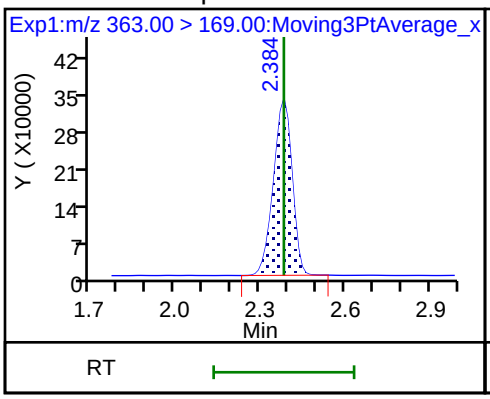
D 9 13C4-PFHpA



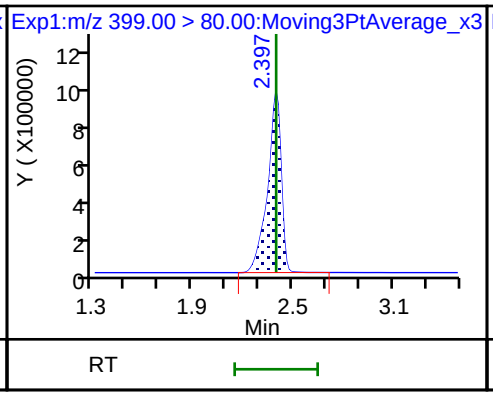
10 Perfluoroheptanoic acid



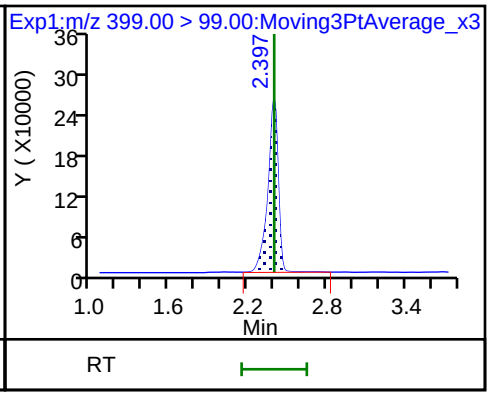
10 Perfluoroheptanoic acid



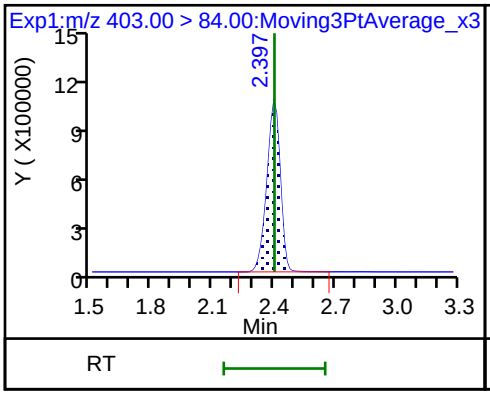
8 Perfluorohexanesulfonic acid



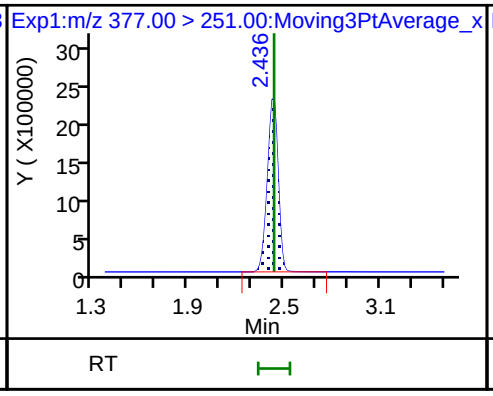
8 Perfluorohexanesulfonic acid



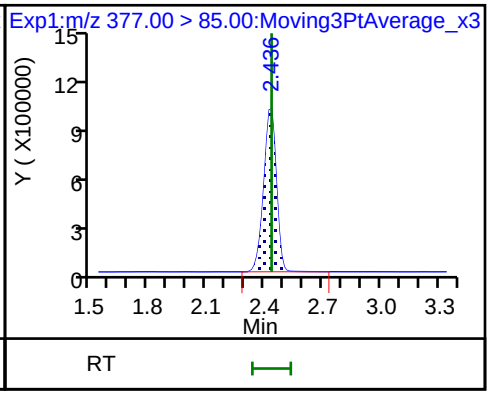
D 11 18O2 PFHxS



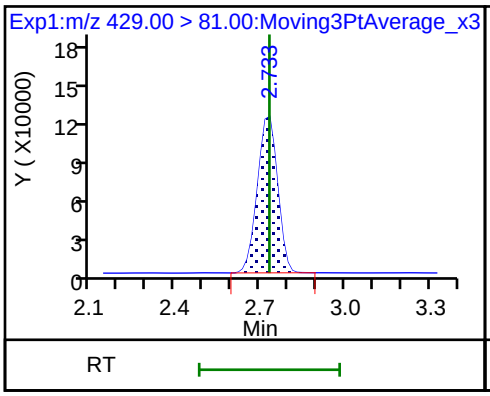
65 ADONA



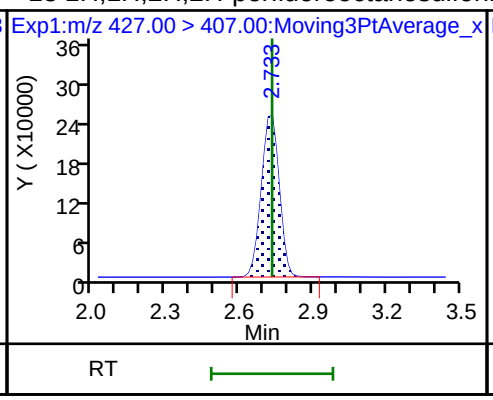
65 ADONA

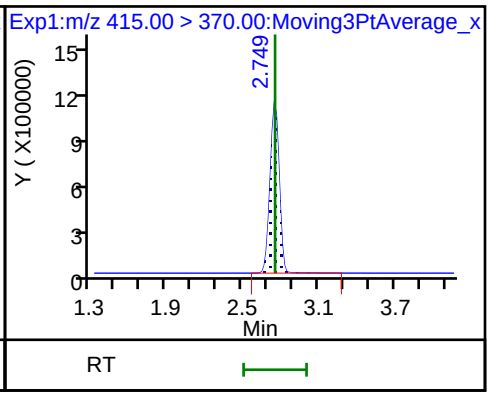


D 12 M2-6:2FTS

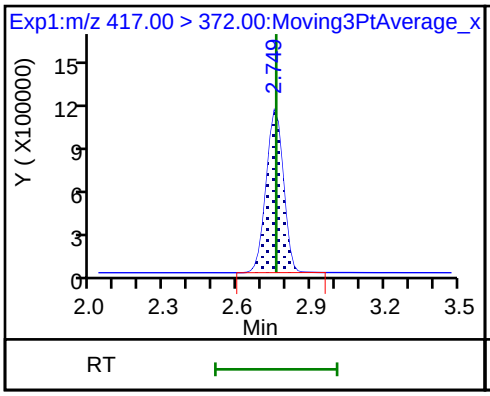


13 1H,1H,2H,2H-perfluorooctanesulfoni* 62 13C2-PFOA

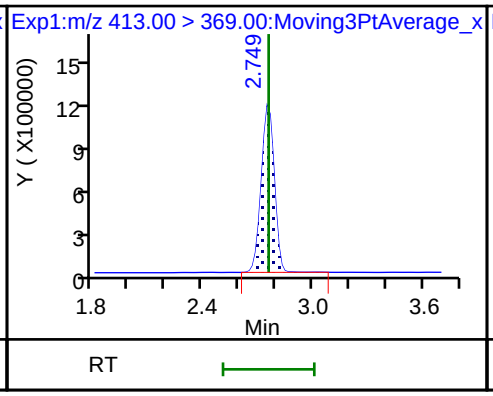




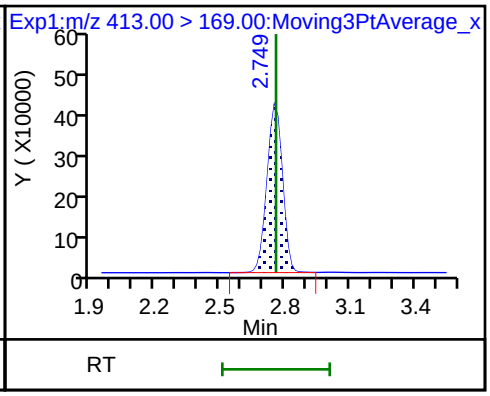
D 14 13C4 PFOA



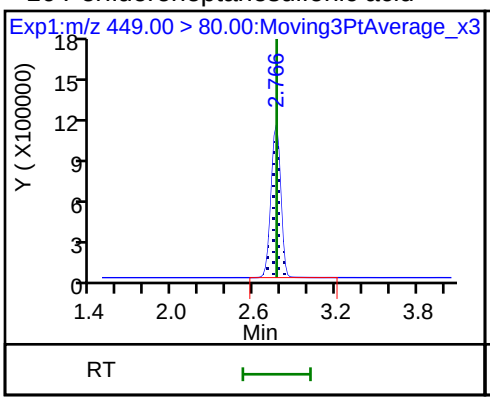
15 Perfluorooctanoic acid



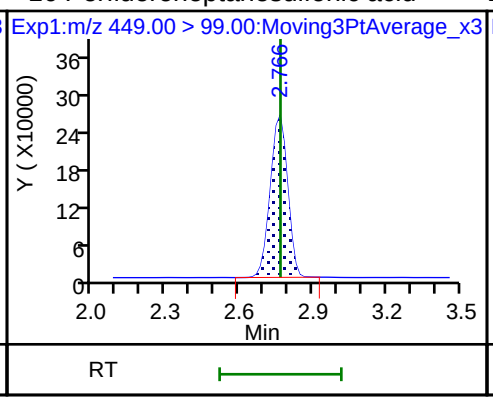
15 Perfluorooctanoic acid



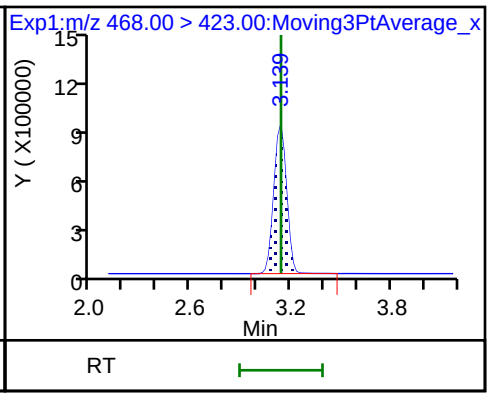
16 Perfluoroheptanesulfonic acid



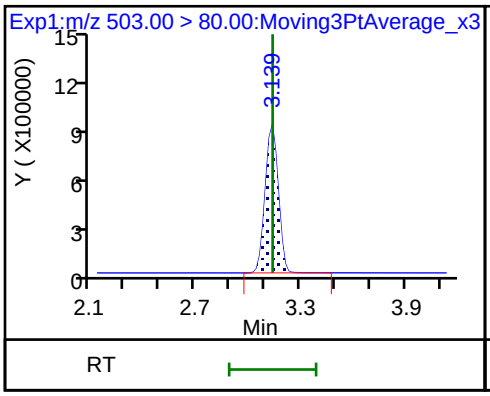
16 Perfluoroheptanesulfonic acid



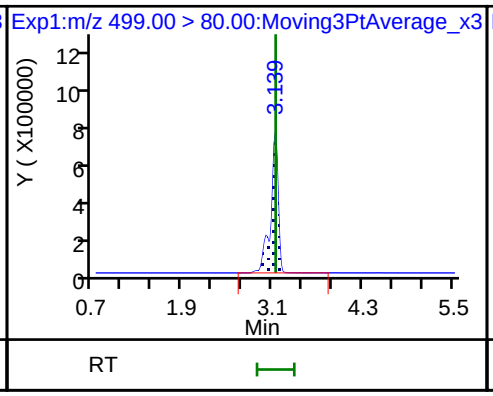
D 19 13C5 PFNA



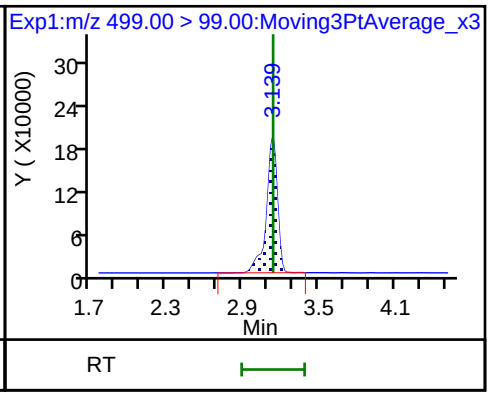
D 18 13C4 PFOS



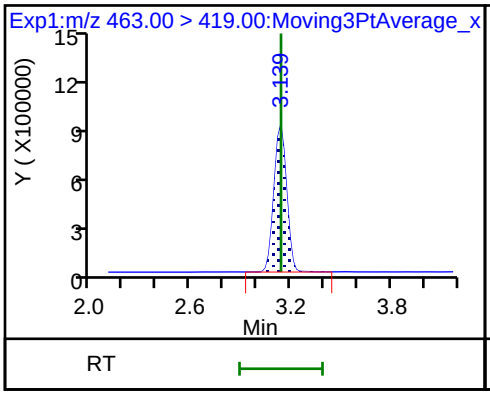
17 Perfluorooctane sulfonic acid



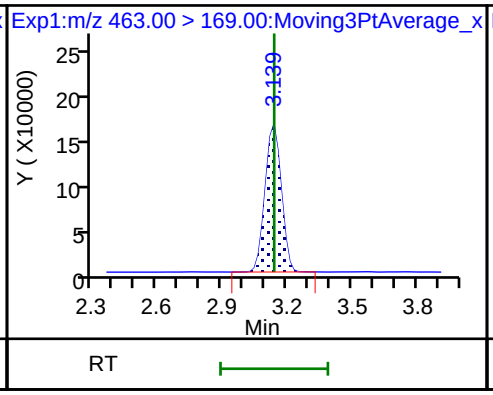
17 Perfluorooctane sulfonic acid



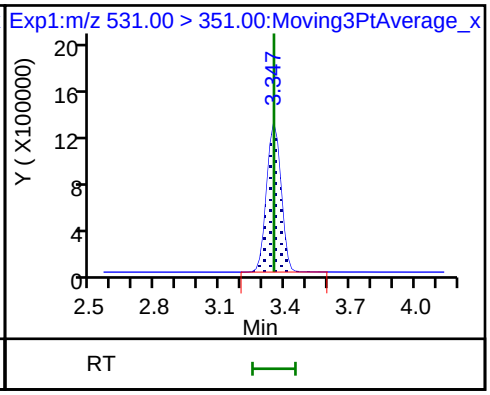
20 Perfluorononanoic acid



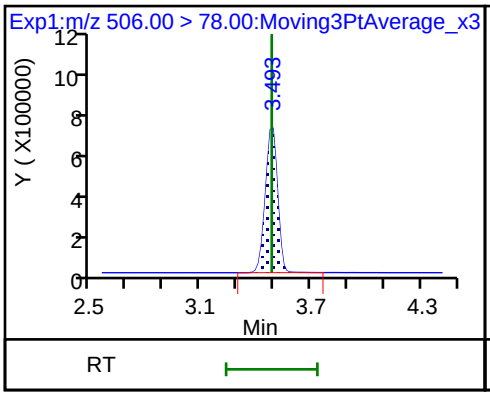
20 Perfluorononanoic acid



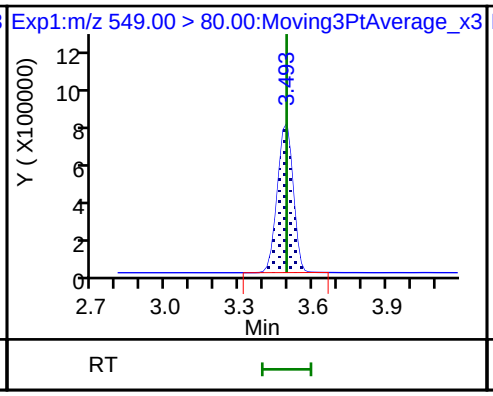
69 9-Chlorohexadecafluoro-3-oxanonane



D 21 13C8 FOSA



68 Perfluorononanesulfonic acid



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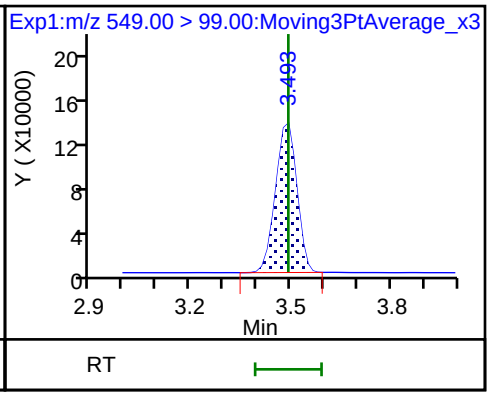
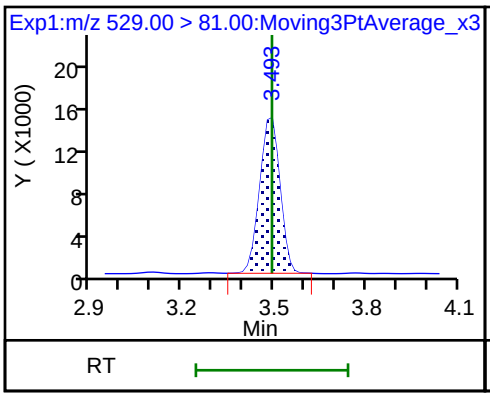
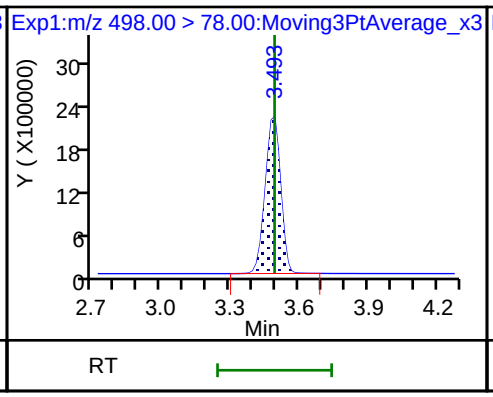


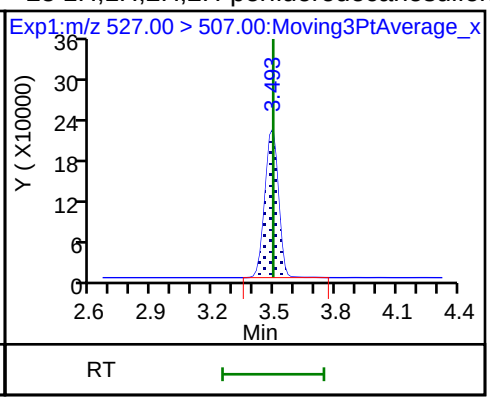
D 26 M2-8:2FTS



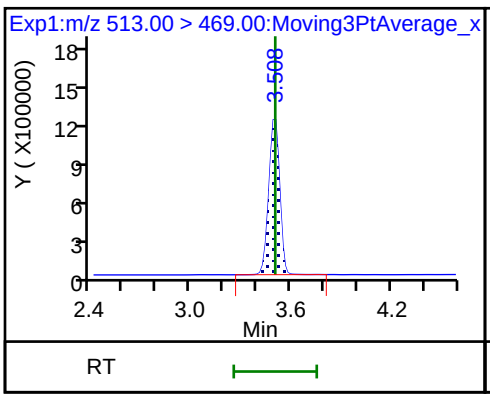
22 Perfluorooctane Sulfonamide



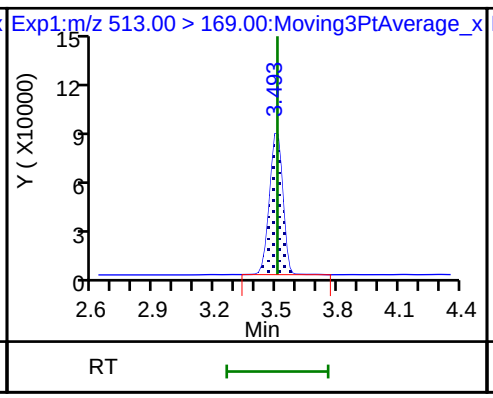
25 1H,1H,2H,2H-perfluorodecanesulfoni



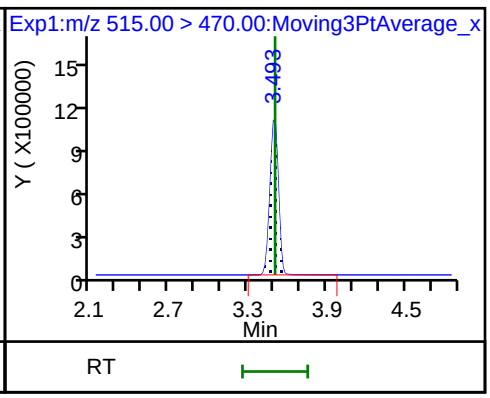
24 Perfluorodecanoic acid



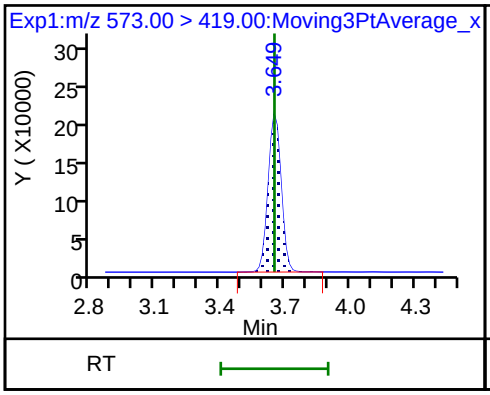
24 Perfluorodecanoic acid



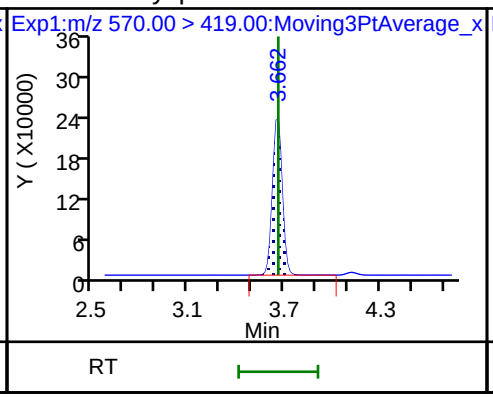
D 23 13C2 PFDA



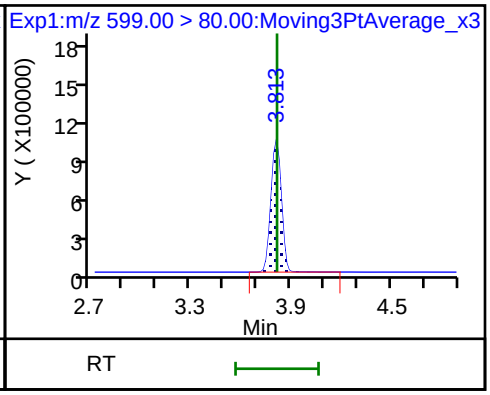
D 27 d3-NMeFOSAA



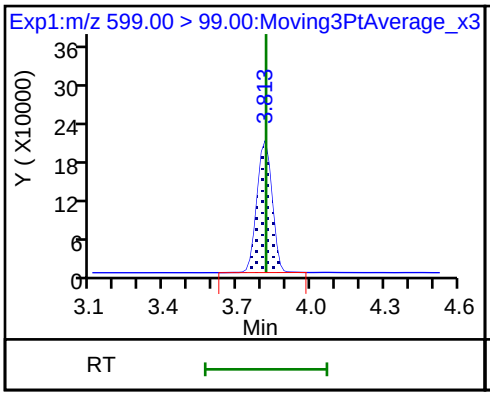
28 N-methyl perfluorooctane sulfonami



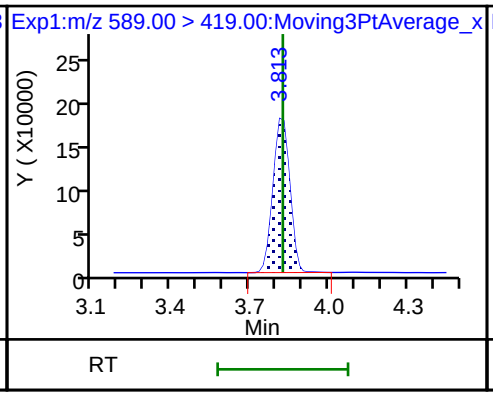
29 Perfluorodecane Sulfonic acid



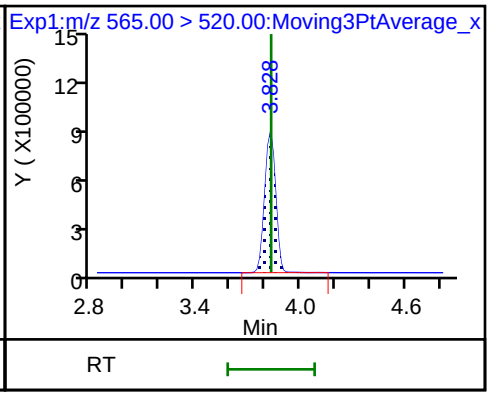
29 Perfluorodecane Sulfonic acid



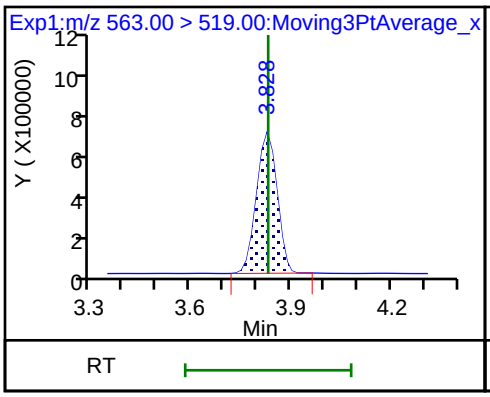
D 32 d5-NEtFOSAA



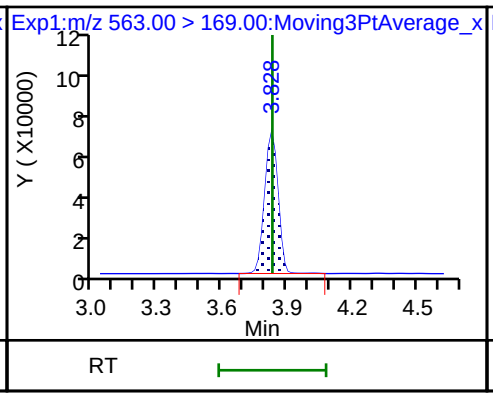
D 30 13C2 PFUnA



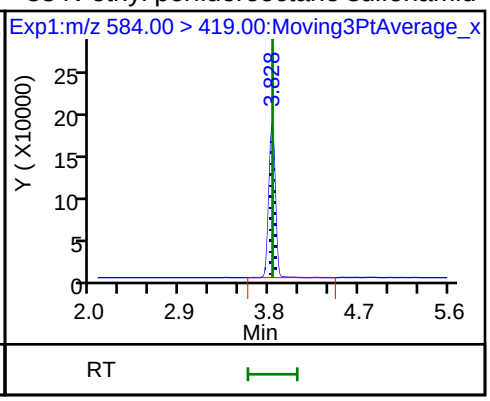
31 Perfluoroundecanoic acid



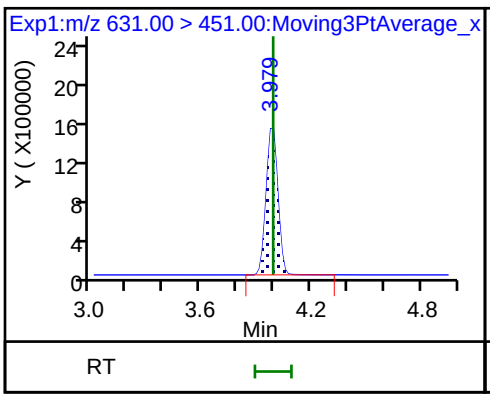
31 Perfluoroundecanoic acid



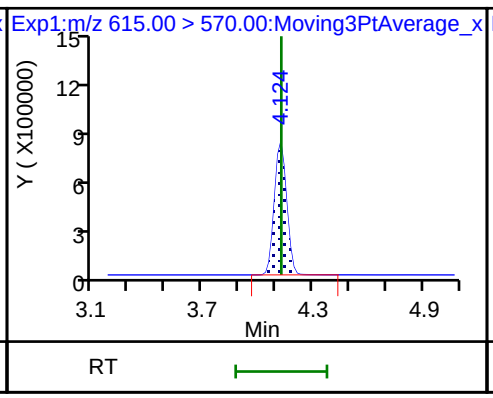
33 N-ethyl perfluorooctane sulfonamid



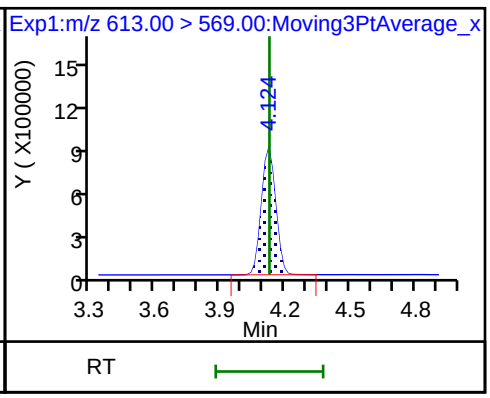
66 11-Chloroeicosafluoro-3-oxaundecan



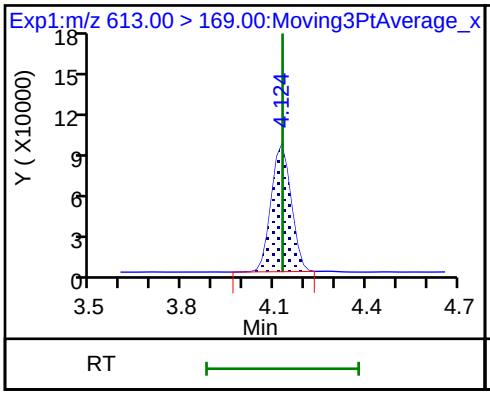
D 36 13C2 PFDoA



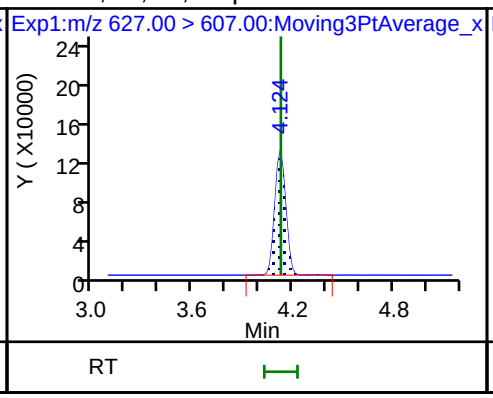
37 Perfluorododecanoic acid



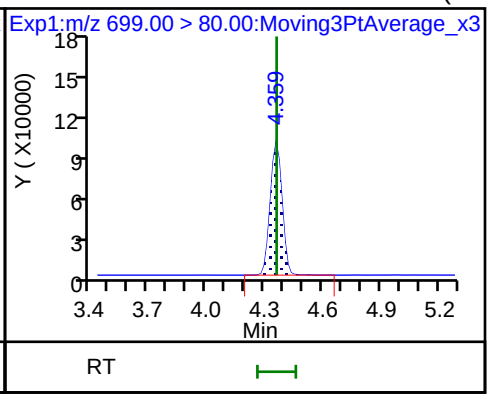
37 Perfluorododecanoic acid



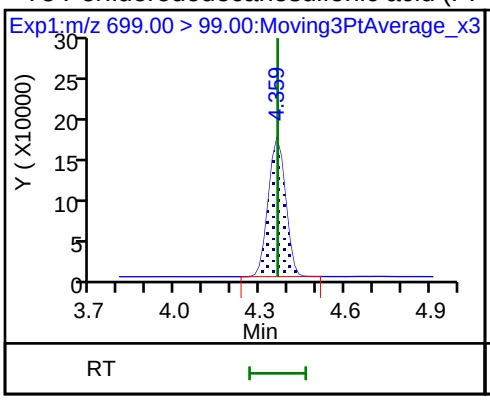
74 1H,1H,2H,2H-perfluorododecanesulfo



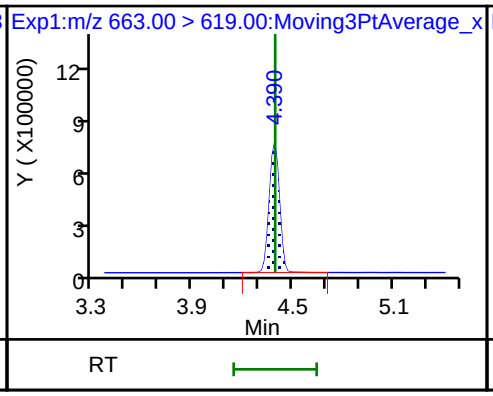
75 Perfluorododecanesulfonic acid (PF



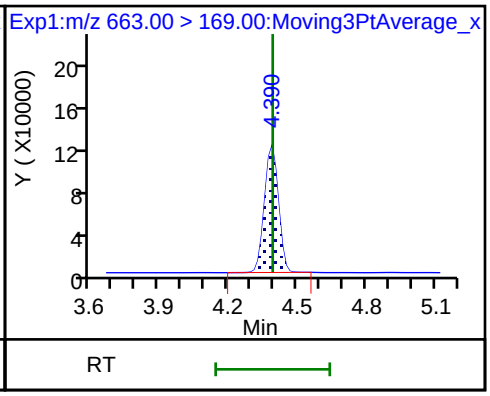
75 Perfluorododecanesulfonic acid (PF



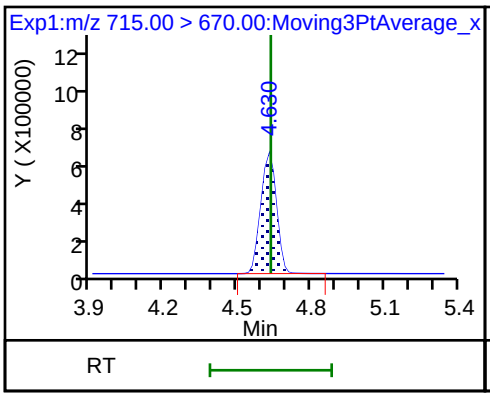
41 Perfluorotridecanoic acid



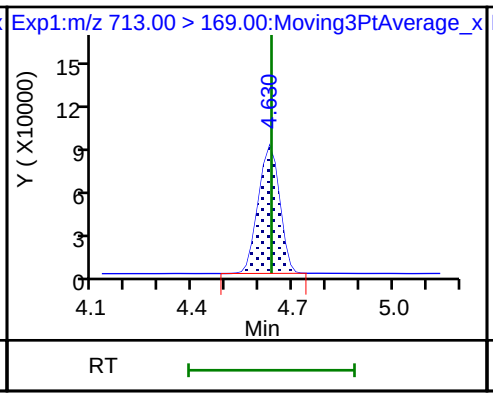
41 Perfluorotridecanoic acid



D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



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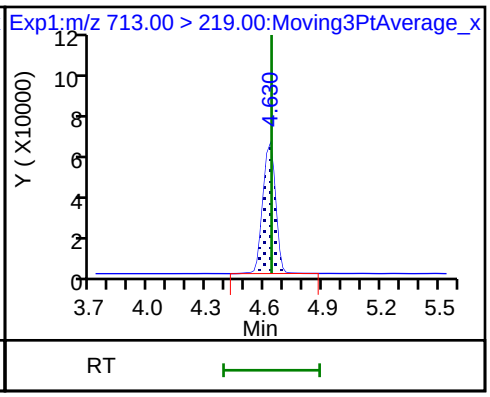
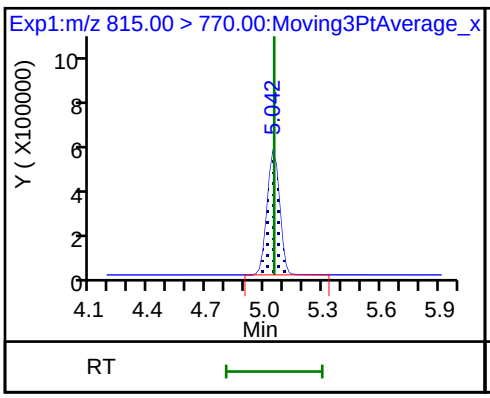
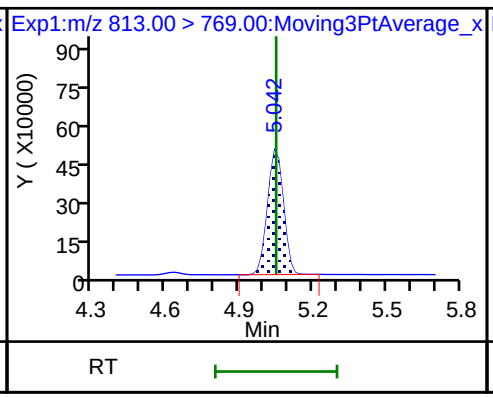


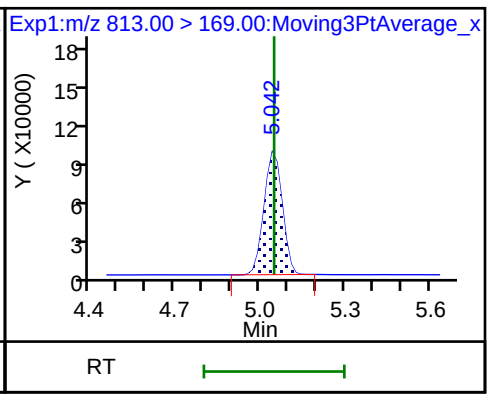
D 44 13C2-PFHxDA



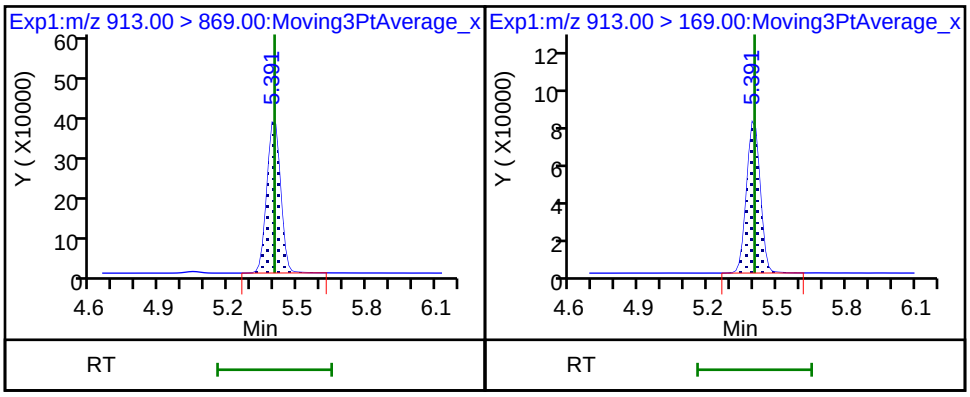
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCVL 320-238708/2 Calibration Date: 08/08/2018 06:14

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.07_LLB_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9293	0.8794		0.0473	0.0500	-5.4	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.020	1.033		0.0506	0.0500	1.3	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	109.7		0.0469	0.0442	6.2	50.0
4:2 FTS	AveID	17.02	13.38			0.0467	-21.4	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9355	0.9161		0.0490	0.0500	-2.1	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	48.91	52.33		0.0502	0.0469	7.0	50.0
HFPO-DA (GenX)	AveID	2.205	1.913		0.0434	0.0500	-13.2	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.038	1.163		0.0560	0.0500	12.0	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.279	1.356		0.0482	0.0455	6.0	50.0
6:2 FTS	AveID	2.137	2.063			0.0474	-3.4	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.011	0.9814		0.0462	0.0476	-2.9	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.096	1.211		0.0553	0.0501	10.5	50.0
Perfluorononanoic acid (PFNA)	AveID	1.055	1.148		0.0544	0.0500	8.9	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.072	1.072		0.0464	0.0464	-0.0	50.0
F-53B Major	AveID	1.181	1.018		0.0401	0.0466	-13.8	50.0
8:2 FTS	AveID	14.02	13.93			0.0479	-0.6	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	3.071	2.972		0.0484	0.0500	-3.2	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.229	1.283		0.0522	0.0500	4.4	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6548	0.6201		0.0455	0.0480	-5.3	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.011	0.8875			0.0500	-12.2	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8334	0.8125		0.0470	0.0482	-2.5	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8969	1.001		0.0558	0.0500	11.6	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8420	0.8381		0.0498	0.0500	-0.5	50.0
F-53B Minor	AveID	1.251	1.272		0.0479	0.0471	1.7	50.0
10:2 FTS	AveID	7.652	7.407		0.0467	0.0482	-3.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9834	1.060		0.0539	0.0500	7.8	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0804	0.0731		0.0440	0.0484	-9.1	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.7505	0.7402		0.0493	0.0500	-1.4	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1611	0.1509		0.0468	0.0500	-6.3	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		1.329		0.0462	0.0500	-7.7	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCVL 320-238708/2 Calibration Date: 08/08/2018 06:14

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.07_LLB_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7099	0.6882		0.0485	0.0500	-3.1	50.0
13C4 PFBA	Ave	1.117	0.9549		2.14	2.50	-14.5	50.0
13C5 PFPeA	Ave	0.999	0.8605		2.15	2.50	-13.8	50.0
13C3-PFBS	Ave	0.0155	0.0123		1.84	2.33	-20.8	50.0
M2-4:2FTS	Ave	0.1052	0.0664		1.47	2.34	-36.9	50.0
13C2 PFHxA	Ave	1.037	0.9217		2.22	2.50	-11.1	50.0
13C3 HFPO-DA	Ave	0.0886	0.1076		3.03	2.50	21.3	50.0
13C4-PFHpA	Ave	1.177	1.091		2.32	2.50	-7.4	50.0
18O2 PFHxS	Ave	0.8862	0.7764		2.07	2.37	-12.4	50.0
M2-6:2FTS	Ave	0.1144	0.1226		2.54	2.38	7.2	50.0
13C4 PFOA	Ave	0.9865	1.005		2.55	2.50	1.8	50.0
13C4 PFOS	Ave	0.9223	0.8388		2.17	2.39	-9.1	50.0
13C5 PFNA	Ave	0.8463	0.8521		2.52	2.50	0.7	50.0
13C8 FOSA	Ave	0.5512	0.4838		2.19	2.50	-12.2	50.0
M2-8:2FTS	Ave	0.0133	0.0145		2.62	2.40	9.3	50.0
13C2 PFDA	Ave	0.8474	0.8392		2.48	2.50	-1.0	50.0
d3-NMeFOSAA	Ave	0.1647	0.1915		2.91	2.50	16.2	50.0
13C2 PFUnA	Ave	0.6849	0.6813		2.49	2.50	-0.5	50.0
d5-NEtFOSAA	Ave	0.1353	0.1590		2.94	2.50	17.5	50.0
13C2 PFDoA	Ave	0.7384	0.7763		2.63	2.50	5.1	50.0
13C2-PFTeDA	Ave	0.4715	0.4918		2.61	2.50	4.3	50.0
13C2-PFHxDA	Ave	0.4325	0.4440		2.57	2.50	2.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\2018.08.07_LLB_005.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 08-Aug-2018 06:14:05 ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 12:06:02 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 11:51:51

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.489	1.484	0.005	0.544	7384596	2.14		85.5	12428	
2 Perfluorobutyric acid										
212.90 > 169.00	1.489	1.494	-0.005	1.000	129883	0.0473		94.6	5.0	
D 3 13C5-PFPeA										
267.90 > 223.00	1.756	1.756	0.0	0.642	6654583	2.15		86.2	8122	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.756	1.764	-0.008	1.000	137488	0.0506		101	7.3	
D 47 13C3-PFBS										
301.90 > 83.00	1.797	1.789	0.008	0.657	88112	1.84		79.2	428	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.797	1.798	-0.001	1.000	183674	0.0469		106	69.7	
298.90 > 99.00	1.797	1.798	-0.001	1.000	62010		2.96(1.35-4.05)		40.2	
D 60 M2-4:2FTS										
329.00 > 81.00	2.007	2.007	0.0	0.734	479789	1.47		63.1	593	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.007	2.018	-0.011	1.117	23683	0.0367		78.6	265	
D 7 13C2 PFHxA										
315.00 > 270.00	2.038	2.038	0.0	0.745	7127702	2.22		88.9	6031	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.038	2.048	-0.010	1.000	130593	0.0490		97.9	37.8	
313.00 > 119.00	2.048	2.048	0.0	1.005	8103		16.12(6.96-20.87)		16.6	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.068	2.069	-0.001	1.151	93014	0.0502		107	213	
349.00 > 99.00	2.068	2.069	-0.001	1.151	45625		2.04(1.15-3.45)		82.2	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.140	2.140	0.0	0.782	831699	3.03		121	2963	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.140	2.151	-0.011	1.000	31820	0.0434		86.8	22.2	
D 9 13C4-PFHpA										
367.00 > 322.00	2.374	2.374	0.0	0.868	8433359	2.32		92.6	16977	
D 11 18O2 PFHxS										
403.00 > 84.00	2.387	2.387	0.0	0.873	5679723	2.07		87.6	7701	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.374	2.387	-0.013	1.000	196197	0.0560		112	24.8	
363.00 > 169.00	2.374	2.387	-0.013	1.000	39077		5.02(2.17-6.52)		73.1	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.387	2.400	-0.013	1.000	148152	0.0482		106	148	
399.00 > 99.00	2.400	2.400	0.0	1.005	44433		3.33(1.90-5.70)		27.2	
65 ADONA										
377.00 > 251.00	2.426	2.427	0.0	0.778	284610	0.0545		109	654	
377.00 > 85.00	2.413	2.427	-0.013	0.774	117067		2.43(1.05-3.16)		88.0	
D 12 M2-6:2FTS										
429.00 > 81.00	2.719	2.719	0.0	0.994	900829	2.54		107	1174	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.719	2.719	0.0	1.000	37097	0.0458		96.6	88.7	
D 14 13C4 PFOA										
417.00 > 372.00	2.735	2.735	0.0	1.000	7768259	2.55		102	7711	
* 62 13C2-PFOA										
415.00 > 370.00	2.735	2.751	-0.016		7733449	2.50			11085	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.751	2.751	0.0	1.006	188275	0.0553		110	24.9	
413.00 > 169.00	2.751	2.751	0.0	1.006	65050		2.89(1.36-4.08)		102	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.751	2.767	-0.016	0.882	121202	0.0462		97.1	92.8	
449.00 > 99.00	2.751	2.767	-0.016	0.882	31021		3.91(1.84-5.53)		93.6	
D 18 13C4 PFOS										
503.00 > 80.00	3.118	3.118	0.0	1.140	6201061	2.17		90.9	4931	
D 19 13C5 PFNA										
468.00 > 423.00	3.118	3.118	0.0	1.140	6589582	2.52		101	12512	
20 Perfluorononanoic acid										
463.00 > 419.00	3.118	3.137	-0.019	1.000	151325	0.0544		109	28.0	
463.00 > 169.00	3.118	3.137	-0.019	1.000	32066		4.72(2.68-8.03)		85.4	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.118	3.137	-0.019	1.000	129056	0.0464		100.0	89.8	
499.00 > 99.00	3.118	3.137	-0.019	1.000	33501		3.85(2.04-6.12)		56.1	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.336	3.353	-0.017	1.070	123027	0.0401		86.2	189	
D 26 M2-8:2FTS										
529.00 > 81.00	3.467	3.467	0.0	1.268	107641	2.62		109	658	
D 21 13C8 FOSA										
506.00 > 78.00	3.467	3.467	0.0	1.268	3741684	2.19		87.8	3766	
D 23 13C2 PFDA										
515.00 > 470.00	3.482	3.483	-0.001	1.273	6489969	2.48		99.0	10969	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.482	3.483	-0.001	1.117	77230	0.0455		94.7	126	
549.00 > 99.00	3.467	3.483	-0.016	1.112	12692		6.08(3.02-9.05)		88.4	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.467	3.483	-0.016	1.000	29998	0.0476		99.4	161	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.467	3.483	-0.016	1.000	222382	0.0484		96.8	493	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.482	3.498	-0.016	1.000	166570	0.0522		104	37.2	
513.00 > 169.00	3.482	3.498	-0.016	1.000	11439		14.56(7.12-21.35)		30.6	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.643	3.630	0.013	1.332	1480758	2.91		116	4177	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.643	3.657	-0.014	1.000	26282	0.0439		87.8	12.1	M
D 30 13C2 PFUnA										
565.00 > 520.00	3.810	3.810	0.0	1.393	5269080	2.49		99.5	7653	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.810	3.810	0.0	1.393	1229538	2.94		117	1858	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.794	3.810	-0.016	1.217	101609	0.0470		97.5	205	
599.00 > 99.00	3.794	3.810	-0.016	1.217	19101		5.32(2.14-6.43)		42.8	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.810	3.826	-0.016	1.000	88317	0.0498		99.5	13.3	
563.00 > 169.00	3.810	3.826	-0.016	1.000	8659		10.20(5.24-15.72)		43.7	
33 N-ethyl perfluorooctane sulfonamid										M
584.00 > 419.00	3.810	3.826	-0.016	1.000	24623	0.0558		112	51.3	M
35 MeFOSA										
512.00 > 169.00	3.962	3.978	-0.016		32086	NC			116	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.978	3.978	0.0	1.276	155478	0.0479		102	425	
D 36 13C2 PFDoA										
615.00 > 570.00	4.108	4.109	-0.001	1.502	6003489	2.63		105	4942	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.108	4.125	-0.017	1.185	16046	0.0467		96.8	71.3	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.108	4.125	-0.017	1.000	127250	0.0539		108	26.5	
613.00 > 169.00	4.108	4.125	-0.017	1.000	12684		10.03(4.68-14.05)		43.2	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.344	4.360	-0.016	1.393	9177	0.0440		90.9	56.6	
699.00 > 99.00	4.344	4.360	-0.016	1.393	15076		0.61(0.28-0.83)		53.1	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.375	4.391	-0.016	1.065	88872	0.0493		98.6	23.9	
663.00 > 169.00	4.375	4.391	-0.016	1.065	18225		4.88(3.09-9.27)		86.1	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.611	4.615	-0.004	1.686	3802947	2.61		104	8570	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.611	4.633	-0.022	1.000	11474	0.0468		93.7	55.7	
713.00 > 219.00	4.611	4.633	-0.022	1.000	7923		1.45(0.70-2.09)		35.1	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.042	5.028	0.014	1.843	3433961	2.57		103	5962	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.042	5.045	-0.003	1.000	91261	0.0462		92.3	6.5	
813.00 > 169.00	5.042	5.045	-0.003	1.000	16053		5.68(2.77-8.32)		74.5	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.390	5.394	-0.004	1.069	47263	0.0485		96.9	20.9	
913.00 > 169.00	5.390	5.394	-0.004	1.069	8361		5.65(2.55-7.64)		102	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00006 Amount Added: 1.00 Units: mL

Report Date: 08-Aug-2018 12:06:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\2018.08.07_LLB_005.d

Injection Date: 08-Aug-2018 06:14:05 Instrument ID: A9

Lims ID: CCVL

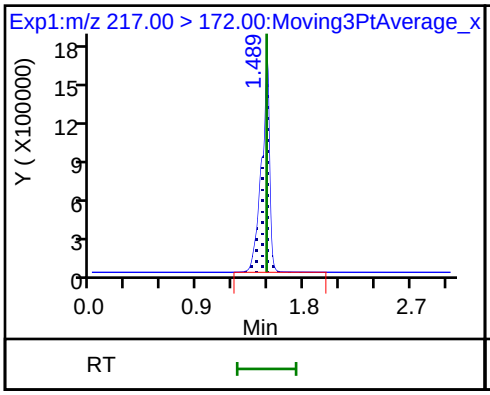
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 21 Worklist Smp#: 2

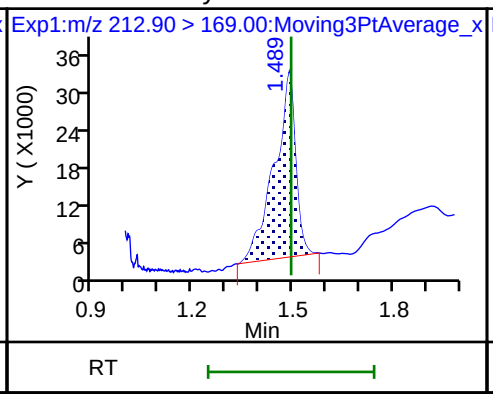
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

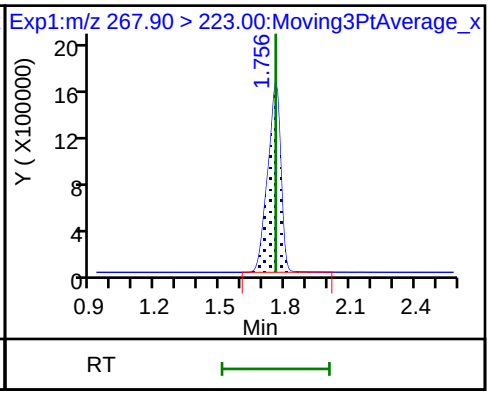
D 1 13C4 PFBA



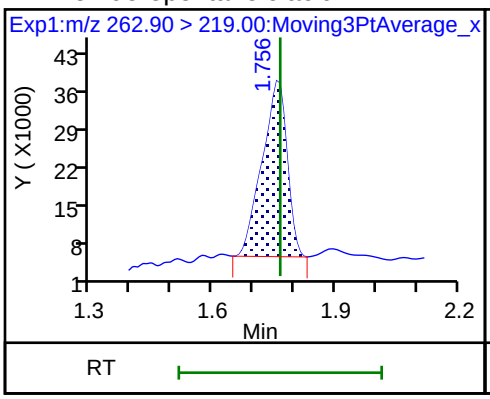
2 Perfluorobutyric acid



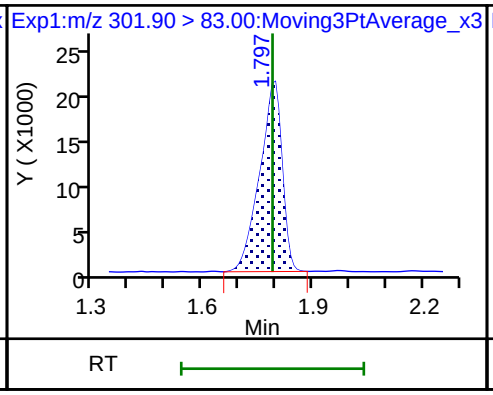
D 3 13C5-PFPeA



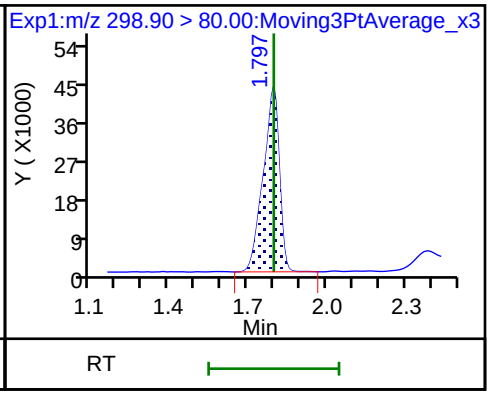
4 Perfluoropentanoic acid



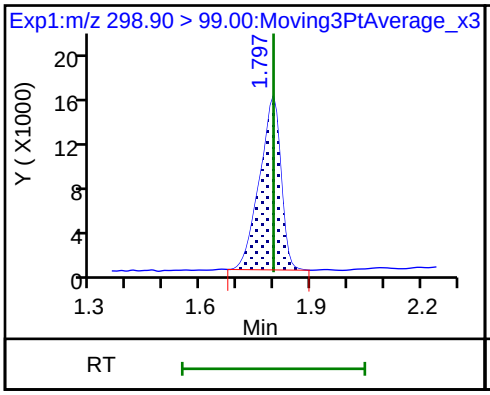
D 47 13C3-PFBS



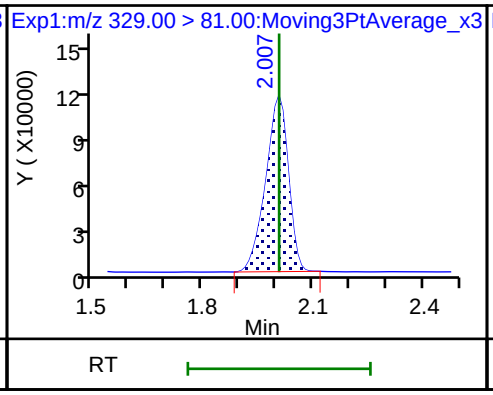
5 Perfluorobutanesulfonic acid



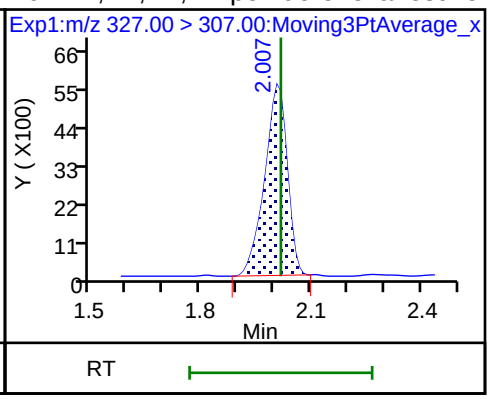
5 Perfluorobutanesulfonic acid



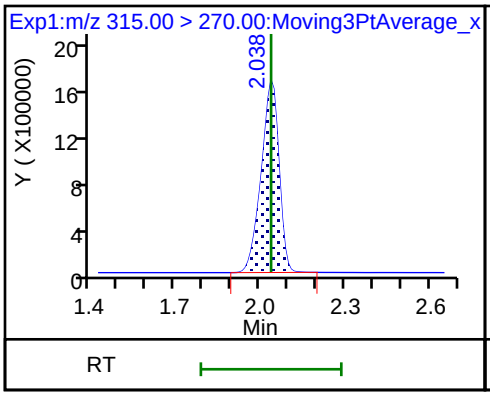
D 60 M2-4:2FTS



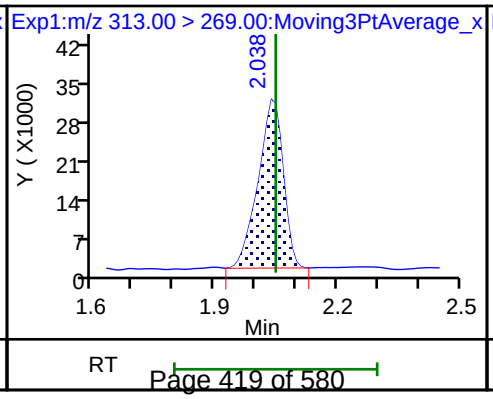
61 1H,1H,2H,2H-perfluorohexanesulfoni



D 7 13C2 PFHxA



6 Perfluorohexanoic acid



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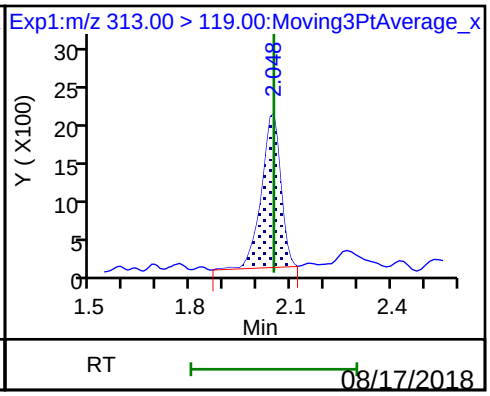
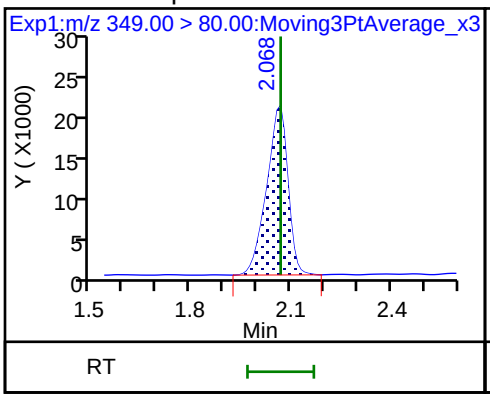
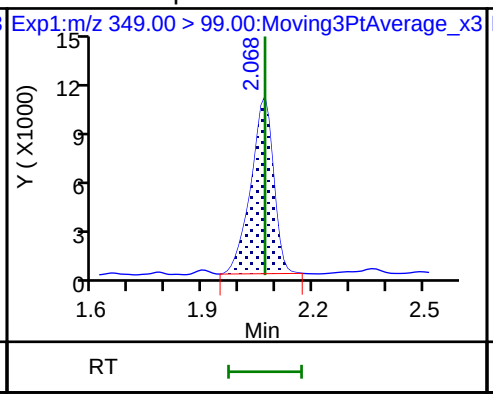


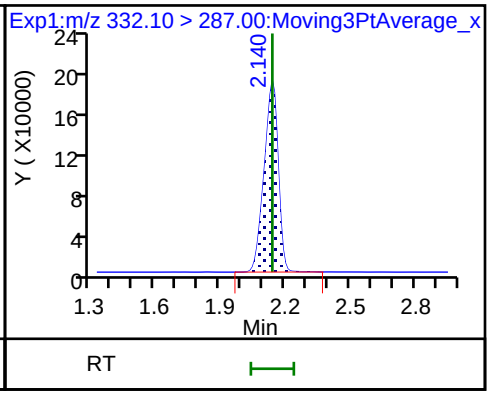
70 Perfluoropentanesulfonic acid



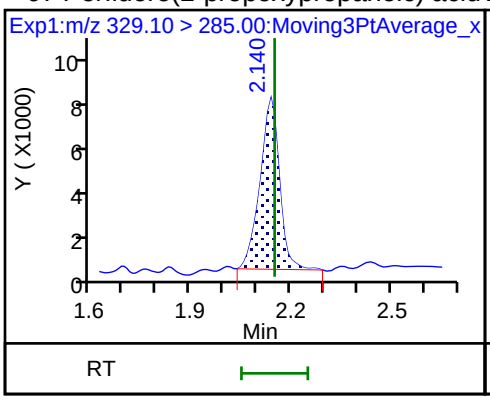
70 Perfluoropentanesulfonic acid



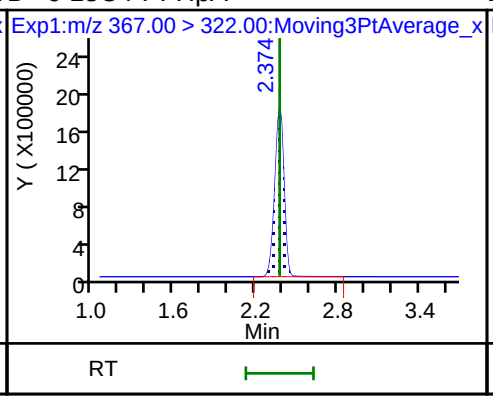
D 64 13C3 HFPO-DA



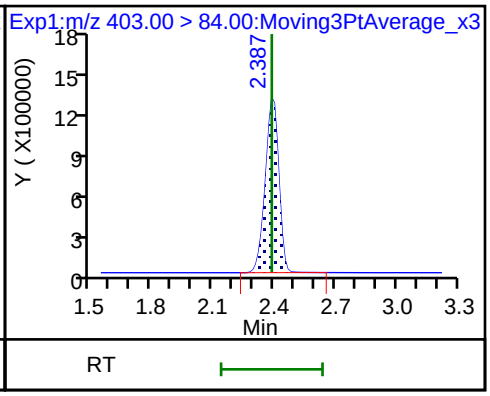
67 Perfluoro(2-propoxypropanoic) acid



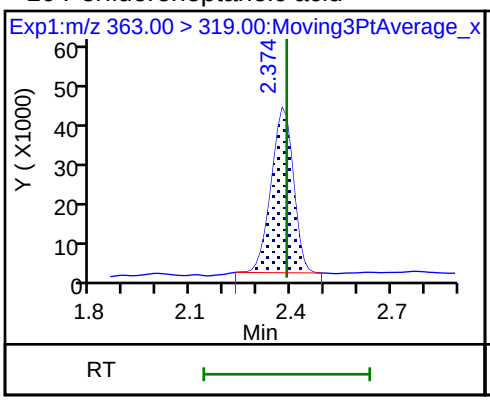
D 9 13C4-PFHpA



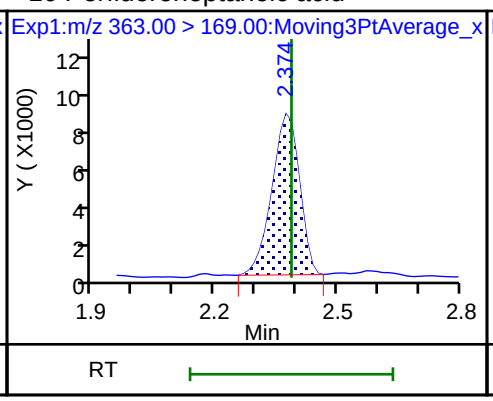
D 11 18O2 PFHxS



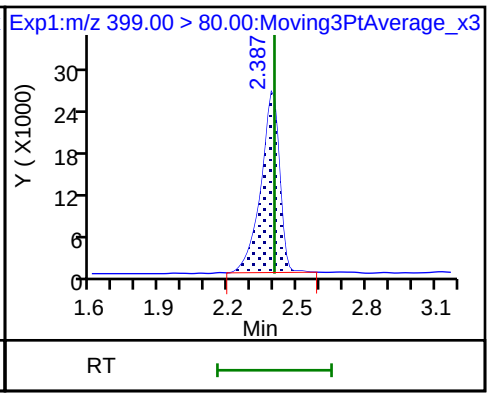
10 Perfluoroheptanoic acid



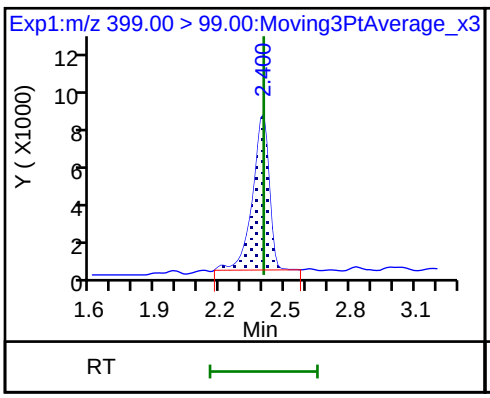
10 Perfluoroheptanoic acid



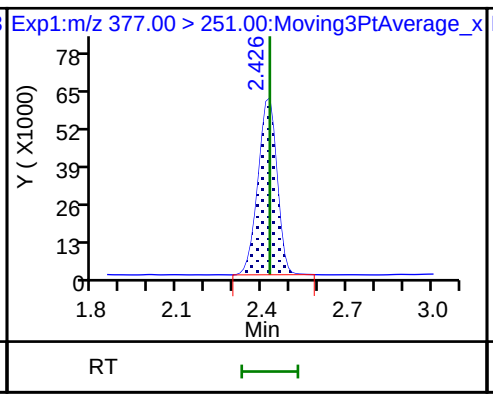
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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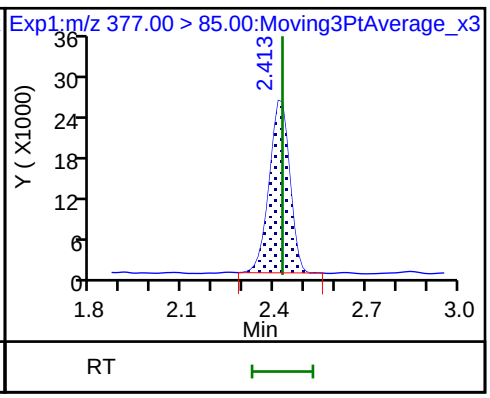
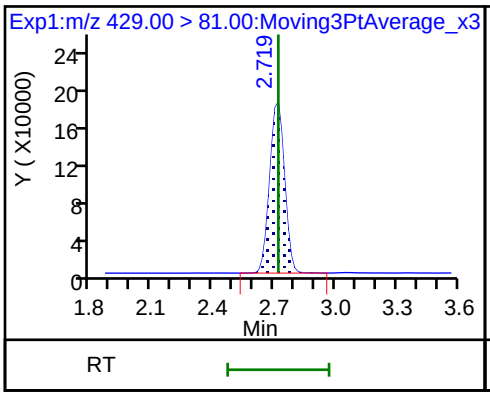
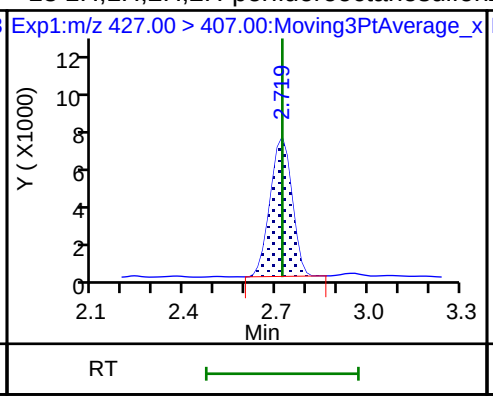


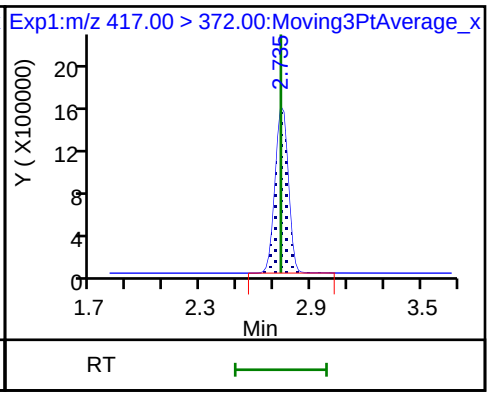
D 12 M2-6:2FTS



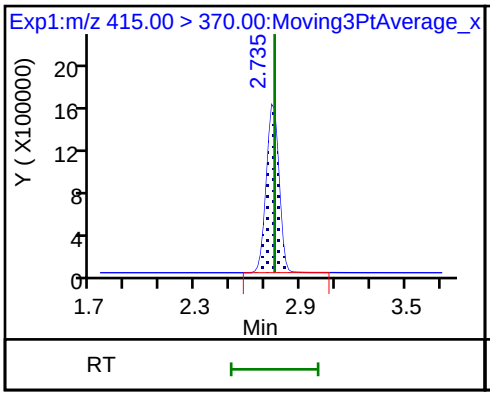
13 1H,1H,2H,2H-perfluorooctanesulfon



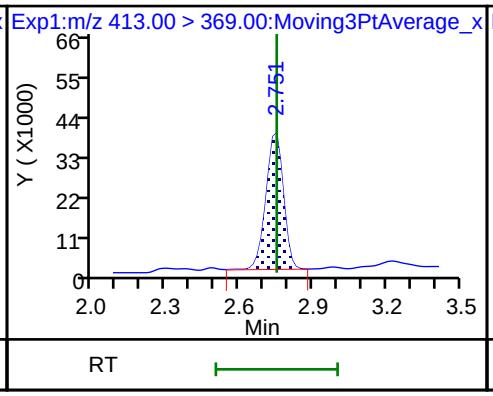
D 14 13C4 PFOA



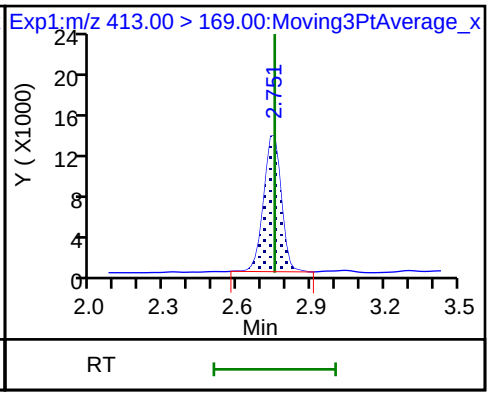
* 62 13C2-PFOA



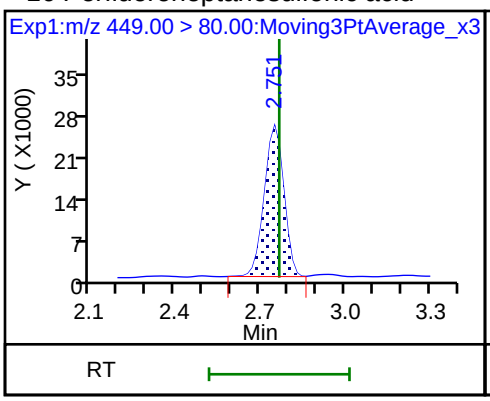
15 Perfluorooctanoic acid



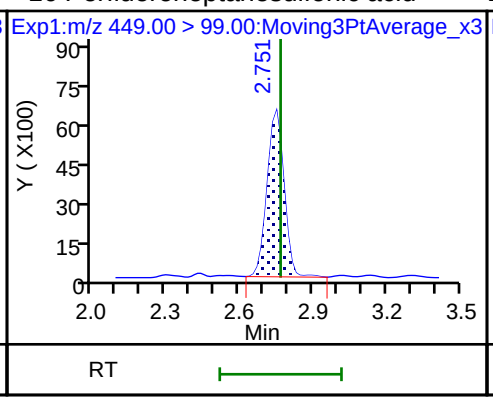
15 Perfluorooctanoic acid



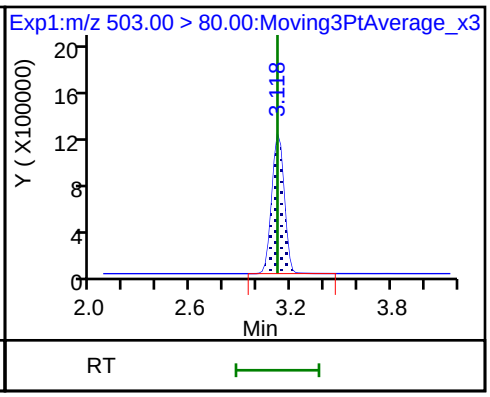
16 Perfluoroheptanesulfonic acid



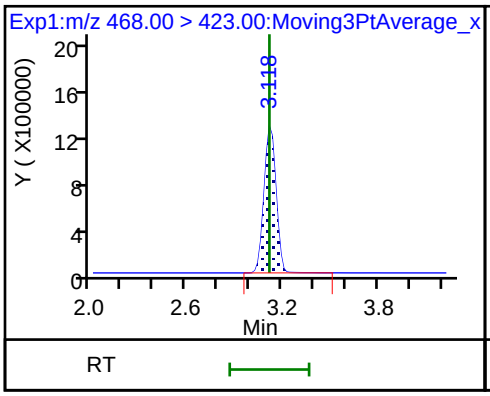
16 Perfluoroheptanesulfonic acid



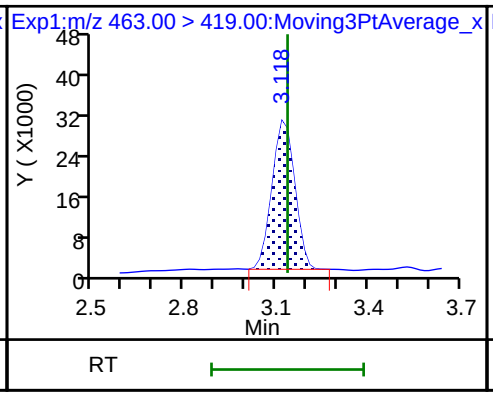
D 18 13C4 PFOS



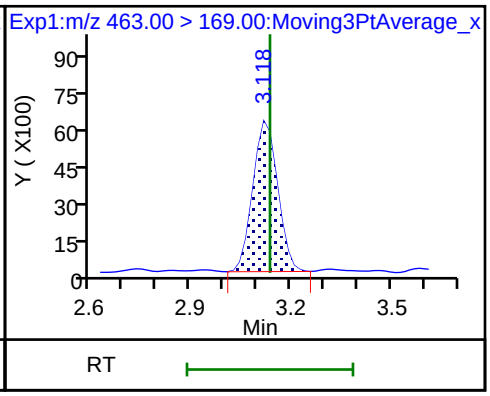
D 19 13C5 PFNA



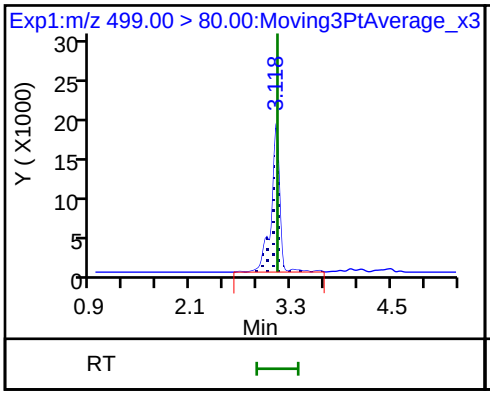
20 Perfluorononanoic acid



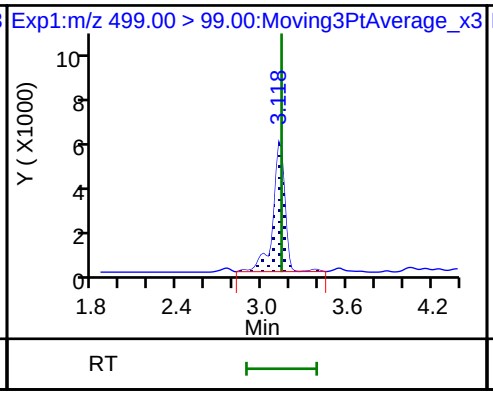
20 Perfluorononanoic acid



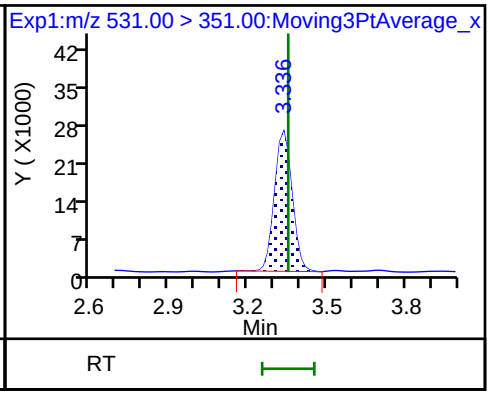
17 Perfluorooctane sulfonic acid



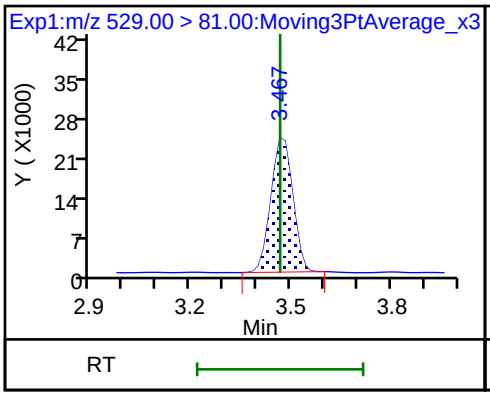
17 Perfluorooctane sulfonic acid



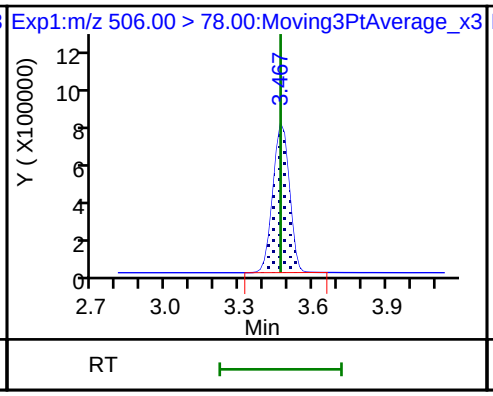
69 9-Chlorohexadecafluoro-3-oxanonane



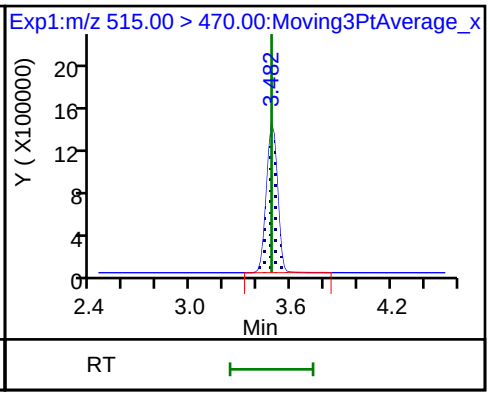
D 26 M2-8:2FTS



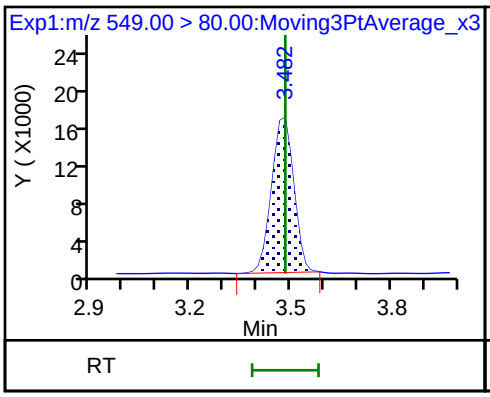
D 21 13C8 FOSA



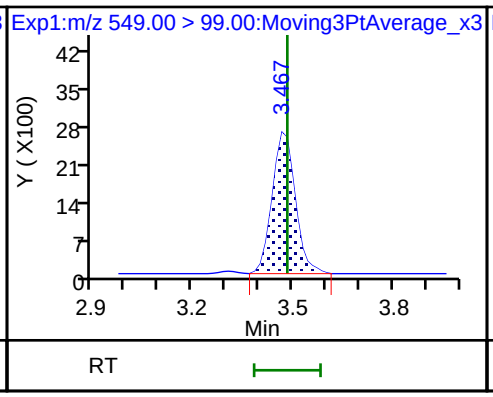
D 23 13C2 PFDA



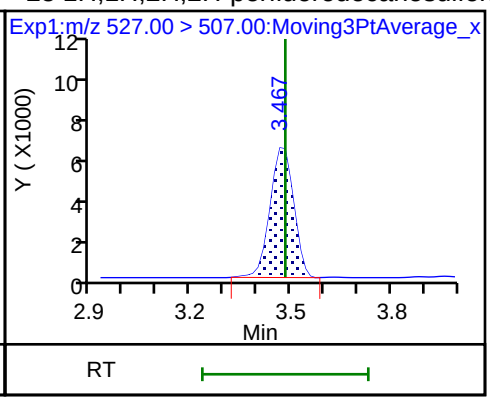
68 Perfluorononanesulfonic acid



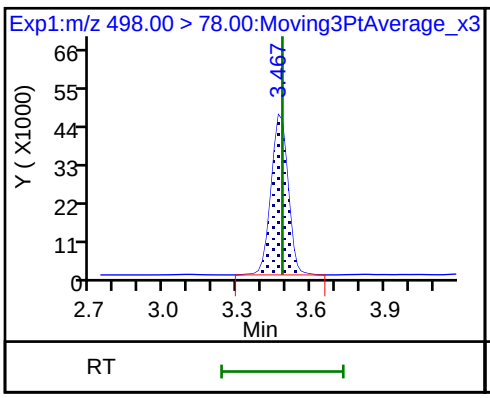
68 Perfluorononanesulfonic acid



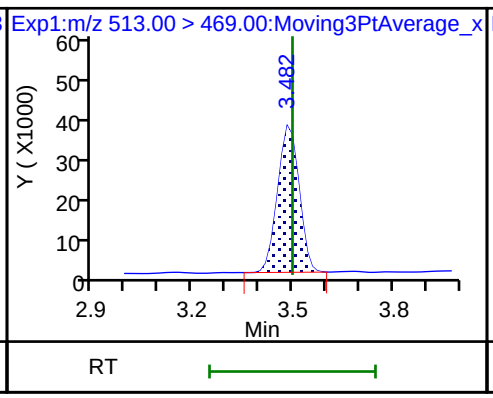
25 1H,1H,2H,2H-perfluorodecanesulfoni



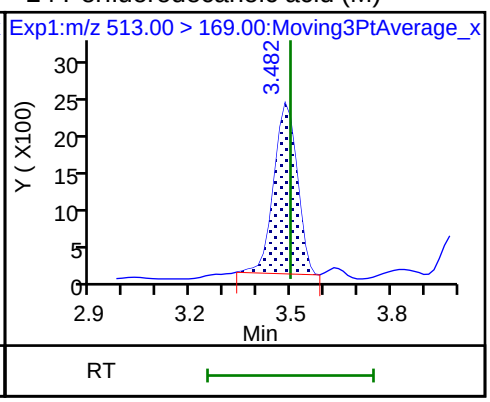
22 Perfluorooctane Sulfonamide



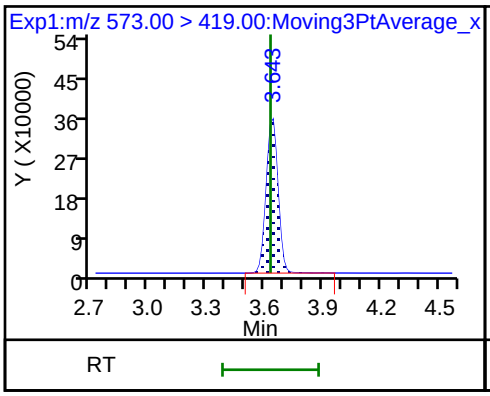
24 Perfluorodecanoic acid



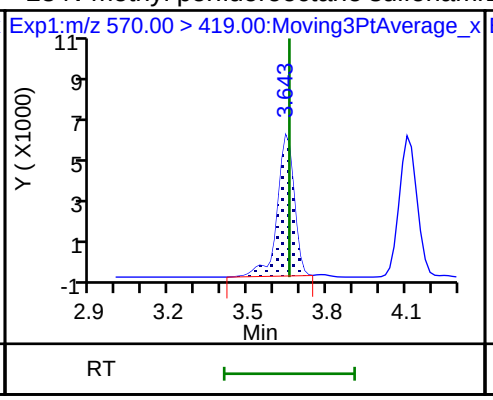
24 Perfluorodecanoic acid (M)



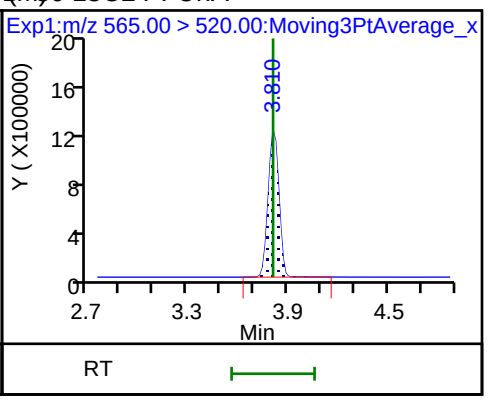
D 27 d3-NMeFOSAA



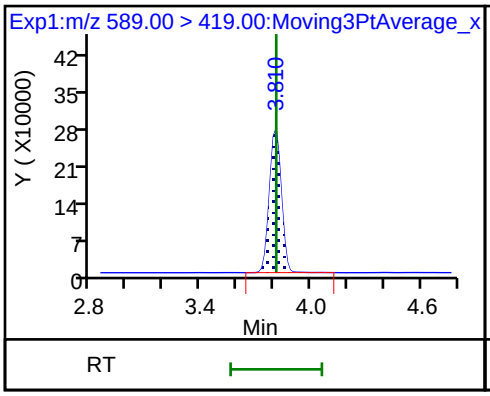
28 N-methyl perfluorooctane sulfonamid (M)



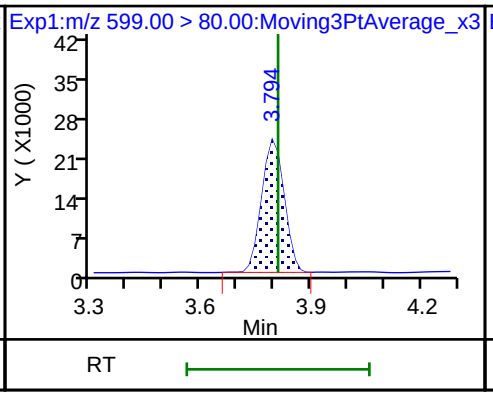
D 30 13C2 PFUnA



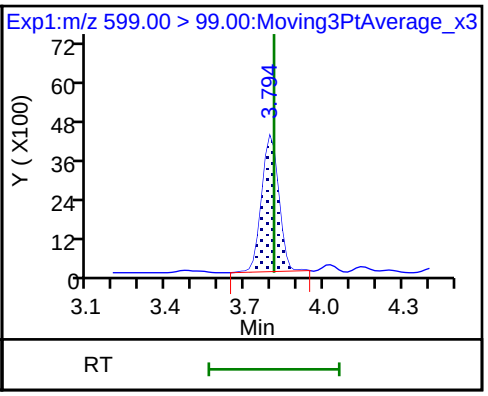
D 32 d5-NEtFOSAA



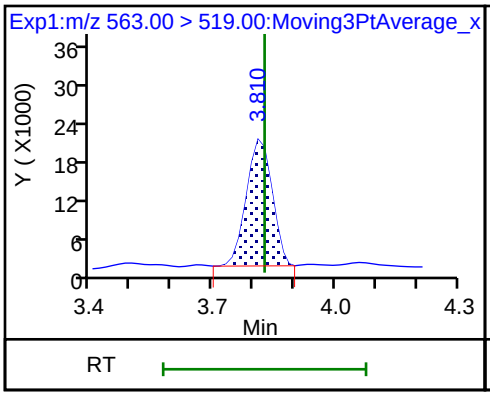
29 Perfluorodecane Sulfonic acid



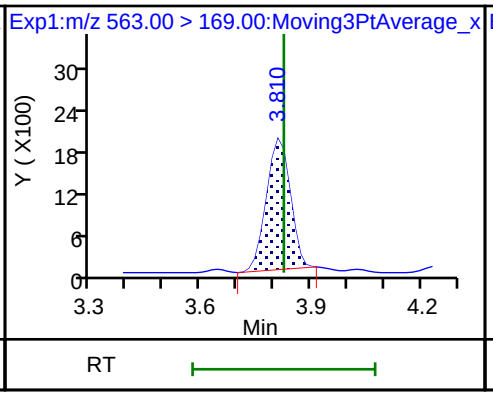
29 Perfluorodecane Sulfonic acid



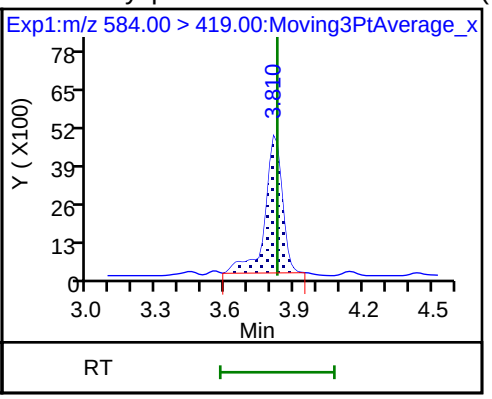
31 Perfluoroundecanoic acid



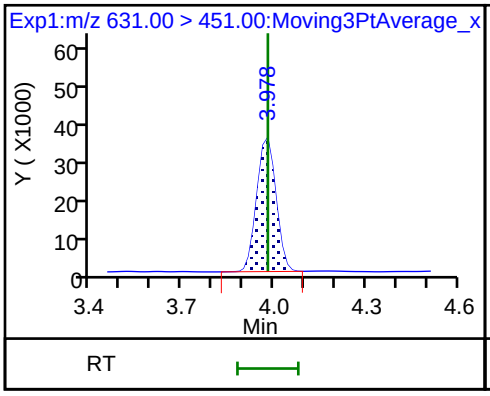
31 Perfluoroundecanoic acid



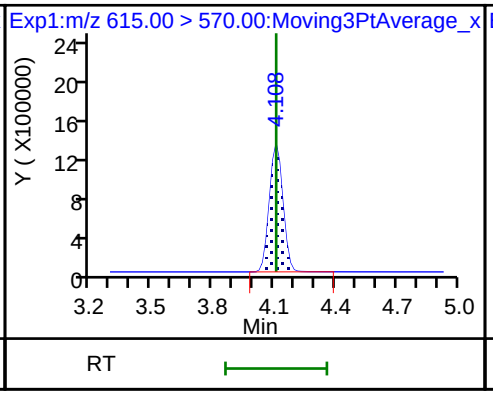
33 N-ethyl perfluorooctane sulfonamid (M)



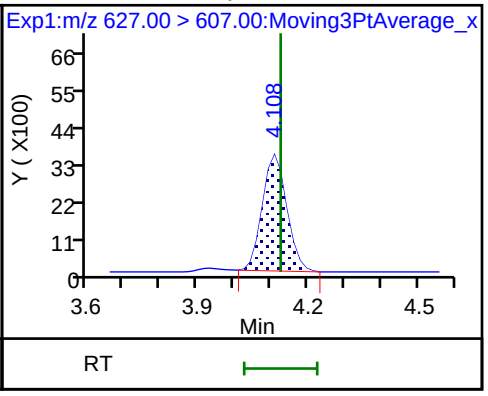
66 11-Chloroeicosafluoro-3-oxaundecan



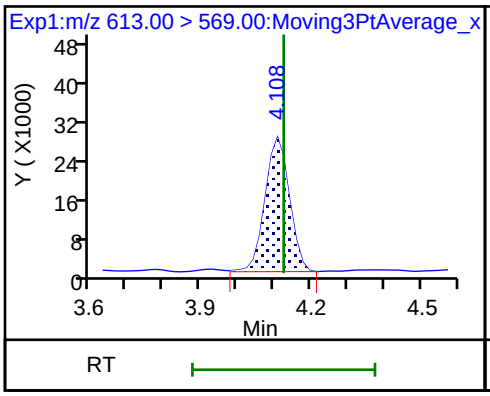
D 36 13C2 PFDoA



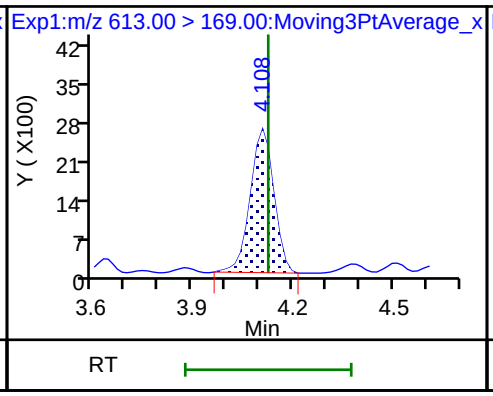
74 1H,1H,2H,2H-perfluorododecanesulfo



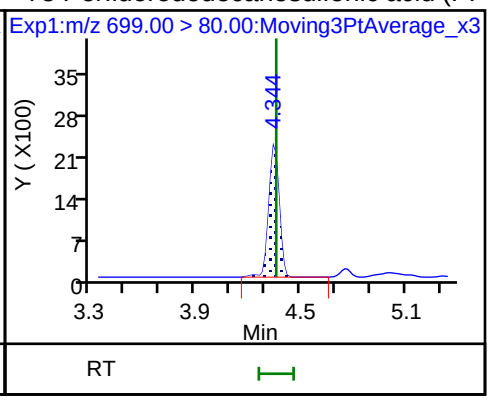
37 Perfluorododecanoic acid



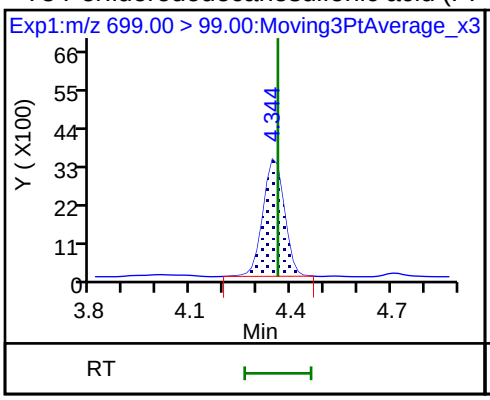
37 Perfluorododecanoic acid



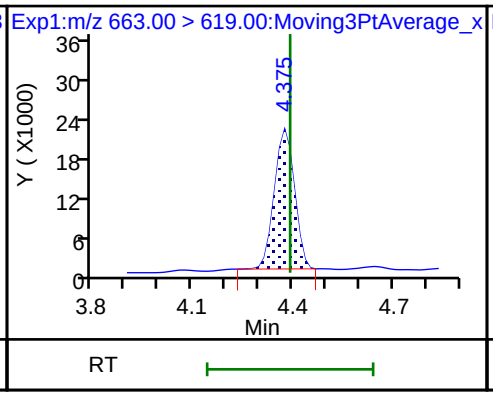
75 Perfluorododecanesulfonic acid (PF



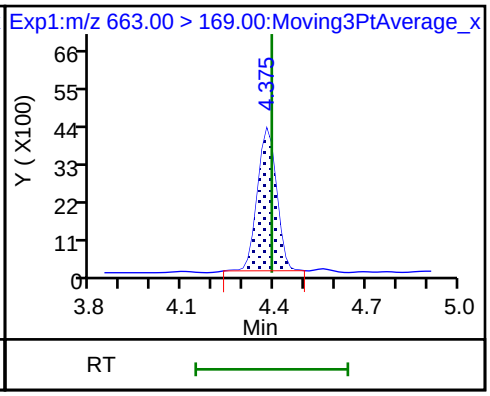
75 Perfluorododecanesulfonic acid (PF



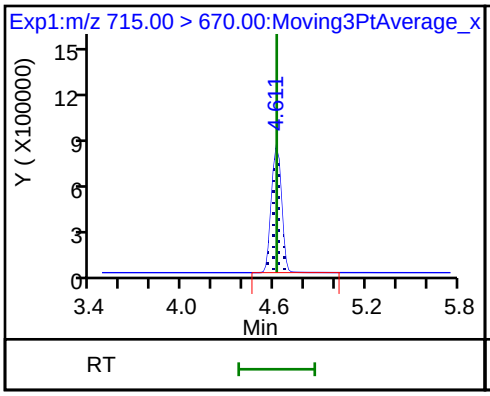
41 Perfluorotridecanoic acid



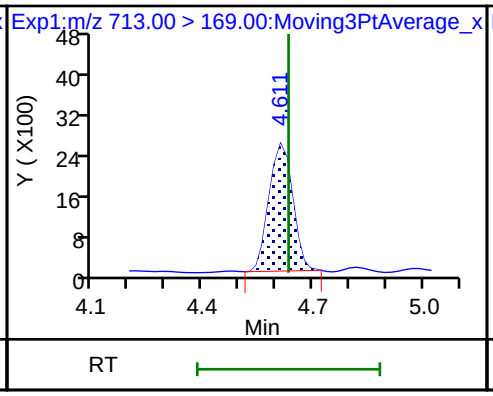
41 Perfluorotridecanoic acid



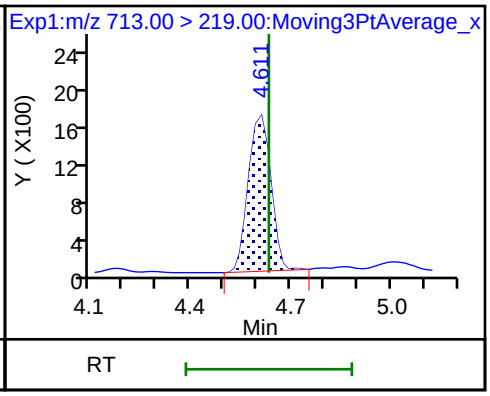
D 43 13C2-PFTeDA



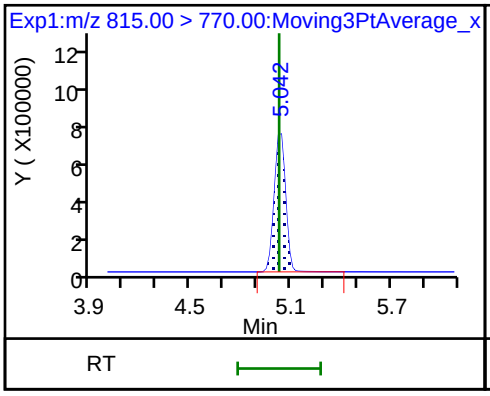
42 Perfluorotetradecanoic acid



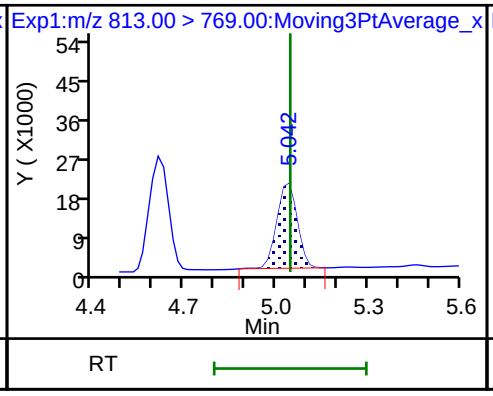
42 Perfluorotetradecanoic acid



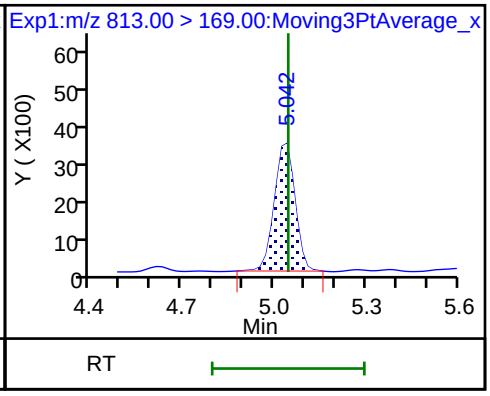
D 44 13C2-PFHxDA



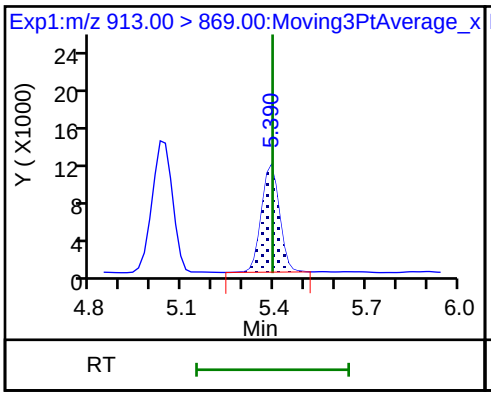
45 Perfluorohexadecanoic acid



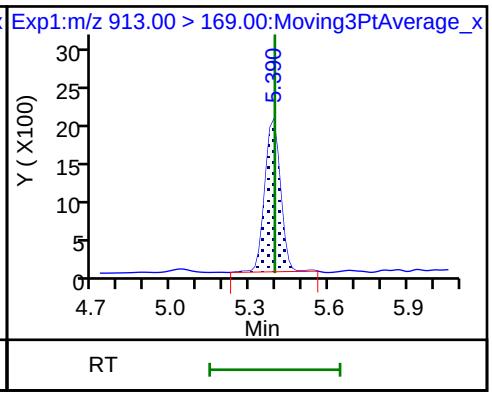
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

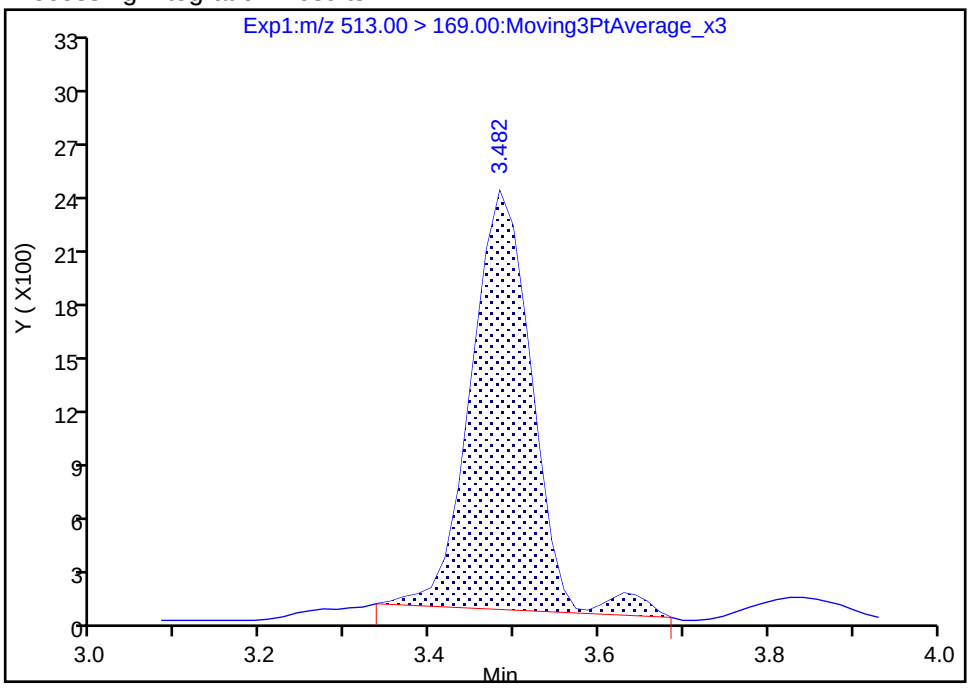
Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\2018.08.07_LLB_005.d
Injection Date: 08-Aug-2018 06:14:05 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

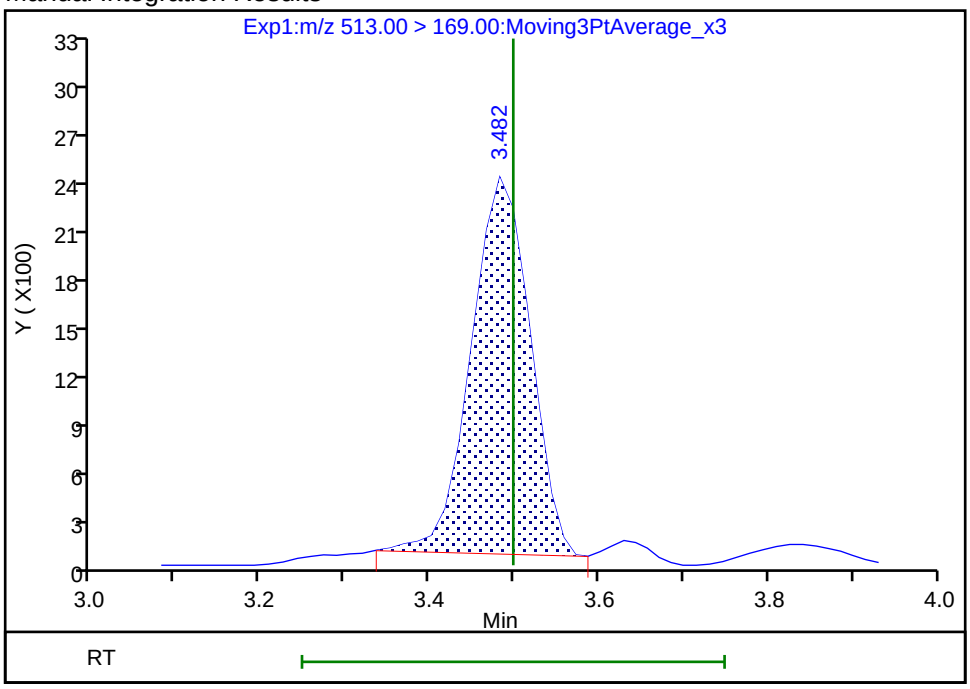
Processing Integration Results

RT: 3.48
Area: 11960
Amount: 0.052199
Amount Units: ng/ml



Manual Integration Results

RT: 3.48
Area: 11439
Amount: 0.052199
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 11:50:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

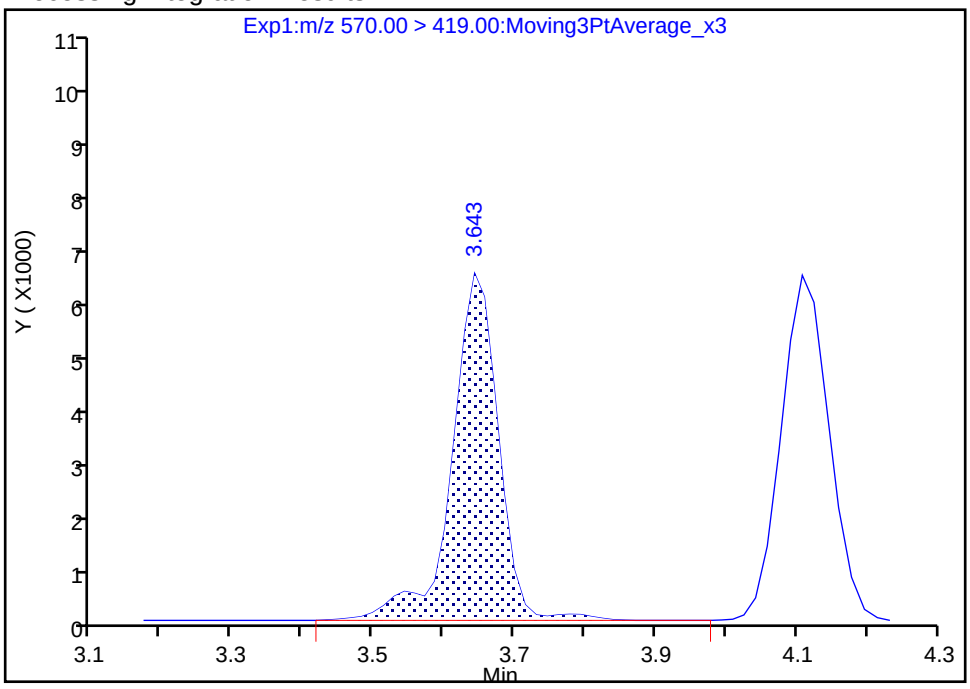
Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\2018.08.07_LLB_005.d
Injection Date: 08-Aug-2018 06:14:05 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

28 N-methyl perfluorooctane sulfonamidoacetic a, CAS: 2355-31-9

Signal: 1

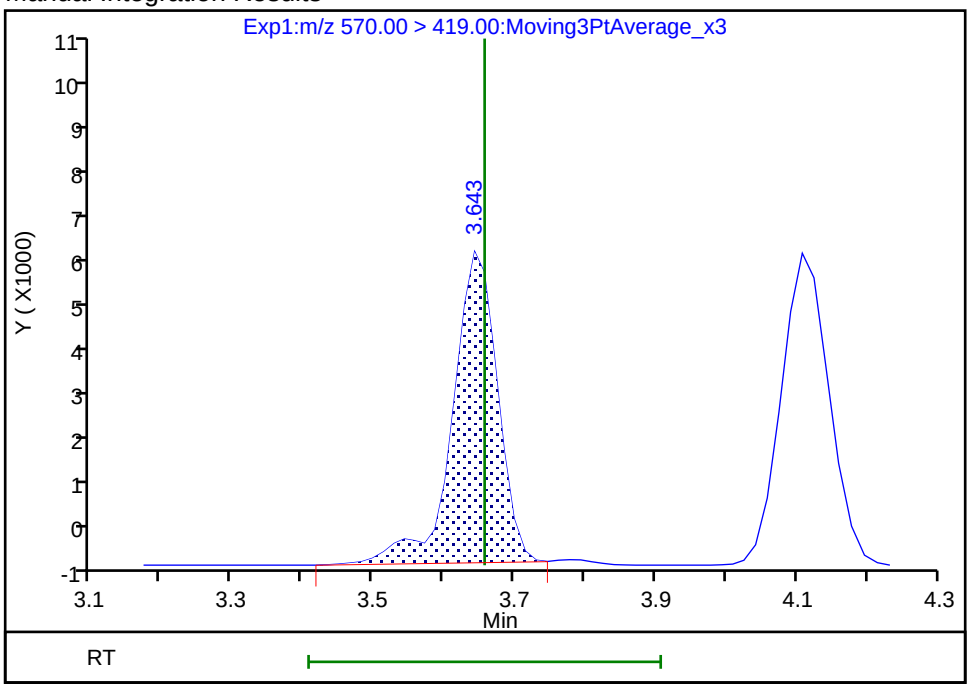
Processing Integration Results

RT: 3.64
Area: 27334
Amount: 0.045662
Amount Units: ng/ml



Manual Integration Results

RT: 3.64
Area: 26282
Amount: 0.043904
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 11:50:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

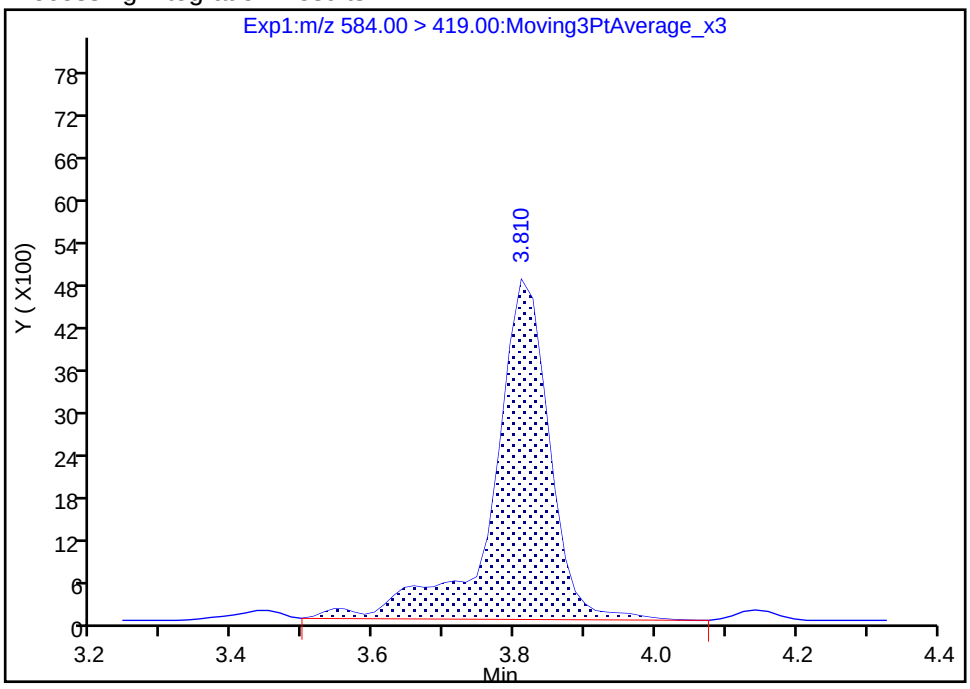
Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\2018.08.07_LLB_005.d
Injection Date: 08-Aug-2018 06:14:05 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

33 N-ethyl perfluorooctane sulfonamidoacetic ac, CAS: 2991-50-6

Signal: 1

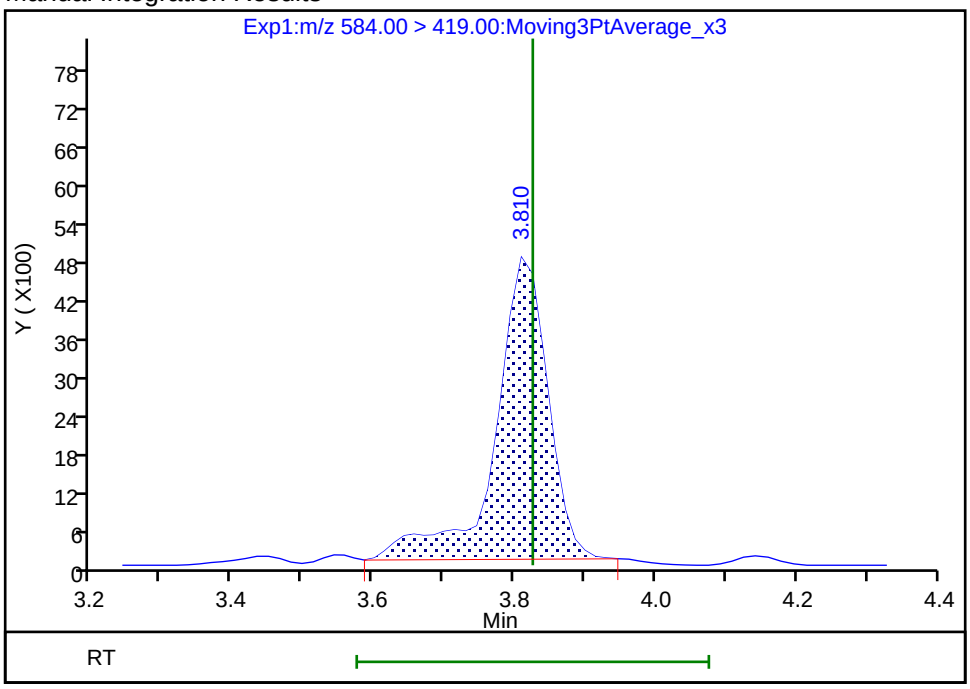
Processing Integration Results

RT: 3.81
Area: 26950
Amount: 0.061097
Amount Units: ng/ml



Manual Integration Results

RT: 3.81
Area: 24623
Amount: 0.055822
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 11:51:08
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-238708/3 Calibration Date: 08/08/2018 06:21

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.07_LLB_030.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9293	0.9462		2.55	2.50	1.8	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.020	0.9897		2.43	2.50	-3.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	111.1		2.38	2.21	7.5	50.0
4:2 FTS	AveID	17.02	13.81		1.89	2.34	-18.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9355	0.8861		2.37	2.50	-5.3	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	48.91	53.49		2.56	2.35	9.4	50.0
HFPO-DA (GenX)	AveID	2.205	1.661		1.88	2.50	-24.7	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.038	0.9919		2.39	2.50	-4.5	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.279	1.212		2.16	2.28	-5.2	40.0
6:2 FTS	AveID	2.137	2.142		2.38	2.37	0.3	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.096	1.024		2.34	2.50	-6.5	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.011	1.062		2.50	2.38	5.1	50.0
Perfluorononanoic acid (PFNA)	AveID	1.055	1.058		2.51	2.50	0.3	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.072	1.087		2.35	2.32	1.3	40.0
F-53B Major	AveID	1.181	1.102		2.18	2.33	-6.6	50.0
8:2 FTS	AveID	14.02	14.01		2.39	2.40	-0.0	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6548	0.6982		2.56	2.40	6.6	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	3.071	3.244		2.64	2.50	5.6	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.229	1.214		2.47	2.50	-1.3	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.011	1.015		2.51	2.50	0.4	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8334	0.8504		2.46	2.41	2.0	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8969	0.9873		2.75	2.50	10.1	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8420	0.8296		2.46	2.50	-1.5	40.0
F-53B Minor	AveID	1.251	1.285		2.42	2.36	2.7	50.0
10:2 FTS	AveID	7.652	8.342		2.63	2.41	9.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9834	1.069		2.72	2.50	8.7	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0804	0.0794		2.39	2.42	-1.3	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.7505	0.7899		2.63	2.50	5.2	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1611	0.1605		2.49	2.50	-0.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9272		2.54	2.50	1.6	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-238708/3 Calibration Date: 08/08/2018 06:21

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.07_LLB_030.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7099	0.6350		2.24	2.50	-10.5	50.0
13C4 PFBA	Ave	1.117	0.998		2.23	2.50	-10.7	50.0
13C5 PFPeA	Ave	0.999	0.8632		2.16	2.50	-13.6	50.0
13C3-PFBS	Ave	0.0155	0.0125		1.87	2.33	-19.5	50.0
M2-4:2FTS	Ave	0.1052	0.0697		1.55	2.34	-33.8	50.0
13C2 PFHxA	Ave	1.037	0.9568		2.31	2.50	-7.7	50.0
13C3 HFPO-DA	Ave	0.0886	0.1205		3.40	2.50	35.9	50.0
13C4-PFHpA	Ave	1.177	1.187		2.52	2.50	0.9	50.0
18O2 PFHxS	Ave	0.8862	0.8090		2.16	2.37	-8.7	50.0
M2-6:2FTS	Ave	0.1144	0.1183		2.46	2.38	3.4	40.0
13C4 PFOA	Ave	0.9865	1.015		2.57	2.50	2.9	50.0
13C4 PFOS	Ave	0.9223	0.8216		2.13	2.39	-10.9	50.0
13C5 PFNA	Ave	0.8463	0.8769		2.59	2.50	3.6	50.0
13C8 FOSA	Ave	0.5512	0.4657		2.11	2.50	-15.5	50.0
M2-8:2FTS	Ave	0.0133	0.0141		2.53	2.40	5.7	40.0
13C2 PFDA	Ave	0.8474	0.8072		2.38	2.50	-4.7	50.0
d3-NMeFOSAA	Ave	0.1647	0.1890		2.87	2.50	14.7	50.0
13C2 PFUnA	Ave	0.6849	0.6756		2.47	2.50	-1.4	50.0
d5-NEtFOSAA	Ave	0.1353	0.1520		2.81	2.50	12.3	50.0
13C2 PFDoA	Ave	0.7384	0.7579		2.57	2.50	2.6	50.0
13C2-PFTeDA	Ave	0.4715	0.4799		2.54	2.50	1.8	50.0
13C2-PFHxDA	Ave	0.4325	0.4509		2.61	2.50	4.2	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\2018.08.07_LLB_030.d
Lims ID: CCV L5
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Aug-2018 06:21:36 ALS Bottle#: 29 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 12:06:06 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 11:52:40

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.489	1.484	0.005	0.544	7415509	2.23		89.3	6436	
2 Perfluorobutyric acid										
212.90 > 169.00	1.489	1.489	0.0	1.000	7016407	2.55		102	268	
D 3 13C5-PFPeA										
267.90 > 223.00	1.756	1.756	0.0	0.642	6413897	2.16		86.4	10094	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.756	1.756	0.0	1.000	6347759	2.43		97.0	321	
D 47 13C3-PFBS										
301.90 > 83.00	1.789	1.789	0.0	0.654	86081	1.87		80.5	454	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.789	1.789	0.0	1.000	9089493	2.38		108	3137	
298.90 > 99.00	1.797	1.789	0.008	1.005	3211594		2.83(1.35-4.05)		1622	
D 60 M2-4:2FTS										
329.00 > 81.00	2.007	2.007	0.0	0.734	483353	1.55		66.2	630	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.007	2.007	0.0	1.122	1193513	1.89		81.1	2236	
D 7 13C2 PFHxA										
315.00 > 270.00	2.038	2.038	0.0	0.745	7108928	2.31		92.3	11355	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.038	2.038	0.0	1.000	6298942	2.37		94.7	1621	
313.00 > 119.00	2.038	2.038	0.0	1.000	478696		13.16(6.96-20.87)		1008	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.058	2.058	0.0	1.150	4643772	2.56		109	5608	
349.00 > 99.00	2.058	2.058	0.0	1.150	2064052		2.25(1.15-3.45)		2319	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.140	2.140	0.0	0.783	895091	3.40		136	3128	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.140	2.140	0.0	1.000	1486792	1.88		75.3	876	
D 9 13C4-PFHpA										
367.00 > 322.00	2.374	2.374	0.0	0.868	8821262	2.52		101	9707	
D 11 18O2 PFHxS										
403.00 > 84.00	2.387	2.387	0.0	0.873	5686132	2.16		91.3	14736	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.374	2.374	0.0	1.000	8749756	2.39		95.5	1096	
363.00 > 169.00	2.374	2.374	0.0	1.000	2015446		4.34(2.17-6.52)		2959	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.387	2.387	0.0	1.000	6630437	2.16		94.8	3807	
399.00 > 99.00	2.387	2.387	0.0	1.000	1692698		3.92(1.90-5.70)		975	
65 ADONA										
377.00 > 251.00	2.413	2.413	0.0	0.774	13646396	2.78		111	18848	
377.00 > 85.00	2.413	2.413	0.0	0.774	5980137		2.28(1.05-3.16)		3349	
D 12 M2-6:2FTS										
429.00 > 81.00	2.719	2.719	0.0	0.994	834913	2.46		103	1037	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.719	2.719	0.0	1.000	1784748	2.38		100	2670	
D 14 13C4 PFOA										
417.00 > 372.00	2.735	2.735	0.0	1.000	7539321	2.57		103	11850	
* 62 13C2-PFOA										
415.00 > 370.00	2.735	2.735	0.0		7430110	2.50			12613	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.735	2.735	0.0	1.000	7727455	2.34		93.5	952	
413.00 > 169.00	2.735	2.735	0.0	1.000	2860879		2.70(1.36-4.08)		2815	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.751	2.751	0.0	0.882	6171798	2.50		105	4024	
449.00 > 99.00	2.751	2.751	0.0	0.882	1498293		4.12(1.84-5.53)		2985	
D 18 13C4 PFOS										
503.00 > 80.00	3.118	3.118	0.0	1.140	5835654	2.13		89.1	4077	
D 19 13C5 PFNA										
468.00 > 423.00	3.118	3.118	0.0	1.140	6515575	2.59		104	6739	
20 Perfluorononanoic acid										
463.00 > 419.00	3.118	3.118	0.0	1.000	6892009	2.51		100	1074	
463.00 > 169.00	3.118	3.118	0.0	1.000	1299988		5.30(2.68-8.03)		2326	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.118	3.118	0.0	1.000	6155570	2.35		101	4268	
499.00 > 99.00	3.118	3.118	0.0	1.000	1449382		4.25(2.04-6.12)		2800	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.336	3.336	0.0	1.070	6272192	2.18		93.4	3874	
D 26 M2-8:2FTS										
529.00 > 81.00	3.467	3.467	0.0	1.268	100035	2.53		106	468	
D 21 13C8 FOSA										
506.00 > 78.00	3.467	3.467	0.0	1.268	3460239	2.11		84.5	4615	
D 23 13C2 PFDA										
515.00 > 470.00	3.483	3.483	-0.001	1.273	5997314	2.38		95.3	4602	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.467	3.467	0.0	1.112	4091222	2.56		107	2983	
549.00 > 99.00	3.467	3.467	0.0	1.112	730413		5.60(3.02-9.05)		2584	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.467	3.467	0.0	1.000	1401516	2.39		99.9	6868	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.467	3.467	0.0	1.000	11224252	2.64		106	4964	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.483	3.483	0.0	1.000	7278454	2.47		98.7	1237	
513.00 > 169.00	3.483	3.483	0.0	1.000	493558		14.75(7.12-21.35)		397	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.643	3.630	0.013	1.332	1404206	2.87		115	3906	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.643	3.643	0.0	1.000	1425119	2.51		100	578	
D 30 13C2 PFUnA										
565.00 > 520.00	3.810	3.810	0.0	1.393	5019859	2.47		98.6	4941	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.810	3.810	0.0	1.393	1129177	2.81		112	1761	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.794	3.794	0.0	1.217	5004409	2.46		102	5145	
599.00 > 99.00	3.794	3.794	0.0	1.217	1055042		4.74(2.14-6.43)		1549	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.810	3.810	0.0	1.000	4164424	2.46		98.5	545	
563.00 > 169.00	3.810	3.810	0.0	1.000	448438		9.29(5.24-15.72)		1356	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.810	3.810	0.0	1.000	1114839	2.75		110	2076	
35 MeFOSA										
512.00 > 169.00	3.962	3.962	0.0		1624443	NC			1730	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.978	3.978	0.0	1.276	7388383	2.42		103	10492	
D 36 13C2 PFDoA										
615.00 > 570.00	4.108	4.109	-0.001	1.502	5631520	2.57		103	8787	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.108	4.108	0.0	1.185	839684	2.63		109	2653	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.108	4.108	0.0	1.000	6020437	2.72		109	918	
613.00 > 169.00	4.108	4.108	0.0	1.000	654408		9.20(4.68-14.05)		1582	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.345	4.345	0.0	1.393	469041	2.39		98.7	1966	
699.00 > 99.00	4.345	4.345	0.0	1.393	818810		0.57(0.28-0.83)		2111	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.376	4.376	0.0	1.065	4448108	2.63		105	1027	
663.00 > 169.00	4.376	4.376	0.0	1.065	749623		5.93(3.09-9.27)		2120	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.615	4.615	0.0	1.687	3565409	2.54		102	6951	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.615	4.615	0.0	1.000	572092	2.49		99.6	1940	
713.00 > 219.00	4.615	4.615	0.0	1.000	374419		1.53(0.70-2.09)		1220	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.028	5.028	0.0	1.838	3350173	2.61		104	5162	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.028	5.028	0.0	1.000	3106121	2.54		102	212	
813.00 > 169.00	5.028	5.028	0.0	1.000	523560		5.93(2.77-8.32)		1577	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.379	5.379	0.0	1.070	2127494	2.24		89.5	794	
913.00 > 169.00	5.379	5.379	0.0	1.070	383373		5.55(2.55-7.64)		1806	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00006 Amount Added: 1.00 Units: mL

Report Date: 08-Aug-2018 12:06:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62348.b\2018.08.07_LLB_030.d

Injection Date: 08-Aug-2018 06:21:36 Instrument ID: A9

Lims ID: CCV L5

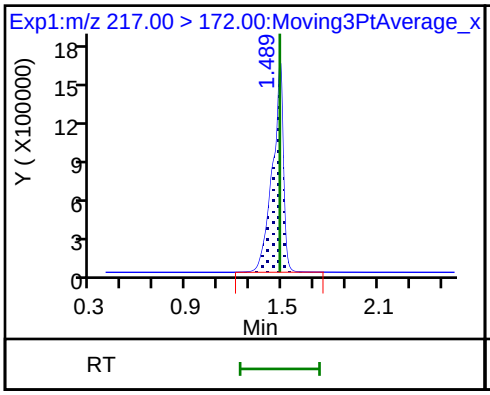
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 3

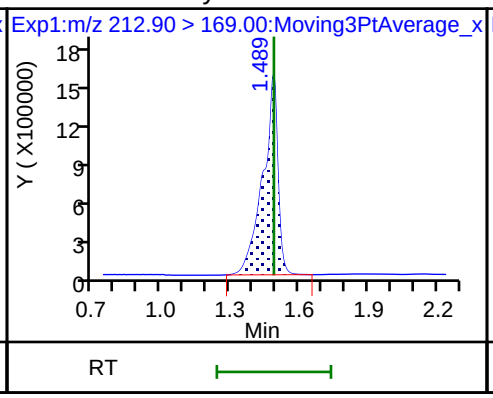
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

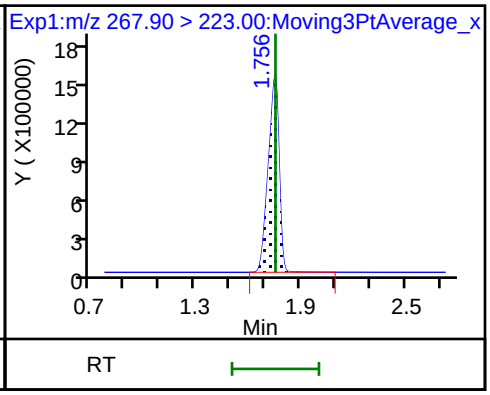
D 1 13C4 PFBA



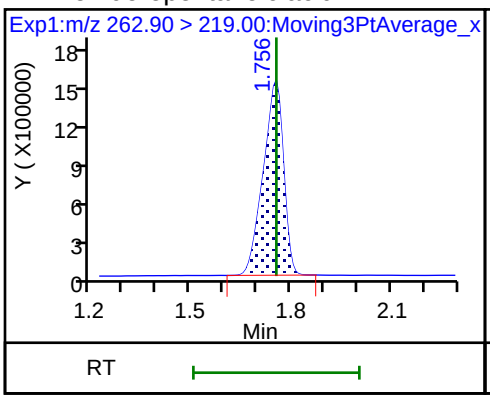
2 Perfluorobutyric acid



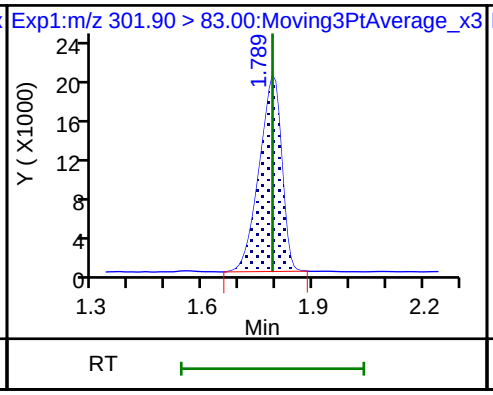
D 3 13C5-PFPeA



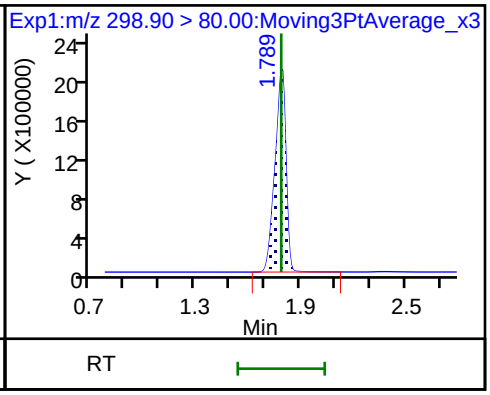
4 Perfluoropentanoic acid



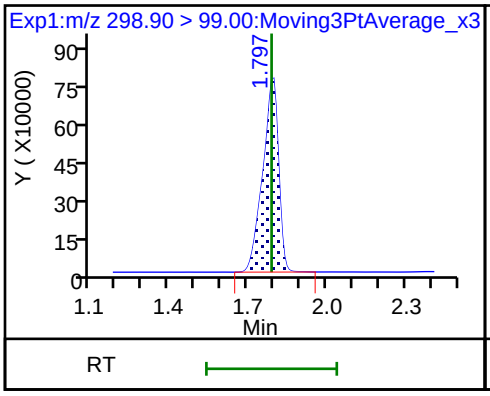
D 47 13C3-PFBS



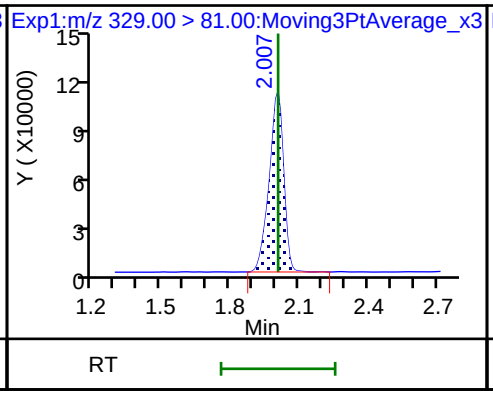
5 Perfluorobutanesulfonic acid



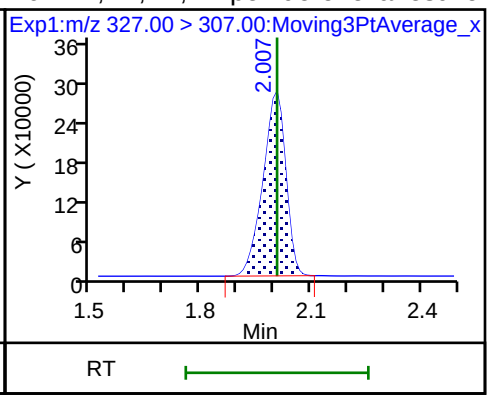
5 Perfluorobutanesulfonic acid



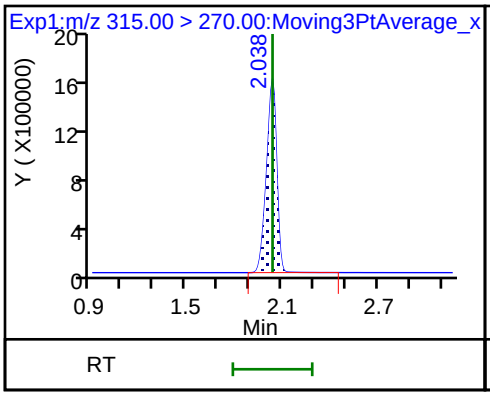
D 60 M2-4:2FTS



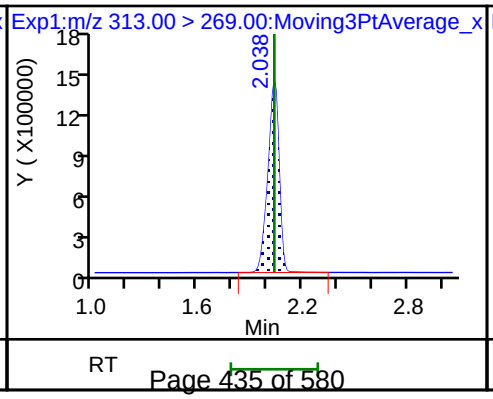
61 1H,1H,2H,2H-perfluorohexanesulfoni



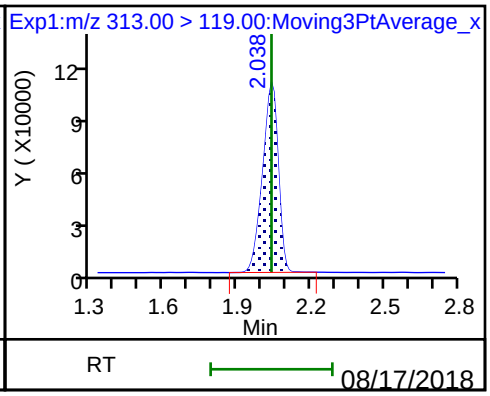
D 7 13C2 PFHxA



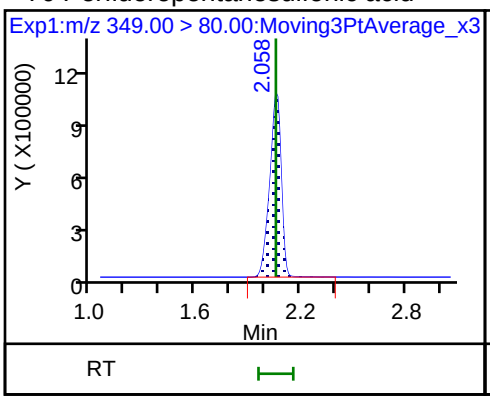
6 Perfluorohexanoic acid



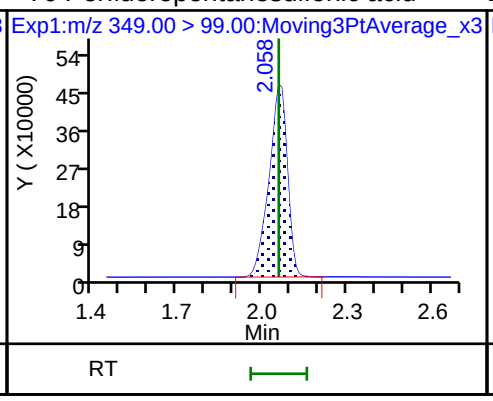
6 Perfluorohexanoic acid



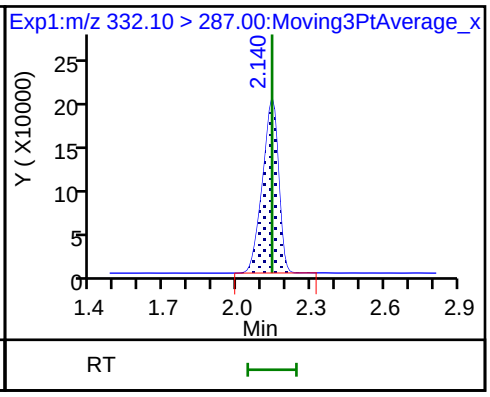
70 Perfluoropentanesulfonic acid



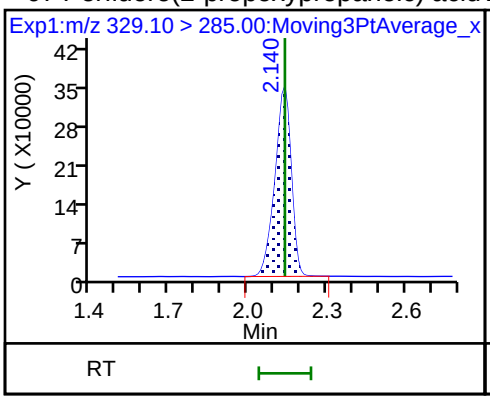
70 Perfluoropentanesulfonic acid



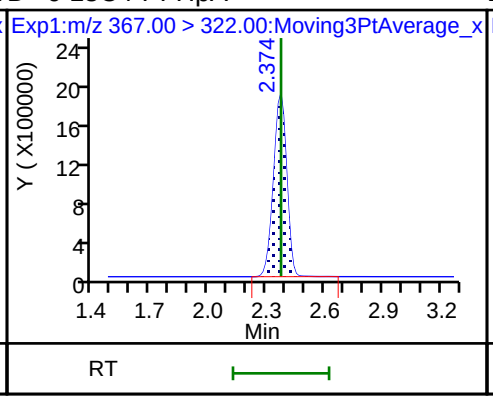
D 64 13C3 HFPO-DA



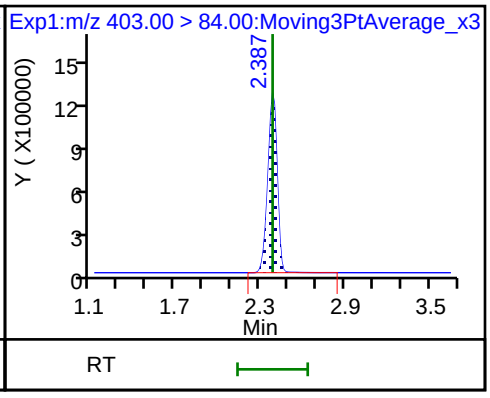
67 Perfluoro(2-propoxypropanoic) acid



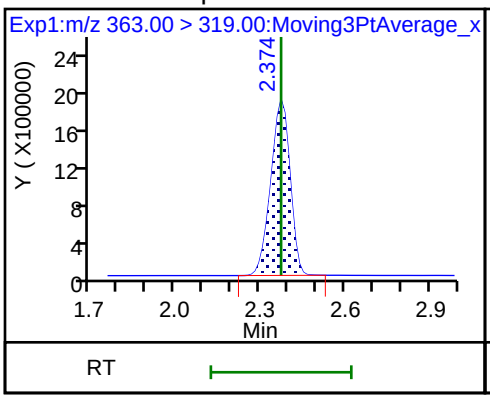
D 9 13C4-PFHpA



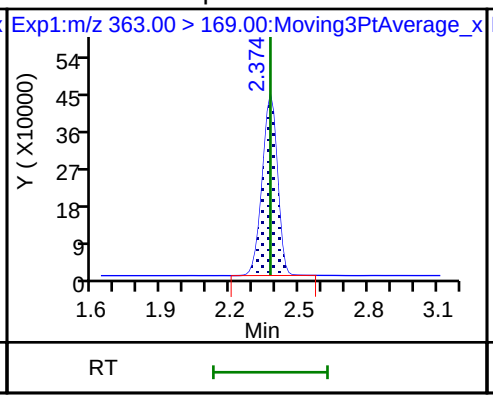
D 11 18O2 PFHxS



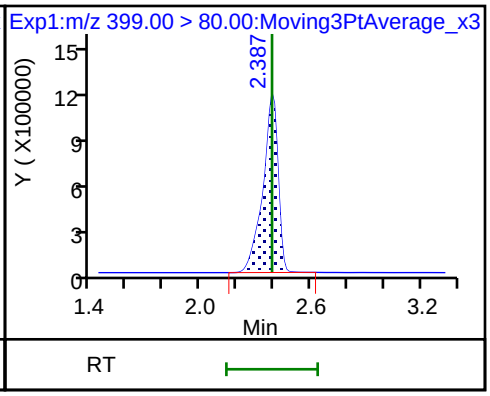
10 Perfluoroheptanoic acid



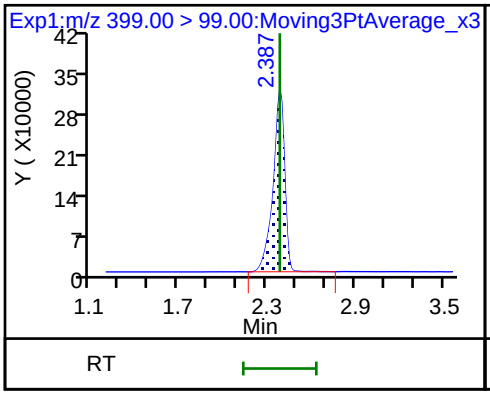
10 Perfluoroheptanoic acid



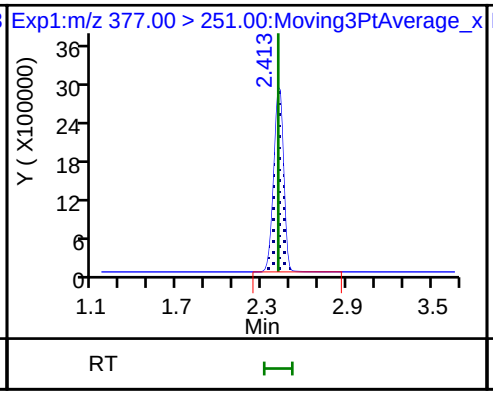
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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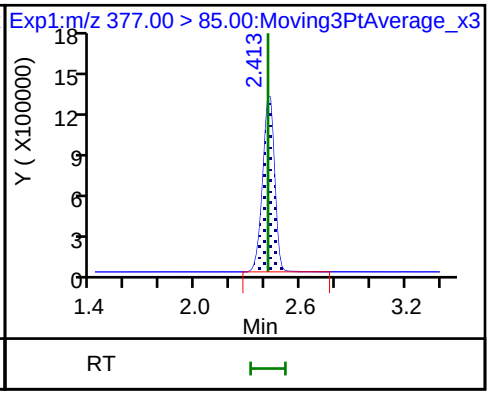
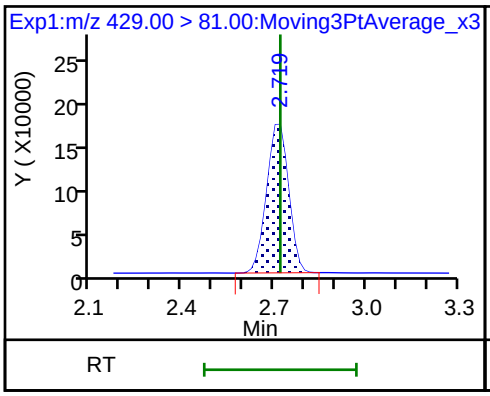
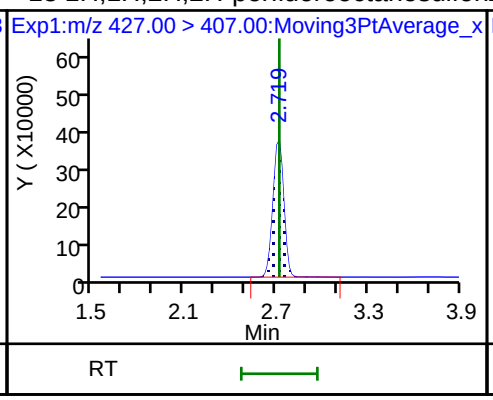


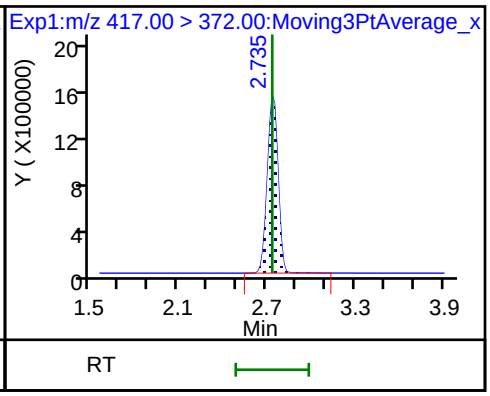
D 12 M2-6:2FTS



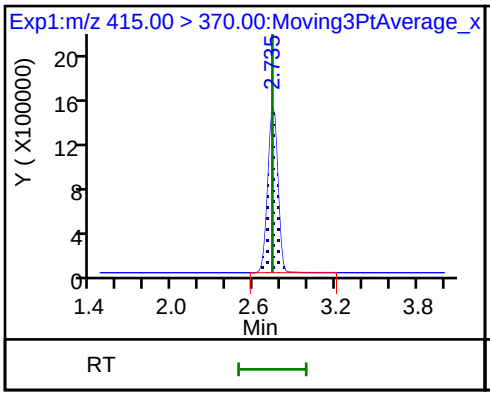
13 1H,1H,2H,2H-perfluorooctanesulfon



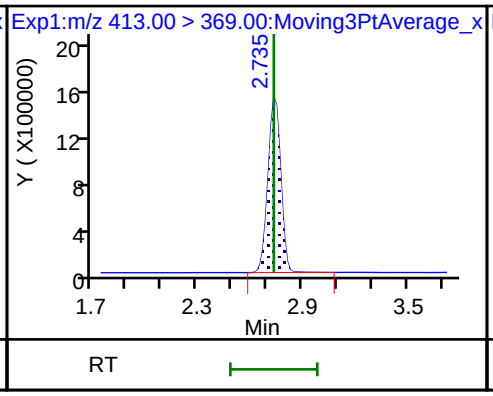
D 14 13C4 PFOA



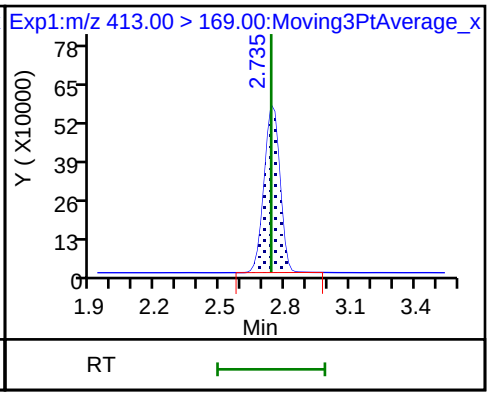
* 62 13C2-PFOA



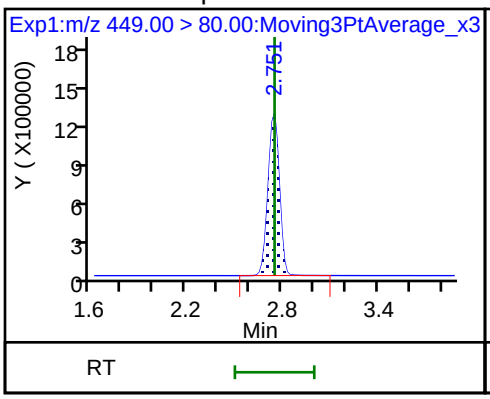
15 Perfluorooctanoic acid



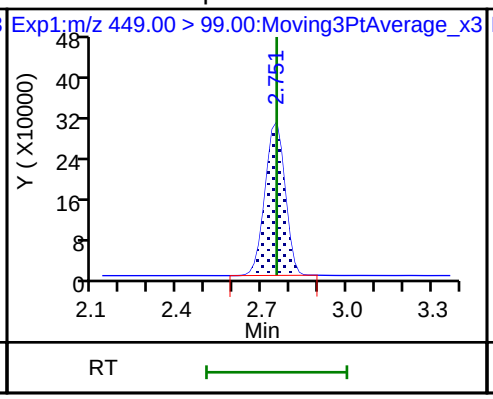
15 Perfluorooctanoic acid



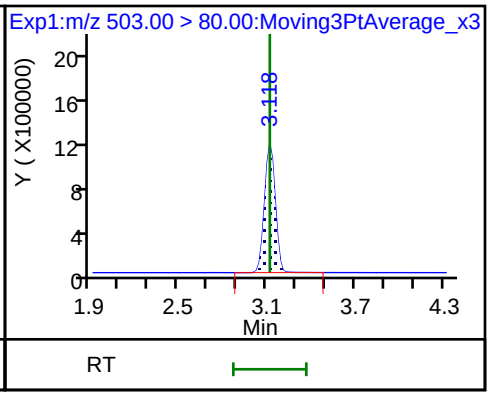
16 Perfluoroheptanesulfonic acid



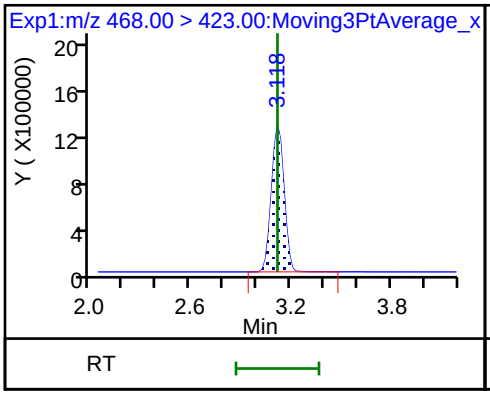
16 Perfluoroheptanesulfonic acid



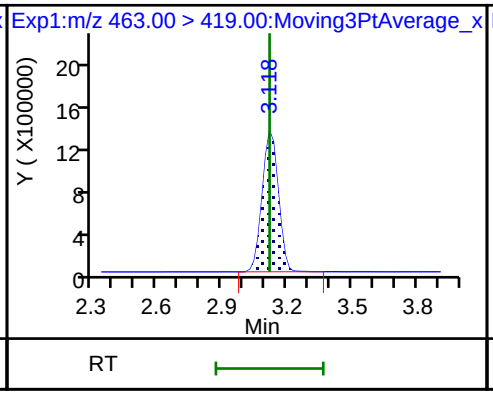
D 18 13C4 PFOS



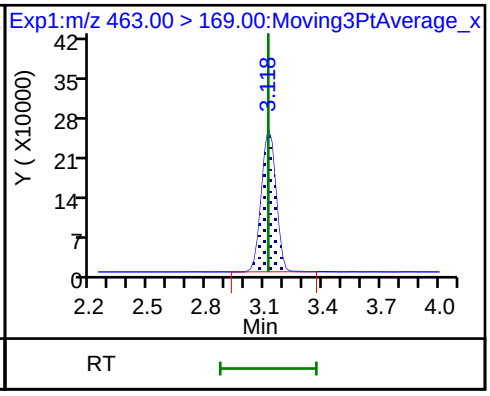
D 19 13C5 PFNA



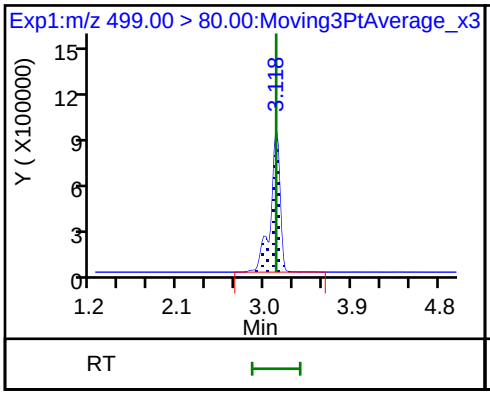
20 Perfluorononanoic acid



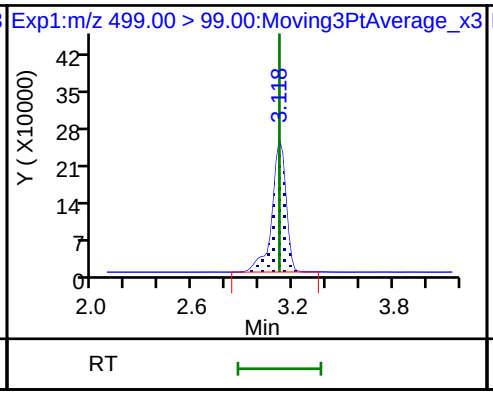
20 Perfluorononanoic acid



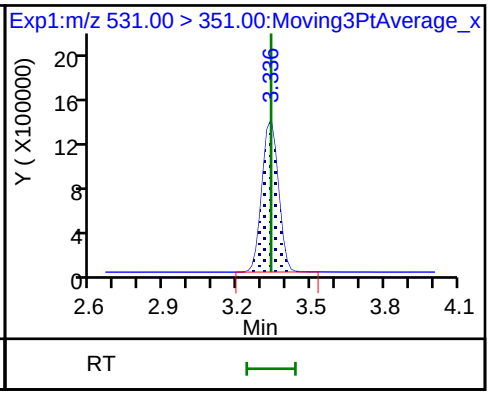
17 Perfluorooctane sulfonic acid



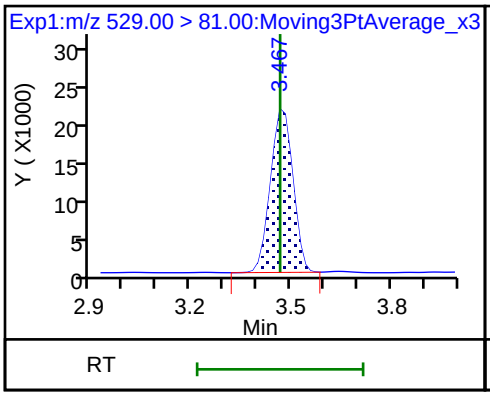
17 Perfluorooctane sulfonic acid



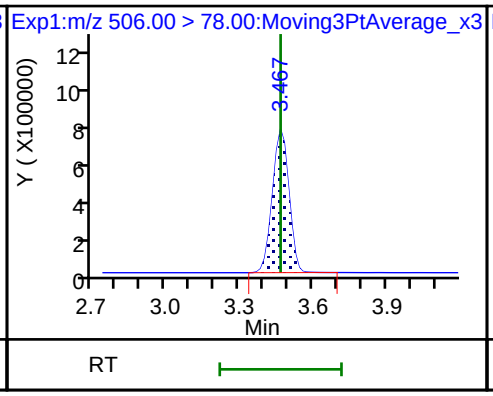
69 9-Chlorohexadecafluoro-3-oxanonane



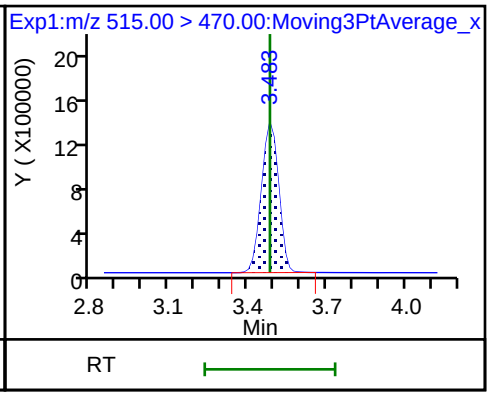
D 26 M2-8:2FTS



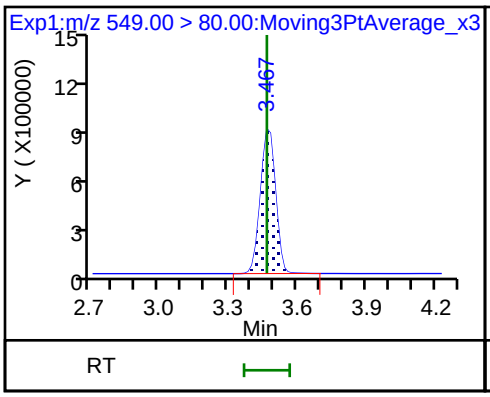
D 21 13C8 FOSA



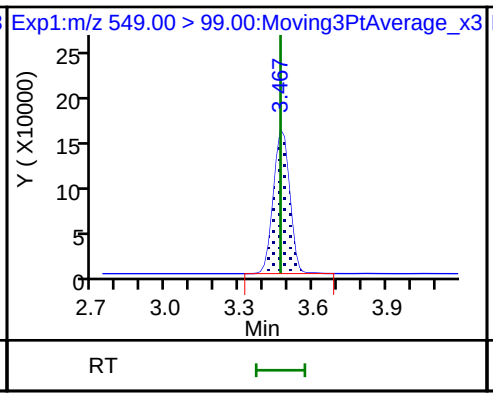
D 23 13C2 PFDA



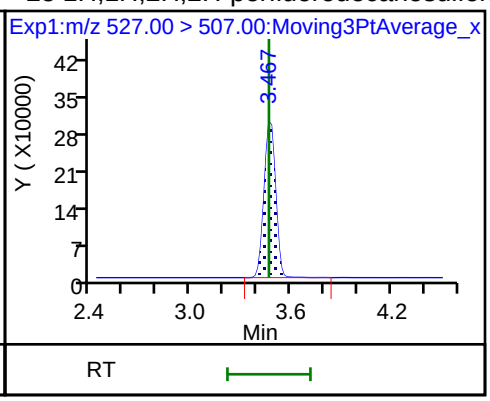
68 Perfluorononanesulfonic acid



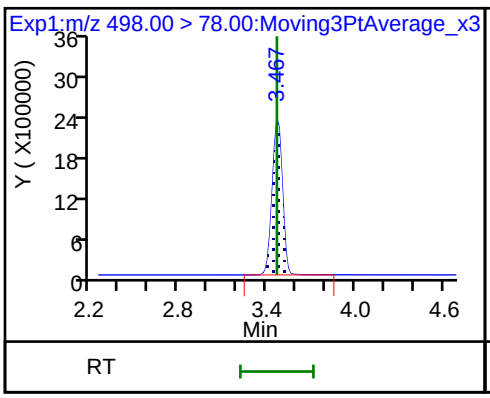
68 Perfluorononanesulfonic acid



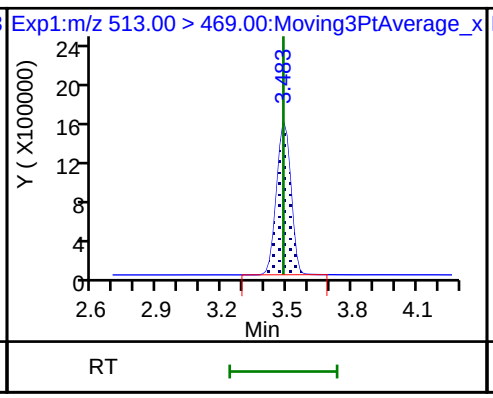
25 1H,1H,2H,2H-perfluorodecanesulfoni



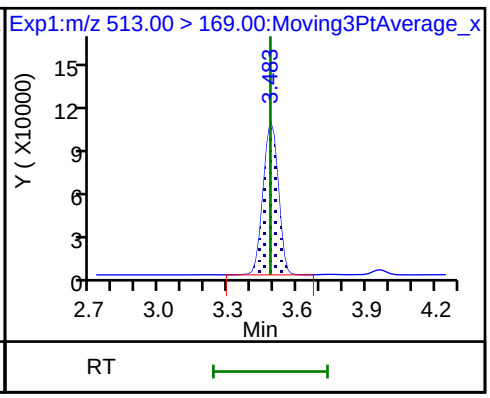
22 Perfluorooctane Sulfonamide



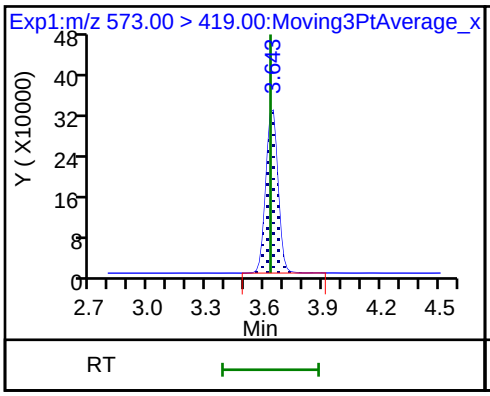
24 Perfluorodecanoic acid



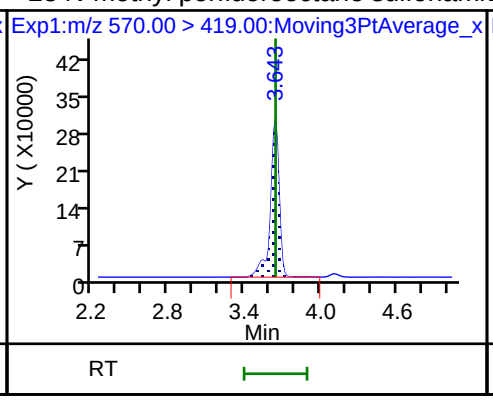
24 Perfluorodecanoic acid



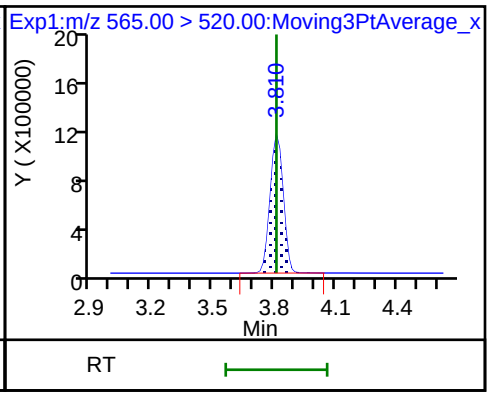
D 27 d3-NMeFOSAA



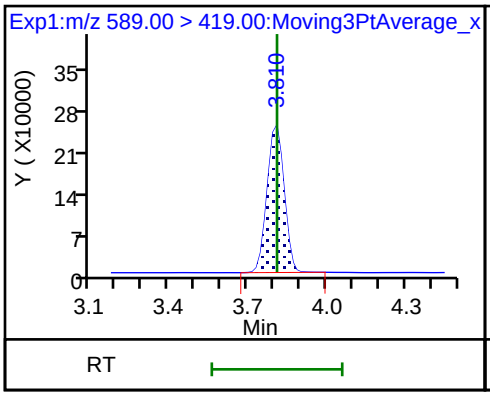
28 N-methyl perfluorooctane sulfonami



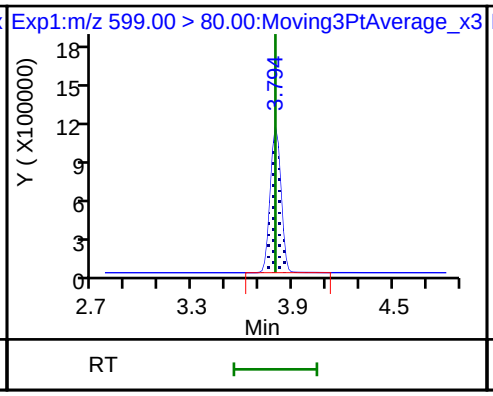
D 30 13C2 PFUnA



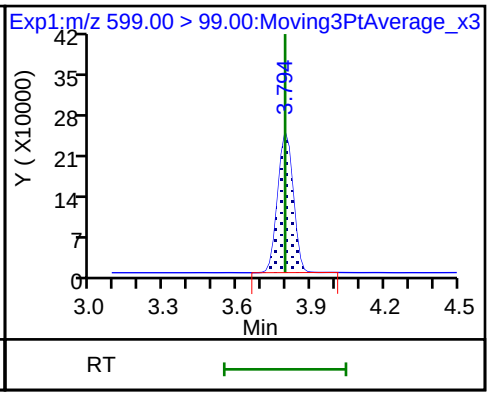
D 32 d5-NEtFOSAA



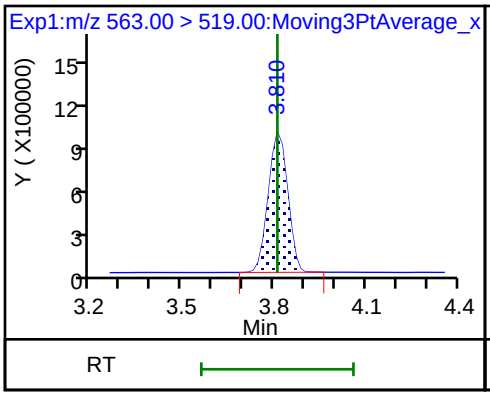
29 Perfluorodecane Sulfonic acid



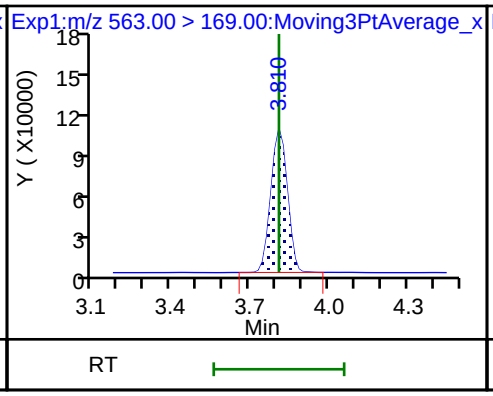
29 Perfluorodecane Sulfonic acid



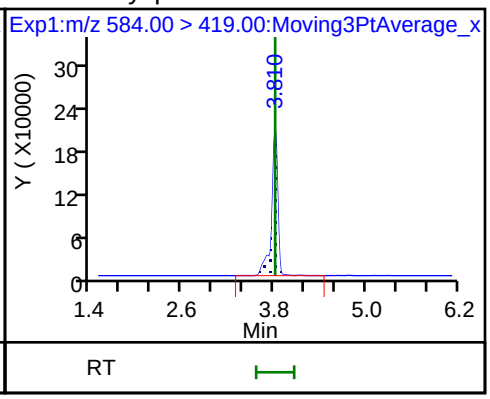
31 Perfluoroundecanoic acid



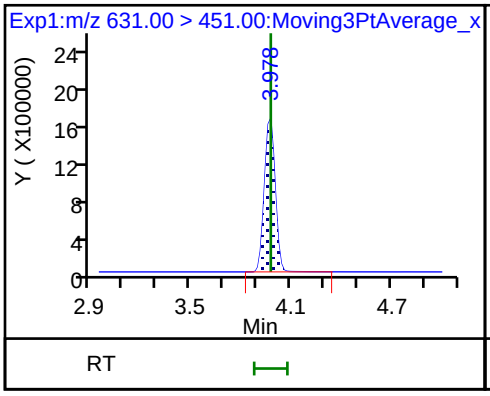
31 Perfluoroundecanoic acid



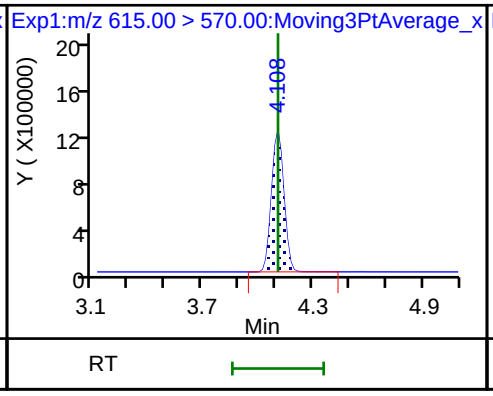
33 N-ethyl perfluorooctane sulfonamid



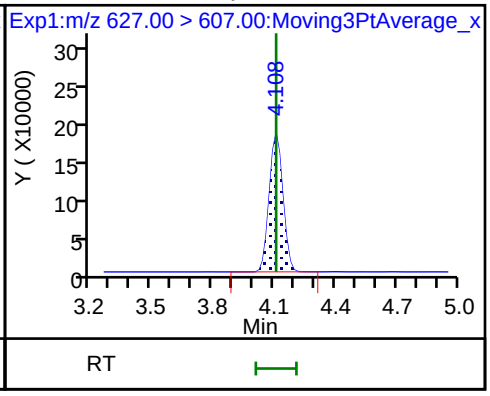
66 11-Chloroeicosafluoro-3-oxaundecan



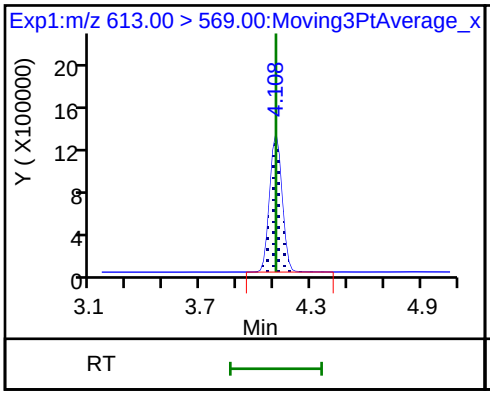
D 36 13C2 PFDoA



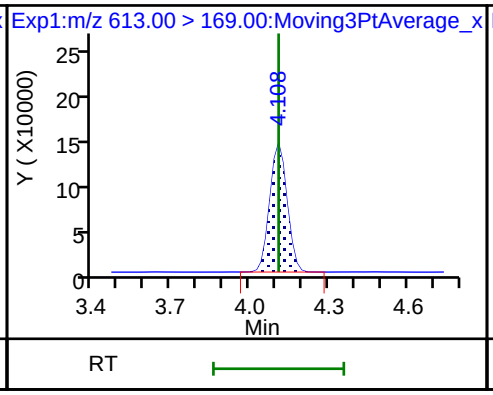
74 1H,1H,2H,2H-perfluorododecanesulfo



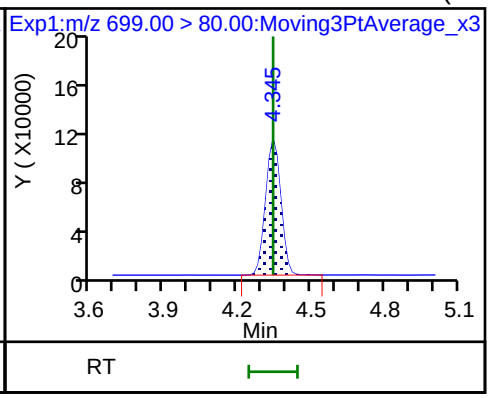
37 Perfluorododecanoic acid



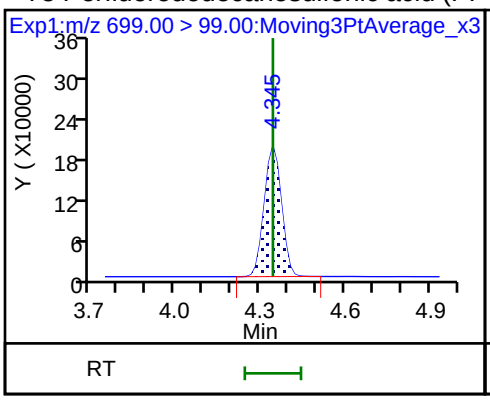
37 Perfluorododecanoic acid



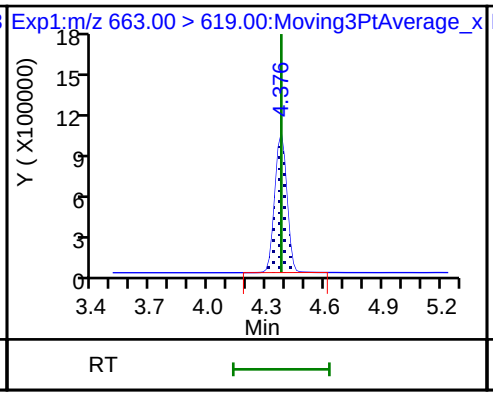
75 Perfluorododecanesulfonic acid (PF



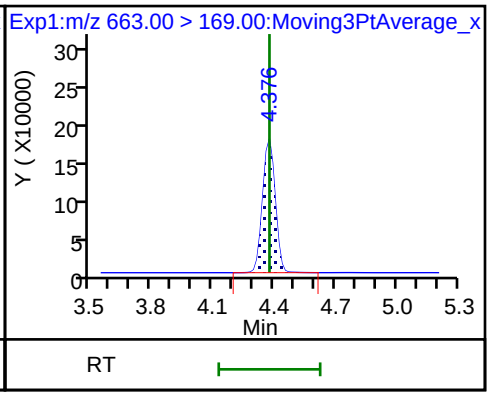
75 Perfluorododecanesulfonic acid (PF



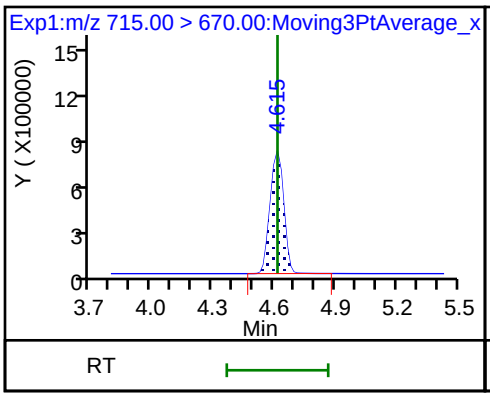
41 Perfluorotridecanoic acid



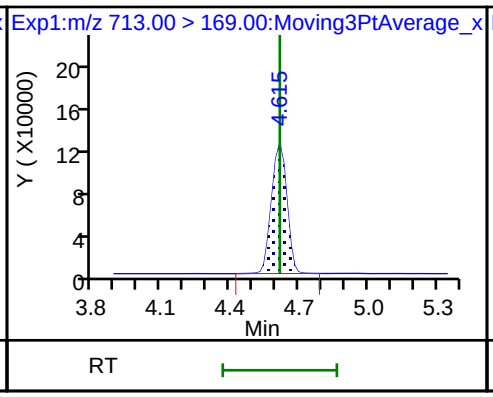
41 Perfluorotridecanoic acid



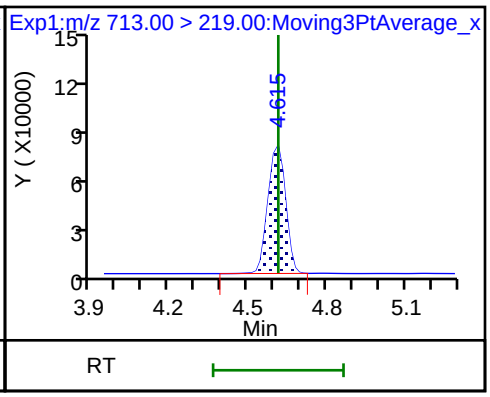
D 43 13C2-PFTeDA



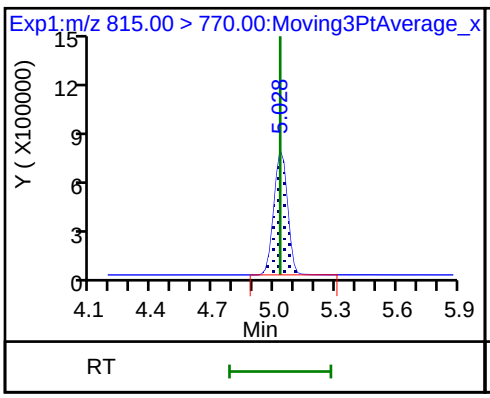
42 Perfluorotetradecanoic acid



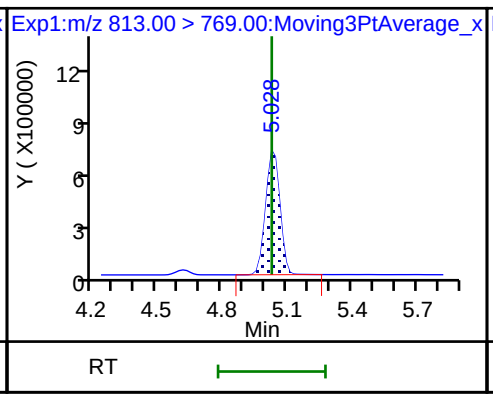
42 Perfluorotetradecanoic acid



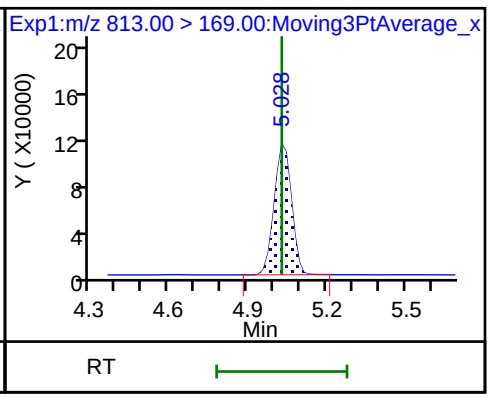
D 44 13C2-PFHxDA



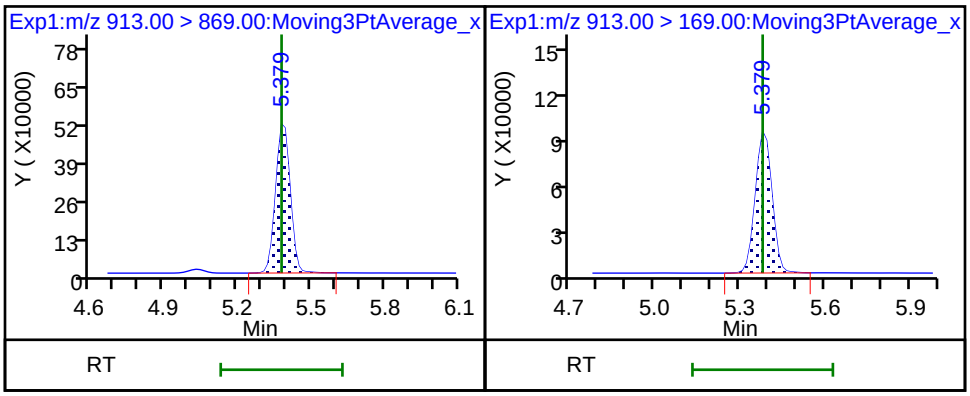
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-238718/1 Calibration Date: 08/08/2018 07:59

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.08LLA_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9293	0.9121		0.982	1.00	-1.8	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.020	1.021		1.00	1.00	0.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	108.8		0.931	0.884	5.3	50.0
4:2 FTS	AveID	17.02	14.75		0.809	0.934	-13.4	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9355	0.8673		0.927	1.00	-7.3	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	48.91	51.05		0.979	0.938	4.4	50.0
HFPO-DA (GenX)	AveID	2.205	1.480		0.671	1.00	-32.9	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.038	1.059		1.02	1.00	2.0	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.279	1.179		0.839	0.910	-7.8	40.0
6:2 FTS	AveID	2.137	2.019		0.896	0.948	-5.5	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.096	1.059		0.968	1.00	-3.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.011	1.083		1.02	0.952	7.1	50.0
Perfluorononanoic acid (PFNA)	AveID	1.055	1.097		1.04	1.00	4.0	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.072	1.066		0.922	0.928	-0.6	40.0
F-53B Major	AveID	1.181	1.088		0.859	0.932	-7.9	50.0
8:2 FTS	AveID	14.02	13.46		0.920	0.958	-4.0	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6548	0.7354		1.08	0.960	12.3	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	3.071	3.286		1.07	1.00	7.0	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.229	1.178		0.958	1.00	-4.2	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.011	1.059		1.05	1.00	4.8	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8334	0.8218		0.951	0.964	-1.4	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8969	0.9420		1.05	1.00	5.0	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8420	0.8320		0.988	1.00	-1.2	40.0
F-53B Minor	AveID	1.251	1.362		1.03	0.942	8.9	50.0
10:2 FTS	AveID	7.652	7.147		0.900	0.964	-6.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9834	1.095		1.11	1.00	11.4	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0804	0.0785		0.944	0.968	-2.4	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.7505	0.7748		1.03	1.00	3.2	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1611	0.1600		0.993	1.00	-0.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9235		0.995	1.00	-0.5	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-238718/1 Calibration Date: 08/08/2018 07:59

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.08LLA_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7099	0.6721		0.947	1.00	-5.3	50.0
13C4 PFBA	Ave	1.117	0.9936		2.22	2.50	-11.0	50.0
13C5 PFPeA	Ave	0.999	0.8527		2.13	2.50	-14.6	50.0
13C3-PFBS	Ave	0.0155	0.0125		1.88	2.33	-19.1	50.0
M2-4:2FTS	Ave	0.1052	0.0662		1.47	2.34	-37.1	50.0
13C2 PFHxA	Ave	1.037	0.9508		2.29	2.50	-8.3	50.0
13C3 HFPO-DA	Ave	0.0886	0.1377		3.88	2.50	55.4*	50.0
13C4-PFHpA	Ave	1.177	1.143		2.43	2.50	-2.9	50.0
18O2 PFHxS	Ave	0.8862	0.7286		1.94	2.37	-17.8	50.0
M2-6:2FTS	Ave	0.1144	0.1296		2.69	2.38	13.2	40.0
13C4 PFOA	Ave	0.9865	1.002		2.54	2.50	1.5	50.0
13C4 PFOS	Ave	0.9223	0.7700		2.00	2.39	-16.5	50.0
13C5 PFNA	Ave	0.8463	0.8454		2.50	2.50	-0.1	50.0
13C8 FOSA	Ave	0.5512	0.4575		2.07	2.50	-17.0	50.0
M2-8:2FTS	Ave	0.0133	0.0149		2.68	2.40	11.9	40.0
13C2 PFDA	Ave	0.8474	0.8435		2.49	2.50	-0.5	50.0
d3-NMeFOSAA	Ave	0.1647	0.1752		2.66	2.50	6.3	50.0
d5-NEtFOSAA	Ave	0.1353	0.1521		2.81	2.50	12.4	50.0
13C2 PFUnA	Ave	0.6849	0.6284		2.29	2.50	-8.2	50.0
13C2 PFDoA	Ave	0.7384	0.7148		2.42	2.50	-3.2	50.0
13C2-PFTeDA	Ave	0.4715	0.4658		2.47	2.50	-1.2	50.0
13C2-PFHxDA	Ave	0.4325	0.4221		2.44	2.50	-2.4	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_005.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 08-Aug-2018 07:59:14 ALS Bottle#: 13 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 13:31:38 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 13:28:09

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.499	1.499	0.0	1.000	2347284	0.9815		98.2	83.7	
D 1 13C4 PFBA										
217.00 > 172.00	1.499	1.499	0.0	0.542	6433566	2.22		89.0	5198	
D 3 13C5-PFPeA										
267.90 > 223.00	1.772	1.764	0.008	0.641	5521133	2.13		85.4	6185	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.772	1.772	0.0	1.000	2253996	1.00		100	121	
D 47 13C3-PFBS										
301.90 > 83.00	1.813	1.806	0.007	0.656	75361	1.88		80.9	463	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.813	1.813	0.0	1.000	3116455	0.9308		105	1202	
298.90 > 99.00	1.813	1.813	0.0	1.000	1068843		2.92(1.35-4.05)		658	
D 60 M2-4:2FTS										
329.00 > 81.00	2.027	2.017	0.010	0.733	400418	1.47		62.9	517	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.027	2.027	0.0	1.118	446485	0.8092		86.6	1698	
D 7 13C2 PFHxA										
315.00 > 270.00	2.058	2.058	0.0	0.744	6156372	2.29		91.7	9639	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.068	2.068	0.0	1.005	2135673	0.9271		92.7	571	
313.00 > 119.00	2.058	2.068	-0.010	1.000	158480		13.48(6.96-20.87)		271	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.088	2.088	0.0	1.152	1552149	0.9791		104	2816	
349.00 > 99.00	2.088	2.088	0.0	1.152	706404		2.20(1.15-3.45)		1176	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.160	2.160	0.0	1.000	527746	0.6711		67.1	378	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.160	2.160	0.0	0.781	891683	3.88		155	4151	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.399	2.399	0.0	1.000	3135145	1.02		102	424	
363.00 > 169.00	2.399	2.399	0.0	1.000	698473		4.49(2.17-6.52)		1413	
D 9 13C4-PFHpA										
367.00 > 322.00	2.399	2.400	-0.001	0.867	7403358	2.43		97.1	7275	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.413	2.413	0.0	1.000	2025238	0.8389		92.2	1361	
399.00 > 99.00	2.413	2.413	0.0	1.000	593474		3.41(1.90-5.70)		376	
D 11 18O2 PFHxS										
403.00 > 84.00	2.413	2.413	0.0	0.872	4462828	1.94		82.2	8626	
65 ADONA										
377.00 > 251.00	2.452	2.452	0.0	0.778	4907417	1.22		122	9037	
377.00 > 85.00	2.439	2.452	-0.013	0.773	2100565		2.34(1.05-3.16)		1265	
D 12 M2-6:2FTS										
429.00 > 81.00	2.734	2.735	-0.001	0.988	797133	2.69		113	1171	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.750	2.750	0.0	1.006	642529	0.8959		94.5	1132	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.766	2.766	0.0	1.000	2751644	0.9680		96.7	342	
413.00 > 169.00	2.766	2.766	0.0	1.000	1028193		2.68(1.36-4.08)		1612	
* 62 13C2-PFOA										
415.00 > 370.00	2.766	2.766	0.0		6474993	2.50			13187	
D 14 13C4 PFOA										
417.00 > 372.00	2.766	2.767	-0.001	1.000	6486607	2.54		102	12432	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.782	2.782	0.0	0.882	2055859	1.02		107	1587	
449.00 > 99.00	2.782	2.782	0.0	0.882	476298		4.32(1.84-5.53)		1541	
D 18 13C4 PFOS										
503.00 > 80.00	3.153	3.136	0.017	1.140	4766360	2.00		83.5	3904	
D 19 13C5 PFNA										
468.00 > 423.00	3.153	3.136	0.017	1.140	5474124	2.50		99.9	5228	
20 Perfluorononanoic acid										
463.00 > 419.00	3.153	3.153	0.0	1.000	2402211	1.04		104	502	
463.00 > 169.00	3.153	3.153	0.0	1.000	423980		5.67(2.68-8.03)		903	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.153	3.153	0.0	1.000	1971943	0.9220		99.4	946	
499.00 > 99.00	3.153	3.153	0.0	1.000	485936		4.06(2.04-6.12)		927	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.367	3.367	0.0	1.068	2022655	0.8588		92.1	2068	
D 26 M2-8:2FTS										
529.00 > 81.00	3.496	3.482	0.014	1.264	92259	2.68		112	428	
D 21 13C8 FOSA										
506.00 > 78.00	3.496	3.482	0.014	1.264	2962094	2.07		83.0	4199	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.496	3.496	0.0	1.109	1407975	1.08		112	1409	
549.00 > 99.00	3.496	3.496	0.0	1.109	242754		5.80(3.02-9.05)		1450	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.496	3.496	0.0	1.000	3893900	1.07		107	2960	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.496	3.496	0.0	1.000	496820	0.9200		96.0	1183	
D 23 13C2 PFDA										
515.00 > 470.00	3.512	3.498	0.014	1.270	5461381	2.49		99.5	7821	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.512	3.512	0.0	1.000	2572476	0.9580		95.8	538	
513.00 > 169.00	3.512	3.512	0.0	1.000	174016		14.78(7.12-21.35)		294	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.669	3.657	0.012	1.326	1134367	2.66		106	2015	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.669	3.669	0.0	1.000	480445	1.05		105	302	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.823	3.823	0.0	1.213	1579876	0.9506		98.6	2305	
599.00 > 99.00	3.823	3.823	0.0	1.213	336918		4.69(2.14-6.43)		909	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.823	3.825	-0.002	1.382	984870	2.81		112	1509	
D 30 13C2 PFUnA										
565.00 > 520.00	3.839	3.825	0.014	1.388	4069072	2.29		91.8	4845	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.839	3.839	0.0	1.000	1354153	0.9881		98.8	199	
563.00 > 169.00	3.839	3.839	0.0	1.000	134274		10.08(5.24-15.72)		419	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.839	3.839	0.0	1.004	371080	1.05		105	877	
35 MeFOSA										
512.00 > 169.00	3.992	3.992	0.0		540400	NC			907	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.992	3.992	0.0	1.266	2558555	1.03		109	4358	
D 36 13C2 PFDoA										
615.00 > 570.00	4.140	4.125	0.015	1.496	4628405	2.42		96.8	5696	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.140	4.140	0.0	1.000	2028015	1.11		111	390	
613.00 > 169.00	4.140	4.140	0.0	1.000	233091		8.70(4.68-14.05)		739	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.140	4.140	0.0	1.184	265396	0.9003		93.4	1002	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.374	4.374	0.0	1.387	151466	0.9444		97.6	770	
699.00 > 99.00	4.374	4.374	0.0	1.387	274885		0.55(0.28-0.83)		943	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.404	4.404	0.0	1.064	1434442	1.03		103	357	
663.00 > 169.00	4.404	4.404	0.0	1.064	243453		5.89(3.09-9.27)		839	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.645	4.630	0.015	1.679	3016311	2.47		98.8	6700	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.645	4.645	0.0	1.000	193081	0.99		99.3	929	
713.00 > 219.00	4.628	4.645	-0.017	0.996	140937		1.37(0.70-2.09)		500	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.059	5.042	0.017	1.829	2732772	2.44		97.6	5640	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.059	5.059	0.0	1.000	1009485	1.00		99.5	81.9	
813.00 > 169.00	5.059	5.059	0.0	1.000	180739		5.59(2.77-8.32)		662	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.404	5.404	0.0	1.068	734677	0.9467		94.7	358	
913.00 > 169.00	5.404	5.404	0.0	1.068	134360		5.47(2.55-7.64)		1118	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00006 Amount Added: 1.00 Units: mL

Report Date: 08-Aug-2018 13:31:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_005.d

Injection Date: 08-Aug-2018 07:59:14 Instrument ID: A9

Lims ID: CCV L4

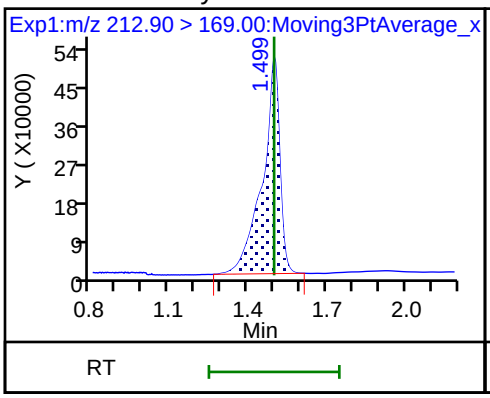
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 13 Worklist Smp#: 1

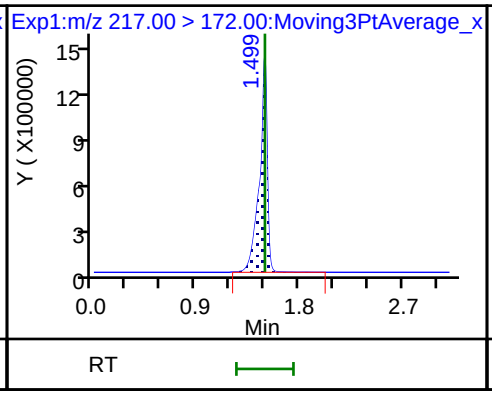
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

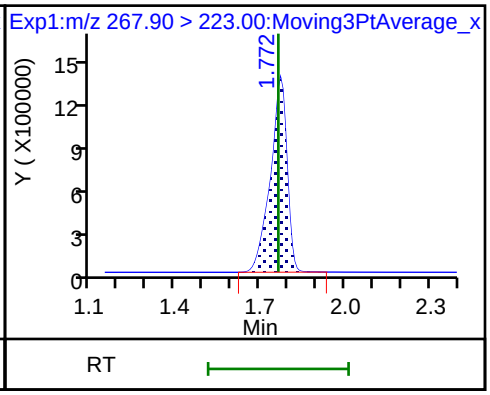
2 Perfluorobutyric acid



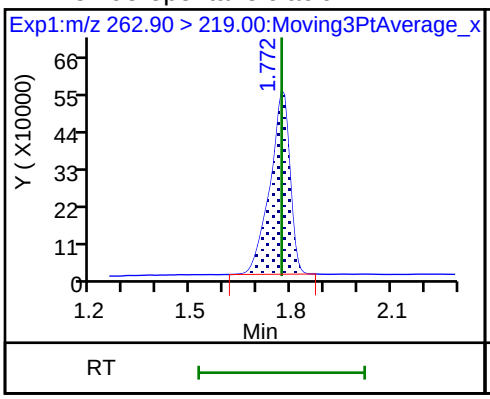
D 1 13C4 PFBA



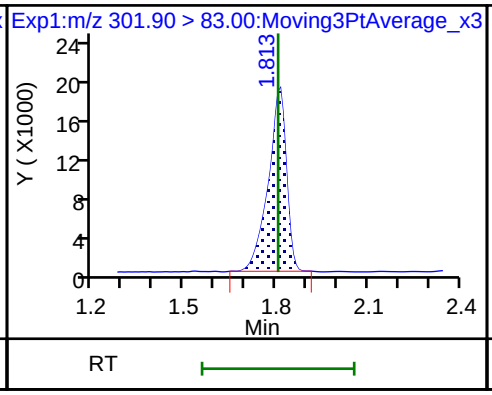
D 3 13C5-PFPeA



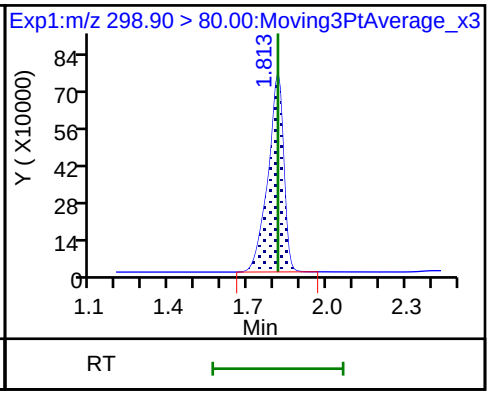
4 Perfluoropentanoic acid



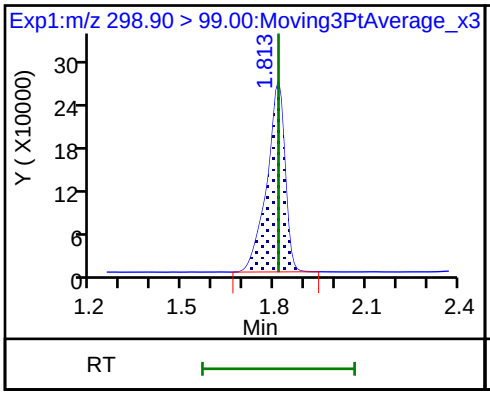
D 47 13C3-PFBS



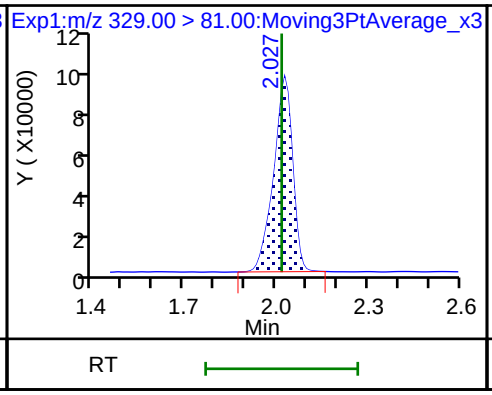
5 Perfluorobutanesulfonic acid



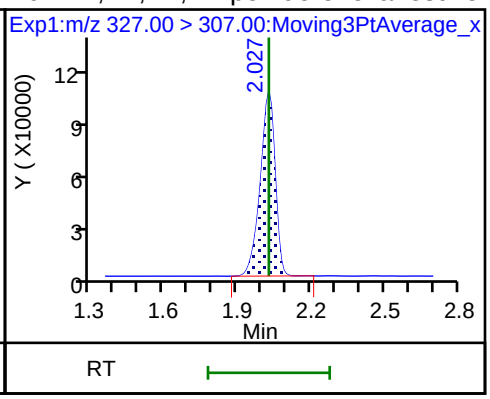
5 Perfluorobutanesulfonic acid



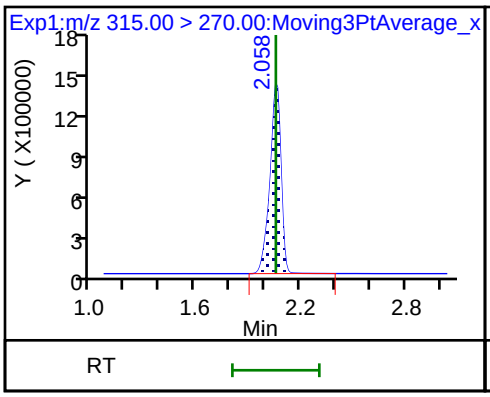
D 60 M2-4:2FTS



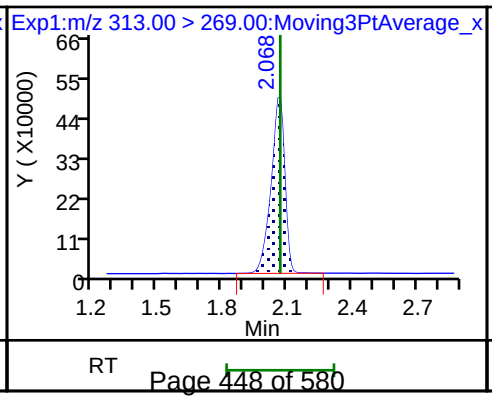
61 1H,1H,2H,2H-perfluorohexanesulfoni



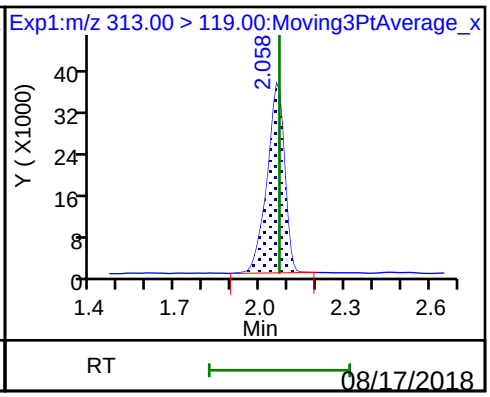
D 7 13C2 PFHxA



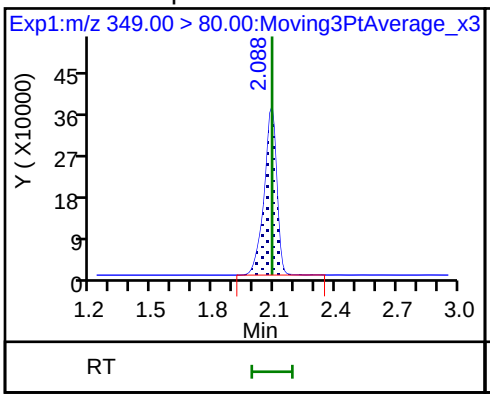
6 Perfluorohexanoic acid



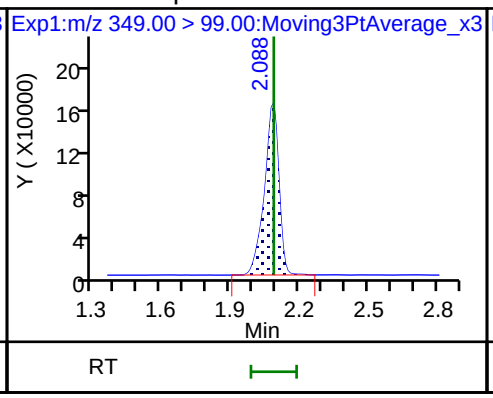
6 Perfluorohexanoic acid



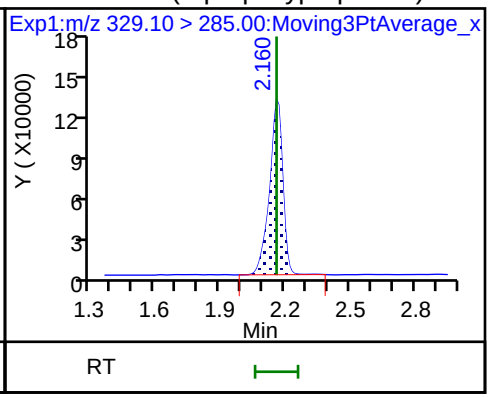
70 Perfluoropentanesulfonic acid



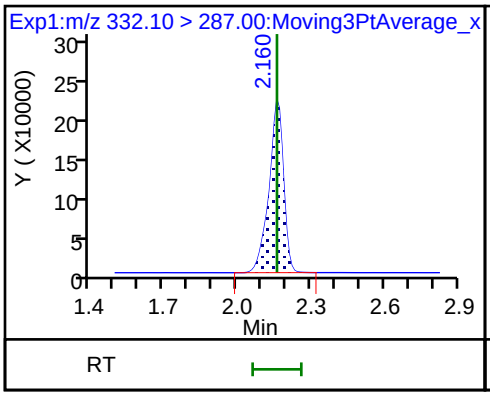
70 Perfluoropentanesulfonic acid



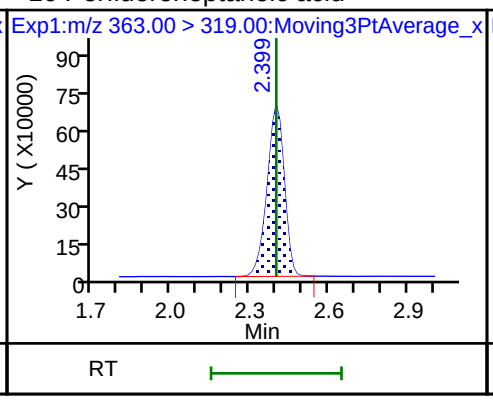
67 Perfluoro(2-propoxypropanoic) acid



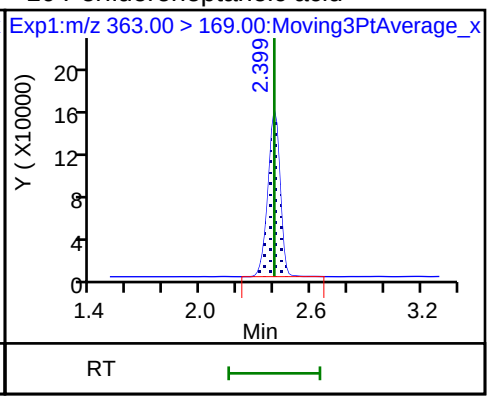
D 64 13C3 HFPO-DA



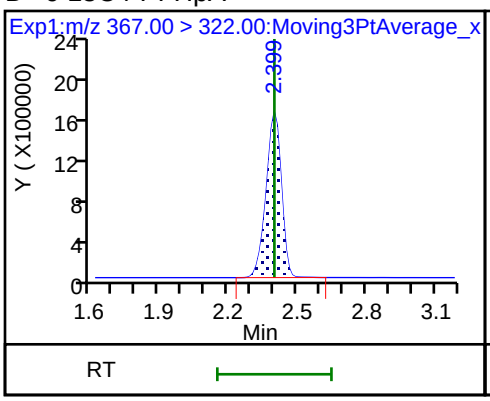
10 Perfluoroheptanoic acid



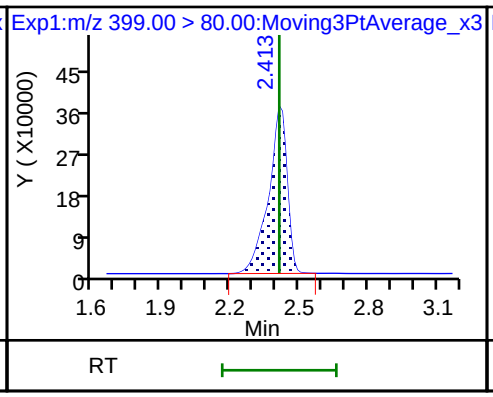
10 Perfluoroheptanoic acid



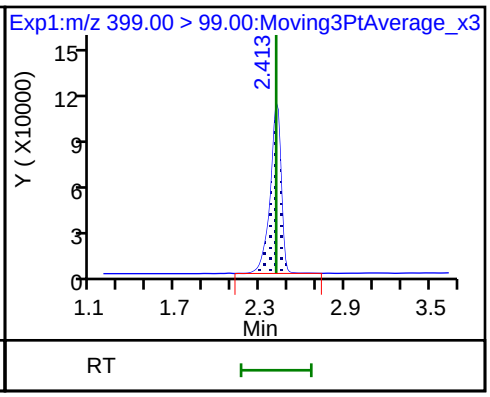
D 9 13C4-PFHpA



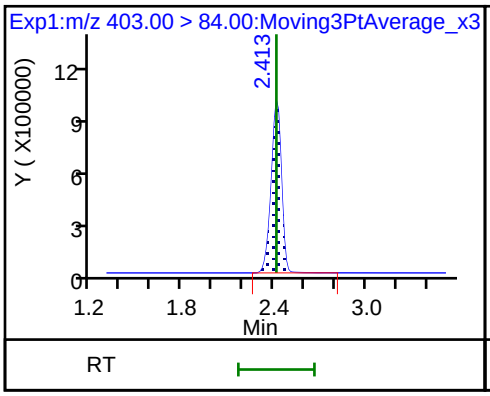
8 Perfluorohexanesulfonic acid



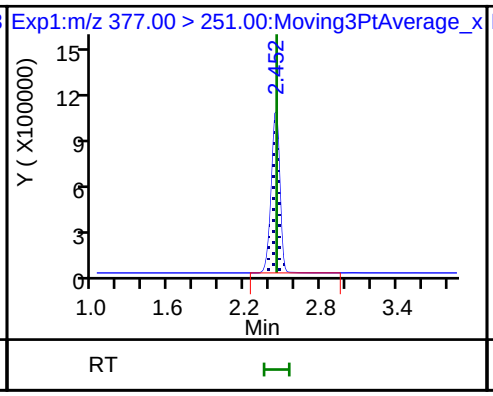
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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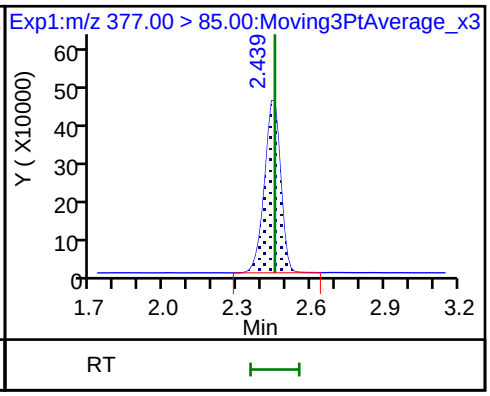
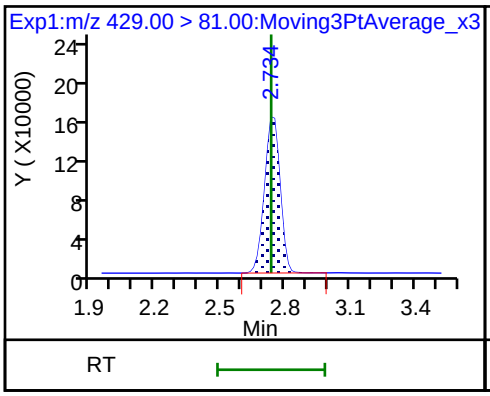
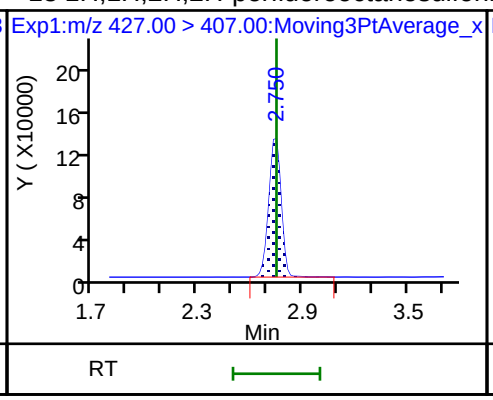


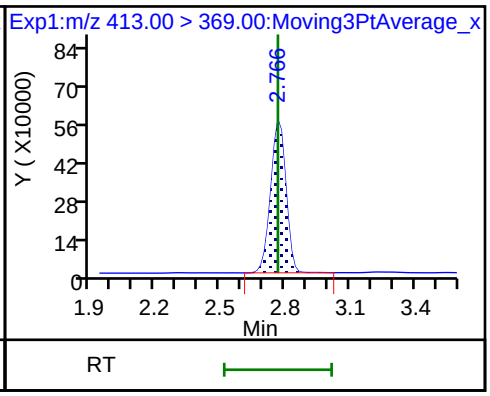
D 12 M2-6:2FTS



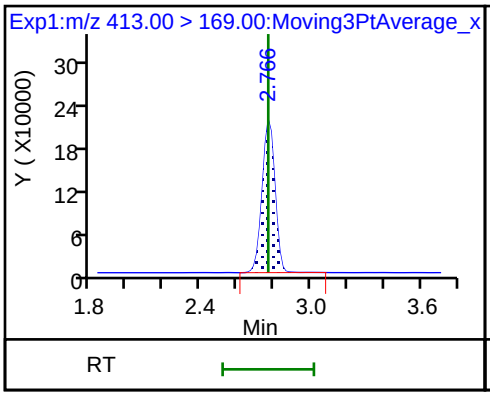
13 1H,1H,2H,2H-perfluorooctanesulfoni



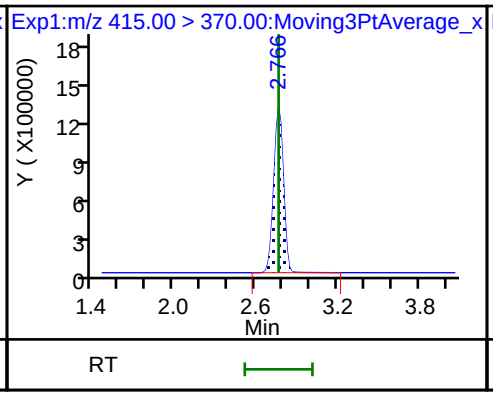
15 Perfluorooctanoic acid



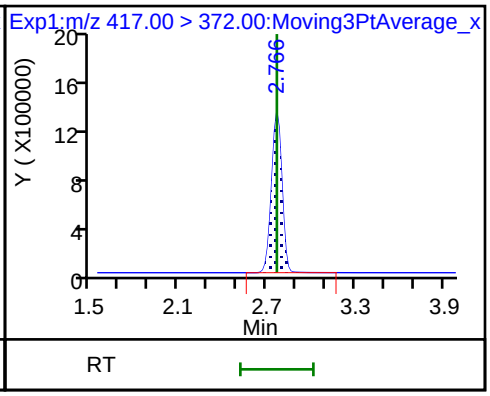
15 Perfluorooctanoic acid



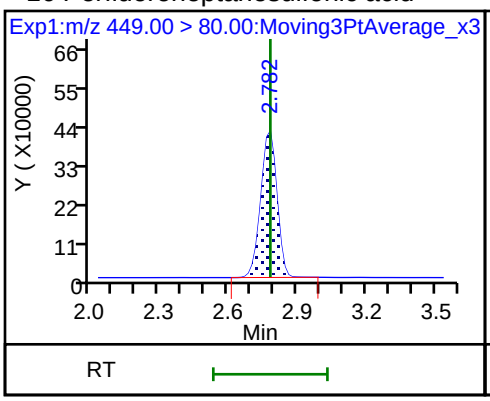
* 62 13C2-PFOA



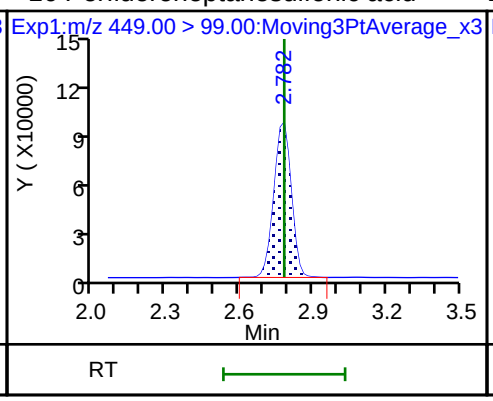
D 14 13C4 PFOA



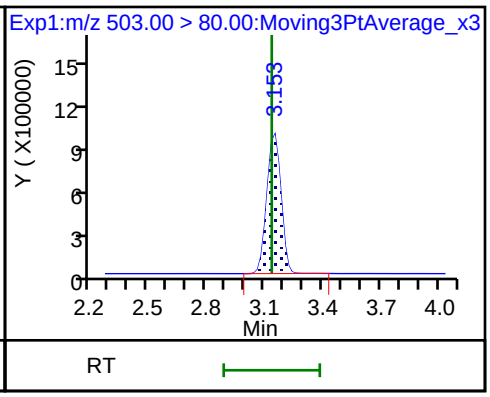
16 Perfluoroheptanesulfonic acid



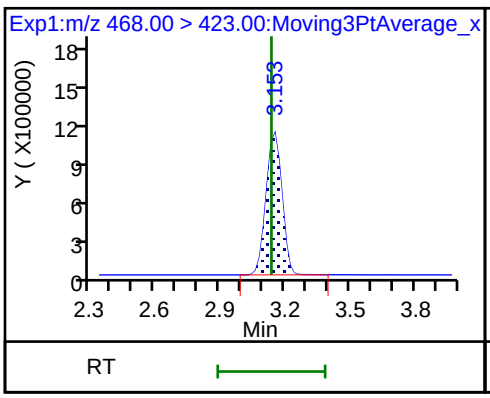
16 Perfluoroheptanesulfonic acid



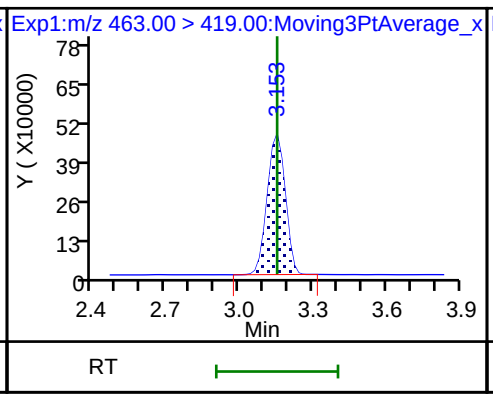
D 18 13C4 PFOS



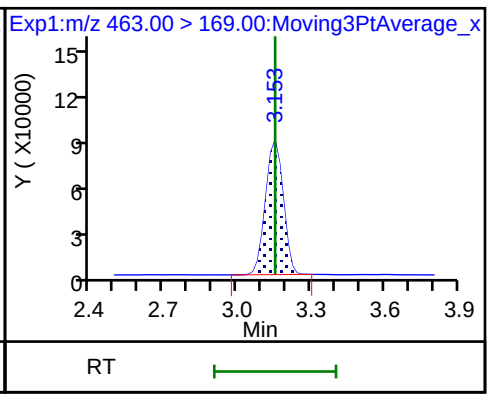
D 19 13C5 PFNA



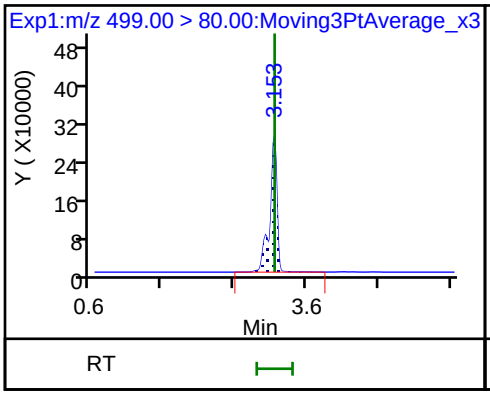
20 Perfluorononanoic acid



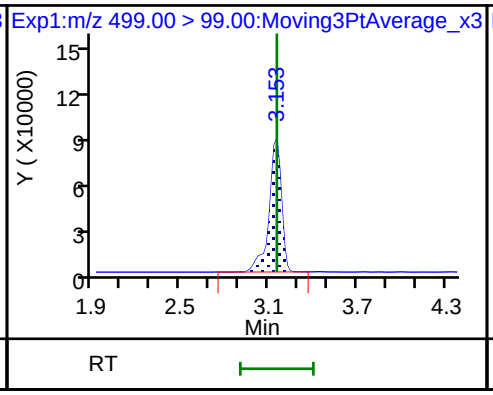
20 Perfluorononanoic acid



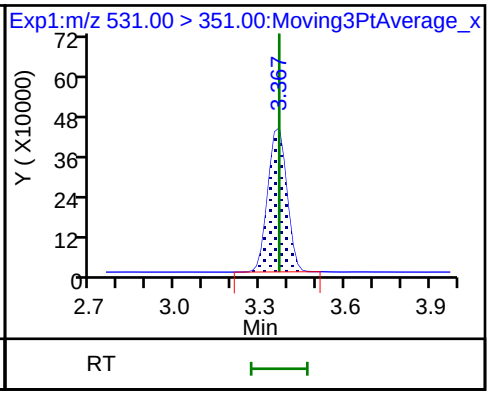
17 Perfluorooctane sulfonic acid



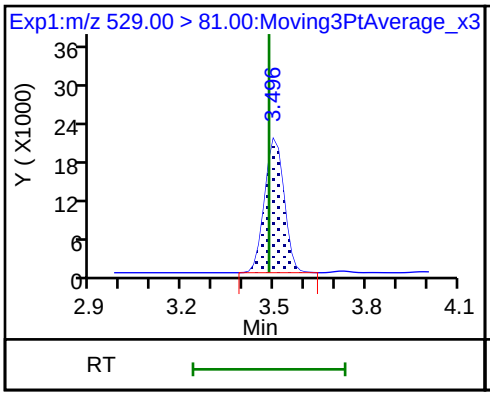
17 Perfluorooctane sulfonic acid



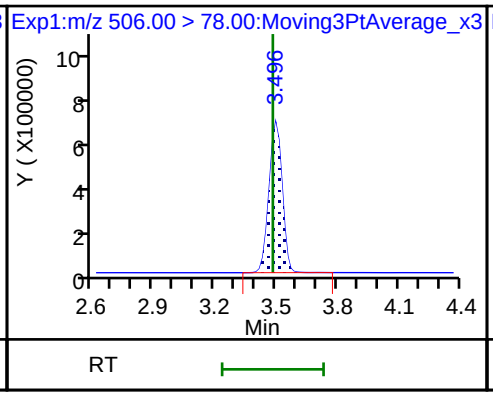
69 9-Chlorohexadecafluoro-3-oxanonane



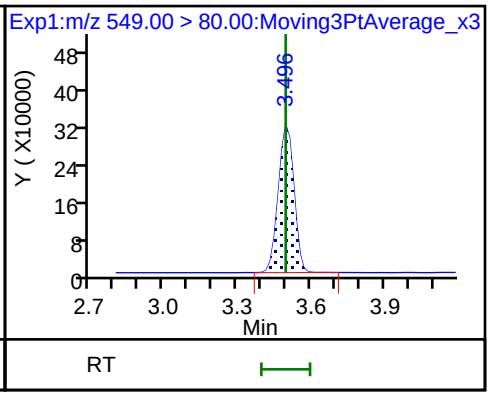
D 26 M2-8:2FTS



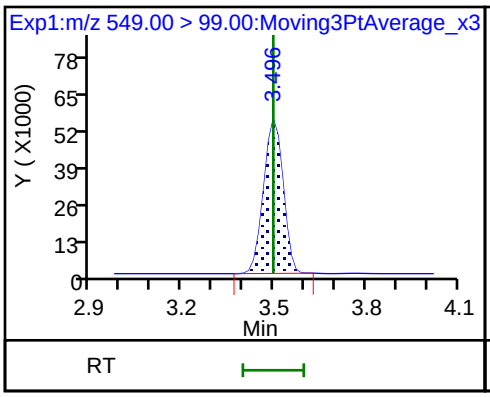
D 21 13C8 FOSA



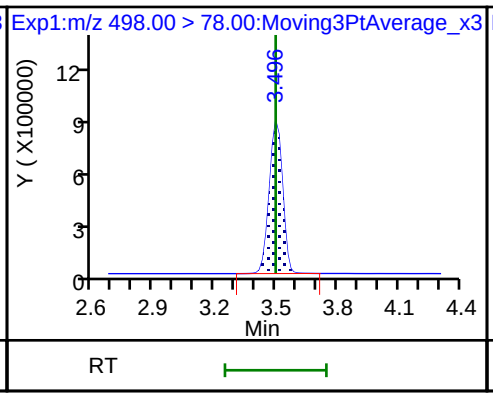
68 Perfluorononanesulfonic acid



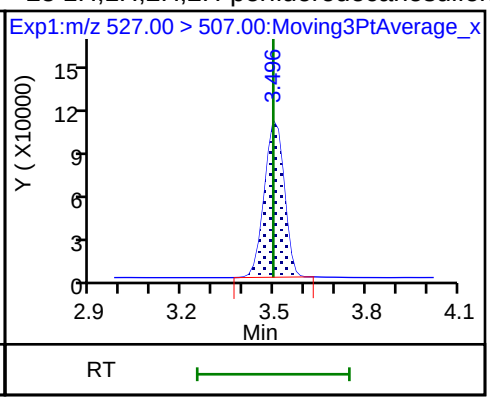
68 Perfluorononanesulfonic acid



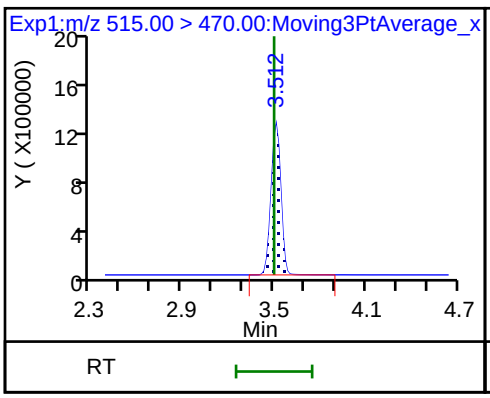
22 Perfluorooctane Sulfonamide



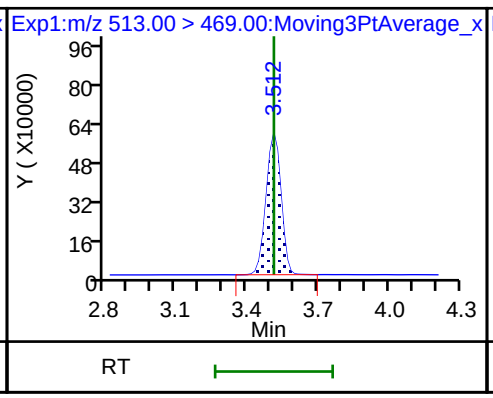
25 1H,1H,2H,2H-perfluorodecanesulfoni



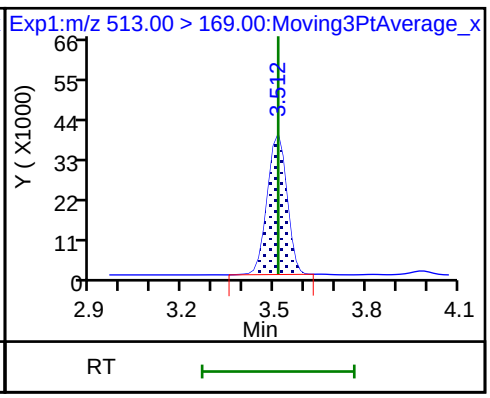
D 23 13C2 PFDA



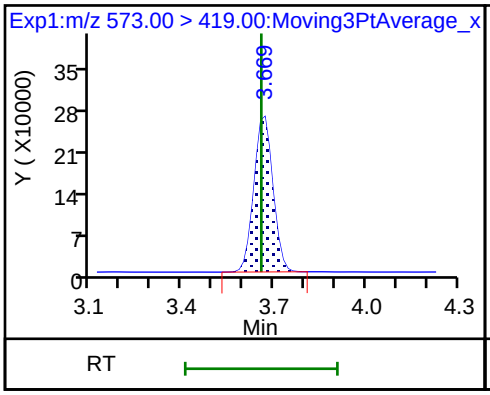
24 Perfluorodecanoic acid



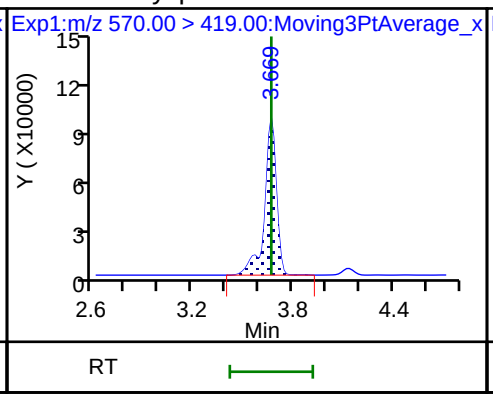
24 Perfluorodecanoic acid



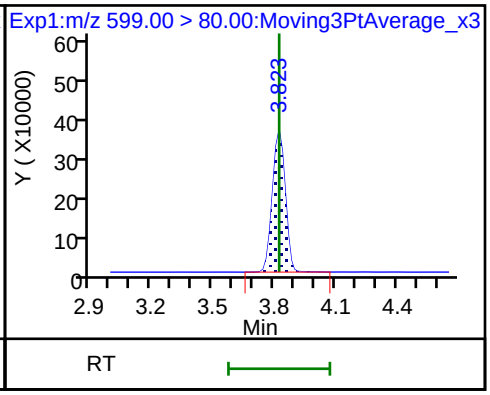
D 27 d3-NMeFOSAA



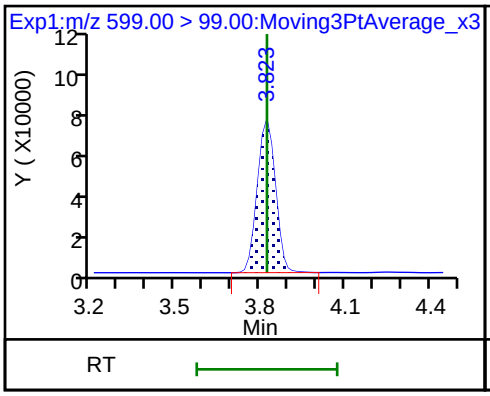
28 N-methyl perfluorooctane sulfonami



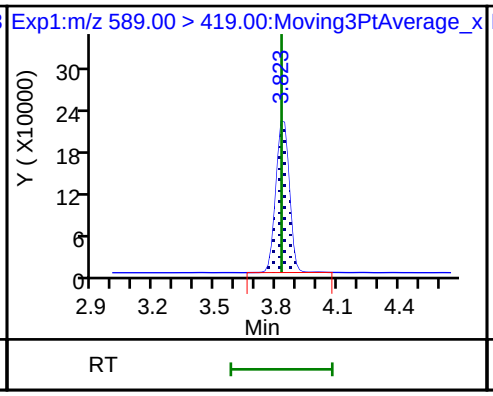
29 Perfluorodecane Sulfonic acid



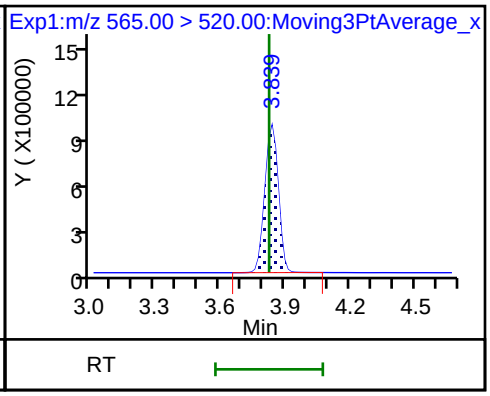
29 Perfluorodecane Sulfonic acid



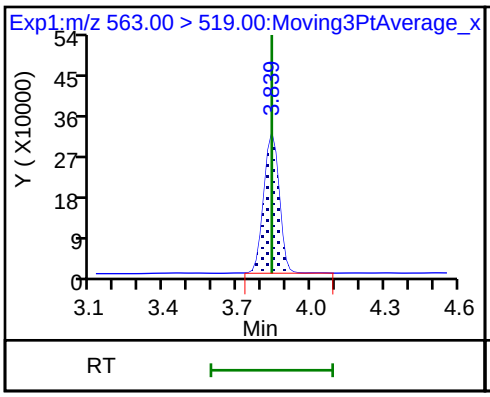
D 32 d5-NEtFOSAA



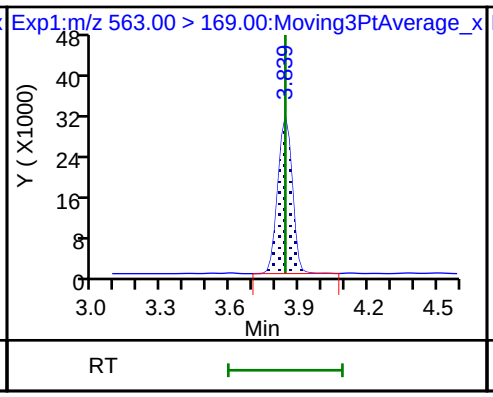
D 30 13C2 PFUnA



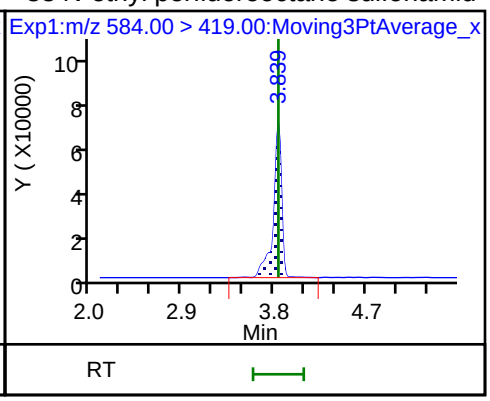
31 Perfluoroundecanoic acid



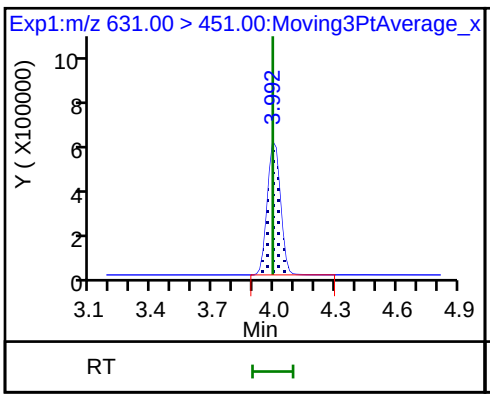
31 Perfluoroundecanoic acid



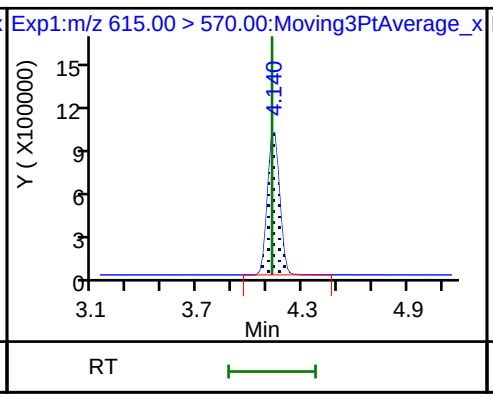
33 N-ethyl perfluorooctane sulfonamid



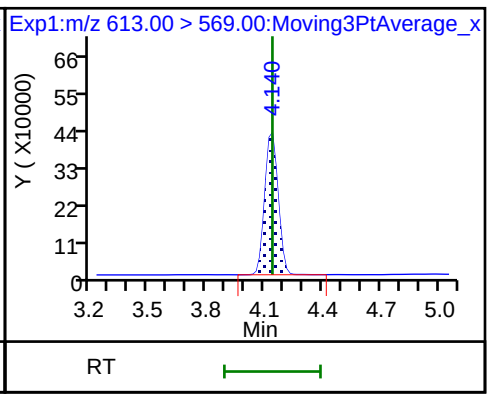
66 11-Chloroeicosafluoro-3-oxaundecan



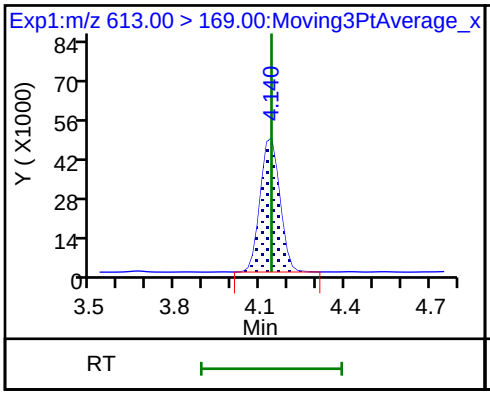
D 36 13C2 PFDoA



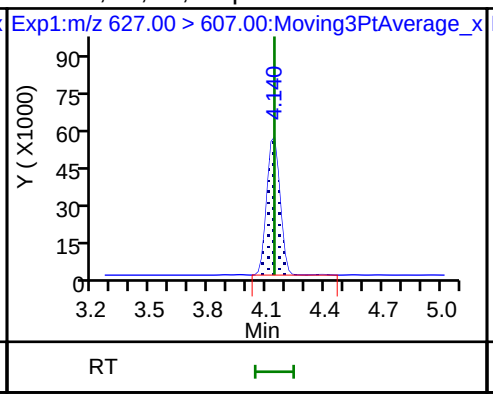
37 Perfluorododecanoic acid



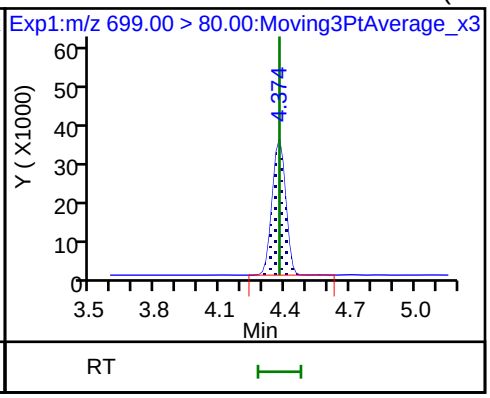
37 Perfluorododecanoic acid



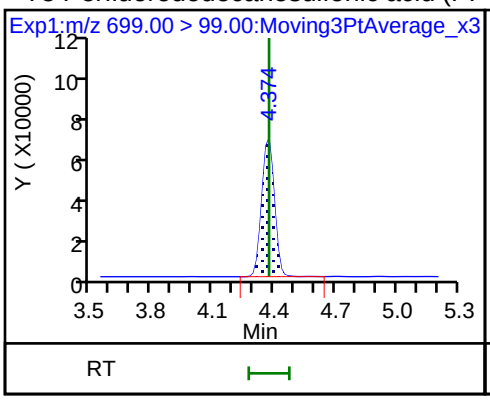
74 1H,1H,2H,2H-perfluorododecanesulfo



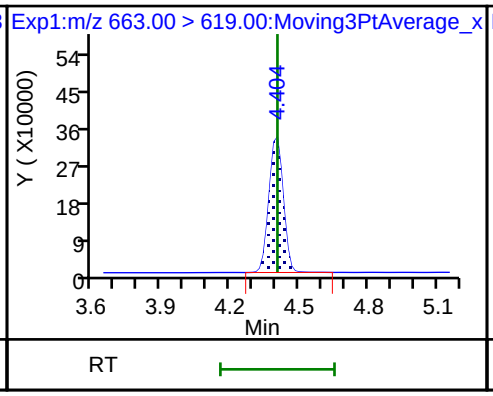
75 Perfluorododecanesulfonic acid (PF



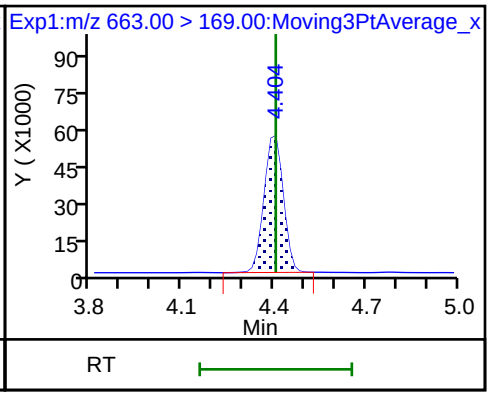
75 Perfluorododecanesulfonic acid (PF



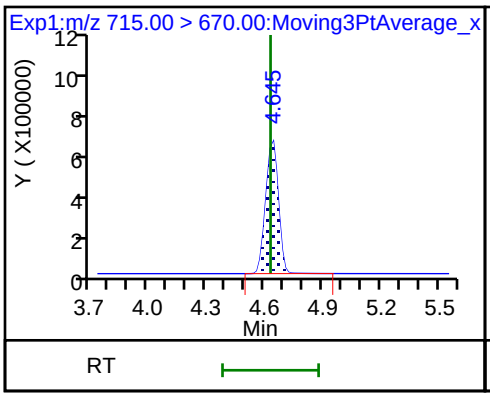
41 Perfluorotridecanoic acid



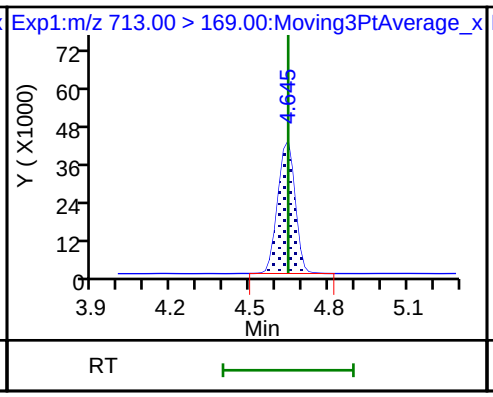
41 Perfluorotridecanoic acid



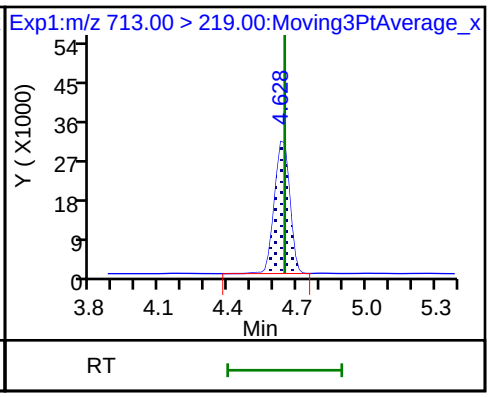
D 43 13C2-PFTeDA



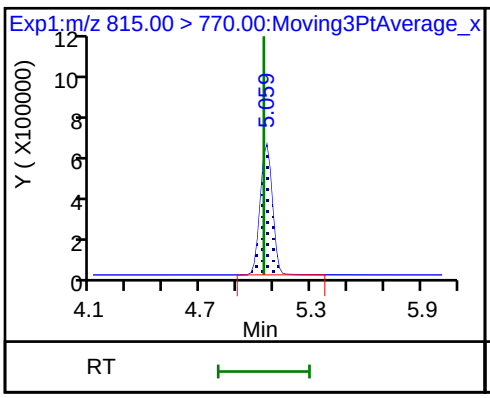
42 Perfluorotetradecanoic acid



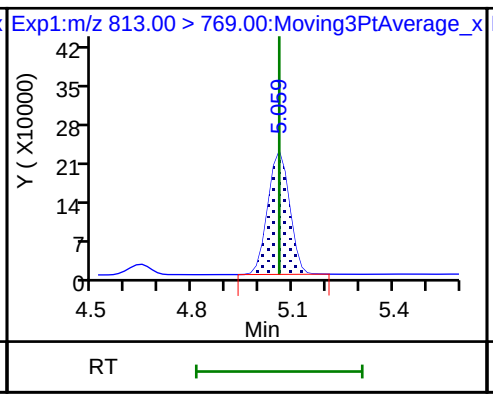
42 Perfluorotetradecanoic acid



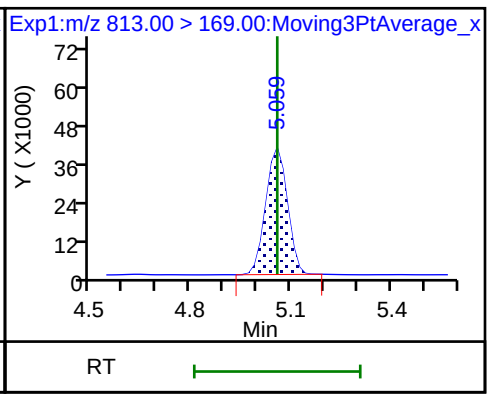
D 44 13C2-PFHxDA



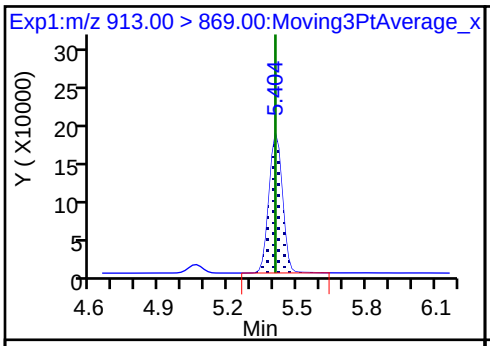
45 Perfluorohexadecanoic acid



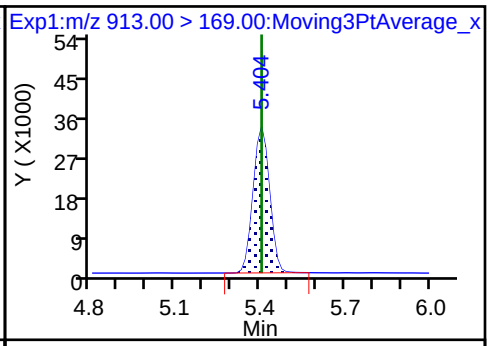
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-238718/12 Calibration Date: 08/08/2018 09:21

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.08LLA_016.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9293	0.9353		2.52	2.50	0.6	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.020	1.010		2.48	2.50	-1.0	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	113.4		2.43	2.21	9.7	50.0
4:2 FTS	AveID	17.02	13.19		1.81	2.34	-22.5	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9355	0.9229		2.47	2.50	-1.3	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	48.91	52.97		2.54	2.35	8.3	50.0
HFPO-DA (GenX)	AveID	2.205	1.666		1.89	2.50	-24.4	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.038	1.063		2.56	2.50	2.4	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.279	1.249		2.22	2.28	-2.4	40.0
6:2 FTS	AveID	2.137	2.100		2.33	2.37	-1.7	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.011	1.022		2.41	2.38	1.2	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.096	1.037		2.37	2.50	-5.4	40.0
Perfluorononanoic acid (PFNA)	AveID	1.055	1.053		2.50	2.50	-0.1	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.072	1.016		2.20	2.32	-5.3	40.0
F-53B Major	AveID	1.181	1.048		2.07	2.33	-11.3	50.0
8:2 FTS	AveID	14.02	13.71		2.34	2.40	-2.2	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6548	0.6859		2.51	2.40	4.7	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	3.071	3.128		2.55	2.50	1.8	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.229	1.121		2.28	2.50	-8.8	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.011	0.9711		2.40	2.50	-3.9	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8334	0.8163		2.36	2.41	-2.1	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8969	0.9721		2.71	2.50	8.4	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8420	0.7894		2.34	2.50	-6.3	40.0
F-53B Minor	AveID	1.251	1.222		2.30	2.36	-2.4	50.0
10:2 FTS	AveID	7.652	7.257		2.29	2.41	-5.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9834	1.031		2.62	2.50	4.9	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0804	0.0741		2.23	2.42	-7.8	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.7505	0.7687		2.56	2.50	2.4	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1611	0.1590		2.47	2.50	-1.3	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9181		2.51	2.50	0.6	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Lab Sample ID: CCV 320-238718/12 Calibration Date: 08/08/2018 09:21

Instrument ID: A9 Calib Start Date: 08/03/2018 16:12

GC Column: Acquity ID: 2.10(mm) Calib End Date: 08/03/2018 16:57

Lab File ID: 2018.08.08LLA_016.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7099	0.6686		2.35	2.50	-5.8	50.0
13C4 PFBA	Ave	1.117	1.035		2.32	2.50	-7.4	50.0
13C5 PFPeA	Ave	0.999	0.8901		2.23	2.50	-10.9	50.0
13C3-PFBS	Ave	0.0155	0.0127		1.91	2.33	-18.0	50.0
M2-4:2FTS	Ave	0.1052	0.0679		1.51	2.34	-35.5	50.0
13C2 PFHxA	Ave	1.037	0.9328		2.25	2.50	-10.0	50.0
13C3 HFPO-DA	Ave	0.0886	0.1189		3.35	2.50	34.2	50.0
13C4-PFHpA	Ave	1.177	1.184		2.51	2.50	0.5	50.0
18O2 PFHxS	Ave	0.8862	0.7694		2.05	2.37	-13.2	50.0
M2-6:2FTS	Ave	0.1144	0.1254		2.60	2.38	9.6	40.0
13C4 PFOA	Ave	0.9865	1.029		2.61	2.50	4.3	50.0
13C4 PFOS	Ave	0.9223	0.8514		2.21	2.39	-7.7	50.0
13C5 PFNA	Ave	0.8463	0.9230		2.73	2.50	9.1	50.0
13C8 FOSA	Ave	0.5512	0.4820		2.19	2.50	-12.6	50.0
13C2 PFDA	Ave	0.8474	0.8622		2.54	2.50	1.8	50.0
M2-8:2FTS	Ave	0.0133	0.0146		2.63	2.40	9.8	40.0
d3-NMeFOSAA	Ave	0.1647	0.1980		3.00	2.50	20.2	50.0
13C2 PFUnA	Ave	0.6849	0.6959		2.54	2.50	1.6	50.0
d5-NEtFOSAA	Ave	0.1353	0.1551		2.87	2.50	14.6	50.0
13C2 PFDoA	Ave	0.7384	0.7225		2.45	2.50	-2.2	50.0
13C2-PFTeDA	Ave	0.4715	0.4956		2.63	2.50	5.1	50.0
13C2-PFHxDA	Ave	0.4325	0.4347		2.51	2.50	0.5	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_016.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 08-Aug-2018 09:21:49 ALS Bottle#: 14 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub3

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 13:32:45 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 13:32:36

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.516	1.516	0.0	0.539	6352416	2.32		92.6	3636	
2 Perfluorobutyric acid										
212.90 > 169.00	1.523	1.523	0.0	1.004	5941564	2.52		101	204	
D 3 13C5-PFPeA										
267.90 > 223.00	1.805	1.805	0.0	0.641	5465544	2.23		89.1	8523	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.805	1.805	0.0	1.000	5521085	2.48		99.0	277	
D 47 13C3-PFBS										
301.90 > 83.00	1.838	1.838	0.0	0.653	72467	1.91		82.0	443	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.847	1.847	0.0	1.005	7808511	2.43		110	2617	
298.90 > 99.00	1.847	1.847	0.0	1.005	2707168		2.88(1.35-4.05)		1451	
D 60 M2-4:2FTS										
329.00 > 81.00	2.058	2.058	0.0	0.731	389100	1.51		64.5	446	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.058	2.058	0.0	1.119	959851	1.81		77.5	1885	
D 7 13C2 PFHxA										
315.00 > 270.00	2.098	2.098	0.0	0.746	5727557	2.25		90.0	6777	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.098	2.098	0.0	1.000	5286217	2.47		98.7	1282	
313.00 > 119.00	2.098	2.098	0.0	1.000	386351		13.68(6.96-20.87)		557	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.119	2.119	0.0	1.153	3871328	2.54		108	6349	
349.00 > 99.00	2.119	2.119	0.0	1.153	1757935		2.20(1.15-3.45)		2176	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.201	2.201	0.0	0.782	730260	3.35		134	2571	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.201	2.201	0.0	1.000	1216711	1.89		75.6	852	
D 9 13C4-PFHpA										
367.00 > 322.00	2.439	2.439	0.0	0.867	7267141	2.51		101	13856	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.439	2.439	0.0	1.000	7723595	2.56		102	972	
363.00 > 169.00	2.439	2.439	0.0	1.000	1708403		4.52(2.17-6.52)		2059	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.452	2.452	0.0	0.995	5369795	2.22		97.6	4395	
399.00 > 99.00	2.465	2.452	0.013	1.000	1441379		3.73(1.90-5.70)		687	
D 11 18O2 PFHxS										
403.00 > 84.00	2.465	2.465	0.0	0.876	4469284	2.05		86.8	10135	
65 ADONA										
377.00 > 251.00	2.491	2.491	0.0	0.781	11345037	2.70		108	13397	
377.00 > 85.00	2.491	2.491	0.0	0.781	5057923		2.24(1.05-3.16)		3012	
D 12 M2-6:2FTS										
429.00 > 81.00	2.782	2.782	0.0	0.989	731577	2.60		110	1125	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.782	2.782	0.0	1.000	1532840	2.33		98.3	2947	
D 14 13C4 PFOA										
417.00 > 372.00	2.814	2.814	0.0	1.000	6315490	2.61		104	9450	
* 62 13C2-PFOA										
415.00 > 370.00	2.814	2.814	0.0		6140146	2.50			11759	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.814	2.814	0.0	1.000	6552528	2.37		94.6	783	
413.00 > 169.00	2.814	2.814	0.0	1.000	2411349		2.72(1.36-4.08)		2798	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.814	2.814	0.0	0.882	5088346	2.41		101	4285	
449.00 > 99.00	2.814	2.814	0.0	0.882	1184052		4.30(1.84-5.53)		2879	
D 18 13C4 PFOS										
503.00 > 80.00	3.190	3.190	0.0	1.134	4997919	2.21		92.3	4679	
D 19 13C5 PFNA										
468.00 > 423.00	3.190	3.190	0.0	1.134	5667256	2.73		109	6277	
20 Perfluorononanoic acid										
463.00 > 419.00	3.190	3.190	0.0	1.000	5970002	2.50		99.9	1192	
463.00 > 169.00	3.190	3.190	0.0	1.000	1066696		5.60(2.68-8.03)		1994	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.190	3.190	0.0	1.000	4929395	2.20		94.7	3063	
499.00 > 99.00	3.190	3.190	0.0	1.000	1179675		4.18(2.04-6.12)		1383	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.400	3.400	0.0	1.066	5105211	2.07		88.7	4611	
D 21 13C8 FOSA										
506.00 > 78.00	3.527	3.527	0.0	1.254	2959548	2.19		87.4	4498	
D 26 M2-8:2FTS										
529.00 > 81.00	3.542	3.542	0.0	1.259	85838	2.63		110	456	
D 23 13C2 PFDA										
515.00 > 470.00	3.542	3.542	0.0	1.259	5294214	2.54		102	4625	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.542	3.542	0.0	1.004	9257559	2.55		102	5273	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.542	3.542	0.0	1.000	1176682	2.34		97.8	4073	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.542	3.542	0.0	1.110	3442179	2.51		105	2915	
549.00 > 99.00	3.542	3.542	0.0	1.110	575478		5.98(3.02-9.05)		2029	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.556	3.556	0.0	1.004	5932476	2.28		91.2	1161	
513.00 > 169.00	3.556	3.556	0.0	1.004	387957		15.29(7.12-21.35)		431	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.697	3.697	0.0	1.314	1215689	3.00		120	874	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.697	3.697	0.0	1.000	1180517	2.40		96.1	616	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.855	3.855	0.0	1.208	4113941	2.36		97.9	5031	
599.00 > 99.00	3.855	3.855	0.0	1.208	820990		5.01(2.14-6.43)		1635	
D 30 13C2 PFUnA										
565.00 > 520.00	3.870	3.870	0.0	1.375	4272626	2.54		102	4721	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.870	3.870	0.0	1.375	952562	2.87		115	2826	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.870	3.870	0.0	1.000	3372585	2.34		93.7	535	
563.00 > 169.00	3.870	3.870	0.0	1.000	354122		9.52(5.24-15.72)		1321	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.870	3.870	0.0	1.000	925986	2.71		108	1711	
35 MeFOSA										
512.00 > 169.00	4.023	4.023	0.0		1299653	NC			1293	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.040	4.040	0.0	1.266	6015557	2.30		97.6	8380	
D 36 13C2 PFDoA										
615.00 > 570.00	4.176	4.176	0.0	1.484	4436278	2.45		97.8	7291	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.176	4.176	0.0	1.000	4574515	2.62		105	891	
613.00 > 169.00	4.176	4.176	0.0	1.000	509935		8.97(4.68-14.05)		1383	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.176	4.176	0.0	1.179	626831	2.29		94.8	1918	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.404	4.404	0.0	1.381	375152	2.23		92.2	1948	
699.00 > 99.00	4.404	4.404	0.0	1.381	690034		0.54(0.28-0.83)		2294	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.435	4.435	0.0	1.062	3409927	2.56		102	801	
663.00 > 169.00	4.435	4.435	0.0	1.062	569705		5.99(3.09-9.27)		1921	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.676	4.676	0.0	1.662	3042739	2.63		105	8109	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.676	4.676	0.0	1.000	483768	2.47		98.7	1724	
713.00 > 219.00	4.660	4.676	-0.016	0.997	332867		1.45(0.70-2.09)		1358	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2-PFHxDA										
815.00 > 770.00	5.092	5.092	0.0	1.810	2669062	2.51		100	4640	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.092	5.092	0.0	1.000	2450524	2.51		101	181	
813.00 > 169.00	5.092	5.092	0.0	1.000	432074		5.67(2.77-8.32)		1626	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.434	5.434	0.0	1.067	1784568	2.35		94.2	818	
913.00 > 169.00	5.434	5.434	0.0	1.067	330522		5.40(2.55-7.64)		2022	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00006 Amount Added: 1.00 Units: mL

Report Date: 08-Aug-2018 13:32:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_016.d

Injection Date: 08-Aug-2018 09:21:49 Instrument ID: A9

Lims ID: CCV L5

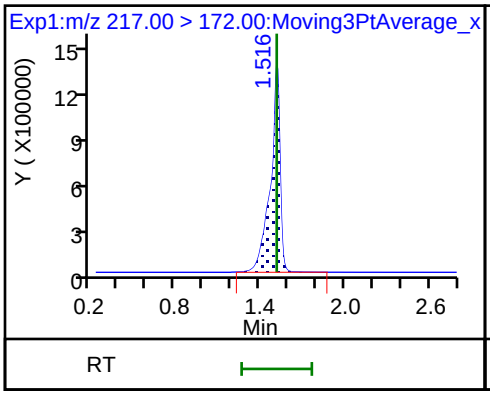
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 14 Worklist Smp#: 12

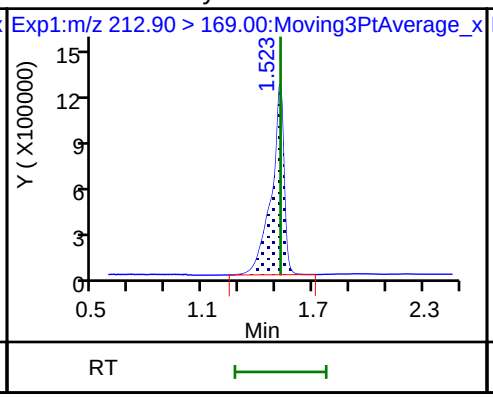
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

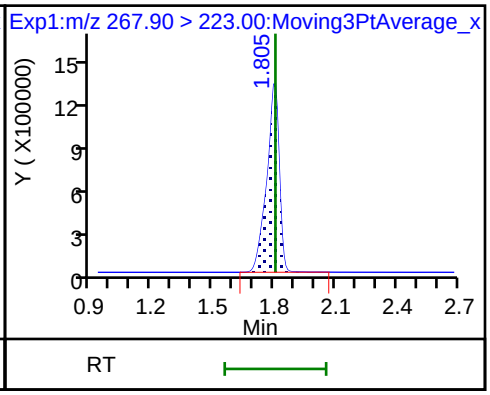
D 1 13C4 PFBA



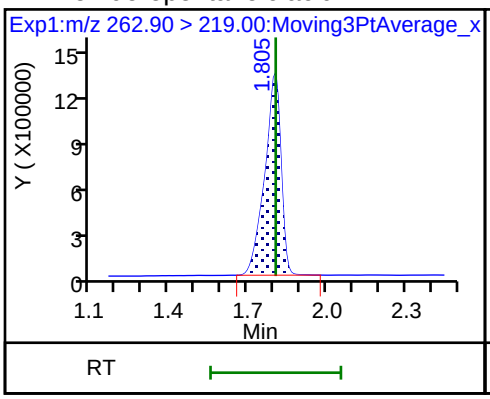
2 Perfluorobutyric acid



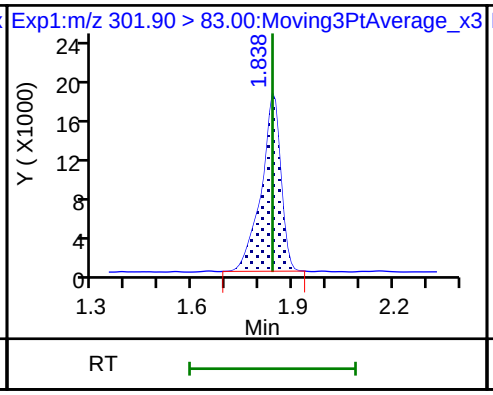
D 3 13C5-PFPeA



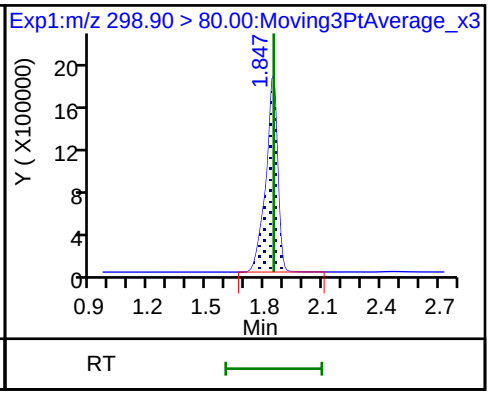
4 Perfluoropentanoic acid



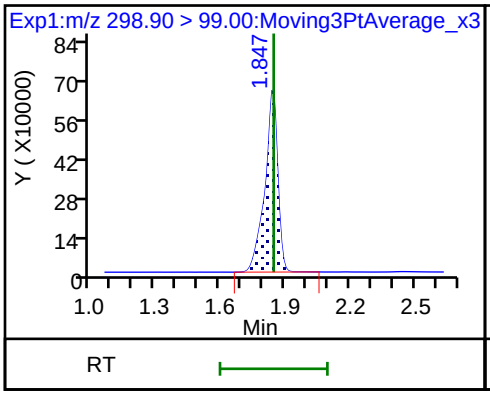
D 47 13C3-PFBS



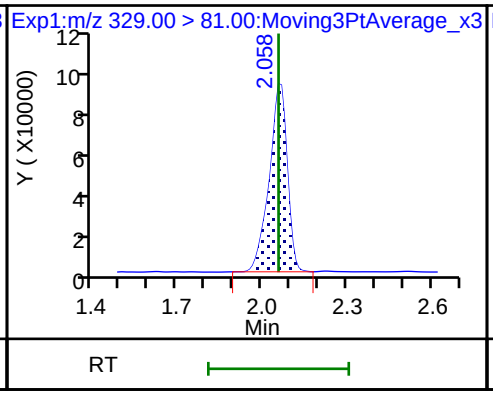
5 Perfluorobutanesulfonic acid



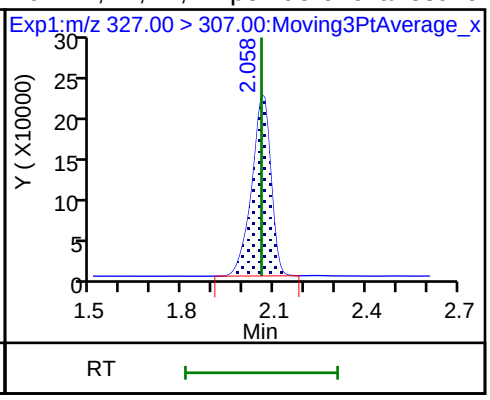
5 Perfluorobutanesulfonic acid



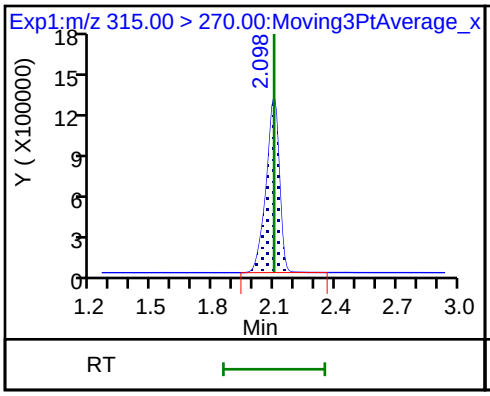
D 60 M2-4:2FTS



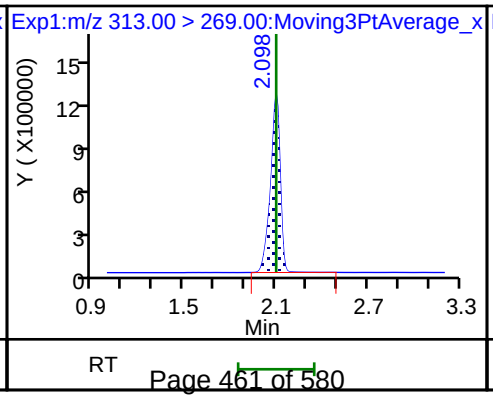
61 1H,1H,2H,2H-perfluorohexanesulfoni



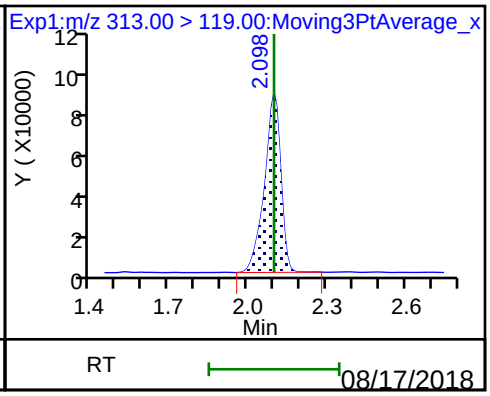
D 7 13C2 PFHxA



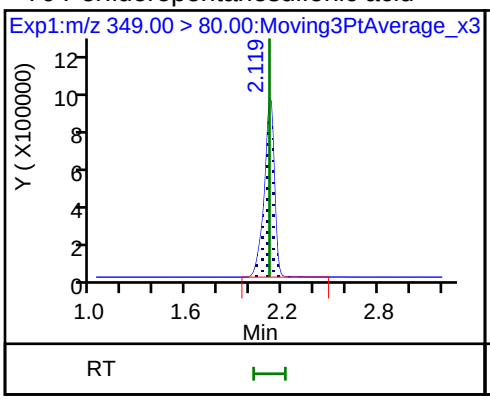
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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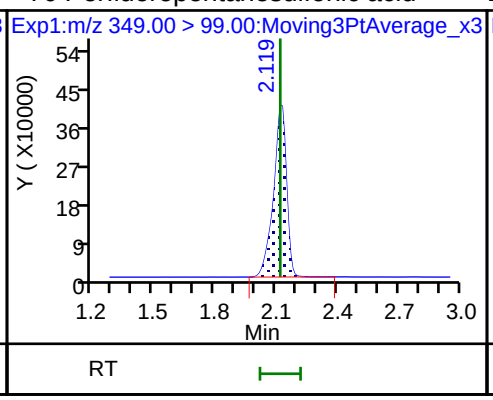
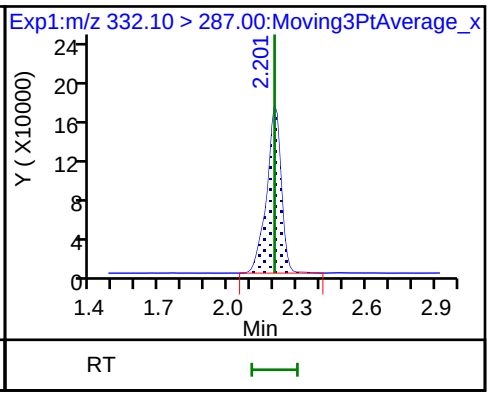
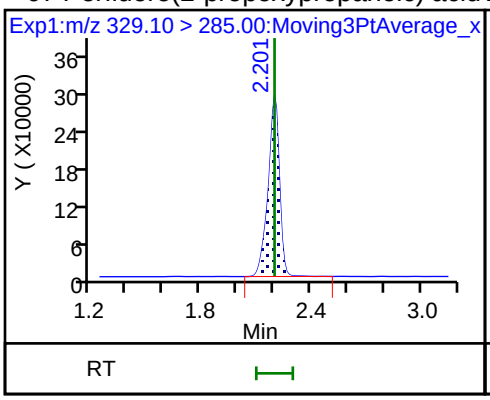


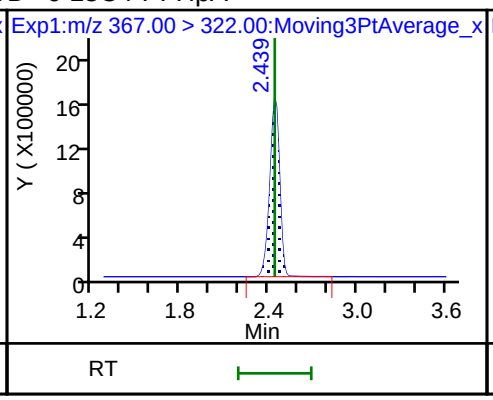
D 64 13C3 HFPO-DA



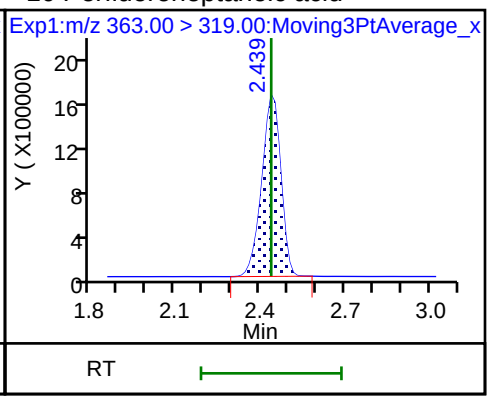
67 Perfluoro(2-propoxypropanoic) acid



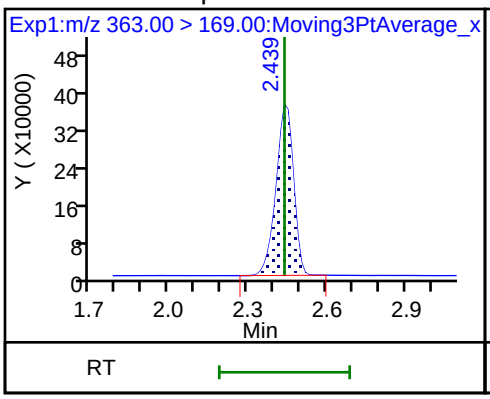
D 9 13C4-PFHpA



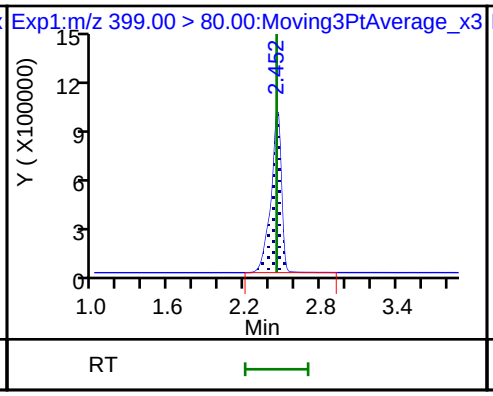
10 Perfluoroheptanoic acid



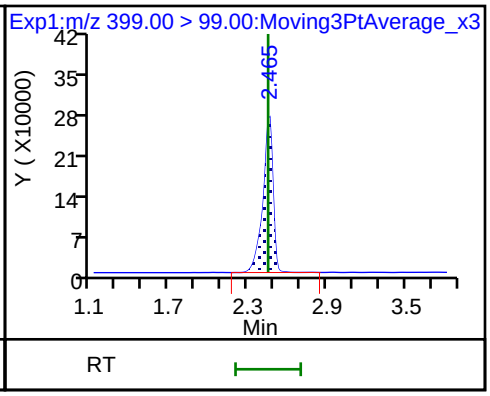
10 Perfluoroheptanoic acid



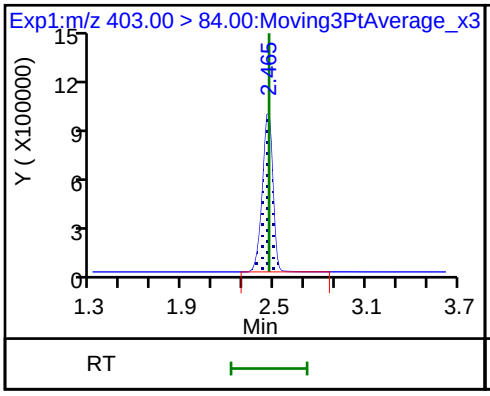
8 Perfluorohexanesulfonic acid



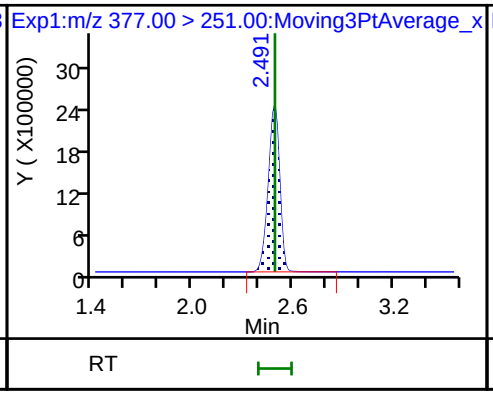
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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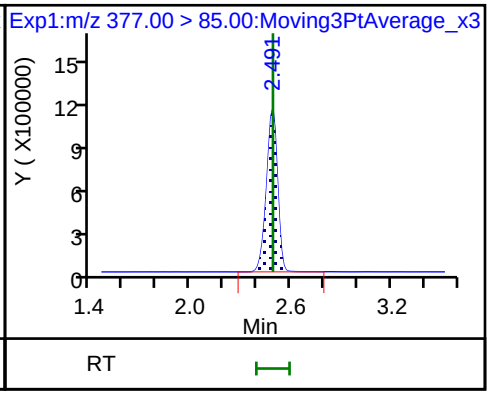
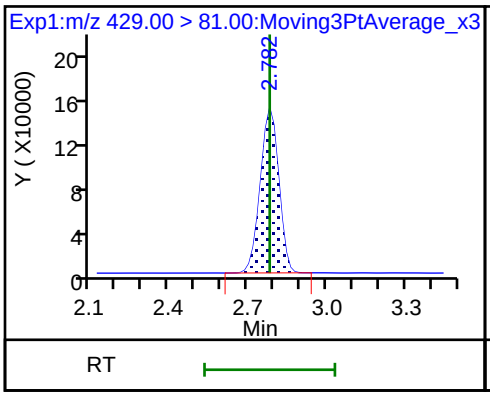
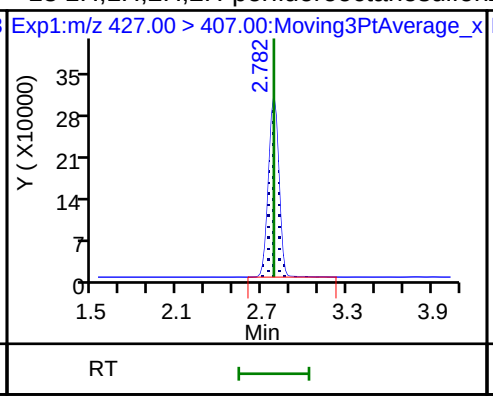


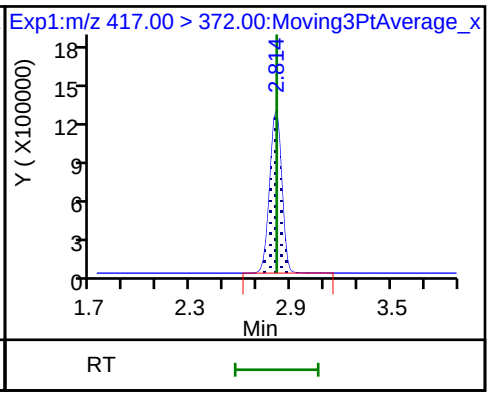
D 12 M2-6:2FTS



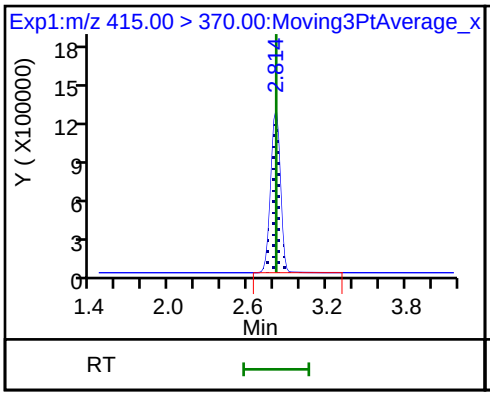
13 1H,1H,2H,2H-perfluorooctanesulfon



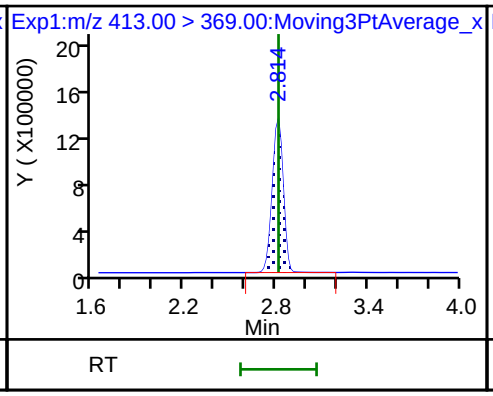
D 14 13C4 PFOA



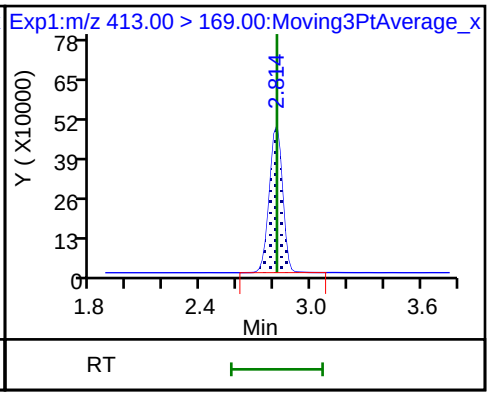
* 62 13C2-PFOA



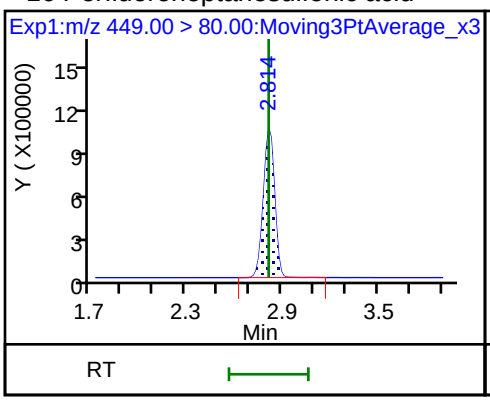
15 Perfluorooctanoic acid



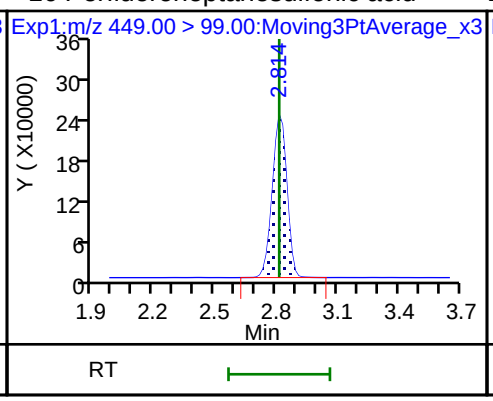
15 Perfluorooctanoic acid



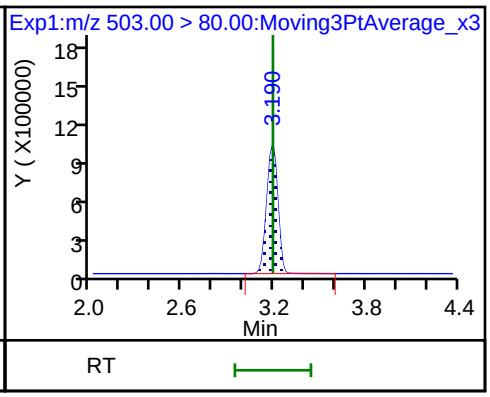
16 Perfluoroheptanesulfonic acid



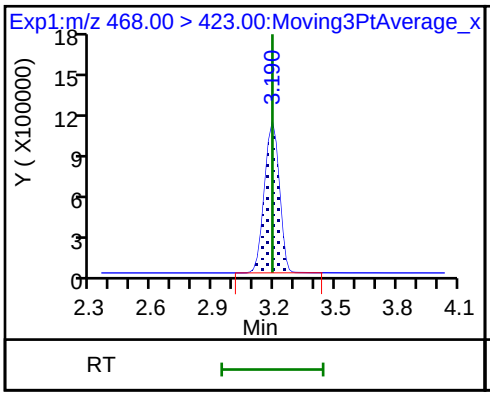
16 Perfluoroheptanesulfonic acid



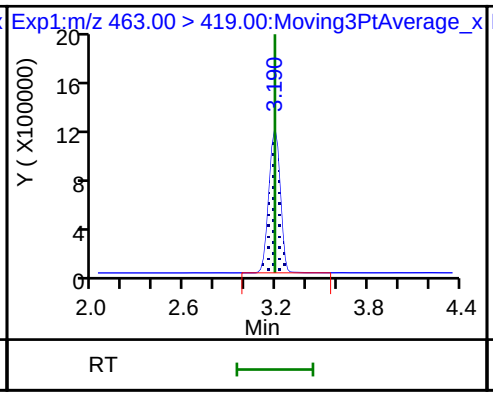
D 18 13C4 PFOS



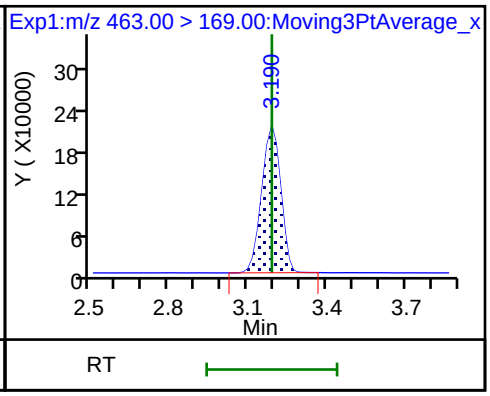
D 19 13C5 PFNA



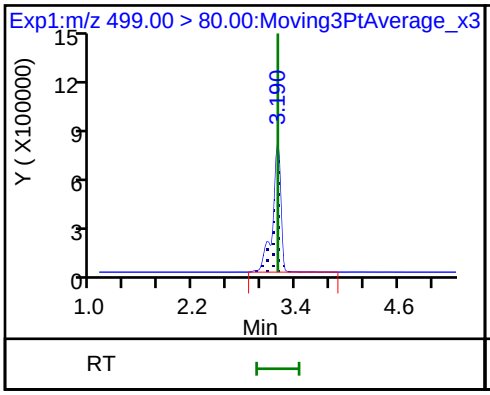
20 Perfluorononanoic acid



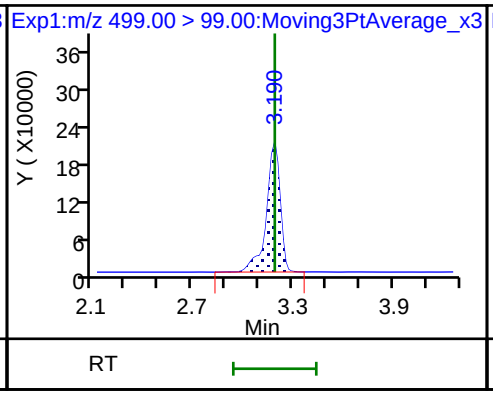
20 Perfluorononanoic acid



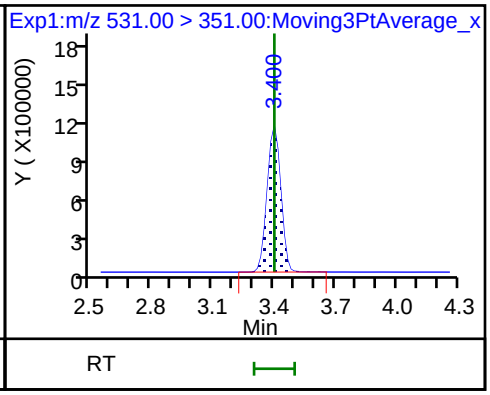
17 Perfluorooctane sulfonic acid



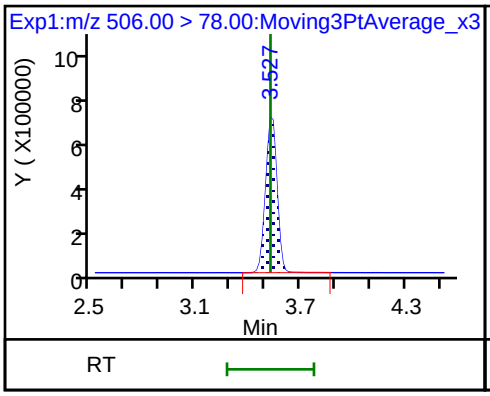
17 Perfluorooctane sulfonic acid



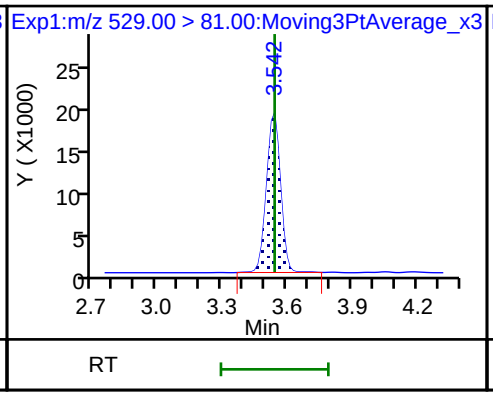
69 9-Chlorohexadecafluoro-3-oxanonane



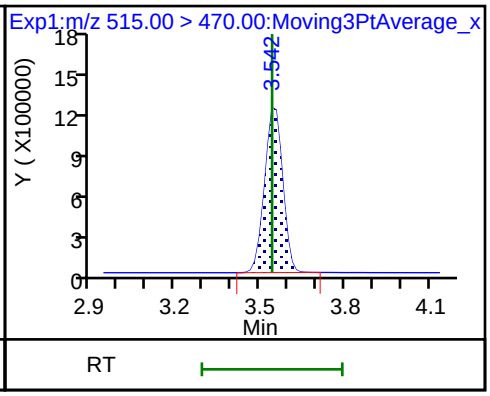
D 21 13C8 FOSA



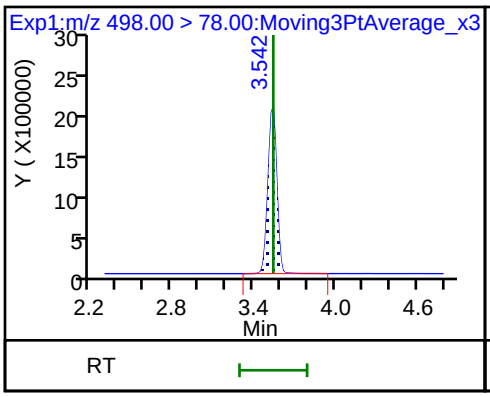
D 26 M2-8:2FTS



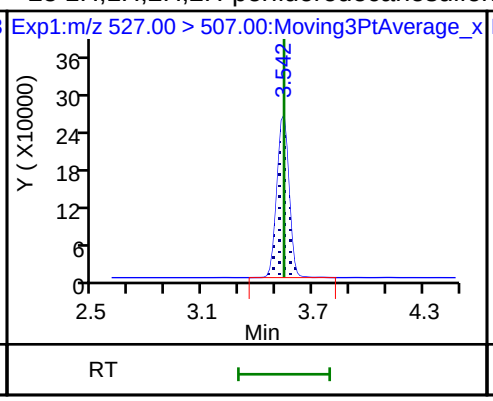
D 23 13C2 PFDA



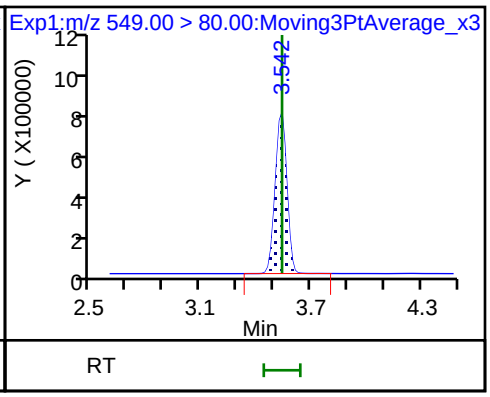
22 Perfluorooctane Sulfonamide



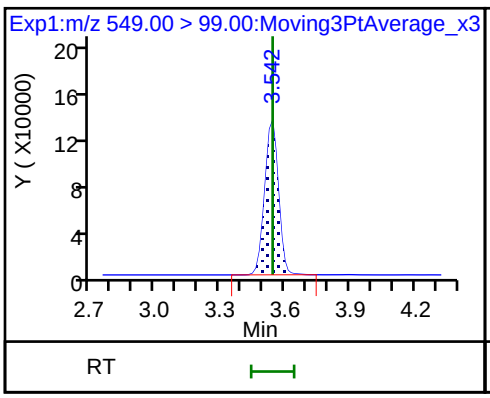
25 1H,1H,2H,2H-perfluorodecanesulfoni



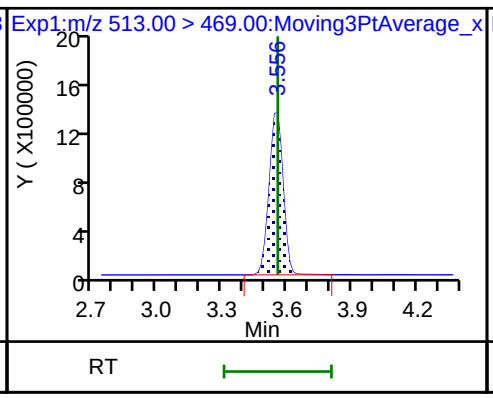
68 Perfluorononanesulfonic acid



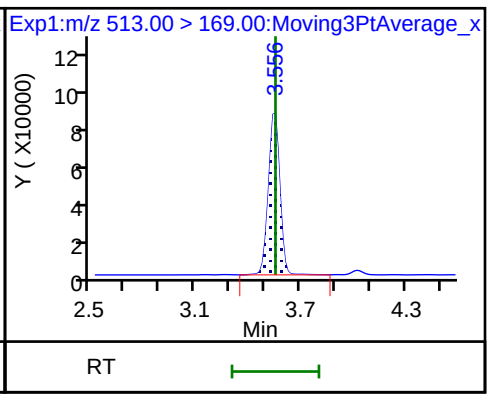
68 Perfluorononanesulfonic acid



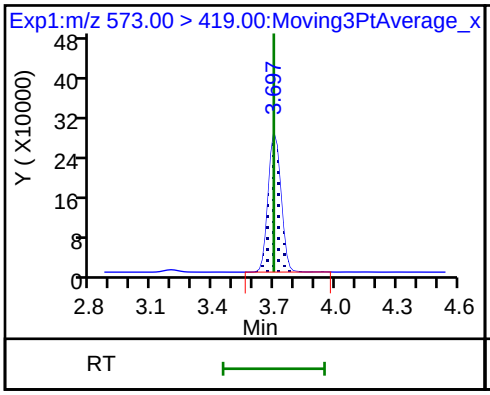
24 Perfluorodecanoic acid



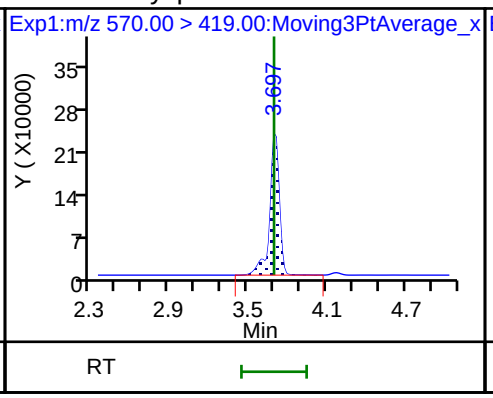
24 Perfluorodecanoic acid



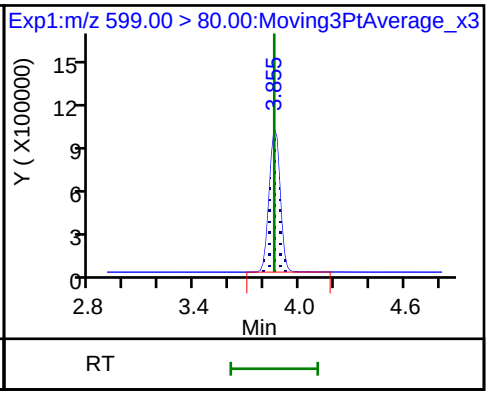
D 27 d3-NMeFOSAA



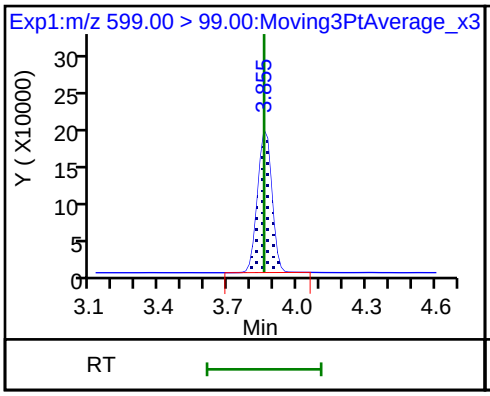
28 N-methyl perfluorooctane sulfonami



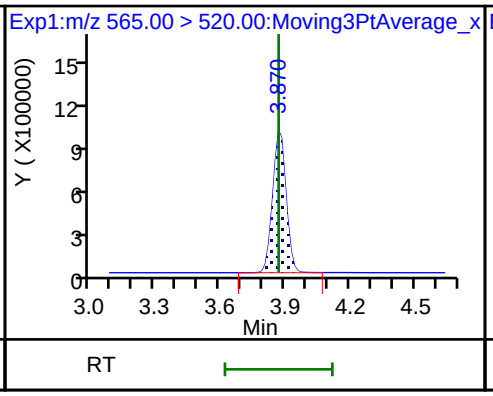
29 Perfluorodecane Sulfonic acid



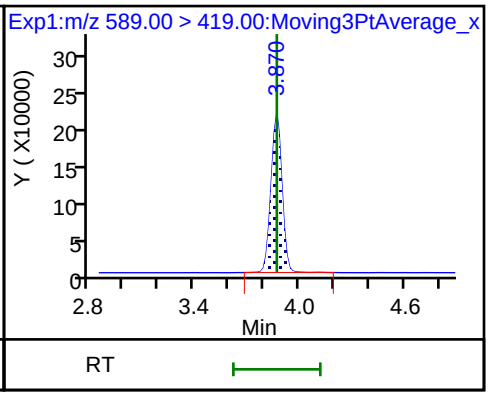
29 Perfluorodecane Sulfonic acid



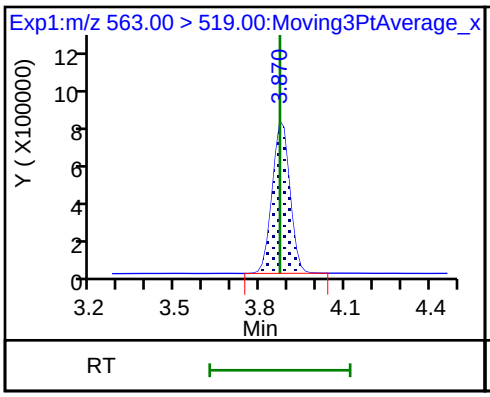
D 30 13C2 PFUnA



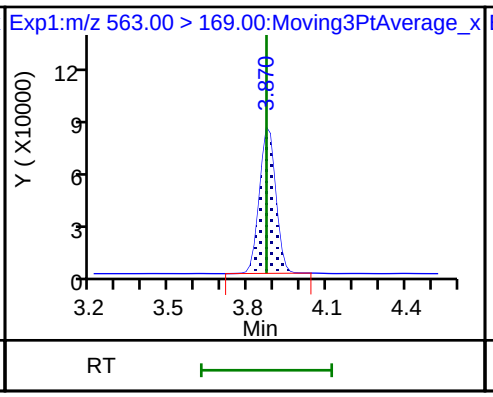
D 32 d5-NEtFOSAA



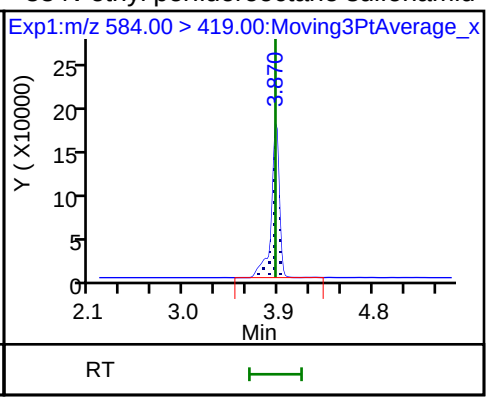
31 Perfluoroundecanoic acid



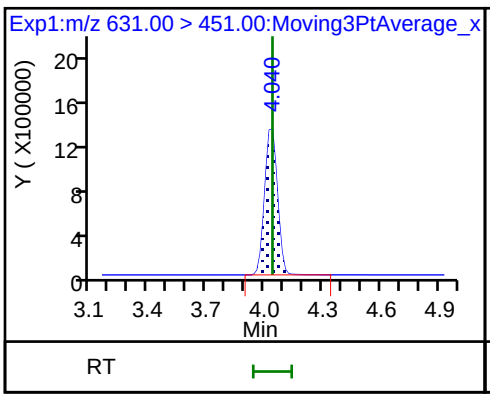
31 Perfluoroundecanoic acid



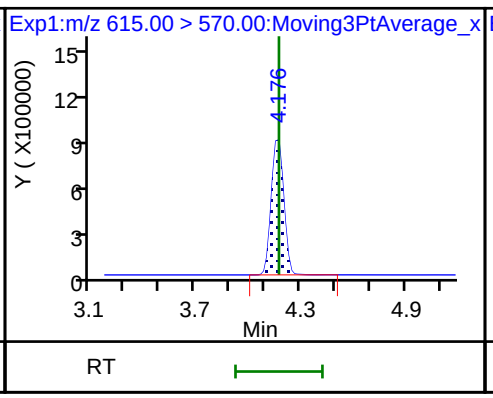
33 N-ethyl perfluorooctane sulfonamid



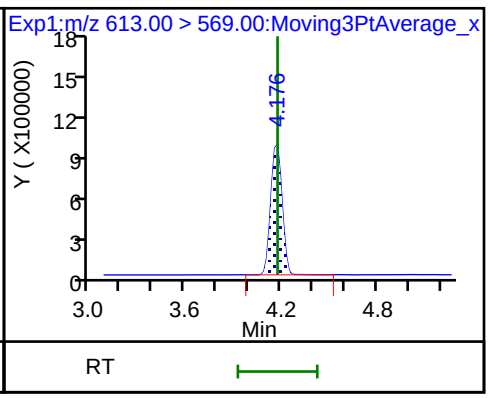
66 11-Chloroeicosafluoro-3-oxaundecan



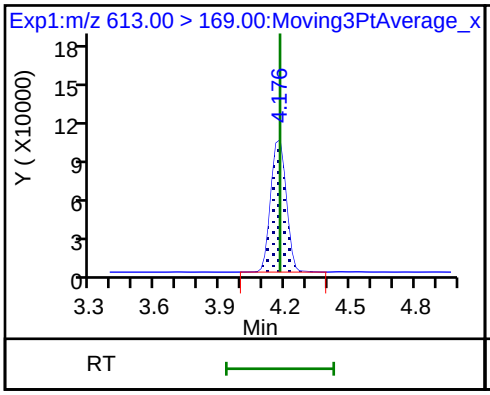
D 36 13C2 PFDoA



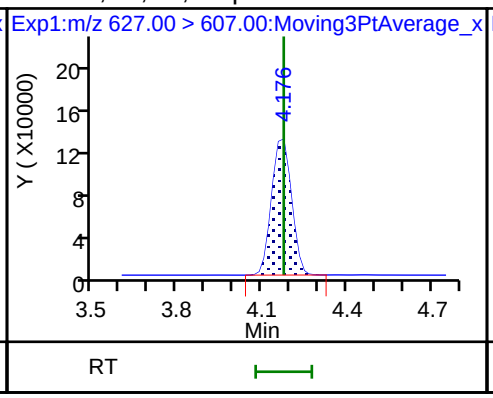
37 Perfluorododecanoic acid



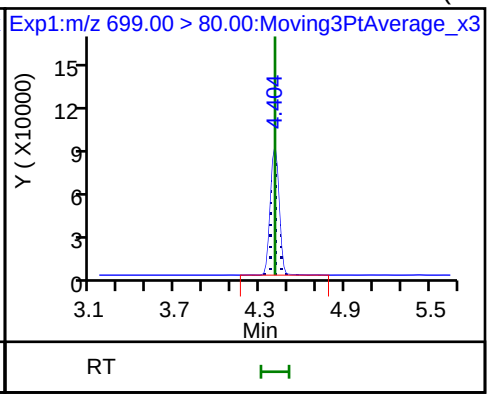
37 Perfluorododecanoic acid



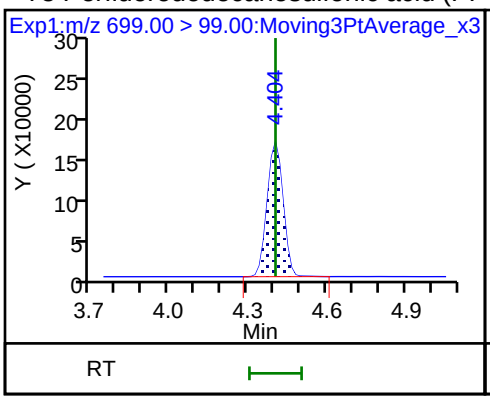
74 1H,1H,2H,2H-perfluorododecanesulfo



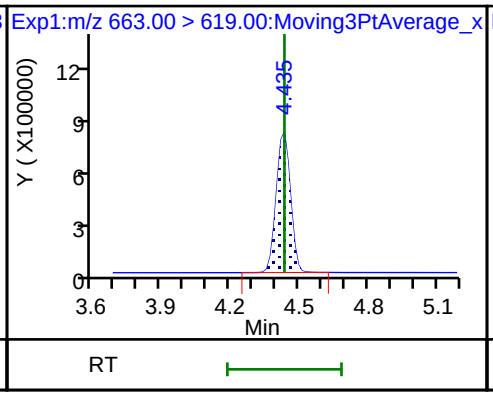
75 Perfluorododecanesulfonic acid (PF



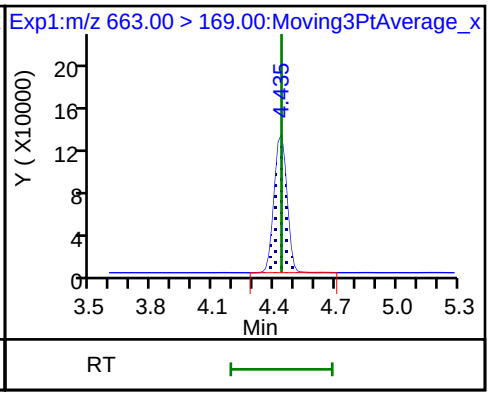
75 Perfluorododecanesulfonic acid (PF



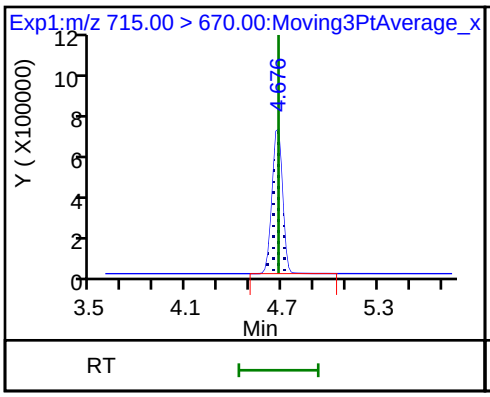
41 Perfluorotridecanoic acid



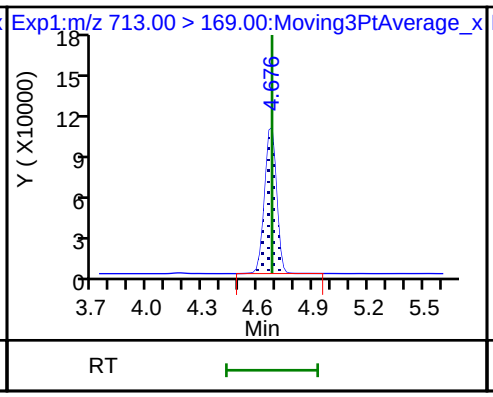
41 Perfluorotridecanoic acid



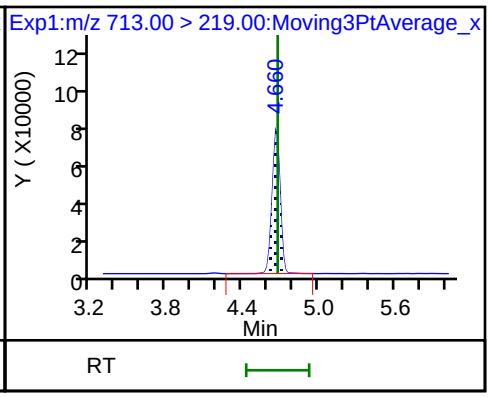
D 43 13C2-PFTeDA



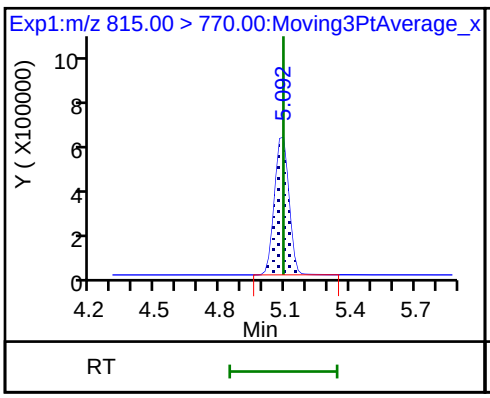
42 Perfluorotetradecanoic acid



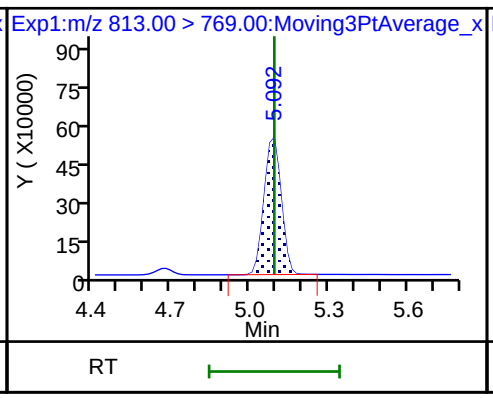
42 Perfluorotetradecanoic acid



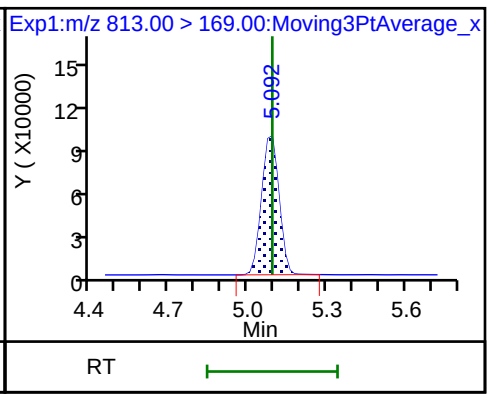
D 44 13C2-PFHxDA



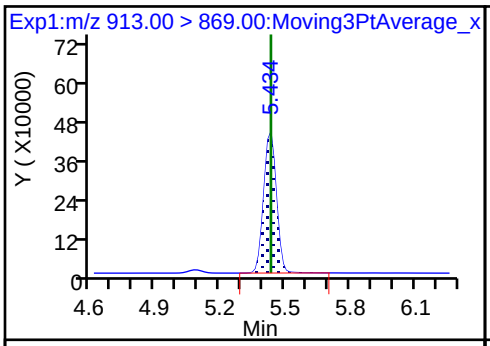
45 Perfluorohexadecanoic acid



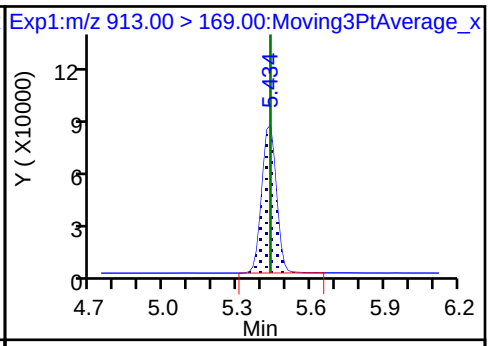
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-238149/1-A

Matrix: Water | Lab File ID: 2018.08.08LLA_006.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:24

Sample wt/vol: 250(mL) | Date Analyzed: 08/08/2018 08:06

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.249	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2 FTS	4.66	J	20	2.0
39108-34-4	8:2 FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-238149/1-A

Matrix: Water | Lab File ID: 2018.08.08LLA_006.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:24

Sample wt/vol: 250(mL) | Date Analyzed: 08/08/2018 08:06

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	95		25-150
STL01893	13C5 PFPeA	85		25-150
STL00993	13C2 PFHxA	92		25-150
STL01892	13C4-PFHpA	93		25-150
STL00990	13C4 PFOA	102		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	102		25-150
STL00997	13C2 PFUnA	90		25-150
STL00998	13C2 PFDoA	99		25-150
STL02116	13C2-PFTeDA	113		25-150
STL02337	13C3-PFBS	75		25-150
STL00994	18O2 PFHxS	83		25-150
STL00991	13C4 PFOS	85		25-150
STL01056	13C8 FOSA	77		25-150
STL02118	d3-NMeFOSAA	120		25-150
STL02117	d5-NEtFOSAA	113		25-150
STL02279	M2-6:2FTS	108		25-150
STL02280	M2-8:2FTS	96		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_006.d
Lims ID: MB 320-238149/1-A
Client ID:
Sample Type: MB
Inject. Date: 08-Aug-2018 08:06:43 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-238149/1-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 13:31:38 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 13:29:09

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.511	1.499	0.012	1.000	14479	0.004325			0.8	
D 1 13C4 PFBA										
217.00 > 172.00	1.511	1.499	0.012	0.543	9005666	2.36		94.6	10307	
D 3 13C5-PFPeA										
267.90 > 223.00	1.781	1.764	0.017	0.640	7220858	2.12		84.8	9678	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.781	1.772	0.009	1.000	12823	0.004352			0.7	
D 47 13C3-PFBS										
301.90 > 83.00	1.822	1.806	0.016	0.655	92589	1.76		75.5	466	
D 7 13C2 PFHxA										
315.00 > 270.00	2.079	2.058	0.021	0.747	8127607	2.30		92.0	7876	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.171	2.160	0.011	0.780	961038	3.18		127	3413	
D 9 13C4-PFHpA										
367.00 > 322.00	2.413	2.400	0.013	0.867	9332147	2.32		93.0	7841	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.426	2.413	0.013	1.000	19993	0.006230			26.1	
399.00 > 99.00	2.426	2.413	0.013	1.000	9358		2.14(1.90-5.70)		3.3	
D 11 18O2 PFHxS										
403.00 > 84.00	2.426	2.413	0.013	0.872	5932911	1.96		83.0	4973	
D 12 M2-6:2FTS										
429.00 > 81.00	2.751	2.735	0.016	0.989	1004526	2.57		108	1204	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.751	2.750	0.001	1.000	105317	0.1165			239	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.783	2.766	0.017	1.000	20590	0.005482			2.5	
413.00 > 169.00	2.783	2.766	0.017	1.000	7195		2.86(1.36-4.08)		10.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 62 13C2-PFOA										s
415.00 > 370.00	2.783	2.766	0.017		8526067	2.50			10352	
D 14 13C4 PFOA										
417.00 > 372.00	2.783	2.767	0.016	1.000	8571027	2.55		102	13079	
D 18 13C4 PFOS										
503.00 > 80.00	3.154	3.136	0.018	1.134	6419041	2.04		85.4	3347	
D 19 13C5 PFNA										
468.00 > 423.00	3.154	3.136	0.018	1.134	7010611	2.43		97.2	8665	
D 26 M2-8:2FTS										
529.00 > 81.00	3.514	3.482	0.032	1.263	103788	2.29		95.6	396	
D 21 13C8 FOSA										
506.00 > 78.00	3.498	3.482	0.016	1.257	3635156	1.93		77.4	3165	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.498	3.496	0.002	1.000	4501	0.001008			9.7	
D 23 13C2 PFDA										
515.00 > 470.00	3.514	3.498	0.016	1.263	7345814	2.54		102	7238	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.514	3.512	0.002	1.000	4562	0.001263			1.1	R
513.00 > 169.00	3.514	3.512	0.002	1.000	711		6.42(7.12-21.35)		1.8	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.671	3.657	0.014	1.319	1689259	3.01		120	3829	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.841	3.825	0.016	1.380	1307439	2.83		113	2864	
D 30 13C2 PFUnA										
565.00 > 520.00	3.841	3.825	0.016	1.380	5240515	2.24		89.7	4868	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.841	3.839	0.002	1.000	2287	0.004876			4.5	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.994	3.992	0.002	1.266	2603	0.000775			9.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.142	4.125	0.017	1.488	6246745	2.48		99.2	11753	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.645	4.630	0.015	1.669	4537605	2.82		113	15036	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.059	5.042	0.017	1.818	3743921	2.54		102	5389	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.059	5.059	0.0	1.000	35020	-0.001508			2.6	
813.00 > 169.00	5.059	5.059	0.0	1.000	5505		6.36(2.77-8.32)		22.6	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

s - Failed ISTD Recovery Test

Report Date: 08-Aug-2018 13:31:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_006.d

Injection Date: 08-Aug-2018 08:06:43 Instrument ID: A9

Lims ID: MB 320-238149/1-A

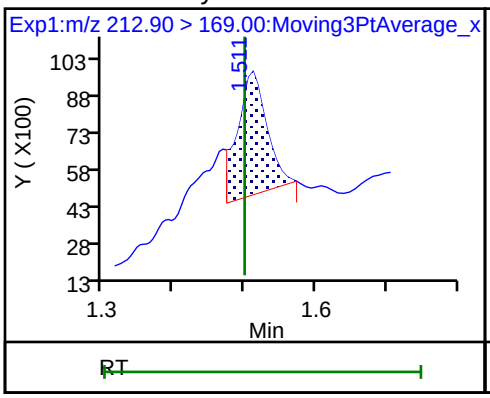
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 1 Worklist Smp#: 2

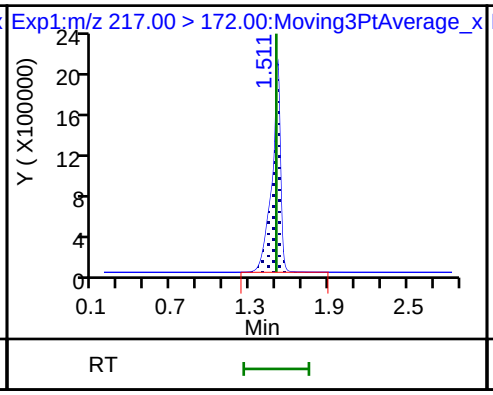
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

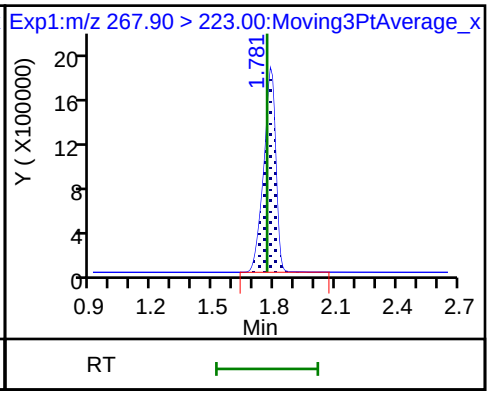
2 Perfluorobutyric acid



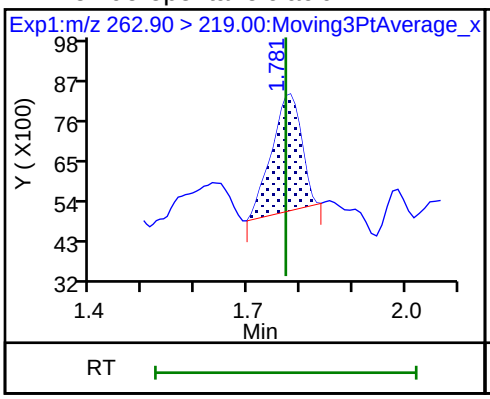
D 1 13C4 PFBA



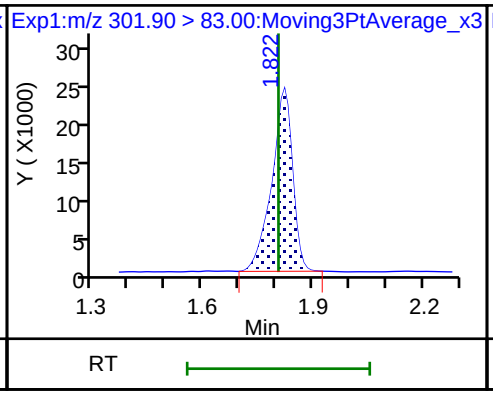
D 3 13C5-PFPeA



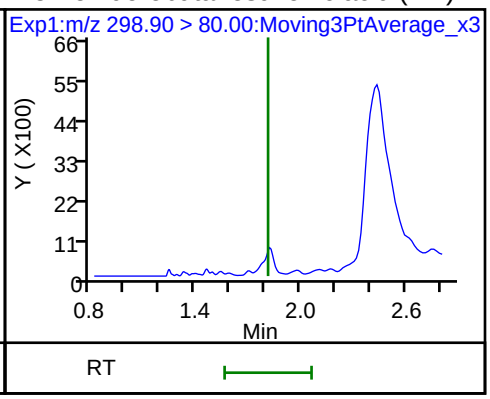
4 Perfluoropentanoic acid



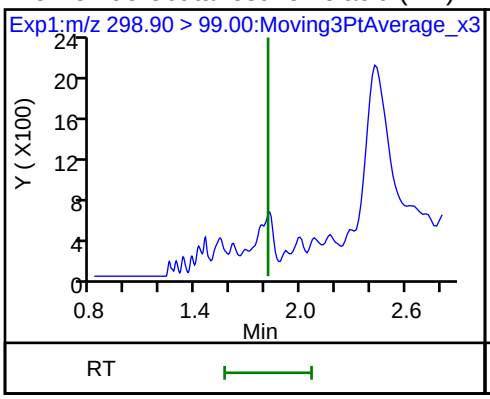
D 47 13C3-PFBS



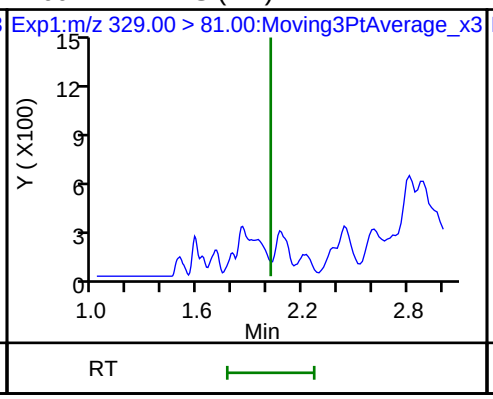
5 Perfluorobutanesulfonic acid (ND)



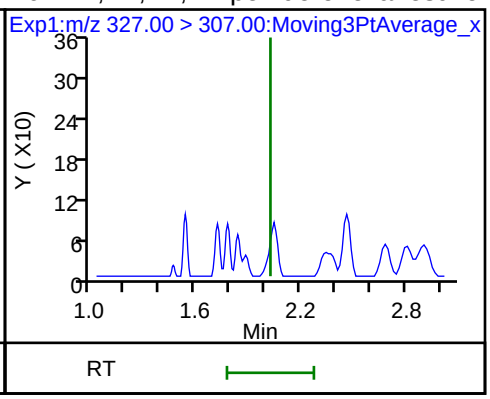
5 Perfluorobutanesulfonic acid (ND)



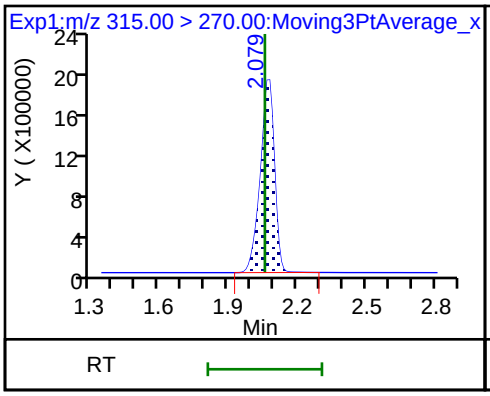
D 60 M2-4:2FTS (ND)



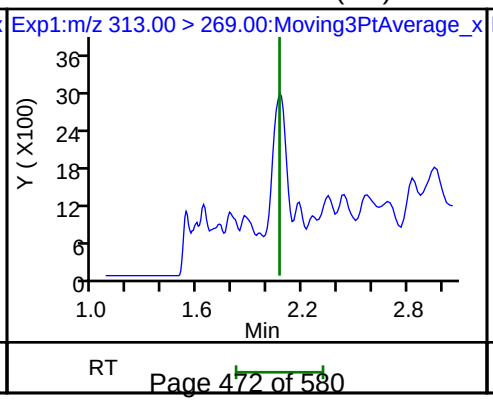
61 1H,1H,2H,2H-perfluorohexanesulfoni (ND)



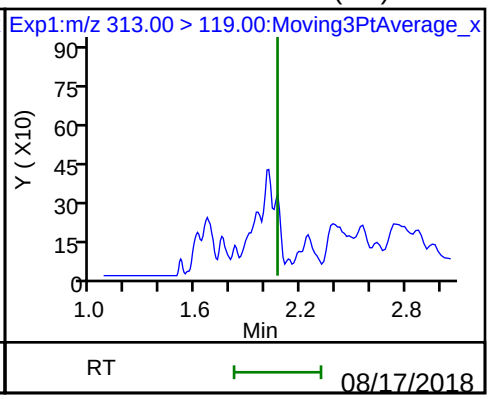
D 7 13C2 PFHxA



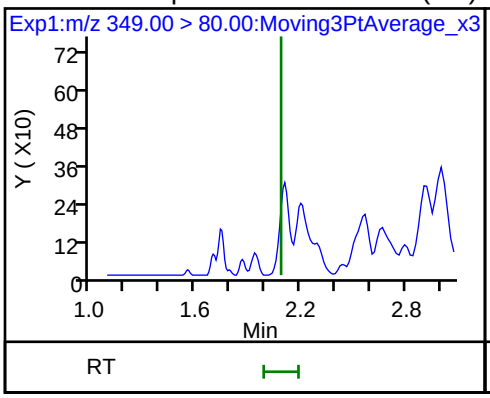
6 Perfluorohexanoic acid (ND)



6 Perfluorohexanoic acid (ND)



70 Perfluoropentanesulfonic acid (ND)



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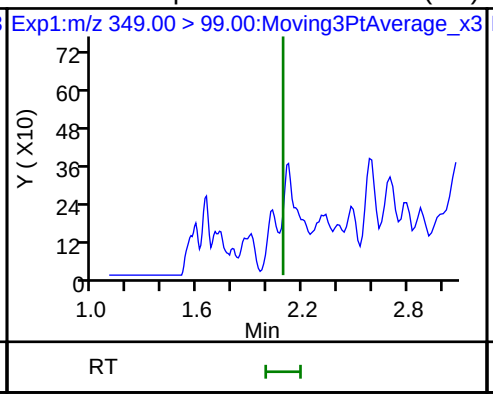
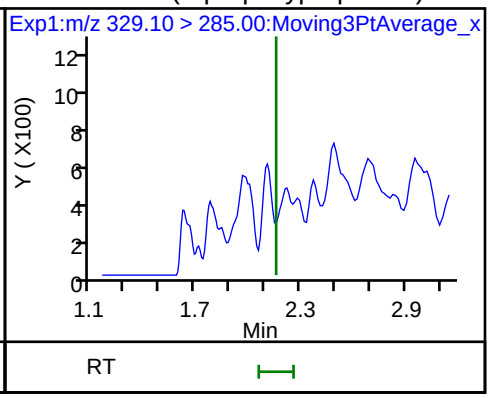
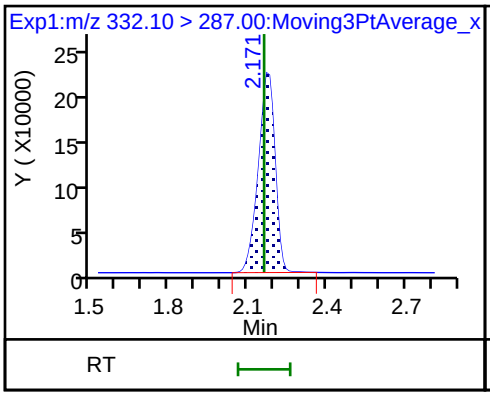


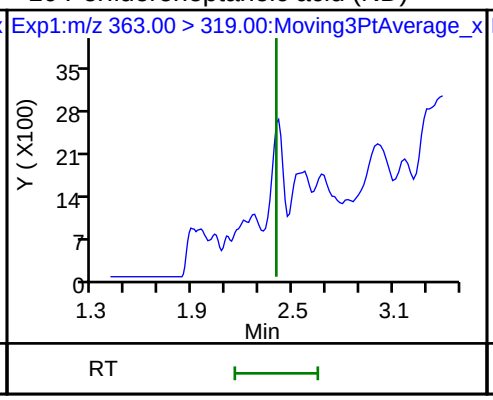
67 Perfluoro(2-propoxypropanoic) acid (ND)



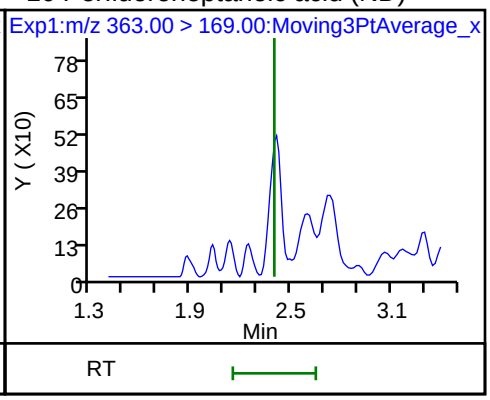
D 64 13C3 HFPO-DA



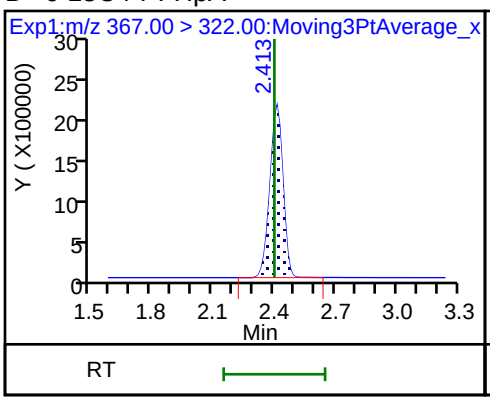
10 Perfluoroheptanoic acid (ND)



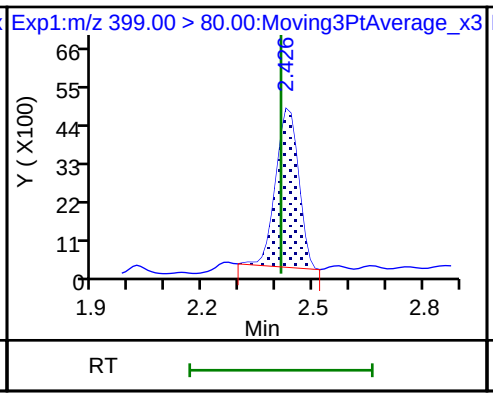
10 Perfluoroheptanoic acid (ND)



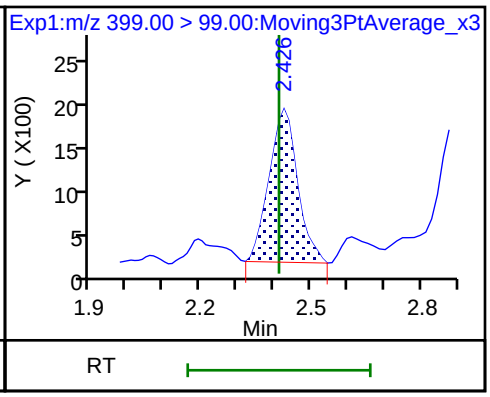
D 9 13C4-PFHpA



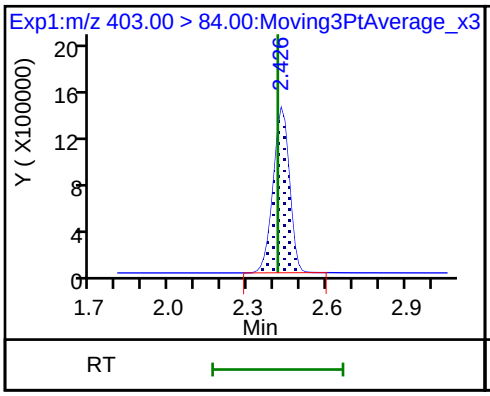
8 Perfluorohexanesulfonic acid



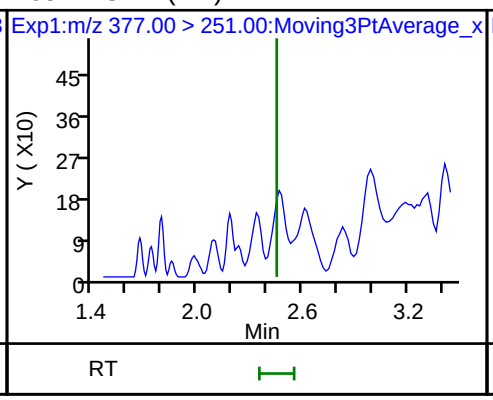
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA (ND)



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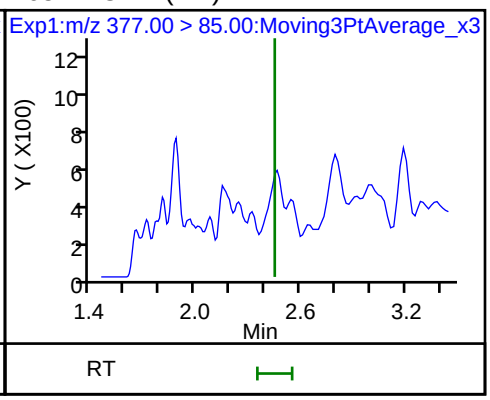
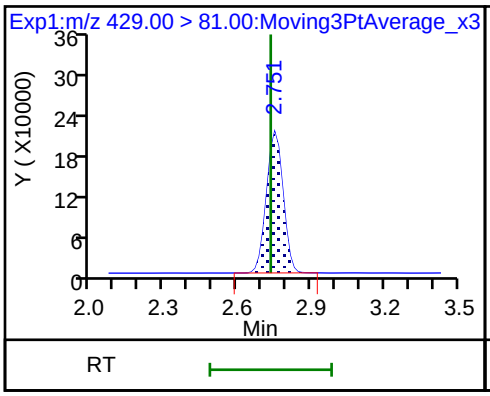
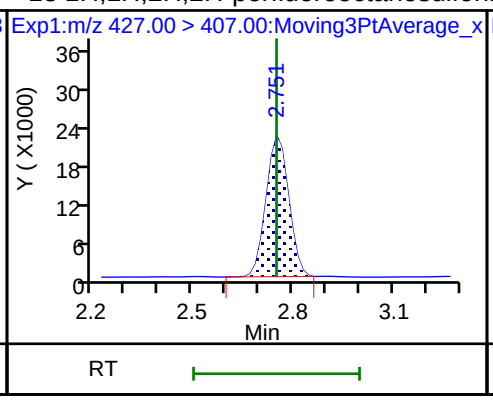


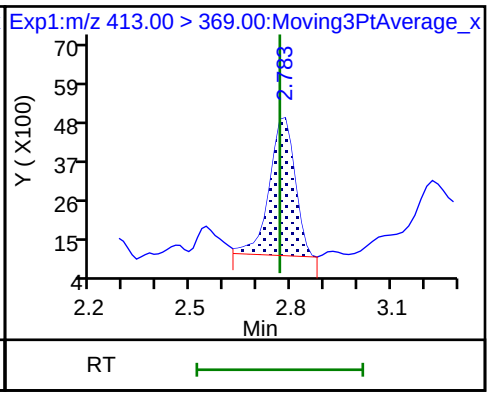
D 12 M2-6:2FTS



13 1H,1H,2H,2H-perfluorooctanesulfoni



15 Perfluorooctanoic acid



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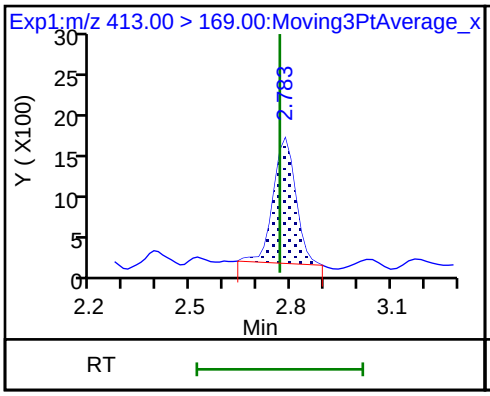
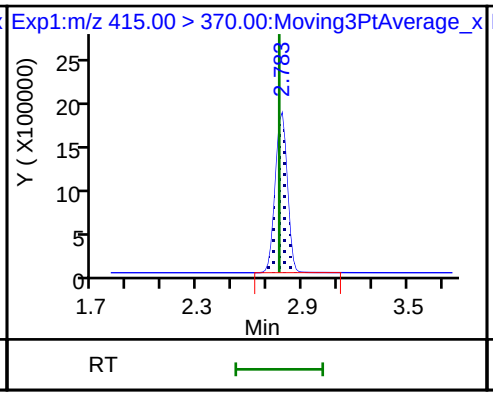
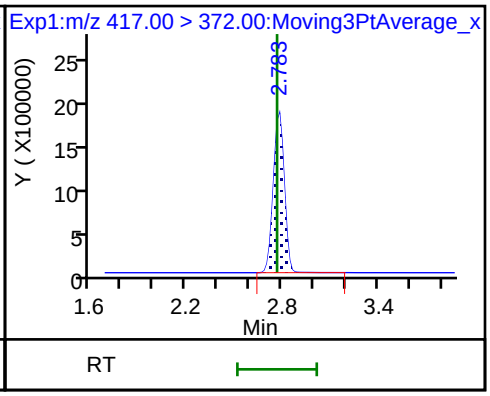


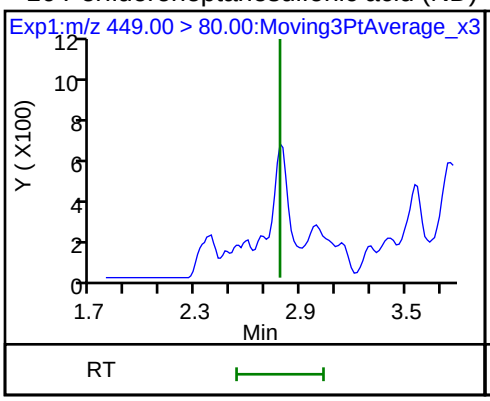
* 62 13C2-PFOA



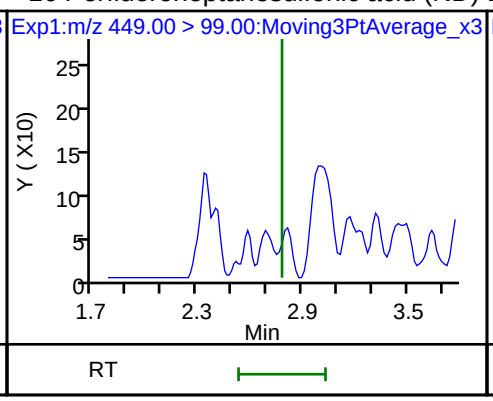
D 14 13C4 PFOA



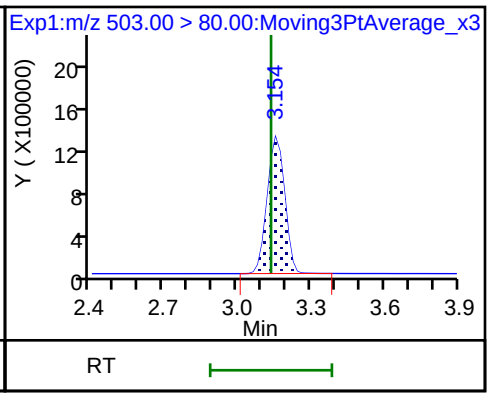
16 Perfluoroheptanesulfonic acid (ND)



16 Perfluoroheptanesulfonic acid (ND)



D 18 13C4 PFOS



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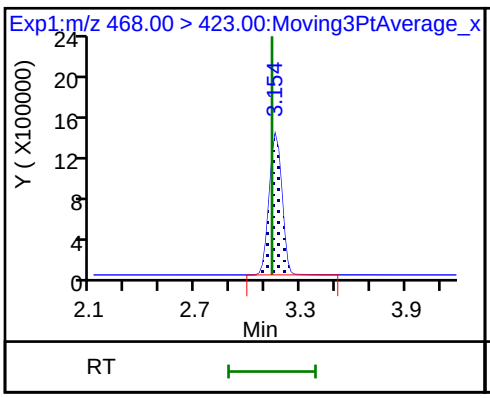
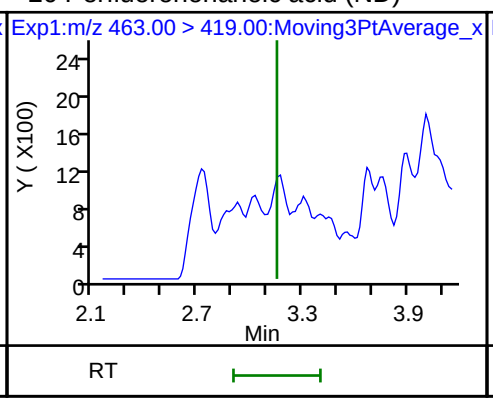
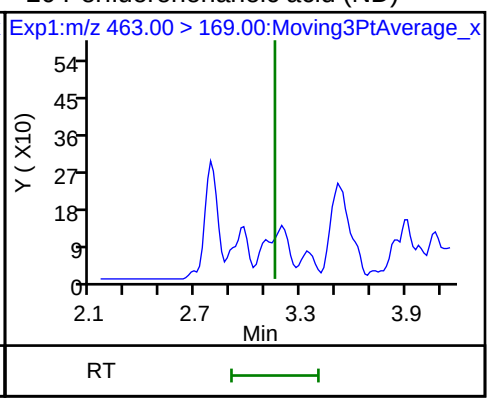


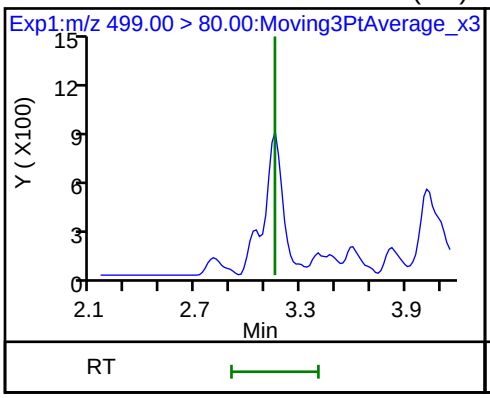
20 Perfluorononanoic acid (ND)



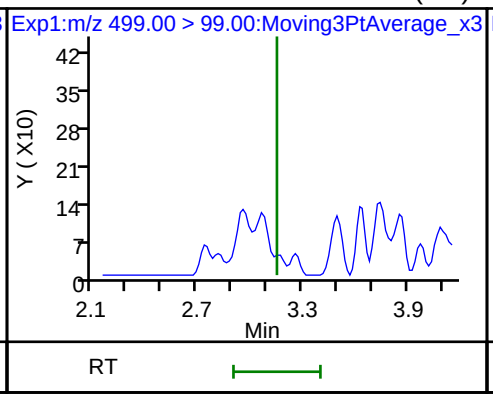
20 Perfluorononanoic acid (ND)



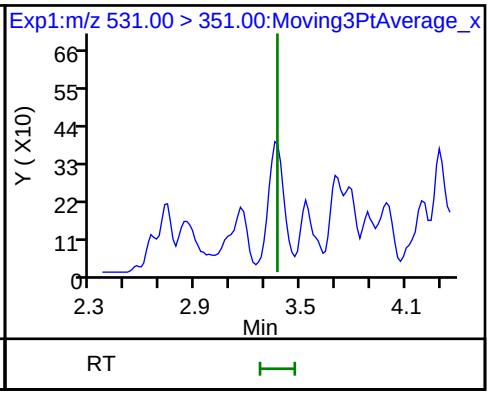
17 Perfluorooctane sulfonic acid (ND)



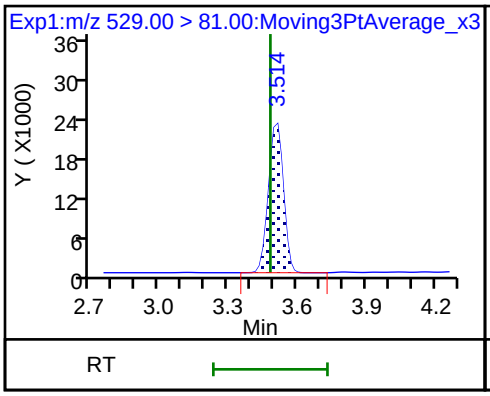
17 Perfluorooctane sulfonic acid (ND)



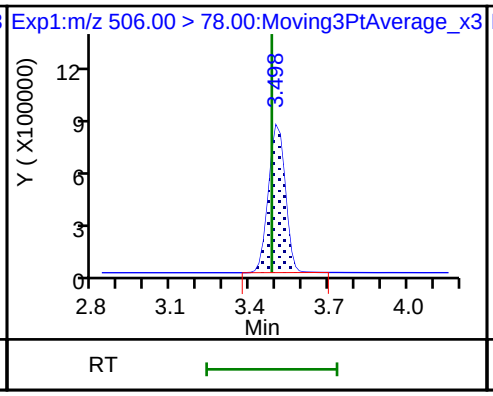
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



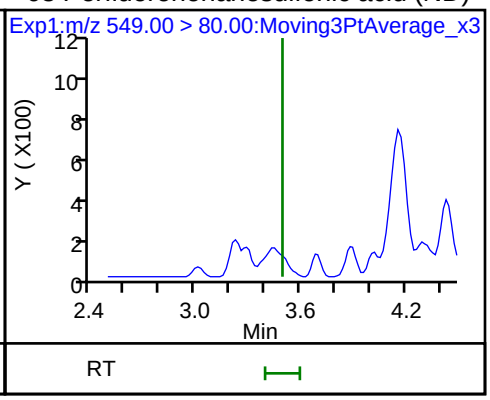
D 26 M2-8:2FTS



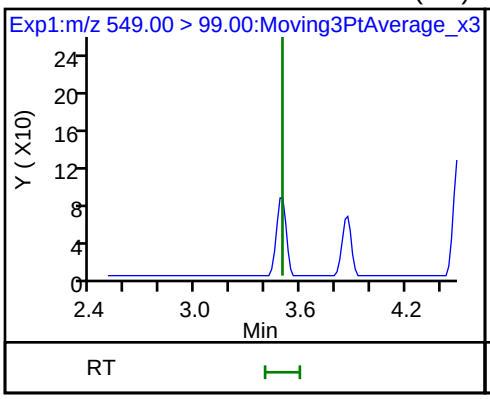
D 21 13C8 FOSA



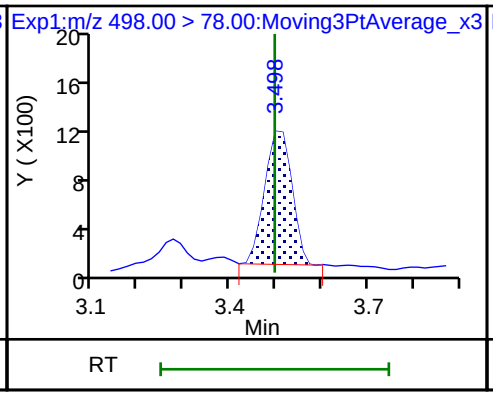
68 Perfluorononanesulfonic acid (ND)



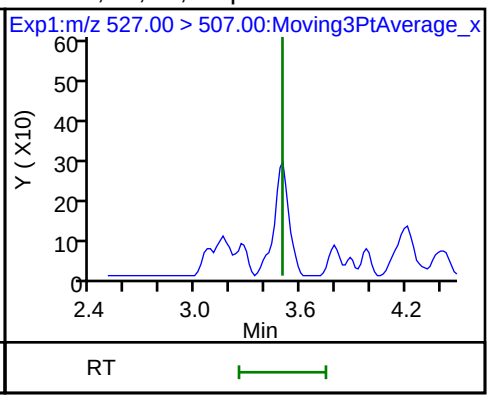
68 Perfluorononanesulfonic acid (ND)



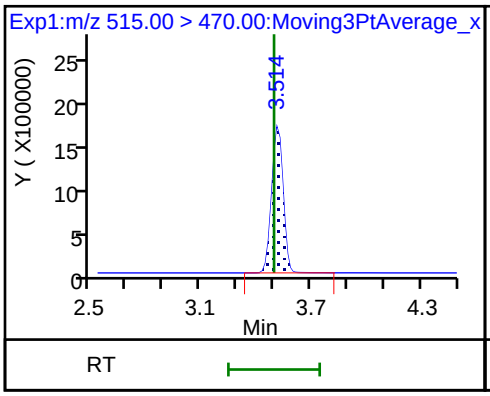
22 Perfluorooctane Sulfonamide



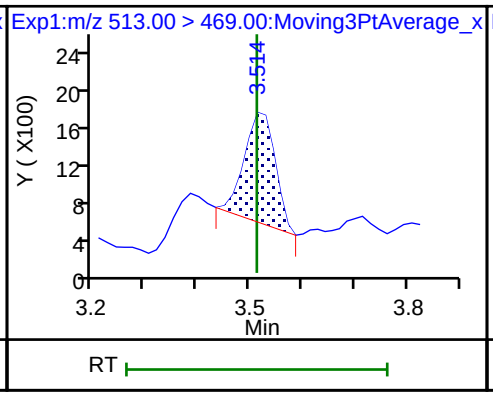
25 1H,1H,2H,2H-perfluorodecanesulfoni (ND)



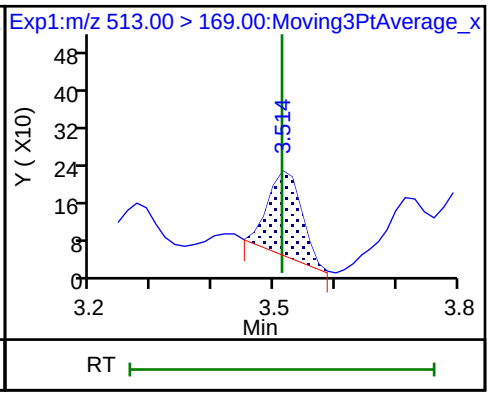
D 23 13C2 PFDA



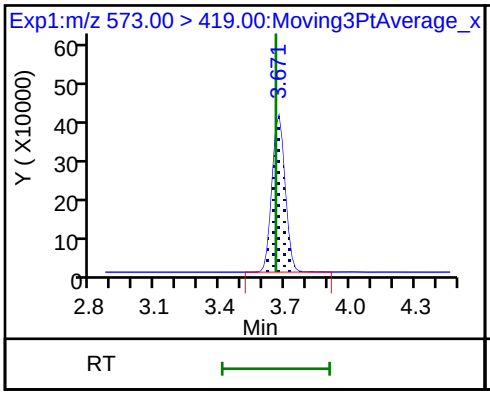
24 Perfluorodecanoic acid



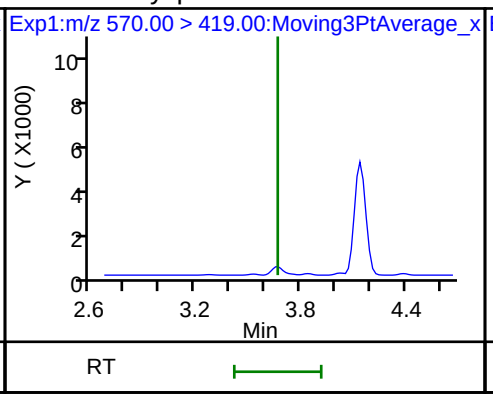
24 Perfluorodecanoic acid



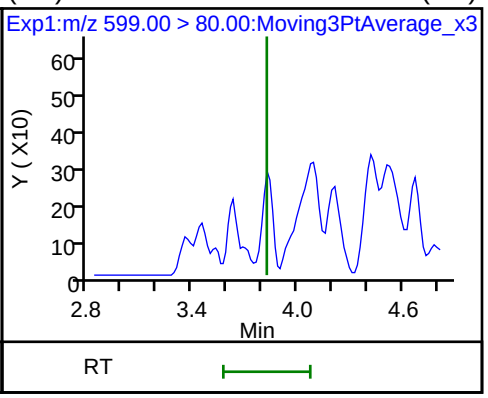
D 27 d3-NMeFOSAA



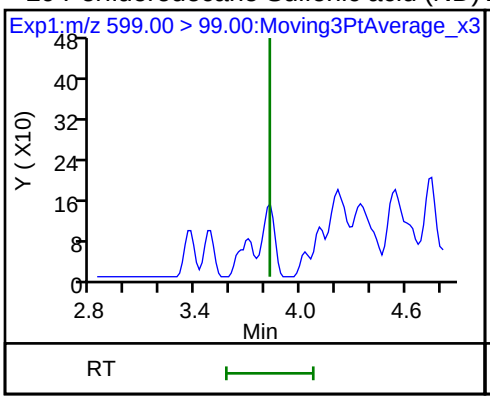
28 N-methyl perfluorooctane sulfonami (ND)



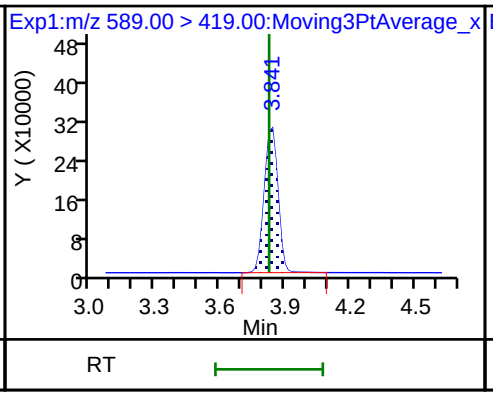
29 Perfluorodecane Sulfonic acid (ND)



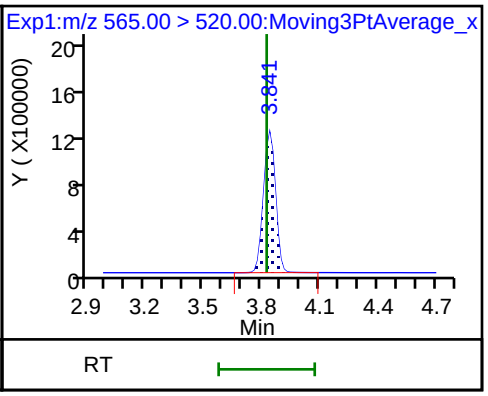
29 Perfluorodecane Sulfonic acid (ND)



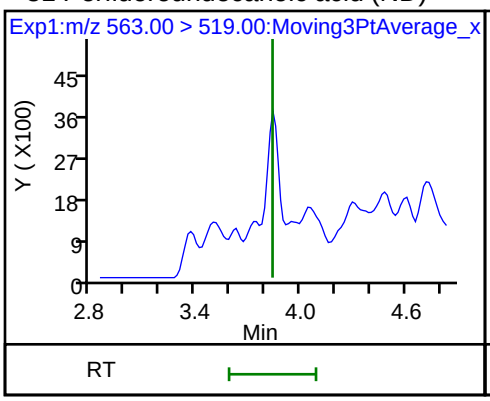
D 32 d5-NEtFOSAA



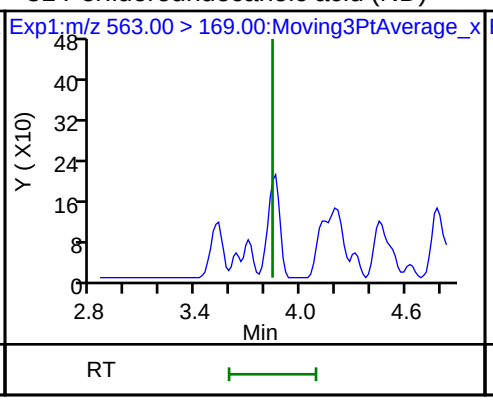
D 30 13C2 PFUnA



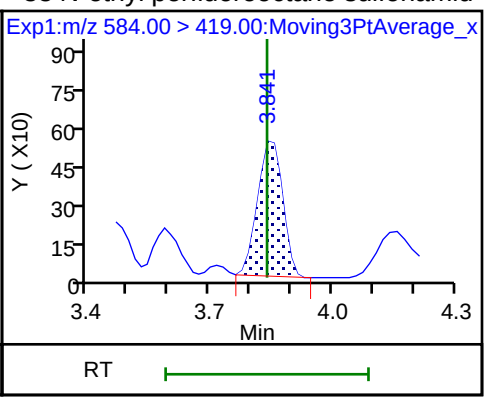
31 Perfluoroundecanoic acid (ND)



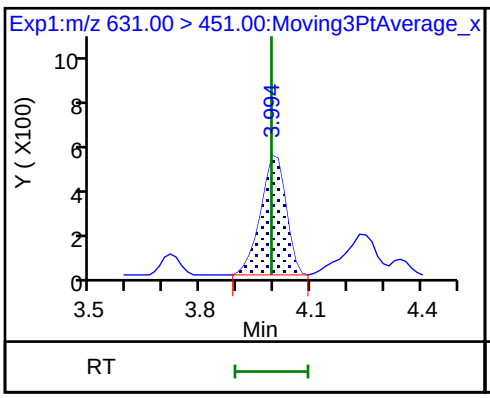
31 Perfluoroundecanoic acid (ND)



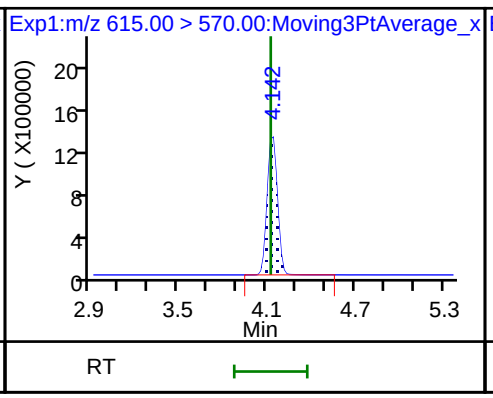
33 N-ethyl perfluorooctane sulfonamid



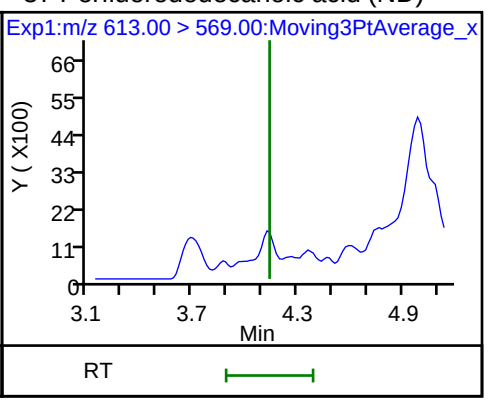
66 11-Chloroeicosafluoro-3-oxaundecan



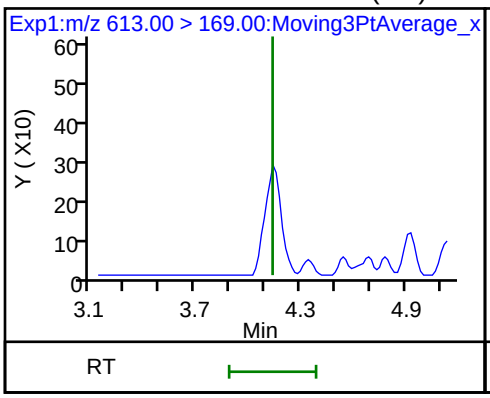
D 36 13C2 PFDoA



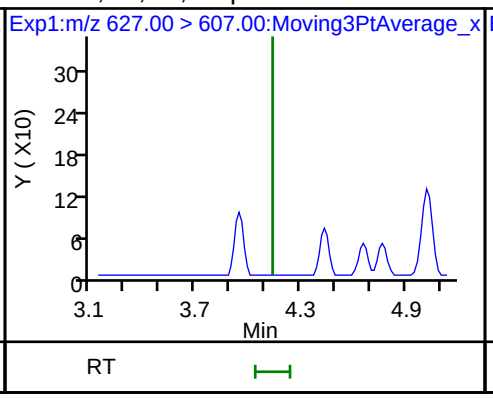
37 Perfluorododecanoic acid (ND)



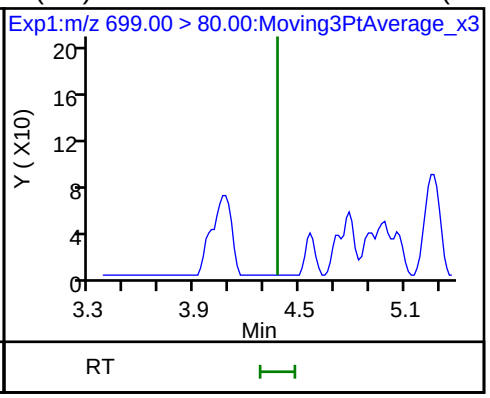
37 Perfluorododecanoic acid (ND)



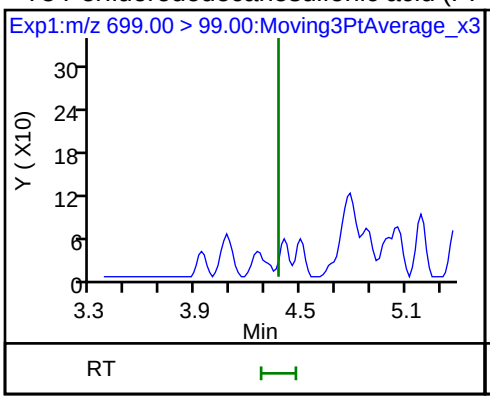
74 1H,1H,2H,2H-perfluorododecanesulfonic acid (NP)



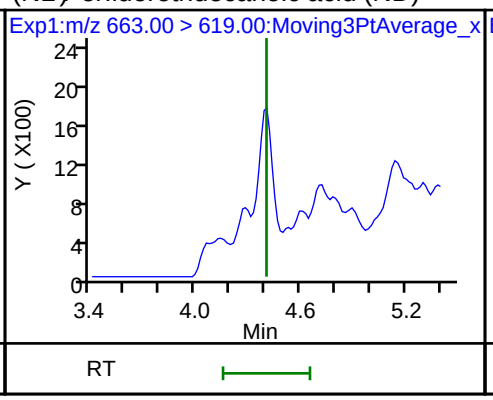
75 Perfluorododecanesulfonic acid (PF (ND)



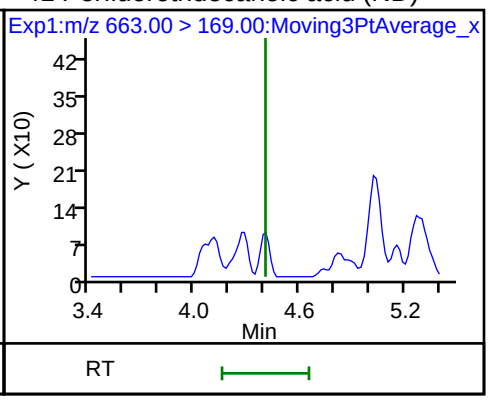
75 Perfluorododecanesulfonic acid (PF (ND)



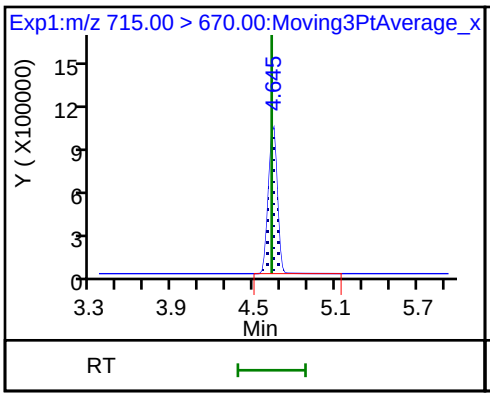
41 Perfluorotridecanoic acid (ND)



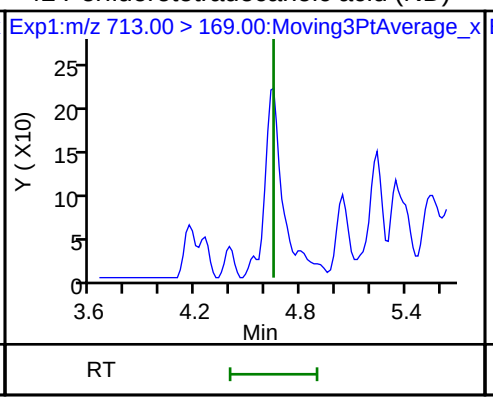
41 Perfluorotridecanoic acid (ND)



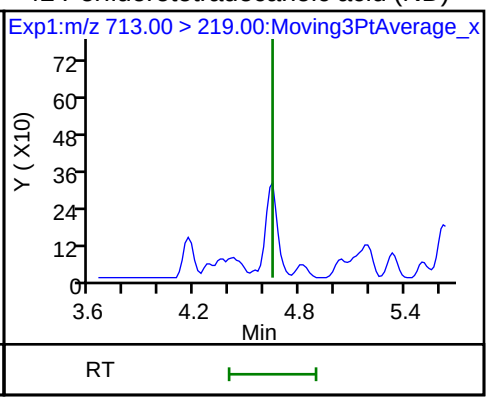
D 43 13C2-PFTeDA



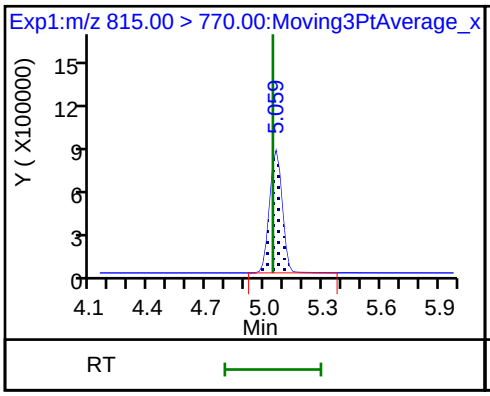
42 Perfluorotetradecanoic acid (ND)



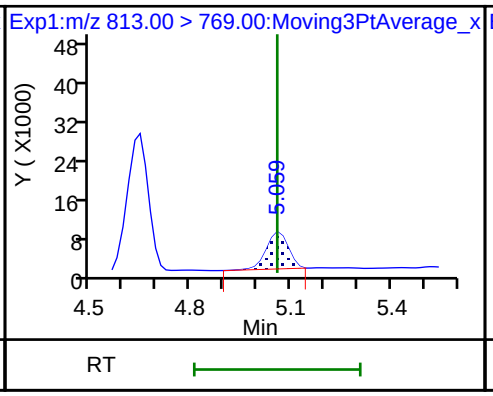
42 Perfluorotetradecanoic acid (ND)



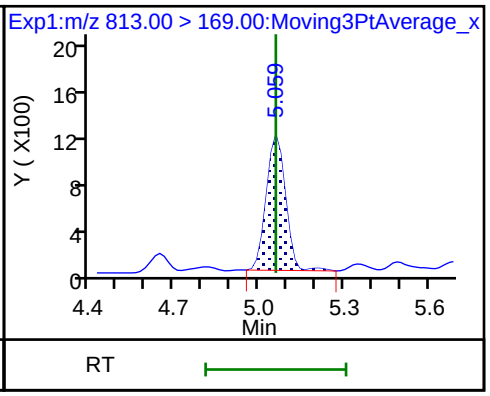
D 44 13C2-PFHxDA



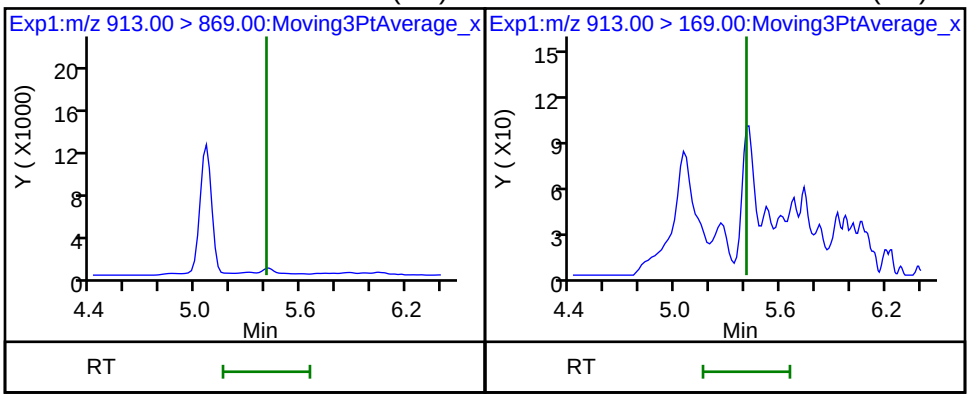
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid (ND) 46 Perfluorooctadecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-239187/1-A

Matrix: Water | Lab File ID: 2018.08.12LLA_033.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 08/10/2018 09:01

Sample wt/vol: 250(mL) | Date Analyzed: 08/12/2018 15:12

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 239440 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.393	J	2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.865	J	2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.261	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2 FTS	ND		20	2.0
39108-34-4	8:2 FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-239187/1-A

Matrix: Water | Lab File ID: 2018.08.12LLA_033.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 08/10/2018 09:01

Sample wt/vol: 250(mL) | Date Analyzed: 08/12/2018 15:12

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 239440 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	92		25-150
STL01893	13C5 PFPeA	87		25-150
STL00993	13C2 PFHxA	87		25-150
STL01892	13C4-PFHpA	89		25-150
STL00990	13C4 PFOA	93		25-150
STL00995	13C5 PFNA	89		25-150
STL00996	13C2 PFDA	89		25-150
STL00997	13C2 PFUnA	93		25-150
STL00998	13C2 PFDoA	97		25-150
STL02116	13C2-PFTeDA	101		25-150
STL02337	13C3-PFBS	87		25-150
STL00994	18O2 PFHxS	85		25-150
STL00991	13C4 PFOS	92		25-150
STL01056	13C8 FOSA	88		25-150
STL02118	d3-NMeFOSAA	105		25-150
STL02117	d5-NEtFOSAA	100		25-150
STL02279	M2-6:2FTS	107		25-150
STL02280	M2-8:2FTS	98		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_033.d
Lims ID: MB 320-239187/1-A
Client ID:
Sample Type: MB
Inject. Date: 12-Aug-2018 15:12:15 ALS Bottle#: 20 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-239187/1-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:27:39 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 10:51:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.411	1.411	0.0	0.534	5666339	2.29		91.7	8259	
2 Perfluorobutyric acid										
212.90 > 169.00	1.416	1.418	-0.002	1.004	20885	0.009814			1.2	
D 3 13C5-PFPeA										
267.90 > 223.00	1.670	1.670	0.0	0.632	3717993	2.18		87.4	8164	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.670	1.676	-0.006	1.000	14140	0.008357			0.9	
D 47 13C3-PFBS										
301.90 > 83.00	1.702	1.702	0.0	0.644	79640	2.02		87.0	414	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.710	1.716	-0.006	1.005	3603	0.001385			1.4	
298.90 > 99.00	1.710	1.716	-0.006	1.005	2053		1.75(1.25-3.74)		1.3	
D 7 13C2 PFHxA										
315.00 > 270.00	1.954	1.954	0.0	0.739	4217906	2.18		87.4	9513	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.048	2.048	0.0	0.775	283584	1.89		75.5	1044	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.048	2.054	-0.006	1.000	2038	0.007423			1.3	
D 9 13C4-PFHpA										
367.00 > 322.00	2.288	2.288	0.0	0.866	4228717	2.22		89.0	10359	
D 11 18O2 PFHxS										
403.00 > 84.00	2.299	2.299	0.0	0.870	4900135	2.01		85.0	10197	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.299	2.303	-0.004	1.000	14668	0.006530			52.7	
399.00 > 99.00	2.299	2.303	-0.004	1.000	5077		2.89(1.50-4.49)		6.0	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
65 ADONA										
377.00 > 251.00	2.332	2.336	-0.004	0.772	4719	0.000989			16.7	
377.00 > 85.00	2.332	2.336	-0.004	0.772	4953		0.95(0.84-2.53)		11.4	
D 12 M2-6:2FTS										
429.00 > 81.00	2.620	2.612	0.008	0.991	1020117	2.55		107	3094	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.620	2.624	-0.004	1.000	29640	0.0439			142	
D 73 13C8 PFOA										
421.00 > 376.00	2.627	2.635	-0.008	0.994	11463	0.003332		0.0	98.0	
D 14 13C4 PFOA										
417.00 > 372.00	2.643	2.643	0.0	1.000	4065464	2.33		93.2	8224	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.643	2.647	-0.004	1.000	14611	0.007946			1.5	
413.00 > 169.00	2.643	2.647	-0.004	1.000	12640		1.16(0.84-2.52)		17.7	
* 62 13C2-PFOA										
415.00 > 370.00	2.643	2.647	-0.004		4462003	2.50			14922	
D 18 13C4 PFOS										
503.00 > 80.00	3.023	3.016	0.007	1.144	3512604	2.19		91.8	3613	
D 19 13C5 PFNA										
468.00 > 423.00	3.015	3.016	-0.001	1.141	3485063	2.23		89.1	8385	
D 72 13C8 PFOS										
507.00 > 99.00	3.023	3.016	0.007	1.144	2097	0.002695		0.0	17.0	
20 Perfluorononanoic acid										
463.00 > 419.00	3.015	3.022	-0.007	1.000	3622	0.002467			0.9	
463.00 > 169.00	3.015	3.022	-0.007	1.000	817		4.43(1.90-5.69)		7.9	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.227	3.234	-0.007	1.068	4874	0.001904			16.1	
D 21 13C8 FOSA										
506.00 > 78.00	3.341	3.335	0.006	1.264	4659969	2.20		87.9	7596	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.341	3.340	0.001	1.000	5315	0.002929			25.1	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.371	3.369	0.002	1.000	1031	0.001677			8.1	
D 26 M2-8:2FTS										
529.00 > 81.00	3.371	3.372	-0.001	1.276	1133152	2.35		97.9	2609	
D 23 13C2 PFDA										
515.00 > 470.00	3.386	3.380	0.006	1.281	3047476	2.22		88.8	5782	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.539	3.537	0.002	1.000	17785	0.0250			25.1	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.539	3.540	-0.001	1.339	1845190	2.63		105	5453	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.709	3.702	0.007	1.403	1819527	2.50		100	2901	
D 30 13C2 PFUnA										
565.00 > 520.00	3.709	3.711	-0.002	1.403	2567435	2.32		93.0	4698	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	3.709	3.716	-0.007	1.000	9331	0.008086			6.4	M
563.00 > 169.00	3.717	3.716	0.001	1.002	2887		3.23(2.12-6.36)		19.5	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.717	3.716	0.001	1.002	15004	0.0231			49.2	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.869	3.878	-0.009	1.280	25294	0.006437			97.5	
37 Perfluorododecanoic acid										R
613.00 > 569.00	4.013	4.012	0.001	1.000	16914	0.0134			8.8	R
613.00 > 169.00	4.013	4.012	0.001	1.000	2417		7.00(2.13-6.40)		15.1	
D 36 13C2 PFDoA										
615.00 > 570.00	4.013	4.017	-0.004	1.518	2835521	2.43		97.1	2977	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.013	4.020	-0.007	1.190	2598	0.006096			22.6	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.255	4.253	0.002	1.408	4413	0.0108			15.5	
699.00 > 99.00	4.255	4.253	0.002	1.408	7503		0.59(0.00-0.00)		46.9	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.274	4.281	-0.007	1.065	26162	0.0215			13.4	
663.00 > 169.00	4.284	4.281	0.003	1.067	8024		3.26(1.25-3.76)		62.2	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.525	4.523	0.002	1.712	3764311	2.53		101	6650	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.525	4.524	0.001	1.000	7884	0.0216			62.9	
713.00 > 219.00	4.525	4.524	0.001	1.000	7123		1.11(0.71-2.13)		56.8	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.944	4.944	0.0	1.871	6431303	2.18		87.2	8004	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.944	4.953	-0.009	1.000	71715	0.007580			9.5	
813.00 > 169.00	4.944	4.953	-0.009	1.000	12716		5.64(2.86-8.58)		57.6	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.308	5.315	-0.007	1.074	17332	0.007322			2.0	
913.00 > 169.00	5.308	5.315	-0.007	1.074	2096		8.27(3.83-11.48)		16.4	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 13-Aug-2018 13:27:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_033.d

Injection Date: 12-Aug-2018 15:12:15 Instrument ID: A8_N

Lims ID: MB 320-239187/1-A

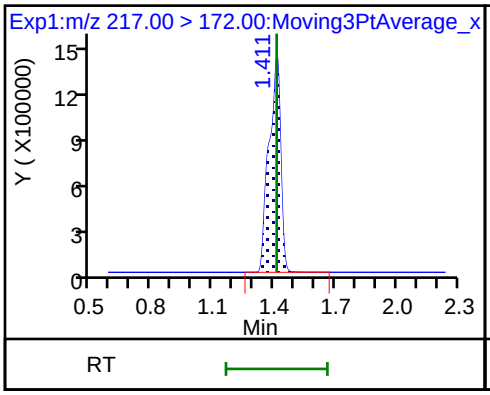
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 20 Worklist Smp#: 2

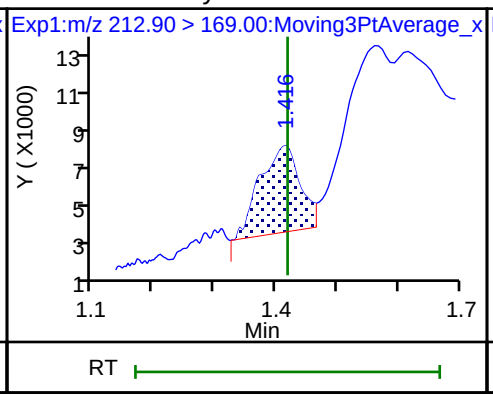
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

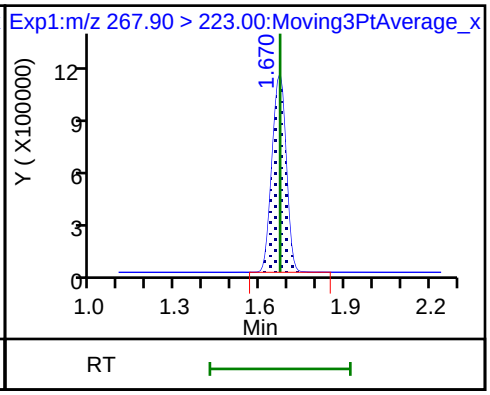
D 1 13C4 PFBA



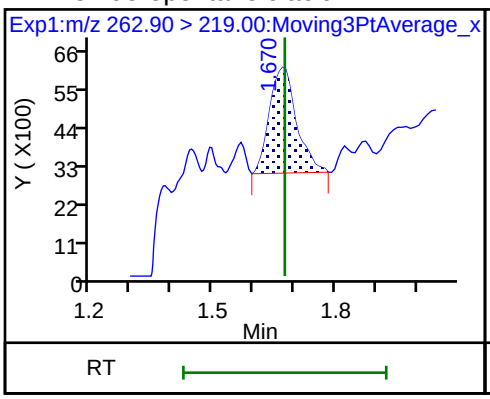
2 Perfluorobutyric acid



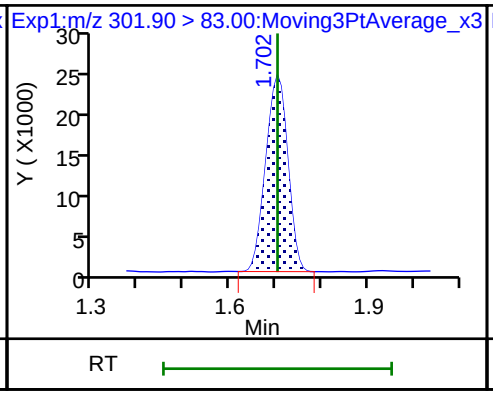
D 3 13C5-PFPeA



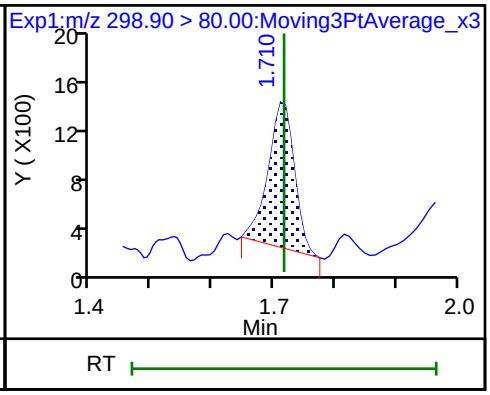
4 Perfluoropentanoic acid



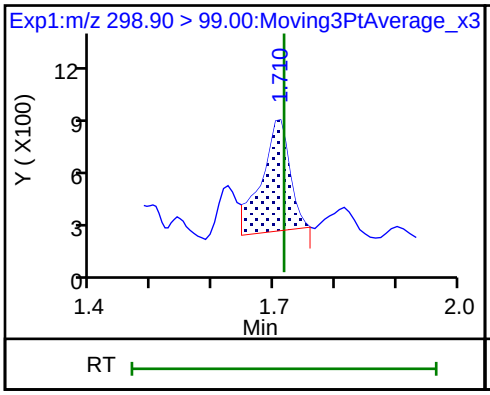
D 47 13C3-PFBS



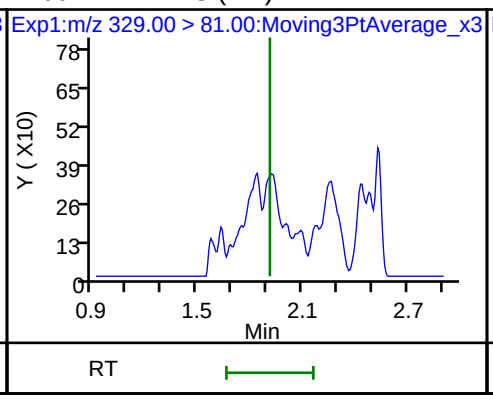
5 Perfluorobutanesulfonic acid



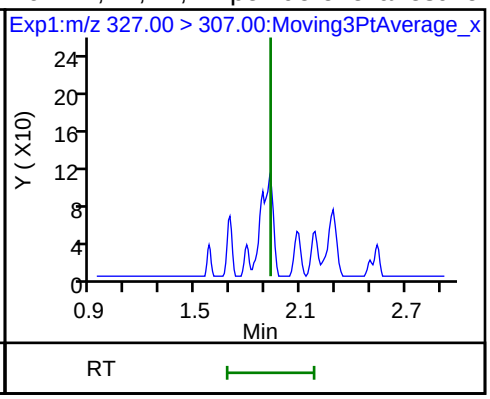
5 Perfluorobutanesulfonic acid



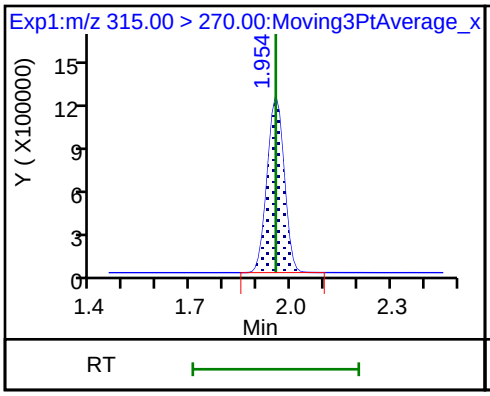
D 60 M2-4:2FTS (ND)



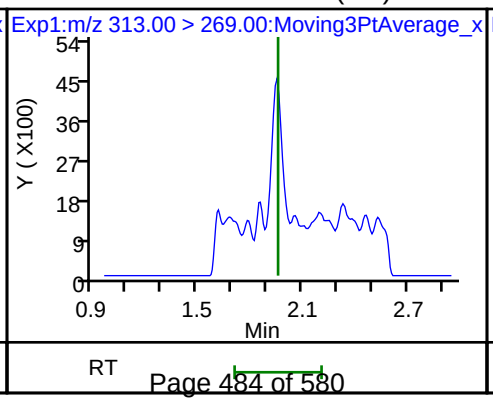
61 1H,1H,2H,2H-perfluorohexanesulfoni (ND)



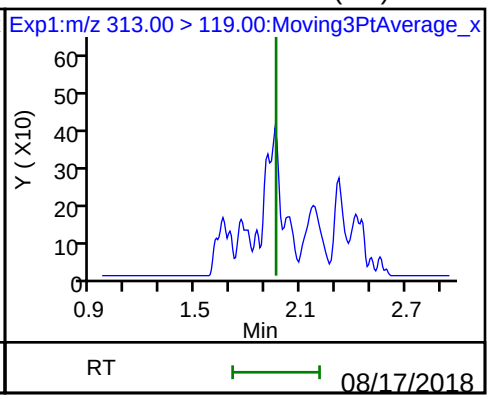
D 7 13C2 PFHxA



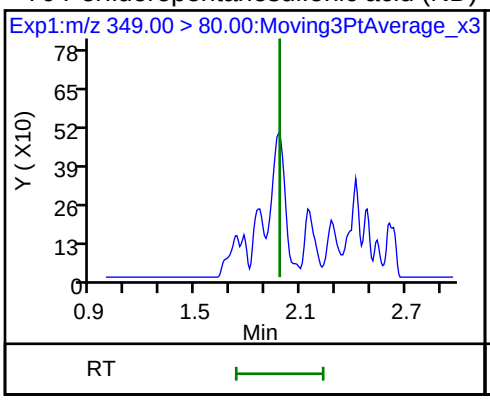
6 Perfluorohexanoic acid (ND)



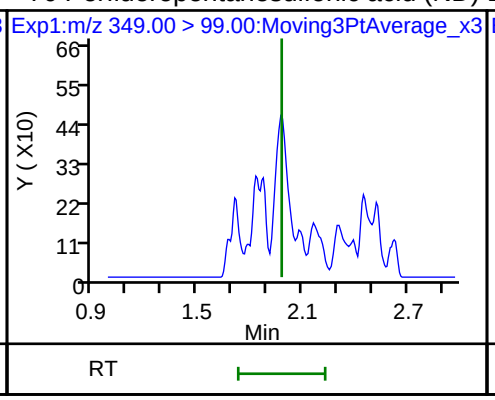
6 Perfluorohexanoic acid (ND)

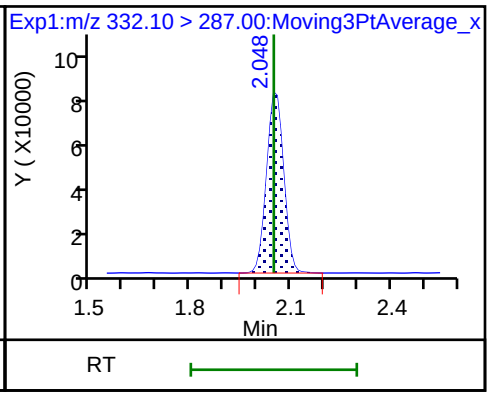


70 Perfluoropentanesulfonic acid (ND)

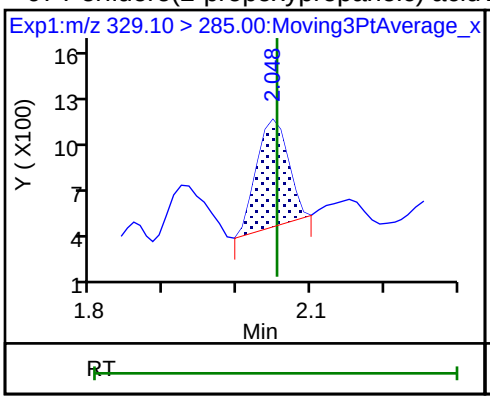


70 Perfluoropentanesulfonic acid (ND) D 64 13C3 HFPO-DA

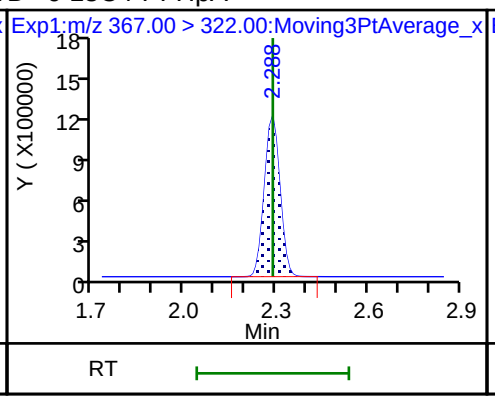




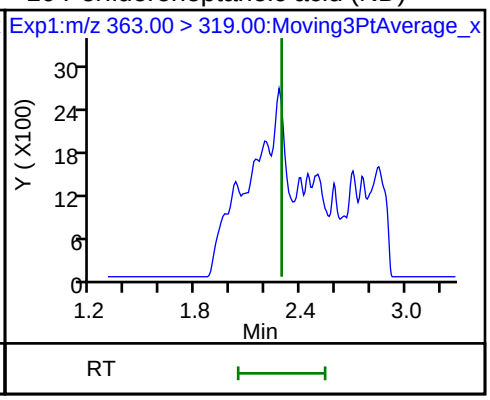
67 Perfluoro(2-propoxypropanoic) acid



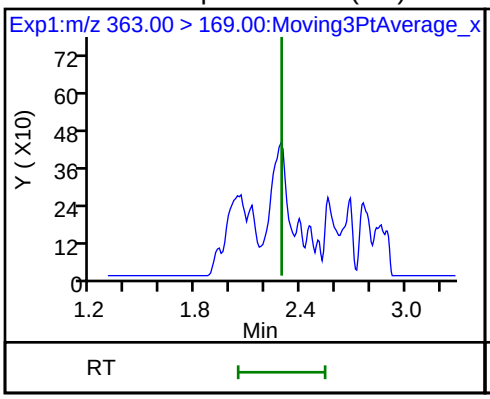
D 9 13C4-PFHpA



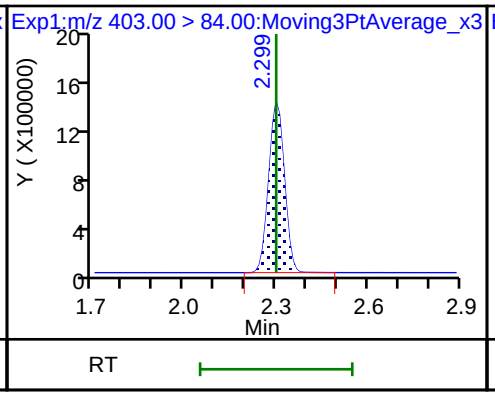
10 Perfluoroheptanoic acid (ND)



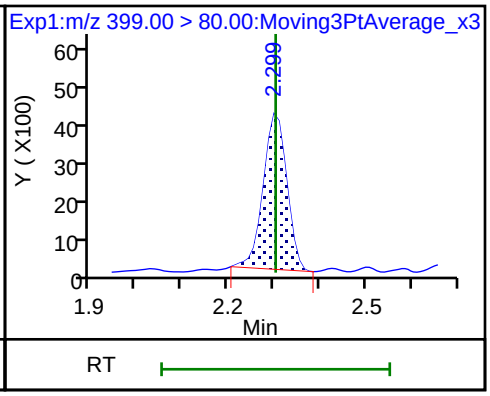
10 Perfluoroheptanoic acid (ND)



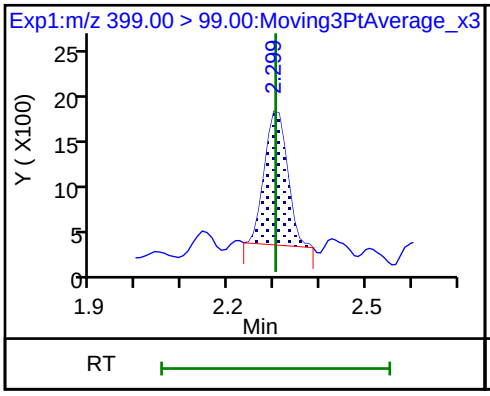
D 11 18O2 PFHxS



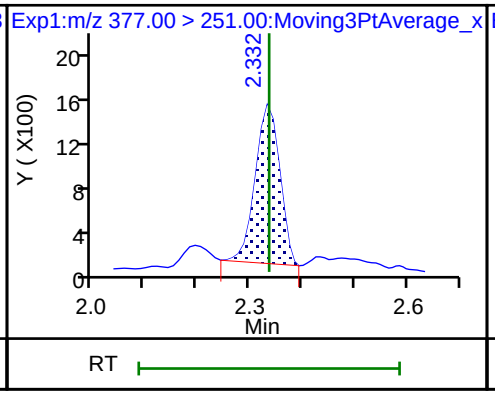
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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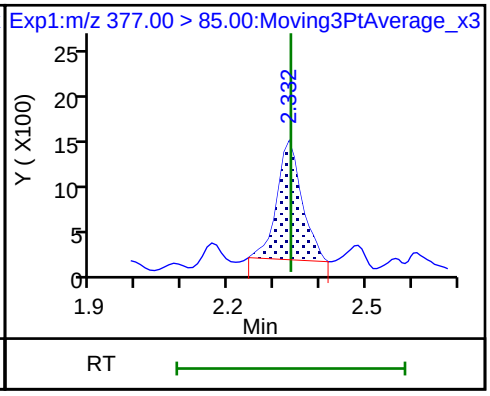
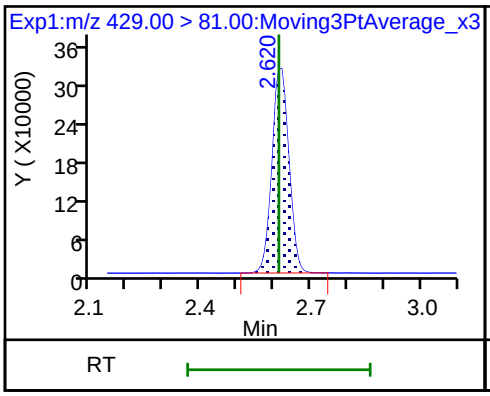
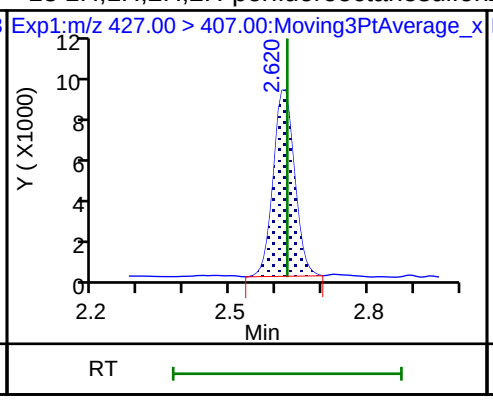


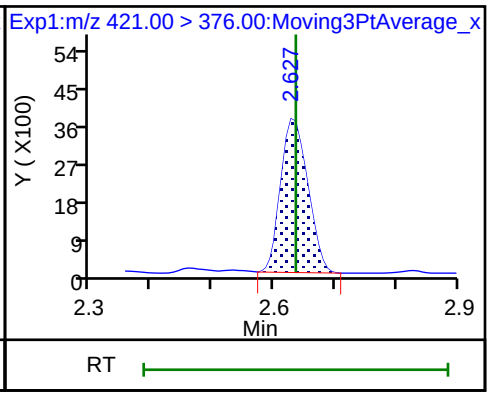
D 12 M2-6:2FTS



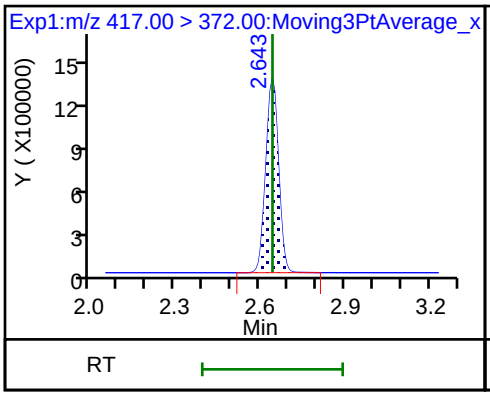
13 1H,1H,2H,2H-perfluorooctanesulfon



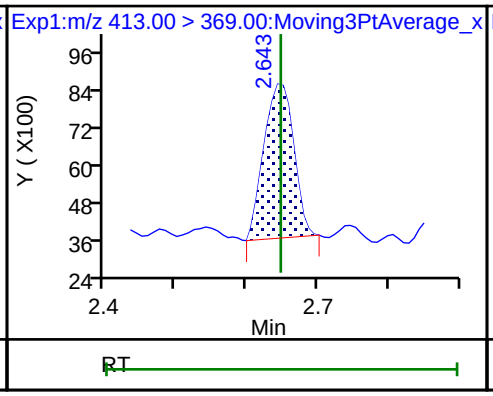
D 73 13C8 PFOA



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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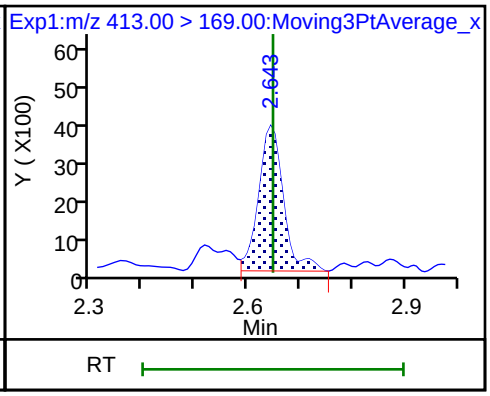
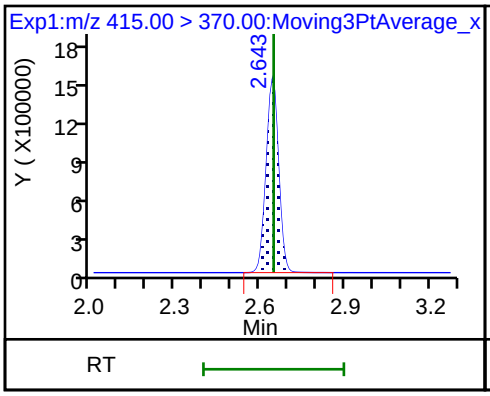
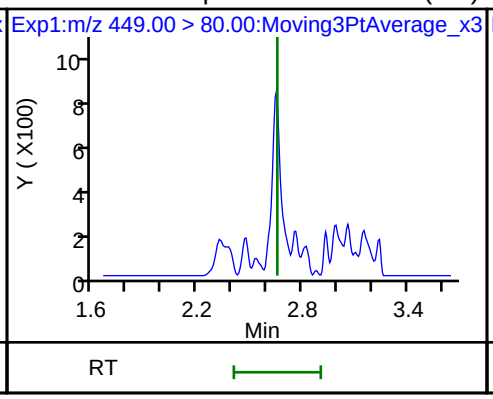


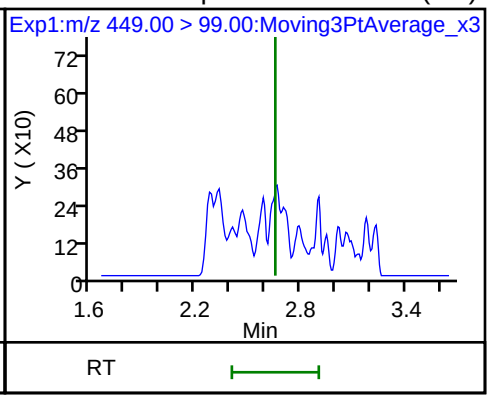
* 62 13C2-PFOA



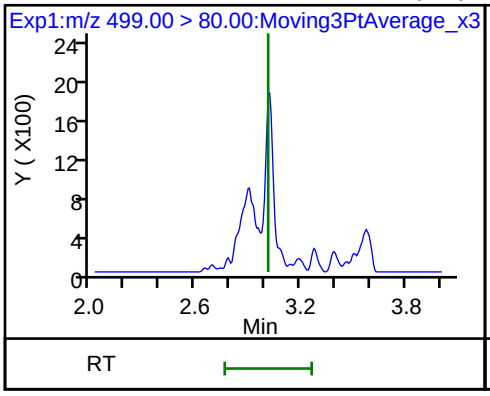
16 Perfluoroheptanesulfonic acid (ND)



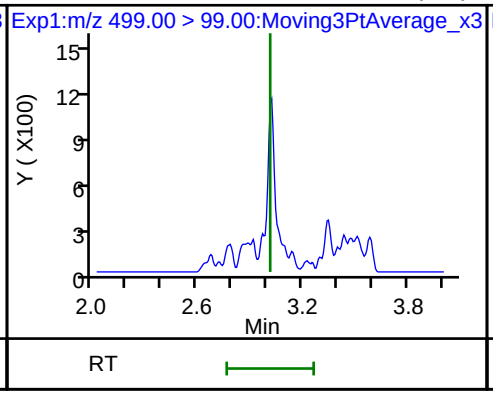
16 Perfluoroheptanesulfonic acid (ND)



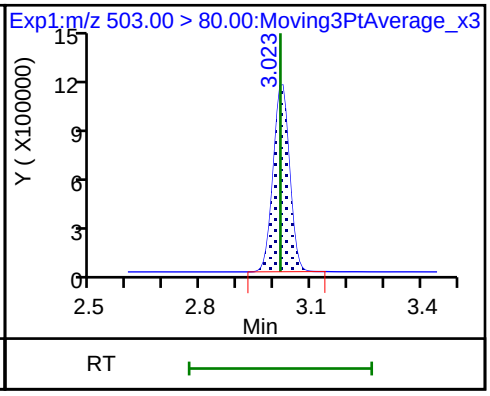
17 Perfluorooctane sulfonic acid (ND)



17 Perfluorooctane sulfonic acid (ND)



D 18 13C4 PFOS



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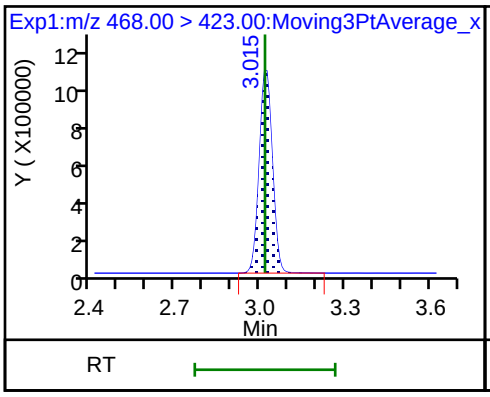
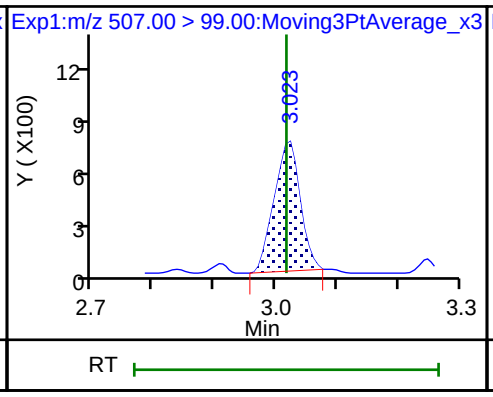
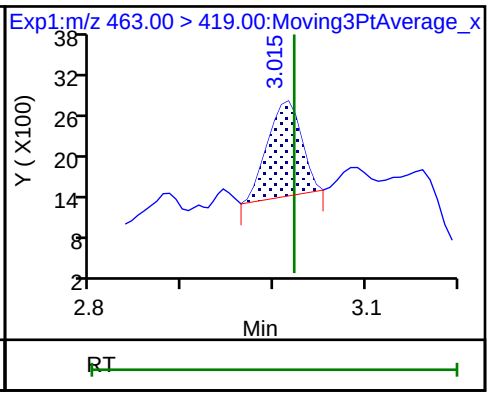


D 72 13C8 PFOS



20 Perfluorononanoic acid



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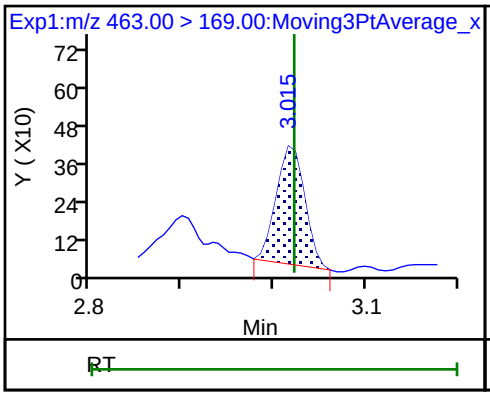
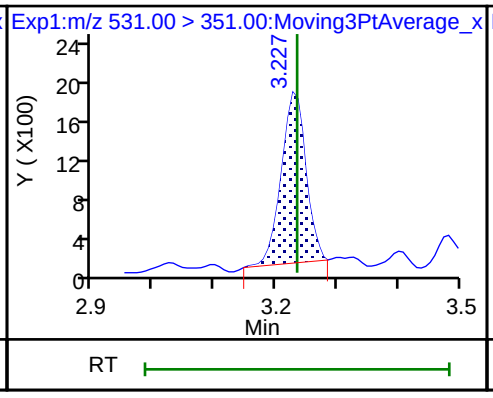
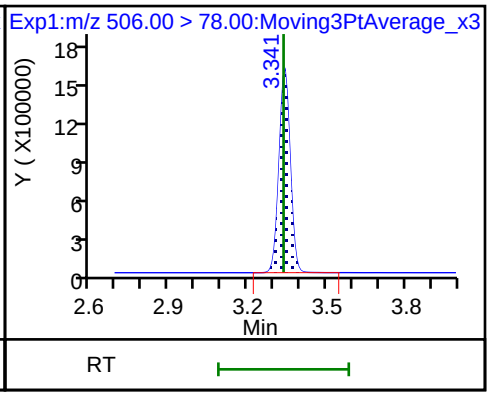


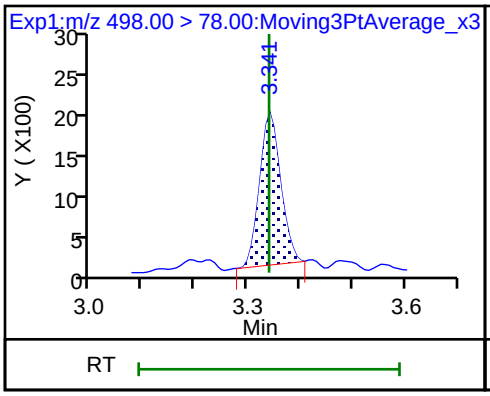
69 9-Chlorohexadecafluoro-3-oxanonane



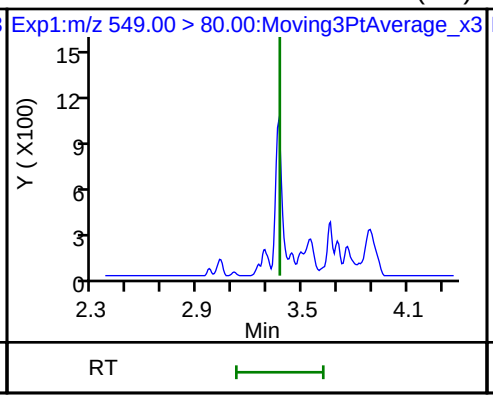
D 21 13C8 FOSA



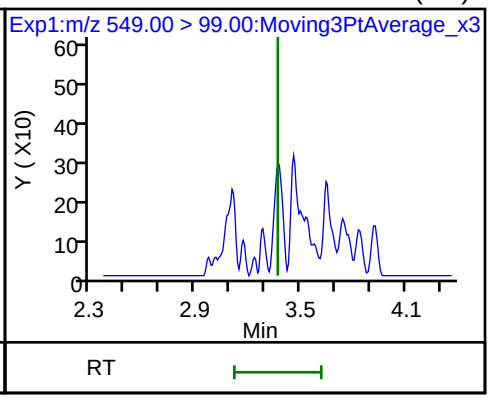
22 Perfluorooctane Sulfonamide



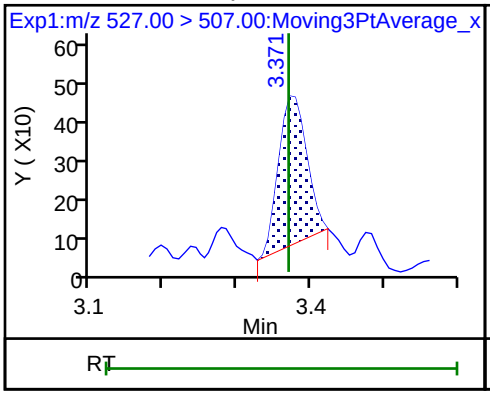
68 Perfluorononanesulfonic acid (ND)



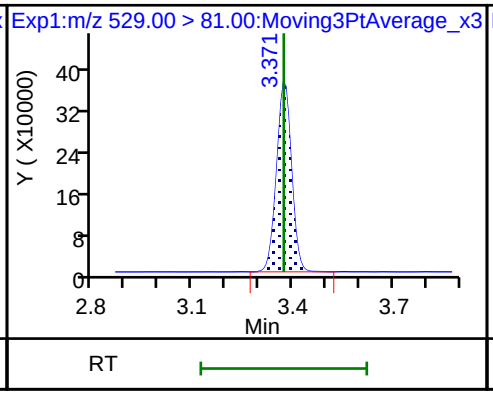
68 Perfluorononanesulfonic acid (ND)



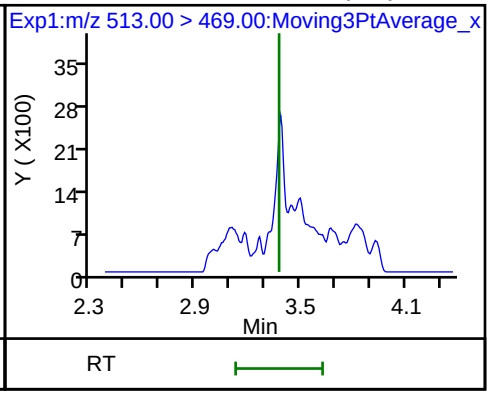
25 1H,1H,2H,2H-perfluorodecanesulfon



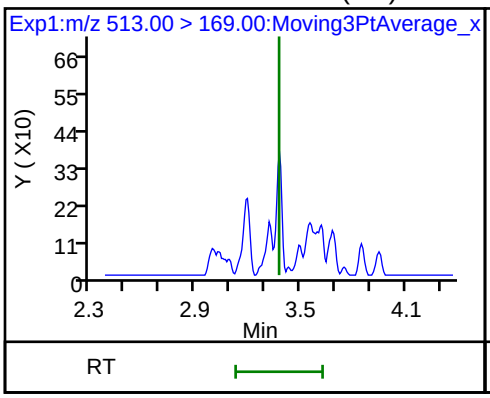
D 26 M2-8:2FTS



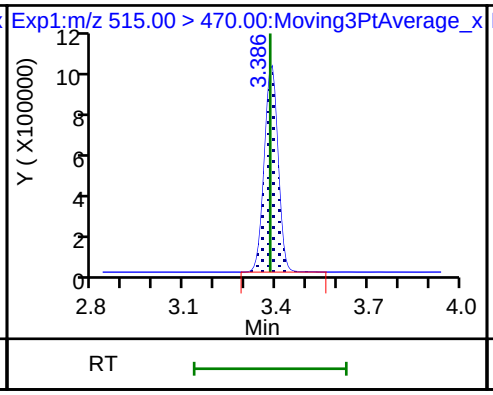
24 Perfluorodecanoic acid (ND)



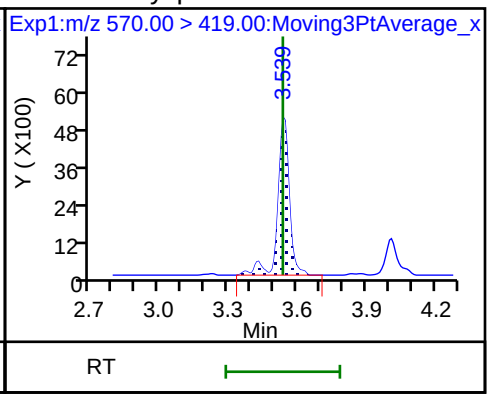
24 Perfluorodecanoic acid (ND)



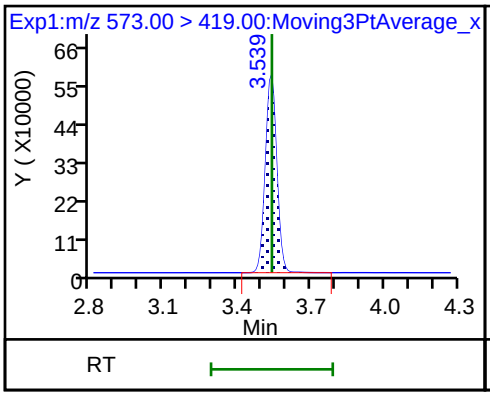
D 23 13C2 PFDA



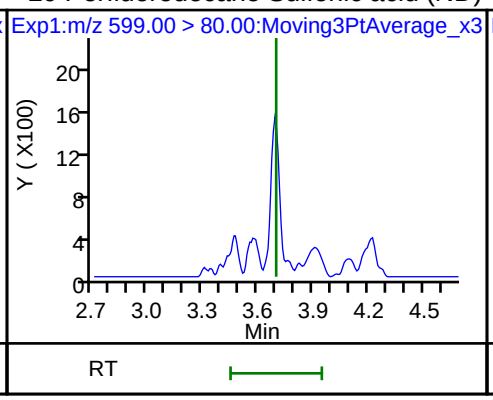
28 N-methyl perfluorooctane sulfonami



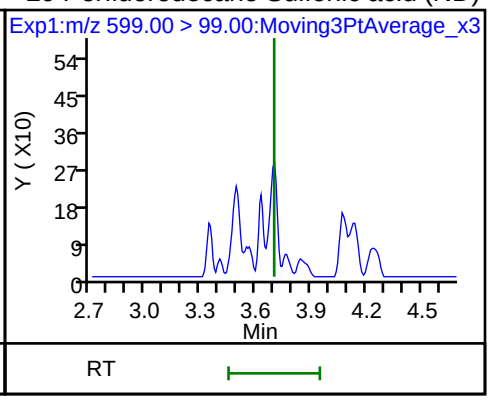
D 27 d3-NMeFOSAA



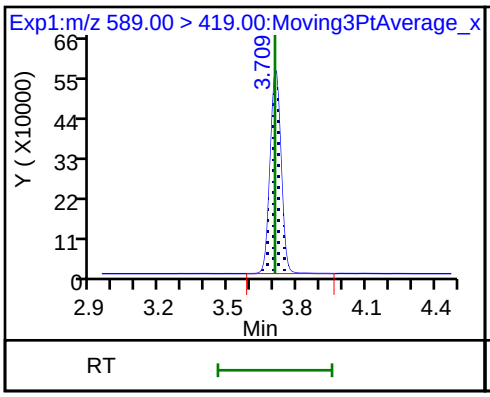
29 Perfluorodecane Sulfonic acid (ND)



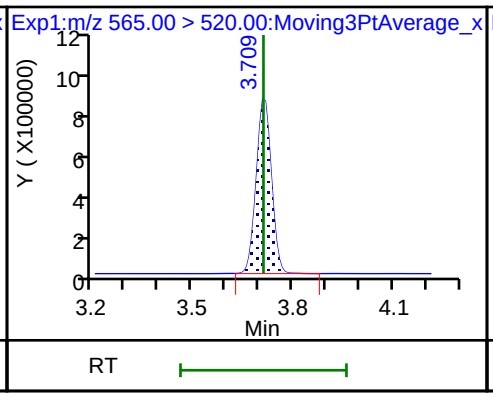
29 Perfluorodecane Sulfonic acid (ND)



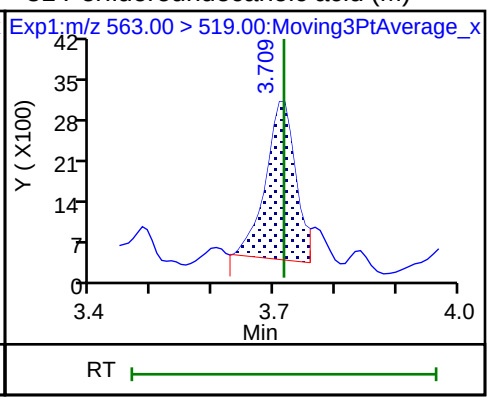
D 32 d5-NEtFOSAA



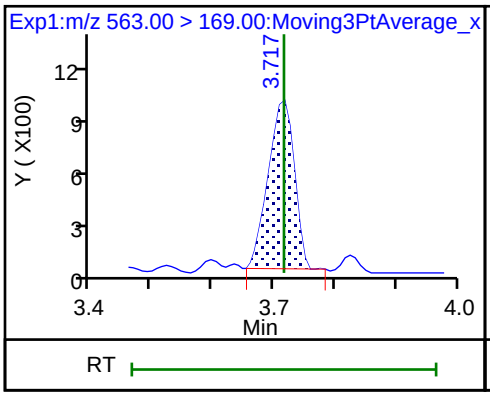
D 30 13C2 PFUnA



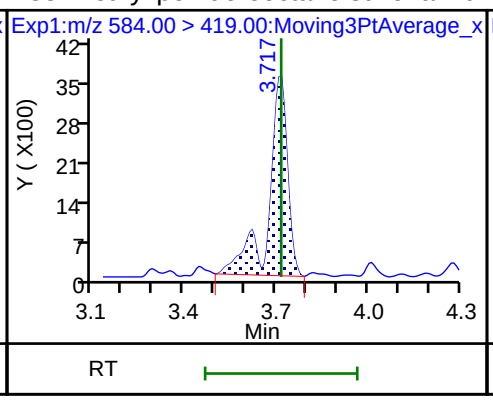
31 Perfluoroundecanoic acid (M)



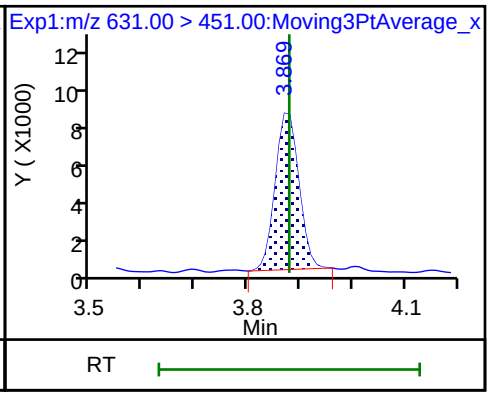
31 Perfluoroundecanoic acid



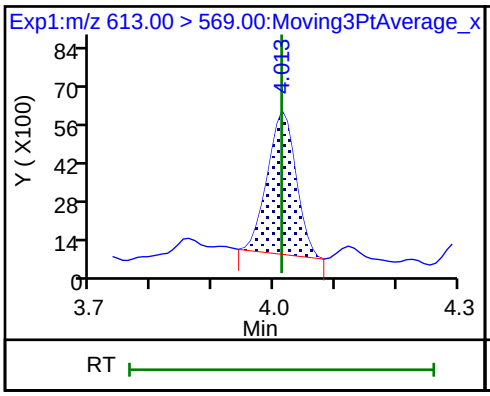
33 N-ethyl perfluorooctane sulfonamid



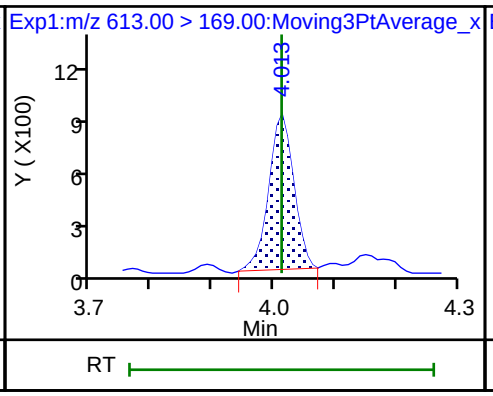
66 11-Chloroeicosafluoro-3-oxaundecan



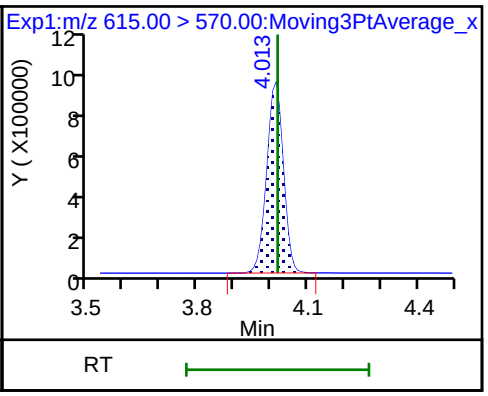
37 Perfluorododecanoic acid



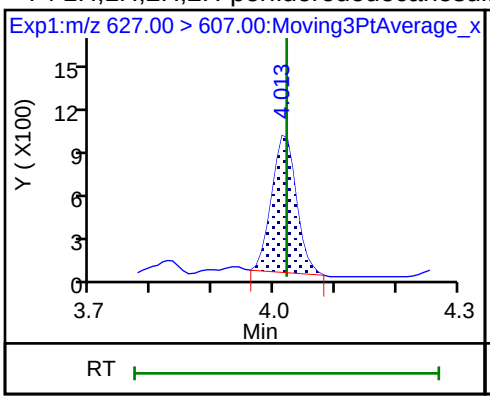
37 Perfluorododecanoic acid



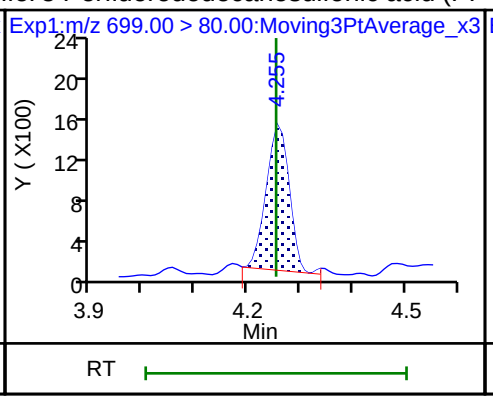
D 36 13C2 PFDoA



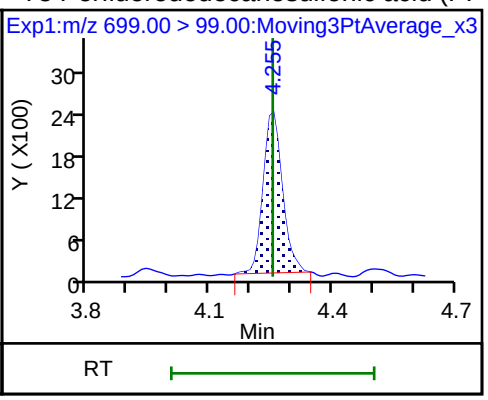
74 1H,1H,2H,2H-perfluorododecanesulfo



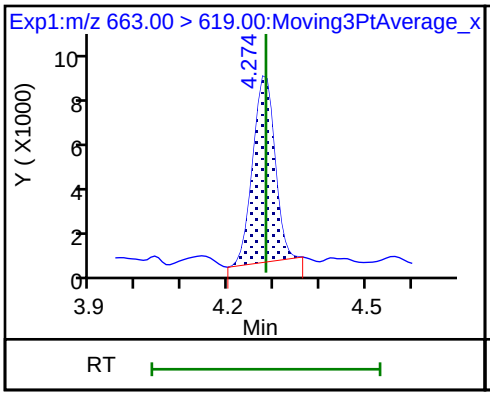
75 Perfluorododecanesulfonic acid (PF



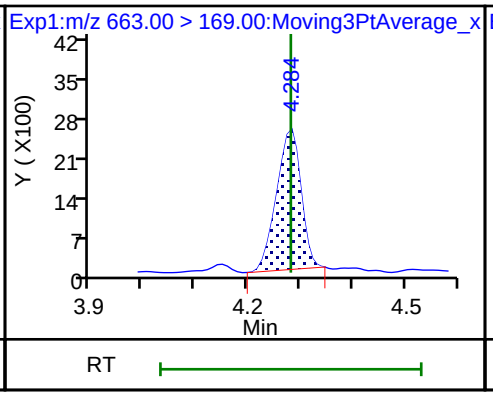
75 Perfluorododecanesulfonic acid (PF



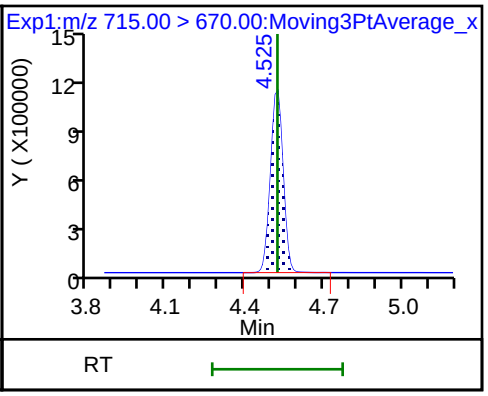
41 Perfluorotridecanoic acid



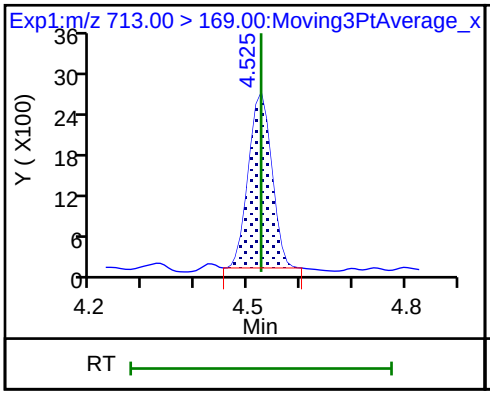
41 Perfluorotridecanoic acid



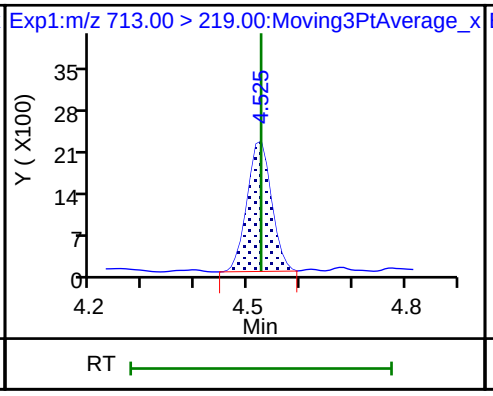
D 43 13C2-PFTeDA



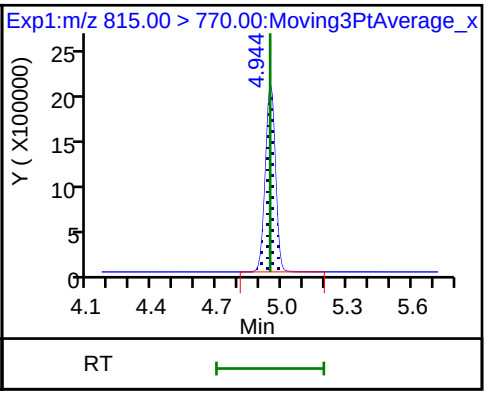
42 Perfluorotetradecanoic acid



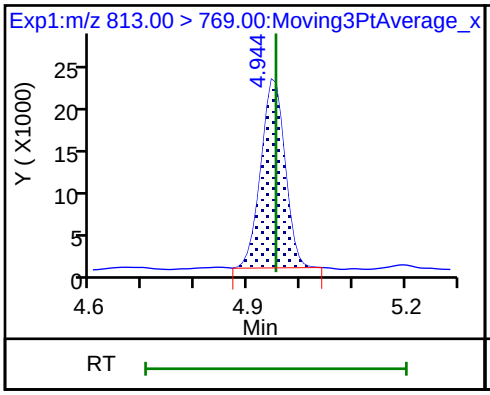
42 Perfluorotetradecanoic acid



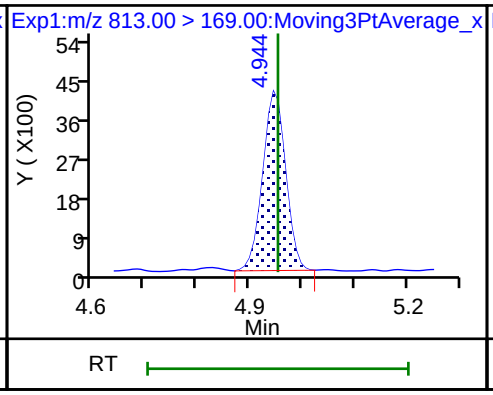
D 44 13C2-PFHxDA



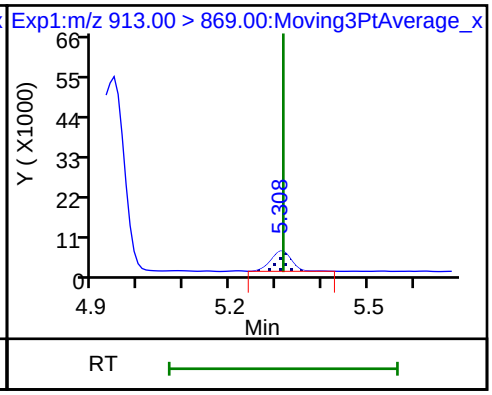
45 Perfluorohexadecanoic acid



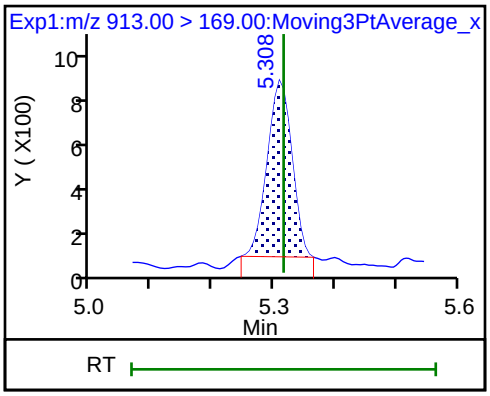
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

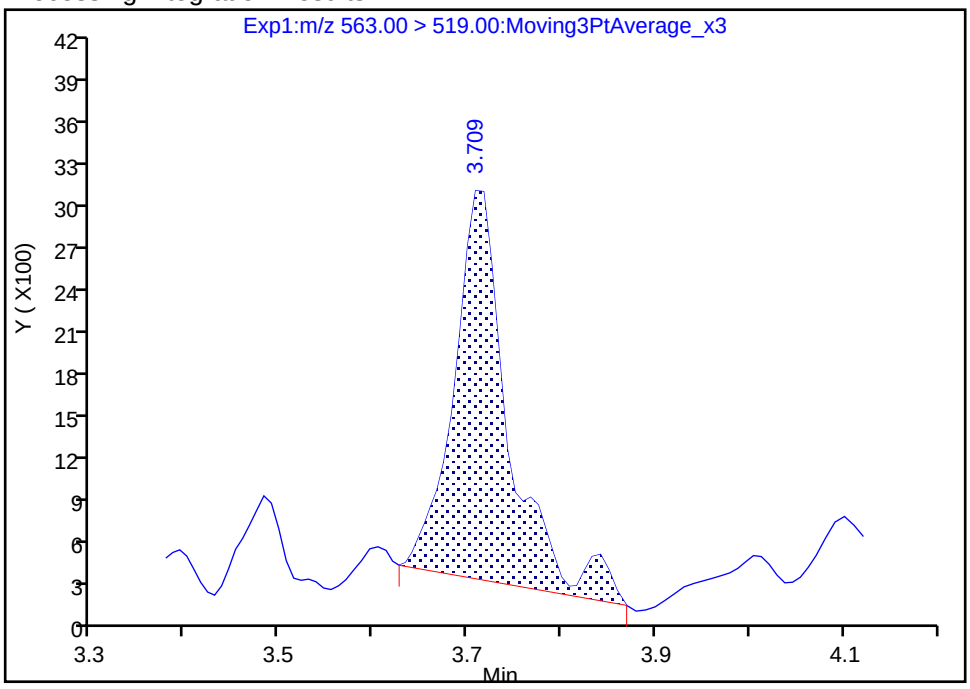
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_033.d
Injection Date: 12-Aug-2018 15:12:15 Instrument ID: A8_N
Lims ID: MB 320-239187/1-A
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 20 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

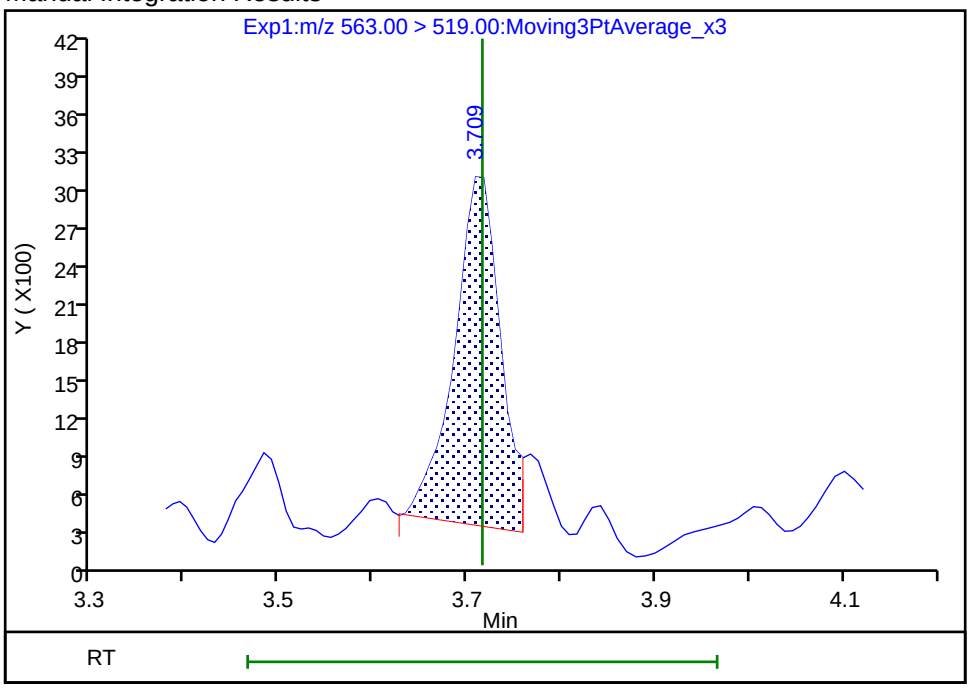
Processing Integration Results

RT: 3.71
Area: 11319
Amount: 0.009809
Amount Units: ng/ml



Manual Integration Results

RT: 3.71
Area: 9331
Amount: 0.008086
Amount Units: ng/ml



Reviewer: barnettj, 13-Aug-2018 10:51:33
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-238149/2-A

Matrix: Water | Lab File ID: 2018.08.08LLA_007.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:24

Sample wt/vol: 250(mL) | Date Analyzed: 08/08/2018 08:14

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	41.7		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	40.3		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	38.9		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	43.1		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	41.9		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	41.2		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	41.8		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	41.3		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	45.7		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	42.6		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	40.7		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	39.4		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	36.9		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	41.3		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	38.4		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	38.5		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	44.9		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	38.0		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	43.4		20	1.9
27619-97-2	6:2 FTS	53.6		20	2.0
39108-34-4	8:2 FTS	40.4		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-238149/2-A

Matrix: Water | Lab File ID: 2018.08.08LLA_007.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:24

Sample wt/vol: 250(mL) | Date Analyzed: 08/08/2018 08:14

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	98		25-150
STL01893	13C5 PFPeA	89		25-150
STL00993	13C2 PFHxA	94		25-150
STL01892	13C4-PFHpA	97		25-150
STL00990	13C4 PFOA	100		25-150
STL00995	13C5 PFNA	106		25-150
STL00996	13C2 PFDA	101		25-150
STL00997	13C2 PFUnA	95		25-150
STL00998	13C2 PFDoA	96		25-150
STL02116	13C2-PFTeDA	108		25-150
STL02337	13C3-PFBS	80		25-150
STL00994	18O2 PFHxS	83		25-150
STL00991	13C4 PFOS	84		25-150
STL01056	13C8 FOSA	77		25-150
STL02118	d3-NMeFOSAA	117		25-150
STL02117	d5-NEtFOSAA	103		25-150
STL02279	M2-6:2FTS	114		25-150
STL02280	M2-8:2FTS	95		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_007.d
Lims ID: LCS 320-238149/2-A
Client ID:
Sample Type: LCS
Inject. Date: 08-Aug-2018 08:14:15 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-238149/2-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 13:31:38 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 13:29:52

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.511	1.499	0.012	1.000	2970427	1.04		104	108	
D 1 13C4 PFBA										
217.00 > 172.00	1.511	1.499	0.012	0.543	7669600	2.45		98.0	8430	
D 3 13C5-PFPeA										
267.90 > 223.00	1.789	1.764	0.025	0.643	6226190	2.23		89.0	8033	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.789	1.772	0.017	1.000	2561408	1.01		101	135	
D 47 13C3-PFBS										
301.90 > 83.00	1.822	1.806	0.016	0.655	80303	1.85		79.7	449	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.831	1.813	0.018	1.005	3511394	0.9843		111	1326	
298.90 > 99.00	1.831	1.813	0.018	1.005	1227165		2.86(1.35-4.05)		721	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.048	2.027	0.021	1.124	488824	0.8314		89.0	1714	
D 7 13C2 PFHxA										
315.00 > 270.00	2.079	2.058	0.021	0.747	6791600	2.34		93.5	9542	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.079	2.068	0.011	1.000	2469394	0.9717		97.2	592	
313.00 > 119.00	2.079	2.068	0.011	1.000	182544		13.53(6.96-20.87)		350	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.099	2.088	0.011	1.152	1751500	1.04		111	3139	
349.00 > 99.00	2.099	2.088	0.011	1.152	812544		2.16(1.15-3.45)		1079	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.181	2.160	0.021	1.000	562122	0.7622		76.2	363	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.181	2.160	0.021	0.784	836227	3.37		135	3057	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.413	2.399	0.014	1.000	3591257	1.08		108	374	
363.00 > 169.00	2.413	2.399	0.014	1.000	775971		4.63(2.17-6.52)		1242	
D 9 13C4-PFHpA										
367.00 > 322.00	2.413	2.400	0.013	0.867	8029337	2.43		97.4	9901	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.439	2.413	0.026	1.000	2434283	0.9219		101	1805	
399.00 > 99.00	2.439	2.413	0.026	1.000	637246		3.82(1.90-5.70)		310	
D 11 18O2 PFHxS										
403.00 > 84.00	2.439	2.413	0.026	0.877	4881349	1.97		83.1	10792	
65 ADONA										
377.00 > 251.00	2.466	2.452	0.014	0.782	5656935	1.29		129	7461	
377.00 > 85.00	2.466	2.452	0.014	0.782	2306263		2.45(1.05-3.16)		1612	
D 12 M2-6:2FTS										
429.00 > 81.00	2.751	2.735	0.016	0.989	868562	2.71		114	1011	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.751	2.750	0.001	1.000	1047532	1.34		141	2247	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.783	2.766	0.017	1.000	3165777	1.05		105	397	
413.00 > 169.00	2.783	2.766	0.017	1.000	1126312		2.81(1.36-4.08)		1344	
* 62 13C2-PFOA										
415.00 > 370.00	2.783	2.766	0.017		7005134	2.50			17577	
D 14 13C4 PFOA										
417.00 > 372.00	2.783	2.767	0.016	1.000	6901416	2.50		99.9	9444	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.799	2.782	0.017	0.887	2265708	1.03		108	1533	
449.00 > 99.00	2.799	2.782	0.017	0.887	580052		3.91(1.84-5.53)		2191	
D 18 13C4 PFOS										
503.00 > 80.00	3.154	3.136	0.018	1.134	5191032	2.01		84.0	3552	
D 19 13C5 PFNA										
468.00 > 423.00	3.173	3.136	0.037	1.140	6305069	2.66		106	12108	
20 Perfluorononanoic acid										
463.00 > 419.00	3.173	3.153	0.020	1.000	2743012	1.03		103	515	
463.00 > 169.00	3.173	3.153	0.020	1.000	505737		5.42(2.68-8.03)		1066	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.173	3.153	0.020	1.006	2238117	0.9609		104	845	
499.00 > 99.00	3.154	3.153	0.001	1.000	509390		4.39(2.04-6.12)		1224	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.369	3.367	0.002	1.068	2399160	0.9353		100	2482	
D 26 M2-8:2FTS										
529.00 > 81.00	3.514	3.482	0.032	1.263	84645	2.27		94.9	378	
D 21 13C8 FOSA										
506.00 > 78.00	3.514	3.482	0.032	1.263	2969570	1.92		76.9	4025	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.514	3.496	0.018	1.114	1458158	1.03		107	1588	
549.00 > 99.00	3.514	3.496	0.018	1.114	247388		5.89(3.02-9.05)		719	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.514	3.496	0.018	1.000	4098903	1.12		112	3207	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.514	3.496	0.018	1.000	500443	1.01		105	1667	
D 23 13C2 PFDA										
515.00 > 470.00	3.529	3.498	0.031	1.268	5982738	2.52		101	7061	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.529	3.512	0.017	1.000	3070880	1.04		104	633	
513.00 > 169.00	3.529	3.512	0.017	1.000	197952		15.51(7.12-21.35)		394	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.671	3.657	0.014	1.319	1351282	2.93		117	2102	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.685	3.669	0.016	1.004	518806	0.9497		95.0	266	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.825	3.823	0.002	1.213	1744349	0.9637		100.0	2581	
599.00 > 99.00	3.825	3.823	0.002	1.213	375044		4.65(2.14-6.43)		800	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.841	3.825	0.016	1.380	978290	2.58		103	1840	
D 30 13C2 PFUnA										
565.00 > 520.00	3.841	3.825	0.016	1.380	4572864	2.38		95.3	7276	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.841	3.839	0.002	1.000	1590157	1.03		103	250	
563.00 > 169.00	3.841	3.839	0.002	1.000	156020		10.19(5.24-15.72)		737	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.841	3.839	0.002	1.000	381040	1.09		109	677	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.010	3.992	0.018	1.271	2758879	1.02		108	5179	
D 36 13C2 PFDoA										
615.00 > 570.00	4.142	4.125	0.017	1.488	4986445	2.41		96.4	6860	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.142	4.140	0.002	1.000	2242432	1.14		114	322	
613.00 > 169.00	4.142	4.140	0.002	1.000	244749		9.16(4.68-14.05)		884	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.406	4.404	0.002	1.064	1593359	1.06		106	384	
663.00 > 169.00	4.406	4.404	0.002	1.064	248799		6.40(3.09-9.27)		1018	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.646	4.630	0.016	1.669	3554749	2.69		108	8503	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.646	4.645	0.001	1.000	233144	1.02		102	934	
713.00 > 219.00	4.646	4.645	0.001	1.000	165389		1.41(0.70-2.09)		585	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.059	5.042	0.017	1.818	2868533	2.37		94.7	4219	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.059	5.059	0.0	1.000	1134778	1.07		107	89.1	
813.00 > 169.00	5.059	5.059	0.0	1.000	195219		5.81(2.77-8.32)		747	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.419	5.404	0.015	1.071	800086	0.9822		98.2	400	
913.00 > 169.00	5.405	5.404	0.001	1.068	149069		5.37(2.55-7.64)		978	

Report Date: 08-Aug-2018 13:31:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_007.d

Injection Date: 08-Aug-2018 08:14:15 Instrument ID: A9

Lims ID: LCS 320-238149/2-A

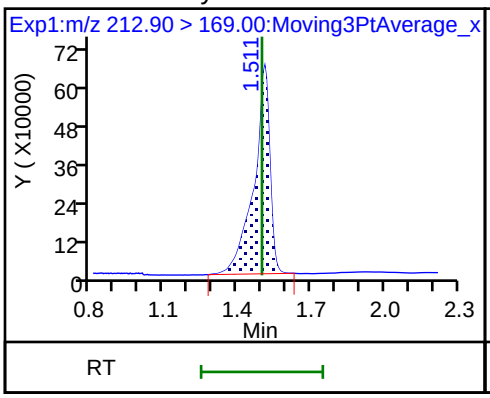
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 2 Worklist Smp#: 3

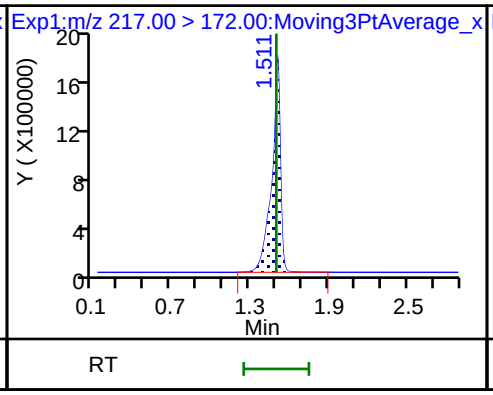
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

2 Perfluorobutyric acid



D 1 13C4 PFBA



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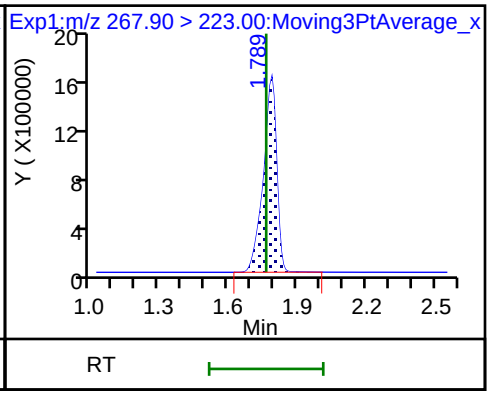
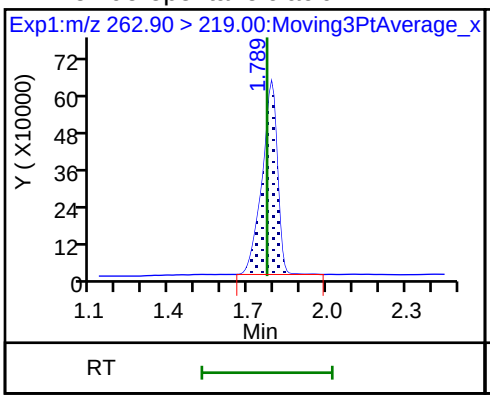
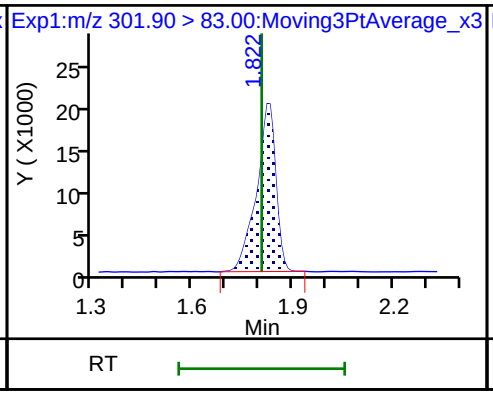


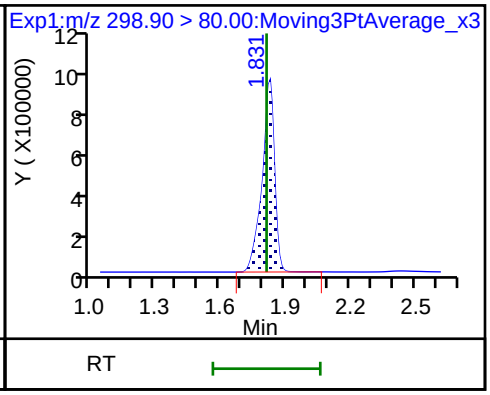
4 Perfluoropentanoic acid



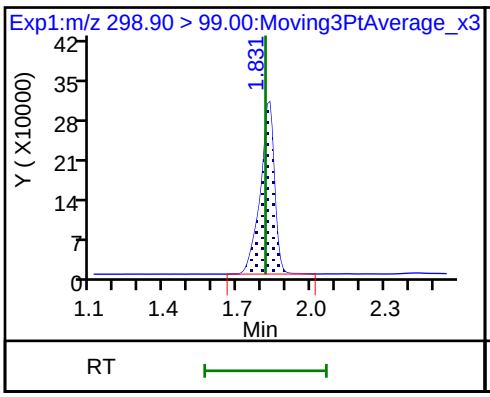
D 47 13C3-PFBS



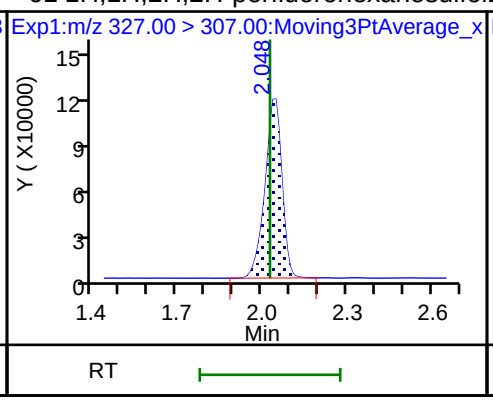
5 Perfluorobutanesulfonic acid



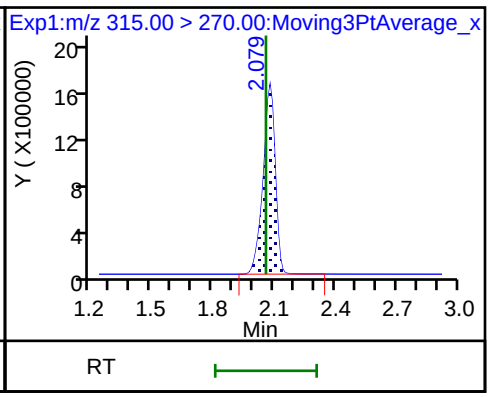
5 Perfluorobutanesulfonic acid



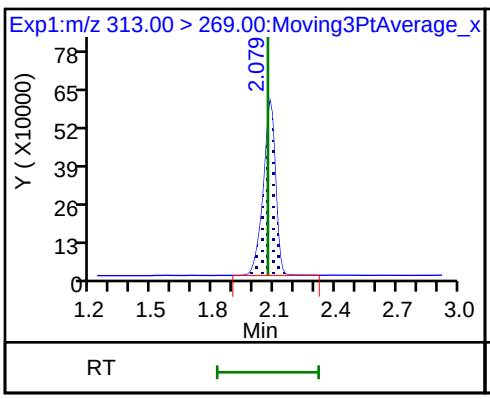
61 1H,1H,2H,2H-perfluorohexanesulfon



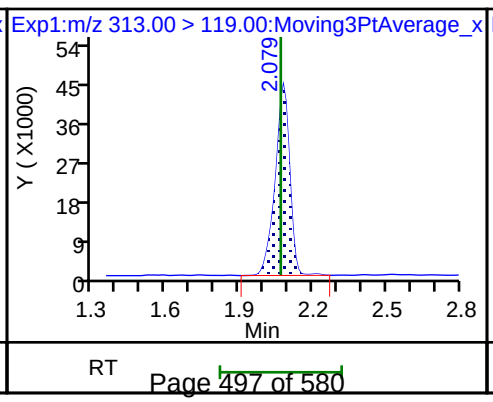
D 7 13C2 PFHxA



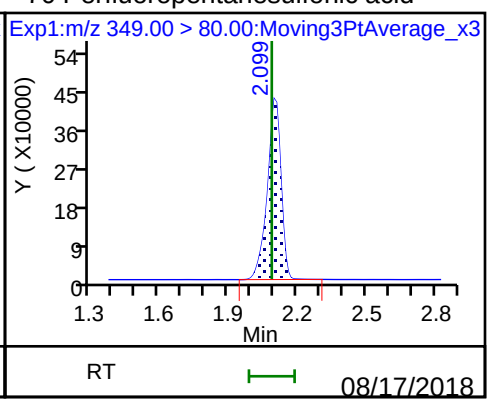
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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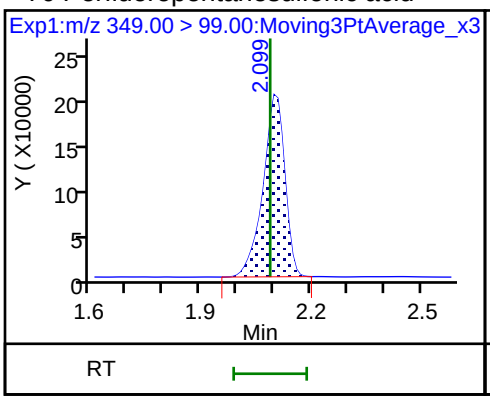
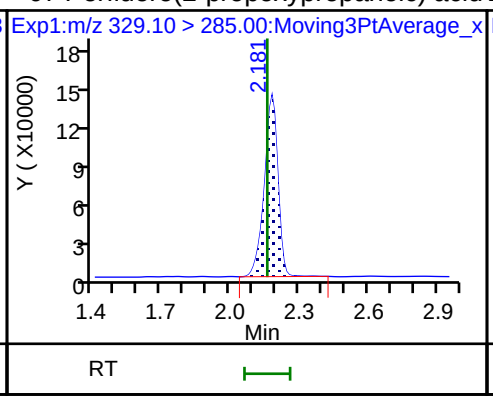
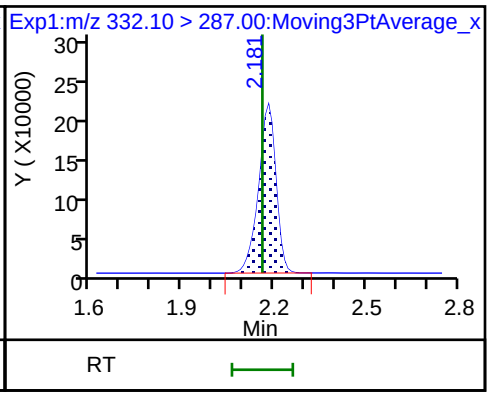


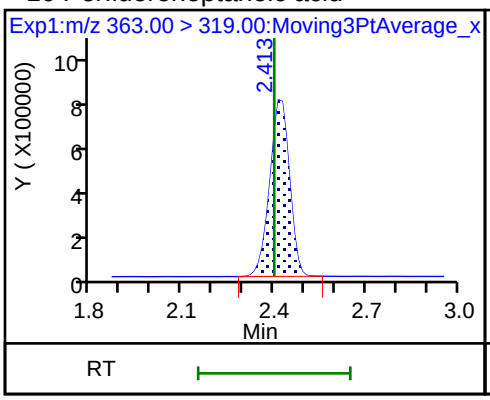
67 Perfluoro(2-propoxypropanoic) acid



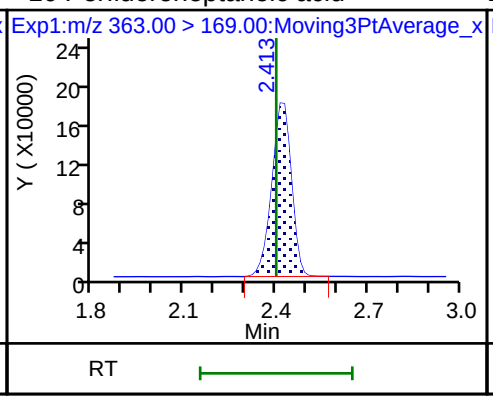
D 64 13C3 HFPO-DA



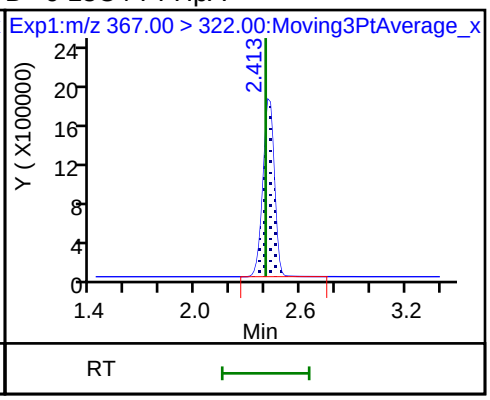
10 Perfluoroheptanoic acid



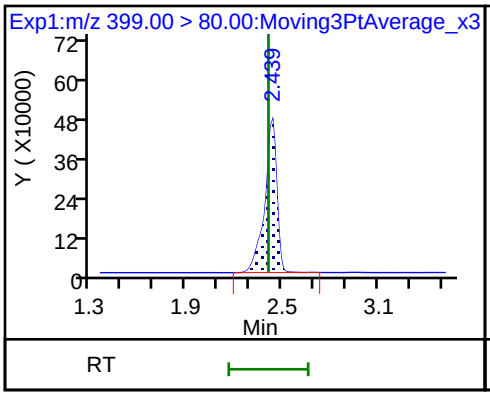
10 Perfluoroheptanoic acid



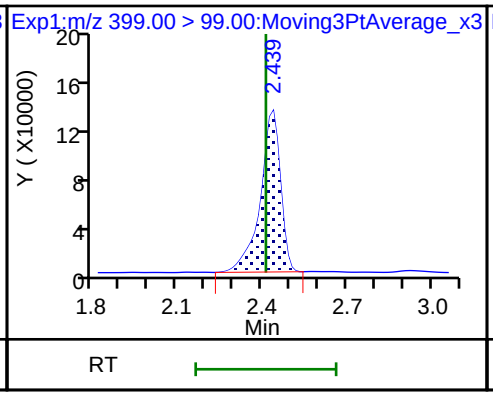
D 9 13C4-PFHpA



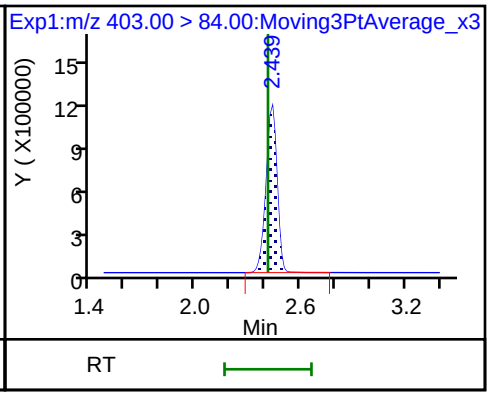
8 Perfluorohexanesulfonic acid



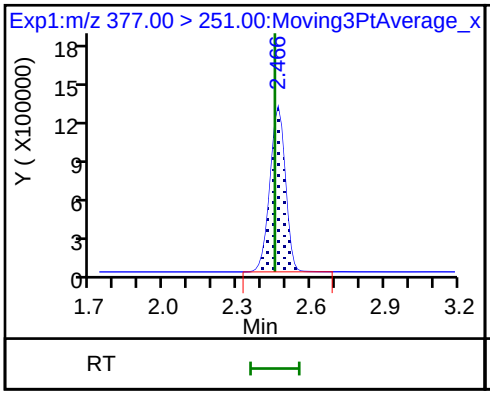
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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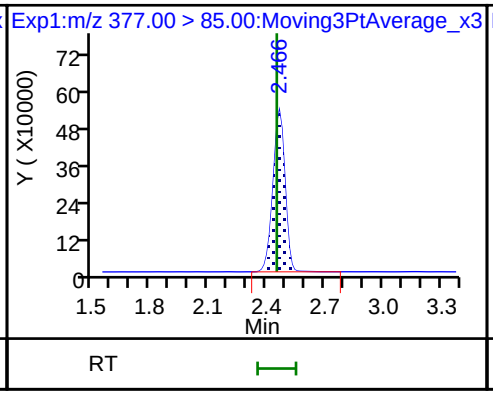
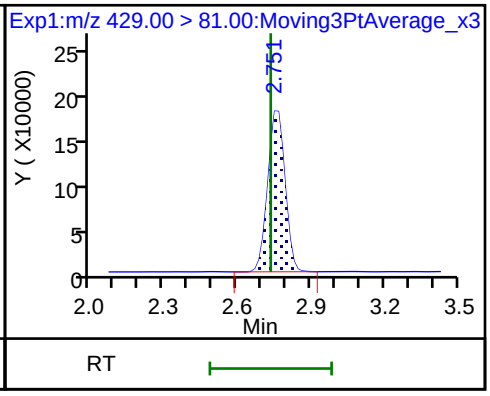
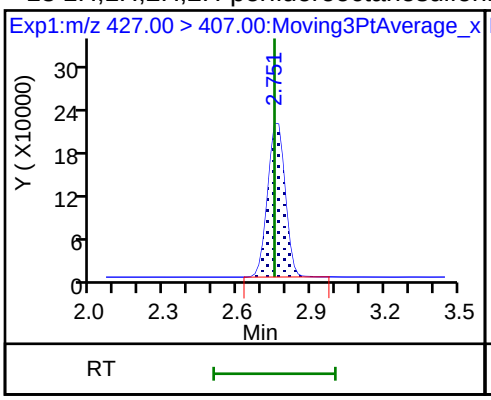


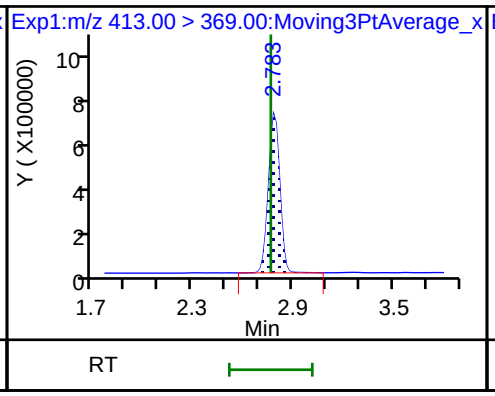
D 12 M2-6:2FTS



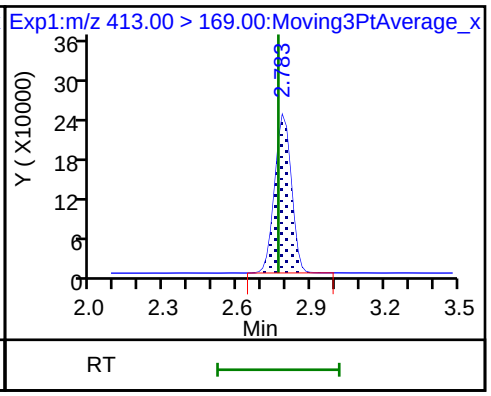
13 1H,1H,2H,2H-perfluorooctanesulfoni



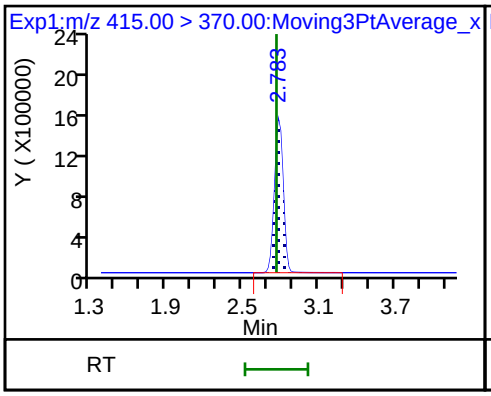
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid



* 62 13C2-PFOA



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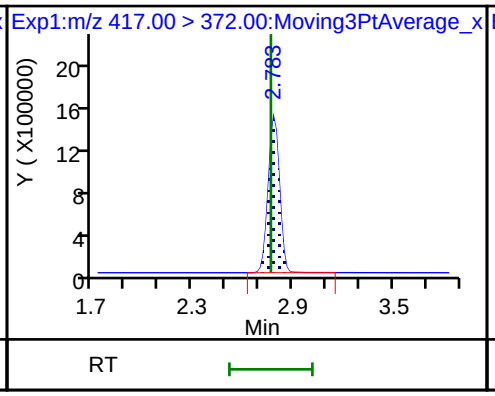
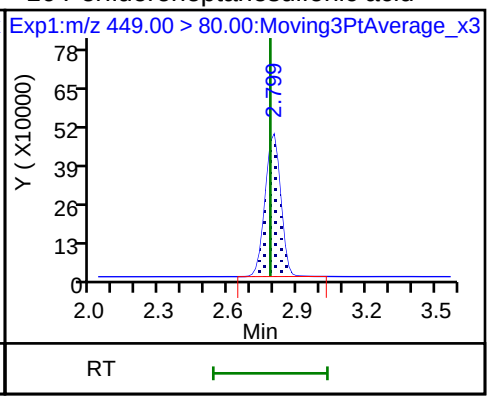
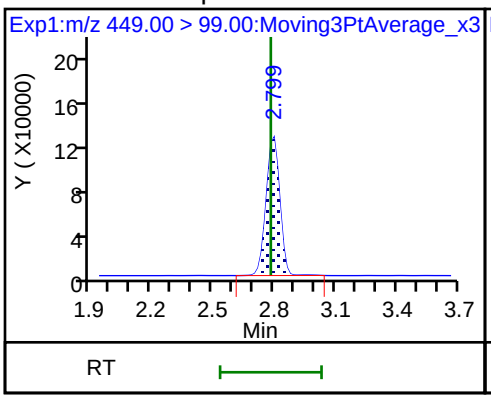


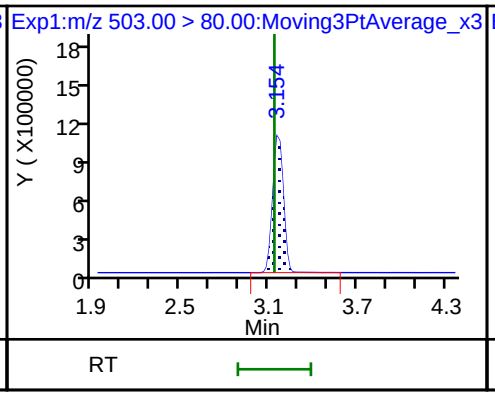
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 18 13C4 PFOS



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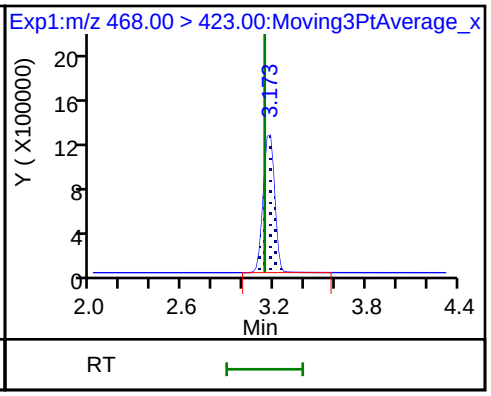
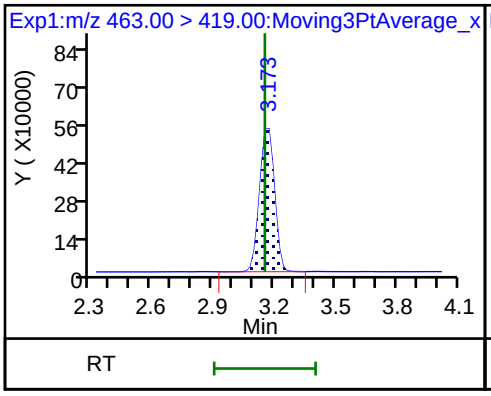


20 Perfluorononanoic acid



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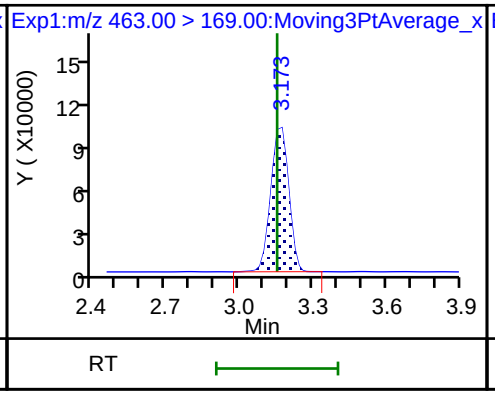
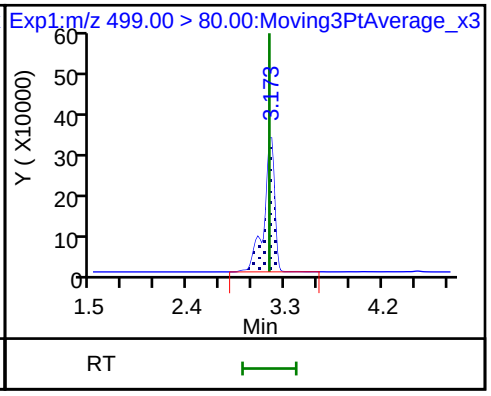
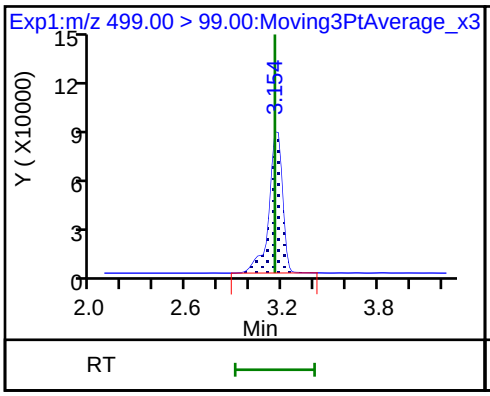


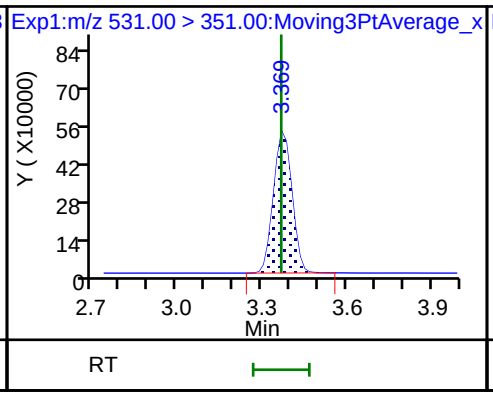
17 Perfluorooctane sulfonic acid



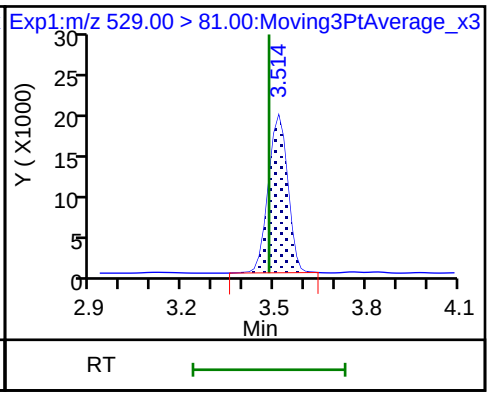
17 Perfluorooctane sulfonic acid



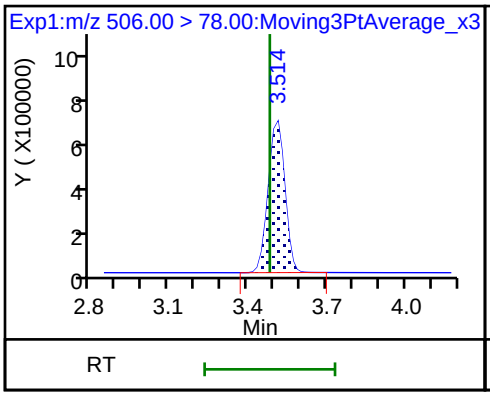
69 9-Chlorohexadecafluoro-3-oxanonane



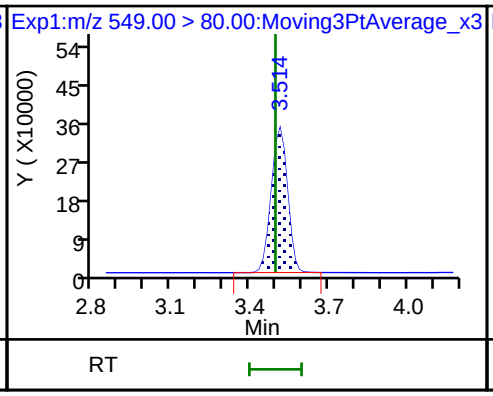
D 26 M2-8:2FTS



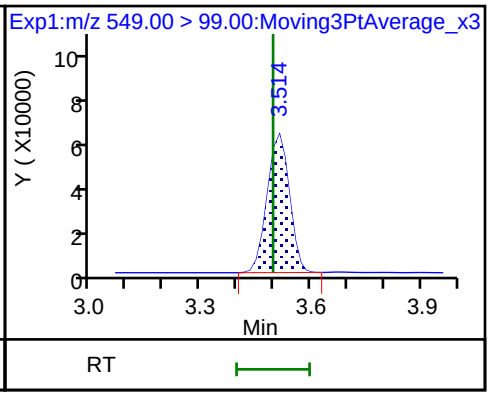
D 21 13C8 FOSA



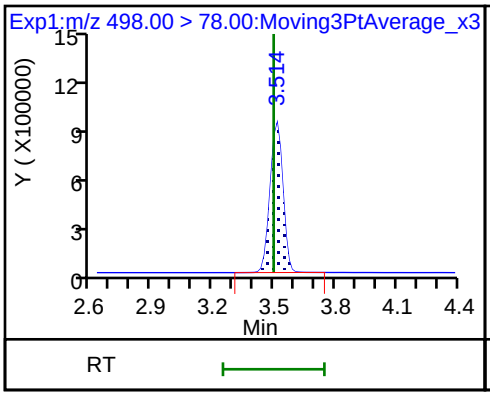
68 Perfluorononanesulfonic acid



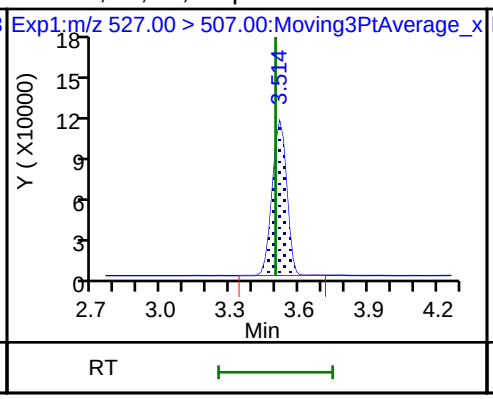
68 Perfluorononanesulfonic acid



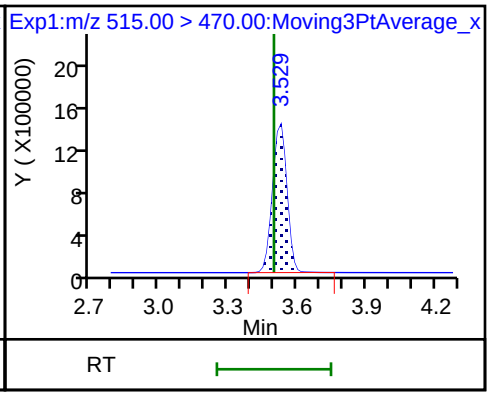
22 Perfluorooctane Sulfonamide



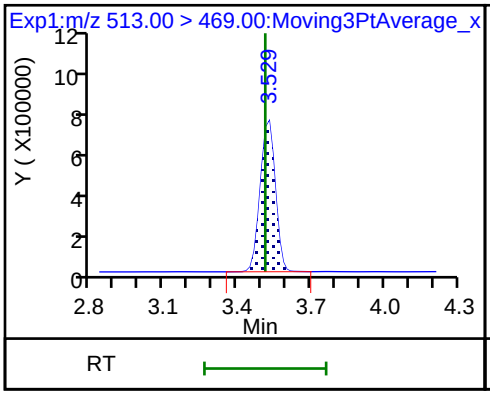
25 1H,1H,2H,2H-perfluorodecanesulfon



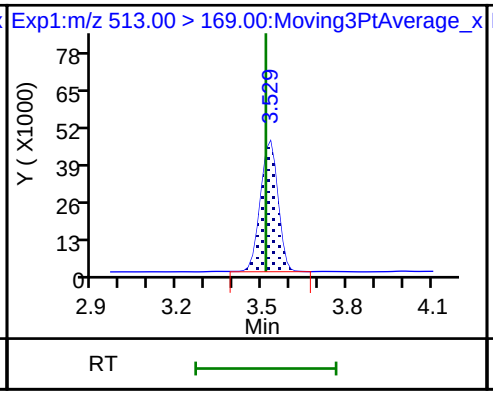
D 23 13C2 PFDA



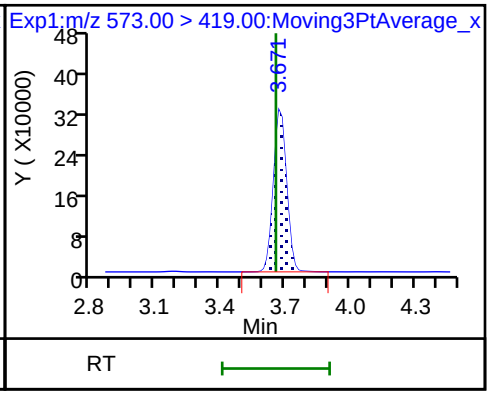
24 Perfluorodecanoic acid



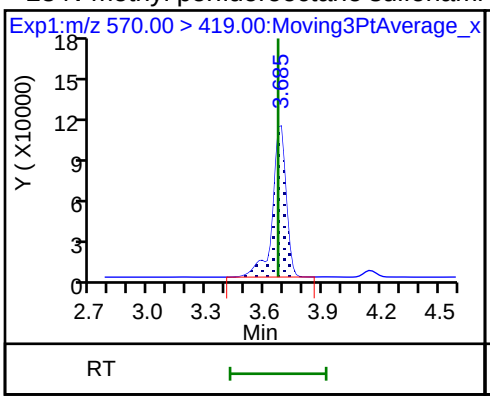
24 Perfluorodecanoic acid



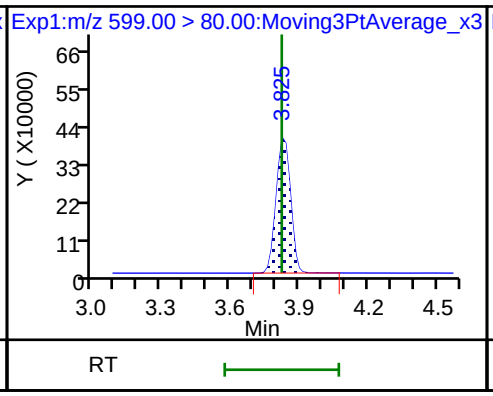
D 27 d3-NMeFOSAA



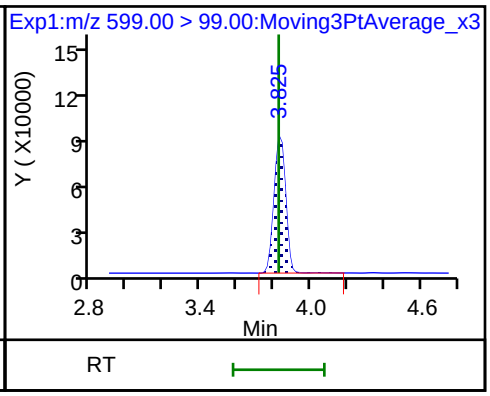
28 N-methyl perfluorooctane sulfonami



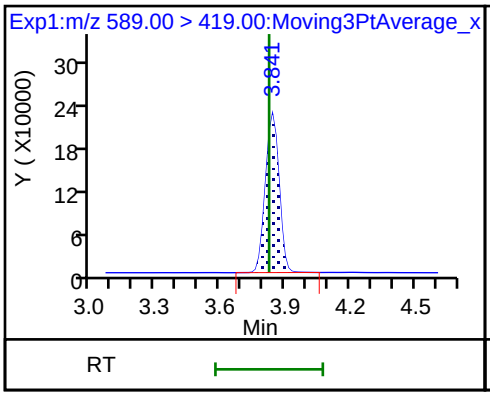
29 Perfluorodecane Sulfonic acid



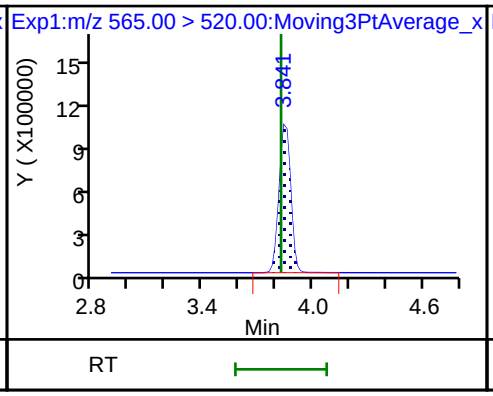
29 Perfluorodecane Sulfonic acid



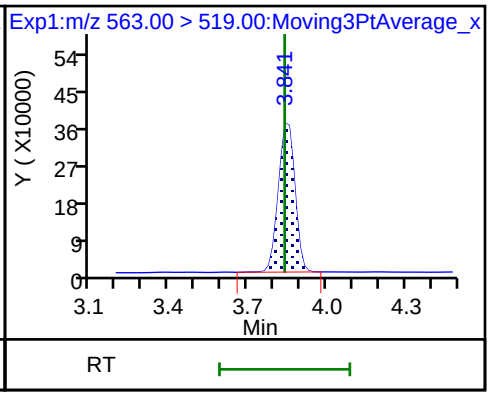
D 32 d5-NEtFOSAA



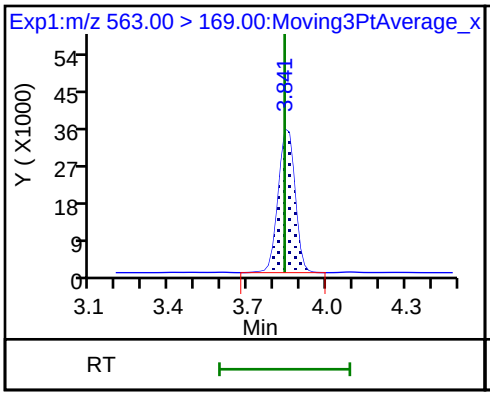
D 30 13C2 PFUnA



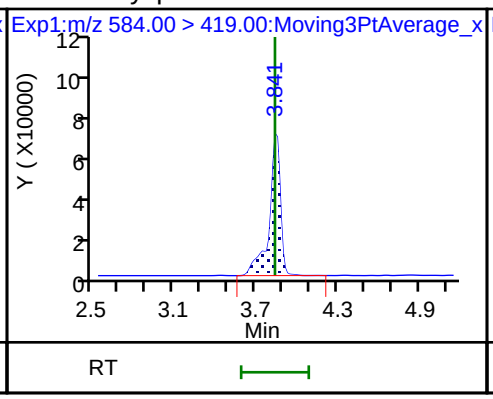
31 Perfluoroundecanoic acid



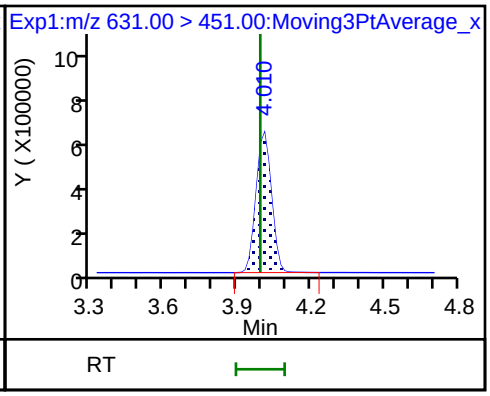
31 Perfluoroundecanoic acid



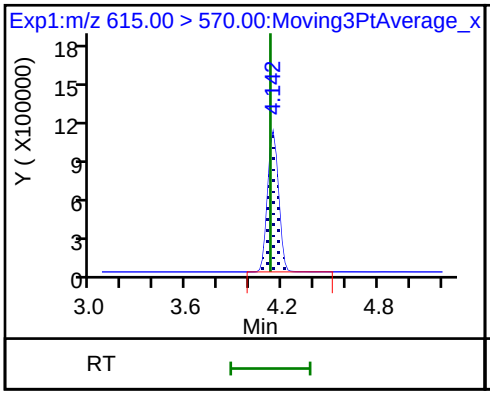
33 N-ethyl perfluorooctane sulfonamid



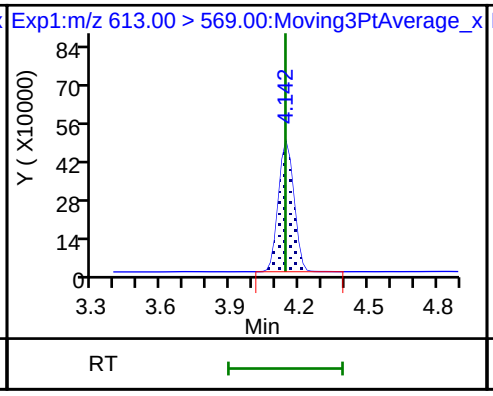
66 11-Chloroeicosafluoro-3-oxaundecan



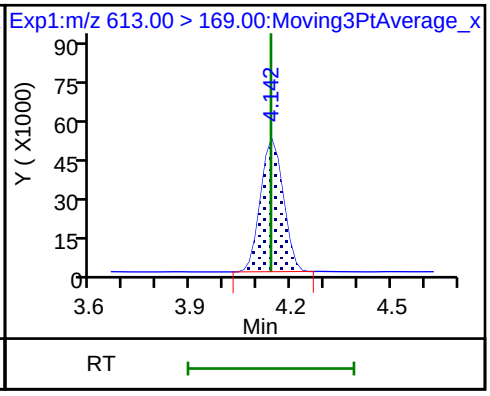
D 36 13C2 PFDoA



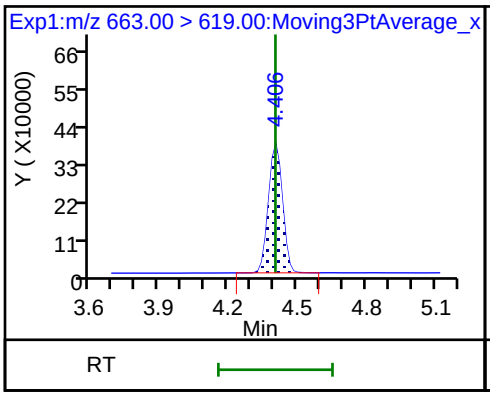
37 Perfluorododecanoic acid



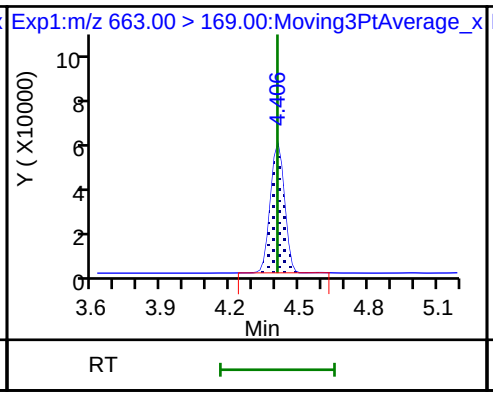
37 Perfluorododecanoic acid



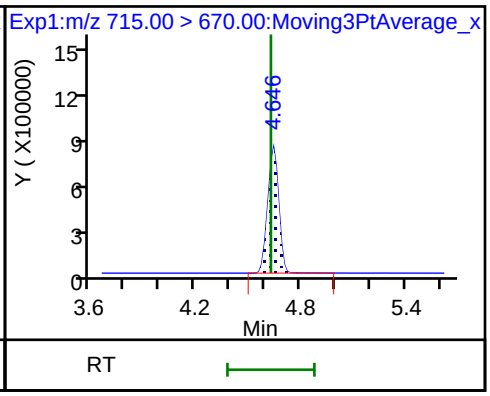
41 Perfluorotridecanoic acid



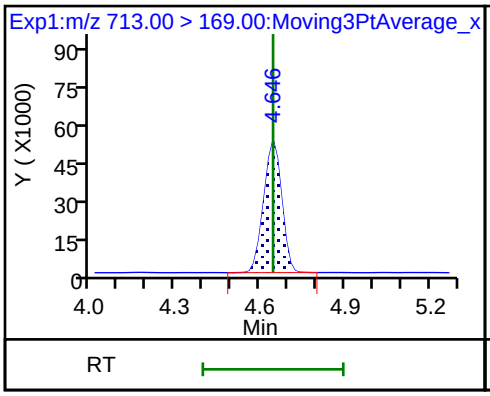
41 Perfluorotridecanoic acid



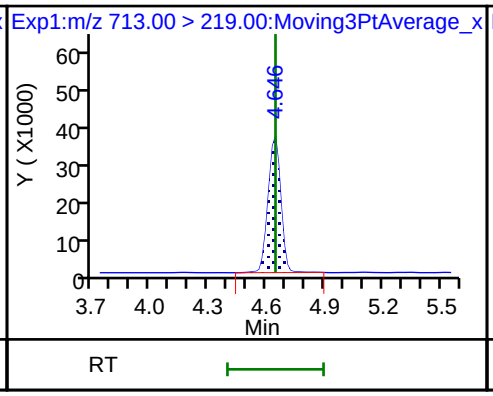
D 43 13C2-PFTeDA



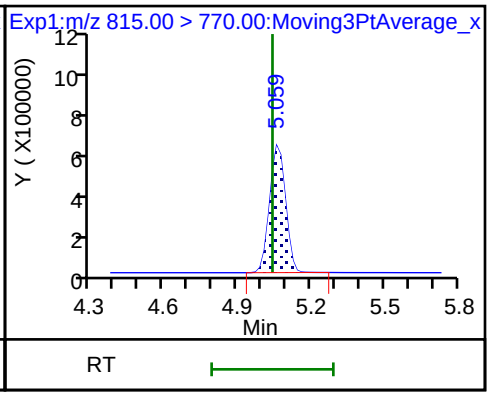
42 Perfluorotetradecanoic acid



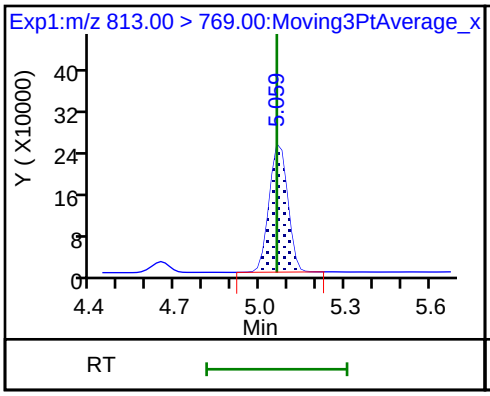
42 Perfluorotetradecanoic acid



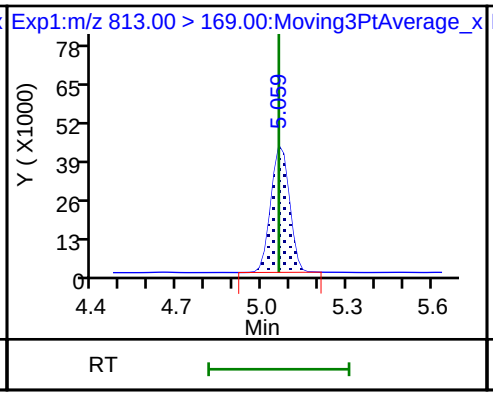
D 44 13C2-PFHxDA



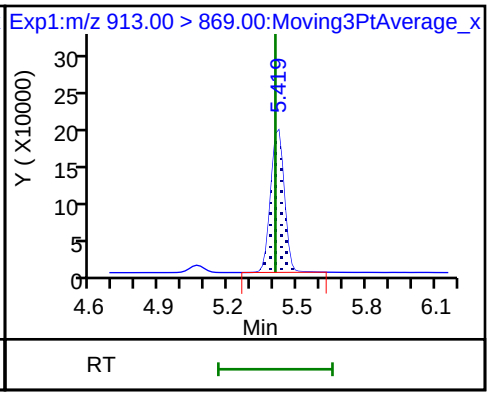
45 Perfluorohexadecanoic acid



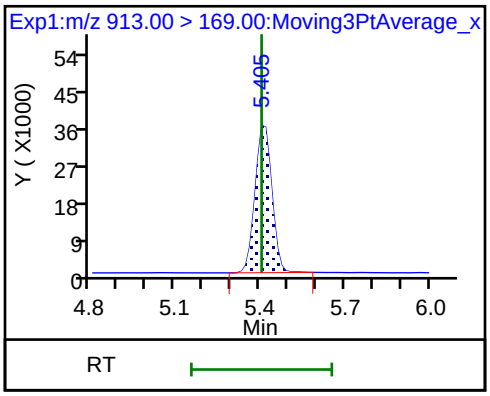
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-239187/2-A

Matrix: Water | Lab File ID: 2018.08.12LLA_034.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 08/10/2018 09:01

Sample wt/vol: 250(mL) | Date Analyzed: 08/12/2018 15:20

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 239440 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	40.1		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	38.0		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	38.6		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	42.9		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	40.3		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	40.2		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	40.0		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	31.1		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	38.1		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	44.1		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	41.9		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	37.2		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	36.4		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	40.5		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	40.0		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	40.4		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	42.5		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.6		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	37.4		20	1.9
27619-97-2	6:2 FTS	38.6		20	2.0
39108-34-4	8:2 FTS	37.8		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-239187/2-A

Matrix: Water | Lab File ID: 2018.08.12LLA_034.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 08/10/2018 09:01

Sample wt/vol: 250(mL) | Date Analyzed: 08/12/2018 15:20

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 239440 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	94		25-150
STL01893	13C5 PFPeA	87		25-150
STL00993	13C2 PFHxA	87		25-150
STL01892	13C4-PFHpA	81		25-150
STL00990	13C4 PFOA	88		25-150
STL00995	13C5 PFNA	88		25-150
STL00996	13C2 PFDA	90		25-150
STL00997	13C2 PFUnA	91		25-150
STL00998	13C2 PFDoA	95		25-150
STL02116	13C2-PFTeDA	98		25-150
STL02337	13C3-PFBS	84		25-150
STL00994	18O2 PFHxS	84		25-150
STL00991	13C4 PFOS	87		25-150
STL01056	13C8 FOSA	84		25-150
STL02118	d3-NMeFOSAA	102		25-150
STL02117	d5-NEtFOSAA	99		25-150
STL02279	M2-6:2FTS	100		25-150
STL02280	M2-8:2FTS	99		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_034.d
Lims ID: LCS 320-239187/2-A
Client ID:
Sample Type: LCS
Inject. Date: 12-Aug-2018 15:20:06 ALS Bottle#: 21 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-239187/2-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:27:39 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 10:54:09

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.416	1.411	0.005	0.534	6121944	2.35		94.1	9728	
2 Perfluorobutyric acid										
212.90 > 169.00	1.416	1.418	-0.002	1.000	2302330	1.00		100	150	
D 3 13C5-PFPeA										
267.90 > 223.00	1.670	1.670	0.0	0.630	3916798	2.18		87.4	10320	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.670	1.676	-0.006	1.000	1691999	0.9492		94.9	127	
D 47 13C3-PFBS										
301.90 > 83.00	1.702	1.702	0.0	0.642	80911	1.95		83.9	427	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.710	1.716	-0.006	1.005	2455507	0.9289		105	732	
298.90 > 99.00	1.710	1.716	-0.006	1.005	1023093		2.40(1.25-3.74)		514	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.923	1.928	-0.005	1.129	607447	1.05		113	5815	
D 7 13C2 PFHxA										
315.00 > 270.00	1.954	1.954	0.0	0.737	4412645	2.17		86.8	10625	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.954	1.960	-0.006	1.000	1738903	0.9653		96.5	391	
313.00 > 119.00	1.954	1.960	-0.006	1.000	155696		11.17(5.03-15.10)		334	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.985	1.980	0.005	1.166	2401302	1.00		107	5374	
349.00 > 99.00	1.985	1.980	0.005	1.166	910989		2.64(1.36-4.07)		1400	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.059	2.048	0.011	0.777	289738	1.83		73.3	839	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.059	2.054	0.005	1.000	328349	1.17		117	178	
D 9 13C4-PFHpA										
367.00 > 322.00	2.288	2.288	0.0	0.863	4043639	2.02		80.8	10127	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.299	2.292	0.007	1.005	1840779	1.07		107	398	
363.00 > 169.00	2.299	2.292	0.007	1.005	717229		2.57(1.13-3.40)		971	
D 11 18O2 PFHxS										
403.00 > 84.00	2.310	2.299	0.011	0.872	5108968	1.99		84.1	6480	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.310	2.303	0.007	1.000	2130590	0.9098		100.0	2911	M
399.00 > 99.00	2.310	2.303	0.007	1.000	715074		2.98(1.50-4.49)		765	M
65 ADONA										
377.00 > 251.00	2.333	2.336	-0.004	0.771	5417997	1.14		114	9228	
377.00 > 85.00	2.333	2.336	-0.004	0.771	3137530		1.73(0.84-2.53)		4321	
D 12 M2-6:2FTS										
429.00 > 81.00	2.627	2.612	0.015	0.991	1002697	2.38		100	4297	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.627	2.624	0.003	1.000	641304	0.9654		102	2109	
D 14 13C4 PFOA										
417.00 > 372.00	2.651	2.643	0.008	1.000	4048581	2.20		88.2	8573	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.651	2.647	0.004	1.000	1843316	1.01		101	188	
413.00 > 169.00	2.651	2.647	0.004	1.000	981335		1.88(0.84-2.52)		1713	
* 62 13C2-PFOA										
415.00 > 370.00	2.651	2.647	0.004		4699572	2.50			8950	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.658	2.655	0.003	0.879	1842539	1.01		106	4963	
449.00 > 99.00	2.658	2.655	0.003	0.879	479462		3.84(1.94-5.82)		1218	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.024	3.014	0.010	1.000	1579786	1.00		108	2449	
499.00 > 99.00	3.024	3.014	0.010	1.000	344403		4.59(2.31-6.93)		824	
D 18 13C4 PFOS										
503.00 > 80.00	3.024	3.016	0.008	1.141	3512523	2.08		87.1	5091	
D 19 13C5 PFNA										
468.00 > 423.00	3.024	3.016	0.008	1.141	3632707	2.20		88.1	6647	
20 Perfluorononanoic acid										
463.00 > 419.00	3.032	3.022	0.010	1.003	1537586	1.00		100	302	
463.00 > 169.00	3.032	3.022	0.010	1.003	379109		4.06(1.90-5.69)		1762	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.244	3.234	0.010	1.073	2624245	1.03		110	4059	
D 21 13C8 FOSA										
506.00 > 78.00	3.342	3.335	0.007	1.261	4678817	2.09		83.8	8705	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.350	3.340	0.010	1.002	1935606	1.06		106	3471	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.380	3.369	0.011	1.118	1154490	1.04		109	2134	
549.00 > 99.00	3.380	3.369	0.011	1.118	418259		2.76(1.33-3.97)		1155	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.380	3.369	0.011	1.000	616720	0.9450		98.6	5302	
D 26 M2-8:2FTS										
529.00 > 81.00	3.380	3.372	0.008	1.275	1203176	2.36		98.7	3075	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	3.387	3.377	0.010	1.000	1309483	1.00		100	795	
513.00 > 169.00	3.387	3.377	0.010	1.000	233882		5.60(2.36-7.09)		314	
D 23 13C2 PFDA										
515.00 > 470.00	3.387	3.380	0.007	1.278	3260517	2.25		90.2	7503	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.548	3.537	0.011	1.002	737107	1.02		102	409	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.540	3.540	0.0	1.335	1880382	2.54		102	4288	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.702	3.699	0.003	1.224	938235	1.01		105	1479	
599.00 > 99.00	3.702	3.699	0.003	1.224	325403		2.88(1.39-4.16)		1761	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.711	3.702	0.009	1.400	1890457	2.47		98.7	3078	
D 30 13C2 PFUnA										
565.00 > 520.00	3.719	3.711	0.008	1.403	2638343	2.27		90.7	5001	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.719	3.716	0.003	1.000	922241	0.7777		77.8	628	
563.00 > 169.00	3.719	3.716	0.003	1.000	224012		4.12(2.12-6.36)		1348	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.719	3.716	0.003	1.002	630154	0.9345		93.4	3314	
35 MeFOSA										
512.00 > 169.00	3.835	3.832	0.003		361051	NC			383	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.873	3.878	-0.005	1.281	4107273	1.05		111	9663	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.017	4.012	0.005	1.000	1234045	0.9532		95.3	653	
613.00 > 169.00	4.017	4.012	0.005	1.000	312588		3.95(2.13-6.40)		1899	
D 36 13C2 PFDoA										
615.00 > 570.00	4.017	4.017	0.0	1.515	2908708	2.37		94.6	7102	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.017	4.020	-0.003	1.188	498142	1.10		114	2837	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.250	4.253	-0.003	1.405	411564	1.01		104	938	
699.00 > 99.00	4.250	4.253	-0.003	1.405	598312		0.69(0.00-0.00)		2812	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.278	4.281	-0.003	1.065	1380106	1.10		110	730	
663.00 > 169.00	4.278	4.281	-0.003	1.065	445970		3.09(1.25-3.76)		3040	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.522	4.523	-0.001	1.706	3825930	2.44		97.7	7583	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.522	4.524	-0.002	1.000	387807	1.05		105	2023	
713.00 > 219.00	4.522	4.524	-0.002	1.000	275640		1.41(0.71-2.13)		1916	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.943	4.944	-0.001	1.865	6548179	2.11		84.3	7196	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.943	4.953	-0.010	1.000	2418392	1.04		104	279	
813.00 > 169.00	4.943	4.953	-0.010	1.000	407615		5.93(2.86-8.58)		1397	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.314	5.315	-0.001	1.075	2654771	1.10		110	260	
913.00 > 169.00	5.307	5.315	-0.008	1.074	324454		8.18(3.83-11.48)		1456	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Report Date: 13-Aug-2018 13:27:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_034.d

Injection Date: 12-Aug-2018 15:20:06 Instrument ID: A8_N

Lims ID: LCS 320-239187/2-A

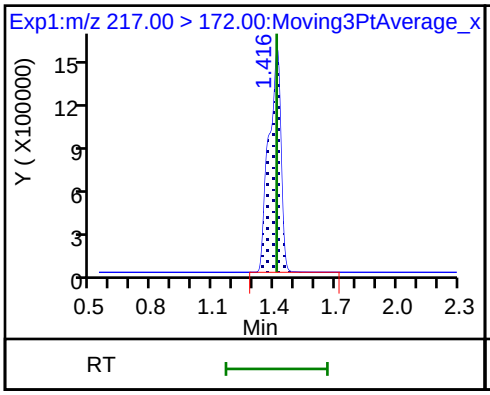
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 21 Worklist Smp#: 3

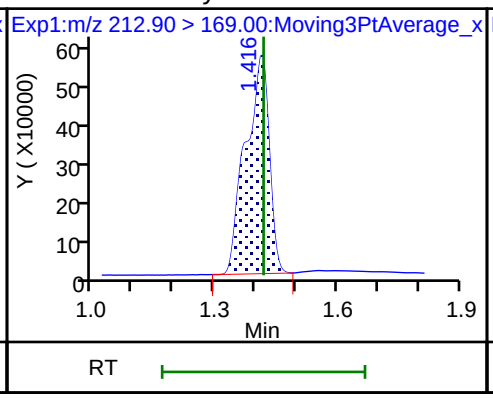
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

D 1 13C4 PFBA



2 Perfluorobutyric acid



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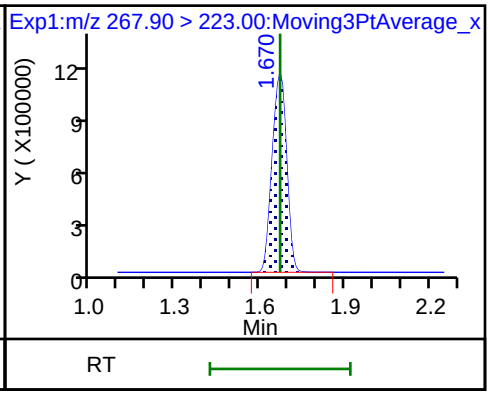
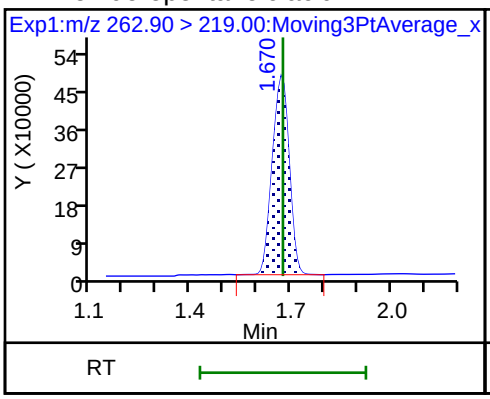
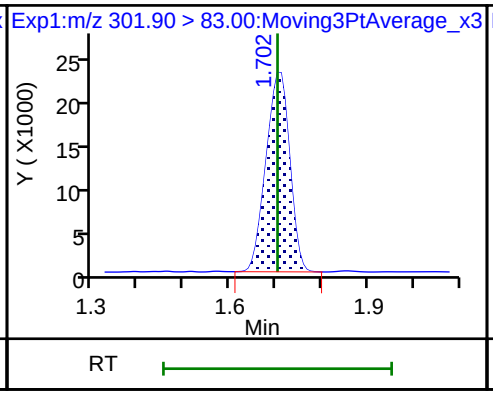


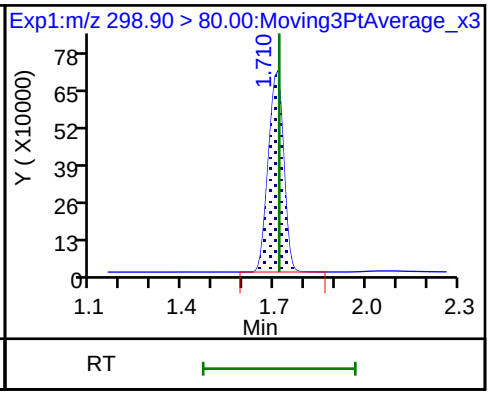
4 Perfluoropentanoic acid



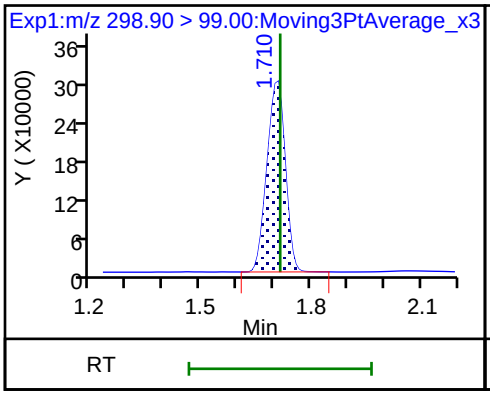
D 47 13C3-PFBS



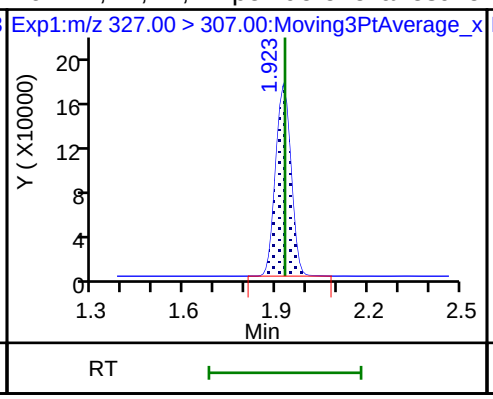
5 Perfluorobutanesulfonic acid



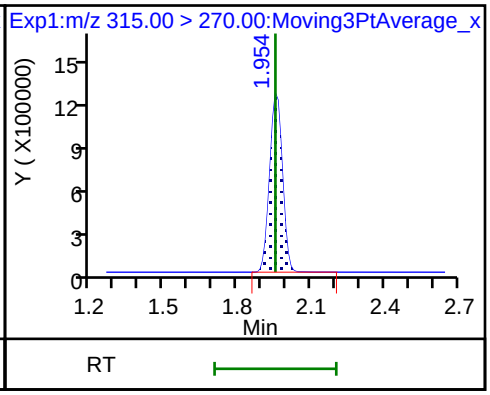
5 Perfluorobutanesulfonic acid



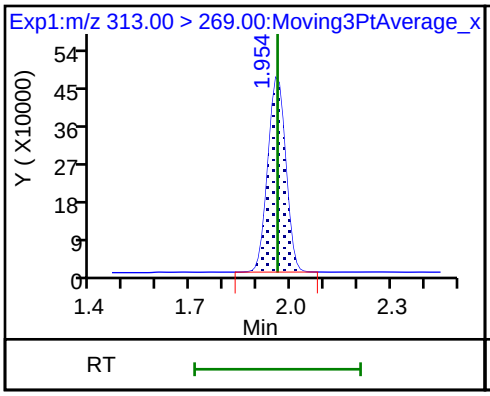
61 1H,1H,2H,2H-perfluorohexanesulfon



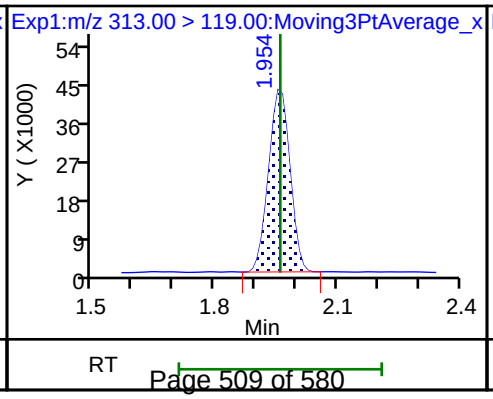
D 7 13C2 PFHxA



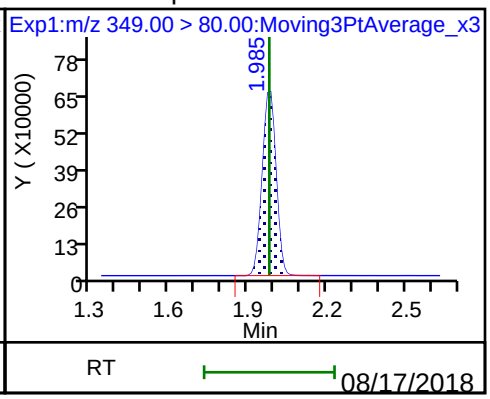
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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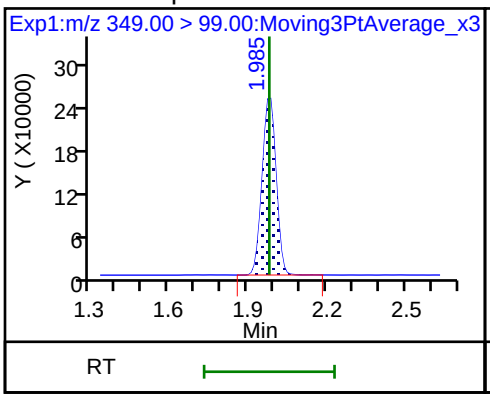
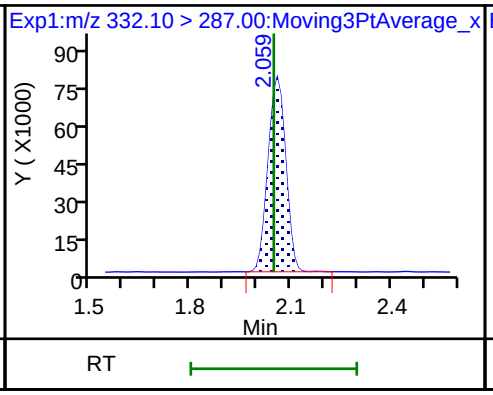
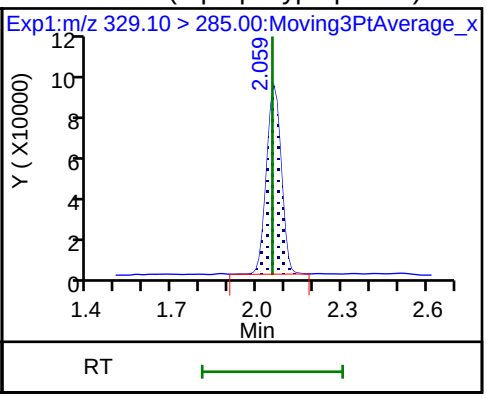


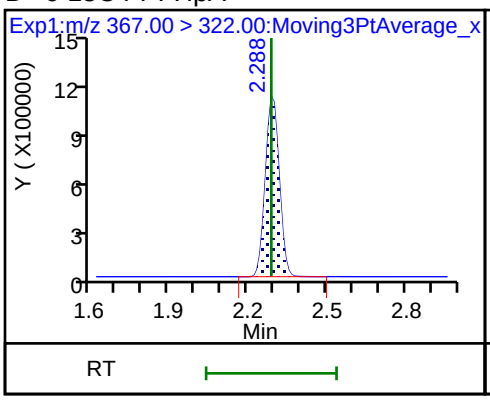
D 64 13C3 HFPO-DA



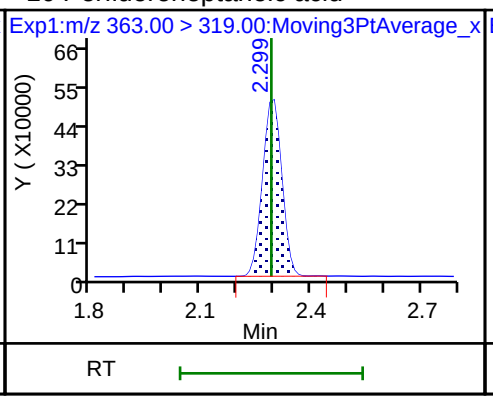
67 Perfluoro(2-propoxypropanoic) acid



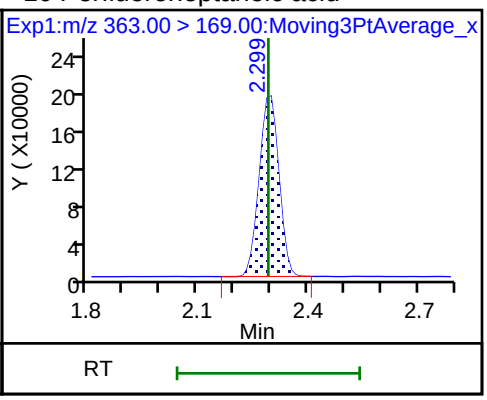
D 9 13C4-PFHpA



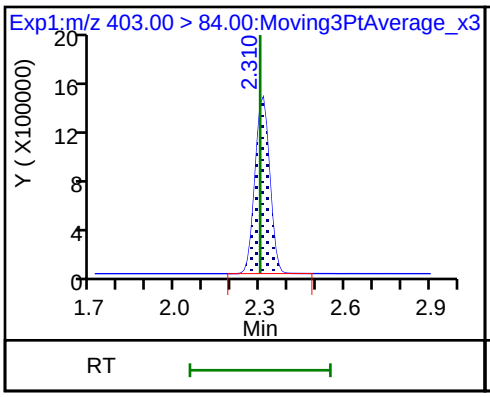
10 Perfluoroheptanoic acid



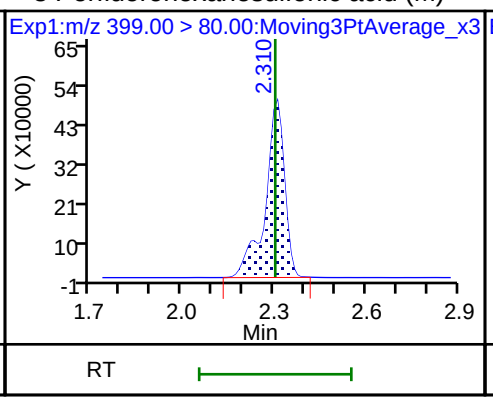
10 Perfluoroheptanoic acid



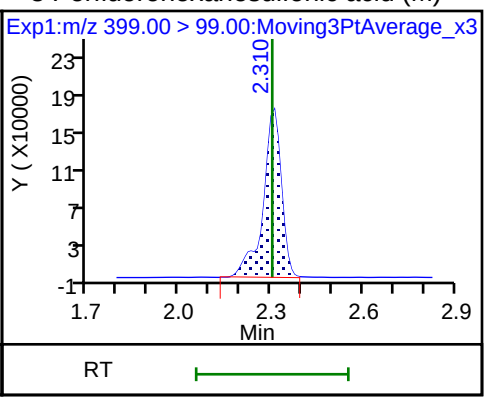
D 11 18O2 PFHxS



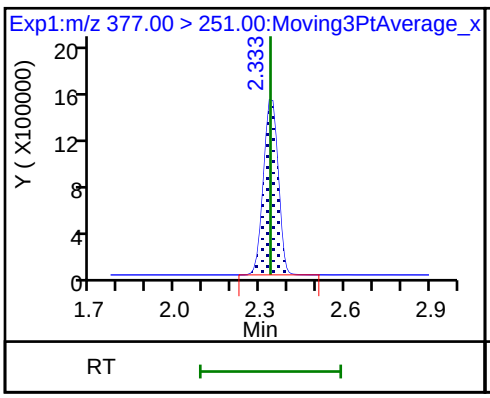
8 Perfluorohexanesulfonic acid (M)



8 Perfluorohexanesulfonic acid (M)



65 ADONA



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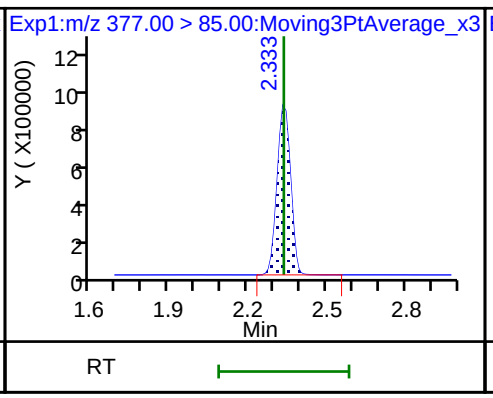
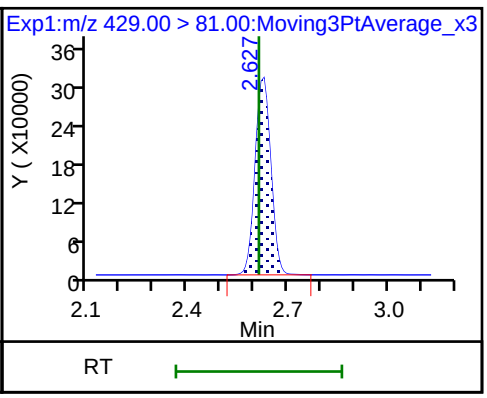
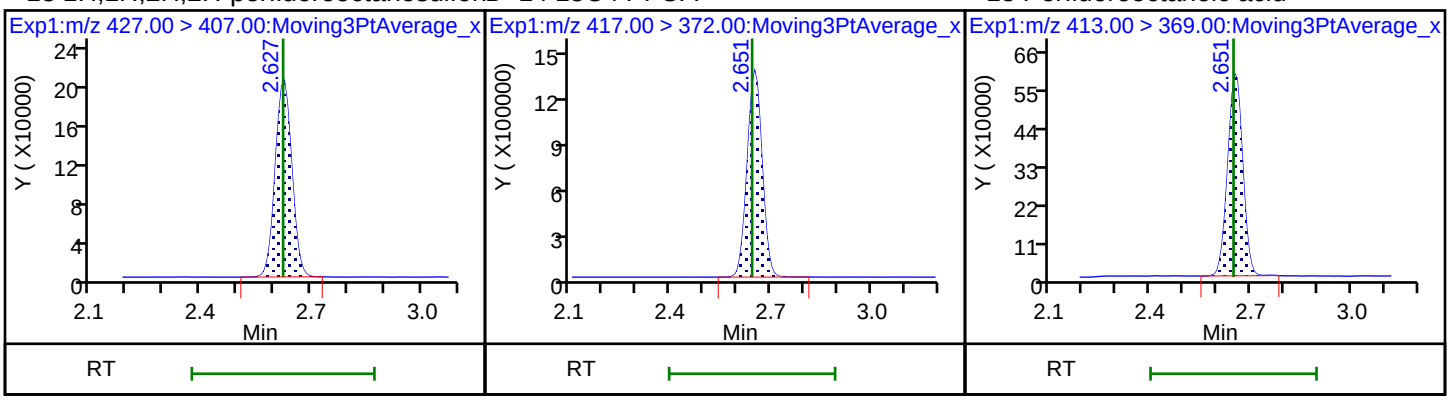


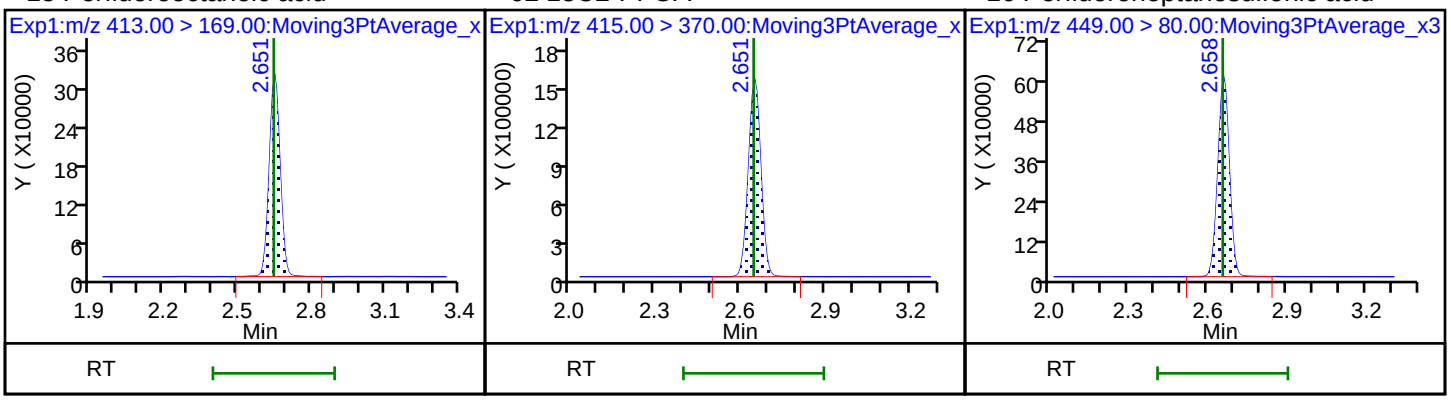
D 12 M2-6:2FTS



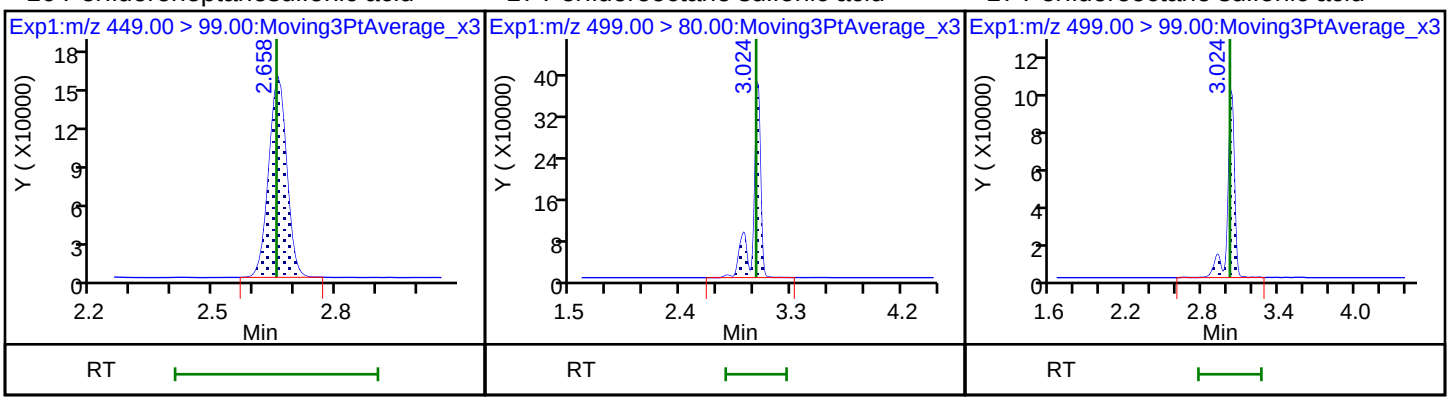
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA 15 Perfluorooctanoic acid



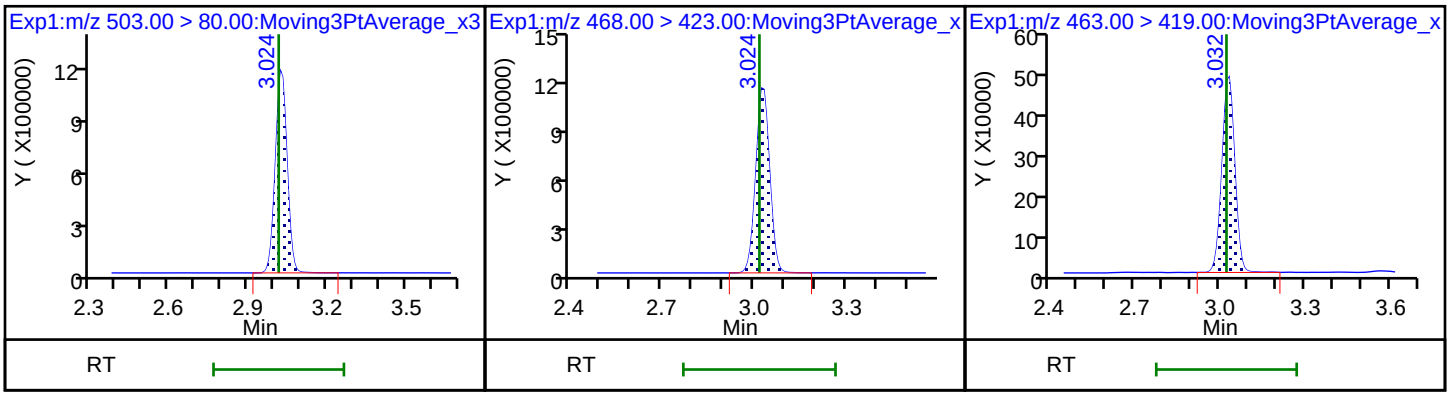
15 Perfluorooctanoic acid * 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid



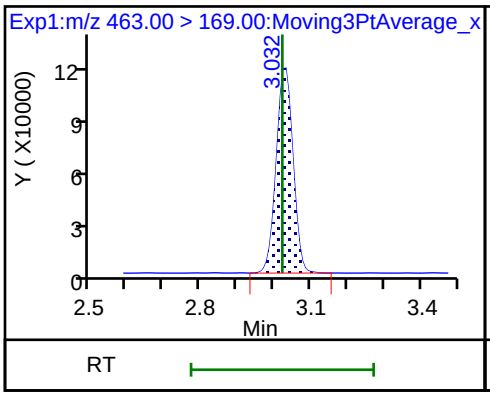
16 Perfluoroheptanesulfonic acid 17 Perfluorooctane sulfonic acid 17 Perfluorooctane sulfonic acid



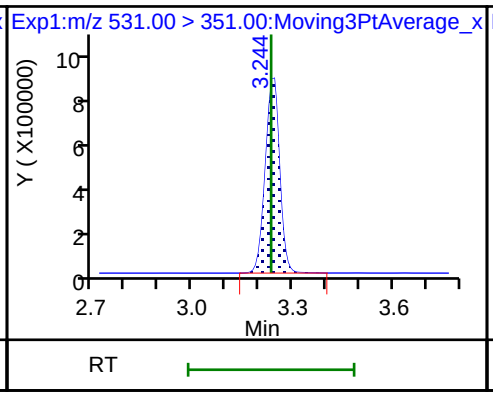
D 18 13C4 PFOS D 19 13C5 PFNA 20 Perfluorononanoic acid



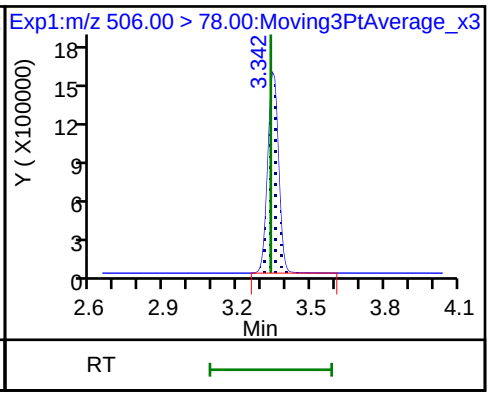
20 Perfluorononanoic acid



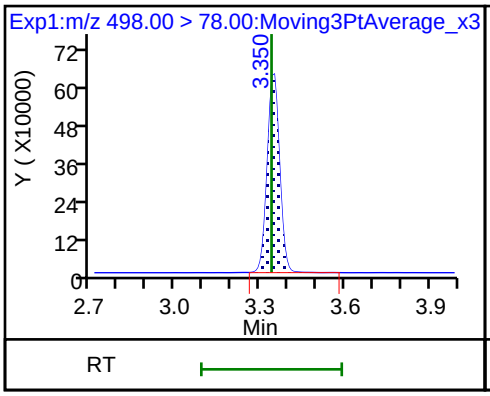
69 9-Chlorohexadecafluoro-3-oxanonane



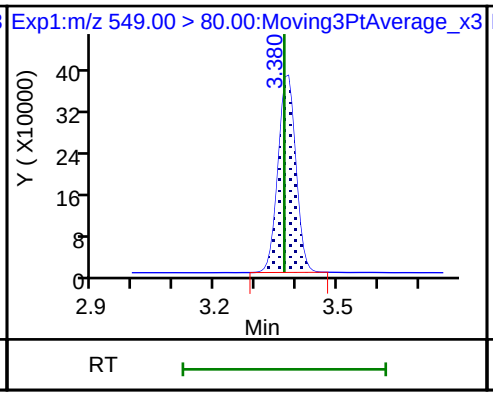
D 21 13C8 FOSA



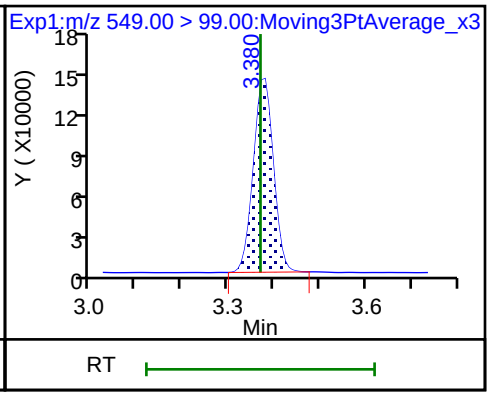
22 Perfluorooctane Sulfonamide



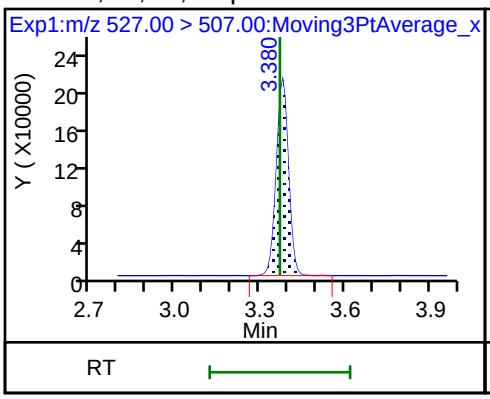
68 Perfluorononanesulfonic acid



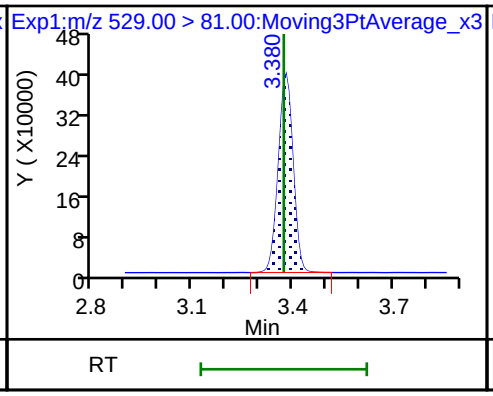
68 Perfluorononanesulfonic acid



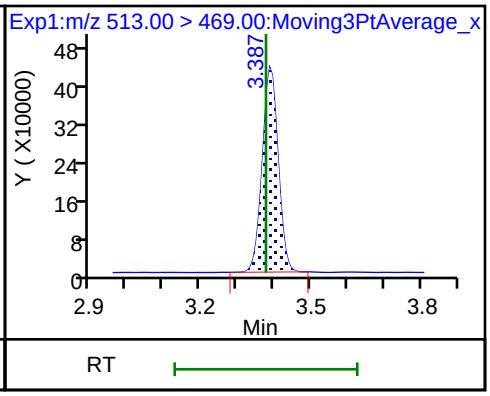
25 1H,1H,2H,2H-perfluorodecanesulfon



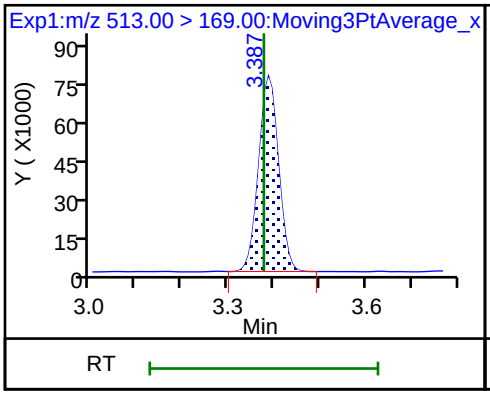
D 26 M2-8:2FTS



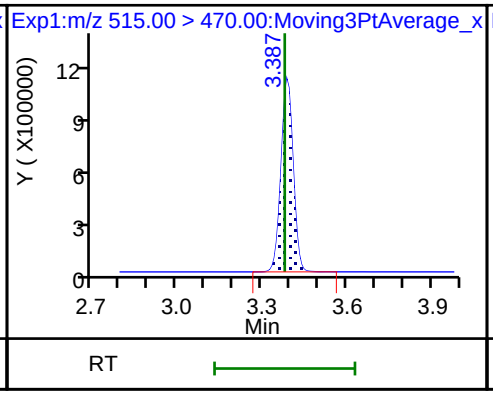
24 Perfluorodecanoic acid



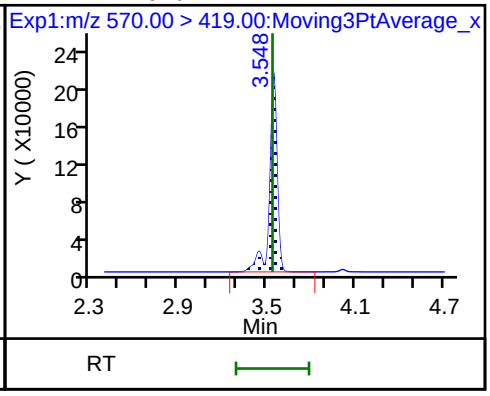
24 Perfluorodecanoic acid



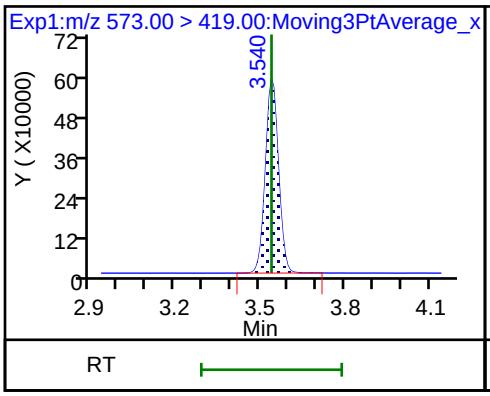
D 23 13C2 PFDA



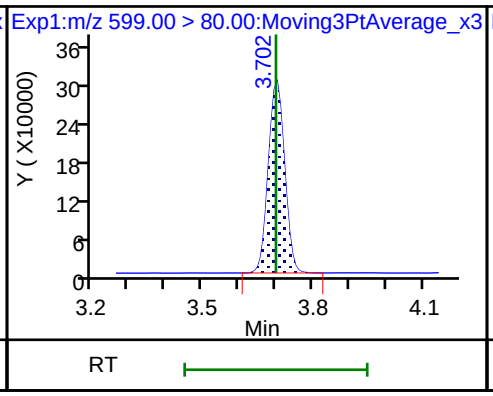
28 N-methyl perfluorooctane sulfonami



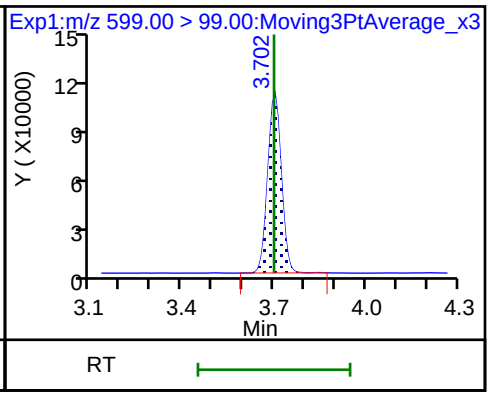
D 27 d3-NMeFOSAA



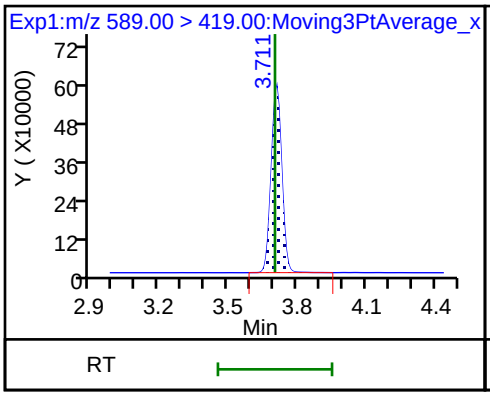
29 Perfluorodecane Sulfonic acid



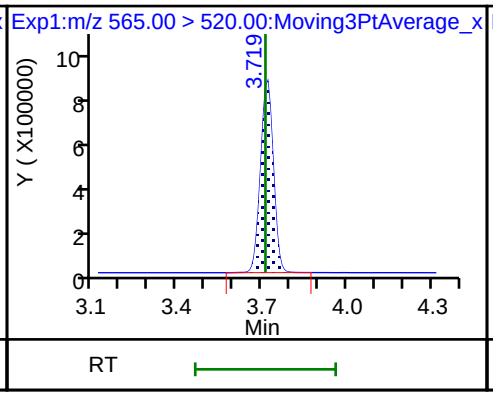
29 Perfluorodecane Sulfonic acid



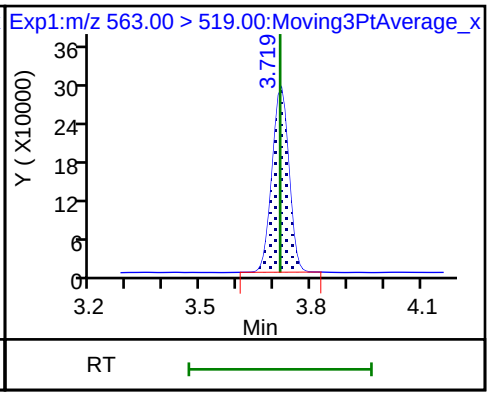
D 32 d5-NEtFOSAA



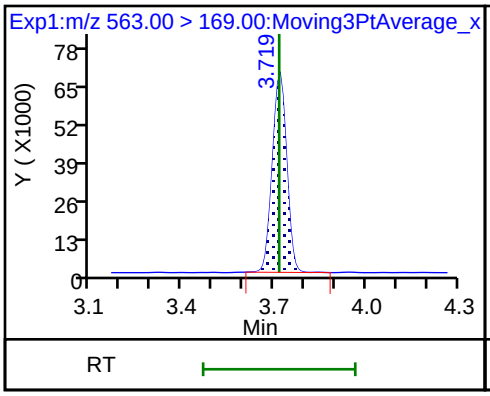
D 30 13C2 PFUnA



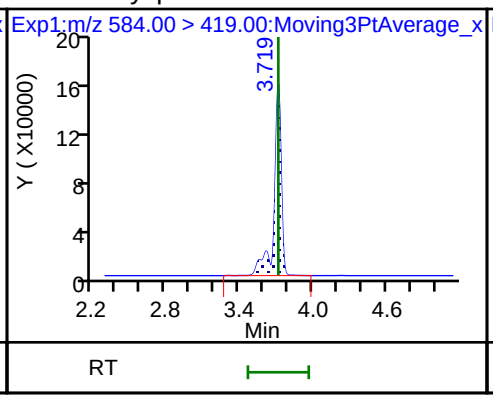
31 Perfluoroundecanoic acid



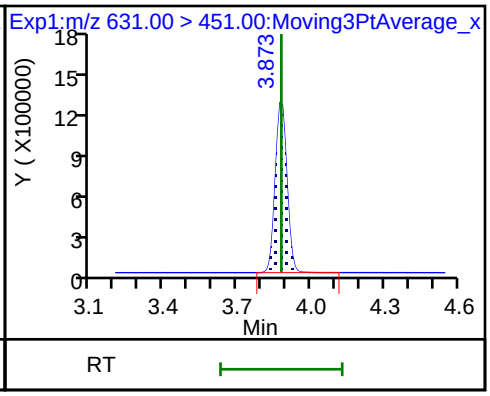
31 Perfluoroundecanoic acid



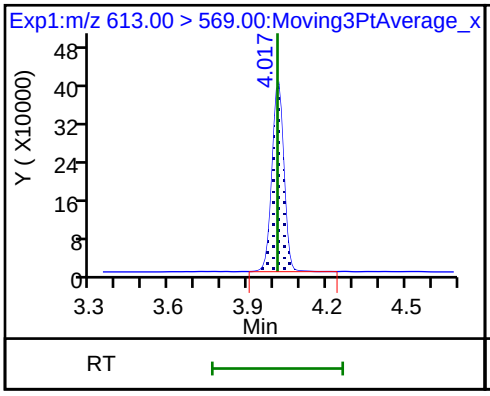
33 N-ethyl perfluorooctane sulfonamid



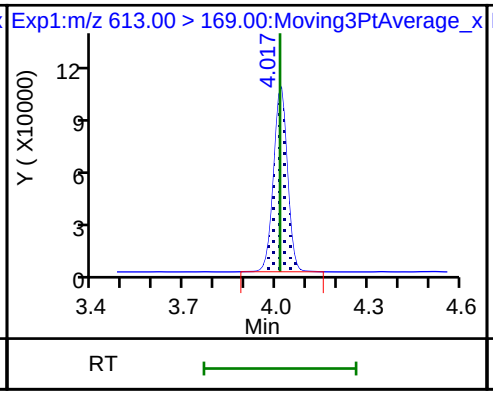
66 11-Chloroeicosafluoro-3-oxaundecan



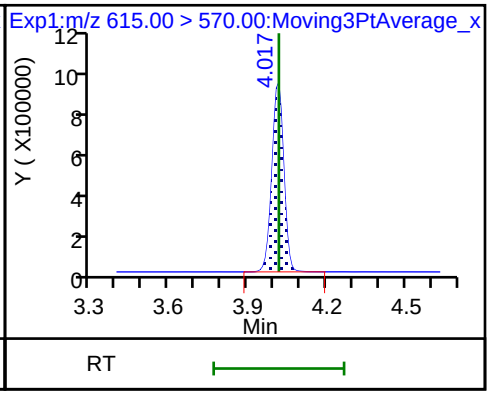
37 Perfluorododecanoic acid



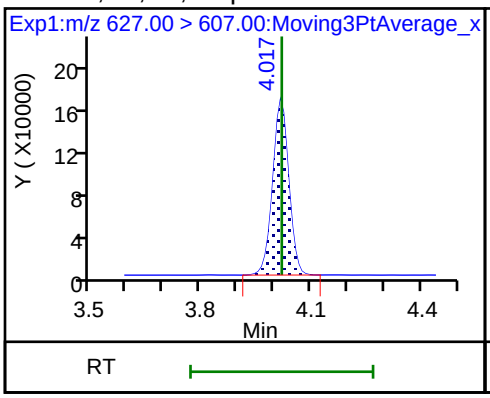
37 Perfluorododecanoic acid



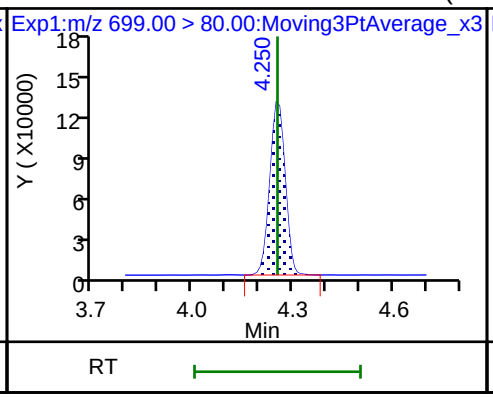
D 36 13C2 PFDoA



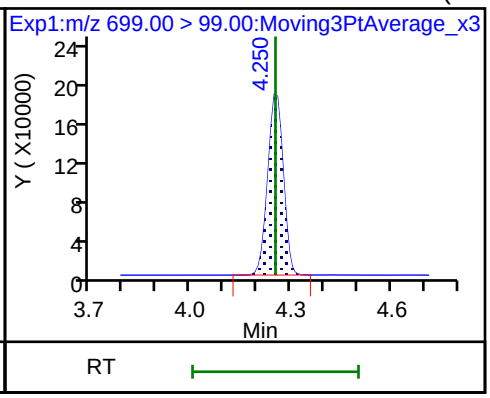
74 1H,1H,2H,2H-perfluorododecanesulfo



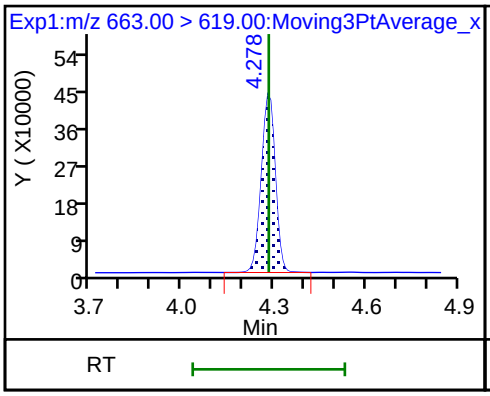
75 Perfluorododecanesulfonic acid (PF



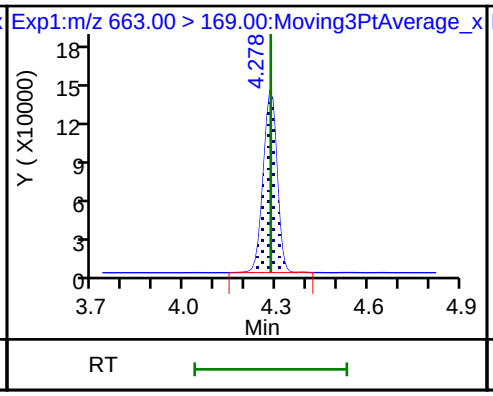
75 Perfluorododecanesulfonic acid (PF



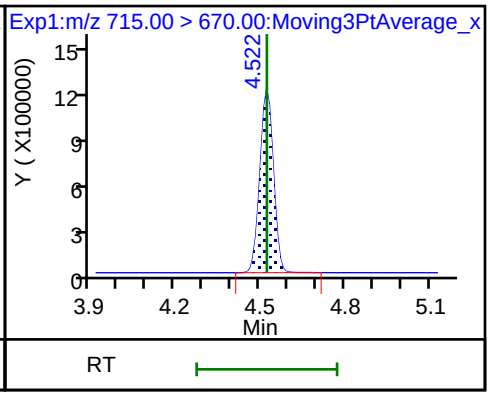
41 Perfluorotridecanoic acid



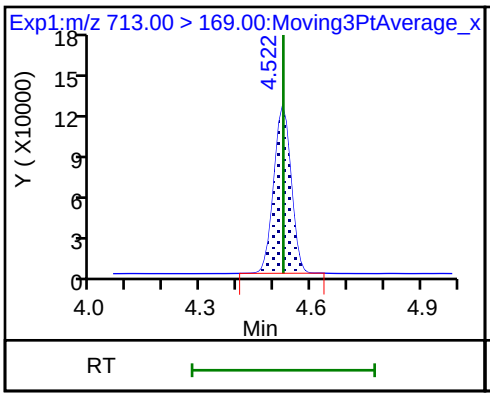
41 Perfluorotridecanoic acid



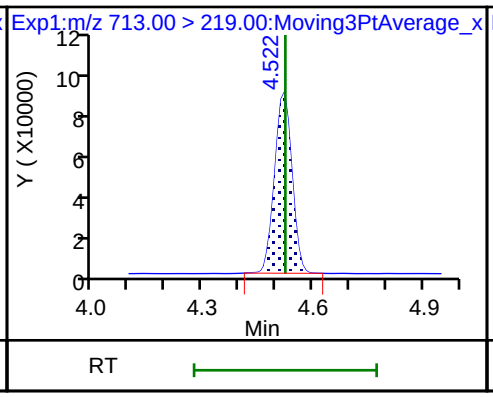
D 43 13C2-PFTeDA



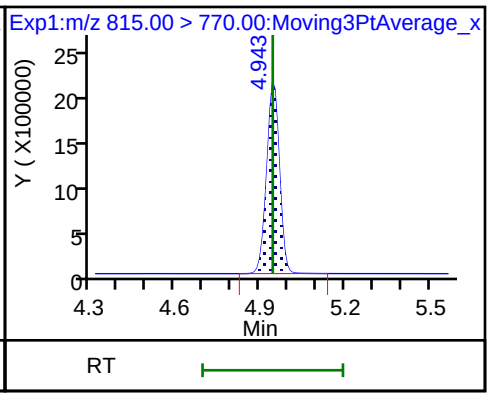
42 Perfluorotetradecanoic acid



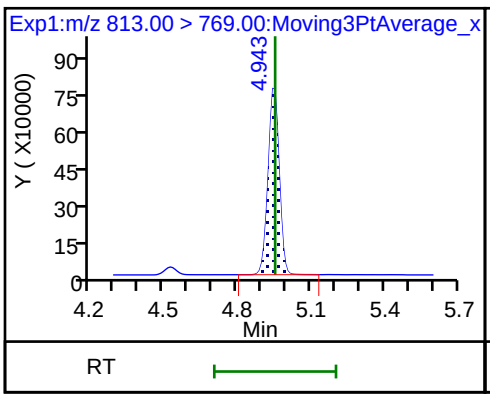
42 Perfluorotetradecanoic acid



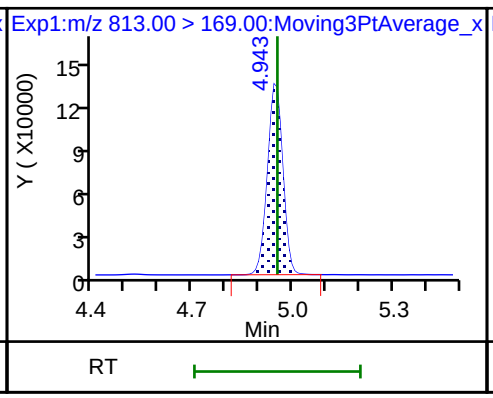
D 44 13C2-PFHxDA



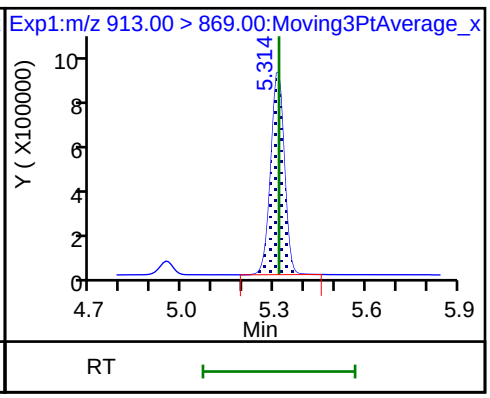
45 Perfluorohexadecanoic acid



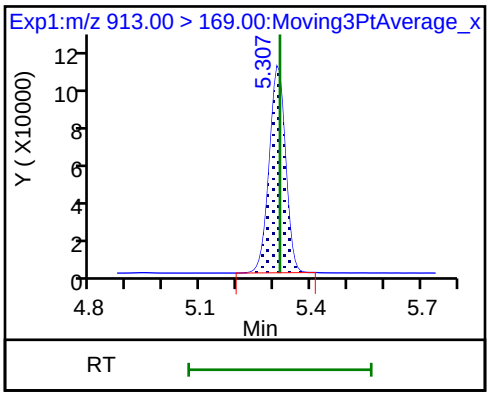
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

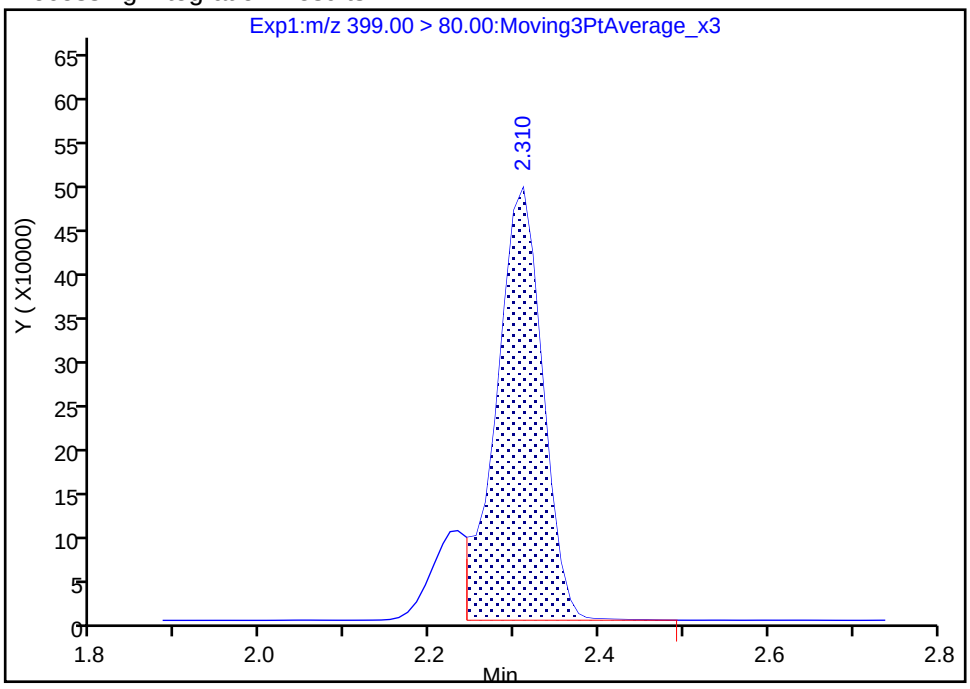
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_034.d
Injection Date: 12-Aug-2018 15:20:06 Instrument ID: A8_N
Lims ID: LCS 320-239187/2-A
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 21 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

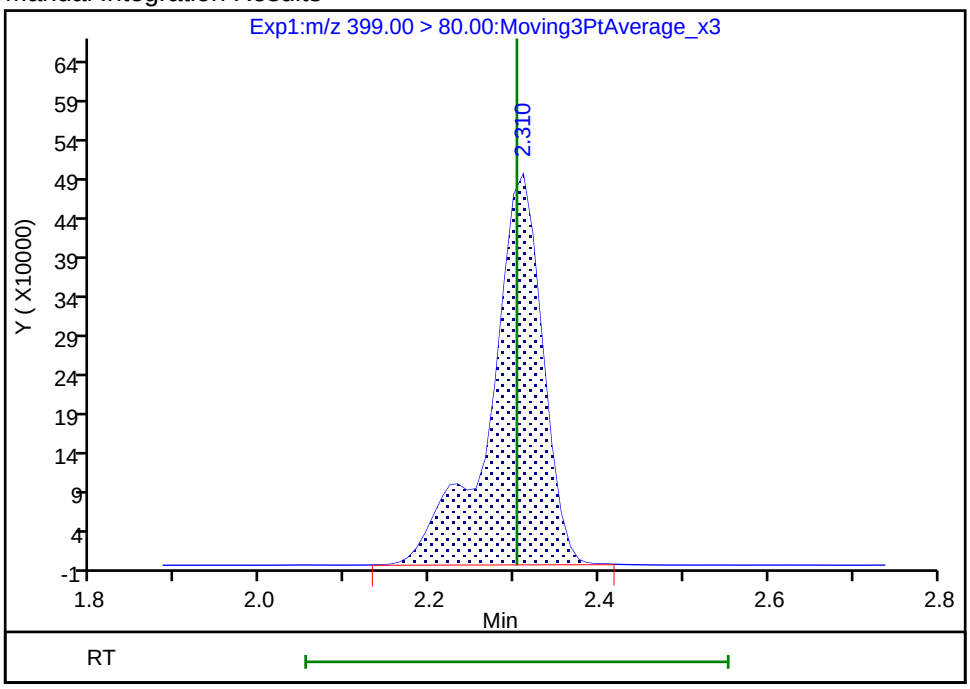
Processing Integration Results

RT: 2.31
Area: 1854228
Amount: 0.791789
Amount Units: ng/ml



Manual Integration Results

RT: 2.31
Area: 2130590
Amount: 0.909801
Amount Units: ng/ml



Reviewer: barnettj, 13-Aug-2018 10:53:28
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

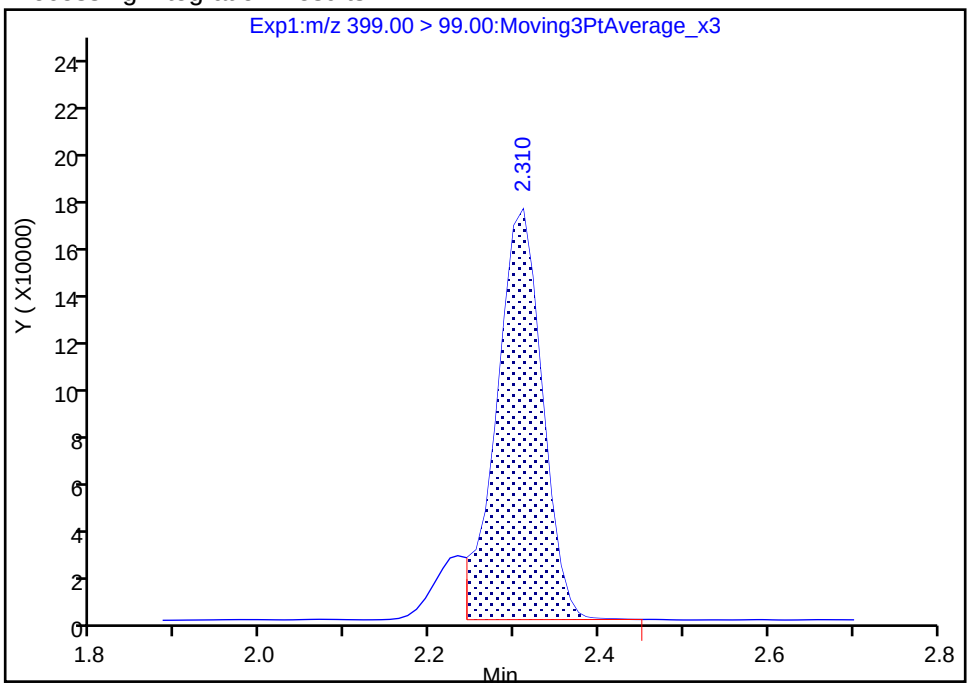
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_034.d
Injection Date: 12-Aug-2018 15:20:06 Instrument ID: A8_N
Lims ID: LCS 320-239187/2-A
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 21 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

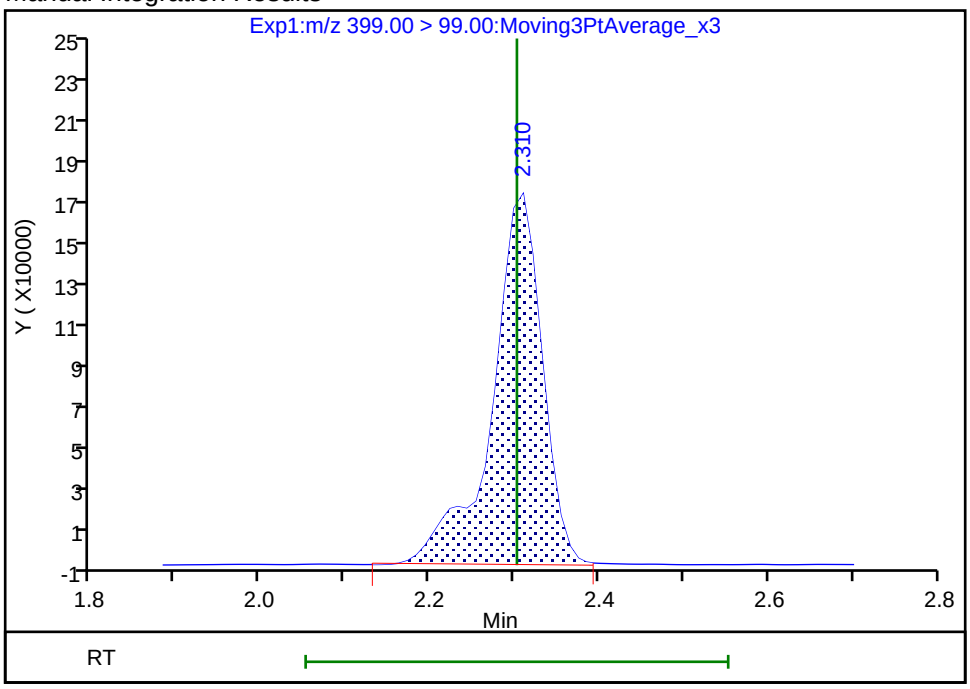
Processing Integration Results

RT: 2.31
Area: 647110
Amount: 0.791789
Amount Units: ng/ml



Manual Integration Results

RT: 2.31
Area: 715074
Amount: 0.909801
Amount Units: ng/ml



Reviewer: barnettj, 13-Aug-2018 10:53:43
Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MS | Lab Sample ID: 320-41460-4 MS

Matrix: Water | Lab File ID: 2018.08.08LLA_013.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 270.7(mL) | Date Analyzed: 08/08/2018 08:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	46.2		1.8	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	56.4		1.8	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	52.8		1.8	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	46.3		1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	69.6		1.8	0.79
375-95-1	Perfluorononanoic acid (PFNA)	43.2		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	39.6		1.8	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	37.3		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	38.9		1.8	0.51
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	38.1		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	33.7		1.8	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	41.8		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	33.9		1.8	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	38.8		1.8	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	49.2		1.8	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	35.0		1.8	0.30
754-91-6	Perfluorooctane Sulfonamide (FOSA)	41.1		1.8	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	37.7		18	2.9
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0		18	1.8
27619-97-2	6:2 FTS	57.4		18	1.8
39108-34-4	8:2 FTS	41.3		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MS | Lab Sample ID: 320-41460-4 MS

Matrix: Water | Lab File ID: 2018.08.08LLA_013.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 270.7(mL) | Date Analyzed: 08/08/2018 08:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	85		25-150
STL01893	13C5 PFPeA	88		25-150
STL00993	13C2 PFHxA	87		25-150
STL01892	13C4-PFHpA	94		25-150
STL00990	13C4 PFOA	98		25-150
STL00995	13C5 PFNA	103		25-150
STL00996	13C2 PFDA	101		25-150
STL00997	13C2 PFUnA	99		25-150
STL00998	13C2 PFDoA	103		25-150
STL02116	13C2-PFTeDA	124		25-150
STL02337	13C3-PFBS	82		25-150
STL00994	18O2 PFHxS	85		25-150
STL00991	13C4 PFOS	85		25-150
STL01056	13C8 FOSA	81		25-150
STL02118	d3-NMeFOSAA	114		25-150
STL02117	d5-NEtFOSAA	109		25-150
STL02279	M2-6:2FTS	112		25-150
STL02280	M2-8:2FTS	103		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_013.d
Lims ID: 320-41460-A-4-B MS
Client ID: GC-MW-109M (WG)
Sample Type: MS
Inject. Date: 08-Aug-2018 08:59:18 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-a-4-b ms
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 15:08:07 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 15:05:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.523	1.516	0.007	0.541	7720904	2.13		85.1	763	
2 Perfluorobutyric acid										
212.90 > 169.00	1.530	1.523	0.007	1.005	3587709	1.25		125	116	
D 3 13C5-PFPeA										
267.90 > 223.00	1.806	1.805	0.001	0.642	7108536	2.19		87.6	6527	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.806	1.805	0.001	1.000	4430749	1.53		153	103	
D 47 13C3-PFBS										
301.90 > 83.00	1.847	1.838	0.009	0.656	95673	1.90		81.9	261	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.847	1.847	0.0	1.000	4810004	1.13		128	304	
298.90 > 99.00	1.847	1.847	0.0	1.000	1712961		2.81(1.35-4.05)		363	M
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.068	2.058	0.010	1.120	627398	0.8957		95.9	1047	
D 7 13C2 PFHxA										
315.00 > 270.00	2.099	2.098	0.001	0.746	7307338	2.17		86.8	8370	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.099	2.098	0.001	1.000	3910472	1.43		143	160	
313.00 > 119.00	2.099	2.098	0.001	1.000	288689		13.55(6.96-20.87)		248	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.130	2.119	0.011	1.153	2039601	1.01		108	445	
349.00 > 99.00	2.130	2.119	0.011	1.153	895887		2.28(1.15-3.45)		251	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.201	2.201	0.0	0.782	986555	3.43		137	1741	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.201	2.201	0.0	1.000	714353	0.8210		82.1	135	
D 9 13C4-PFHpA										
367.00 > 322.00	2.439	2.439	0.0	0.867	9019211	2.36		94.3	9462	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.439	2.439	0.0	1.000	4693303	1.25		125	182	
363.00 > 169.00	2.439	2.439	0.0	1.000	1051447		4.46(2.17-6.52)		1275	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.465	2.452	0.013	1.005	2880267	0.9180		101	711	
399.00 > 99.00	2.465	2.452	0.013	1.005	817523		3.52(1.90-5.70)		292	
D 11 18O2 PFHxS										
403.00 > 84.00	2.452	2.465	-0.013	0.871	5800500	2.01		85.2	11609	
65 ADONA										
377.00 > 251.00	2.492	2.491	0.001	0.781	6148795	1.20		120	3996	
377.00 > 85.00	2.492	2.491	0.001	0.781	2626976		2.34(1.05-3.16)		760	
D 12 M2-6:2FTS										
429.00 > 81.00	2.783	2.782	0.001	0.989	987918	2.66		112	686	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.783	2.782	0.001	1.000	1381845	1.55		164	2278	
D 14 13C4 PFOA										
417.00 > 372.00	2.814	2.814	0.0	1.000	7853553	2.45		98.0	8416	
* 62 13C2-PFOA										
415.00 > 370.00	2.814	2.814	0.0		8122306	2.50			17860	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.814	2.814	0.0	1.000	6485087	1.88		188	420	
413.00 > 169.00	2.814	2.814	0.0	1.000	2203797		2.94(1.36-4.08)		1874	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.814	2.814	0.0	0.882	2699197	1.05		110	972	
449.00 > 99.00	2.814	2.814	0.0	0.882	650166		4.15(1.84-5.53)		1184	
D 18 13C4 PFOS										
503.00 > 80.00	3.192	3.190	0.002	1.134	6077030	2.03		84.9	2698	
D 19 13C5 PFNA										
468.00 > 423.00	3.192	3.190	0.002	1.134	7061483	2.57		103	7476	
20 Perfluorononanoic acid										
463.00 > 419.00	3.192	3.190	0.002	1.000	3482478	1.17		117	437	
463.00 > 169.00	3.192	3.190	0.002	1.000	626244		5.56(2.68-8.03)		1010	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.192	3.190	0.002	1.000	3631309	1.33		143	1150	
499.00 > 99.00	3.192	3.190	0.002	1.000	823588		4.41(2.04-6.12)		1145	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.401	3.400	0.001	1.066	2870002	0.9557		103	2422	
D 21 13C8 FOSA										
506.00 > 78.00	3.529	3.527	0.002	1.254	3646655	2.04		81.5	4097	
D 26 M2-8:2FTS										
529.00 > 81.00	3.543	3.542	0.001	1.259	106840	2.47		103	407	
D 23 13C2 PFDA										
515.00 > 470.00	3.543	3.542	0.001	1.259	6976670	2.53		101	9300	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.543	3.542	0.001	1.004	4983096	1.11		111	4744	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.543	3.542	0.001	1.000	699485	1.12		117	2279	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.543	3.542	0.001	1.110	1875338	1.13		117	1481	
549.00 > 99.00	3.543	3.542	0.001	1.110	305049		6.15(3.02-9.05)		1290	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.543	3.556	-0.013	1.000	3677393	1.07		107	570	
513.00 > 169.00	3.558	3.556	0.002	1.004	238493		15.42(7.12-21.35)		564	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.699	3.697	0.002	1.314	1522049	2.84		114	1624	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.699	3.697	0.002	1.000	628131	1.02		102	307	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.857	3.855	0.002	1.208	2007347	0.9473		98.3	257	
599.00 > 99.00	3.857	3.855	0.002	1.208	473756		4.24(2.14-6.43)		514	
D 30 13C2 PFUnA										
565.00 > 520.00	3.872	3.870	0.002	1.376	5481961	2.46		98.5	6927	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.872	3.870	0.002	1.376	1202000	2.73		109	2208	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.872	3.870	0.002	1.000	1865874	1.01		101	295	
563.00 > 169.00	3.872	3.870	0.002	1.000	190243		9.81(5.24-15.72)		694	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.872	3.870	0.002	1.000	466736	1.08		108	559	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.025	4.040	-0.015	1.261	3308905	1.04		110	5491	
D 36 13C2 PFDoA										
615.00 > 570.00	4.160	4.176	-0.016	1.478	6171053	2.57		103	10626	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.160	4.176	-0.016	1.000	2556401	1.05		105	255	
613.00 > 169.00	4.160	4.176	-0.016	1.000	278513		9.18(4.68-14.05)		1154	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.421	4.435	-0.014	1.063	1908877	1.03		103	482	
663.00 > 169.00	4.421	4.435	-0.014	1.063	305368		6.25(3.09-9.27)		1304	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.660	4.676	-0.016	1.656	4740886	3.09		124	12448	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.660	4.676	-0.016	1.000	278963	0.9132		91.3	1052	
713.00 > 219.00	4.660	4.676	-0.016	1.000	188127		1.48(0.70-2.09)		808	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.075	5.092	-0.017	1.803	3626174	2.58		103	5720	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.075	5.092	-0.017	1.000	1403682	1.04		104	102	
813.00 > 169.00	5.075	5.092	-0.017	1.000	243262		5.77(2.77-8.32)		731	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.419	5.434	-0.015	1.068	979888	0.9516		95.2	373	
913.00 > 169.00	5.419	5.434	-0.015	1.068	181336		5.40(2.55-7.64)		1091	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 08-Aug-2018 15:08:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_013.d

Injection Date: 08-Aug-2018 08:59:18 Instrument ID: A9

Lims ID: 320-41460-A-4-B MS

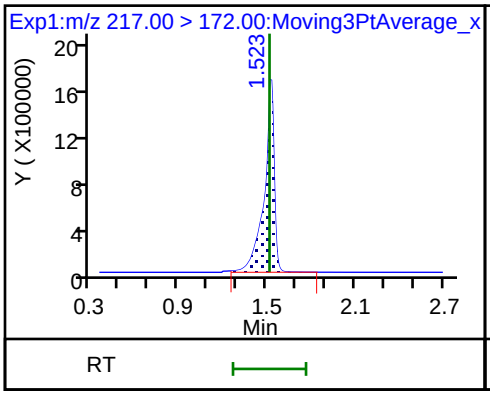
Client ID: GC-MW-109M (WG)

Operator ID: A9\Administrator ALS Bottle#: 8 Worklist Smp#: 9

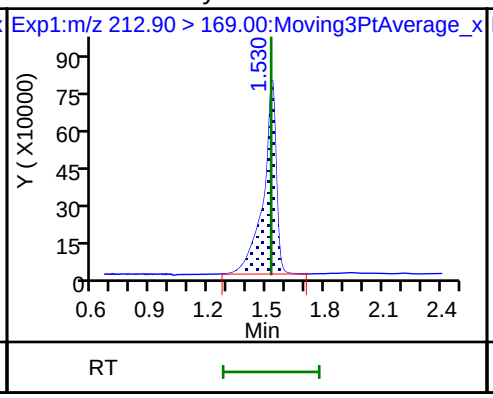
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

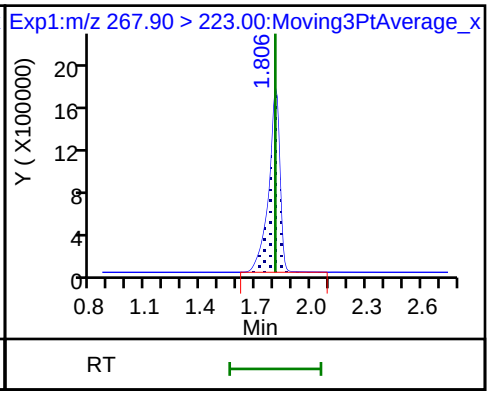
D 1 13C4 PFBA



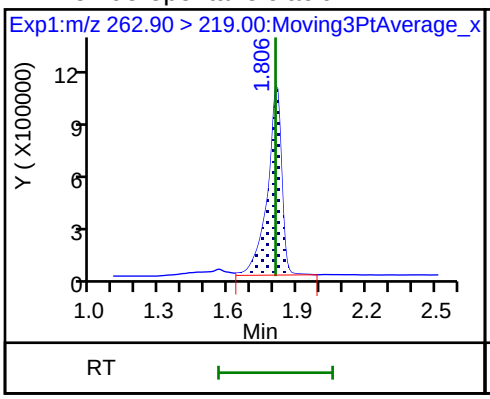
2 Perfluorobutyric acid



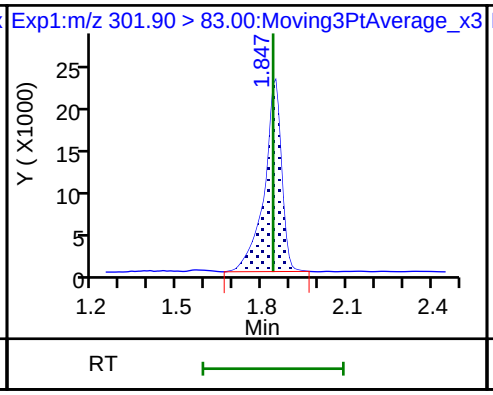
D 3 13C5-PFPeA



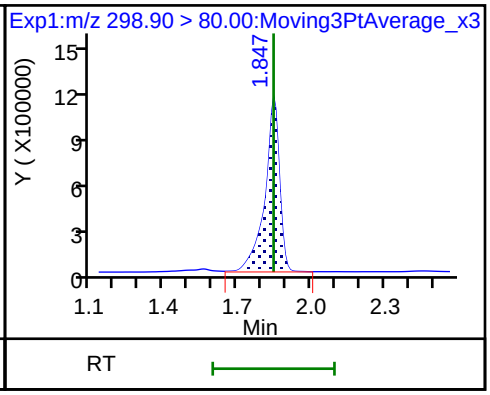
4 Perfluoropentanoic acid



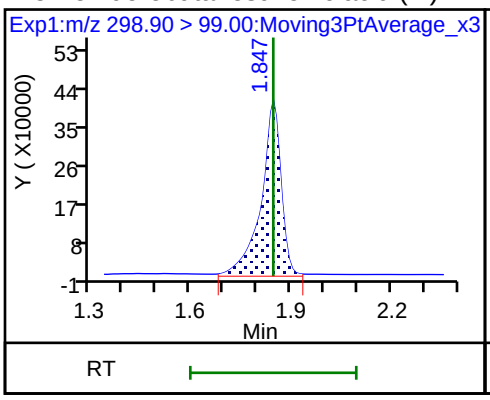
D 47 13C3-PFBS



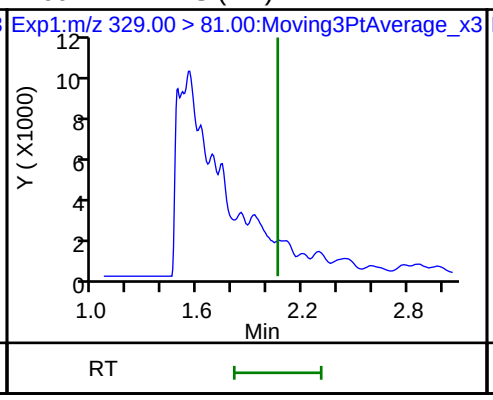
5 Perfluorobutanesulfonic acid



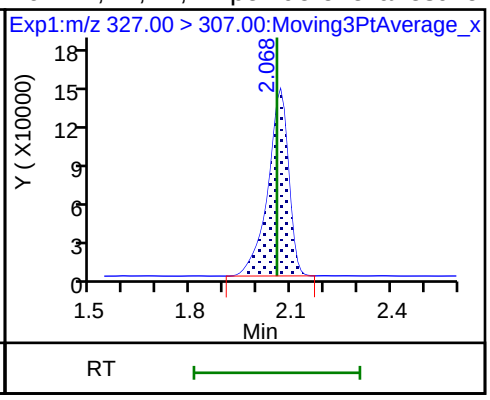
5 Perfluorobutanesulfonic acid (M)



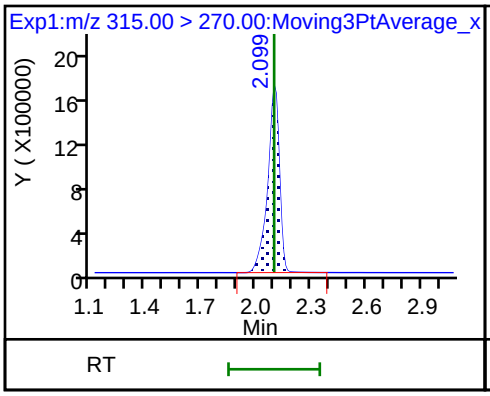
D 60 M2-4:2FTS (ND)



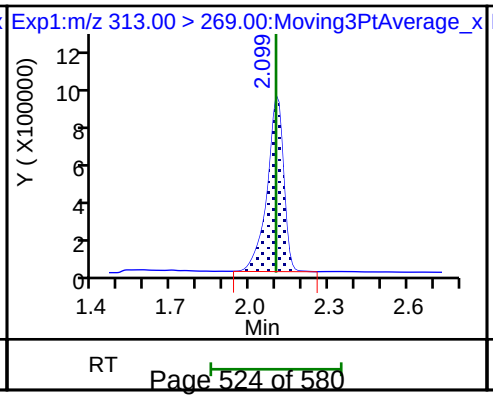
61 1H,1H,2H,2H-perfluorohexanesulfoni



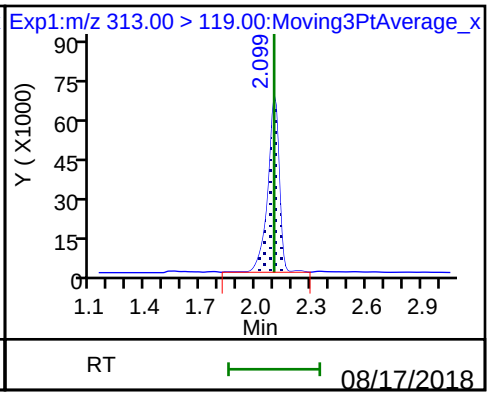
D 7 13C2 PFHxA



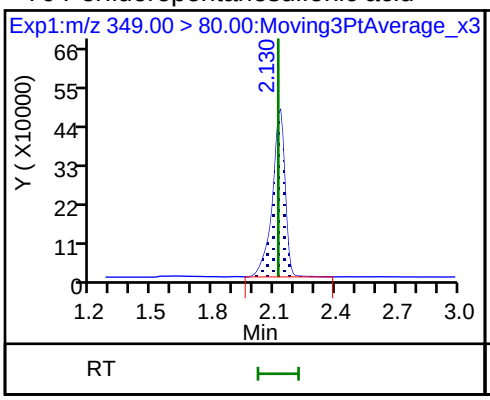
6 Perfluorohexanoic acid



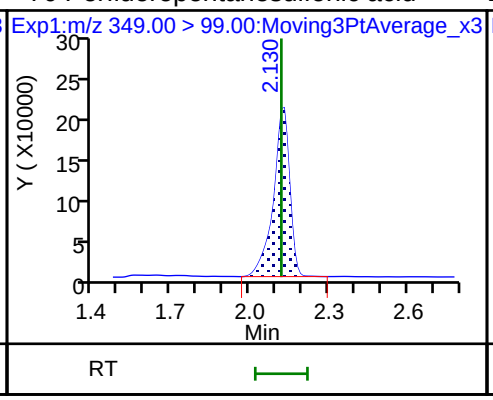
6 Perfluorohexanoic acid



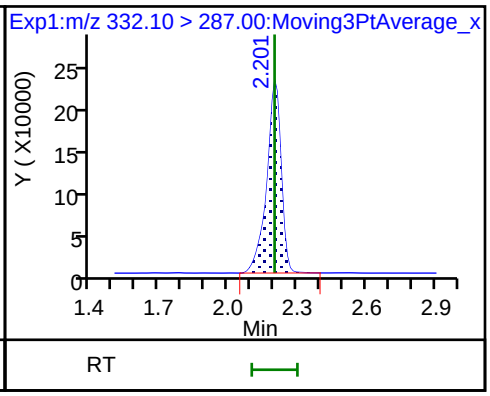
70 Perfluoropentanesulfonic acid



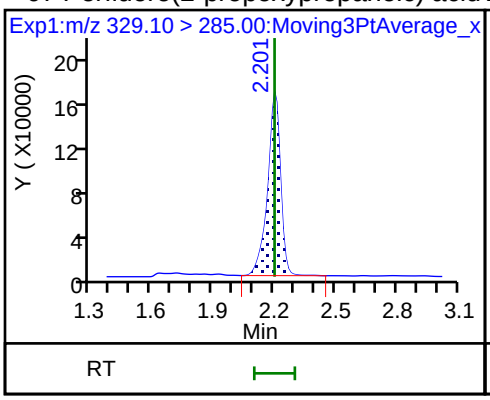
70 Perfluoropentanesulfonic acid



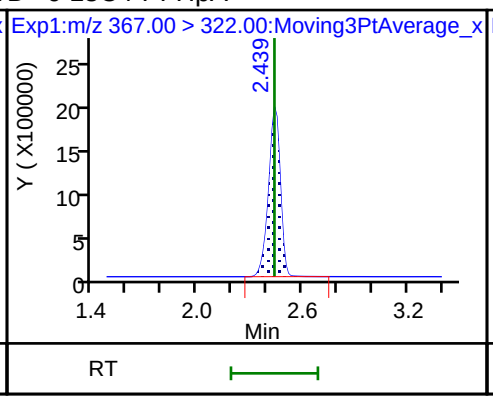
D 64 13C3 HFPO-DA



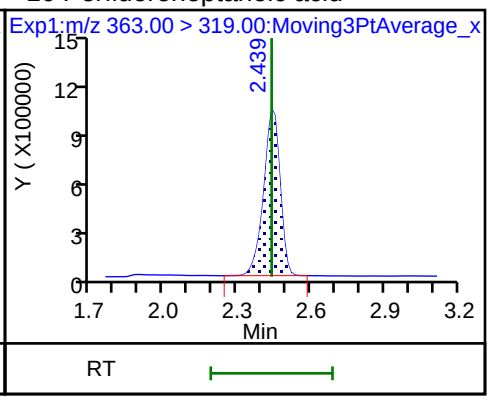
67 Perfluoro(2-propoxypropanoic) acid



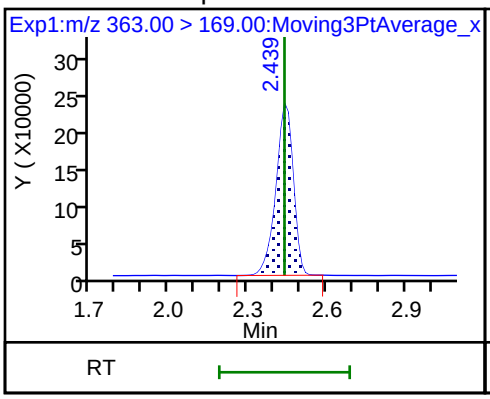
D 9 13C4-PFHpA



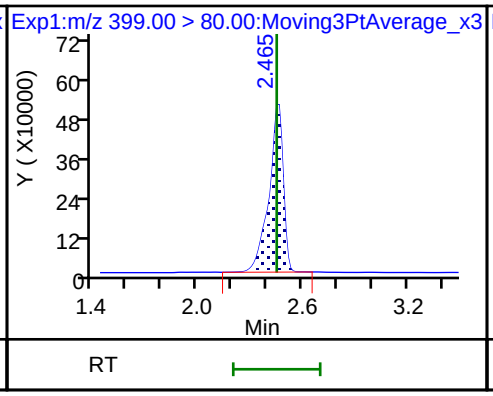
10 Perfluoroheptanoic acid



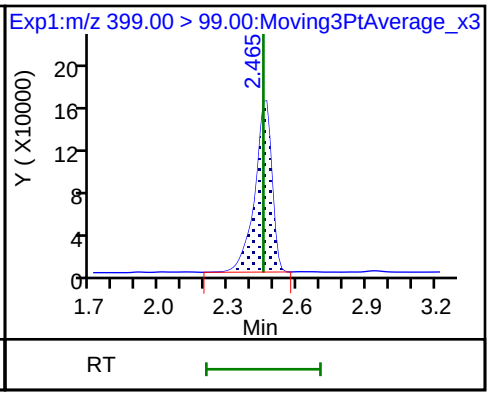
10 Perfluoroheptanoic acid



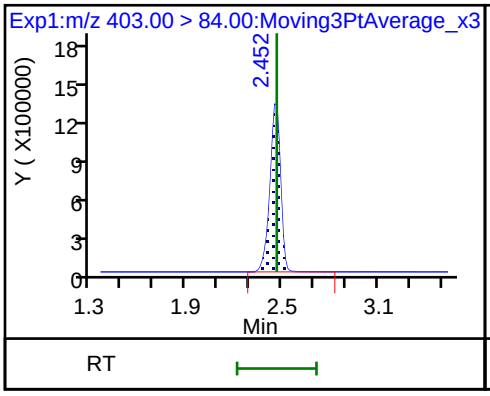
8 Perfluorohexanesulfonic acid



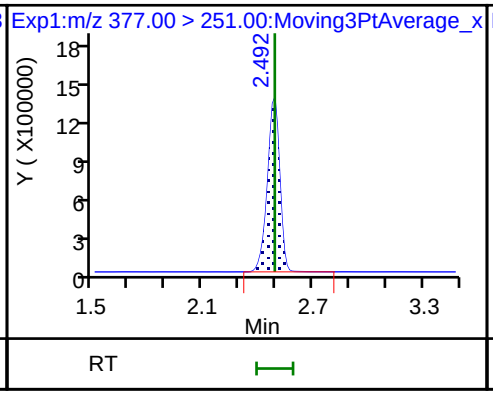
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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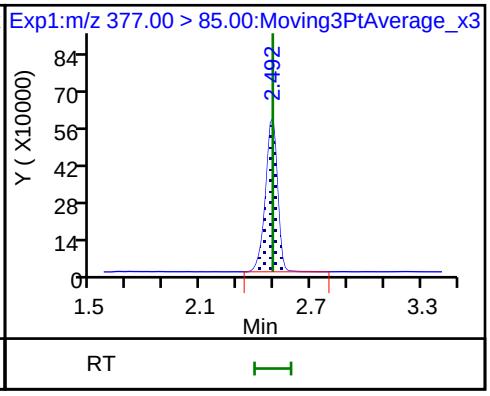
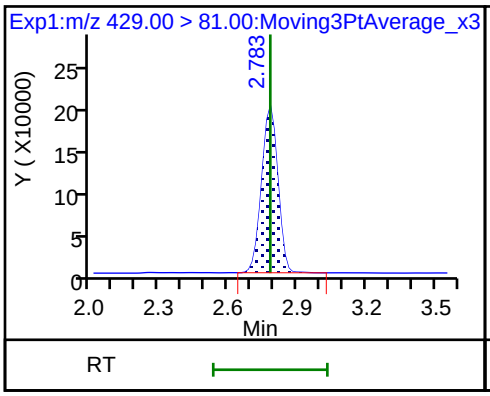
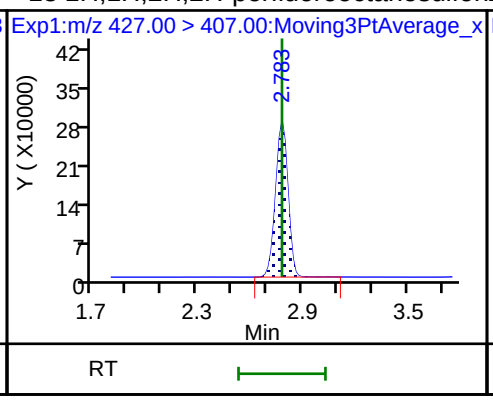


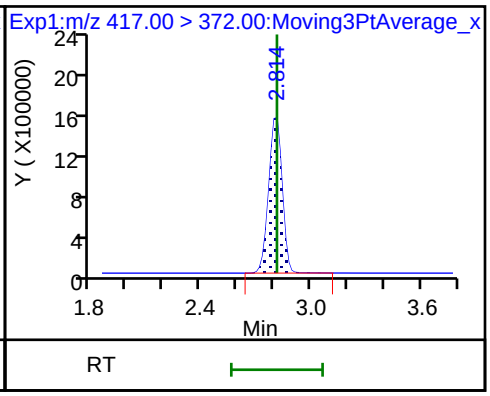
D 12 M2-6:2FTS



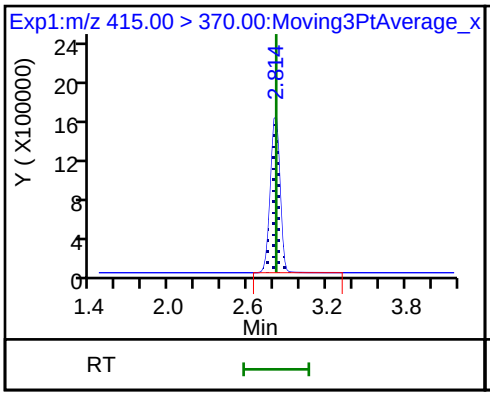
13 1H,1H,2H,2H-perfluorooctanesulfon



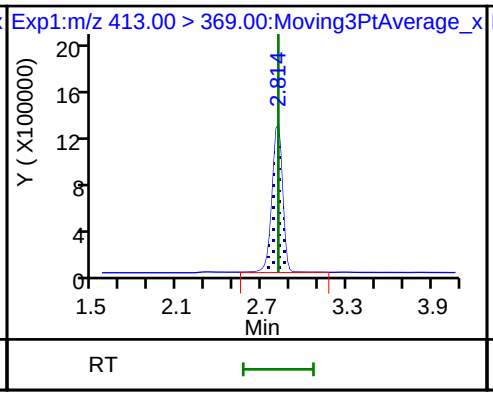
D 14 13C4 PFOA



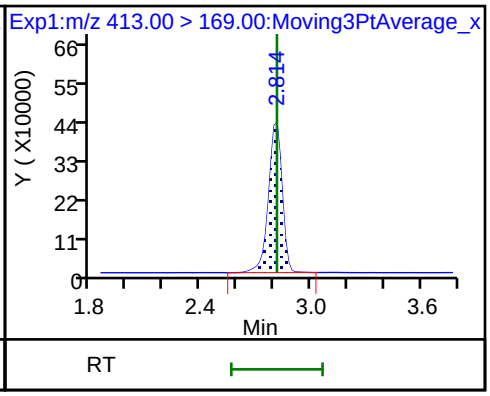
* 62 13C2-PFOA



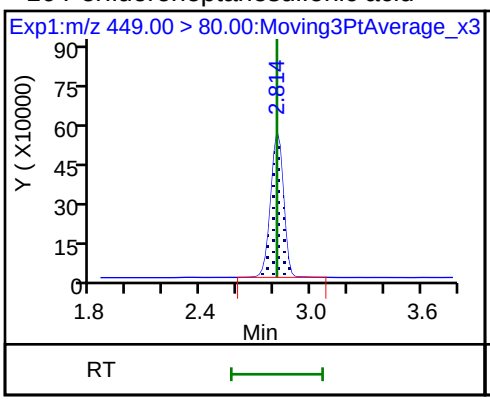
15 Perfluorooctanoic acid



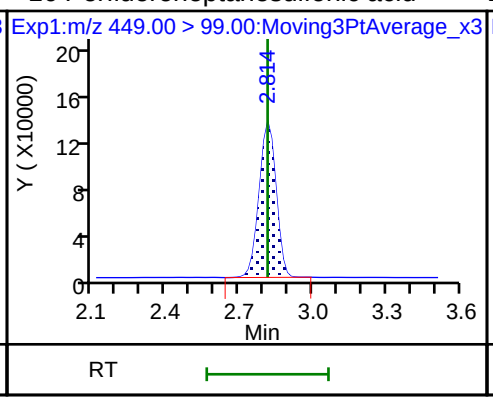
15 Perfluorooctanoic acid



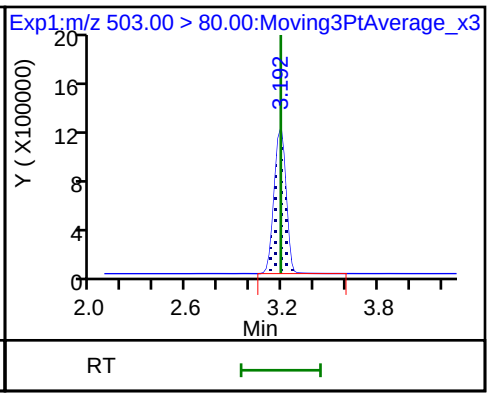
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 18 13C4 PFOS



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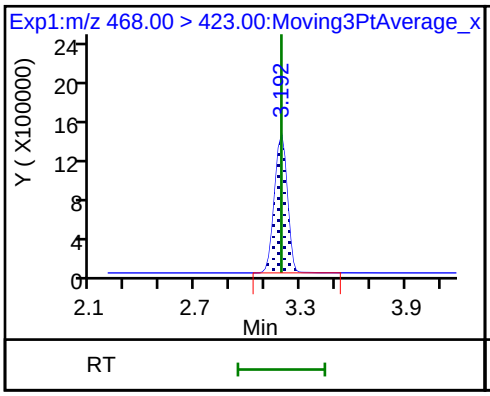
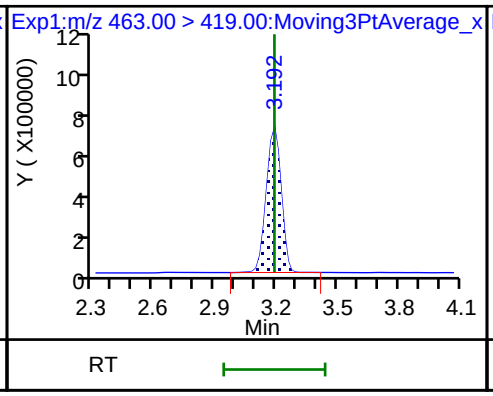
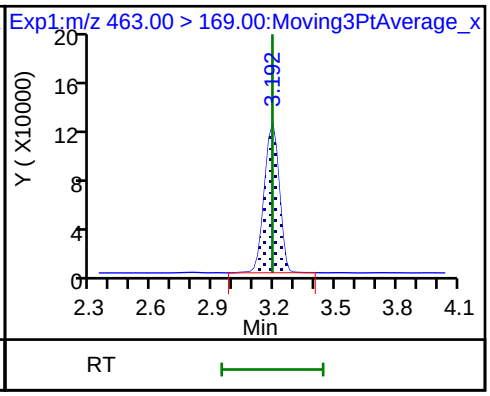


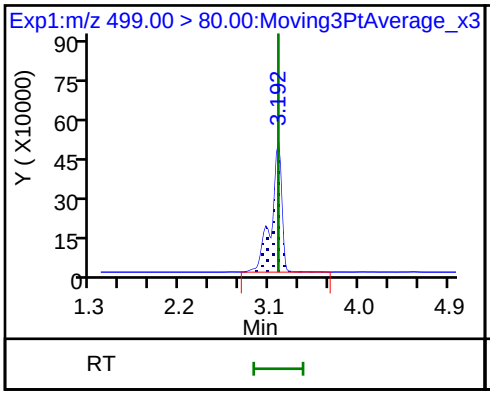
20 Perfluorononanoic acid



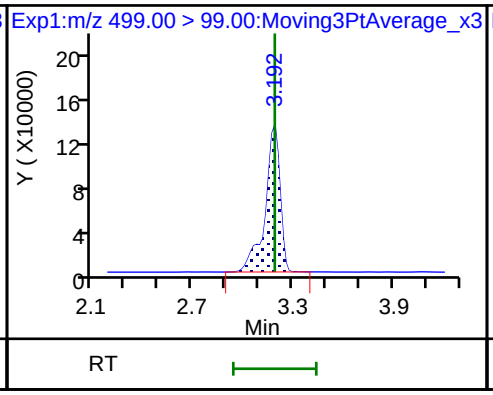
20 Perfluorononanoic acid



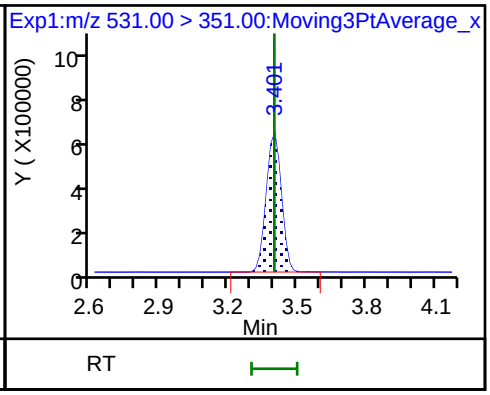
17 Perfluorooctane sulfonic acid



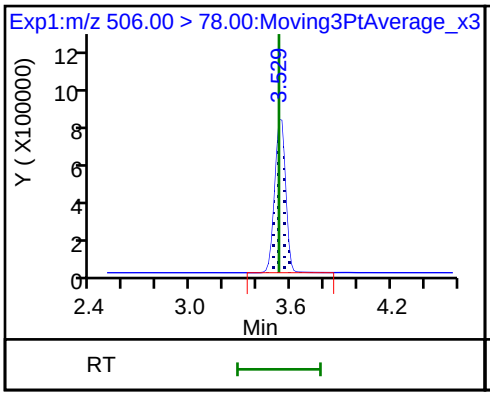
17 Perfluorooctane sulfonic acid



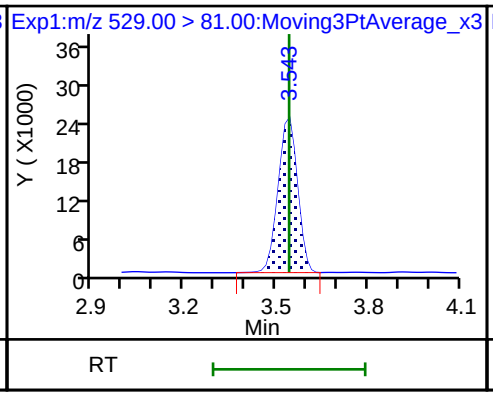
69 9-Chlorohexadecafluoro-3-oxanonane



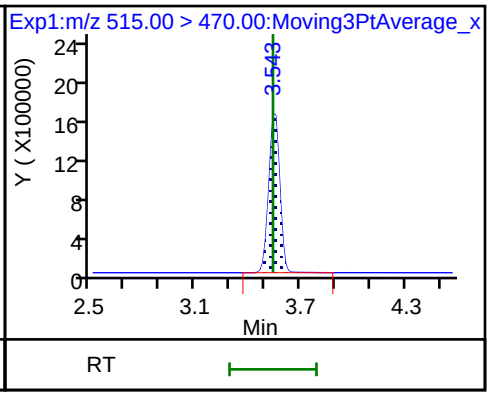
D 21 13C8 FOSA



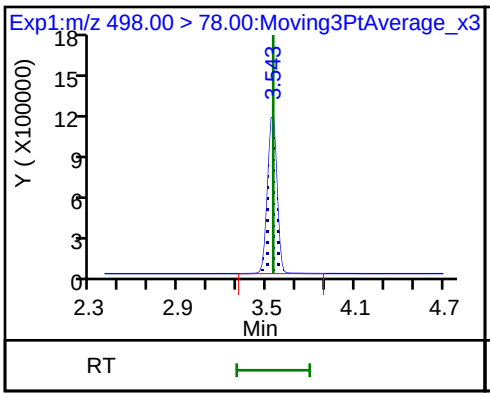
D 26 M2-8:2FTS



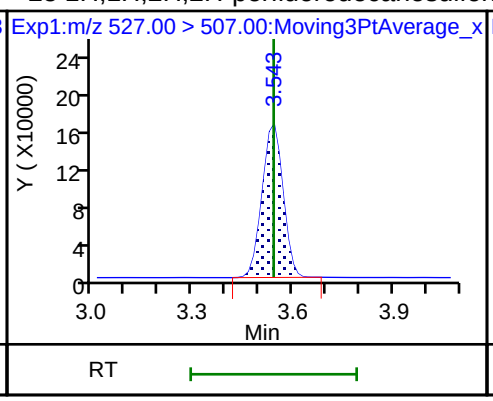
D 23 13C2 PFDA



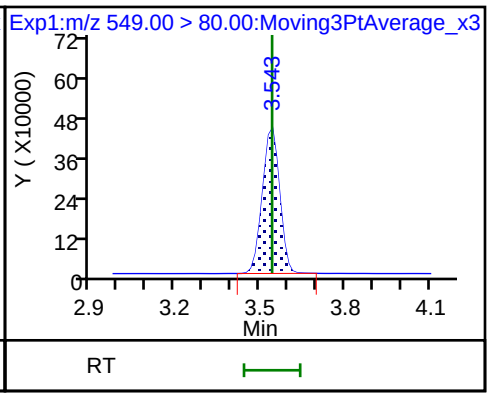
22 Perfluorooctane Sulfonamide



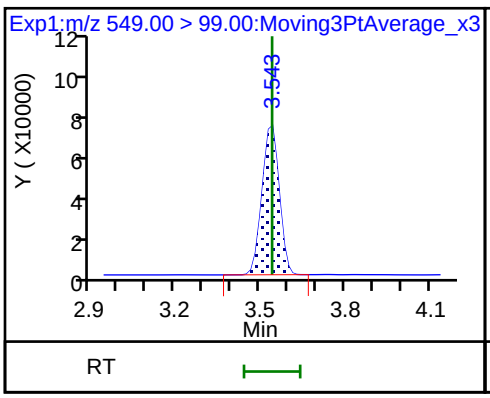
25 1H,1H,2H,2H-perfluorodecanesulfoni



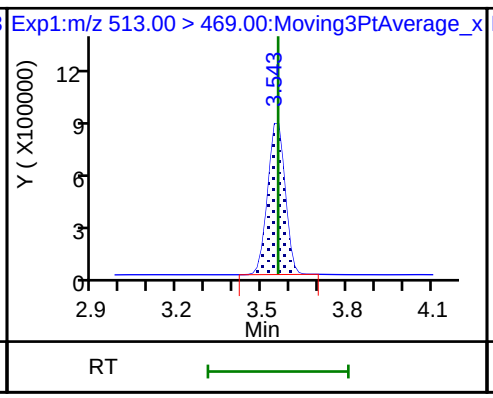
68 Perfluorononanesulfonic acid



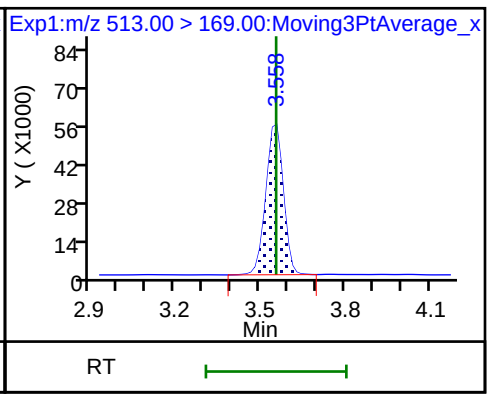
68 Perfluorononanesulfonic acid



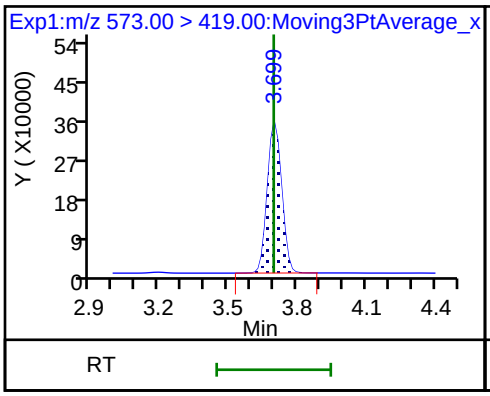
24 Perfluorodecanoic acid



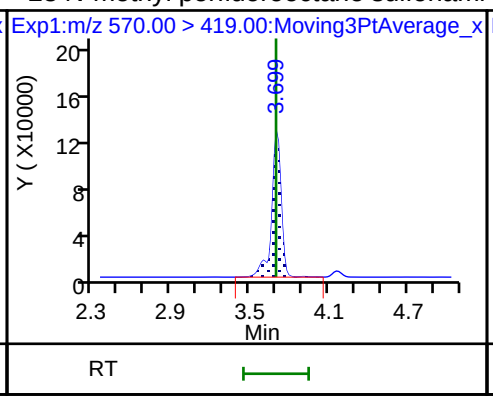
24 Perfluorodecanoic acid



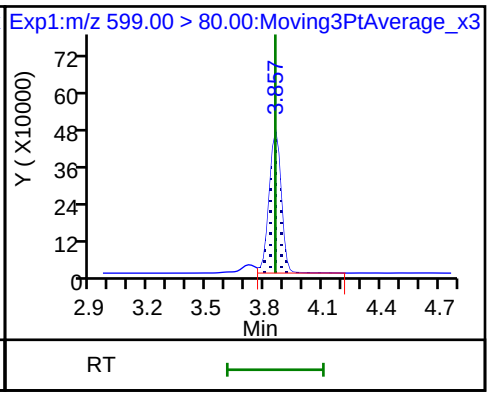
D 27 d3-NMeFOSAA



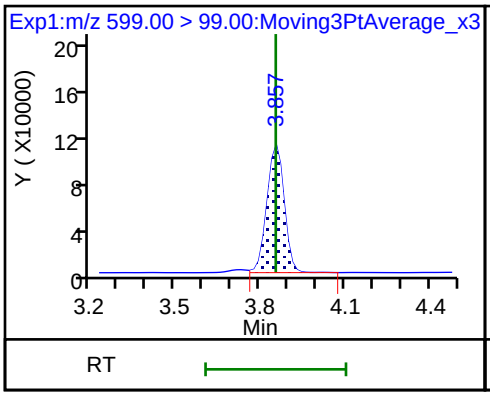
28 N-methyl perfluorooctane sulfonami



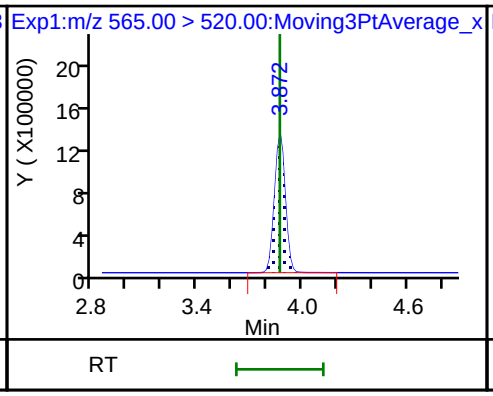
29 Perfluorodecane Sulfonic acid



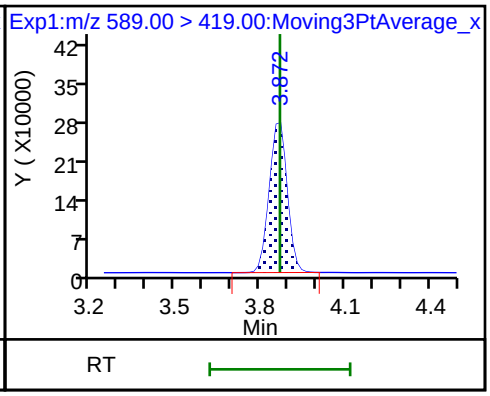
29 Perfluorodecane Sulfonic acid



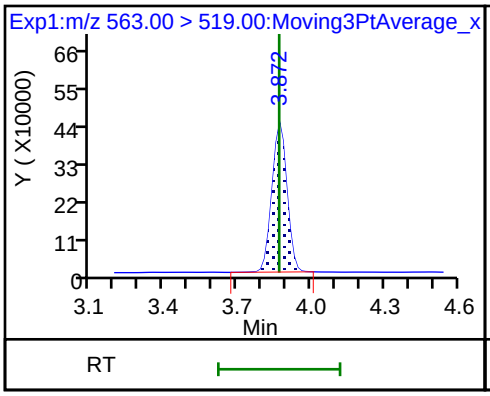
D 30 13C2 PFUnA



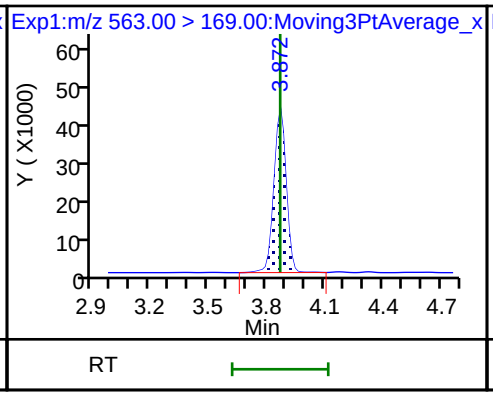
D 32 d5-NEtFOSAA



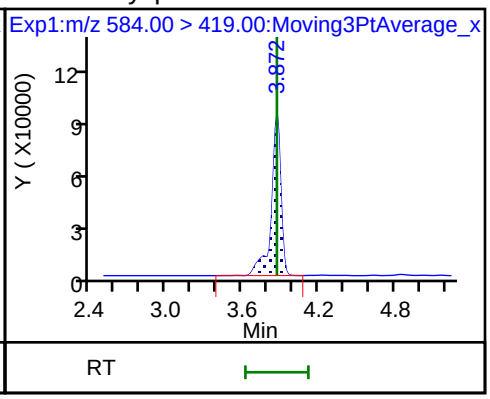
31 Perfluoroundecanoic acid



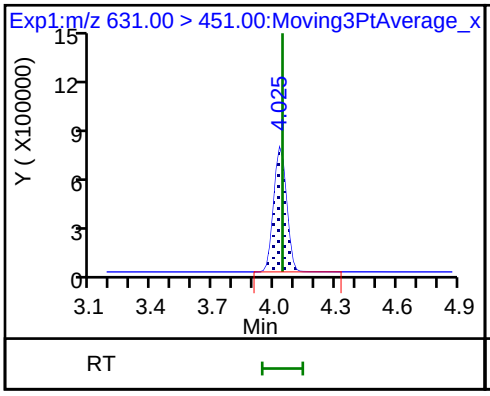
31 Perfluoroundecanoic acid



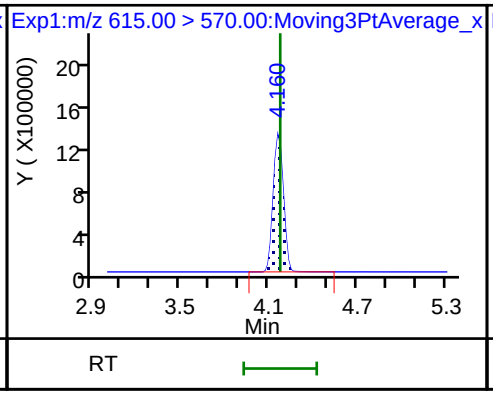
33 N-ethyl perfluorooctane sulfonamid



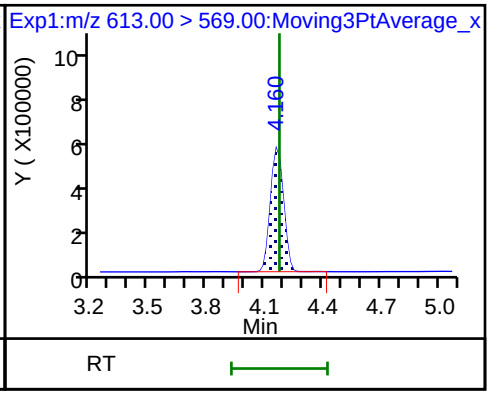
66 11-Chloroeicosafluoro-3-oxaundecan



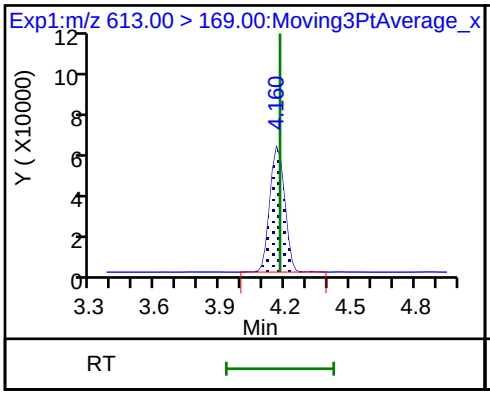
D 36 13C2 PFDoA



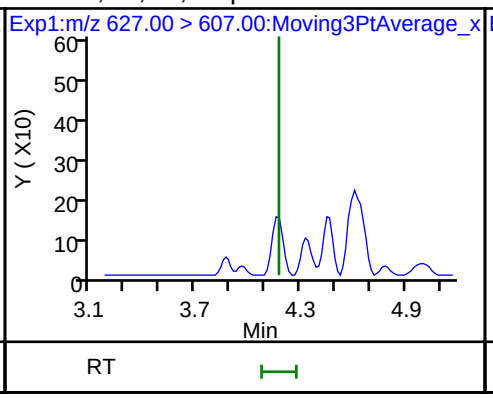
37 Perfluorododecanoic acid



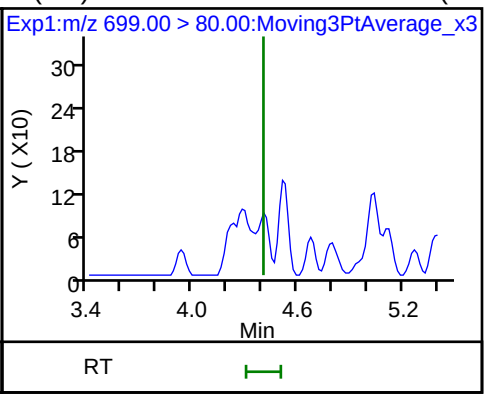
37 Perfluorododecanoic acid



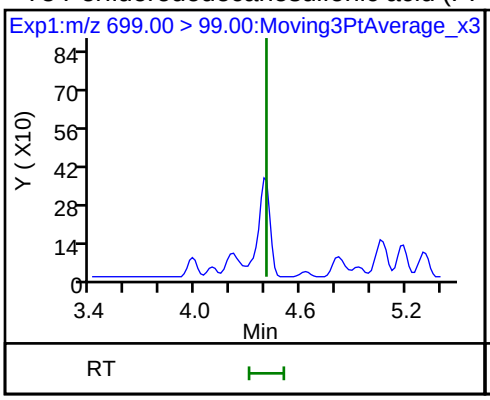
74 1H,1H,2H,2H-perfluorododecanesulfonic acid (MP)



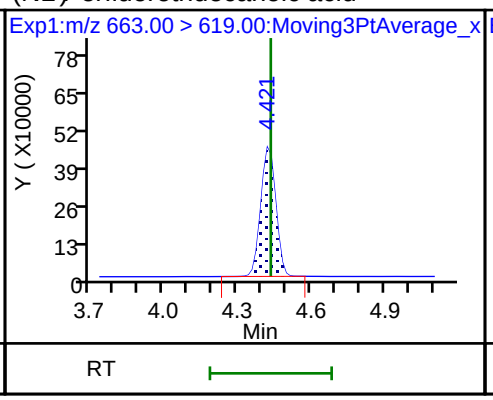
75 Perfluorododecanesulfonic acid (PF (ND)



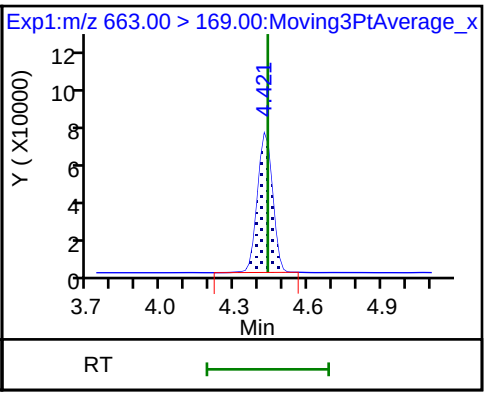
75 Perfluorododecanesulfonic acid (PF (ND)



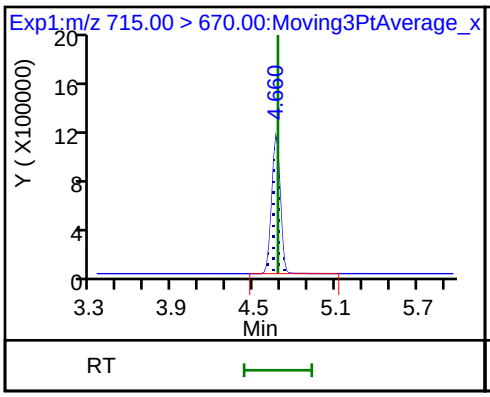
41 Perfluorotridecanoic acid



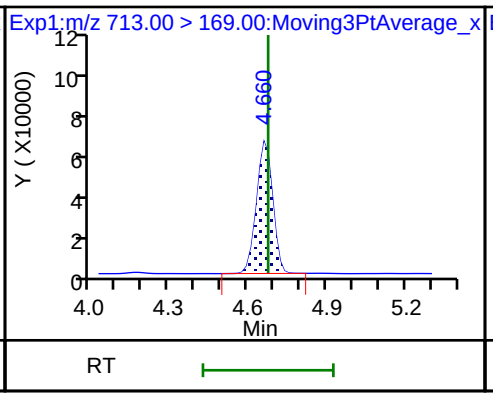
41 Perfluorotridecanoic acid



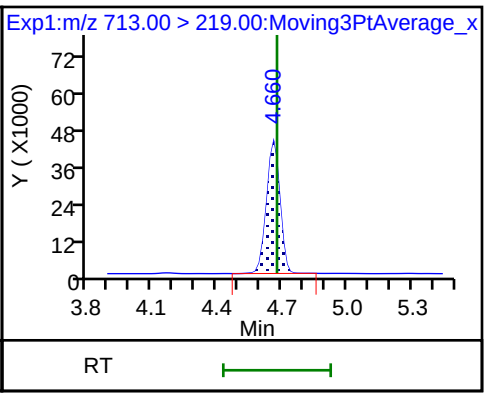
D 43 13C2-PFTeDA



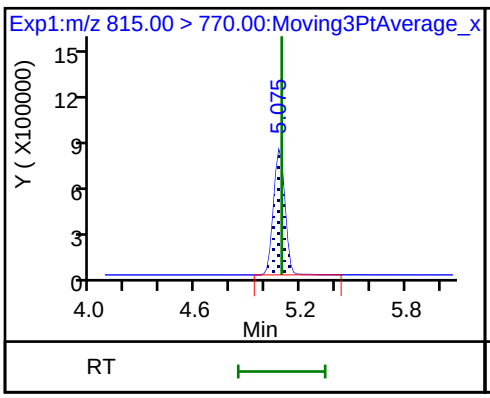
42 Perfluorotetradecanoic acid



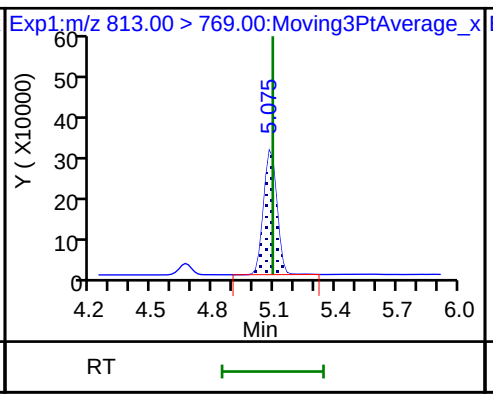
42 Perfluorotetradecanoic acid



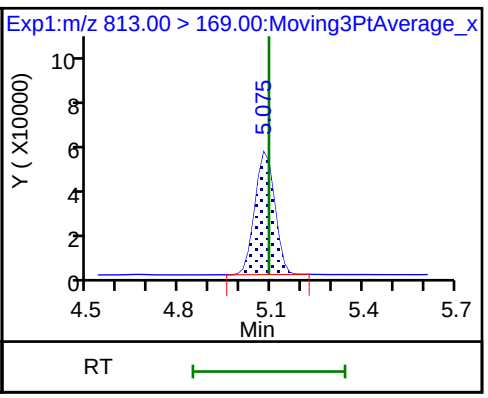
D 44 13C2-PFHxDA



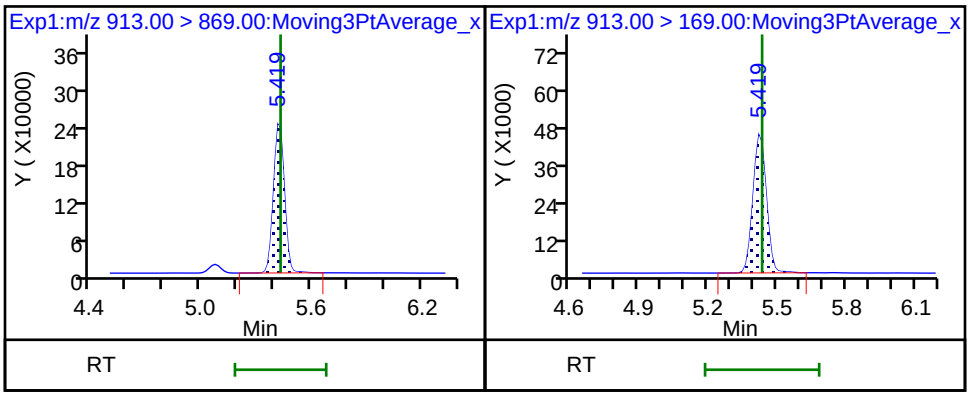
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

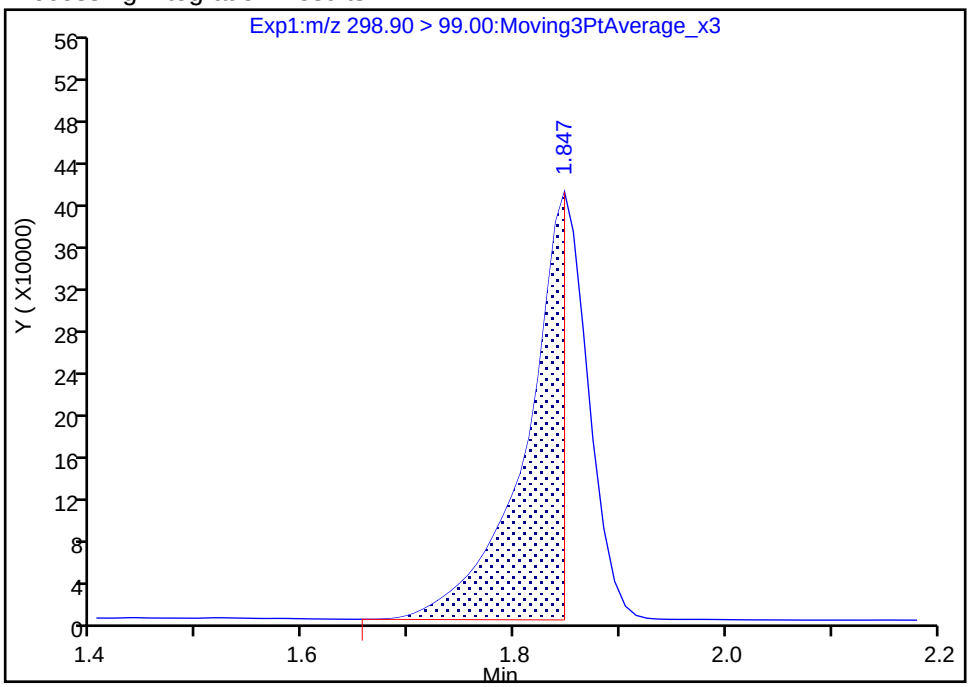
Data File:	\\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_013.d				
Injection Date:	08-Aug-2018 08:59:18	Instrument ID:	A9		
Lims ID:	320-41460-A-4-B MS				
Client ID:	GC-MW-109M (WG)				
Operator ID:	A9\Administrator	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

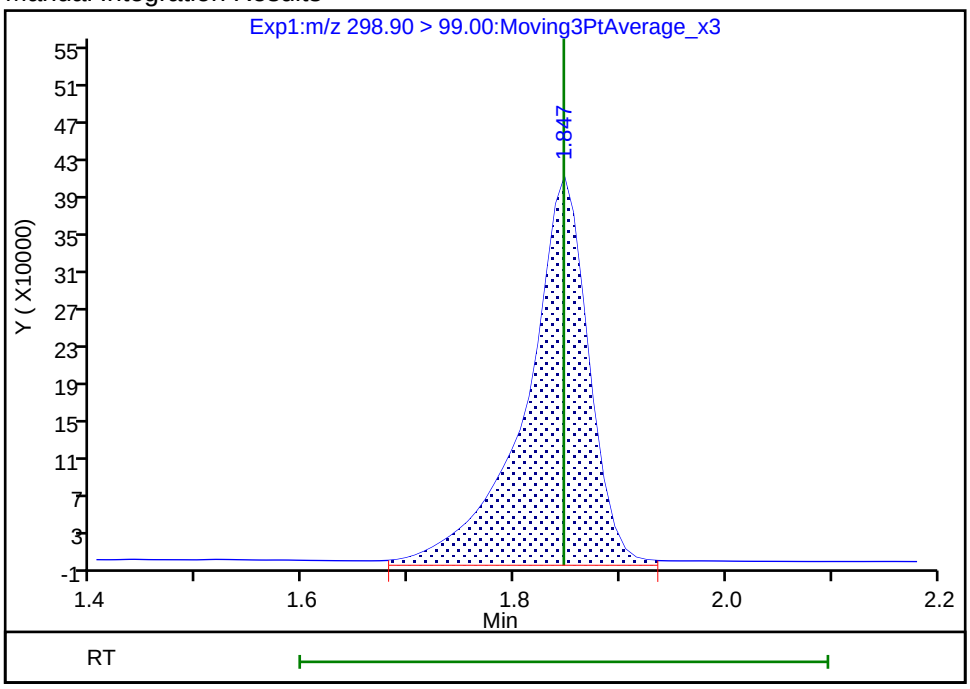
Processing Integration Results

RT: 1.85
Area: 1005233
Amount: 1.131660
Amount Units: ng/ml



Manual Integration Results

RT: 1.85
Area: 1712961
Amount: 1.131660
Amount Units: ng/ml



Reviewer: roycea, 08-Aug-2018 15:04:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MS RE | Lab Sample ID: 320-41460-4 MS RE

Matrix: Water | Lab File ID: 2018.08.12LLA_044.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/10/2018 09:01

Sample wt/vol: 273.4(mL) | Date Analyzed: 08/12/2018 16:38

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 239440 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
27619-97-2	*6:2 FTS*	*35.2*		*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02279	M2-6:2FTS	116		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_044.d
Lims ID: 320-41460-B-4-B MS
Client ID: GC-MW-109M (WG)
Sample Type: MS
Inject. Date: 12-Aug-2018 16:38:16 ALS Bottle#: 30 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-b-4-b ms
Misc. Info.: Plate: 1 Rack: 3
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:28:05 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 11:22:43

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.416	1.411	0.005	0.536	4829558	1.97		78.6	6776	
2 Perfluorobutyric acid										
212.90 > 169.00	1.416	1.415	0.001	1.000	2201781	1.21		121	187	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.670	1.669	0.001	1.000	2389452	1.46		146	113	
D 3 13C5-PFPeA										
267.90 > 223.00	1.670	1.670	0.0	0.632	3605881	2.13		85.3	5900	
D 47 13C3-PFBS										
301.90 > 83.00	1.702	1.702	0.0	0.644	76858	1.96		84.5	272	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.702	1.709	-0.007	1.000	2712626	1.08		122	139	
298.90 > 99.00	1.702	1.709	-0.007	1.000	1159658		2.34(1.25-3.74)		363	
D 60 M2-4:2FTS										
329.00 > 81.00	1.831	1.912	-0.081	0.693	2028	0.007274		0.0	0.5	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.922	1.919	0.003	1.129	779924	1.42		152	4626	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.954	1.951	0.003	1.000	2370092	1.44		144	241	
313.00 > 119.00	1.954	1.951	0.003	1.000	210995		11.23(5.03-15.10)		585	
D 7 13C2 PFHxA										
315.00 > 270.00	1.954	1.954	0.0	0.739	4038588	2.10		84.2	12064	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.975	1.972	0.003	1.160	2318797	1.02		109	813	
349.00 > 99.00	1.975	1.972	0.003	1.160	863213		2.69(1.36-4.07)		780	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.058	2.048	0.010	0.779	274202	1.84		73.5	977	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.058	2.055	0.003	1.000	281770	1.06		106	84.1	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.288	2.282	0.006	1.000	2144334	1.22		122	358	
363.00 > 169.00	2.288	2.282	0.006	1.000	869312		2.47(1.13-3.40)		1381	
D 9 13C4-PFHpA										
367.00 > 322.00	2.288	2.288	0.0	0.866	4137213	2.19		87.6	7708	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.299	2.293	0.006	1.000	2212791	1.00		109	1055	M
399.00 > 99.00	2.299	2.293	0.006	1.000	716240		3.09(1.50-4.49)		811	M
D 11 18O2 PFHxS										
403.00 > 84.00	2.299	2.299	0.0	0.870	4846633	2.00		84.6	8958	
65 ADONA										
377.00 > 251.00	2.332	2.327	0.005	0.773	4951305	1.08		108	6724	
377.00 > 85.00	2.332	2.327	0.005	0.773	3050278		1.62(0.84-2.53)		2913	
D 12 M2-6:2FTS										
429.00 > 81.00	2.620	2.612	0.008	0.991	1091335	2.75		116	1529	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.620	2.616	0.004	1.000	696135	0.9629		102	2649	
D 73 13C8 PFOA										
421.00 > 376.00	2.635	2.635	0.0	0.997	10354	0.003029		0.0	101	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.643	2.640	0.003	1.000	3330286	1.85		185	335	M
413.00 > 169.00	2.643	2.640	0.003	1.000	1830643		1.82(0.84-2.52)		2069	M
* 62 13C2-PFOA										
415.00 > 370.00	2.643	2.640	0.003		4434155	2.50			9602	
D 14 13C4 PFOA										
417.00 > 372.00	2.643	2.643	0.0	1.000	3974203	2.29		91.7	9505	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.651	2.647	0.004	0.879	1772810	1.01		106	1383	
449.00 > 99.00	2.651	2.647	0.004	0.879	496913		3.57(1.94-5.82)		917	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.016	3.014	0.002	1.000	2142495	1.41		152	2009	
499.00 > 99.00	3.016	3.014	0.002	1.000	435853		4.92(2.31-6.93)		1064	
20 Perfluorononanoic acid										
463.00 > 419.00	3.024	3.014	0.010	1.000	1609838	1.11		111	373	
463.00 > 169.00	3.016	3.014	0.002	0.997	416570		3.86(1.90-5.69)		1605	
D 19 13C5 PFNA										
468.00 > 423.00	3.024	3.016	0.008	1.144	3432599	2.21		88.3	9411	
D 18 13C4 PFOS										
503.00 > 80.00	3.016	3.016	0.0	1.141	3382456	2.13		88.9	3919	
D 72 13C8 PFOS										
507.00 > 99.00	3.024	3.016	0.008	1.144	1685	0.002179		0.0	16.3	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.228	3.226	0.002	1.070	2472954	1.00		108	5640	
D 21 13C8 FOSA										
506.00 > 78.00	3.342	3.335	0.007	1.265	4712015	2.24		89.4	5268	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.342	3.339	0.003	1.000	1918226	1.05		105	2730	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.372	3.369	0.003	1.118	1095604	1.03		107	2131	
549.00 > 99.00	3.372	3.369	0.003	1.118	393696		2.78(1.33-3.97)		1334	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.372	3.369	0.003	1.000	594185	0.9559		99.8	1679	
D 26 M2-8:2FTS										
529.00 > 81.00	3.372	3.372	0.0	1.276	1145958	2.39		99.7	2831	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.380	3.376	0.004	1.000	1362769	1.14		114	906	
513.00 > 169.00	3.380	3.376	0.004	1.000	256051		5.32(2.36-7.09)		468	
D 23 13C2 PFDA										
515.00 > 470.00	3.380	3.380	0.0	1.279	2978252	2.18		87.3	6279	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.540	3.536	0.004	1.002	643338	1.00		100	691	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.532	3.540	-0.008	1.336	1659343	2.38		95.1	5097	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.694	3.690	0.004	1.225	915098	1.02		106	142	
599.00 > 99.00	3.694	3.690	0.004	1.225	315789		2.90(1.39-4.16)		412	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.702	3.702	0.0	1.401	1701245	2.35		94.1	1910	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.711	3.707	0.004	1.002	626359	1.03		103	1758	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.711	3.707	0.004	1.000	863149	0.7915		79.2	655	
563.00 > 169.00	3.711	3.707	0.004	1.000	211705		4.08(2.12-6.36)		757	
D 30 13C2 PFUnA										
565.00 > 520.00	3.711	3.711	0.0	1.404	2426221	2.21		88.4	3775	
35 MeFOSA										
512.00 > 169.00	3.835	3.840	-0.005		332634	NC			421	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.873	3.867	0.006	1.284	3826127	1.01		107	8975	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.008	4.012	-0.004	1.000	1138160	0.9839		98.4	777	
613.00 > 169.00	4.008	4.012	-0.004	1.000	294249		3.87(2.13-6.40)		1553	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.016	4.012	0.004	1.191	467869	1.09		113	2617	
D 36 13C2 PFDoA										
615.00 > 570.00	4.008	4.017	-0.009	1.517	2599034	2.24		89.6	6683	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.249	4.254	-0.005	1.409	385436	0.9806		101	1153	
699.00 > 99.00	4.249	4.254	-0.005	1.409	565936		0.68(0.00-0.00)		3107	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.278	4.273	0.005	1.067	1246337	1.11		111	548	
663.00 > 169.00	4.278	4.273	0.005	1.067	397090		3.14(1.25-3.76)		1753	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.522	4.514	0.008	1.000	374117	1.10		110	2642	
713.00 > 219.00	4.512	4.514	-0.002	0.998	256584		1.46(0.71-2.13)		1603	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.522	4.523	-0.001	1.711	3525797	2.38		95.4	5103	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.943	4.944	-0.001	1.000	2101297	1.09		109	242	
813.00 > 169.00	4.943	4.944	-0.001	1.000	368469		5.70(2.86-8.58)		1809	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.943	4.944	-0.001	1.870	5434759	1.85		74.1	7183	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.300	5.301	-0.001	1.072	2218298	1.11		111	223	
913.00 > 169.00	5.300	5.301	-0.001	1.072	279390		7.94(3.83-11.48)		1389	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Report Date: 13-Aug-2018 13:28:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_044.d

Injection Date: 12-Aug-2018 16:38:16 Instrument ID: A8_N

Lims ID: 320-41460-B-4-B MS

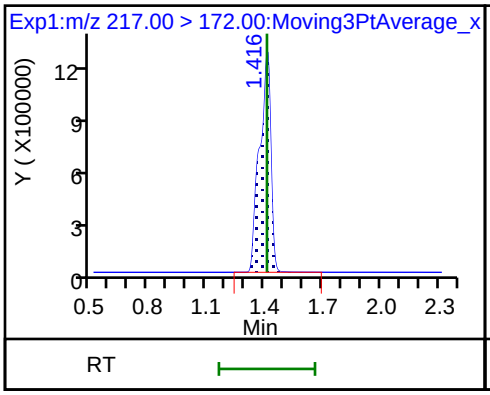
Client ID: GC-MW-109M (WG)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 30 Worklist Smp#: 13

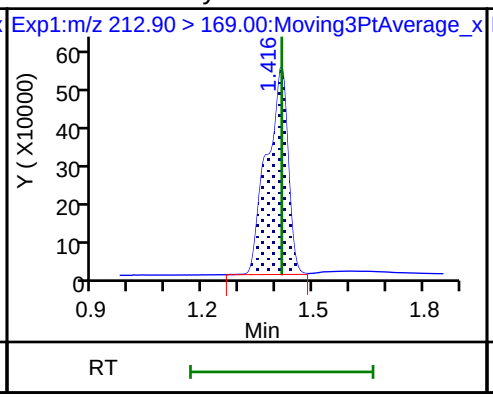
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

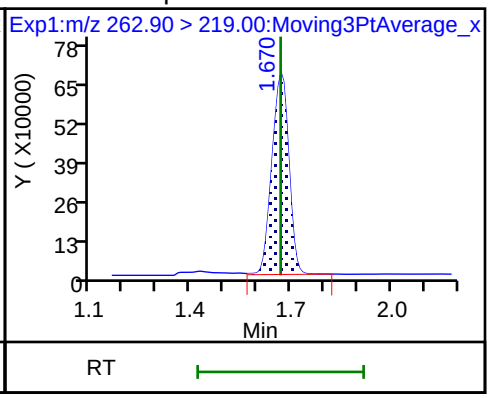
D 1 13C4 PFBA



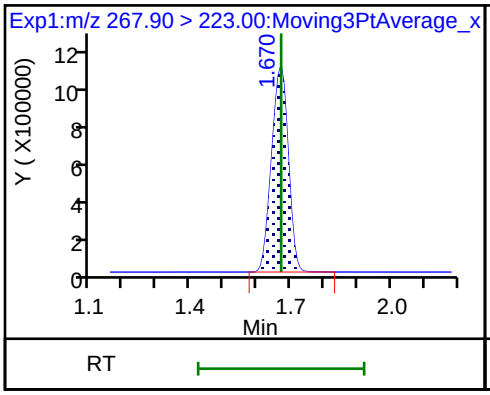
2 Perfluorobutyric acid



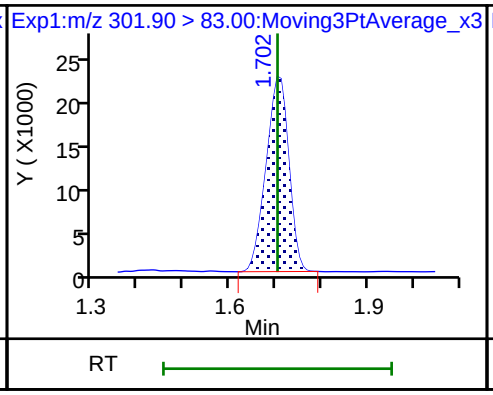
4 Perfluoropentanoic acid



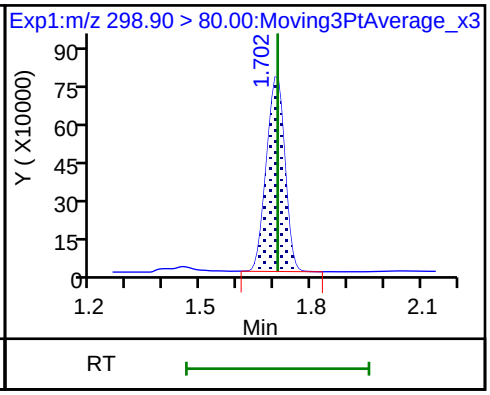
D 3 13C5-PFPeA



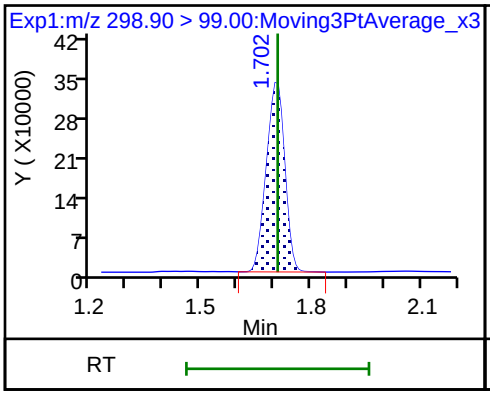
D 47 13C3-PFBS



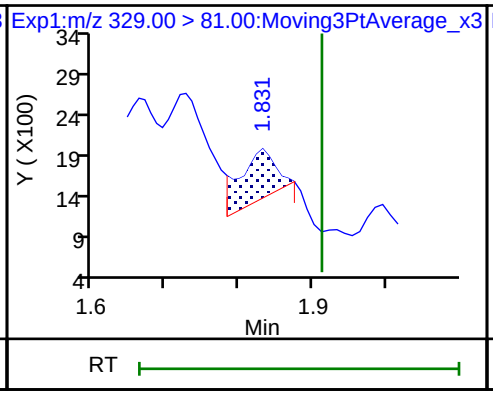
5 Perfluorobutanesulfonic acid



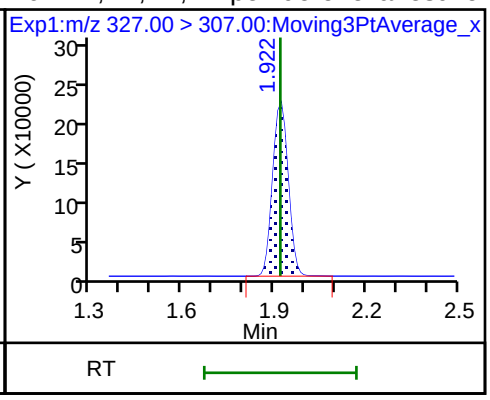
5 Perfluorobutanesulfonic acid



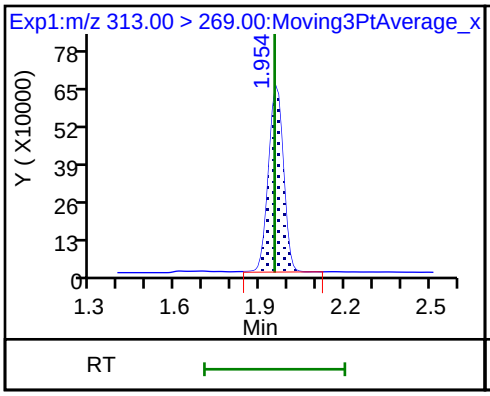
D 60 M2-4:2FTS



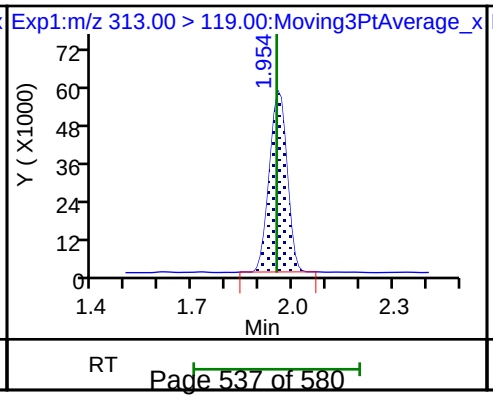
61 1H,1H,2H,2H-perfluorohexanesulfoni



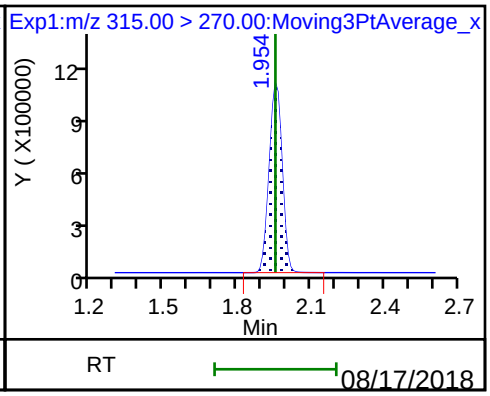
6 Perfluorohexanoic acid



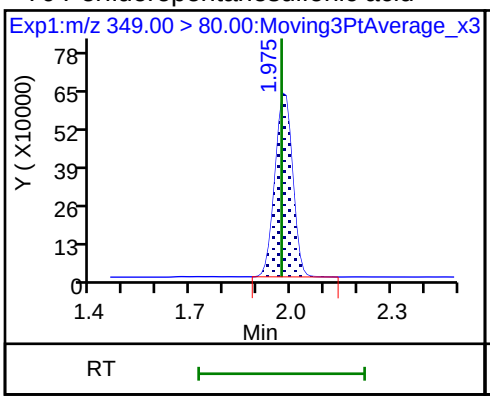
6 Perfluorohexanoic acid



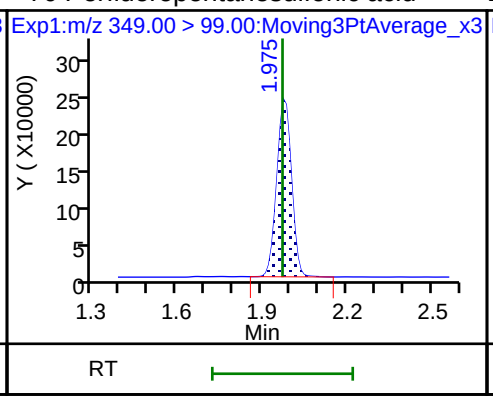
D 7 13C2 PFHxA



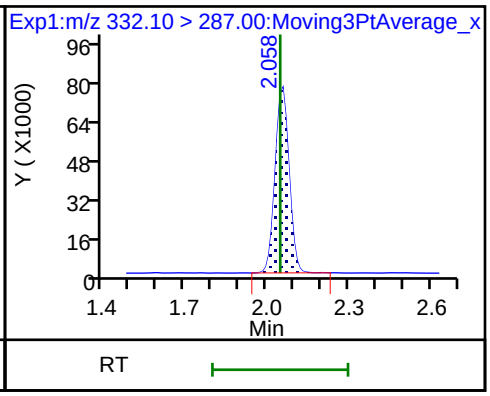
70 Perfluoropentanesulfonic acid



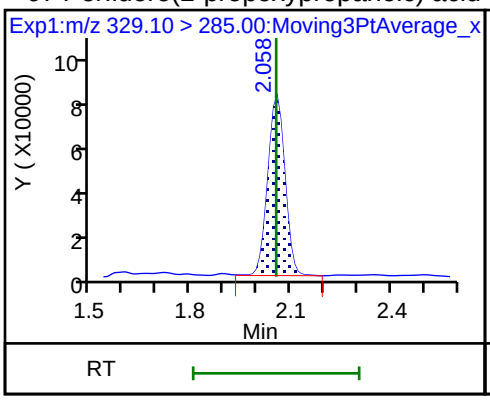
70 Perfluoropentanesulfonic acid



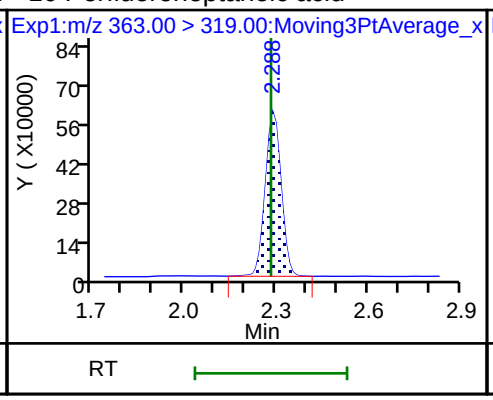
D 64 13C3 HFPO-DA



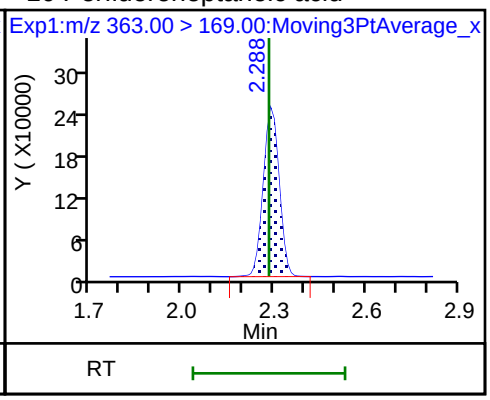
67 Perfluoro(2-propoxypropanoic) acid



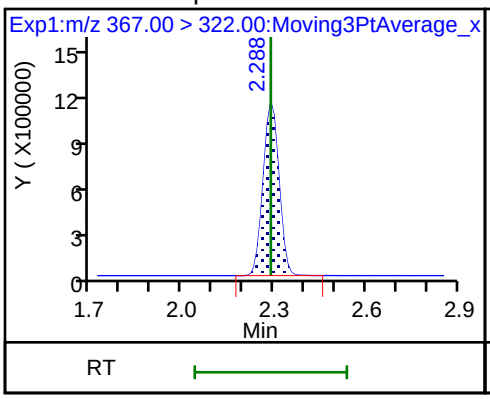
10 Perfluoroheptanoic acid



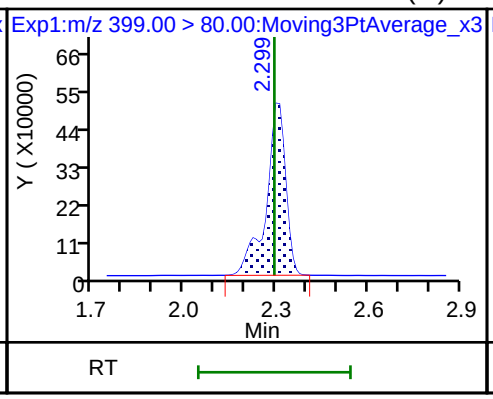
10 Perfluoroheptanoic acid



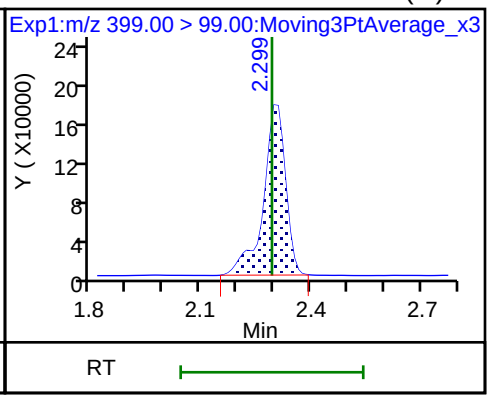
D 9 13C4-PFHpA



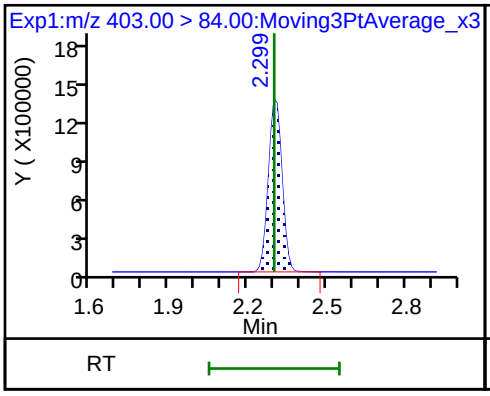
8 Perfluorohexanesulfonic acid (M)



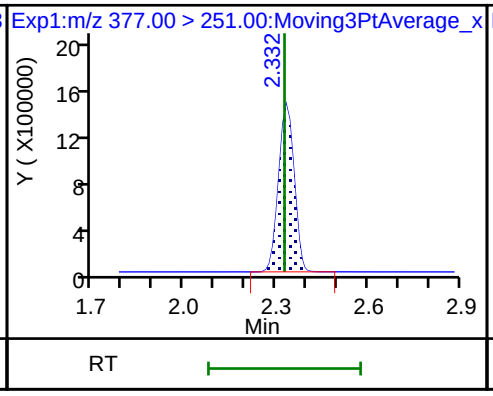
8 Perfluorohexanesulfonic acid (M)



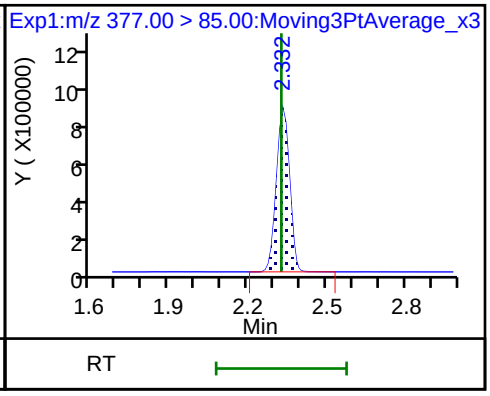
D 11 18O2 PFHxS



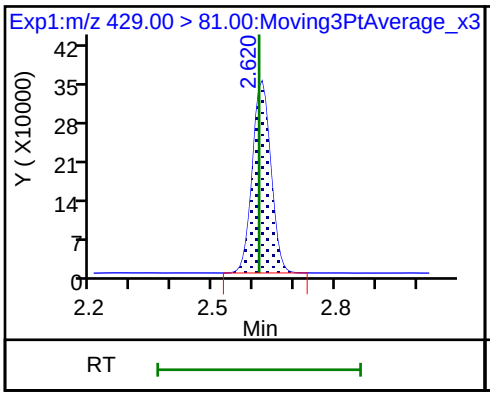
65 ADONA



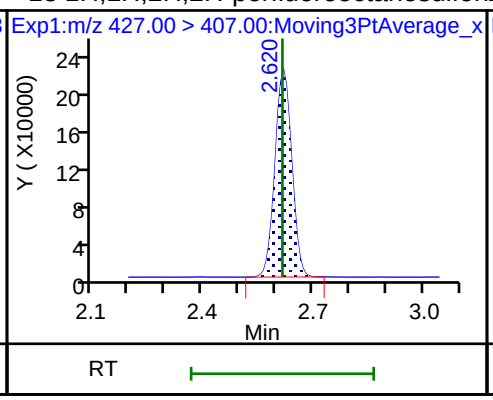
65 ADONA



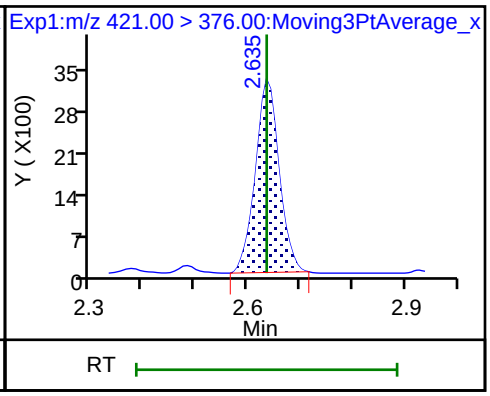
D 12 M2-6:2FTS



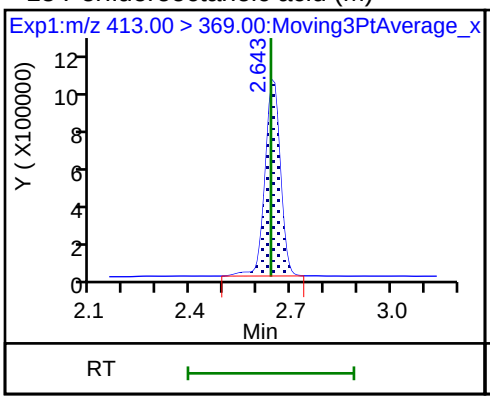
13 1H,1H,2H,2H-perfluorooctanesulfon



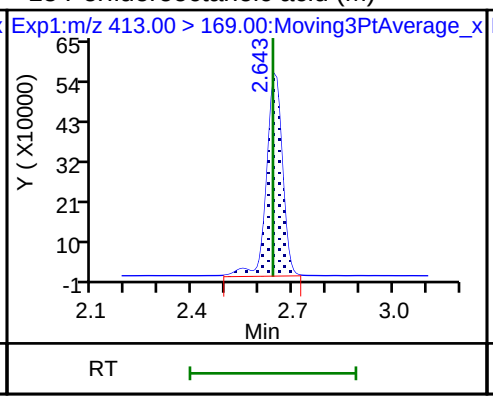
D 73 13C8 PFOA



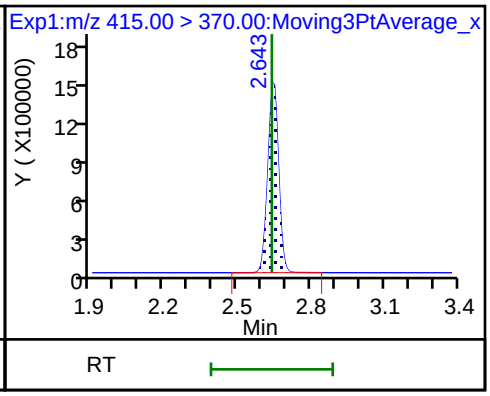
15 Perfluorooctanoic acid (M)



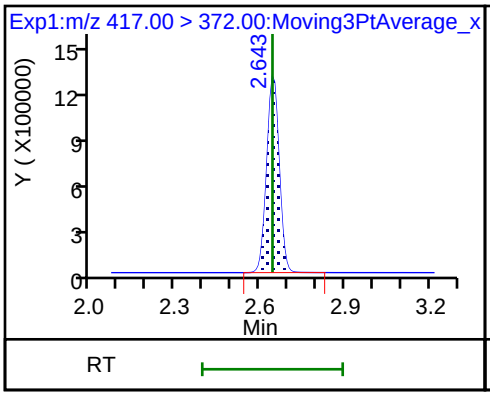
15 Perfluorooctanoic acid (M)



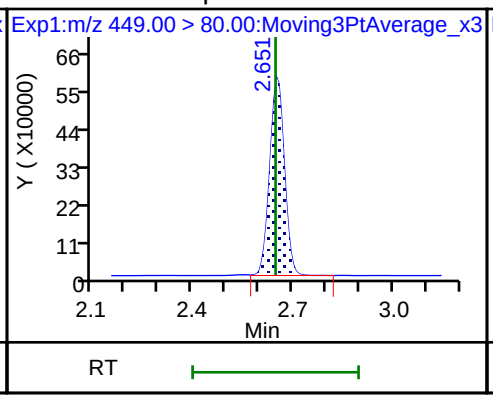
* 62 13C2-PFOA



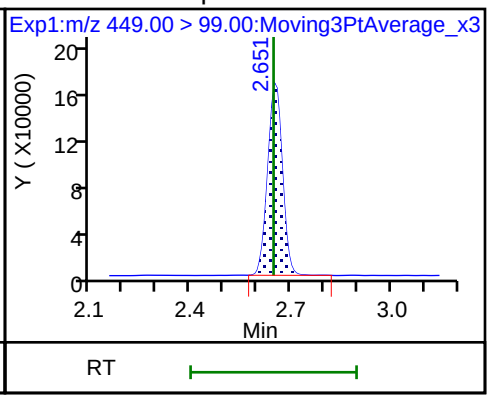
D 14 13C4 PFOA



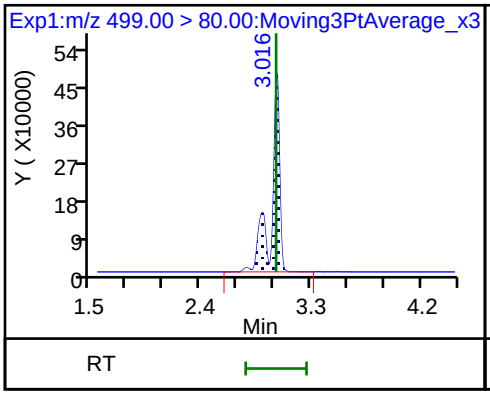
16 Perfluoroheptanesulfonic acid



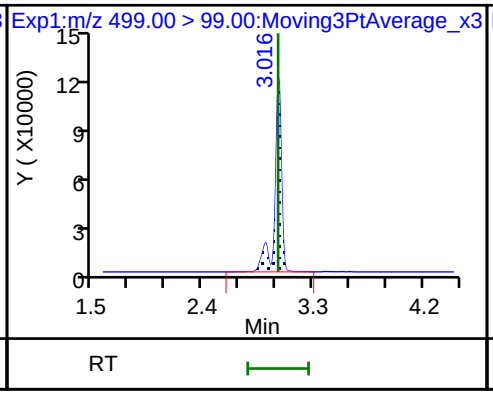
16 Perfluoroheptanesulfonic acid



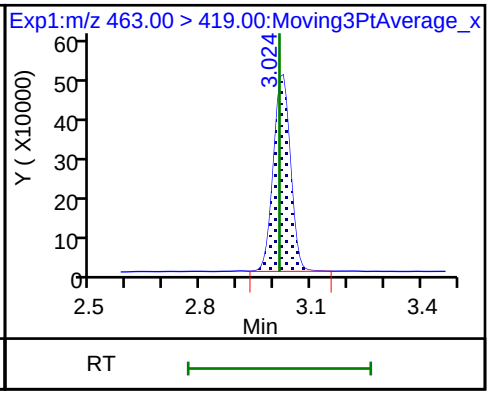
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



20 Perfluorononanoic acid



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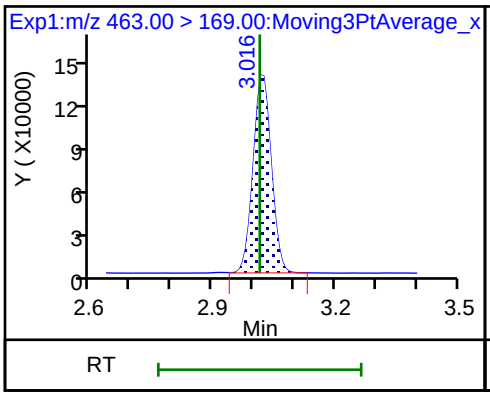
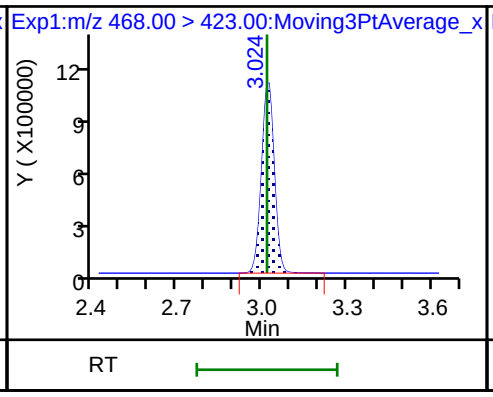
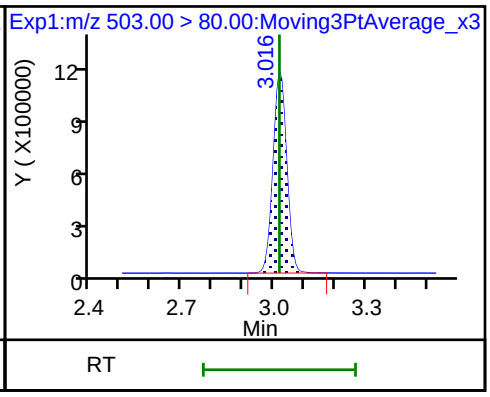


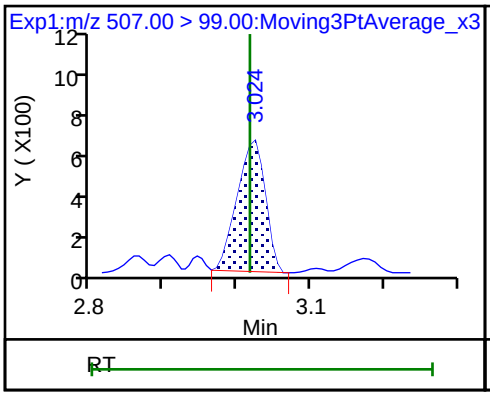
D 19 13C5 PFNA



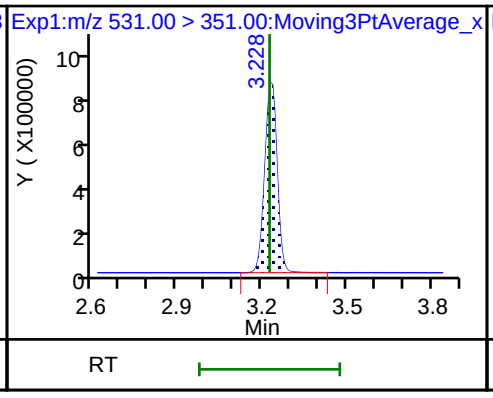
D 18 13C4 PFOS



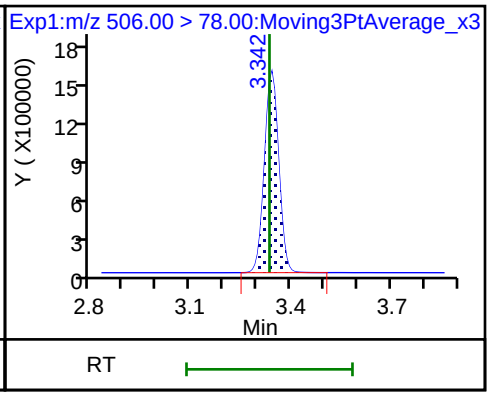
D 72 13C8 PFOS



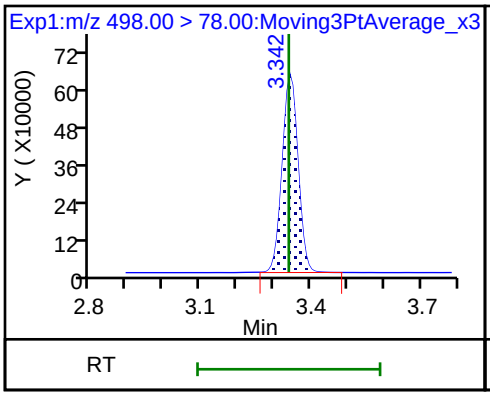
69 9-Chlorohexadecafluoro-3-oxanonane



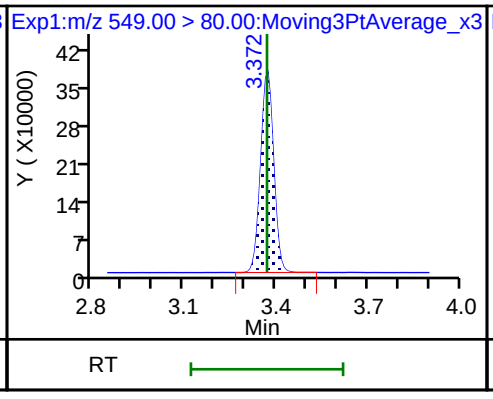
D 21 13C8 FOSA



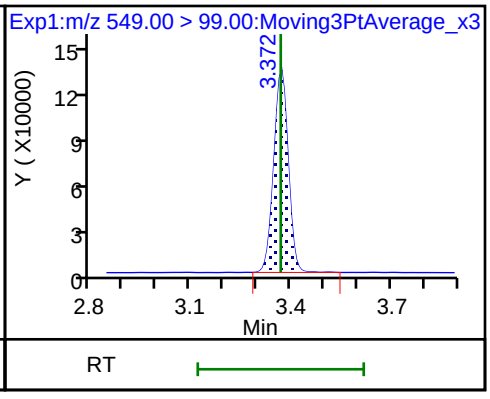
22 Perfluorooctane Sulfonamide



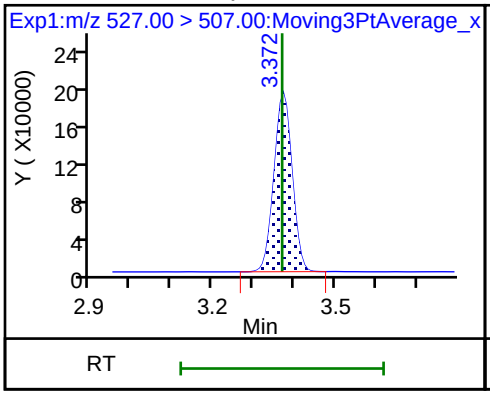
68 Perfluorononanesulfonic acid



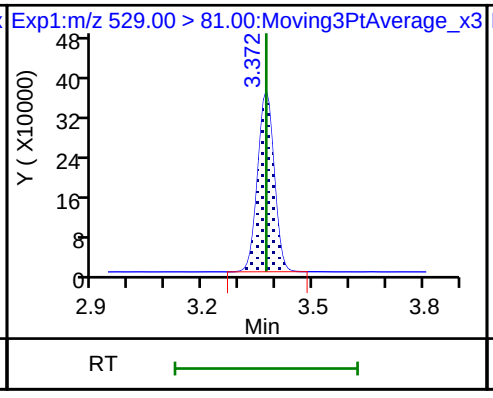
68 Perfluorononanesulfonic acid



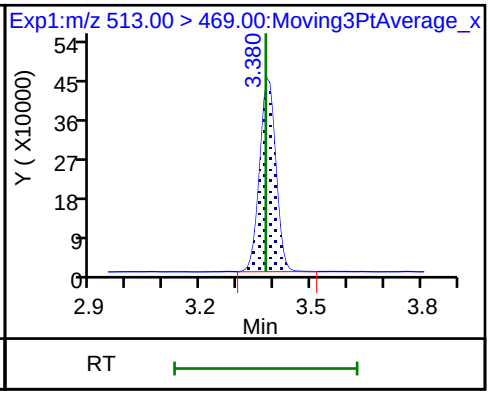
25 1H,1H,2H,2H-perfluorodecanesulfon



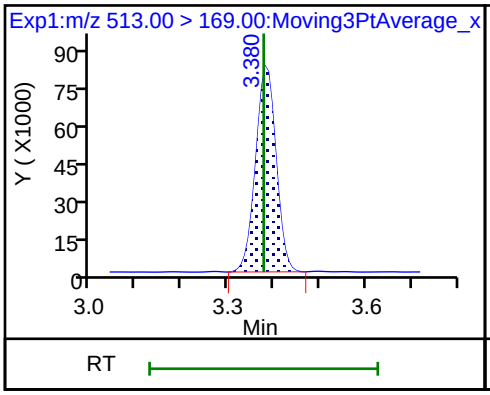
D 26 M2-8:2FTS



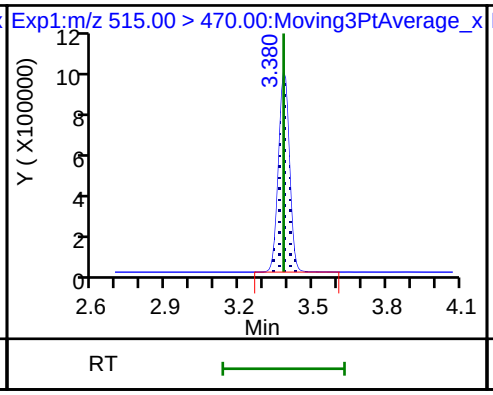
24 Perfluorodecanoic acid



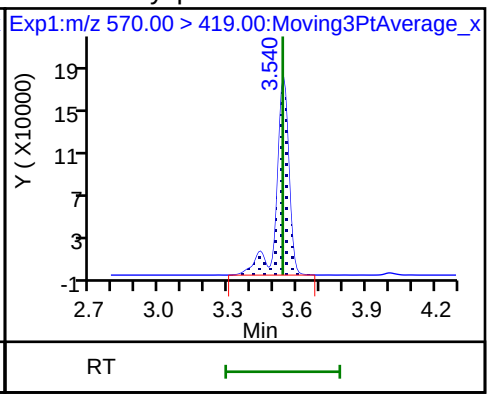
24 Perfluorodecanoic acid



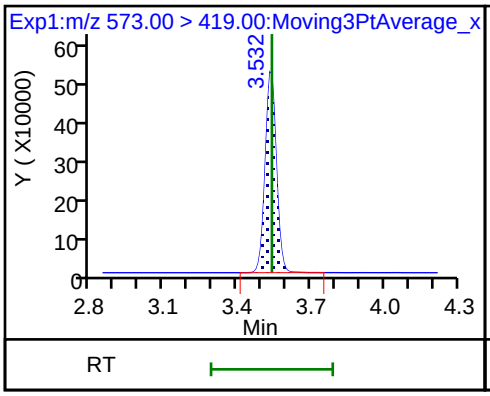
D 23 13C2 PFDA



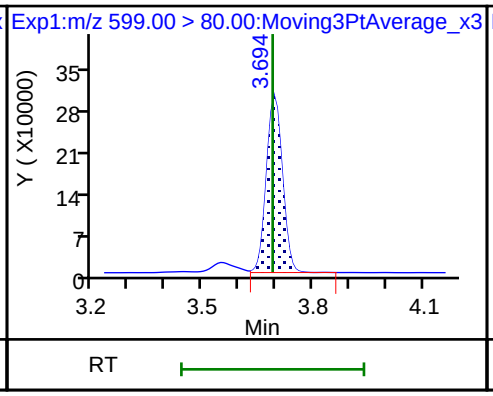
28 N-methyl perfluorooctane sulfonami (M)



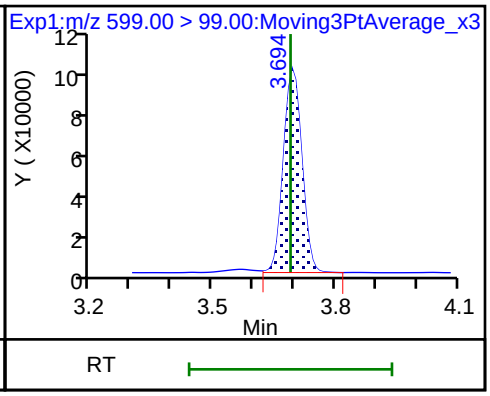
D 27 d3-NMeFOSAA



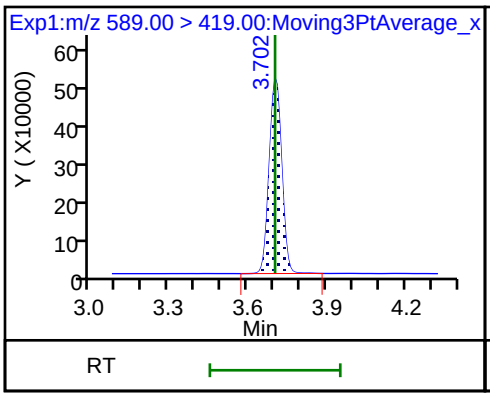
29 Perfluorodecane Sulfonic acid



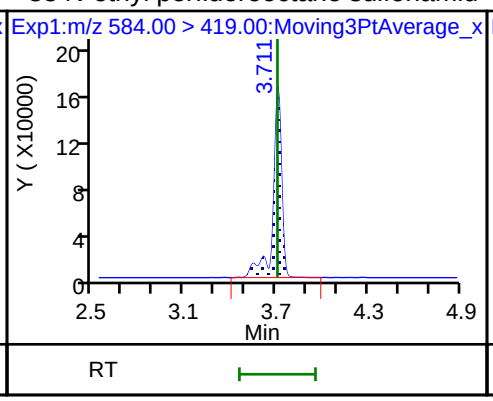
29 Perfluorodecane Sulfonic acid



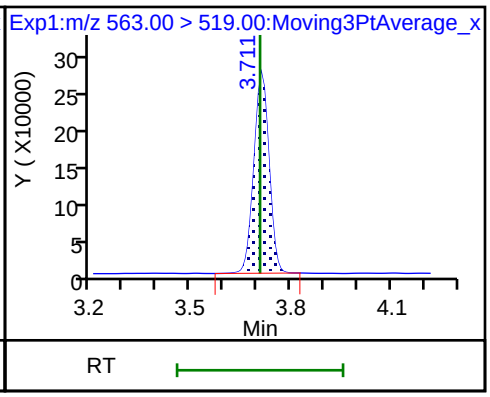
D 32 d5-NEtFOSAA



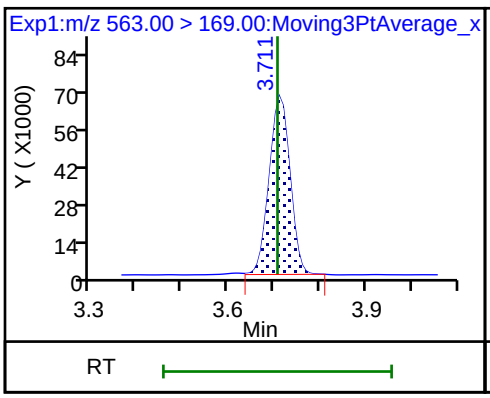
33 N-ethyl perfluorooctane sulfonamid



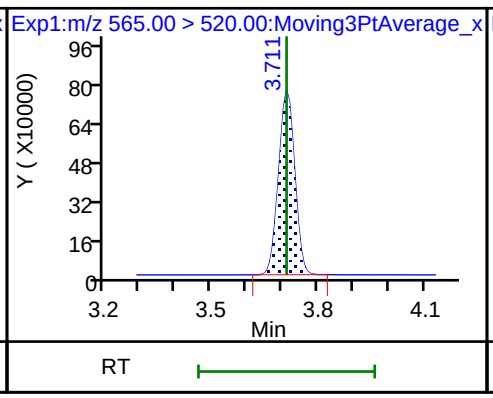
31 Perfluoroundecanoic acid



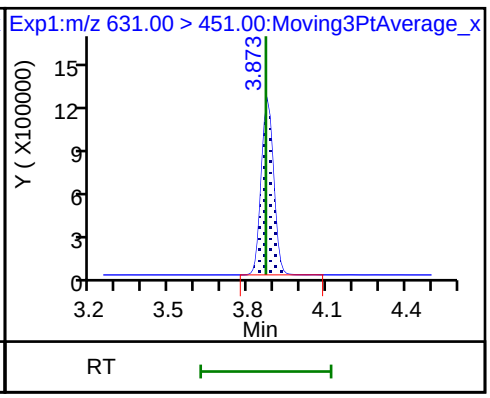
31 Perfluoroundecanoic acid



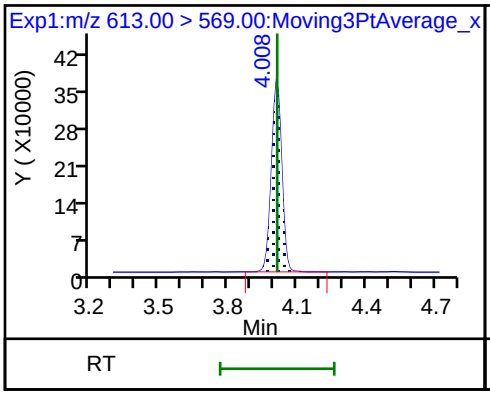
D 30 13C2 PFUnA



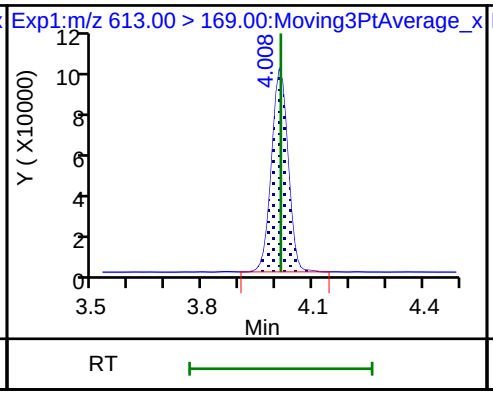
66 11-Chloroeicosafluoro-3-oxaundecan



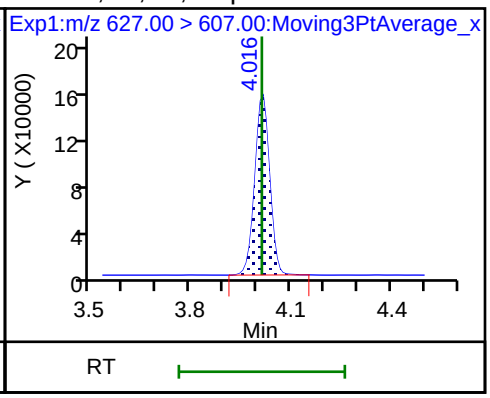
37 Perfluorododecanoic acid



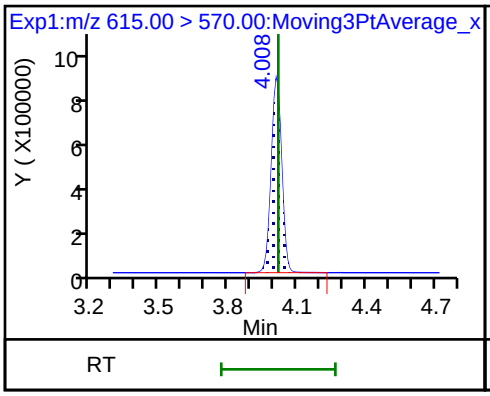
37 Perfluorododecanoic acid



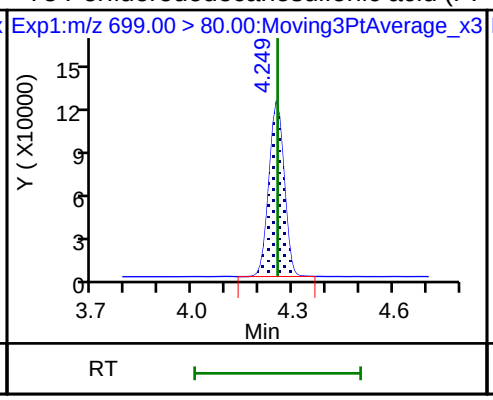
74 1H,1H,2H,2H-perfluorododecanesulfo



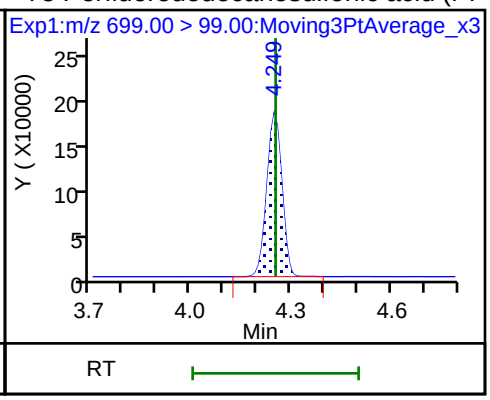
D 36 13C2 PFDoA



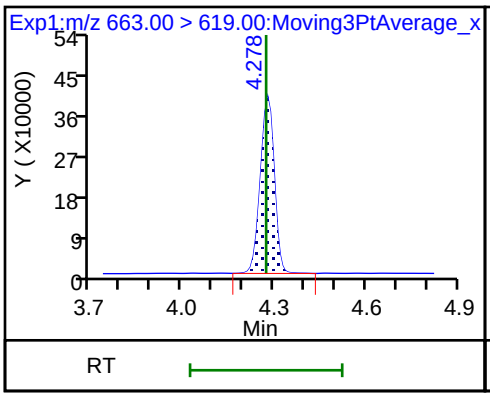
75 Perfluorododecanesulfonic acid (PF



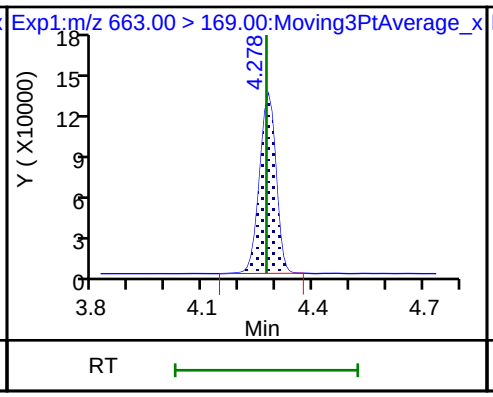
75 Perfluorododecanesulfonic acid (PF



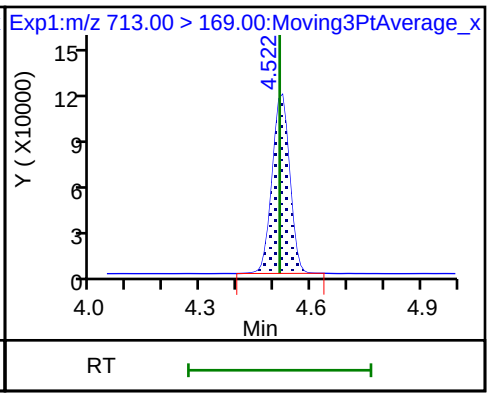
41 Perfluorotridecanoic acid



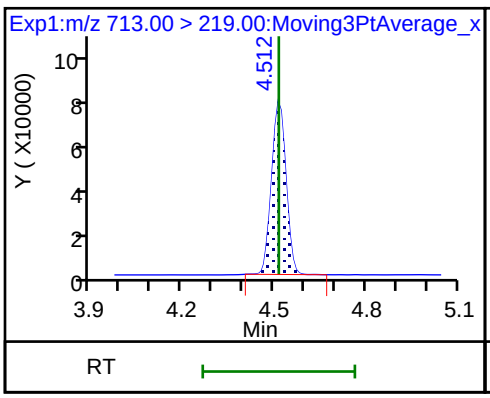
41 Perfluorotridecanoic acid



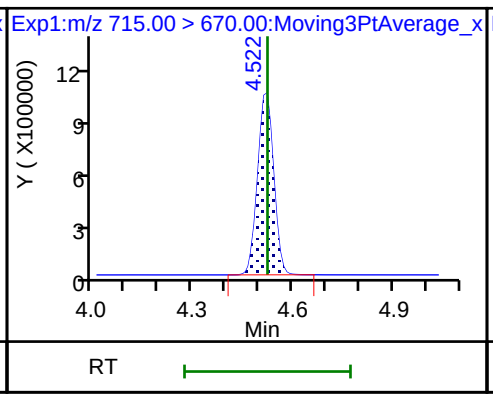
42 Perfluorotetradecanoic acid



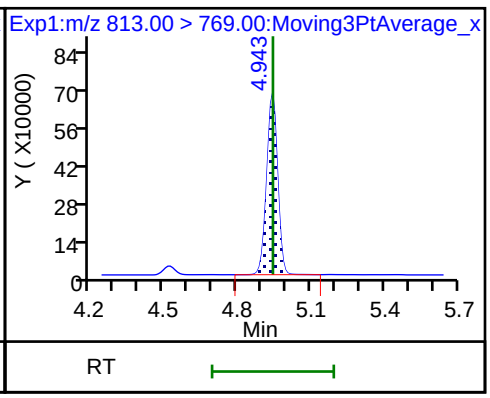
42 Perfluorotetradecanoic acid



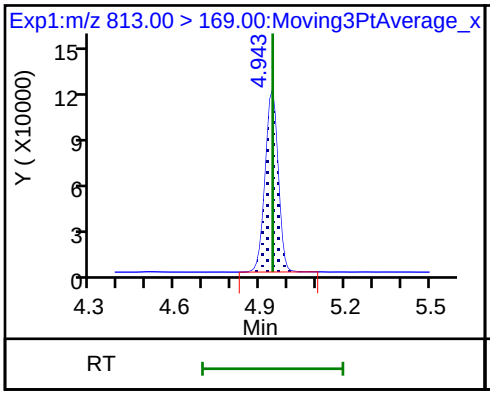
D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



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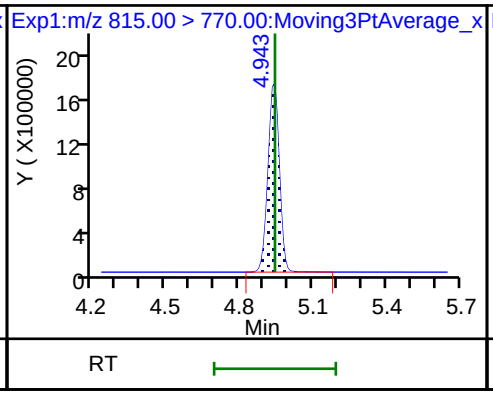
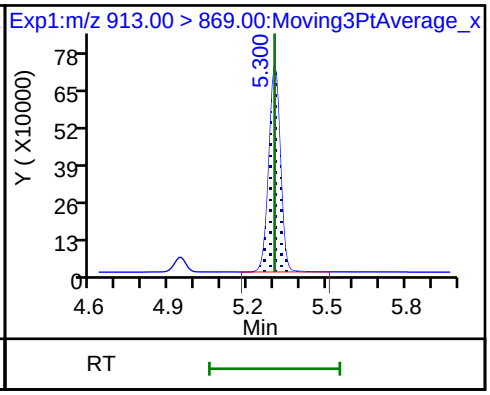
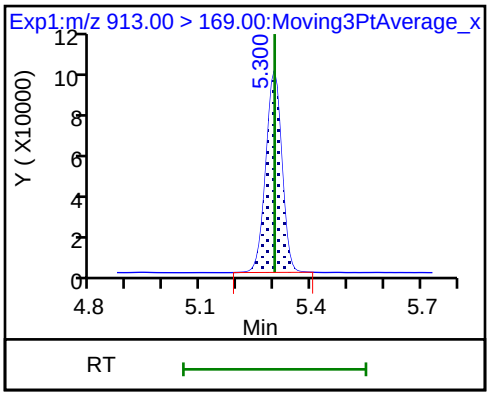


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MSD | Lab Sample ID: 320-41460-4 MSD

Matrix: Water | Lab File ID: 2018.08.08LLA_014.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 270.5(mL) | Date Analyzed: 08/08/2018 09:06

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	46.9		1.8	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	55.1		1.8	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	50.5		1.8	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	48.6		1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	67.9		1.8	0.79
375-95-1	Perfluorononanoic acid (PFNA)	42.2		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	39.8		1.8	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	38.1		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	39.7		1.8	0.51
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	40.1		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	35.6		1.8	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	40.3		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	34.2		1.8	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	38.0		1.8	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	48.9		1.8	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	33.8		1.8	0.30
754-91-6	Perfluorooctane Sulfonamide (FOSA)	39.8		1.8	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	35.7		18	2.9
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0		18	1.8
27619-97-2	6:2 FTS	74.5		18	1.8
39108-34-4	8:2 FTS	36.1		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MSD | Lab Sample ID: 320-41460-4 MSD

Matrix: Water | Lab File ID: 2018.08.08LLA_014.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/06/2018 10:25

Sample wt/vol: 270.5(mL) | Date Analyzed: 08/08/2018 09:06

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238718 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	92		25-150
STL01893	13C5 PFPeA	90		25-150
STL00993	13C2 PFHxA	90		25-150
STL01892	13C4-PFHpA	94		25-150
STL00990	13C4 PFOA	100		25-150
STL00995	13C5 PFNA	103		25-150
STL00996	13C2 PFDA	101		25-150
STL00997	13C2 PFUnA	100		25-150
STL00998	13C2 PFDoA	94		25-150
STL02116	13C2-PFTeDA	113		25-150
STL02337	13C3-PFBS	87		25-150
STL00994	18O2 PFHxS	88		25-150
STL00991	13C4 PFOS	86		25-150
STL01056	13C8 FOSA	83		25-150
STL02118	d3-NMeFOSAA	119		25-150
STL02117	d5-NEtFOSAA	112		25-150
STL02279	M2-6:2FTS	112		25-150
STL02280	M2-8:2FTS	102		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_014.d
Lims ID: 320-41460-A-4-C MSD
Client ID: GC-MW-109M (WG)
Sample Type: MSD
Inject. Date: 08-Aug-2018 09:06:48 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-a-4-c msd
Misc. Info.: Plate: 1 Rack: 3
Operator ID: A9\Administrator Instrument ID: A9

Method: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 15:08:07 Calib Date: 03-Aug-2018 16:57:30
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20180803-62120.b\2018.08.03LLICAL_011.d

Column 1 : Det: EXP1
Process Host: XAWRK001

First Level Reviewer: roycea Date: 08-Aug-2018 15:06:07

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.517	1.516	0.001	0.539	7147100	2.29		91.7	1634	
2 Perfluorobutyric acid										
212.90 > 169.00	1.523	1.523	0.0	1.004	3369365	1.27		127	119	
D 3 13C5-PFPeA										
267.90 > 223.00	1.806	1.805	0.001	0.642	6233527	2.24		89.5	5282	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.806	1.805	0.001	1.000	3792258	1.49		149	96.4	
D 47 13C3-PFBS										
301.90 > 83.00	1.839	1.838	0.001	0.653	86979	2.02		86.7	246	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.847	1.847	0.0	1.005	4215707	1.09		123	246	
298.90 > 99.00	1.847	1.847	0.0	1.005	1427044		2.95(1.35-4.05)		317	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.068	2.058	0.010	1.125	515938	0.8102		86.7	1262	
D 7 13C2 PFHxA										
315.00 > 270.00	2.099	2.098	0.001	0.746	6534759	2.26		90.4	5623	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.099	2.098	0.001	1.000	3342661	1.37		137	155	
313.00 > 119.00	2.099	2.098	0.001	1.000	250422		13.35(6.96-20.87)		242	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.120	2.119	0.001	1.153	1788481	0.9775		104	462	
349.00 > 99.00	2.120	2.119	0.001	1.153	818777		2.18(1.15-3.45)		269	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.201	2.201	0.0	0.782	890250	3.60		144	2003	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.201	2.201	0.0	1.000	589056	0.7502		75.0	126	
D 9 13C4-PFHpA										
367.00 > 322.00	2.439	2.439	0.0	0.867	7701619	2.35		93.8	10077	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.439	2.439	0.0	1.000	4202563	1.31		131	194	
363.00 > 169.00	2.439	2.439	0.0	1.000	939178		4.47(2.17-6.52)		1255	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.452	2.452	0.0	1.000	2580656	0.9262		102	661	
399.00 > 99.00	2.452	2.452	0.0	1.000	711938		3.62(1.90-5.70)		259	
D 11 18O2 PFHxS										
403.00 > 84.00	2.452	2.465	-0.013	0.871	5151273	2.08		88.1	13588	
65 ADONA										
377.00 > 251.00	2.492	2.491	0.001	0.781	5360765	1.21		121	4853	
377.00 > 85.00	2.492	2.491	0.001	0.781	2242595		2.39(1.05-3.16)		720	
D 12 M2-6:2FTS										
429.00 > 81.00	2.783	2.782	0.001	0.989	852058	2.67		112	468	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.783	2.782	0.001	1.000	1544866	2.02		213	2751	
D 14 13C4 PFOA										
417.00 > 372.00	2.815	2.814	0.001	1.000	6872532	2.50		99.9	15459	
* 62 13C2-PFOA										
415.00 > 370.00	2.815	2.814	0.001		6974783	2.50			13181	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.815	2.814	0.001	1.000	5529930	1.84		183	381	
413.00 > 169.00	2.815	2.814	0.001	1.000	1936565		2.86(1.36-4.08)		1708	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.815	2.814	0.001	0.882	2290800	1.03		108	942	
449.00 > 99.00	2.815	2.814	0.001	0.882	572028		4.00(1.84-5.53)		1310	
D 18 13C4 PFOS										
503.00 > 80.00	3.192	3.190	0.002	1.134	5271710	2.05		85.7	2491	
D 19 13C5 PFNA										
468.00 > 423.00	3.192	3.190	0.002	1.134	6091492	2.58		103	6648	
20 Perfluorononanoic acid										
463.00 > 419.00	3.192	3.190	0.002	1.000	2935339	1.14		114	417	
463.00 > 169.00	3.192	3.190	0.002	1.000	513486		5.72(2.68-8.03)		873	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.192	3.190	0.002	1.000	3129675	1.32		143	1021	
499.00 > 99.00	3.192	3.190	0.002	1.000	667031		4.69(2.04-6.12)		1036	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.402	3.400	0.002	1.066	2252397	0.8646		92.8	2031	
D 21 13C8 FOSA										
506.00 > 78.00	3.529	3.527	0.002	1.254	3183656	2.07		82.8	3457	
D 26 M2-8:2FTS										
529.00 > 81.00	3.544	3.542	0.002	1.259	90678	2.45		102	373	
D 23 13C2 PFDA										
515.00 > 470.00	3.544	3.542	0.002	1.259	5951894	2.52		101	7833	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.544	3.542	0.002	1.004	4214315	1.08		108	4143	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.544	3.542	0.002	1.000	518752	0.9774		102	1918	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.544	3.542	0.002	1.110	1564588	1.08		113	1420	
549.00 > 99.00	3.529	3.542	-0.013	1.106	260411		6.01(3.02-9.05)		1487	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.544	3.556	-0.012	1.000	3149141	1.08		108	525	
513.00 > 169.00	3.544	3.556	-0.012	1.000	219848		14.32(7.12-21.35)		545	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.699	3.697	0.002	1.314	1362378	2.96		119	1377	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.699	3.697	0.002	1.000	532432	0.9667		96.7	285	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.857	3.855	0.002	1.208	1680823	0.9144		94.9	284	
599.00 > 99.00	3.857	3.855	0.002	1.208	378198		4.44(2.14-6.43)		606	
D 30 13C2 PFUnA										
565.00 > 520.00	3.872	3.870	0.002	1.376	4762352	2.49		99.7	5924	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.872	3.870	0.002	1.376	1057045	2.80		112	1676	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.872	3.870	0.002	1.000	1654896	1.03		103	252	
563.00 > 169.00	3.872	3.870	0.002	1.000	173151		9.56(5.24-15.72)		899	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.872	3.870	0.002	1.000	410726	1.08		108	793	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.026	4.040	-0.014	1.261	2660801	0.9642		102	6625	
D 36 13C2 PFDoA										
615.00 > 570.00	4.160	4.176	-0.016	1.478	4829848	2.34		93.8	10729	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.160	4.176	-0.016	1.000	2040581	1.07		107	248	
613.00 > 169.00	4.160	4.176	-0.016	1.000	214340		9.52(4.68-14.05)		573	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.422	4.435	-0.013	1.063	1574148	1.09		109	369	
663.00 > 169.00	4.422	4.435	-0.013	1.063	272314		5.78(3.09-9.27)		983	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.664	4.676	-0.012	1.657	3704063	2.82		113	12215	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.664	4.676	-0.012	1.000	229918	0.9633		96.3	811	
713.00 > 219.00	4.664	4.676	-0.012	1.000	161047		1.43(0.70-2.09)		460	
D 44 13C2-PFHxDA										
815.00 > 770.00	5.079	5.092	-0.013	1.804	2904504	2.41		96.3	6247	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.079	5.092	-0.013	1.000	1135761	1.06		106	94.2	
813.00 > 169.00	5.079	5.092	-0.013	1.000	188467		6.03(2.77-8.32)		682	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.422	5.434	-0.012	1.068	760863	0.9225		92.2	382	
913.00 > 169.00	5.422	5.434	-0.012	1.068	139343		5.46(2.55-7.64)		960	

Report Date: 08-Aug-2018 15:08:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20180808-62350.b\2018.08.08LLA_014.d

Injection Date: 08-Aug-2018 09:06:48 Instrument ID: A9

Lims ID: 320-41460-A-4-C MSD

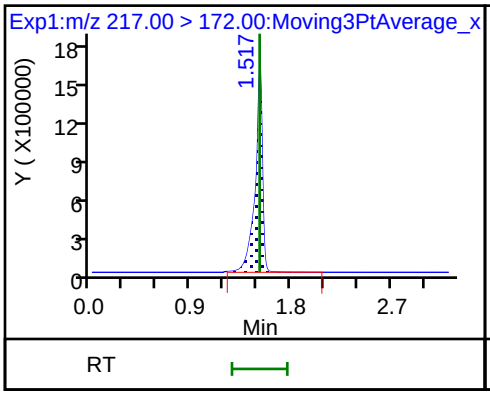
Client ID: GC-MW-109M (WG)

Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 10

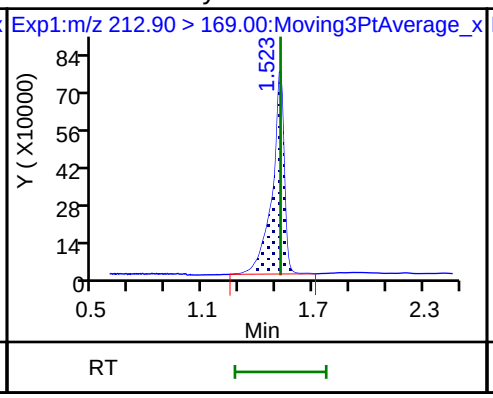
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

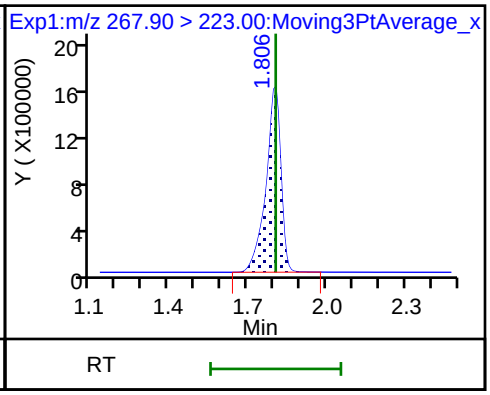
D 1 13C4 PFBA



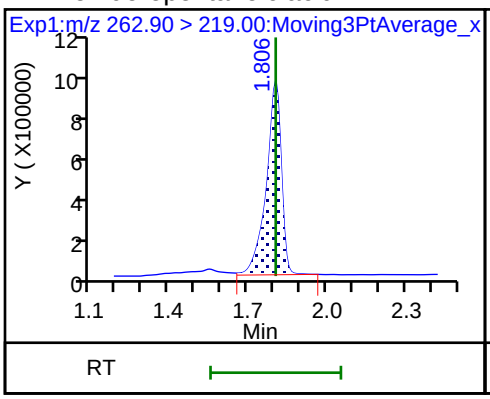
2 Perfluorobutyric acid



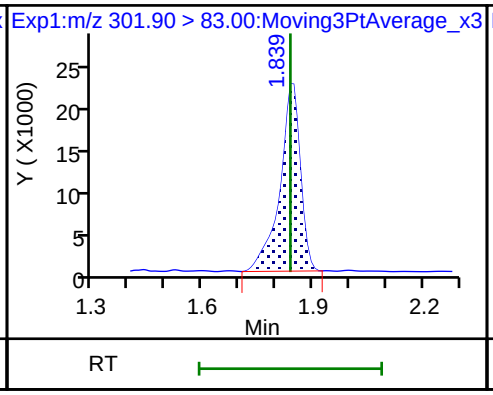
D 3 13C5-PFPeA



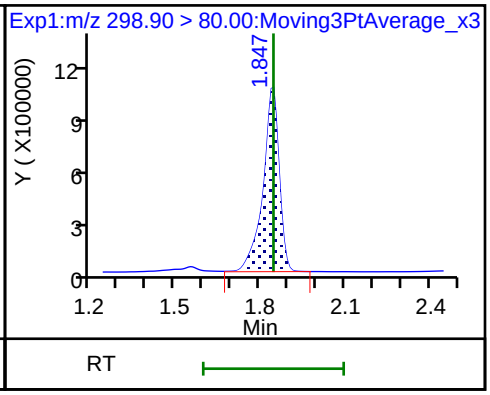
4 Perfluoropentanoic acid



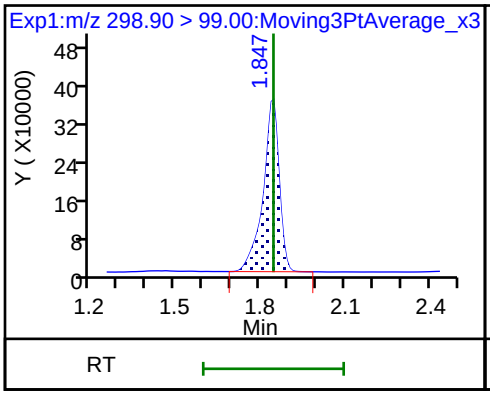
D 47 13C3-PFBS



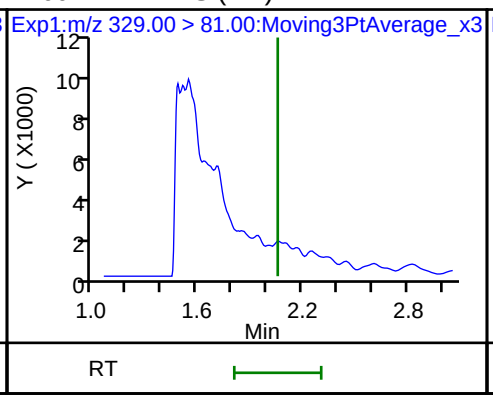
5 Perfluorobutanesulfonic acid



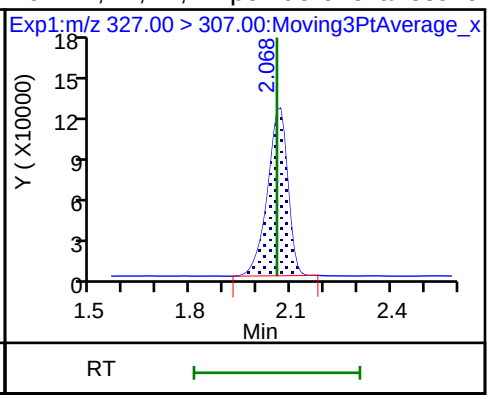
5 Perfluorobutanesulfonic acid



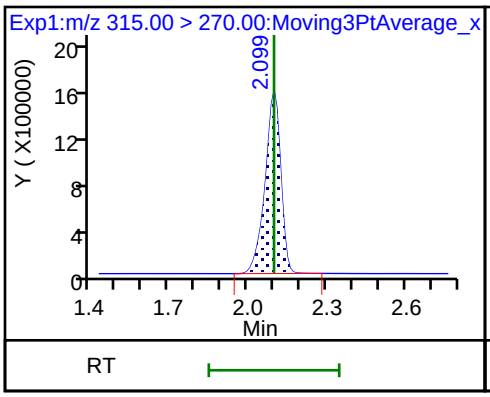
D 60 M2-4:2FTS (ND)



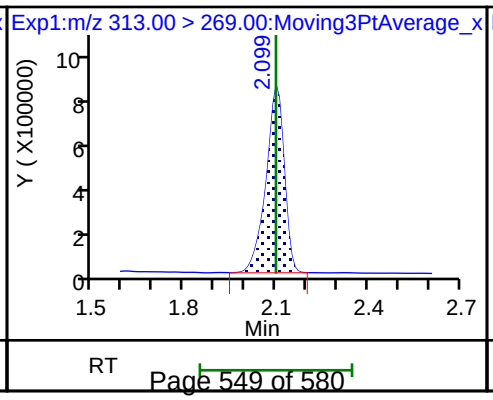
61 1H,1H,2H,2H-perfluorohexanesulfoni



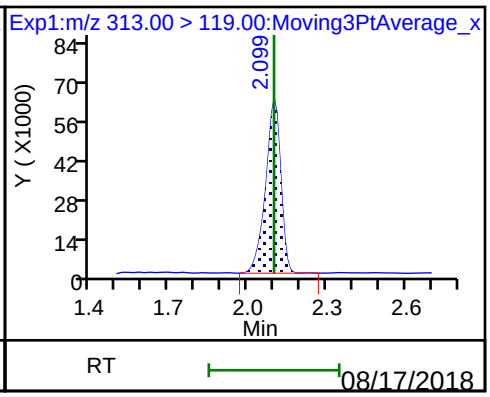
D 7 13C2 PFHxA



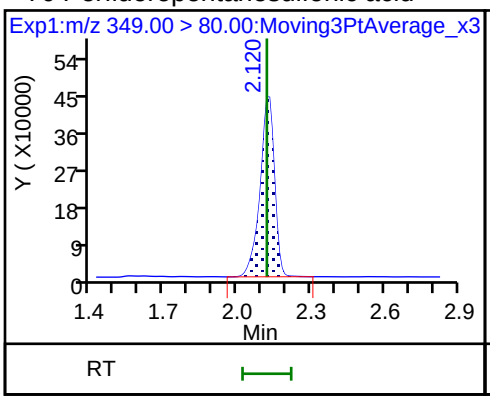
6 Perfluorohexanoic acid



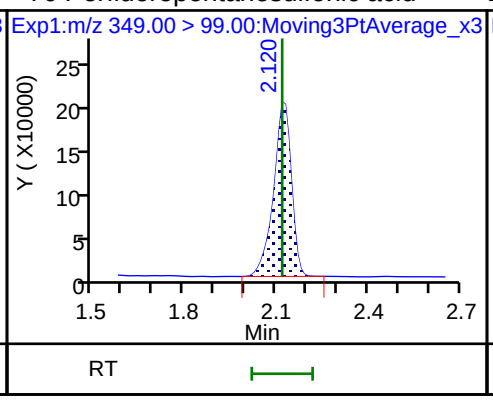
6 Perfluorohexanoic acid



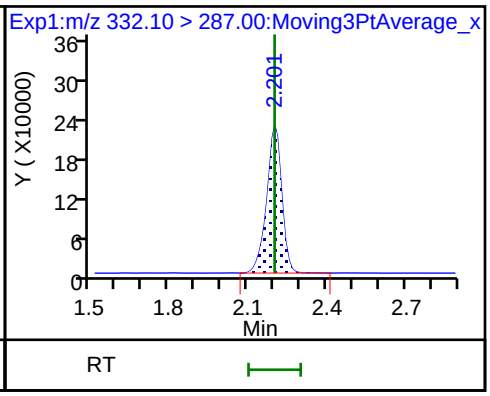
70 Perfluoropentanesulfonic acid



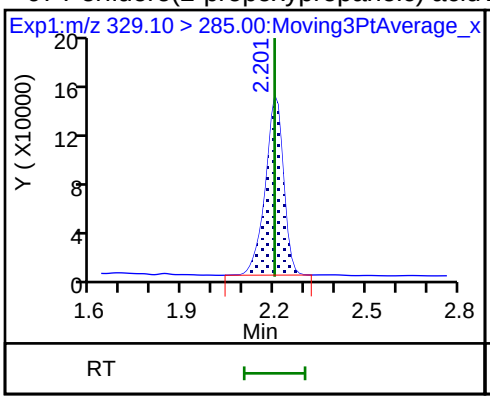
70 Perfluoropentanesulfonic acid



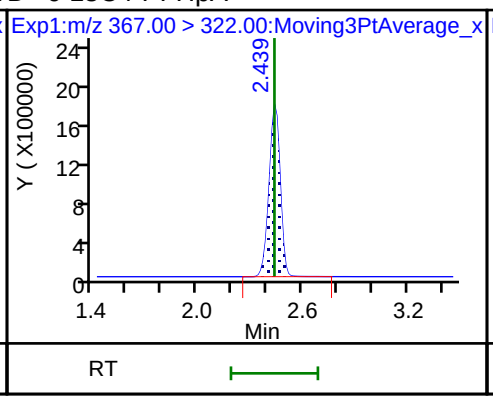
D 64 13C3 HFPO-DA



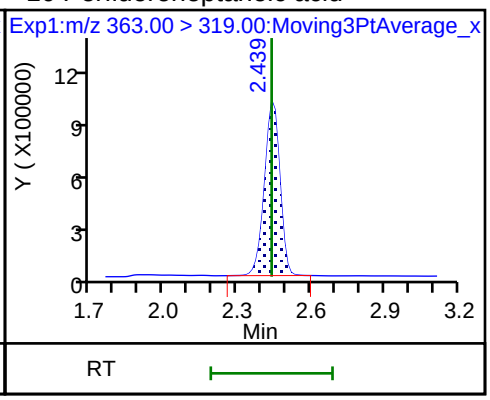
67 Perfluoro(2-propoxypropanoic) acid



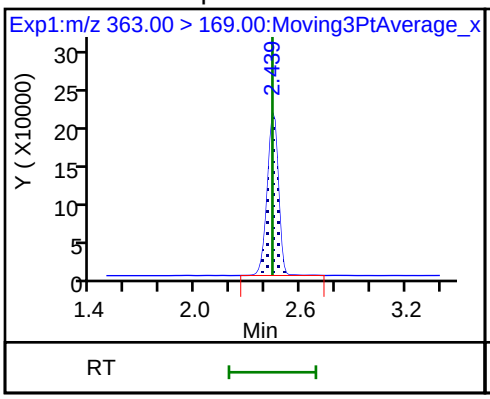
D 9 13C4-PFHpA



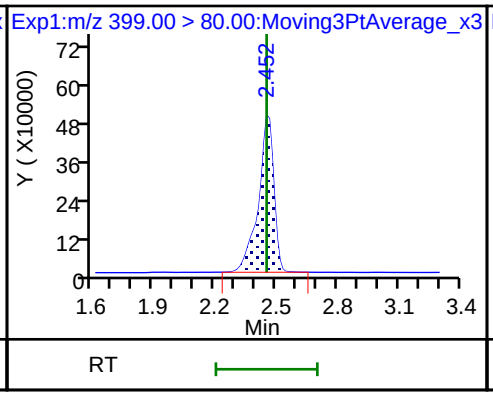
10 Perfluoroheptanoic acid



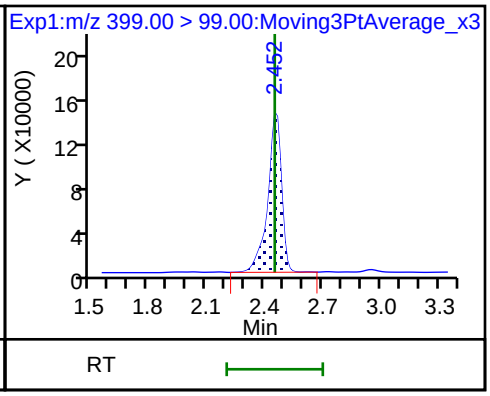
10 Perfluoroheptanoic acid



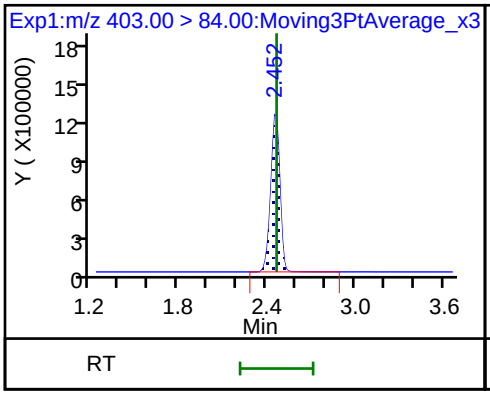
8 Perfluorohexanesulfonic acid



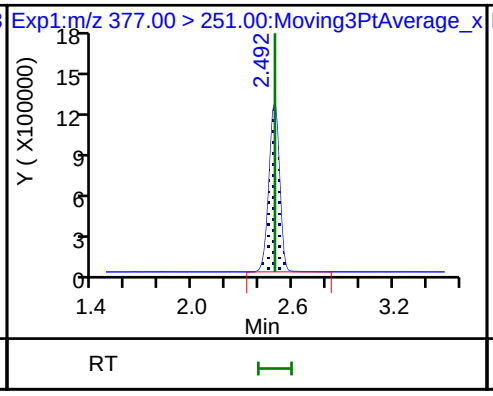
8 Perfluorohexanesulfonic acid



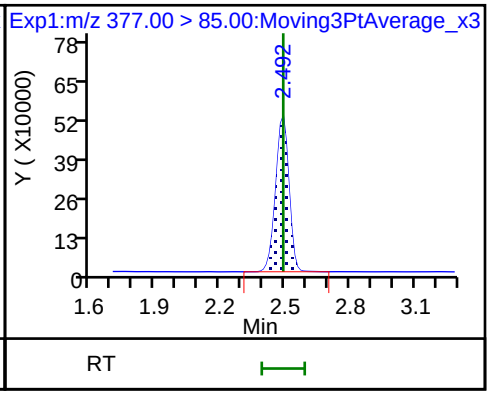
D 11 18O2 PFHxS



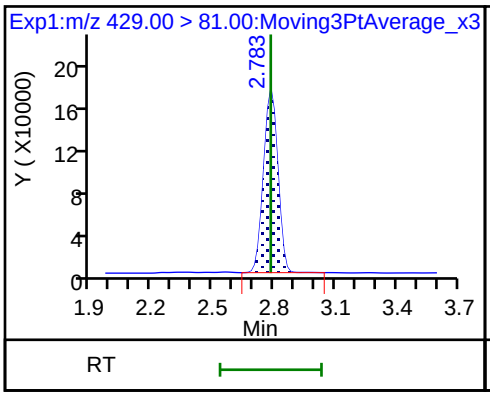
65 ADONA



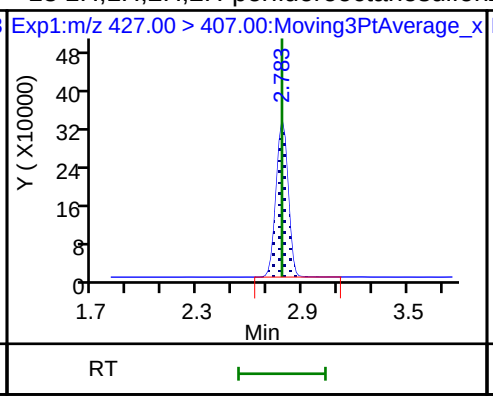
65 ADONA



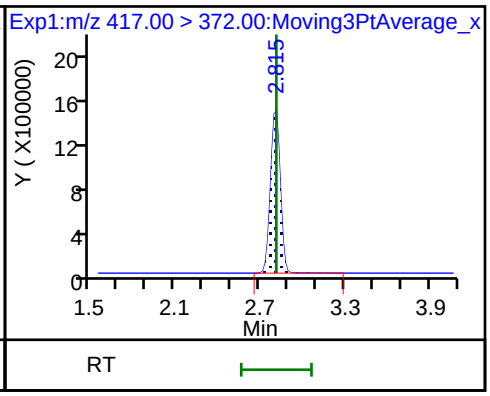
D 12 M2-6:2FTS



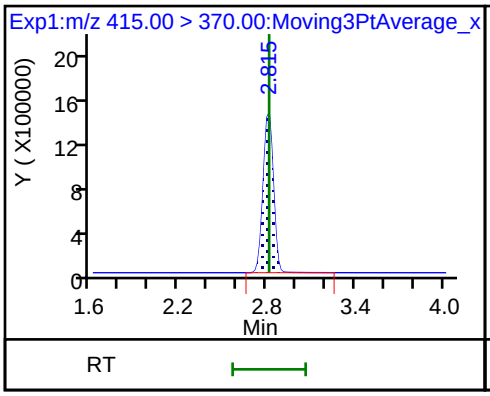
13 1H,1H,2H,2H-perfluorooctanesulfon



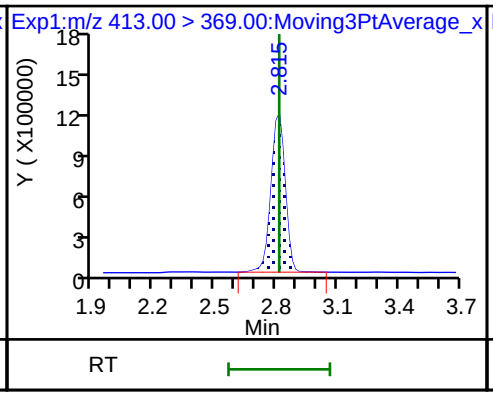
D 14 13C4 PFOA



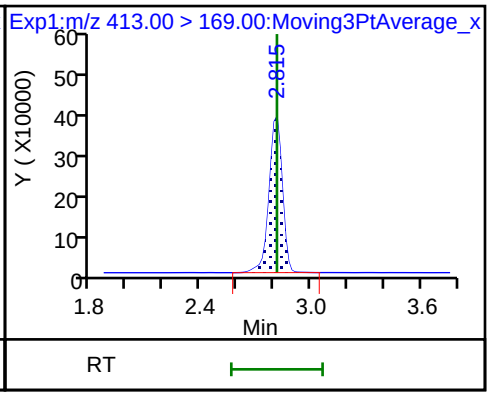
* 62 13C2-PFOA



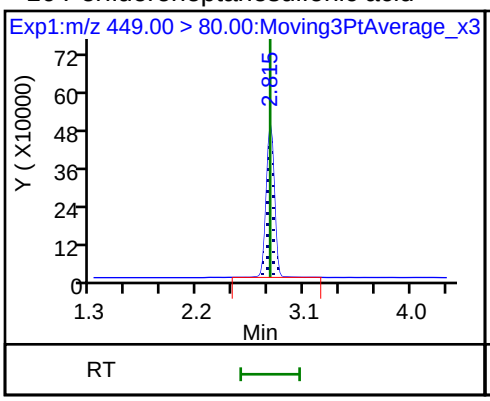
15 Perfluorooctanoic acid



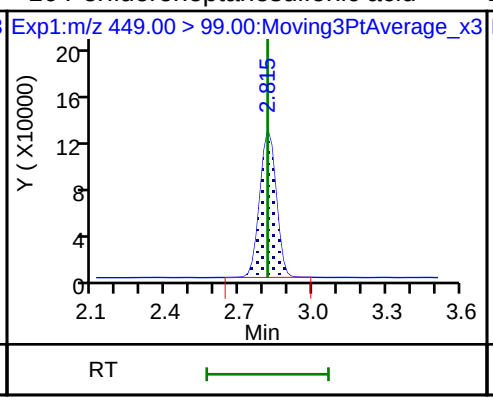
15 Perfluorooctanoic acid



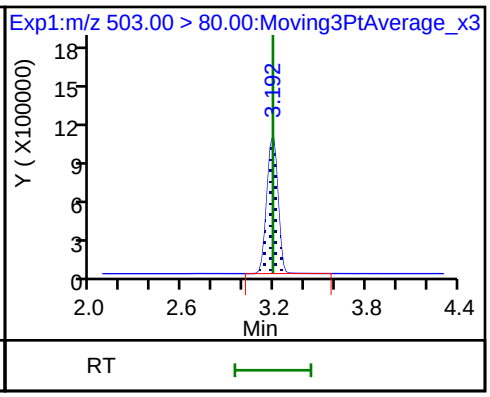
16 Perfluoroheptanesulfonic acid



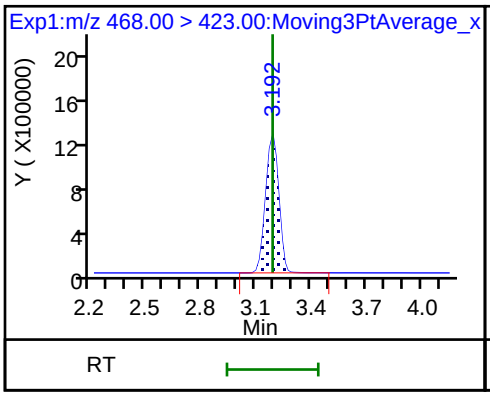
16 Perfluoroheptanesulfonic acid



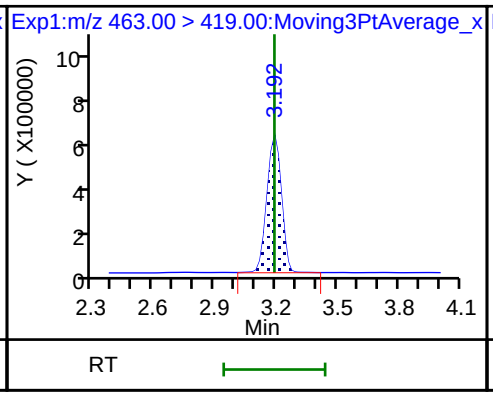
D 18 13C4 PFOS



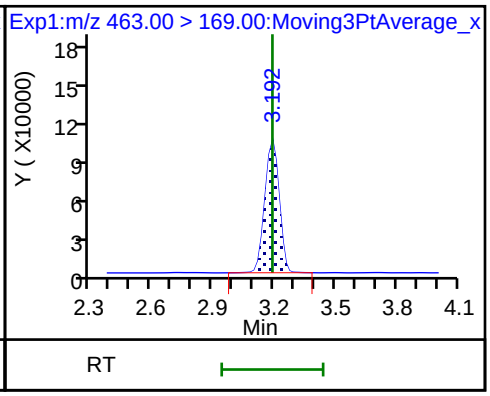
D 19 13C5 PFNA



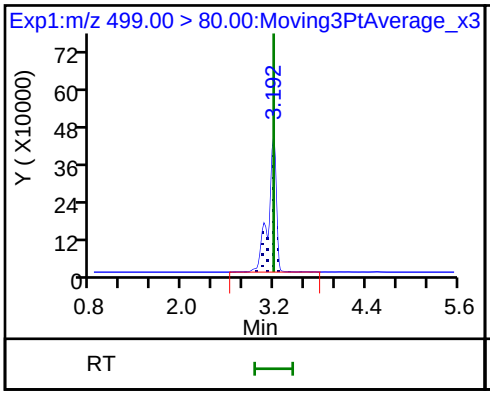
20 Perfluorononanoic acid



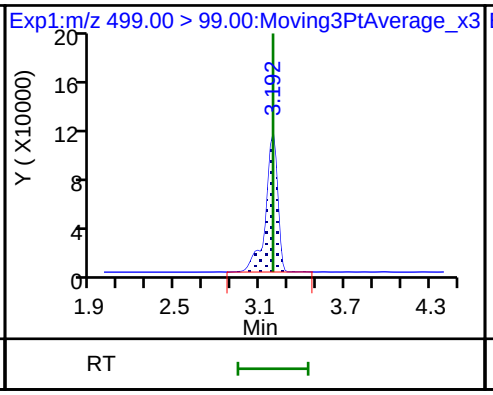
20 Perfluorononanoic acid



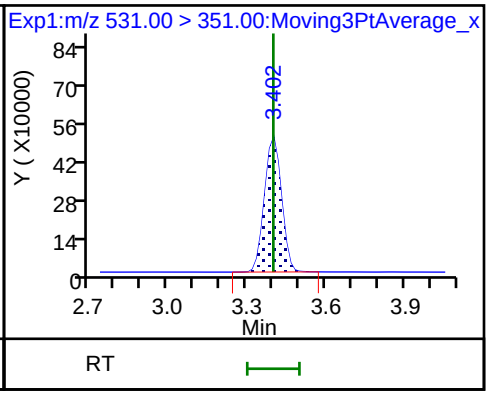
17 Perfluorooctane sulfonic acid



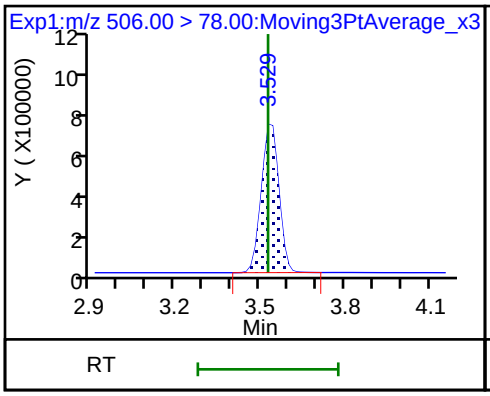
17 Perfluorooctane sulfonic acid



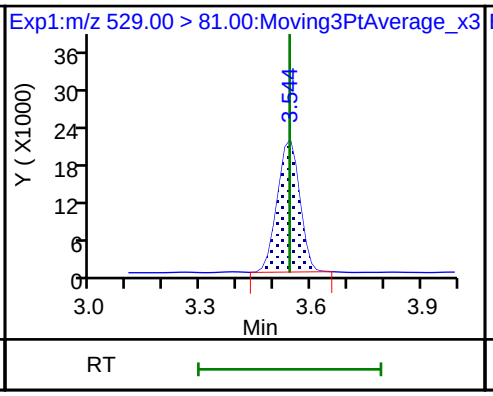
69 9-Chlorohexadecafluoro-3-oxanonane



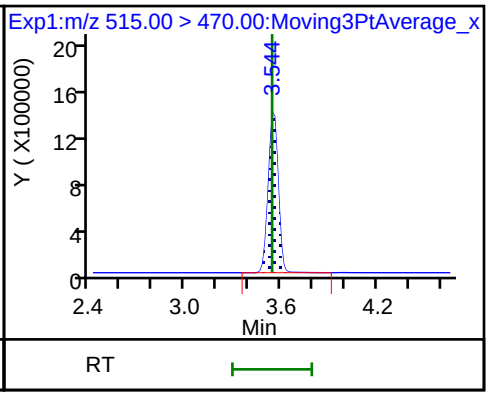
D 21 13C8 FOSA



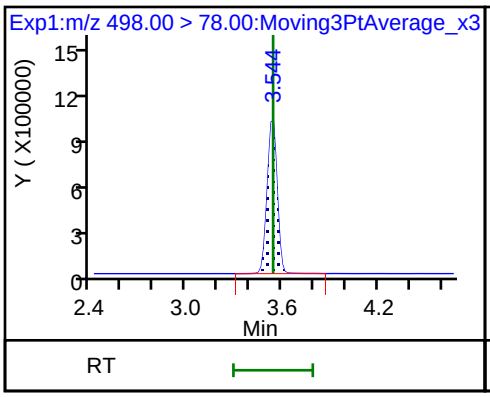
D 26 M2-8:2FTS



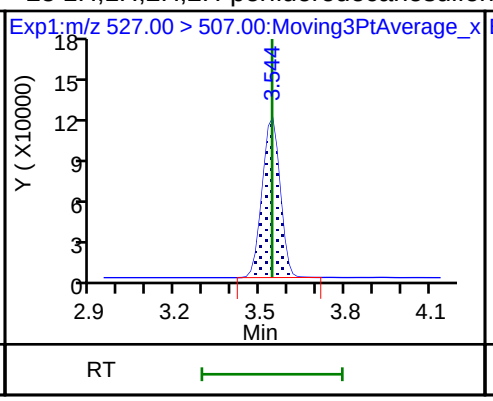
D 23 13C2 PFDA



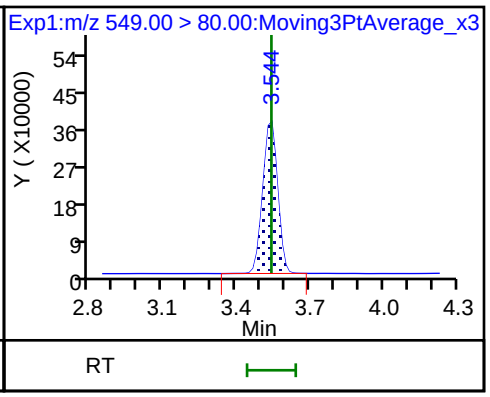
22 Perfluorooctane Sulfonamide



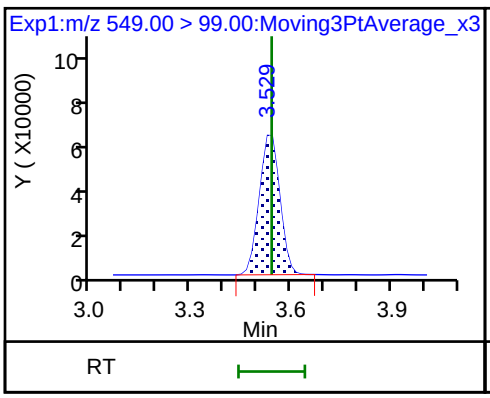
25 1H,1H,2H,2H-perfluorodecanesulfoni



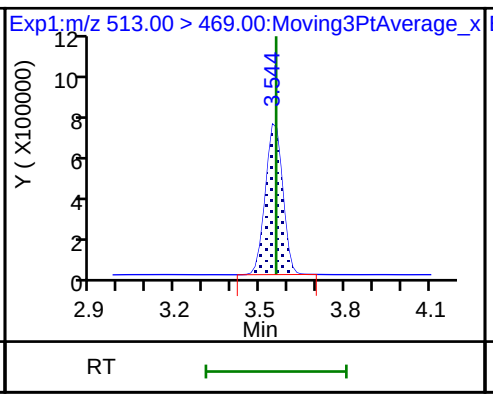
68 Perfluorononanesulfonic acid



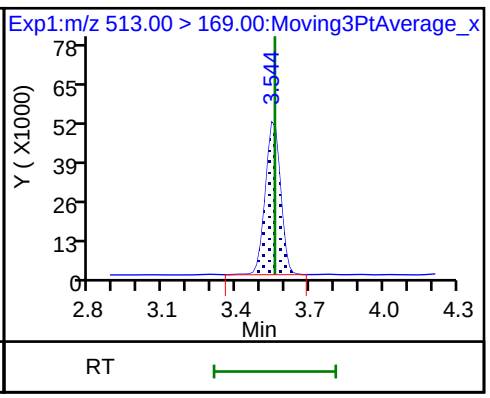
68 Perfluorononanesulfonic acid



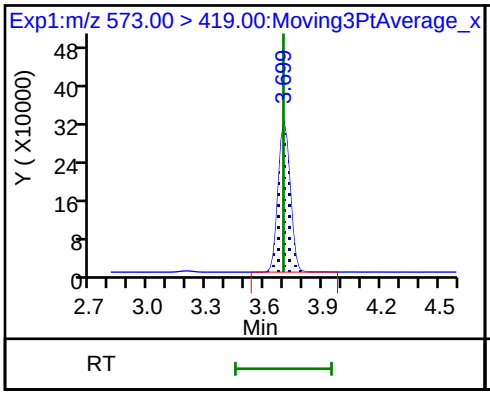
24 Perfluorodecanoic acid



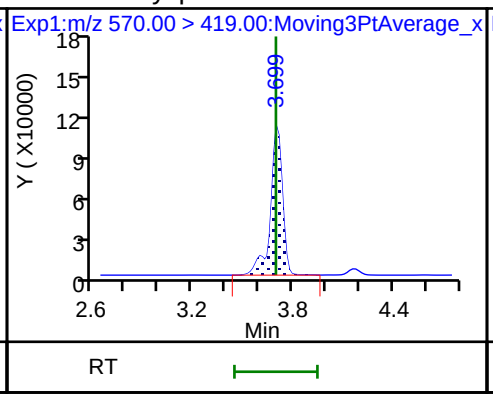
24 Perfluorodecanoic acid



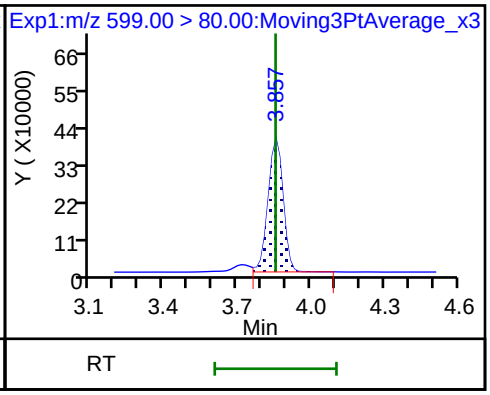
D 27 d3-NMeFOSAA



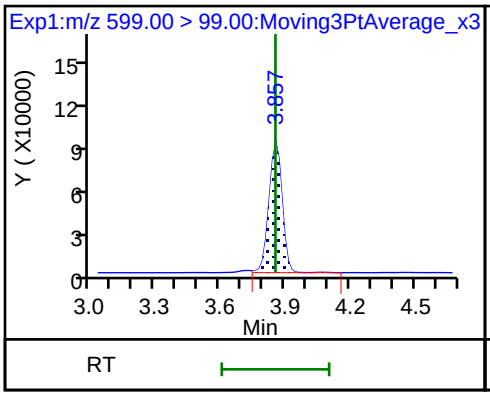
28 N-methyl perfluorooctane sulfonami



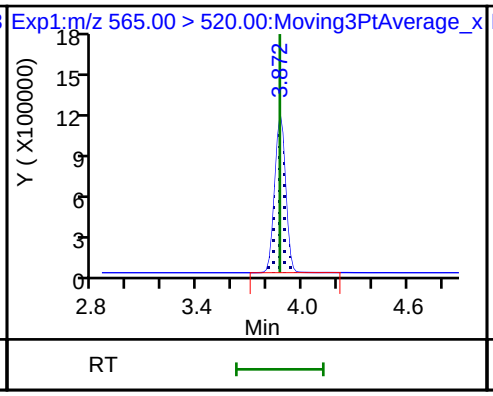
29 Perfluorodecane Sulfonic acid



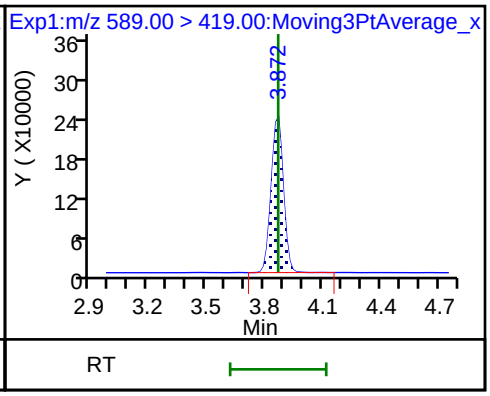
29 Perfluorodecane Sulfonic acid



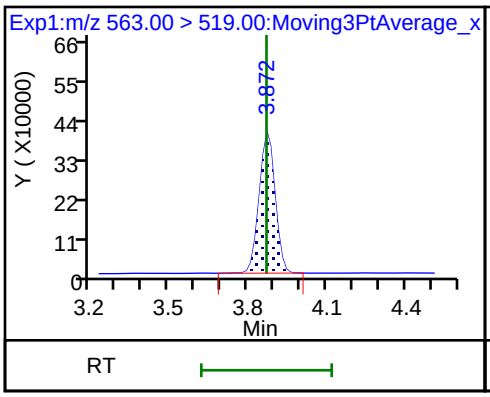
D 30 13C2 PFUnA



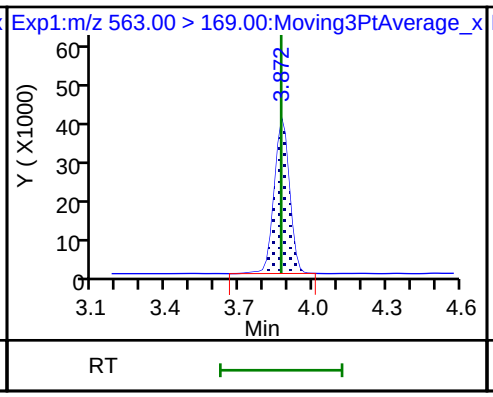
D 32 d5-NEtFOSAA



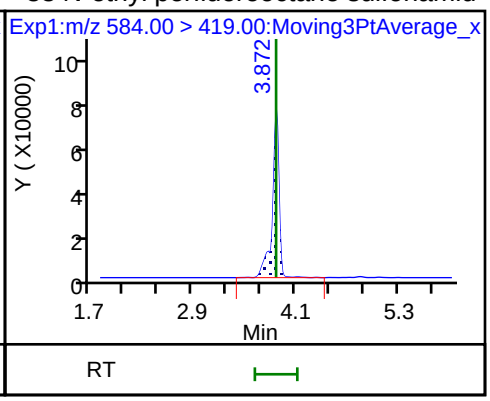
31 Perfluoroundecanoic acid



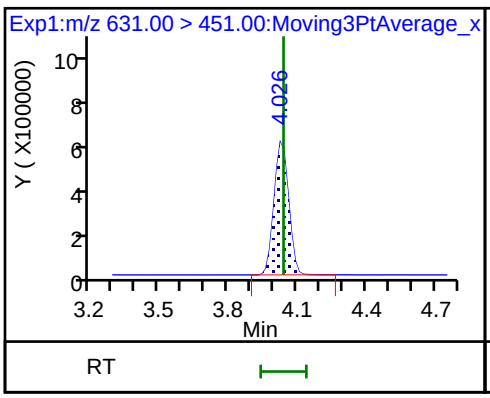
31 Perfluoroundecanoic acid



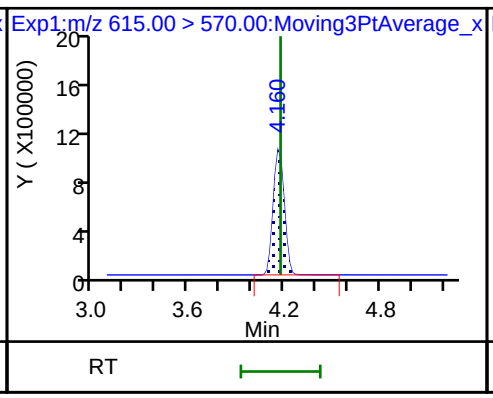
33 N-ethyl perfluorooctane sulfonamid



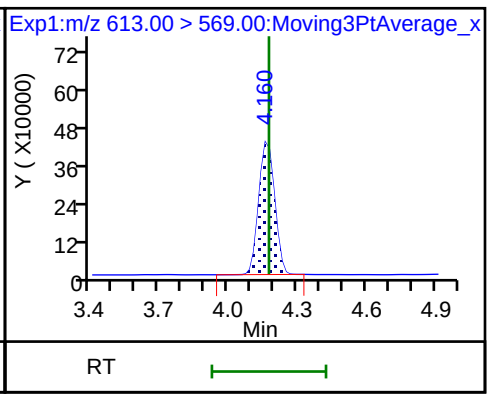
66 11-Chloroeicosafluoro-3-oxaundecan



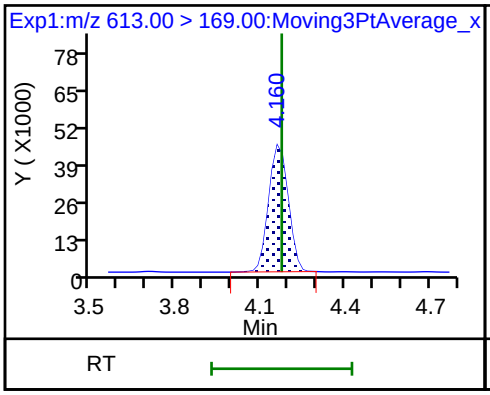
D 36 13C2 PFDoA



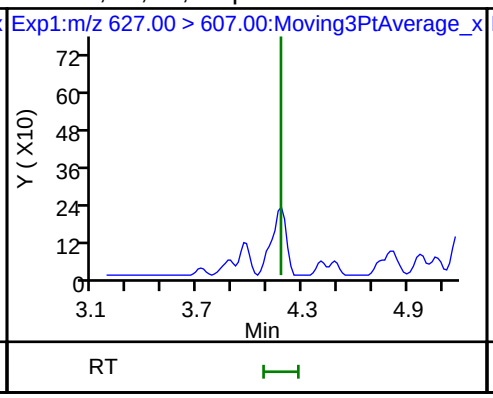
37 Perfluorododecanoic acid



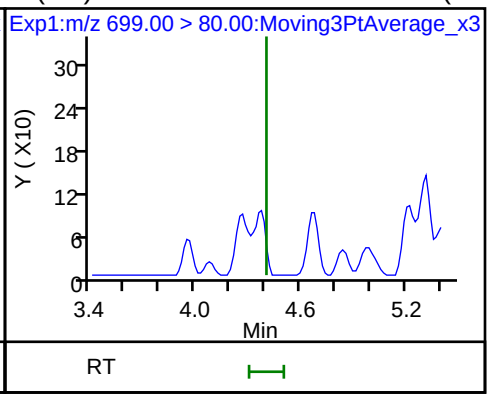
37 Perfluorododecanoic acid



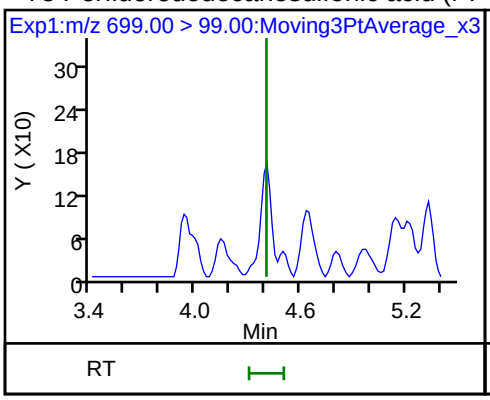
74 1H,1H,2H,2H-perfluorododecanesulfonic acid (PF (ND)



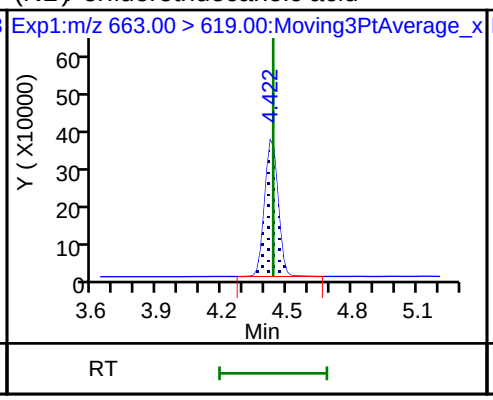
75 Perfluorododecanesulfonic acid (PF (ND)



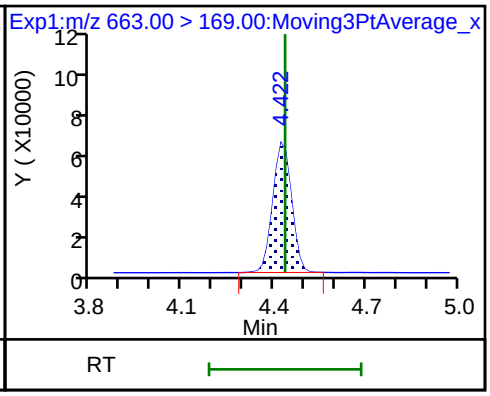
75 Perfluorododecanesulfonic acid (PF (ND)



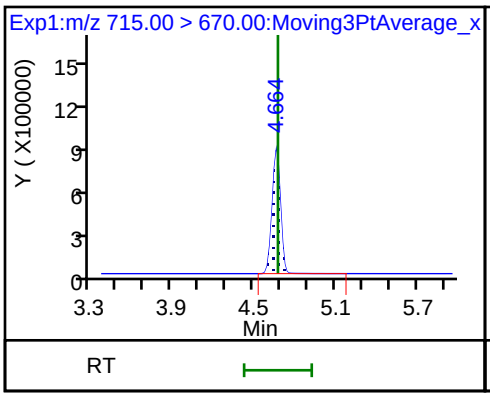
41 Perfluorotridecanoic acid



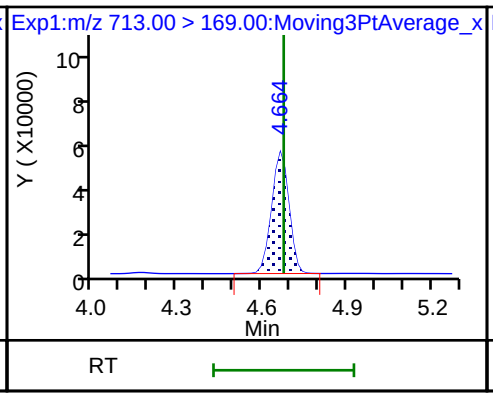
41 Perfluorotridecanoic acid



D 43 13C2-PFTeDA



42 Perfluorotetradecanoic acid



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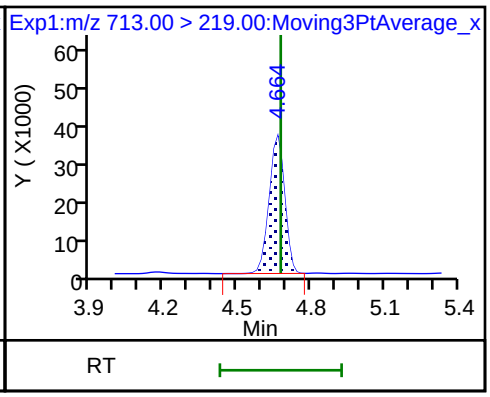
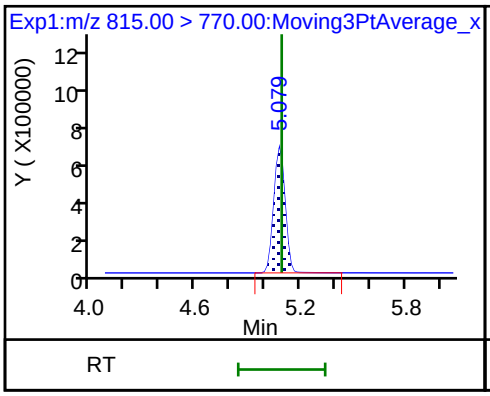
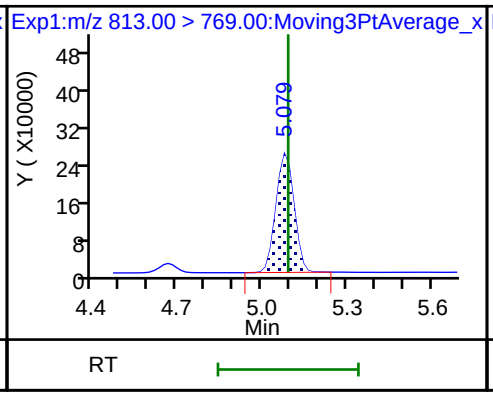


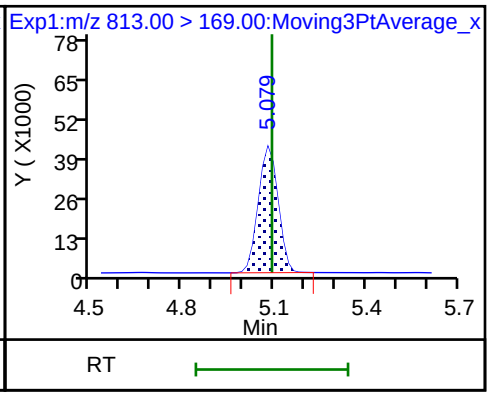
D 44 13C2-PFHxDA



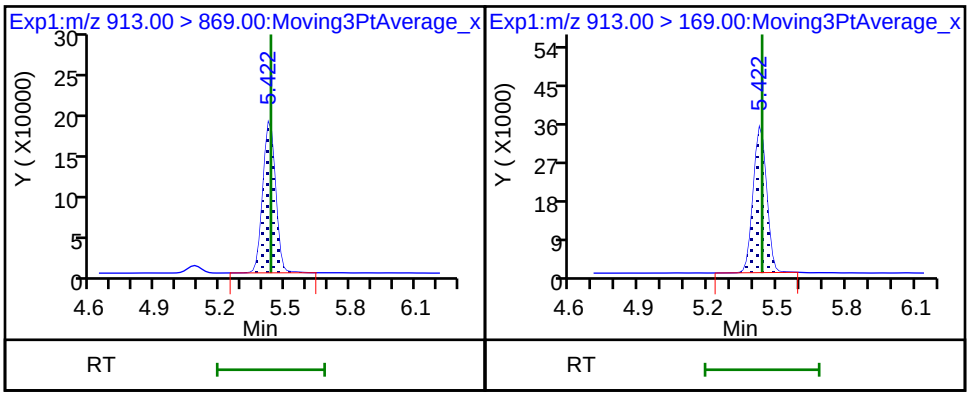
45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41460-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) MSD RE | Lab Sample ID: 320-41460-4 MSD RE

Matrix: Water | Lab File ID: 2018.08.12LLA_045.d

Analysis Method: 537 (modified) | Date Collected: 07/24/2018 10:50

Extraction Method: 3535 | Date Extracted: 08/10/2018 09:01

Sample wt/vol: 264.1(mL) | Date Analyzed: 08/12/2018 16:46

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 239440 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
27619-97-2	*6:2 FTS*	*35.8*		*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02279	M2-6:2FTS	117		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_045.d
Lims ID: 320-41460-B-4-C MSD
Client ID: GC-MW-109M (WG)
Sample Type: MSD
Inject. Date: 12-Aug-2018 16:46:06 ALS Bottle#: 31 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-41460-b-4-c msd
Misc. Info.: Plate: 1 Rack: 3
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 13-Aug-2018 13:28:05 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK003

First Level Reviewer: barnettj Date: 13-Aug-2018 11:24:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.411	1.411	0.0	0.534	4992326	2.14		85.6	7214	
2 Perfluorobutyric acid										
212.90 > 169.00	1.411	1.415	-0.004	1.000	2249289	1.20		120	203	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.670	1.669	0.001	1.000	2348867	1.47		147	116	
D 3 13C5-PFPeA										
267.90 > 223.00	1.670	1.670	0.0	0.632	3511526	2.18		87.4	7718	
D 47 13C3-PFBS										
301.90 > 83.00	1.702	1.702	0.0	0.644	73441	1.98		85.0	292	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.702	1.709	-0.007	1.000	2704456	1.13		128	70.9	
298.90 > 99.00	1.702	1.709	-0.007	1.000	1079421		2.51(1.25-3.74)		343	
D 60 M2-4:2FTS										
329.00 > 81.00	1.758	1.912	-0.154	0.665	6080	0.0230		0.0	1.4	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.922	1.919	0.003	1.129	724305	1.38		148	5516	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.954	1.951	0.003	1.000	2263790	1.39		139	247	
313.00 > 119.00	1.954	1.951	0.003	1.000	205375		11.02(5.03-15.10)		431	
D 7 13C2 PFHxA										
315.00 > 270.00	1.954	1.954	0.0	0.739	3987019	2.19		87.4	9728	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.975	1.972	0.003	1.160	2273468	1.04		111	884	
349.00 > 99.00	1.975	1.972	0.003	1.160	805480		2.82(1.36-4.07)		708	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.058	2.048	0.010	0.779	253218	1.79		71.4	733	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.058	2.055	0.003	1.000	280844	1.15		115	86.8	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.288	2.282	0.006	1.000	2139753	1.28		128	373	
363.00 > 169.00	2.288	2.282	0.006	1.000	830500		2.58(1.13-3.40)		1145	
D 9 13C4-PFHpA										
367.00 > 322.00	2.288	2.288	0.0	0.866	3934164	2.19		87.7	7728	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.299	2.293	0.006	1.000	2056332	0.9620		106	1080	M
399.00 > 99.00	2.299	2.293	0.006	1.000	695373		2.96(1.50-4.49)		850	
D 11 18O2 PFHxS										
403.00 > 84.00	2.299	2.299	0.0	0.870	4663587	2.03		85.7	7262	
65 ADONA										
377.00 > 251.00	2.332	2.327	0.005	0.771	4811192	1.10		110	7045	
377.00 > 85.00	2.332	2.327	0.005	0.771	2666856		1.80(0.84-2.53)		2495	
D 12 M2-6:2FTS										
429.00 > 81.00	2.620	2.612	0.008	0.991	1053896	2.79		117	1999	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.620	2.616	0.004	1.000	659780	0.9450		99.7	2313	
D 73 13C8 PFOA										
421.00 > 376.00	2.643	2.635	0.008	1.000	6693	0.002060		0.0	76.5	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.651	2.640	0.011	1.003	3122426	1.82		182	302	M
413.00 > 169.00	2.643	2.640	0.003	1.000	1714703		1.82(0.84-2.52)		1867	M
* 62 13C2-PFOA										
415.00 > 370.00	2.643	2.640	0.003		4213268	2.50			10899	
D 14 13C4 PFOA										
417.00 > 372.00	2.643	2.643	0.0	1.000	3784612	2.30		91.9	5564	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.651	2.647	0.004	0.877	1682122	1.01		106	1491	
449.00 > 99.00	2.651	2.647	0.004	0.877	449229		3.74(1.94-5.82)		830	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.023	3.014	0.009	1.000	1950096	1.35		146	1999	
499.00 > 99.00	3.023	3.014	0.009	1.000	403172		4.84(2.31-6.93)		1679	
20 Perfluorononanoic acid										
463.00 > 419.00	3.023	3.014	0.009	1.000	1496350	1.07		107	328	
463.00 > 169.00	3.023	3.014	0.009	1.000	376233		3.98(1.90-5.69)		1213	
D 19 13C5 PFNA										
468.00 > 423.00	3.023	3.016	0.007	1.144	3303661	2.24		89.4	6373	
D 18 13C4 PFOS										
503.00 > 80.00	3.023	3.016	0.007	1.144	3210957	2.12		88.8	3595	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.236	3.226	0.010	1.070	2296270	0.9811		105	5008	
D 21 13C8 FOSA										
506.00 > 78.00	3.342	3.335	0.007	1.264	4602930	2.30		91.9	5343	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.349	3.339	0.010	1.002	1767112	0.9858		98.6	3003	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.372	3.369	0.003	1.115	974478	0.9643		100	2477	
549.00 > 99.00	3.372	3.369	0.003	1.115	366353		2.66(1.33-3.97)		1565	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.372	3.369	0.003	1.000	560477	0.9606		100	1858	
D 26 M2-8:2FTS										
529.00 > 81.00	3.372	3.372	0.0	1.276	1075669	2.36		98.4	2726	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.386	3.376	0.010	1.000	1283900	1.11		111	897	
513.00 > 169.00	3.386	3.376	0.010	1.000	226064		5.68(2.36-7.09)		499	
D 23 13C2 PFDA										
515.00 > 470.00	3.386	3.380	0.006	1.281	2889535	2.23		89.1	4837	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.539	3.536	0.003	1.000	605239	0.9562		95.6	557	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.539	3.540	-0.001	1.339	1640495	2.47		98.9	2968	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.693	3.690	0.003	1.222	837757	0.9867		102	152	
599.00 > 99.00	3.693	3.690	0.003	1.222	284295		2.95(1.39-4.16)		411	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.710	3.702	0.008	1.404	1661918	2.42		96.7	1615	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.710	3.707	0.003	1.000	558426	0.9420		94.2	1167	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.719	3.707	0.012	1.002	751228	0.7083		70.8	473	
563.00 > 169.00	3.710	3.707	0.003	1.000	179784		4.18(2.12-6.36)		1012	
D 30 13C2 PFUnA										
565.00 > 520.00	3.710	3.711	-0.001	1.404	2359727	2.26		90.5	3191	
35 MeFOSA										
512.00 > 169.00	3.843	3.840	0.003		286975	NC			381	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.872	3.867	0.005	1.281	3773076	1.05		112	6447	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.007	4.012	-0.005	1.000	1033357	0.9631		96.3	683	
613.00 > 169.00	4.007	4.012	-0.005	1.000	268518		3.85(2.13-6.40)		1764	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.016	4.012	0.004	1.191	448042	1.11		115	1956	
D 36 13C2 PFDoA										
615.00 > 570.00	4.007	4.017	-0.010	1.516	2410727	2.19		87.5	4755	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.249	4.254	-0.005	1.405	372842	1.00		103	952	
699.00 > 99.00	4.249	4.254	-0.005	1.405	518390		0.72(0.00-0.00)		1820	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.278	4.273	0.005	1.067	1127191	1.09		109	580	
663.00 > 169.00	4.278	4.273	0.005	1.067	359033		3.14(1.25-3.76)		2337	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.512	4.514	-0.002	1.000	342617	1.03		103	2535	
713.00 > 219.00	4.512	4.514	-0.002	1.000	242082		1.42(0.71-2.13)		1940	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.512	4.523	-0.011	1.707	3432294	2.44		97.7	6065	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.934	4.944	-0.010	1.000	2059288	1.02		102	246	
813.00 > 169.00	4.934	4.944	-0.010	1.000	371763		5.54(2.86-8.58)		1630	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.934	4.944	-0.010	1.867	5655692	2.03		81.2	7371	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.299	5.301	-0.002	1.074	2254792	1.08		108	231	
913.00 > 169.00	5.292	5.301	-0.009	1.073	277730		8.12(3.83-11.48)		1360	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Report Date: 13-Aug-2018 13:28:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180812-62564.b\2018.08.12LLA_045.d

Injection Date: 12-Aug-2018 16:46:06 Instrument ID: A8_N

Lims ID: 320-41460-B-4-C MSD

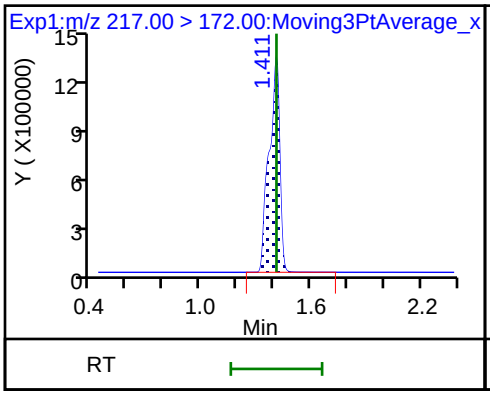
Client ID: GC-MW-109M (WG)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 31 Worklist Smp#: 14

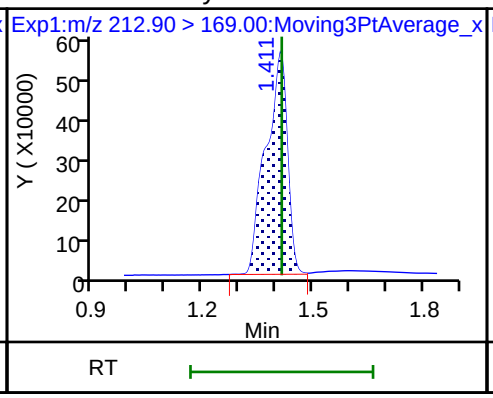
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

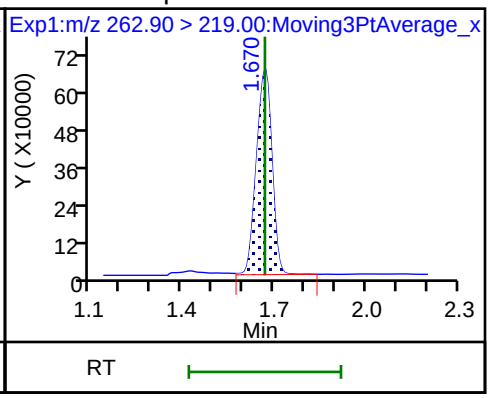
D 1 13C4 PFBA



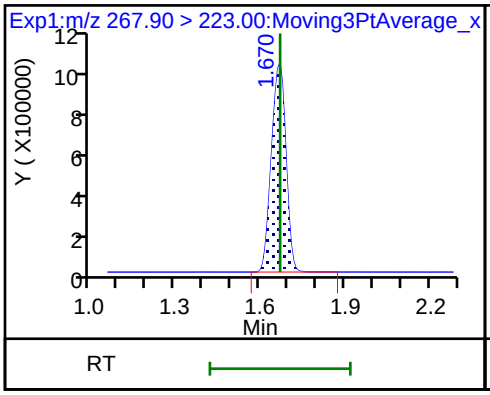
2 Perfluorobutyric acid



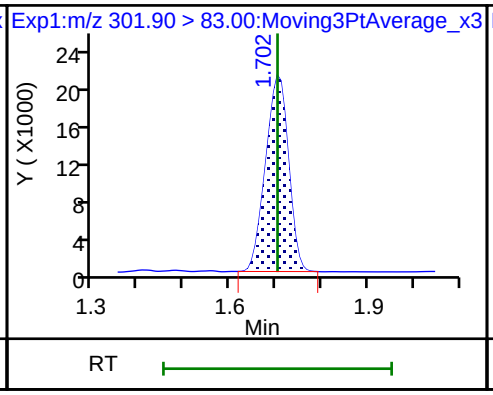
4 Perfluoropentanoic acid



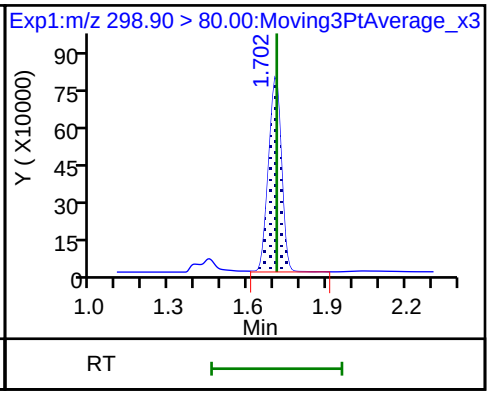
D 3 13C5-PFPeA



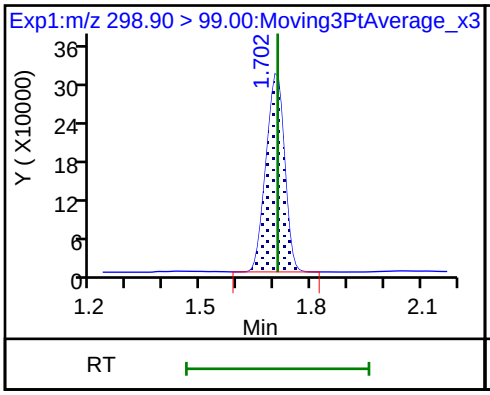
D 47 13C3-PFBS



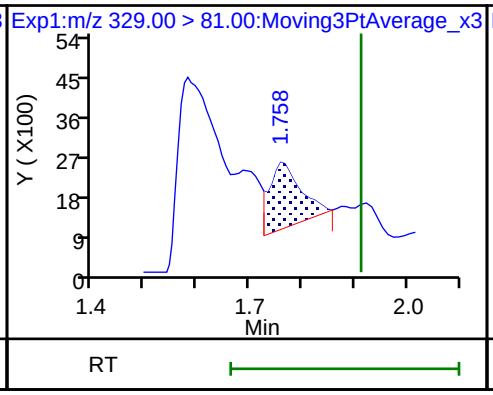
5 Perfluorobutanesulfonic acid



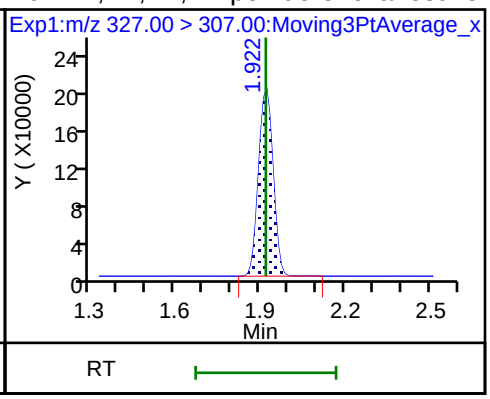
5 Perfluorobutanesulfonic acid



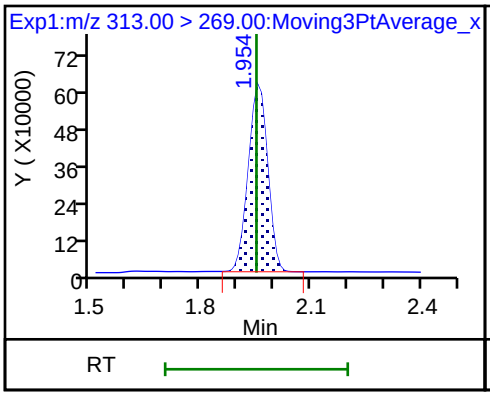
D 60 M2-4:2FTS



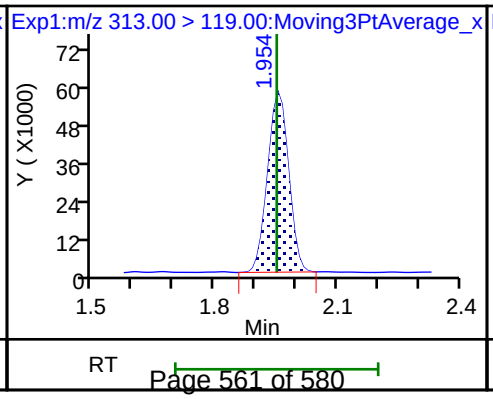
61 1H,1H,2H,2H-perfluorohexanesulfoni



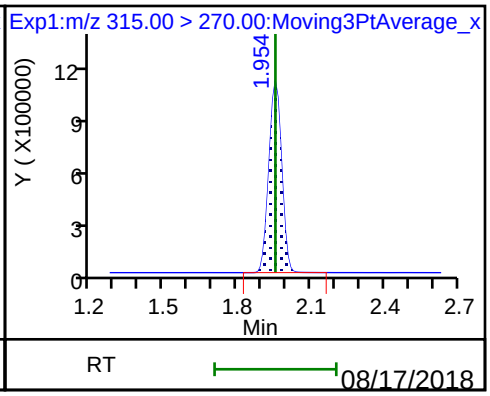
6 Perfluorohexanoic acid



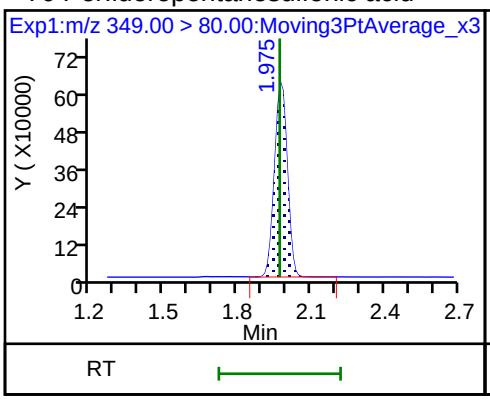
6 Perfluorohexanoic acid



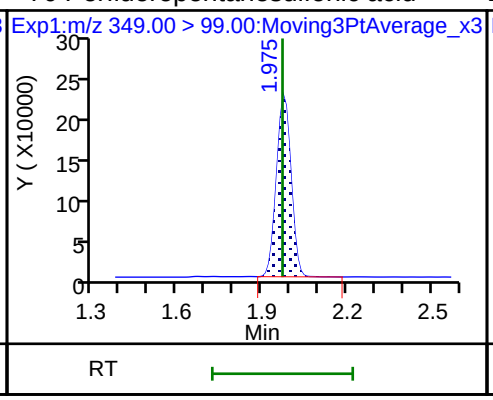
D 7 13C2 PFHxA



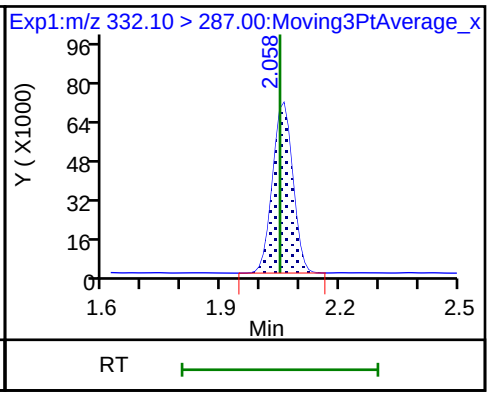
70 Perfluoropentanesulfonic acid



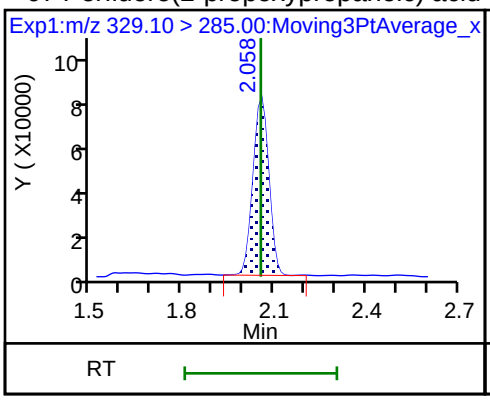
70 Perfluoropentanesulfonic acid



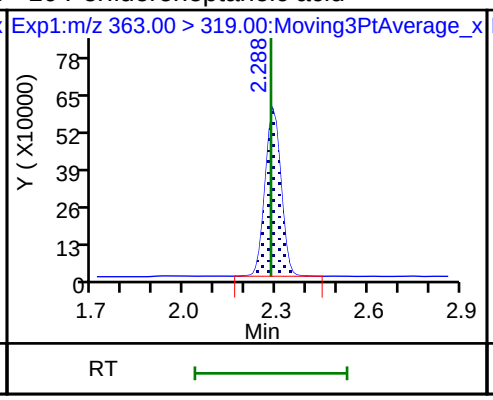
D 64 13C3 HFPO-DA



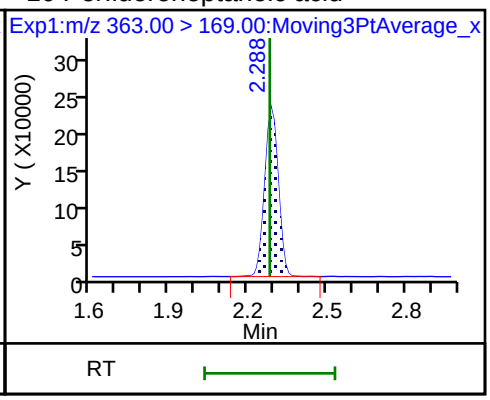
67 Perfluoro(2-propoxypropanoic) acid



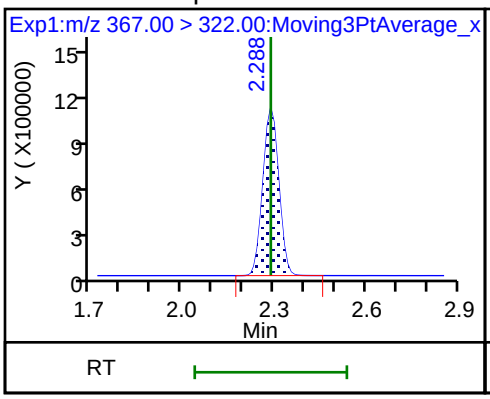
10 Perfluoroheptanoic acid



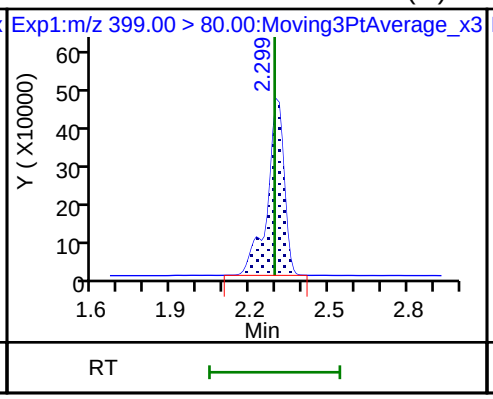
10 Perfluoroheptanoic acid



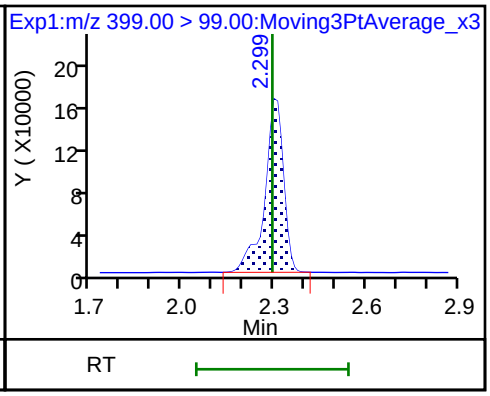
D 9 13C4-PFHpA



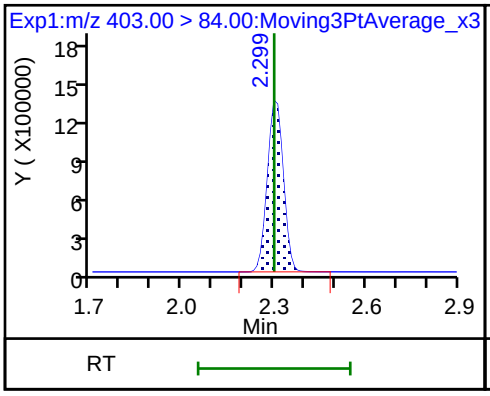
8 Perfluorohexanesulfonic acid (M)



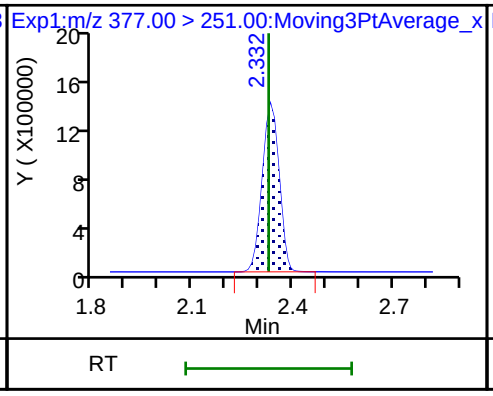
8 Perfluorohexanesulfonic acid



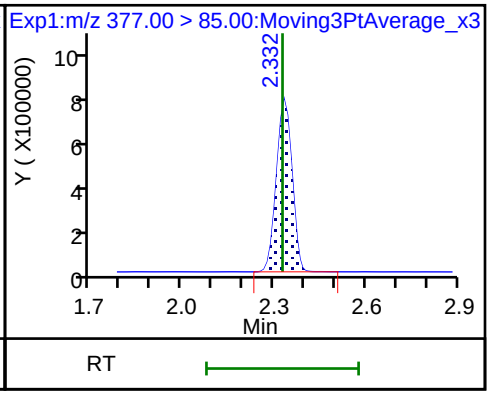
D 11 18O2 PFHxS



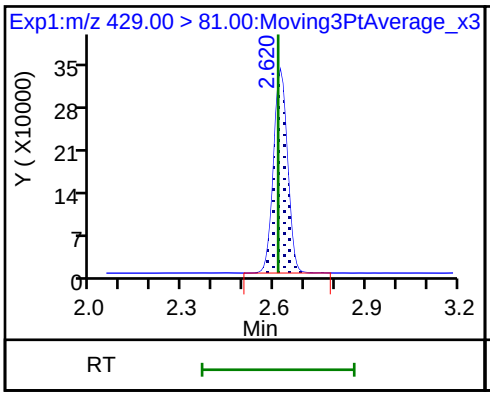
65 ADONA



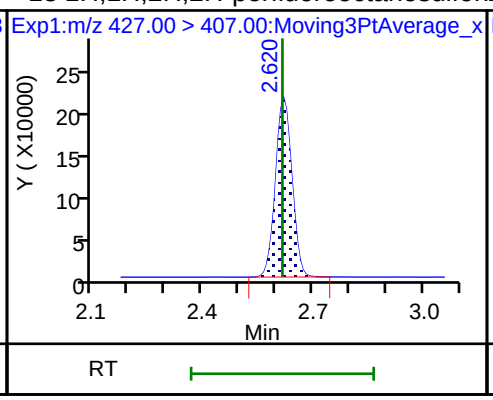
65 ADONA



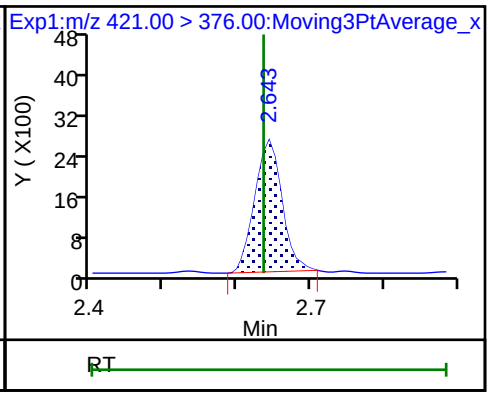
D 12 M2-6:2FTS



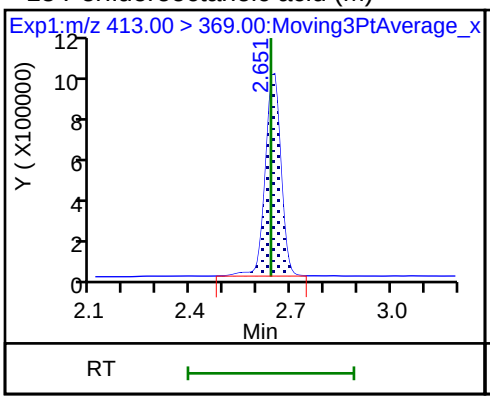
13 1H,1H,2H,2H-perfluorooctanesulfon



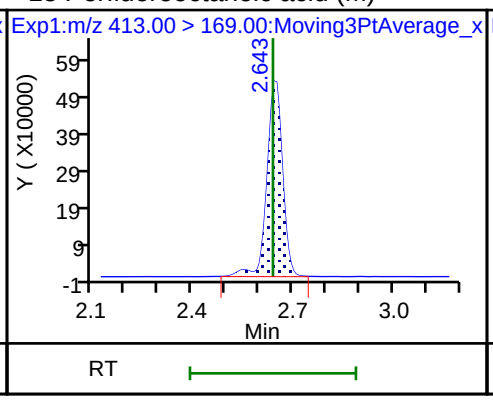
D 73 13C8 PFOA



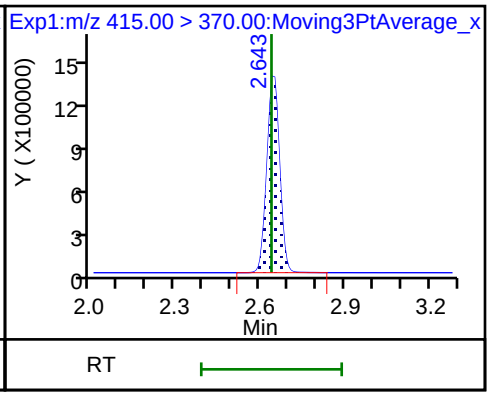
15 Perfluorooctanoic acid (M)



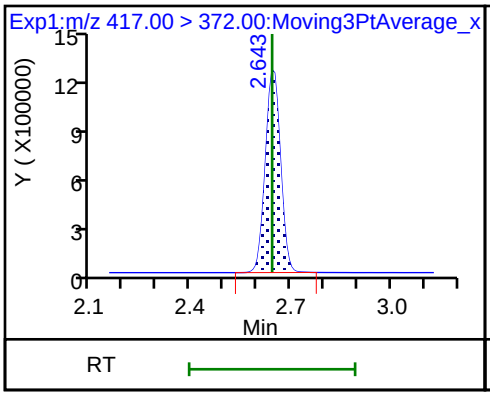
15 Perfluorooctanoic acid (M)



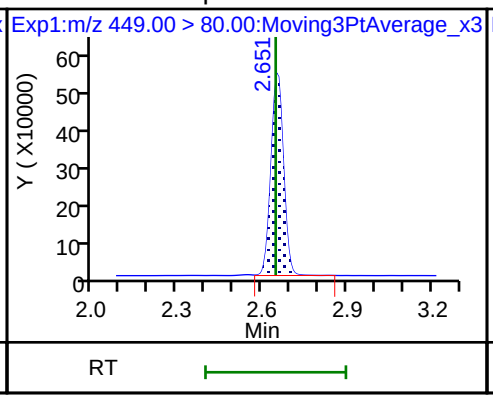
* 62 13C2-PFOA



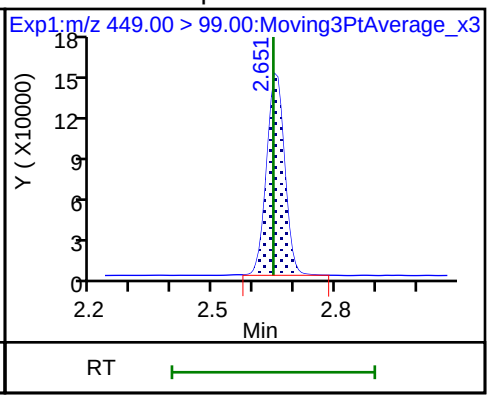
D 14 13C4 PFOA



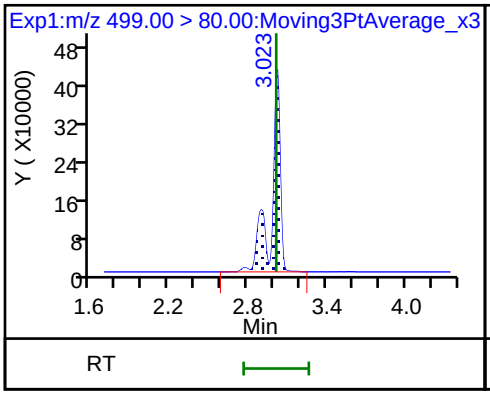
16 Perfluoroheptanesulfonic acid



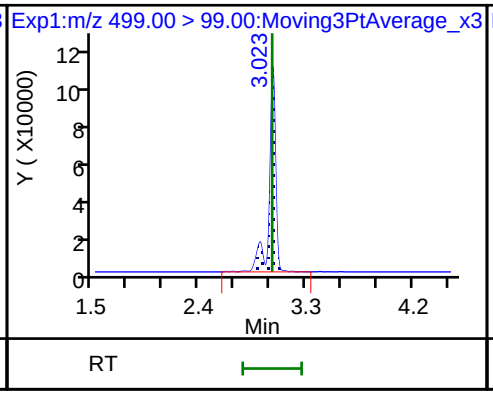
16 Perfluoroheptanesulfonic acid



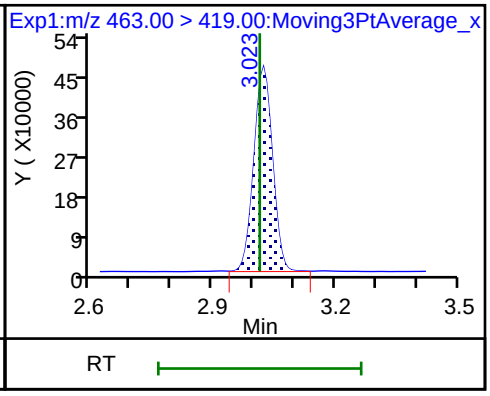
17 Perfluorooctane sulfonic acid



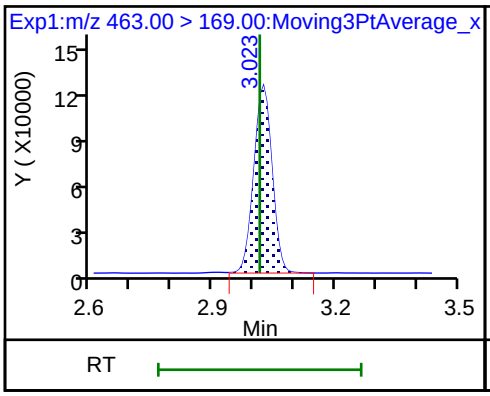
17 Perfluorooctane sulfonic acid



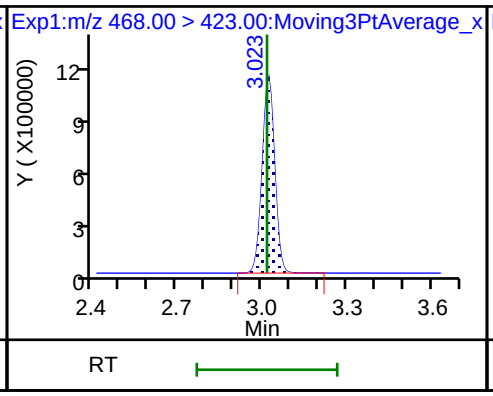
20 Perfluorononanoic acid



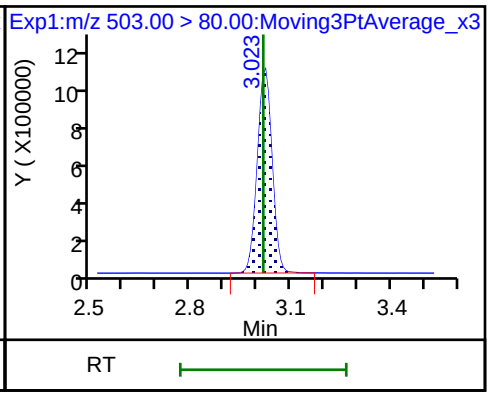
20 Perfluorononanoic acid



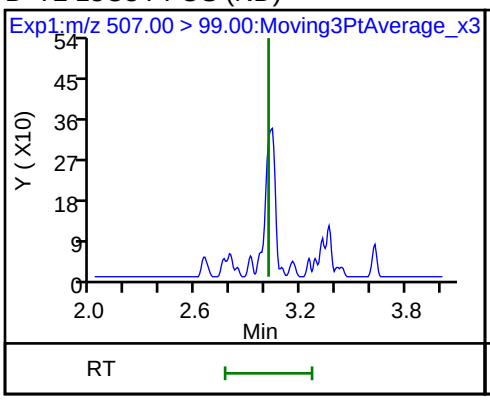
D 19 13C5 PFNA



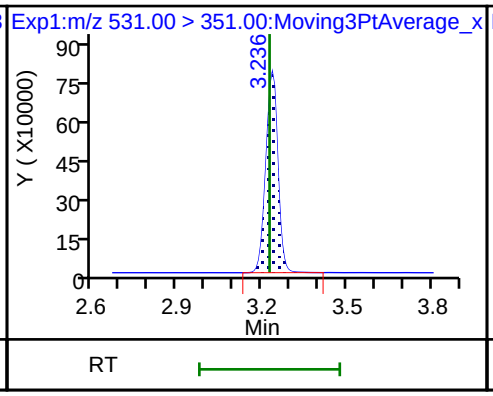
D 18 13C4 PFOS



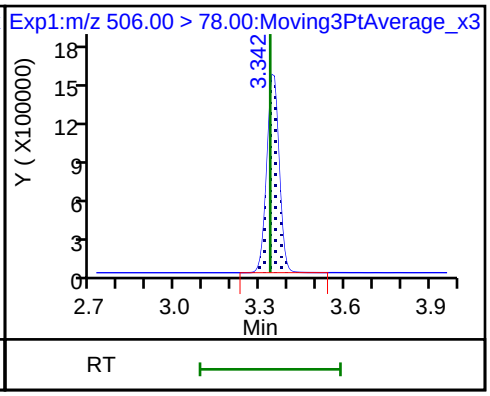
D 72 13C8 PFOS (ND)



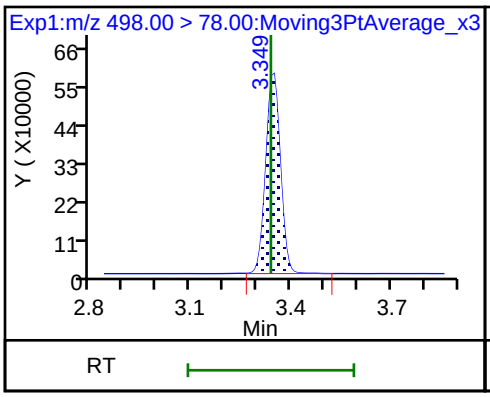
69 9-Chlorohexadecafluoro-3-oxanonane



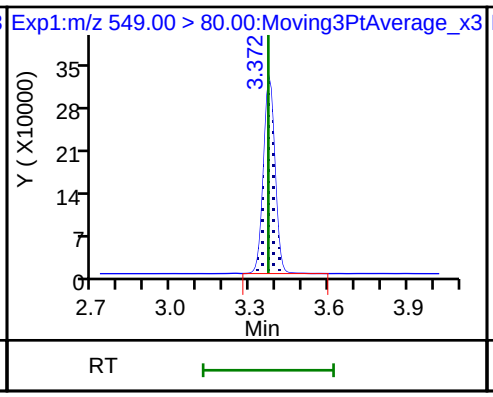
D 21 13C8 FOSA



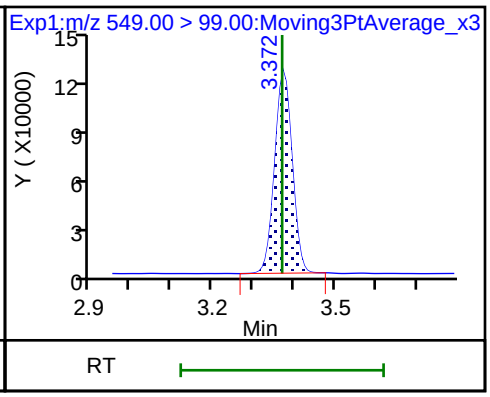
22 Perfluorooctane Sulfonamide



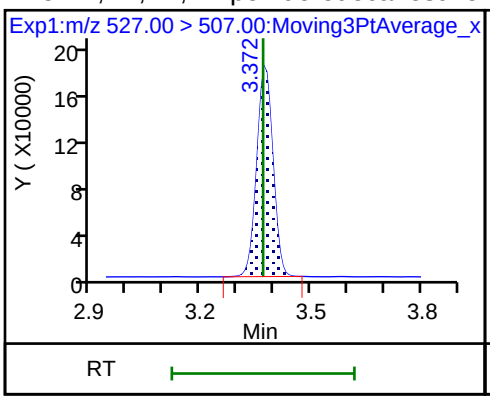
68 Perfluorononanesulfonic acid



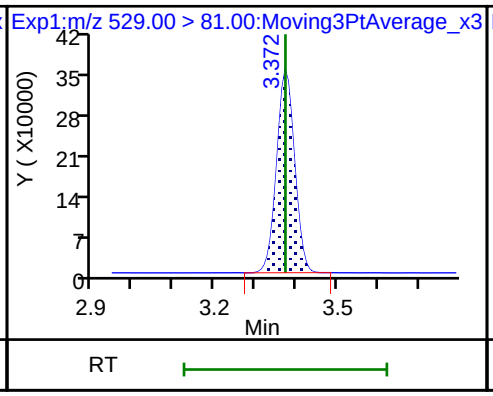
68 Perfluorononanesulfonic acid



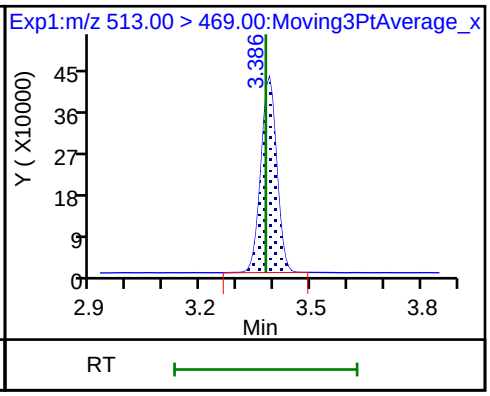
25 1H,1H,2H,2H-perfluorodecanesulfon



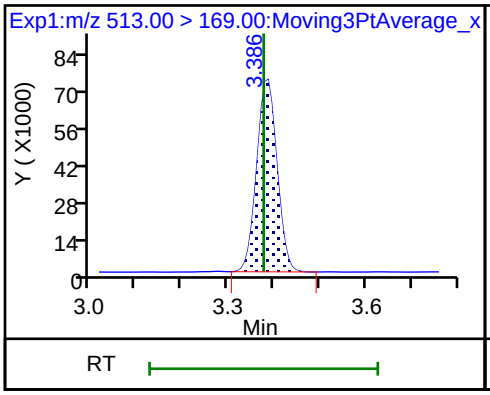
D 26 M2-8:2FTS



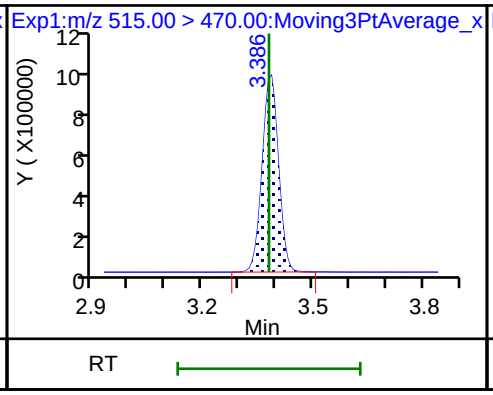
24 Perfluorodecanoic acid



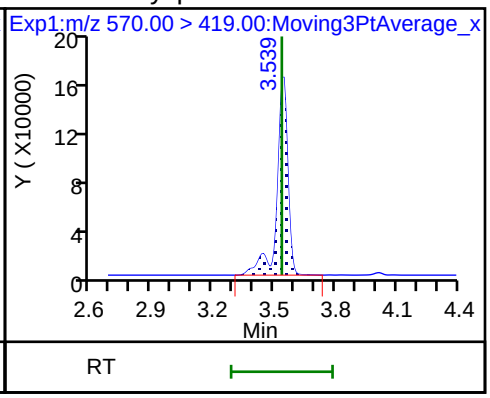
24 Perfluorodecanoic acid



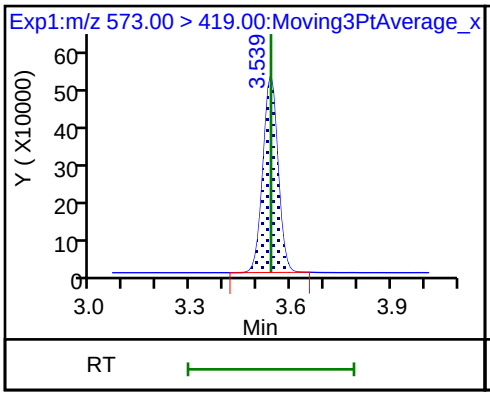
D 23 13C2 PFDA



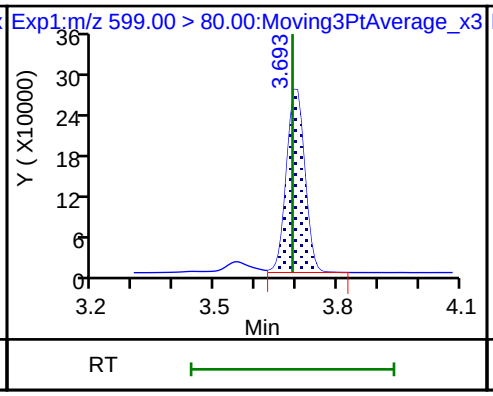
28 N-methyl perfluorooctane sulfonami



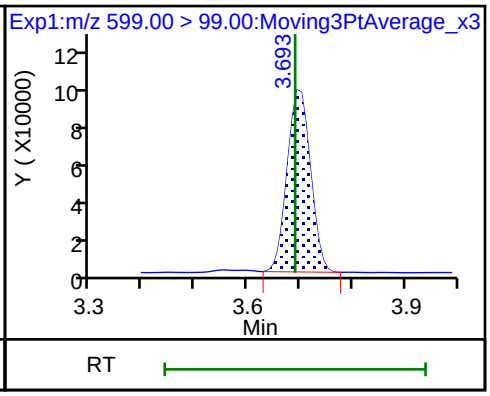
D 27 d3-NMeFOSAA



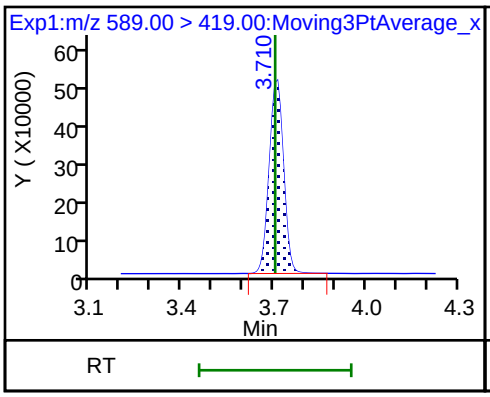
29 Perfluorodecane Sulfonic acid



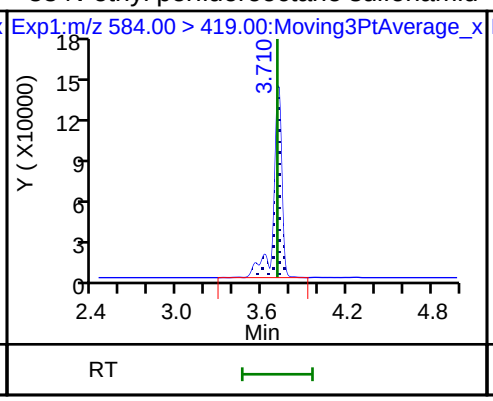
29 Perfluorodecane Sulfonic acid



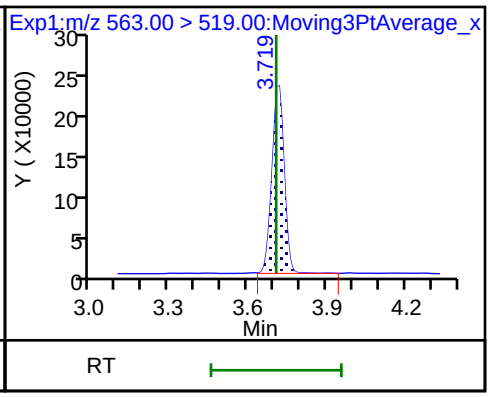
D 32 d5-NEtFOSAA



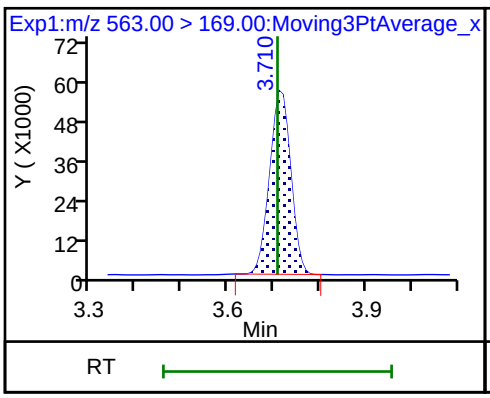
33 N-ethyl perfluorooctane sulfonamid



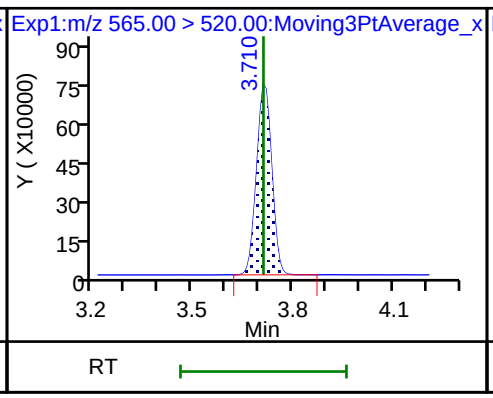
31 Perfluoroundecanoic acid



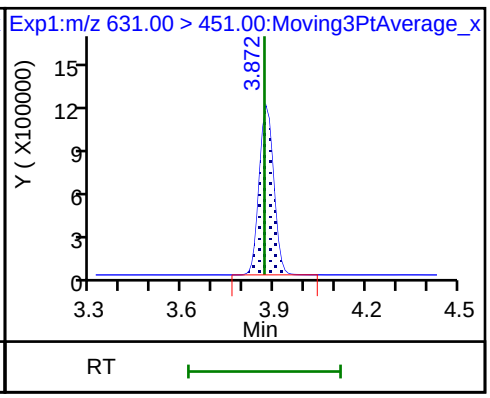
31 Perfluoroundecanoic acid



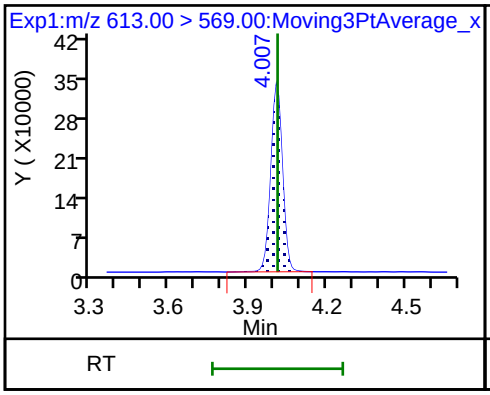
D 30 13C2 PFUnA



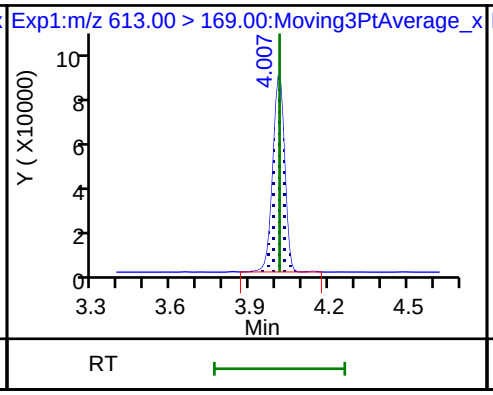
66 11-Chloroeicosafluoro-3-oxaundecan



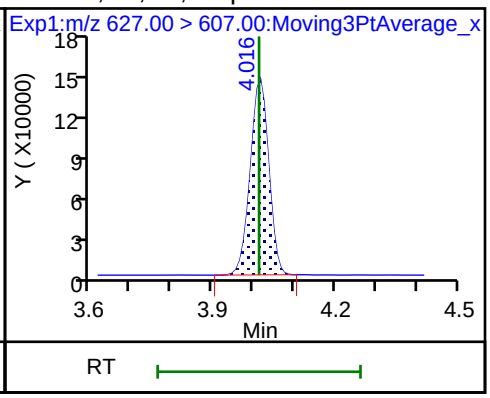
37 Perfluorododecanoic acid



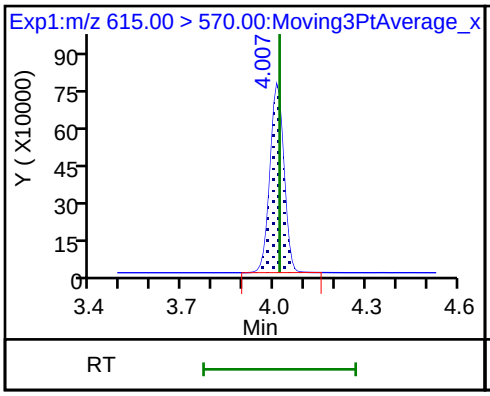
37 Perfluorododecanoic acid



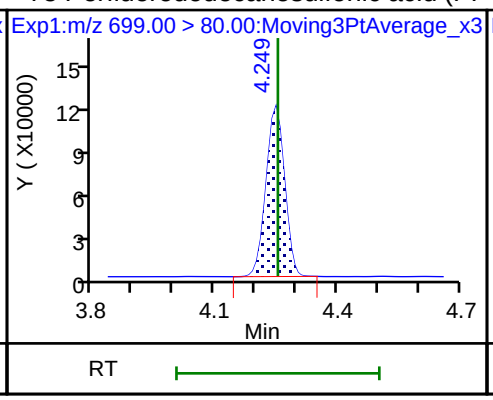
74 1H,1H,2H,2H-perfluorododecanesulfo



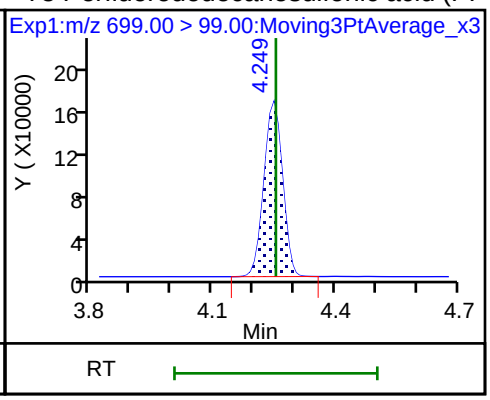
D 36 13C2 PFDoA



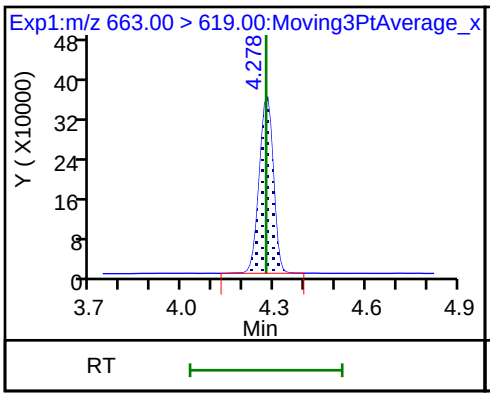
75 Perfluorododecanesulfonic acid (PF



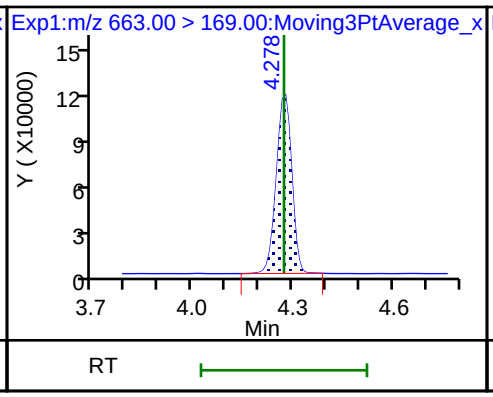
75 Perfluorododecanesulfonic acid (PF



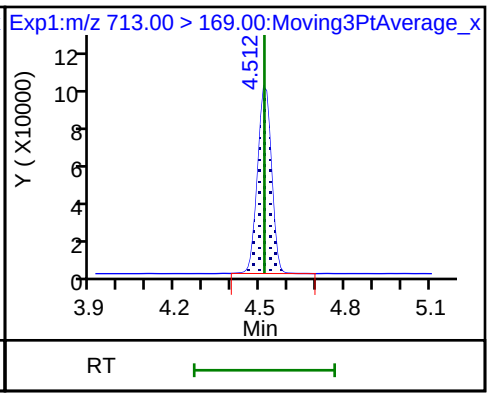
41 Perfluorotridecanoic acid



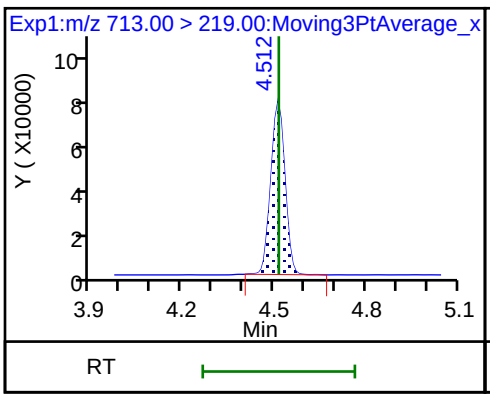
41 Perfluorotridecanoic acid



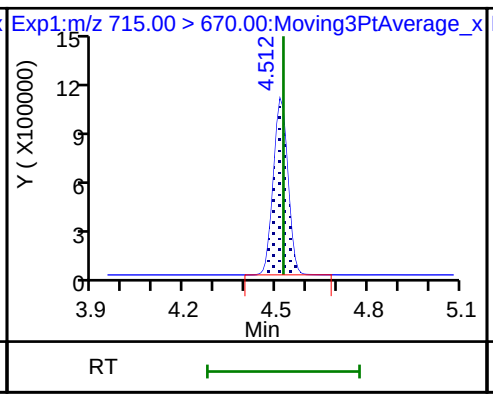
42 Perfluorotetradecanoic acid



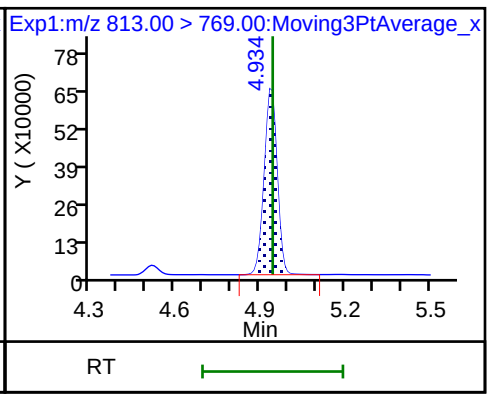
42 Perfluorotetradecanoic acid



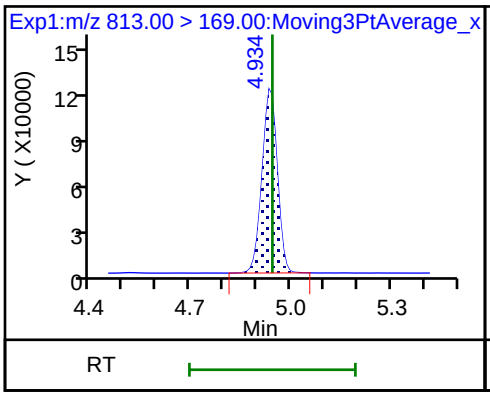
D 43 13C2-PFTeDA



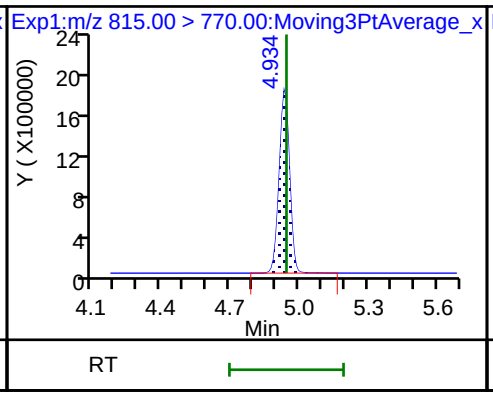
45 Perfluorohexadecanoic acid



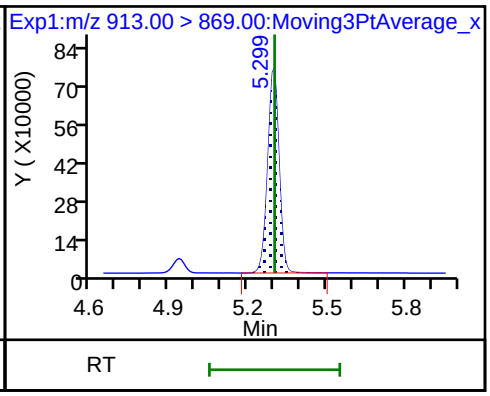
45 Perfluorohexadecanoic acid



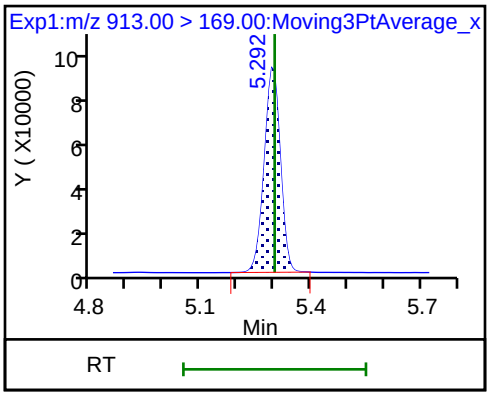
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Instrument ID: A8_N Start Date: 08/06/2018 11:10

Analysis Batch Number: 238192 End Date: 08/06/2018 12:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-238192/2		08/06/2018 11:10	1	2018.08.06LLICAL_002.d	GeminiC18 3x100 3(mm)
IC 320-238192/3		08/06/2018 11:17	1	2018.08.06LLICAL_003.d	GeminiC18 3x100 3(mm)
IC 320-238192/4		08/06/2018 11:25	1	2018.08.06LLICAL_004.d	GeminiC18 3x100 3(mm)
IC 320-238192/5 ICIS		08/06/2018 11:33	1	2018.08.06LLICAL_005.d	GeminiC18 3x100 3(mm)
IC 320-238192/6		08/06/2018 11:41	1	2018.08.06LLICAL_006.d	GeminiC18 3x100 3(mm)
IC 320-238192/7		08/06/2018 11:49	1	2018.08.06LLICAL_007.d	GeminiC18 3x100 3(mm)
IC 320-238192/8		08/06/2018 11:56	1	2018.08.06LLICAL_008.d	GeminiC18 3x100 3(mm)
ICB 320-238192/9		08/06/2018 12:04	1	2018.08.06LLICAL_009.d	GeminiC18 3x100 3(mm)
ICV 320-238192/10		08/06/2018 12:12	1	2018.08.06LLICAL_010.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Instrument ID: A8_N Start Date: 08/12/2018 11:25

Analysis Batch Number: 239433 End Date: 08/12/2018 13:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-239433/1		08/12/2018 11:25	1	2018.08.12LLA_004.d	GeminiC18 3x100 3(mm)
CCVL 320-239433/2		08/12/2018 11:33	1	2018.08.12LLA_005.d	GeminiC18 3x100 3(mm)
CCV 320-239433/3 CCVIS		08/12/2018 11:40	1	2018.08.12LLA_006.d	GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 11:48	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 11:56	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 12:04	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 12:12	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 12:19	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 12:27	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 12:35	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 12:43	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 12:51	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 12:59	1		GeminiC18 3x100 3(mm)
CCV 320-239433/14		08/12/2018 13:06	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 13:14	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 13:22	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 13:30	100		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 13:38	1		GeminiC18 3x100 3(mm)
CCV 320-239433/20		08/12/2018 13:54	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Instrument ID: A8_N Start Date: 08/12/2018 15:04

Analysis Batch Number: 239440 End Date: 08/12/2018 18:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-239440/1		08/12/2018 15:04	1	2018.08.12LLA_032.d	GeminiC18 3x100 3(mm)
MB 320-239187/1-A		08/12/2018 15:12	1	2018.08.12LLA_033.d	GeminiC18 3x100 3(mm)
LCS 320-239187/2-A		08/12/2018 15:20	1	2018.08.12LLA_034.d	GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 15:27	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 15:35	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 15:43	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 15:51	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 15:59	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 16:07	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 16:14	1		GeminiC18 3x100 3(mm)
320-41460-4 RE		08/12/2018 16:22	1	2018.08.12LLA_042.d	GeminiC18 3x100 3(mm)
CCV 320-239440/12		08/12/2018 16:30	1	2018.08.12LLA_043.d	GeminiC18 3x100 3(mm)
320-41460-4 MS RE		08/12/2018 16:38	1	2018.08.12LLA_044.d	GeminiC18 3x100 3(mm)
320-41460-4 MSD RE		08/12/2018 16:46	1	2018.08.12LLA_045.d	GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 16:53	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 17:01	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 17:17	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 17:25	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 17:32	20		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 17:40	20		GeminiC18 3x100 3(mm)
CCV 320-239440/22		08/12/2018 17:48	1	2018.08.12LLA_053.d	GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 17:56	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/12/2018 18:04	1		GeminiC18 3x100 3(mm)
CCV 320-239440/26		08/12/2018 18:19	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Instrument ID: A9 Start Date: 08/03/2018 16:12

Analysis Batch Number: 237920 End Date: 08/03/2018 17:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-237920/2		08/03/2018 16:12	1	2018.08.03LLICAL_005.d	Acquity 2.1(mm)
IC 320-237920/3		08/03/2018 16:19	1	2018.08.03LLICAL_006.d	Acquity 2.1(mm)
IC 320-237920/4		08/03/2018 16:27	1	2018.08.03LLICAL_007.d	Acquity 2.1(mm)
IC 320-237920/5 ICIS		08/03/2018 16:34	1	2018.08.03LLICAL_008.d	Acquity 2.1(mm)
IC 320-237920/6		08/03/2018 16:42	1	2018.08.03LLICAL_009.d	Acquity 2.1(mm)
IC 320-237920/7		08/03/2018 16:50	1	2018.08.03LLICAL_010.d	Acquity 2.1(mm)
IC 320-237920/8		08/03/2018 16:57	1	2018.08.03LLICAL_011.d	Acquity 2.1(mm)
ICB 320-237920/9		08/03/2018 17:04	1	2018.08.03LLICAL_012.d	Acquity 2.1(mm)
ICV 320-237920/10		08/03/2018 17:12	1	2018.08.03LLICAL_013.d	Acquity 2.1(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Instrument ID: A9 Start Date: 08/08/2018 06:06

Analysis Batch Number: 238708 End Date: 08/08/2018 07:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-238708/1		08/08/2018 06:06	1	2018.08.07_LLB_004.d	Acquity 2.1(mm)
CCVL 320-238708/2		08/08/2018 06:14	1	2018.08.07_LLB_005.d	Acquity 2.1(mm)
CCV 320-238708/3 CCVIS		08/08/2018 06:21	1	2018.08.07_LLB_030.d	Acquity 2.1(mm)
ZZZZZ		08/08/2018 06:44	10		Acquity 2.1(mm)
ZZZZZ		08/08/2018 06:51	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 06:59	1		Acquity 2.1(mm)
CCV 320-238708/9		08/08/2018 07:06	1		Acquity 2.1(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Instrument ID: A9 Start Date: 08/08/2018 07:59

Analysis Batch Number: 238718 End Date: 08/08/2018 12:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-238718/1		08/08/2018 07:59	1	2018.08.08LLA_005.d	Acquity 2.1(mm)
MB 320-238149/1-A		08/08/2018 08:06	1	2018.08.08LLA_006.d	Acquity 2.1(mm)
LCS 320-238149/2-A		08/08/2018 08:14	1	2018.08.08LLA_007.d	Acquity 2.1(mm)
ZZZZZ		08/08/2018 08:21	1		Acquity 2.1(mm)
320-41460-1		08/08/2018 08:29	1	2018.08.08LLA_009.d	Acquity 2.1(mm)
320-41460-2		08/08/2018 08:36	1	2018.08.08LLA_010.d	Acquity 2.1(mm)
320-41460-3		08/08/2018 08:44	1	2018.08.08LLA_011.d	Acquity 2.1(mm)
320-41460-4		08/08/2018 08:51	1	2018.08.08LLA_012.d	Acquity 2.1(mm)
320-41460-4 MS		08/08/2018 08:59	1	2018.08.08LLA_013.d	Acquity 2.1(mm)
320-41460-4 MSD		08/08/2018 09:06	1	2018.08.08LLA_014.d	Acquity 2.1(mm)
320-41460-5		08/08/2018 09:14	1	2018.08.08LLA_015.d	Acquity 2.1(mm)
CCV 320-238718/12		08/08/2018 09:21	1	2018.08.08LLA_016.d	Acquity 2.1(mm)
ZZZZZ		08/08/2018 09:29	100		Acquity 2.1(mm)
ZZZZZ		08/08/2018 09:36	100		Acquity 2.1(mm)
ZZZZZ		08/08/2018 09:44	100		Acquity 2.1(mm)
ZZZZZ		08/08/2018 09:51	100		Acquity 2.1(mm)
ZZZZZ		08/08/2018 09:59	100		Acquity 2.1(mm)
ZZZZZ		08/08/2018 10:06	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 10:14	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 10:21	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 10:29	1		Acquity 2.1(mm)
CCV 320-238718/23		08/08/2018 12:01	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 12:09	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 12:16	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 12:24	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 12:31	1		Acquity 2.1(mm)
ZZZZZ		08/08/2018 12:39	1		Acquity 2.1(mm)
CCV 320-238718/29		08/08/2018 12:46	1		Acquity 2.1(mm)

537 (modified)

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Batch Number: 238149 Batch Start Date: 08/06/18 10:24 Batch Analyst: Kolstad, Kate M

Batch Method: 3535 Batch End Date: 08/06/18 17:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC_ALL_SU 00095	LCPFC-IS 00074
MB 320-238149/1		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
LCS 320-238149/2		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
320-41460-A-1	GC-MW-107 (WG)	3535, 537 (modified)	T	295.65 g	26.95 g	268.7 mL	10.00 mL	500 uL	500 uL
320-41460-A-2	GC-MW-108 (WG)	3535, 537 (modified)	T	297.85 g	27.18 g	270.7 mL	10.00 mL	500 uL	500 uL
320-41460-A-3	GC-MW-109 (WG)	3535, 537 (modified)	T	298.14 g	28.52 g	269.6 mL	10.00 mL	500 uL	500 uL
320-41460-A-4	GC-MW-109M (WG)	3535, 537 (modified)	T	310.57 g	27.37 g	283.2 mL	10.00 mL	500 uL	500 uL
320-41460-A-4 MS	GC-MW-109M (WG)	3535, 537 (modified)	T	297.69 g	26.98 g	270.7 mL	10.00 mL	500 uL	500 uL
320-41460-A-4 MSD	GC-MW-109M (WG)	3535, 537 (modified)	T	298.55 g	28.09 g	270.5 mL	10.00 mL	500 uL	500 uL
320-41460-A-5	GC-EQUIPMENT BLANK (072418)	3535, 537 (modified)	T	305.62 g	26.72 g	278.9 mL	10.00 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00161					
MB 320-238149/1		3535, 537 (modified)							
LCS 320-238149/2		3535, 537 (modified)		500 uL					
320-41460-A-1	GC-MW-107 (WG)	3535, 537 (modified)	T						
320-41460-A-2	GC-MW-108 (WG)	3535, 537 (modified)	T						
320-41460-A-3	GC-MW-109 (WG)	3535, 537 (modified)	T						
320-41460-A-4	GC-MW-109M (WG)	3535, 537 (modified)	T						
320-41460-A-4 MS	GC-MW-109M (WG)	3535, 537 (modified)	T	500 uL					
320-41460-A-4 MSD	GC-MW-109M (WG)	3535, 537 (modified)	T	500 uL					
320-41460-A-5	GC-EQUIPMENT BLANK (072418)	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Batch Number: 238149 Batch Start Date: 08/06/18 10:24 Batch Analyst: Kolstad, Kate M

Batch Method: 3535 Batch End Date: 08/06/18 17:52

Batch Notes	
Analyst ID - Aliquot Step	KMK
Balance ID	QA-078
Batch Comment	Client labels match TA label, KMK.
Analyst ID - Final Volume Step	KMK
H2O ID	8-2-18
Hexane ID	1313826
Internal Standard ID#	1314761
Manifold ID	G, J
Methanol ID	1313683
Sodium Hydroxide ID	1319395
Pipette ID	I46345G
Analyst ID - Reagent Drop	KMK
Analyst ID - IS Reagent Drop	KMK
Analyst ID - IS Reagent Drop Witness	VPM
Analyst ID - SU Reagent Drop	KMK
Analyst ID - SU Reagent Drop Witness	VPM
Solvent Lot #	1314660
Solvent Name	0.3% NH4OH/MEOH
SOP Number	WS-LC-0025
SPE Cartridge Type	WAX 500mg
Solid Phase Extraction Disk ID	003237137A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Batch Number: 239187 Batch Start Date: 08/10/18 09:01 Batch Analyst: Kouchari, Shamiran

Batch Method: 3535 Batch End Date: 08/10/18 15:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC_ALL_SU 00092	LCPFC-IS 00055
MB 320-239187/1		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
LCS 320-239187/2		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
320-41460-B-4	GC-MW-109M (WG)	3535, 537 (modified)	T	295.89 g	28.62 g	267.3 mL	10.00 mL	500 uL	500 uL
320-41460-B-4 MS	GC-MW-109M (WG)	3535, 537 (modified)	T	300.45 g	27.02 g	273.4 mL	10.00 mL	500 uL	500 uL
320-41460-B-4 MSD	GC-MW-109M (WG)	3535, 537 (modified)	T	292.63 g	28.49 g	264.1 mL	10.00 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00163					
MB 320-239187/1		3535, 537 (modified)							
LCS 320-239187/2		3535, 537 (modified)		500 uL					
320-41460-B-4	GC-MW-109M (WG)	3535, 537 (modified)	T						
320-41460-B-4 MS	GC-MW-109M (WG)	3535, 537 (modified)	T	500 uL					
320-41460-B-4 MSD	GC-MW-109M (WG)	3535, 537 (modified)	T	500 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-41460-1

SDG No.:

Batch Number: 239187 Batch Start Date: 08/10/18 09:01 Batch Analyst: Kouchari, Shamiran

Batch Method: 3535 Batch End Date: 08/10/18 15:05

Batch Notes	
Analyst ID - Aliquot Step	SKD
Balance ID	QA-078
Batch Comment	Client labels match TA label, SKD 08/10/18
Analyst ID - Final Volume Step	SKD
H2O ID	08/09/18
Hexane ID	1313826
Internal Standard ID#	1265442
Manifold ID	G, H
Methanol ID	1323394
Sodium Hydroxide ID	1325869
Pipette ID	1320118
Analyst ID - Reagent Drop	SKD
Analyst ID - IS Reagent Drop	SKD
Analyst ID - IS Reagent Drop Witness	MNV
Analyst ID - SU Reagent Drop	SKD
Analyst ID - SU Reagent Drop Witness	MNV
Solvent Lot #	1320119
Solvent Name	0.3% NH4OH/MEOH
SOP Number	WS-LC-0025
SPE Cartridge Type	WAX 500mg
Solid Phase Extraction Disk ID	003237137A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

7/24/18 Sharma

Chain of Custody Record

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817-2859
phone 732.549.3900 fax 732.549.3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☑Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Lindsay O'Hara	Site Contact: Sanjay Sharma	Date: 7-24-18	COC No:
TRC Engineers, Inc.	Tel/Fax: 203-278-5305	Lab Contact: Jannel Franklin	Carrier:	1 of 1 COCs
1430 Broadway, 10th Floor	Analysis Turnaround Time			Sampler:
New York, New York 10024	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
212-221-7822	TAT if different from Below Standard			Walk-in Client:
FAX 212-2217840	☑ 2 weeks			Lab Sampling:
Project Name: Gem Cleaners	☐ 1 week			
Site: 84 N Village Avenue, Rockville Centre, NY	☐ 2 days			Job / SDG No.:
PO#: 120097; Project No. 279191.0000.0000 Phase 2	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFAS (List of 21 Compounds)	Sample Specific Notes:
GC-MW-107 (WG)	7-24	0745	G	GW	2	—		X	
GC-MW-108 (WG)		0850				—		X	
GC-MW-109 (WG)		0950				—		X	
GC-MW-109M (WG)		1050				—		X	
GC-MW-109M (WG) - MS		1050				—		X	
GC-MW-109M (WG) - MSD		1050	↓	↓		—		X	
SS		—	—	—	—	—			
* GC-EQUIPMENT BLANK (072418)	↓	0700	—	—	↓	—		X	

320-41460 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Please provide Category B Deliverable Data packages, EDD in EQUIS format, and EDD with tabulated results with RLs shown. NYSDEC Project.
Final batch of samples

Custody Seals Intact: ☐ Yes ☑ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 1.9 Corr'd: 1.9 | Therm ID No.: AK-2

	Company	Date/Time	Received by:	Company	Date/Time
Relinquished by:	TRC	7/24/18 1300		PA	7/24/18 11:06
Relinquished by:	PA	7/24/18 1800		PA	7/24/18 1500
Relinquished by:	TRC	7/24/18 1700	Received in Laboratory by:	TAL-EDISON	7/25/18 915

Labeled GC-EQB 072418. DH 7/25/18

Form No. CA-C-WI-002, Rev. 4.15, dated 9/27/2017

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08/17/2018

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 320-41460-1

Login Number: 41460
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 320-41405-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Lindsay O'Hara

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
8/17/2018 9:27 AM

Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
08/17/2018

Job Number: 320-41405-1

Job Description: GEM Cleaners

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
8/17/2018 9:27 AM

Jannel O Franklin

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 320-41405-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 07/24/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.4 C.

PFOA/PFOS

Samples GC-MW-104 (WG) (320-41405-1), GC-MW-105 (WG) (320-41405-2), GC-EQUIPMENT BLANK (072318) (320-41405-3), GC-MW-2 (WG) (320-41405-4) and GC-MW-DRAIN (WG) (320-41405-5) were analyzed for Perfluorinated Hydrocarbons (PFC) in accordance with PFC. The samples were prepared on 07/31/2018 and analyzed on 08/04/2018 and 08/07/2018.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-6:2FTS in the following sample: GC-MW-DRAIN (WG) (320-41405-5). Re-analysis was performed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Internal standard (ISTD) response for the following sample was outside control limits: GC-MW-DRAIN (WG) (320-41405-5). The sample was re-analyzed with concurring results. The ISTD is not used to quantitate target analytes; therefore, there is no impact to the data.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-8:2FTS in the following sample: GC-MW-DRAIN (WG) (320-41405-5). This IDA was also outside control limits in the undiluted extract. Results for this analyte were reported from the dilution due to improved IDA recovery. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Results for sample GC-MW-DRAIN (WG) (320-41405-5) were reported from the analysis of a diluted extract due to matrix issues in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

The following sample has chromatographic interferences that could adversely impact the identification and quantitation of Perfluorobutanoic acid (PFBA) and Perfluorobutanesulfonic acid (PFBS): GC-MW-DRAIN (WG) (320-41405-5) These interferences could cause false positive results.

Perfluorohexanesulfonic acid (PFHxS) was detected in method blank MB 320-237151/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-237151.

Refer to the QC report for details.

The following sample: GC-MW-105 (WG) (320-41405-2) is observed to be a brown color prior to extraction. After the sample was extracted and eluted through the solid-phase column the sample extract was observed to be a yellow color.

Due to the nature of the sample matrix, the entire sample could not be eluted through the SPE column, due to the sample clogging the SPE column. The initial volumes used for the following samples deviated from the standard procedure: GC-MW-105 (WG) (320-41405-2). The reporting limits (RLs) have been adjusted proportionately.

Samples GC-MW-105 (WG) (320-41405-2) have fine sediment at the bottom of the bottle and mixed in with the sample water.

Samples GC-MW-DRAIN (WG) (320-41405-5) both have two layers, the top layer was yellow and bottom was white. It was mixed after the vortex and became yellow throughout. Sample GC-MW-DRAIN (WG) (320-41405-5)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Perfluorinated Hydrocarbons (PFC) analysis.

All other quality control parameters were within the acceptance limits.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41405-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-41405-1	GC-MW-104 (WG)	Water	07/23/18 12:20	07/24/18 09:00
320-41405-2	GC-MW-105 (WG)	Water	07/23/18 13:10	07/24/18 09:00
320-41405-3	GC-EQUIPMENT BLANK (072318)	Water	07/23/18 09:15	07/24/18 09:00
320-41405-4	GC-MW-2 (WG)	Water	07/23/18 13:25	07/24/18 09:00
320-41405-5	GC-MW-DRAIN (WG)	Water	07/23/18 12:15	07/24/18 09:00

Detection Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41405-1

Client Sample ID: GC-MW-104 (WG) — Lab Sample ID: 320-41405-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	8.9		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	13		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	14		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	7.5		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	28		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.9		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.3	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	7.1		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.0	B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.46	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	13		1.8	0.49	ng/L	1		537 (modified)	Total/NA
6:2 FTS	2.3	J	18	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-105 (WG) — Lab Sample ID: 320-41405-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	11		2.4	0.42	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	19		2.4	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	16		2.4	0.70	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	9.5		2.4	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	38		2.4	1.0	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.5		2.4	0.33	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.4	J	2.4	0.38	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	11		2.4	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3	J B	2.4	0.21	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.74	J	2.4	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		2.4	0.66	ng/L	1		537 (modified)	Total/NA
6:2 FTS	4.1	J	24	2.4	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-EQUIPMENT BLANK (072318) — Lab Sample ID: 320-41405-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.30	J	1.7	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.23	J B	1.7	0.14	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-2 (WG) — Lab Sample ID: 320-41405-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.0		1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	13		1.7	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	13		1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	7.8		1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	27		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.9		1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.59	J	1.7	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.1		1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.6	J B	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.47	J	1.7	0.16	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GC-MW-2 (WG) (Continued)

Lab Sample ID: 320-41405-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	23		1.7	0.46	ng/L	1		537 (modified)	Total/NA
6:2 FTS	2.5	J	17	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-MW-DRAIN (WG)

Lab Sample ID: 320-41405-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	180	CI	1.7	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	12		1.7	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	36		1.7	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	37		1.7	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	210		1.7	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	14		1.7	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	28		1.7	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	3.0		1.7	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.85	J	1.7	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	11	CI	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	11	B	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	12		1.7	0.31	ng/L	1		537 (modified)	Total/NA
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	28		17	2.7	ng/L	1		537 (modified)	Total/NA
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	11	J	17	1.7	ng/L	1		537 (modified)	Total/NA
6:2 FTS	6.2	J	17	1.7	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS) - DL	7.1	J	17	1.7	ng/L	10		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	230		17	4.7	ng/L	10		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41405-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Client Sample ID: GC-MW-104 (WG)

Date Collected: 07/23/18 12:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41405-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**8.9**		1.8	0.32	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluoropentanoic acid (PFPeA)	**13**		1.8	0.44	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorohexanoic acid (PFHxA)	**14**		1.8	0.53	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluoroheptanoic acid (PFHpA)	**7.5**		1.8	0.23	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorooctanoic acid (PFOA)	**28**		1.8	0.77	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorononanoic acid (PFNA)	**1.9**		1.8	0.24	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorodecanoic acid (PFDA)	**1.3**	**J**	1.8	0.28	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorobutanesulfonic acid (PFBS)	**7.1**		1.8	0.18	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorohexanesulfonic acid (PFHxS)	**2.0**	**B**	1.8	0.15	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.46**	**J**	1.8	0.17	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorooctanesulfonic acid (PFOS)	**13**		1.8	0.49	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		07/31/18 10:53	08/04/18 00:27	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.32	ng/L		07/31/18 10:53	08/04/18 00:27	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		07/31/18 10:53	08/04/18 00:27	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		07/31/18 10:53	08/04/18 00:27	1
6:2 FTS	**2.3**	**J**	18	1.8	ng/L		07/31/18 10:53	08/04/18 00:27	1
8:2 FTS	ND		18	1.8	ng/L		07/31/18 10:53	08/04/18 00:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*68*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C5 PFPeA	*79*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C2 PFHxA	*91*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C4-PFHpA	*96*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C4 PFOA	*96*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C5 PFNA	*99*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C2 PFDA	*107*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C2 PFUnA	*98*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C2 PFDoA	*99*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C2-PFTeDA	*99*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C3-PFBS	*83*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
18O2 PFHxS	*93*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C4 PFOS	*90*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
13C8 FOSA	*87*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
d3-NMeFOSAA	*92*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
d5-NEtFOSAA	*93*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
M2-6:2FTS	*104*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*
M2-8:2FTS	*111*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:27*	*1*

Client Sample ID: GC-MW-105 (WG)

Date Collected: 07/23/18 13:10
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41405-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**11**		2.4	0.42	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluoropentanoic acid (PFPeA)	**19**		2.4	0.59	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorohexanoic acid (PFHxA)	**16**		2.4	0.70	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluoroheptanoic acid (PFHpA)	**9.5**		2.4	0.30	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorooctanoic acid (PFOA)	**38**		2.4	1.0	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorononanoic acid (PFNA)	**2.5**		2.4	0.33	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorodecanoic acid (PFDA)	**1.4**	**J**	2.4	0.38	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluoroundecanoic acid (PFUnA)	ND		2.4	1.3	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorododecanoic acid (PFDoA)	ND		2.4	0.67	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.4	1.6	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.4	0.35	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorobutanesulfonic acid (PFBS)	**11**		2.4	0.24	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorohexanesulfonic acid (PFHxS)	**2.3**	**J B**	2.4	0.21	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.74**	**J**	2.4	0.23	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorooctanesulfonic acid (PFOS)	**14**		2.4	0.66	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.4	0.39	ng/L		07/31/18 10:53	08/04/18 00:35	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.4	0.42	ng/L		07/31/18 10:53	08/04/18 00:35	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		24	3.8	ng/L		07/31/18 10:53	08/04/18 00:35	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		24	2.3	ng/L		07/31/18 10:53	08/04/18 00:35	1
6:2 FTS	**4.1**	**J**	24	2.4	ng/L		07/31/18 10:53	08/04/18 00:35	1
8:2 FTS	ND		24	2.4	ng/L		07/31/18 10:53	08/04/18 00:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*59*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C5 PFPeA	*65*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C2 PFHxA	*76*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C4-PFHpA	*80*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C4 PFOA	*77*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C5 PFNA	*81*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C2 PFDA	*88*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C2 PFUnA	*74*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C2 PFDoA	*62*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C2-PFTeDA	*52*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C3-PFBS	*66*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
18O2 PFHxS	*76*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C4 PFOS	*75*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
13C8 FOSA	*71*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
d3-NMeFOSAA	*70*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
d5-NEtFOSAA	*67*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
M2-6:2FTS	*82*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*
M2-8:2FTS	*90*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:35*	*1*

Client Sample ID: GC-EQUIPMENT BLANK (072318)

Date Collected: 07/23/18 09:15
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41405-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.30**	**J**	1.7	0.29	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.41	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.49	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorooctanoic acid (PFOA)	ND		1.7	0.71	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.92	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.24	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorohexanesulfonic acid (PFHxS)	**0.23**	**J B**	1.7	0.14	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.45	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		07/31/18 10:53	08/04/18 00:51	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.29	ng/L		07/31/18 10:53	08/04/18 00:51	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		07/31/18 10:53	08/04/18 00:51	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		07/31/18 10:53	08/04/18 00:51	1
6:2 FTS	ND		17	1.7	ng/L		07/31/18 10:53	08/04/18 00:51	1
8:2 FTS	ND		17	1.7	ng/L		07/31/18 10:53	08/04/18 00:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C5 PFPeA	*101*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C2 PFHxA	*110*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C4-PFHpA	*100*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C4 PFOA	*99*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C5 PFNA	*101*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C2 PFDA	*110*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C2 PFUnA	*98*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C2 PFDoA	*100*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C2-PFTeDA	*93*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C3-PFBS	*89*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
18O2 PFHxS	*97*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C4 PFOS	*94*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
13C8 FOSA	*86*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
d3-NMeFOSAA	*92*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
d5-NEtFOSAA	*92*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
M2-6:2FTS	*104*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*
M2-8:2FTS	*108*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:51*	*1*

Client Sample ID: GC-MW-2 (WG)

Date Collected: 07/23/18 13:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41405-4

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**7.0**		1.7	0.30	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluoropentanoic acid (PFPeA)	**13**		1.7	0.42	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorohexanoic acid (PFHxA)	**13**		1.7	0.50	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluoroheptanoic acid (PFHpA)	**7.8**		1.7	0.21	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorooctanoic acid (PFOA)	**27**		1.7	0.73	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorononanoic acid (PFNA)	**3.9**		1.7	0.23	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorodecanoic acid (PFDA)	**0.59**	**J**	1.7	0.27	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorobutanesulfonic acid (PFBS)	**5.1**		1.7	0.17	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorohexanesulfonic acid (PFHxS)	**1.6**	**J B**	1.7	0.15	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.47**	**J**	1.7	0.16	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorooctanesulfonic acid (PFOS)	**23**		1.7	0.46	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		07/31/18 10:53	08/04/18 00:58	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.30	ng/L		07/31/18 10:53	08/04/18 00:58	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7	ng/L		07/31/18 10:53	08/04/18 00:58	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		07/31/18 10:53	08/04/18 00:58	1
6:2 FTS	**2.5**	**J**	17	1.7	ng/L		07/31/18 10:53	08/04/18 00:58	1
8:2 FTS	ND		17	1.7	ng/L		07/31/18 10:53	08/04/18 00:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*69*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C5 PFPeA	*81*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C2 PFHxA	*96*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C4-PFHpA	*100*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C4 PFOA	*95*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C5 PFNA	*102*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C2 PFDA	*114*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C2 PFUnA	*106*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C2 PFDoA	*106*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C2-PFTeDA	*104*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C3-PFBS	*86*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
18O2 PFHxS	*98*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C4 PFOS	*96*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
13C8 FOSA	*93*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
d3-NMeFOSAA	*98*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
d5-NEtFOSAA	*98*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
M2-6:2FTS	*115*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*
M2-8:2FTS	*120*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:58*	*1*

Client Sample ID: GC-MW-DRAIN (WG)

Date Collected: 07/23/18 12:15
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41405-5

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**180**	**CI**	1.7	0.31	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluoropentanoic acid (PFPeA)	**12**		1.7	0.43	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorohexanoic acid (PFHxA)	**36**		1.7	0.51	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluoroheptanoic acid (PFHpA)	**37**		1.7	0.22	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorooctanoic acid (PFOA)	**210**		1.7	0.74	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorononanoic acid (PFNA)	**14**		1.7	0.24	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorodecanoic acid (PFDA)	**28**		1.7	0.27	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorododecanoic acid (PFDoA)	**3.0**		1.7	0.48	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorotetradecanoic acid (PFTeA)	**0.85**	**J**	1.7	0.25	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorobutanesulfonic acid (PFBS)	**11**	**CI**	1.7	0.17	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorohexanesulfonic acid (PFHxS)	**11**	**B**	1.7	0.15	ng/L		07/31/18 10:53	08/07/18 22:27	1
Perfluorooctane Sulfonamide (FOSA)	**12**		1.7	0.31	ng/L		07/31/18 10:53	08/07/18 22:27	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	**28**		17	2.7	ng/L		07/31/18 10:53	08/07/18 22:27	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	**11**	**J**	17	1.7	ng/L		07/31/18 10:53	08/07/18 22:27	1
6:2 FTS	**6.2**	**J**	17	1.7	ng/L		07/31/18 10:53	08/07/18 22:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*28*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C5 PFPeA	*54*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C2 PFHxA	*69*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C4-PFHpA	*76*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C4 PFOA	*91*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C5 PFNA	*123*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C2 PFDA	*140*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C2 PFDoA	*139*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C2-PFTeDA	*85*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C3-PFBS	*104*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
18O2 PFHxS	*140*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
13C8 FOSA	*101*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
d3-NMeFOSAA	*98*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
d5-NEtFOSAA	*134*		*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*
M2-6:2FTS	*197*	*	*25 - 150*	*07/31/18 10:53*	*08/07/18 22:27*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	ND		17	9.6	ng/L		07/31/18 10:53	08/07/18 22:19	10
Perfluoroheptanesulfonic Acid (PFHpS)	**7.1**	**J**	17	1.7	ng/L		07/31/18 10:53	08/07/18 22:19	10
Perfluorooctanesulfonic acid (PFOS)	**230**		17	4.7	ng/L		07/31/18 10:53	08/07/18 22:19	10
Perfluorodecanesulfonic acid (PFDS)	ND		17	2.8	ng/L		07/31/18 10:53	08/07/18 22:19	10
8:2 FTS	ND		170	17	ng/L		07/31/18 10:53	08/07/18 22:19	10

Client Sample ID: GC-MW-DRAIN (WG)

Date Collected: 07/23/18 12:15
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41405-5

Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	107		25 - 150	07/31/18 10:53	08/07/18 22:19	10
13C4 PFOS	101		25 - 150	07/31/18 10:53	08/07/18 22:19	10
M2-8:2FTS	184	*	25 - 150	07/31/18 10:53	08/07/18 22:19	10

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41405-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-41405-1	GC-MW-104 (WG)	68	79	91	96	96	99	107	98
320-41405-2	GC-MW-105 (WG)	59	65	76	80	77	81	88	74
320-41405-3	GC-EQUIPMENT BLANK (0723	95	101	110	100	99	101	110	98
320-41405-4	GC-MW-2 (WG)	69	81	96	100	95	102	114	106
320-41405-5 - DL	GC-MW-DRAIN (WG)								107
320-41405-5	GC-MW-DRAIN (WG)	28	54	69	76	91	123	140	
LCS 320-237151/2-A	Lab Control Sample	93	95	103	101	94	97	105	96
LCSD 320-237151/3-A	Lab Control Sample Dup	92	92	101	100	94	98	101	94
MB 320-237151/1-A	Method Blank	80	90	96	96	91	94	98	93

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOSA (25-150)	-NEtFOSA (25-150)
320-41405-1	GC-MW-104 (WG)	99	99	83	93	90	87	92	93
320-41405-2	GC-MW-105 (WG)	62	52	66	76	75	71	70	67
320-41405-3	GC-EQUIPMENT BLANK (0723	100	93	89	97	94	86	92	92
320-41405-4	GC-MW-2 (WG)	106	104	86	98	96	93	98	98
320-41405-5 - DL	GC-MW-DRAIN (WG)					101			
320-41405-5	GC-MW-DRAIN (WG)	139	85	104	140		101	98	134
LCS 320-237151/2-A	Lab Control Sample	94	99	89	97	92	86	87	92
LCSD 320-237151/3-A	Lab Control Sample Dup	98	87	84	98	92	82	83	86
MB 320-237151/1-A	Method Blank	92	92	83	94	88	81	85	90

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
320-41405-1	GC-MW-104 (WG)	104	111
320-41405-2	GC-MW-105 (WG)	82	90
320-41405-3	GC-EQUIPMENT BLANK (0723	104	108
320-41405-4	GC-MW-2 (WG)	115	120
320-41405-5 - DL	GC-MW-DRAIN (WG)		184 *
320-41405-5	GC-MW-DRAIN (WG)	197 *	
LCS 320-237151/2-A	Lab Control Sample	102	105
LCSD 320-237151/3-A	Lab Control Sample Dup	99	99
MB 320-237151/1-A	Method Blank	94	101

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
PFHpA = 13C4-PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2-PFTeDA
13C3-PFBS = 13C3-PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA

d3-NMeFOSAA = d3-NMeFOSAA
d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2FTS
M282FTS = M2-8:2FTS

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-237151/1-A
Matrix: Water
Analysis Batch: 237938

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 237151

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorohexanesulfonic acid (PFHxS)	0.239	J	2.0	0.17	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		07/31/18 10:53	08/04/18 00:04	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		07/31/18 10:53	08/04/18 00:04	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		07/31/18 10:53	08/04/18 00:04	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		07/31/18 10:53	08/04/18 00:04	1
6:2 FTS	ND		20	2.0	ng/L		07/31/18 10:53	08/04/18 00:04	1
8:2 FTS	ND		20	2.0	ng/L		07/31/18 10:53	08/04/18 00:04	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*80*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C5 PFPeA	*90*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C2 PFHxA	*96*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C4-PFHpA	*96*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C4 PFOA	*91*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C5 PFNA	*94*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C2 PFDA	*98*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C2 PFUnA	*93*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C2 PFDoA	*92*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C2-PFTeDA	*92*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C3-PFBS	*83*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
18O2 PFHxS	*94*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C4 PFOS	*88*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
13C8 FOSA	*81*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
d3-NMeFOSAA	*85*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
d5-NEtFOSAA	*90*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
M2-6:2FTS	*94*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*
M2-8:2FTS	*101*		*25 - 150*	*07/31/18 10:53*	*08/04/18 00:04*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-237151/2-A
Matrix: Water
Analysis Batch: 237938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237151

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	38.7		ng/L		97	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	39.3		ng/L		98	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	38.6		ng/L		96	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	38.1		ng/L		95	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	40.6		ng/L		101	64 - 124
Perfluorononanoic acid (PFNA)	40.0	41.1		ng/L		103	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	38.7		ng/L		97	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	38.0		ng/L		95	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	40.0		ng/L		100	71 - 131
Perfluorotridecanoic Acid (PFTriA)	40.0	40.4		ng/L		101	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	38.7		ng/L		97	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	37.4		ng/L		106	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.8		ng/L		93	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	35.8		ng/L		94	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	36.7		ng/L		99	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	34.5		ng/L		90	68 - 128
Perfluorooctane Sulfonamide (FOSA)	40.0	40.2		ng/L		101	70 - 130
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	42.0		ng/L		105	67 - 127
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	39.6		ng/L		99	65 - 125
6:2 FTS	37.9	37.1		ng/L		98	66 - 126
8:2 FTS	38.3	35.0		ng/L		91	67 - 127

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*93*		*25 - 150*
13C5 PFPeA	*95*		*25 - 150*
13C2 PFHxA	*103*		*25 - 150*
13C4-PFHpA	*101*		*25 - 150*
13C4 PFOA	*94*		*25 - 150*
13C5 PFNA	*97*		*25 - 150*
13C2 PFDA	*105*		*25 - 150*
13C2 PFUnA	*96*		*25 - 150*
13C2 PFDoA	*94*		*25 - 150*
13C2-PFTeDA	*99*		*25 - 150*
13C3-PFBS	*89*		*25 - 150*
18O2 PFHxS	*97*		*25 - 150*
13C4 PFOS	*92*		*25 - 150*
13C8 FOSA	*86*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-237151/2-A
Matrix: Water
Analysis Batch: 237938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237151

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
d3-NMeFOSAA	87		25 - 150
d5-NEtFOSAA	92		25 - 150
M2-6:2FTS	102		25 - 150
M2-8:2FTS	105		25 - 150

Lab Sample ID: LCSD 320-237151/3-A
Matrix: Water
Analysis Batch: 237938

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 237151

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	39.3		ng/L		98	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)			40.0	39.8		ng/L		99	66 - 126	1	30
Perfluorohexanoic acid (PFHxA)			40.0	38.5		ng/L		96	66 - 126	0	30
Perfluoroheptanoic acid (PFHpA)			40.0	39.1		ng/L		98	66 - 126	2	30
Perfluorooctanoic acid (PFOA)			40.0	39.5		ng/L		99	64 - 124	3	30
Perfluorononanoic acid (PFNA)			40.0	39.9		ng/L		100	68 - 128	3	30
Perfluorodecanoic acid (PFDA)			40.0	38.8		ng/L		97	69 - 129	0	30
Perfluoroundecanoic acid (PFUnA)			40.0	40.2		ng/L		100	60 - 120	6	30
Perfluorododecanoic acid (PFDoA)			40.0	37.9		ng/L		95	71 - 131	5	30
Perfluorotridecanoic Acid (PFTriA)			40.0	36.5		ng/L		91	72 - 132	10	30
Perfluorotetradecanoic acid (PFTeA)			40.0	39.5		ng/L		99	68 - 128	2	30
Perfluorobutanesulfonic acid (PFBS)			35.4	38.4		ng/L		109	73 - 133	3	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	32.4		ng/L		89	63 - 123	4	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	36.8		ng/L		97	68 - 128	3	30
Perfluorooctanesulfonic acid (PFOS)			37.1	36.6		ng/L		99	67 - 127	0	30
Perfluorodecanesulfonic acid (PFDS)			38.6	34.9		ng/L		90	68 - 128	1	30
Perfluorooctane Sulfonamide (FOSA)			40.0	41.6		ng/L		104	70 - 130	3	30
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)			40.0	41.0		ng/L		103	67 - 127	2	30
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)			40.0	39.2		ng/L		98	65 - 125	1	30
6:2 FTS			37.9	39.0		ng/L		103	66 - 126	5	30
8:2 FTS			38.3	37.6		ng/L		98	67 - 127	7	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	92		25 - 150
13C5 PFPeA	92		25 - 150
13C2 PFHxA	101		25 - 150
13C4-PFHpA	100		25 - 150
13C4 PFOA	94		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-237151/3-A
Matrix: Water
Analysis Batch: 237938

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 237151

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C5 PFNA	98		25 - 150
13C2 PFDA	101		25 - 150
13C2 PFUnA	94		25 - 150
13C2 PFDoA	98		25 - 150
13C2-PFTeDA	87		25 - 150
13C3-PFBS	84		25 - 150
18O2 PFHxS	98		25 - 150
13C4 PFOS	92		25 - 150
13C8 FOSA	82		25 - 150
d3-NMeFOSAA	83		25 - 150
d5-NEtFOSAA	86		25 - 150
M2-6:2FTS	99		25 - 150
M2-8:2FTS	99		25 - 150

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
*	Isotope Dilution analyte is outside acceptance limits.
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

LCMS

Prep Batch: 237151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41405-1	GC-MW-104 (WG)	Total/NA	Water	3535	
320-41405-2	GC-MW-105 (WG)	Total/NA	Water	3535	
320-41405-3	GC-EQUIPMENT BLANK (072318)	Total/NA	Water	3535	
320-41405-4	GC-MW-2 (WG)	Total/NA	Water	3535	
320-41405-5 - DL	GC-MW-DRAIN (WG)	Total/NA	Water	3535	
320-41405-5	GC-MW-DRAIN (WG)	Total/NA	Water	3535	
MB 320-237151/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-237151/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-237151/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 237938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41405-1	GC-MW-104 (WG)	Total/NA	Water	537 (modified)	237151
320-41405-2	GC-MW-105 (WG)	Total/NA	Water	537 (modified)	237151
320-41405-3	GC-EQUIPMENT BLANK (072318)	Total/NA	Water	537 (modified)	237151
320-41405-4	GC-MW-2 (WG)	Total/NA	Water	537 (modified)	237151
MB 320-237151/1-A	Method Blank	Total/NA	Water	537 (modified)	237151
LCS 320-237151/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	237151
LCSD 320-237151/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	237151

Analysis Batch: 238593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41405-5 - DL	GC-MW-DRAIN (WG)	Total/NA	Water	537 (modified)	237151
320-41405-5	GC-MW-DRAIN (WG)	Total/NA	Water	537 (modified)	237151

Client Sample ID: GC-MW-104 (WG)

Lab Sample ID: 320-41405-1

Date Collected: 07/23/18 12:20

Matrix: Water

Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237151	07/31/18 10:53	MNV	TAL SAC
Total/NA	Analysis	537 (modified)		1	237938	08/04/18 00:27	S1M	TAL SAC

Client Sample ID: GC-MW-105 (WG)

Lab Sample ID: 320-41405-2

Date Collected: 07/23/18 13:10

Matrix: Water

Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237151	07/31/18 10:53	MNV	TAL SAC
Total/NA	Analysis	537 (modified)		1	237938	08/04/18 00:35	S1M	TAL SAC

Client Sample ID: GC-EQUIPMENT BLANK (072318)

Lab Sample ID: 320-41405-3

Date Collected: 07/23/18 09:15

Matrix: Water

Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237151	07/31/18 10:53	MNV	TAL SAC
Total/NA	Analysis	537 (modified)		1	237938	08/04/18 00:51	S1M	TAL SAC

Client Sample ID: GC-MW-2 (WG)

Lab Sample ID: 320-41405-4

Date Collected: 07/23/18 13:25

Matrix: Water

Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237151	07/31/18 10:53	MNV	TAL SAC
Total/NA	Analysis	537 (modified)		1	237938	08/04/18 00:58	S1M	TAL SAC

Client Sample ID: GC-MW-DRAIN (WG)

Lab Sample ID: 320-41405-5

Date Collected: 07/23/18 12:15

Matrix: Water

Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	DL		237151	07/31/18 10:53	MNV	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10	238593	08/07/18 22:19	ABH	TAL SAC
Total/NA	Prep	3535			237151	07/31/18 10:53	MNV	TAL SAC
Total/NA	Analysis	537 (modified)		1	238593	08/07/18 22:27	ABH	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-41405-1

Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD ELAP		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	10-31-18
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
GC-MW-DRAIN (WG)	320-41405-5	28	54	104	69	76	140	197 *	91

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5 PFPeA	25-150
PFBS = 13C3-PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4-PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFNA #	PFDA #	PFOSA #	d3NMFOS #	d5NEFOS #	PFDoA #	PFTDA #
GC-MW-DRAIN (WG)	320-41405-5	123	140	101	98	134	139	85

	QC LIMITS
PFNA = 13C5 PFNA	25-150
PFDA = 13C2 PFDA	25-150
PFOSA = 13C8 FOSA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFDoA = 13C2 PFDoA	25-150
PFTDA = 13C2-PFTeDA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
GC-MW-104 (WG)	320-41405-1	68	79	83	91	96	93	104	96
GC-MW-105 (WG)	320-41405-2	59	65	66	76	80	76	82	77
GC-EQUIPMENT BLANK (072318)	320-41405-3	95	101	89	110	100	97	104	99
GC-MW-2 (WG)	320-41405-4	69	81	86	96	100	98	115	95
	MB 320-237151/1-A	80	90	83	96	96	94	94	91
	LCS 320-237151/2-A	93	95	89	103	101	97	102	94
	LCSD 320-237151/3-A	92	92	84	101	100	98	99	94

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5 PFPeA	25-150
PFBS = 13C3-PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4-PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFNA #	PFOS #	M282FTS #	PFDA #	PFOSA #	d3NMFOS #	d5NEFOS #	PFUnA #
GC-MW-104 (WG)	320-41405-1	99	90	111	107	87	92	93	98
GC-MW-105 (WG)	320-41405-2	81	75	90	88	71	70	67	74
GC-EQUIPMENT BLANK (072318)	320-41405-3	101	94	108	110	86	92	92	98
GC-MW-2 (WG)	320-41405-4	102	96	120	114	93	98	98	106
	MB 320-237151/1-A	94	88	101	98	81	85	90	93
	LCS 320-237151/2-A	97	92	105	105	86	87	92	96
	LCSD 320-237151/3-A	98	92	99	101	82	83	86	94

	QC LIMITS
PFNA = 13C5 PFNA	25-150
PFOS = 13C4 PFOS	25-150
M282FTS = M2-8:2FTS	25-150
PFDA = 13C2 PFDA	25-150
PFOSA = 13C8 FOSA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFDoA #	PFTDA #
GC-MW-104 (WG)	320-41405-1	99	99
GC-MW-105 (WG)	320-41405-2	62	52
GC-EQUIPMENT BLANK (072318)	320-41405-3	100	93
GC-MW-2 (WG)	320-41405-4	106	104
	MB 320-237151/1-A	92	92
	LCS 320-237151/2-A	94	99
	LCSD 320-237151/3-A	98	87

	QC LIMITS
PFDoA = 13C2 PFDoA	25-150
PFTDA = 13C2-PFTeDA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFOS #	M282FTS #	PFUnA #
GC-MW-DRAIN (WG) DL	320-41405-5 DL	101	184 *	107

	QC LIMITS
PFOS = 13C4 PFOS	25-150
M282FTS = M2-8:2FTS	25-150
PFUnA = 13C2 PFUnA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.03LLC_007.d

Lab ID: LCS 320-237151/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	38.7	97	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	39.3	98	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	38.6	96	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	38.1	95	66-126	
Perfluorooctanoic acid (PFOA)	40.0	40.6	101	64-124	
Perfluorononanoic acid (PFNA)	40.0	41.1	103	68-128	
Perfluorodecanoic acid (PFDA)	40.0	38.7	97	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	38.0	95	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	40.0	100	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	40.4	101	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	38.7	97	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	37.4	106	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.8	93	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	35.8	94	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.7	99	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	34.5	90	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	40.2	101	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	42.0	105	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	39.6	99	65-125	
6:2 FTS	37.9	37.1	98	66-126	
8:2 FTS	38.3	35.0	91	67-127	
13C4 PFBA	100	93.1	93	25-150	
13C5 PFPeA	100	95.2	95	25-150	
13C2 PFHxA	100	103	103	25-150	
13C4-PFHpA	100	101	101	25-150	
13C4 PFOA	100	93.7	94	25-150	
13C5 PFNA	100	96.7	97	25-150	
13C2 PFDA	100	105	105	25-150	
13C2 PFUnA	100	96.5	96	25-150	
13C2 PFDoA	100	94.3	94	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.03LLC_007.d

Lab ID: LCS 320-237151/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
13C2-PFTeDA	100	98.9	99	25-150	
13C3-PFBS	93.0	82.9	89	25-150	
18O2 PFHxS	94.6	91.5	97	25-150	
13C4 PFOS	95.6	88.1	92	25-150	
13C8 FOSA	100	85.9	86	25-150	
d3-NMeFOSAA	100	87.1	87	25-150	
d5-NEtFOSAA	100	91.9	92	25-150	
M2-6:2FTS	95.0	96.8	102	25-150	
M2-8:2FTS	95.8	100	105	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.03LLC_008.d

Lab ID: LCSD 320-237151/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	39.3	98	1	30	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	39.8	99	1	30	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	38.5	96	0	30	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	39.1	98	2	30	66-126	
Perfluorooctanoic acid (PFOA)	40.0	39.5	99	3	30	64-124	
Perfluorononanoic acid (PFNA)	40.0	39.9	100	3	30	68-128	
Perfluorodecanoic acid (PFDA)	40.0	38.8	97	0	30	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	40.2	100	6	30	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	37.9	95	5	30	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	36.5	91	10	30	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	39.5	99	2	30	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	38.4	109	3	30	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.4	89	4	30	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.8	97	3	30	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.6	99	0	30	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	34.9	90	1	30	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	41.6	104	3	30	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	41.0	103	2	30	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	39.2	98	1	30	65-125	
6:2 FTS	37.9	39.0	103	5	30	66-126	
8:2 FTS	38.3	37.6	98	7	30	67-127	
13C4 PFBA	100	91.6	92			25-150	
13C5 PFPeA	100	91.6	92			25-150	
13C2 PFHxA	100	101	101			25-150	
13C4-PFHpA	100	100	100			25-150	
13C4 PFOA	100	93.8	94			25-150	
13C5 PFNA	100	97.8	98			25-150	
13C2 PFDA	100	101	101			25-150	
13C2 PFUnA	100	94.4	94			25-150	
13C2 PFDoA	100	97.8	98			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.08.03LLC_008.d

Lab ID: LCSD 320-237151/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
13C2-PFTeDA	100	87.3	87			25-150	
13C3-PFBS	93.0	78.1	84			25-150	
18O2 PFHxS	94.6	93.1	98			25-150	
13C4 PFOS	95.6	87.6	92			25-150	
13C8 FOSA	100	82.2	82			25-150	
d3-NMeFOSAA	100	83.5	83			25-150	
d5-NEtFOSAA	100	85.9	86			25-150	
M2-6:2FTS	95.0	93.9	99			25-150	
M2-8:2FTS	95.8	94.4	99			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab File ID: 2018.08.03LLC_006.d Lab Sample ID: MB 320-237151/1-A

Matrix: Water Date Extracted: 07/31/2018 10:53

Instrument ID: A8_N Date Analyzed: 08/04/2018 00:04

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-237151/2-A	2018.08.03LLC_007.d	08/04/2018 00:11
	LCSD 320-237151/3-A	2018.08.03LLC_008.d	08/04/2018 00:19
GC-MW-104 (WG)	320-41405-1	2018.08.03LLC_009.d	08/04/2018 00:27
GC-MW-105 (WG)	320-41405-2	2018.08.03LLC_010.d	08/04/2018 00:35
GC-EQUIPMENT BLANK (072318)	320-41405-3	2018.08.03LLC_012.d	08/04/2018 00:51
GC-MW-2 (WG)	320-41405-4	2018.08.03LLC_013.d	08/04/2018 00:58
GC-MW-DRAIN (WG) DL	320-41405-5 DL	2018.08.07LLBB_063.d	08/07/2018 22:19
GC-MW-DRAIN (WG)	320-41405-5	2018.08.07LLBB_064.d	08/07/2018 22:27

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Sample No.: IC 320-237401/5 Date Analyzed: 08/01/2018 13:22

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.08.01LLICAL_00 Heated Purge: (Y/N) N

Calibration ID: 40448

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		3424441	2.58				
UPPER LIMIT		5136662	2.78				
LOWER LIMIT		1712221	2.38				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-237401/9		3483672	2.58				
ICV 320-237401/10		3437702	2.57				
CCV 320-237938/3 CCVIS		3538264	2.57				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Sample No.: CCV 320-237938/3 Date Analyzed: 08/03/2018 23:56

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.08.03LLC_005.d Heated Purge: (Y/N) N

Calibration ID: 40448

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		3538264	2.57				
UPPER LIMIT		5307396	2.77				
LOWER LIMIT		1769132	2.37				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-237938/1		3514514	2.57				
CCVL 320-237938/2		3380924	2.56				
MB 320-237151/1-A		3993576	2.56				
LCS 320-237151/2-A		3775478	2.56				
LCSD 320-237151/3-A		3884985	2.56				
320-41405-1	GC-MW-104 (WG)	3658982	2.57				
320-41405-2	GC-MW-105 (WG)	3867667	2.56				
320-41405-3	GC-EQUIPMENT BLANK (072318)	3648497	2.56				
320-41405-4	GC-MW-2 (WG)	3559241	2.56				
CCV 320-237938/14		3344395	2.57				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Sample No.: IC 320-238192/5 Date Analyzed: 08/06/2018 11:33

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.08.06LLICAL_00 Heated Purge: (Y/N) N

Calibration ID: 40492

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		3997336	2.57				
UPPER LIMIT		5996004	2.77				
LOWER LIMIT		1998668	2.37				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-238192/9		4092642	2.57				
ICV 320-238192/10		3797956	2.57				
CCV 320-238518/3 CCVIS		4015152	2.57				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Sample No.: CCV 320-238518/3 Date Analyzed: 08/07/2018 14:53

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2018.08.07LLB_006.d Heated Purge: (Y/N) N

Calibration ID: 40492

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		4015152	2.57				
UPPER LIMIT		6022728	2.77				
LOWER LIMIT		2007576	2.37				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-238518/1		4051776	2.57				
CCVL 320-238518/2		4027471	2.57				
CCV 320-238593/1		3895856	2.57				
320-41405-5 DL	GC-MW-DRAIN (WG) DL	401920*	2.57				
320-41405-5	GC-MW-DRAIN (WG)	1621530*	2.56				
CCV 320-238593/4		3658036	2.57				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-104 (WG) | Lab Sample ID: 320-41405-1

Matrix: Water | Lab File ID: 2018.08.03LLC_009.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 12:20

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 275.7(mL) | Date Analyzed: 08/04/2018 00:27

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	8.9		1.8	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	13		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	14		1.8	0.53
375-85-9	Perfluoroheptanoic acid (PFHpA)	7.5		1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	28		1.8	0.77
375-95-1	Perfluorononanoic acid (PFNA)	1.9		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	1.3	J	1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.1		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.0	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.46	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	13		1.8	0.49
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2 FTS	2.3	J	18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-104 (WG) | Lab Sample ID: 320-41405-1

Matrix: Water | Lab File ID: 2018.08.03LLC_009.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 12:20

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 275.7(mL) | Date Analyzed: 08/04/2018 00:27

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	68		25-150
STL01893	13C5 PFPeA	79		25-150
STL00993	13C2 PFHxA	91		25-150
STL01892	13C4-PFHpA	96		25-150
STL00990	13C4 PFOA	96		25-150
STL00995	13C5 PFNA	99		25-150
STL00996	13C2 PFDA	107		25-150
STL00997	13C2 PFUnA	98		25-150
STL00998	13C2 PFDoA	99		25-150
STL02116	13C2-PFTeDA	99		25-150
STL02337	13C3-PFBS	83		25-150
STL00994	18O2 PFHxS	93		25-150
STL00991	13C4 PFOS	90		25-150
STL01056	13C8 FOSA	87		25-150
STL02118	d3-NMeFOSAA	92		25-150
STL02117	d5-NEtFOSAA	93		25-150
STL02279	M2-6:2FTS	104		25-150
STL02280	M2-8:2FTS	111		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_009.d
Lims ID: 320-41405-A-1-A
Client ID: GC-MW-104 (WG)
Sample Type: Client
Inject. Date: 04-Aug-2018 00:27:37 ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-41405-a-1-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 10:57:16 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK036

First Level Reviewer: hannigana Date: 06-Aug-2018 10:45:36

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.391	0.0	0.541	3599578	1.71		68.3	69210	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.391	1.396	-0.005	1.000	347193	0.2447			135	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.632	1.632	0.0	0.635	2756957	1.99		79.5	48478	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.632	1.632	0.0	1.000	480998	0.3643			166	
D 47 13C3-PFBS										
301.90 > 83.00	1.665	1.665	0.0	0.647	77399	1.94		83.4	301	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.665	1.665	0.0	1.000	497489	0.1950			409	
298.90 > 99.00	1.665	1.665	0.0	1.000	205707		2.42(1.25-3.74)		576	
D 7 13C2 PFHxA										
315.00 > 270.00	1.894	1.905	-0.011	0.737	3396975	2.26		90.5	108452	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.905	1.905	0.0	1.006	553892	0.3865			604	
313.00 > 119.00	1.905	1.905	0.0	1.006	47338		11.70(5.03-15.10)		699	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.217	0.0	0.862	3507497	2.41		96.4	78915	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.217	2.217	0.0	1.000	337953	0.2077			161	
363.00 > 169.00	2.217	2.217	0.0	1.000	137813		2.45(1.13-3.40)		1739	
D 11 18O2 PFHxS										
403.00 > 84.00	2.228	2.228	0.0	0.866	4787453	2.19		92.6	76835	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.228	2.229	-0.001	1.000	131618	0.0562			137	
399.00 > 99.00	2.228	2.229	-0.001	1.000	44373		2.97(1.50-4.49)		92.2	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.545	2.545	0.0	0.990	1055209	2.48		104	7014	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.545	2.546	-0.001	1.000	45586	0.0620			823	
* 62 13C2-PFOA										
415.00 > 370.00	2.572	2.564	0.008		3658982	2.50			84488	
D 14 13C4 PFOA										
417.00 > 372.00	2.572	2.572	0.0	1.000	3372064	2.40		96.0	86957	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.572	2.572	0.0	1.000	1186156	0.7606			833	
413.00 > 169.00	2.572	2.572	0.0	1.000	647145		1.83(0.84-2.52)		4742	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.580	2.572	0.008	0.880	24037	0.0128			70.4	
449.00 > 99.00	2.580	2.572	0.008	0.880	5014		4.79(1.94-5.82)		38.6	M
D 19 13C5 PFNA										
468.00 > 423.00	2.931	2.931	0.0	1.140	3043236	2.49		99.4	57773	
D 18 13C4 PFOS										
503.00 > 80.00	2.931	2.931	0.0	1.140	3244378	2.15		89.9	28384	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.931	2.931	0.0	1.000	549768	0.3607			2229	M
499.00 > 99.00	2.931	2.931	0.0	1.000	102243		5.38(2.31-6.93)		719	
20 Perfluorononanoic acid										
463.00 > 419.00	2.931	2.931	0.0	1.000	69370	0.0528			154	
463.00 > 169.00	2.931	2.931	0.0	1.000	17018		4.08(1.90-5.69)		395	
D 26 M2-8:2FTS										
529.00 > 81.00	3.276	3.276	0.0	1.274	1106488	2.66		111	17434	
D 23 13C2 PFDA										
515.00 > 470.00	3.291	3.283	0.008	1.280	2456887	2.68		107	61267	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.291	3.283	0.008	1.000	38632	0.0368			65.1	M
513.00 > 169.00	3.283	3.283	0.0	0.998	5980		6.46(2.36-7.09)		145	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.314	3.307	0.007	1.000	3086	0.001618			39.0	
D 21 13C8 FOSA										
506.00 > 78.00	3.314	3.314	0.0	1.289	4829994	2.18		87.1	55553	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.439	3.439	0.0	1.337	512383	2.31		92.2	13927	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.600	3.611	-0.011	1.400	550842	2.31		92.5	5978	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.611	0.0	1.404	1725656	2.45		97.9	36678	
D 36 13C2 PFDoA										
615.00 > 570.00	3.899	3.909	-0.010	1.516	1504668	2.46		98.6	20848	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.394	0.0	1.709	1272354	2.48		99.3	6373	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 06-Aug-2018 11:01:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_009.d

Injection Date: 04-Aug-2018 00:27:37 Instrument ID: A8_N

Lims ID: 320-41405-A-1-A Lab Sample ID: 320-41405-1

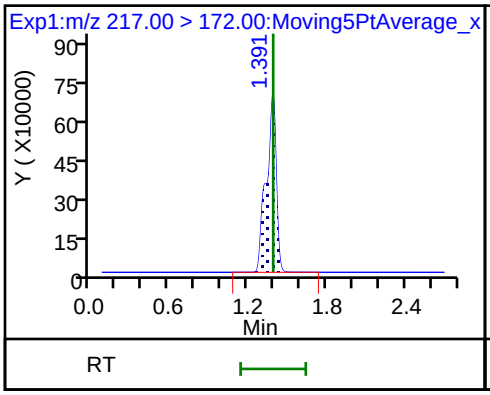
Client ID: GC-MW-104 (WG)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 4 Worklist Smp#: 7

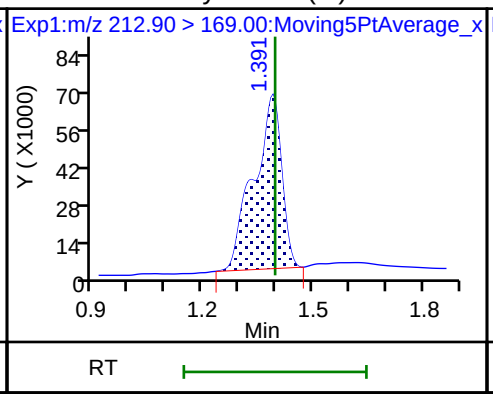
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

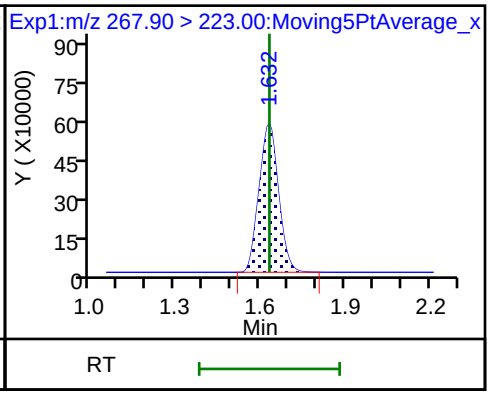
D 1 13C4 PFBA



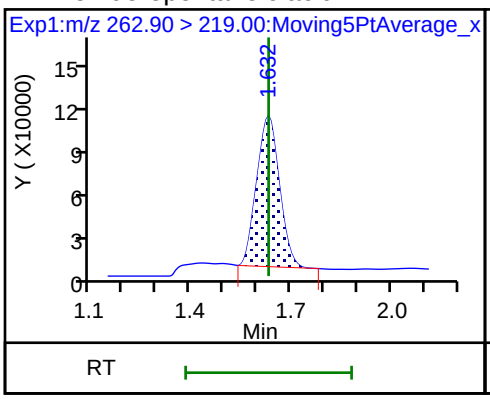
2 Perfluorobutyric acid (M)



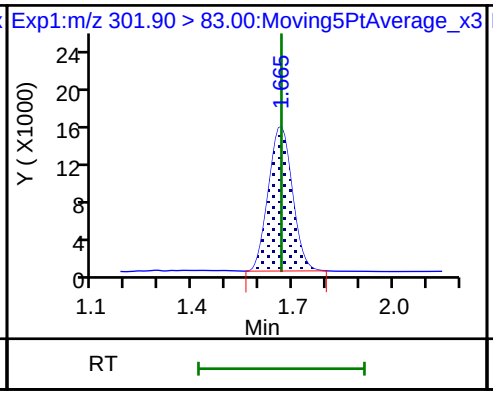
D 3 13C5-PFPeA



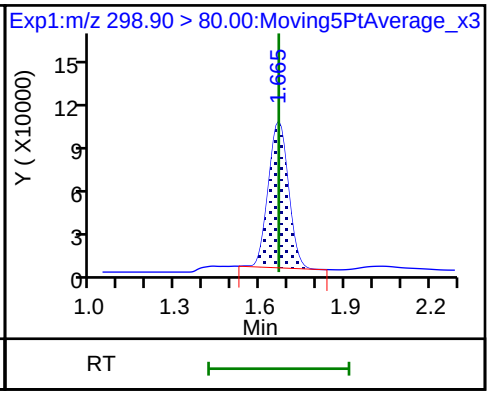
4 Perfluoropentanoic acid



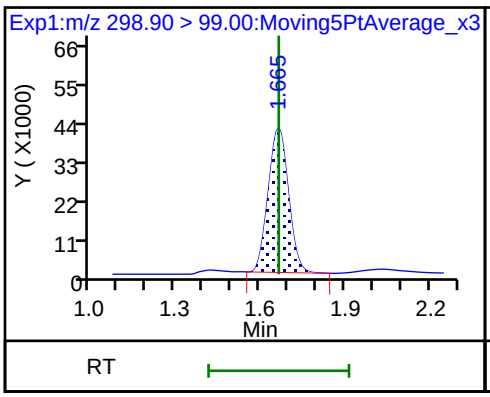
D 47 13C3-PFBS



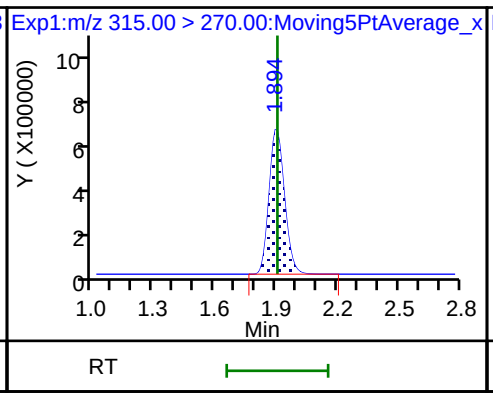
5 Perfluorobutanesulfonic acid



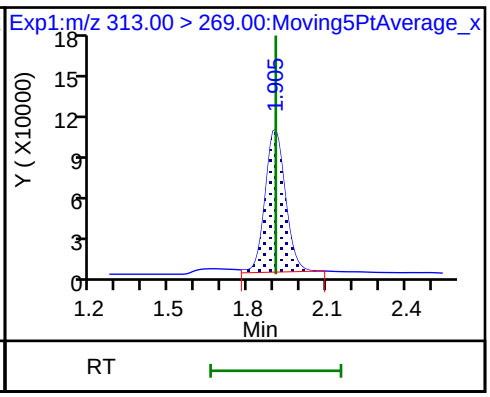
5 Perfluorobutanesulfonic acid



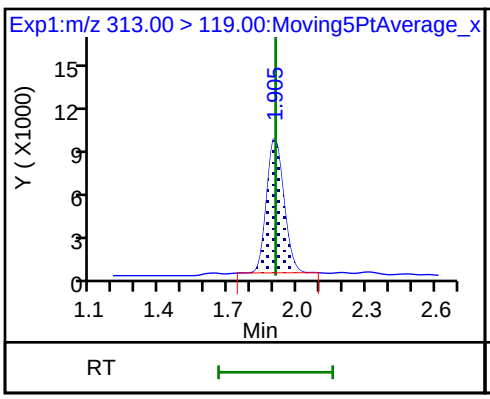
D 7 13C2 PFHxA



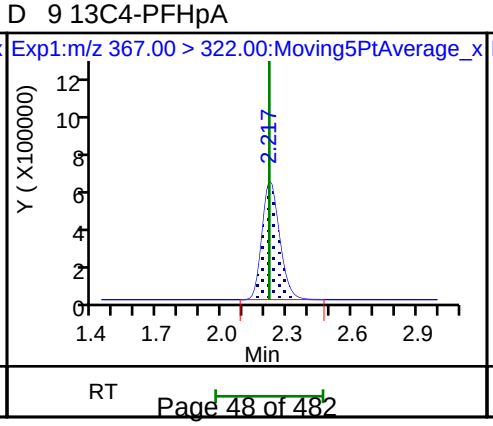
6 Perfluorohexanoic acid



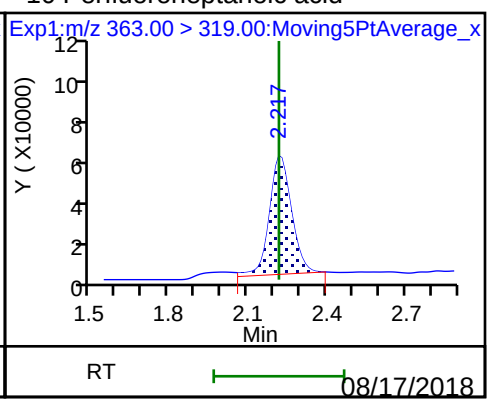
6 Perfluorohexanoic acid



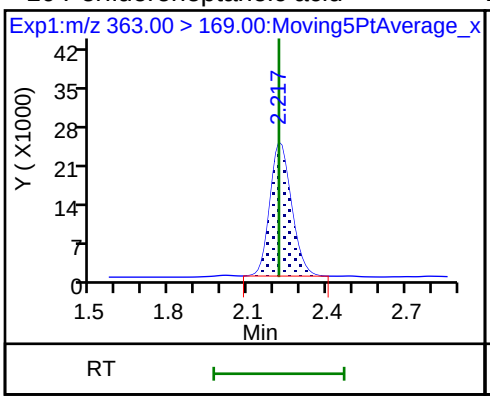
D 9 13C4-PFHpA



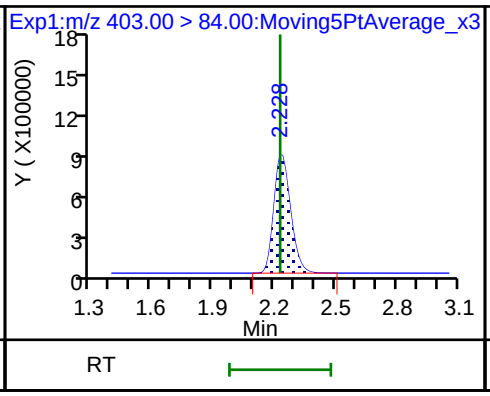
10 Perfluoroheptanoic acid



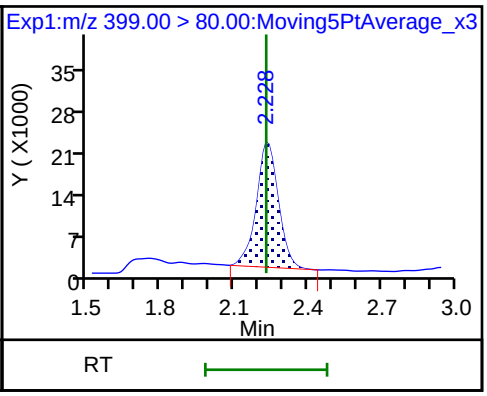
10 Perfluoroheptanoic acid



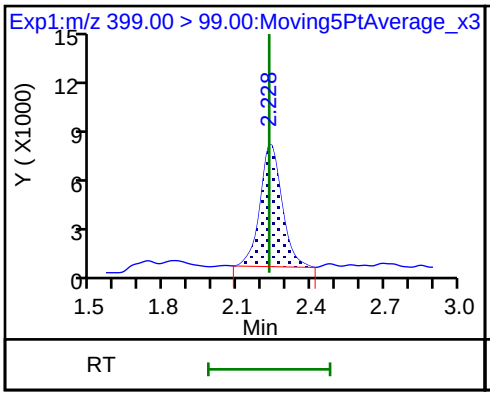
D 11 18O2 PFHxS



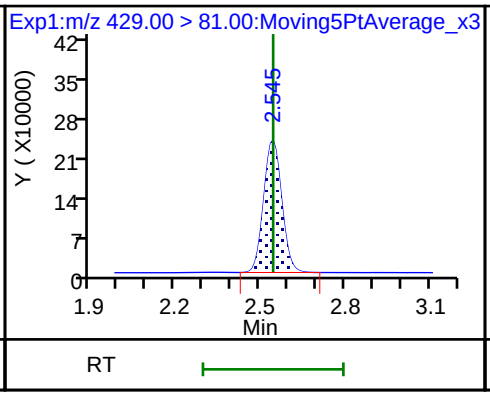
8 Perfluorohexanesulfonic acid



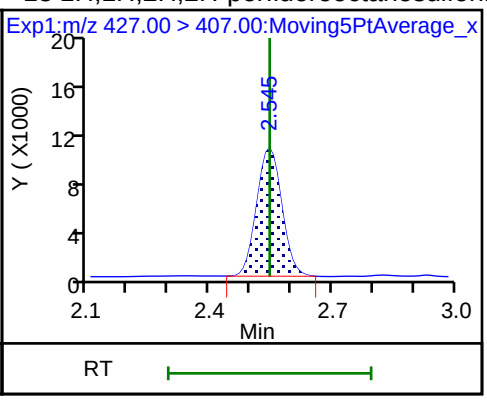
8 Perfluorohexanesulfonic acid



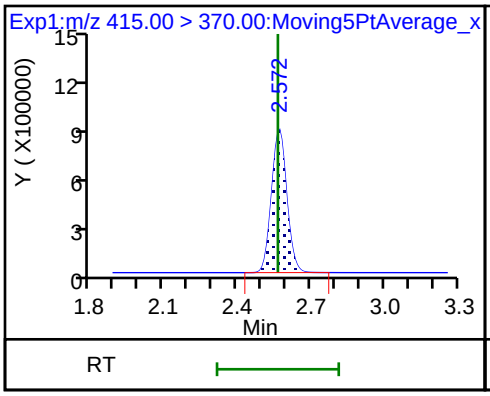
D 12 M2-6:2FTS



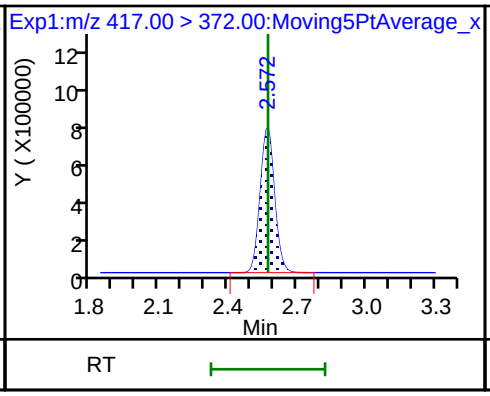
13 1H,1H,2H,2H-perfluorooctanesulfoni



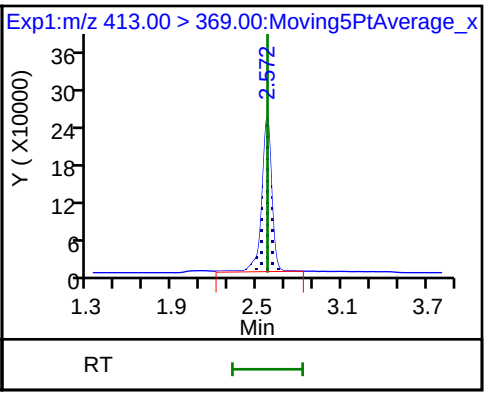
* 62 13C2-PFOA



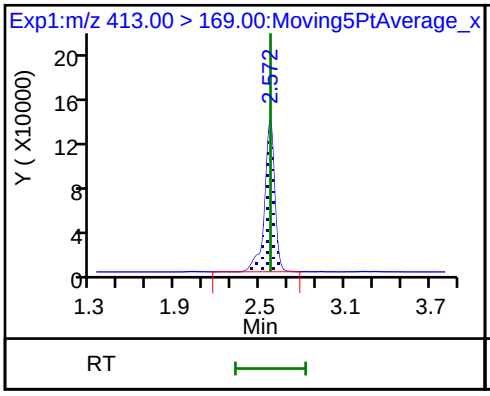
D 14 13C4 PFOA



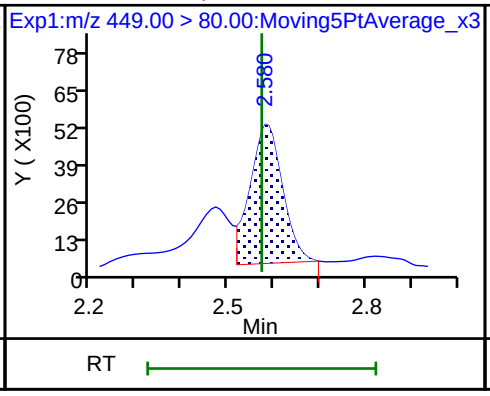
15 Perfluorooctanoic acid



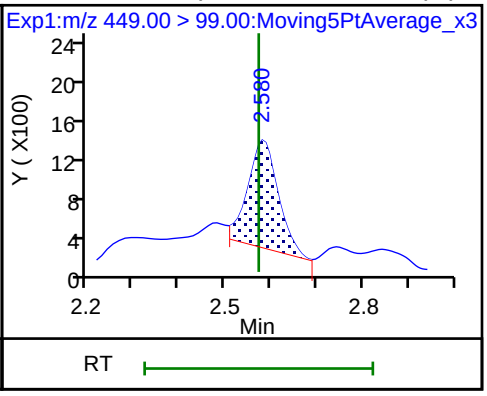
15 Perfluorooctanoic acid



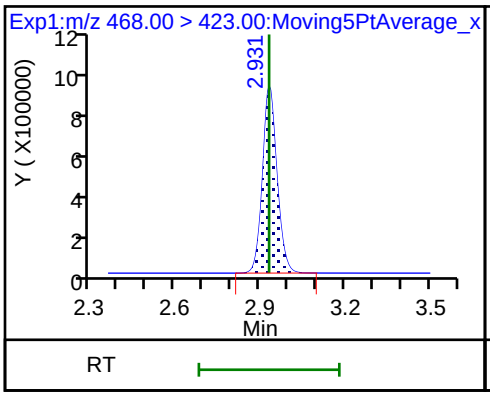
16 Perfluoroheptanesulfonic acid



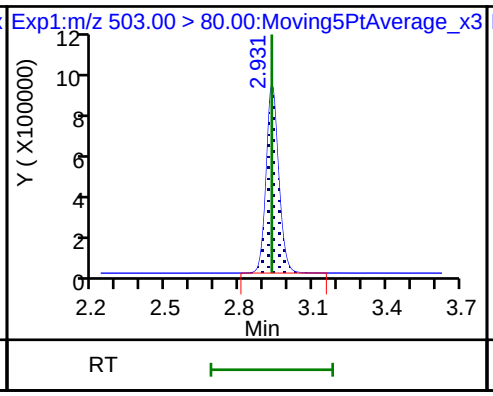
16 Perfluoroheptanesulfonic acid (M)



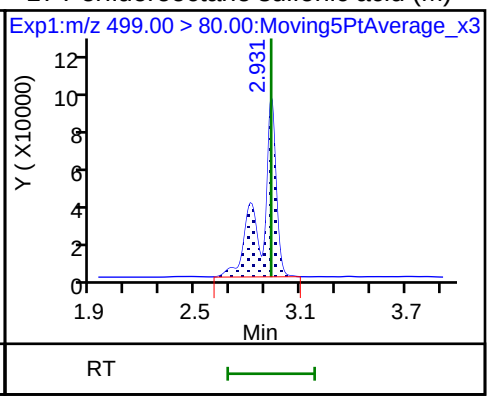
D 19 13C5 PFNA



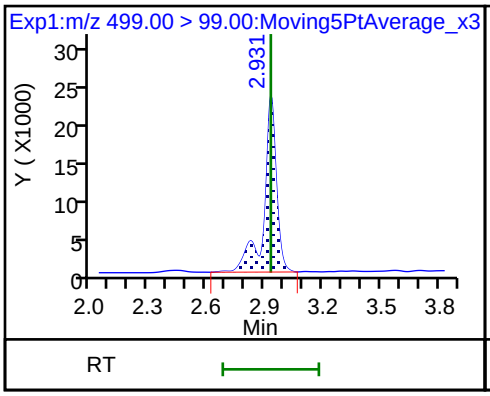
D 18 13C4 PFOS



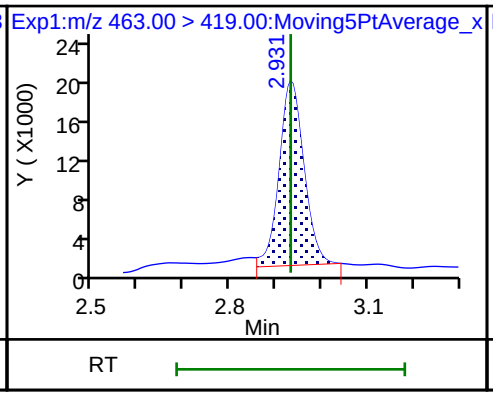
17 Perfluorooctane sulfonic acid (M)



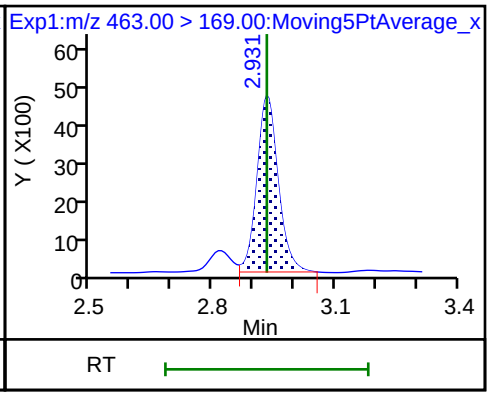
17 Perfluorooctane sulfonic acid



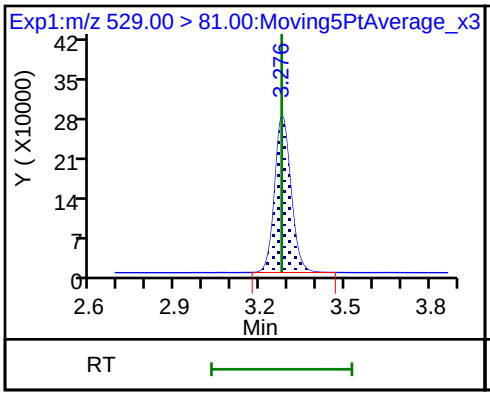
20 Perfluorononanoic acid



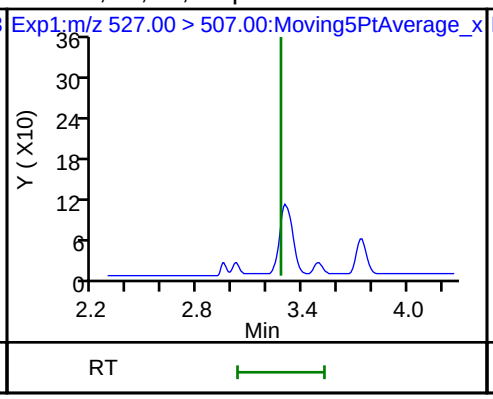
20 Perfluorononanoic acid



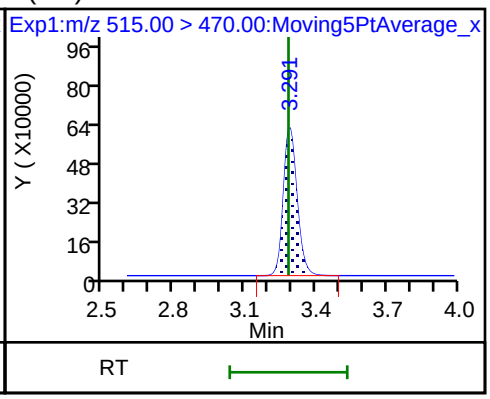
D 26 M2-8:2FTS



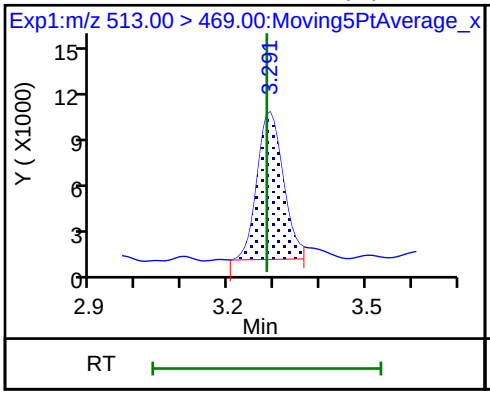
25 1H,1H,2H,2H-perfluorodecanesulfonic acid (M)



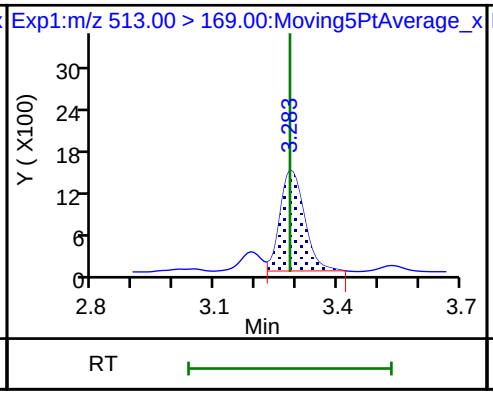
D 28 13C2 PFDA



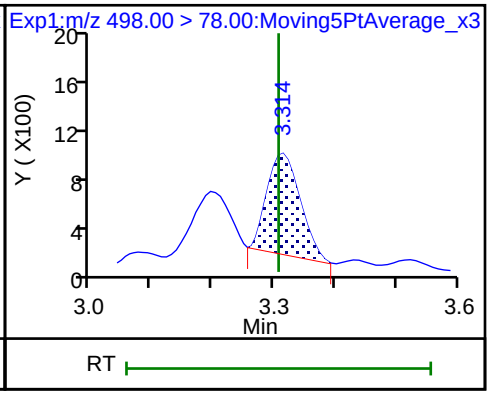
24 Perfluorodecanoic acid (M)



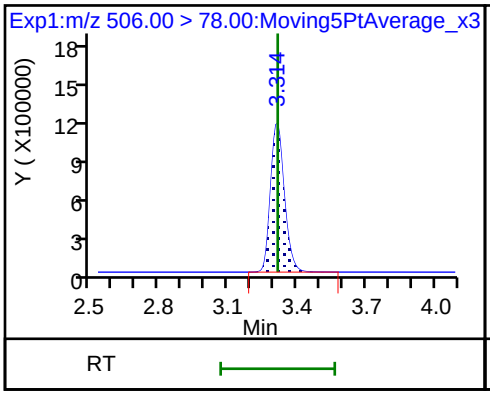
24 Perfluorodecanoic acid



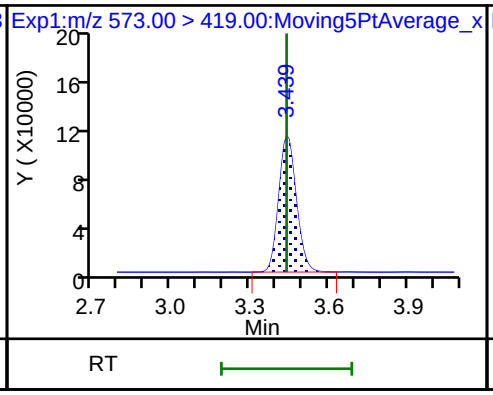
22 Perfluorooctane Sulfonamide



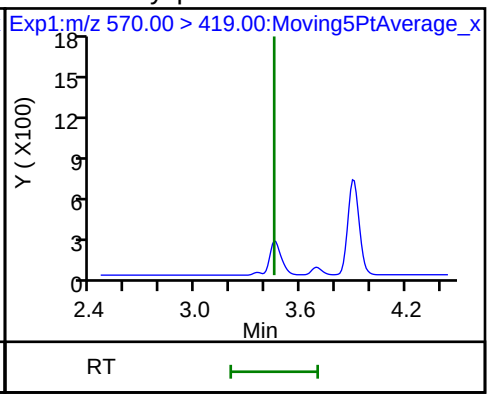
D 21 13C8 FOSA



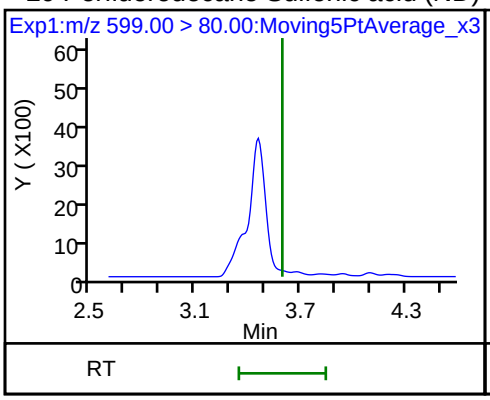
D 27 d3-NMeFOSAA



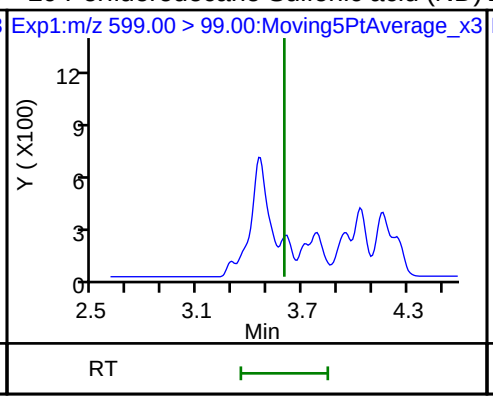
28 N-methyl perfluorooctane sulfonami (ND)



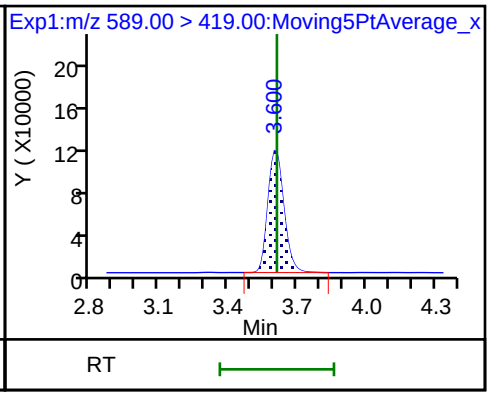
29 Perfluorodecane Sulfonic acid (ND)



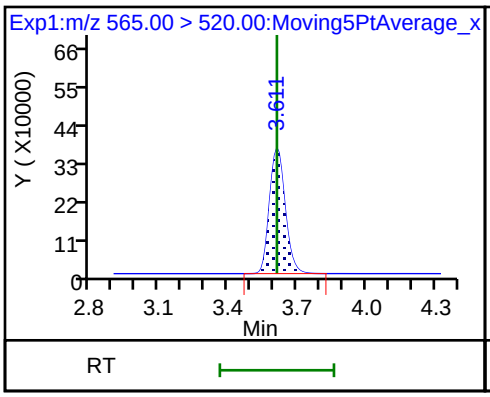
29 Perfluorodecane Sulfonic acid (ND)



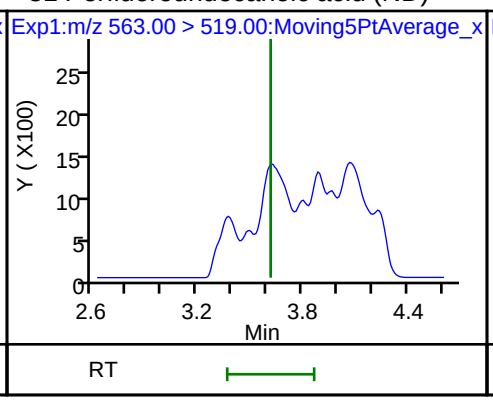
D 32 d5-NEtFOSAA



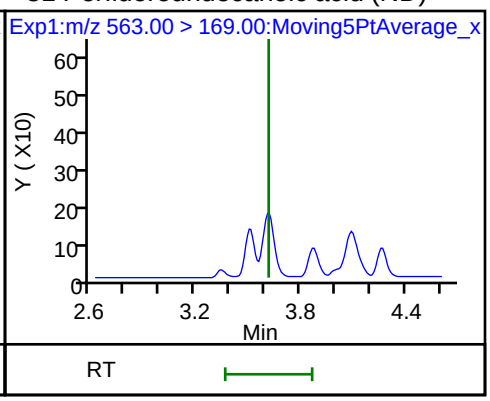
D 30 13C2 PFUnA



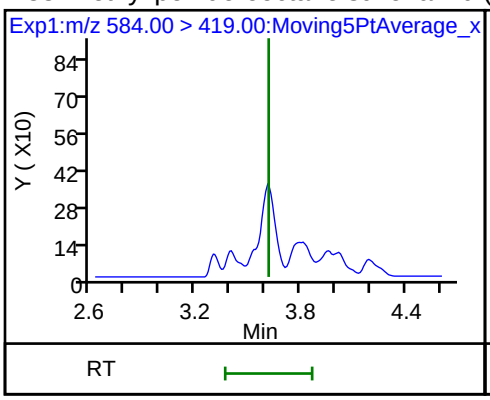
31 Perfluoroundecanoic acid (ND)



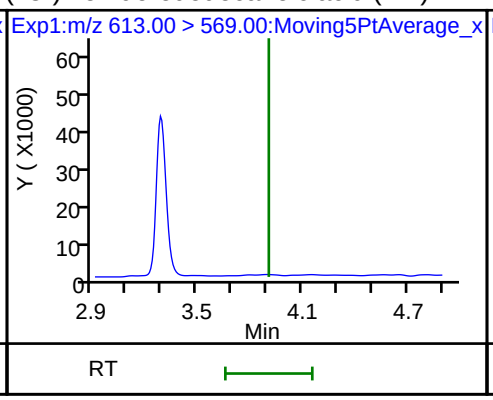
31 Perfluoroundecanoic acid (ND)



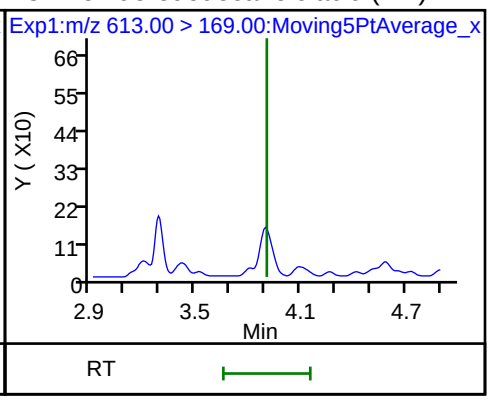
33 N-ethyl perfluorooctane sulfonamid (ND)



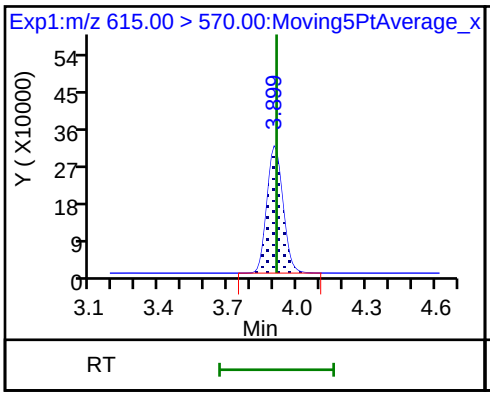
37 Perfluorododecanoic acid (ND)



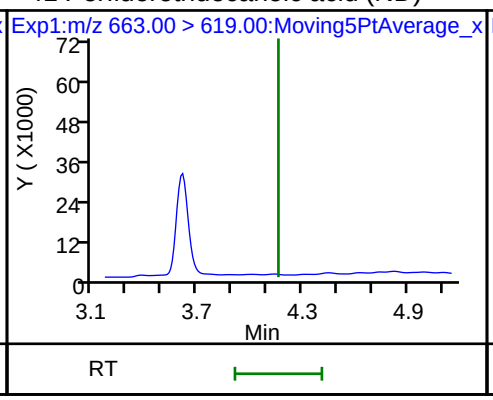
37 Perfluorododecanoic acid (ND)



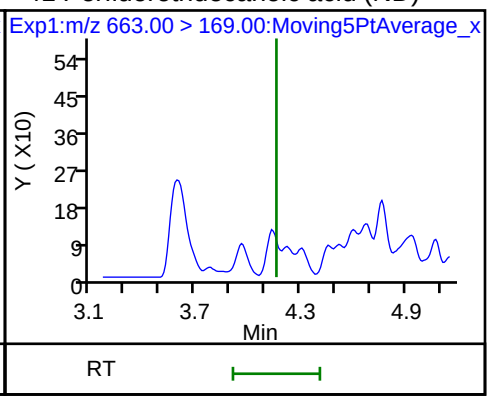
D 36 13C2 PFDoA



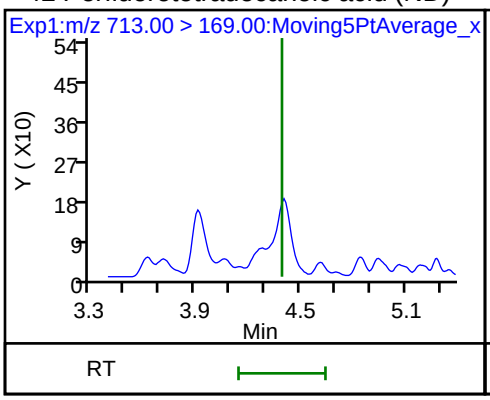
41 Perfluorotridecanoic acid (ND)



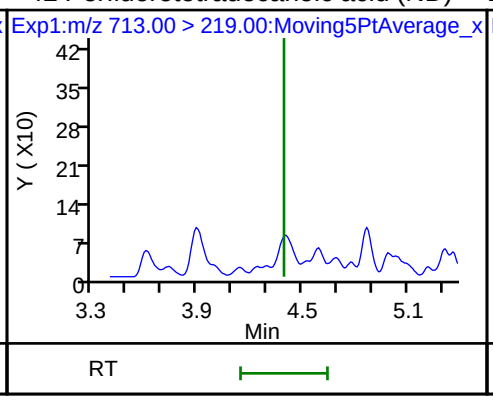
41 Perfluorotridecanoic acid (ND)



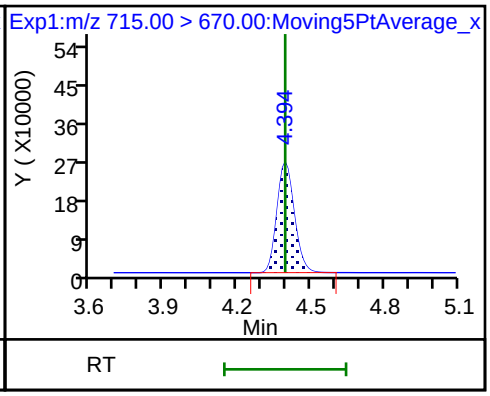
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

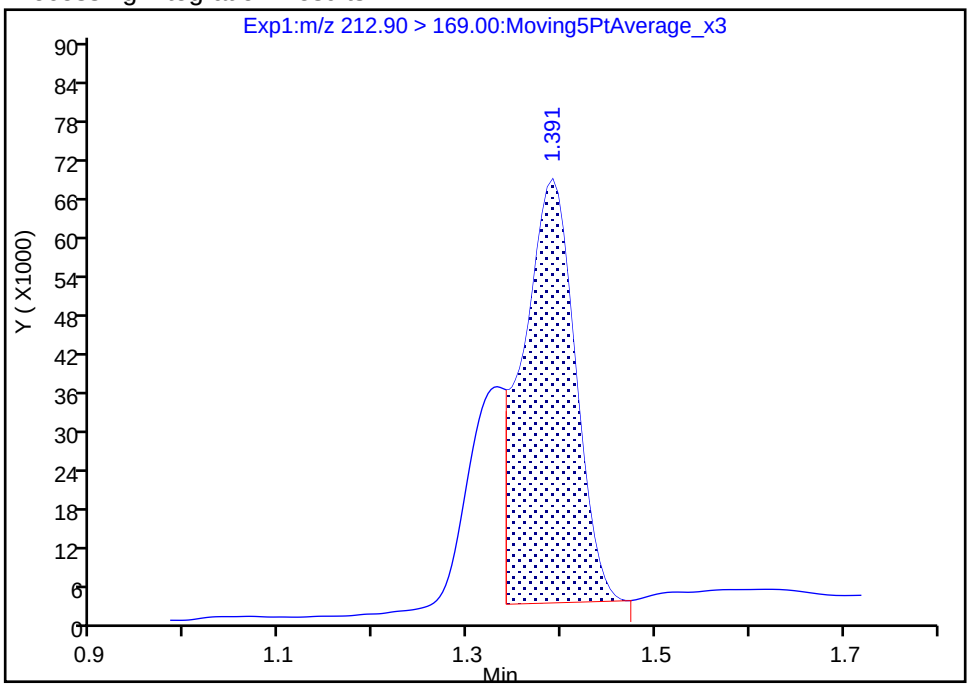
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_009.d				
Injection Date:	04-Aug-2018 00:27:37	Instrument ID:	A8_N		
Lims ID:	320-41405-A-1-A	Lab Sample ID:	320-41405-1		
Client ID:	GC-MW-104 (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

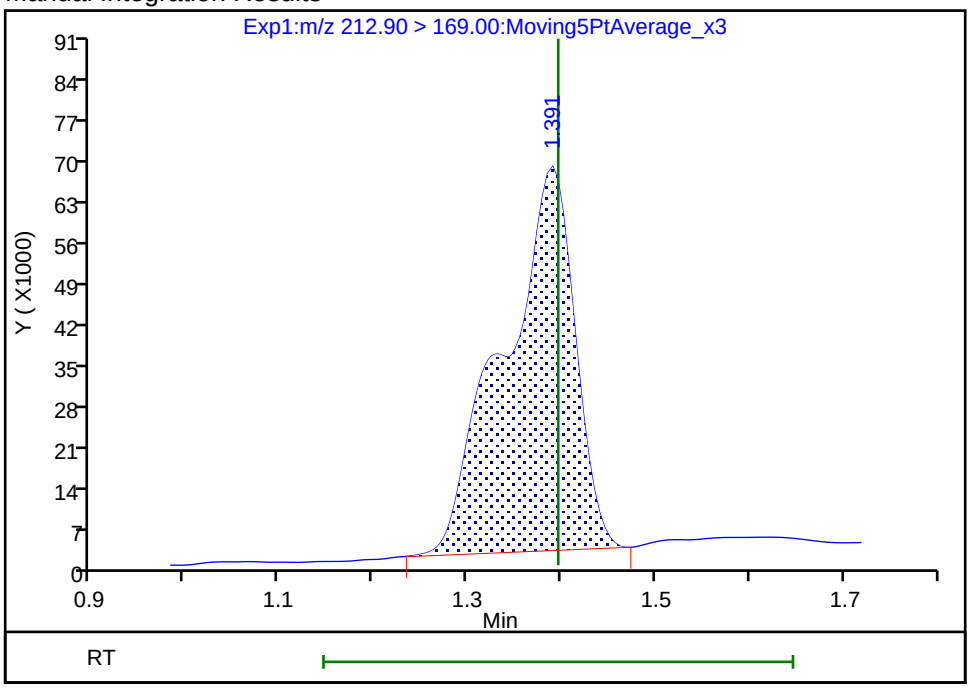
Processing Integration Results

RT: 1.39
Area: 252745
Amount: 0.178129
Amount Units: ng/ml



Manual Integration Results

RT: 1.39
Area: 347193
Amount: 0.244694
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:44:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

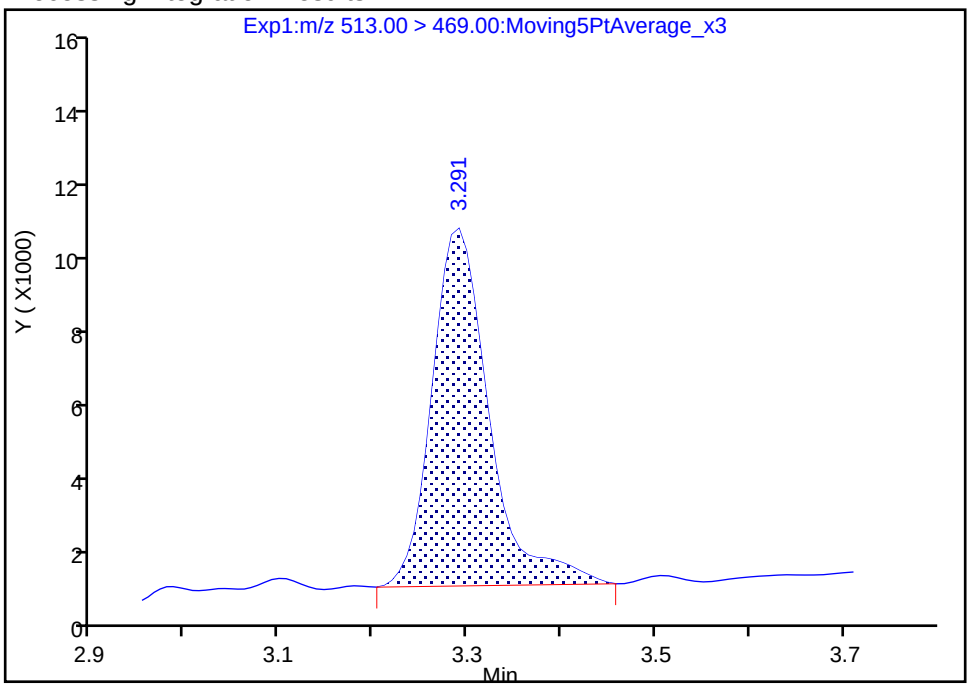
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_009.d				
Injection Date:	04-Aug-2018 00:27:37	Instrument ID:	A8_N		
Lims ID:	320-41405-A-1-A	Lab Sample ID:	320-41405-1		
Client ID:	GC-MW-104 (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

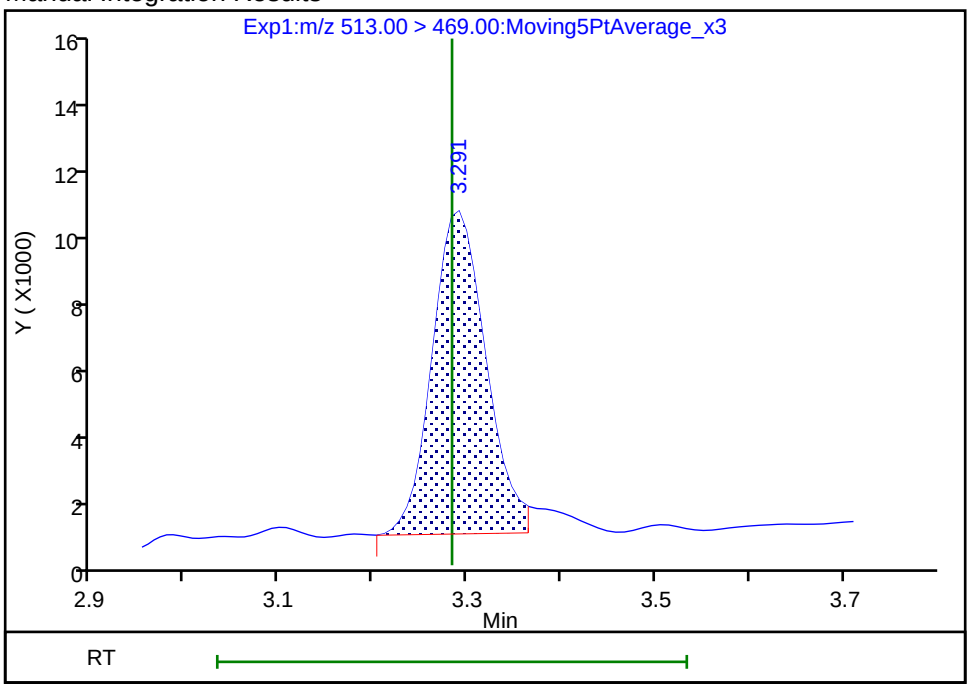
Processing Integration Results

RT: 3.29
Area: 41148
Amount: 0.039227
Amount Units: ng/ml



Manual Integration Results

RT: 3.29
Area: 38632
Amount: 0.036828
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:45:16

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

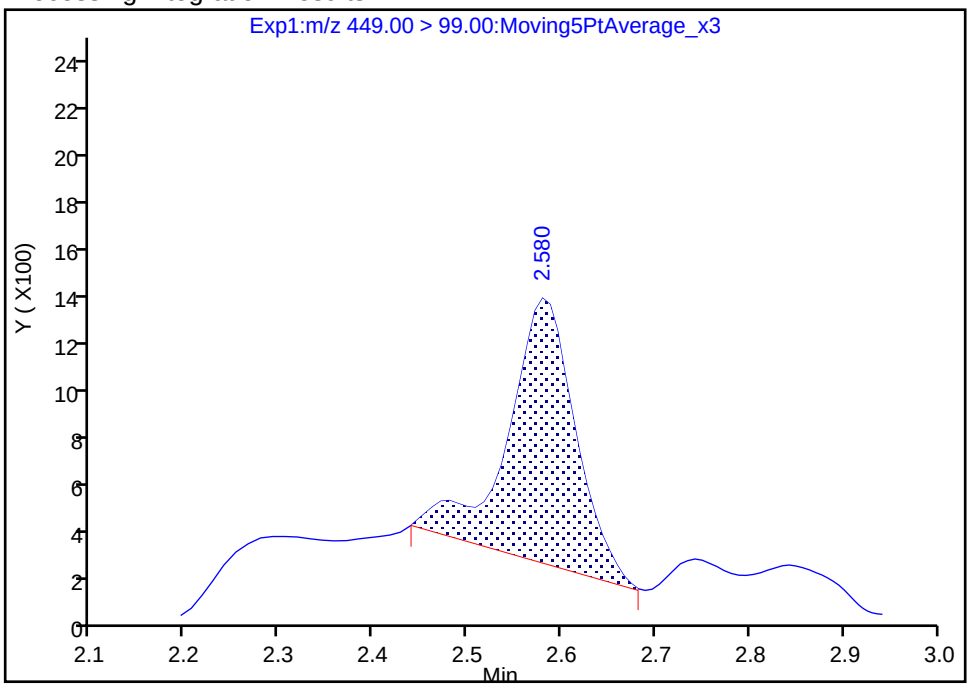
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_009.d				
Injection Date:	04-Aug-2018 00:27:37	Instrument ID:	A8_N		
Lims ID:	320-41405-A-1-A	Lab Sample ID:	320-41405-1		
Client ID:	GC-MW-104 (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

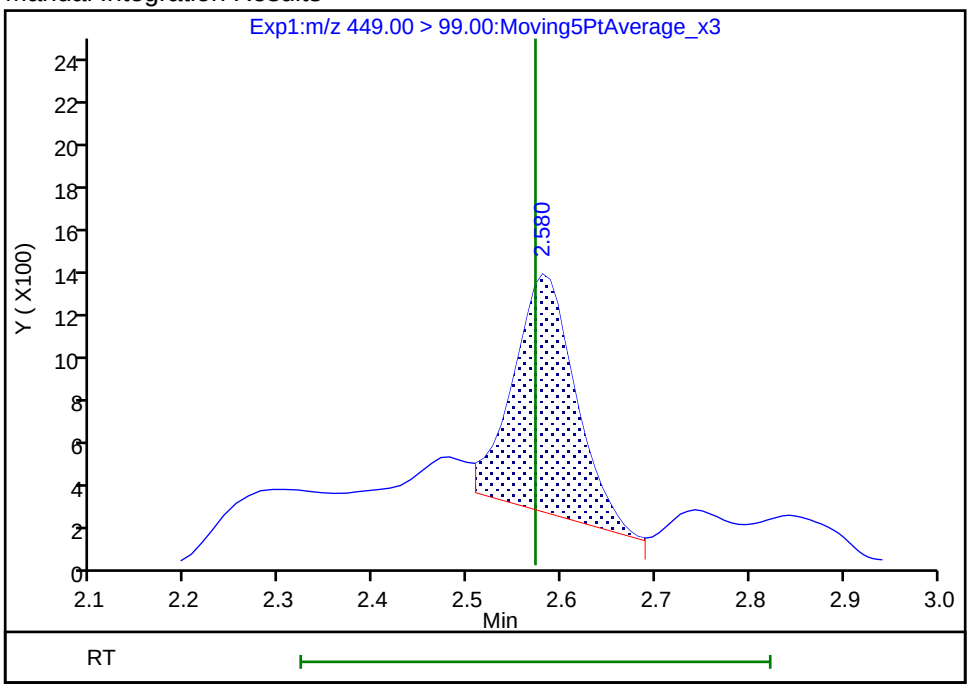
Processing Integration Results

RT: 2.58
Area: 5530
Amount: 0.012809
Amount Units: ng/ml



Manual Integration Results

RT: 2.58
Area: 5014
Amount: 0.012809
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:44:43

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

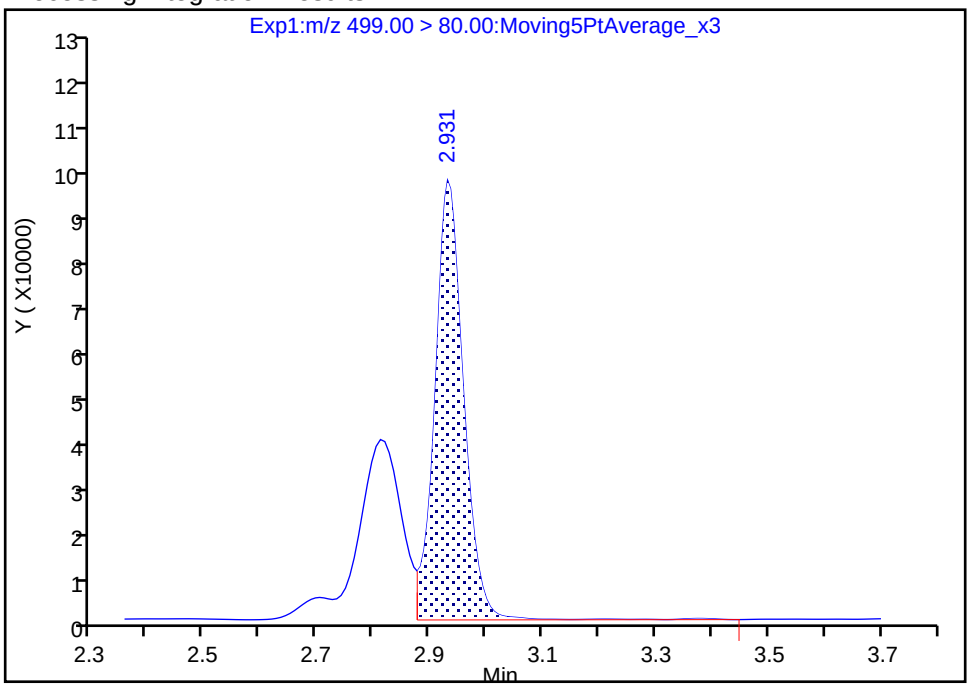
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_009.d				
Injection Date:	04-Aug-2018 00:27:37	Instrument ID:	A8_N		
Lims ID:	320-41405-A-1-A	Lab Sample ID:	320-41405-1		
Client ID:	GC-MW-104 (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

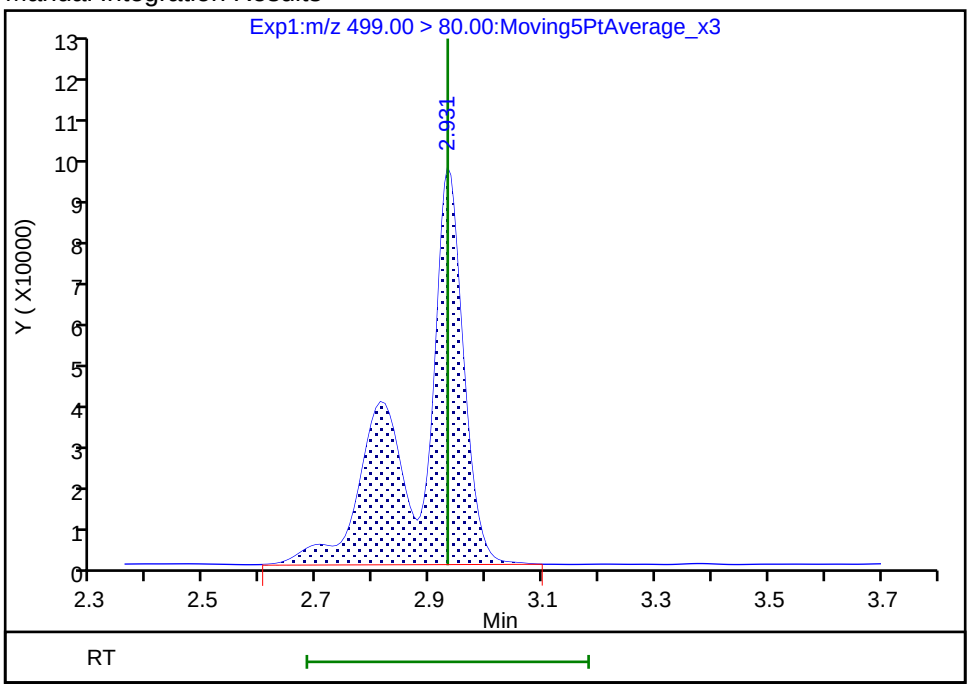
Processing Integration Results

RT: 2.93
Area: 336760
Amount: 0.220976
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 549768
Amount: 0.360748
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:45:01

Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-105 (WG) | Lab Sample ID: 320-41405-2

Matrix: Water | Lab File ID: 2018.08.03LLC_010.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 13:10

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 206(mL) | Date Analyzed: 08/04/2018 00:35

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	11		2.4	0.42
2706-90-3	Perfluoropentanoic acid (PFPeA)	19		2.4	0.59
307-24-4	Perfluorohexanoic acid (PFHxA)	16		2.4	0.70
375-85-9	Perfluoroheptanoic acid (PFHpA)	9.5		2.4	0.30
335-67-1	Perfluorooctanoic acid (PFOA)	38		2.4	1.0
375-95-1	Perfluorononanoic acid (PFNA)	2.5		2.4	0.33
335-76-2	Perfluorodecanoic acid (PFDA)	1.4	J	2.4	0.38
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.4	1.3
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.4	0.67
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.4	1.6
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.4	0.35
375-73-5	Perfluorobutanesulfonic acid (PFBS)	11		2.4	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.3	J B	2.4	0.21
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.74	J	2.4	0.23
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14		2.4	0.66
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.4	0.39
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.4	0.42
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		24	3.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		24	2.3
27619-97-2	6:2 FTS	4.1	J	24	2.4
39108-34-4	8:2 FTS	ND		24	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-105 (WG) | Lab Sample ID: 320-41405-2

Matrix: Water | Lab File ID: 2018.08.03LLC_010.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 13:10

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 206(mL) | Date Analyzed: 08/04/2018 00:35

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	59		25-150
STL01893	13C5 PFPeA	65		25-150
STL00993	13C2 PFHxA	76		25-150
STL01892	13C4-PFHpA	80		25-150
STL00990	13C4 PFOA	77		25-150
STL00995	13C5 PFNA	81		25-150
STL00996	13C2 PFDA	88		25-150
STL00997	13C2 PFUnA	74		25-150
STL00998	13C2 PFDoA	62		25-150
STL02116	13C2-PFTeDA	52		25-150
STL02337	13C3-PFBS	66		25-150
STL00994	18O2 PFHxS	76		25-150
STL00991	13C4 PFOS	75		25-150
STL01056	13C8 FOSA	71		25-150
STL02118	d3-NMeFOSAA	70		25-150
STL02117	d5-NEtFOSAA	67		25-150
STL02279	M2-6:2FTS	82		25-150
STL02280	M2-8:2FTS	90		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_010.d
Lims ID: 320-41405-A-2-A
Client ID: GC-MW-105 (WG)
Sample Type: Client
Inject. Date: 04-Aug-2018 00:35:27 ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-41405-a-2-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 10:57:16 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK036

First Level Reviewer: hannigana Date: 06-Aug-2018 10:46:31

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.385	1.391	-0.006	0.540	3281567	1.47		58.9	80280	
2 Perfluorobutyric acid										
212.90 > 169.00	1.385	1.396	-0.011	1.000	299303	0.2314			108	
D 3 13C5-PFPeA										
267.90 > 223.00	1.625	1.632	-0.007	0.634	2366435	1.61		64.5	47037	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.632	1.632	0.0	1.005	439582	0.3879			171	
D 47 13C3-PFBS										
301.90 > 83.00	1.656	1.665	-0.009	0.646	64780	1.54		66.1	286	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.665	1.665	0.0	1.005	467569	0.2189			450	
298.90 > 99.00	1.665	1.665	0.0	1.005	178838		2.61(1.25-3.74)		544	
D 7 13C2 PFHxA										
315.00 > 270.00	1.895	1.905	-0.010	0.739	3024471	1.91		76.2	75445	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.895	1.905	-0.010	1.000	432109	0.3387			549	
313.00 > 119.00	1.895	1.905	-0.010	1.000	38219		11.31(5.03-15.10)		693	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.217	0.0	0.865	3076288	2.00		80.0	70604	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.217	2.217	0.0	1.000	278631	0.1953			140	
363.00 > 169.00	2.217	2.217	0.0	1.000	107952		2.58(1.13-3.40)		1776	
D 11 18O2 PFHxS										
403.00 > 84.00	2.228	2.228	0.0	0.869	4173634	1.81		76.4	68788	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.228	2.229	-0.001	1.000	97395	0.0477			114	
399.00 > 99.00	2.228	2.229	-0.001	1.000	29754		3.27(1.50-4.49)		62.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.536	2.545	-0.009	0.989	872510	1.94		81.5	5335	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.536	2.546	-0.010	1.000	51774	0.0852			1319	
* 62 13C2-PFOA										
415.00 > 370.00	2.564	2.564	0.0		3867667	2.50			82052	
D 14 13C4 PFOA										
417.00 > 372.00	2.564	2.572	-0.008	1.000	2864711	1.93		77.2	83552	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.564	2.572	-0.008	1.000	1030644	0.7779			645	
413.00 > 169.00	2.564	2.572	-0.008	1.000	537560		1.92(0.84-2.52)		3894	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.580	2.572	0.008	0.882	24977	0.0152			74.6	
449.00 > 99.00	2.572	2.572	0.0	0.879	5601		4.46(1.94-5.82)		49.4	M
D 19 13C5 PFNA										
468.00 > 423.00	2.926	2.931	-0.005	1.141	2607749	2.02		80.6	67990	
D 18 13C4 PFOS										
503.00 > 80.00	2.926	2.931	-0.005	1.141	2847923	1.78		74.6	19354	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.926	2.931	-0.005	1.000	390118	0.2916			1912	
499.00 > 99.00	2.926	2.931	-0.005	1.000	75309		5.18(2.31-6.93)		695	
20 Perfluorononanoic acid										
463.00 > 419.00	2.926	2.931	-0.005	1.000	57905	0.0514			147	
463.00 > 169.00	2.926	2.931	-0.005	1.000	12694		4.56(1.90-5.69)		305	
D 26 M2-8:2FTS										
529.00 > 81.00	3.276	3.276	0.0	1.278	946147	2.15		89.9	18302	
D 23 13C2 PFDA										
515.00 > 470.00	3.283	3.283	0.0	1.280	2122484	2.19		87.7	36214	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.283	3.283	0.0	1.000	27002	0.0298			48.0	
513.00 > 169.00	3.283	3.283	0.0	1.000	6172		4.37(2.36-7.09)		147	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.315	3.307	0.007	1.002	1994	0.001215			33.8	
D 21 13C8 FOSA										
506.00 > 78.00	3.307	3.314	-0.007	1.290	4156334	1.77		70.9	32878	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.439	3.439	0.0	1.341	413402	1.76		70.4	12935	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.600	3.611	-0.011	1.404	423692	1.68		67.3	3674	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.611	0.0	1.408	1386006	1.86		74.4	36408	
D 36 13C2 PFDoA										
615.00 > 570.00	3.899	3.909	-0.010	1.521	995489	1.54		61.7	13870	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.394	0.0	1.714	699239	1.29		51.6	3493	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 06-Aug-2018 11:01:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_010.d

Injection Date: 04-Aug-2018 00:35:27 Instrument ID: A8_N

Lims ID: 320-41405-A-2-A Lab Sample ID: 320-41405-2

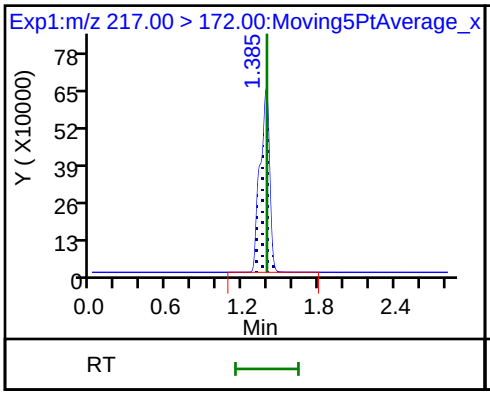
Client ID: GC-MW-105 (WG)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 5 Worklist Smp#: 8

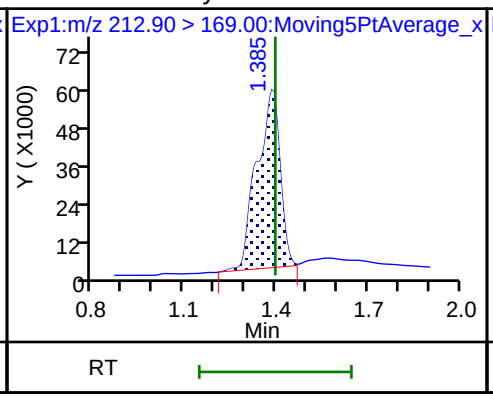
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

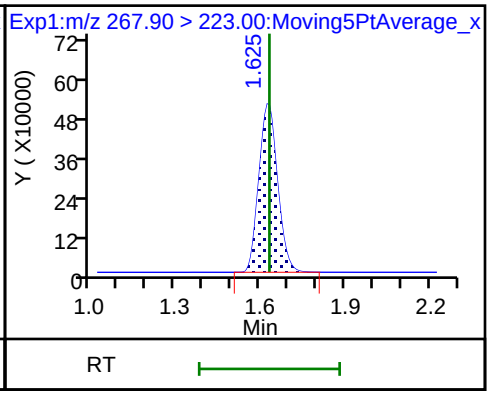
D 1 13C4 PFBA



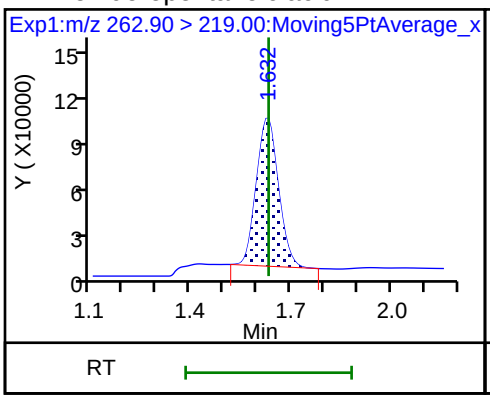
2 Perfluorobutyric acid



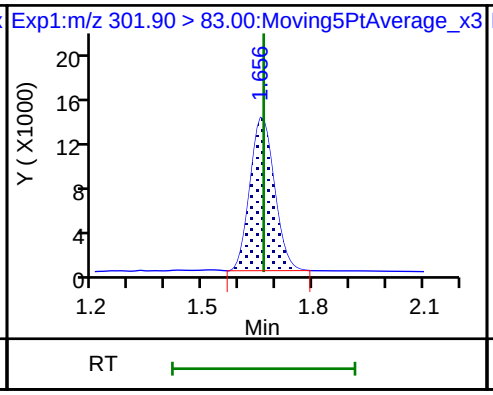
D 3 13C5-PFPeA



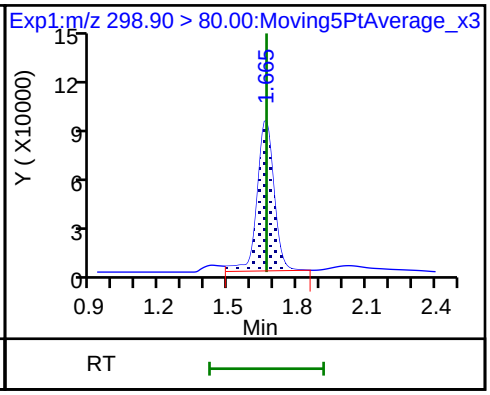
4 Perfluoropentanoic acid



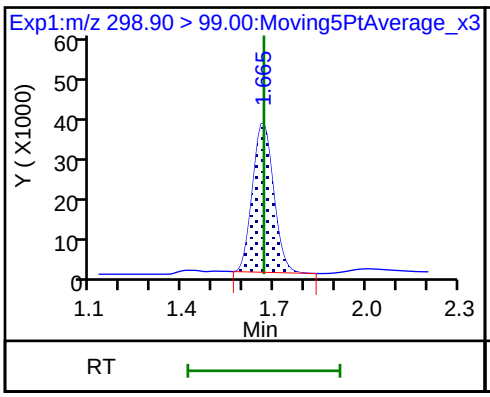
D 47 13C3-PFBS



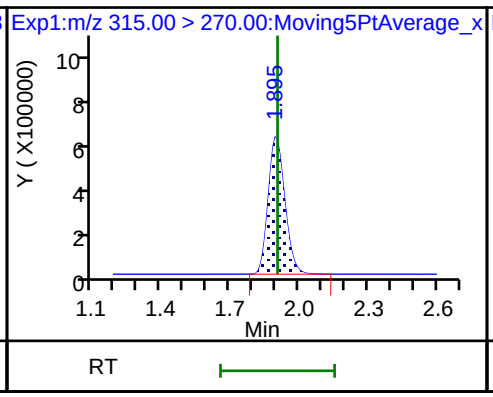
5 Perfluorobutanesulfonic acid



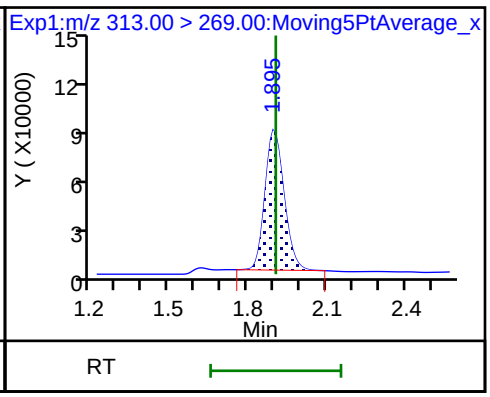
5 Perfluorobutanesulfonic acid



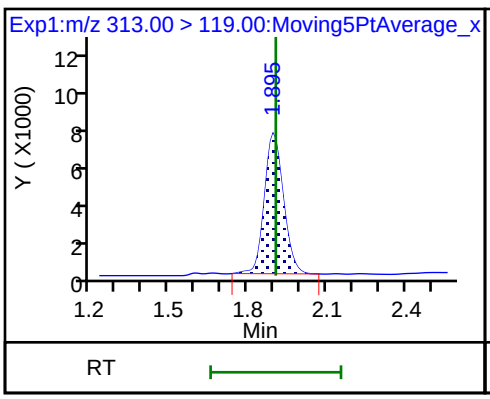
D 7 13C2 PFHxA



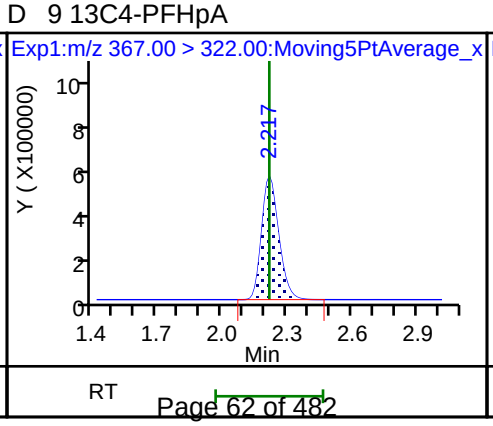
6 Perfluorohexanoic acid



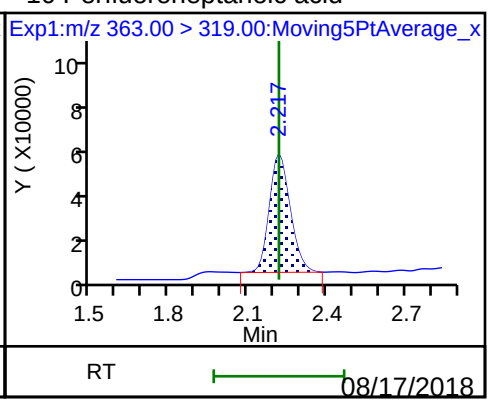
6 Perfluorohexanoic acid



D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



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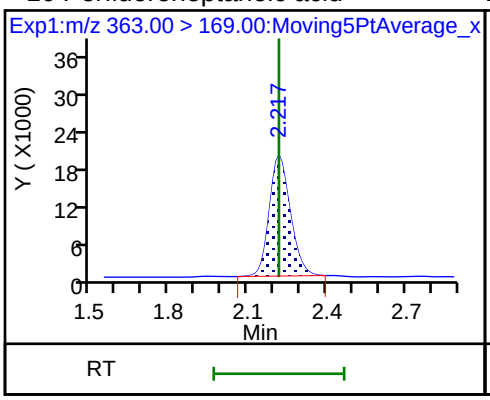
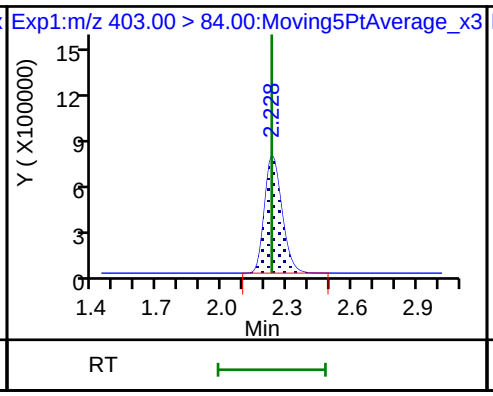
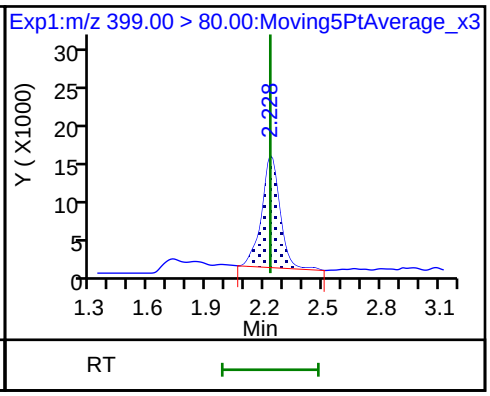


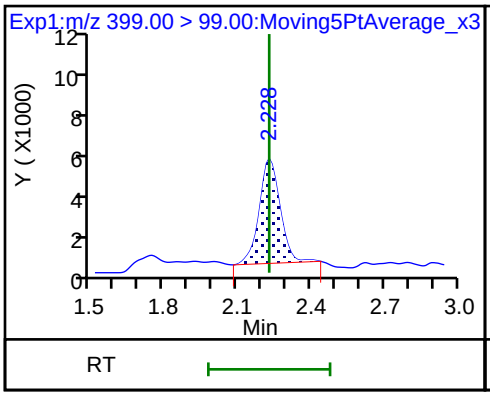
D 11 18O2 PFHxS



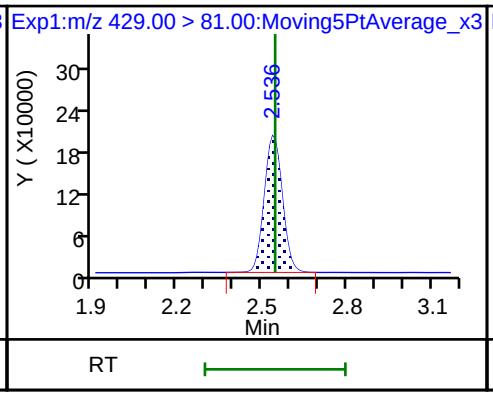
8 Perfluorohexanesulfonic acid



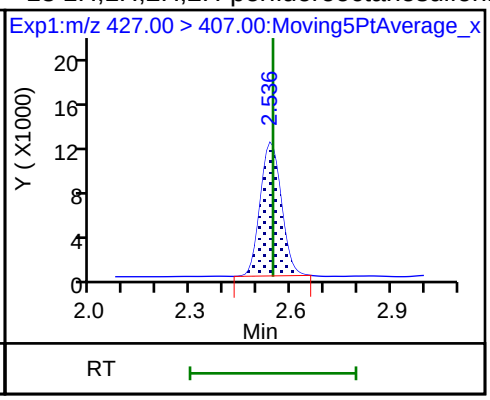
8 Perfluorohexanesulfonic acid



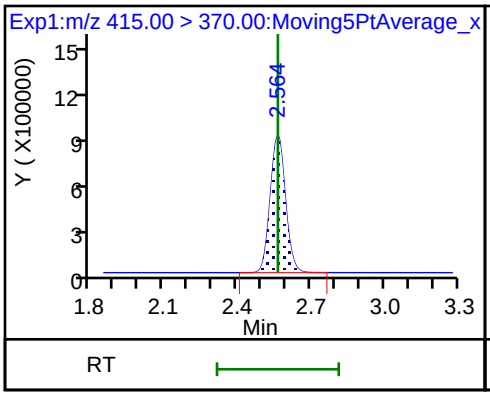
D 12 M2-6:2FTS



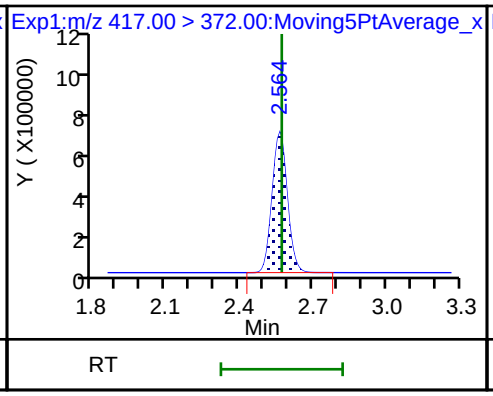
13 1H,1H,2H,2H-perfluorooctanesulfoni



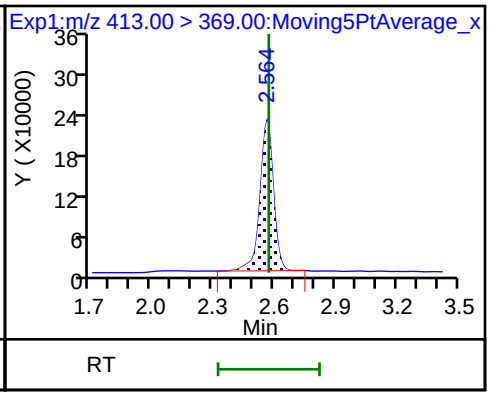
* 62 13C2-PFOA



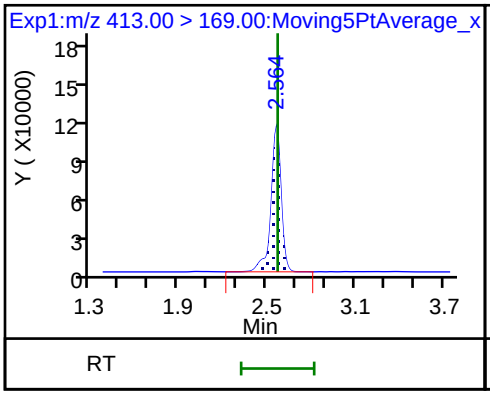
D 14 13C4 PFOA



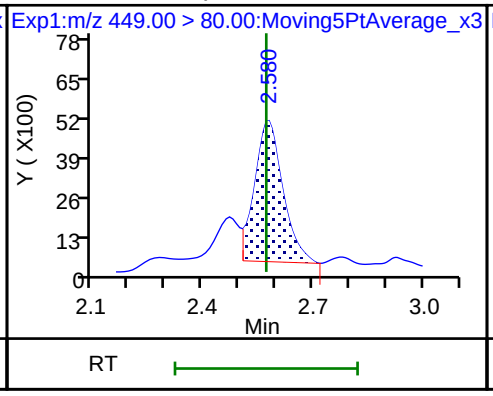
15 Perfluorooctanoic acid



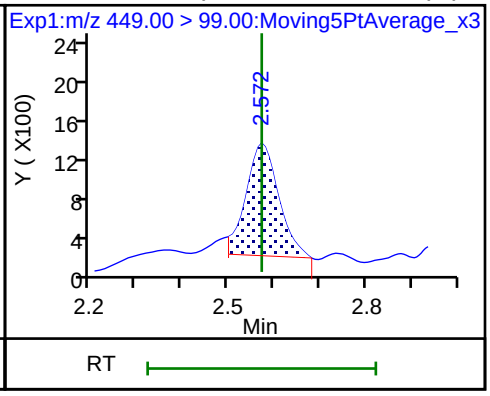
15 Perfluorooctanoic acid



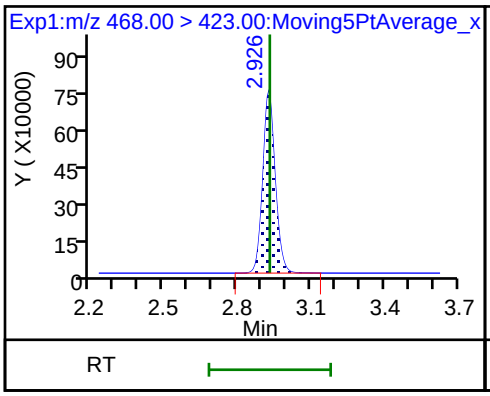
16 Perfluoroheptanesulfonic acid



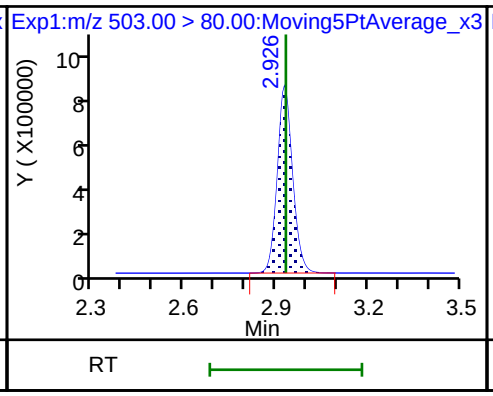
16 Perfluoroheptanesulfonic acid (M)



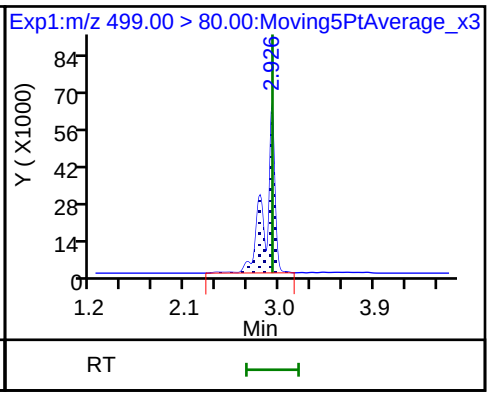
D 19 13C5 PFNA



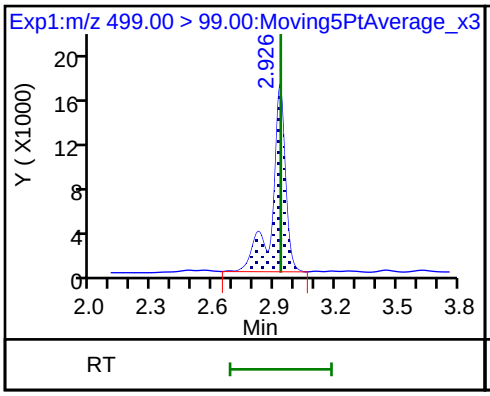
D 18 13C4 PFOS



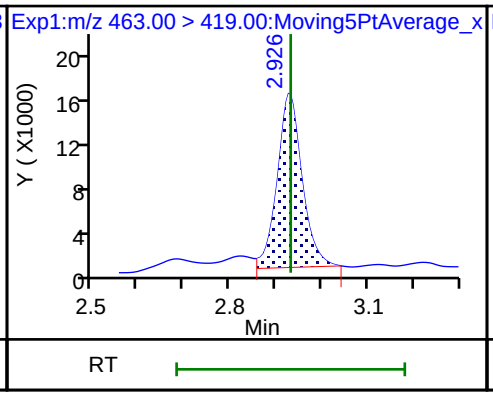
17 Perfluorooctane sulfonic acid



17 Perfluorooctane sulfonic acid



20 Perfluorononanoic acid



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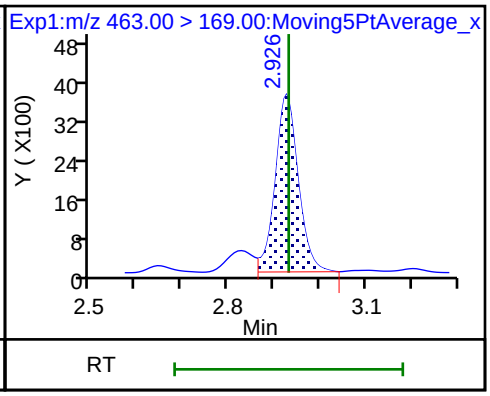
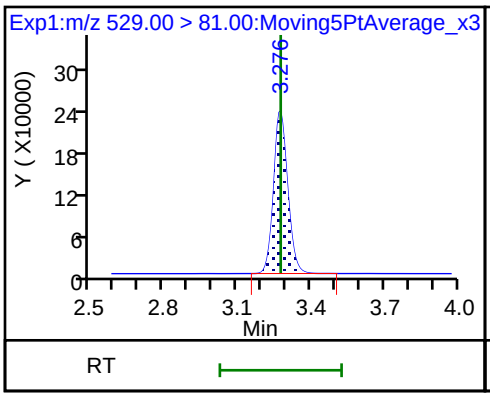
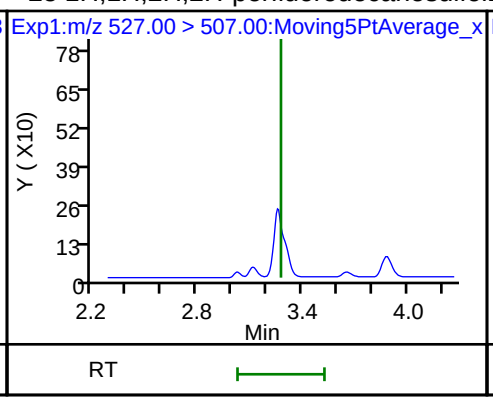


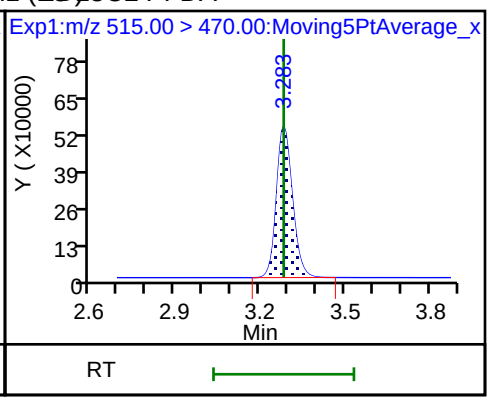
D 26 M2-8:2FTS



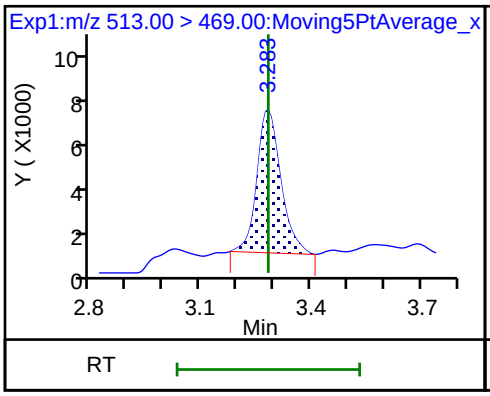
25 1H,1H,2H,2H-perfluorodecanesulfonic acid



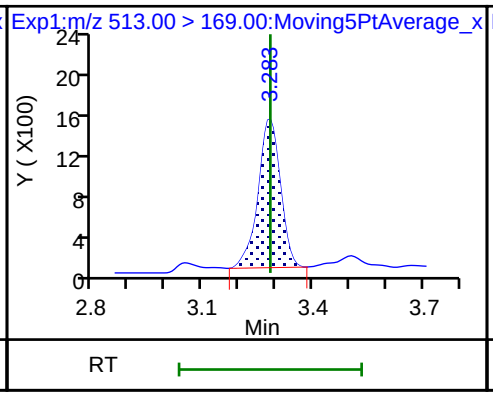
D 23 13C2 PFDA



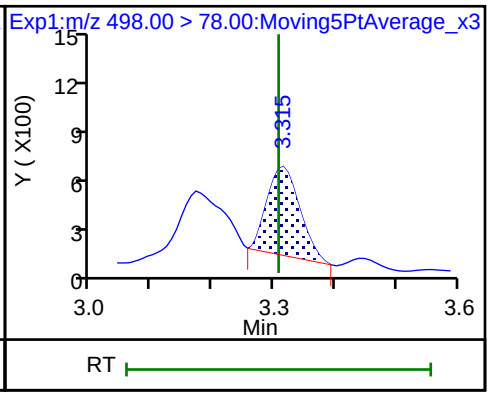
24 Perfluorodecanoic acid



24 Perfluorodecanoic acid



22 Perfluorooctane Sulfonamide



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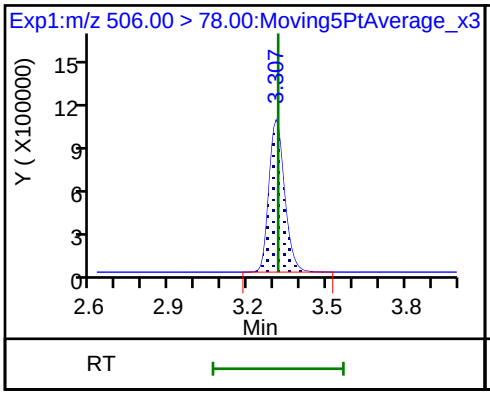
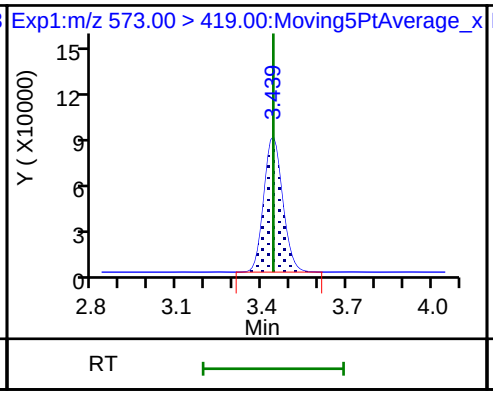
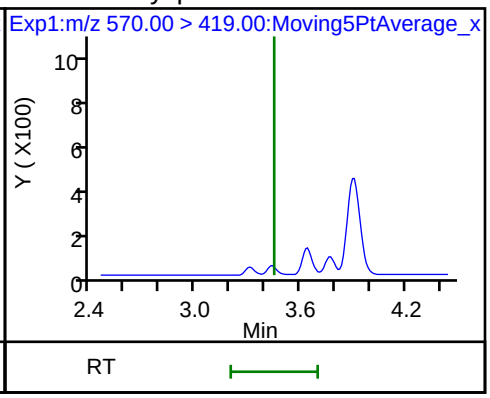


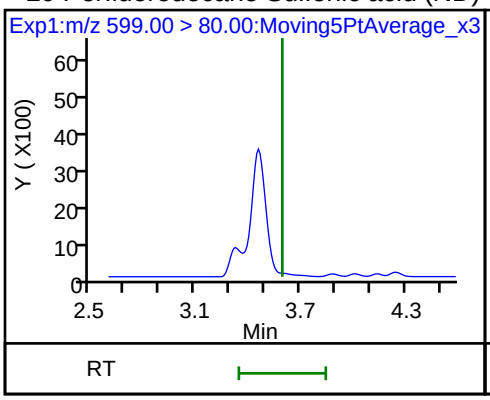
D 27 d3-NMeFOSAA



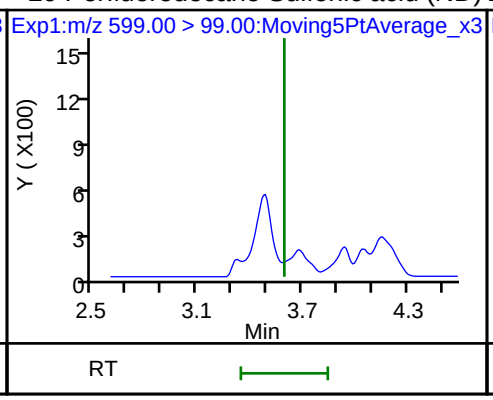
28 N-methyl perfluorooctane sulfonami (ND)



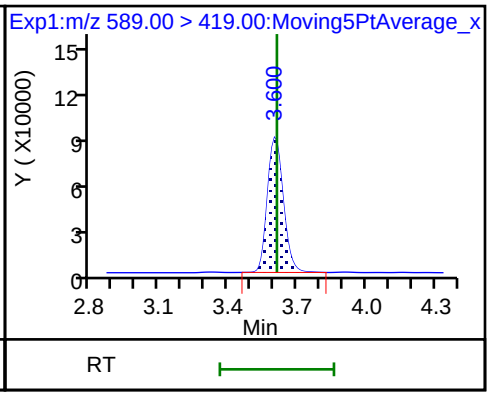
29 Perfluorodecane Sulfonic acid (ND)



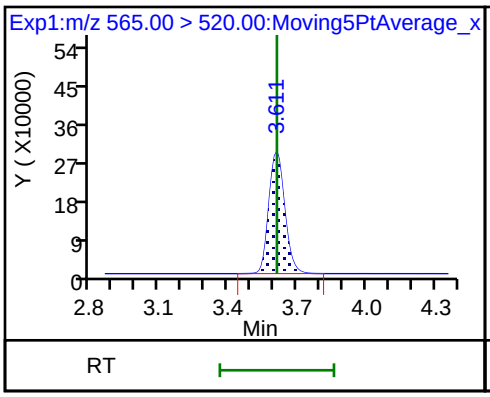
29 Perfluorodecane Sulfonic acid (ND)



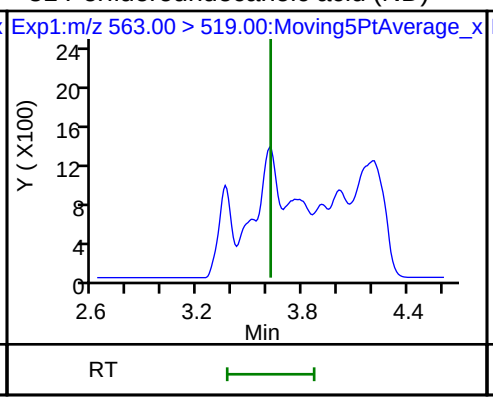
D 32 d5-NEtFOSAA



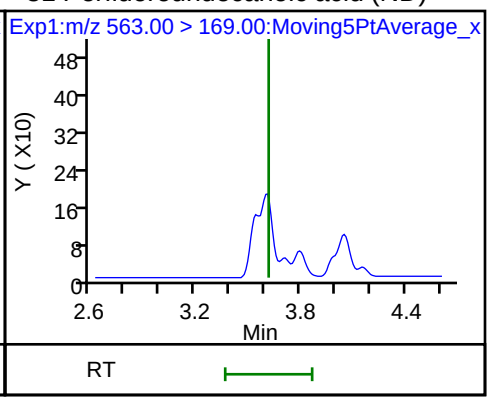
D 30 13C2 PFUnA



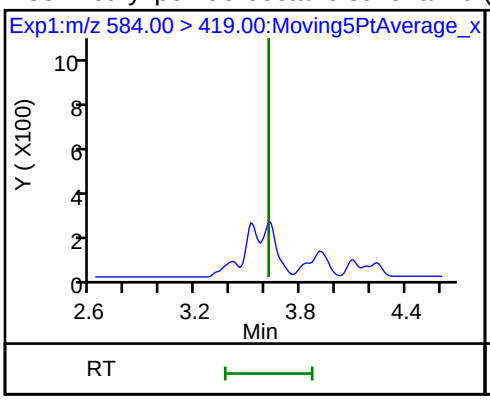
31 Perfluoroundecanoic acid (ND)



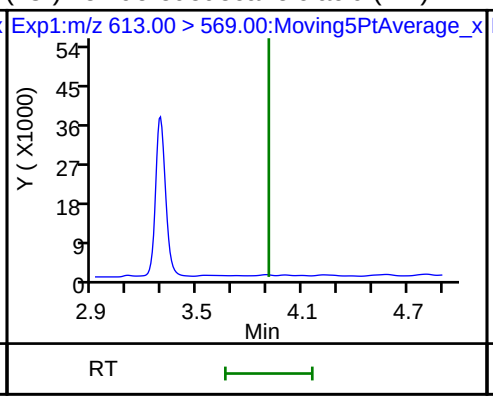
31 Perfluoroundecanoic acid (ND)



33 N-ethyl perfluorooctane sulfonamid (ND)



37 Perfluorododecanoic acid (ND)



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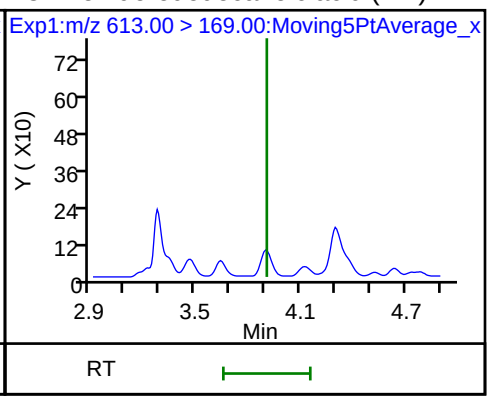
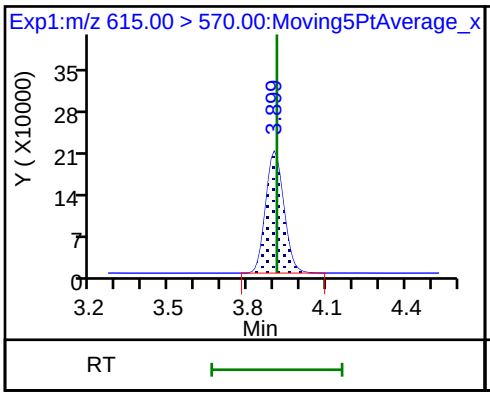
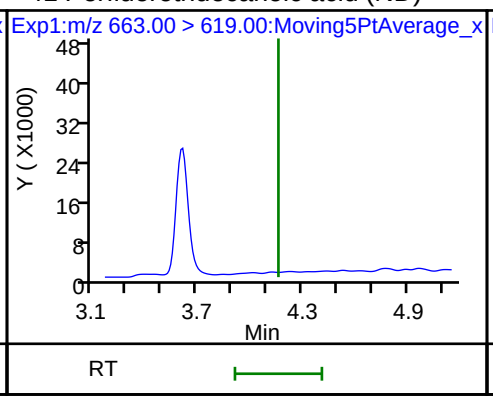


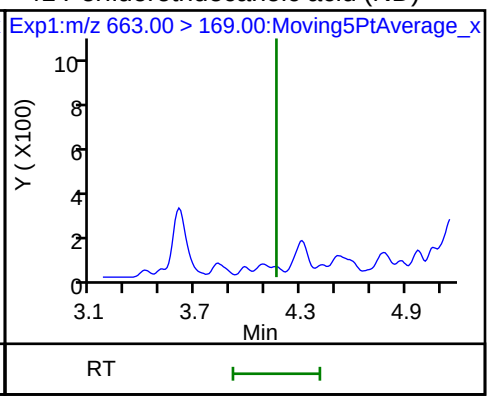
D 36 13C2 PFDoA



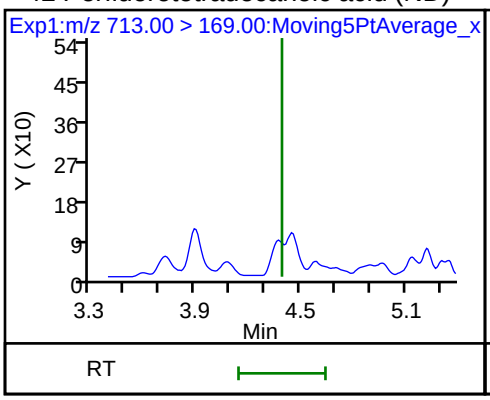
41 Perfluorotridecanoic acid (ND)



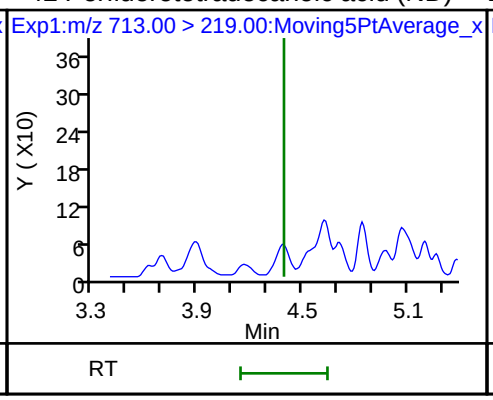
41 Perfluorotridecanoic acid (ND)



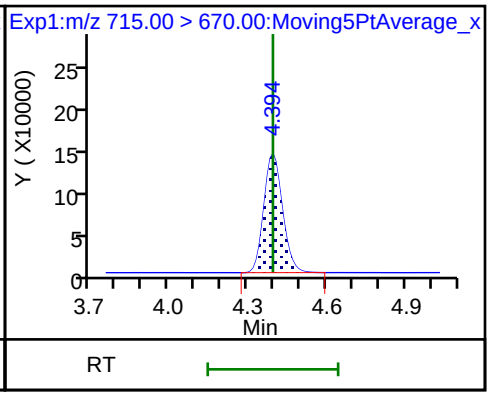
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

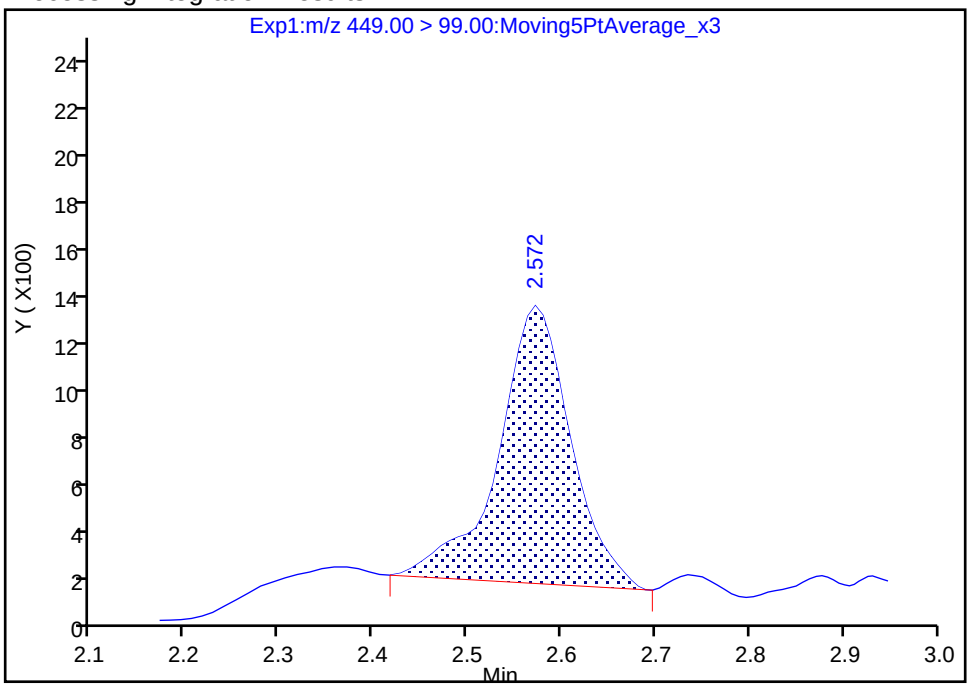
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_010.d				
Injection Date:	04-Aug-2018 00:35:27	Instrument ID:	A8_N		
Lims ID:	320-41405-A-2-A	Lab Sample ID:	320-41405-2		
Client ID:	GC-MW-105 (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	5	Worklist Smp#:	8
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

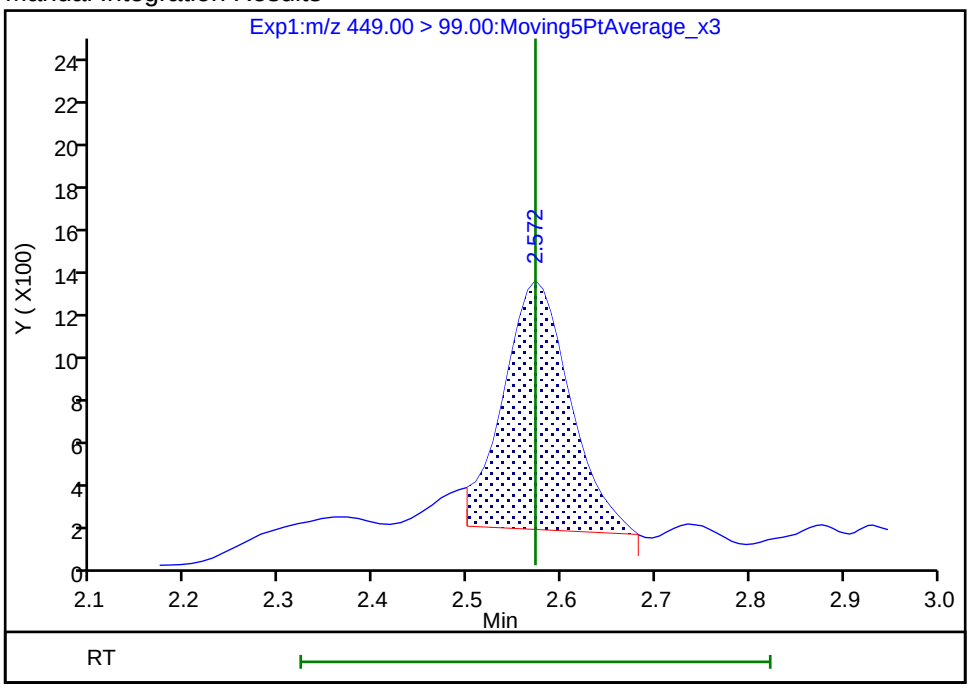
Processing Integration Results

RT: 2.57
Area: 6172
Amount: 0.015163
Amount Units: ng/ml



Manual Integration Results

RT: 2.57
Area: 5601
Amount: 0.015163
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:46:19

Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK (072318) | Lab Sample ID: 320-41405-3

Matrix: Water | Lab File ID: 2018.08.03LLC_012.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 09:15

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 298.2(mL) | Date Analyzed: 08/04/2018 00:51

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.30	J	1.7	0.29
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.41
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.49
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.7	0.71
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.26
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.92
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.24
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.23	J B	1.7	0.14
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.45
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.29
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2 FTS	ND		17	1.7
39108-34-4	8:2 FTS	ND		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK (072318) | Lab Sample ID: 320-41405-3

Matrix: Water | Lab File ID: 2018.08.03LLC_012.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 09:15

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 298.2(mL) | Date Analyzed: 08/04/2018 00:51

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	95		25-150
STL01893	13C5 PFPeA	101		25-150
STL00993	13C2 PFHxA	110		25-150
STL01892	13C4-PFHpA	100		25-150
STL00990	13C4 PFOA	99		25-150
STL00995	13C5 PFNA	101		25-150
STL00996	13C2 PFDA	110		25-150
STL00997	13C2 PFUnA	98		25-150
STL00998	13C2 PFDoA	100		25-150
STL02116	13C2-PFTeDA	93		25-150
STL02337	13C3-PFBS	89		25-150
STL00994	18O2 PFHxS	97		25-150
STL00991	13C4 PFOS	94		25-150
STL01056	13C8 FOSA	86		25-150
STL02118	d3-NMeFOSAA	92		25-150
STL02117	d5-NEtFOSAA	92		25-150
STL02279	M2-6:2FTS	104		25-150
STL02280	M2-8:2FTS	108		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_012.d
Lims ID: 320-41405-A-3-A
Client ID: GC-EQUIPMENT BLANK (072318)
Sample Type: Client
Inject. Date: 04-Aug-2018 00:51:04 ALS Bottle#: 6 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-41405-a-3-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 10:57:16 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK036

First Level Reviewer: hannigana Date: 06-Aug-2018 10:48:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.385	1.391	-0.006	0.540	4987838	2.37		95.0	125293	
2 Perfluorobutyric acid										
212.90 > 169.00	1.385	1.396	-0.011	1.000	17473	0.008887			5.0	
D 3 13C5-PFPeA										
267.90 > 223.00	1.625	1.632	-0.007	0.634	3479856	2.52		101	82758	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.625	1.632	-0.007	1.000	9896	0.005938			3.2	M
D 47 13C3-PFBS										
301.90 > 83.00	1.656	1.665	-0.009	0.646	82719	2.08		89.4	598	
D 7 13C2 PFHxA										
315.00 > 270.00	1.895	1.905	-0.010	0.739	4101701	2.74		110	89648	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.217	0.0	0.865	3613706	2.49		99.6	72683	
D 11 18O2 PFHxS										
403.00 > 84.00	2.228	2.228	0.0	0.869	5004112	2.30		97.0	82189	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.228	2.229	-0.001	1.000	17008	0.006953			110	
399.00 > 99.00	2.228	2.229	-0.001	1.000	5581		3.05(1.50-4.49)		14.3	
D 12 M2-6:2FTS										
429.00 > 81.00	2.536	2.545	-0.009	0.989	1051196	2.47		104	26232	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.536	2.546	-0.010	1.000	23980	0.0328			619	
* 62 13C2-PFOA										
415.00 > 370.00	2.564	2.564	0.0		3648497	2.50			76295	
D 14 13C4 PFOA										
417.00 > 372.00	2.564	2.572	-0.008	1.000	3455774	2.47		98.7	72177	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.564	2.572	-0.008	1.000	4375	0.002737			3.3	
413.00 > 169.00	2.564	2.572	-0.008	1.000	2920		1.50(0.84-2.52)		25.0	M
D 19 13C5 PFNA										
468.00 > 423.00	2.926	2.931	-0.005	1.141	3084469	2.53		101	55390	
D 18 13C4 PFOS										
503.00 > 80.00	2.926	2.931	-0.005	1.141	3398646	2.26		94.4	49269	
D 26 M2-8:2FTS										
529.00 > 81.00	3.269	3.276	-0.007	1.275	1074107	2.59		108	18158	
D 23 13C2 PFDA										
515.00 > 470.00	3.283	3.283	0.0	1.280	2513490	2.75		110	63361	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.314	3.307	0.007	1.002	2113	0.001126			63.3	
D 21 13C8 FOSA										
506.00 > 78.00	3.307	3.314	-0.007	1.290	4753749	2.15		85.9	64670	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.439	3.439	0.0	1.341	511378	2.31		92.3	15876	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.600	3.611	-0.011	1.404	548643	2.31		92.4	6046	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.611	0.0	1.408	1730170	2.46		98.4	44948	
D 36 13C2 PFDoA										
615.00 > 570.00	3.899	3.909	-0.010	1.521	1517594	2.49		99.7	16452	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.384	4.394	-0.010	1.710	1182539	2.31		92.5	5404	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 06-Aug-2018 11:01:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_012.d

Injection Date: 04-Aug-2018 00:51:04 Instrument ID: A8_N

Lims ID: 320-41405-A-3-A Lab Sample ID: 320-41405-3

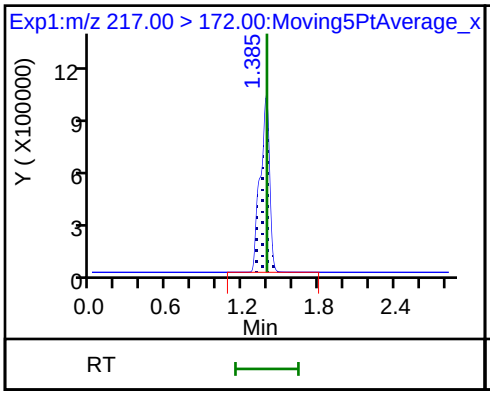
Client ID: GC-EQUIPMENT BLANK (072318)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 6 Worklist Smp#: 10

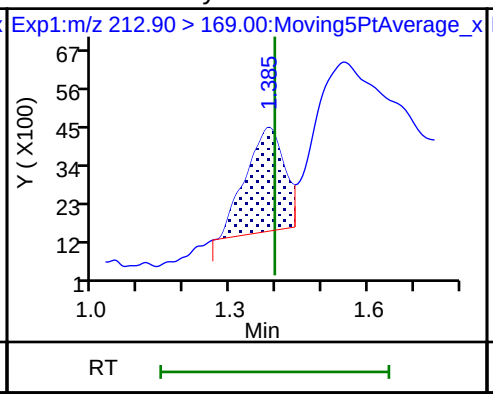
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

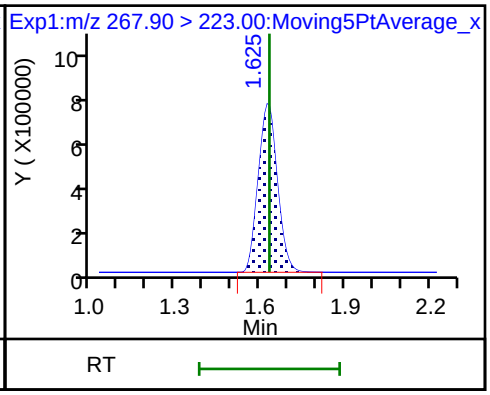
D 1 13C4 PFBA



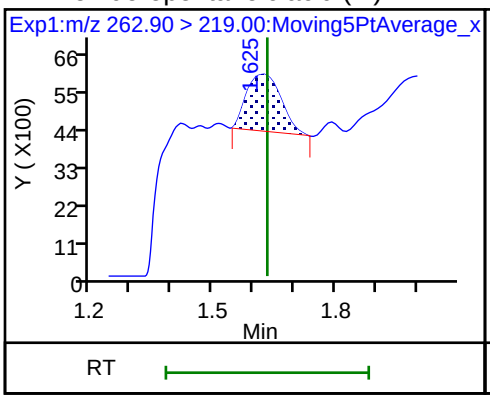
2 Perfluorobutyric acid



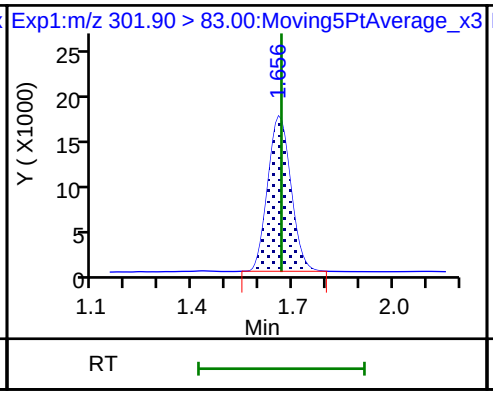
D 3 13C5-PFPeA



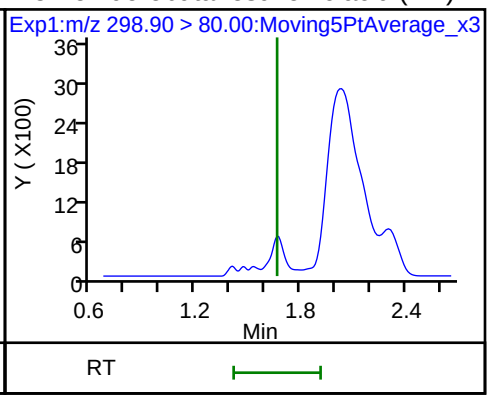
4 Perfluoropentanoic acid (M)



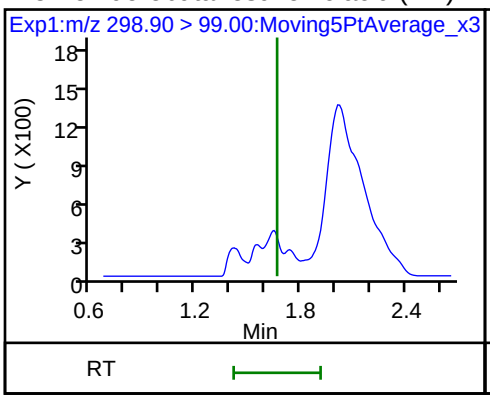
D 47 13C3-PFBS



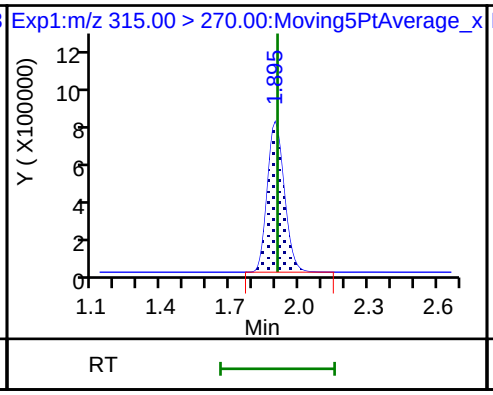
5 Perfluorobutanesulfonic acid (ND)



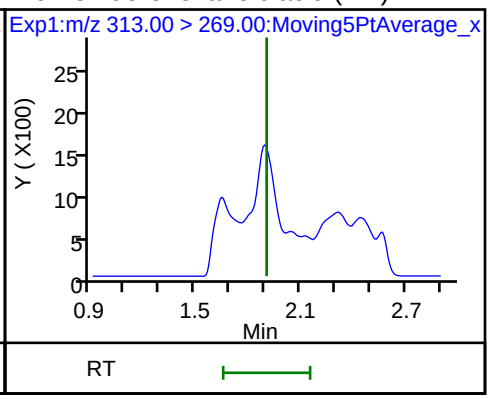
5 Perfluorobutanesulfonic acid (ND)



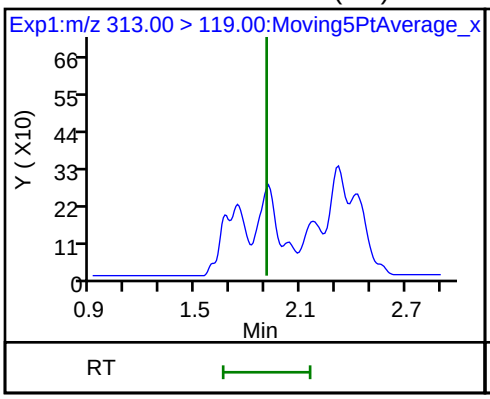
D 7 13C2 PFHxA



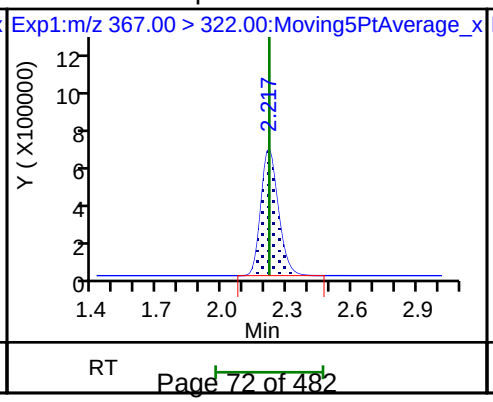
6 Perfluorohexanoic acid (ND)



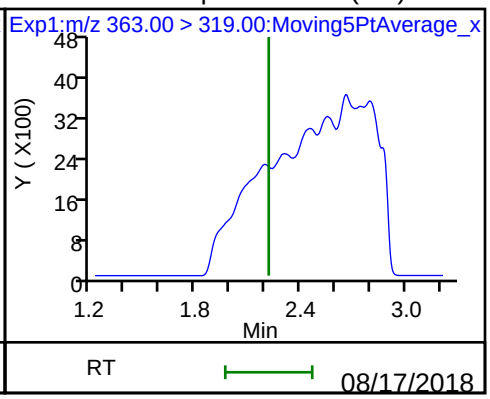
6 Perfluorohexanoic acid (ND)



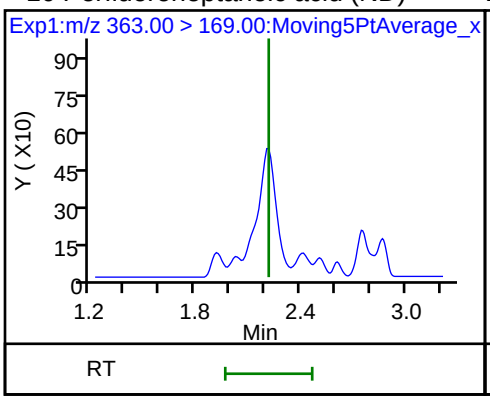
D 9 13C4-PFHpA



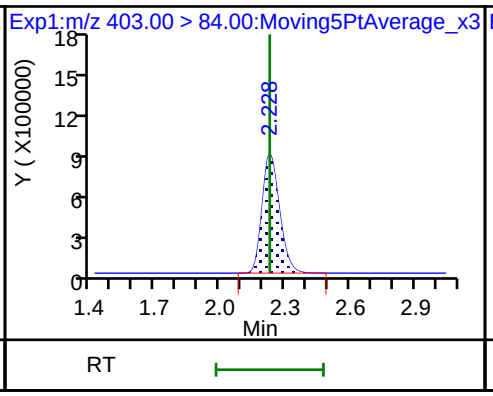
10 Perfluoroheptanoic acid (ND)



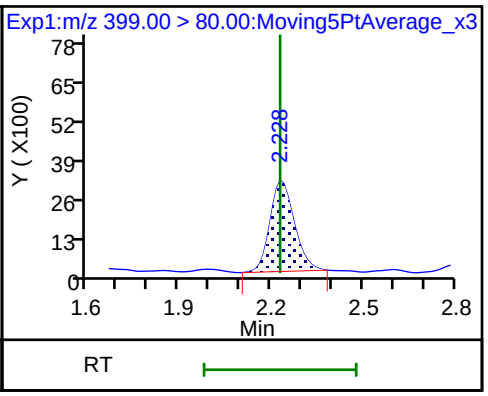
10 Perfluoroheptanoic acid (ND)



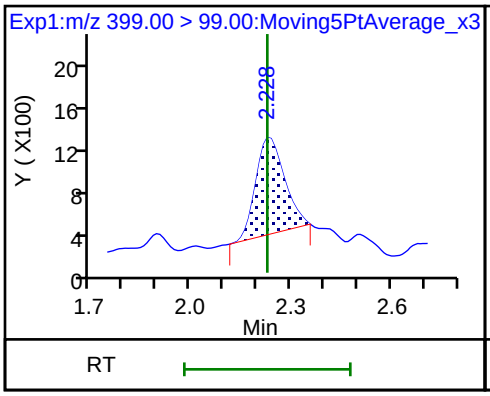
D 11 18O2 PFHxS



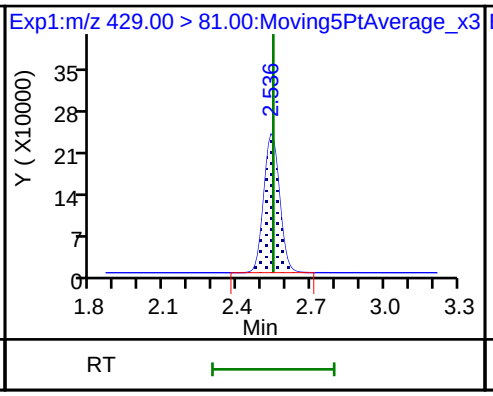
8 Perfluorohexanesulfonic acid



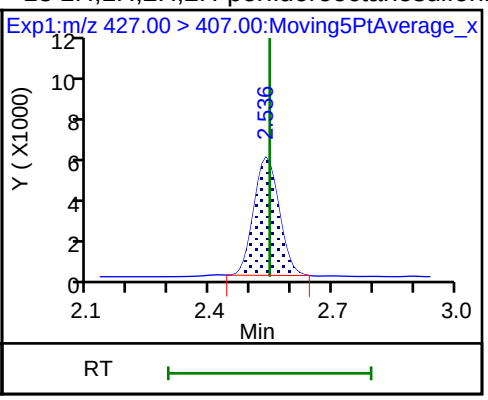
8 Perfluorohexanesulfonic acid



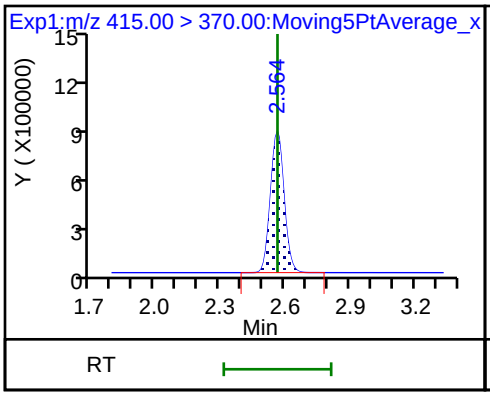
D 12 M2-6:2FTS



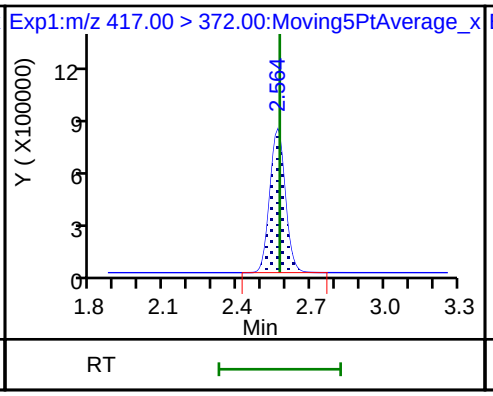
13 1H,1H,2H,2H-perfluorooctanesulfoni



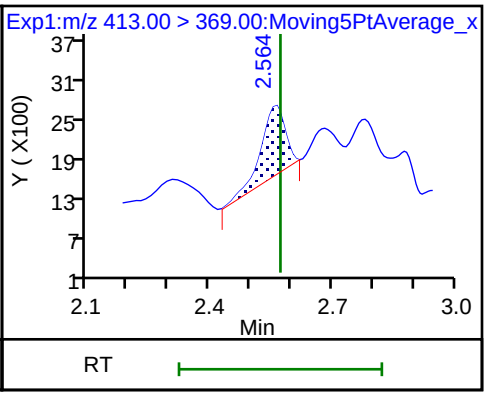
* 62 13C2-PFOA



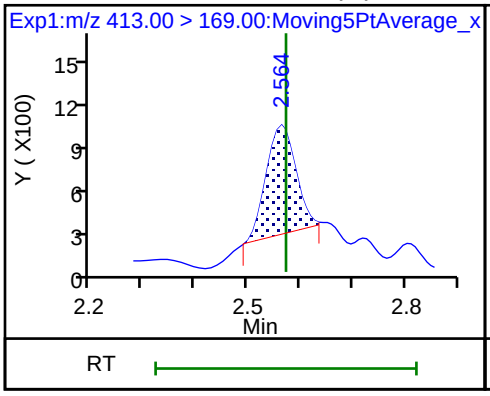
D 14 13C4 PFOA



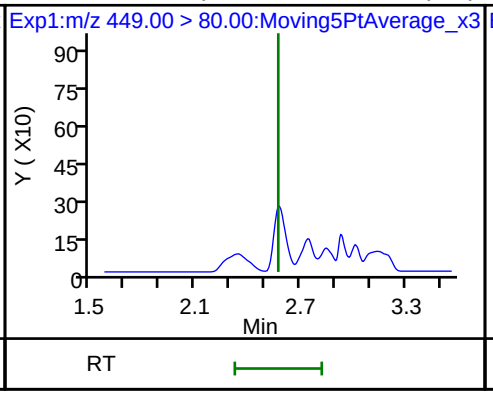
15 Perfluorooctanoic acid



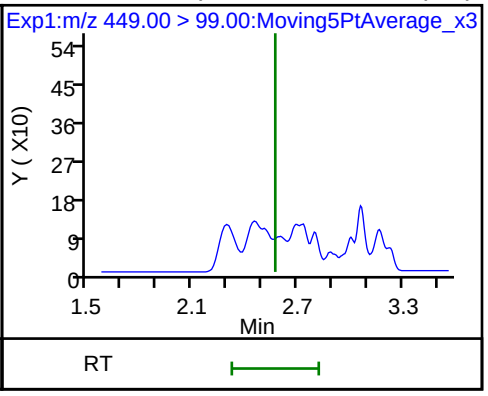
15 Perfluorooctanoic acid (M)



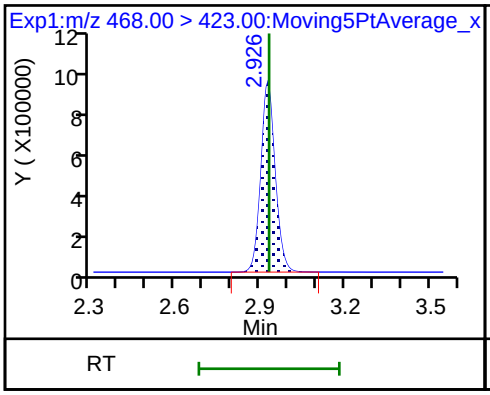
16 Perfluoroheptanesulfonic acid (ND)



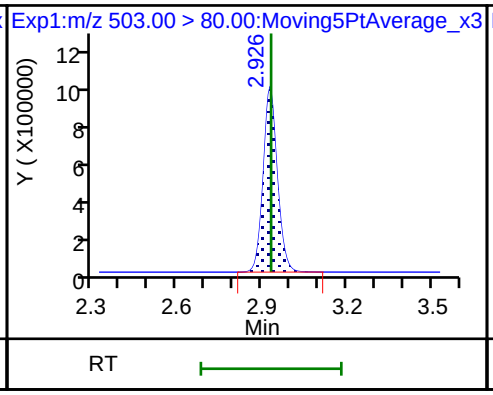
16 Perfluoroheptanesulfonic acid (ND)



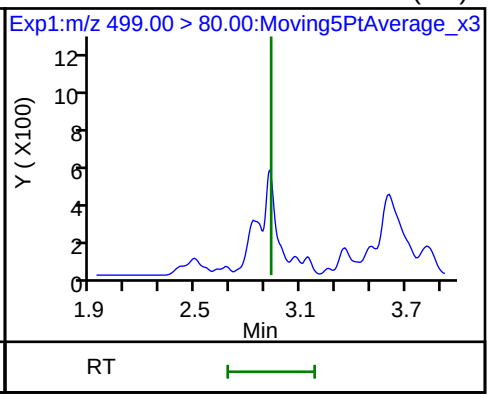
D 19 13C5 PFNA



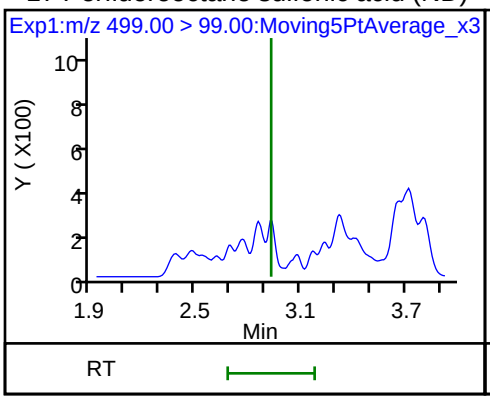
D 18 13C4 PFOS



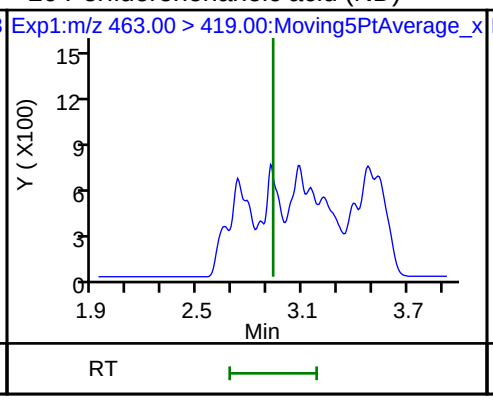
17 Perfluorooctane sulfonic acid (ND)



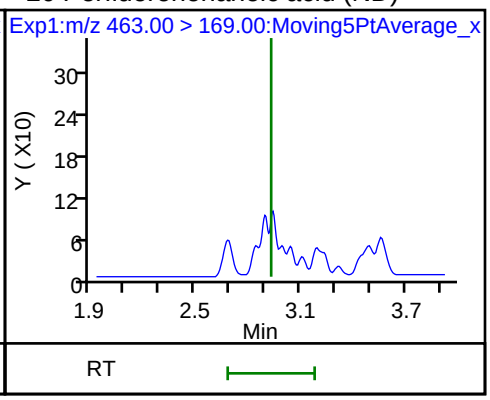
17 Perfluorooctane sulfonic acid (ND)



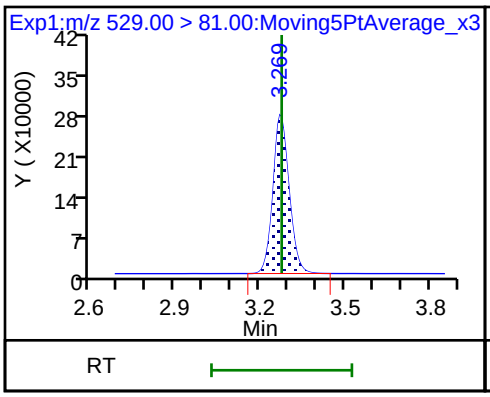
20 Perfluorononanoic acid (ND)



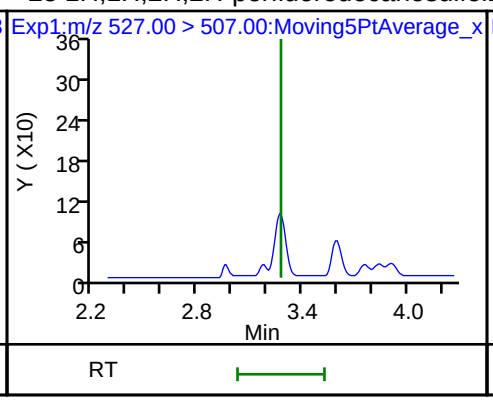
20 Perfluorononanoic acid (ND)



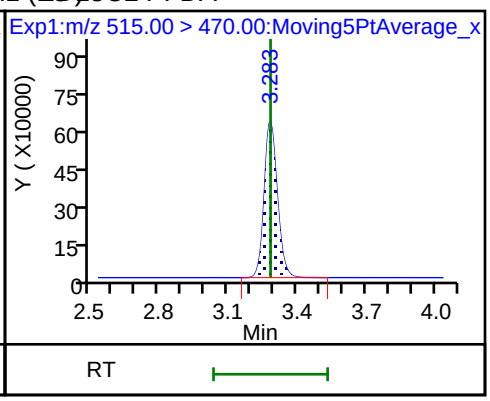
D 26 M2-8:2FTS



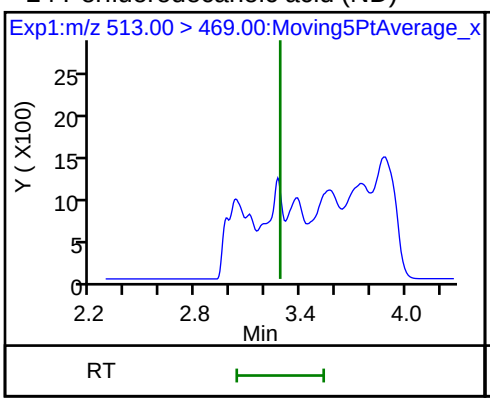
25 1H,1H,2H,2H-perfluorodecanesulfonic acid (ND)



D 28 13C2 PFDA



24 Perfluorodecanoic acid (ND)



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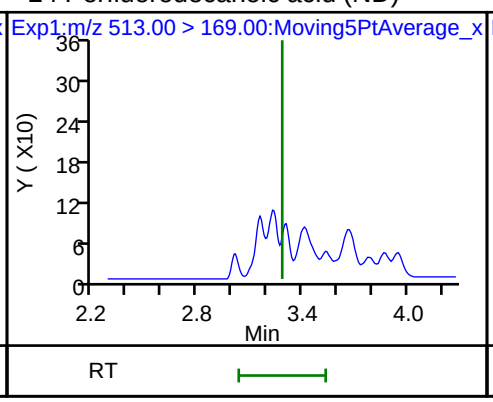
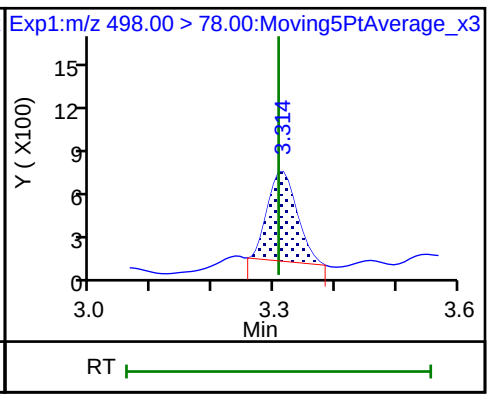
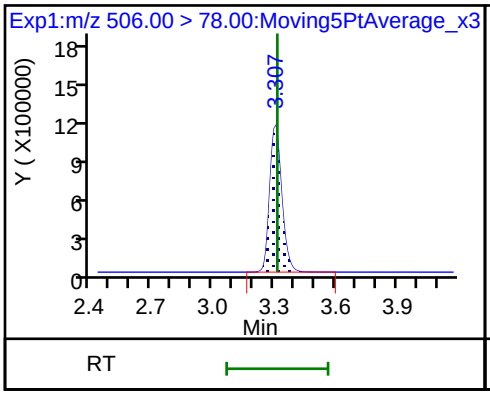


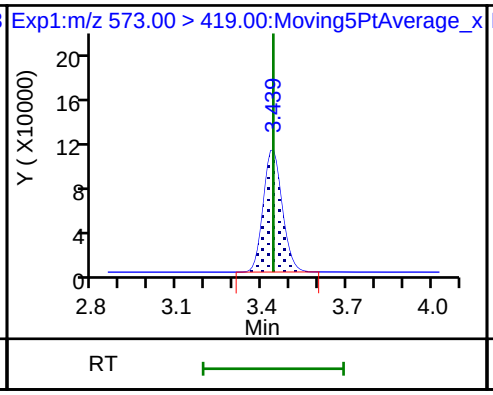
22 Perfluorooctane Sulfonamide



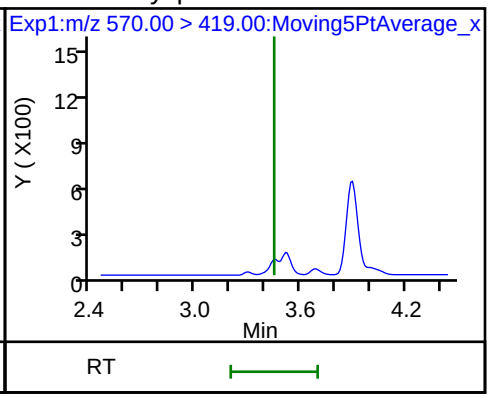
D 21 13C8 FOSA



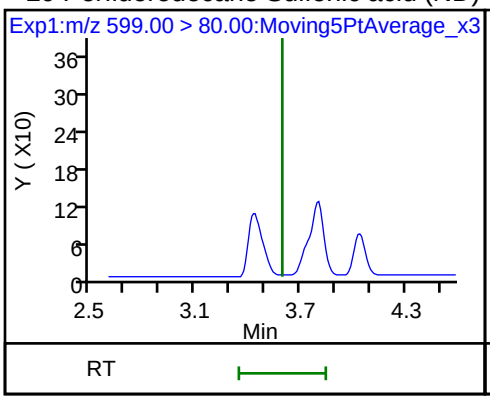
D 27 d3-NMeFOSAA



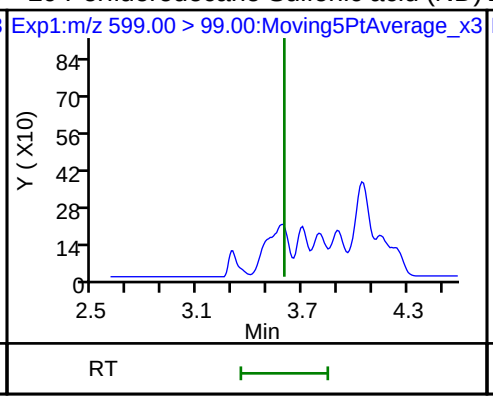
28 N-methyl perfluorooctane sulfonami (ND)



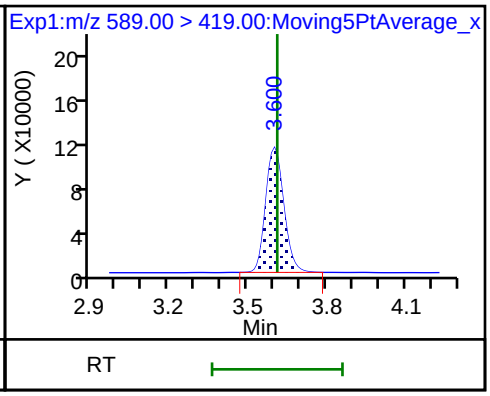
29 Perfluorodecane Sulfonic acid (ND)



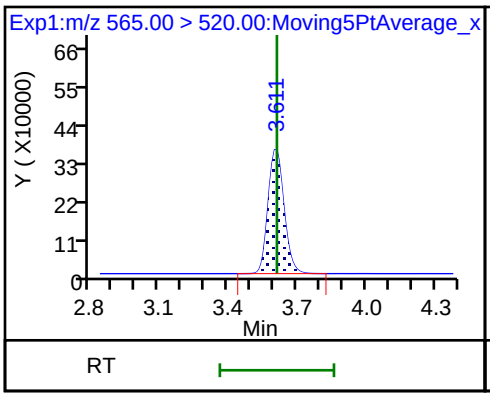
29 Perfluorodecane Sulfonic acid (ND)



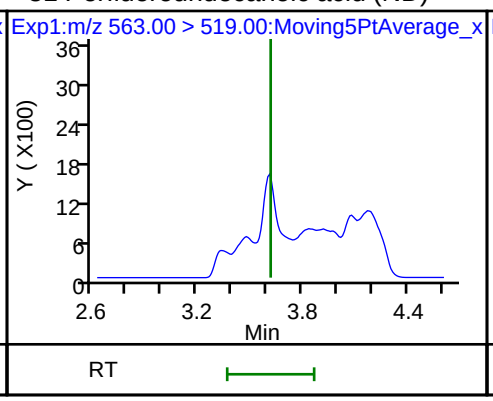
D 32 d5-NEtFOSAA



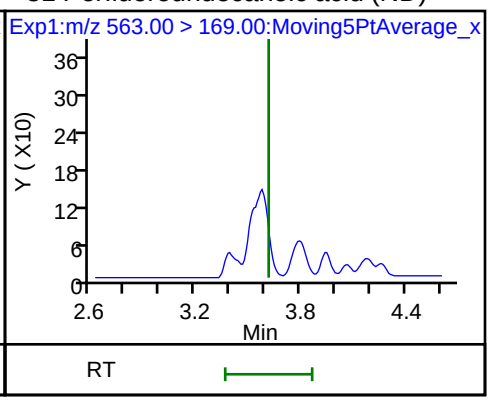
D 30 13C2 PFUnA



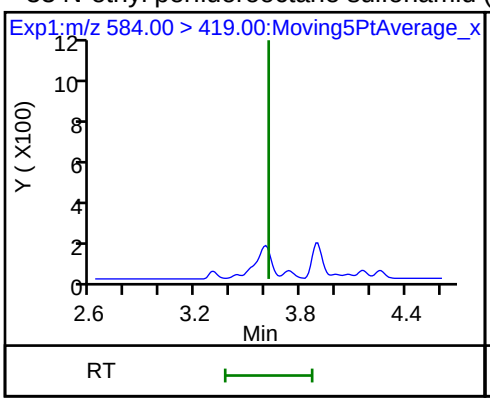
31 Perfluoroundecanoic acid (ND)



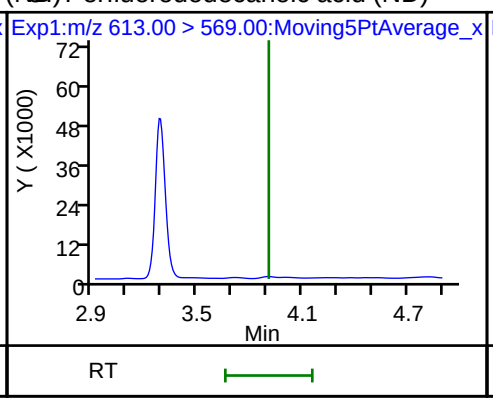
31 Perfluoroundecanoic acid (ND)



33 N-ethyl perfluorooctane sulfonamid (ND)



37 Perfluorododecanoic acid (ND)



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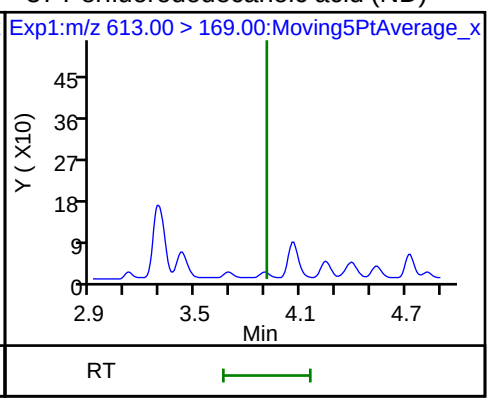
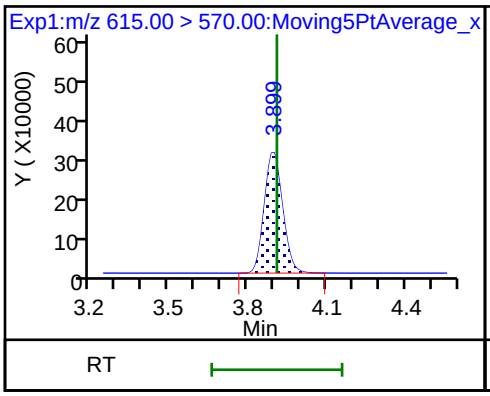
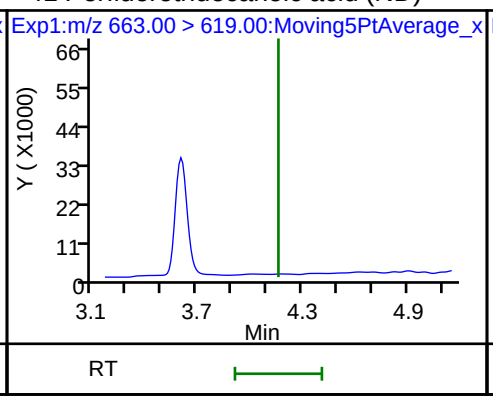


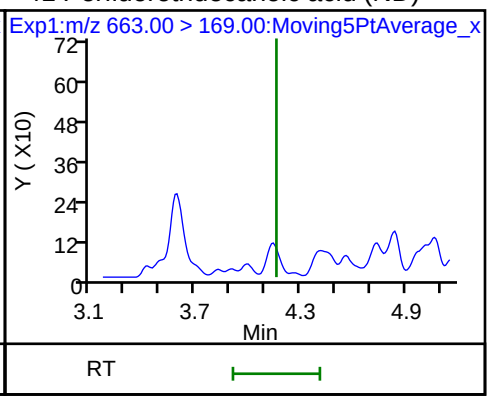
D 36 13C2 PFDoA



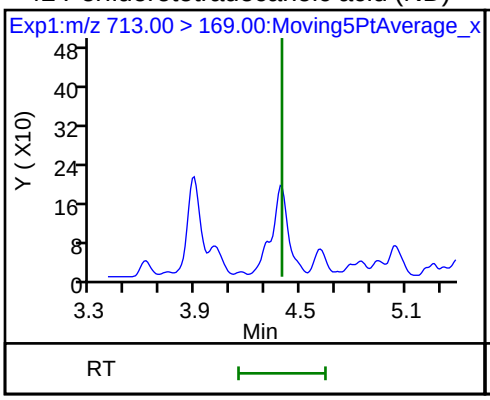
41 Perfluorotridecanoic acid (ND)



41 Perfluorotridecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



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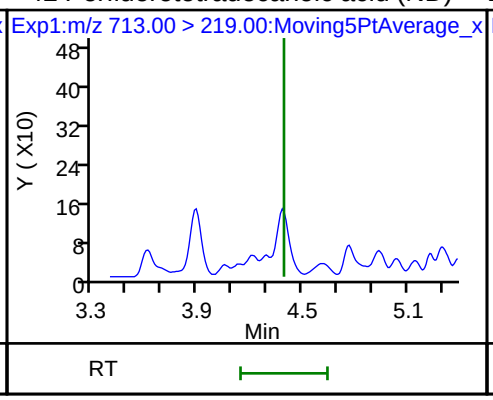
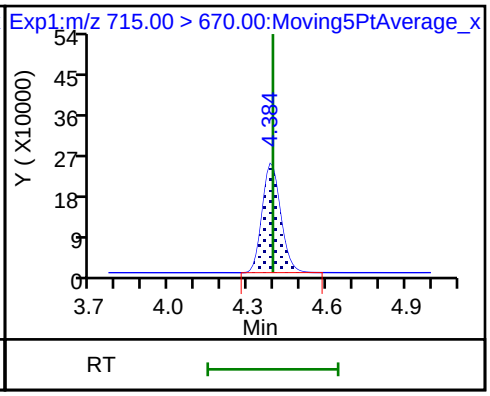


D 43 13C2-PFTeDA



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

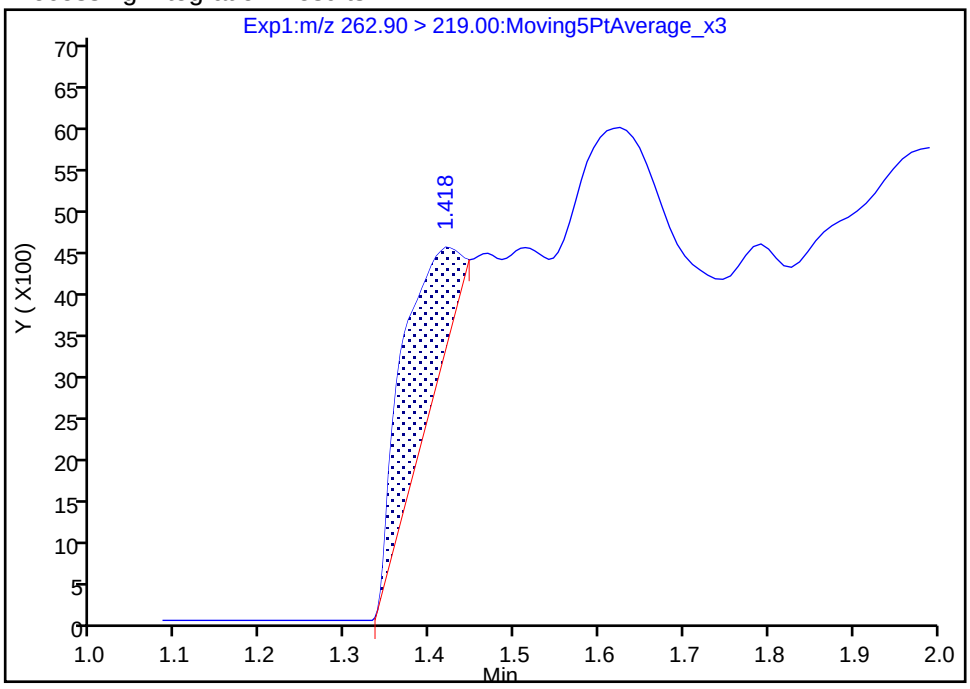
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_012.d				
Injection Date:	04-Aug-2018 00:51:04	Instrument ID:	A8_N		
Lims ID:	320-41405-A-3-A	Lab Sample ID:	320-41405-3		
Client ID:	GC-EQUIPMENT BLANK (072318)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	6	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

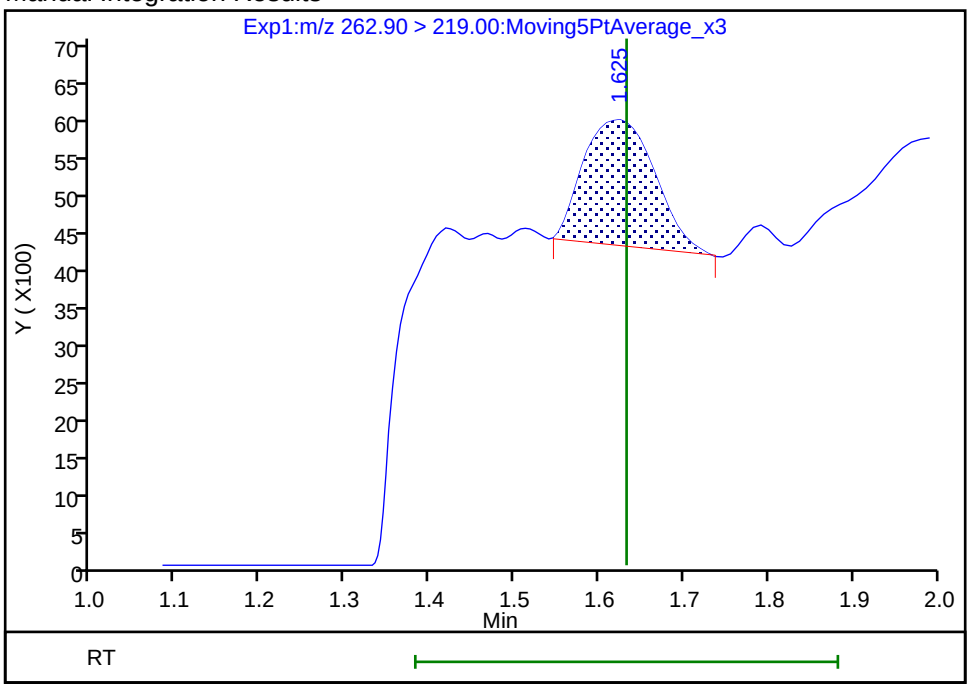
Processing Integration Results

RT: 1.42
Area: 8562
Amount: 0.005137
Amount Units: ng/ml



Manual Integration Results

RT: 1.62
Area: 9896
Amount: 0.005938
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:48:06

Audit Action: Manually Integrated Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

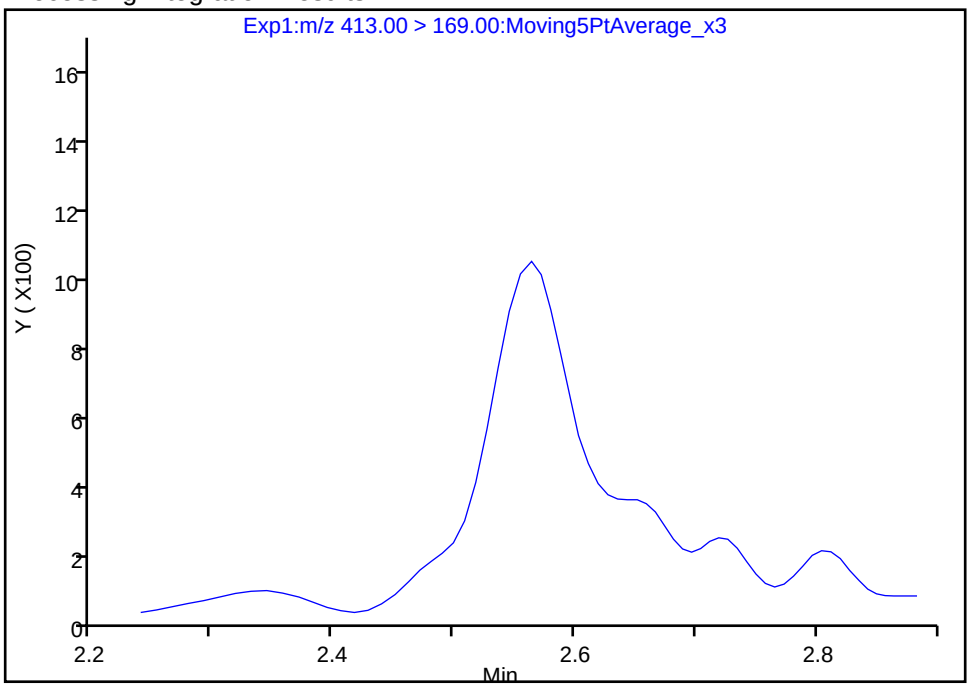
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_012.d				
Injection Date:	04-Aug-2018 00:51:04	Instrument ID:	A8_N		
Lims ID:	320-41405-A-3-A	Lab Sample ID:	320-41405-3		
Client ID:	GC-EQUIPMENT BLANK (072318)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	6	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

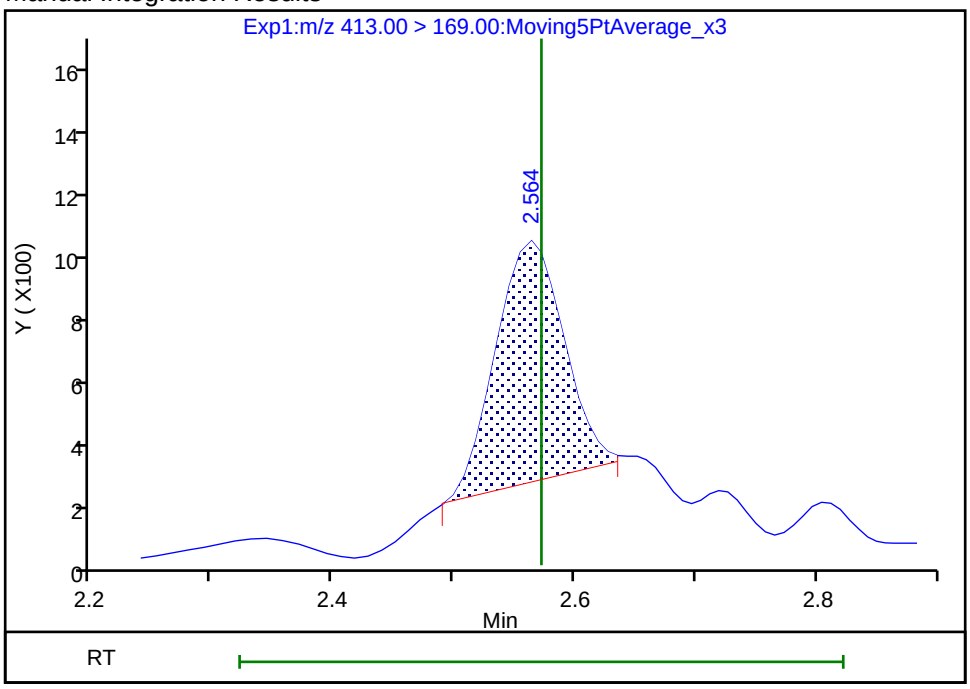
Processing Integration Results

RT: 2.57
Area: 0
Amount: 0.002737
Amount Units: ng/ml



Manual Integration Results

RT: 2.56
Area: 2920
Amount: 0.002737
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:48:20
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-2 (WG) | Lab Sample ID: 320-41405-4

Matrix: Water | Lab File ID: 2018.08.03LLC_013.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 13:25

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 291.8(mL) | Date Analyzed: 08/04/2018 00:58

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.0		1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	13		1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	13		1.7	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	7.8		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	27		1.7	0.73
375-95-1	Perfluorononanoic acid (PFNA)	3.9		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	0.59	J	1.7	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.1		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.6	J B	1.7	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.47	J	1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	23		1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.30
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2 FTS	2.5	J	17	1.7
39108-34-4	8:2 FTS	ND		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-2 (WG) | Lab Sample ID: 320-41405-4

Matrix: Water | Lab File ID: 2018.08.03LLC_013.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 13:25

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 291.8(mL) | Date Analyzed: 08/04/2018 00:58

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	69		25-150
STL01893	13C5 PFPeA	81		25-150
STL00993	13C2 PFHxA	96		25-150
STL01892	13C4-PFHpA	100		25-150
STL00990	13C4 PFOA	95		25-150
STL00995	13C5 PFNA	102		25-150
STL00996	13C2 PFDA	114		25-150
STL00997	13C2 PFUnA	106		25-150
STL00998	13C2 PFDoA	106		25-150
STL02116	13C2-PFTeDA	104		25-150
STL02337	13C3-PFBS	86		25-150
STL00994	18O2 PFHxS	98		25-150
STL00991	13C4 PFOS	96		25-150
STL01056	13C8 FOSA	93		25-150
STL02118	d3-NMeFOSAA	98		25-150
STL02117	d5-NEtFOSAA	98		25-150
STL02279	M2-6:2FTS	115		25-150
STL02280	M2-8:2FTS	120		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_013.d
Lims ID: 320-41405-A-4-A
Client ID: GC-MW-2 (WG)
Sample Type: Client
Inject. Date: 04-Aug-2018 00:58:55 ALS Bottle#: 7 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-41405-a-4-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 10:57:16 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK036

First Level Reviewer: hannigana Date: 06-Aug-2018 10:49:11

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.391	0.0	0.542	3522978	1.72		68.8	69502	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.396	-0.005	1.000	283370	0.2041			103	
D 3 13C5-PFPeA										
267.90 > 223.00	1.632	1.632	0.0	0.637	2720121	2.02		80.6	53129	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.632	1.632	0.0	1.000	508705	0.3905			164	
D 47 13C3-PFBS										
301.90 > 83.00	1.665	1.665	0.0	0.649	77333	1.99		85.7	260	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.665	1.665	0.0	1.000	380847	0.1494			167	
298.90 > 99.00	1.665	1.665	0.0	1.000	170045		2.24(1.25-3.74)		431	
D 7 13C2 PFHxA										
315.00 > 270.00	1.894	1.905	-0.011	0.739	3504366	2.40		96.0	62845	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.894	1.905	-0.011	1.000	565185	0.3823			592	
313.00 > 119.00	1.894	1.905	-0.011	1.000	48589		11.63(5.03-15.10)		727	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.217	0.0	0.865	3542919	2.50		100	80894	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.217	2.217	0.0	1.000	374428	0.2278			167	
363.00 > 169.00	2.217	2.217	0.0	1.000	128880		2.91(1.13-3.40)		1943	
D 11 18O2 PFHxS										
403.00 > 84.00	2.228	2.228	0.0	0.869	4950343	2.33		98.4	63809	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.228	2.229	-0.001	1.000	115958	0.0479			80.4	
399.00 > 99.00	2.228	2.229	-0.001	1.000	34746		3.34(1.50-4.49)		58.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.536	2.545	-0.009	0.989	1129512	2.72		115	6441	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.536	2.546	-0.010	1.000	57599	0.0732			1006	
* 62 13C2-PFOA										
415.00 > 370.00	2.564	2.564	0.0		3559241	2.50			68825	
D 14 13C4 PFOA										
417.00 > 372.00	2.564	2.572	-0.008	1.000	3258144	2.38		95.4	58304	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.564	2.572	-0.008	1.000	1174816	0.7797			581	
413.00 > 169.00	2.564	2.572	-0.008	1.000	634749		1.85(0.84-2.52)		5044	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.580	2.572	0.008	0.882	26973	0.0138			60.9	
449.00 > 99.00	2.580	2.572	0.008	0.882	7170		3.76(1.94-5.82)		61.1	M
D 19 13C5 PFNA										
468.00 > 423.00	2.926	2.931	-0.005	1.141	3023936	2.54		102	79161	
D 18 13C4 PFOS										
503.00 > 80.00	2.926	2.931	-0.005	1.141	3367855	2.29		95.9	23375	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.926	2.931	-0.005	1.000	1048625	0.6629			3929	
499.00 > 99.00	2.926	2.931	-0.005	1.000	178437		5.88(2.31-6.93)		1337	
20 Perfluorononanoic acid										
463.00 > 419.00	2.926	2.931	-0.005	1.000	148759	0.1139			304	
463.00 > 169.00	2.926	2.931	-0.005	1.000	36409		4.09(1.90-5.69)		873	
D 26 M2-8:2FTS										
529.00 > 81.00	3.269	3.276	-0.007	1.275	1158683	2.87		120	12765	
D 23 13C2 PFDA										
515.00 > 470.00	3.283	3.283	0.0	1.280	2529819	2.84		114	53579	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.283	3.283	0.0	1.000	18599	0.0172			33.6	
513.00 > 169.00	3.283	3.283	0.0	1.000	2761		6.74(2.36-7.09)		61.6	
D 21 13C8 FOSA										
506.00 > 78.00	3.307	3.314	-0.007	1.290	4994154	2.31		92.6	47059	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.439	3.439	0.0	1.341	531735	2.46		98.4	16632	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.600	3.611	-0.011	1.404	570277	2.46		98.5	5393	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.611	0.0	1.408	1819638	2.65		106	47761	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.621	3.617	0.004	1.003	4849	0.005406			8.6	
563.00 > 169.00	3.600	3.617	-0.017	0.997	1436		3.38(2.12-6.36)		41.7	
D 36 13C2 PFDoA										
615.00 > 570.00	3.899	3.909	-0.010	1.521	1567908	2.64		106	18082	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.394	0.0	1.714	1299127	2.61		104	5642	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 06-Aug-2018 11:01:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_013.d

Injection Date: 04-Aug-2018 00:58:55 Instrument ID: A8_N

Lims ID: 320-41405-A-4-A Lab Sample ID: 320-41405-4

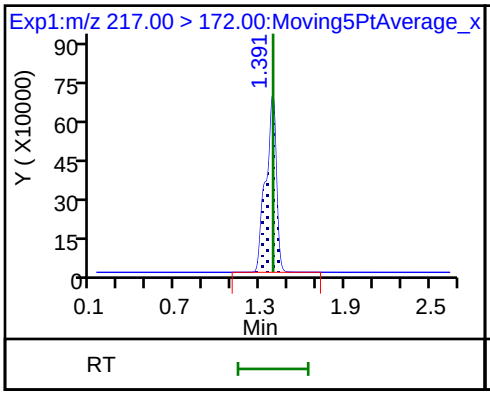
Client ID: GC-MW-2 (WG)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 7 Worklist Smp#: 11

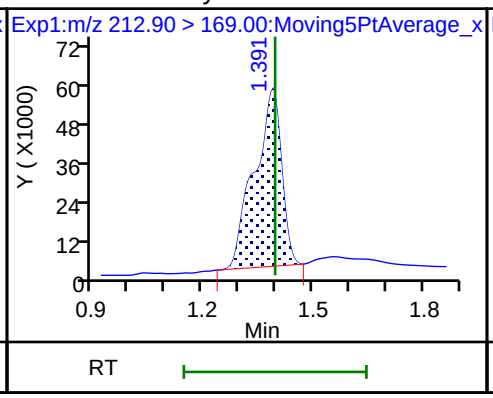
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

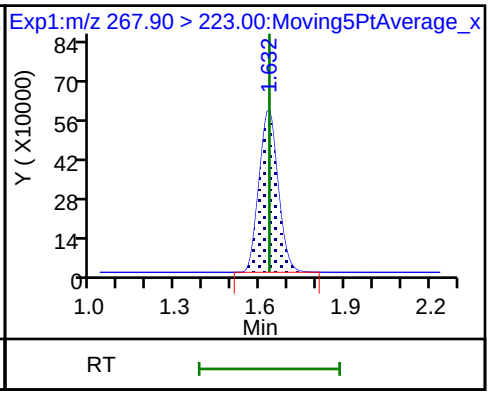
D 1 13C4 PFBA



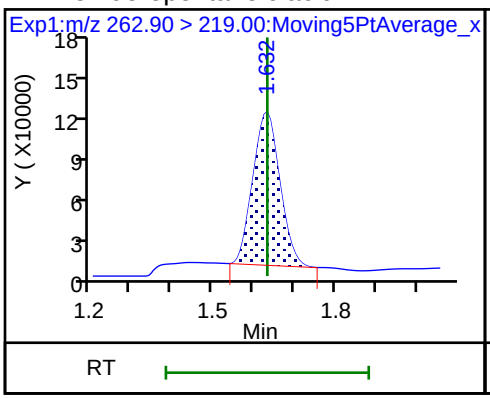
2 Perfluorobutyric acid



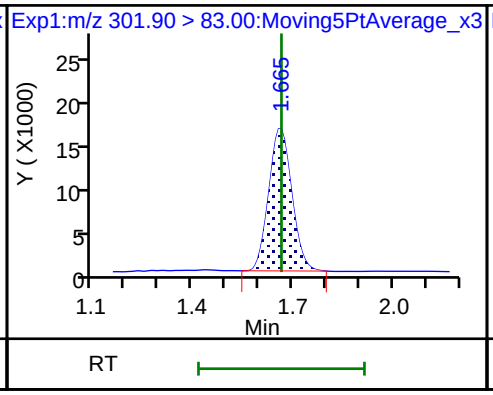
D 3 13C5-PFPeA



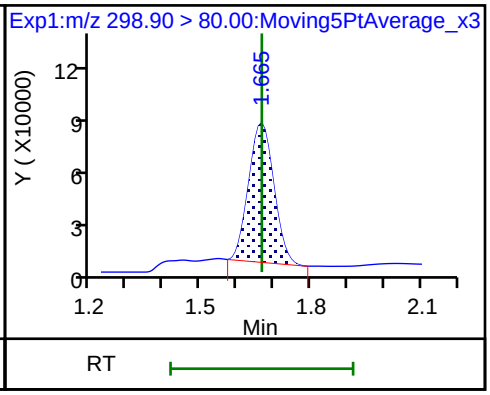
4 Perfluoropentanoic acid



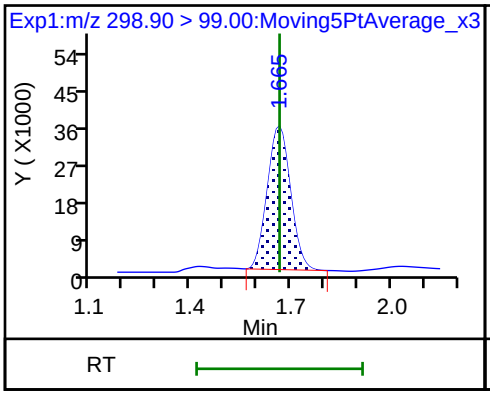
D 47 13C3-PFBS



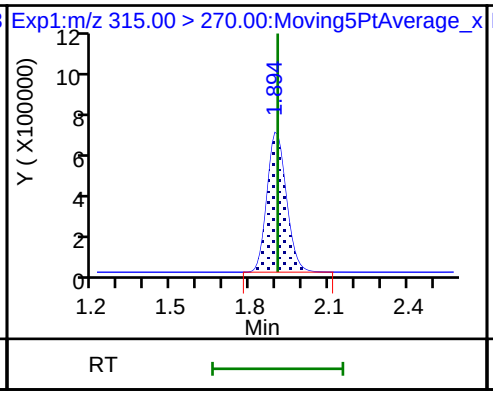
5 Perfluorobutanesulfonic acid



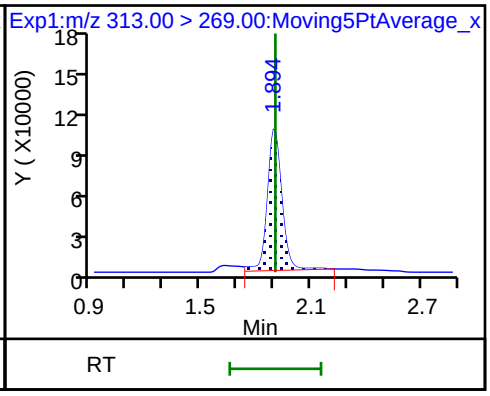
5 Perfluorobutanesulfonic acid



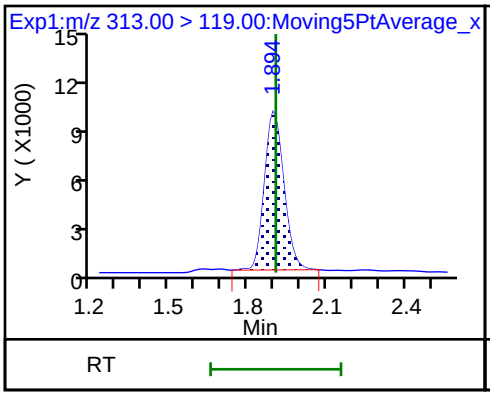
D 7 13C2 PFHxA



6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



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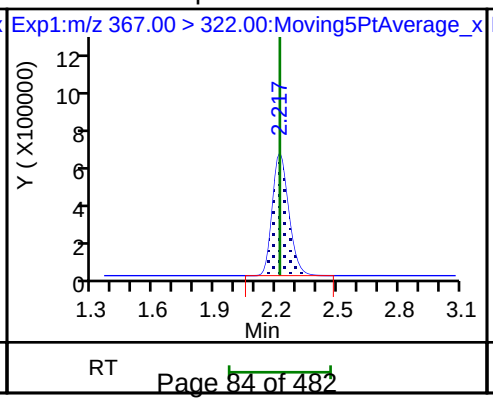
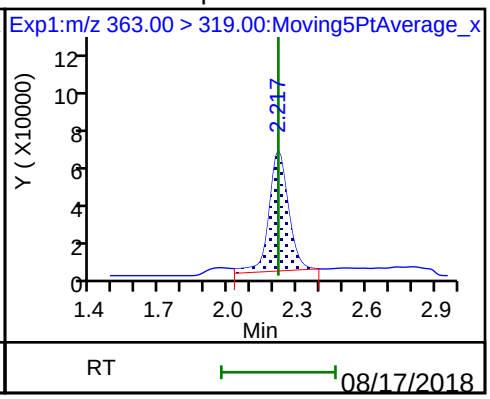
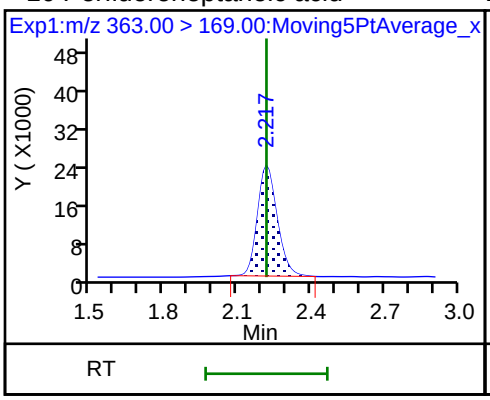


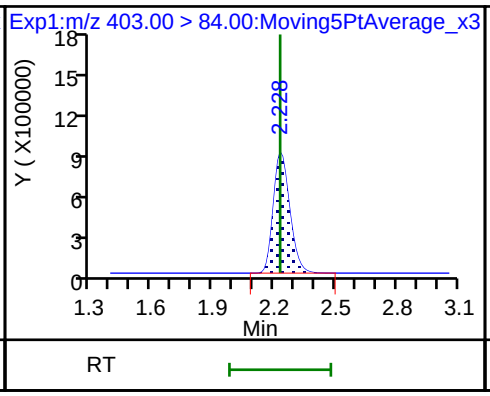
10 Perfluoroheptanoic acid



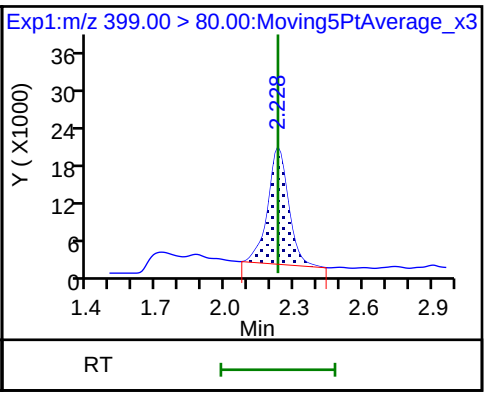
10 Perfluoroheptanoic acid



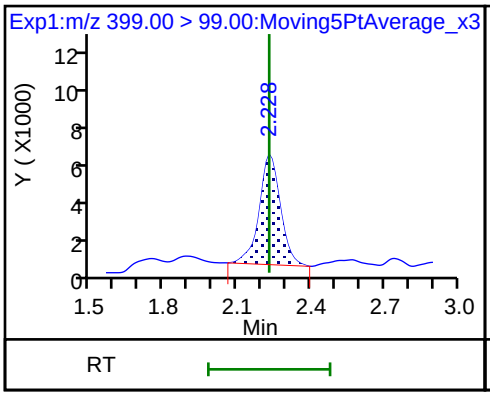
D 11 18O2 PFHxS



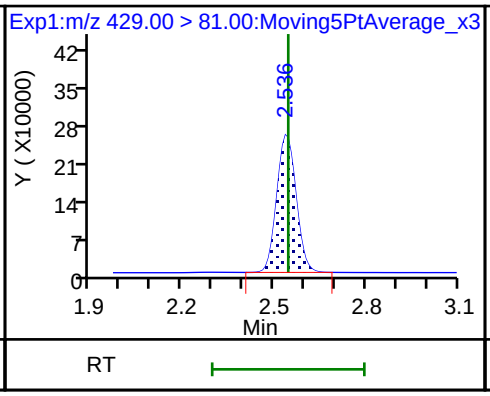
8 Perfluorohexanesulfonic acid



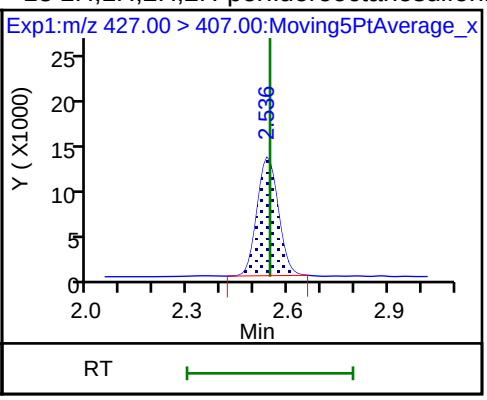
8 Perfluorohexanesulfonic acid



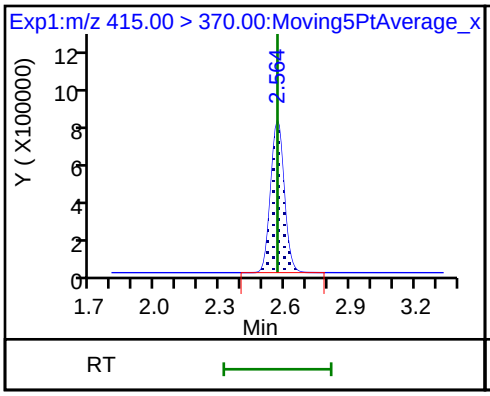
D 12 M2-6:2FTS



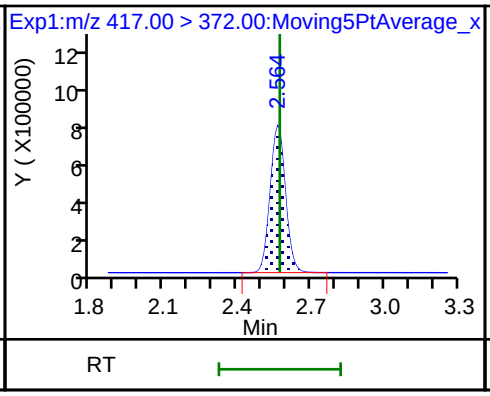
13 1H,1H,2H,2H-perfluorooctanesulfoni



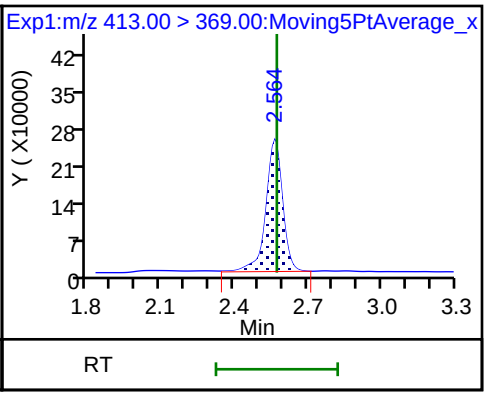
* 62 13C2-PFOA



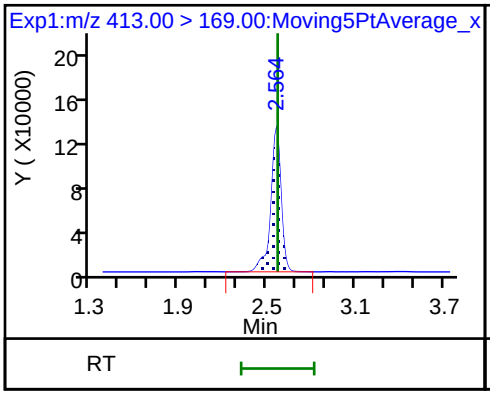
D 14 13C4 PFOA



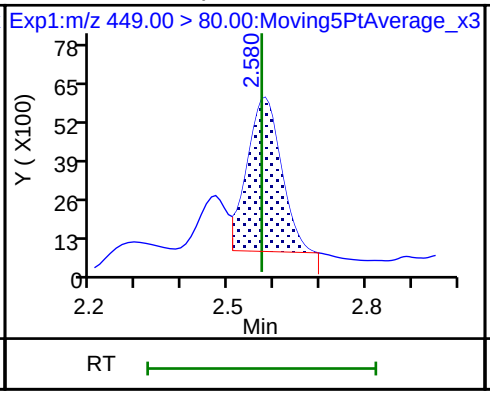
15 Perfluorooctanoic acid



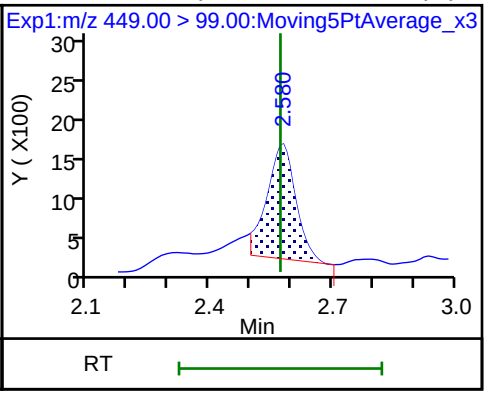
15 Perfluorooctanoic acid



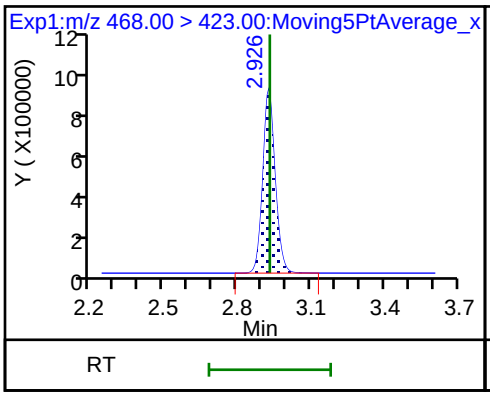
16 Perfluoroheptanesulfonic acid



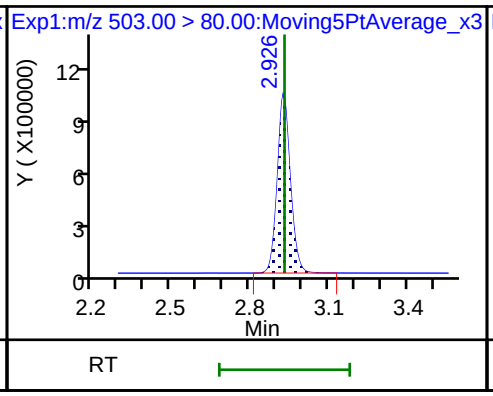
16 Perfluoroheptanesulfonic acid (M)



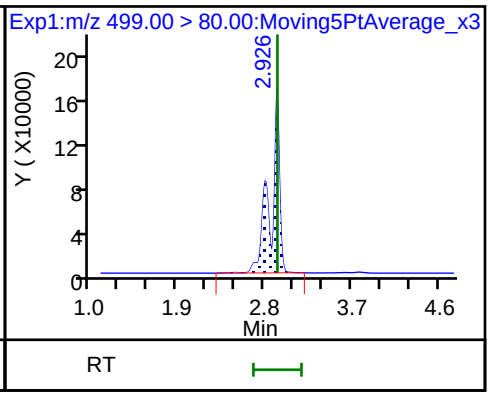
D 19 13C5 PFNA



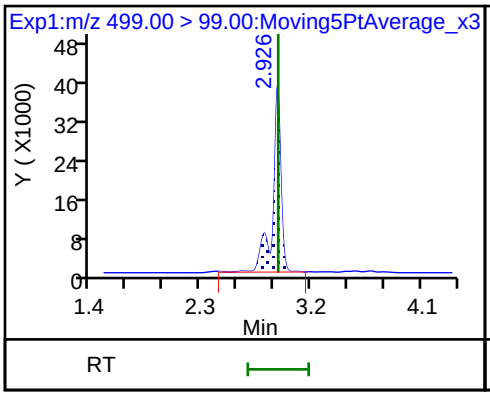
D 18 13C4 PFOS



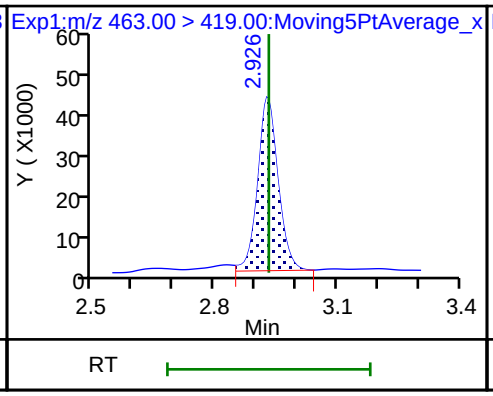
17 Perfluorooctane sulfonic acid



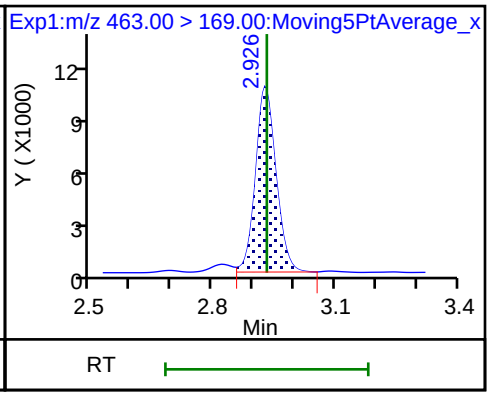
17 Perfluorooctane sulfonic acid



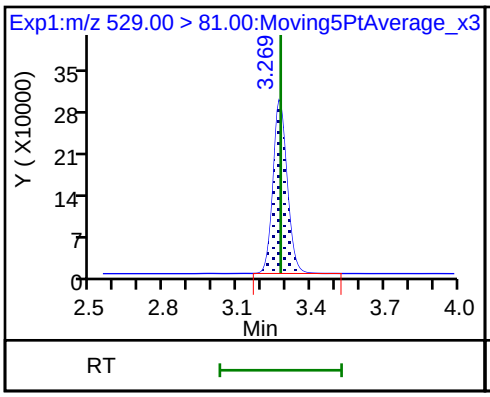
20 Perfluorononanoic acid



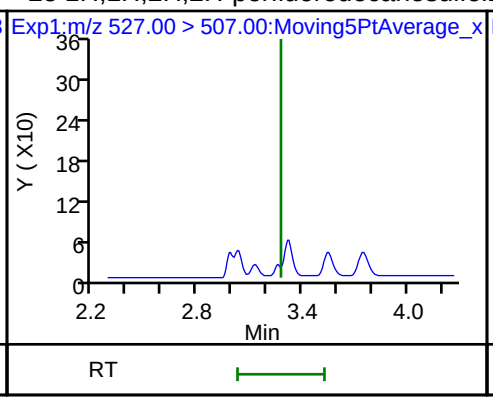
20 Perfluorononanoic acid



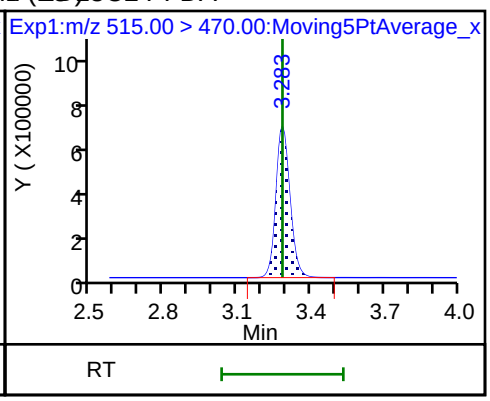
D 26 M2-8:2FTS



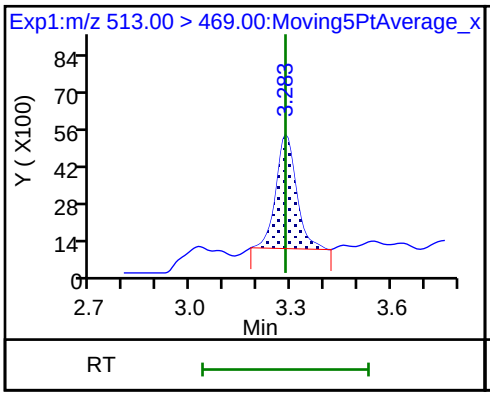
25 1H,1H,2H,2H-perfluorodecanesulfonic acid



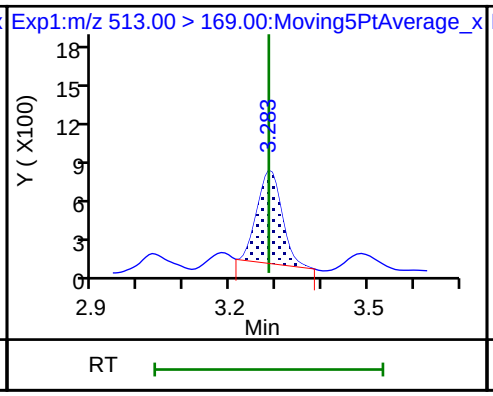
D [illegible]13C2 PFDA



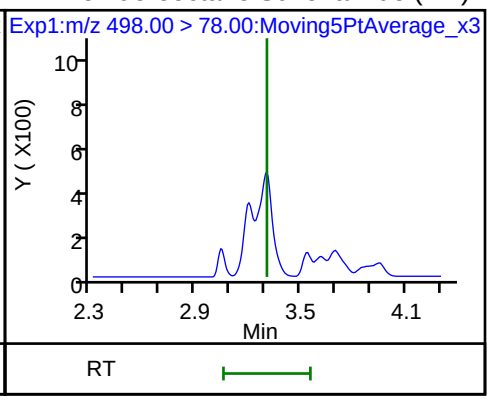
24 Perfluorodecanoic acid



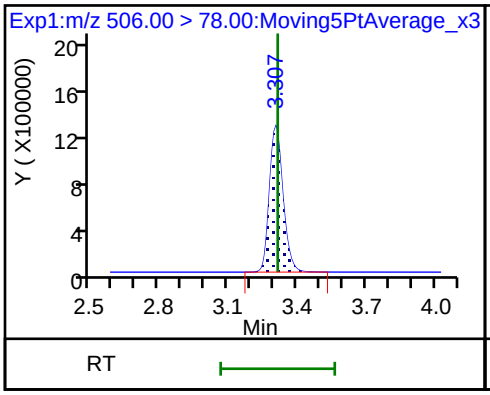
24 Perfluorodecanoic acid



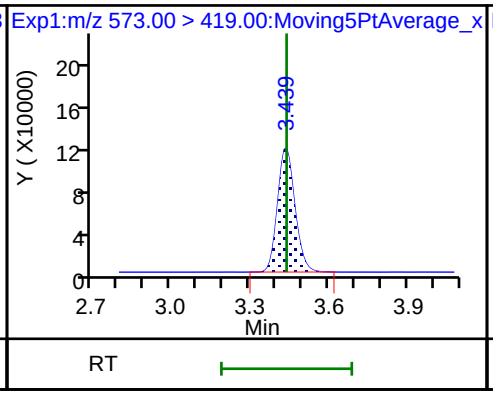
22 Perfluorooctane Sulfonamide (ND)



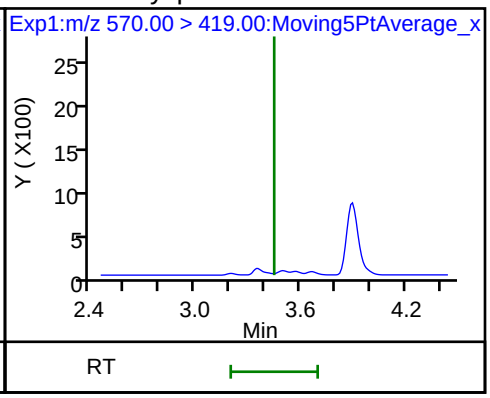
D 21 13C8 FOSA



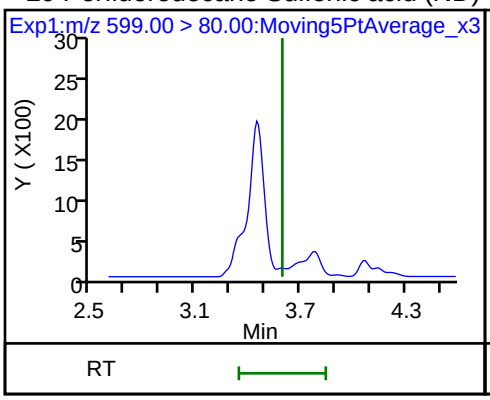
D 27 d3-NMeFOSAA



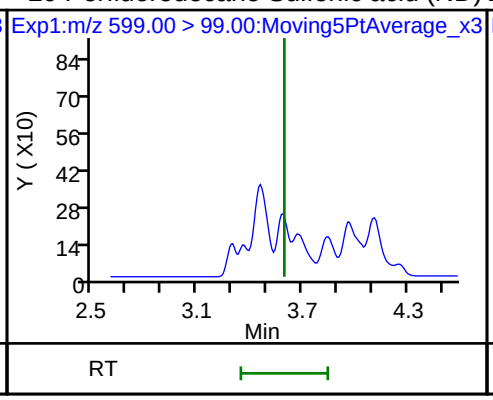
28 N-methyl perfluorooctane sulfonami (ND)



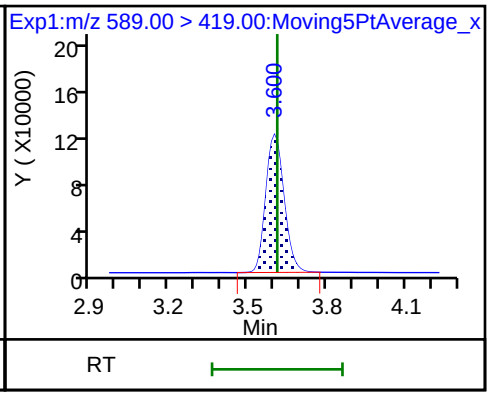
29 Perfluorodecane Sulfonic acid (ND)



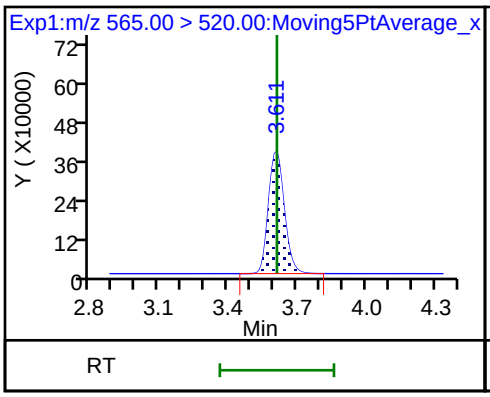
29 Perfluorodecane Sulfonic acid (ND)



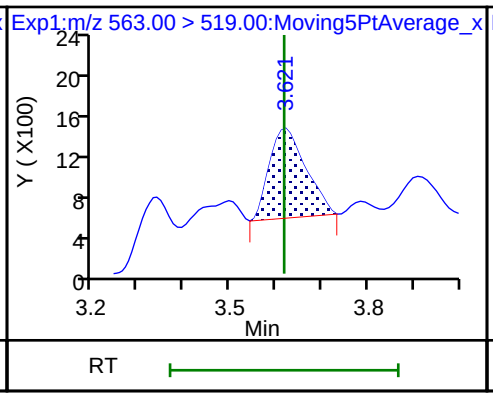
D 32 d5-NEtFOSAA



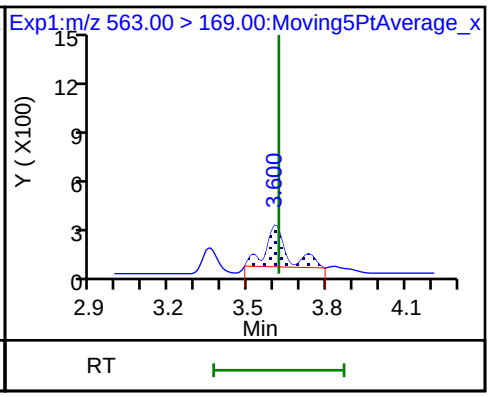
D 30 13C2 PFUnA



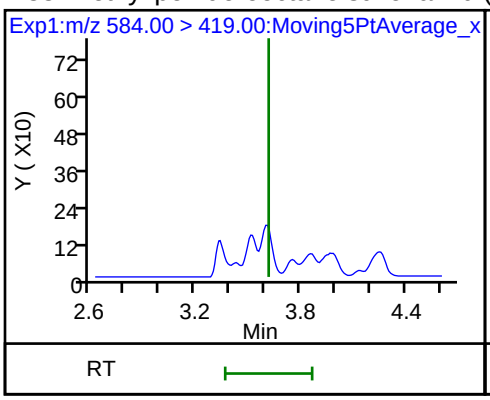
31 Perfluoroundecanoic acid



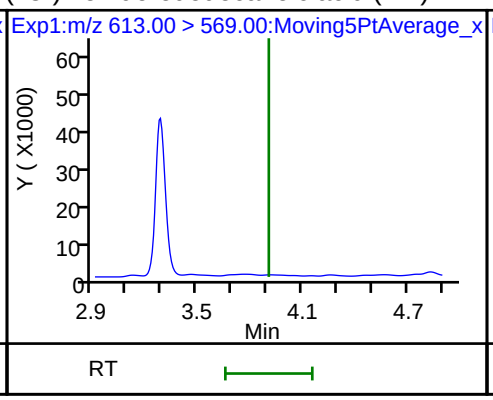
31 Perfluoroundecanoic acid



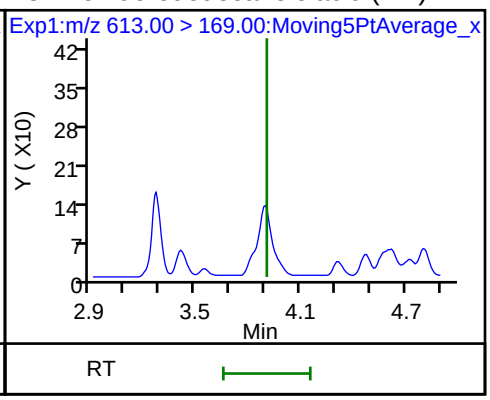
33 N-ethyl perfluorooctane sulfonamid (NEt



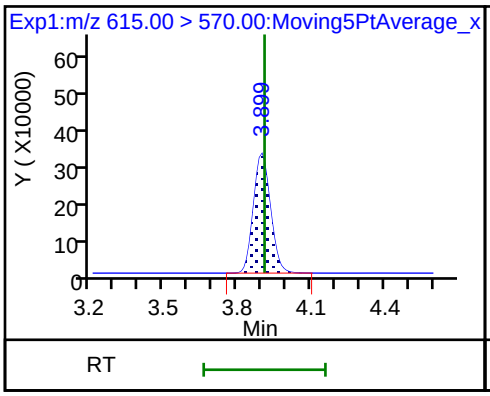
37 Perfluorododecanoic acid (ND)



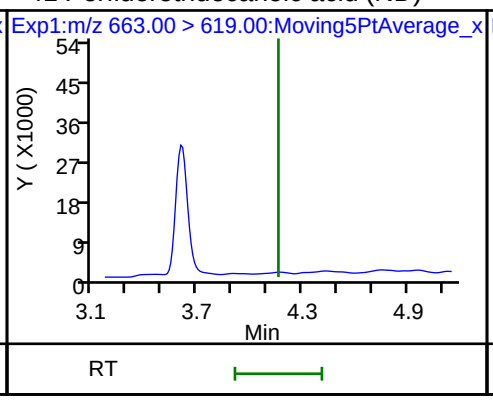
37 Perfluorododecanoic acid (ND)



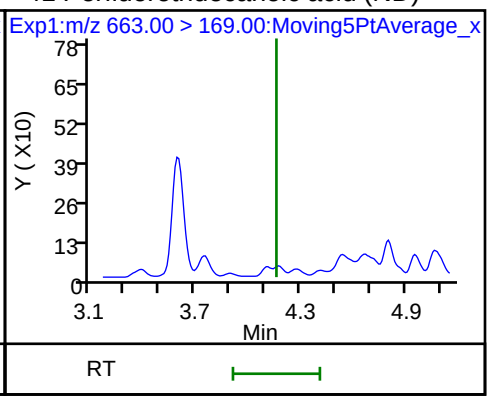
D 36 13C2 PFDoA



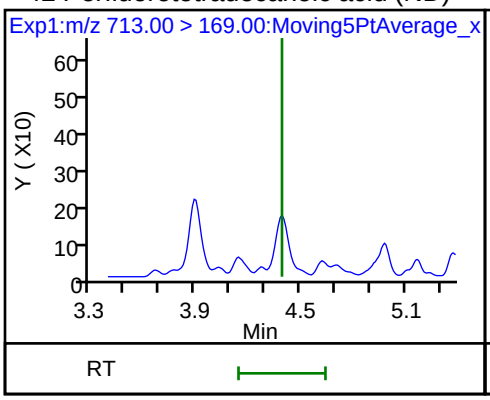
41 Perfluorotridecanoic acid (ND)



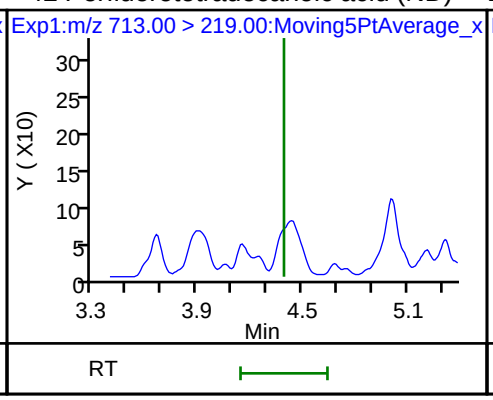
41 Perfluorotridecanoic acid (ND)



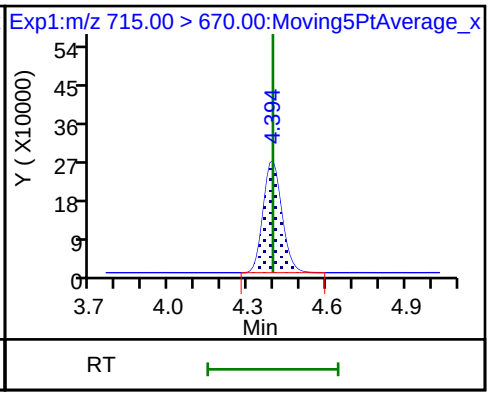
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

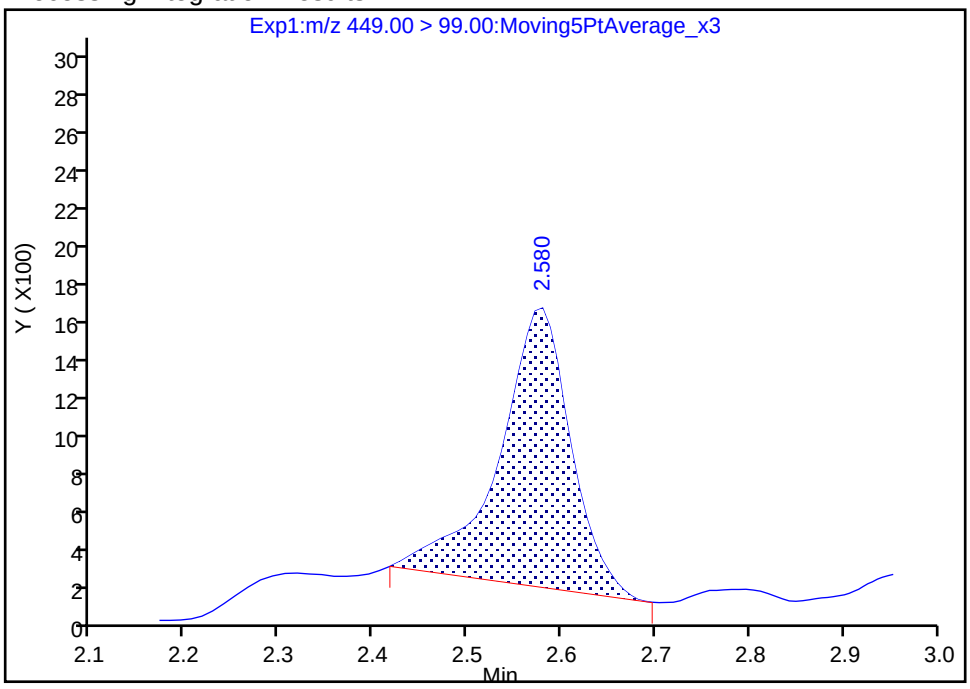
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_013.d				
Injection Date:	04-Aug-2018 00:58:55	Instrument ID:	A8_N		
Lims ID:	320-41405-A-4-A	Lab Sample ID:	320-41405-4		
Client ID:	GC-MW-2 (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	7	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

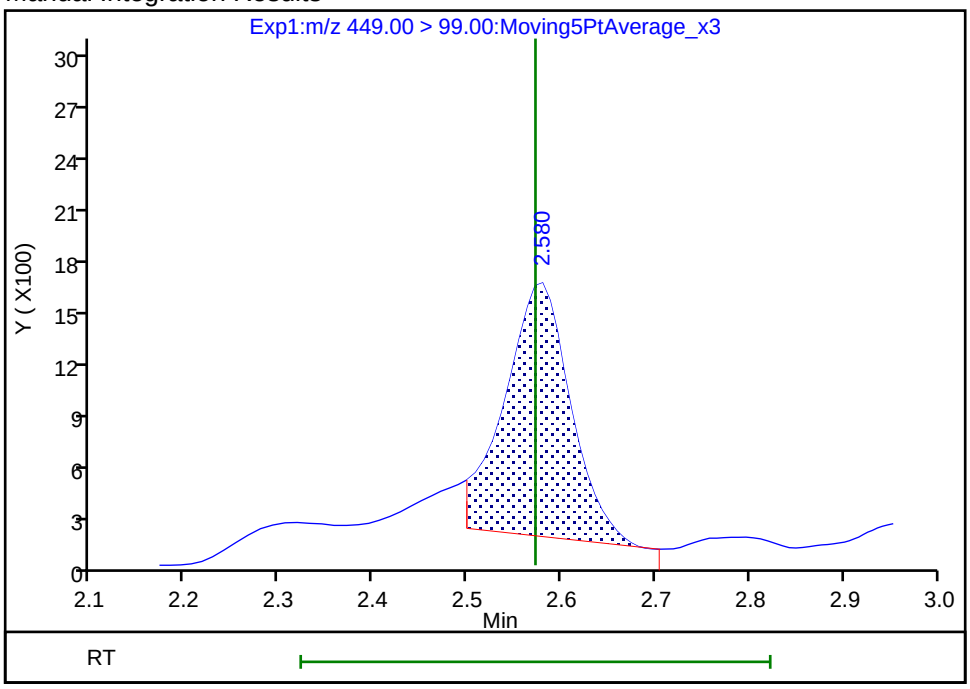
Processing Integration Results

RT: 2.58
Area: 7785
Amount: 0.013847
Amount Units: ng/ml



Manual Integration Results

RT: 2.58
Area: 7170
Amount: 0.013847
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:48:57

Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-DRAIN (WG) | Lab Sample ID: 320-41405-5

Matrix: Water | Lab File ID: 2018.08.07LLBB_064.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 12:15

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 286(mL) | Date Analyzed: 08/07/2018 22:27

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238593 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	180	CI	1.7	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	12		1.7	0.43
307-24-4	Perfluorohexanoic acid (PFHxA)	36		1.7	0.51
375-85-9	Perfluoroheptanoic acid (PFHpA)	37		1.7	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	210		1.7	0.74
375-95-1	Perfluorononanoic acid (PFNA)	14		1.7	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	28		1.7	0.27
307-55-1	Perfluorododecanoic acid (PFDoA)	3.0		1.7	0.48
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.85	J	1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	11	CI	1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	11	B	1.7	0.15
754-91-6	Perfluorooctane Sulfonamide (FOSA)	12		1.7	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	28		17	2.7
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	11	J	17	1.7
27619-97-2	6:2 FTS	6.2	J	17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-DRAIN (WG) | Lab Sample ID: 320-41405-5

Matrix: Water | Lab File ID: 2018.08.07LLBB_064.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 12:15

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 286(mL) | Date Analyzed: 08/07/2018 22:27

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238593 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	28		25-150
STL01893	13C5 PFPeA	54		25-150
STL00993	13C2 PFHxA	69		25-150
STL01892	13C4-PFHpA	76		25-150
STL00990	13C4 PFOA	91		25-150
STL00995	13C5 PFNA	123		25-150
STL00996	13C2 PFDA	140		25-150
STL00998	13C2 PFDoA	139		25-150
STL02116	13C2-PFTeDA	85		25-150
STL02337	13C3-PFBS	104		25-150
STL00994	18O2 PFHxS	140		25-150
STL01056	13C8 FOSA	101		25-150
STL02118	d3-NMeFOSAA	98		25-150
STL02117	d5-NEtFOSAA	134		25-150
STL02279	M2-6:2FTS	197	*	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d
Lims ID: 320-41405-A-5-A
Client ID: GC-MW-DRAIN (WG)
Sample Type: Client
Inject. Date: 07-Aug-2018 22:27:02 ALS Bottle#: 41 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-41405-a-5-a
Misc. Info.: Plate: 1 Rack: 5
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 11:34:28 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK048

First Level Reviewer: hannigana Date: 08-Aug-2018 11:34:21

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										M
212.90 > 169.00	1.366	1.396	-0.030	0.983	1241394	5.27			8.6	M
D 1 13C4 PFBA										
217.00 > 172.00	1.389	1.399	-0.010	0.542	627801	0.6989		28.0	705	
D 3 13C5-PFPeA										
267.90 > 223.00	1.636	1.644	-0.008	0.638	828724	1.34		53.6	89.9	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.629	1.646	-0.017	0.995	125035	0.3315			0.3	M
D 47 13C3-PFBS										M
301.90 > 83.00	1.660	1.676	-0.016	0.648	34689	2.42		104	4.3	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.629	1.678	-0.049	0.981	342765	0.3025			0.2	M
298.90 > 99.00	1.668	1.678	-0.010	1.005	184728		1.86(1.25-3.74)		2.5	M
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.898	1.912	-0.014	1.000	517448	1.04			2.8	M
313.00 > 119.00	1.898	1.912	-0.014	1.000	39394		13.14(5.03-15.10)		6.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	1.898	1.918	-0.020	0.741	1216262	1.73		69.3	1284	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.219	2.223	-0.004	1.000	593164	1.07			12.1	M
363.00 > 169.00	2.219	2.223	-0.004	1.000	250531		2.37(1.13-3.40)		78.8	M
D 9 13C4-PFHpA										
367.00 > 322.00	2.219	2.227	-0.008	0.866	1304048	1.89		75.5	2647	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.227	2.232	-0.005	1.000	428802	0.3187			0.8	M
399.00 > 99.00	2.227	2.232	-0.005	1.000	127384		3.37(1.50-4.49)		8.5	M
D 11 18O2 PFHxS										
403.00 > 84.00	2.227	2.247	-0.020	0.869	2935461	3.31		140	1515	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.538	2.549	-0.011	1.000	79528	0.1764			81.4	
D 12 M2-6:2FTS										M
429.00 > 81.00	2.538	2.553	-0.015	0.990	680617	4.68		197	2.5	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.563	2.572	-0.009	1.000	3894526	5.96			105	M
413.00 > 169.00	2.563	2.572	-0.009	1.000	2300949		1.69(0.84-2.52)		390	M
* 62 13C2-PFOA										s
415.00 > 370.00	2.563	2.572	-0.009		1621530	2.50			3803	
D 14 13C4 PFOA										
417.00 > 372.00	2.563	2.575	-0.012	1.000	1444393	2.28		91.1	2476	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	2.583	2.579	0.004	0.881	61761	0.0505			0.1	M
449.00 > 99.00	2.576	2.579	-0.003	0.879	26068		2.37(1.94-5.82)		2.5	M
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.937	2.938	-0.001	1.002	7075299	6.67			20.5	M
499.00 > 99.00	2.931	2.938	-0.007	1.000	1476686		4.79(2.31-6.93)		307	
D 19 13C5 PFNA										
468.00 > 423.00	2.931	2.941	-0.010	1.144	1743667	3.07		123	2606	
D 18 13C4 PFOS										M
503.00 > 80.00	2.931	2.941	-0.010	1.144	2359816	4.05		170	4.7	M
20 Perfluorononanoic acid										M
463.00 > 419.00	2.931	2.944	-0.013	1.000	298249	0.4060			12.7	M
463.00 > 169.00	2.931	2.944	-0.013	1.000	79178		3.77(1.90-5.69)		49.9	M
D 26 M2-8:2FTS										M
529.00 > 81.00	3.282	3.282	0.0	1.281	1159684	6.60		276	7.4	M
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.282	3.283	-0.001	1.000	90949	0.1446			218	
D 23 13C2 PFDA										
515.00 > 470.00	3.289	3.297	-0.008	1.283	1744247	3.49		140	4476	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.289	3.298	-0.009	1.000	570417	0.8150			51.7	M
513.00 > 169.00	3.296	3.298	-0.002	1.002	95802		5.95(2.36-7.09)		81.6	
D 21 13C8 FOSA										
506.00 > 78.00	3.318	3.318	0.0	1.295	1938667	2.51		101	2762	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.318	3.319	-0.001	1.000	261819	0.3468			32.6	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.443	3.451	-0.008	1.344	624065	2.44		97.8	449	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.451	3.452	-0.001	1.002	191681	0.7961			195	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.611	3.619	-0.008	1.409	888498	3.36		134	378	
D 30 13C2 PFUnA										
565.00 > 520.00	3.618	3.626	-0.008	1.412	1646320	4.10		164	6380	
33 N-ethyl perfluorooctane sulfonamid										M
584.00 > 419.00	3.618	3.627	-0.008	1.002	95362	0.3009			165	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
31 Perfluoroundecanoic acid										M
563.00 > 519.00	3.618	3.627	-0.008	1.000	62801	0.0849			8.8	M
563.00 > 169.00	3.618	3.627	-0.008	1.000	10542		5.96(2.12-6.36)		12.6	M
D 36 13C2 PFDoA										
615.00 > 570.00	3.907	3.908	-0.001	1.525	1477602	3.48		139	3486	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.918	3.919	-0.001	1.003	56891	0.0865			15.2	
613.00 > 169.00	3.918	3.919	-0.001	1.003	15000		3.79(2.13-6.40)		46.7	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.177	4.177	0.0	1.069	4729	0.007441			1.8	M
663.00 > 169.00	4.177	4.177	0.0	1.069	1719		2.75(1.25-3.76)		5.2	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.397	4.405	-0.008	0.998	2694	0.0243			10.5	
713.00 > 219.00	4.405	4.405	0.0	1.000	1477		1.82(0.71-2.13)		12.5	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.405	4.406	-0.001	1.719	1147160	2.12		84.9	3483	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

Report Date: 08-Aug-2018 11:34:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d

Injection Date: 07-Aug-2018 22:27:02 Instrument ID: A8_N

Lims ID: 320-41405-A-5-A Lab Sample ID: 320-41405-5

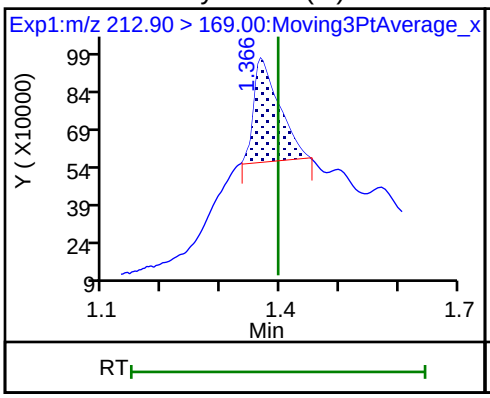
Client ID: GC-MW-DRAIN (WG)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 41 Worklist Smp#: 3

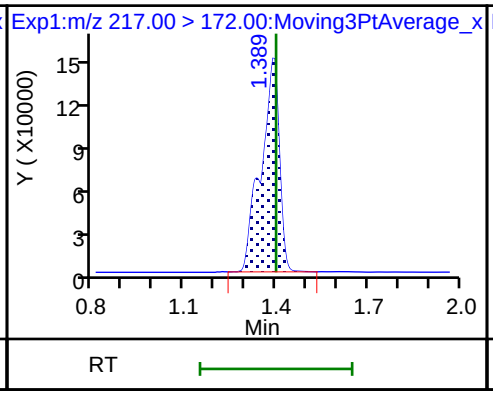
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

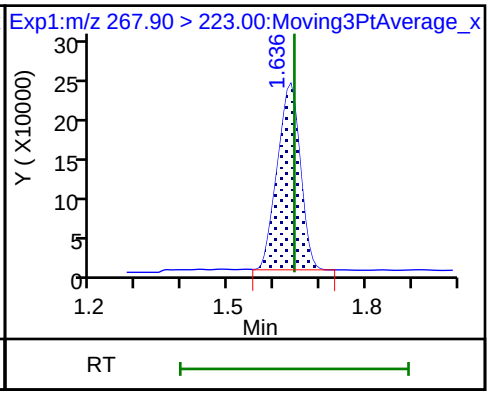
2 Perfluorobutyric acid (M)



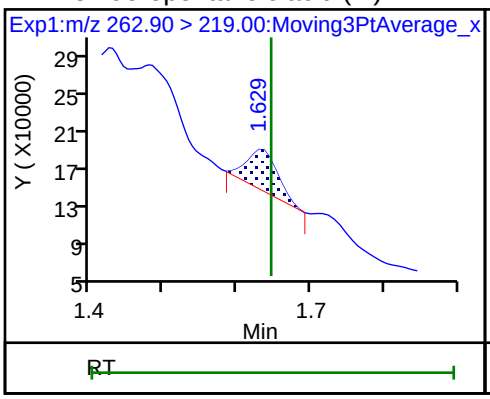
D 1 13C4 PFBA



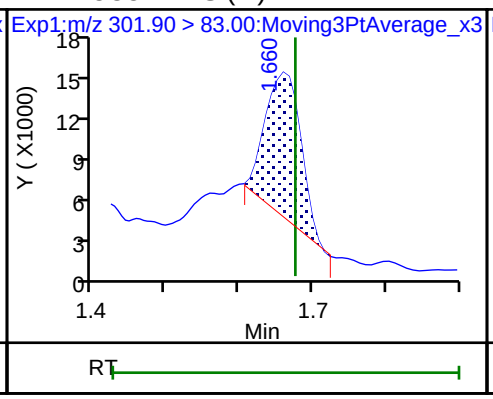
D 3 13C5-PFPeA



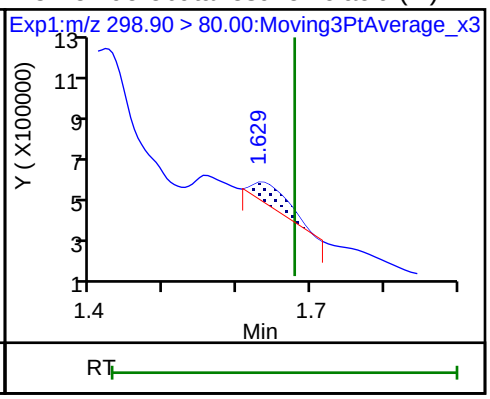
4 Perfluoropentanoic acid (M)



D 47 13C3-PFBS (M)



5 Perfluorobutanesulfonic acid (M)



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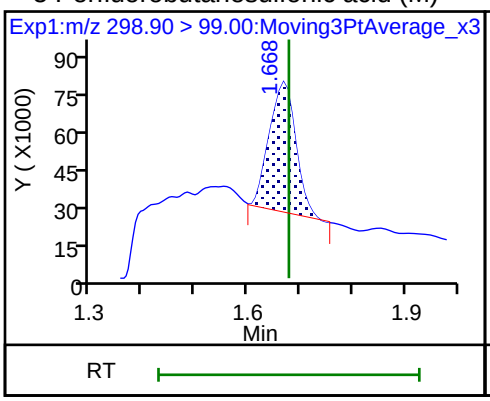
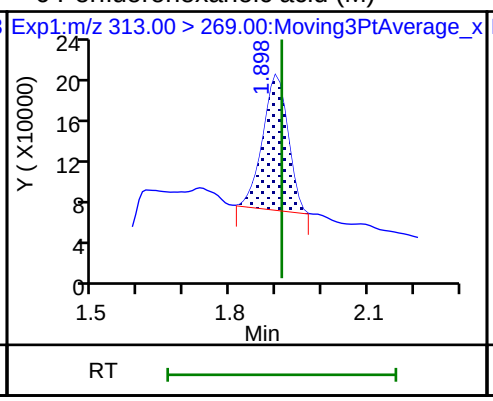
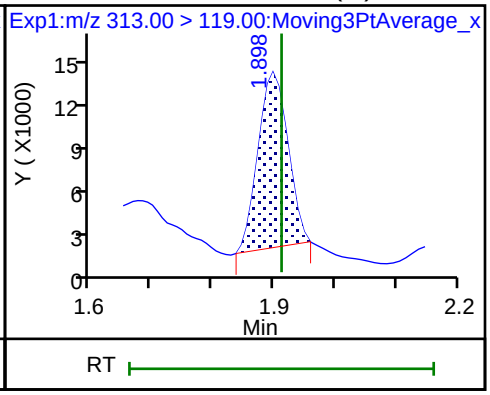


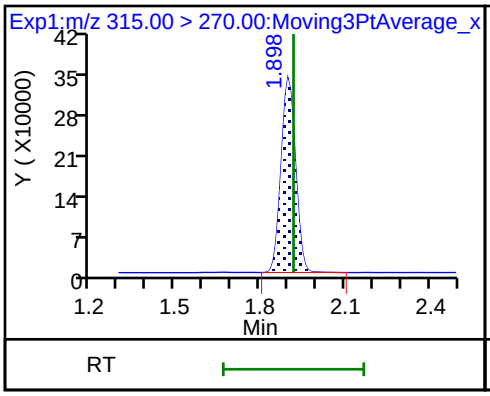
6 Perfluorohexanoic acid (M)



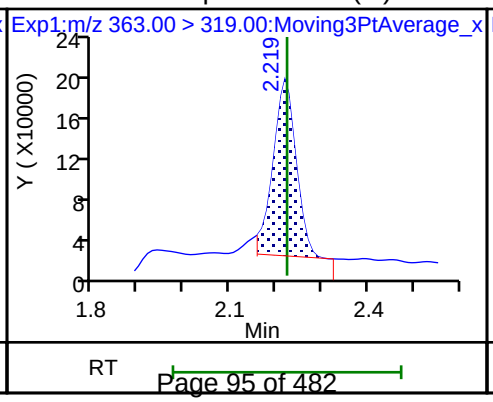
6 Perfluorohexanoic acid (M)



D 7 13C2 PFHxA



10 Perfluoroheptanoic acid (M)



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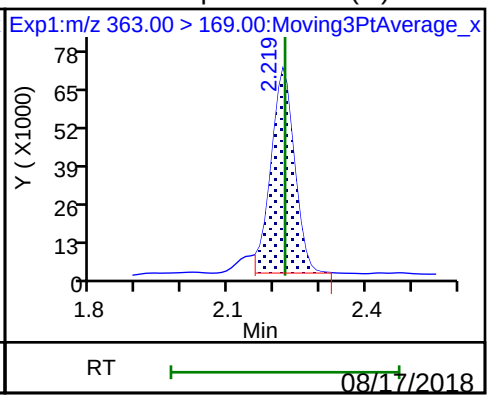
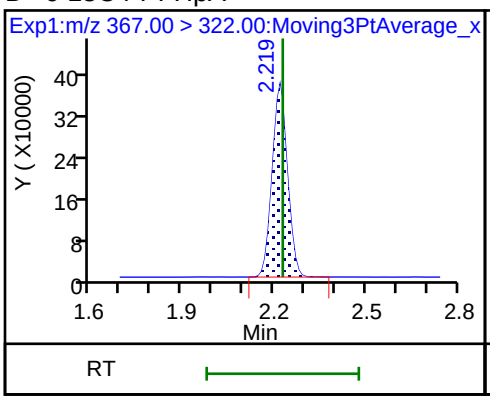
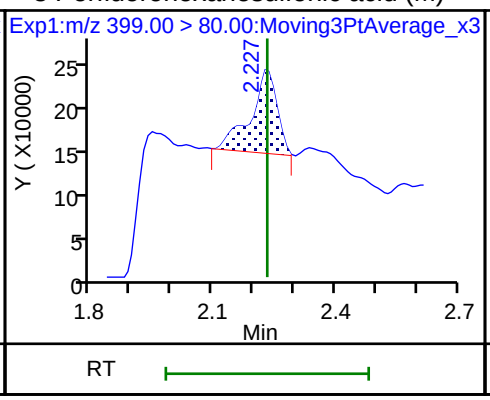


D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid (M)



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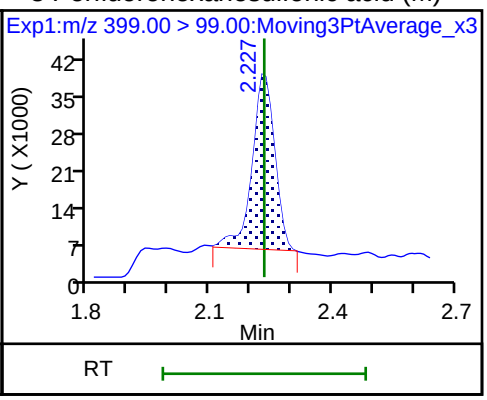
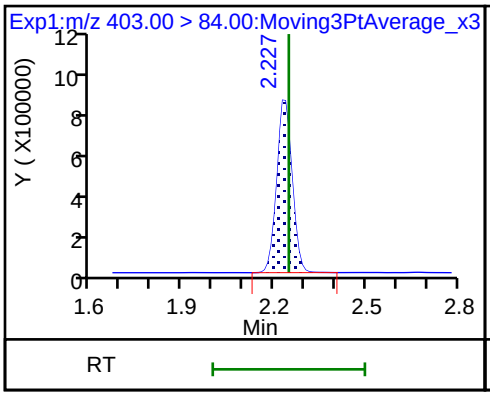
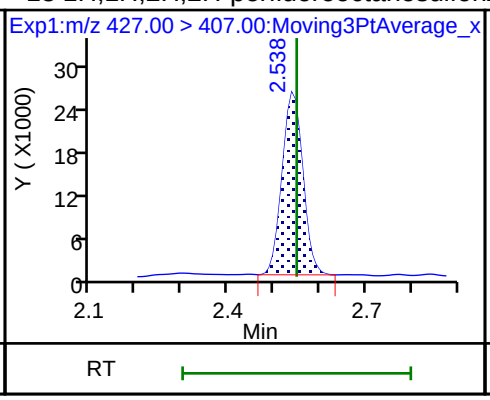


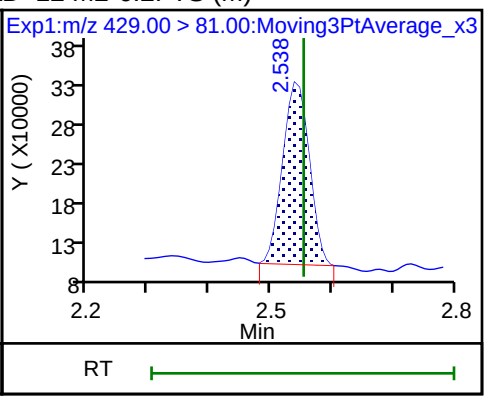
D 11 18O2 PFHxS



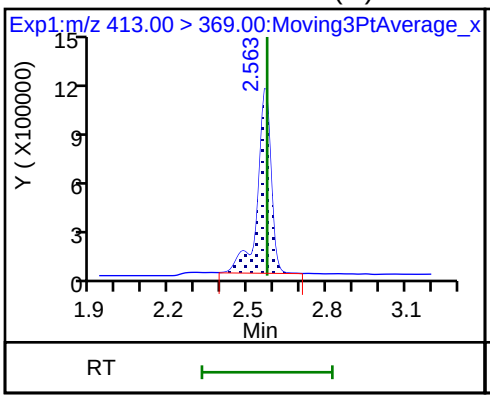
13 1H,1H,2H,2H-perfluorooctanesulfon



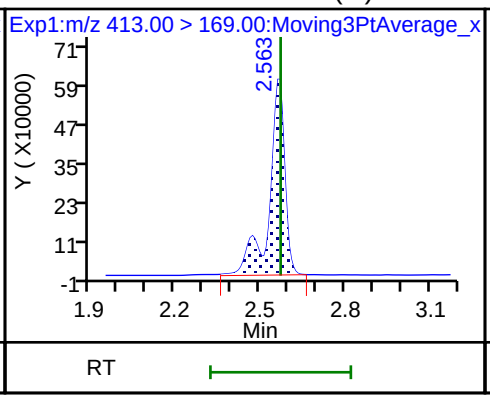
D 12 M2-6:2FTS (M)



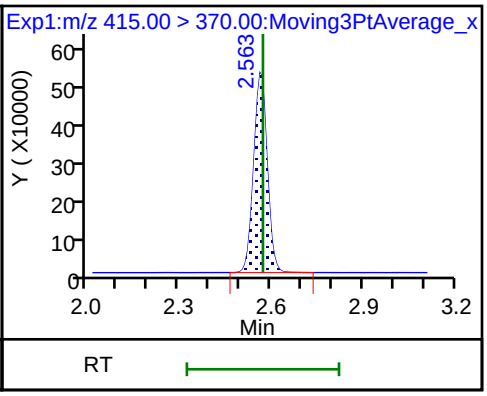
15 Perfluorooctanoic acid (M)



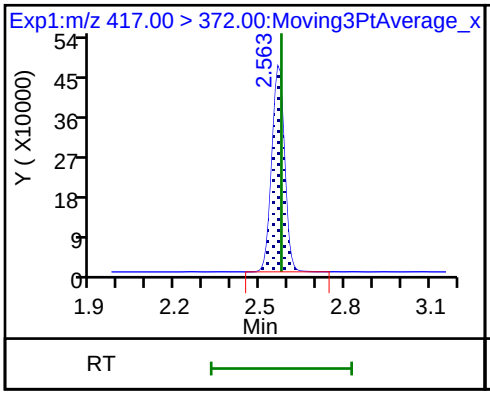
15 Perfluorooctanoic acid (M)



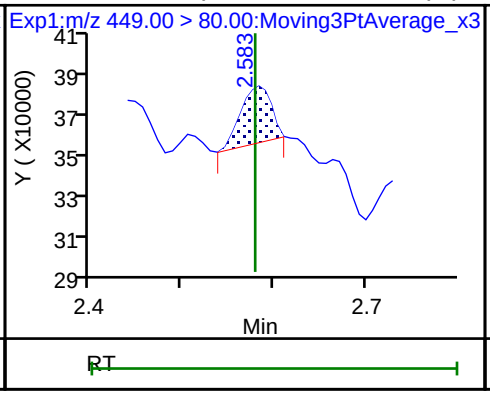
* 62 13C2-PFOA



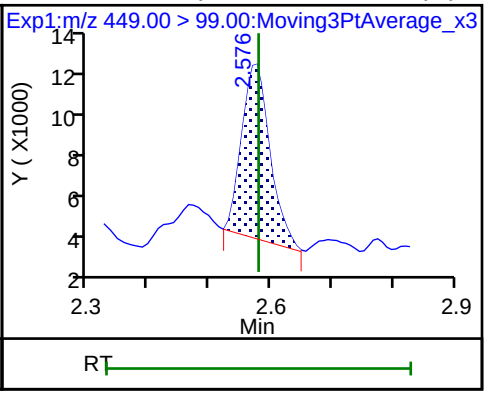
D 14 13C4 PFOA



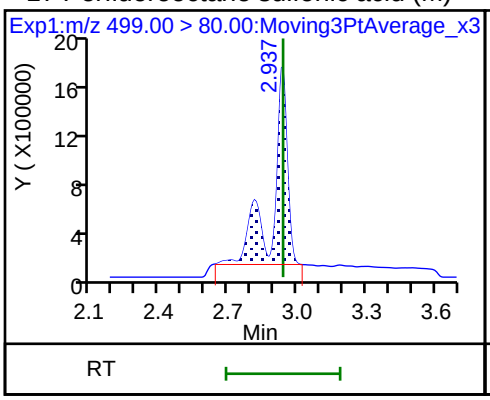
16 Perfluoroheptanesulfonic acid (M)



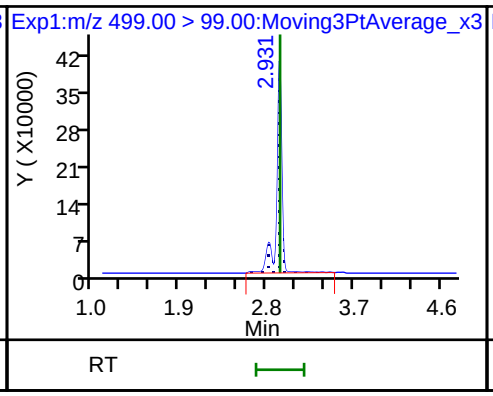
16 Perfluoroheptanesulfonic acid (M)



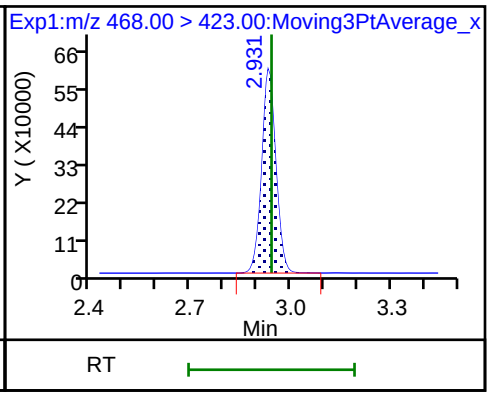
17 Perfluorooctane sulfonic acid (M)



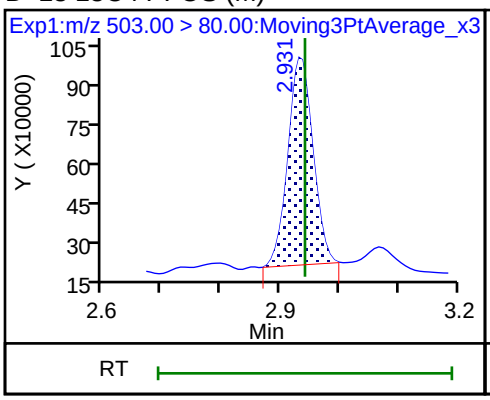
17 Perfluorooctane sulfonic acid



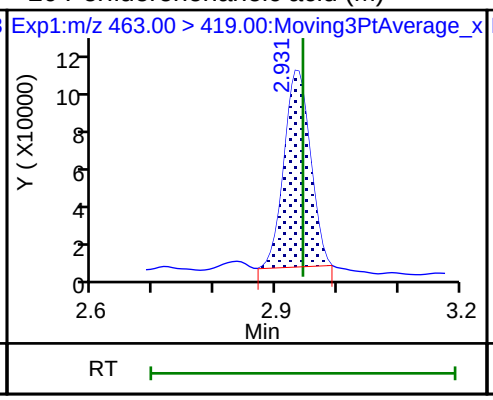
D 19 13C5 PFNA



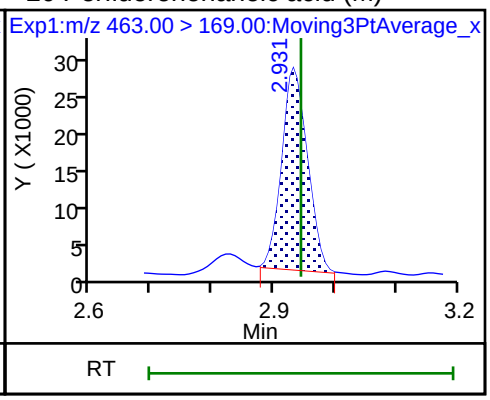
D 18 13C4 PFOS (M)



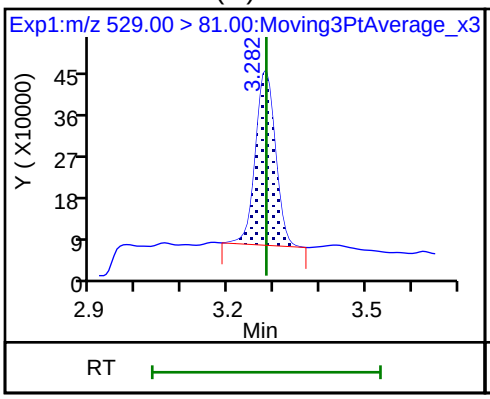
20 Perfluorononanoic acid (M)



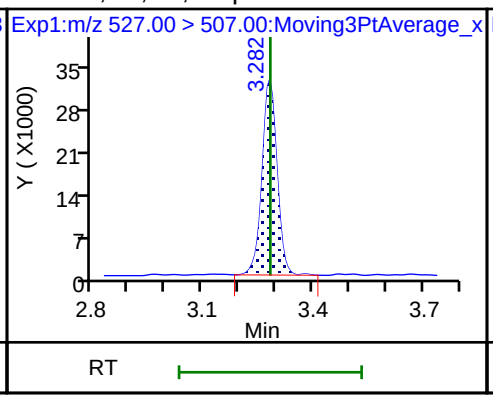
20 Perfluorononanoic acid (M)



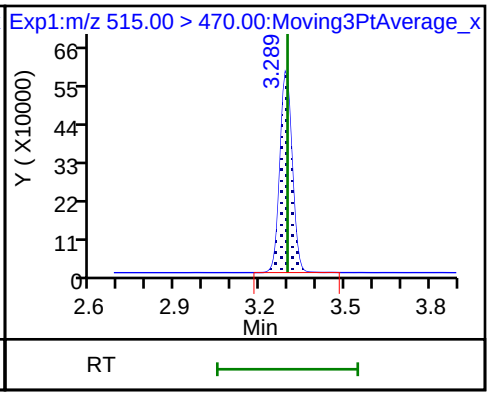
D 26 M2-8:2FTS (M)



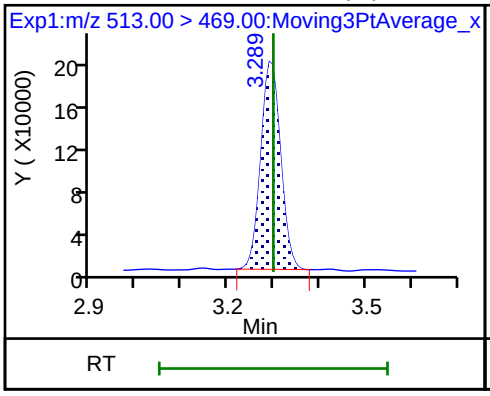
25 1H,1H,2H,2H-perfluorodecanesulfon



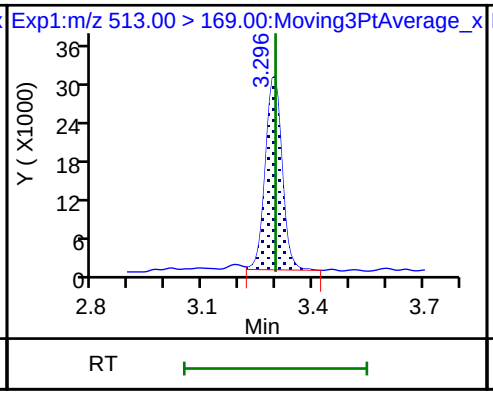
D 23 13C2 PFDA



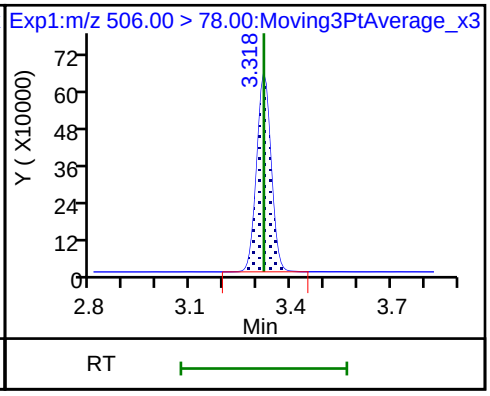
24 Perfluorodecanoic acid (M)



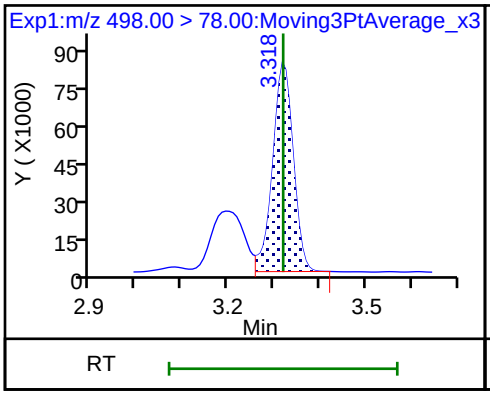
24 Perfluorodecanoic acid



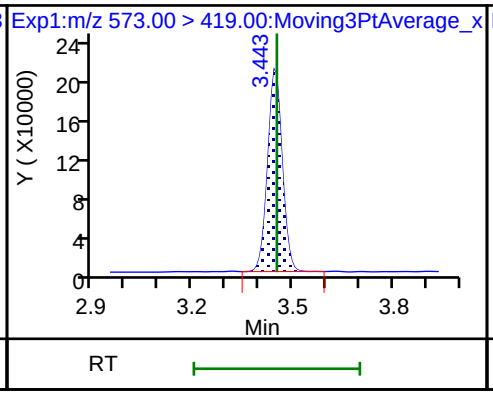
D 21 13C8 FOSA



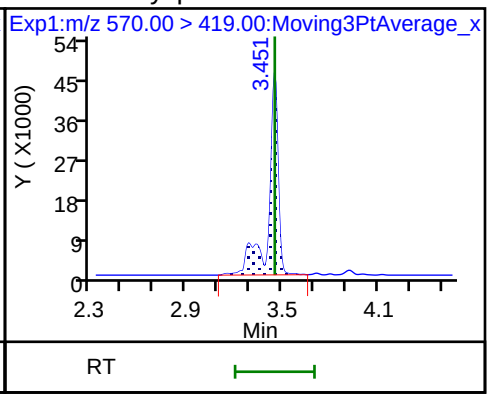
22 Perfluorooctane Sulfonamide



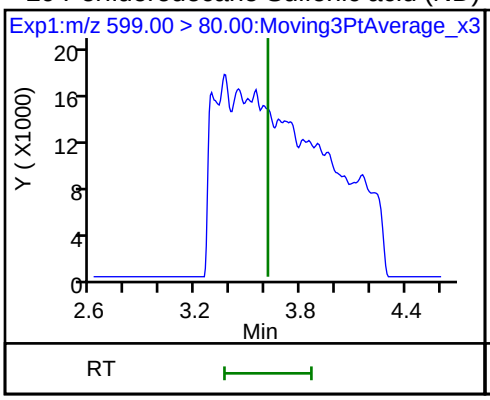
D 27 d3-NMeFOSAA



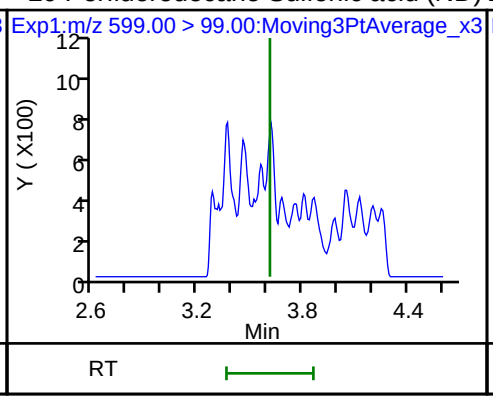
28 N-methyl perfluorooctane sulfonami



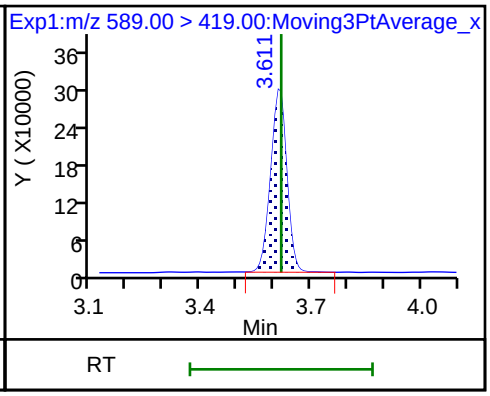
29 Perfluorodecane Sulfonic acid (ND)



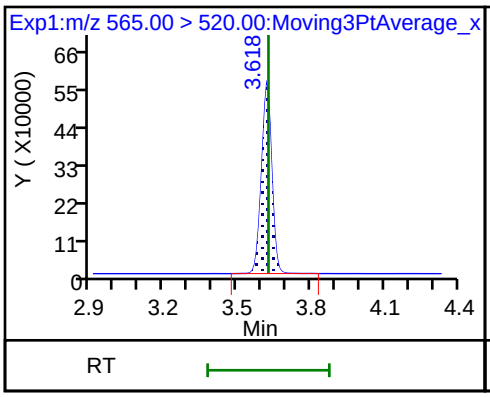
29 Perfluorodecane Sulfonic acid (ND)



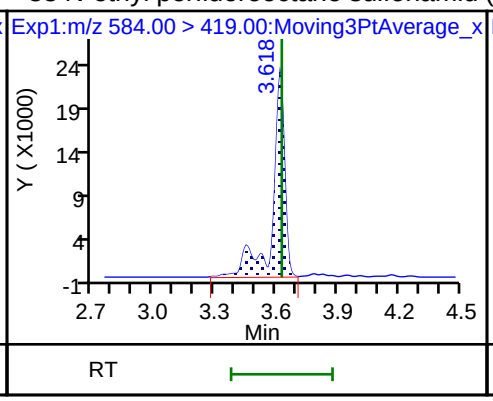
D 32 d5-NEtFOSAA



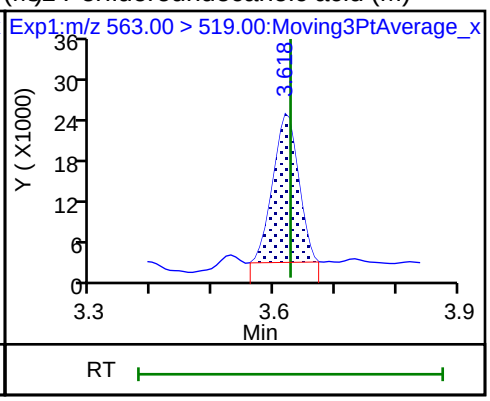
D 30 13C2 PFUnA



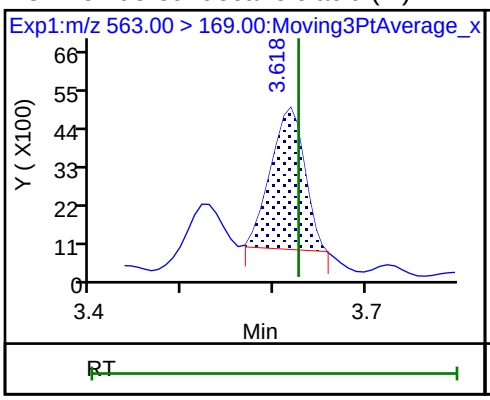
33 N-ethyl perfluorooctane sulfonamid (M)



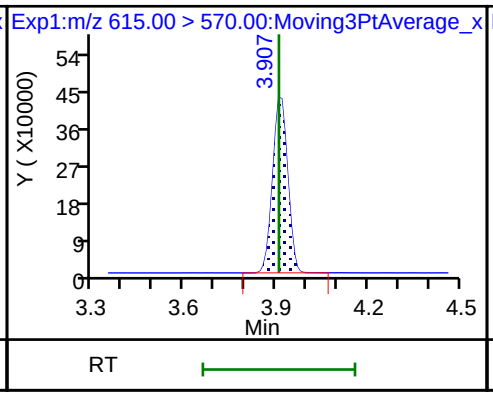
31 Perfluoroundecanoic acid (M)



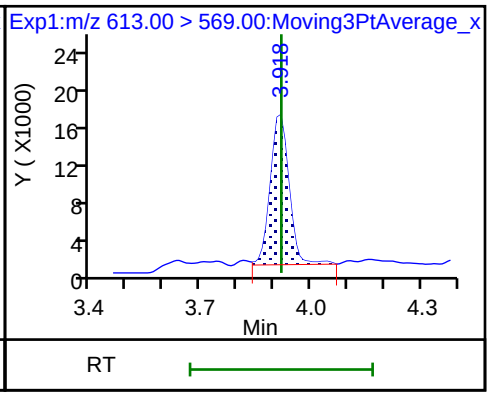
31 Perfluoroundecanoic acid (M)



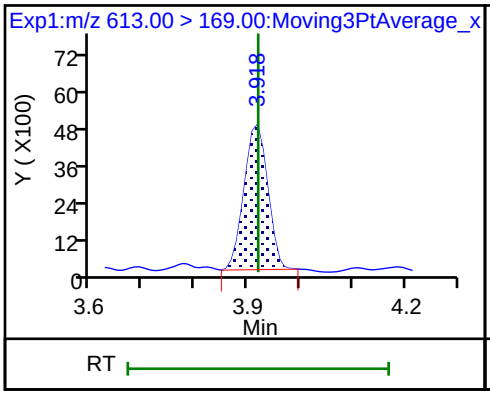
D 36 13C2 PFDoA



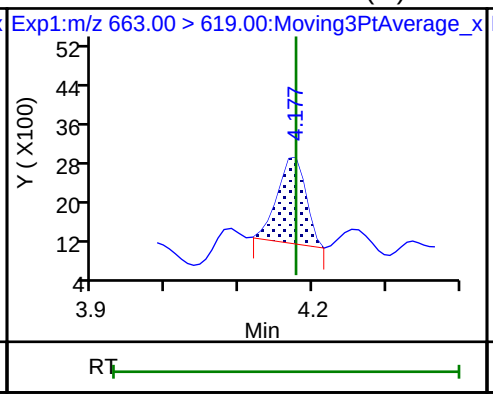
37 Perfluorododecanoic acid



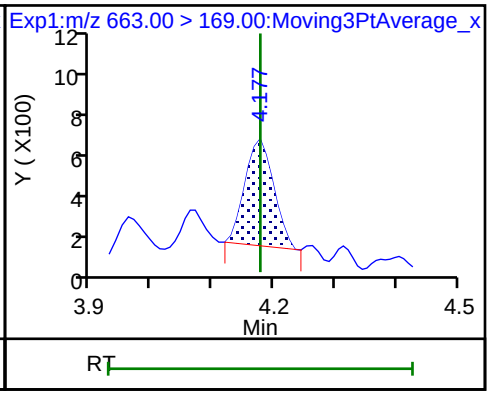
37 Perfluorododecanoic acid



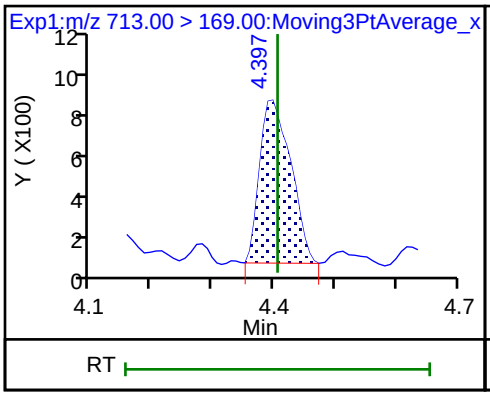
41 Perfluorotridecanoic acid (M)



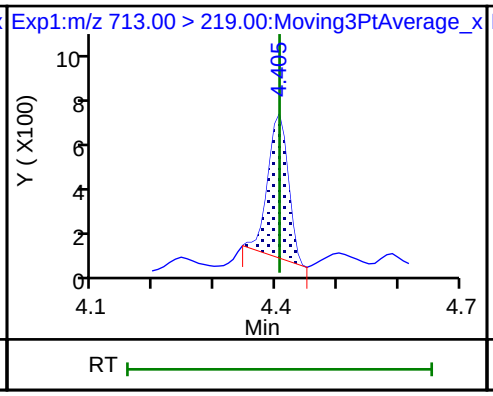
41 Perfluorotridecanoic acid



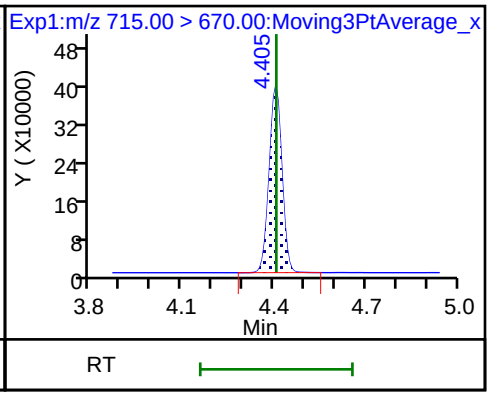
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 43 13C2-PFTeDA



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

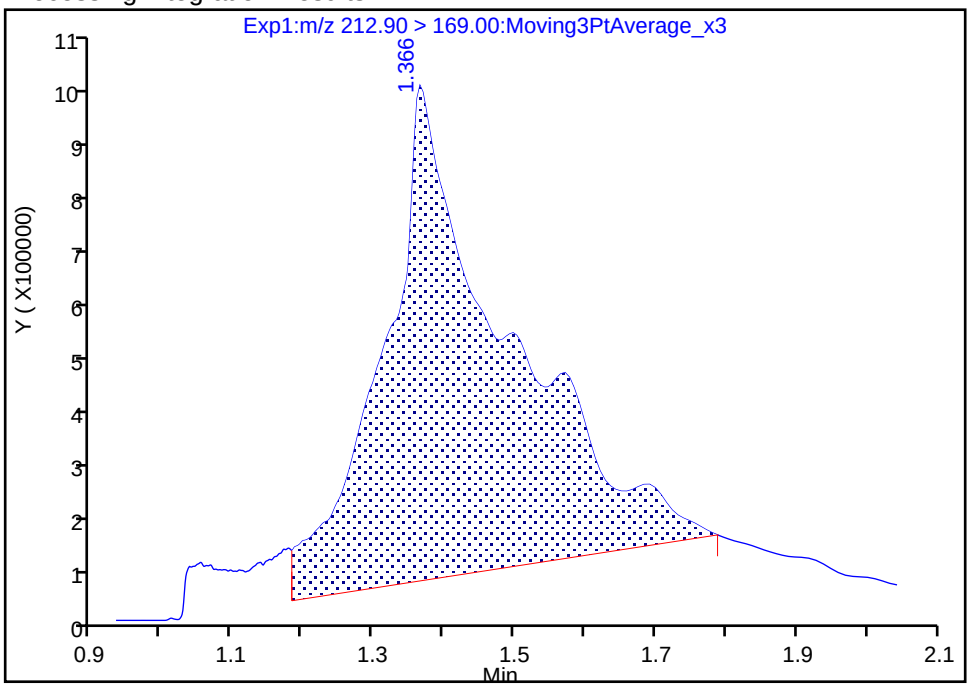
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

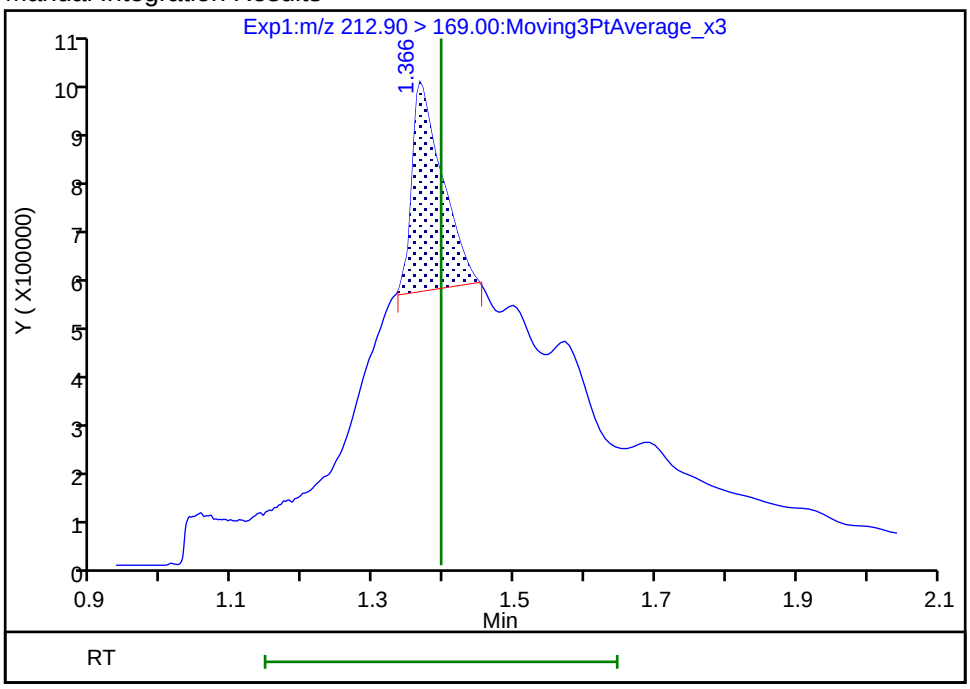
Processing Integration Results

RT: 1.37
Area: 11047587
Amount: 46.857409
Amount Units: ng/ml



Manual Integration Results

RT: 1.37
Area: 1241394
Amount: 5.265268
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:30:26

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

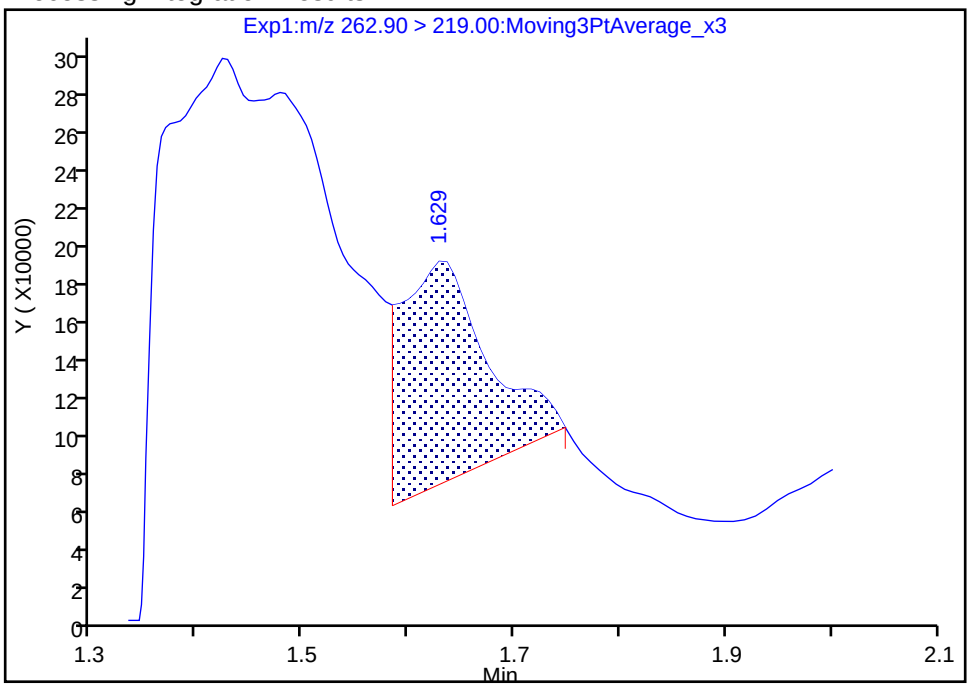
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

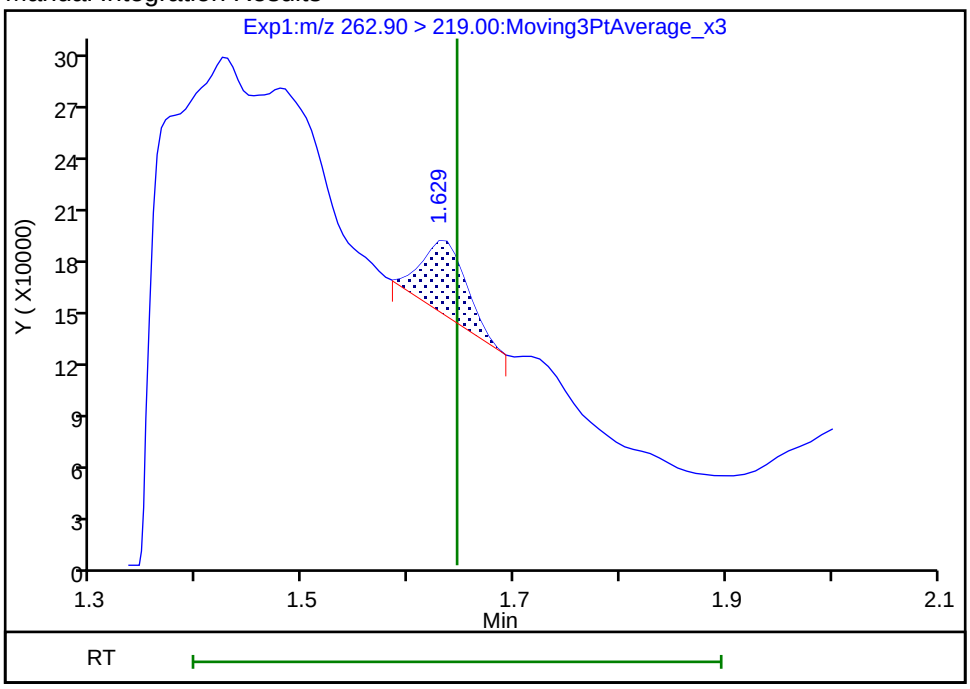
Processing Integration Results

RT: 1.63
Area: 655463
Amount: 1.737897
Amount Units: ng/ml



Manual Integration Results

RT: 1.63
Area: 125035
Amount: 0.331518
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:30:59

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

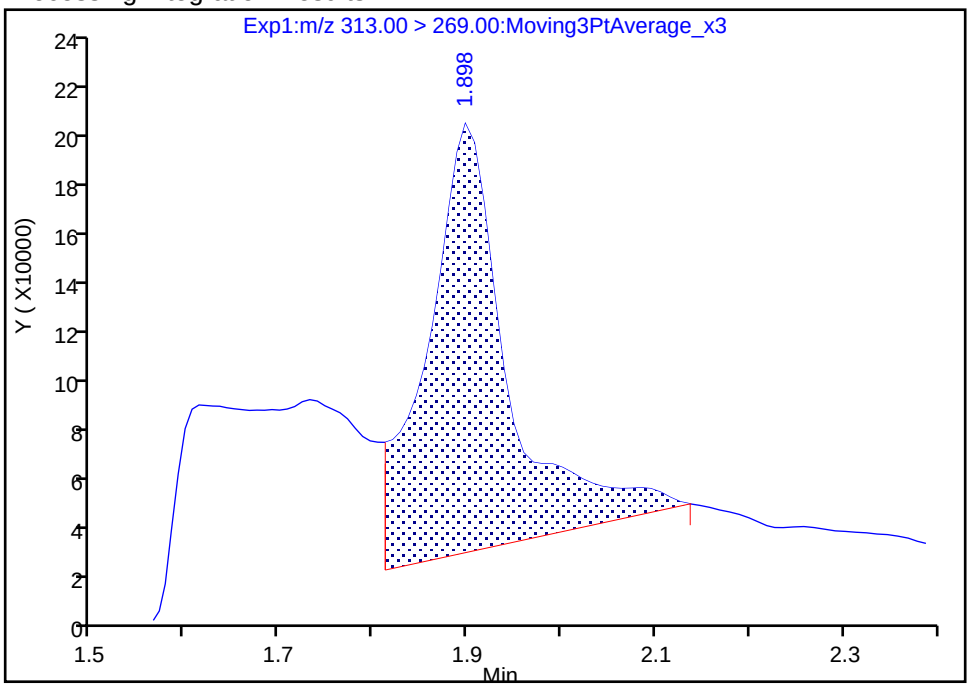
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

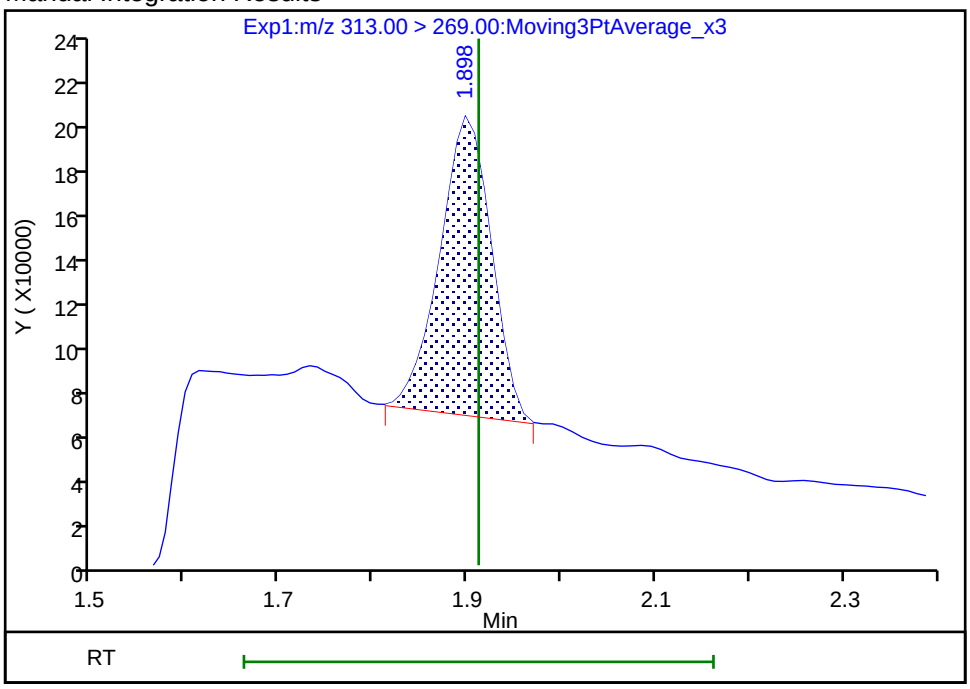
Processing Integration Results

RT: 1.90
Area: 1061748
Amount: 2.138312
Amount Units: ng/ml



Manual Integration Results

RT: 1.90
Area: 517448
Amount: 1.042117
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:31:33

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

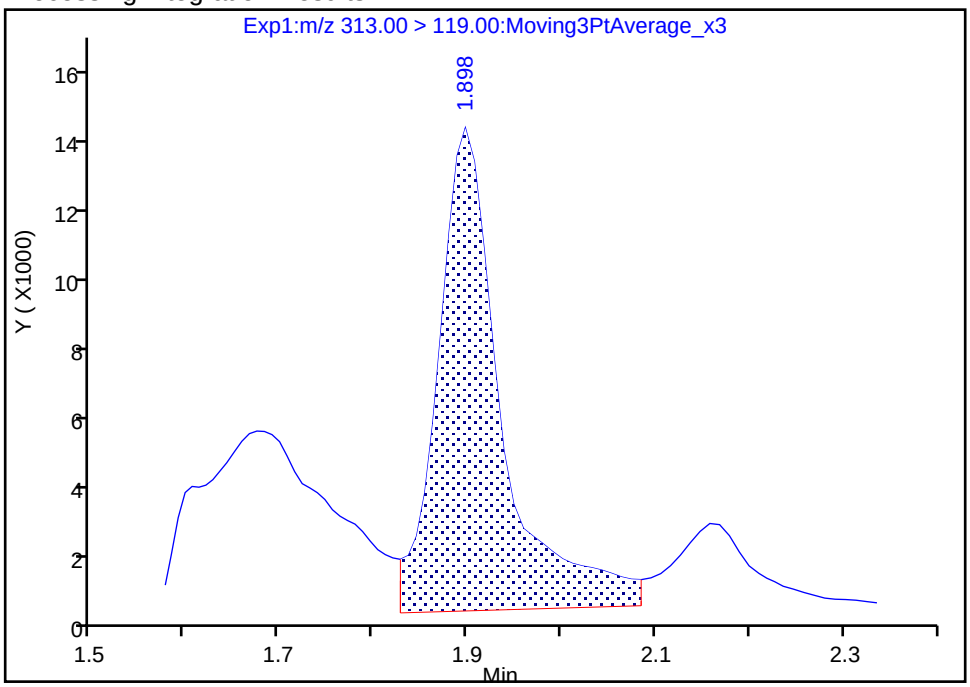
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

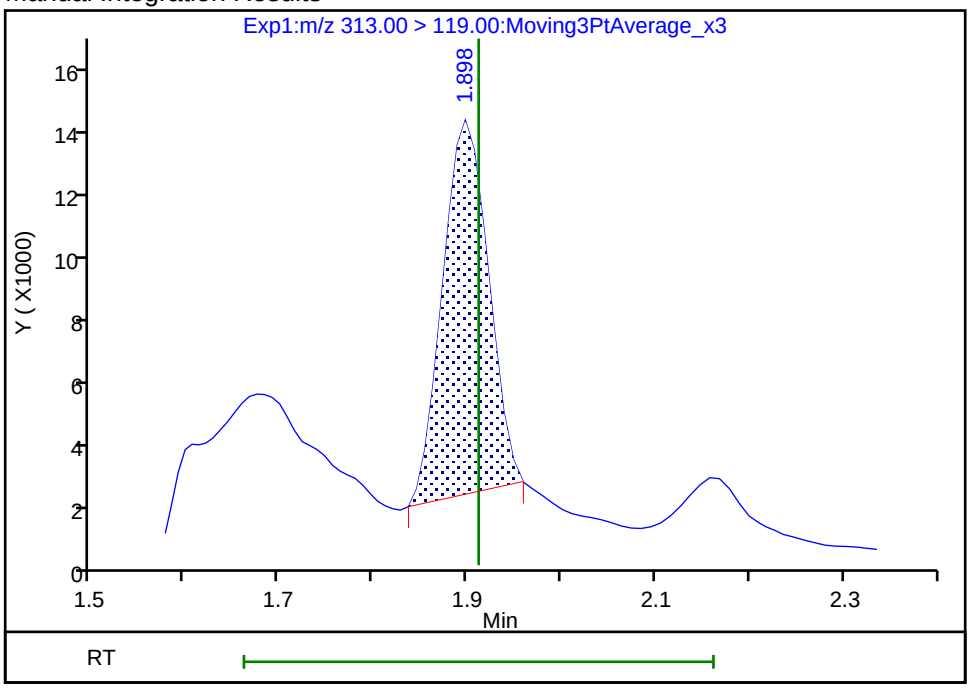
Processing Integration Results

RT: 1.90
Area: 64242
Amount: 2.138312
Amount Units: ng/ml



Manual Integration Results

RT: 1.90
Area: 39394
Amount: 1.042117
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:31:44
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

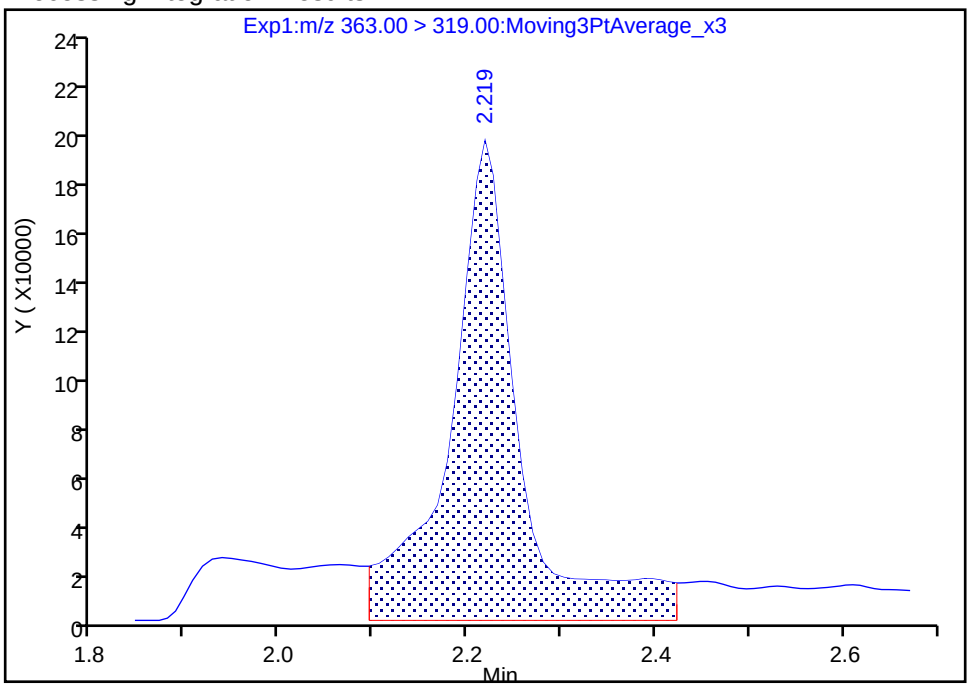
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

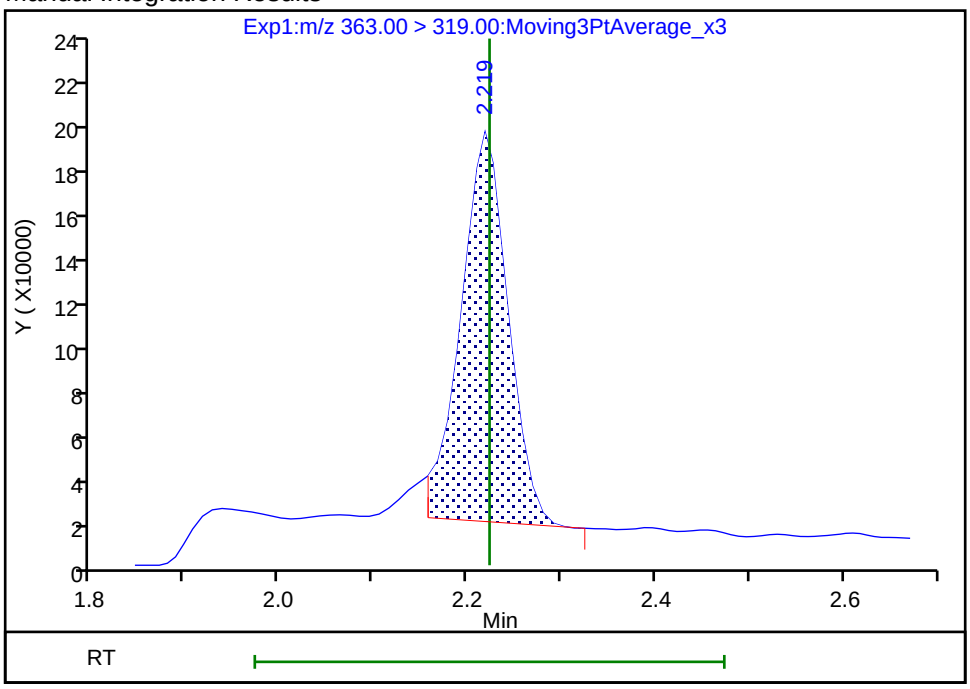
Processing Integration Results

RT: 2.22
Area: 982837
Amount: 1.774448
Amount Units: ng/ml



Manual Integration Results

RT: 2.22
Area: 593164
Amount: 1.070919
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:31:53

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

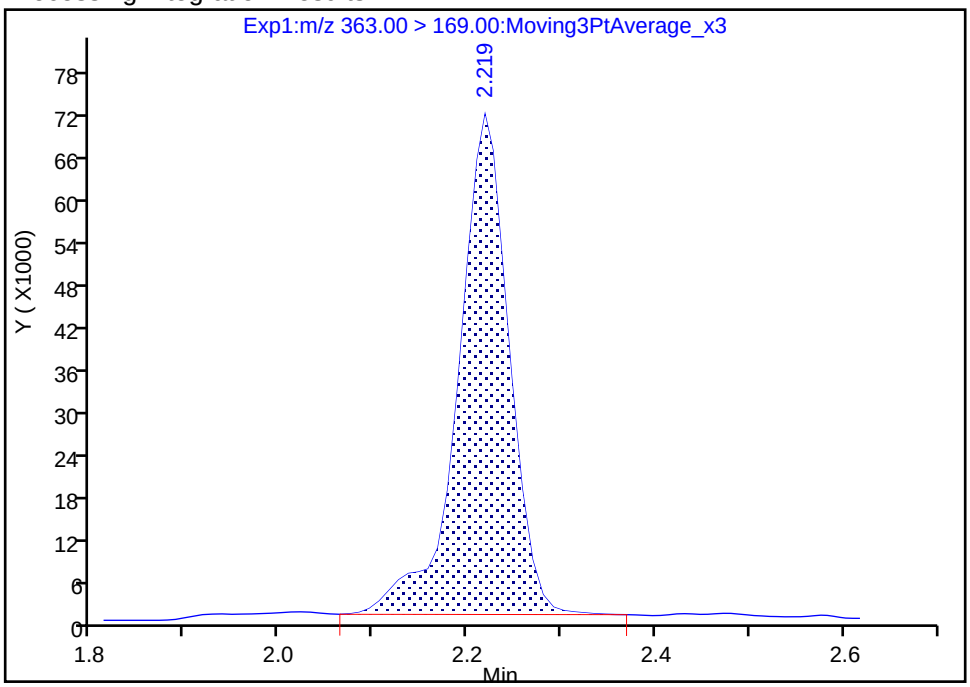
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

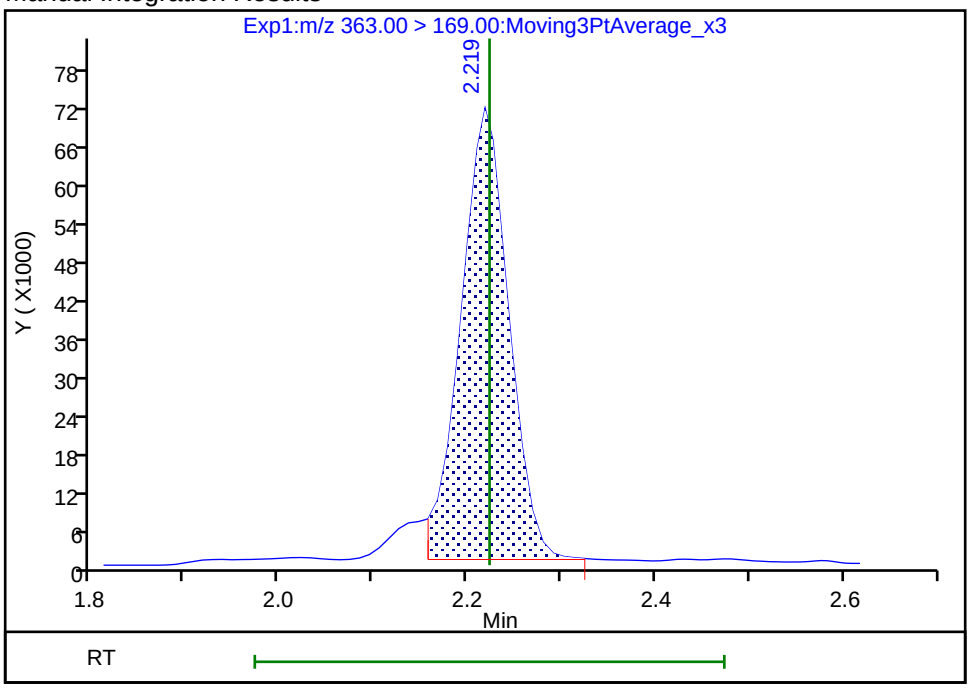
Processing Integration Results

RT: 2.22
Area: 267984
Amount: 1.774448
Amount Units: ng/ml



Manual Integration Results

RT: 2.22
Area: 250531
Amount: 1.070919
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:31:57
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

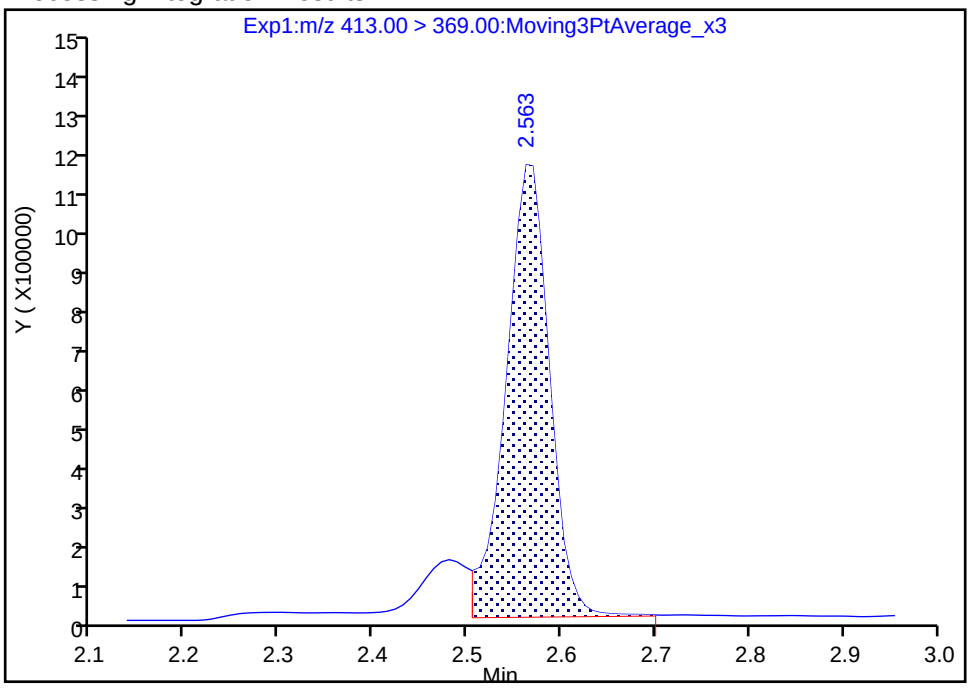
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

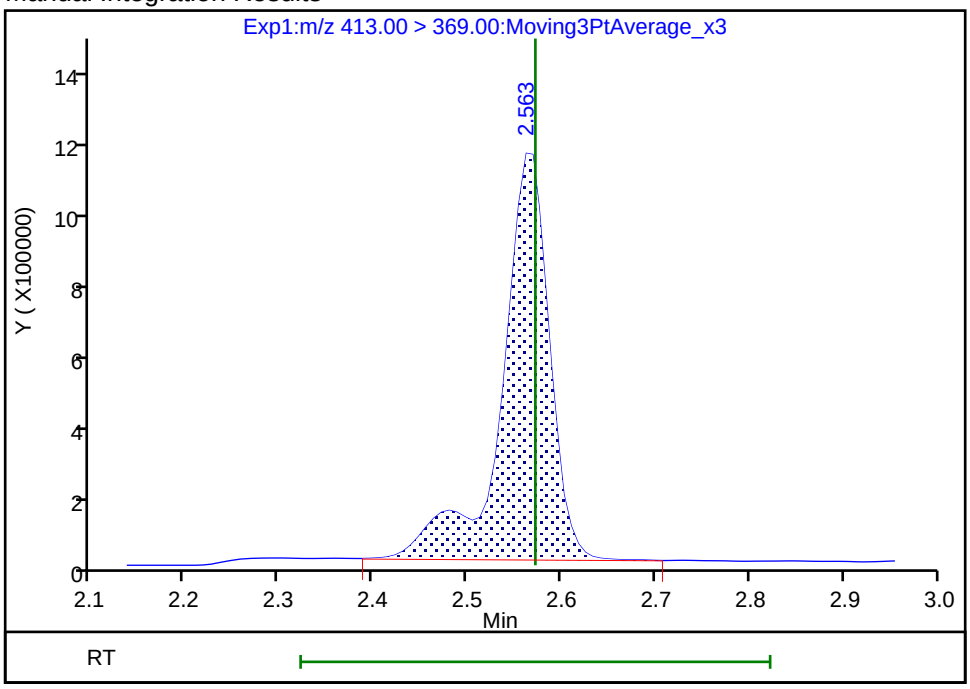
Processing Integration Results

RT: 2.56
Area: 3512054
Amount: 5.376219
Amount Units: ng/ml



Manual Integration Results

RT: 2.56
Area: 3894526
Amount: 5.961704
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:32:23

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

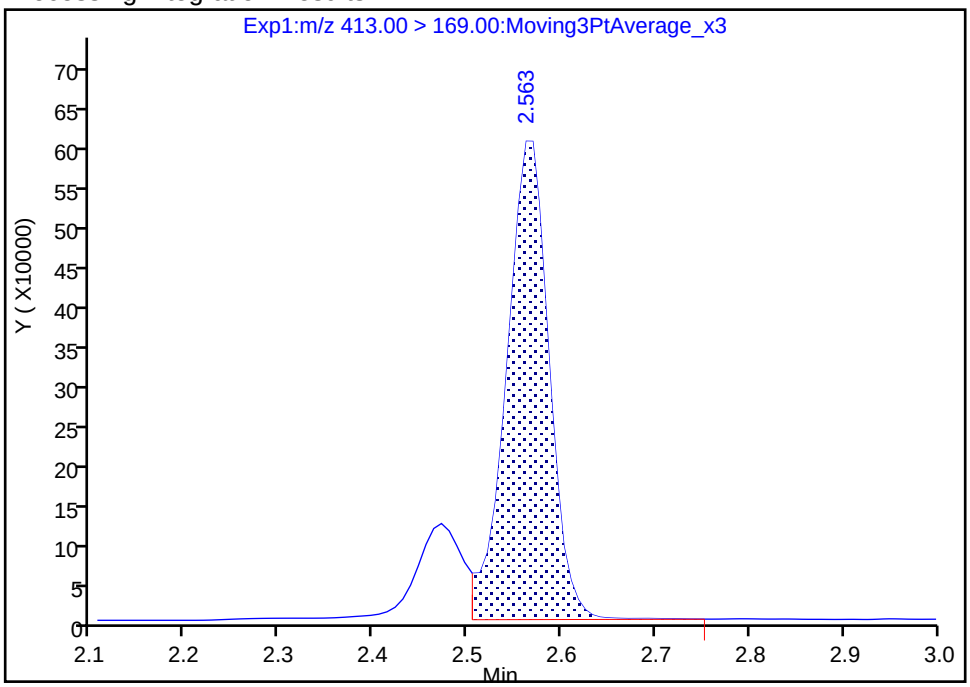
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

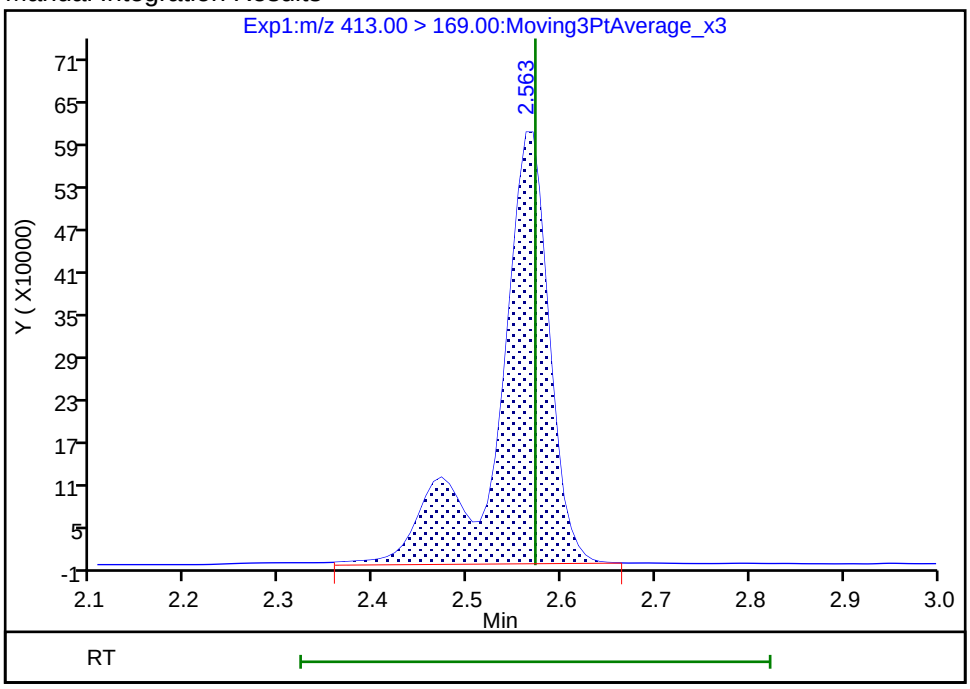
Processing Integration Results

RT: 2.56
Area: 1891876
Amount: 5.376219
Amount Units: ng/ml



Manual Integration Results

RT: 2.56
Area: 2300949
Amount: 5.961704
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:32:28
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

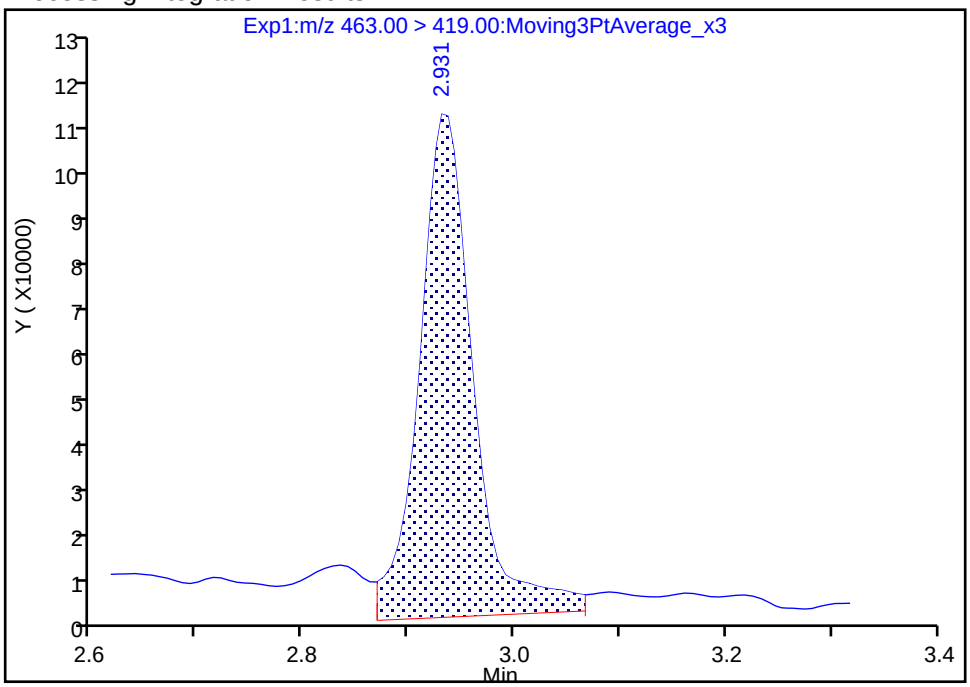
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

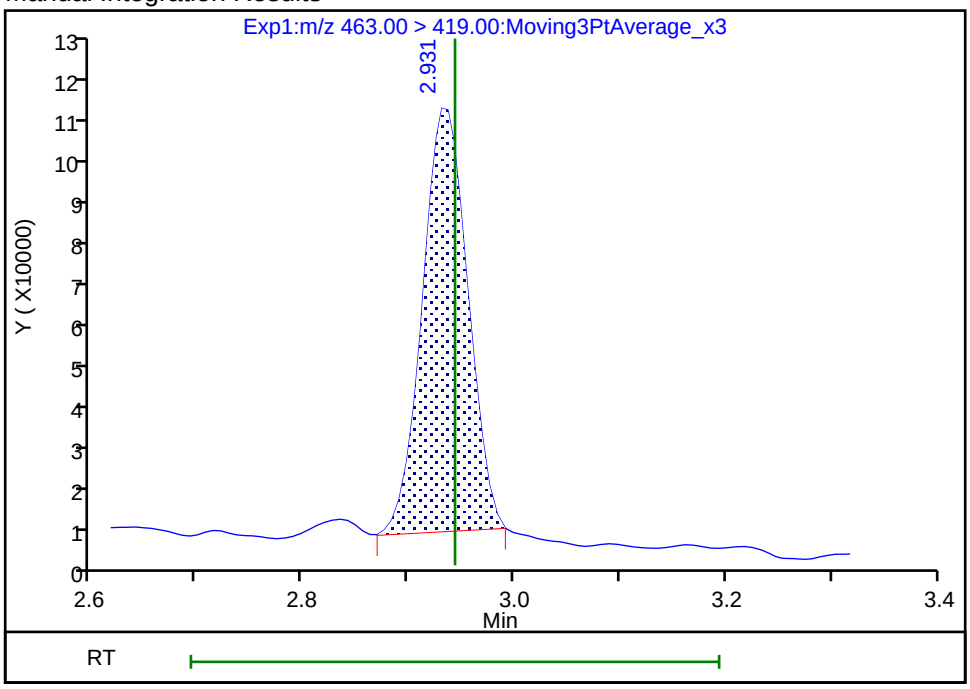
Processing Integration Results

RT: 2.93
Area: 384108
Amount: 0.522820
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 298249
Amount: 0.405955
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:33:05

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

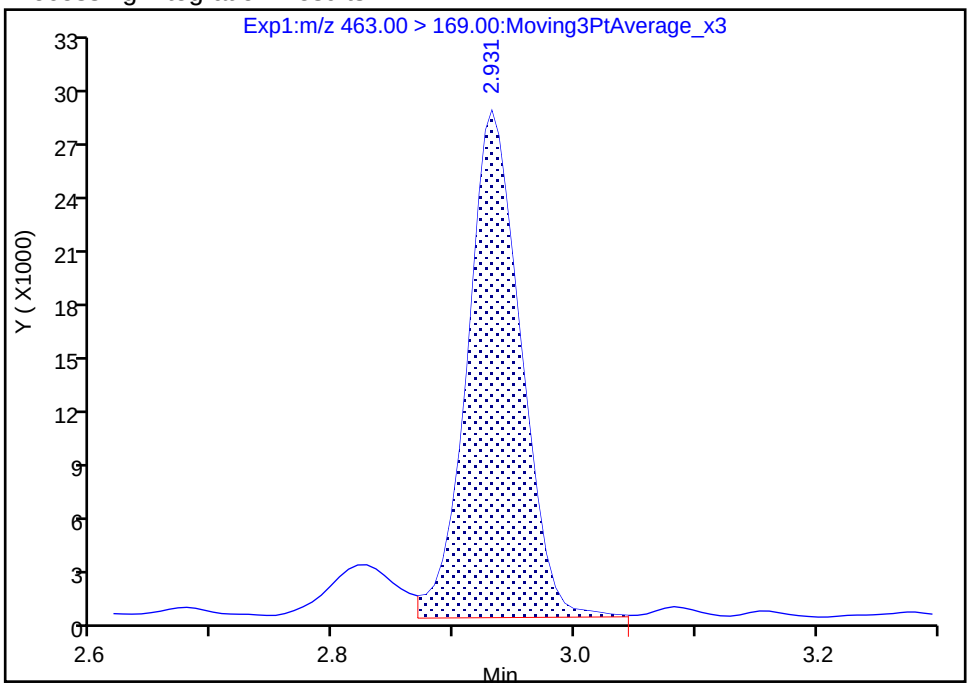
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

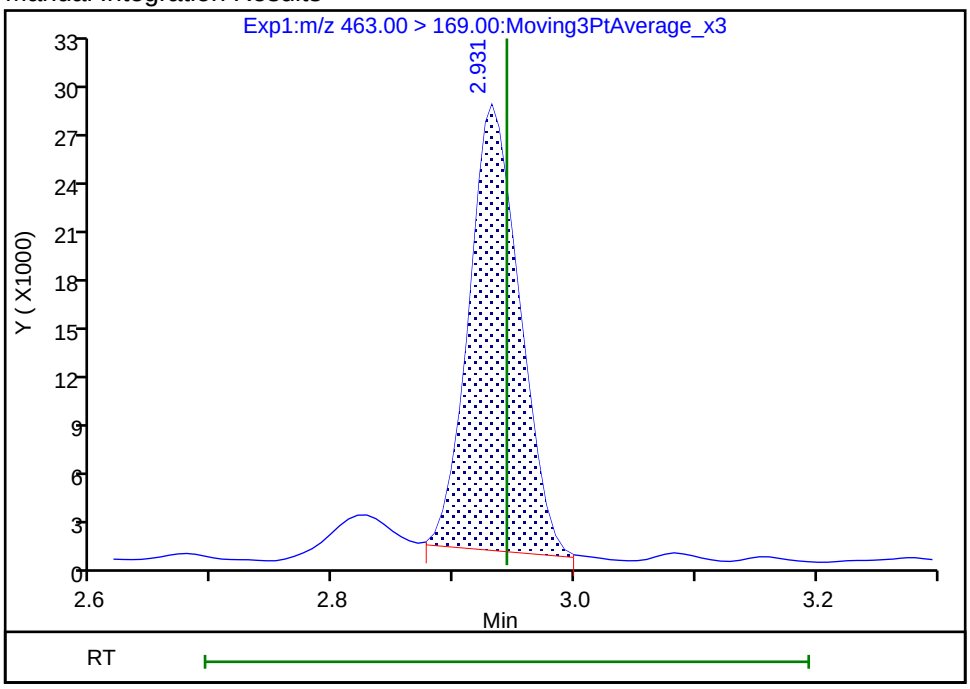
Processing Integration Results

RT: 2.93
Area: 85563
Amount: 0.522820
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 79178
Amount: 0.405955
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:33:11
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

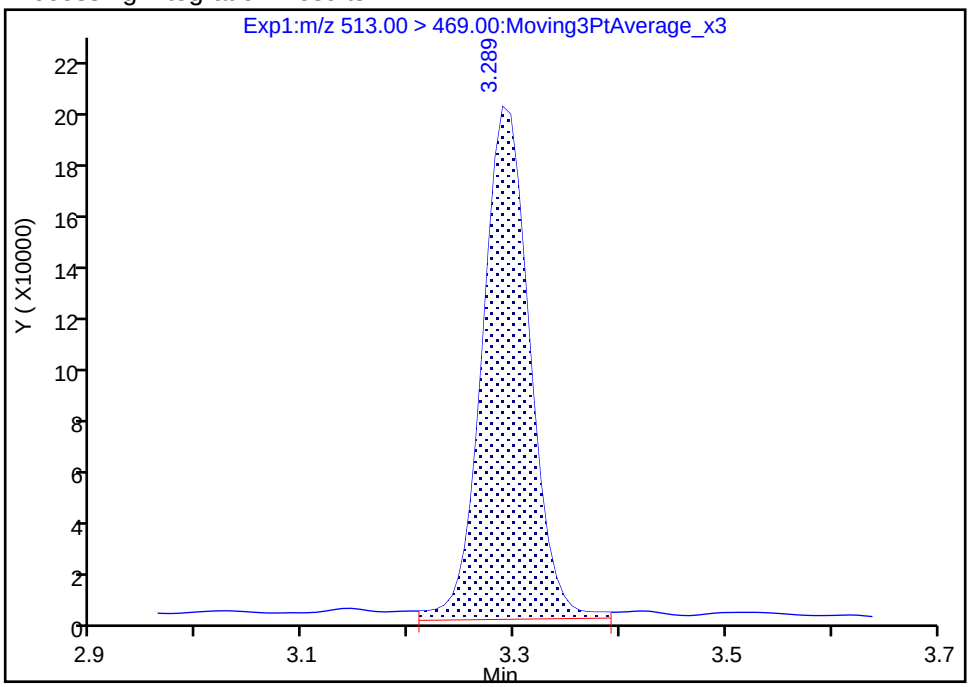
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

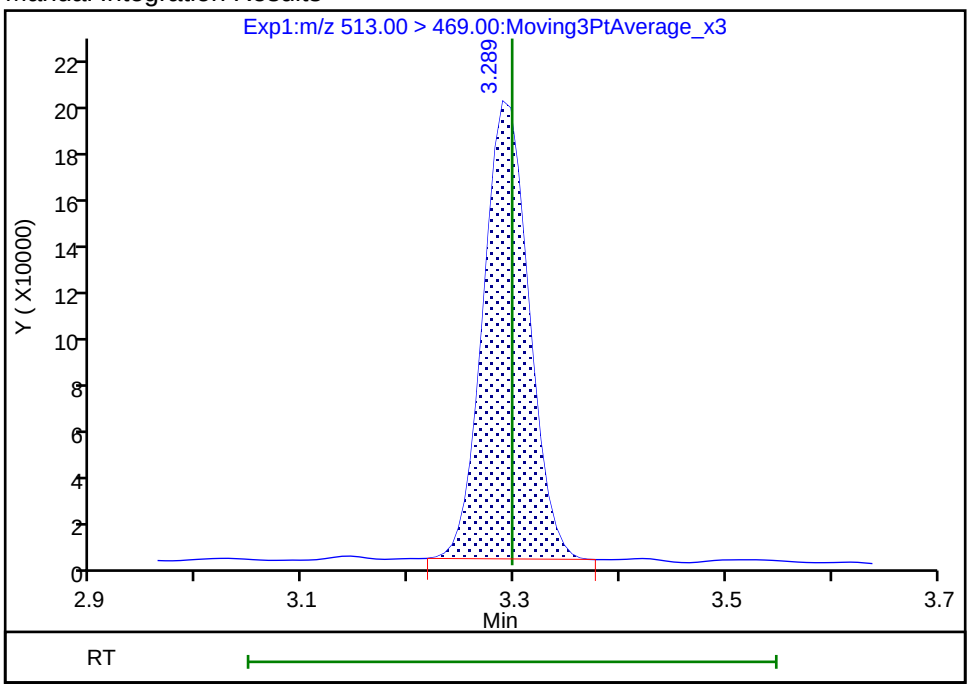
Processing Integration Results

RT: 3.29
Area: 602279
Amount: 0.860497
Amount Units: ng/ml



Manual Integration Results

RT: 3.29
Area: 570417
Amount: 0.814975
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:33:22

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

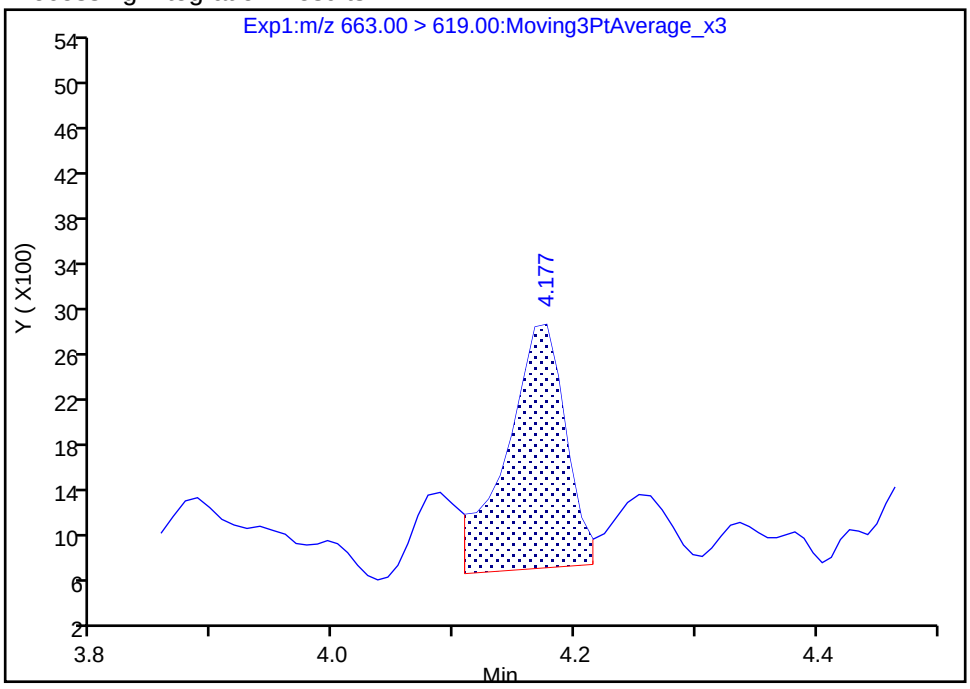
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

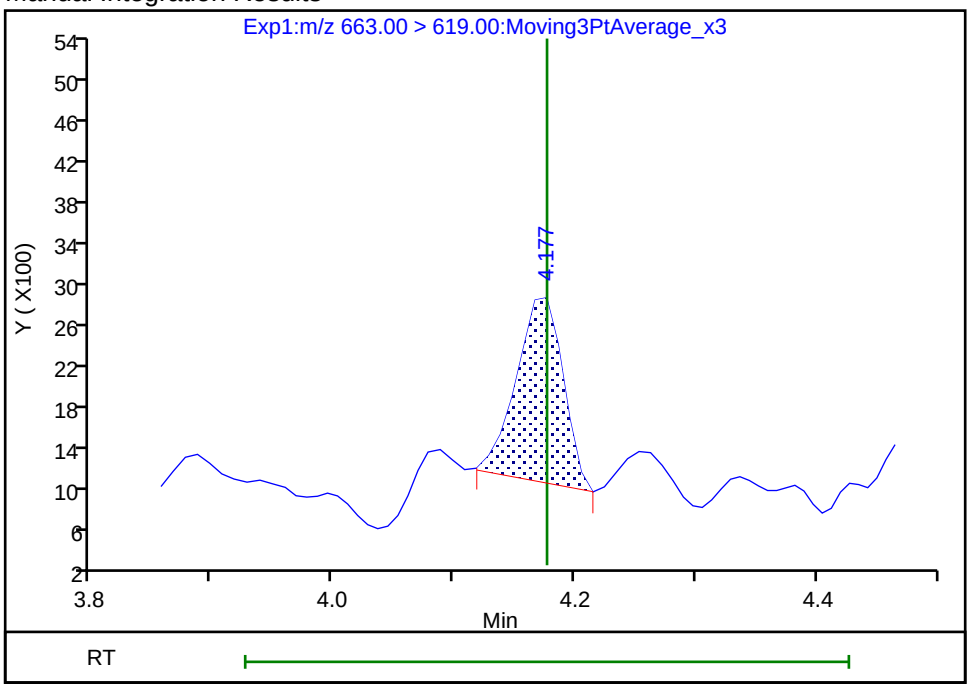
Processing Integration Results

RT: 4.18
Area: 7116
Amount: 0.011197
Amount Units: ng/ml



Manual Integration Results

RT: 4.18
Area: 4729
Amount: 0.007441
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:34:14

Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

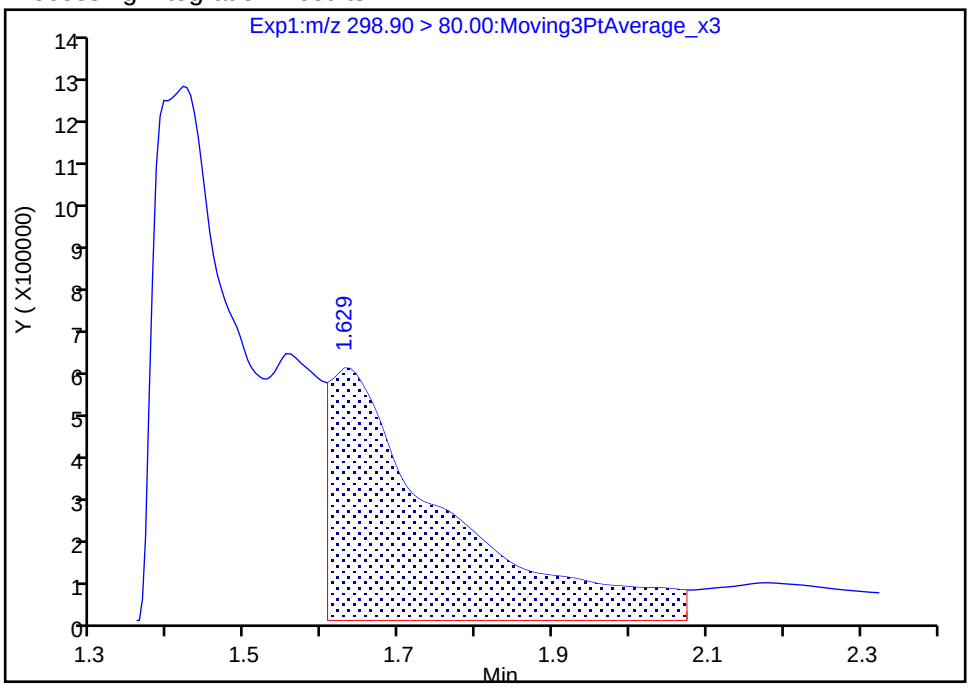
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

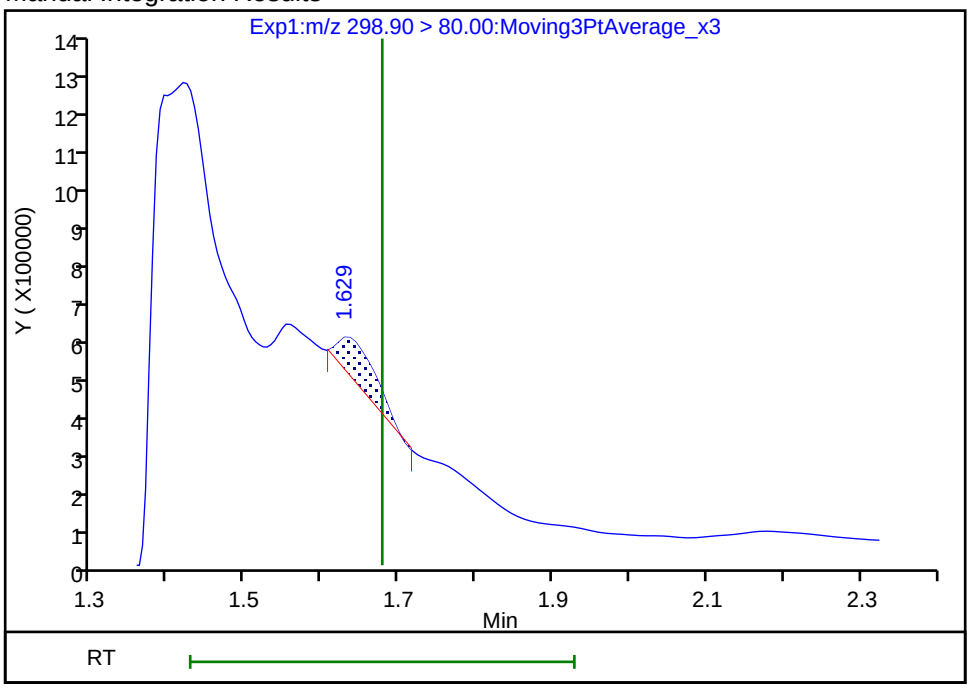
Processing Integration Results

RT: 1.63
Area: 6035776
Amount: 5.325909
Amount Units: ng/ml



Manual Integration Results

RT: 1.63
Area: 342765
Amount: 0.302452
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:31:12
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

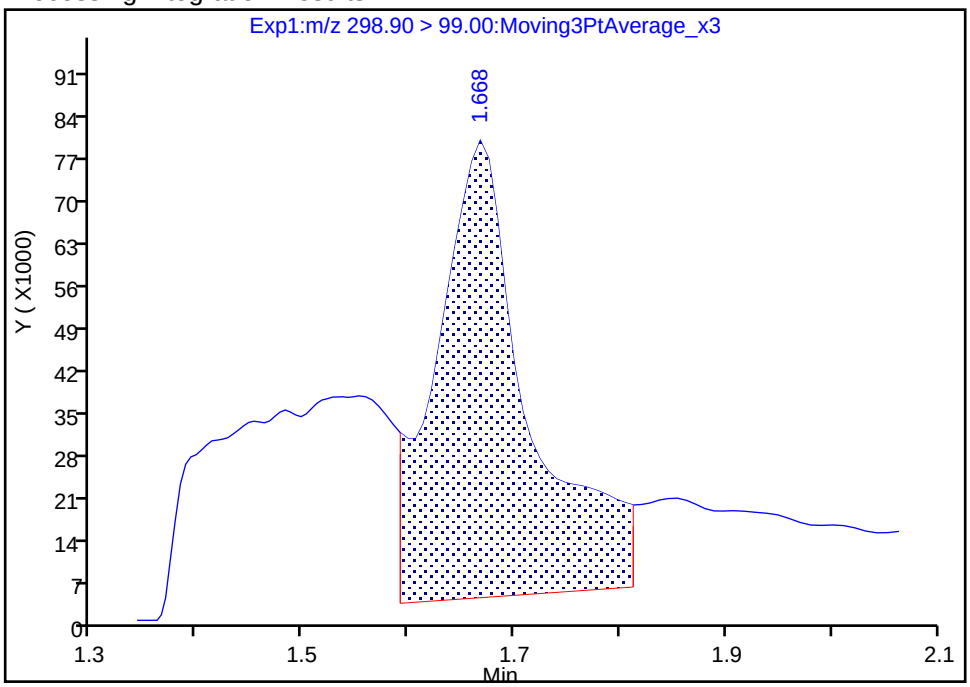
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d
Injection Date: 07-Aug-2018 22:27:02 Instrument ID: A8_N
Lims ID: 320-41405-A-5-A Lab Sample ID: 320-41405-5
Client ID: GC-MW-DRAIN (WG)
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 41 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

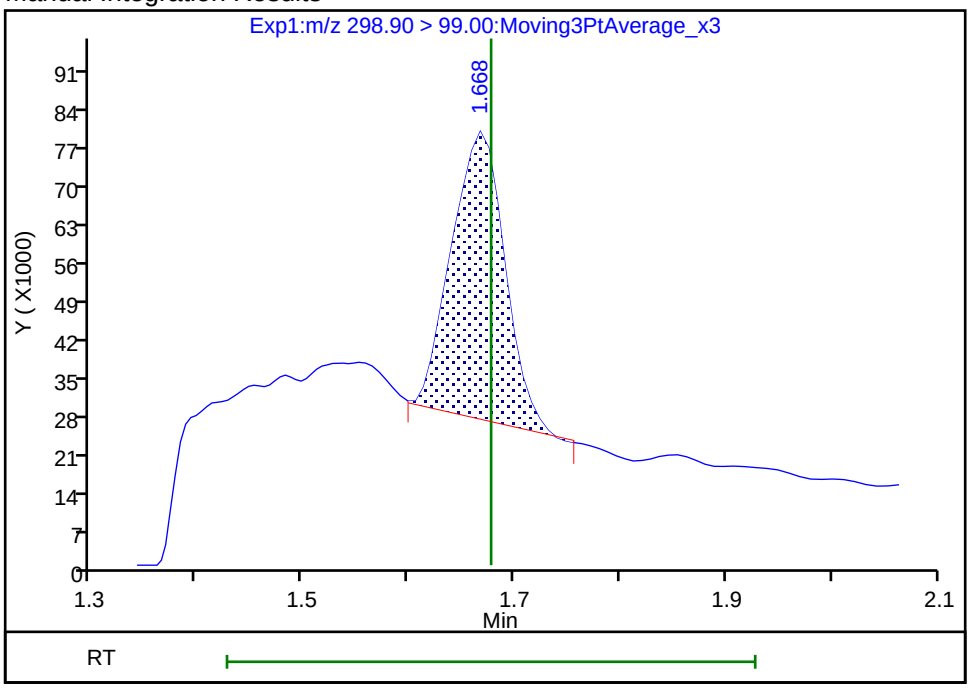
Processing Integration Results

RT: 1.67
Area: 462522
Amount: 5.325909
Amount Units: ng/ml



Manual Integration Results

RT: 1.67
Area: 184728
Amount: 0.302452
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:31:16
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

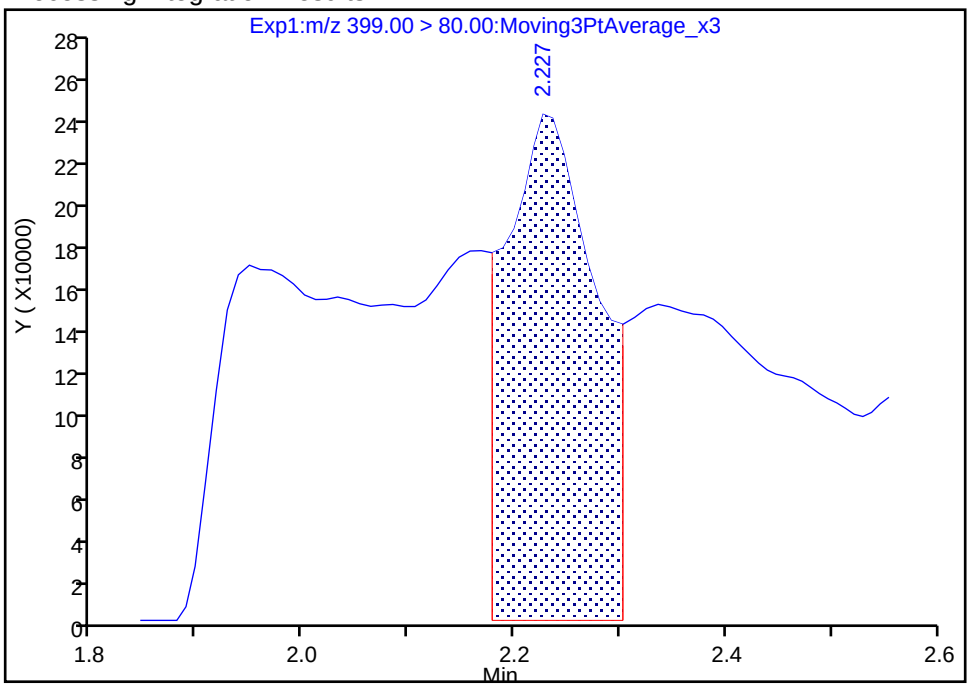
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

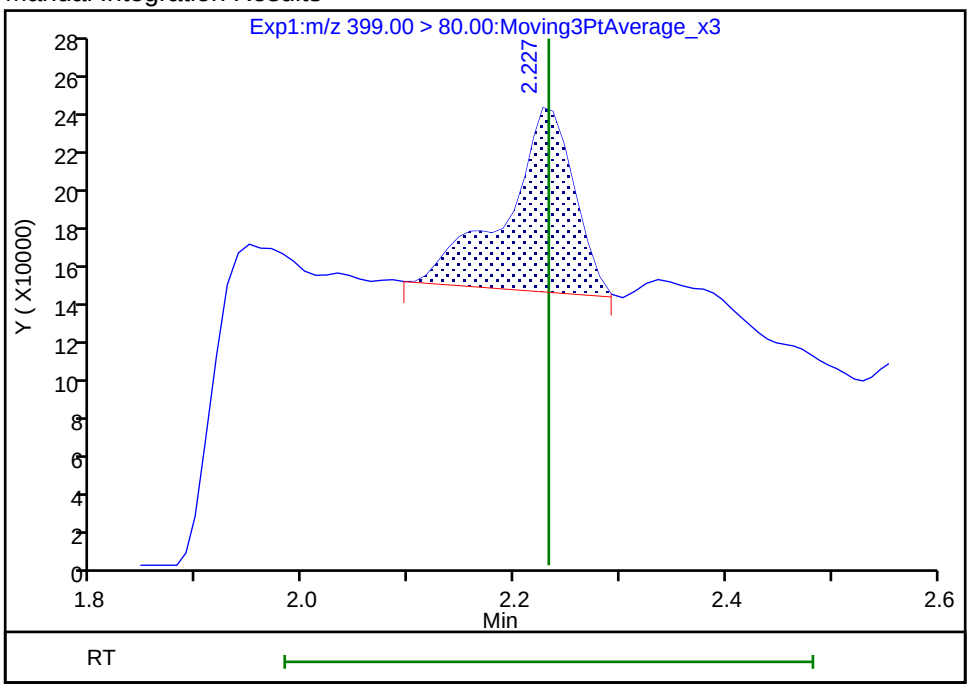
Processing Integration Results

RT: 2.23
Area: 1396748
Amount: 1.038058
Amount Units: ng/ml



Manual Integration Results

RT: 2.23
Area: 428802
Amount: 0.318684
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:32:10

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

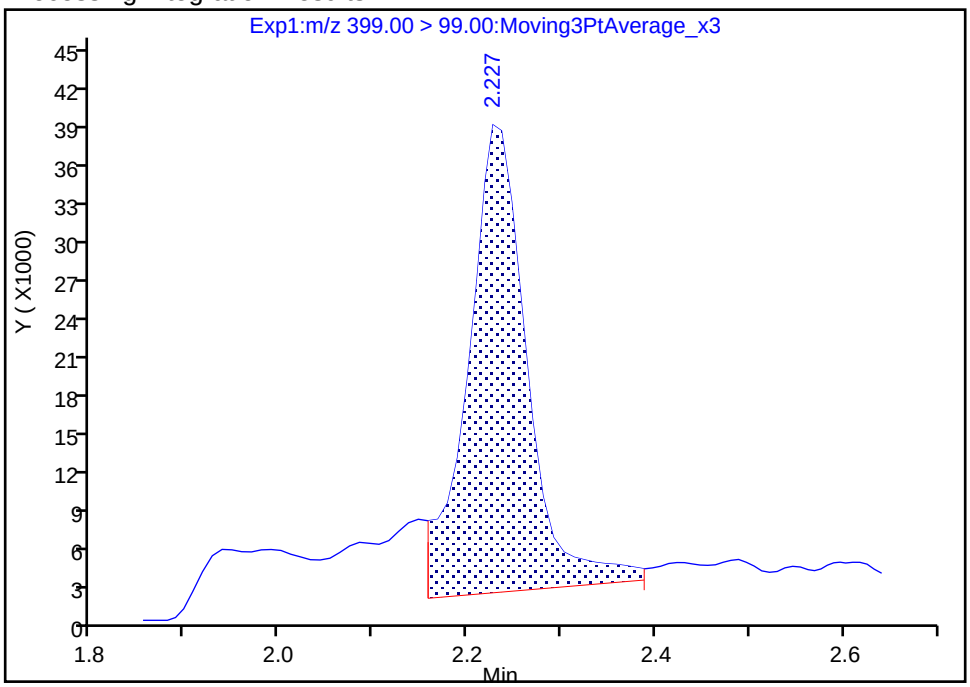
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

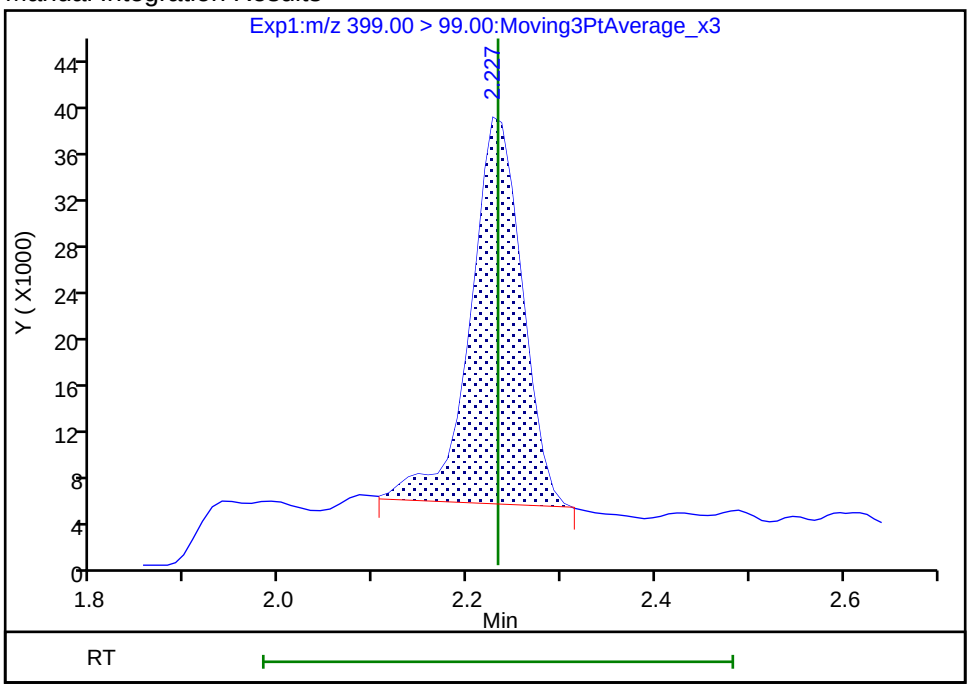
Processing Integration Results

RT: 2.23
Area: 158107
Amount: 1.038058
Amount Units: ng/ml



Manual Integration Results

RT: 2.23
Area: 127384
Amount: 0.318684
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:32:14
Audit Action: Manually Integrated Audit Reason: Isomers

TestAmerica Sacramento

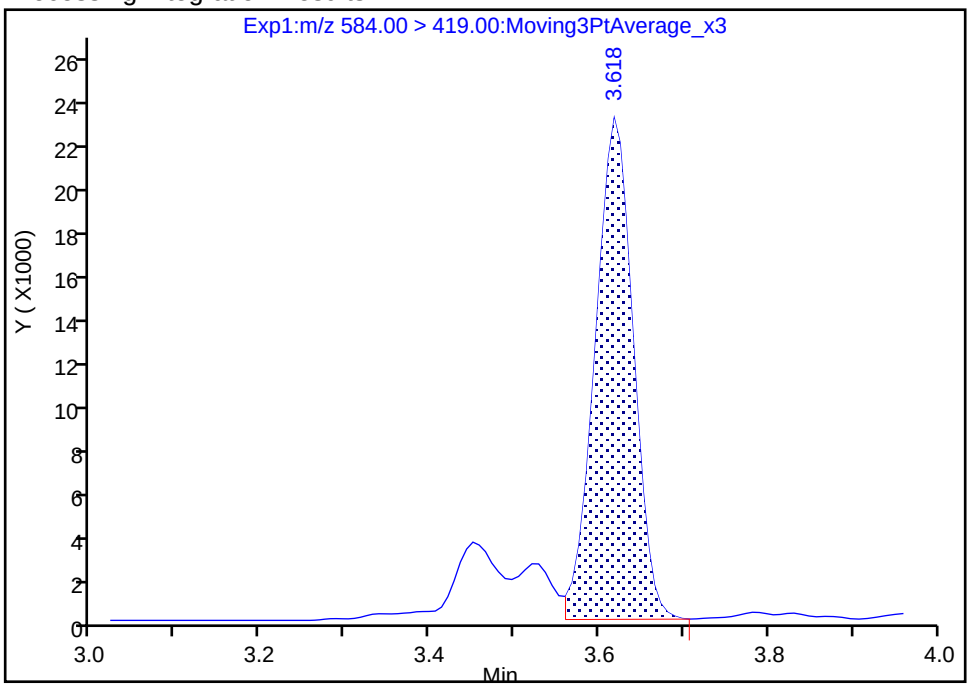
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

33 N-ethyl perfluorooctane sulfonamidoacetic ac, CAS: 2991-50-6

Signal: 1

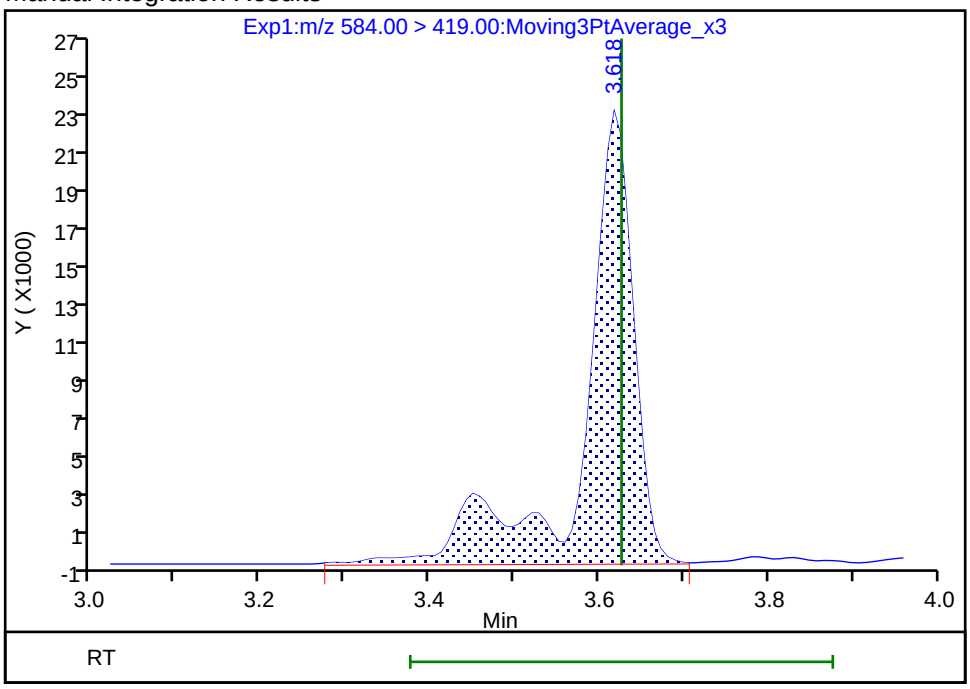
Processing Integration Results

RT: 3.62
Area: 72105
Amount: 0.227502
Amount Units: ng/ml



Manual Integration Results

RT: 3.62
Area: 95362
Amount: 0.300881
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:33:41
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

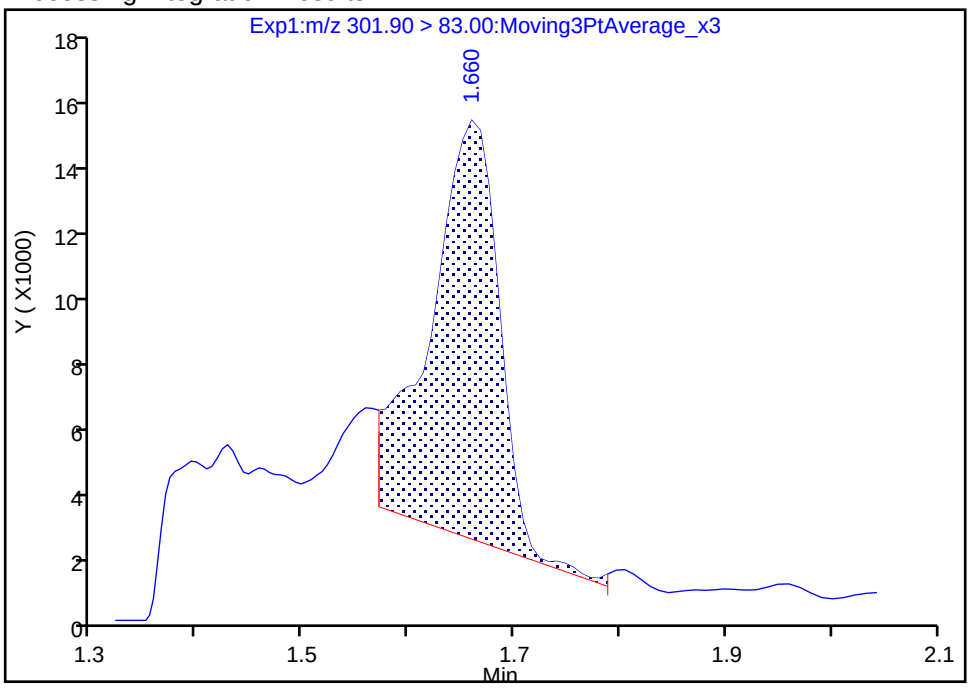
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

D 47 13C3-PFBS, CAS: STL02337

Signal: 1

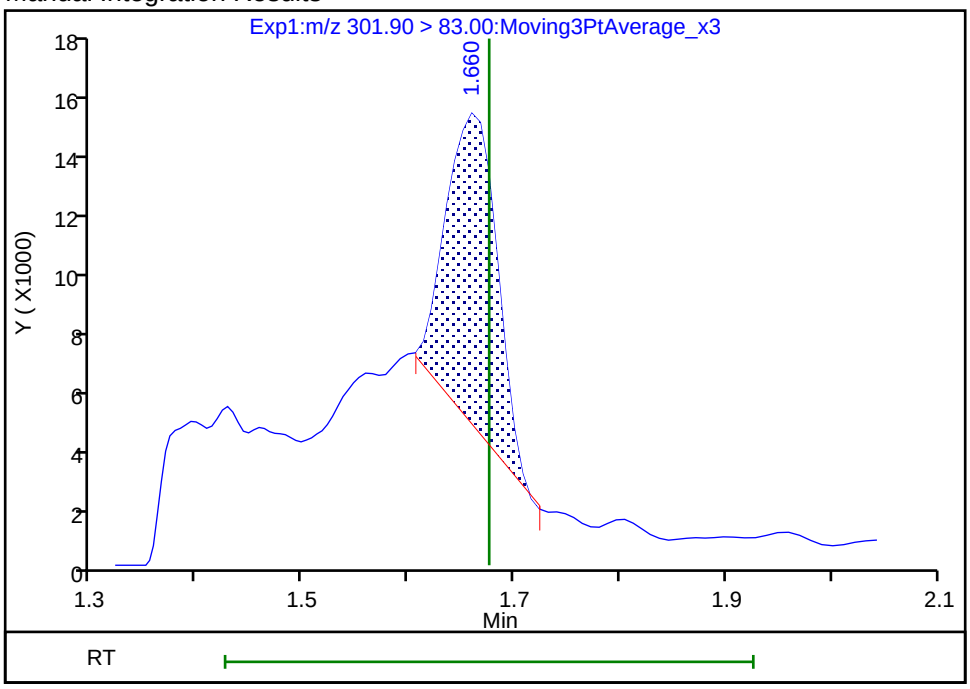
Processing Integration Results

RT: 1.66
Area: 57491
Amount: 4.018402
Amount Units: ng/ml



Manual Integration Results

RT: 1.66
Area: 34689
Amount: 2.424629
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:29:09

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

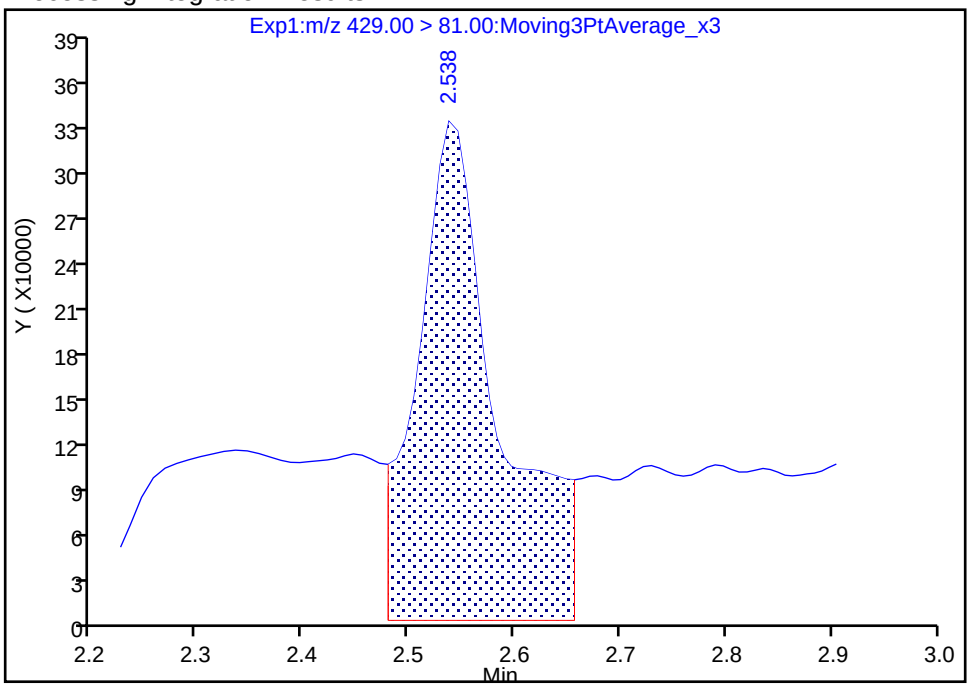
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_064.d				
Injection Date:	07-Aug-2018 22:27:02	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:	320-41405-5		
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	41	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

D 12 M2-6:2FTS, CAS: STL02279

Signal: 1

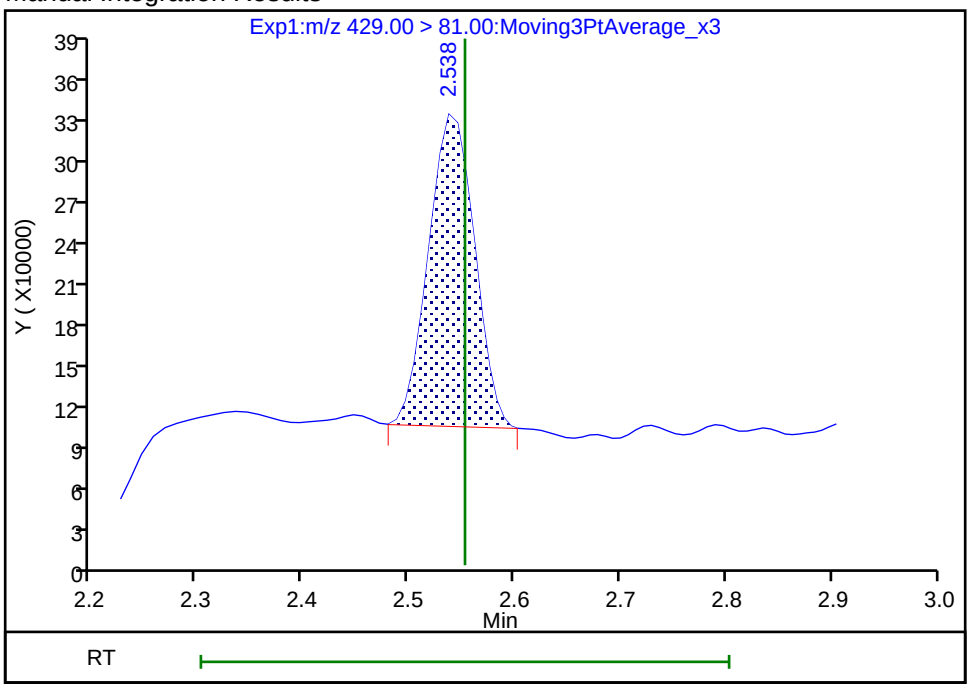
Processing Integration Results

RT: 2.54
Area: 1728631
Amount: 11.889887
Amount Units: ng/ml



Manual Integration Results

RT: 2.54
Area: 680617
Amount: 4.681427
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:29:30

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: GC-MW-DRAIN (WG) DL | Lab Sample ID: 320-41405-5 DL

Matrix: Water | Lab File ID: 2018.08.07LLBB_063.d

Analysis Method: 537 (modified) | Date Collected: 07/23/2018 12:15

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 286(mL) | Date Analyzed: 08/07/2018 22:19

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 238593 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		17	9.6
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	7.1	J	17	1.7
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	230		17	4.7
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		17	2.8
39108-34-4	8:2 FTS	ND		170	17

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00997	13C2 PFUnA	107		25-150
STL00991	13C4 PFOS	101		25-150
STL02280	M2-8:2FTS	184	*	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d
Lims ID: 320-41405-A-5-A
Client ID: GC-MW-DRAIN (WG)
Sample Type: Client
Inject. Date: 07-Aug-2018 22:19:12 ALS Bottle#: 40 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 10.0000
Sample Info: 320-41405-a-5-a 10X
Misc. Info.: Plate: 1 Rack: 5
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 11:34:28 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK048

First Level Reviewer: hannigana Date: 08-Aug-2018 11:28:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										M
212.90 > 169.00	1.367	1.396	-0.029	0.979	277506	0.2481			5.0	M
D 1 13C4 PFBA										
217.00 > 172.00	1.396	1.399	-0.003	0.543	297780	0.1337		53.5	590	
D 3 13C5-PFPeA										
267.90 > 223.00	1.639	1.644	-0.005	0.637	269226	0.1756		70.2	89.7	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.639	1.646	-0.007	1.000	36127	0.0295			0.3	M
D 47 13C3-PFBS										
301.90 > 83.00	1.670	1.676	-0.006	0.649	6417	0.1810		77.8	3.4	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.902	1.912	-0.010	0.995	148770	0.1120			2.4	
313.00 > 119.00	1.902	1.912	-0.010	0.995	11229		13.25(5.03-15.10)		7.1	
D 7 13C2 PFHxA										
315.00 > 270.00	1.912	1.918	-0.006	0.743	325333	0.1870		74.8	912	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.224	2.223	0.001	1.000	172204	0.1111			10.8	
363.00 > 169.00	2.224	2.223	0.001	1.000	67025		2.57(1.13-3.40)		54.2	
D 9 13C4-PFHpA										
367.00 > 322.00	2.224	2.227	-0.003	0.864	364955	0.2131		85.3	1650	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.244	2.232	0.012	1.000	78046	0.0348			0.8	M
399.00 > 99.00	2.244	2.232	0.012	1.000	23415		3.33(1.50-4.49)		4.5	M
D 11 18O2 PFHxS										
403.00 > 84.00	2.244	2.247	-0.003	0.872	489419	0.2229		94.3	1089	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.549	2.549	0.0	1.000	25551	0.0249			35.7	
D 12 M2-6:2FTS										M
429.00 > 81.00	2.549	2.553	-0.004	0.991	155170	0.4306		181	2.7	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.572	2.572	0.0	1.000	953518	0.5626			84.9	M
413.00 > 169.00	2.572	2.572	0.0	1.000	556774		1.71(0.84-2.52)		246	M
* 62 13C2-PFOA										
415.00 > 370.00	2.572	2.572	0.0		401920	0.2500			1965	
D 14 13C4 PFOA										
417.00 > 372.00	2.572	2.575	-0.003	1.000	374719	0.2385		95.4	2780	
16 Perfluoroheptanesulfonic acid										RM
449.00 > 80.00	2.586	2.579	0.007	0.882	36441	0.0203			0.1	RM
449.00 > 99.00	2.579	2.579	0.0	0.880	3236		11.26(1.94-5.82)		1.7	M
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.932	2.938	-0.006	1.000	1010950	0.6488			17.6	M
499.00 > 99.00	2.938	2.938	0.0	1.002	218562		4.63(2.31-6.93)		149	
D 19 13C5 PFNA										
468.00 > 423.00	2.938	2.941	-0.003	1.142	355128	0.2519		101	1108	
D 18 13C4 PFOS										M
503.00 > 80.00	2.932	2.941	-0.009	1.140	346803	0.2404		101	4.3	M
20 Perfluorononanoic acid										M
463.00 > 419.00	2.938	2.944	-0.006	1.000	64571	0.0432			10.7	M
463.00 > 169.00	2.938	2.944	-0.006	1.000	14572		4.43(1.90-5.69)		29.5	
D 26 M2-8:2FTS										M
529.00 > 81.00	3.277	3.282	-0.005	1.274	191342	0.4397		184	8.3	M
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.277	3.283	-0.006	1.000	14152	0.0136			123	
D 23 13C2 PFDA										
515.00 > 470.00	3.290	3.297	-0.007	1.279	336147	0.2717		109	2026	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.290	3.298	-0.008	1.000	117936	0.0874			29.0	
513.00 > 169.00	3.290	3.298	-0.008	1.000	19549		6.03(2.36-7.09)		55.4	
D 21 13C8 FOSA										
506.00 > 78.00	3.312	3.318	-0.006	1.287	433536	0.2269		90.8	2124	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.312	3.319	-0.007	1.000	59516	0.0352			25.5	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.445	3.451	-0.006	1.339	191149	0.3021		121	473	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.445	3.452	-0.007	1.000	58424	0.0792			213	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.612	3.619	-0.007	1.404	215735	0.3291		132	312	
D 30 13C2 PFUnA										
565.00 > 520.00	3.619	3.626	-0.007	1.407	265436	0.2668		107	1543	
33 N-ethyl perfluorooctane sulfonamid										M
584.00 > 419.00	3.619	3.627	-0.007	1.002	26777	0.0348			99.0	M
31 Perfluoroundecanoic acid										M
563.00 > 519.00	3.619	3.627	-0.007	1.000	12933	0.0108			5.4	M
563.00 > 169.00	3.612	3.627	-0.014	0.998	2897		4.46(2.12-6.36)		7.8	M
D 36 13C2 PFDoA										
615.00 > 570.00	3.909	3.908	0.001	1.520	227265	0.2161		86.4	1272	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
37 Perfluorododecanoic acid										
613.00 > 569.00	3.909	3.919	-0.010	1.000	10771	0.0106			4.3	
613.00 > 169.00	3.909	3.919	-0.010	1.000	2209		4.88(2.13-6.40)		9.5	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.405	4.406	-0.001	1.712	134676	0.1005		40.2	655	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 08-Aug-2018 11:34:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d

Injection Date: 07-Aug-2018 22:19:12 Instrument ID: A8_N

Lims ID: 320-41405-A-5-A Lab Sample ID:

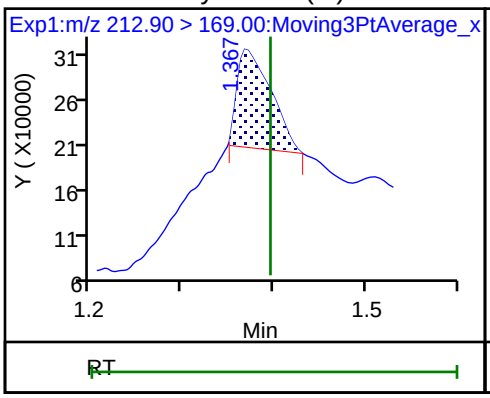
Client ID: GC-MW-DRAIN (WG)

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 40 Worklist Smp#: 2

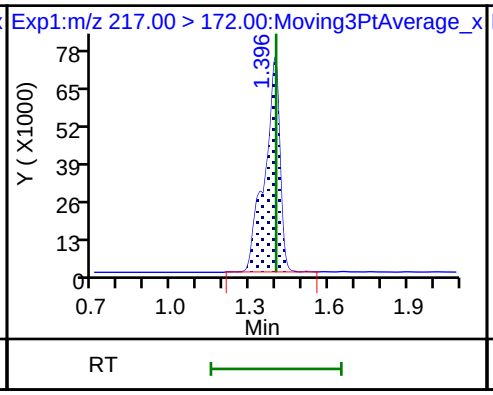
Injection Vol: 2.0 ul Dil. Factor: 10.0000

Method: A8_N Limit Group: LC PFC ICAL

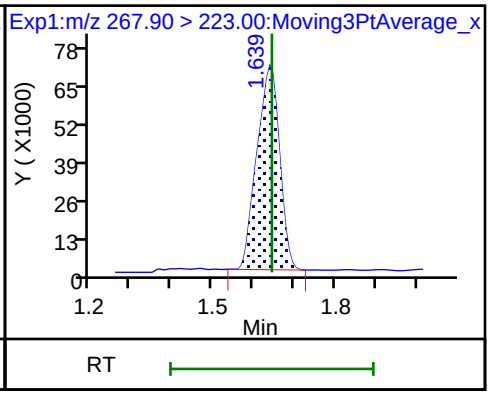
2 Perfluorobutyric acid (M)



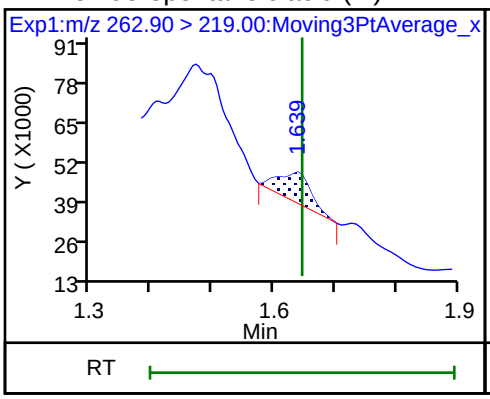
D 1 13C4 PFBA



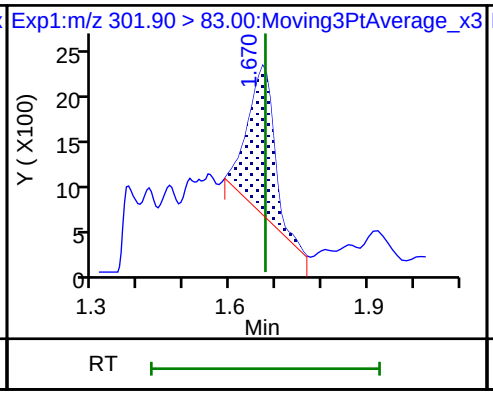
D 3 13C5-PFPeA



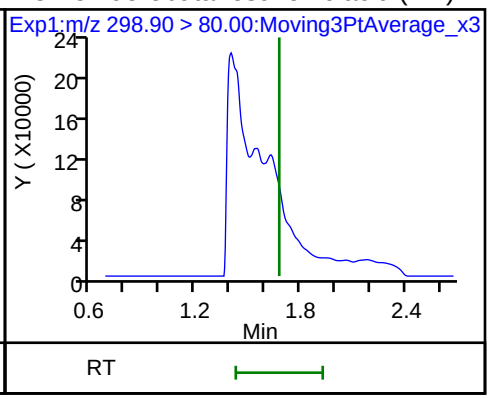
4 Perfluoropentanoic acid (M)



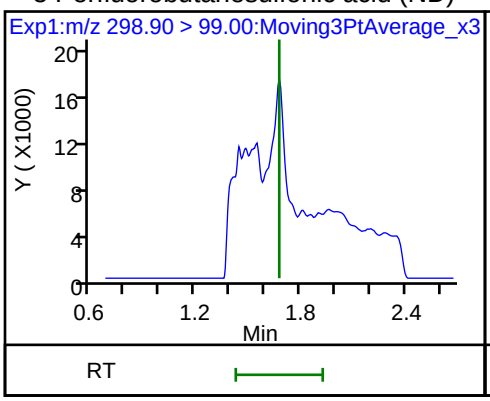
D 47 13C3-PFBS



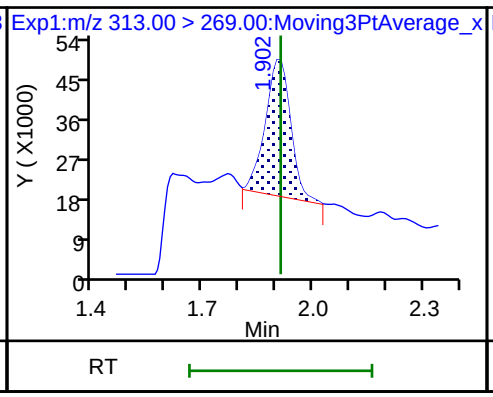
5 Perfluorobutanesulfonic acid (ND)



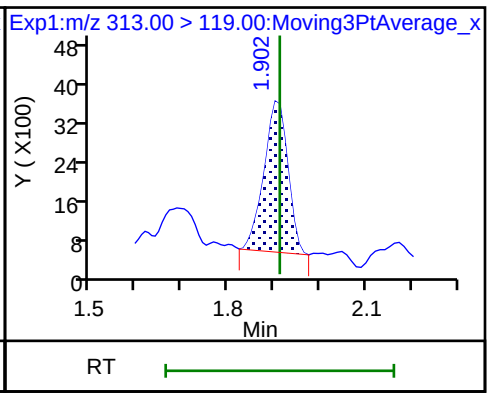
5 Perfluorobutanesulfonic acid (ND)



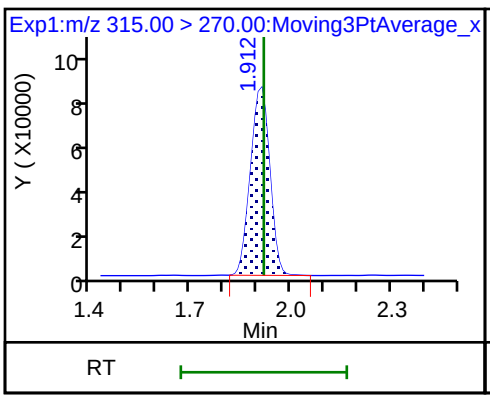
6 Perfluorohexanoic acid



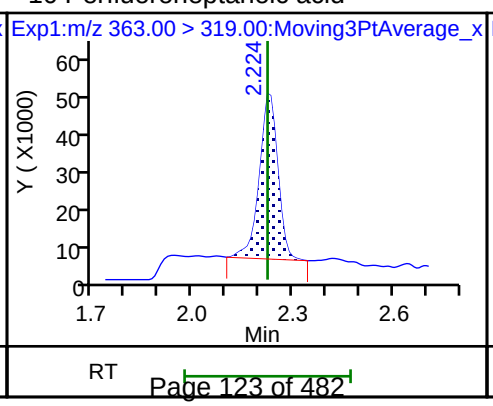
6 Perfluorohexanoic acid



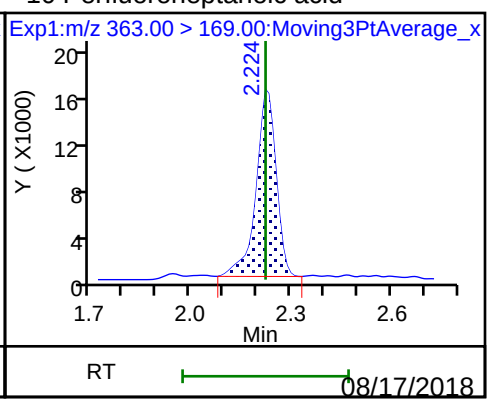
D 7 13C2 PFHxA



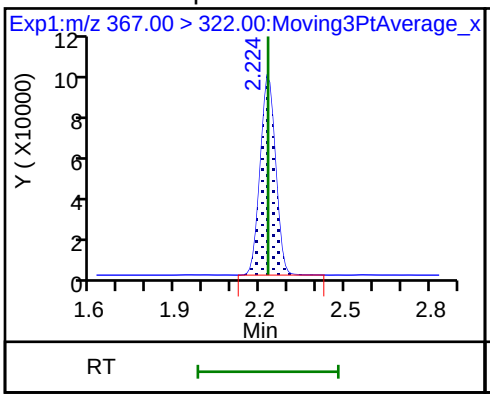
10 Perfluoroheptanoic acid



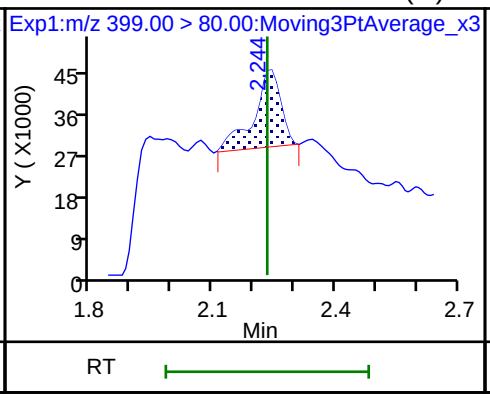
10 Perfluoroheptanoic acid



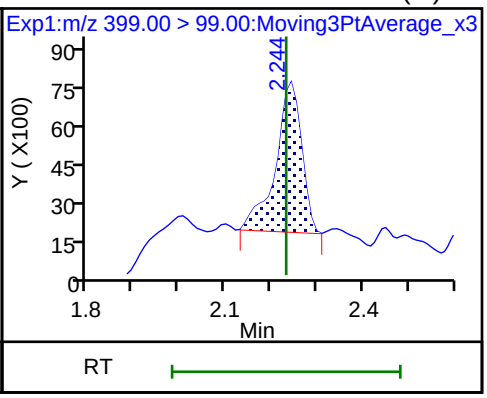
D 9 13C4-PFHpA



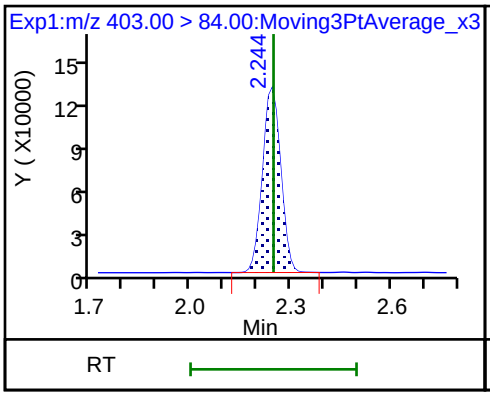
8 Perfluorohexanesulfonic acid (M)



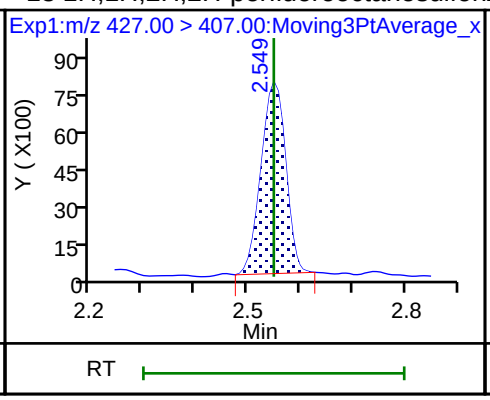
8 Perfluorohexanesulfonic acid (M)



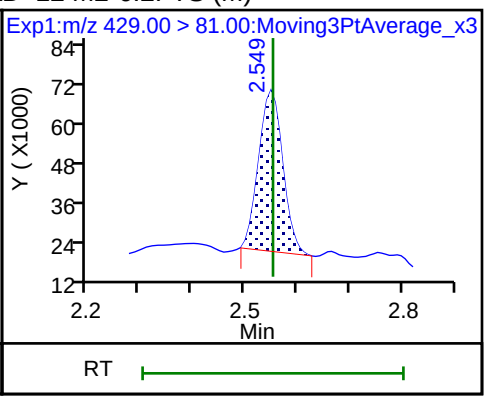
D 11 18O2 PFHxS



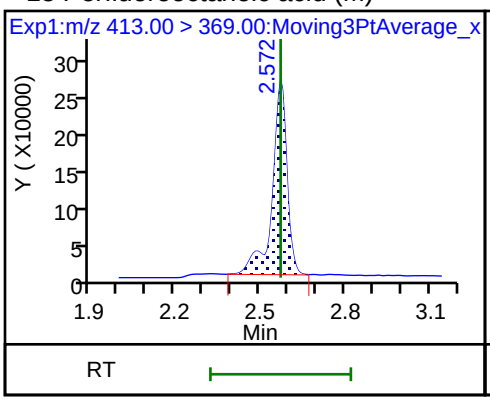
13 1H,1H,2H,2H-perfluorooctanesulfon



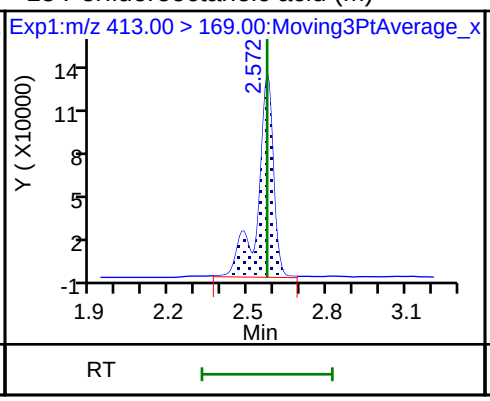
D 12 M2-6:2FTS (M)



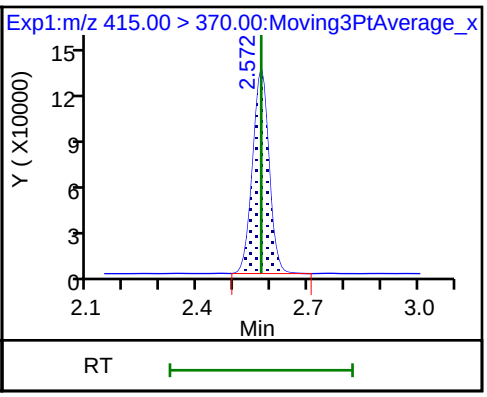
15 Perfluorooctanoic acid (M)



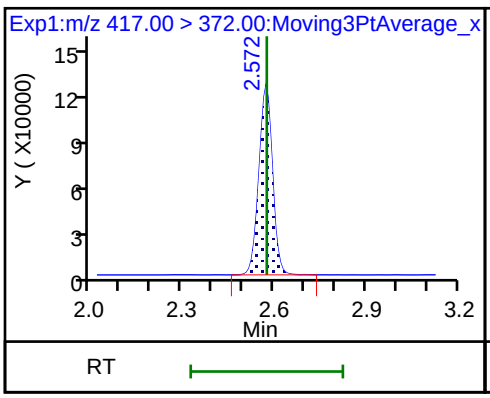
15 Perfluorooctanoic acid (M)



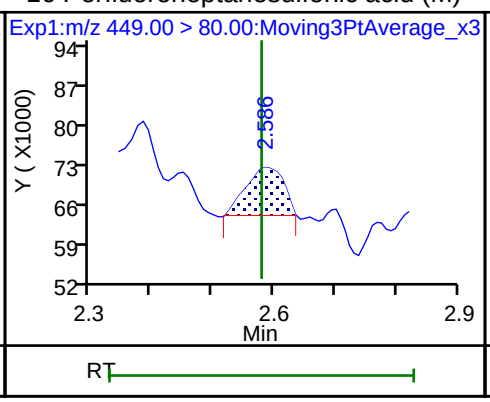
* 62 13C2-PFOA



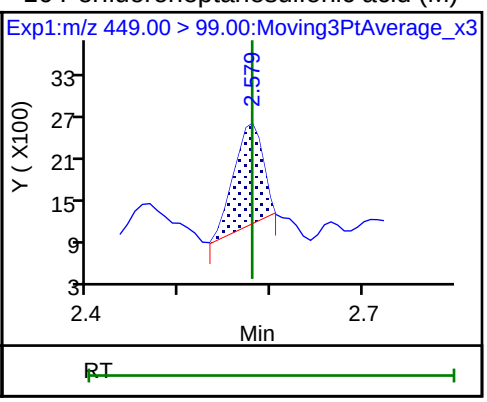
D 14 13C4 PFOA



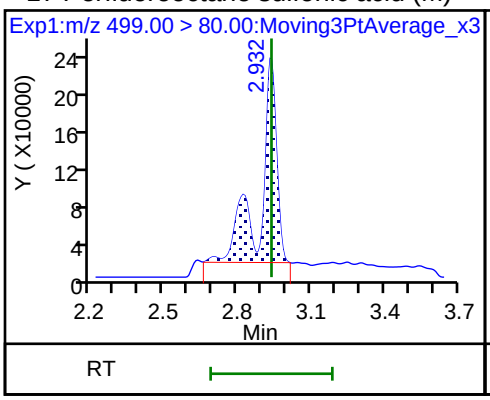
16 Perfluoroheptanesulfonic acid (M)



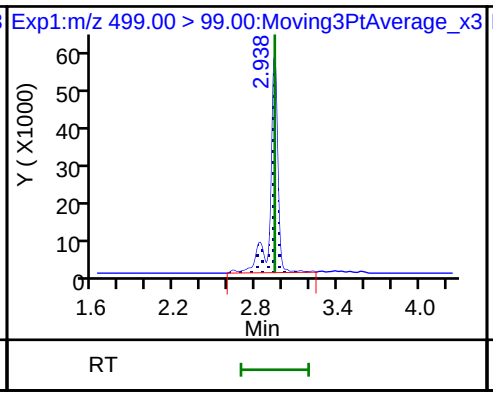
16 Perfluoroheptanesulfonic acid (M)



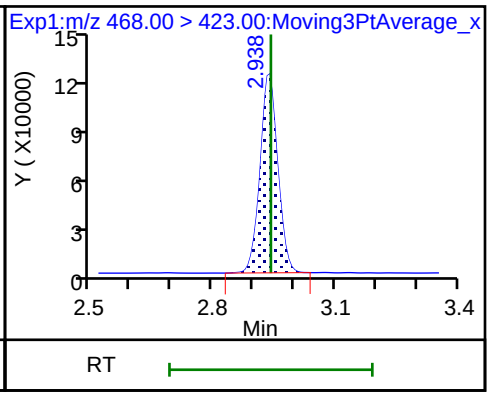
17 Perfluorooctane sulfonic acid (M)



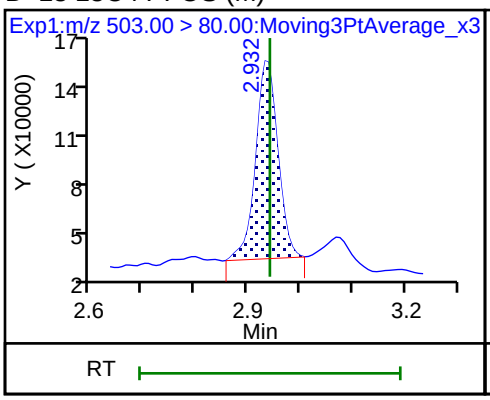
17 Perfluorooctane sulfonic acid



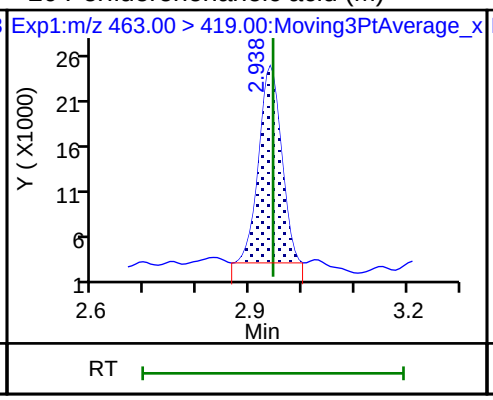
D 19 13C5 PFNA



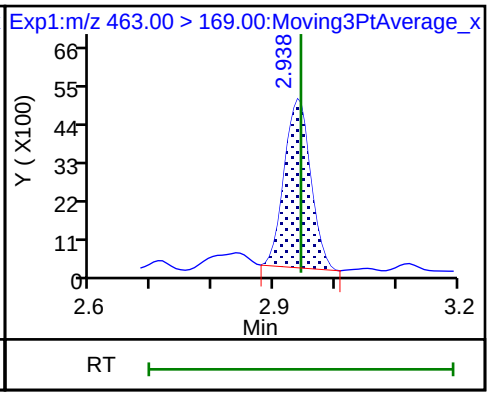
D 18 13C4 PFOS (M)



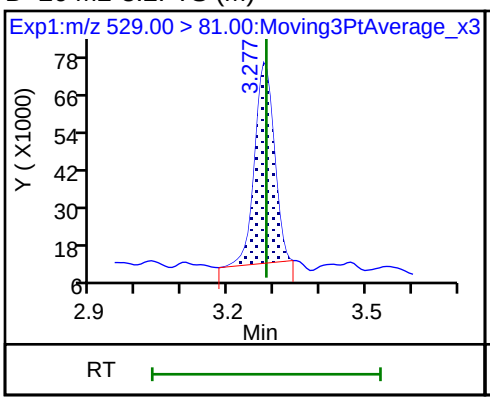
20 Perfluorononanoic acid (M)



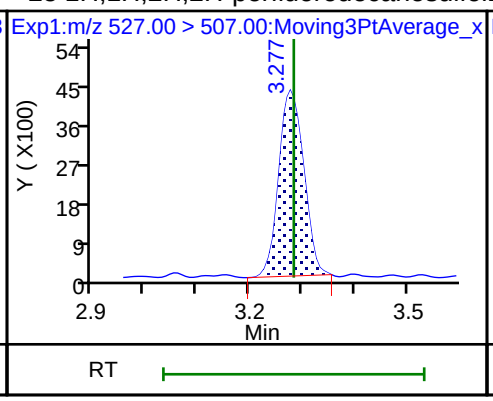
20 Perfluorononanoic acid



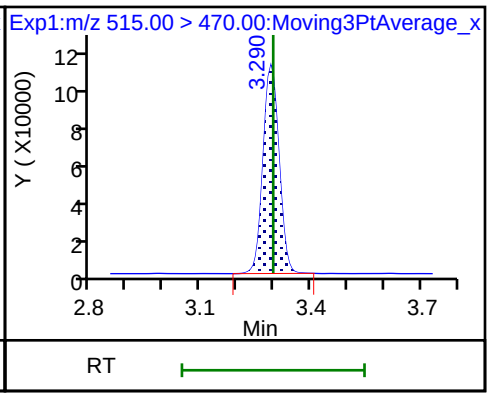
D 26 M2-8:2FTS (M)



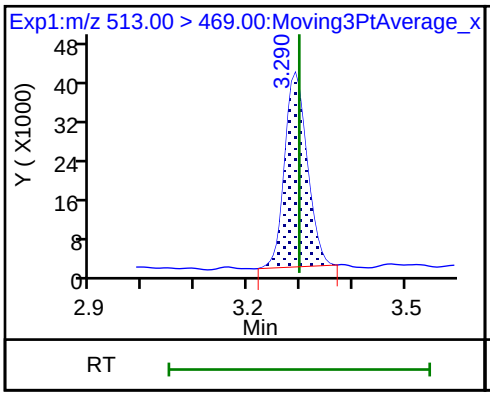
25 1H,1H,2H,2H-perfluorodecanesulfon



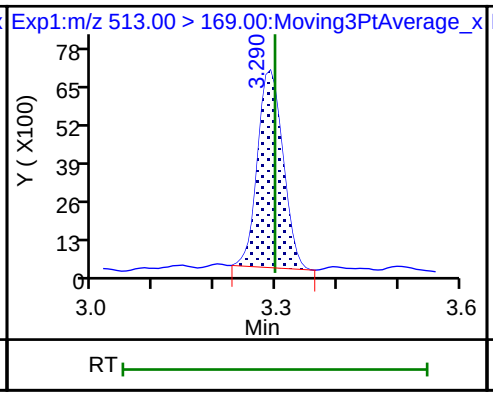
D 23 13C2 PFDA



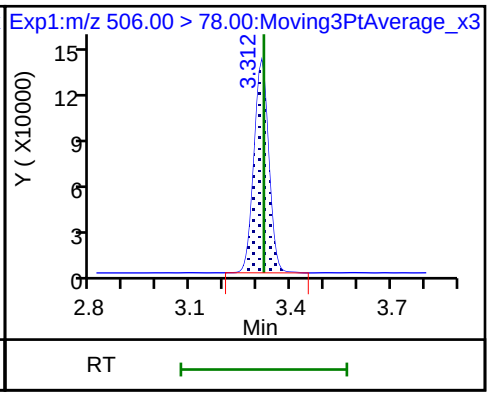
24 Perfluorodecanoic acid



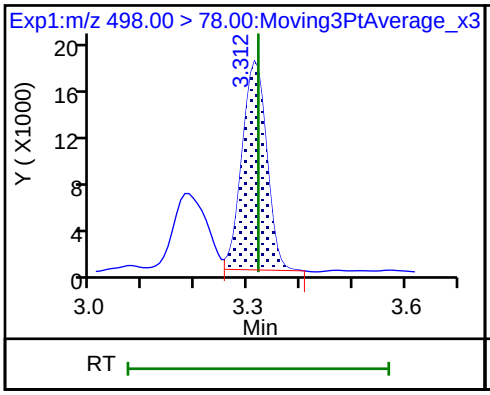
24 Perfluorodecanoic acid



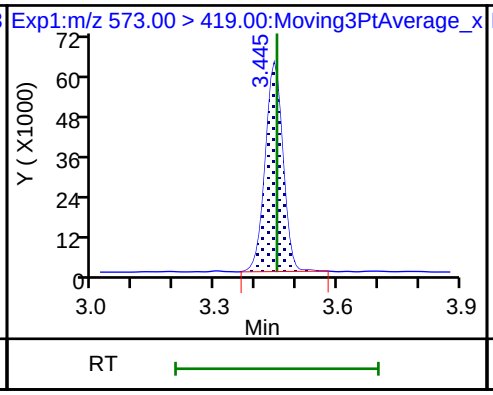
D 21 13C8 FOSA



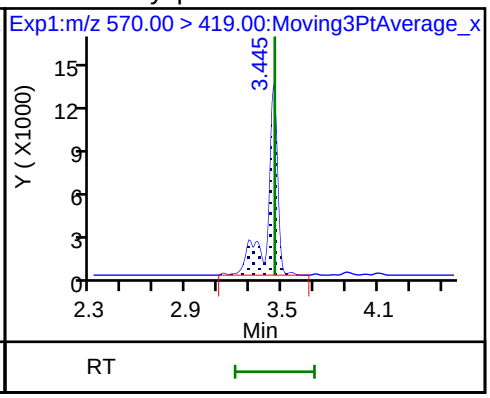
22 Perfluorooctane Sulfonamide



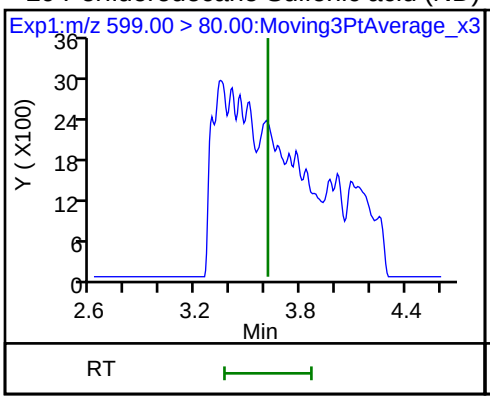
D 27 d3-NMeFOSAA



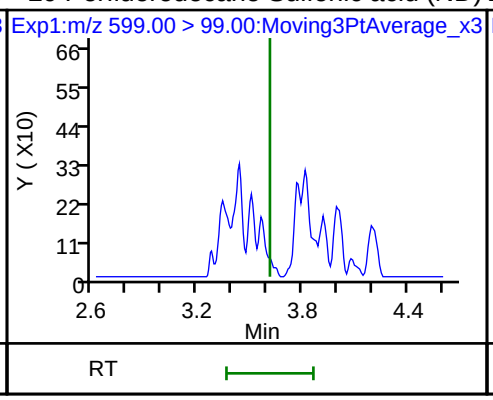
28 N-methyl perfluorooctane sulfonami



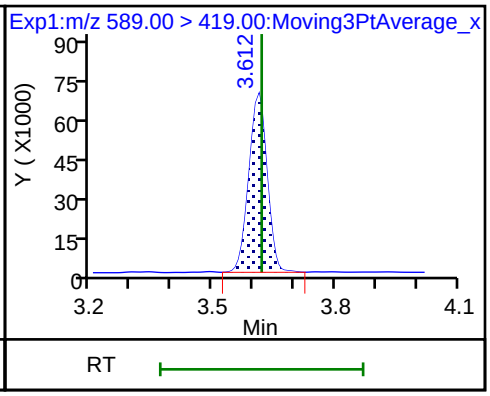
29 Perfluorodecane Sulfonic acid (ND)



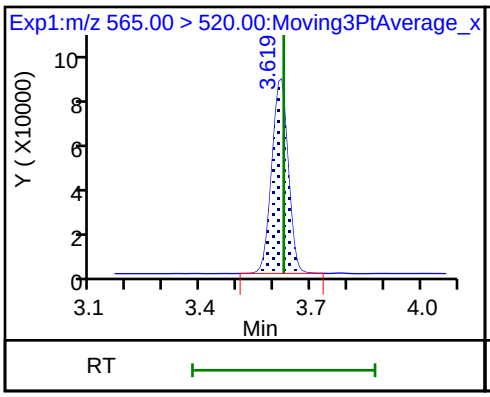
29 Perfluorodecane Sulfonic acid (ND)



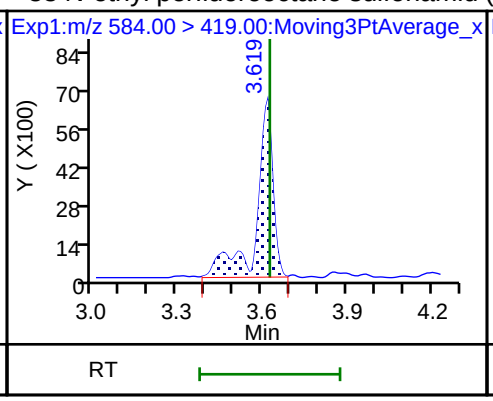
D 32 d5-NEtFOSAA



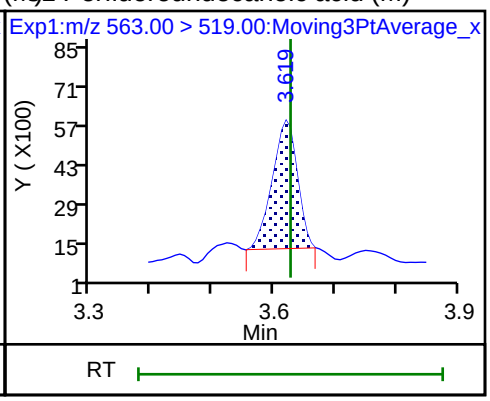
D 30 13C2 PFUnA



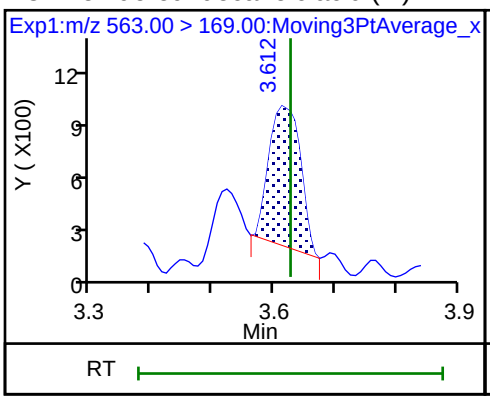
33 N-ethyl perfluorooctane sulfonamid (M)



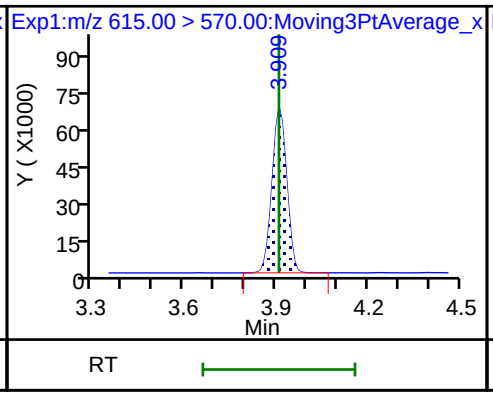
31 Perfluoroundecanoic acid (M)



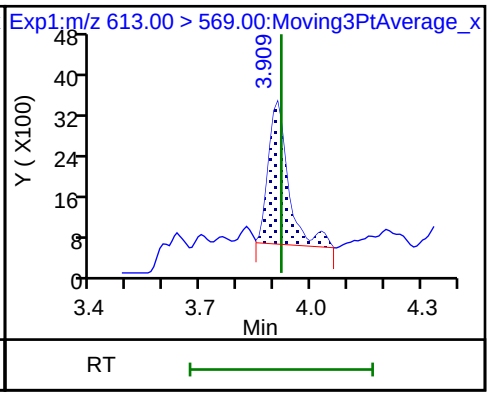
31 Perfluoroundecanoic acid (M)



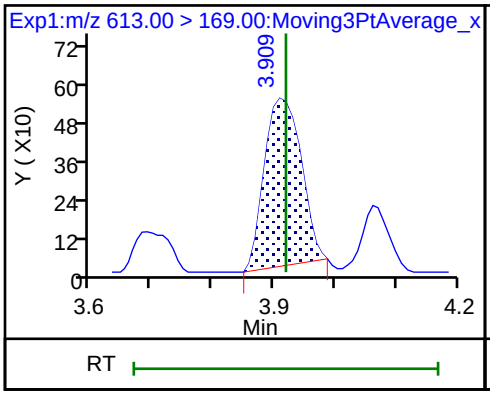
D 36 13C2 PFDoA



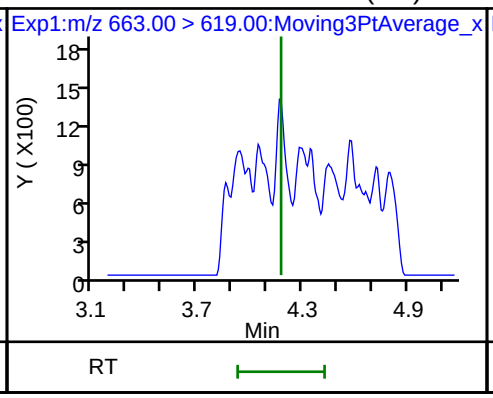
37 Perfluorododecanoic acid



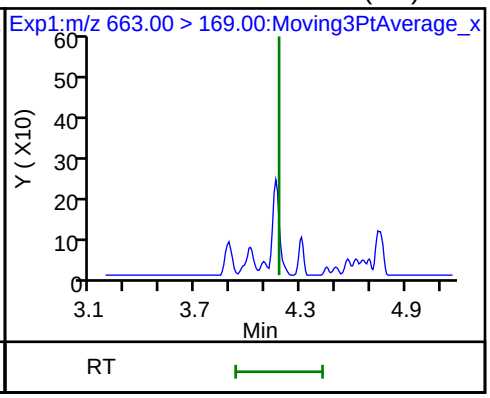
37 Perfluorododecanoic acid



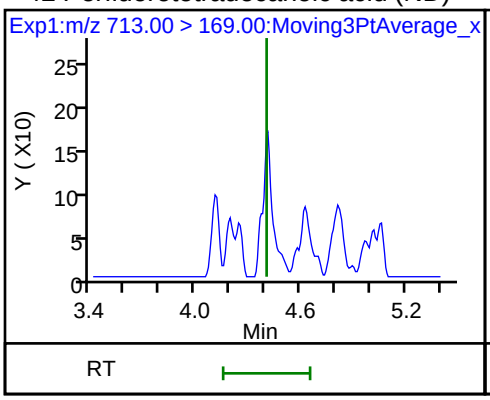
41 Perfluorotridecanoic acid (ND)



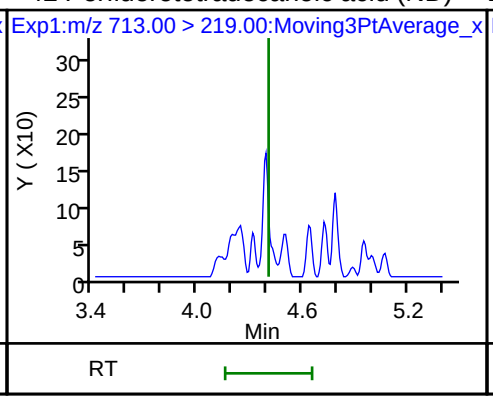
41 Perfluorotridecanoic acid (ND)



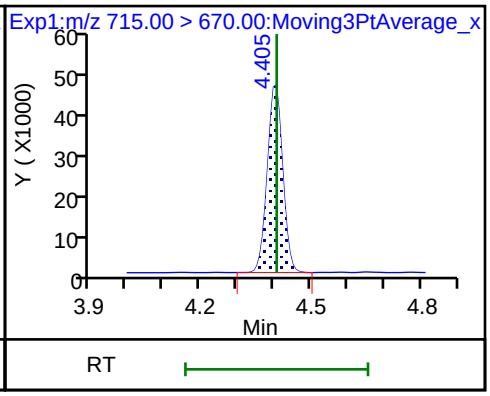
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2-PFTeDA



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

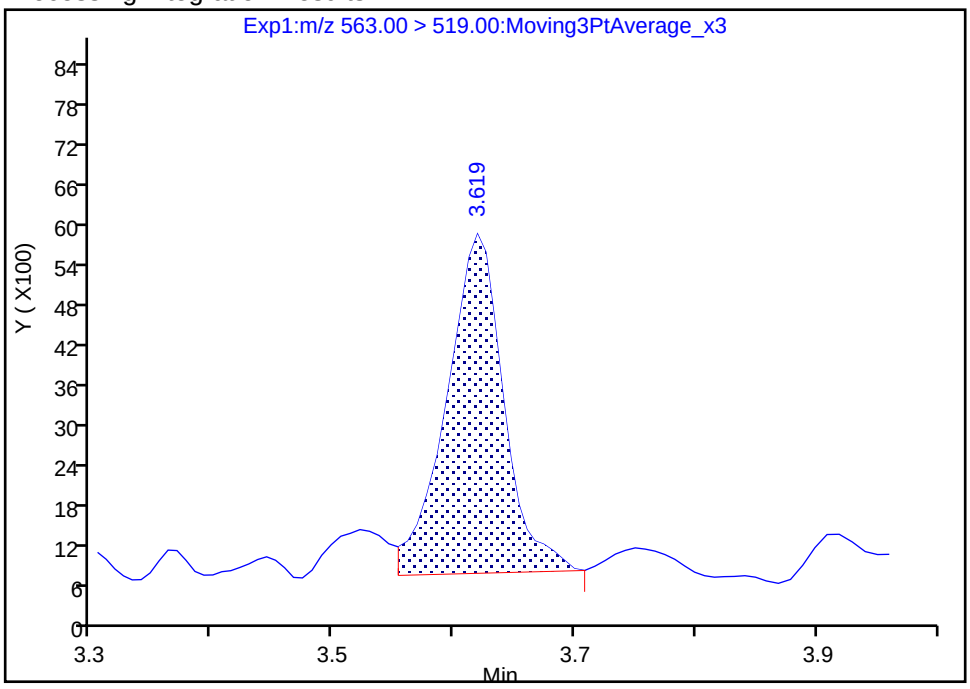
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d
Injection Date: 07-Aug-2018 22:19:12 Instrument ID: A8_N
Lims ID: 320-41405-A-5-A Lab Sample ID:
Client ID: GC-MW-DRAIN (WG)
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 40 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 10.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

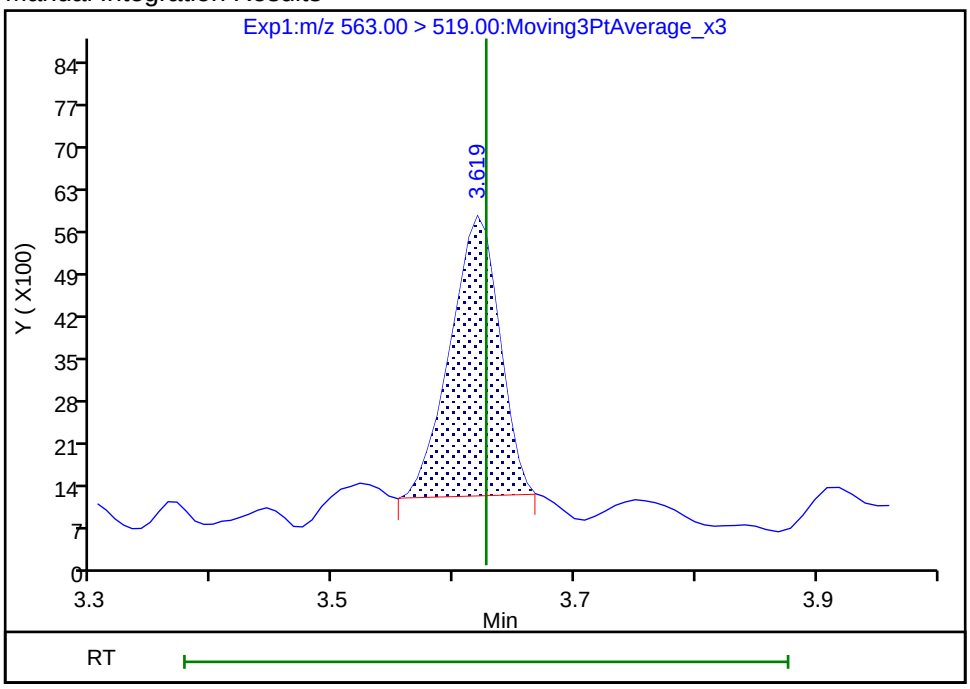
Processing Integration Results

RT: 3.62
Area: 16440
Amount: 0.013780
Amount Units: ng/ml



Manual Integration Results

RT: 3.62
Area: 12933
Amount: 0.010841
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:28:40
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

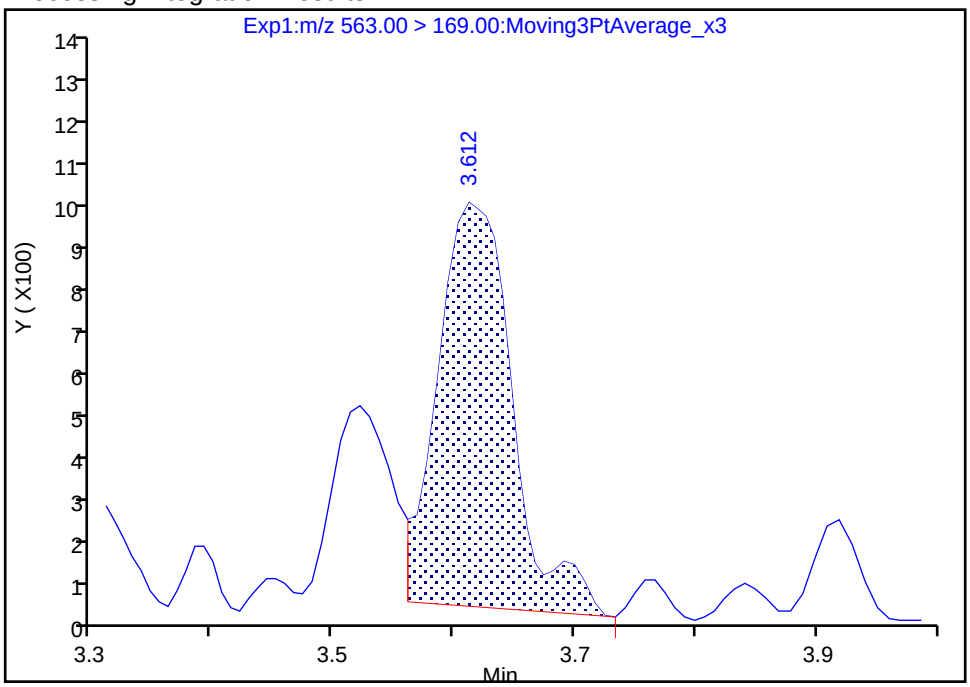
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d				
Injection Date:	07-Aug-2018 22:19:12	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:			
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	40	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	10.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

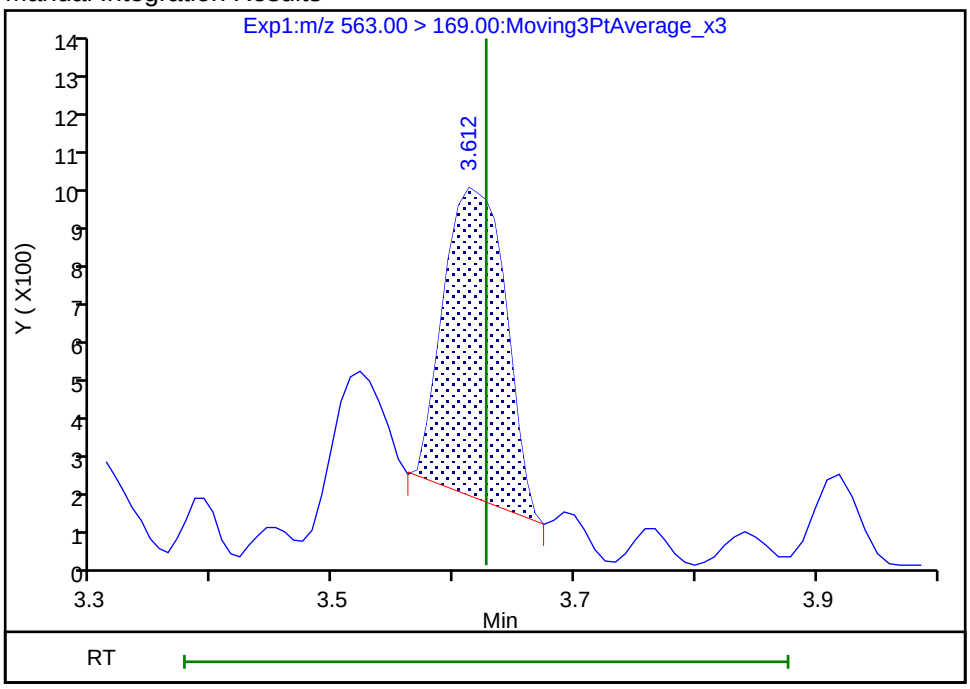
Processing Integration Results

RT: 3.61
Area: 4121
Amount: 0.013780
Amount Units: ng/ml



Manual Integration Results

RT: 3.61
Area: 2897
Amount: 0.010841
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:28:44

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

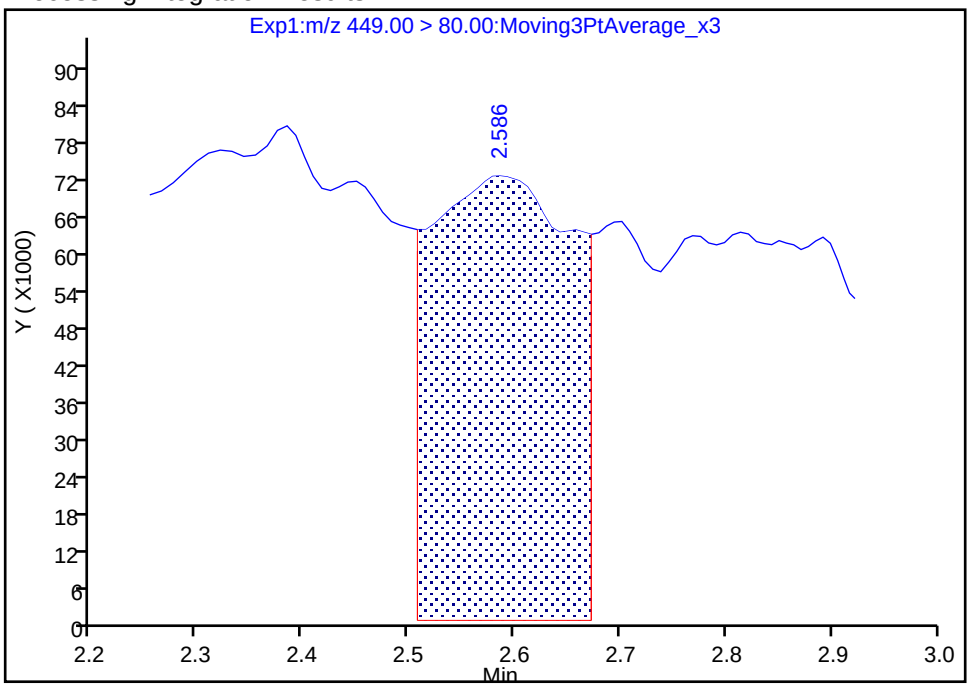
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d				
Injection Date:	07-Aug-2018 22:19:12	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:			
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	40	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	10.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

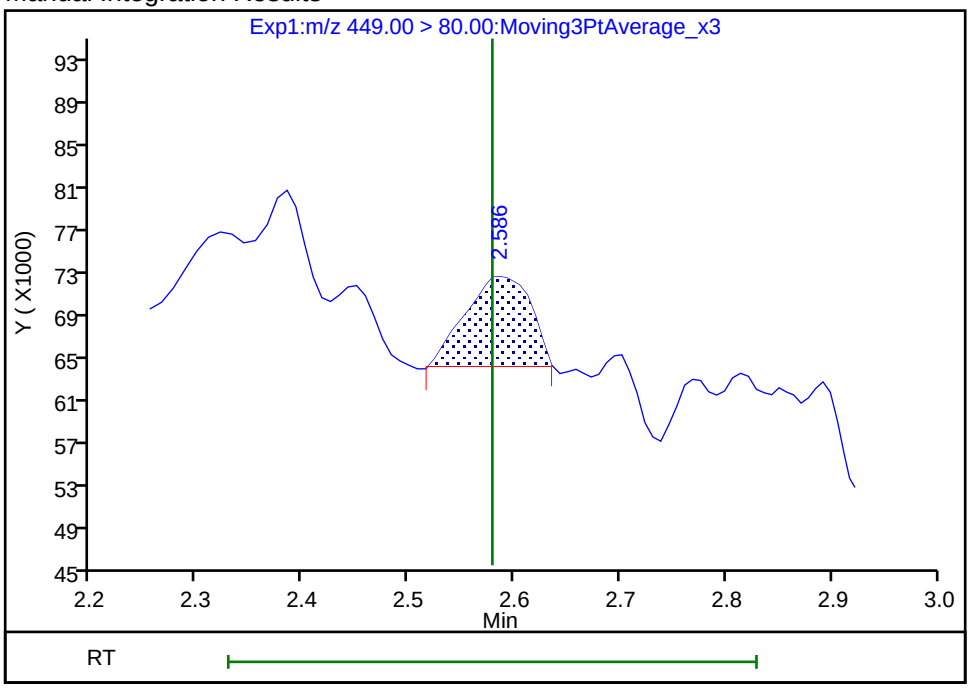
Processing Integration Results

RT: 2.59
Area: 666314
Amount: 0.370599
Amount Units: ng/ml



Manual Integration Results

RT: 2.59
Area: 36441
Amount: 0.020268
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:27:52

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

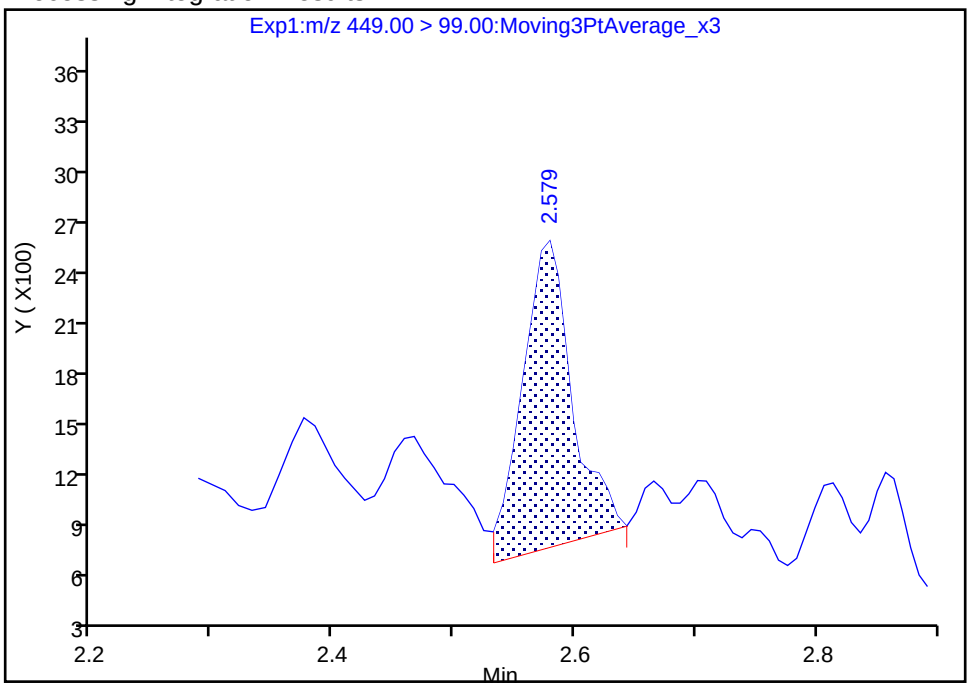
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d
Injection Date: 07-Aug-2018 22:19:12 Instrument ID: A8_N
Lims ID: 320-41405-A-5-A Lab Sample ID:
Client ID: GC-MW-DRAIN (WG)
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 40 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 10.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

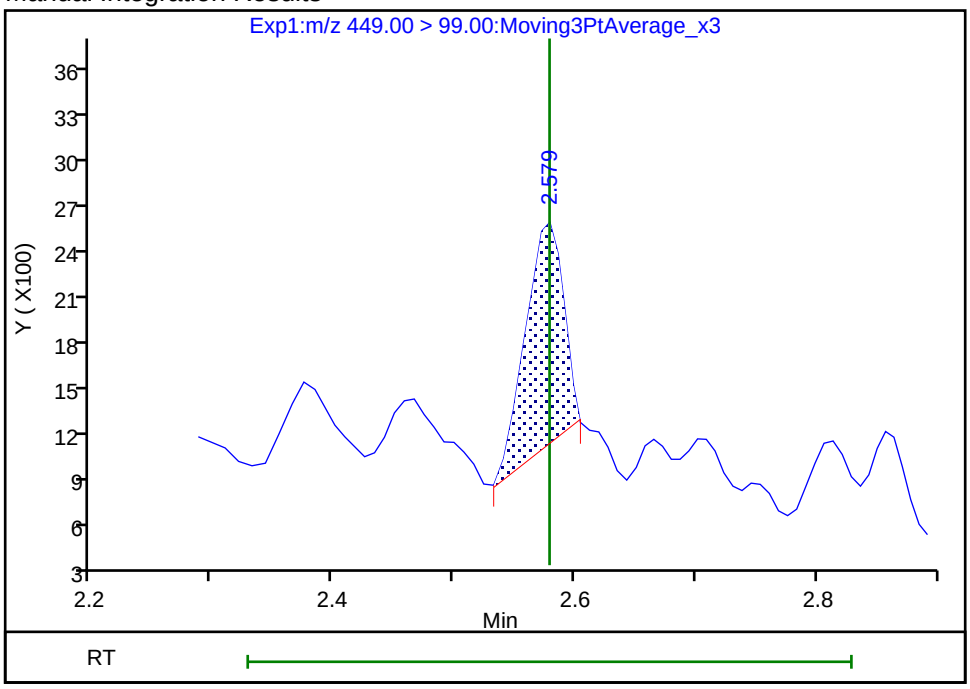
Processing Integration Results

RT: 2.58
Area: 5240
Amount: 0.370599
Amount Units: ng/ml



Manual Integration Results

RT: 2.58
Area: 3236
Amount: 0.020268
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:27:56
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

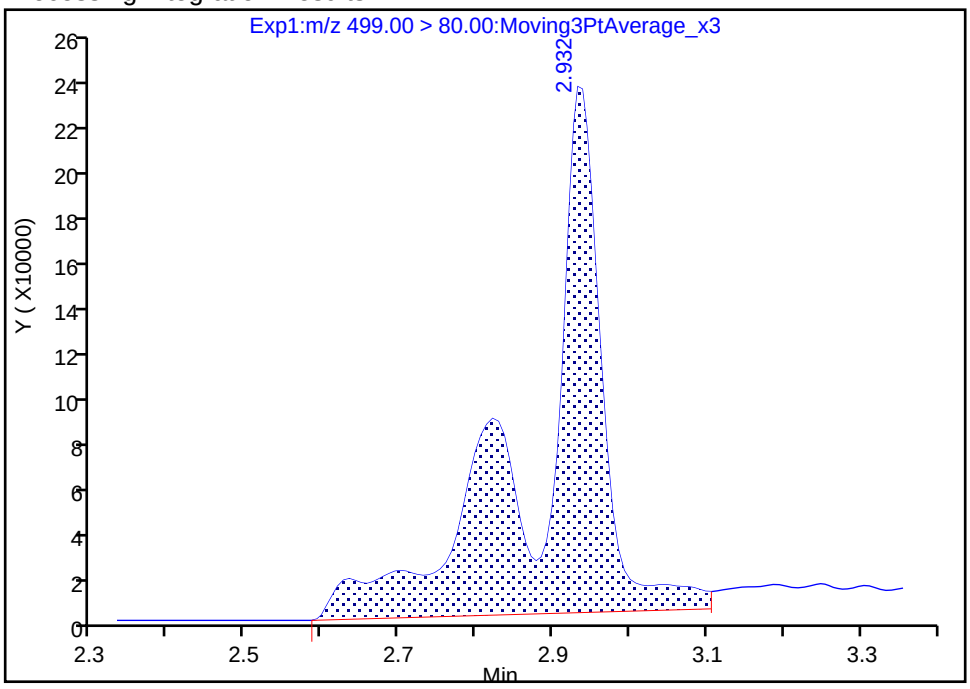
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d				
Injection Date:	07-Aug-2018 22:19:12	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:			
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	40	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	10.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

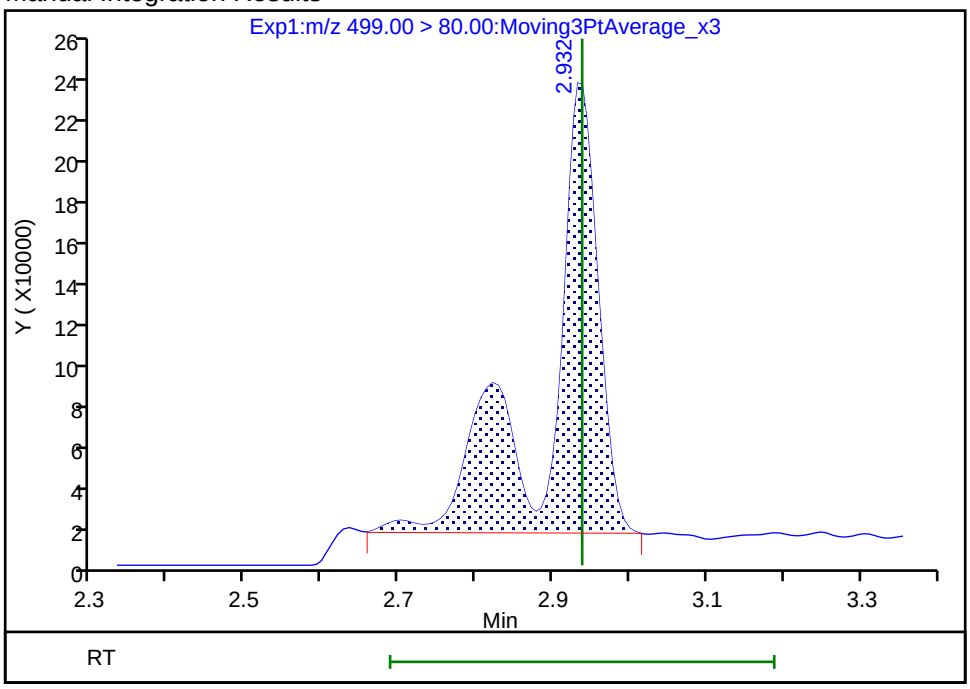
Processing Integration Results

RT: 2.93
Area: 1405561
Amount: 0.902114
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 1010950
Amount: 0.648846
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:28:03

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

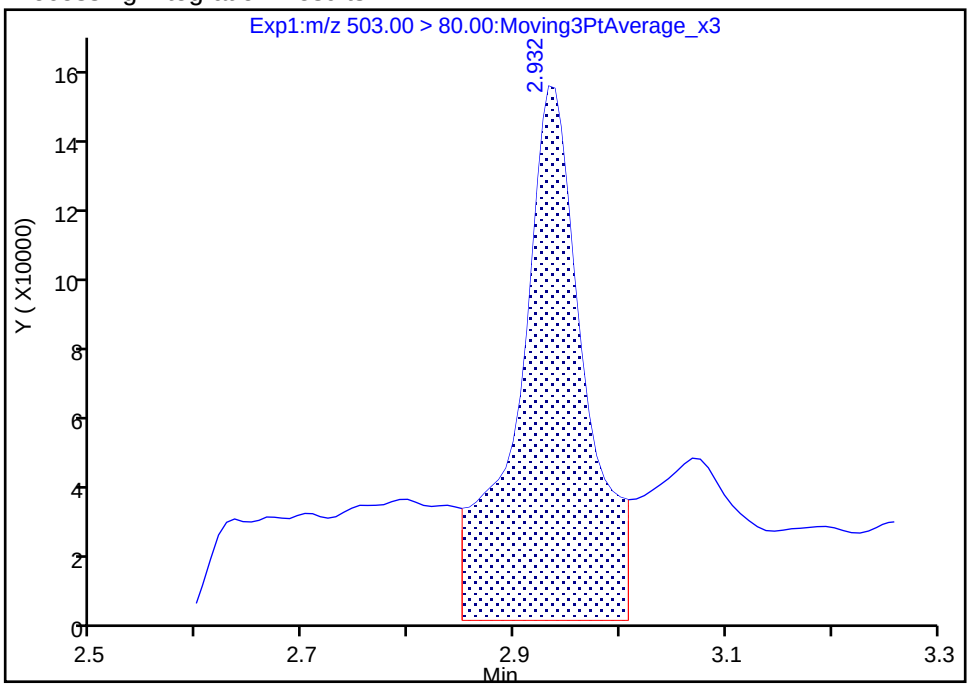
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d				
Injection Date:	07-Aug-2018 22:19:12	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:			
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	40	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	10.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

D 18 13C4 PFOS, CAS: STL00991

Signal: 1

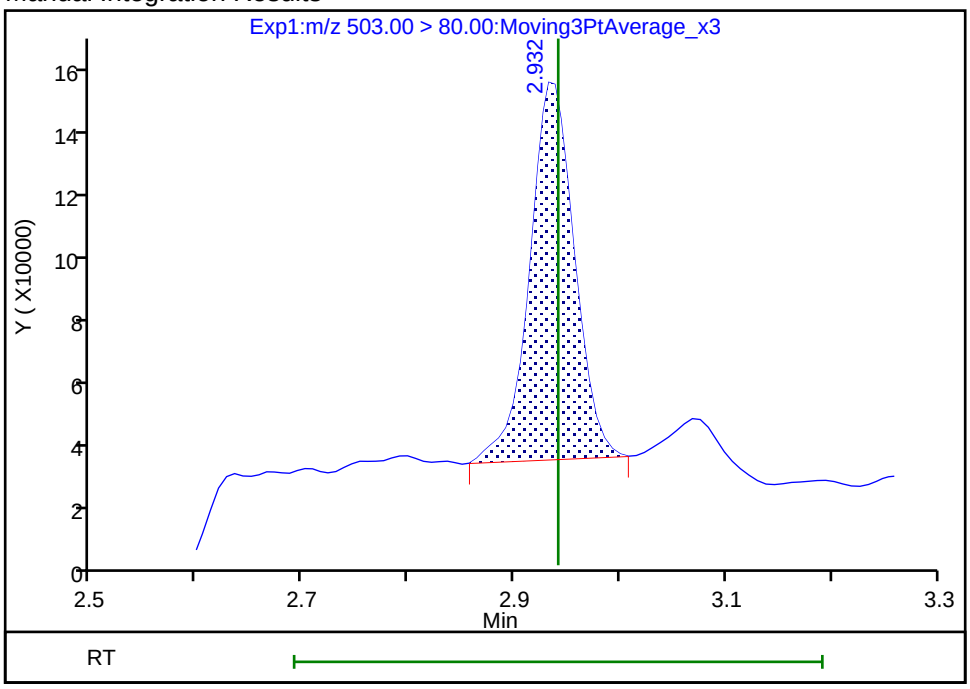
Processing Integration Results

RT: 2.93
Area: 657253
Amount: 0.455611
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 346803
Amount: 0.240406
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:26:05

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

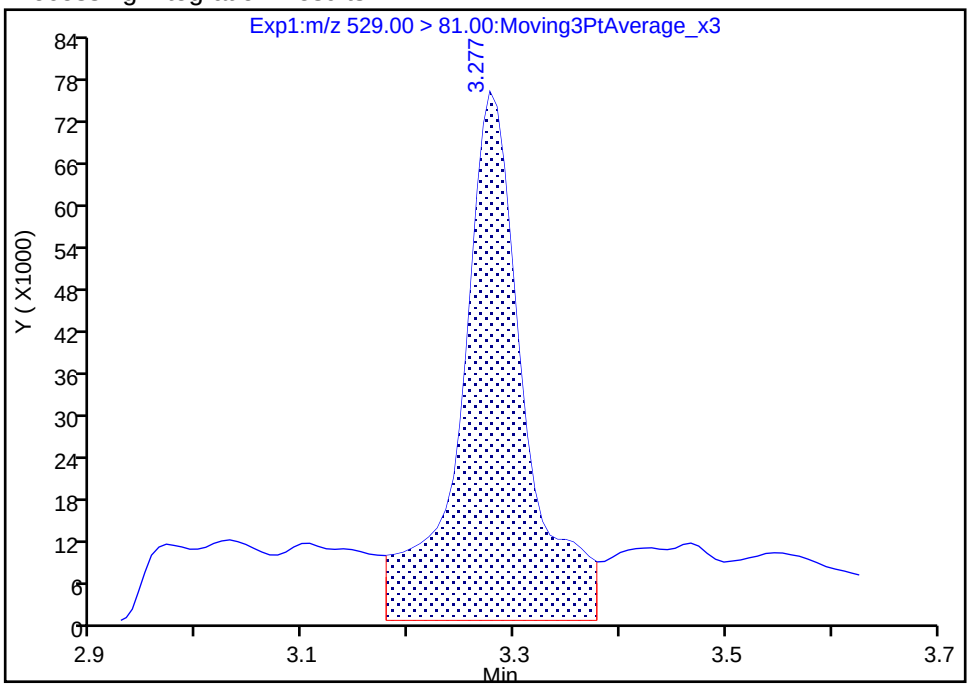
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_063.d				
Injection Date:	07-Aug-2018 22:19:12	Instrument ID:	A8_N		
Lims ID:	320-41405-A-5-A	Lab Sample ID:			
Client ID:	GC-MW-DRAIN (WG)				
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	40	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	10.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

D 26 M2-8:2FTS, CAS: STL02280

Signal: 1

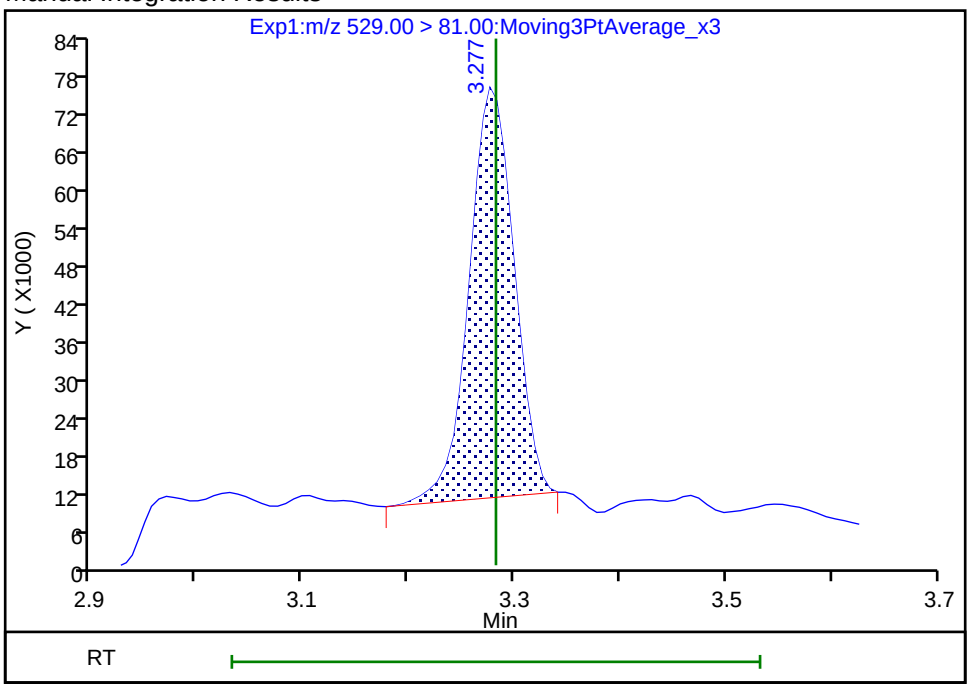
Processing Integration Results

RT: 3.28
Area: 316354
Amount: 0.726894
Amount Units: ng/ml



Manual Integration Results

RT: 3.28
Area: 191342
Amount: 0.439651
Amount Units: ng/ml



Reviewer: hannigana, 08-Aug-2018 11:26:15

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 237401

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/01/2018 12:59 Calibration End Date: 08/01/2018 13:46 Calibration ID: 40448

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-237401/2	2018.08.01LLICAL_002.d
Level 2	IC 320-237401/3	2018.08.01LLICAL_003.d
Level 3	IC 320-237401/4	2018.08.01LLICAL_004.d
Level 4	IC 320-237401/5	2018.08.01LLICAL_005.d
Level 5	IC 320-237401/6	2018.08.01LLICAL_006.d
Level 6	IC 320-237401/7	2018.08.01LLICAL_007.d
Level 7	IC 320-237401/8	2018.08.01LLICAL_008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	1.0341 0.9972	0.9799 0.9834	0.9577	0.9623	0.9835	AveID		0.9855				2.6		35.0			
Perfluoropentanoic acid (PFPeA)	1.2135 1.1977	1.2772 1.1997	1.1732	1.1396	1.1803	AveID		1.1973				3.6		35.0			
Perfluorobutanesulfonic acid (PFBS)	77.861 76.922	76.347 73.670	75.500	78.075	78.162	AveID		76.648				2.1		50.0			
4:2 FTS	17.009 16.910	17.314 16.211	17.766	18.555	16.706	AveID		17.210				4.4		50.0			
Perfluorohexanoic acid (PFHxA)	1.0349 1.0545	1.1276 1.0819	1.0073	1.0407	1.0350	AveID		1.0546				3.7		35.0			
Perfluoropentanesulfonic acid (PFPeS)	66.118 68.869	66.515 66.804	66.603	69.820	68.852	AveID		67.654				2.2		50.0			
HFPO-DA (GenX)	4.6547 3.8051	2.9817 3.8855	4.2038	4.2993	4.1886	AveID		4.0027				13.2		35.0			
Perfluoroheptanoic acid (PFHpA)	1.2256 1.1650	1.1159 1.1495	1.1723	1.1813	1.1078	AveID		1.1596				3.5		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.3789 1.1090	1.2306 1.0783	1.0904	1.0665	1.1383	AveID		1.1560				9.7		35.0			
ADONA	2.8607 2.8080	2.8924 2.4227	2.7313	2.8747	2.9613	AveID		2.7930				6.4		50.0			
6:2 FTS	1.6086 1.6432	1.6820 1.7048	1.6109	1.7076	1.6188	AveID		1.6537				2.6		35.0			
Perfluorooctanoic acid (PFOA)	1.1936 1.1841	1.1205 1.1606	1.1342	1.1315	1.1689	AveID		1.1562				2.4		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.4367 1.4256	1.4491 1.3190	1.2931	1.3270	1.4260	AveID		1.3824				4.8		50.0			
Perfluorononanoic acid (PFNA)	1.0260 1.1092	1.1173 1.1233	1.0184	1.0806	1.0842	AveID		1.0799				3.9		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 237401

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/01/2018 12:59 Calibration End Date: 08/01/2018 13:46 Calibration ID: 40448

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid (PFOS)	1.2316 1.1195	1.1413 1.1217	1.0371	1.0748	1.1325	AveID		1.1226				5.4		35.0			
F-53B Major	1.9003 1.8162	1.7950 1.6571	1.7232	1.7790	1.8326	AveID		1.7862				4.4		50.0			
8:2 FTS	1.3856 1.3517	1.4103 1.3057	1.3830	1.3210	1.3008	AveID		1.3511				3.2		35.0			
Perfluorononanesulfonic acid (PFNS)	0.6692 0.7668	0.7515 0.7224	0.6529	0.7198	0.7484	AveID		0.7187				6.0		50.0			
Perfluorodecanoic acid (PFDA)	1.1200 1.0213	1.0789 1.0702	1.0909	1.0386	1.0518	AveID		1.0674				3.1		35.0			
Perfluorooctane Sulfonamide (FOSA)	0.9853 0.9975	0.9675 0.9764	0.9700	1.0090	1.0037	AveID		0.9871				1.7		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.0296 0.9833	1.1040 1.0283	0.9606	1.0149	0.9958	AveID		1.0166				4.5		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.6182 0.6700	0.6918 0.6365	0.6465	0.6174	0.6724	AveID		0.6504				4.4		50.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.9092 0.9063	0.7809 0.9307	0.9039	0.9216	0.8860	AveID		0.8912				5.7		35.0			
Perfluoroundecanoic acid (PFUnA)	1.5332 1.1610	1.2751 1.1866	1.1085	1.1713	1.1901	AveID		1.2323				11.5		35.0			
F-53B Minor	2.2887 2.4837	2.4944 2.1798	2.4072	2.5895	2.5856	AveID		2.4327				6.3		50.0			
Perfluorododecanoic acid (PFDoA)	1.1314 1.0953	1.0778 1.0496	1.0444	1.0390	1.1416	AveID		1.0827				3.9		35.0			
Perfluorotridecanoic Acid (PFTriA)	1.0526 1.0082	0.8009 0.9105	0.9230	0.9030	0.9986	AveID		0.9424				8.9		50.0			
Perfluorotetradecanoic acid (PFTeA)	+++++ 0.2617	0.2978 0.2668	0.2613	0.2576	0.2710	AveID		0.2694				5.5		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	2.0007 0.9968	1.3303 0.9645	1.0161	1.0018	0.9545	L1ID	0.0226	0.9684							1.0000		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	1.0298 1.0493	1.0357 0.9889	1.0259	1.0264	1.0422	AveID		1.0283				1.9		50.0			
13C4 PFBA	1.3860 1.5038	1.4125 1.5694	1.3776	1.4016	1.4257	Ave		1.4395				4.9		50.0			
13C5 PFPeA	0.9305 0.9725	0.9291 0.9956	0.9358	0.9353	0.9377	Ave		0.9481				2.7		50.0			
13C3-PFBS	0.0253 0.0289	0.0266 0.0304	0.0261	0.0260	0.0276	Ave		0.0273				6.7		50.0			
M2-4:2FTS	0.1945 0.1987	0.1860 0.1973	0.1868	0.1906	0.1943	Ave		0.1926				2.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 237401

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/01/2018 12:59 Calibration End Date: 08/01/2018 13:46 Calibration ID: 40448

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2 PFHxA	1.0134 1.0568	0.9986 1.0567	0.9968	1.0136	1.0448	Ave		1.0258				2.6		50.0			
13C3 HFPO-DA	0.0462 0.0503	0.0493 0.0557	0.0473	0.0428	0.0447	Ave		0.0480				8.9		50.0			
13C4-PFHpA	0.9934 1.0191	0.9760 1.0169	0.9730	0.9740	1.0074	Ave		0.9943				2.1		50.0			
18O2 PFHxS	1.4304 1.5738	1.4538 1.6700	1.4140	1.4586	1.4573	Ave		1.4940				6.2		50.0			
M2-6:2FTS	0.2961 0.2939	0.2996 0.2881	0.2885	0.2821	0.2907	Ave		0.2913				2.0		50.0			
13C4 PFOA	0.9546 0.9624	0.9775 0.9545	0.9507	0.9545	0.9655	Ave		0.9600				1.0		50.0			
13C4 PFOS	0.9886 1.0700	0.9821 1.1500	1.0111	1.0083	1.0143	Ave		1.0320				5.7		50.0			
13C5 PFNA	0.8370 0.8467	0.8476 0.8370	0.8256	0.8317	0.8297	Ave		0.8365				1.0		50.0			
M2-8:2FTS	0.2896 0.2827	0.2927 0.2716	0.2809	0.2878	0.2823	Ave		0.2839				2.4		50.0			
13C2 PFDA	0.6339 0.6420	0.6249 0.6255	0.6020	0.6324	0.6188	Ave		0.6256				2.0		50.0			
13C8 FOSA	1.4347 1.5785	1.4590 1.6106	1.4918	1.4859	1.5520	Ave		1.5161				4.3		50.0			
d3-NMeFOSAA	0.1450 0.1640	0.1468 0.1633	0.1486	0.1434	0.1515	Ave		0.1518				5.6		50.0			
d5-NEtFOSAA	0.1576 0.1621	0.1676 0.1655	0.1629	0.1634	0.1602	Ave		0.1627				2.0		50.0			
13C2 PFUnA	0.4758 0.4899	0.4889 0.5032	0.4795	0.4765	0.4588	Ave		0.4818				2.9		50.0			
13C2 PFDoA	0.3873 0.4184	0.4188 0.4727	0.3980	0.4174	0.4079	Ave		0.4172				6.5		50.0			
13C2-PFTeDA	0.3367 0.3657	0.3424 0.3736	0.3450	0.3395	0.3487	Ave		0.3502				4.0		50.0			
13C2-PFHxDA	0.5978 0.6133	0.5840 0.6631	0.5991	0.5347	0.6310	Ave		0.6033				6.6		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 237401

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/01/2018 12:59 Calibration End Date: 08/01/2018 13:46 Calibration ID: 40448

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-237401/2	2018.08.01LLICAL_002.d
Level 2	IC 320-237401/3	2018.08.01LLICAL_003.d
Level 3	IC 320-237401/4	2018.08.01LLICAL_004.d
Level 4	IC 320-237401/5	2018.08.01LLICAL_005.d
Level 5	IC 320-237401/6	2018.08.01LLICAL_006.d
Level 6	IC 320-237401/7	2018.08.01LLICAL_007.d
Level 7	IC 320-237401/8	2018.08.01LLICAL_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	49584 9171174	100773 17657065	462891	1847519	4662124	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	39061 7124053	86389 13665143	385176	1460012	3679899	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	60262 12002466	130464 22654929	611203	2456709	6345476	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	13909 2787781	31260 5267139	151962	616866	1432956	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	36283 6816050	81976 13079443	352293	1444908	3595187	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	54299 11402360	120606 21798270	572115	2331146	5931128	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	7432 1171510	10701 2476711	69749	252051	622158	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	42120 7260990	79296 13373710	400178	1576104	3710400	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	62092 9713740	118530 18747407	492246	1939177	5019141	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
ADONA		AveID	92157 17310053	194813 30025263	912723	3740044	9407416	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
6:2 FTS		AveID	15623 2799930	34779 5327073	154602	625589	1483178	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	39458 6976550	79819 12686108	378678	1480871	3755999	0.0250 5.01	0.0501 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	46773 8881601	98640 16519531	436716	1744730	4578297	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorononanoic acid (PFNA)		AveID	29706 5744475	68954 10755568	295007	1231102	2990574	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctanesulfonic acid (PFOS)		AveID	39085 6798798	75727 13695202	341410	1377557	3544232	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 237401

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/01/2018 12:59 Calibration End Date: 08/01/2018 13:46 Calibration ID: 40448

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
F-53B Major		AveID	60566 11077192	119615 20317968	569724	2289912	5759920	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
8:2 FTS		AveID	13298 2239081	28792 3886014	130586	498832	1169399	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorononanesulfonic acid (PFNS)		AveID	21970 4817452	51583 9124121	222331	954403	2423026	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
Perfluorodecanoic acid (PFDA)		AveID	24561 4009985	49086 7657634	230406	899636	2163881	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctane Sulfonamide (FOSA)		AveID	48904 9630397	102774 17992319	507693	2053736	5178982	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	5163 986536	11798 1921554	50086	199395	501591	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	20381 4226499	47682 8073020	221097	822043	2185833	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	4957 898298	9530 1761697	51670	206227	471804	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroundecanoic acid (PFUnA)		AveID	25237 3479056	45391 6830755	186462	764538	1815476	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
F-53B Minor		AveID	73728 15311015	168004 27013913	804413	3369008	8214135	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)		AveID	15157 2802983	32864 5676012	145817	594065	1548416	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotridecanoic Acid (PFTriA)		AveID	14102 2580030	24421 4923814	128866	516294	1354496	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	+++++ 585419	7424 1140306	31626	119786	314195	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L1ID	41372 3739164	56565 7317162	213563	733744	2002321	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	21294 3935966	44038 7502047	215624	751756	2186416	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PFOA	Ave	4794702 4598618	5141928 4488667	4833356	4799715	4740211	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PFOA	Ave	3218796 2974004	3382043 2847672	3283004	3202919	3117638	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3-PFBS	13PFOA	Ave	81424 82077	89887 80880	85167	82758	85408	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2FTS	13PFOA	Ave	628423 567443	632383 526933	612244	609520	603368	2.34 2.34	2.34 2.34	2.34	2.34	2.34
13C2 PFHxA	13PFOA	Ave	3505828 3231846	3635013 3022362	3497268	3471025	3473699	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PFOA	Ave	159667 153939	179442 159356	165918	146564	148535	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 237401

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/01/2018 12:59 Calibration End Date: 08/01/2018 13:46 Calibration ID: 40448

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C4-PFHpA	13PF OA	Ave	3436629 3116337	3553062 2908549	3413685	3335466	3349409	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	4681014 4552896	5006593 4518625	4692968	4725288	4583643	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2FTS	13PF OA	Ave	973239 853793	1036033 782824	961732	917820	918152	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C4 PFOA	13PF OA	Ave	3302357 2942955	3558329 2730006	3335341	3268736	3210040	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFOS	13PF OA	Ave	3269307 3128101	3417703 3144316	3391354	3300872	3224053	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	2895444 2589352	3085644 2393820	2896674	2848081	2758407	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2FTS	13PF OA	Ave	959713 828227	1020788 744064	944227	944062	899004	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	2192940 1963135	2274867 1788913	2112120	2165508	2057230	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	4963170 4827094	5311185 4606616	5234016	5088363	5160037	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	501437 501663	534311 467155	521422	491188	503700	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	545218 495602	610182 473237	571651	559410	532526	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	1645990 1498263	1779877 1439097	1682161	1631762	1525487	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	1339683 1279511	1524607 1351987	1396187	1429399	1356329	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFTeDA	13PF OA	Ave	1164683 1118375	1246501 1068686	1210263	1162431	1159368	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFHxDA	13PF OA	Ave	2067843 1875506	2126007 1896531	2101845	1831086	2097837	2.50 2.50	2.50 2.50	2.50	2.50	2.50

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L1ID = Linear 1/conc IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Aug-2018 12:59:04 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L1-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 01-Aug-2018 14:59:33 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK022

First Level Reviewer: roycea Date: 01-Aug-2018 14:28:13

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.395	1.395	0.001	0.541	4794702	2.41		96.3	64287	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.395	1.396	-0.001	1.000	49584	0.0262		105	11.2	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.637	1.636	0.001	0.635	3218796	2.45		98.1	51402	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.637	1.636	0.001	1.000	39061	0.0253		101	14.7	
D 47 13C3-PFBS										
301.90 > 83.00	1.672	1.669	0.003	0.648	81424	2.16		92.8	391	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.672	1.671	0.001	1.000	60262	0.0224		102	287	
298.90 > 99.00	1.681	1.671	0.010	1.005	25278		2.38(1.25-3.74)	102	110	
D 60 M2-4:2FTS										
329.00 > 81.00	1.873	1.872	0.001	0.726	628423	2.36		101	7484	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.873	1.872	0.001	1.120	13909	0.0231		98.8	820	
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.903	-0.001	0.738	3505828	2.47		98.8	68035	
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.902	1.903	-0.001	1.000	36283	0.0245		98.1	51.6	M
313.00 > 119.00	1.902	1.903	-0.001	1.000	3247		11.17(5.03-15.10)	98.1	20.3	M
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.935	1.928	0.007	1.157	54299	0.0229		97.7	1145	
349.00 > 99.00	1.924	1.928	-0.004	1.151	19898		2.73(1.36-4.07)	97.7	101	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.000	2.000	0.0	0.775	159667	2.40		96.1	4614	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.011	2.002	0.009	1.006	7432	0.0291		116	23.6	
D 9 13C4-PFHpA										
367.00 > 322.00	2.226	2.225	0.001	0.863	3436629	2.50		99.9	63835	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.226	2.226	0.0	1.000	42120	0.0264		106	16.7	M
363.00 > 169.00	2.226	2.226	0.0	1.000	18218		2.31(1.13-3.40)	106	143	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.238	2.237	0.001	1.000	62092	0.0271		119	363	
399.00 > 99.00	2.238	2.237	0.001	1.000	21302		2.91(1.50-4.49)	119	33.8	
D 11 18O2 PFHxS										
403.00 > 84.00	2.238	2.238	0.0	0.868	4681014	2.26		95.7	45481	
65 ADONA										
377.00 > 251.00	2.277	2.270	0.007	0.773	92157	0.0241		102	803	
377.00 > 85.00	2.277	2.270	0.007	0.773	58106		1.59(0.84-2.53)	102	198	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.554	2.554	0.0	1.000	15623	0.0231		97.3	375	
D 12 M2-6:2FTS										
429.00 > 81.00	2.554	2.556	-0.002	0.990	973239	2.41		102	11040	
D 14 13C4 PFOA										
417.00 > 372.00	2.579	2.580	-0.001	1.000	3302357	2.49		99.4	40075	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.579	2.581	-0.002	1.000	39458	0.0258		103	21.0	
413.00 > 169.00	2.579	2.581	-0.002	1.000	25449		1.55(0.84-2.52)	103	130	M
* 62 13C2-PFOA										
415.00 > 370.00	2.579	2.581	-0.002		3459352	2.50			50770	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.587	2.587	0.0	0.878	46773	0.0247		104	734	
449.00 > 99.00	2.587	2.587	0.0	0.878	12280		3.81(1.94-5.82)	104	118	
D 18 13C4 PFOS										
503.00 > 80.00	2.946	2.946	0.0	1.142	3269307	2.29		95.8	33518	
D 19 13C5 PFNA										
468.00 > 423.00	2.952	2.948	0.004	1.144	2895444	2.50		100	58511	
20 Perfluorononanoic acid										M
463.00 > 419.00	2.952	2.949	0.003	1.000	29706	0.0238		95.0	45.7	M
463.00 > 169.00	2.952	2.949	0.003	1.000	7031		4.23(1.90-5.69)	95.0	266	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.952	2.949	0.003	1.002	39085	0.0255		110	318	
499.00 > 99.00	2.952	2.949	0.003	1.002	8733		4.48(2.31-6.93)	110	42.9	M
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.162	3.158	0.004	1.073	60566	0.0248		106	868	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.295	3.292	0.003	1.000	13298	0.0246		103	1113	
D 26 M2-8:2FTS										
529.00 > 81.00	3.295	3.292	0.003	1.278	959713	2.44		102	16553	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.295	3.295	0.0	1.119	21970	0.0223		93.1	920	
549.00 > 99.00	3.295	3.295	0.0	1.119	9963		2.21(1.33-3.97)	93.1	56.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.311	3.306	0.005	1.284	2192940	2.53		101	75042	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.311	3.308	0.003	1.000	24561	0.0262		105	33.2	
513.00 > 169.00	3.303	3.308	-0.005	0.998	4748		5.17(2.36-7.09)	105	64.5	
D 21 13C8 FOSA										
506.00 > 78.00	3.311	3.312	-0.001	1.284	4963170	2.37		94.6	48844	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.311	3.313	-0.002	1.000	48904	0.0250		99.8	1474	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.464	3.459	0.005	1.343	501437	2.39		95.5	11078	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.473	3.465	0.008	1.003	5163	0.0253		101	63.6	M
29 Perfluorodecane Sulfonic acid										M
599.00 > 80.00	3.628	3.620	0.008	1.232	20381	0.0229		95.1	533	
599.00 > 99.00	3.618	3.620	-0.002	1.228	6067		3.36(1.39-4.16)	95.1	52.2	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.628	3.627	0.001	1.407	545218	2.42		96.8	4334	
33 N-ethyl perfluorooctane sulfonamid										M
584.00 > 419.00	3.647	3.633	0.014	1.005	4957	0.0255		102	116	M
D 30 13C2 PFUnA										
565.00 > 520.00	3.638	3.634	0.004	1.410	1645990	2.47		98.8	31735	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	3.638	3.634	0.004	1.000	25237	0.0311		124	51.2	R
563.00 > 169.00	3.647	3.634	0.013	1.003	3299		7.65(2.12-6.36)	124	108	M
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.793	3.792	0.001	1.287	73728	0.0222		94.1	1970	
D 36 13C2 PFDoA										
615.00 > 570.00	3.928	3.925	0.003	1.523	1339683	2.32		92.8	19954	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.928	3.927	0.001	1.000	15157	0.0261		104	4.4	
613.00 > 169.00	3.928	3.927	0.001	1.000	4103		3.69(2.13-6.40)	104	70.2	
41 Perfluorotridecanoic acid										R
663.00 > 619.00	4.193	4.188	0.005	1.067	14102	0.0279		112	4.5	R
663.00 > 169.00	4.193	4.188	0.005	1.067	3483		4.05(1.25-3.76)	112	29.0	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.426	4.423	0.003	1.000	4297	0.0342		137	56.7	
713.00 > 219.00	4.426	4.423	0.003	1.000	2855		1.51(0.71-2.13)	137	37.3	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.426	4.423	0.003	1.716	1164683	2.40		96.1	5463	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.833	4.826	0.007	1.874	2067843	2.48		99.1	3018	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.833	4.827	0.006	1.000	41372	0.0283		113	2.5	
813.00 > 169.00	4.833	4.827	0.006	1.000	6431		6.43(2.86-8.58)	113	67.5	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.173	5.166	0.007	1.070	21294	0.0250		100	6.9	
913.00 > 169.00	5.173	5.166	0.007	1.070	3017		7.06(3.83-11.48)	100	29.4	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00006 Amount Added: 1.00 Units: mL

Report Date: 01-Aug-2018 14:59:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d

Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N

Lims ID: IC L1 Full

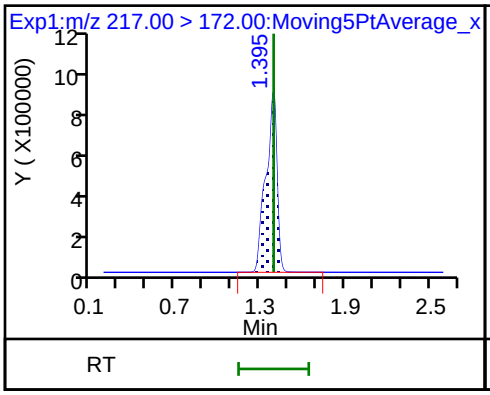
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2

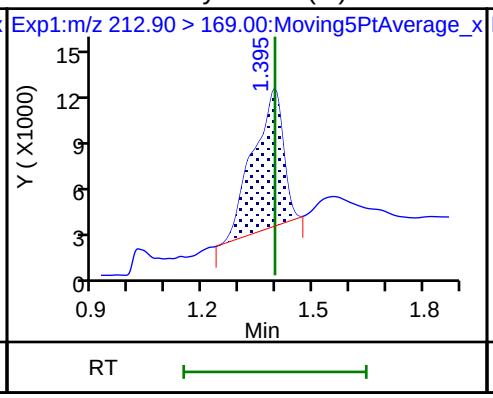
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

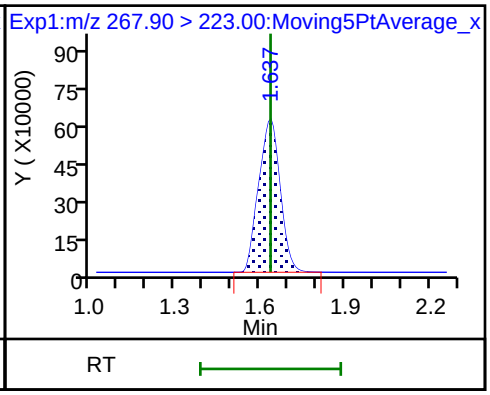
D 1 13C4 PFBA



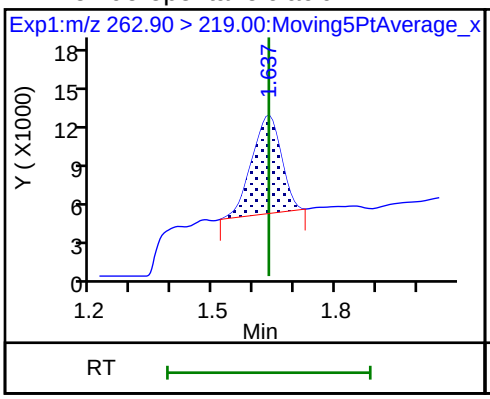
2 Perfluorobutyric acid (M)



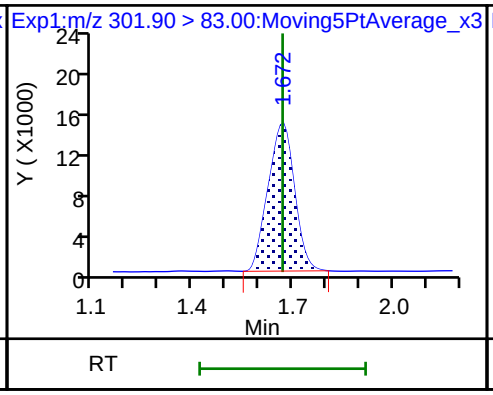
D 3 13C5-PFPeA



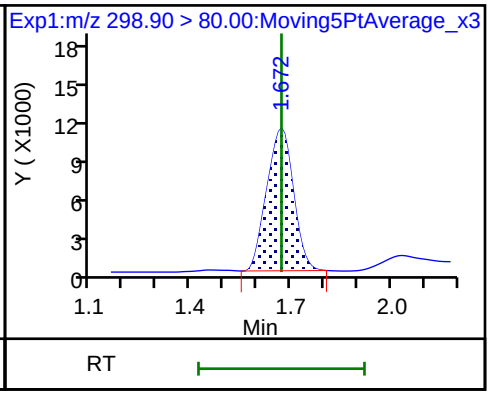
4 Perfluoropentanoic acid



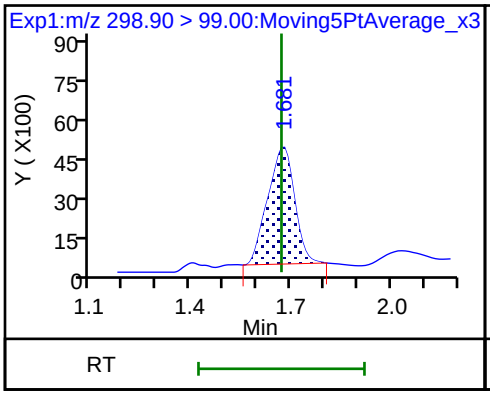
D 47 13C3-PFBS



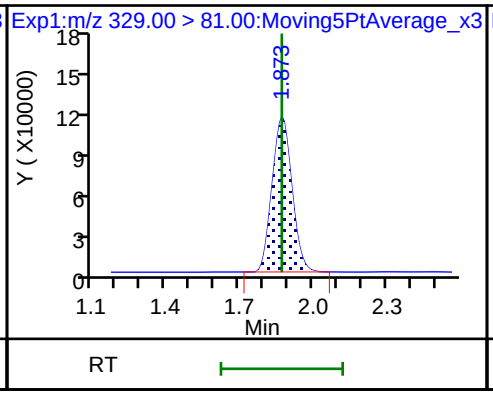
5 Perfluorobutanesulfonic acid



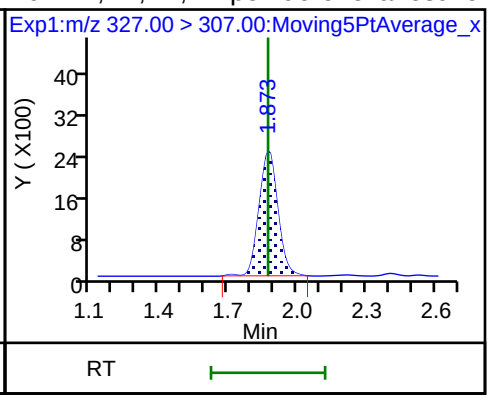
5 Perfluorobutanesulfonic acid



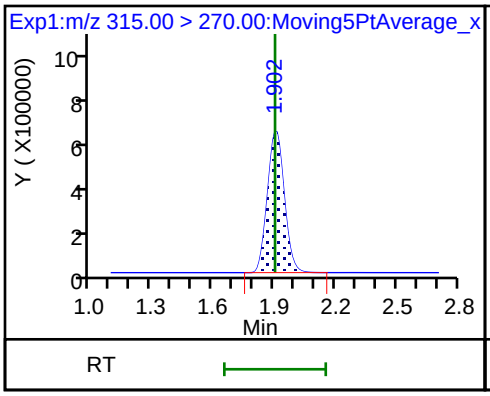
D 60 M2-4:2FTS



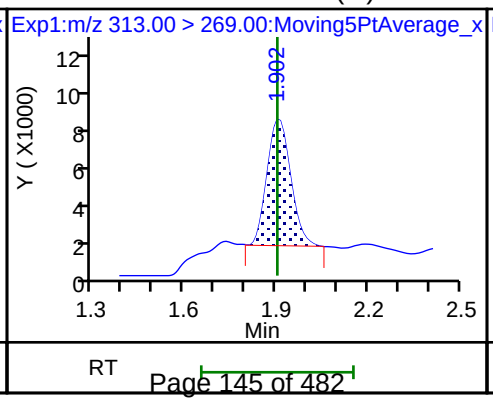
61 1H,1H,2H,2H-perfluorohexanesulfoni



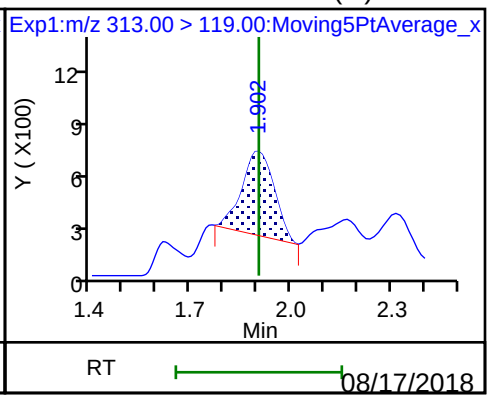
D 7 13C2 PFHxA



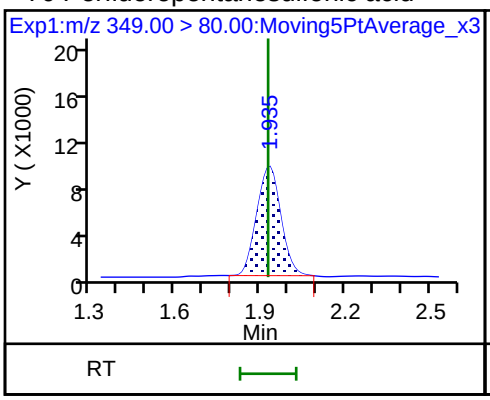
6 Perfluorohexanoic acid (M)



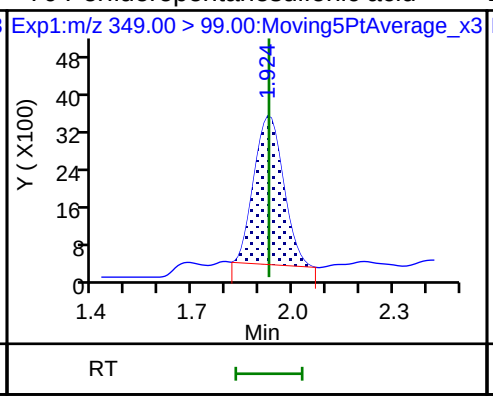
6 Perfluorohexanoic acid (M)



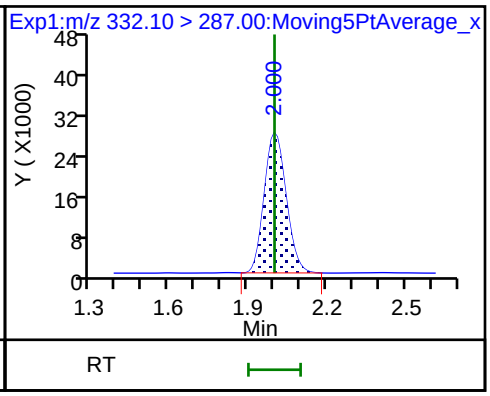
70 Perfluoropentanesulfonic acid



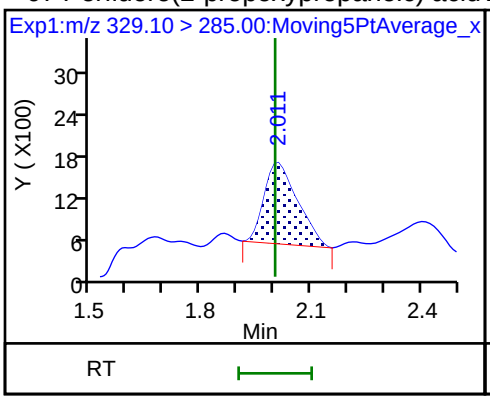
70 Perfluoropentanesulfonic acid



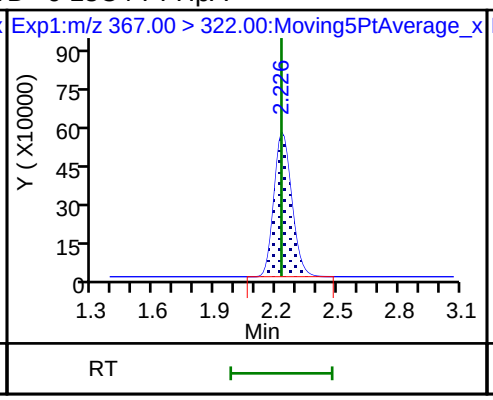
D 64 13C3 HFPO-DA



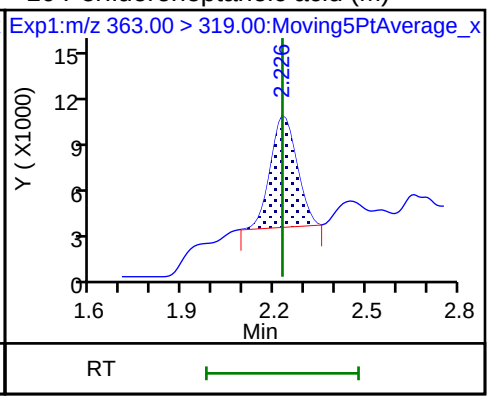
67 Perfluoro(2-propoxypropanoic) acid



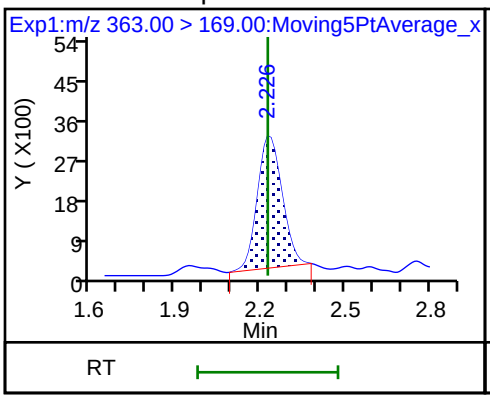
D 9 13C4-PFHpA



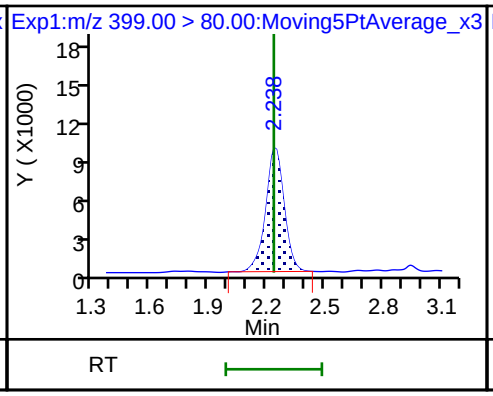
10 Perfluoroheptanoic acid (M)



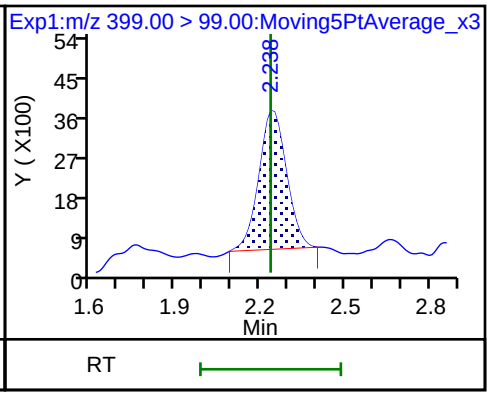
10 Perfluoroheptanoic acid



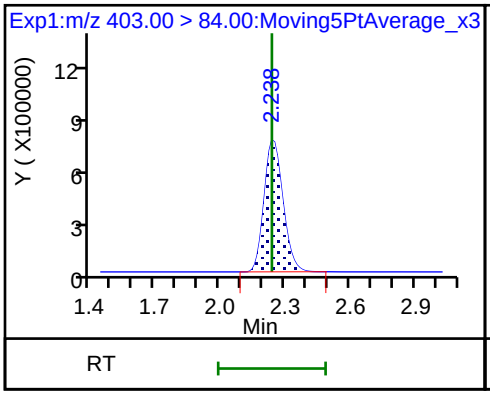
8 Perfluorohexanesulfonic acid



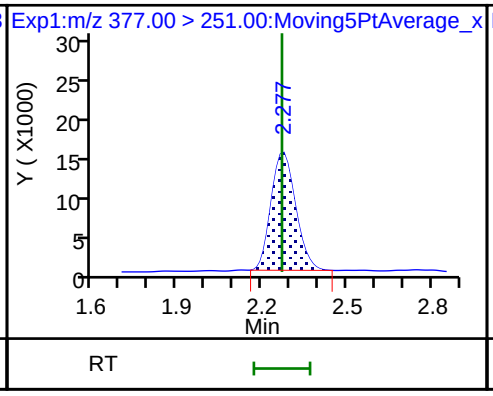
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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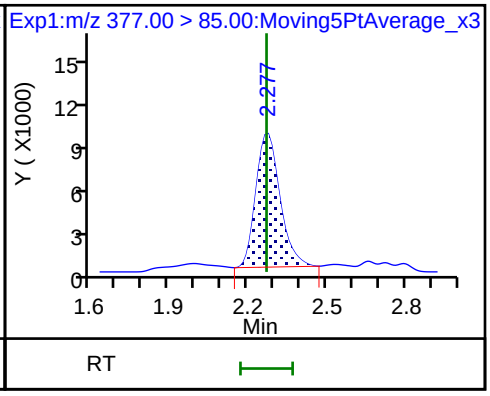
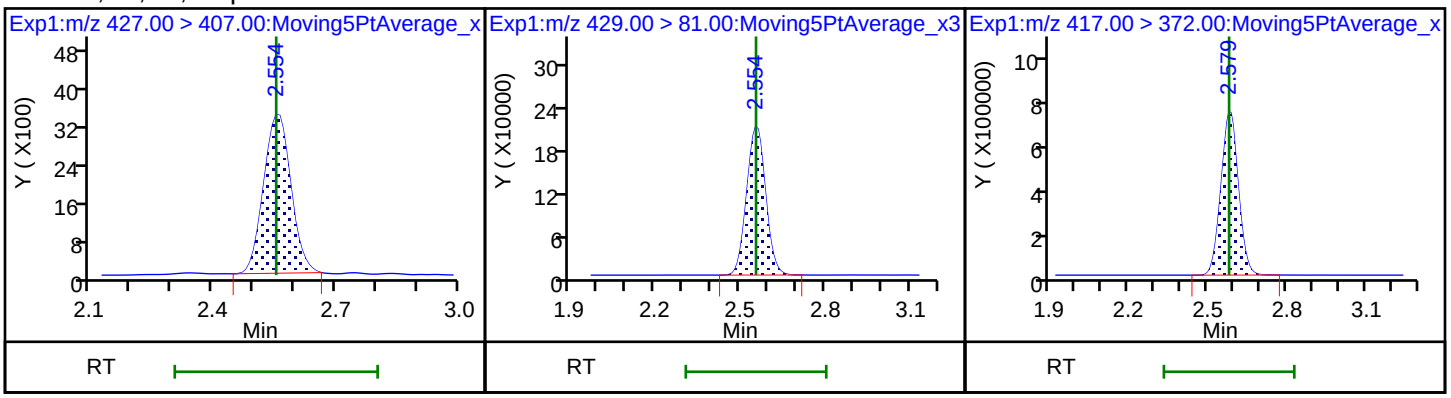
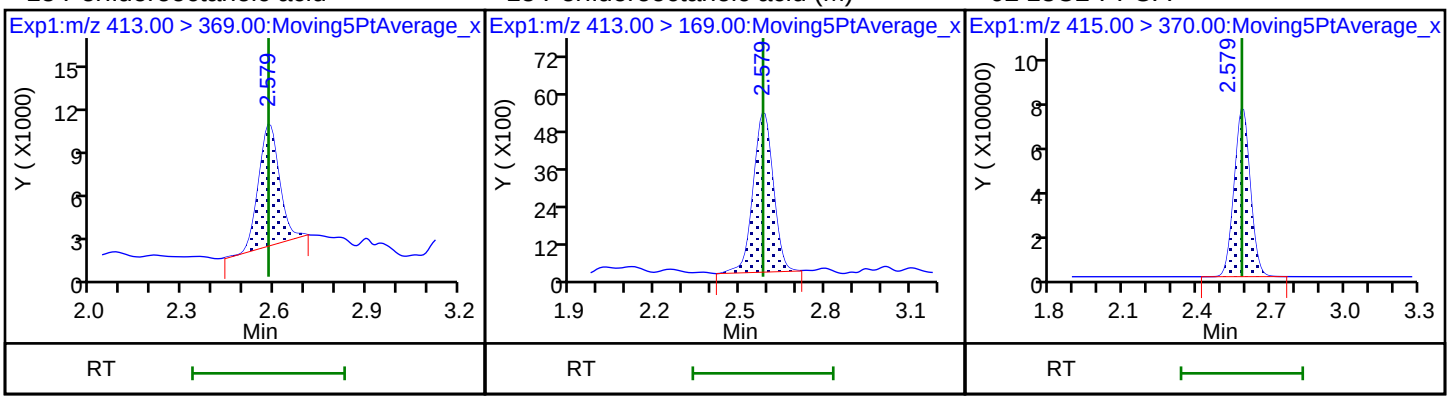


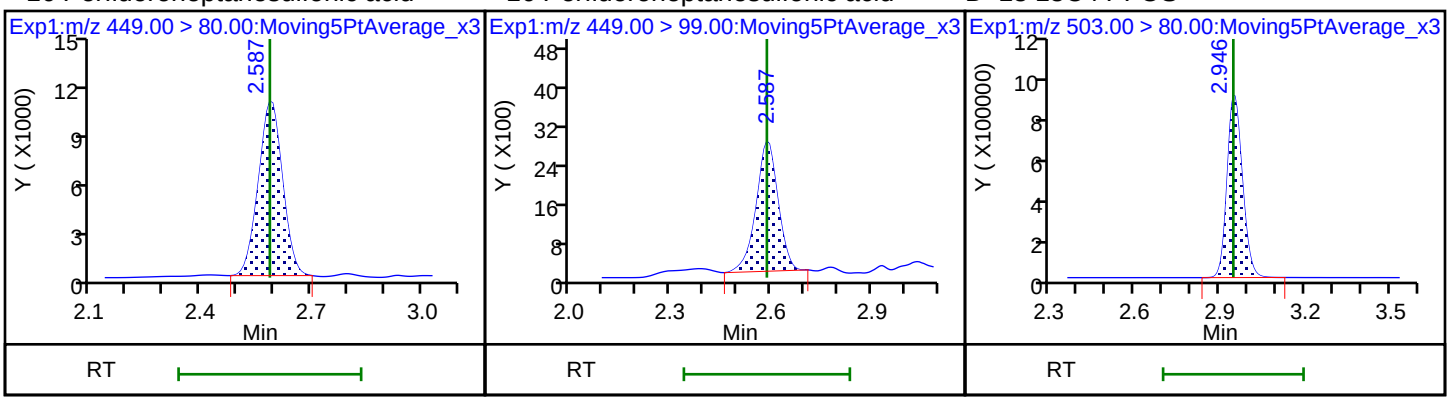
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 14 13C4 PFOA



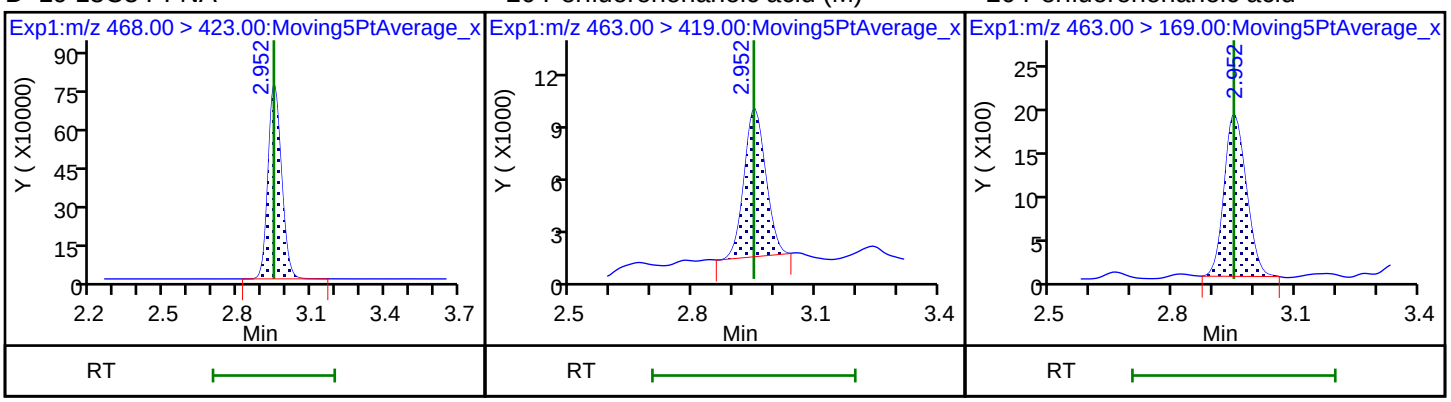
15 Perfluorooctanoic acid 15 Perfluorooctanoic acid (M) * 62 13C2-PFOA



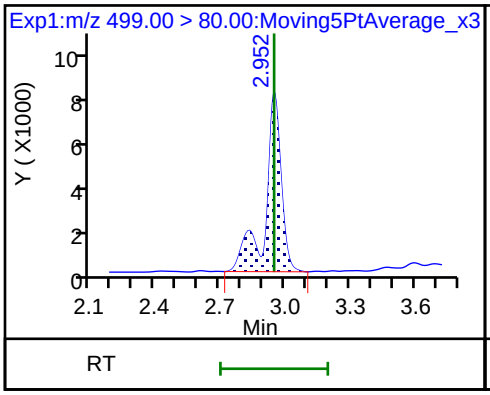
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 18 13C4 PFOS



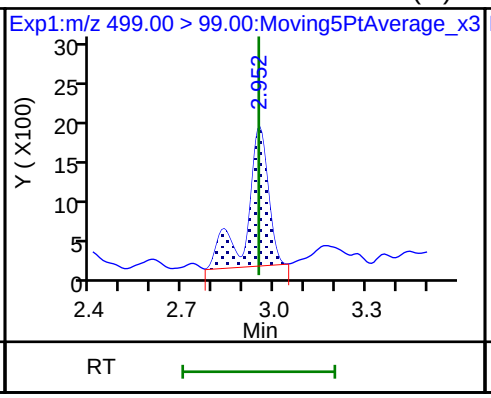
D 19 13C5 PFNA 20 Perfluorononanoic acid (M) 20 Perfluorononanoic acid



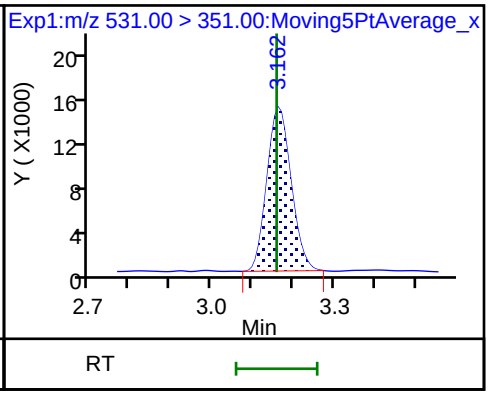
17 Perfluorooctane sulfonic acid



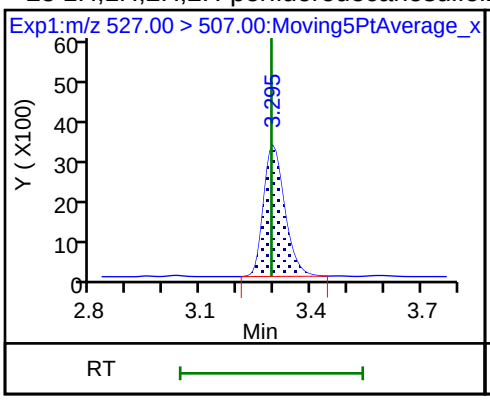
17 Perfluorooctane sulfonic acid (M)



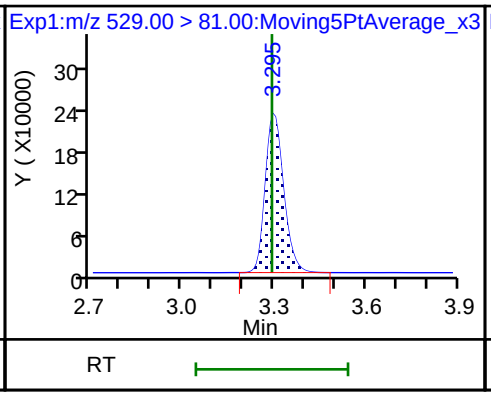
69 9-Chlorohexadecafluoro-3-oxanonane



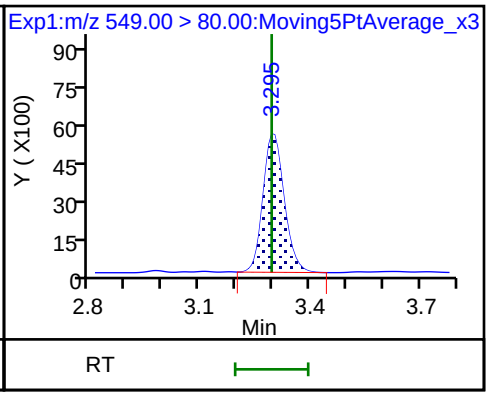
25 1H,1H,2H,2H-perfluorodecanesulfon



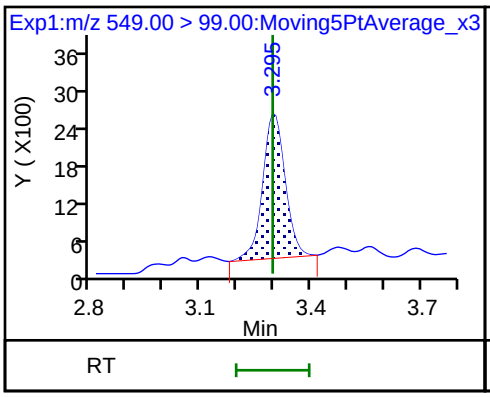
D 26 M2-8:2FTS



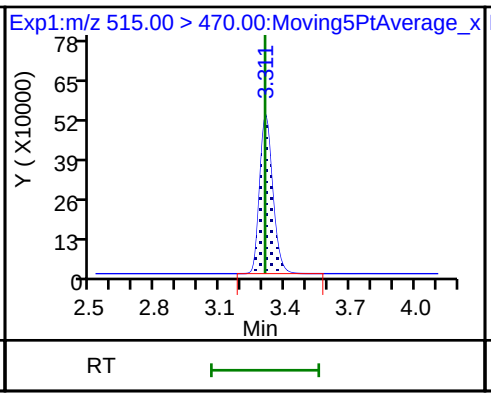
68 Perfluorononanesulfonic acid



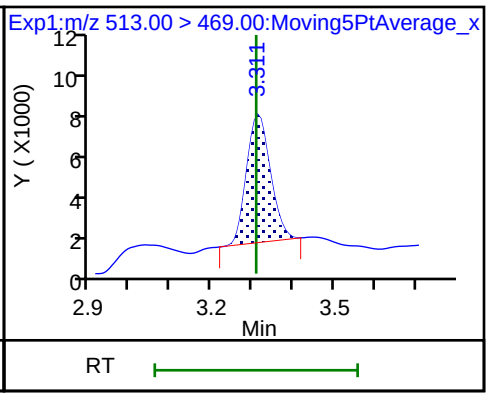
68 Perfluorononanesulfonic acid



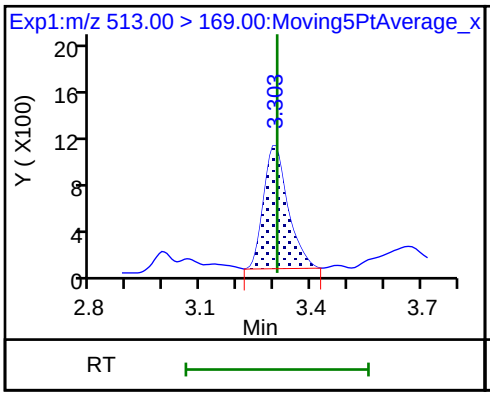
D 23 13C2 PFDA



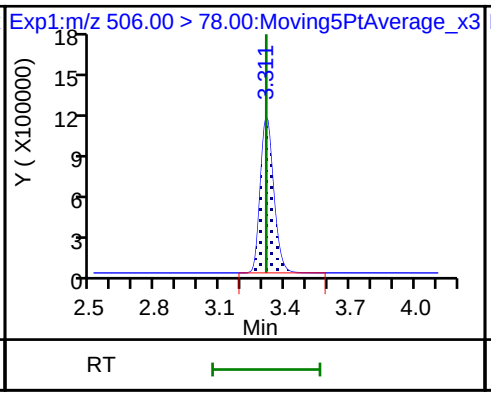
24 Perfluorodecanoic acid



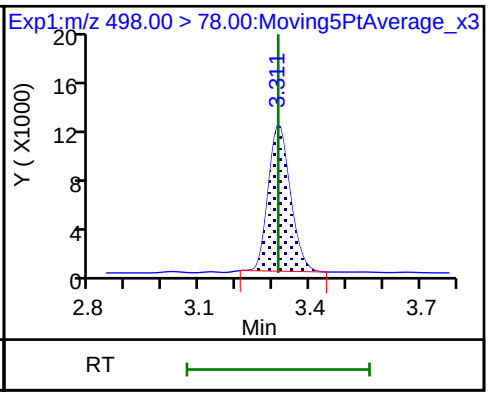
24 Perfluorodecanoic acid



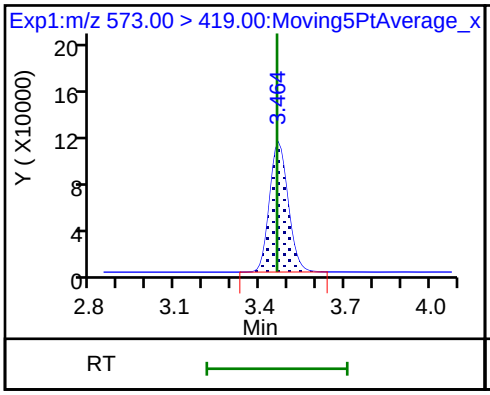
D 21 13C8 FOSA



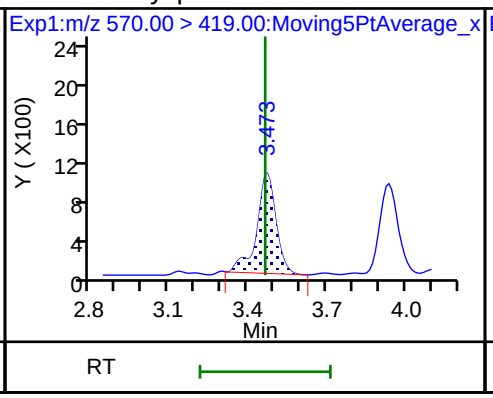
22 Perfluorooctane Sulfonamide



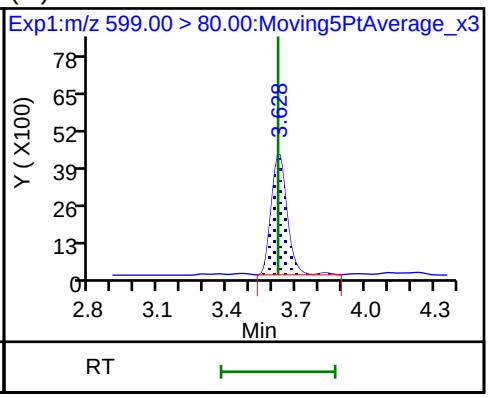
D 27 d3-NMeFOSAA



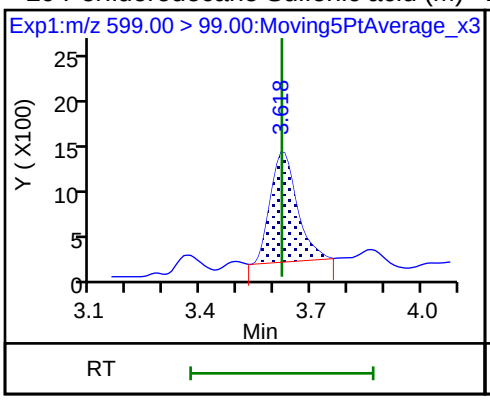
28 N-methyl perfluorooctane sulfonami (M)



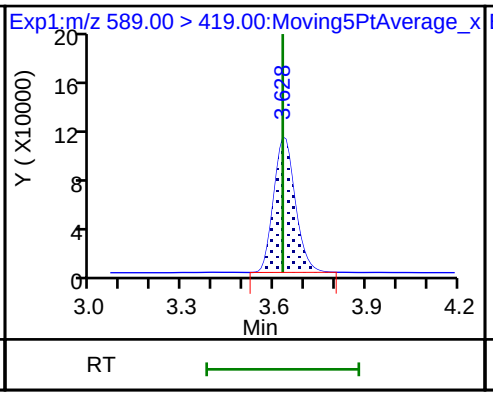
29 Perfluorodecane Sulfonic acid



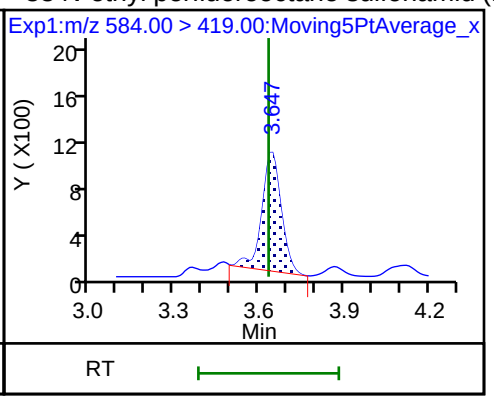
29 Perfluorodecane Sulfonic acid (M)



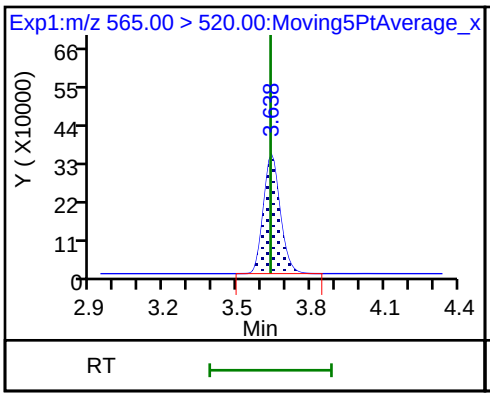
D 32 d5-NEtFOSAA



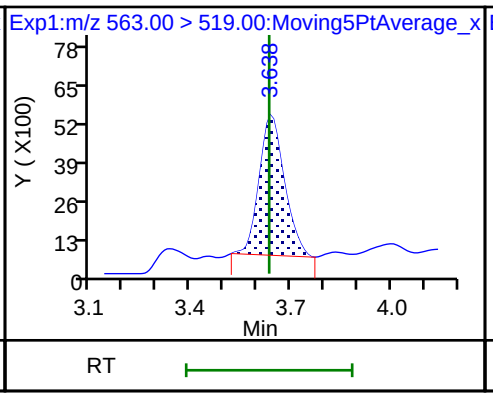
33 N-ethyl perfluorooctane sulfonamid (M)



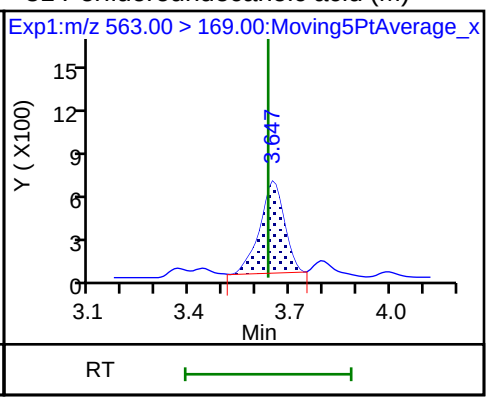
D 30 13C2 PFUnA



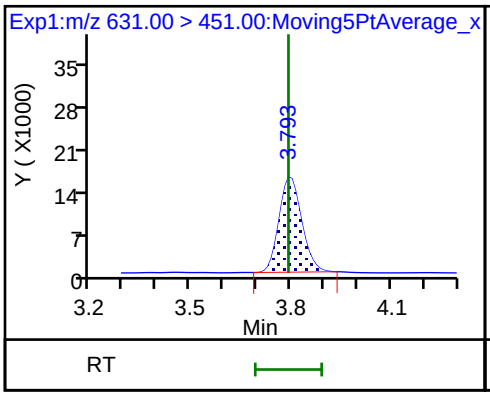
31 Perfluoroundecanoic acid



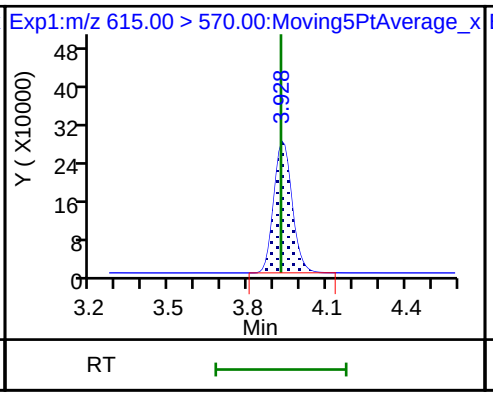
31 Perfluoroundecanoic acid (M)



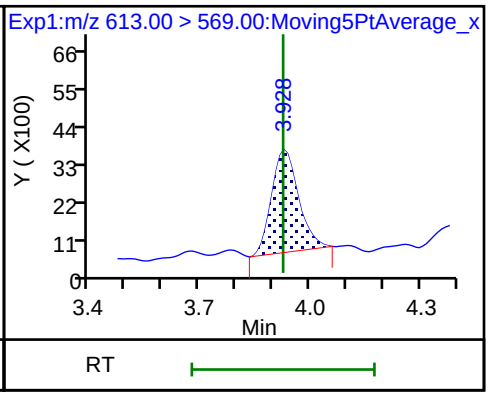
66 11-Chloroeicosafluoro-3-oxaundecan



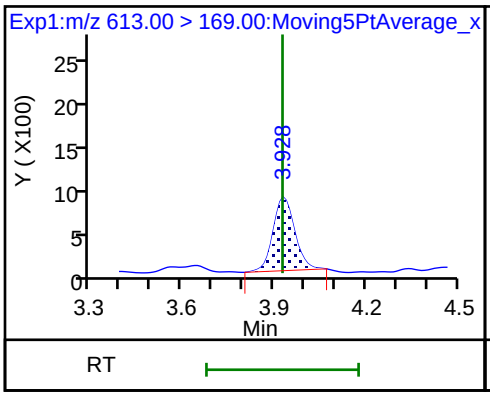
D 36 13C2 PFDoA



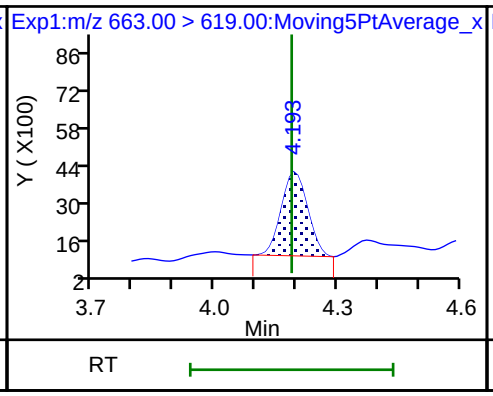
37 Perfluorododecanoic acid



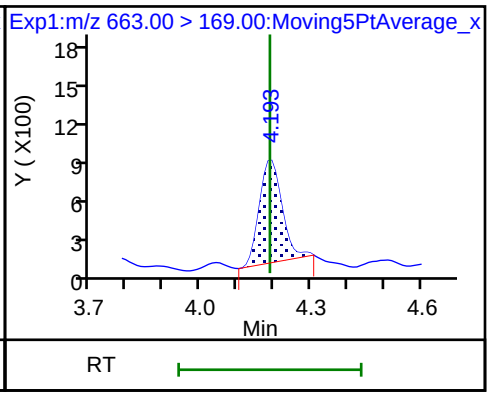
37 Perfluorododecanoic acid



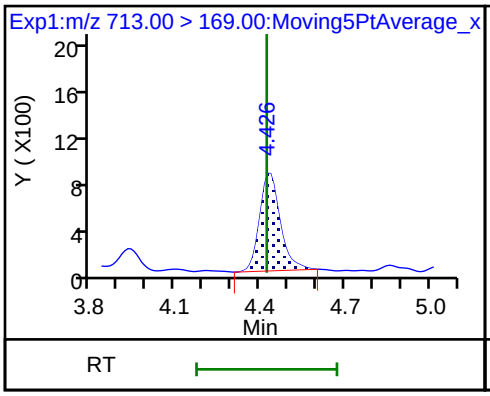
41 Perfluorotridecanoic acid



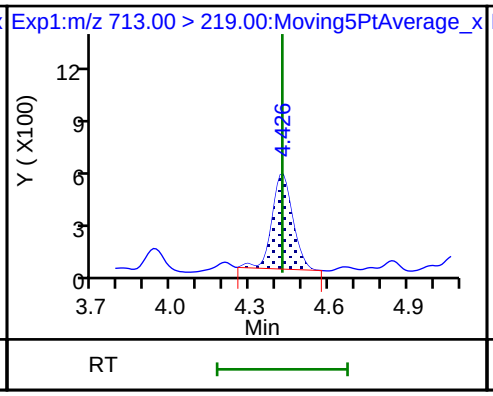
41 Perfluorotridecanoic acid



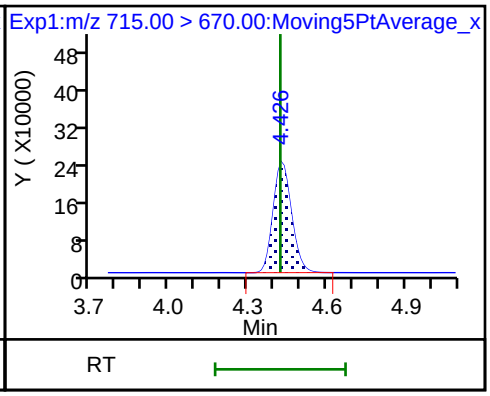
42 Perfluorotetradecanoic acid



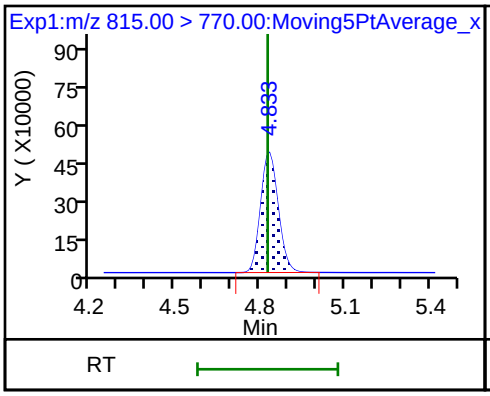
42 Perfluorotetradecanoic acid



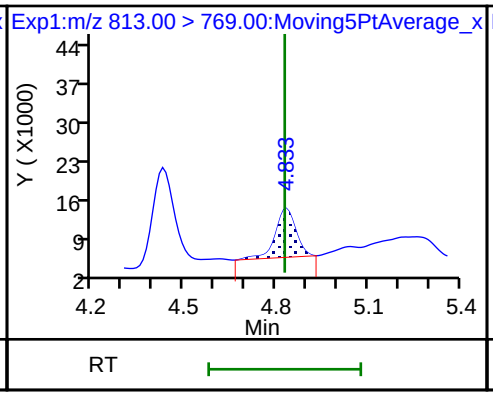
D 43 13C2-PFTeDA



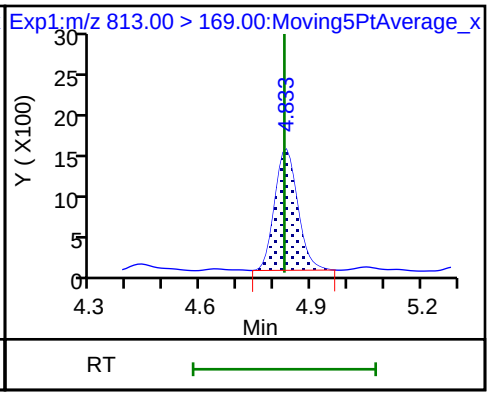
D 44 13C2-PFHxDA



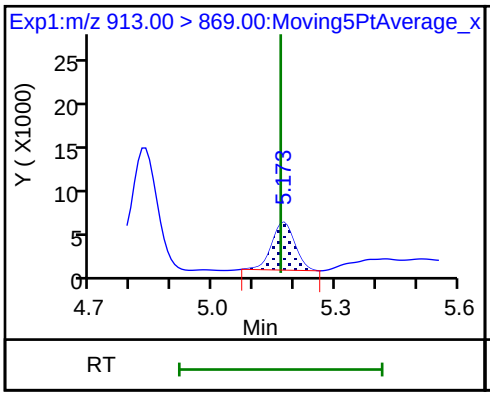
45 Perfluorohexadecanoic acid



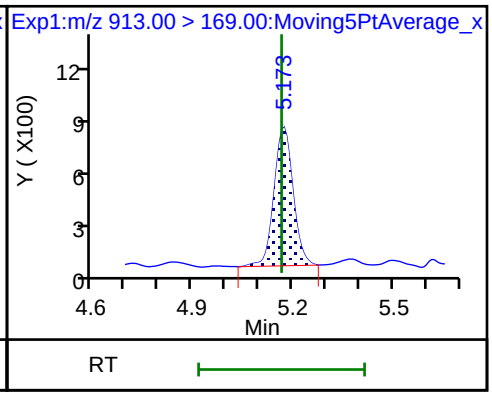
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

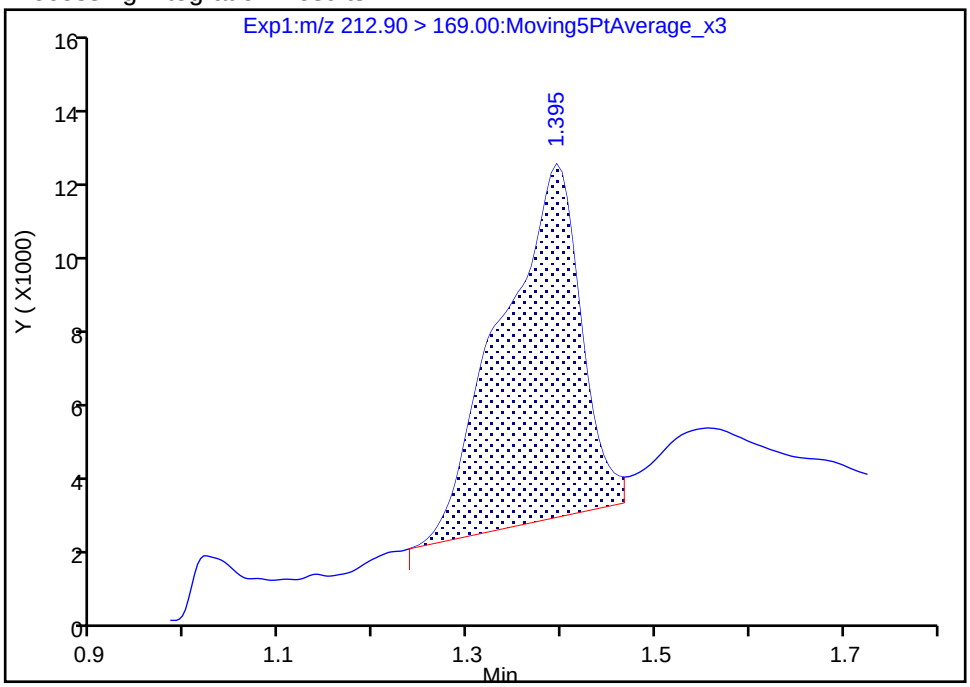
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

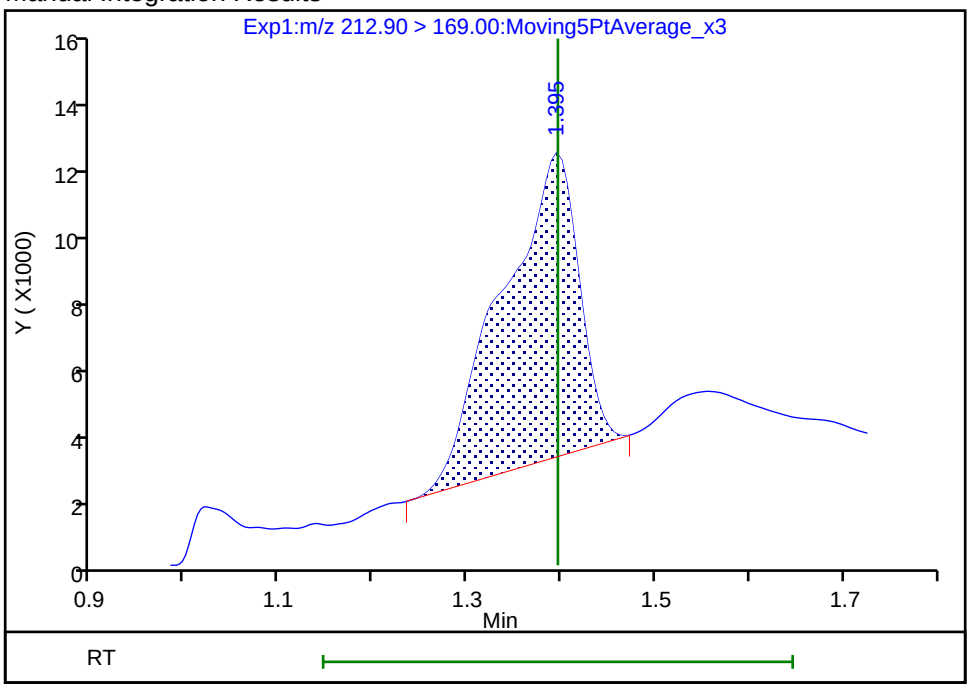
Processing Integration Results

RT: 1.39
Area: 53947
Amount: 0.028172
Amount Units: ng/ml



Manual Integration Results

RT: 1.39
Area: 49584
Amount: 0.026235
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:23:50
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

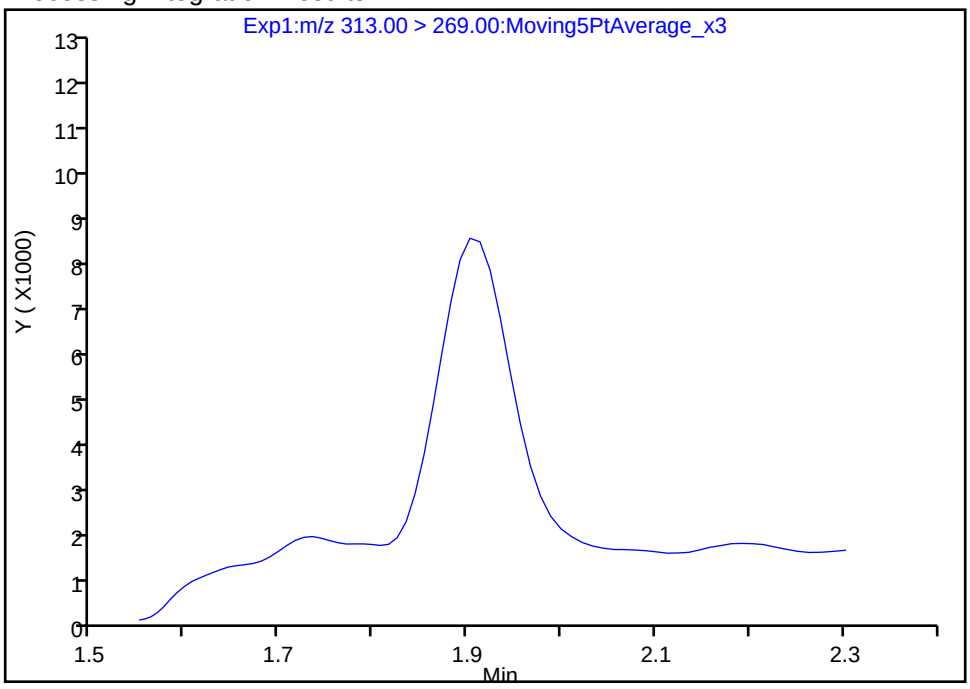
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

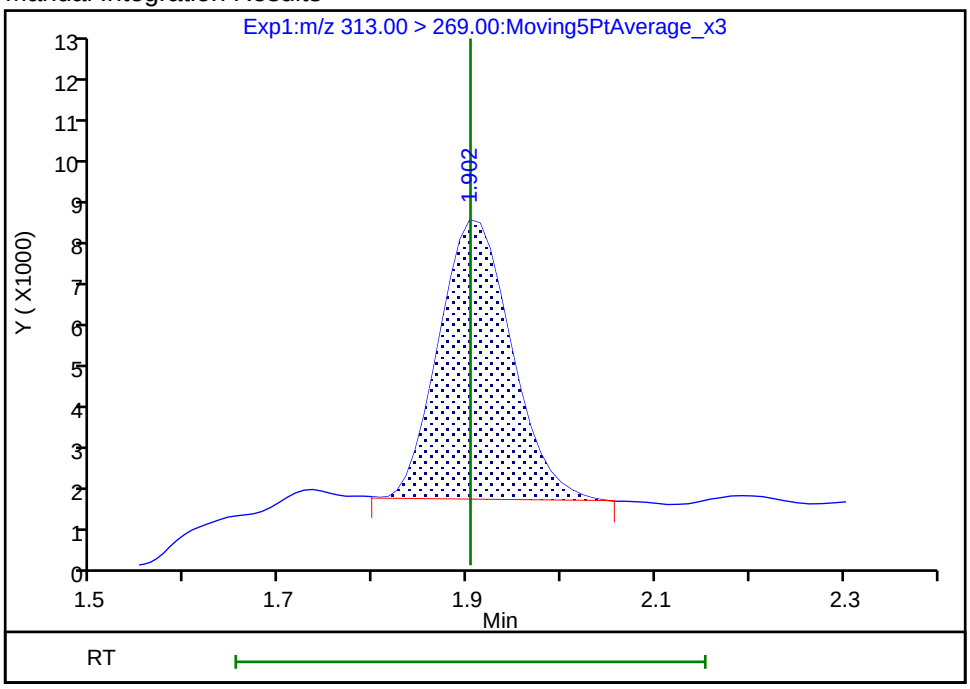
Not Detected
Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
Area: 36283
Amount: 0.024535
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:24:03
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

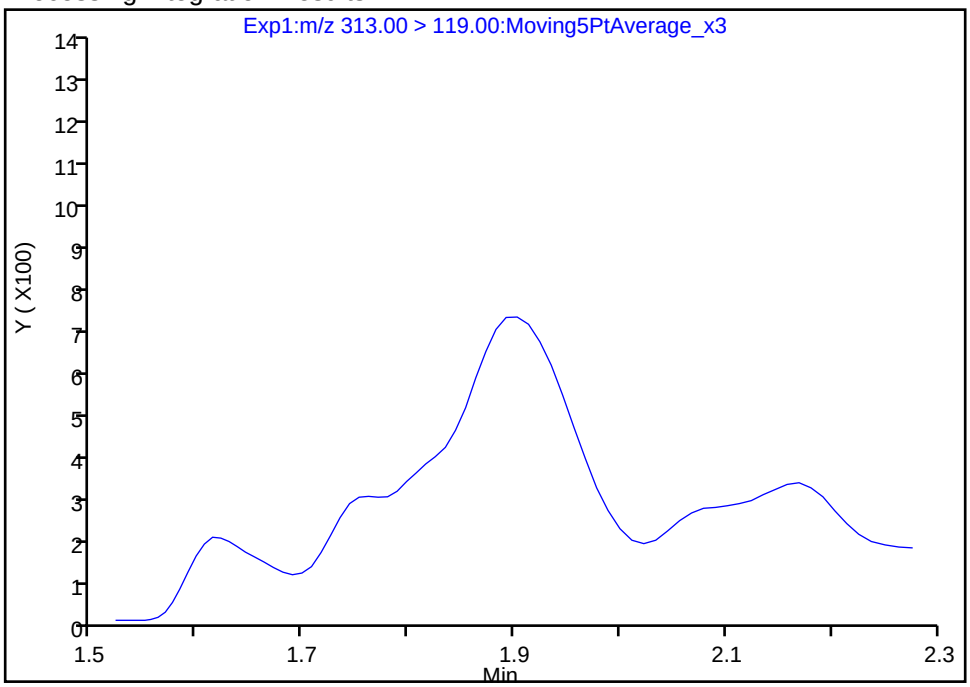
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

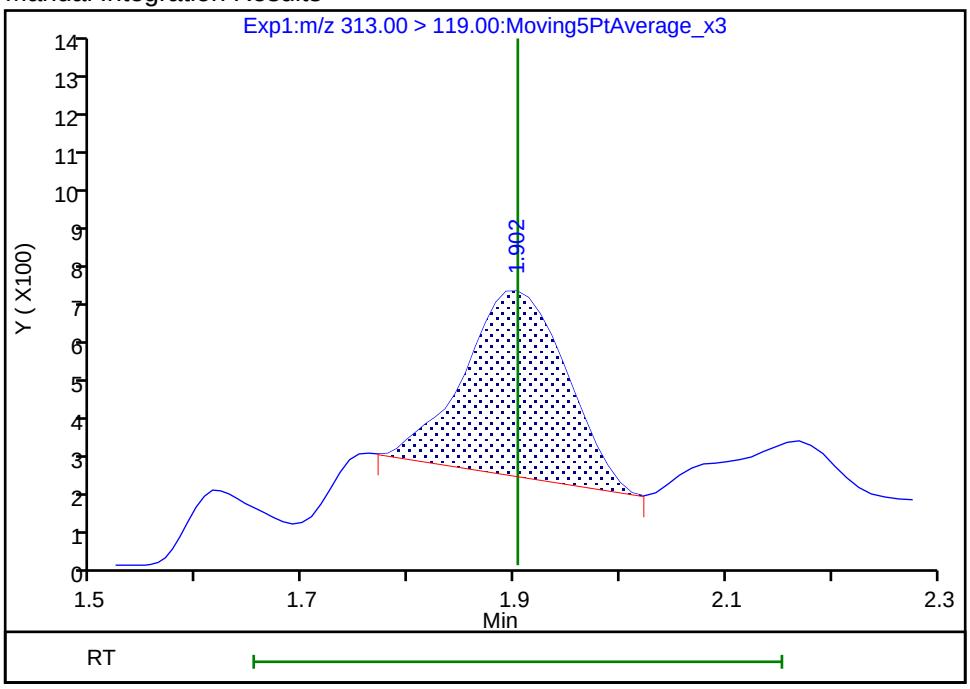
Not Detected
Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
Area: 3247
Amount: 0.024535
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:24:09
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

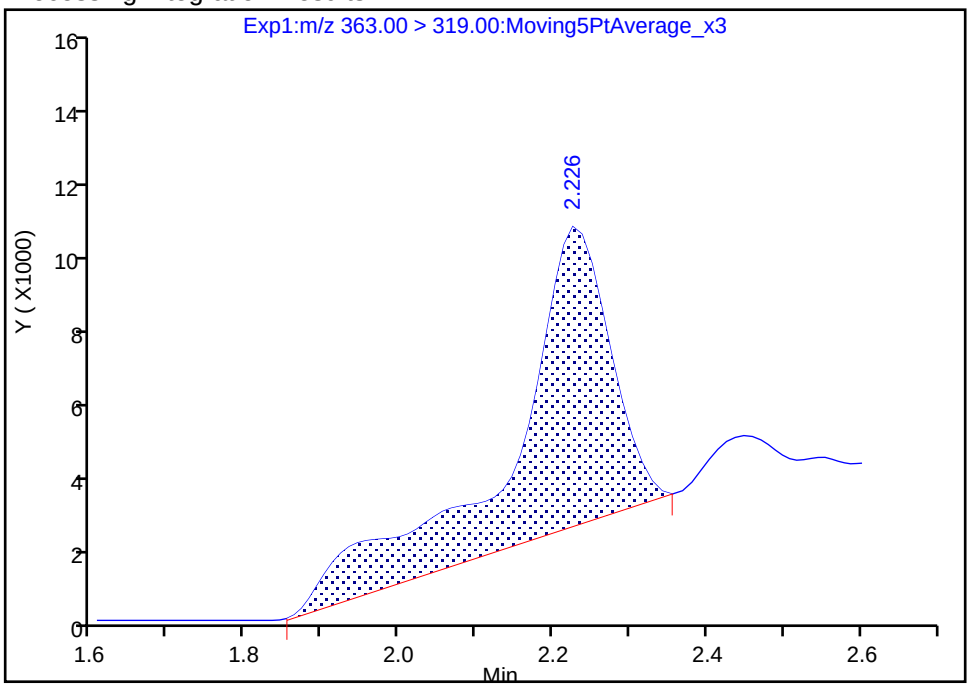
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

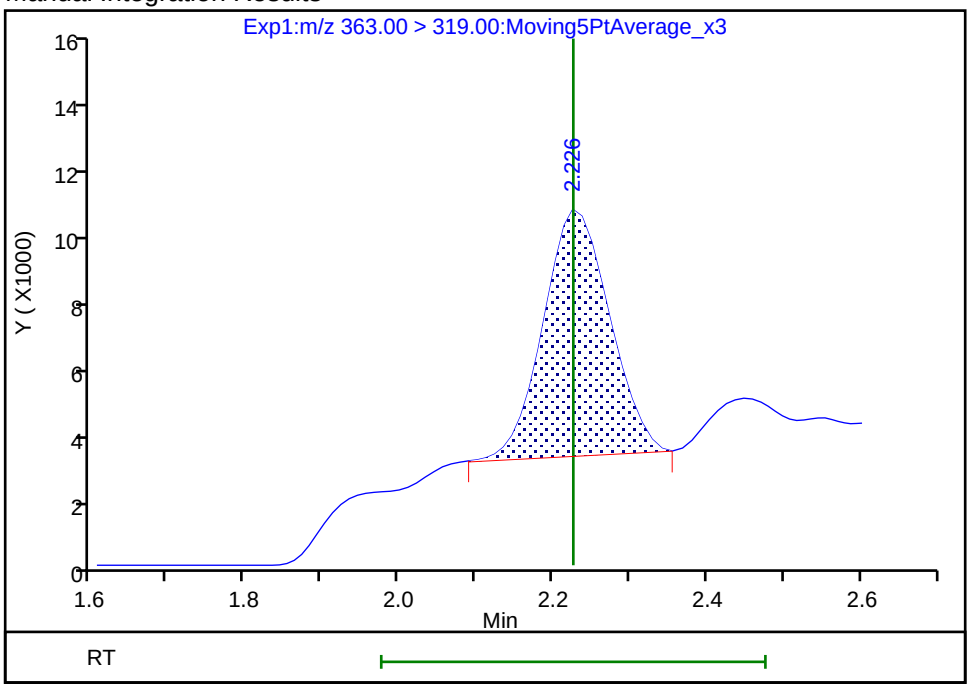
Processing Integration Results

RT: 2.23
Area: 69199
Amount: 0.039009
Amount Units: ng/ml



Manual Integration Results

RT: 2.23
Area: 42120
Amount: 0.026423
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:24:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

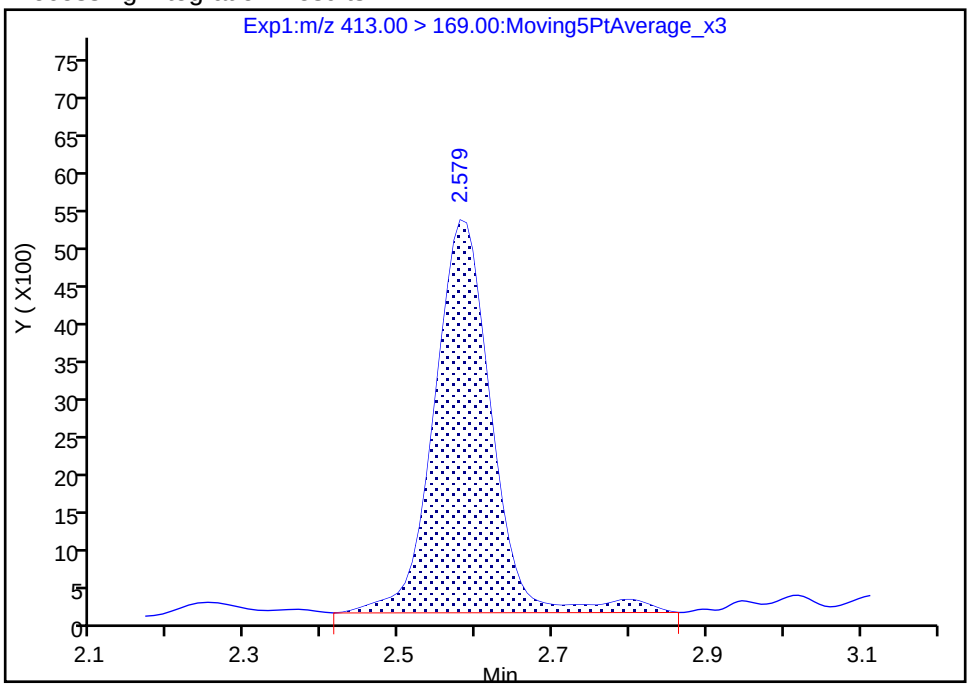
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

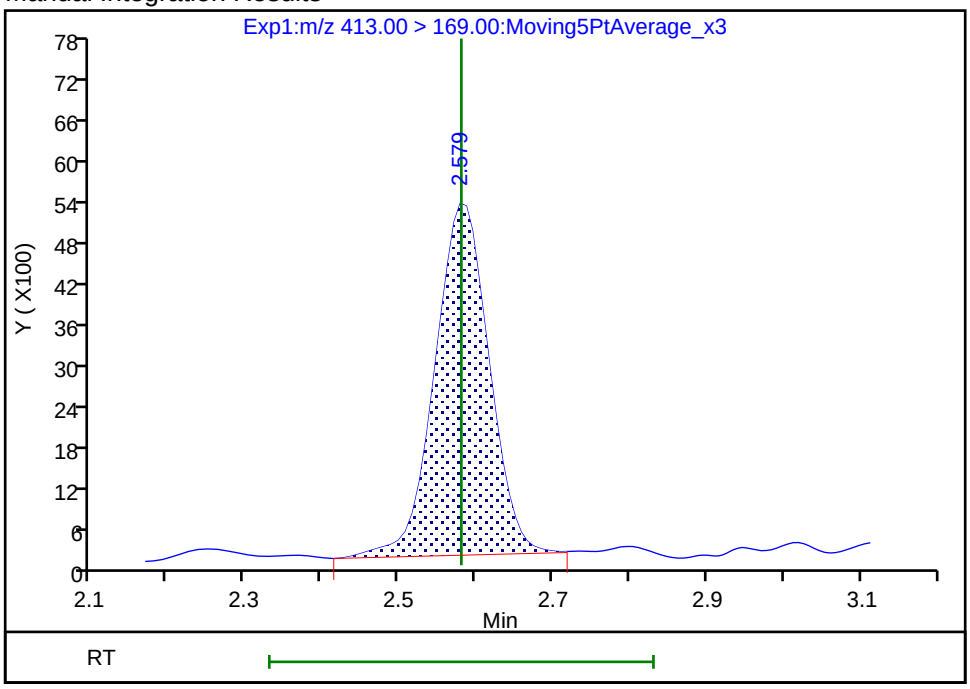
Processing Integration Results

RT: 2.58
Area: 27152
Amount: 0.025387
Amount Units: ng/ml



Manual Integration Results

RT: 2.58
Area: 25449
Amount: 0.025836
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:23:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

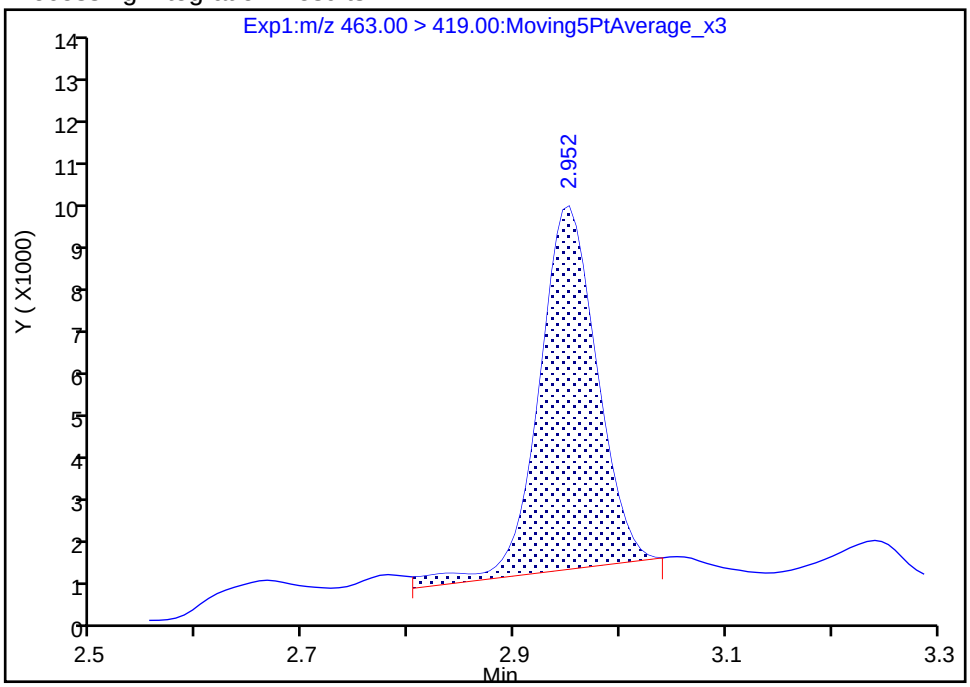
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

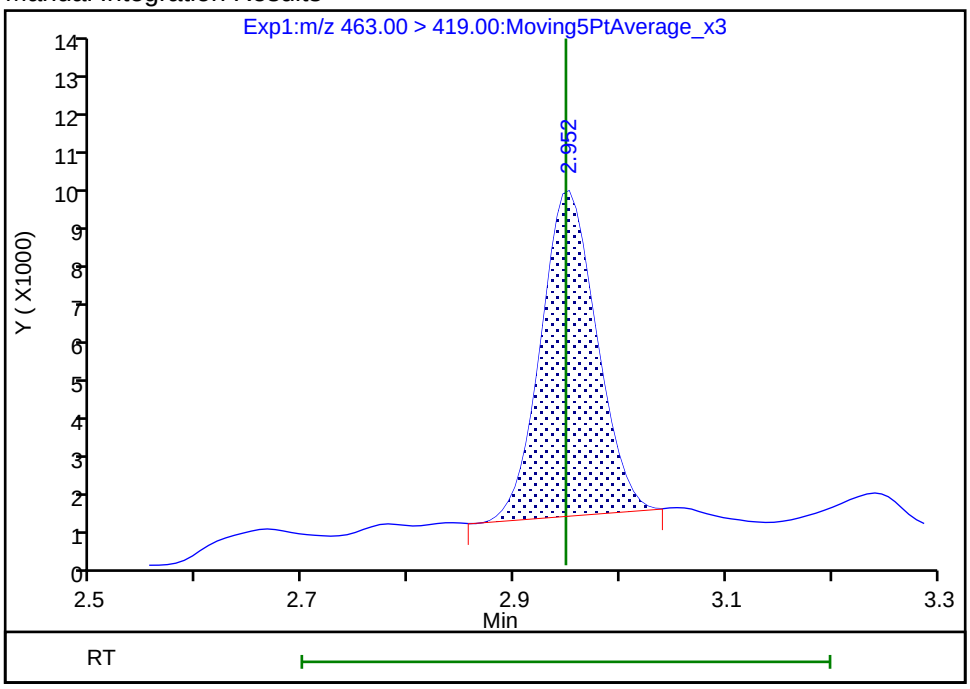
Processing Integration Results

RT: 2.95
Area: 31262
Amount: 0.024820
Amount Units: ng/ml



Manual Integration Results

RT: 2.95
Area: 29706
Amount: 0.023752
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:25:05
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

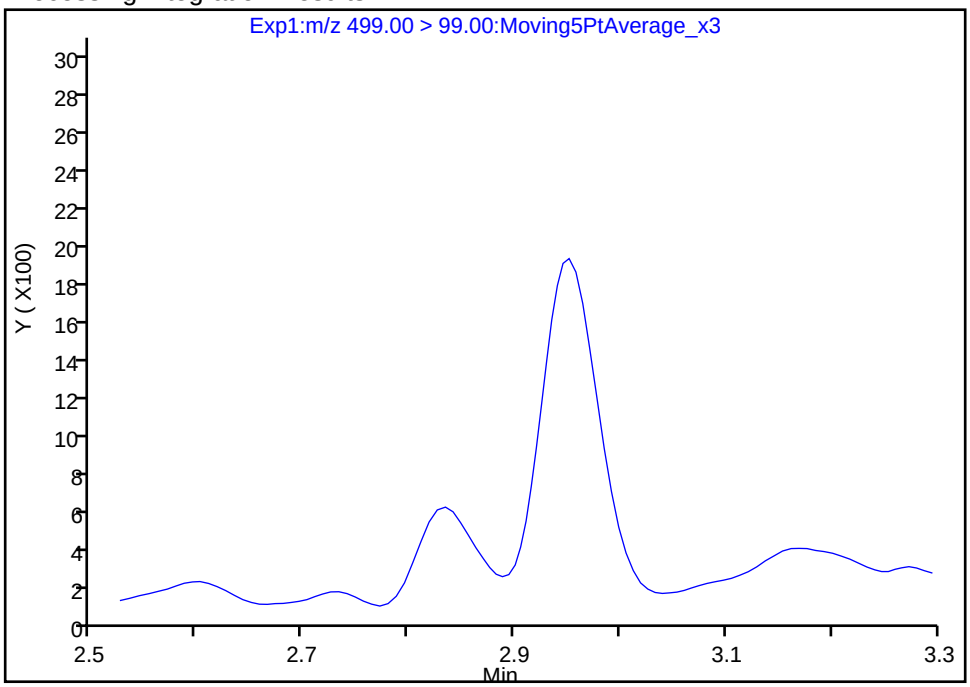
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

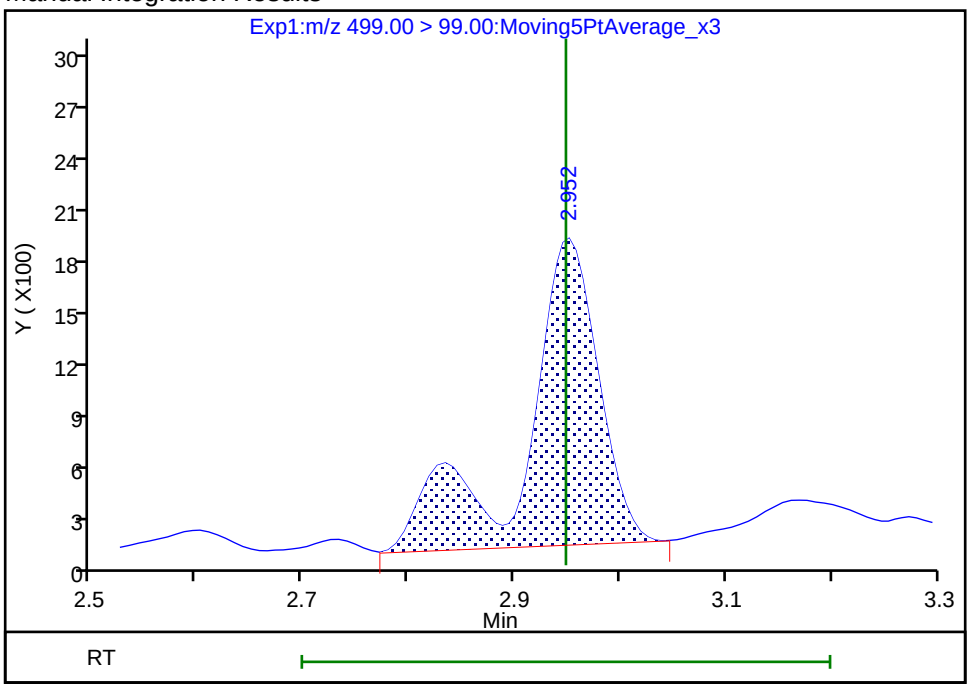
Processing Integration Results

RT: 2.95
Area: 0
Amount: 0.026262
Amount Units: ng/ml



Manual Integration Results

RT: 2.95
Area: 8733
Amount: 0.025451
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:24:45
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

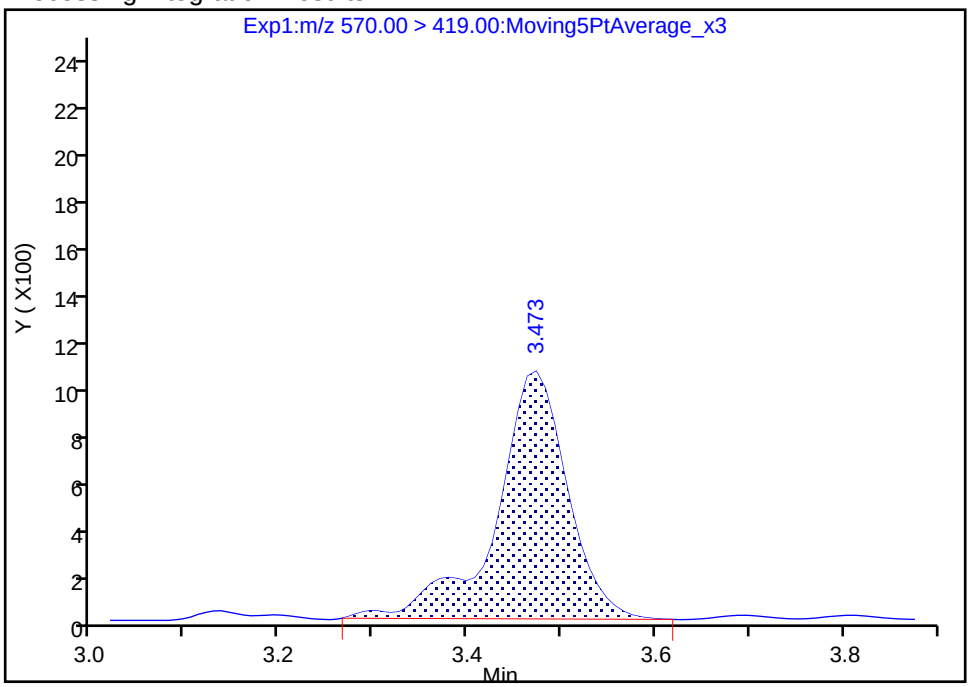
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

28 N-methyl perfluorooctane sulfonamidoacetic a, CAS: 2355-31-9

Signal: 1

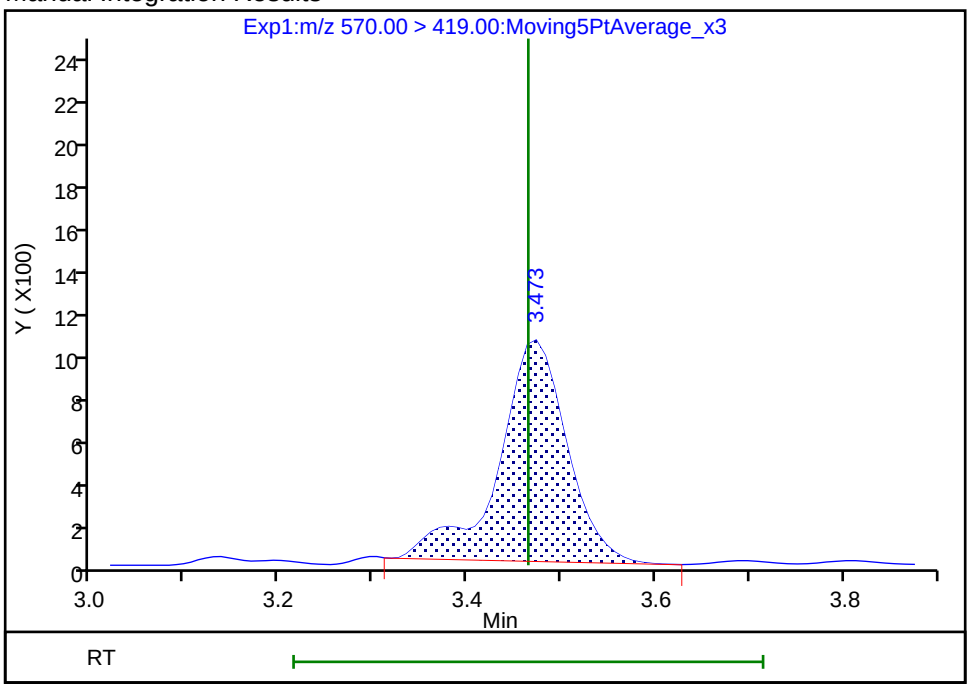
Processing Integration Results

RT: 3.47
Area: 5437
Amount: 0.026807
Amount Units: ng/ml



Manual Integration Results

RT: 3.47
Area: 5163
Amount: 0.025320
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:25:26
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

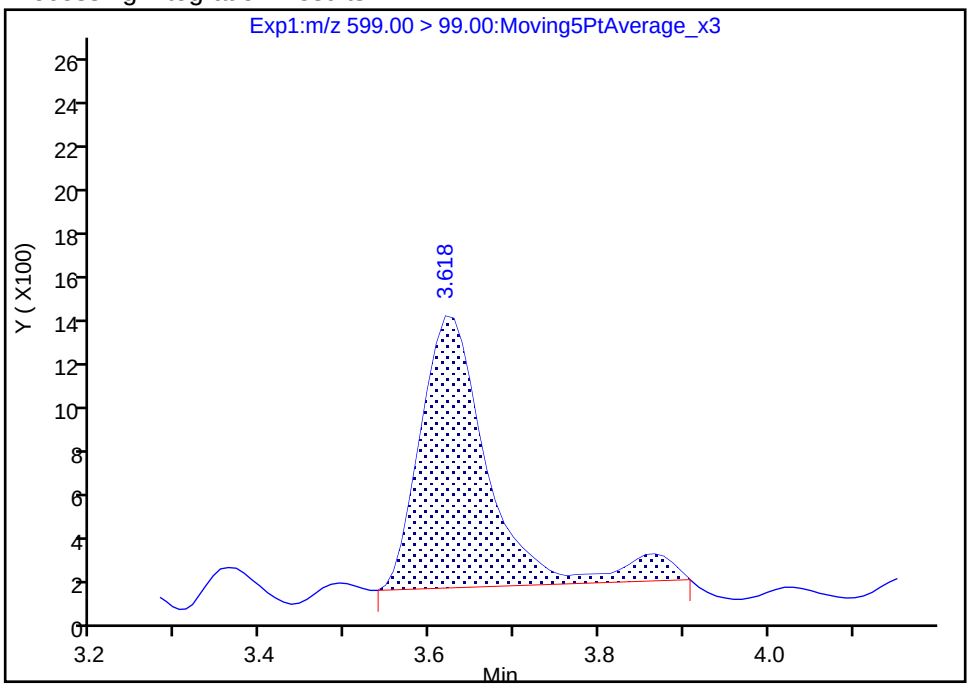
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

29 Perfluorodecane Sulfonic acid, CAS: 335-77-3

Signal: 2

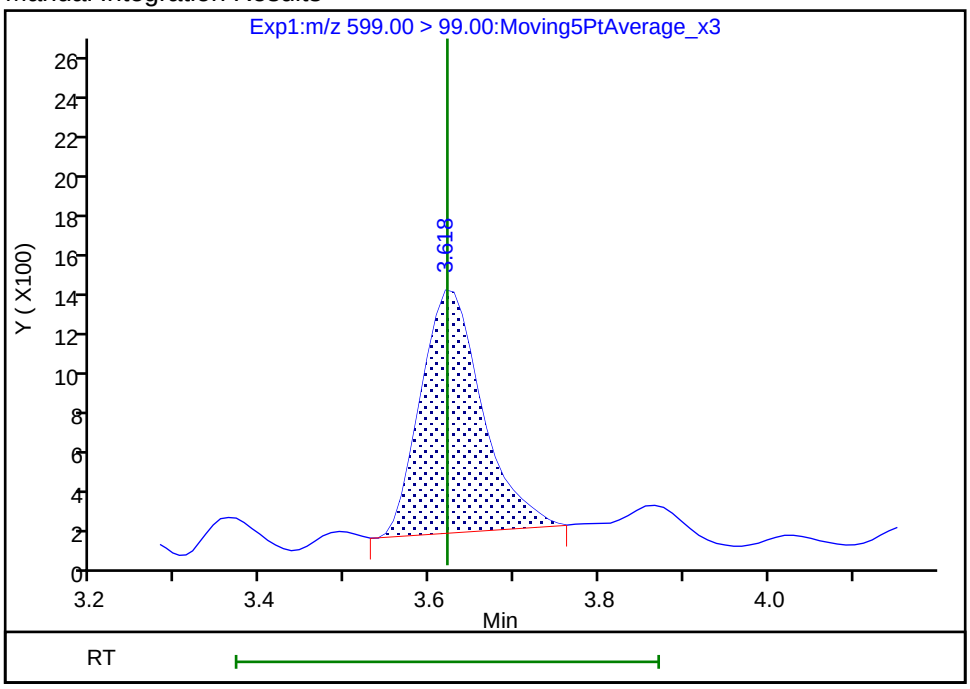
RT: 3.62
Area: 6867
Amount: 0.022908
Amount Units: ng/ml

Processing Integration Results



RT: 3.62
Area: 6067
Amount: 0.022908
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 01-Aug-2018 14:26:44
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

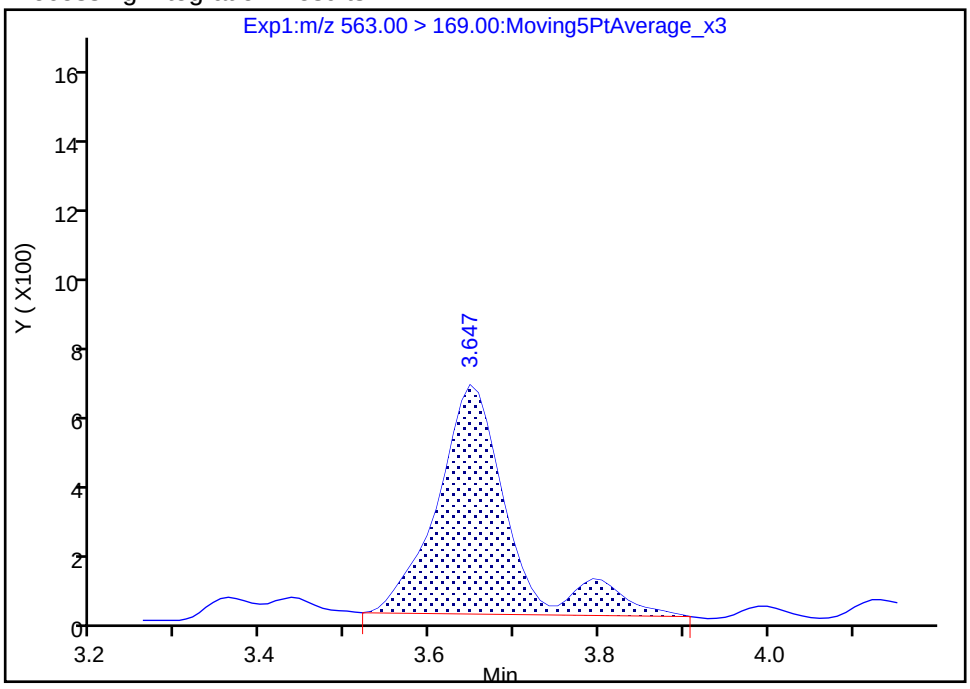
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

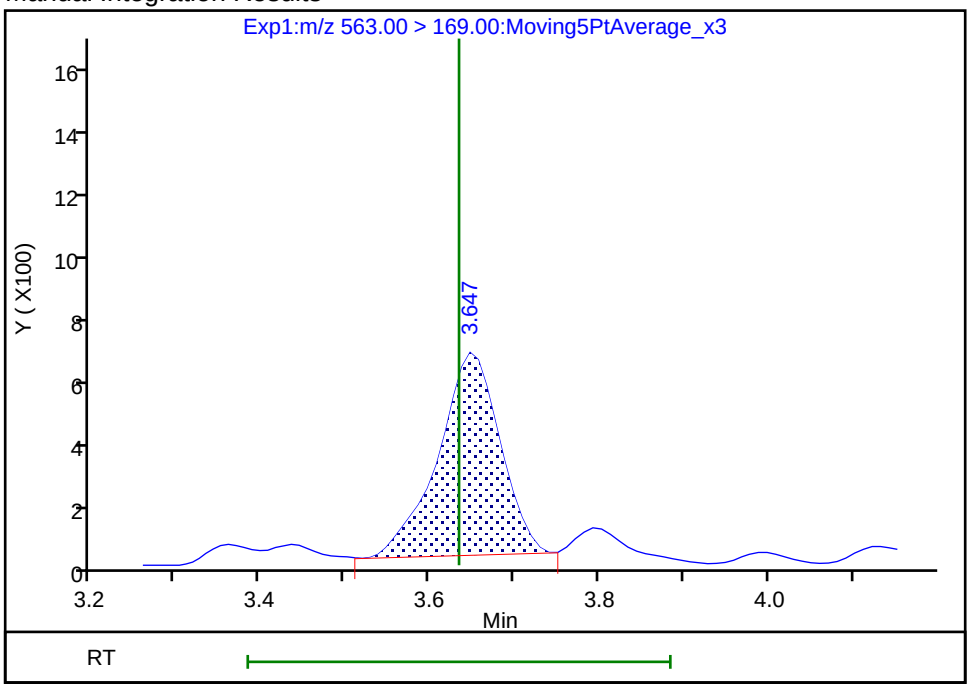
Processing Integration Results

RT: 3.65
Area: 3919
Amount: 0.031106
Amount Units: ng/ml



Manual Integration Results

RT: 3.65
Area: 3299
Amount: 0.031106
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:27:05
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

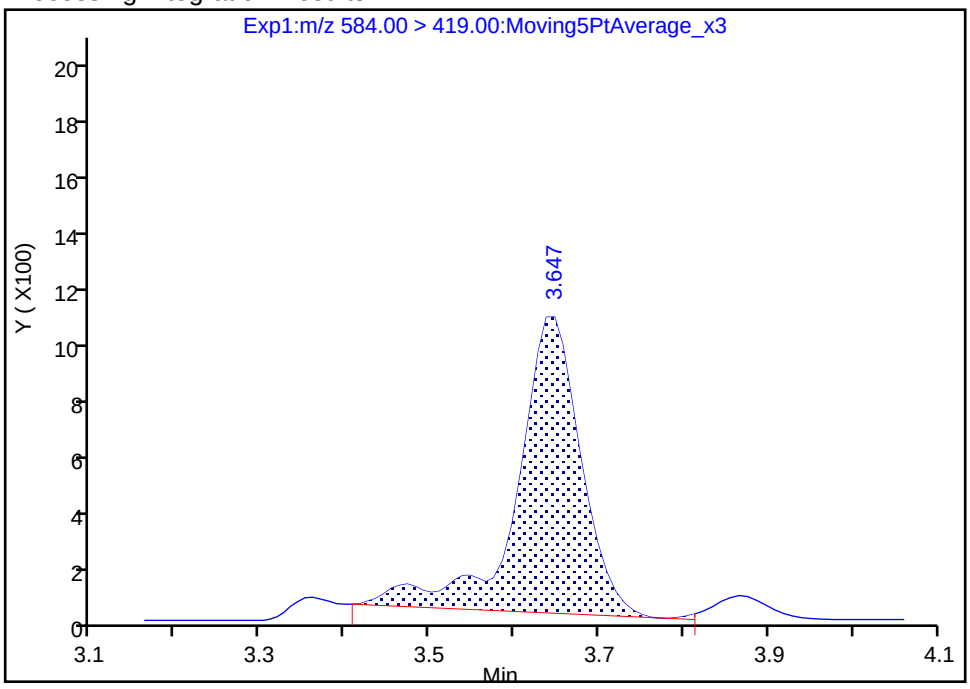
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_002.d
Injection Date: 01-Aug-2018 12:59:04 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

33 N-ethyl perfluorooctane sulfonamidoacetic ac, CAS: 2991-50-6

Signal: 1

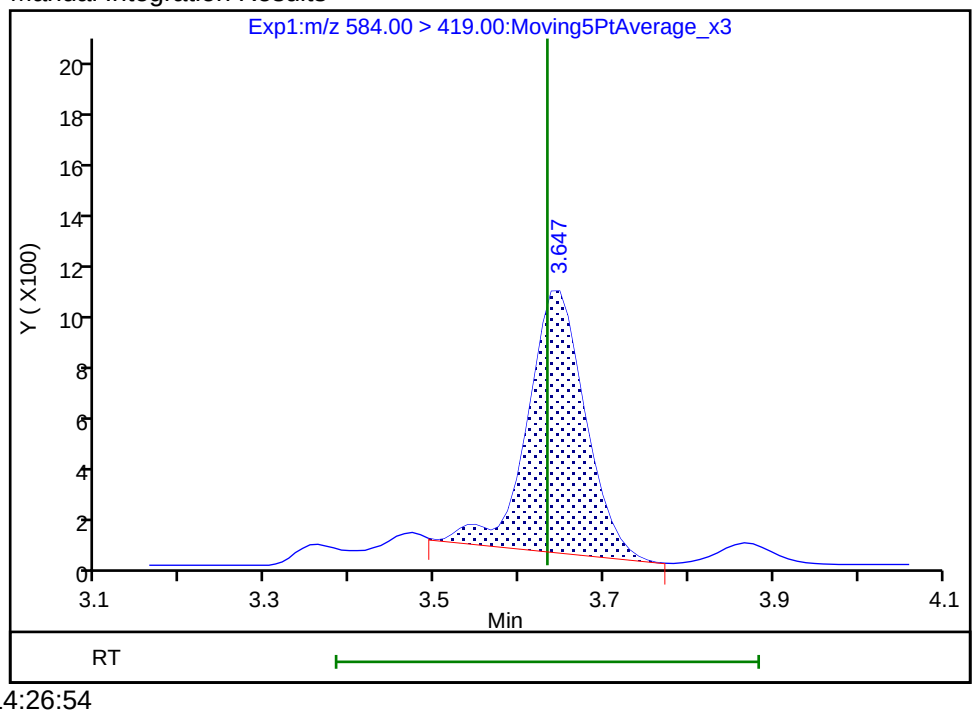
Processing Integration Results

RT: 3.65
Area: 5628
Amount: 0.028396
Amount Units: ng/ml



Manual Integration Results

RT: 3.65
Area: 4957
Amount: 0.025504
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:26:54
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_003.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Aug-2018 13:06:53 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L2-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 01-Aug-2018 14:59:39 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK022

First Level Reviewer: roycea Date: 01-Aug-2018 14:31:28

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.397	1.395	0.002	0.540	5141928	2.45		98.1	74945	
2 Perfluorobutyric acid										
212.90 > 169.00	1.402	1.396	0.006	1.004	100773	0.0497		99.4	23.4	
D 3 13C5-PFPeA										
267.90 > 223.00	1.640	1.636	0.004	0.634	3382043	2.45		98.0	54096	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.640	1.636	0.004	1.000	86389	0.0533		107	31.2	
D 47 13C3-PFBS										
301.90 > 83.00	1.675	1.669	0.006	0.647	89887	2.26		97.4	348	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.675	1.671	0.004	1.000	130464	0.0440		99.6	734	
298.90 > 99.00	1.675	1.671	0.004	1.000	56499		2.31(1.25-3.74)	99.6	234	
D 60 M2-4:2FTS										
329.00 > 81.00	1.876	1.872	0.004	0.725	632383	2.26		96.6	6856	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.876	1.872	0.004	1.120	31260	0.0470		101	1851	
D 7 13C2 PFHxA										
315.00 > 270.00	1.905	1.903	0.002	0.736	3635013	2.43		97.3	79582	
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.905	1.903	0.002	1.000	81976	0.0535		107	123	M
313.00 > 119.00	1.916	1.903	0.013	1.006	8717		9.40(5.03-15.10)	107	61.8	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.927	1.928	-0.001	1.151	120606	0.0461		98.3	1899	
349.00 > 99.00	1.927	1.928	-0.001	1.151	46184		2.61(1.36-4.07)	98.3	266	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.014	2.000	0.014	0.778	179442	2.57		103	4453	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.003	2.002	0.001	0.994	10701	0.0372		74.5	36.8	
D 9 13C4-PFHpA										
367.00 > 322.00	2.229	2.225	0.004	0.861	3553062	2.45		98.2	66788	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.229	2.226	0.003	1.000	79296	0.0481		96.2	32.7	M
363.00 > 169.00	2.229	2.226	0.003	1.000	37217		2.13(1.13-3.40)	96.2	328	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.240	2.237	0.003	1.000	118530	0.0484		106	688	
399.00 > 99.00	2.240	2.237	0.003	1.000	41157		2.88(1.50-4.49)	106	67.6	
D 11 18O2 PFHxS										
403.00 > 84.00	2.240	2.238	0.002	0.866	5006593	2.30		97.3	55144	
65 ADONA										
377.00 > 251.00	2.280	2.270	0.010	0.773	194813	0.0488		104	1691	
377.00 > 85.00	2.280	2.270	0.010	0.773	113714		1.71(0.84-2.53)	104	456	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.564	2.554	0.010	1.000	34779	0.0482		102	936	
D 12 M2-6:2FTS										
429.00 > 81.00	2.564	2.556	0.008	0.991	1036033	2.44		103	15008	
D 14 13C4 PFOA										
417.00 > 372.00	2.580	2.580	0.0	0.997	3558329	2.55		102	52579	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.588	2.581	0.007	1.003	79819	0.0485		96.9	40.0	M
413.00 > 169.00	2.588	2.581	0.007	1.003	46881		1.70(0.84-2.52)	96.9	302	
* 62 13C2-PFOA										
415.00 > 370.00	2.588	2.581	0.007		3640262	2.50			47450	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.588	2.587	0.001	0.878	98640	0.0499		105	1833	
449.00 > 99.00	2.588	2.587	0.001	0.878	26853		3.67(1.94-5.82)	105	226	
D 18 13C4 PFOS										
503.00 > 80.00	2.948	2.946	0.002	1.139	3417703	2.27		95.2	45596	
D 19 13C5 PFNA										
468.00 > 423.00	2.948	2.948	0.0	1.139	3085644	2.53		101	63218	
20 Perfluorononanoic acid										
463.00 > 419.00	2.953	2.949	0.004	1.002	68954	0.0517		103	105	
463.00 > 169.00	2.948	2.949	-0.001	1.000	16456		4.19(1.90-5.69)	103	876	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.953	2.949	0.004	1.002	75727	0.0472		102	600	
499.00 > 99.00	2.953	2.949	0.004	1.002	17304		4.38(2.31-6.93)	102	99.6	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.164	3.158	0.006	1.073	119615	0.0468		100	1581	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.299	3.292	0.007	1.000	28792	0.0500		104	1757	
D 26 M2-8:2FTS										
529.00 > 81.00	3.299	3.292	0.007	1.275	1020788	2.47		103	19201	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.299	3.295	0.004	1.119	51583	0.0502		105	1797	
549.00 > 99.00	3.299	3.295	0.004	1.119	19964		2.58(1.33-3.97)	105	132	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.307	3.306	0.001	1.278	2274867	2.50		99.9	36263	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.315	3.308	0.007	1.002	49086	0.0505		101	62.1	
513.00 > 169.00	3.307	3.308	-0.001	1.000	9842		4.99(2.36-7.09)	101	159	
D 21 13C8 FOSA										
506.00 > 78.00	3.315	3.312	0.003	1.281	5311185	2.41		96.2	47157	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.315	3.313	0.002	1.000	102774	0.0490		98.0	1888	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.467	3.459	0.008	1.340	534311	2.42		96.7	11634	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.467	3.465	0.002	1.000	11798	0.0543		109	127	M
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.621	3.620	0.001	1.228	47682	0.0513		106	1719	
599.00 > 99.00	3.621	3.620	0.001	1.228	15861		3.01(1.39-4.16)	106	145	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.630	3.627	0.003	1.403	610182	2.57		103	9078	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.630	3.633	-0.003	1.000	9530	0.0438		87.6	216	
D 30 13C2 PFUnA										
565.00 > 520.00	3.640	3.634	0.006	1.406	1779877	2.54		101	31430	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.640	3.634	0.006	1.000	45391	0.0517		103	94.2	
563.00 > 169.00	3.640	3.634	0.006	1.000	9346		4.86(2.12-6.36)	103	385	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.795	3.792	0.003	1.287	168004	0.0483		103	5028	
D 36 13C2 PFDoA										
615.00 > 570.00	3.930	3.925	0.005	1.519	1524607	2.51		100	17103	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.930	3.927	0.003	1.000	32864	0.0498		99.5	9.8	
613.00 > 169.00	3.930	3.927	0.003	1.000	8696		3.78(2.13-6.40)	99.5	180	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.193	4.188	0.005	1.067	24421	0.0425		85.0	7.3	
663.00 > 169.00	4.193	4.188	0.005	1.067	7586		3.22(1.25-3.76)	85.0	76.7	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.426	4.423	0.003	1.000	7424	0.0553		111	107	
713.00 > 219.00	4.416	4.423	-0.007	0.998	4052		1.83(0.71-2.13)	111	64.9	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.426	4.423	0.003	1.710	1246501	2.44		97.8	5991	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.833	4.826	0.007	1.868	2126007	2.42		96.8	3087	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	4.833	4.827	0.006	1.000	56565	0.0453		90.7	3.7	M
813.00 > 169.00	4.833	4.827	0.006	1.000	9667		5.85(2.86-8.58)	90.7	103	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.167	5.166	0.001	1.069	44038	0.0504		101	13.9	
913.00 > 169.00	5.167	5.166	0.001	1.069	5315		8.29(3.83-11.48)	101	50.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00005 Amount Added: 1.00 Units: mL

Report Date: 01-Aug-2018 14:59:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_003.d

Injection Date: 01-Aug-2018 13:06:53 Instrument ID: A8_N

Lims ID: IC L2 Full

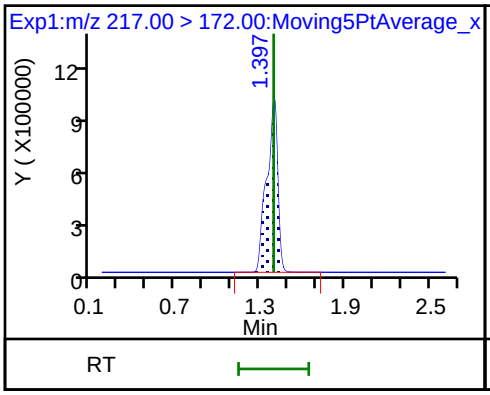
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 11 Worklist Smp#: 3

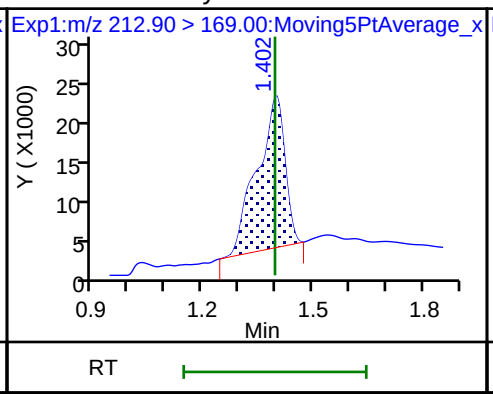
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

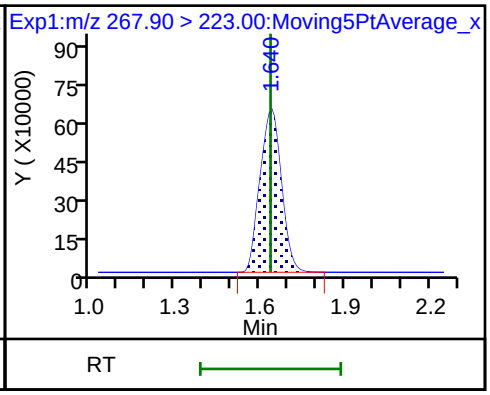
D 1 13C4 PFBA



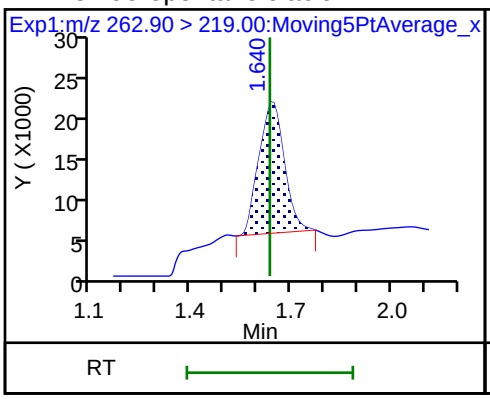
2 Perfluorobutyric acid



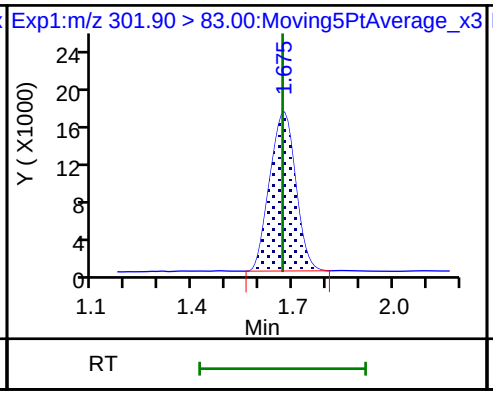
D 3 13C5-PFPeA



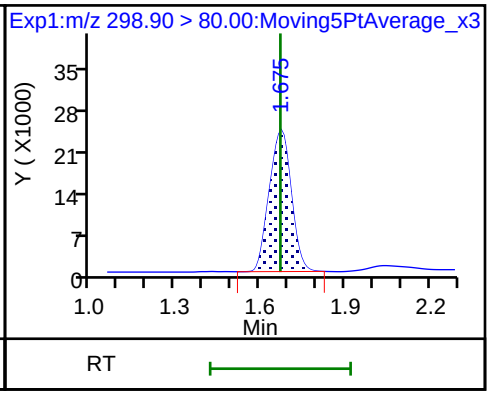
4 Perfluoropentanoic acid



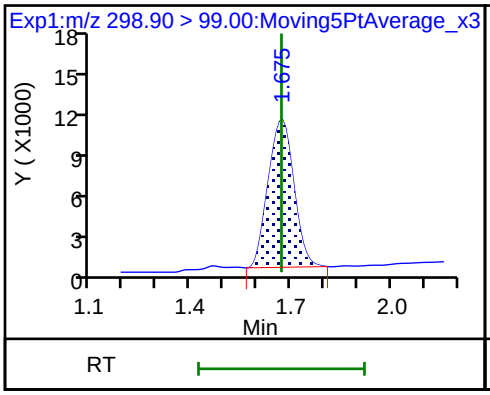
D 47 13C3-PFBS



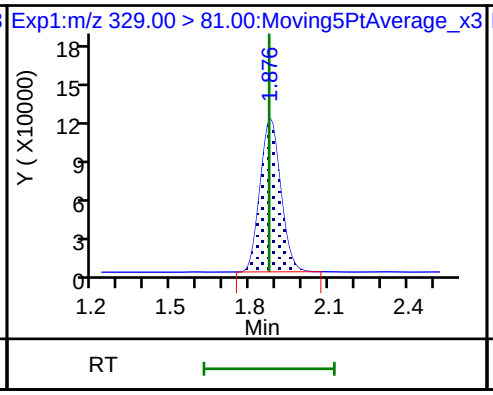
5 Perfluorobutanesulfonic acid



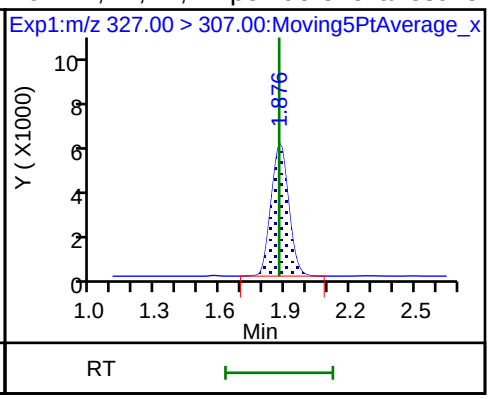
5 Perfluorobutanesulfonic acid



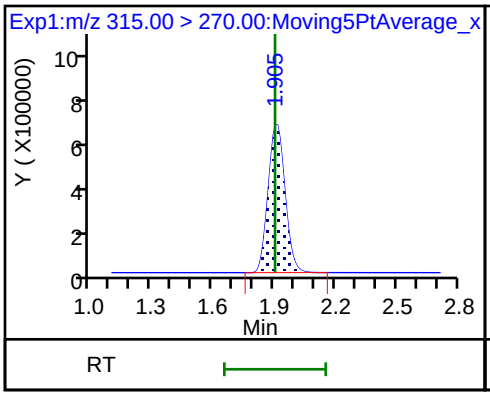
D 60 M2-4:2FTS



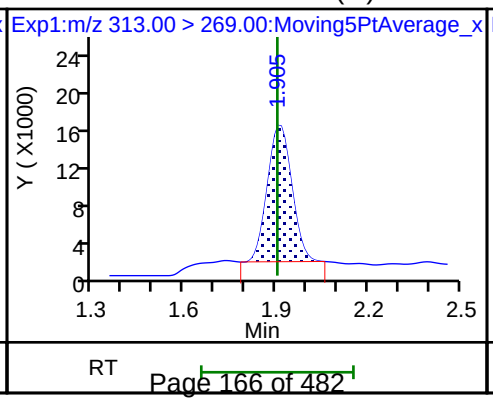
61 1H,1H,2H,2H-perfluorohexanesulfoni



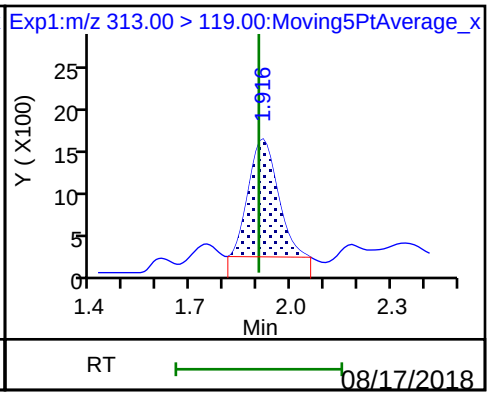
D 7 13C2 PFHxA



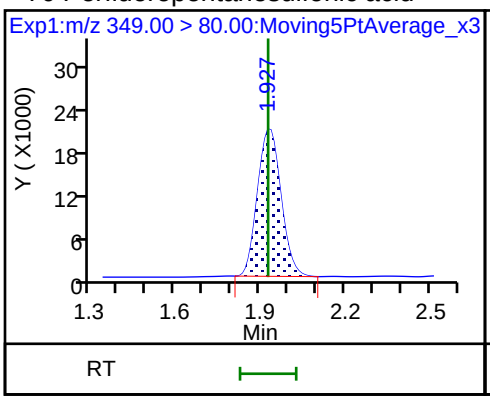
6 Perfluorohexanoic acid (M)



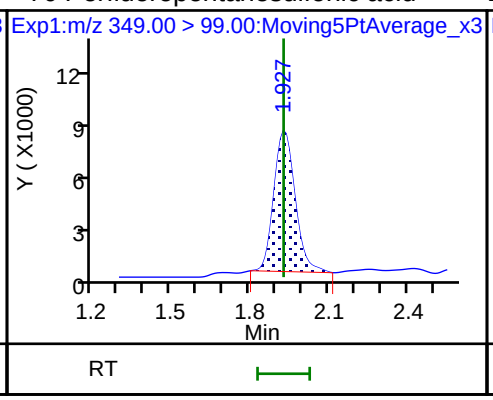
6 Perfluorohexanoic acid



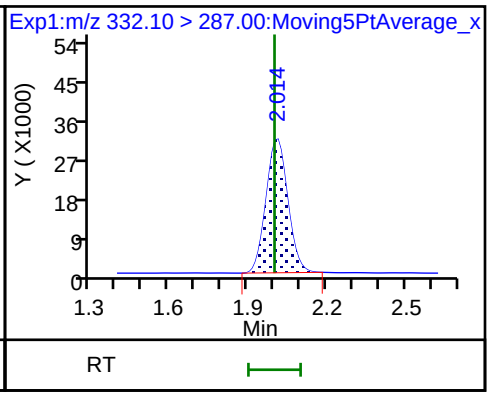
70 Perfluoropentanesulfonic acid



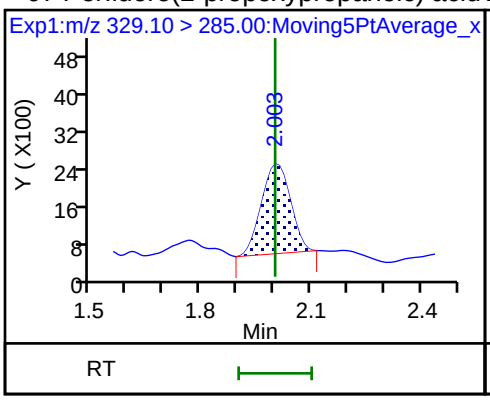
70 Perfluoropentanesulfonic acid



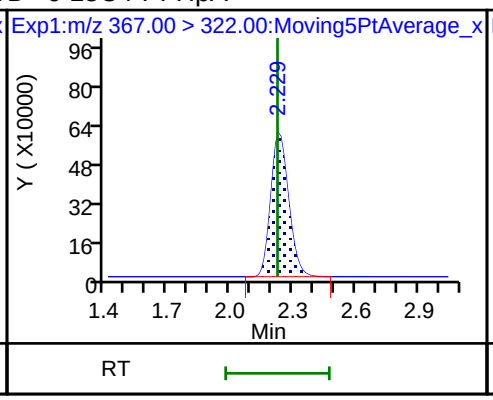
D 64 13C3 HFPO-DA



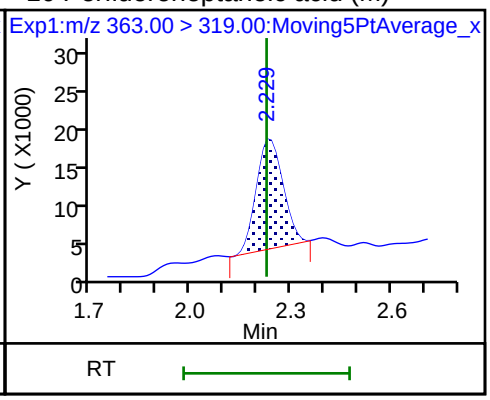
67 Perfluoro(2-propoxypropanoic) acid



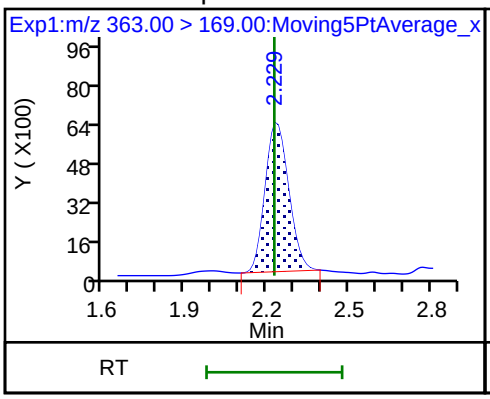
D 9 13C4-PFHpA



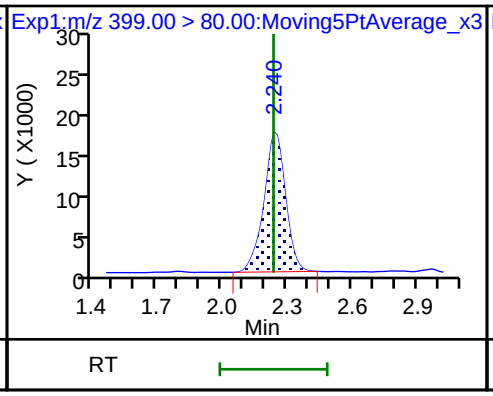
10 Perfluoroheptanoic acid (M)



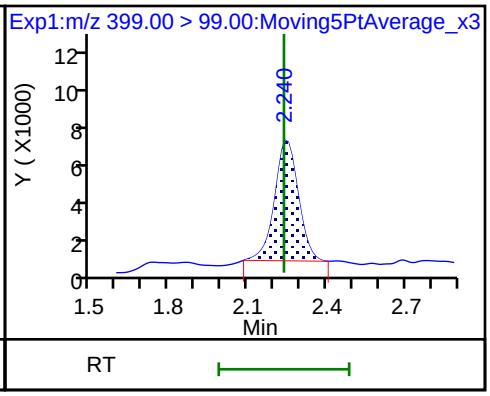
10 Perfluoroheptanoic acid



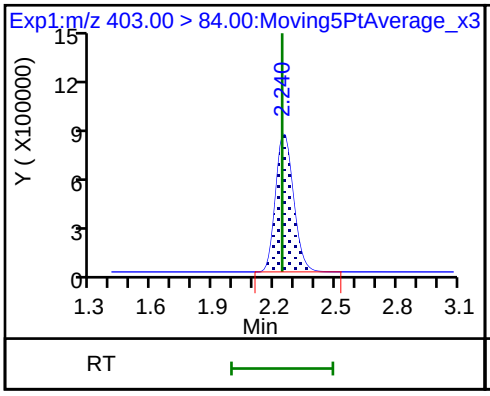
8 Perfluorohexanesulfonic acid



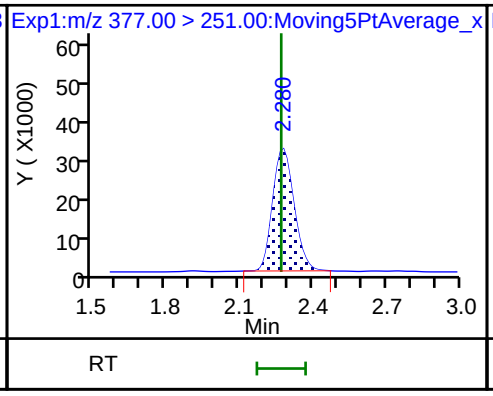
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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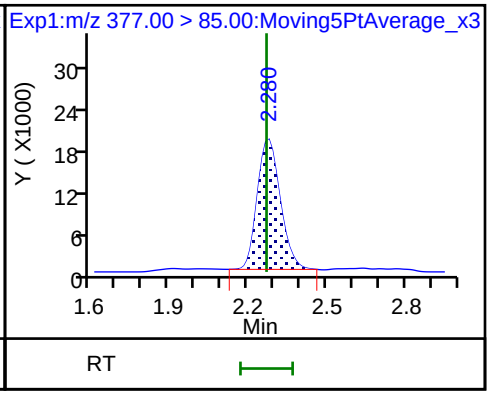
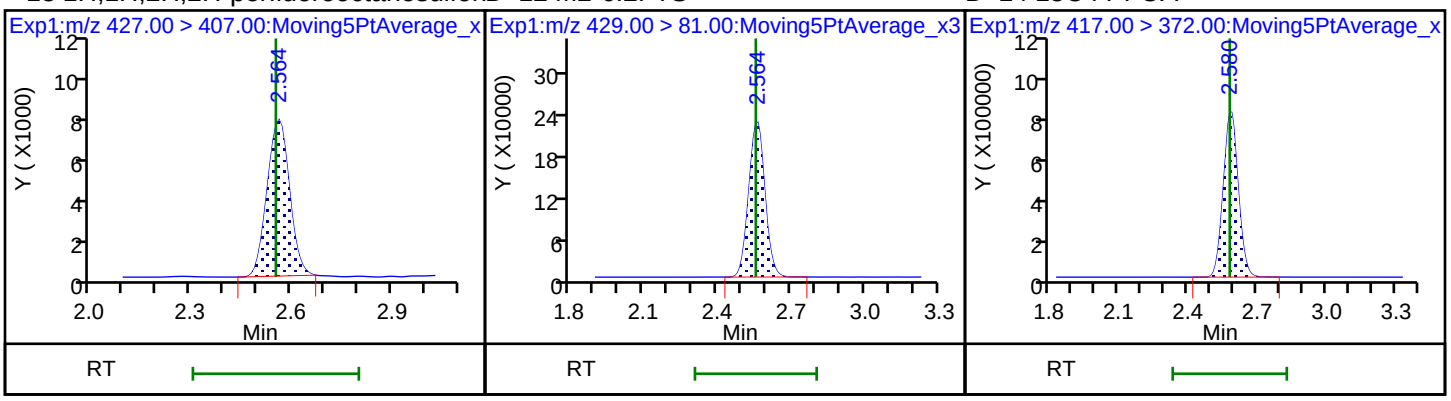
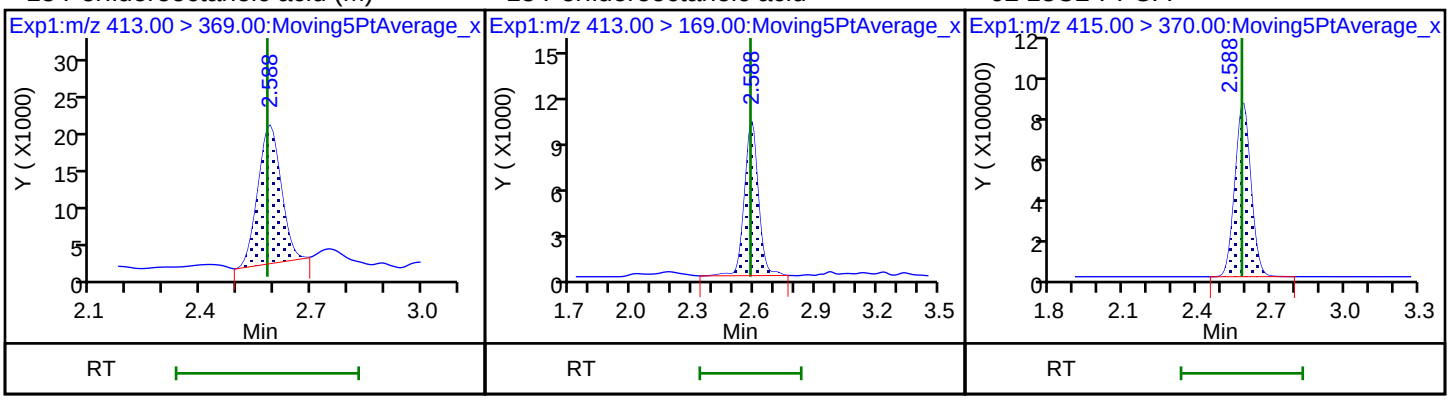


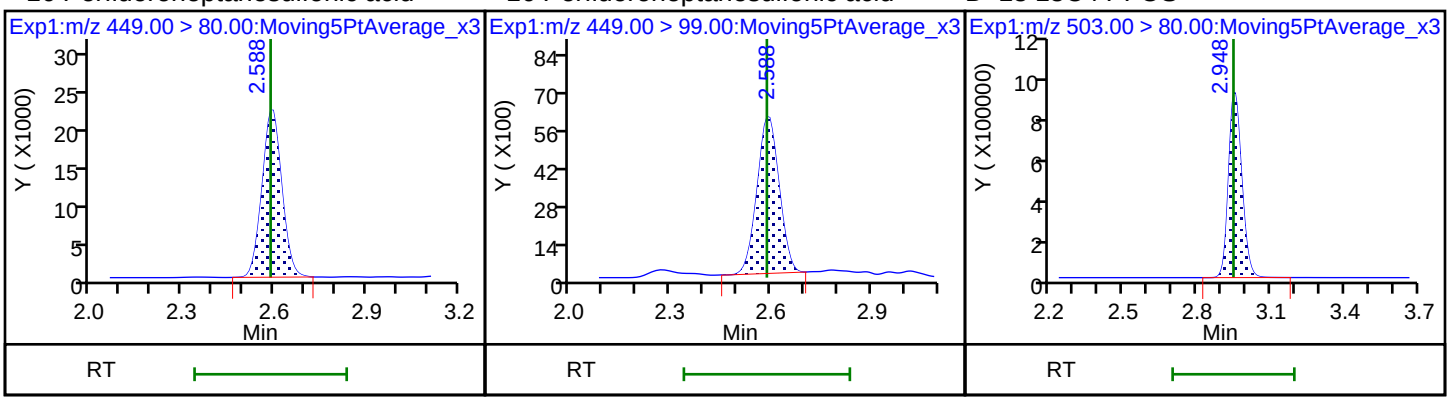
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 14 13C4 PFOA



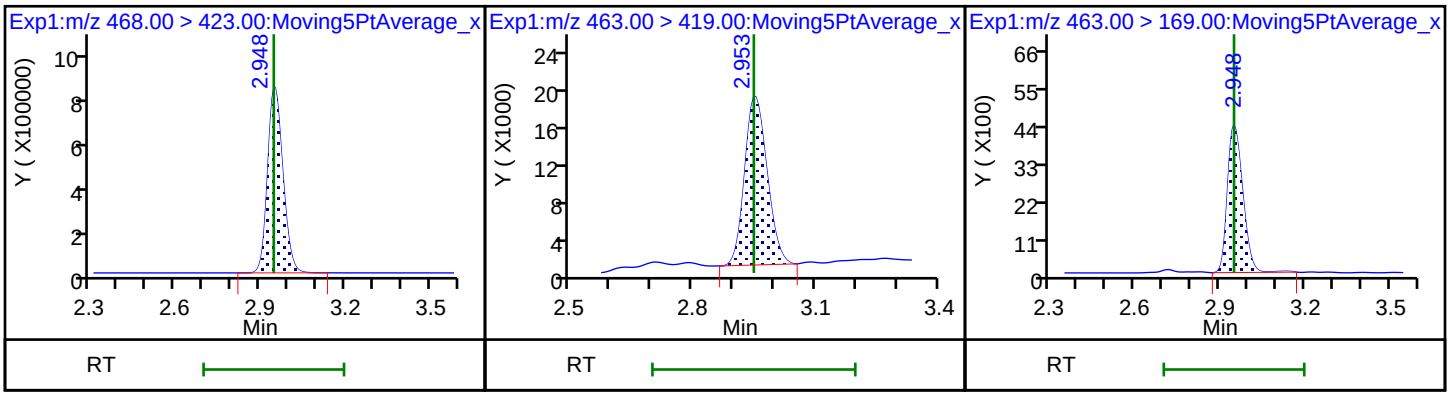
15 Perfluorooctanoic acid (M) 15 Perfluorooctanoic acid * 62 13C2-PFOA



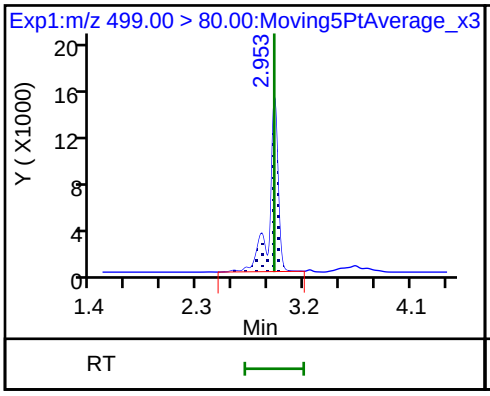
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 18 13C4 PFOS



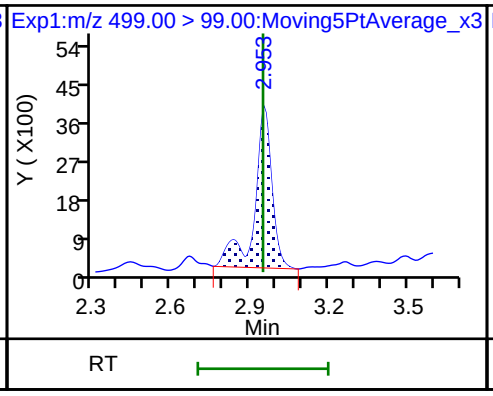
D 19 13C5 PFNA 20 Perfluorononanoic acid 20 Perfluorononanoic acid



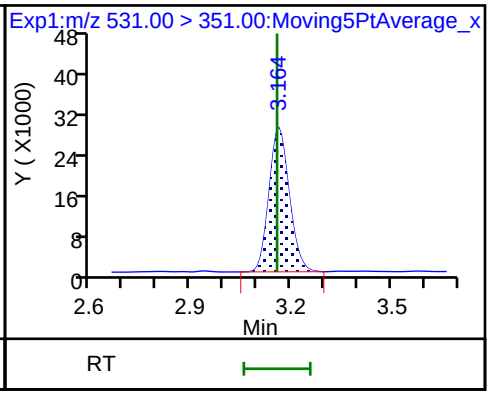
17 Perfluorooctane sulfonic acid



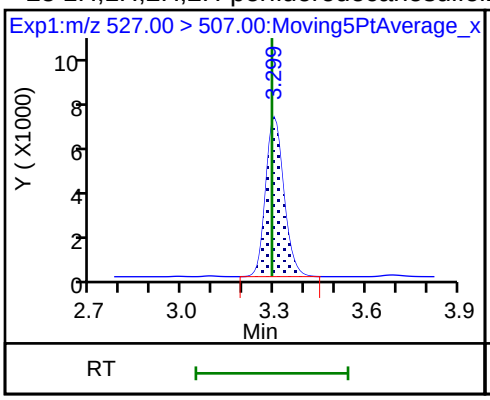
17 Perfluorooctane sulfonic acid



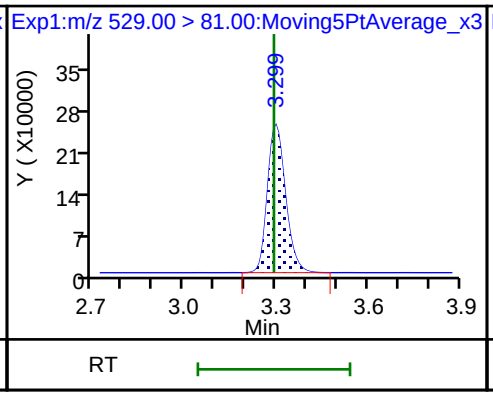
69 9-Chlorohexadecafluoro-3-oxanonane



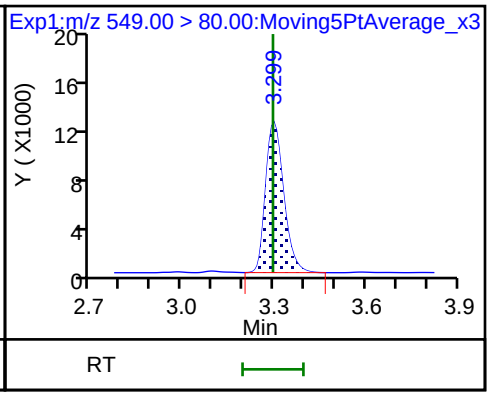
25 1H,1H,2H,2H-perfluorodecanesulfon



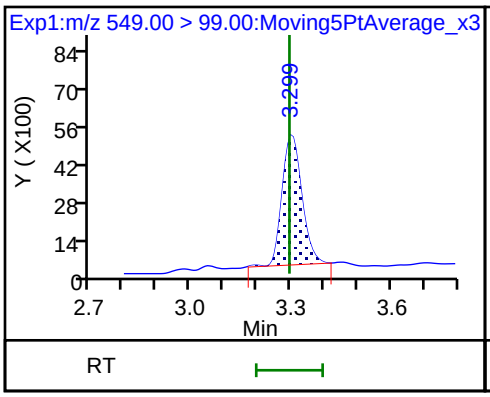
D 26 M2-8:2FTS



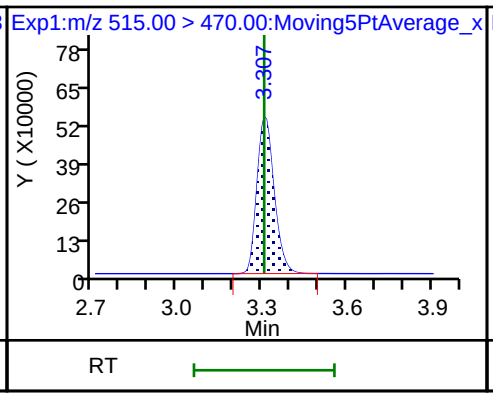
68 Perfluorononanesulfonic acid



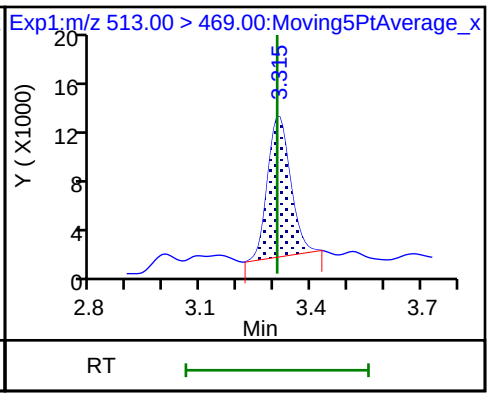
68 Perfluorononanesulfonic acid



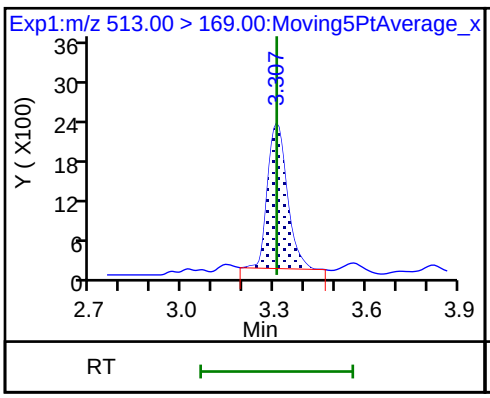
D 23 13C2 PFDA



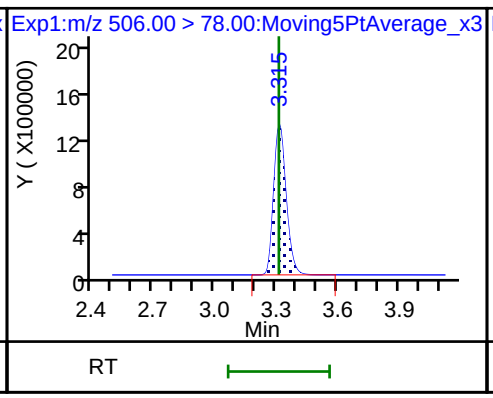
24 Perfluorodecanoic acid



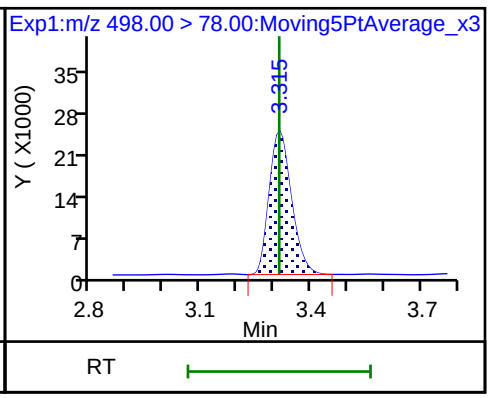
24 Perfluorodecanoic acid



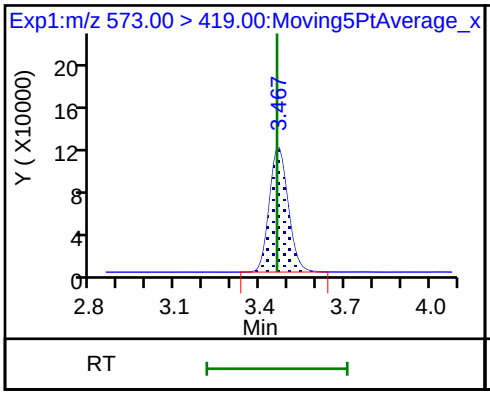
D 21 13C8 FOSA



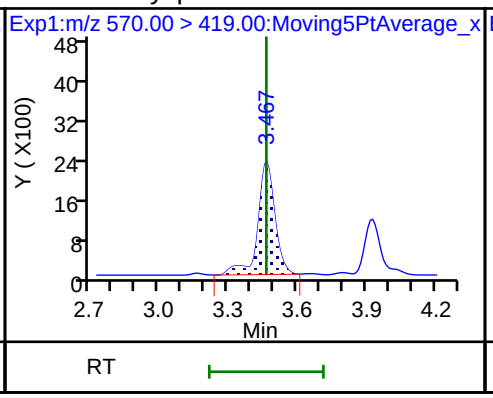
22 Perfluorooctane Sulfonamide



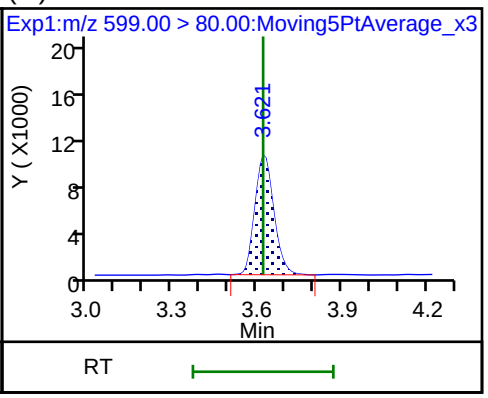
D 27 d3-NMeFOSAA



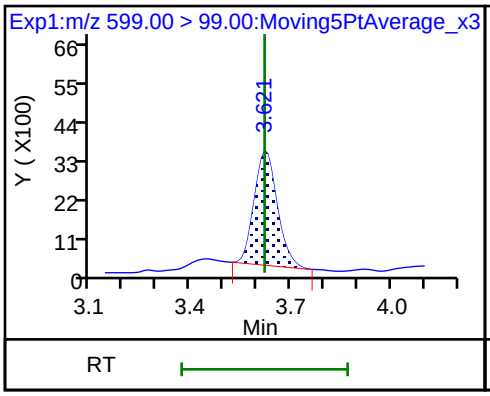
28 N-methyl perfluorooctane sulfonami (M)



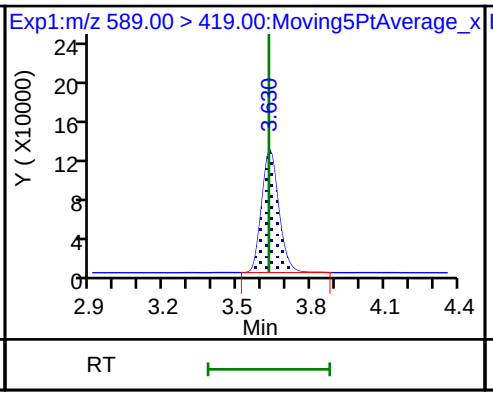
29 Perfluorodecane Sulfonic acid



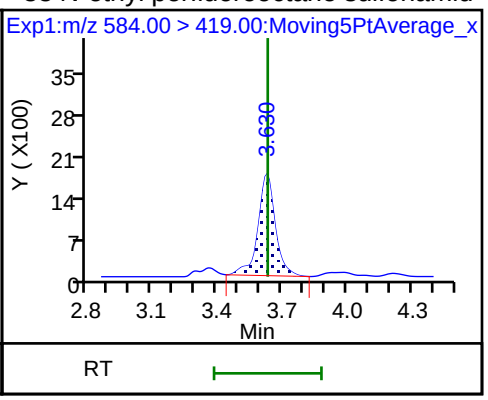
29 Perfluorodecane Sulfonic acid



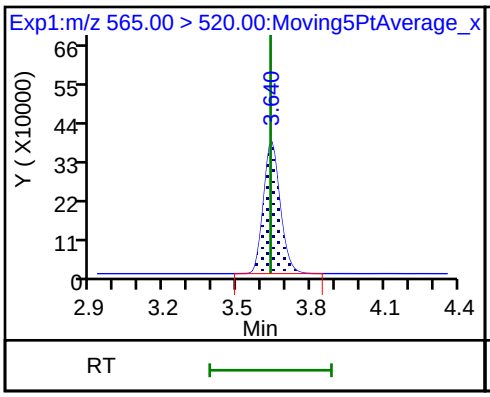
D 32 d5-NEtFOSAA



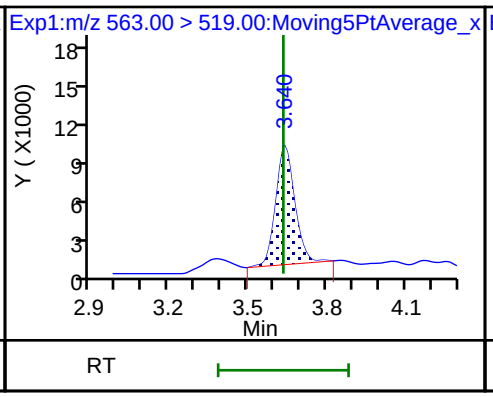
33 N-ethyl perfluorooctane sulfonamid



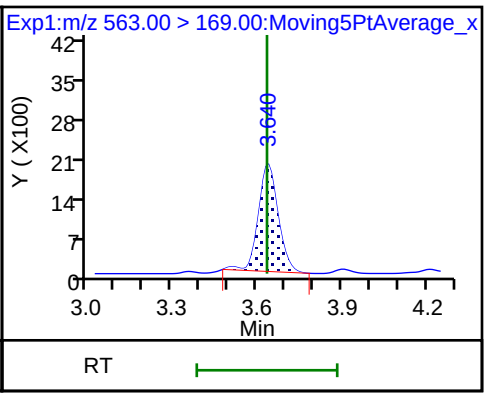
D 30 13C2 PFUnA



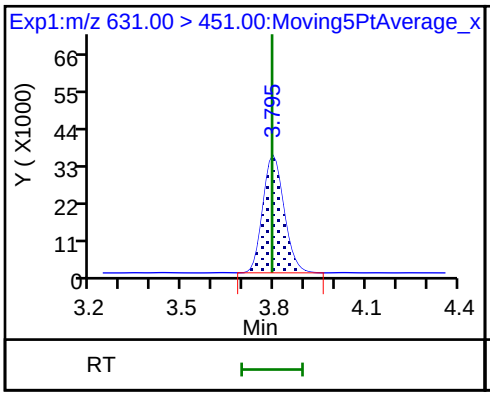
31 Perfluoroundecanoic acid



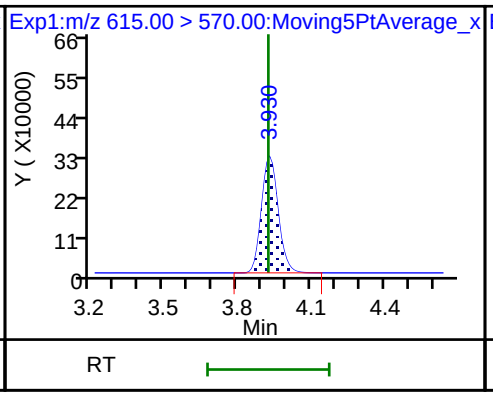
31 Perfluoroundecanoic acid



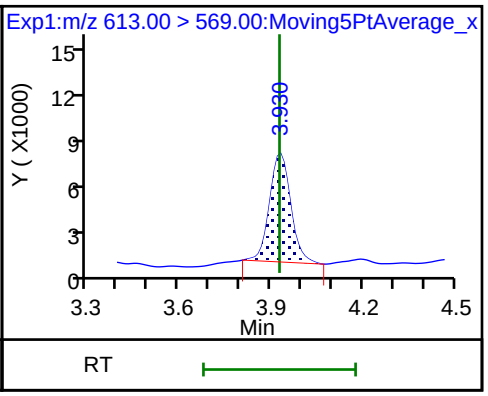
66 11-Chloroeicosafluoro-3-oxaundecan



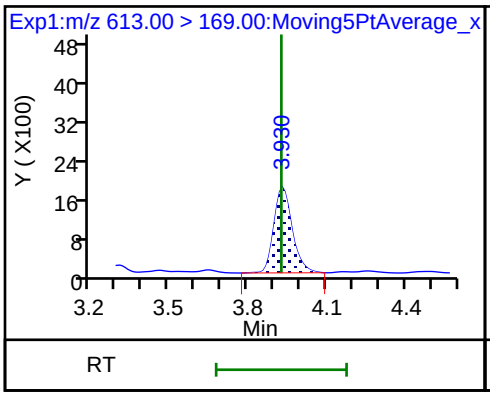
D 36 13C2 PFDoA



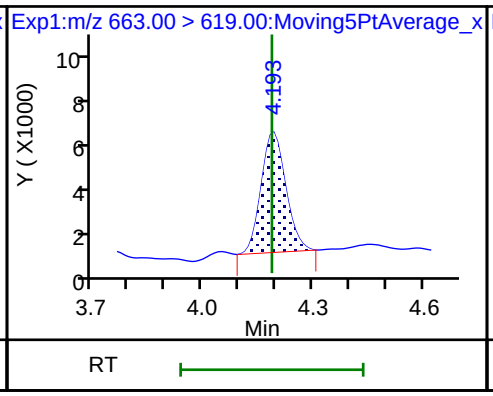
37 Perfluorododecanoic acid



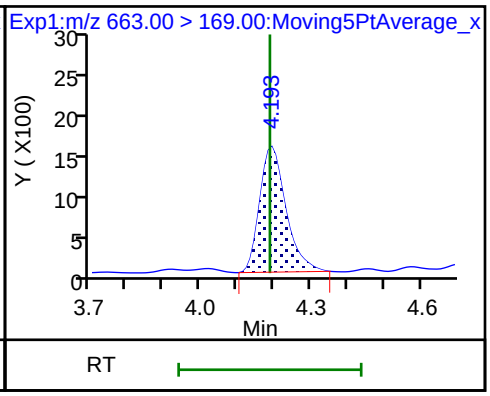
37 Perfluorododecanoic acid



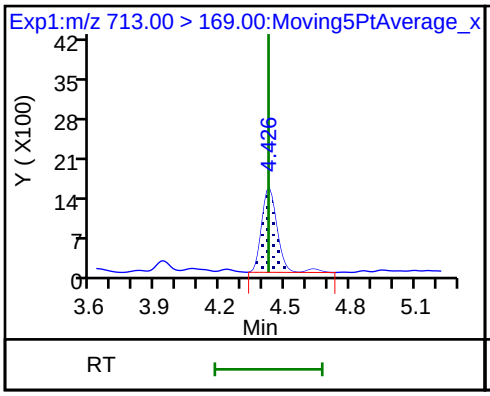
41 Perfluorotridecanoic acid



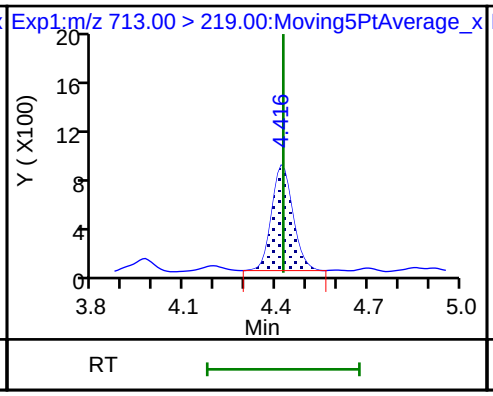
41 Perfluorotridecanoic acid



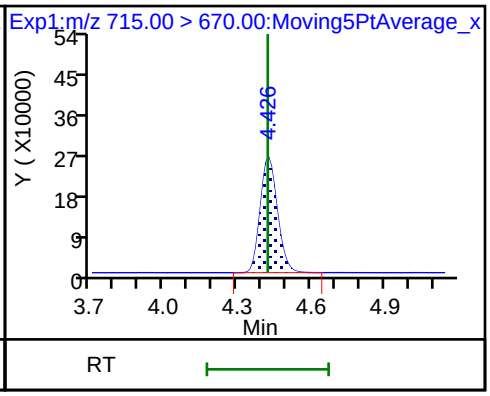
42 Perfluorotetradecanoic acid



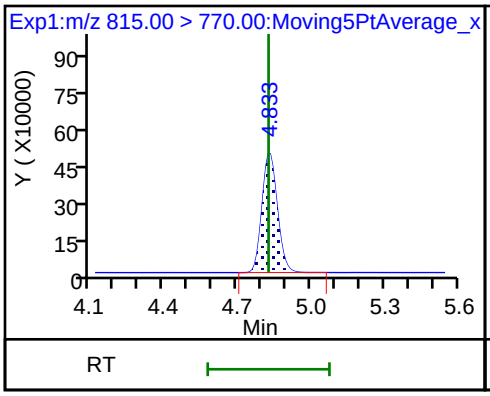
42 Perfluorotetradecanoic acid



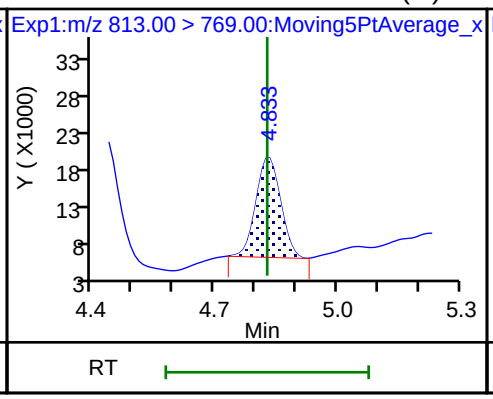
D 43 13C2-PFTeDA



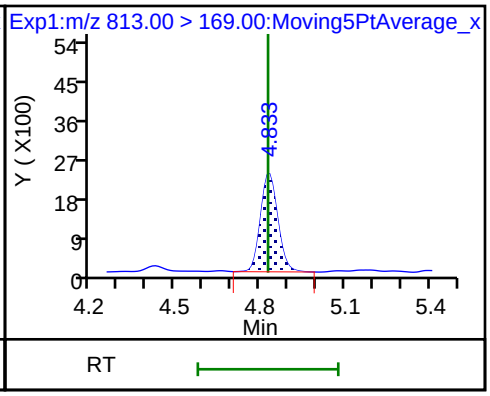
D 44 13C2-PFHxDA



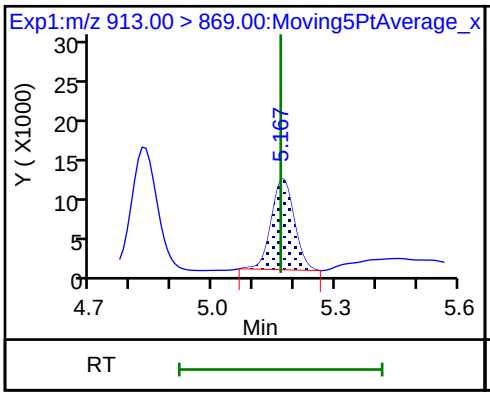
45 Perfluorohexadecanoic acid (M)



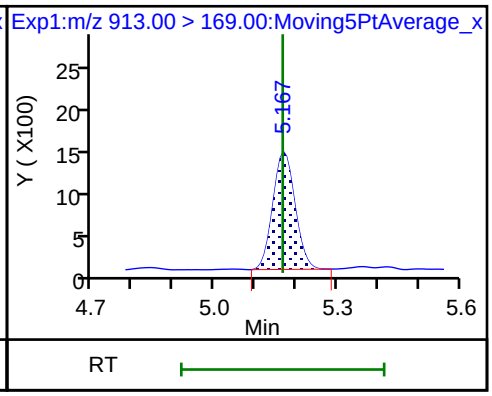
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

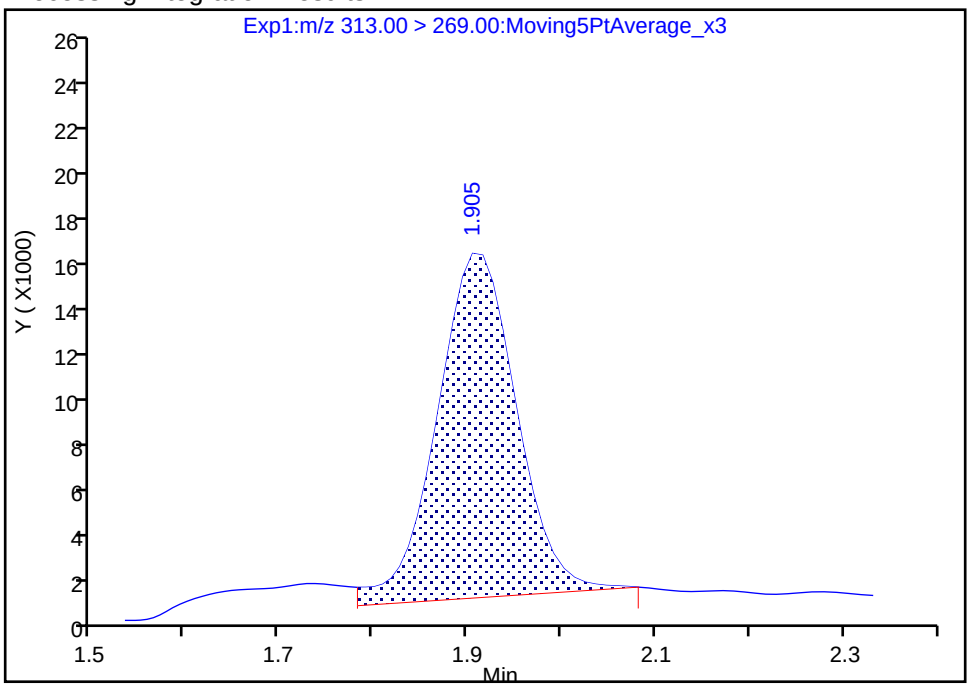
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_003.d
Injection Date: 01-Aug-2018 13:06:53 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

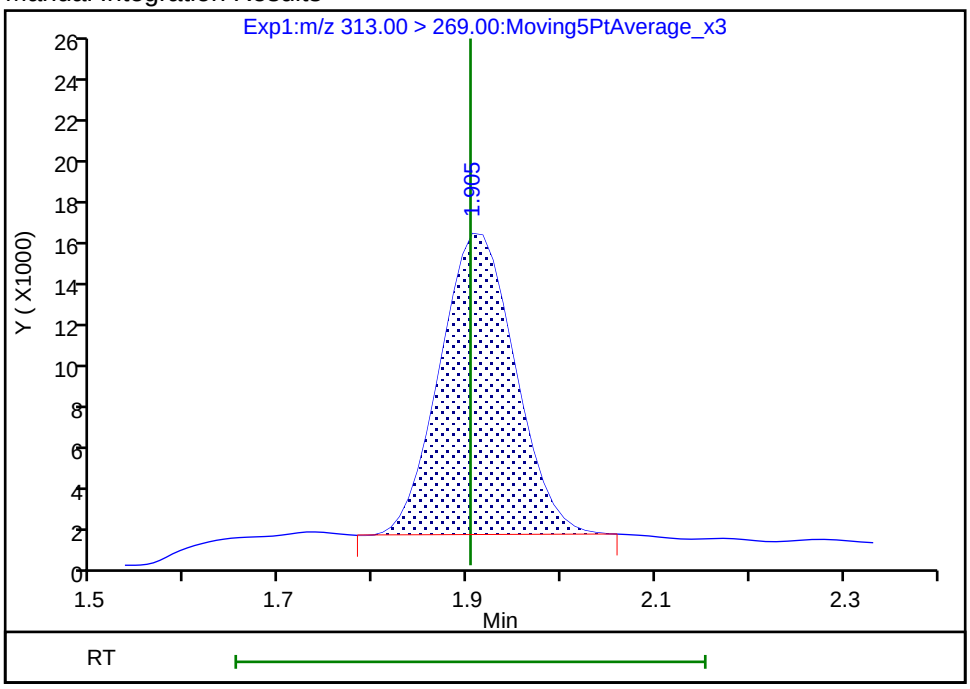
Processing Integration Results

RT: 1.91
Area: 89995
Amount: 0.057828
Amount Units: ng/ml



Manual Integration Results

RT: 1.91
Area: 81976
Amount: 0.053462
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:29:08
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

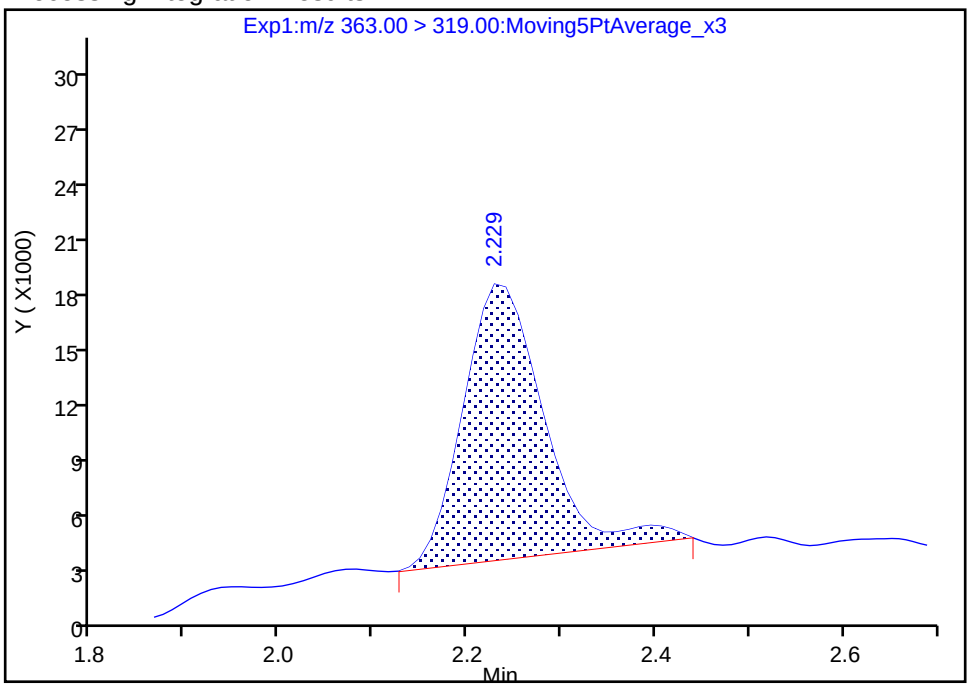
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_003.d				
Injection Date:	01-Aug-2018 13:06:53	Instrument ID:	A8_N		
Lims ID:	IC L2 Full				
Client ID:					
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	11	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

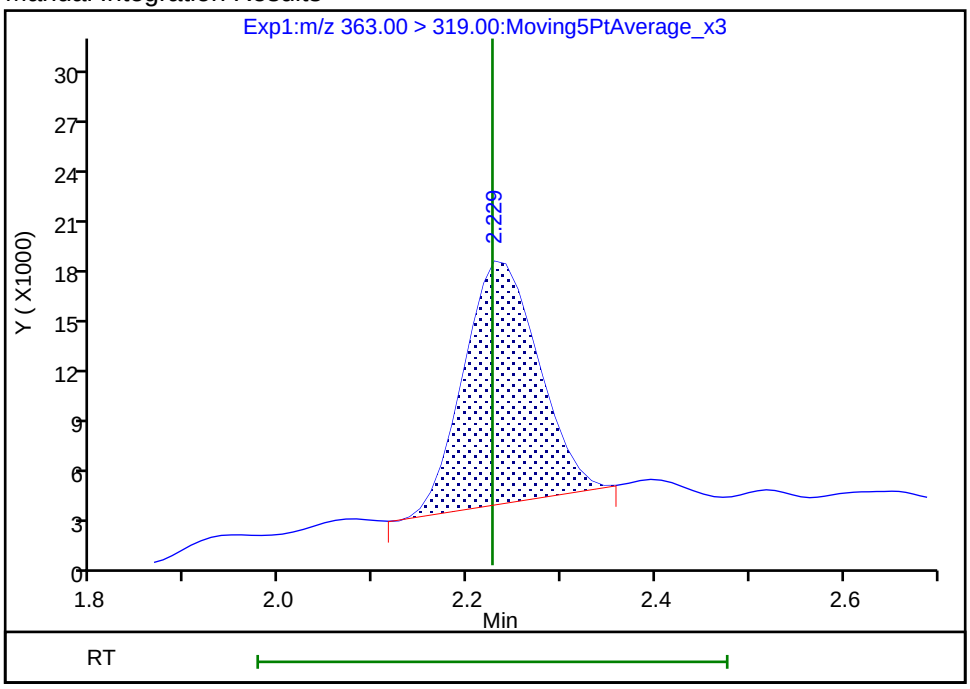
Processing Integration Results

RT: 2.23
Area: 88379
Amount: 0.052794
Amount Units: ng/ml



Manual Integration Results

RT: 2.23
Area: 79296
Amount: 0.048114
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:29:25
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

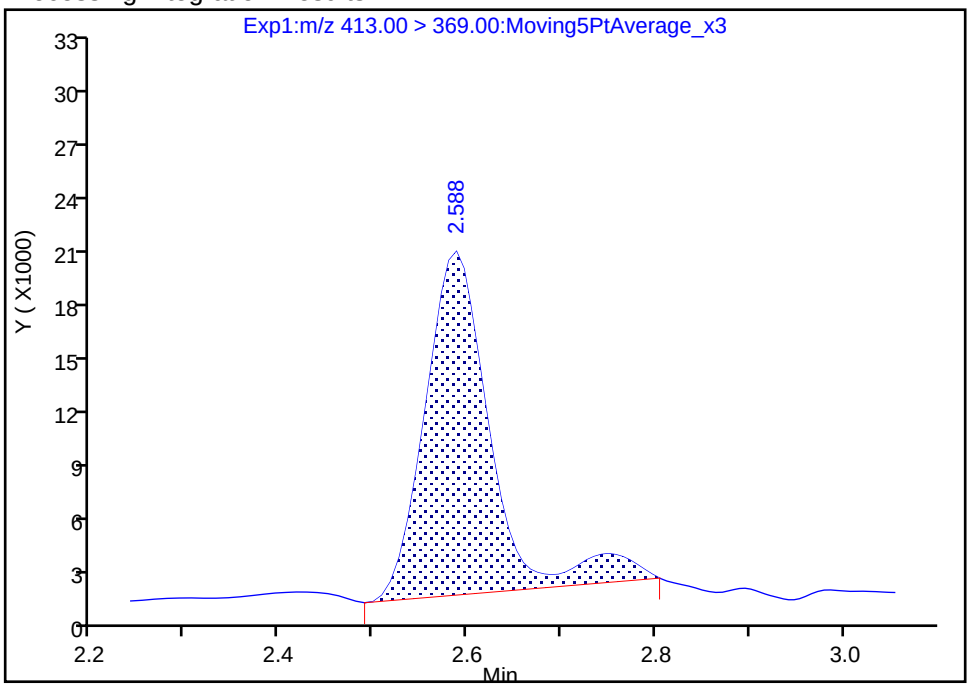
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_003.d				
Injection Date:	01-Aug-2018 13:06:53	Instrument ID:	A8_N		
Lims ID:	IC L2 Full				
Client ID:					
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	11	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

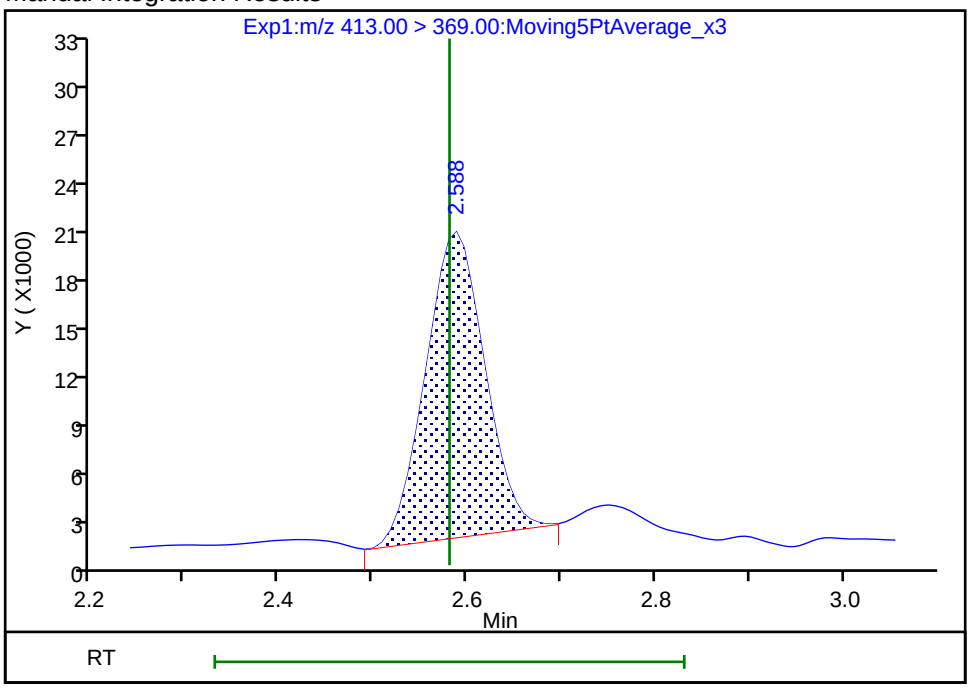
Processing Integration Results

RT: 2.59
Area: 90013
Amount: 0.053747
Amount Units: ng/ml



Manual Integration Results

RT: 2.59
Area: 79819
Amount: 0.048503
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:28:37
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

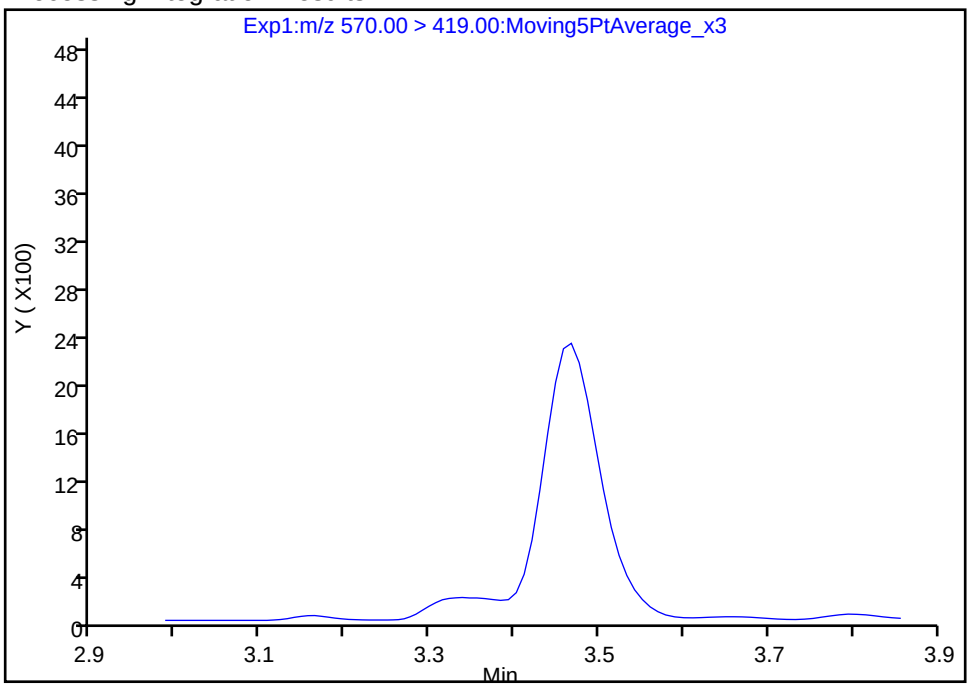
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_003.d
Injection Date: 01-Aug-2018 13:06:53 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

28 N-methyl perfluorooctane sulfonamidoacetic a, CAS: 2355-31-9

Signal: 1

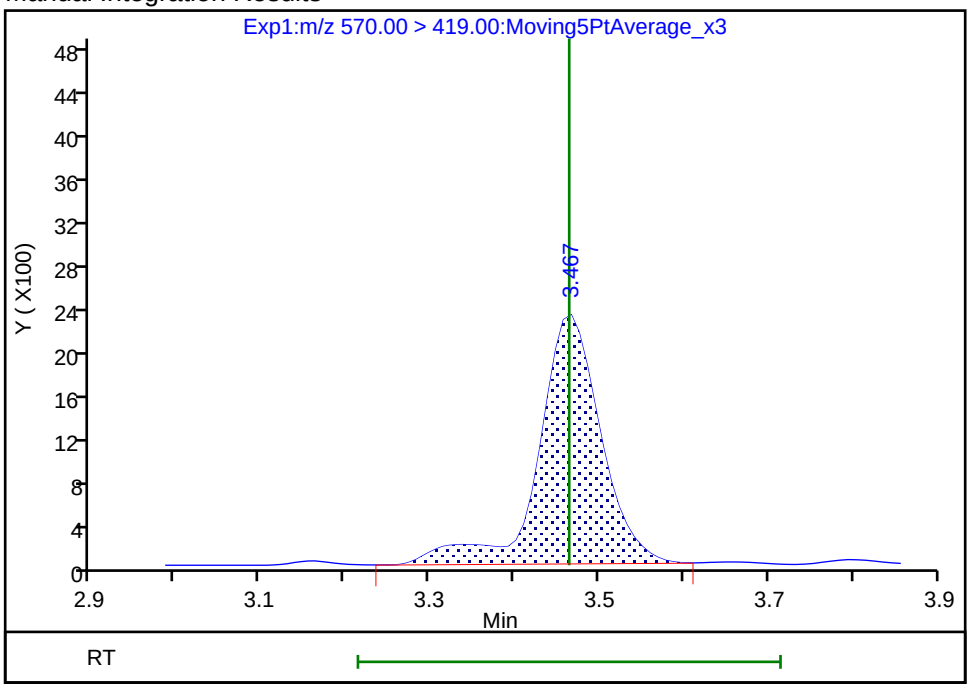
Not Detected
Expected RT: 3.46

Processing Integration Results



Manual Integration Results

RT: 3.47
Area: 11798
Amount: 0.054298
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:29:42
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

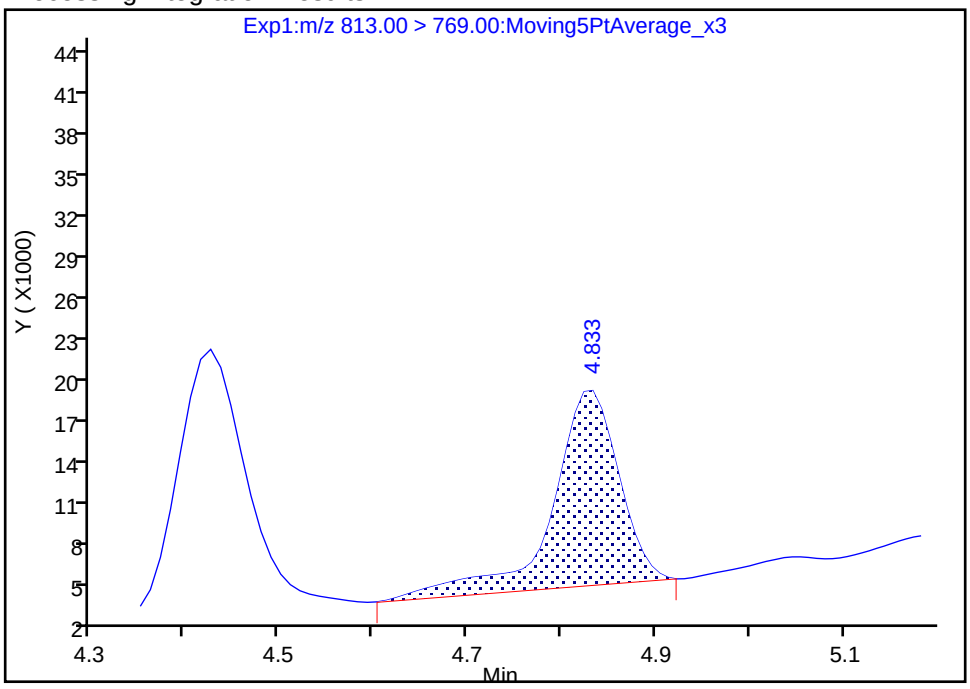
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_003.d
Injection Date: 01-Aug-2018 13:06:53 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

45 Perfluorohexadecanoic acid, CAS: 67905-19-5

Signal: 1

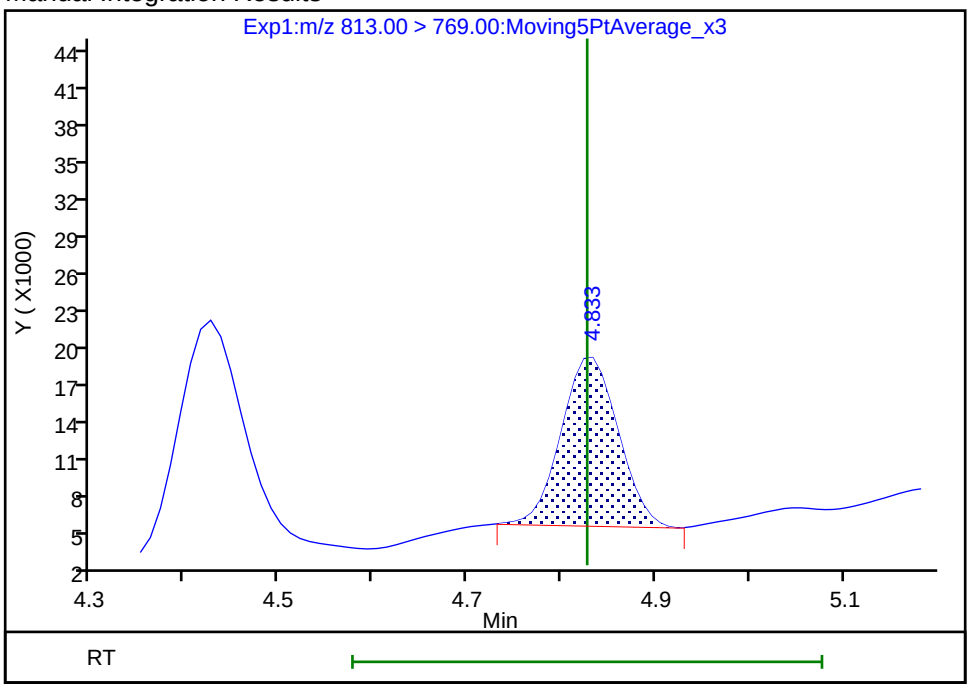
Processing Integration Results

RT: 4.83
Area: 69836
Amount: 0.067023
Amount Units: ng/ml



Manual Integration Results

RT: 4.83
Area: 56565
Amount: 0.045330
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:30:10
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_004.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Aug-2018 13:14:43 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L3-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 01-Aug-2018 14:59:43 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK022

First Level Reviewer: roycea Date: 01-Aug-2018 14:32:40

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.397	1.395	0.003	0.540	4833356	2.39		95.7	89658	
2 Perfluorobutyric acid										
212.90 > 169.00	1.397	1.396	0.001	1.000	462891	0.2430		97.2	104	
D 3 13C5-PFPeA										
267.90 > 223.00	1.641	1.636	0.004	0.635	3283004	2.47		98.7	56857	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.641	1.636	0.004	1.000	385176	0.2450		98.0	143	
D 47 13C3-PFBS										
301.90 > 83.00	1.666	1.669	-0.003	0.645	85167	2.23		95.7	327	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.675	1.671	0.004	1.005	611203	0.2177		98.5	3163	
298.90 > 99.00	1.675	1.671	0.004	1.005	265854		2.30(1.25-3.74)	98.5	1104	
D 60 M2-4:2FTS										
329.00 > 81.00	1.876	1.872	0.004	0.726	612244	2.27		97.0	5766	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.876	1.872	0.004	1.126	151962	0.2410		103	9089	
D 7 13C2 PFHxA										
315.00 > 270.00	1.905	1.903	0.002	0.737	3497268	2.43		97.2	101113	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.905	1.903	0.002	1.000	352293	0.2388		95.5	530	
313.00 > 119.00	1.905	1.903	0.002	1.000	35057		10.05(5.03-15.10)	95.5	338	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.927	1.928	-0.001	1.157	572115	0.2309		98.4	10772	
349.00 > 99.00	1.927	1.928	-0.001	1.157	211889		2.70(1.36-4.07)	98.4	1247	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.003	2.000	0.003	0.775	165918	2.46		98.4	5657	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.003	2.002	0.001	1.000	69749	0.2626		105	261	
D 9 13C4-PFHpA										
367.00 > 322.00	2.229	2.225	0.004	0.862	3413685	2.45		97.9	57432	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.229	2.226	0.003	1.000	400178	0.2527		101	165	
363.00 > 169.00	2.229	2.226	0.003	1.000	144272		2.77(1.13-3.40)	101	1607	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.241	2.237	0.004	1.000	492246	0.2146		94.3	2563	
399.00 > 99.00	2.241	2.237	0.004	1.000	176898		2.78(1.50-4.49)	94.3	290	
D 11 18O2 PFHxS										
403.00 > 84.00	2.241	2.238	0.003	0.867	4692968	2.24		94.6	40809	
65 ADONA										
377.00 > 251.00	2.267	2.270	-0.003	0.768	912723	0.2303		97.8	6763	
377.00 > 85.00	2.267	2.270	-0.003	0.768	516047		1.77(0.84-2.53)	97.8	1961	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.560	2.554	0.006	1.000	154602	0.2309		97.4	4116	
D 12 M2-6:2FTS										
429.00 > 81.00	2.560	2.556	0.004	0.991	961732	2.35		99.1	13733	
D 14 13C4 PFOA										
417.00 > 372.00	2.584	2.580	0.004	1.000	3335341	2.48		99.0	46480	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.584	2.581	0.003	1.000	378678	0.2455		98.1	236	
413.00 > 169.00	2.584	2.581	0.003	1.000	188937		2.00(0.84-2.52)	98.1	1155	
* 62 13C2-PFOA										
415.00 > 370.00	2.584	2.581	0.003		3508409	2.50			48346	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.592	2.587	0.005	0.879	436716	0.2226		93.5	7361	
449.00 > 99.00	2.592	2.587	0.005	0.879	122110		3.58(1.94-5.82)	93.5	1406	
D 18 13C4 PFOS										
503.00 > 80.00	2.951	2.946	0.005	1.142	3391354	2.34		98.0	33814	
D 19 13C5 PFNA										
468.00 > 423.00	2.951	2.948	0.003	1.142	2896674	2.47		98.7	59571	
20 Perfluorononanoic acid										
463.00 > 419.00	2.951	2.949	0.002	1.000	295007	0.2358		94.3	549	
463.00 > 169.00	2.951	2.949	0.002	1.000	74494		3.96(1.90-5.69)	94.3	1695	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.951	2.949	0.002	1.000	341410	0.2143		92.4	3442	
499.00 > 99.00	2.951	2.949	0.002	1.000	82300		4.15(2.31-6.93)	92.4	432	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.159	3.158	0.001	1.071	569724	0.2248		96.5	7887	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.295	3.292	0.003	1.000	130586	0.2451		102	7867	
D 26 M2-8:2FTS										
529.00 > 81.00	3.295	3.292	0.003	1.275	944227	2.37		98.9	14150	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.302	3.295	0.007	1.119	222331	0.2180		90.8	9052	
549.00 > 99.00	3.295	3.295	0.0	1.117	100259		2.22(1.33-3.97)	90.8	845	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.310	3.306	0.004	1.281	2112120	2.41		96.2	46081	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.310	3.308	0.002	1.000	230406	0.2555		102	324	
513.00 > 169.00	3.310	3.308	0.002	1.000	36327		6.34(2.36-7.09)	102	583	
D 21 13C8 FOSA										
506.00 > 78.00	3.318	3.312	0.006	1.284	5234016	2.46		98.4	65059	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.318	3.313	0.005	1.000	507693	0.2457		98.3	9280	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.463	3.459	0.004	1.340	521422	2.45		97.9	10409	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.463	3.465	-0.002	1.000	50086	0.2362		94.5	1029	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.618	3.620	-0.002	1.226	221097	0.2396		99.4	5766	
599.00 > 99.00	3.618	3.620	-0.002	1.226	66539		3.32(1.39-4.16)	99.4	626	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.627	3.627	0.0	1.404	571651	2.50		100	5691	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.637	3.633	0.004	1.003	51670	0.2536		101	1206	
D 30 13C2 PFUnA										
565.00 > 520.00	3.637	3.634	0.003	1.407	1682161	2.49		99.5	32258	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.637	3.634	0.003	1.000	186462	0.2249		90.0	400	
563.00 > 169.00	3.637	3.634	0.003	1.000	38148		4.89(2.12-6.36)	90.0	1315	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.792	3.792	0.0	1.285	804413	0.2330		99.0	13958	
D 36 13C2 PFDoA										
615.00 > 570.00	3.928	3.925	0.003	1.520	1396187	2.38		95.4	17277	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.928	3.927	0.001	1.000	145817	0.2411		96.5	45.4	
613.00 > 169.00	3.928	3.927	0.001	1.000	37372		3.90(2.13-6.40)	96.5	608	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.192	4.188	0.004	1.067	128866	0.2448		97.9	41.7	
663.00 > 169.00	4.192	4.188	0.004	1.067	39055		3.30(1.25-3.76)	97.9	312	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.425	4.423	0.002	1.000	31626	0.2425		97.0	380	
713.00 > 219.00	4.415	4.423	-0.008	0.998	22264		1.42(0.71-2.13)	97.0	338	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.425	4.423	0.002	1.713	1210263	2.46		98.5	5695	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.823	4.826	-0.003	1.866	2101845	2.48		99.3	2996	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.832	4.827	0.005	1.002	213563	0.2390		95.6	13.7	
813.00 > 169.00	4.832	4.827	0.005	1.002	37996		5.62(2.86-8.58)	95.6	459	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.165	5.166	-0.001	1.071	215624	0.2494		99.8	69.1	
913.00 > 169.00	5.165	5.166	-0.001	1.071	26376		8.18(3.83-11.48)	99.8	263	

Reagents:

LCPFC_LL3_00005 Amount Added: 1.00 Units: mL

Report Date: 01-Aug-2018 14:59:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_004.d

Injection Date: 01-Aug-2018 13:14:43 Instrument ID: A8_N

Lims ID: IC L3 Full

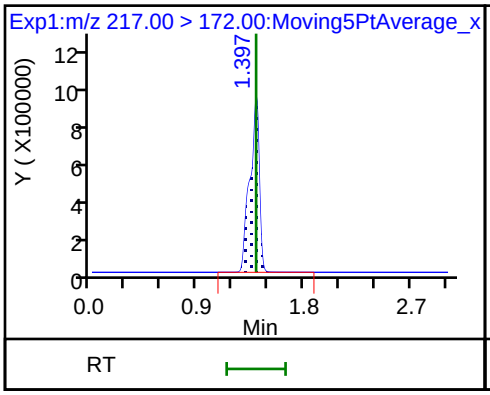
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 12 Worklist Smp#: 4

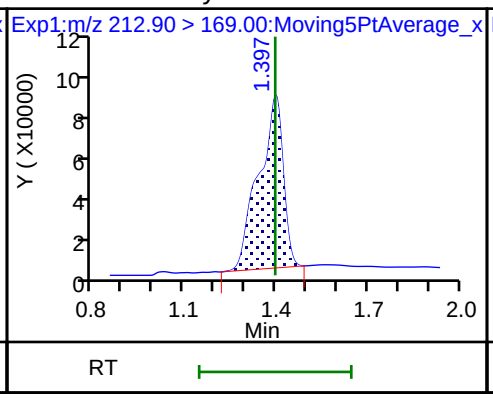
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

D 1 13C4 PFBA



2 Perfluorobutyric acid



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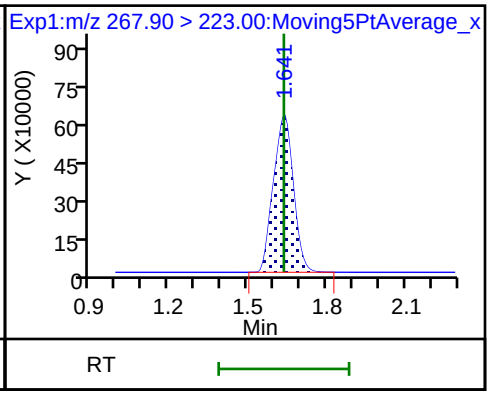

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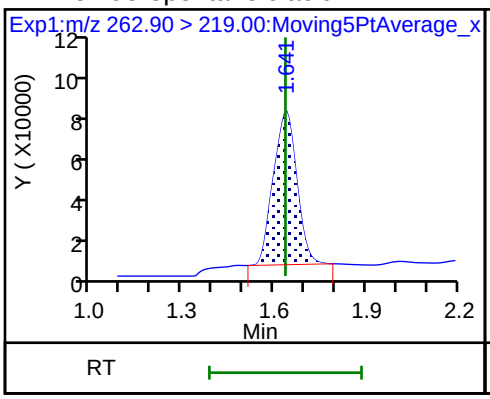
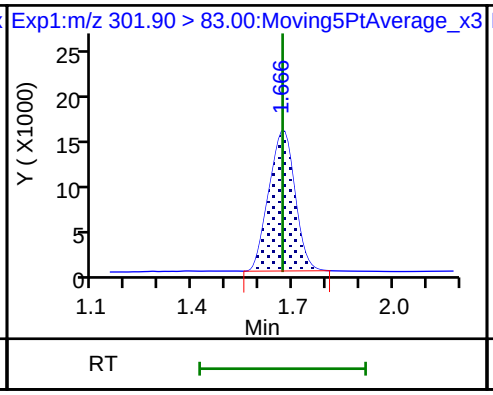
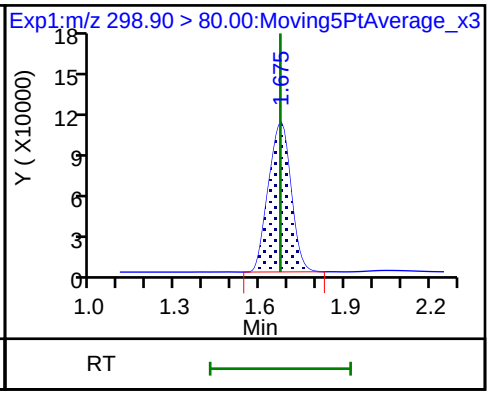


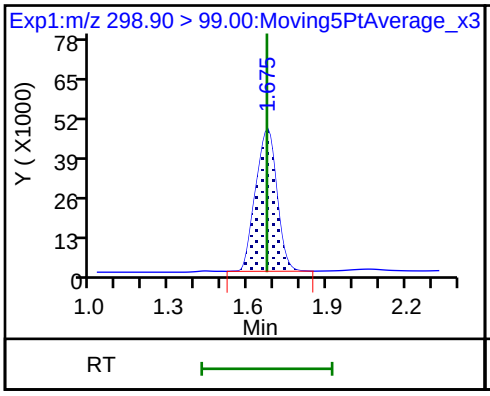
D 47 13C3-PFBS



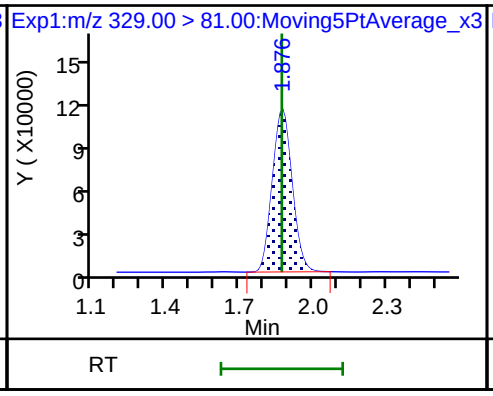
5 Perfluorobutanesulfonic acid



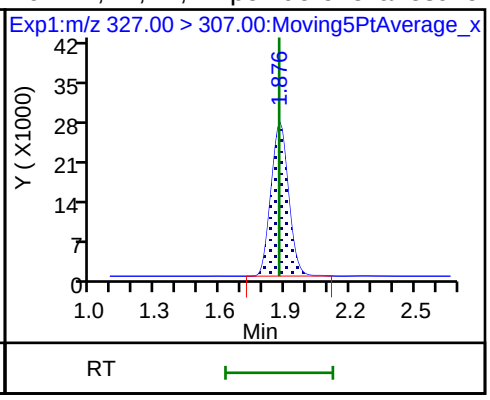
5 Perfluorobutanesulfonic acid



D 60 M2-4:2FTS



61 1H,1H,2H,2H-perfluorohexanesulfoni



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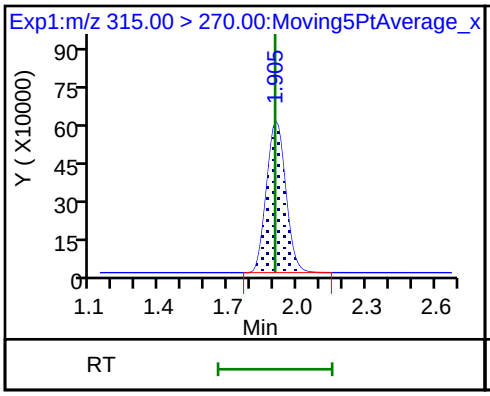

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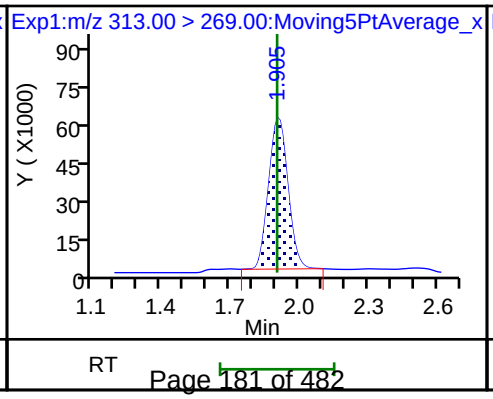

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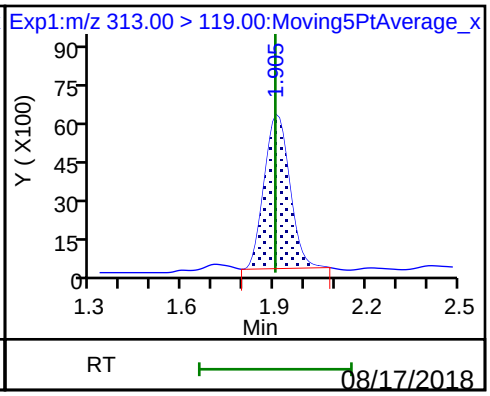

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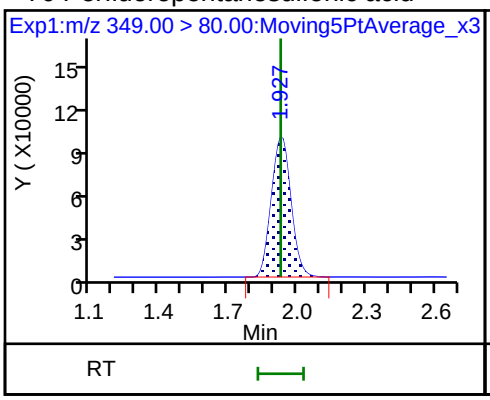

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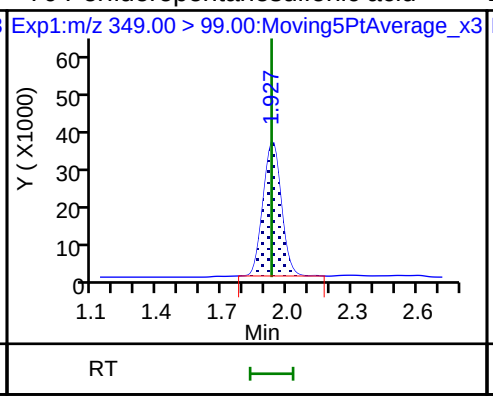
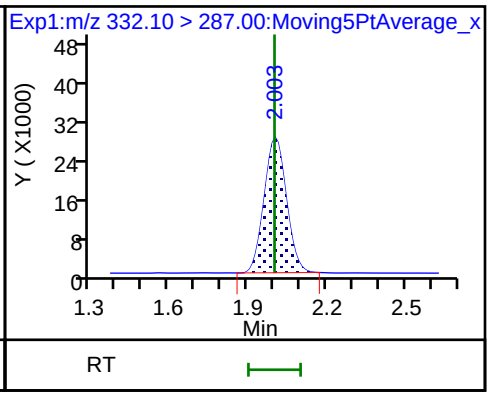
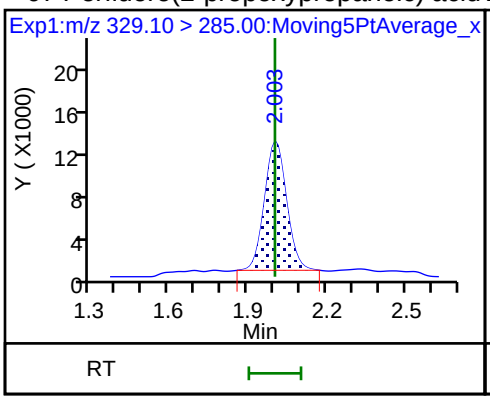


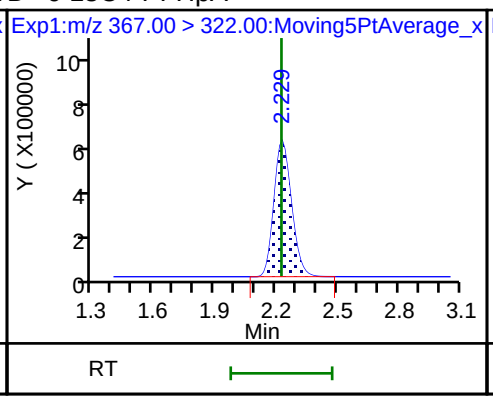
D 64 13C3 HFPO-DA



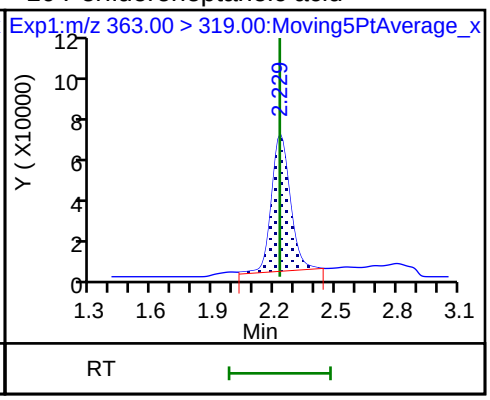
67 Perfluoro(2-propoxypropanoic) acid



D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



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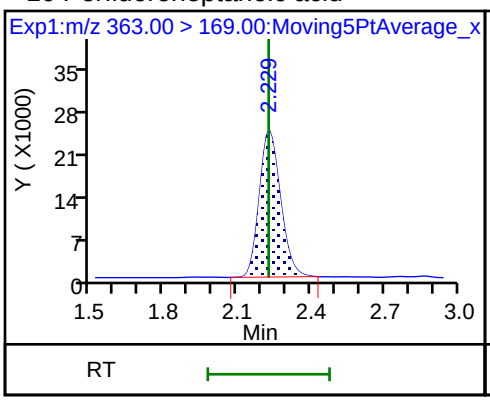
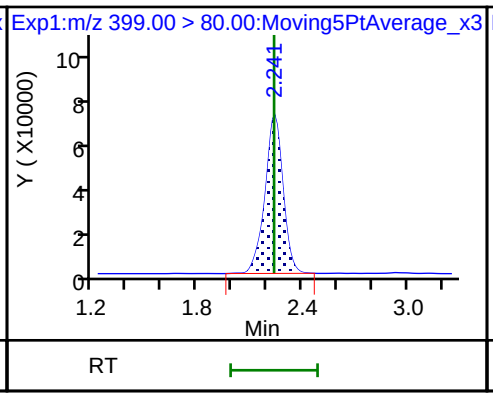


8 Perfluorohexanesulfonic acid



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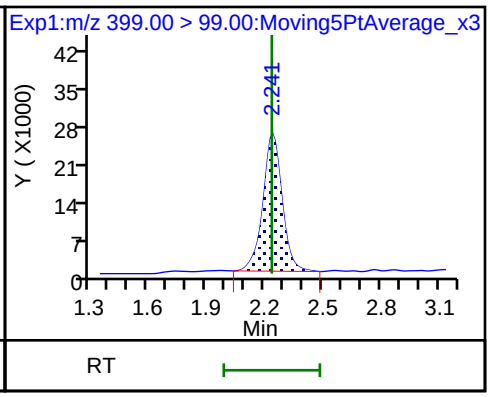
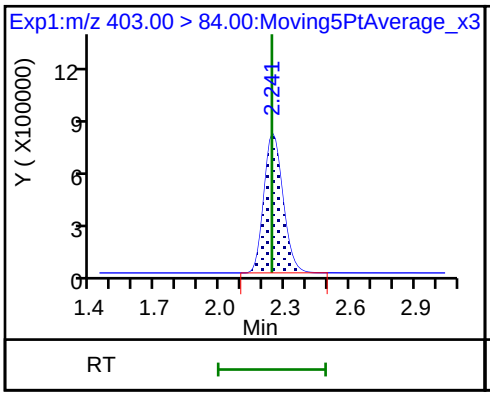


D 11 18O2 PFHxS



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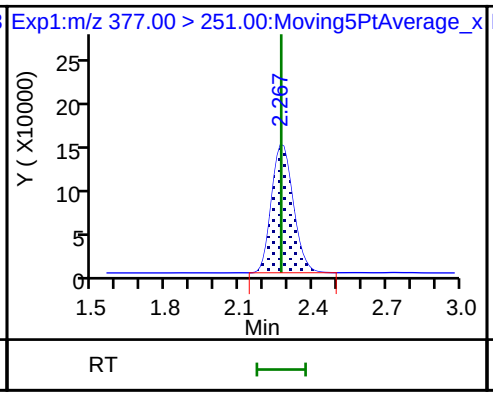

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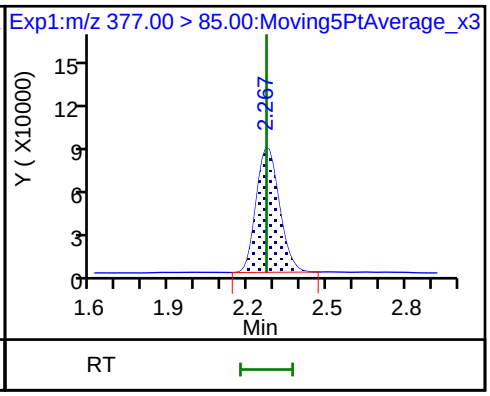
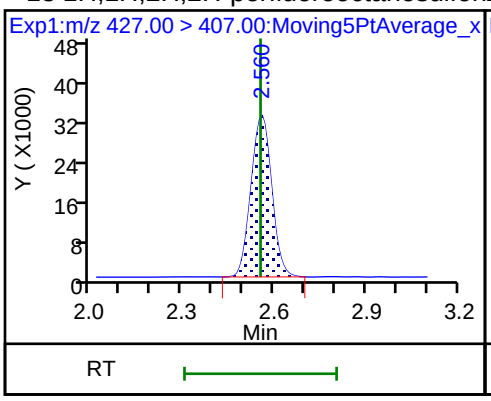
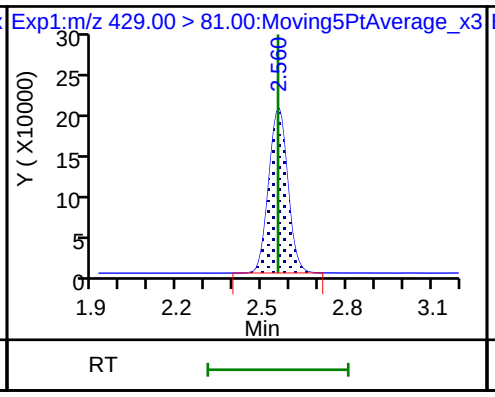


13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS





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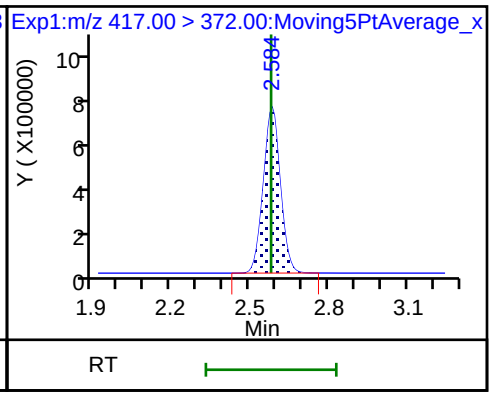

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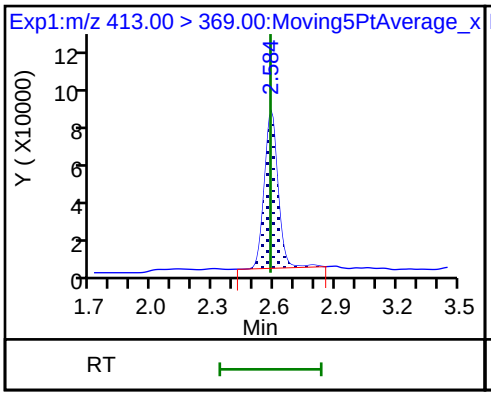

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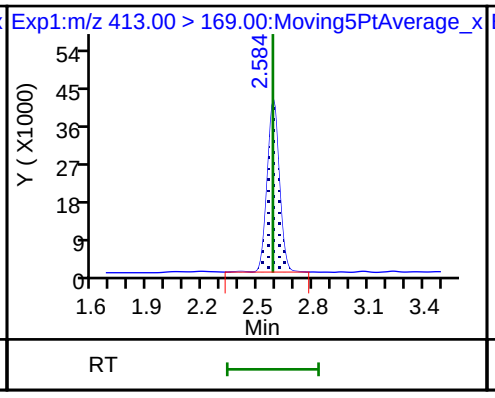
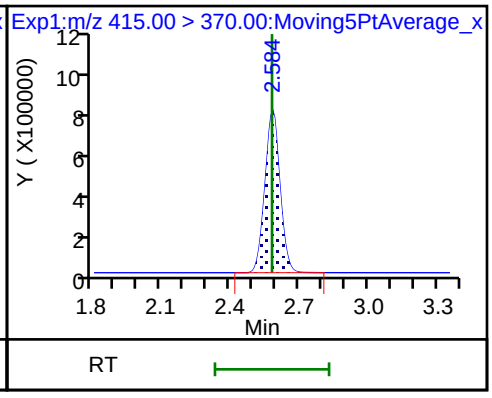
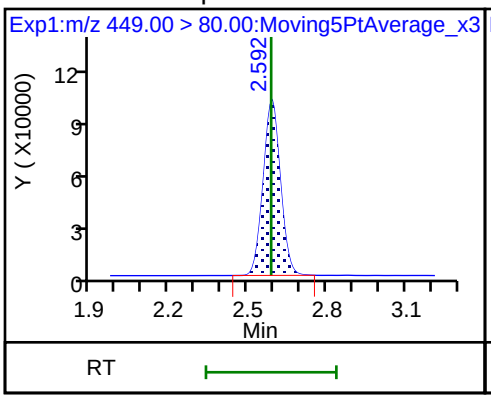


* 62 13C2-PFOA



16 Perfluoroheptanesulfonic acid



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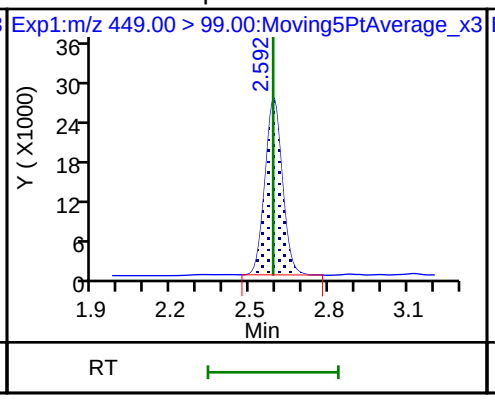

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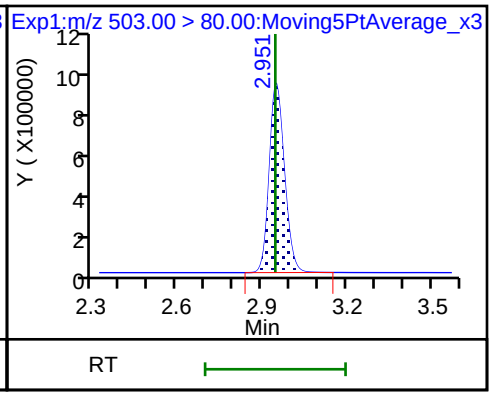

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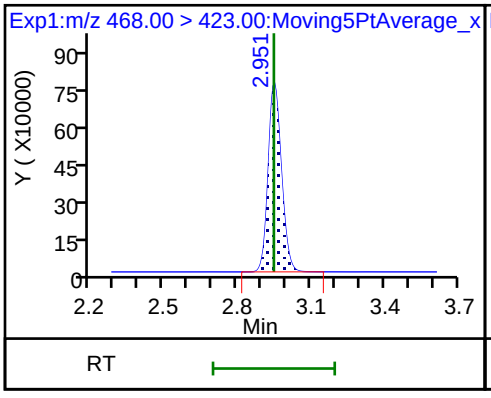

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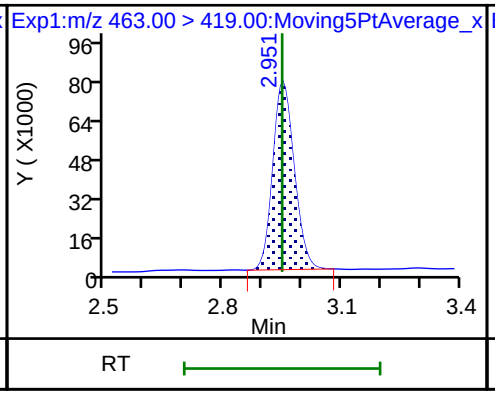

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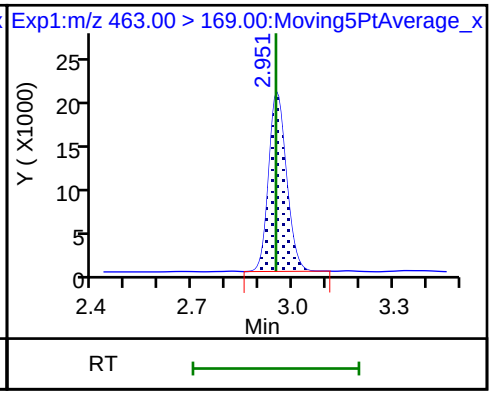
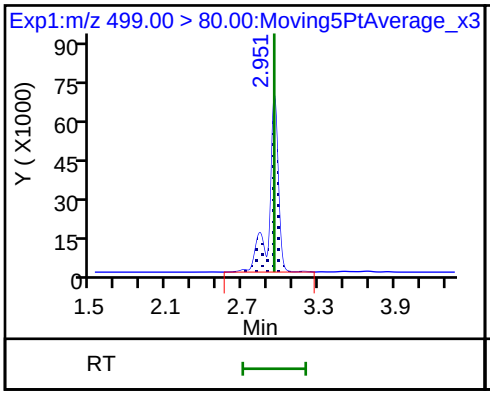


17 Perfluorooctane sulfonic acid



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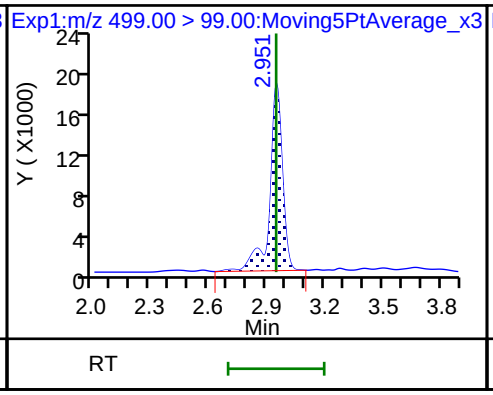
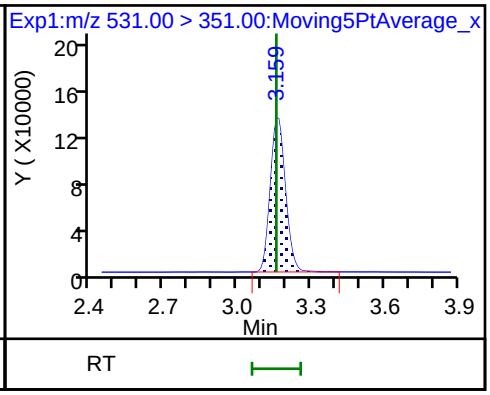
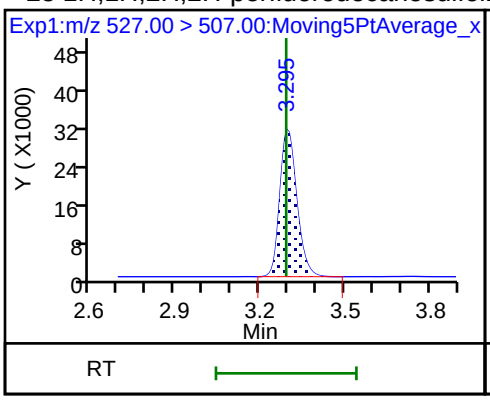


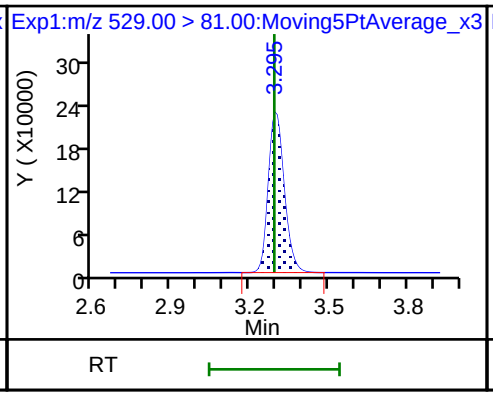
69 9-Chlorohexadecafluoro-3-oxanonane



25 1H,1H,2H,2H-perfluorodecanesulfon



D 26 M2-8:2FTS



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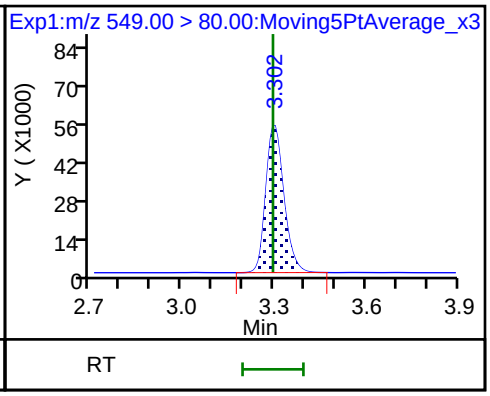

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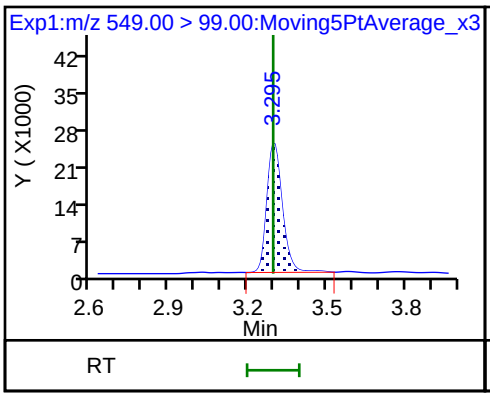
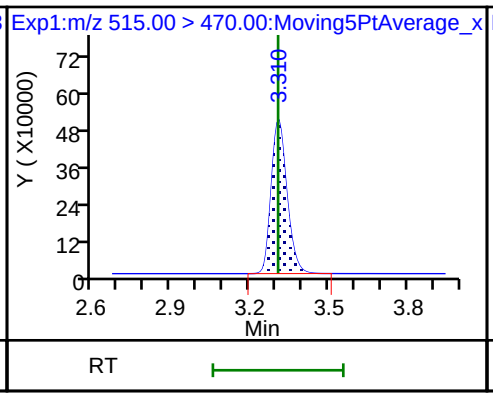
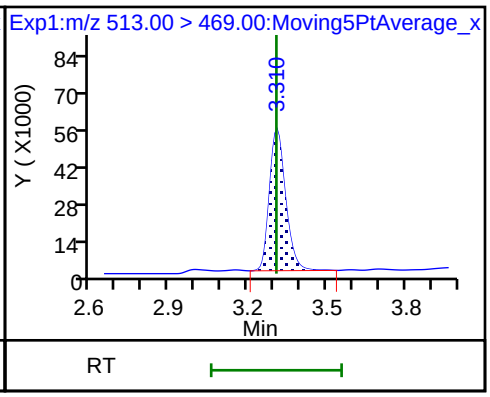


D 23 13C2 PFDA



24 Perfluorodecanoic acid



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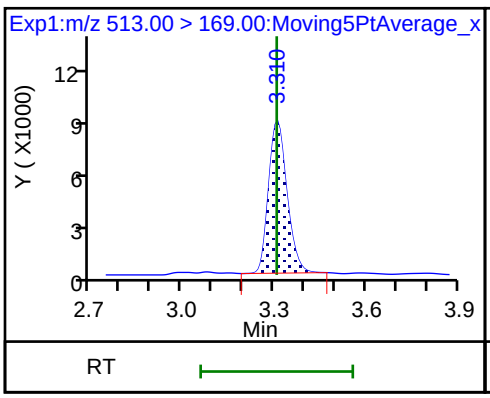
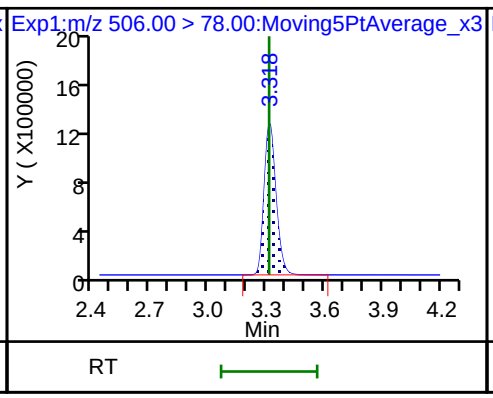
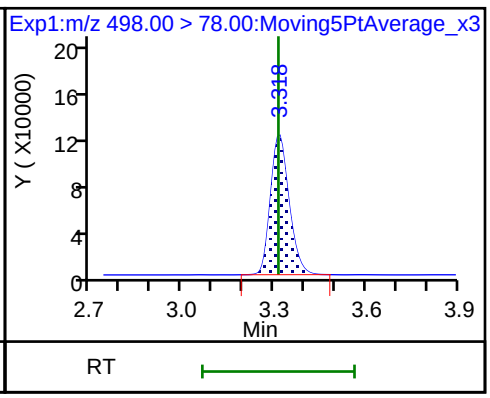


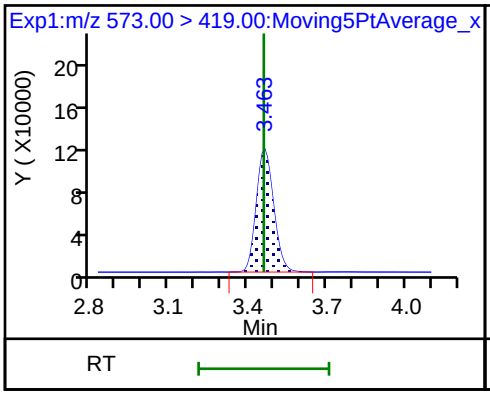
D 21 13C8 FOSA



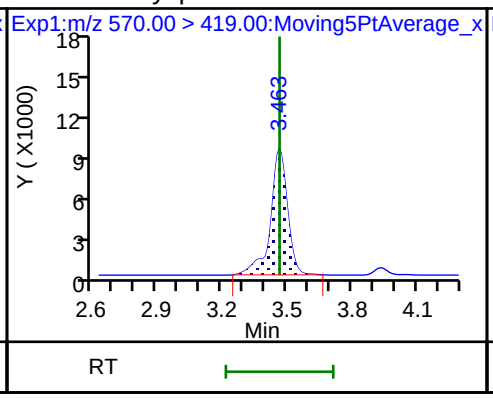
22 Perfluorooctane Sulfonamide



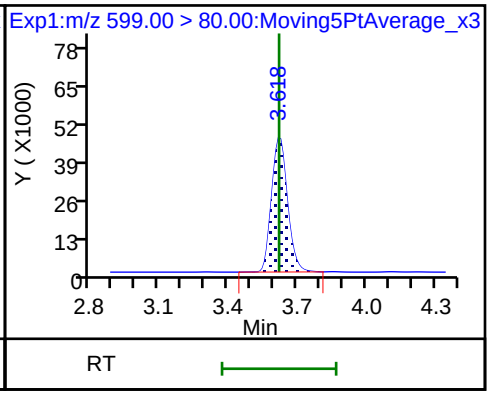
D 27 d3-NMeFOSAA



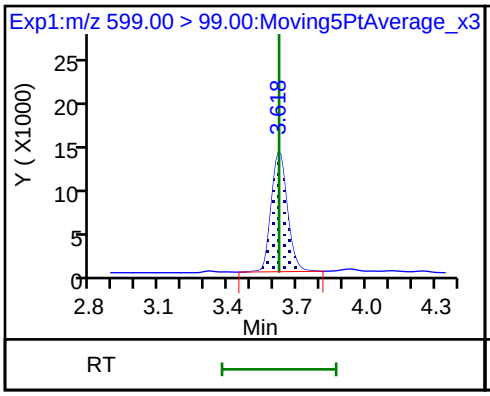
28 N-methyl perfluorooctane sulfonami



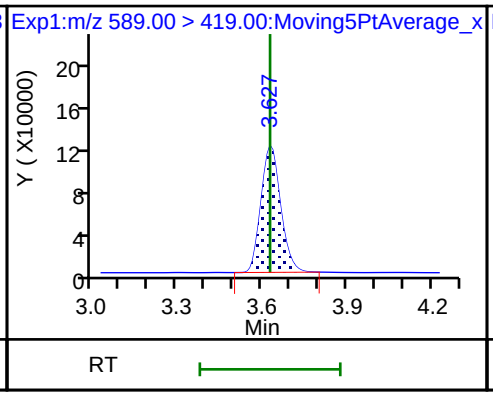
29 Perfluorodecane Sulfonic acid



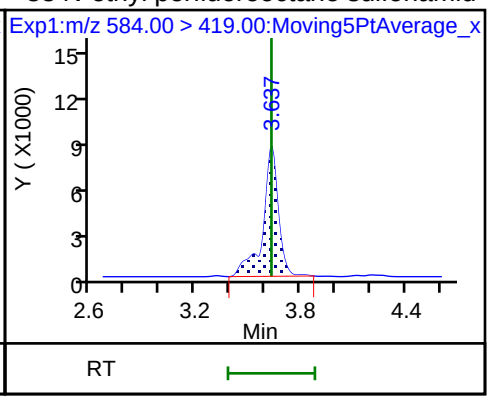
29 Perfluorodecane Sulfonic acid



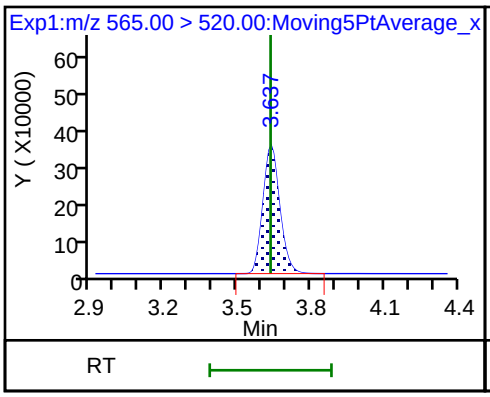
D 32 d5-NEtFOSAA



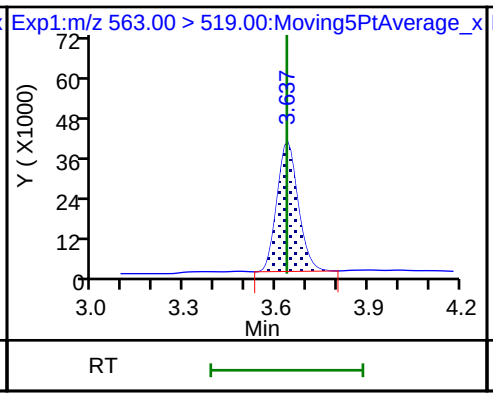
33 N-ethyl perfluorooctane sulfonamid



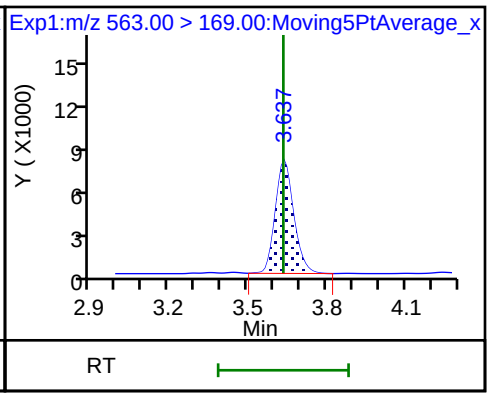
D 30 13C2 PFUnA



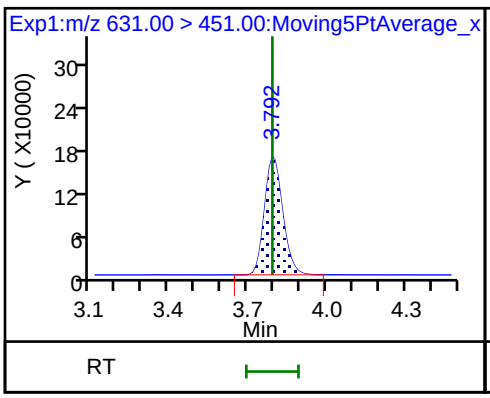
31 Perfluoroundecanoic acid



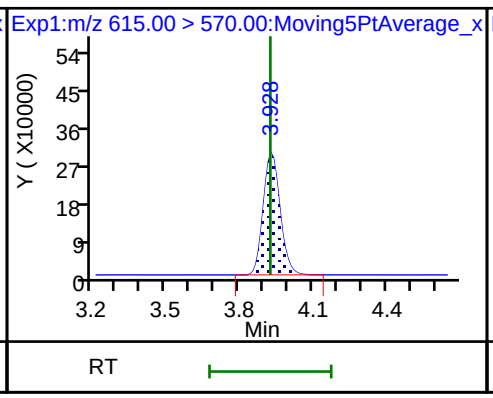
31 Perfluoroundecanoic acid



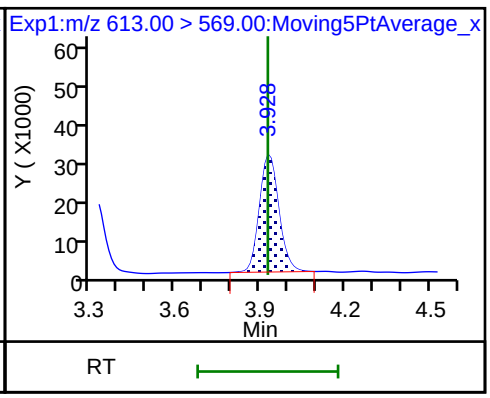
66 11-Chloroeicosafluoro-3-oxaundecan



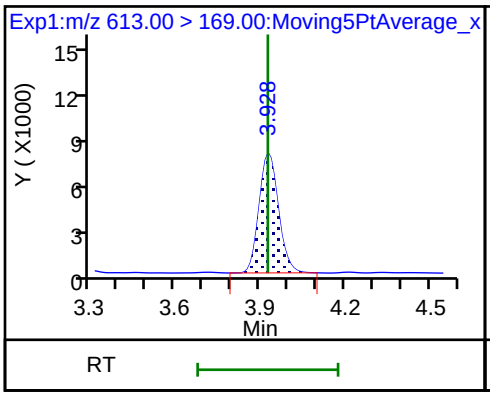
D 36 13C2 PFDoA



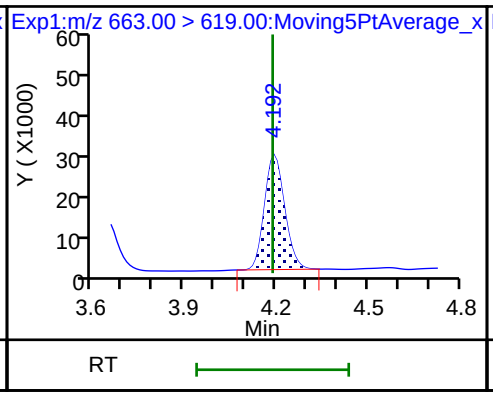
37 Perfluorododecanoic acid



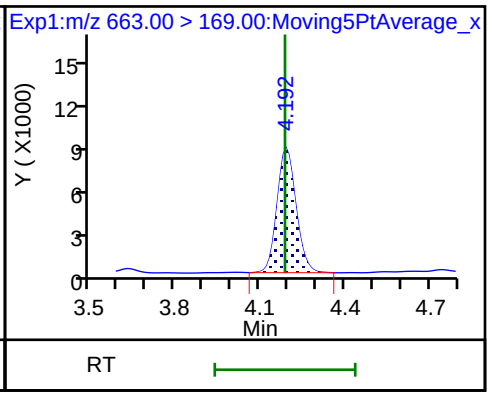
37 Perfluorododecanoic acid



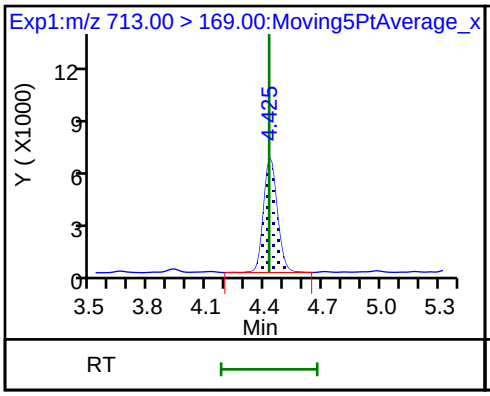
41 Perfluorotridecanoic acid



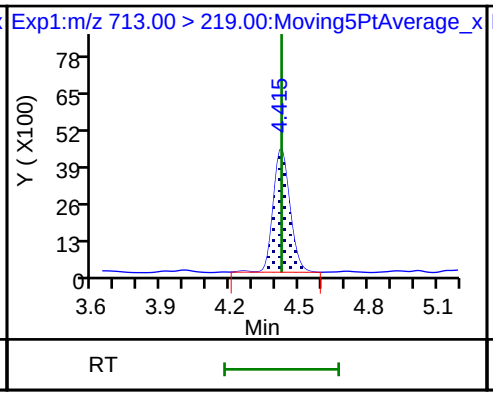
41 Perfluorotridecanoic acid



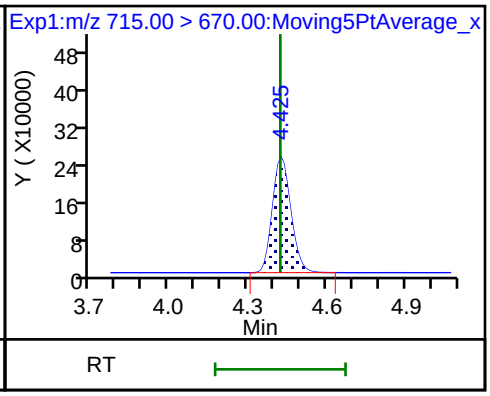
42 Perfluorotetradecanoic acid



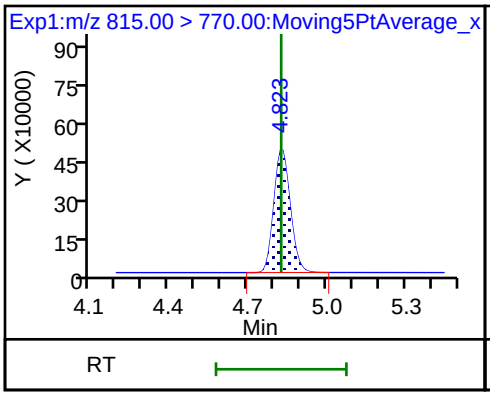
42 Perfluorotetradecanoic acid



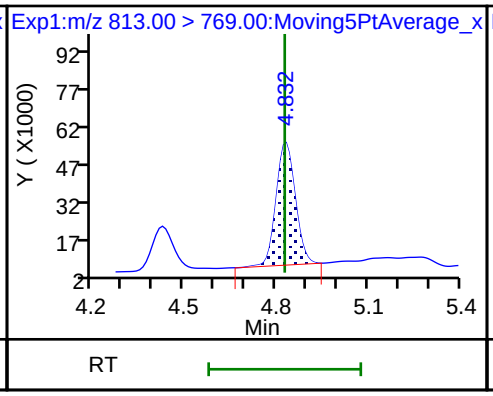
D 43 13C2-PFTeDA



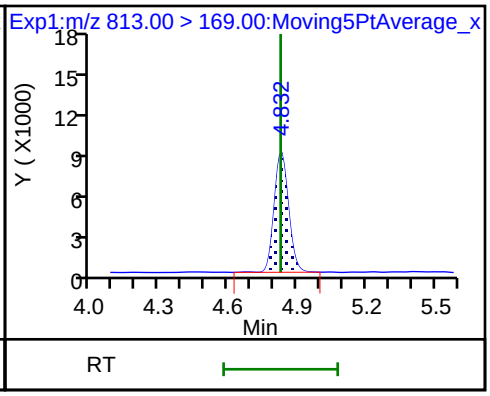
D 44 13C2-PFHxDA



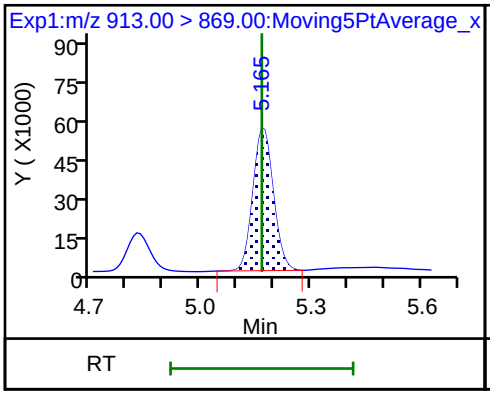
45 Perfluorohexadecanoic acid



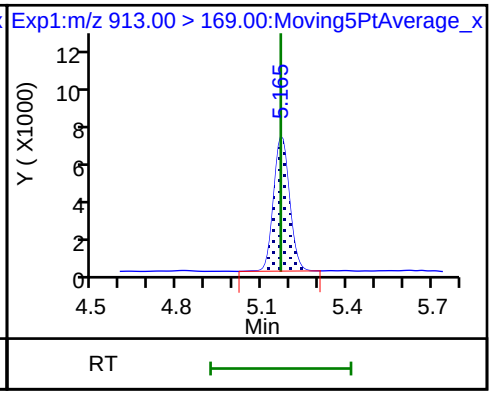
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_005.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 01-Aug-2018 13:22:33 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L4-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 01-Aug-2018 14:59:47 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK022

First Level Reviewer: roycea Date: 01-Aug-2018 14:33:45

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.395	-0.003	0.539	4799715	2.43		97.4	74573	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.396	-0.005	1.000	1847519	0.9765		97.7	458	
D 3 13C5-PFPeA										
267.90 > 223.00	1.633	1.636	-0.003	0.633	3202919	2.47		98.7	50580	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.633	1.636	-0.003	1.000	1460012	0.9518		95.2	576	
D 47 13C3-PFBS										
301.90 > 83.00	1.666	1.669	-0.003	0.645	82758	2.22		95.3	322	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.666	1.671	-0.005	1.000	2456709	0.9005		102	11704	
298.90 > 99.00	1.666	1.671	-0.005	1.000	1020887		2.41(1.25-3.74)	102	4237	
D 60 M2-4:2FTS										
329.00 > 81.00	1.866	1.872	-0.006	0.723	609520	2.31		99.0	7261	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.866	1.872	-0.006	1.120	616866	1.01		108	27741	
D 7 13C2 PFHxA										
315.00 > 270.00	1.905	1.903	0.002	0.738	3471025	2.47		98.8	74585	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.905	1.903	0.002	1.000	1444908	0.9868		98.7	2675	
313.00 > 119.00	1.905	1.903	0.002	1.000	130079		11.11(5.03-15.10)	98.7	1229	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.927	1.928	-0.001	1.157	2331146	0.9680		103	28507	
349.00 > 99.00	1.927	1.928	-0.001	1.157	858927		2.71(1.36-4.07)	103	3854	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.992	2.000	-0.008	0.772	146564	2.23		89.1	4135	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.003	2.002	0.001	1.006	252051	1.07		107	970	
D 9 13C4-PFHpA										
367.00 > 322.00	2.218	2.225	-0.007	0.859	3335466	2.45		98.0	92739	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.229	2.226	0.003	1.005	1576104	1.02		102	710	
363.00 > 169.00	2.218	2.226	-0.008	1.000	581246		2.71(1.13-3.40)	102	4223	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.229	2.237	-0.008	0.995	1939177	0.8396		92.3	8693	
399.00 > 99.00	2.229	2.237	-0.008	0.995	684304		2.83(1.50-4.49)	92.3	1083	
D 11 18O2 PFHxS										
403.00 > 84.00	2.241	2.238	0.003	0.868	4725288	2.31		97.6	51826	
65 ADONA										
377.00 > 251.00	2.267	2.270	-0.003	0.771	3740044	0.9696		103	26879	
377.00 > 85.00	2.267	2.270	-0.003	0.771	2140747		1.75(0.84-2.53)	103	8829	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.547	2.554	-0.007	0.996	625589	0.9789		103	10144	
D 12 M2-6:2FTS										
429.00 > 81.00	2.556	2.556	0.0	0.990	917820	2.30		96.9	11454	
D 14 13C4 PFOA										
417.00 > 372.00	2.581	2.580	0.001	1.000	3268736	2.49		99.4	58647	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.581	2.581	0.0	1.000	1480871	0.9796		97.9	834	
413.00 > 169.00	2.581	2.581	0.0	1.000	778244		1.90(0.84-2.52)	97.9	4099	
* 62 13C2-PFOA										
415.00 > 370.00	2.581	2.581	0.0		3424441	2.50			49930	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.589	2.587	0.002	0.880	1744730	0.9139		96.0	21103	
449.00 > 99.00	2.589	2.587	0.002	0.880	476758		3.66(1.94-5.82)	96.0	5417	
D 18 13C4 PFOS										
503.00 > 80.00	2.943	2.946	-0.003	1.140	3300872	2.33		97.7	52168	
D 19 13C5 PFNA										
468.00 > 423.00	2.949	2.948	0.001	1.142	2848081	2.49		99.4	53985	
20 Perfluorononanoic acid										
463.00 > 419.00	2.949	2.949	0.0	1.000	1231102	1.00		100	2303	
463.00 > 169.00	2.949	2.949	0.0	1.000	308292		3.99(1.90-5.69)	100	10022	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.949	2.949	0.0	1.002	1377557	0.8885		95.7	9043	M
499.00 > 99.00	2.943	2.949	-0.006	1.000	324464		4.25(2.31-6.93)	95.7	1831	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.156	3.158	-0.002	1.073	2289912	0.9282		99.6	22851	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.292	3.292	0.0	1.000	498832	0.9366		97.8	30068	
D 26 M2-8:2FTS										
529.00 > 81.00	3.292	3.292	0.0	1.275	944062	2.43		101	16371	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.292	3.295	-0.003	1.119	954403	0.9615		100	23863	
549.00 > 99.00	3.292	3.295	-0.003	1.119	369759		2.58(1.33-3.97)	100	2430	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.308	3.306	0.002	1.282	2165508	2.53		101	52188	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.308	3.308	0.0	1.000	899636	0.9730		97.3	1260	
513.00 > 169.00	3.308	3.308	0.0	1.000	160313		5.61(2.36-7.09)	97.3	2251	
D 21 13C8 FOSA										
506.00 > 78.00	3.308	3.312	-0.004	1.282	5088363	2.45		98.0	41666	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.315	3.313	0.002	1.002	2053736	1.02		102	25672	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.460	3.459	0.001	1.340	491188	2.36		94.5	21413	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.460	3.465	-0.005	1.000	199395	1.00		99.8	2768	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.624	3.620	0.004	1.232	822043	0.9151		94.9	24438	
599.00 > 99.00	3.614	3.620	-0.006	1.228	292040		2.81(1.39-4.16)	94.9	2192	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.624	3.627	-0.003	1.404	559410	2.51		100	6051	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.634	3.633	0.001	1.003	206227	1.03		103	3971	
D 30 13C2 PFUnA										
565.00 > 520.00	3.634	3.634	0.0	1.408	1631762	2.47		98.9	42516	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.634	3.634	0.0	1.000	764538	0.9505		95.1	1912	
563.00 > 169.00	3.634	3.634	0.0	1.000	135245		5.65(2.12-6.36)	95.1	4704	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.789	3.792	-0.003	1.287	3369008	1.00		106	63395	
D 36 13C2 PFDoA										
615.00 > 570.00	3.924	3.925	-0.001	1.520	1429399	2.50		100	18712	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.924	3.927	-0.003	1.000	594065	0.9596		96.0	186	
613.00 > 169.00	3.924	3.927	-0.003	1.000	139893		4.25(2.13-6.40)	96.0	1975	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.189	4.188	0.001	1.067	516294	0.9582		95.8	170	
663.00 > 169.00	4.189	4.188	0.001	1.067	156240		3.30(1.25-3.76)	95.8	1002	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.424	4.423	0.001	1.000	119786	0.9564		95.6	1904	
713.00 > 219.00	4.424	4.423	0.001	1.000	84842		1.41(0.71-2.13)	95.6	1434	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.424	4.423	0.001	1.714	1162431	2.42		96.9	6005	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.822	4.826	-0.004	1.868	1831086	2.22		88.6	2796	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.822	4.827	-0.005	1.000	733744	1.01		101	46.2	
813.00 > 169.00	4.822	4.827	-0.005	1.000	117618		6.24(2.86-8.58)	101	1277	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.164	5.166	-0.002	1.071	751756	1.00		99.8	248	
913.00 > 169.00	5.164	5.166	-0.002	1.071	91329		8.23(3.83-11.48)	99.8	984	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00005 Amount Added: 1.00 Units: mL

Report Date: 01-Aug-2018 14:59:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_005.d

Injection Date: 01-Aug-2018 13:22:33 Instrument ID: A8_N

Lims ID: IC L4 Full

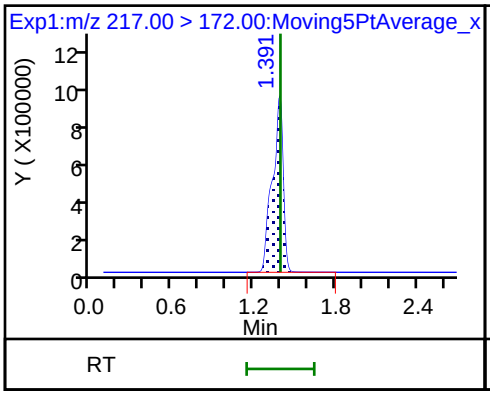
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 5

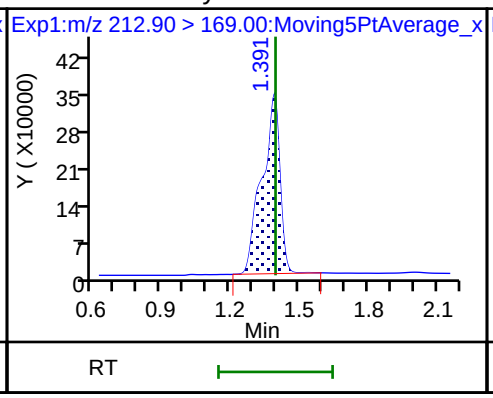
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

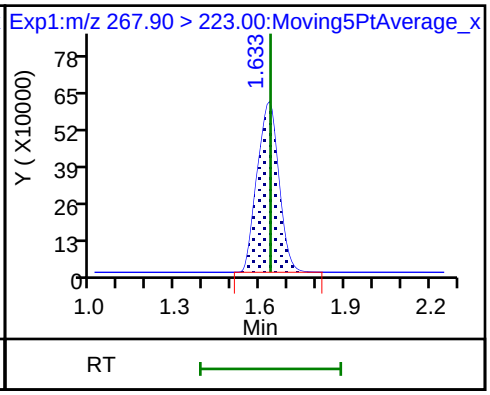
D 1 13C4 PFBA



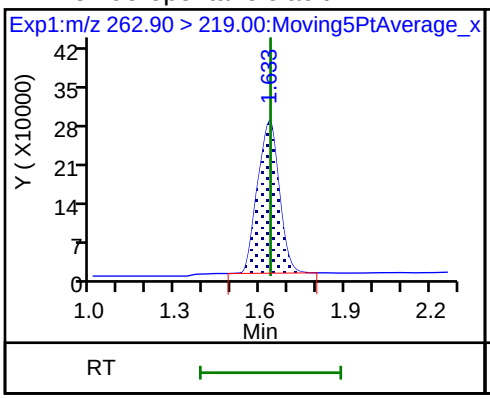
2 Perfluorobutyric acid



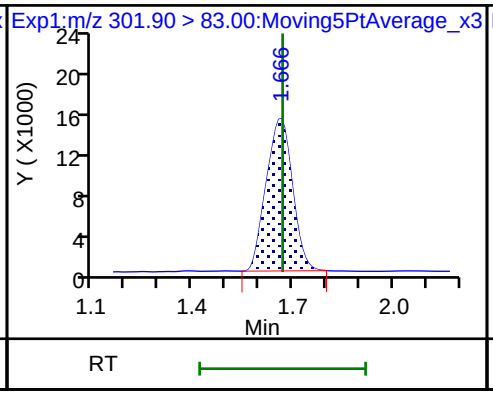
D 3 13C5-PFPeA



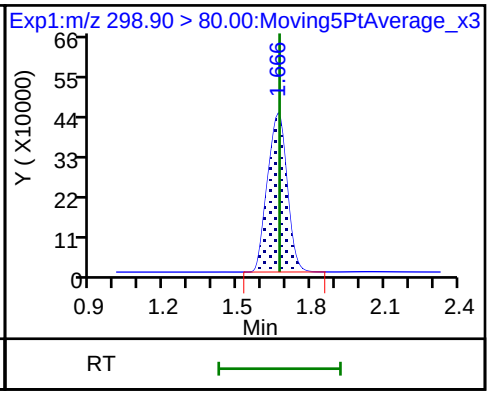
4 Perfluoropentanoic acid



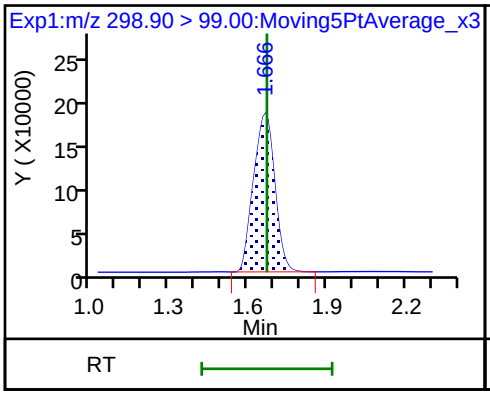
D 47 13C3-PFBS



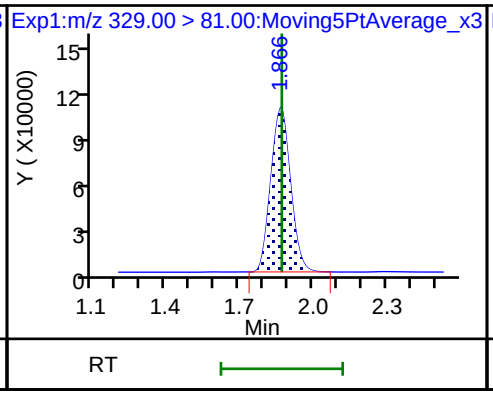
5 Perfluorobutanesulfonic acid



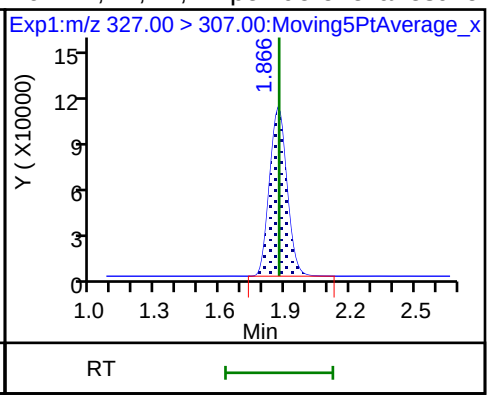
5 Perfluorobutanesulfonic acid



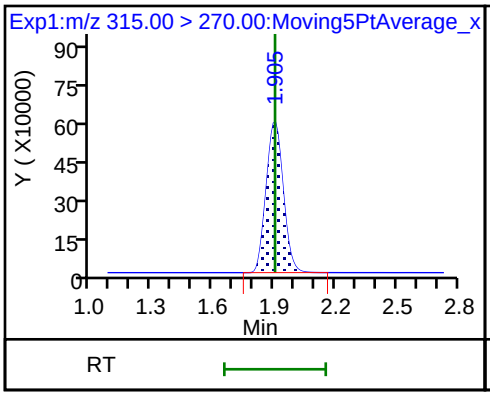
D 60 M2-4:2FTS



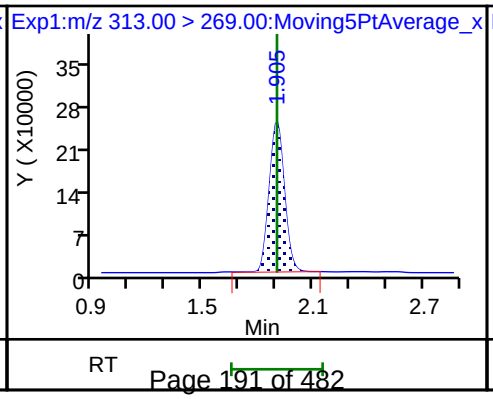
61 1H,1H,2H,2H-perfluorohexanesulfoni



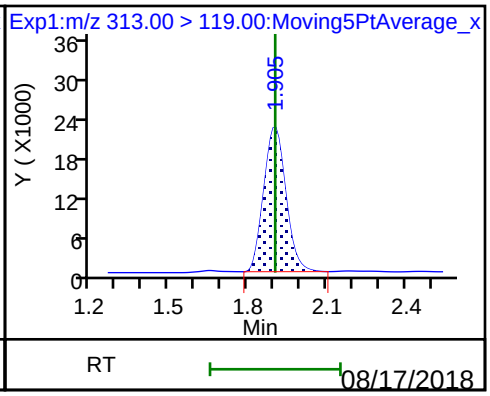
D 7 13C2 PFHxA



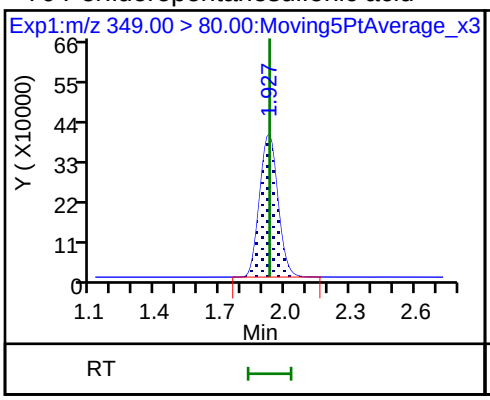
6 Perfluorohexanoic acid



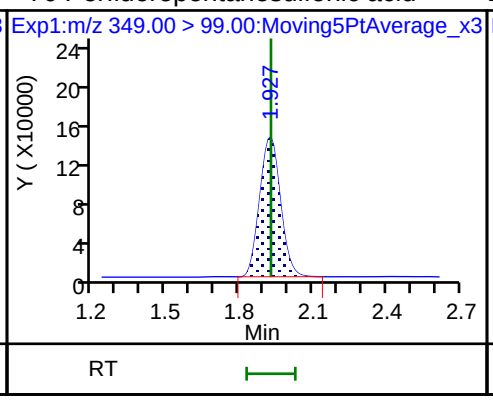
6 Perfluorohexanoic acid



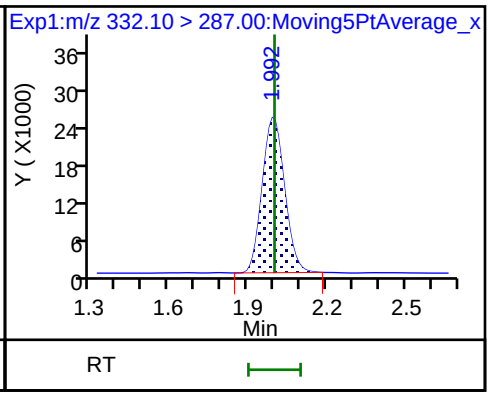
70 Perfluoropentanesulfonic acid



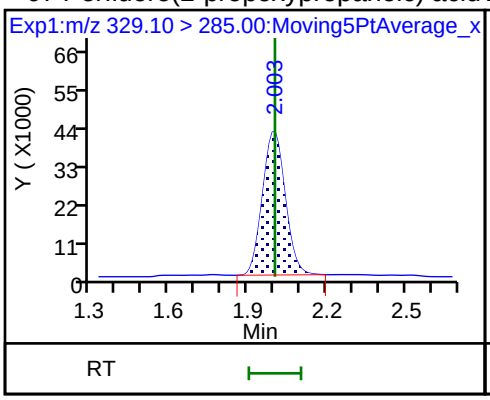
70 Perfluoropentanesulfonic acid



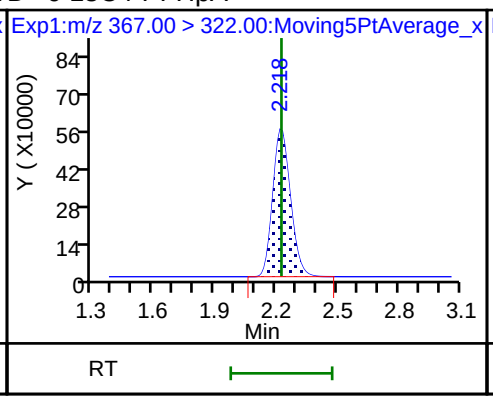
D 64 13C3 HFPO-DA



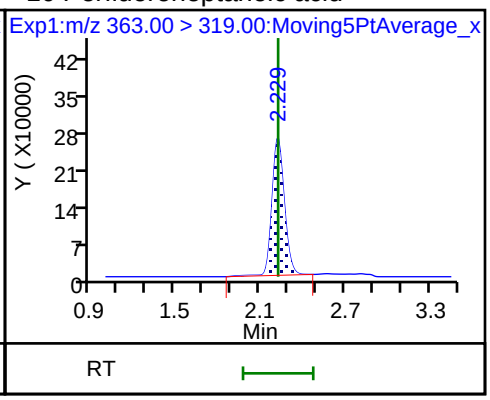
67 Perfluoro(2-propoxypropanoic) acid



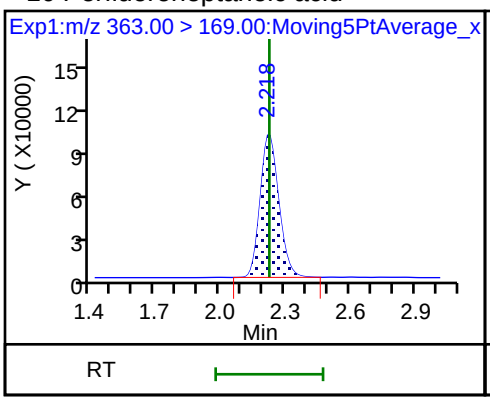
D 9 13C4-PFHpA



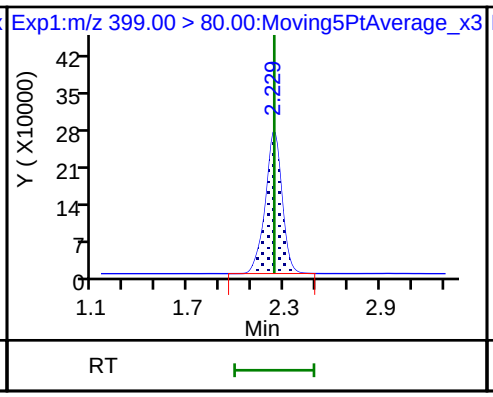
10 Perfluoroheptanoic acid



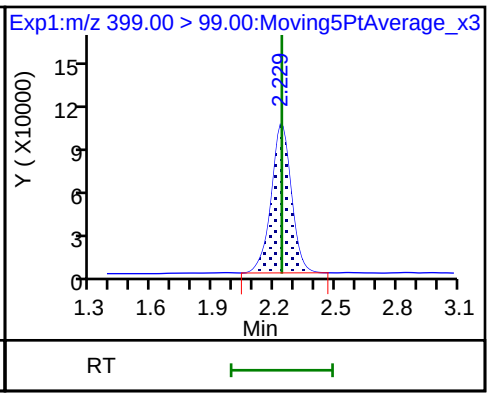
10 Perfluoroheptanoic acid



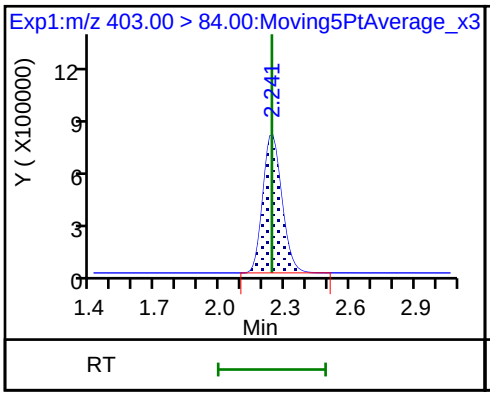
8 Perfluorohexanesulfonic acid



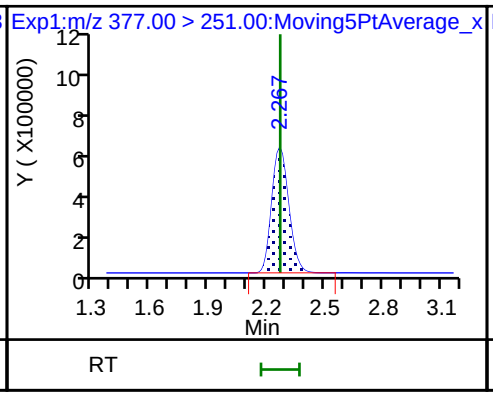
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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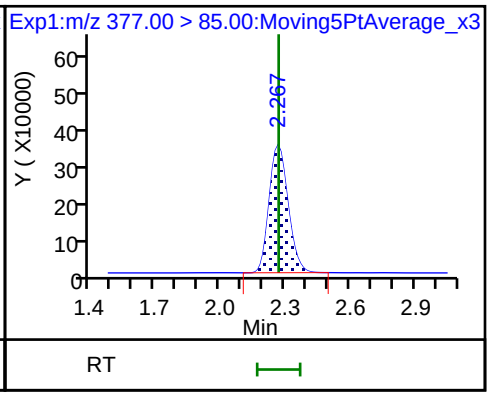
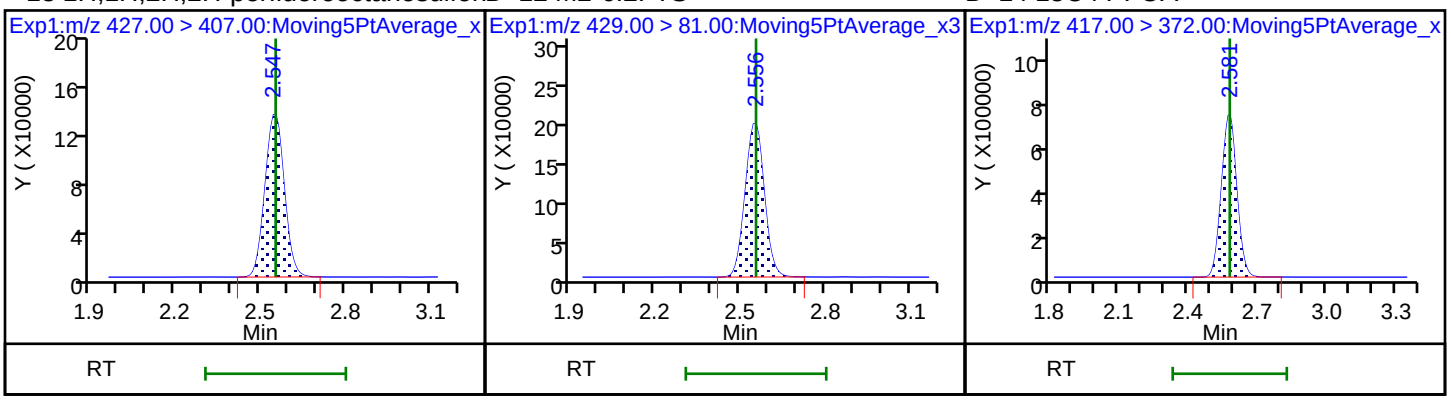
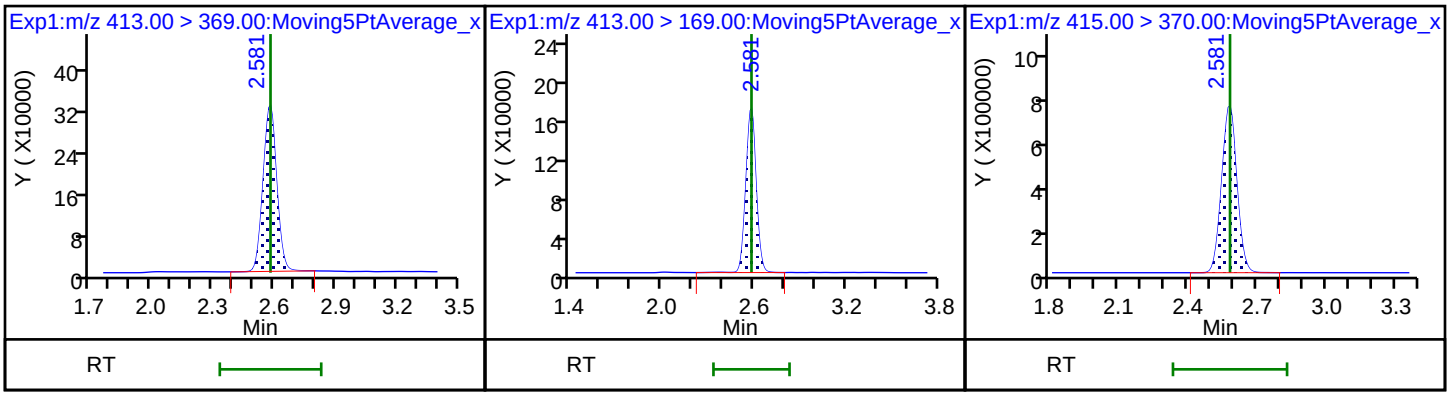


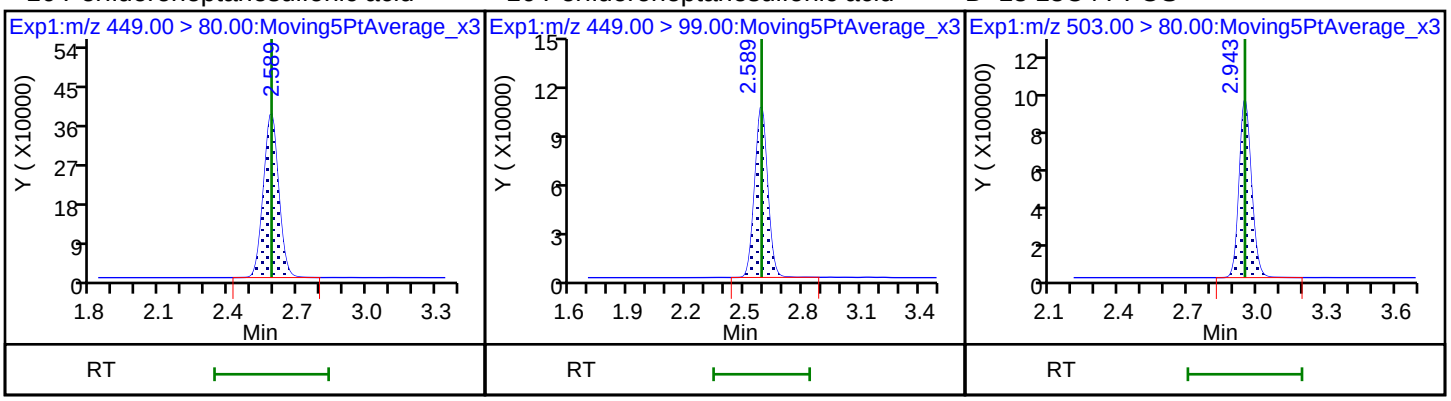
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 14 13C4 PFOA



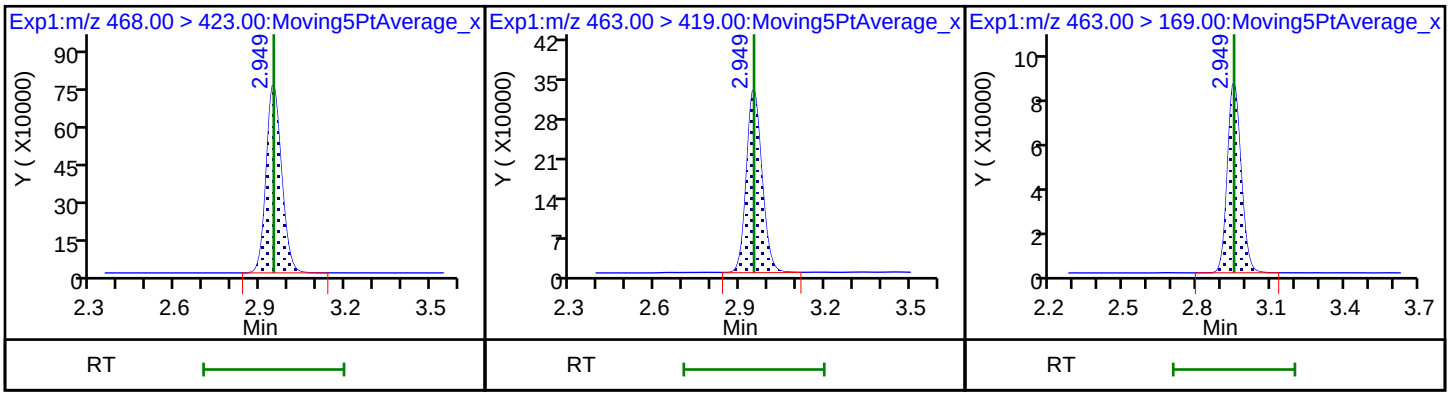
15 Perfluorooctanoic acid 15 Perfluorooctanoic acid * 62 13C2-PFOA



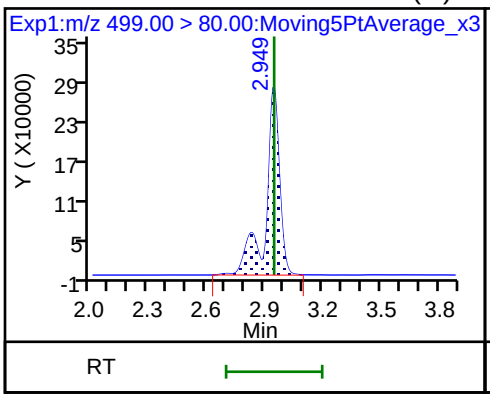
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 18 13C4 PFOS



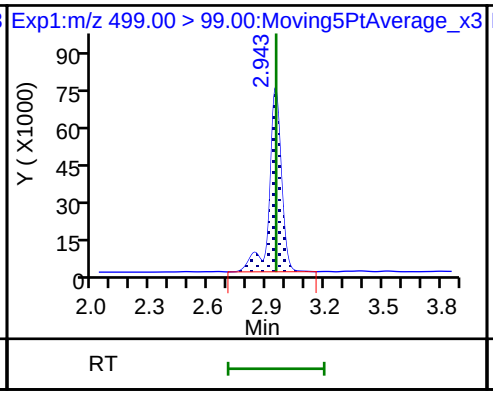
D 19 13C5 PFNA 20 Perfluorononanoic acid 20 Perfluorononanoic acid



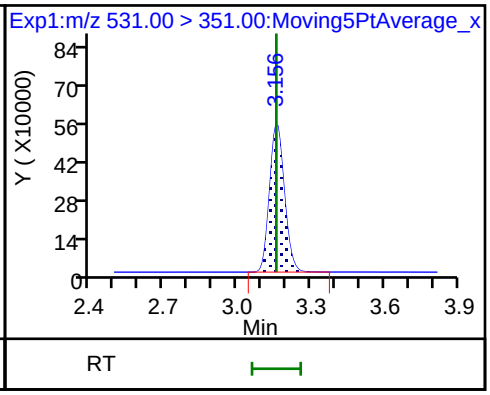
17 Perfluorooctane sulfonic acid (M)



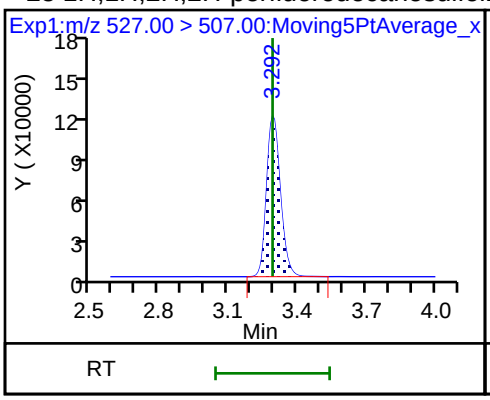
17 Perfluorooctane sulfonic acid



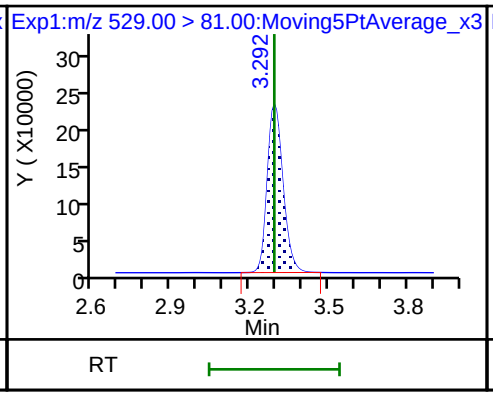
69 9-Chlorohexadecafluoro-3-oxanonane



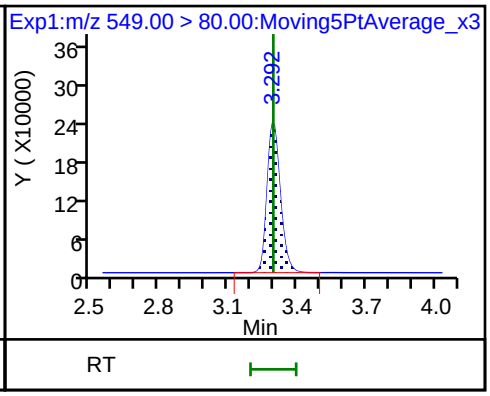
25 1H,1H,2H-perfluorodecanesulfon



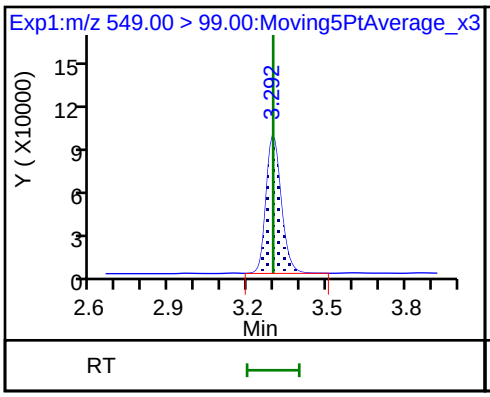
D 26 M2-8:2FTS



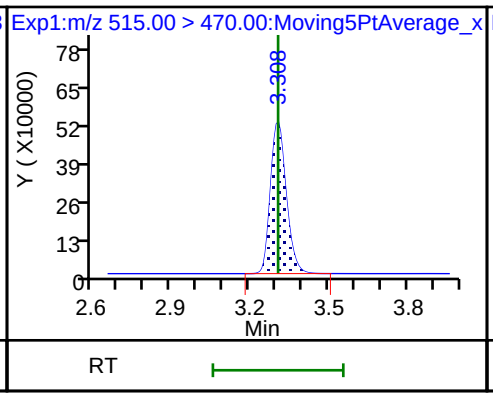
68 Perfluorononanesulfonic acid



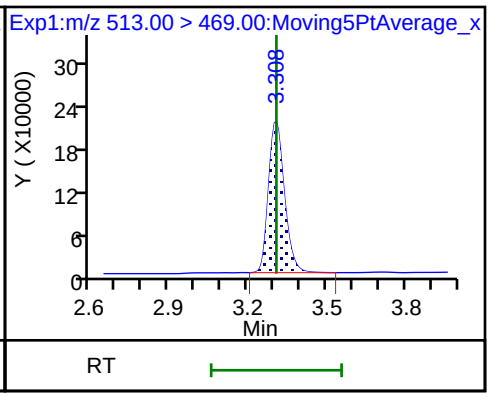
68 Perfluorononanesulfonic acid



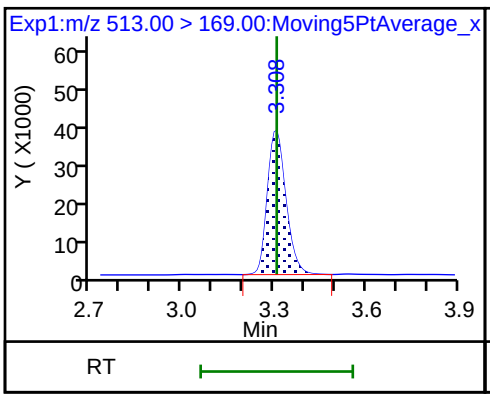
D 23 13C2 PFDA



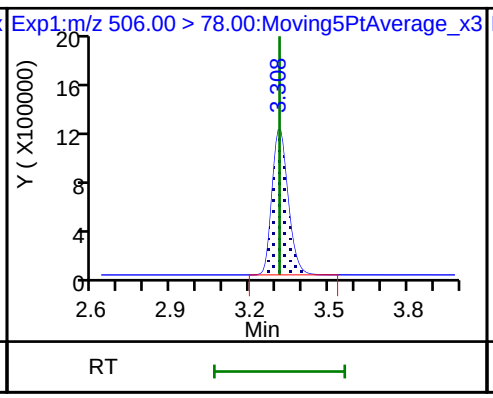
24 Perfluorodecanoic acid



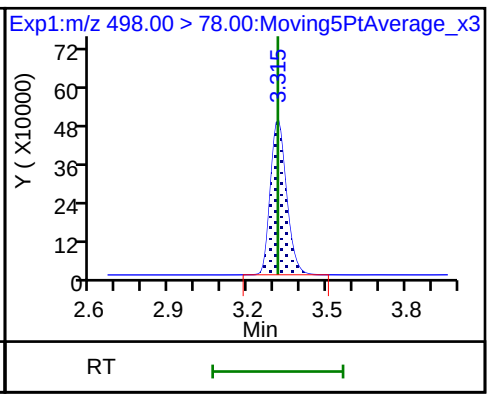
24 Perfluorodecanoic acid



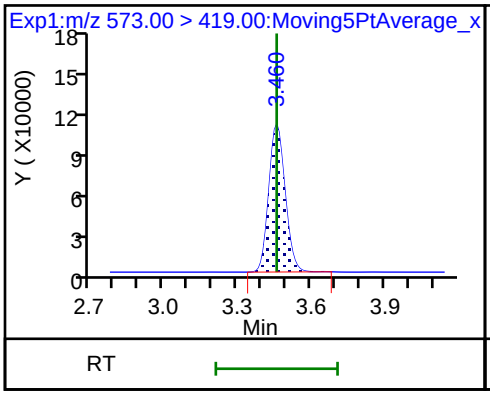
D 21 13C8 FOSA



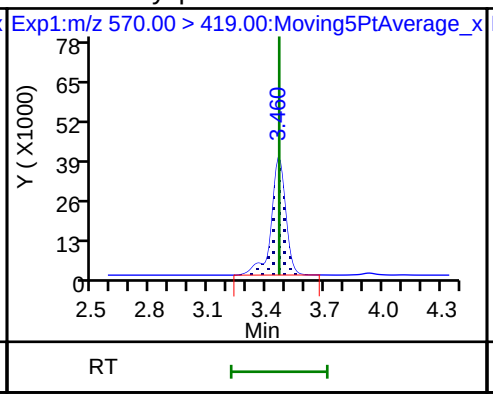
22 Perfluorooctane Sulfonamide



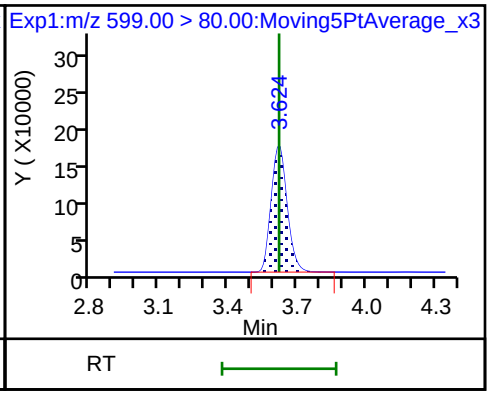
D 27 d3-NMeFOSAA



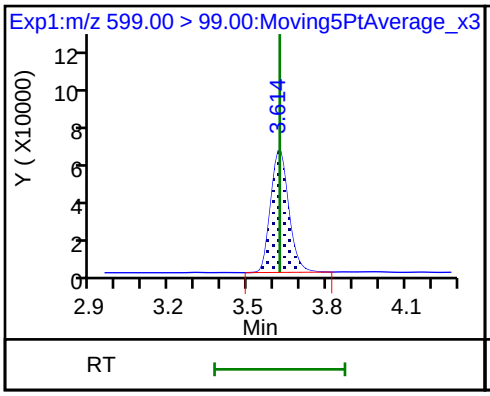
28 N-methyl perfluorooctane sulfonami



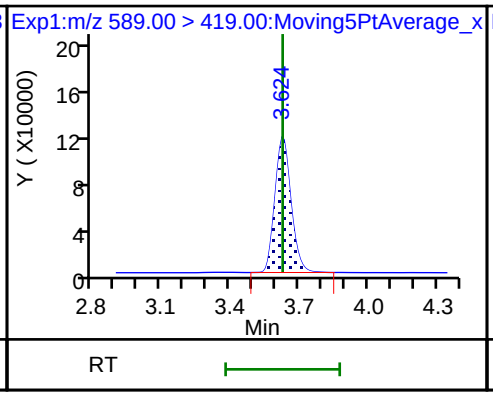
29 Perfluorodecane Sulfonic acid



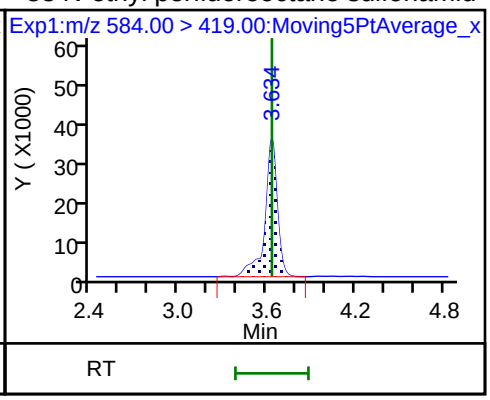
29 Perfluorodecane Sulfonic acid



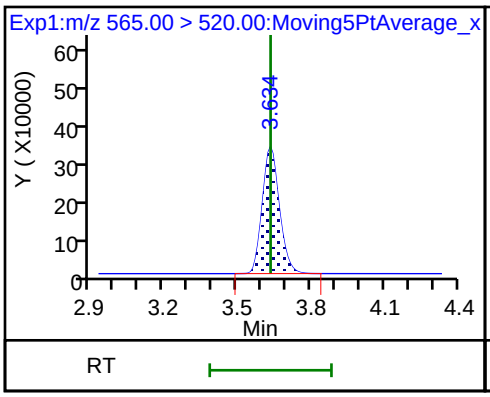
D 32 d5-NEtFOSAA



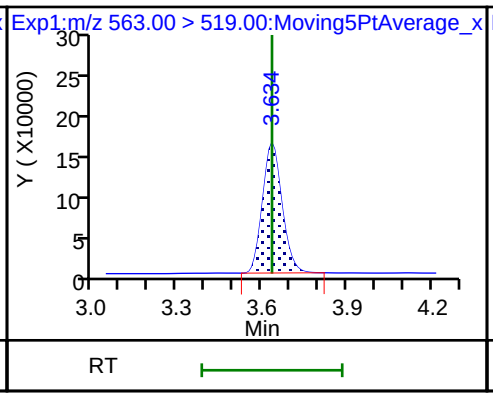
33 N-ethyl perfluorooctane sulfonamid



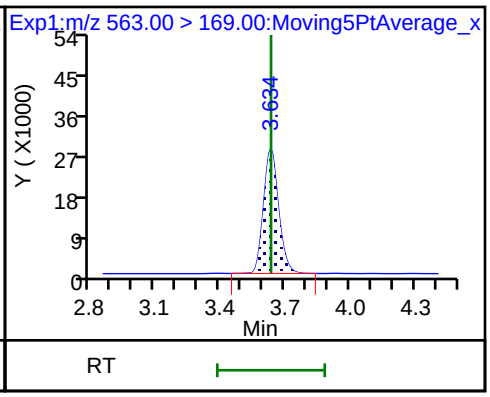
D 30 13C2 PFUnA



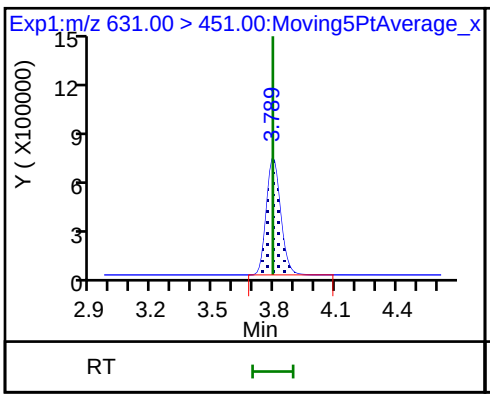
31 Perfluoroundecanoic acid



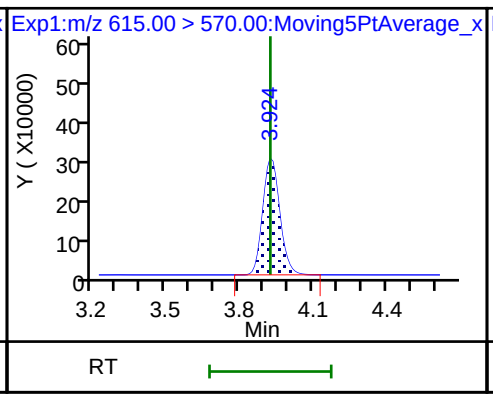
31 Perfluoroundecanoic acid



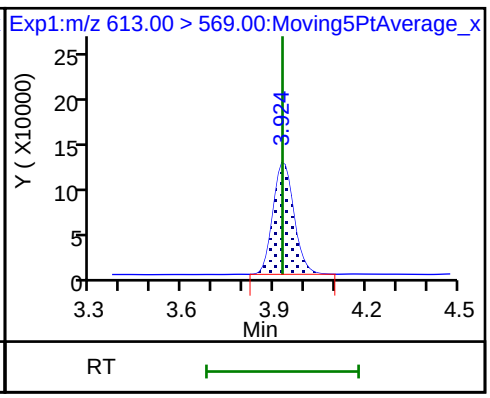
66 11-Chloroeicosafluoro-3-oxaundecan



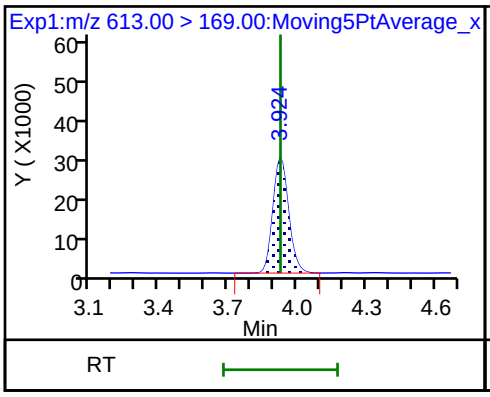
D 36 13C2 PFDoA



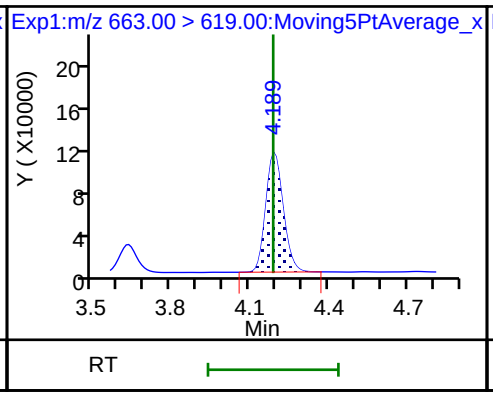
37 Perfluorododecanoic acid



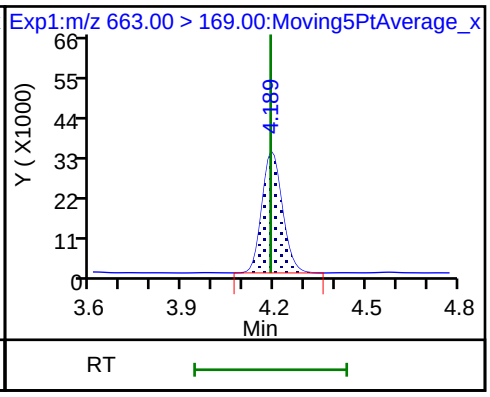
37 Perfluorododecanoic acid



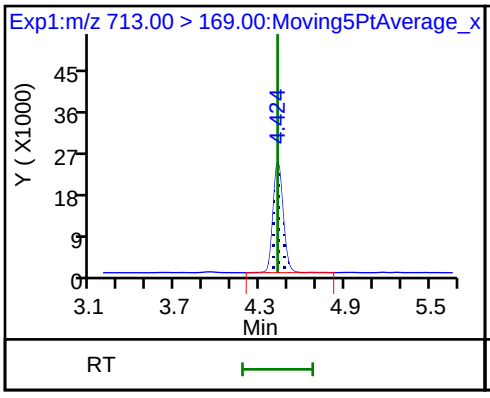
41 Perfluorotridecanoic acid



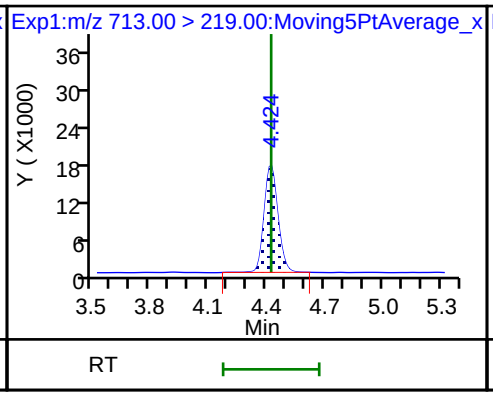
41 Perfluorotridecanoic acid



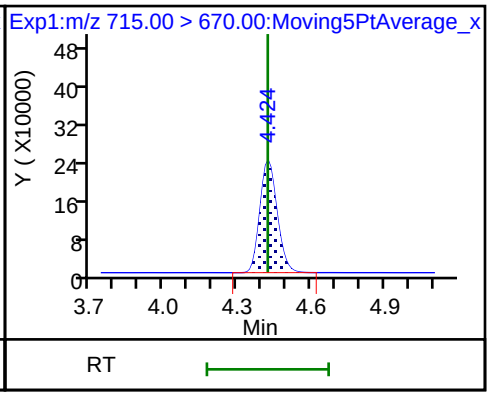
42 Perfluorotetradecanoic acid



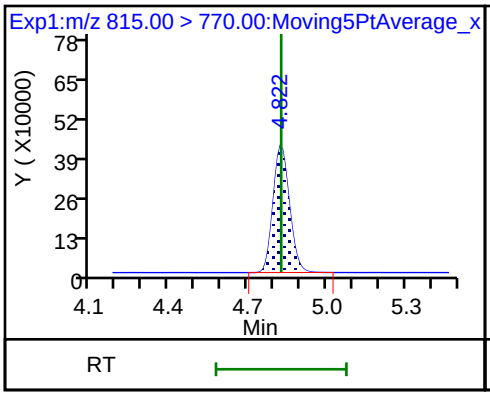
42 Perfluorotetradecanoic acid



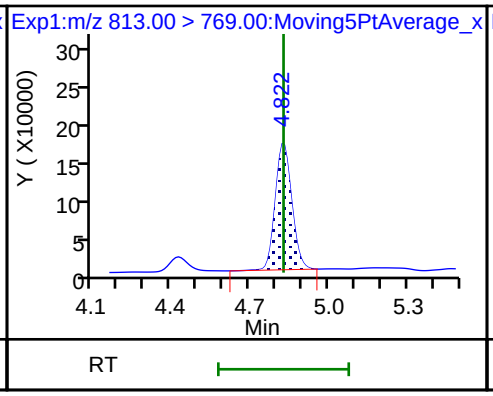
D 43 13C2-PFTeDA



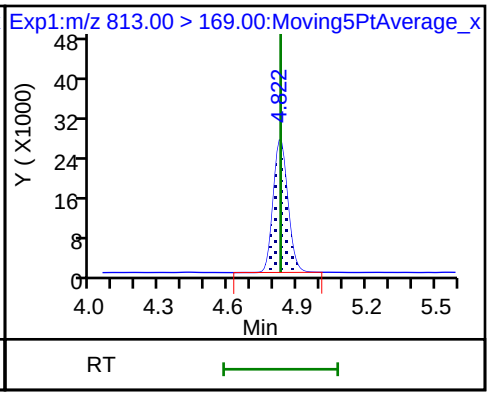
D 44 13C2-PFHxDA



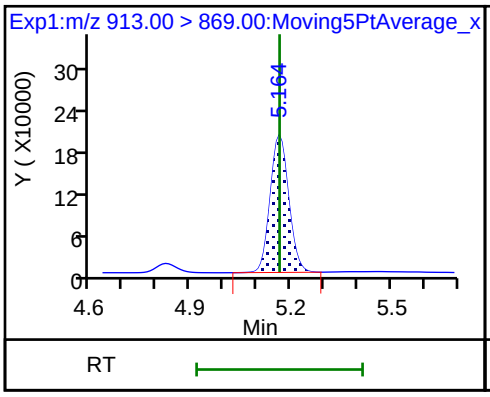
45 Perfluorohexadecanoic acid



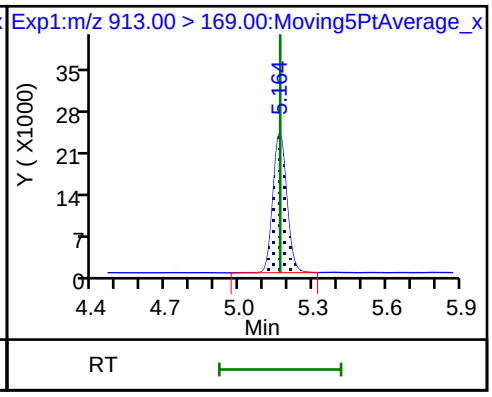
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

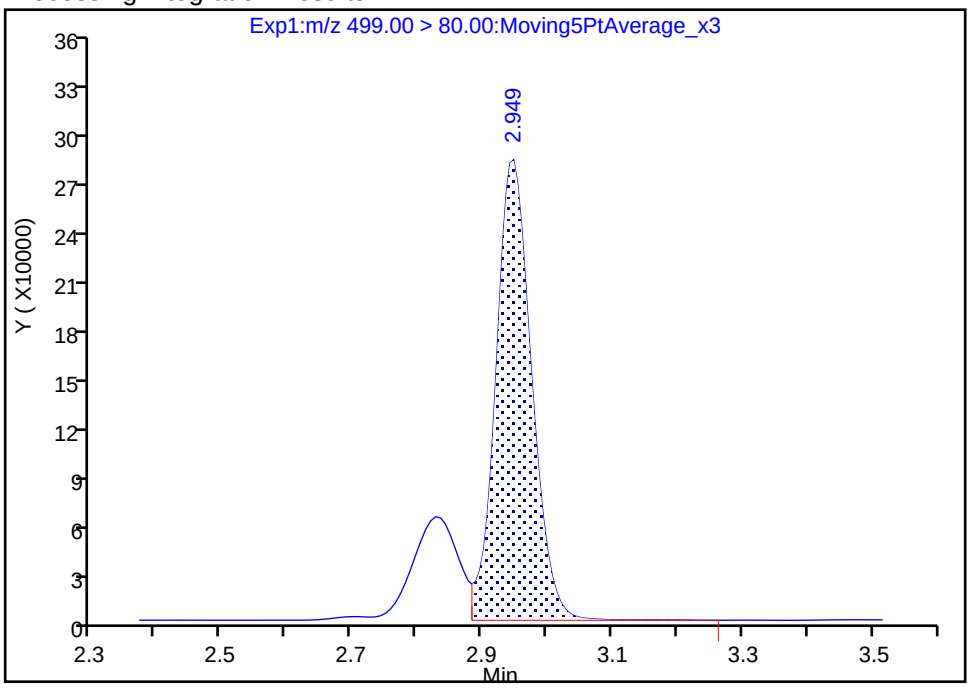
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_005.d
Injection Date: 01-Aug-2018 13:22:33 Instrument ID: A8_N
Lims ID: IC L4 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

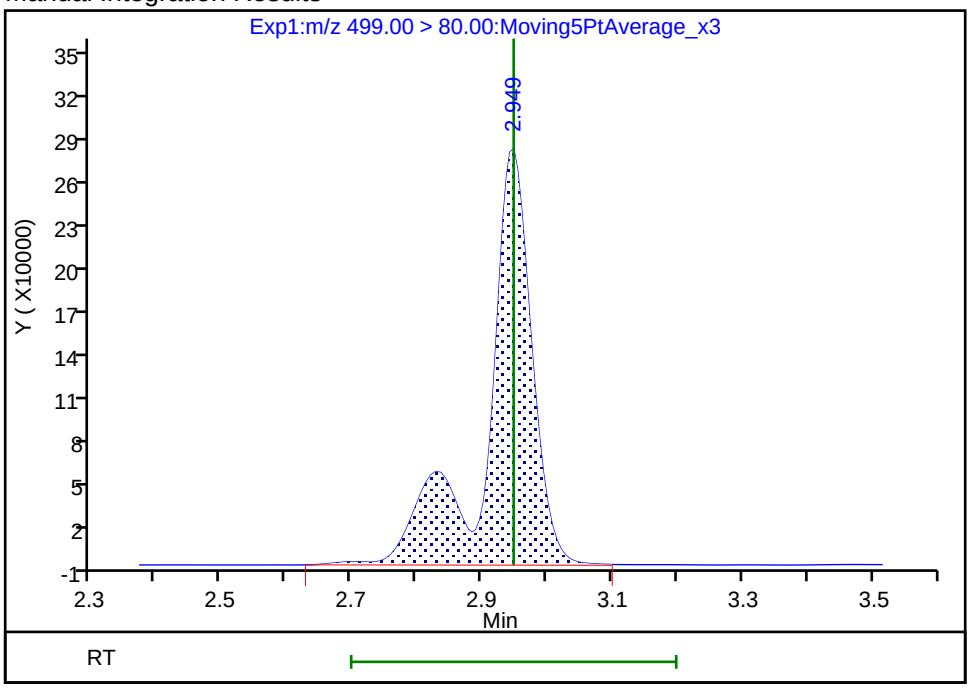
Processing Integration Results

RT: 2.95
Area: 1066714
Amount: 0.709888
Amount Units: ng/ml



Manual Integration Results

RT: 2.95
Area: 1377557
Amount: 0.888458
Amount Units: ng/ml



Reviewer: roycea, 01-Aug-2018 14:33:07
Audit Action: Manually Integrated Audit Reason: Isomers

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_006.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Aug-2018 13:30:23 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L5-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 01-Aug-2018 14:59:50 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK022

First Level Reviewer: roycea Date: 01-Aug-2018 14:34:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.394	1.395	0.0	0.541	4740211	2.48		99.0	79259	
2 Perfluorobutyric acid										
212.90 > 169.00	1.400	1.396	0.004	1.004	4662124	2.50		99.8	1176	
D 3 13C5-PFPeA										
267.90 > 223.00	1.637	1.636	0.001	0.635	3117638	2.47		98.9	49305	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.637	1.636	0.001	1.000	3679899	2.46		98.6	1471	
D 47 13C3-PFBS										
301.90 > 83.00	1.671	1.669	0.002	0.648	85408	2.36		101	403	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.671	1.671	0.0	1.000	6345476	2.25		102	29623	
298.90 > 99.00	1.671	1.671	0.0	1.000	2536780		2.50(1.25-3.74)	102	10495	
D 60 M2-4:2FTS										
329.00 > 81.00	1.872	1.872	0.0	0.726	603368	2.36		101	6037	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.872	1.872	0.0	1.120	1432956	2.27		97.1	64785	
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.903	-0.001	0.738	3473699	2.55		102	76225	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.902	1.903	-0.001	1.000	3595187	2.45		98.1	5255	
313.00 > 119.00	1.902	1.903	-0.001	1.000	338806		10.61(5.03-15.10)	98.1	2550	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.923	1.928	-0.005	1.151	5931128	2.39		102	59589	
349.00 > 99.00	1.923	1.928	-0.005	1.151	2210145		2.68(1.36-4.07)	102	10516	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.999	2.000	-0.001	0.775	148535	2.32		93.0	4245	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.999	2.002	-0.003	1.000	622158	2.62		105	2808	
D 9 13C4-PFHpA										
367.00 > 322.00	2.225	2.225	0.0	0.863	3349409	2.53		101	56764	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.225	2.226	-0.001	1.000	3710400	2.39		95.5	1604	
363.00 > 169.00	2.225	2.226	-0.001	1.000	1418167		2.62(1.13-3.40)	95.5	12553	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.237	2.237	0.0	1.000	5019141	2.24		98.5	18548	
399.00 > 99.00	2.237	2.237	0.0	1.000	1661270		3.02(1.50-4.49)	98.5	2637	
D 11 18O2 PFHxS										
403.00 > 84.00	2.237	2.238	-0.001	0.867	4583643	2.31		97.5	40055	
65 ADONA										
377.00 > 251.00	2.263	2.270	-0.007	0.768	9407416	2.50		106	67386	
377.00 > 85.00	2.263	2.270	-0.007	0.768	5469113		1.72(0.84-2.53)	106	21080	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.554	2.554	0.0	1.000	1483178	2.32		97.9	29041	
D 12 M2-6:2FTS										
429.00 > 81.00	2.554	2.556	-0.002	0.990	918152	2.37		99.8	13169	
D 14 13C4 PFOA										
417.00 > 372.00	2.579	2.580	-0.001	1.000	3210040	2.51		101	37275	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.579	2.581	-0.002	1.000	3755999	2.53		101	2236	
413.00 > 169.00	2.579	2.581	-0.002	1.000	1895218		1.98(0.84-2.52)	101	9580	
* 62 13C2-PFOA										
415.00 > 370.00	2.579	2.581	-0.002		3324756	2.50			48783	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.587	2.587	0.0	0.878	4578297	2.46		103	35137	
449.00 > 99.00	2.587	2.587	0.0	0.878	1227668		3.73(1.94-5.82)	103	13514	
D 18 13C4 PFOS										
503.00 > 80.00	2.945	2.946	-0.001	1.142	3224053	2.35		98.3	33751	
D 19 13C5 PFNA										
468.00 > 423.00	2.945	2.948	-0.003	1.142	2758407	2.48		99.2	52925	
20 Perfluorononanoic acid										
463.00 > 419.00	2.945	2.949	-0.004	1.000	2990574	2.51		100	5749	
463.00 > 169.00	2.945	2.949	-0.004	1.000	730894		4.09(1.90-5.69)	100	24495	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.945	2.949	-0.004	1.000	3544232	2.34		101	21346	
499.00 > 99.00	2.945	2.949	-0.004	1.000	827927		4.28(2.31-6.93)	101	4643	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.153	3.158	-0.005	1.070	5759920	2.39		103	40362	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.287	3.292	-0.005	1.000	1169399	2.31		96.3	40497	
D 26 M2-8:2FTS										
529.00 > 81.00	3.287	3.292	-0.005	1.275	899004	2.38		99.4	12948	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.294	3.295	-0.001	1.119	2423026	2.50		104	43353	
549.00 > 99.00	3.287	3.295	-0.008	1.116	908376		2.67(1.33-3.97)	104	5660	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.302	3.306	-0.004	1.281	2057230	2.47		98.9	55312	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.302	3.308	-0.006	1.000	2163881	2.46		98.5	3036	
513.00 > 169.00	3.302	3.308	-0.006	1.000	394458		5.49(2.36-7.09)	98.5	6847	
D 21 13C8 FOSA										
506.00 > 78.00	3.310	3.312	-0.002	1.284	5160037	2.56		102	35436	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.310	3.313	-0.003	1.000	5178982	2.54		102	47592	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.453	3.459	-0.006	1.339	503700	2.49		99.8	13758	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.463	3.465	-0.002	1.003	501591	2.45		98.0	5074	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.617	3.620	-0.003	1.228	2185833	2.49		103	51377	
599.00 > 99.00	3.617	3.620	-0.003	1.228	696558		3.14(1.39-4.16)	103	7270	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.627	3.627	0.0	1.407	532526	2.46		98.4	3898	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.627	3.633	-0.006	1.000	471804	2.49		99.4	13060	
D 30 13C2 PFUnA										
565.00 > 520.00	3.627	3.634	-0.007	1.407	1525487	2.38		95.2	44993	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.627	3.634	-0.007	1.000	1815476	2.41		96.6	4055	
563.00 > 169.00	3.627	3.634	-0.007	1.000	313726		5.79(2.12-6.36)	96.6	13018	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.792	3.792	0.0	1.287	8214135	2.50		106	94573	
D 36 13C2 PFDoA										
615.00 > 570.00	3.927	3.925	0.002	1.523	1356329	2.44		97.8	13416	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.927	3.927	0.0	1.000	1548416	2.64		105	525	
613.00 > 169.00	3.927	3.927	0.0	1.000	358786		4.32(2.13-6.40)	105	6196	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.182	4.188	-0.006	1.065	1354496	2.65		106	484	
663.00 > 169.00	4.182	4.188	-0.006	1.065	411754		3.29(1.25-3.76)	106	3297	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.415	4.423	-0.008	1.000	314195	2.52		101	3555	
713.00 > 219.00	4.415	4.423	-0.008	1.000	226756		1.39(0.71-2.13)	101	2914	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.415	4.423	-0.008	1.712	1159368	2.49		99.6	5921	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.823	4.826	-0.003	1.870	2097837	2.61		105	3110	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.823	4.827	-0.004	1.000	2002321	2.44		97.6	133	
813.00 > 169.00	4.823	4.827	-0.004	1.000	339061		5.91(2.86-8.58)	97.6	3586	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.165	5.166	-0.001	1.071	2186416	2.53		101	704	
913.00 > 169.00	5.157	5.166	-0.009	1.069	268198		8.15(3.83-11.48)	101	2448	

Reagents:

LCPFC_LL5_00005 Amount Added: 1.00 Units: mL

Report Date: 01-Aug-2018 14:59:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_006.d

Injection Date: 01-Aug-2018 13:30:23 Instrument ID: A8_N

Lims ID: IC L5 Full

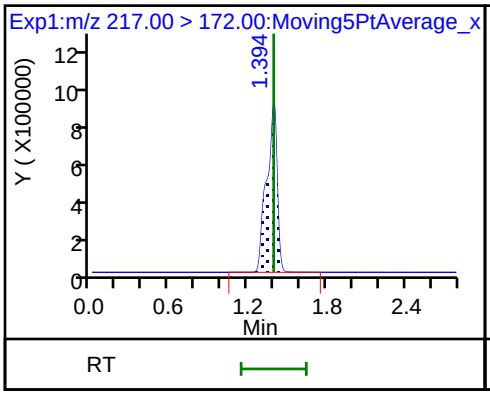
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 14 Worklist Smp#: 6

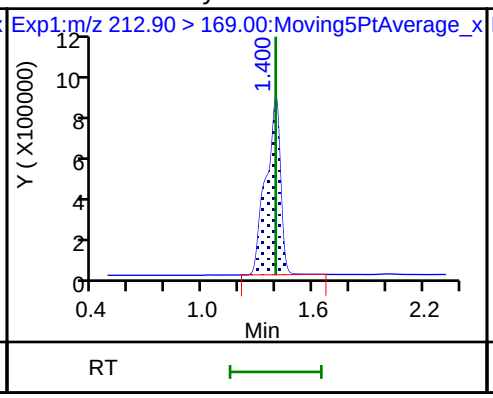
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

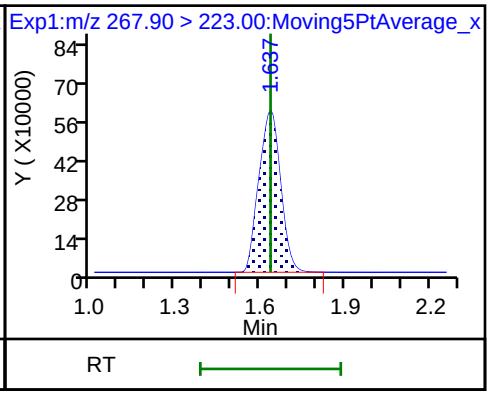
D 1 13C4 PFBA



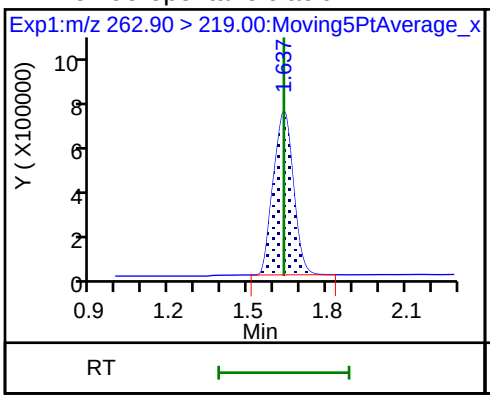
2 Perfluorobutyric acid



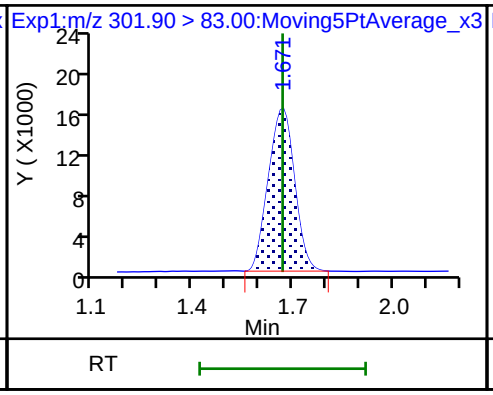
D 3 13C5-PFPeA



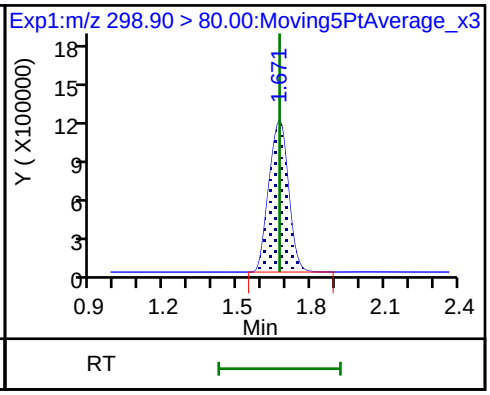
4 Perfluoropentanoic acid



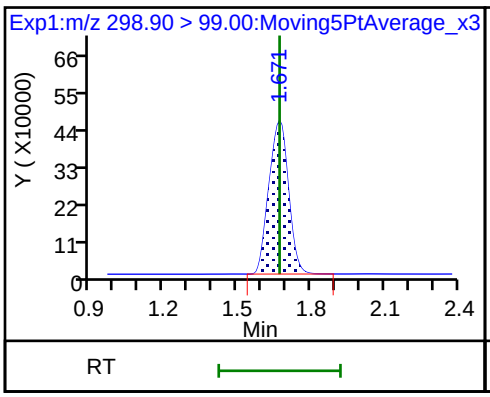
D 47 13C3-PFBS



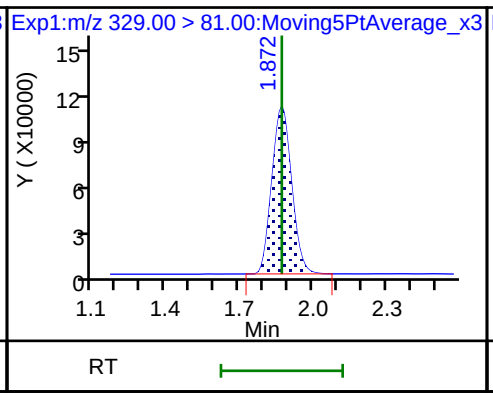
5 Perfluorobutanesulfonic acid



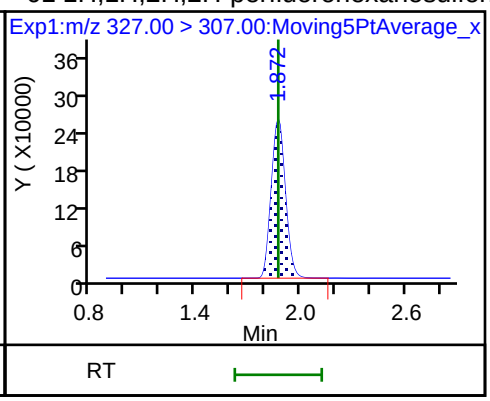
5 Perfluorobutanesulfonic acid



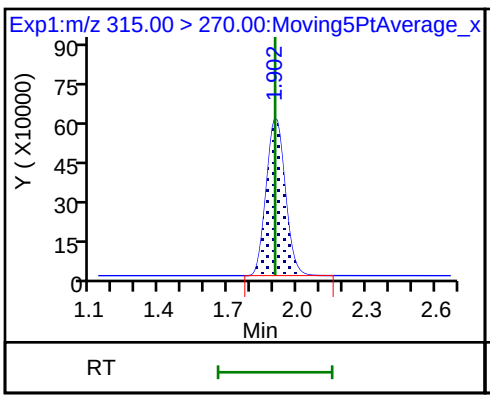
D 60 M2-4:2FTS



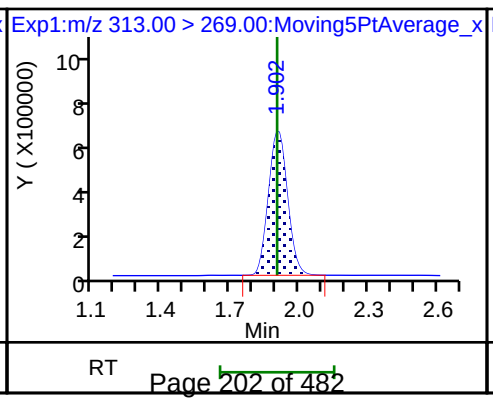
61 1H,1H,2H,2H-perfluorohexanesulfoni



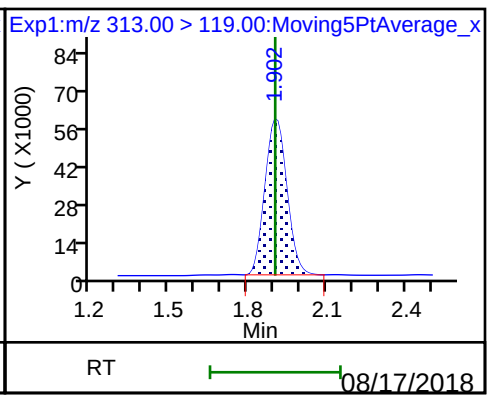
D 7 13C2 PFHxA



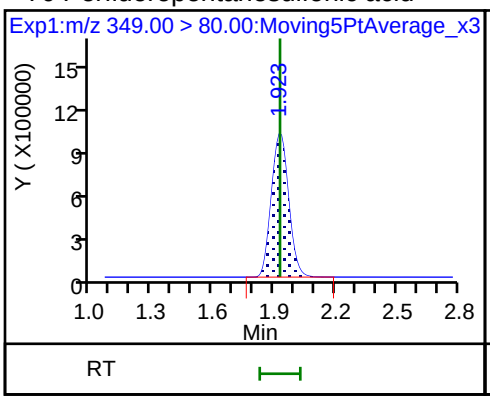
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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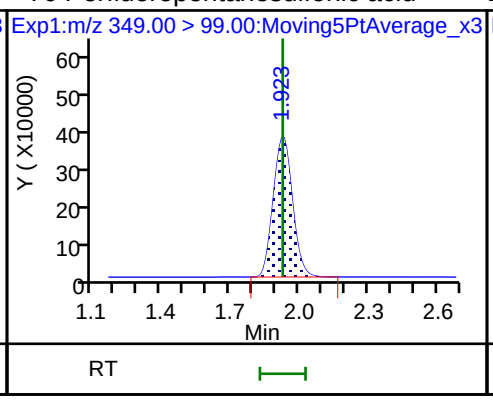
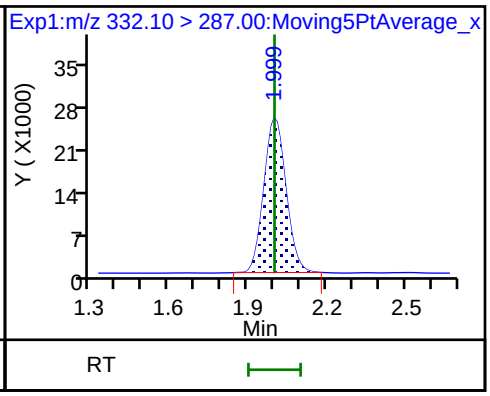
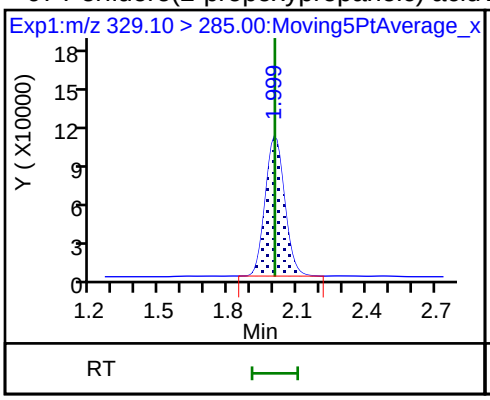


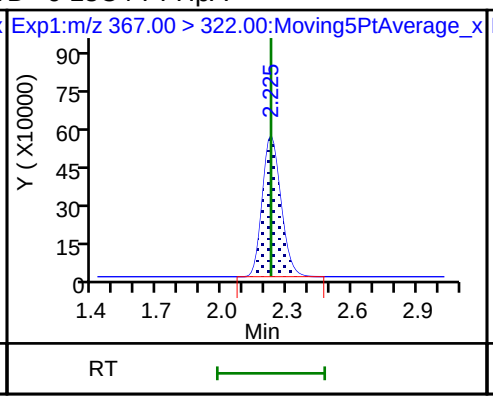
D 64 13C3 HFPO-DA



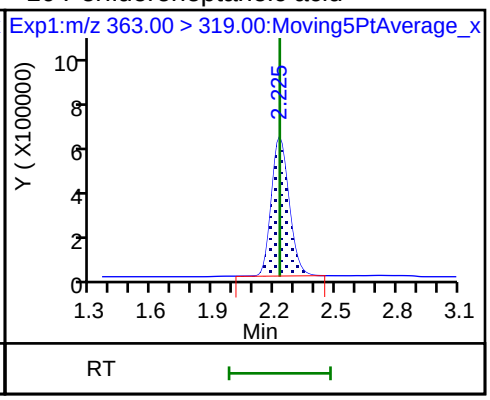
67 Perfluoro(2-propoxypropanoic) acid



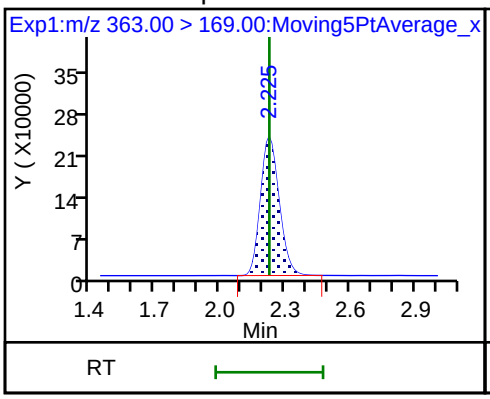
D 9 13C4-PFHpA



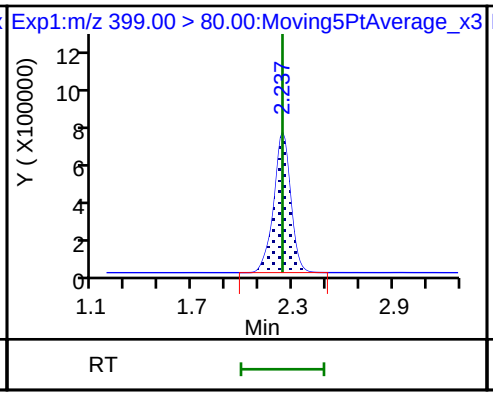
10 Perfluoroheptanoic acid



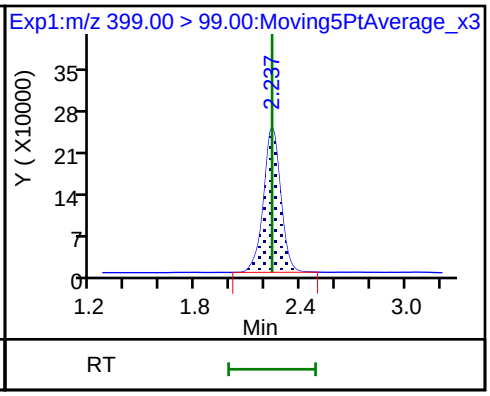
10 Perfluoroheptanoic acid



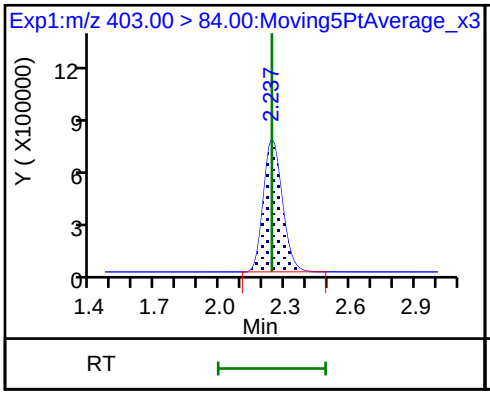
8 Perfluorohexanesulfonic acid



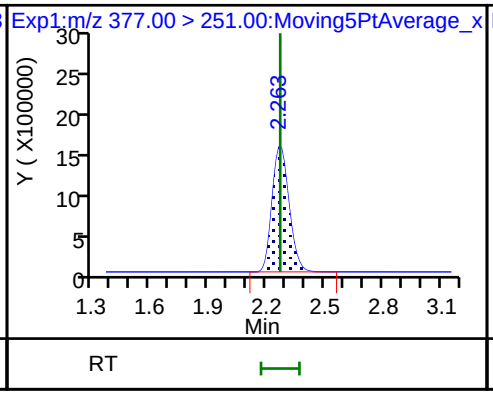
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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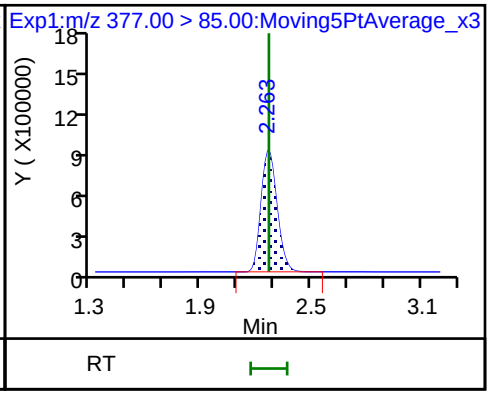
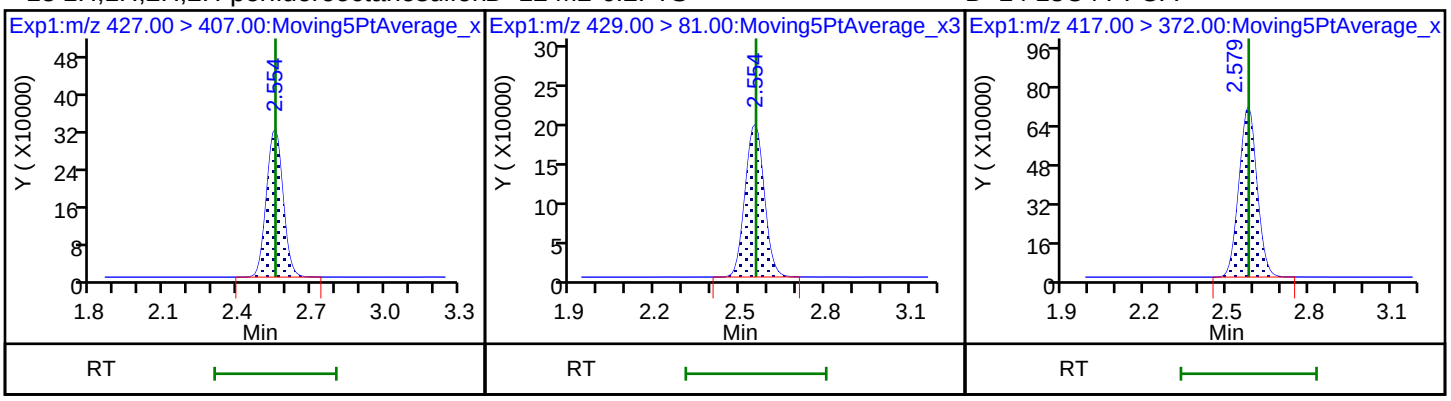
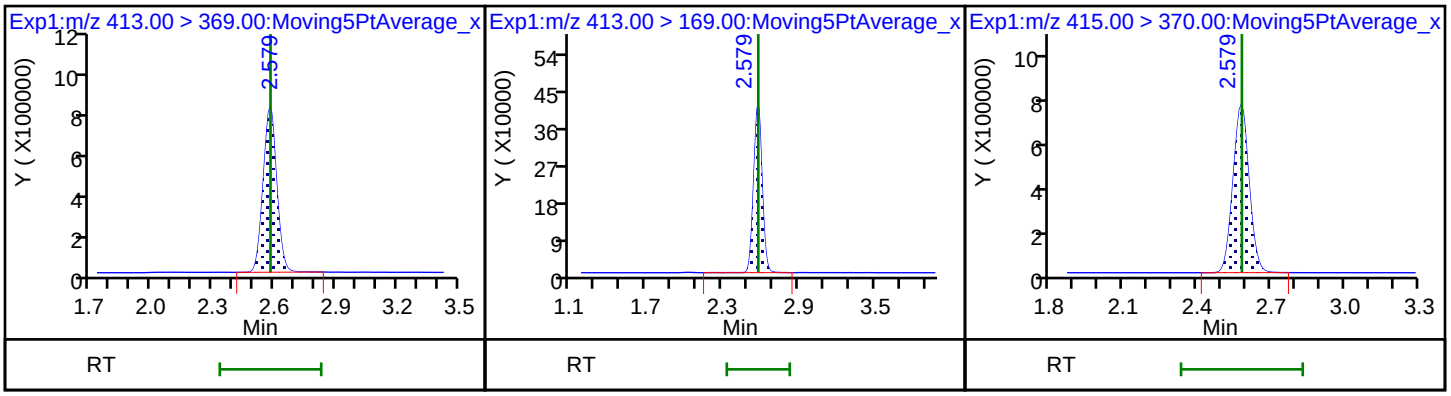


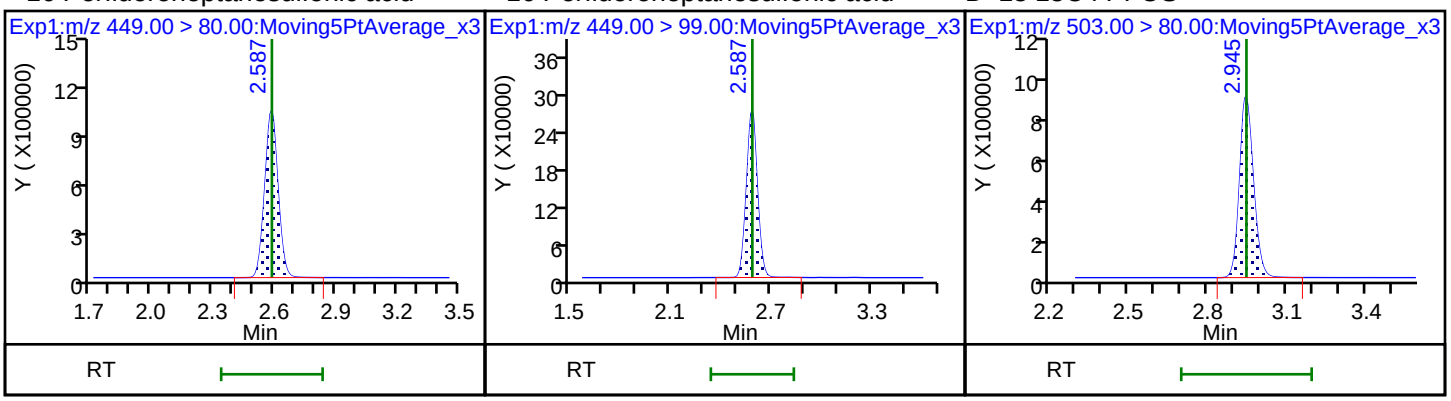
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 14 13C4 PFOA



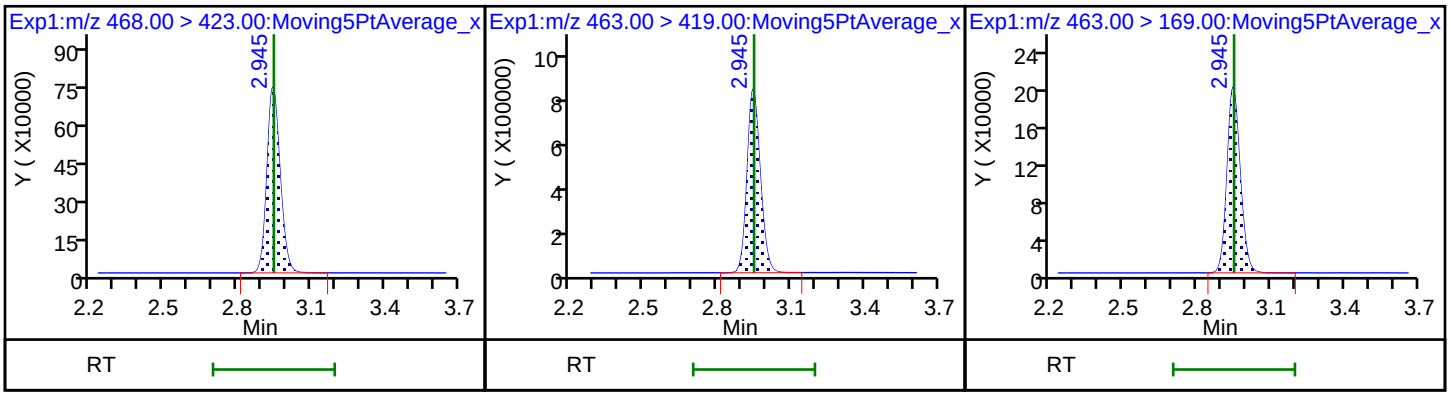
15 Perfluorooctanoic acid 15 Perfluorooctanoic acid * 62 13C2-PFOA



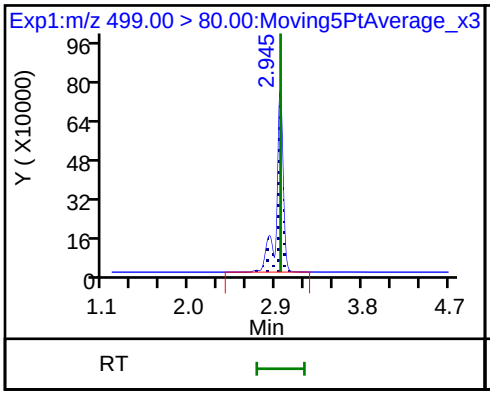
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 18 13C4 PFOS



D 19 13C5 PFNA 20 Perfluorononanoic acid 20 Perfluorononanoic acid



17 Perfluorooctane sulfonic acid



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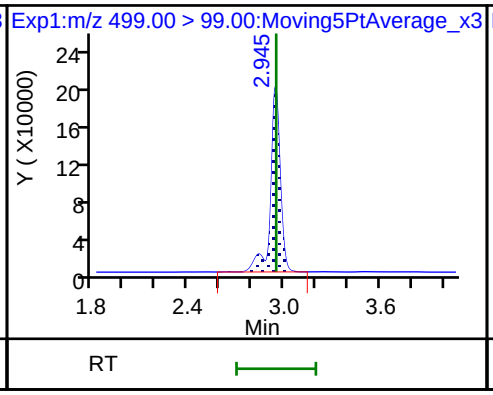
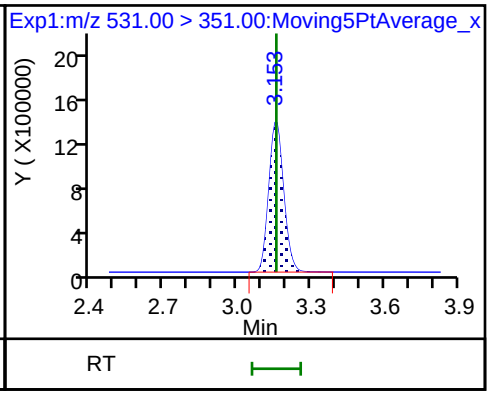
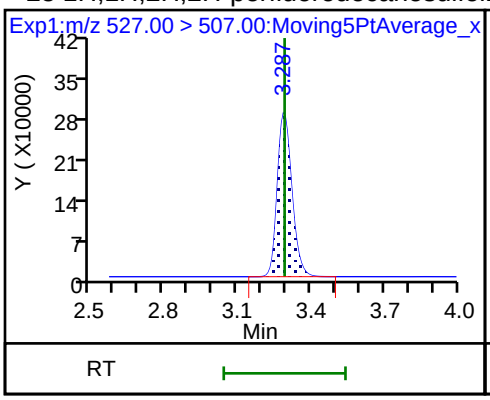


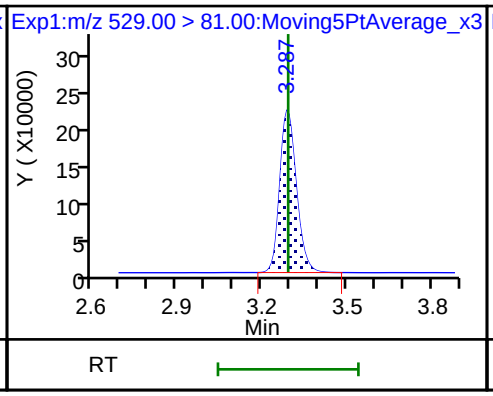
69 9-Chlorohexadecafluoro-3-oxanonane



25 1H,1H,2H,2H-perfluorodecanesulfon



D 26 M2-8:2FTS



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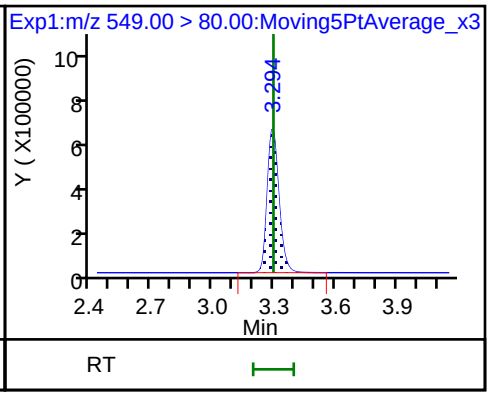

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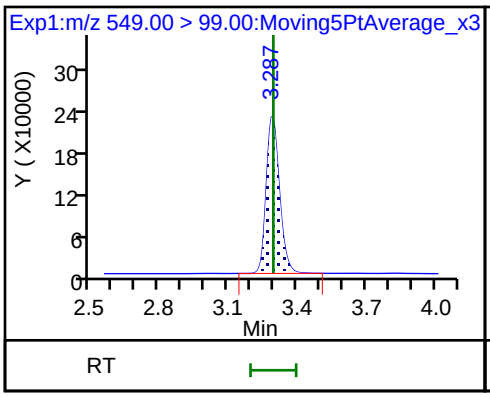
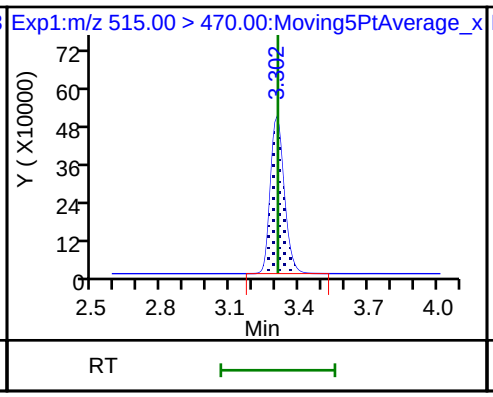
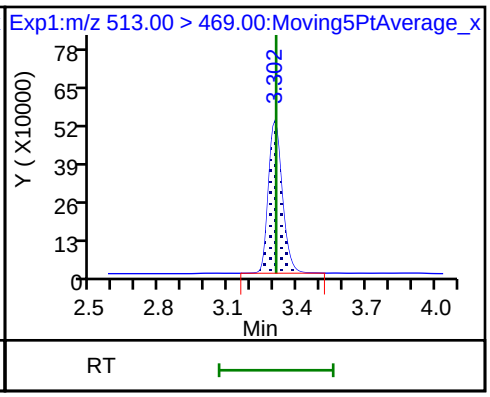


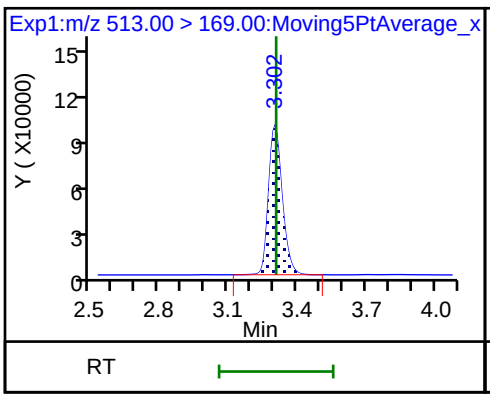
D 23 13C2 PFDA



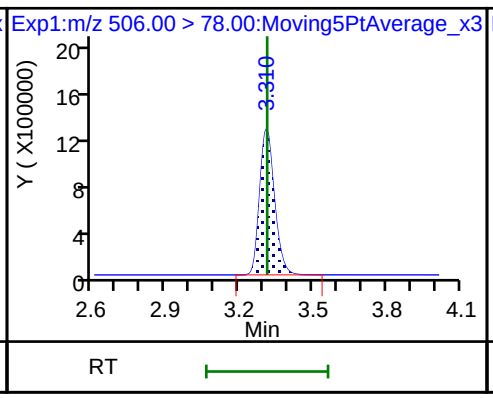
24 Perfluorodecanoic acid



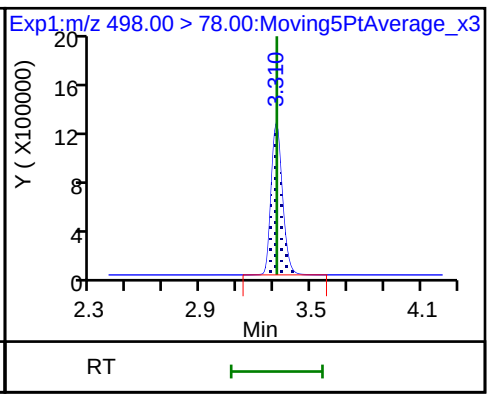
24 Perfluorodecanoic acid



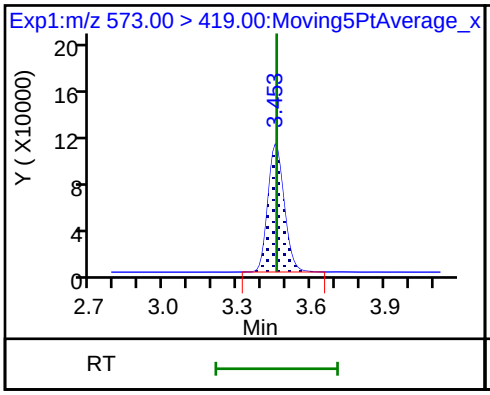
D 21 13C8 FOSA



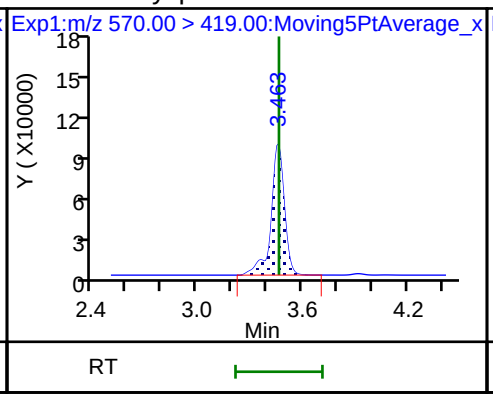
22 Perfluorooctane Sulfonamide



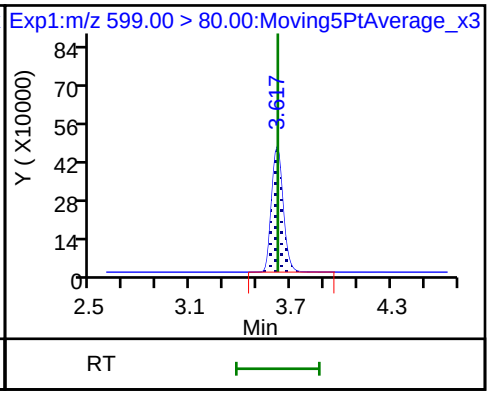
D 27 d3-NMeFOSAA



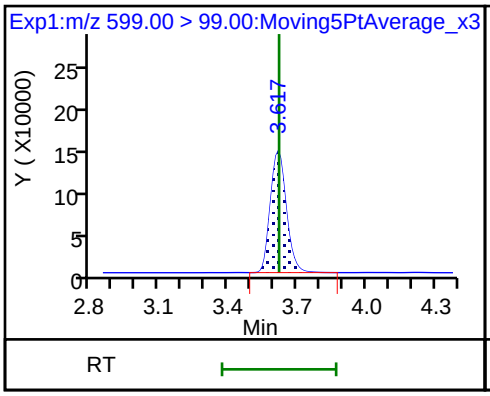
28 N-methyl perfluorooctane sulfonami



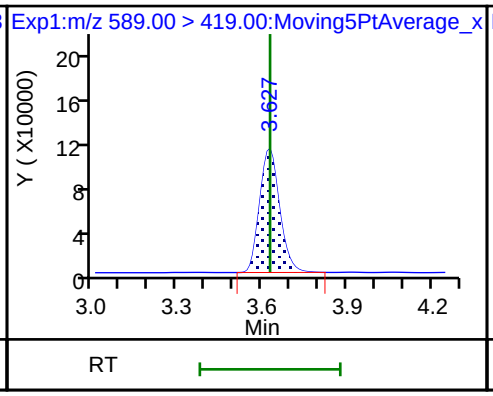
29 Perfluorodecane Sulfonic acid



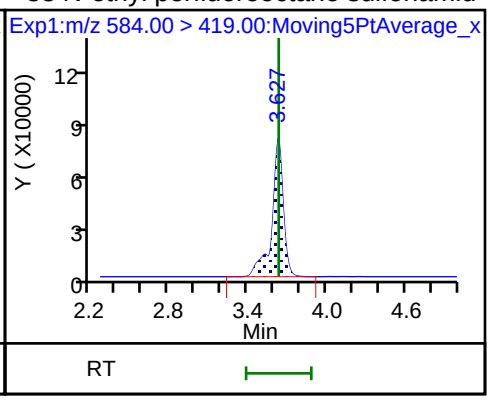
29 Perfluorodecane Sulfonic acid



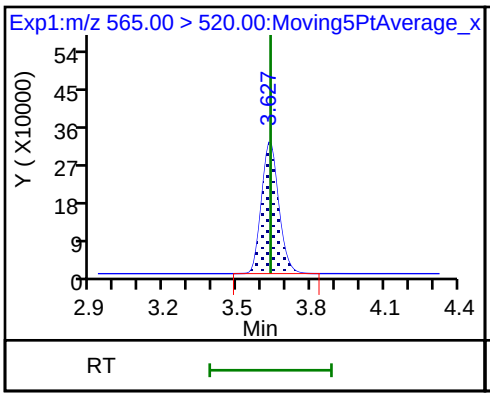
D 32 d5-NEtFOSAA



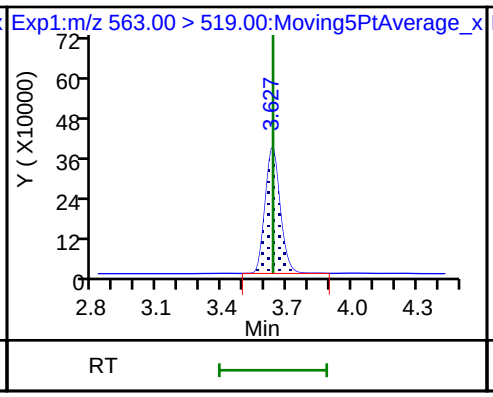
33 N-ethyl perfluorooctane sulfonamid



D 30 13C2 PFUnA



31 Perfluoroundecanoic acid



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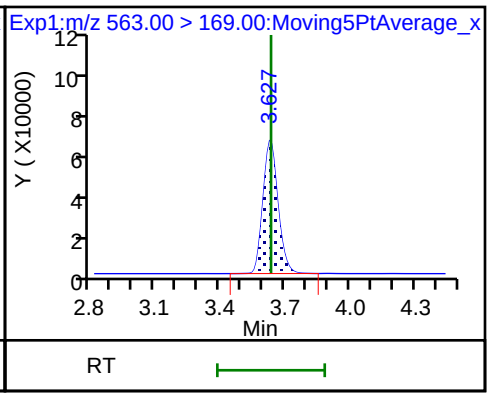
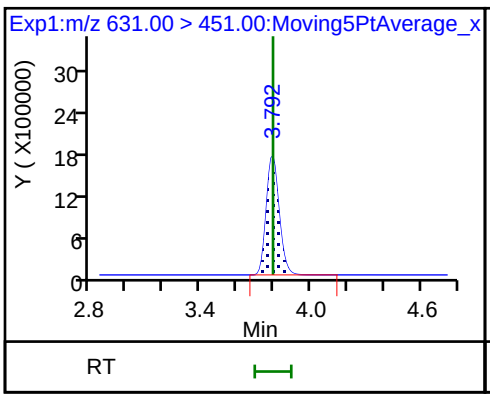


66 11-Chloroeicosafluoro-3-oxaundecan



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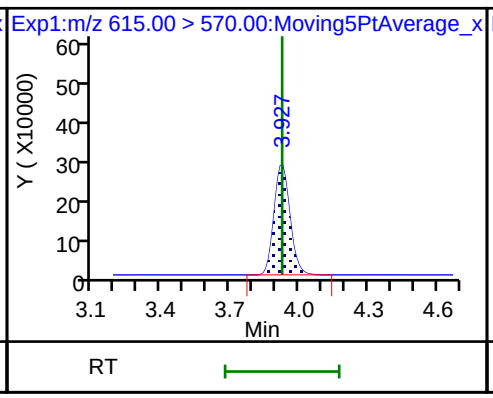
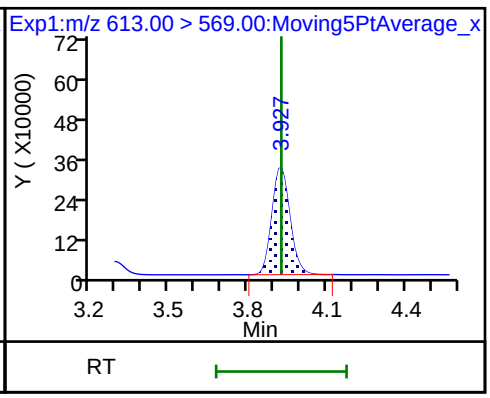


37 Perfluorododecanoic acid



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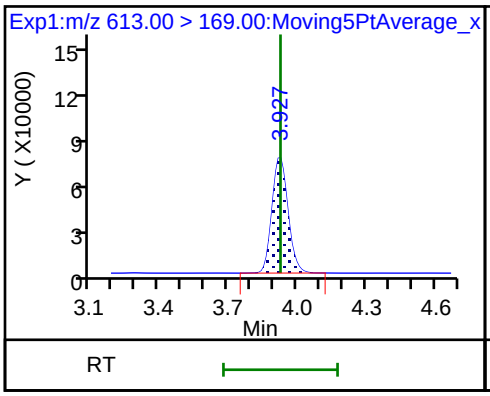
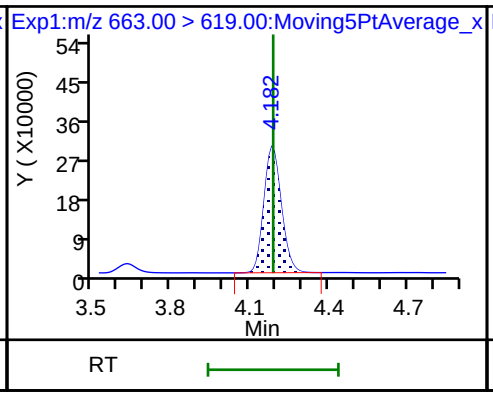


41 Perfluorotridecanoic acid



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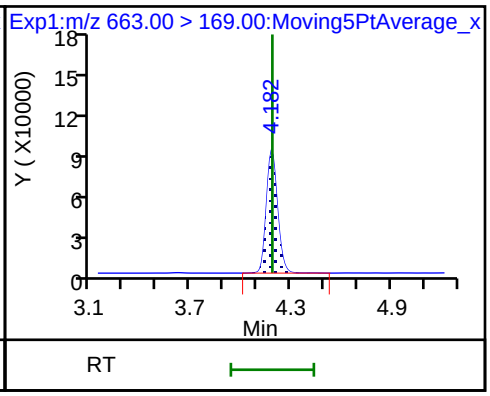
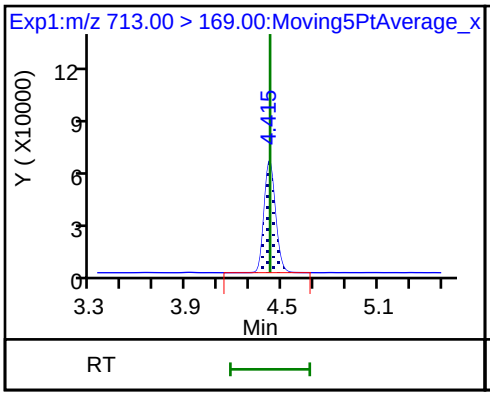


42 Perfluorotetradecanoic acid



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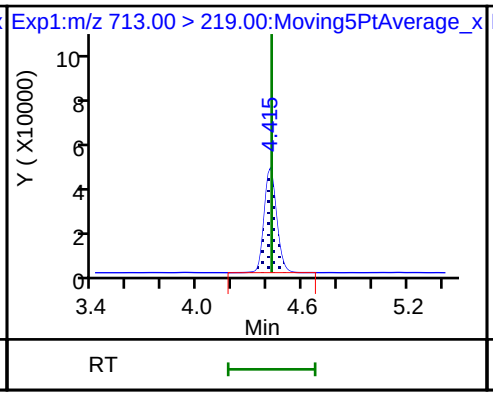
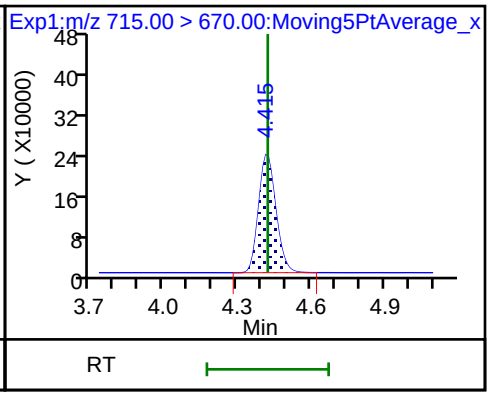


D 43 13C2-PFTeDA



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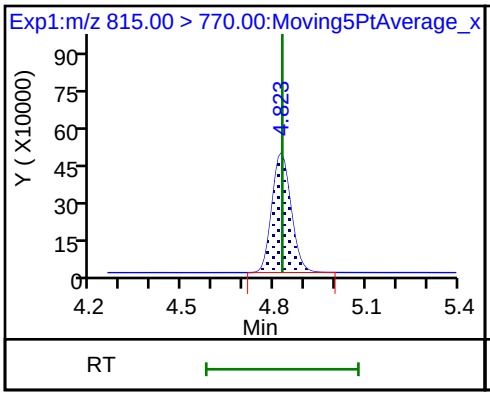
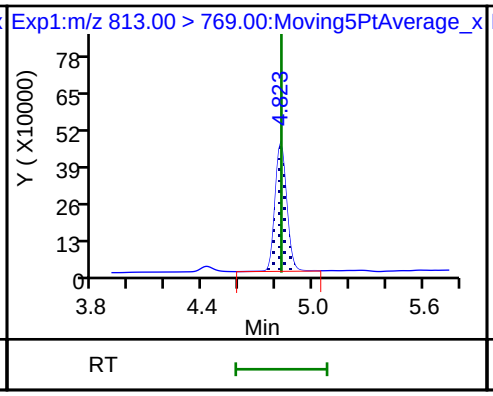
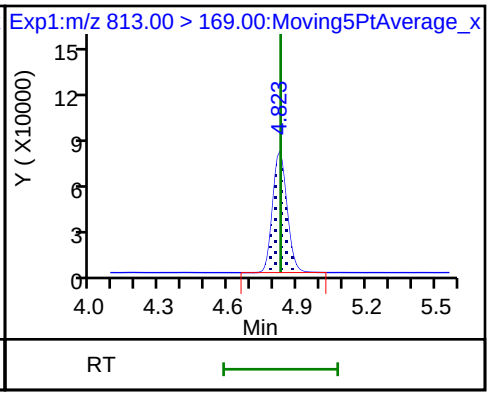


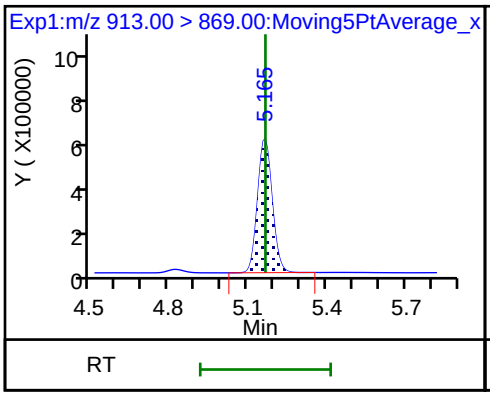
45 Perfluorohexadecanoic acid



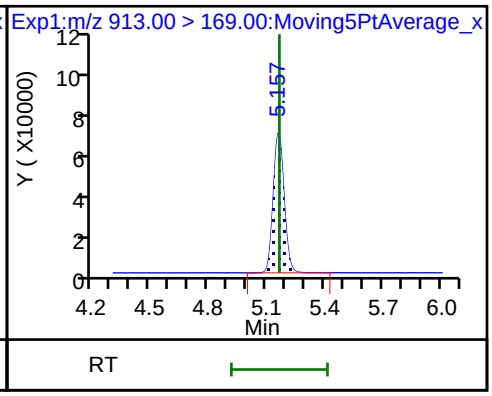
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

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Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Aug-2018 13:38:11 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L6-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 01-Aug-2018 14:59:29 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK022

First Level Reviewer: roycea Date: 01-Aug-2018 14:59:29

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.397	1.395	0.003	0.541	4598618	2.61		104	69966	
2 Perfluorobutyric acid										
212.90 > 169.00	1.397	1.396	0.001	1.000	9171174	5.06		101	2117	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.633	1.636	-0.003	1.000	7124053	5.00		100	3043	
D 3 13C5-PFPeA										
267.90 > 223.00	1.633	1.636	-0.003	0.633	2974004	2.56		103	42918	
D 47 13C3-PFBS										
301.90 > 83.00	1.666	1.669	-0.003	0.646	82077	2.46		106	326	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.675	1.671	0.004	1.005	12002466	4.44		100	49723	
298.90 > 99.00	1.666	1.671	-0.005	1.000	5088225		2.36(1.25-3.74)	100	22853	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.876	1.872	0.004	1.126	2787781	4.59		98.3	122401	
D 60 M2-4:2FTS										
329.00 > 81.00	1.876	1.872	0.004	0.727	567443	2.41		103	6287	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.906	1.903	0.003	1.000	6816050	5.00		100	10692	
313.00 > 119.00	1.906	1.903	0.003	1.000	607403		11.22(5.03-15.10)	100	6084	
D 7 13C2 PFHxA										
315.00 > 270.00	1.906	1.903	0.003	0.738	3231846	2.58		103	69974	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.927	1.928	-0.001	1.157	11402360	4.77		102	91517	
349.00 > 99.00	1.927	1.928	-0.001	1.157	4322819		2.64(1.36-4.07)	102	21604	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.003	2.000	0.003	0.776	153939	2.62		105	4397	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.003	2.002	0.001	1.000	1171510	4.75		95.1	4626	
D 9 13C4-PFHpA										
367.00 > 322.00	2.229	2.225	0.004	0.864	3116337	2.56		102	57492	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.229	2.226	0.003	1.000	7260990	5.02		100	3272	
363.00 > 169.00	2.229	2.226	0.003	1.000	2743085		2.65(1.13-3.40)	100	22895	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.241	2.237	0.004	1.000	9713740	4.36		95.9	29626	
399.00 > 99.00	2.241	2.237	0.004	1.000	3229342		3.01(1.50-4.49)	95.9	4983	
D 11 18O2 PFHxS										
403.00 > 84.00	2.241	2.238	0.003	0.868	4552896	2.49		105	41500	
65 ADONA										
377.00 > 251.00	2.267	2.270	-0.003	0.769	17310053	4.74		101	97371	
377.00 > 85.00	2.267	2.270	-0.003	0.769	10635588		1.63(0.84-2.53)	101	37926	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.555	2.554	0.001	1.000	2799930	4.71		99.4	29558	
D 12 M2-6:2FTS										
429.00 > 81.00	2.555	2.556	-0.001	0.990	853793	2.40		101	10018	
D 14 13C4 PFOA										
417.00 > 372.00	2.580	2.580	0.0	1.000	2942955	2.51		100	37513	
* 62 13C2-PFOA										
415.00 > 370.00	2.580	2.581	-0.001		3058012	2.50			46964	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.580	2.581	-0.001	1.000	6976550	5.13		102	5295	
413.00 > 169.00	2.580	2.581	-0.001	1.000	3689319		1.89(0.84-2.52)	102	12958	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.588	2.587	0.001	0.878	8881601	4.91		103	41144	
449.00 > 99.00	2.588	2.587	0.001	0.878	2392742		3.71(1.94-5.82)	103	21710	
D 18 13C4 PFOS										
503.00 > 80.00	2.948	2.946	0.002	1.142	3128101	2.48		104	34966	
D 19 13C5 PFNA										
468.00 > 423.00	2.948	2.948	0.0	1.142	2589352	2.53		101	48232	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.948	2.949	-0.001	1.000	6798798	4.63		99.7	37617	
499.00 > 99.00	2.948	2.949	-0.001	1.000	1556808		4.37(2.31-6.93)	99.7	8559	
20 Perfluorononanoic acid										
463.00 > 419.00	2.948	2.949	-0.001	1.000	5744475	5.14		103	11587	
463.00 > 169.00	2.948	2.949	-0.001	1.000	1399812		4.10(1.90-5.69)	103	26388	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.156	3.158	-0.002	1.070	11077192	4.74		102	84001	
D 26 M2-8:2FTS										
529.00 > 81.00	3.291	3.292	-0.001	1.275	828227	2.38		99.6	14255	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.291	3.292	-0.001	1.000	2239081	4.79		100	67668	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.291	3.295	-0.004	1.116	4817452	5.12		107	47993	
549.00 > 99.00	3.291	3.295	-0.004	1.116	1750190		2.75(1.33-3.97)	107	10655	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.307	3.306	0.001	1.282	1963135	2.57		103	42394	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.307	3.308	-0.001	1.000	4009985	4.78		95.7	4974	
513.00 > 169.00	3.307	3.308	-0.001	1.000	708571		5.66(2.36-7.09)	95.7	8379	
D 21 13C8 FOSA										
506.00 > 78.00	3.315	3.312	0.003	1.285	4827094	2.60		104	47868	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.315	3.313	0.002	1.000	9630397	5.05		101	44465	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.458	3.459	-0.001	1.340	501663	2.70		108	13710	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.467	3.465	0.002	1.003	986536	4.84		96.7	11800	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.621	3.620	0.001	1.228	4226499	4.96		103	128198	
599.00 > 99.00	3.621	3.620	0.001	1.228	1369923		3.09(1.39-4.16)	103	18062	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.631	3.627	0.004	1.407	495602	2.49		99.6	4442	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.631	3.633	-0.002	1.000	898298	5.08		102	17316	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.631	3.634	-0.003	1.000	3479056	4.71		94.2	7241	
563.00 > 169.00	3.631	3.634	-0.003	1.000	615392		5.65(2.12-6.36)	94.2	25449	
D 30 13C2 PFUnA										
565.00 > 520.00	3.631	3.634	-0.003	1.407	1498263	2.54		102	35012	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.795	3.792	0.003	1.287	15311015	4.81		102	98644	
D 36 13C2 PFDoA										
615.00 > 570.00	3.920	3.925	-0.005	1.519	1279511	2.51		100	16773	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.931	3.927	0.004	1.003	2802983	5.06		101	1051	
613.00 > 169.00	3.920	3.927	-0.007	1.000	716512		3.91(2.13-6.40)	101	12519	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.184	4.188	-0.004	1.067	2580030	5.35		107	886	
663.00 > 169.00	4.184	4.188	-0.004	1.067	776811		3.32(1.25-3.76)	107	6166	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.427	4.423	0.004	1.716	1118375	2.61		104	5580	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.427	4.423	0.004	1.000	585419	4.86		97.2	5924	
713.00 > 219.00	4.416	4.423	-0.007	0.998	418173		1.40(0.71-2.13)	97.2	5362	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.824	4.826	-0.002	1.869	1875506	2.54		102	2831	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.824	4.827	-0.003	1.000	3739164	5.12		102	237	
813.00 > 169.00	4.824	4.827	-0.003	1.000	606682		6.16(2.86-8.58)	102	4826	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.166	5.166	0.0	1.071	3935966	5.10		102	1173	
913.00 > 169.00	5.158	5.166	-0.008	1.069	487622		8.07(3.83-11.48)	102	4062	

Reagents:

LCPFC_LL6_00006 Amount Added: 1.00 Units: mL

Report Date: 01-Aug-2018 14:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_007.d

Injection Date: 01-Aug-2018 13:38:11 Instrument ID: A8_N

Lims ID: IC L6 Full

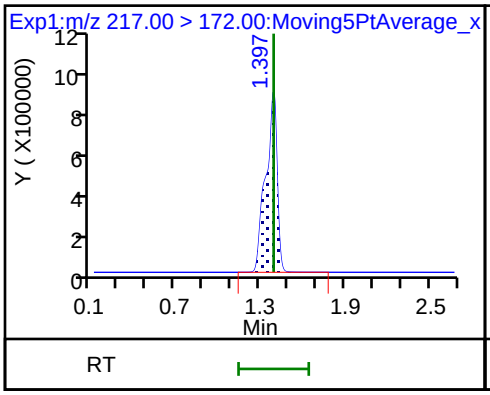
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 15 Worklist Smp#: 7

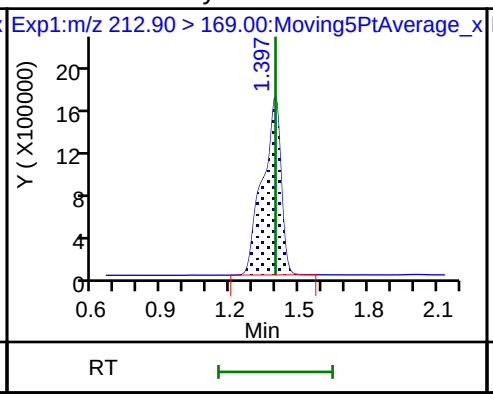
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

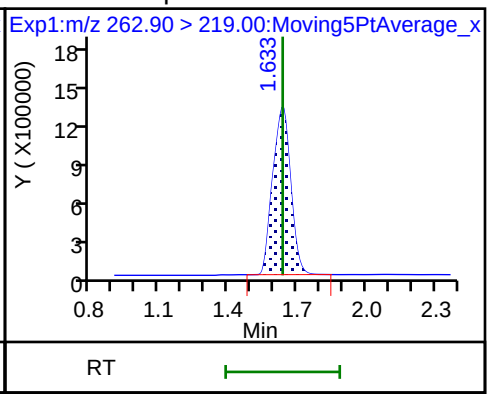
D 1 13C4 PFBA



2 Perfluorobutyric acid



4 Perfluoropentanoic acid



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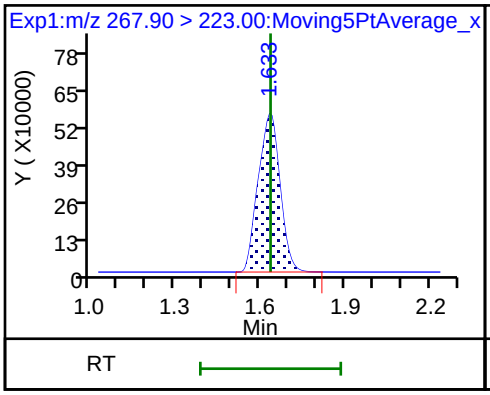

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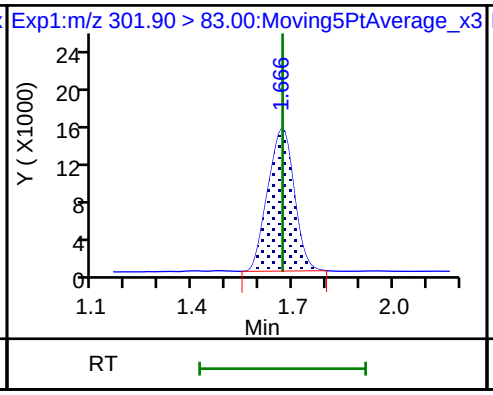
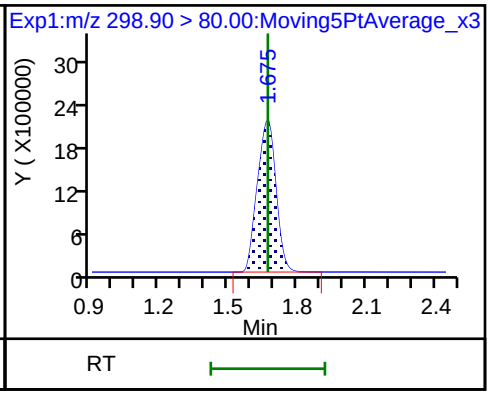
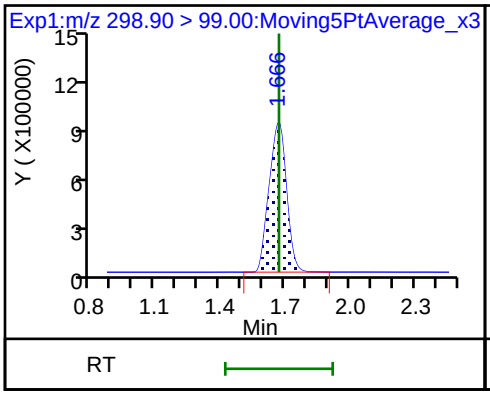


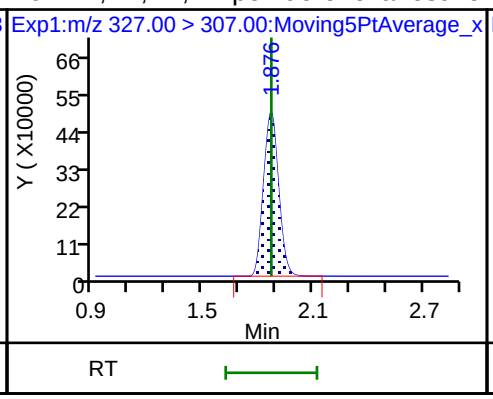
5 Perfluorobutanesulfonic acid



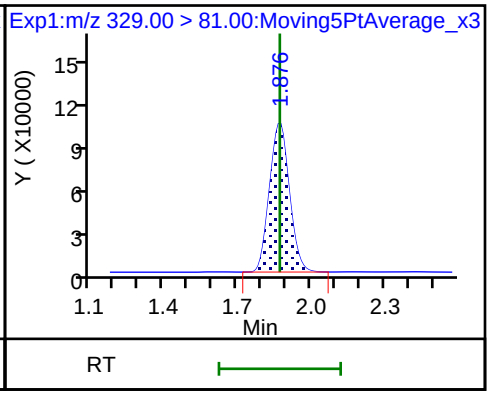
5 Perfluorobutanesulfonic acid



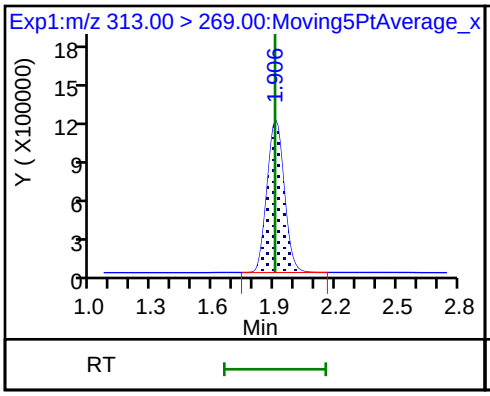
61 1H,1H,2H,2H-perfluorohexanesulfon



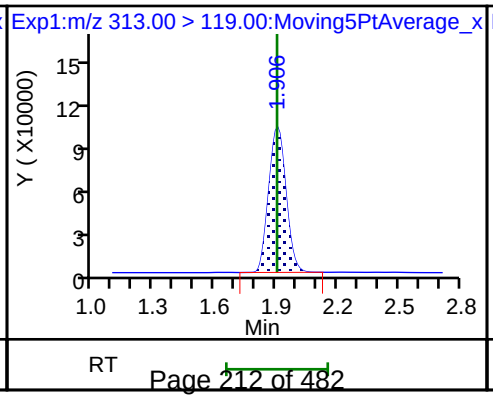
D 60 M2-4:2FTS



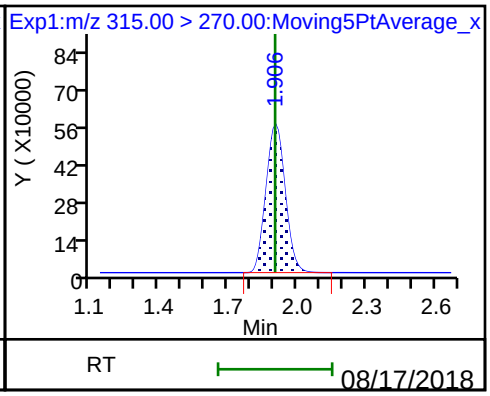
6 Perfluorohexanoic acid



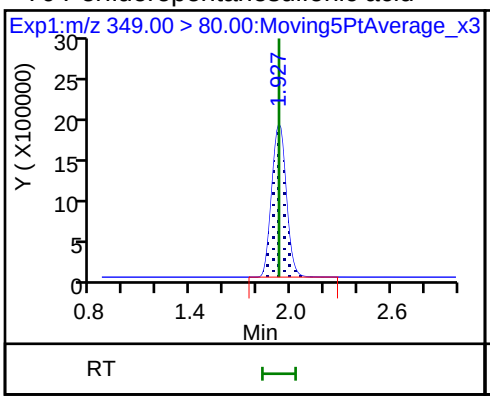
6 Perfluorohexanoic acid



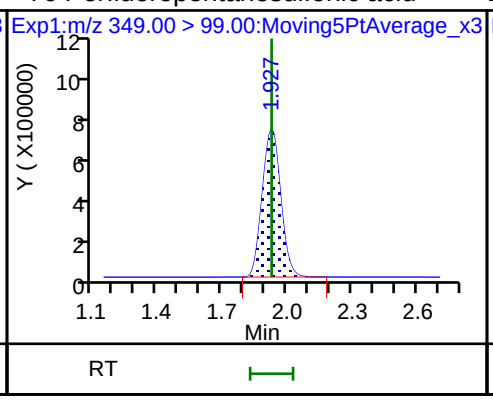
D 7 13C2 PFHxA



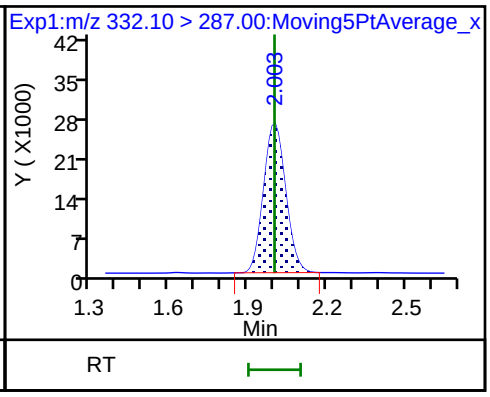
70 Perfluoropentanesulfonic acid



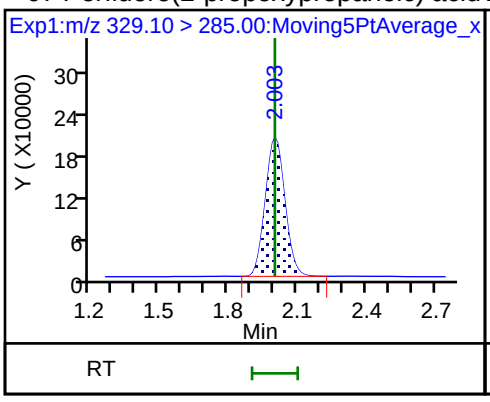
70 Perfluoropentanesulfonic acid



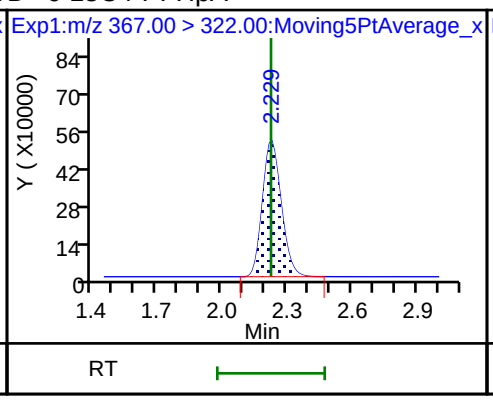
D 64 13C3 HFPO-DA



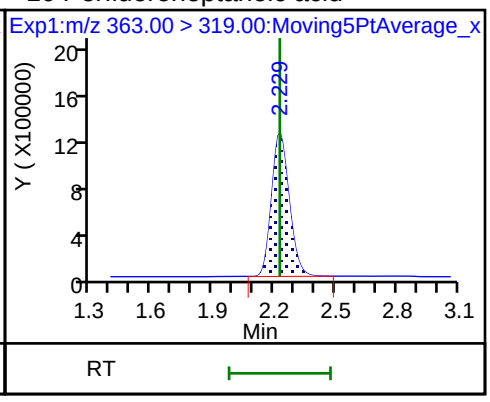
67 Perfluoro(2-propoxypropanoic) acid



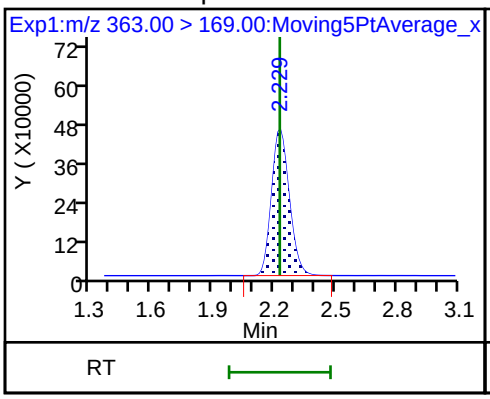
D 9 13C4-PFHpA



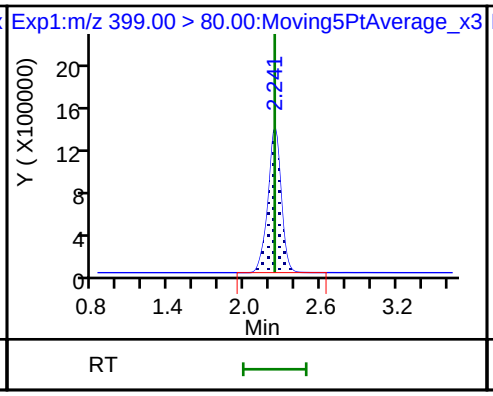
10 Perfluoroheptanoic acid



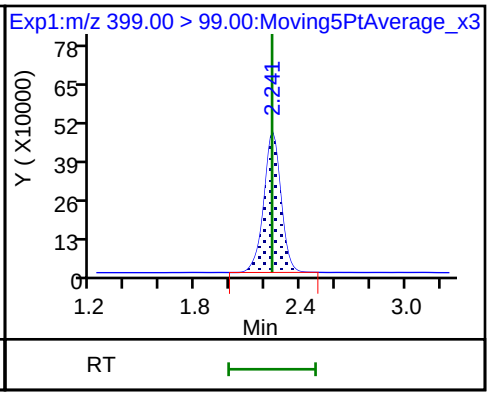
10 Perfluoroheptanoic acid



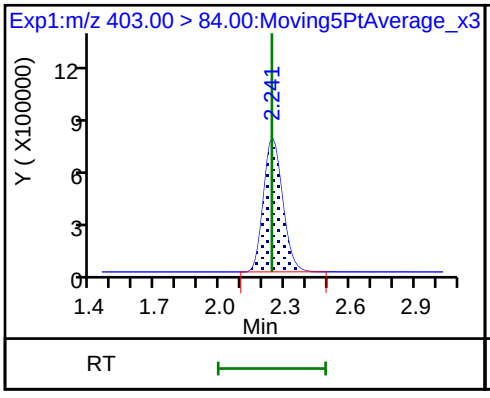
8 Perfluorohexanesulfonic acid



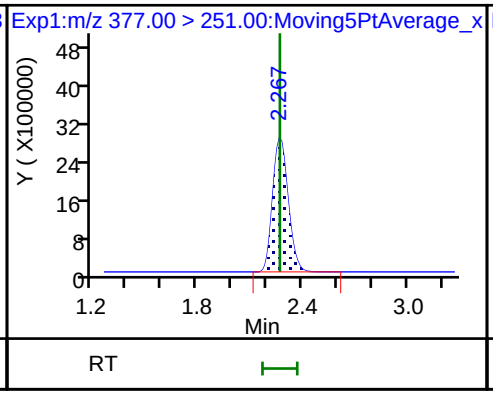
8 Perfluorohexanesulfonic acid



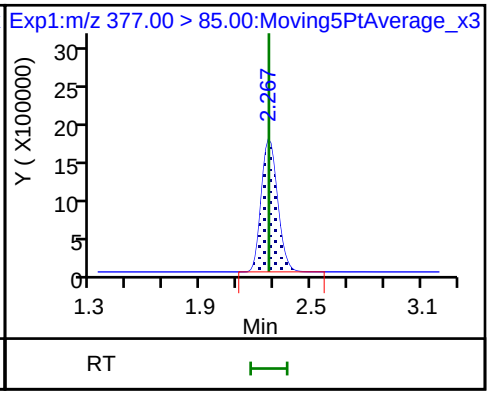
D 11 18O2 PFHxS



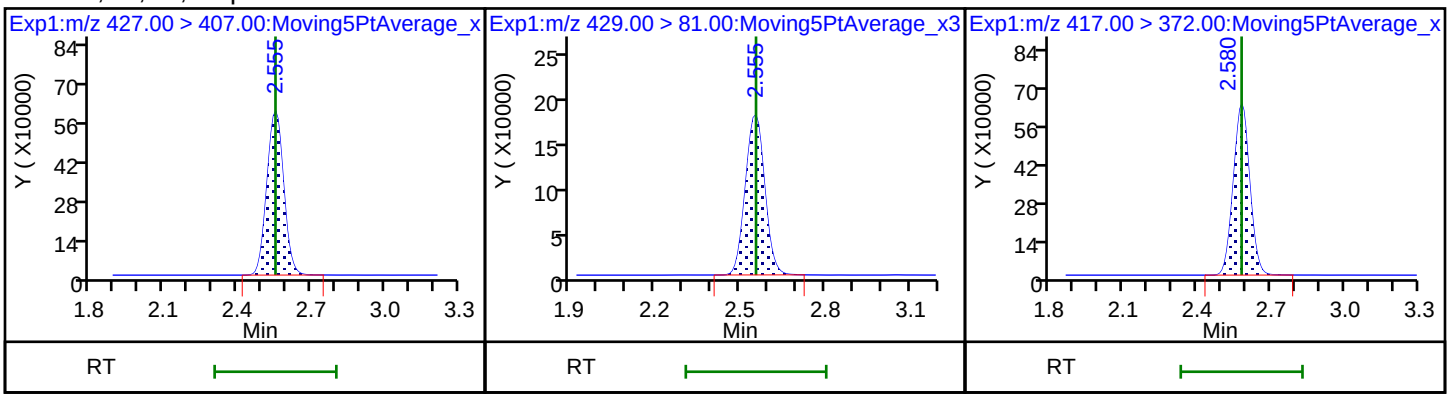
65 ADONA



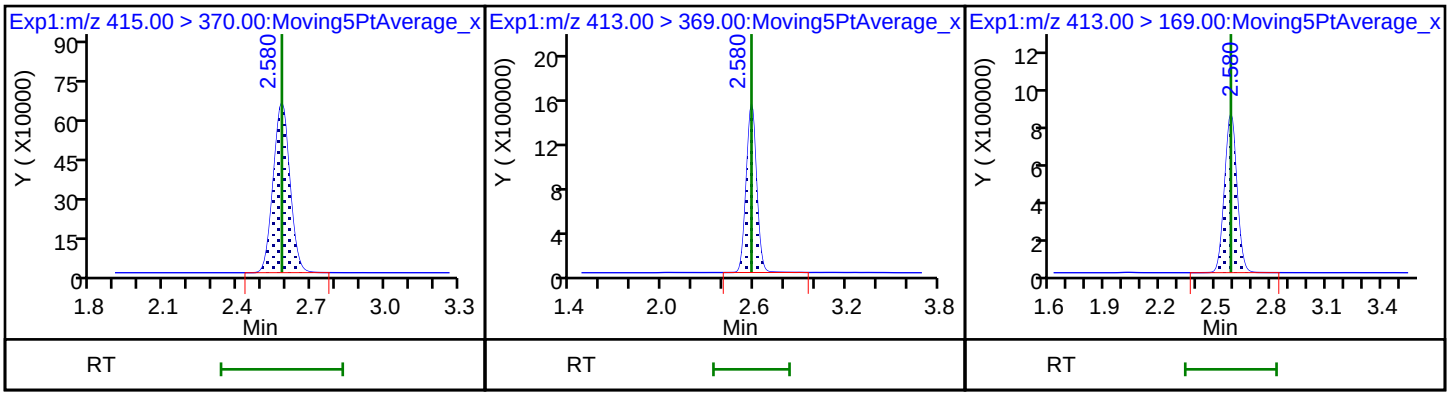
65 ADONA



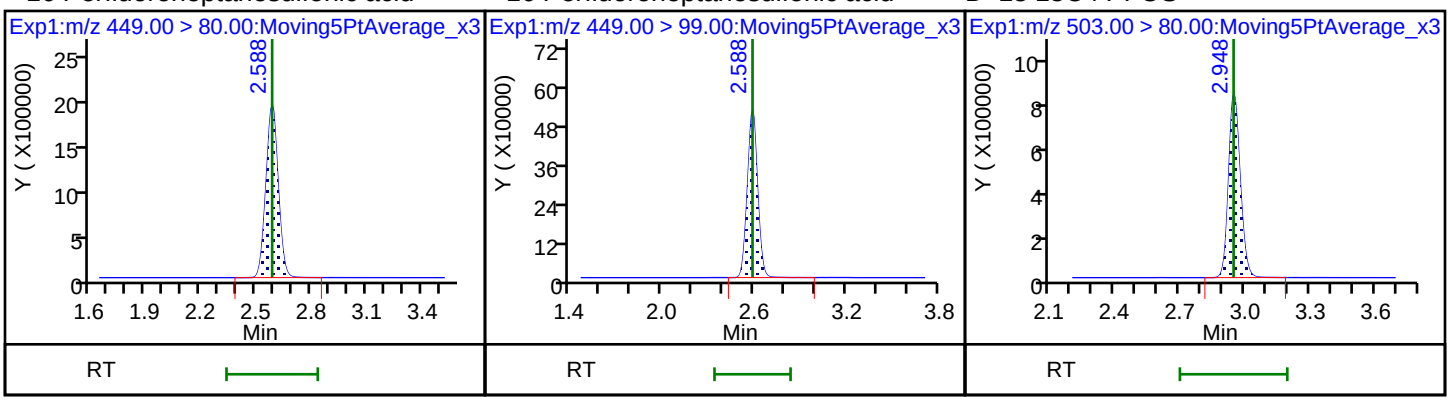
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 14 13C4 PFOA



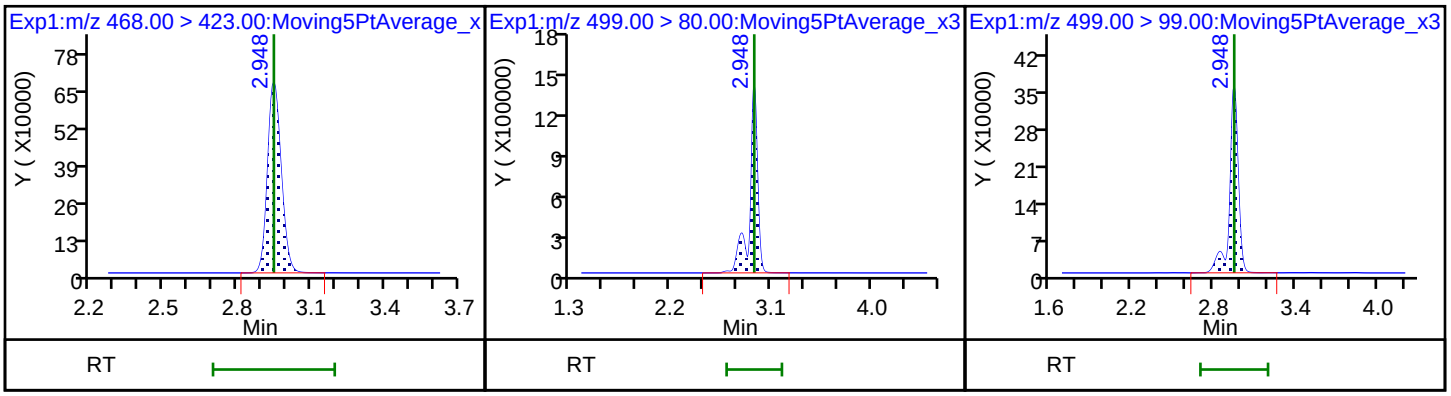
* 62 13C2-PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



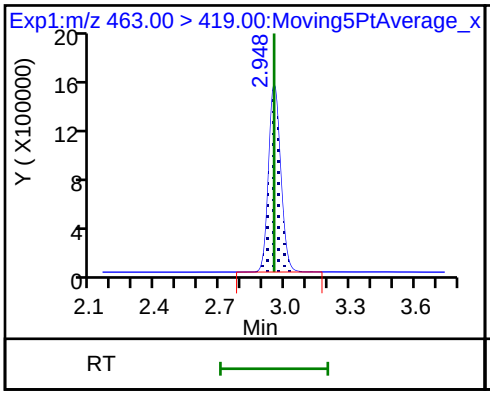
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 18 13C4 PFOS



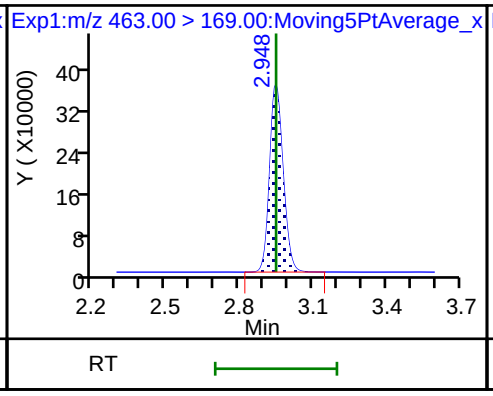
D 19 13C5 PFNA 17 Perfluorooctane sulfonic acid 17 Perfluorooctane sulfonic acid



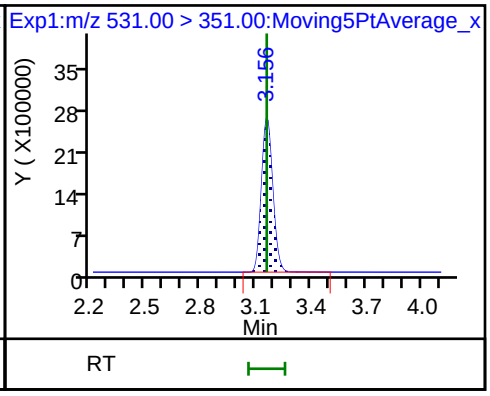
20 Perfluorononanoic acid



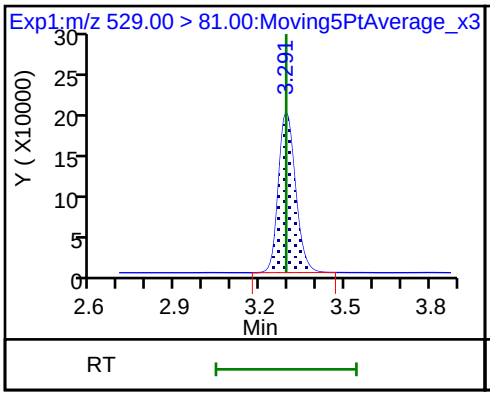
20 Perfluorononanoic acid



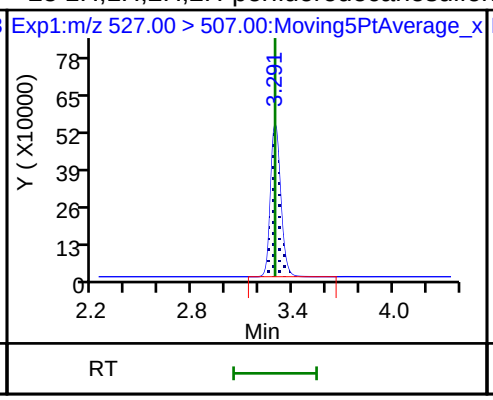
69 9-Chlorohexadecafluoro-3-oxanonane



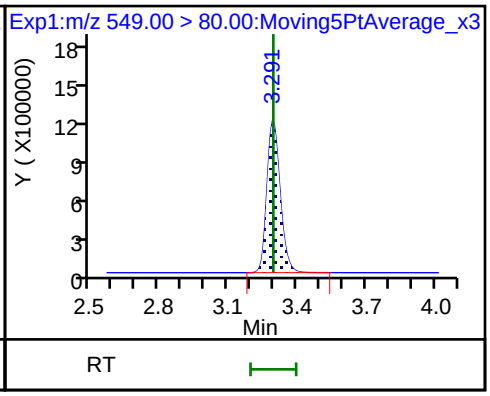
D 26 M2-8:2FTS



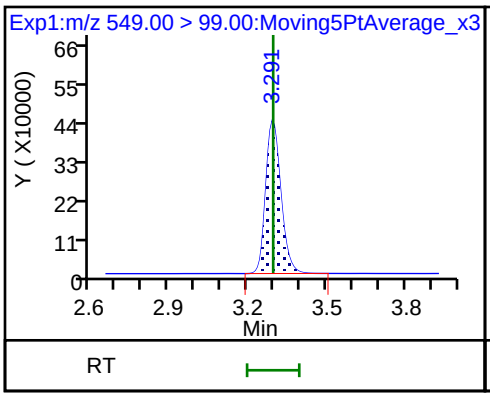
25 1H,1H,2H,2H-perfluorodecanesulfoni



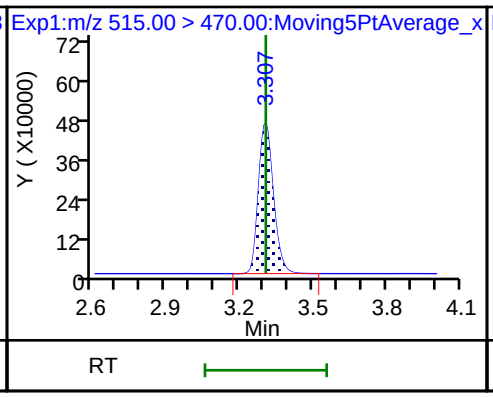
68 Perfluorononanesulfonic acid



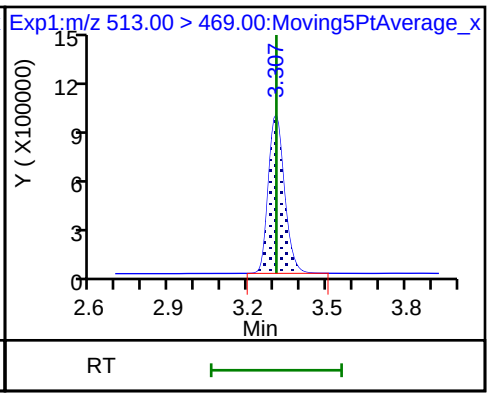
68 Perfluorononanesulfonic acid



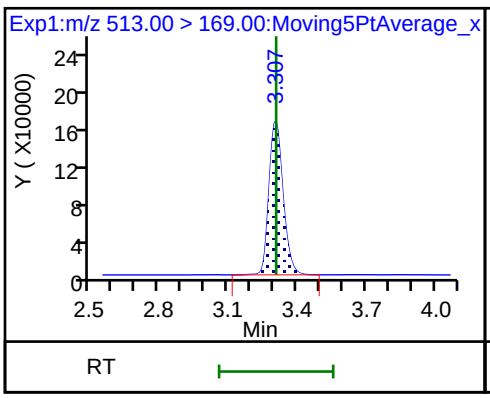
D 23 13C2 PFDA



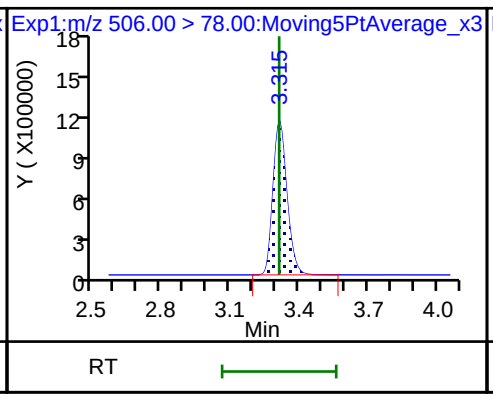
24 Perfluorodecanoic acid



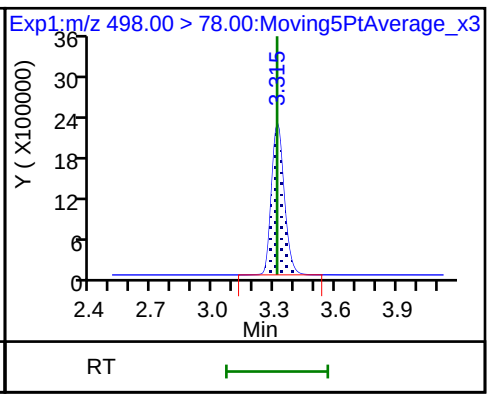
24 Perfluorodecanoic acid



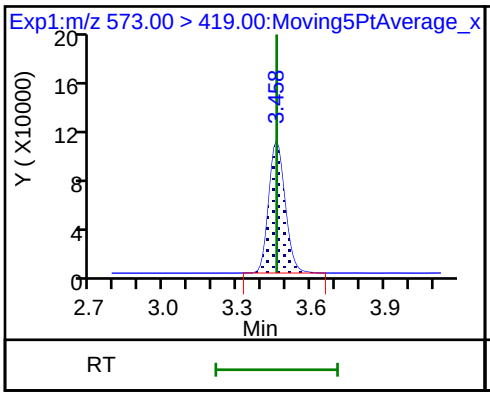
D 21 13C8 FOSA



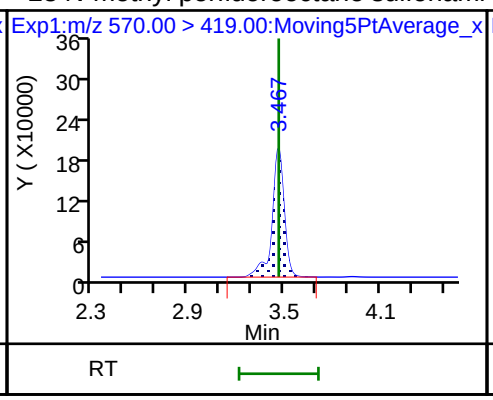
22 Perfluorooctane Sulfonamide



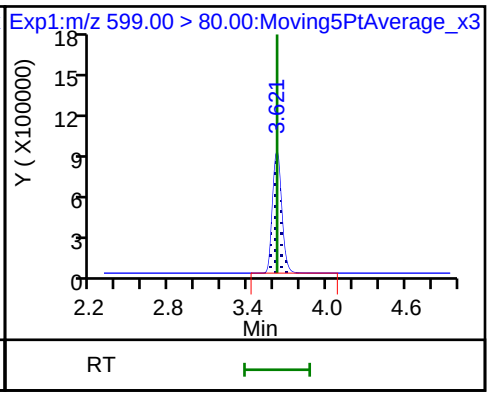
D 27 d3-NMeFOSAA



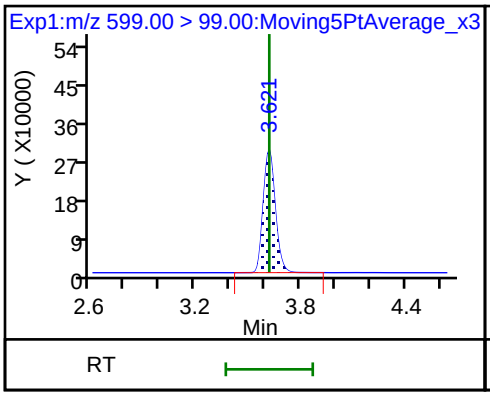
28 N-methyl perfluorooctane sulfonami



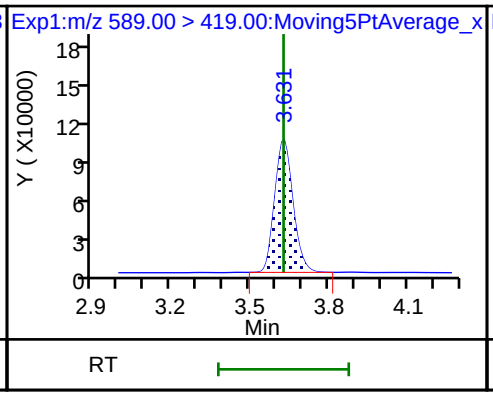
29 Perfluorodecane Sulfonic acid



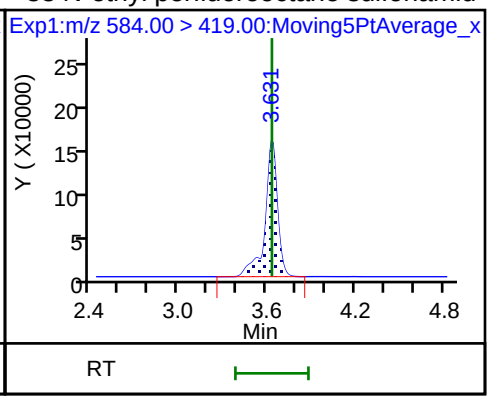
29 Perfluorodecane Sulfonic acid



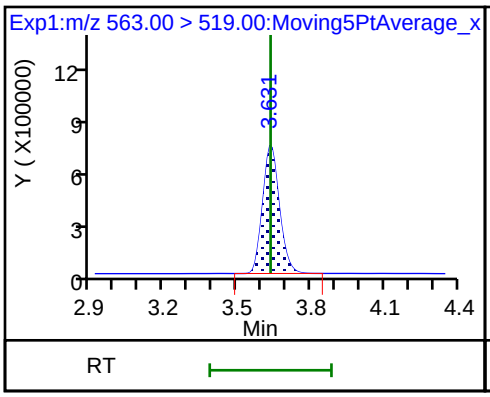
D 32 d5-NEtFOSAA



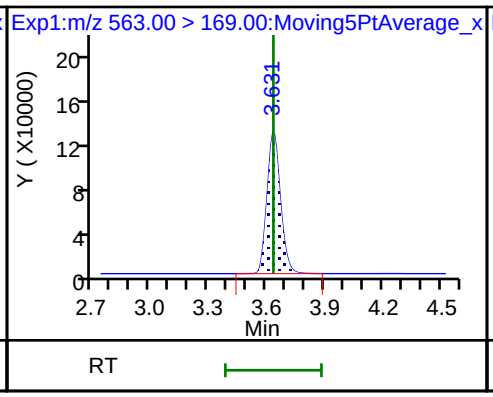
33 N-ethyl perfluorooctane sulfonamid



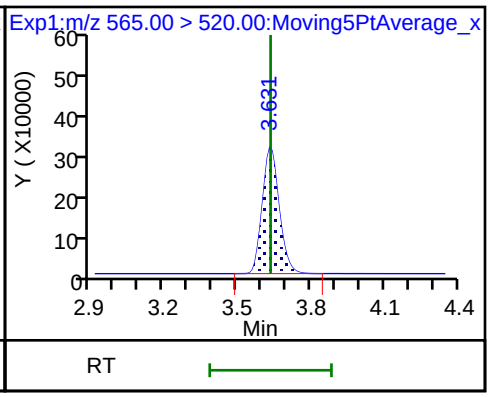
31 Perfluoroundecanoic acid



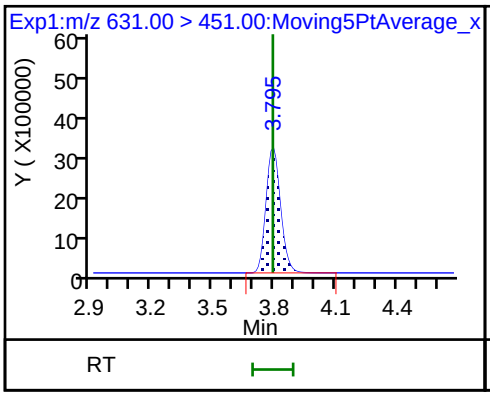
31 Perfluoroundecanoic acid



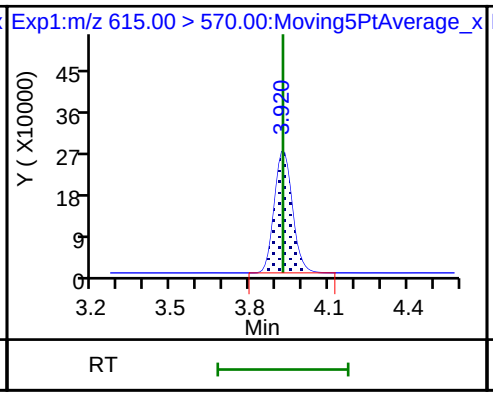
D 30 13C2 PFUnA



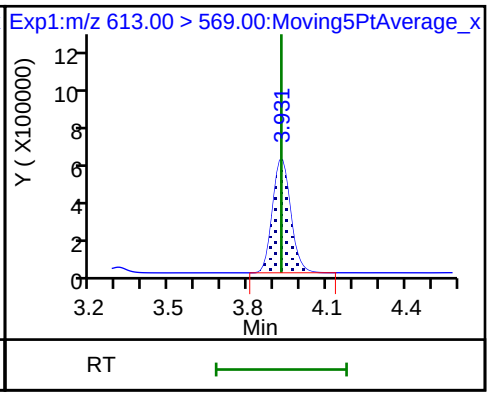
66 11-Chloroeicosafluoro-3-oxaundecan



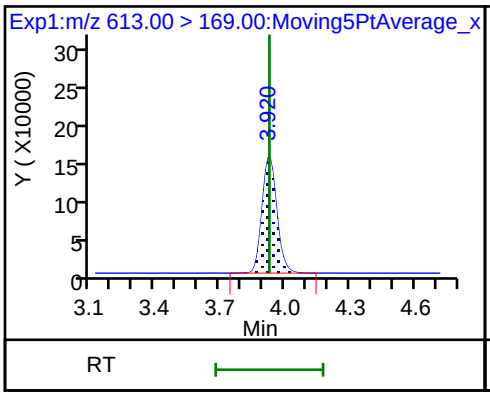
D 36 13C2 PFDoA



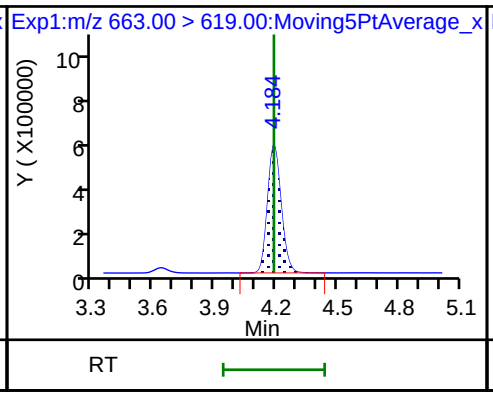
37 Perfluorododecanoic acid



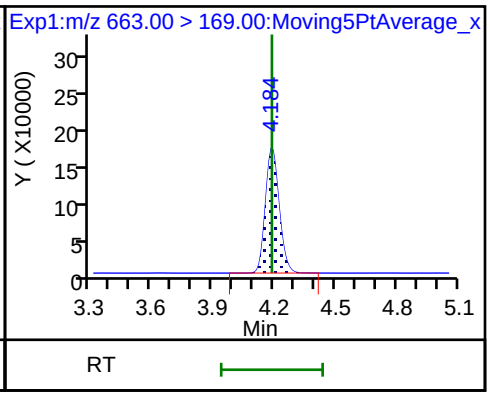
37 Perfluorododecanoic acid



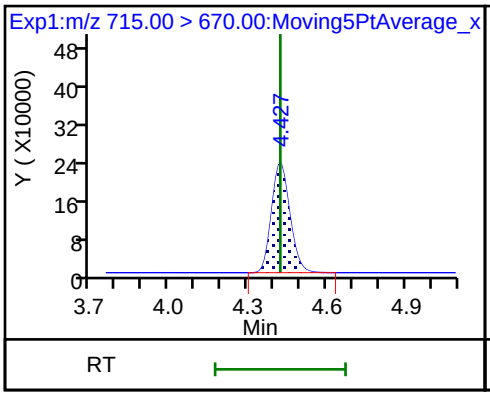
41 Perfluorotridecanoic acid



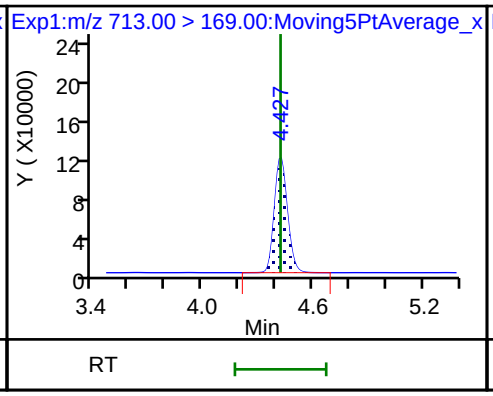
41 Perfluorotridecanoic acid



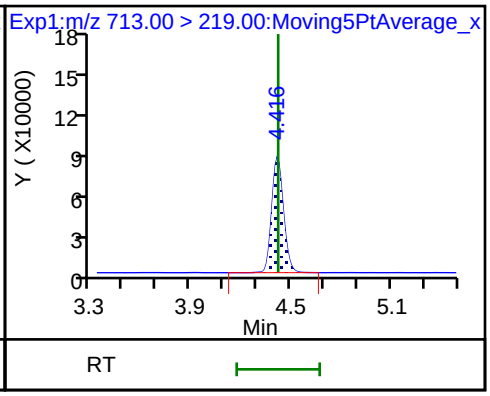
D 43 13C2-PFTeDA



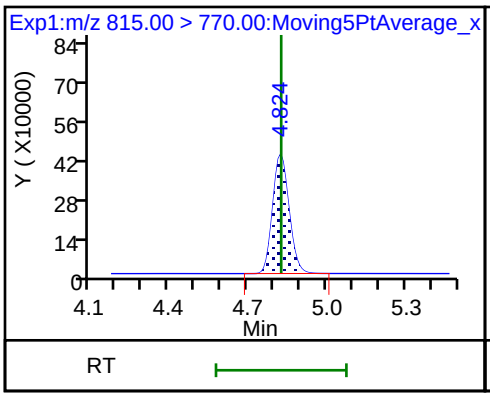
42 Perfluorotetradecanoic acid



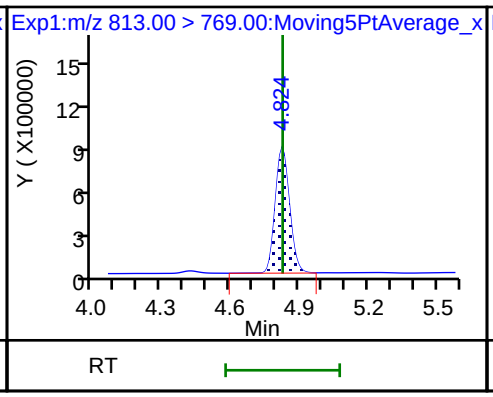
42 Perfluorotetradecanoic acid



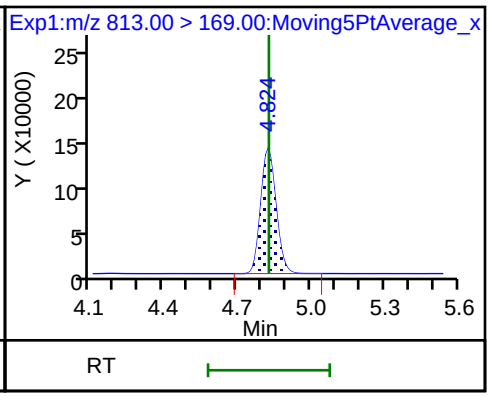
D 44 13C2-PFHxDA



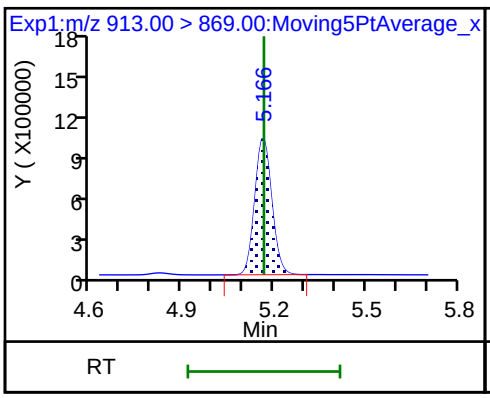
45 Perfluorohexadecanoic acid



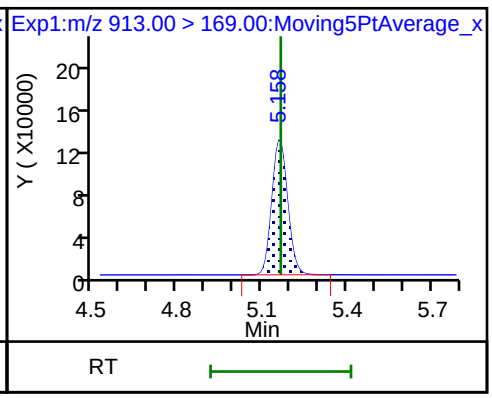
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Aug-2018 13:46:01 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L7-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 01-Aug-2018 14:59:54 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK022

First Level Reviewer: roycea Date: 01-Aug-2018 14:35:43

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.395	-0.003	0.541	4488667	2.73		109	73989	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.396	-0.005	1.000	17657065	9.98		99.8	4339	
D 3 13C5-PFPeA										
267.90 > 223.00	1.633	1.636	-0.003	0.635	2847672	2.63		105	44006	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.633	1.636	-0.003	1.000	13665143	10.0		100	5702	
D 47 13C3-PFBS										
301.90 > 83.00	1.666	1.669	-0.003	0.647	80880	2.59		112	321	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.666	1.671	-0.005	1.000	22654929	8.50		96.1	77149	
298.90 > 99.00	1.666	1.671	-0.005	1.000	10018644		2.26(1.25-3.74)	96.1	64080	
D 60 M2-4:2FTS										
329.00 > 81.00	1.866	1.872	-0.006	0.725	526933	2.39		102	5548	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.866	1.872	-0.006	1.120	5267139	8.80		94.2	185327	
D 7 13C2 PFHxA										
315.00 > 270.00	1.895	1.903	-0.008	0.737	3022362	2.58		103	64725	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.895	1.903	-0.008	1.000	13079443	10.3		103	23297	
313.00 > 119.00	1.895	1.903	-0.008	1.000	1166130		11.22(5.03-15.10)	103	13276	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.927	1.928	-0.001	1.157	21798270	9.26		98.7	139676	
349.00 > 99.00	1.927	1.928	-0.001	1.157	8606195		2.53(1.36-4.07)	98.7	42784	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.992	2.000	-0.008	0.774	159356	2.90		116	3961	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.992	2.002	-0.010	1.000	2476711	9.71		97.1	10791	
D 9 13C4-PFHpA										
367.00 > 322.00	2.218	2.225	-0.007	0.862	2908549	2.56		102	60437	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.218	2.226	-0.008	1.000	13373710	9.91		99.1	5700	
363.00 > 169.00	2.218	2.226	-0.008	1.000	5233691		2.56(1.13-3.40)	99.1	41791	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.229	2.237	-0.008	1.000	18747407	8.49		93.3	37401	
399.00 > 99.00	2.229	2.237	-0.008	1.000	6489057		2.89(1.50-4.49)	93.3	8896	
D 11 18O2 PFHxS										
403.00 > 84.00	2.229	2.238	-0.009	0.866	4518625	2.64		112	52710	
65 ADONA										
377.00 > 251.00	2.267	2.270	-0.003	0.771	30025263	8.17		86.7	138977	
377.00 > 85.00	2.267	2.270	-0.003	0.771	18863315		1.59(0.84-2.53)	86.7	55929	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.547	2.554	-0.007	1.000	5327073	9.77		103	41841	
D 12 M2-6:2FTS										
429.00 > 81.00	2.547	2.556	-0.009	0.990	782824	2.35		98.9	10988	
D 14 13C4 PFOA										
417.00 > 372.00	2.573	2.580	-0.007	1.000	2730006	2.49		99.4	48269	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.573	2.581	-0.008	1.000	12686108	10.0		100	9244	
413.00 > 169.00	2.573	2.581	-0.008	1.000	7050018		1.80(0.84-2.52)	100	18721	
* 62 13C2-PFOA										
415.00 > 370.00	2.573	2.581	-0.008		2860140	2.50			30580	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.587	-0.006	0.877	16519531	9.08		95.4	40839	
449.00 > 99.00	2.581	2.587	-0.006	0.877	4738121		3.49(1.94-5.82)	95.4	36870	
D 18 13C4 PFOS										
503.00 > 80.00	2.943	2.946	-0.003	1.144	3144316	2.66		111	42087	
D 19 13C5 PFNA										
468.00 > 423.00	2.943	2.948	-0.005	1.144	2393820	2.50		100	51513	
20 Perfluorononanoic acid										
463.00 > 419.00	2.943	2.949	-0.006	1.000	10755568	10.4		104	21010	
463.00 > 169.00	2.943	2.949	-0.006	1.000	2576235		4.17(1.90-5.69)	104	41900	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.943	2.949	-0.006	1.000	13695202	9.27		99.9	54151	
499.00 > 99.00	2.943	2.949	-0.006	1.000	3178976		4.31(2.31-6.93)	99.9	18790	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.156	3.158	-0.002	1.073	20317968	8.65		92.8	84817	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.284	3.292	-0.008	1.000	3886014	9.26		96.6	84560	
D 26 M2-8:2FTS										
529.00 > 81.00	3.284	3.292	-0.008	1.276	744064	2.29		95.6	12722	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.292	3.295	-0.003	1.119	9124121	9.65		101	51248	
549.00 > 99.00	3.292	3.295	-0.003	1.119	3638243		2.51(1.33-3.97)	101	19247	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.300	3.306	-0.006	1.282	1788913	2.50		100.0	32934	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.300	3.308	-0.008	1.000	7657634	10.0		100	9199	
513.00 > 169.00	3.300	3.308	-0.008	1.000	1309103		5.85(2.36-7.09)	100	14855	
D 21 13C8 FOSA										
506.00 > 78.00	3.308	3.312	-0.004	1.285	4606616	2.66		106	37706	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.308	3.313	-0.005	1.000	17992319	9.89		98.9	109874	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.450	3.459	-0.009	1.341	467155	2.69		108	14408	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.460	3.465	-0.005	1.003	1921554	10.1		101	14086	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.614	3.620	-0.006	1.228	8073020	9.43		97.9	120699	
599.00 > 99.00	3.614	3.620	-0.006	1.228	2617387		3.08(1.39-4.16)	97.9	42044	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.624	3.627	-0.003	1.408	473237	2.54		102	5165	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.624	3.633	-0.009	1.000	1761697	10.4		104	24833	
D 30 13C2 PFUnA										
565.00 > 520.00	3.634	3.634	0.0	1.412	1439097	2.61		104	42272	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.634	3.634	0.0	1.000	6830755	9.63		96.3	15533	
563.00 > 169.00	3.624	3.634	-0.010	0.997	1198536		5.70(2.12-6.36)	96.3	24762	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.792	3.792	0.0	1.288	27013913	8.44		89.6	65696	
D 36 13C2 PFDoA										
615.00 > 570.00	3.917	3.925	-0.008	1.522	1351987	2.83		113	20224	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.917	3.927	-0.010	1.000	5676012	9.69		96.9	2244	
613.00 > 169.00	3.917	3.927	-0.010	1.000	1385417		4.10(2.13-6.40)	96.9	19252	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.182	4.188	-0.006	1.068	4923814	9.66		96.6	1723	
663.00 > 169.00	4.182	4.188	-0.006	1.068	1575534		3.13(1.25-3.76)	96.6	13165	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.415	4.423	-0.008	1.000	1140306	9.90		99.0	9729	
713.00 > 219.00	4.415	4.423	-0.008	1.000	831907		1.37(0.71-2.13)	99.0	9444	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.415	4.423	-0.008	1.716	1068686	2.67		107	5212	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.824	4.826	-0.002	1.875	1896531	2.75		110	2774	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.824	4.827	-0.003	1.000	7317162	9.94		99.4	476	
813.00 > 169.00	4.824	4.827	-0.003	1.000	1186172		6.17(2.86-8.58)	99.4	7540	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.158	5.166	-0.008	1.069	7502047	9.62		96.2	2210	
913.00 > 169.00	5.158	5.166	-0.008	1.069	918043		8.17(3.83-11.48)	96.2	6030	

Reagents:

LCPFC_LL7_00005 Amount Added: 1.00 Units: mL

Report Date: 01-Aug-2018 14:59:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Injection Date: 01-Aug-2018 13:46:01 Instrument ID: A8_N

Lims ID: IC L7 Full

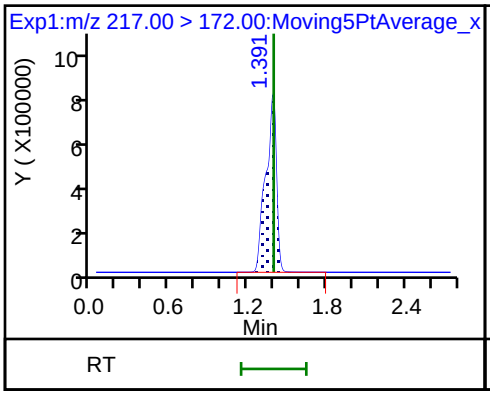
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 16 Worklist Smp#: 8

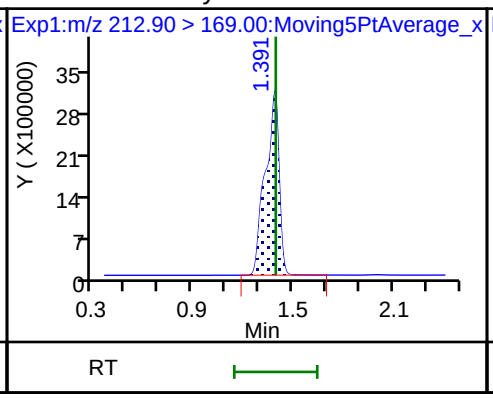
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

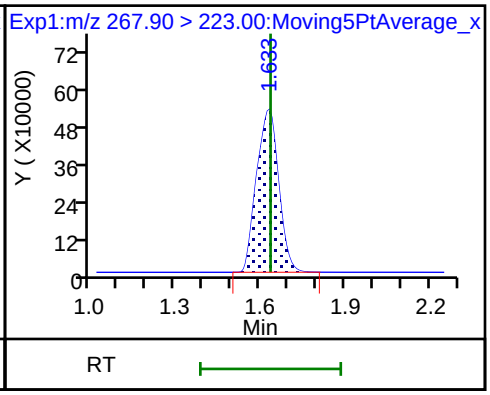
D 1 13C4 PFBA



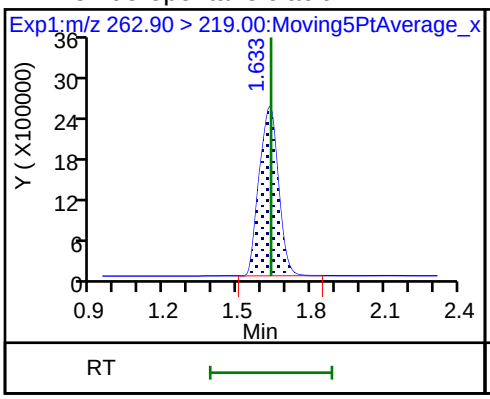
2 Perfluorobutyric acid



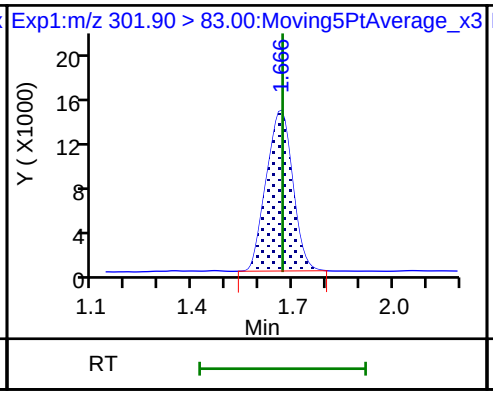
D 3 13C5-PFPeA



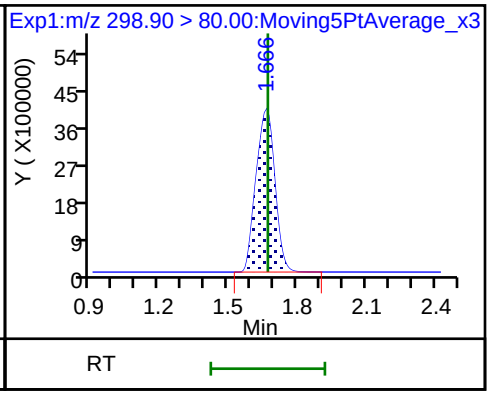
4 Perfluoropentanoic acid



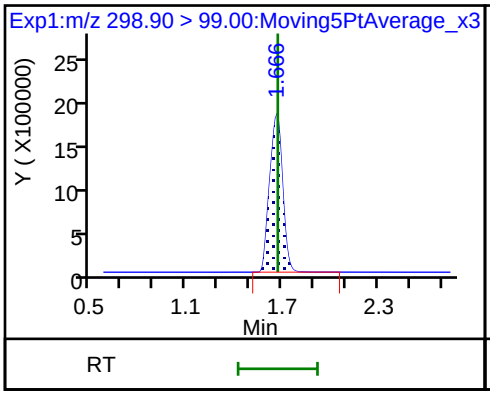
D 47 13C3-PFBS



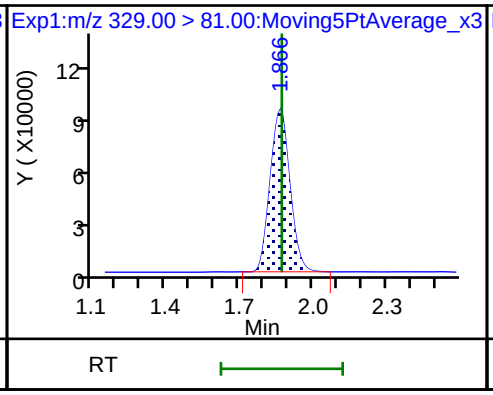
5 Perfluorobutanesulfonic acid



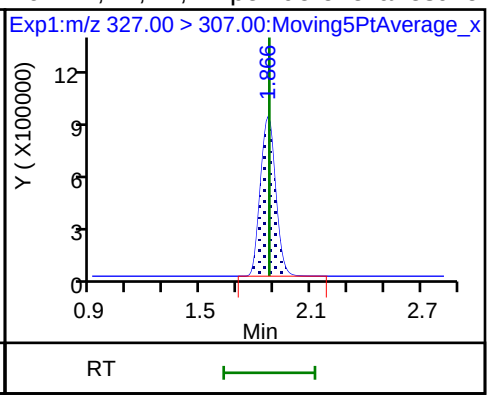
5 Perfluorobutanesulfonic acid



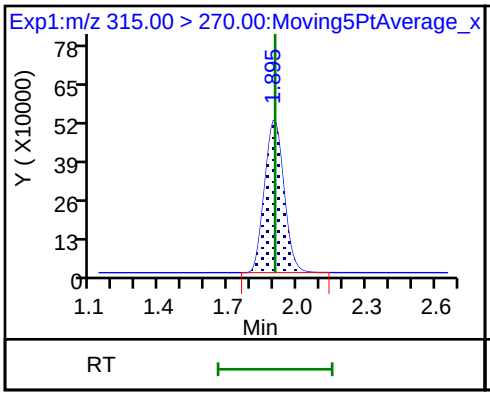
D 60 M2-4:2FTS



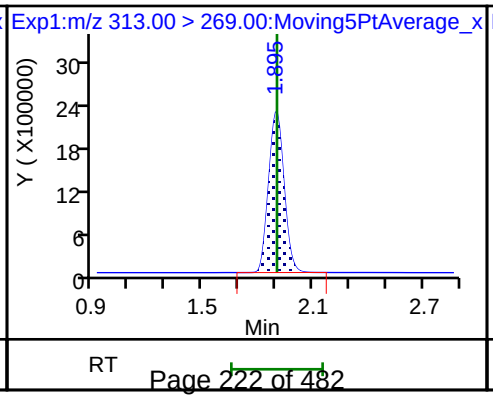
61 1H,1H,2H,2H-perfluorohexanesulfoni



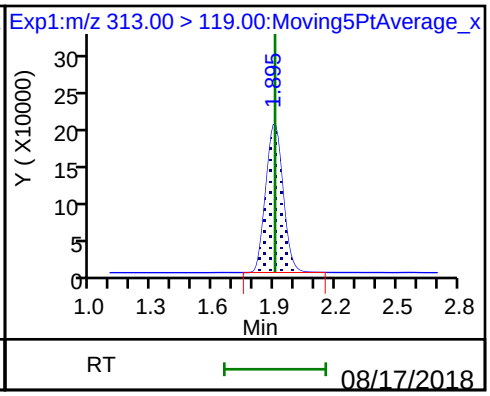
D 7 13C2 PFHxA



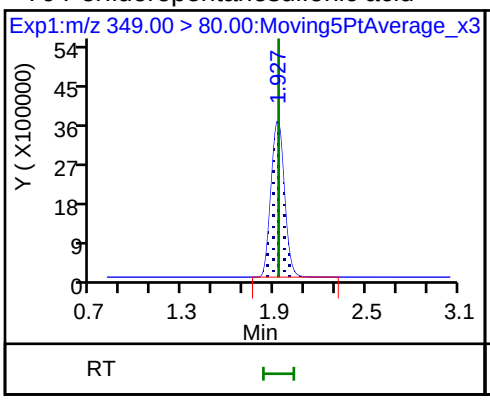
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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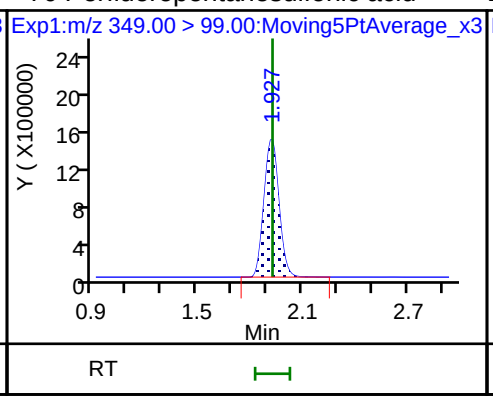
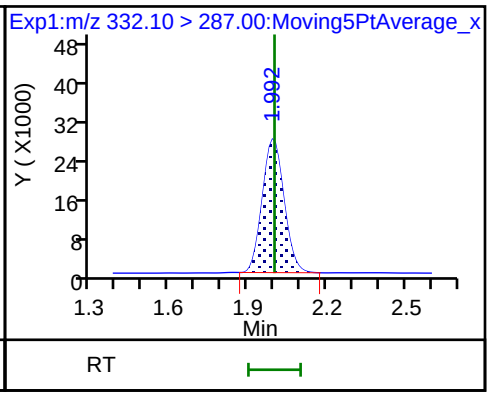
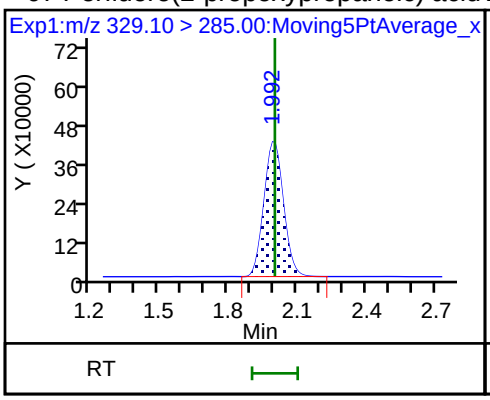


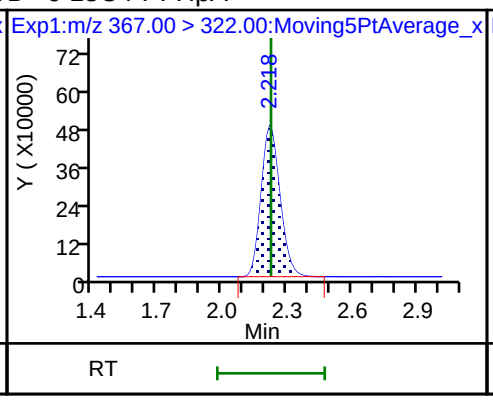
D 64 13C3 HFPO-DA



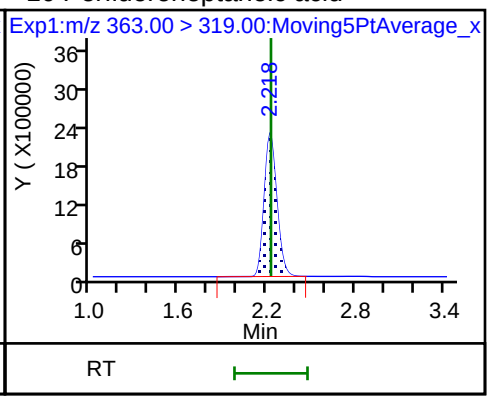
67 Perfluoro(2-propoxypropanoic) acid



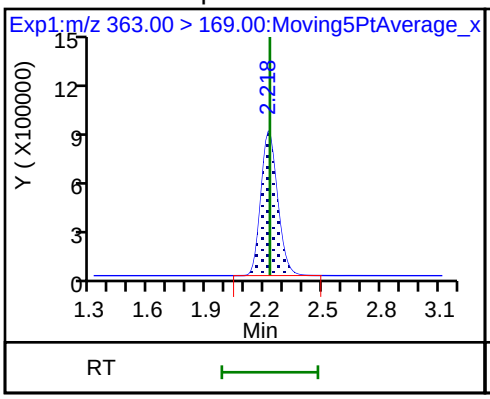
D 9 13C4-PFHpA



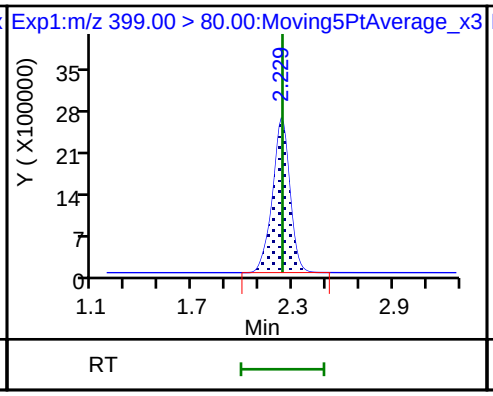
10 Perfluoroheptanoic acid



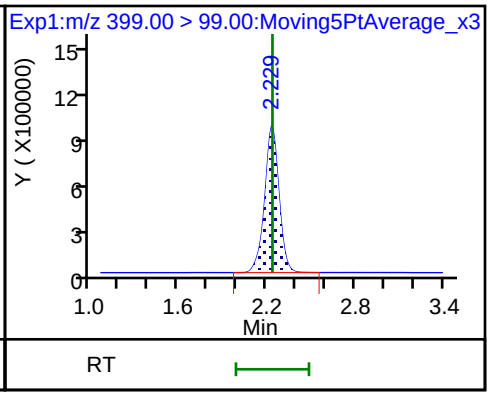
10 Perfluoroheptanoic acid



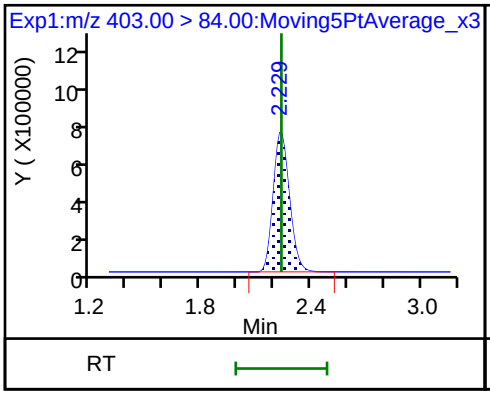
8 Perfluorohexanesulfonic acid



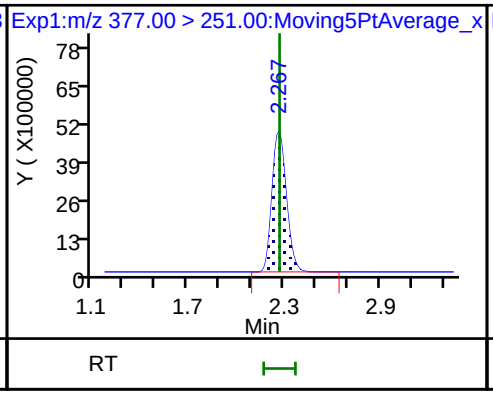
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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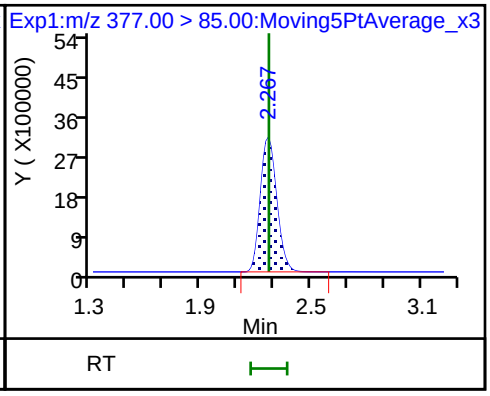
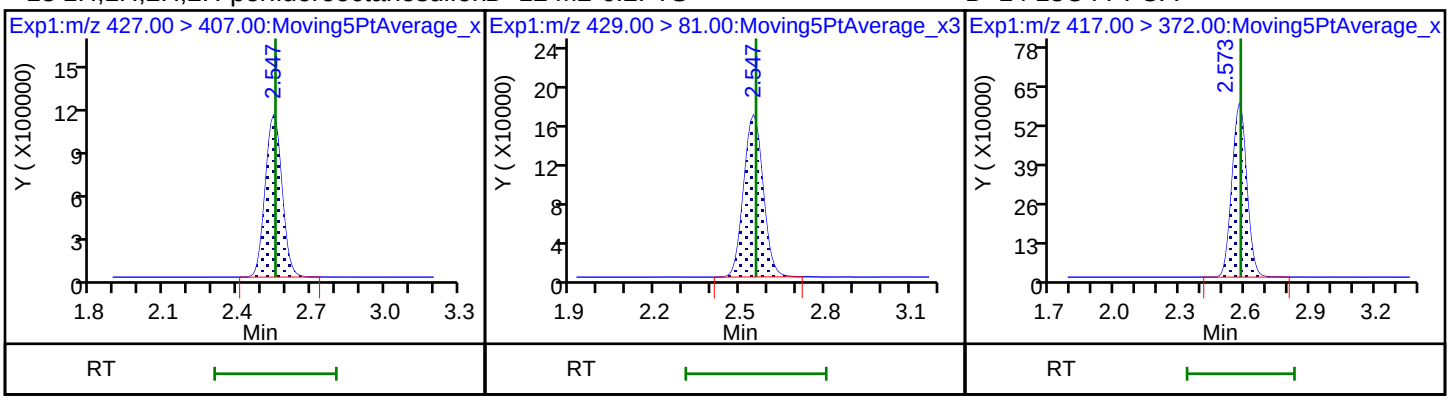
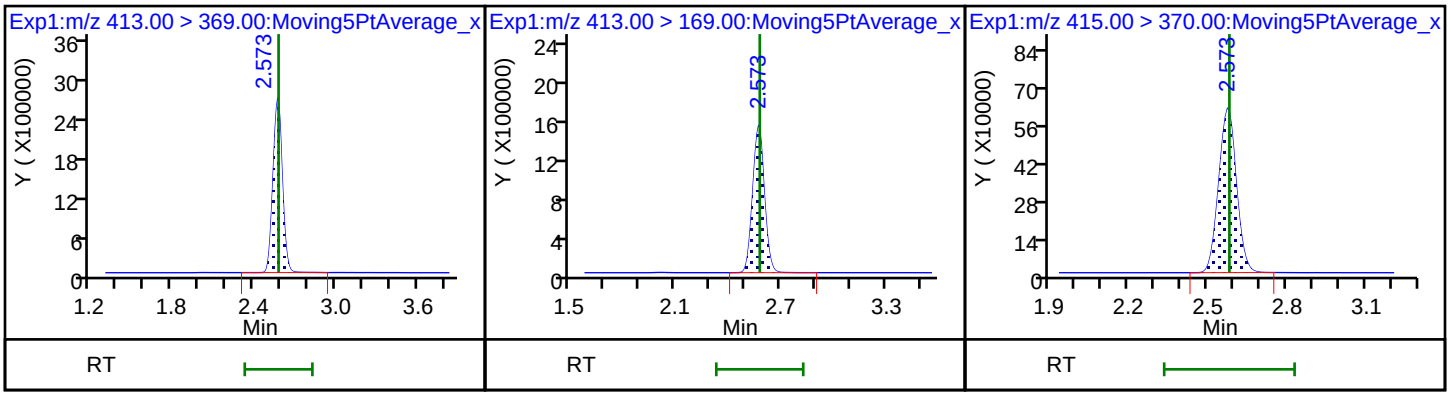


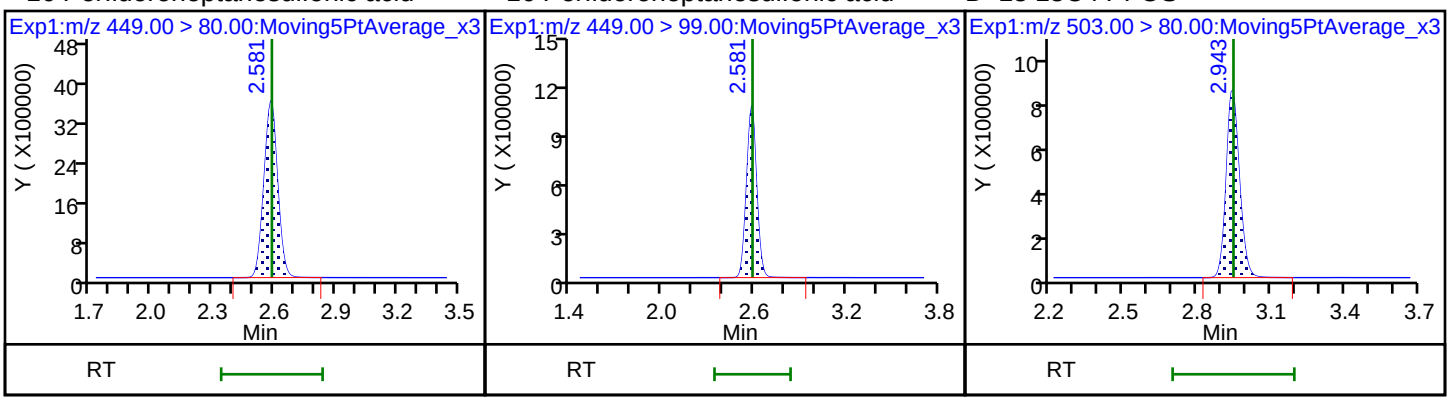
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 14 13C4 PFOA



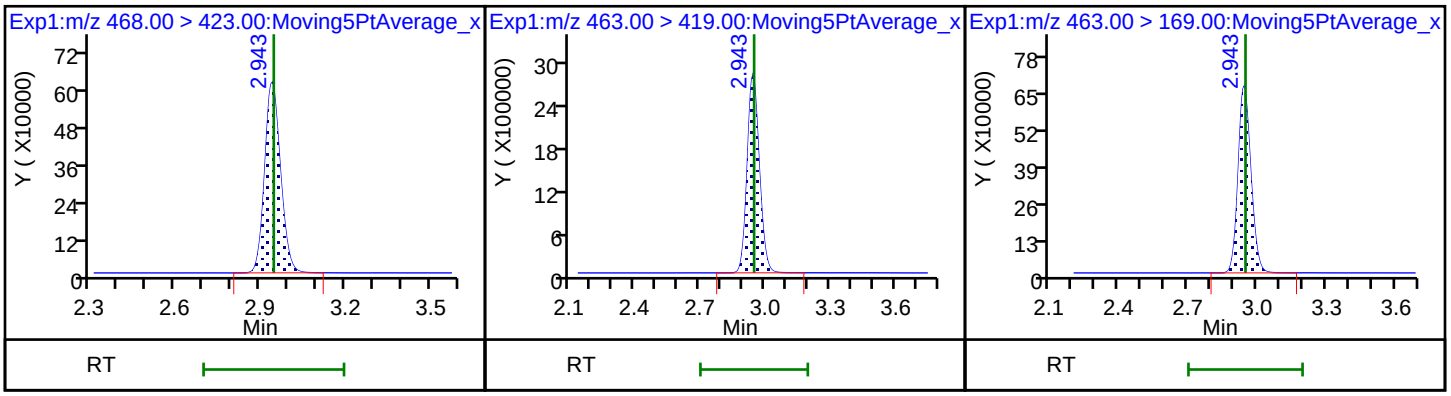
15 Perfluorooctanoic acid 15 Perfluorooctanoic acid * 62 13C2-PFOA



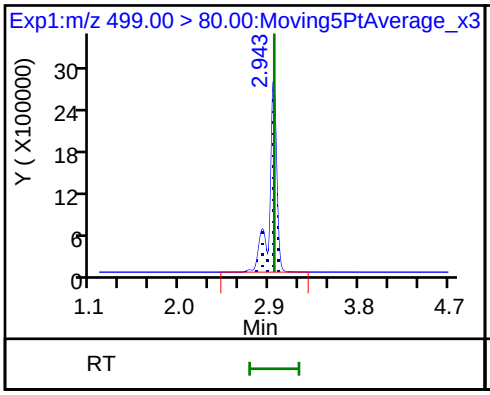
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 18 13C4 PFOS



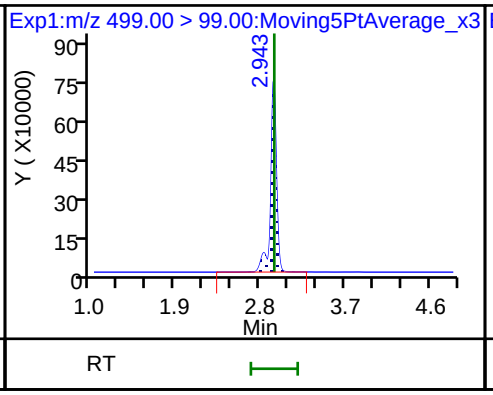
D 19 13C5 PFNA 20 Perfluorononanoic acid 20 Perfluorononanoic acid



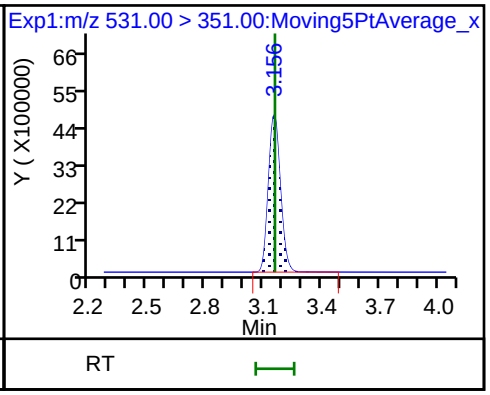
17 Perfluorooctane sulfonic acid



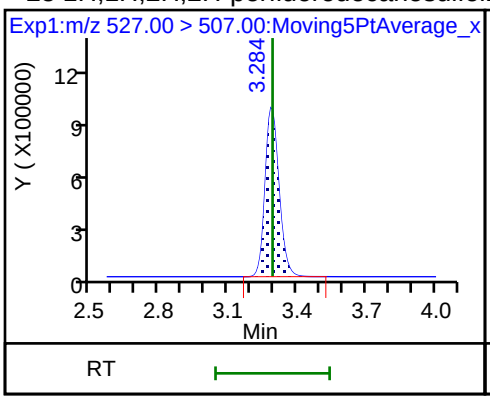
17 Perfluorooctane sulfonic acid



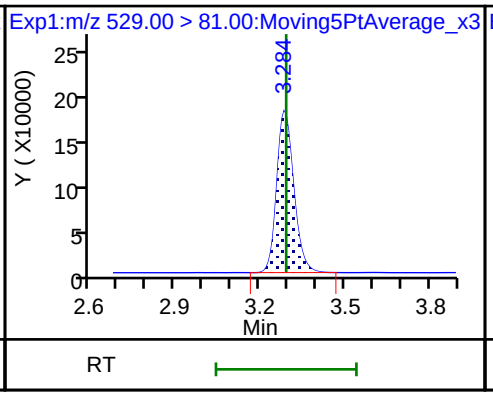
69 9-Chlorohexadecafluoro-3-oxanonane



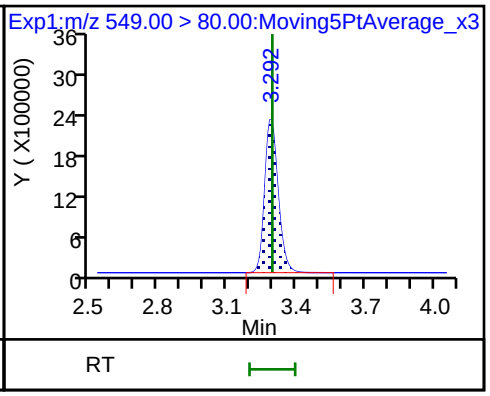
25 1H,1H,2H,2H-perfluorodecanesulfon



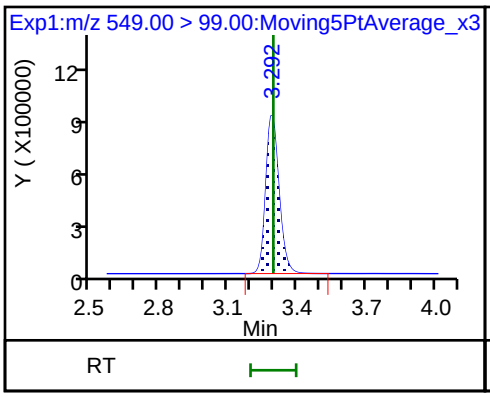
D 26 M2-8:2FTS



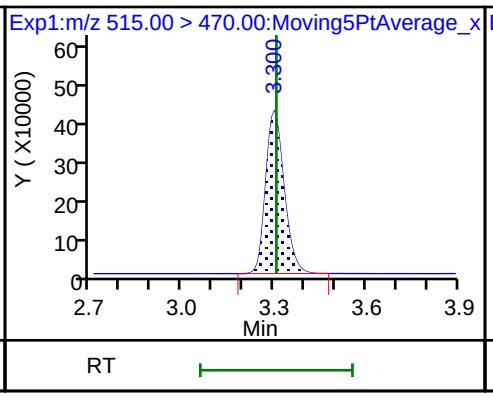
68 Perfluorononanesulfonic acid



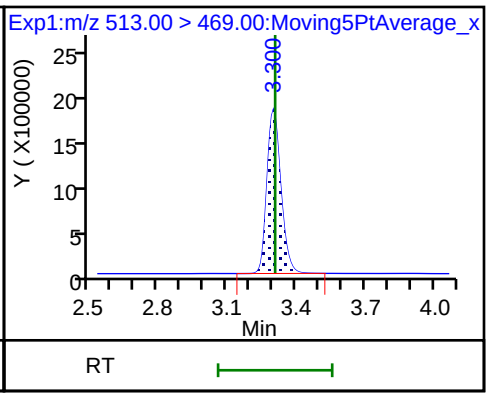
68 Perfluorononanesulfonic acid



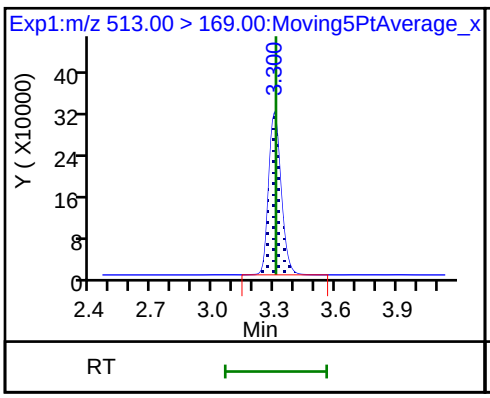
D 23 13C2 PFDA



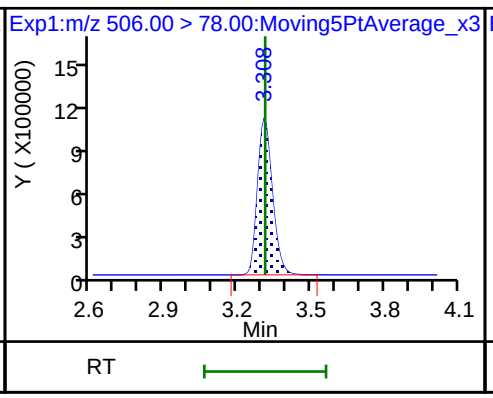
24 Perfluorodecanoic acid



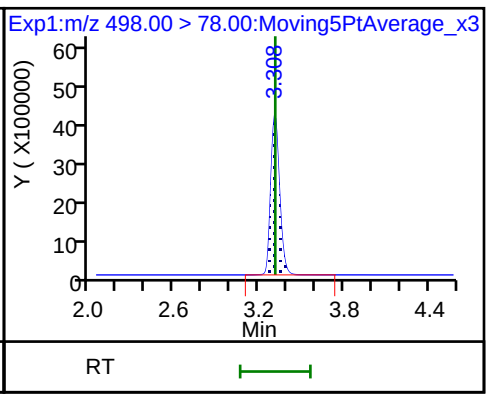
24 Perfluorodecanoic acid



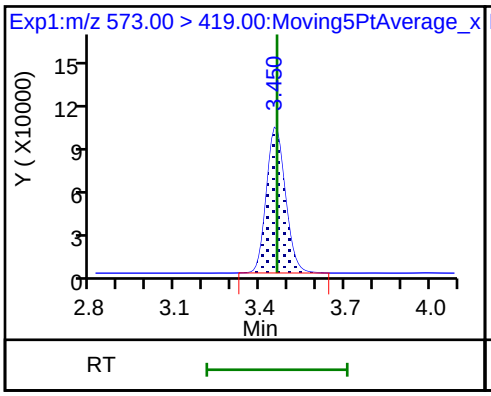
D 21 13C8 FOSA



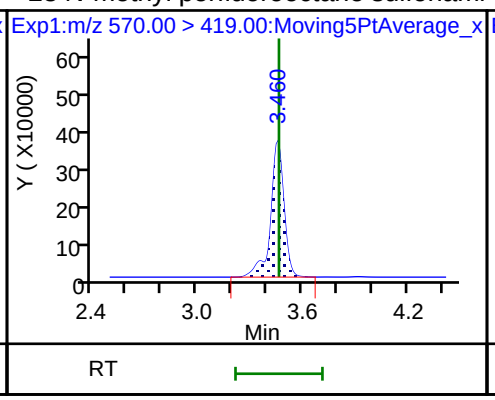
22 Perfluorooctane Sulfonamide



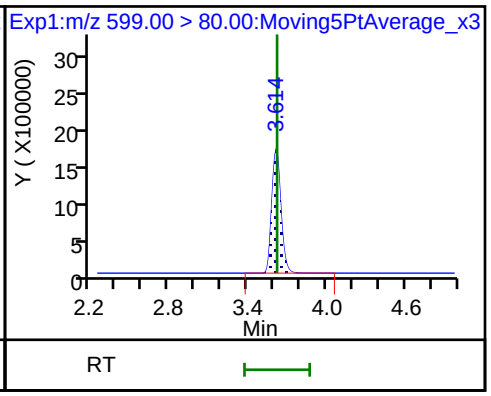
D 27 d3-NMeFOSAA



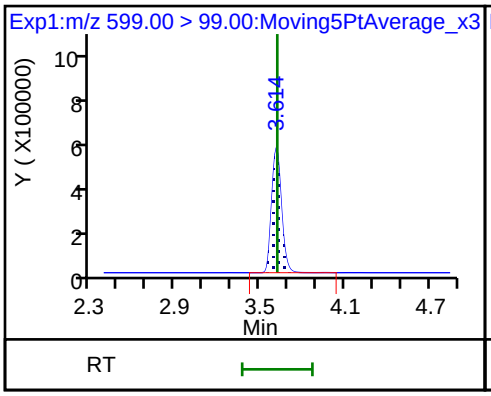
28 N-methyl perfluorooctane sulfonami



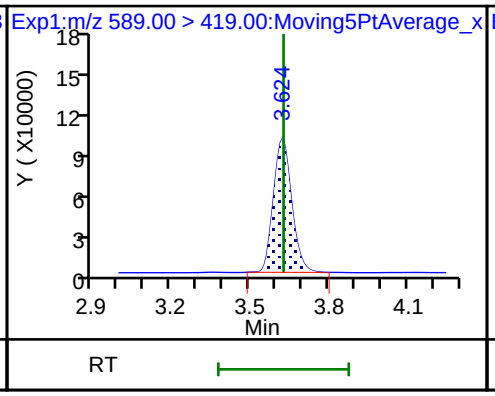
29 Perfluorodecane Sulfonic acid



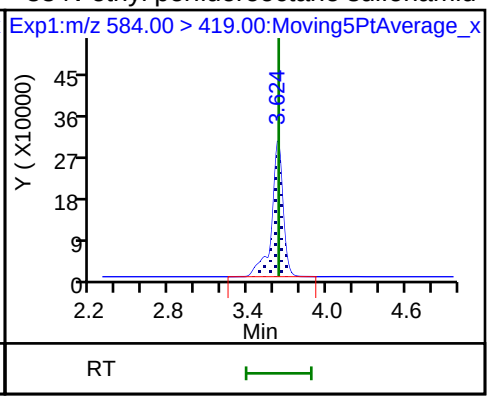
29 Perfluorodecane Sulfonic acid



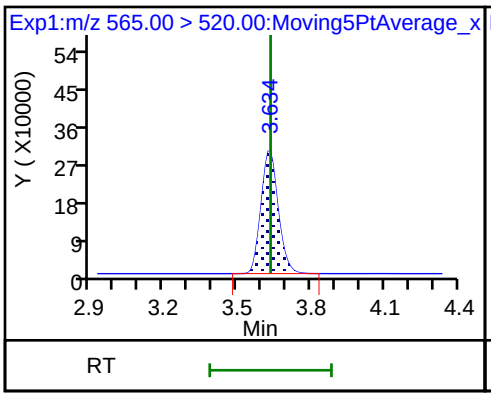
D 32 d5-NEtFOSAA



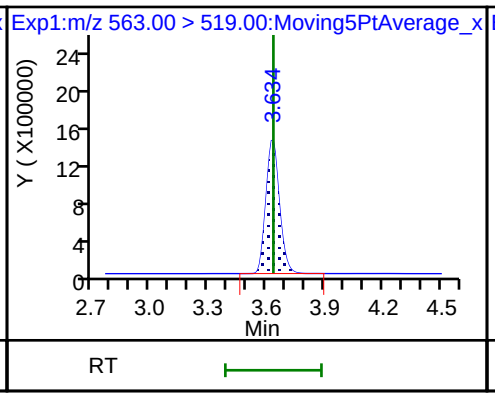
33 N-ethyl perfluorooctane sulfonamid



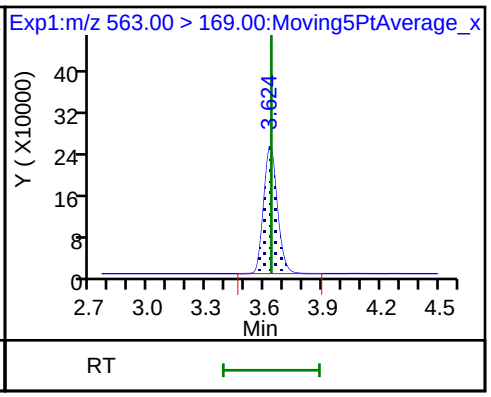
D 30 13C2 PFUnA



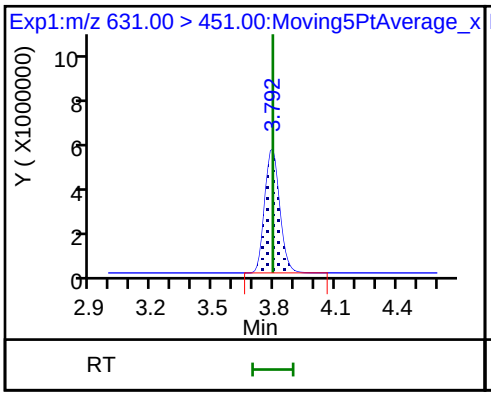
31 Perfluoroundecanoic acid



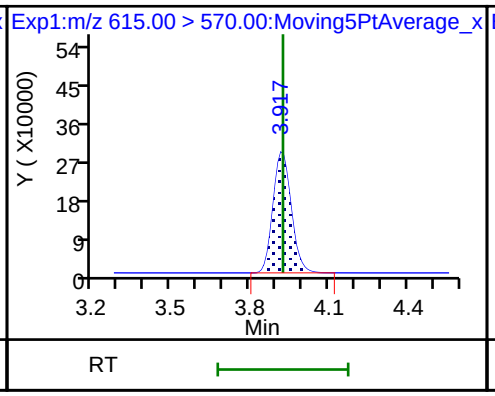
31 Perfluoroundecanoic acid



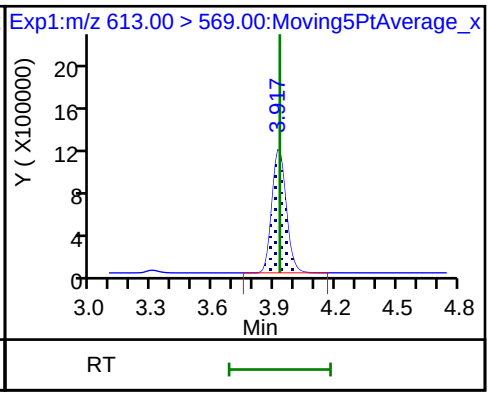
66 11-Chloroeicosafluoro-3-oxaundecan



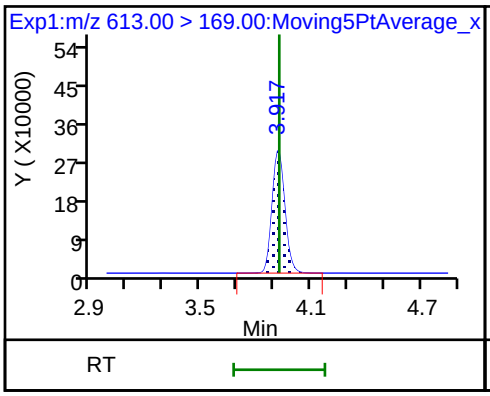
D 36 13C2 PFDoA



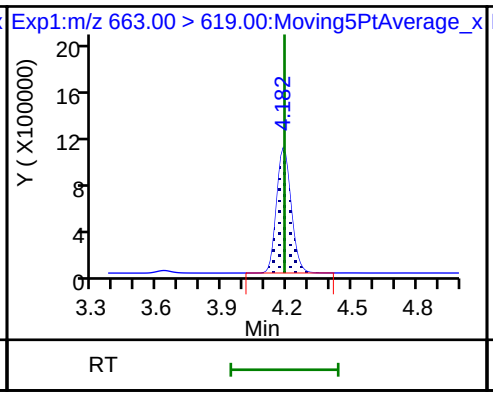
37 Perfluorododecanoic acid



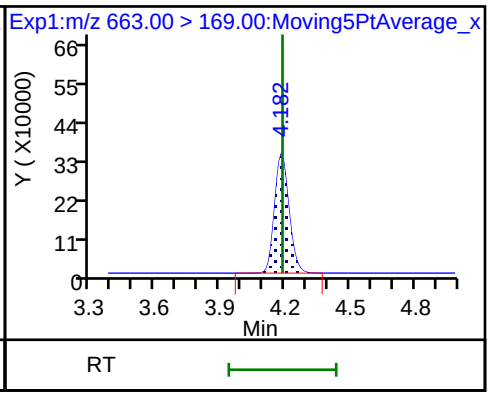
37 Perfluorododecanoic acid



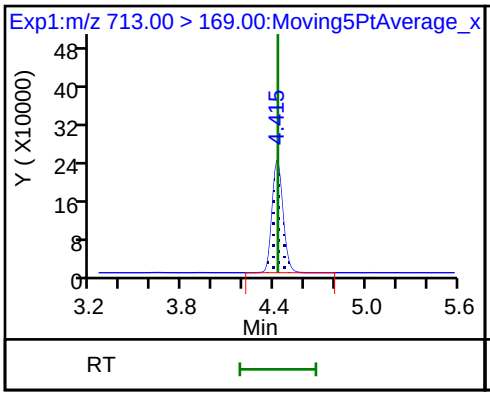
41 Perfluorotridecanoic acid



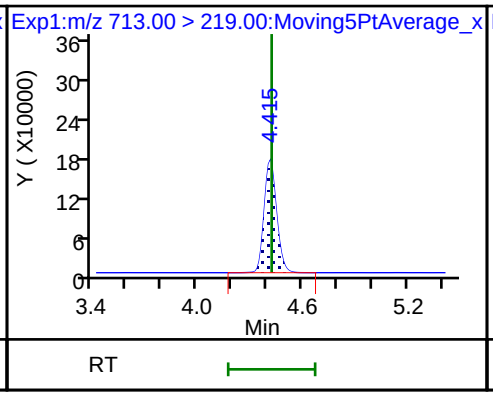
41 Perfluorotridecanoic acid



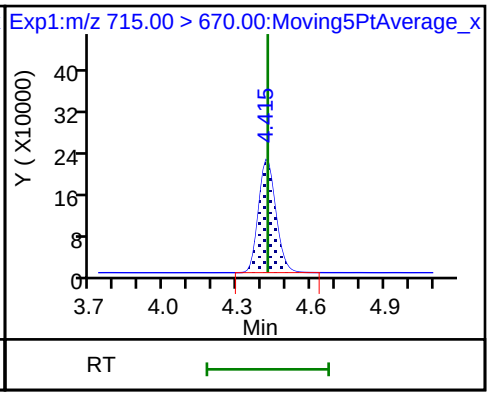
42 Perfluorotetradecanoic acid



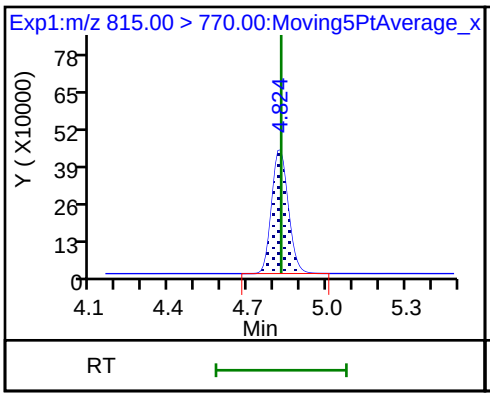
42 Perfluorotetradecanoic acid



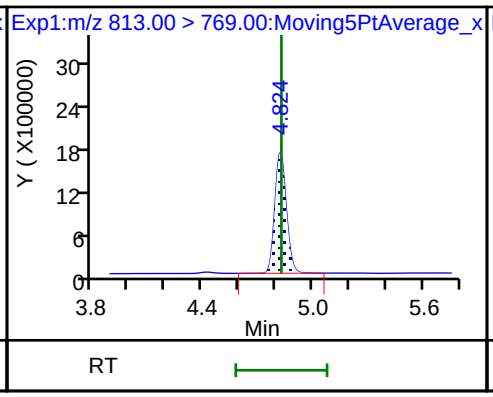
D 43 13C2-PFTeDA



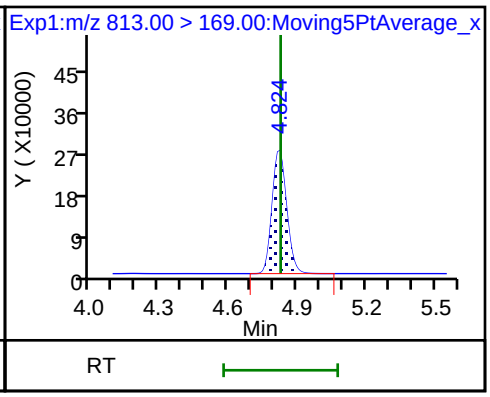
D 44 13C2-PFHxDA



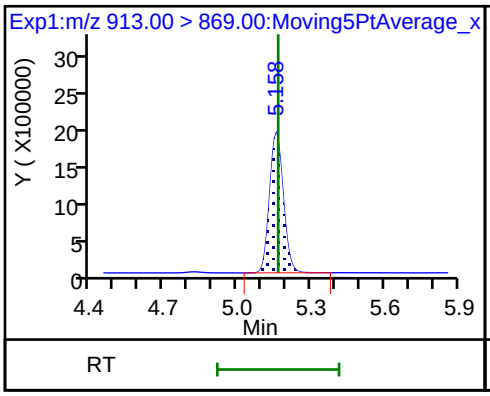
45 Perfluorohexadecanoic acid



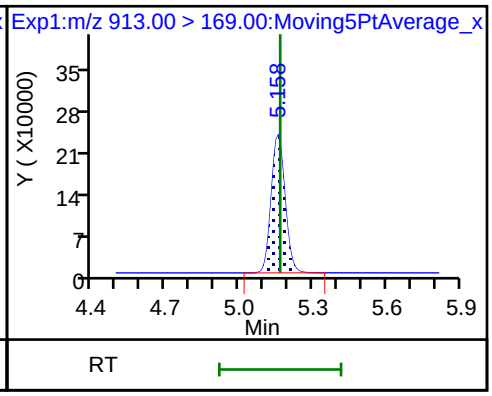
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-238192/2	2018.08.06LLICAL_002.d
Level 2	IC 320-238192/3	2018.08.06LLICAL_003.d
Level 3	IC 320-238192/4	2018.08.06LLICAL_004.d
Level 4	IC 320-238192/5	2018.08.06LLICAL_005.d
Level 5	IC 320-238192/6	2018.08.06LLICAL_006.d
Level 6	IC 320-238192/7	2018.08.06LLICAL_007.d
Level 7	IC 320-238192/8	2018.08.06LLICAL_008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	1.0356 0.9385	0.9092 0.9295	0.9181	0.9138	0.9275	AveID		0.9389				4.7		35.0			
Perfluoropentanoic acid (PFPeA)	1.3867 1.1127	1.0717 1.1007	1.0769	1.1120	1.1037	AveID		1.1378				9.8		35.0			
Perfluorobutanesulfonic acid (PFBS)	76.063 79.702	72.042 71.920	75.499	79.131	77.346	AveID		75.957				4.1		50.0			
4:2 FTS	16.899 16.409	15.948 15.581	16.354	17.979	16.820	AveID		16.570				4.7		50.0			
Perfluorohexanoic acid (PFHxA)	1.1713 1.0157	0.9838 0.9930	0.9663	1.0078	1.0064	AveID		1.0206				6.7		35.0			
Perfluoropentanesulfonic acid (PFPeS)	68.597 72.591	70.149 63.027	67.160	70.677	70.259	AveID		68.923				4.5		50.0			
HFPO-DA (GenX)	2.9114 2.4100	2.3352 2.4009	2.3481	2.3226	2.2150	AveID		2.4205				9.3		35.0			
Perfluoroheptanoic acid (PFHpA)	+++++ 1.0462	1.0598 1.0766	1.0410	1.0735	1.0740	AveID		1.0619				1.4		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.2251 1.0319	1.1827 1.0319	1.0717	1.0213	1.0237	AveID		1.0841				7.8		35.0			
ADONA	3.3483 3.1468	3.3029 2.7439	3.3386	3.4719	3.3638	AveID		3.2452				7.4		50.0			
6:2 FTS	1.7499 1.5710	1.5746 1.6133	1.4237	1.5556	1.5255	AveID		1.5734				6.2		35.0			
Perfluorooctanoic acid (PFOA)	1.2008 1.0886	1.2853 1.0557	1.0978	1.0896	1.0969	AveID		1.1307				7.2		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.2610 1.2616	1.2442 1.2011	1.1885	1.2551	1.2619	AveID		1.2391				2.5		50.0			
Perfluorononanoic acid (PFNA)	1.1473 1.0799	1.0748 1.0323	1.0182	0.9962	1.0249	AveID		1.0534				4.9		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid (PFOS)	1.1452 1.0892	1.0806 1.0719	1.0331	1.0486	1.0477	AveID		1.0738				3.5		35.0			
F-53B Major	1.8459 1.7643	1.6935 1.6823	1.6722	1.7599	1.7762	AveID		1.7420				3.6		50.0			
Perfluorononanesulfonic acid (PFNS)	0.7326 0.7691	0.7576 0.7460	0.7565	0.7459	0.7575	AveID		0.7522				1.6		50.0			
8:2 FTS	1.3250 1.2730	1.4395 1.3051	1.2793	1.2063	1.2657	AveID		1.2991				5.6		35.0			
Perfluorodecanoic acid (PFDA)	1.0978 0.9968	1.0000 0.9777	1.0353	0.9399	0.9748	AveID		1.0032				5.1		35.0			
Perfluorooctane Sulfonamide (FOSA)	0.9400 1.0032	0.9765 0.9376	0.9545	0.9847	1.0189	AveID		0.9736				3.2		35.0			
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.9510 0.9835	1.0084 0.9888	0.9336	0.9540	0.9328	AveID		0.9646				3.0		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.6051 0.6390	0.6643 0.6091	0.6429	0.6182	0.6451	AveID		0.6320				3.4		50.0			
Perfluoroundecanoic acid (PFUnA)	+++++ 1.0924	1.2343 1.0863	1.0961	1.1589	1.0738	AveID		1.1236				5.5		35.0			
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.9845 0.8814	0.9491 0.9072	0.8112	0.8526	0.8566	AveID		0.8918				6.7		35.0			
F-53B Minor	2.5393 2.7364	2.7548 2.3608	2.6747	2.7935	2.8554	AveID		2.6736				6.4		50.0			
10:2 FTS	0.8639 0.9340	0.8804 0.9326	0.9235	0.8718	0.8993	AveID		0.9008				3.3		50.0			
Perfluorododecanoic acid (PFDoA)	1.1896 1.0745	1.1772 1.0999	1.0449	1.1145	1.0884	AveID		1.1127				4.8		35.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2456 0.2793	0.2716 0.2774	0.3060	0.2852	0.2790	AveID		0.2777				6.5		50.0			
Perfluorotridecanoic Acid (PFTriA)	1.0415 1.1188	1.0997 1.0389	1.0944	1.0656	1.0680	AveID		1.0753				2.8		50.0			
Perfluorotetradecanoic acid (PFTeA)	+++++ 0.2376	0.2550 0.2466	0.2390	0.2330	0.2410	AveID		0.2420				3.2		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.7308 0.8791	1.2721 0.8280	0.9785	0.9010	0.9010	L2ID	0.0213	0.8703							0.9990		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	0.9036 0.9237	0.9066 0.8652	0.9539	0.9377	0.9501	AveID		0.9201				3.4		50.0			
13C4 PFBA	1.3454 1.4071	1.3544 1.4354	1.3670	1.3767	1.4083	Ave		1.3849				2.4		50.0			
13C5 PFPeA	0.9142 0.9681	0.9515 0.9792	0.9416	0.9284	0.9928	Ave		0.9537				2.9		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C3-PFBS	0.0217 0.0217	0.0221 0.0231	0.0222	0.0212	0.0224	Ave		0.0221				2.7		50.0			
M2-4:2FTS	0.1581 0.1611	0.1549 0.1507	0.1547	0.1588	0.1621	Ave		0.1572				2.6		50.0			
13C2 PFHxA	1.0908 1.0709	1.0832 1.0771	1.0664	1.0648	1.1220	Ave		1.0822				1.8		50.0			
13C3 HFPO-DA	0.0795 0.0831	0.0820 0.0870	0.0833	0.0832	0.0911	Ave		0.0842				4.5		50.0			
13C4-PFHpA	1.0528 1.0755	1.0748 1.0417	1.0614	1.0647	1.0848	Ave		1.0651				1.4		50.0			
18O2 PFHxS	1.3540 1.3675	1.4005 1.3474	1.3411	1.3518	1.3975	Ave		1.3657				1.8		50.0			
M2-6:2FTS	0.2197 0.2237	0.2210 0.2189	0.2309	0.2274	0.2275	Ave		0.2242				2.0		50.0			
13C8 PFOA	1.9506 1.8835	1.9359 1.8807	1.8897	1.9738	1.9781	Ave		1.9275				2.2		50.0			
13C4 PFOA	0.9700 0.9794	0.9570 0.9943	0.9864	0.9624	0.9914	Ave		0.9773				1.5		50.0			
13C8 PFOS	0.4256 0.4433	0.4430 0.4308	0.4347	0.4293	0.4450	Ave		0.4359				1.8		50.0			
13C4 PFOS	0.8675 0.8973	0.8804 0.9183	0.9045	0.8918	0.9213	Ave		0.8973				2.2		50.0			
13C5 PFNA	0.8612 0.8554	0.8748 0.8585	0.8921	0.8848	0.9123	Ave		0.8770				2.4		50.0			
M2-8:2FTS	0.2727 0.2715	0.2729 0.2567	0.2676	0.2731	0.2806	Ave		0.2707				2.7		50.0			
13C2 PFDA	0.7423 0.7808	0.7526 0.7805	0.7387	0.7911	0.8001	Ave		0.7695				3.2		50.0			
13C8 FOSA	1.1730 1.1817	1.1961 1.2106	1.1997	1.1702	1.1882	Ave		1.1885				1.2		50.0			
d3-NMeFOSAA	0.3925 0.3861	0.3877 0.3984	0.3885	0.3872	0.4143	Ave		0.3935				2.6		50.0			
d5-NEtFOSAA	0.4192 0.3947	0.4132 0.3750	0.4229	0.4161	0.4128	Ave		0.4077				4.2		50.0			
13C2 PFUnA	0.6182 0.6069	0.6026 0.6096	0.6343	0.6068	0.6538	Ave		0.6189				3.0		50.0			
13C2 PFDoA	0.6320 0.6494	0.6378 0.6472	0.6693	0.6531	0.6902	Ave		0.6541				3.0		50.0			
13C2-PFTeDA	0.8409 0.8358	0.8205 0.8213	0.8511	0.8289	0.8364	Ave		0.8335				1.3		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2-PFHxDA	1.6553 1.6633	1.6811 1.6556	1.6239	1.6406	1.6546	Ave		1.6535				1.1		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-238192/2	2018.08.06LLICAL_002.d
Level 2	IC 320-238192/3	2018.08.06LLICAL_003.d
Level 3	IC 320-238192/4	2018.08.06LLICAL_004.d
Level 4	IC 320-238192/5	2018.08.06LLICAL_005.d
Level 5	IC 320-238192/6	2018.08.06LLICAL_006.d
Level 6	IC 320-238192/7	2018.08.06LLICAL_007.d
Level 7	IC 320-238192/8	2018.08.06LLICAL_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	57127 10686384	100389 19976933	522272	2011540	5049773	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	51978 8717868	83129 16137329	421991	1650773	4235935	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	59862 12353528	114549 21980500	616670	2375205	5929736	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	14052 2687262	26792 5031154	141135	570176	1362407	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	52384 8802526	86871 16015982	428854	1715767	4365425	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	57284 11938702	118353 20439230	582073	2251038	5715419	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	9494 1620535	15610 3129271	81354	308918	779751	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	+++++ 9106263	92858 16791846	459833	1827459	4504362	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	61896 10391537	122877 18945578	544267	2008773	5033358	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
ADONA		AveID	119095 22851214	237055 37729670	1256630	4950939	11980639	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
6:2 FTS		AveID	14940 2696182	26890 5013052	129666	536262	1272183	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	47808 8637324	100379 15733520	451059	1678386	4208258	0.0250 5.01	0.0501 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	42699 8721667	85012 15722427	425894	1703787	4278634	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorononanoic acid (PFNA)		AveID	40510 7475851	76644 13269892	377996	1409363	3614991	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctanesulfonic acid (PFOS)		AveID	37801 7339820	71970 13677354	360873	1387650	3462772	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
F-53B Major		AveID	61193 11940295	113277 21558959	586624	2339008	5895997	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorononanesulfonic acid (PFNS)		AveID	25016 5361178	52199 9847776	273347	1021056	2589883	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
8:2 FTS		AveID	14190 2679186	30677 4806399	136487	504558	1315230	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorodecanoic acid (PFDA)		AveID	33414 6298810	61353 11426488	318256	1188927	3015215	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctane Sulfonamide (FOSA)		AveID	45210 9594151	95215 16995473	476525	1842464	4680280	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)		AveID	15304 3073336	31870 5898014	150940	590682	1493989	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	20747 4472904	45962 8074266	233277	849835	2214864	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluoroundecanoic acid (PFUnA)		AveID	+++++ 5365541	60636 9915678	289310	1124406	2714159	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)		AveID	16923 2815576	31965 5094367	142770	567205	1366918	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
F-53B Minor		AveID	85084 18718037	186244 30579411	948354	3752452	9579999	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
10:2 FTS		AveID	9310 1978025	18880 3456093	99141	366950	940315	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluorododecanoic acid (PFDoA)		AveID	30826 5646629	61213 10658790	291016	1163733	2903966	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorododecanesulfonic acid (PFDoS)		AveID	8457 1963594	18872 3692356	111497	393708	961771	0.0242 4.84	0.0484 9.68	0.242	0.968	2.42
Perfluorotridecanoic Acid (PFTriA)		AveID	26989 5879570	57183 10067689	304796	1112653	2849697	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	+++++ 1606848	17056 3032661	84652	308839	779223	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	117463 11833130	174341 20527532	661220	2363491	5763175	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	61329 12433827	124240 21448602	644655	2459730	6077489	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PF OA	Ave	5516377 5693569	5520570 5373122	5688815	5503224	5444583	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PF OA	Ave	3748386 3917323	3878229 3665379	3918495	3711287	3838069	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3-PFBS	13PF OA	Ave	82796 81531	83639 80382	85930	78945	80654	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2FTS	13PF OA	Ave	605486 609022	589543 526817	601195	592717	585341	2.34 2.34	2.34 2.34	2.34	2.34	2.34

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C2 PFHxA	13PF OA	Ave	4472467 4333101	4415087 4032113	4437948	4256324	4337626	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PF OA	Ave	326098 336215	334230 325849	346469	332511	352025	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4-PFHpA	13PF OA	Ave	4316698 4351928	4381099 3899256	4417214	4255889	4193874	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	5251983 5234562	5400125 4771422	5279483	5111728	5111206	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2FTS	13PF OA	Ave	855574 859900	855666 778460	912690	863649	835688	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C8 PFOA	13PF OA	Ave	7829980 7461246	7724966 6892356	7698803	7724133	7486707	2.45 2.45	2.45 2.45	2.45	2.45	2.45
13C4 PFOA	13PF OA	Ave	3977347 3963063	3900845 3722009	4104790	3847208	3832692	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 PFOS	13PF OA	Ave	1668266 1714648	1726052 1541520	1729501	1640677	1644552	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C4 PFOS	13PF OA	Ave	3400422 3471061	3430647 3286355	3598367	3408113	3404908	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	3530907 3461355	3565521 3213782	3712571	3536917	3527035	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2FTS	13PF OA	Ave	1070959 1052330	1065531 920670	1066887	1045687	1039099	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	3043654 3159574	3067735 2921735	3074087	3162481	3093053	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	4809407 4781606	4875140 4531636	4992636	4677735	4593505	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	1609182 1562466	1580220 1491160	1616798	1547904	1601576	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	1718969 1597197	1684036 1403844	1760050	1663128	1595779	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	2534521 2455806	2456263 2281933	2639555	2425508	2527555	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	2591339 2627551	2599869 2422707	2785129	2610480	2668181	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFTeDA	13PF OA	Ave	3447891 3382019	3344339 3074334	3541707	3313318	3233399	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2-PFHxDA	13PF OA	Ave	6786819 6730439	6852227 6197635	6757749	6558204	6396595	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1 Analy Batch No.: 238192

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 11:10 Calibration End Date: 08/06/2018 11:56 Calibration ID: 40492

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_002.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Aug-2018 11:10:09 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L1-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:16:53 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:22:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.401	1.395	0.006	0.543	5516377	2.43		97.1	8663	
2 Perfluorobutyric acid										
212.90 > 169.00	1.401	1.397	0.004	1.000	57127	0.0276		110	6.0	
D 3 13C5-PFPeA										
267.90 > 223.00	1.646	1.639	0.007	0.638	3748386	2.40		95.9	8167	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.646	1.643	0.003	1.000	51978	0.0305		122	3.1	
D 47 13C3-PFBS										
301.90 > 83.00	1.678	1.675	0.003	0.651	82796	2.29		98.4	394	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.678	1.676	0.002	1.000	59862	0.0221		100	27.4	
298.90 > 99.00	1.686	1.676	0.010	1.005	26611		2.25(1.25-3.74)	100	16.7	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.875	1.875	0.0	1.117	14052	0.0238		102	121	
D 60 M2-4:2FTS										
329.00 > 81.00	1.883	1.875	0.008	0.730	605486	2.35		101	831	
D 7 13C2 PFHxA										
315.00 > 270.00	1.912	1.908	0.004	0.741	4472467	2.52		101	8390	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.912	1.908	0.004	1.000	52384	0.0287		115	14.5	
313.00 > 119.00	1.923	1.908	0.015	1.005	4815		10.88(5.03-15.10)	115	12.0	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.933	1.930	0.003	1.152	57284	0.0233		99.5	135	
349.00 > 99.00	1.933	1.930	0.003	1.152	21167		2.71(1.36-4.07)	99.5	28.8	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.006	2.003	0.003	1.000	9494	0.0301		120	3.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.006	2.003	0.003	0.778	326098	2.36		94.5	976	
D 9 13C4-PFHpA										
367.00 > 322.00	2.233	2.227	0.006	0.866	4316698	2.47		98.8	9522	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.233	2.228	0.005	1.000	70955	0.0387		155	13.9	
363.00 > 169.00	2.233	2.228	0.005	1.000	28093		2.53(1.13-3.40)	155	60.1	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.243	2.239	0.004	1.000	61896	0.0257		113	144	
399.00 > 99.00	2.243	2.239	0.004	1.000	21470		2.88(1.50-4.49)	113	24.0	
D 11 18O2 PFHxS										
403.00 > 84.00	2.243	2.239	0.004	0.870	5251983	2.34		99.1	5490	
65 ADONA										
377.00 > 251.00	2.277	2.271	0.006	0.773	119095	0.0258		103	369	
377.00 > 85.00	2.277	2.271	0.006	0.773	70717		1.68(0.84-2.53)	103	160	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.557	2.548	0.009	1.000	14940	0.0264		111	29.3	
D 12 M2-6:2FTS										
429.00 > 81.00	2.557	2.549	0.008	0.992	855574	2.33		98.0	2284	
D 73 13C8 PFOA										
421.00 > 376.00	2.579	2.571	0.008	1.000	7829980	2.48		101	11714	
D 14 13C4 PFOA										
417.00 > 372.00	2.579	2.573	0.006	1.000	3977347	2.48		99.3	6149	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.579	2.574	0.005	1.000	47808	0.0266		106	5.0	
413.00 > 169.00	2.579	2.574	0.005	1.000	27163		1.76(0.84-2.52)	106	59.5	
* 62 13C2-PFOA										
415.00 > 370.00	2.579	2.575	0.004		4100164	2.50			7067	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.586	2.583	0.003	0.878	42699	0.0242		102	133	
449.00 > 99.00	2.586	2.583	0.003	0.878	10587		4.03(1.94-5.82)	102	22.5	
D 72 13C8 PFOS										
507.00 > 99.00	2.944	2.938	0.006	1.141	1668266	2.33		97.6	5837	
D 18 13C4 PFOS										
503.00 > 80.00	2.944	2.939	0.005	1.141	3400422	2.31		96.7	4592	
D 19 13C5 PFNA										
468.00 > 423.00	2.944	2.939	0.005	1.141	3530907	2.45		98.2	7876	
20 Perfluorononanoic acid										
463.00 > 419.00	2.944	2.939	0.005	1.000	40510	0.0272		109	12.3	
463.00 > 169.00	2.944	2.939	0.005	1.000	8595		4.71(1.90-5.69)	109	72.2	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.950	2.940	0.010	1.002	37801	0.0247		107	105	
499.00 > 99.00	2.950	2.940	0.010	1.002	10855		3.48(2.31-6.93)	107	29.5	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.154	3.150	0.004	1.071	61193	0.0247		106	259	
D 26 M2-8:2FTS										
529.00 > 81.00	3.284	3.284	0.0	1.273	1070959	2.41		101	2863	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.284	3.285	0.0	1.115	25016	0.0234		97.4	162	
549.00 > 99.00	3.291	3.285	0.007	1.118	10319		2.42(1.33-3.97)	97.4	44.8	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.298	3.286	0.012	1.004	14190	0.0244		102	42.6	
D 23 13C2 PFDA										
515.00 > 470.00	3.298	3.294	0.004	1.279	3043654	2.41		96.5	5778	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.298	3.296	0.002	1.000	33414	0.0274		109	26.5	
513.00 > 169.00	3.298	3.296	0.002	1.000	4888		6.84(2.36-7.09)	109	34.8	
D 21 13C8 FOSA										
506.00 > 78.00	3.320	3.317	0.003	1.287	4809407	2.47		98.7	5689	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.320	3.319	0.001	1.000	45210	0.0241		96.5	291	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.453	3.448	0.005	1.339	1609182	2.49		99.7	4803	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.460	3.453	0.007	1.002	15304	0.0246		98.6	9.3	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.613	3.608	0.005	1.227	20747	0.0231		95.7	187	
599.00 > 99.00	3.620	3.608	0.012	1.230	9035		2.30(1.39-4.16)	95.7	58.0	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.620	3.616	0.004	1.404	1718969	2.57		103	1292	
D 30 13C2 PFUnA										
565.00 > 520.00	3.620	3.620	0.0	1.404	2534521	2.50		99.9	7331	
31 Perfluoroundecanoic acid										R
563.00 > 519.00	3.627	3.622	0.005	1.002	39159	0.0344		138	28.2	R
563.00 > 169.00	3.620	3.622	-0.002	1.000	5282		7.41(2.12-6.36)	138	39.3	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.627	3.623	0.004	1.002	16923	0.0276		110	56.6	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.783	3.781	0.002	1.285	85084	0.0224		95.0	354	
35 MeFOSA										
512.00 > 169.00	3.824	3.826	-0.002		15364	NC			107	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.919	3.913	0.006	1.000	30826	0.0267		107	19.8	
613.00 > 169.00	3.919	3.913	0.006	1.000	5801		5.31(2.13-6.40)	107	54.6	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.919	3.913	0.006	1.194	9310	0.0231		95.9	66.5	
D 36 13C2 PFDoA										
615.00 > 570.00	3.919	3.913	0.006	1.520	2591339	2.42		96.6	4078	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.148	4.148	0.0	1.409	8457	0.0214		88.4	56.6	
699.00 > 99.00	4.148	4.148	0.0	1.409	12505		0.68(0.00-0.00)	88.4	138	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.177	4.173	0.004	1.066	26989	0.0242		96.9	12.7	
663.00 > 169.00	4.177	4.173	0.004	1.066	9362		2.88(1.25-3.76)	96.9	74.8	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.405	4.399	0.006	1.708	3447891	2.52		101	9514	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.405	4.400	0.005	1.000	8064	0.0242		96.6	88.6	
713.00 > 219.00	4.413	4.400	0.013	1.002	5513		1.46(0.71-2.13)	96.6	97.0	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.803	4.799	0.004	1.862	6786819	2.50		100	7400	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.814	4.801	0.013	1.002	117463	0.0253		101	50.8	
813.00 > 169.00	4.803	4.801	0.002	1.000	21885		5.37(2.86-8.58)	101	197	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.147	5.136	0.011	1.072	61329	0.0246		98.2	14.1	
913.00 > 169.00	5.140	5.136	0.004	1.070	7812		7.85(3.83-11.48)	98.2	103	

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Reagents:

LCPFC_LL1_00007 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:16:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_002.d

Injection Date: 06-Aug-2018 11:10:09 Instrument ID: A8_N

Lims ID: IC L1 Full

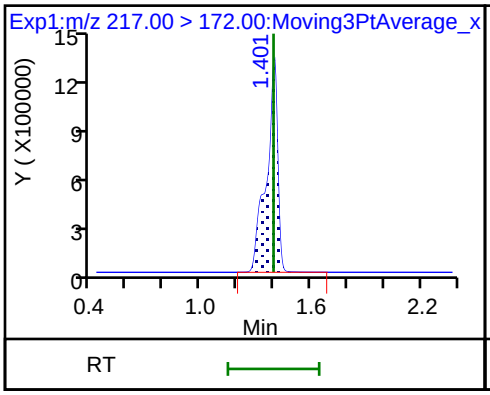
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 10 Worklist Smp#: 2

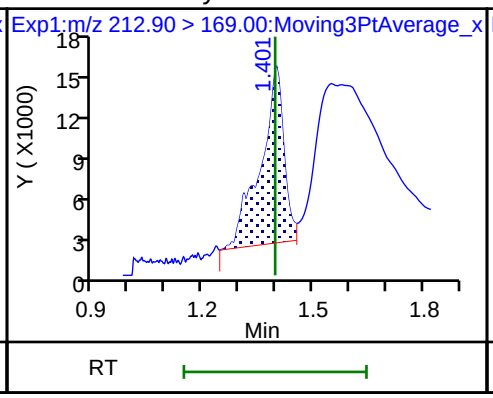
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

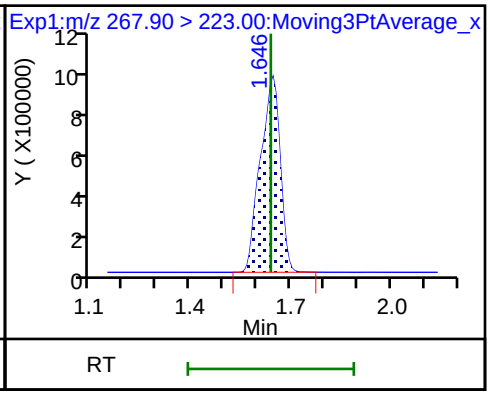
D 1 13C4 PFBA



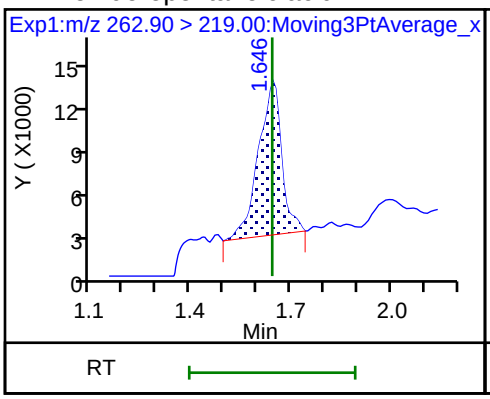
2 Perfluorobutyric acid



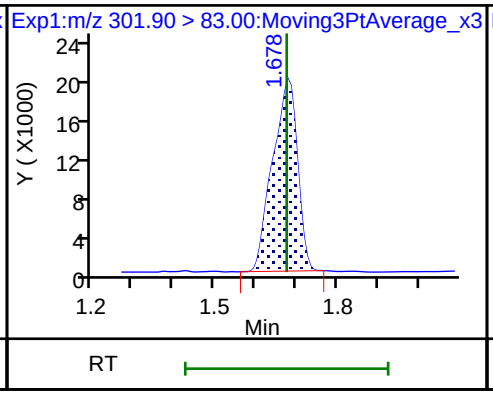
D 3 13C5-PFPeA



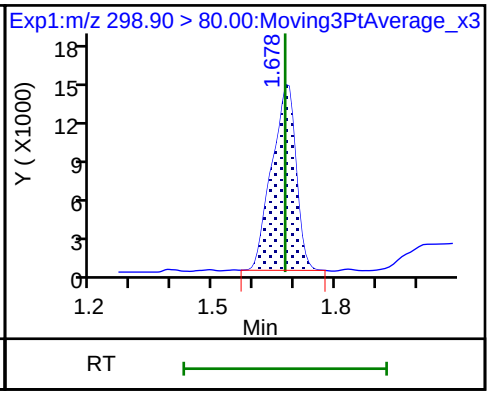
4 Perfluoropentanoic acid



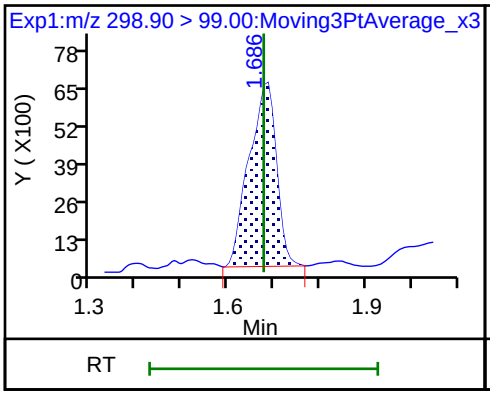
D 47 13C3-PFBS



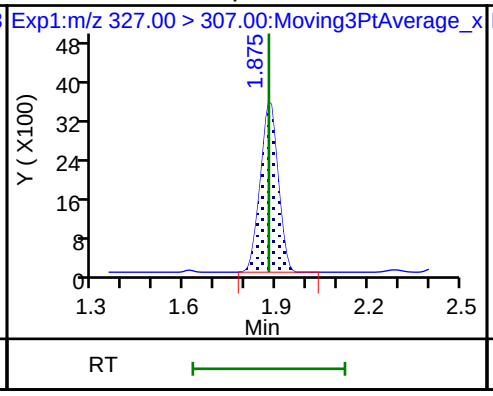
5 Perfluorobutanesulfonic acid



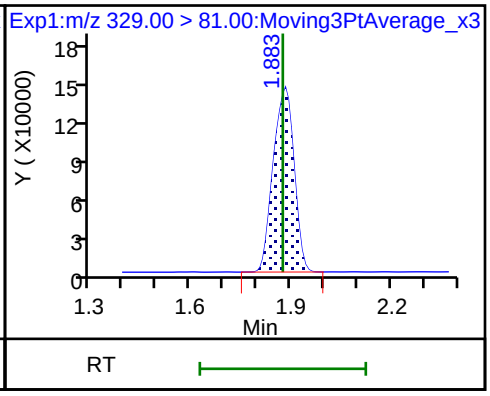
5 Perfluorobutanesulfonic acid



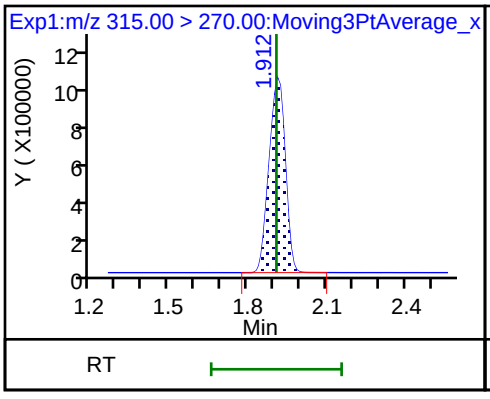
61 1H,1H,2H,2H-perfluorohexanesulfon



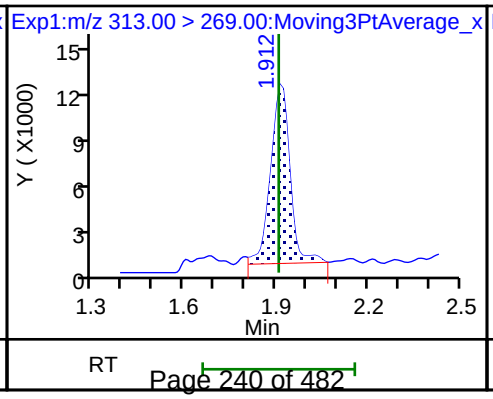
D 60 M2-4:2FTS



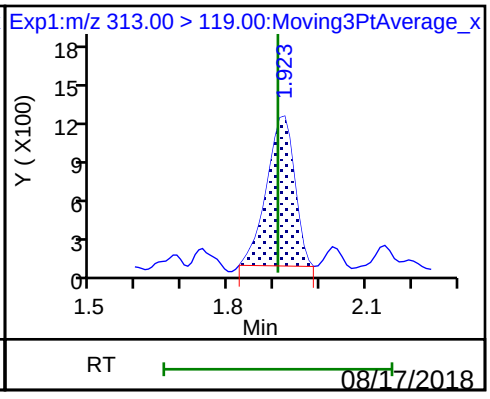
D 7 13C2 PFHxA



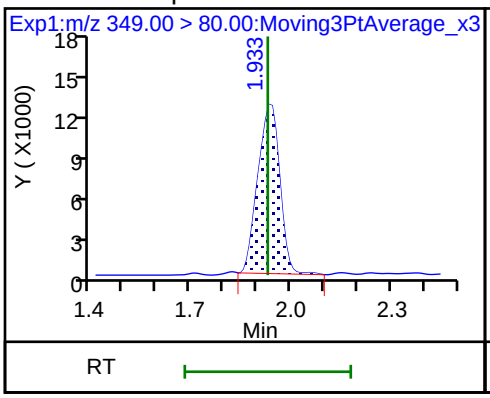
6 Perfluorohexanoic acid



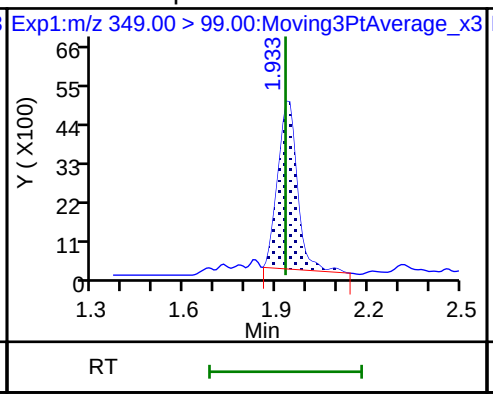
6 Perfluorohexanoic acid



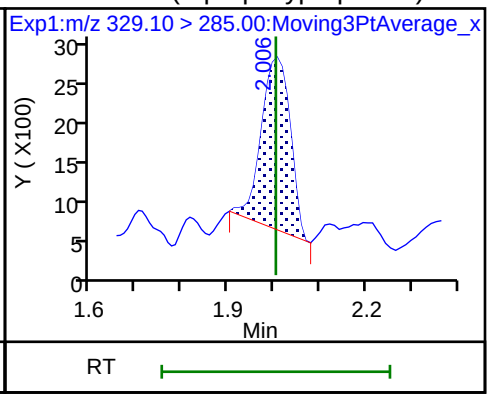
70 Perfluoropentanesulfonic acid



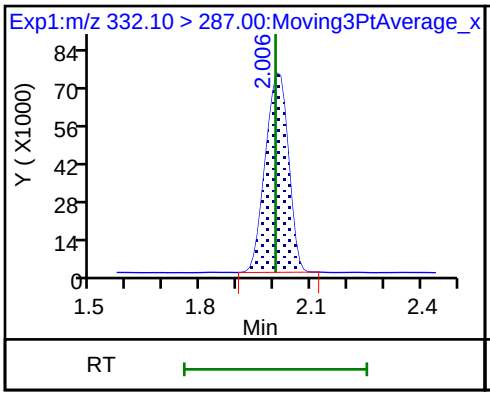
70 Perfluoropentanesulfonic acid



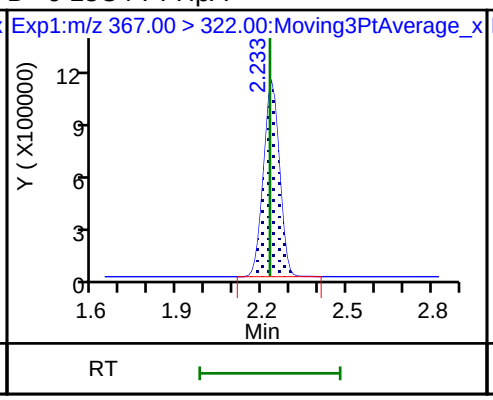
67 Perfluoro(2-propoxypropanoic) acid



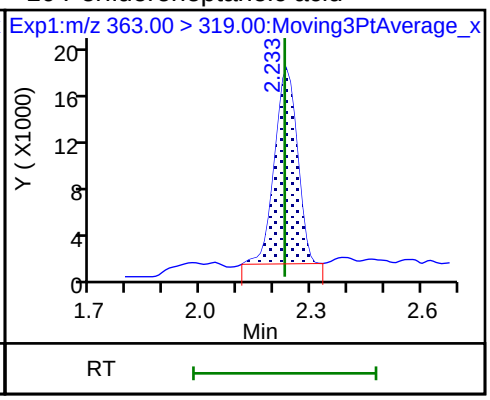
D 64 13C3 HFPO-DA



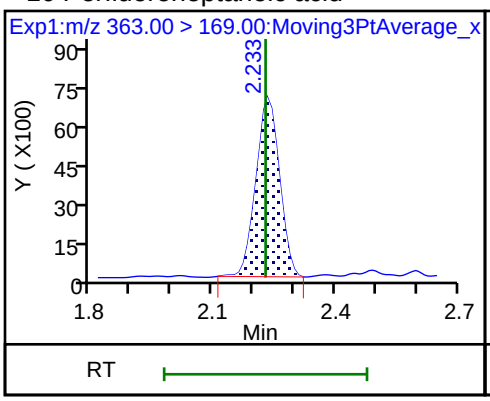
D 9 13C4-PFHpA



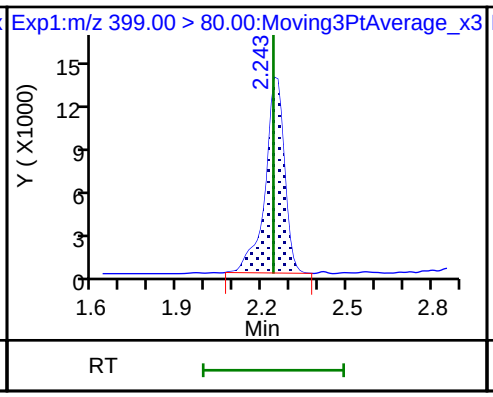
10 Perfluoroheptanoic acid



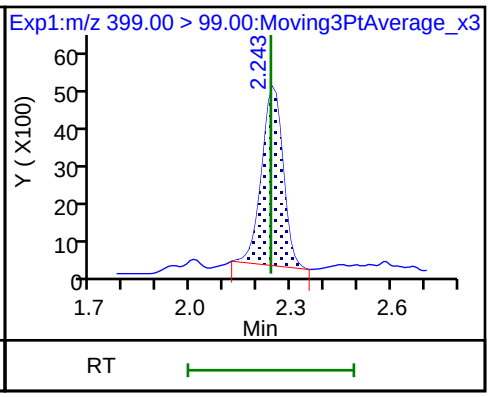
10 Perfluoroheptanoic acid



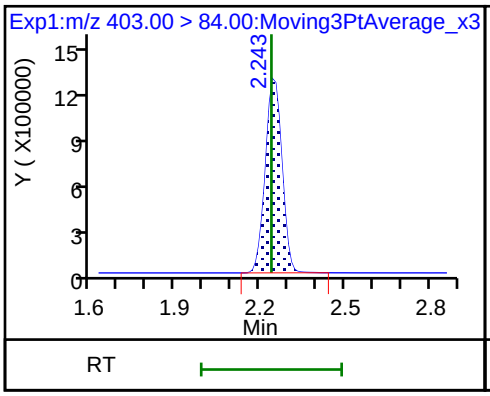
8 Perfluorohexanesulfonic acid



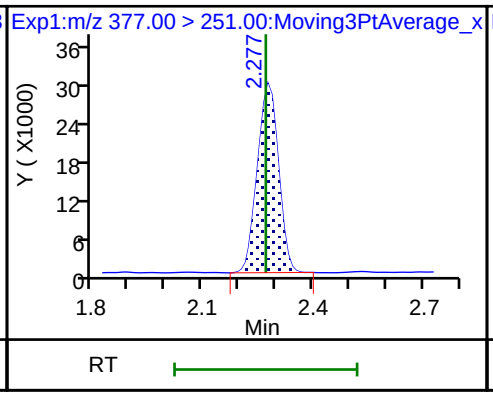
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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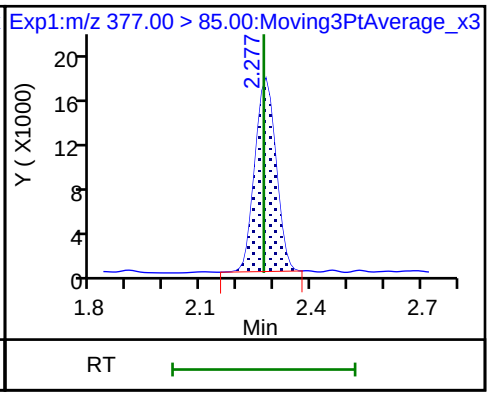
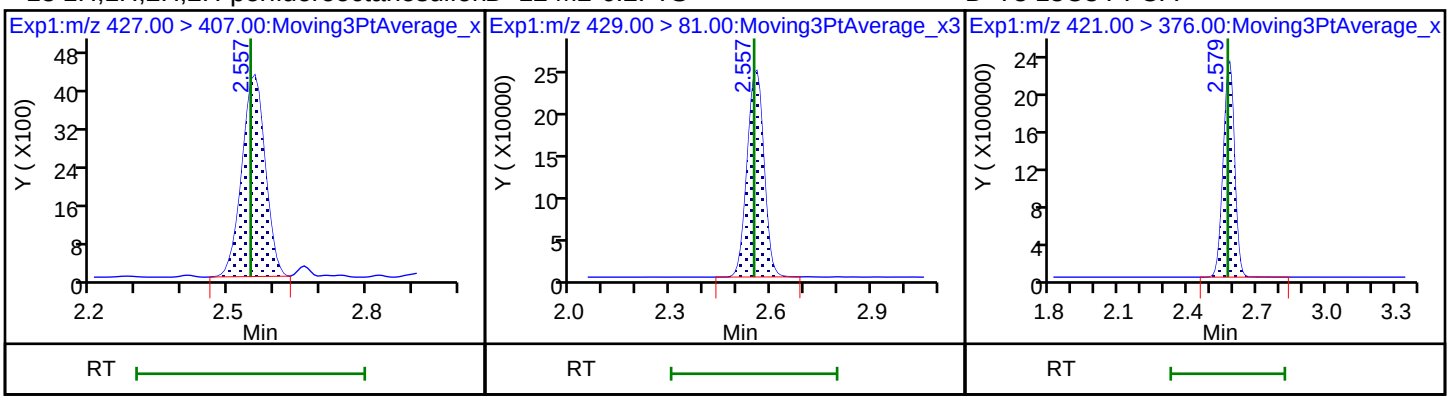
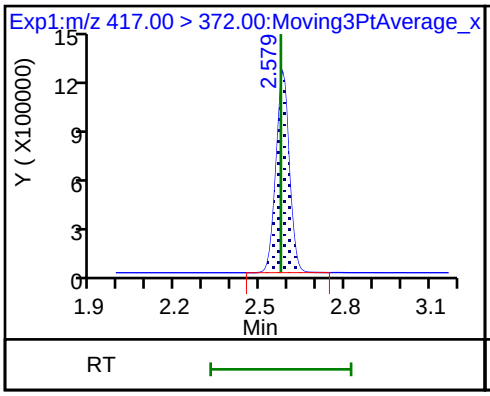


13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS

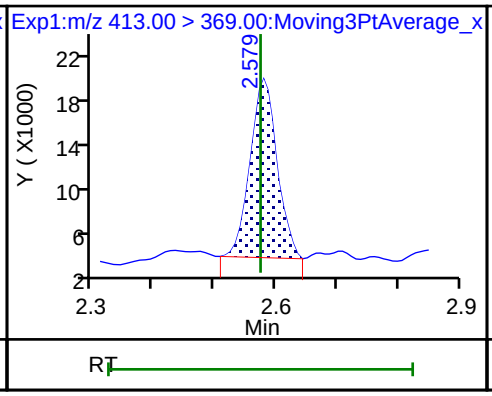


D 73 13C8 PFOA

D 14 13C4 PFOA



15 Perfluorooctanoic acid



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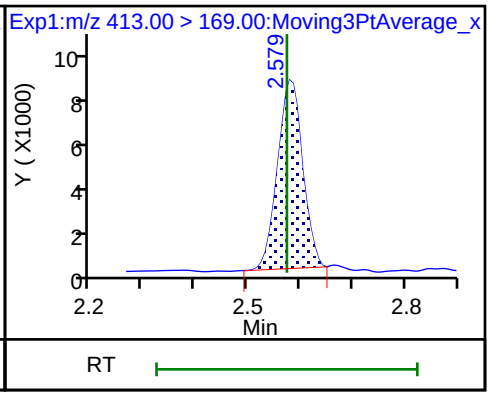
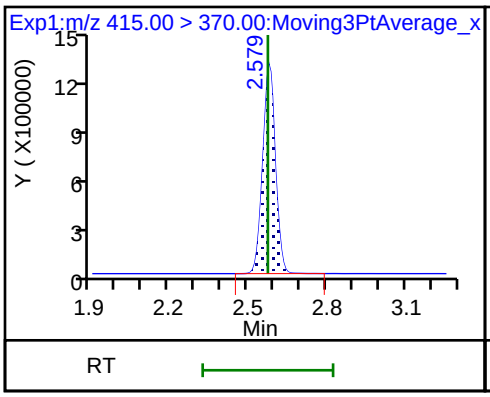
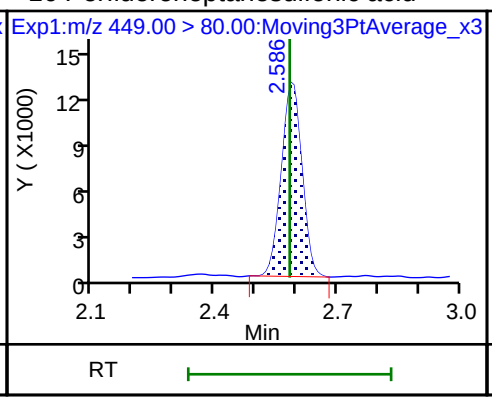


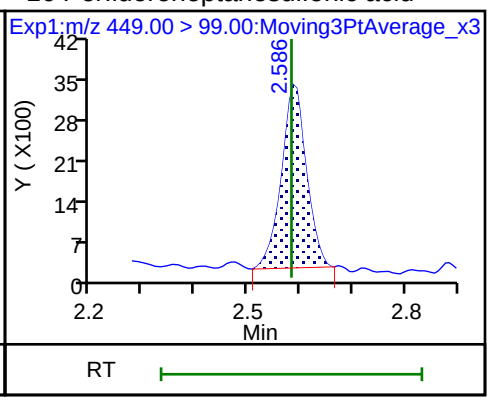
* 62 13C2-PFOA



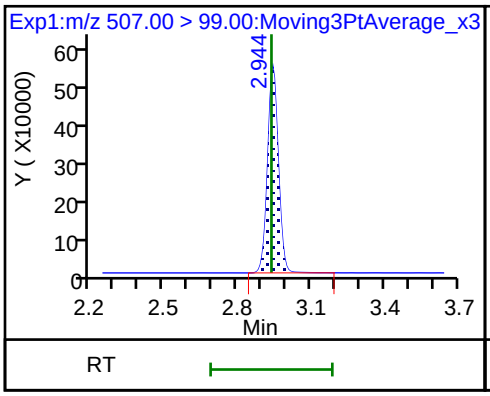
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 72 13C8 PFOS



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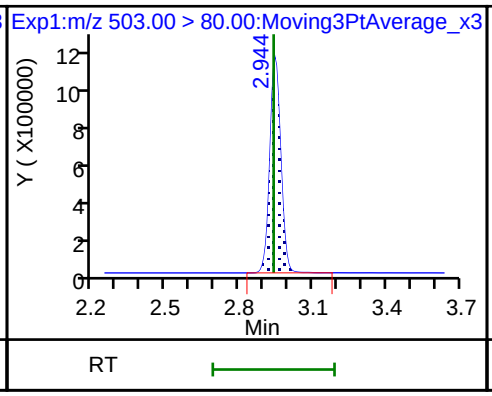

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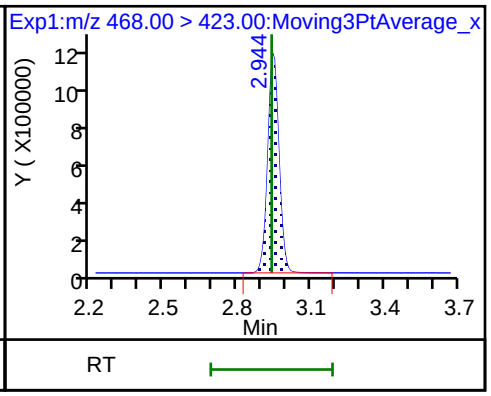
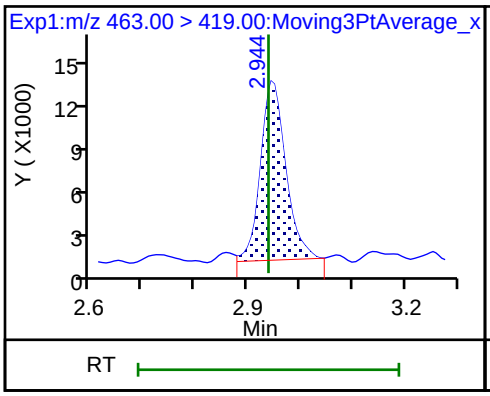
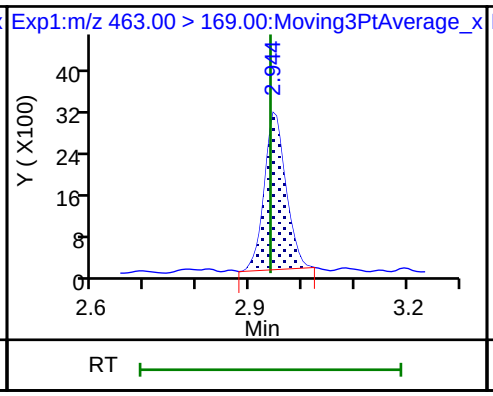


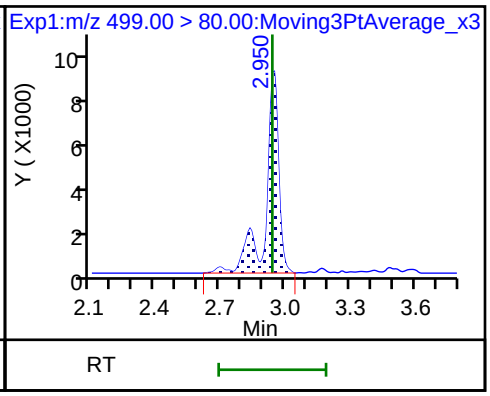
20 Perfluorononanoic acid



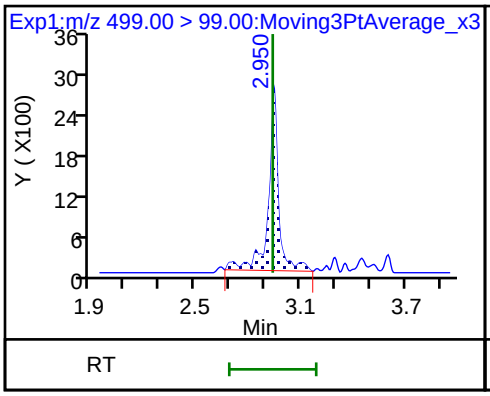
20 Perfluorononanoic acid



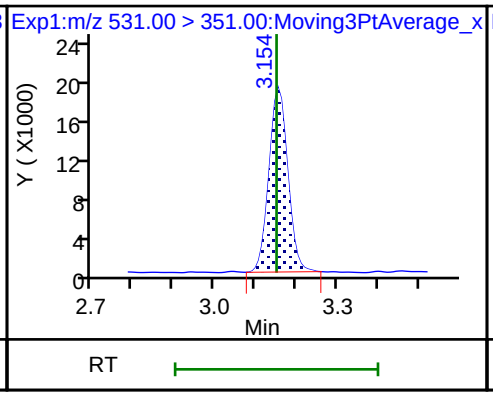
17 Perfluorooctane sulfonic acid



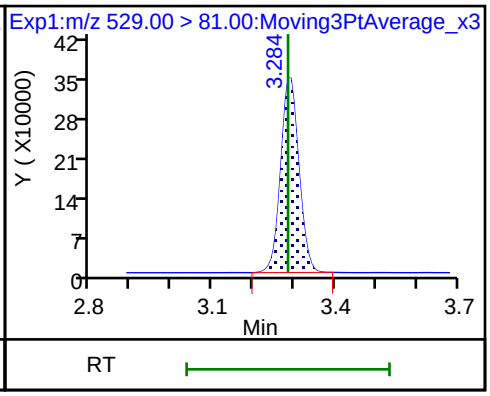
17 Perfluorooctane sulfonic acid



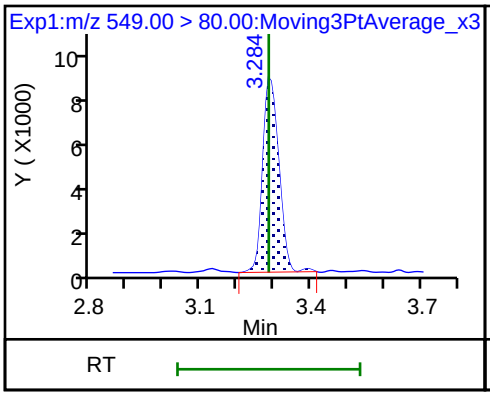
69 9-Chlorohexadecafluoro-3-oxanonane



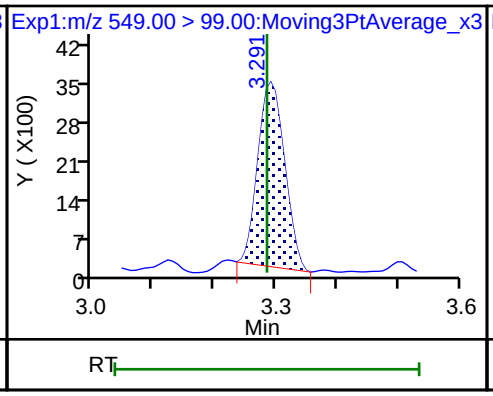
D 26 M2-8:2FTS



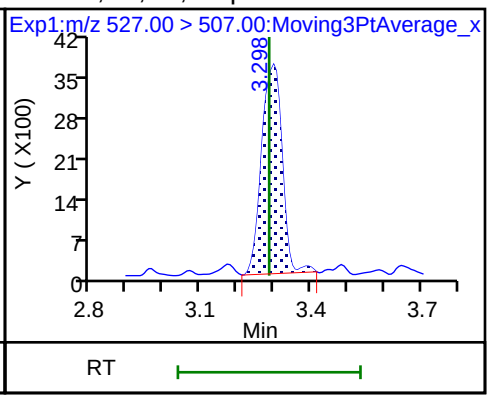
68 Perfluorononanesulfonic acid



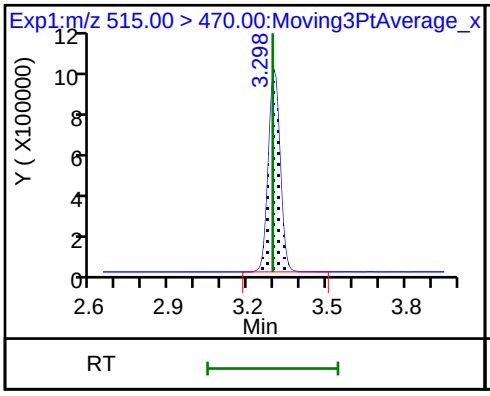
68 Perfluorononanesulfonic acid



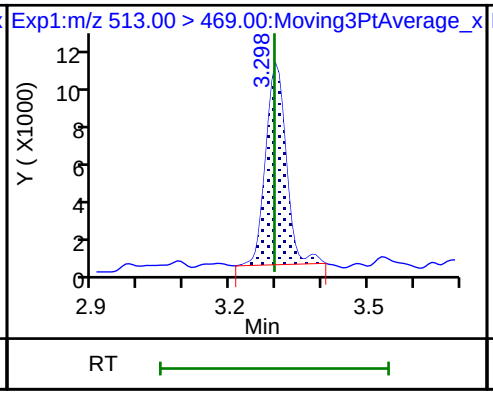
25 1H,1H,2H,2H-perfluorodecanesulfoni



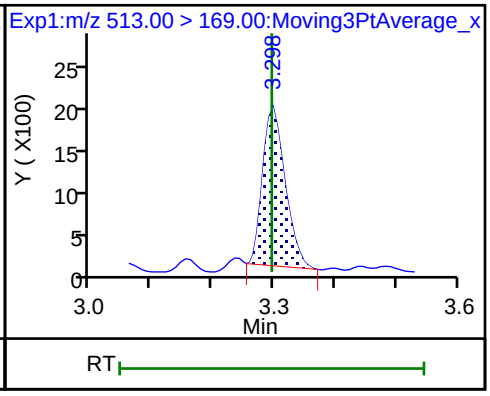
D 23 13C2 PFDA



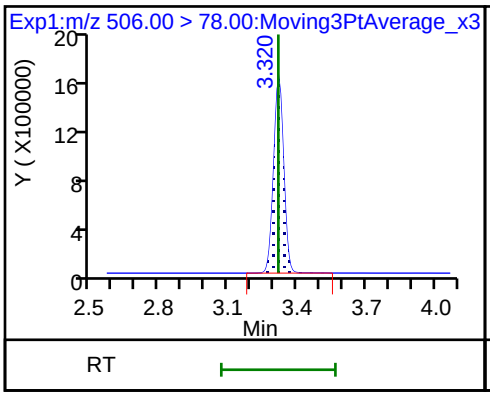
24 Perfluorodecanoic acid



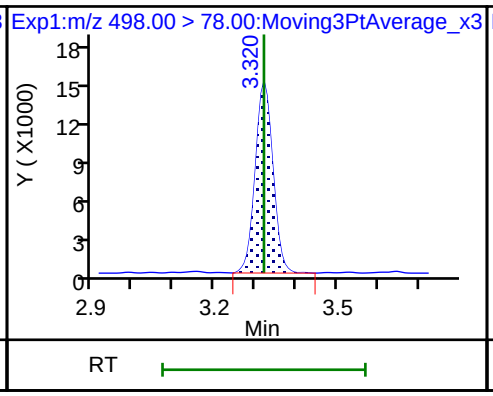
24 Perfluorodecanoic acid



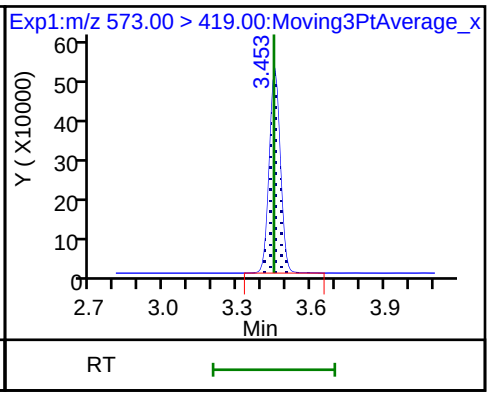
D 21 13C8 FOSA



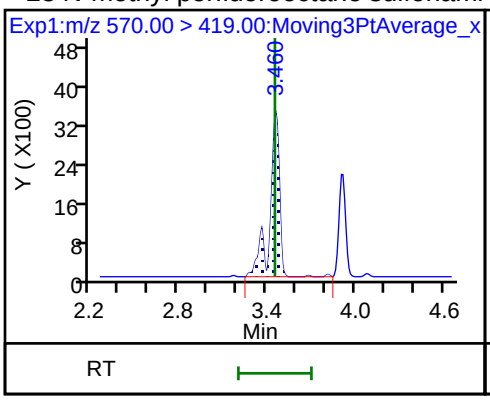
22 Perfluorooctane Sulfonamide



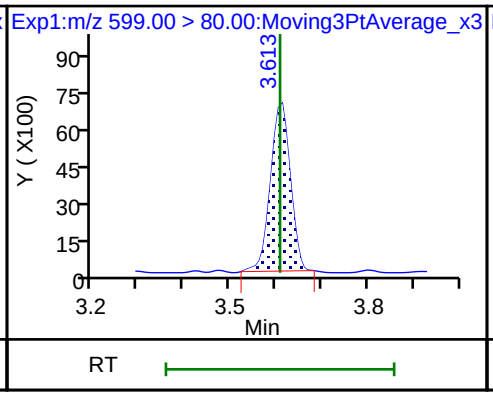
D 27 d3-NMeFOSAA



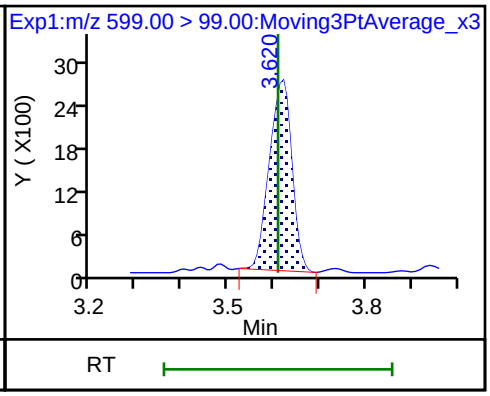
28 N-methyl perfluorooctane sulfonami



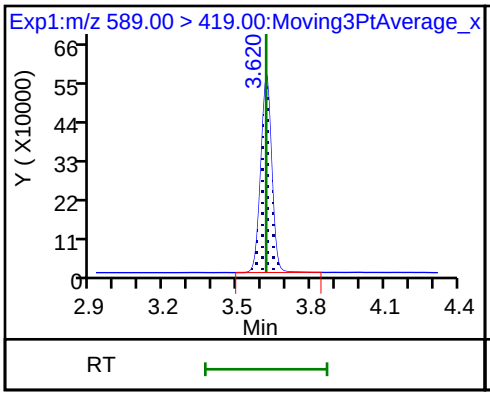
29 Perfluorodecane Sulfonic acid



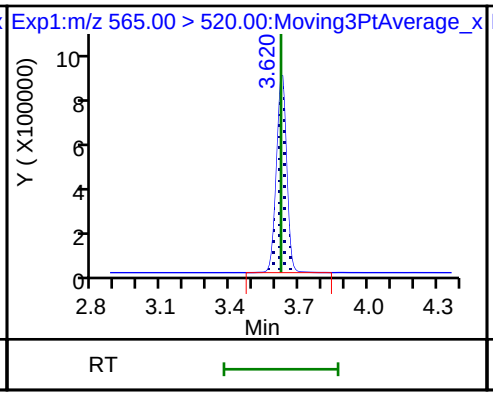
29 Perfluorodecane Sulfonic acid



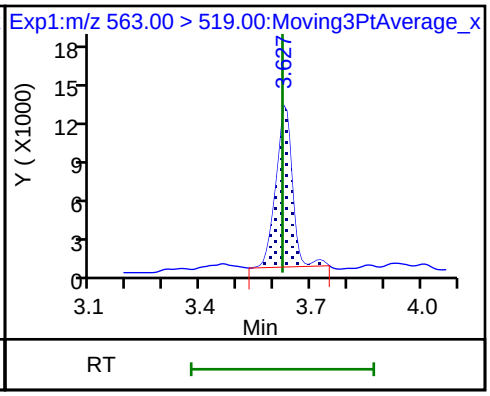
D 32 d5-NEtFOSAA



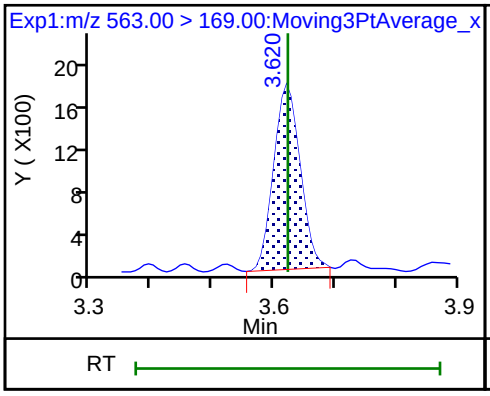
D 30 13C2 PFUnA



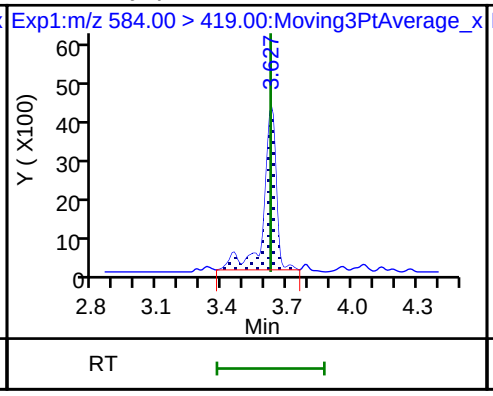
31 Perfluoroundecanoic acid



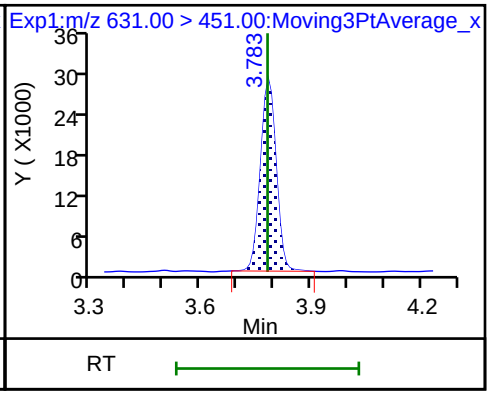
31 Perfluoroundecanoic acid



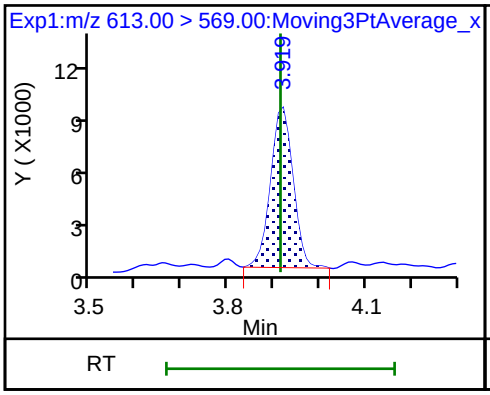
33 N-ethyl perfluorooctane sulfonamid



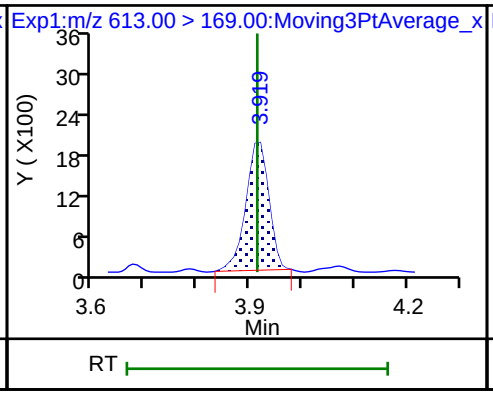
66 11-Chloroeicosafluoro-3-oxaundecan



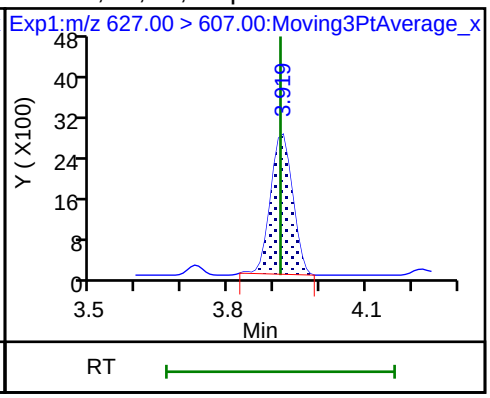
37 Perfluorododecanoic acid



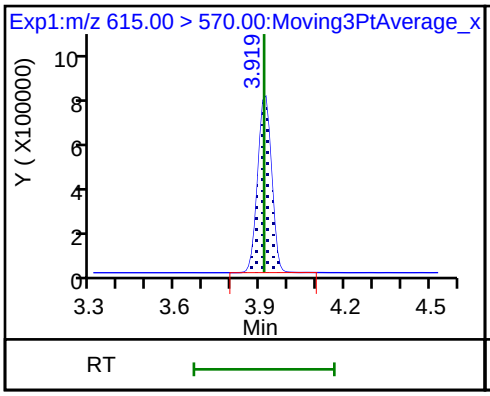
37 Perfluorododecanoic acid



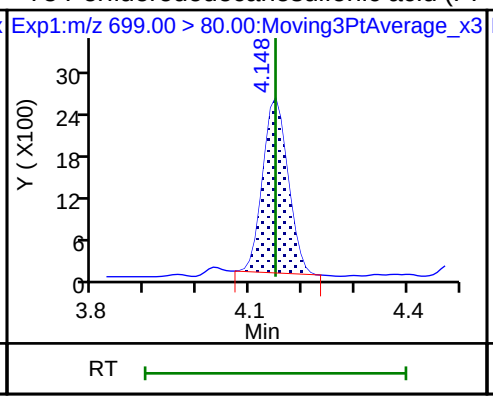
74 1H,1H,2H,2H-perfluorododecanesulfo



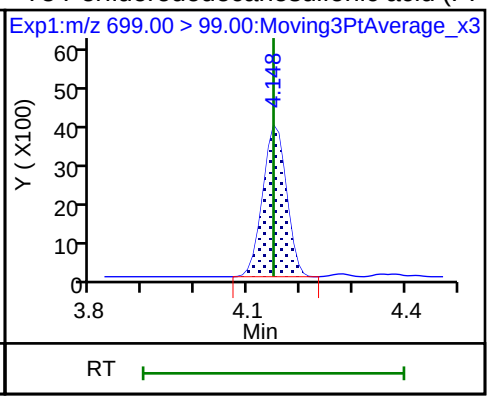
D 36 13C2 PFDoA



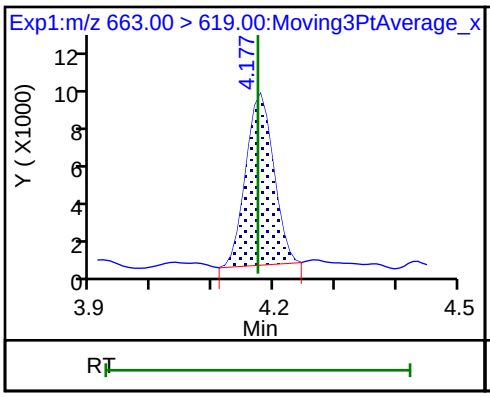
75 Perfluorododecanesulfonic acid (PF



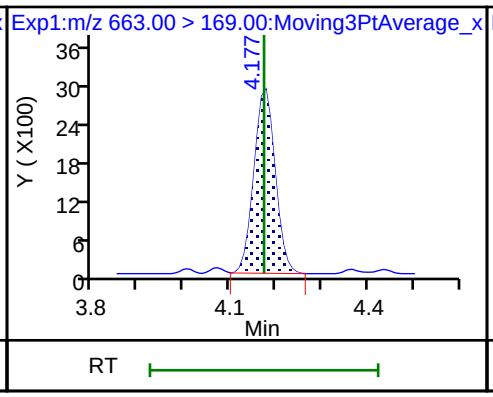
75 Perfluorododecanesulfonic acid (PF



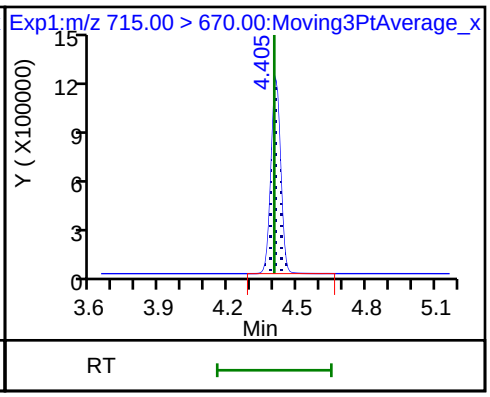
41 Perfluorotridecanoic acid



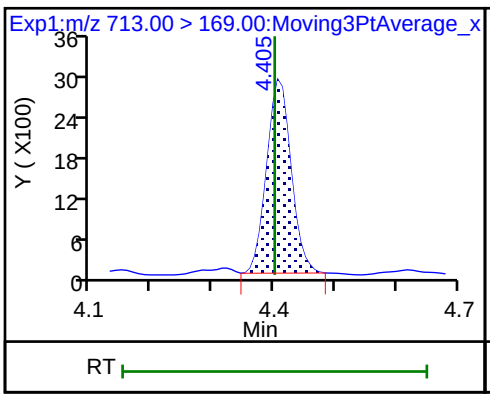
41 Perfluorotridecanoic acid



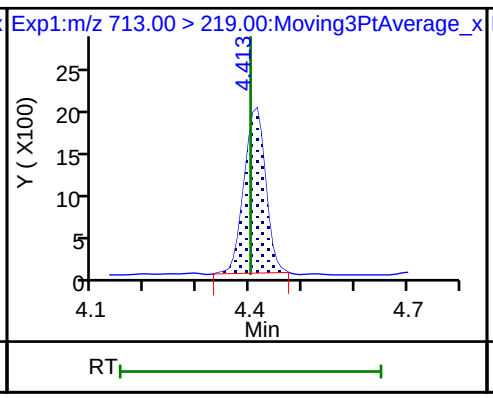
D 43 13C2-PFTeDA



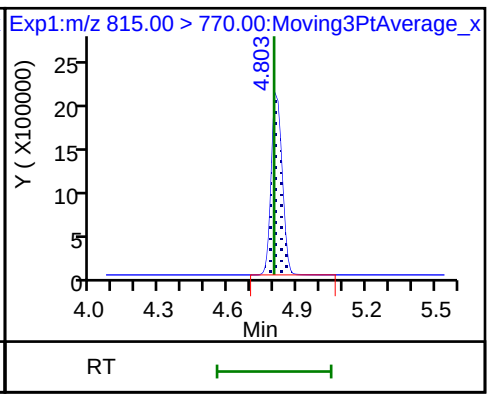
42 Perfluorotetradecanoic acid



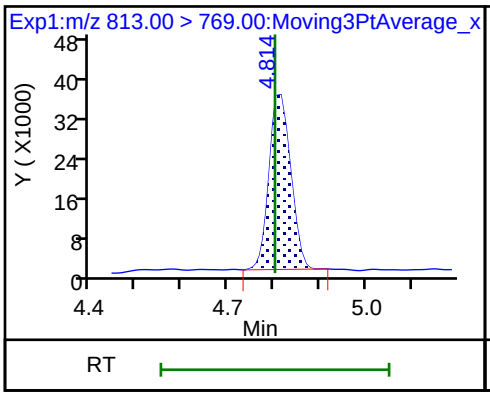
42 Perfluorotetradecanoic acid



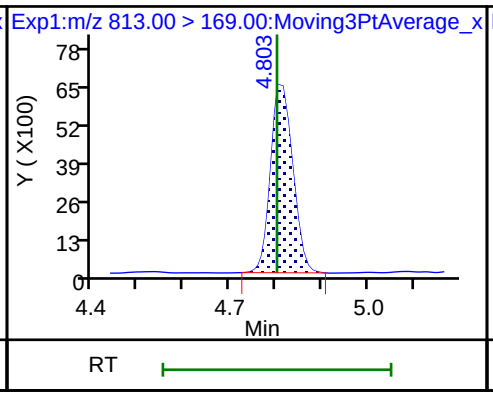
D 44 13C2-PFHxDA



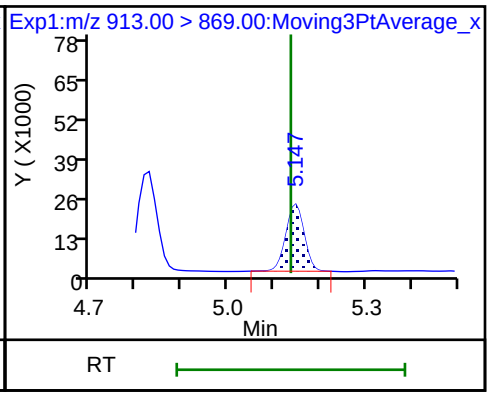
45 Perfluorohexadecanoic acid



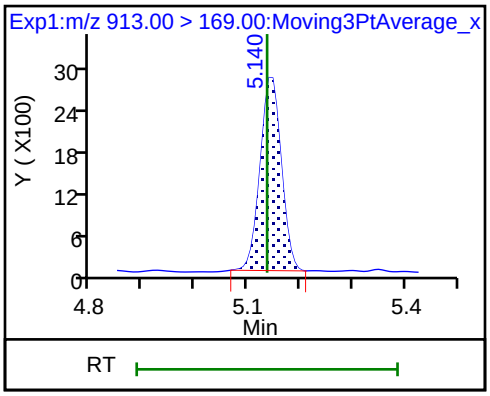
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_003.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Aug-2018 11:17:57 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L2-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:16:59 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:29:16

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.394	1.395	-0.001	0.541	5520570	2.44		97.8	9922	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.394	1.397	-0.003	1.000	100389	0.0484		96.8	10.2	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.644	1.639	0.005	0.638	3878229	2.49		99.8	8401	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.644	1.643	0.001	1.000	83129	0.0471		94.2	5.4	
D 47 13C3-PFBS										
301.90 > 83.00	1.676	1.675	0.001	0.651	83639	2.33		100	351	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.676	1.676	0.0	1.000	114549	0.0419		94.8	51.2	
298.90 > 99.00	1.676	1.676	0.0	1.000	46700		2.45(1.25-3.74)	94.8	30.6	
D 60 M2-4:2FTS										
329.00 > 81.00	1.880	1.875	0.005	0.730	589543	2.30		98.5	1139	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.880	1.875	0.005	1.122	26792	0.0449		96.2	390	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.907	1.908	-0.001	1.000	86871	0.0482		96.4	22.2	
313.00 > 119.00	1.898	1.908	-0.010	0.995	8895		9.77(5.03-15.10)	96.4	23.2	
D 7 13C2 PFHxA										
315.00 > 270.00	1.907	1.908	-0.001	0.741	4415087	2.50		100	10413	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.928	1.930	-0.002	1.151	118353	0.0477		102	348	
349.00 > 99.00	1.939	1.930	0.009	1.157	42210		2.80(1.36-4.07)	102	57.1	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.001	2.003	-0.002	0.777	334230	2.44		97.4	816	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.001	2.003	-0.002	1.000	15610	0.0482		96.5	6.2	
D 9 13C4-PFHpA										
367.00 > 322.00	2.227	2.227	0.0	0.865	4381099	2.52		101	6167	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.227	2.228	-0.001	1.000	92858	0.0499		99.8	18.9	
363.00 > 169.00	2.227	2.228	-0.001	1.000	37320		2.49(1.13-3.40)	99.8	83.7	
D 11 18O2 PFHxS										
403.00 > 84.00	2.236	2.239	-0.003	0.869	5400125	2.43		103	4645	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.236	2.239	-0.003	1.000	122877	0.0496		109	251	
399.00 > 99.00	2.236	2.239	-0.003	1.000	41779		2.94(1.50-4.49)	109	38.1	
65 ADONA										
377.00 > 251.00	2.269	2.271	-0.002	0.772	237055	0.0509		102	440	
377.00 > 85.00	2.269	2.271	-0.002	0.772	142844		1.66(0.84-2.53)	102	244	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.544	2.548	-0.004	0.997	26890	0.0474		100	38.6	
D 12 M2-6:2FTS										
429.00 > 81.00	2.553	2.549	0.004	0.991	855666	2.34		98.6	2444	
D 73 13C8 PFOA										
421.00 > 376.00	2.568	2.571	-0.003	0.997	7724966	2.46		100	14507	
D 14 13C4 PFOA										
417.00 > 372.00	2.574	2.573	0.001	1.000	3900845	2.45		97.9	7238	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.574	2.574	0.0	1.000	100379	0.0569		114	9.5	
413.00 > 169.00	2.574	2.574	0.0	1.000	49130		2.04(0.84-2.52)	114	101	
* 62 13C2-PFOA										
415.00 > 370.00	2.574	2.575	-0.001		4076020	2.50			7362	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.002	0.878	85012	0.0478		100	401	
449.00 > 99.00	2.581	2.583	-0.002	0.878	21336		3.98(1.94-5.82)	100	49.1	
D 72 13C8 PFOS										
507.00 > 99.00	2.933	2.938	-0.005	1.139	1726052	2.43		102	3374	
20 Perfluorononanoic acid										
463.00 > 419.00	2.939	2.939	0.0	1.000	76644	0.0510		102	24.0	
463.00 > 169.00	2.933	2.939	-0.006	0.998	17838		4.30(1.90-5.69)	102	95.9	
D 19 13C5 PFNA										
468.00 > 423.00	2.939	2.939	0.0	1.141	3565521	2.49		99.7	4849	
D 18 13C4 PFOS										
503.00 > 80.00	2.939	2.939	0.0	1.141	3430647	2.34		98.1	4945	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.939	2.940	-0.001	1.000	71970	0.0467		101	155	
499.00 > 99.00	2.939	2.940	-0.001	1.000	19079		3.77(2.31-6.93)	101	32.7	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.147	3.150	-0.003	1.071	113277	0.0453		97.2	601	
D 26 M2-8:2FTS										
529.00 > 81.00	3.285	3.284	0.001	1.276	1065531	2.41		101	3535	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.285	3.285	0.001	1.118	52199	0.0483		101	318	
549.00 > 99.00	3.285	3.285	0.001	1.118	19699		2.65(1.33-3.97)	101	87.3	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.285	3.286	-0.001	1.000	30677	0.0531		111	130	
D 23 13C2 PFDA										
515.00 > 470.00	3.292	3.294	-0.002	1.279	3067735	2.45		97.8	7563	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.299	3.296	0.003	1.002	61353	0.0498		99.7	43.1	
513.00 > 169.00	3.299	3.296	0.003	1.002	12066		5.08(2.36-7.09)	99.7	64.7	
D 21 13C8 FOSA										
506.00 > 78.00	3.313	3.317	-0.004	1.287	4875140	2.52		101	5256	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.321	3.319	0.002	1.002	95215	0.0501		100	663	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.339	1580220	2.46		98.5	3859	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.454	3.453	0.001	1.002	31870	0.0523		105	38.4	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.606	3.608	-0.002	1.227	45962	0.0507		105	238	
599.00 > 99.00	3.606	3.608	-0.002	1.227	14657		3.14(1.39-4.16)	105	83.7	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.615	3.616	-0.001	1.404	1684036	2.53		101	1215	
D 30 13C2 PFUnA										
565.00 > 520.00	3.622	3.620	0.002	1.407	2456263	2.43		97.4	5363	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.622	3.622	0.0	1.000	60636	0.0549		110	38.2	
563.00 > 169.00	3.629	3.622	0.007	1.002	11793		5.14(2.12-6.36)	110	69.7	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.622	3.623	-0.001	1.002	31965	0.0532		106	133	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.785	3.781	0.004	1.288	186244	0.0485		103	799	
35 MeFOSA										
512.00 > 169.00	3.826	3.826	0.0		27155	NC			156	
D 36 13C2 PFDoA										
615.00 > 570.00	3.913	3.913	0.0	1.520	2599869	2.44		97.5	4097	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.913	3.913	0.0	1.191	18880	0.0471		97.7	179	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.913	3.913	0.0	1.000	61213	0.0529		106	37.0	
613.00 > 169.00	3.913	3.913	0.0	1.000	13716		4.46(2.13-6.40)	106	77.9	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.153	4.148	0.005	1.413	18872	0.0473		97.8	117	
699.00 > 99.00	4.153	4.148	0.005	1.413	25750		0.73(0.00-0.00)	97.8	251	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.173	4.173	0.0	1.066	57183	0.0511		102	26.7	
663.00 > 169.00	4.173	4.173	0.0	1.066	17627		3.24(1.25-3.76)	102	142	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.403	4.399	0.004	1.710	3344339	2.46		98.4	7399	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.403	4.400	0.003	1.000	17056	0.0527		105	165	
713.00 > 219.00	4.403	4.400	0.003	1.000	14716		1.16(0.71-2.13)	105	310	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.801	4.799	0.002	1.865	6852227	2.54		102	6967	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.801	4.801	0.0	1.000	174341	0.0486		97.3	76.1	
813.00 > 169.00	4.801	4.801	0.0	1.000	29566		5.90(2.86-8.58)	97.3	282	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.136	5.136	0.0	1.070	124240	0.0493		98.5	40.2	
913.00 > 169.00	5.136	5.136	0.0	1.070	15061		8.25(3.83-11.48)	98.5	225	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_003.d

Injection Date: 06-Aug-2018 11:17:57 Instrument ID: A8_N

Lims ID: IC L2 Full

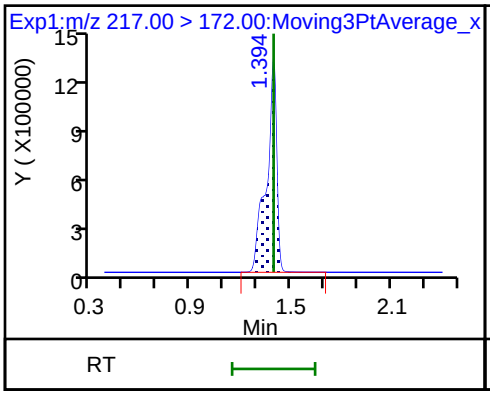
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 11 Worklist Smp#: 3

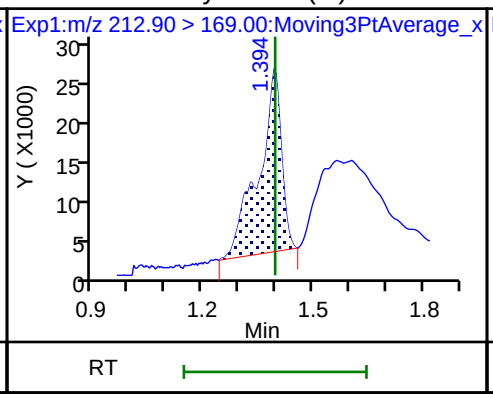
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

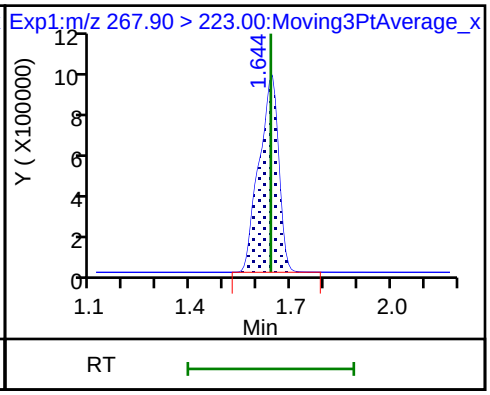
D 1 13C4 PFBA



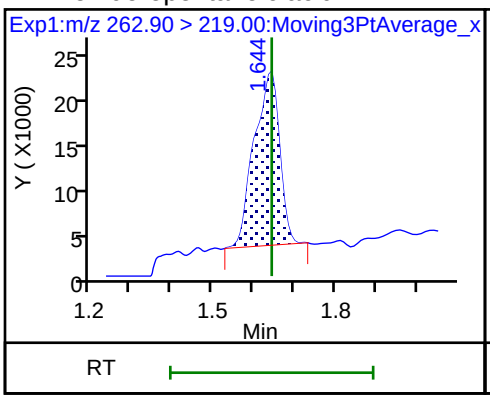
2 Perfluorobutyric acid (M)



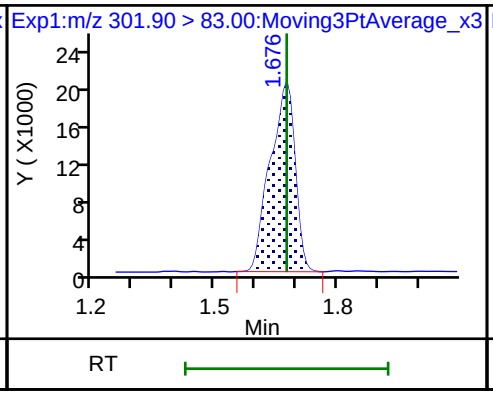
D 3 13C5-PFPeA



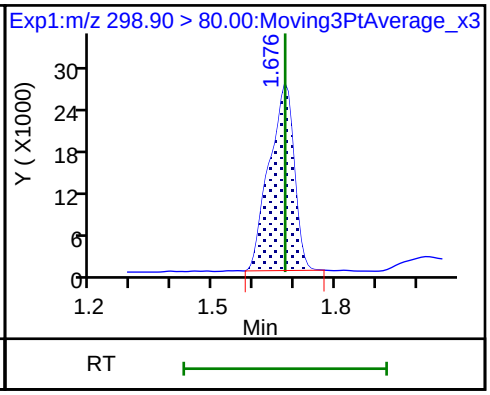
4 Perfluoropentanoic acid



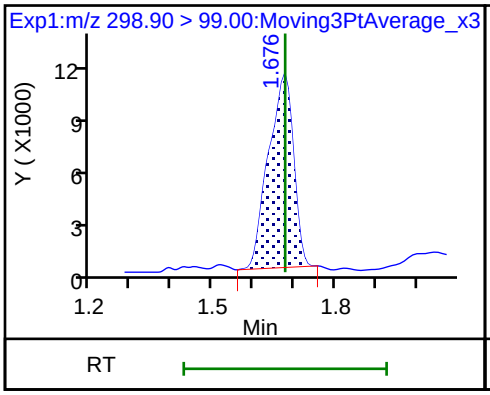
D 47 13C3-PFBS



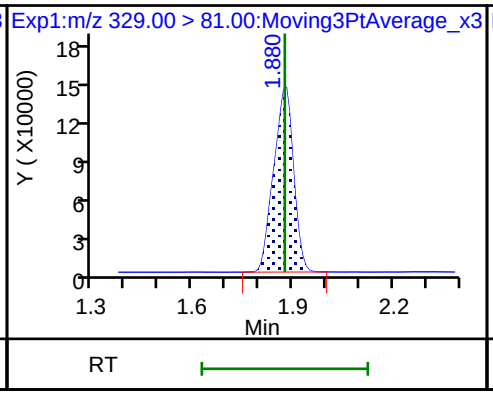
5 Perfluorobutanesulfonic acid



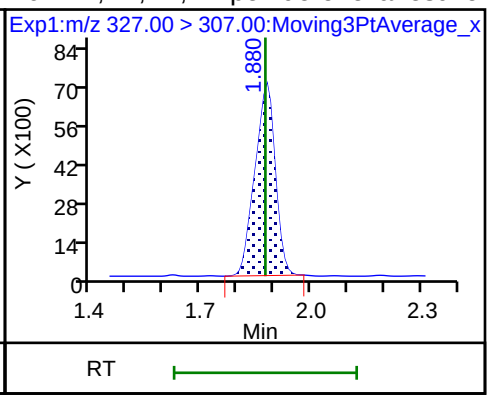
5 Perfluorobutanesulfonic acid



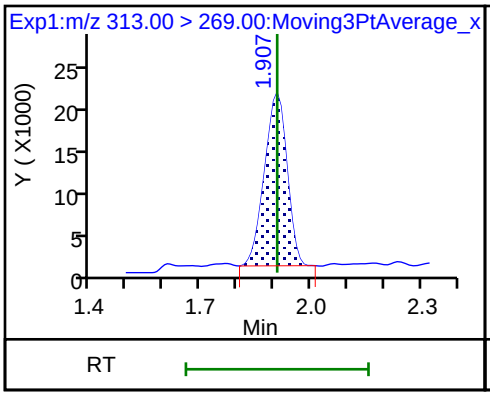
D 60 M2-4:2FTS



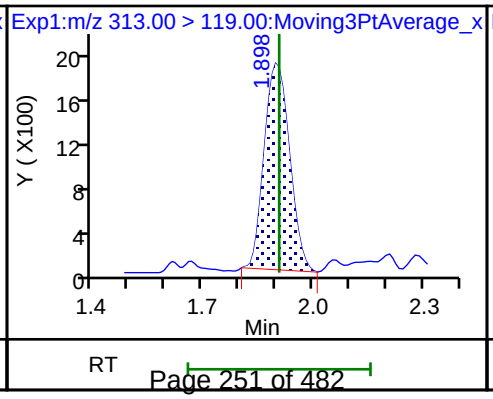
61 1H,1H,2H,2H-perfluorohexanesulfoni



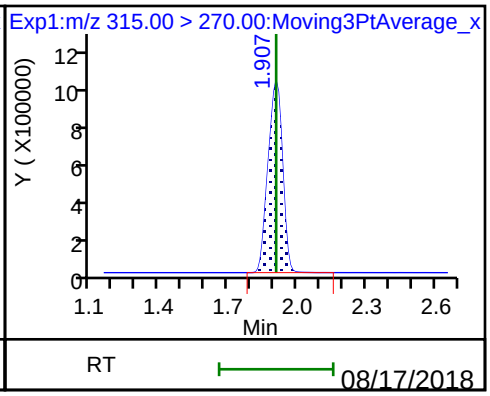
6 Perfluorohexanoic acid



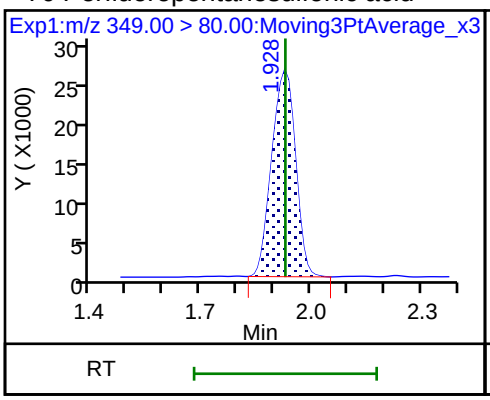
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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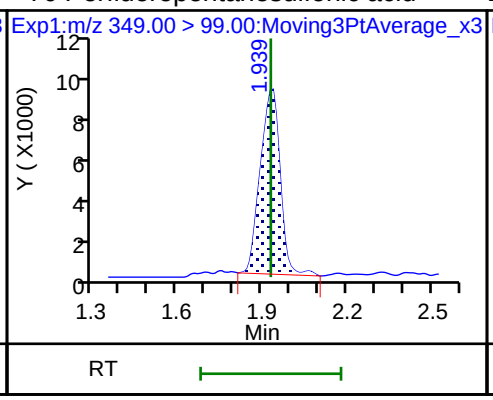
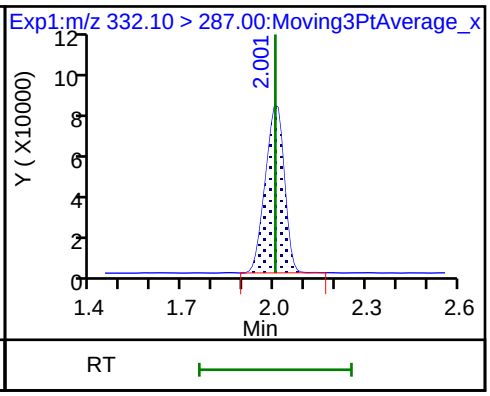
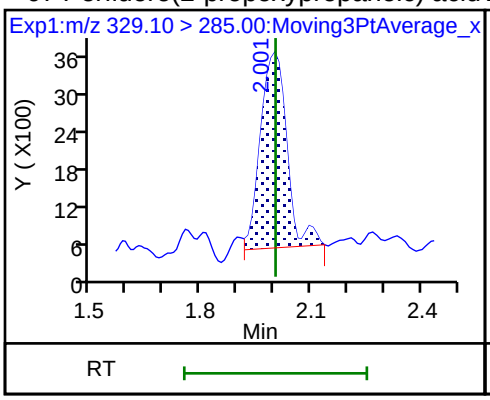


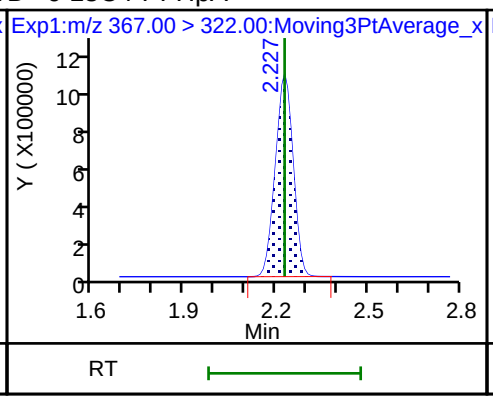
D 64 13C3 HFPO-DA



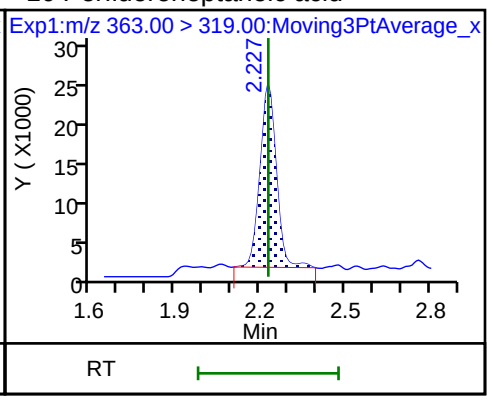
67 Perfluoro(2-propoxypropanoic) acid



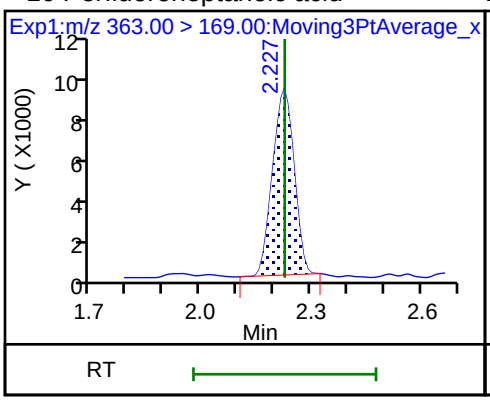
D 9 13C4-PFHpA



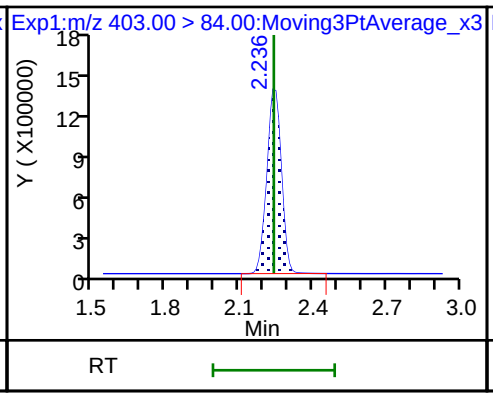
10 Perfluoroheptanoic acid



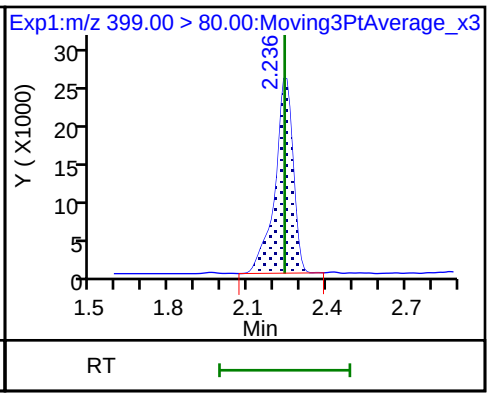
10 Perfluoroheptanoic acid



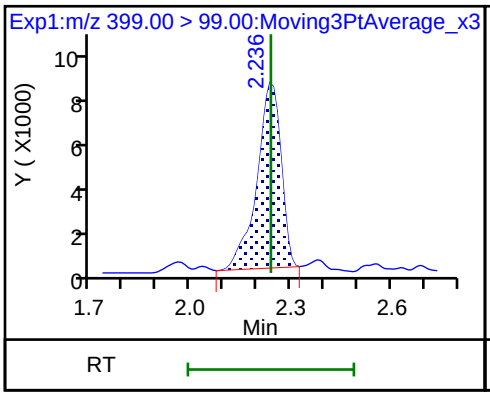
D 11 18O2 PFHxS



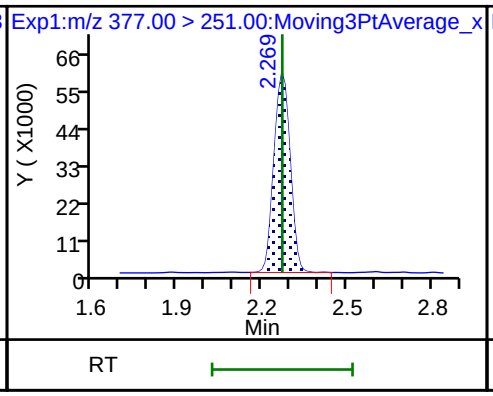
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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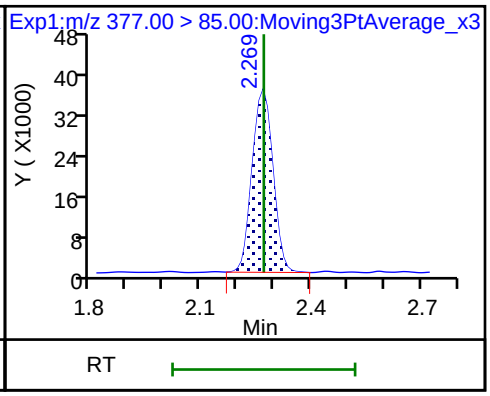
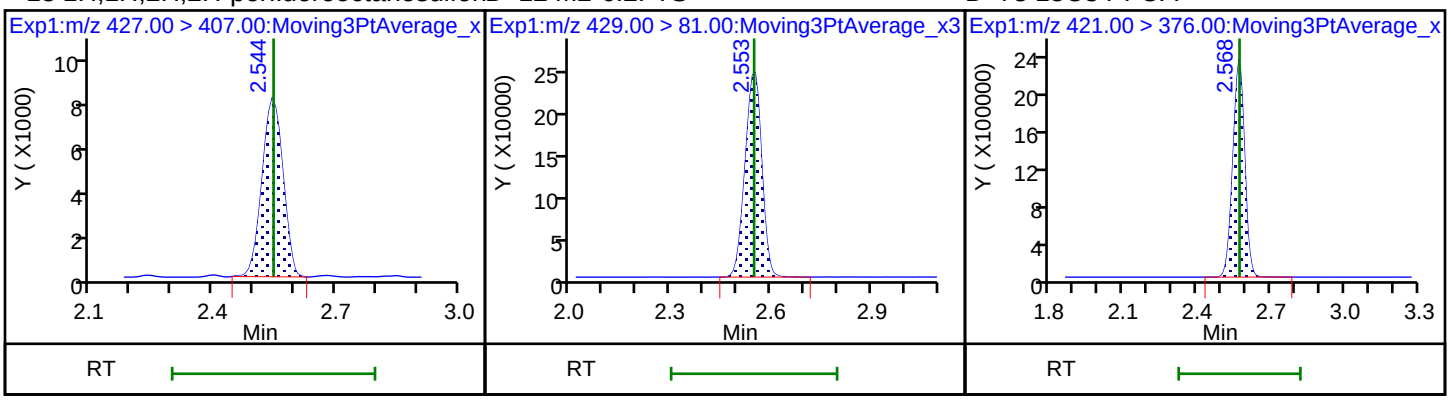
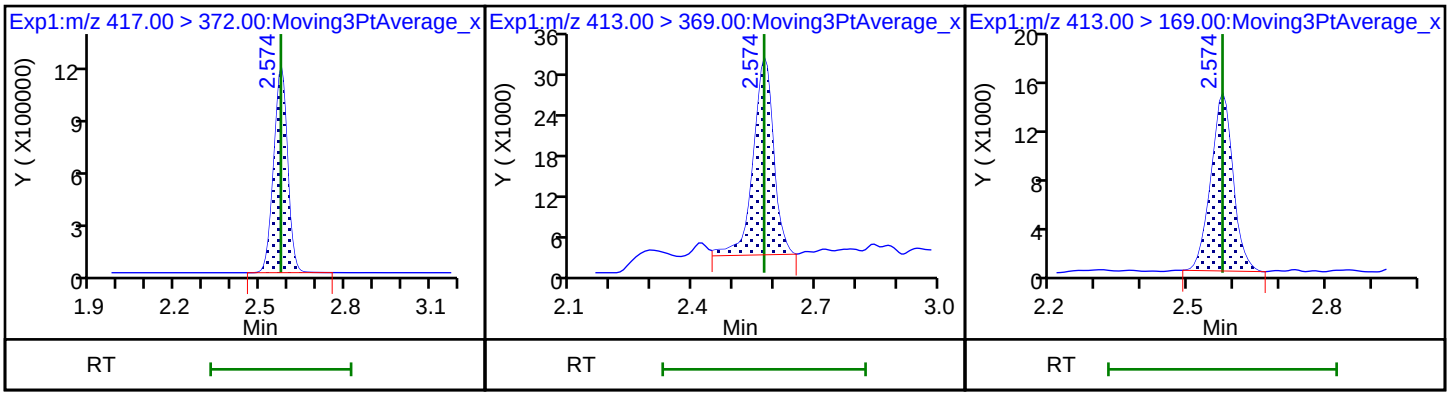


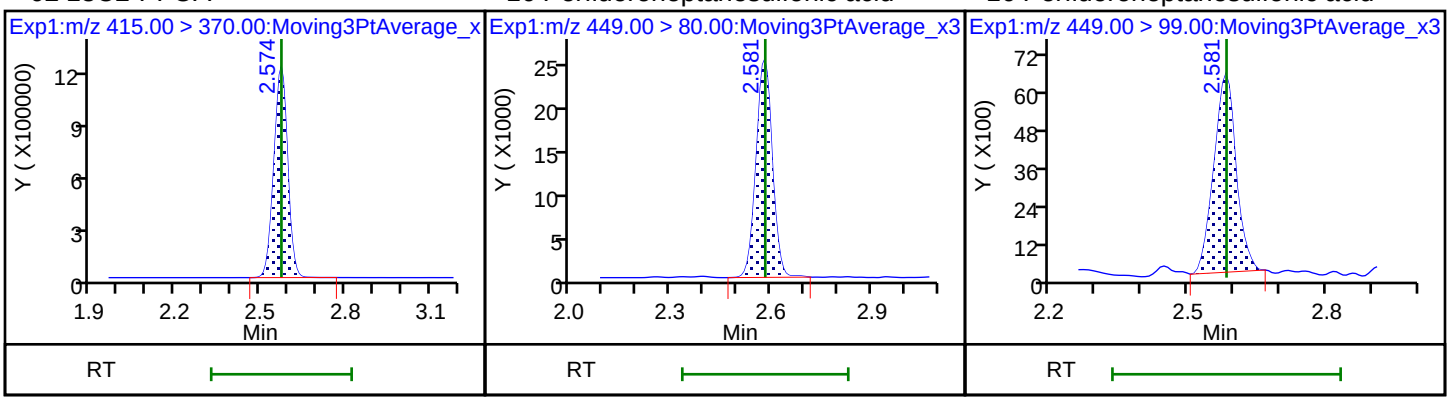
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



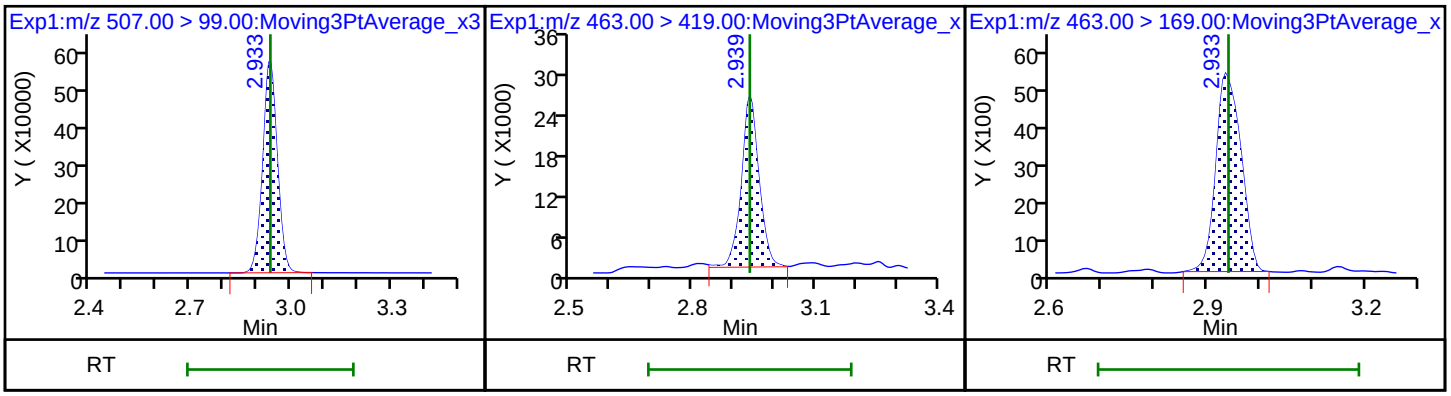
D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



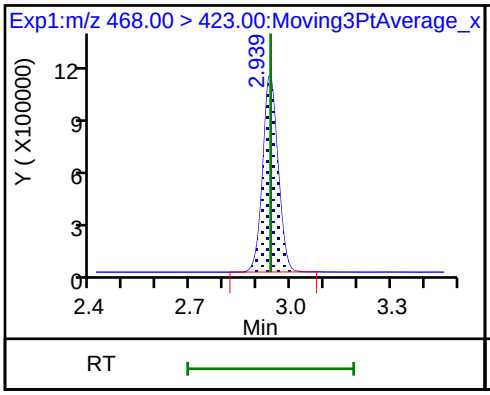
* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



D 72 13C8 PFOS 20 Perfluorononanoic acid 20 Perfluorononanoic acid



D 19 13C5 PFNA



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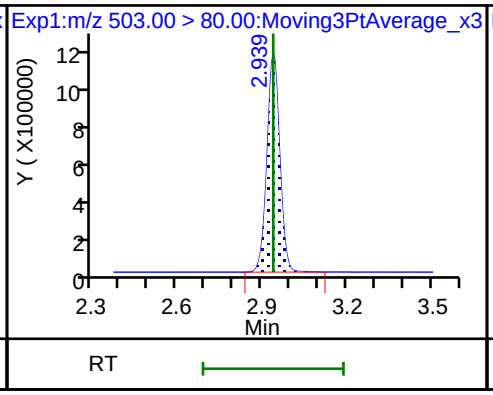
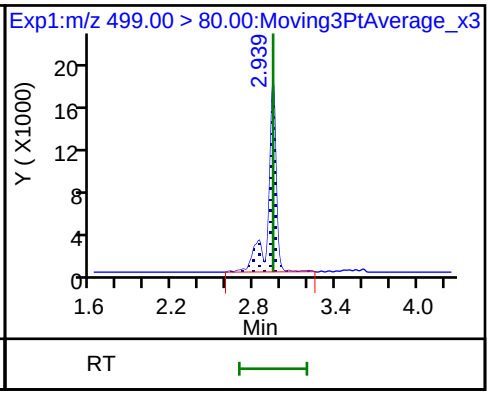
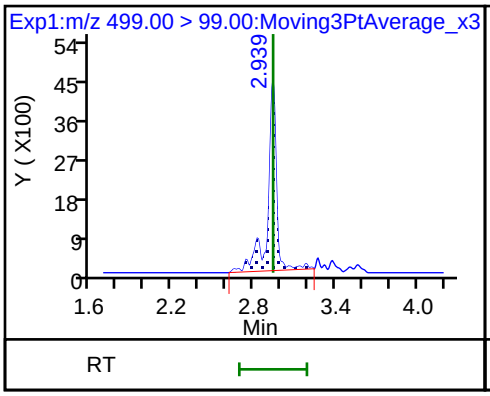


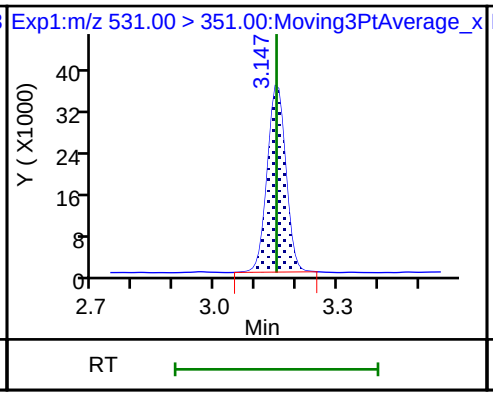
17 Perfluorooctane sulfonic acid



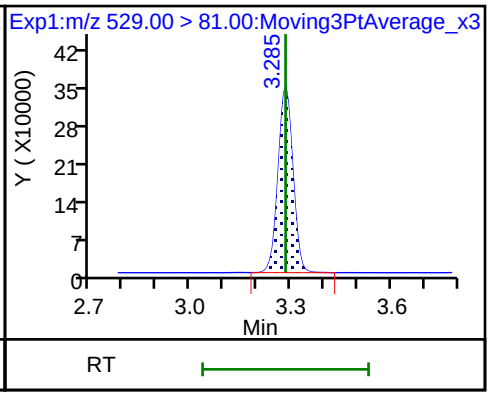
17 Perfluorooctane sulfonic acid



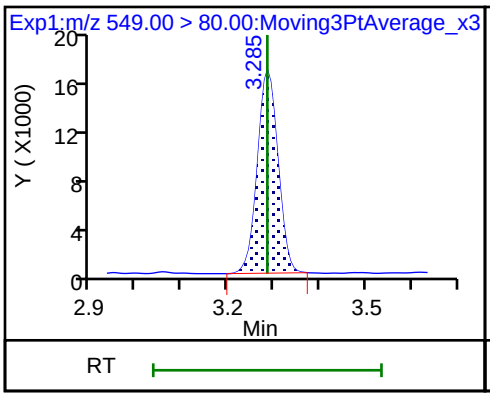
69 9-Chlorohexadecafluoro-3-oxanonane



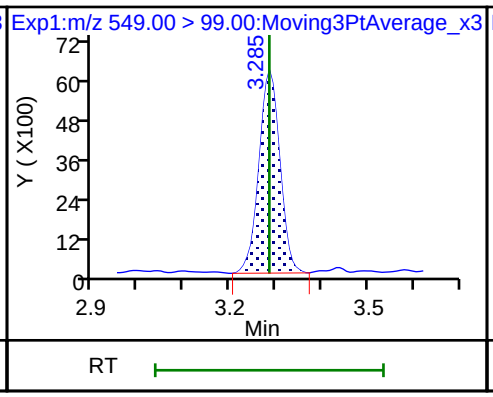
D 26 M2-8:2FTS



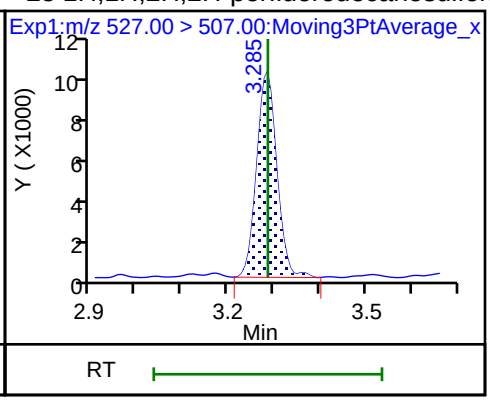
68 Perfluorononanesulfonic acid



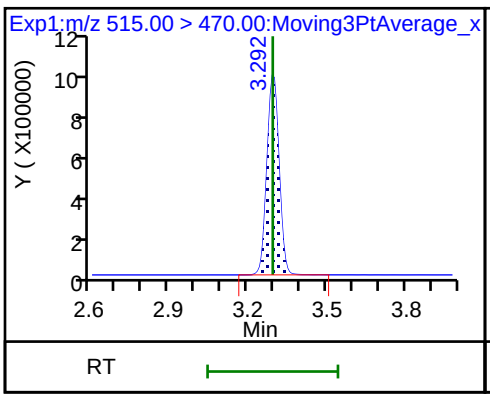
68 Perfluorononanesulfonic acid



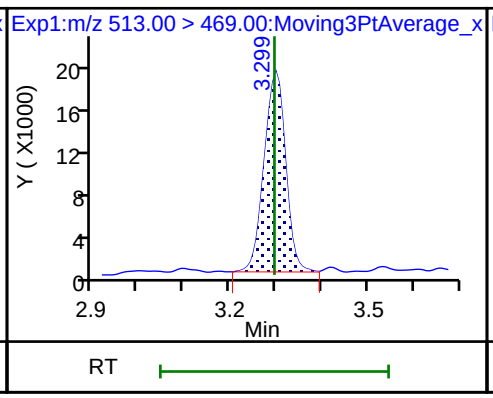
25 1H,1H,2H,2H-perfluorodecanesulfoni



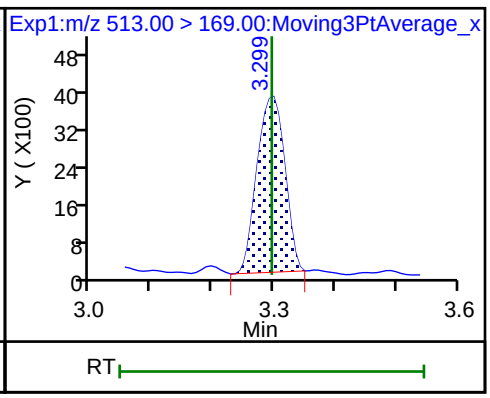
D 23 13C2 PFDA



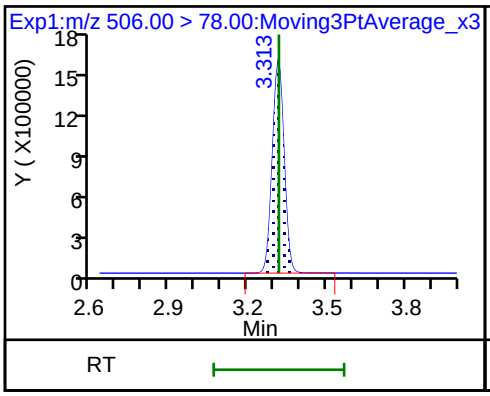
24 Perfluorodecanoic acid



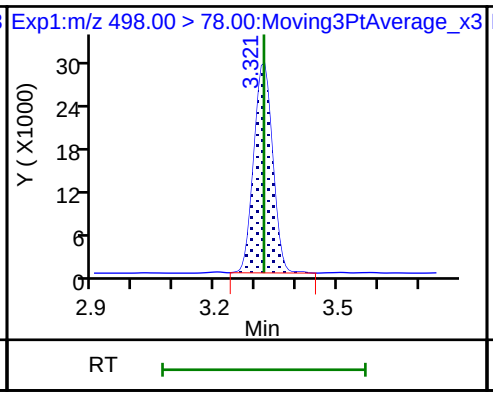
24 Perfluorodecanoic acid



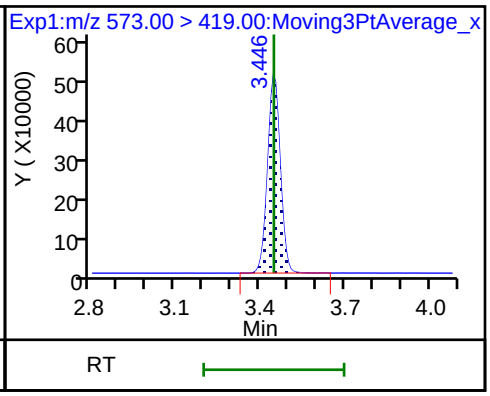
D 21 13C8 FOSA



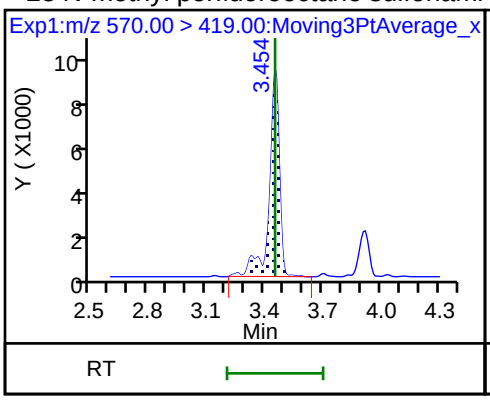
22 Perfluorooctane Sulfonamide



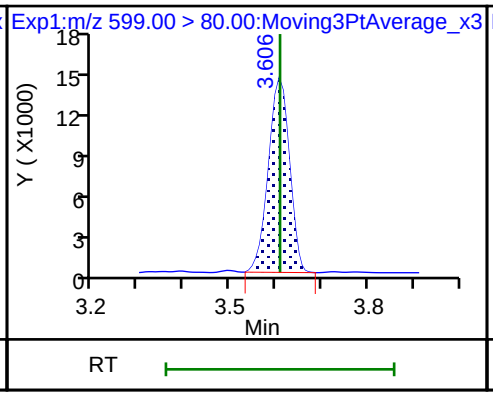
D 27 d3-NMeFOSAA



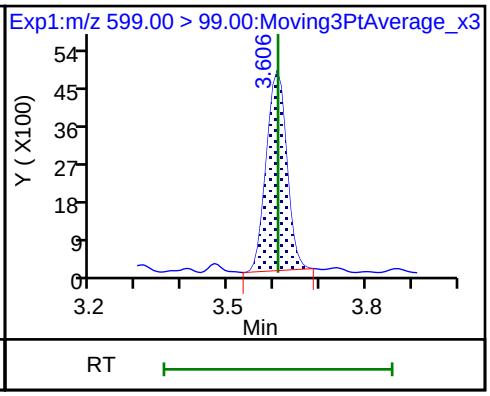
28 N-methyl perfluorooctane sulfonami



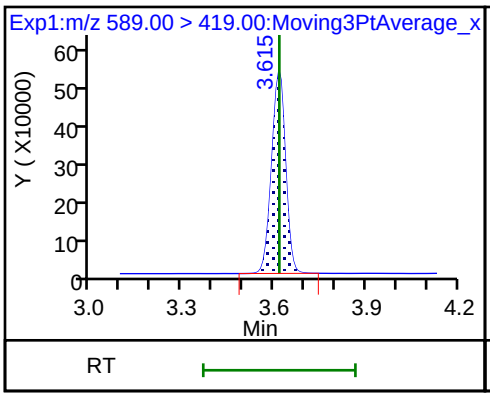
29 Perfluorodecane Sulfonic acid



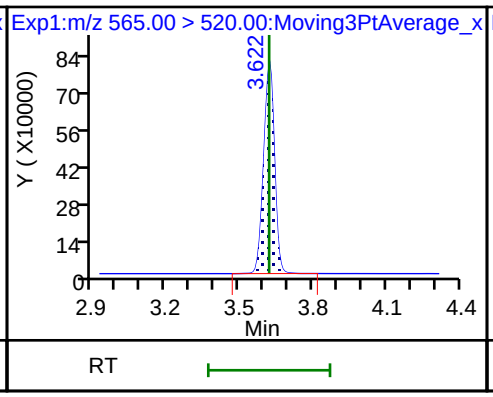
29 Perfluorodecane Sulfonic acid



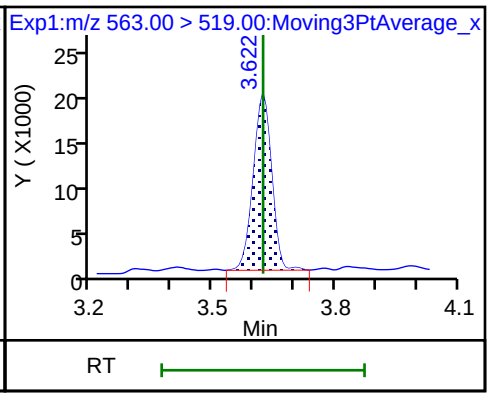
D 32 d5-NEtFOSAA



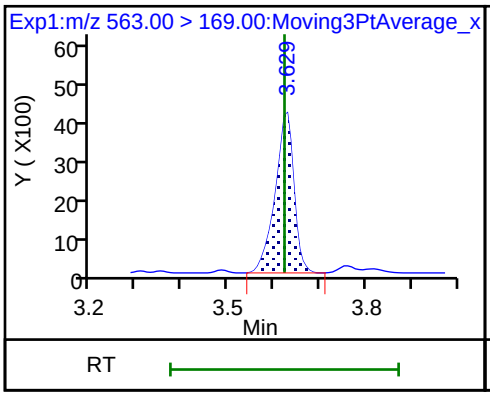
D 30 13C2 PFUnA



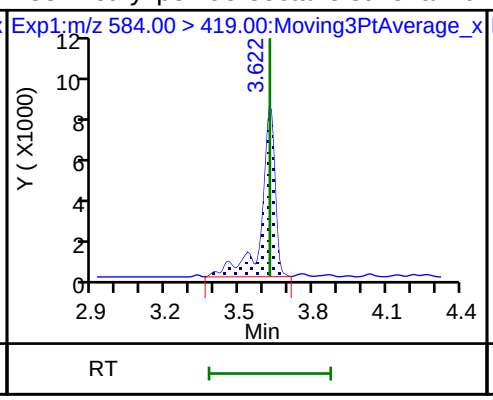
31 Perfluoroundecanoic acid



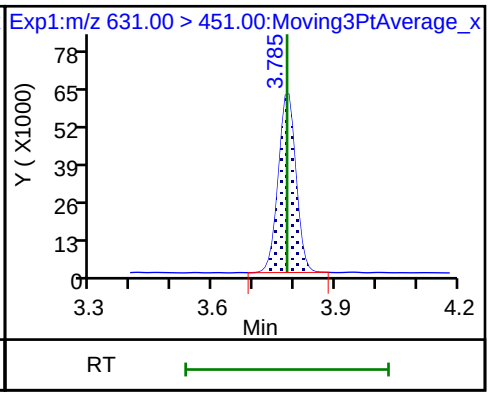
31 Perfluoroundecanoic acid



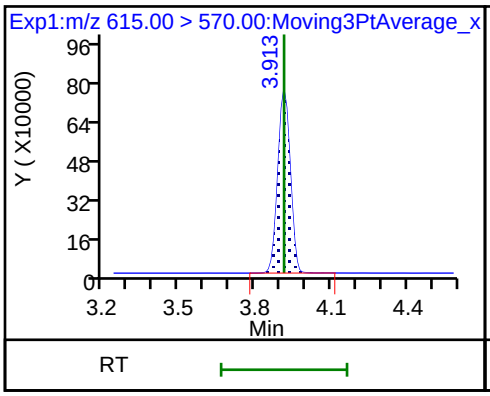
33 N-ethyl perfluorooctane sulfonamid



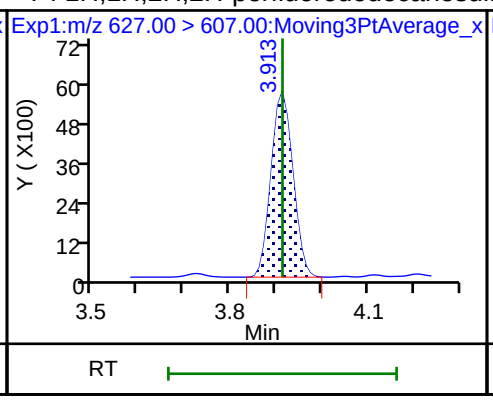
66 11-Chloroeicosafluoro-3-oxaundecan



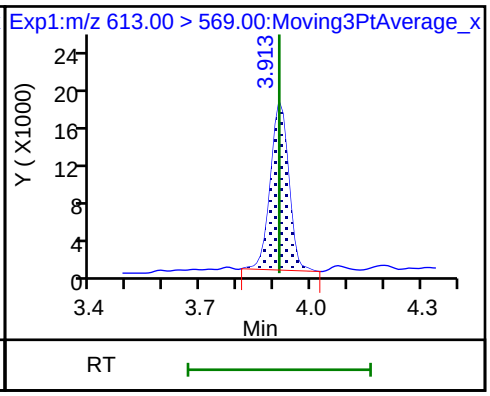
D 36 13C2 PFDoA



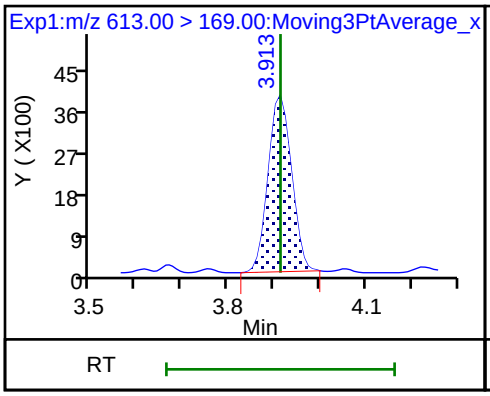
74 1H,1H,2H,2H-perfluorododecanesulfo



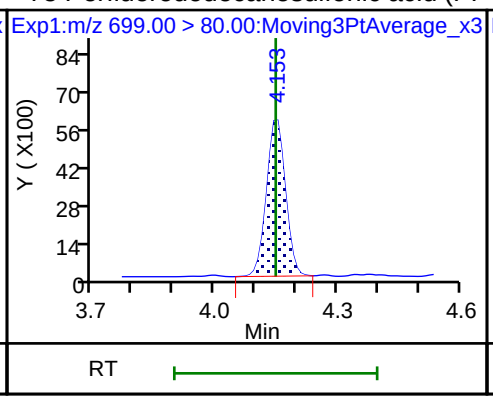
37 Perfluorododecanoic acid



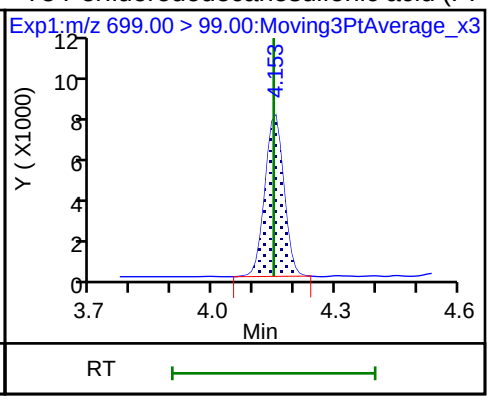
37 Perfluorododecanoic acid



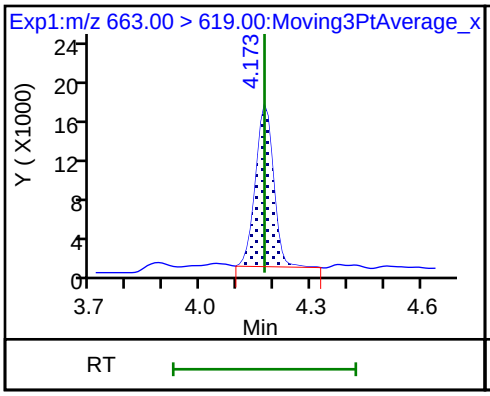
75 Perfluorododecanesulfonic acid (PF



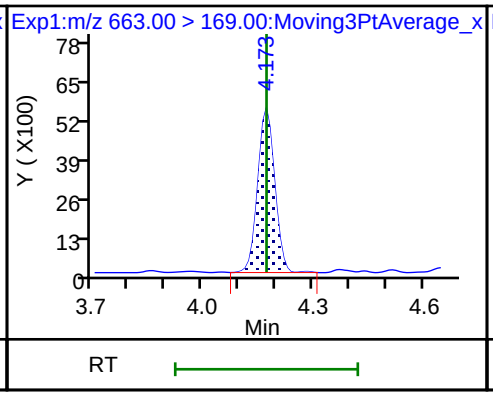
75 Perfluorododecanesulfonic acid (PF



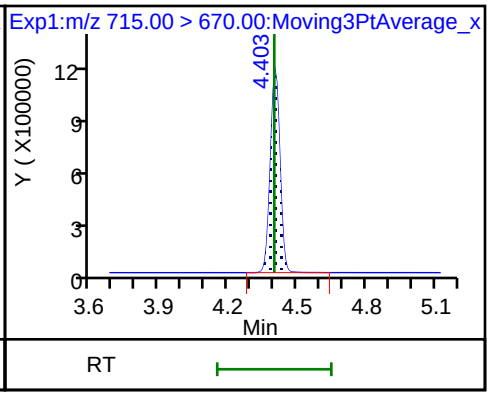
41 Perfluorotridecanoic acid



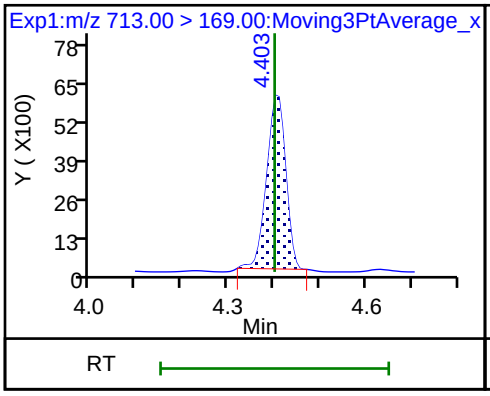
41 Perfluorotridecanoic acid



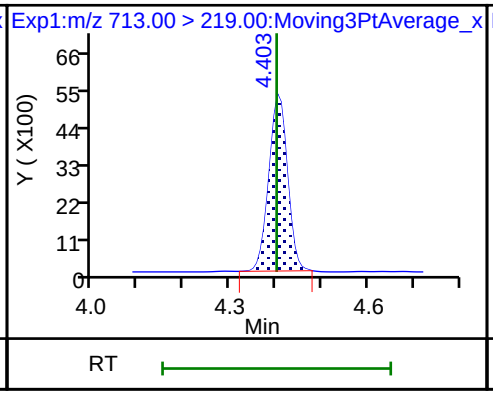
D 43 13C2-PFTeDA



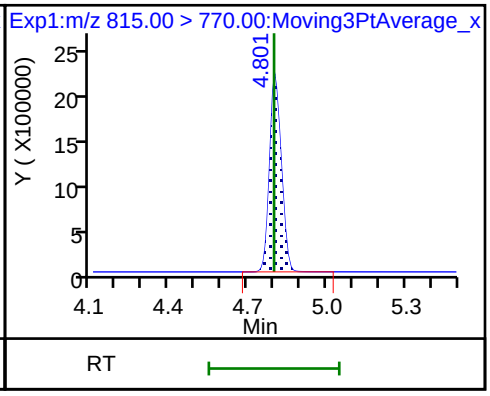
42 Perfluorotetradecanoic acid



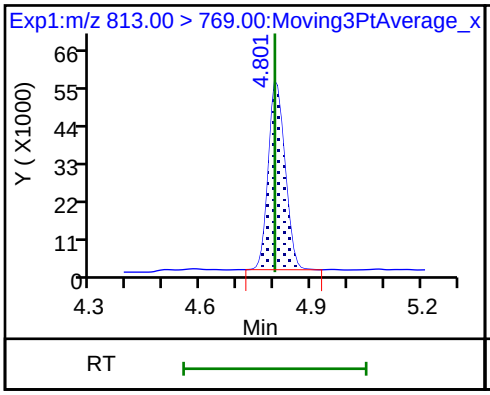
42 Perfluorotetradecanoic acid



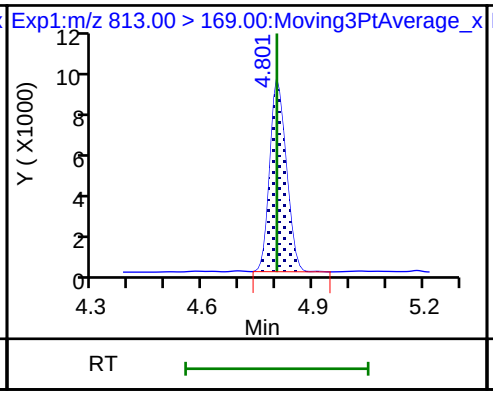
D 44 13C2-PFHxDA



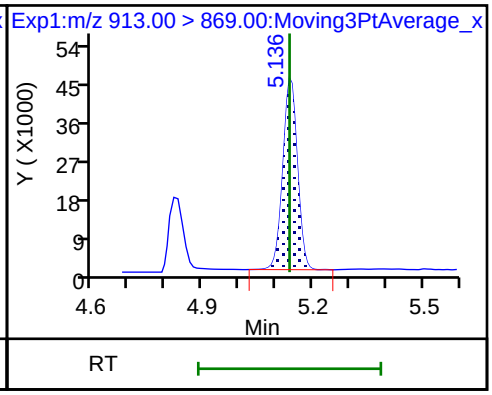
45 Perfluorohexadecanoic acid



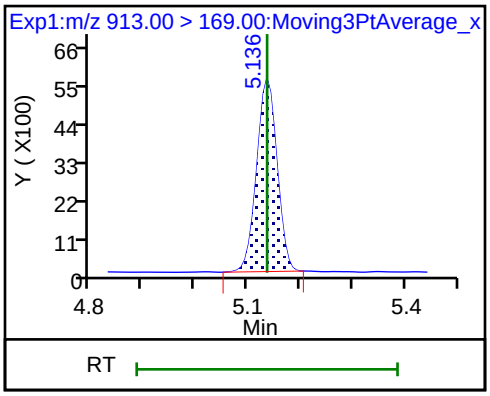
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

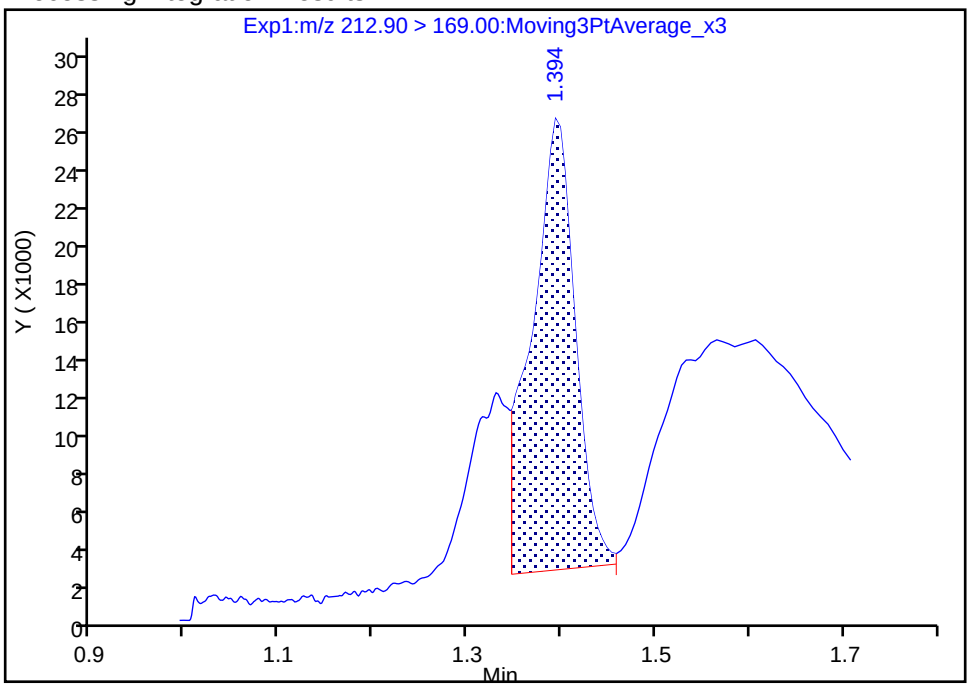
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_003.d
Injection Date: 06-Aug-2018 11:17:57 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

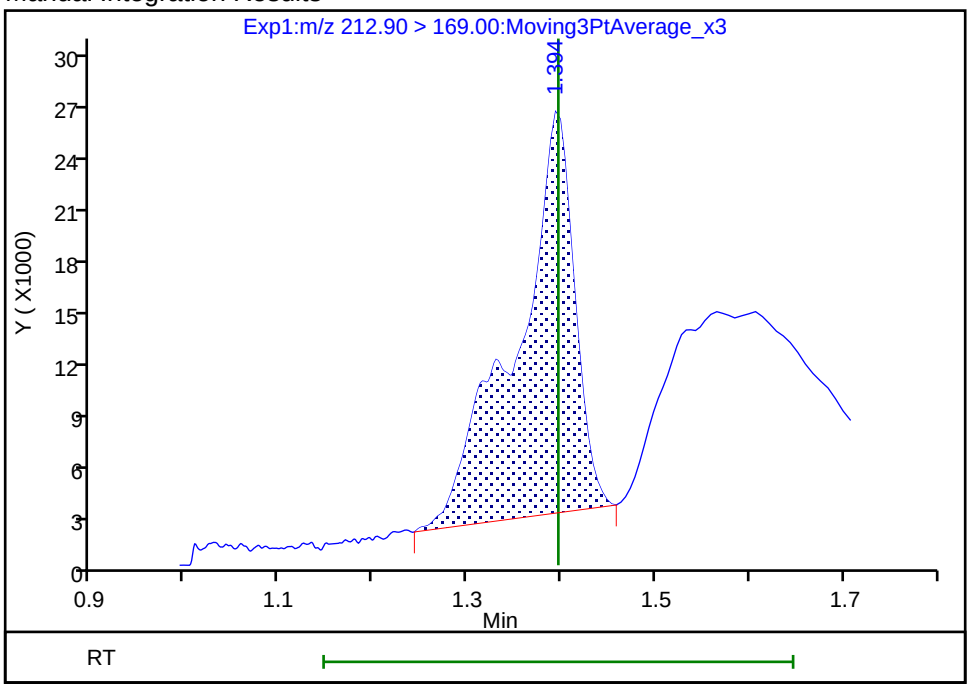
Processing Integration Results

RT: 1.39
Area: 75241
Amount: 0.037594
Amount Units: ng/ml



Manual Integration Results

RT: 1.39
Area: 100389
Amount: 0.048421
Amount Units: ng/ml



Reviewer: westendorfc, 06-Aug-2018 15:52:40
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_004.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Aug-2018 11:25:44 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L3-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:05 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:28:13

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.396	1.395	0.001	0.541	5688815	2.47		98.7	8052	
2 Perfluorobutyric acid										
212.90 > 169.00	1.401	1.397	0.004	1.004	522272	0.2445		97.8	52.9	
D 3 13C5-PFPeA										
267.90 > 223.00	1.640	1.639	0.001	0.635	3918495	2.47		98.7	11150	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.647	1.643	0.004	1.005	421991	0.2366		94.7	28.3	
D 47 13C3-PFBS										
301.90 > 83.00	1.679	1.675	0.004	0.651	85930	2.34		101	402	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.679	1.676	0.003	1.000	616670	0.2197		99.4	231	
298.90 > 99.00	1.679	1.676	0.003	1.000	251343		2.45(1.25-3.74)	99.4	142	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.885	1.875	0.010	1.122	141135	0.2305		98.7	1346	
D 60 M2-4:2FTS										
329.00 > 81.00	1.876	1.875	0.001	0.727	601195	2.30		98.4	964	
D 7 13C2 PFHxA										
315.00 > 270.00	1.913	1.908	0.005	0.741	4437948	2.46		98.5	14259	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.913	1.908	0.005	1.000	428854	0.2367		94.7	119	
313.00 > 119.00	1.913	1.908	0.005	1.000	41462		10.34(5.03-15.10)	94.7	91.4	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.934	1.930	0.004	1.152	582073	0.2285		97.4	1268	
349.00 > 99.00	1.934	1.930	0.004	1.152	218098		2.67(1.36-4.07)	97.4	288	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.007	2.003	0.004	1.000	81354	0.2425		97.0	37.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.007	2.003	0.004	0.778	346469	2.47		98.9	940	
D 9 13C4-PFHpA										
367.00 > 322.00	2.225	2.227	-0.002	0.862	4417214	2.49		99.7	7046	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.234	2.228	0.006	1.004	459833	0.2451		98.0	94.8	
363.00 > 169.00	2.225	2.228	-0.003	1.000	172415		2.67(1.13-3.40)	98.0	347	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.245	2.239	0.006	1.000	544267	0.2249		98.9	1144	
399.00 > 99.00	2.245	2.239	0.006	1.000	172368		3.16(1.50-4.49)	98.9	186	
D 11 18O2 PFHxS										
403.00 > 84.00	2.245	2.239	0.006	0.870	5279483	2.32		98.2	5983	
65 ADONA										
377.00 > 251.00	2.278	2.271	0.007	0.774	1256630	0.2572		103	3231	
377.00 > 85.00	2.278	2.271	0.007	0.774	754513		1.67(0.84-2.53)	103	1041	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.553	2.548	0.005	1.000	129666	0.2145		90.5	183	
D 12 M2-6:2FTS										
429.00 > 81.00	2.553	2.549	0.004	0.989	912690	2.45		103	2504	
D 73 13C8 PFOA										
421.00 > 376.00	2.575	2.571	0.004	0.997	7698803	2.40		98.0	11913	
D 14 13C4 PFOA										
417.00 > 372.00	2.575	2.573	0.002	0.997	4104790	2.52		101	6871	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.575	2.574	0.001	1.000	451059	0.2430		97.1	42.9	
413.00 > 169.00	2.581	2.574	0.007	1.003	229069		1.97(0.84-2.52)	97.1	434	
* 62 13C2-PFOA										
415.00 > 370.00	2.581	2.575	0.006		4161520	2.50			6277	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.588	2.583	0.005	0.879	425894	0.2283		95.9	1142	
449.00 > 99.00	2.588	2.583	0.005	0.879	119281		3.57(1.94-5.82)	95.9	308	
D 72 13C8 PFOS										
507.00 > 99.00	2.945	2.938	0.007	1.141	1729501	2.38		99.7	4106	
D 18 13C4 PFOS										
503.00 > 80.00	2.945	2.939	0.006	1.141	3598367	2.41		101	4581	
D 19 13C5 PFNA										
468.00 > 423.00	2.945	2.939	0.006	1.141	3712571	2.54		102	9104	
20 Perfluorononanoic acid										
463.00 > 419.00	2.945	2.939	0.006	1.000	377996	0.2416		96.7	111	
463.00 > 169.00	2.945	2.939	0.006	1.000	90259		4.19(1.90-5.69)	96.7	548	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.945	2.940	0.005	1.000	360873	0.2232		96.2	732	
499.00 > 99.00	2.945	2.940	0.005	1.000	85319		4.23(2.31-6.93)	96.2	158	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.155	3.150	0.005	1.072	586624	0.2237		96.0	2466	
D 26 M2-8:2FTS										
529.00 > 81.00	3.292	3.284	0.008	1.275	1066887	2.37		98.9	2644	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.292	3.285	0.008	1.118	273347	0.2414		101	1085	
549.00 > 99.00	3.292	3.285	0.008	1.118	98712		2.77(1.33-3.97)	101	413	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.292	3.286	0.006	1.000	136487	0.2358		98.5	563	
D 23 13C2 PFDA										
515.00 > 470.00	3.299	3.294	0.005	1.278	3074087	2.40		96.0	5313	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.299	3.296	0.003	1.000	318256	0.2580		103	203	
513.00 > 169.00	3.299	3.296	0.003	1.000	54367		5.85(2.36-7.09)	103	170	
D 21 13C8 FOSA										
506.00 > 78.00	3.321	3.317	0.004	1.286	4992636	2.52		101	5246	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.321	3.319	0.002	1.000	476525	0.2451		98.0	1873	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.454	3.448	0.006	1.338	1616798	2.47		98.7	4005	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.461	3.453	0.008	1.002	150940	0.2420		96.8	179	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.615	3.608	0.007	1.228	233277	0.2452		102	968	
599.00 > 99.00	3.606	3.608	-0.002	1.225	79055		2.95(1.39-4.16)	102	375	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.622	3.616	0.006	1.403	1760050	2.59		104	1377	
D 30 13C2 PFUnA										
565.00 > 520.00	3.622	3.620	0.002	1.403	2639555	2.56		102	7745	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.622	3.622	0.0	1.000	289310	0.2439		97.5	194	
563.00 > 169.00	3.629	3.622	0.007	1.002	49327		5.87(2.12-6.36)	97.5	296	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.629	3.623	0.006	1.002	142770	0.2274		91.0	559	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.786	3.781	0.005	1.286	948354	0.2356		100	2037	
35 MeFOSA										
512.00 > 169.00	3.827	3.826	0.001		147856	NC			551	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.913	3.913	0.0	1.000	291016	0.2348		93.9	163	
613.00 > 169.00	3.913	3.913	0.0	1.000	60342		4.82(2.13-6.40)	93.9	418	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.913	3.913	0.0	1.189	99141	0.2471		103	902	
D 36 13C2 PFDoA										
615.00 > 570.00	3.913	3.913	0.0	1.516	2785129	2.56		102	5994	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.154	4.148	0.006	1.411	111497	0.2666		110	728	
699.00 > 99.00	4.154	4.148	0.006	1.411	133931		0.83(0.00-0.00)	110	1049	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.173	4.173	0.0	1.066	304796	0.2544		102	138	
663.00 > 169.00	4.173	4.173	0.0	1.066	95463		3.19(1.25-3.76)	102	719	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.403	4.399	0.004	1.706	3541707	2.55		102	7360	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.403	4.400	0.003	1.000	84652	0.2469		98.8	893	
713.00 > 219.00	4.403	4.400	0.003	1.000	58906		1.44(0.71-2.13)	98.8	634	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.801	4.799	0.002	1.860	6757749	2.46		98.2	5754	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.808	4.801	0.007	1.001	661220	0.2566		103	299	
813.00 > 169.00	4.801	4.801	0.0	1.000	112805		5.86(2.86-8.58)	103	1161	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.142	5.136	0.006	1.071	644655	0.2592		104	182	
913.00 > 169.00	5.135	5.136	-0.001	1.070	77077		8.36(3.83-11.48)	104	768	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL3_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_004.d

Injection Date: 06-Aug-2018 11:25:44 Instrument ID: A8_N

Lims ID: IC L3 Full

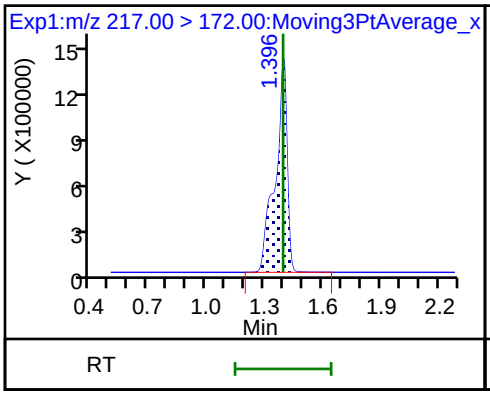
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 12 Worklist Smp#: 4

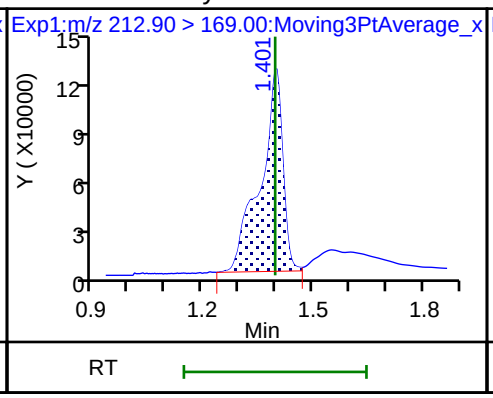
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

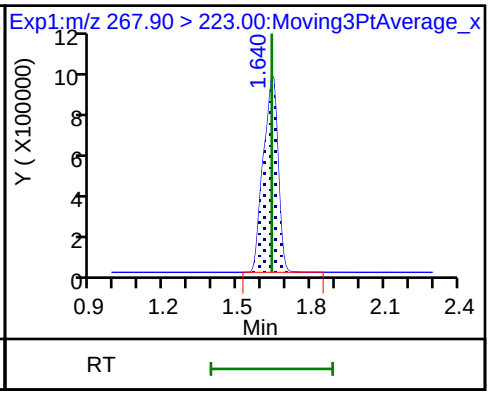
D 1 13C4 PFBA



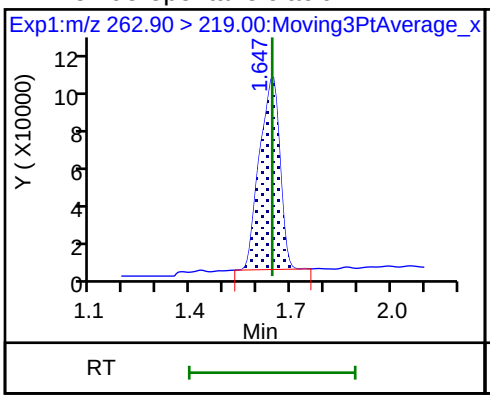
2 Perfluorobutyric acid



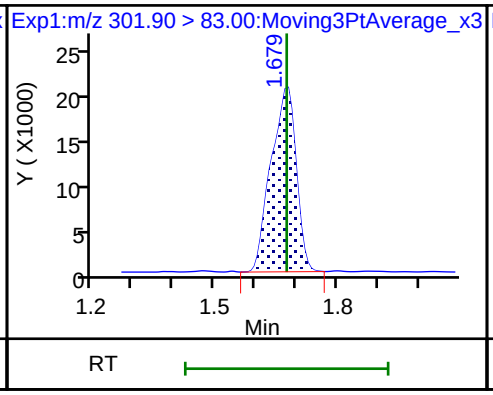
D 3 13C5-PFPeA



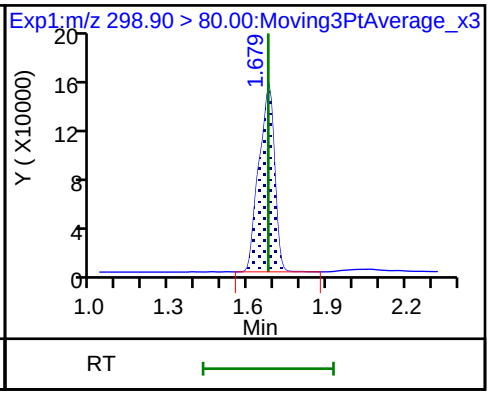
4 Perfluoropentanoic acid



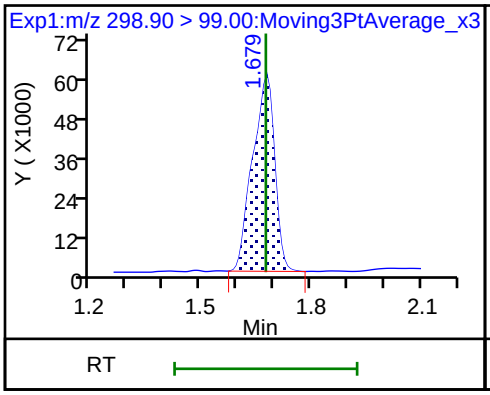
D 47 13C3-PFBS



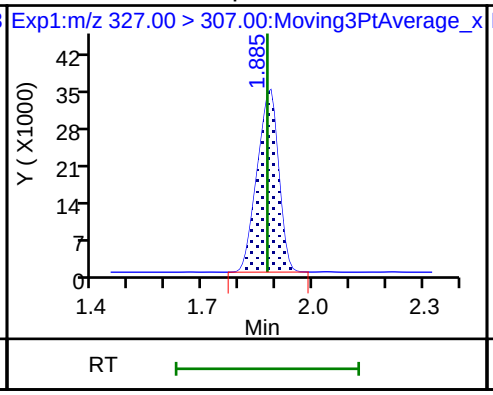
5 Perfluorobutanesulfonic acid



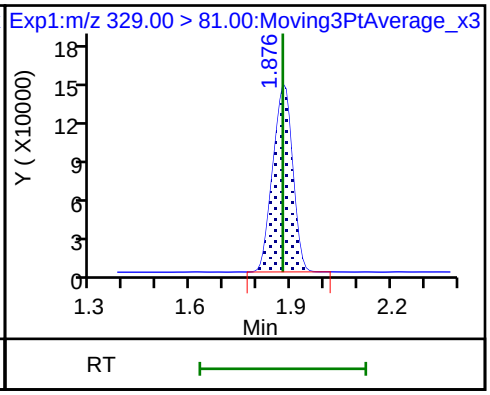
5 Perfluorobutanesulfonic acid



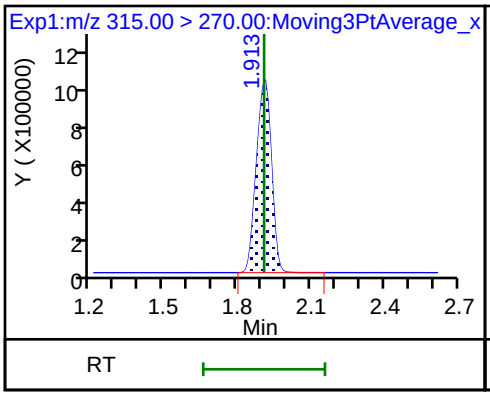
61 1H,1H,2H,2H-perfluorohexanesulfon



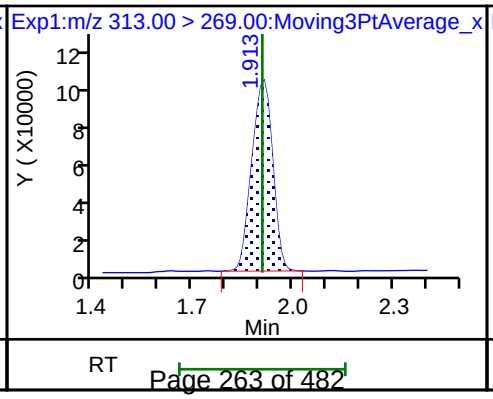
D 60 M2-4:2FTS



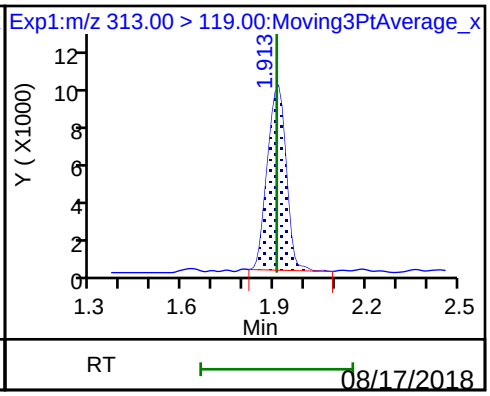
D 7 13C2 PFHxA



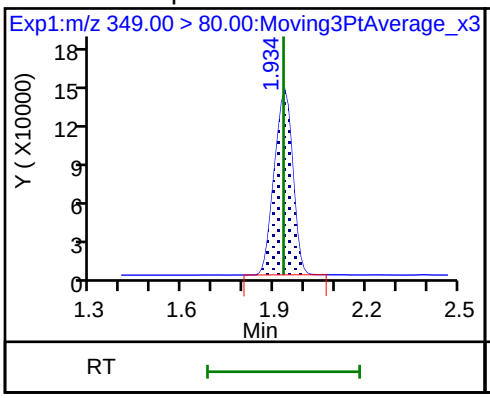
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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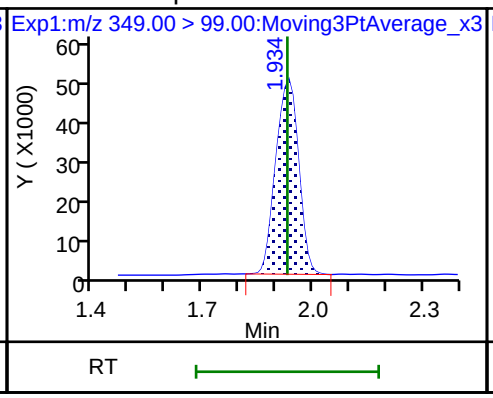
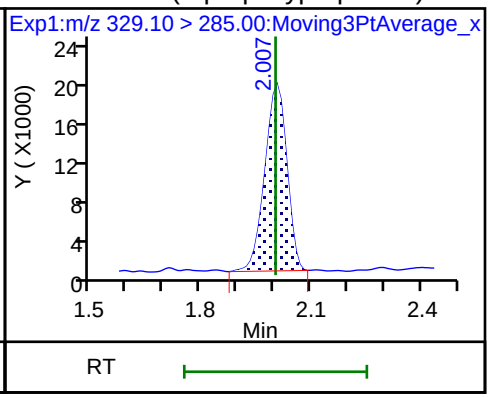
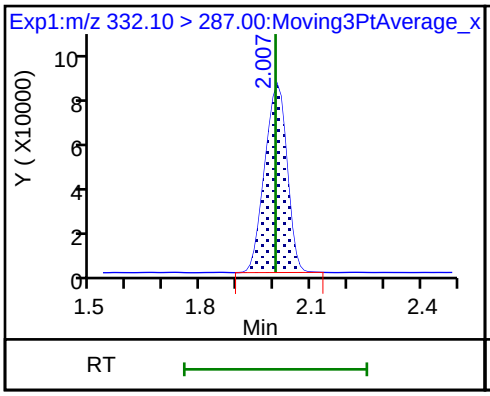


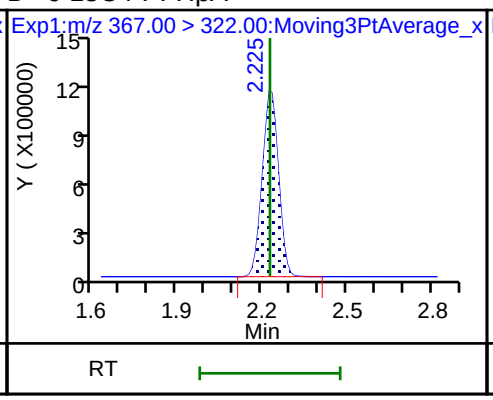
67 Perfluoro(2-propoxypropanoic) acid



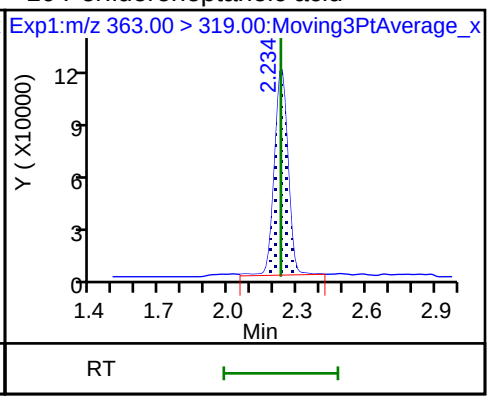
D 64 13C3 HFPO-DA



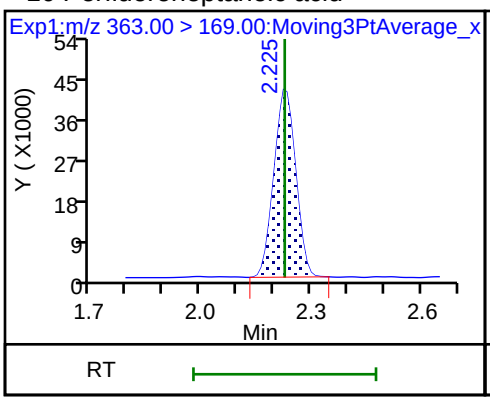
D 9 13C4-PFHpA



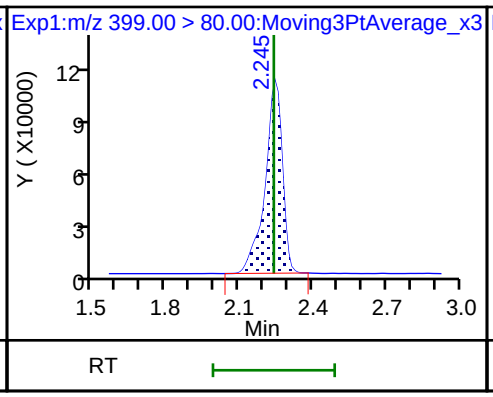
10 Perfluoroheptanoic acid



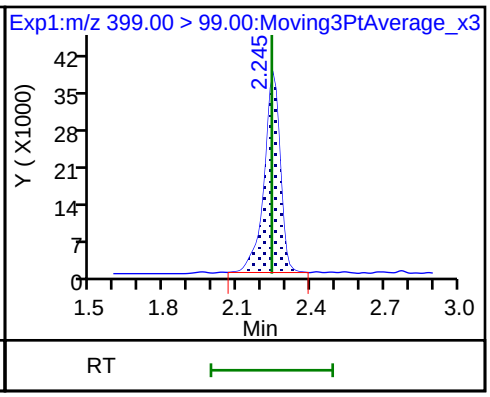
10 Perfluoroheptanoic acid



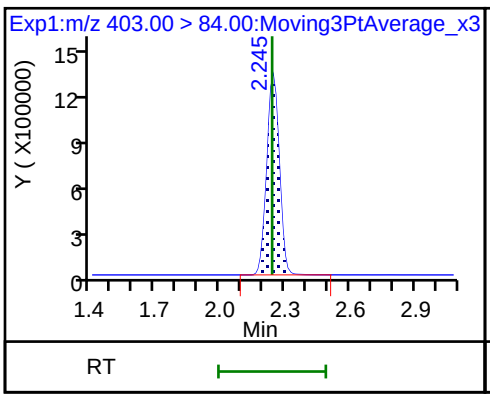
8 Perfluorohexanesulfonic acid



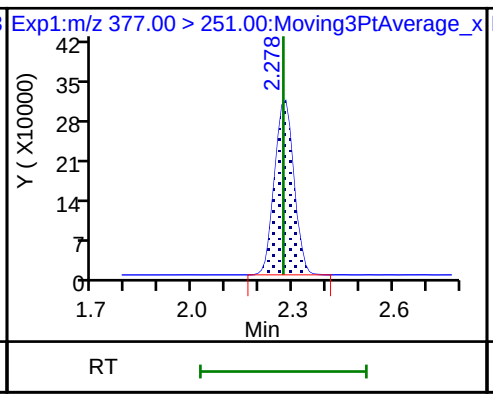
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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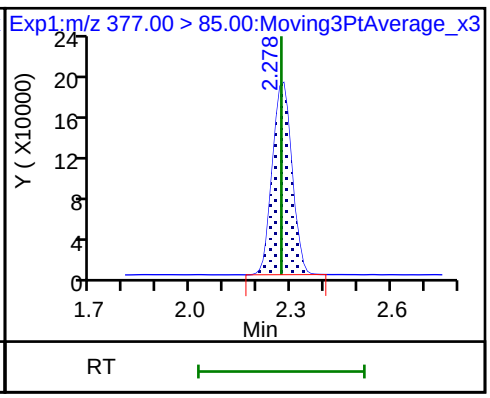
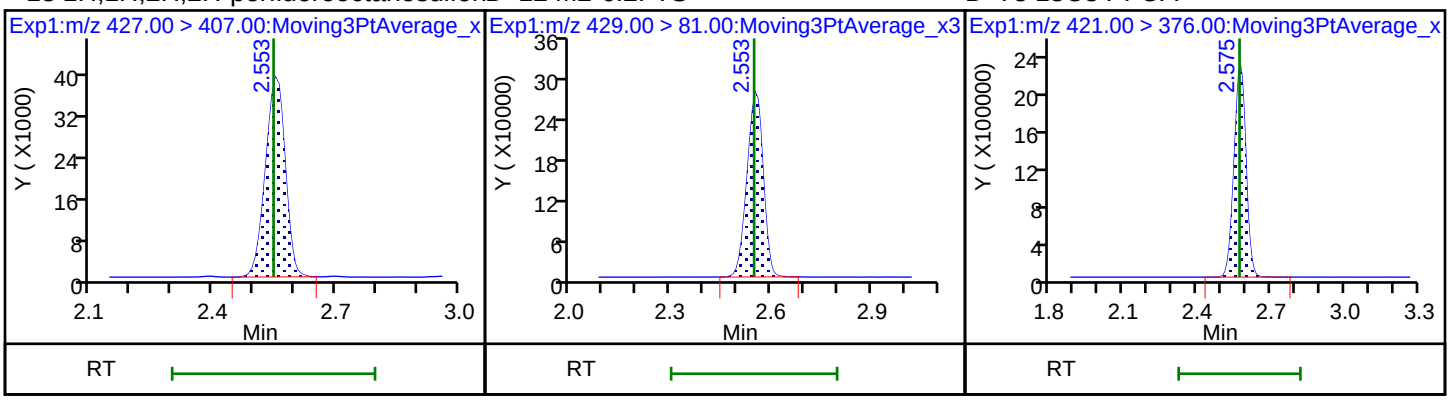
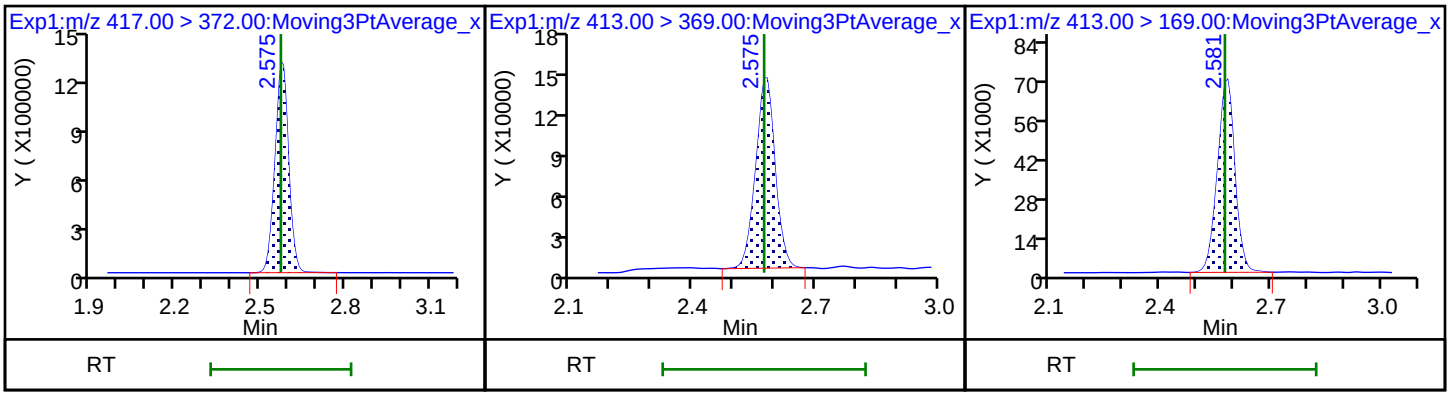


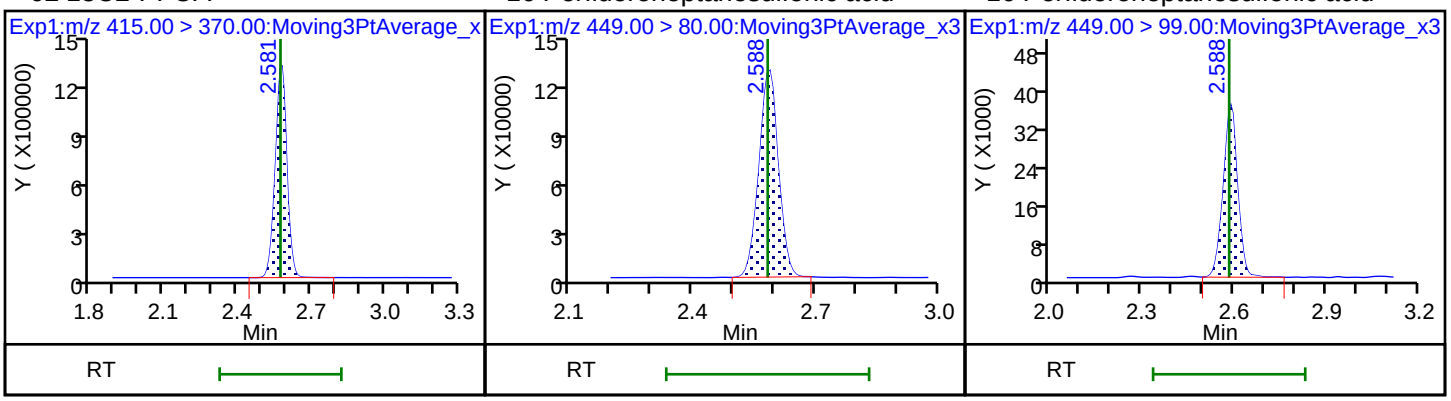
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



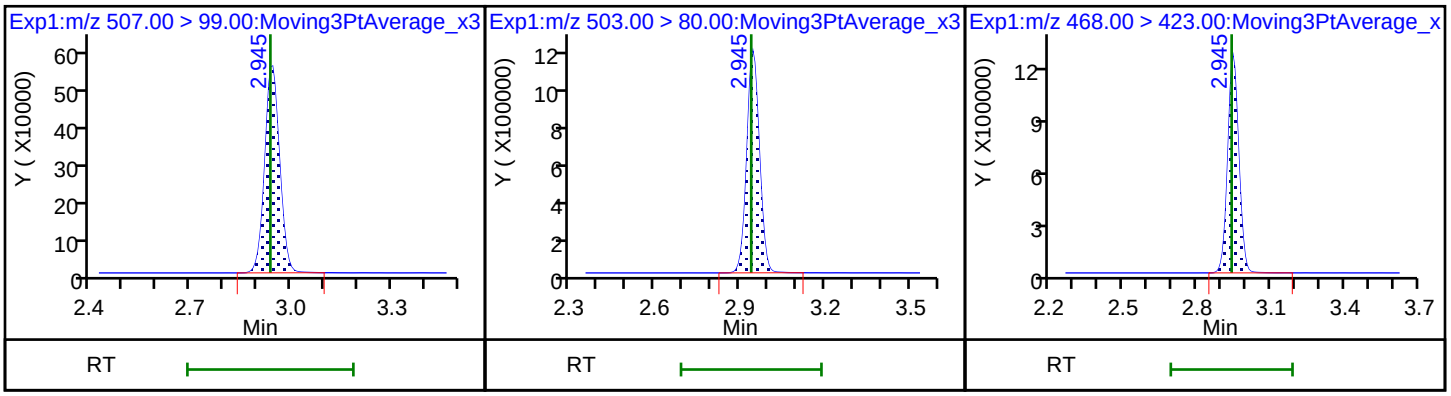
D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



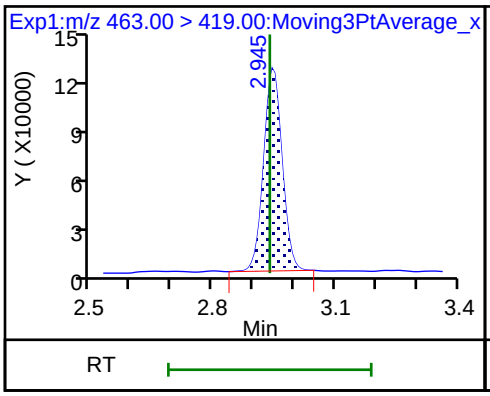
* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



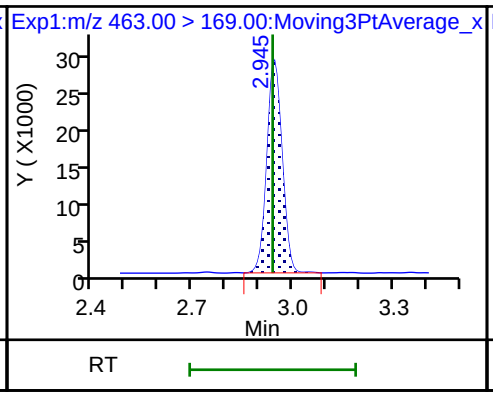
D 72 13C8 PFOS D 18 13C4 PFOS D 19 13C5 PFNA



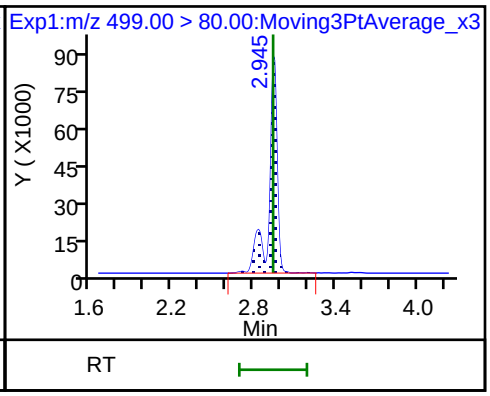
20 Perfluorononanoic acid



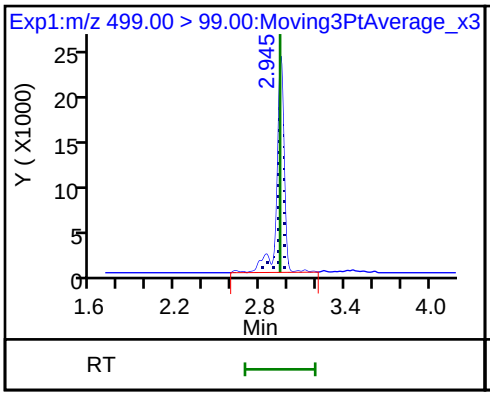
20 Perfluorononanoic acid



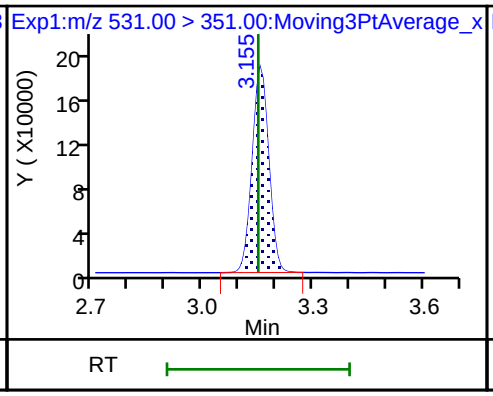
17 Perfluorooctane sulfonic acid



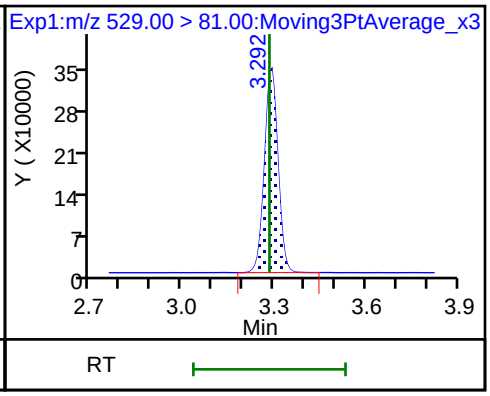
17 Perfluorooctane sulfonic acid



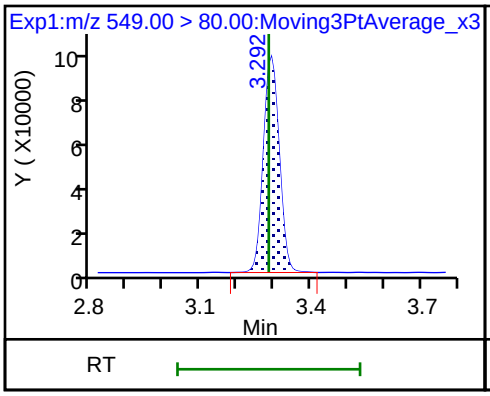
69 9-Chlorohexadecafluoro-3-oxanonane



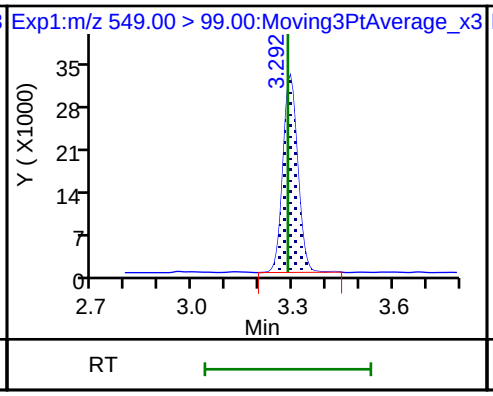
D 26 M2-8:2FTS



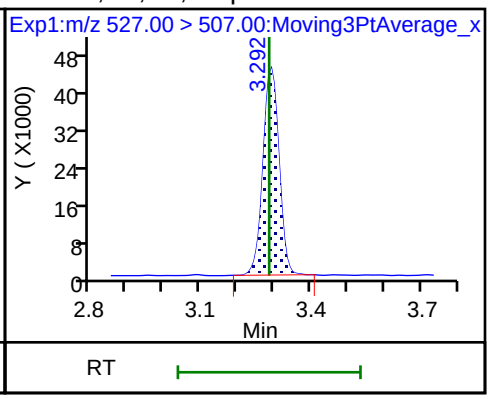
68 Perfluorononanesulfonic acid



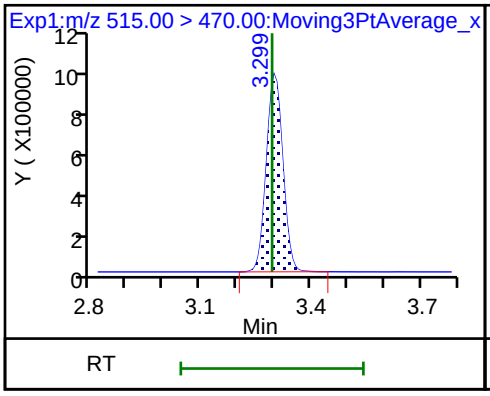
68 Perfluorononanesulfonic acid



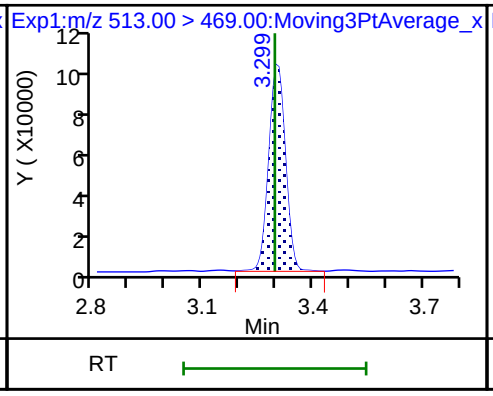
25 1H,1H,2H,2H-perfluorodecanesulfoni



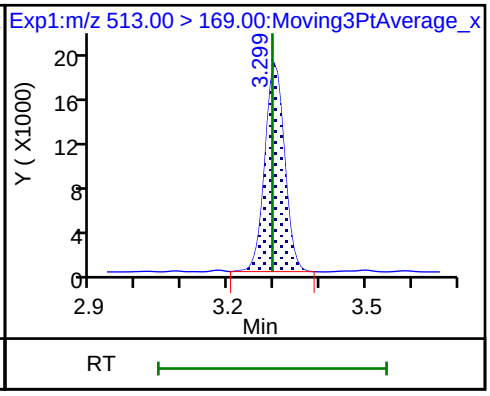
D 23 13C2 PFDA



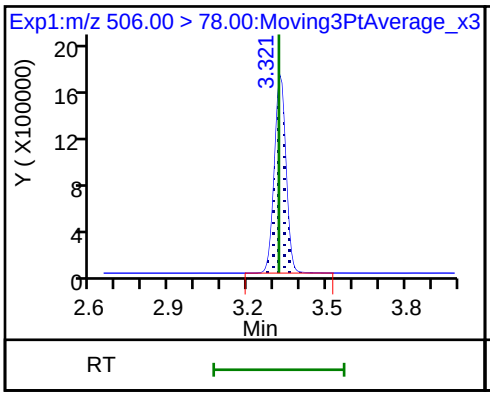
24 Perfluorodecanoic acid



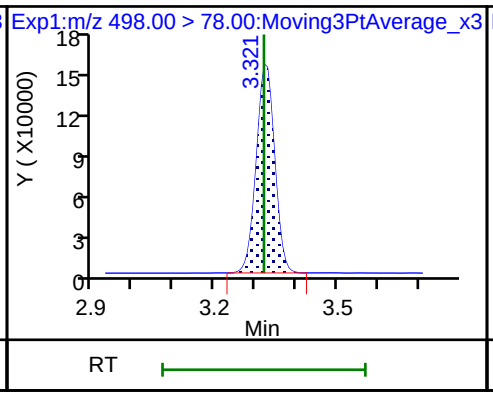
24 Perfluorodecanoic acid



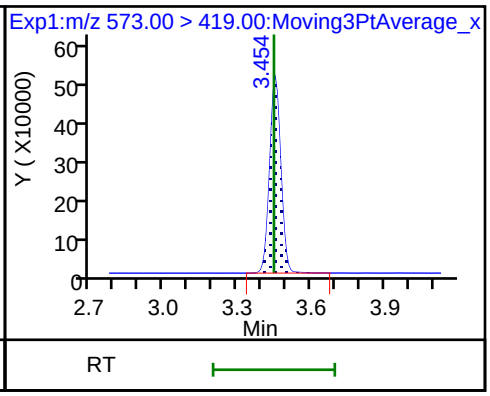
D 21 13C8 FOSA



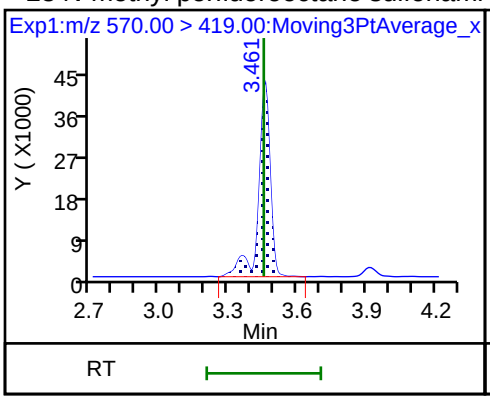
22 Perfluorooctane Sulfonamide



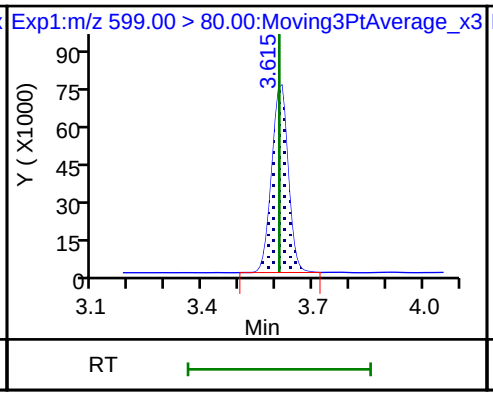
D 27 d3-NMeFOSAA



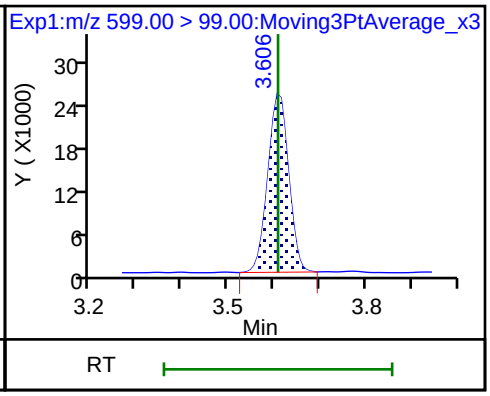
28 N-methyl perfluorooctane sulfonami



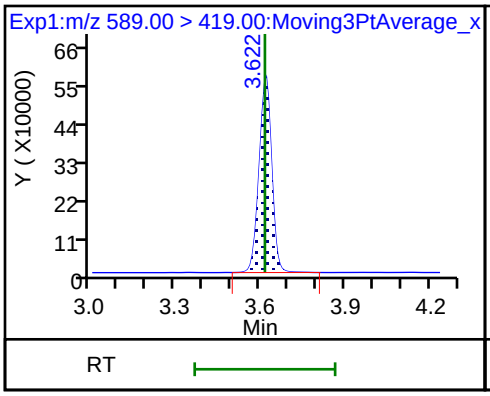
29 Perfluorodecane Sulfonic acid



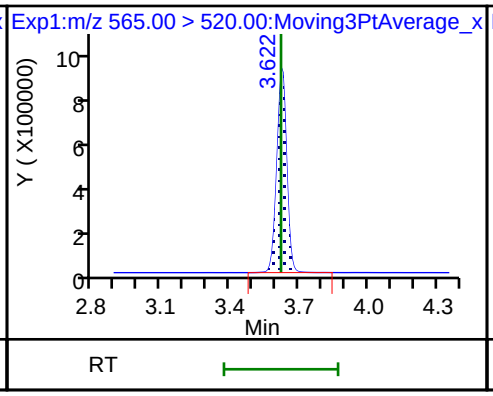
29 Perfluorodecane Sulfonic acid



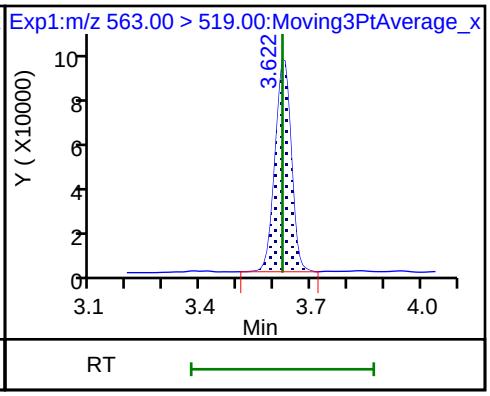
D 32 d5-NEtFOSAA



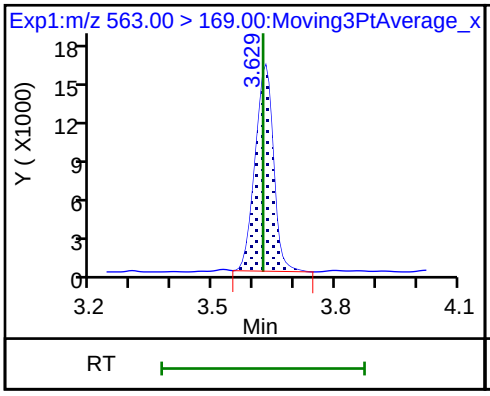
D 30 13C2 PFUnA



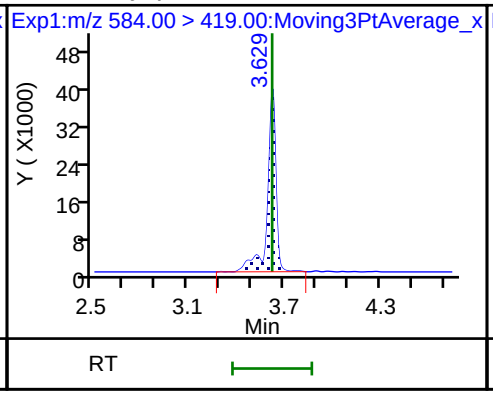
31 Perfluoroundecanoic acid



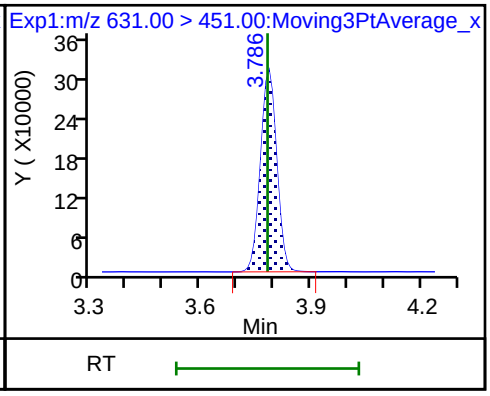
31 Perfluoroundecanoic acid



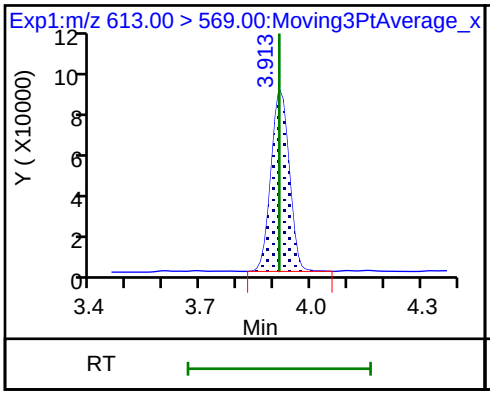
33 N-ethyl perfluorooctane sulfonamid



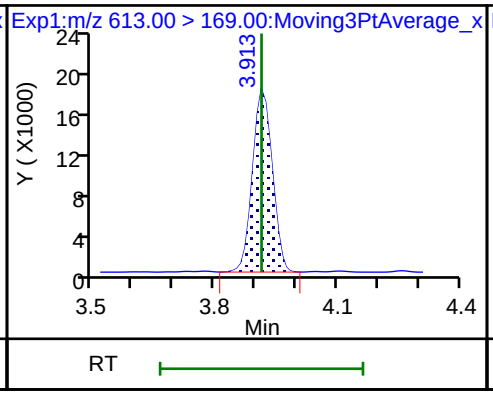
66 11-Chloroeicosafluoro-3-oxaundecan



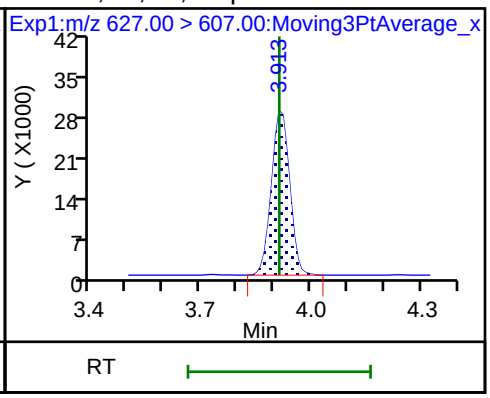
37 Perfluorododecanoic acid



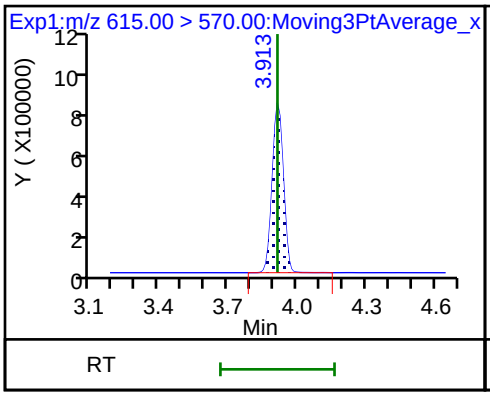
37 Perfluorododecanoic acid



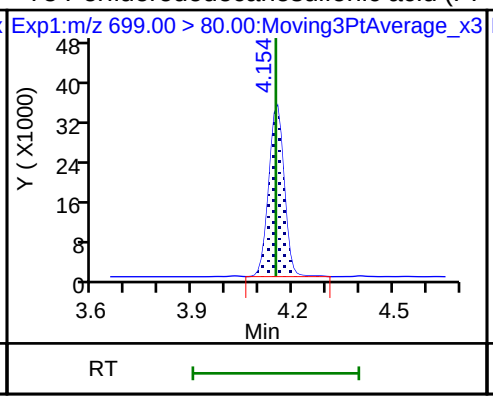
74 1H,1H,2H,2H-perfluorododecanesulfo



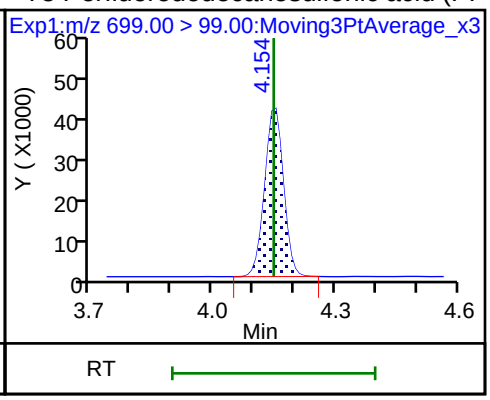
D 36 13C2 PFDoA



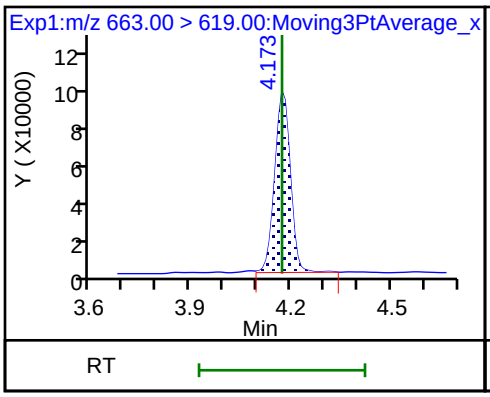
75 Perfluorododecanesulfonic acid (PF



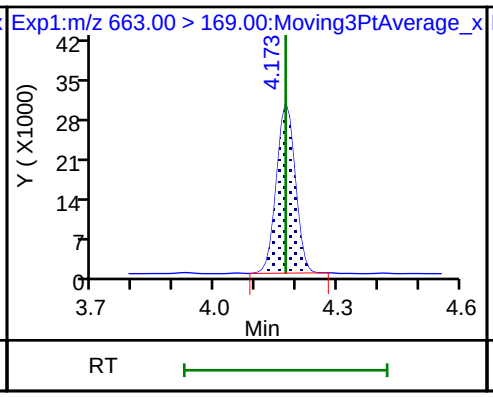
75 Perfluorododecanesulfonic acid (PF



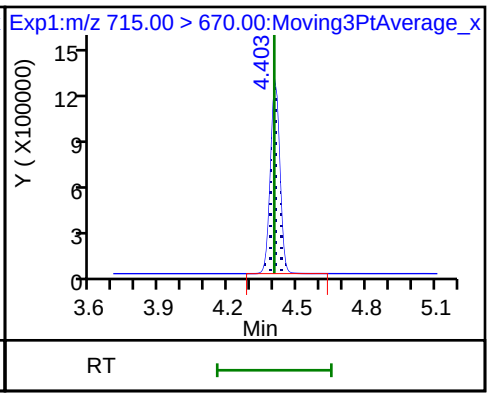
41 Perfluorotridecanoic acid



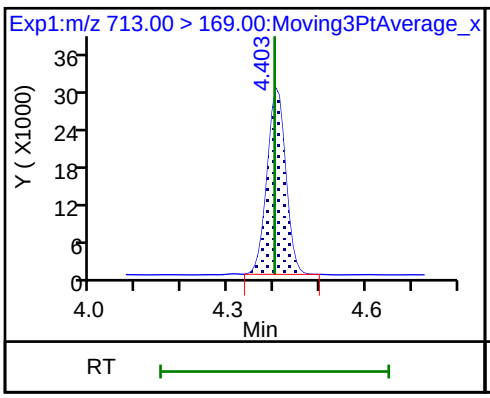
41 Perfluorotridecanoic acid



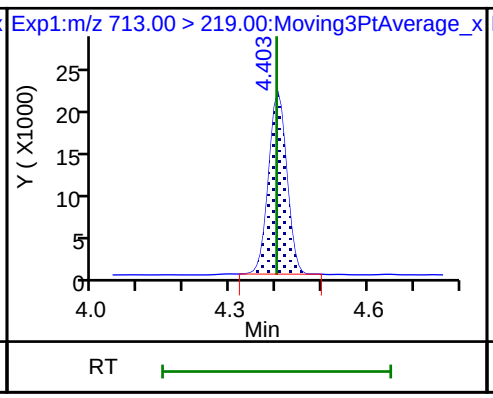
D 43 13C2-PFTeDA



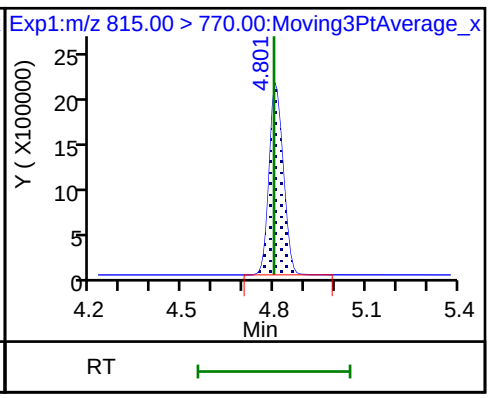
42 Perfluorotetradecanoic acid



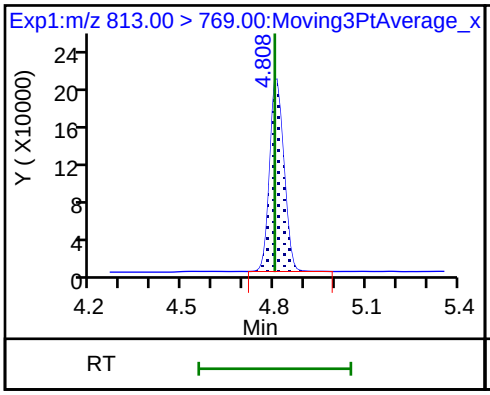
42 Perfluorotetradecanoic acid



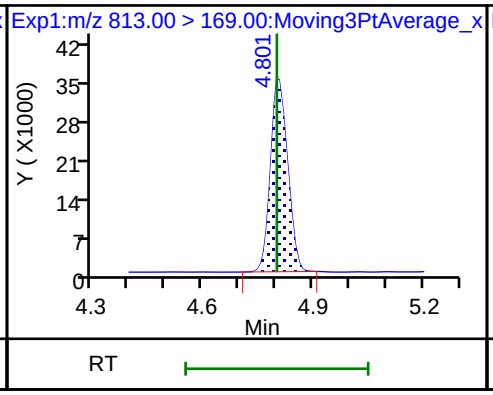
D 44 13C2-PFHxDA



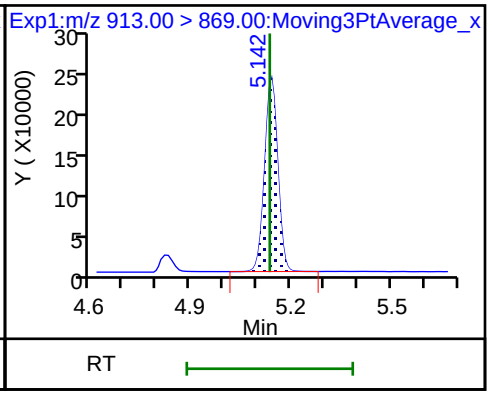
45 Perfluorohexadecanoic acid



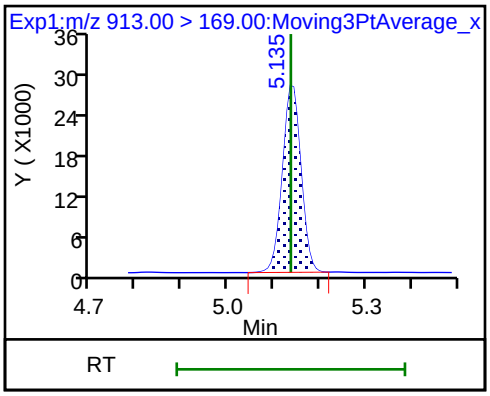
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_005.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 06-Aug-2018 11:33:34 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L4-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:10 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:00:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.397	1.395	0.002	0.543	5503224	2.49		99.4	10421	
2 Perfluorobutyric acid										
212.90 > 169.00	1.397	1.397	0.0	1.000	2011540	0.9733		97.3	198	
D 3 13C5-PFPeA										
267.90 > 223.00	1.640	1.639	0.001	0.637	3711287	2.43		97.4	9635	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.640	1.643	-0.003	1.000	1650773	0.9773		97.7	114	
D 47 13C3-PFBS										
301.90 > 83.00	1.672	1.675	-0.003	0.649	78945	2.24		96.3	323	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.680	1.676	0.004	1.005	2375205	0.9209		104	901	
298.90 > 99.00	1.680	1.676	0.004	1.005	1015406		2.34(1.25-3.74)	104	513	
D 60 M2-4:2FTS										
329.00 > 81.00	1.876	1.875	0.001	0.729	592717	2.36		101	872	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.876	1.875	0.001	1.122	570176	1.01		109	3930	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.903	1.908	-0.005	1.000	1715767	0.9874		98.7	433	
313.00 > 119.00	1.903	1.908	-0.005	1.000	156736		10.95(5.03-15.10)	98.7	462	
D 7 13C2 PFHxA										
315.00 > 270.00	1.903	1.908	-0.005	0.739	4256324	2.46		98.4	8880	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.934	1.930	0.004	1.157	2251038	0.9619		103	2681	
349.00 > 99.00	1.934	1.930	0.004	1.157	845080		2.66(1.36-4.07)	103	824	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.008	2.003	0.005	0.780	332511	2.47		98.8	1022	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.008	2.003	0.005	1.000	308918	0.9596		96.0	152	
D 9 13C4-PFHpA										
367.00 > 322.00	2.225	2.227	-0.002	0.864	4255889	2.50		100.0	6181	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.225	2.228	-0.003	1.000	1827459	1.01		101	379	
363.00 > 169.00	2.225	2.228	-0.003	1.000	719613		2.54(1.13-3.40)	101	1239	
D 11 18O2 PFHxS										
403.00 > 84.00	2.245	2.239	0.006	0.872	5111728	2.34		99.0	4756	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.245	2.239	0.006	1.000	2008773	0.8573		94.2	1987	
399.00 > 99.00	2.245	2.239	0.006	1.000	689420		2.91(1.50-4.49)	94.2	645	
65 ADONA										
377.00 > 251.00	2.267	2.271	-0.004	0.771	4950939	1.07		107	7395	
377.00 > 85.00	2.267	2.271	-0.004	0.771	2850758		1.74(0.84-2.53)	107	3276	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.550	2.548	0.002	1.000	536262	0.9373		98.9	1106	
D 12 M2-6:2FTS										
429.00 > 81.00	2.550	2.549	0.001	0.991	863649	2.41		101	2238	
D 73 13C8 PFOA										
421.00 > 376.00	2.574	2.571	0.003	1.000	7724133	2.51		102	11158	
D 14 13C4 PFOA										
417.00 > 372.00	2.574	2.573	0.001	1.000	3847208	2.46		98.5	6637	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.574	2.574	0.0	1.000	1678386	0.9646		96.4	158	
413.00 > 169.00	2.574	2.574	0.0	1.000	874632		1.92(0.84-2.52)	96.4	1551	
* 62 13C2-PFOA										
415.00 > 370.00	2.574	2.575	-0.001		3997336	2.50			9177	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.003	0.878	1703787	0.9643		101	2000	
449.00 > 99.00	2.581	2.583	-0.003	0.878	442374		3.85(1.94-5.82)	101	761	
D 72 13C8 PFOS										
507.00 > 99.00	2.939	2.938	0.001	1.142	1640677	2.35		98.5	3589	
20 Perfluorononanoic acid										
463.00 > 419.00	2.939	2.939	0.0	1.000	1409363	0.9457		94.6	412	
463.00 > 169.00	2.939	2.939	0.0	1.000	338359		4.17(1.90-5.69)	94.6	1435	
D 19 13C5 PFNA										
468.00 > 423.00	2.939	2.939	0.0	1.142	3536917	2.52		101	6788	
D 18 13C4 PFOS										
503.00 > 80.00	2.939	2.939	0.0	1.142	3408113	2.38		99.4	4275	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.939	2.940	-0.001	1.000	1387650	0.9063		97.7	2200	
499.00 > 99.00	2.939	2.940	-0.001	1.000	324621		4.27(2.31-6.93)	97.7	823	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.155	3.150	0.005	1.074	2339008	0.9416		101	3500	
D 26 M2-8:2FTS										
529.00 > 81.00	3.285	3.284	0.001	1.276	1045687	2.42		101	3279	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.285	3.285	0.001	1.118	1021056	0.9520		99.2	2447	
549.00 > 99.00	3.285	3.285	0.001	1.118	375050		2.72(1.33-3.97)	99.2	1043	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.285	3.286	-0.001	1.000	504558	0.8895		92.9	1402	
D 23 13C2 PFDA										
515.00 > 470.00	3.292	3.294	-0.002	1.279	3162481	2.57		103	5418	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.299	3.296	0.003	1.002	1188927	0.9369		93.7	777	
513.00 > 169.00	3.299	3.296	0.003	1.002	213587		5.57(2.36-7.09)	93.7	390	
D 21 13C8 FOSA										
506.00 > 78.00	3.321	3.317	0.004	1.290	4677735	2.46		98.5	7100	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.321	3.319	0.002	1.000	1842464	1.01		101	3243	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.339	1547904	2.46		98.4	3369	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.454	3.453	0.001	1.002	590682	0.9890		98.9	742	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.606	3.608	-0.002	1.227	849835	0.9430		97.8	3617	
599.00 > 99.00	3.606	3.608	-0.002	1.227	299784		2.83(1.39-4.16)	97.8	2220	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.615	3.616	-0.001	1.405	1663128	2.55		102	1489	
D 30 13C2 PFUnA										
565.00 > 520.00	3.622	3.620	0.002	1.407	2425508	2.45		98.0	5922	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.622	3.622	0.0	1.000	1124406	1.03		103	798	
563.00 > 169.00	3.622	3.622	0.0	1.000	177923		6.32(2.12-6.36)	103	940	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.622	3.623	-0.001	1.002	567205	0.9561		95.6	1327	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.785	3.781	0.004	1.288	3752452	0.9843		104	5976	
35 MeFOSA										
512.00 > 169.00	3.826	3.826	0.0		540488	NC			861	
D 36 13C2 PFDoA										
615.00 > 570.00	3.913	3.913	0.0	1.520	2610480	2.50		99.8	3794	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.913	3.913	0.0	1.191	366950	0.9330		96.8	2916	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.913	3.913	0.0	1.000	1163733	1.00		100	624	
613.00 > 169.00	3.913	3.913	0.0	1.000	259339		4.49(2.13-6.40)	100	1676	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.153	4.148	0.005	1.413	393708	0.99		103	1564	
699.00 > 99.00	4.153	4.148	0.005	1.413	556205		0.71(0.00-0.00)	103	3372	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.172	4.173	-0.001	1.066	1112653	0.99		99.1	487	
663.00 > 169.00	4.172	4.173	-0.001	1.066	335552		3.32(1.25-3.76)	99.1	2095	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.402	4.399	0.003	1.711	3313318	2.49		99.4	6184	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.402	4.400	0.002	1.000	308839	0.9628		96.3	3431	
713.00 > 219.00	4.402	4.400	0.002	1.000	221323		1.40(0.71-2.13)	96.3	1043	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.800	4.799	0.001	1.865	6558204	2.48		99.2	7387	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.800	4.801	-0.001	1.000	2363491	1.01		101	902	
813.00 > 169.00	4.800	4.801	-0.001	1.000	402071		5.88(2.86-8.58)	101	2430	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.135	5.136	-0.001	1.070	2459730	1.02		102	668	
913.00 > 169.00	5.135	5.136	-0.001	1.070	301046		8.17(3.83-11.48)	102	2004	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_005.d

Injection Date: 06-Aug-2018 11:33:34 Instrument ID: A8_N

Lims ID: IC L4 Full

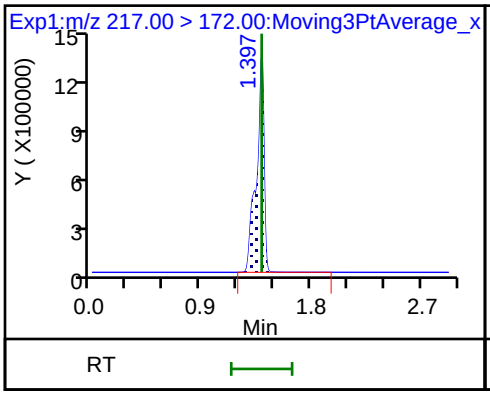
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 5

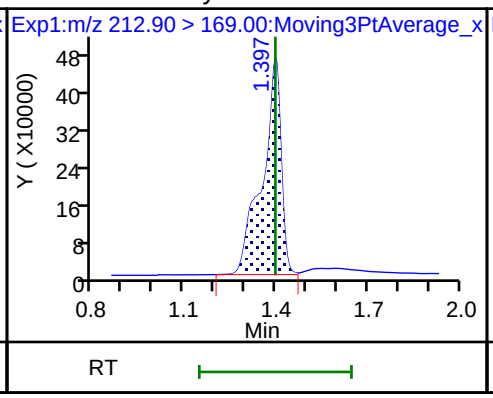
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

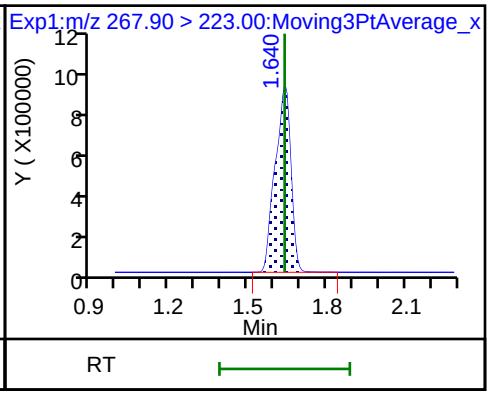
D 1 13C4 PFBA



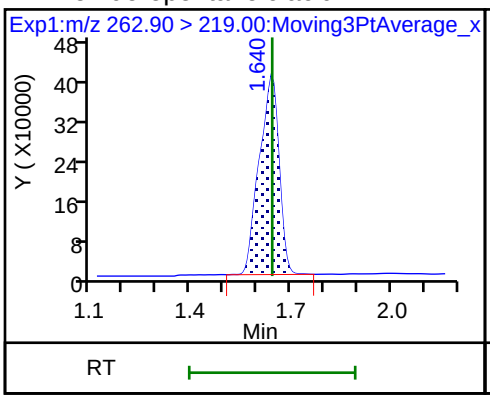
2 Perfluorobutyric acid



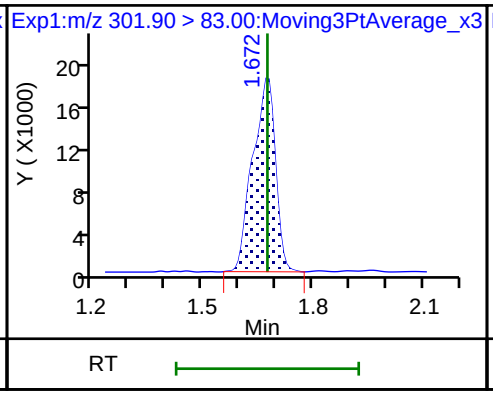
D 3 13C5-PFPeA



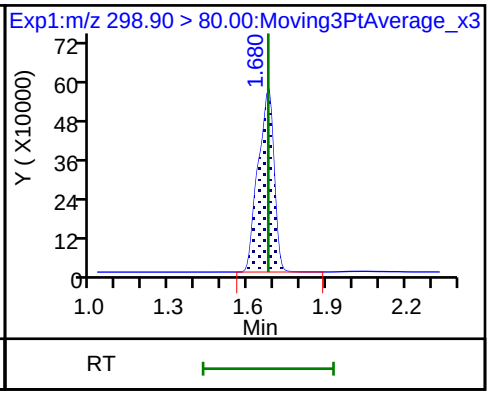
4 Perfluoropentanoic acid



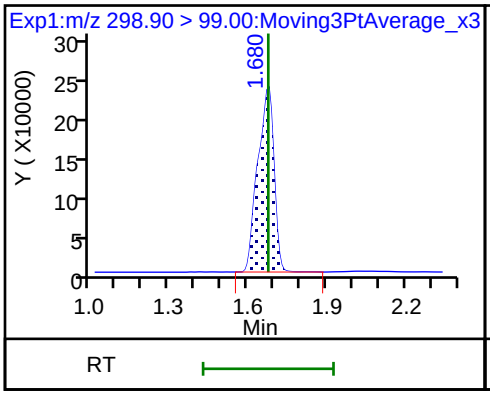
D 47 13C3-PFBS



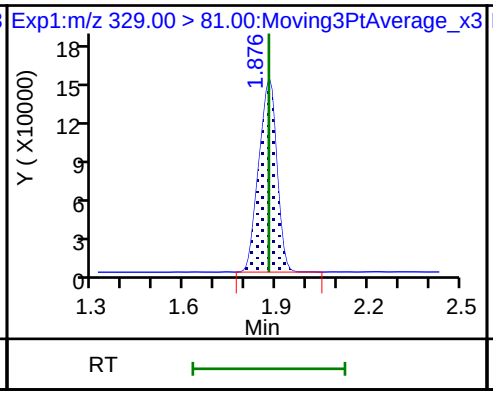
5 Perfluorobutanesulfonic acid



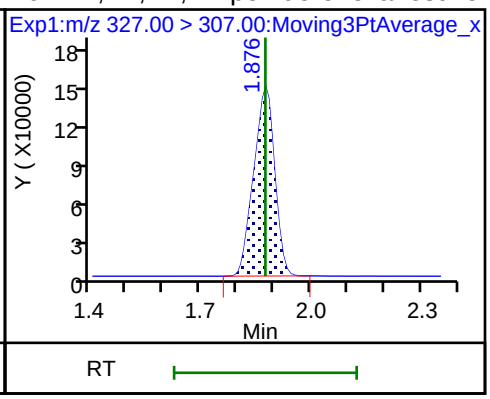
5 Perfluorobutanesulfonic acid



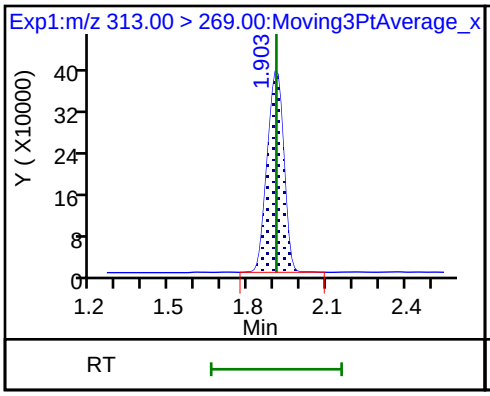
D 60 M2-4:2FTS



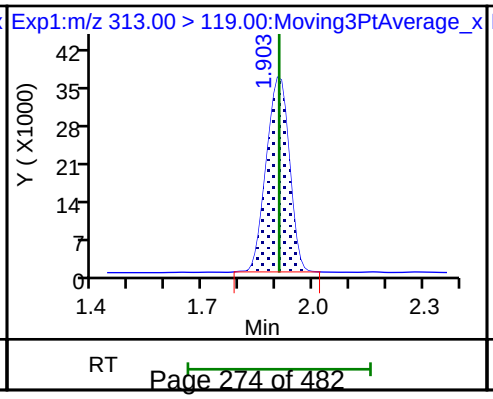
61 1H,1H,2H,2H-perfluorohexanesulfoni



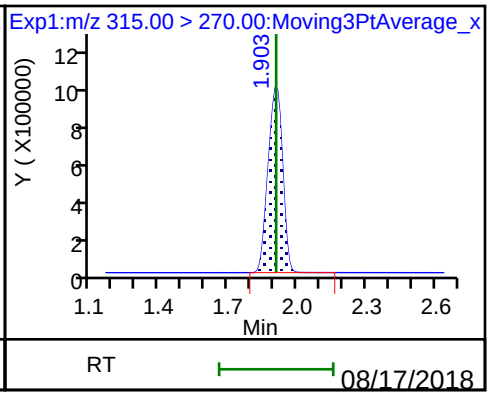
6 Perfluorohexanoic acid



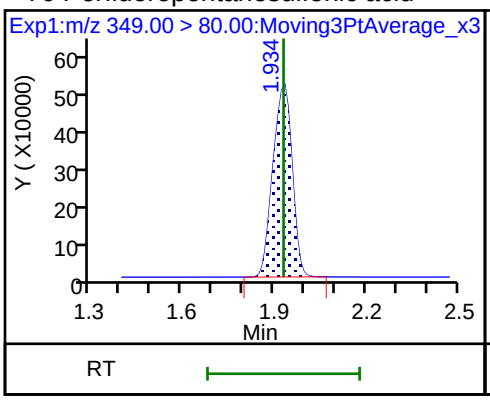
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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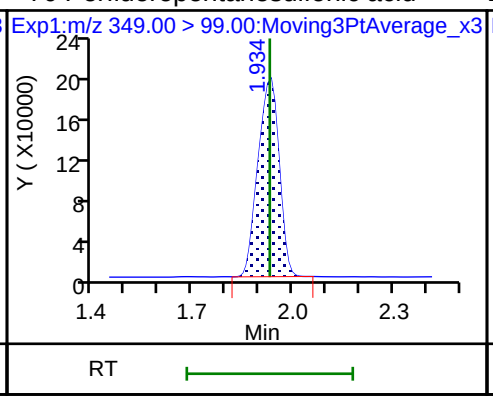
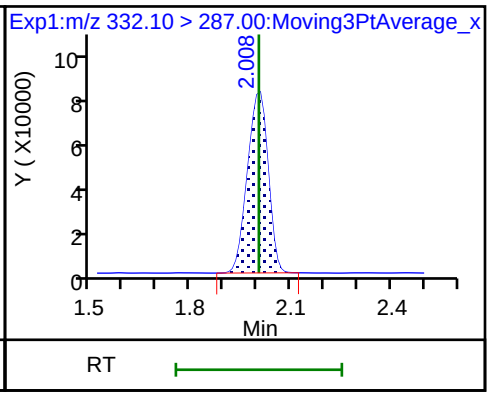
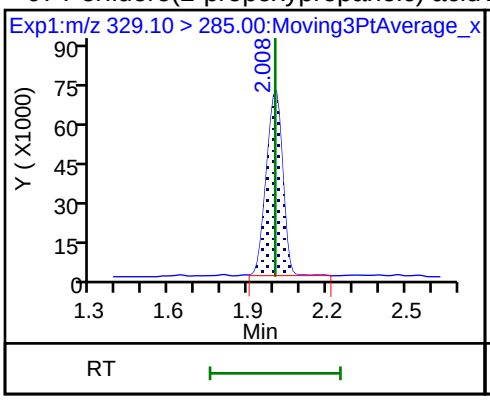


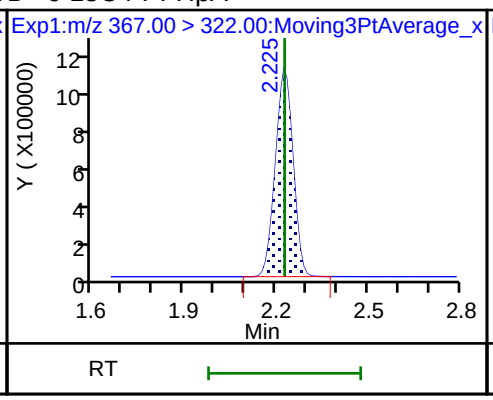
D 64 13C3 HFPO-DA



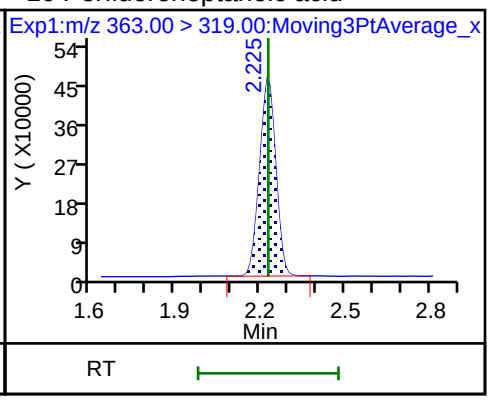
67 Perfluoro(2-propoxypropanoic) acid



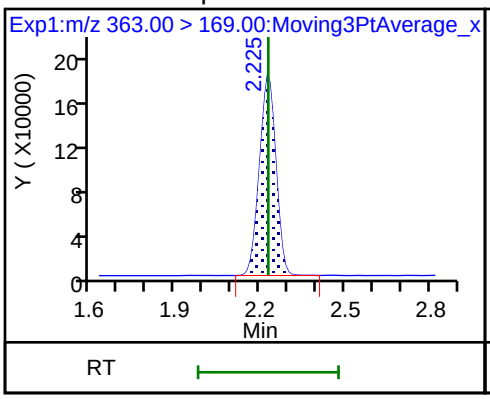
D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



10 Perfluoroheptanoic acid



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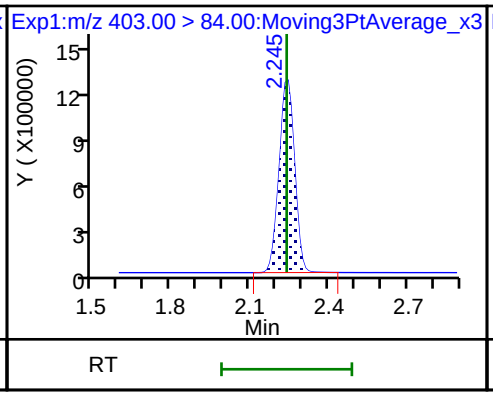
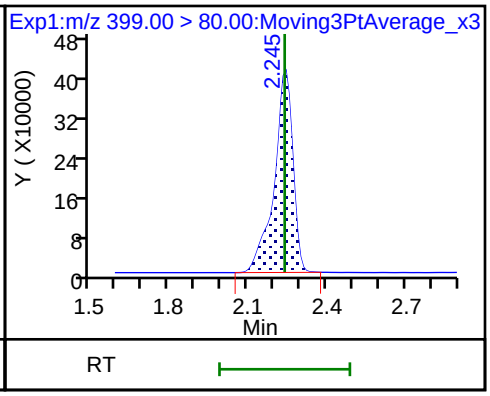


8 Perfluorohexanesulfonic acid



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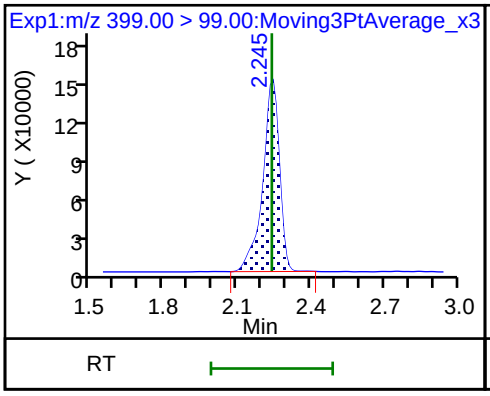
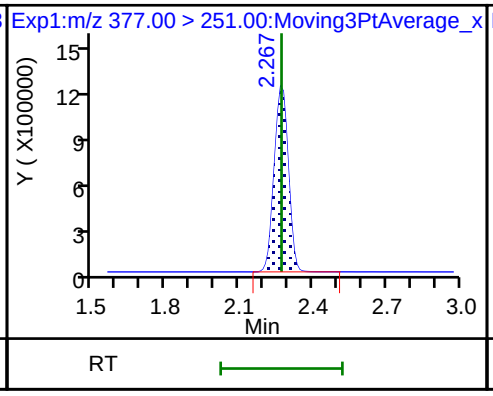


65 ADONA



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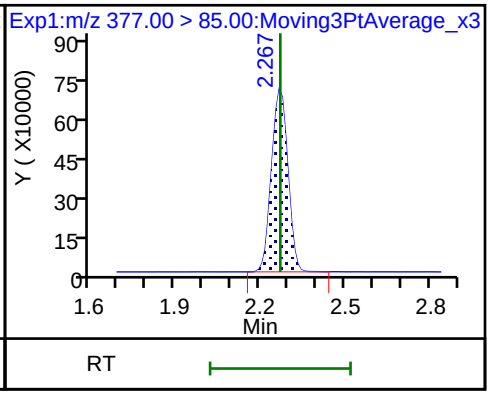
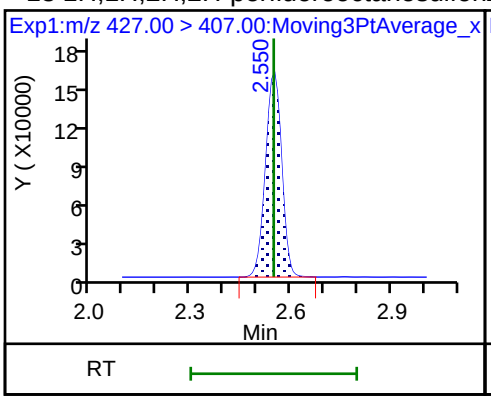
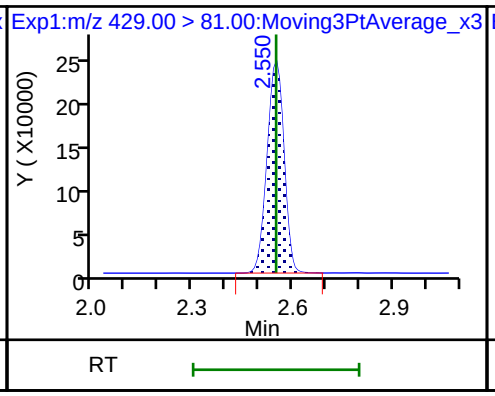
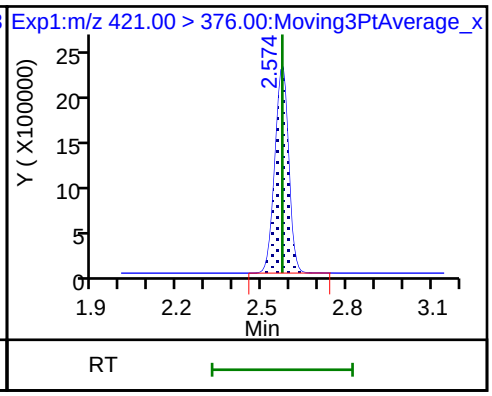


13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS





D 73 13C8 PFOA



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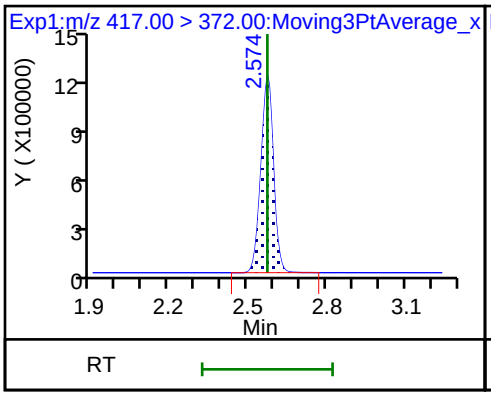
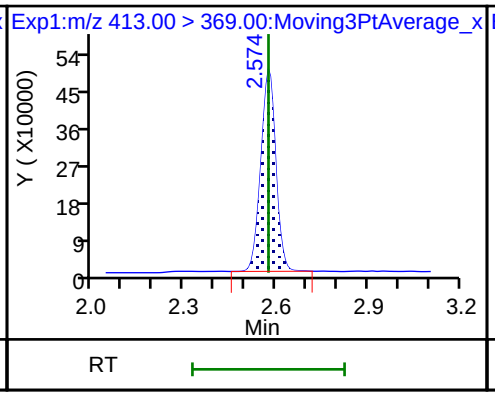


15 Perfluorooctanoic acid



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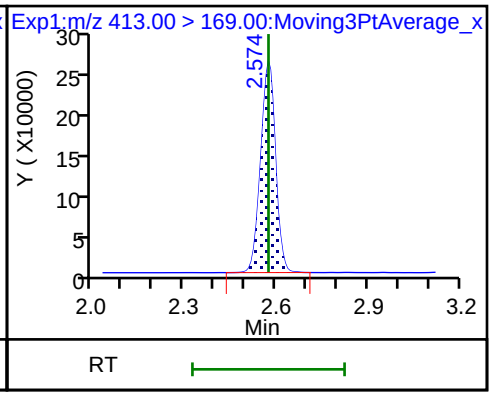
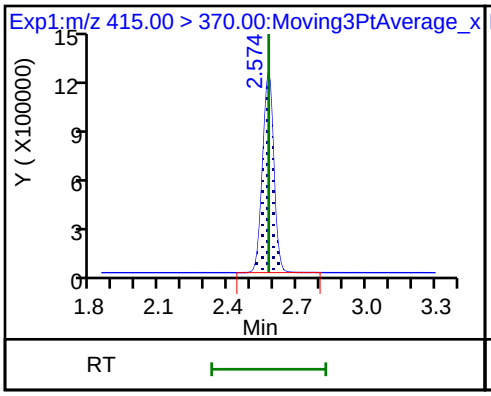
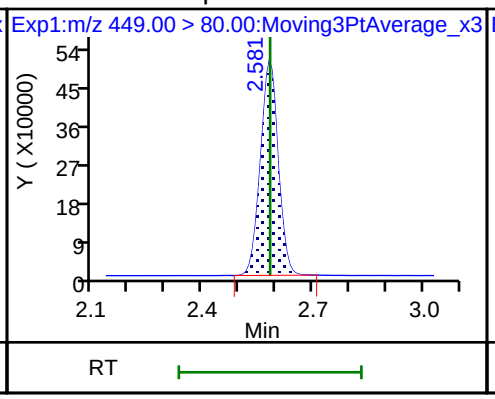


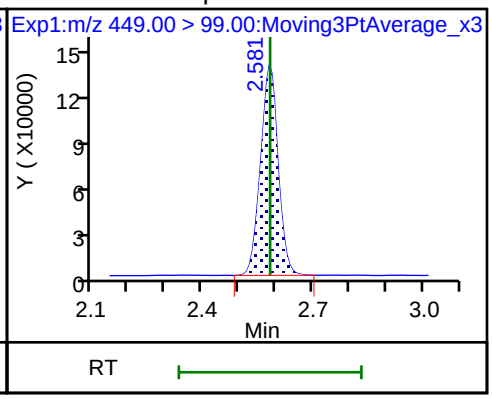
* 62 13C2-PFOA



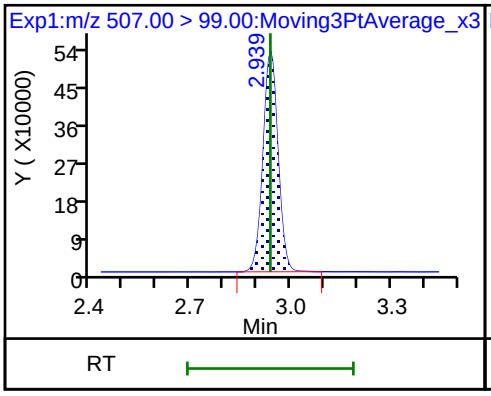
16 Perfluoroheptanesulfonic acid



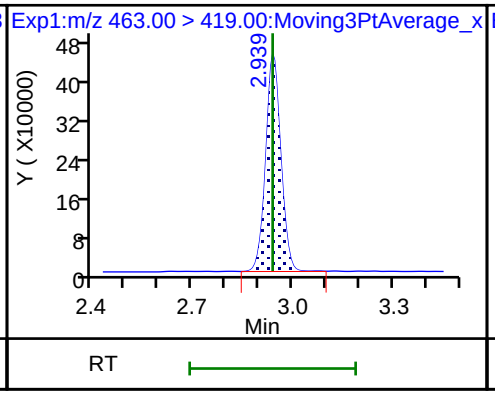
16 Perfluoroheptanesulfonic acid



D 72 13C8 PFOS



20 Perfluorononanoic acid



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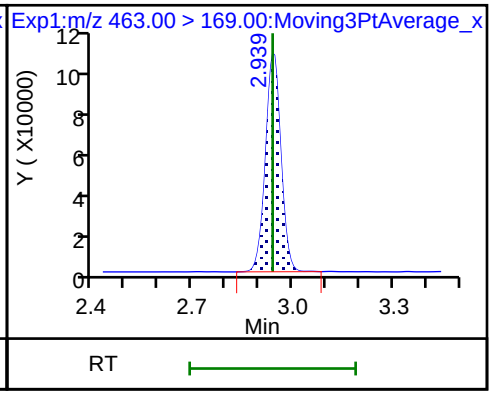

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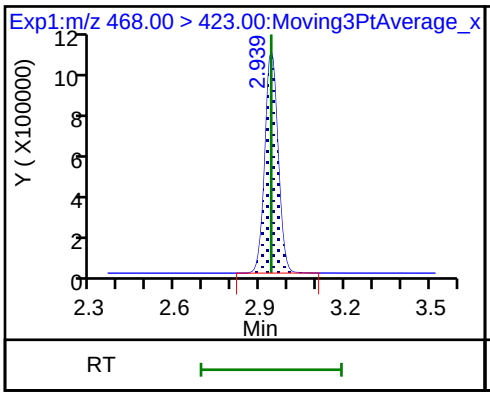

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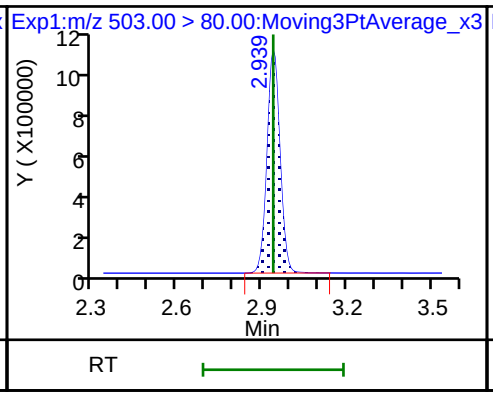
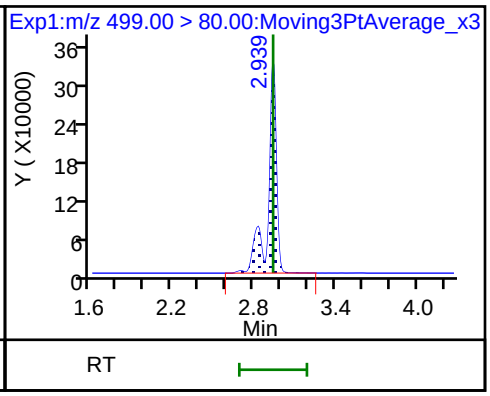
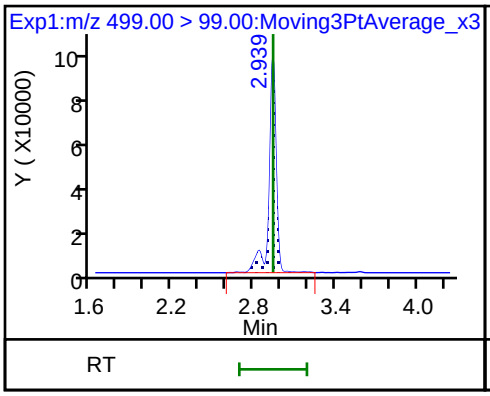


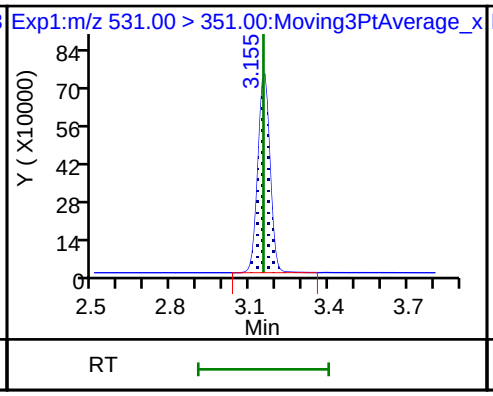
17 Perfluorooctane sulfonic acid



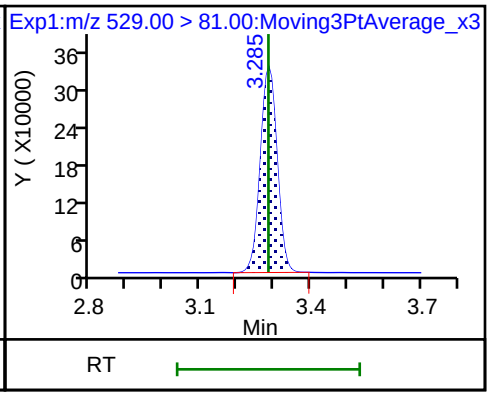
17 Perfluorooctane sulfonic acid



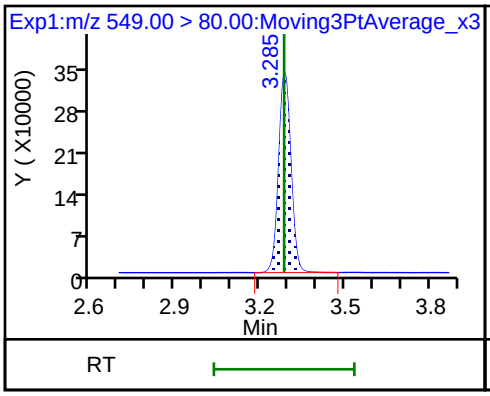
69 9-Chlorohexadecafluoro-3-oxanonane



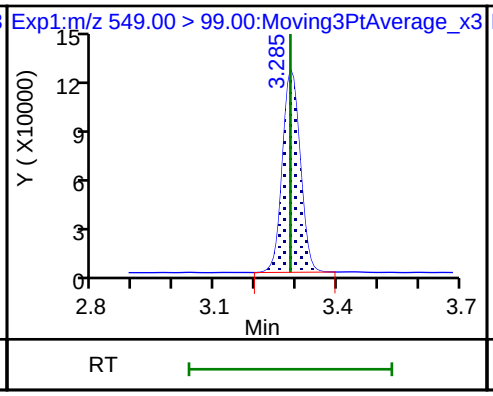
D 26 M2-8:2FTS



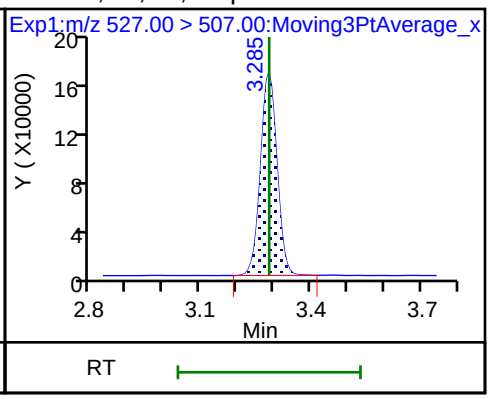
68 Perfluorononanesulfonic acid



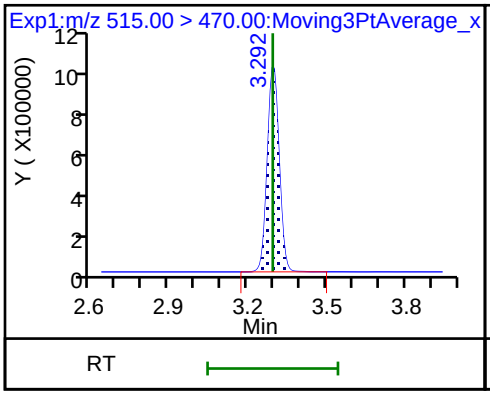
68 Perfluorononanesulfonic acid



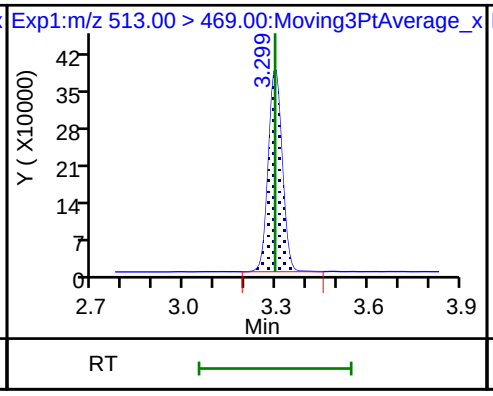
25 1H,1H,2H,2H-perfluorodecanesulfoni



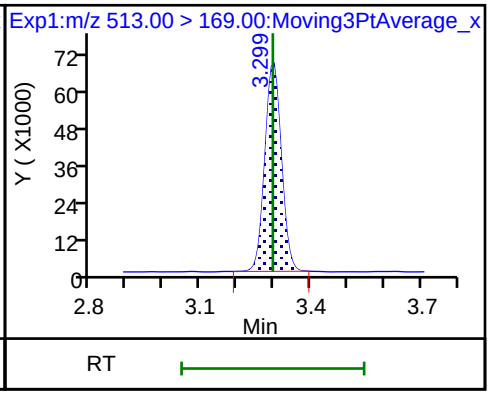
D 23 13C2 PFDA



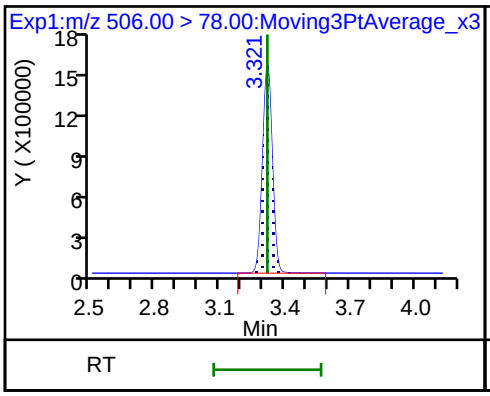
24 Perfluorodecanoic acid



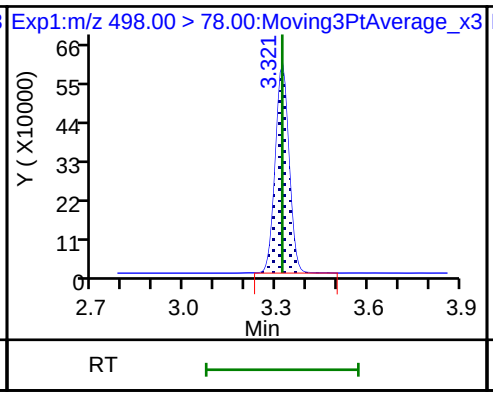
24 Perfluorodecanoic acid



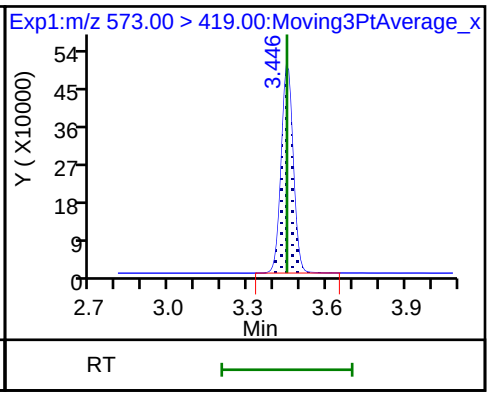
D 21 13C8 FOSA



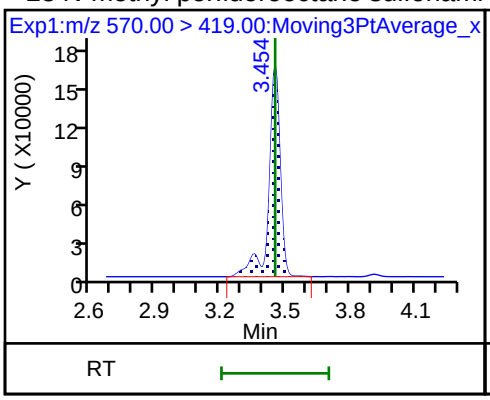
22 Perfluorooctane Sulfonamide



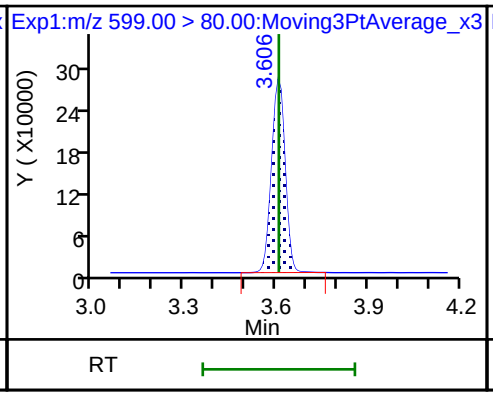
D 27 d3-NMeFOSAA



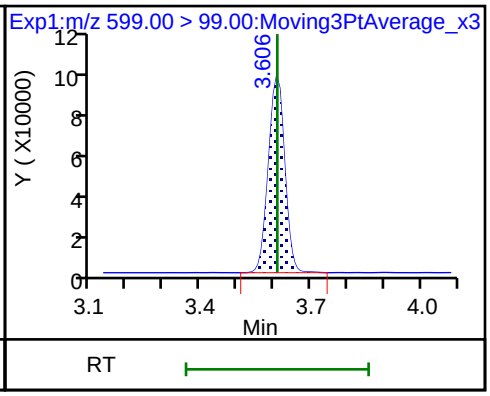
28 N-methyl perfluorooctane sulfonami



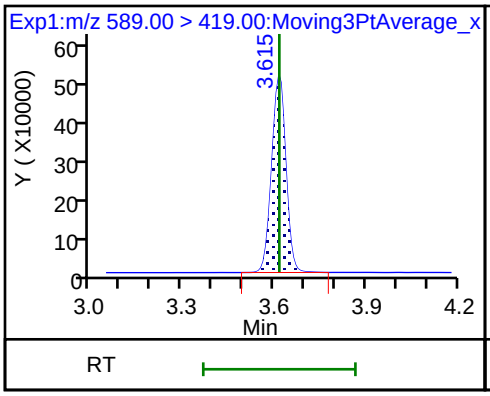
29 Perfluorodecane Sulfonic acid



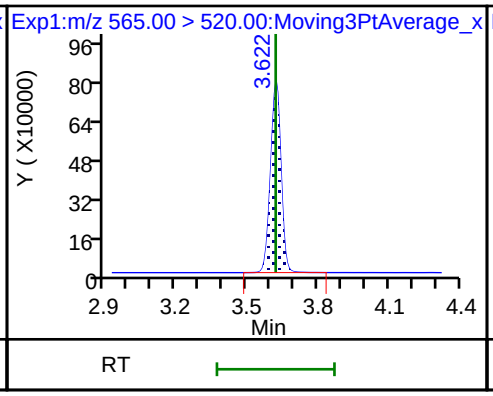
29 Perfluorodecane Sulfonic acid



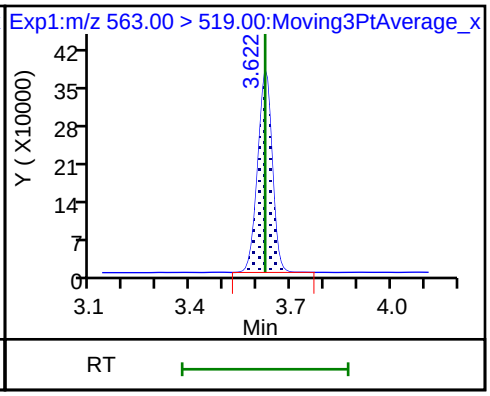
D 32 d5-NEtFOSAA



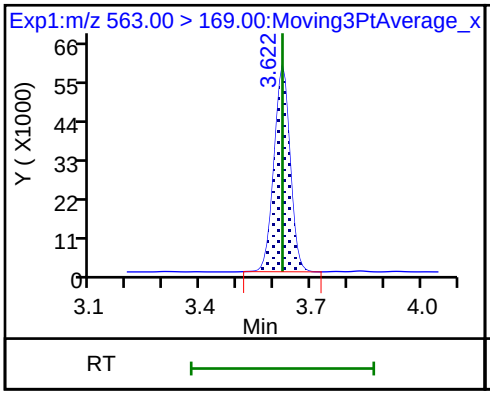
D 30 13C2 PFUnA



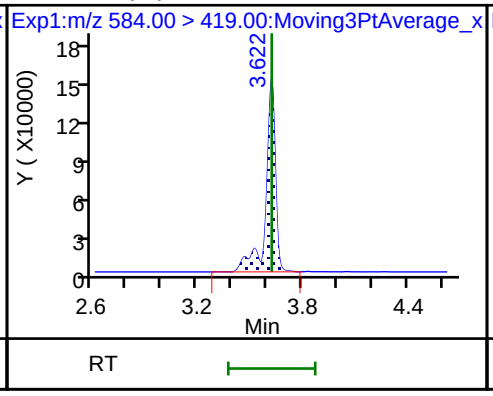
31 Perfluoroundecanoic acid



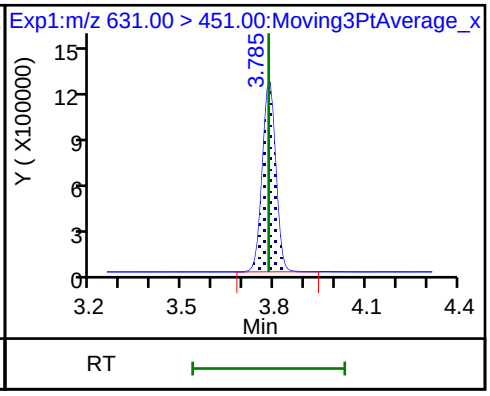
31 Perfluoroundecanoic acid



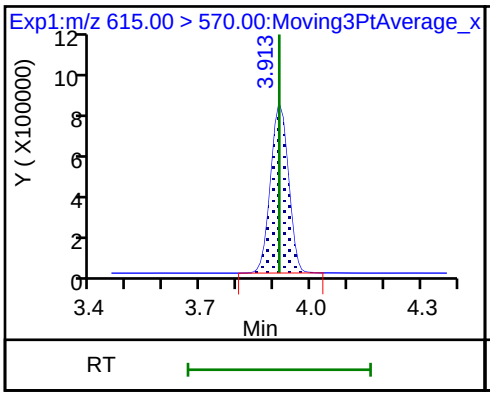
33 N-ethyl perfluorooctane sulfonamid



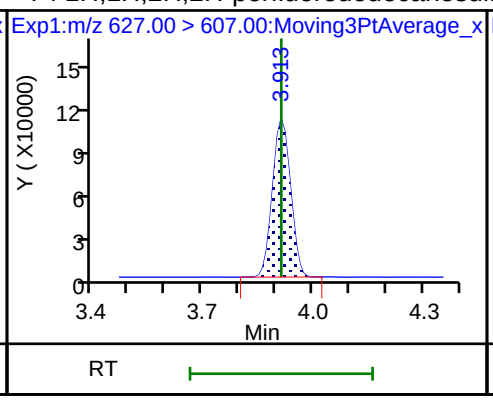
66 11-Chloroeicosafluoro-3-oxaundecan



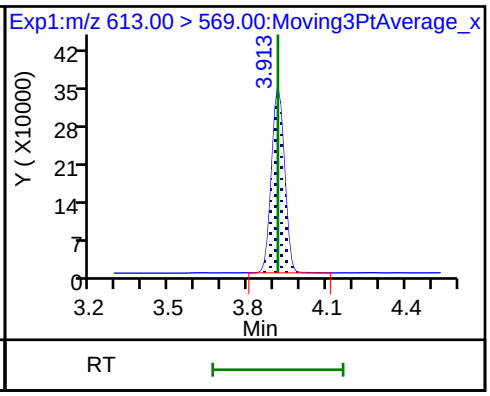
D 36 13C2 PFDoA



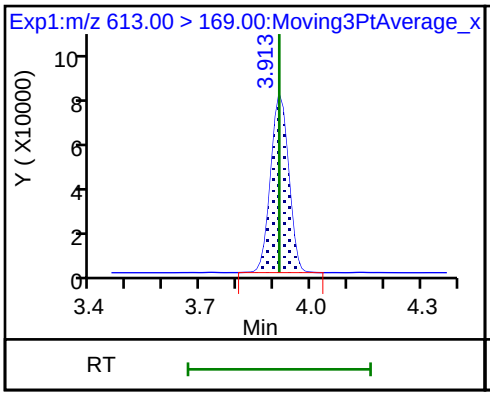
74 1H,1H,2H,2H-perfluorododecanesulfo



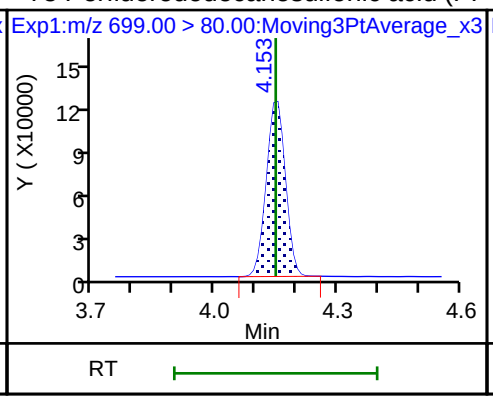
37 Perfluorododecanoic acid



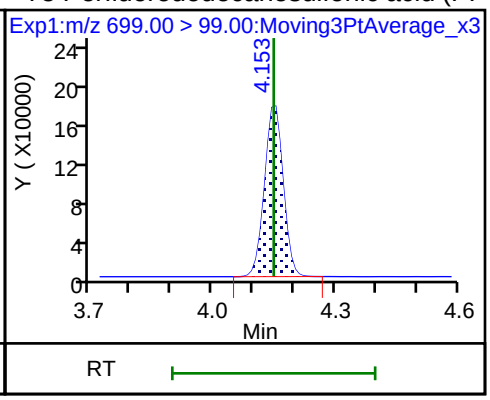
37 Perfluorododecanoic acid



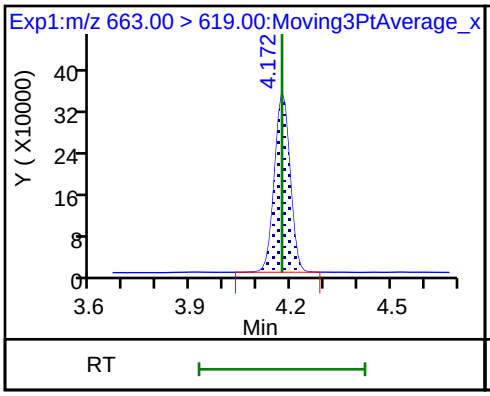
75 Perfluorododecanesulfonic acid (PF



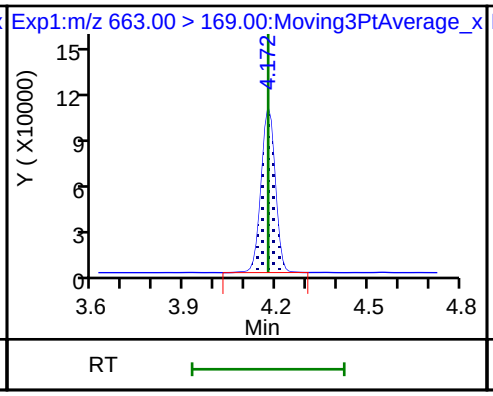
75 Perfluorododecanesulfonic acid (PF



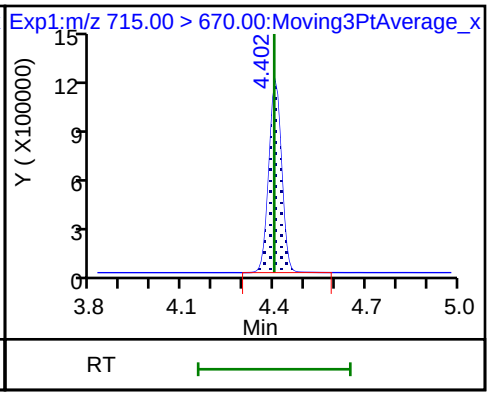
41 Perfluorotridecanoic acid



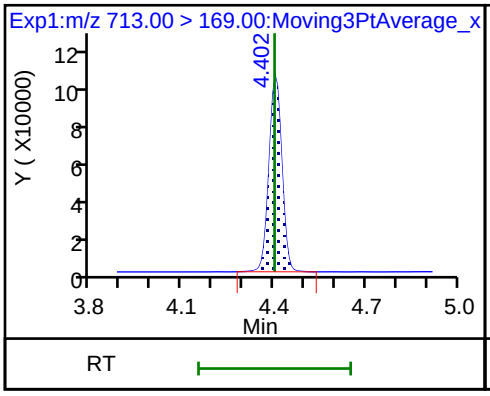
41 Perfluorotridecanoic acid



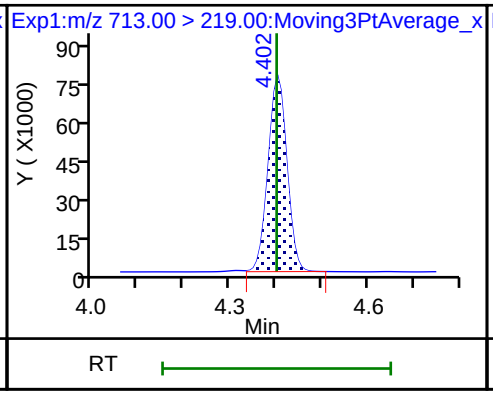
D 43 13C2-PFTeDA



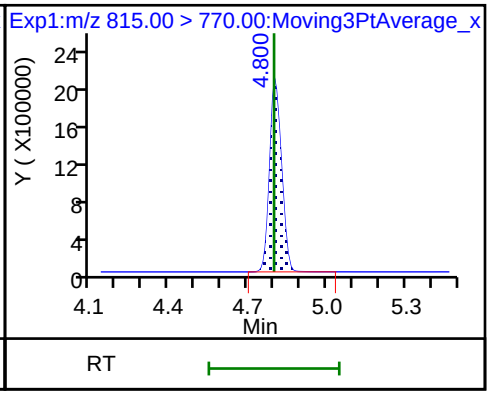
42 Perfluorotetradecanoic acid



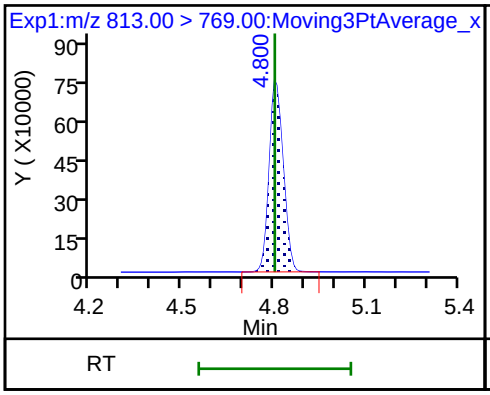
42 Perfluorotetradecanoic acid



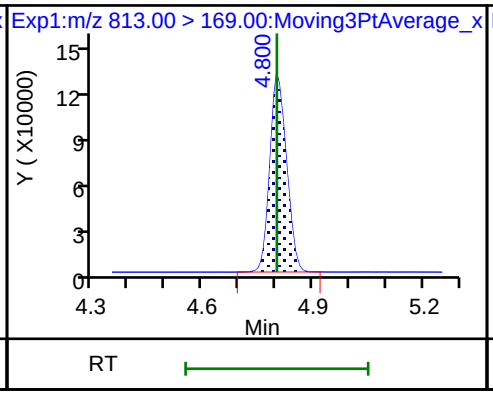
D 44 13C2-PFHxDA



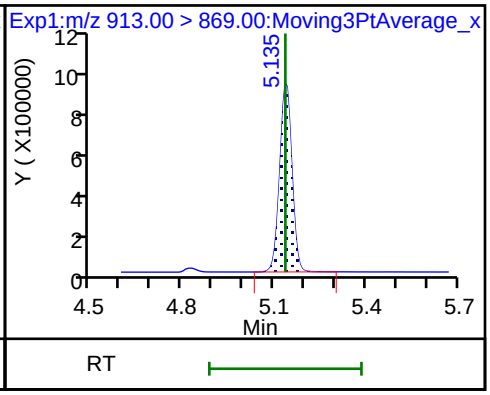
45 Perfluorohexadecanoic acid



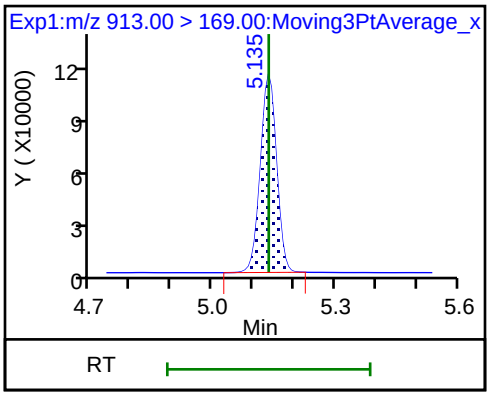
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_006.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Aug-2018 11:41:23 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L5-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:16 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:07:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.392	1.395	-0.003	0.541	5444583	2.54		102	8249	
2 Perfluorobutyric acid										
212.90 > 169.00	1.392	1.397	-0.005	1.000	5049773	2.47		98.8	508	
D 3 13C5-PFPeA										
267.90 > 223.00	1.633	1.639	-0.006	0.634	3838069	2.60		104	8427	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.640	1.643	-0.003	1.005	4235935	2.43		97.0	293	
D 47 13C3-PFBS										
301.90 > 83.00	1.672	1.675	-0.003	0.649	80654	2.36		102	261	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.672	1.676	-0.004	1.000	5929736	2.25		102	2174	
298.90 > 99.00	1.672	1.676	-0.004	1.000	2454638		2.42(1.25-3.74)	102	1269	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.868	1.875	-0.007	1.117	1362407	2.37		102	7811	
D 60 M2-4:2FTS										
329.00 > 81.00	1.868	1.875	-0.007	0.726	585341	2.41		103	782	
D 7 13C2 PFHxA										
315.00 > 270.00	1.903	1.908	-0.005	0.739	4337626	2.59		104	12580	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.903	1.908	-0.005	1.000	4365425	2.47		98.6	1122	
313.00 > 119.00	1.903	1.908	-0.005	1.000	395592		11.04(5.03-15.10)	98.6	758	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.924	1.930	-0.006	1.151	5715419	2.39		102	6693	
349.00 > 99.00	1.924	1.930	-0.006	1.151	2110213		2.71(1.36-4.07)	102	2084	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.997	2.003	-0.006	1.000	779751	2.29		91.5	346	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.997	2.003	-0.006	0.776	352025	2.70		108	762	
D 9 13C4-PFHpA										
367.00 > 322.00	2.225	2.227	-0.002	0.865	4193874	2.55		102	5912	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.225	2.228	-0.003	1.000	4504362	2.53		101	823	
363.00 > 169.00	2.225	2.228	-0.003	1.000	1708808		2.64(1.13-3.40)	101	2518	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.234	2.239	-0.005	1.000	5033358	2.15		94.4	2983	
399.00 > 99.00	2.234	2.239	-0.005	1.000	1700813		2.96(1.50-4.49)	94.4	1217	
D 11 18O2 PFHxS										
403.00 > 84.00	2.234	2.239	-0.005	0.868	5111206	2.42		102	4580	
65 ADONA										
377.00 > 251.00	2.267	2.271	-0.004	0.771	11980639	2.59		104	8272	
377.00 > 85.00	2.267	2.271	-0.004	0.771	7225332		1.66(0.84-2.53)	104	5651	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.542	2.548	-0.006	1.000	1272183	2.30		97.0	1798	
D 12 M2-6:2FTS										
429.00 > 81.00	2.542	2.549	-0.007	0.988	835688	2.41		102	2359	
D 73 13C8 PFOA										
421.00 > 376.00	2.567	2.571	-0.004	0.997	7486707	2.51		103	12368	
D 14 13C4 PFOA										
417.00 > 372.00	2.574	2.573	0.001	1.000	3832692	2.54		101	8027	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.574	2.574	0.0	1.000	4208258	2.43		97.0	382	
413.00 > 169.00	2.574	2.574	0.0	1.000	2127673		1.98(0.84-2.52)	97.0	2867	
* 62 13C2-PFOA										
415.00 > 370.00	2.574	2.575	-0.001		3866051	2.50			7379	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.002	0.878	4278634	2.42		102	4054	
449.00 > 99.00	2.581	2.583	-0.002	0.878	1138164		3.76(1.94-5.82)	102	1763	
D 72 13C8 PFOS										
507.00 > 99.00	2.939	2.938	0.001	1.142	1644552	2.44		102	3344	
D 18 13C4 PFOS										
503.00 > 80.00	2.939	2.939	0.0	1.142	3404908	2.45		103	4842	
D 19 13C5 PFNA										
468.00 > 423.00	2.939	2.939	0.0	1.142	3527035	2.60		104	6184	
20 Perfluorononanoic acid										
463.00 > 419.00	2.939	2.939	0.0	1.000	3614991	2.43		97.3	1002	
463.00 > 169.00	2.939	2.939	0.0	1.000	865774		4.18(1.90-5.69)	97.3	3370	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.939	2.940	-0.001	1.000	3462772	2.26		97.6	2634	
499.00 > 99.00	2.939	2.940	-0.001	1.000	797490		4.34(2.31-6.93)	97.6	1200	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.147	3.150	-0.003	1.071	5895997	2.38		102	4521	
D 26 M2-8:2FTS										
529.00 > 81.00	3.285	3.284	0.001	1.276	1039099	2.48		104	4478	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.285	3.285	0.001	1.118	2589883	2.42		101	3256	
549.00 > 99.00	3.285	3.285	0.001	1.118	921596		2.81(1.33-3.97)	101	2355	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.285	3.286	-0.001	1.000	1315230	2.33		97.4	3552	
D 23 13C2 PFDA										
515.00 > 470.00	3.292	3.294	-0.002	1.279	3093053	2.60		104	7014	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.292	3.296	-0.004	1.000	3015215	2.43		97.2	1428	
513.00 > 169.00	3.299	3.296	0.003	1.002	521331		5.78(2.36-7.09)	97.2	351	
D 21 13C8 FOSA										
506.00 > 78.00	3.321	3.317	0.004	1.290	4593505	2.50		100.0	4893	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.321	3.319	0.002	1.000	4680280	2.62		105	6720	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.339	1601576	2.63		105	3113	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.454	3.453	0.001	1.002	1493989	2.42		96.7	1186	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.606	3.608	-0.002	1.227	2214864	2.46		102	4654	
599.00 > 99.00	3.606	3.608	-0.002	1.227	732667		3.02(1.39-4.16)	102	3079	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.615	3.616	-0.001	1.405	1595779	2.53		101	1266	
D 30 13C2 PFUnA										
565.00 > 520.00	3.622	3.620	0.002	1.407	2527555	2.64		106	4544	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.622	3.622	0.0	1.000	2714159	2.39		95.6	1491	
563.00 > 169.00	3.622	3.622	0.0	1.000	457550		5.93(2.12-6.36)	95.6	2345	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.622	3.623	-0.001	1.002	1366918	2.40		96.1	2485	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.777	3.781	-0.004	1.285	9579999	2.52		107	13064	
35 MeFOSA										
512.00 > 169.00	3.827	3.826	0.001		1352810	NC			1222	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.913	3.913	0.0	1.000	2903966	2.45		97.8	1268	
613.00 > 169.00	3.913	3.913	0.0	1.000	683851		4.25(2.13-6.40)	97.8	2694	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.913	3.913	0.0	1.191	940315	2.41		99.8	5393	
D 36 13C2 PFDoA										
615.00 > 570.00	3.913	3.913	0.0	1.520	2668181	2.64		106	5732	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.144	4.148	-0.004	1.410	961771	2.43		100	3921	
699.00 > 99.00	4.144	4.148	-0.004	1.410	1365105		0.70(0.00-0.00)	100	3564	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.173	4.173	0.0	1.066	2849697	2.48		99.3	1172	
663.00 > 169.00	4.173	4.173	0.0	1.066	828238		3.44(1.25-3.76)	99.3	3194	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.395	4.399	-0.004	1.708	3233399	2.51		100	5729	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.395	4.400	-0.005	1.000	779223	2.49		99.6	2925	
713.00 > 219.00	4.395	4.400	-0.005	1.000	544891		1.43(0.71-2.13)	99.6	5524	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.794	4.799	-0.005	1.863	6396595	2.50		100	7999	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.794	4.801	-0.007	1.000	5763175	2.56		103	2066	
813.00 > 169.00	4.794	4.801	-0.007	1.000	944162		6.10(2.86-8.58)	103	4213	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.131	5.136	-0.005	1.070	6077489	2.58		103	1462	
913.00 > 169.00	5.131	5.136	-0.005	1.070	729623		8.33(3.83-11.48)	103	3111	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_006.d

Injection Date: 06-Aug-2018 11:41:23 Instrument ID: A8_N

Lims ID: IC L5 Full

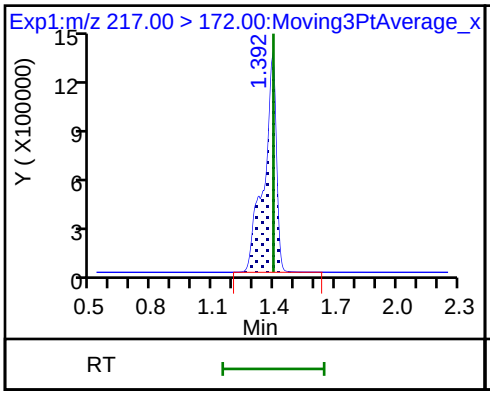
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 14 Worklist Smp#: 6

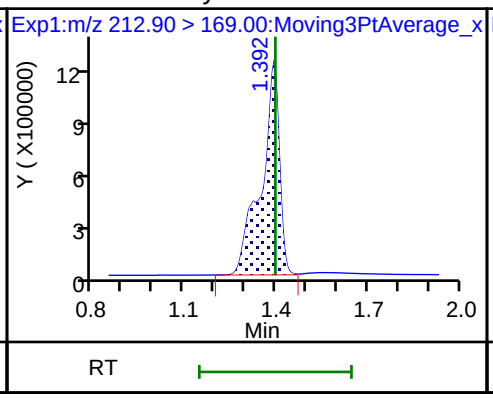
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

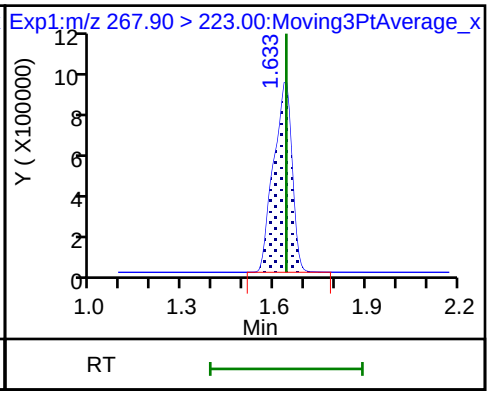
D 1 13C4 PFBA



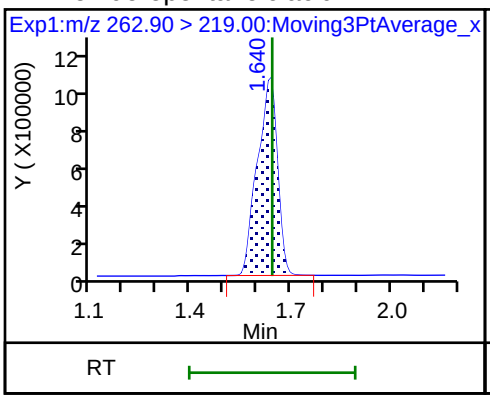
2 Perfluorobutyric acid



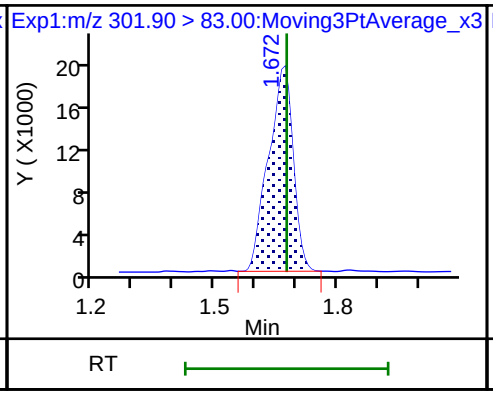
D 3 13C5-PFPeA



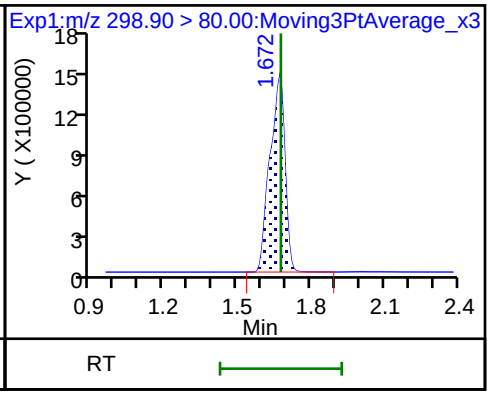
4 Perfluoropentanoic acid



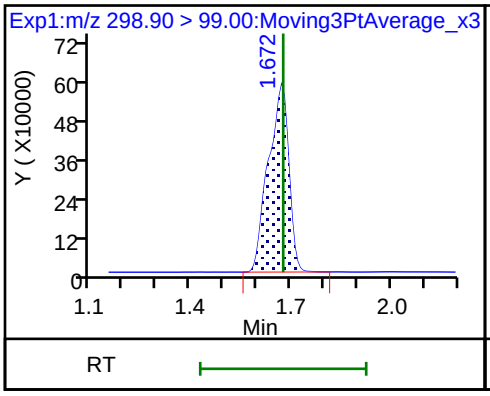
D 47 13C3-PFBS



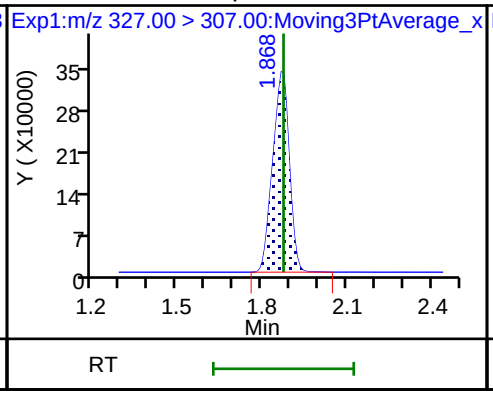
5 Perfluorobutanesulfonic acid



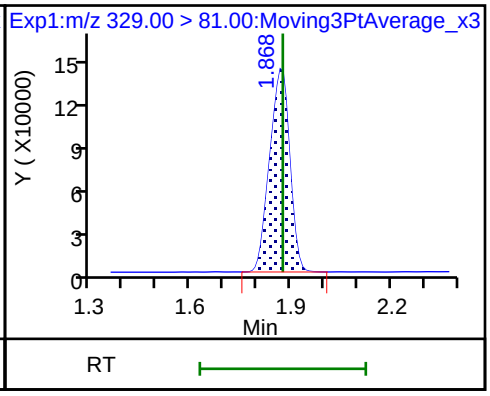
5 Perfluorobutanesulfonic acid



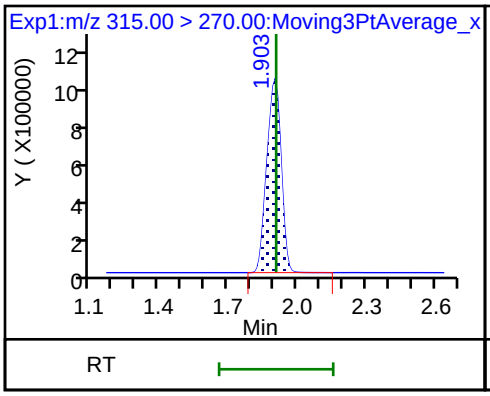
61 1H,1H,2H,2H-perfluorohexanesulfon



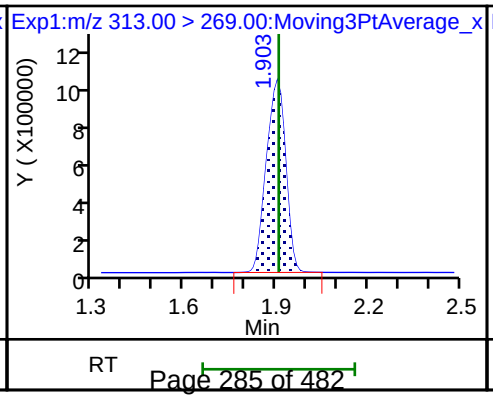
D 60 M2-4:2FTS



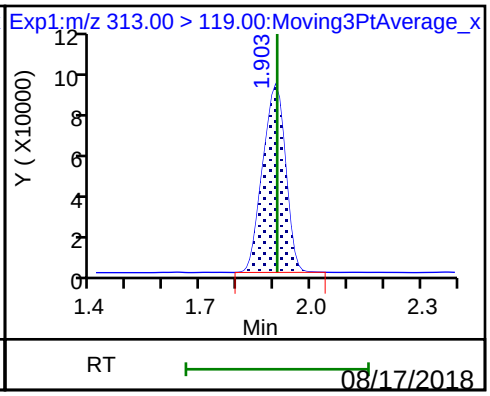
D 7 13C2 PFHxA



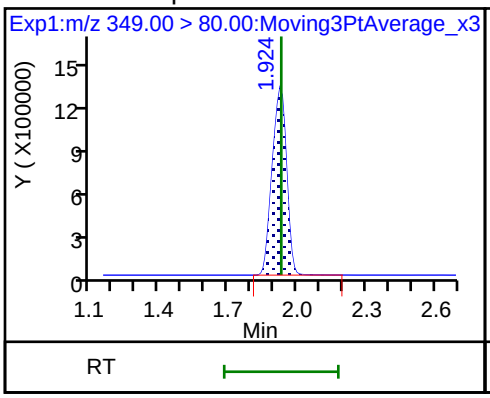
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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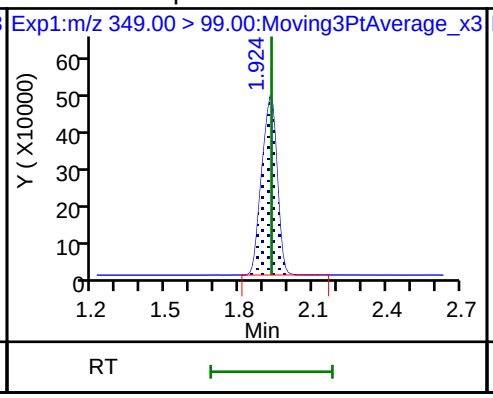
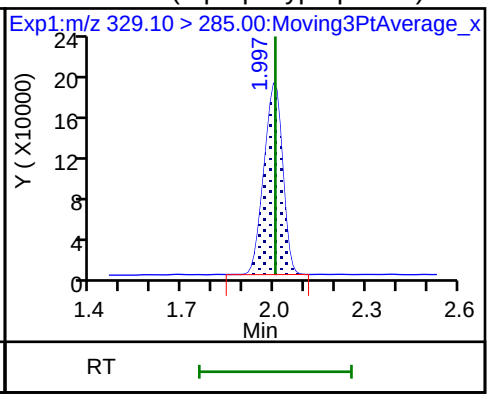
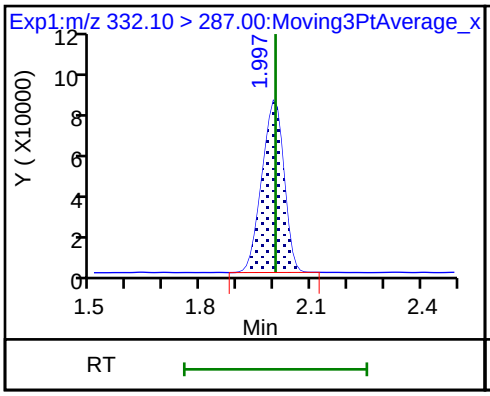


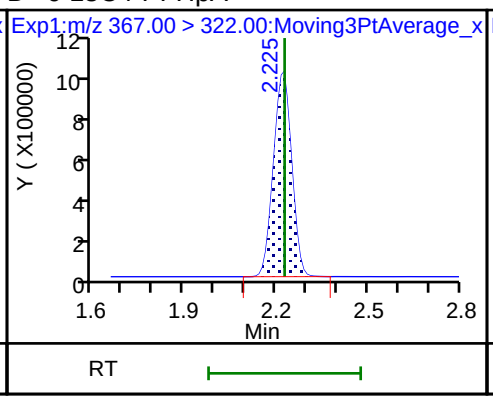
67 Perfluoro(2-propoxypropanoic) acid



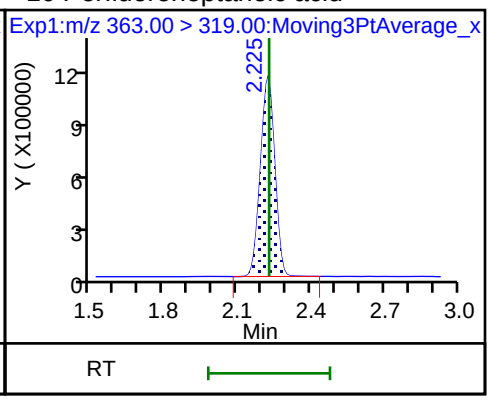
D 64 13C3 HFPO-DA



D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



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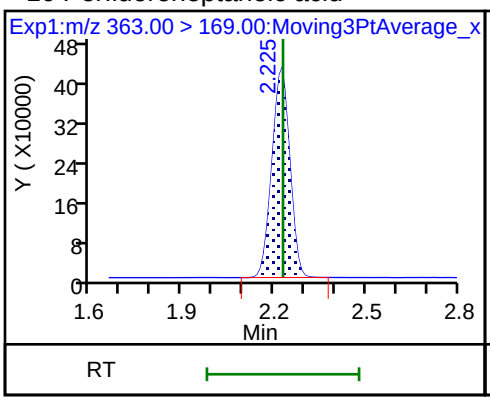
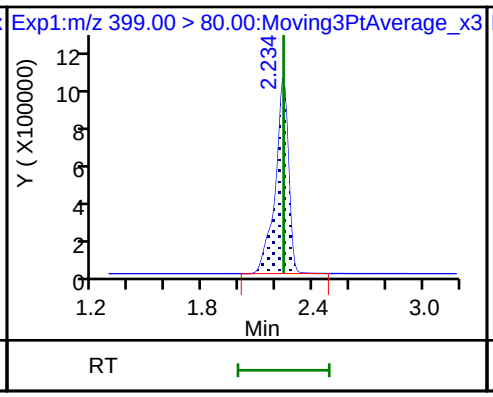


8 Perfluorohexanesulfonic acid



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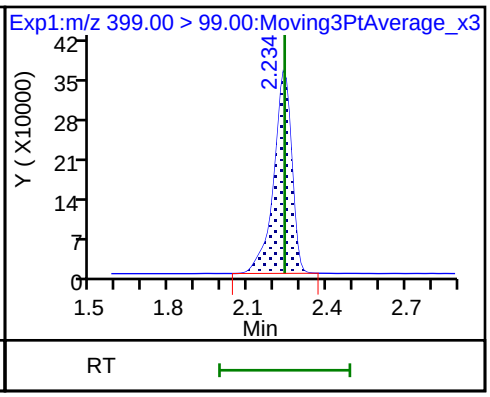
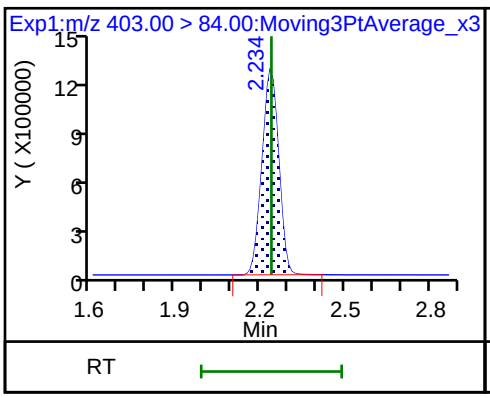
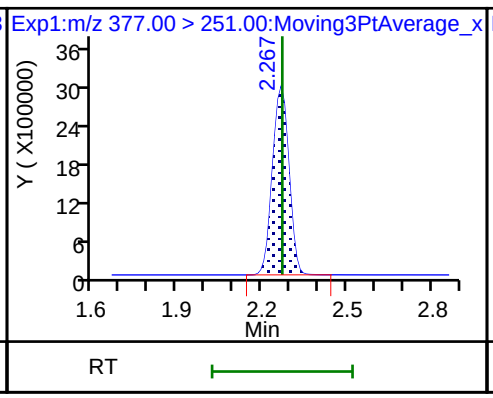


D 11 18O2 PFHxS



65 ADONA



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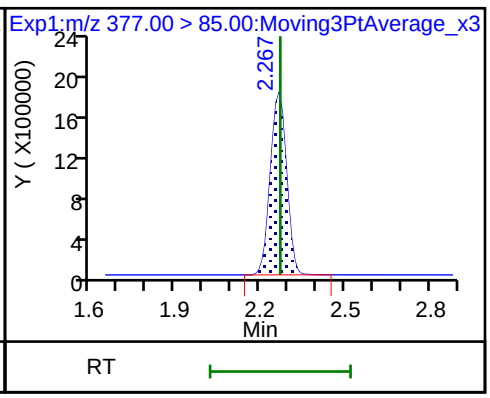
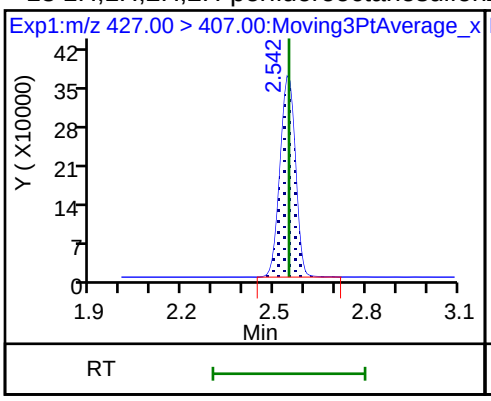
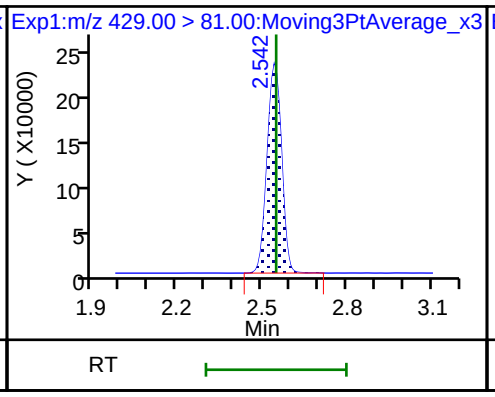
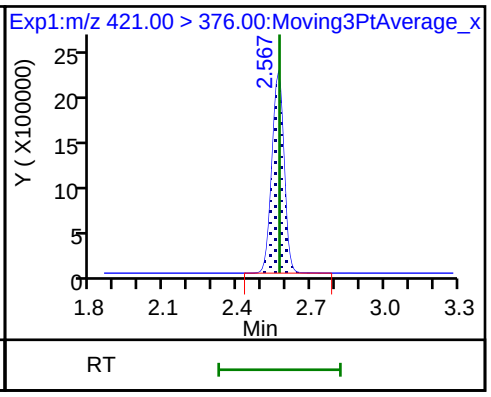


13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS

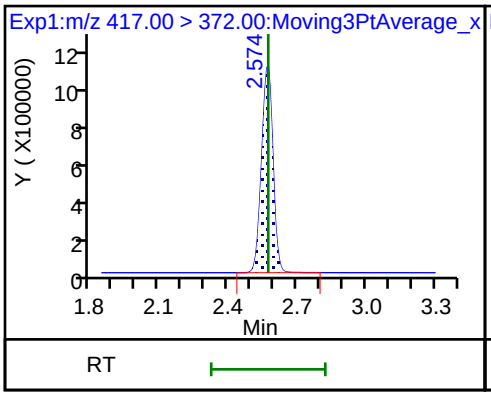




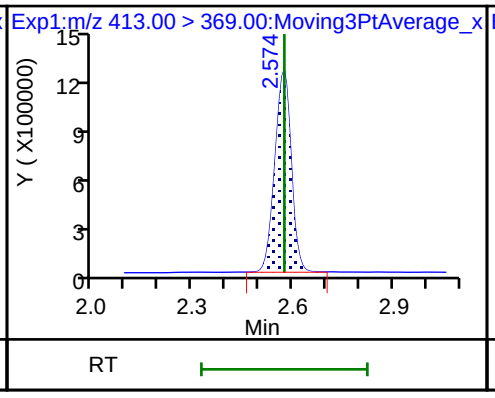
D 73 13C8 PFOA



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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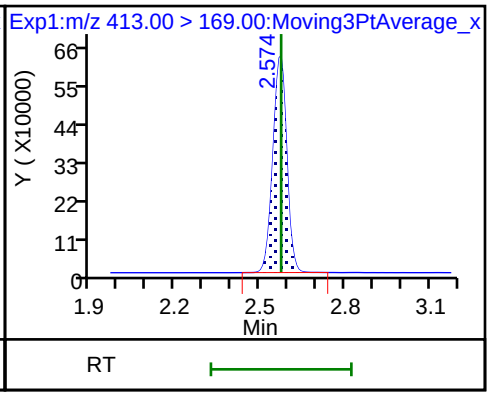
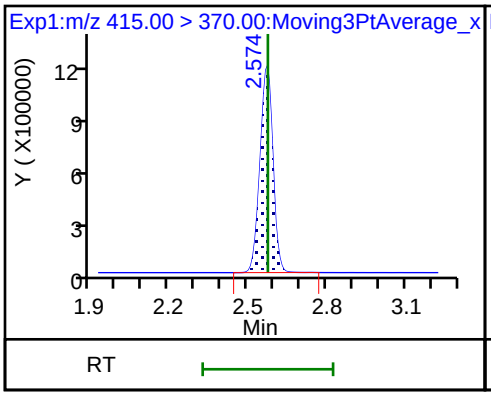
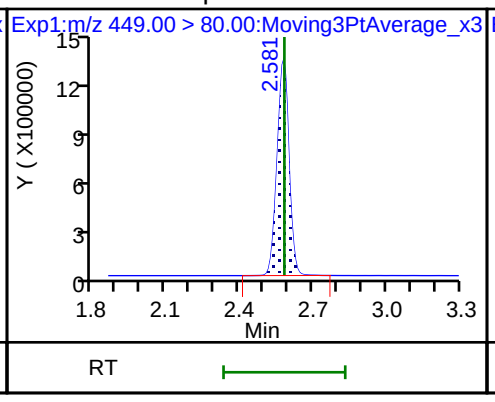


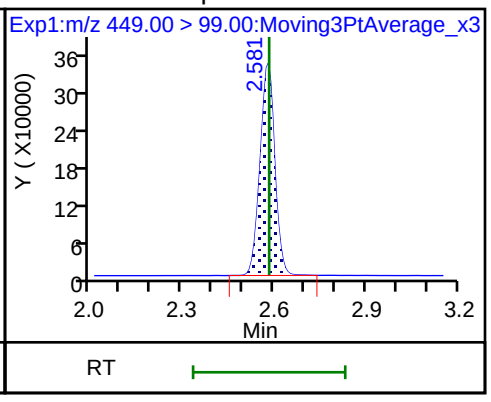
* 62 13C2-PFOA



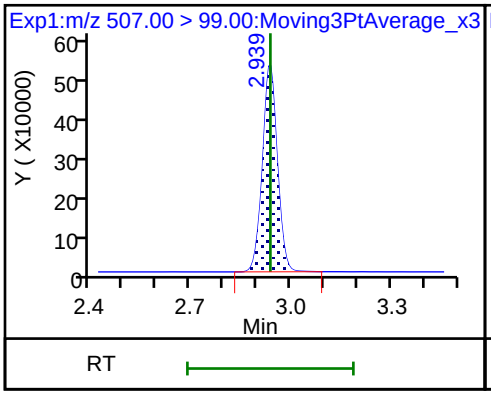
16 Perfluoroheptanesulfonic acid



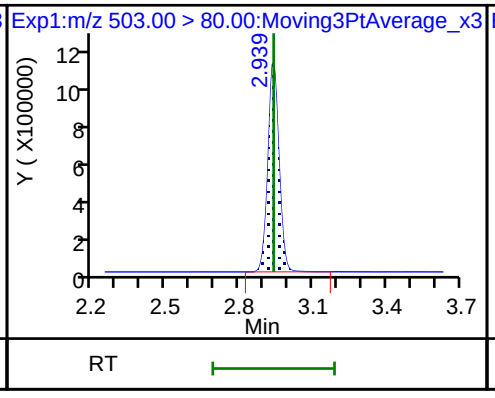
16 Perfluoroheptanesulfonic acid



D 72 13C8 PFOS



D 18 13C4 PFOS



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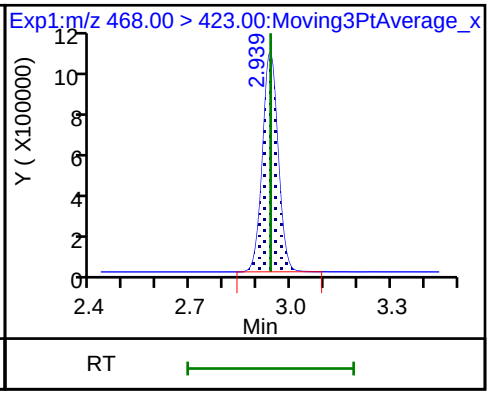
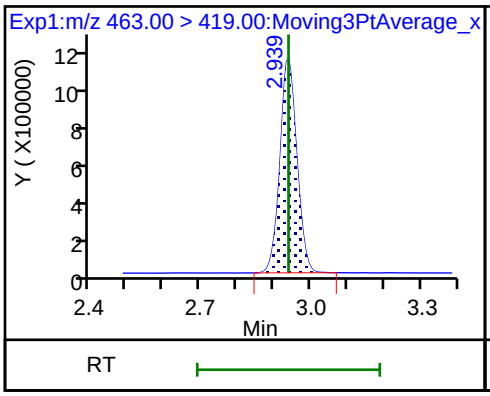


20 Perfluorononanoic acid



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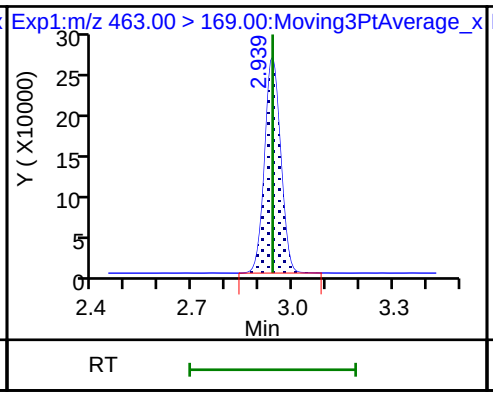
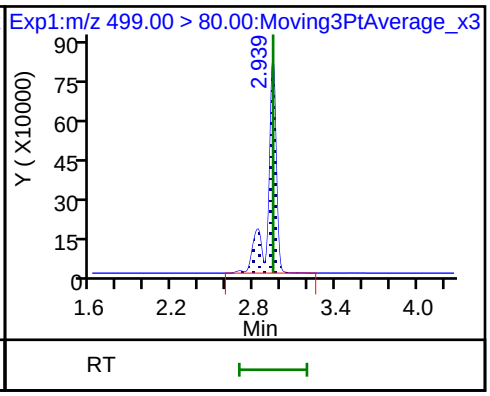
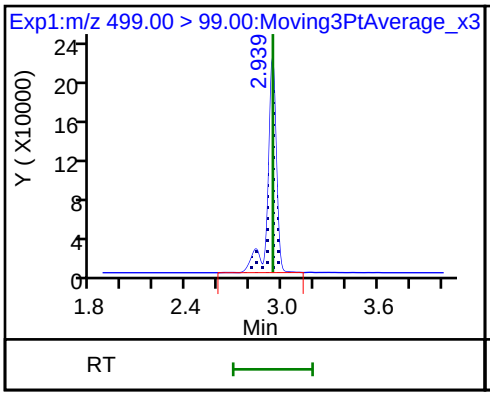


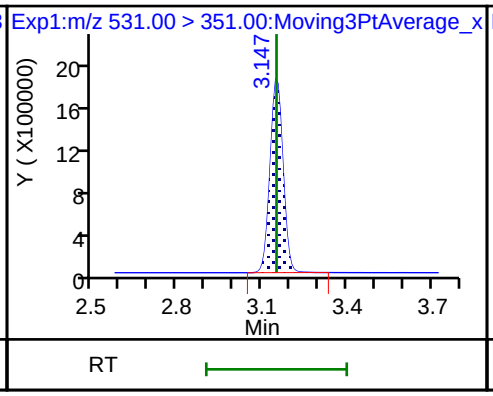
17 Perfluorooctane sulfonic acid



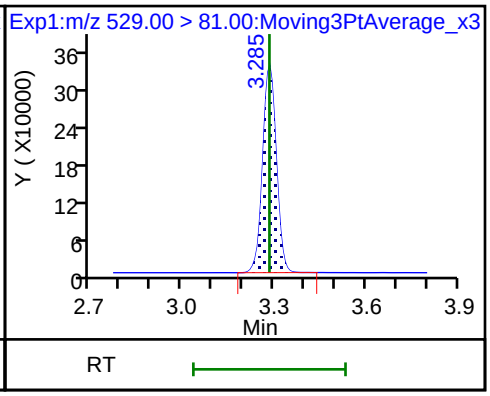
17 Perfluorooctane sulfonic acid



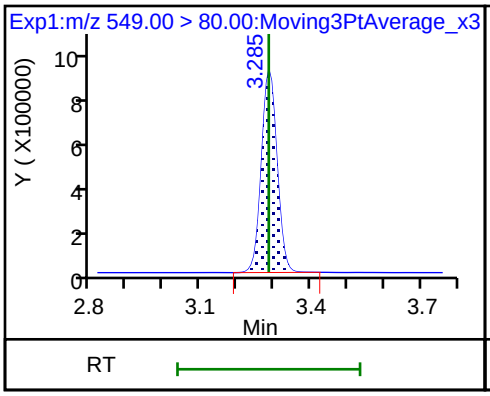
69 9-Chlorohexadecafluoro-3-oxanonane



D 26 M2-8:2FTS



68 Perfluorononanesulfonic acid



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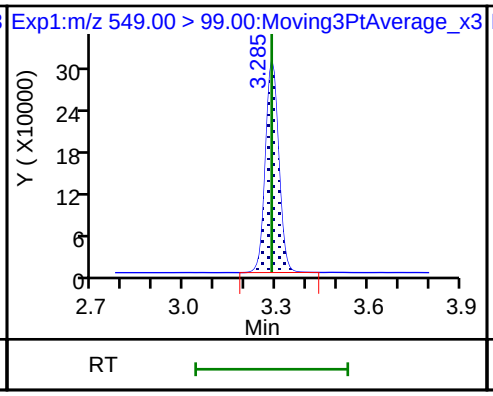
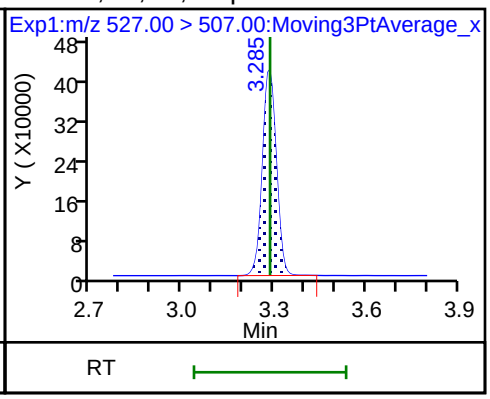
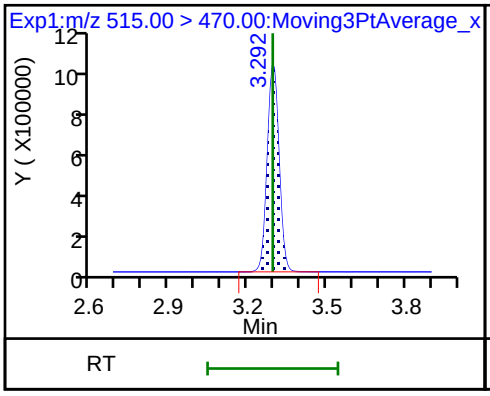


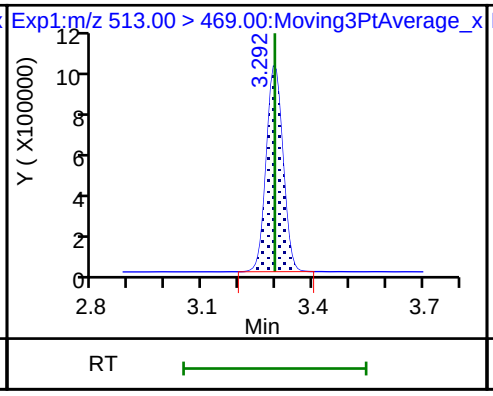
25 1H,1H,2H,2H-perfluorodecanesulfoni



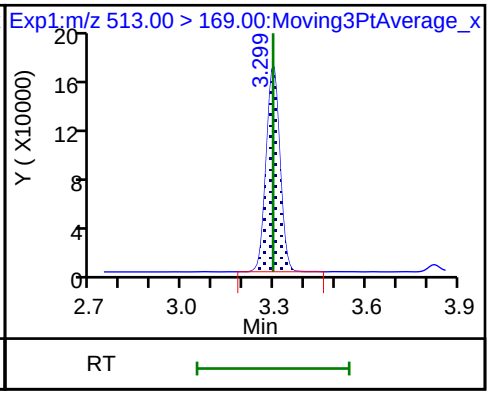
D 23 13C2 PFDA



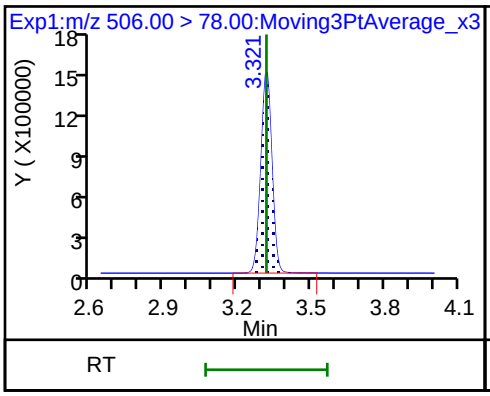
24 Perfluorodecanoic acid



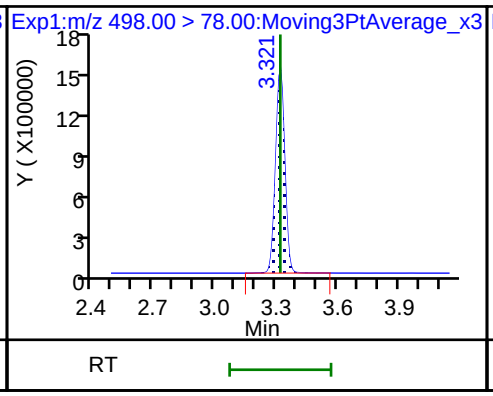
24 Perfluorodecanoic acid



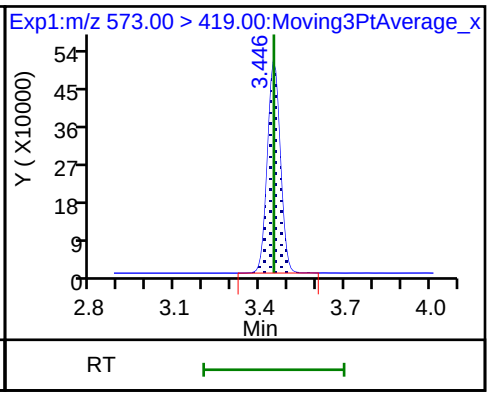
D 21 13C8 FOSA



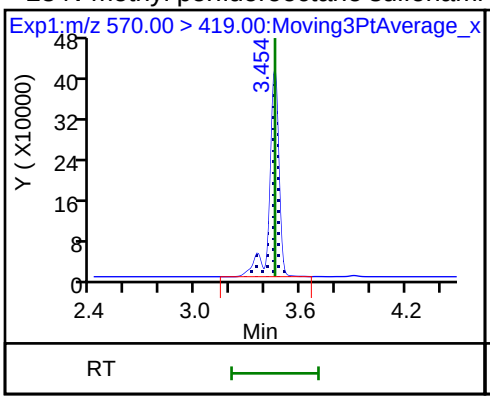
22 Perfluorooctane Sulfonamide



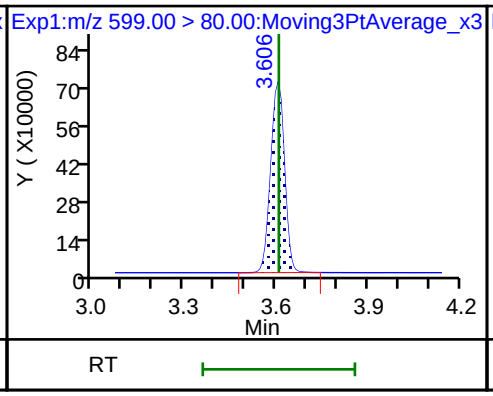
D 27 d3-NMeFOSAA



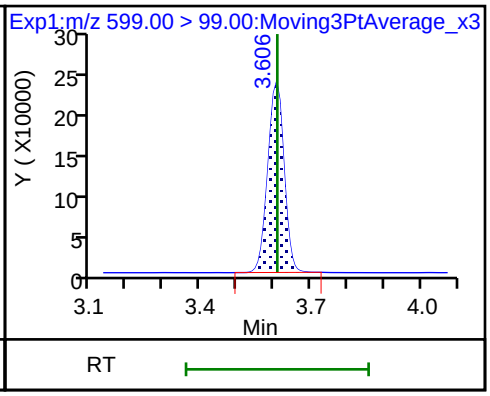
28 N-methyl perfluorooctane sulfonami



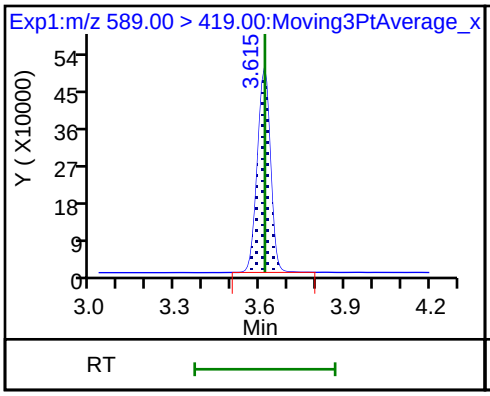
29 Perfluorodecane Sulfonic acid



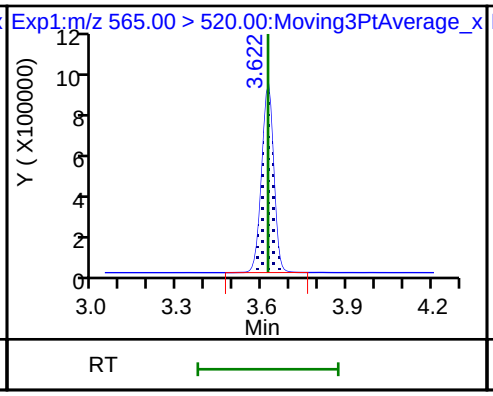
29 Perfluorodecane Sulfonic acid



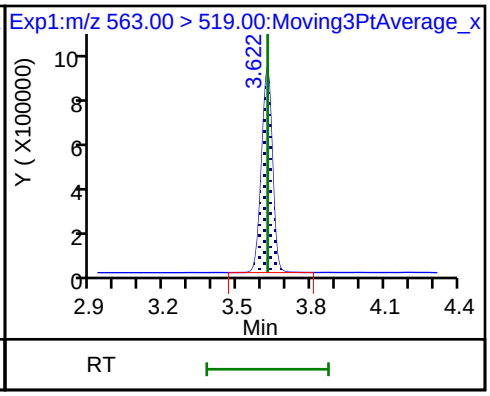
D 32 d5-NEtFOSAA



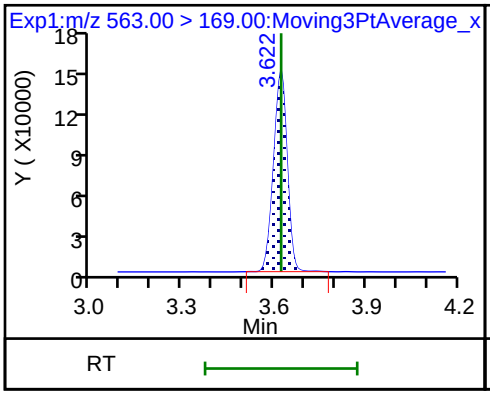
D 30 13C2 PFUnA



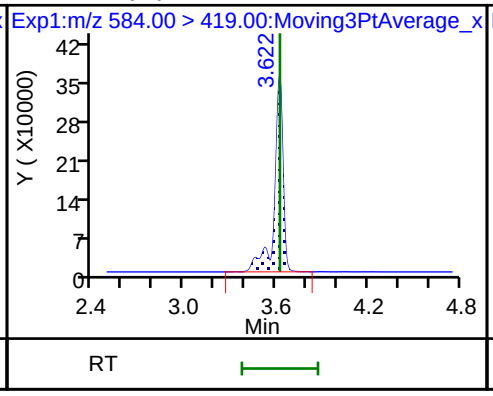
31 Perfluoroundecanoic acid



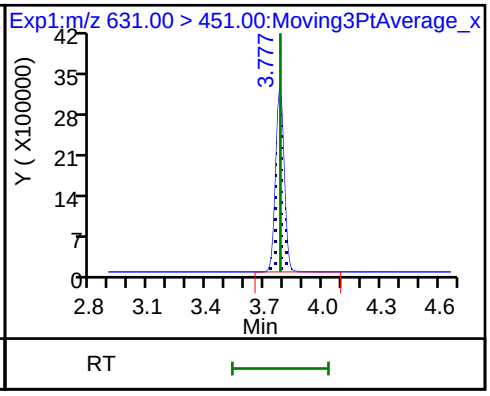
31 Perfluoroundecanoic acid



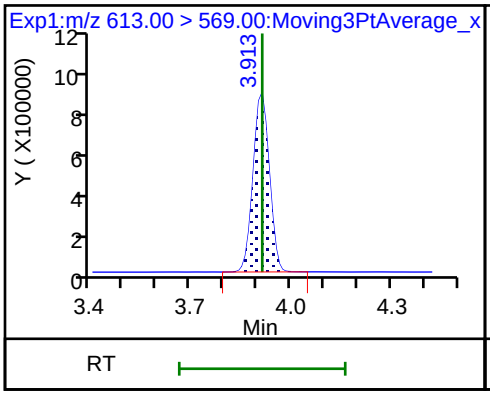
33 N-ethyl perfluorooctane sulfonamid



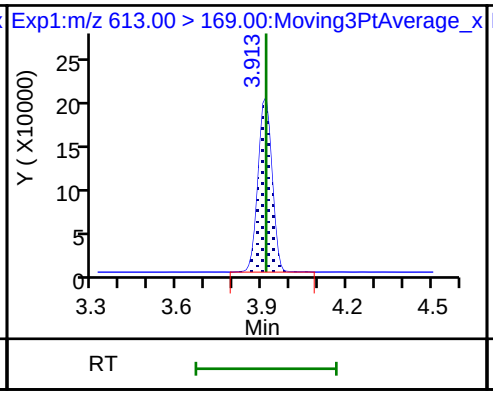
66 11-Chloroeicosafluoro-3-oxaundecan



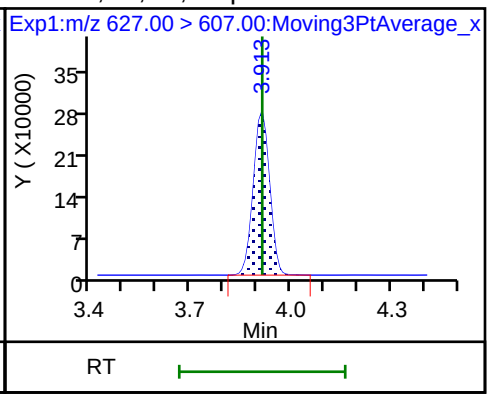
37 Perfluorododecanoic acid



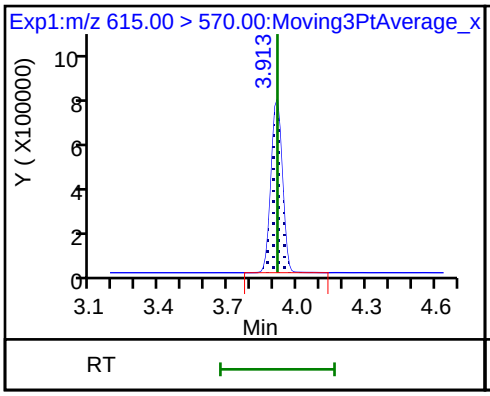
37 Perfluorododecanoic acid



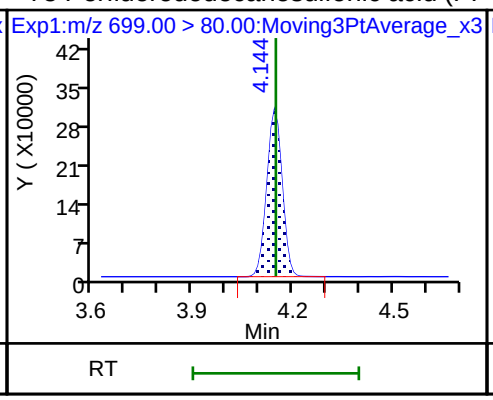
74 1H,1H,2H,2H-perfluorododecanesulfo



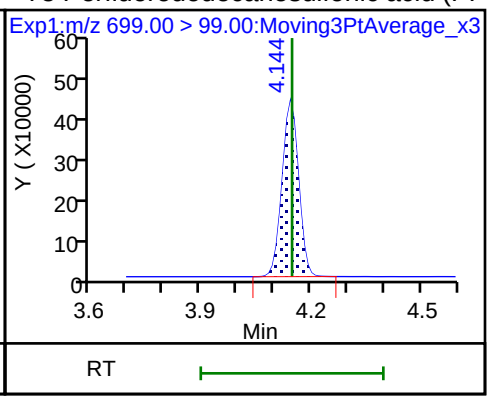
D 36 13C2 PFDoA



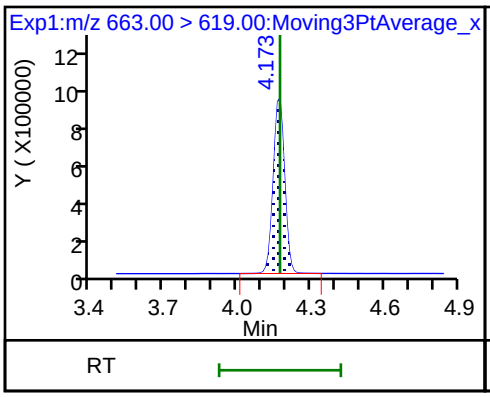
75 Perfluorododecanesulfonic acid (PF



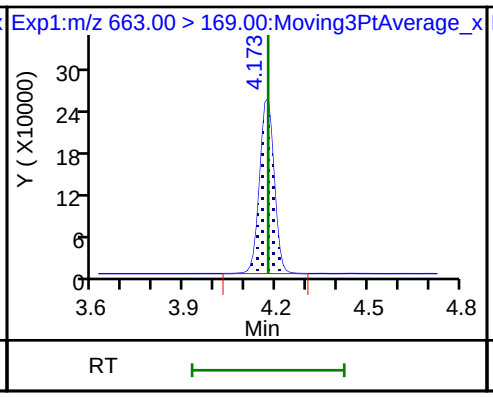
75 Perfluorododecanesulfonic acid (PF



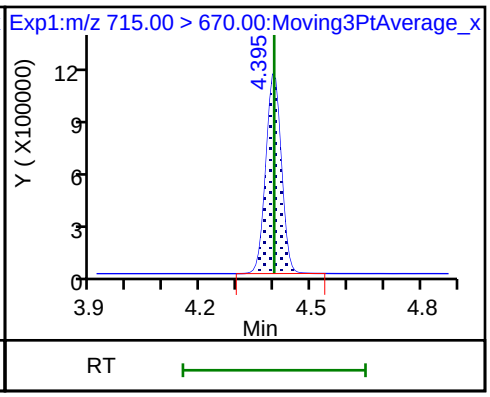
41 Perfluorotridecanoic acid



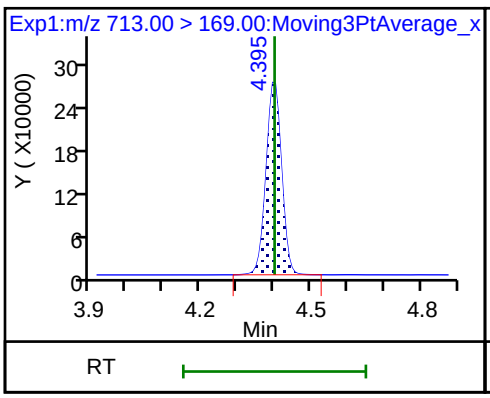
41 Perfluorotridecanoic acid



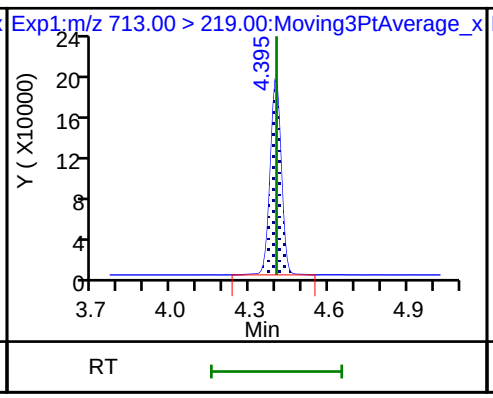
D 43 13C2-PFTeDA



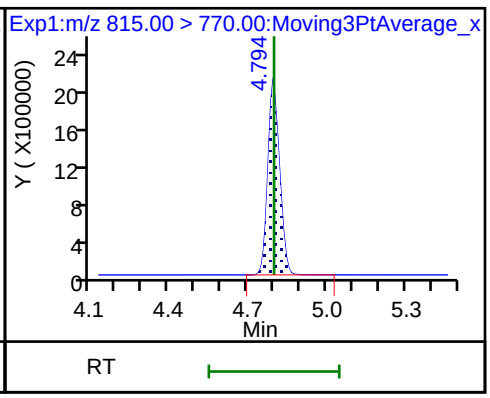
42 Perfluorotetradecanoic acid



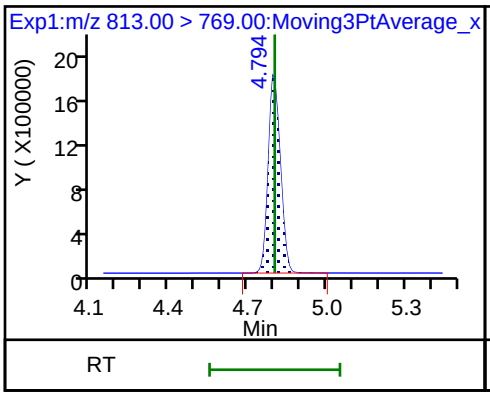
42 Perfluorotetradecanoic acid



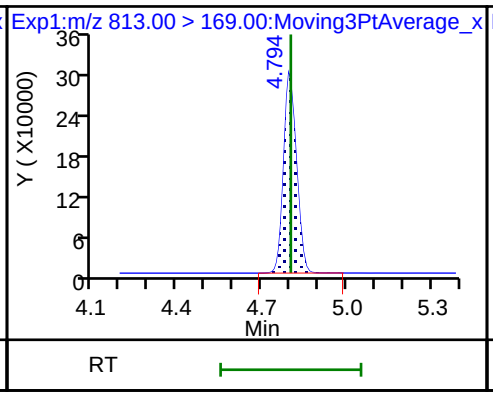
D 44 13C2-PFHxDA



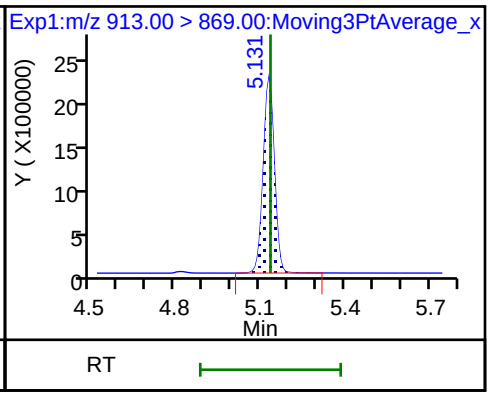
45 Perfluorohexadecanoic acid



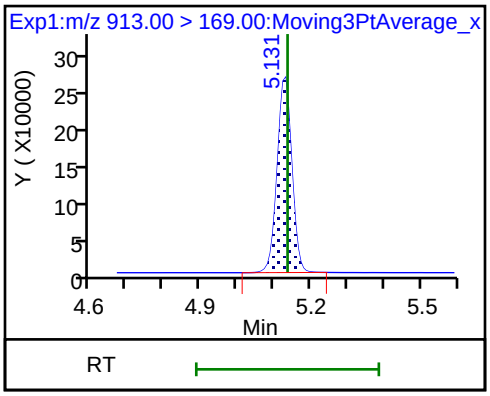
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_007.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Aug-2018 11:49:11 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L6-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:22 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:40:35

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.394	1.395	-0.001	0.541	5693569	2.54		102	7704	
2 Perfluorobutyric acid										
212.90 > 169.00	1.394	1.397	-0.003	1.000	10686384	5.00		100.0	1220	
D 3 13C5-PFPeA										
267.90 > 223.00	1.636	1.639	-0.003	0.636	3917323	2.54		102	8427	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.643	1.643	0.0	1.005	8717868	4.89		97.8	602	
D 47 13C3-PFBS										
301.90 > 83.00	1.676	1.675	0.001	0.651	81531	2.28		98.2	279	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.676	1.676	0.0	1.000	12353528	4.64		105	4081	
298.90 > 99.00	1.676	1.676	0.0	1.000	5231288		2.36(1.25-3.74)	105	2506	
D 60 M2-4:2FTS										
329.00 > 81.00	1.872	1.875	-0.003	0.727	609022	2.39		103	998	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.872	1.875	-0.003	1.117	2687262	4.62		99.0	10818	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.907	1.908	-0.001	1.000	8802526	4.98		99.5	1994	
313.00 > 119.00	1.907	1.908	-0.001	1.000	793855		11.09(5.03-15.10)	99.5	1839	
D 7 13C2 PFHxA										
315.00 > 270.00	1.907	1.908	-0.001	0.741	4333101	2.47		99.0	9810	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.928	1.930	-0.002	1.151	11938702	4.94		105	10425	
349.00 > 99.00	1.928	1.930	-0.002	1.151	4318494		2.76(1.36-4.07)	105	3576	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.001	2.003	-0.002	0.777	336215	2.47		98.7	800	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.001	2.003	-0.002	1.000	1620535	4.98		99.6	795	
D 9 13C4-PFHpA										
367.00 > 322.00	2.227	2.227	0.0	0.865	4351928	2.52		101	6506	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.227	2.228	-0.001	1.000	9106263	4.93		98.5	1787	
363.00 > 169.00	2.227	2.228	-0.001	1.000	3813206		2.39(1.13-3.40)	98.5	5503	
D 11 18O2 PFHxS										
403.00 > 84.00	2.236	2.239	-0.003	0.869	5234562	2.37		100	5690	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.236	2.239	-0.003	1.000	10391537	4.33		95.2	4424	
399.00 > 99.00	2.236	2.239	-0.003	1.000	3502068		2.97(1.50-4.49)	95.2	2351	
65 ADONA										
377.00 > 251.00	2.269	2.271	-0.002	0.774	22851214	4.85		97.0	14304	
377.00 > 85.00	2.269	2.271	-0.002	0.774	14239580		1.60(0.84-2.53)	97.0	11126	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.544	2.548	-0.004	1.000	2696182	4.73		99.9	2996	
D 12 M2-6:2FTS										
429.00 > 81.00	2.544	2.549	-0.005	0.988	859900	2.37		99.8	3069	
D 73 13C8 PFOA										
421.00 > 376.00	2.568	2.571	-0.003	0.997	7461246	2.39		97.7	9011	
D 14 13C4 PFOA										
417.00 > 372.00	2.568	2.573	-0.005	0.997	3963063	2.51		100	5629	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.568	2.574	-0.006	1.000	8637324	4.82		96.3	834	
413.00 > 169.00	2.574	2.574	0.0	1.003	4333301		1.99(0.84-2.52)	96.3	3910	
* 62 13C2-PFOA										
415.00 > 370.00	2.574	2.575	-0.001		4046341	2.50			5779	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.002	0.880	8721667	4.85		102	5365	
449.00 > 99.00	2.581	2.583	-0.002	0.880	2296888		3.80(1.94-5.82)	102	2733	
D 72 13C8 PFOS										
507.00 > 99.00	2.933	2.938	-0.005	1.139	1714648	2.43		102	3239	
20 Perfluorononanoic acid										
463.00 > 419.00	2.933	2.939	-0.006	1.000	7475851	5.13		103	1834	
463.00 > 169.00	2.933	2.939	-0.006	1.000	1732734		4.31(1.90-5.69)	103	4946	
D 19 13C5 PFNA										
468.00 > 423.00	2.933	2.939	-0.006	1.139	3461355	2.44		97.5	7405	
D 18 13C4 PFOS										
503.00 > 80.00	2.933	2.939	-0.006	1.139	3471061	2.39		100	4088	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.933	2.940	-0.007	1.000	7339820	4.71		101	4397	
499.00 > 99.00	2.933	2.940	-0.007	1.000	1648492		4.45(2.31-6.93)	101	2215	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.147	3.150	-0.003	1.073	11940295	4.72		101	9089	
D 26 M2-8:2FTS										
529.00 > 81.00	3.278	3.284	-0.006	1.273	1052330	2.40		100	2990	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.278	3.285	-0.006	1.118	5361178	4.91		102	6489	
549.00 > 99.00	3.278	3.285	-0.006	1.118	1913317		2.80(1.33-3.97)	102	4125	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.278	3.286	-0.008	1.000	2679186	4.69		98.0	7666	
D 23 13C2 PFDA										
515.00 > 470.00	3.291	3.294	-0.003	1.279	3159574	2.54		101	5723	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.291	3.296	-0.005	1.000	6298810	4.97		99.4	3082	
513.00 > 169.00	3.291	3.296	-0.005	1.000	1066541		5.91(2.36-7.09)	99.4	375	
D 21 13C8 FOSA										
506.00 > 78.00	3.313	3.317	-0.004	1.287	4781606	2.49		99.4	7259	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.313	3.319	-0.006	1.000	9594151	5.15		103	5632	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.338	1562466	2.45		98.1	3298	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.446	3.453	-0.007	1.000	3073336	5.10		102	1851	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.605	3.608	-0.003	1.229	4472904	4.87		101	6207	
599.00 > 99.00	3.605	3.608	-0.003	1.229	1485053		3.01(1.39-4.16)	101	3079	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.614	3.616	-0.002	1.404	1597197	2.42		96.8	1213	
D 30 13C2 PFUnA										
565.00 > 520.00	3.620	3.620	0.0	1.406	2455806	2.45		98.1	4433	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.620	3.622	-0.002	1.000	5365541	4.86		97.2	2645	
563.00 > 169.00	3.620	3.622	-0.002	1.000	966969		5.55(2.12-6.36)	97.2	3828	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.620	3.623	-0.003	1.002	2815576	4.94		98.8	3781	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.776	3.781	-0.005	1.287	18718037	4.82		102	15847	
35 MeFOSA										
512.00 > 169.00	3.825	3.826	-0.001		2815632	NC			1284	
D 36 13C2 PFDoA										
615.00 > 570.00	3.912	3.913	-0.001	1.519	2627551	2.48		99.3	5544	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.912	3.913	-0.001	1.193	1978025	5.00		104	5592	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.912	3.913	-0.001	1.000	5646629	4.83		96.6	2368	
613.00 > 169.00	3.912	3.913	-0.001	1.000	1341283		4.21(2.13-6.40)	96.6	4604	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.143	4.148	-0.005	1.413	1963594	4.87		101	4220	
699.00 > 99.00	4.143	4.148	-0.005	1.413	2852468		0.69(0.00-0.00)	101	6658	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.172	4.173	-0.001	1.066	5879570	5.20		104	1968	
663.00 > 169.00	4.172	4.173	-0.001	1.066	1735255		3.39(1.25-3.76)	104	3374	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.399	-0.005	1.707	3382019	2.51		100	6979	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.402	4.400	0.002	1.002	1606848	4.91		98.2	5145	
713.00 > 219.00	4.394	4.400	-0.006	1.000	1111841		1.45(0.71-2.13)	98.2	2346	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.800	4.799	0.001	1.864	6730439	2.51		101	7597	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.800	4.801	-0.001	1.000	11833130	5.03		101	3519	
813.00 > 169.00	4.800	4.801	-0.001	1.000	2057982		5.75(2.86-8.58)	101	6089	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.135	5.136	-0.001	1.070	12433827	5.02		100	2663	
913.00 > 169.00	5.128	5.136	-0.008	1.068	1501219		8.28(3.83-11.48)	100	4432	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL6_00007 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_007.d

Injection Date: 06-Aug-2018 11:49:11 Instrument ID: A8_N

Lims ID: IC L6 Full

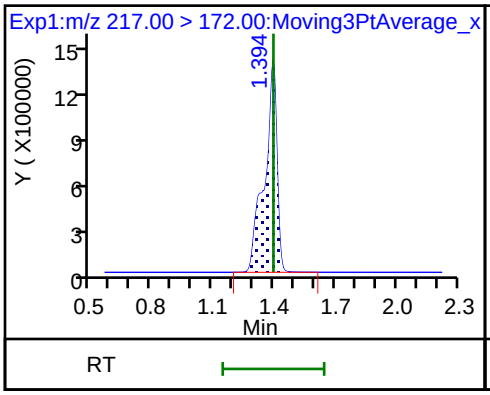
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 15 Worklist Smp#: 7

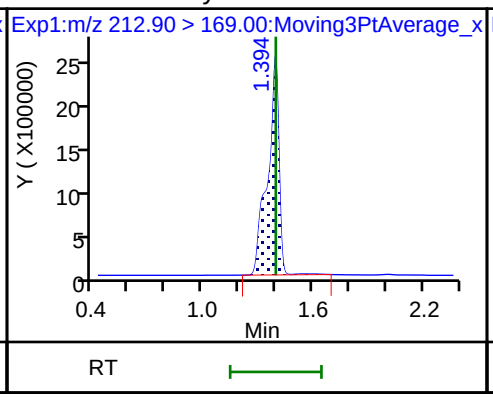
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

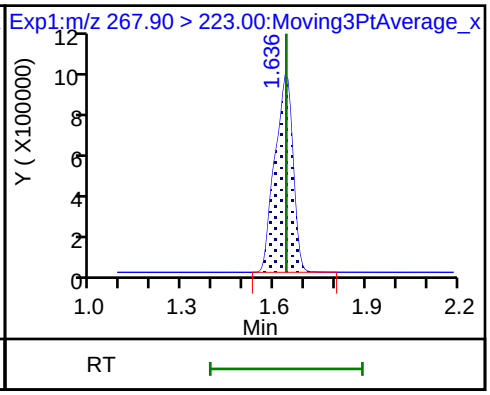
D 1 13C4 PFBA



2 Perfluorobutyric acid



D 3 13C5-PFPeA



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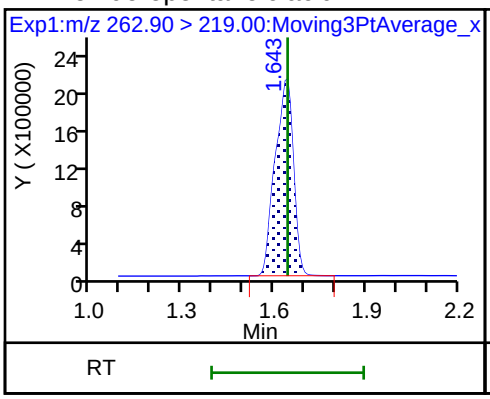

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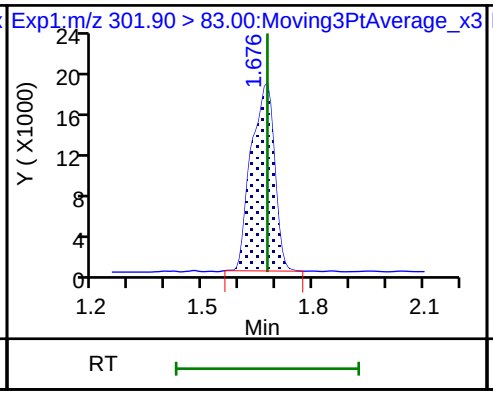
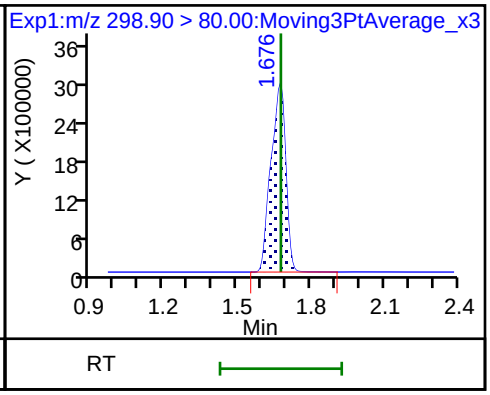


5 Perfluorobutanesulfonic acid



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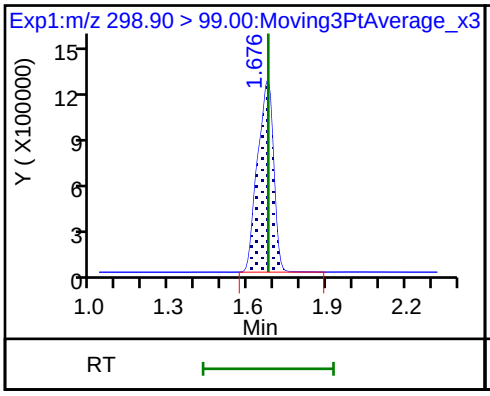

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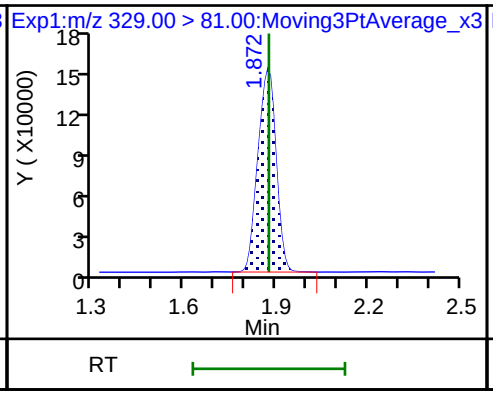
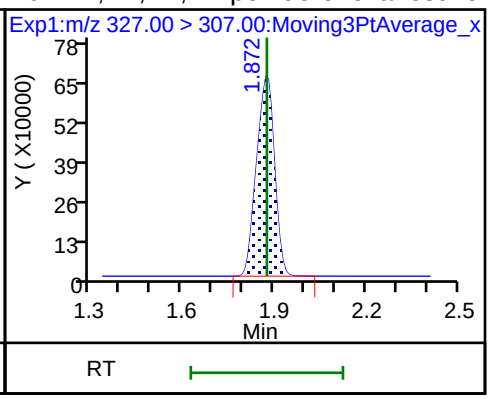
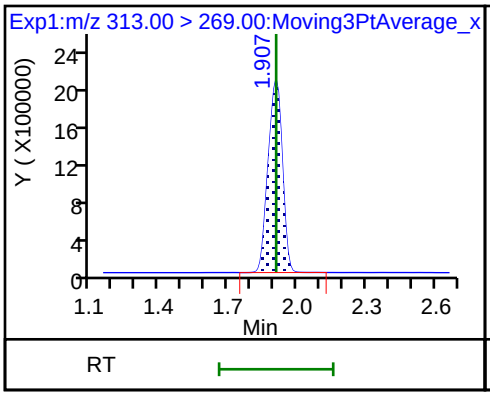


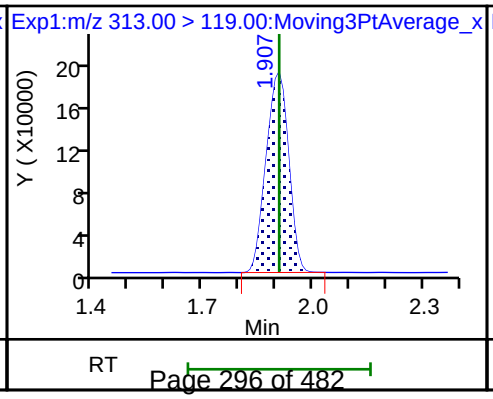
61 1H,1H,2H,2H-perfluorohexanesulfoni



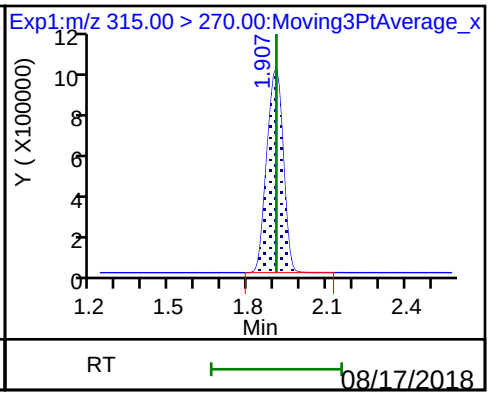
6 Perfluorohexanoic acid



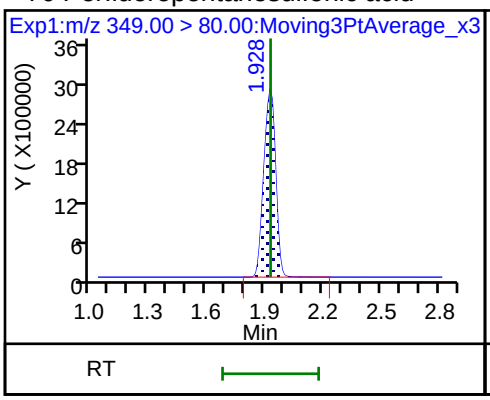
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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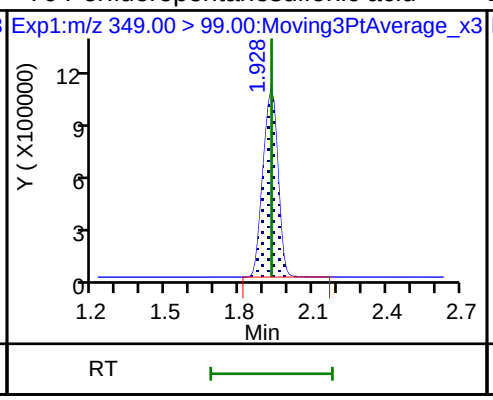
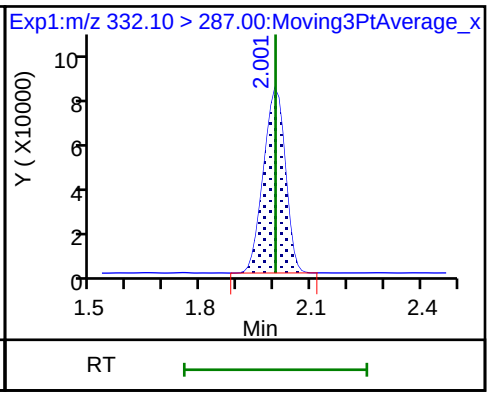
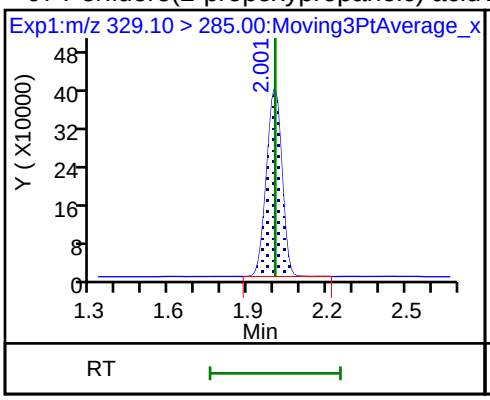


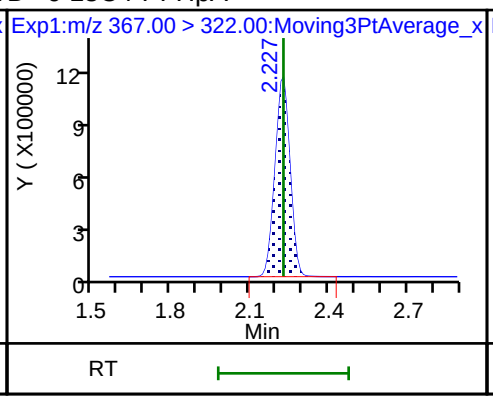
D 64 13C3 HFPO-DA



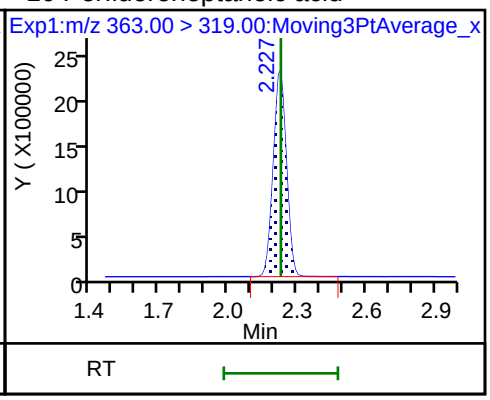
67 Perfluoro(2-propoxypropanoic) acid



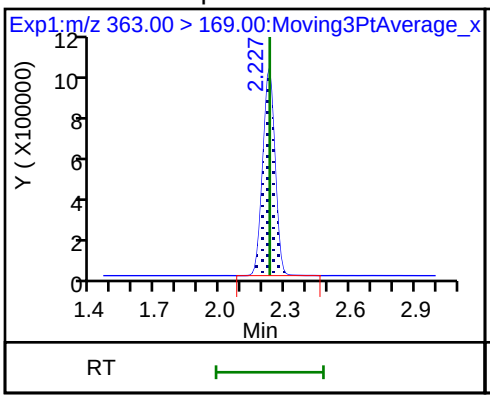
D 9 13C4-PFHpA



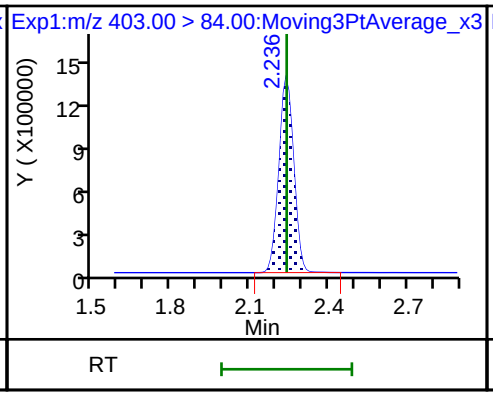
10 Perfluoroheptanoic acid



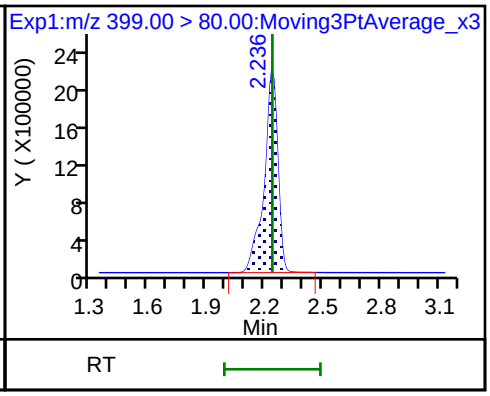
10 Perfluoroheptanoic acid



D 11 18O2 PFHxS



8 Perfluorohexanesulfonic acid



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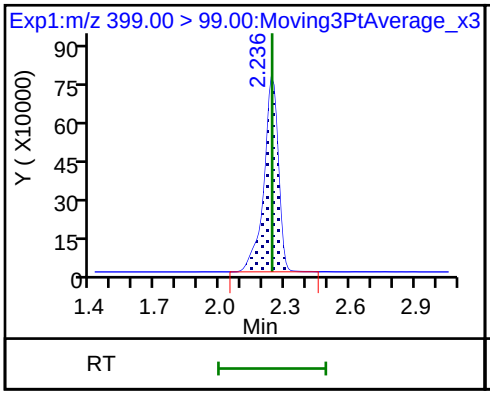

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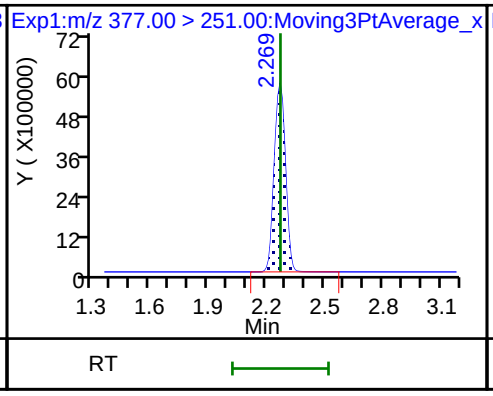

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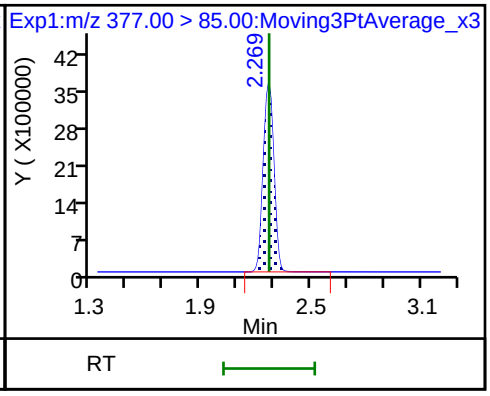
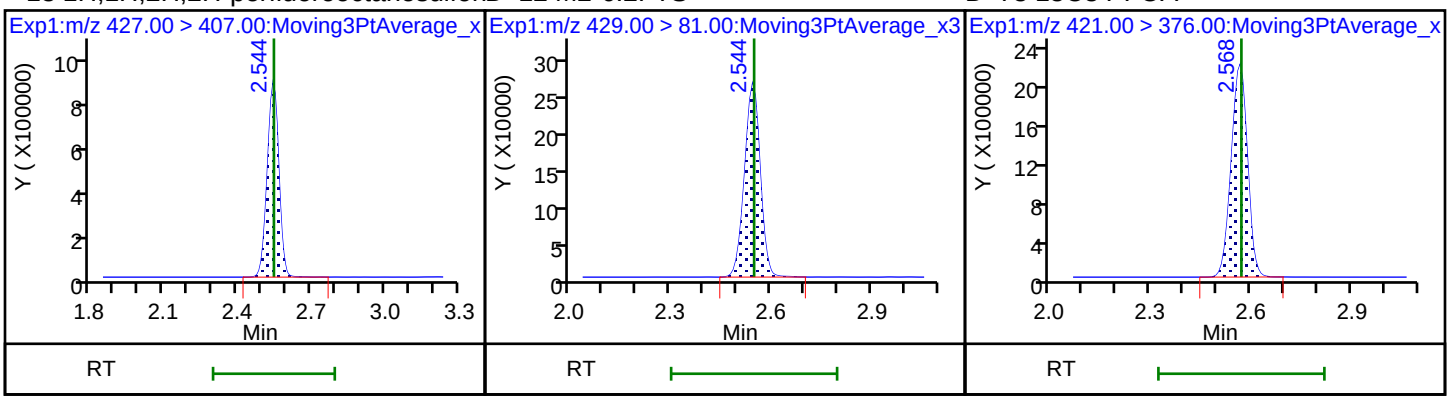
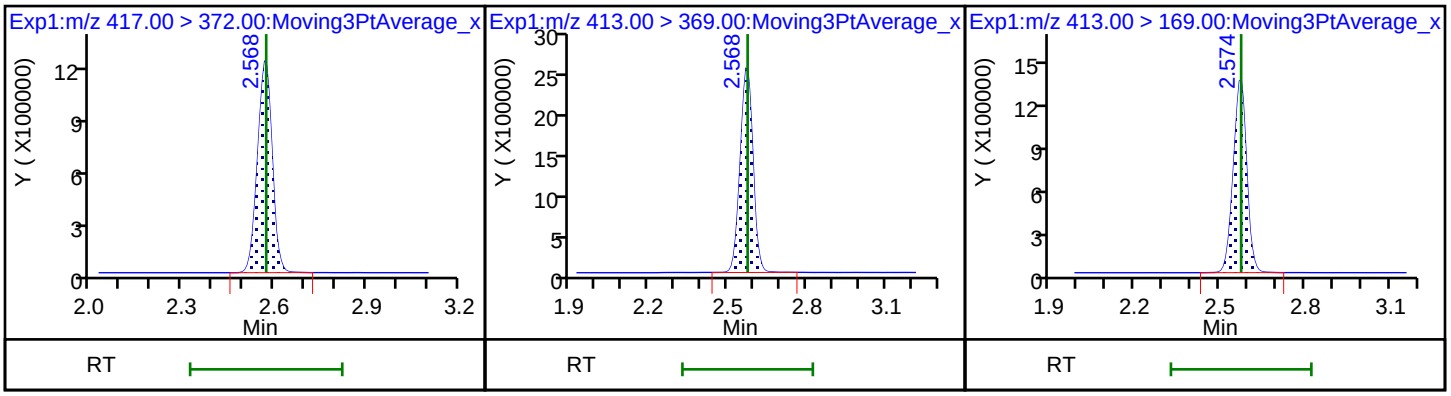


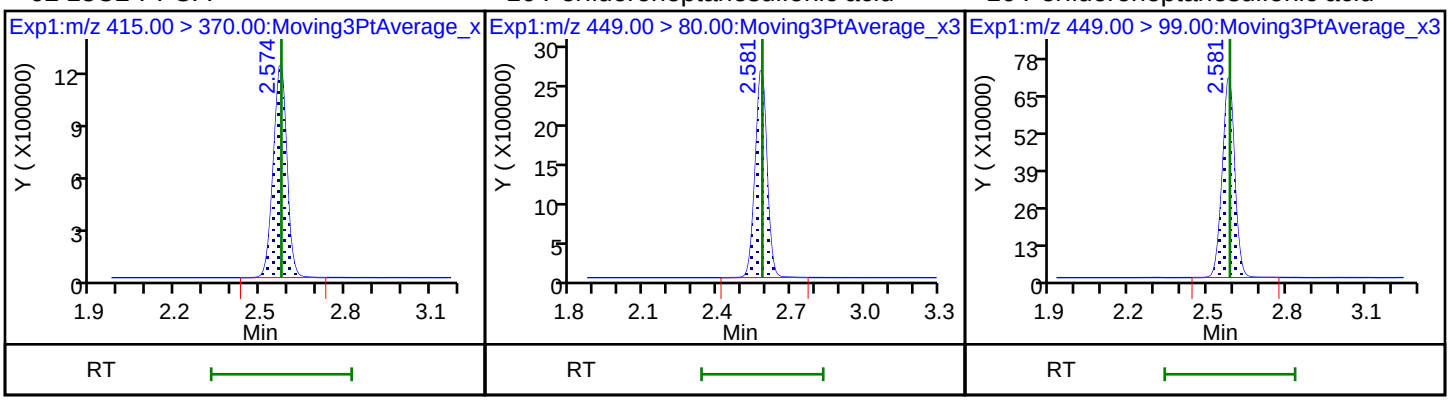
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



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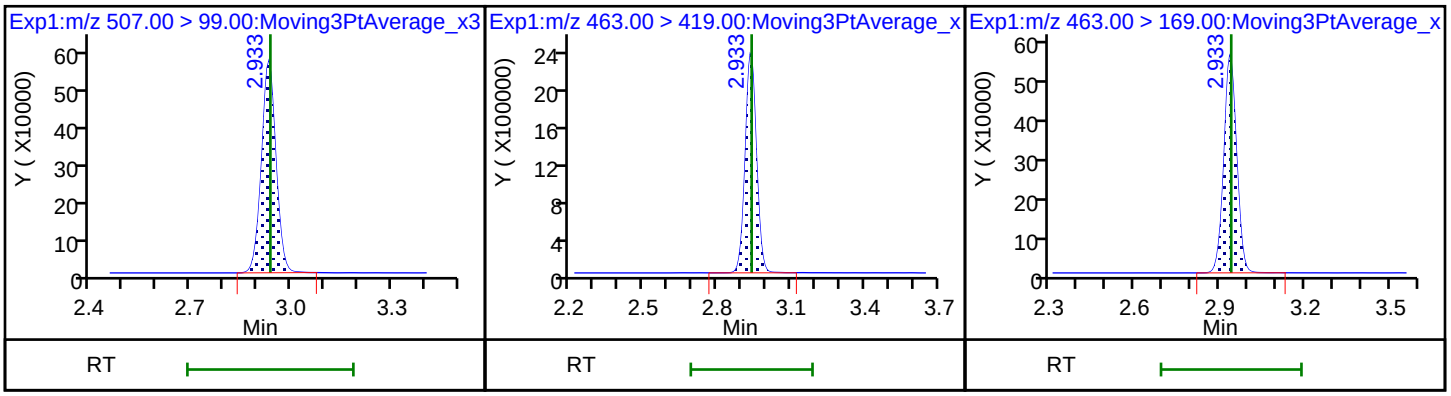

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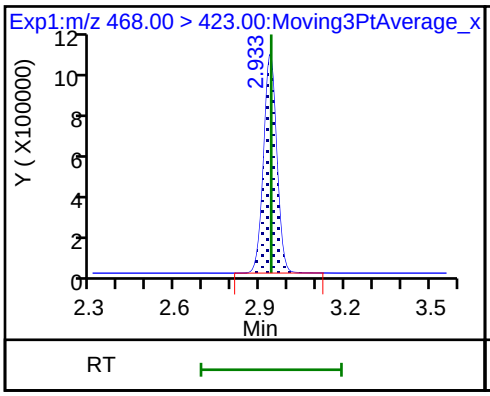

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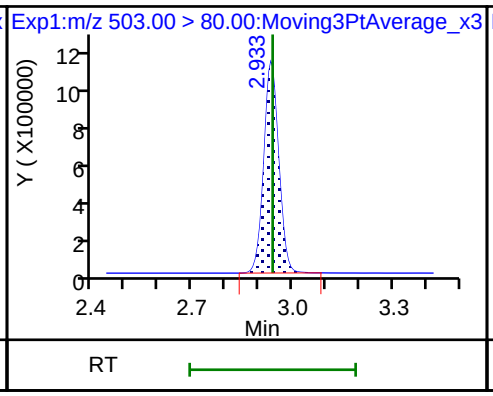
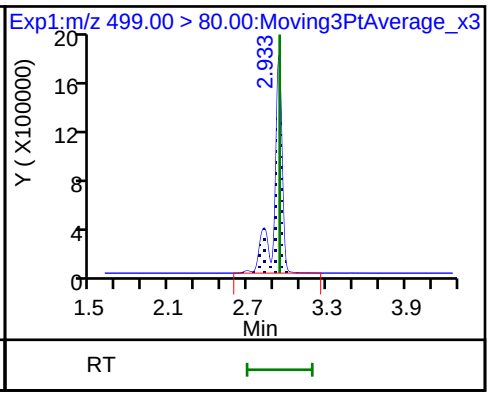
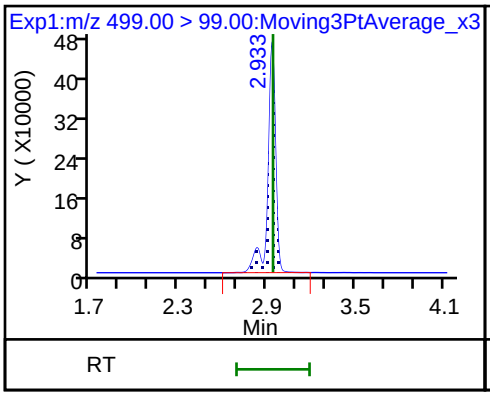


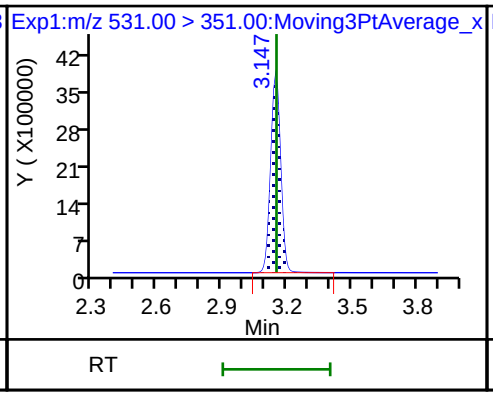
17 Perfluorooctane sulfonic acid



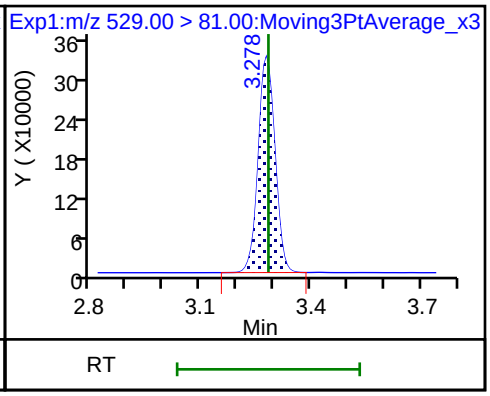
17 Perfluorooctane sulfonic acid



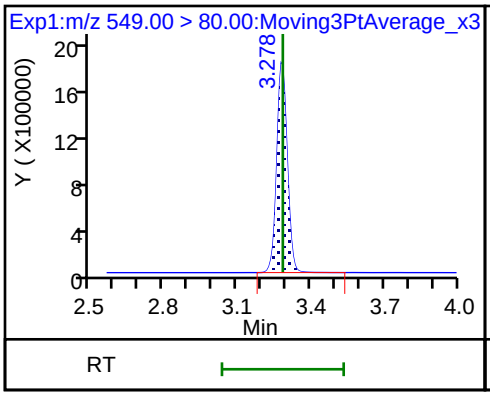
69 9-Chlorohexadecafluoro-3-oxanonane



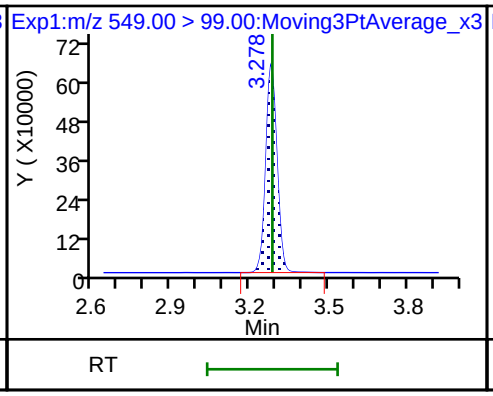
D 26 M2-8:2FTS



68 Perfluorononanesulfonic acid



68 Perfluorononanesulfonic acid



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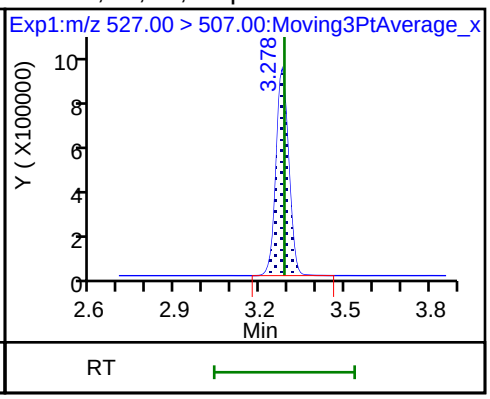
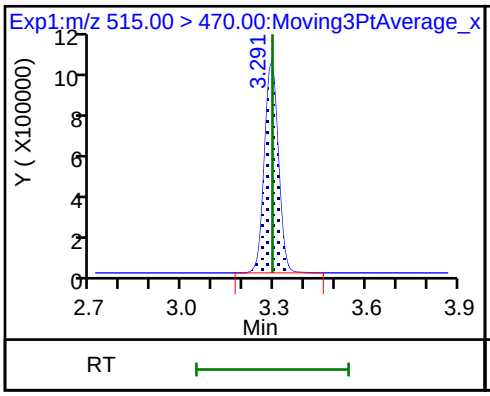
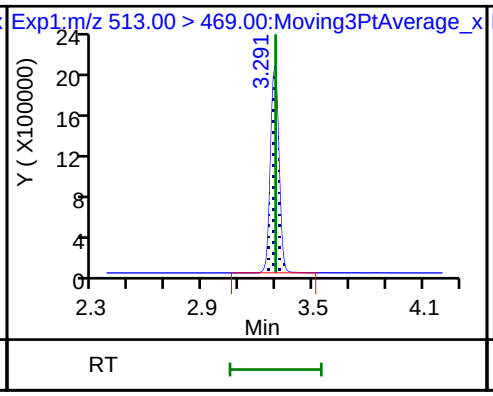


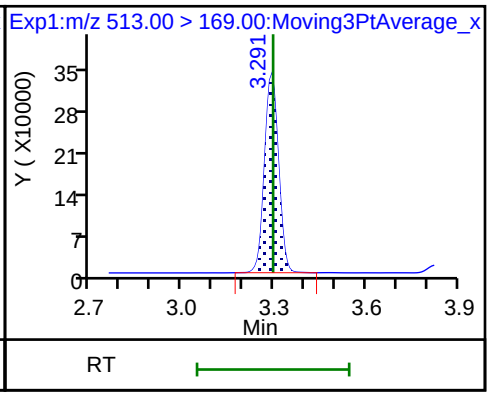
D 23 13C2 PFDA



24 Perfluorodecanoic acid



24 Perfluorodecanoic acid



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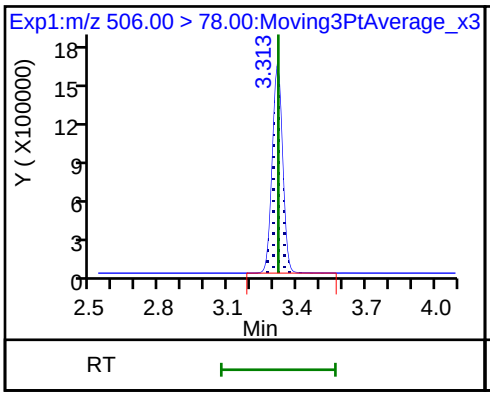
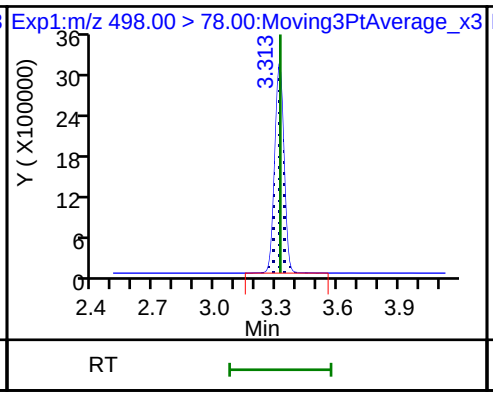
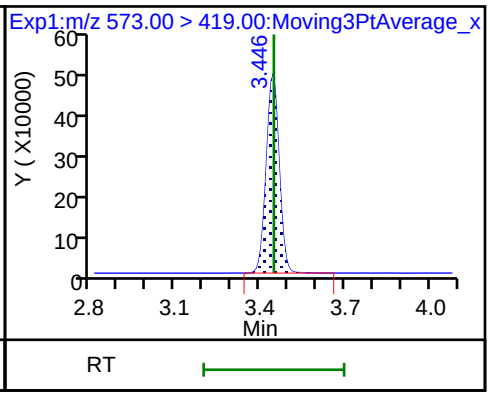


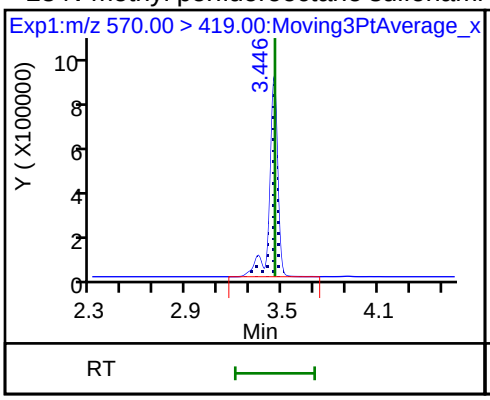
22 Perfluorooctane Sulfonamide



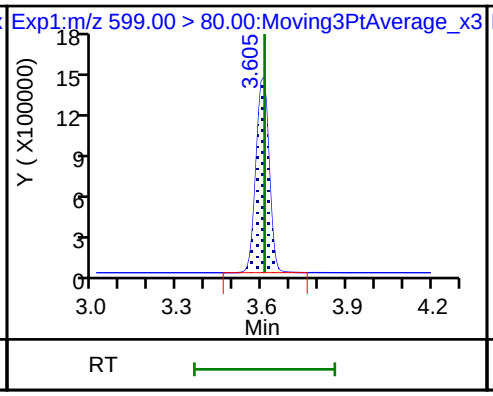
D 27 d3-NMeFOSAA



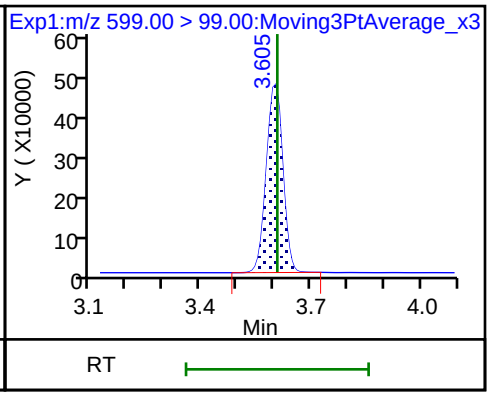
28 N-methyl perfluorooctane sulfonami



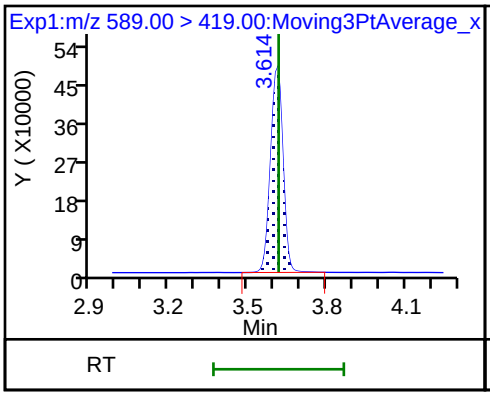
29 Perfluorodecane Sulfonic acid



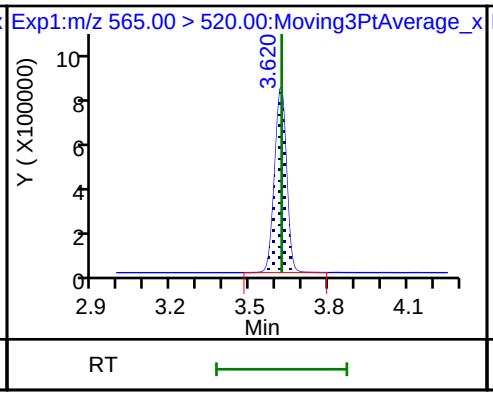
29 Perfluorodecane Sulfonic acid



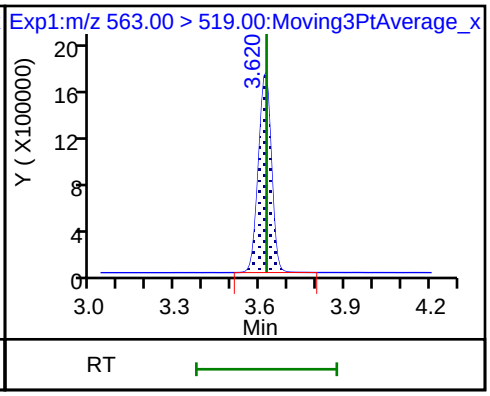
D 32 d5-NEtFOSAA



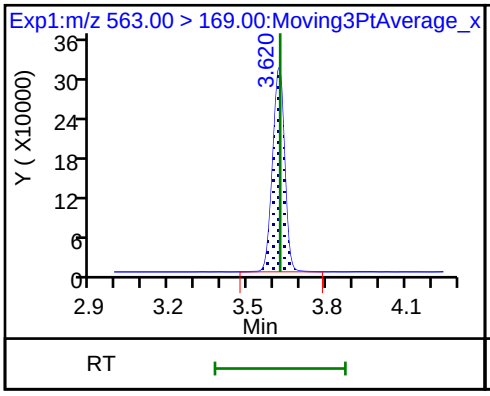
D 30 13C2 PFUnA



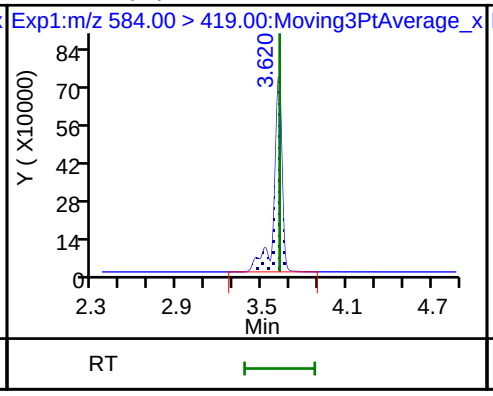
31 Perfluoroundecanoic acid



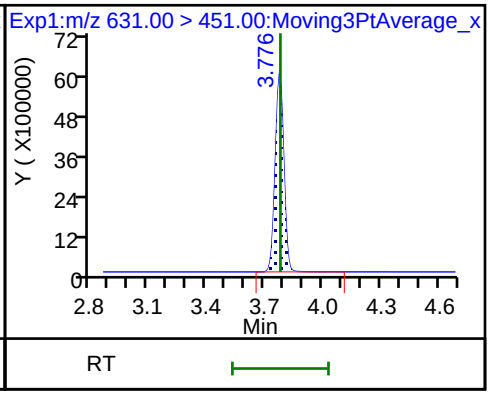
31 Perfluoroundecanoic acid



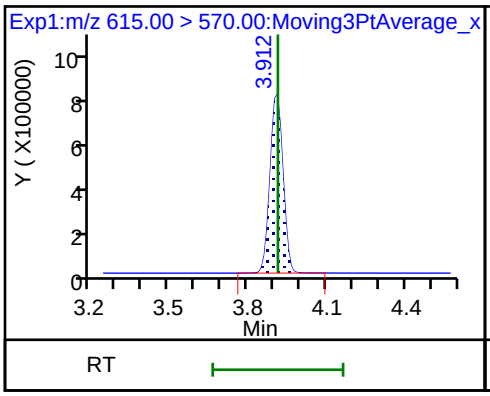
33 N-ethyl perfluorooctane sulfonamid



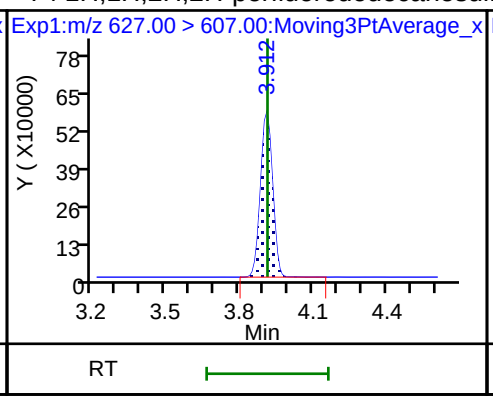
66 11-Chloroeicosafluoro-3-oxaundecan



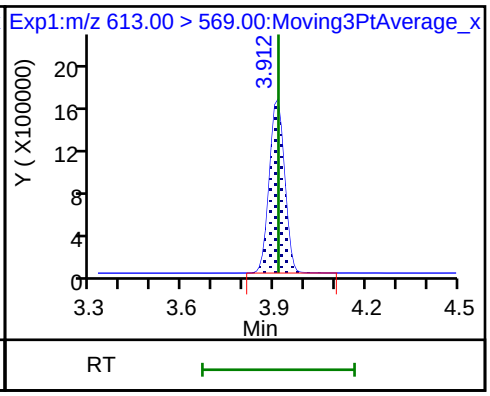
D 36 13C2 PFDoA



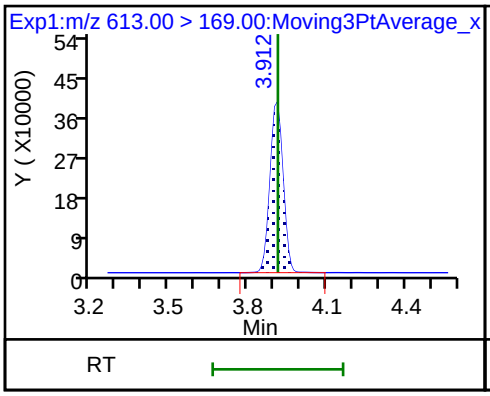
74 1H,1H,2H,2H-perfluorododecanesulfo



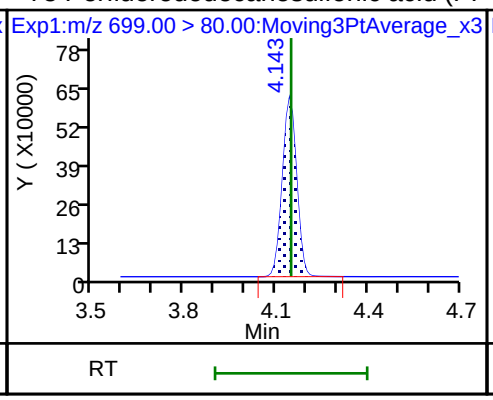
37 Perfluorododecanoic acid



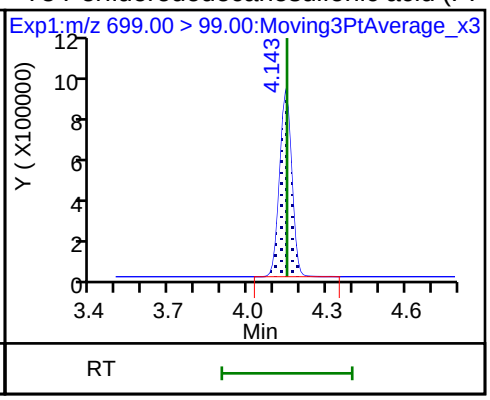
37 Perfluorododecanoic acid



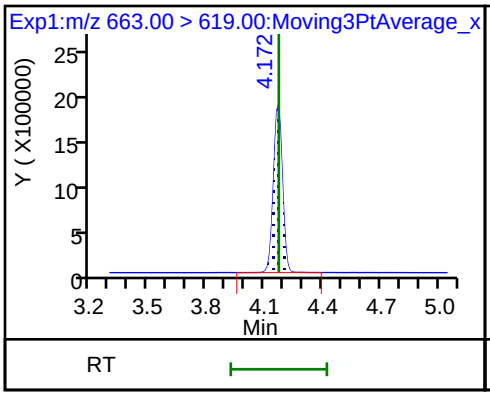
75 Perfluorododecanesulfonic acid (PF



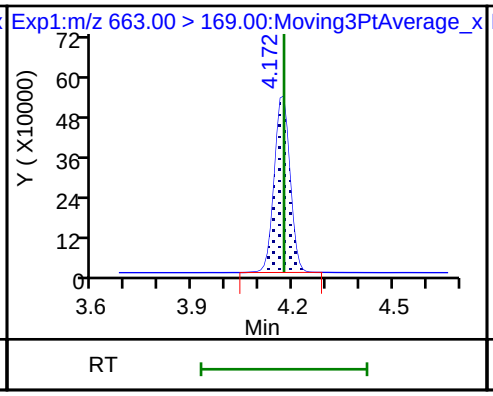
75 Perfluorododecanesulfonic acid (PF



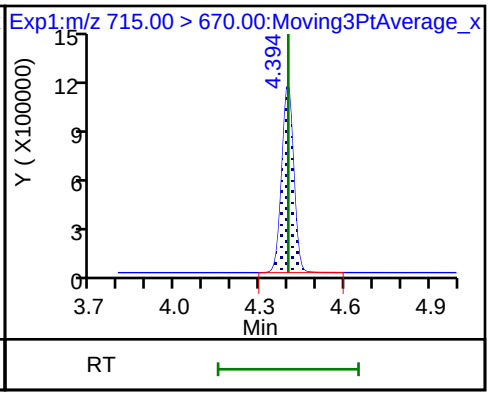
41 Perfluorotridecanoic acid



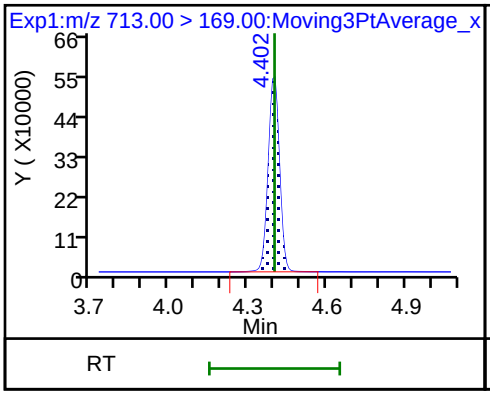
41 Perfluorotridecanoic acid



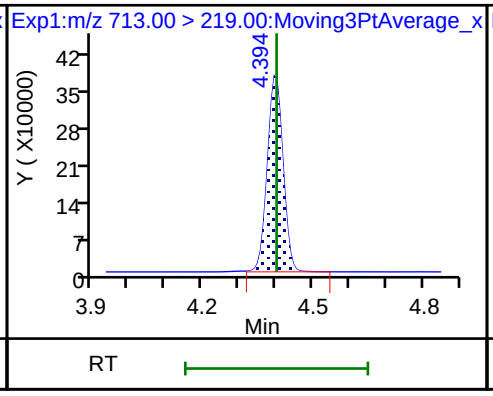
D 43 13C2-PFTeDA



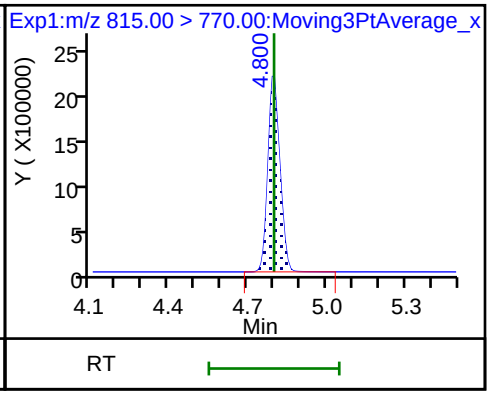
42 Perfluorotetradecanoic acid



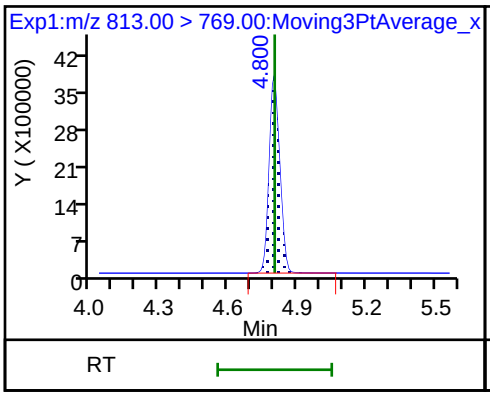
42 Perfluorotetradecanoic acid



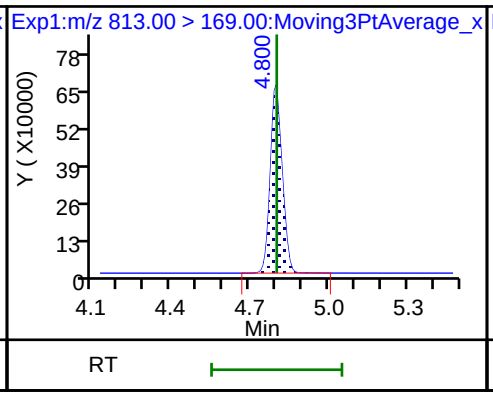
D 44 13C2-PFHxDA



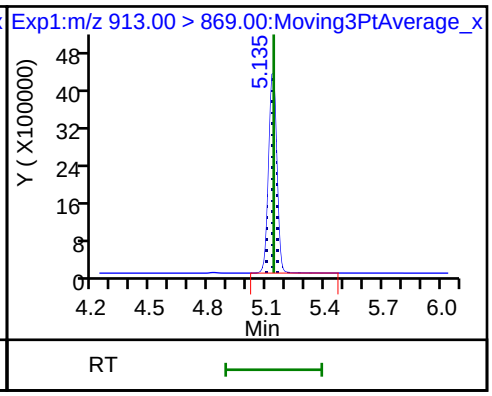
45 Perfluorohexadecanoic acid



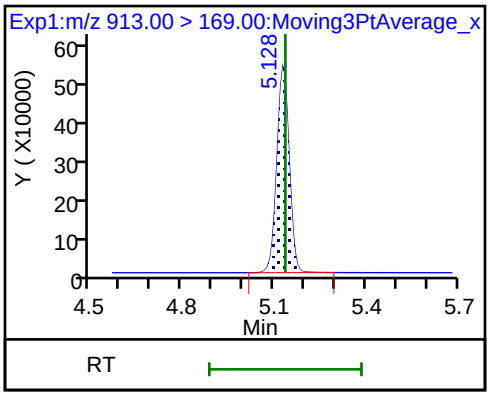
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Aug-2018 11:56:59 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: L7-FULL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:27 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:40:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.393	1.395	-0.002	0.543	5373122	2.59		104	8955	
2 Perfluorobutyric acid										
212.90 > 169.00	1.398	1.397	0.001	1.004	19976933	9.90		99.0	2232	
D 3 13C5-PFPeA										
267.90 > 223.00	1.636	1.639	-0.003	0.637	3665379	2.57		103	10131	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.643	1.643	0.0	1.005	16137329	9.67		96.7	1088	
D 47 13C3-PFBS										
301.90 > 83.00	1.675	1.675	0.0	0.653	80382	2.43		105	383	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.675	1.676	-0.001	1.000	21980500	8.37		94.7	5584	
298.90 > 99.00	1.675	1.676	-0.001	1.000	9699800		2.27(1.25-3.74)	94.7	4353	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.872	1.875	-0.003	1.117	5031154	8.78		94.0	19015	
D 60 M2-4:2FTS										
329.00 > 81.00	1.872	1.875	-0.003	0.729	526817	2.24		95.9	662	
D 7 13C2 PFHxA										
315.00 > 270.00	1.907	1.908	-0.001	0.743	4032113	2.49		99.5	6971	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.907	1.908	-0.001	1.000	16015982	9.73		97.3	3097	
313.00 > 119.00	1.907	1.908	-0.001	1.000	1512000		10.59(5.03-15.10)	97.3	4252	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.928	1.930	-0.002	1.151	20439230	8.58		91.4	14928	
349.00 > 99.00	1.928	1.930	-0.002	1.151	8089990		2.53(1.36-4.07)	91.4	6469	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.001	2.003	-0.002	1.000	3129271	9.92		99.2	1411	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.001	2.003	-0.002	0.779	325849	2.59		103	928	
D 9 13C4-PFHpA										
367.00 > 322.00	2.227	2.227	0.0	0.867	3899256	2.44		97.8	10839	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.227	2.228	-0.001	1.000	16791846	10.1		101	2753	
363.00 > 169.00	2.227	2.228	-0.001	1.000	6618023		2.54(1.13-3.40)	101	6159	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.236	2.239	-0.003	1.000	18945578	8.66		95.2	5842	
399.00 > 99.00	2.236	2.239	-0.003	1.000	6725945		2.82(1.50-4.49)	95.2	3280	
D 11 18O2 PFHxS										
403.00 > 84.00	2.236	2.239	-0.003	0.871	4771422	2.33		98.7	7147	
65 ADONA										
377.00 > 251.00	2.269	2.271	-0.002	0.774	37729670	8.46		84.6	19741	
377.00 > 85.00	2.269	2.271	-0.002	0.774	24564041		1.54(0.84-2.53)	84.6	8345	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.544	2.548	-0.004	1.000	5013052	9.72		103	5460	
D 12 M2-6:2FTS										
429.00 > 81.00	2.544	2.549	-0.005	0.991	778460	2.32		97.7	2269	
D 73 13C8 PFOA										
421.00 > 376.00	2.567	2.571	-0.004	1.000	6892356	2.39		97.6	15661	
D 14 13C4 PFOA										
417.00 > 372.00	2.567	2.573	-0.006	1.000	3722009	2.54		102	8195	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.574	2.574	0.0	1.003	15733520	9.35		93.4	1426	
413.00 > 169.00	2.567	2.574	-0.007	1.000	8441832		1.86(0.84-2.52)	93.4	6654	
* 62 13C2-PFOA										
415.00 > 370.00	2.567	2.575	-0.008		3743332	2.50			5893	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.581	2.583	-0.002	0.880	15722427	9.23		96.9	5659	
449.00 > 99.00	2.581	2.583	-0.002	0.880	4425328		3.55(1.94-5.82)	96.9	3345	
D 72 13C8 PFOS										
507.00 > 99.00	2.933	2.938	-0.005	1.142	1541520	2.36		98.8	4287	
D 18 13C4 PFOS										
503.00 > 80.00	2.933	2.939	-0.006	1.142	3286355	2.45		102	3679	
D 19 13C5 PFNA										
468.00 > 423.00	2.933	2.939	-0.006	1.142	3213782	2.45		97.9	5714	
20 Perfluorononanoic acid										
463.00 > 419.00	2.933	2.939	-0.006	1.000	13269892	9.80		98.0	3367	
463.00 > 169.00	2.939	2.939	0.0	1.002	3365018		3.94(1.90-5.69)	98.0	6693	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.939	2.940	-0.001	1.002	13677354	9.26		99.8	4268	
499.00 > 99.00	2.939	2.940	-0.001	1.002	3143905		4.35(2.31-6.93)	99.8	4772	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.146	3.150	-0.004	1.073	21558959	9.00		96.6	9734	
D 26 M2-8:2FTS										
529.00 > 81.00	3.278	3.284	-0.006	1.277	920670	2.27		94.8	3125	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.284	3.285	0.0	1.120	9847776	9.52		99.2	6966	
549.00 > 99.00	3.278	3.285	-0.006	1.118	3544459		2.78(1.33-3.97)	99.2	4072	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.278	3.286	-0.008	1.000	4806399	9.62		100	8267	
D 23 13C2 PFDA										
515.00 > 470.00	3.291	3.294	-0.003	1.282	2921735	2.54		101	4151	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.291	3.296	-0.005	1.000	11426488	9.75		97.5	5078	
513.00 > 169.00	3.291	3.296	-0.005	1.000	1895278		6.03(2.36-7.09)	97.5	380	
D 21 13C8 FOSA										
506.00 > 78.00	3.313	3.317	-0.004	1.290	4531636	2.55		102	5690	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.320	3.319	0.001	1.002	16995473	9.63		96.3	5922	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.446	3.448	-0.002	1.342	1491160	2.53		101	3267	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.446	3.453	-0.007	1.000	5898014	10.3		103	2718	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.605	3.608	-0.003	1.229	8074266	9.29		96.4	7721	
599.00 > 99.00	3.605	3.608	-0.003	1.229	2686974		3.00(1.39-4.16)	96.4	3936	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.613	3.616	-0.003	1.407	1403844	2.30		92.0	1026	
D 30 13C2 PFUnA										
565.00 > 520.00	3.613	3.620	-0.007	1.407	2281933	2.46		98.5	3233	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.620	3.622	-0.002	1.002	9915678	9.67		96.7	4400	
563.00 > 169.00	3.613	3.622	-0.009	1.000	1720527		5.76(2.12-6.36)	96.7	3803	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.620	3.623	-0.003	1.002	5094367	10.2		102	3513	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.776	3.781	-0.005	1.287	30579411	8.32		88.3	12956	
35 MeFOSA										
512.00 > 169.00	3.825	3.826	-0.001		5720935	NC			1392	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.911	3.913	-0.002	1.000	10658790	9.88		98.8	3649	
613.00 > 169.00	3.911	3.913	-0.002	1.000	2518515		4.23(2.13-6.40)	98.8	5134	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.911	3.913	-0.002	1.193	3456093	9.98		104	4921	
D 36 13C2 PFDoA										
615.00 > 570.00	3.911	3.913	-0.002	1.523	2422707	2.47		98.9	3347	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.142	4.148	-0.006	1.412	3692356	9.67		99.9	8127	
699.00 > 99.00	4.142	4.148	-0.006	1.412	5250911		0.70(0.00-0.00)	99.9	7654	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.171	4.173	-0.002	1.066	10067689	9.66		96.6	2777	
663.00 > 169.00	4.171	4.173	-0.002	1.066	3084095		3.26(1.25-3.76)	96.6	5037	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.399	-0.005	1.711	3074334	2.46		98.5	5617	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.394	4.400	-0.006	1.000	3032661	10.2		102	6149	
713.00 > 219.00	4.394	4.400	-0.006	1.000	2077180		1.46(0.71-2.13)	102	5141	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.792	4.799	-0.007	1.866	6197635	2.50		100	8201	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.792	4.801	-0.009	1.000	20527532	9.49		94.9	4806	
813.00 > 169.00	4.792	4.801	-0.009	1.000	3783975		5.42(2.86-8.58)	94.9	8314	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.127	5.136	-0.009	1.070	21448602	9.40		94.0	3703	
913.00 > 169.00	5.127	5.136	-0.009	1.070	2812581		7.63(3.83-11.48)	94.0	4640	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL7_00006 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Injection Date: 06-Aug-2018 11:56:59 Instrument ID: A8_N

Lims ID: IC L7 Full

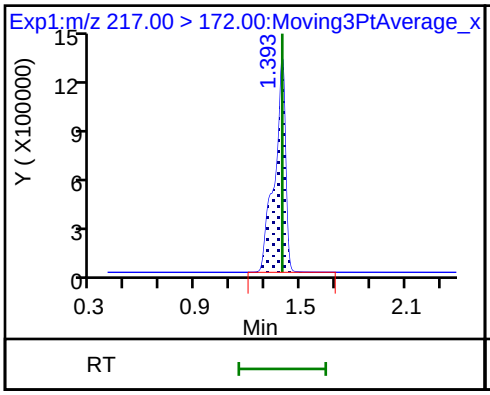
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 16 Worklist Smp#: 8

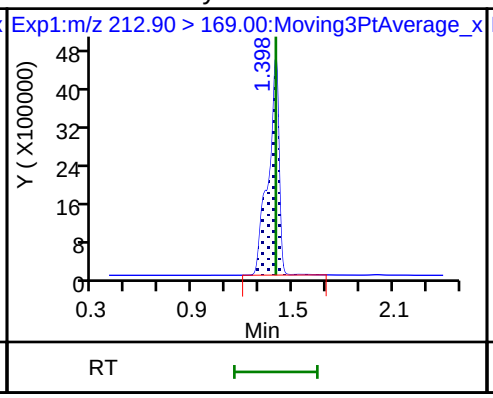
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

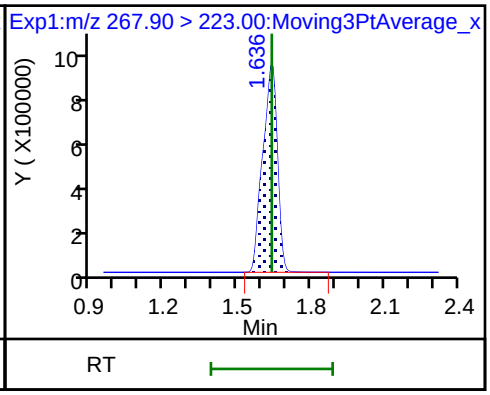
D 1 13C4 PFBA



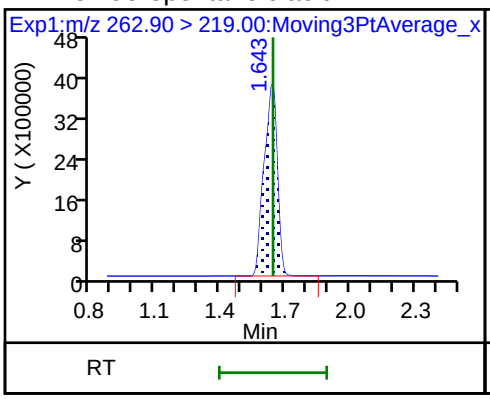
2 Perfluorobutyric acid



D 3 13C5-PFPeA



4 Perfluoropentanoic acid



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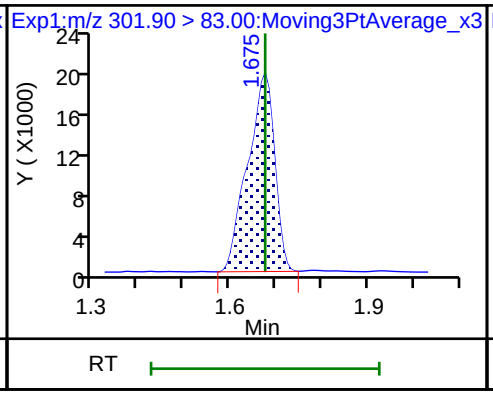
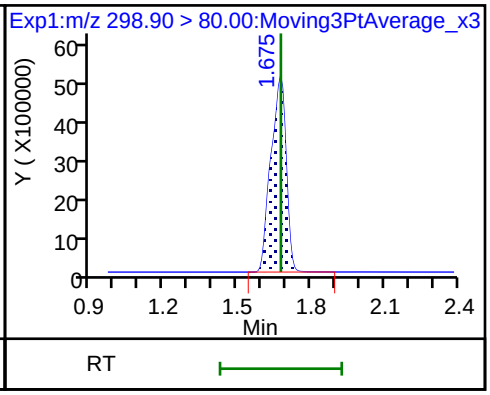


5 Perfluorobutanesulfonic acid



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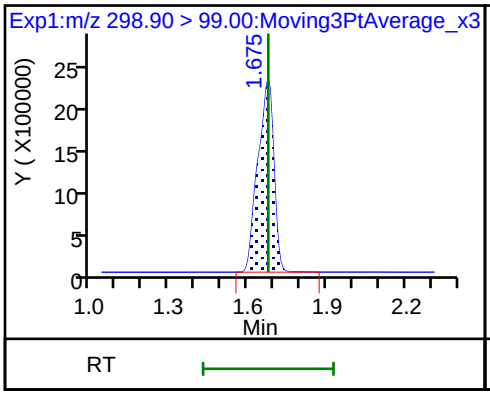
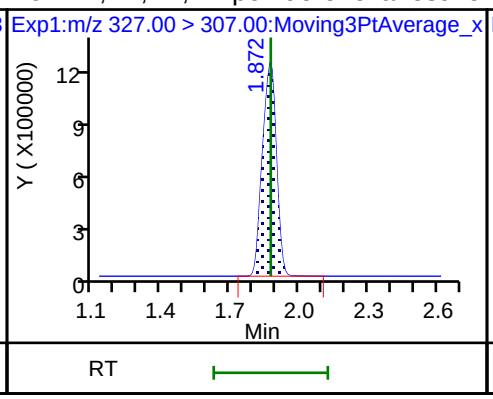


61 1H,1H,2H,2H-perfluorohexanesulfon



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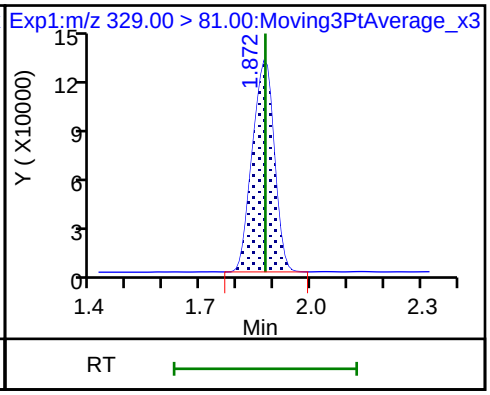

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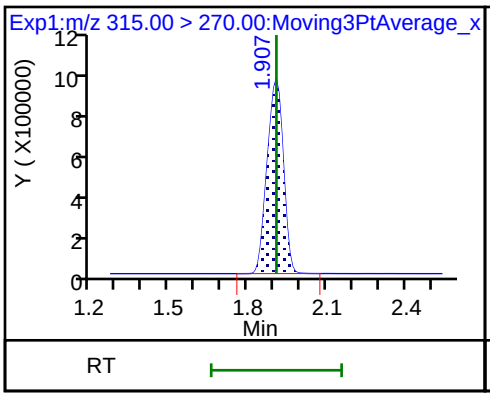

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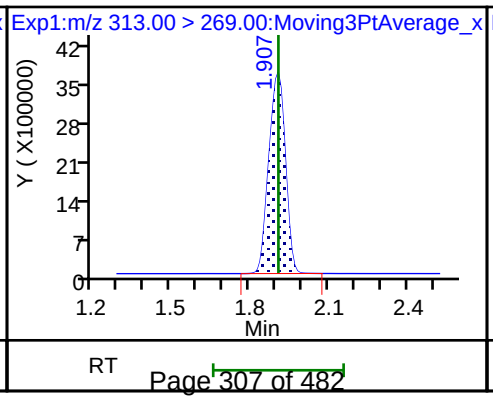
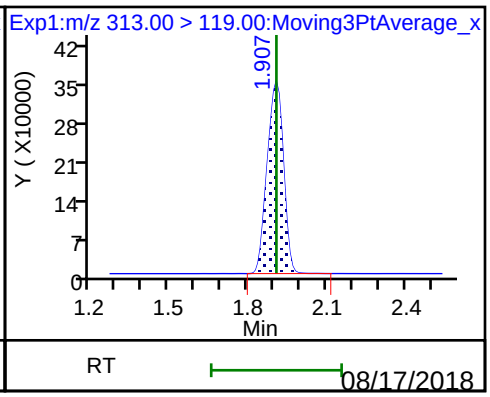
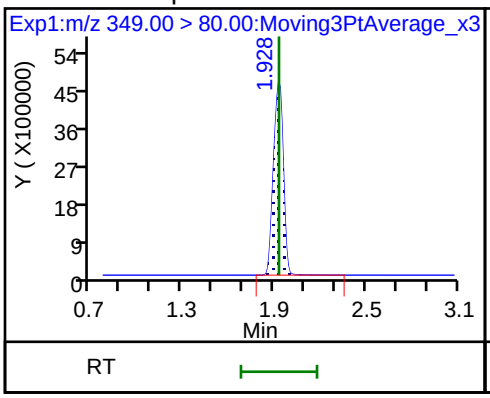


6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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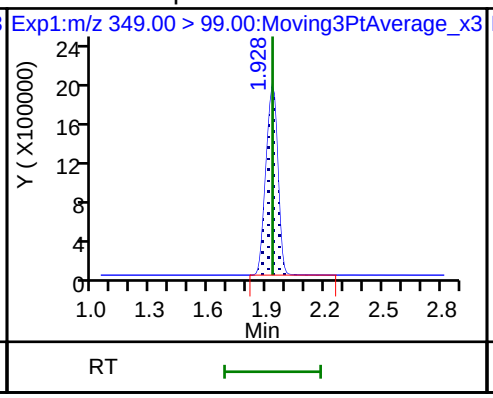
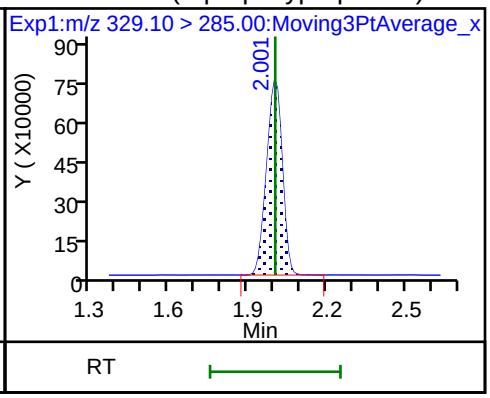
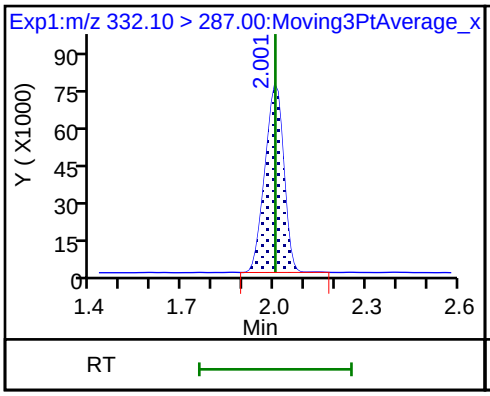


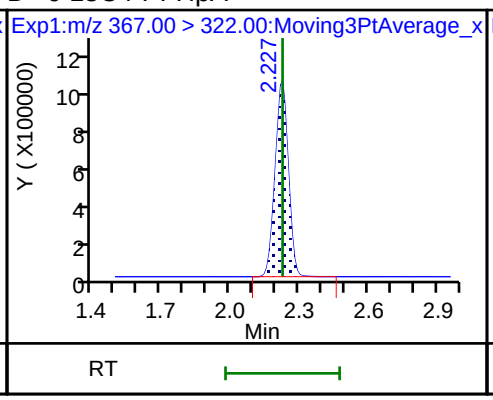
67 Perfluoro(2-propoxypropanoic) acid



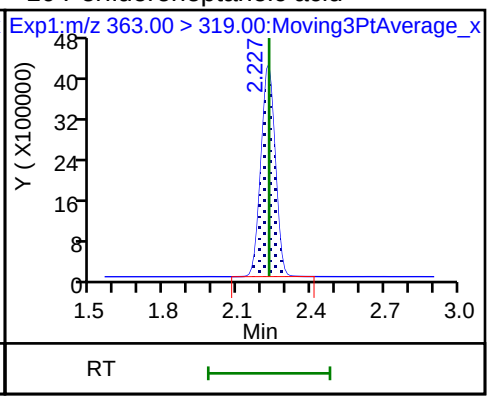
D 64 13C3 HFPO-DA



D 9 13C4-PFHpA



10 Perfluoroheptanoic acid



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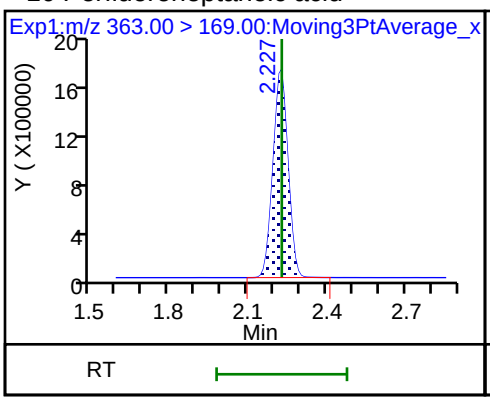

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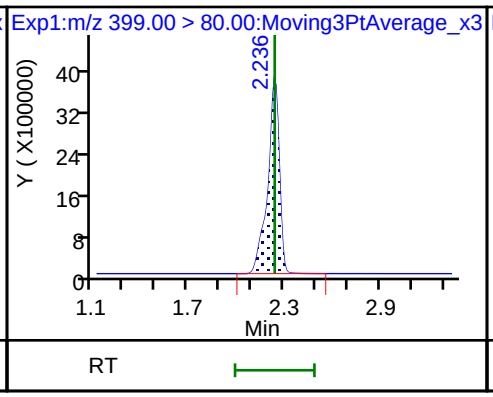

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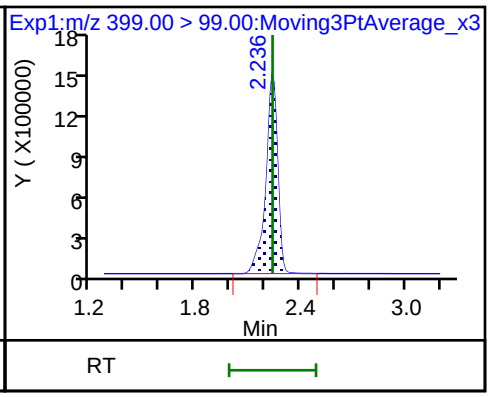
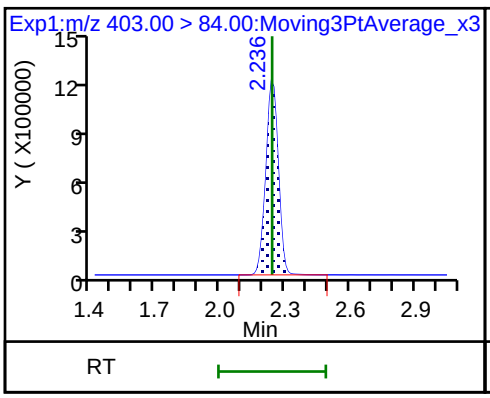


D 11 18O2 PFHxS



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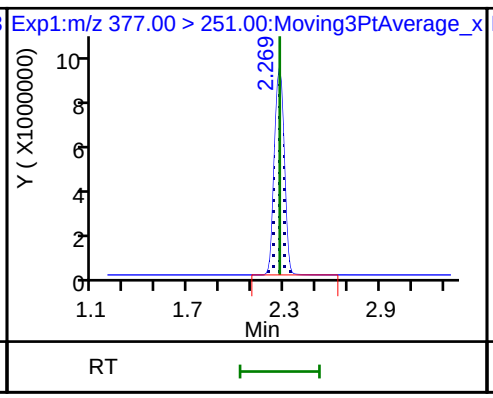

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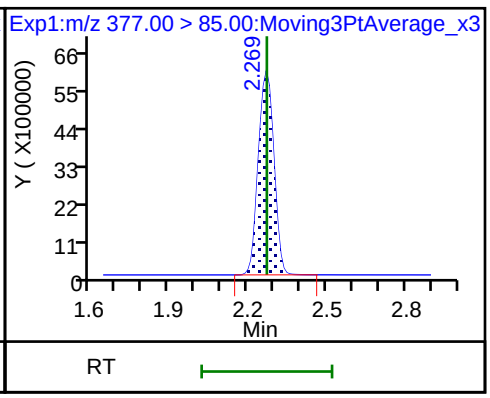
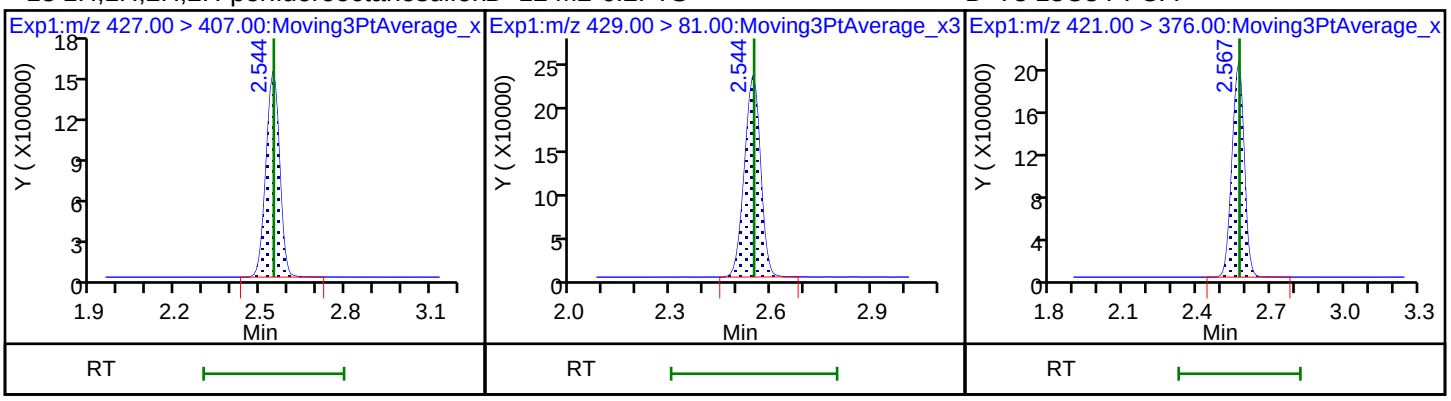
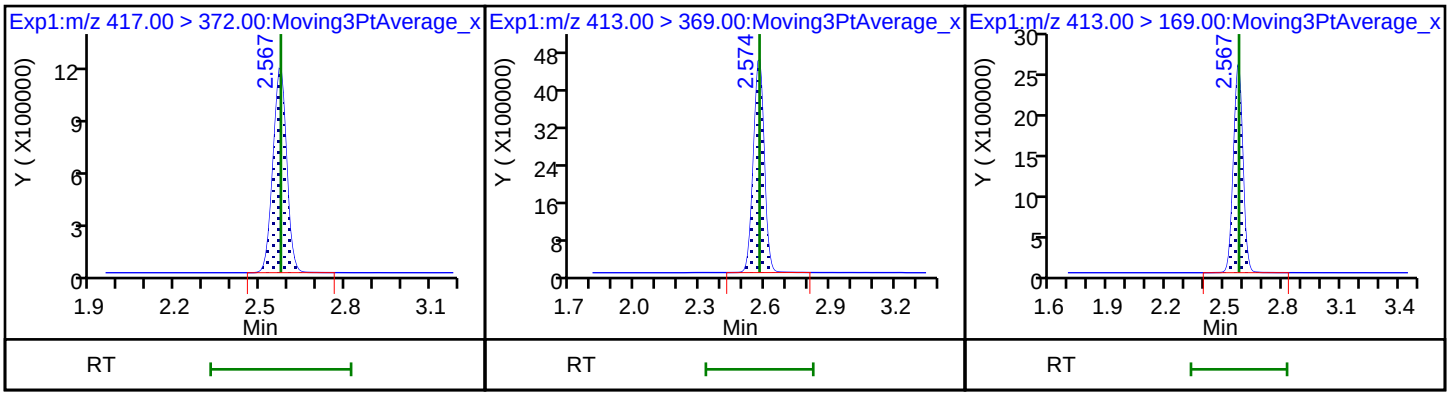


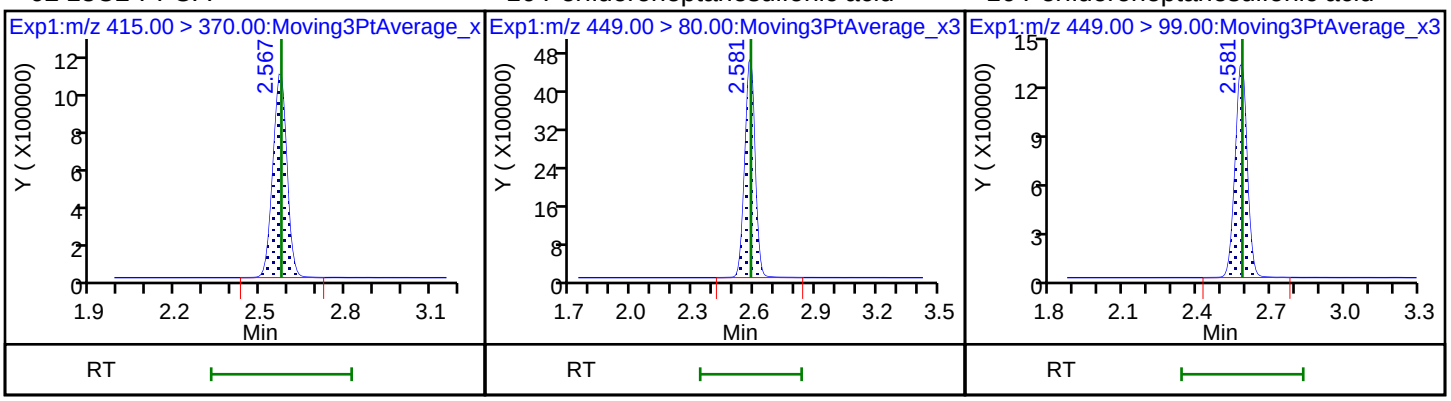
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 73 13C8 PFOA



D 14 13C4 PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



* 62 13C2-PFOA 16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid



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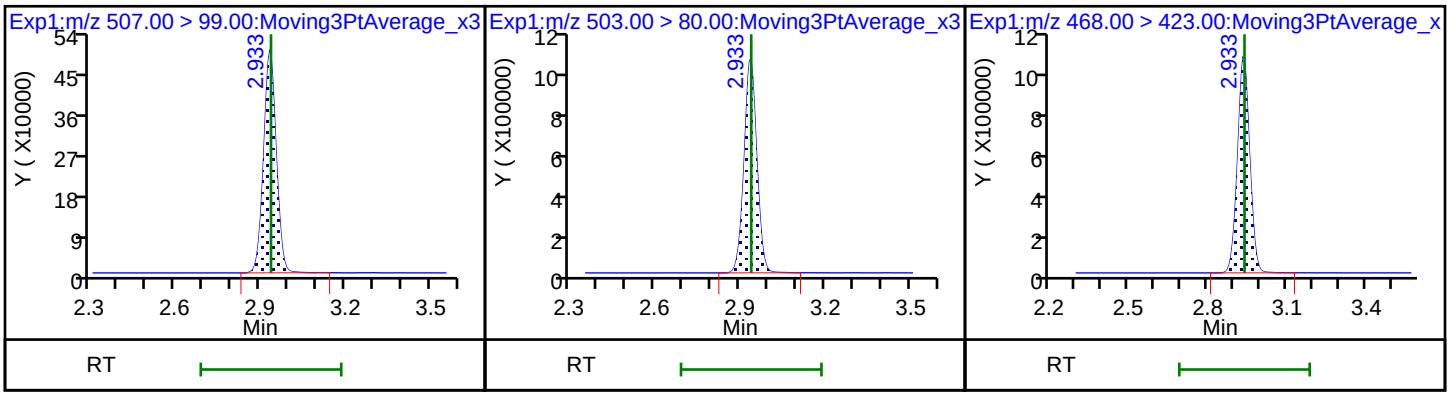
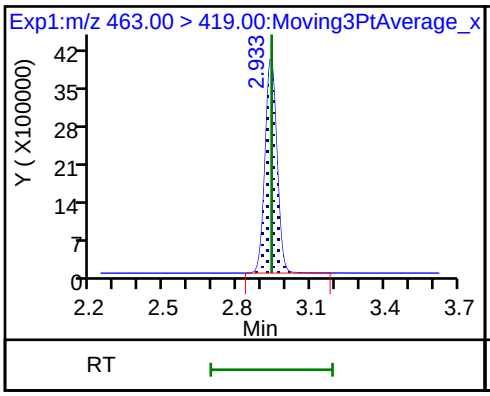


20 Perfluorononanoic acid



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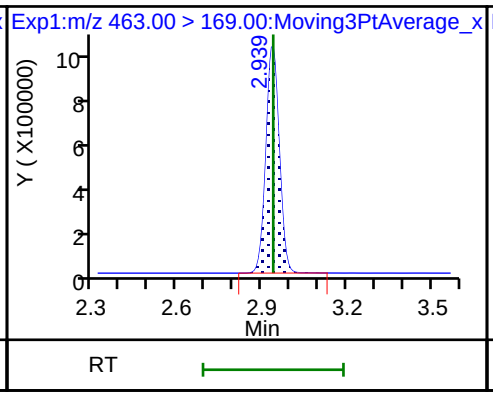
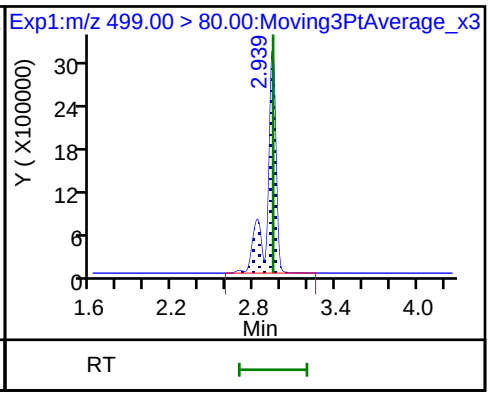
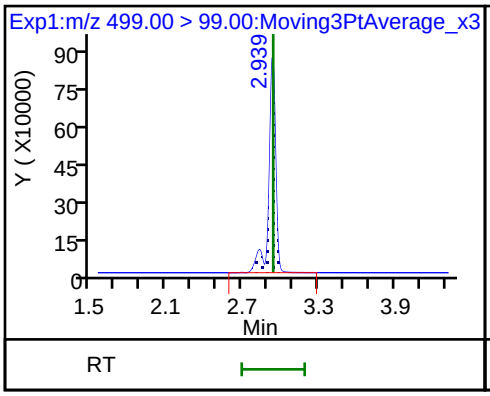


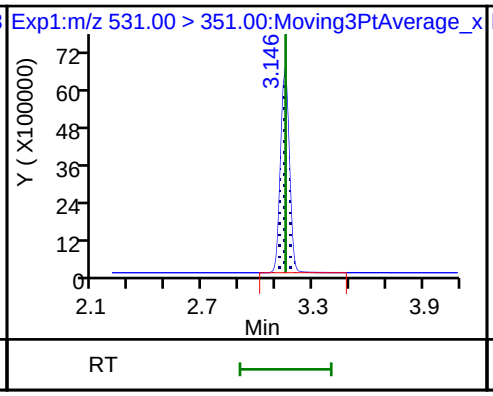
17 Perfluorooctane sulfonic acid



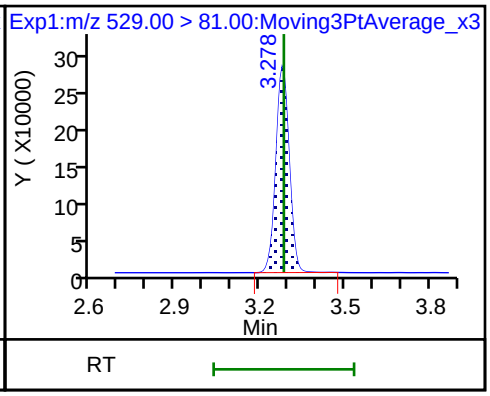
17 Perfluorooctane sulfonic acid



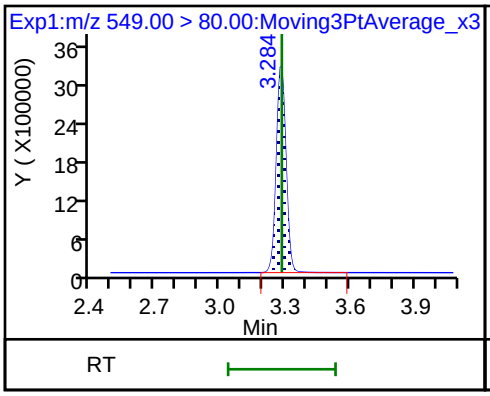
69 9-Chlorohexadecafluoro-3-oxanonane



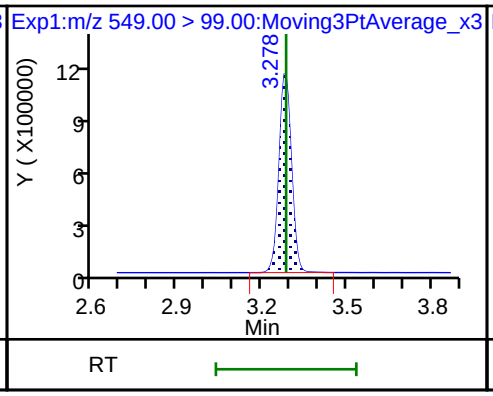
D 26 M2-8:2FTS



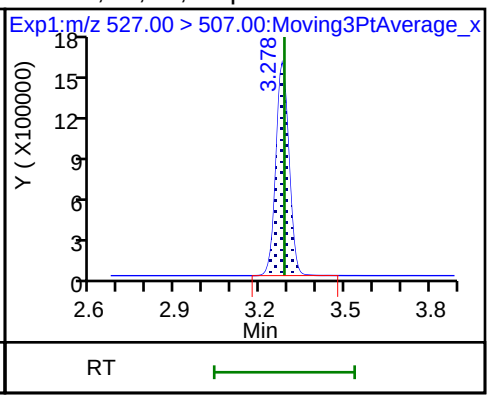
68 Perfluorononanesulfonic acid



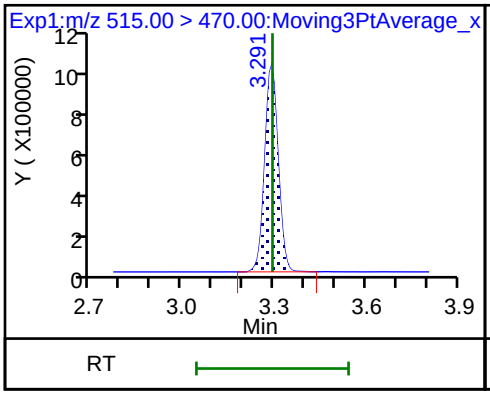
68 Perfluorononanesulfonic acid



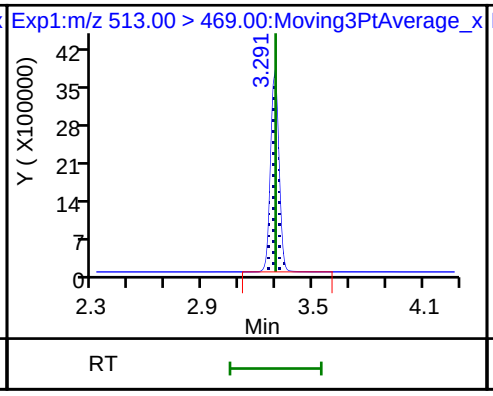
25 1H,1H,2H,2H-perfluorodecanesulfoni



D 23 13C2 PFDA



24 Perfluorodecanoic acid



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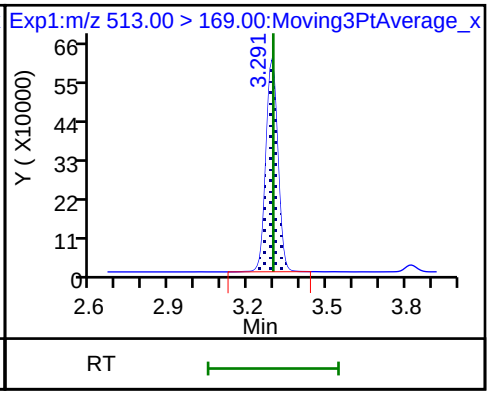
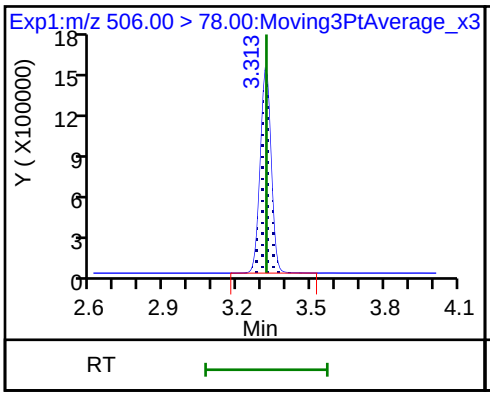
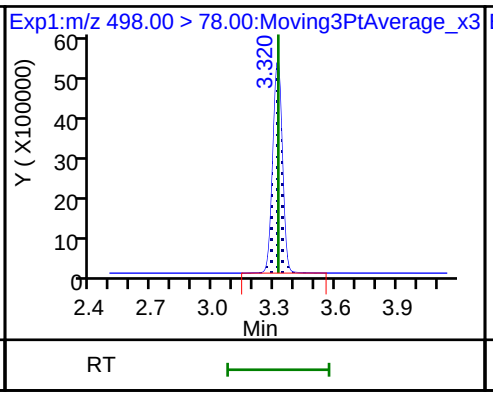


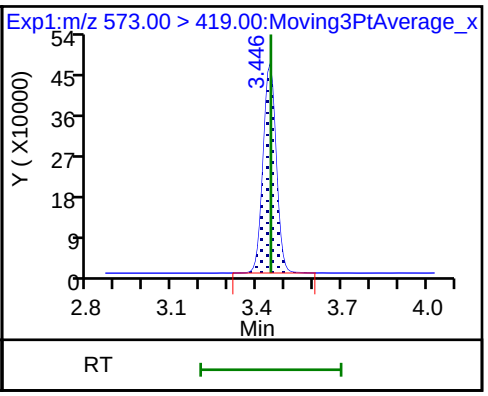
D 21 13C8 FOSA



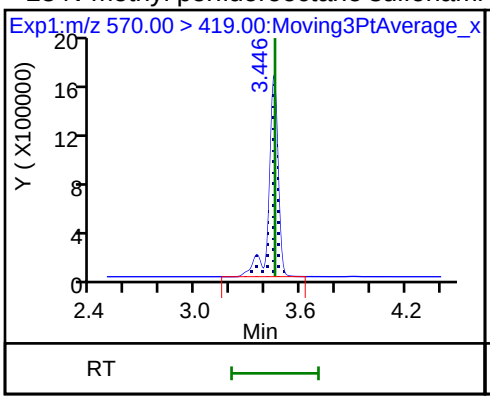
22 Perfluorooctane Sulfonamide



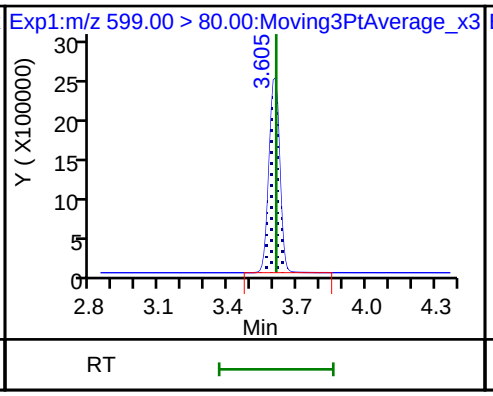
D 27 d3-NMeFOSAA



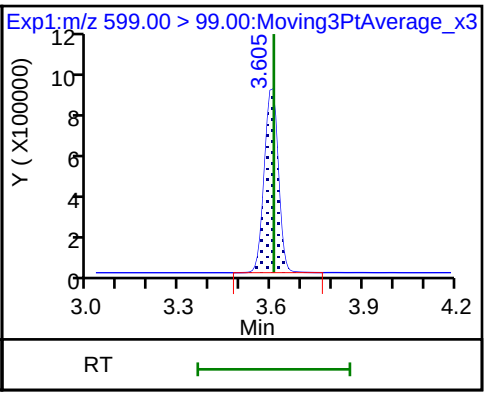
28 N-methyl perfluorooctane sulfonami



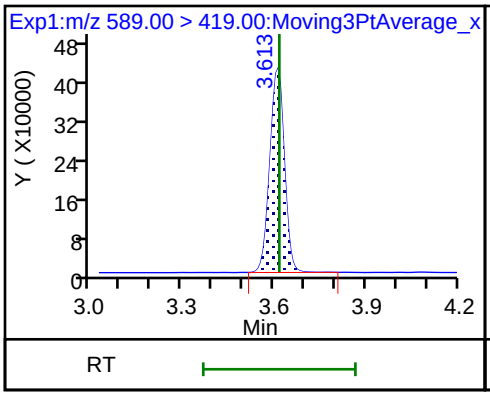
29 Perfluorodecane Sulfonic acid



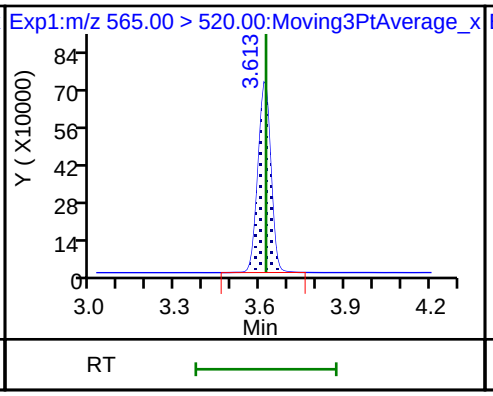
29 Perfluorodecane Sulfonic acid



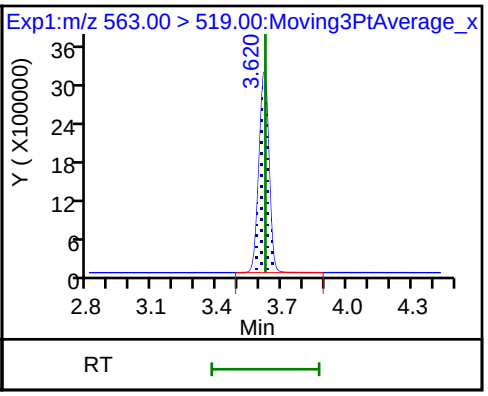
D 32 d5-NEtFOSAA



D 30 13C2 PFUnA



31 Perfluoroundecanoic acid



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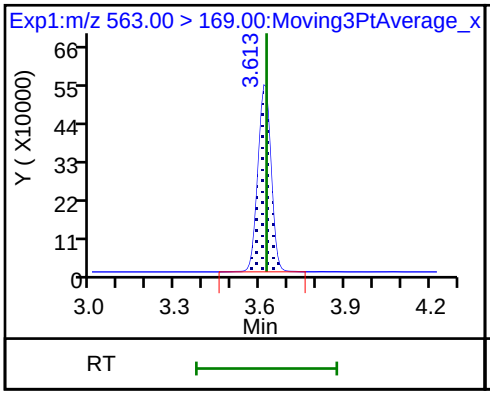
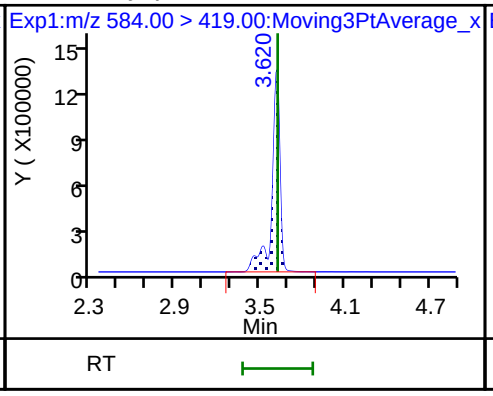
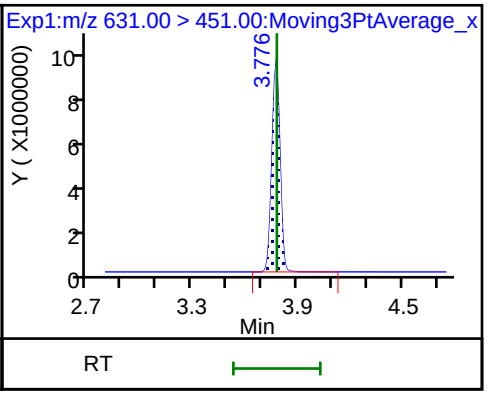


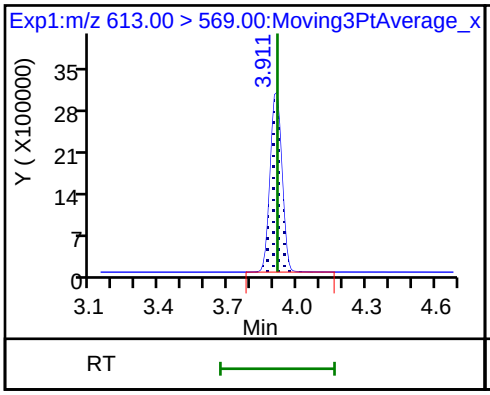
33 N-ethyl perfluorooctane sulfonamid



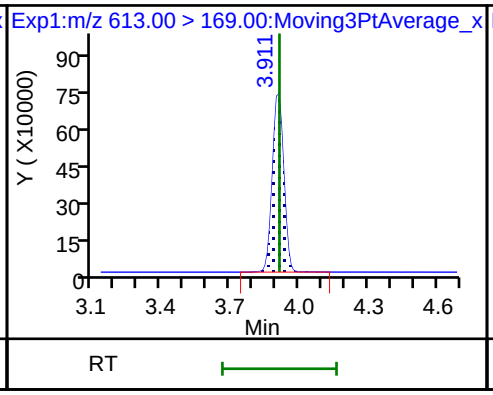
66 11-Chloroeicosafluoro-3-oxaundecan



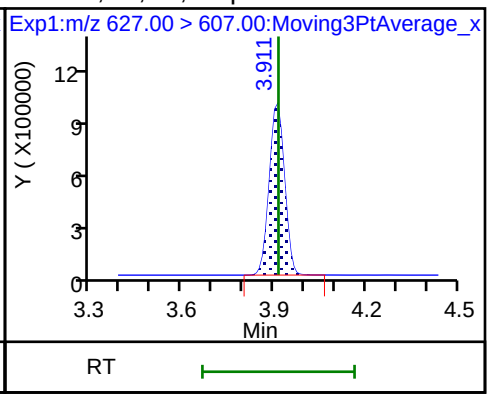
37 Perfluorododecanoic acid



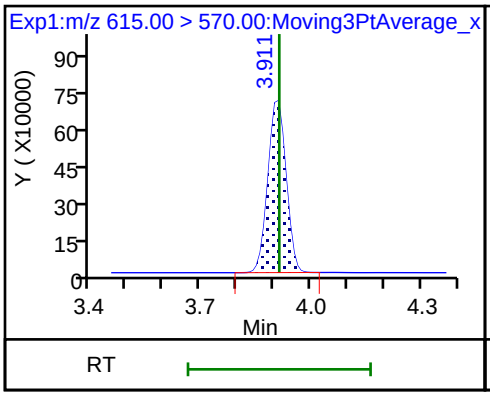
37 Perfluorododecanoic acid



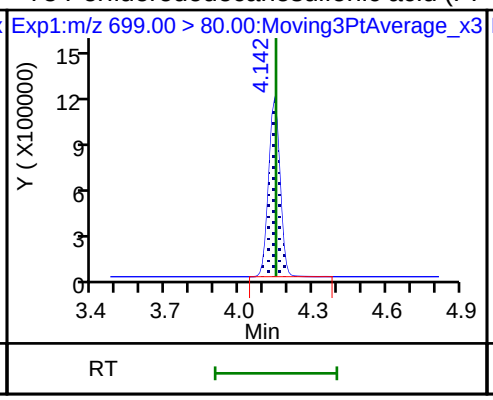
74 1H,1H,2H,2H-perfluorododecanesulfo



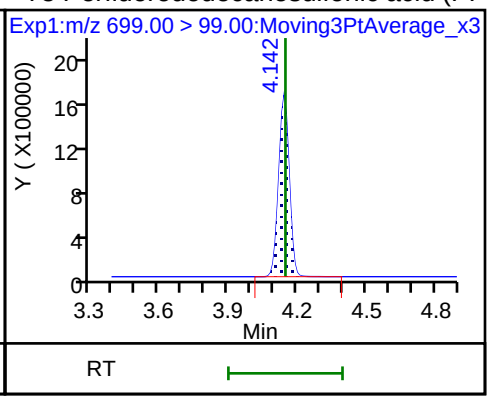
D 36 13C2 PFDoA



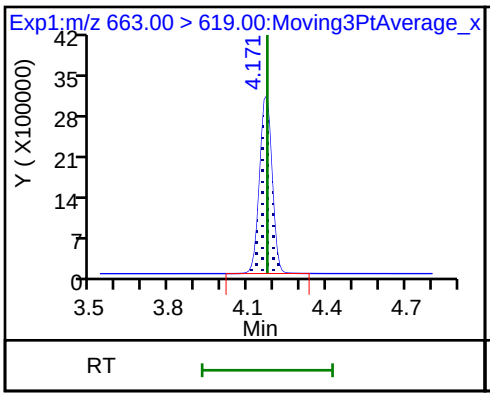
75 Perfluorododecanesulfonic acid (PF



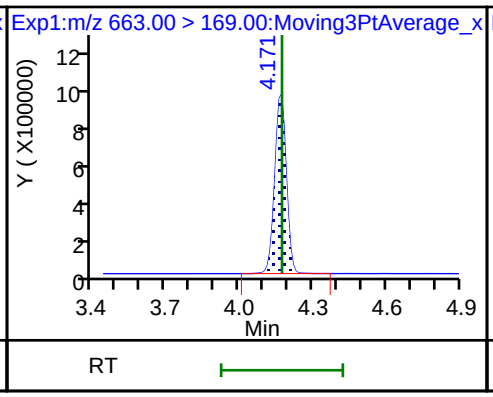
75 Perfluorododecanesulfonic acid (PF



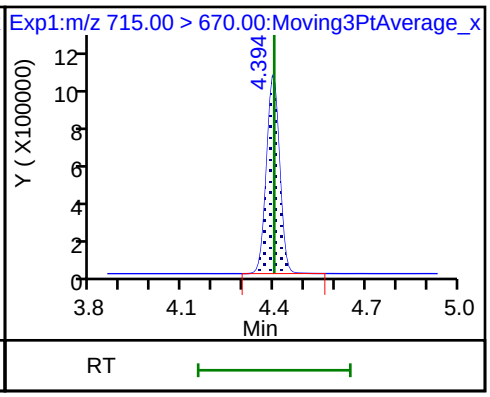
41 Perfluorotridecanoic acid



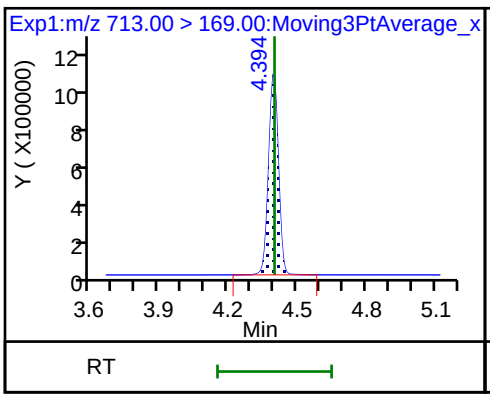
41 Perfluorotridecanoic acid



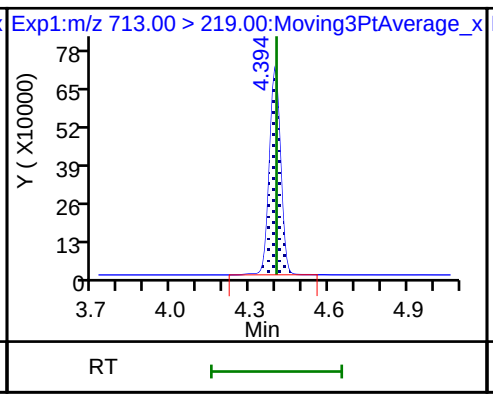
D 43 13C2-PFTeDA



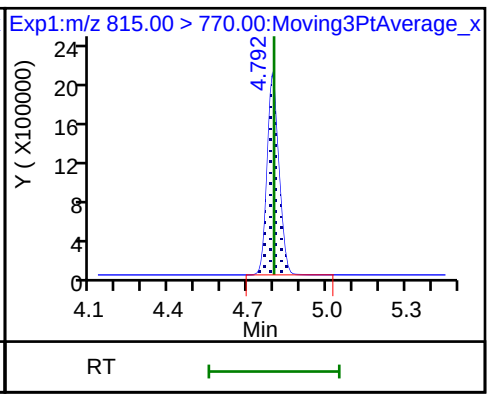
42 Perfluorotetradecanoic acid



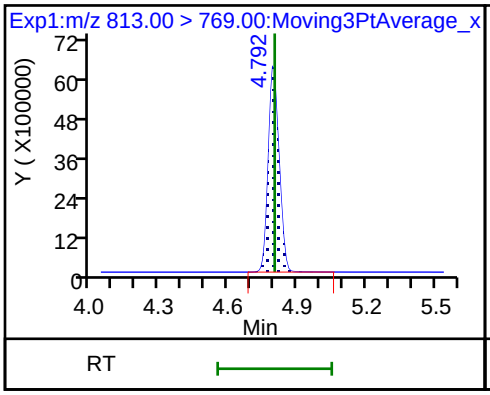
42 Perfluorotetradecanoic acid



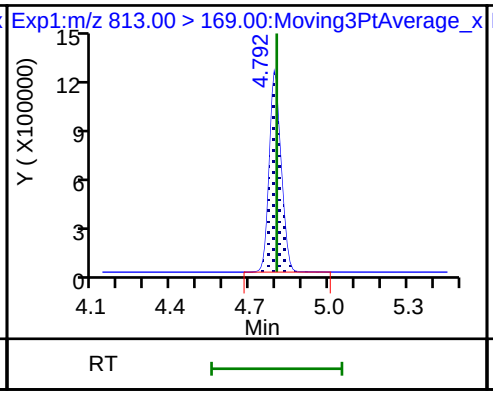
D 44 13C2-PFHxDA



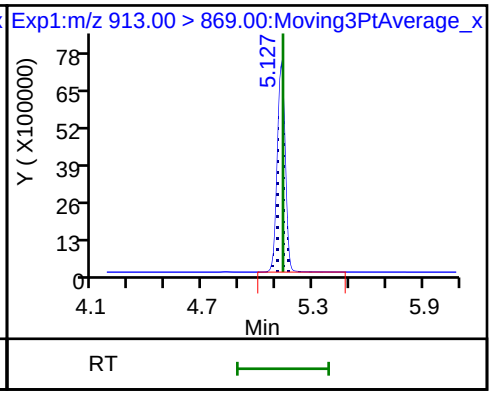
45 Perfluorohexadecanoic acid



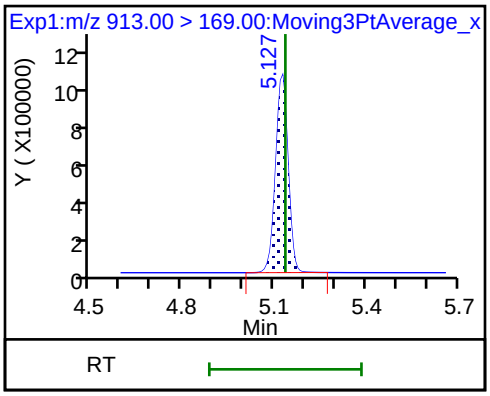
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: ICV 320-237401/10 Calibration Date: 08/01/2018 14:01

Instrument ID: A8_N Calib Start Date: 08/01/2018 12:59

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/01/2018 13:46

Lab File ID: 2018.08.01LLICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9855	0.996		2.53	2.50	1.1	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.197	1.141		2.38	2.50	-4.7	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	76.65	78.28		2.26	2.21	2.1	50.0
4:2 FTS	AveID	17.21	18.09		2.45	2.34	5.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.055	1.073		2.54	2.50	1.7	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.65	71.70		2.49	2.35	6.0	50.0
HFPO-DA (GenX)	AveID	4.003	3.744		2.34	2.50	-6.5	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.160	1.180		2.54	2.50	1.8	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.156	1.098		2.16	2.28	-5.0	40.0
ADONA	AveID	2.793	2.652		2.37	2.50	-5.1	50.0
6:2 FTS	AveID	1.654	1.634		2.34	2.37	-1.2	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.173		2.54	2.50	1.5	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.382	1.361		2.34	2.38	-1.5	50.0
Perfluorononanoic acid (PFNA)	AveID	1.080	1.076		2.49	2.50	-0.4	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.123	1.120		2.32	2.32	-0.2	40.0
F-53B Major	AveID	1.786	1.741		2.27	2.33	-2.5	50.0
8:2 FTS	AveID	1.351	1.284		2.28	2.40	-4.9	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7187	0.7689		2.57	2.40	7.0	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.067	1.063		2.49	2.50	-0.4	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9871	1.010		2.56	2.50	2.3	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.017	0.9942		2.44	2.50	-2.2	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6504	0.6058		2.24	2.41	-6.9	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8912	0.9063		2.54	2.50	1.7	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.232	1.219		2.47	2.50	-1.1	40.0
F-53B Minor	AveID	2.433	2.601		2.52	2.36	6.9	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.083	1.124		2.59	2.50	3.8	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.9424	0.9558		2.54	2.50	1.4	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2694	0.2709		2.51	2.50	0.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9218		2.36	2.50	-5.7	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.028	0.8687		2.11	2.50	-15.5	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: ICV 320-237401/10 Calibration Date: 08/01/2018 14:01

Instrument ID: A8_N Calib Start Date: 08/01/2018 12:59

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/01/2018 13:46

Lab File ID: 2018.08.01LLICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C4 PFBA	Ave	1.440	1.501		2.61	2.50	4.3	50.0
13C5 PFPeA	Ave	0.9481	0.999		2.63	2.50	5.4	50.0
13C3-PFBS	Ave	0.0273	0.0284		2.42	2.33	4.2	50.0
M2-4:2FTS	Ave	0.1926	0.2087		2.53	2.34	8.4	50.0
13C2 PFHxA	Ave	1.026	1.058		2.58	2.50	3.2	50.0
13C3 HFPO-DA	Ave	0.0480	0.0493		2.57	2.50	2.6	50.0
13C4-PFHpA	Ave	0.9943	1.027		2.58	2.50	3.3	50.0
18O2 PFHxS	Ave	1.494	1.570		2.49	2.37	5.1	50.0
M2-6:2FTS	Ave	0.2913	0.3055		2.49	2.38	4.9	40.0
13C4 PFOA	Ave	0.9600	0.9713		2.53	2.50	1.2	50.0
13C4 PFOS	Ave	1.032	1.079		2.50	2.39	4.6	50.0
13C5 PFNA	Ave	0.8365	0.8635		2.58	2.50	3.2	50.0
M2-8:2FTS	Ave	0.2839	0.2881		2.43	2.40	1.5	40.0
13C2 PFDA	Ave	0.6256	0.6373		2.55	2.50	1.9	50.0
13C8 FOSA	Ave	1.516	1.575		2.60	2.50	3.9	50.0
d3-NMeFOSAA	Ave	0.1518	0.1582		2.61	2.50	4.2	50.0
13C2 PFUnA	Ave	0.4818	0.4684		2.43	2.50	-2.8	50.0
d5-NEtFOSAA	Ave	0.1627	0.1659		2.55	2.50	2.0	50.0
13C2 PFDoA	Ave	0.4172	0.4308		2.58	2.50	3.3	50.0
13C2-PFTeDA	Ave	0.3502	0.3637		2.60	2.50	3.8	50.0
13C2-PFHxDA	Ave	0.6033	0.6229		2.58	2.50	3.3	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_010.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 01-Aug-2018 14:01:42 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist:

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 01-Aug-2018 14:58:55 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK022

First Level Reviewer: roycea Date: 01-Aug-2018 14:39:04

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.395	-0.003	0.541	5158997	2.61		104	85495	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.396	-0.005	1.000	5138118	2.53			1232	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.633	1.636	-0.003	1.000	3919947	2.38			1698	
D 3 13C5-PFPeA										
267.90 > 223.00	1.633	1.636	-0.003	0.635	3434840	2.63		105	55728	
D 47 13C3-PFBS										
301.90 > 83.00	1.657	1.669	-0.012	0.644	90781	2.42		104	426	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.666	1.671	-0.005	1.005	6754766	2.26			41131	
298.90 > 99.00	1.666	1.671	-0.005	1.005	2808886		2.40(1.25-3.74)		13438	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.866	1.872	-0.006	1.126	1649631	2.45			61313	
D 60 M2-4:2FTS										
329.00 > 81.00	1.866	1.872	-0.006	0.725	670160	2.53		108	7799	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.895	1.903	-0.008	1.000	3902411	2.54			7245	
313.00 > 119.00	1.895	1.903	-0.008	1.000	347547		11.23(5.03-15.10)		4820	
D 7 13C2 PFHxA										
315.00 > 270.00	1.895	1.903	-0.008	0.737	3637776	2.58		103	72472	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.927	1.928	-0.001	1.163	6564767	2.49			72476	
349.00 > 99.00	1.916	1.928	-0.012	1.157	2371753		2.77(1.36-4.07)		12317	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.003	2.000	0.003	0.779	169507	2.57		103	4270	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.991	2.002	-0.011	0.994	634603	2.34			2525	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.225	-0.008	0.862	3531170	2.58		103	61136	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.217	2.226	-0.009	1.000	4167871	2.54			1936	
363.00 > 169.00	2.217	2.226	-0.009	1.000	1563964		2.66(1.13-3.40)		15045	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.229	2.237	-0.008	1.000	5395477	2.16			20268	
399.00 > 99.00	2.229	2.237	-0.008	1.000	1851466		2.91(1.50-4.49)		2832	
D 11 18O2 PFHxS										
403.00 > 84.00	2.229	2.238	-0.009	0.866	5106773	2.49		105	57818	
65 ADONA										
377.00 > 251.00	2.267	2.270	-0.003	0.772	9836221	2.37			61243	
377.00 > 85.00	2.267	2.270	-0.003	0.772	5856972		1.68(0.84-2.53)		25221	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.546	2.554	-0.008	1.000	1627073	2.34			23474	
D 12 M2-6:2FTS										
429.00 > 81.00	2.546	2.556	-0.010	0.990	997741	2.49		105	14512	
D 14 13C4 PFOA										
417.00 > 372.00	2.572	2.580	-0.008	1.000	3338986	2.53		101	48960	
* 62 13C2-PFOA										
415.00 > 370.00	2.572	2.581	-0.009		3437702	2.50			58528	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.572	2.581	-0.009	1.000	3920928	2.54			2215	
413.00 > 169.00	2.572	2.581	-0.009	1.000	2042358		1.92(0.84-2.52)		8644	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.580	2.587	-0.007	0.879	4806506	2.34			33495	
449.00 > 99.00	2.580	2.587	-0.007	0.879	1302594		3.69(1.94-5.82)		13848	
D 18 13C4 PFOS										
503.00 > 80.00	2.937	2.946	-0.009	1.142	3546365	2.50		105	38150	
D 19 13C5 PFNA										
468.00 > 423.00	2.937	2.948	-0.011	1.142	2968342	2.58		103	47853	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.937	2.949	-0.012	1.000	3856513	2.32			36179	
499.00 > 99.00	2.937	2.949	-0.012	1.000	885014		4.36(2.31-6.93)		8338	
20 Perfluorononanoic acid										
463.00 > 419.00	2.937	2.949	-0.012	1.000	3194149	2.49			7264	
463.00 > 169.00	2.937	2.949	-0.012	1.000	778384		4.10(1.90-5.69)		21558	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.148	3.158	-0.010	1.072	6018978	2.27			38345	
D 26 M2-8:2FTS										
529.00 > 81.00	3.283	3.292	-0.009	1.276	948689	2.43		101	16643	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.283	3.292	-0.009	1.000	1218401	2.28			43042	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.283	3.295	-0.012	1.118	2738195	2.57			47146	
549.00 > 99.00	3.283	3.295	-0.012	1.118	986495		2.78(1.33-3.97)		6451	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.291	3.306	-0.015	1.279	2190677	2.55		102	41149	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.291	3.308	-0.017	1.000	2329283	2.49			3298	
513.00 > 169.00	3.291	3.308	-0.017	1.000	408402		5.70(2.36-7.09)		8194	
D 21 13C8 FOSA										
506.00 > 78.00	3.307	3.312	-0.005	1.286	5414039	2.60		104	48450	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.307	3.313	-0.006	1.000	5468758	2.56			38250	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.449	3.459	-0.010	1.341	543823	2.61		104	12011	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.458	3.465	-0.007	1.003	540665	2.44			5417	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.611	3.620	-0.009	1.230	2166453	2.24			41917	
599.00 > 99.00	3.611	3.620	-0.009	1.230	731739		2.96(1.39-4.16)		7029	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.621	3.627	-0.006	1.408	570452	2.55		102	5372	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.621	3.633	-0.012	1.000	516993	2.54			14918	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.621	3.634	-0.013	1.000	1962447	2.47			4374	
563.00 > 169.00	3.621	3.634	-0.013	1.000	347507		5.65(2.12-6.36)		10450	
D 30 13C2 PFUnA										
565.00 > 520.00	3.621	3.634	-0.013	1.408	1610245	2.43		97.2	42028	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.785	3.792	-0.007	1.289	9090381	2.52			82214	
D 36 13C2 PFDoA										
615.00 > 570.00	3.920	3.925	-0.005	1.524	1481030	2.58		103	18241	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.920	3.927	-0.007	1.000	1664007	2.59			514	
613.00 > 169.00	3.920	3.927	-0.007	1.000	388004		4.29(2.13-6.40)		8144	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.174	4.188	-0.014	1.065	1415575	2.54			433	
663.00 > 169.00	4.174	4.188	-0.014	1.065	436616		3.24(1.25-3.76)		3223	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.416	4.423	-0.007	1.717	1250322	2.60		104	5684	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.416	4.423	-0.007	1.000	338703	2.51			4600	
713.00 > 219.00	4.405	4.423	-0.018	0.998	238055		1.42(0.71-2.13)		3041	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.815	4.826	-0.011	1.872	2141386	2.58		103	3112	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.815	4.827	-0.012	1.000	1974016	2.36			123	
813.00 > 169.00	4.815	4.827	-0.012	1.000	324992		6.07(2.86-8.58)		3024	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.150	5.166	-0.016	1.070	1860264	2.11			569	
913.00 > 169.00	5.150	5.166	-0.016	1.070	229133		8.12(3.83-11.48)		2098	

Reagents:

LCPFCIC_FULL_00012 Amount Added: 1.00 Units: mL

Report Date: 01-Aug-2018 14:58:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_010.d

Injection Date: 01-Aug-2018 14:01:42 Instrument ID: A8_N

Lims ID: ICV Full

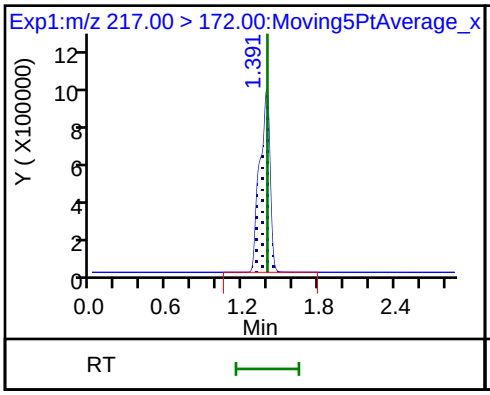
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 17 Worklist Smp#: 10

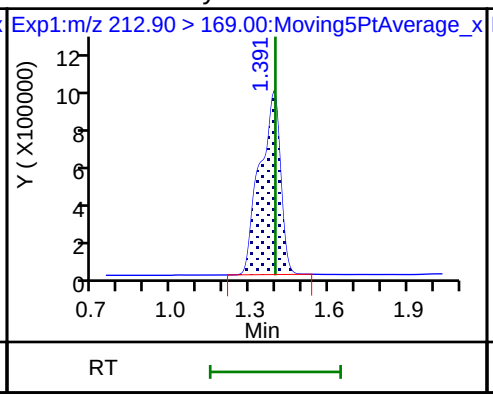
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

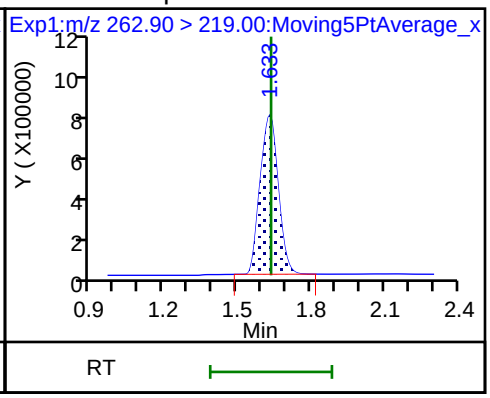
D 1 13C4 PFBA



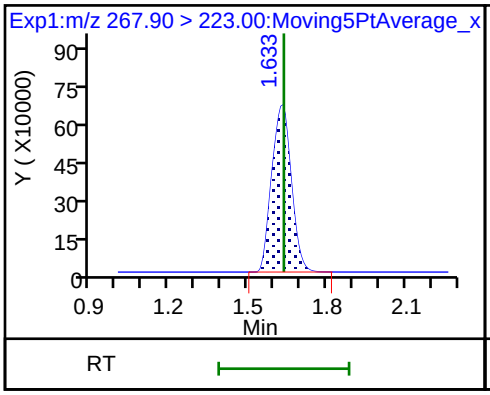
2 Perfluorobutyric acid



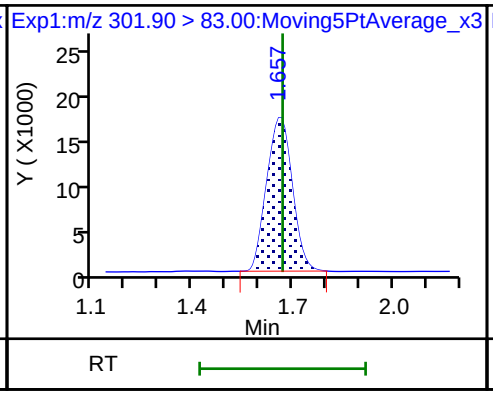
4 Perfluoropentanoic acid



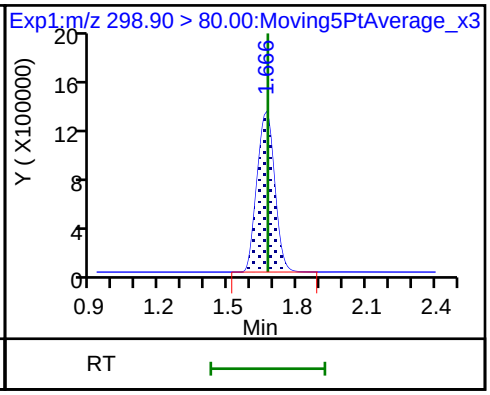
D 3 13C5-PFPeA



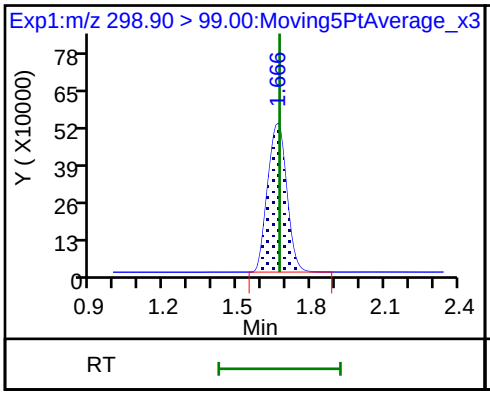
D 47 13C3-PFBS



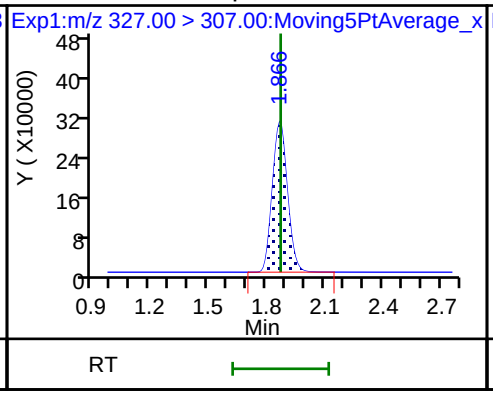
5 Perfluorobutanesulfonic acid



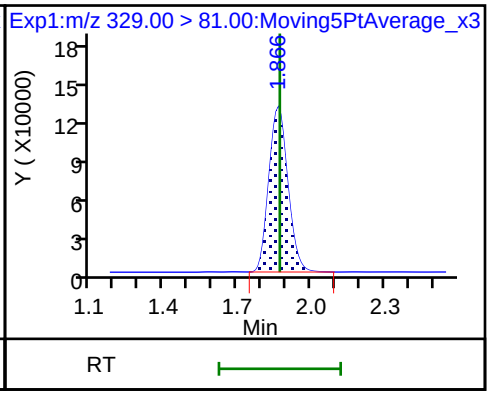
5 Perfluorobutanesulfonic acid



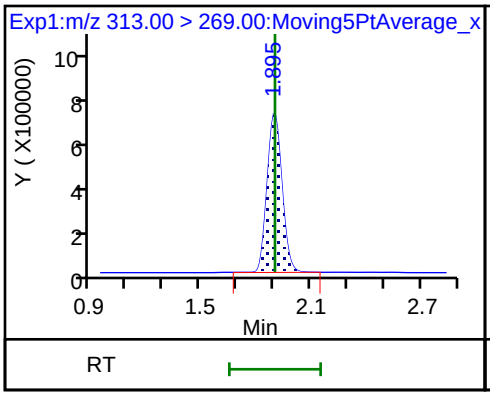
61 1H,1H,2H,2H-perfluorohexanesulfon



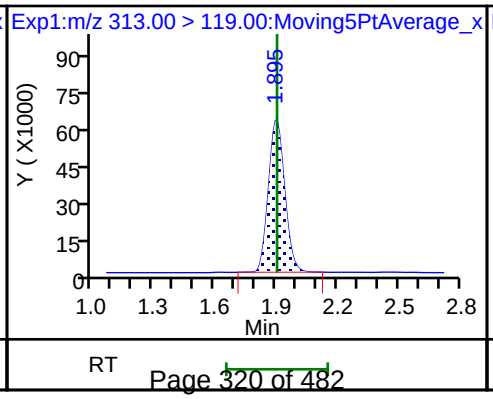
D 60 M2-4:2FTS



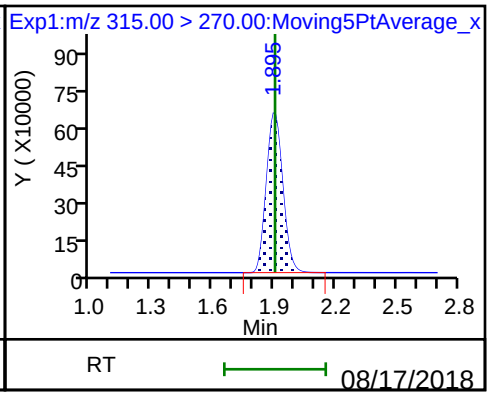
6 Perfluorohexanoic acid



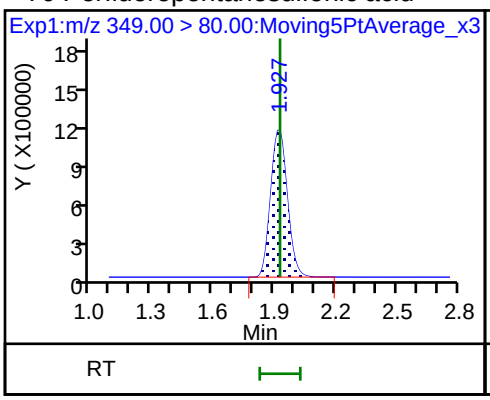
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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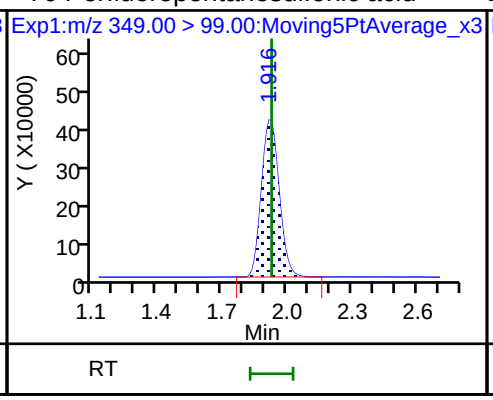
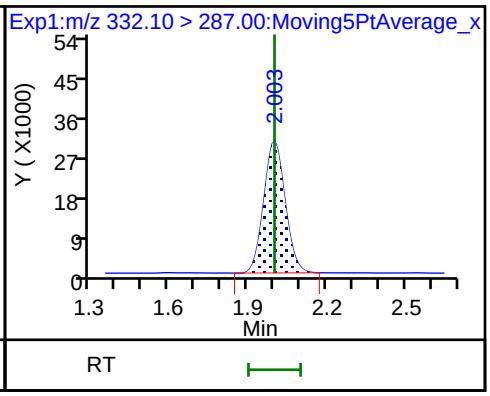
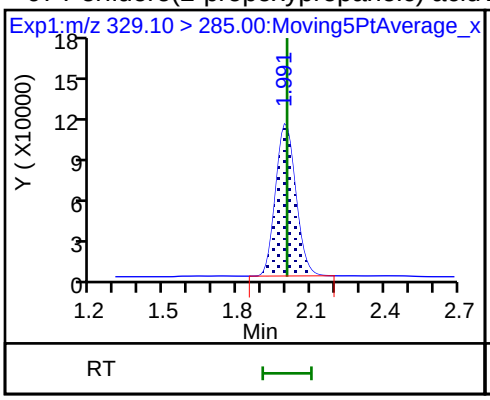


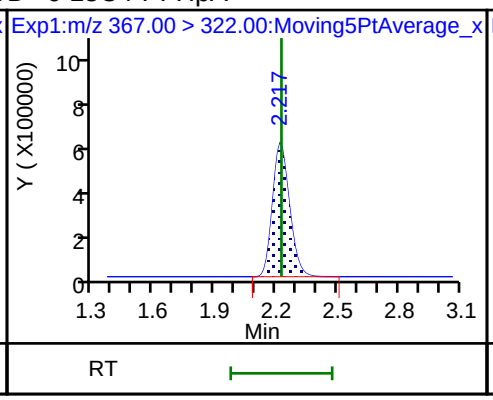
D 64 13C3 HFPO-DA



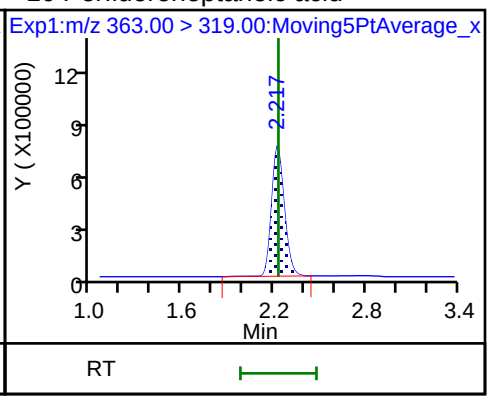
67 Perfluoro(2-propoxypropanoic) acid



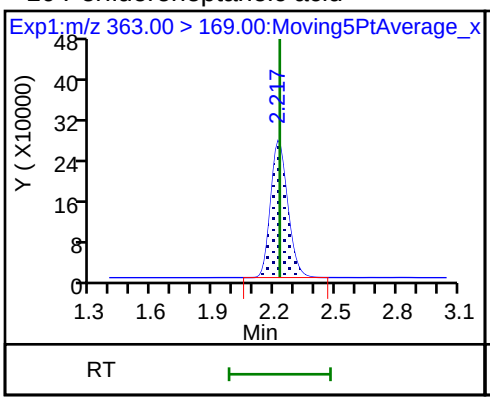
D 9 13C4-PFHpA



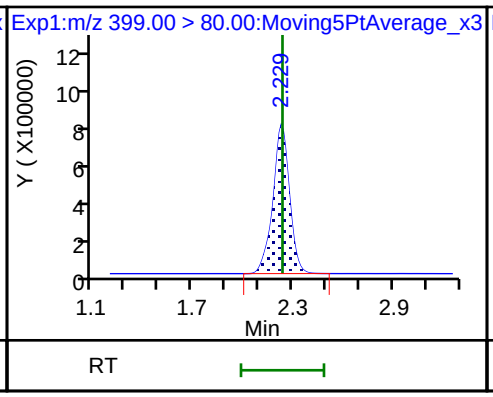
10 Perfluoroheptanoic acid



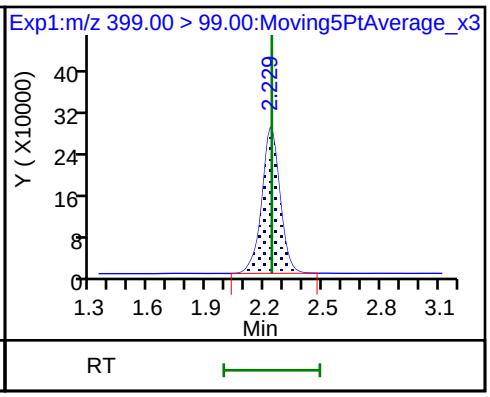
10 Perfluoroheptanoic acid



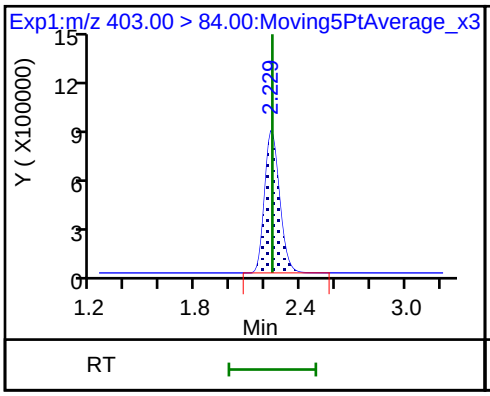
8 Perfluorohexanesulfonic acid



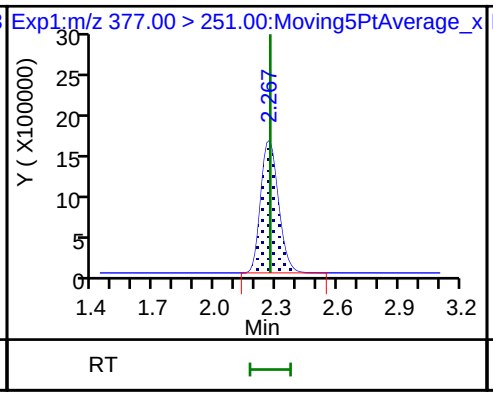
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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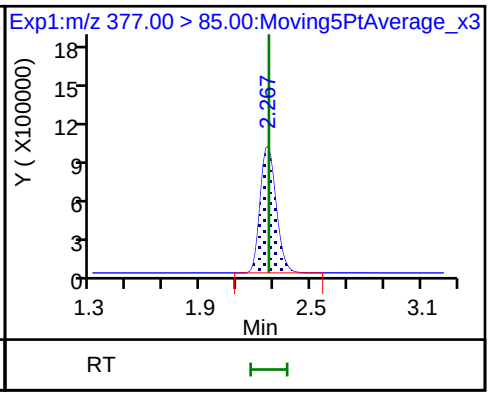
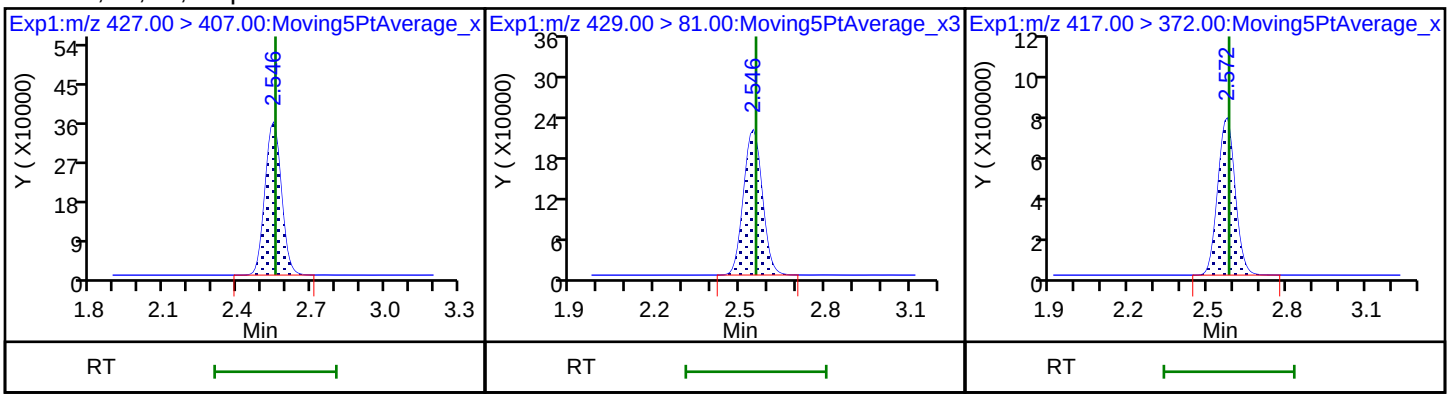
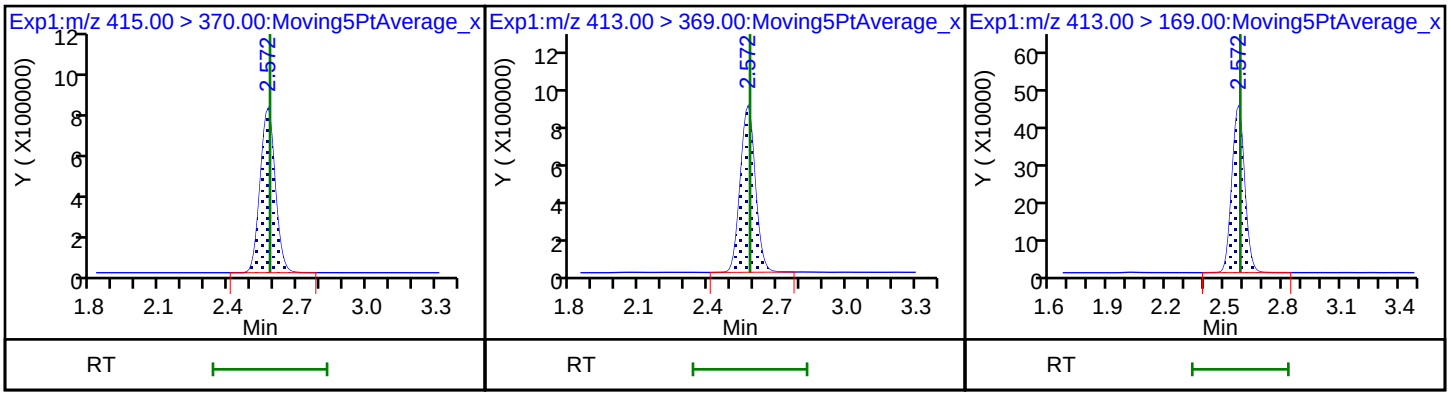


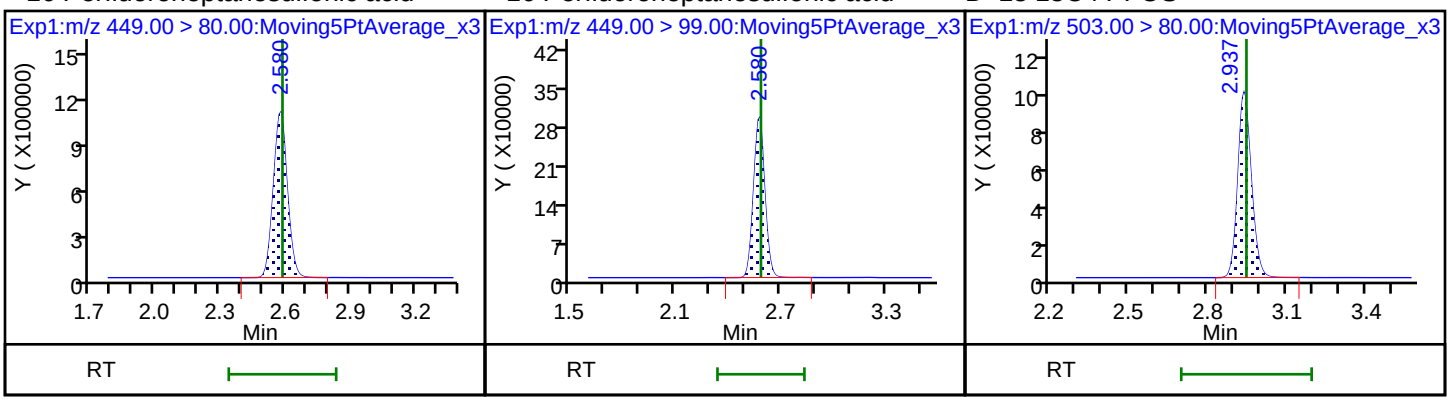
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS D 14 13C4 PFOA



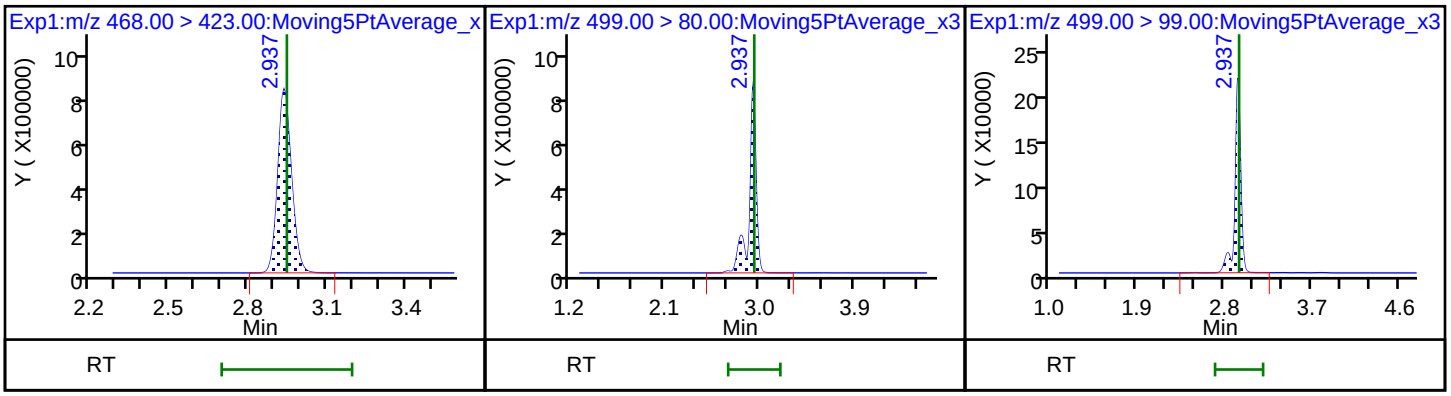
* 62 13C2-PFOA 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



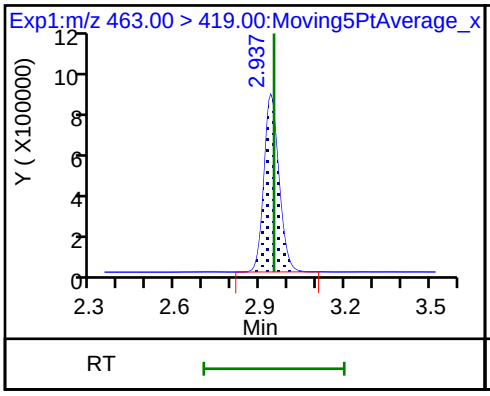
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 18 13C4 PFOS



D 19 13C5 PFNA 17 Perfluorooctane sulfonic acid 17 Perfluorooctane sulfonic acid



20 Perfluorononanoic acid



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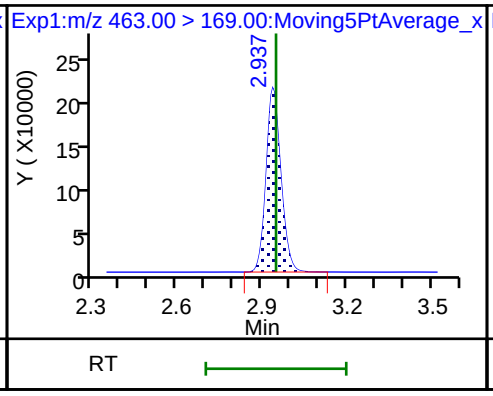
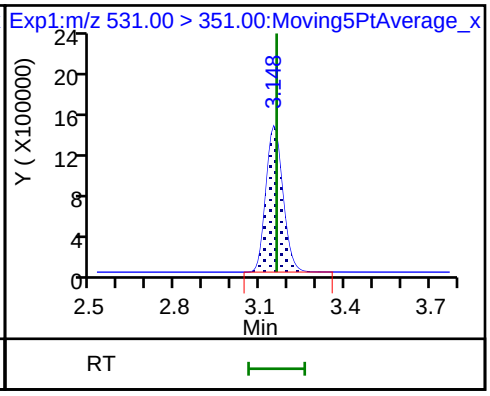
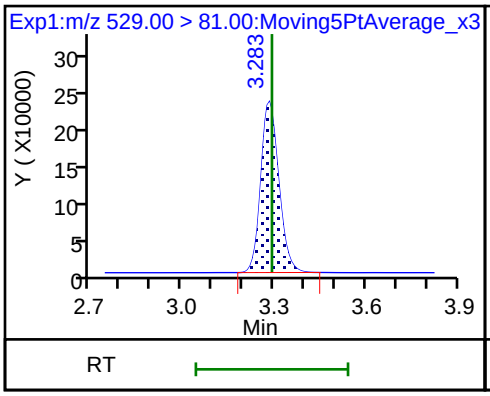


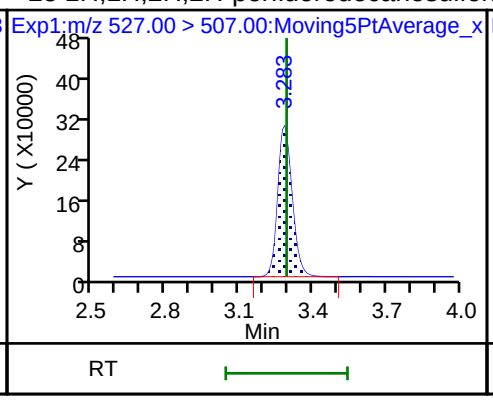
69 9-Chlorohexadecafluoro-3-oxanonane



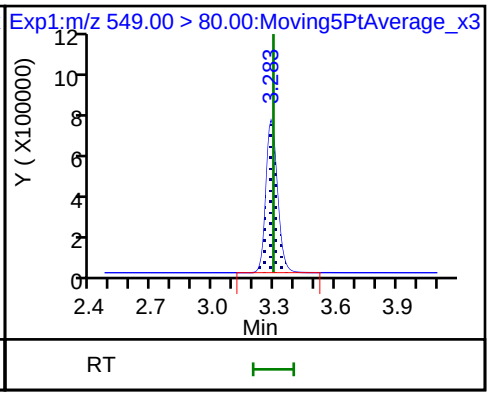
D 26 M2-8:2FTS



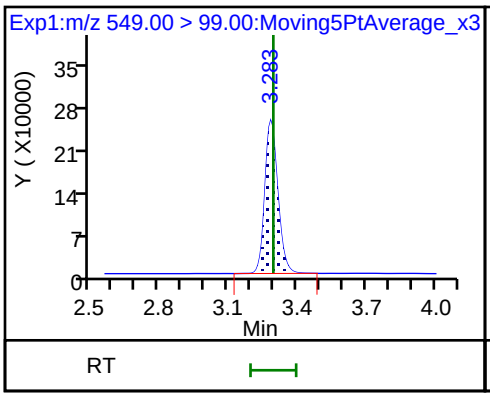
25 1H,1H,2H,2H-perfluorodecanesulfoni



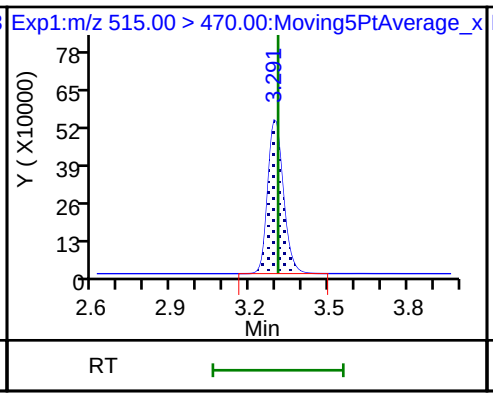
68 Perfluorononanesulfonic acid



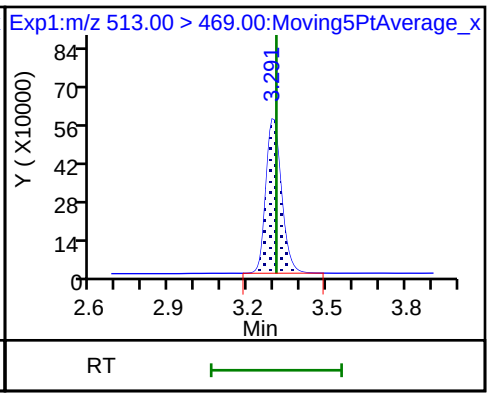
68 Perfluorononanesulfonic acid



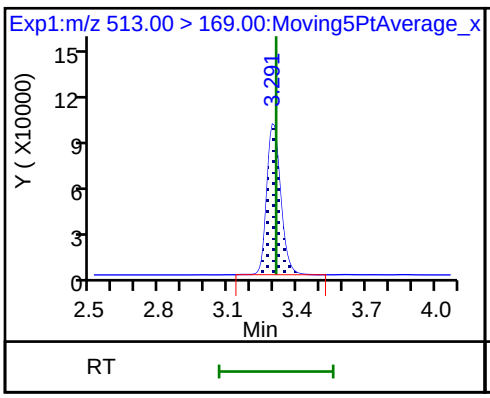
D 23 13C2 PFDA



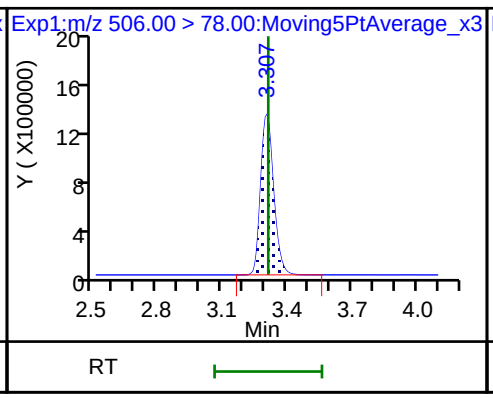
24 Perfluorodecanoic acid



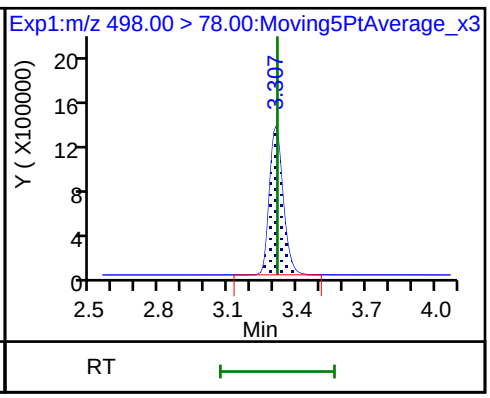
24 Perfluorodecanoic acid



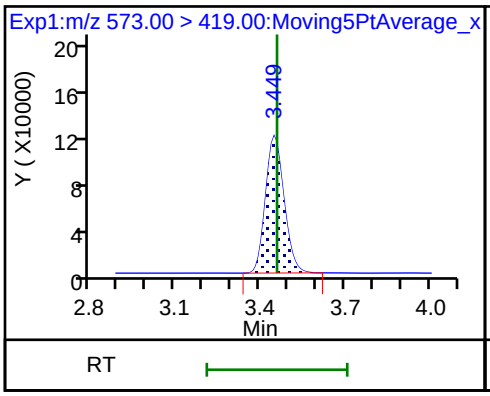
D 21 13C8 FOSA



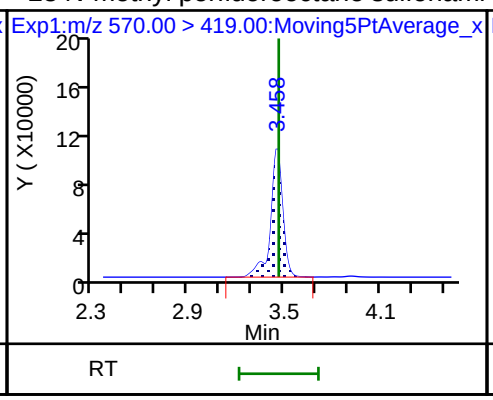
22 Perfluorooctane Sulfonamide



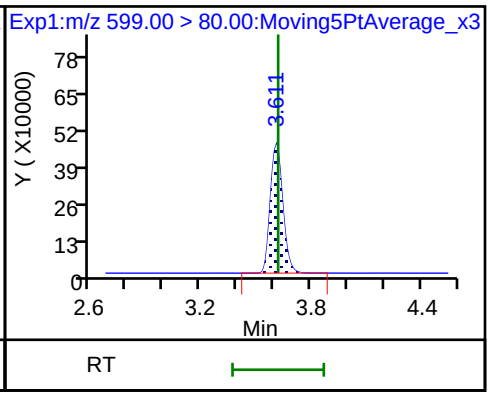
D 27 d3-NMeFOSAA



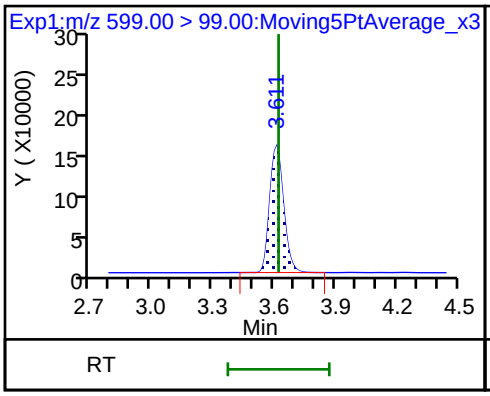
28 N-methyl perfluorooctane sulfonami



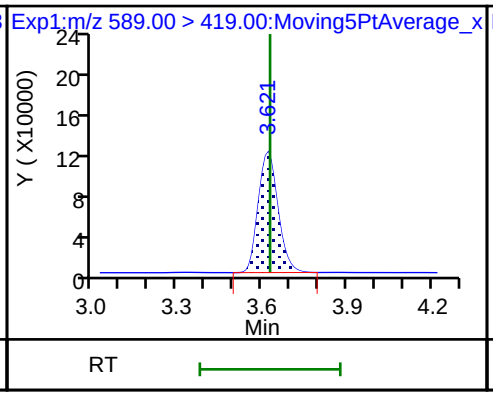
29 Perfluorodecane Sulfonic acid



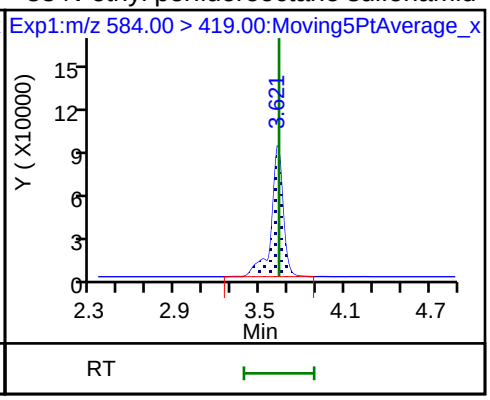
29 Perfluorodecane Sulfonic acid



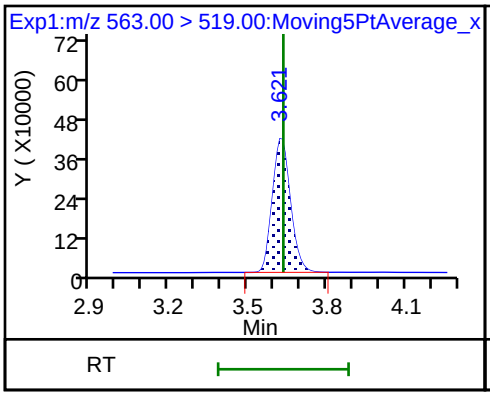
D 32 d5-NEtFOSAA



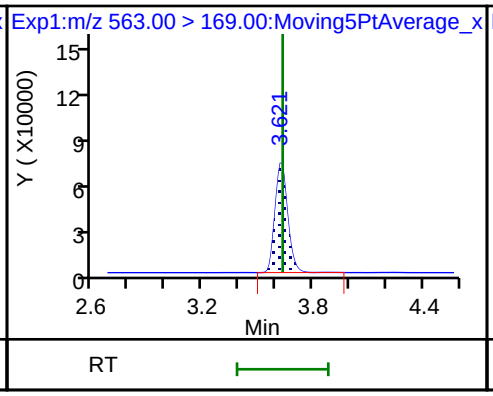
33 N-ethyl perfluorooctane sulfonamid



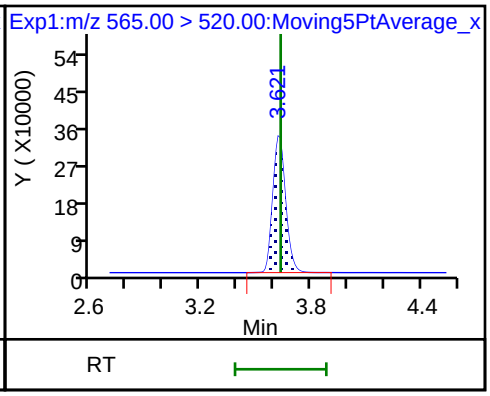
31 Perfluoroundecanoic acid



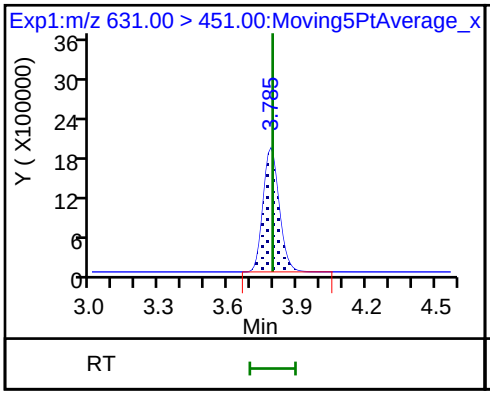
31 Perfluoroundecanoic acid



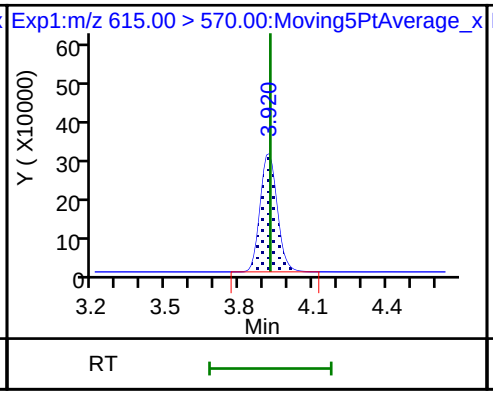
D 30 13C2 PFUnA



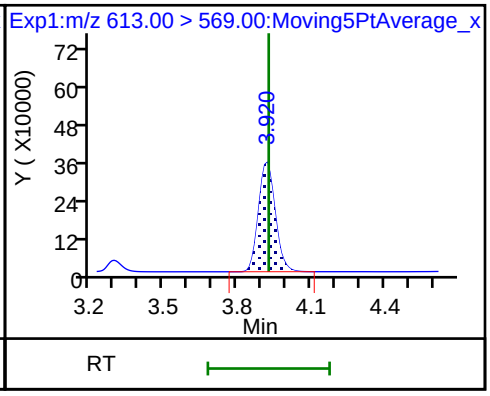
66 11-Chloroeicosafluoro-3-oxaundecan



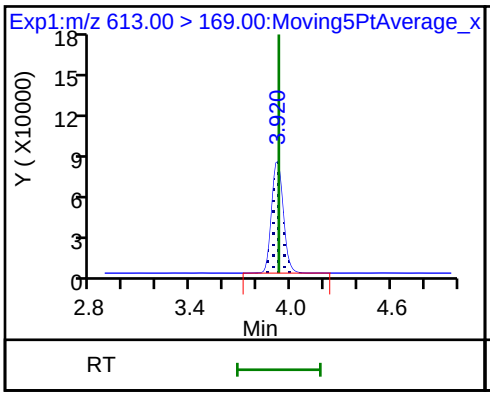
D 36 13C2 PFDoA



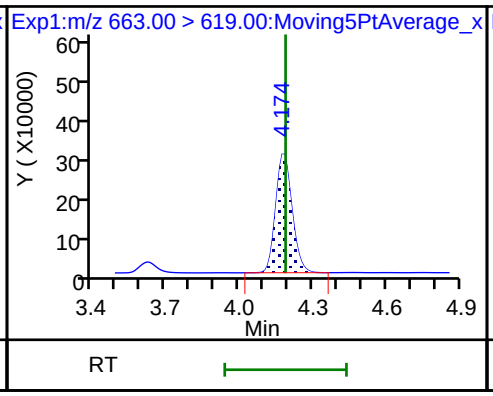
37 Perfluorododecanoic acid



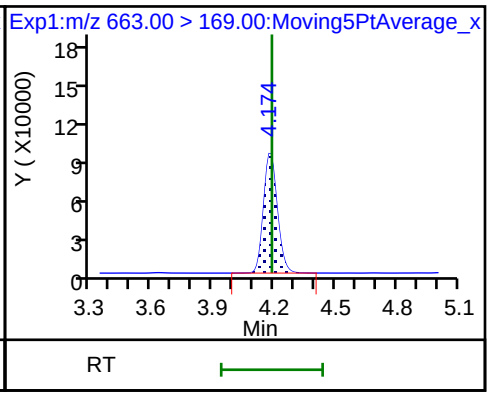
37 Perfluorododecanoic acid



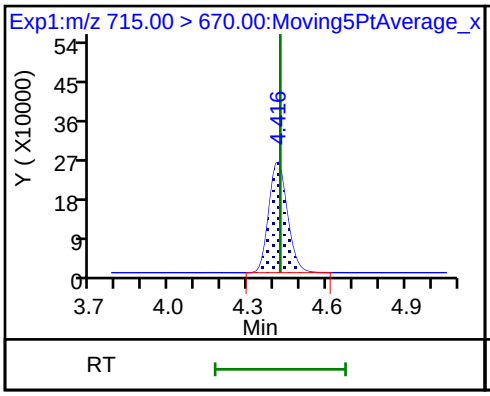
41 Perfluorotridecanoic acid



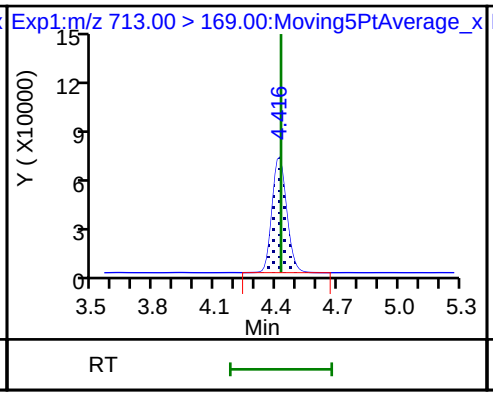
41 Perfluorotridecanoic acid



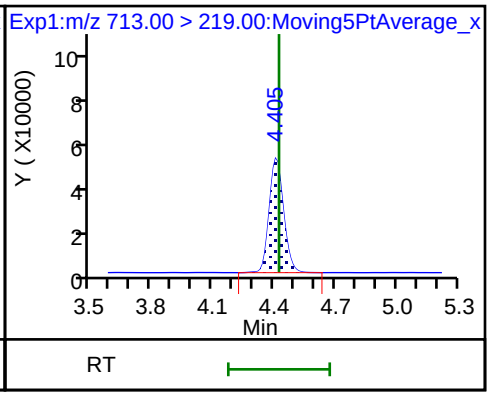
D 43 13C2-PFTeDA



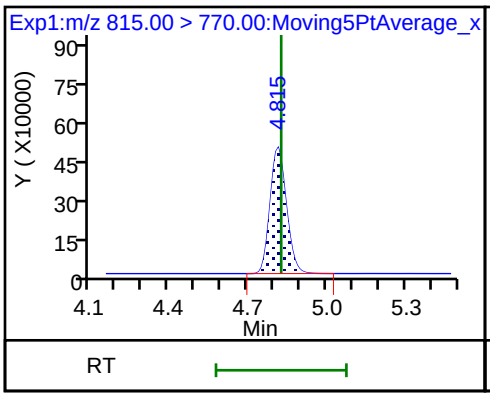
42 Perfluorotetradecanoic acid



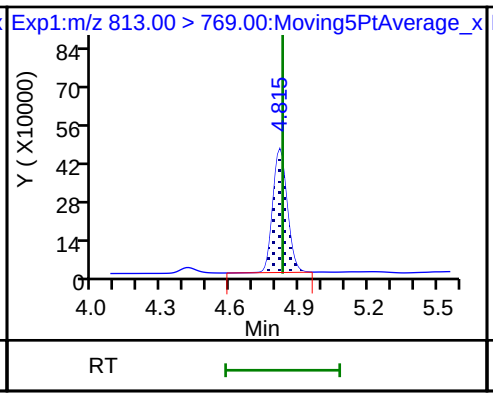
42 Perfluorotetradecanoic acid



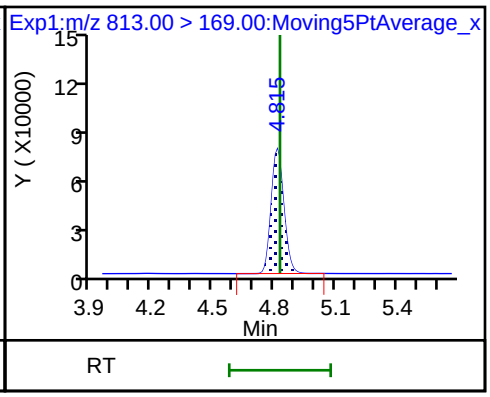
D 44 13C2-PFHxDA



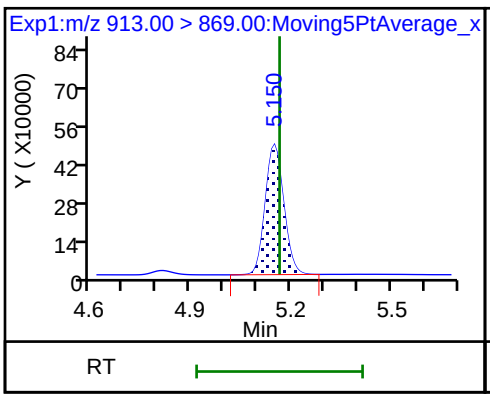
45 Perfluorohexadecanoic acid



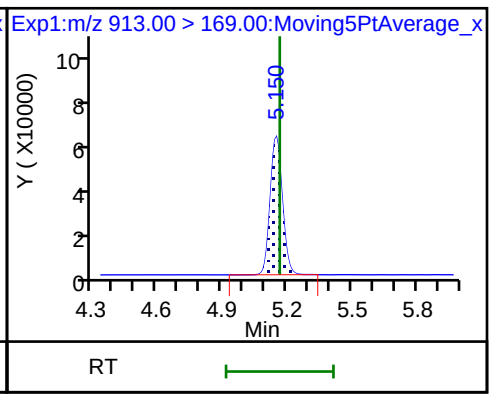
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCVL 320-237938/2 Calibration Date: 08/03/2018 23:48

Instrument ID: A8_N Calib Start Date: 08/01/2018 12:59

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/01/2018 13:46

Lab File ID: 2018.08.03LLC_004.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9855	0.9467		0.0480	0.0500	-3.9	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.197	1.279		0.0534	0.0500	6.8	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	76.65	80.22		0.0463	0.0442	4.7	50.0
4:2 FTS	AveID	17.21	20.21		0.0548	0.0467	17.4	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.055	0.9592		0.0455	0.0500	-9.0	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.65	70.82		0.0491	0.0469	4.7	50.0
HFPO-DA (GenX)	AveID	4.003	4.749		0.0593	0.0500	18.6	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.160	1.275		0.0550	0.0500	10.0	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.156	1.235		0.0486	0.0455	6.8	50.0
ADONA	AveID	2.793	2.966		0.0531	0.0500	6.2	50.0
6:2 FTS	AveID	1.654	1.620			0.0474	-2.1	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.184		0.0513	0.0501	2.4	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.382	1.371		0.0472	0.0476	-0.8	50.0
Perfluorononanoic acid (PFNA)	AveID	1.080	1.104		0.0511	0.0500	2.2	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.123	1.152		0.0476	0.0464	2.7	50.0
F-53B Major	AveID	1.786	1.991		0.0519	0.0466	11.5	50.0
8:2 FTS	AveID	1.351	1.271			0.0479	-5.9	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7187	0.7987		0.0533	0.0480	11.1	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.067	1.060		0.0496	0.0500	-0.7	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9871	1.080		0.0547	0.0500	9.4	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.017	1.186			0.0500	16.7	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6504	0.6627		0.0491	0.0482	1.9	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8912	0.9232		0.0518	0.0500	3.6	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.232	1.324		0.0537	0.0500	7.5	50.0
F-53B Minor	AveID	2.433	2.646		0.0512	0.0471	8.8	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.083	1.174		0.0542	0.0500	8.4	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.9424	0.8766		0.0465	0.0500	-7.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2694	0.3112		0.0578	0.0500	15.5	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		1.830		0.0711	0.0500	42.2	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.028	1.314		0.0639	0.0500	27.8	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCVL 320-237938/2 Calibration Date: 08/03/2018 23:48

Instrument ID: A8_N Calib Start Date: 08/01/2018 12:59

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/01/2018 13:46

Lab File ID: 2018.08.03LLC_004.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C4 PFBA	Ave	1.440	1.378		2.39	2.50	-4.3	50.0
13C5 PFPeA	Ave	0.9481	0.9467		2.50	2.50	-0.1	50.0
13C3-PFBS	Ave	0.0273	0.0256		2.18	2.33	-6.1	50.0
M2-4:2FTS	Ave	0.1926	0.1986		2.41	2.34	3.1	50.0
13C2 PFHxA	Ave	1.026	1.108		2.70	2.50	8.0	50.0
13C3 HFPO-DA	Ave	0.0480	0.0564		2.94	2.50	17.4	50.0
13C4-PFHpA	Ave	0.9943	1.100		2.77	2.50	10.6	50.0
18O2 PFHxS	Ave	1.494	1.495		2.37	2.37	0.0	50.0
M2-6:2FTS	Ave	0.2913	0.2895		2.36	2.38	-0.6	50.0
13C4 PFOA	Ave	0.9600	0.9617		2.50	2.50	0.2	50.0
13C4 PFOS	Ave	1.032	0.9741		2.26	2.39	-5.6	50.0
13C5 PFNA	Ave	0.8365	0.8808		2.63	2.50	5.3	50.0
M2-8:2FTS	Ave	0.2839	0.3071		2.59	2.40	8.2	50.0
13C2 PFDA	Ave	0.6256	0.6783		2.71	2.50	8.4	50.0
13C8 FOSA	Ave	1.516	1.515		2.50	2.50	-0.0	50.0
d3-NMeFOSAA	Ave	0.1518	0.1536		2.53	2.50	1.2	50.0
13C2 PFUnA	Ave	0.4818	0.4833		2.51	2.50	0.3	50.0
d5-NEtFOSAA	Ave	0.1627	0.1583		2.43	2.50	-2.8	50.0
13C2 PFDoA	Ave	0.4172	0.4285		2.57	2.50	2.7	50.0
13C2-PFTeDA	Ave	0.3502	0.3568		2.55	2.50	1.9	50.0
13C2-PFHxDA	Ave	0.6033	0.5133		2.13	2.50	-14.9	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_004.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 03-Aug-2018 23:48:27 ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 12:44:18 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK008

First Level Reviewer: mongkols Date: 06-Aug-2018 12:44:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.391	0.0	0.542	4657827	2.39		95.7	82016	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.395	-0.004	1.000	88193	0.0480		96.1	30.7	
D 3 13C5-PFPeA										
267.90 > 223.00	1.633	1.632	0.0	0.637	3200764	2.50		99.9	62183	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.633	1.637	-0.005	1.000	81849	0.0534		107	34.4	
D 47 13C3-PFBS										
301.90 > 83.00	1.666	1.665	0.001	0.650	80498	2.18		93.9	462	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.666	1.671	-0.005	1.000	122764	0.0463		105	309	
298.90 > 99.00	1.666	1.671	-0.005	1.000	49219		2.49(1.25-3.74)		212	
D 60 M2-4:2FTS										
329.00 > 81.00	1.866	1.866	0.0	0.728	627205	2.41		103	9030	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.866	1.873	-0.006	1.120	32672	0.0548		117	1550	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.905	1.902	0.003	1.006	71852	0.0455		91.0	270	
313.00 > 119.00	1.895	1.902	-0.007	1.000	8358		8.60(5.03-15.10)		124	
D 7 13C2 PFHxA										
315.00 > 270.00	1.895	1.905	-0.010	0.739	3745268	2.70		108	97425	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.916	1.924	-0.008	1.150	114991	0.0491		105	2297	
349.00 > 99.00	1.916	1.924	-0.008	1.150	43287		2.66(1.36-4.07)		392	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.991	1.991	0.0	0.777	190752	2.94		117	6675	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.991	1.999	-0.008	1.000	18117	0.0593		119	112	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.217	2.214	0.003	1.000	94853	0.0550		110	60.0	
363.00 > 169.00	2.217	2.214	0.003	1.000	34478		2.75(1.13-3.40)		546	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.217	0.0	0.865	3718899	2.77		111	64305	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.229	2.225	0.004	1.000	113622	0.0486		107	579	
399.00 > 99.00	2.229	2.225	0.004	1.000	37734		3.01(1.50-4.49)		85.7	
D 11 18O2 PFHxS										
403.00 > 84.00	2.229	2.228	0.001	0.869	4782755	2.37		100	58422	
65 ADONA										
377.00 > 251.00	2.254	2.264	-0.010	0.769	195373	0.0531		106	2715	
377.00 > 85.00	2.267	2.264	0.003	0.773	106871		1.83(0.84-2.53)		391	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.537	2.545	-0.008	0.996	30055	0.0464		97.9	909	
D 12 M2-6:2FTS										
429.00 > 81.00	2.546	2.545	0.001	0.993	929844	2.36		99.4	14235	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.564	2.571	-0.007	1.000	77076	0.0513		102	61.8	
413.00 > 169.00	2.572	2.571	0.001	1.003	45456		1.70(0.84-2.52)		359	
* 62 13C2-PFOA										
415.00 > 370.00	2.564	2.571	-0.007		3380924	2.50			53077	
D 14 13C4 PFOA										
417.00 > 372.00	2.564	2.572	-0.008	1.000	3251495	2.50		100	51138	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.572	2.579	-0.007	0.878	85993	0.0472		99.2	1618	
449.00 > 99.00	2.572	2.579	-0.007	0.878	22530		3.82(1.94-5.82)		451	
20 Perfluorononanoic acid										
463.00 > 419.00	2.931	2.930	0.001	1.000	65726	0.0511		102	334	
463.00 > 169.00	2.931	2.930	0.001	1.000	14854		4.42(1.90-5.69)		1066	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.931	2.930	0.001	1.000	70438	0.0476		103	964	
499.00 > 99.00	2.931	2.930	0.001	1.000	17055		4.13(2.31-6.93)		145	M
D 18 13C4 PFOS										
503.00 > 80.00	2.931	2.931	0.0	1.143	3148313	2.26		94.4	35266	
D 19 13C5 PFNA										
468.00 > 423.00	2.931	2.931	0.0	1.143	2977956	2.63		105	58685	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.139	3.145	-0.006	1.071	122214	0.0519		111	2670	
D 26 M2-8:2FTS										
529.00 > 81.00	3.276	3.276	0.0	1.278	994765	2.59		108	18952	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.269	3.280	-0.011	0.998	25291	0.0451		94.1	1561	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.276	3.280	-0.004	1.118	50499	0.0533		111	3121	
549.00 > 99.00	3.276	3.280	-0.004	1.118	17206		2.93(1.33-3.97)		156	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.283	3.283	0.0	1.280	2293315	2.71		108	57300	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.283	3.287	-0.004	1.000	48606	0.0496		99.3	103	
513.00 > 169.00	3.291	3.287	0.004	1.002	9556		5.09(2.36-7.09)		234	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.307	3.310	-0.003	1.000	110628	0.0547		109	3879	
D 21 13C8 FOSA										
506.00 > 78.00	3.307	3.314	-0.007	1.290	5122038	2.50		99.9	39905	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.439	3.439	0.0	1.341	519274	2.53		101	16251	
28 N-methyl perfluorooctane sulfonami										M
570.00 > 419.00	3.439	3.444	-0.005	1.000	12319	0.0583		117	179	M
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.590	3.596	-0.006	1.225	42076	0.0491		102	1486	
599.00 > 99.00	3.601	3.596	0.005	1.228	14016		3.00(1.39-4.16)		124	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.611	3.611	0.0	1.408	535079	2.43		97.2	5520	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.611	0.0	1.408	1634134	2.51		100	24626	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.611	3.618	-0.007	1.000	43279	0.0537		107	86.9	
563.00 > 169.00	3.611	3.618	-0.007	1.000	7379		5.87(2.12-6.36)		311	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.611	3.618	-0.007	1.000	9880	0.0518		104	188	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.774	3.771	0.003	1.288	164184	0.0512		109	5660	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.899	3.907	-0.008	1.000	34014	0.0542		108	9.4	
613.00 > 169.00	3.899	3.907	-0.008	1.000	8277		4.11(2.13-6.40)		188	
D 36 13C2 PFDoA										
615.00 > 570.00	3.899	3.909	-0.010	1.521	1448604	2.57		103	15792	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.164	4.162	0.002	1.068	25396	0.0465		93.0	7.4	
663.00 > 169.00	4.164	4.162	0.002	1.068	9422		2.70(1.25-3.76)		92.1	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.395	4.394	0.001	1.000	7508	0.0578		116	119	
713.00 > 219.00	4.395	4.394	0.001	1.000	4735		1.59(0.71-2.13)		73.2	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.395	4.394	0.001	1.714	1206399	2.55		102	5492	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.796	4.796	0.0	1.002	63505	0.0711		142	2.6	
813.00 > 169.00	4.796	4.796	0.0	1.002	8778		7.23(2.86-8.58)		120	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.787	4.796	-0.009	1.867	1735273	2.13		85.1	2634	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.127	5.126	0.001	1.071	45617	0.0639		128	16.4	
913.00 > 169.00	5.127	5.126	0.001	1.071	5257		8.68(3.83-11.48)		63.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00006 Amount Added: 1.00 Units: mL

Report Date: 06-Aug-2018 12:44:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_004.d

Injection Date: 03-Aug-2018 23:48:27 Instrument ID: A8_N

Lims ID: CCVL

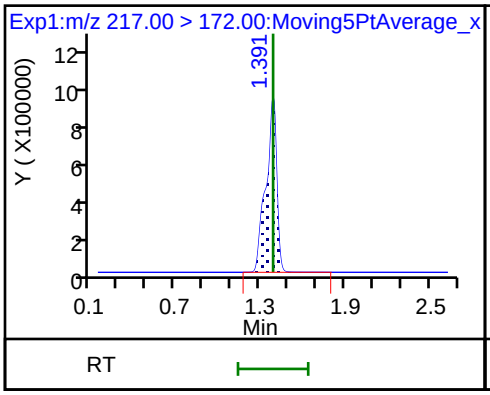
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 21 Worklist Smp#: 2

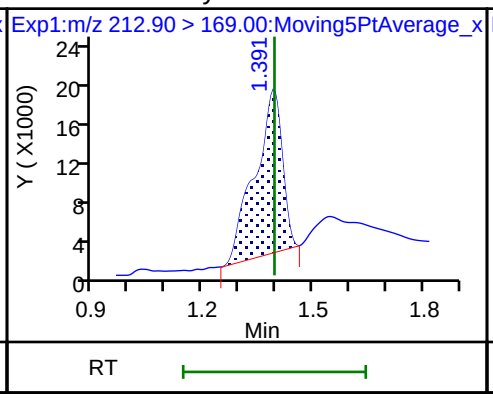
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

D 1 13C4 PFBA



2 Perfluorobutyric acid



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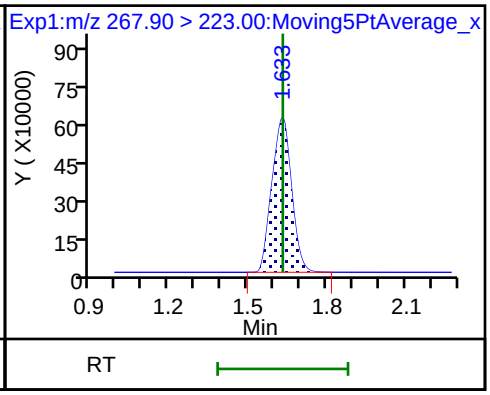
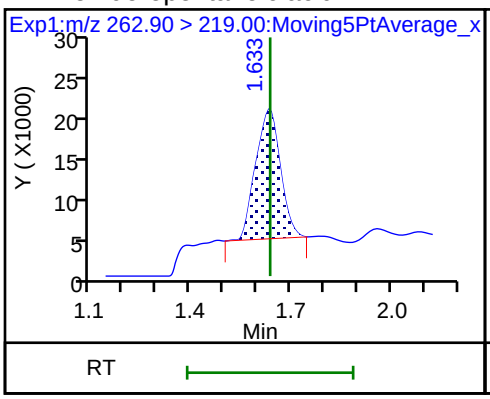
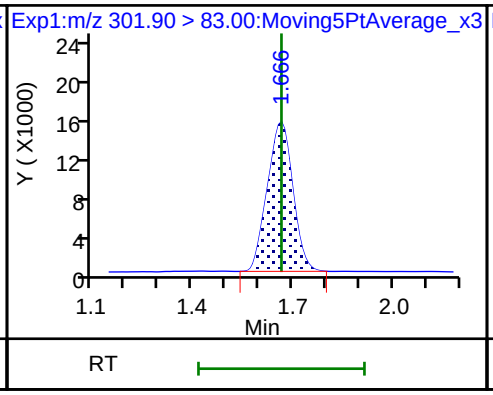


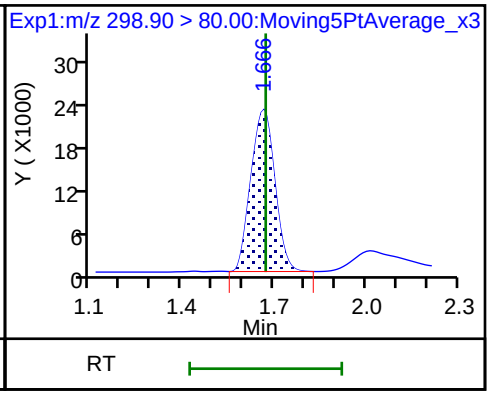
4 Perfluoropentanoic acid



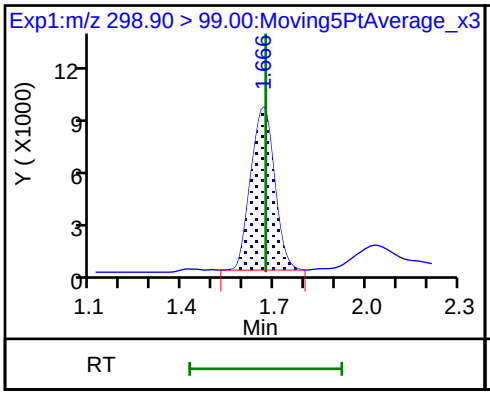
D 47 13C3-PFBS



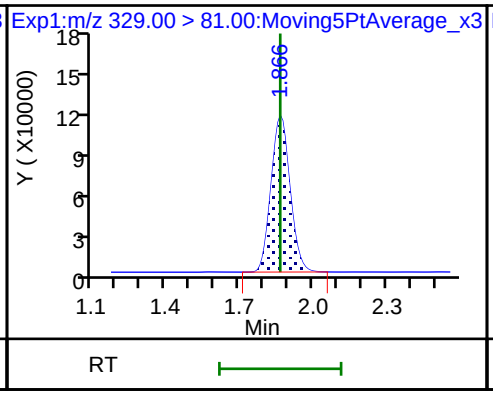
5 Perfluorobutanesulfonic acid



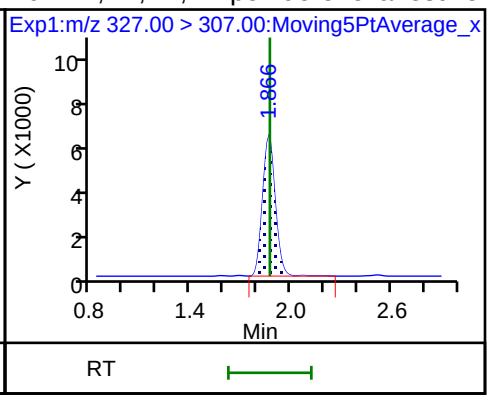
5 Perfluorobutanesulfonic acid



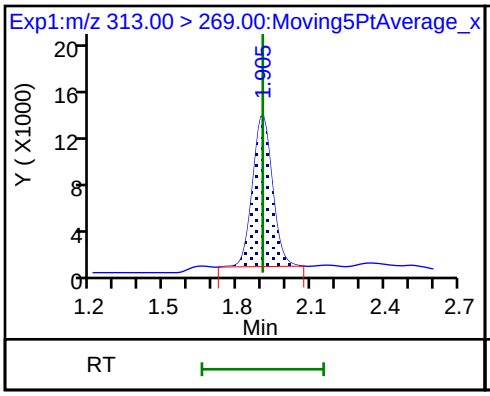
D 60 M2-4:2FTS



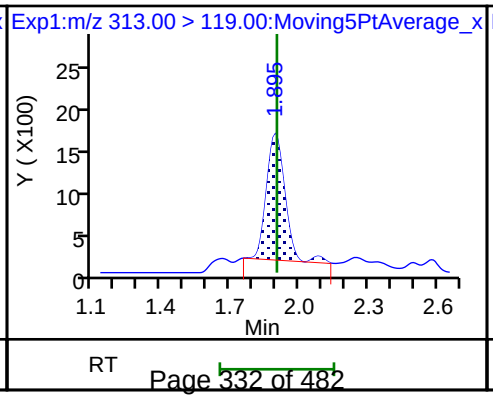
61 1H,1H,2H,2H-perfluorohexanesulfoni



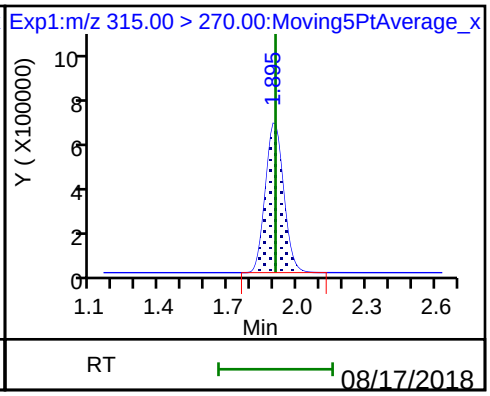
6 Perfluorohexanoic acid



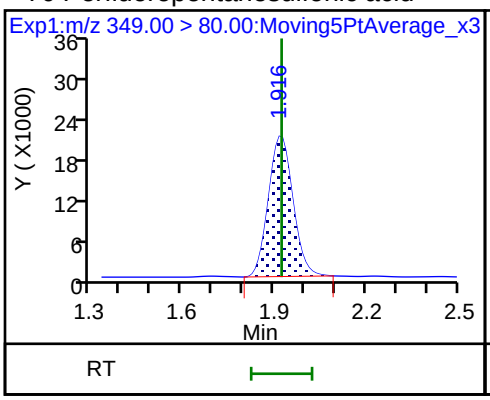
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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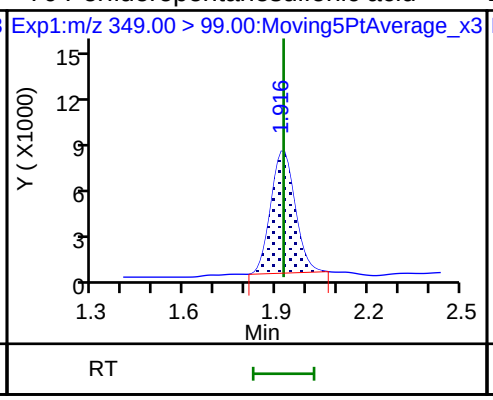
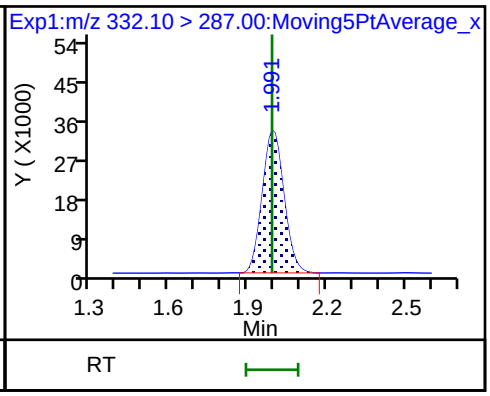
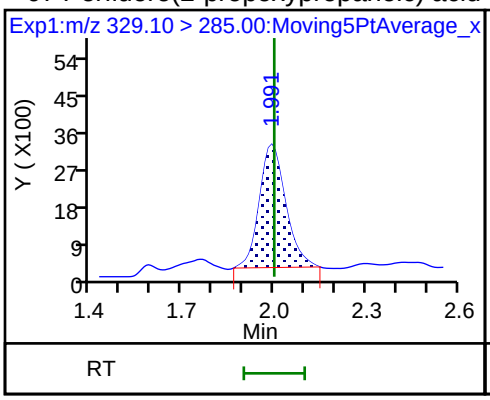


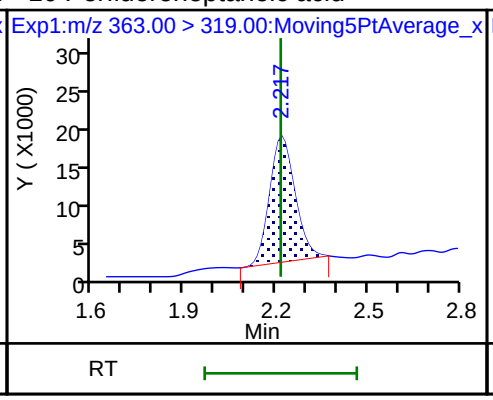
D 64 13C3 HFPO-DA



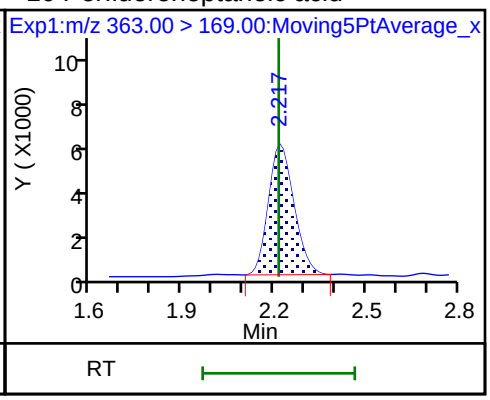
67 Perfluoro(2-propoxypropanoic) acid



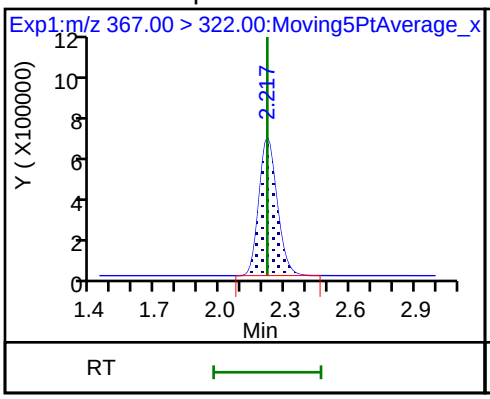
10 Perfluoroheptanoic acid



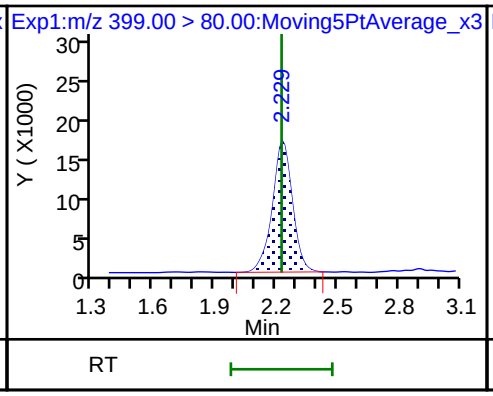
10 Perfluoroheptanoic acid



D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid



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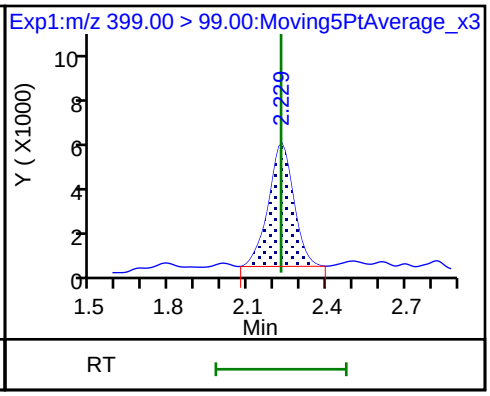
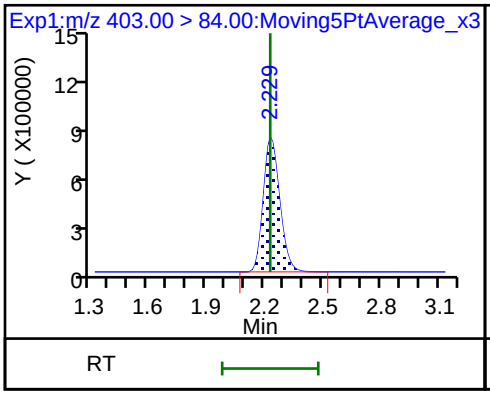
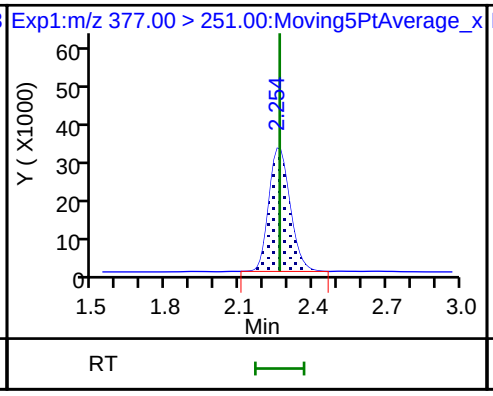


D 11 18O2 PFHxS



65 ADONA



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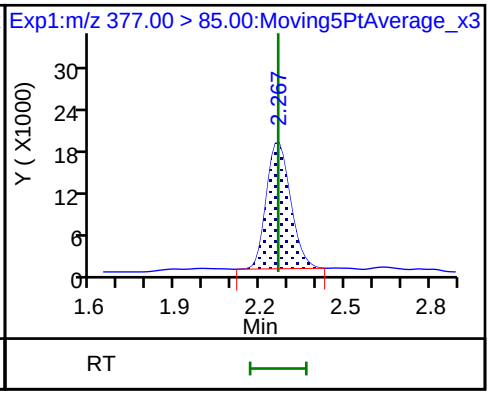
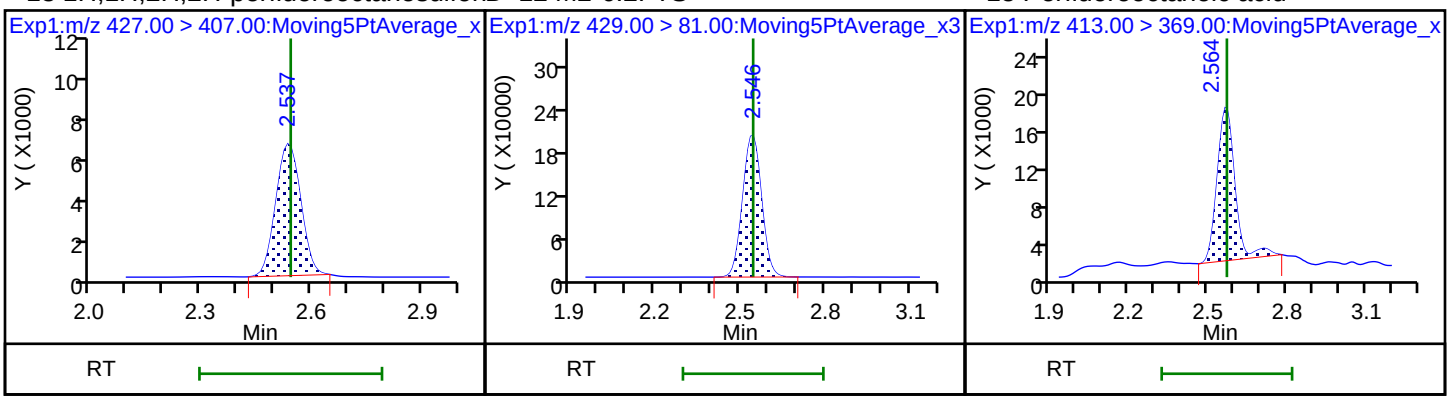
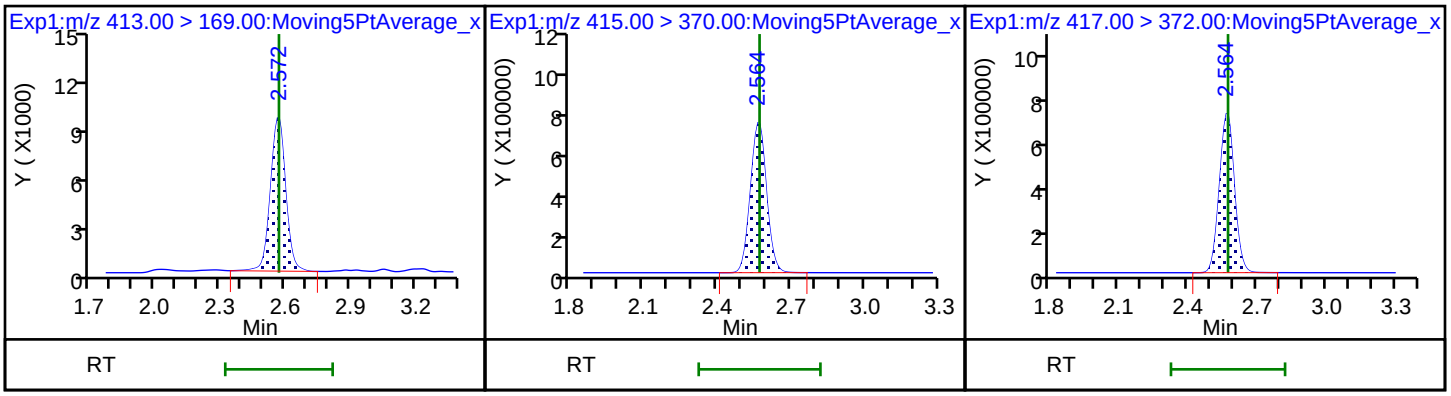


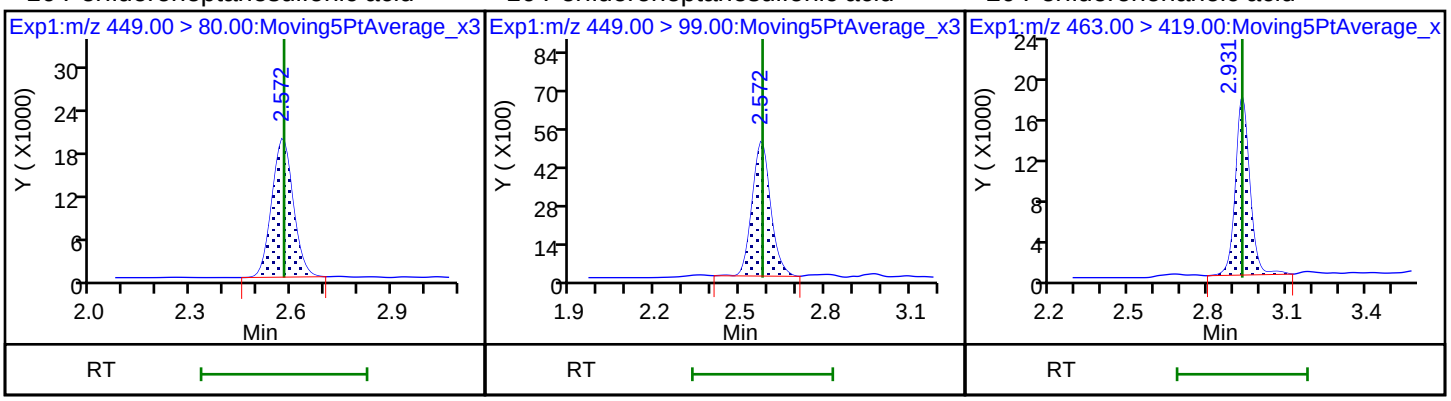
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS 15 Perfluorooctanoic acid



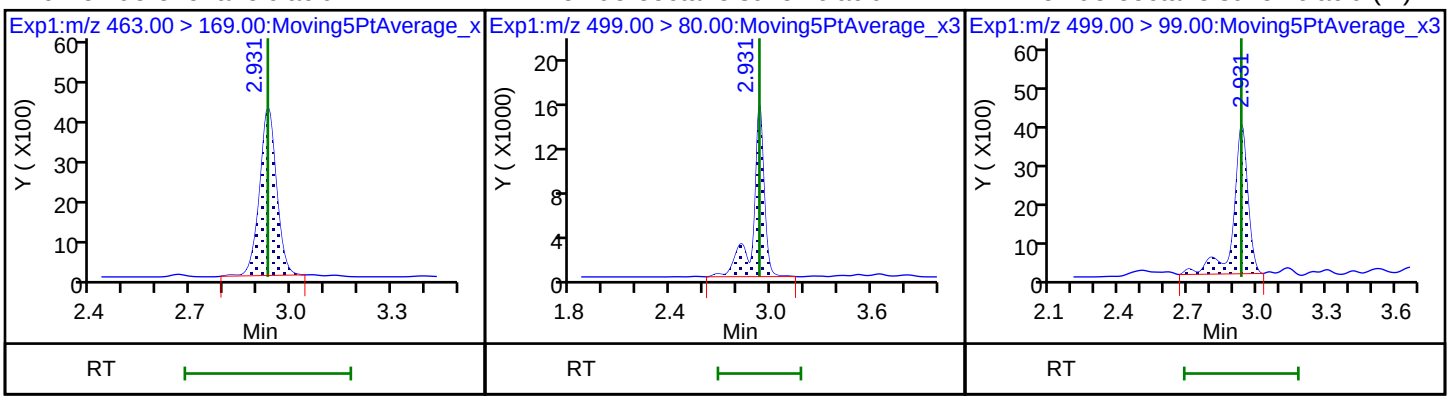
15 Perfluorooctanoic acid * 62 13C2-PFOA D 14 13C4 PFOA



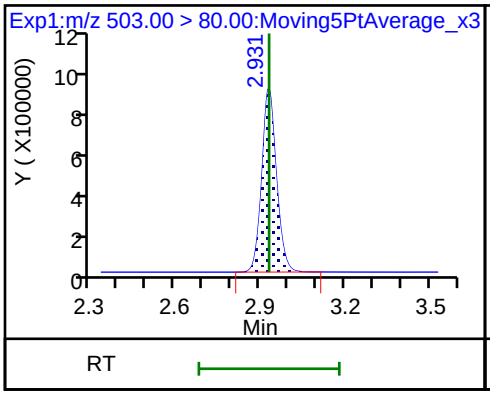
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid 20 Perfluorononanoic acid



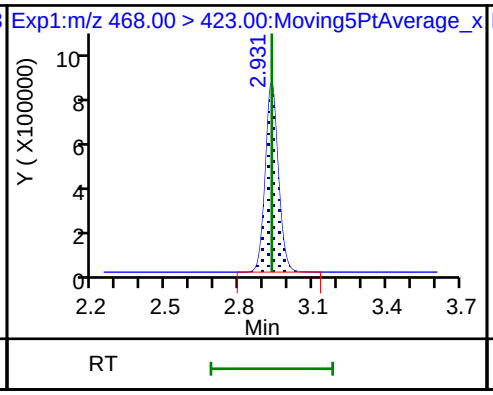
20 Perfluorononanoic acid 17 Perfluorooctane sulfonic acid 17 Perfluorooctane sulfonic acid (M)



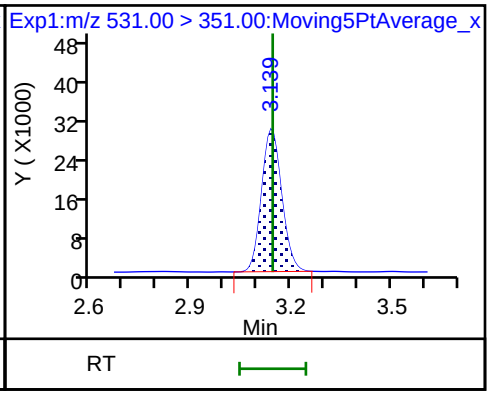
D 18 13C4 PFOS



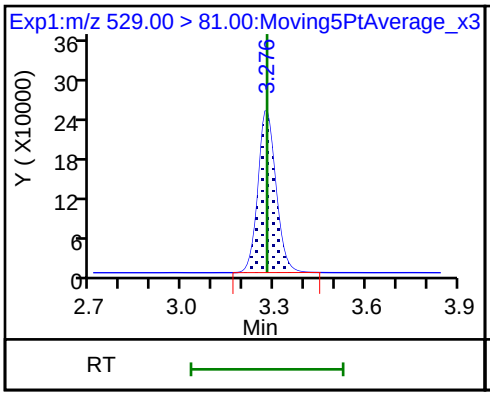
D 19 13C5 PFNA



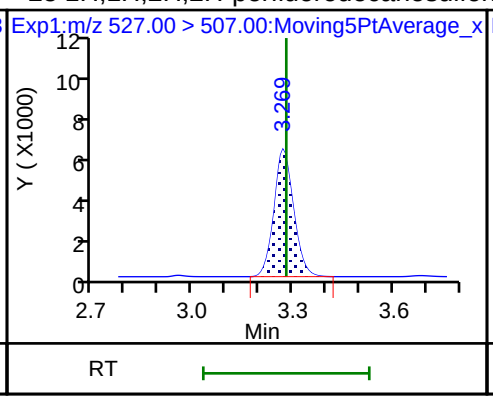
69 9-Chlorohexadecafluoro-3-oxanonane



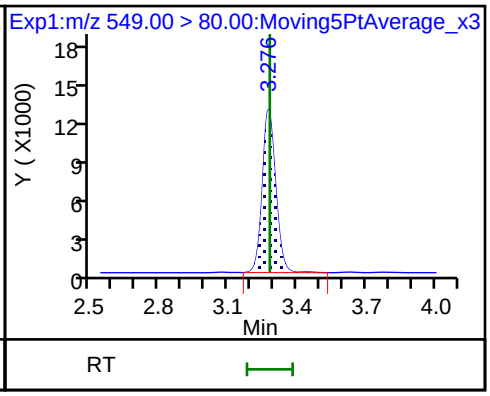
D 26 M2-8:2FTS



25 1H,1H,2H,2H-perfluorodecanesulfoni



68 Perfluorononanesulfonic acid



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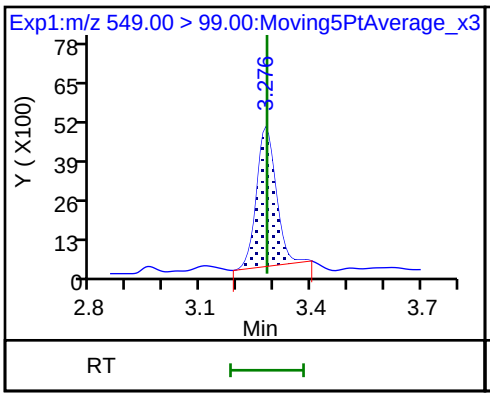
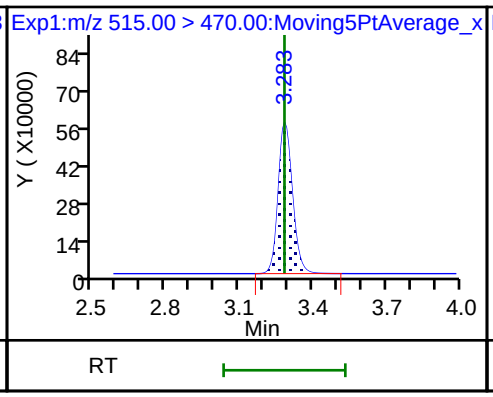
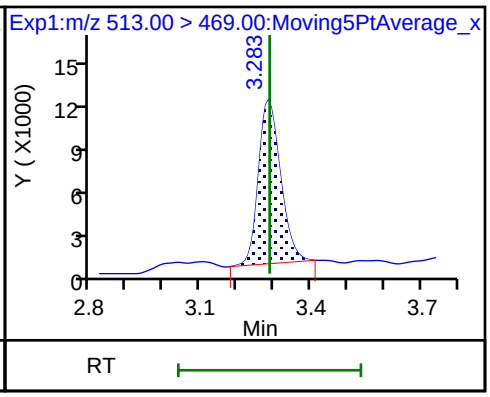


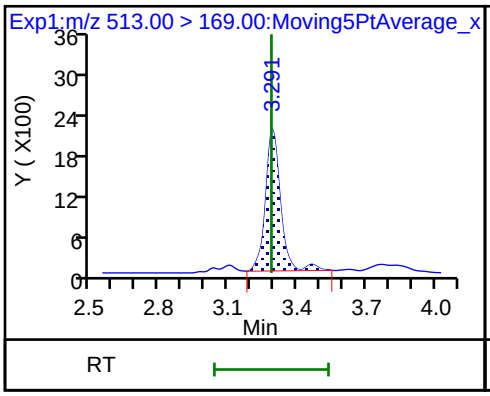
D 23 13C2 PFDA



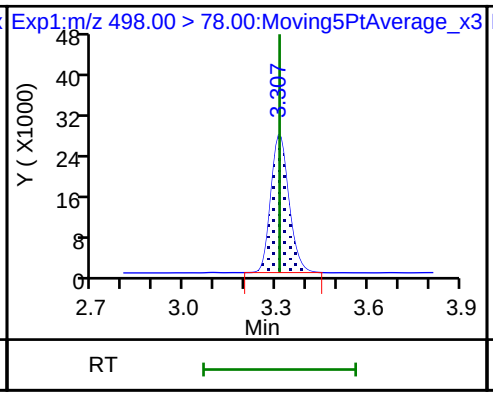
24 Perfluorodecanoic acid



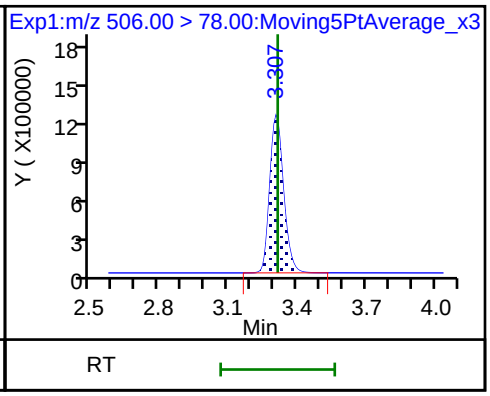
24 Perfluorodecanoic acid



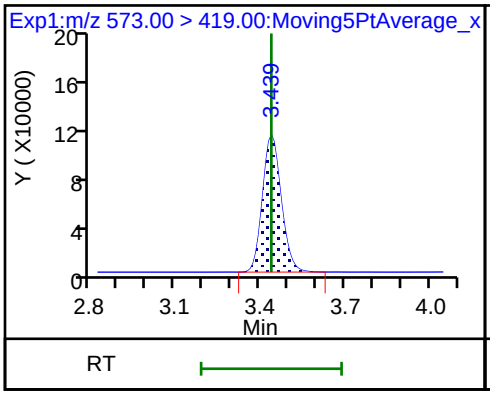
22 Perfluorooctane Sulfonamide



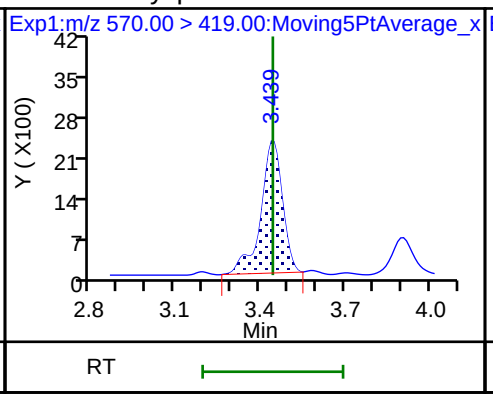
D 21 13C8 FOSA



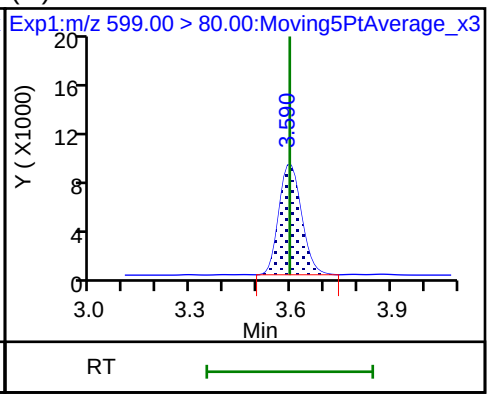
D 27 d3-NMeFOSAA



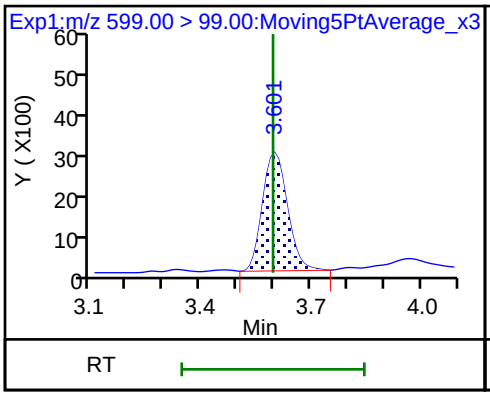
28 N-methyl perfluorooctane sulfonami (M)



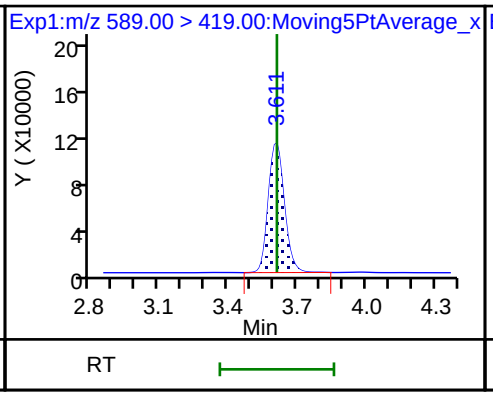
29 Perfluorodecane Sulfonic acid



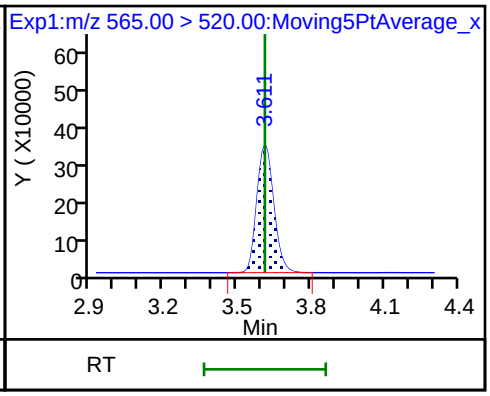
29 Perfluorodecane Sulfonic acid



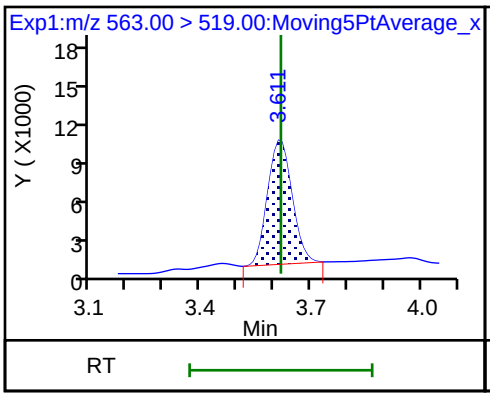
D 32 d5-NEtFOSAA



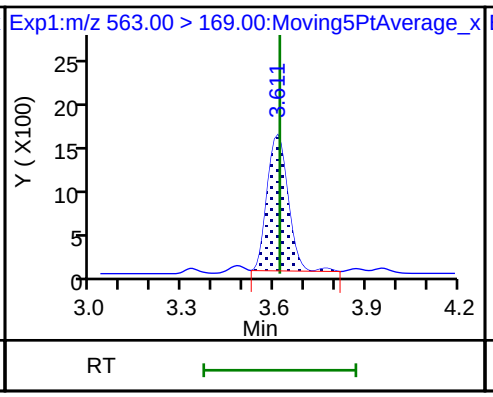
D 30 13C2 PFUnA



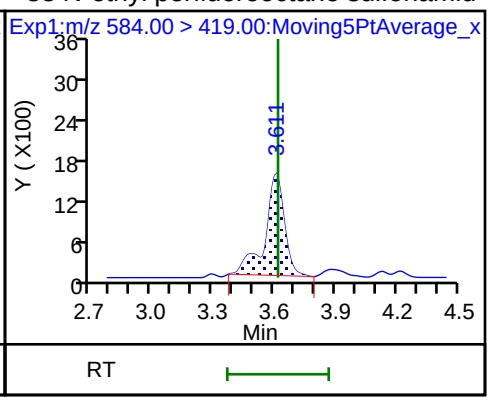
31 Perfluoroundecanoic acid



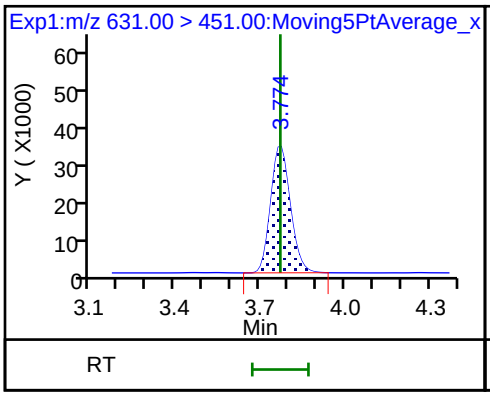
31 Perfluoroundecanoic acid



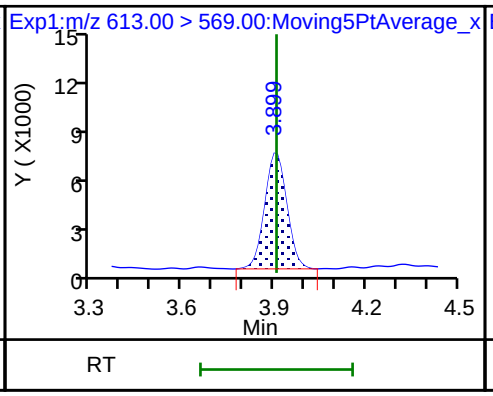
33 N-ethyl perfluorooctane sulfonamid



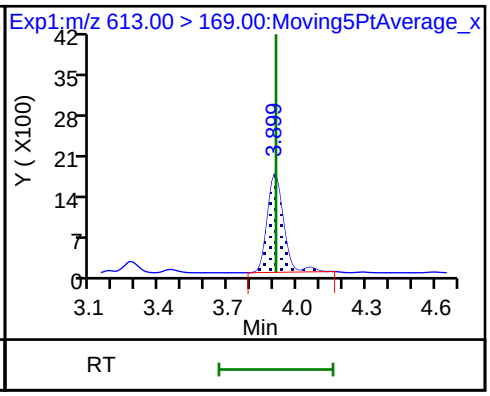
66 11-Chloroeicosafluoro-3-oxaundecan



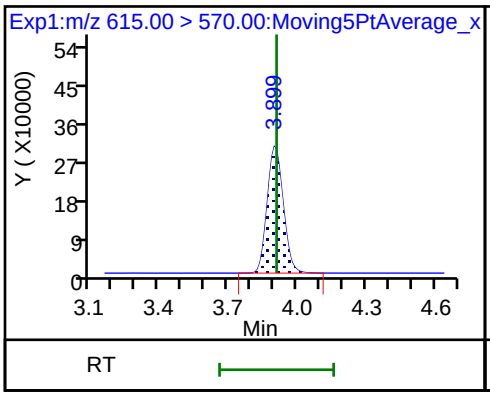
37 Perfluorododecanoic acid



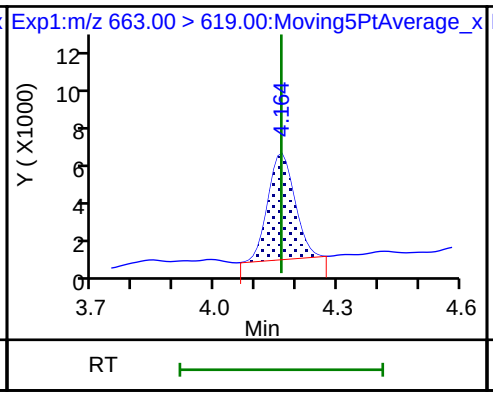
37 Perfluorododecanoic acid



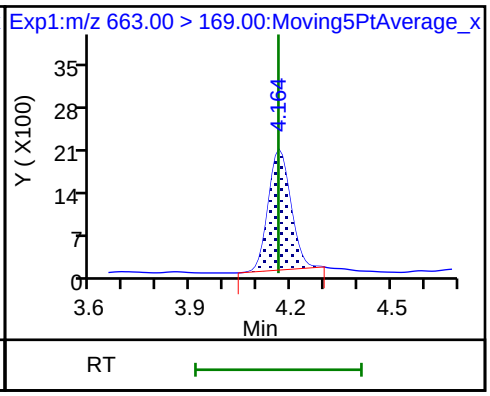
D 36 13C2 PFDoA



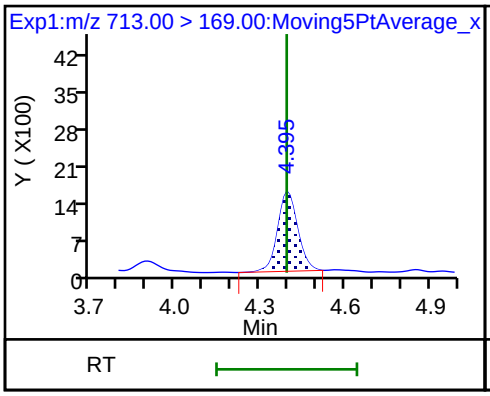
41 Perfluorotridecanoic acid



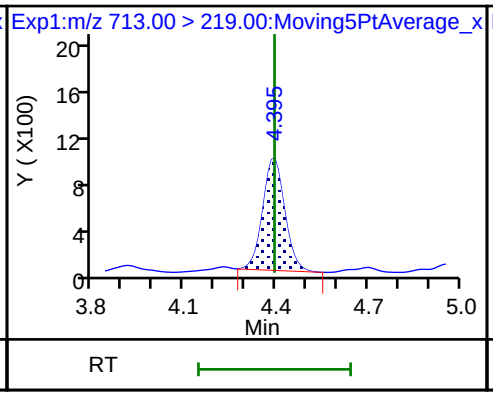
41 Perfluorotridecanoic acid



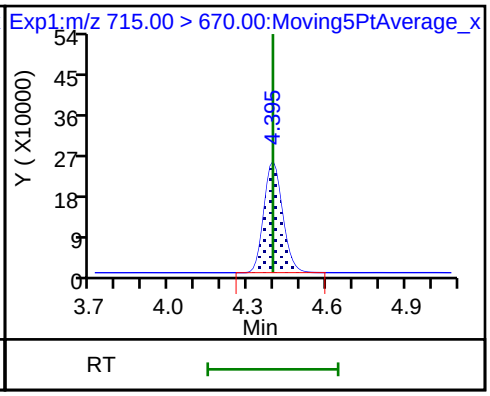
42 Perfluorotetradecanoic acid



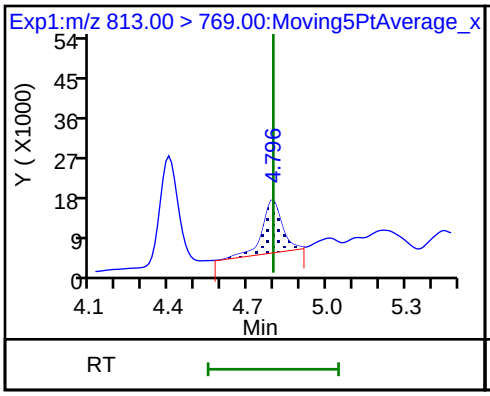
42 Perfluorotetradecanoic acid



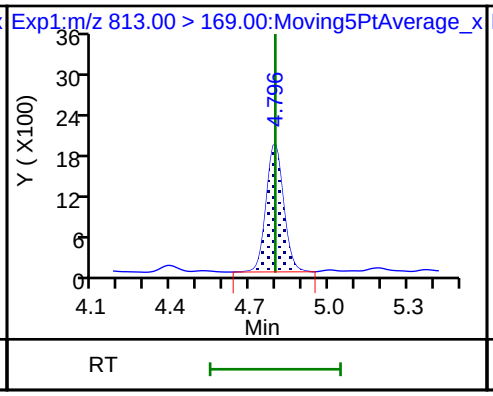
D 43 13C2-PFTeDA



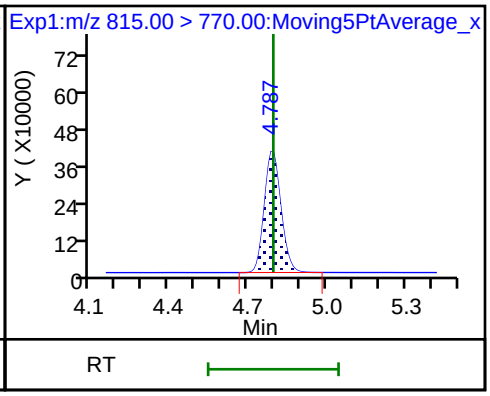
45 Perfluorohexadecanoic acid



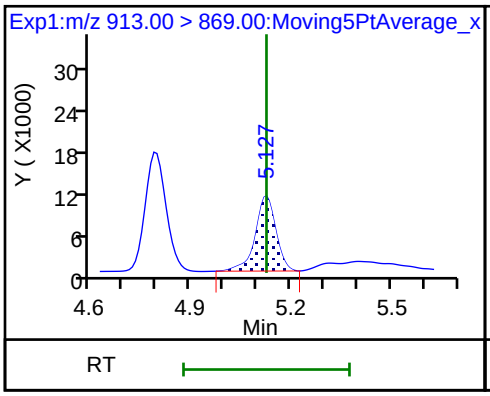
45 Perfluorohexadecanoic acid



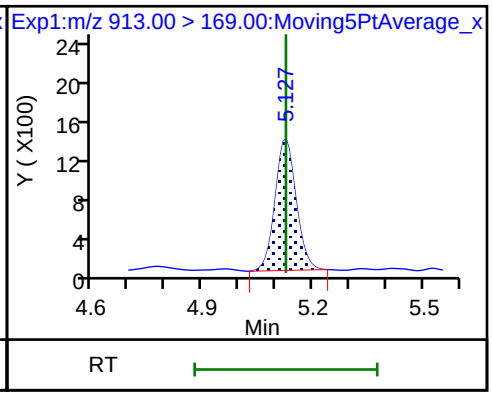
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

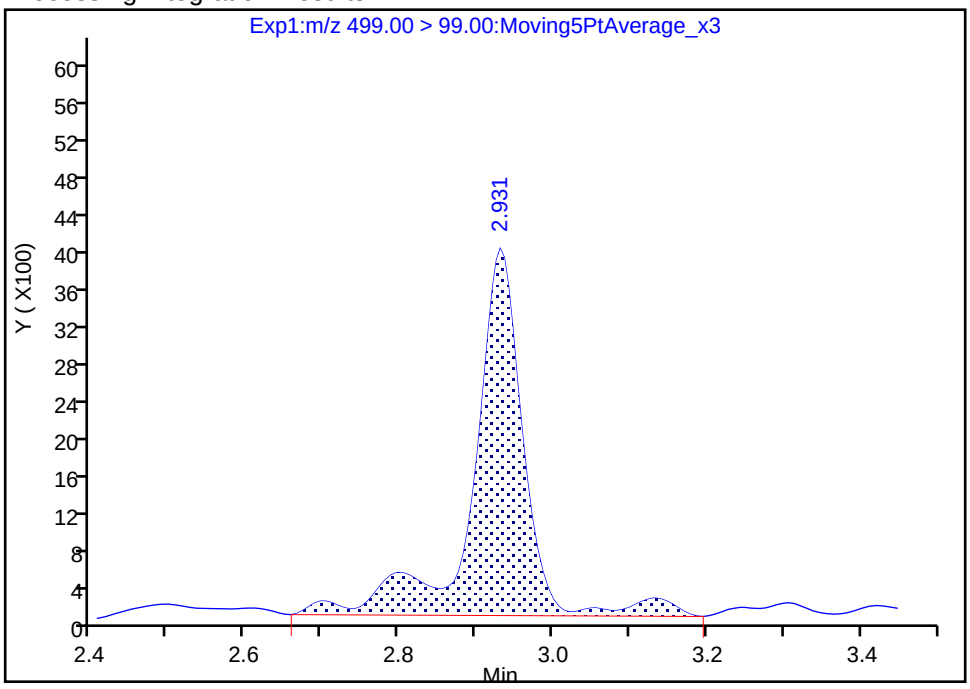
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_004.d
Injection Date: 03-Aug-2018 23:48:27 Instrument ID: A8_N
Lims ID: CCVL
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

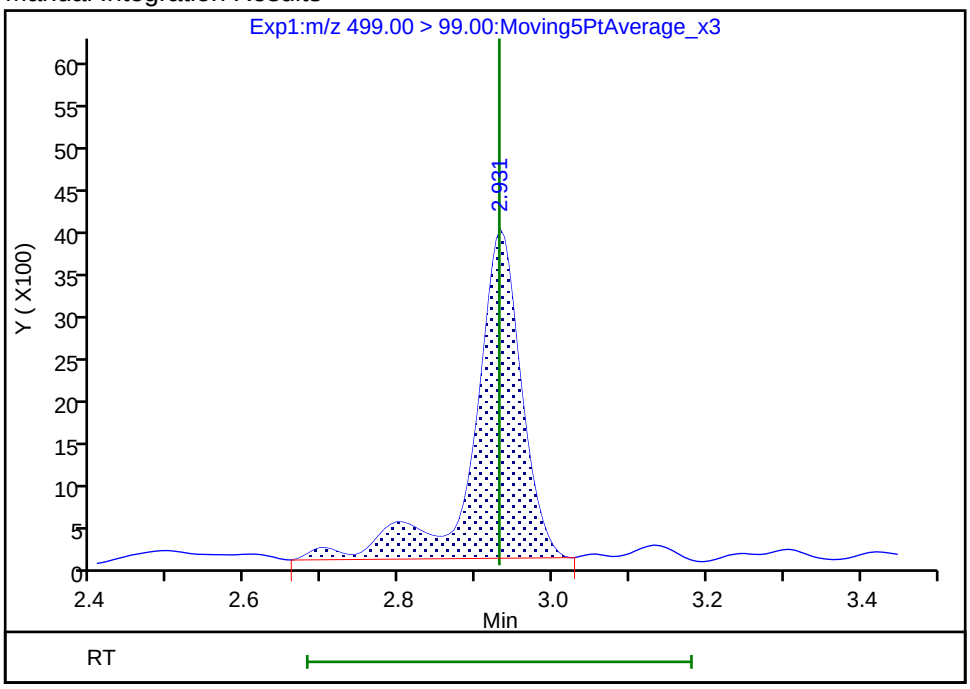
Processing Integration Results

RT: 2.93
Area: 18482
Amount: 0.047631
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 17055
Amount: 0.047631
Amount Units: ng/ml



Reviewer: mongkols, 06-Aug-2018 12:43:42
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

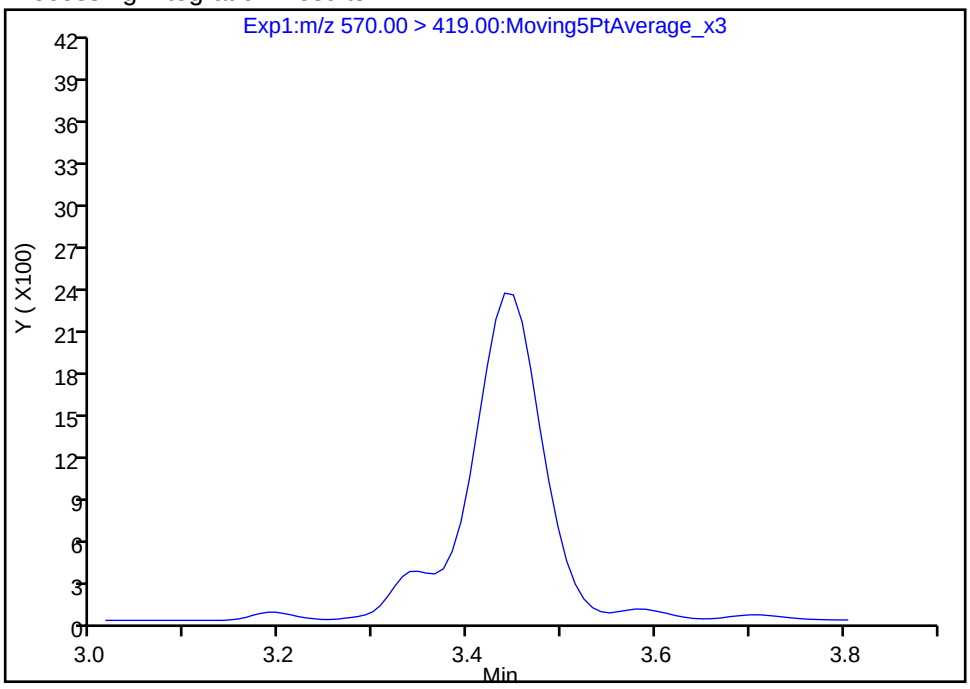
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_004.d				
Injection Date:	03-Aug-2018 23:48:27	Instrument ID:	A8_N		
Lims ID:	CCVL				
Client ID:					
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	21	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

28 N-methyl perfluorooctane sulfonamidoacetic a, CAS: 2355-31-9

Signal: 1

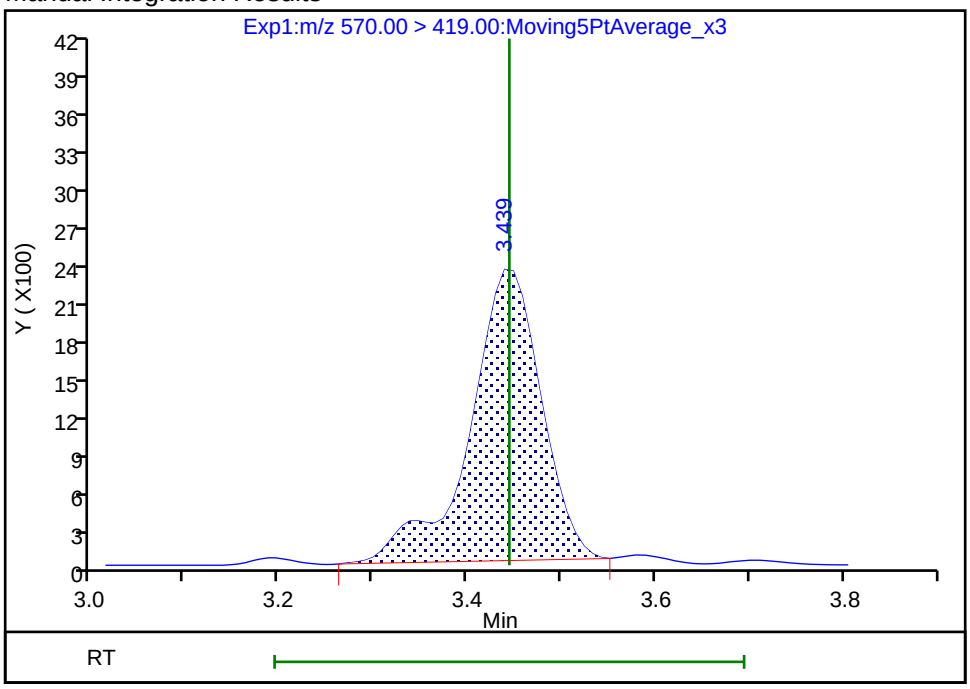
Not Detected
Expected RT: 3.44

Processing Integration Results



Manual Integration Results

RT: 3.44
Area: 12319
Amount: 0.058338
Amount Units: ng/ml



Reviewer: mongkols, 06-Aug-2018 12:44:12
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-237938/3 Calibration Date: 08/03/2018 23:56

Instrument ID: A8_N Calib Start Date: 08/01/2018 12:59

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/01/2018 13:46

Lab File ID: 2018.08.03LLC_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9855	0.9685		0.983	1.00	-1.7	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.197	1.190		0.994	1.00	-0.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	76.65	77.58		0.895	0.884	1.2	50.0
4:2 FTS	AveID	17.21	19.74		1.07	0.934	14.7	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.055	1.046		0.992	1.00	-0.8	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.65	69.50		0.964	0.938	2.7	50.0
HFPO-DA (GenX)	AveID	4.003	3.917		0.979	1.00	-2.1	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.160	1.281		1.10	1.00	10.4	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.156	1.079		0.849	0.910	-6.7	40.0
ADONA	AveID	2.793	3.124		1.05	0.942	11.9	50.0
6:2 FTS	AveID	1.654	1.617		0.927	0.948	-2.2	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.141		0.988	1.00	-1.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.382	1.345		0.926	0.952	-2.7	50.0
Perfluorononanoic acid (PFNA)	AveID	1.080	1.071		0.991	1.00	-0.9	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.123	1.067		0.882	0.928	-4.9	40.0
F-53B Major	AveID	1.786	1.791		0.935	0.932	0.3	50.0
8:2 FTS	AveID	1.351	1.264		0.897	0.958	-6.4	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7187	0.7446		0.995	0.960	3.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.067	1.037		0.972	1.00	-2.8	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9871	0.9771		0.990	1.00	-1.0	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.017	1.030		1.01	1.00	1.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6504	0.6051		0.897	0.964	-7.0	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8912	0.9060		1.02	1.00	1.7	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.232	1.139		0.925	1.00	-7.5	40.0
F-53B Minor	AveID	2.433	2.575		0.997	0.942	5.8	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.083	1.016		0.939	1.00	-6.1	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.9424	0.9093		0.965	1.00	-3.5	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2694	0.2488		0.923	1.00	-7.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9671		0.975	1.00	-2.5	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.028	1.233		1.20	1.00	19.9	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-237938/3 Calibration Date: 08/03/2018 23:56

Instrument ID: A8_N Calib Start Date: 08/01/2018 12:59

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/01/2018 13:46

Lab File ID: 2018.08.03LLC_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C4 PFBA	Ave	1.440	1.334		2.32	2.50	-7.3	50.0
13C5 PFPeA	Ave	0.9481	0.9134		2.41	2.50	-3.7	50.0
13C3-PFBS	Ave	0.0273	0.0248		2.11	2.33	-9.1	50.0
M2-4:2FTS	Ave	0.1926	0.1970		2.39	2.34	2.3	50.0
13C2 PFHxA	Ave	1.026	1.032		2.51	2.50	0.6	50.0
13C3 HFPO-DA	Ave	0.0480	0.0517		2.69	2.50	7.5	50.0
13C4-PFHpA	Ave	0.9943	1.008		2.53	2.50	1.4	50.0
18O2 PFHxS	Ave	1.494	1.438		2.28	2.37	-3.8	50.0
M2-6:2FTS	Ave	0.2913	0.2808		2.29	2.38	-3.6	40.0
13C4 PFOA	Ave	0.9600	0.9364		2.44	2.50	-2.5	50.0
13C4 PFOS	Ave	1.032	0.9563		2.21	2.39	-7.3	50.0
13C5 PFNA	Ave	0.8365	0.8334		2.49	2.50	-0.4	50.0
M2-8:2FTS	Ave	0.2839	0.2967		2.50	2.40	4.5	40.0
13C2 PFDA	Ave	0.6256	0.6288		2.51	2.50	0.5	50.0
13C8 FOSA	Ave	1.516	1.465		2.42	2.50	-3.4	50.0
d3-NMeFOSAA	Ave	0.1518	0.1443		2.38	2.50	-4.9	50.0
d5-NEtFOSAA	Ave	0.1627	0.1577		2.42	2.50	-3.1	50.0
13C2 PFUnA	Ave	0.4818	0.4630		2.40	2.50	-3.9	50.0
13C2 PFDoA	Ave	0.4172	0.4163		2.49	2.50	-0.2	50.0
13C2-PFTeDA	Ave	0.3502	0.3354		2.39	2.50	-4.2	50.0
13C2-PFHxDA	Ave	0.6033	0.4890		2.03	2.50	-18.9	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_005.d
Lims ID: CCV L4
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Aug-2018 23:56:18 ALS Bottle#: 28 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 12:44:50 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK008

First Level Reviewer: mongkols Date: 06-Aug-2018 12:44:50

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.389	1.391	-0.002	0.540	4720469	2.32		92.7	82795	
2 Perfluorobutyric acid										
212.90 > 169.00	1.395	1.395	0.0	1.004	1828607	0.9827		98.3	673	
D 3 13C5-PFPeA										
267.90 > 223.00	1.630	1.632	-0.002	0.634	3231692	2.41		96.3	62352	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.630	1.630	0.0	1.000	1538640	0.99		99.4	674	
D 47 13C3-PFBS										
301.90 > 83.00	1.663	1.665	-0.002	0.647	81529	2.11		90.9	501	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.663	1.663	0.0	1.000	2404930	0.8948		101	5599	
298.90 > 99.00	1.663	1.663	0.0	1.000	1018685		2.36(1.25-3.74)		4863	
D 60 M2-4:2FTS										
329.00 > 81.00	1.863	1.866	-0.003	0.725	651160	2.39		102	7576	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.863	1.863	0.0	1.121	646481	1.07		115	39830	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.902	1.902	0.0	1.000	1527204	0.99		99.2	5497	
313.00 > 119.00	1.902	1.902	0.0	1.000	136130		11.22(5.03-15.10)		1730	
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.905	-0.003	0.740	3651358	2.51		101	81813	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.924	1.924	0.0	1.157	2286070	0.9636		103	36886	
349.00 > 99.00	1.924	1.924	0.0	1.157	856508		2.67(1.36-4.07)		10185	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.000	1.991	0.009	0.778	182736	2.69		108	6275	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.000	2.000	0.0	1.000	286287	0.9785		97.9	1932	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.214	2.214	0.0	1.000	1826616	1.10		110	1205	
363.00 > 169.00	2.214	2.214	0.0	1.000	702797		2.60(1.13-3.40)		10926	
D 9 13C4-PFHpA										
367.00 > 322.00	2.214	2.217	-0.003	0.861	3565842	2.53		101	54884	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.226	2.226	0.0	0.995	1998154	0.8493		93.3	9672	
399.00 > 99.00	2.226	2.226	0.0	0.995	687793		2.91(1.50-4.49)		1752	
D 11 18O2 PFHxS										
403.00 > 84.00	2.238	2.228	0.010	0.870	4813197	2.28		96.2	40564	
65 ADONA										
377.00 > 251.00	2.264	2.264	0.0	0.771	3983546	1.05		112	44907	
377.00 > 85.00	2.264	2.264	0.0	0.771	2292436		1.74(0.84-2.53)		10733	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.545	2.545	0.0	1.000	609200	0.9271		97.8	12028	
D 12 M2-6:2FTS										
429.00 > 81.00	2.545	2.545	0.0	0.990	943695	2.29		96.4	20518	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.571	2.571	0.0	1.000	1514288	0.9882		98.7	1033	
413.00 > 169.00	2.571	2.571	0.0	1.000	797232		1.90(0.84-2.52)		6842	
* 62 13C2-PFOA										
415.00 > 370.00	2.571	2.571	0.0		3538264	2.50			46398	
D 14 13C4 PFOA										
417.00 > 372.00	2.571	2.572	-0.001	1.000	3313355	2.44		97.5	49639	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.579	2.579	0.0	0.879	1732528	0.9260		97.3	20310	
449.00 > 99.00	2.579	2.579	0.0	0.879	453514		3.82(1.94-5.82)		8439	
20 Perfluorononanoic acid										
463.00 > 419.00	2.935	2.935	0.0	1.000	1262742	0.99		99.1	5283	
463.00 > 169.00	2.935	2.935	0.0	1.000	297011		4.25(1.90-5.69)		13605	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.935	2.935	0.0	1.000	1340617	0.8823		95.1	10975	M
499.00 > 99.00	2.935	2.935	0.0	1.000	312665		4.29(2.31-6.93)		2746	
D 18 13C4 PFOS										
503.00 > 80.00	2.935	2.931	0.004	1.142	3234813	2.21		92.7	43173	
D 19 13C5 PFNA										
468.00 > 423.00	2.935	2.931	0.004	1.142	2948666	2.49		99.6	47662	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.146	3.146	0.0	1.072	2259592	0.9347		100	23659	
D 26 M2-8:2FTS										
529.00 > 81.00	3.281	3.276	0.005	1.276	1005725	2.50		104	22706	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.281	3.281	0.0	1.000	508692	0.8966		93.6	25305	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.281	3.281	0.0	1.118	967487	0.99		104	31061	
549.00 > 99.00	3.281	3.281	0.0	1.118	361040		2.68(1.33-3.97)		3397	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.288	3.283	0.005	1.279	2224718	2.51		101	45165	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.296	3.296	0.0	1.002	923034	0.9718		97.2	1981	
513.00 > 169.00	3.296	3.296	0.0	1.002	172455		5.35(2.36-7.09)		3316	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.319	3.319	0.0	1.002	2025563	0.9898		99.0	37024	
D 21 13C8 FOSA										
506.00 > 78.00	3.311	3.314	-0.003	1.288	5182841	2.42		96.6	36473	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.445	3.439	0.006	1.340	510566	2.38		95.1	22315	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.445	3.445	0.0	1.000	210402	1.01		101	2641	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.597	3.597	0.0	1.225	789527	0.8969		93.0	27435	
599.00 > 99.00	3.597	3.597	0.0	1.225	285112		2.77(1.39-4.16)		3709	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.608	3.611	-0.003	1.403	558122	2.42		96.9	5497	
D 30 13C2 PFUnA										
565.00 > 520.00	3.618	3.611	0.007	1.407	1638091	2.40		96.1	42789	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.618	3.618	0.0	1.000	746601	0.9247		92.5	1868	
563.00 > 169.00	3.618	3.618	0.0	1.000	139370		5.36(2.12-6.36)		9720	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.618	3.618	0.0	1.003	202257	1.02		102	5803	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.772	3.772	0.0	1.285	3282438	1.00		106	40398	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.908	3.908	0.0	1.000	598819	0.9386		93.9	164	
613.00 > 169.00	3.908	3.908	0.0	1.000	155237		3.86(2.13-6.40)		3549	
D 36 13C2 PFDoA										
615.00 > 570.00	3.908	3.909	-0.001	1.520	1473057	2.49		99.8	18018	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.163	4.163	0.0	1.065	535778	0.9649		96.5	157	
663.00 > 169.00	4.163	4.163	0.0	1.065	167230		3.20(1.25-3.76)		1441	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.394	4.394	0.0	1.000	118085	0.9235		92.3	1708	
713.00 > 219.00	4.394	4.394	0.0	1.000	93211		1.27(0.71-2.13)		1897	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.394	0.0	1.709	1186761	2.39		95.8	5391	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.796	4.796	0.0	1.000	669327	0.9753		97.5	34.1	
813.00 > 169.00	4.796	4.796	0.0	1.000	108400		6.17(2.86-8.58)		1238	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.796	4.796	0.0	1.865	1730190	2.03		81.1	2661	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.126	5.126	0.0	1.069	853408	1.20		120	324	
913.00 > 169.00	5.126	5.126	0.0	1.069	112308		7.60(3.83-11.48)		1313	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00005 Amount Added: 1.00 Units: mL

Report Date: 06-Aug-2018 12:44:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_005.d

Injection Date: 03-Aug-2018 23:56:18 Instrument ID: A8_N

Lims ID: CCV L4

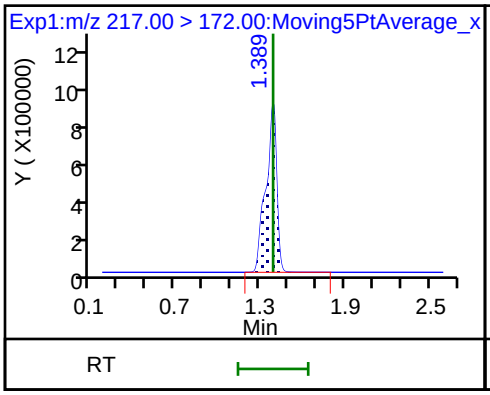
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 28 Worklist Smp#: 3

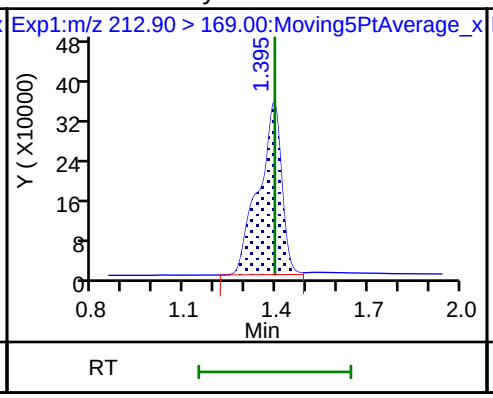
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

D 1 13C4 PFBA



2 Perfluorobutyric acid



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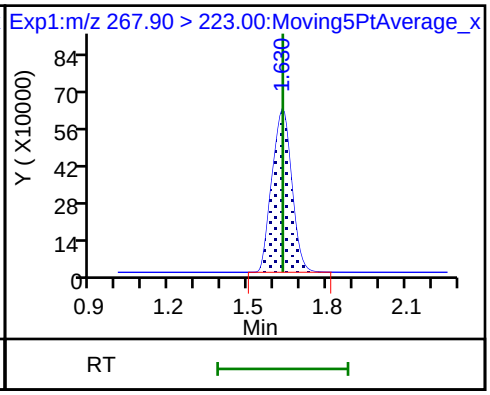
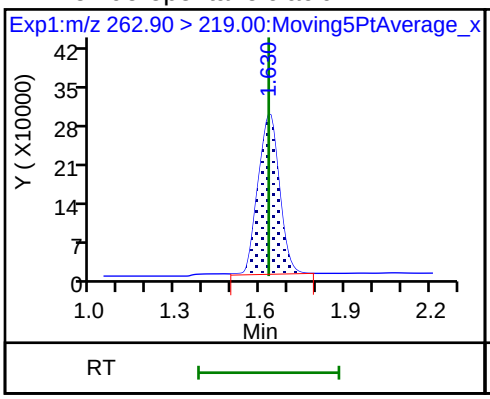
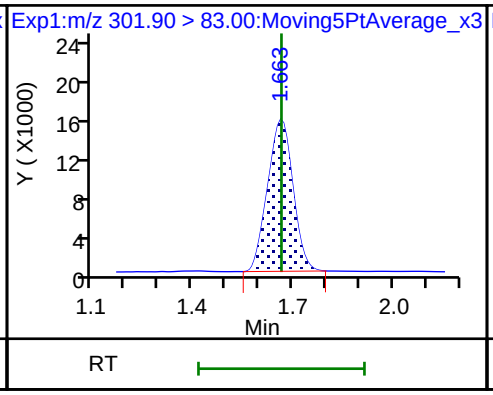


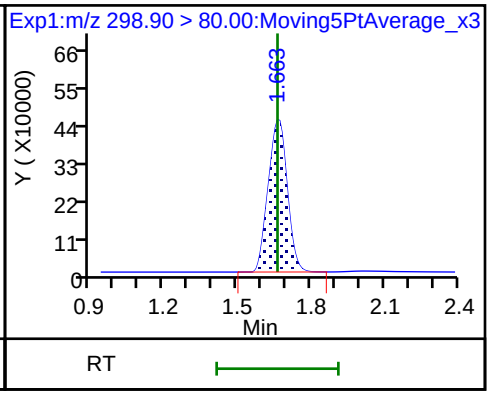
4 Perfluoropentanoic acid



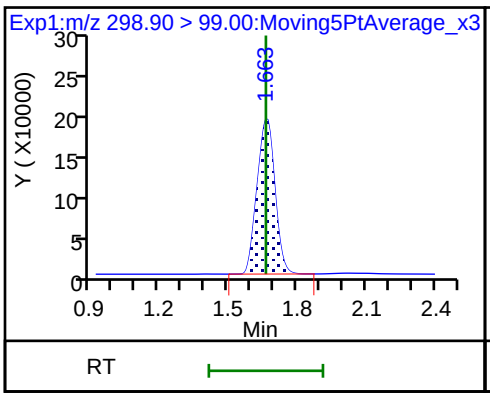
D 47 13C3-PFBS



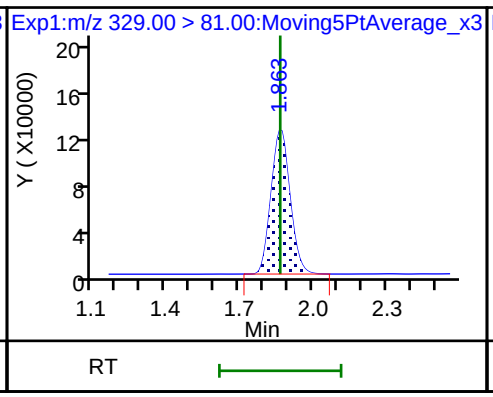
5 Perfluorobutanesulfonic acid



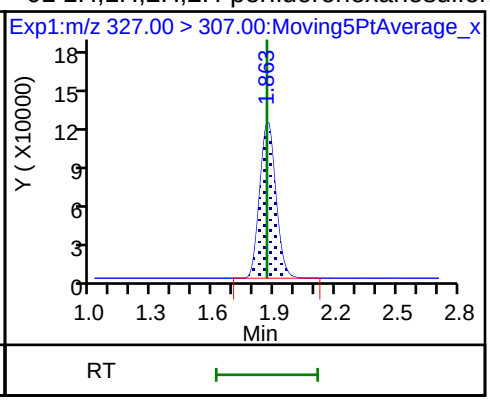
5 Perfluorobutanesulfonic acid



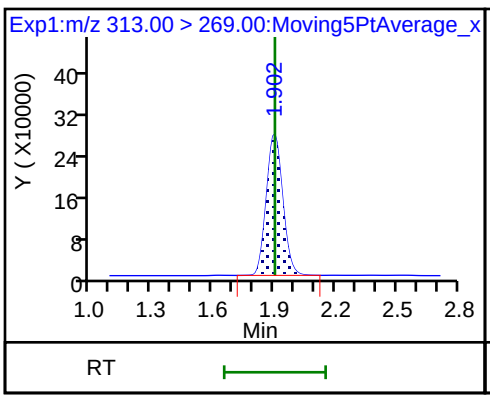
D 60 M2-4:2FTS



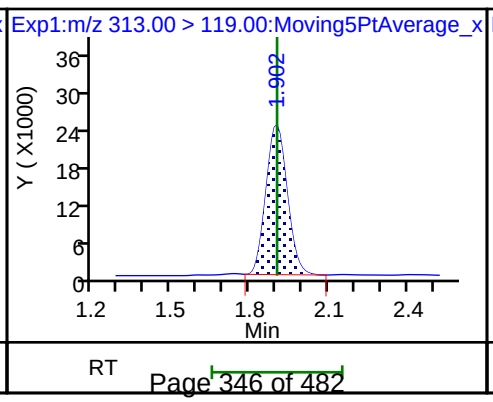
61 1H,1H,2H,2H-perfluorohexanesulfoni



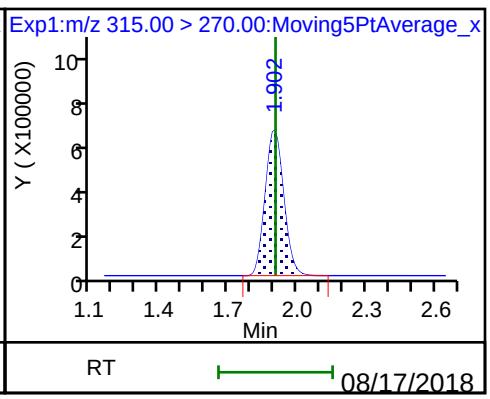
6 Perfluorohexanoic acid



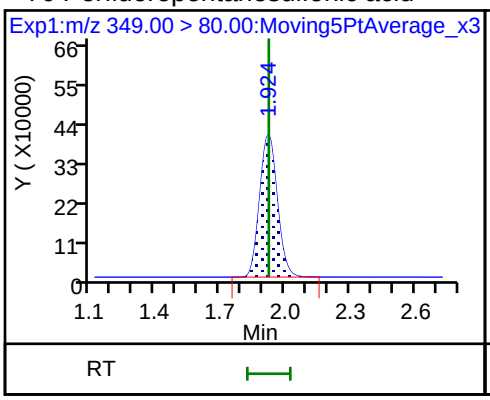
6 Perfluorohexanoic acid



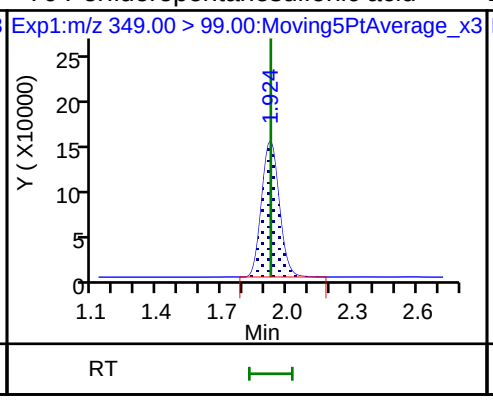
D 7 13C2 PFHxA



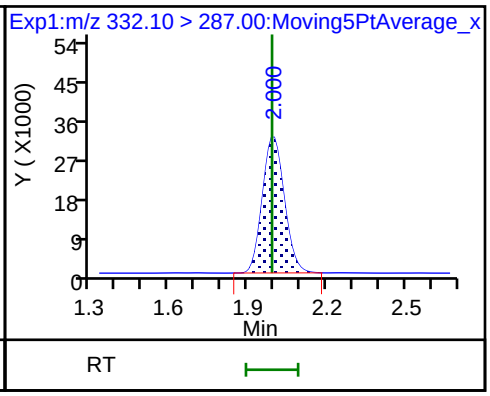
70 Perfluoropentanesulfonic acid



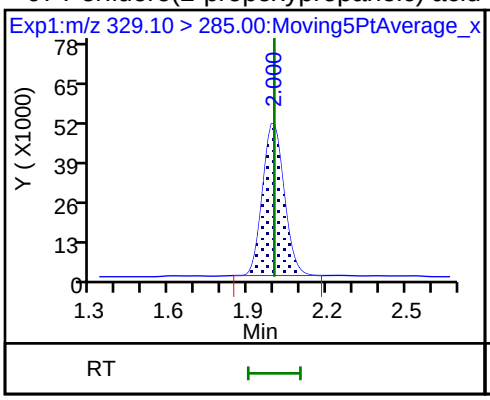
70 Perfluoropentanesulfonic acid



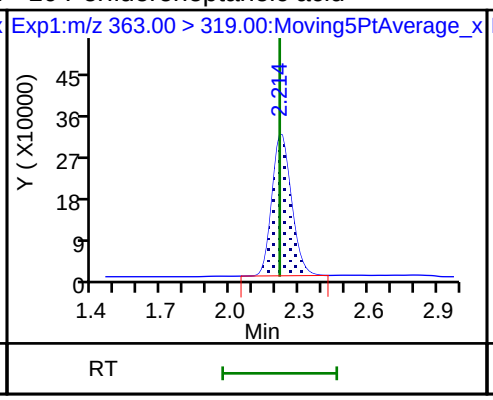
D 64 13C3 HFPO-DA



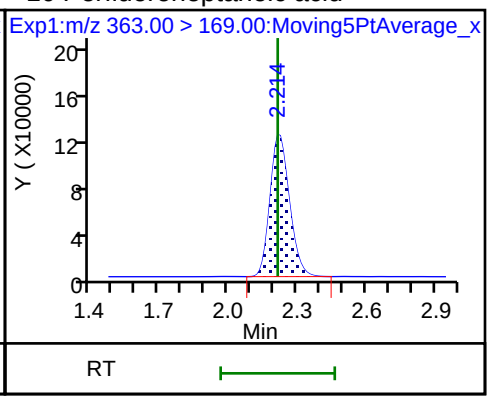
67 Perfluoro(2-propoxypropanoic) acid



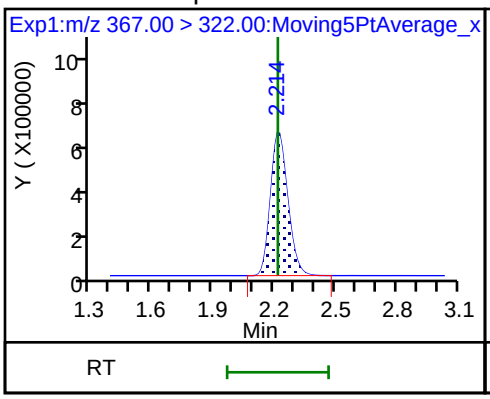
10 Perfluoroheptanoic acid



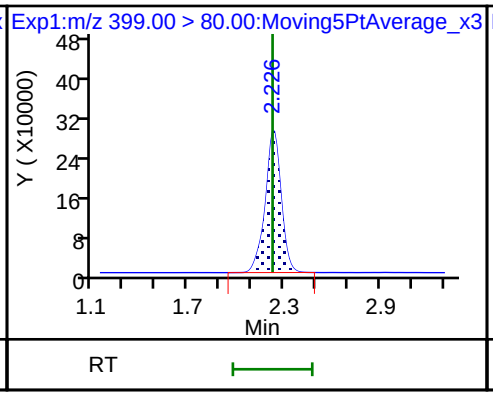
10 Perfluoroheptanoic acid



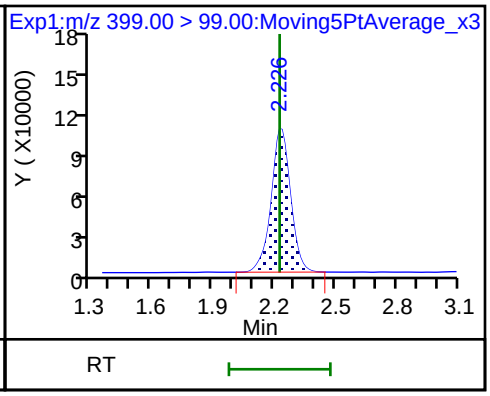
D 9 13C4-PFHpA



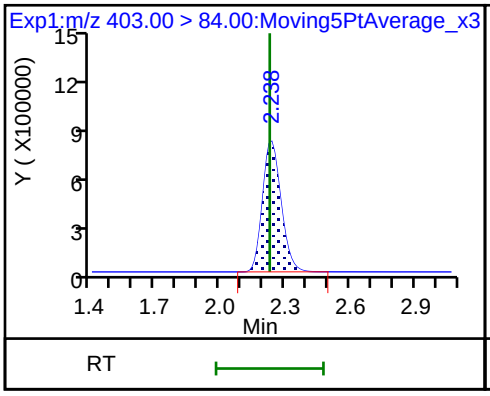
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



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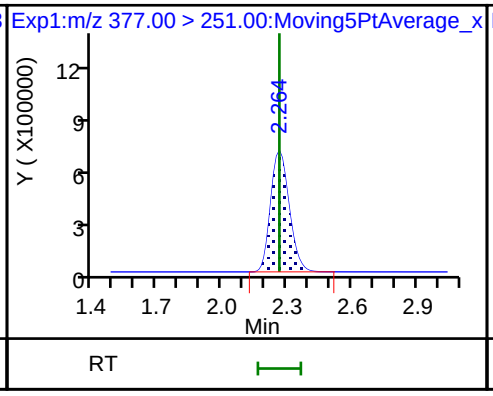

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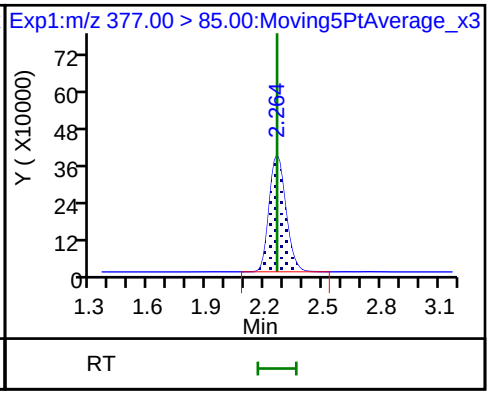
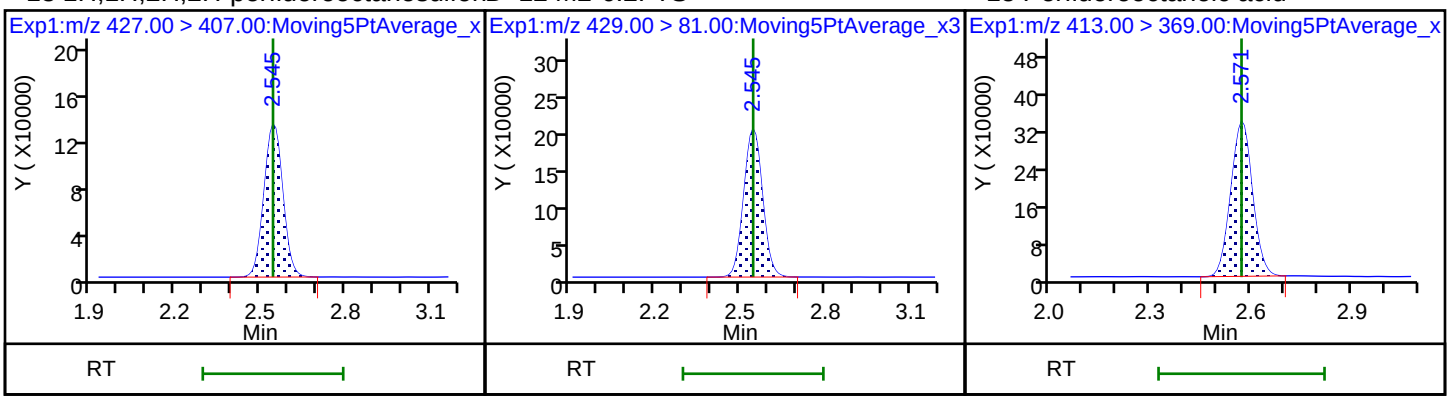
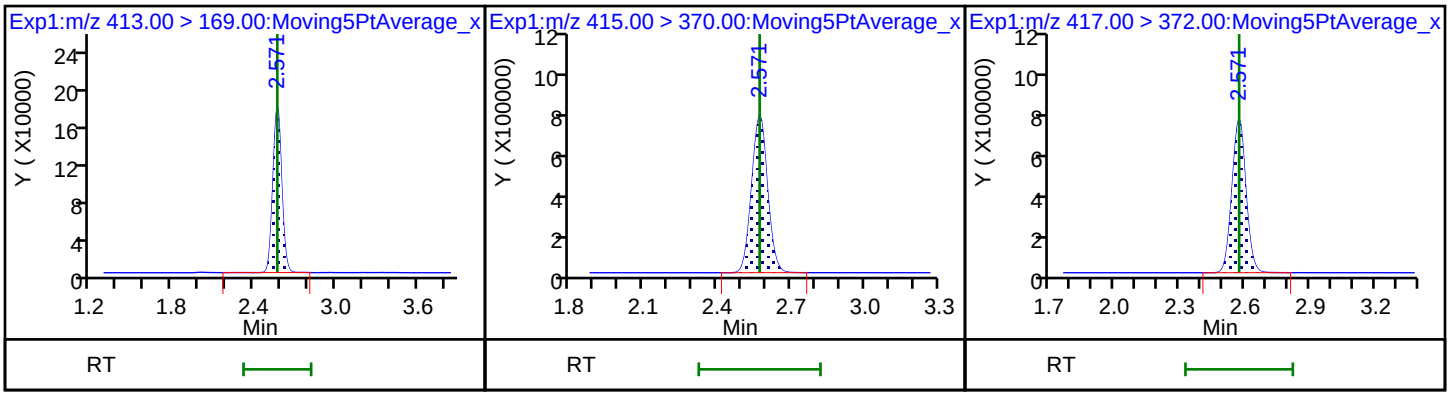


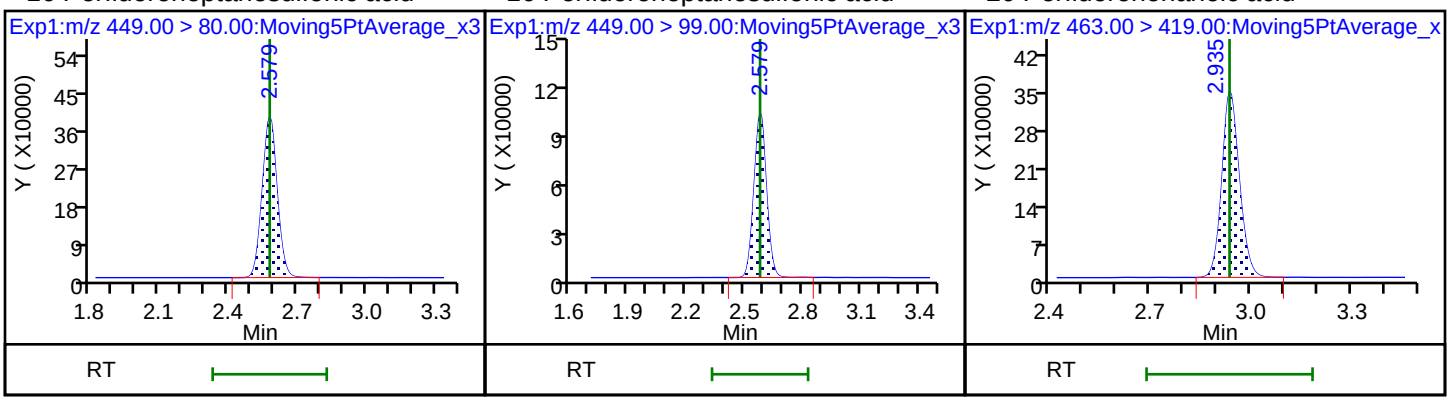
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS 15 Perfluorooctanoic acid



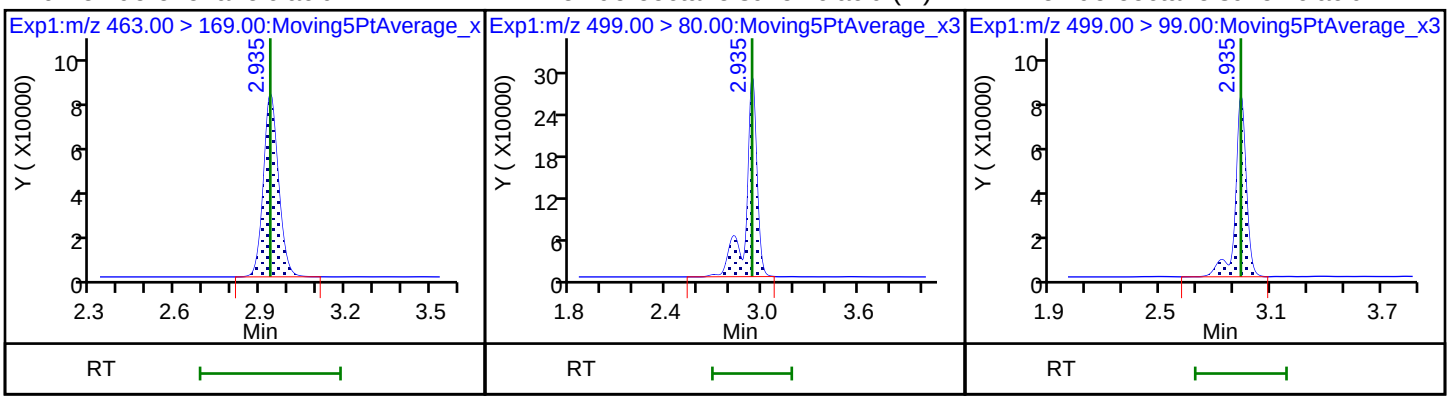
15 Perfluorooctanoic acid * 62 13C2-PFOA D 14 13C4 PFOA



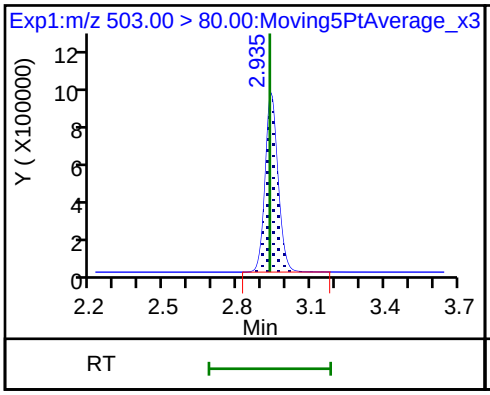
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid 20 Perfluorononanoic acid



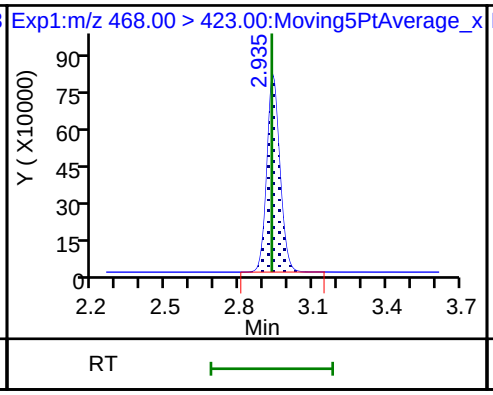
20 Perfluorononanoic acid 17 Perfluorooctane sulfonic acid (M) 17 Perfluorooctane sulfonic acid



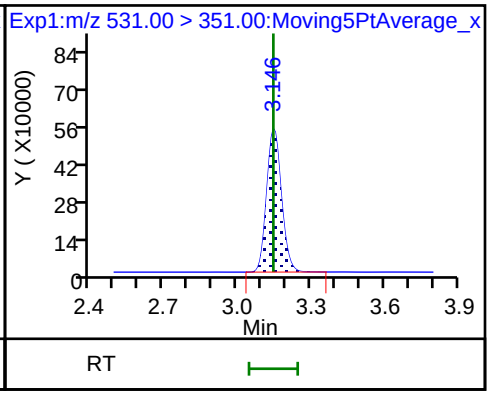
D 18 13C4 PFOS



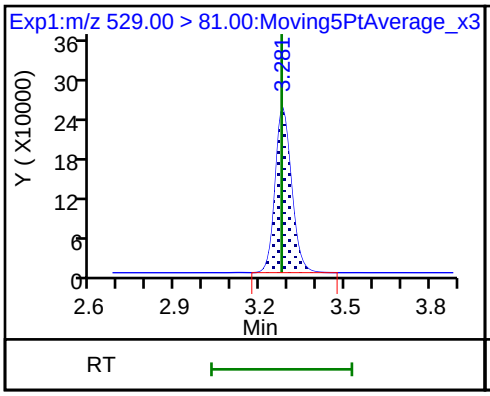
D 19 13C5 PFNA



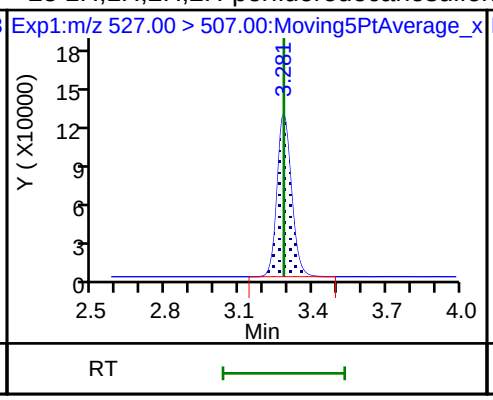
69 9-Chlorohexadecafluoro-3-oxanonane



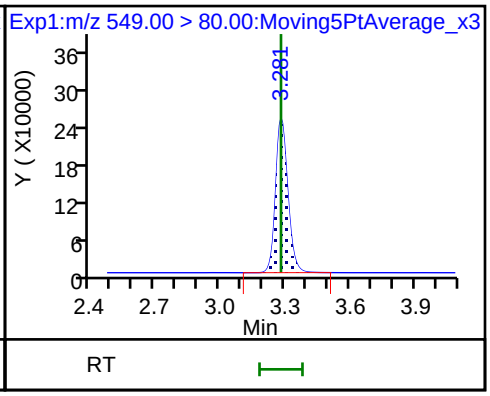
D 26 M2-8:2FTS



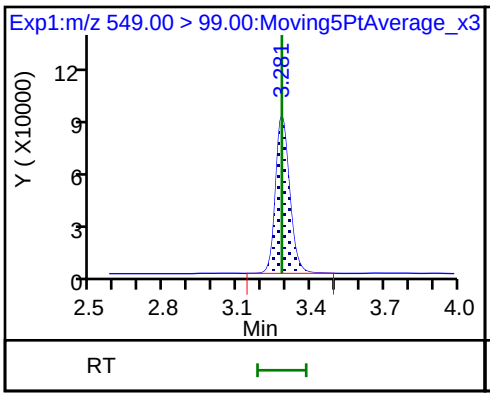
25 1H,1H,2H,2H-perfluorodecanesulfoni



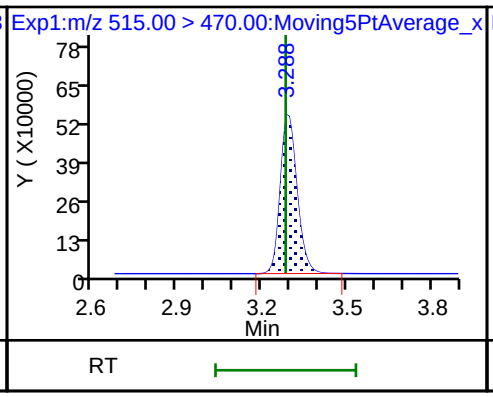
68 Perfluorononanesulfonic acid



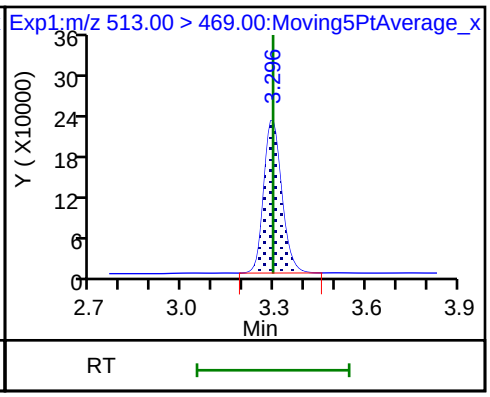
68 Perfluorononanesulfonic acid



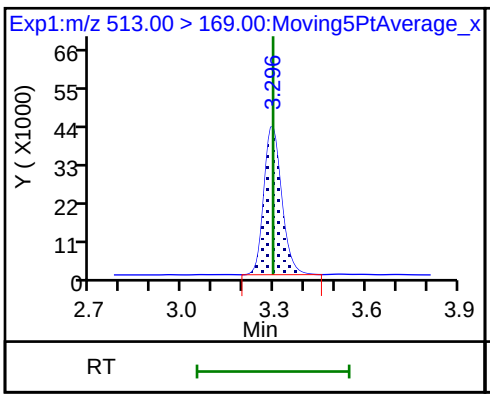
D 23 13C2 PFDA



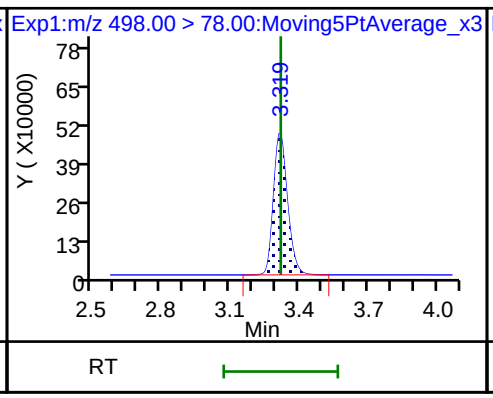
24 Perfluorodecanoic acid



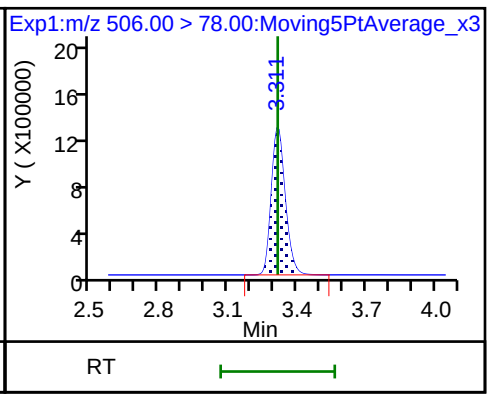
24 Perfluorodecanoic acid



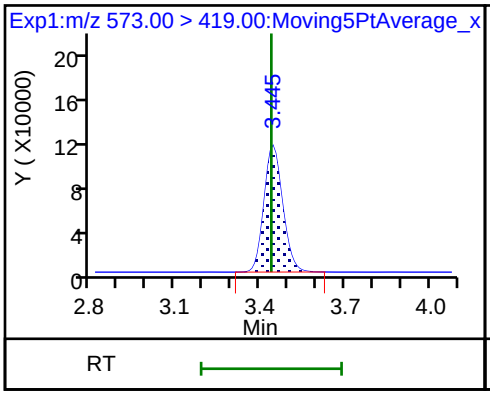
22 Perfluorooctane Sulfonamide



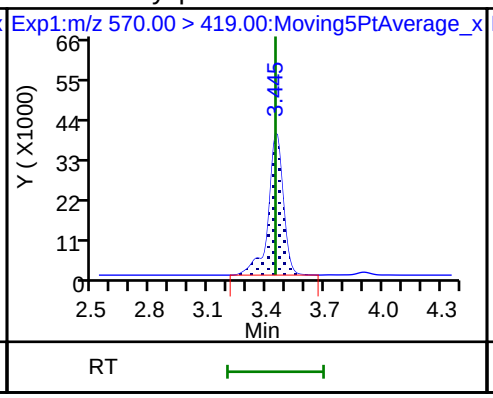
D 21 13C8 FOSA



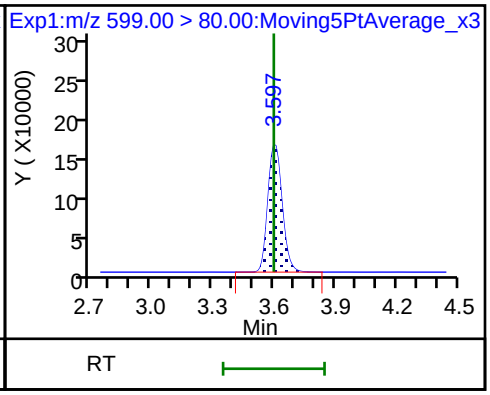
D 27 d3-NMeFOSAA



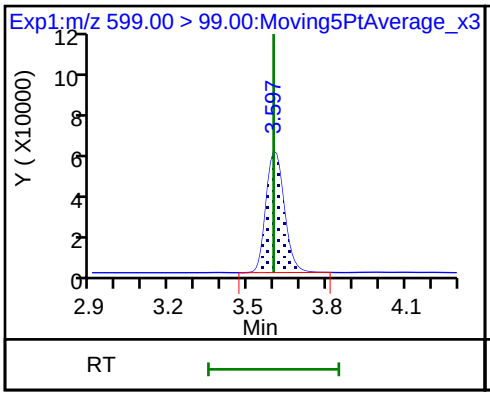
28 N-methyl perfluorooctane sulfonami



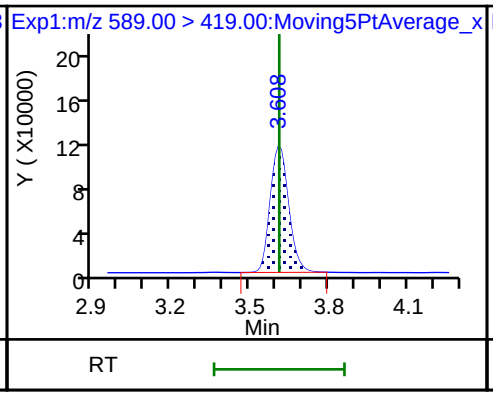
29 Perfluorodecane Sulfonic acid



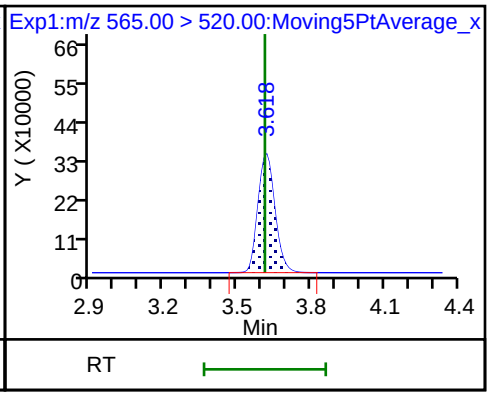
29 Perfluorodecane Sulfonic acid



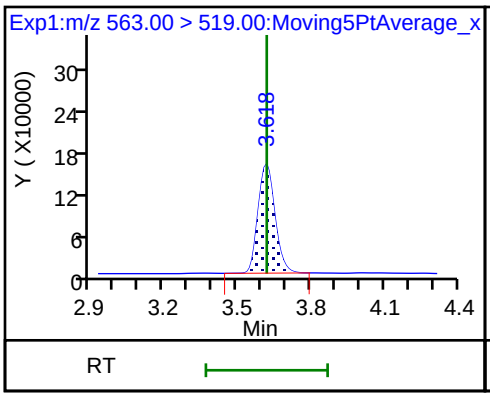
D 32 d5-NEtFOSAA



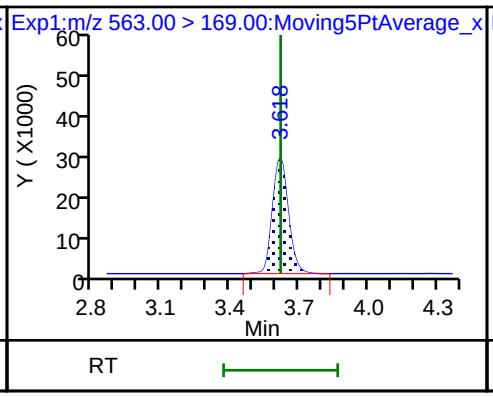
D 30 13C2 PFUnA



31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid



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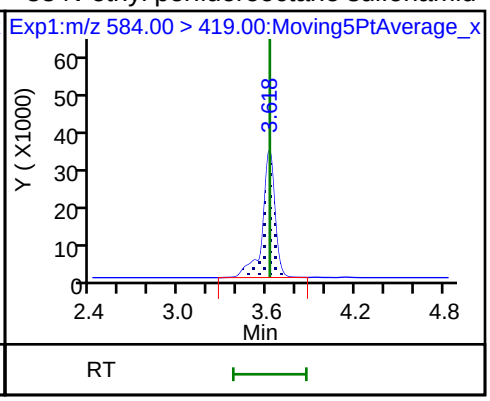
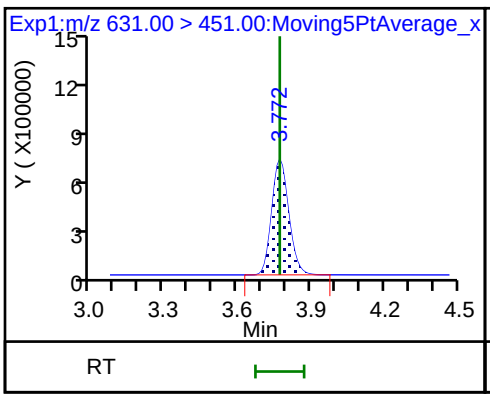


66 11-Chloroeicosafluoro-3-oxaundecan



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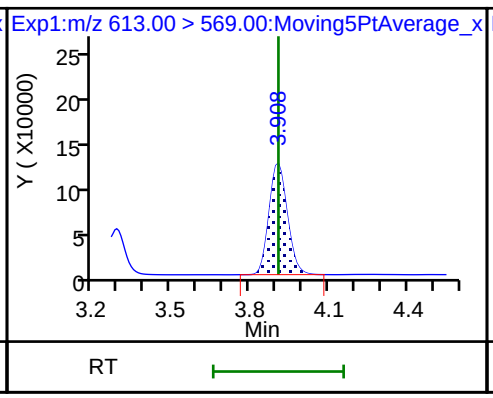

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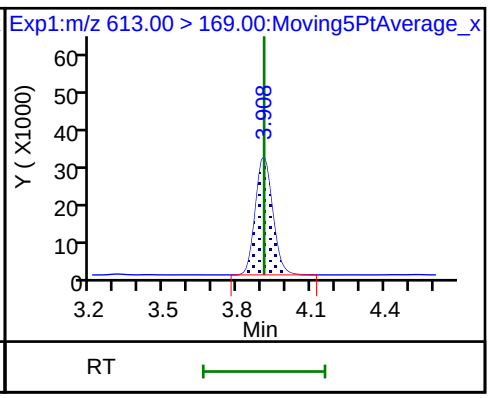
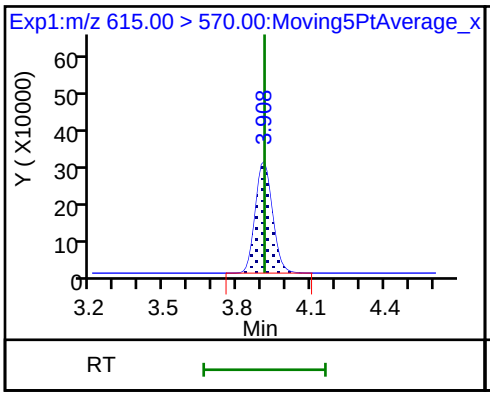


D 36 13C2 PFDoA



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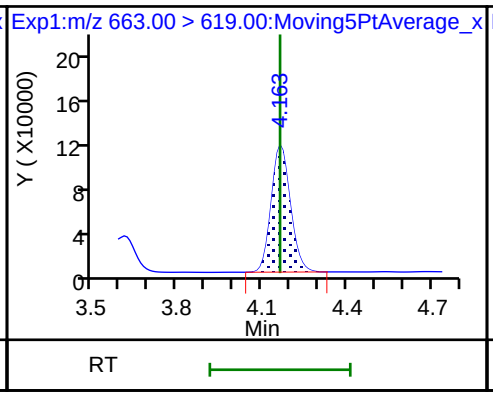
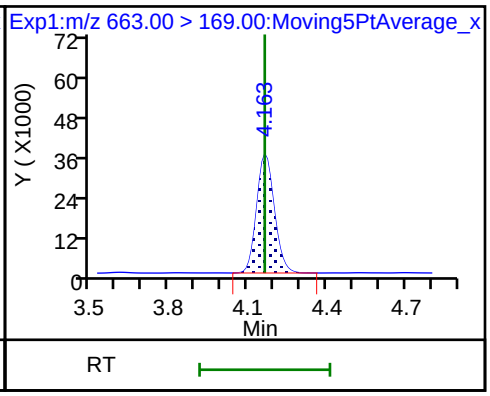


41 Perfluorotridecanoic acid



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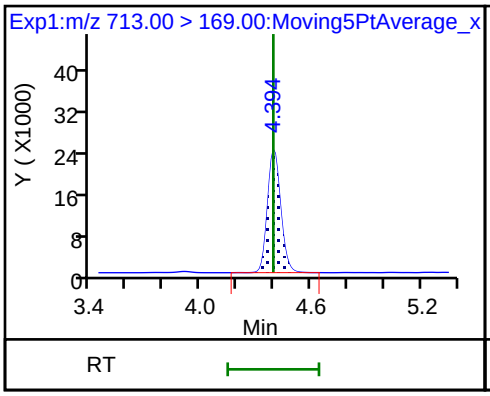

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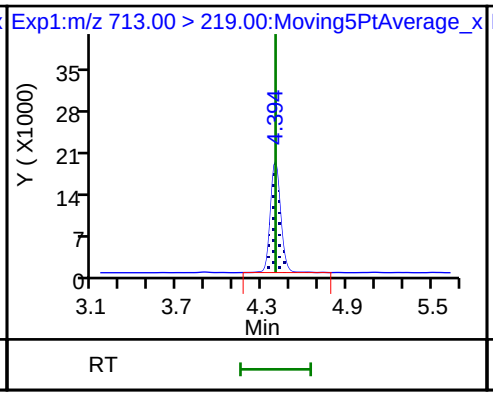
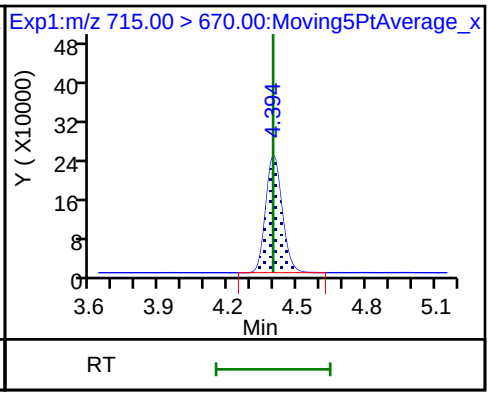
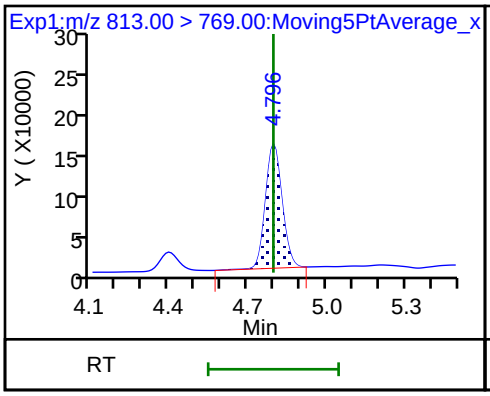


D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid



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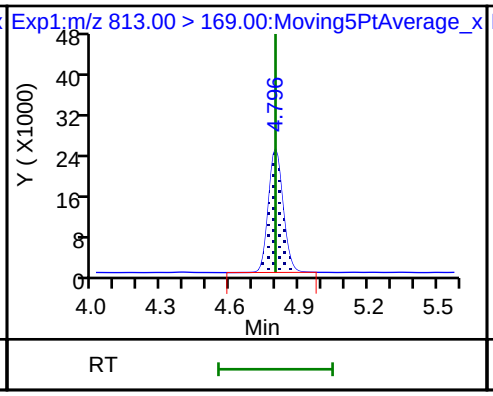

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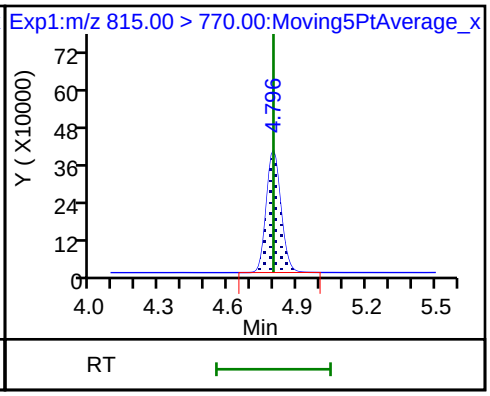
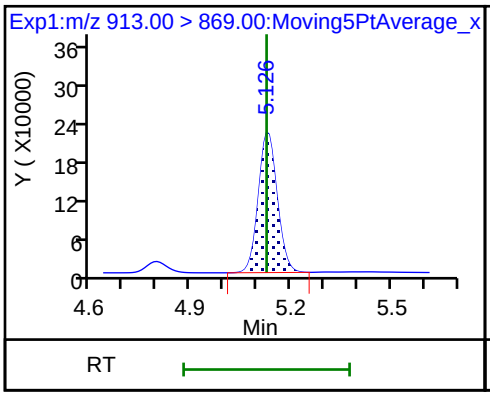
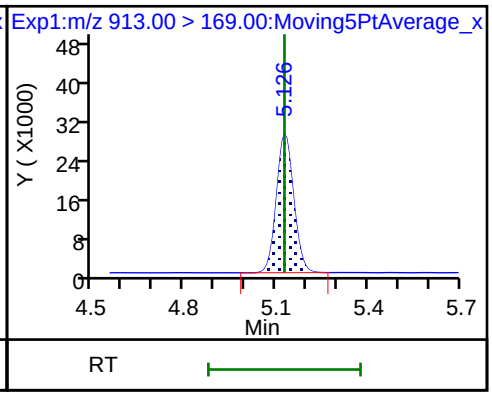


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

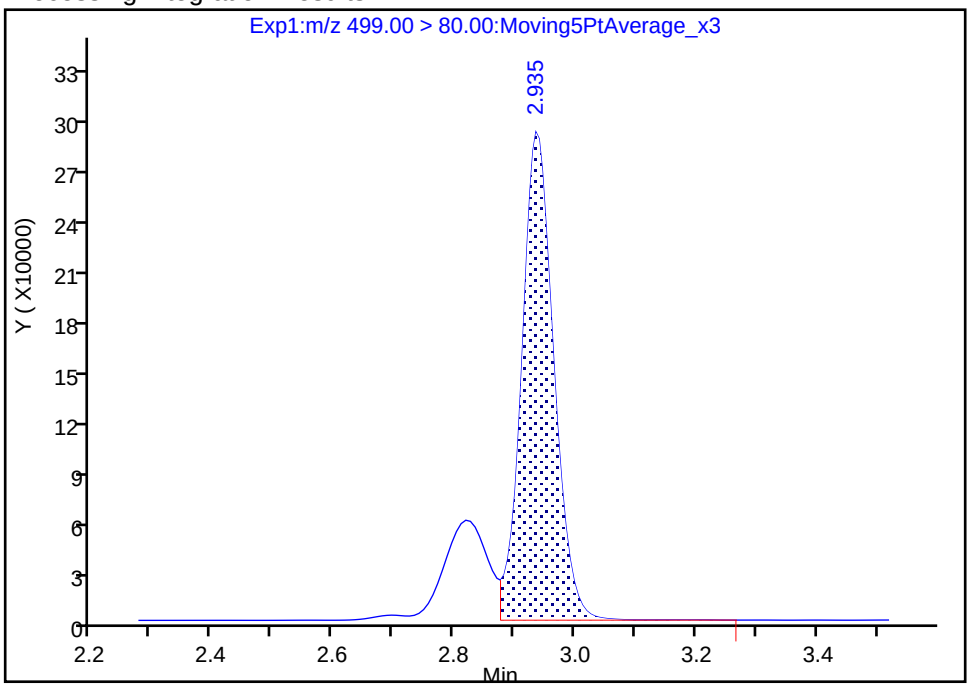
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_005.d				
Injection Date:	03-Aug-2018 23:56:18	Instrument ID:	A8_N		
Lims ID:	CCV L4				
Client ID:					
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	28	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

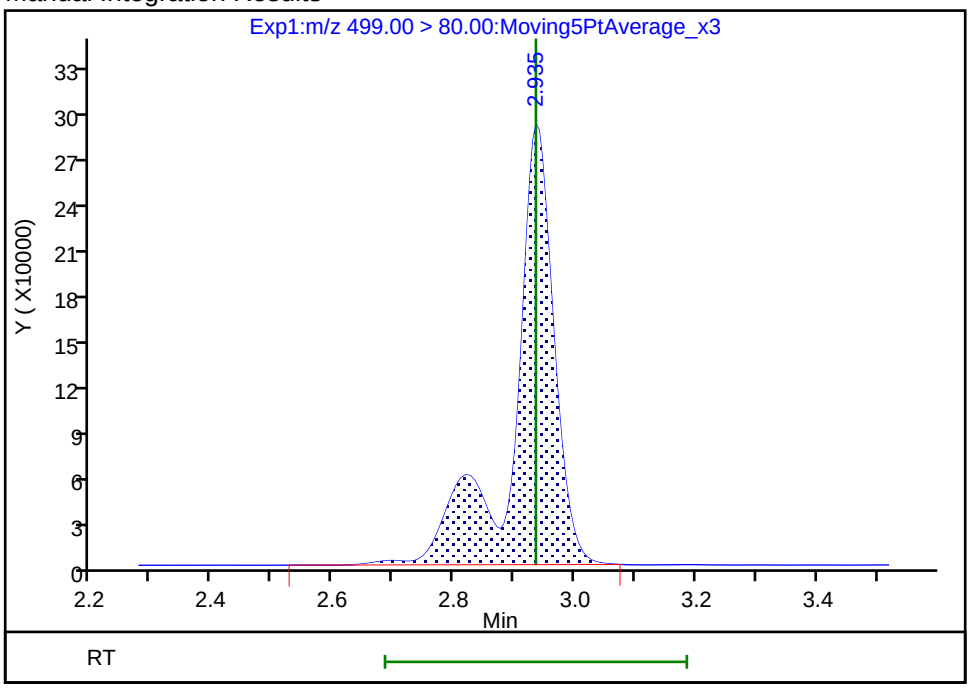
Processing Integration Results

RT: 2.94
Area: 1047007
Amount: 0.689059
Amount Units: ng/ml



Manual Integration Results

RT: 2.94
Area: 1340617
Amount: 0.882291
Amount Units: ng/ml



Reviewer: mongkols, 06-Aug-2018 12:44:42

Audit Action: Manually Integrated Audit Reason: Isomers

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-237938/14 Calibration Date: 08/04/2018 01:22

Instrument ID: A8_N Calib Start Date: 08/01/2018 12:59

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/01/2018 13:46

Lab File ID: 2018.08.03LLC_016.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9855	0.9609		0.975	1.00	-2.5	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.197	1.183		0.988	1.00	-1.2	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	76.65	79.46		0.916	0.884	3.7	50.0
4:2 FTS	AveID	17.21	18.92		1.03	0.934	9.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.055	0.9806		0.930	1.00	-7.0	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.65	71.88		0.997	0.938	6.2	50.0
HFPO-DA (GenX)	AveID	4.003	3.241		0.810	1.00	-19.0	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.160	1.226		1.06	1.00	5.8	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.156	1.088		0.856	0.910	-5.9	40.0
ADONA	AveID	2.793	2.992		1.01	0.942	7.1	50.0
6:2 FTS	AveID	1.654	1.568		0.899	0.948	-5.2	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.156	1.174		1.02	1.00	1.5	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.382	1.308		0.901	0.952	-5.4	50.0
Perfluorononanoic acid (PFNA)	AveID	1.080	1.073		0.993	1.00	-0.7	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.123	1.059		0.875	0.928	-5.7	40.0
F-53B Major	AveID	1.786	1.720		0.898	0.932	-3.7	50.0
8:2 FTS	AveID	1.351	1.327		0.941	0.958	-1.8	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7187	0.7282		0.973	0.960	1.3	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.067	1.026		0.961	1.00	-3.9	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9871	1.042		1.06	1.00	5.6	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	1.017	0.998		0.982	1.00	-1.8	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6504	0.5892		0.873	0.964	-9.4	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8912	0.8872		0.996	1.00	-0.4	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.232	1.164		0.944	1.00	-5.6	40.0
F-53B Minor	AveID	2.433	2.484		0.962	0.942	2.1	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.083	1.095		1.01	1.00	1.2	40.0
Perfluorotridecanoic Acid (PFTriA)	AveID	0.9424	0.8885		0.943	1.00	-5.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2694	0.2682		0.996	1.00	-0.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9884		0.997	1.00	-0.3	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.028	1.286		1.25	1.00	25.0	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-237938/14 Calibration Date: 08/04/2018 01:22

Instrument ID: A8_N Calib Start Date: 08/01/2018 12:59

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/01/2018 13:46

Lab File ID: 2018.08.03LLC_016.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
13C4 PFBA	Ave	1.440	1.342		2.33	2.50	-6.8	50.0
13C5 PFPeA	Ave	0.9481	0.9219		2.43	2.50	-2.8	50.0
13C3-PFBS	Ave	0.0273	0.0246		2.09	2.33	-9.9	50.0
M2-4:2FTS	Ave	0.1926	0.2017		2.44	2.34	4.7	50.0
13C2 PFHxA	Ave	1.026	1.048		2.55	2.50	2.1	50.0
13C3 HFPO-DA	Ave	0.0480	0.0634		3.30	2.50	32.0	50.0
13C4-PFHpA	Ave	0.9943	1.003		2.52	2.50	0.8	50.0
18O2 PFHxS	Ave	1.494	1.424		2.25	2.37	-4.7	50.0
M2-6:2FTS	Ave	0.2913	0.2921		2.38	2.38	0.3	40.0
13C4 PFOA	Ave	0.9600	0.9200		2.40	2.50	-4.2	50.0
13C4 PFOS	Ave	1.032	0.9866		2.28	2.39	-4.4	50.0
13C5 PFNA	Ave	0.8365	0.8279		2.47	2.50	-1.0	50.0
M2-8:2FTS	Ave	0.2839	0.2876		2.43	2.40	1.3	40.0
13C2 PFDA	Ave	0.6256	0.6466		2.58	2.50	3.4	50.0
13C8 FOSA	Ave	1.516	1.419		2.34	2.50	-6.4	50.0
d3-NMeFOSAA	Ave	0.1518	0.1505		2.48	2.50	-0.9	50.0
d5-NEtFOSAA	Ave	0.1627	0.1568		2.41	2.50	-3.6	50.0
13C2 PFUnA	Ave	0.4818	0.4716		2.45	2.50	-2.1	50.0
13C2 PFDoA	Ave	0.4172	0.4091		2.45	2.50	-1.9	50.0
13C2-PFTeDA	Ave	0.3502	0.3474		2.48	2.50	-0.8	50.0
13C2-PFHxDA	Ave	0.6033	0.5149		2.13	2.50	-14.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_016.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 04-Aug-2018 01:22:23 ALS Bottle#: 28 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub32

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 11:01:44 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK036

First Level Reviewer: hannigana Date: 06-Aug-2018 10:54:22

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.395	1.391	0.004	0.542	4486644	2.33		93.2	80752	
2 Perfluorobutyric acid										
212.90 > 169.00	1.395	1.395	0.0	1.000	1724462	0.9751		97.5	542	
D 3 13C5-PFPeA										
267.90 > 223.00	1.637	1.632	0.005	0.637	3083271	2.43		97.2	54464	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.637	1.637	0.0	1.000	1458422	0.9876		98.8	606	
D 47 13C3-PFBS										
301.90 > 83.00	1.662	1.665	-0.003	0.647	76382	2.09		90.1	430	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.671	1.671	0.0	1.005	2307609	0.9164		104	5663	
298.90 > 99.00	1.671	1.671	0.0	1.005	968443		2.38(1.25-3.74)		4185	
D 60 M2-4:2FTS										
329.00 > 81.00	1.873	1.866	0.006	0.728	629916	2.44		105	8316	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.873	1.873	0.0	1.126	580488	1.03		110	35409	
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.905	-0.003	0.740	3503675	2.55		102	104688	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.902	1.902	0.0	1.000	1374253	0.9298		93.0	4288	
313.00 > 119.00	1.902	1.902	0.0	1.000	135691		10.13(5.03-15.10)		2045	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.924	1.924	0.0	1.157	2214910	1.00		106	32535	
349.00 > 99.00	1.924	1.924	0.0	1.157	804290		2.75(1.36-4.07)		7126	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.999	1.991	0.008	0.778	212051	3.30		132	9649	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.999	1.999	0.0	1.000	274914	0.8097		81.0	1732	
D 9 13C4-PFHpA										
367.00 > 322.00	2.214	2.217	-0.003	0.861	3353181	2.52		101	63476	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.214	2.214	0.0	1.000	1645054	1.06		106	1069	
363.00 > 169.00	2.214	2.214	0.0	1.000	650611		2.53(1.13-3.40)		10043	
D 11 18O2 PFHxS										
403.00 > 84.00	2.237	2.228	0.009	0.870	4504361	2.25		95.3	47301	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.225	2.225	0.0	0.995	1885450	0.8564		94.1	8546	
399.00 > 99.00	2.237	2.225	0.012	1.000	638265		2.95(1.50-4.49)		1382	
65 ADONA										
377.00 > 251.00	2.264	2.264	0.0	0.772	3719243	1.01		107	36700	
377.00 > 85.00	2.264	2.264	0.0	0.772	2146423		1.73(0.84-2.53)		9709	
D 12 M2-6:2FTS										
429.00 > 81.00	2.545	2.545	0.0	0.990	928191	2.38		100	16667	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.545	2.545	0.0	1.000	580873	0.8988		94.8	10401	
* 62 13C2-PFOA										
415.00 > 370.00	2.571	2.571	0.0		3344395	2.50			49804	
D 14 13C4 PFOA										
417.00 > 372.00	2.571	2.572	-0.001	1.000	3076889	2.40		95.8	48183	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.571	2.571	0.0	1.000	1446026	1.02		102	1206	
413.00 > 169.00	2.571	2.571	0.0	1.000	759113		1.90(0.84-2.52)		4501	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.579	2.579	0.0	0.880	1643461	0.9008		94.6	16518	
449.00 > 99.00	2.579	2.579	0.0	0.880	431379		3.81(1.94-5.82)		6384	
D 19 13C5 PFNA										
468.00 > 423.00	2.930	2.931	-0.001	1.140	2768654	2.47		99.0	57919	
D 18 13C4 PFOS										
503.00 > 80.00	2.930	2.931	-0.001	1.140	3154347	2.28		95.6	39987	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.930	2.930	0.0	1.000	1296615	0.8751		94.3	8100	M
499.00 > 99.00	2.930	2.930	0.0	1.000	303852		4.27(2.31-6.93)		3647	
20 Perfluorononanoic acid										
463.00 > 419.00	2.930	2.930	0.0	1.000	1188105	0.99		99.3	5656	
463.00 > 169.00	2.930	2.930	0.0	1.000	286845		4.14(1.90-5.69)		15515	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.145	3.145	0.0	1.073	2115902	0.8976		96.3	20272	
D 26 M2-8:2FTS										
529.00 > 81.00	3.273	3.276	-0.003	1.273	921317	2.43		101	16093	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.280	3.280	0.0	1.002	489203	0.9412		98.2	30132	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.280	3.280	0.0	1.119	922675	0.9727		101	13731	
549.00 > 99.00	3.280	3.280	0.0	1.119	347174		2.66(1.33-3.97)		3485	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.287	3.283	0.004	1.278	2162458	2.58		103	53475	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.287	3.287	0.0	1.000	887365	0.9611		96.1	2121	
513.00 > 169.00	3.287	3.287	0.0	1.000	153970		5.76(2.36-7.09)		3117	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.310	3.310	0.0	1.000	1979543	1.06		106	39472	
D 21 13C8 FOSA										
506.00 > 78.00	3.310	3.314	-0.004	1.288	4747140	2.34		93.6	43350	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.444	3.439	0.005	1.340	503346	2.48		99.1	21708	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.444	3.444	0.0	1.000	200966	0.9818		98.2	3213	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.596	3.596	0.0	1.227	749583	0.8732		90.6	10335	
599.00 > 99.00	3.596	3.596	0.0	1.227	251780		2.98(1.39-4.16)		2469	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.607	3.611	-0.004	1.403	524499	2.41		96.4	6666	
D 30 13C2 PFUnA										
565.00 > 520.00	3.618	3.611	0.007	1.407	1577255	2.45		97.9	27389	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.618	3.618	0.0	1.000	734178	0.9443		94.4	1657	
563.00 > 169.00	3.618	3.618	0.0	1.000	134358		5.46(2.12-6.36)		7003	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.618	3.618	0.0	1.003	186142	1.00		99.6	6240	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.771	3.771	0.0	1.287	3088513	0.9619		102	45548	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.907	3.907	0.0	1.000	599383	1.01		101	173	
613.00 > 169.00	3.907	3.907	0.0	1.000	150688		3.98(2.13-6.40)		2857	
D 36 13C2 PFDoA										
615.00 > 570.00	3.907	3.909	-0.002	1.520	1368175	2.45		98.1	14981	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.162	4.162	0.0	1.065	486244	0.9428		94.3	154	
663.00 > 169.00	4.162	4.162	0.0	1.065	158801		3.06(1.25-3.76)		1419	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.394	4.394	0.0	1.000	124608	1.00		99.6	1694	
713.00 > 219.00	4.394	4.394	0.0	1.000	87818		1.42(0.71-2.13)		1275	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.394	0.0	1.709	1161687	2.48		99.2	5155	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.796	4.796	0.0	1.000	680797	1.00		99.7	36.0	
813.00 > 169.00	4.796	4.796	0.0	1.000	114702		5.94(2.86-8.58)		1144	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.796	4.796	0.0	1.865	1721903	2.13		85.3	2607	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.126	5.126	0.0	1.069	885542	1.25		125	349	
913.00 > 169.00	5.126	5.126	0.0	1.069	113440		7.81(3.83-11.48)		1325	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00005 Amount Added: 1.00 Units: mL

Report Date: 06-Aug-2018 11:01:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_016.d

Injection Date: 04-Aug-2018 01:22:23 Instrument ID: A8_N

Lims ID: CCV L4

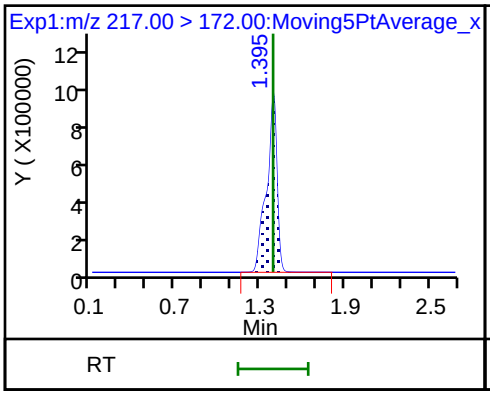
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 28 Worklist Smp#: 14

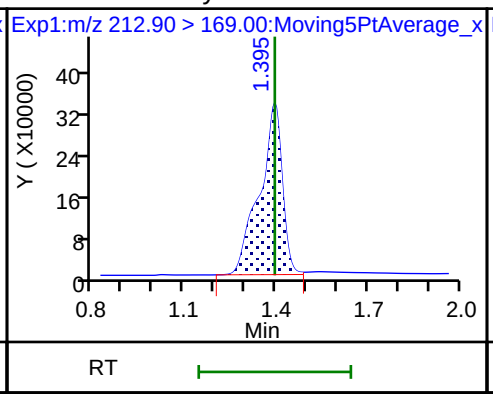
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

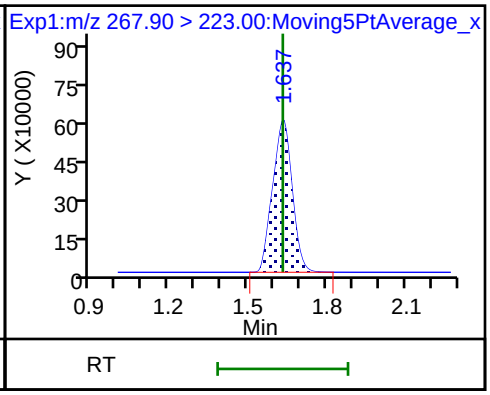
D 1 13C4 PFBA



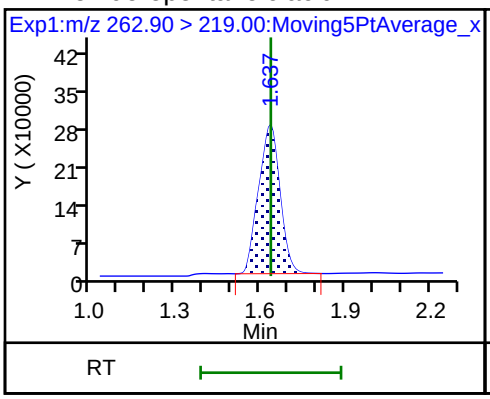
2 Perfluorobutyric acid



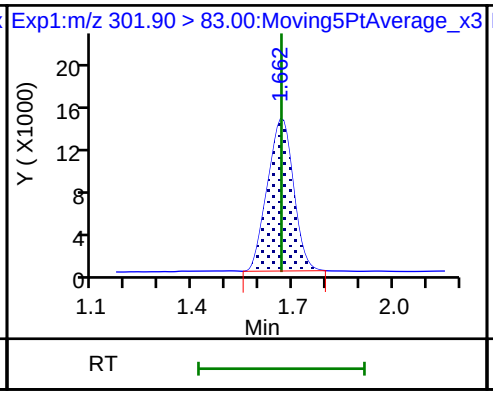
D 3 13C5-PFPeA



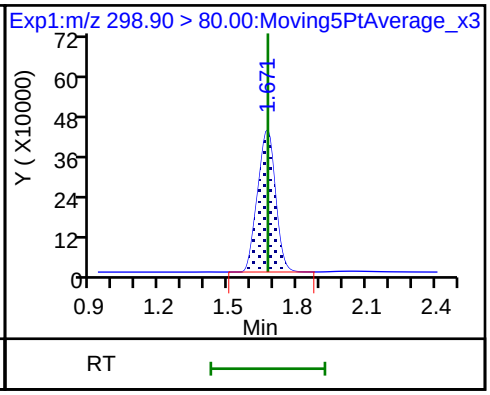
4 Perfluoropentanoic acid



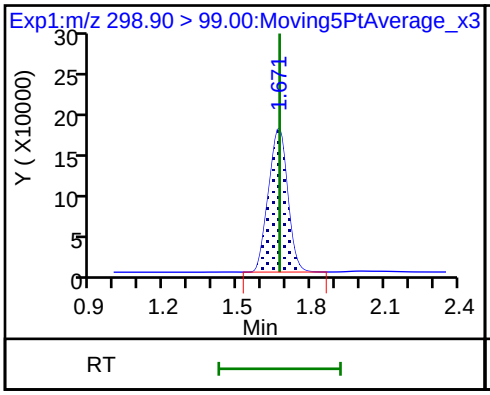
D 47 13C3-PFBS



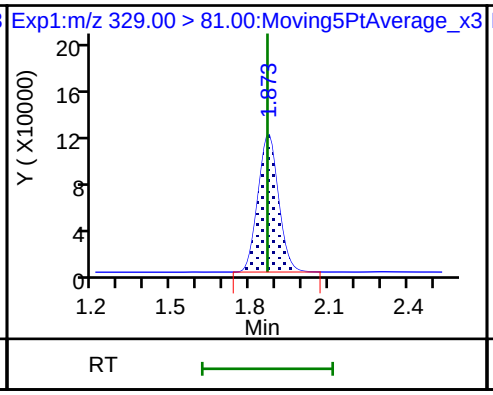
5 Perfluorobutanesulfonic acid



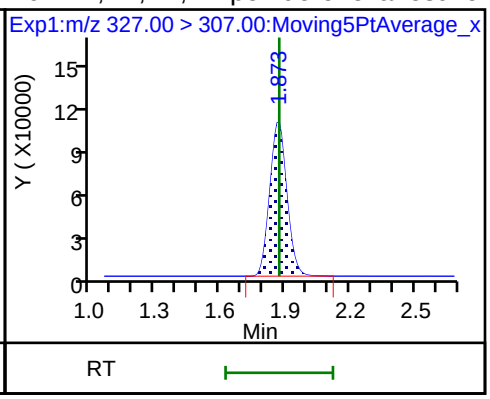
5 Perfluorobutanesulfonic acid



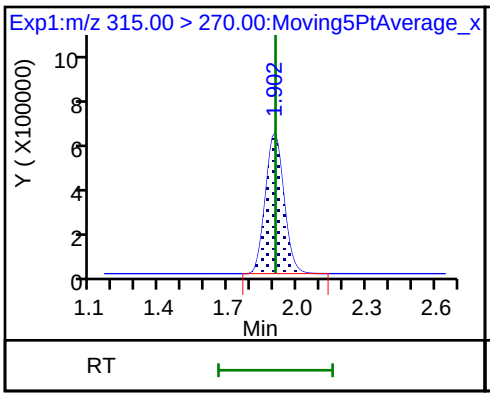
D 60 M2-4:2FTS



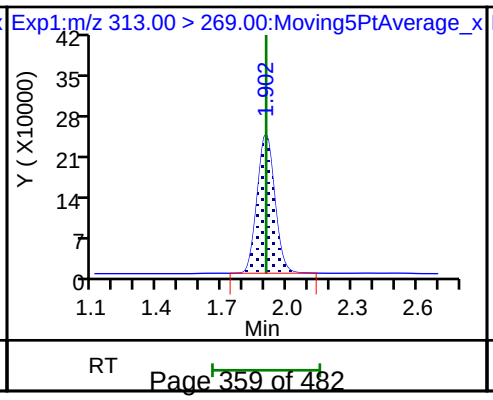
61 1H,1H,2H,2H-perfluorohexanesulfoni



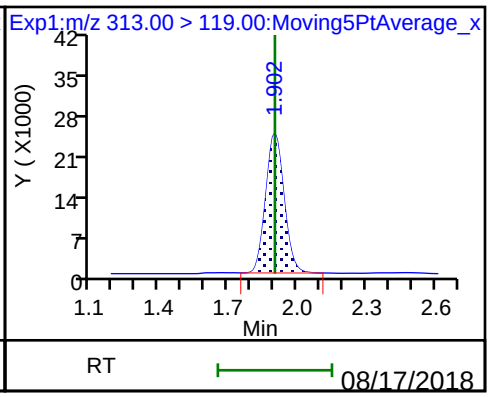
D 7 13C2 PFHxA



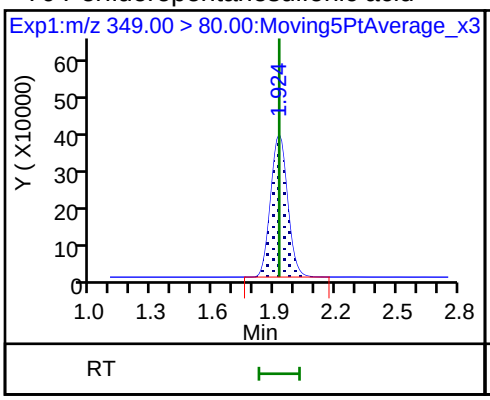
6 Perfluorohexanoic acid



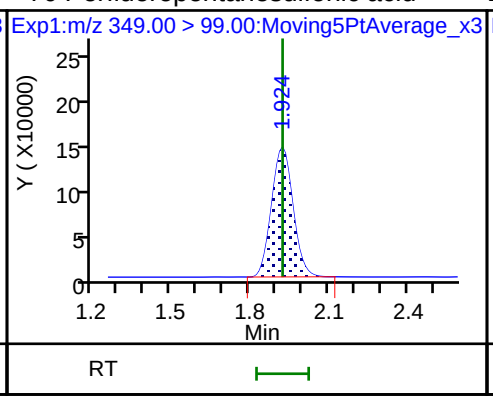
6 Perfluorohexanoic acid



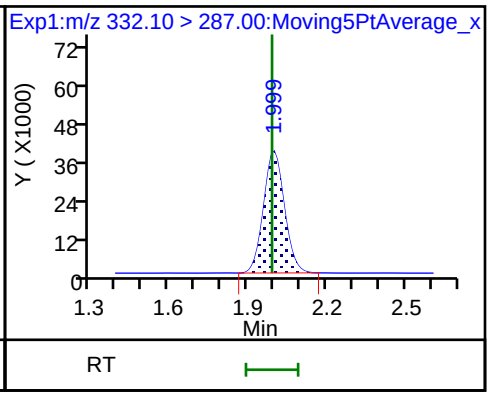
70 Perfluoropentanesulfonic acid



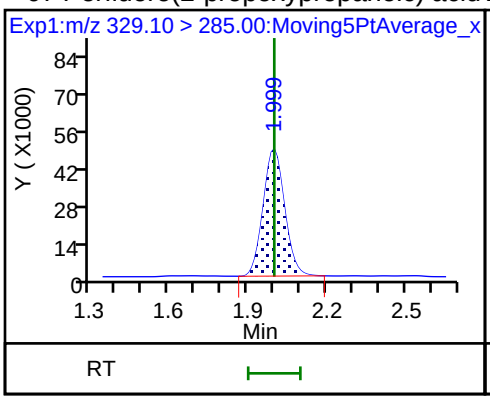
70 Perfluoropentanesulfonic acid



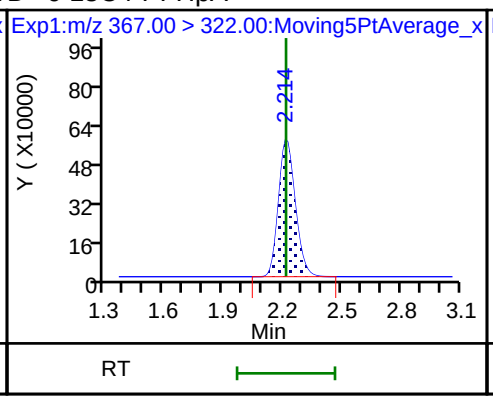
D 64 13C3 HFPO-DA



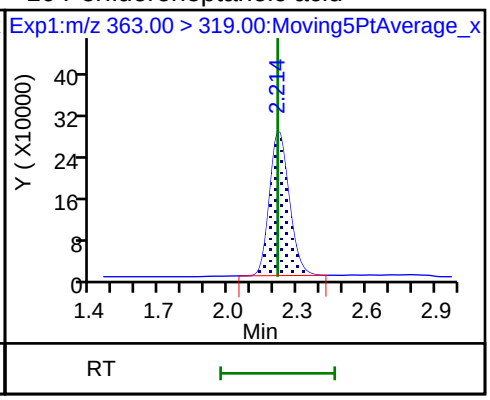
67 Perfluoro(2-propoxypropanoic) acid



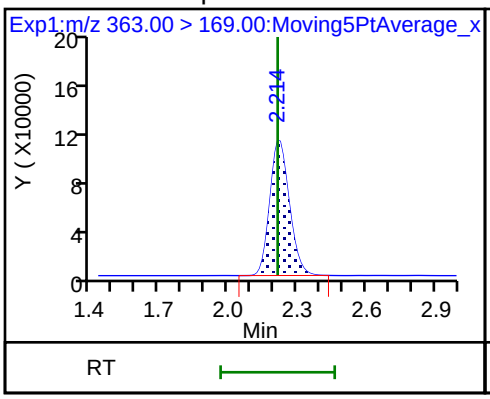
D 9 13C4-PFHpA



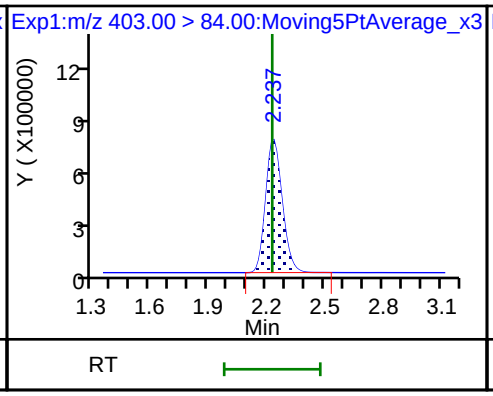
10 Perfluoroheptanoic acid



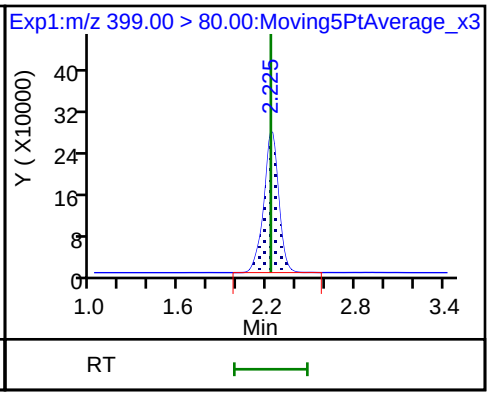
10 Perfluoroheptanoic acid



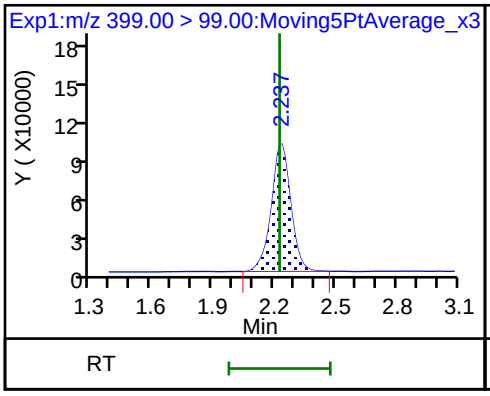
D 11 18O2 PFHxS



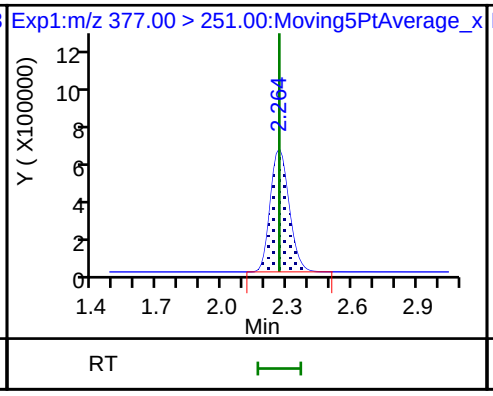
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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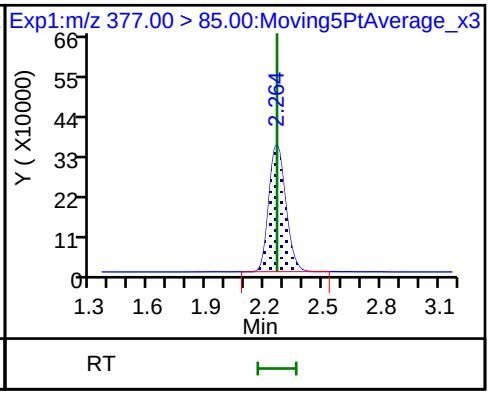
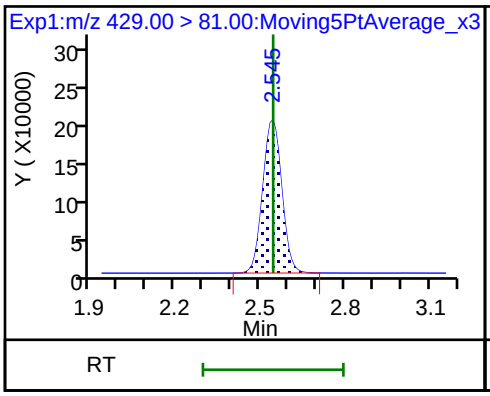
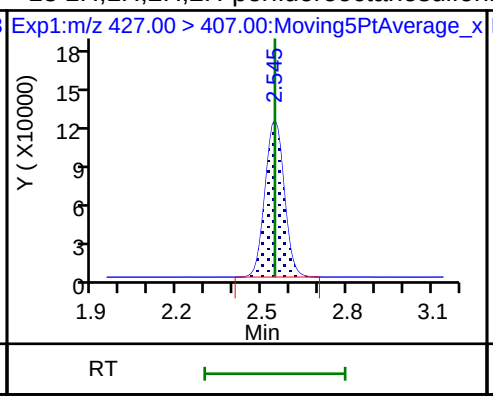
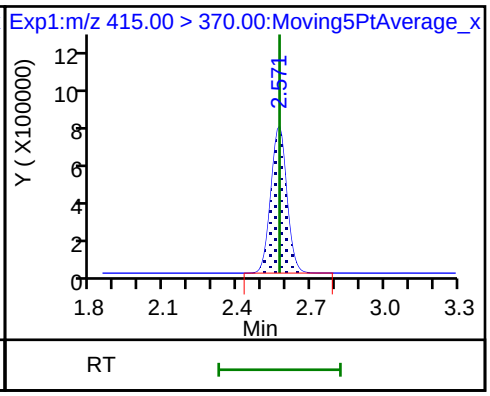


D 12 M2-6:2FTS

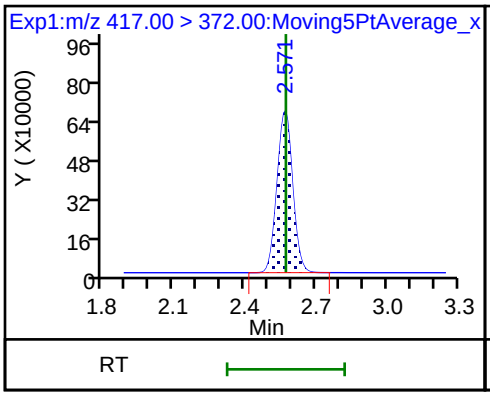


13 1H,1H,2H,2H-perfluorooctanesulfonic* 62 13C2-PFOA

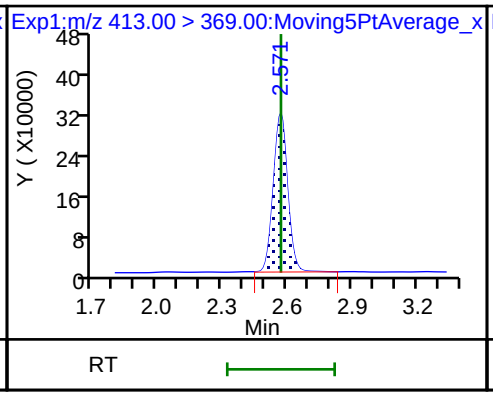




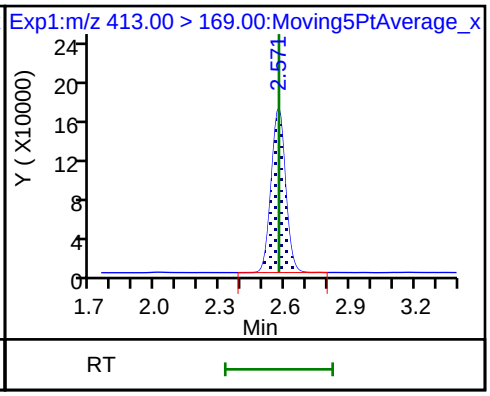
D 14 13C4 PFOA



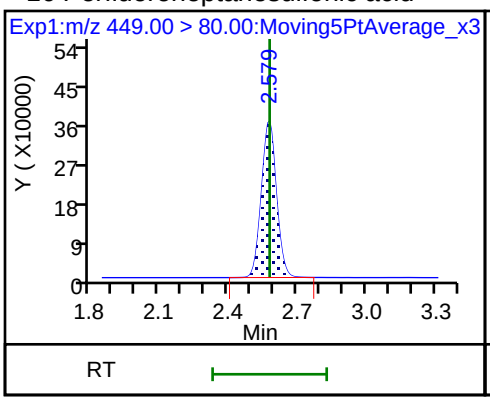
15 Perfluorooctanoic acid



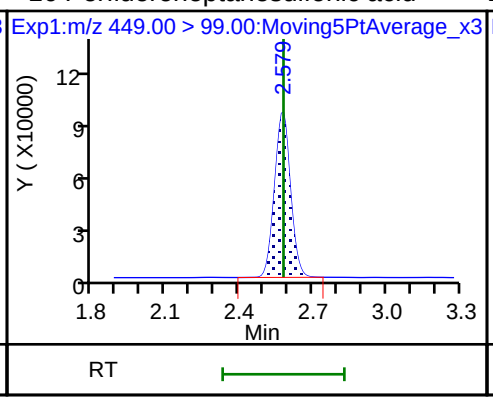
15 Perfluorooctanoic acid



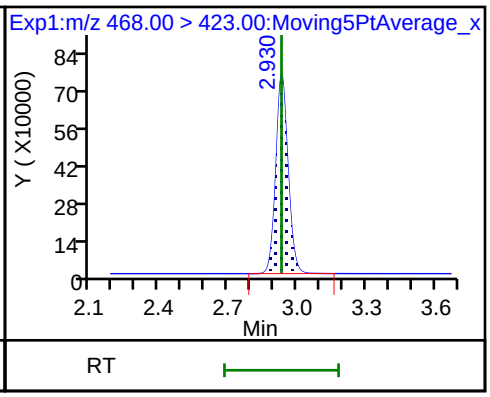
16 Perfluoroheptanesulfonic acid



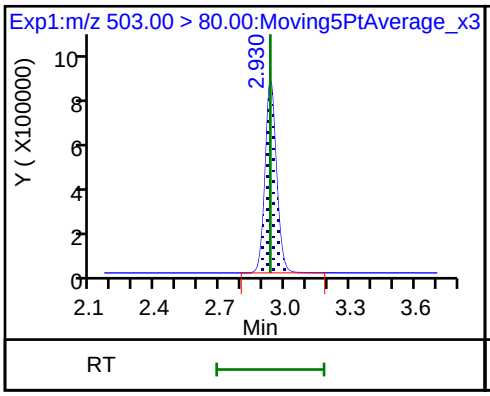
16 Perfluoroheptanesulfonic acid



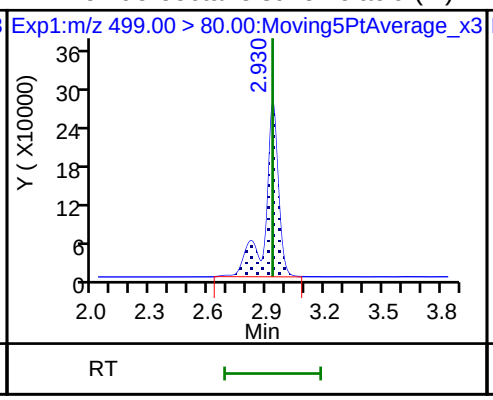
D 19 13C5 PFNA



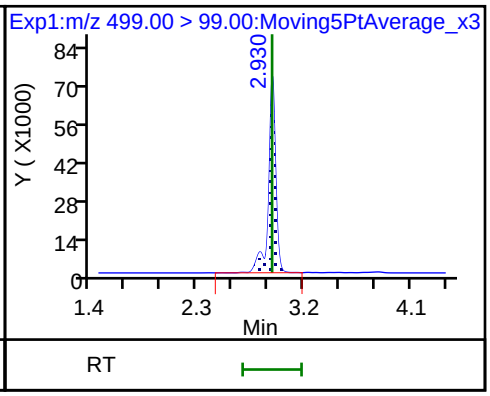
D 18 13C4 PFOS



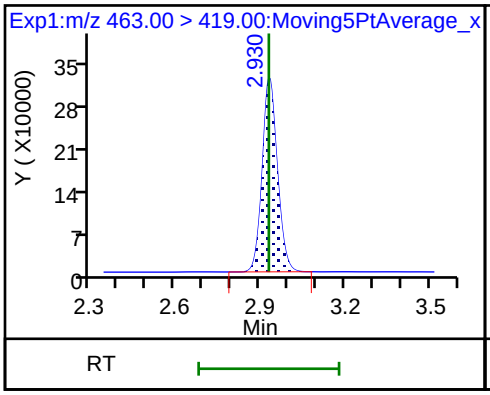
17 Perfluorooctane sulfonic acid (M)



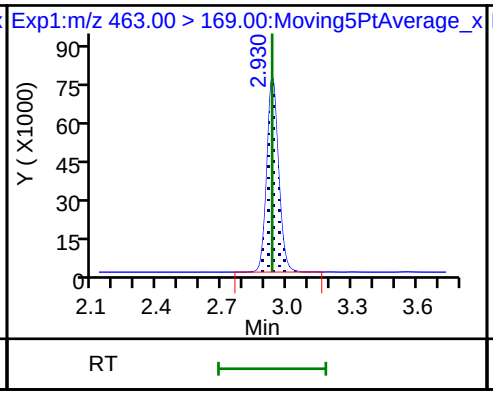
17 Perfluorooctane sulfonic acid



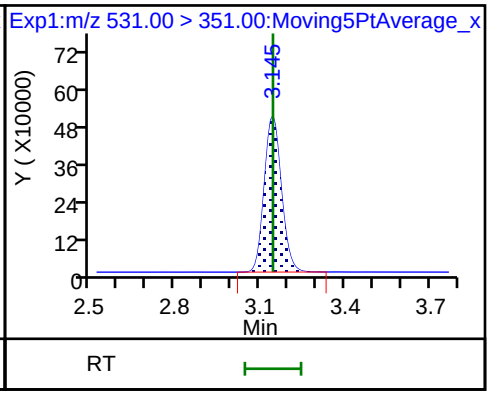
20 Perfluorononanoic acid



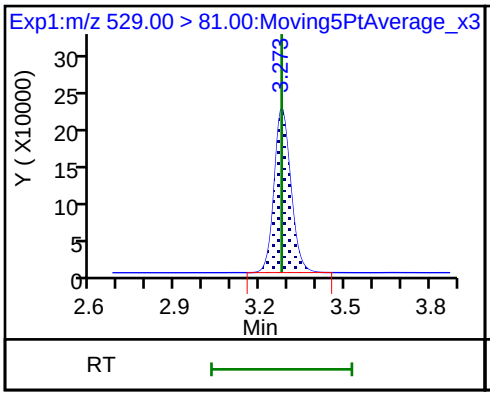
20 Perfluorononanoic acid



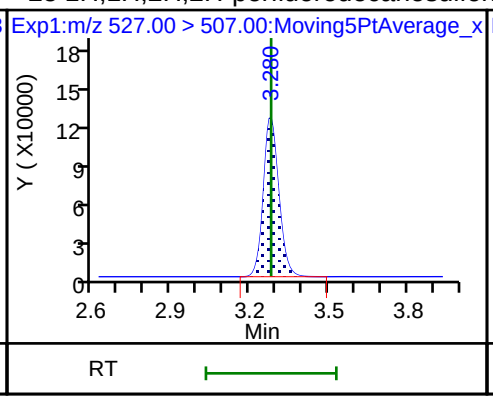
69 9-Chlorohexadecafluoro-3-oxanonane



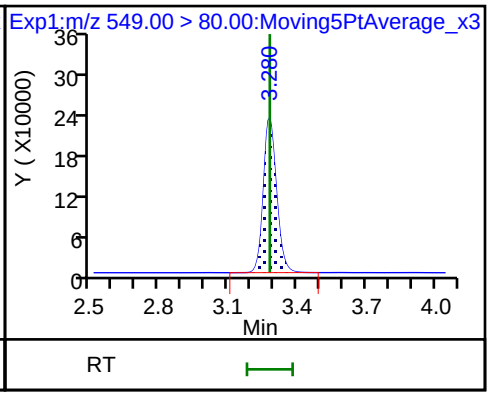
D 26 M2-8:2FTS



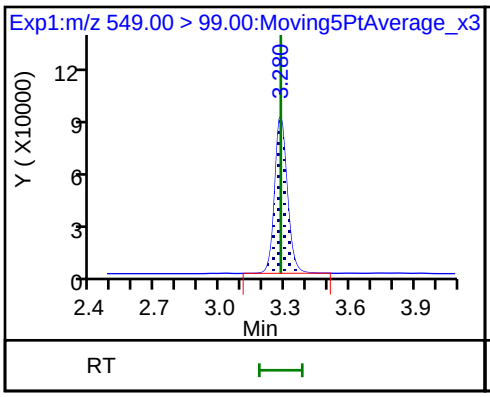
25 1H,1H,2H,2H-perfluorodecanesulfoni



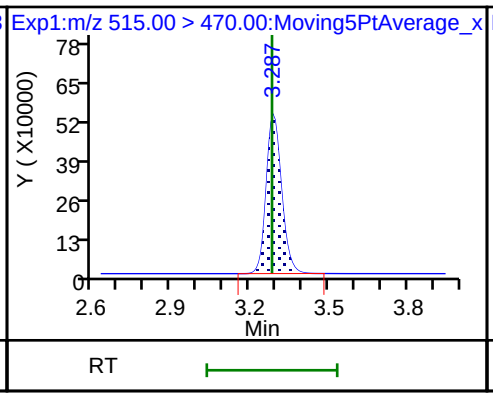
68 Perfluorononanesulfonic acid



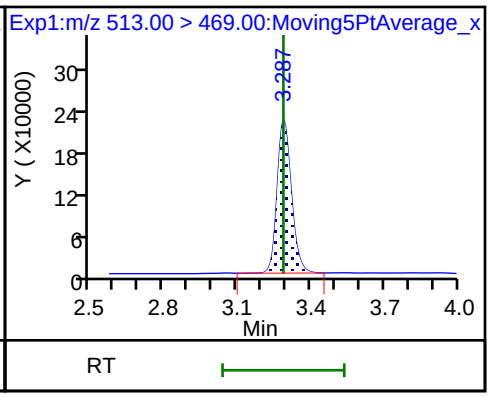
68 Perfluorononanesulfonic acid



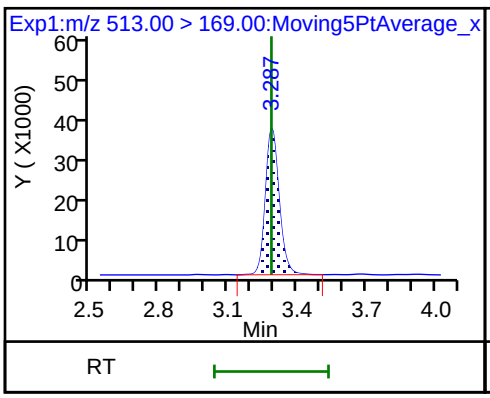
D 23 13C2 PFDA



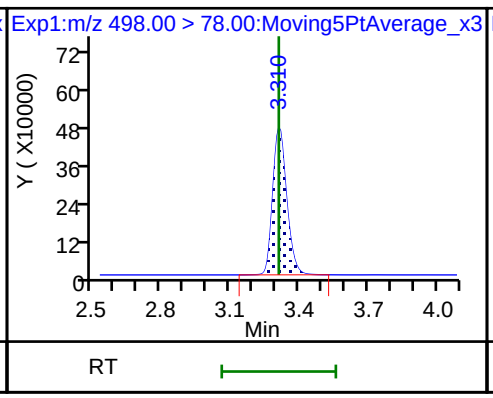
24 Perfluorodecanoic acid



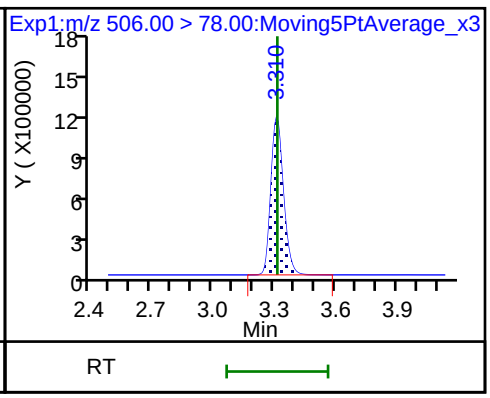
24 Perfluorodecanoic acid



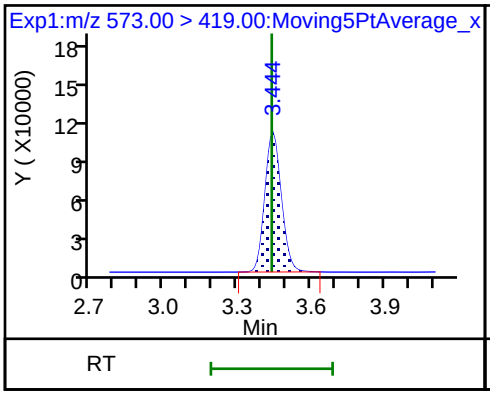
22 Perfluorooctane Sulfonamide



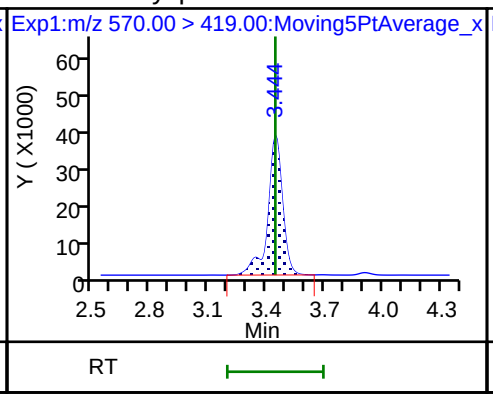
D 21 13C8 FOSA



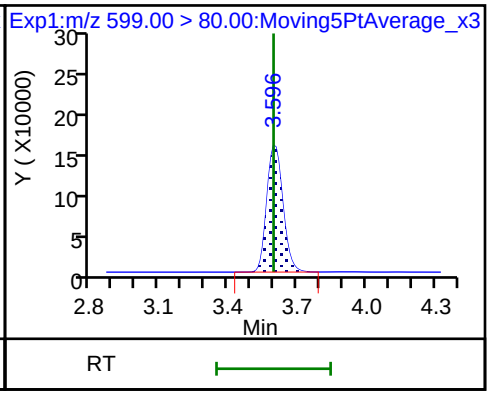
D 27 d3-NMeFOSAA



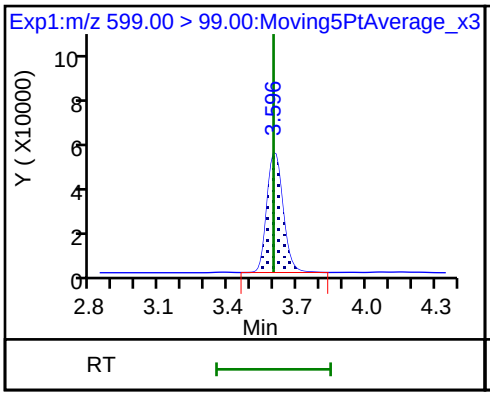
28 N-methyl perfluorooctane sulfonami



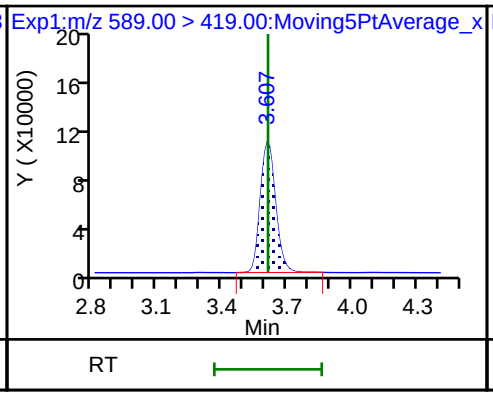
29 Perfluorodecane Sulfonic acid



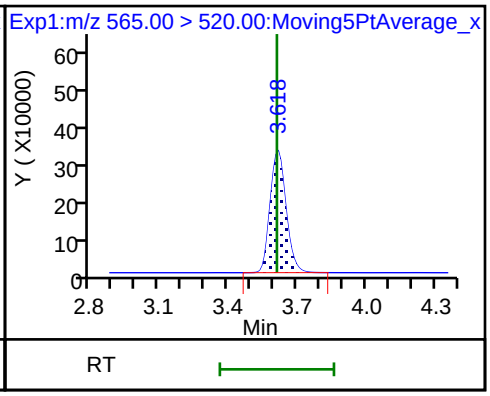
29 Perfluorodecane Sulfonic acid



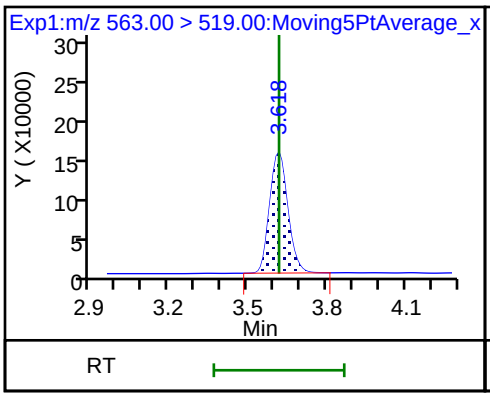
D 32 d5-NEtFOSAA



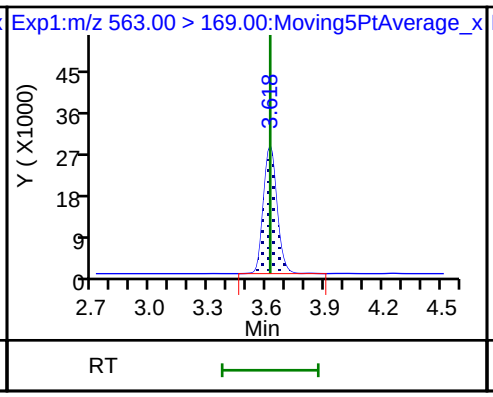
D 30 13C2 PFUnA



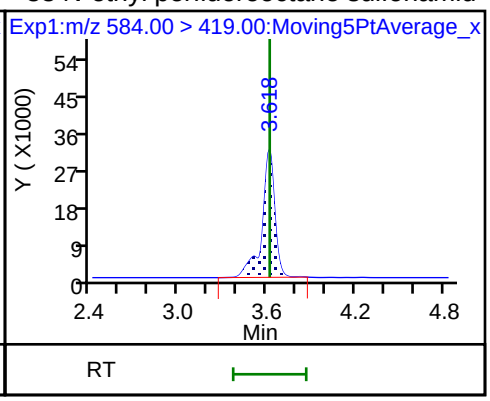
31 Perfluoroundecanoic acid



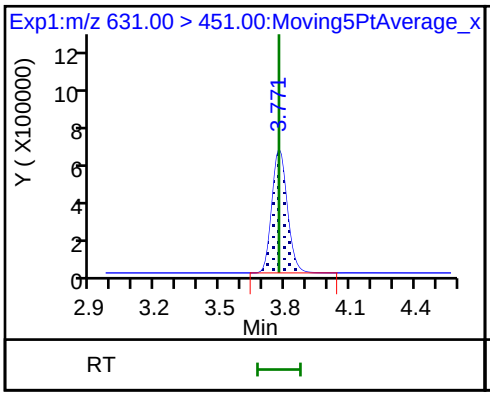
31 Perfluoroundecanoic acid



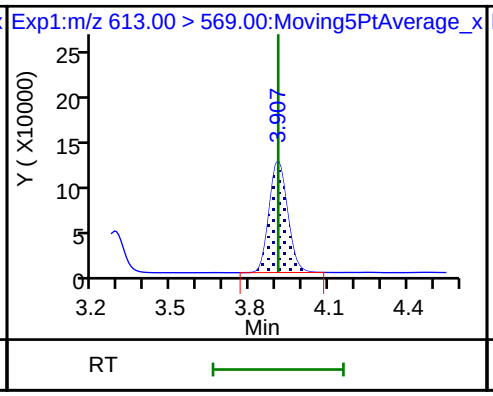
33 N-ethyl perfluorooctane sulfonamid



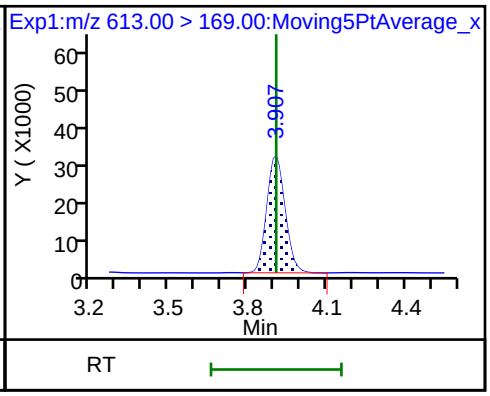
66 11-Chloroeicosafluoro-3-oxaundecan



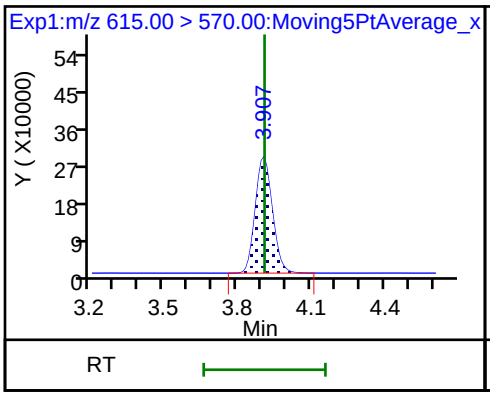
37 Perfluorododecanoic acid



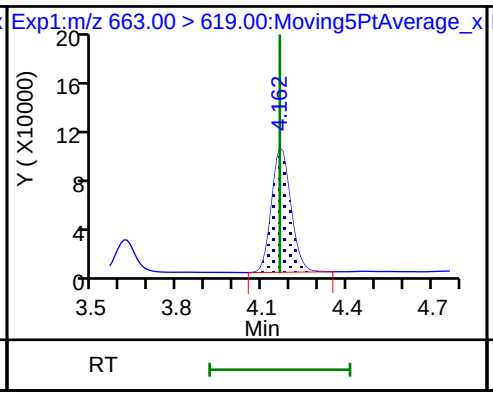
37 Perfluorododecanoic acid



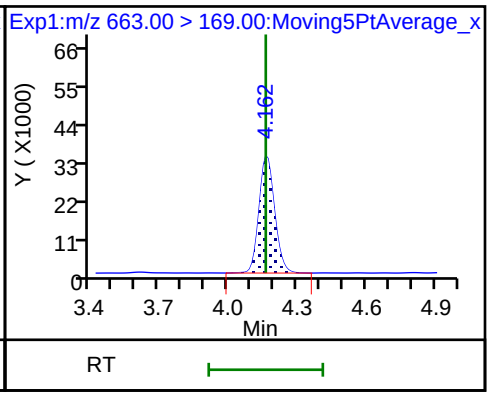
D 36 13C2 PFDoA



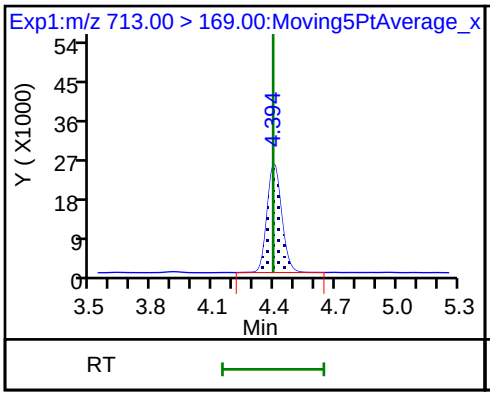
41 Perfluorotridecanoic acid



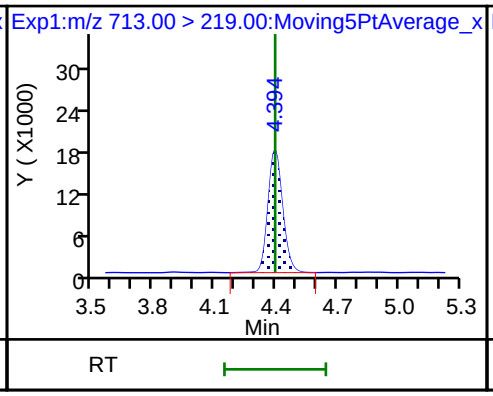
41 Perfluorotridecanoic acid



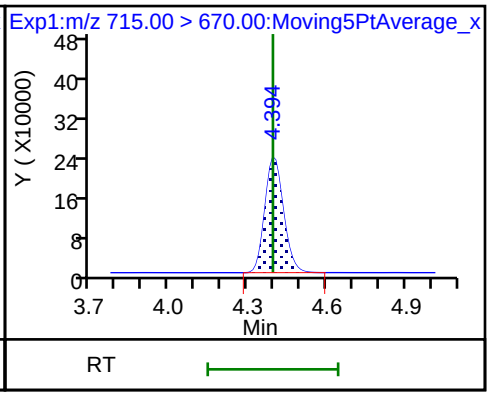
42 Perfluorotetradecanoic acid



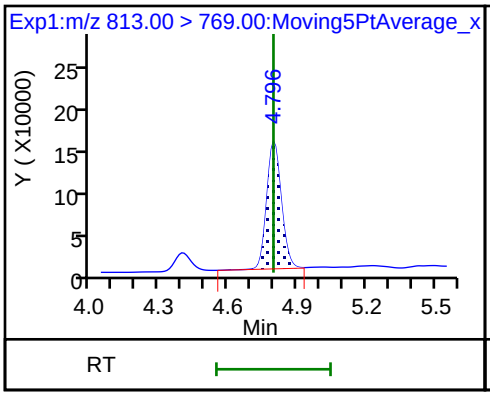
42 Perfluorotetradecanoic acid



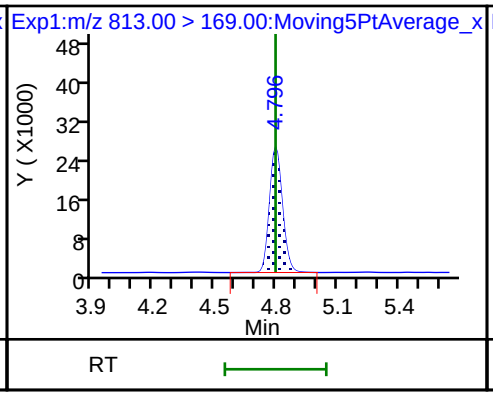
D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



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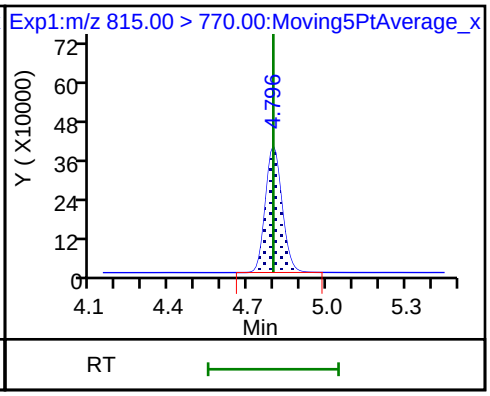
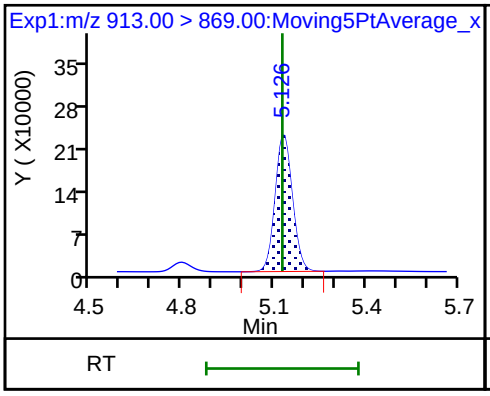
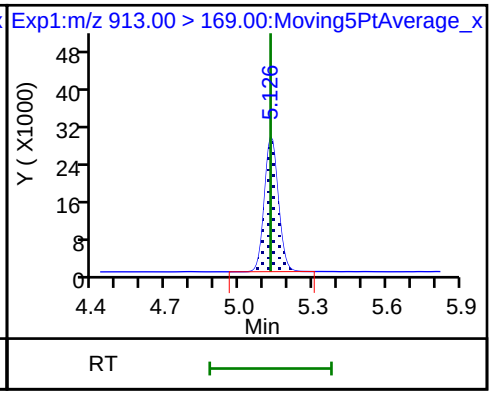


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

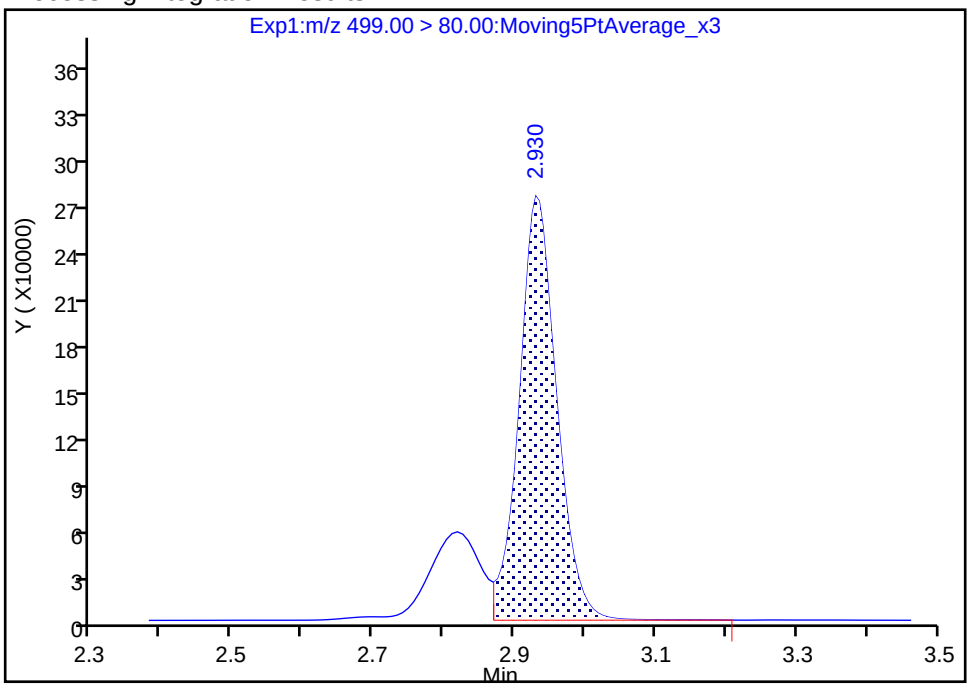
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_016.d
Injection Date: 04-Aug-2018 01:22:23 Instrument ID: A8_N
Lims ID: CCV L4
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 28 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

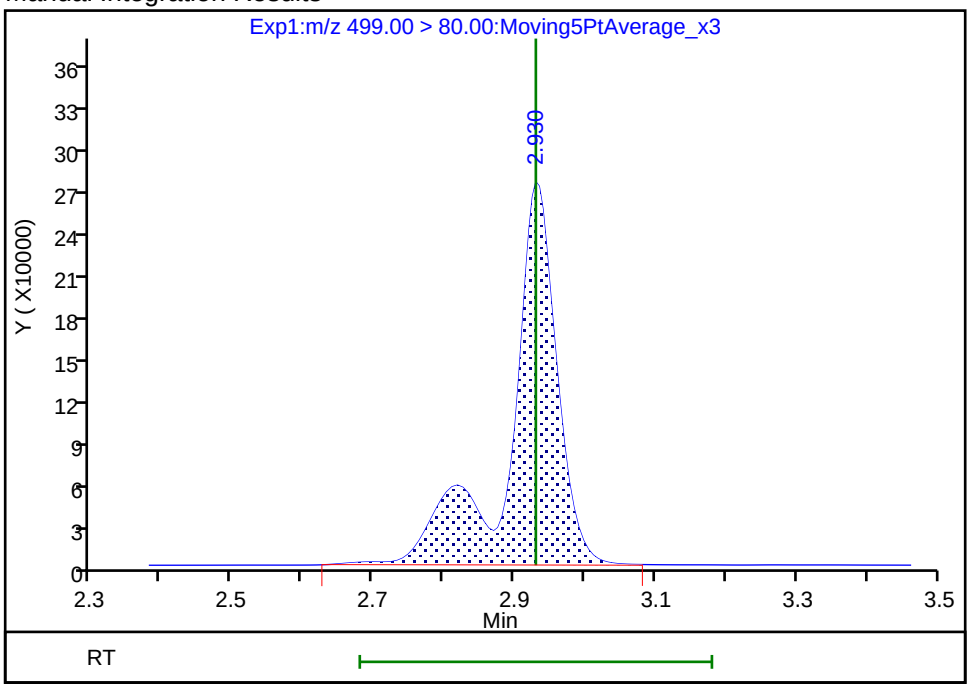
Processing Integration Results

RT: 2.93
Area: 1011002
Amount: 0.682337
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 1296615
Amount: 0.875100
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:54:12
Audit Action: Manually Integrated Audit Reason: Isomers

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: ICV 320-238192/10 Calibration Date: 08/06/2018 12:12

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.06LLICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9111		2.43	2.50	-3.0	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.131		2.49	2.50	-0.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	75.88		2.21	2.21	-0.1	50.0
4:2 FTS	AveID	16.57	16.30		2.30	2.34	-1.6	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	0.9745		2.39	2.50	-4.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	67.78		2.31	2.35	-1.7	50.0
HFPO-DA (GenX)	AveID	2.420	2.301		2.38	2.50	-4.9	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.095		2.58	2.50	3.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.006		2.12	2.28	-7.2	40.0
ADONA	AveID	3.245	3.452		2.66	2.50	6.4	50.0
6:2 FTS	AveID	1.573	1.480		2.23	2.38	-5.9	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.105		2.44	2.50	-2.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.268		2.43	2.38	2.3	50.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.063		2.52	2.50	0.9	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.062		2.29	2.31	-1.1	40.0
F-53B Major	AveID	1.742	1.892		2.53	2.33	8.6	50.0
8:2 FTS	AveID	1.299	1.302		2.41	2.40	0.2	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.7949		2.54	2.40	5.7	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	0.9537		2.38	2.50	-4.9	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	1.033		2.65	2.50	6.1	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	1.046		2.71	2.50	8.5	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6548		2.50	2.41	3.6	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.9360		2.62	2.50	5.0	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	1.111		2.47	2.50	-1.1	40.0
F-53B Minor	AveID	2.674	2.930		2.58	2.36	9.6	50.0
10:2 FTS	AveID	0.9008	0.9660		2.58	2.41	7.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.112		2.50	2.50	-0.1	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2846		2.48	2.42	2.5	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.081		2.51	2.50	0.6	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2415		2.49	2.50	-0.2	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: ICV 320-238192/10 Calibration Date: 08/06/2018 12:12

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.06LLICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9410		2.68	2.50	7.1	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.9891		2.69	2.50	7.5	50.0
13C4 PFBA	Ave	1.385	1.395		2.52	2.50	0.7	50.0
13C5 PFPeA	Ave	0.9537	0.9739		2.55	2.50	2.1	50.0
13C3-PFBS	Ave	0.0221	0.0228		2.41	2.33	3.5	50.0
M2-4:2FTS	Ave	0.1572	0.1582		2.35	2.34	0.6	50.0
13C2 PFHxA	Ave	1.082	1.136		2.62	2.50	5.0	50.0
13C3 HFPO-DA	Ave	0.0842	0.0848		2.52	2.50	0.8	50.0
13C4-PFHpA	Ave	1.065	1.049		2.46	2.50	-1.5	50.0
18O2 PFHxS	Ave	1.366	1.389		2.41	2.37	1.7	50.0
M2-6:2FTS	Ave	0.2242	0.2398		2.54	2.38	7.0	40.0
13C4 PFOA	Ave	0.9773	1.001		2.56	2.50	2.4	50.0
13C8 PFOA	Ave	1.927	1.974		2.51	2.45	2.4	50.0
13C5 PFNA	Ave	0.8770	0.8835		2.52	2.50	0.7	50.0
13C8 PFOS	Ave	0.4359	0.4509		2.47	2.39	3.4	50.0
13C4 PFOS	Ave	0.8973	0.9046		2.41	2.39	0.8	50.0
M2-8:2FTS	Ave	0.2707	0.2722		2.41	2.40	0.5	40.0
13C2 PFDA	Ave	0.7695	0.8085		2.63	2.50	5.1	50.0
13C8 FOSA	Ave	1.188	1.221		2.57	2.50	2.7	50.0
d3-NMeFOSAA	Ave	0.3935	0.4029		2.56	2.50	2.4	50.0
d5-NEtFOSAA	Ave	0.4077	0.4067		2.49	2.50	-0.2	50.0
13C2 PFUnA	Ave	0.6189	0.6228		2.52	2.50	0.6	50.0
13C2 PFDoA	Ave	0.6541	0.6517		2.49	2.50	-0.4	50.0
13C2-PFTeDA	Ave	0.8335	0.8309		2.49	2.50	-0.3	50.0
13C2-PFHxDA	Ave	1.653	1.653		2.50	2.50	-0.0	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_010.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 06-Aug-2018 12:12:35 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist:

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 07-Aug-2018 08:17:35 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK002

First Level Reviewer: westendorfc Date: 06-Aug-2018 14:44:08

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.395	-0.004	0.542	5296521	2.52		101	7091	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.397	-0.006	1.000	4825878	2.43			504	
D 3 13C5-PFPeA										
267.90 > 223.00	1.639	1.639	0.0	0.639	3698626	2.55		102	7119	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.639	1.643	-0.004	1.000	4183399	2.49			284	
D 47 13C3-PFBS										
301.90 > 83.00	1.670	1.675	-0.005	0.651	80665	2.41		104	325	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.670	1.676	-0.006	1.000	5824451	2.21			1937	
298.90 > 99.00	1.670	1.676	-0.006	1.000	2407614		2.42(1.25-3.74)		1183	
D 60 M2-4:2FTS										
329.00 > 81.00	1.875	1.875	0.0	0.731	561057	2.35		101	886	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.875	1.875	0.0	1.123	1321953	2.30			6725	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.902	1.908	-0.006	1.000	4205198	2.39			977	
313.00 > 119.00	1.902	1.908	-0.006	1.000	400387		10.50(5.03-15.10)		846	
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.908	-0.006	0.741	4315219	2.62		105	15192	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.923	1.930	-0.007	1.151	5526564	2.31			5906	
349.00 > 99.00	1.923	1.930	-0.007	1.151	2095463		2.64(1.36-4.07)		2107	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.996	2.003	-0.007	0.778	322162	2.52		101	933	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.996	2.003	-0.007	1.000	741324	2.38			344	
D 9 13C4-PFHpA										
367.00 > 322.00	2.224	2.227	-0.003	0.867	3985248	2.46		98.5	13174	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.224	2.228	-0.004	1.000	4365036	2.58			796	
363.00 > 169.00	2.224	2.228	-0.004	1.000	1653058		2.64(1.13-3.40)		2332	
D 11 18O2 PFHxS										
403.00 > 84.00	2.233	2.239	-0.006	0.870	4991823	2.41		102	6129	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.233	2.239	-0.006	1.000	4839695	2.12			4067	
399.00 > 99.00	2.233	2.239	-0.006	1.000	1675306		2.89(1.50-4.49)		1317	
65 ADONA										
377.00 > 251.00	2.266	2.271	-0.005	0.773	11858483	2.66			9196	
377.00 > 85.00	2.266	2.271	-0.005	0.773	7230959		1.64(0.84-2.53)		6790	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.541	2.548	-0.007	1.000	1280328	2.23			1590	
D 12 M2-6:2FTS										
429.00 > 81.00	2.541	2.549	-0.008	0.990	865191	2.54		107	2048	
D 73 13C8 PFOA										
421.00 > 376.00	2.565	2.571	-0.006	1.000	7338024	2.51		102	10284	
D 14 13C4 PFOA										
417.00 > 372.00	2.565	2.573	-0.008	1.000	3800480	2.56		102	6853	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.565	2.574	-0.009	1.000	4200537	2.44			410	
413.00 > 169.00	2.565	2.574	-0.009	1.000	2114411		1.99(0.84-2.52)		2903	
* 62 13C2-PFOA										
415.00 > 370.00	2.565	2.575	-0.010		3797956	2.50			5989	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.572	2.583	-0.011	0.877	4137002	2.43			2987	
449.00 > 99.00	2.572	2.583	-0.011	0.877	1077824		3.84(1.94-5.82)		1432	
D 72 13C8 PFOS										
507.00 > 99.00	2.927	2.938	-0.011	1.141	1637179	2.47		103	4240	
20 Perfluorononanoic acid										
463.00 > 419.00	2.932	2.939	-0.007	1.002	3565093	2.52			1099	
463.00 > 169.00	2.927	2.939	-0.012	1.000	836654		4.26(1.90-5.69)		3309	
D 19 13C5 PFNA										
468.00 > 423.00	2.927	2.939	-0.012	1.141	3355305	2.52		101	5903	
D 18 13C4 PFOS										
503.00 > 80.00	2.932	2.939	-0.007	1.143	3284321	2.41		101	4465	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.932	2.940	-0.008	1.000	3376348	2.29			2781	
499.00 > 99.00	2.932	2.940	-0.008	1.000	758026		4.45(2.31-6.93)		1161	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.138	3.150	-0.012	1.070	6059178	2.53			6074	
D 26 M2-8:2FTS										
529.00 > 81.00	3.271	3.284	-0.013	1.275	990254	2.41		101	3137	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.277	3.285	-0.007	1.118	2621562	2.54			5053	
549.00 > 99.00	3.277	3.285	-0.007	1.118	925714		2.83(1.33-3.97)		2112	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.271	3.286	-0.015	1.000	1292056	2.41			2763	
D 23 13C2 PFDA										
515.00 > 470.00	3.283	3.294	-0.011	1.280	3070618	2.63		105	4701	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.283	3.296	-0.013	1.000	2928556	2.38			1743	
513.00 > 169.00	3.283	3.296	-0.013	1.000	492806		5.94(2.36-7.09)		1454	
D 21 13C8 FOSA										
506.00 > 78.00	3.305	3.317	-0.012	1.288	4636545	2.57		103	4566	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.312	3.319	-0.007	1.002	4790545	2.65			4274	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.438	3.448	-0.010	1.340	1530216	2.56		102	2513	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.445	3.453	-0.008	1.002	1600813	2.71			1423	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.595	3.608	-0.013	1.226	2170741	2.50			5861	
599.00 > 99.00	3.595	3.608	-0.013	1.226	719544		3.02(1.39-4.16)		2645	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.604	3.616	-0.012	1.405	1544621	2.49		99.8	1098	
D 30 13C2 PFUnA										
565.00 > 520.00	3.613	3.620	-0.007	1.408	2365503	2.52		101	5330	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.613	3.622	-0.009	1.000	2627473	2.47			1492	
563.00 > 169.00	3.613	3.622	-0.009	1.000	445341		5.90(2.12-6.36)		1665	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.613	3.623	-0.010	1.002	1445786	2.62			2945	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.766	3.781	-0.015	1.284	9482077	2.58			7397	
D 36 13C2 PFDoA										
615.00 > 570.00	3.899	3.913	-0.014	1.520	2474996	2.49		99.6	5677	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.899	3.913	-0.014	1.192	962597	2.58			4544	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.899	3.913	-0.014	1.000	2751158	2.50			1368	
613.00 > 169.00	3.899	3.913	-0.014	1.000	638644		4.31(2.13-6.40)		3219	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.139	4.148	-0.009	1.411	946435	2.48			6010	
699.00 > 99.00	4.139	4.148	-0.009	1.411	1287773		0.73(0.00-0.00)		3741	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.158	4.173	-0.015	1.066	2676685	2.51			1031	
663.00 > 169.00	4.158	4.173	-0.015	1.066	835828		3.20(1.25-3.76)		3211	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.390	4.399	-0.009	1.711	3155599	2.49		99.7	7430	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.390	4.400	-0.010	1.000	762188	2.49			3740	
713.00 > 219.00	4.390	4.400	-0.010	1.000	546353		1.40(0.71-2.13)		2085	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.789	4.799	-0.010	1.867	6279185	2.50		100.0	7044	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.796	4.801	-0.005	1.001	5908591	2.68			1969	
813.00 > 169.00	4.789	4.801	-0.012	1.000	999181		5.91(2.86-8.58)		4590	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.126	5.136	-0.010	1.070	6210892	2.69			1785	
913.00 > 169.00	5.126	5.136	-0.010	1.070	740263		8.39(3.83-11.48)		2920	

Reagents:

LCPFCIC_FULL_00013 Amount Added: 1.00 Units: mL

Report Date: 07-Aug-2018 08:17:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_010.d

Injection Date: 06-Aug-2018 12:12:35 Instrument ID: A8_N

Lims ID: ICV Full

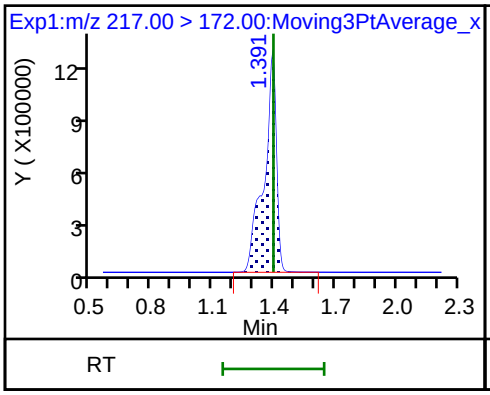
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 17 Worklist Smp#: 10

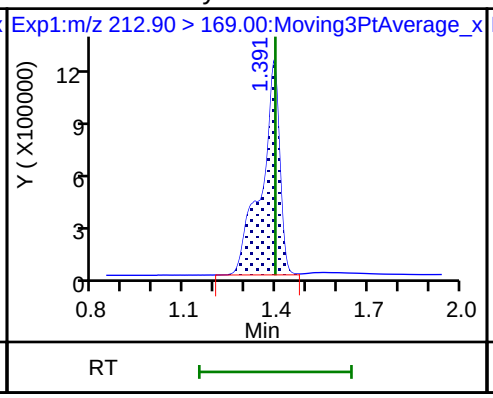
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

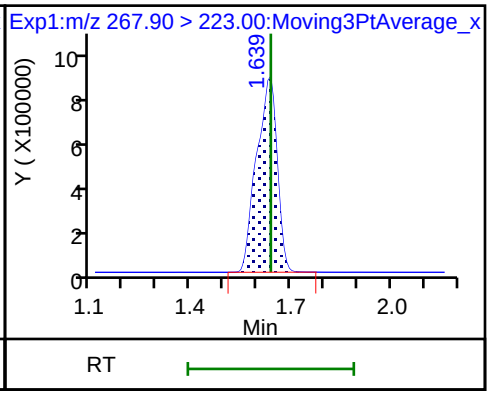
D 1 13C4 PFBA



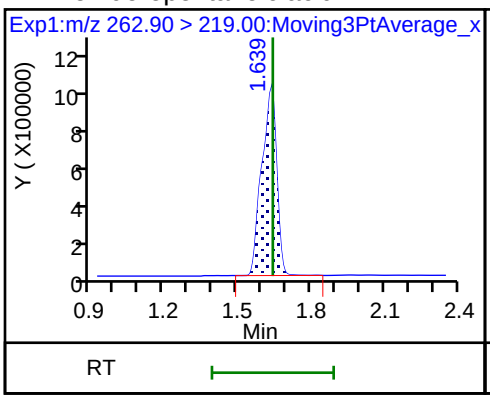
2 Perfluorobutyric acid



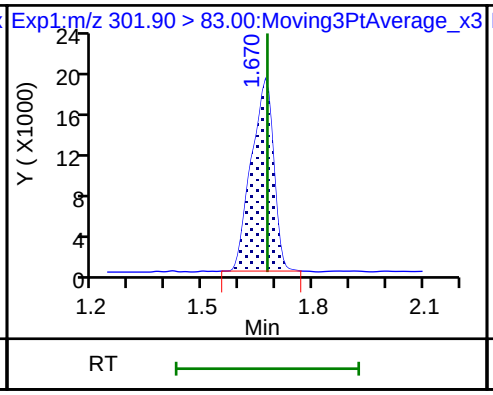
D 3 13C5-PFPeA



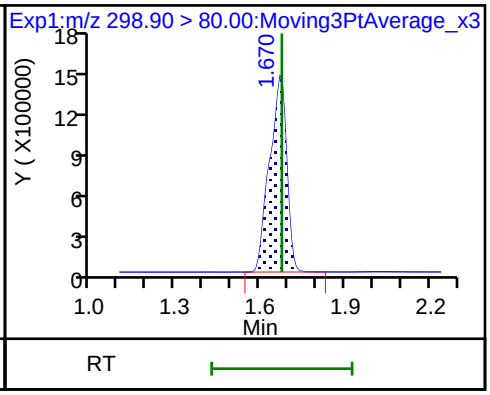
4 Perfluoropentanoic acid



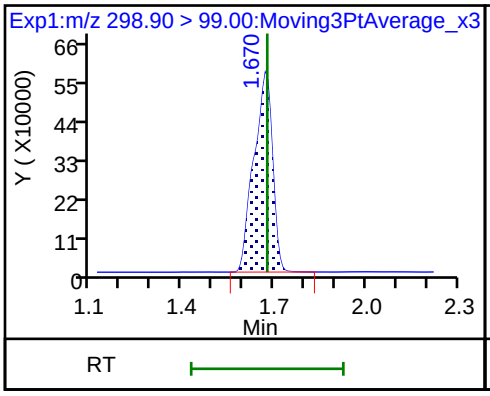
D 47 13C3-PFBS



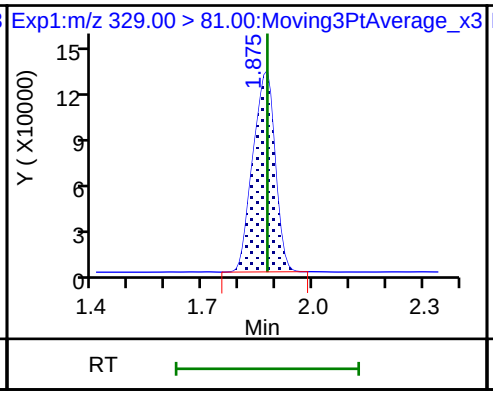
5 Perfluorobutanesulfonic acid



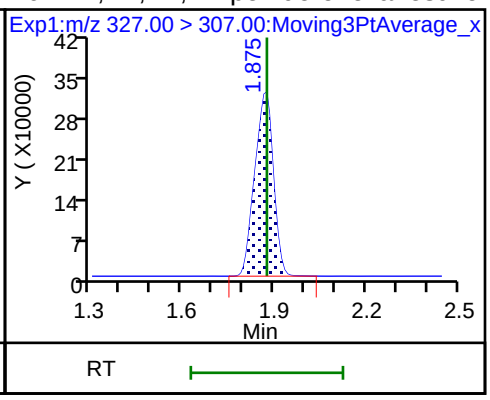
5 Perfluorobutanesulfonic acid



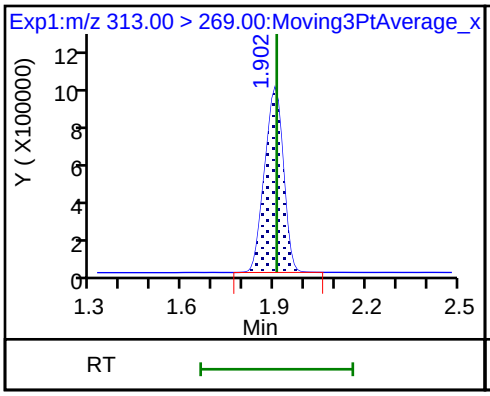
D 60 M2-4:2FTS



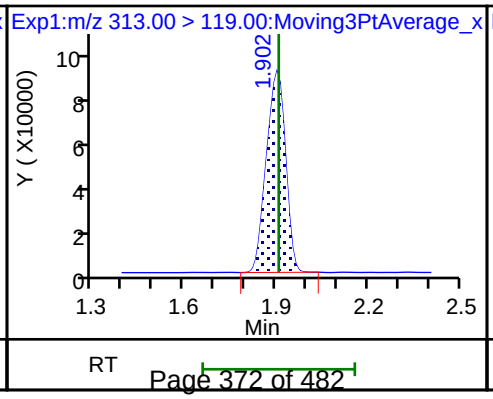
61 1H,1H,2H,2H-perfluorohexanesulfoni



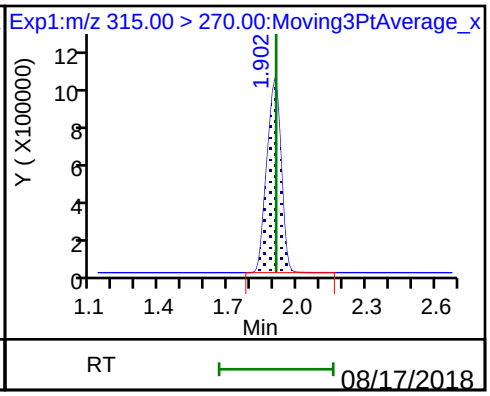
6 Perfluorohexanoic acid



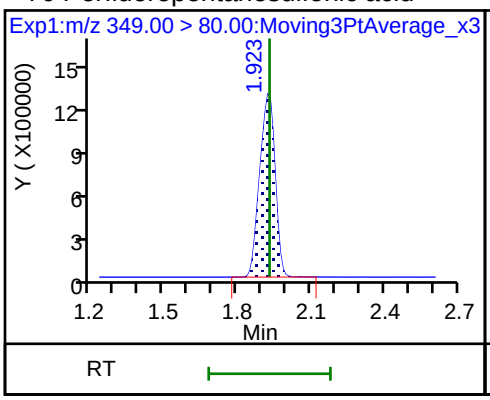
6 Perfluorohexanoic acid



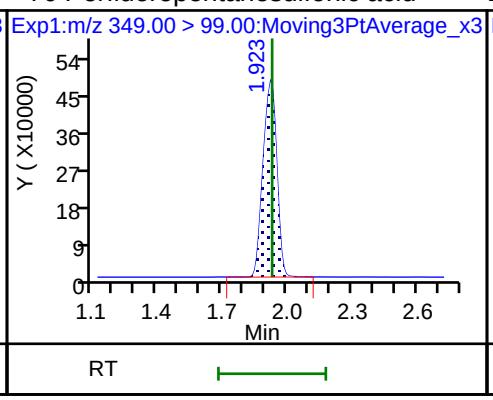
D 7 13C2 PFHxA



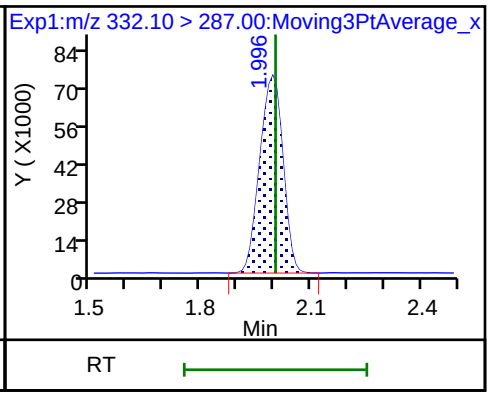
70 Perfluoropentanesulfonic acid



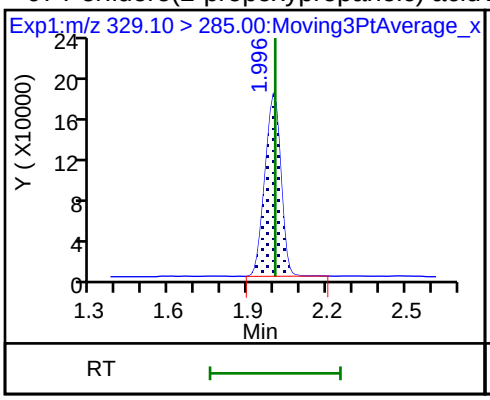
70 Perfluoropentanesulfonic acid



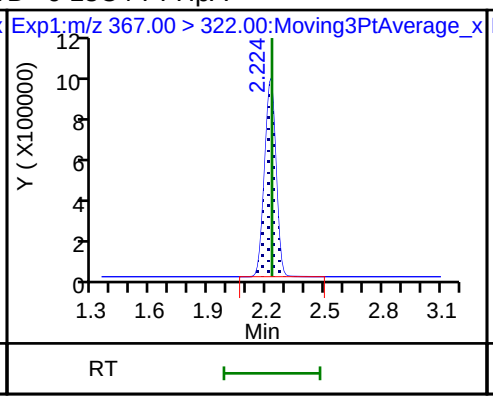
D 64 13C3 HFPO-DA



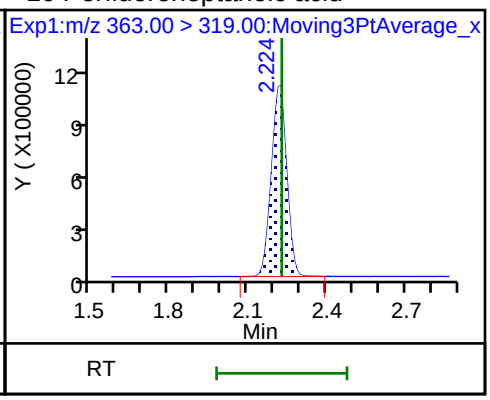
67 Perfluoro(2-propoxypropanoic) acid



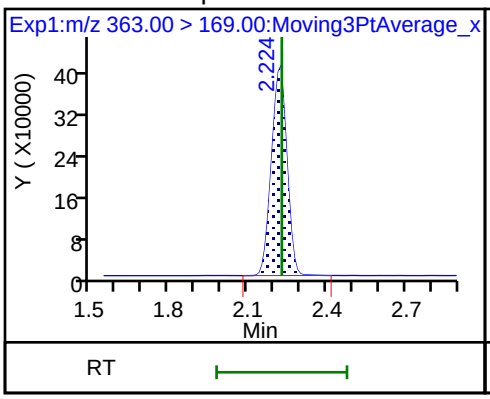
D 9 13C4-PFHpA



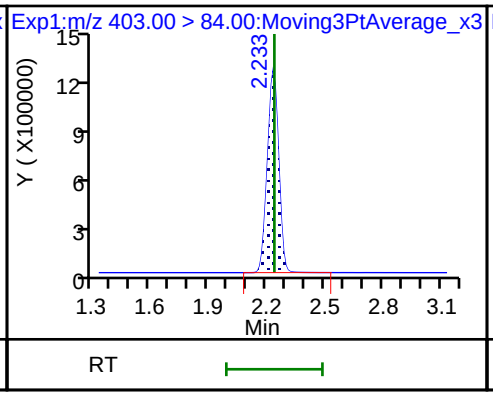
10 Perfluoroheptanoic acid



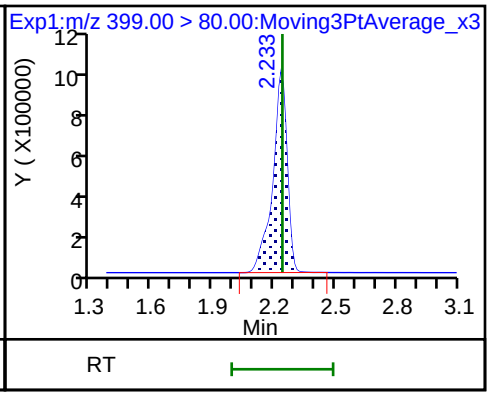
10 Perfluoroheptanoic acid



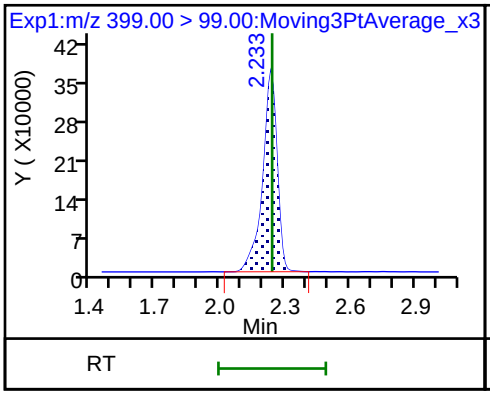
D 11 18O2 PFHxS



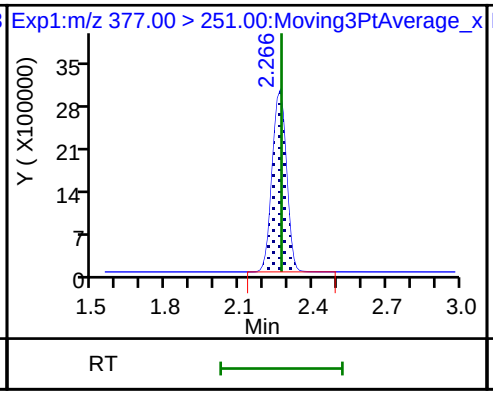
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA



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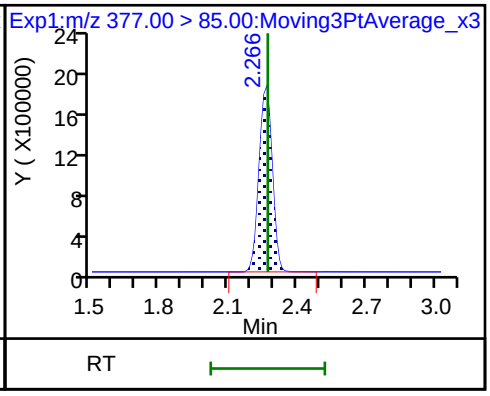
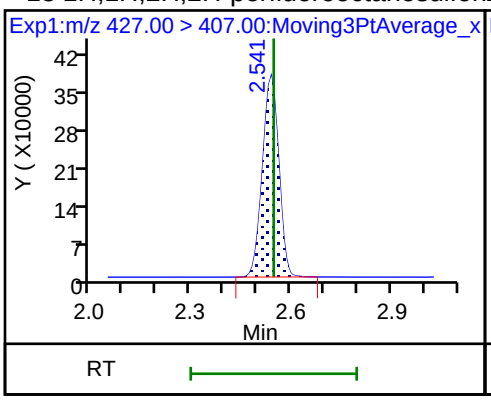
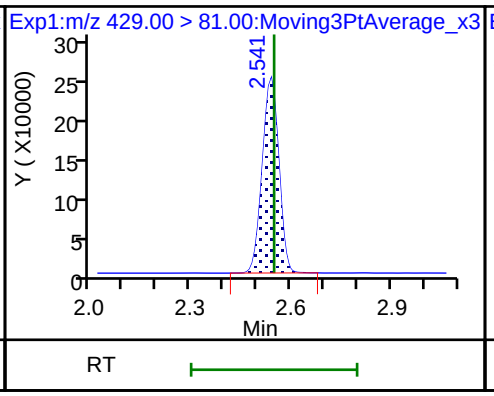


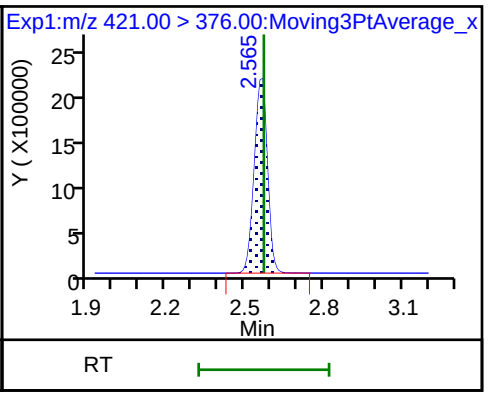
13 1H,1H,2H,2H-perfluorooctanesulfon



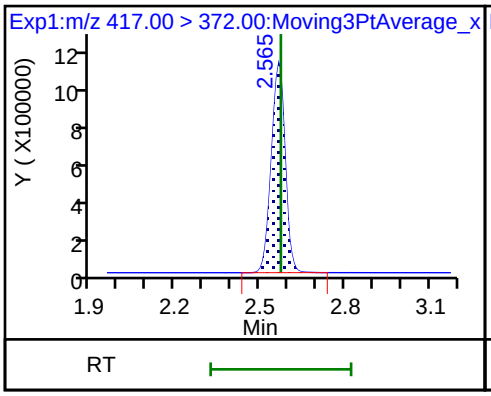
D 12 M2-6:2FTS



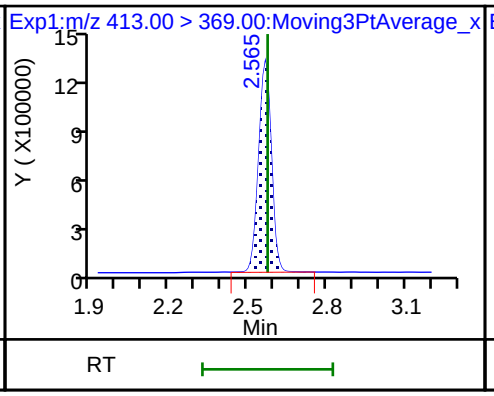
D 73 13C8 PFOA



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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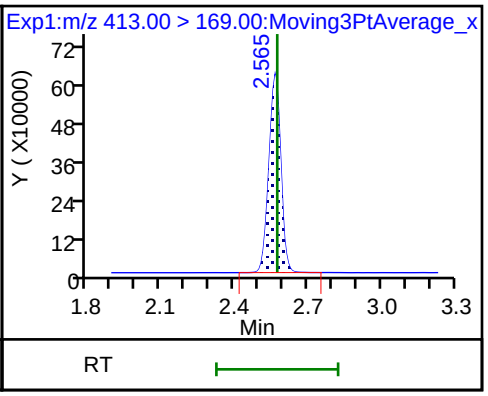
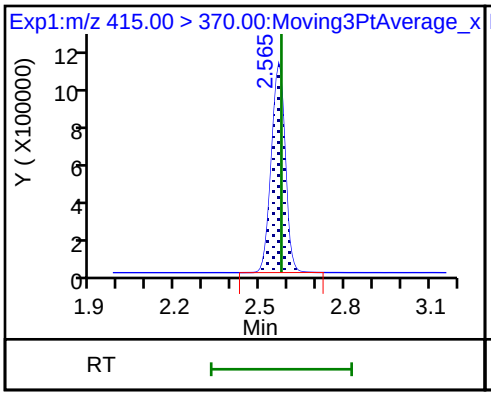
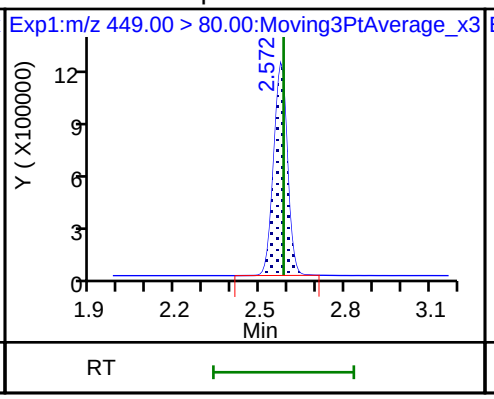


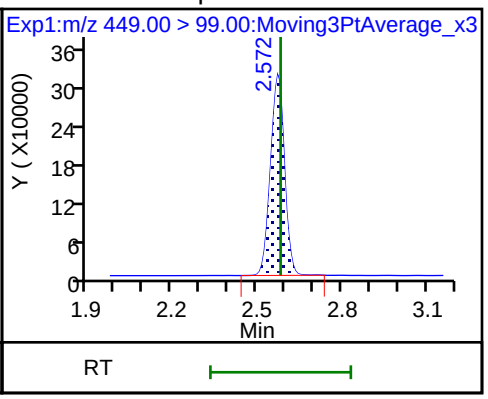
* 62 13C2-PFOA



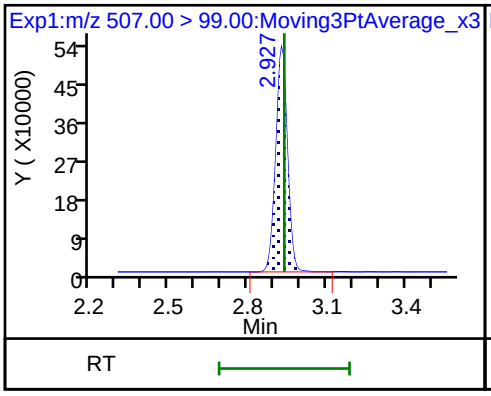
16 Perfluoroheptanesulfonic acid



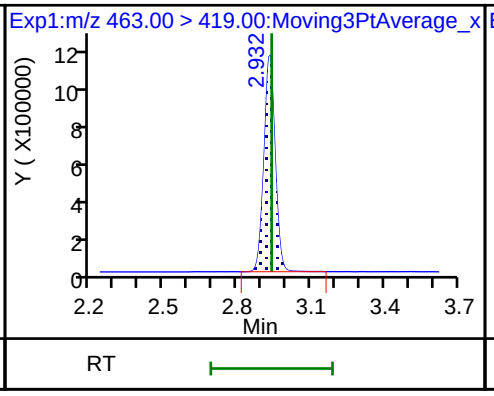
16 Perfluoroheptanesulfonic acid



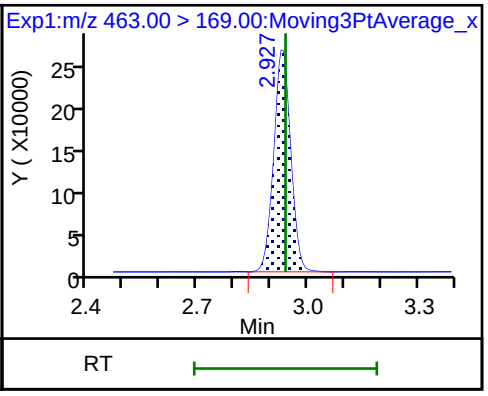
D 72 13C8 PFOS



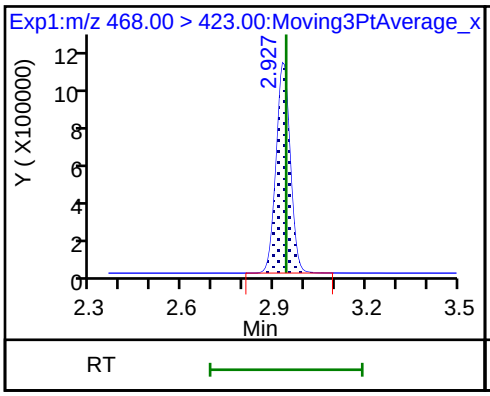
20 Perfluorononanoic acid



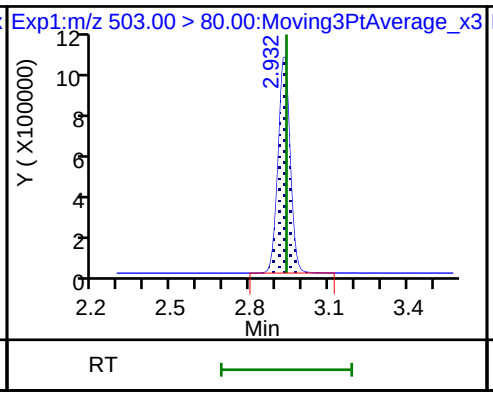
20 Perfluorononanoic acid



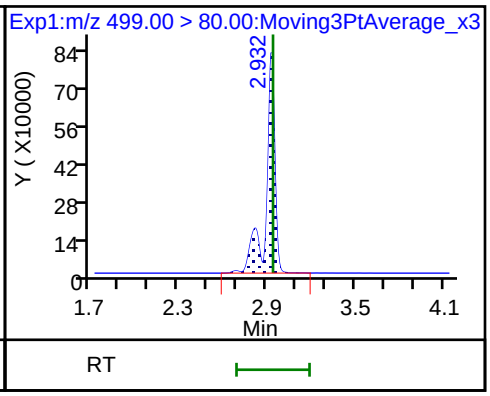
D 19 13C5 PFNA



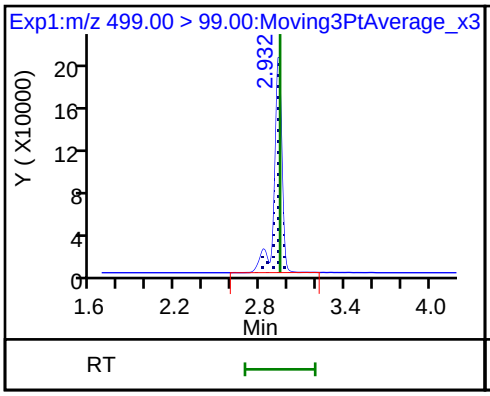
D 18 13C4 PFOS



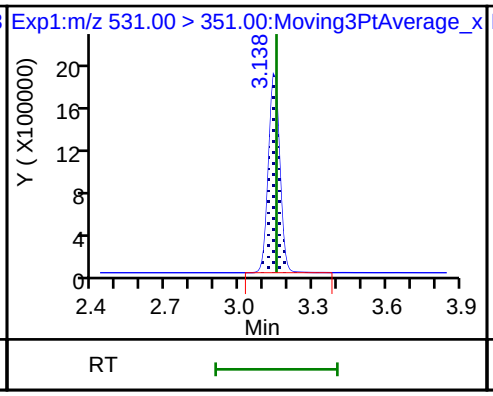
17 Perfluorooctane sulfonic acid



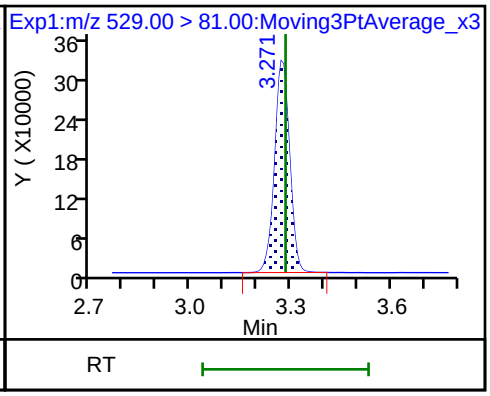
17 Perfluorooctane sulfonic acid



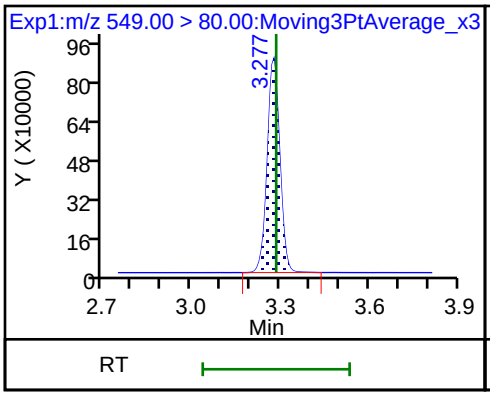
69 9-Chlorohexadecafluoro-3-oxanonane



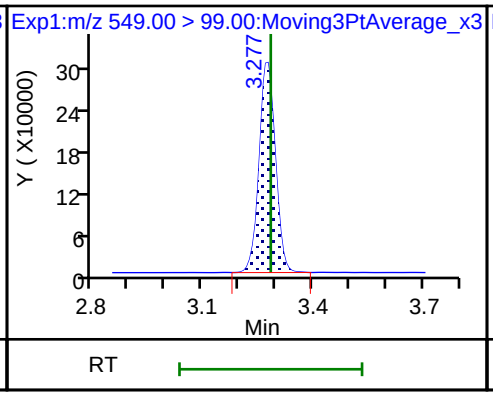
D 26 M2-8:2FTS



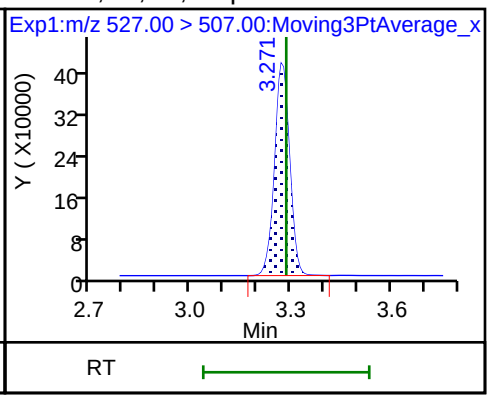
68 Perfluorononanesulfonic acid



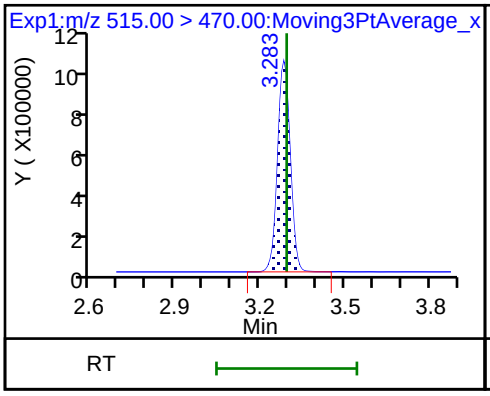
68 Perfluorononanesulfonic acid



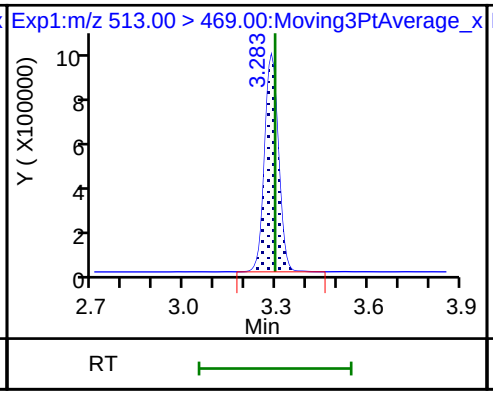
25 1H,1H,2H,2H-perfluorodecanesulfoni



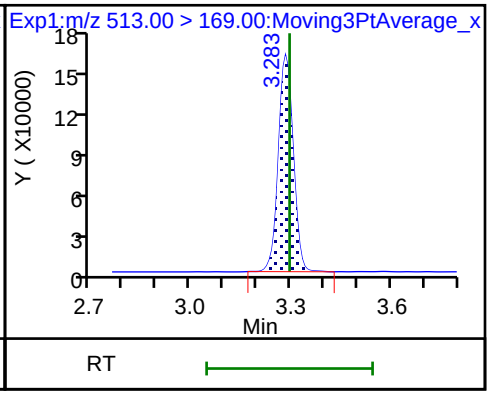
D 23 13C2 PFDA



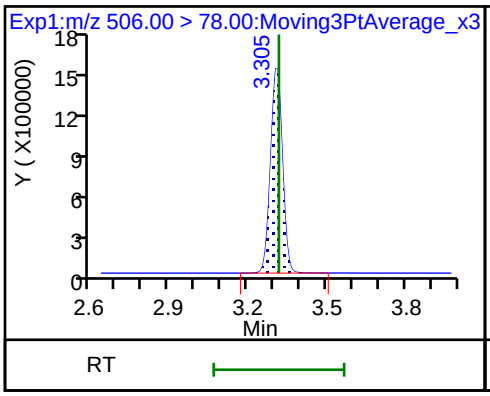
24 Perfluorodecanoic acid



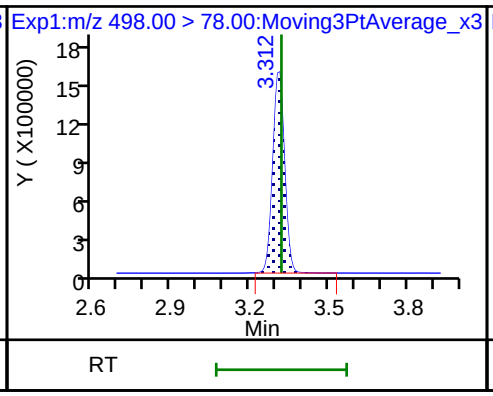
24 Perfluorodecanoic acid



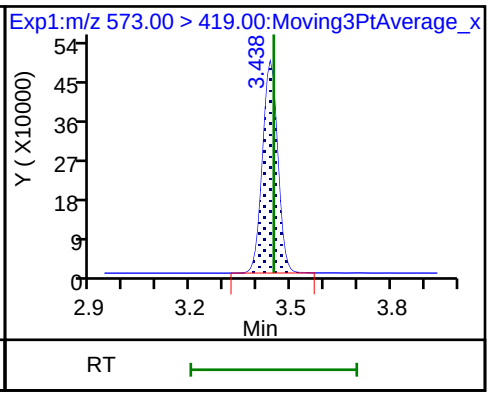
D 21 13C8 FOSA



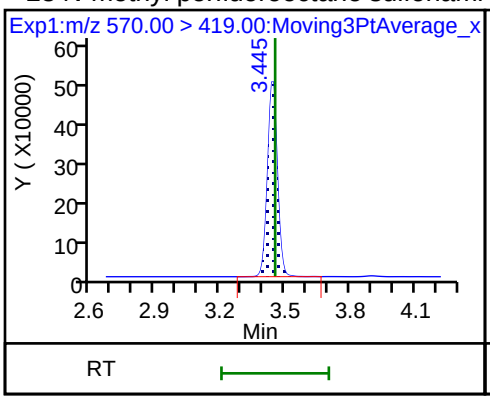
22 Perfluorooctane Sulfonamide



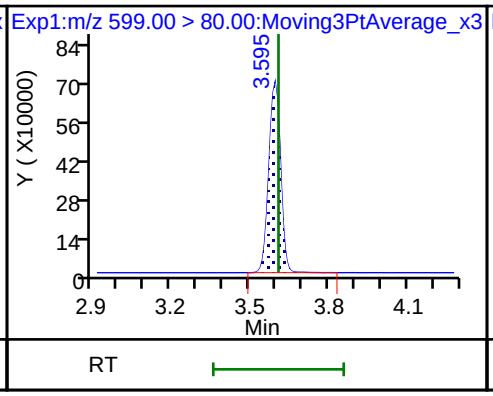
D 27 d3-NMeFOSAA



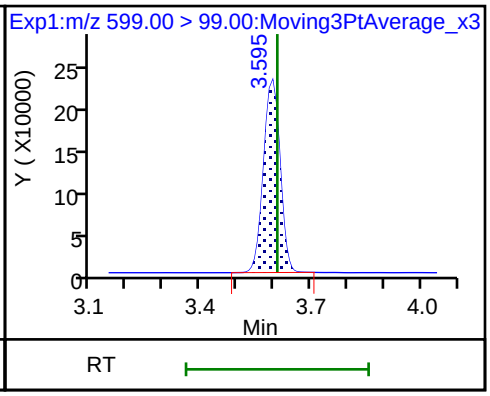
28 N-methyl perfluorooctane sulfonami



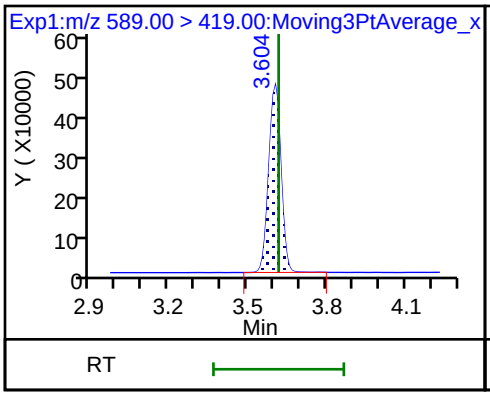
29 Perfluorodecane Sulfonic acid



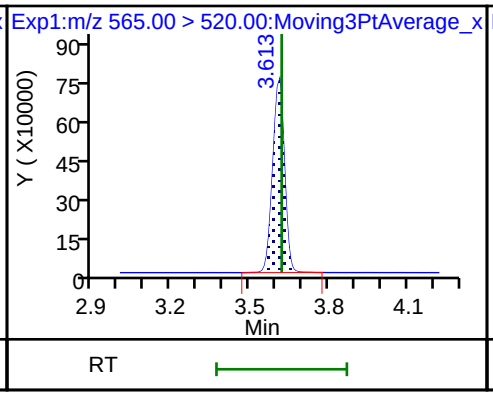
29 Perfluorodecane Sulfonic acid



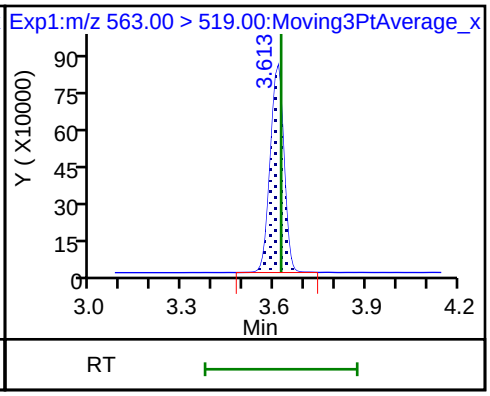
D 32 d5-NEtFOSAA



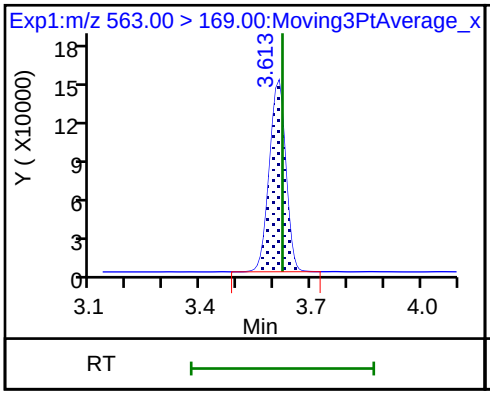
D 30 13C2 PFUnA



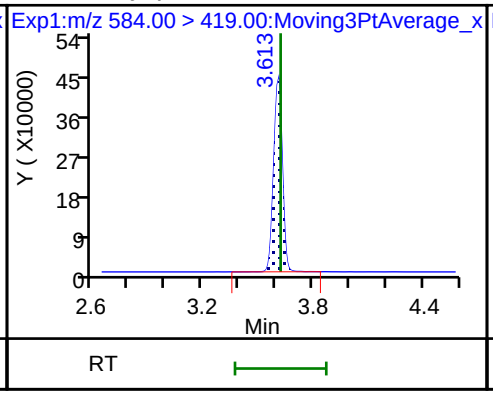
31 Perfluoroundecanoic acid



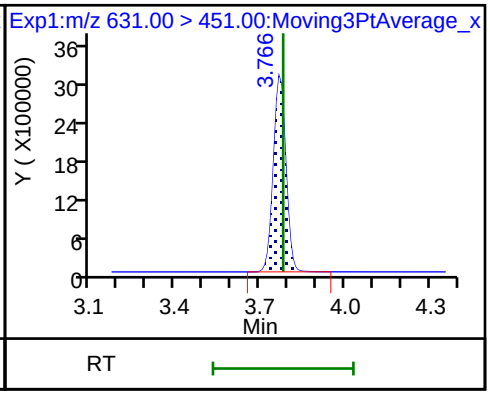
31 Perfluoroundecanoic acid



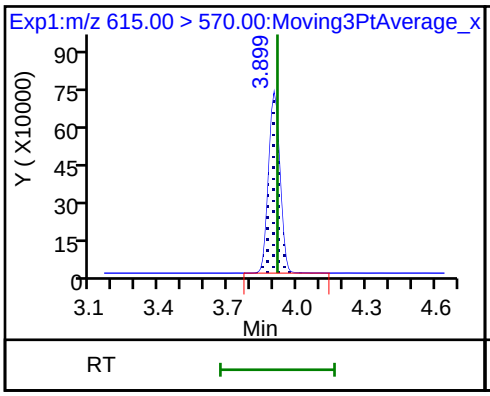
33 N-ethyl perfluorooctane sulfonamid



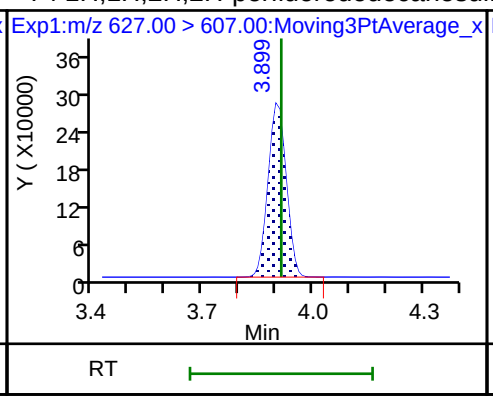
66 11-Chloroeicosafluoro-3-oxaundecan



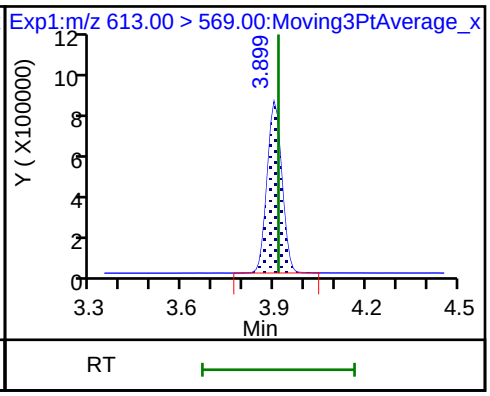
D 36 13C2 PFDoA



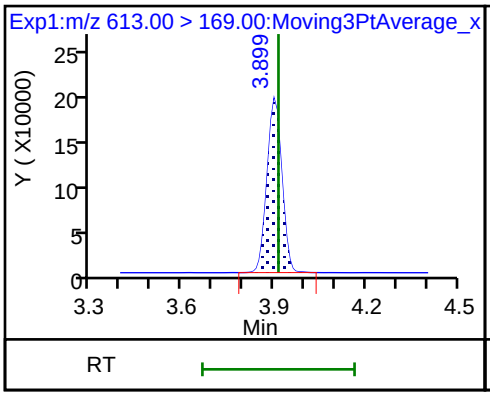
74 1H,1H,2H,2H-perfluorododecanesulfo



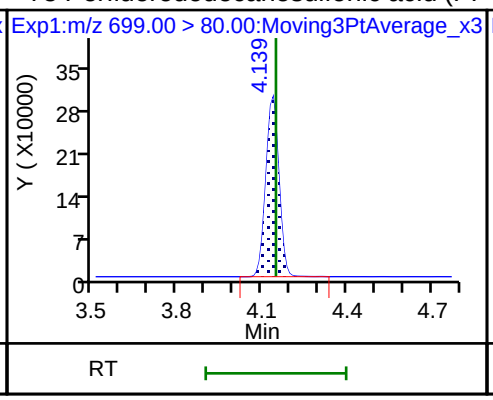
37 Perfluorododecanoic acid



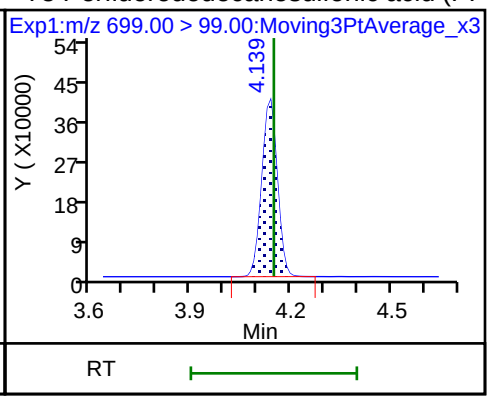
37 Perfluorododecanoic acid



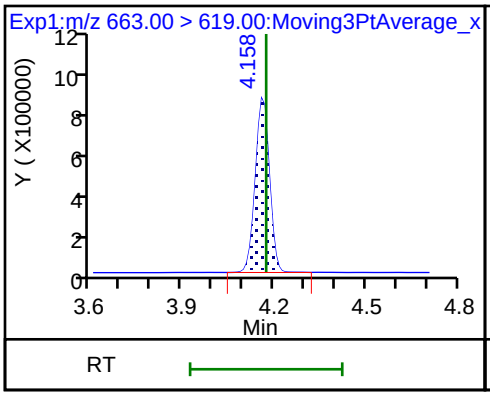
75 Perfluorododecanesulfonic acid (PF



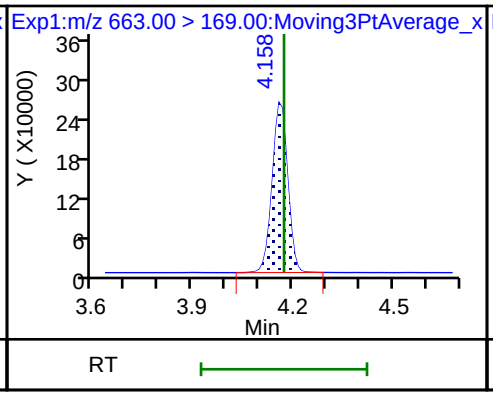
75 Perfluorododecanesulfonic acid (PF



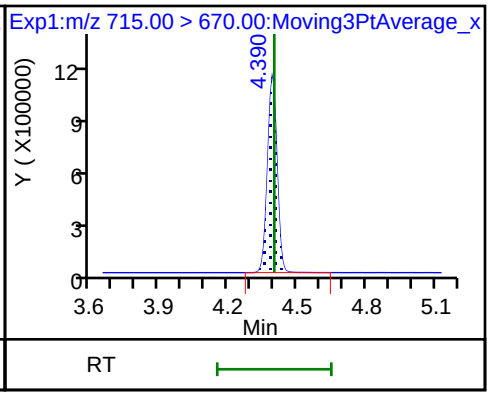
41 Perfluorotridecanoic acid



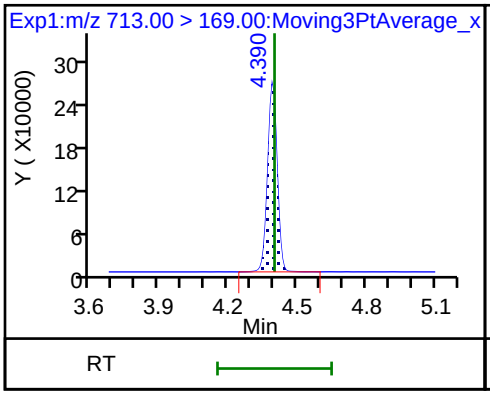
41 Perfluorotridecanoic acid



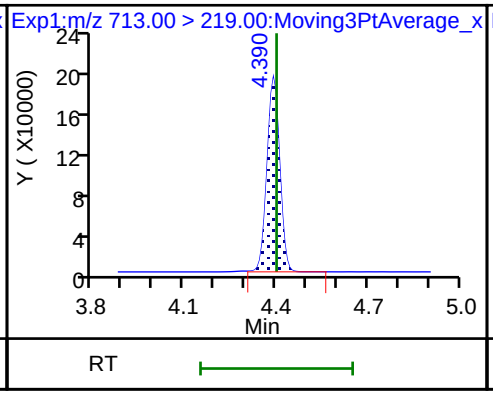
D 43 13C2-PFTeDA



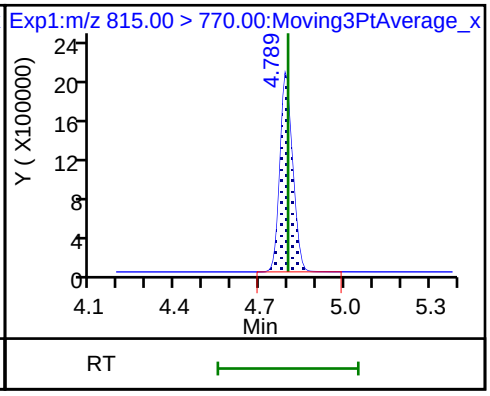
42 Perfluorotetradecanoic acid



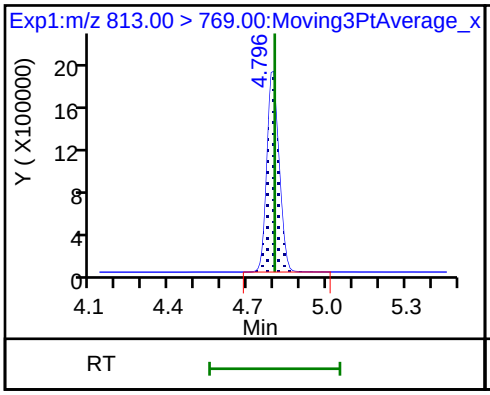
42 Perfluorotetradecanoic acid



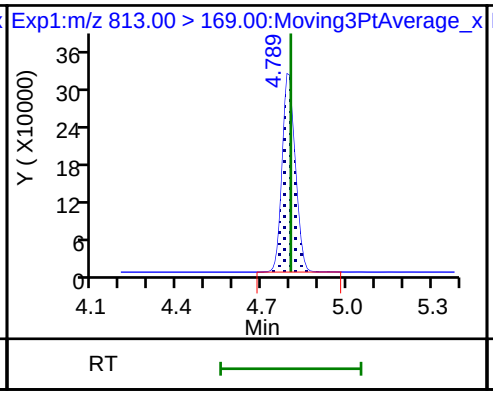
D 44 13C2-PFHxDA



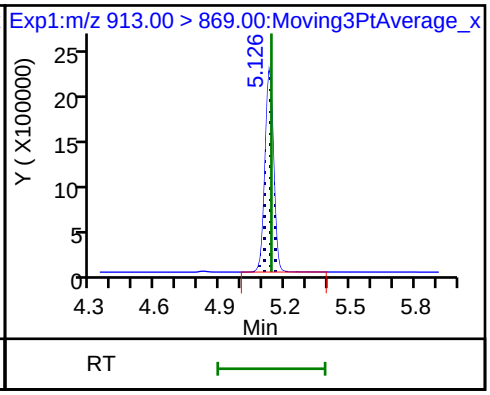
45 Perfluorohexadecanoic acid



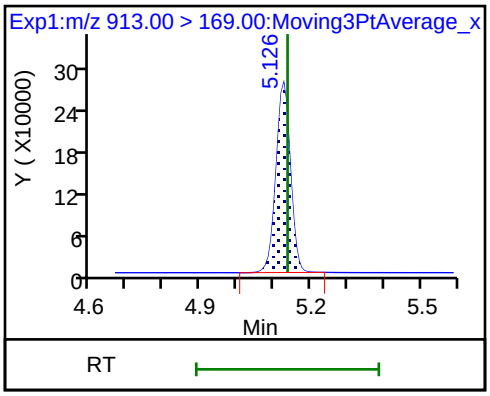
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCVL 320-238518/2 Calibration Date: 08/07/2018 14:45

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.07LLB_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	1.026		0.0546	0.0500	9.3	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.197		0.0526	0.0500	5.2	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	81.42		0.0474	0.0442	7.2	50.0
4:2 FTS	AveID	16.57	18.04			0.0467	8.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	1.117		0.0547	0.0500	9.4	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	70.51		0.0480	0.0469	2.3	50.0
HFPO-DA (GenX)	AveID	2.420	2.458		0.0508	0.0500	1.6	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.082		0.0510	0.0500	1.9	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.175		0.0493	0.0455	8.4	50.0
ADONA	AveID	3.245	3.309		0.0510	0.0500	2.0	50.0
6:2 FTS	AveID	1.573	1.522			0.0474	-3.3	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.214		0.0537	0.0501	7.4	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.166		0.0448	0.0476	-5.9	50.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.083		0.0514	0.0500	2.8	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.071		0.0463	0.0464	-0.2	50.0
F-53B Major	AveID	1.742	1.648		0.0441	0.0466	-5.4	50.0
8:2 FTS	AveID	1.299	1.330			0.0479	2.4	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.7010		0.0447	0.0480	-6.8	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	0.9655		0.0481	0.0500	-3.8	50.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	1.032		0.0530	0.0500	6.0	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	0.9759			0.0500	1.2	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6109		0.0466	0.0482	-3.3	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	1.267		0.0564	0.0500	12.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8051			0.0500	-9.7	50.0
F-53B Minor	AveID	2.674	2.906		0.0512	0.0471	8.7	50.0
10:2 FTS	AveID	0.9008	0.9276		0.0496	0.0482	3.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.178		0.0529	0.0500	5.9	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2405		0.0419	0.0484	-13.4	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.183		0.0550	0.0500	10.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2668		0.0551	0.0500	10.2	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCVL 320-238518/2 Calibration Date: 08/07/2018 14:45

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.07LLB_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.286		0.0494	0.0500	-1.1	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.9619		0.0523	0.0500	4.5	50.0
13C4 PFBA	Ave	1.385	1.335		2.41	2.50	-3.6	50.0
13C5 PFPeA	Ave	0.9537	0.9543		2.50	2.50	0.0	50.0
13C3-PFBS	Ave	0.0221	0.0209		2.20	2.33	-5.5	50.0
M2-4:2FTS	Ave	0.1572	0.1681		2.50	2.34	7.0	50.0
13C2 PFHxA	Ave	1.082	1.073		2.48	2.50	-0.8	50.0
13C3 HFPO-DA	Ave	0.0842	0.0814		2.42	2.50	-3.3	50.0
13C4-PFHpA	Ave	1.065	1.072		2.52	2.50	0.6	50.0
18O2 PFHxS	Ave	1.366	1.347		2.33	2.37	-1.4	50.0
M2-6:2FTS	Ave	0.2242	0.2291		2.43	2.38	2.2	50.0
13C8 PFOA	Ave	1.927	1.956		2.48	2.45	1.5	50.0
13C4 PFOA	Ave	0.9773	0.9679		2.48	2.50	-1.0	50.0
13C4 PFOS	Ave	0.8973	0.8881		2.37	2.39	-1.0	50.0
13C5 PFNA	Ave	0.8770	0.8720		2.49	2.50	-0.6	50.0
13C8 PFOS	Ave	0.4359	0.4403		2.41	2.39	1.0	50.0
M2-8:2FTS	Ave	0.2707	0.2697		2.39	2.40	-0.4	50.0
13C2 PFDA	Ave	0.7695	0.7862		2.55	2.50	2.2	50.0
13C8 FOSA	Ave	1.188	1.203		2.53	2.50	1.2	50.0
d3-NMeFOSAA	Ave	0.3935	0.3846		2.44	2.50	-2.3	50.0
13C2 PFUnA	Ave	0.6189	0.6324		2.55	2.50	2.2	50.0
d5-NEtFOSAA	Ave	0.4077	0.4154		2.55	2.50	1.9	50.0
13C2 PFDoA	Ave	0.6541	0.6364		2.43	2.50	-2.7	50.0
13C2-PFTeDA	Ave	0.8335	0.8074		2.42	2.50	-3.1	50.0
13C2-PFHxDA	Ave	1.653	1.502		2.27	2.50	-9.2	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62287.b\2018.08.07LLB_005.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 07-Aug-2018 14:45:30 ALS Bottle#: 21 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62287.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 08:32:19 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK048

First Level Reviewer: phomsophat Date: 07-Aug-2018 20:36:30

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.395	1.396	-0.001	1.000	110373	0.0546		109	9.9	
D 1 13C4 PFBA										
217.00 > 172.00	1.395	1.398	-0.003	0.543	5378175	2.41		96.4	8370	
D 3 13C5-PFPeA										
267.90 > 223.00	1.637	1.643	-0.006	0.638	3843410	2.50		100	7966	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.637	1.646	-0.009	1.000	92007	0.0526		105	5.4	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.677	1.678	-0.001	1.000	120884	0.0474		107	47.9	
298.90 > 99.00	1.677	1.678	-0.001	1.000	51695		2.34(1.25-3.74)		25.5	
D 47 13C3-PFBS										
301.90 > 83.00	1.677	1.684	-0.007	0.653	78099	2.20		94.5	252	
D 60 M2-4:2FTS										
329.00 > 81.00	1.874	1.880	-0.006	0.730	632498	2.50		107	818	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.874	1.880	-0.006	1.117	28294	0.0508		109	295	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.900	1.907	-0.007	1.000	96549	0.0547		109	16.2	
313.00 > 119.00	1.910	1.907	0.003	1.005	7801		12.38(5.03-15.10)		17.5	
D 7 13C2 PFHxA										
315.00 > 270.00	1.900	1.918	-0.018	0.740	4322474	2.48		99.2	8298	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.931	1.928	0.003	1.151	111081	0.0480		102	245	
349.00 > 99.00	1.920	1.928	-0.008	1.145	43157		2.57(1.36-4.07)		43.9	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.994	2.001	-0.007	0.995	16119	0.0508		102	6.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.004	2.012	-0.008	0.780	327870	2.42		96.7	905	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.221	2.227	-0.006	1.000	93459	0.0510		102	17.3	
363.00 > 169.00	2.221	2.227	-0.006	1.000	37851		2.47(1.13-3.40)		60.9	
D 9 13C4-PFHpA										
367.00 > 322.00	2.221	2.236	-0.015	0.865	4316892	2.52		101	8234	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.240	2.236	0.004	1.004	116044	0.0493		108	176	
399.00 > 99.00	2.240	2.236	0.004	1.004	40425		2.87(1.50-4.49)		34.9	
D 11 18O2 PFHxS										
403.00 > 84.00	2.231	2.247	-0.016	0.869	5132671	2.33		98.6	5939	
65 ADONA										
377.00 > 251.00	2.262	2.269	-0.007	0.773	236708	0.0510		102	562	
377.00 > 85.00	2.262	2.269	-0.007	0.773	135269		1.75(0.84-2.53)		221	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.537	2.544	-0.007	1.000	26623	0.0459		96.7	48.0	
D 12 M2-6:2FTS										
429.00 > 81.00	2.537	2.552	-0.015	0.988	876488	2.43		102	2281	
* 62 13C2-PFOA										
415.00 > 370.00	2.568	2.568	0.0		4027471	2.50			8536	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.568	2.568	0.0	1.000	94749	0.0537		107	7.9	
413.00 > 169.00	2.568	2.568	0.0	1.000	50301		1.88(0.84-2.52)		88.3	
D 73 13C8 PFOA										
421.00 > 376.00	2.561	2.574	-0.013	0.997	7710870	2.48		101	8599	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.575	2.574	0.001	0.880	79422	0.0448		94.1	267	
449.00 > 99.00	2.575	2.574	0.001	0.880	21626		3.67(1.94-5.82)		42.3	
D 14 13C4 PFOA										
417.00 > 372.00	2.568	2.581	-0.013	1.000	3898338	2.48		99.0	8206	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.926	2.930	-0.004	1.000	71117	0.0463		99.8	154	
499.00 > 99.00	2.931	2.930	0.001	1.002	18985		3.75(2.31-6.93)		28.6	
20 Perfluorononanoic acid										
463.00 > 419.00	2.926	2.930	-0.004	1.000	76096	0.0514		103	20.7	
463.00 > 169.00	2.926	2.930	-0.004	1.000	17056		4.46(1.90-5.69)		105	
D 19 13C5 PFNA										
468.00 > 423.00	2.926	2.941	-0.015	1.139	3512034	2.49		99.4	7897	
D 72 13C8 PFOS										
507.00 > 99.00	2.926	2.941	-0.015	1.139	1695417	2.41		101	4298	
D 18 13C4 PFOS										
503.00 > 80.00	2.926	2.941	-0.015	1.139	3419546	2.37		99.0	4493	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.137	3.143	-0.006	1.072	109896	0.0441		94.6	395	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.269	3.270	-0.001	1.000	27673	0.0490		102	173	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.275	3.275	0.0	1.119	48144	0.0447		93.2	233	
549.00 > 99.00	3.275	3.275	0.0	1.119	18589		2.59(1.33-3.97)		97.1	
D 26 M2-8:2FTS										
529.00 > 81.00	3.269	3.282	-0.013	1.273	1040561	2.39		99.6	2069	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.282	3.282	0.0	1.000	61142	0.0481		96.2	35.8	
513.00 > 169.00	3.282	3.282	0.0	1.000	12059		5.07(2.36-7.09)		60.8	
D 23 13C2 PFDA										
515.00 > 470.00	3.282	3.296	-0.014	1.278	3166396	2.55		102	6665	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.317	3.318	-0.001	1.002	100034	0.0530		106	675	
D 21 13C8 FOSA										
506.00 > 78.00	3.310	3.318	-0.008	1.289	4844408	2.53		101	5964	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.436	3.436	0.0	1.000	30233	0.0506		101	24.7	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.436	3.451	-0.015	1.338	1549058	2.44		97.7	3212	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.594	3.594	0.0	1.228	42127	0.0466		96.7	206	
599.00 > 99.00	3.594	3.594	0.0	1.228	14870		2.83(1.39-4.16)		107	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.611	3.611	0.0	1.002	26943	0.0451		90.3	136	
31 Perfluoroundecanoic acid										R
563.00 > 519.00	3.602	3.611	-0.009	1.000	64513	0.0564		113	39.7	R
563.00 > 169.00	3.602	3.611	-0.009	1.000	9423		6.85(2.12-6.36)		44.2	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.602	3.611	-0.009	1.403	1673184	2.55		102	1641	
D 30 13C2 PFUnA										
565.00 > 520.00	3.602	3.618	-0.016	1.403	2546846	2.55		102	5552	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.765	3.765	0.0	1.287	195826	0.0512		109	631	
35 MeFOSA										
512.00 > 169.00	3.822	3.823	-0.001		28280	NC			183	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.897	3.898	-0.001	1.000	60389	0.0529		106	30.6	
613.00 > 169.00	3.897	3.898	-0.001	1.000	10939		5.52(2.13-6.40)		63.4	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.897	3.898	-0.001	1.192	19425	0.0496		103	375	
D 36 13C2 PFDoA										
615.00 > 570.00	3.897	3.908	-0.011	1.518	2563239	2.43		97.3	4422	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.129	4.138	-0.009	1.411	16657	0.0419		86.6	86.9	
699.00 > 99.00	4.129	4.138	-0.009	1.411	27906		0.60(0.00-0.00)		251	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.148	4.157	-0.009	1.064	60633	0.0550		110	27.2	
663.00 > 169.00	4.158	4.157	0.001	1.067	18335		3.31(1.25-3.76)		153	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.382	4.390	-0.008	1.000	17351	0.0551		110	177	
713.00 > 219.00	4.382	4.390	-0.008	1.000	12636		1.37(0.71-2.13)		192	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.382	4.397	-0.015	1.706	3251854	2.42		96.9	5691	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.781	4.789	-0.008	1.000	155566	0.0494		98.9	70.8	
813.00 > 169.00	4.781	4.789	-0.008	1.000	25844		6.02(2.86-8.58)		308	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.781	4.796	-0.015	1.862	6048034	2.27		90.8	6587	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.118	5.119	-0.001	1.071	116355	0.0523		105	58.4	
913.00 > 169.00	5.111	5.119	-0.008	1.069	15104		7.70(3.83-11.48)		255	

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Reagents:

LCPFC_LL2_00006 Amount Added: 1.00 Units: mL

Report Date: 08-Aug-2018 08:32:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62287.b\2018.08.07LLB_005.d

Injection Date: 07-Aug-2018 14:45:30 Instrument ID: A8_N

Lims ID: CCVL

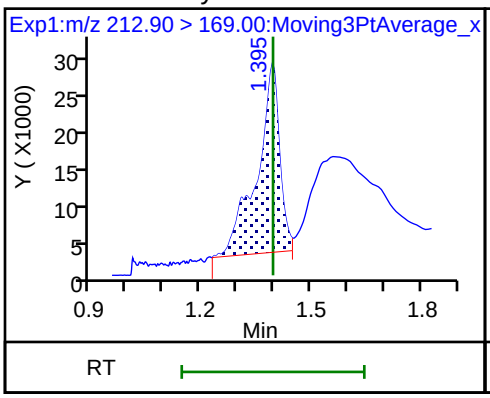
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 21 Worklist Smp#: 2

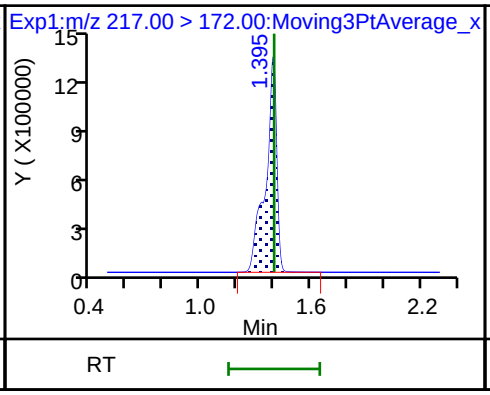
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

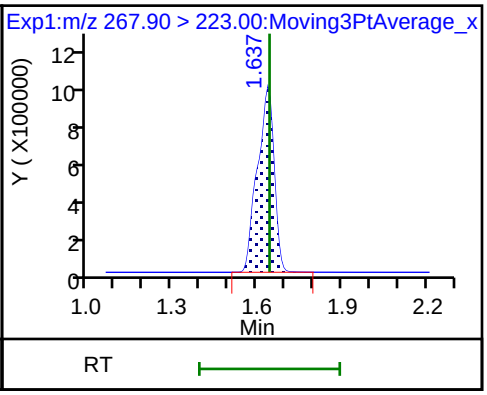
2 Perfluorobutyric acid



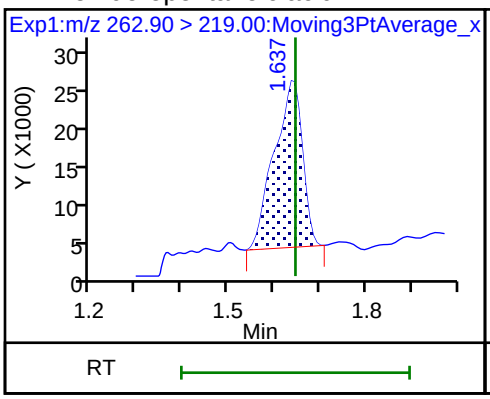
D 1 13C4 PFBA



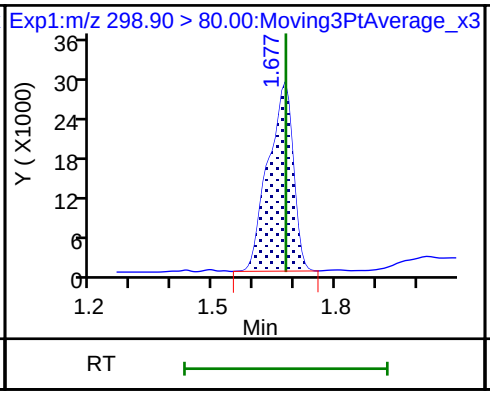
D 3 13C5-PFPeA



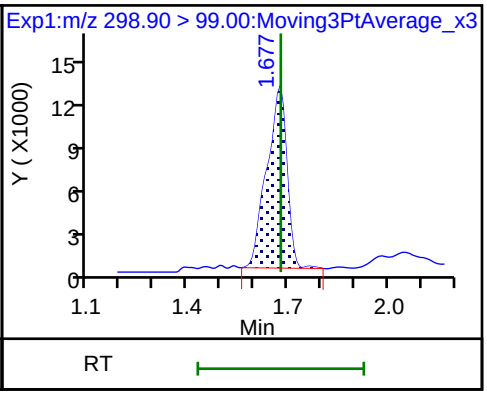
4 Perfluoropentanoic acid



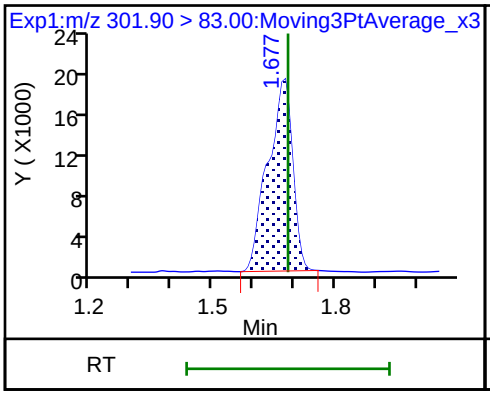
5 Perfluorobutanesulfonic acid



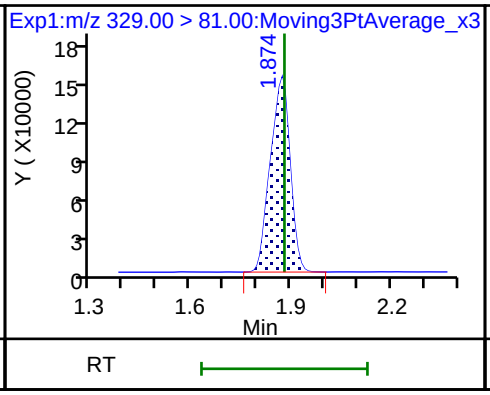
5 Perfluorobutanesulfonic acid



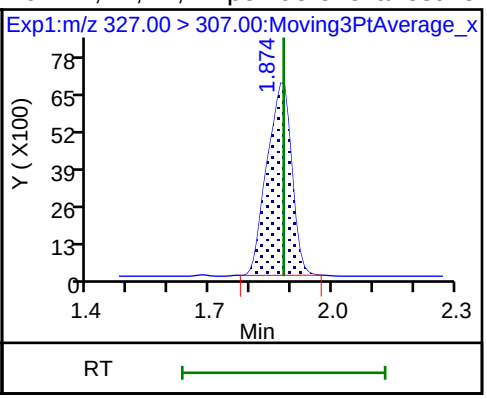
D 47 13C3-PFBS



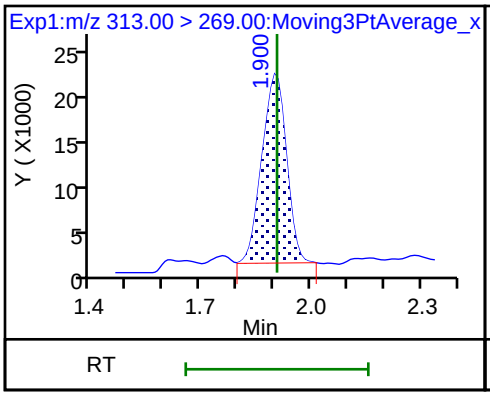
D 60 M2-4:2FTS



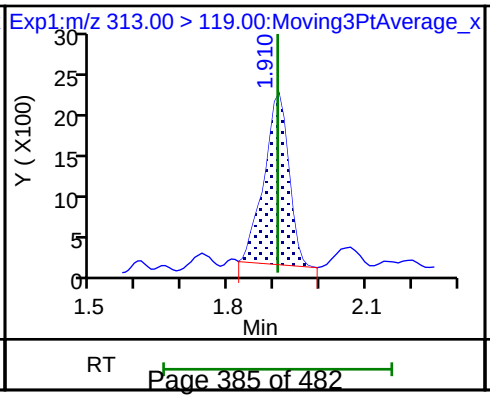
61 1H,1H,2H,2H-perfluorohexanesulfoni



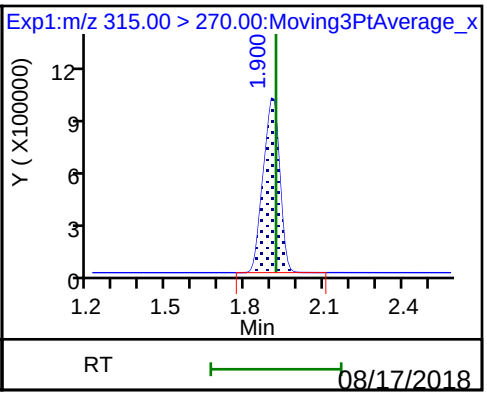
6 Perfluorohexanoic acid



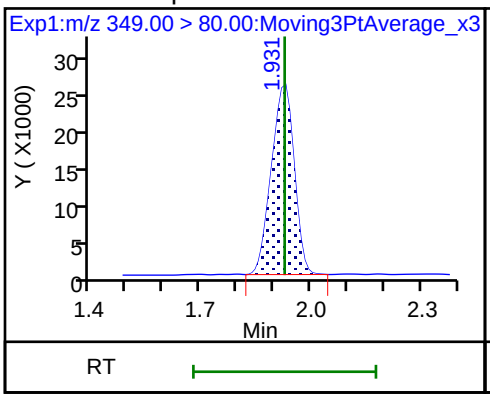
6 Perfluorohexanoic acid



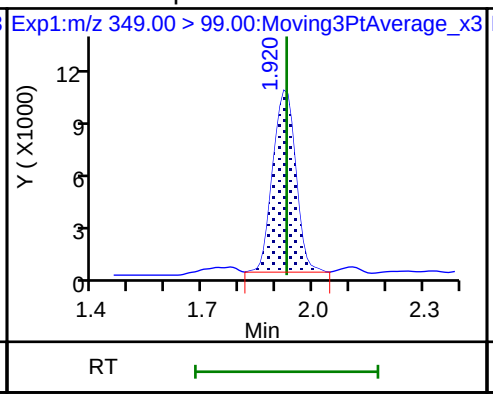
D 7 13C2 PFHxA



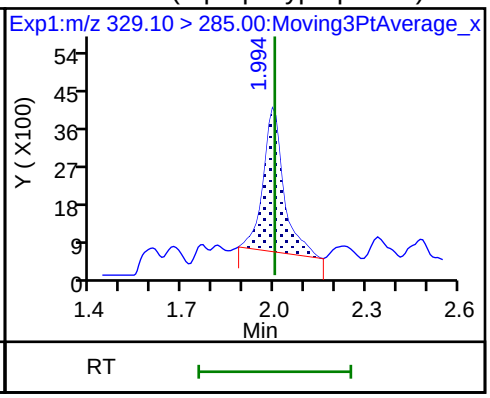
70 Perfluoropentanesulfonic acid



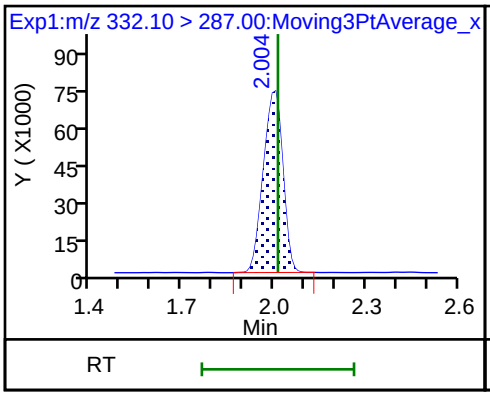
70 Perfluoropentanesulfonic acid



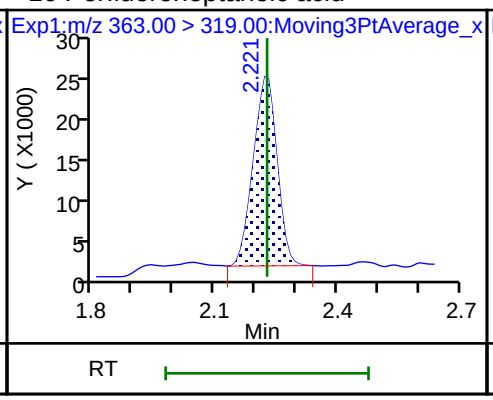
67 Perfluoro(2-propoxypropanoic) acid



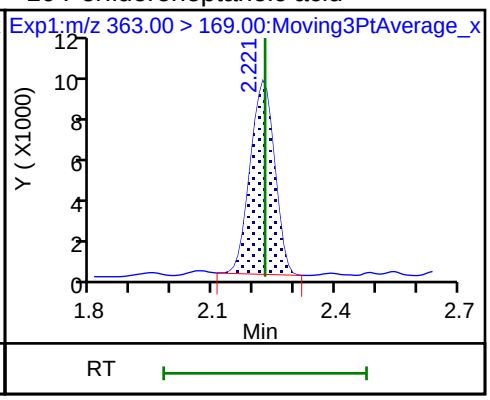
D 64 13C3 HFPO-DA



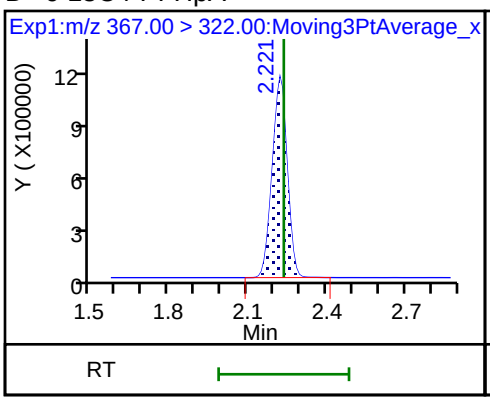
10 Perfluoroheptanoic acid



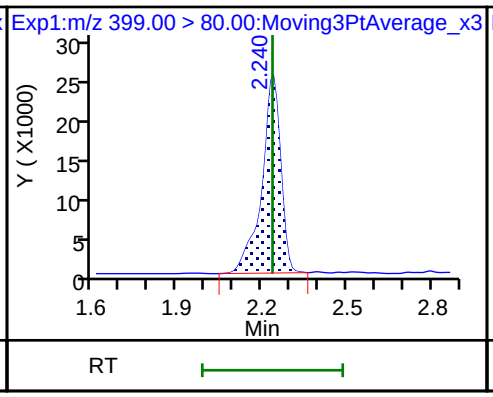
10 Perfluoroheptanoic acid



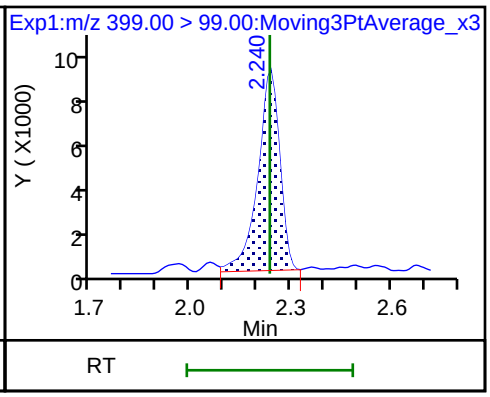
D 9 13C4-PFHpA



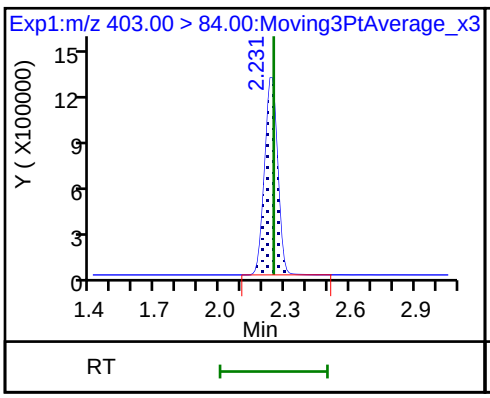
8 Perfluorohexanesulfonic acid



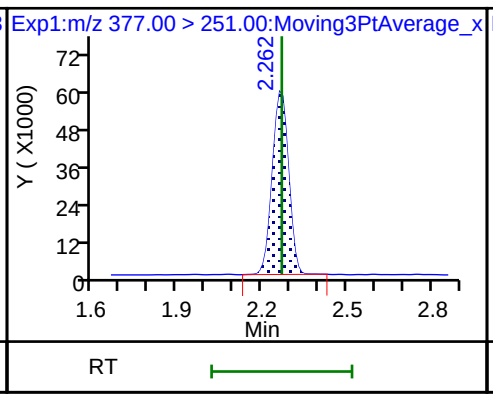
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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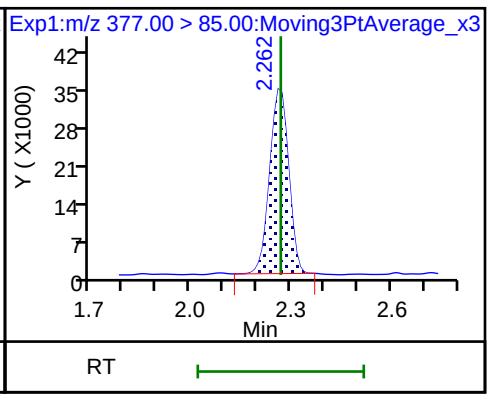
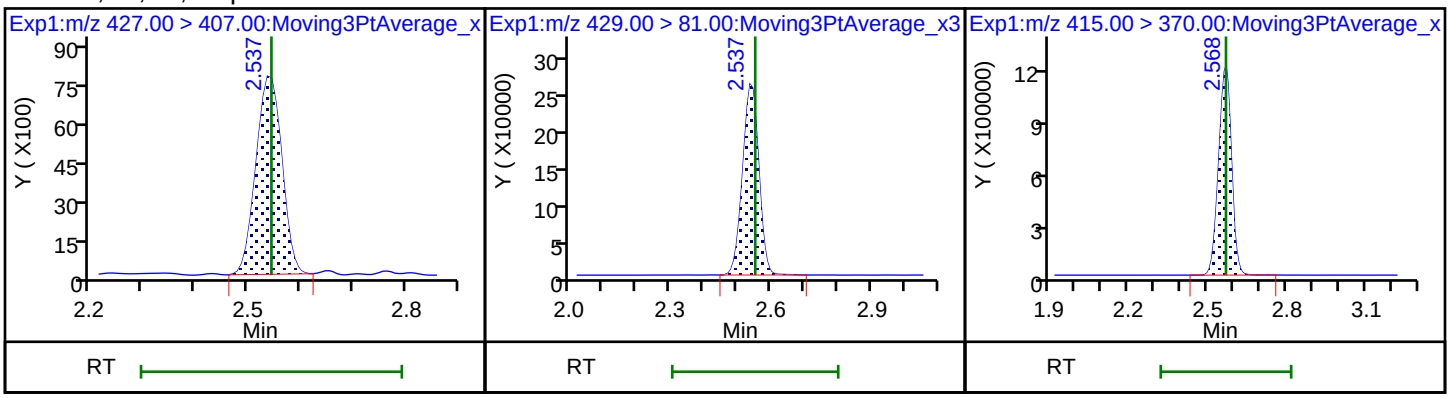
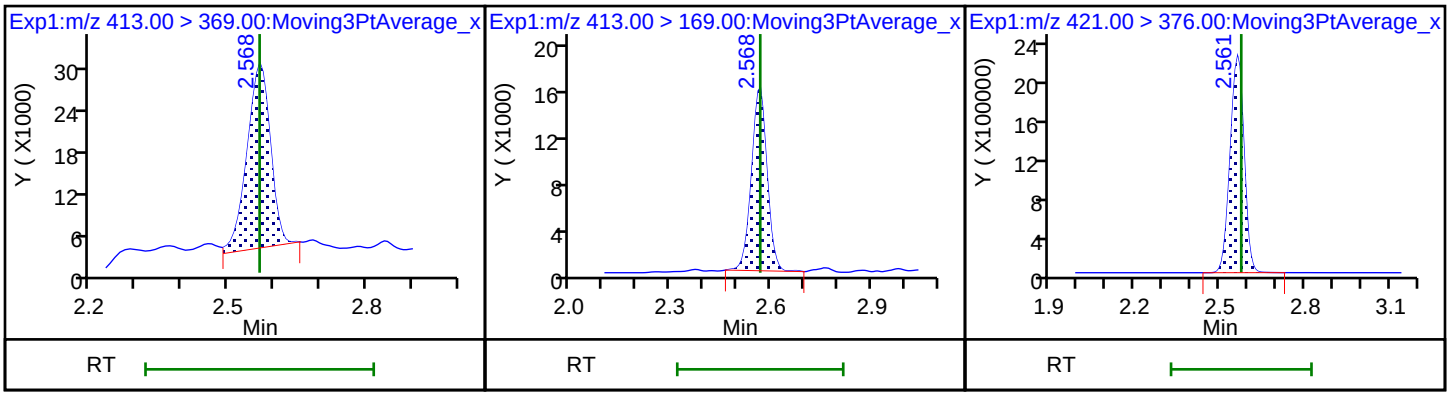


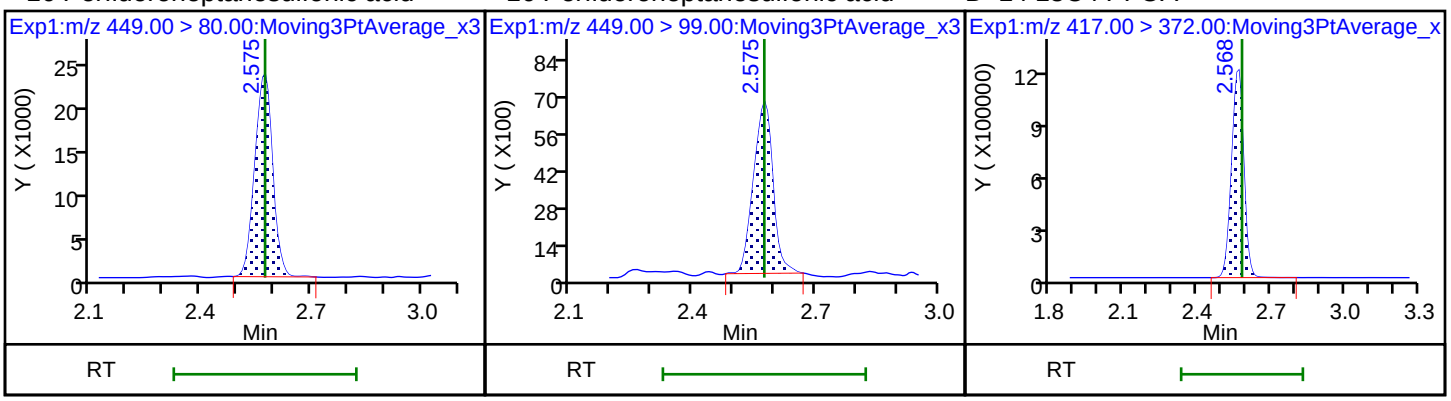
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS * 62 13C2-PFOA



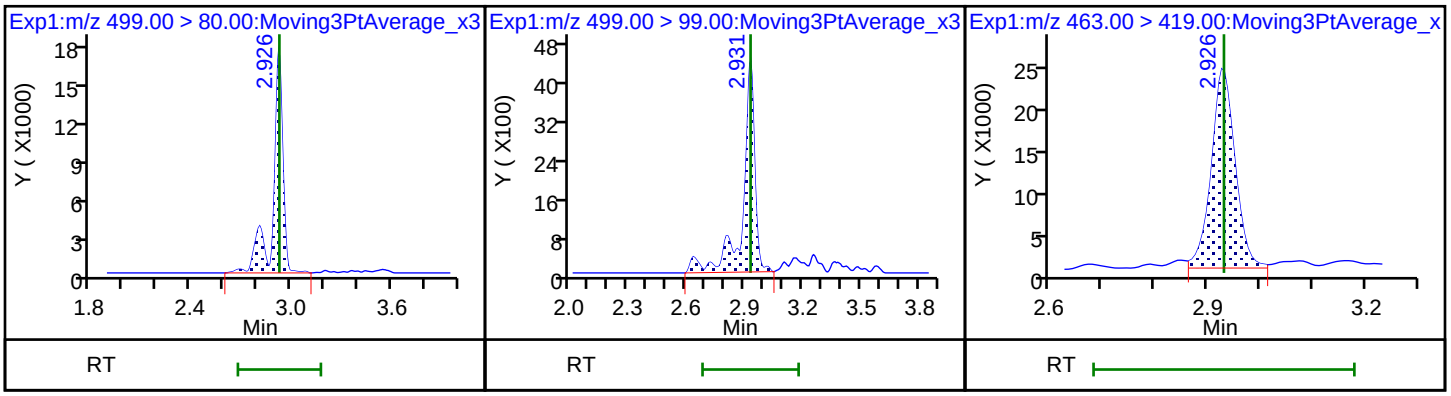
15 Perfluorooctanoic acid 15 Perfluorooctanoic acid D 73 13C8 PFOA



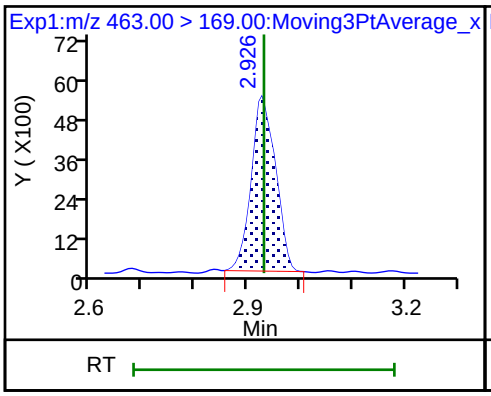
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 14 13C4 PFOA



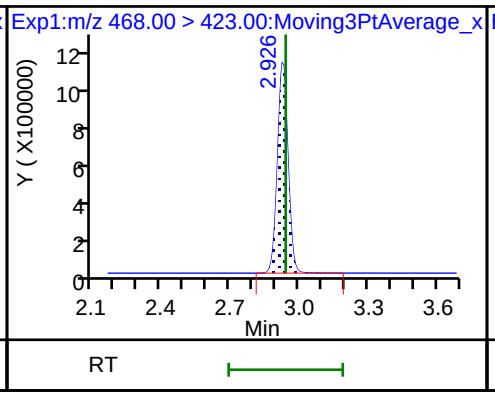
17 Perfluorooctane sulfonic acid 17 Perfluorooctane sulfonic acid 20 Perfluorononanoic acid



20 Perfluorononanoic acid



D 19 13C5 PFNA



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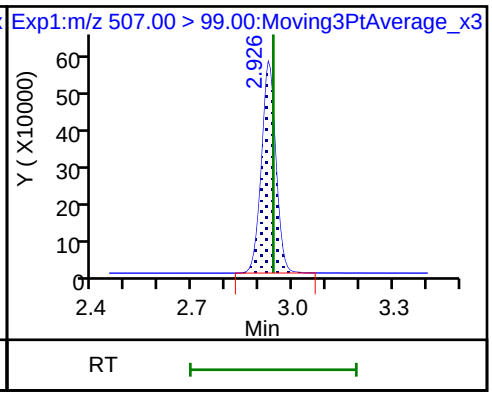
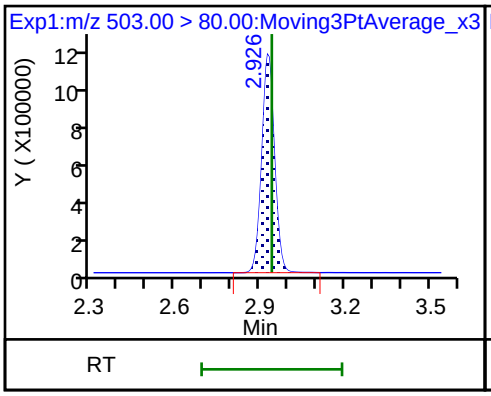
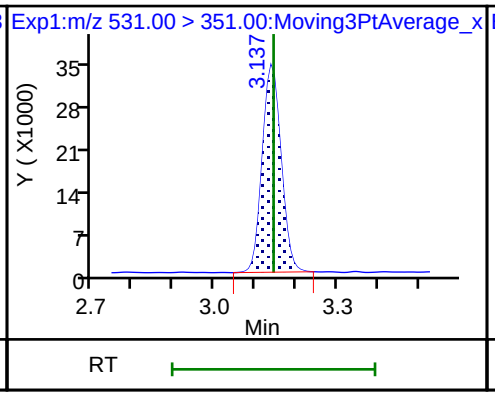


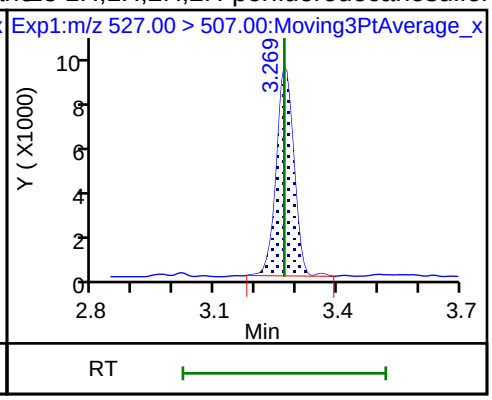
D 18 13C4 PFOS



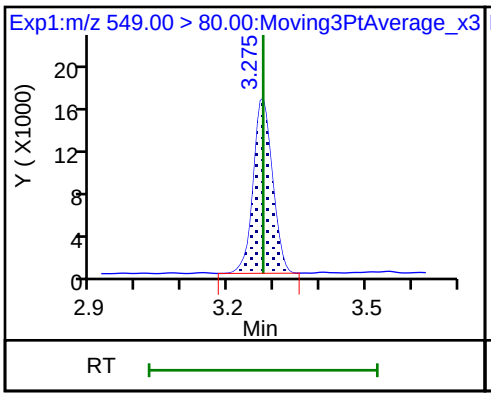
69 9-Chlorohexadecafluoro-3-oxanonane



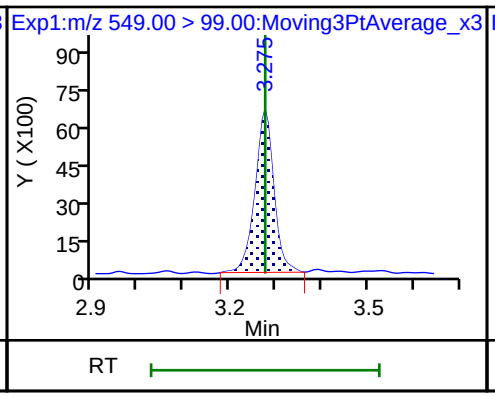
25 1H,1H,2H,2H-perfluorodecanesulfoni



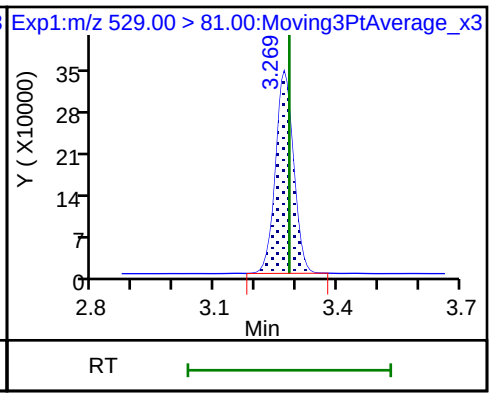
68 Perfluorononanesulfonic acid



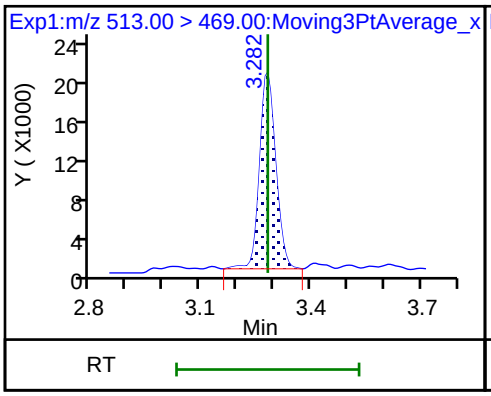
68 Perfluorononanesulfonic acid



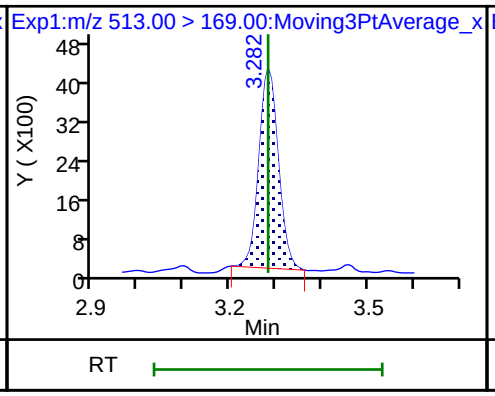
D 26 M2-8:2FTS



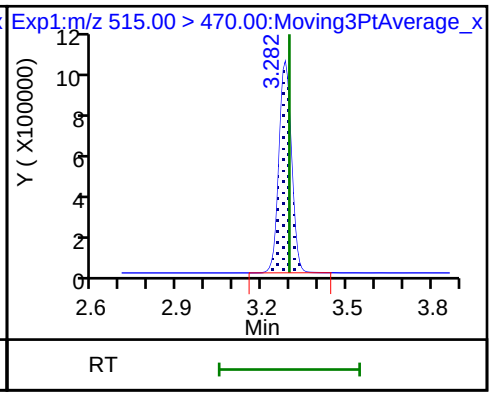
24 Perfluorodecanoic acid



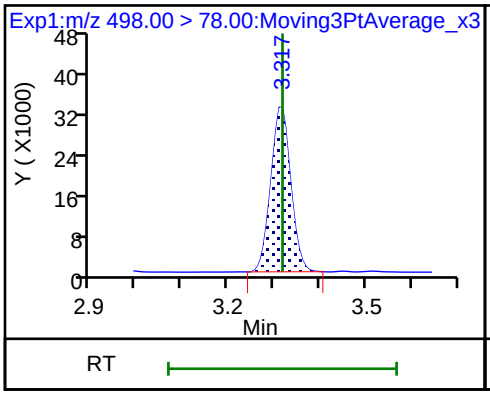
24 Perfluorodecanoic acid



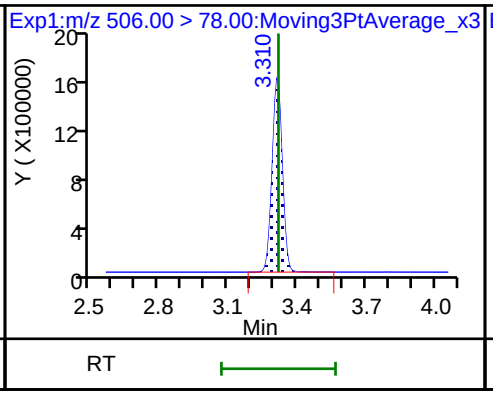
D 23 13C2 PFDA



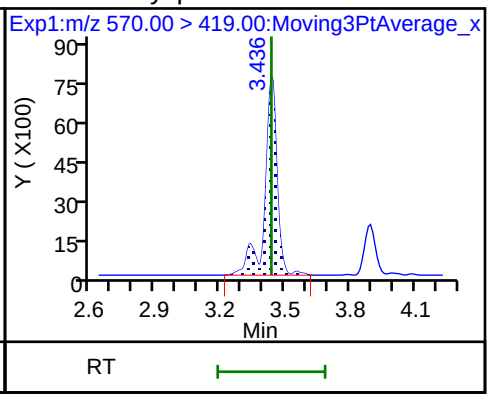
22 Perfluorooctane Sulfonamide



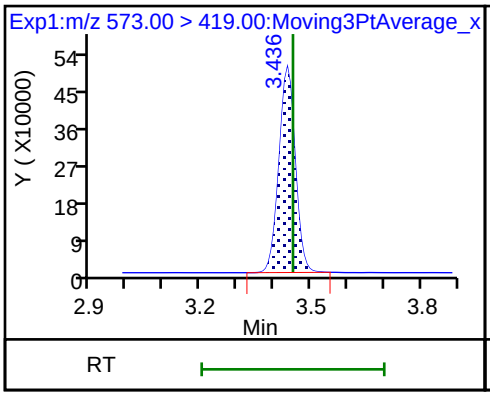
D 21 13C8 FOSA



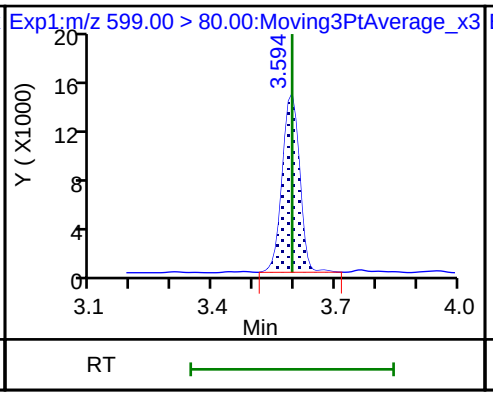
28 N-methyl perfluorooctane sulfonami



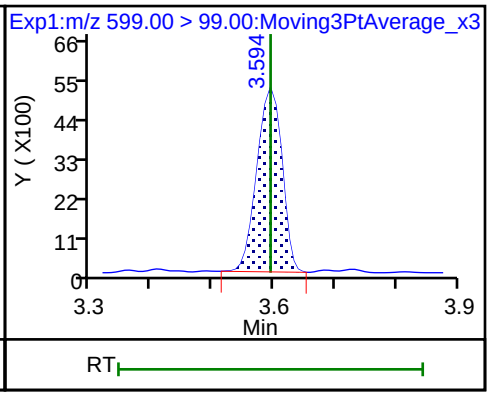
D 27 d3-NMeFOSAA



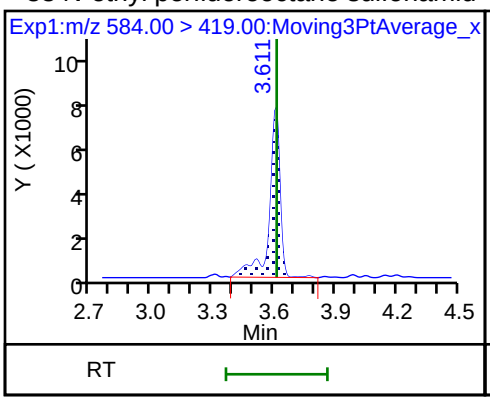
29 Perfluorodecane Sulfonic acid



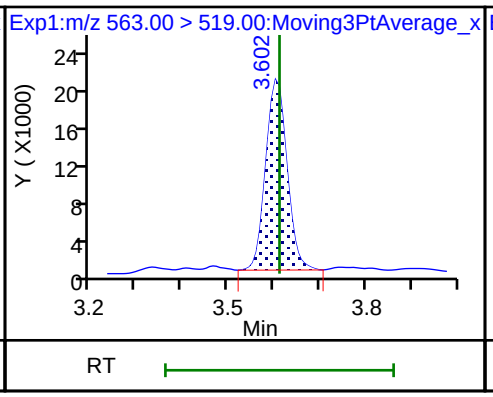
29 Perfluorodecane Sulfonic acid



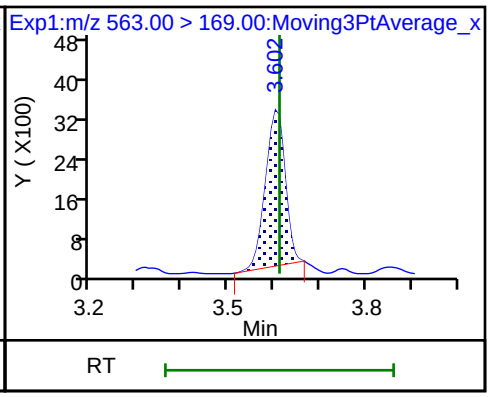
33 N-ethyl perfluorooctane sulfonamid



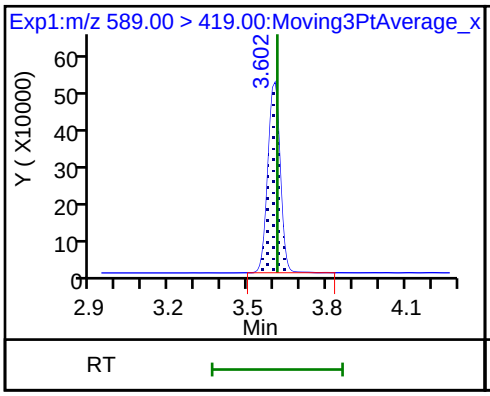
31 Perfluoroundecanoic acid



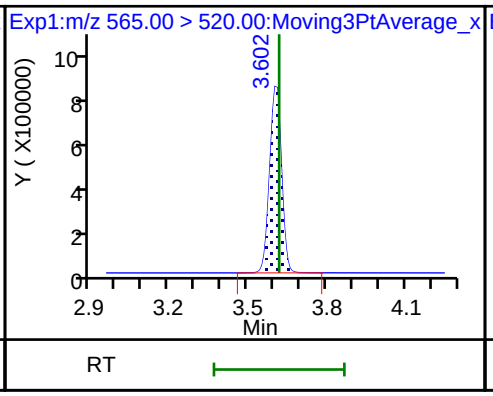
31 Perfluoroundecanoic acid



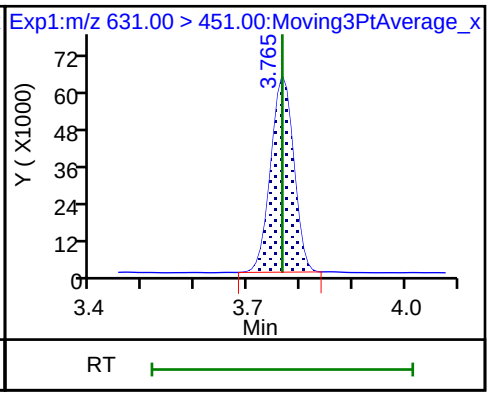
D 32 d5-NEtFOSAA



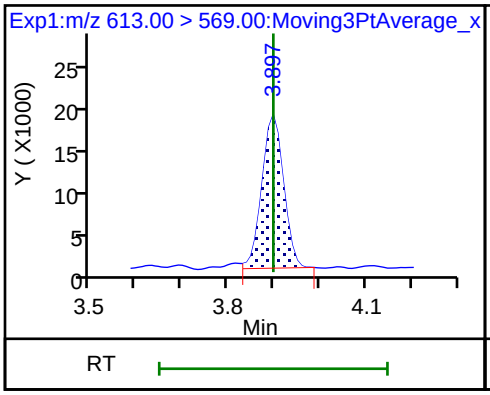
D 30 13C2 PFUnA



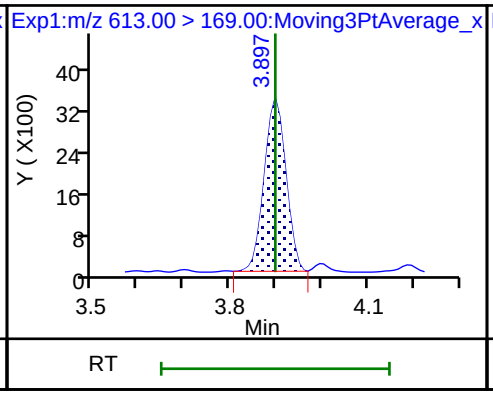
66 11-Chloroeicosafluoro-3-oxaundecan



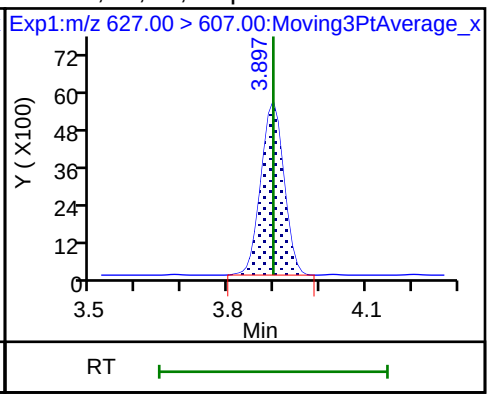
37 Perfluorododecanoic acid



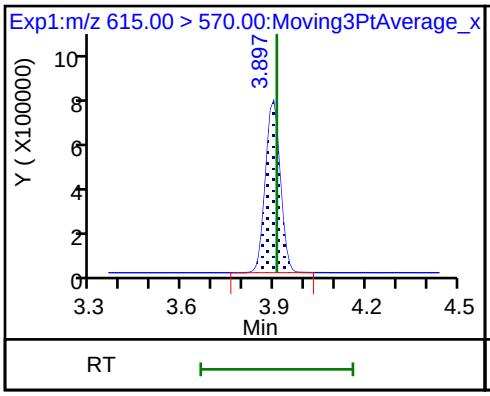
37 Perfluorododecanoic acid



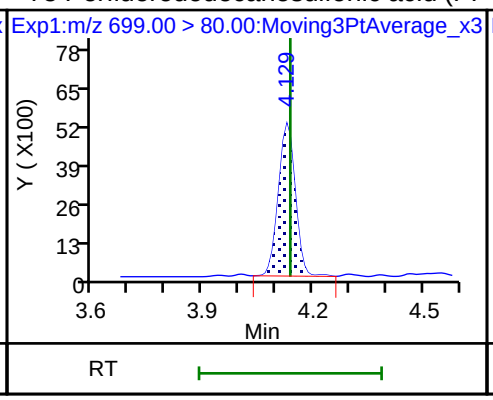
74 1H,1H,2H,2H-perfluorododecanesulfo



D 36 13C2 PFDoA



75 Perfluorododecanesulfonic acid (PF



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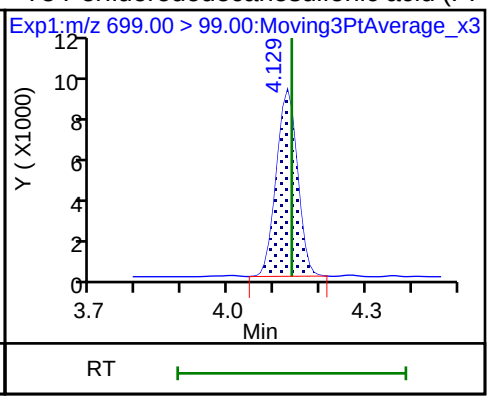
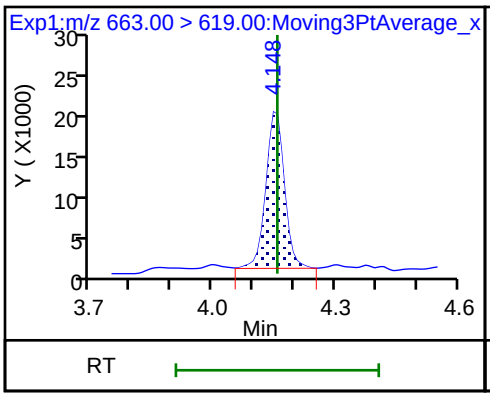
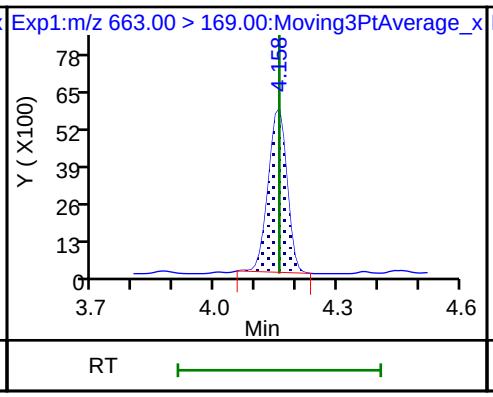


41 Perfluorotridecanoic acid



41 Perfluorotridecanoic acid



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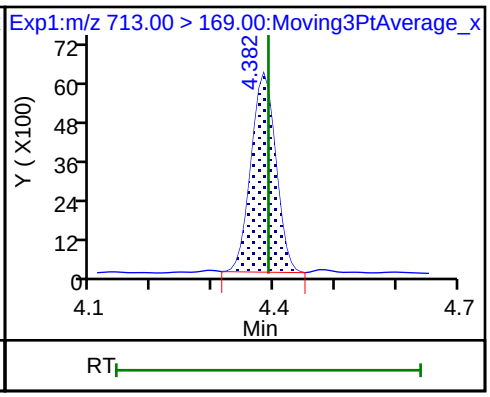
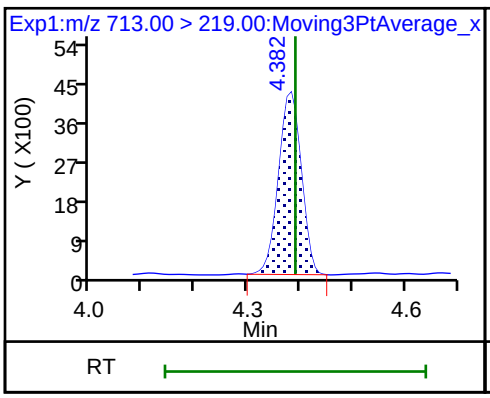
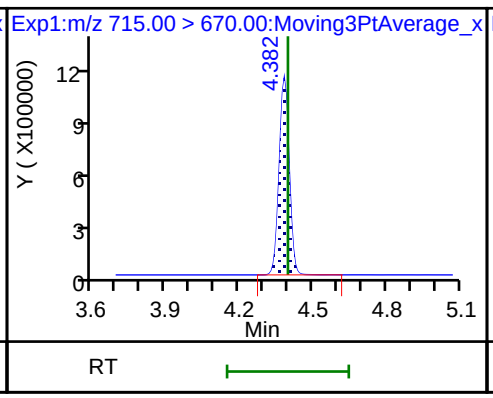


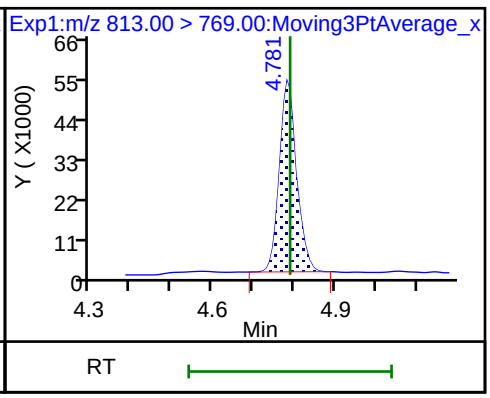
42 Perfluorotetradecanoic acid



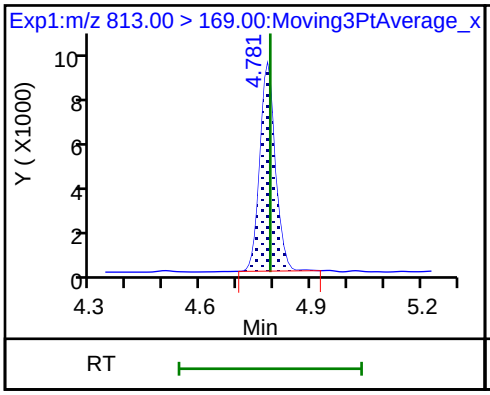
D 43 13C2-PFTeDA



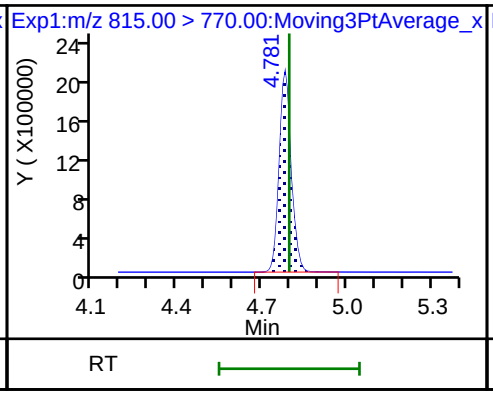
45 Perfluorohexadecanoic acid



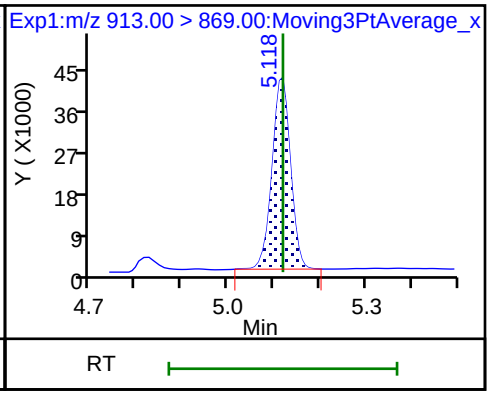
45 Perfluorohexadecanoic acid



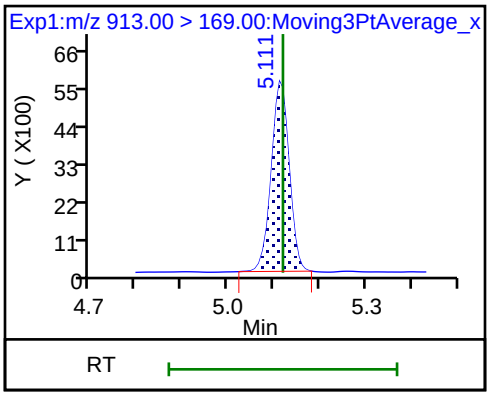
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-238518/3 Calibration Date: 08/07/2018 14:53

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.07LLB_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9093		0.968	1.00	-3.2	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.094		0.962	1.00	-3.8	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	74.33		0.865	0.884	-2.1	50.0
4:2 FTS	AveID	16.57	15.69		0.885	0.934	-5.3	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	0.9449		0.926	1.00	-7.4	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	66.46		0.904	0.938	-3.6	50.0
HFPO-DA (GenX)	AveID	2.420	2.397		0.990	1.00	-1.0	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.069		1.01	1.00	0.7	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	0.9773		0.820	0.910	-9.8	40.0
ADONA	AveID	3.245	3.384		1.04	1.00	4.3	50.0
6:2 FTS	AveID	1.573	1.491		0.898	0.948	-5.2	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.079		0.955	1.00	-4.6	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.235		0.949	0.952	-0.3	50.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.044		0.991	1.00	-0.9	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.055		0.912	0.928	-1.7	40.0
F-53B Major	AveID	1.742	1.764		0.944	0.932	1.3	50.0
8:2 FTS	AveID	1.299	1.239		0.914	0.958	-4.6	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.7591		0.969	0.960	0.9	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	1.019		1.02	1.00	1.6	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.9617		0.988	1.00	-1.2	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	0.9446		0.979	1.00	-2.1	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6475		0.988	0.964	2.5	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8160		0.915	1.00	-8.5	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	1.073		0.955	1.00	-4.5	40.0
F-53B Minor	AveID	2.674	2.889		1.02	0.942	8.1	50.0
10:2 FTS	AveID	0.9008	0.9165		0.981	0.964	1.7	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.055		0.948	1.00	-5.2	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2913		1.02	0.968	4.9	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.080		1.00	1.00	0.4	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2281		0.943	1.00	-5.7	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-238518/3 Calibration Date: 08/07/2018 14:53

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.07LLB_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9120		1.02	1.00	2.3	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.9741		1.06	1.00	5.9	50.0
13C4 PFBA	Ave	1.385	1.349		2.44	2.50	-2.6	50.0
13C5 PFPeA	Ave	0.9537	0.9546		2.50	2.50	0.1	50.0
13C3-PFBS	Ave	0.0221	0.0232		2.44	2.33	5.0	50.0
M2-4:2FTS	Ave	0.1572	0.1610		2.39	2.34	2.4	50.0
13C2 PFHxA	Ave	1.082	1.116		2.58	2.50	3.1	50.0
13C3 HFPO-DA	Ave	0.0842	0.0793		2.36	2.50	-5.7	50.0
13C4-PFHpA	Ave	1.065	1.081		2.54	2.50	1.5	50.0
18O2 PFHxS	Ave	1.366	1.399		2.42	2.37	2.4	50.0
M2-6:2FTS	Ave	0.2242	0.2331		2.47	2.38	4.0	40.0
13C8 PFOA	Ave	1.927	1.911		2.43	2.45	-0.9	50.0
13C4 PFOA	Ave	0.9773	0.997		2.55	2.50	2.0	50.0
13C4 PFOS	Ave	0.8973	0.9052		2.41	2.39	0.9	50.0
13C5 PFNA	Ave	0.8770	0.8795		2.51	2.50	0.3	50.0
13C8 PFOS	Ave	0.4359	0.4459		2.44	2.39	2.3	50.0
M2-8:2FTS	Ave	0.2707	0.2788		2.47	2.40	3.0	40.0
13C2 PFDA	Ave	0.7695	0.7893		2.56	2.50	2.6	50.0
13C8 FOSA	Ave	1.188	1.194		2.51	2.50	0.5	50.0
d3-NMeFOSAA	Ave	0.3935	0.3950		2.51	2.50	0.4	50.0
d5-NEtFOSAA	Ave	0.4077	0.4180		2.56	2.50	2.5	50.0
13C2 PFUnA	Ave	0.6189	0.6312		2.55	2.50	2.0	50.0
13C2 PFDoA	Ave	0.6541	0.6549		2.50	2.50	0.1	50.0
13C2-PFTeDA	Ave	0.8335	0.8354		2.51	2.50	0.2	50.0
13C2-PFHxDA	Ave	1.653	1.499		2.27	2.50	-9.3	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62287.b\2018.08.07LLB_006.d
Lims ID: CCV L4
Client ID:
Sample Type: CCVIS
Inject. Date: 07-Aug-2018 14:53:15 ALS Bottle#: 13 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62287.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 08:32:24 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK048

First Level Reviewer: phomsophat Date: 07-Aug-2018 20:36:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.396	1.396	0.0	1.000	1970752	0.9685		96.8	170	
D 1 13C4 PFBA										
217.00 > 172.00	1.396	1.398	-0.002	0.544	5418413	2.44		97.4	7041	
D 3 13C5-PFPeA										
267.90 > 223.00	1.639	1.643	-0.004	0.638	3832838	2.50		100	8859	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.646	1.646	0.0	1.004	1677385	0.9616		96.2	96.6	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.678	1.678	0.0	1.000	2444344	0.8650		97.9	881	
298.90 > 99.00	1.678	1.678	0.0	1.000	1012142		2.42(1.25-3.74)		515	
D 47 13C3-PFBS										
301.90 > 83.00	1.678	1.684	-0.006	0.654	86494	2.44		105	313	
D 60 M2-4:2FTS										
329.00 > 81.00	1.872	1.880	-0.008	0.729	603827	2.39		102	845	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.880	1.880	0.0	1.120	545240	0.8845		94.7	4760	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.907	1.907	0.0	1.000	1693458	0.9258		92.6	297	
313.00 > 119.00	1.907	1.907	0.0	1.000	158724		10.67(5.03-15.10)		309	
D 7 13C2 PFHxA										
315.00 > 270.00	1.907	1.918	-0.011	0.743	4480499	2.58		103	9790	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.928	1.928	0.0	1.149	2319119	0.9045		96.4	3153	
349.00 > 99.00	1.928	1.928	0.0	1.149	871350		2.66(1.36-4.07)		770	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.001	2.001	0.0	1.000	305413	0.99		99.0	123	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.001	2.012	-0.011	0.779	318532	2.36		94.3	773	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.227	2.227	0.0	1.000	1856132	1.01		101	361	
363.00 > 169.00	2.227	2.227	0.0	1.000	707031		2.63(1.13-3.40)		996	
D 9 13C4-PFHpA										
367.00 > 322.00	2.227	2.236	-0.009	0.867	4339225	2.54		101	10314	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.236	2.236	0.0	1.000	1997583	0.8204		90.2	1651	
399.00 > 99.00	2.236	2.236	0.0	1.000	679705		2.94(1.50-4.49)		490	
D 11 18O2 PFHxS										
403.00 > 84.00	2.236	2.247	-0.011	0.871	5312086	2.42		102	5156	
65 ADONA										
377.00 > 251.00	2.269	2.269	0.0	0.774	4919722	1.04		104	6231	
377.00 > 85.00	2.269	2.269	0.0	0.774	2953738		1.67(0.84-2.53)		3434	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.544	2.544	0.0	1.000	529072	0.8984		94.8	726	
D 12 M2-6:2FTS										
429.00 > 81.00	2.544	2.552	-0.008	0.991	888964	2.47		104	1821	
* 62 13C2-PFOA										
415.00 > 370.00	2.568	2.568	0.0		4015152	2.50			5959	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.568	2.568	0.0	1.000	1728983	0.9550		95.4	156	
413.00 > 169.00	2.568	2.568	0.0	1.000	898213		1.92(0.84-2.52)		980	
D 73 13C8 PFOA										
421.00 > 376.00	2.561	2.574	-0.013	0.997	7512058	2.43		99.1	11696	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.574	2.574	0.0	0.879	1709165	0.9489		99.7	2590	
449.00 > 99.00	2.574	2.574	0.0	0.879	456451		3.74(1.94-5.82)		927	
D 14 13C4 PFOA										
417.00 > 372.00	2.568	2.581	-0.013	1.000	4003110	2.55		102	6853	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.930	2.930	0.0	1.000	1423669	0.9121		98.3	1809	
499.00 > 99.00	2.930	2.930	0.0	1.000	326606		4.36(2.31-6.93)		628	
20 Perfluorononanoic acid										
463.00 > 419.00	2.930	2.930	0.0	1.000	1474822	0.99		99.1	390	
463.00 > 169.00	2.930	2.930	0.0	1.000	359081		4.11(1.90-5.69)		1728	
D 19 13C5 PFNA										
468.00 > 423.00	2.930	2.941	-0.011	1.141	3531435	2.51		100	8905	
D 72 13C8 PFOS										
507.00 > 99.00	2.930	2.941	-0.011	1.141	1711643	2.44		102	4635	
D 18 13C4 PFOS										
503.00 > 80.00	2.930	2.941	-0.011	1.141	3474403	2.41		101	4401	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.143	3.143	0.0	1.073	2390410	0.9439		101	4894	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.270	3.270	0.0	1.000	531661	0.9140		95.4	2027	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.275	3.275	0.0	1.118	1059390	0.9689		101	2498	
549.00 > 99.00	3.275	3.275	0.0	1.118	393247		2.69(1.33-3.97)		1259	
D 26 M2-8:2FTS										
529.00 > 81.00	3.270	3.282	-0.012	1.273	1072395	2.47		103	3907	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.282	3.282	0.0	1.000	1292175	1.02		102	743	
513.00 > 169.00	3.282	3.282	0.0	1.000	221847		5.82(2.36-7.09)		369	
D 23 13C2 PFDA										
515.00 > 470.00	3.282	3.296	-0.014	1.278	3169120	2.56		103	4236	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.318	3.318	0.0	1.002	1844880	0.9877		98.8	4668	
D 21 13C8 FOSA										
506.00 > 78.00	3.311	3.318	-0.007	1.289	4795839	2.51		101	3696	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.436	3.436	0.0	1.000	599213	0.9793		97.9	627	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.436	3.451	-0.015	1.338	1585892	2.51		100	2400	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.594	3.594	0.0	1.227	907344	0.9876		102	2580	
599.00 > 99.00	3.594	3.594	0.0	1.227	298049		3.04(1.39-4.16)		2003	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.611	3.611	0.0	1.002	547758	0.9150		91.5	1675	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.611	3.611	0.0	1.000	1087614	0.9548		95.5	635	
563.00 > 169.00	3.611	3.611	0.0	1.000	198304		5.48(2.12-6.36)		1055	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.602	3.611	-0.009	1.403	1678243	2.56		103	1506	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.618	-0.007	1.406	2534292	2.55		102	6817	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.765	3.765	0.0	1.285	3956044	1.02		108	7227	
35 MeFOSA										
512.00 > 169.00	3.823	3.823	0.0		541759	NC			973	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.898	3.898	0.0	1.000	1109627	0.9481		94.8	540	
613.00 > 169.00	3.898	3.898	0.0	1.000	270589		4.10(2.13-6.40)		1830	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.898	3.898	0.0	1.192	395582	0.9808		102	2986	
D 36 13C2 PFDoA										
615.00 > 570.00	3.898	3.908	-0.010	1.518	2629647	2.50		100	4613	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.138	4.138	0.0	1.412	409935	1.02		105	1759	
699.00 > 99.00	4.128	4.138	-0.010	1.409	553144		0.74(0.00-0.00)		3087	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.157	4.157	0.0	1.067	1135953	1.00		100	449	
663.00 > 169.00	4.157	4.157	0.0	1.067	358684		3.17(1.25-3.76)		2170	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.390	4.390	0.0	1.002	306107	0.9426		94.3	1955	
713.00 > 219.00	4.383	4.390	-0.007	1.000	211495		1.45(0.71-2.13)		1368	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.383	4.397	-0.014	1.707	3354407	2.51		100	6762	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.789	4.789	0.0	1.002	2196198	1.02		102	898	
813.00 > 169.00	4.782	4.789	-0.007	1.000	365300		6.01(2.86-8.58)		2571	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.782	4.796	-0.014	1.862	6020074	2.27		90.7	8651	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.119	5.119	0.0	1.071	2345738	1.06		106	926	
913.00 > 169.00	5.119	5.119	0.0	1.071	282174		8.31(3.83-11.48)		2382	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00006 Amount Added: 1.00 Units: mL

Report Date: 08-Aug-2018 08:32:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62287.b\2018.08.07LLB_006.d

Injection Date: 07-Aug-2018 14:53:15 Instrument ID: A8_N

Lims ID: CCV L4

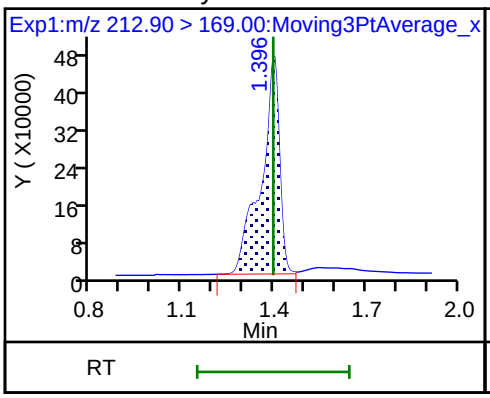
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 3

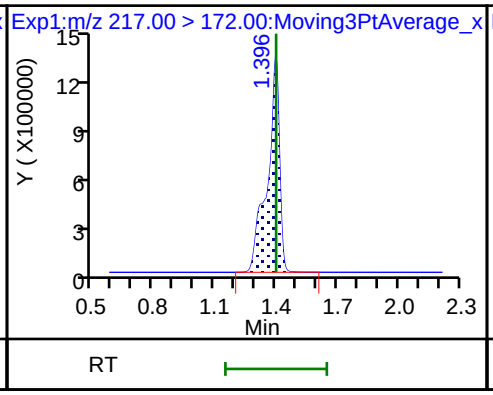
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

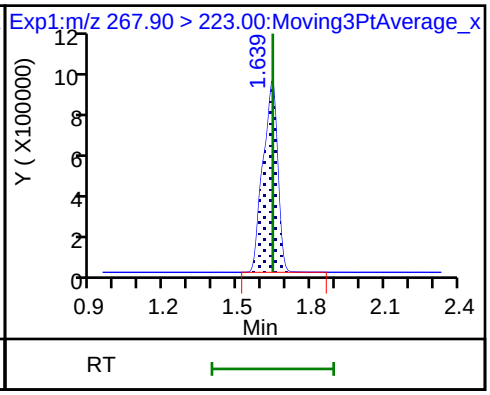
2 Perfluorobutyric acid



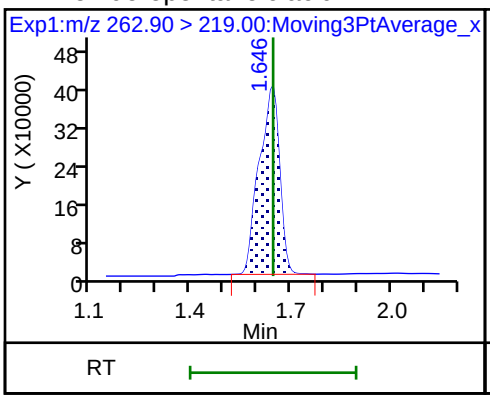
D 1 13C4 PFBA



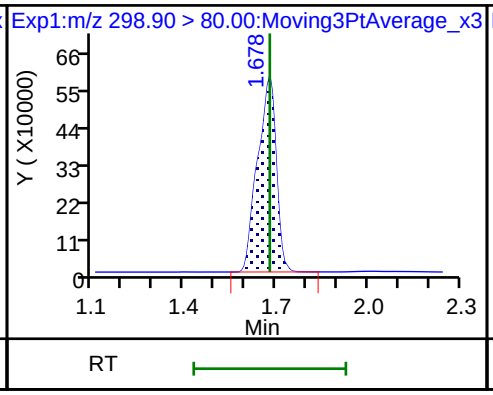
D 3 13C5-PFPeA



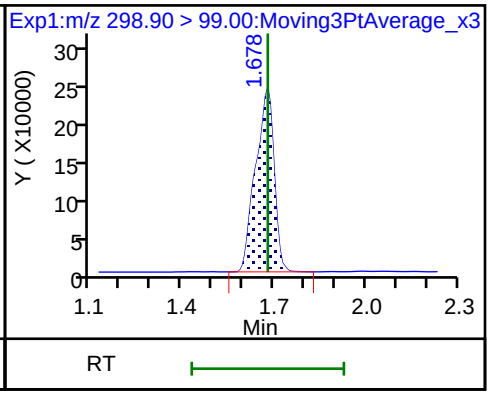
4 Perfluoropentanoic acid



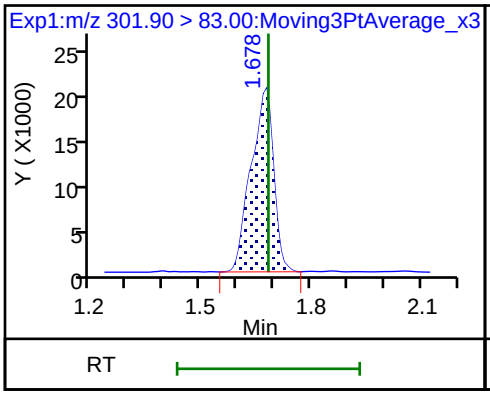
5 Perfluorobutanesulfonic acid



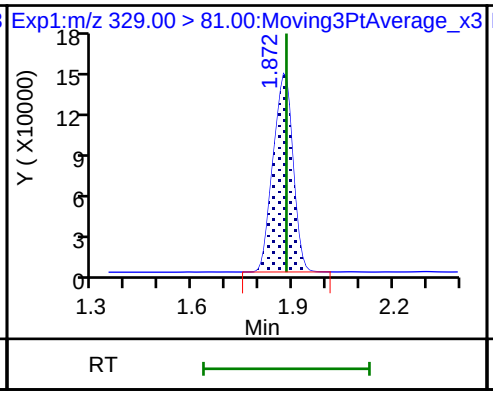
5 Perfluorobutanesulfonic acid



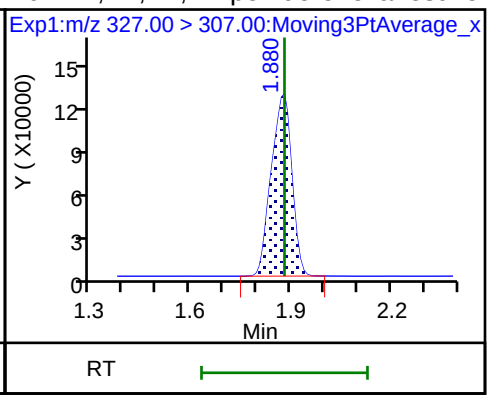
D 47 13C3-PFBS



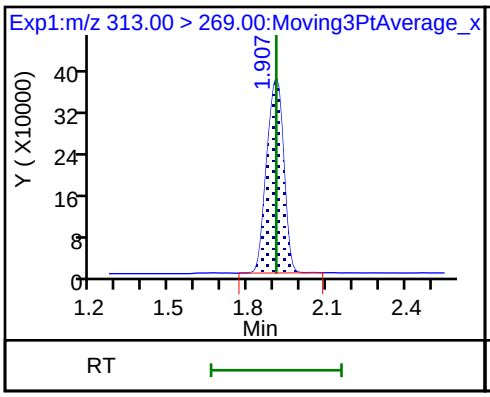
D 60 M2-4:2FTS



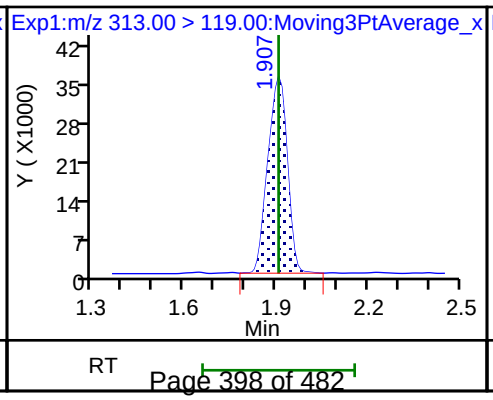
61 1H,1H,2H,2H-perfluorohexanesulfoni



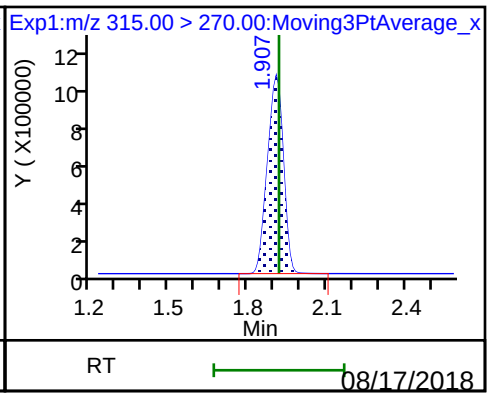
6 Perfluorohexanoic acid



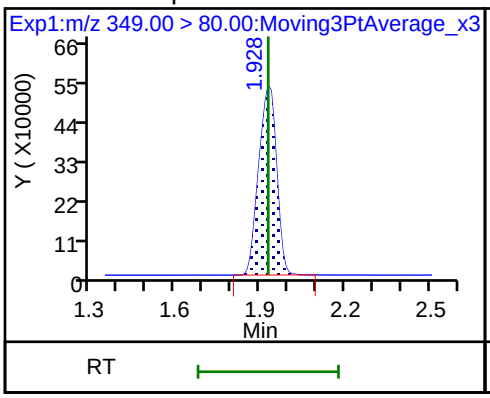
6 Perfluorohexanoic acid



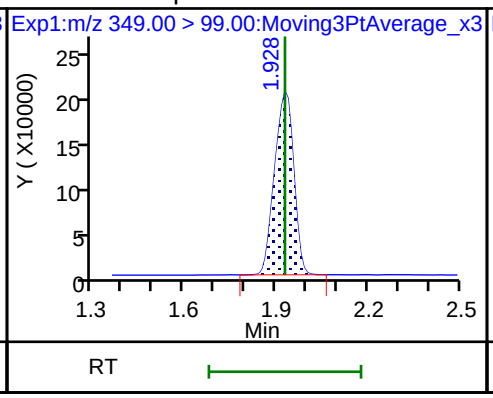
D 7 13C2 PFHxA



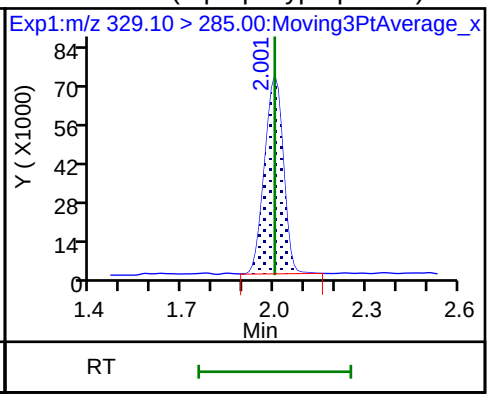
70 Perfluoropentanesulfonic acid



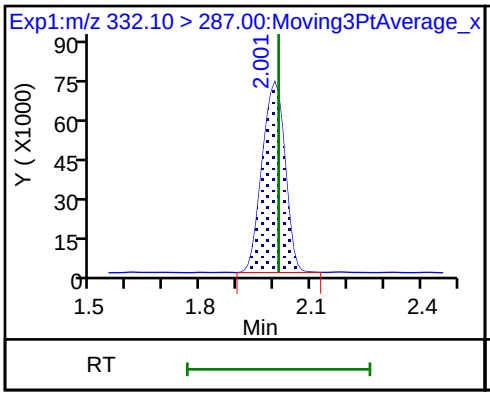
70 Perfluoropentanesulfonic acid



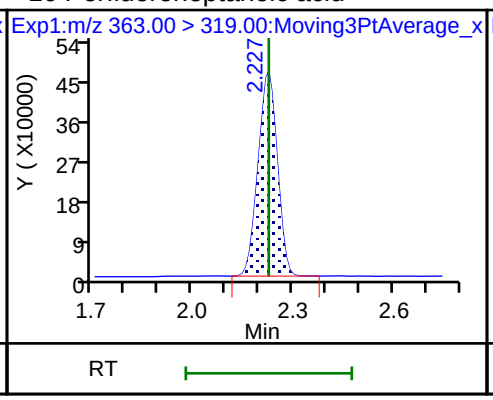
67 Perfluoro(2-propoxypropanoic) acid



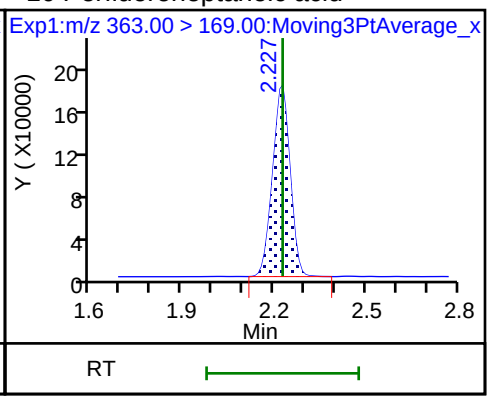
D 64 13C3 HFPO-DA



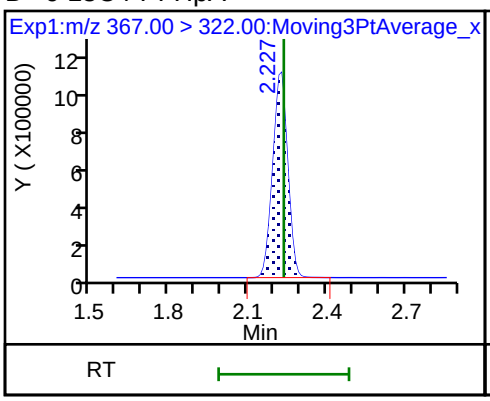
10 Perfluoroheptanoic acid



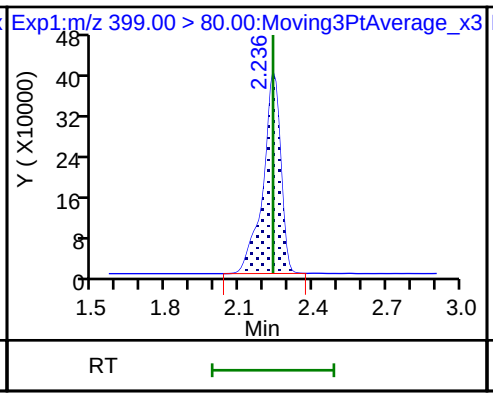
10 Perfluoroheptanoic acid



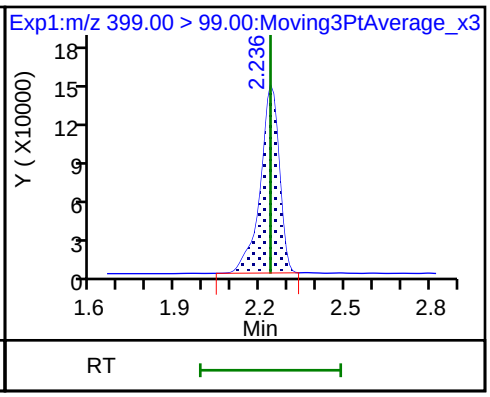
D 9 13C4-PFHpA



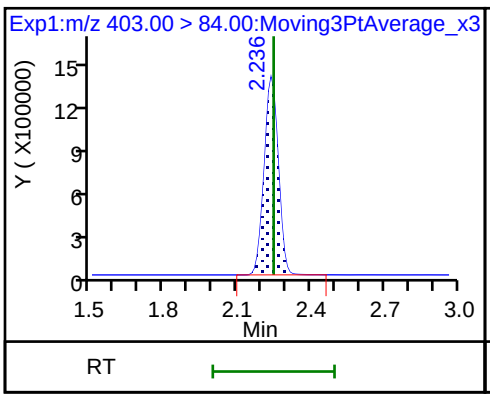
8 Perfluorohexanesulfonic acid



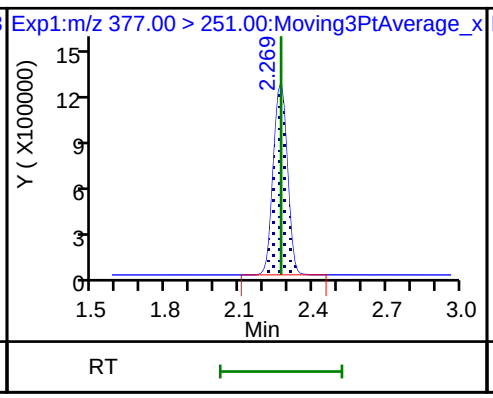
8 Perfluorohexanesulfonic acid



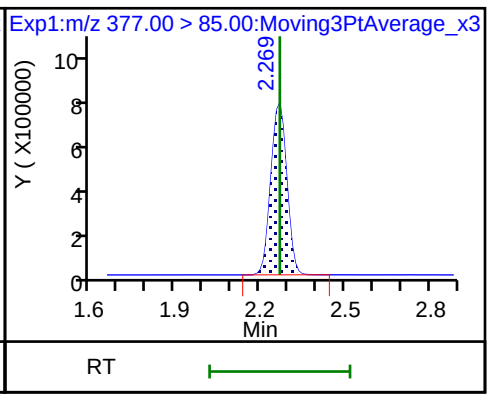
D 11 18O2 PFHxS



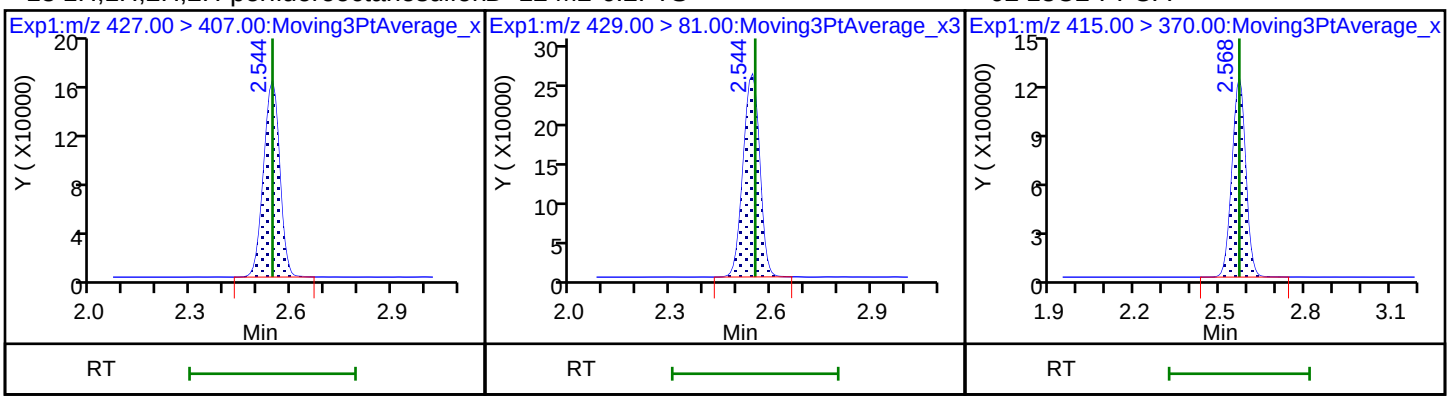
65 ADONA



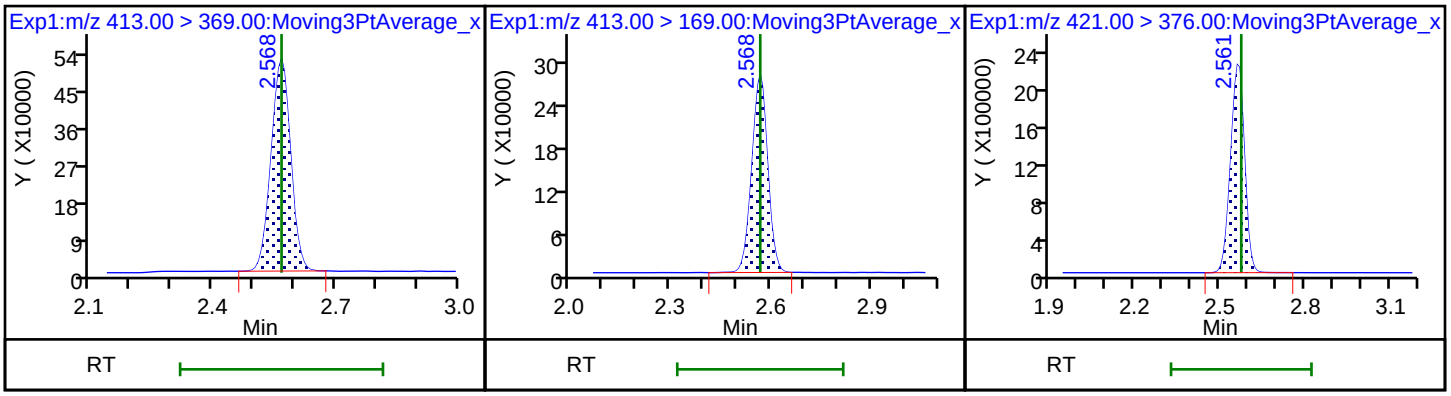
65 ADONA



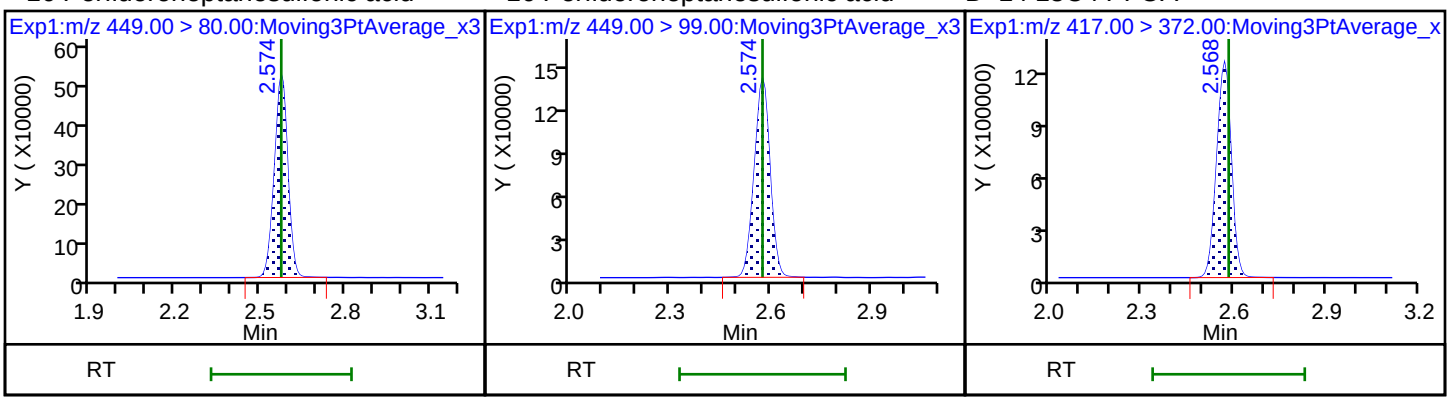
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2FTS * 62 13C2-PFOA



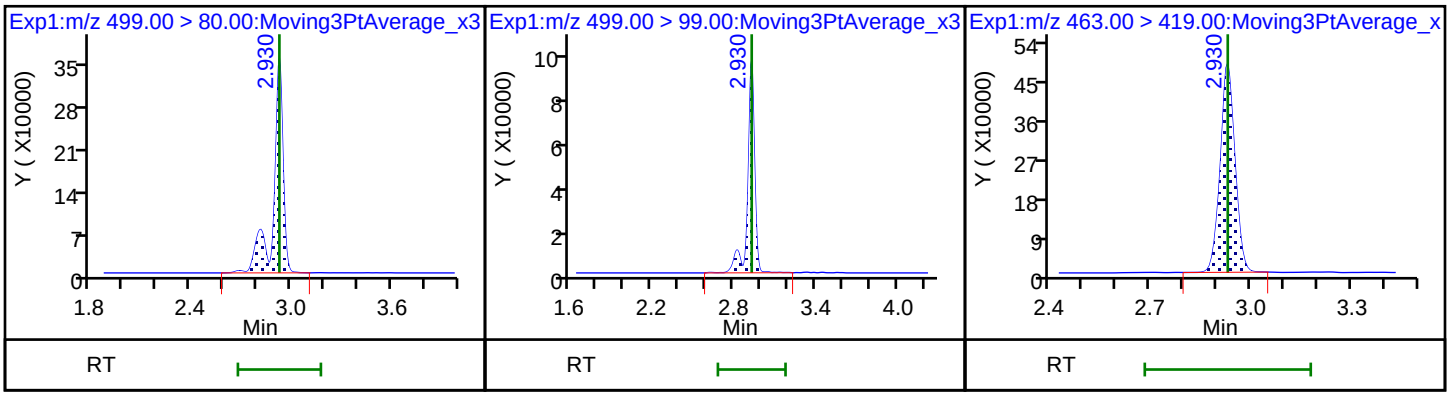
15 Perfluorooctanoic acid 15 Perfluorooctanoic acid D 73 13C8 PFOA



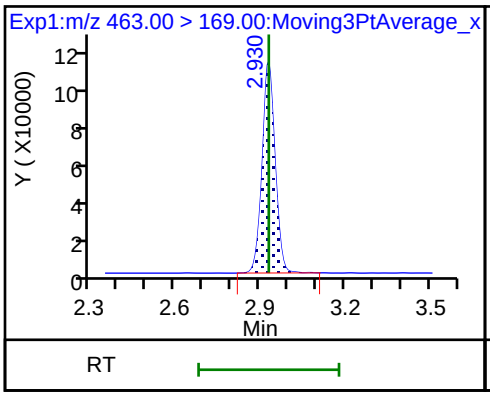
16 Perfluoroheptanesulfonic acid 16 Perfluoroheptanesulfonic acid D 14 13C4 PFOA



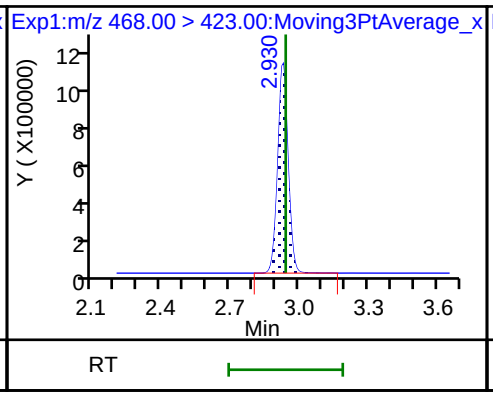
17 Perfluorooctane sulfonic acid 17 Perfluorooctane sulfonic acid 20 Perfluorononanoic acid



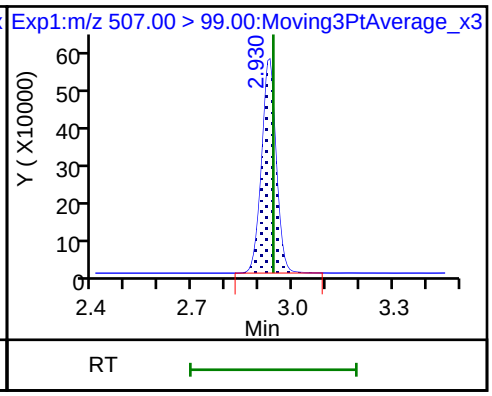
20 Perfluorononanoic acid



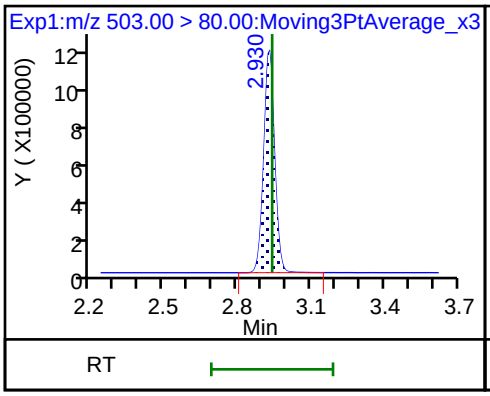
D 19 13C5 PFNA



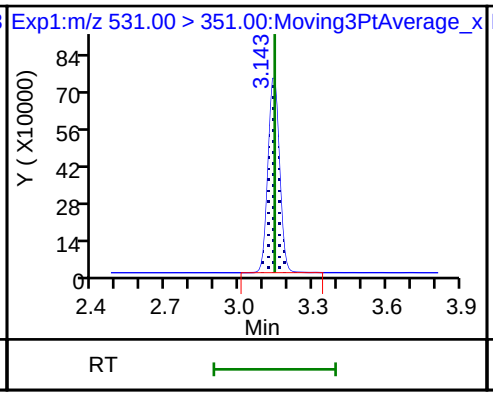
D 72 13C8 PFOS



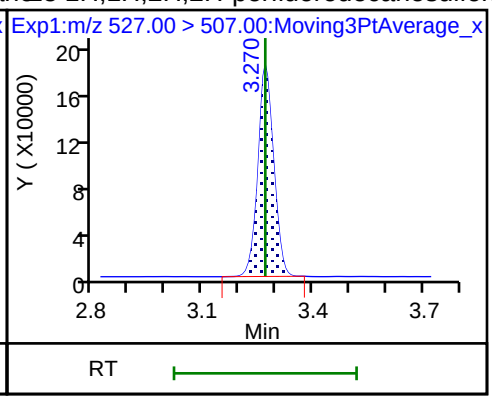
D 18 13C4 PFOS



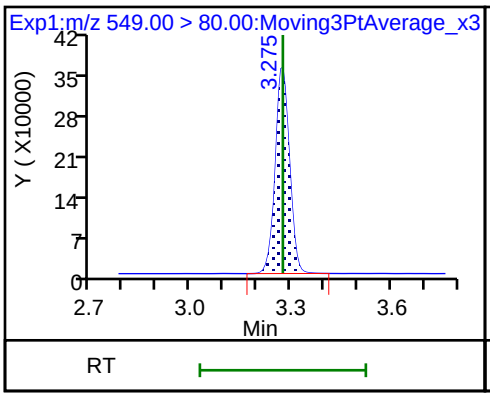
69 9-Chlorohexadecafluoro-3-oxanonane



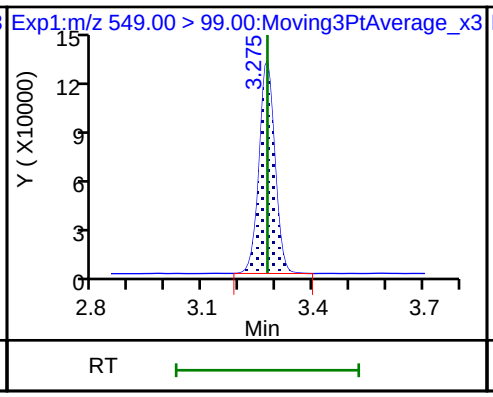
25 1H,1H,2H,2H-perfluorodecanesulfoni



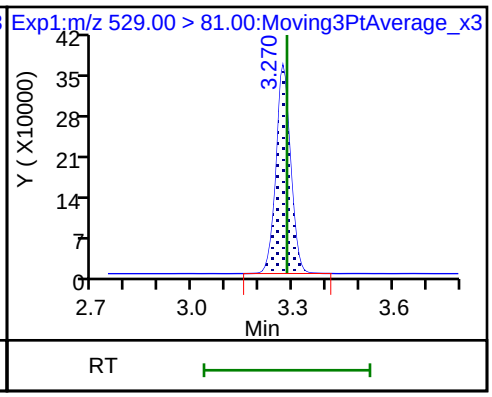
68 Perfluorononanesulfonic acid



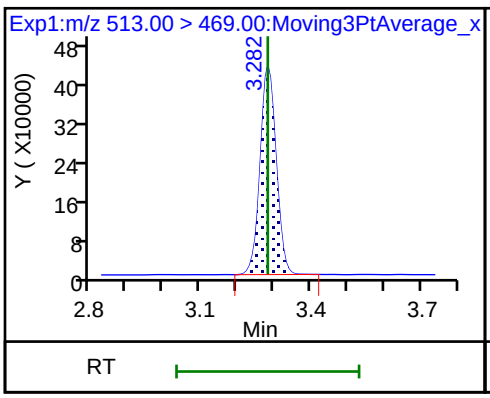
68 Perfluorononanesulfonic acid



D 26 M2-8:2FTS



24 Perfluorodecanoic acid



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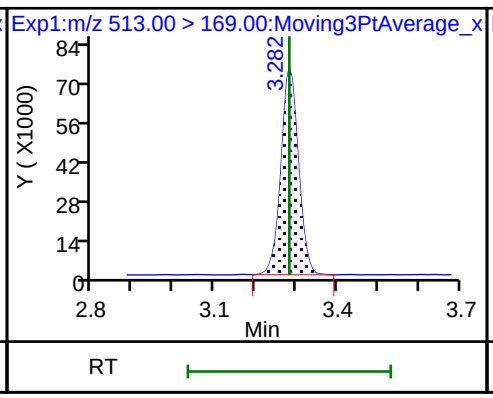
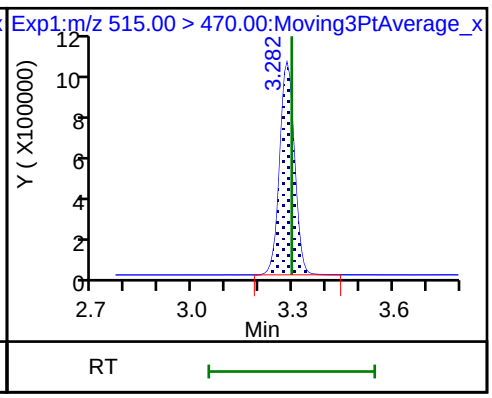
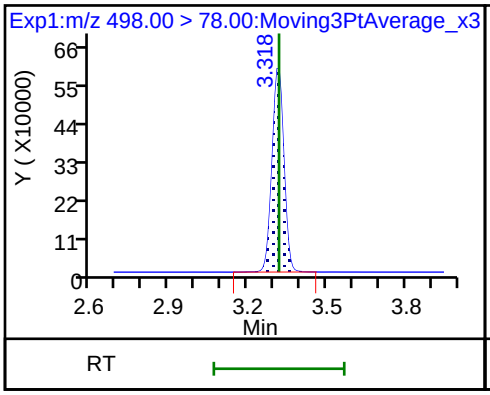


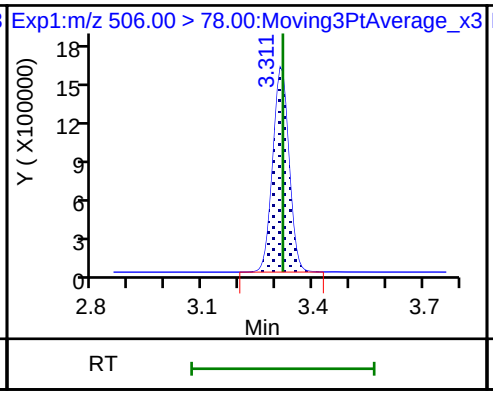
D 23 13C2 PFDA



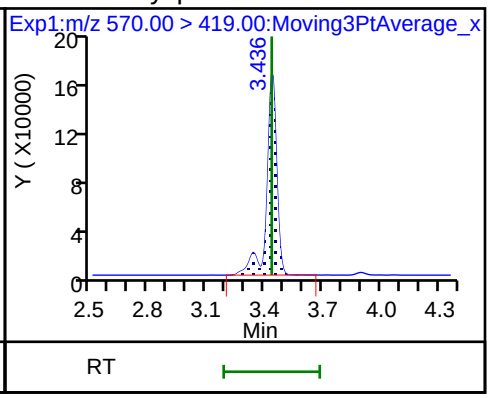
22 Perfluorooctane Sulfonamide



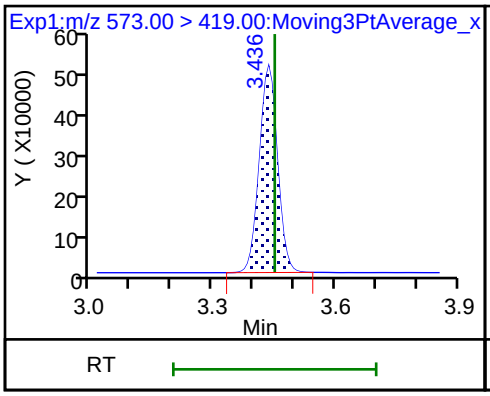
D 21 13C8 FOSA



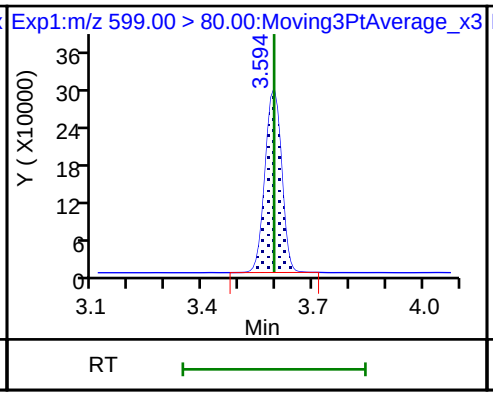
28 N-methyl perfluorooctane sulfonami



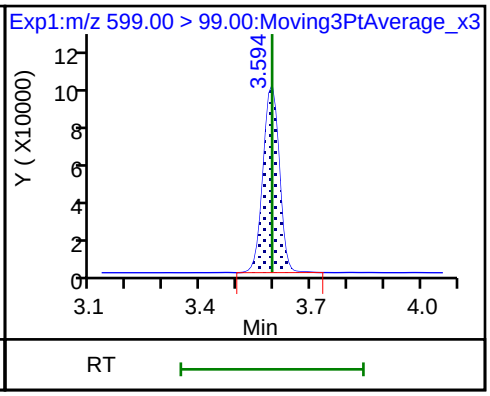
D 27 d3-NMeFOSAA



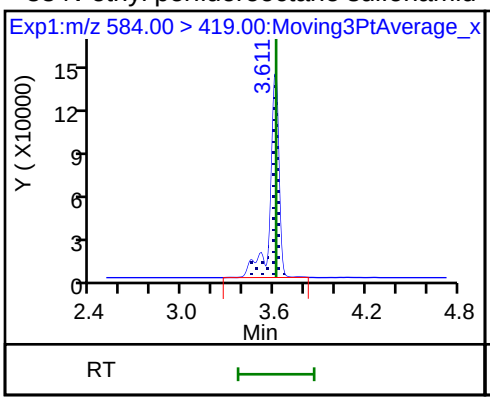
29 Perfluorodecane Sulfonic acid



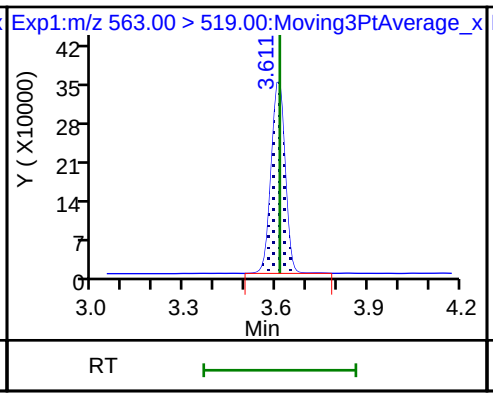
29 Perfluorodecane Sulfonic acid



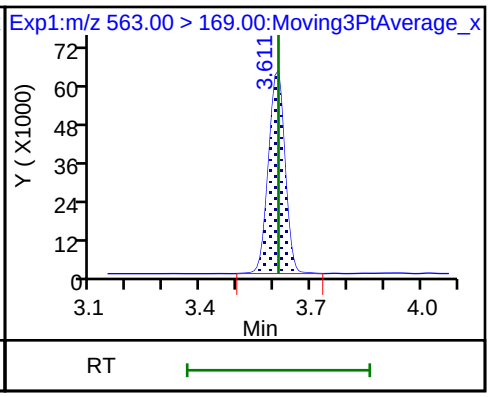
33 N-ethyl perfluorooctane sulfonamid



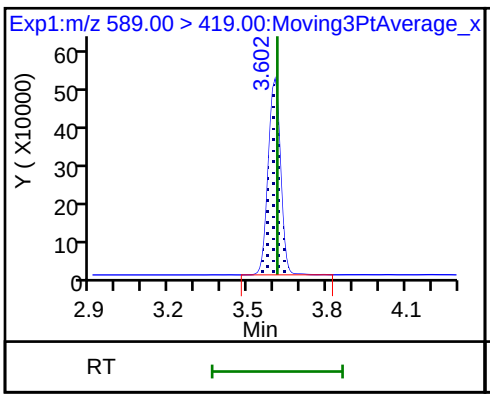
31 Perfluoroundecanoic acid



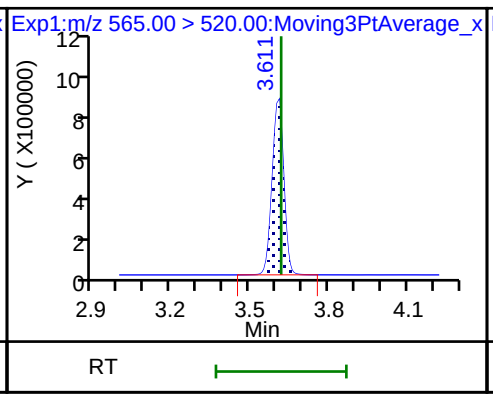
31 Perfluoroundecanoic acid



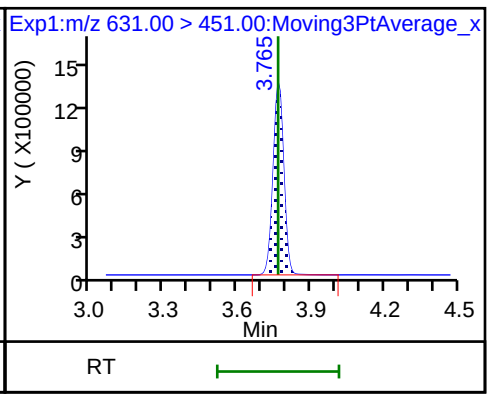
D 32 d5-NEtFOSAA



D 30 13C2 PFUnA



66 11-Chloroeicosafluoro-3-oxaundecan



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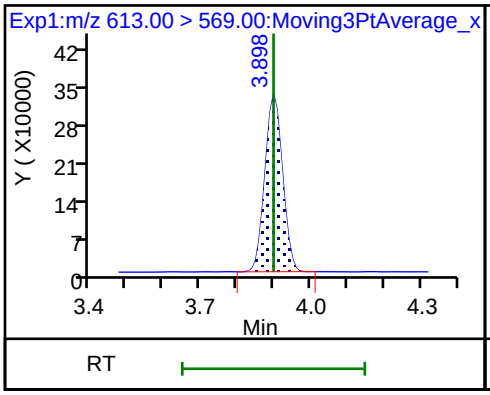
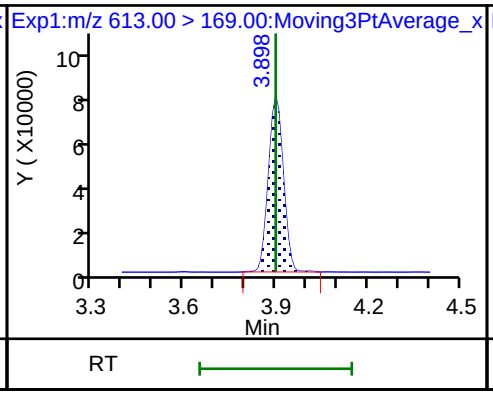
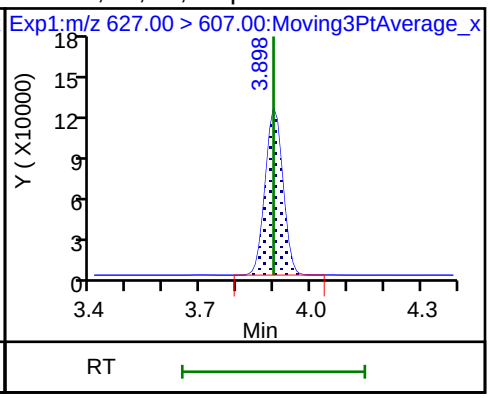


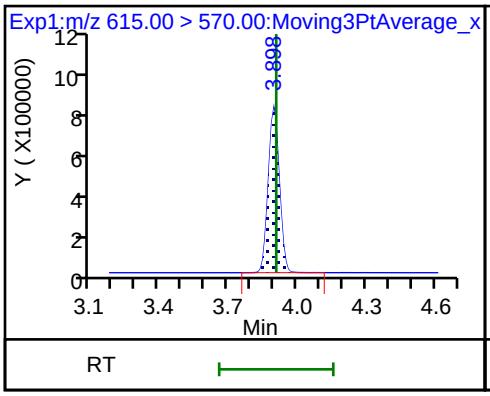
37 Perfluorododecanoic acid



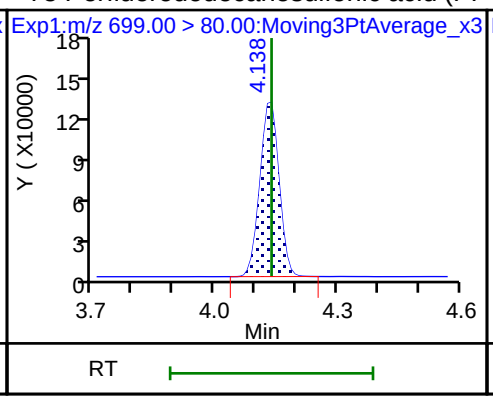
74 1H,1H,2H,2H-perfluorododecanesulfo



D 36 13C2 PFDoA



75 Perfluorododecanesulfonic acid (PF



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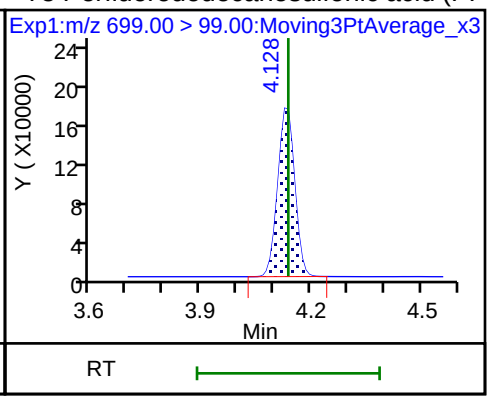
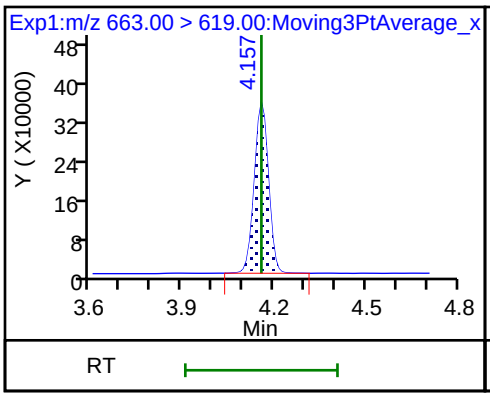
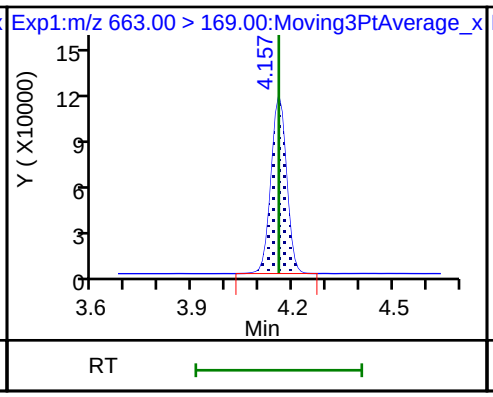


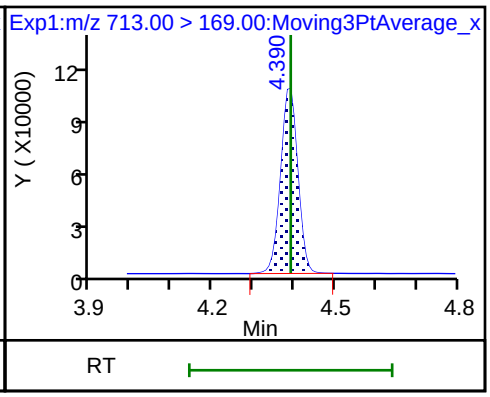
41 Perfluorotridecanoic acid



41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid



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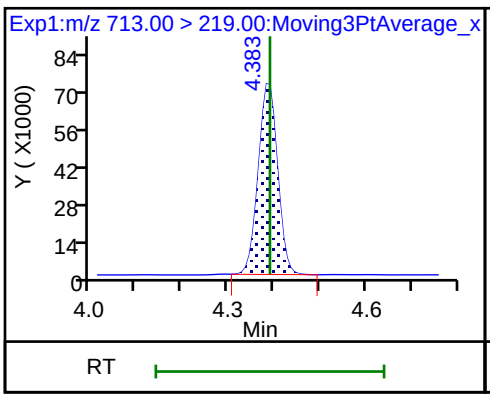
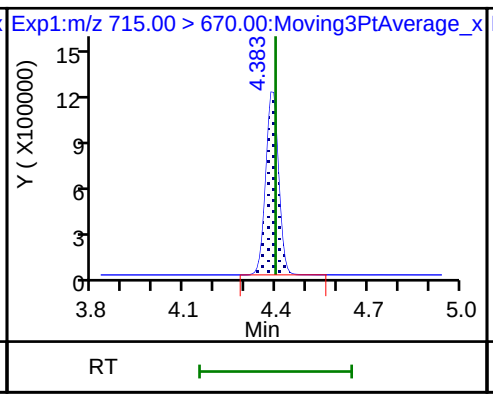
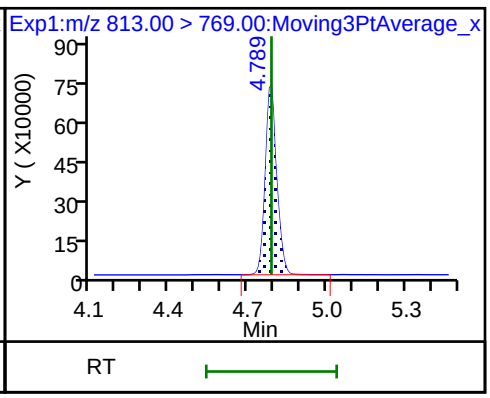


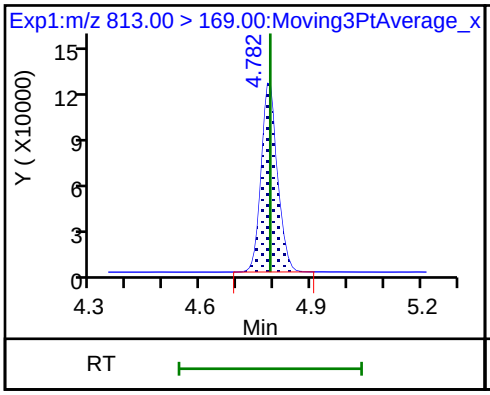
D 43 13C2-PFTeDA



45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



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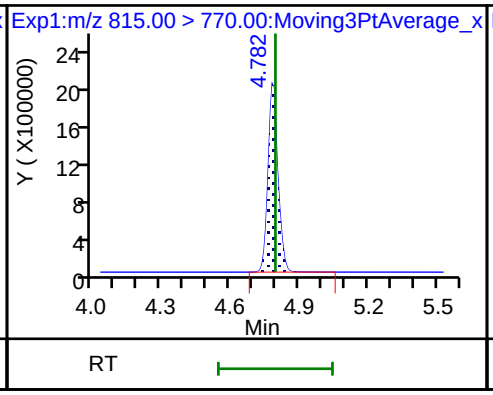
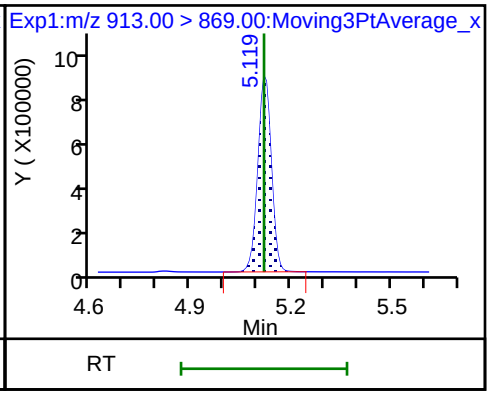
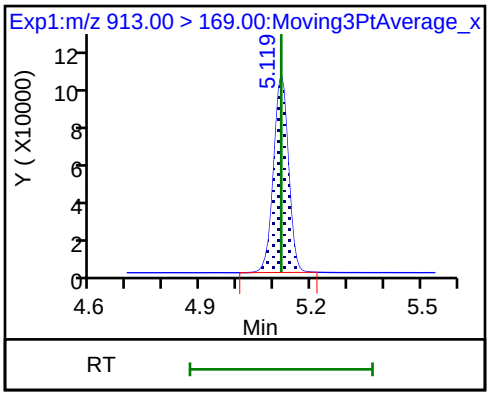


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-238593/1 Calibration Date: 08/07/2018 22:11

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.07LLBB_062.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9105		0.970	1.00	-3.0	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.083		0.952	1.00	-4.8	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	73.87		0.860	0.884	-2.8	50.0
4:2 FTS	AveID	16.57	16.39		0.924	0.934	-1.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	0.9629		0.943	1.00	-5.7	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	66.08		0.899	0.938	-4.1	50.0
HFPO-DA (GenX)	AveID	2.420	2.430		1.00	1.00	0.4	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.023		0.963	1.00	-3.7	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.004		0.843	0.910	-7.4	40.0
ADONA	AveID	3.245	3.524		1.09	1.00	8.6	50.0
6:2 FTS	AveID	1.573	1.520		0.916	0.948	-3.4	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.087		0.963	1.00	-3.8	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.227		0.943	0.952	-0.9	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.061		0.917	0.928	-1.2	40.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.053		1.00	1.00	0.0	40.0
F-53B Major	AveID	1.742	1.756		0.939	0.932	0.8	50.0
8:2 FTS	AveID	1.299	1.326		0.978	0.958	2.1	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.7332		0.936	0.960	-2.5	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	0.9536		0.951	1.00	-4.9	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	0.996		1.02	1.00	2.2	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	0.9592		0.994	1.00	-0.6	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6203		0.946	0.964	-1.9	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8343		0.935	1.00	-6.5	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	1.080		0.961	1.00	-3.9	40.0
F-53B Minor	AveID	2.674	2.815		0.992	0.942	5.3	50.0
10:2 FTS	AveID	0.9008	0.9948		1.06	0.964	10.4	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.054		0.948	1.00	-5.2	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2790		0.972	0.968	0.5	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.128		1.05	1.00	4.9	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2397		0.990	1.00	-1.0	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-238593/1 Calibration Date: 08/07/2018 22:11

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.07LLBB_062.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9250		1.04	1.00	3.8	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.9577		1.04	1.00	4.1	50.0
13C4 PFBA	Ave	1.385	1.361		2.46	2.50	-1.7	50.0
13C5 PFPeA	Ave	0.9537	0.9465		2.48	2.50	-0.8	50.0
13C3-PFBS	Ave	0.0221	0.0220		2.32	2.33	-0.1	50.0
M2-4:2FTS	Ave	0.1572	0.1606		2.39	2.34	2.1	50.0
13C2 PFHxA	Ave	1.082	1.130		2.61	2.50	4.4	50.0
13C3 HFPO-DA	Ave	0.0842	0.0777		2.31	2.50	-7.7	50.0
13C4-PFHpA	Ave	1.065	1.111		2.61	2.50	4.3	50.0
18O2 PFHxS	Ave	1.366	1.395		2.42	2.37	2.2	50.0
M2-6:2FTS	Ave	0.2242	0.2389		2.53	2.38	6.6	40.0
13C4 PFOA	Ave	0.9773	0.9789		2.50	2.50	0.2	50.0
13C8 PFOA	Ave	1.927	1.952		2.48	2.45	1.3	50.0
13C4 PFOS	Ave	0.8973	0.8892		2.37	2.39	-0.9	50.0
13C5 PFNA	Ave	0.8770	0.8925		2.54	2.50	1.8	50.0
13C8 PFOS	Ave	0.4359	0.4339		2.38	2.39	-0.5	50.0
M2-8:2FTS	Ave	0.2707	0.2790		2.47	2.40	3.1	40.0
13C2 PFDA	Ave	0.7695	0.7815		2.54	2.50	1.6	50.0
13C8 FOSA	Ave	1.188	1.168		2.46	2.50	-1.8	50.0
d3-NMeFOSAA	Ave	0.3935	0.4069		2.58	2.50	3.4	50.0
d5-NEtFOSAA	Ave	0.4077	0.4308		2.64	2.50	5.7	50.0
13C2 PFUnA	Ave	0.6189	0.6463		2.61	2.50	4.4	50.0
13C2 PFDoA	Ave	0.6541	0.6611		2.53	2.50	1.1	50.0
13C2-PFTeDA	Ave	0.8335	0.8666		2.60	2.50	4.0	50.0
13C2-PFHxDA	Ave	1.653	1.698		2.57	2.50	2.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_062.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 07-Aug-2018 22:11:23 ALS Bottle#: 13 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 11:34:28 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK048

First Level Reviewer: hannigana Date: 08-Aug-2018 11:25:15

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.396	1.396	0.0	1.000	1931110	0.9697		97.0	151	
D 1 13C4 PFBA										
217.00 > 172.00	1.396	1.399	-0.003	0.543	5302627	2.46		98.3	7358	
D 3 13C5-PFPeA										
267.90 > 223.00	1.638	1.644	-0.006	0.637	3687387	2.48		99.2	8659	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.646	1.646	0.0	1.005	1597014	0.9516		95.2	104	
D 47 13C3-PFBS										
301.90 > 83.00	1.678	1.676	0.002	0.652	79818	2.32		99.9	293	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.678	1.678	0.0	1.000	2241765	0.8597		97.2	851	
298.90 > 99.00	1.678	1.678	0.0	1.000	939473		2.39(1.25-3.74)		574	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.874	1.874	0.0	1.117	525617	0.9240		98.9	6145	
D 60 M2-4:2FTS										
329.00 > 81.00	1.874	1.881	-0.007	0.729	584224	2.39		102	1023	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.912	1.912	0.0	1.000	1695368	0.9434		94.3	438	
313.00 > 119.00	1.901	1.912	-0.011	0.995	150304		11.28(5.03-15.10)		333	
D 7 13C2 PFHxA										
315.00 > 270.00	1.912	1.918	-0.006	0.743	4401915	2.61		104	9818	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.933	1.933	0.0	1.152	2127780	0.8993		95.9	2945	
349.00 > 99.00	1.933	1.933	0.0	1.152	824724		2.58(1.36-4.07)		914	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.995	1.995	0.0	0.995	294144	1.00		100	134	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.006	2.012	-0.006	0.780	302651	2.31		92.3	896	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.223	2.223	0.0	1.000	1770105	0.9632		96.3	353	
363.00 > 169.00	2.223	2.223	0.0	1.000	705894		2.51(1.13-3.40)		1031	
D 9 13C4-PFHpA										
367.00 > 322.00	2.223	2.227	-0.004	0.864	4326935	2.61		104	11310	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.232	2.232	0.0	0.995	1986707	0.8428		92.6	2143	
399.00 > 99.00	2.243	2.232	0.011	1.000	650676		3.05(1.50-4.49)		592	
D 11 18O2 PFHxS										
403.00 > 84.00	2.243	2.247	-0.004	0.872	5142522	2.42		102	7155	
65 ADONA										
377.00 > 251.00	2.265	2.265	0.0	0.771	4882403	1.09		109	6435	
377.00 > 85.00	2.265	2.265	0.0	0.771	2868633		1.70(0.84-2.53)		4170	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.549	2.549	0.0	1.000	536517	0.9159		96.6	1438	
D 12 M2-6:2FTS										
429.00 > 81.00	2.549	2.553	-0.004	0.991	884223	2.53		107	2147	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.572	2.572	0.0	1.000	1660437	0.9627		96.2	147	
413.00 > 169.00	2.572	2.572	0.0	1.000	878121		1.89(0.84-2.52)		1637	
* 62 13C2-PFOA										
415.00 > 370.00	2.572	2.572	0.0		3895856	2.50			4973	
D 14 13C4 PFOA										
417.00 > 372.00	2.572	2.575	-0.003	1.000	3813460	2.50		100	5675	
D 73 13C8 PFOA										
421.00 > 376.00	2.572	2.575	-0.003	1.000	7445200	2.48		101	9244	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.579	2.579	0.0	0.878	1619142	0.9431		99.1	2684	
449.00 > 99.00	2.579	2.579	0.0	0.878	430178		3.76(1.94-5.82)		919	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.938	2.938	0.0	1.000	1364339	0.9170		98.8	1349	
499.00 > 99.00	2.938	2.938	0.0	1.000	307933		4.43(2.31-6.93)		724	
D 19 13C5 PFNA										
468.00 > 423.00	2.938	2.941	-0.003	1.142	3477023	2.54		102	6446	
D 18 13C4 PFOS										
503.00 > 80.00	2.938	2.941	-0.003	1.142	3311619	2.37		99.1	4620	
D 72 13C8 PFOS										
507.00 > 99.00	2.938	2.941	-0.003	1.142	1616056	2.38		99.5	4514	
20 Perfluorononanoic acid										
463.00 > 419.00	2.944	2.944	0.0	1.002	1465035	1.00		100	485	
463.00 > 169.00	2.938	2.944	-0.006	1.000	330125		4.44(1.90-5.69)		1424	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.154	3.154	0.0	1.074	2267117	0.9392		101	4140	
D 26 M2-8:2FTS										
529.00 > 81.00	3.283	3.282	0.001	1.277	1041266	2.47		103	3036	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.283	3.283	0.0	1.000	552268	0.9778		102	2566	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.291	3.291	0.0	1.120	975249	0.9358		97.5	3262	
549.00 > 99.00	3.291	3.291	0.0	1.120	358969		2.72(1.33-3.97)		1429	
D 23 13C2 PFDA										
515.00 > 470.00	3.298	3.297	0.001	1.282	3044775	2.54		102	5760	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.298	3.298	0.0	1.000	1161416	0.9506		95.1	763	
513.00 > 169.00	3.298	3.298	0.0	1.000	219604		5.29(2.36-7.09)		369	
D 21 13C8 FOSA										
506.00 > 78.00	3.319	3.318	0.001	1.290	4548453	2.46		98.2	6183	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.319	3.319	0.0	1.000	1811196	1.02		102	2236	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.452	3.451	0.001	1.342	1585020	2.58		103	3133	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.452	3.452	0.0	1.000	608108	0.99		99.4	653	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.613	3.613	0.0	1.230	828495	0.9462		98.1	2750	
599.00 > 99.00	3.613	3.613	0.0	1.230	290138		2.86(1.39-4.16)		2308	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.620	3.619	0.001	1.407	1678459	2.64		106	1315	
D 30 13C2 PFUnA										
565.00 > 520.00	3.627	3.626	0.0	1.410	2518009	2.61		104	4824	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.627	3.627	0.0	1.002	560114	0.9355		93.5	988	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.627	3.627	0.0	1.000	1087903	0.9613		96.1	767	
563.00 > 169.00	3.620	3.627	-0.006	0.998	198983		5.47(2.12-6.36)		1086	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.783	3.783	0.0	1.288	3674604	0.99		105	8074	
35 MeFOSA										
512.00 > 169.00	3.824	3.824	0.0		547913	NC			797	
D 36 13C2 PFDoA										
615.00 > 570.00	3.919	3.908	0.011	1.524	2575547	2.53		101	5029	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.919	3.919	0.0	1.000	1086304	0.9476		94.8	565	
613.00 > 169.00	3.919	3.919	0.0	1.000	255185		4.26(2.13-6.40)		1879	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.919	3.919	0.0	1.194	416932	1.06		110	3338	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.148	4.148	0.0	1.412	374239	0.9724		100	1414	
699.00 > 99.00	4.148	4.148	0.0	1.412	547882		0.68(0.00-0.00)		3479	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.177	4.177	0.0	1.066	1161861	1.05		105	561	
663.00 > 169.00	4.177	4.177	0.0	1.066	360403		3.22(1.25-3.76)		1662	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.405	4.405	0.0	1.000	323721	0.99		99.0	2412	
713.00 > 219.00	4.405	4.405	0.0	1.000	228221		1.42(0.71-2.13)		1399	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.405	4.406	-0.001	1.713	3376268	2.60		104	9188	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.803	4.803	0.0	1.000	2447569	1.04		104	848	
813.00 > 169.00	4.803	4.803	0.0	1.000	413972		5.91(2.86-8.58)		2755	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.803	4.804	-0.001	1.867	6615138	2.57		103	7471	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.140	5.140	0.0	1.070	2534105	1.04		104	521	
913.00 > 169.00	5.140	5.140	0.0	1.070	311158		8.14(3.83-11.48)		1846	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00006 Amount Added: 1.00 Units: mL

Report Date: 08-Aug-2018 11:34:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_062.d

Injection Date: 07-Aug-2018 22:11:23 Instrument ID: A8_N

Lims ID: CCV L4

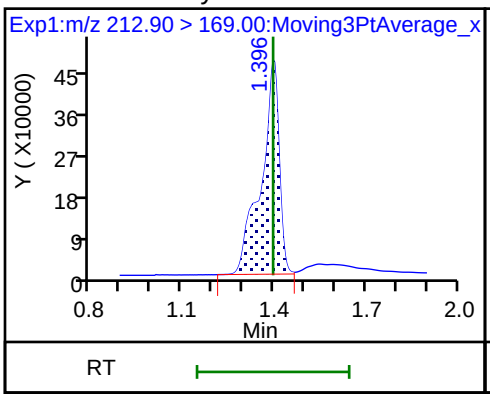
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 13 Worklist Smp#: 1

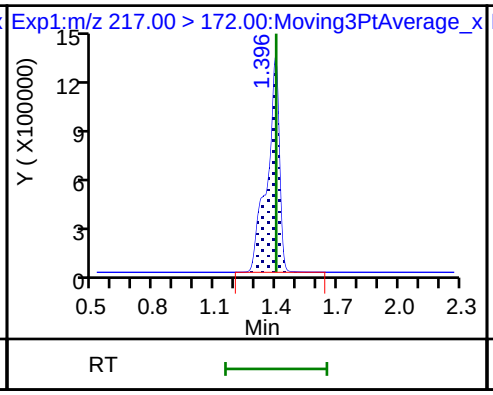
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

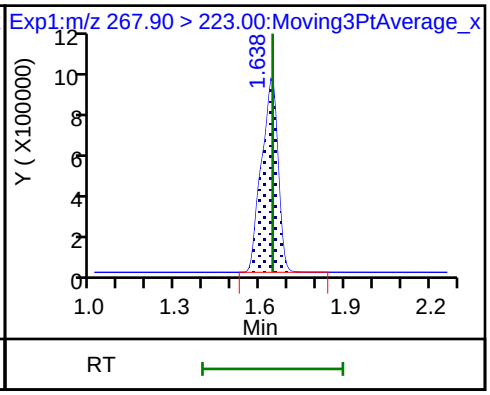
2 Perfluorobutyric acid



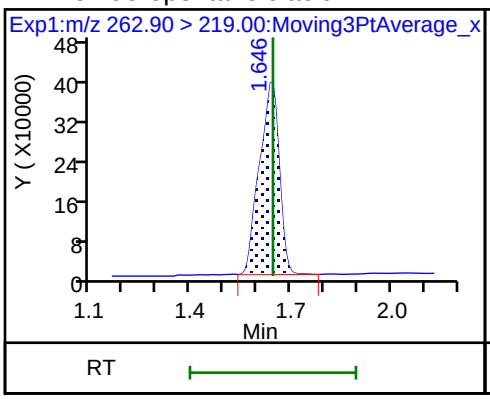
D 1 13C4 PFBA



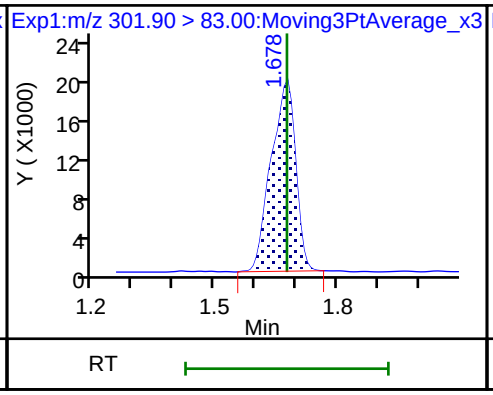
D 3 13C5-PFPeA



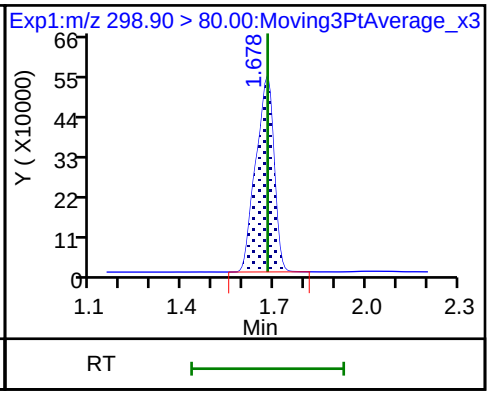
4 Perfluoropentanoic acid



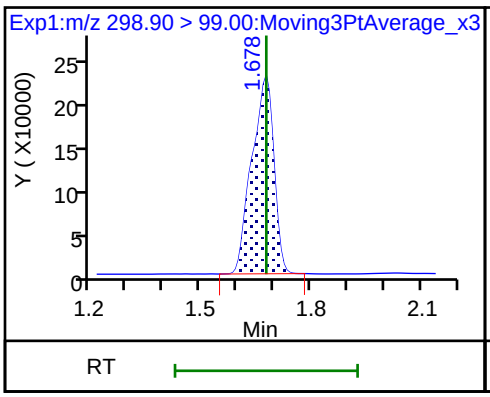
D 47 13C3-PFBS



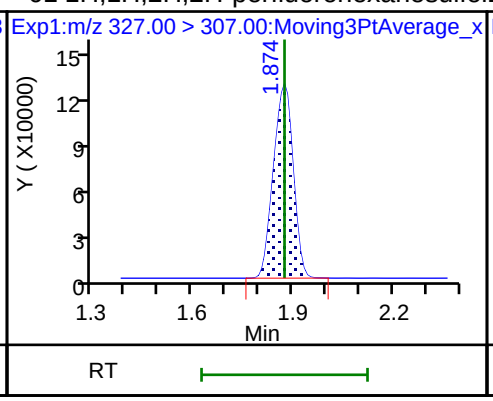
5 Perfluorobutanesulfonic acid



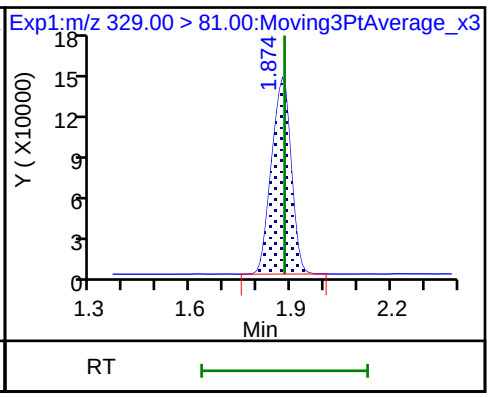
5 Perfluorobutanesulfonic acid



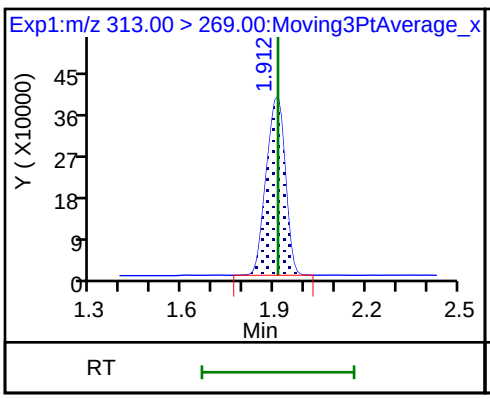
61 1H,1H,2H,2H-perfluorohexanesulfon



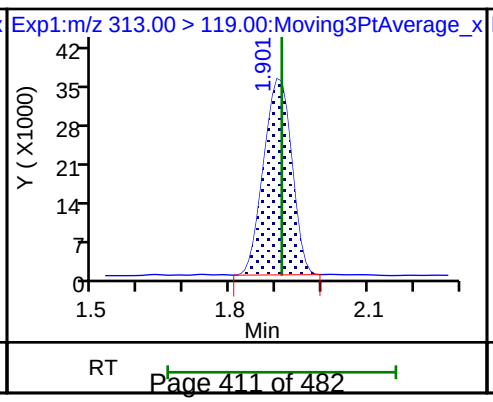
D 60 M2-4:2FTS



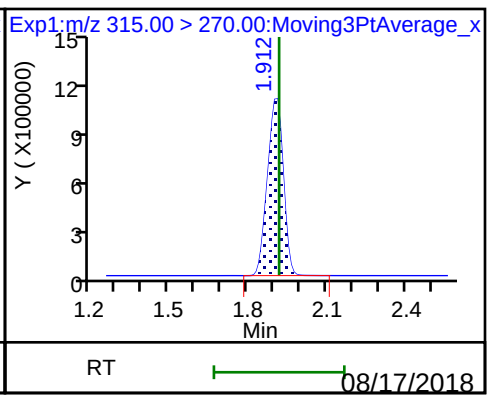
6 Perfluorohexanoic acid



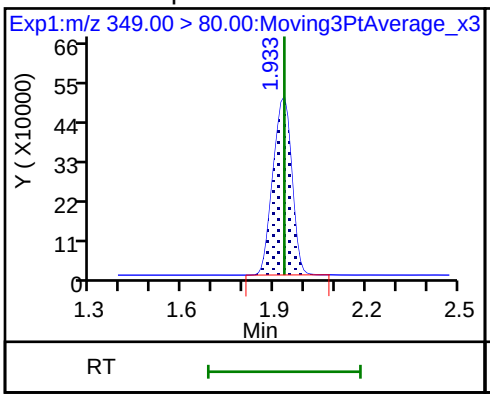
6 Perfluorohexanoic acid



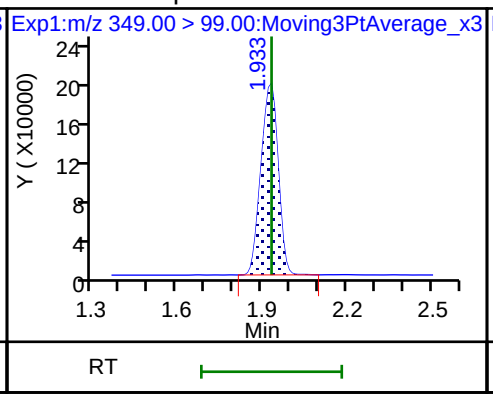
D 7 13C2 PFHxA



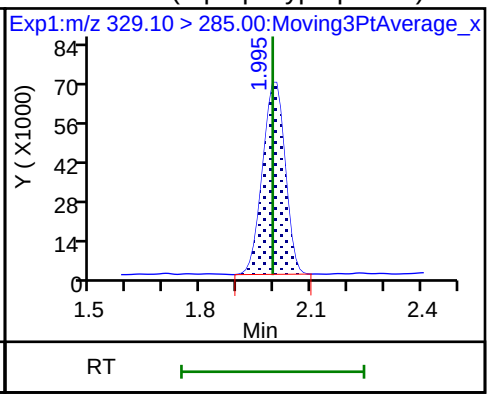
70 Perfluoropentanesulfonic acid



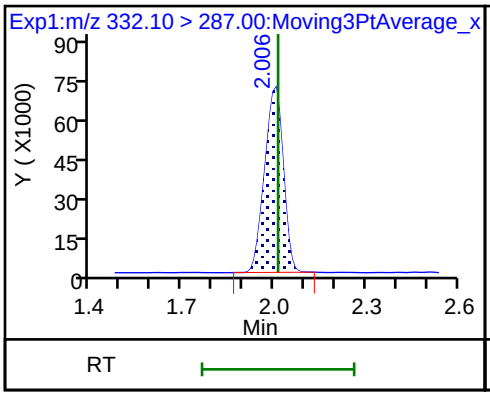
70 Perfluoropentanesulfonic acid



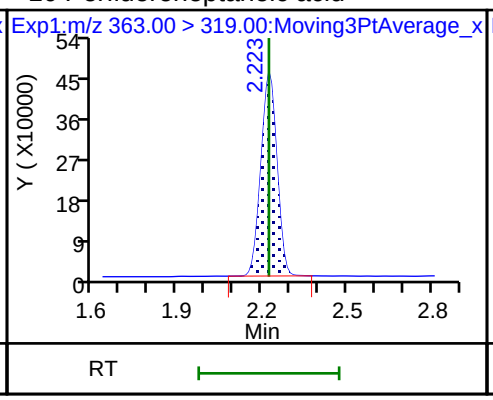
67 Perfluoro(2-propoxypropanoic) acid



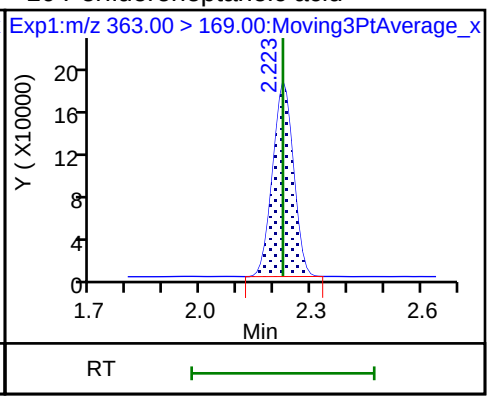
D 64 13C3 HFPO-DA



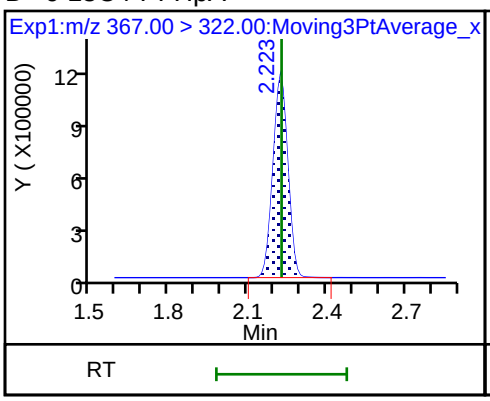
10 Perfluoroheptanoic acid



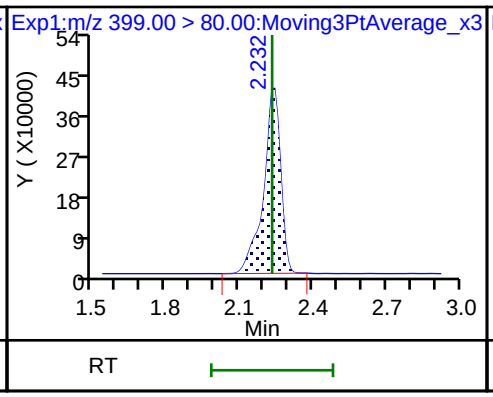
10 Perfluoroheptanoic acid



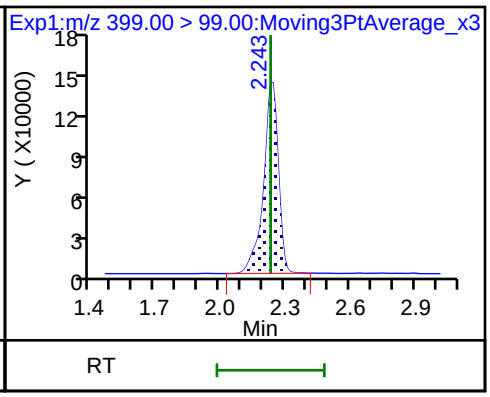
D 9 13C4-PFHpA



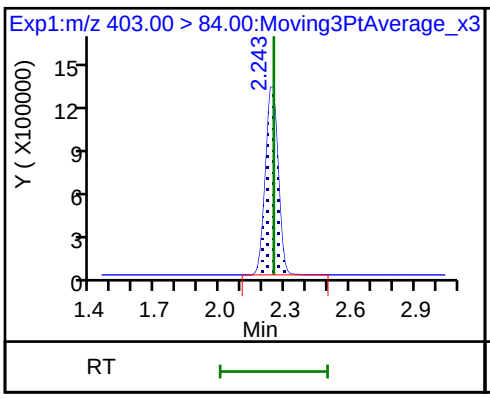
8 Perfluorohexanesulfonic acid



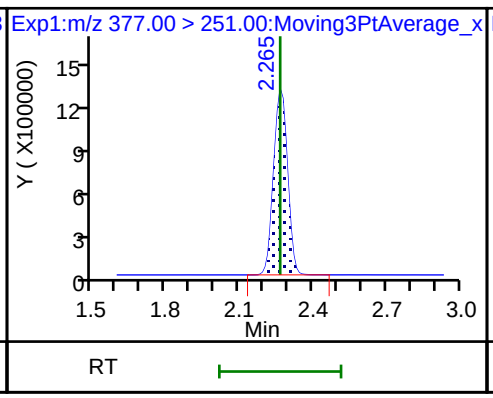
8 Perfluorohexanesulfonic acid



D 11 18O2 PFHxS



65 ADONA



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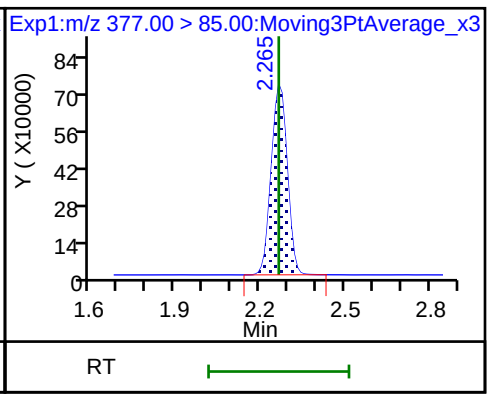
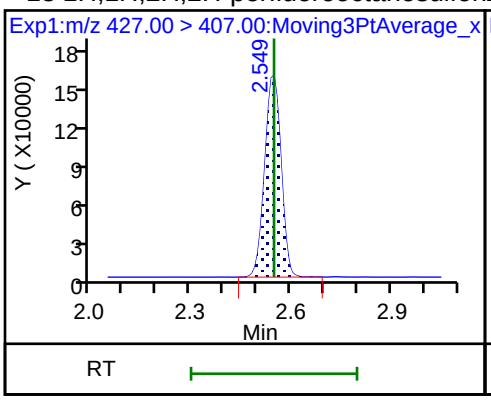
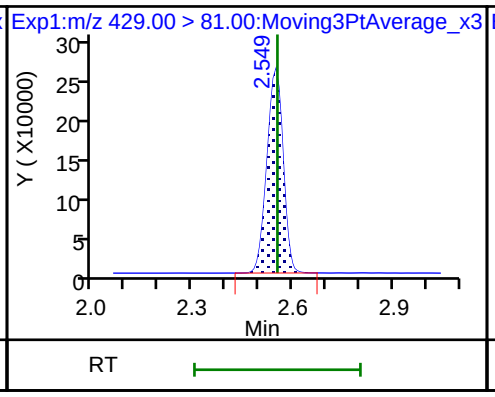


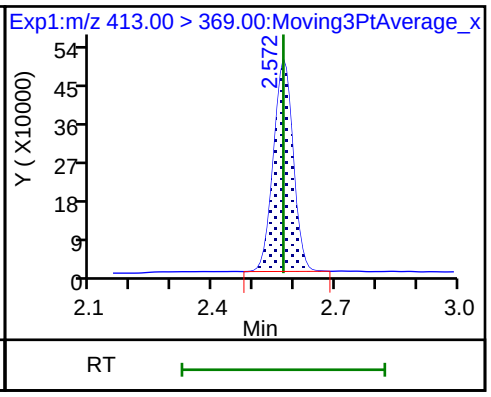
13 1H,1H,2H,2H-perfluorooctanesulfon



D 12 M2-6:2FTS



15 Perfluorooctanoic acid



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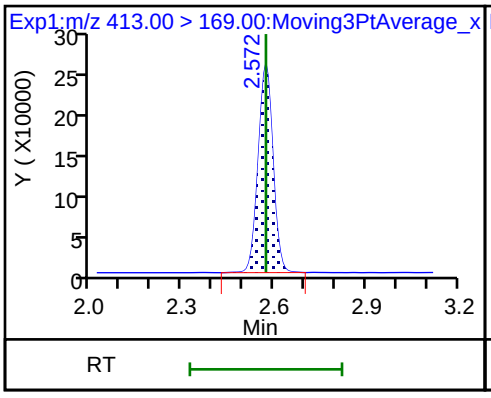
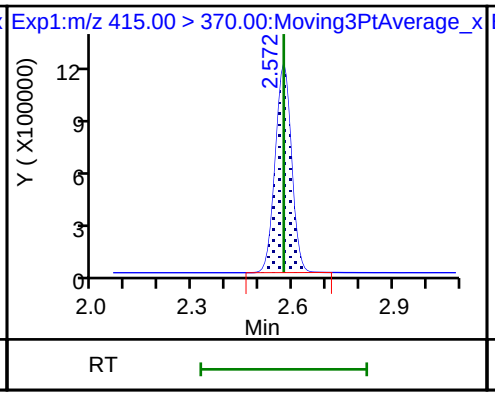
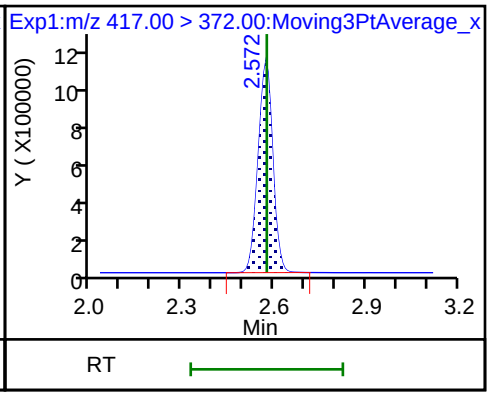


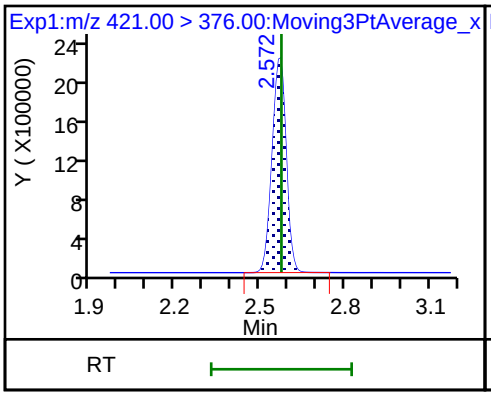
* 62 13C2-PFOA



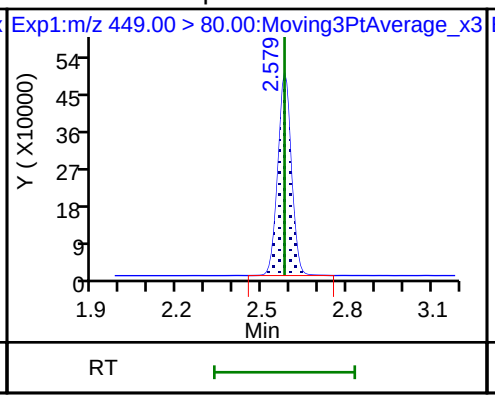
D 14 13C4 PFOA



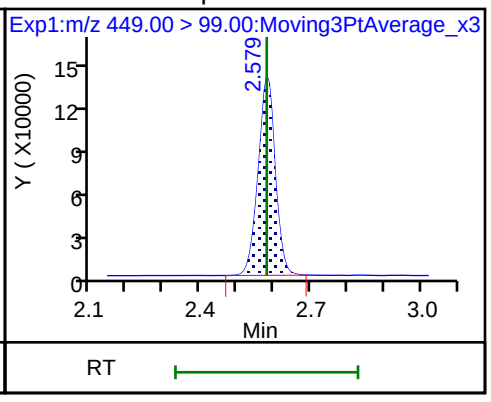
D 73 13C8 PFOA



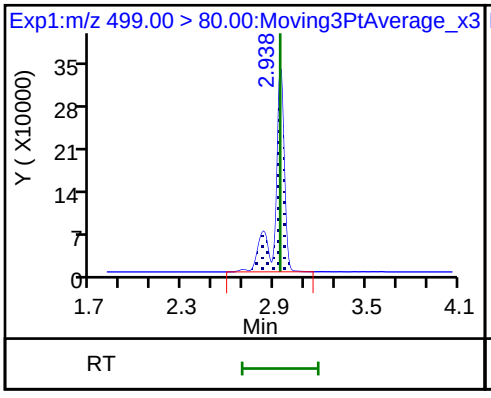
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



17 Perfluorooctane sulfonic acid



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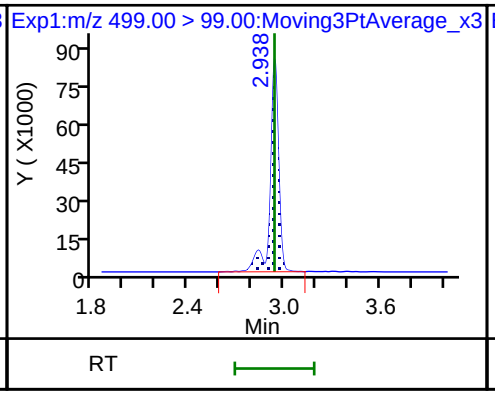
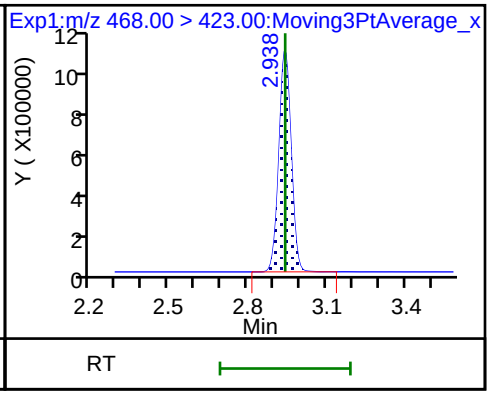
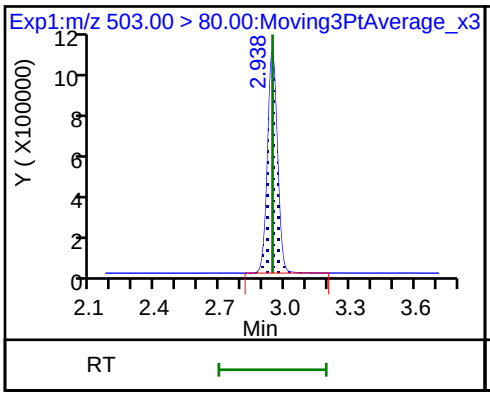


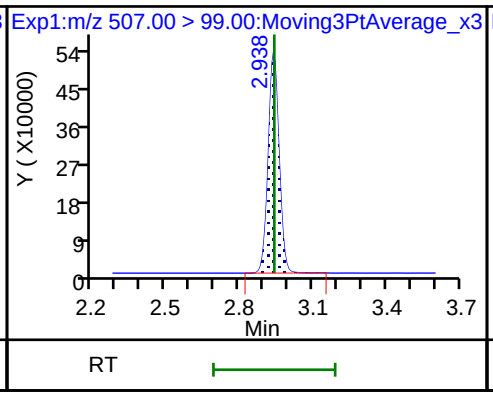
D 19 13C5 PFNA



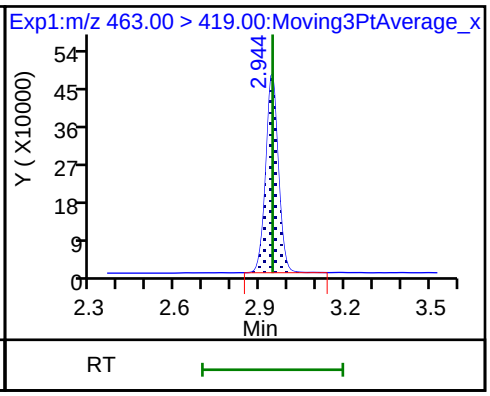
D 18 13C4 PFOS



D 72 13C8 PFOS



20 Perfluorononanoic acid



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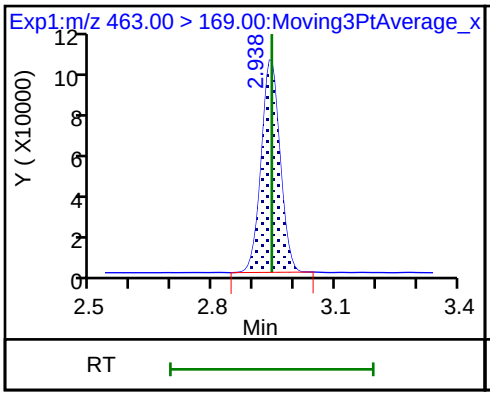
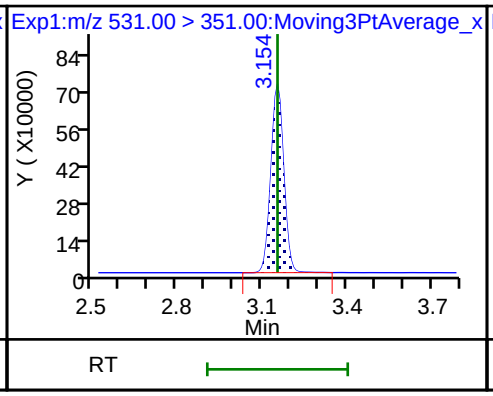
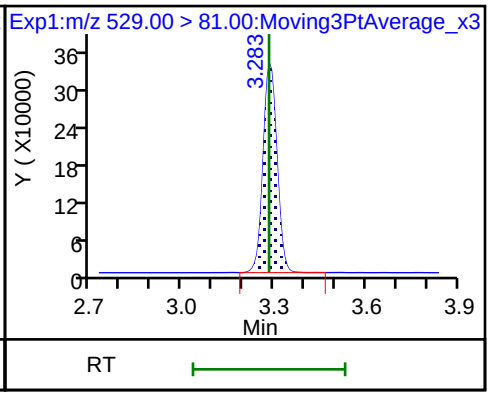


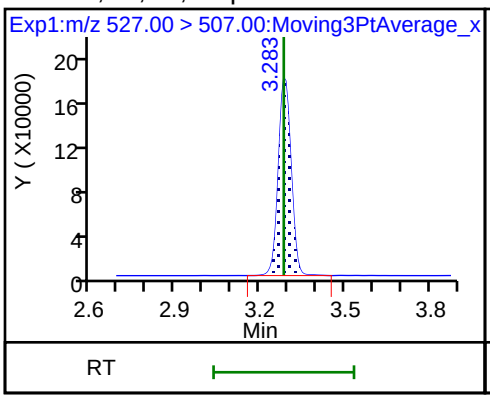
69 9-Chlorohexadecafluoro-3-oxanonane



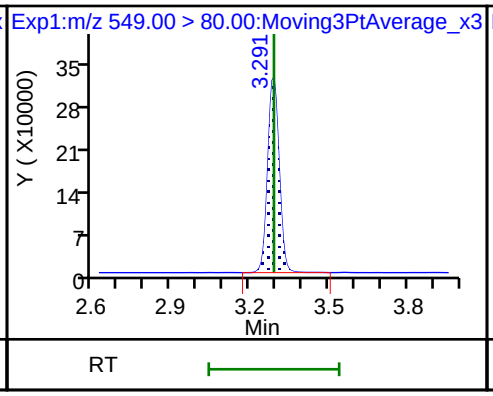
D 26 M2-8:2FTS



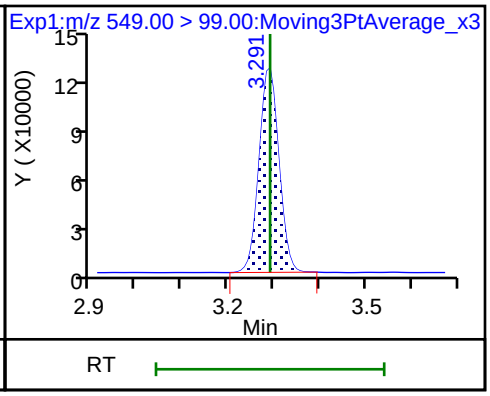
25 1H,1H,2H,2H-perfluorodecanesulfoni



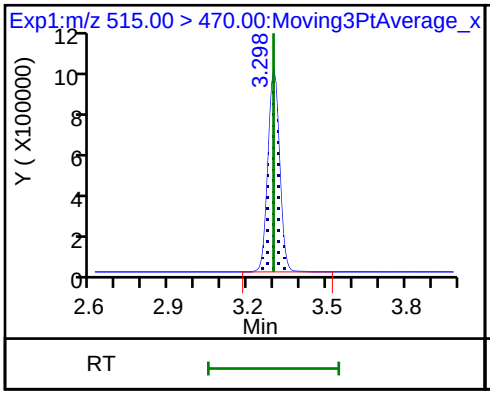
68 Perfluorononanesulfonic acid



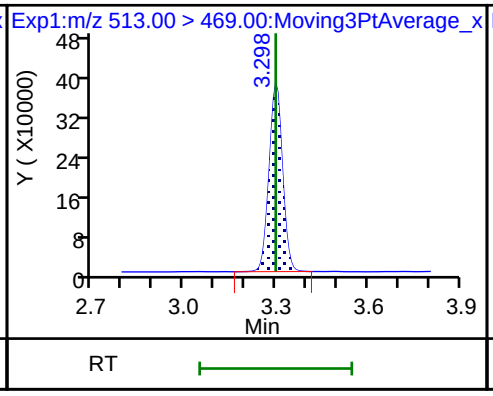
68 Perfluorononanesulfonic acid



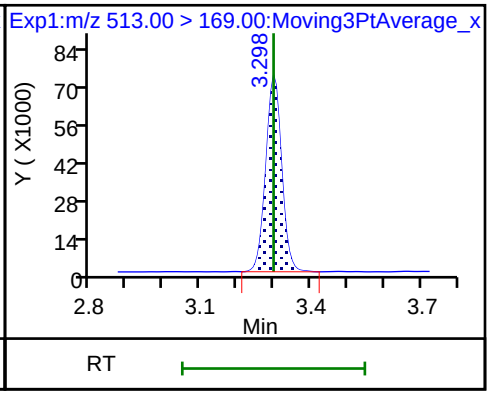
D 23 13C2 PFDA



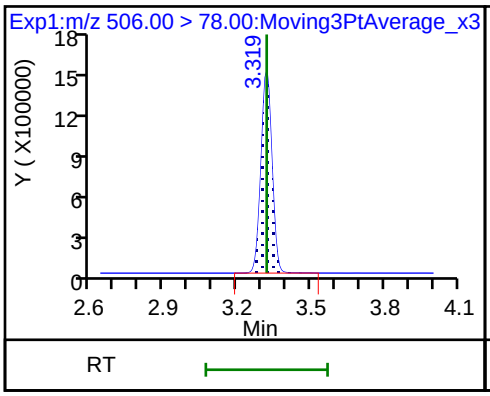
24 Perfluorodecanoic acid



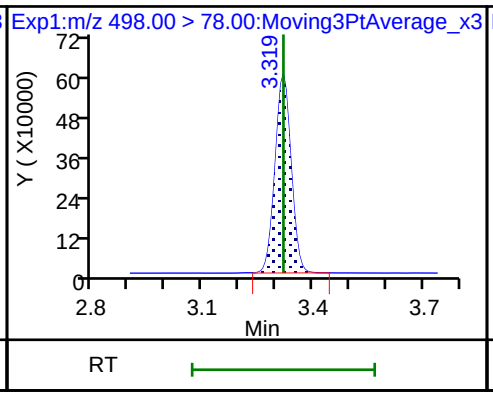
24 Perfluorodecanoic acid



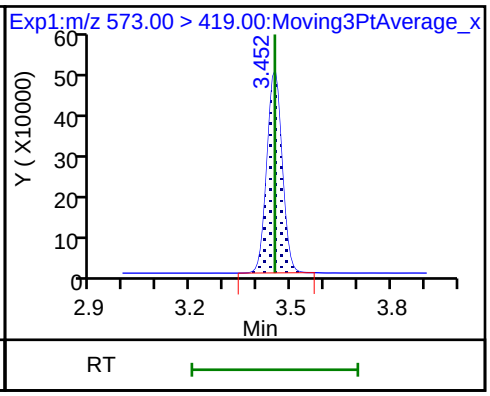
D 21 13C8 FOSA



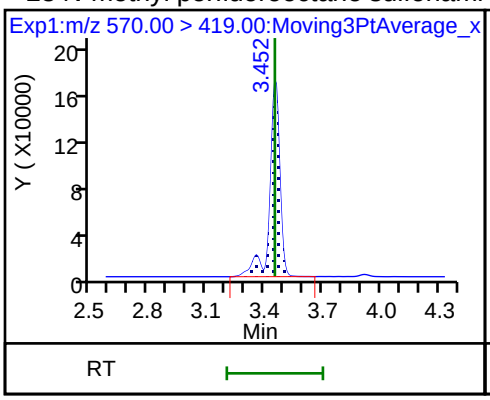
22 Perfluorooctane Sulfonamide



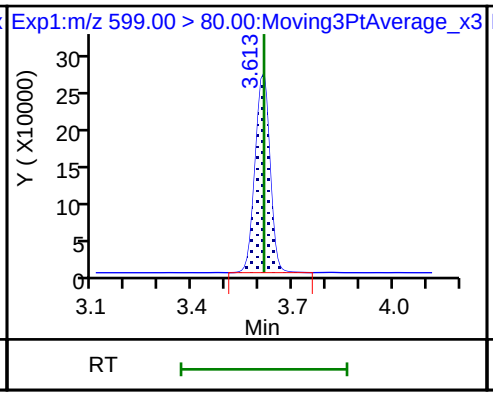
D 27 d3-NMeFOSAA



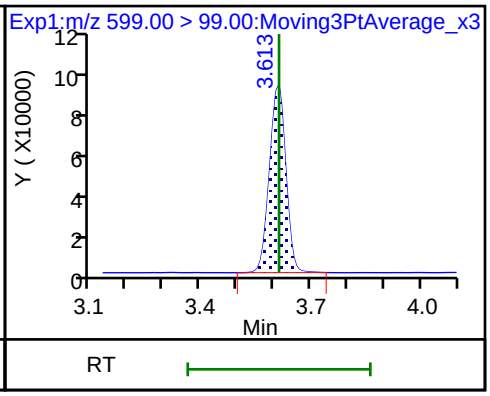
28 N-methyl perfluorooctane sulfonami



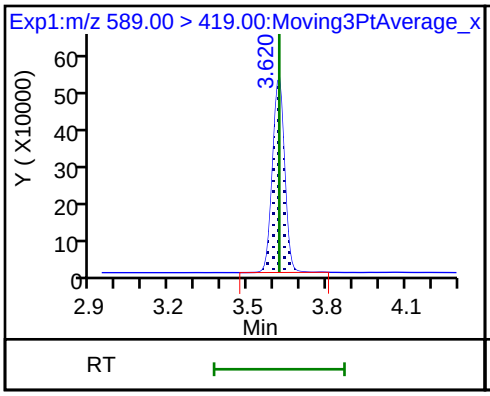
29 Perfluorodecane Sulfonic acid



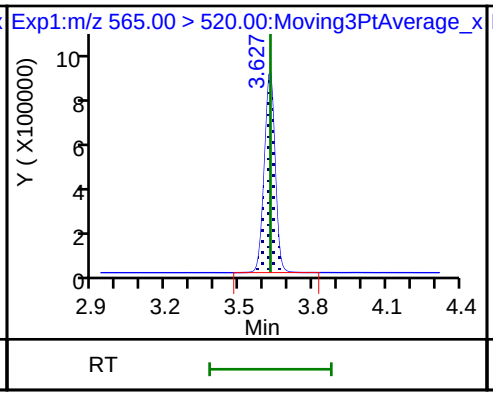
29 Perfluorodecane Sulfonic acid



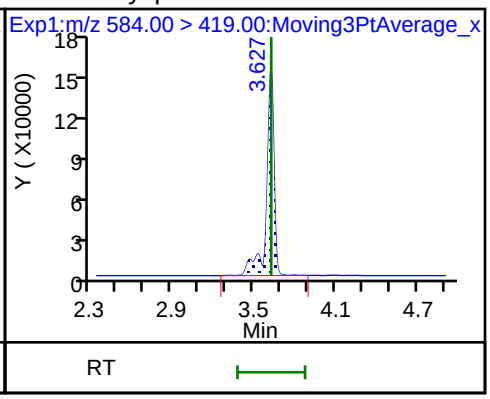
D 32 d5-NEtFOSAA



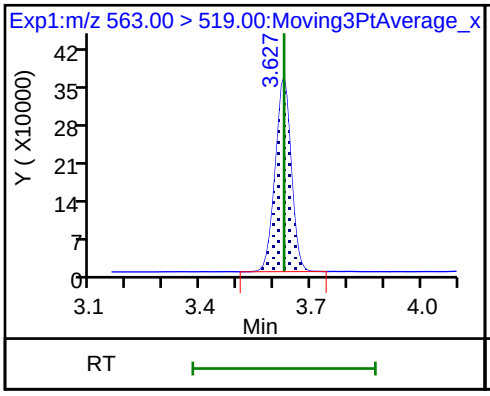
D 30 13C2 PFUnA



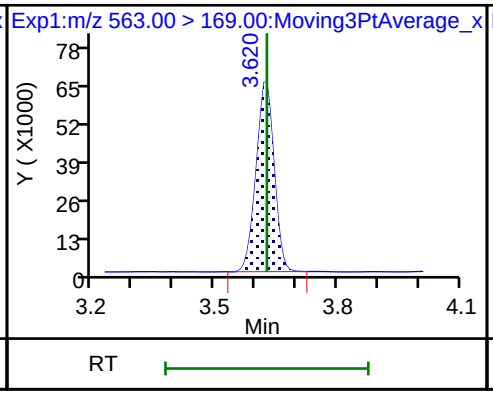
33 N-ethyl perfluorooctane sulfonamid



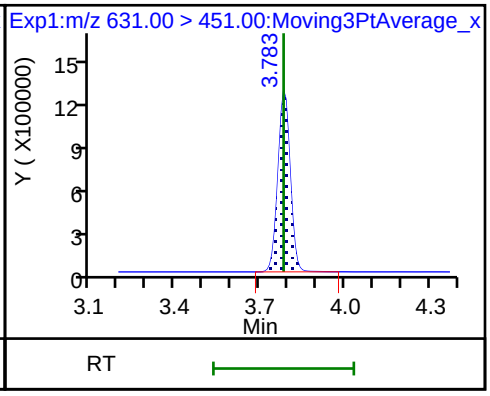
31 Perfluoroundecanoic acid



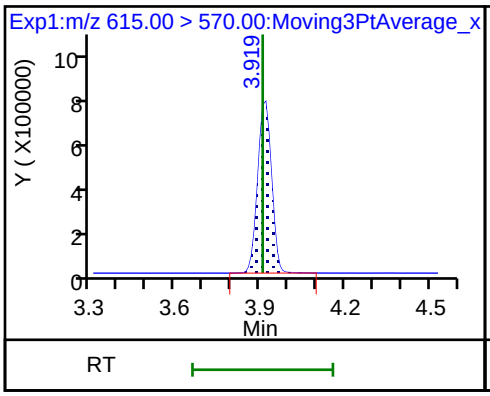
31 Perfluoroundecanoic acid



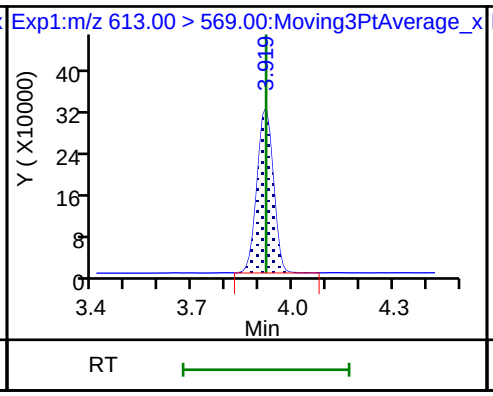
66 11-Chloroeicosafluoro-3-oxaundecan



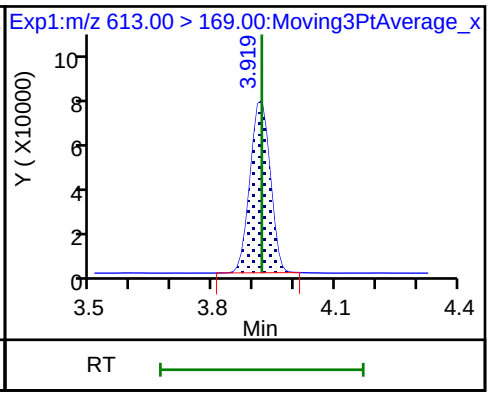
D 36 13C2 PFDoA



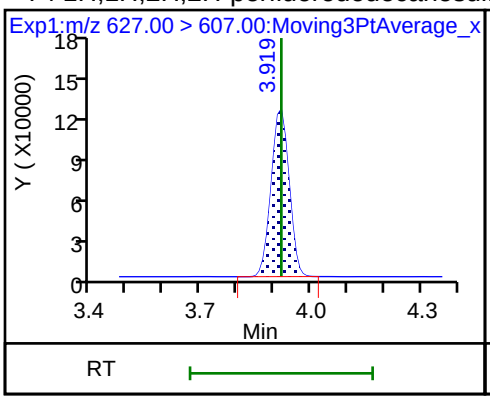
37 Perfluorododecanoic acid



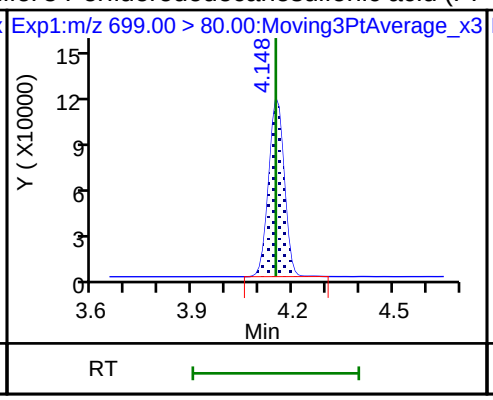
37 Perfluorododecanoic acid



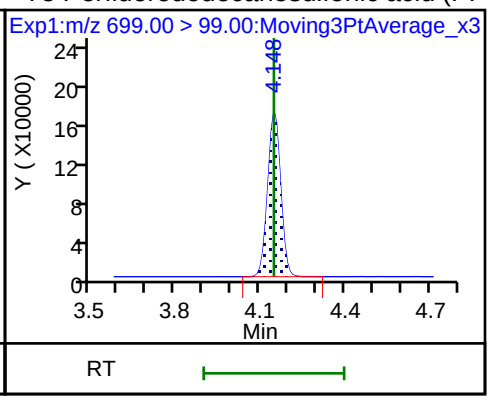
74 1H,1H,2H,2H-perfluorododecanesulfo



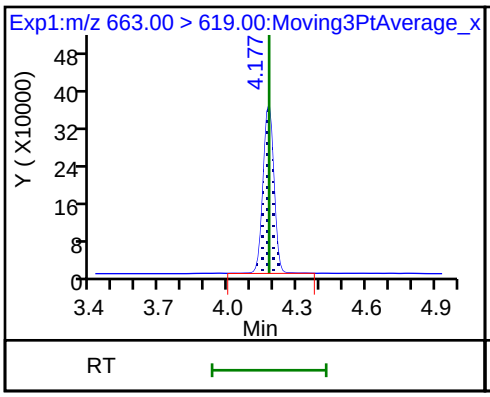
75 Perfluorododecanesulfonic acid (PF



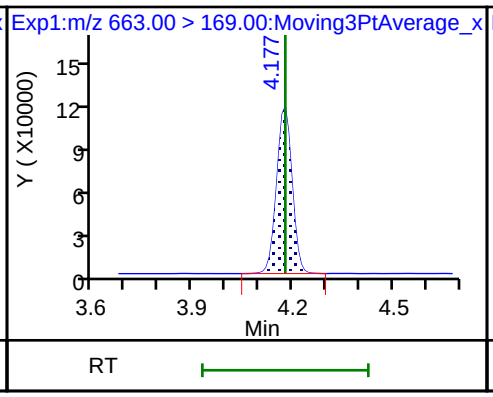
75 Perfluorododecanesulfonic acid (PF



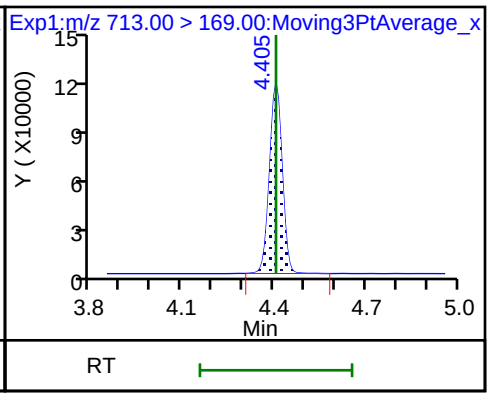
41 Perfluorotridecanoic acid



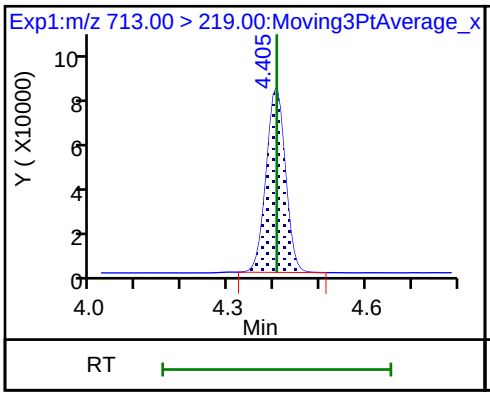
41 Perfluorotridecanoic acid



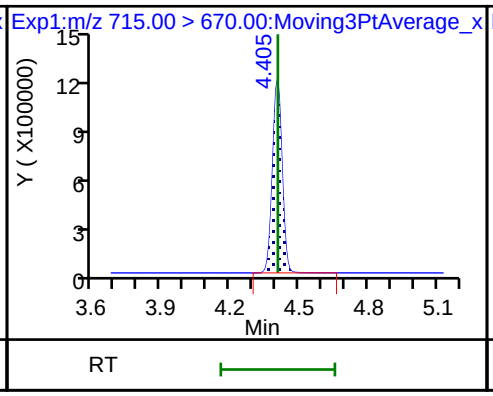
42 Perfluorotetradecanoic acid



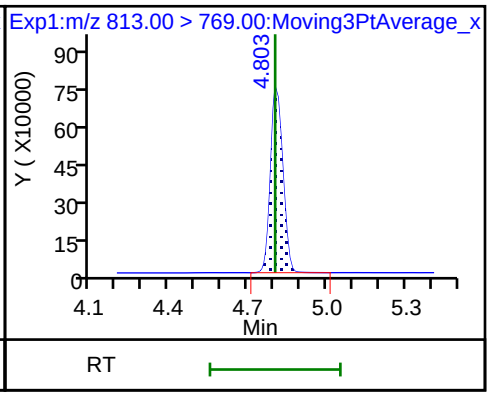
42 Perfluorotetradecanoic acid



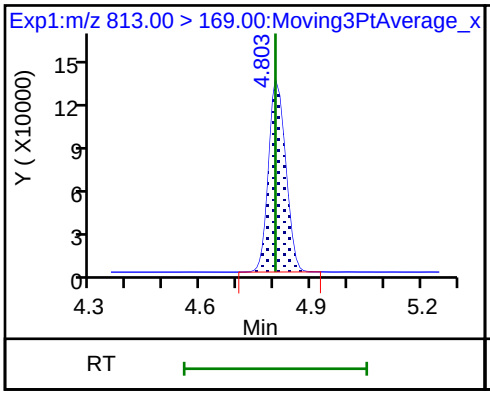
D 43 13C2-PFTeDA



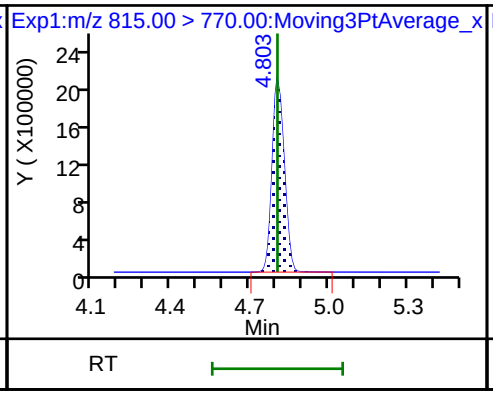
45 Perfluorohexadecanoic acid



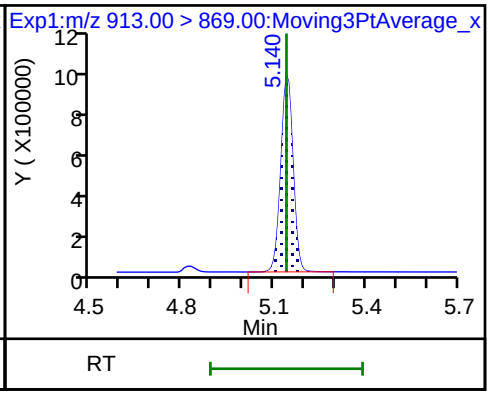
45 Perfluorohexadecanoic acid



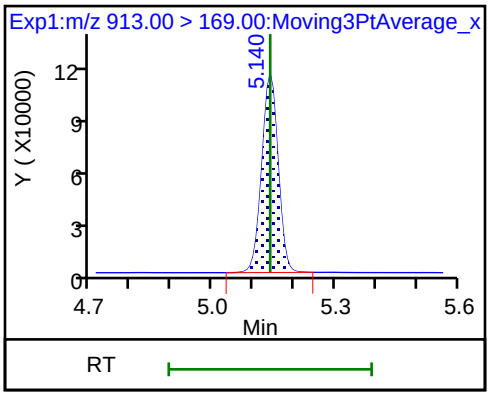
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-238593/4 Calibration Date: 08/07/2018 22:34

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.07LLBB_065.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9389	0.9194		2.45	2.50	-2.1	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.138	1.117		2.45	2.50	-1.8	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	75.96	77.26		2.25	2.21	1.7	50.0
4:2 FTS	AveID	16.57	17.20		2.42	2.34	3.8	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.021	0.9500		2.33	2.50	-6.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	68.92	68.46		2.33	2.35	-0.7	50.0
HFPO-DA (GenX)	AveID	2.420	2.569		2.65	2.50	6.1	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.062	1.076		2.53	2.50	1.3	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.084	1.023		2.15	2.28	-5.7	40.0
ADONA	AveID	3.245	3.372		2.60	2.50	3.9	50.0
6:2 FTS	AveID	1.573	1.542		2.32	2.37	-2.0	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.131	1.108		2.45	2.50	-2.0	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.239	1.250		2.40	2.38	0.9	50.0
Perfluorononanoic acid (PFNA)	AveID	1.053	1.028		2.44	2.50	-2.5	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.074	1.086		2.35	2.32	1.1	40.0
F-53B Major	AveID	1.742	1.842		2.46	2.33	5.7	50.0
8:2 FTS	AveID	1.299	1.238		2.28	2.40	-4.7	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.7522	0.7818		2.49	2.40	3.9	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.003	1.024		2.55	2.50	2.1	40.0
Perfluorooctane Sulfonamide (FOSA)	AveID	0.9736	1.021		2.62	2.50	4.8	40.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	AveID	0.9646	0.9413		2.44	2.50	-2.4	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6320	0.6429		2.45	2.41	1.7	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	AveID	0.8918	0.8531		2.39	2.50	-4.3	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.124	1.112		2.47	2.50	-1.1	40.0
F-53B Minor	AveID	2.674	2.910		2.56	2.36	8.8	50.0
10:2 FTS	AveID	0.9008	0.9809		2.62	2.41	8.9	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.113	1.064		2.39	2.50	-4.4	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2777	0.2865		2.50	2.42	3.2	50.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.075	1.127		2.62	2.50	4.9	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2420	0.2451		2.53	2.50	1.3	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Lab Sample ID: CCV 320-238593/4 Calibration Date: 08/07/2018 22:34

Instrument ID: A8_N Calib Start Date: 08/06/2018 11:10

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 08/06/2018 11:56

Lab File ID: 2018.08.07LLBB_065.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.8722		2.48	2.50	-0.8	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.9201	0.9353		2.54	2.50	1.7	50.0
13C4 PFBA	Ave	1.385	1.350		2.44	2.50	-2.5	50.0
13C5 PFPeA	Ave	0.9537	0.9366		2.46	2.50	-1.8	50.0
13C3-PFBS	Ave	0.0221	0.0220		2.32	2.33	-0.4	50.0
M2-4:2FTS	Ave	0.1572	0.1619		2.41	2.34	3.0	50.0
13C2 PFHxA	Ave	1.082	1.111		2.57	2.50	2.7	50.0
13C3 HFPO-DA	Ave	0.0842	0.0765		2.27	2.50	-9.1	50.0
13C4-PFHpA	Ave	1.065	1.056		2.48	2.50	-0.8	50.0
18O2 PFHxS	Ave	1.366	1.353		2.34	2.37	-0.9	50.0
M2-6:2FTS	Ave	0.2242	0.2315		2.45	2.38	3.3	40.0
13C8 PFOA	Ave	1.927	1.947		2.47	2.45	1.0	50.0
13C4 PFOA	Ave	0.9773	0.9651		2.47	2.50	-1.2	50.0
13C8 PFOS	Ave	0.4359	0.4440		2.43	2.39	1.8	50.0
13C4 PFOS	Ave	0.8973	0.8930		2.38	2.39	-0.5	50.0
13C5 PFNA	Ave	0.8770	0.8980		2.56	2.50	2.4	50.0
M2-8:2FTS	Ave	0.2707	0.2755		2.44	2.40	1.8	40.0
13C2 PFDA	Ave	0.7695	0.7630		2.48	2.50	-0.8	50.0
13C8 FOSA	Ave	1.188	1.161		2.44	2.50	-2.3	50.0
d3-NMeFOSAA	Ave	0.3935	0.4174		2.65	2.50	6.1	50.0
d5-NEtFOSAA	Ave	0.4077	0.4193		2.57	2.50	2.8	50.0
13C2 PFUnA	Ave	0.6189	0.6432		2.60	2.50	3.9	50.0
13C2 PFDoA	Ave	0.6541	0.7026		2.69	2.50	7.4	50.0
13C2-PFTeDA	Ave	0.8335	0.8908		2.67	2.50	6.9	50.0
13C2-PFHxDA	Ave	1.653	1.731		2.62	2.50	4.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_065.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 07-Aug-2018 22:34:50 ALS Bottle#: 14 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N
Sublist: chrom-A8_N*sub34

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 08-Aug-2018 11:36:40 Calib Date: 06-Aug-2018 11:56:59
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180806-62198.b\2018.08.06LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK048

First Level Reviewer: hannigana Date: 08-Aug-2018 11:36:35

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.90 > 169.00	1.396	1.396	0.0	1.000	4540566	2.45		97.9	295	
D 1 13C4 PFBA										
217.00 > 172.00	1.396	1.399	-0.003	0.543	4938879	2.44		97.5	7552	
D 3 13C5-PFPeA										
267.90 > 223.00	1.639	1.644	-0.005	0.637	3425943	2.46		98.2	6250	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.639	1.646	-0.007	1.000	3826705	2.45		98.2	209	
D 47 13C3-PFBS										
301.90 > 83.00	1.670	1.676	-0.006	0.649	74776	2.32		99.6	326	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.678	1.678	0.0	1.005	5491469	2.25		102	1398	
298.90 > 99.00	1.678	1.678	0.0	1.005	2202602		2.49(1.25-3.74)		1253	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.875	1.874	0.001	1.123	1291774	2.42		104	3913	
D 60 M2-4:2FTS										
329.00 > 81.00	1.875	1.881	-0.006	0.729	553235	2.41		103	658	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.912	1.912	0.0	1.000	3861247	2.33		93.1	814	
313.00 > 119.00	1.912	1.912	0.0	1.000	356818		10.82(5.03-15.10)		713	
D 7 13C2 PFHxA										
315.00 > 270.00	1.912	1.918	-0.006	0.743	4064407	2.57		103	6465	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.933	1.933	0.0	1.157	5163026	2.33		99.3	5300	
349.00 > 99.00	1.933	1.933	0.0	1.157	1963016		2.63(1.36-4.07)		2123	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.006	1.995	0.011	1.000	719153	2.65		106	354	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.006	2.012	-0.006	0.780	279972	2.27		90.9	725	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.224	2.223	0.001	1.000	4156231	2.53		101	755	
363.00 > 169.00	2.224	2.223	0.001	1.000	1612771		2.58(1.13-3.40)		1964	
D 9 13C4-PFHpA										
367.00 > 322.00	2.224	2.227	-0.003	0.864	3864080	2.48		99.2	7517	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.244	2.232	0.012	1.000	4606621	2.15		94.3	2449	
399.00 > 99.00	2.244	2.232	0.012	1.000	1552684		2.97(1.50-4.49)		1113	
D 11 18O2 PFHxS										
403.00 > 84.00	2.244	2.247	-0.003	0.872	4682415	2.34		99.1	6452	
65 ADONA										
377.00 > 251.00	2.266	2.265	0.001	0.771	11015489	2.60		104	9780	
377.00 > 85.00	2.266	2.265	0.001	0.771	6868009		1.60(0.84-2.53)		7088	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.549	2.549	0.0	1.000	1238381	2.32		98.0	2365	
D 12 M2-6:2FTS										
429.00 > 81.00	2.549	2.553	-0.004	0.991	804599	2.45		103	1404	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.572	2.572	0.0	1.000	3914287	2.45		98.0	365	
413.00 > 169.00	2.572	2.572	0.0	1.000	2045663		1.91(0.84-2.52)		2092	
* 62 13C2-PFOA										
415.00 > 370.00	2.572	2.572	0.0		3658036	2.50			6503	
D 14 13C4 PFOA										
417.00 > 372.00	2.572	2.575	-0.003	1.000	3530265	2.47		98.8	5798	
D 73 13C8 PFOA										
421.00 > 376.00	2.566	2.575	-0.009	0.997	6973446	2.47		101	14379	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.579	2.579	0.0	0.878	3886490	2.40		101	1760	
449.00 > 99.00	2.579	2.579	0.0	0.878	1037887		3.74(1.94-5.82)		2168	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.938	2.938	0.0	1.000	3290535	2.35		101	1531	
499.00 > 99.00	2.938	2.938	0.0	1.000	727375		4.52(2.31-6.93)		1381	
D 19 13C5 PFNA										
468.00 > 423.00	2.938	2.941	-0.003	1.142	3284759	2.56		102	5773	
D 18 13C4 PFOS										
503.00 > 80.00	2.938	2.941	-0.003	1.142	3122789	2.38		99.5	2014	
D 72 13C8 PFOS										
507.00 > 99.00	2.932	2.941	-0.009	1.140	1552666	2.43		102	3366	
20 Perfluorononanoic acid										
463.00 > 419.00	2.938	2.944	-0.006	1.000	3375105	2.44		97.5	1149	
463.00 > 169.00	2.938	2.944	-0.006	1.000	791252		4.27(1.90-5.69)		3309	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.146	3.154	-0.008	1.071	5607544	2.46		106	4806	
D 26 M2-8:2FTS										
529.00 > 81.00	3.277	3.282	-0.005	1.274	965392	2.44		102	1807	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.277	3.283	-0.006	1.000	1195330	2.28		95.3	2874	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.284	3.291	-0.007	1.118	2451745	2.49		104	2258	
549.00 > 99.00	3.284	3.291	-0.007	1.118	845862		2.90(1.33-3.97)		1776	
D 23 13C2 PFDA										
515.00 > 470.00	3.291	3.297	-0.006	1.279	2791093	2.48		99.2	3199	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.291	3.298	-0.007	1.000	2858438	2.55		102	1709	
513.00 > 169.00	3.291	3.298	-0.007	1.000	489561		5.84(2.36-7.09)		404	
D 21 13C8 FOSA										
506.00 > 78.00	3.312	3.318	-0.006	1.288	4245415	2.44		97.7	4238	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.312	3.319	-0.007	1.000	4332919	2.62		105	5458	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.445	3.451	-0.006	1.339	1526706	2.65		106	3870	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.452	3.452	0.0	1.002	1437121	2.44		97.6	1685	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.604	3.613	-0.009	1.227	2024452	2.45		102	2241	
599.00 > 99.00	3.604	3.613	-0.009	1.227	667705		3.03(1.39-4.16)		3275	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.613	3.619	-0.006	1.404	1533768	2.57		103	1214	
D 30 13C2 PFUnA										
565.00 > 520.00	3.620	3.626	-0.006	1.407	2352972	2.60		104	5414	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.620	3.627	-0.006	1.002	1308505	2.39		95.7	1736	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.620	3.627	-0.006	1.000	2615934	2.47		98.9	1156	
563.00 > 169.00	3.620	3.627	-0.006	1.000	453665		5.77(2.12-6.36)		1895	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.775	3.783	-0.008	1.285	8953143	2.56		109	6826	
35 MeFOSA										
512.00 > 169.00	3.824	3.824	0.0		1244464	NC			1118	
D 36 13C2 PFDoA										
615.00 > 570.00	3.909	3.908	0.001	1.520	2570068	2.69		107	5372	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.909	3.919	-0.010	1.000	2733855	2.39		95.6	1267	
613.00 > 169.00	3.909	3.919	-0.010	1.000	606544		4.51(2.13-6.40)		1726	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.909	3.919	-0.010	1.193	952880	2.62		109	3051	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.148	4.148	0.0	1.412	905926	2.50		103	1353	
699.00 > 99.00	4.148	4.148	0.0	1.412	1279010		0.71(0.00-0.00)		3303	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.167	4.177	-0.010	1.066	2897618	2.62		105	1326	
663.00 > 169.00	4.167	4.177	-0.010	1.066	853377		3.40(1.25-3.76)		4421	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.398	4.405	-0.007	1.000	798606	2.53		101	4379	
713.00 > 219.00	4.398	4.405	-0.007	1.000	568352		1.41(0.71-2.13)		3794	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.398	4.406	-0.008	1.710	3258695	2.67		107	6199	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.803	4.803	0.0	1.000	5521420	2.48		99.2	1769	
813.00 > 169.00	4.803	4.803	0.0	1.000	959325		5.76(2.86-8.58)		3532	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.803	4.804	-0.001	1.867	6330253	2.62		105	7911	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.140	5.140	0.0	1.070	5920901	2.54		102	1397	
913.00 > 169.00	5.140	5.140	0.0	1.070	722138		8.20(3.83-11.48)		2465	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00006 Amount Added: 1.00 Units: mL

Report Date: 08-Aug-2018 11:36:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180807-62315.b\2018.08.07LLBB_065.d

Injection Date: 07-Aug-2018 22:34:50 Instrument ID: A8_N

Lims ID: CCV L5

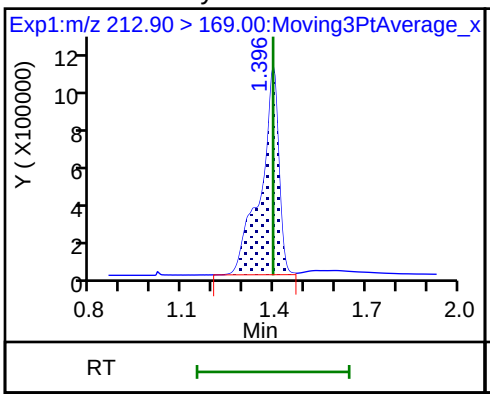
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 14 Worklist Smp#: 4

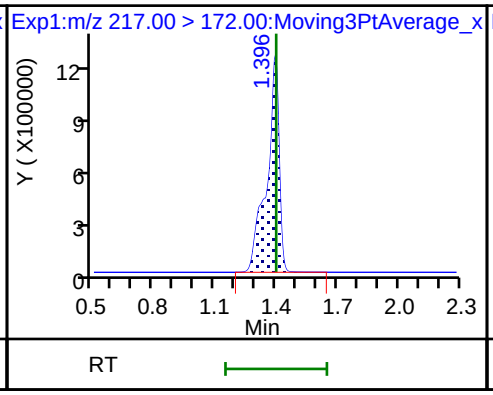
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

2 Perfluorobutyric acid



D 1 13C4 PFBA



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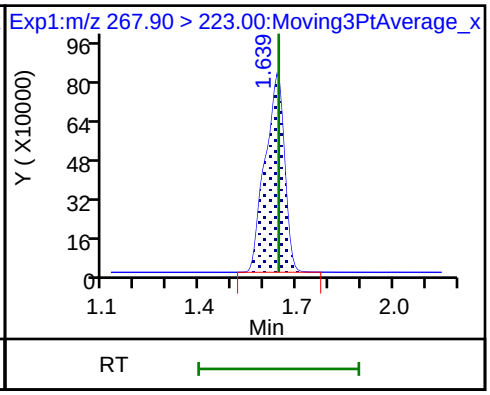
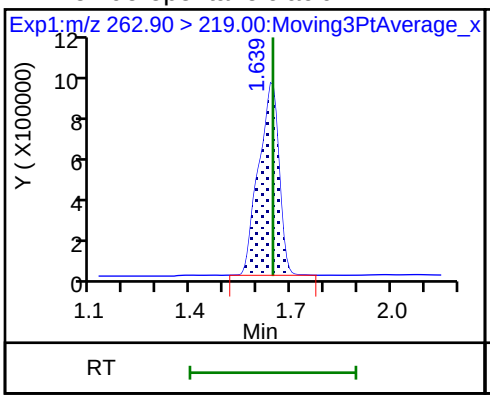
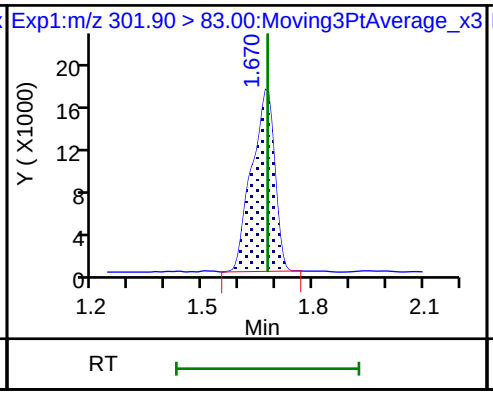


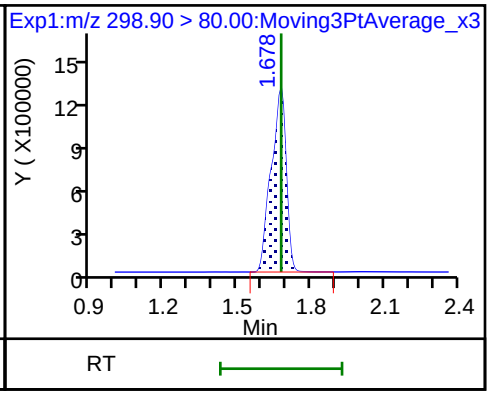
4 Perfluoropentanoic acid



D 47 13C3-PFBS



5 Perfluorobutanesulfonic acid



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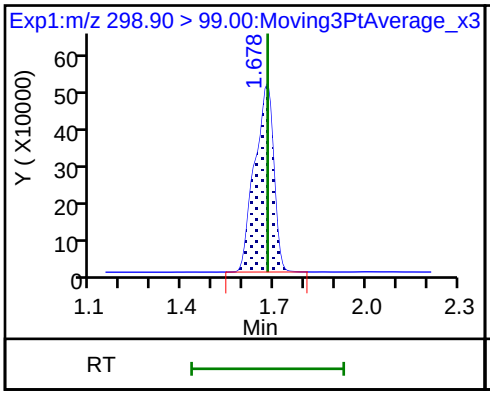
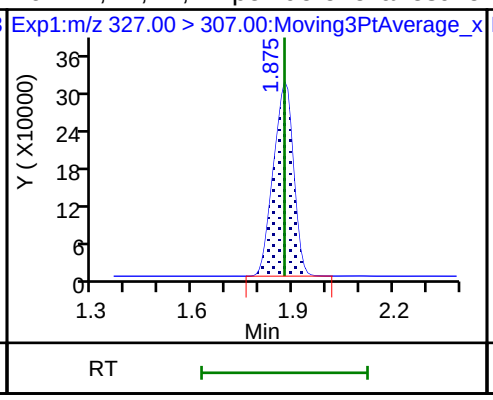
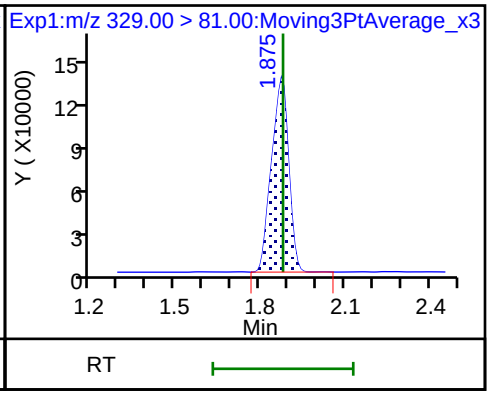


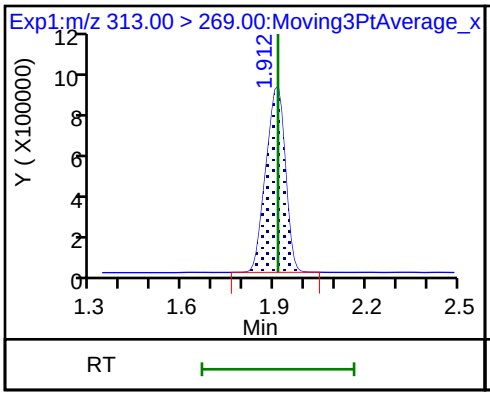
61 1H,1H,2H,2H-perfluorohexanesulfon



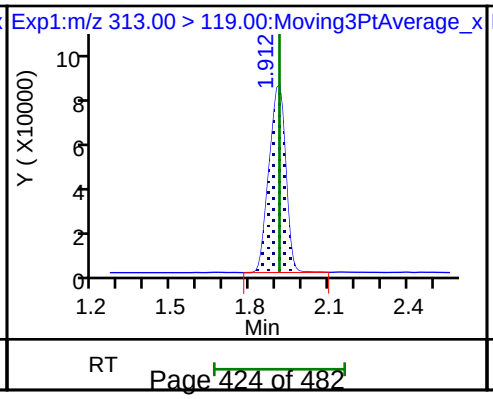
D 60 M2-4:2FTS



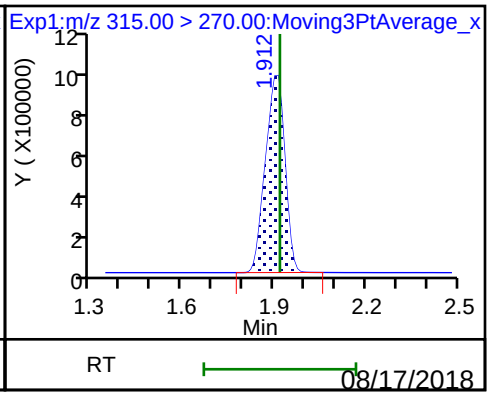
6 Perfluorohexanoic acid



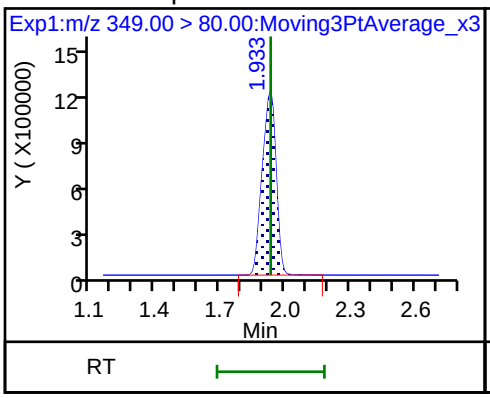
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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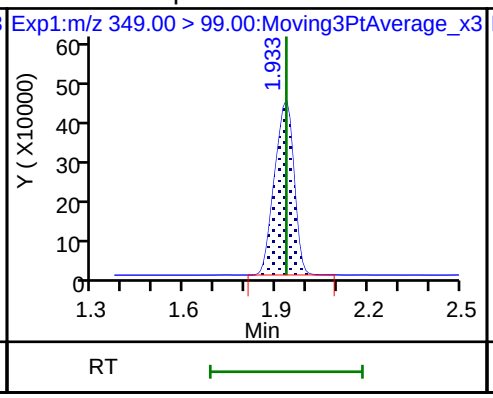
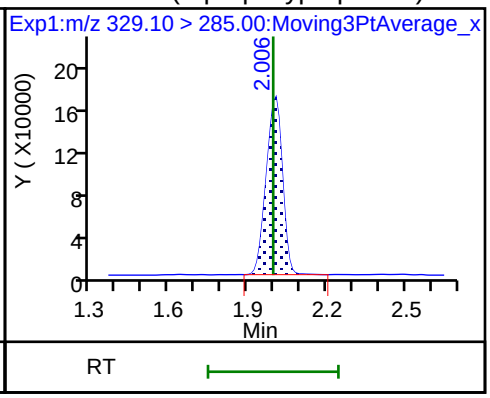
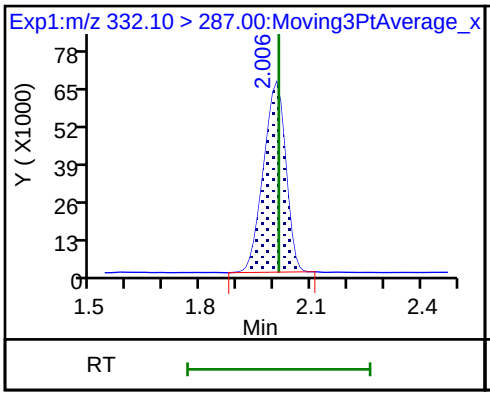


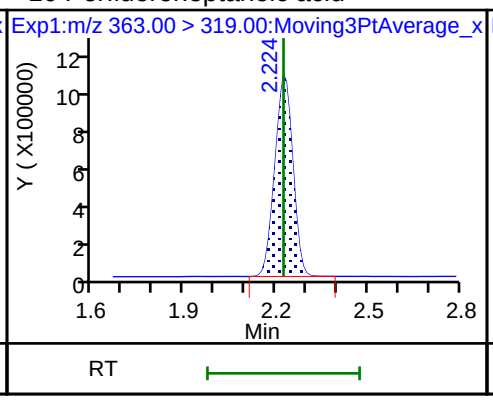
67 Perfluoro(2-propoxypropanoic) acid



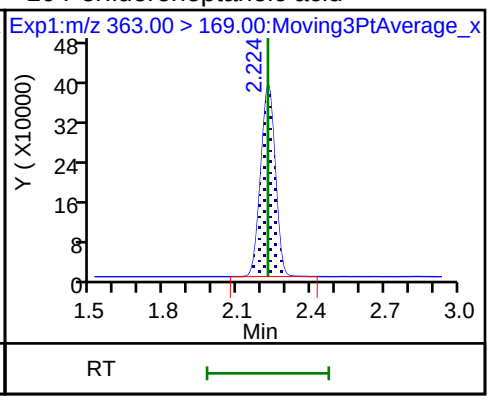
D 64 13C3 HFPO-DA



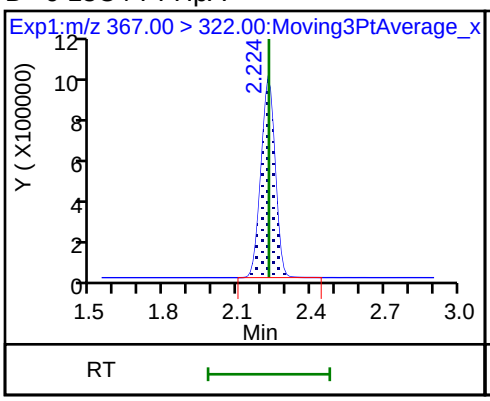
10 Perfluoroheptanoic acid



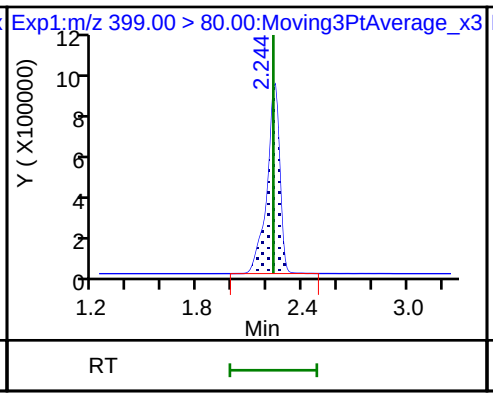
10 Perfluoroheptanoic acid



D 9 13C4-PFHpA



8 Perfluorohexanesulfonic acid



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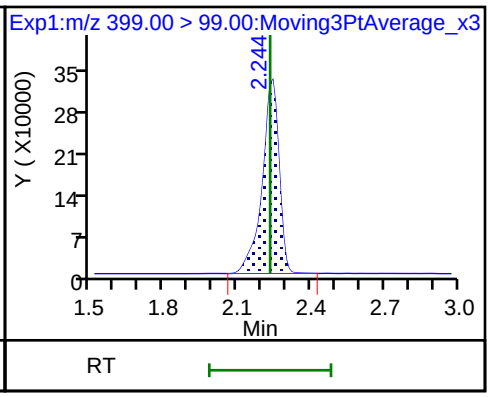
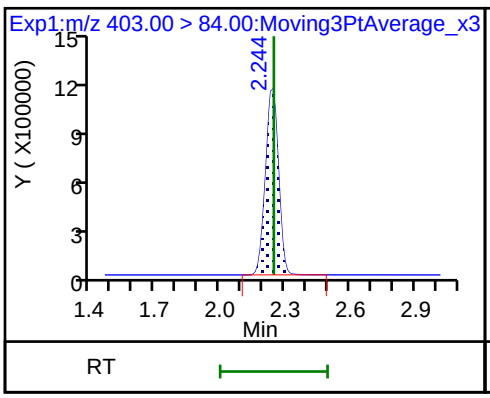
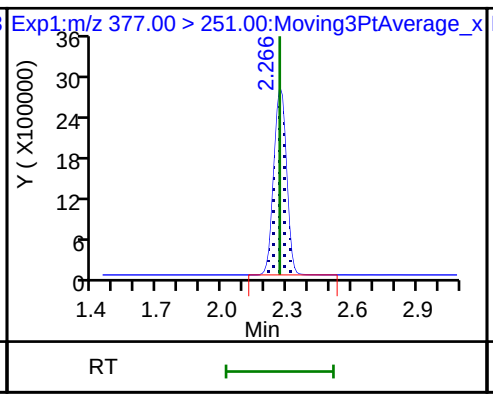


D 11 18O2 PFHxS



65 ADONA



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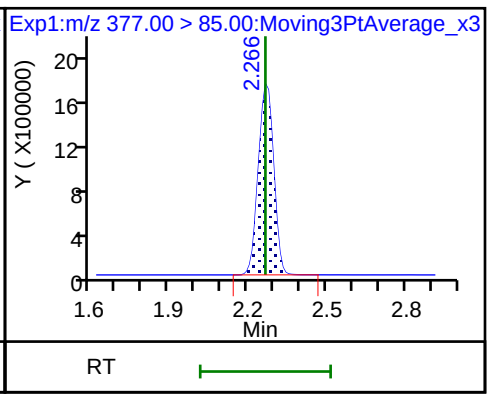
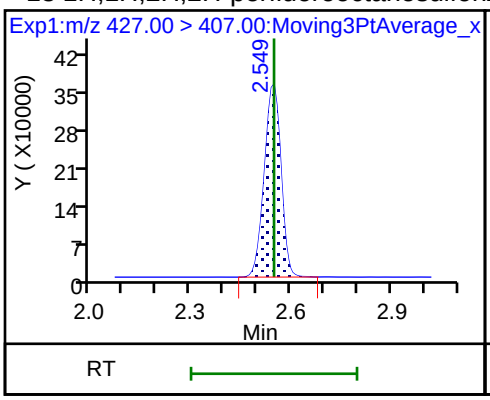
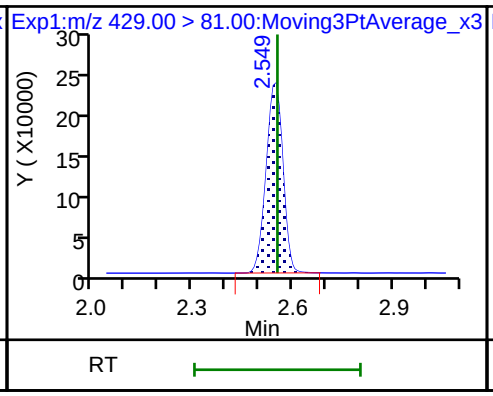


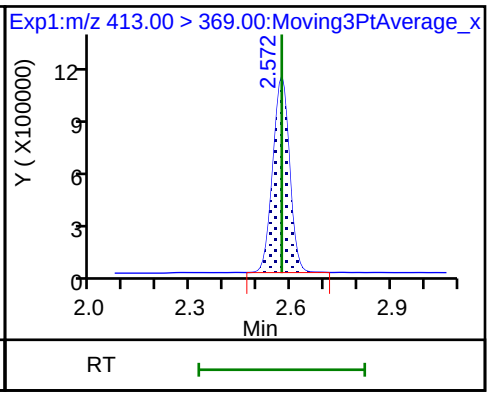
13 1H,1H,2H,2H-perfluorooctanesulfon



D 12 M2-6:2FTS



15 Perfluorooctanoic acid



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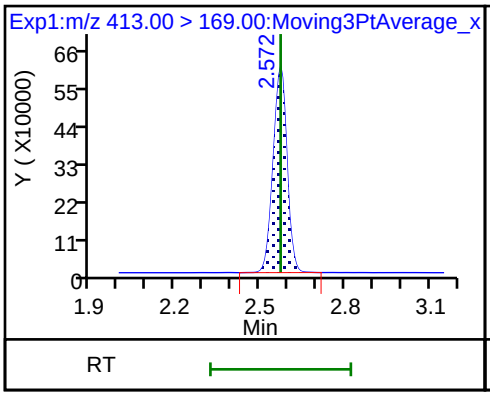
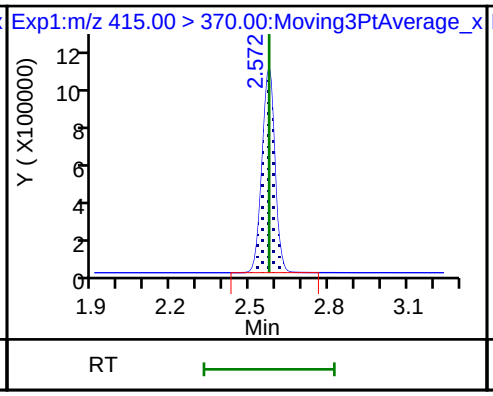
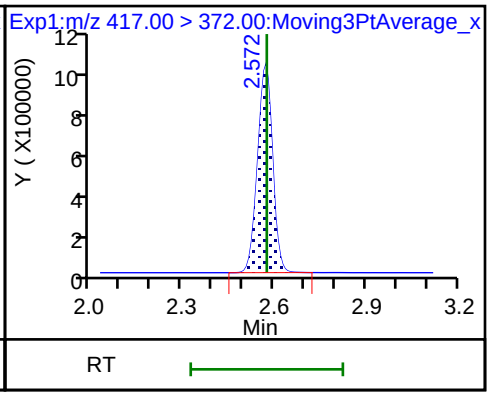


* 62 13C2-PFOA



D 14 13C4 PFOA



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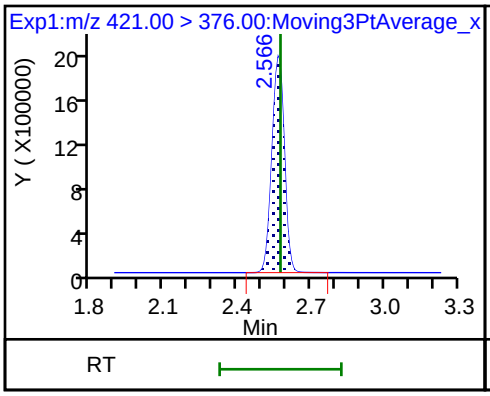
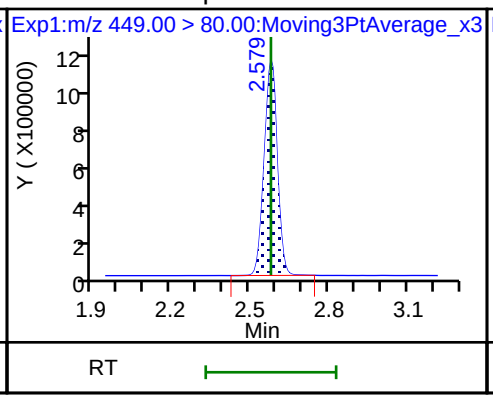
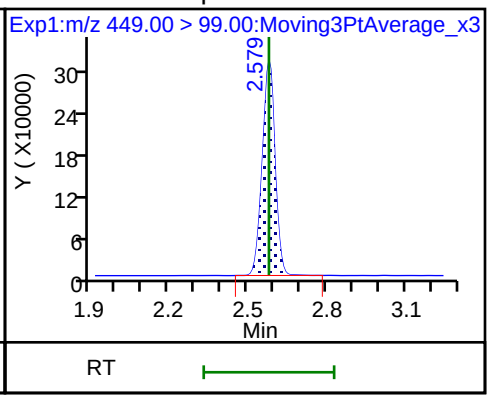


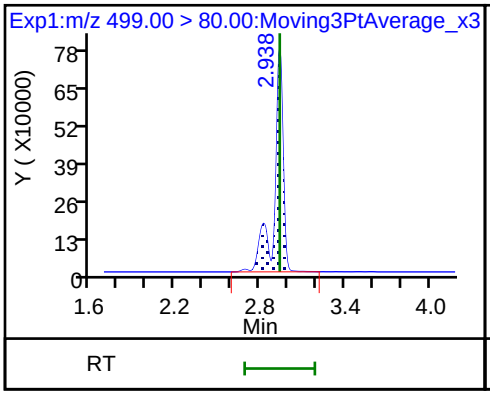
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



17 Perfluorooctane sulfonic acid



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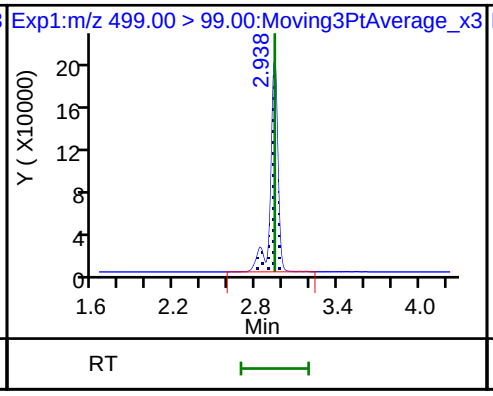
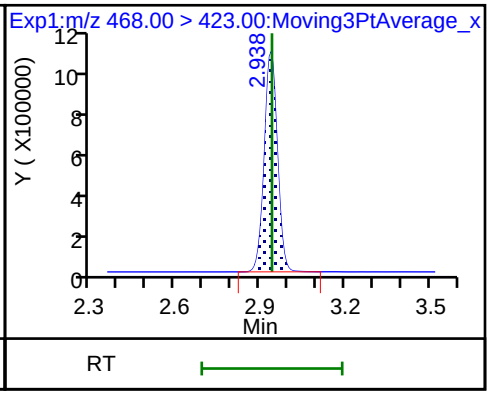


D 19 13C5 PFNA



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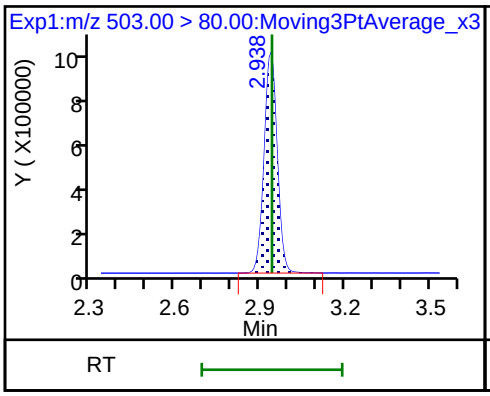

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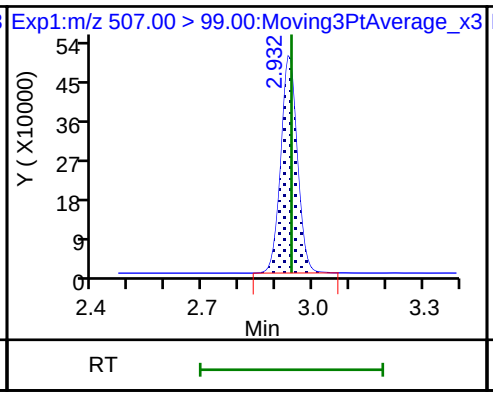
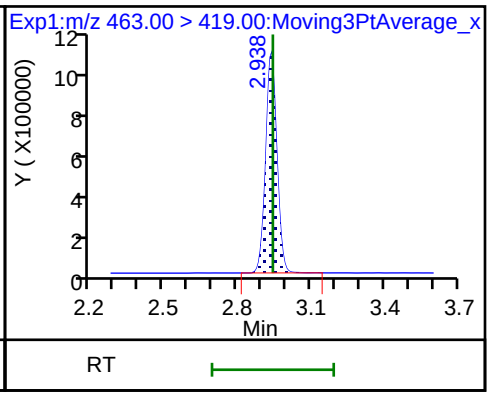


20 Perfluorononanoic acid



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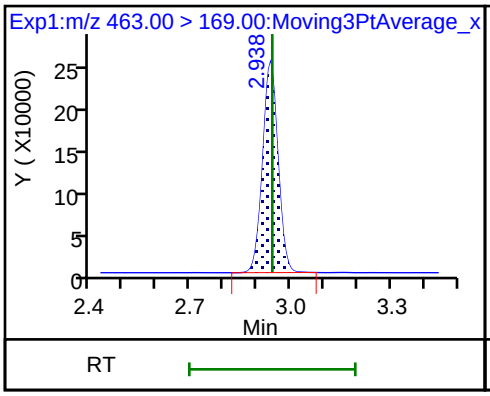
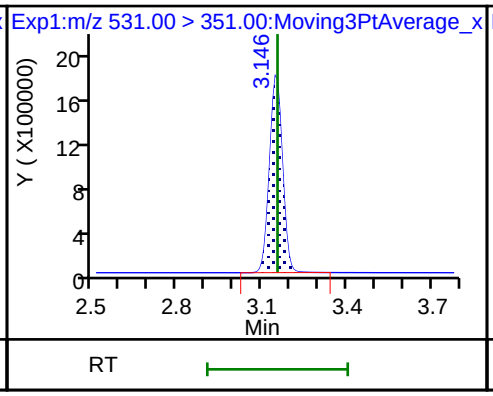
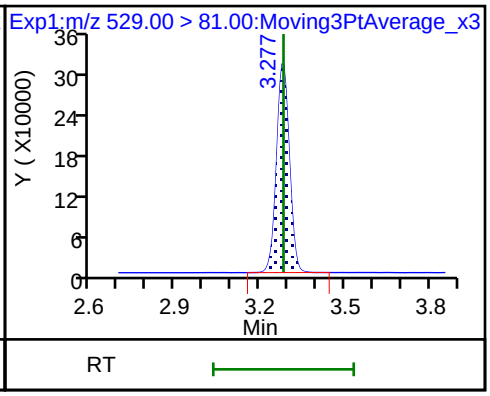


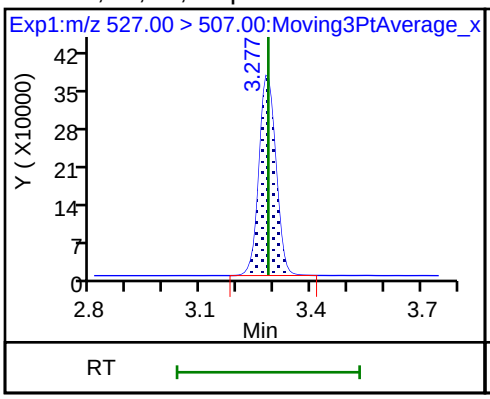
69 9-Chlorohexadecafluoro-3-oxanonane



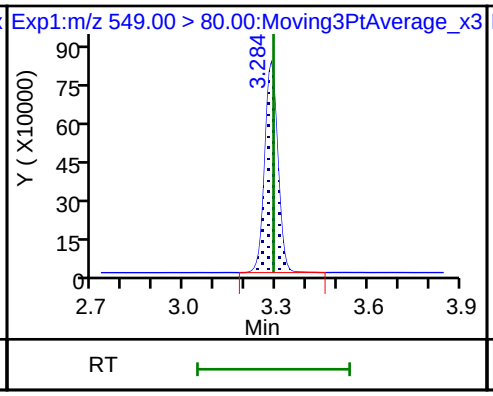
D 26 M2-8:2FTS



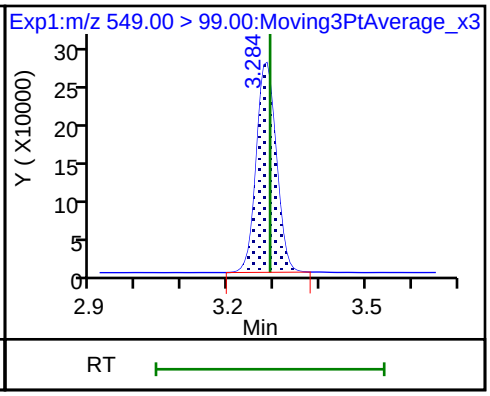
25 1H,1H,2H,2H-perfluorodecanesulfoni



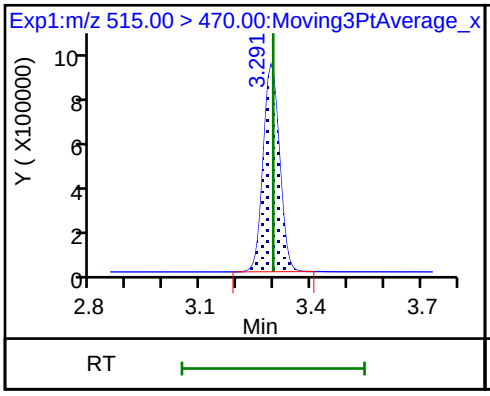
68 Perfluorononanesulfonic acid



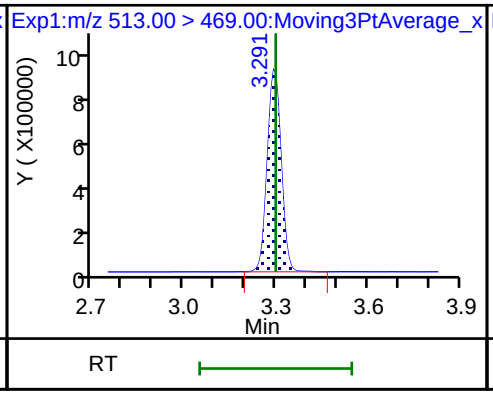
68 Perfluorononanesulfonic acid



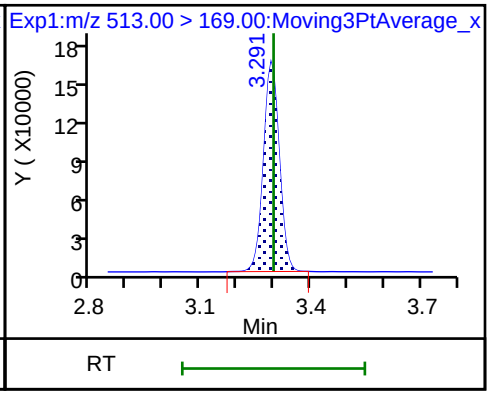
D 23 13C2 PFDA



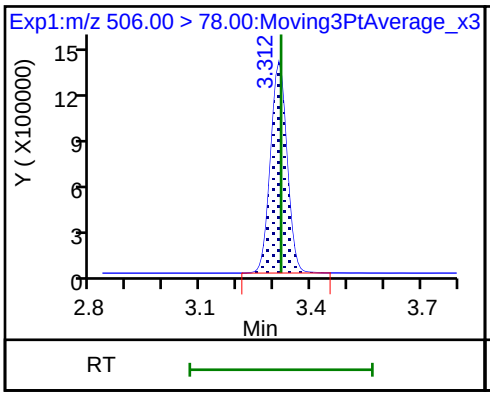
24 Perfluorodecanoic acid



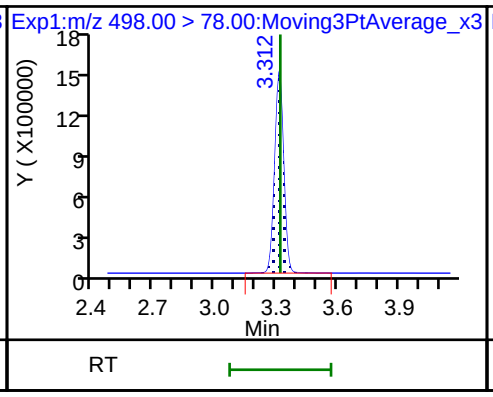
24 Perfluorodecanoic acid



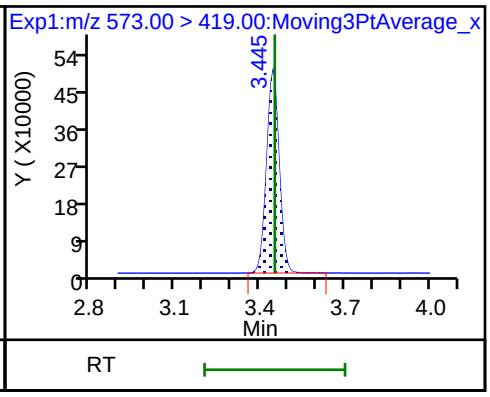
D 21 13C8 FOSA



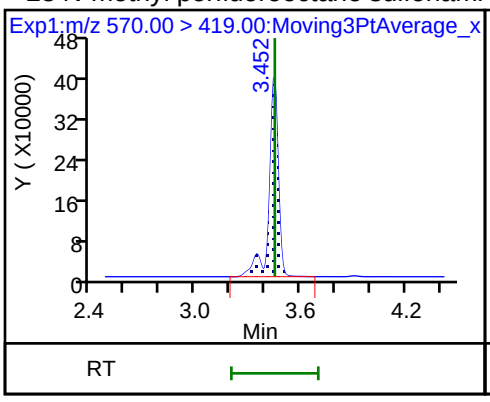
22 Perfluorooctane Sulfonamide



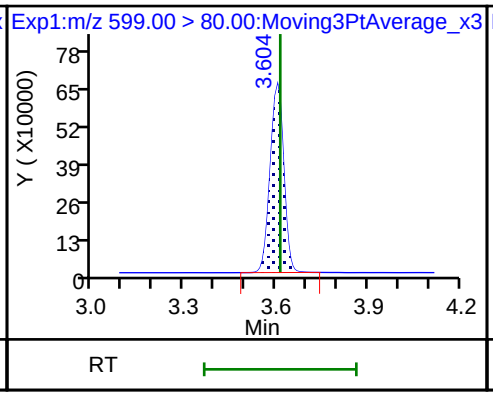
D 27 d3-NMeFOSAA



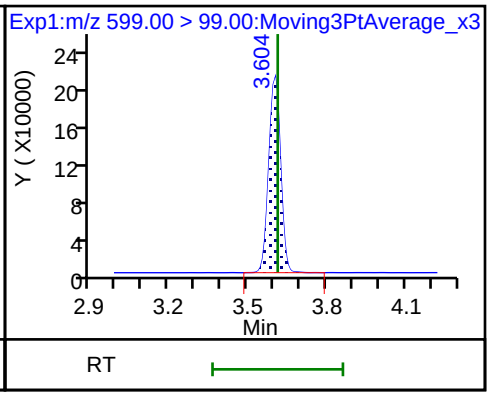
28 N-methyl perfluorooctane sulfonami



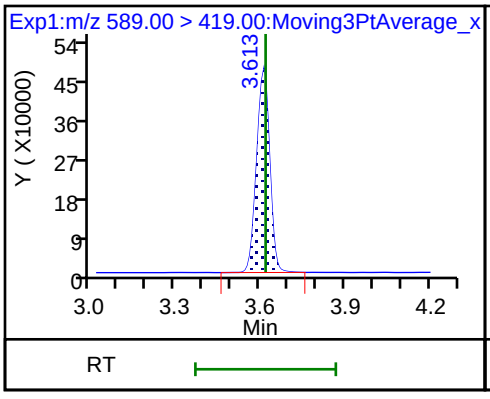
29 Perfluorodecane Sulfonic acid



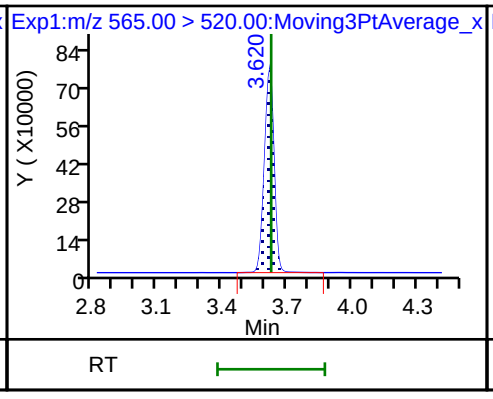
29 Perfluorodecane Sulfonic acid



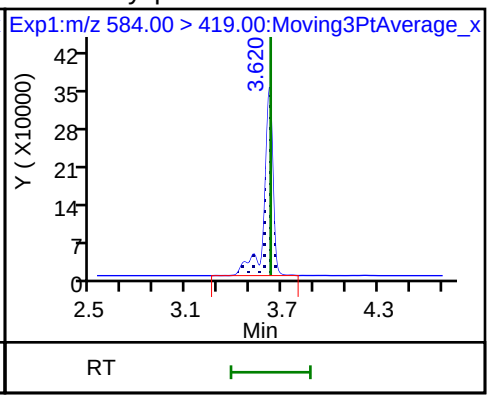
D 32 d5-NEtFOSAA



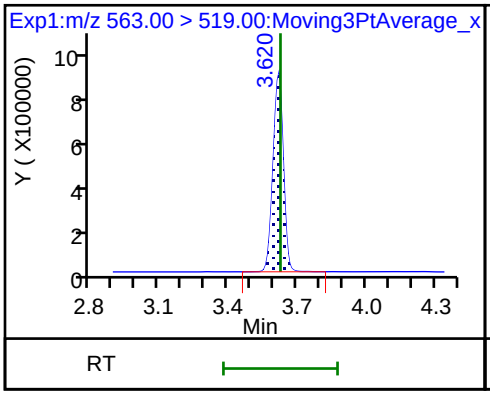
D 30 13C2 PFUnA



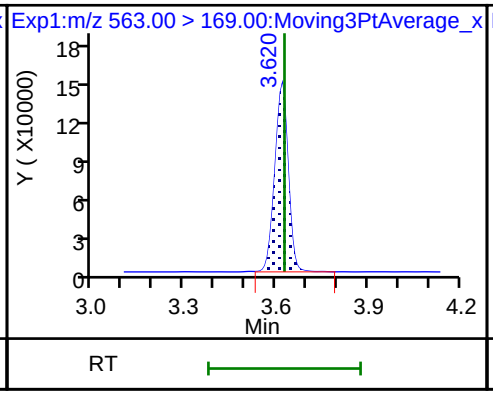
33 N-ethyl perfluorooctane sulfonamid



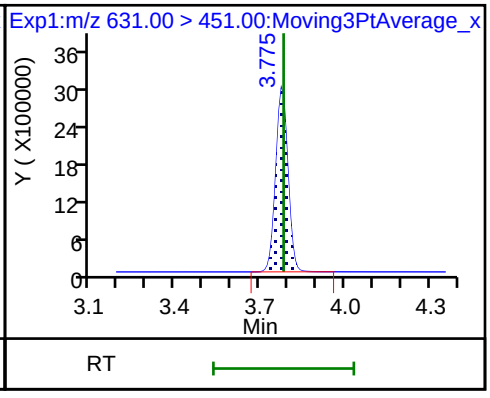
31 Perfluoroundecanoic acid



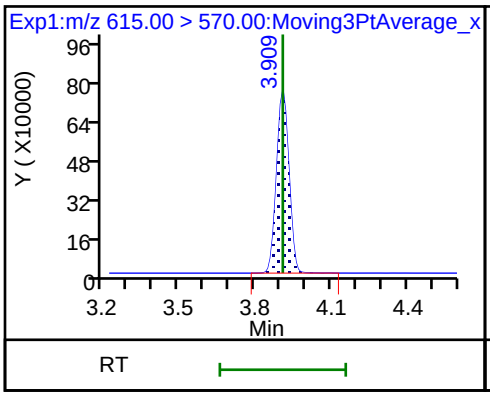
31 Perfluoroundecanoic acid



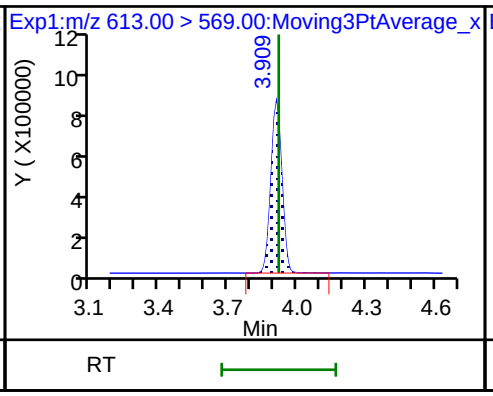
66 11-Chloroeicosafluoro-3-oxaundecan



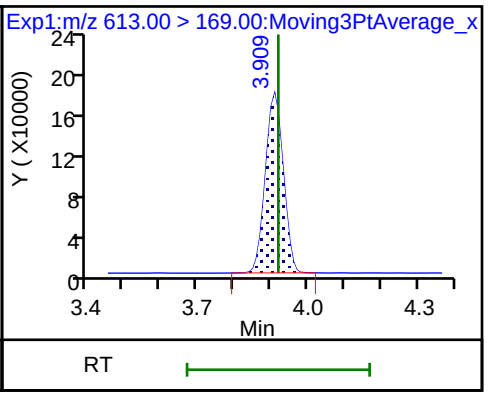
D 36 13C2 PFDoA



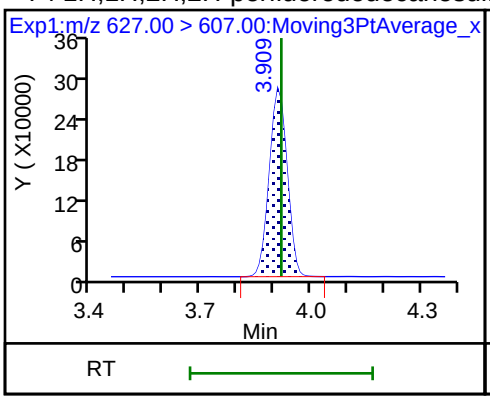
37 Perfluorododecanoic acid



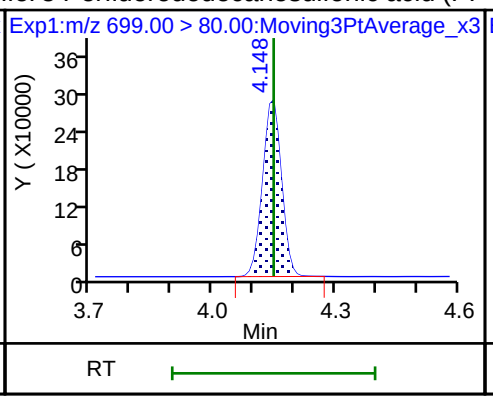
37 Perfluorododecanoic acid



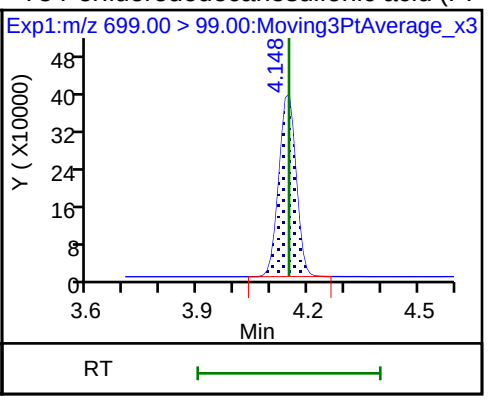
74 1H,1H,2H,2H-perfluorododecanesulfo



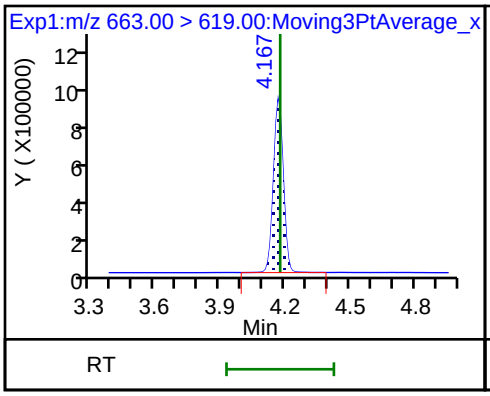
75 Perfluorododecanesulfonic acid (PF



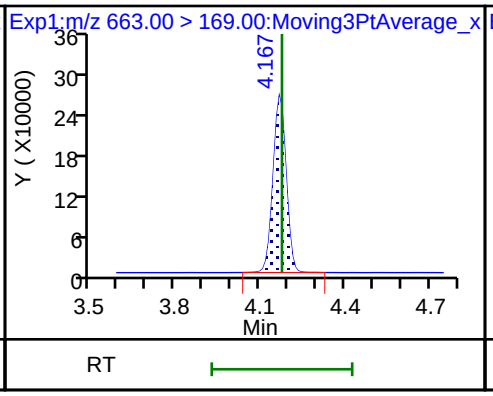
75 Perfluorododecanesulfonic acid (PF



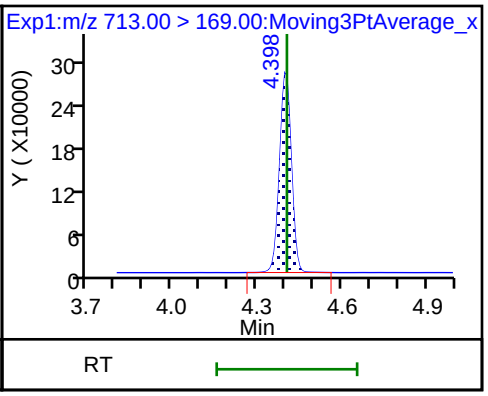
41 Perfluorotridecanoic acid



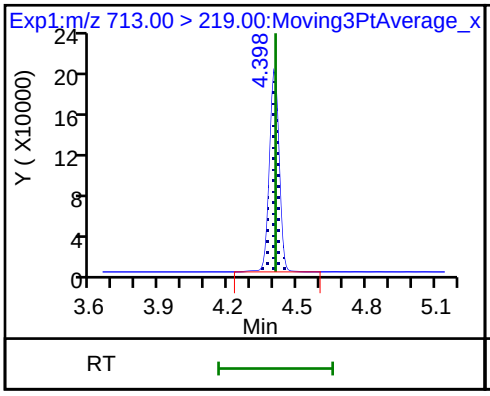
41 Perfluorotridecanoic acid



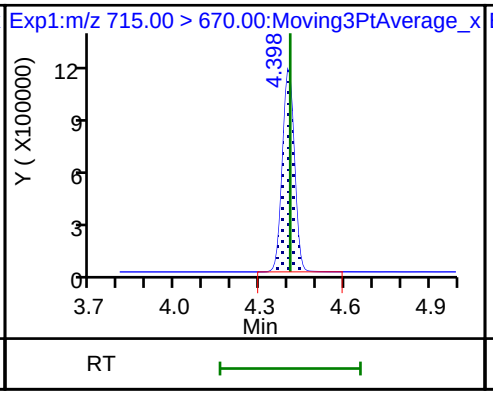
42 Perfluorotetradecanoic acid



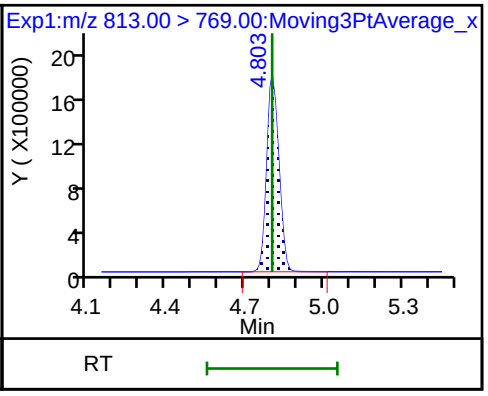
42 Perfluorotetradecanoic acid



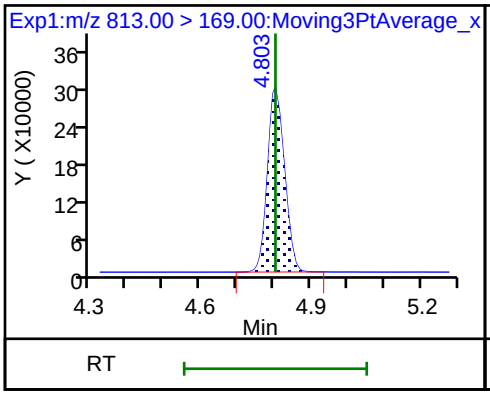
D 43 13C2-PFTeDA



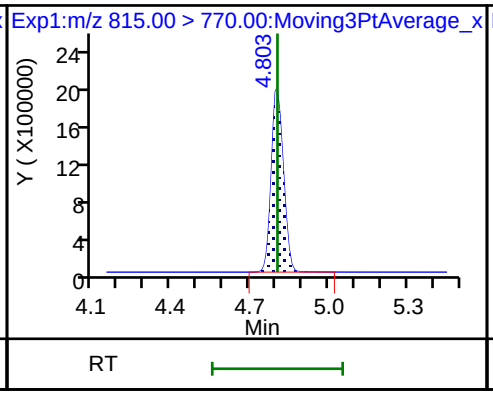
45 Perfluorohexadecanoic acid



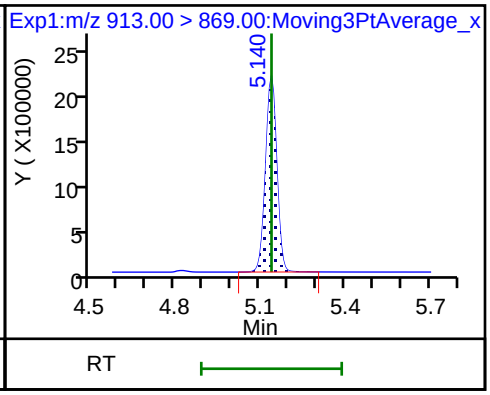
45 Perfluorohexadecanoic acid



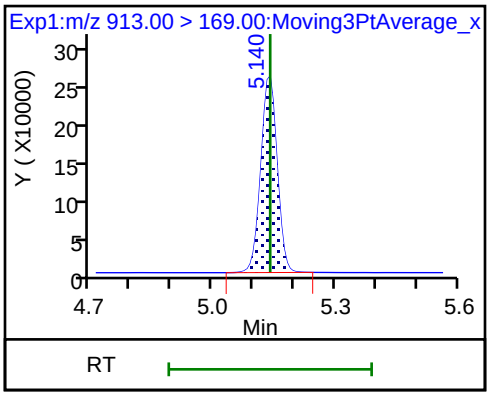
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-237151/1-A

Matrix: Water | Lab File ID: 2018.08.03LLC_006.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 250(mL) | Date Analyzed: 08/04/2018 00:04

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.239	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2 FTS	ND		20	2.0
39108-34-4	8:2 FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-237151/1-A

Matrix: Water | Lab File ID: 2018.08.03LLC_006.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 250(mL) | Date Analyzed: 08/04/2018 00:04

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	80		25-150
STL01893	13C5 PFPeA	90		25-150
STL00993	13C2 PFHxA	96		25-150
STL01892	13C4-PFHpA	96		25-150
STL00990	13C4 PFOA	91		25-150
STL00995	13C5 PFNA	94		25-150
STL00996	13C2 PFDA	98		25-150
STL00997	13C2 PFUnA	93		25-150
STL00998	13C2 PFDoA	92		25-150
STL02116	13C2-PFTeDA	92		25-150
STL02337	13C3-PFBS	83		25-150
STL00994	18O2 PFHxS	94		25-150
STL00991	13C4 PFOS	88		25-150
STL01056	13C8 FOSA	81		25-150
STL02118	d3-NMeFOSAA	85		25-150
STL02117	d5-NEtFOSAA	90		25-150
STL02279	M2-6:2FTS	94		25-150
STL02280	M2-8:2FTS	101		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_006.d
Lims ID: MB 320-237151/1-A
Client ID:
Sample Type: MB
Inject. Date: 04-Aug-2018 00:04:09 ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-237151/1-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 10:57:16 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK036

First Level Reviewer: hannigana Date: 06-Aug-2018 10:38:04

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.385	1.391	-0.006	0.540	4575920	1.99		79.6	128736	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.391	1.396	-0.005	1.004	8529	0.004728			2.9	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.625	1.632	-0.007	0.634	3407417	2.25		90.0	79834	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.625	1.632	-0.007	1.000	8519	0.005220			3.2	M
D 47 13C3-PFBS										
301.90 > 83.00	1.656	1.665	-0.009	0.646	84305	1.94		83.3	625	
D 7 13C2 PFHxA										
315.00 > 270.00	1.895	1.905	-0.010	0.739	3943216	2.41		96.3	96378	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.991	1.991	0.0	0.777	236296	3.08		123	9085	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.217	0.0	0.865	3810292	2.40		96.0	76343	
D 11 18O2 PFHxS										
403.00 > 84.00	2.229	2.228	0.001	0.869	5292933	2.22		93.8	86110	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.229	2.229	0.0	1.000	15468	0.005979			91.4	
399.00 > 99.00	2.229	2.229	0.0	1.000	4266		3.63(1.50-4.49)		11.9	
D 12 M2-6:2FTS										
429.00 > 81.00	2.536	2.545	-0.009	0.989	1042090	2.24		94.3	19351	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.546	2.546	0.0	1.004	17344	0.0239			659	
* 62 13C2-PFOA										
415.00 > 370.00	2.564	2.564	0.0		3993576	2.50			65606	
D 14 13C4 PFOA										
417.00 > 372.00	2.564	2.572	-0.008	1.000	3506985	2.29		91.5	57598	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.572	2.572	0.0	1.003	4742	0.002924			3.9	
413.00 > 169.00	2.564	2.572	-0.008	1.000	3993		1.19(0.84-2.52)		29.8	M
D 19 13C5 PFNA										
468.00 > 423.00	2.926	2.931	-0.005	1.141	3147588	2.36		94.2	80950	
D 18 13C4 PFOS										
503.00 > 80.00	2.926	2.931	-0.005	1.141	3471321	2.11		88.1	50214	
D 26 M2-8:2FTS										
529.00 > 81.00	3.276	3.276	0.0	1.278	1100774	2.43		101	23223	
D 23 13C2 PFDA										
515.00 > 470.00	3.283	3.283	0.0	1.280	2437447	2.44		97.6	51293	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.307	3.307	0.0	1.000	2180	0.001121			89.0	
D 21 13C8 FOSA										
506.00 > 78.00	3.307	3.314	-0.007	1.290	4926040	2.03		81.4	60221	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.439	3.439	0.0	1.341	516549	2.13		85.2	18902	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.601	3.611	-0.010	1.404	585486	2.25		90.1	4053	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.611	0.0	1.408	1784117	2.32		92.7	37372	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.764	3.770	-0.006	1.286	2714	0.000768			89.6	
D 36 13C2 PFDoA										
615.00 > 570.00	3.900	3.909	-0.009	1.521	1538424	2.31		92.3	19996	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.395	4.394	0.001	1.714	1284750	2.30		91.9	5567	
45 Perfluorohexadecanoic acid										M
813.00 > 769.00	4.787	4.795	-0.008	1.000	22533	0.009253			1.0	M
813.00 > 169.00	4.796	4.795	0.001	1.002	2765		8.15(2.86-8.58)		34.5	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.787	4.796	-0.009	1.867	1783814	1.85		74.0	2573	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 06-Aug-2018 11:00:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_006.d

Injection Date: 04-Aug-2018 00:04:09 Instrument ID: A8_N

Lims ID: MB 320-237151/1-A

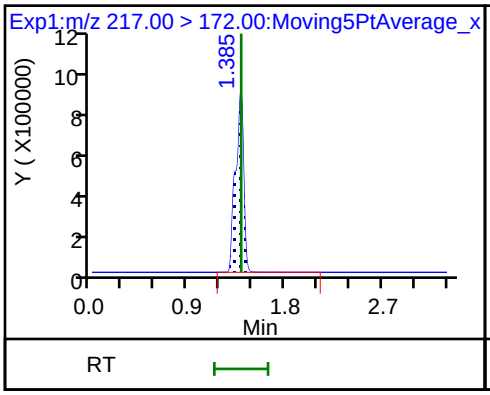
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 1 Worklist Smp#: 4

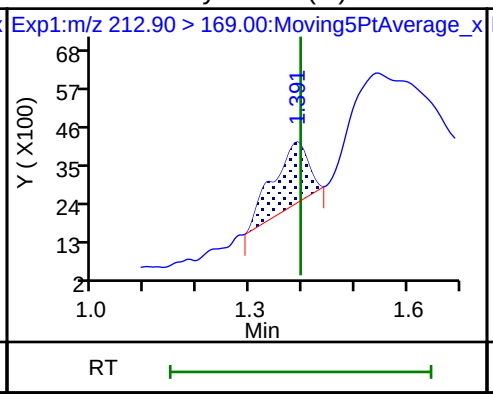
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

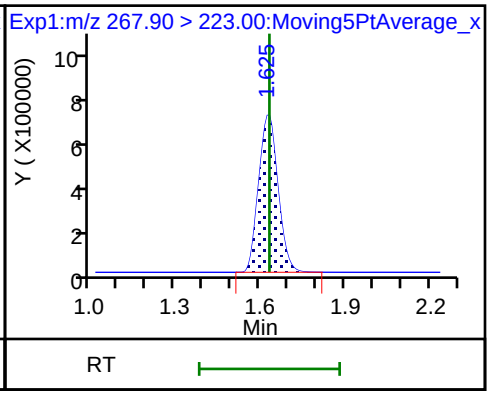
D 1 13C4 PFBA



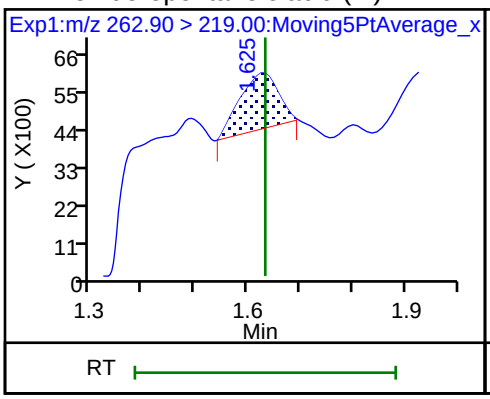
2 Perfluorobutyric acid (M)



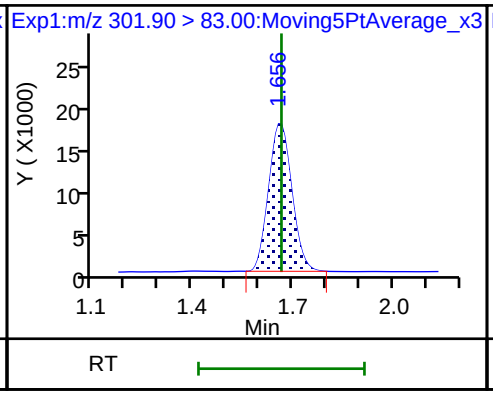
D 3 13C5-PFPeA



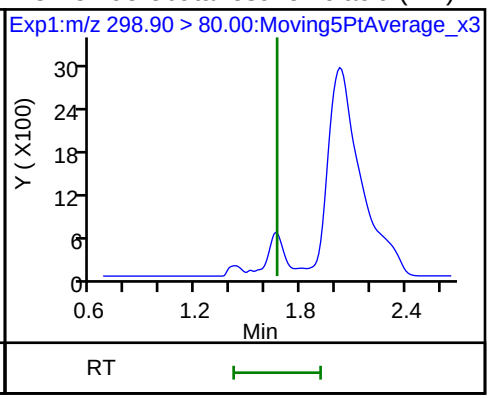
4 Perfluoropentanoic acid (M)



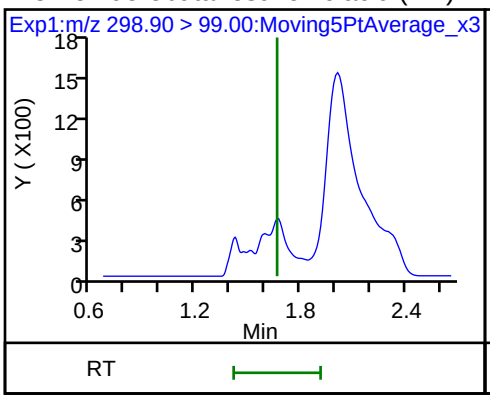
D 47 13C3-PFBS



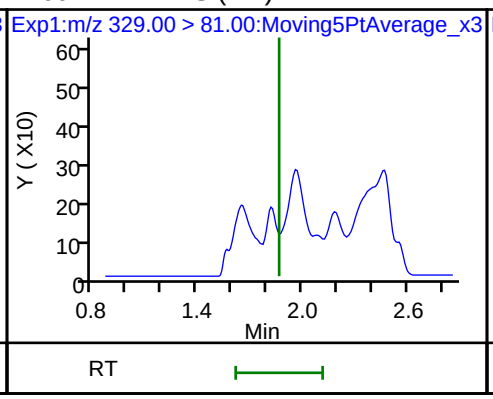
5 Perfluorobutanesulfonic acid (ND)



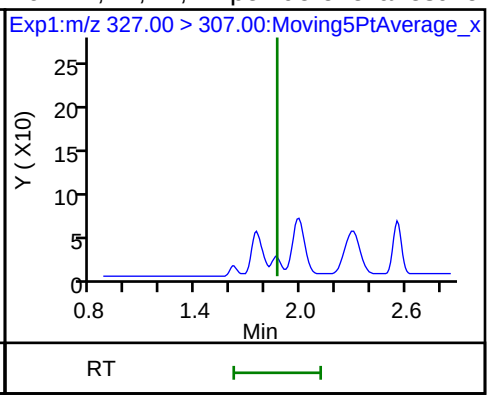
5 Perfluorobutanesulfonic acid (ND)



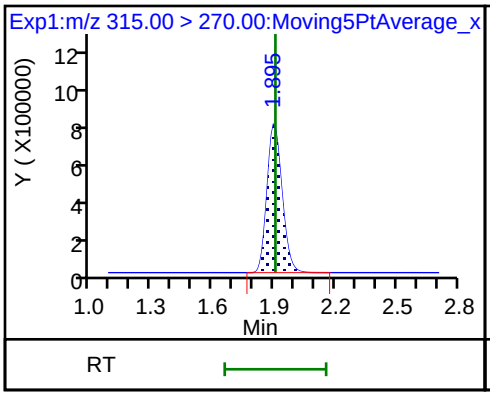
D 60 M2-4:2FTS (ND)



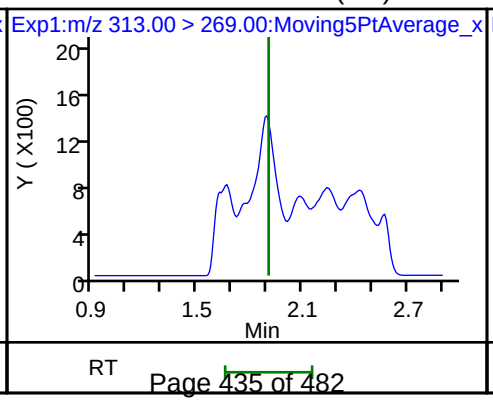
61 1H,1H,2H,2H-perfluorohexanesulfoni (ND)



D 7 13C2 PFHxA



6 Perfluorohexanoic acid (ND)



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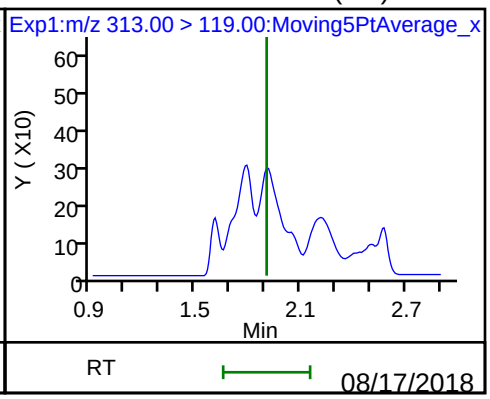
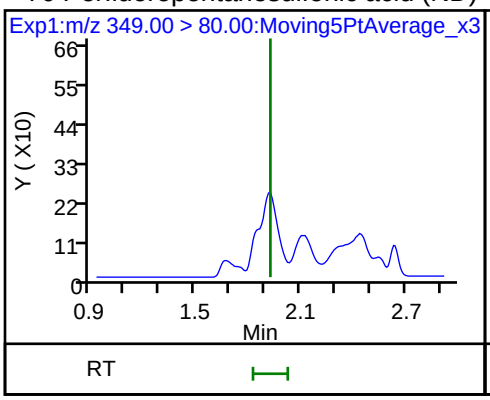
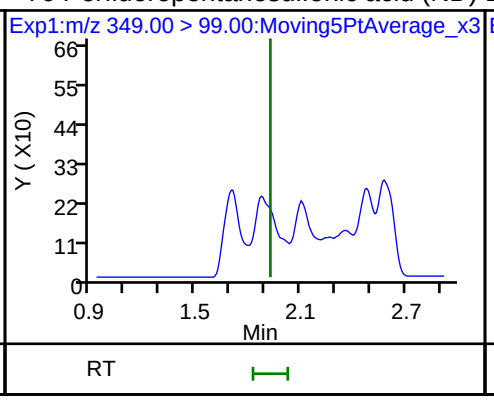
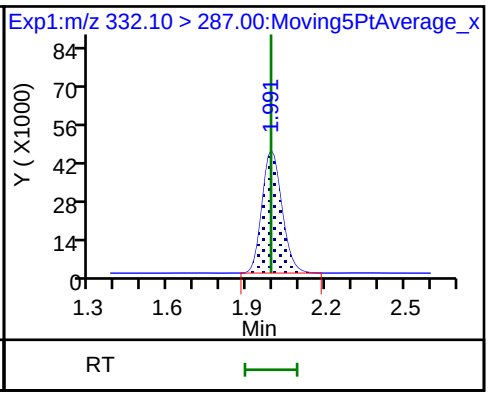


70 Perfluoropentanesulfonic acid (ND)

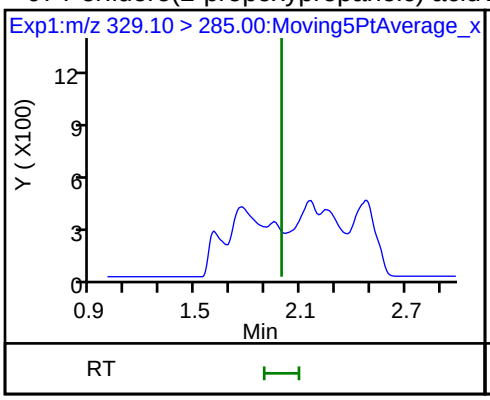


70 Perfluoropentanesulfonic acid (ND) D 64 13C3 HFPO-DA

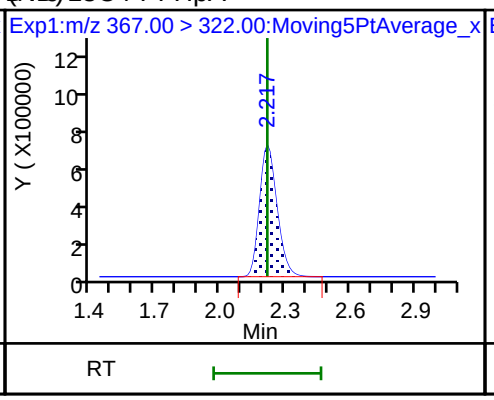




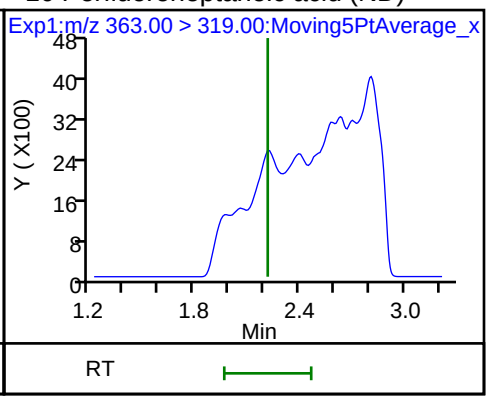
67 Perfluoro(2-propoxypropanoic) acid (ND)



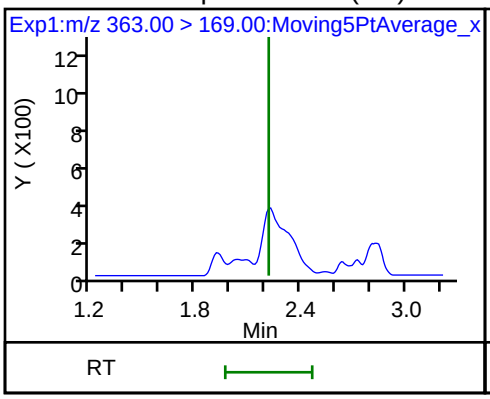
D 9 13C4-PFHpA



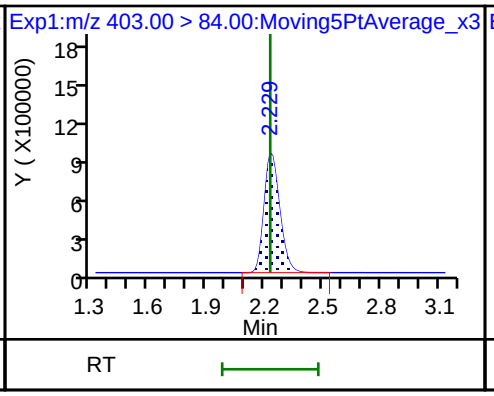
10 Perfluoroheptanoic acid (ND)



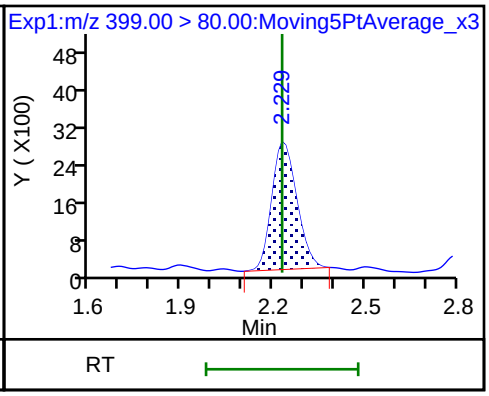
10 Perfluoroheptanoic acid (ND)



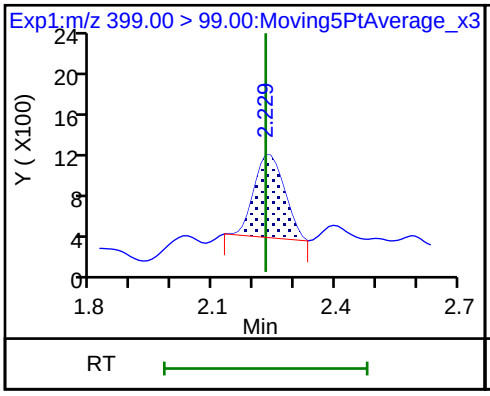
D 11 18O2 PFHxS



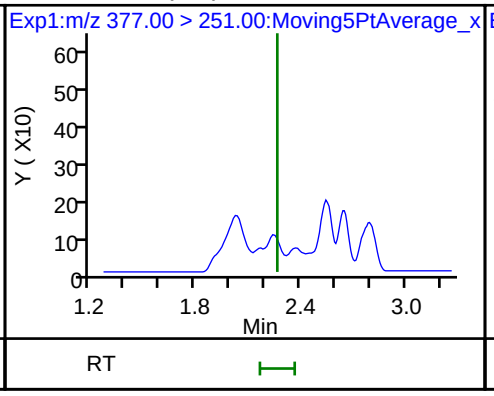
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



65 ADONA (ND)



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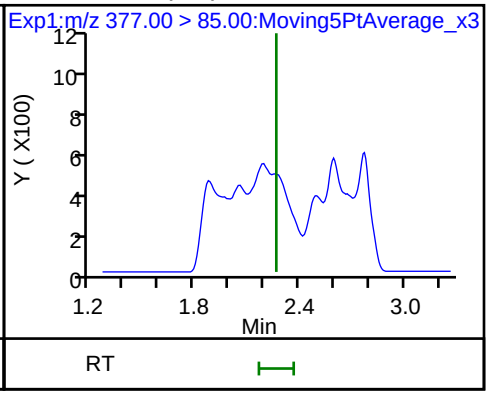
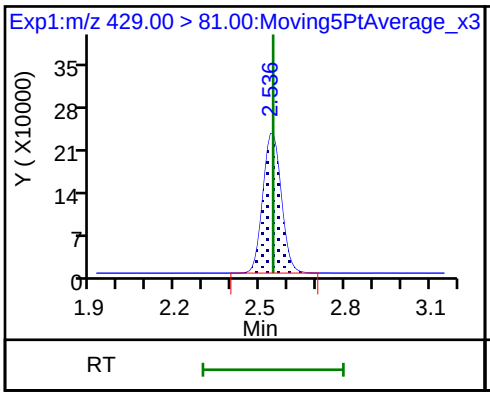
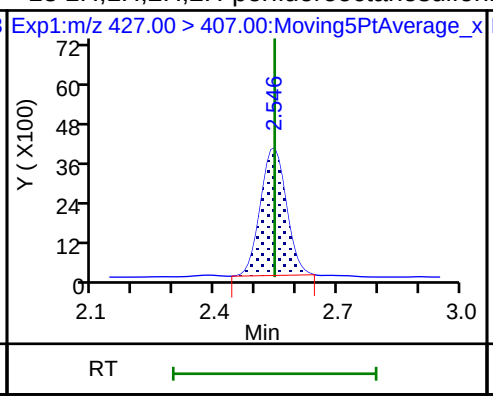
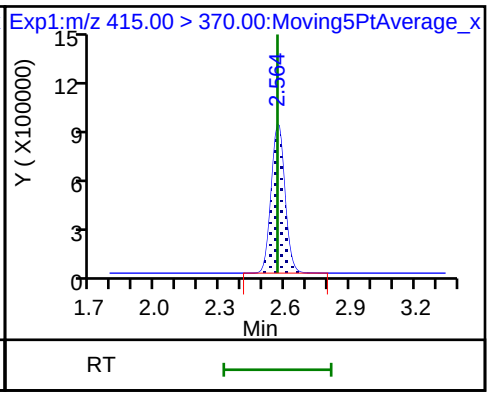


D 12 M2-6:2FTS

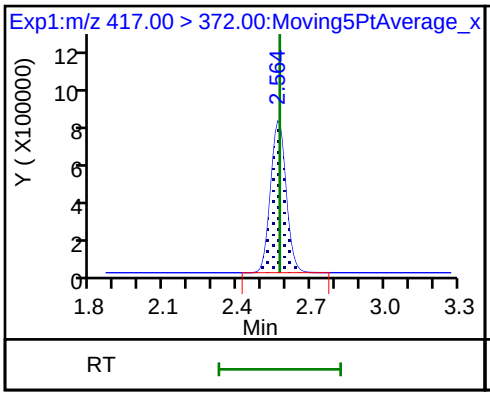


13 1H,1H,2H,2H-perfluorooctanesulfoni* 62 13C2-PFOA

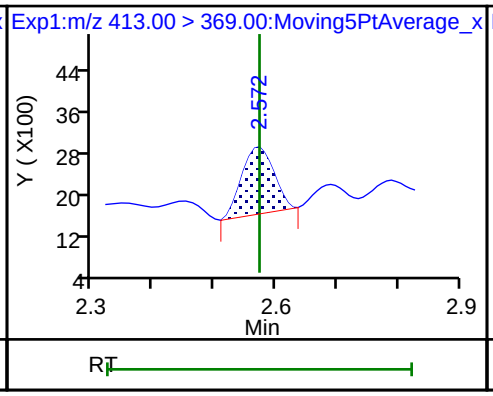




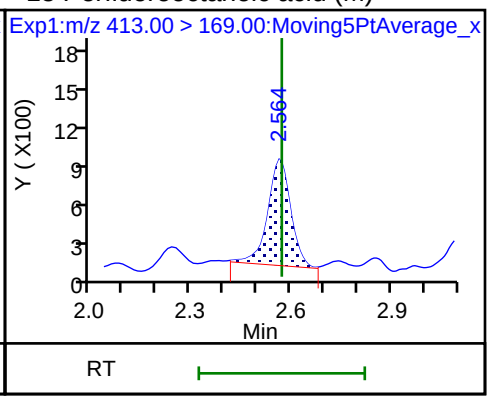
D 14 13C4 PFOA



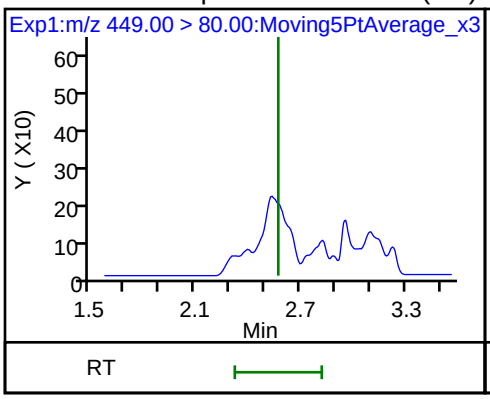
15 Perfluorooctanoic acid



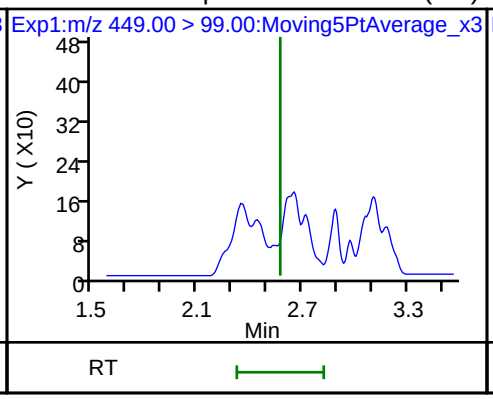
15 Perfluorooctanoic acid (M)



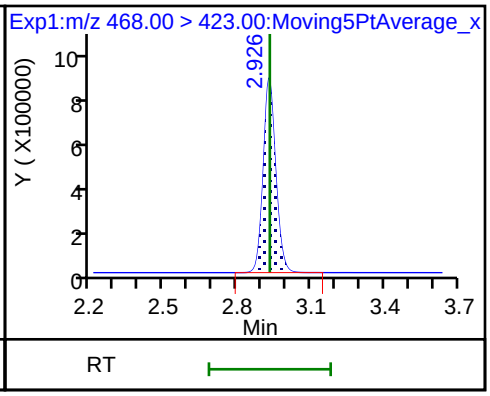
16 Perfluoroheptanesulfonic acid (ND)



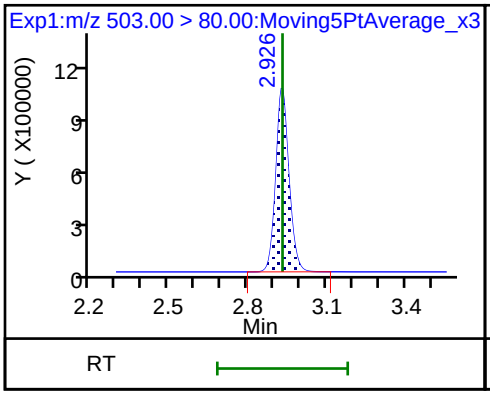
16 Perfluoroheptanesulfonic acid (ND)



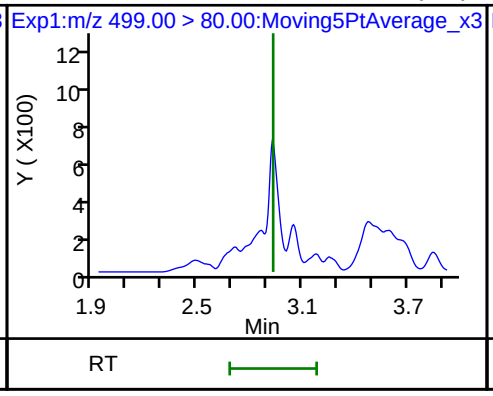
D 19 13C5 PFNA



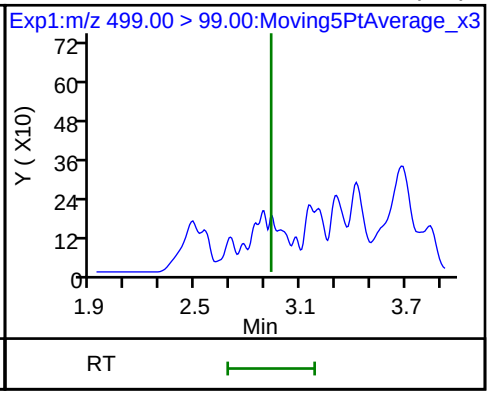
D 18 13C4 PFOS



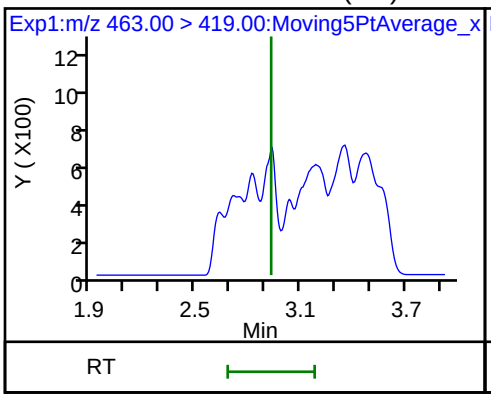
17 Perfluorooctane sulfonic acid (ND)



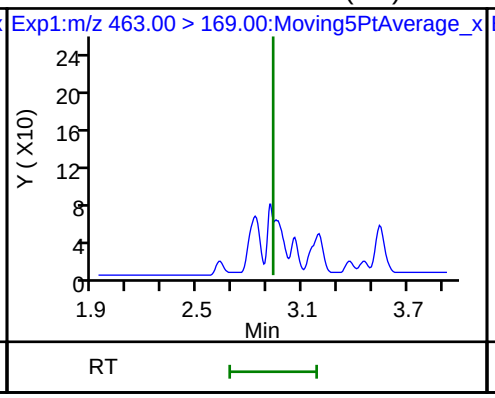
17 Perfluorooctane sulfonic acid (ND)



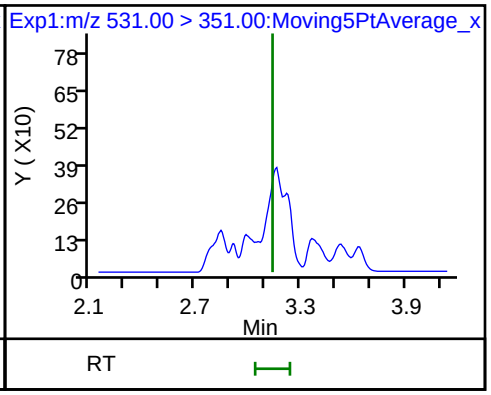
20 Perfluorononanoic acid (ND)



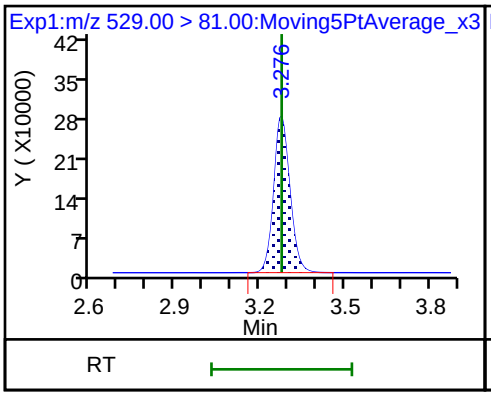
20 Perfluorononanoic acid (ND)



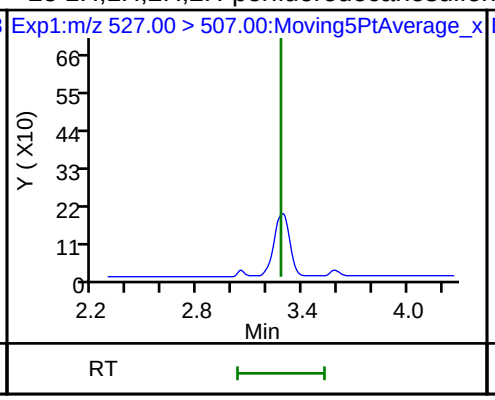
69 9-Chlorohexadecafluoro-3-oxanonane (ND)



D 26 M2-8:2FTS

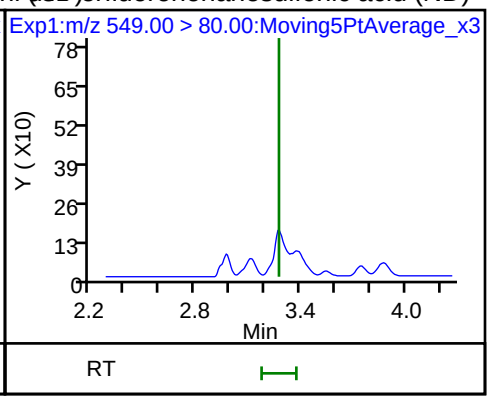


25 1H,1H,2H,2H-perfluorodecanesulfoni

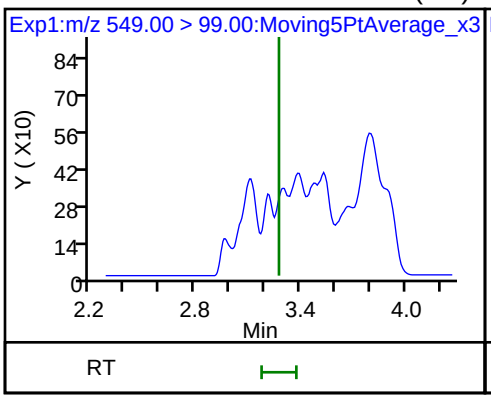


(ND)

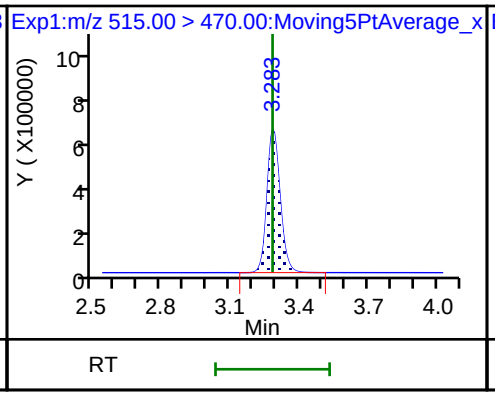
67 Perfluorononanesulfonic acid (ND)



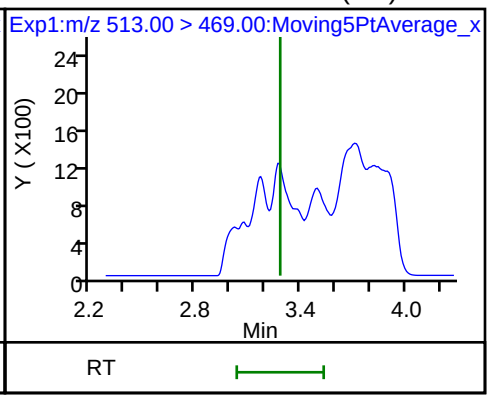
68 Perfluorononanesulfonic acid (ND)



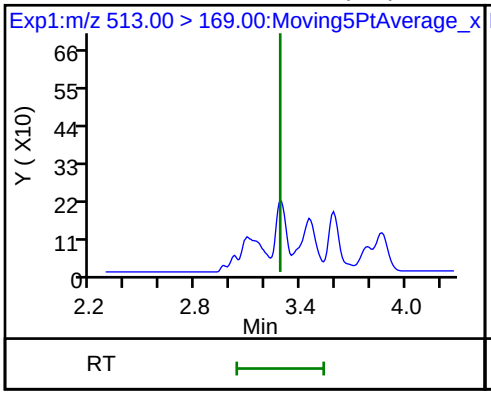
D 23 13C2 PFDA



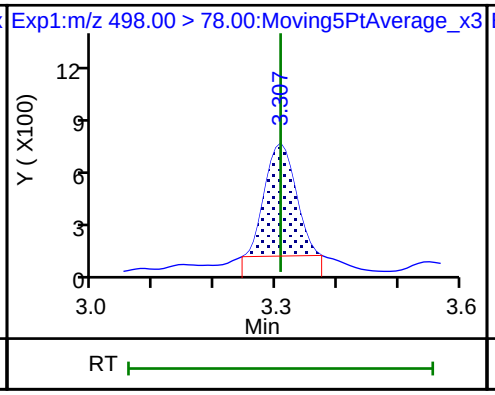
24 Perfluorodecanoic acid (ND)



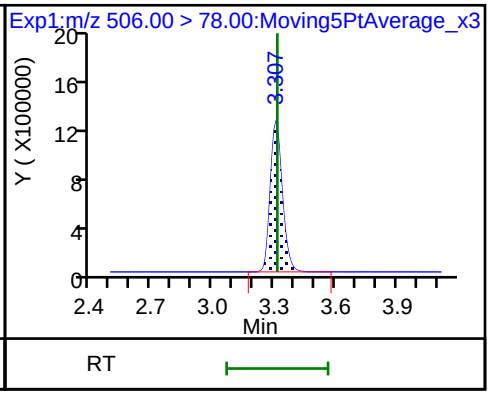
24 Perfluorodecanoic acid (ND)



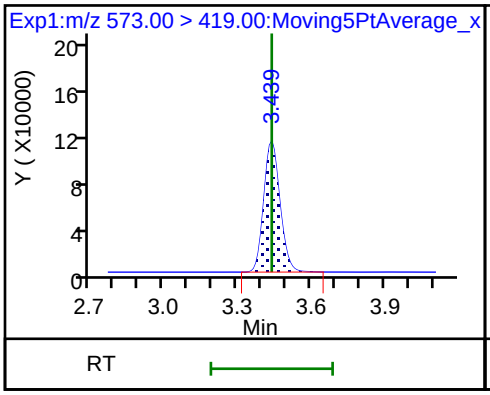
22 Perfluorooctane Sulfonamide



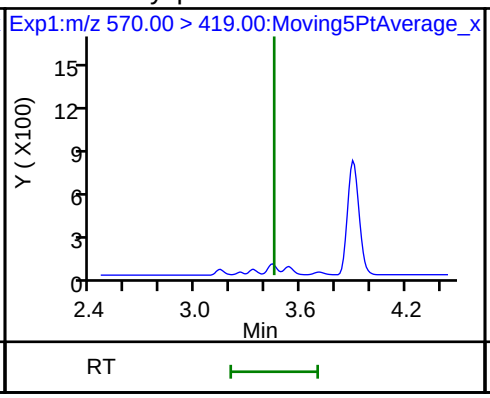
D 21 13C8 FOSA



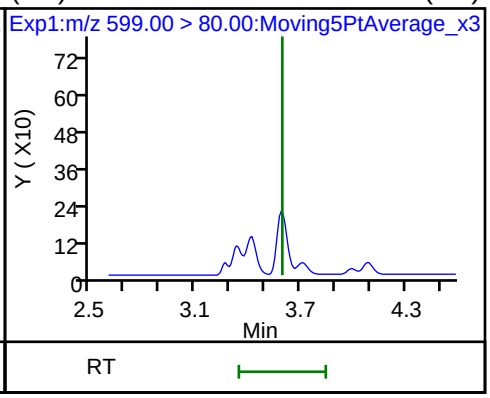
D 27 d3-NMeFOSAA



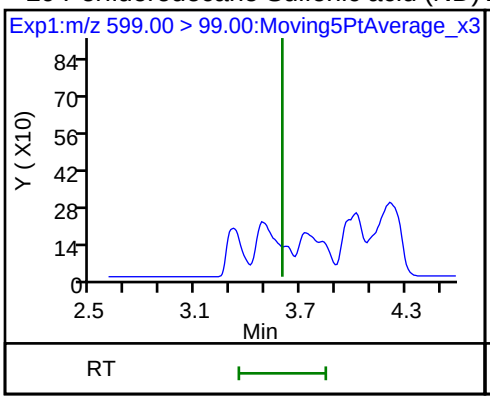
28 N-methyl perfluorooctane sulfonami (ND)



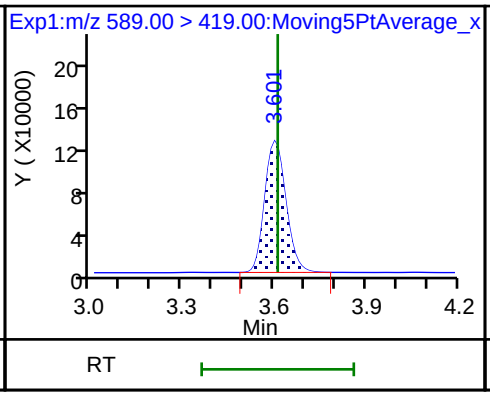
29 Perfluorodecane Sulfonic acid (ND)



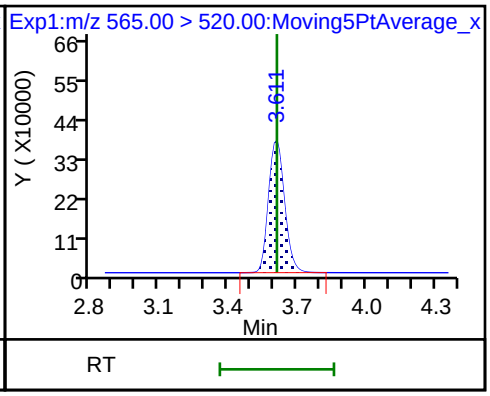
29 Perfluorodecane Sulfonic acid (ND)



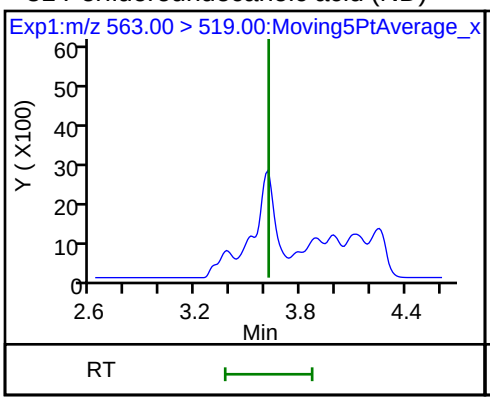
D 32 d5-NEtFOSAA



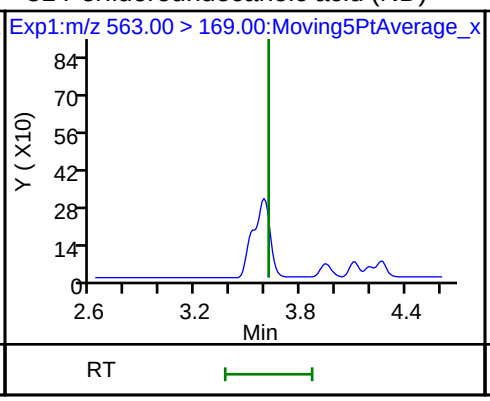
D 30 13C2 PFUnA



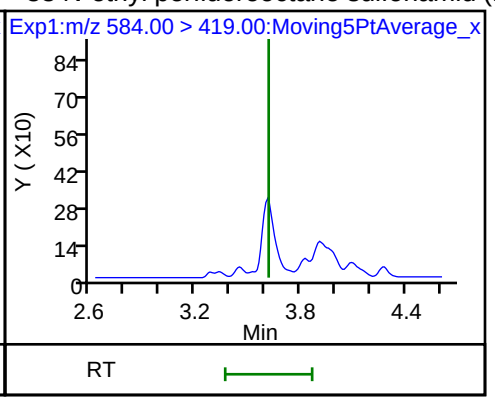
31 Perfluoroundecanoic acid (ND)



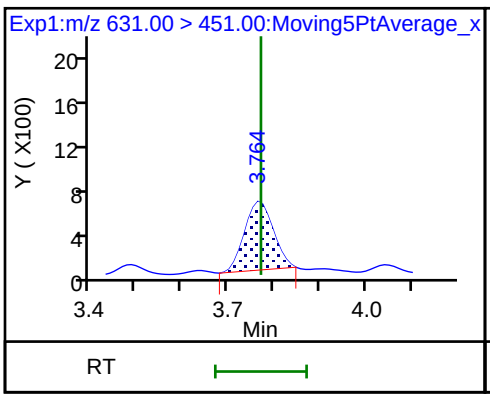
31 Perfluoroundecanoic acid (ND)



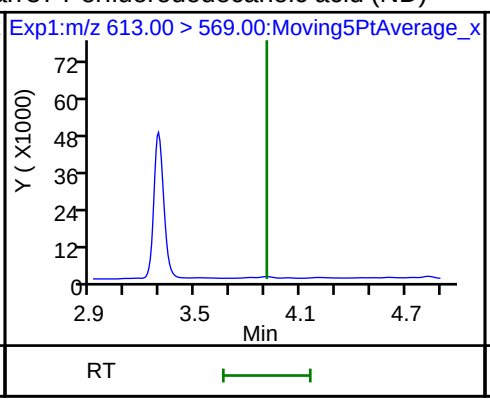
33 N-ethyl perfluorooctane sulfonamid (ND)



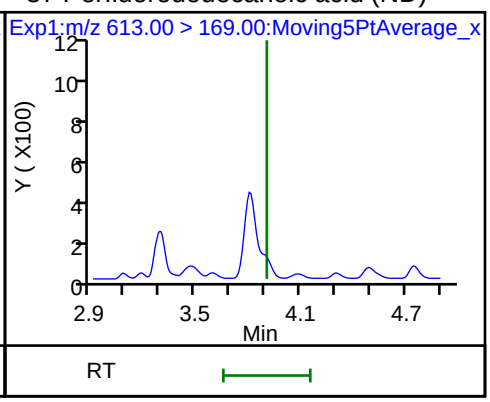
66 11-Chloroeicosafluoro-3-oxaundecan



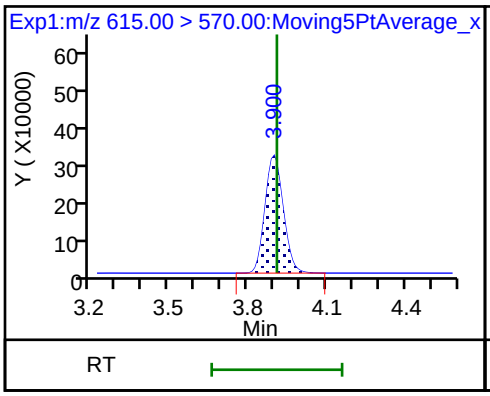
37 Perfluorododecanoic acid (ND)



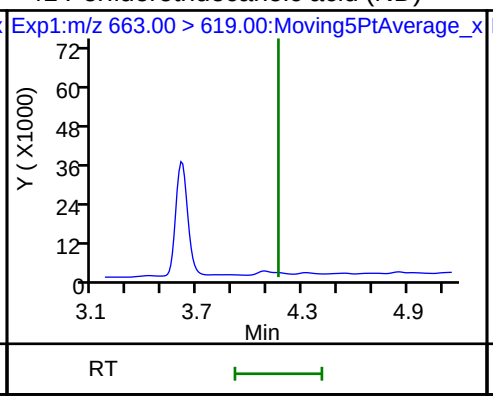
37 Perfluorododecanoic acid (ND)



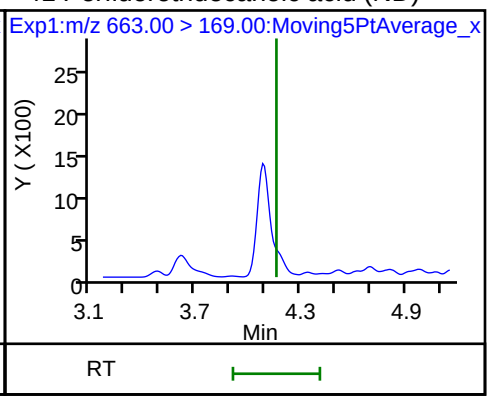
D 36 13C2 PFDoA



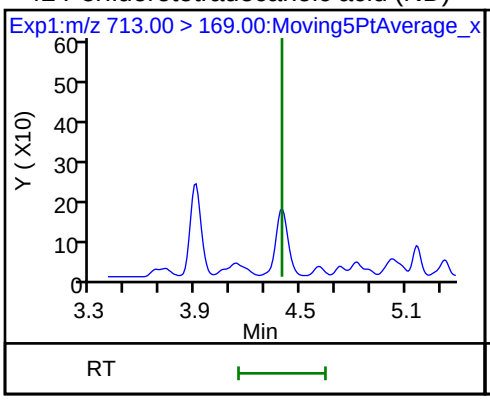
41 Perfluorotridecanoic acid (ND)



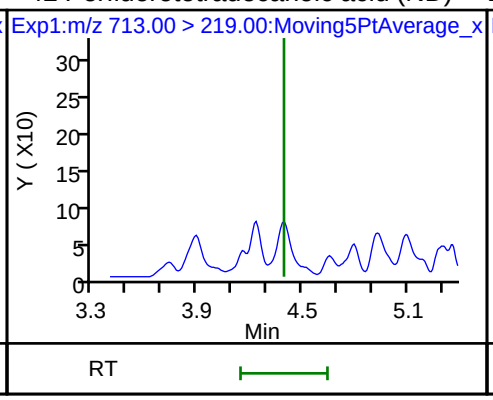
41 Perfluorotridecanoic acid (ND)



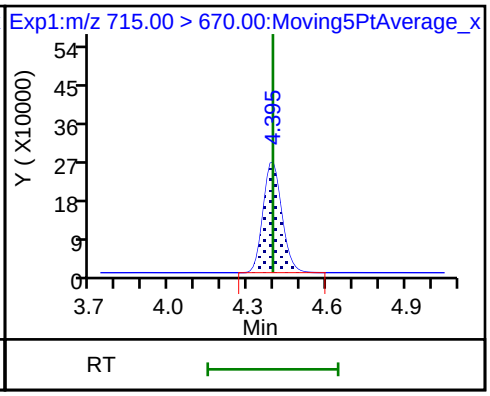
42 Perfluorotetradecanoic acid (ND)



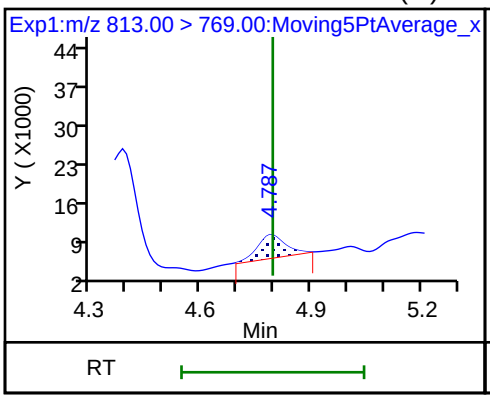
42 Perfluorotetradecanoic acid (ND)



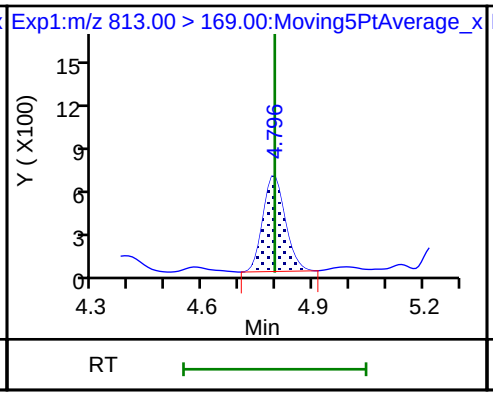
D 43 13C2-PFTeDA



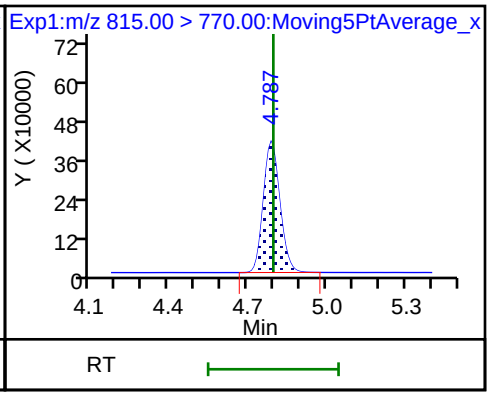
45 Perfluorohexadecanoic acid (M)



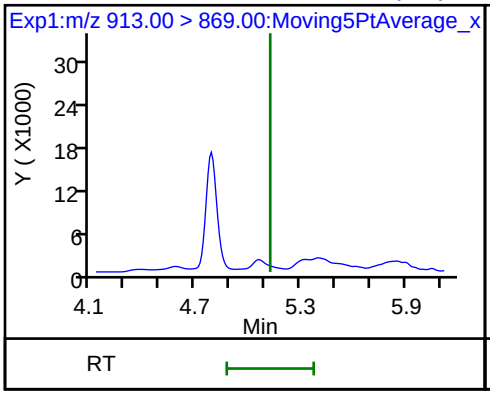
45 Perfluorohexadecanoic acid



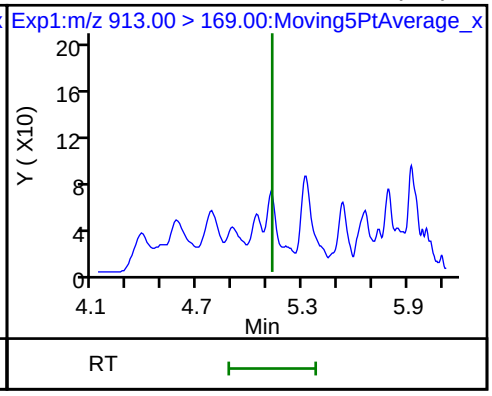
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

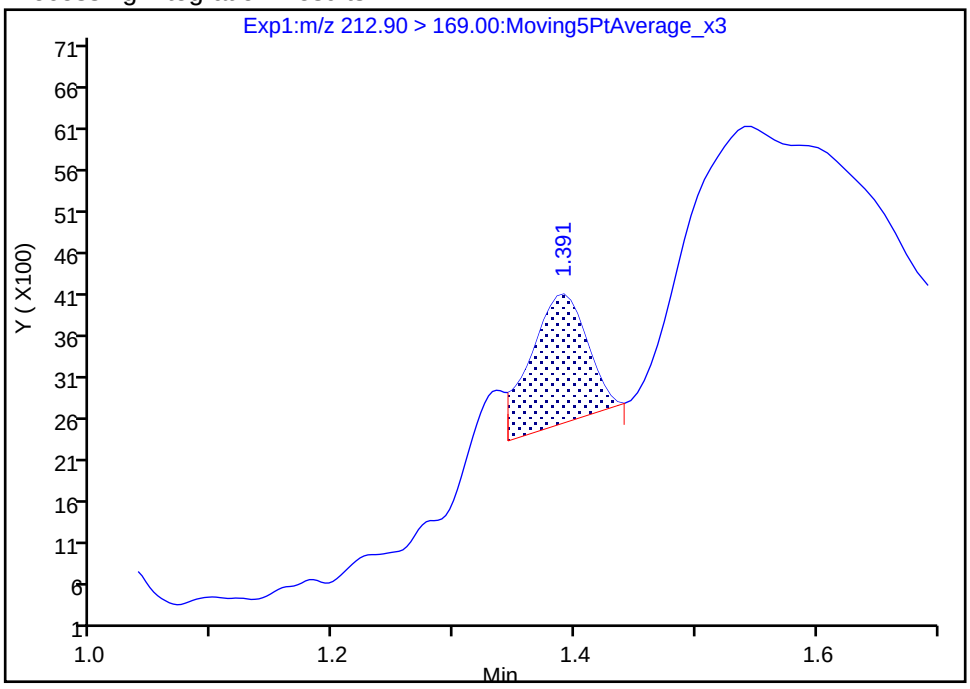
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_006.d
Injection Date: 04-Aug-2018 00:04:09 Instrument ID: A8_N
Lims ID: MB 320-237151/1-A
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

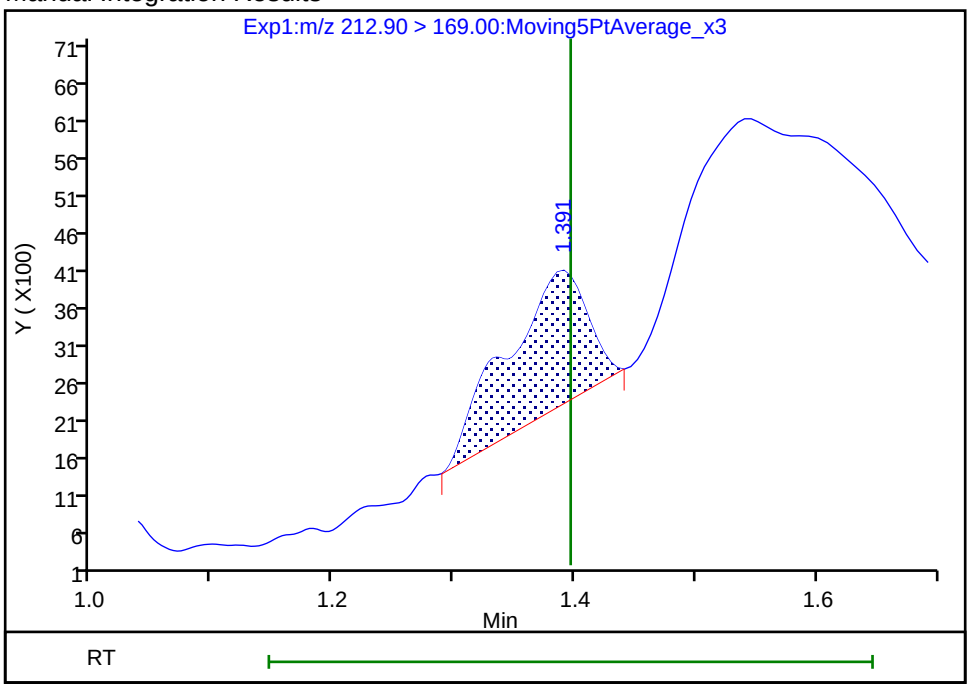
Processing Integration Results

RT: 1.39
Area: 5037
Amount: 0.002793
Amount Units: ng/ml



Manual Integration Results

RT: 1.39
Area: 8529
Amount: 0.004728
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:37:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

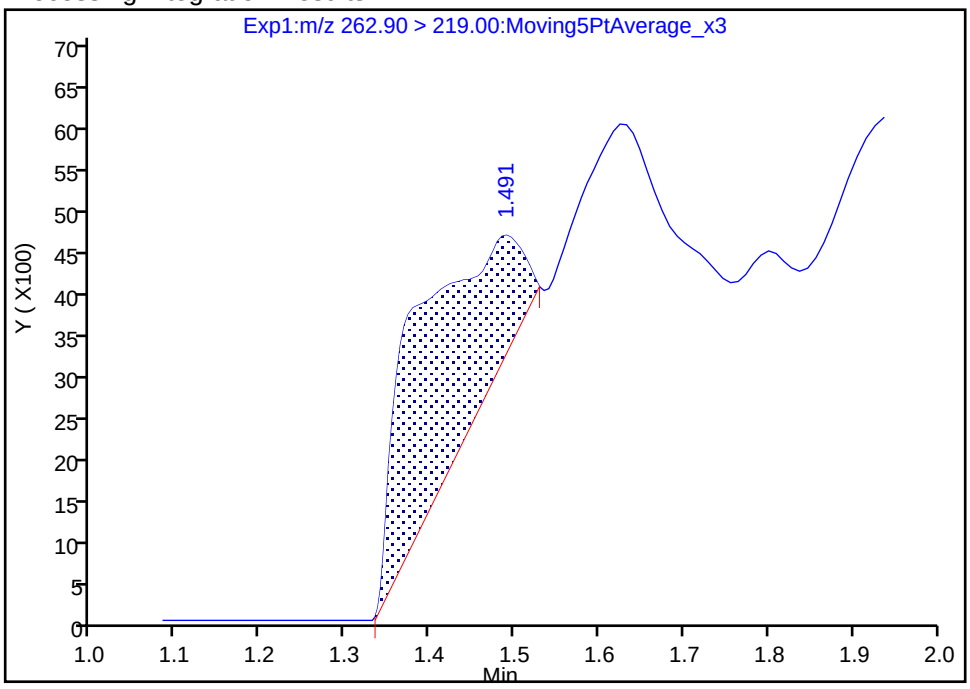
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_006.d
Injection Date: 04-Aug-2018 00:04:09 Instrument ID: A8_N
Lims ID: MB 320-237151/1-A
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

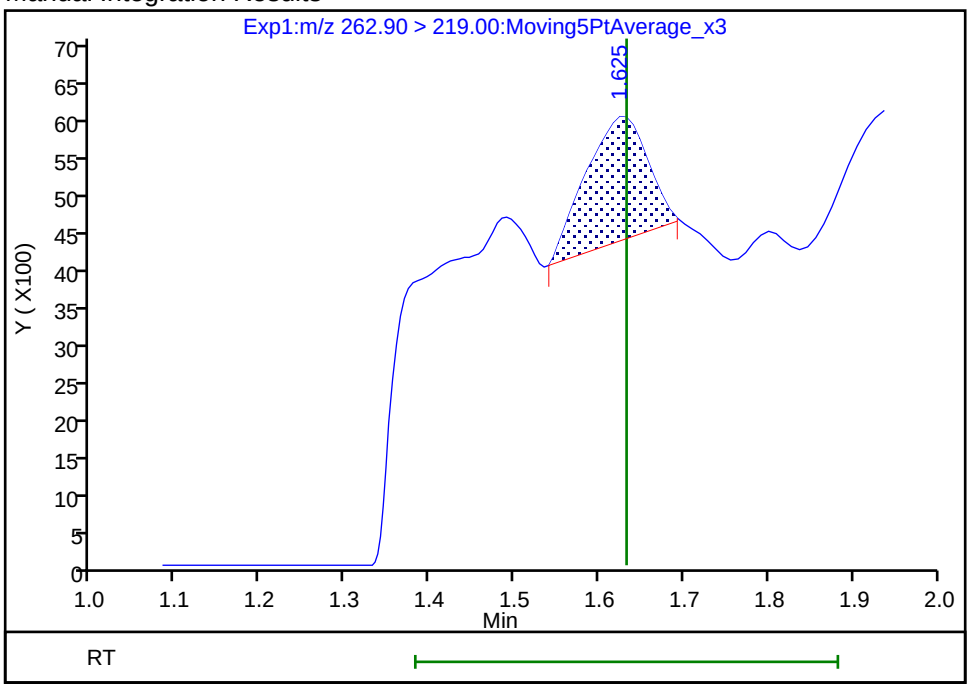
Processing Integration Results

RT: 1.49
Area: 20456
Amount: 0.012535
Amount Units: ng/ml



Manual Integration Results

RT: 1.62
Area: 8519
Amount: 0.005220
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:37:14
Audit Action: Manually Integrated Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

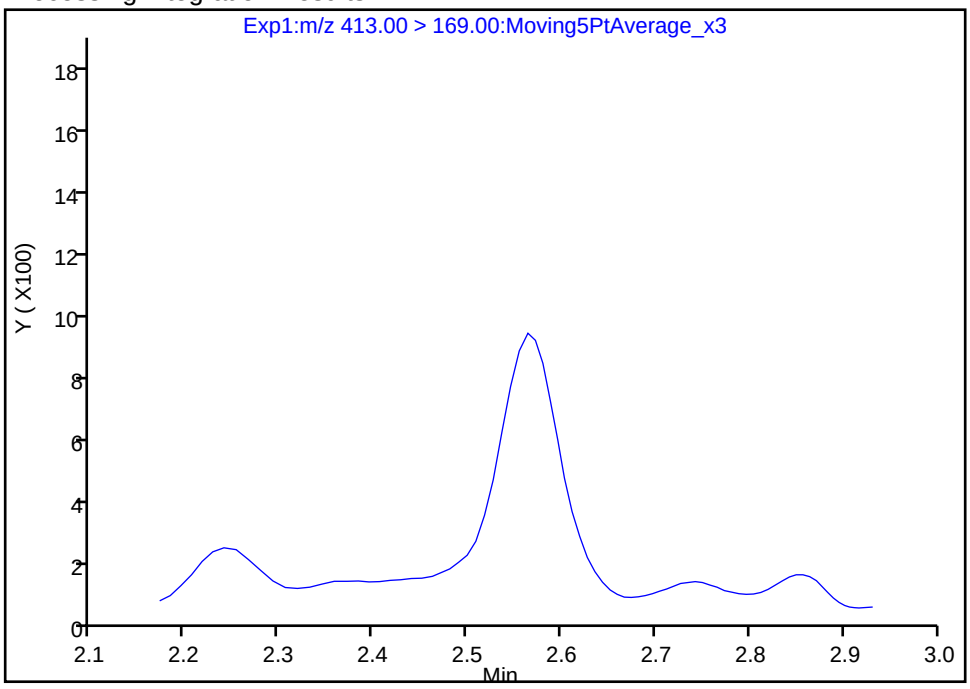
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_006.d				
Injection Date:	04-Aug-2018 00:04:09	Instrument ID:	A8_N		
Lims ID:	MB 320-237151/1-A				
Client ID:					
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

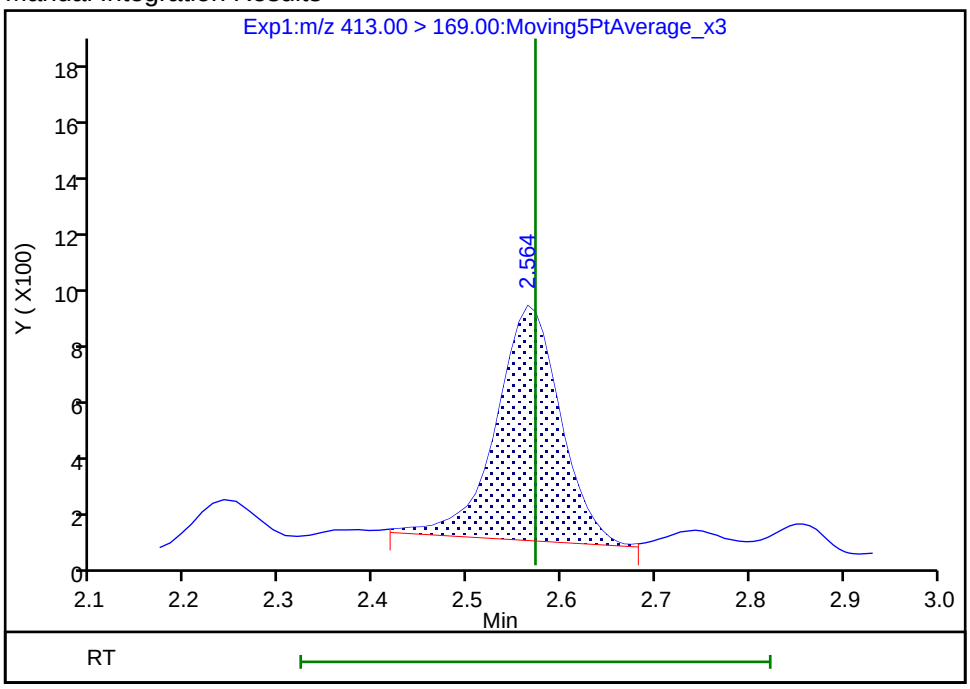
Processing Integration Results

RT: 2.57
Area: 0
Amount: 0.002924
Amount Units: ng/ml



Manual Integration Results

RT: 2.56
Area: 3993
Amount: 0.002924
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:37:26
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-237151/2-A

Matrix: Water | Lab File ID: 2018.08.03LLC_007.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 250(mL) | Date Analyzed: 08/04/2018 00:11

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	38.7		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	39.3		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	38.6		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	38.1		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	40.6		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	41.1		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	38.7		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	38.0		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	40.0		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	40.4		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	38.7		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	37.4		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	33.8		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	35.8		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	36.7		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	34.5		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	40.2		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	42.0		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	39.6		20	1.9
27619-97-2	6:2 FTS	37.1		20	2.0
39108-34-4	8:2 FTS	35.0		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-237151/2-A

Matrix: Water | Lab File ID: 2018.08.03LLC_007.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 250(mL) | Date Analyzed: 08/04/2018 00:11

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	93		25-150
STL01893	13C5 PFPeA	95		25-150
STL00993	13C2 PFHxA	103		25-150
STL01892	13C4-PFHpA	101		25-150
STL00990	13C4 PFOA	94		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	105		25-150
STL00997	13C2 PFUnA	96		25-150
STL00998	13C2 PFDoA	94		25-150
STL02116	13C2-PFTeDA	99		25-150
STL02337	13C3-PFBS	89		25-150
STL00994	18O2 PFHxS	97		25-150
STL00991	13C4 PFOS	92		25-150
STL01056	13C8 FOSA	86		25-150
STL02118	d3-NMeFOSAA	87		25-150
STL02117	d5-NEtFOSAA	92		25-150
STL02279	M2-6:2FTS	102		25-150
STL02280	M2-8:2FTS	105		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_007.d
Lims ID: LCS 320-237151/2-A
Client ID:
Sample Type: LCS
Inject. Date: 04-Aug-2018 00:11:58 ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-237151/2-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 10:57:16 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK036

First Level Reviewer: roycea Date: 06-Aug-2018 09:24:14

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.391	1.391	0.0	0.542	5062469	2.33		93.1	83038	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.396	-0.005	1.000	1932304	0.9683		96.8	731	
D 3 13C5-PFPeA										
267.90 > 223.00	1.632	1.632	0.0	0.637	3406175	2.38		95.2	73186	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.632	1.632	0.0	1.000	1601488	0.9817		98.2	860	
D 47 13C3-PFBS										
301.90 > 83.00	1.665	1.665	0.0	0.649	85312	2.07		89.1	621	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.665	1.665	0.0	1.000	2627180	0.9341		106	7094	
298.90 > 99.00	1.665	1.665	0.0	1.000	1056908		2.49(1.25-3.74)		4917	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.866	1.866	0.0	1.120	667861	1.06		113	34218	
D 7 13C2 PFHxA										
315.00 > 270.00	1.895	1.905	-0.010	0.739	3983255	2.57		103	97967	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.895	1.905	-0.010	1.000	1620910	0.9647		96.5	7352	
313.00 > 119.00	1.895	1.905	-0.010	1.000	155297		10.44(5.03-15.10)		2566	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.916	1.927	-0.011	1.150	2404209	0.9685		103	42592	
349.00 > 99.00	1.916	1.927	-0.011	1.150	895790		2.68(1.36-4.07)		10935	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.991	1.991	0.0	0.777	212084	2.92		117	6771	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.991	1.991	0.0	1.000	299861	0.8831		88.3	2184	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.217	0.0	0.865	3776941	2.52		101	62307	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.217	2.217	0.0	1.000	1668648	0.9525		95.2	1126	
363.00 > 169.00	2.217	2.217	0.0	1.000	660152		2.53(1.13-3.40)		10926	
D 11 18O2 PFHxS										
403.00 > 84.00	2.228	2.228	0.0	0.869	5158595	2.29		96.7	77089	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.228	2.229	-0.001	1.000	2131722	0.8454		92.9	10077	
399.00 > 99.00	2.228	2.229	-0.001	1.000	725120		2.94(1.50-4.49)		1923	
65 ADONA										
377.00 > 251.00	2.266	2.267	-0.001	0.773	4082460	1.02		102	37500	
377.00 > 85.00	2.266	2.267	-0.001	0.773	2426016		1.68(0.84-2.53)		9817	
D 12 M2-6:2FTS										
429.00 > 81.00	2.536	2.545	-0.009	0.989	1064131	2.42		102	21523	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.546	2.546	0.0	1.004	687464	0.9278		97.9	12772	
* 62 13C2-PFOA										a
415.00 > 370.00	2.564	2.564	0.0		3775478	2.50			45867	a
D 14 13C4 PFOA										
417.00 > 372.00	2.564	2.572	-0.008	1.000	3395656	2.34		93.7	52168	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.564	2.572	-0.008	1.000	1595446	1.02		101	1314	
413.00 > 169.00	2.564	2.572	-0.008	1.000	848819		1.88(0.84-2.52)		6689	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.572	2.572	0.0	0.878	1779711	0.8961		94.1	24444	
449.00 > 99.00	2.572	2.572	0.0	0.878	493446		3.61(1.94-5.82)		7752	
D 19 13C5 PFNA										
468.00 > 423.00	2.931	2.931	0.0	1.143	3052639	2.42		96.7	78293	
D 18 13C4 PFOS										
503.00 > 80.00	2.931	2.931	0.0	1.143	3433839	2.20		92.2	55420	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.931	2.931	0.0	1.000	1481372	0.9184		99.0	14897	M
499.00 > 99.00	2.931	2.931	0.0	1.000	348726		4.25(2.31-6.93)		2892	
20 Perfluorononanoic acid										
463.00 > 419.00	2.931	2.931	0.0	1.000	1355783	1.03		103	5729	
463.00 > 169.00	2.931	2.931	0.0	1.000	326340		4.15(1.90-5.69)		15341	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.147	3.139	0.008	1.074	2369433	0.9233		99.1	27627	
D 26 M2-8:2FTS										
529.00 > 81.00	3.276	3.276	0.0	1.278	1074080	2.50		105	22292	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.276	3.276	0.0	1.000	529639	0.8741		91.2	43491	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.283	3.276	0.007	1.120	1001298	0.9697		101	36518	
549.00 > 99.00	3.283	3.276	0.007	1.120	382404		2.62(1.33-3.97)		3060	
D 23 13C2 PFDA										
515.00 > 470.00	3.291	3.283	0.008	1.283	2473918	2.62		105	51550	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	3.291	3.283	0.008	1.000	1021934	0.9675		96.8	2458	
513.00 > 169.00	3.291	3.283	0.008	1.000	191792		5.33(2.36-7.09)		4315	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.315	3.307	0.008	1.000	1951973	1.01		101	22473	
D 21 13C8 FOSA										
506.00 > 78.00	3.315	3.314	0.001	1.293	4919015	2.15		85.9	56818	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.448	3.439	0.009	1.345	498931	2.18		87.1	18042	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.448	3.449	-0.001	1.000	212807	1.05		105	3098	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.600	3.595	0.005	1.228	806509	0.8631		89.5	19000	
599.00 > 99.00	3.600	3.595	0.005	1.228	265970		3.03(1.39-4.16)		2976	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.611	3.611	0.0	1.408	564971	2.30		91.9	4535	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.611	0.0	1.408	1754520	2.41		96.5	45890	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.621	3.617	0.004	1.003	821628	0.9501		95.0	1933	
563.00 > 169.00	3.621	3.617	0.004	1.003	149240		5.51(2.12-6.36)		5147	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.611	3.617	-0.006	1.000	199550	0.99		99.1	6789	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.774	3.770	0.004	1.288	3399473	0.9726		103	64268	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.910	3.906	0.004	1.000	642521	1.00		99.9	174	
613.00 > 169.00	3.910	3.906	0.004	1.000	161991		3.97(2.13-6.40)		3057	
D 36 13C2 PFDoA										
615.00 > 570.00	3.910	3.909	0.001	1.525	1485198	2.36		94.3	16142	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.163	4.162	0.001	1.065	566064	1.01		101	160	
663.00 > 169.00	4.163	4.162	0.001	1.065	178574		3.17(1.25-3.76)		1576	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.395	4.393	0.002	1.000	136379	0.9676		96.8	1977	
713.00 > 219.00	4.395	4.393	0.002	1.000	95698		1.43(0.71-2.13)		1772	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.395	4.394	0.001	1.714	1308145	2.47		98.9	6076	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.796	4.795	0.001	1.000	732186	0.9747		97.5	36.2	
813.00 > 169.00	4.796	4.795	0.001	1.000	120470		6.08(2.86-8.58)		1248	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.796	4.796	0.0	1.871	1893913	2.08		83.2	2671	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.127	5.126	0.001	1.069	939760	1.21		121	351	
913.00 > 169.00	5.127	5.126	0.001	1.069	117547		7.99(3.83-11.48)		1302	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Report Date: 06-Aug-2018 11:00:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_007.d

Injection Date: 04-Aug-2018 00:11:58 Instrument ID: A8_N

Lims ID: LCS 320-237151/2-A

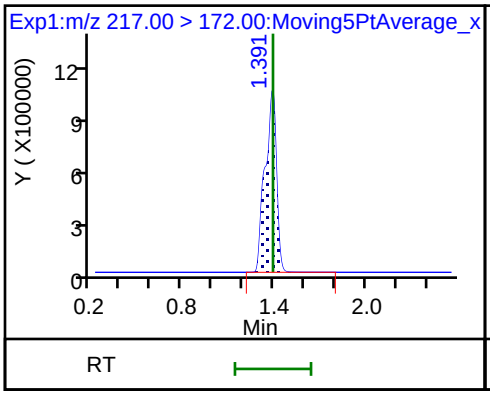
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 2 Worklist Smp#: 5

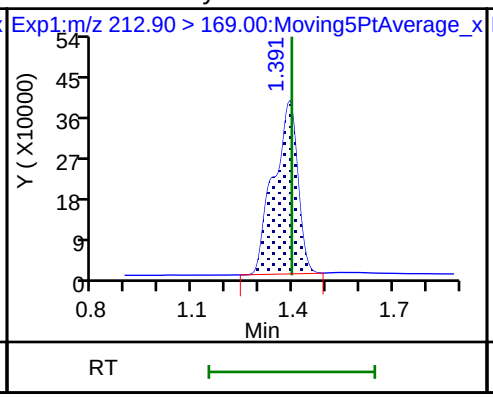
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

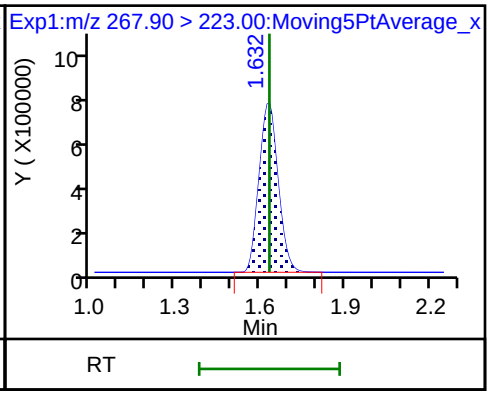
D 1 13C4 PFBA



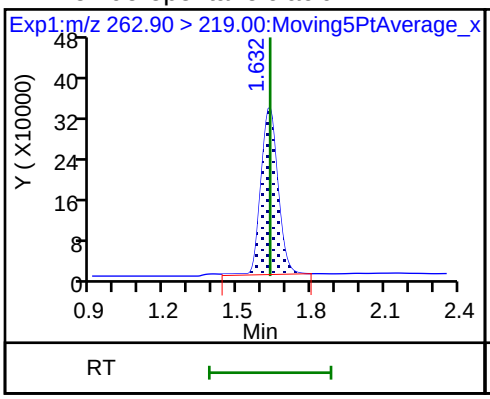
2 Perfluorobutyric acid



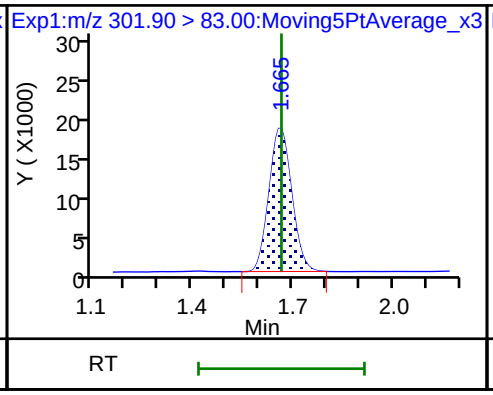
D 3 13C5-PFPeA



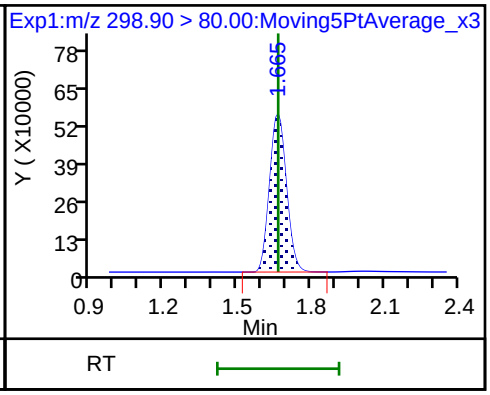
4 Perfluoropentanoic acid



D 47 13C3-PFBS



5 Perfluorobutanesulfonic acid



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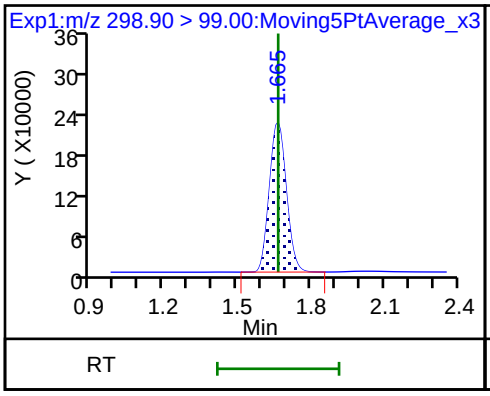
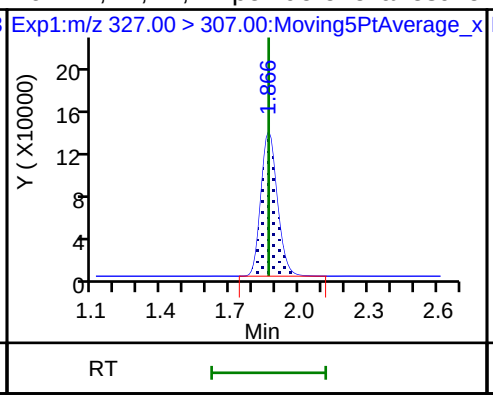
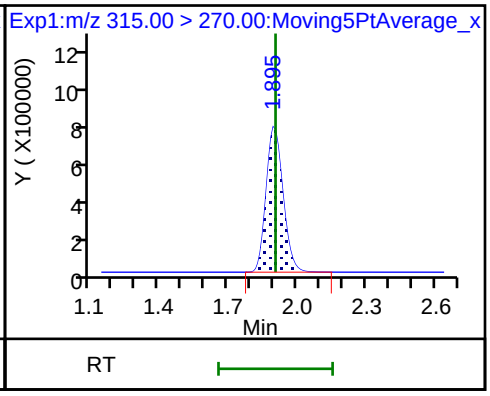


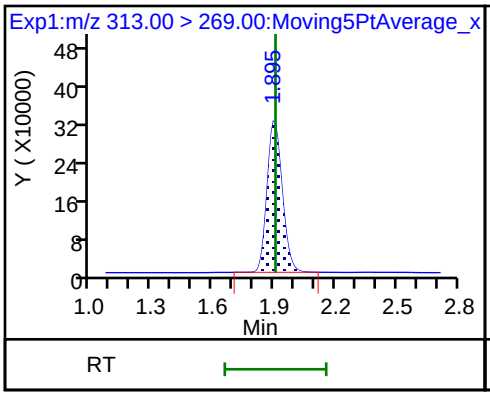
61 1H,1H,2H,2H-perfluorohexanesulfon



D 7 13C2 PFHxA



6 Perfluorohexanoic acid



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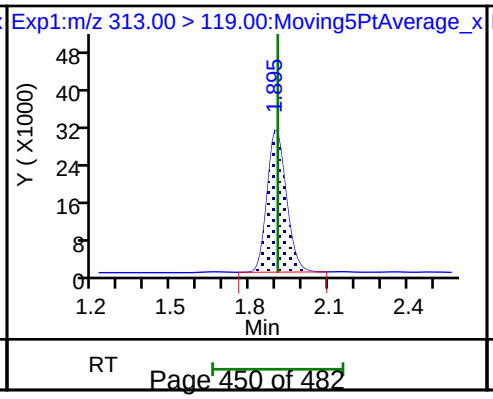
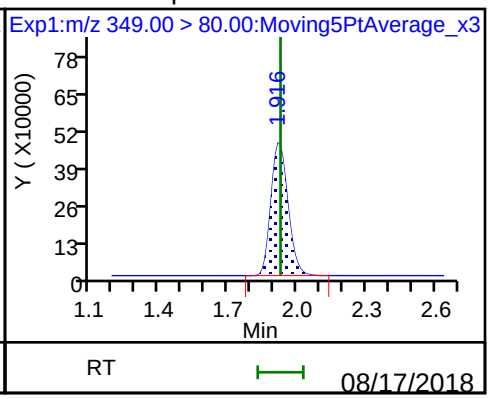


70 Perfluoropentanesulfonic acid



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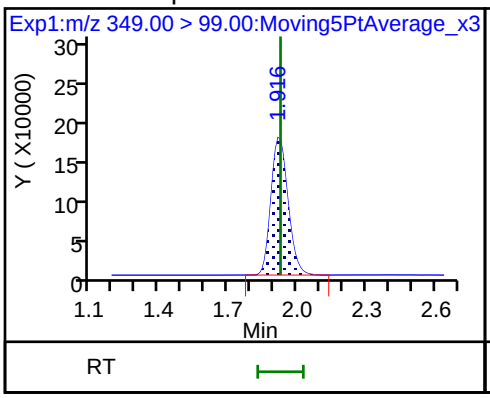
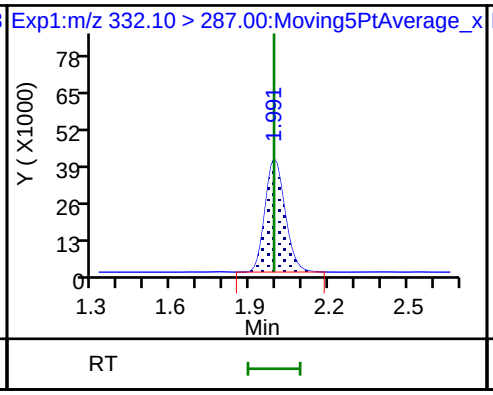
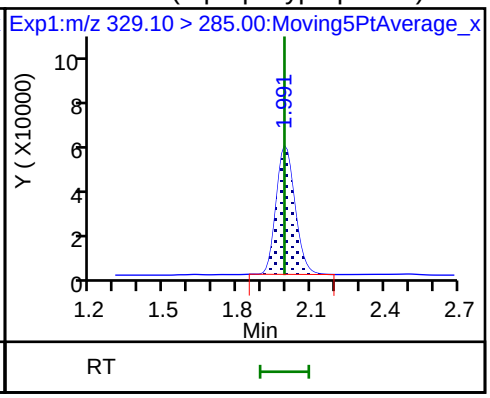


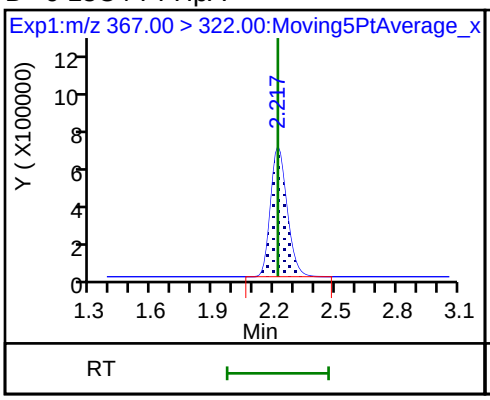
D 64 13C3 HFPO-DA



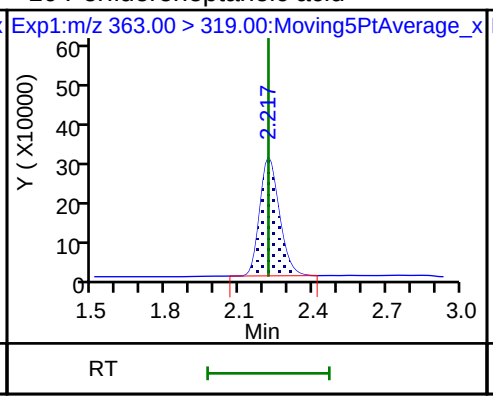
67 Perfluoro(2-propoxypropanoic) acid



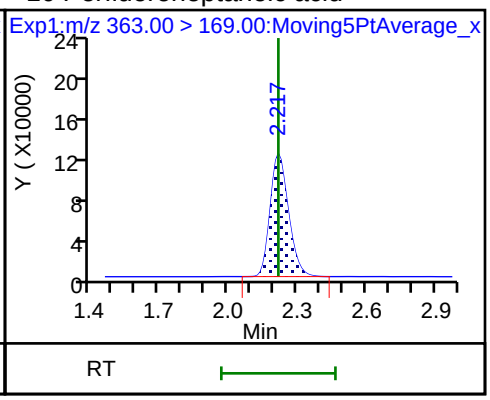
D 9 13C4-PFHpA



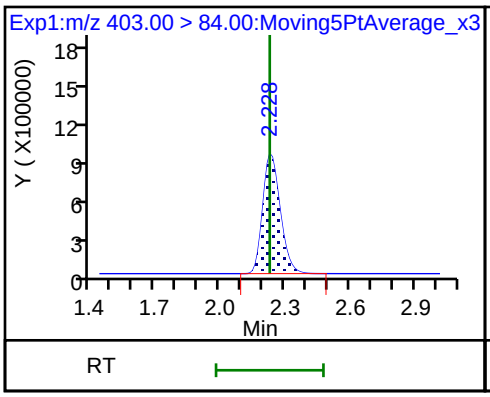
10 Perfluoroheptanoic acid



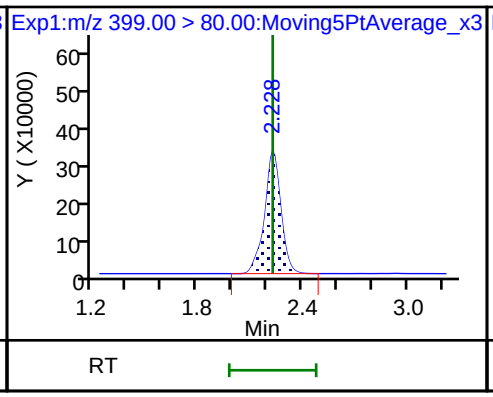
10 Perfluoroheptanoic acid



D 11 18O2 PFHxS



8 Perfluorohexanesulfonic acid



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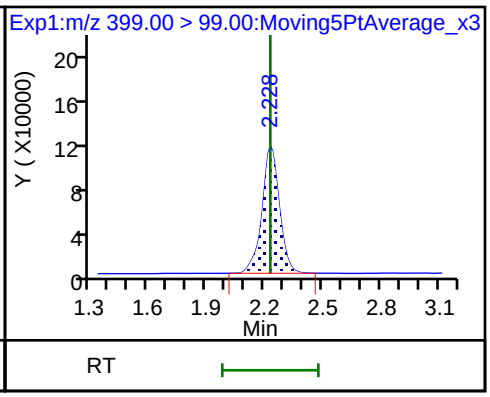
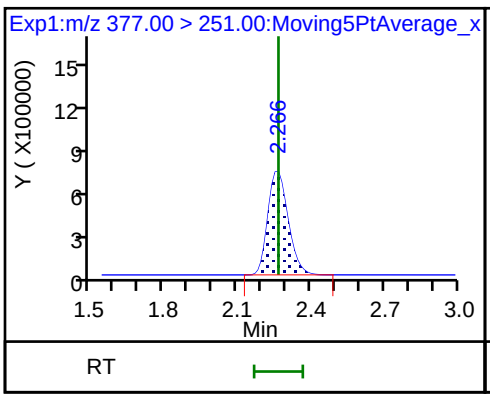


65 ADONA



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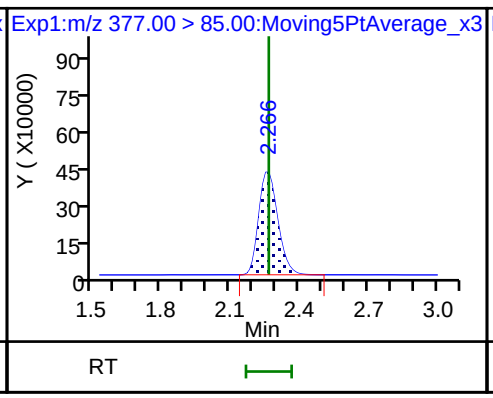
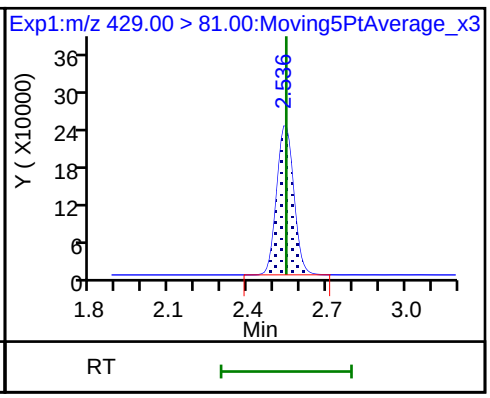
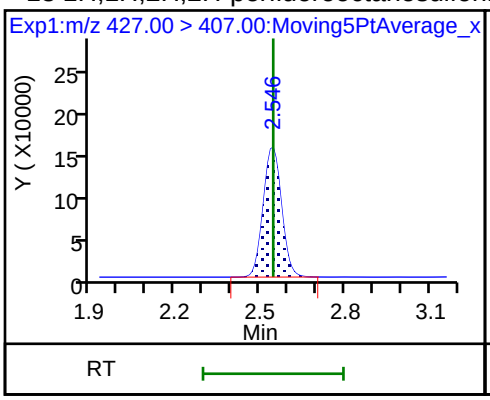


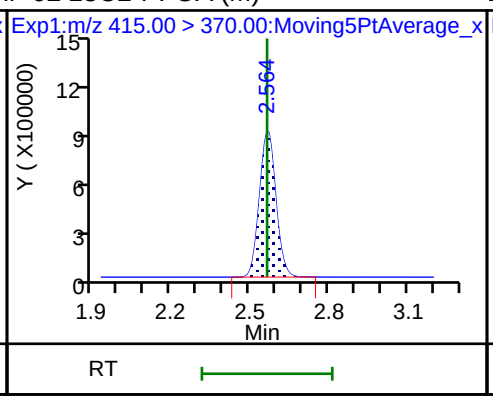
D 12 M2-6:2FTS



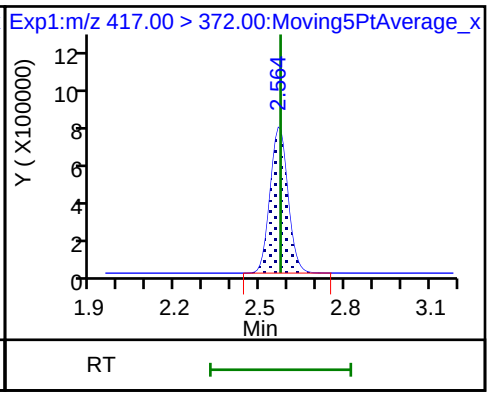
13 1H,1H,2H,2H-perfluorooctanesulfonI



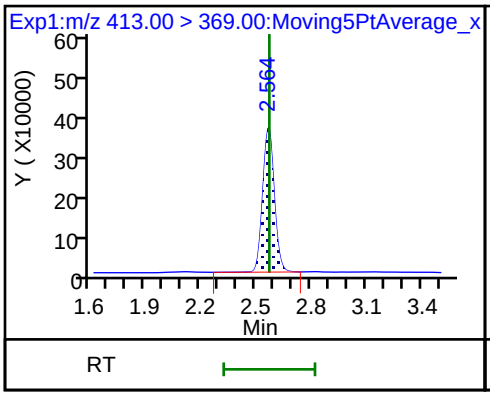
62 13C2-PFOA (M)



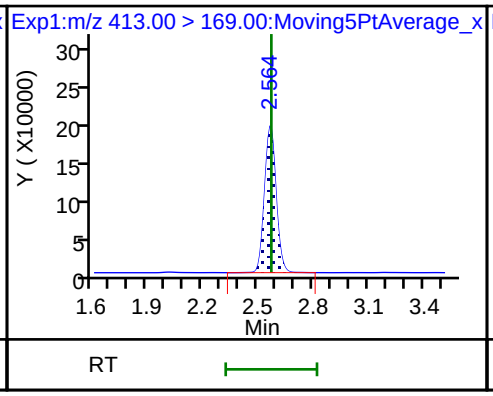
D 14 13C4 PFOA



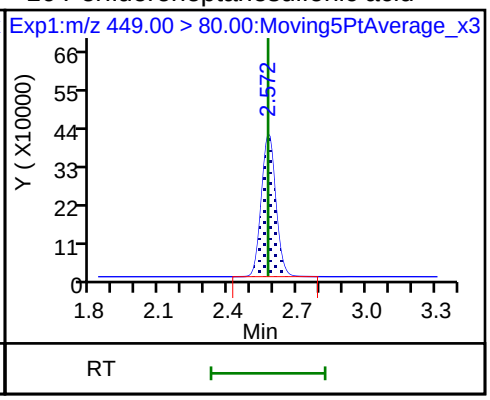
15 Perfluorooctanoic acid



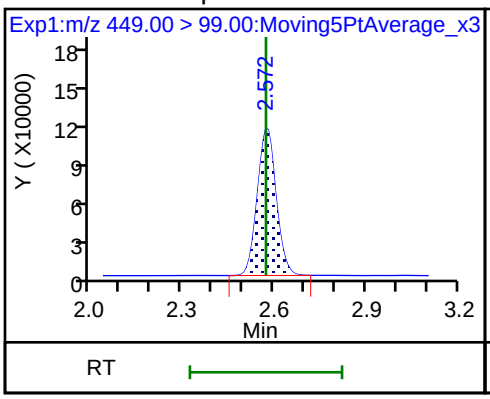
15 Perfluorooctanoic acid



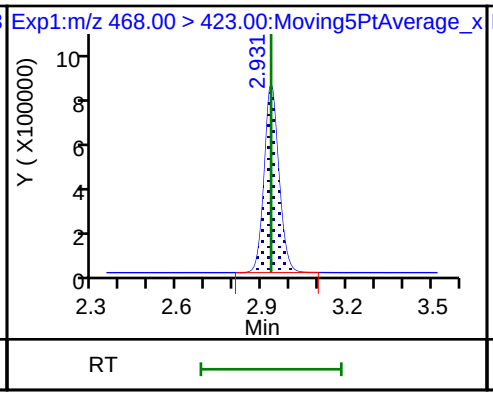
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid



D 19 13C5 PFNA



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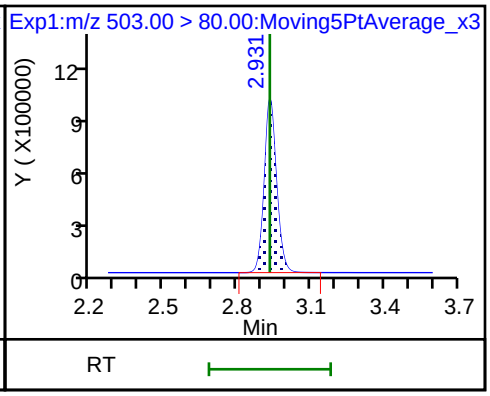
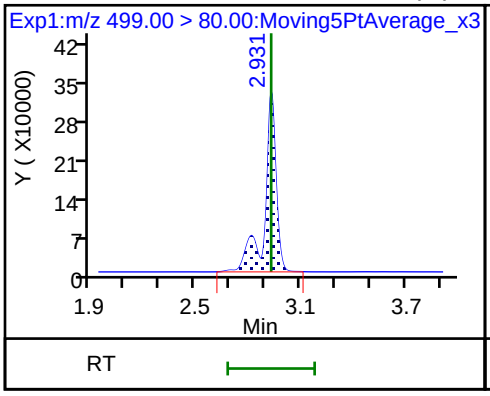
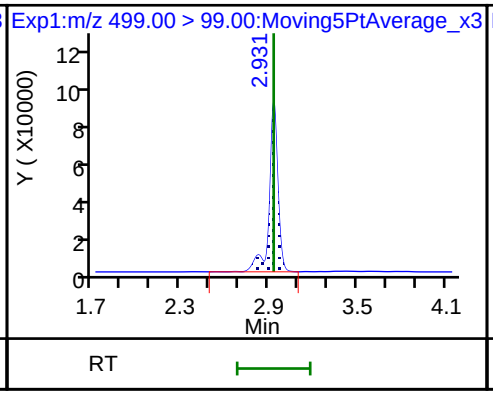


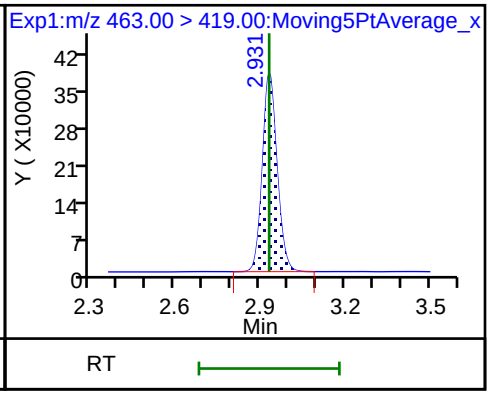
17 Perfluorooctane sulfonic acid (M)



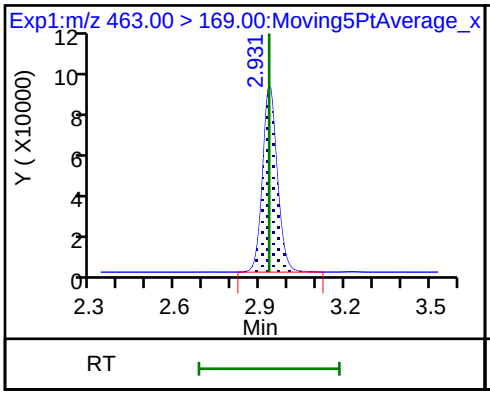
17 Perfluorooctane sulfonic acid



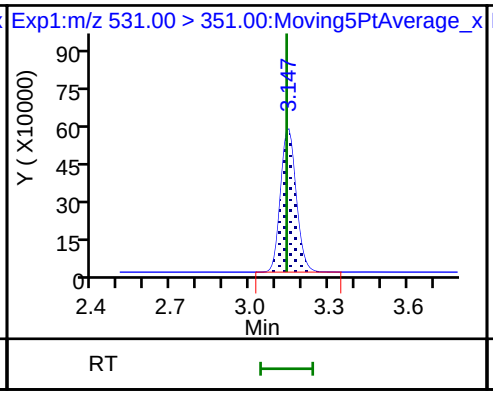
20 Perfluorononanoic acid



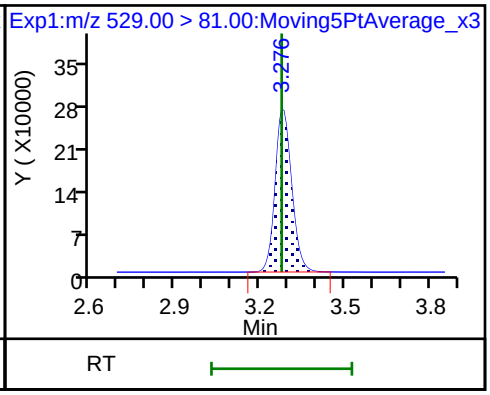
20 Perfluorononanoic acid



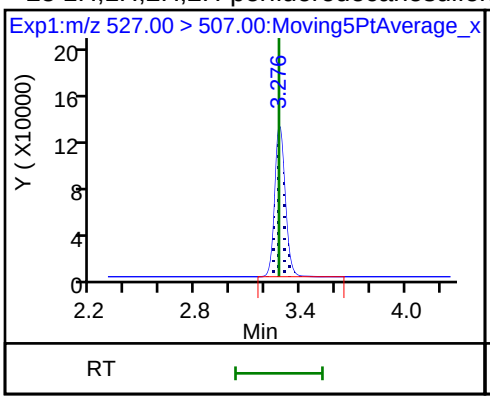
69 9-Chlorohexadecafluoro-3-oxanonane



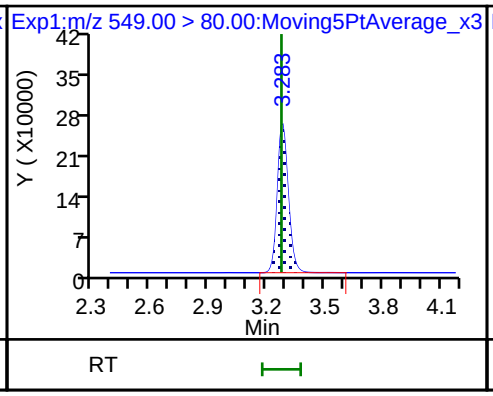
D 26 M2-8:2FTS



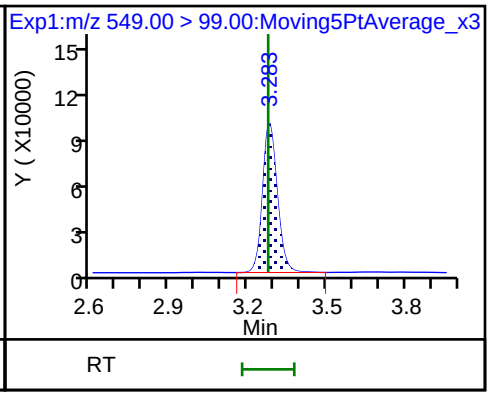
25 1H,1H,2H,2H-perfluorodecanesulfoni



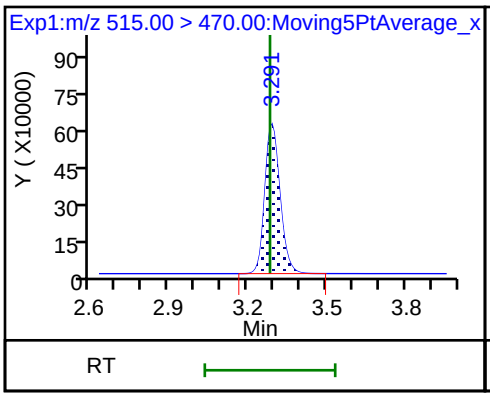
68 Perfluorononanesulfonic acid



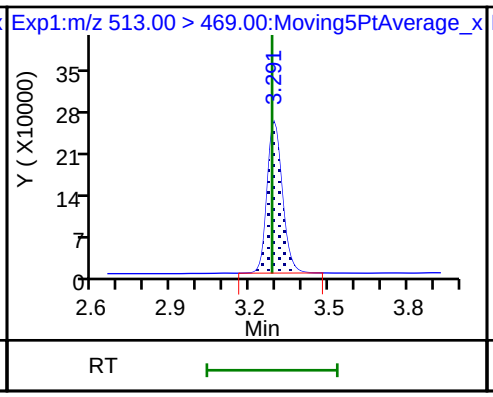
68 Perfluorononanesulfonic acid



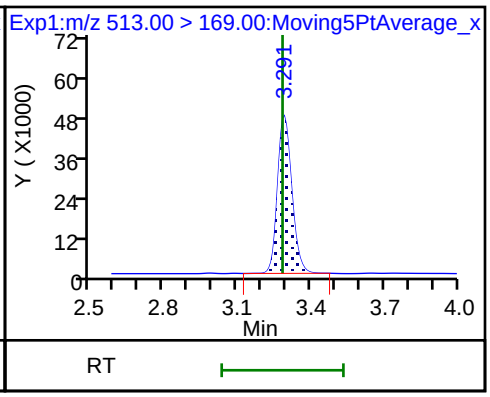
D 23 13C2 PFDA



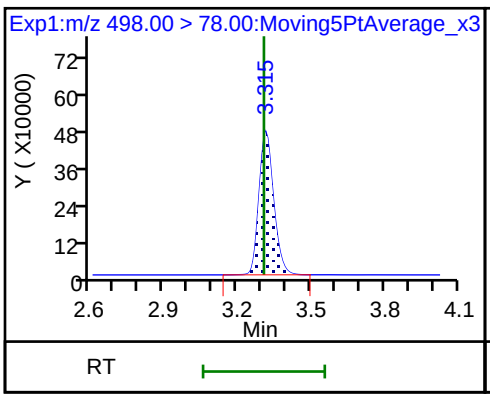
24 Perfluorodecanoic acid



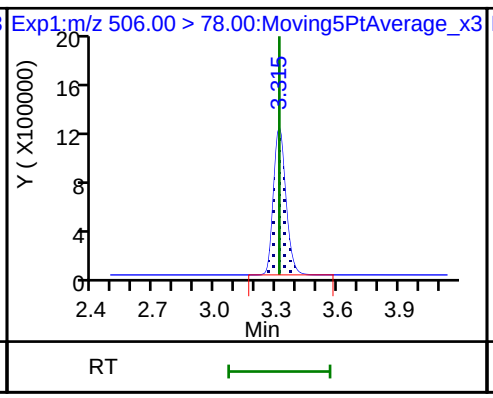
24 Perfluorodecanoic acid



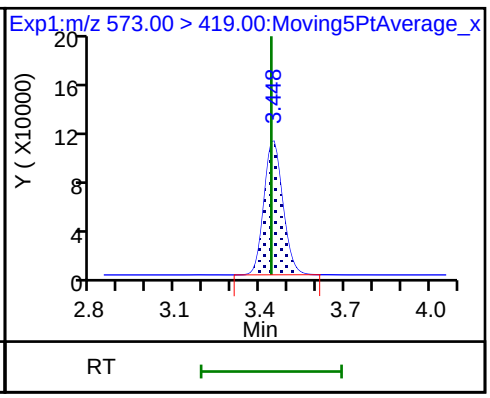
22 Perfluorooctane Sulfonamide



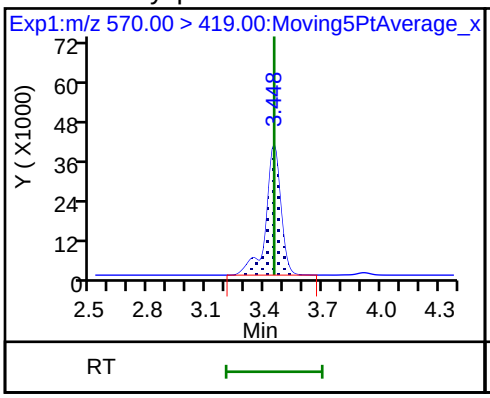
D 21 13C8 FOSA



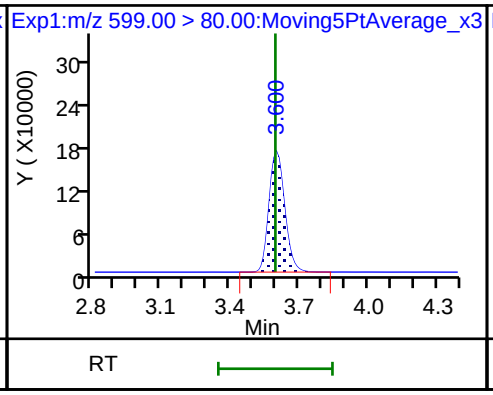
D 27 d3-NMeFOSAA



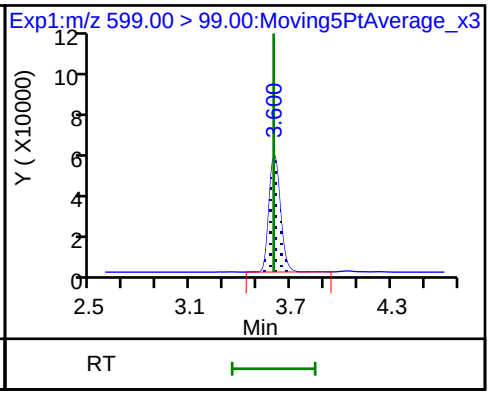
28 N-methyl perfluorooctane sulfonami



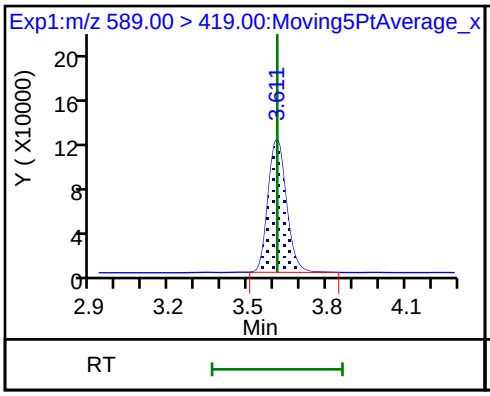
29 Perfluorodecane Sulfonic acid



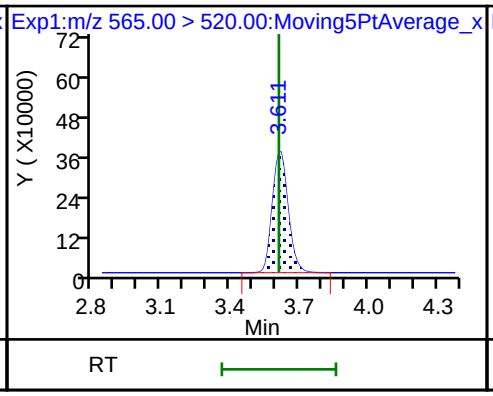
29 Perfluorodecane Sulfonic acid



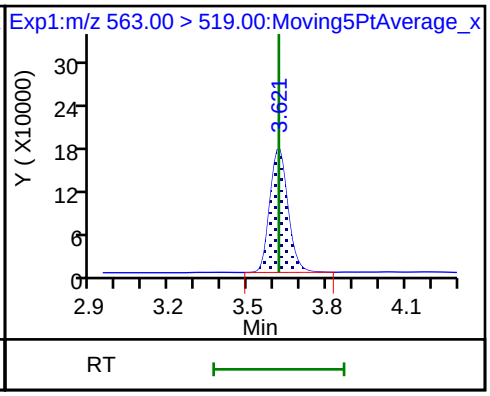
D 32 d5-NEtFOSAA



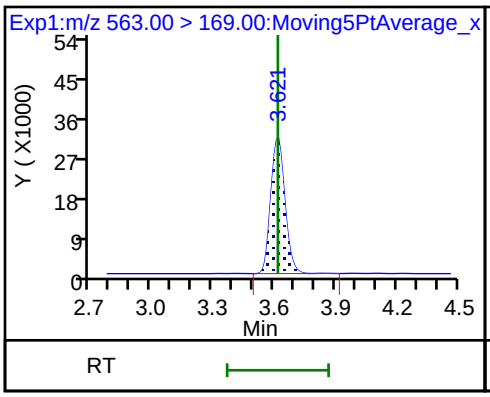
D 30 13C2 PFUnA



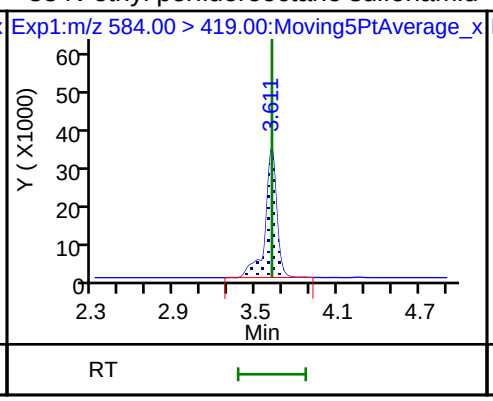
31 Perfluoroundecanoic acid



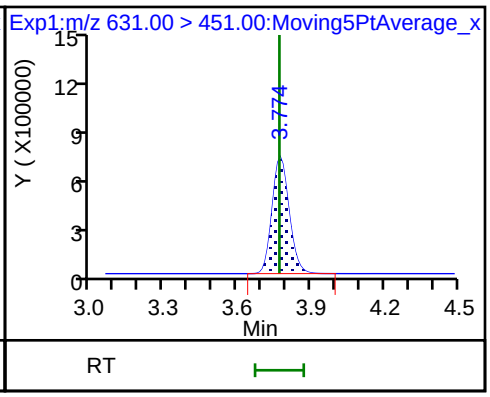
31 Perfluoroundecanoic acid



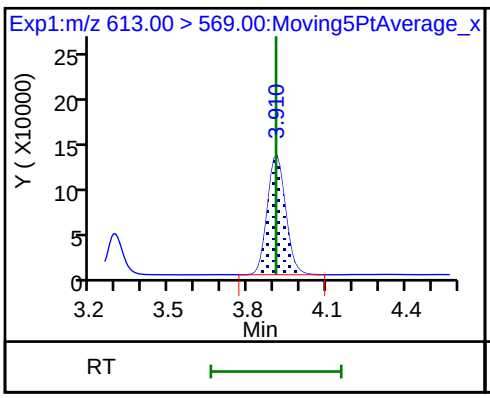
33 N-ethyl perfluorooctane sulfonamid



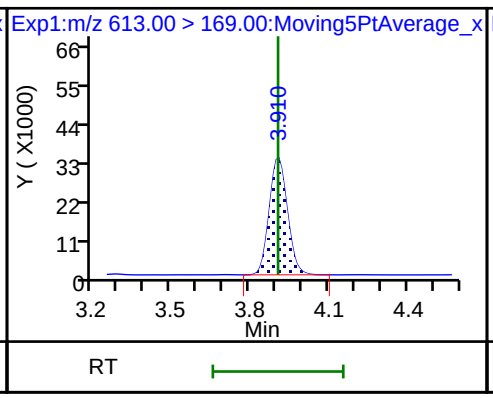
66 11-Chloroeicosafluoro-3-oxaundecan



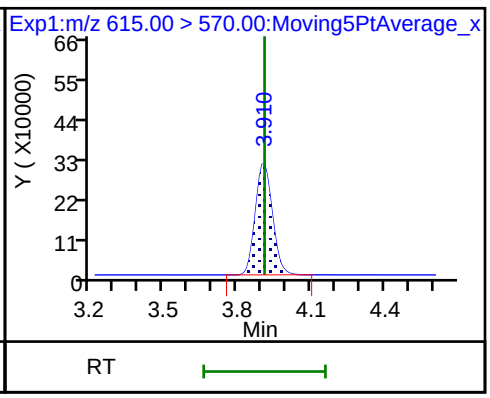
37 Perfluorododecanoic acid



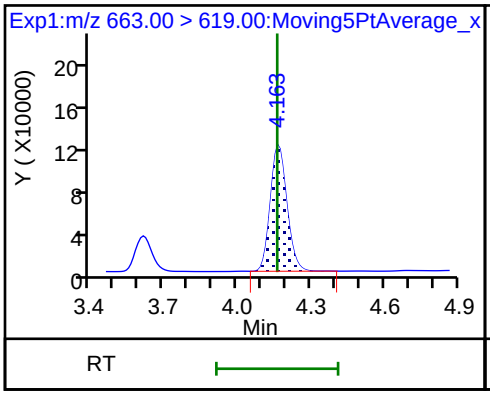
37 Perfluorododecanoic acid



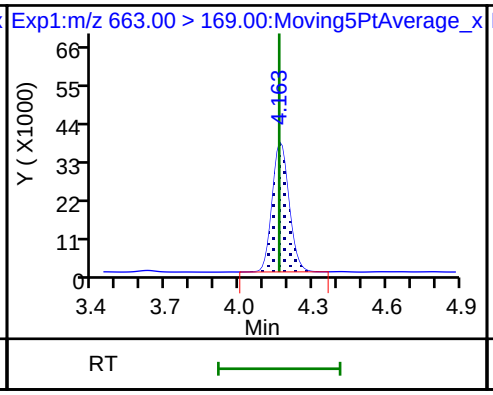
D 36 13C2 PFDoA



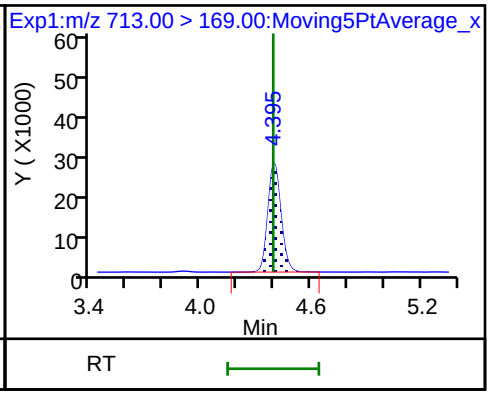
41 Perfluorotridecanoic acid



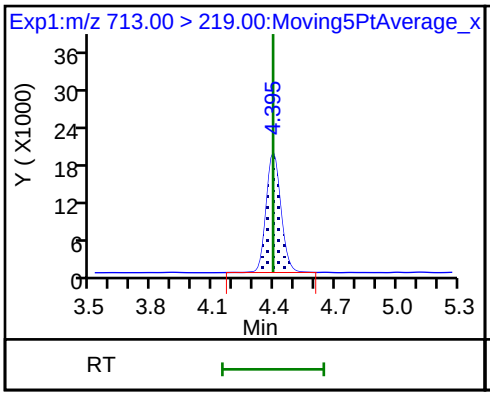
41 Perfluorotridecanoic acid



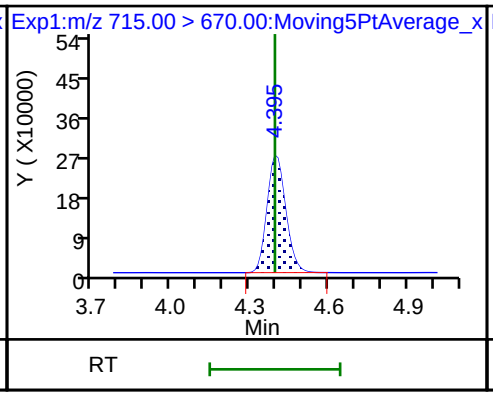
42 Perfluorotetradecanoic acid



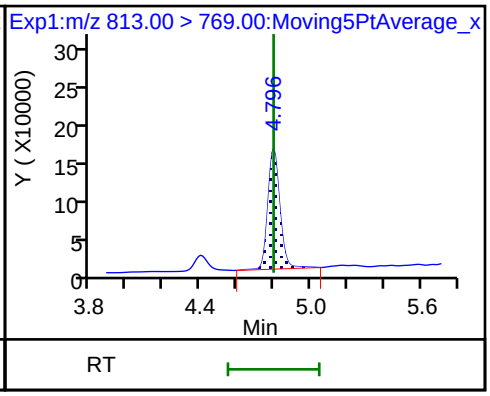
42 Perfluorotetradecanoic acid



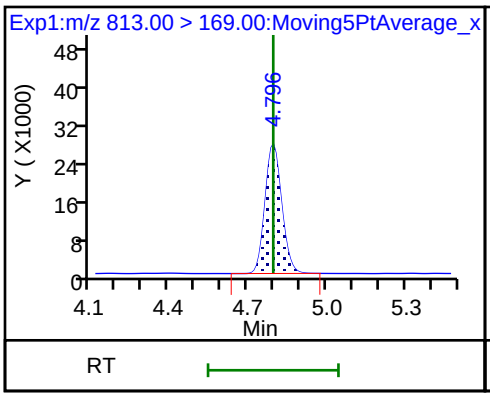
D 43 13C2-PFTeDA



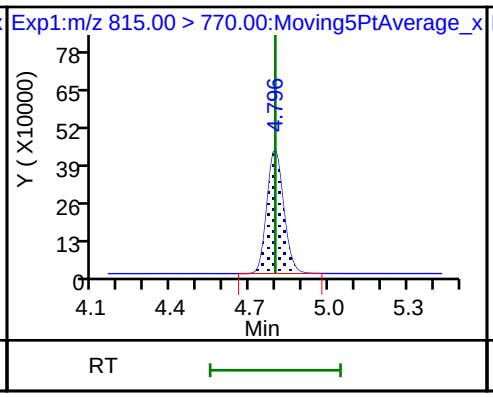
45 Perfluorohexadecanoic acid



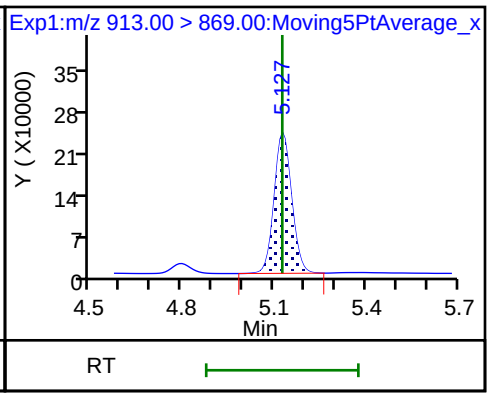
45 Perfluorohexadecanoic acid



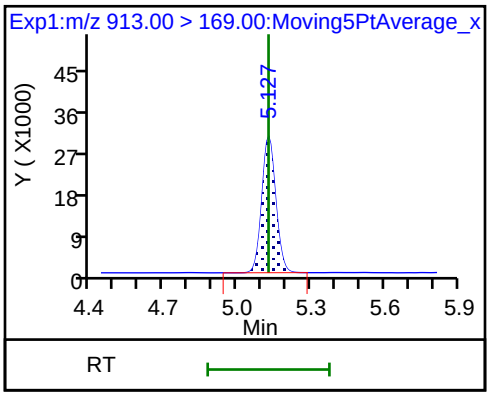
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

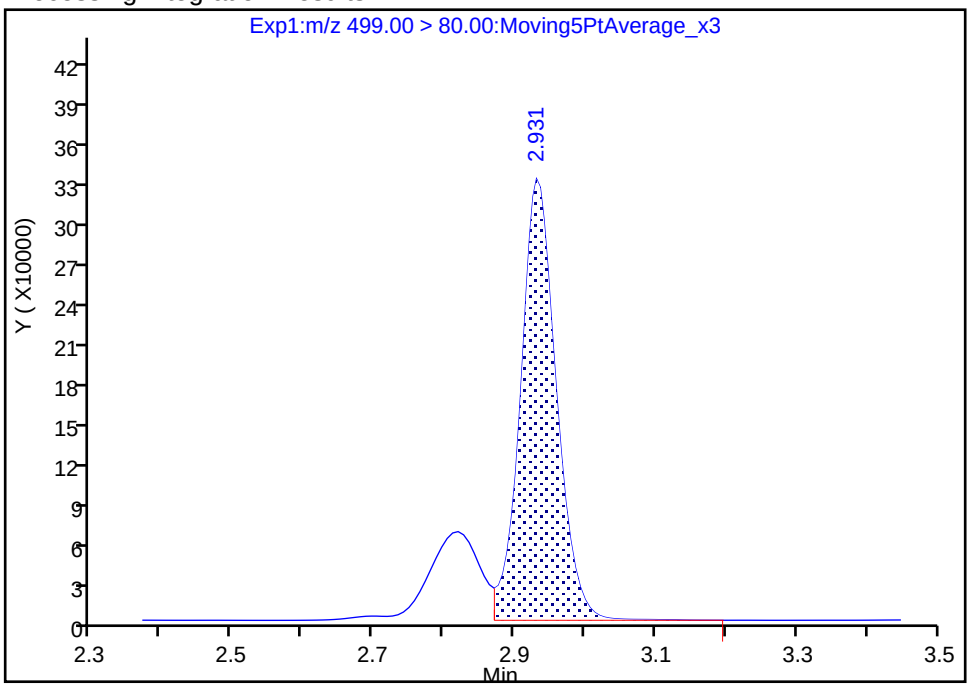
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_007.d				
Injection Date:	04-Aug-2018 00:11:58	Instrument ID:	A8_N		
Lims ID:	LCS 320-237151/2-A				
Client ID:					
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	2	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

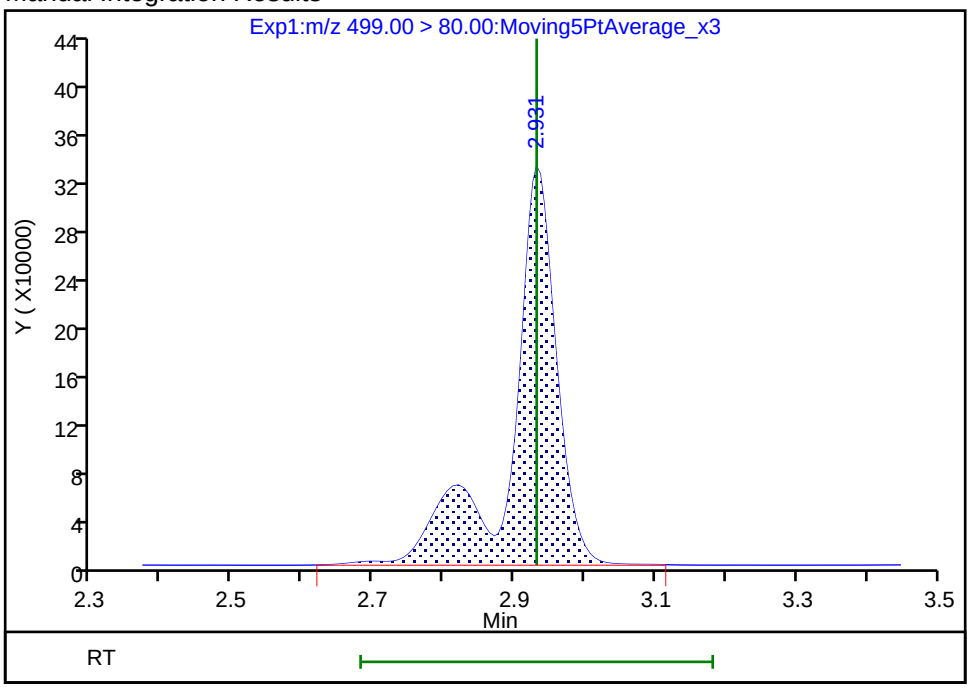
Processing Integration Results

RT: 2.93
Area: 1150094
Amount: 0.713033
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 1481372
Amount: 0.918418
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:38:46

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

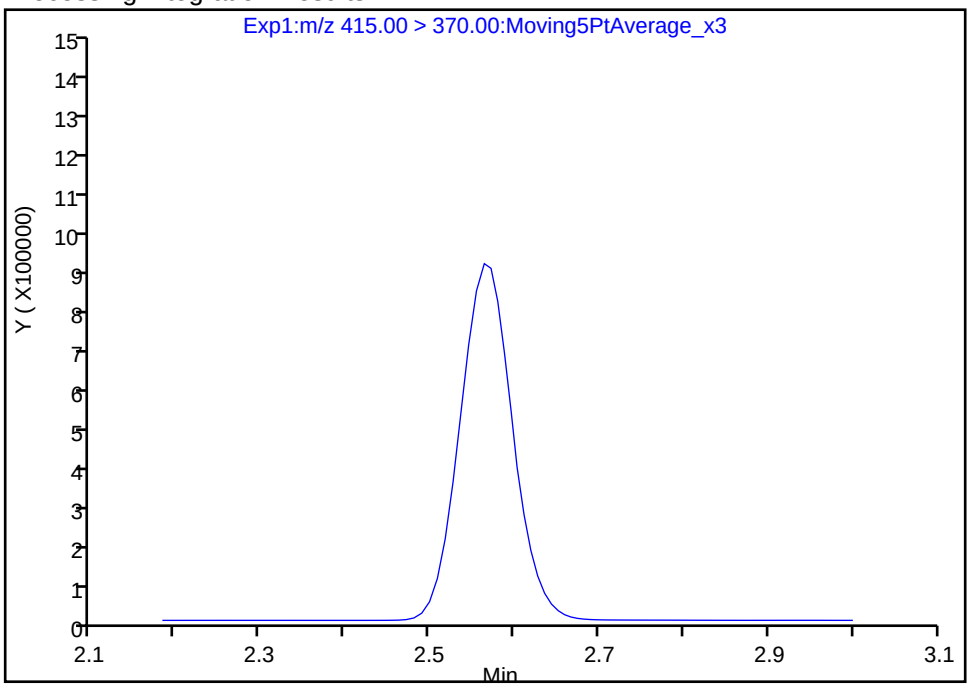
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_007.d				
Injection Date:	04-Aug-2018 00:11:58	Instrument ID:	A8_N		
Lims ID:	LCS 320-237151/2-A				
Client ID:					
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	2	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

* 62 13C2-PFOA, CAS: STL00623

Signal: 1

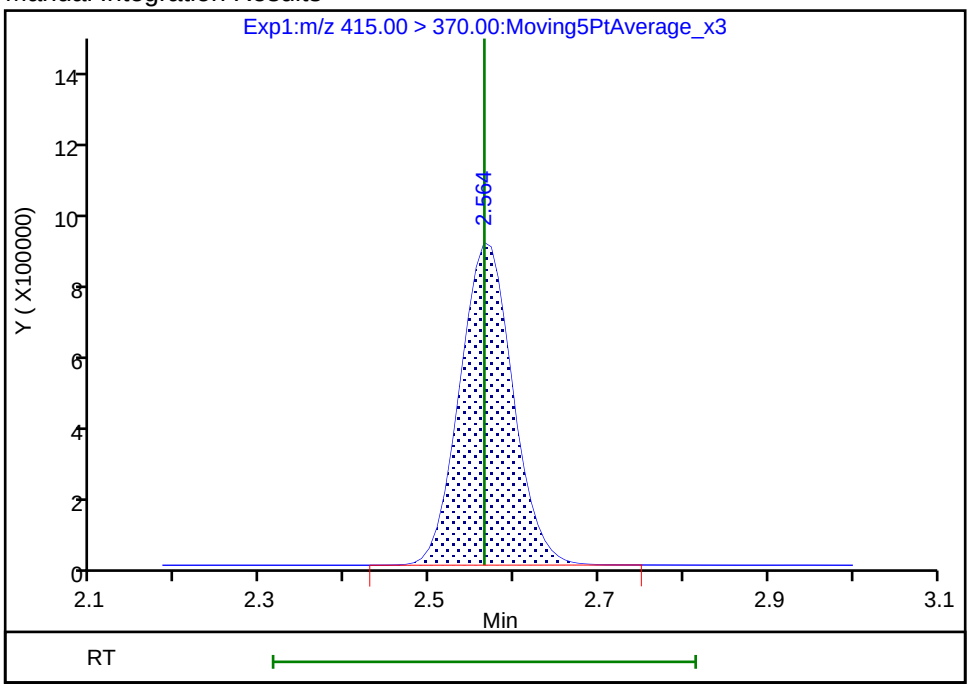
Not Detected
Expected RT: 2.56

Processing Integration Results



Manual Integration Results

RT: 2.56
Area: 3775478
Amount: 2.500000
Amount Units: ng/ml



Reviewer: roycea, 06-Aug-2018 09:24:09
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-237151/3-A

Matrix: Water | Lab File ID: 2018.08.03LLC_008.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 250(mL) | Date Analyzed: 08/04/2018 00:19

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	39.3		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	39.8		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	38.5		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	39.1		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	39.5		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	39.9		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	38.8		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	40.2		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	37.9		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	36.5		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	39.5		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	38.4		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	32.4		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	36.8		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	36.6		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	34.9		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	41.6		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	41.0		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	39.2		20	1.9
27619-97-2	6:2 FTS	39.0		20	2.0
39108-34-4	8:2 FTS	37.6		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-41405-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-237151/3-A

Matrix: Water | Lab File ID: 2018.08.03LLC_008.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 07/31/2018 10:53

Sample wt/vol: 250(mL) | Date Analyzed: 08/04/2018 00:19

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 237938 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	92		25-150
STL01893	13C5 PFPeA	92		25-150
STL00993	13C2 PFHxA	101		25-150
STL01892	13C4-PFHpA	100		25-150
STL00990	13C4 PFOA	94		25-150
STL00995	13C5 PFNA	98		25-150
STL00996	13C2 PFDA	101		25-150
STL00997	13C2 PFUnA	94		25-150
STL00998	13C2 PFDoA	98		25-150
STL02116	13C2-PFTeDA	87		25-150
STL02337	13C3-PFBS	84		25-150
STL00994	18O2 PFHxS	98		25-150
STL00991	13C4 PFOS	92		25-150
STL01056	13C8 FOSA	82		25-150
STL02118	d3-NMeFOSAA	83		25-150
STL02117	d5-NEtFOSAA	86		25-150
STL02279	M2-6:2FTS	99		25-150
STL02280	M2-8:2FTS	99		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_008.d
Lims ID: LCSD 320-237151/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 04-Aug-2018 00:19:48 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: lcsd 320-237151/3-a
Misc. Info.: Plate: 1 Rack: 6
Operator ID: \SACINSTLCMS01@tai.com Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 06-Aug-2018 10:57:16 Calib Date: 01-Aug-2018 13:46:01
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180801-61988.b\2018.08.01LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK036

First Level Reviewer: roycea Date: 06-Aug-2018 09:24:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.385	1.391	-0.006	0.540	5125174	2.29		91.6	128403	
2 Perfluorobutyric acid										
212.90 > 169.00	1.391	1.396	-0.005	1.004	1983796	0.9820		98.2	705	
D 3 13C5-PFPeA										
267.90 > 223.00	1.625	1.632	-0.007	0.634	3373070	2.29		91.6	72302	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.633	1.632	0.001	1.005	1606228	0.99		99.4	720	
D 47 13C3-PFBS										
301.90 > 83.00	1.657	1.665	-0.008	0.646	82767	1.95		84.0	624	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.666	1.665	0.001	1.005	2621507	0.9608		109	7602	
298.90 > 99.00	1.666	1.665	0.001	1.005	1072529		2.44(1.25-3.74)		4997	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.866	1.866	0.0	1.126	690001	1.13		121	35130	
D 7 13C2 PFHxA										
315.00 > 270.00	1.895	1.905	-0.010	0.739	4012940	2.52		101	113473	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.895	1.905	-0.010	1.000	1631190	0.9636		96.4	6064	
313.00 > 119.00	1.895	1.905	-0.010	1.000	143750		11.35(5.03-15.10)		2831	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.916	1.927	-0.011	1.157	2444238	1.01		108	53141	
349.00 > 99.00	1.916	1.927	-0.011	1.157	916966		2.67(1.36-4.07)		9954	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.991	1.991	0.0	0.777	223750	3.00		120	8395	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.991	1.991	0.0	1.000	314601	0.8782		87.8	2067	
D 9 13C4-PFHpA										
367.00 > 322.00	2.217	2.217	0.0	0.865	3862888	2.50		100	78651	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.217	2.217	0.0	1.000	1749750	0.9765		97.7	1357	
363.00 > 169.00	2.217	2.217	0.0	1.000	666621		2.62(1.13-3.40)		10081	
D 11 18O2 PFHxS										
403.00 > 84.00	2.229	2.228	0.001	0.869	5404085	2.33		98.4	75216	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.229	2.229	0.0	1.000	2141287	0.8106		89.1	10431	
399.00 > 99.00	2.229	2.229	0.0	1.000	746952		2.87(1.50-4.49)		1812	
65 ADONA										
377.00 > 251.00	2.254	2.267	-0.013	0.769	4265604	1.04		104	74475	
377.00 > 85.00	2.254	2.267	-0.013	0.769	2548272		1.67(0.84-2.53)		12397	
D 12 M2-6:2FTS										
429.00 > 81.00	2.537	2.545	-0.009	0.989	1062376	2.35		98.8	21606	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.537	2.546	-0.010	1.000	721501	0.9754		103	17887	
* 62 13C2-PFOA										a
415.00 > 370.00	2.564	2.564	0.0		3884985	2.50			81575	a
D 14 13C4 PFOA										
417.00 > 372.00	2.564	2.572	-0.008	1.000	3496916	2.34		93.8	62117	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.564	2.572	-0.008	1.000	1598576	0.9885		98.7	1528	
413.00 > 169.00	2.564	2.572	-0.008	1.000	832008		1.92(0.84-2.52)		6788	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.572	2.572	0.0	0.878	1869338	0.9198		96.6	27572	
449.00 > 99.00	2.572	2.572	0.0	0.878	486471		3.84(1.94-5.82)		8851	
D 19 13C5 PFNA										
468.00 > 423.00	2.931	2.931	0.0	1.143	3179541	2.45		97.8	59970	
D 18 13C4 PFOS										
503.00 > 80.00	2.931	2.931	0.0	1.143	3513615	2.19		91.7	53514	
17 Perfluorooctane sulfonic acid										M
499.00 > 80.00	2.931	2.931	0.0	1.000	1510922	0.9155		98.6	21093	M
499.00 > 99.00	2.931	2.931	0.0	1.000	342068		4.42(2.31-6.93)		3093	
20 Perfluorononanoic acid										
463.00 > 419.00	2.931	2.931	0.0	1.000	1369945	1.00		99.7	6894	
463.00 > 169.00	2.931	2.931	0.0	1.000	334777		4.09(1.90-5.69)		19100	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.139	3.139	0.0	1.071	2441798	0.9299		99.8	28431	
D 26 M2-8:2FTS										
529.00 > 81.00	3.276	3.276	0.0	1.278	1041179	2.36		98.5	18757	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.276	3.276	0.0	1.000	551617	0.9391		98.0	27443	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.276	3.276	0.0	1.118	1017216	0.9627		100	22109	
549.00 > 99.00	3.276	3.276	0.0	1.118	383254		2.65(1.33-3.97)		2769	
D 23 13C2 PFDA										
515.00 > 470.00	3.283	3.283	0.0	1.280	2455676	2.53		101	50850	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	3.291	3.283	0.008	1.002	1016190	0.9692		96.9	2774	
513.00 > 169.00	3.291	3.283	0.008	1.002	172724		5.88(2.36-7.09)		3997	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.315	3.307	0.008	1.002	1986087	1.04		104	34545	
D 21 13C8 FOSA										
506.00 > 78.00	3.307	3.314	-0.007	1.290	4839752	2.05		82.2	61754	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.439	3.439	0.0	1.341	492446	2.09		83.5	15200	
28 N-methyl perfluorooctane sulfonami										
570.00 > 419.00	3.449	3.449	0.0	1.003	205277	1.03		103	3251	
29 Perfluorodecane Sulfonic acid										
599.00 > 80.00	3.600	3.595	0.005	1.228	833567	0.8718		90.4	34956	
599.00 > 99.00	3.590	3.595	-0.005	1.225	288948		2.88(1.39-4.16)		3347	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.600	3.611	-0.011	1.404	542876	2.15		85.9	5632	
D 30 13C2 PFUnA										
565.00 > 520.00	3.611	3.611	0.0	1.408	1766311	2.36		94.4	37352	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.611	3.617	-0.006	1.000	874572	1.00		100	2048	
563.00 > 169.00	3.611	3.617	-0.006	1.000	146164		5.98(2.12-6.36)		4393	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.611	3.617	-0.006	1.003	189755	0.9805		98.1	10844	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	3.764	3.770	-0.006	1.284	3330287	0.9312		98.9	57530	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.899	3.906	-0.007	1.000	650305	0.9470		94.7	172	
613.00 > 169.00	3.899	3.906	-0.007	1.000	165501		3.93(2.13-6.40)		3136	
D 36 13C2 PFDoA										
615.00 > 570.00	3.899	3.909	-0.010	1.521	1585513	2.45		97.8	15863	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.163	4.162	0.001	1.068	545408	0.9125		91.3	158	
663.00 > 169.00	4.163	4.162	0.001	1.068	174880		3.12(1.25-3.76)		1619	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.394	4.393	0.001	1.000	126288	0.9868		98.7	1699	
713.00 > 219.00	4.384	4.393	-0.009	0.998	91738		1.38(0.71-2.13)		1254	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.394	4.394	0.0	1.714	1187713	2.18		87.3	5773	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.787	4.795	-0.008	1.000	690199	0.9674		96.7	34.8	
813.00 > 169.00	4.787	4.795	-0.008	1.000	115923		5.95(2.86-8.58)		1458	
D 44 13C2-PFHxDA										
815.00 > 770.00	4.787	4.796	-0.009	1.867	1798518	1.92		76.7	2670	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.119	5.126	-0.007	1.069	919949	1.24		124	338	
913.00 > 169.00	5.119	5.126	-0.007	1.069	119906		7.67(3.83-11.48)		1385	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Report Date: 06-Aug-2018 11:01:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_008.d

Injection Date: 04-Aug-2018 00:19:48 Instrument ID: A8_N

Lims ID: LCSD 320-237151/3-A

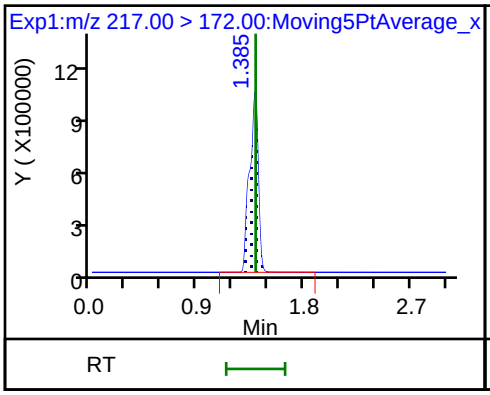
Client ID:

Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 3 Worklist Smp#: 6

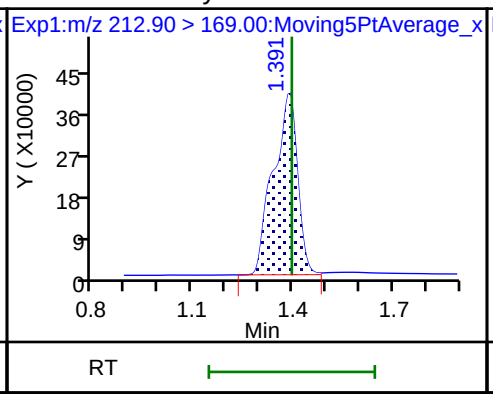
Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

D 1 13C4 PFBA



2 Perfluorobutyric acid



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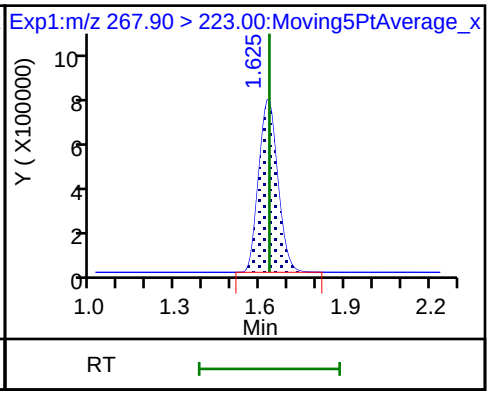
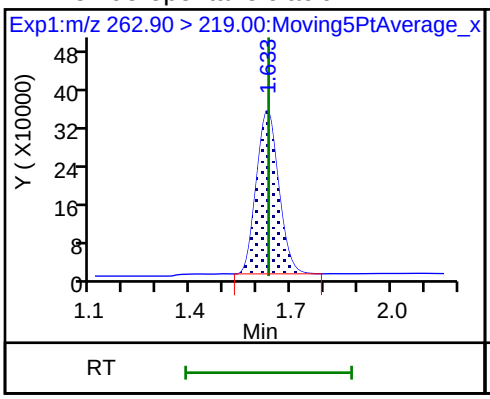
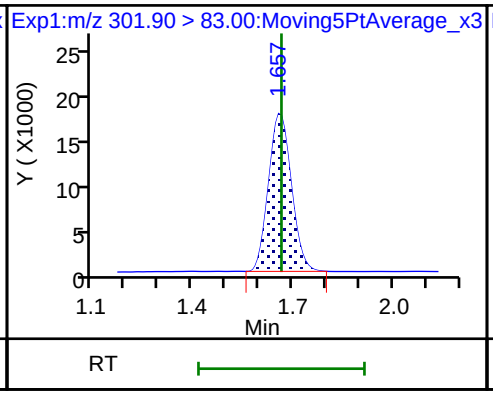


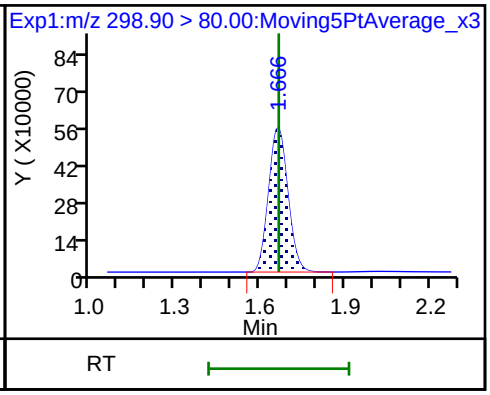
4 Perfluoropentanoic acid



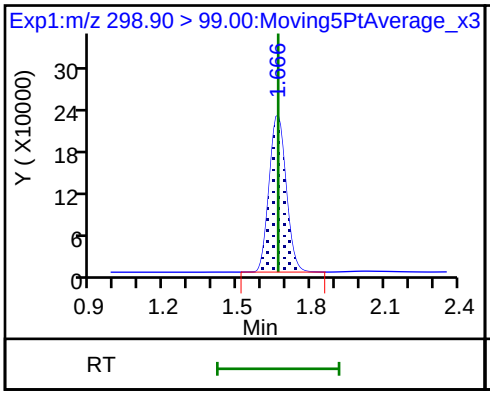
D 47 13C3-PFBS



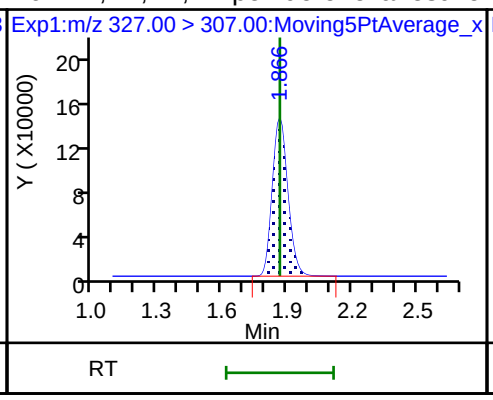
5 Perfluorobutanesulfonic acid



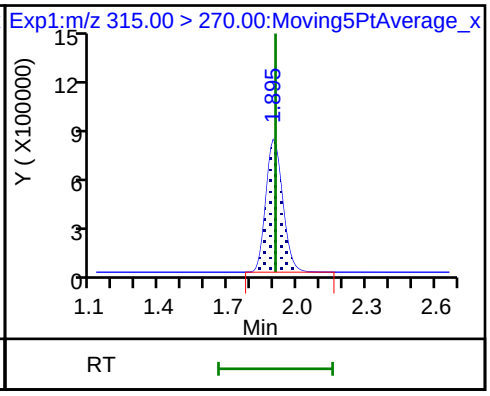
5 Perfluorobutanesulfonic acid



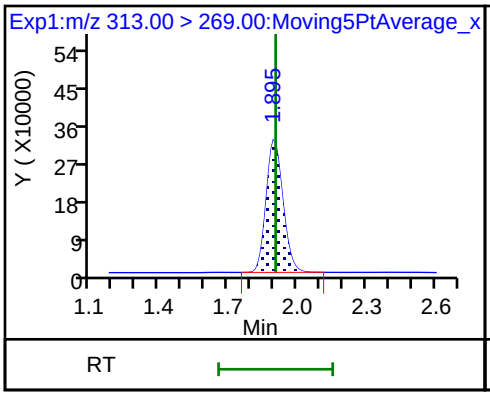
61 1H,1H,2H,2H-perfluorohexanesulfon



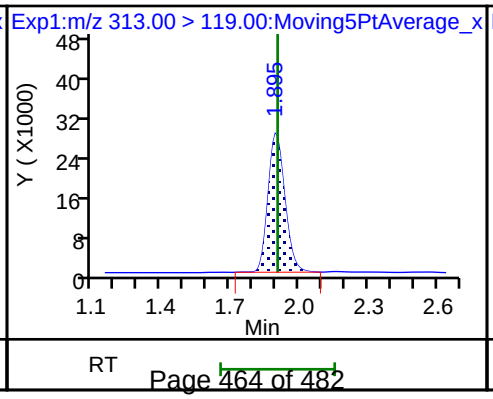
D 7 13C2 PFHxA



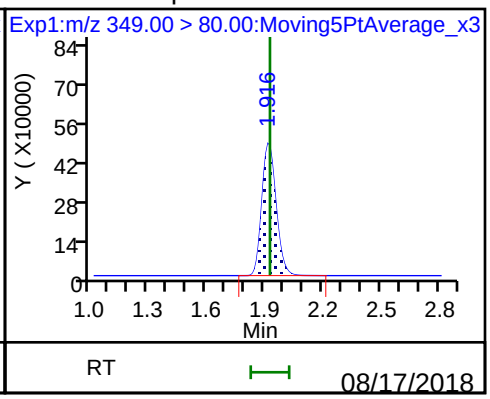
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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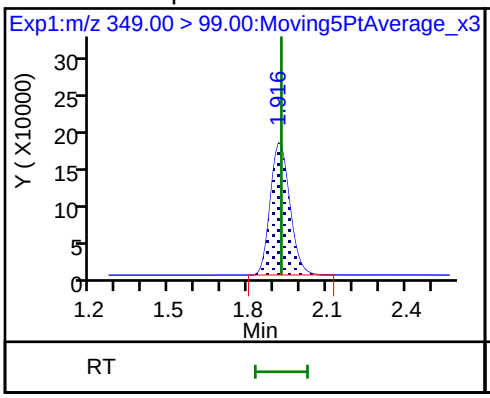
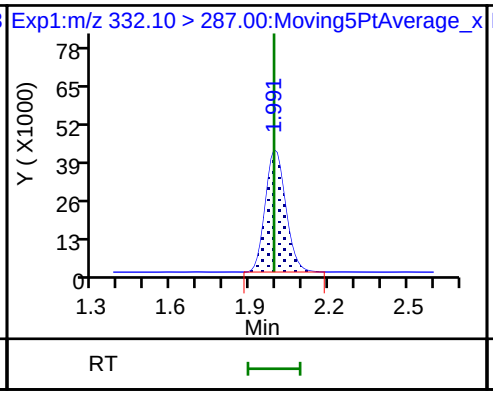
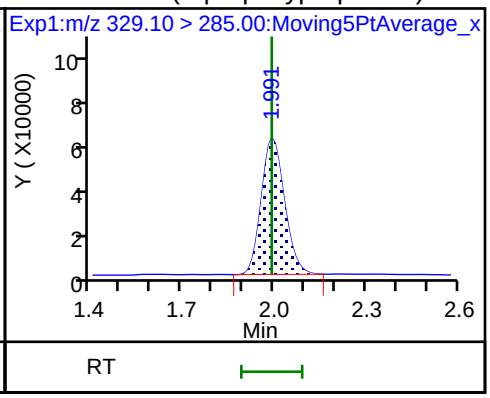


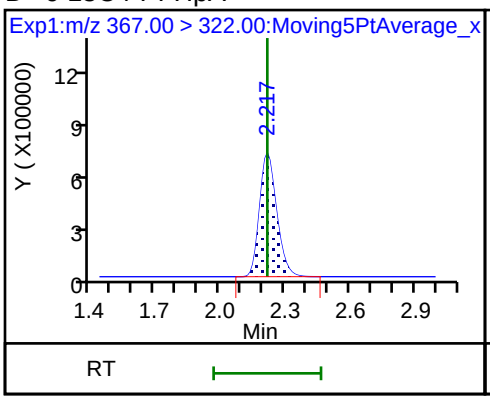
D 64 13C3 HFPO-DA



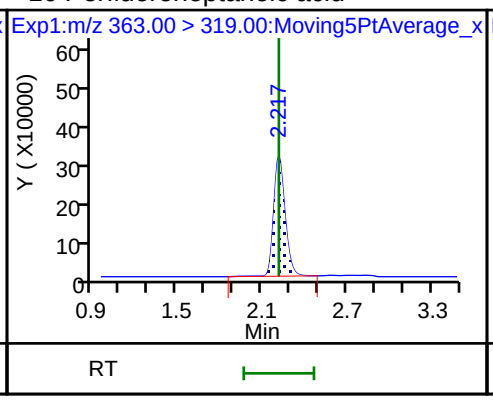
67 Perfluoro(2-propoxypropanoic) acid



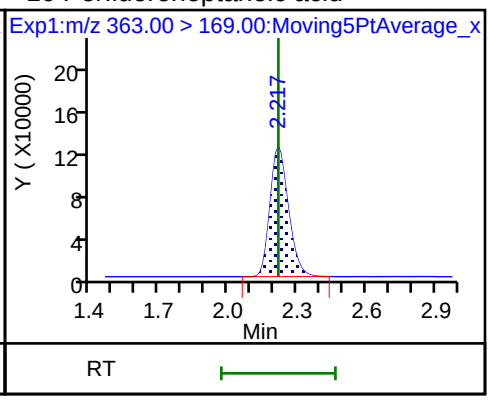
D 9 13C4-PFHpA



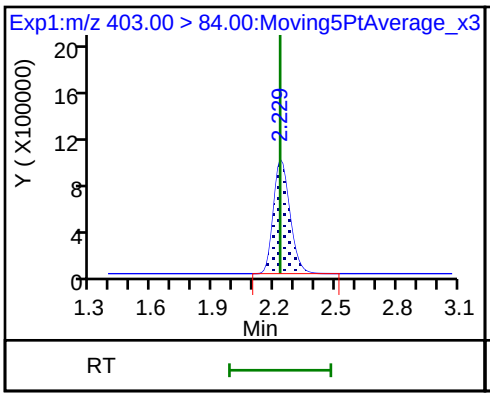
10 Perfluoroheptanoic acid



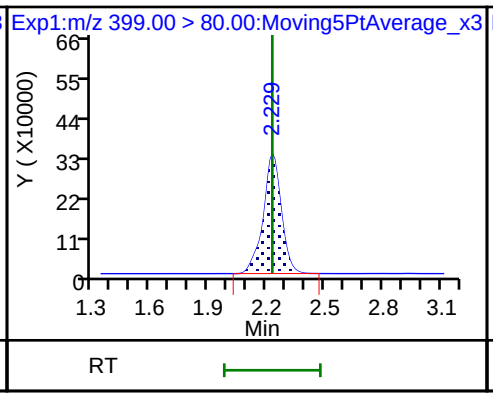
10 Perfluoroheptanoic acid



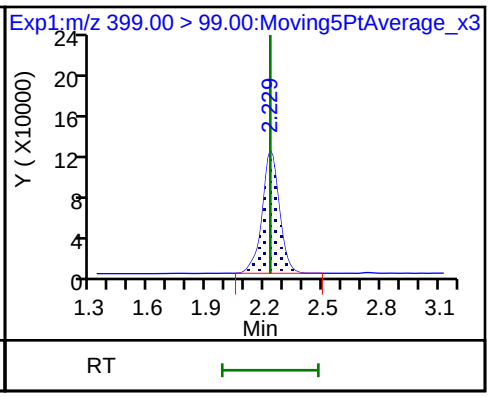
D 11 18O2 PFHxS



8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid



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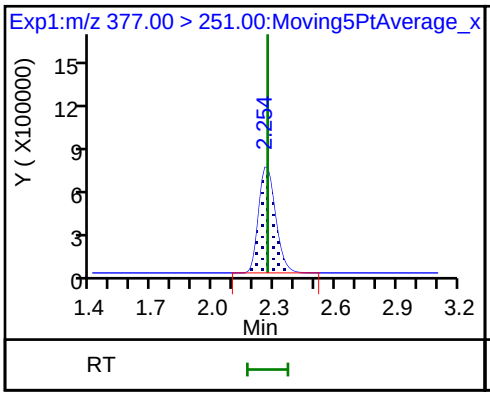

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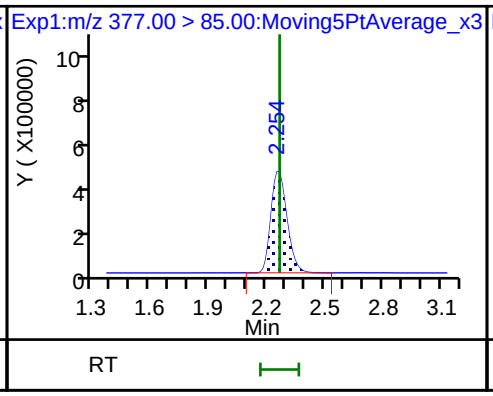
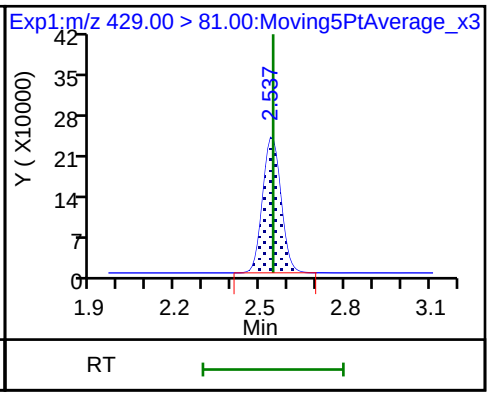
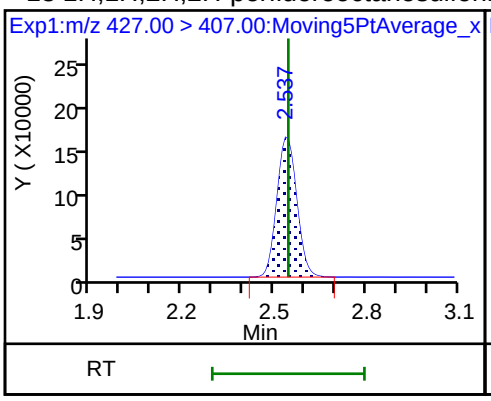


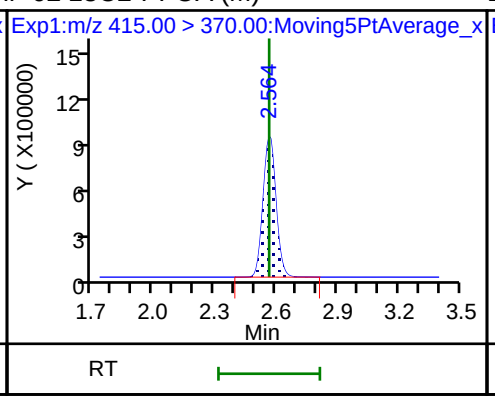
D 12 M2-6:2FTS



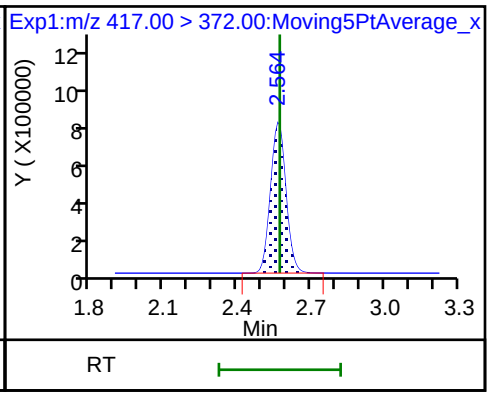
13 1H,1H,2H,2H-perfluorooctanesulfonI



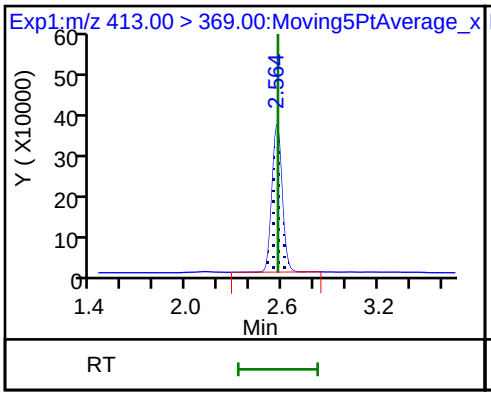
62 13C2-PFOA (M)



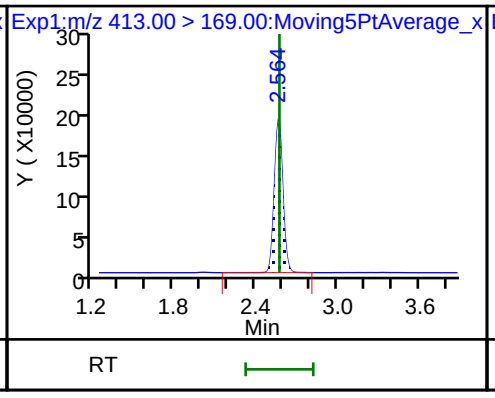
D 14 13C4 PFOA



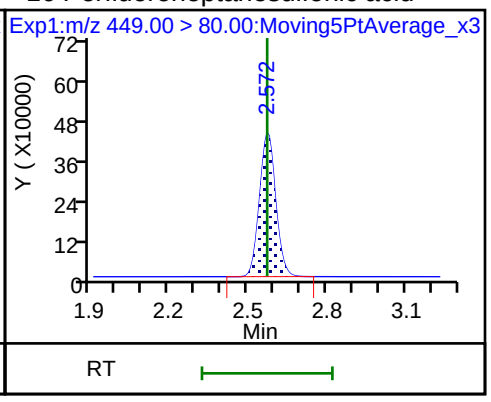
15 Perfluorooctanoic acid



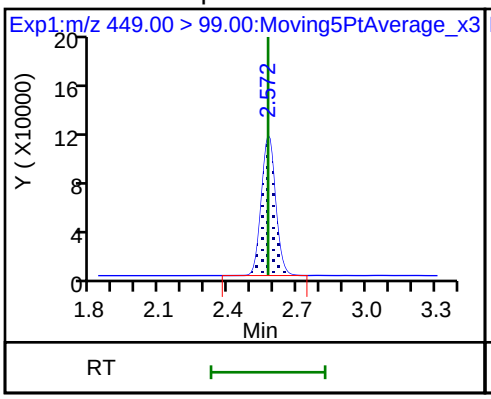
15 Perfluorooctanoic acid



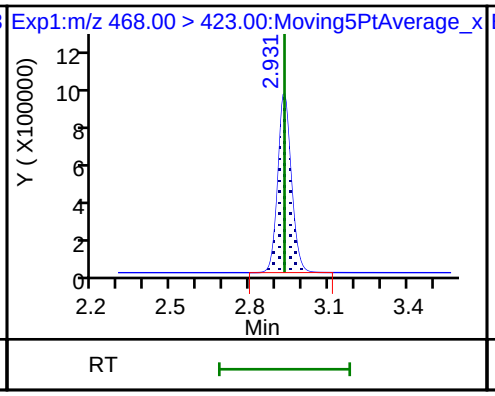
16 Perfluoroheptanesulfonic acid



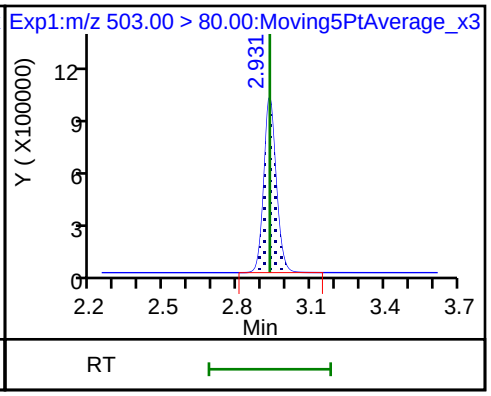
16 Perfluoroheptanesulfonic acid



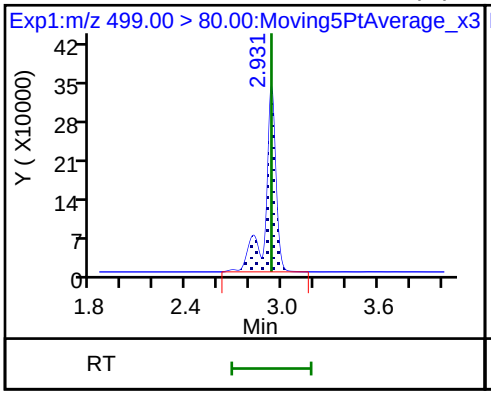
D 19 13C5 PFNA



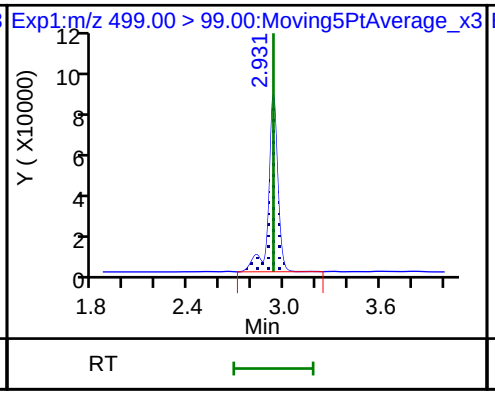
D 18 13C4 PFOS



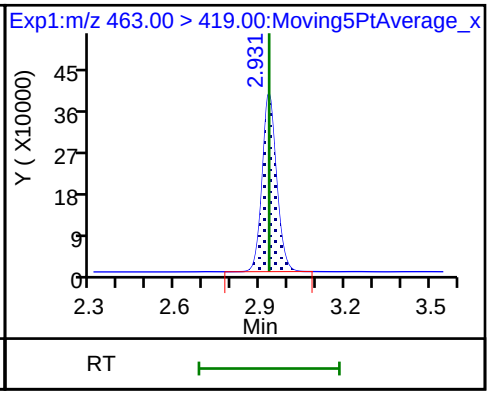
17 Perfluorooctane sulfonic acid (M)



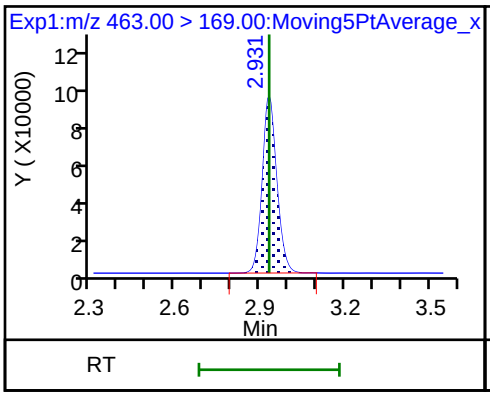
17 Perfluorooctane sulfonic acid



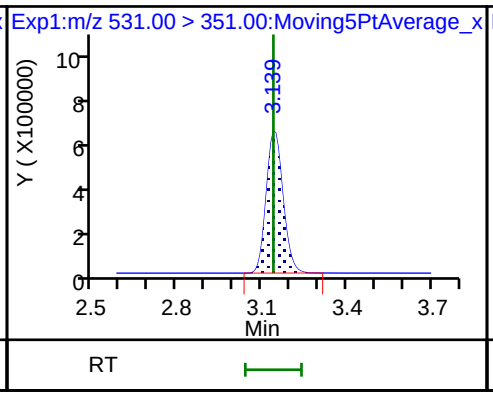
20 Perfluorononanoic acid



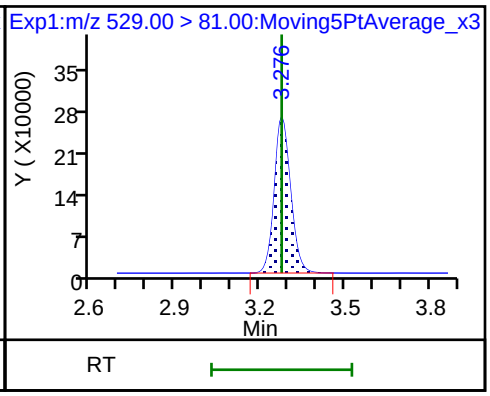
20 Perfluorononanoic acid



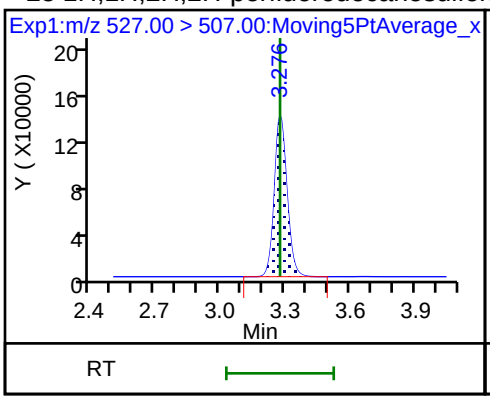
69 9-Chlorohexadecafluoro-3-oxanonane



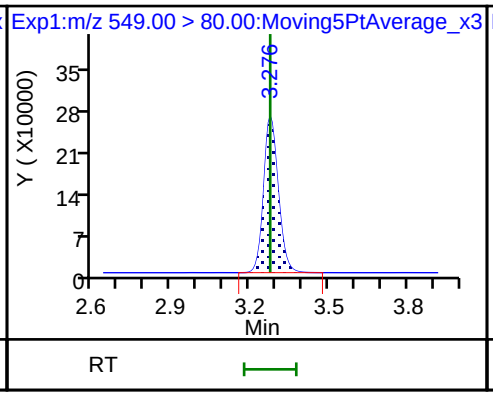
D 26 M2-8:2FTS



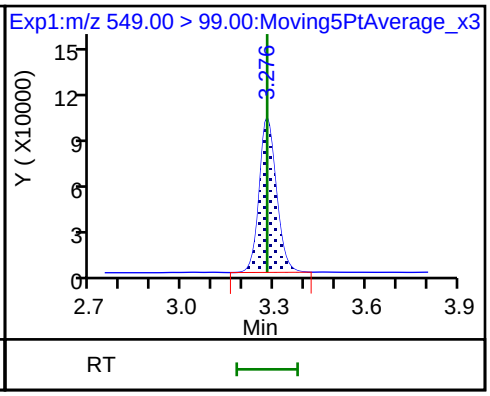
25 1H,1H,2H,2H-perfluorodecanesulfoni



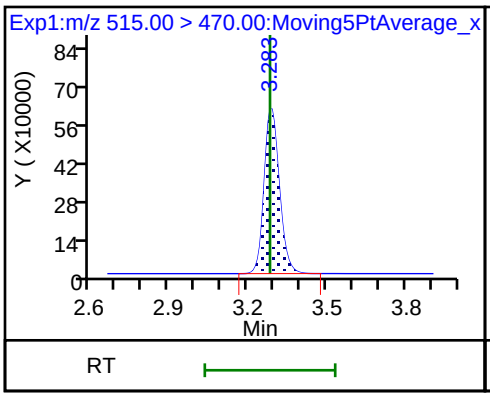
68 Perfluorononanesulfonic acid



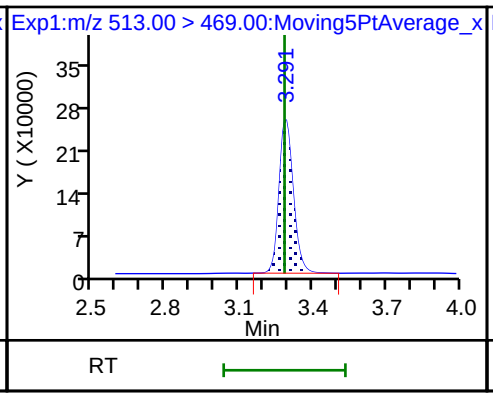
68 Perfluorononanesulfonic acid



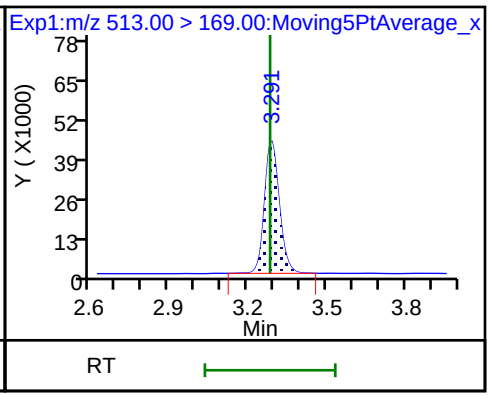
D 23 13C2 PFDA



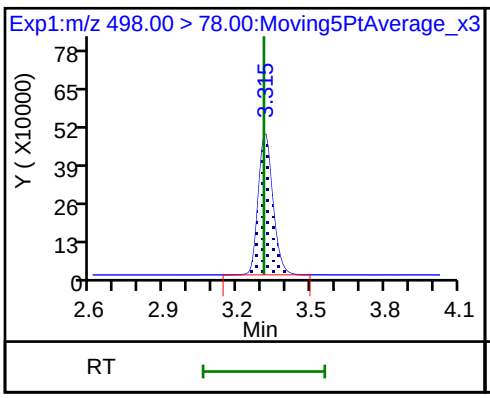
24 Perfluorodecanoic acid



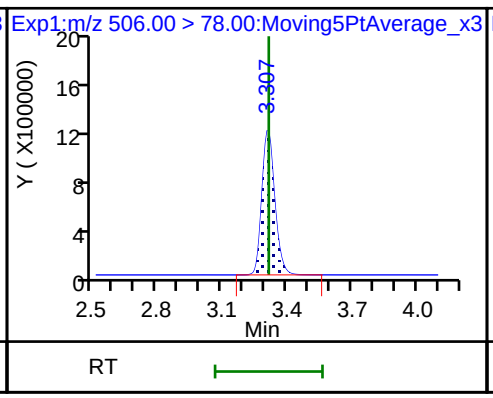
24 Perfluorodecanoic acid



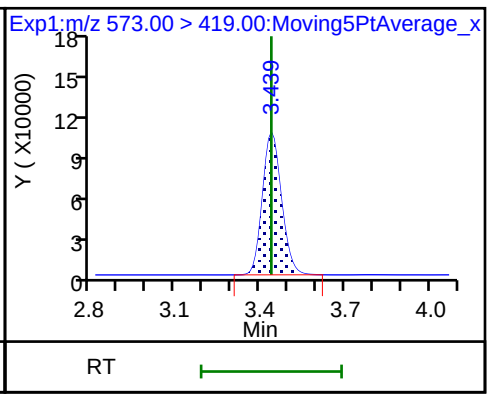
22 Perfluorooctane Sulfonamide



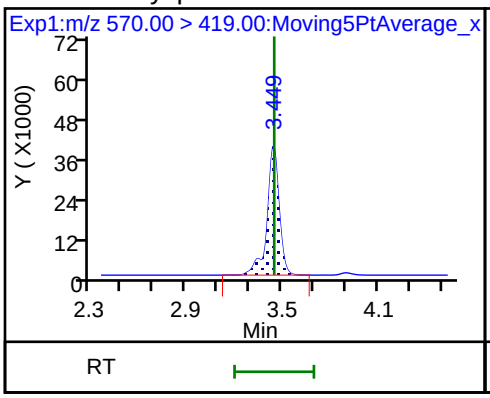
D 21 13C8 FOSA



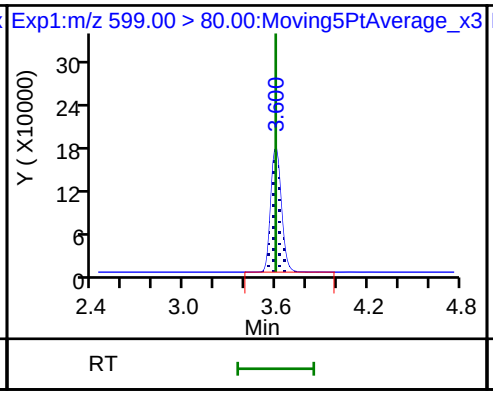
D 27 d3-NMeFOSAA



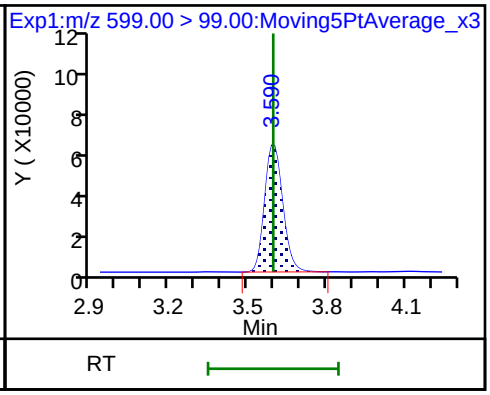
28 N-methyl perfluorooctane sulfonami



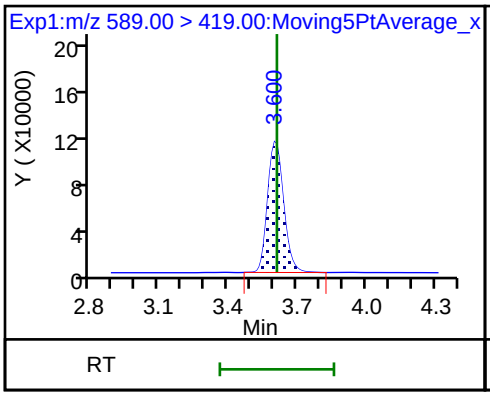
29 Perfluorodecane Sulfonic acid



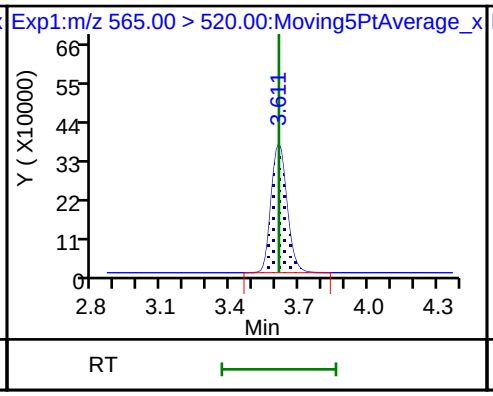
29 Perfluorodecane Sulfonic acid



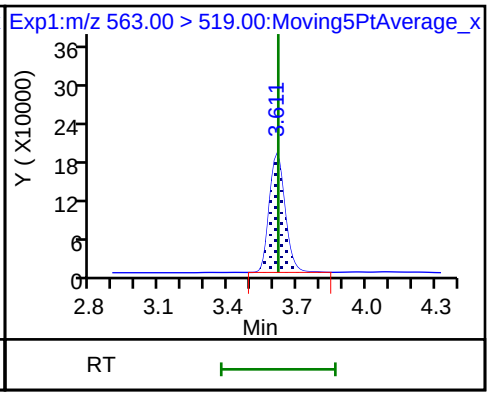
D 32 d5-NEtFOSAA



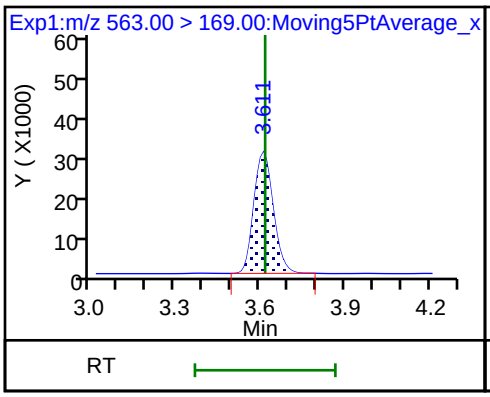
D 30 13C2 PFUnA



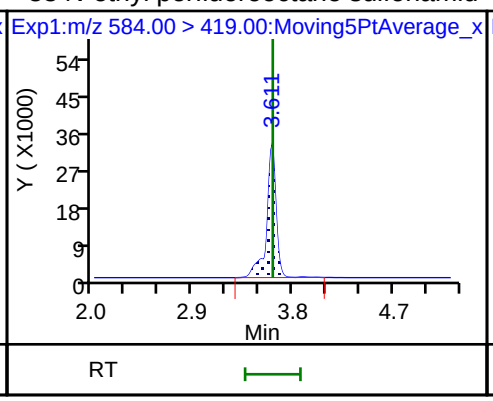
31 Perfluoroundecanoic acid



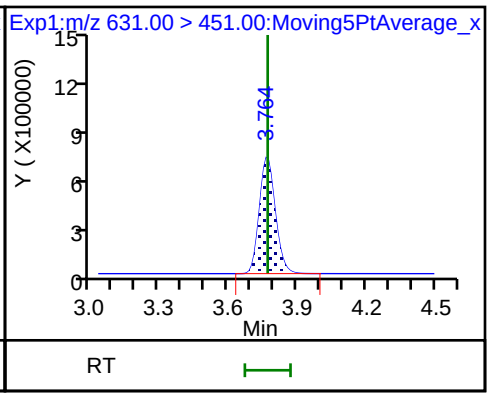
31 Perfluoroundecanoic acid



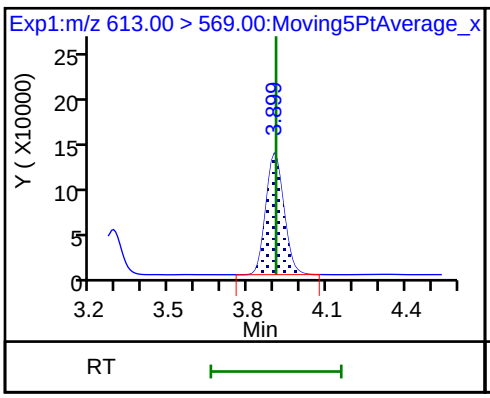
33 N-ethyl perfluorooctane sulfonamid



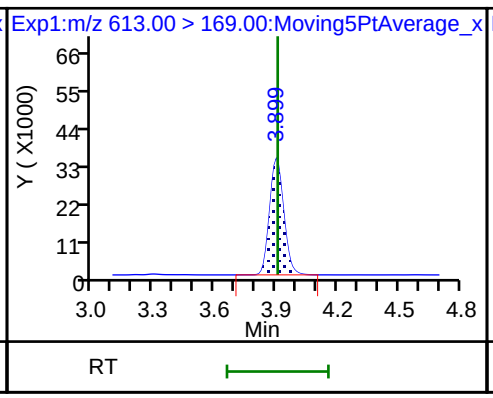
66 11-Chloroeicosafluoro-3-oxaundecan



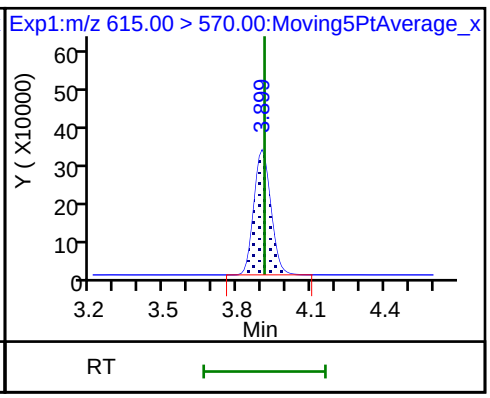
37 Perfluorododecanoic acid



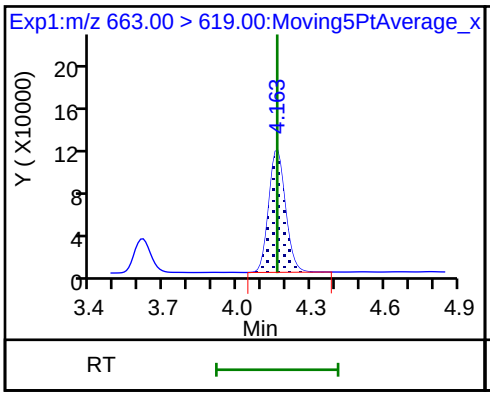
37 Perfluorododecanoic acid



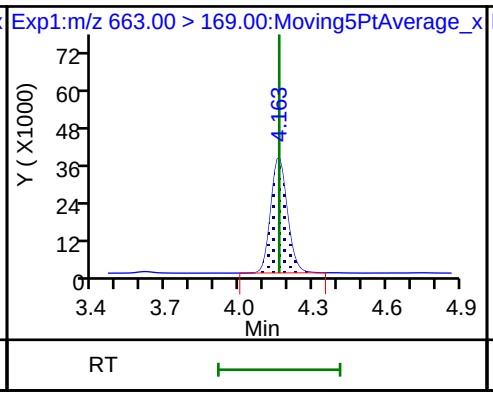
D 36 13C2 PFDoA



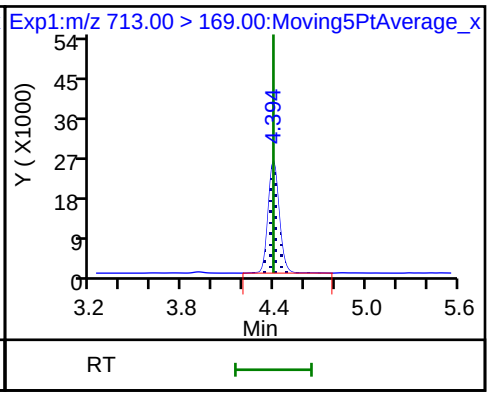
41 Perfluorotridecanoic acid



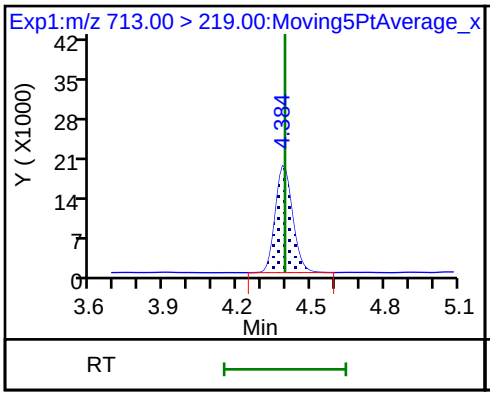
41 Perfluorotridecanoic acid



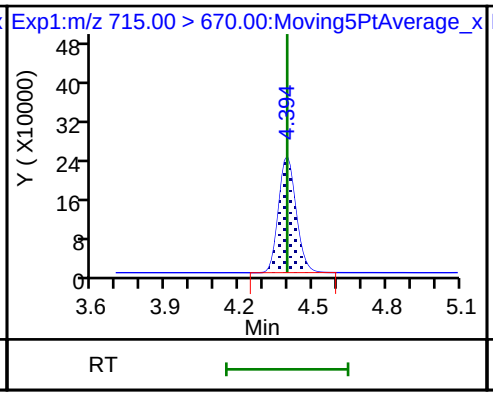
42 Perfluorotetradecanoic acid



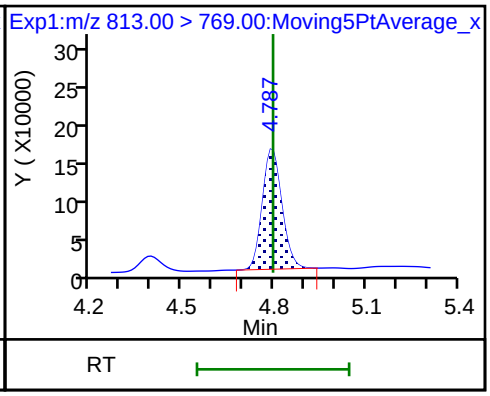
42 Perfluorotetradecanoic acid



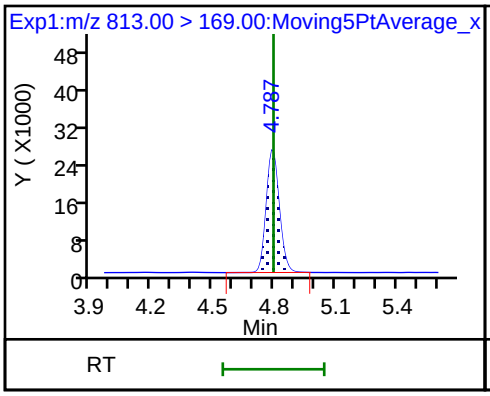
D 43 13C2-PFTeDA



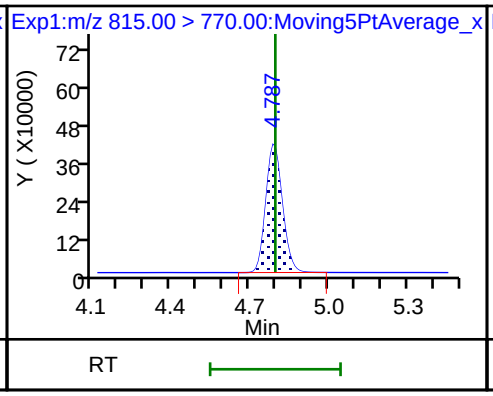
45 Perfluorohexadecanoic acid



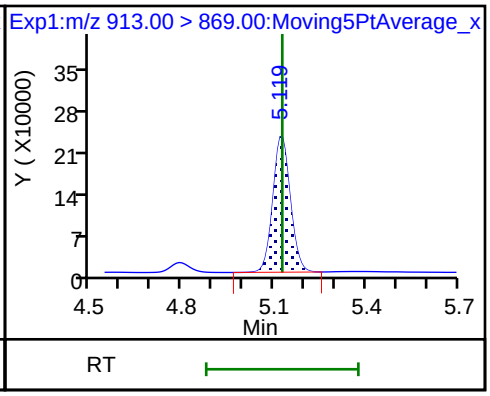
45 Perfluorohexadecanoic acid



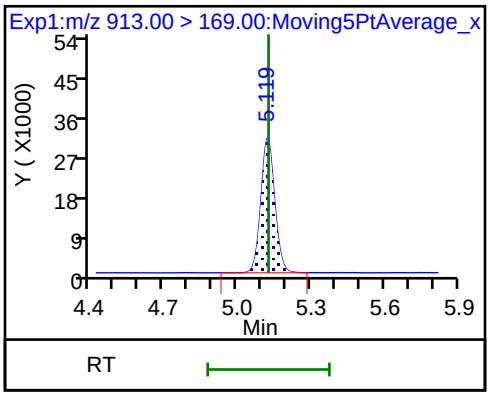
D 44 13C2-PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

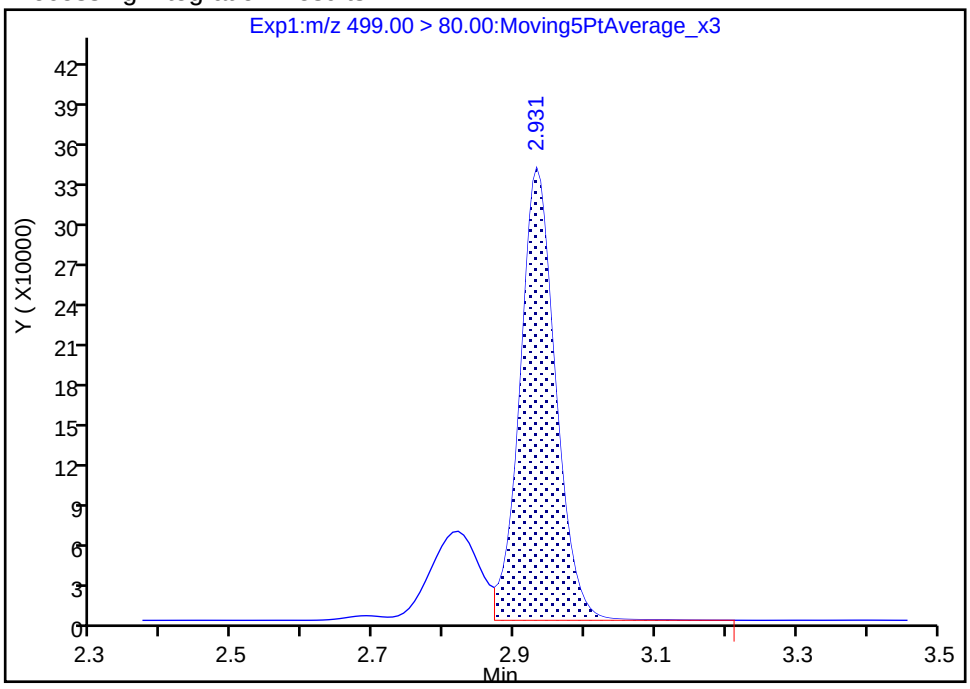
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_008.d				
Injection Date:	04-Aug-2018 00:19:48	Instrument ID:	A8_N		
Lims ID:	LCSD 320-237151/3-A				
Client ID:					
Operator ID:	\SACINSTLCMS01@tai.com	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

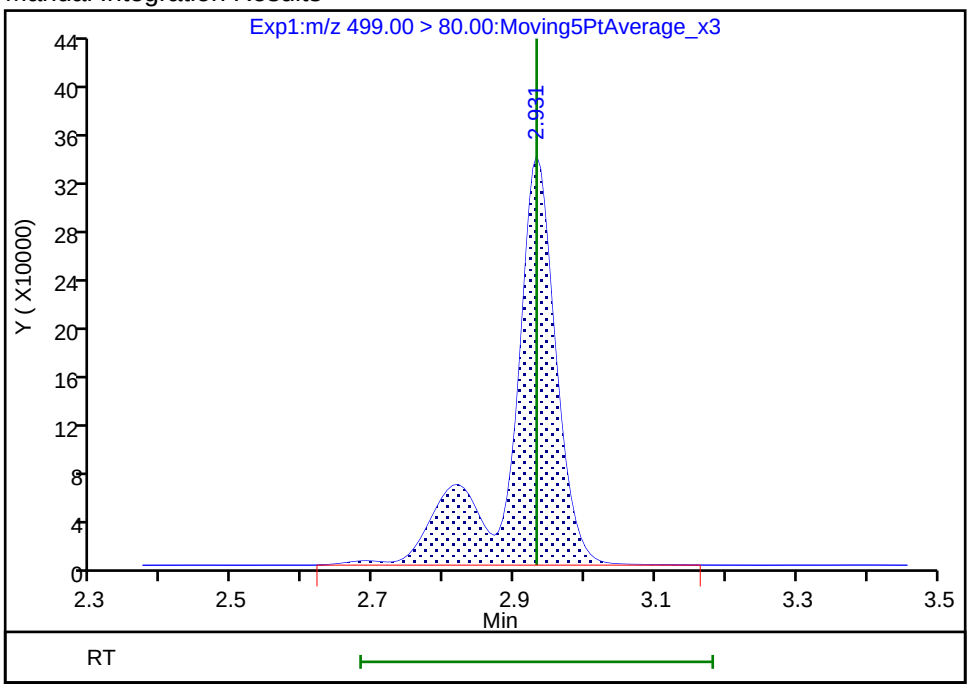
Processing Integration Results

RT: 2.93
Area: 1180422
Amount: 0.715219
Amount Units: ng/ml



Manual Integration Results

RT: 2.93
Area: 1510922
Amount: 0.915470
Amount Units: ng/ml



Reviewer: hannigana, 06-Aug-2018 10:43:08

Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

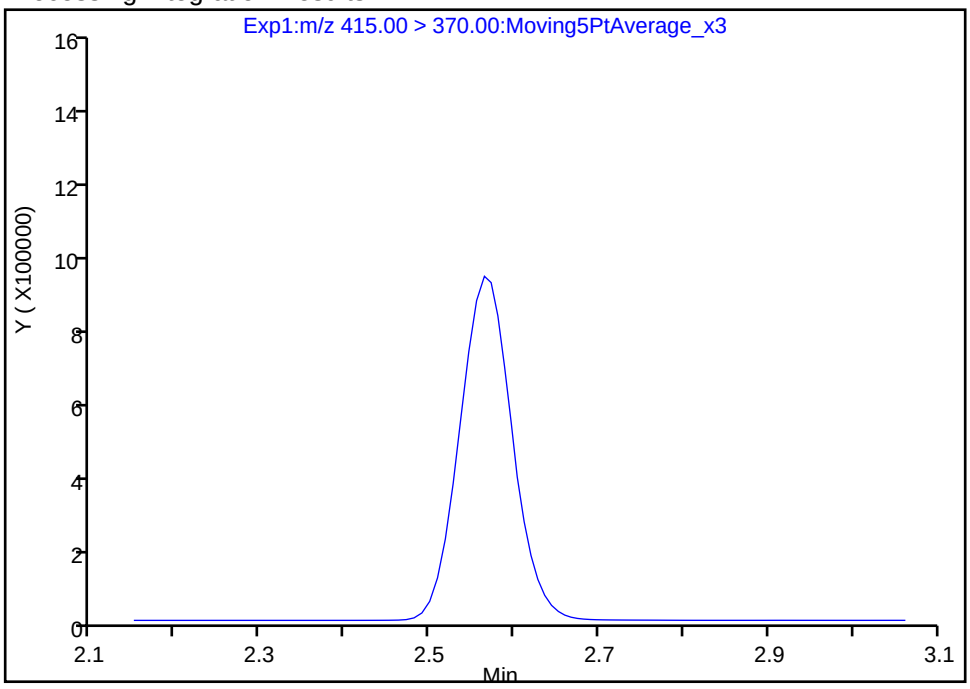
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180803-62129.b\2018.08.03LLC_008.d
Injection Date: 04-Aug-2018 00:19:48 Instrument ID: A8_N
Lims ID: LCSD 320-237151/3-A
Client ID:
Operator ID: \SACINSTLCMS01@tai.com ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

* 62 13C2-PFOA, CAS: STL00623

Signal: 1

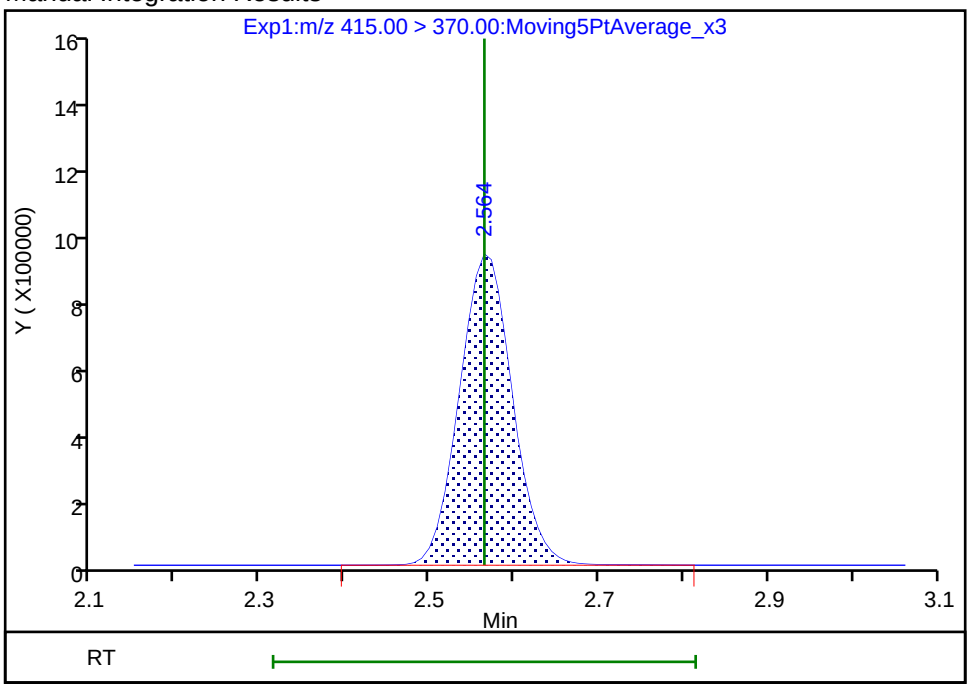
Not Detected
Expected RT: 2.56

Processing Integration Results



Manual Integration Results

RT: 2.56
Area: 3884985
Amount: 2.500000
Amount Units: ng/ml



Reviewer: roycea, 06-Aug-2018 09:24:19
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Instrument ID: A8_N Start Date: 08/01/2018 12:59

Analysis Batch Number: 237401 End Date: 08/01/2018 14:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-237401/2		08/01/2018 12:59	1	2018.08.01LLICAL 002.d	GeminiC18 3x100 3(mm)
IC 320-237401/3		08/01/2018 13:06	1	2018.08.01LLICAL 003.d	GeminiC18 3x100 3(mm)
IC 320-237401/4		08/01/2018 13:14	1	2018.08.01LLICAL 004.d	GeminiC18 3x100 3(mm)
IC 320-237401/5 ICIS		08/01/2018 13:22	1	2018.08.01LLICAL 005.d	GeminiC18 3x100 3(mm)
IC 320-237401/6		08/01/2018 13:30	1	2018.08.01LLICAL 006.d	GeminiC18 3x100 3(mm)
IC 320-237401/7		08/01/2018 13:38	1	2018.08.01LLICAL 007.d	GeminiC18 3x100 3(mm)
IC 320-237401/8		08/01/2018 13:46	1	2018.08.01LLICAL 008.d	GeminiC18 3x100 3(mm)
ICB 320-237401/9		08/01/2018 13:53	1	2018.08.01LLICAL 009.d	GeminiC18 3x100 3(mm)
ICV 320-237401/10		08/01/2018 14:01	1	2018.08.01LLICAL 010.d	GeminiC18 3x100 3(mm)
CCB 320-237401/11		08/01/2018 14:09	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Instrument ID: A8_N Start Date: 08/03/2018 23:40

Analysis Batch Number: 237938 End Date: 08/04/2018 02:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-237938/1		08/03/2018 23:40	1	2018.08.03LLC_003.d	GeminiC18 3x100 3(mm)
CCVL 320-237938/2		08/03/2018 23:48	1	2018.08.03LLC_004.d	GeminiC18 3x100 3(mm)
CCV 320-237938/3 CCVIS		08/03/2018 23:56	1	2018.08.03LLC_005.d	GeminiC18 3x100 3(mm)
MB 320-237151/1-A		08/04/2018 00:04	1	2018.08.03LLC_006.d	GeminiC18 3x100 3(mm)
LCS 320-237151/2-A		08/04/2018 00:11	1	2018.08.03LLC_007.d	GeminiC18 3x100 3(mm)
LCSD 320-237151/3-A		08/04/2018 00:19	1	2018.08.03LLC_008.d	GeminiC18 3x100 3(mm)
320-41405-1		08/04/2018 00:27	1	2018.08.03LLC_009.d	GeminiC18 3x100 3(mm)
320-41405-2		08/04/2018 00:35	1	2018.08.03LLC_010.d	GeminiC18 3x100 3(mm)
320-41405-3		08/04/2018 00:51	1	2018.08.03LLC_012.d	GeminiC18 3x100 3(mm)
320-41405-4		08/04/2018 00:58	1	2018.08.03LLC_013.d	GeminiC18 3x100 3(mm)
ZZZZZ		08/04/2018 01:06	1		GeminiC18 3x100 3(mm)
CCV 320-237938/14		08/04/2018 01:22	1	2018.08.03LLC_016.d	GeminiC18 3x100 3(mm)
ZZZZZ		08/04/2018 01:30	100		GeminiC18 3x100 3(mm)
ZZZZZ		08/04/2018 01:38	100		GeminiC18 3x100 3(mm)
ZZZZZ		08/04/2018 01:45	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/04/2018 01:53	1		GeminiC18 3x100 3(mm)
CCV 320-237938/20		08/04/2018 02:09	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Instrument ID: A8_N Start Date: 08/06/2018 11:10

Analysis Batch Number: 238192 End Date: 08/06/2018 12:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-238192/2		08/06/2018 11:10	1	2018.08.06LLICAL_002.d	GeminiC18 3x100 3(mm)
IC 320-238192/3		08/06/2018 11:17	1	2018.08.06LLICAL_003.d	GeminiC18 3x100 3(mm)
IC 320-238192/4		08/06/2018 11:25	1	2018.08.06LLICAL_004.d	GeminiC18 3x100 3(mm)
IC 320-238192/5 ICIS		08/06/2018 11:33	1	2018.08.06LLICAL_005.d	GeminiC18 3x100 3(mm)
IC 320-238192/6		08/06/2018 11:41	1	2018.08.06LLICAL_006.d	GeminiC18 3x100 3(mm)
IC 320-238192/7		08/06/2018 11:49	1	2018.08.06LLICAL_007.d	GeminiC18 3x100 3(mm)
IC 320-238192/8		08/06/2018 11:56	1	2018.08.06LLICAL_008.d	GeminiC18 3x100 3(mm)
ICB 320-238192/9		08/06/2018 12:04	1	2018.08.06LLICAL_009.d	GeminiC18 3x100 3(mm)
ICV 320-238192/10		08/06/2018 12:12	1	2018.08.06LLICAL_010.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Instrument ID: A8_N Start Date: 08/07/2018 14:37

Analysis Batch Number: 238518 End Date: 08/07/2018 16:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-238518/1		08/07/2018 14:37	1	2018.08.07LLB_004.d	GeminiC18 3x100 3(mm)
CCVL 320-238518/2		08/07/2018 14:45	1	2018.08.07LLB_005.d	GeminiC18 3x100 3(mm)
CCV 320-238518/3 CCVIS		08/07/2018 14:53	1	2018.08.07LLB_006.d	GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 15:01	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 15:08	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 15:16	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 15:24	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 15:32	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 15:40	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 15:47	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 15:55	1		GeminiC18 3x100 3(mm)
CCV 320-238518/12		08/07/2018 16:03	1		GeminiC18 3x100 3(mm)
ZZZZZ		08/07/2018 16:11	1		GeminiC18 3x100 3(mm)
CCV 320-238518/14		08/07/2018 16:19	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Instrument ID: A8_N Start Date: 08/07/2018 22:11

Analysis Batch Number: 238593 End Date: 08/07/2018 22:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-238593/1		08/07/2018 22:11	1	2018.08.07LLBB_062.d	GeminiC18 3x100 3(mm)
320-41405-5 DL		08/07/2018 22:19	10	2018.08.07LLBB_063.d	GeminiC18 3x100 3(mm)
320-41405-5		08/07/2018 22:27	1	2018.08.07LLBB_064.d	GeminiC18 3x100 3(mm)
CCV 320-238593/4		08/07/2018 22:34	1	2018.08.07LLBB_065.d	GeminiC18 3x100 3(mm)

537 (modified)

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Batch Number: 237151 Batch Start Date: 07/31/18 10:53 Batch Analyst: Vang, Mai Neng

Batch Method: 3535 Batch End Date: 07/31/18 18:08

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC_ALL_SU 00090	LCPFC-IS 00075
MB 320-237151/1		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
LCS 320-237151/2		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
LCSD 320-237151/3		3535, 537 (modified)				250 mL	10.00 mL	500 uL	500 uL
320-41405-A-1	GC-MW-104 (WG)	3535, 537 (modified)	T	302.49 g	26.84 g	275.7 mL	10.00 mL	500 uL	500 uL
320-41405-A-2	GC-MW-105 (WG)	3535, 537 (modified)	T	288.10 g	82.13 g	206 mL	10.00 mL	500 uL	500 uL
320-41405-A-3	GC-EQUIPMENT BLANK (072318)	3535, 537 (modified)	T	326.34 g	28.15 g	298.2 mL	10.00 mL	500 uL	500 uL
320-41405-A-4	GC-MW-2 (WG)	3535, 537 (modified)	T	319.19 g	27.44 g	291.8 mL	10.00 mL	500 uL	500 uL
320-41405-A-5	GC-MW-DRAIN (WG)	3535, 537 (modified)	T	313.82 g	27.87 g	286 mL	10.00 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00161					
MB 320-237151/1		3535, 537 (modified)							
LCS 320-237151/2		3535, 537 (modified)		500 uL					
LCSD 320-237151/3		3535, 537 (modified)		500 uL					
320-41405-A-1	GC-MW-104 (WG)	3535, 537 (modified)	T						
320-41405-A-2	GC-MW-105 (WG)	3535, 537 (modified)	T						
320-41405-A-3	GC-EQUIPMENT BLANK (072318)	3535, 537 (modified)	T						
320-41405-A-4	GC-MW-2 (WG)	3535, 537 (modified)	T						
320-41405-A-5	GC-MW-DRAIN (WG)	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-41405-1

SDG No.:

Batch Number: 237151 Batch Start Date: 07/31/18 10:53 Batch Analyst: Vang, Mai Neng

Batch Method: 3535 Batch End Date: 07/31/18 18:08

Batch Notes	
Analyst ID - Aliquot Step	MNV
Balance ID	QA-078
Batch Comment	Client labels match TA label, MNV.
Analyst ID - Final Volume Step	MNV
H2O ID	7/30/18
Hexane ID	1313826
Internal Standard ID#	1314762
Manifold ID	A
Sodium Hydroxide ID	1313848
Pipette ID	I46162G
Analyst ID - Reagent Drop	VPM
Analyst ID - IS Reagent Drop	VPM
Analyst ID - IS Reagent Drop Witness	MNV
Analyst ID - SU Reagent Drop	VPM
Analyst ID - SU Reagent Drop Witness	MNV
Solvent Lot #	1315195
Solvent Name	0.3% NH4OH/MEOH
SOP Number	WS-LC-0025
SPE Cartridge Type	WAX 500mg
Solid Phase Extraction Disk ID	003637254A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America – Sacramento

Sample Dilution Record

Method ID PFC-IDA

Analyst (Print Name) Quintin Phan **Reagent ID** LC-80:20_00011

Date 8/6/18

Job #	Sample #	Original F.V. (uL)	Aliquot (uL)	Dilution F.V. (uL)	Dilution Factor
320-41495	5	10,000	30	300	10
			QM 8/6/18		

Comments:

Shipping and Receiving Documents

Shipped JAnnel

7/23/18 SAC

NYSC 460501

Chain of Custody Record

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817-2859
phone 732.549.3900 fax 732.549.3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☑Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Lindsay O'Hara	Site Contact: Sanjay Sharma	Date: 7-23-18	COC No:
TRC Engineers, Inc.	Tel/Fax: 203-278-5305	Lab Contact: Jannel Franklin	Carrier:	01 of 01 COCs
1430 Broadway, 10th Floor	Analysis Turnaround Time			Sampler:
New York, New York 10024	☐CALENDAR DAYS ☑WORKING DAYS			For Lab Use Only:
212-221-7822	TAT if different from Below Standard			Walk-in Client:
FAX 212-2217840	☑ 2 weeks			Lab Sampling:
Project Name: Gem Cleaners	☐ 1 week			
Site: 84 N Village Avenue, Rockville Centre, NY	☐ 2 days			Job / SDG No.:
PO#: 120097; Project No. 279191.0000.0000 Phase 2	☐ 1 day			

320-41405 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFAS (List of 21 Compounds)	Sample Specific Notes:
GC-MW-104 (WG)	7-23	1220	G	GW	2	N	N	X	
GC-MW-105 (WG)		1310	G	GW	2	N	N	X	
GC-EQUIPMENT BLANK (072318)		0915	G	AQ	2	N	N	X	
GC-MW-2 (WG)		1325	G	GW	2	N	N	X	
GC-MW-DRAIN (WG)		1215	G	DR	2	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐Return to Client ☐Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments: Please provide Category B Deliverable Data packages, EDD in EQUIS format, and EDD with tabulated results in mg/kg with RLs shown. NYSDEC Project.

2nd batch of samples tomorrow on 7/24/18

Custody Seals Intact: ☐Yes ☐No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____
Relinquished by:	Company: TRC	Date/Time: 7/23/18	Received by:	Company: TA	Date/Time: 7/23/18 13:42
Relinquished by:	Company:	Date/Time: 7/23/18 16:00	Received by:	Company:	Date/Time: 7/23/18 1600
Relinquished by:	Company: TA	Date/Time: 7/23/18 1900	Received in Laboratory by:	Company: TA-Sac	Date/Time: 7/24/18 900

1.4°C

Form No. CA-C-WI-002, Rev. 4.15, dated 9/27/2017

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 320-41405-1

Login Number: 41405
List Number: 1
Creator: Her, David A

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 320-48096-1

Job Description: GEM Cleaners

Contract Number: C008010

For:
TRC Environmental Corporation
1430 Broadway, 10th FL
New York, NY 10018-3308

Attention: Lindsay O'Hara

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
3/21/2019 8:06 PM

Jannel O Franklin, Manager of Project Management Assistants
777 New Durham Road, Edison, NJ, 08817
(732)593-2551
jannel.franklin@testamericainc.com
03/21/2019

Job Number: 320-48096-1

Job Description: GEM Cleaners

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Jannel O Franklin
Manager of Project Management Assistants
3/21/2019 8:06 PM

Jannel O Franklin

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CASE NARRATIVE

Client: TRC Environmental Corporation

Project: GEM Cleaners

Report Number: 320-48096-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 3/6/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° C.

Receipt Exceptions

Analysis for PFAS for the following samples were put on hold by the client on 3/7/19: GC-DYE-TABLET(WZ) (320-48096-1) and GC-DYE-LIQUID(WZ) (320-48096-2). This analysis was originally requested on the chain-of-custody (COC).

Analysis for PFAS for the following samples were activated by the client on 3/11/19: GC-DYE-TABLET(WZ) (320-48096-1) and GC-DYE-LIQUID(WZ) (320-48096-2). This analysis was originally requested on the chain-of-custody (COC).

PFOA/PFOS

Samples GC-DYE-TABLET(WZ) (320-48096-1) and GC-DYE-LIQUID(WZ) (320-48096-2) were analyzed for PFOA/PFOS in accordance with PFOA/PFOS. The samples were prepared and analyzed on 03/12/2019.

Perfluorohexanesulfonic acid (PFHxS), Perfluorooctanoic acid (PFOA) and Perfluorotetradecanoic acid (PFTeA) were detected in method blank MB 320-281038/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-8:2 FTS in the following sample: GC-DYE-LIQUID(WZ) (320-48096-2). The samples were re-analyzed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

The following sample exhibited elevated noise or matrix interferences for Perfluorobutanoic acid (PFBA) and Perfluoropentanoic acid (PFPeA) causing elevation of the reporting limit (RL): GC-DYE-LIQUID(WZ) (320-48096-2) . The reporting limit (RL) for the affected analytes has been raised to be equal to the matrix, and a "G" qualifier applied.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-281038. 320-281038 Method code: 3535 PFC-W

The following samples were observed to be a light green color prior to extraction: GC-DYE-TABLET(WZ) (320-48096-1) and

GC-DYE-LIQUID(WZ) (320-48096-2). 320-281038 Method code: 3535 PFC-W

The following sample extracts were observed to be a bright light green color: GC-DYE-TABLET(WZ) (320-48096-1) and GC-DYE-LIQUID(WZ) (320-48096-2). 320-281038 Method code: 3535 PFC-W

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-48096-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-48096-1	GC-DYE-TABLET(WZ)	Water	03/04/19 12:00	03/06/19 10:00
320-48096-2	GC-DYE-LIQUID(WZ)	Water	03/04/19 12:00	03/06/19 10:00

Client Sample ID: GC-DYE-TABLET(WZ) — Lab Sample ID: 320-48096-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.4	J	1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.62	J	1.7	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.75	J I	1.7	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.57	J	1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.2	J B	1.7	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.28	J B	1.7	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.40	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.49	J B	1.7	0.14	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.63	J	1.7	0.46	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GC-DYE-LIQUID(WZ) — Lab Sample ID: 320-48096-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	0.71	J	1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.52	J I	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.2	J B	1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.29	J B	1.8	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.38	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.45	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-48096-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Client Sample ID: GC-DYE-TABLET(WZ)

Date Collected: 03/04/19 12:00
Date Received: 03/06/19 10:00

Lab Sample ID: 320-48096-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.4**	**J**	1.7	0.30	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluoropentanoic acid (PFPeA)	**0.62**	**J**	1.7	0.41	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorohexanoic acid (PFHxA)	**0.75**	**J I**	1.7	0.49	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluoroheptanoic acid (PFHpA)	**0.57**	**J**	1.7	0.21	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorooctanoic acid (PFOA)	**1.2**	**J B**	1.7	0.72	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorotetradecanoic acid (PFTeA)	**0.28**	**J B**	1.7	0.24	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorobutanesulfonic acid (PFBS)	**0.40**	**J**	1.7	0.17	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorohexanesulfonic acid (PFHxS)	**0.49**	**J B**	1.7	0.14	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorooctanesulfonic acid (PFOS)	**0.63**	**J**	1.7	0.46	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		03/12/19 06:07	03/12/19 21:24	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		03/12/19 06:07	03/12/19 21:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		03/12/19 06:07	03/12/19 21:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		03/12/19 06:07	03/12/19 21:24	1
6:2 FTS	ND		17	1.7	ng/L		03/12/19 06:07	03/12/19 21:24	1
8:2 FTS	ND		17	1.7	ng/L		03/12/19 06:07	03/12/19 21:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*84*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C5-PFPeA DNU	*98*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C2 PFHxA	*107*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C4 PFHpA	*107*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C4 PFOA	*107*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C5 PFNA	*106*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C2 PFDA	*111*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C2 PFUnA	*109*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C2 PFDoA	*124*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C2 PFTeDA	*115*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C3 PFBS	*90*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
18O2 PFHxS	*105*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C4 PFOS	*102*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
13C8 FOSA	*97*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
d3-NMeFOSAA	*69*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
d5-NEtFOSAA	*106*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
M2-6:2 FTS	*123*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*
M2-8:2 FTS	*138*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:24*	*1*

Client Sample ID: GC-DYE-LIQUID(WZ)

Date Collected: 03/04/19 12:00
Date Received: 03/06/19 10:00

Lab Sample ID: 320-48096-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	G	3.5	3.5	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluoropentanoic acid (PFPeA)	ND	G	3.5	3.5	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorohexanoic acid (PFHxA)	**0.71**	**J**	1.8	0.51	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluoroheptanoic acid (PFHpA)	**0.52**	**J I**	1.8	0.22	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorooctanoic acid (PFOA)	**1.2**	**J B**	1.8	0.75	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorotetradecanoic acid (PFTeA)	**0.29**	**J B**	1.8	0.26	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorobutanesulfonic acid (PFBS)	**0.38**	**J**	1.8	0.18	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorohexanesulfonic acid (PFHxS)	**0.45**	**J B**	1.8	0.15	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		03/12/19 06:07	03/12/19 21:31	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31	ng/L		03/12/19 06:07	03/12/19 21:31	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7	ng/L		03/12/19 06:07	03/12/19 21:31	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		03/12/19 06:07	03/12/19 21:31	1
6:2 FTS	ND		18	1.8	ng/L		03/12/19 06:07	03/12/19 21:31	1
8:2 FTS	ND		18	1.8	ng/L		03/12/19 06:07	03/12/19 21:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*87*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C5-PFPeA DNU	*102*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C2 PFHxA	*107*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C4 PFHpA	*108*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C4 PFOA	*110*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C5 PFNA	*112*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C2 PFDA	*114*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C2 PFUnA	*112*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C2 PFDoA	*126*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C2 PFTeDA	*111*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C3 PFBS	*93*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
18O2 PFHxS	*105*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C4 PFOS	*100*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
13C8 FOSA	*100*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
d3-NMeFOSAA	*103*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
d5-NEtFOSAA	*114*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
M2-6:2 FTS	*140*		*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*
M2-8:2 FTS	*164*	*	*25 - 150*	*03/12/19 06:07*	*03/12/19 21:31*	*1*

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-48096-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnA
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
320-48096-1	GC-DYE-TABLET(WZ)	84	98	107	107	107	106	111	109
320-48096-2	GC-DYE-LIQUID(WZ)	87	102	107	108	110	112	114	112
LCS 320-281038/2-A	Lab Control Sample	103	102	108	113	108	114	112	97
LCSD 320-281038/3-A	Lab Control Sample Dup	99	97	104	102	107	101	104	106
MB 320-281038/1-A	Method Blank	95	94	97	103	97	97	102	105

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFDoA	PFTDA	3C3-PFBS	PFHxS	PFOS	PFOSA	-NMeFOSA	-NEtFOSA
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
320-48096-1	GC-DYE-TABLET(WZ)	124	115	90	105	102	97	69	106
320-48096-2	GC-DYE-LIQUID(WZ)	126	111	93	105	100	100	103	114
LCS 320-281038/2-A	Lab Control Sample	99	114	99	111	99	92	102	105
LCSD 320-281038/3-A	Lab Control Sample Dup	113	116	86	101	98	93	112	110
MB 320-281038/1-A	Method Blank	112	113	88	102	94	91	100	108

		Percent Isotope Dilution Recovery (Acceptance Limits)	
		M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(25-150)	(25-150)
320-48096-1	GC-DYE-TABLET(WZ)	123	138
320-48096-2	GC-DYE-LIQUID(WZ)	140	164 *
LCS 320-281038/2-A	Lab Control Sample	121	117
LCSD 320-281038/3-A	Lab Control Sample Dup	108	112
MB 320-281038/1-A	Method Blank	113	114

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5-PFPeA DNU
PFHxA = 13C2 PFHxA
PFHpA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
13C3-PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3-NMeFOSAA = d3-NMeFOSAA
d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-281038/1-A
Matrix: Water
Analysis Batch: 281279

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281038

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorooctanoic acid (PFOA)	1.09	J	2.0	0.85	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorotetradecanoic acid (PFTeA)	0.327	J I	2.0	0.29	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorohexanesulfonic acid (PFHxS)	0.310	J I	2.0	0.17	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		03/12/19 06:07	03/12/19 19:31	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.35	ng/L		03/12/19 06:07	03/12/19 19:31	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		03/12/19 06:07	03/12/19 19:31	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		03/12/19 06:07	03/12/19 19:31	1
6:2 FTS	ND		20	2.0	ng/L		03/12/19 06:07	03/12/19 19:31	1
8:2 FTS	ND		20	2.0	ng/L		03/12/19 06:07	03/12/19 19:31	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C5-PFPeA DNU	*94*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C2 PFHxA	*97*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C4 PFHpA	*103*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C4 PFOA	*97*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C5 PFNA	*97*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C2 PFDA	*102*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C2 PFUnA	*105*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C2 PFDoA	*112*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C2 PFTeDA	*113*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C3 PFBS	*88*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
18O2 PFHxS	*102*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C4 PFOS	*94*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
13C8 FOSA	*91*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
d3-NMeFOSAA	*100*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
d5-NEtFOSAA	*108*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
M2-6:2 FTS	*113*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*
M2-8:2 FTS	*114*		*25 - 150*	*03/12/19 06:07*	*03/12/19 19:31*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-281038/2-A
Matrix: Water
Analysis Batch: 281559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281038

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	45.6		ng/L		114	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	42.9		ng/L		107	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	41.0		ng/L		102	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	40.6		ng/L		101	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	45.5		ng/L		114	64 - 124
Perfluorononanoic acid (PFNA)	40.0	41.0		ng/L		103	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	40.5		ng/L		101	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	41.4		ng/L		103	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	43.1		ng/L		108	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	44.8		ng/L		112	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	38.8		ng/L		97	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	39.0		ng/L		110	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.4		ng/L		100	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	46.3		ng/L		122	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	38.7		ng/L		104	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	38.7		ng/L		100	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	41.6		ng/L		104	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	40.7		ng/L		102	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	41.4		ng/L		103	65 - 125
6:2 FTS	37.9	41.3		ng/L		109	66 - 126
8:2 FTS	38.3	41.2		ng/L		108	67 - 127

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*103*		*25 - 150*
13C5-PFPeA DNU	*102*		*25 - 150*
13C2 PFHxA	*108*		*25 - 150*
13C4 PFHpA	*113*		*25 - 150*
13C4 PFOA	*108*		*25 - 150*
13C5 PFNA	*114*		*25 - 150*
13C2 PFDA	*112*		*25 - 150*
13C2 PFUnA	*97*		*25 - 150*
13C2 PFDoA	*99*		*25 - 150*
13C2 PFTeDA	*114*		*25 - 150*
13C3 PFBS	*99*		*25 - 150*
18O2 PFHxS	*111*		*25 - 150*
13C4 PFOS	*99*		*25 - 150*
13C8 FOSA	*92*		*25 - 150*
d3-NMeFOSAA	*102*		*25 - 150*
d5-NEtFOSAA	*105*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-281038/2-A
Matrix: Water
Analysis Batch: 281559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281038

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	121		25 - 150
M2-8:2 FTS	117		25 - 150

Lab Sample ID: LCSD 320-281038/3-A
Matrix: Water
Analysis Batch: 281279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 281038

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	41.8		ng/L		105	70 - 130	8	30
Perfluoropentanoic acid (PFPeA)			40.0	41.3		ng/L		103	66 - 126	4	30
Perfluorohexanoic acid (PFHxA)			40.0	39.2		ng/L		98	66 - 126	4	30
Perfluoroheptanoic acid (PFHpA)			40.0	43.4		ng/L		109	66 - 126	7	30
Perfluorooctanoic acid (PFOA)			40.0	42.6		ng/L		107	64 - 124	6	30
Perfluorononanoic acid (PFNA)			40.0	42.8		ng/L		107	68 - 128	4	30
Perfluorodecanoic acid (PFDA)			40.0	45.9		ng/L		115	69 - 129	13	30
Perfluoroundecanoic acid (PFUnA)			40.0	39.0		ng/L		97	60 - 120	6	30
Perfluorododecanoic acid (PFDoA)			40.0	43.1		ng/L		108	71 - 131	0	30
Perfluorotridecanoic acid (PFTriA)			40.0	42.9		ng/L		107	72 - 132	4	30
Perfluorotetradecanoic acid (PFTeA)			40.0	37.7		ng/L		94	68 - 128	3	30
Perfluorobutanesulfonic acid (PFBS)			35.4	40.8		ng/L		115	73 - 133	5	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	34.5		ng/L		95	63 - 123	5	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	42.9		ng/L		113	68 - 128	8	30
Perfluorooctanesulfonic acid (PFOS)			37.1	38.0		ng/L		102	67 - 127	2	30
Perfluorodecanesulfonic acid (PFDS)			38.6	39.4		ng/L		102	68 - 128	2	30
Perfluorooctanesulfonamide (FOSA)			40.0	47.9		ng/L		120	70 - 130	14	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			40.0	42.1		ng/L		105	67 - 127	3	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			40.0	43.6		ng/L		109	65 - 125	5	30
6:2 FTS			37.9	39.6		ng/L		104	66 - 126	4	30
8:2 FTS			38.3	43.5		ng/L		113	67 - 127	5	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	99		25 - 150
13C5-PFPeA DNU	97		25 - 150
13C2 PFHxA	104		25 - 150
13C4 PFHpA	102		25 - 150
13C4 PFOA	107		25 - 150
13C5 PFNA	101		25 - 150
13C2 PFDA	104		25 - 150
13C2 PFUnA	106		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-281038/3-A
Matrix: Water
Analysis Batch: 281279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 281038

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C2 PFDoA	113		25 - 150
13C2 PFTeDA	116		25 - 150
13C3 PFBS	86		25 - 150
18O2 PFHxS	101		25 - 150
13C4 PFOS	98		25 - 150
13C8 FOSA	93		25 - 150
d3-NMeFOSAA	112		25 - 150
d5-NEtFOSAA	110		25 - 150
M2-6:2 FTS	108		25 - 150
M2-8:2 FTS	112		25 - 150

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
I	Value is EMPC (estimated maximum possible concentration).
*	Isotope Dilution analyte is outside acceptance limits.
G	The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

LCMS

Prep Batch: 281038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-48096-1	GC-DYE-TABLET(WZ)	Total/NA	Water	3535	
320-48096-2	GC-DYE-LIQUID(WZ)	Total/NA	Water	3535	
MB 320-281038/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-281038/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-281038/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 281279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-48096-1	GC-DYE-TABLET(WZ)	Total/NA	Water	537 (modified)	281038
320-48096-2	GC-DYE-LIQUID(WZ)	Total/NA	Water	537 (modified)	281038
MB 320-281038/1-A	Method Blank	Total/NA	Water	537 (modified)	281038
LCSD 320-281038/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	281038

Analysis Batch: 281559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-281038/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	281038

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-48096-1

Client Sample ID: GC-DYE-TABLET(WZ)

Lab Sample ID: 320-48096-1

Date Collected: 03/04/19 12:00

Matrix: Water

Date Received: 03/06/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281038	03/12/19 06:07	MNV	TAL SAC
Total/NA	Analysis	537 (modified)		1	281279	03/12/19 21:24	S1M	TAL SAC

Client Sample ID: GC-DYE-LIQUID(WZ)

Lab Sample ID: 320-48096-2

Date Collected: 03/04/19 12:00

Matrix: Water

Date Received: 03/06/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281038	03/12/19 06:07	MNV	TAL SAC
Total/NA	Analysis	537 (modified)		1	281279	03/12/19 21:31	S1M	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Project/Site: GEM Cleaners

TestAmerica Job ID: 320-48096-1

Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD / DOE		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-20
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19 *
Hawaii	State Program	9	N/A	01-29-20
Illinois	NELAP	5	200060	03-17-19 *
Kansas	NELAP	7	E-10375	10-31-19
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19 *
Oregon	NELAP	10	4040	01-29-20
Pennsylvania	NELAP	3	68-01272	03-31-19 *
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	12-31-20
Utah	NELAP	8	CA00044	02-28-19 *
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19 *
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-19
Wyoming	State Program	8	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method PFC IDA

Fluorinated Hydrocarbons by Method PFAS IDA

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
GC-DYE-TABLET(WZ)	320-48096-1	84	98	90	107	107	105	123	107
GC-DYE-LIQUID(WZ)	320-48096-2	87	102	93	107	108	105	140	110
	MB 320-281038/1-A	95	94	88	97	103	102	113	97
	LCS 320-281038/2-A	103	102	99	108	113	111	121	108
	LCSD 320-281038/3-A	99	97	86	104	102	101	108	107

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5-PFPeA DNU	25-150
PFBS = 13C3 PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4 PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2 FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFOS #	PFNA #	PFOSA #	M282FTS #	PFDA #	d3NMFOS #	d5NEFOS #	PFUnA #
GC-DYE-TABLET(WZ)	320-48096-1	102	106	97	138	111	69	106	109
GC-DYE-LIQUID(WZ)	320-48096-2	100	112	100	164 *	114	103	114	112
	MB 320-281038/1-A	94	97	91	114	102	100	108	105
	LCS 320-281038/2-A	99	114	92	117	112	102	105	97
	LCSD 320-281038/3-A	98	101	93	112	104	112	110	106

	QC LIMITS
PFOS = 13C4 PFOS	25-150
PFNA = 13C5 PFNA	25-150
PFOSA = 13C8 FOSA	25-150
M282FTS = M2-8:2 FTS	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFDoA #	PFTDA #
GC-DYE-TABLET(WZ)	320-48096-1	124	115
GC-DYE-LIQUID(WZ)	320-48096-2	126	111
	MB 320-281038/1-A	112	113
	LCS 320-281038/2-A	99	114
	LCSD 320-281038/3-A	113	116

	QC LIMITS
PFDoA = 13C2 PFDoA	25-150
PFTDA = 13C2 PFTeDA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2019.03.13LLA_030.d

Lab ID: LCS 320-281038/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	45.6	114	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	42.9	107	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	41.0	102	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	40.6	101	66-126	
Perfluorooctanoic acid (PFOA)	40.0	45.5	114	64-124	
Perfluorononanoic acid (PFNA)	40.0	41.0	103	68-128	
Perfluorodecanoic acid (PFDA)	40.0	40.5	101	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	41.4	103	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	43.1	108	71-131	
Perfluorotridecanoic acid (PFTriA)	40.0	44.8	112	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	38.8	97	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	39.0	110	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.4	100	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	46.3	122	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	38.7	104	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	38.7	100	68-128	
Perfluorooctanesulfonamide (FOSA)	40.0	41.6	104	70-130	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	40.7	102	67-127	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	41.4	103	65-125	
6:2 FTS	37.9	41.3	109	66-126	
8:2 FTS	38.3	41.2	108	67-127	
13C4 PFBA	100	103	103	25-150	
13C5-PFPeA DNU	100	102	102	25-150	
13C2 PFHxA	100	108	108	25-150	
13C4 PFHpA	100	113	113	25-150	
13C4 PFOA	100	108	108	25-150	
13C5 PFNA	100	114	114	25-150	
13C2 PFDA	100	112	112	25-150	
13C2 PFUnA	100	97.4	97	25-150	
13C2 PFDoA	100	99.4	99	25-150	
13C2 PFTeDA	100	114	114	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2019.03.13LLA_030.d

Lab ID: LCS 320-281038/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
13C3 PFBS	93.0	91.6	99	25-150	
18O2 PFHxS	94.6	105	111	25-150	
13C4 PFOS	95.6	94.7	99	25-150	
13C8 FOSA	100	92.3	92	25-150	
d3-NMeFOSAA	100	102	102	25-150	
d5-NEtFOSAA	100	105	105	25-150	
M2-6:2 FTS	95.0	115	121	25-150	
M2-8:2 FTS	95.8	112	117	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2019.03.12LLA_047.d

Lab ID: LCSD 320-281038/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	41.8	105	8	30	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	41.3	103	4	30	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	39.2	98	4	30	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	43.4	109	7	30	66-126	
Perfluorooctanoic acid (PFOA)	40.0	42.6	107	6	30	64-124	
Perfluorononanoic acid (PFNA)	40.0	42.8	107	4	30	68-128	
Perfluorodecanoic acid (PFDA)	40.0	45.9	115	13	30	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	39.0	97	6	30	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	43.1	108	0	30	71-131	
Perfluorotridecanoic acid (PFTriA)	40.0	42.9	107	4	30	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	37.7	94	3	30	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	40.8	115	5	30	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.5	95	5	30	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	42.9	113	8	30	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	38.0	102	2	30	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	39.4	102	2	30	68-128	
Perfluorooctanesulfonamide (FOSA)	40.0	47.9	120	14	30	70-130	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	42.1	105	3	30	67-127	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	43.6	109	5	30	65-125	
6:2 FTS	37.9	39.6	104	4	30	66-126	
8:2 FTS	38.3	43.5	113	5	30	67-127	
13C4 PFBA	100	99.0	99			25-150	
13C5-PFPeA DNU	100	97.5	97			25-150	
13C2 PFHxA	100	104	104			25-150	
13C4 PFHpA	100	102	102			25-150	
13C4 PFOA	100	107	107			25-150	
13C5 PFNA	100	101	101			25-150	
13C2 PFDA	100	104	104			25-150	
13C2 PFUnA	100	106	106			25-150	
13C2 PFDoA	100	113	113			25-150	
13C2 PFTeDA	100	116	116			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2019.03.12LLA_047.d

Lab ID: LCSD 320-281038/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
13C3 PFBS	93.0	80.0	86			25-150	
18O2 PFHxS	94.6	96.0	101			25-150	
13C4 PFOS	95.6	93.7	98			25-150	
13C8 FOSA	100	92.9	93			25-150	
d3-NMeFOSAA	100	112	112			25-150	
d5-NEtFOSAA	100	110	110			25-150	
M2-6:2 FTS	95.0	103	108			25-150	
M2-8:2 FTS	95.8	107	112			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab File ID: 2019.03.12LLA_045.d Lab Sample ID: MB 320-281038/1-A

Matrix: Water Date Extracted: 03/12/2019 06:07

Instrument ID: A9 Date Analyzed: 03/12/2019 19:31

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCSD 320-281038/3-A	2019.03.12LLA_047.d	03/12/2019 19:46
GC-DYE-TABLET(WZ)	320-48096-1	2019.03.12LLA_060.d	03/12/2019 21:24
GC-DYE-LIQUID(WZ)	320-48096-2	2019.03.12LLA_061.d	03/12/2019 21:31
	LCS 320-281038/2-A	2019.03.13LLA_030.d	03/14/2019 00:59

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Sample No.: IC 320-280516/5 Date Analyzed: 03/09/2019 01:40

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2019.03.08ICAL_008. Heated Purge: (Y/N) N

Calibration ID: 44179

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		5802087	3.19				
UPPER LIMIT		8703131	3.39				
LOWER LIMIT		2901044	2.99				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-280516/9		5574501	3.17				
ICV 320-280516/10		5901676	3.18				
CCV 320-281496/3 CCVIS		5472793	3.20				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Sample No.: CCV 320-281496/3 Date Analyzed: 03/13/2019 21:29

Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3(mm)

Lab File ID (Standard): 2019.03.13LLB_046.d Heated Purge: (Y/N) N

Calibration ID: 44179

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		5472793	3.20				
UPPER LIMIT		8209190	3.40				
LOWER LIMIT		2736397	3.00				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-281496/1		5532488	3.19				
CCVL 320-281496/2		5463367	3.20				
CCV 320-281559/1		5473812	3.19				
LCS 320-281038/2-A		4871974	3.19				
CCV 320-281559/10		5493466	3.20				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Sample No.: IC 320-280812/5 Date Analyzed: 03/11/2019 11:49

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm)

Lab File ID (Standard): 2019.03.11_ICAL_005 Heated Purge: (Y/N) N

Calibration ID: 44233

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		7381619	3.23				
UPPER LIMIT		11072429	3.43				
LOWER LIMIT		3690810	3.03				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-280812/9		7269401	3.22				
ICV 320-280812/10		7118039	3.22				
CCV 320-281205/3 CCVIS		6961550	3.20				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Sample No.: CCV 320-281205/3 Date Analyzed: 03/12/2019 14:08

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm)

Lab File ID (Standard): 2019.03.12LLA_006.d Heated Purge: (Y/N) N

Calibration ID: 44233

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		6961550	3.20				
UPPER LIMIT		10442325	3.40				
LOWER LIMIT		3480775	3.00				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-281205/1		6888999	3.19				
CCVL 320-281205/2		7070678	3.20				
MB 320-281038/1-A		6678629	3.20				
320-48096-1	GC-DYE-TABLET(WZ)	6740920	3.20				
320-48096-2	GC-DYE-LIQUID(WZ)	7037227	3.20				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: GC-DYE-TABLET(WZ) | Lab Sample ID: 320-48096-1

Matrix: Water | Lab File ID: 2019.03.12LLA_060.d

Analysis Method: 537 (modified) | Date Collected: 03/04/2019 12:00

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 296.2(mL) | Date Analyzed: 03/12/2019 21:24

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281279 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.4	J	1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.62	J	1.7	0.41
307-24-4	Perfluorohexanoic acid (PFHxA)	0.75	J I	1.7	0.49
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.57	J	1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	1.2	J B	1.7	0.72
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.26
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.28	J B	1.7	0.24
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.40	J	1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.49	J B	1.7	0.14
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.63	J	1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2 FTS	ND		17	1.7
39108-34-4	8:2 FTS	ND		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: GC-DYE-TABLET(WZ) | Lab Sample ID: 320-48096-1

Matrix: Water | Lab File ID: 2019.03.12LLA_060.d

Analysis Method: 537 (modified) | Date Collected: 03/04/2019 12:00

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 296.2(mL) | Date Analyzed: 03/12/2019 21:24

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281279 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	84		25-150
STL01893	13C5-PFPeA DNU	98		25-150
STL00993	13C2 PFHxA	107		25-150
STL01892	13C4 PFHpA	107		25-150
STL00990	13C4 PFOA	107		25-150
STL00995	13C5 PFNA	106		25-150
STL00996	13C2 PFDA	111		25-150
STL00997	13C2 PFUnA	109		25-150
STL00998	13C2 PFDoA	124		25-150
STL02116	13C2 PFTeDA	115		25-150
STL02337	13C3 PFBS	90		25-150
STL00994	18O2 PFHxS	105		25-150
STL00991	13C4 PFOS	102		25-150
STL01056	13C8 FOSA	97		25-150
STL02118	d3-NMeFOSAA	69		25-150
STL02117	d5-NEtFOSAA	106		25-150
STL02279	M2-6:2 FTS	123		25-150
STL02280	M2-8:2 FTS	138		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d
Lims ID: 320-48096-A-1-A
Client ID: GC-DYE-TABLET(WZ)
Sample Type: Client
Inject. Date: 12-Mar-2019 21:24:12 ALS Bottle#: 43 Worklist Smp#: 17
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-48096-a-1-a
Misc. Info.: Plate: 1 Rack: 2
Operator ID: A9\Administrator Instrument ID: A9

Method: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 13:57:39 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 13:57:39
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.712	1.704	0.008	0.536	4741403	2.09		83.7	12338	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.720	1.705	0.015	1.005	69172	0.0417			1.0	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.036	2.025	0.011	0.637	4737056	2.45		97.9	7322	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.026	2.027	-0.001	0.995	34313	0.0184			1.1	M
D 5 13C3 PFBS										
301.90 > 80.00	2.069	2.057	0.012	0.647	6413522	2.10		90.5	177216	
6 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.069	2.070	-0.001	1.000	30181	0.0119	Target=2.65		10.9	M
298.90 > 99.00	2.069	2.070	-0.001	1.000	12529		2.41(2.05-3.82)		3.5	
D 9 13C2 PFHxA										
315.00 > 270.00	2.393	2.381	0.012	0.749	5788857	2.67		107	11249	
10 Perfluorohexanoic acid										R
313.00 > 269.00	2.393	2.394	-0.001	1.000	44597	0.0222	Target=13.45		6.5	R
313.00 > 119.00	2.384	2.394	-0.010	0.996	2542		17.54(9.33-17.33)		6.2	
D 16 13C4 PFHpA										
367.00 > 322.00	2.792	2.781	0.011	0.873	7149747	2.66		107	11854	
D 17 18O2 PFHxS										
403.00 > 84.00	2.801	2.790	0.011	0.876	4372911	2.49		105	8825	
15 Perfluoroheptanoic acid										M
363.00 > 319.00	2.792	2.791	0.001	1.000	48148	0.0169	Target=4.70		6.5	M
363.00 > 169.00	2.792	2.791	0.001	1.000	9924		4.85(3.00-5.57)		25.8	
18 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.801	2.800	0.001	1.000	32434	0.0145	Target=3.63		41.5	M
399.00 > 99.00	2.792	2.800	-0.008	0.997	8867		3.66(2.29-4.25)		14.6	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 20 M2-6:2 FTS										
429.00 > 81.00	3.174	3.172	0.002	0.993	710545	2.93		123	1419	
D 25 13C4 PFOA										
417.00 > 372.00	3.197	3.195	0.002	1.000	6536249	2.68		107	9694	
26 Perfluorooctanoic acid										M
413.00 > 369.00	3.205	3.204	0.001	1.002	96816	0.0356	Target=2.75		5.2	M
413.00 > 169.00	3.197	3.204	-0.007	1.000	35952		2.69(1.36-4.08)		36.6	M
* 24 13C2 PFOA										
415.00 > 370.00	3.197	3.204	-0.007		6740920	2.50			8819	
D 28 13C4 PFOS										
503.00 > 80.00	3.583	3.581	0.002	1.121	5003555	2.44		102	9109	
29 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.583	3.583	0.0	1.000	38180	0.0188	Target=4.24		31.4	M
499.00 > 99.00	3.583	3.583	0.0	1.000	7029		5.43(2.04-6.12)		22.7	M
D 31 13C5 PFNA										
468.00 > 423.00	3.591	3.589	0.002	1.123	6047961	2.65		106	9736	
D 33 13C8 FOSA										
506.00 > 78.00	3.937	3.927	0.010	1.231	3268085	2.43		97.4	7159	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.955	3.954	0.001	1.237	909688	3.30		138	1832	
D 36 13C2 PFDA										
515.00 > 470.00	3.955	3.954	0.001	1.237	6525897	2.79		111	10349	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.122	4.112	0.010	1.289	1231493	1.73		69.3	1989	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.278	4.276	0.002	1.338	1601829	2.65		106	2402	
D 44 13C2 PFUnA										
565.00 > 520.00	4.278	4.276	0.002	1.338	5195844	2.71		109	8136	
D 49 13C2 PFDoA										
615.00 > 570.00	4.567	4.565	0.002	1.428	6722112	3.11		124	9217	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.076	5.067	0.009	1.588	4569406	2.87		115	8045	
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.068	5.076	-0.008	0.998	2636	0.008198	Target=1.52		16.7	
713.00 > 219.00	5.068	5.076	-0.008	0.998	1346		1.96(1.07-1.99)		20.3	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 13-Mar-2019 13:57:40 Chrom Revision: 2.3 12-Mar-2019 09:55:20

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d

Injection Date: 12-Mar-2019 21:24:12 Instrument ID: A9

Lims ID: 320-48096-A-1-A Lab Sample ID: 320-48096-1

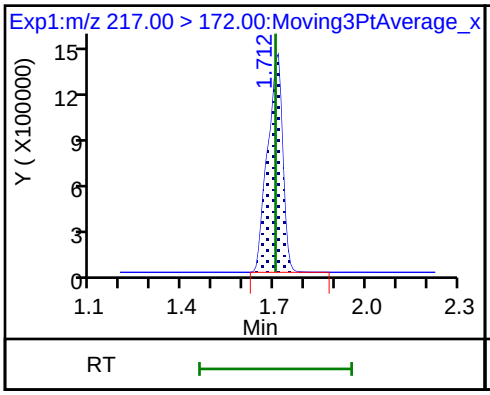
Client ID: GC-DYE-TABLET(WZ)

Operator ID: A9\Administrator ALS Bottle#: 43 Worklist Smp#: 17

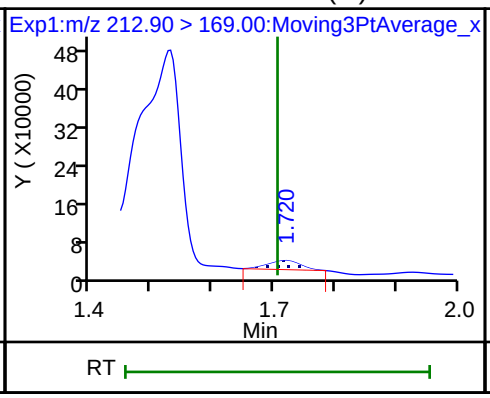
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

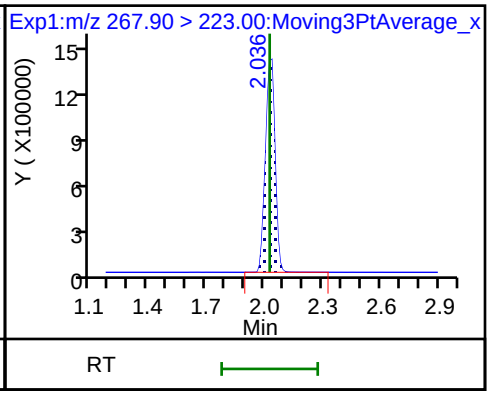
D 1 13C4 PFBA



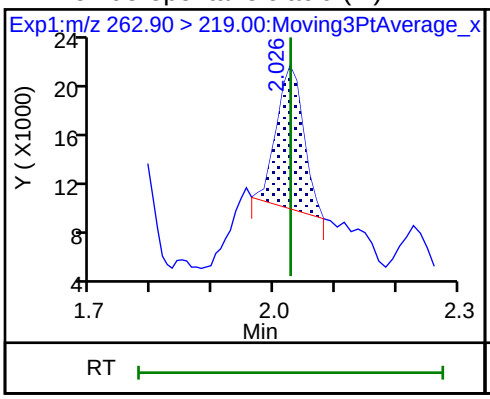
2 Perfluorobutanoic acid (M)



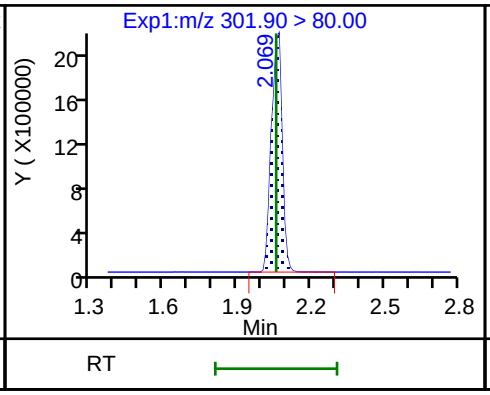
D 3 13C5 PFPeA



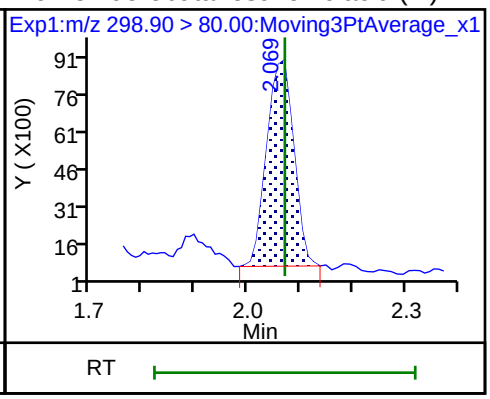
4 Perfluoropentanoic acid (M)



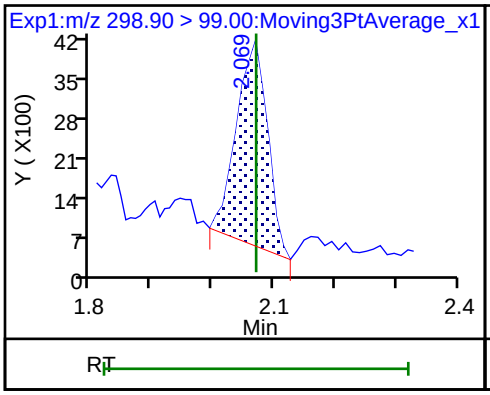
D 5 13C3 PFBS



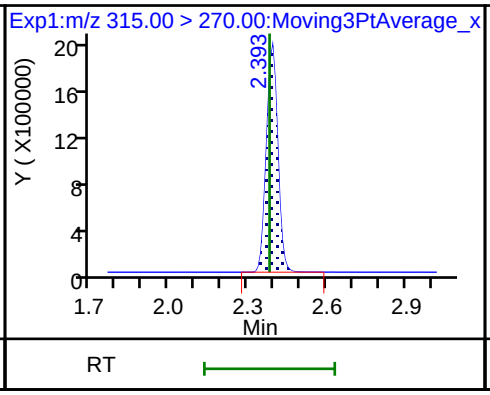
6 Perfluorobutanesulfonic acid (M)



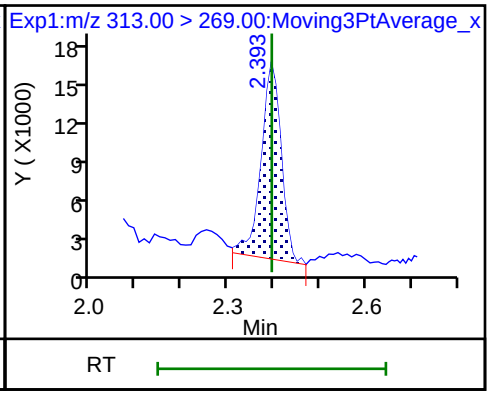
6 Perfluorobutanesulfonic acid



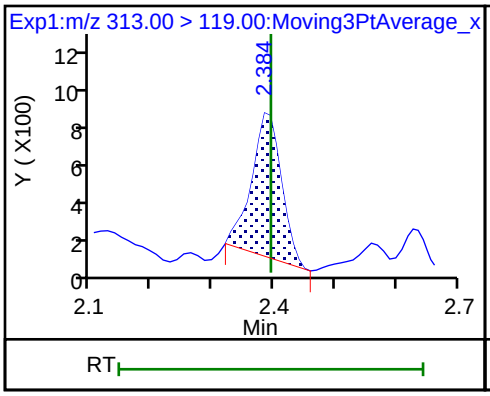
D 9 13C2 PFHxA



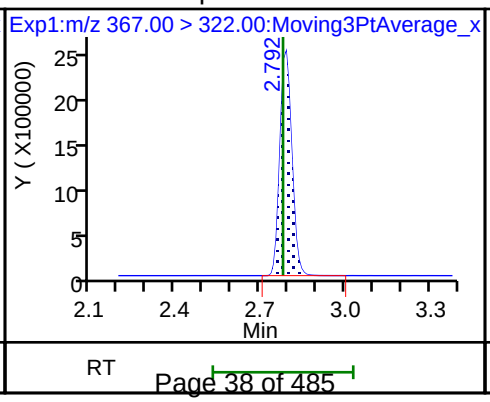
10 Perfluorohexanoic acid



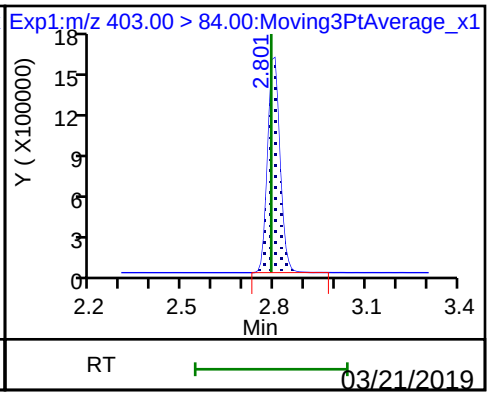
10 Perfluorohexanoic acid



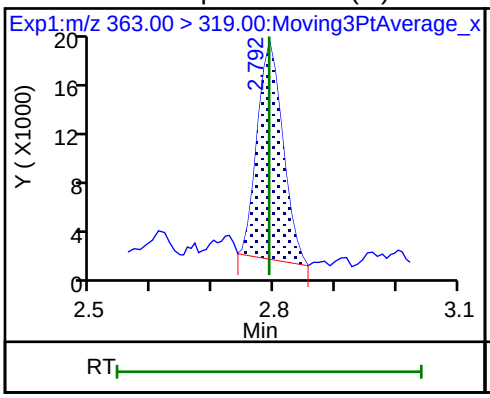
D 16 13C4 PFHpA



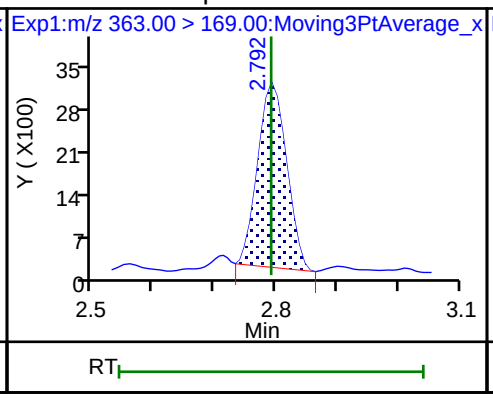
D 17 18O2 PFHxS



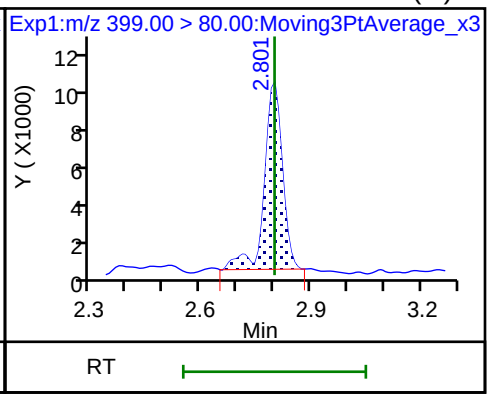
15 Perfluoroheptanoic acid (M)



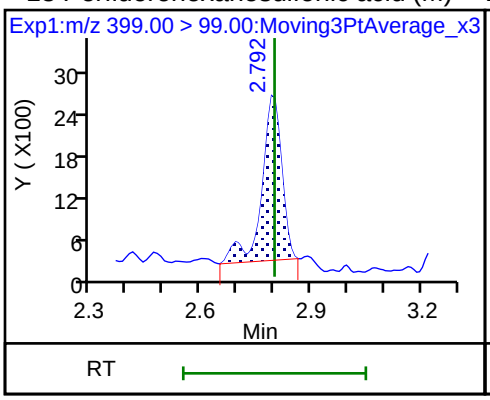
15 Perfluoroheptanoic acid



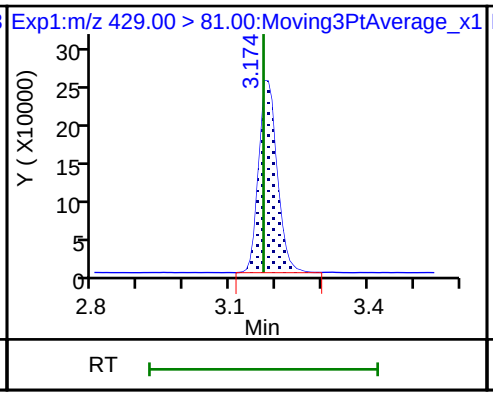
18 Perfluorohexanesulfonic acid (M)



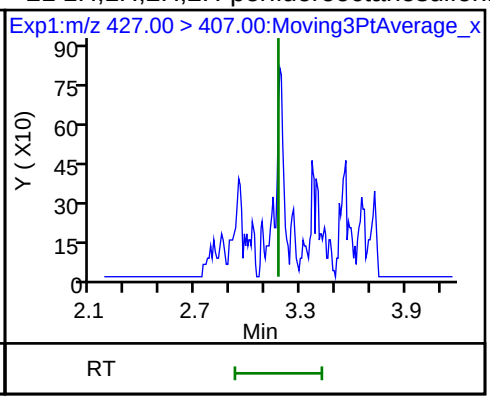
18 Perfluorohexanesulfonic acid (M)



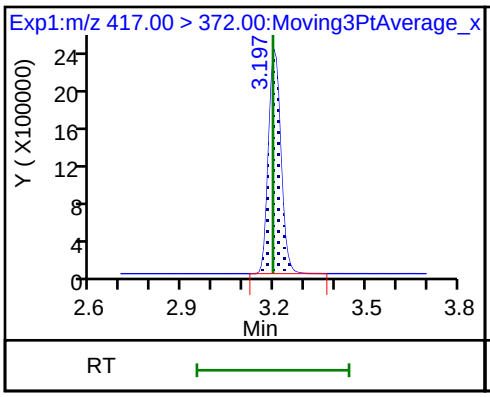
D 20 M2-6:2 FTS



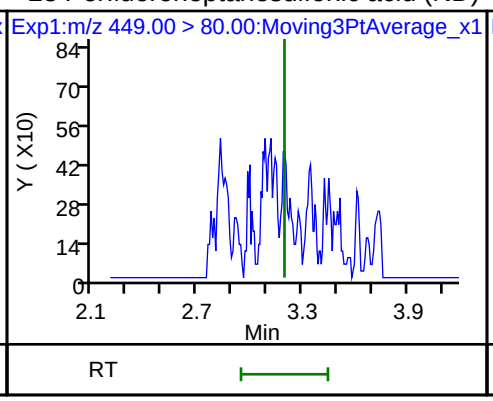
21 1H,1H,2H,2H-perfluorooctanesulfoni (ND)



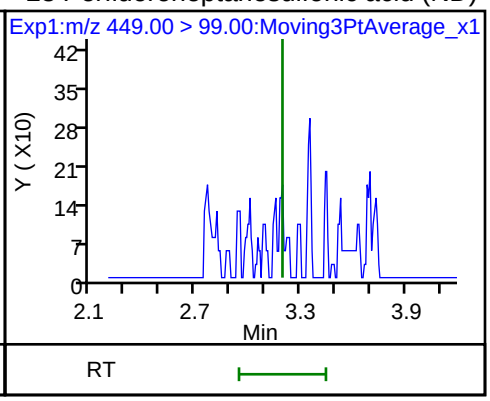
D 25 13C4 PFOA



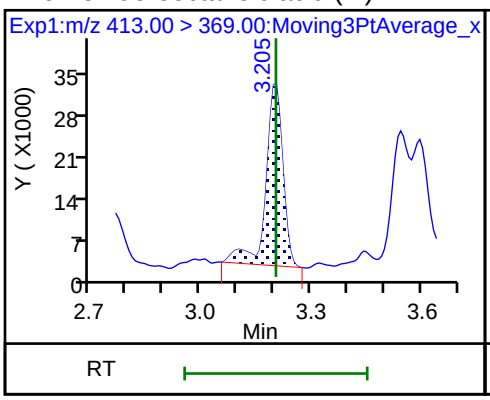
23 Perfluoroheptanesulfonic acid (ND)



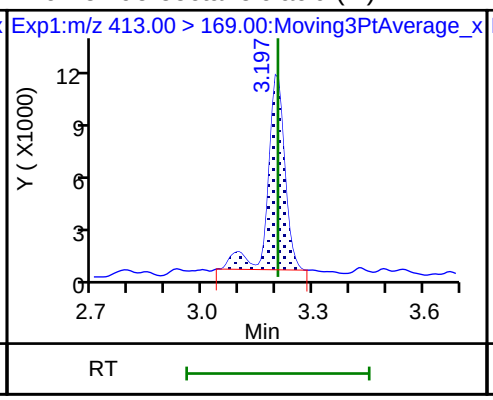
23 Perfluoroheptanesulfonic acid (ND)



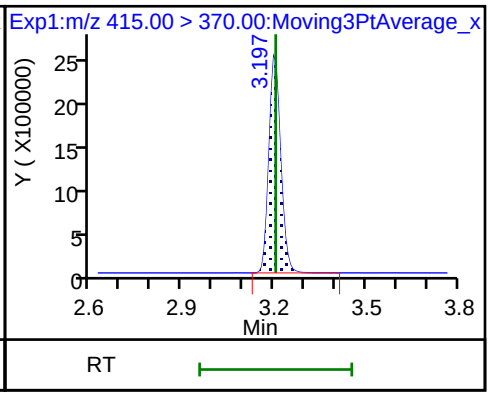
26 Perfluorooctanoic acid (M)



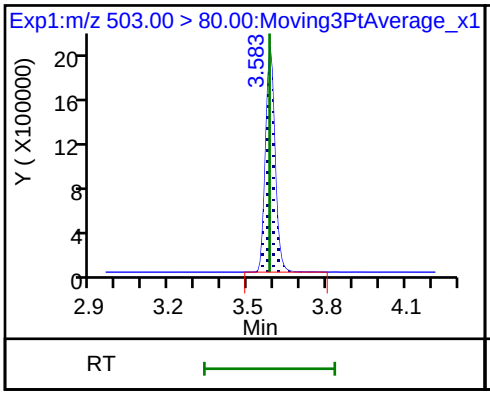
26 Perfluorooctanoic acid (M)



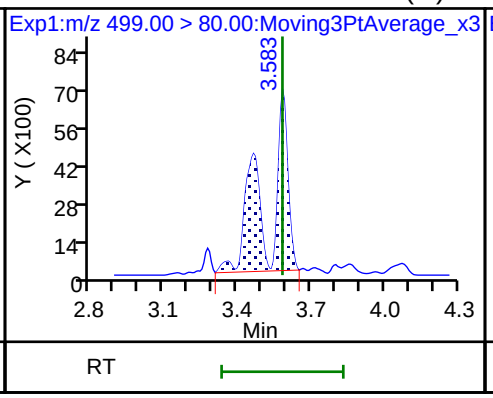
* 24 13C2 PFOA



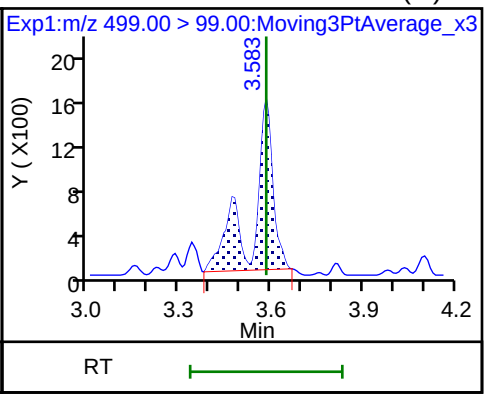
D 28 13C4 PFOS



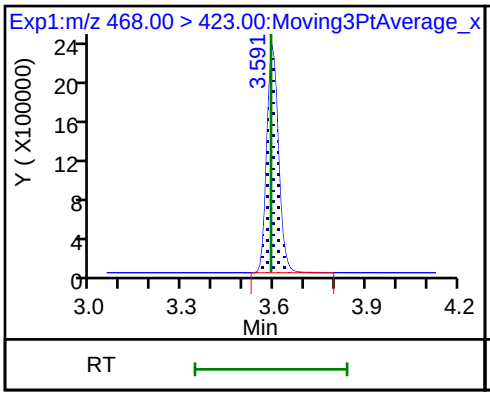
29 Perfluorooctanesulfonic acid (M)



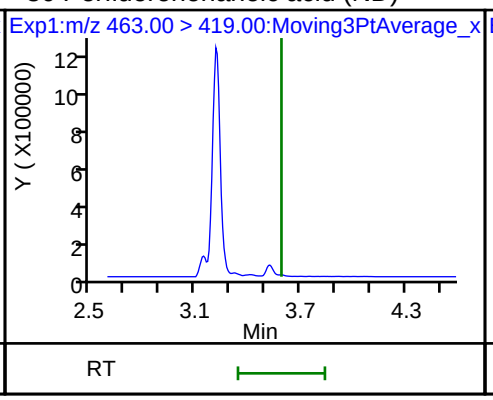
29 Perfluorooctanesulfonic acid (M)



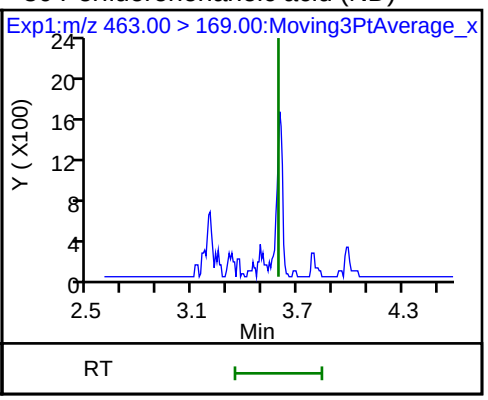
D 31 13C5 PFNA



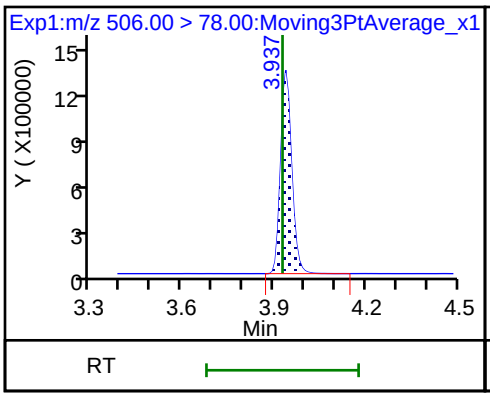
30 Perfluorononanoic acid (ND)



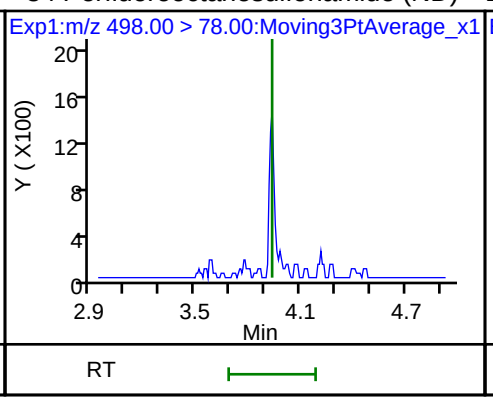
30 Perfluorononanoic acid (ND)



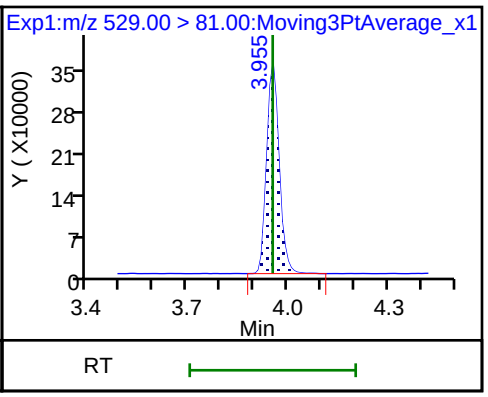
D 33 13C8 FOSA



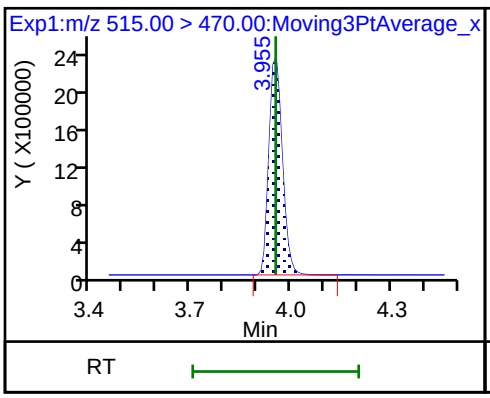
34 Perfluorooctanesulfonamide (ND)



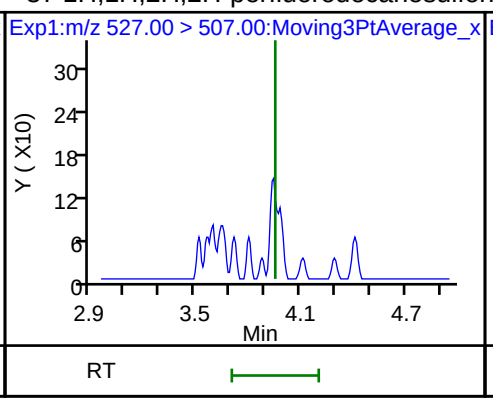
D 39 M2-8:2 FTS



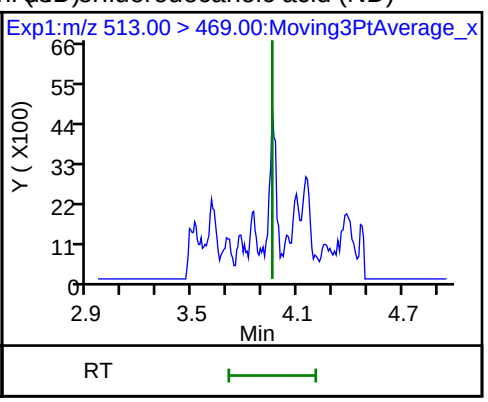
D 36 13C2 PFDA



37 1H,1H,2H,2H-perfluorodecanesulfoni

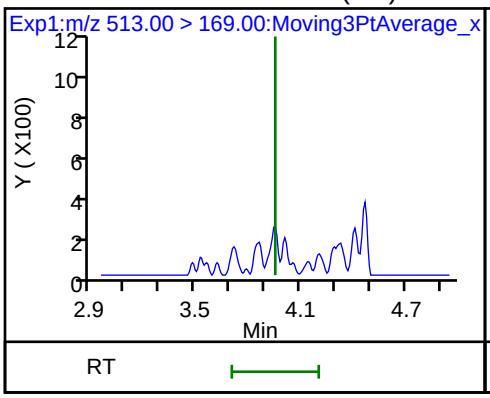


(ND)

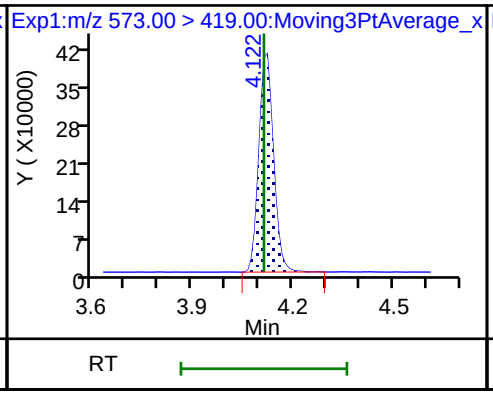


perfluorodecanoic acid (ND)

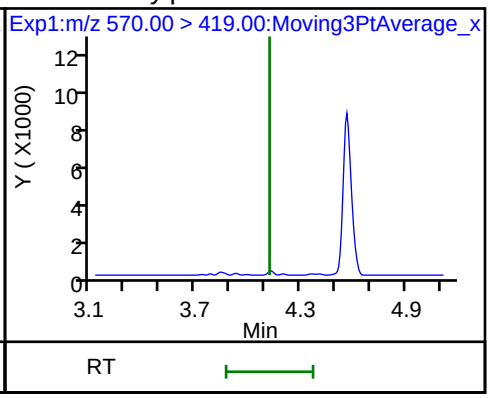
38 Perfluorodecanoic acid (ND)



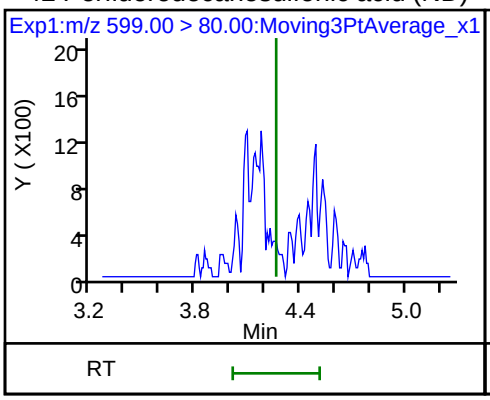
D 40 d3-NMeFOSAA



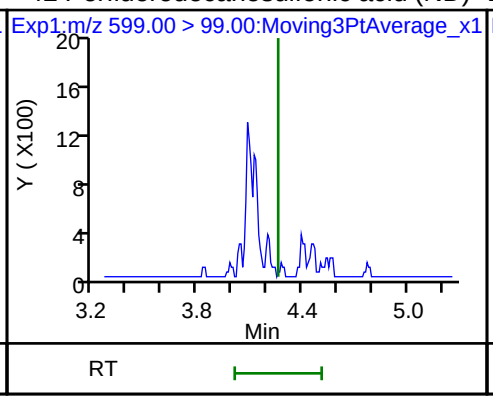
41 N-methylperfluorooctanesulfonamido (ND)



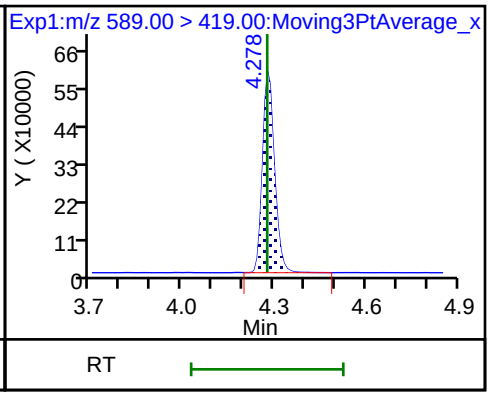
42 Perfluorodecanesulfonic acid (ND)



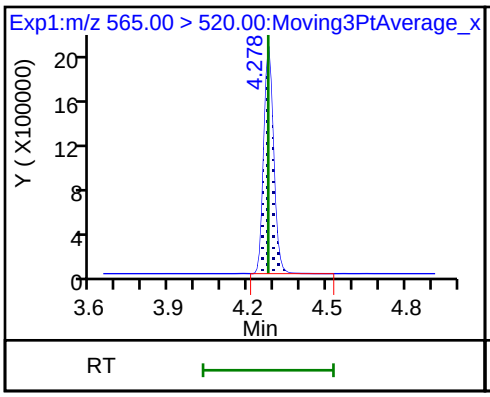
42 Perfluorodecanesulfonic acid (ND)



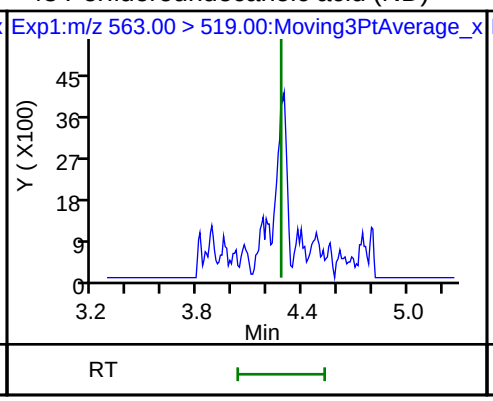
D 45 d5-NEtFOSAA



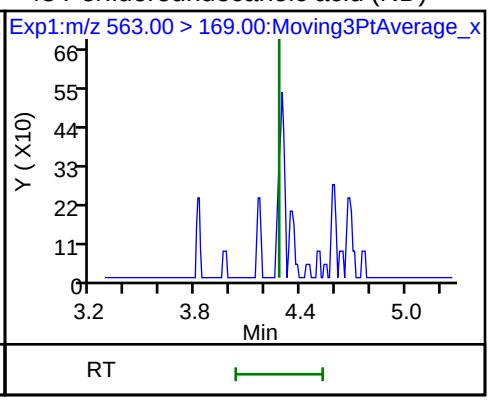
D 44 13C2 PFUnA



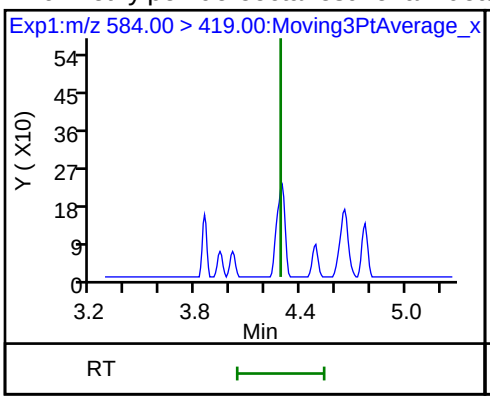
43 Perfluoroundecanoic acid (ND)



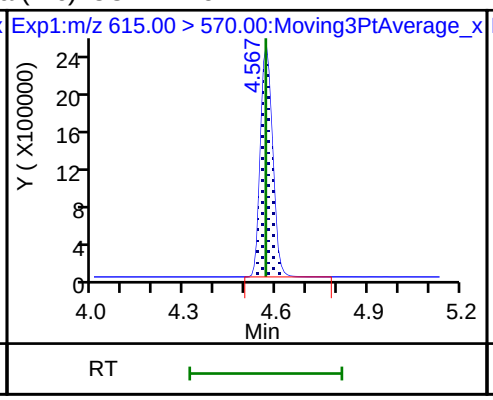
43 Perfluoroundecanoic acid (ND)



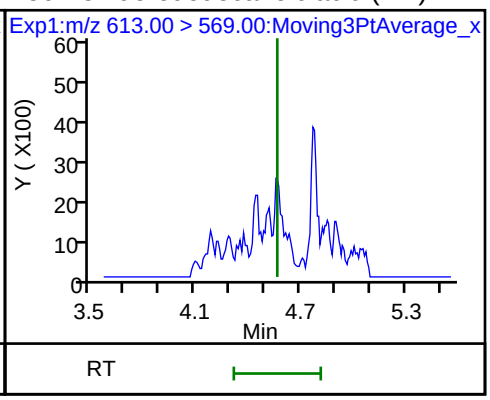
46 N-ethylperfluorooctanesulfonamidoa(ND)



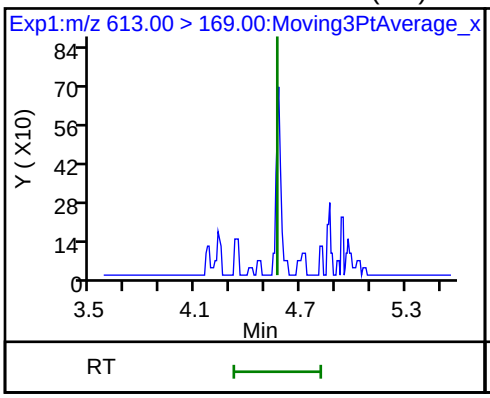
D 49 13C2 PFDoA



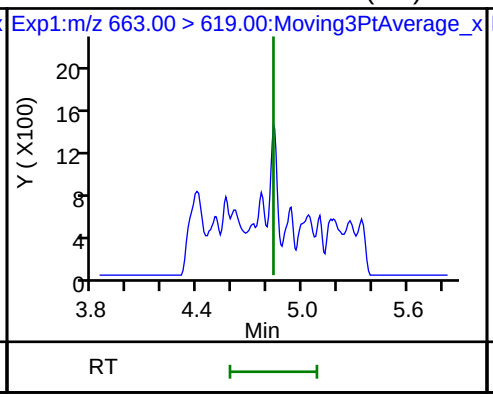
50 Perfluorododecanoic acid (ND)



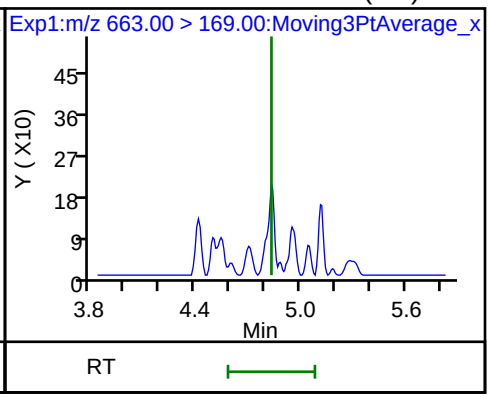
50 Perfluorododecanoic acid (ND)



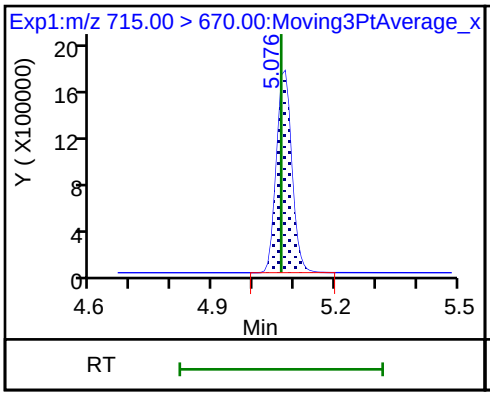
54 Perfluorotridecanoic acid (ND)



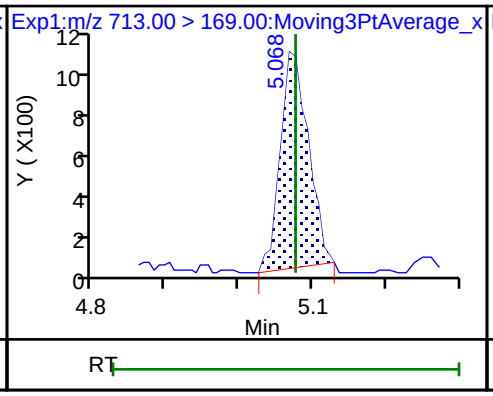
54 Perfluorotridecanoic acid (ND)



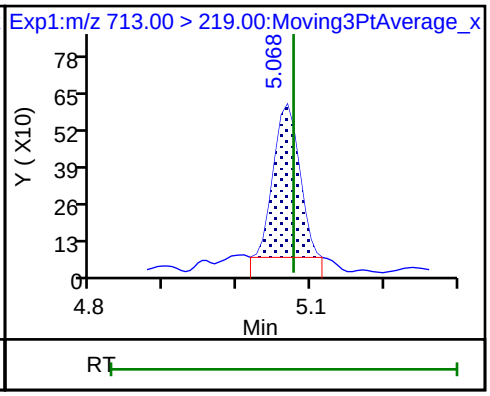
D 55 13C2 PFTeDA



56 Perfluorotetradecanoic acid



56 Perfluorotetradecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

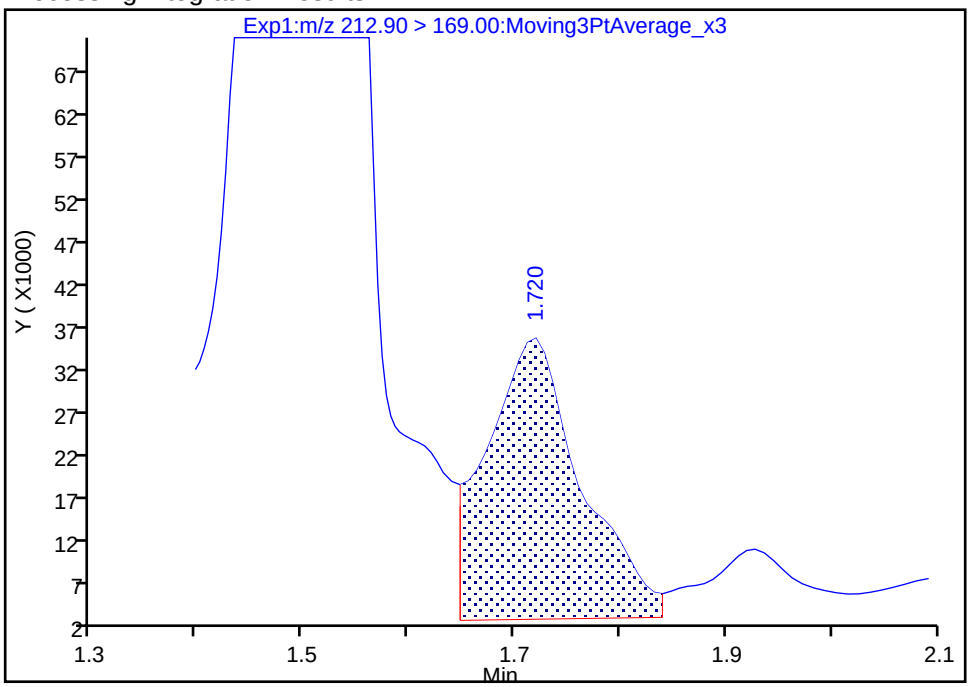
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d				
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

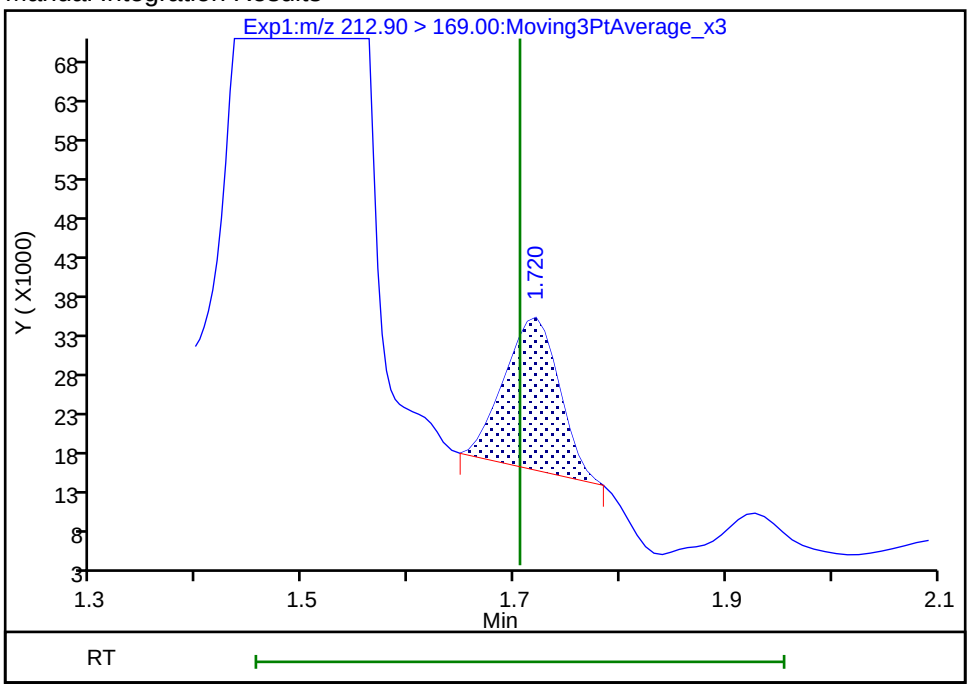
Processing Integration Results

RT: 1.72
Area: 202258
Amount: 0.121952
Amount Units: ng/ml



Manual Integration Results

RT: 1.72
Area: 69172
Amount: 0.041707
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:56:30

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

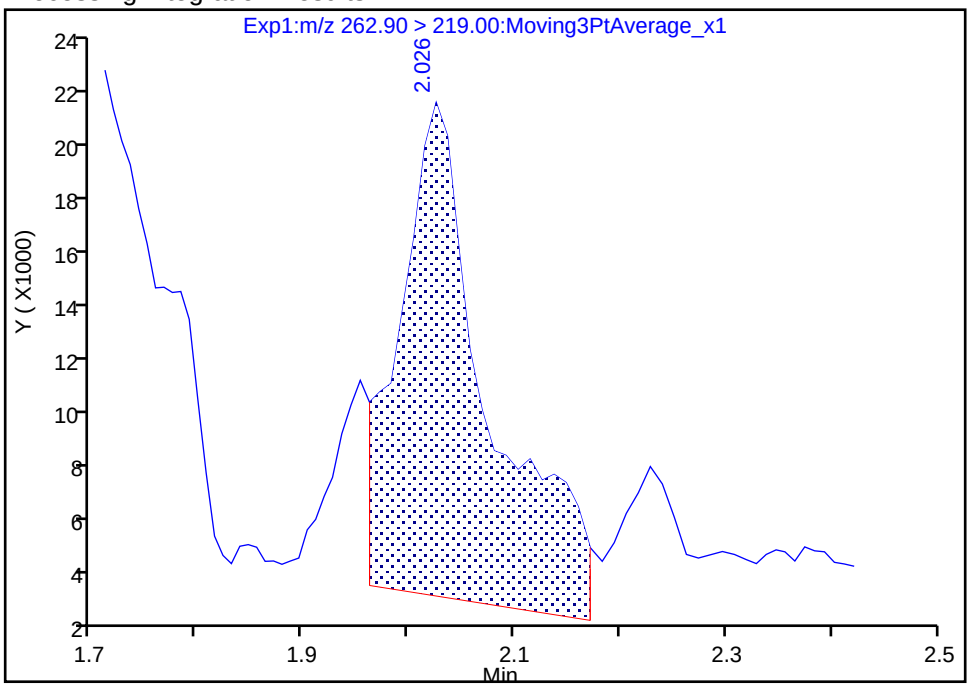
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d				
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

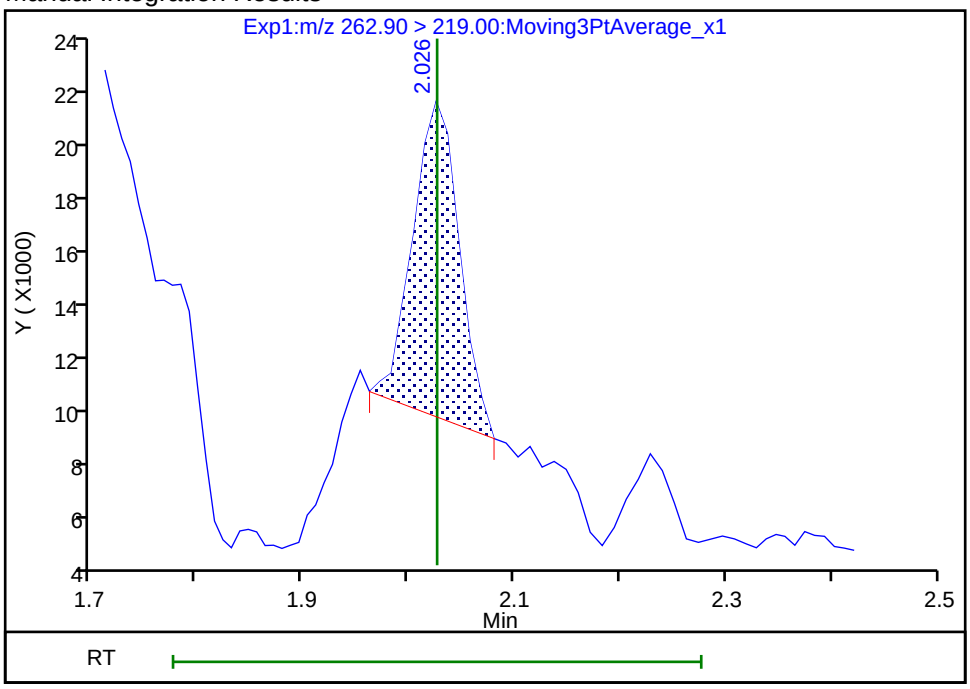
Processing Integration Results

RT: 2.03
Area: 100916
Amount: 0.054024
Amount Units: ng/ml



Manual Integration Results

RT: 2.03
Area: 34313
Amount: 0.018369
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:56:36

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

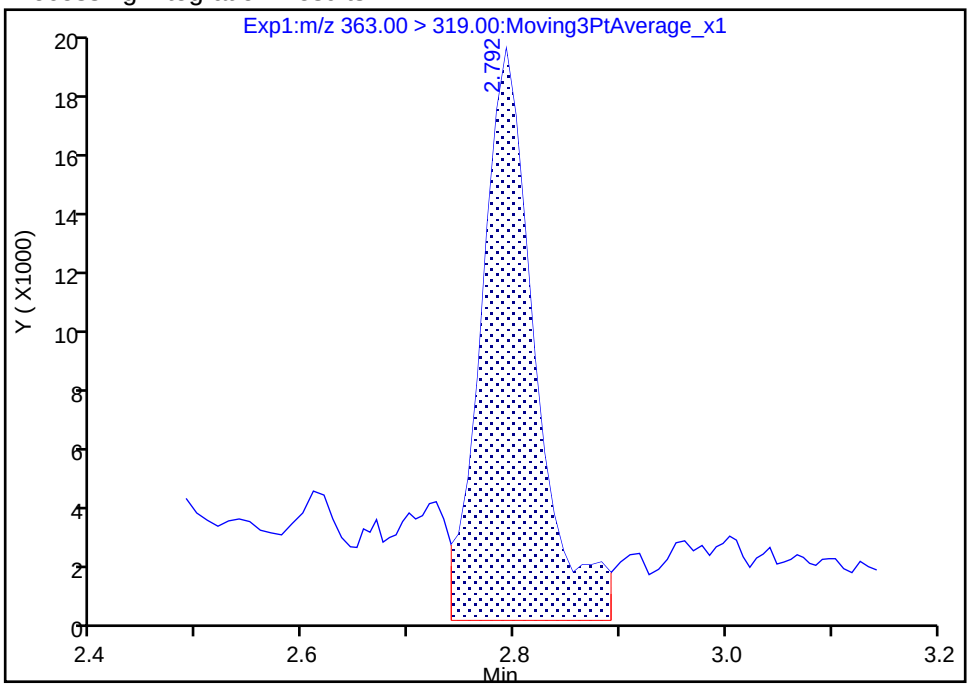
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d				
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

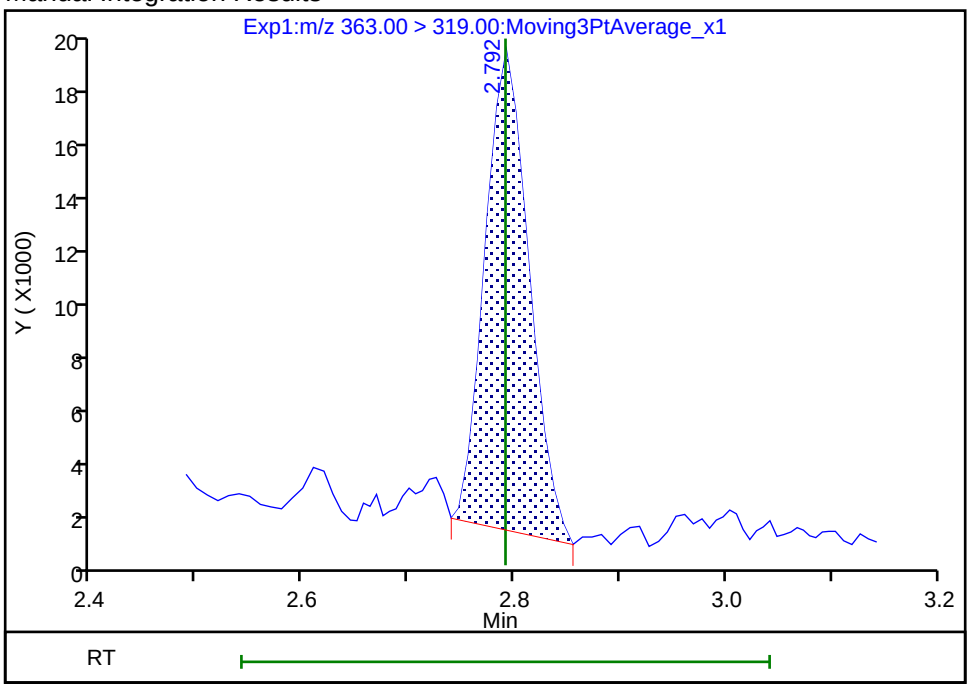
Processing Integration Results

RT: 2.79
Area: 66028
Amount: 0.023125
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 48148
Amount: 0.016863
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:56:48

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

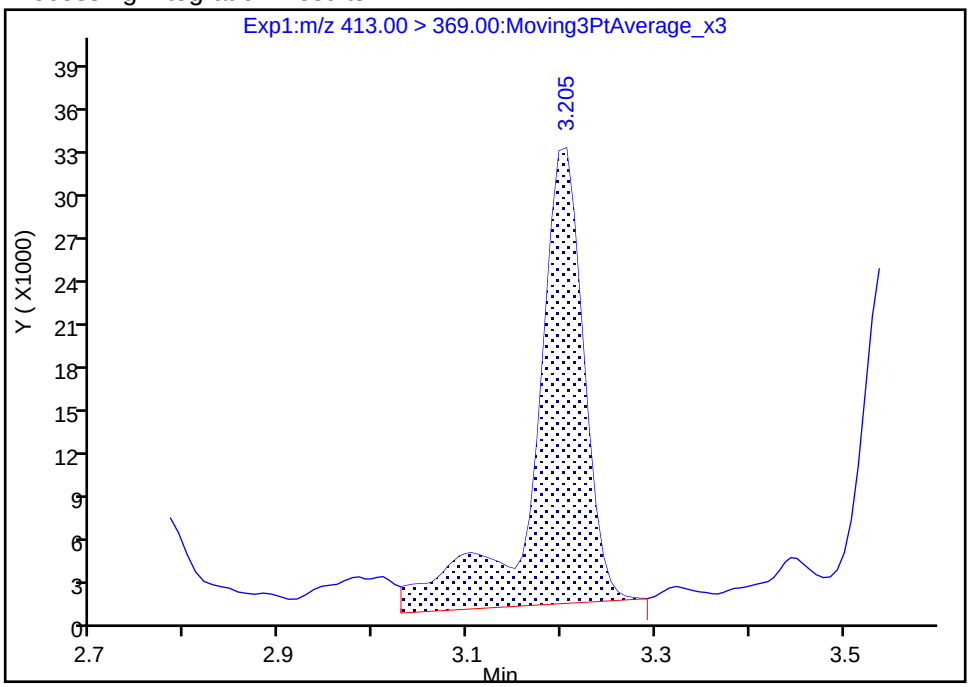
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d				
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

26 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

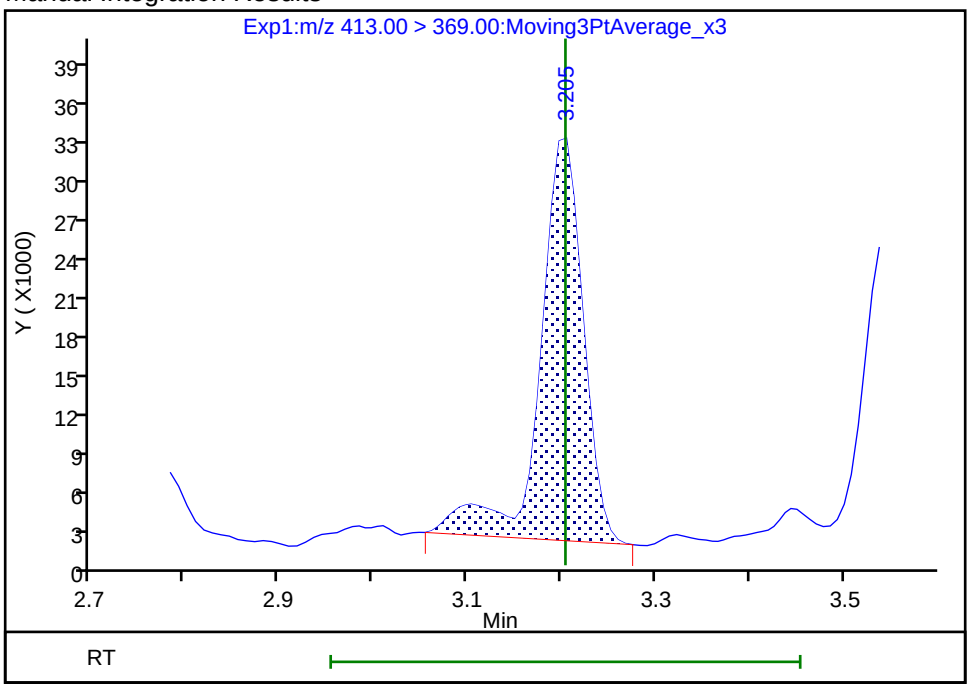
Processing Integration Results

RT: 3.21
Area: 112968
Amount: 0.041560
Amount Units: ng/ml



Manual Integration Results

RT: 3.21
Area: 96816
Amount: 0.035618
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:57:10

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d

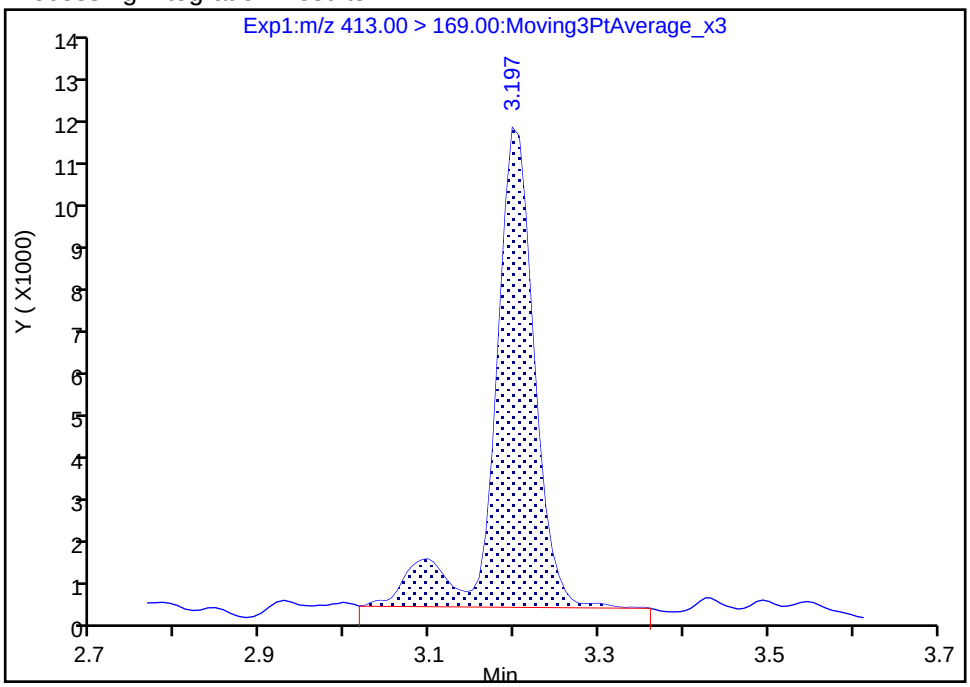
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

26 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

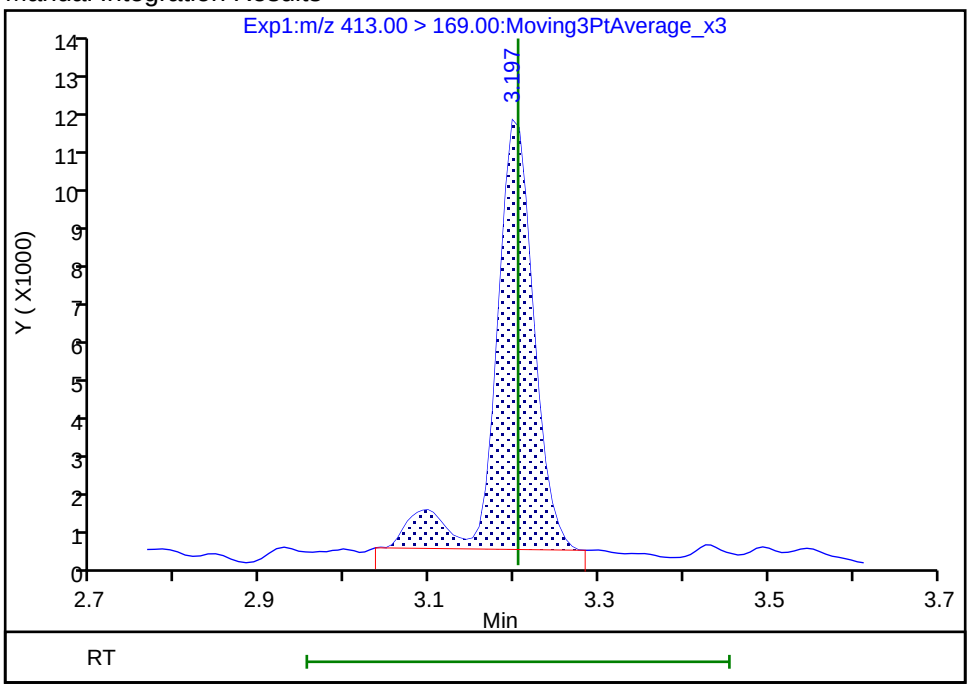
Processing Integration Results

RT: 3.20
Area: 37881
Amount: 0.041560
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 35952
Amount: 0.035618
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:57:14

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

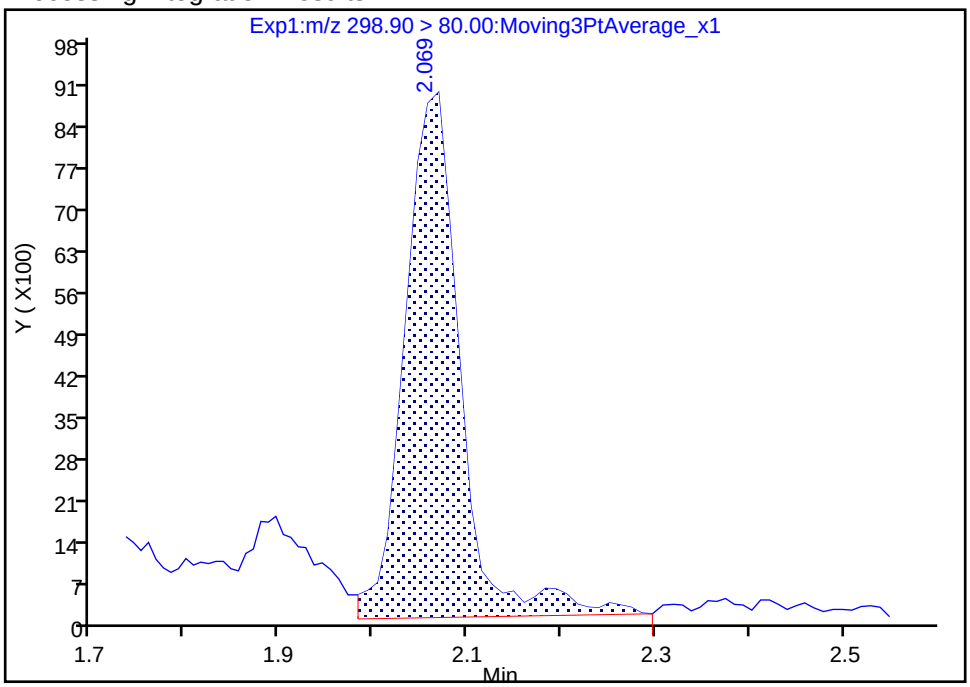
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d				
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

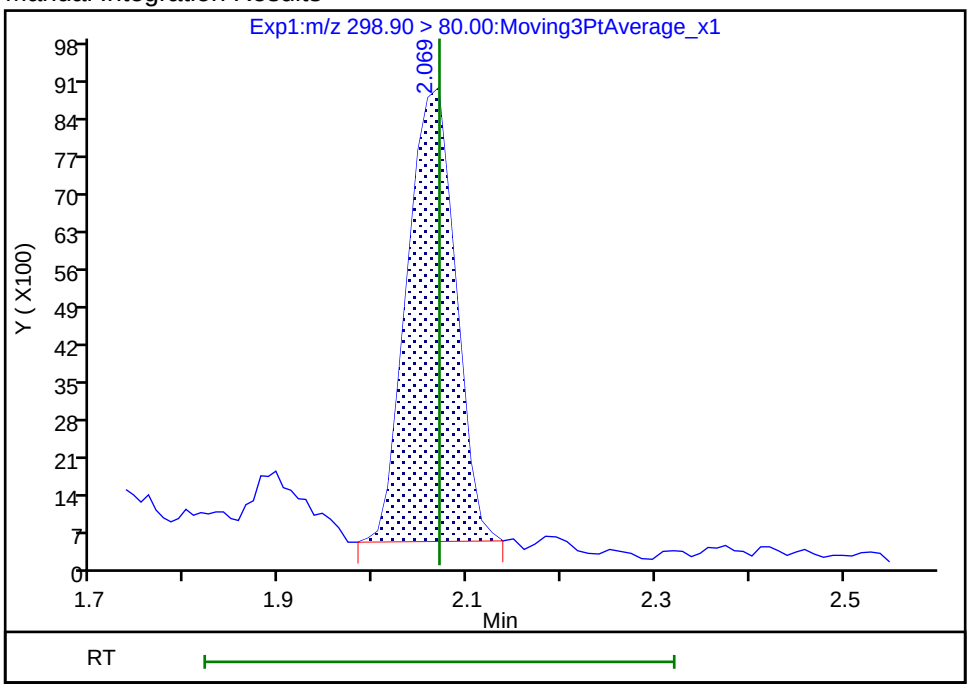
Processing Integration Results

RT: 2.07
Area: 36105
Amount: 0.014230
Amount Units: ng/ml



Manual Integration Results

RT: 2.07
Area: 30181
Amount: 0.011895
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:56:41

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d

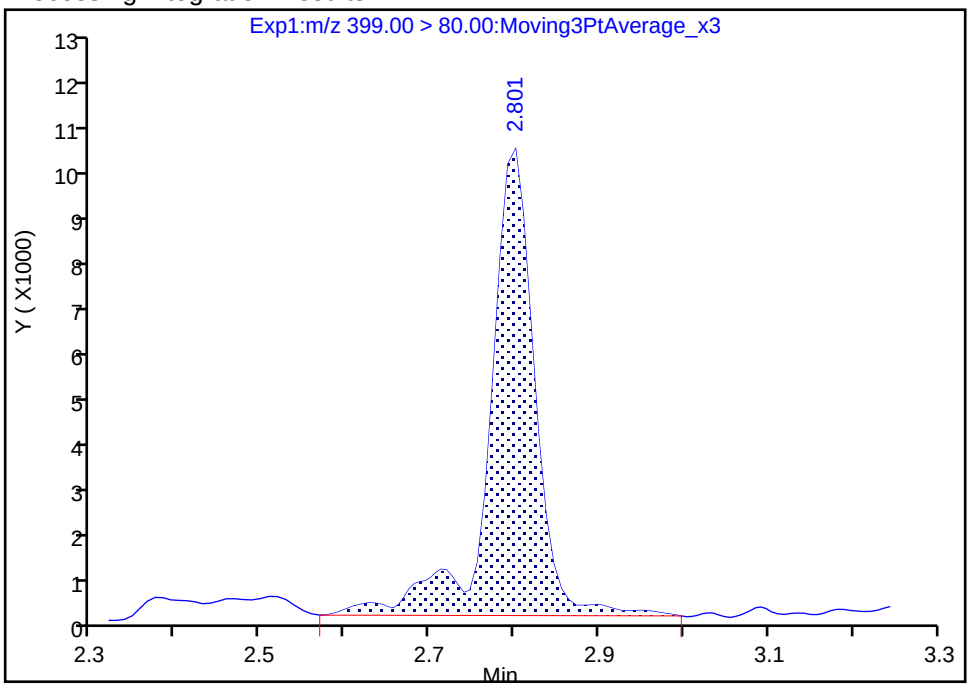
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

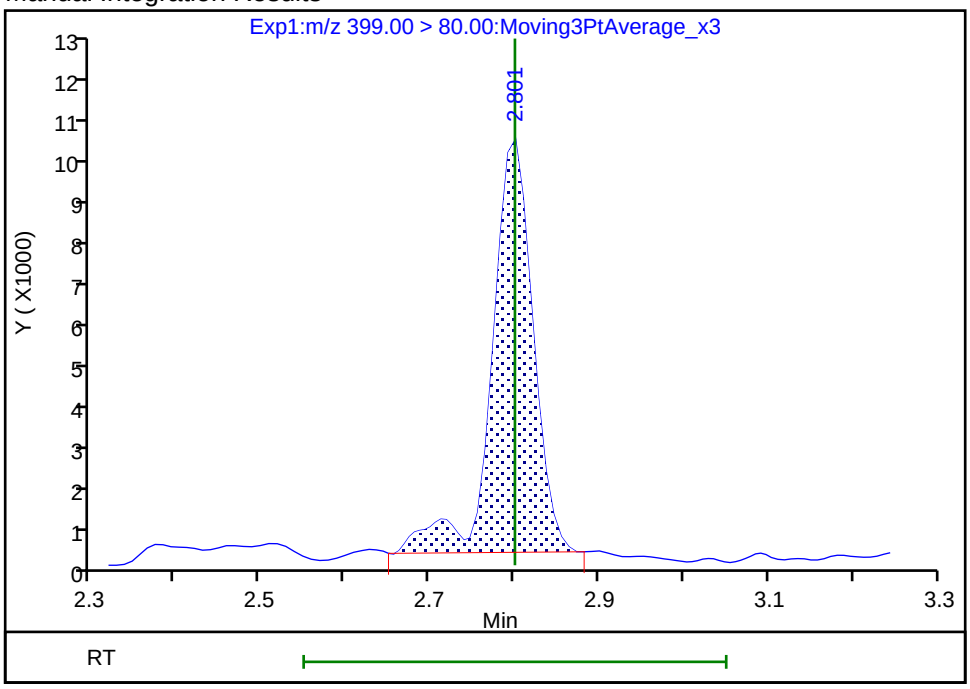
Processing Integration Results

RT: 2.80
Area: 36660
Amount: 0.016374
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 32434
Amount: 0.014486
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:56:53

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d

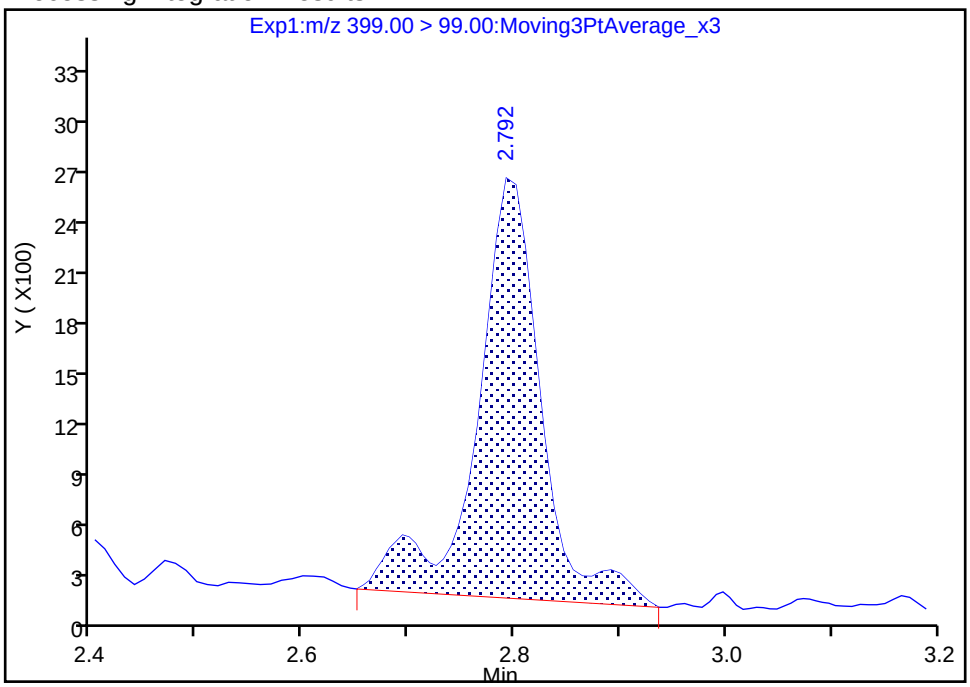
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

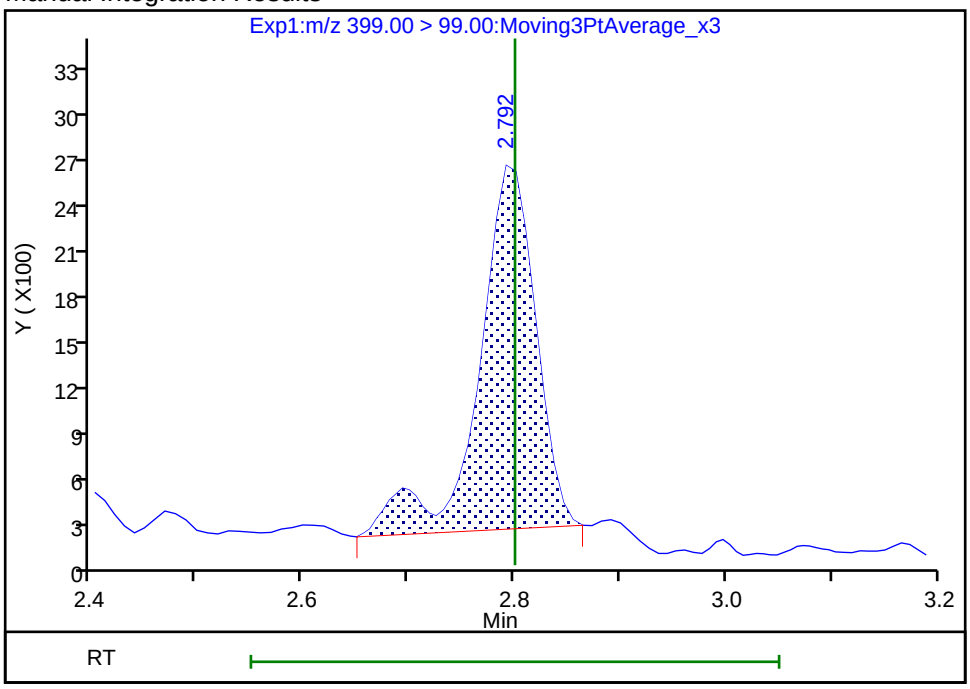
Processing Integration Results

RT: 2.79
Area: 10425
Amount: 0.016374
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 8867
Amount: 0.014486
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:56:58

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

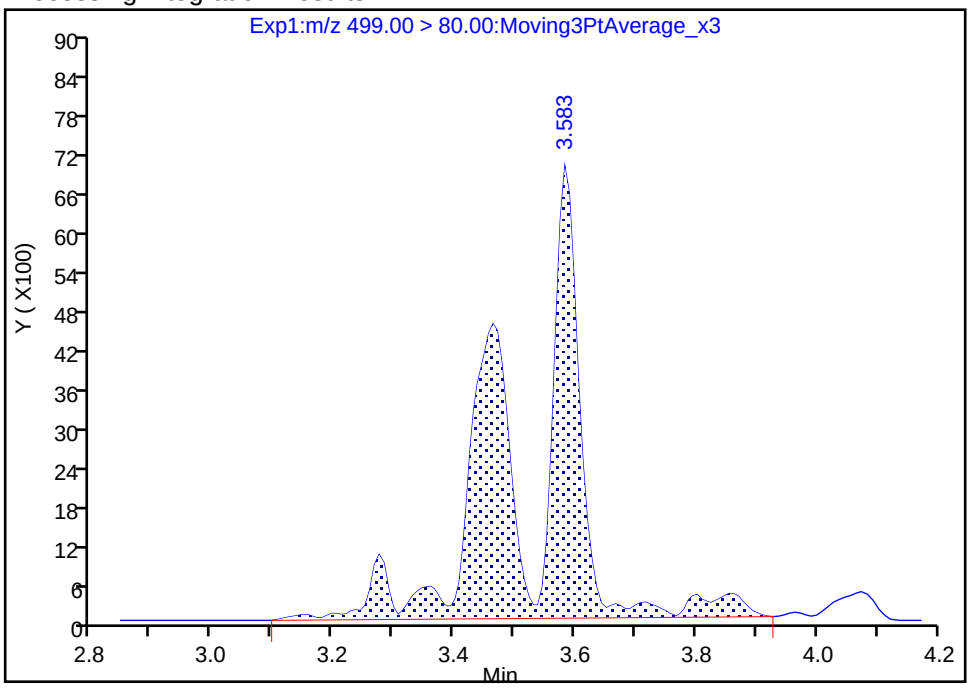
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d				
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

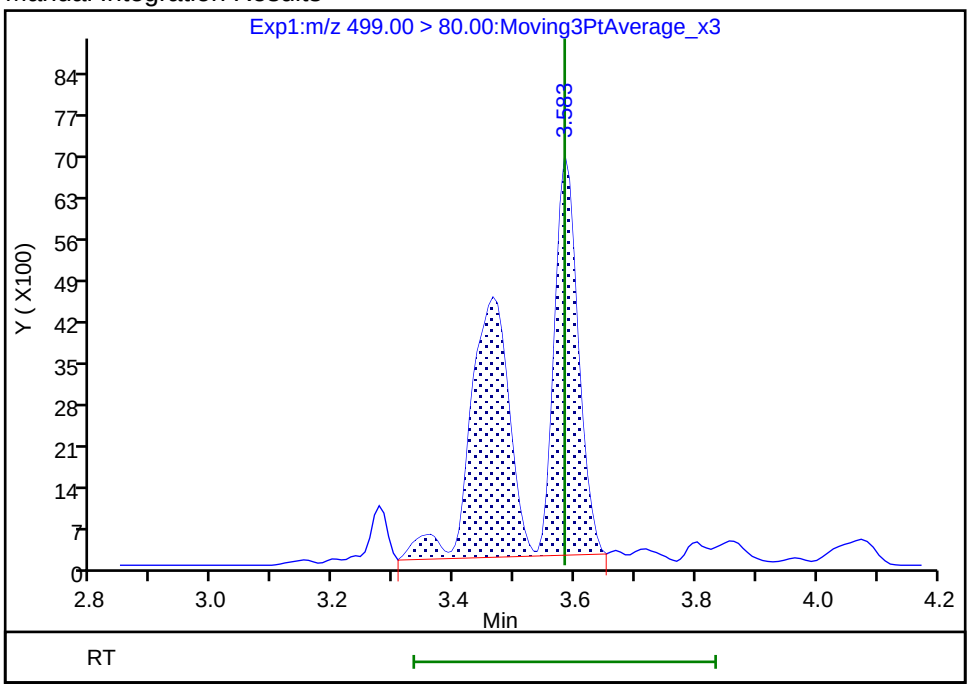
Processing Integration Results

RT: 3.58
Area: 46196
Amount: 0.022703
Amount Units: ng/ml



Manual Integration Results

RT: 3.58
Area: 38180
Amount: 0.018763
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:57:22

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

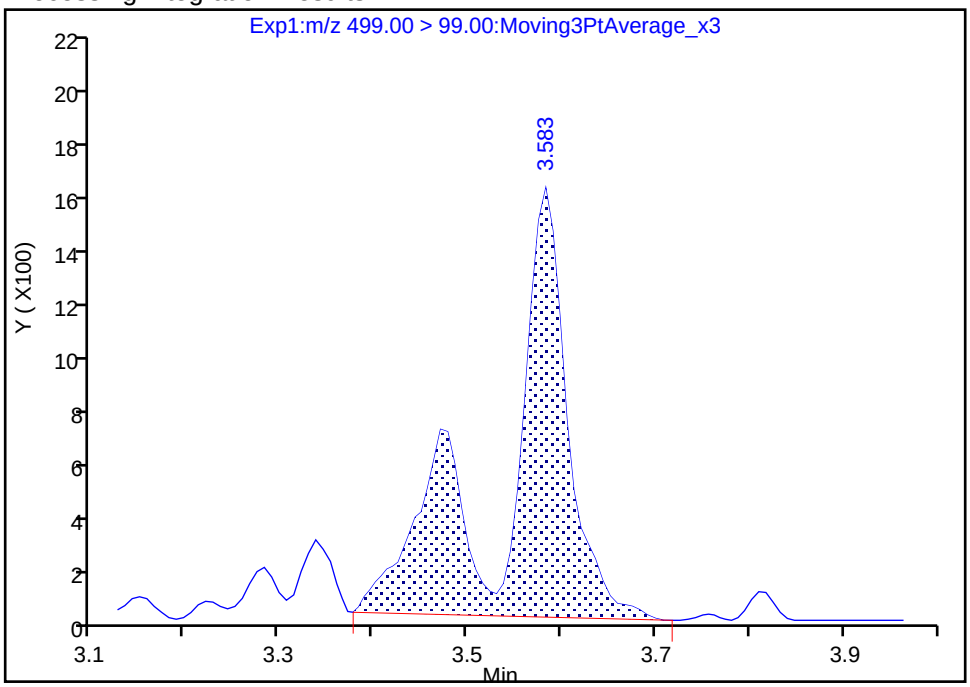
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_060.d				
Injection Date:	12-Mar-2019 21:24:12	Instrument ID:	A9		
Lims ID:	320-48096-A-1-A	Lab Sample ID:	320-48096-1		
Client ID:	GC-DYE-TABLET(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	43	Worklist Smp#:	17
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

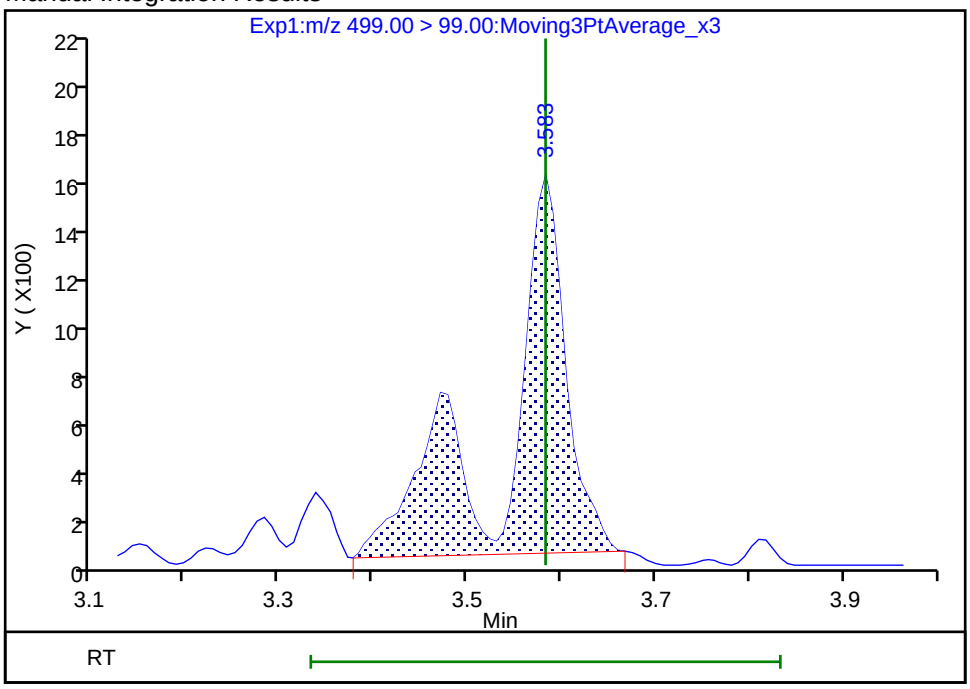
Processing Integration Results

RT: 3.58
Area: 7558
Amount: 0.022703
Amount Units: ng/ml



Manual Integration Results

RT: 3.58
Area: 7029
Amount: 0.018763
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:57:27

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: GC-DYE-LIQUID(WZ) | Lab Sample ID: 320-48096-2

Matrix: Water | Lab File ID: 2019.03.12LLA_061.d

Analysis Method: 537 (modified) | Date Collected: 03/04/2019 12:00

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 282.9(mL) | Date Analyzed: 03/12/2019 21:31

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281279 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND	G	3.5	3.5
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND	G	3.5	3.5
307-24-4	Perfluorohexanoic acid (PFHxA)	0.71	J	1.8	0.51
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.52	J I	1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	1.2	J B	1.8	0.75
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.29	J B	1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.38	J	1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.45	J B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2 FTS	ND		18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: GC-DYE-LIQUID(WZ) | Lab Sample ID: 320-48096-2

Matrix: Water | Lab File ID: 2019.03.12LLA_061.d

Analysis Method: 537 (modified) | Date Collected: 03/04/2019 12:00

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 282.9(mL) | Date Analyzed: 03/12/2019 21:31

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281279 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	87		25-150
STL01893	13C5-PFPeA DNU	102		25-150
STL00993	13C2 PFHxA	107		25-150
STL01892	13C4 PFHpA	108		25-150
STL00990	13C4 PFOA	110		25-150
STL00995	13C5 PFNA	112		25-150
STL00996	13C2 PFDA	114		25-150
STL00997	13C2 PFUnA	112		25-150
STL00998	13C2 PFDoA	126		25-150
STL02116	13C2 PFTeDA	111		25-150
STL02337	13C3 PFBS	93		25-150
STL00994	18O2 PFHxS	105		25-150
STL00991	13C4 PFOS	100		25-150
STL01056	13C8 FOSA	100		25-150
STL02118	d3-NMeFOSAA	103		25-150
STL02117	d5-NEtFOSAA	114		25-150
STL02279	M2-6:2 FTS	140		25-150
STL02280	M2-8:2 FTS	164	*	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d
Lims ID: 320-48096-A-2-A
Client ID: GC-DYE-LIQUID(WZ)
Sample Type: Client
Inject. Date: 12-Mar-2019 21:31:43 ALS Bottle#: 44 Worklist Smp#: 18
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 320-48096-a-2-a
Misc. Info.: Plate: 1 Rack: 2
Operator ID: A9\Administrator Instrument ID: A9

Method: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 14:02:56 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 14:02:56
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.704	1.704	0.0	0.533	5132438	2.17		86.8	12327	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.704	1.705	-0.001	1.000	61313	0.0342			1.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.026	2.025	0.001	0.634	5177670	2.56		102	8777	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.026	2.027	-0.001	1.000	38252	0.0187			1.2	M
D 5 13C3 PFBS										
301.90 > 80.00	2.058	2.057	0.001	0.644	6876187	2.16		92.9	238256	
6 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.058	2.070	-0.012	1.000	29547	0.0109	Target=2.65		11.8	M
298.90 > 99.00	2.058	2.070	-0.012	1.000	10384		2.85(2.05-3.82)		3.2	
D 9 13C2 PFHxA										
315.00 > 270.00	2.382	2.381	0.001	0.745	6052668	2.67		107	12385	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.382	2.394	-0.012	1.000	42119	0.0200	Target=13.45		6.7	
313.00 > 119.00	2.382	2.394	-0.012	1.000	3458		12.18(9.33-17.33)		9.0	
D 16 13C4 PFHpA										
367.00 > 322.00	2.790	2.781	0.009	0.873	7595177	2.71		108	14443	
D 17 18O2 PFHxS										
403.00 > 84.00	2.790	2.790	0.0	0.873	4552537	2.48		105	8036	
15 Perfluoroheptanoic acid										R
363.00 > 319.00	2.790	2.791	-0.001	1.000	44875	0.0148	Target=4.70		6.8	R
363.00 > 169.00	2.790	2.791	-0.001	1.000	7883		5.69(3.00-5.57)		23.0	
18 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.790	2.800	-0.010	1.000	29456	0.0126	Target=3.63		32.9	M
399.00 > 99.00	2.790	2.800	-0.010	1.000	10271		2.87(2.29-4.25)		14.1	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 20 M2-6:2 FTS										
429.00 > 81.00	3.172	3.172	0.0	0.993	844188	3.33		140	2257	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.172	3.173	-0.001	1.000	5923	0.008456			15.7	
D 25 13C4 PFOA										
417.00 > 372.00	3.196	3.195	0.001	1.000	6980567	2.75		110	14136	
26 Perfluorooctanoic acid										M
413.00 > 369.00	3.196	3.204	-0.008	1.000	100892	0.0348	Target=2.75		3.1	M
413.00 > 169.00	3.204	3.204	0.0	1.002	33157		3.04(1.36-4.08)		39.4	M
* 24 13C2 PFOA										
415.00 > 370.00	3.196	3.204	-0.008		7037227	2.50			6366	
D 28 13C4 PFOS										
503.00 > 80.00	3.582	3.581	0.001	1.121	5107932	2.39		99.8	9115	
29 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.582	3.583	-0.001	1.000	27837	0.0134	Target=4.24		23.6	M
499.00 > 99.00	3.574	3.583	-0.009	0.998	5810		4.79(2.04-6.12)		13.5	M
D 31 13C5 PFNA										
468.00 > 423.00	3.589	3.589	0.0	1.123	6640413	2.79		112	10486	
D 33 13C8 FOSA										
506.00 > 78.00	3.936	3.927	0.009	1.232	3493686	2.49		99.7	7913	
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.945	3.937	0.008	1.002	3710	0.000963			12.4	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.945	3.954	-0.009	1.235	1129793	3.93		164	2735	
D 36 13C2 PFDA										
515.00 > 470.00	3.954	3.954	0.0	1.237	6985910	2.86		114	11589	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.113	4.112	0.001	1.287	1913927	2.58		103	3873	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.277	4.276	0.001	1.338	1802340	2.85		114	2247	
D 44 13C2 PFUnA										
565.00 > 520.00	4.268	4.276	-0.008	1.336	5582408	2.79		112	5597	
D 49 13C2 PFDoA										
615.00 > 570.00	4.566	4.565	0.001	1.429	7122694	3.15		126	10131	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.068	5.067	0.001	1.586	4626394	2.79		111	9979	
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.068	5.076	-0.008	1.000	2680	0.008232	Target=1.52		20.9	
713.00 > 219.00	5.068	5.076	-0.008	1.000	1768		1.52(1.07-1.99)		23.5	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags
M - Manually Integrated

Report Date: 13-Mar-2019 14:02:56 Chrom Revision: 2.3 12-Mar-2019 09:55:20

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d

Injection Date: 12-Mar-2019 21:31:43 Instrument ID: A9

Lims ID: 320-48096-A-2-A Lab Sample ID: 320-48096-2

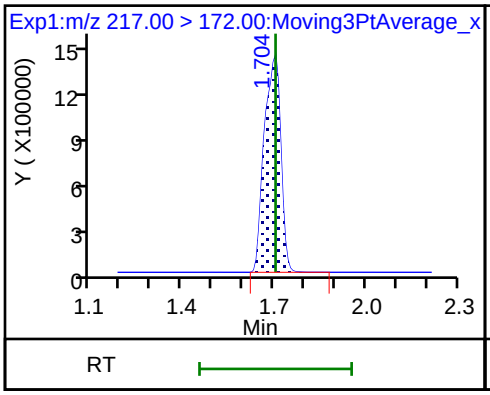
Client ID: GC-DYE-LIQUID(WZ)

Operator ID: A9\Administrator ALS Bottle#: 44 Worklist Smp#: 18

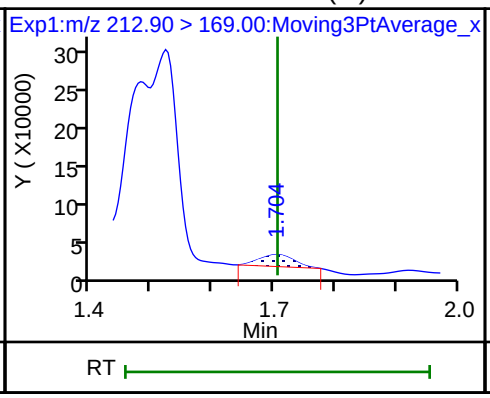
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

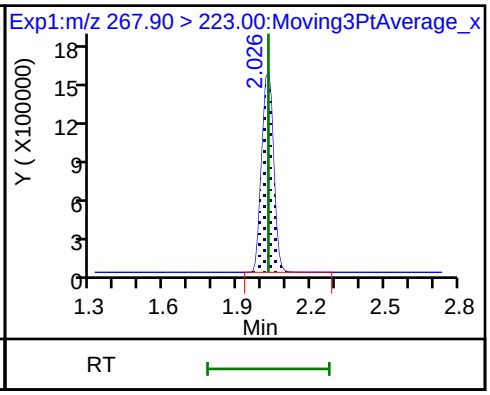
D 1 13C4 PFBA



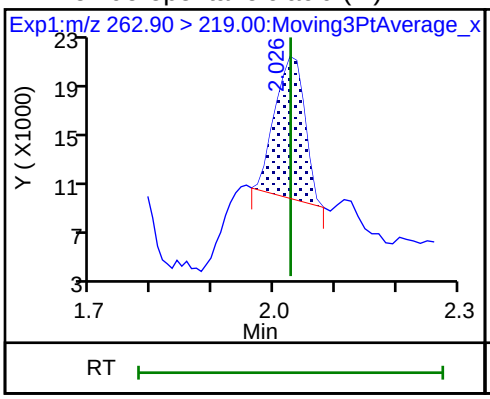
2 Perfluorobutanoic acid (M)



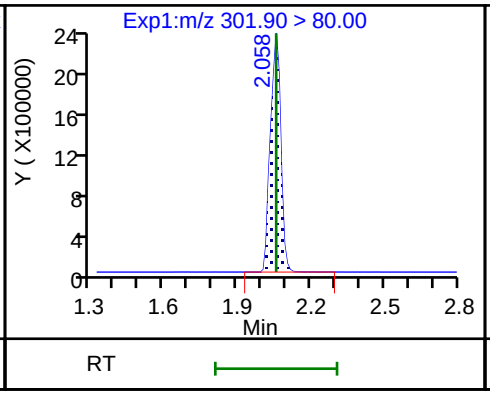
D 3 13C5 PFPeA



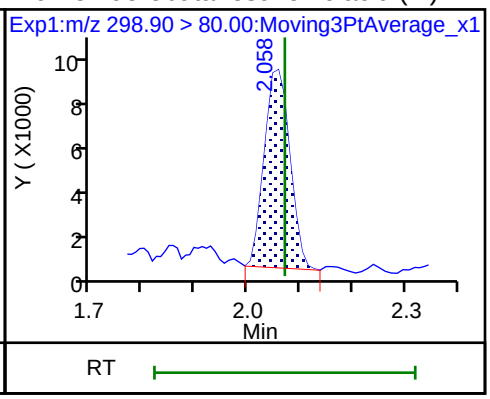
4 Perfluoropentanoic acid (M)



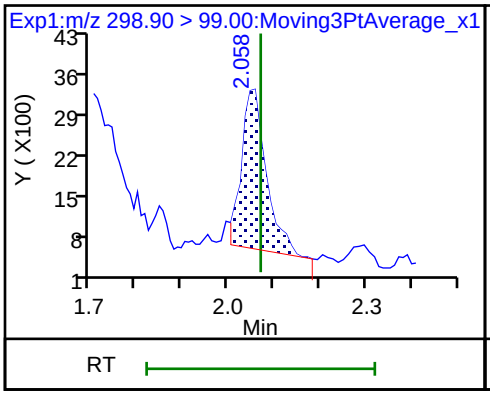
D 5 13C3 PFBS



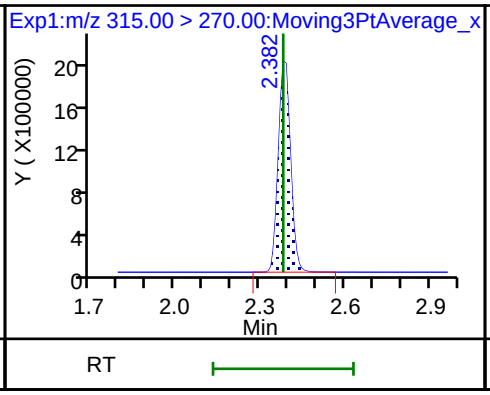
6 Perfluorobutanesulfonic acid (M)



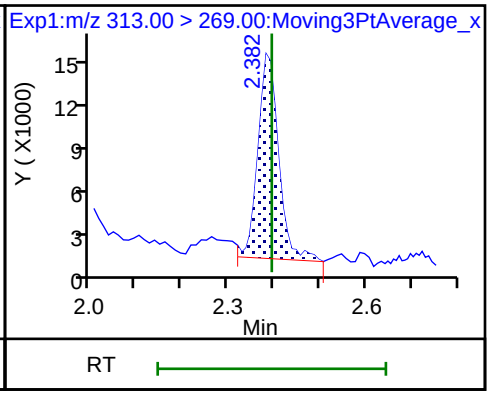
6 Perfluorobutanesulfonic acid



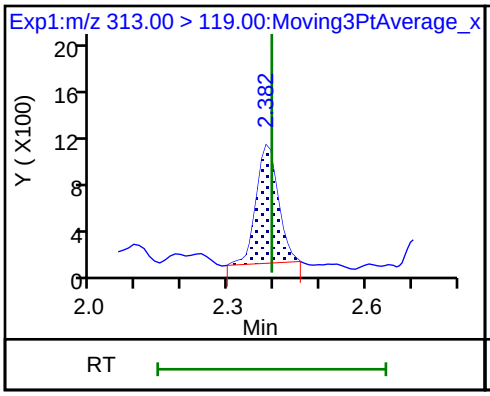
D 9 13C2 PFHxA



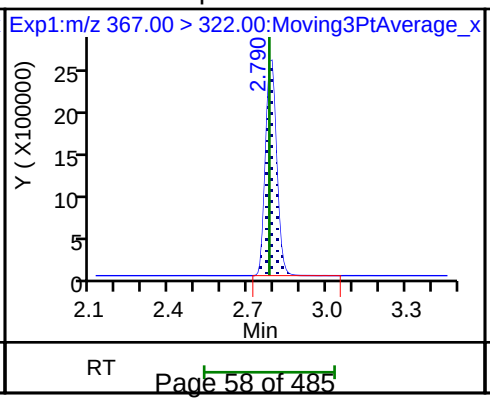
10 Perfluorohexanoic acid



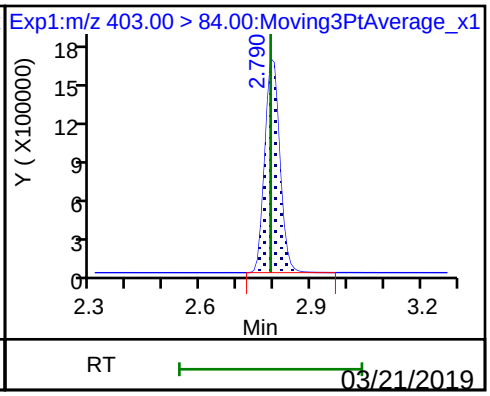
10 Perfluorohexanoic acid



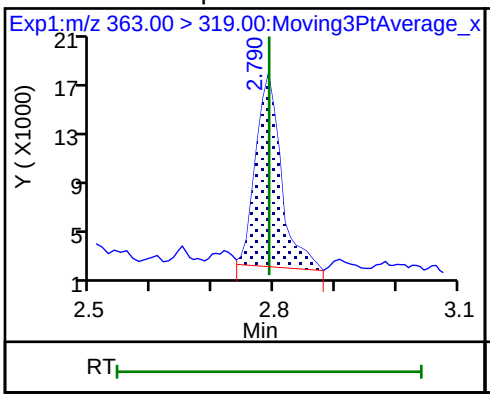
D 16 13C4 PFHpA



D 17 18O2 PFHxS



15 Perfluoroheptanoic acid



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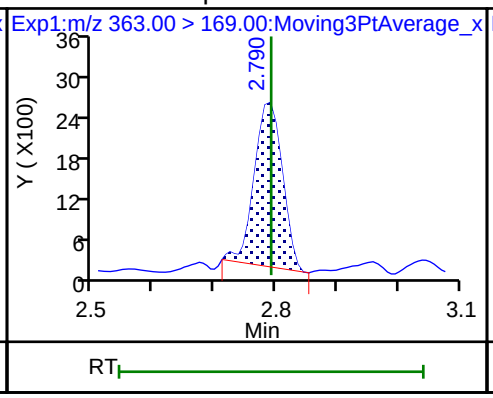
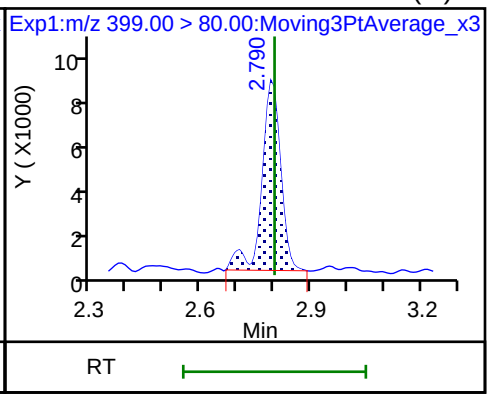
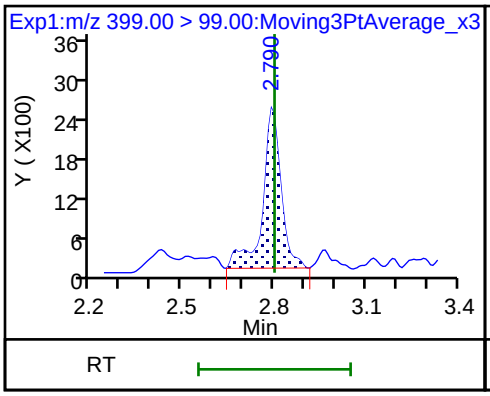


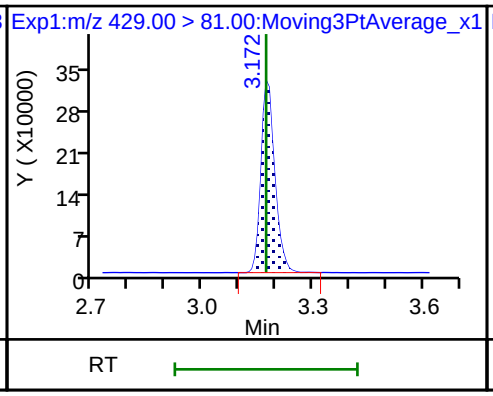
18 Perfluorohexanesulfonic acid (M)



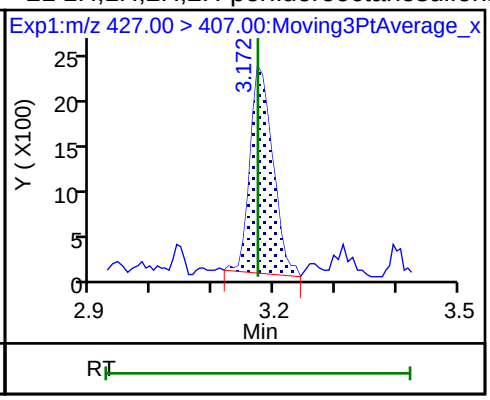
18 Perfluorohexanesulfonic acid



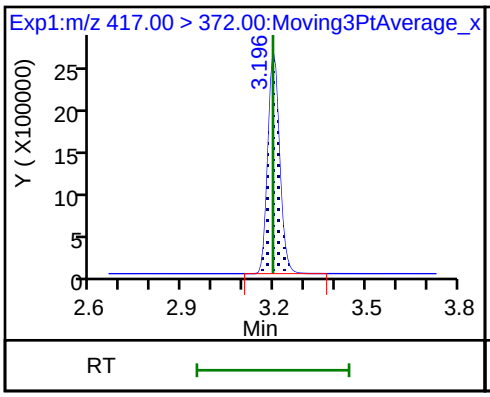
D 20 M2-6:2 FTS



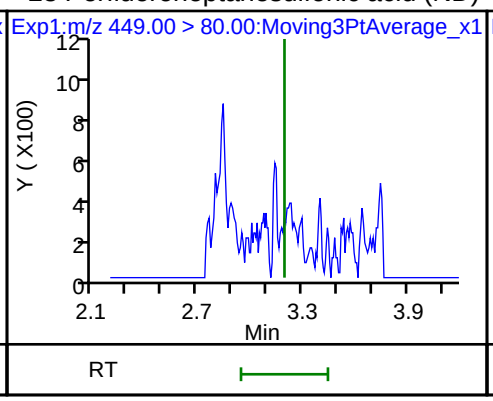
21 1H,1H,2H,2H-perfluorooctanesulfoni



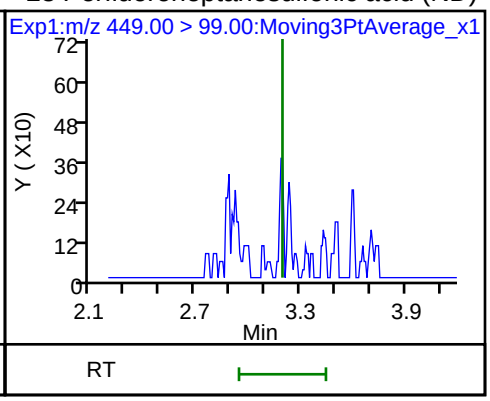
D 25 13C4 PFOA



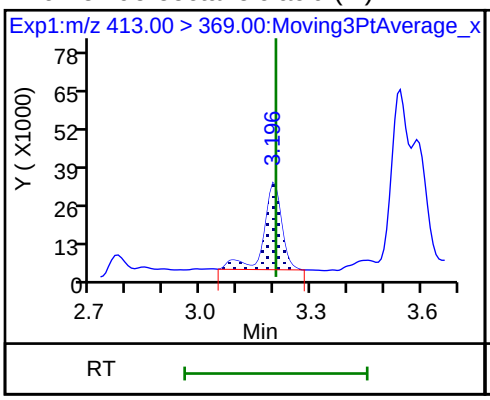
23 Perfluoroheptanesulfonic acid (ND)



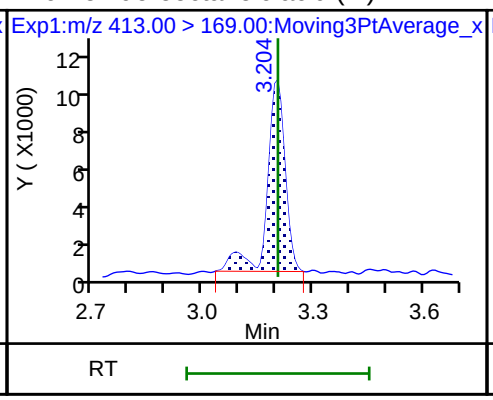
23 Perfluoroheptanesulfonic acid (ND)



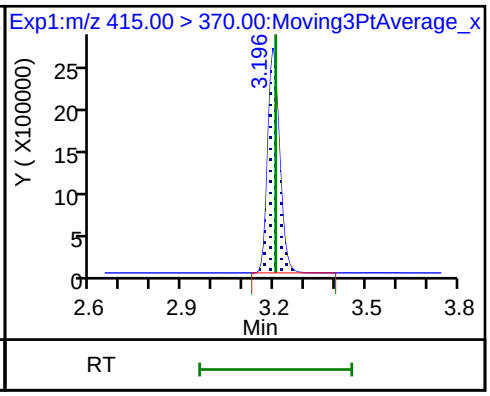
26 Perfluorooctanoic acid (M)



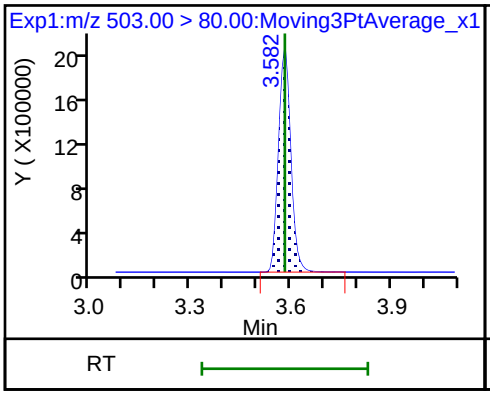
26 Perfluorooctanoic acid (M)



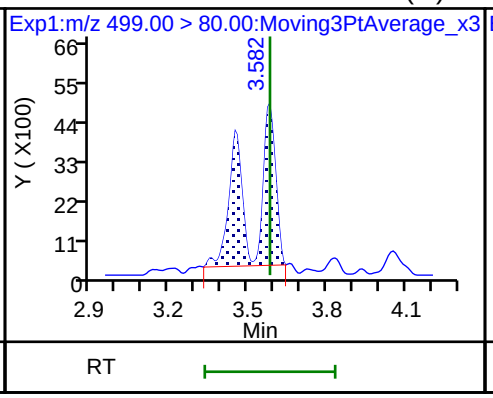
* 24 13C2 PFOA



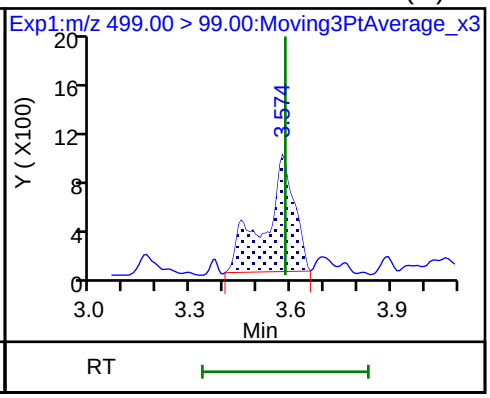
D 28 13C4 PFOS



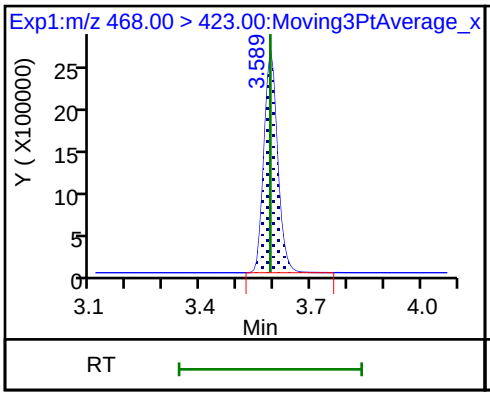
29 Perfluorooctanesulfonic acid (M)



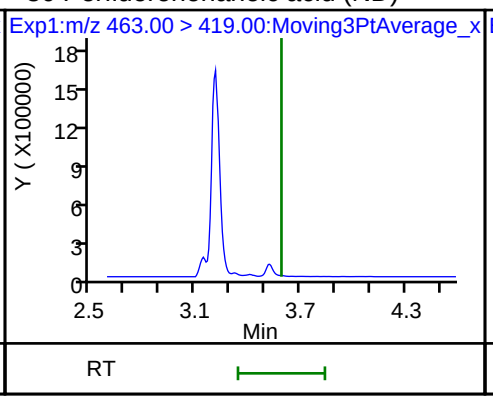
29 Perfluorooctanesulfonic acid (M)



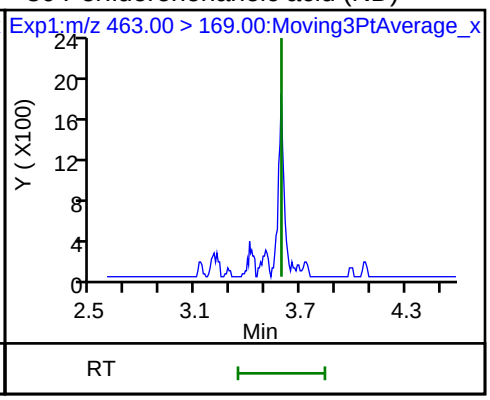
D 31 13C5 PFNA



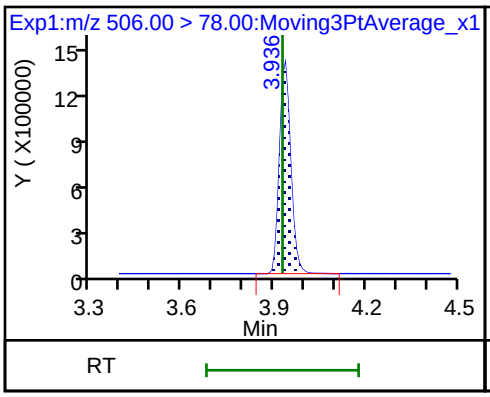
30 Perfluorononanoic acid (ND)



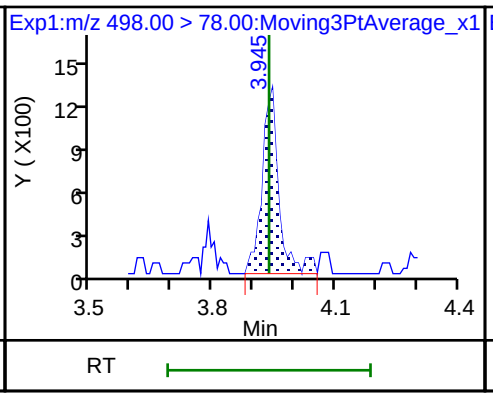
30 Perfluorononanoic acid (ND)



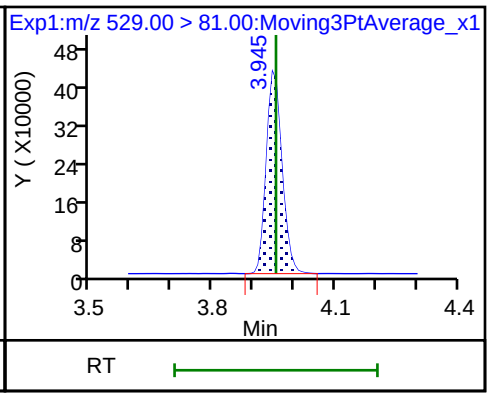
D 33 13C8 FOSA



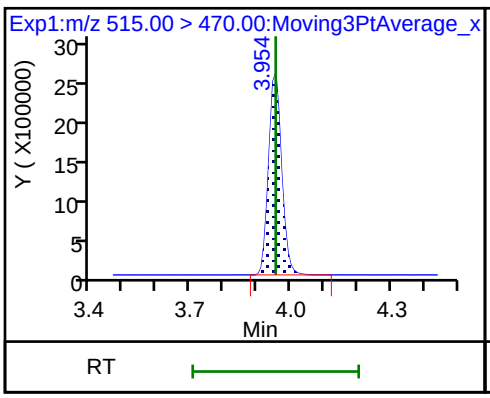
34 Perfluorooctanesulfonamide



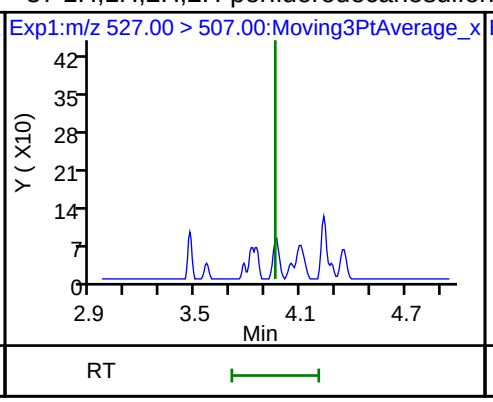
D 39 M2-8:2 FTS



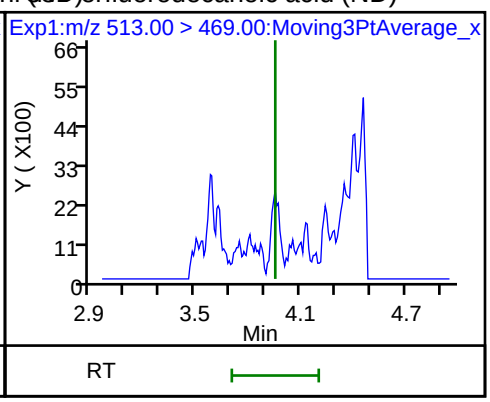
D 36 13C2 PFDA



37 1H,1H,2H,2H-perfluorodecanesulfoni



38 Perfluorodecanoic acid (ND)



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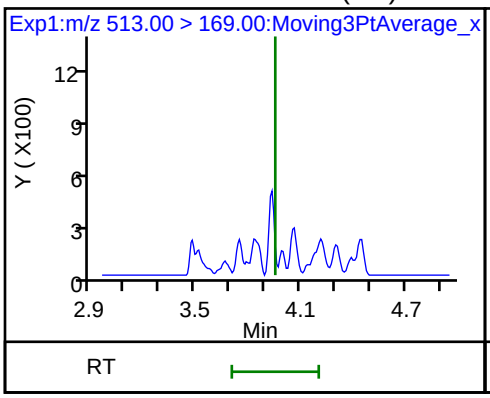
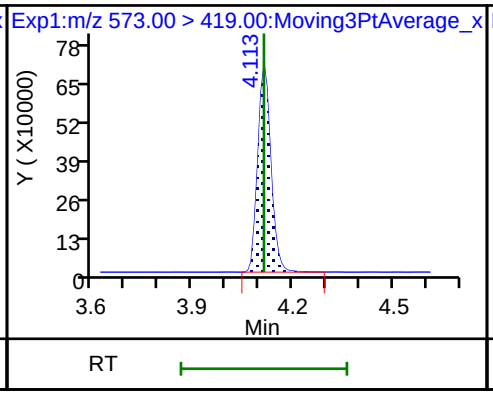
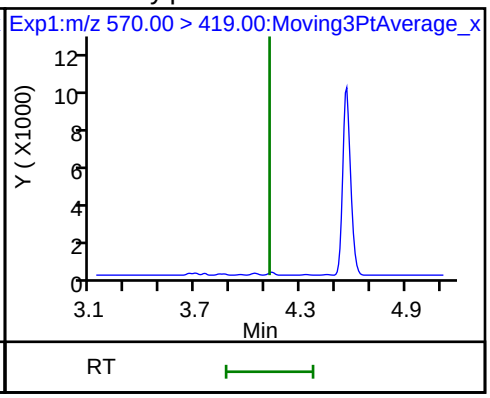


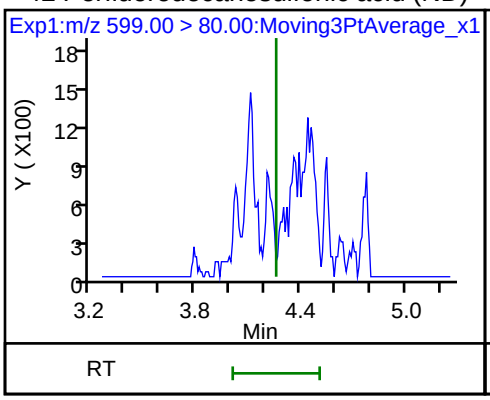
D 40 d3-NMeFOSAA



41 N-methylperfluorooctanesulfonamido (ND)



42 Perfluorodecanesulfonic acid (ND)



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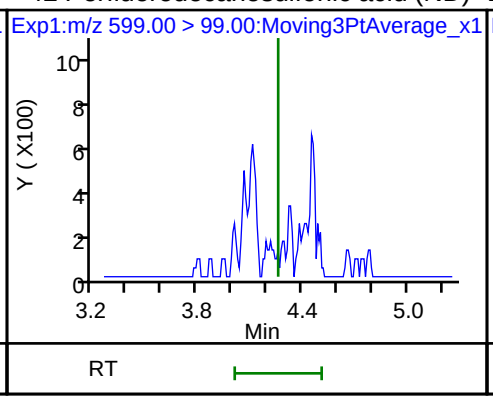
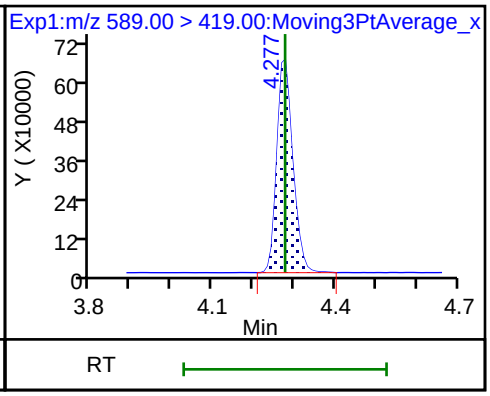
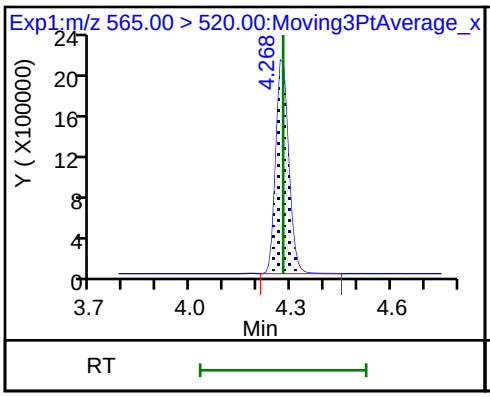


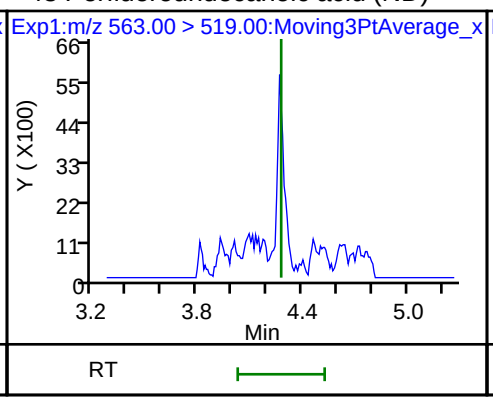
D 45 d5-NEtFOSAA



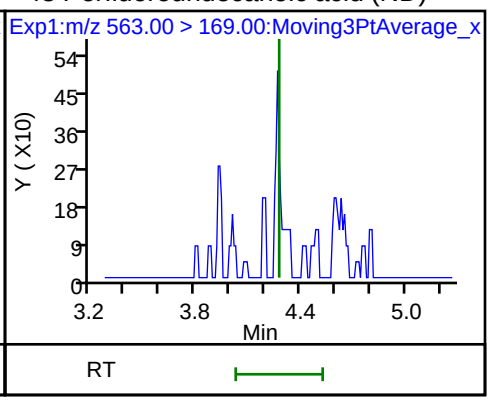
D 44 13C2 PFUnA



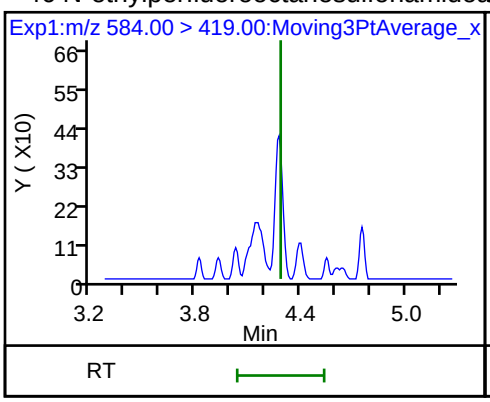
43 Perfluoroundecanoic acid (ND)



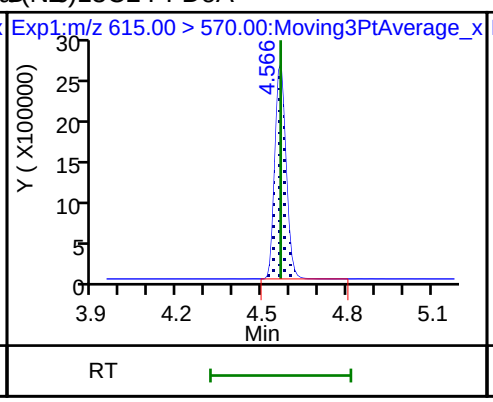
43 Perfluoroundecanoic acid (ND)



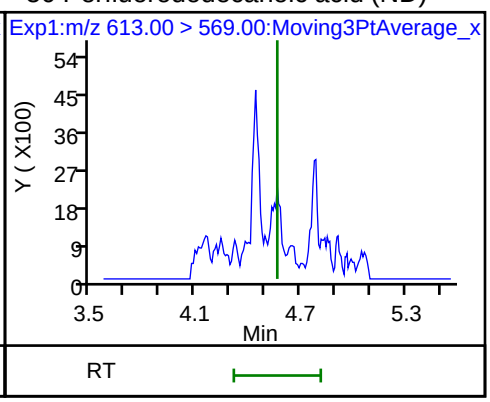
46 N-ethylperfluorooctanesulfonamidoa (ND)



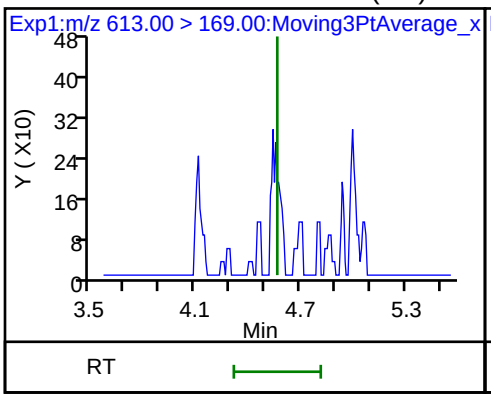
D 49 13C2 PFDoA



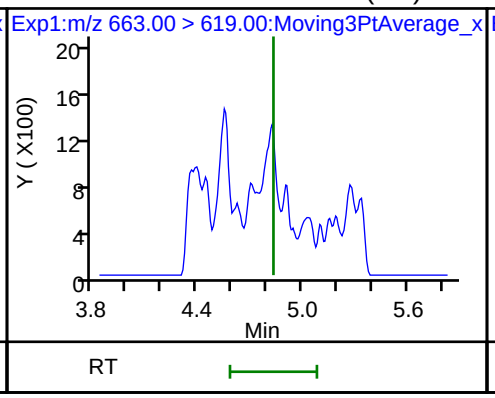
50 Perfluorododecanoic acid (ND)



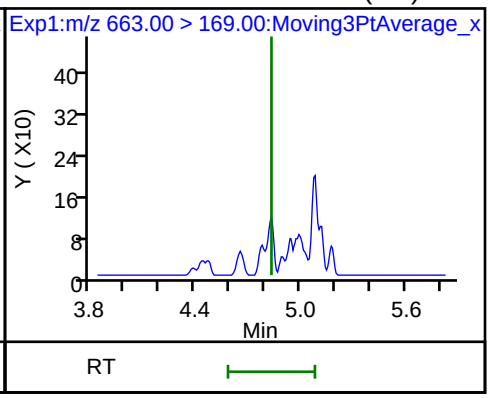
50 Perfluorododecanoic acid (ND)



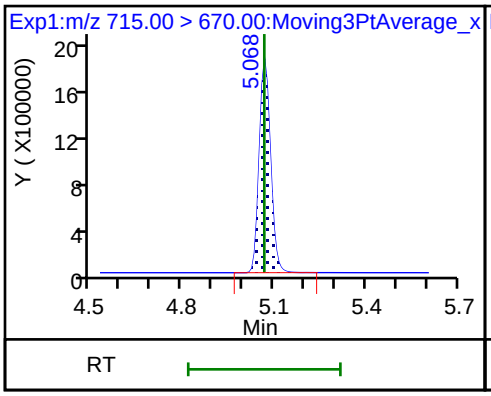
54 Perfluorotridecanoic acid (ND)



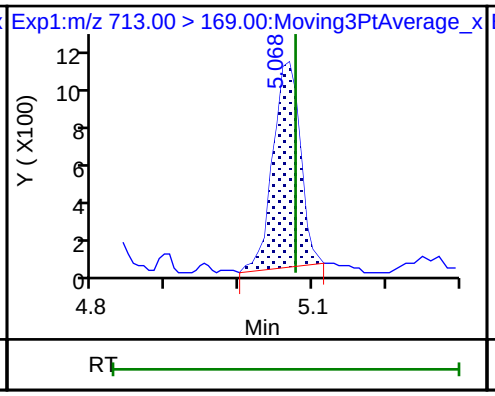
54 Perfluorotridecanoic acid (ND)



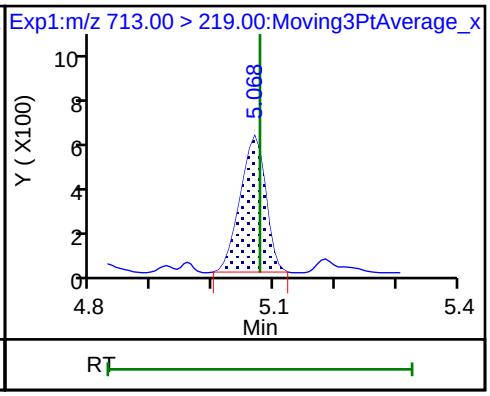
D 55 13C2 PFTeDA



56 Perfluorotetradecanoic acid



56 Perfluorotetradecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

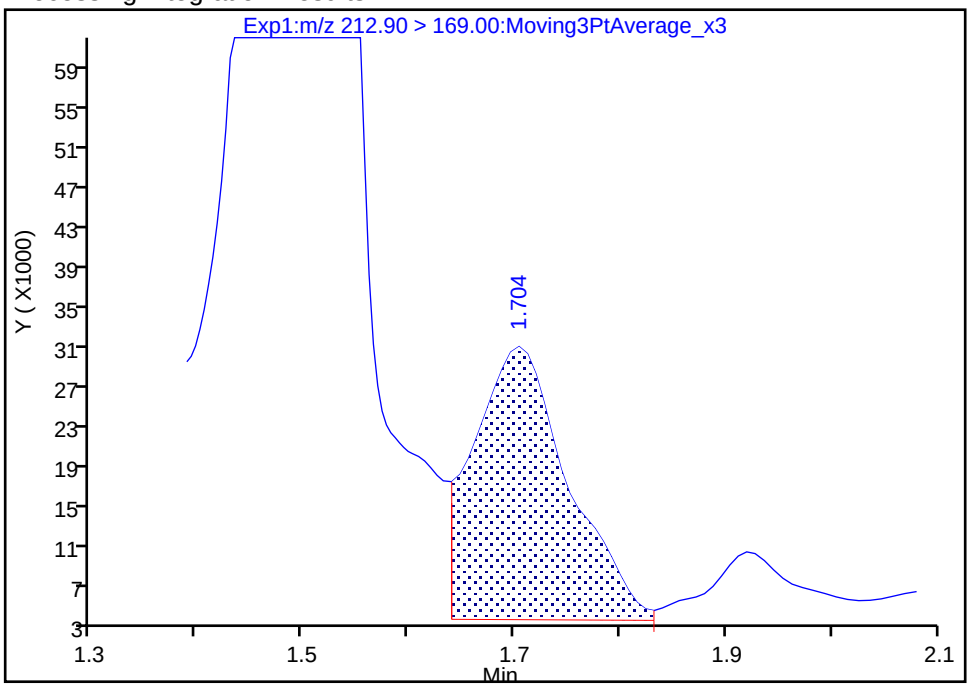
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d				
Injection Date:	12-Mar-2019 21:31:43	Instrument ID:	A9		
Lims ID:	320-48096-A-2-A	Lab Sample ID:	320-48096-2		
Client ID:	GC-DYE-LIQUID(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	44	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

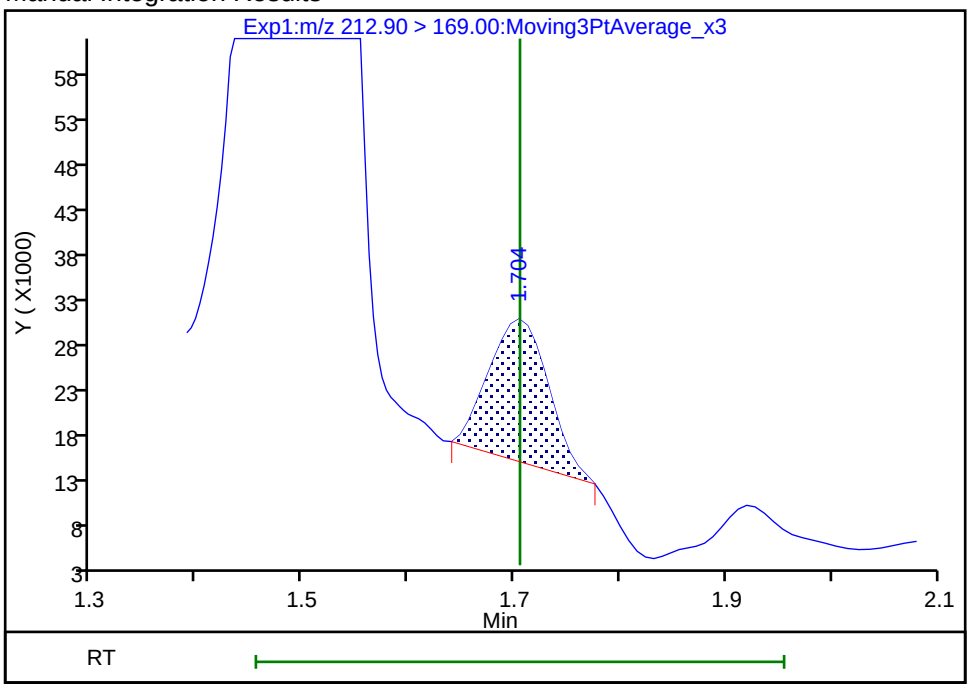
Processing Integration Results

RT: 1.70
Area: 168722
Amount: 0.093980
Amount Units: ng/ml



Manual Integration Results

RT: 1.70
Area: 61313
Amount: 0.034152
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:01:59
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

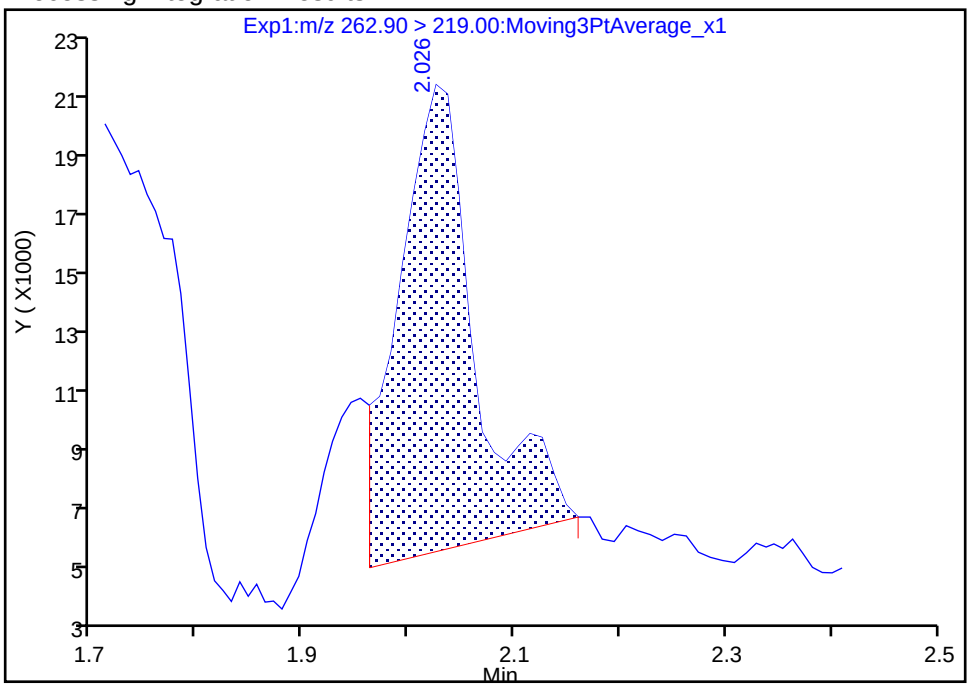
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d				
Injection Date:	12-Mar-2019 21:31:43	Instrument ID:	A9		
Lims ID:	320-48096-A-2-A	Lab Sample ID:	320-48096-2		
Client ID:	GC-DYE-LIQUID(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	44	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

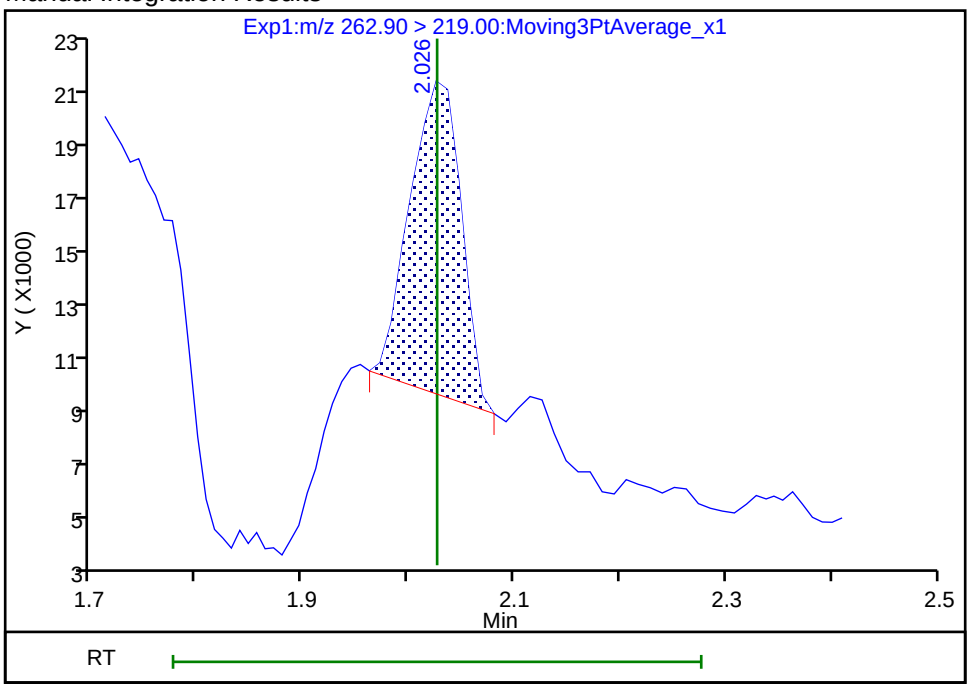
Processing Integration Results

RT: 2.03
Area: 77024
Amount: 0.037725
Amount Units: ng/ml



Manual Integration Results

RT: 2.03
Area: 38252
Amount: 0.018735
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:02:05

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

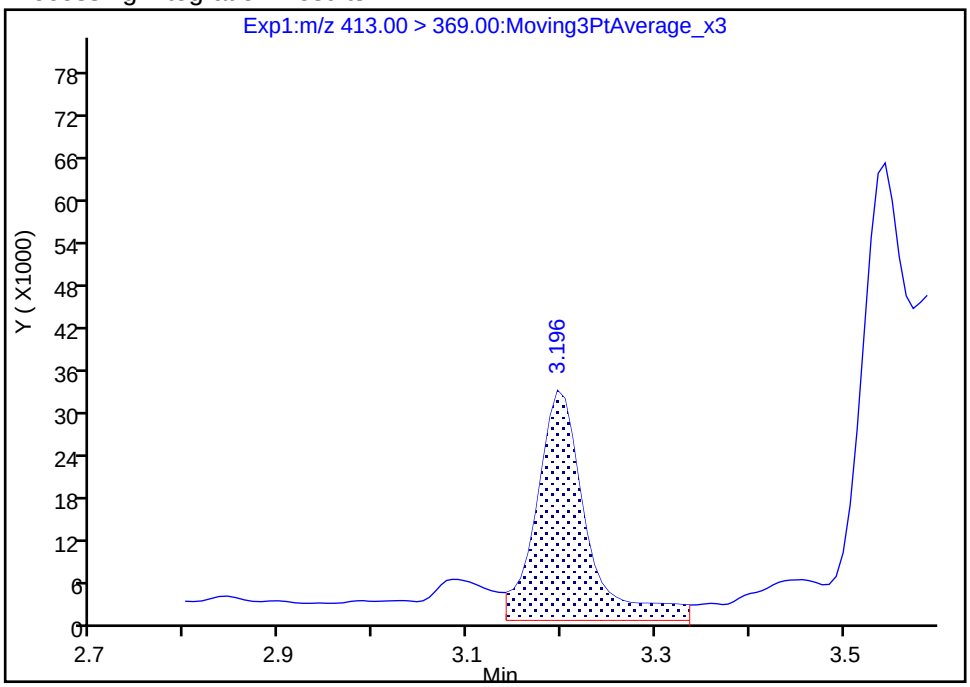
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d				
Injection Date:	12-Mar-2019 21:31:43	Instrument ID:	A9		
Lims ID:	320-48096-A-2-A	Lab Sample ID:	320-48096-2		
Client ID:	GC-DYE-LIQUID(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	44	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

26 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

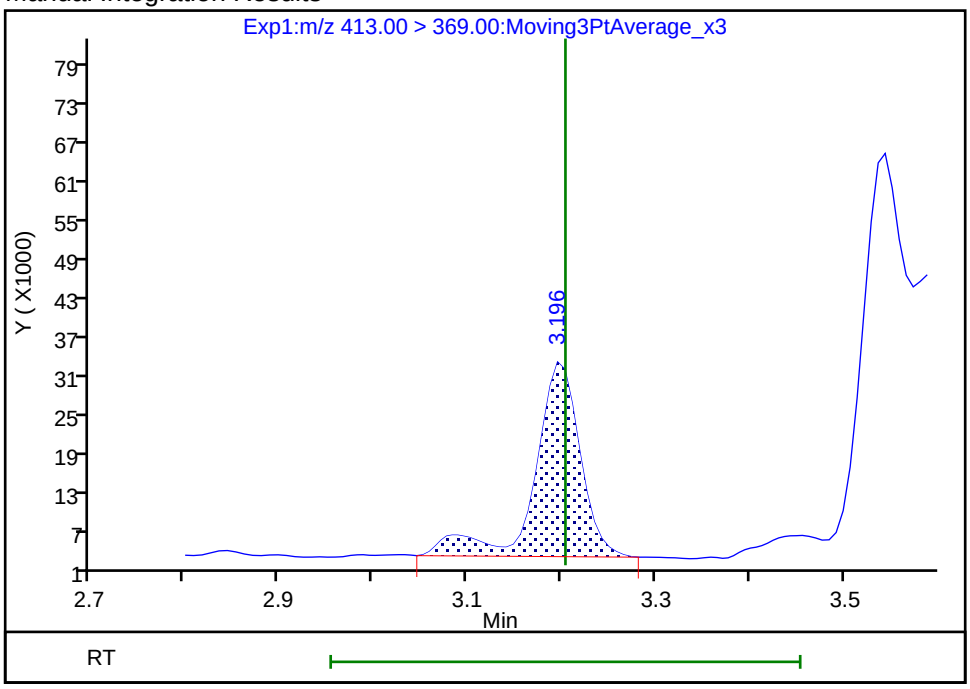
Processing Integration Results

RT: 3.20
Area: 118127
Amount: 0.040692
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 100892
Amount: 0.034755
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:02:25

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

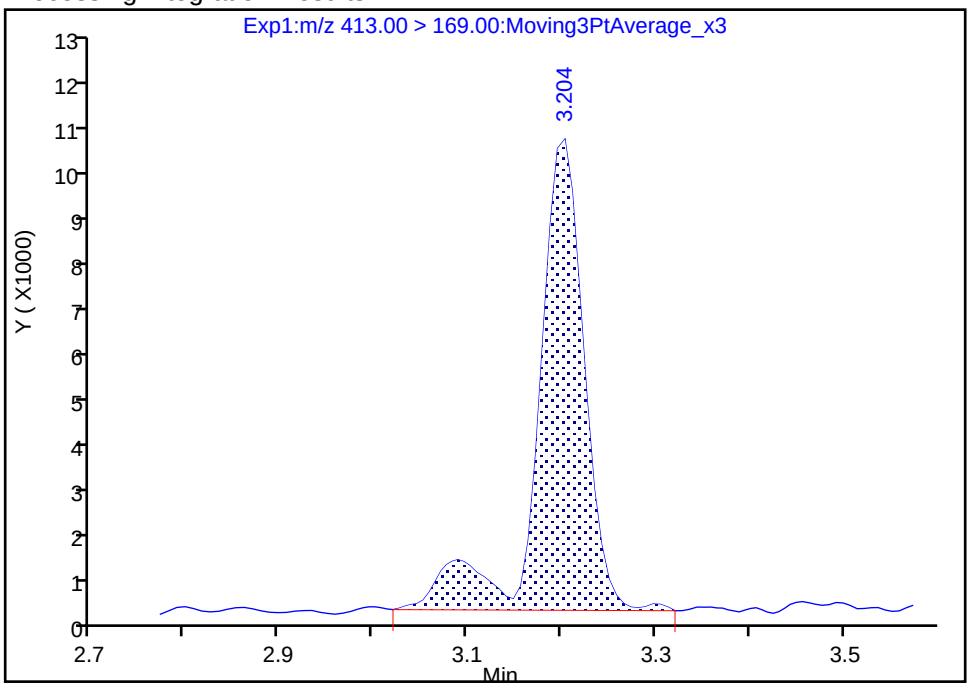
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d				
Injection Date:	12-Mar-2019 21:31:43	Instrument ID:	A9		
Lims ID:	320-48096-A-2-A	Lab Sample ID:	320-48096-2		
Client ID:	GC-DYE-LIQUID(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	44	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

26 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

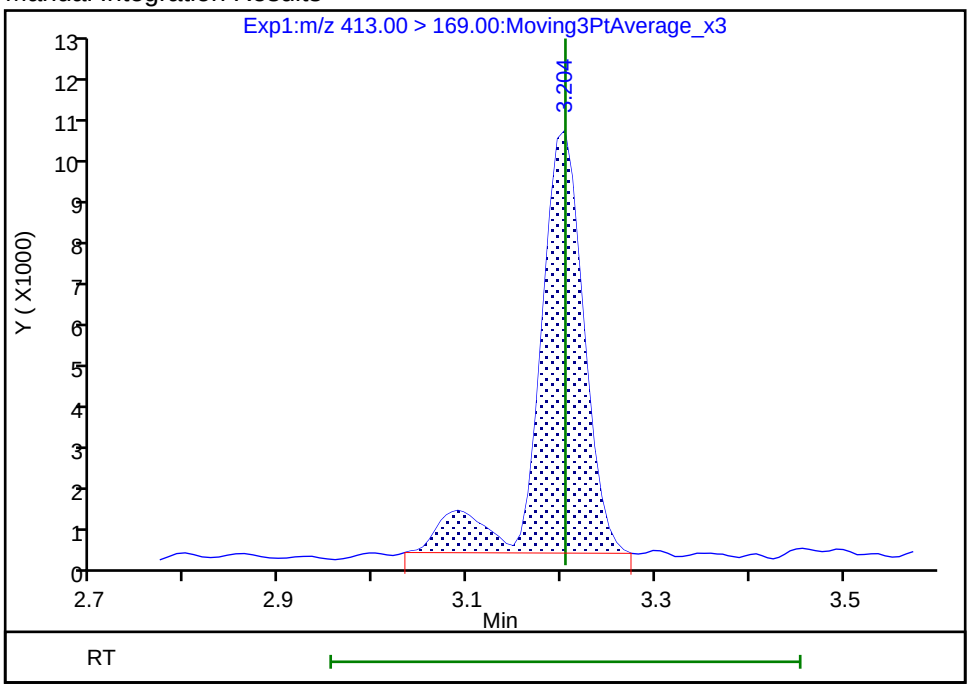
Processing Integration Results

RT: 3.20
Area: 34453
Amount: 0.040692
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 33157
Amount: 0.034755
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:02:28
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

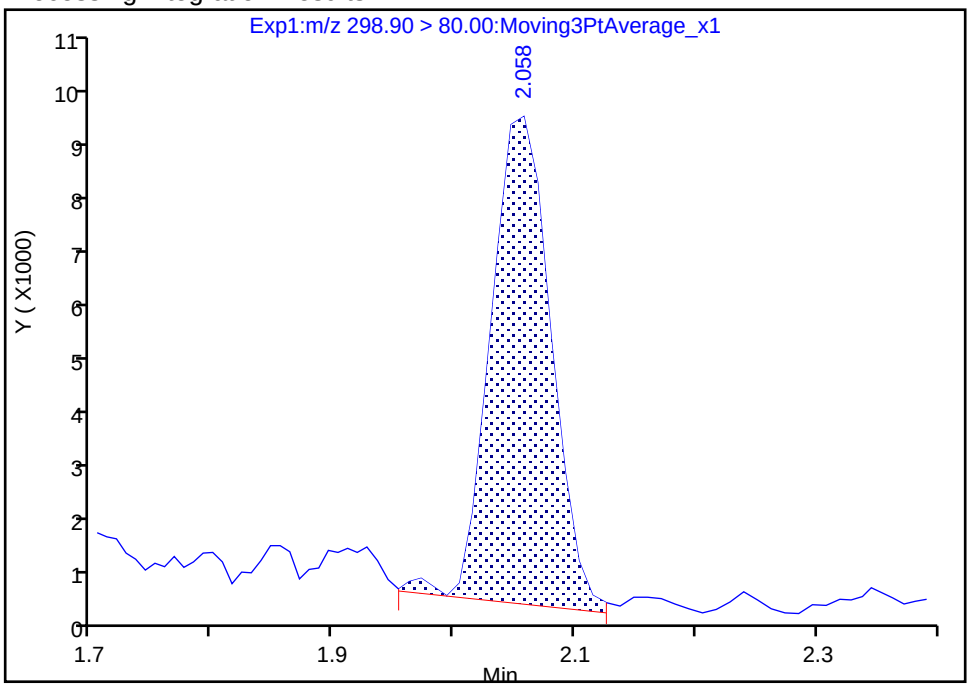
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d				
Injection Date:	12-Mar-2019 21:31:43	Instrument ID:	A9		
Lims ID:	320-48096-A-2-A	Lab Sample ID:	320-48096-2		
Client ID:	GC-DYE-LIQUID(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	44	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

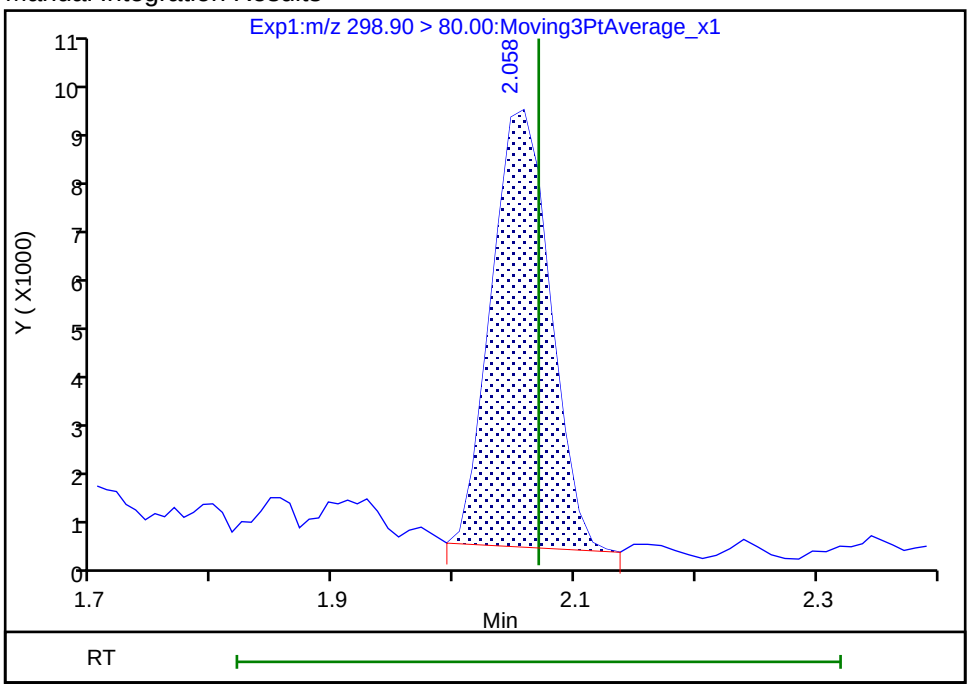
Processing Integration Results

RT: 2.06
Area: 30463
Amount: 0.011198
Amount Units: ng/ml



Manual Integration Results

RT: 2.06
Area: 29547
Amount: 0.010862
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:02:10
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

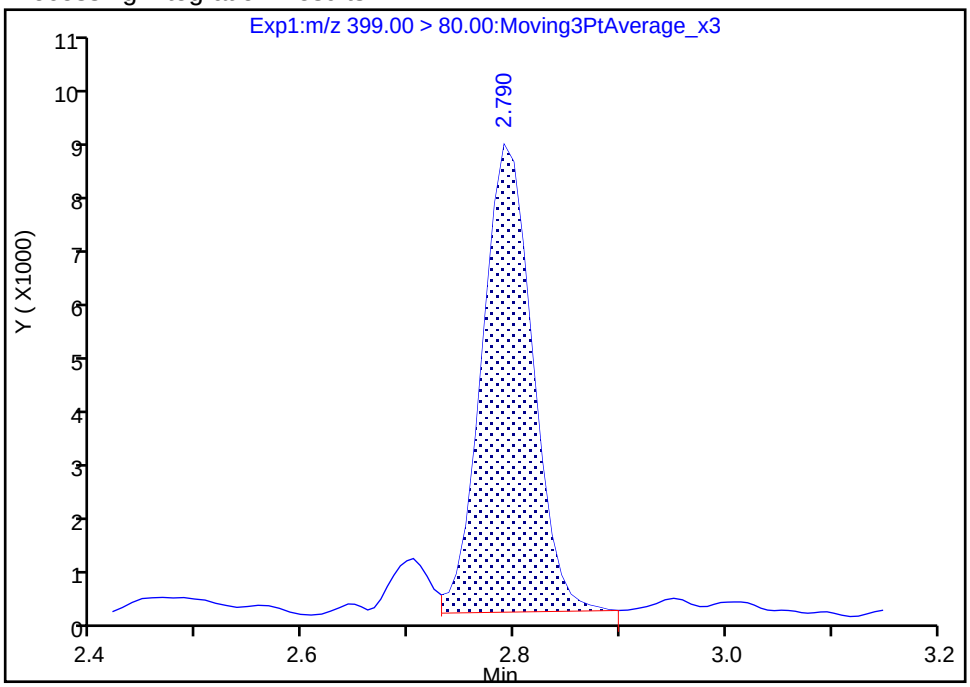
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d				
Injection Date:	12-Mar-2019 21:31:43	Instrument ID:	A9		
Lims ID:	320-48096-A-2-A	Lab Sample ID:	320-48096-2		
Client ID:	GC-DYE-LIQUID(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	44	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

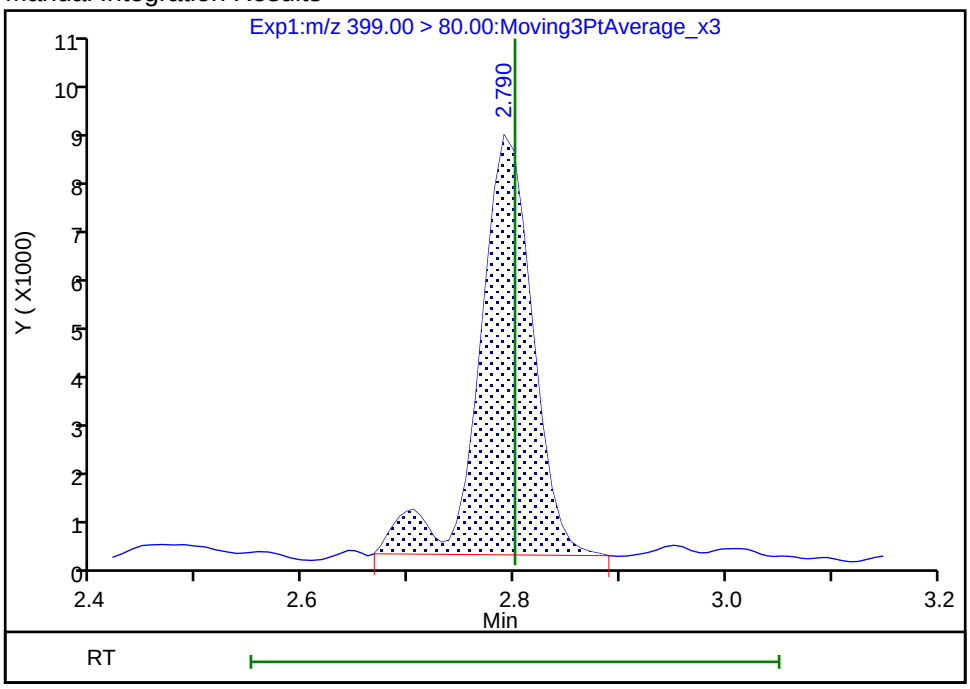
Processing Integration Results

RT: 2.79
Area: 27881
Amount: 0.011961
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 29456
Amount: 0.012637
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:02:18

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

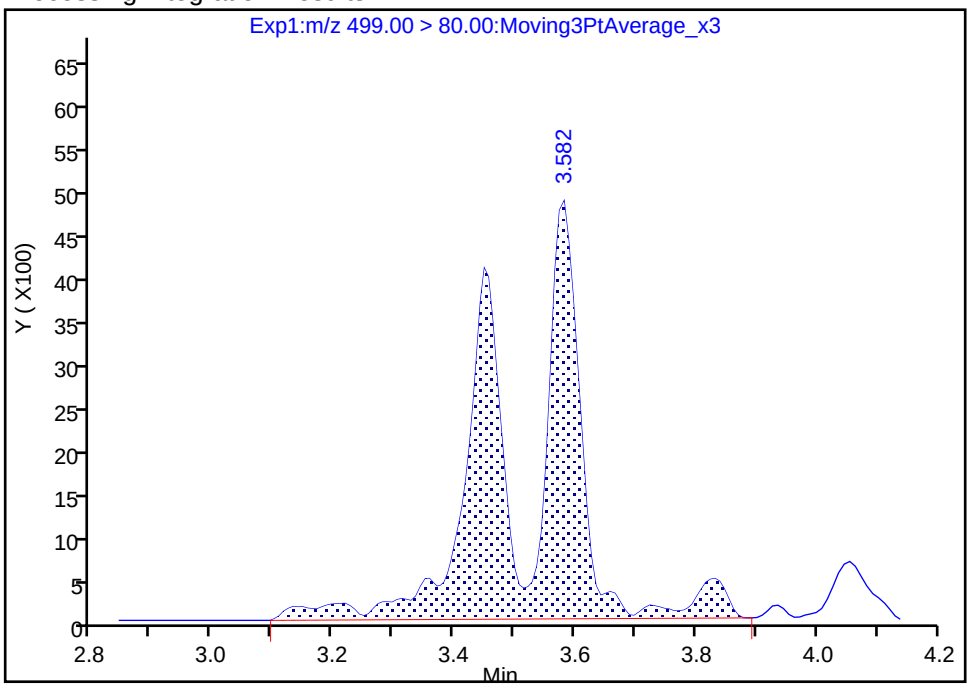
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d				
Injection Date:	12-Mar-2019 21:31:43	Instrument ID:	A9		
Lims ID:	320-48096-A-2-A	Lab Sample ID:	320-48096-2		
Client ID:	GC-DYE-LIQUID(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	44	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

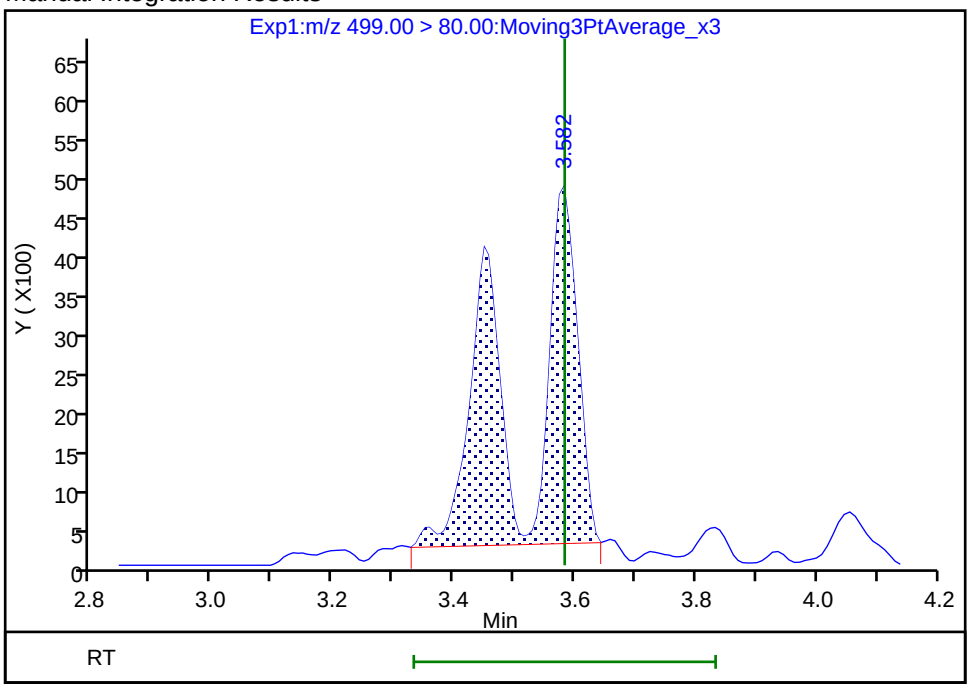
Processing Integration Results

RT: 3.58
Area: 37187
Amount: 0.017902
Amount Units: ng/ml



Manual Integration Results

RT: 3.58
Area: 27837
Amount: 0.013401
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:02:33

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

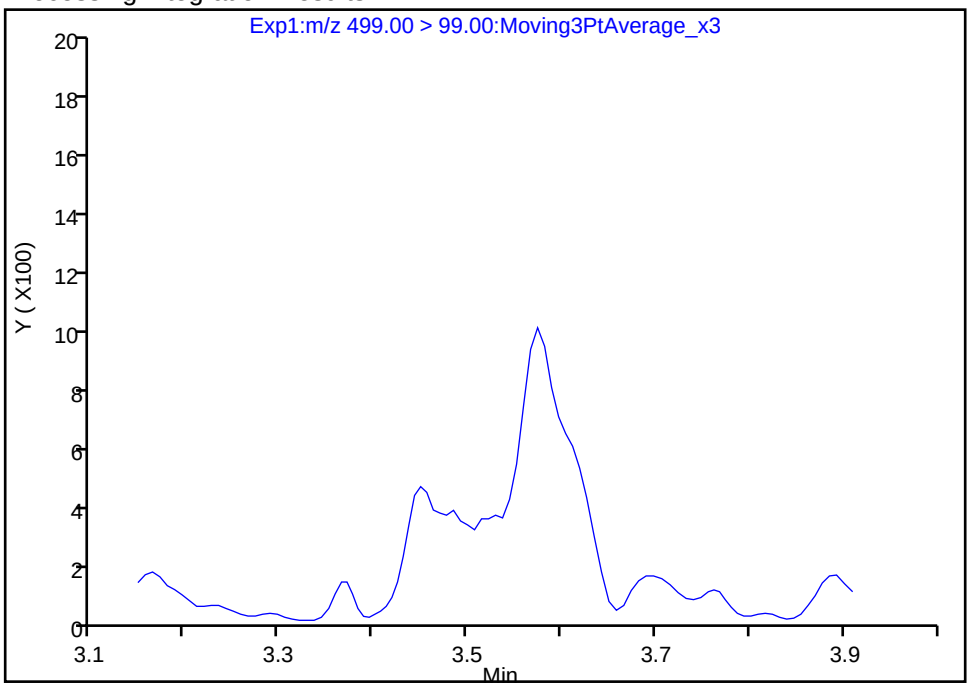
Data File:	\\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_061.d				
Injection Date:	12-Mar-2019 21:31:43	Instrument ID:	A9		
Lims ID:	320-48096-A-2-A	Lab Sample ID:	320-48096-2		
Client ID:	GC-DYE-LIQUID(WZ)				
Operator ID:	A9\Administrator	ALS Bottle#:	44	Worklist Smp#:	18
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

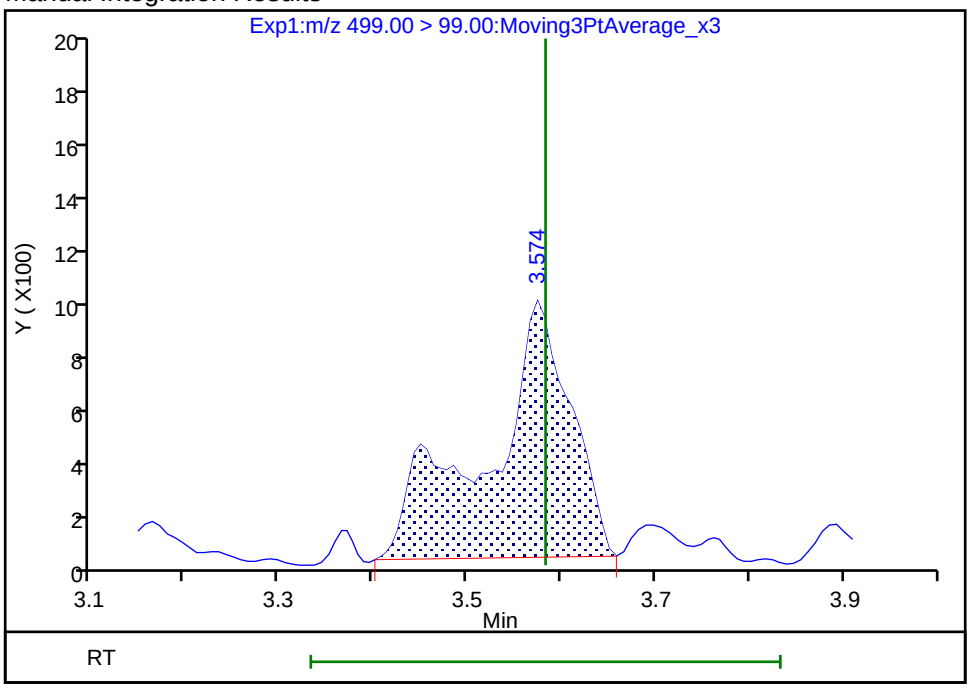
Processing Integration Results

RT: 3.58
Area: 0
Amount: 0.017902
Amount Units: ng/ml



Manual Integration Results

RT: 3.57
Area: 5810
Amount: 0.013401
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:02:36
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280516

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/09/2019 01:17 Calibration End Date: 03/09/2019 02:02 Calibration ID: 44179

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-280516/2	2019.03.08ICAL_005.d
Level 2	IC 320-280516/3	2019.03.08ICAL_006.d
Level 3	IC 320-280516/4	2019.03.08ICAL_007.d
Level 4	IC 320-280516/5	2019.03.08ICAL_008.d
Level 5	IC 320-280516/6	2019.03.08ICAL_009.d
Level 6	IC 320-280516/7	2019.03.08ICAL_010.d
Level 7	IC 320-280516/8	2019.03.08ICAL_011.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.7173 0.8398	0.7500 0.7912	0.8105	0.8406	0.8534	AveID		0.8004				6.4		35.0			
Perfluoropentanoic acid (PFPeA)	1.0194 0.9964	0.9701 0.9414	1.0024	0.9503	1.0048	AveID		0.9835				3.0		35.0			
Perfluorobutanesulfonic acid (PFBS)	0.9009 0.9648	0.9184 0.8425	0.9422	1.0170	0.9713	AveID		0.9367				6.0		50.0			
4:2 FTS	2.0581 2.0494	1.9896 2.1259	1.9612	2.0717	2.0521	AveID		2.0440				2.6		50.0			
Perfluorohexanoic acid (PFHxA)	1.1199 0.9227	0.9618 0.8859	0.8873	0.9216	0.9292	AveID		0.9469				8.5		35.0			
Perfluoropentanesulfonic acid (PFPeS)	0.7403 0.8142	0.7623 0.7046	0.7549	0.8429	0.8219	AveID		0.7773				6.4		50.0			
HFPO-DA (GenX)	+++++ 3.2160	3.2453 3.0763	2.6813	3.0226	2.9074	AveID		3.0248				6.9		35.0			
Perfluoroheptanoic acid (PFHpA)	0.9708 1.0338	0.9880 0.9576	0.9853	1.0098	0.9883	AveID		0.9905				2.5		35.0			
Perfluorohexanesulfonic acid (PFHxS)	+++++ 0.9882	1.0810 0.9938	0.9884	0.9814	0.9653	AveID		0.9997				4.1		35.0			
DONA	3.4346 3.1337	3.1479 2.5052	3.4330	3.5071	3.3340	AveID		3.2136				10.7		50.0			
6:2 FTS	1.5180 1.4179	1.2941 1.4804	1.3804	1.4388	1.4012	AveID		1.4187				5.1		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.1458 1.1204	1.0940 1.0218	1.1185	1.1429	1.0953	AveID		1.1055				3.8		50.0			
Perfluorooctanoic acid (PFOA)	1.2649 1.0408	1.0527 0.9798	1.0422	1.0175	1.0247	AveID		1.0603				8.8		35.0			
Perfluorooctanesulfonic acid (PFOS)	0.9890 1.0299	0.9795 0.9929	0.9777	1.2892	0.9884	AveID		1.0352				10.9		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280516

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/09/2019 01:17 Calibration End Date: 03/09/2019 02:02 Calibration ID: 44179

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorononanoic acid (PFNA)	0.8710 0.9833	0.9779 0.9491	0.9554	0.9439	0.9642	AveID		0.9492				3.9		35.0			
F-53B Major	1.7076 1.7245	1.5815 1.5262	1.5911	1.6803	1.6405	AveID		1.6360				4.5		50.0			
Perfluorononanesulfonic acid (PFNS)	0.7920 0.8471	0.8318 0.7819	0.8467	0.8744	0.8379	AveID		0.8303				3.9		50.0			
Perfluorodecanoic acid (PFDA)	0.8834 0.9437	0.9123 0.9143	0.9139	0.9468	0.9278	AveID		0.9203				2.3		35.0			
8:2 FTS	1.0276 1.2475	1.0656 1.1855	1.2448	1.1204	1.1399	AveID		1.1473				7.4		35.0			
Perfluorooctanesulfonamide (FOSA)	0.8712 0.8624	0.8879 0.8060	0.9203	0.9309	0.8920	AveID		0.8815				4.7		35.0			
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.9881 0.8755	0.8308 0.8929	0.8534	0.7989	0.8153	AveID		0.8650				7.3		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.7154 0.7589	0.6470 0.6990	0.7091	0.6817	0.7126	AveID		0.7034				4.9		50.0			
Perfluoroundecanoic acid (PFUnA)	0.9143 0.7720	0.8300 0.7770	0.7860	0.7520	0.7611	AveID		0.7989				7.1		35.0			
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.7593 0.8293	0.7868 0.8188	0.8040	0.7968	0.7838	AveID		0.7970				2.9		35.0			
F-53B Minor	2.3297 2.4545	2.3807 2.0977	2.4279	2.5308	2.4809	AveID		2.3860				6.0		50.0			
Perfluorododecanoic acid (PFDoA)	0.8961 0.9632	0.8922 0.9485	0.9506	0.9601	0.9718	AveID		0.9404				3.5		35.0			
10:2 FTS	1.0658 1.1370	1.2404 1.1195	1.1729	1.1430	1.1280	AveID		1.1438				4.7		50.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2713 0.2835	0.2362 0.2839	0.2869	0.2678	0.2624	AveID		0.2703				6.5		50.0			
Perfluorotridecanoic acid (PFTriA)	0.8863 0.9638	1.0262 0.8817	0.9212	0.9852	0.9556	AveID		0.9457				5.6		50.0			
Perfluorotetradecanoic acid (PFTeA)	0.2566 0.2304	0.2635 0.2403	0.2305	0.2284	0.2265	AveID		0.2395				6.2		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.6811 0.8516	1.2773 +++++	0.9180	0.8781	0.8705	L1ID	0.0208	0.8525							1.0000		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	1.1770 1.1364	1.1642 1.2158	1.1813	1.2124	1.2039	AveID		1.1844				2.4		50.0			
13C4 PFBA	1.3849 1.4897	1.3445 1.4951	1.4423	1.4440	1.4782	Ave		1.4398				3.9		50.0			
13C5 PFPeA	0.9619 1.0005	0.9462 1.0129	0.9899	1.0055	1.0173	Ave		0.9906				2.7		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280516

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/09/2019 01:17 Calibration End Date: 03/09/2019 02:02 Calibration ID: 44179

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C3 PFBS	1.5033 1.4971	1.4238 1.5324	1.5243	1.5036	1.5462	Ave		1.5044				2.6		50.0			
M2-4:2 FTS	0.1151 0.1257	0.1137 0.1236	0.1243	0.1209	0.1238	Ave		0.1210				3.9		50.0			
13C2 PFHxA	0.9788 1.0424	0.9615 1.0148	1.0408	1.0362	1.0365	Ave		1.0159				3.2		50.0			
13C3 HFPO-DA	0.0533 0.0592	0.0514 0.0620	0.0593	0.0607	0.0631	Ave		0.0584				7.6		50.0			
13C4 PFHpA	0.9102 0.9280	0.9035 0.9111	0.9622	0.9314	0.9592	Ave		0.9294				2.5		50.0			
18O2 PFHxS	1.0343 1.0615	1.0432 1.0102	1.0872	1.0622	1.0865	Ave		1.0550				2.7		50.0			
M2-6:2 FTS	0.1584 0.1605	0.1513 0.1537	0.1652	0.1639	0.1646	Ave		0.1597				3.4		50.0			
13C8 PFOA	1.1677 1.2512	1.1416 1.2469	1.2124	1.2068	1.2618	Ave		1.2126				3.7		50.0			
13C4 PFOA	0.8614 0.8812	0.8737 0.8709	0.9087	0.9107	0.9077	Ave		0.8878				2.3		50.0			
13C8 PFOS	0.4139 0.4170	0.4209 0.4165	0.4158	0.4245	0.4235	Ave		0.4189				1.0		50.0			
13C4 PFOS	0.7781 0.8168	0.8133 0.8160	0.8374	0.8249	0.8531	Ave		0.8199				2.8		50.0			
13C5 PFNA	0.7069 0.7222	0.6740 0.7270	0.7313	0.7330	0.7352	Ave		0.7185				3.0		50.0			
13C2 PFDA	0.6580 0.6630	0.6478 0.6342	0.6621	0.6550	0.6863	Ave		0.6581				2.4		50.0			
M2-8:2 FTS	0.1994 0.1899	0.1789 0.1887	0.1927	0.1991	0.1939	Ave		0.1918				3.7		50.0			
13C8 FOSA	1.3602 1.4040	1.3405 1.3038	1.3882	1.4179	1.4090	Ave		1.3748				3.0		50.0			
d3-NMeFOSAA	0.3250 0.3527	0.3191 0.3557	0.3377	0.3453	0.3503	Ave		0.3408				4.2		50.0			
13C2 PFUnA	0.6042 0.5905	0.5862 0.5553	0.6112	0.6103	0.6172	Ave		0.5964				3.6		50.0			
d5-NEtFOSAA	0.3586 0.3638	0.3598 0.3583	0.3660	0.3623	0.3832	Ave		0.3646				2.4		50.0			
13C2 PFDoA	0.6521 0.6377	0.6280 0.6279	0.6549	0.6271	0.6687	Ave		0.6423				2.6		50.0			
13C2 PFTeDA	0.6601 0.6846	0.6477 0.6741	0.6865	0.7054	0.7004	Ave		0.6798				3.1		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280516

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/09/2019 01:17 Calibration End Date: 03/09/2019 02:02 Calibration ID: 44179

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2 PFHxDA	1.0799 1.1956	1.0552 1.0893	1.1452	1.1500	1.0939	Ave		1.1156				4.4		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280516

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/09/2019 01:17 Calibration End Date: 03/09/2019 02:02 Calibration ID: 44179

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-280516/2	2019.03.08ICAL_005.d
Level 2	IC 320-280516/3	2019.03.08ICAL_006.d
Level 3	IC 320-280516/4	2019.03.08ICAL_007.d
Level 4	IC 320-280516/5	2019.03.08ICAL_008.d
Level 5	IC 320-280516/6	2019.03.08ICAL_009.d
Level 6	IC 320-280516/7	2019.03.08ICAL_010.d
Level 7	IC 320-280516/8	2019.03.08ICAL_011.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	60626 14177289	129703 26626265	709224	2817080	6984397	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	59838 11298104	118079 21463670	602000	2217606	5659454	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	73062 14470202	148694 25688593	770270	3137132	7349925	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	13498 2726150	27182 5522945	138136	543062	1314151	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	66895 10899855	118956 20235575	560306	2216211	5332643	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	63704 12957622	130961 22798908	654825	2758990	6599462	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	+++++ 2157056	21437 4294329	96482	425724	1015158	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	53923 10871611	114818 19639003	575205	2182849	5248667	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	+++++ 10817917	132000 20565147	593290	2201521	5283939	+++++ 4.55	0.0455 9.10	0.228	0.910	2.28
DONA		AveID	153639 27324367	310217 43345110	1642976	6324979	14833457	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
6:2 FTS		AveID	13908 2444899	23871 4855478	131157	518971	1210736	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	51796 9873088	108960 17866148	540973	2083044	4924988	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorooctanoic acid (PFOA)		AveID	66492 10393822	118314 19205987	574525	2150474	5149900	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctanesulfonic acid (PFOS)		AveID	43583 8846861	95096 16923228	460944	2290537	4332356	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32
Perfluorononanoic acid (PFNA)		AveID	37571 8048214	84777 15530814	423879	1605728	3924411	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280516

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/09/2019 01:17 Calibration End Date: 03/09/2019 02:02 Calibration ID: 44179

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
F-53B Major		AveID	75574 14877046	154195 26125963	753406	2998201	7221490	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorononanesulfonic acid (PFNS)		AveID	36104 7527514	83542 13786916	412966	1607045	3798949	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
Perfluorodecanoic acid (PFDA)		AveID	35472 7090704	76025 13052474	367084	1439395	3525062	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
8:2 FTS		AveID	11979 2571797	23497 4822646	139400	495885	1172514	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorooctanesulfonamide (FOSA)		AveID	72320 13722572	153104 23652749	775070	3063360	6958129	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)		AveID	19594 3499004	34100 7150083	174859	640225	1581362	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	32749 6771421	65254 12377327	347296	1258093	3244523	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluoroundecanoic acid (PFUnA)		AveID	33708 5166184	62580 9712757	291459	1065071	2600803	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)		AveID	16616 3418998	36421 6602760	178531	669968	1663076	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
F-53B Minor		AveID	104212 21402068	234613 36294016	1161956	4564179	11037622	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)		AveID	35663 6960857	72074 13405037	377706	1397343	3598197	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
10:2 FTS		AveID	12502 2358627	27524 4582827	132174	509076	1167484	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)		AveID	12471 2540177	23917 5046921	141117	496364	1199867	0.0242 4.84	0.0484 9.68	0.242	0.968	2.42
Perfluorotridecanoic acid (PFTriA)		AveID	35272 6965234	82906 12460709	366020	1433852	3538136	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	10334 1787600	21953 3646522	95997	373929	878440	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L1ID	110786 11538669	173370 +++++	637771	2343644	5272227	0.0250 5.00	0.0500 +++++	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	77566 15397288	158023 29812867	820746	3235957	7291158	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PFOA	Ave	8451516 8441185	8647257 8413291	8750677	8378309	8184162	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5 PFPeA	13PFOA	Ave	5869935 5669502	6085935 5699937	6005829	5833812	5632376	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 PFBS	13PFOA	Ave	8531511 7889097	8516561 8019825	8600808	8113175	7961244	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2 FTS	13PFOA	Ave	655833 665115	683114 649493	704353	655334	640396	2.34 2.34	2.34 2.34	2.34	2.34	2.34

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280516

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/09/2019 01:17 Calibration End Date: 03/09/2019 02:02 Calibration ID: 44179

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C2 PFHxA	13PF OA	Ave	5973120 5906468	6184189 5710425	6314775	6012110	5738776	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PF OA	Ave	325178 335368	330273 348990	359837	352120	349167	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFHpA	13PF OA	Ave	5554266 5258232	5810829 5127150	5837816	5403913	5310592	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	5970721 5690070	6346937 5377921	6239941	5830118	5690657	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2 FTS	13PF OA	Ave	918127 863989	924246 821693	952112	903668	865876	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C8 PFOA	13PF OA	Ave	6976326 6940882	7188036 6869596	7201223	6854916	6839414	2.45 2.45	2.45 2.45	2.45	2.45	2.45
13C4 PFOA	13PF OA	Ave	5256667 4993315	5619592 4900672	5512839	5283972	5025750	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 PFOS	13PF OA	Ave	2414982 2258920	2587866 2240511	2411819	2354772	2241717	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C4 PFOS	13PF OA	Ave	4539691 4424506	5000643 4389816	4857008	4575729	4515236	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	4313692 4092425	4334722 4091000	4436818	4252938	4070306	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDA	13PF OA	Ave	4015184 3756842	4166467 3569131	4016742	3800643	3799507	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2 FTS	13PF OA	Ave	1165744 1030772	1102532 1017043	1119883	1106510	1028575	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C8 FOSA	13PF OA	Ave	8300737 7955739	8621864 7336755	8421911	8226972	7800708	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	1983043 1998315	2052243 2001890	2048850	2003493	1939633	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	3686890 3345911	3770094 3125042	3707956	3540791	3417131	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	2188420 2061456	2314381 2016020	2220465	2101982	2121857	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	3979669 3613252	4039292 3533342	3973167	3638418	3702478	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFTeDA	13PF OA	Ave	4027979 3878997	4165771 3793542	4165055	4092623	3877568	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFHxDA	13PF OA	Ave	6590086 6774659	6786694 6130156	6947732	6672593	6056290	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280516

SDG No.:

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/09/2019 01:17 Calibration End Date: 03/09/2019 02:02 Calibration ID: 44179

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L1ID = Linear 1/conc IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_005.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 09-Mar-2019 01:17:41 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 1
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 09-Mar-2019 07:56:46 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0306

First Level Reviewer: roycea Date: 09-Mar-2019 07:24:25
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.756	1.764	-0.008		8451516	2.40		96.2	7182	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.763	1.766	-0.003	1.004	60626	0.0224		89.6	16.4	
D 3 13C5 PFPeA										
267.90 > 223.00	2.084	2.088	-0.004		5869935	2.43		97.1	8950	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.084	2.091	-0.007	1.000	59838	0.0259		104	3.6	
D 47 13C3 PFBS										
301.90 > 80.00	2.116	2.120	-0.004		8531511	2.32		99.9	778885	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.116	2.123	-0.007	1.000	73062	0.0213	Target=2.39	96.2	116	
298.90 > 99.00	2.116	2.123	-0.007	1.000	30884		0.00(1.68-3.11)	96.2	90.9	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.392	2.394	-0.002	1.000	13498	0.0235		101	218	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.392	2.394	-0.002		655833	2.22		95.1	1783	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.432	2.432	0.0	1.000	66895	0.0296	Target=11.00	118	46.6	
313.00 > 119.00	2.422	2.432	-0.010	0.996	5740		0.00(7.70-14.30)	118	24.0	
D 7 13C2 PFHxA										
315.00 > 270.00	2.432	2.432	0.0		5973120	2.41		96.4	12009	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.442	2.446	-0.004	1.154	63704	0.0223	Target=2.65	95.2	558	
349.00 > 99.00	2.442	2.446	-0.004	1.154	23335		0.00(1.85-3.44)	95.2	101	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.541	2.541	0.0	1.000	13620	0.0346		138	21.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.541	2.541	0.0		325178	2.28		91.2	1225	
D 9 13C4 PFHpA										
367.00 > 322.00	2.802	2.798	0.004		5554266	2.45		97.9	10084	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.802	2.800	0.002	1.000	53923	0.0245	Target=2.52	98.0	22.0	
363.00 > 169.00	2.802	2.800	0.002	1.000	21440		0.00(1.76-3.27)	98.0	96.4	
D 11 18O2 PFHxS										
403.00 > 84.00	2.802	2.806	-0.004		5970721	2.32		98.0	6324	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.811	2.807	0.004	1.003	76125	0.0302	Target=2.82	133	607	
399.00 > 99.00	2.811	2.807	0.004	1.003	24942		0.00(1.97-3.66)	133	83.3	M
77 DONA										
377.00 > 251.00	2.848	2.844	0.004	0.801	153639	0.0252	Target=1.65	107	593	
377.00 > 85.00	2.848	2.844	0.004	0.801	90712		0.00(1.16-2.15)	107	147	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.165	3.162	0.003		918127	2.36		99.2	6407	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.165	3.163	0.002	1.000	13908	0.0254		107	67.6	
D 73 13C8 PFOA										
421.00 > 376.00	3.180	3.177	0.003		6976326	2.36		96.3	10998	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.180	3.179	0.001	0.895	51796	0.0247	Target=3.74	104	579	
449.00 > 99.00	3.180	3.179	0.001	0.895	13294		0.00(2.61-4.86)	104	82.7	
* 62 13C2 PFOA										
415.00 > 370.00	3.188	3.181	0.007		6102514	2.50			6880	
D 14 13C4 PFOA										
417.00 > 372.00	3.188	3.181	0.007		5256667	2.43		97.0	7556	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.188	3.184	0.004	1.000	66492	0.0298	Target=1.00	119	8.5	M
413.00 > 169.00	3.188	3.184	0.004	1.000	38217		1.74(0.70-1.30)	119	52.6	
D 72 13C8 PFOS										
507.00 > 99.00	3.548	3.545	0.003		2414982	2.36		98.8	5531	
D 18 13C4 PFOS										
503.00 > 80.00	3.555	3.549	0.006		4539691	2.27		94.9	7287	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.555	3.550	0.005	1.000	43583	0.0222	Target=1.00	95.5	86.7	M
499.00 > 99.00	3.548	3.550	-0.002	0.998	9685		4.50(0.70-1.30)	95.5	39.6	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.563	3.561	0.002	1.000	37571	0.0229	Target=4.13	91.8	14.5	
463.00 > 169.00	3.563	3.561	0.002	1.000	8551		0.00(2.89-5.37)	91.8	89.4	
D 19 13C5 PFNA										
468.00 > 423.00	3.563	3.561	0.002		4313692	2.46		98.4	8250	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.750	3.750	0.0	1.055	75574	0.0243		104	186	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.893	3.892	0.001	1.095	36104	0.0229	Target=2.93	95.4	416	
549.00 > 99.00	3.893	3.892	0.001	1.095	12667		0.00(2.05-3.81)	95.4	52.2	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.908	3.913	-0.005	0.998	11979	0.0215		89.6	35.1	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.915	3.913	0.002	1.000	35472	0.0240	Target=5.34	96.0	53.7	
513.00 > 169.00	3.915	3.913	0.002	1.000	6643		0.00(3.74-6.94)	96.0	51.8	
D 23 13C2 PFDA										
515.00 > 470.00	3.915	3.913	0.002		4015184	2.50		100.0	7849	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.915	3.914	0.001		1165744	2.49		104	3200	
D 21 13C8 FOSA										
506.00 > 78.00	3.922	3.921	0.001		8300737	2.47		98.9	9184	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.930	3.923	0.007	1.002	72320	0.0247		98.8	101	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.071	4.072	-0.001		1983043	2.38		95.3	4626	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.080	4.078	0.002	1.002	19594	0.0286		114	6.7	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.204	4.205	-0.001	1.182	32749	0.0245	Target=3.26	102	292	
599.00 > 99.00	4.212	4.205	0.007	1.185	8766		0.00(2.28-4.23)	102	79.2	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.228	4.230	-0.002	1.000	33708	0.0286	Target=4.09	114	32.2	
563.00 > 169.00	4.228	4.230	-0.002	1.000	7616		0.00(2.86-5.32)	114	67.9	
D 30 13C2 PFUnA										
565.00 > 520.00	4.228	4.230	-0.002		3686890	2.53		101	7809	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.236	4.233	0.003		2188420	2.46		98.4	933	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.244	4.240	0.004	1.002	16616	0.0238		95.3	111	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.369	4.370	-0.001	1.229	104212	0.0230		97.6	431	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.512	4.514	-0.002	1.000	35663	0.0238	Target=4.03	95.3	25.6	
613.00 > 169.00	4.512	4.514	-0.002	1.000	10667		0.00(2.82-5.24)	95.3	89.9	
D 36 13C2 PFDoA										
615.00 > 570.00	4.512	4.514	-0.002		3979669	2.54		102	7458	
74 1H,1H,2H,2H-perfluorododecanesulfo										M
627.00 > 607.00	4.529	4.531	-0.002	1.157	12502	0.0225		93.2	56.9	M
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.741	4.741	0.0	1.333	12471	0.0243	Target=0.63	100	125	
699.00 > 99.00	4.741	4.741	0.0	1.333	20195		0.00(0.44-0.82)	100	172	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.769	4.773	-0.004	1.057	35272	0.0234	Target=3.11	93.7	13.8	
663.00 > 169.00	4.769	4.773	-0.004	1.057	10563		0.00(2.18-4.05)	93.7	118	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.003	5.008	-0.005	1.000	10334	0.0268	Target=1.37	107	164	
713.00 > 219.00	5.003	5.008	-0.005	1.000	8325		0.00(0.96-1.79)	107	144	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.003	5.008	-0.005		4027979	2.43		97.1	6027	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.431	5.430	0.001		6590086	2.42		96.8	5507	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.431	5.433	-0.002	1.000	110786	0.0250	Target=5.26	99.8	4.4	
813.00 > 169.00	5.431	5.433	-0.002	1.000	20803		0.00(3.69-6.84)	99.8	118	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.833	5.840	-0.007	1.074	77566	0.0248	Target=7.43	99.4	3.8	
913.00 > 169.00	5.833	5.840	-0.007	1.074	10529		0.00(5.20-9.66)	99.4	90.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00011 Amount Added: 1.00 Units: mL

Report Date: 09-Mar-2019 07:56:48 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_005.d

Injection Date: 09-Mar-2019 01:17:41 Instrument ID: A8_N

Lims ID: IC L1 Full

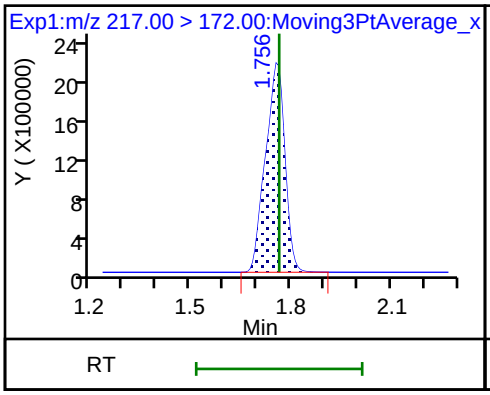
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2

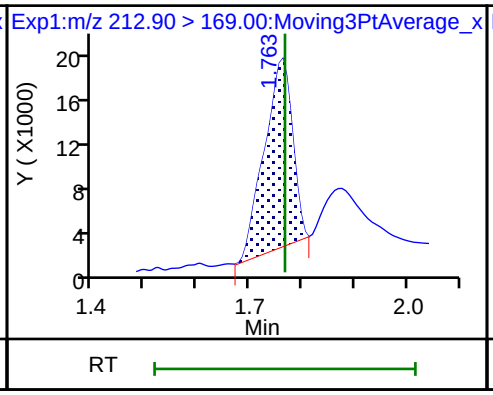
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

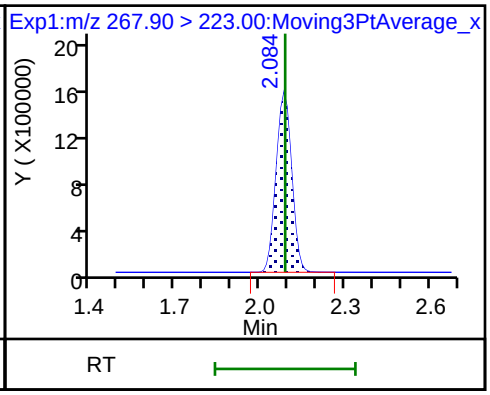
D 1 13C4 PFBA



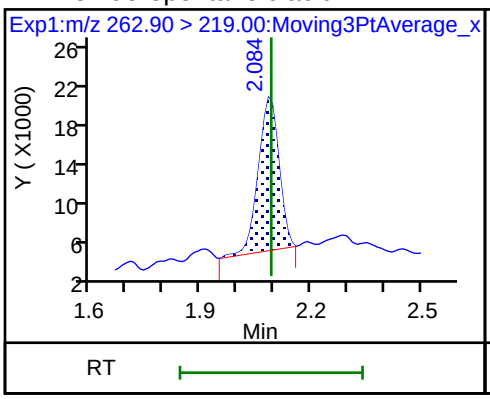
2 Perfluorobutanoic acid



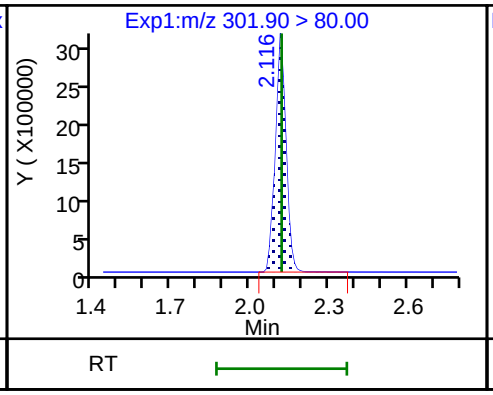
D 3 13C5 PFPeA



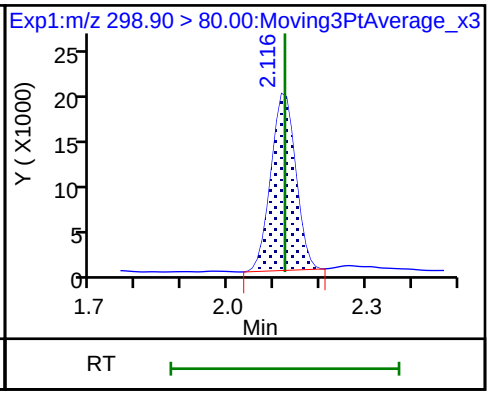
4 Perfluoropentanoic acid



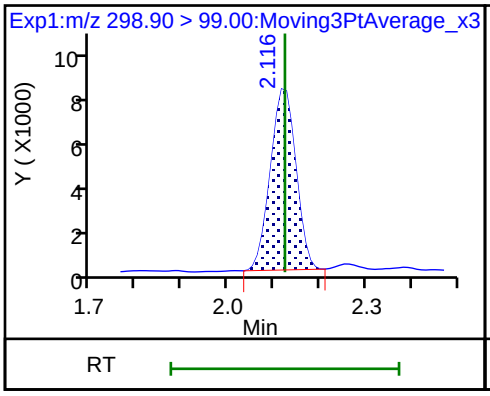
D 47 13C3 PFBS



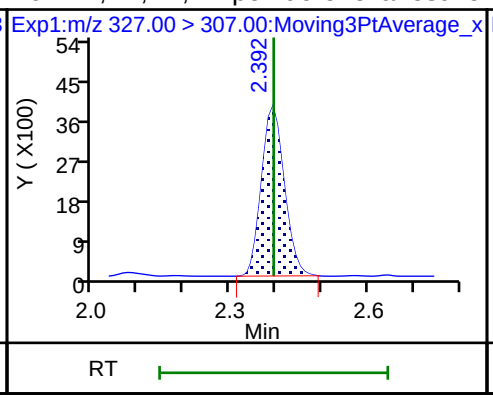
5 Perfluorobutanesulfonic acid



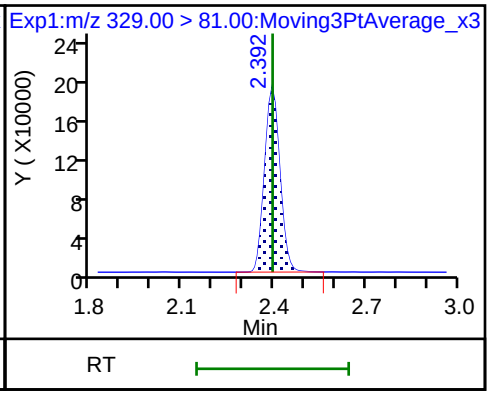
5 Perfluorobutanesulfonic acid



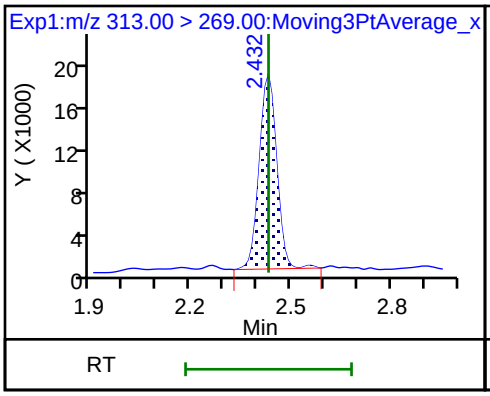
61 1H,1H,2H,2H-perfluorohexanesulfon



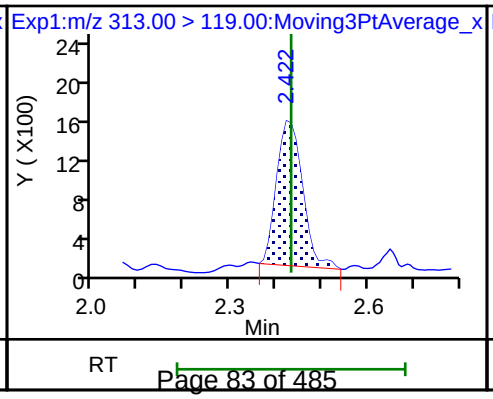
D 60 M2-4:2 FTS



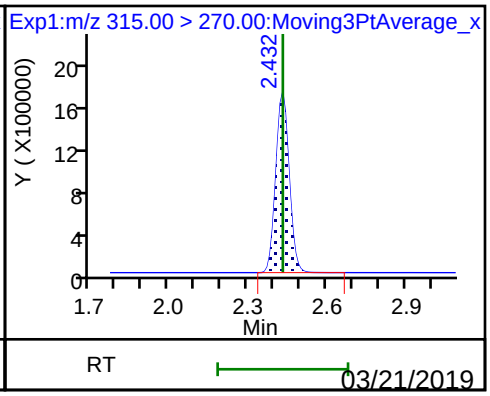
6 Perfluorohexanoic acid



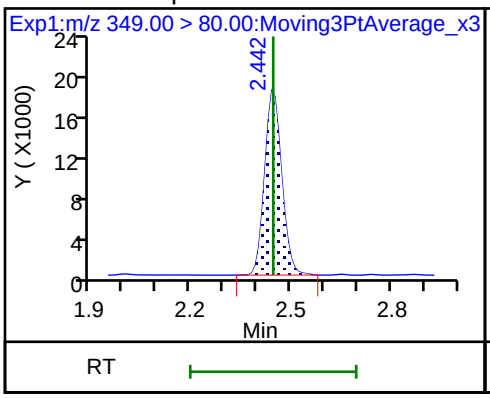
6 Perfluorohexanoic acid



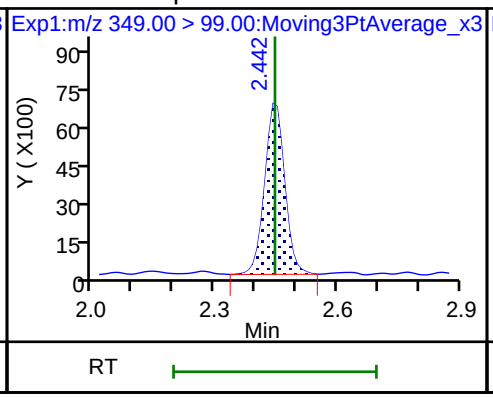
D 7 13C2 PFHxA



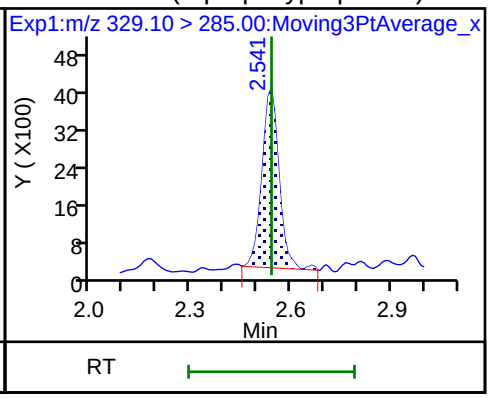
70 Perfluoropentanesulfonic acid



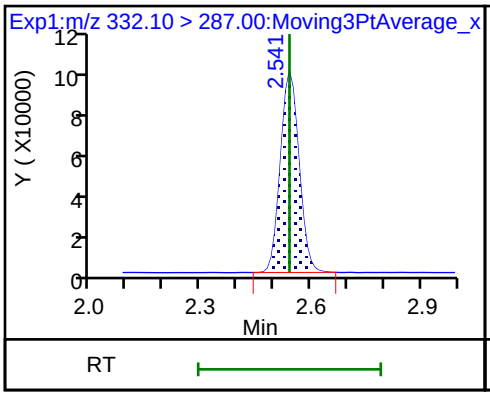
70 Perfluoropentanesulfonic acid



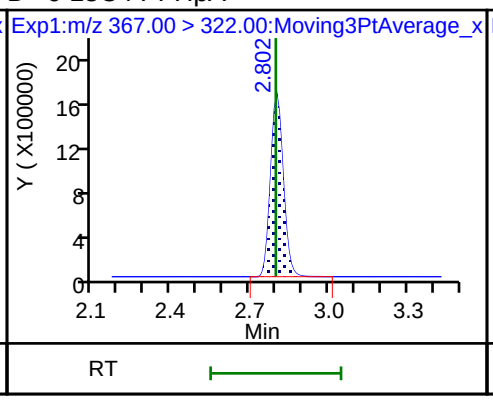
67 Perfluoro(2-propoxypropanoic) acid



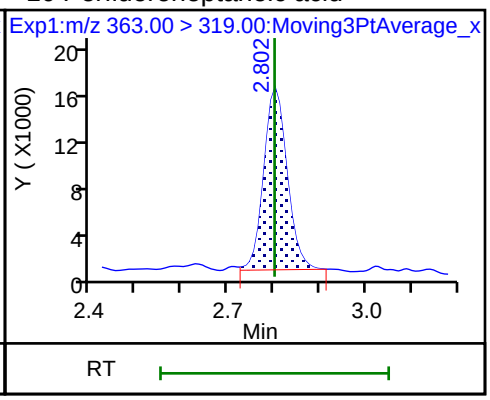
D 64 13C3 HFPO-DA



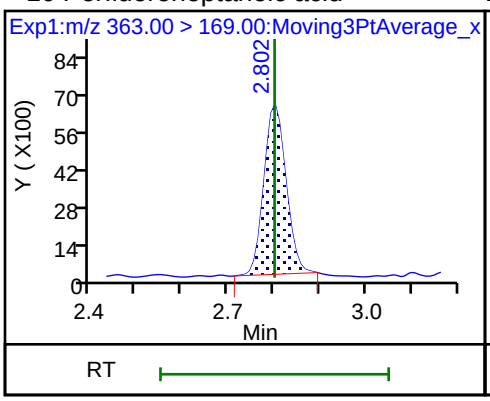
D 9 13C4 PFHpA



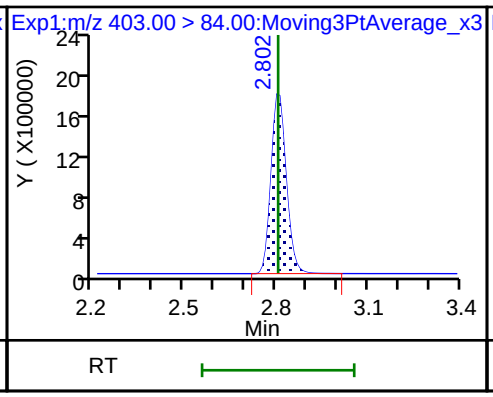
10 Perfluoroheptanoic acid



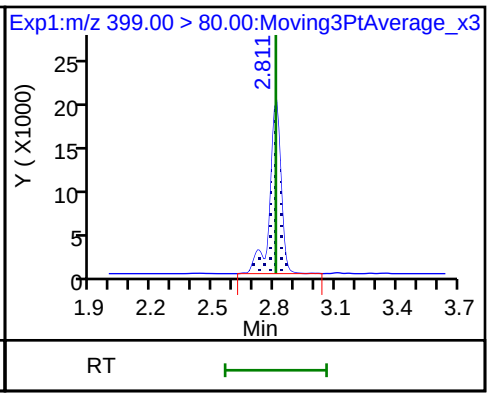
10 Perfluoroheptanoic acid



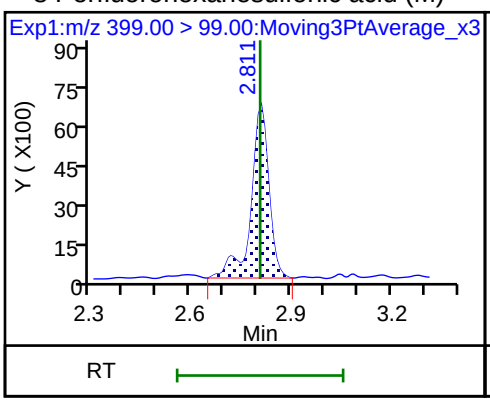
D 11 18O2 PFHxS



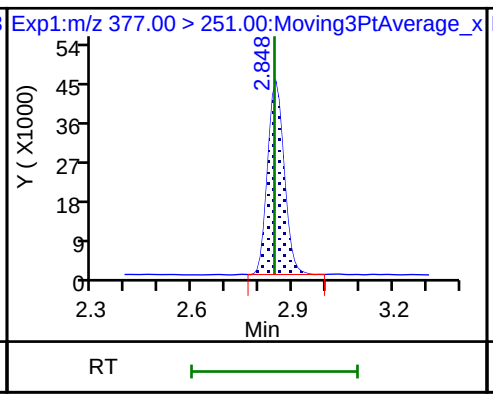
8 Perfluorohexanesulfonic acid



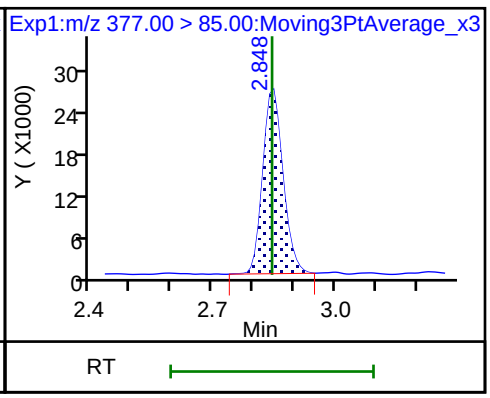
8 Perfluorohexanesulfonic acid (M)



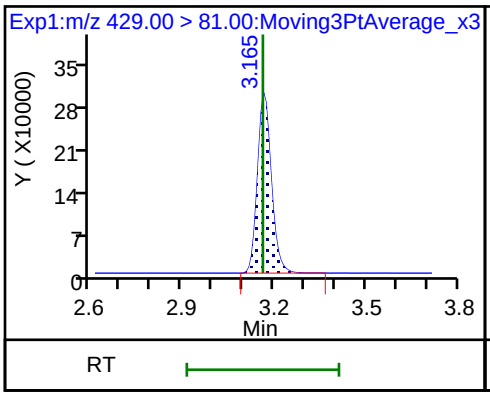
77 DONA



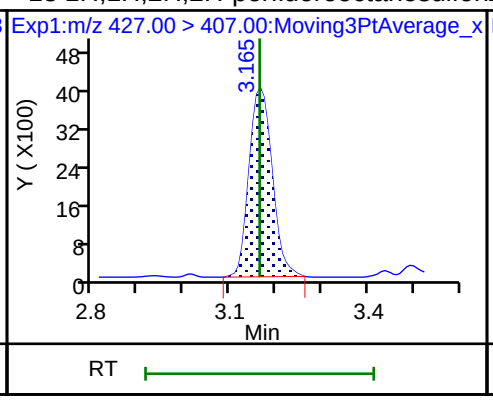
77 DONA



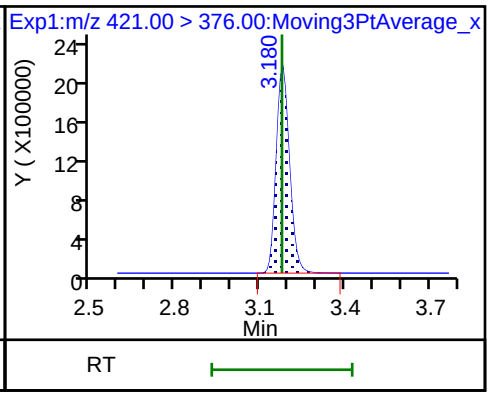
D 12 M2-6:2 FTS



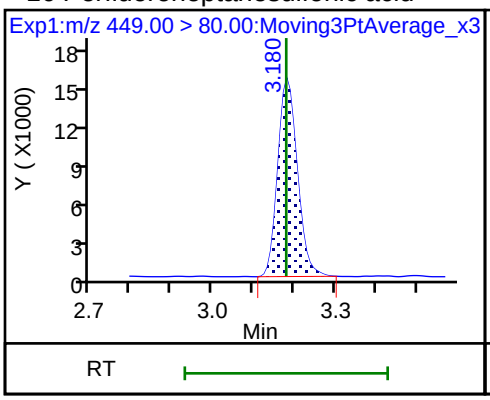
13 1H,1H,2H,2H-perfluorooctanesulfon



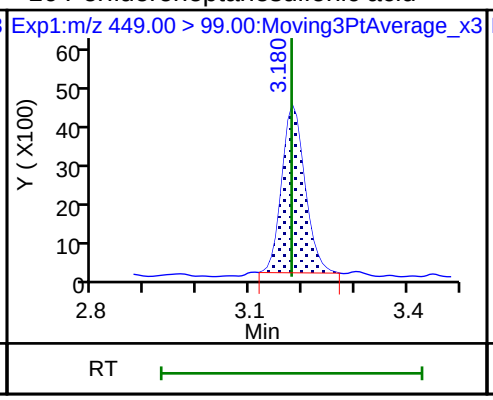
D 73 13C8 PFOA



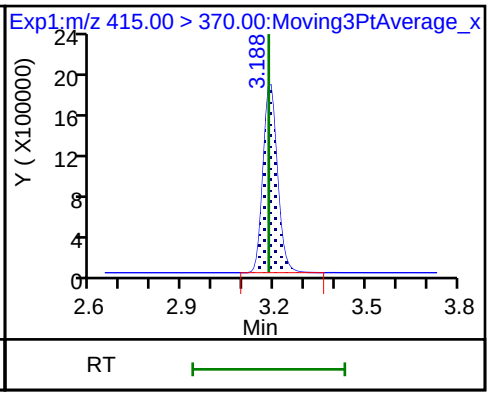
16 Perfluoroheptanesulfonic acid



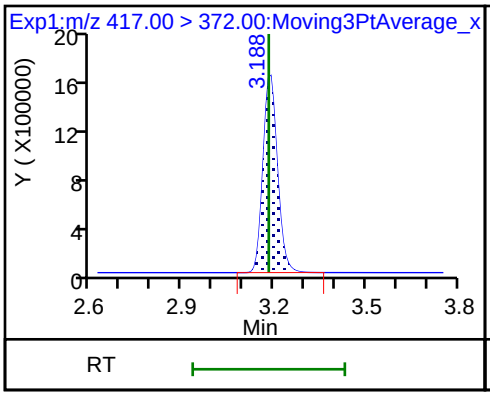
16 Perfluoroheptanesulfonic acid



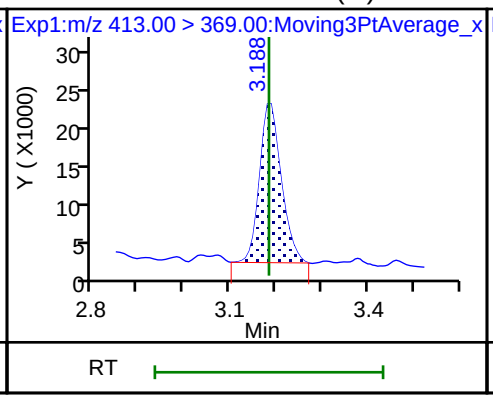
* 62 13C2 PFOA



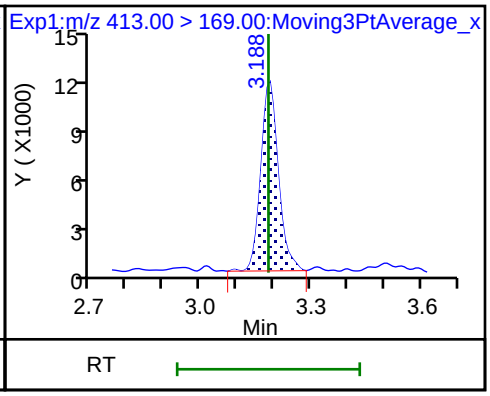
D 14 13C4 PFOA



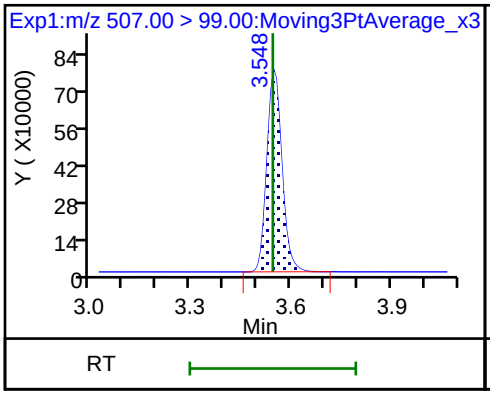
15 Perfluorooctanoic acid (M)



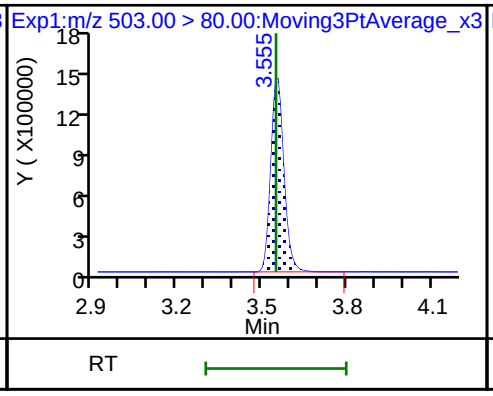
15 Perfluorooctanoic acid



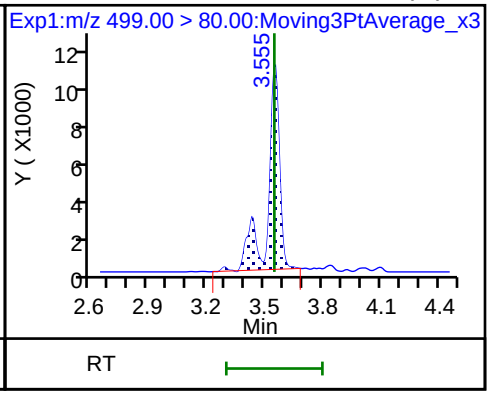
D 72 13C8 PFOS



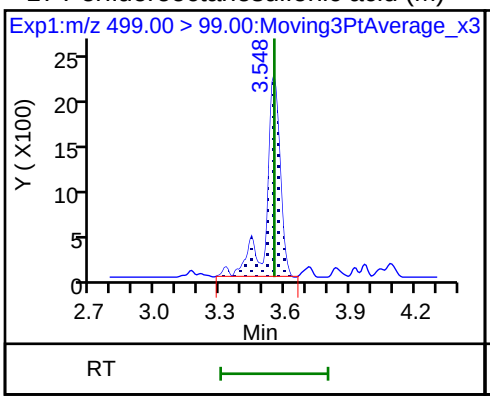
D 18 13C4 PFOS



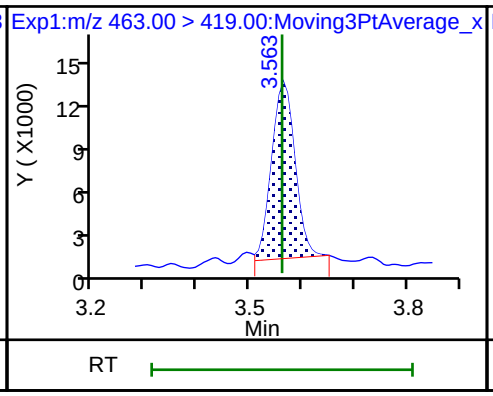
17 Perfluorooctanesulfonic acid (M)



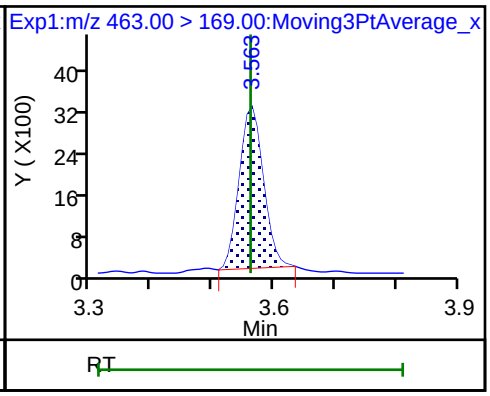
17 Perfluorooctanesulfonic acid (M)



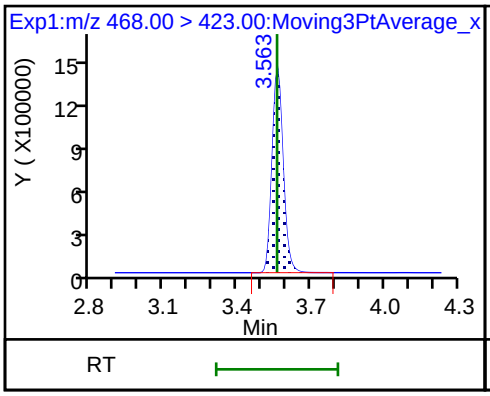
20 Perfluorononanoic acid



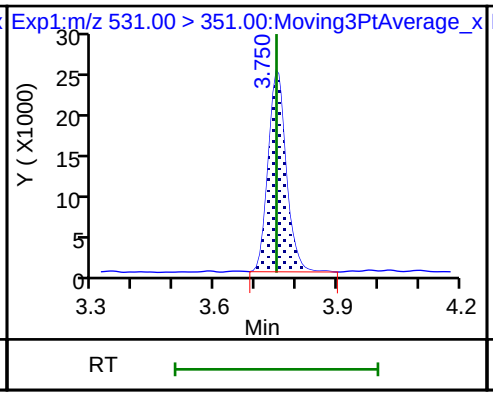
20 Perfluorononanoic acid



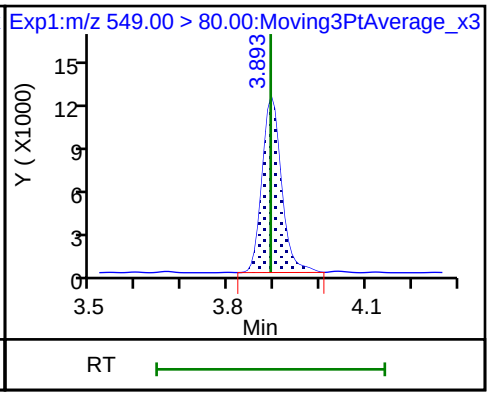
D 19 13C5 PFNA



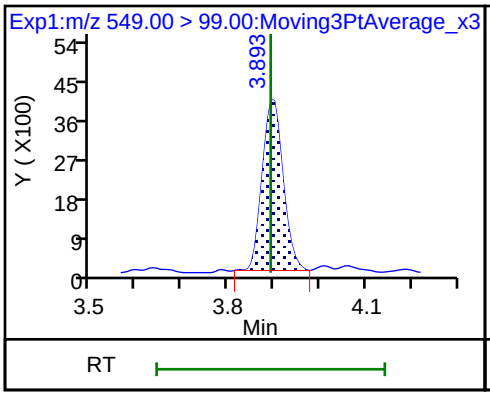
69 9-Chlorohexadecafluoro-3-oxanonane



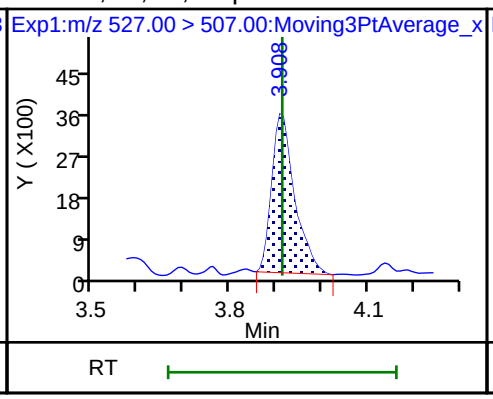
68 Perfluorononanesulfonic acid



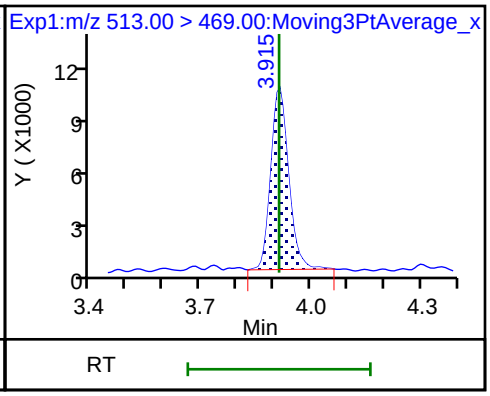
68 Perfluorononanesulfonic acid



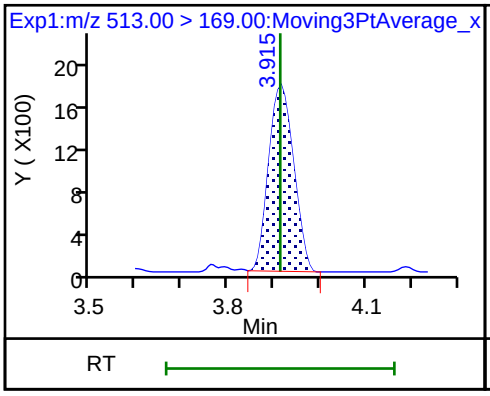
25 1H,1H,2H,2H-perfluorodecanesulfoni



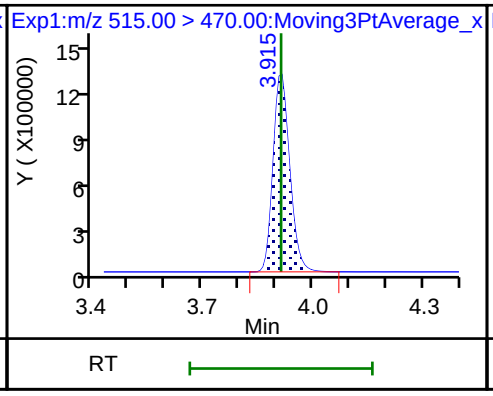
24 Perfluorodecanoic acid



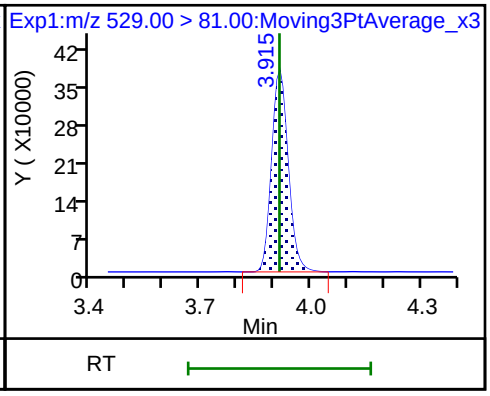
24 Perfluorodecanoic acid



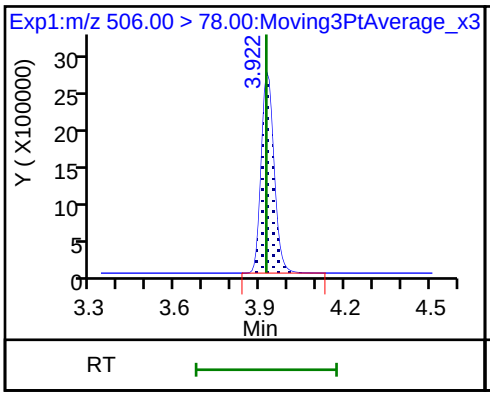
D 23 13C2 PFDA



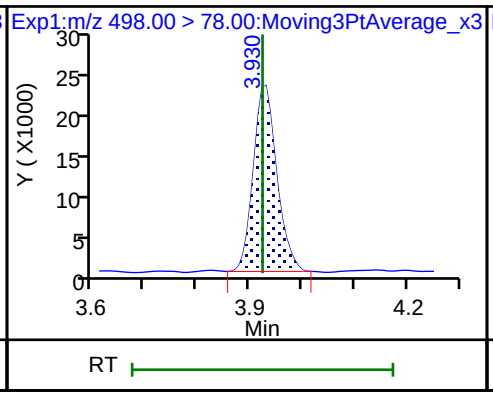
D 26 M2-8:2 FTS



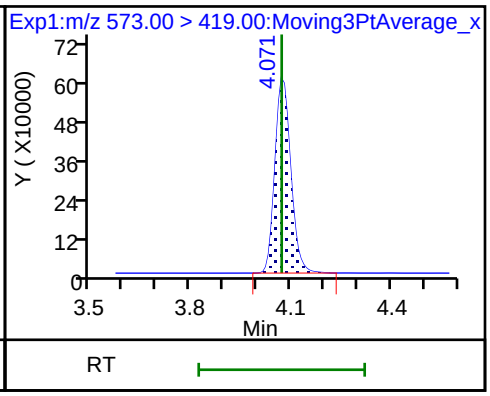
D 21 13C8 FOSA



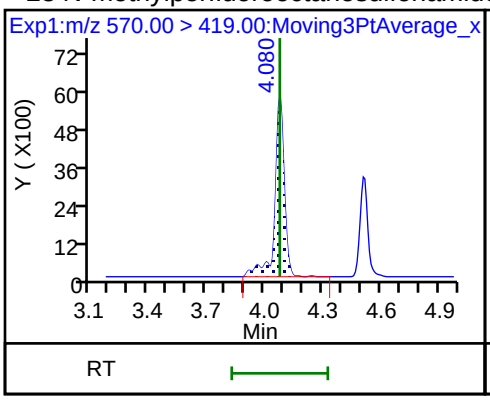
22 Perfluorooctanesulfonamide



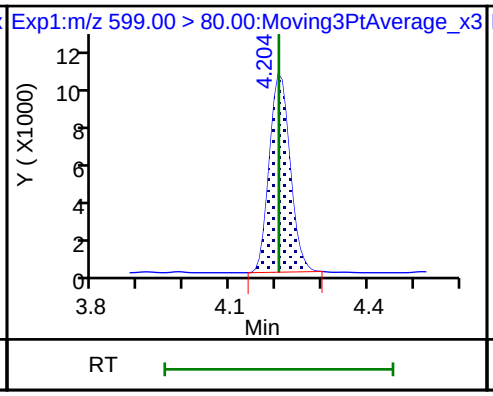
D 27 d3-NMeFOSAA



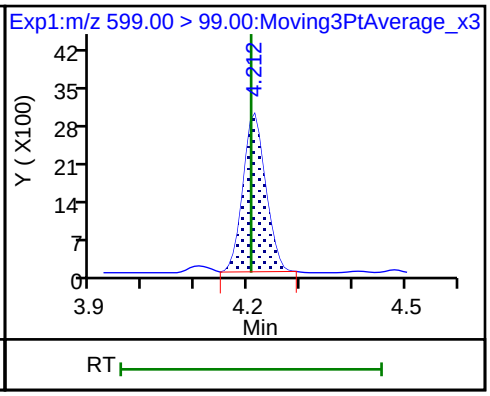
28 N-methylperfluorooctanesulfonamido



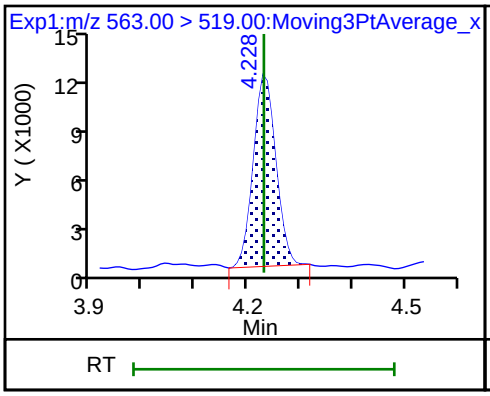
29 Perfluorodecanesulfonic acid



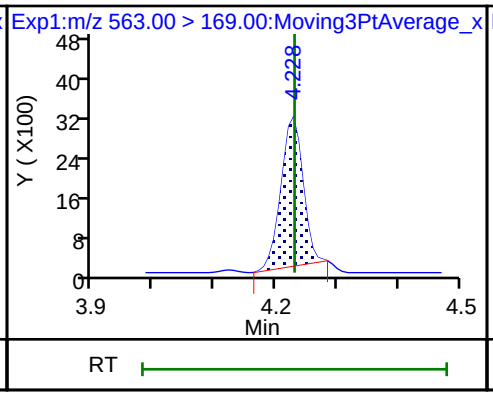
29 Perfluorodecanesulfonic acid



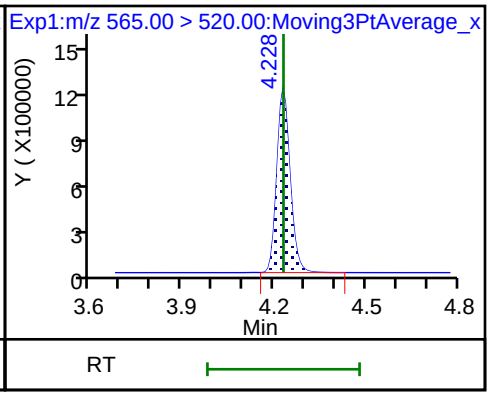
31 Perfluoroundecanoic acid



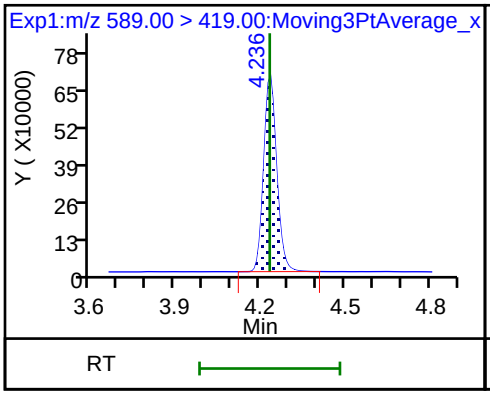
31 Perfluoroundecanoic acid



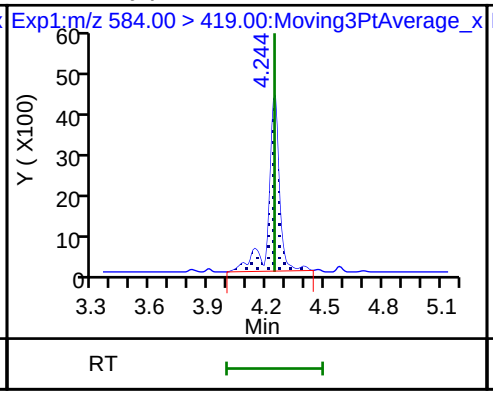
D 30 13C2 PFUnA



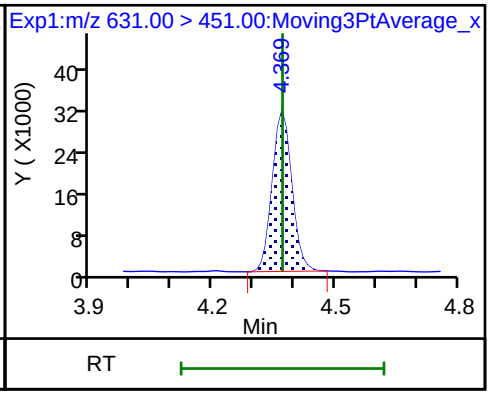
D 32 d5-NEtFOSAA



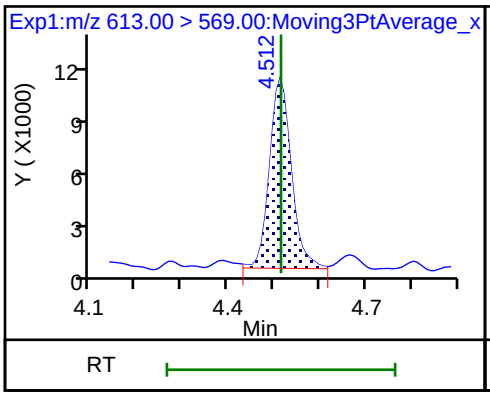
33 N-ethylperfluorooctanesulfonamidoa



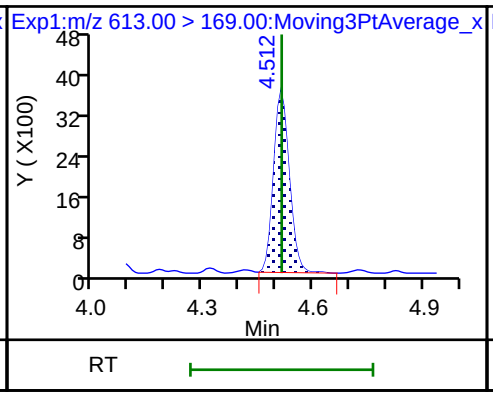
66 11-Chloroeicosafluoro-3-oxaundecan



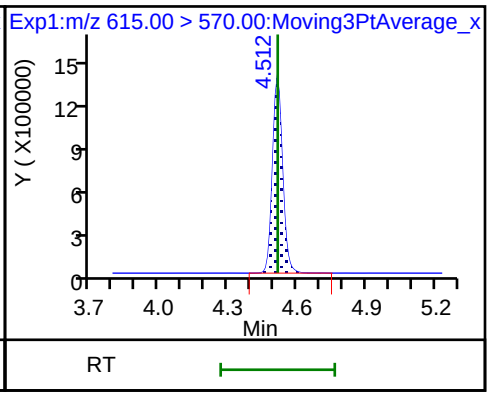
37 Perfluorododecanoic acid



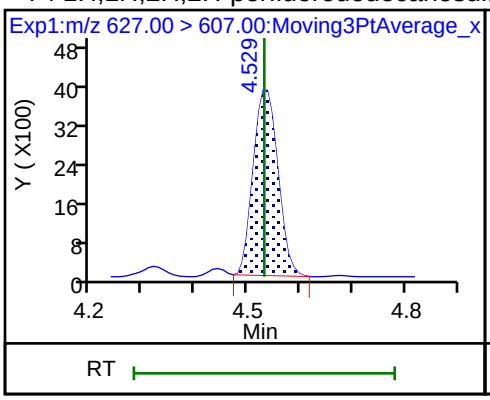
37 Perfluorododecanoic acid



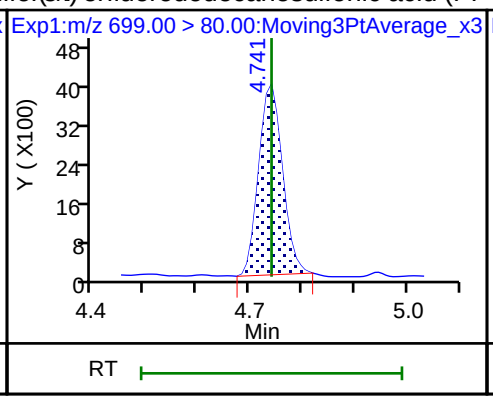
D 36 13C2 PFDoA



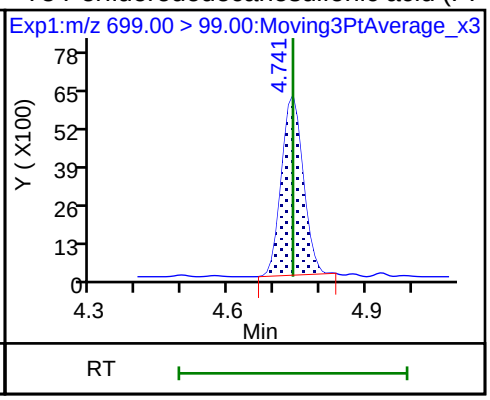
74 1H,1H,2H,2H-perfluorododecanesulfonic acid (M



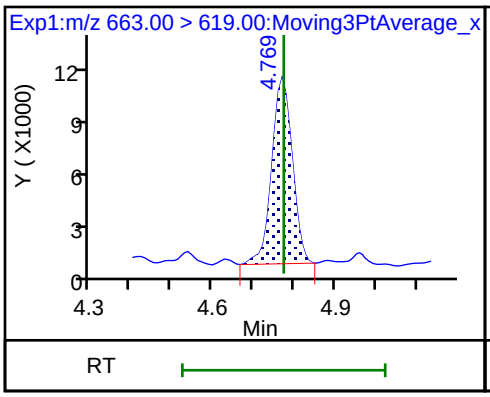
75 Perfluorododecanesulfonic acid (PF



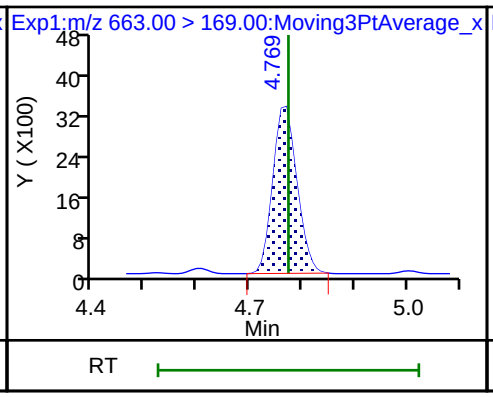
75 Perfluorododecanesulfonic acid (PF



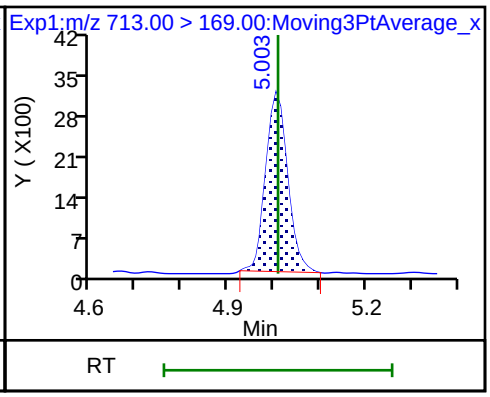
41 Perfluorotridecanoic acid



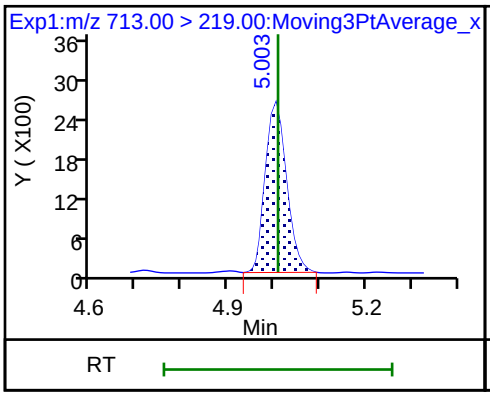
41 Perfluorotridecanoic acid



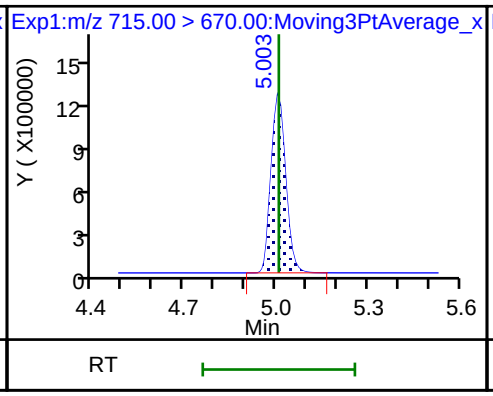
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 43 13C2 PFTeDA



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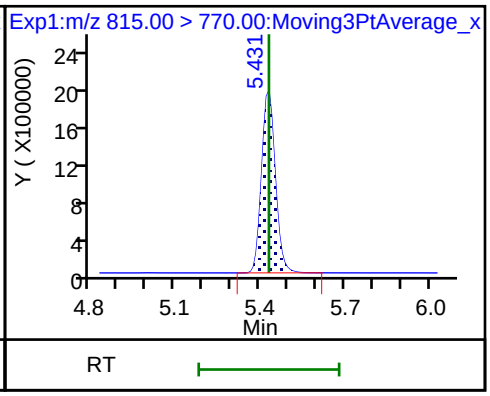
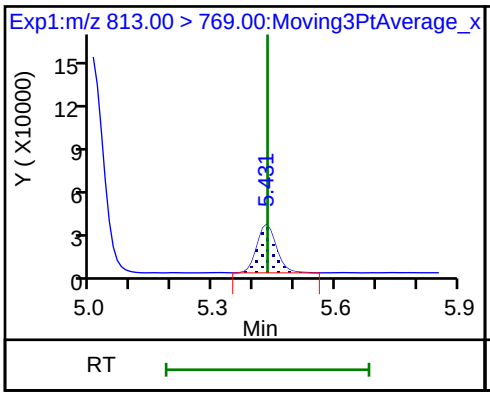
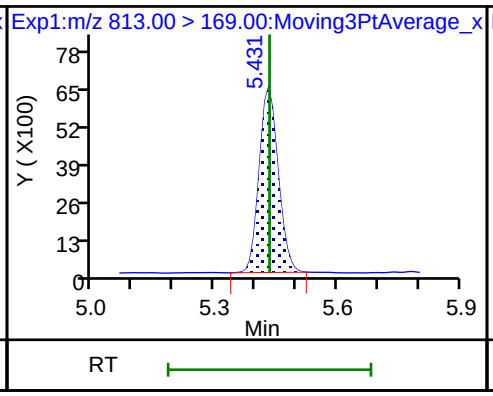


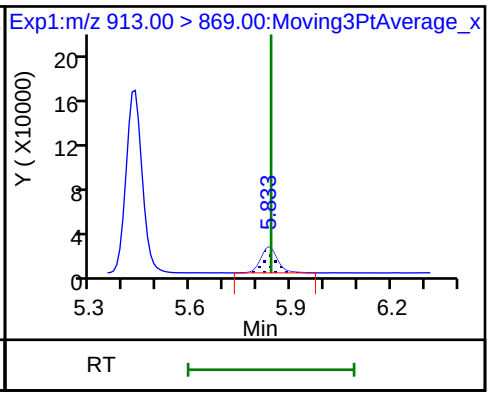
45 Perfluorohexadecanoic acid



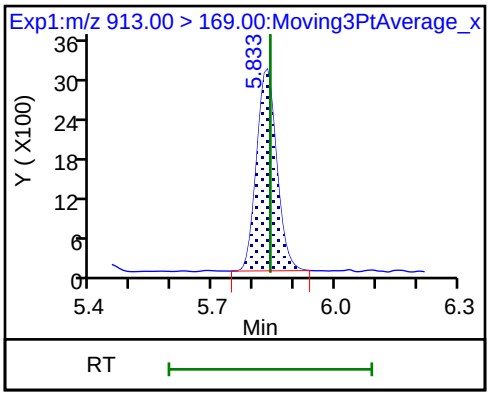
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

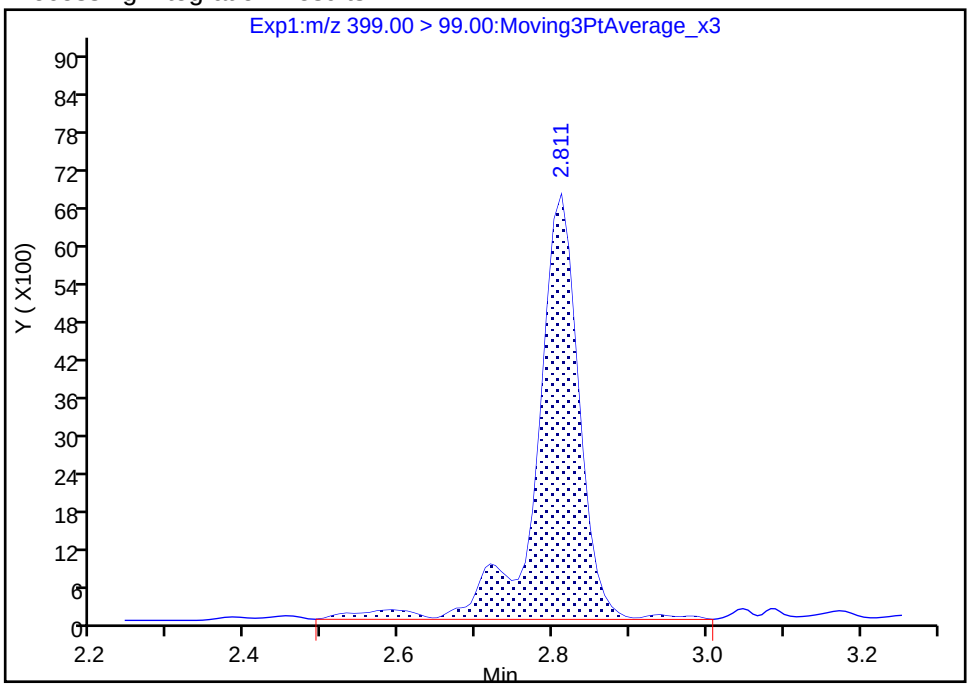
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_005.d
Injection Date: 09-Mar-2019 01:17:41 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

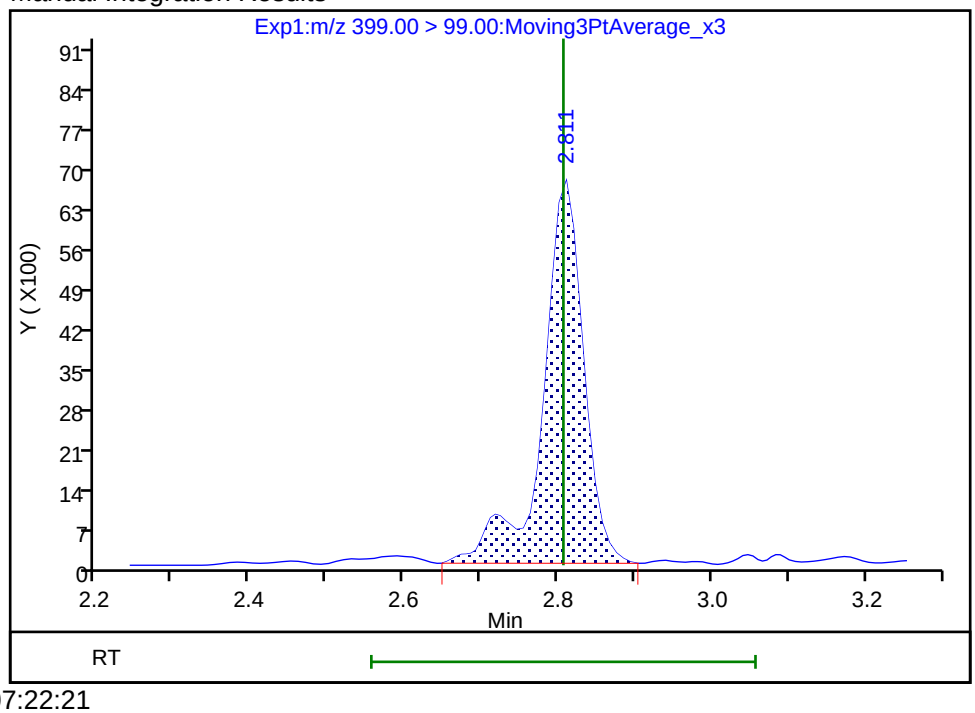
Processing Integration Results

RT: 2.81
Area: 26327
Amount: 0.028821
Amount Units: ng/ml



Manual Integration Results

RT: 2.81
Area: 24942
Amount: 0.030163
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:22:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

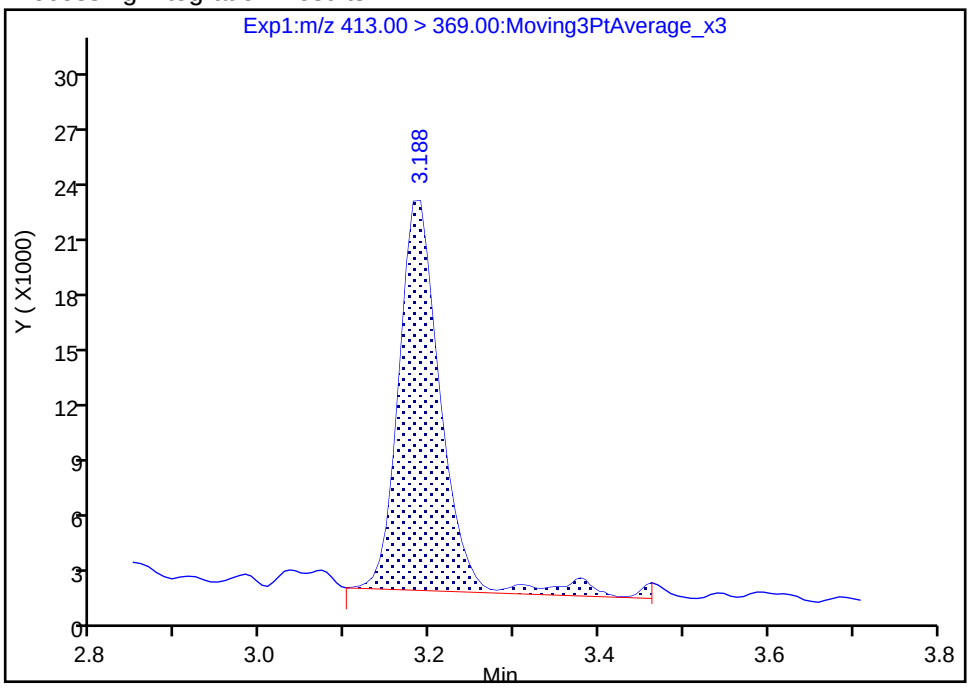
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_005.d
Injection Date: 09-Mar-2019 01:17:41 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

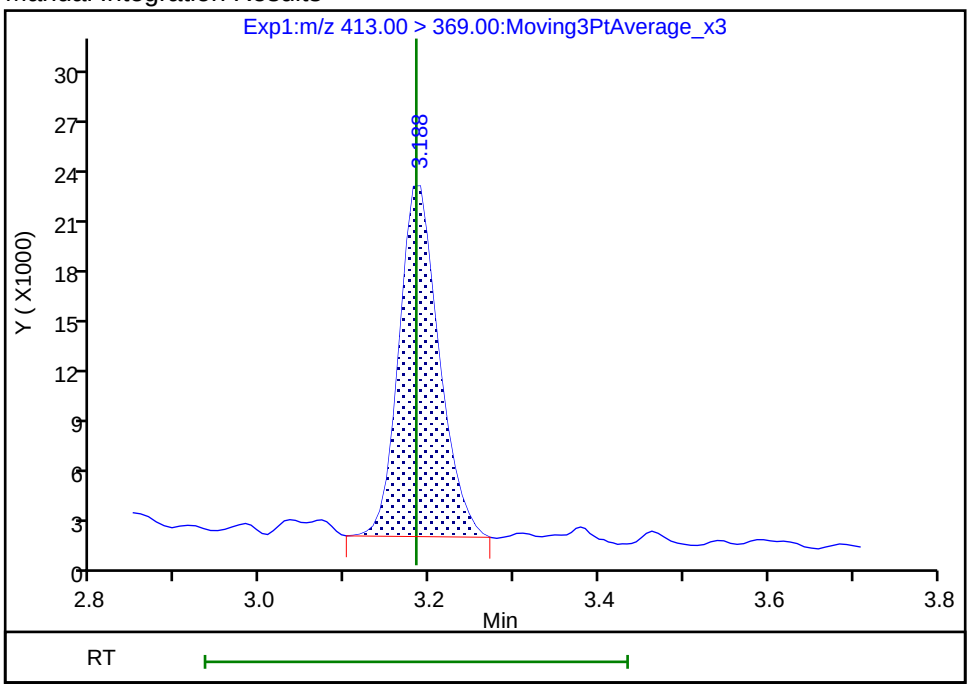
Processing Integration Results

RT: 3.19
Area: 71680
Amount: 0.030958
Amount Units: ng/ml



Manual Integration Results

RT: 3.19
Area: 66492
Amount: 0.029823
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:22:32
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

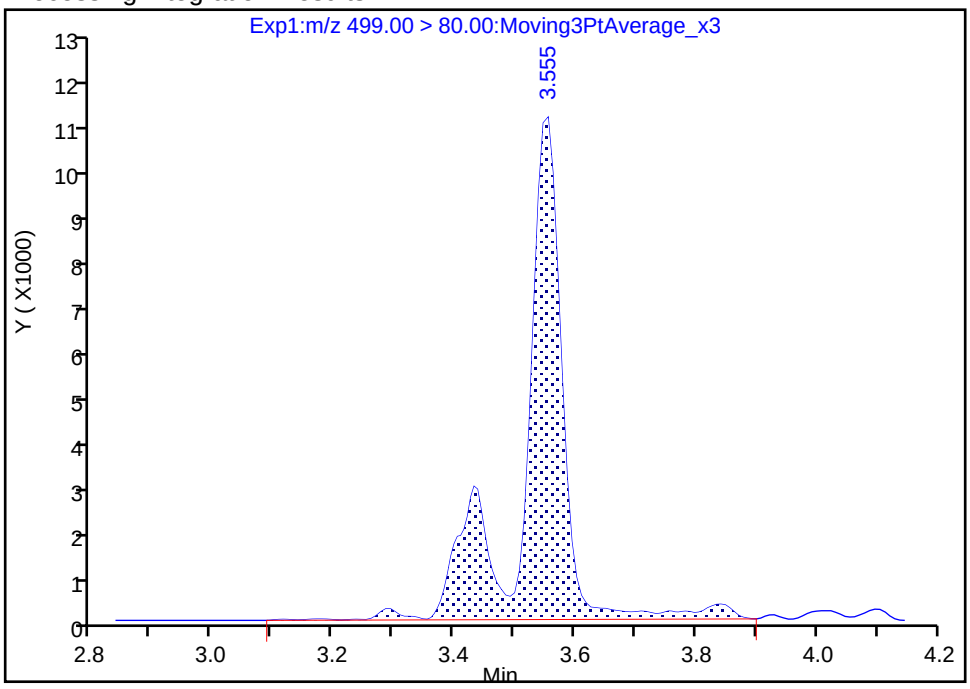
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_005.d
Injection Date: 09-Mar-2019 01:17:41 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

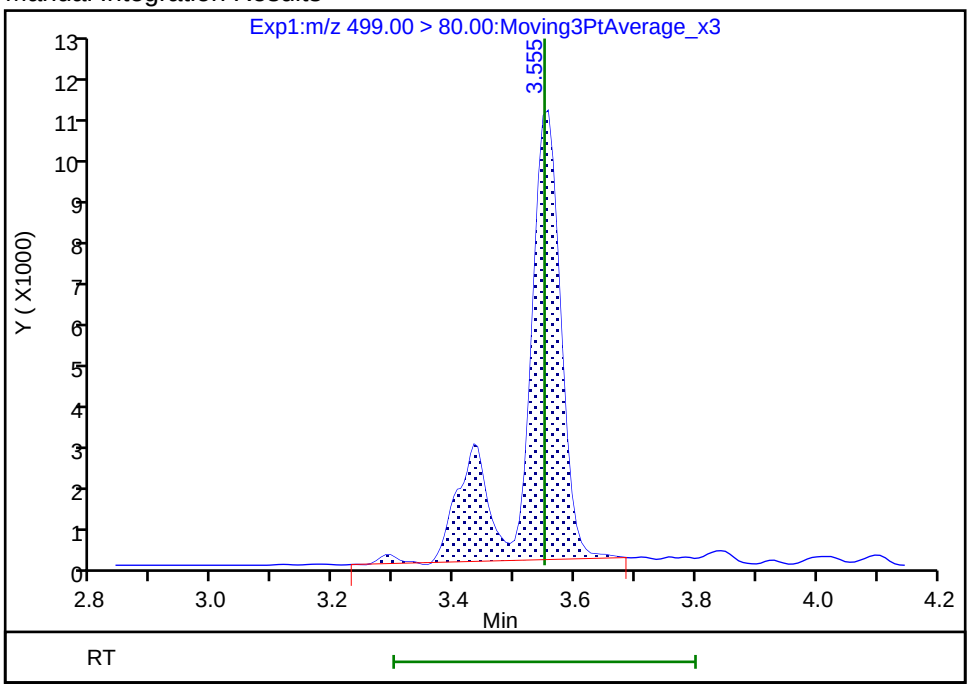
Processing Integration Results

RT: 3.56
Area: 47976
Amount: 0.024067
Amount Units: ng/ml



Manual Integration Results

RT: 3.56
Area: 43583
Amount: 0.022164
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:22:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

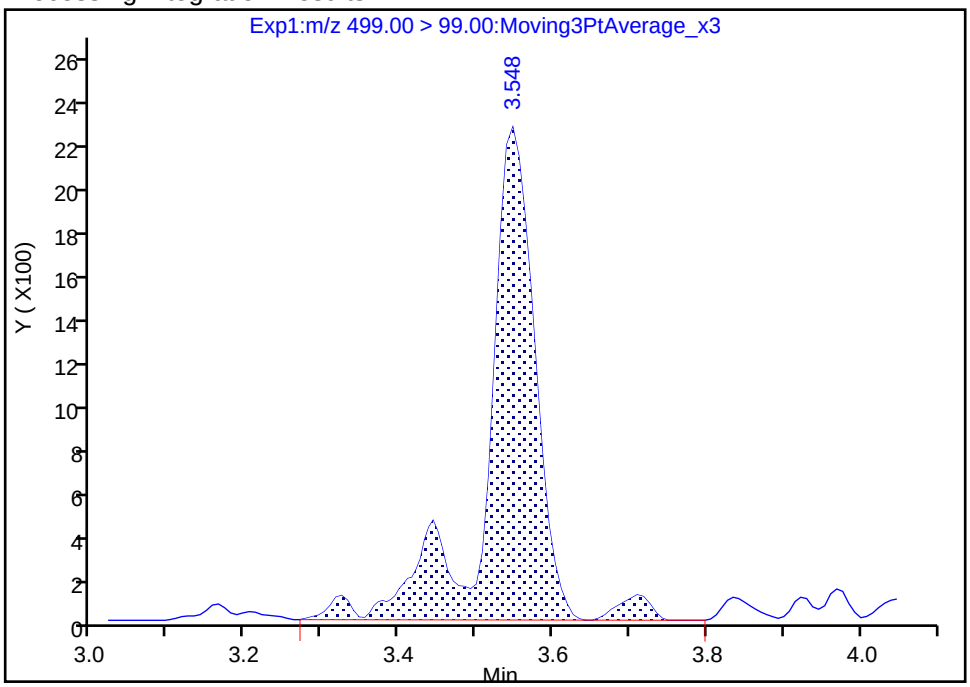
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_005.d
Injection Date: 09-Mar-2019 01:17:41 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

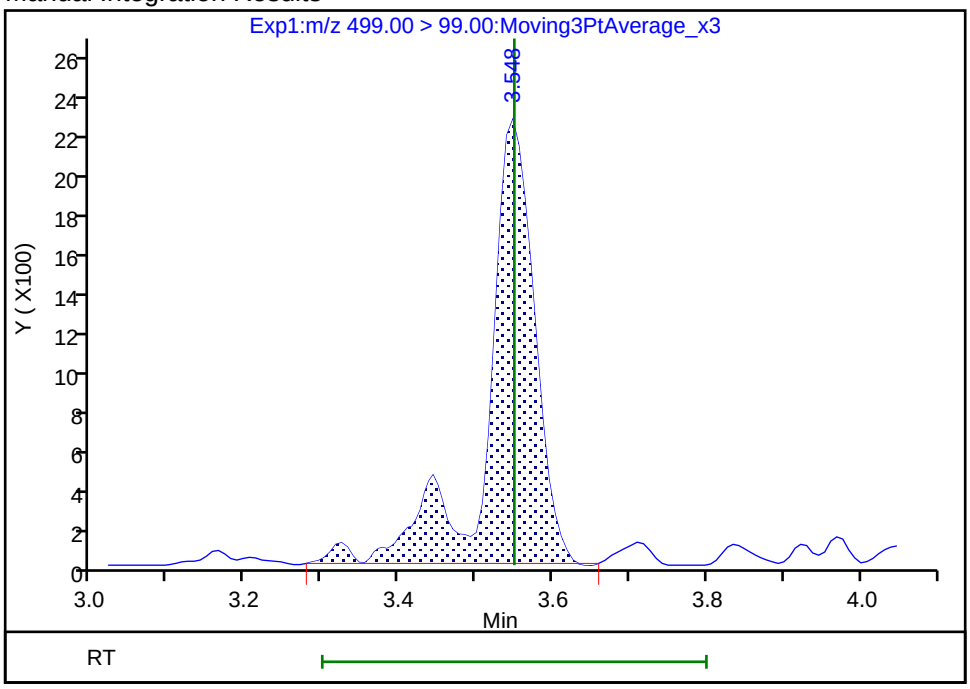
Processing Integration Results

RT: 3.55
Area: 10183
Amount: 0.024067
Amount Units: ng/ml



Manual Integration Results

RT: 3.55
Area: 9685
Amount: 0.022164
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:22:44
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

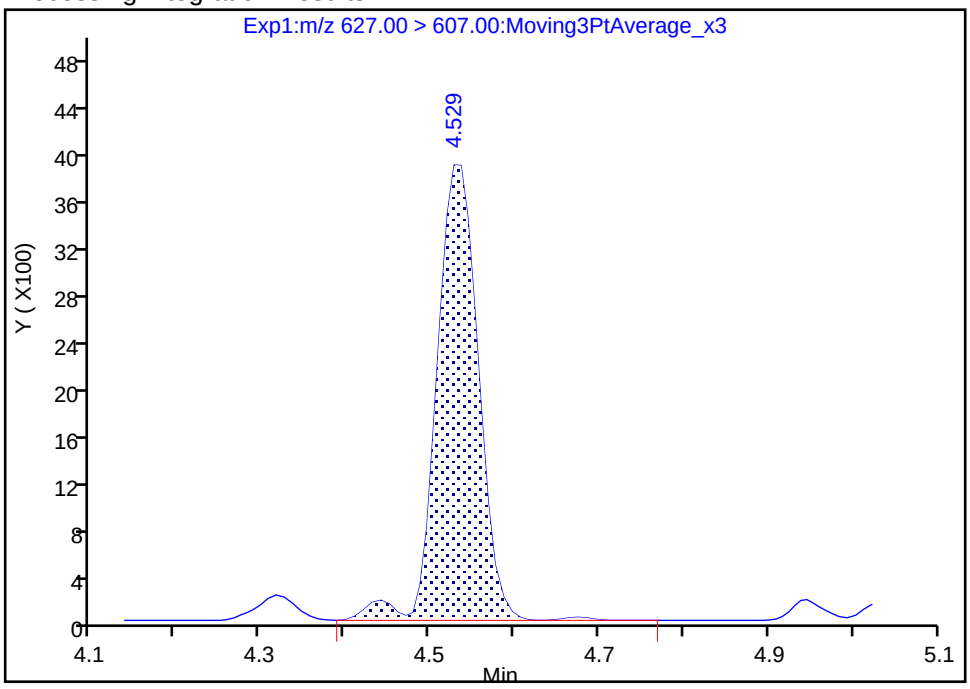
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_005.d
Injection Date: 09-Mar-2019 01:17:41 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

74 1H,1H,2H,2H-perfluorododecanesulfonic acid (, CAS: 120226-60-0

Signal: 1

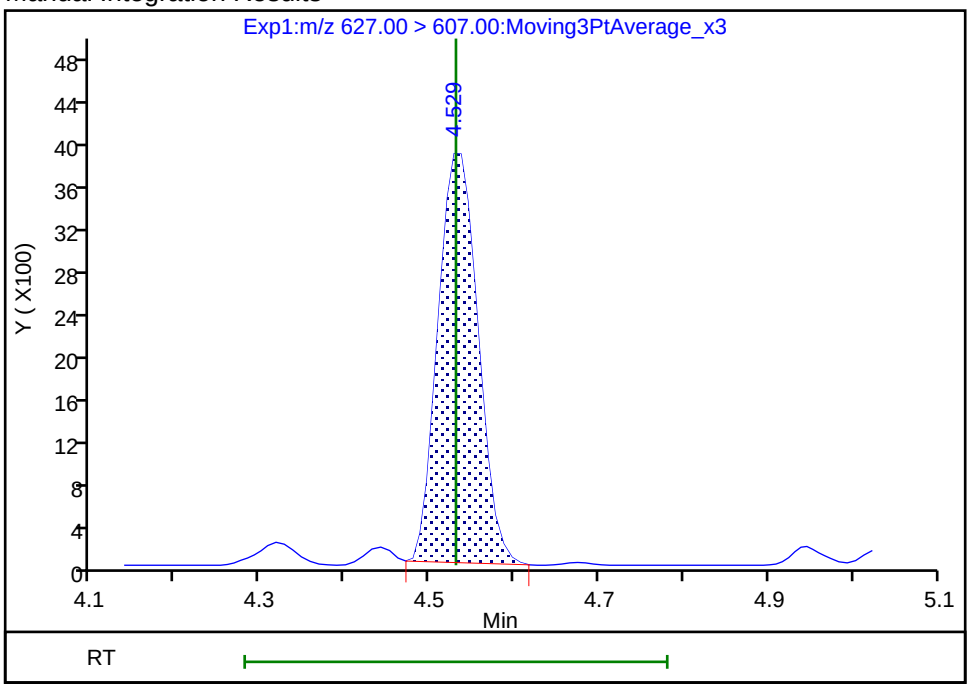
Processing Integration Results

RT: 4.53
Area: 13157
Amount: 0.023469
Amount Units: ng/ml



Manual Integration Results

RT: 4.53
Area: 12502
Amount: 0.022456
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:23:17
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_006.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 09-Mar-2019 01:25:09 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 2
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 09-Mar-2019 07:56:53 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0306

First Level Reviewer: roycea Date: 09-Mar-2019 07:25:33
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.763	1.764	-0.001		8647257	2.33		93.4	6801	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.763	1.766	-0.003	1.000	129703	0.0468		93.7	33.8	
D 3 13C5 PFPeA										
267.90 > 223.00	2.084	2.088	-0.004		6085935	2.39		95.5	8294	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.094	2.091	0.003	1.005	118079	0.0493		98.6	7.0	
D 47 13C3 PFBS										
301.90 > 80.00	2.116	2.120	-0.004		8516561	2.20		94.6	458717	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.126	2.123	0.003	1.005	148694	0.0433	Target=2.39	98.0	210	
298.90 > 99.00	2.126	2.123	0.003	1.005	60807		0.00(1.68-3.11)	98.0	154	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.392	2.394	-0.002	1.000	27182	0.0455		97.3	637	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.392	2.394	-0.002		683114	2.19		94.0	1865	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.432	2.432	0.0	1.000	118956	0.0508	Target=11.00	102	67.6	
313.00 > 119.00	2.432	2.432	0.0	1.000	10355		0.00(7.70-14.30)	102	70.1	
D 7 13C2 PFHxA										
315.00 > 270.00	2.432	2.432	0.0		6184189	2.37		94.7	9532	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.452	2.446	0.006	1.159	130961	0.0460	Target=2.65	98.1	1336	
349.00 > 99.00	2.452	2.446	0.006	1.159	50165		0.00(1.85-3.44)	98.1	188	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.541	2.541	0.0	1.000	21437	0.0536		107	27.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.541	2.541	0.0		330273	2.20		87.9	1406	
D 9 13C4 PFHpA										
367.00 > 322.00	2.802	2.798	0.004		5810829	2.43		97.2	10619	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.802	2.800	0.002	1.000	114818	0.0499	Target=2.52	99.7	50.8	
363.00 > 169.00	2.802	2.800	0.002	1.000	47390		0.00(1.76-3.27)	99.7	170	
D 11 18O2 PFHxS										
403.00 > 84.00	2.811	2.806	0.005		6346937	2.34		98.9	7663	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.811	2.807	0.004	1.000	132000	0.0492	Target=2.82	108	811	
399.00 > 99.00	2.811	2.807	0.004	1.000	50967		0.00(1.97-3.66)	108	110	
77 DONA										
377.00 > 251.00	2.849	2.844	0.005	0.801	310217	0.0461	Target=1.65	98.0	1011	
377.00 > 85.00	2.849	2.844	0.005	0.801	180577		0.00(1.16-2.15)	98.0	317	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.165	3.162	0.003		924246	2.25		94.7	6525	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.165	3.163	0.002	1.000	23871	0.0432		91.2	98.0	
D 73 13C8 PFOA										
421.00 > 376.00	3.181	3.177	0.004		7188036	2.30		94.1	10774	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.181	3.179	0.002	0.895	108960	0.0471	Target=3.74	99.0	1150	
449.00 > 99.00	3.181	3.179	0.002	0.895	29905		0.00(2.61-4.86)	99.0	162	
* 62 13C2 PFOA										
415.00 > 370.00	3.181	3.181	0.0		6431644	2.50			10090	
D 14 13C4 PFOA										
417.00 > 372.00	3.181	3.181	0.0		5619592	2.46		98.4	12029	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.189	3.184	0.005	1.002	118314	0.0496	Target=1.00	99.3	14.7	M
413.00 > 169.00	3.189	3.184	0.005	1.002	69381		1.71(0.70-1.30)	99.3	138	
D 72 13C8 PFOS										
507.00 > 99.00	3.548	3.545	0.003		2587866	2.40		100	4617	
D 18 13C4 PFOS										
503.00 > 80.00	3.556	3.549	0.007		5000643	2.37		99.2	6641	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.556	3.550	0.006	1.000	95096	0.0439	Target=1.00	94.6	183	
499.00 > 99.00	3.548	3.550	-0.002	0.998	22614		4.21(0.70-1.30)	94.6	116	
20 Perfluorononanoic acid										
463.00 > 419.00	3.564	3.561	0.003	1.000	84777	0.0515	Target=4.13	103	33.5	
463.00 > 169.00	3.556	3.561	-0.005	0.998	21031		0.00(2.89-5.37)	103	326	
D 19 13C5 PFNA										
468.00 > 423.00	3.564	3.561	0.003		4334722	2.35		93.8	7281	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.756	3.750	0.006	1.056	154195	0.0450		96.7	349	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.894	3.892	0.002	1.095	83542	0.0481	Target=2.93	100	566	
549.00 > 99.00	3.894	3.892	0.002	1.095	27894		0.00(2.05-3.81)	100	168	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.916	3.913	0.003	1.000	23497	0.0445		92.9	78.7	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.916	3.913	0.003	1.000	76025	0.0496	Target=5.34	99.1	104	
513.00 > 169.00	3.916	3.913	0.003	1.000	14926		0.00(3.74-6.94)	99.1	130	
D 23 13C2 PFDA										
515.00 > 470.00	3.916	3.913	0.003		4166467	2.46		98.4	6407	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.916	3.914	0.002		1102532	2.23		93.3	3692	
D 21 13C8 FOSA										
506.00 > 78.00	3.923	3.921	0.002		8621864	2.44		97.5	8695	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.923	3.923	0.0	1.000	153104	0.0504		101	181	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.072	4.072	0.0		2052243	2.34		93.6	4105	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.080	4.078	0.002	1.002	34100	0.0480		96.0	15.6	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.205	4.205	0.0	1.182	65254	0.0443	Target=3.26	92.0	481	
599.00 > 99.00	4.205	4.205	0.0	1.182	20668		0.00(2.28-4.23)	92.0	157	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.229	4.230	-0.001	1.000	62580	0.0519	Target=4.09	104	59.8	
563.00 > 169.00	4.229	4.230	-0.001	1.000	15028		0.00(2.86-5.32)	104	159	
D 30 13C2 PFUnA										
565.00 > 520.00	4.229	4.230	-0.001		3770094	2.46		98.3	6883	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.229	4.233	-0.004		2314381	2.47		98.7	1062	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.237	4.240	-0.003	1.002	36421	0.0494		98.7	218	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.371	4.370	0.001	1.229	234613	0.0470		99.8	982	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.515	4.514	0.001	1.000	72074	0.0474	Target=4.03	94.9	62.0	
613.00 > 169.00	4.515	4.514	0.001	1.000	16019		0.00(2.82-5.24)	94.9	122	
D 36 13C2 PFDoA										
615.00 > 570.00	4.515	4.514	0.001		4039292	2.44		97.8	5694	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.531	4.531	0.0	1.157	27524	0.0523		108	137	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.735	4.741	-0.006	1.332	23917	0.0423	Target=0.63	87.4	197	
699.00 > 99.00	4.735	4.741	-0.006	1.332	40765		0.00(0.44-0.82)	87.4	513	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.773	4.773	0.0	1.057	82906	0.0543	Target=3.11	109	34.7	
663.00 > 169.00	4.773	4.773	0.0	1.057	26993		0.00(2.18-4.05)	109	284	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.006	5.008	-0.002	1.000	21953	0.0550	Target=1.37	110	230	
713.00 > 219.00	5.006	5.008	-0.002	1.000	15943		0.00(0.96-1.79)	110	235	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.006	5.008	-0.002		4165771	2.38		95.3	7202	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.423	5.430	-0.007		6786694	2.36		94.6	5623	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.432	5.433	-0.001	1.002	173370	0.0506	Target=5.26	101	6.3	
813.00 > 169.00	5.432	5.433	-0.001	1.002	35175		0.00(3.69-6.84)	101	190	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.833	5.840	-0.007	1.076	158023	0.0491	Target=7.43	98.3	6.9	
913.00 > 169.00	5.825	5.840	-0.015	1.074	22250		0.00(5.20-9.66)	98.3	175	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00011 Amount Added: 1.00 Units: mL

Report Date: 09-Mar-2019 07:56:55 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_006.d

Injection Date: 09-Mar-2019 01:25:09 Instrument ID: A8_N

Lims ID: IC L2 Full

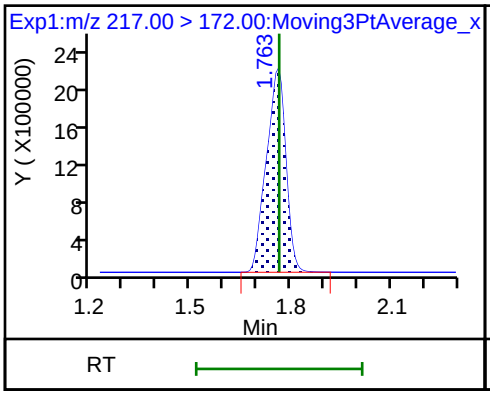
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3

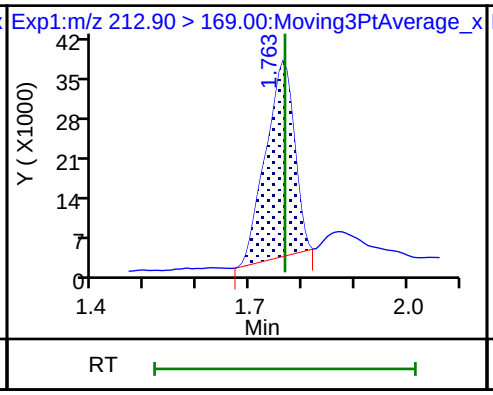
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

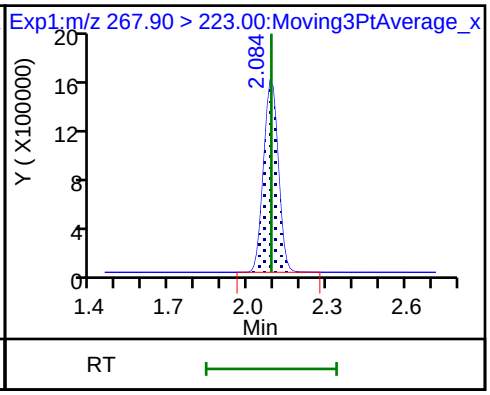
D 1 13C4 PFBA



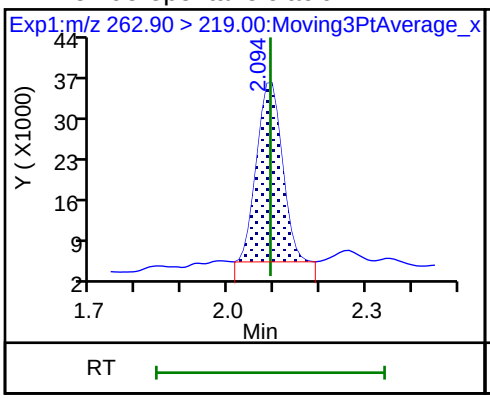
2 Perfluorobutanoic acid



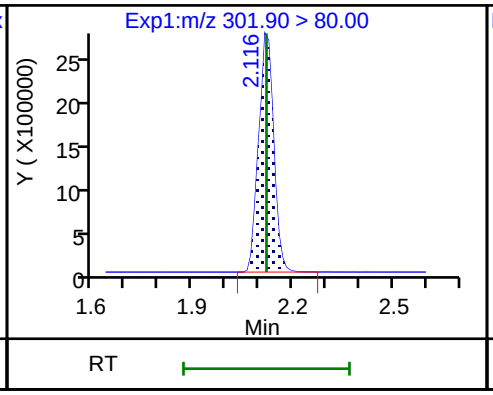
D 3 13C5 PFPeA



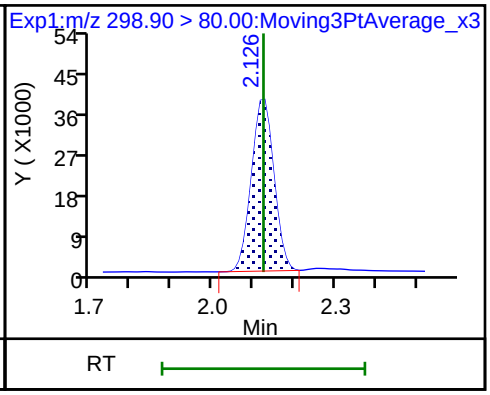
4 Perfluoropentanoic acid



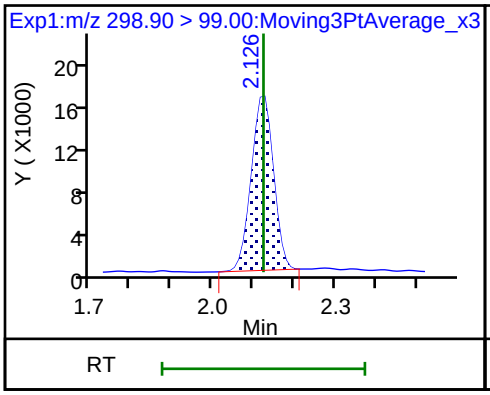
D 47 13C3 PFBS



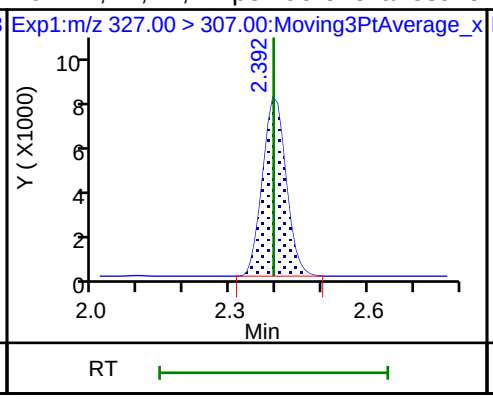
5 Perfluorobutanesulfonic acid



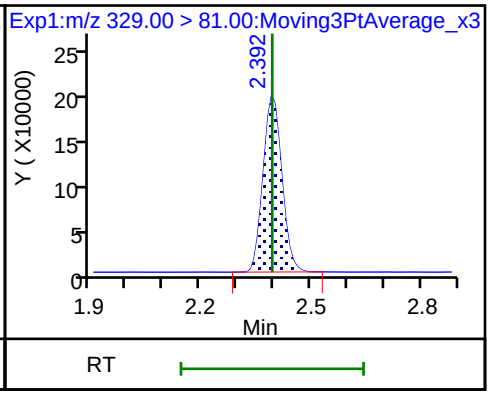
5 Perfluorobutanesulfonic acid



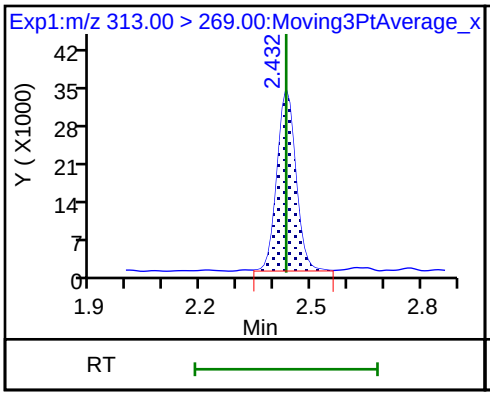
61 1H,1H,2H,2H-perfluorohexanesulfon



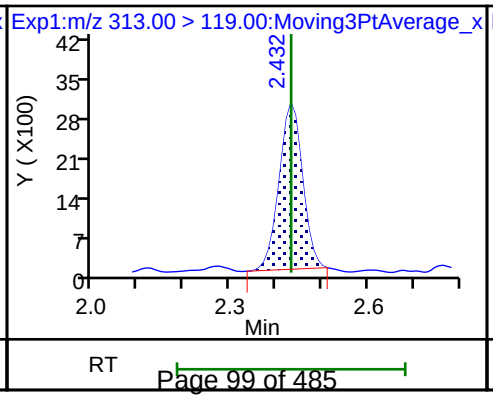
D 60 M2-4:2 FTS



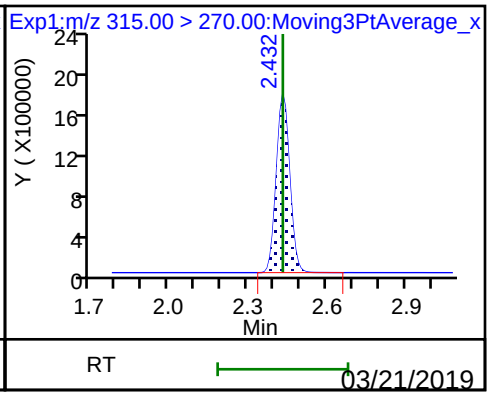
6 Perfluorohexanoic acid



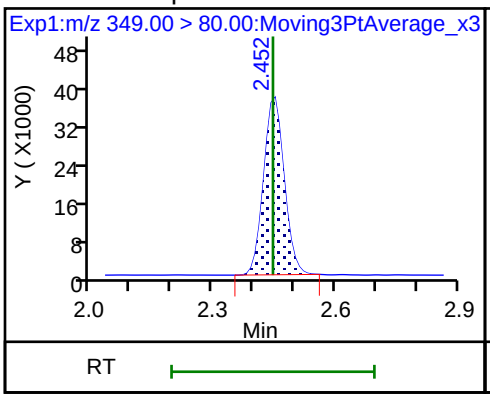
6 Perfluorohexanoic acid



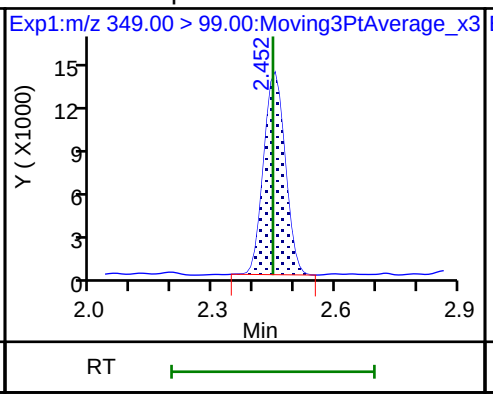
D 7 13C2 PFHxA



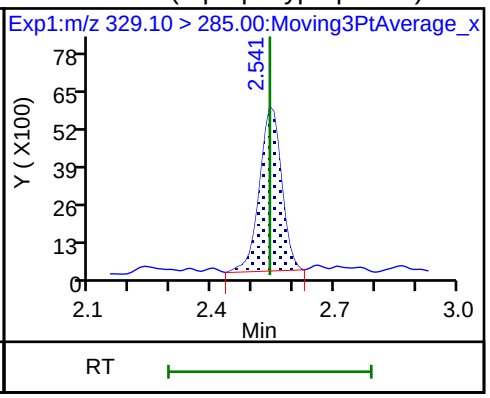
70 Perfluoropentanesulfonic acid



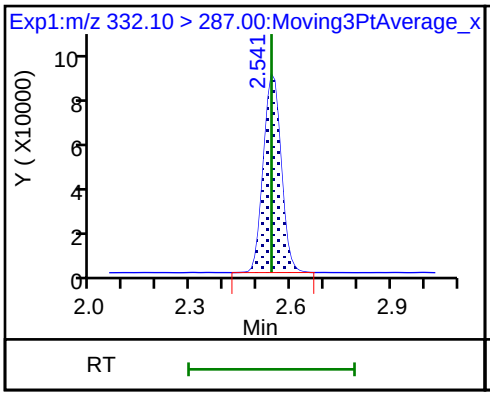
70 Perfluoropentanesulfonic acid



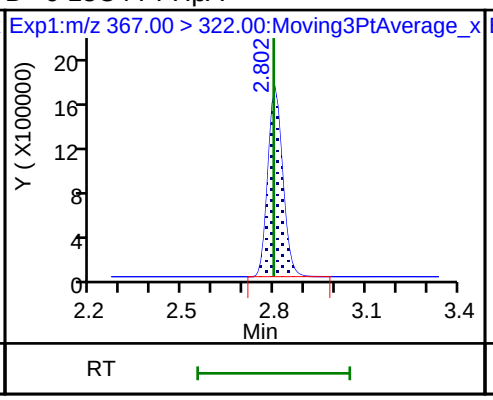
67 Perfluoro(2-propoxypropanoic) acid



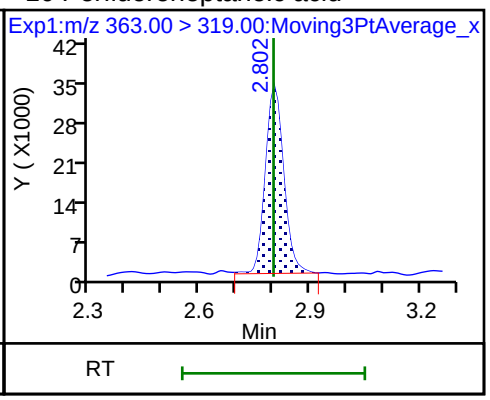
D 64 13C3 HFPO-DA



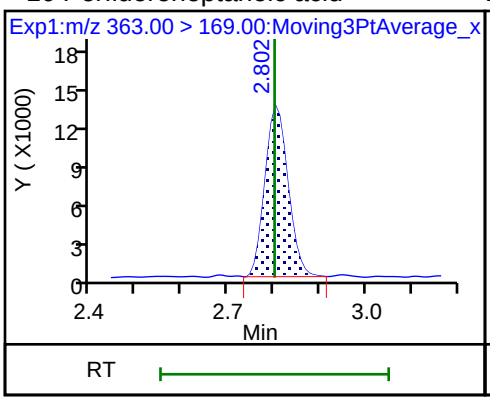
D 9 13C4 PFHpA



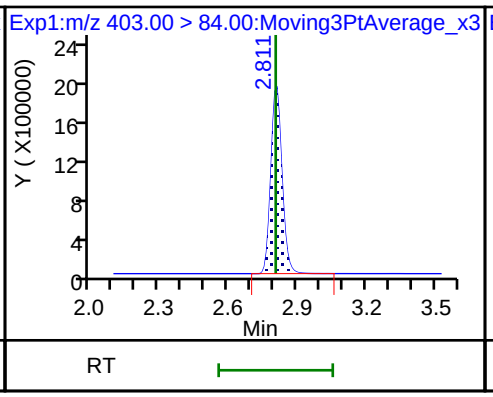
10 Perfluoroheptanoic acid



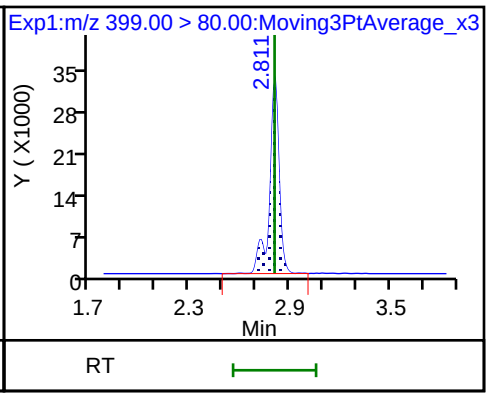
10 Perfluoroheptanoic acid



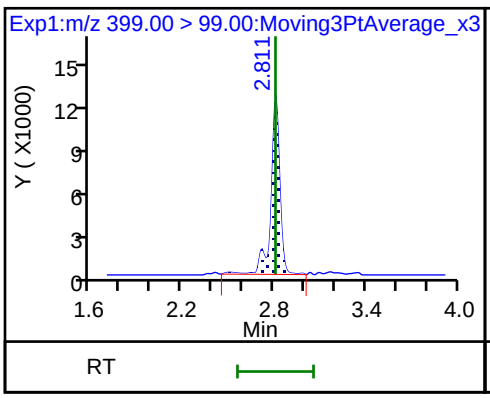
D 11 18O2 PFHxS



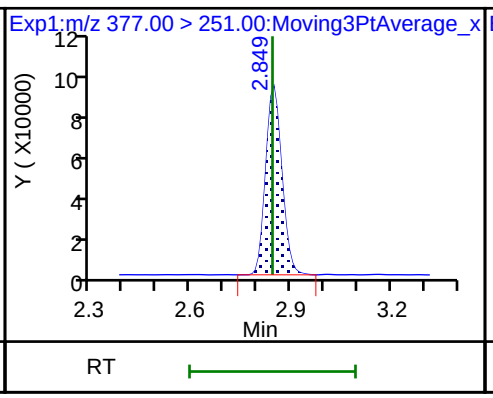
8 Perfluorohexanesulfonic acid



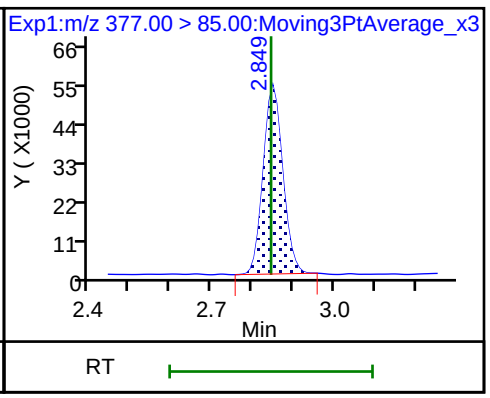
8 Perfluorohexanesulfonic acid



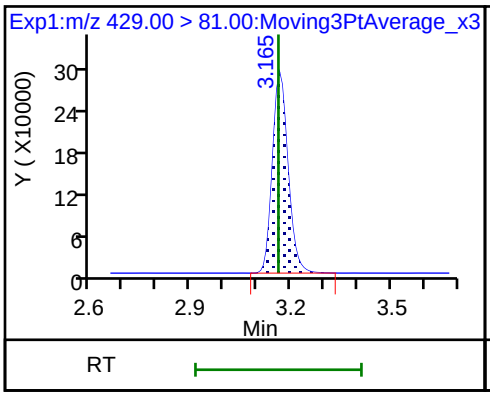
77 DONA



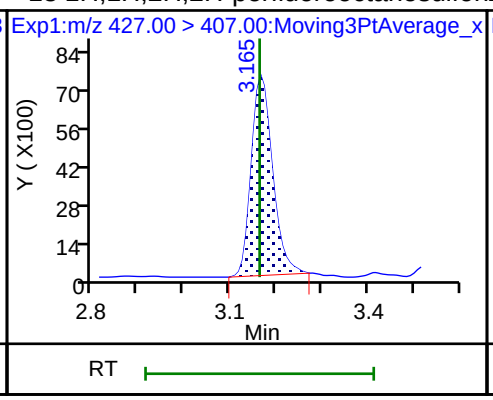
77 DONA



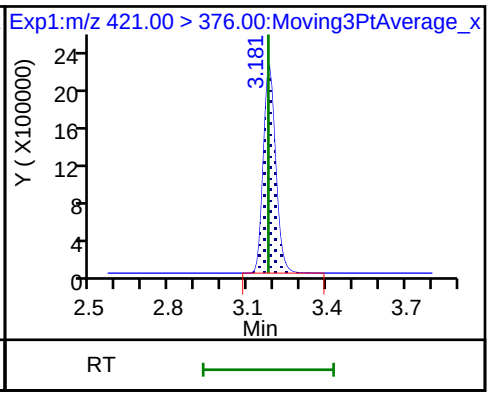
D 12 M2-6:2 FTS



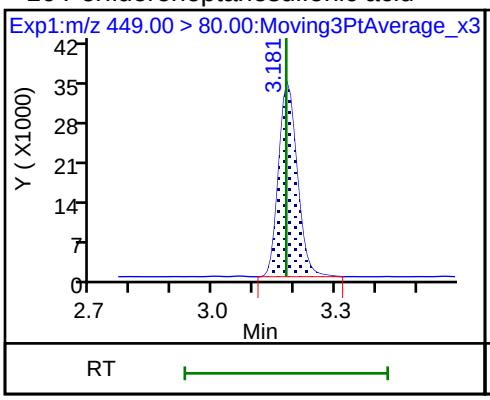
13 1H,1H,2H,2H-perfluorooctanesulfon



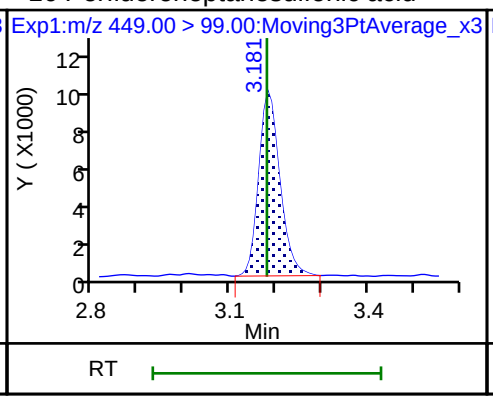
D 73 13C8 PFOA



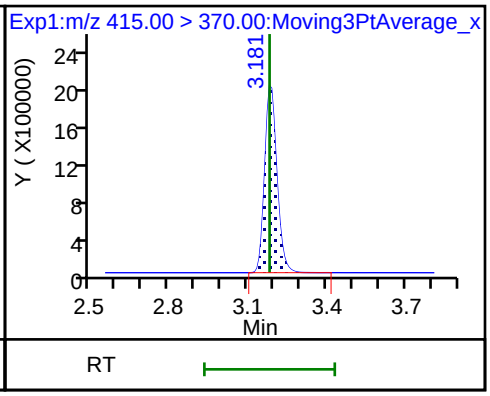
16 Perfluoroheptanesulfonic acid



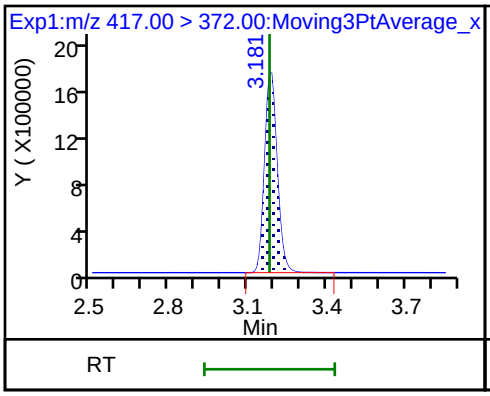
16 Perfluoroheptanesulfonic acid



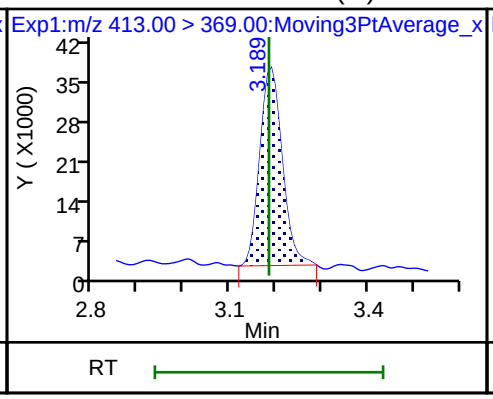
* 62 13C2 PFOA



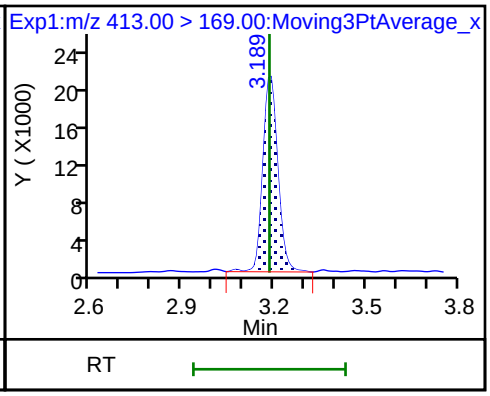
D 14 13C4 PFOA



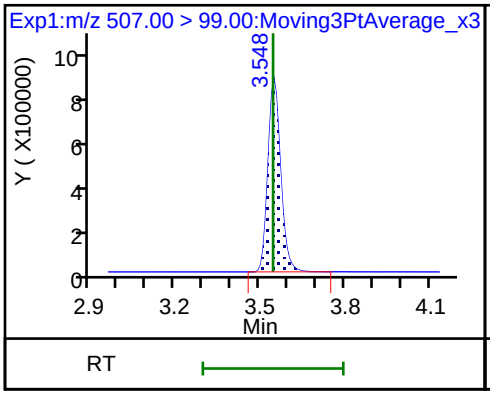
15 Perfluorooctanoic acid (M)



15 Perfluorooctanoic acid



D 72 13C8 PFOS



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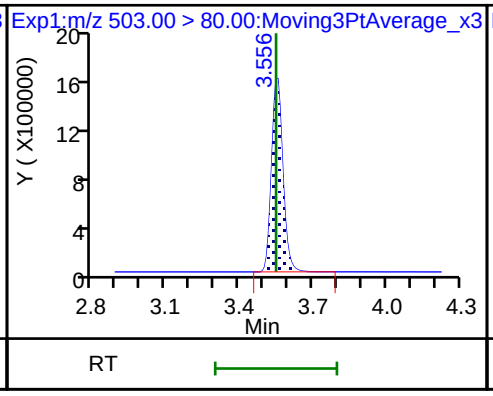
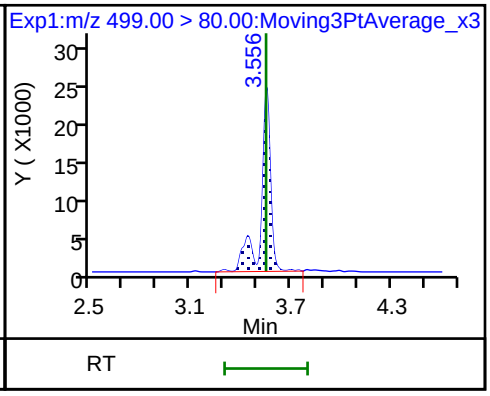
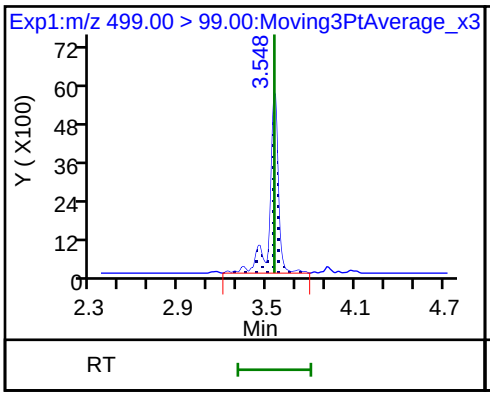


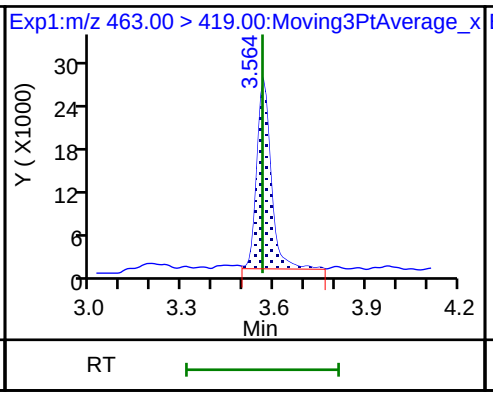
17 Perfluorooctanesulfonic acid



17 Perfluorooctanesulfonic acid



20 Perfluorononanoic acid



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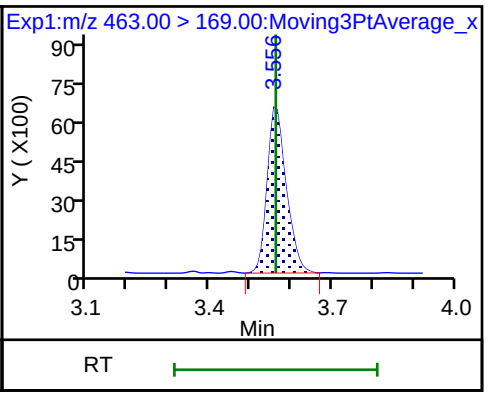
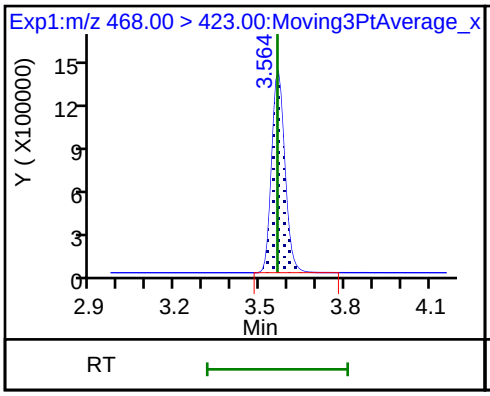
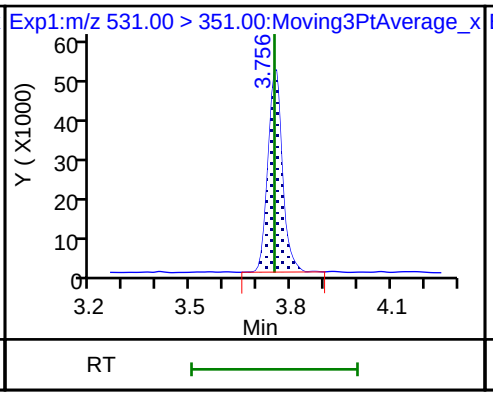


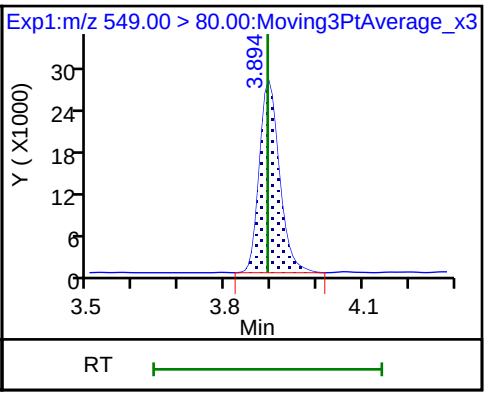
D 19 13C5 PFNA



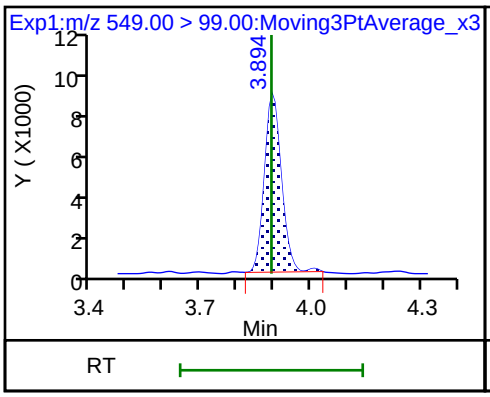
69 9-Chlorohexadecafluoro-3-oxanonane



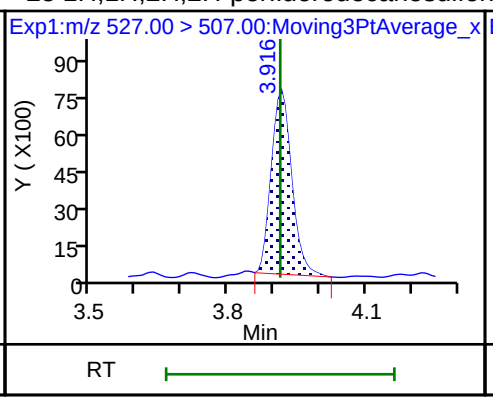
68 Perfluorononanesulfonic acid



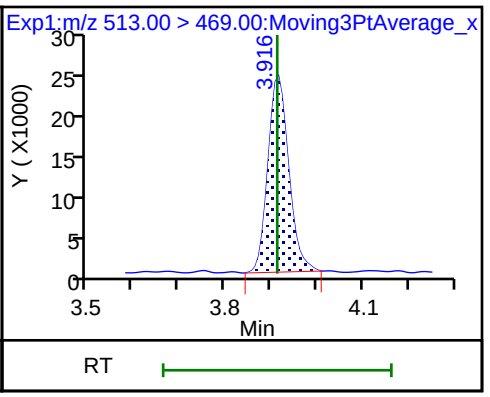
68 Perfluorononanesulfonic acid



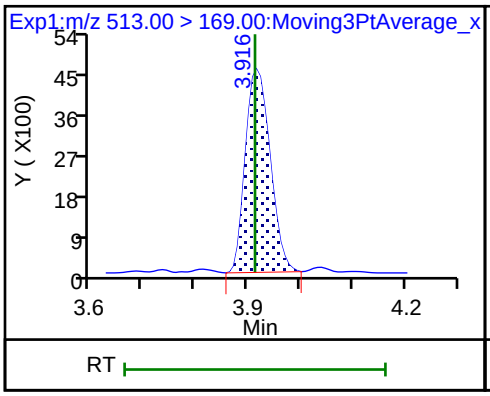
25 1H,1H,2H,2H-perfluorodecanesulfoni



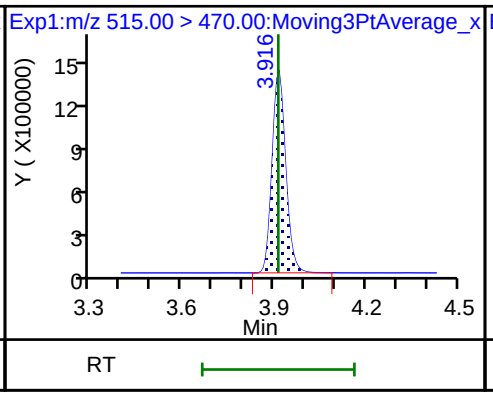
24 Perfluorodecanoic acid



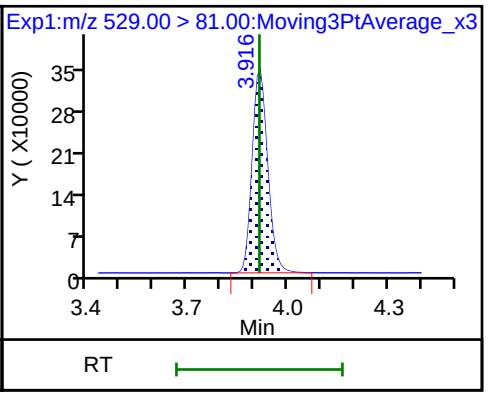
24 Perfluorodecanoic acid



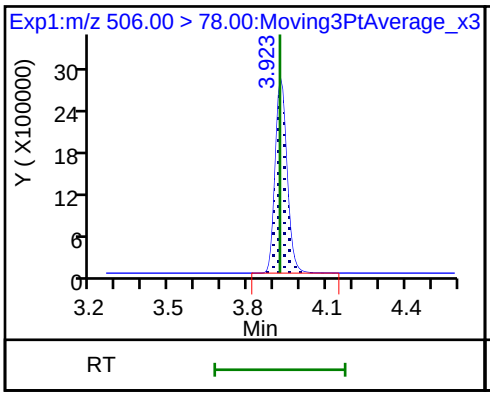
D 23 13C2 PFDA



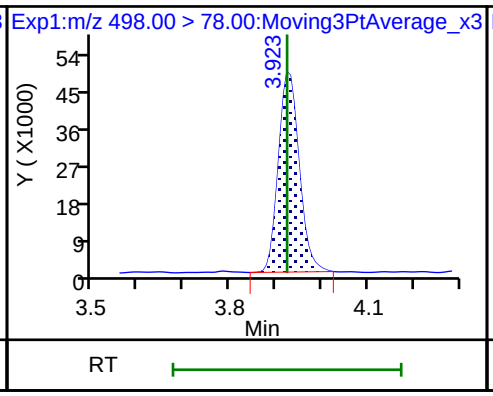
D 26 M2-8:2 FTS



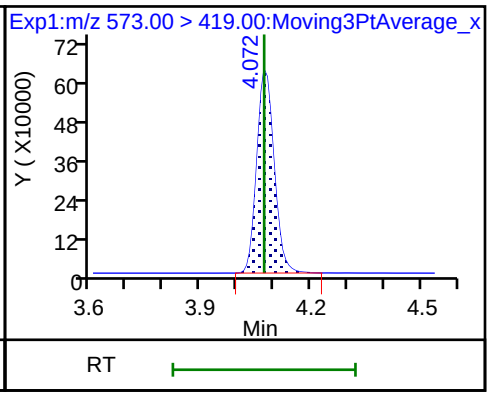
D 21 13C8 FOSA



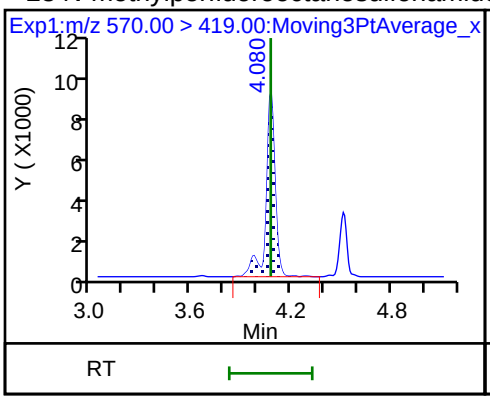
22 Perfluorooctanesulfonamide



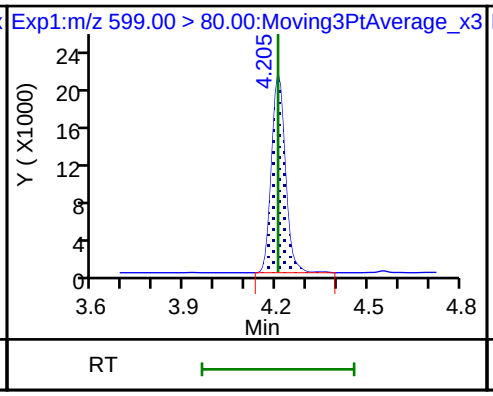
D 27 d3-NMeFOSAA



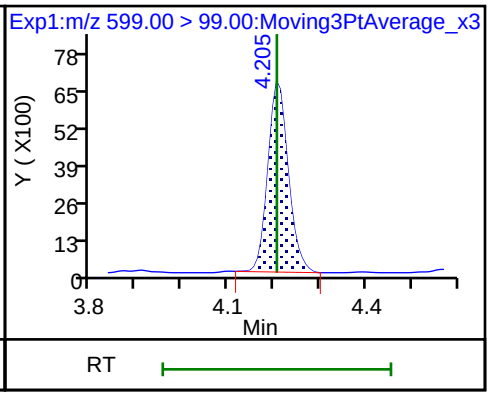
28 N-methylperfluorooctanesulfonamido



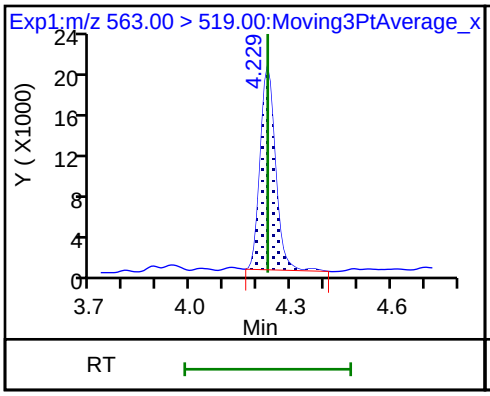
29 Perfluorodecanesulfonic acid



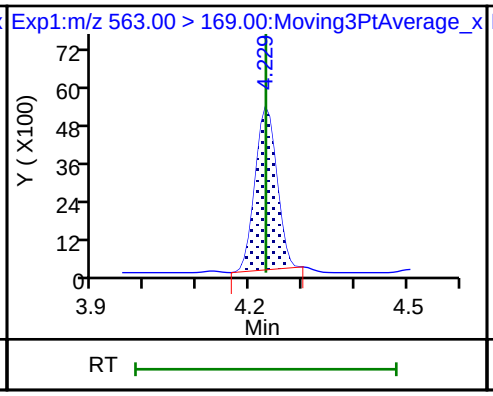
29 Perfluorodecanesulfonic acid



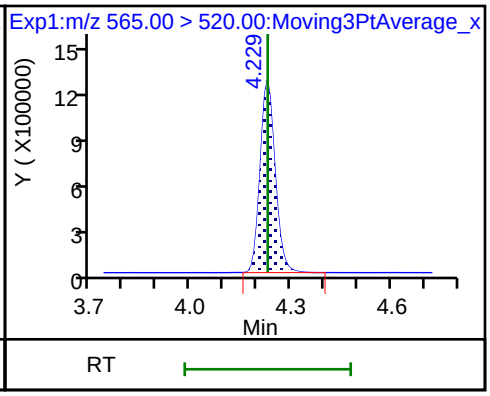
31 Perfluoroundecanoic acid



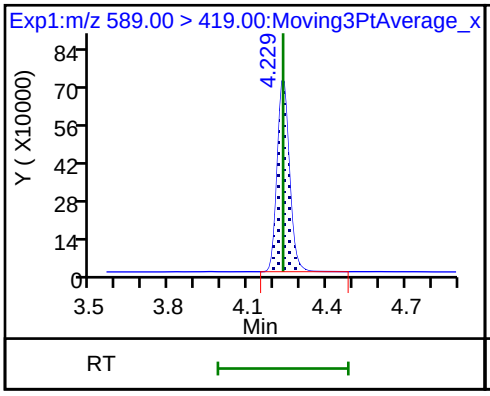
31 Perfluoroundecanoic acid



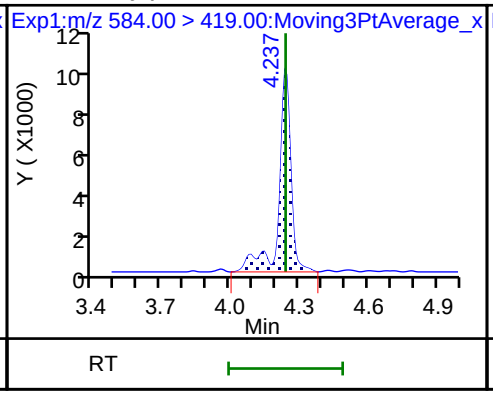
D 30 13C2 PFUnA



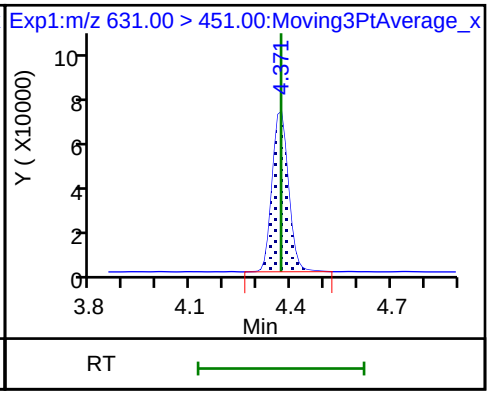
D 32 d5-NEtFOSAA



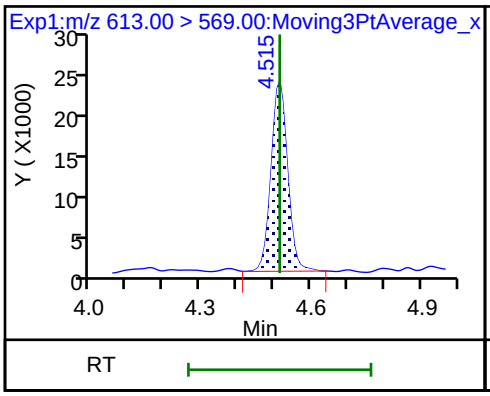
33 N-ethylperfluorooctanesulfonamidoa



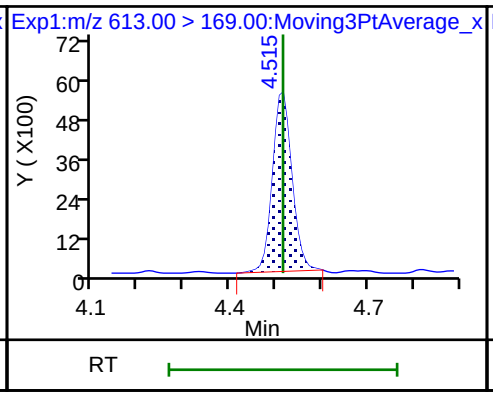
66 11-Chloroeicosafluoro-3-oxaundecan



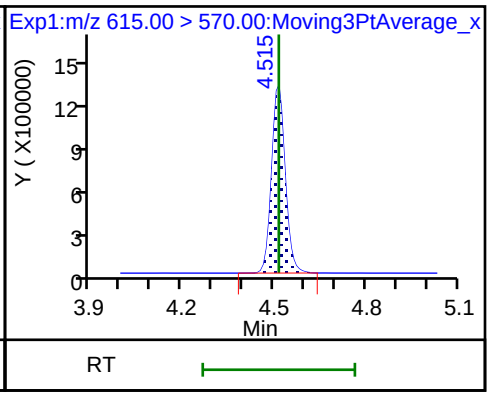
37 Perfluorododecanoic acid



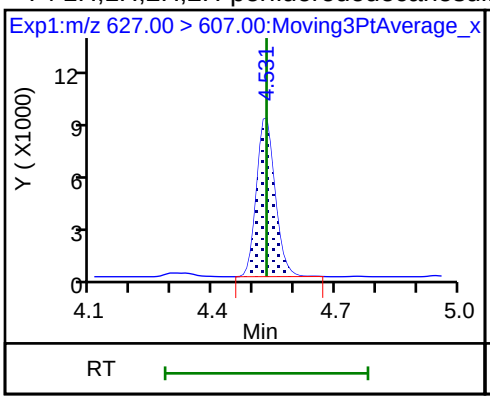
37 Perfluorododecanoic acid



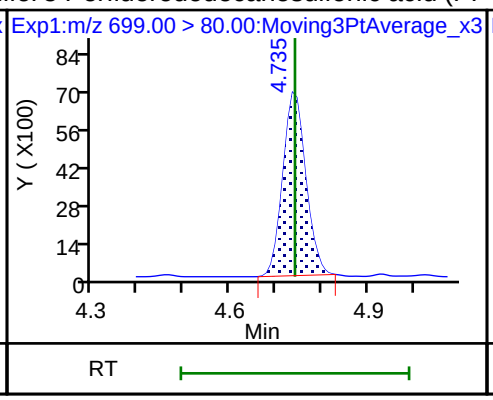
D 36 13C2 PFDoA



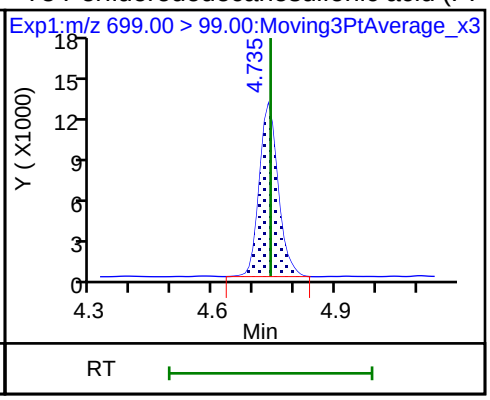
74 1H,1H,2H,2H-perfluorododecanesulfo



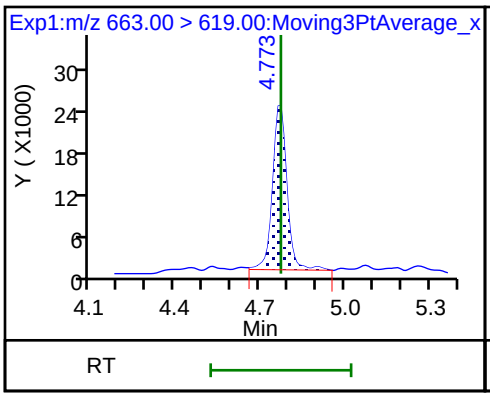
75 Perfluorododecanesulfonic acid (PF



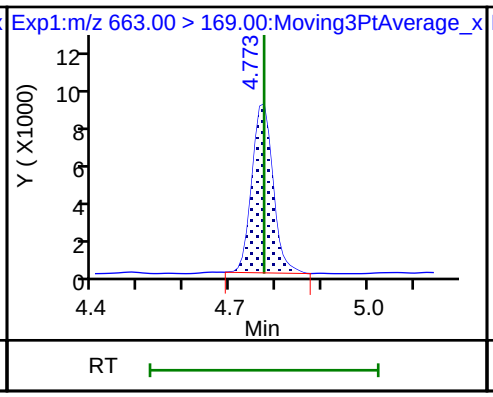
75 Perfluorododecanesulfonic acid (PF



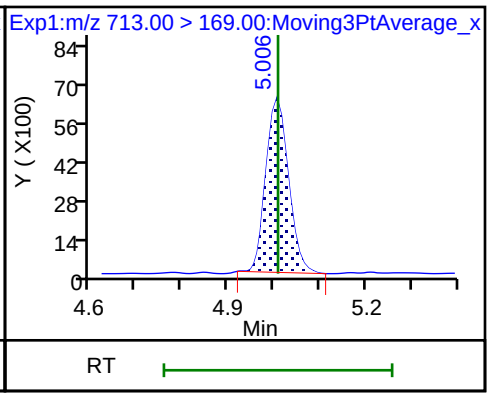
41 Perfluorotridecanoic acid



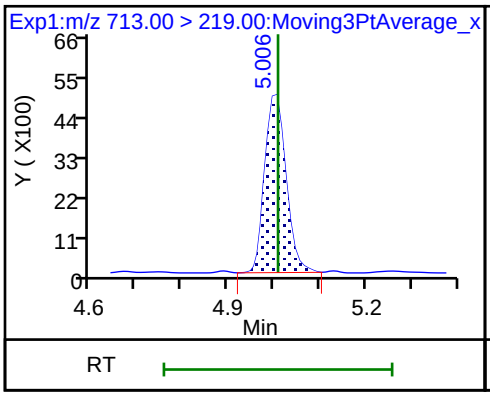
41 Perfluorotridecanoic acid



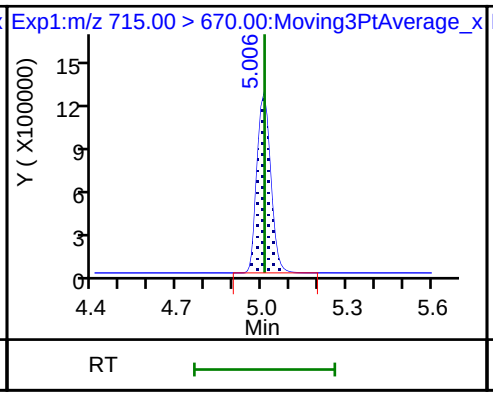
42 Perfluorotetradecanoic acid



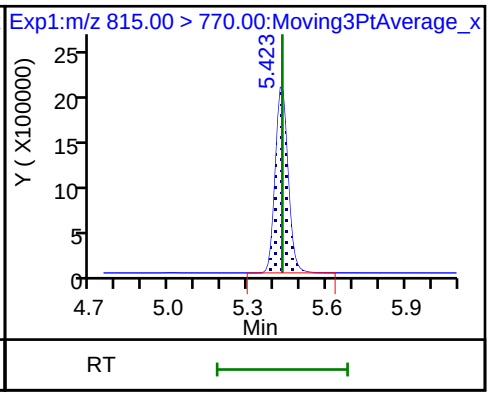
42 Perfluorotetradecanoic acid



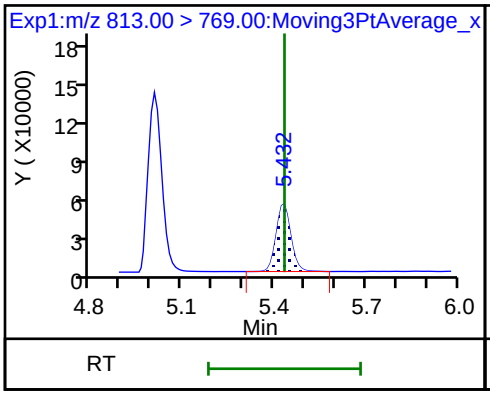
D 43 13C2 PFTeDA



D 44 13C2 PFHxDA



45 Perfluorohexadecanoic acid



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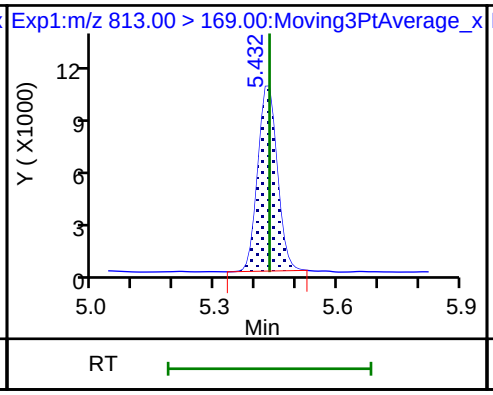
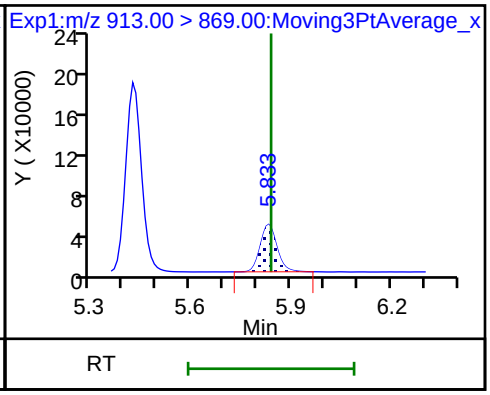
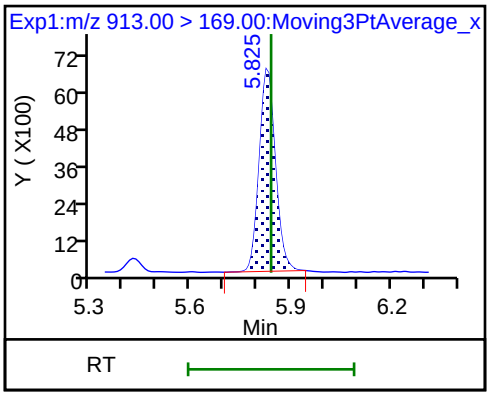


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

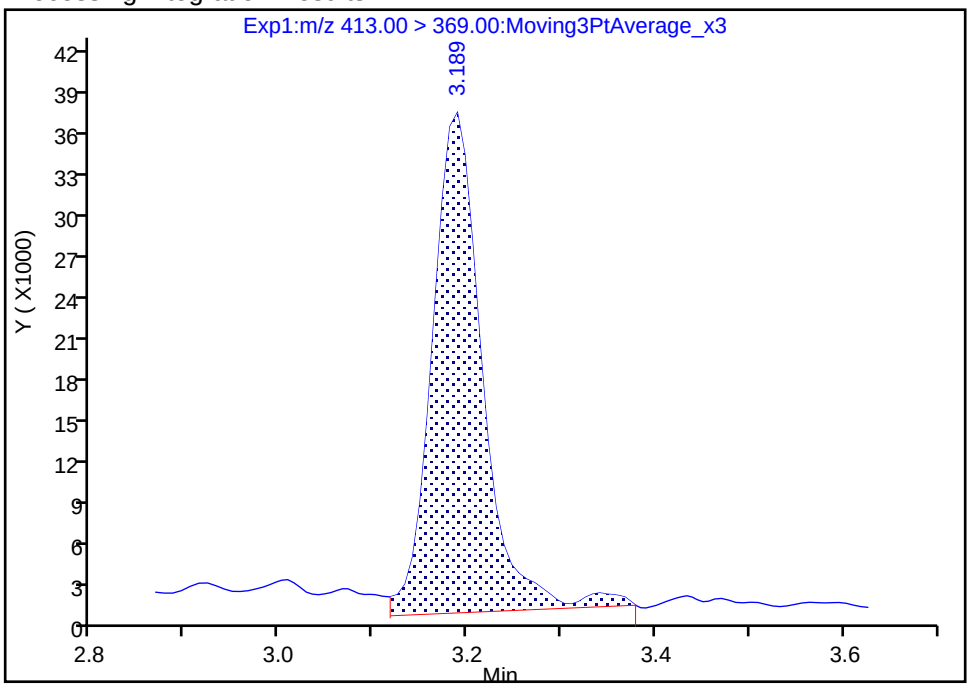
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_006.d
Injection Date: 09-Mar-2019 01:25:09 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

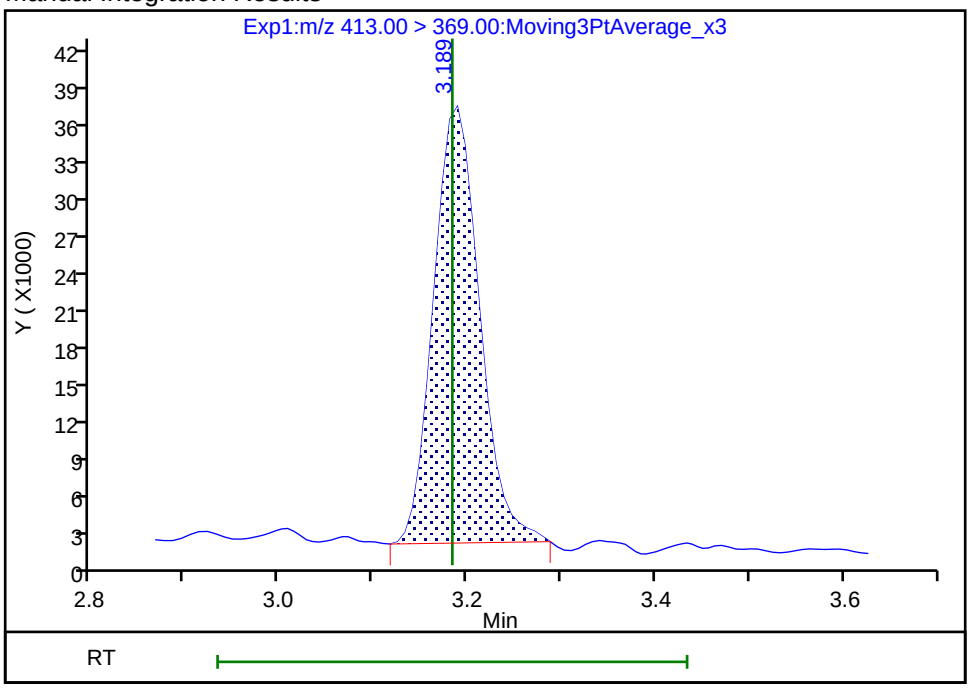
Processing Integration Results

RT: 3.19
Area: 134196
Amount: 0.054919
Amount Units: ng/ml



Manual Integration Results

RT: 3.19
Area: 118314
Amount: 0.049639
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:24:53
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_007.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-Mar-2019 01:32:36 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 3
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 09-Mar-2019 07:56:59 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0306

First Level Reviewer: roycea Date: 09-Mar-2019 07:26:50
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.770	1.764	0.006		8750677	2.50		100	7705	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.770	1.766	0.004	1.000	709224	0.2532		101	183	
D 3 13C5 PFPeA										
267.90 > 223.00	2.095	2.088	0.007		6005829	2.50		99.9	8916	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.095	2.091	0.004	1.000	602000	0.2548		102	36.1	
D 47 13C3 PFBS										
301.90 > 80.00	2.127	2.120	0.007		8600808	2.36		101	966619	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.127	2.123	0.004	1.000	770270	0.2223	Target=2.39	101	1274	
298.90 > 99.00	2.127	2.123	0.004	1.000	315639		0.00(1.68-3.11)	101	764	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.403	2.394	0.009	1.000	138136	0.2240		95.9	1949	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.403	2.394	0.009		704353	2.40		103	1978	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.442	2.432	0.010	1.000	560306	0.2343	Target=11.00	93.7	323	
313.00 > 119.00	2.442	2.432	0.010	1.000	54937		0.00(7.70-14.30)	93.7	330	
D 7 13C2 PFHxA										
315.00 > 270.00	2.442	2.432	0.010		6314775	2.56		102	8644	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.452	2.446	0.006	1.153	654825	0.2277	Target=2.65	97.1	4510	
349.00 > 99.00	2.452	2.446	0.006	1.153	247986		0.00(1.85-3.44)	97.1	1106	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.551	2.541	0.010	1.000	96482	0.2216		88.6	165	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.551	2.541	0.010		359837	2.54		102	1351	
D 9 13C4 PFHpA										
367.00 > 322.00	2.807	2.798	0.009		5837816	2.59		104	8727	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.807	2.800	0.007	1.000	575205	0.2487	Target=2.52	99.5	275	
363.00 > 169.00	2.807	2.800	0.007	1.000	220252		0.00(1.76-3.27)	99.5	669	
D 11 18O2 PFHxS										
403.00 > 84.00	2.816	2.806	0.010		6239941	2.44		103	5728	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.816	2.807	0.009	1.000	593290	0.2249	Target=2.82	98.9	2260	
399.00 > 99.00	2.816	2.807	0.009	1.000	213008		0.00(1.97-3.66)	98.9	630	
77 DONA										
377.00 > 251.00	2.853	2.844	0.009	0.802	1642976	0.2516	Target=1.65	107	3833	
377.00 > 85.00	2.853	2.844	0.009	0.802	969581		0.00(1.16-2.15)	107	1792	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.177	3.162	0.015		952112	2.46		103	4696	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.177	3.163	0.014	1.000	131157	0.2306		97.3	859	
D 73 13C8 PFOA										
421.00 > 376.00	3.185	3.177	0.008		7201223	2.45		100.0	8423	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.193	3.179	0.013	0.897	540973	0.2408	Target=3.74	101	2748	
449.00 > 99.00	3.193	3.179	0.013	0.897	145144		0.00(2.61-4.86)	101	716	
* 62 13C2 PFOA										
415.00 > 370.00	3.193	3.181	0.011		6066973	2.50			7984	
D 14 13C4 PFOA										
417.00 > 372.00	3.193	3.181	0.011		5512839	2.56		102	8778	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.193	3.184	0.008	1.000	574525	0.2457	Target=1.00	98.3	75.8	M
413.00 > 169.00	3.193	3.184	0.008	1.000	301472		1.91(0.70-1.30)	98.3	510	
D 72 13C8 PFOS										
507.00 > 99.00	3.552	3.545	0.007		2411819	2.37		99.3	4250	
D 18 13C4 PFOS										
503.00 > 80.00	3.560	3.549	0.011		4857008	2.44		102	6913	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.560	3.550	0.010	1.000	460944	0.2191	Target=1.00	94.4	872	
499.00 > 99.00	3.560	3.550	0.010	1.000	97668		4.72(0.70-1.30)	94.4	462	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.568	3.561	0.007	1.000	423879	0.2516	Target=4.13	101	163	
463.00 > 169.00	3.568	3.561	0.007	1.000	102892		0.00(2.89-5.37)	101	706	
D 19 13C5 PFNA										
468.00 > 423.00	3.568	3.561	0.007		4436818	2.54		102	8254	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.759	3.750	0.009	1.056	753406	0.2266		97.3	1610	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.898	3.892	0.006	1.095	412966	0.2448	Target=2.93	102	2398	
549.00 > 99.00	3.898	3.892	0.006	1.095	149185		0.00(2.05-3.81)	102	569	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.920	3.913	0.007	1.000	139400	0.2598		108	338	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.920	3.913	0.007	1.000	367084	0.2483	Target=5.34	99.3	455	
513.00 > 169.00	3.920	3.913	0.007	1.000	69511		0.00(3.74-6.94)	99.3	437	
D 23 13C2 PFDA										
515.00 > 470.00	3.920	3.913	0.007		4016742	2.52		101	4719	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.920	3.914	0.006		1119883	2.41		100	4566	
D 21 13C8 FOSA										
506.00 > 78.00	3.928	3.921	0.007		8421911	2.52		101	9012	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.936	3.923	0.013	1.002	775070	0.2610		104	827	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.085	4.072	0.013		2048850	2.48		99.1	3326	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.085	4.078	0.007	1.000	174859	0.2467		98.7	109	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.216	4.205	0.011	1.184	347296	0.2430	Target=3.26	101	1654	
599.00 > 99.00	4.216	4.205	0.011	1.184	111043		0.00(2.28-4.23)	101	991	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.240	4.230	0.010	1.000	291459	0.2460	Target=4.09	98.4	333	
563.00 > 169.00	4.240	4.230	0.010	1.000	73728		0.00(2.86-5.32)	98.4	962	
D 30 13C2 PFUnA										
565.00 > 520.00	4.240	4.230	0.010		3707956	2.56		102	7678	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.240	4.233	0.007		2220465	2.51		100	1002	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.248	4.240	0.008	1.002	178531	0.2522		101	761	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.375	4.370	0.005	1.229	1161956	0.2396		102	3123	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.519	4.514	0.005	1.000	377706	0.2527	Target=4.03	101	247	
613.00 > 169.00	4.519	4.514	0.005	1.000	92036		0.00(2.82-5.24)	101	1223	
D 36 13C2 PFDoA										
615.00 > 570.00	4.519	4.514	0.005		3973167	2.55		102	7528	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.535	4.531	0.004	1.157	132174	0.2471		103	937	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.748	4.741	0.007	1.334	141117	0.2569	Target=0.63	106	1691	
699.00 > 99.00	4.748	4.741	0.007	1.334	219664		0.00(0.44-0.82)	106	2666	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.777	4.773	0.004	1.057	366020	0.2435	Target=3.11	97.4	159	
663.00 > 169.00	4.777	4.773	0.004	1.057	119772		0.00(2.18-4.05)	97.4	1167	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.012	5.008	0.004	1.000	95997	0.2406	Target=1.37	96.3	1150	
713.00 > 219.00	5.012	5.008	0.004	1.000	70071		0.00(0.96-1.79)	96.3	1144	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.012	5.008	0.004		4165055	2.52		101	8643	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.429	5.430	-0.001		6947732	2.57		103	6477	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.429	5.433	-0.004	1.000	637771	0.2448	Target=5.26	97.9	21.2	
813.00 > 169.00	5.429	5.433	-0.004	1.000	123568		0.00(3.69-6.84)	97.9	667	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.839	5.840	-0.001	1.075	820746	0.2493	Target=7.43	99.7	34.4	
913.00 > 169.00	5.831	5.840	-0.009	1.074	106493		0.00(5.20-9.66)	99.7	777	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL3_00010 Amount Added: 1.00 Units: mL

Report Date: 09-Mar-2019 07:57:01 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_007.d

Injection Date: 09-Mar-2019 01:32:36 Instrument ID: A8_N

Lims ID: IC L3 Full

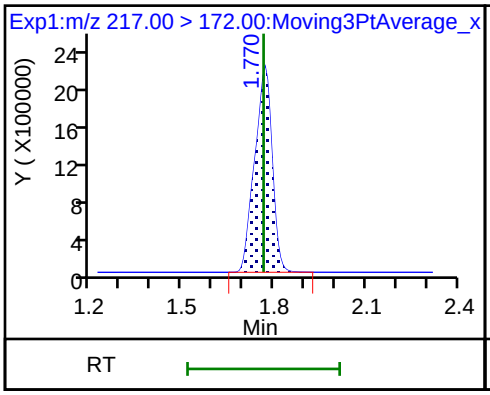
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 4

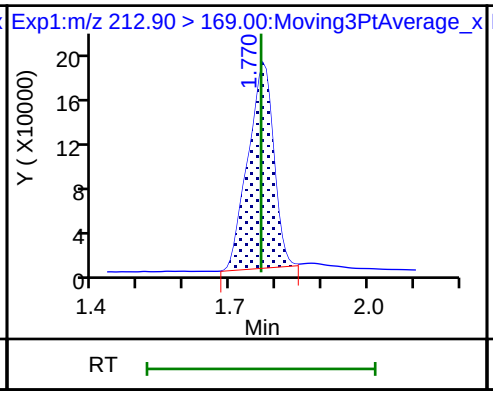
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

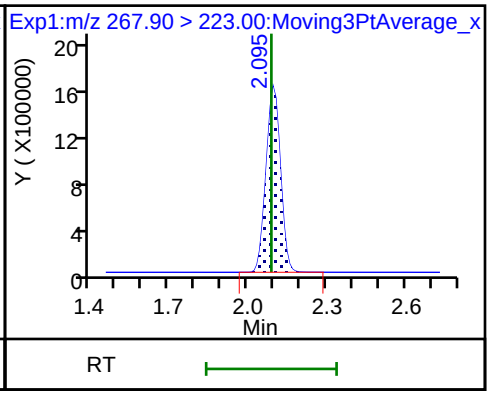
D 1 13C4 PFBA



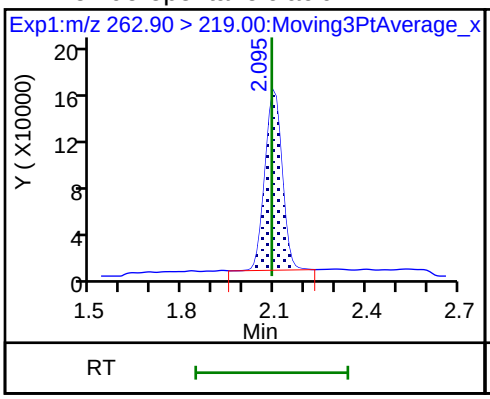
2 Perfluorobutanoic acid



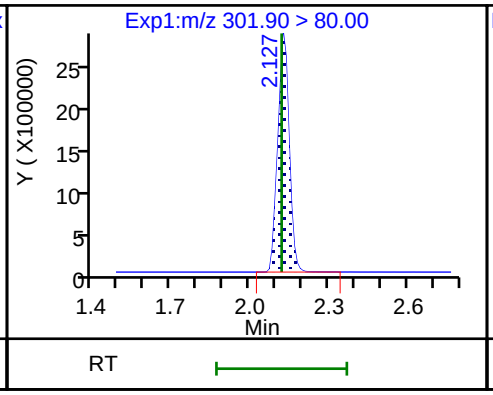
D 3 13C5 PFPeA



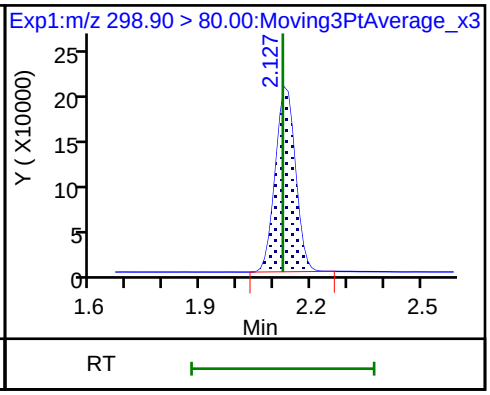
4 Perfluoropentanoic acid



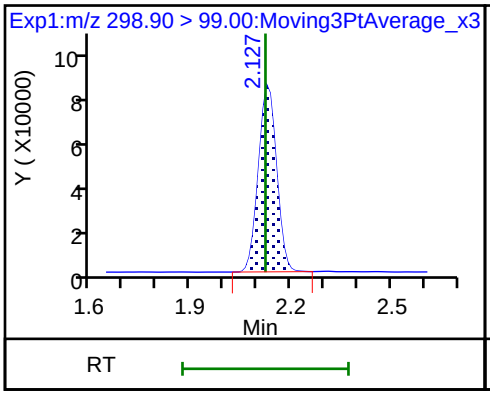
D 47 13C3 PFBS



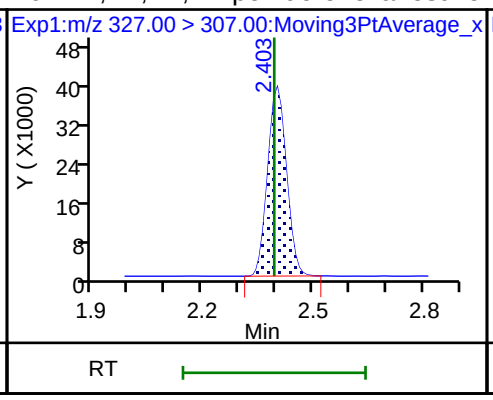
5 Perfluorobutanesulfonic acid



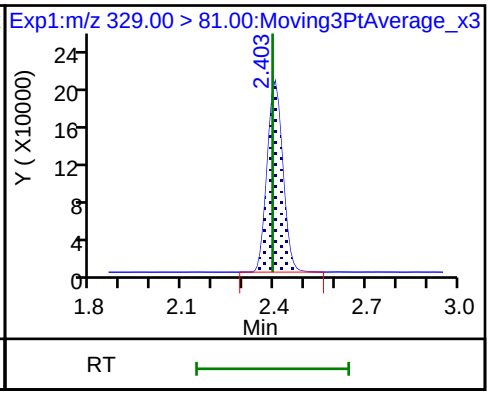
5 Perfluorobutanesulfonic acid



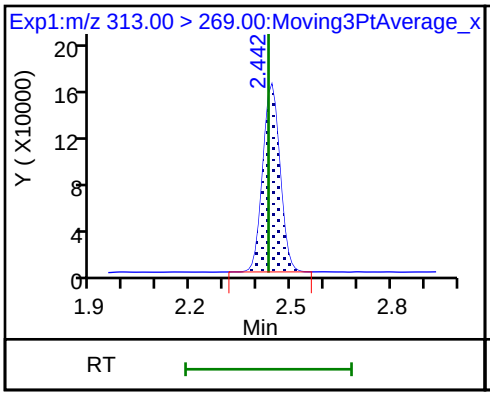
61 1H,1H,2H,2H-perfluorohexanesulfon



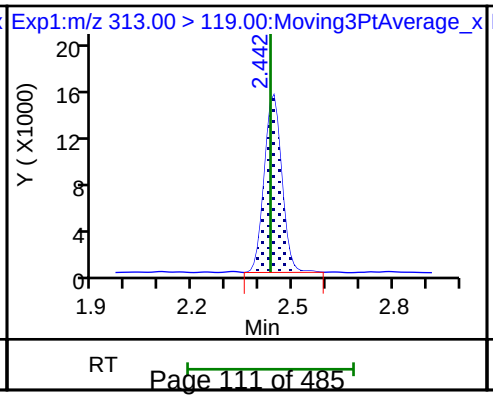
D 60 M2-4:2 FTS



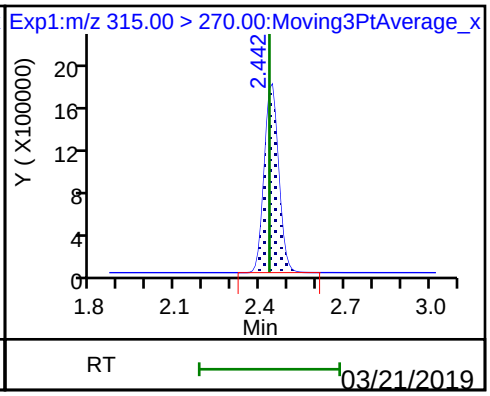
6 Perfluorohexanoic acid



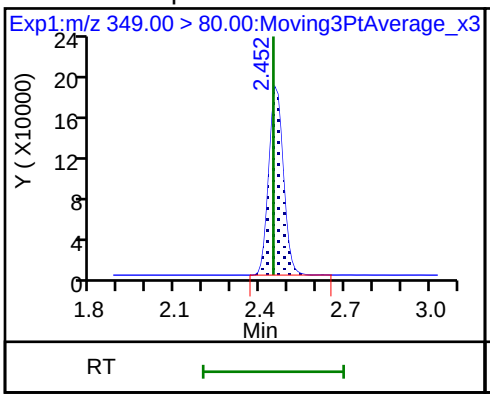
6 Perfluorohexanoic acid



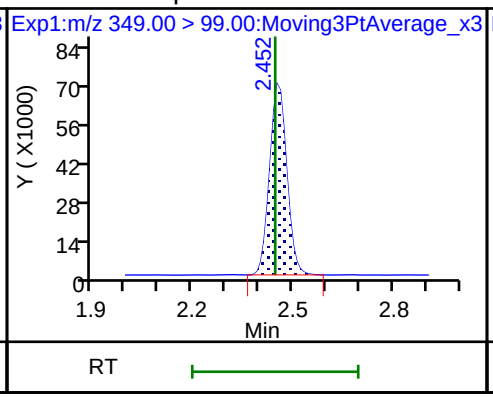
D 7 13C2 PFHxA



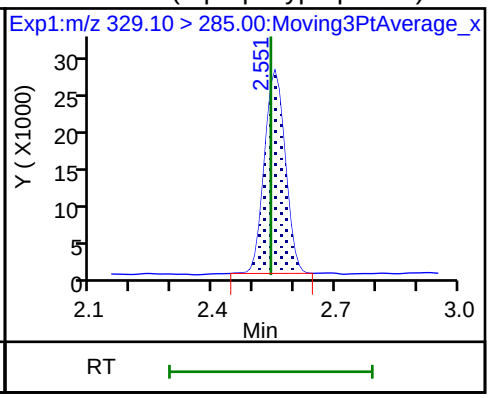
70 Perfluoropentanesulfonic acid



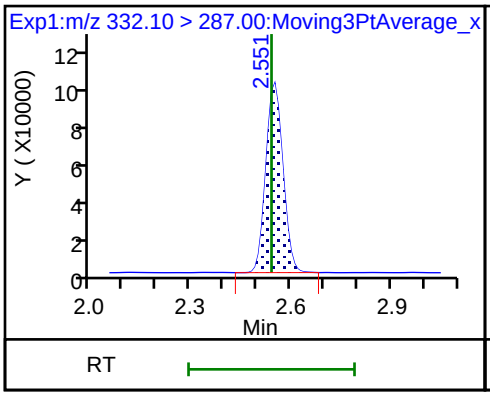
70 Perfluoropentanesulfonic acid



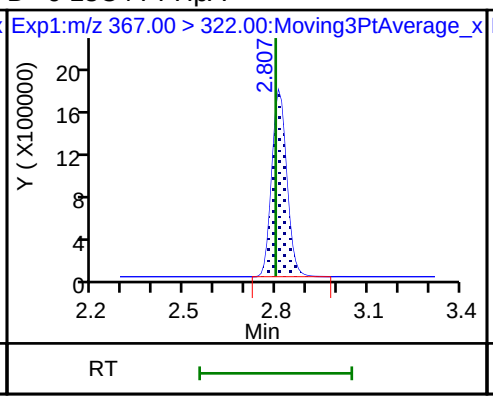
67 Perfluoro(2-propoxypropanoic) acid



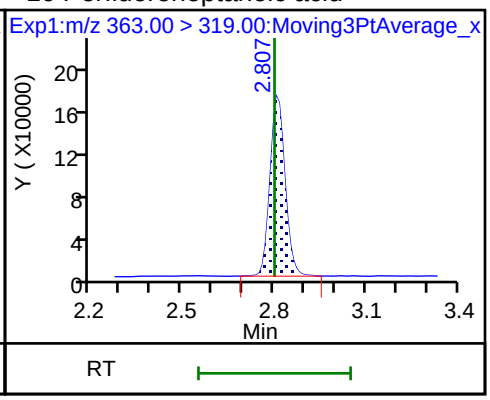
D 64 13C3 HFPO-DA



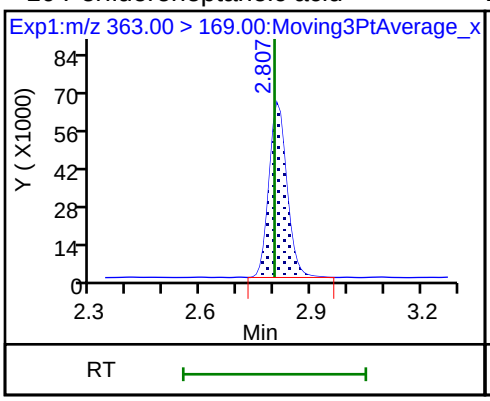
D 9 13C4 PFHpA



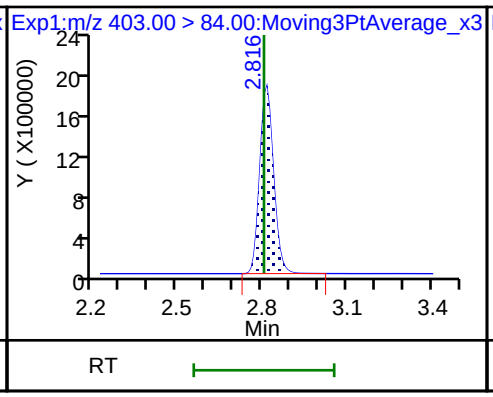
10 Perfluoroheptanoic acid



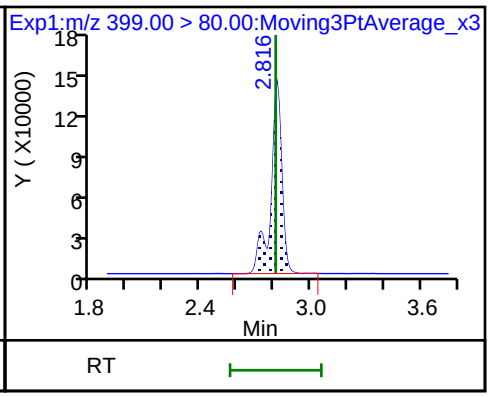
10 Perfluoroheptanoic acid



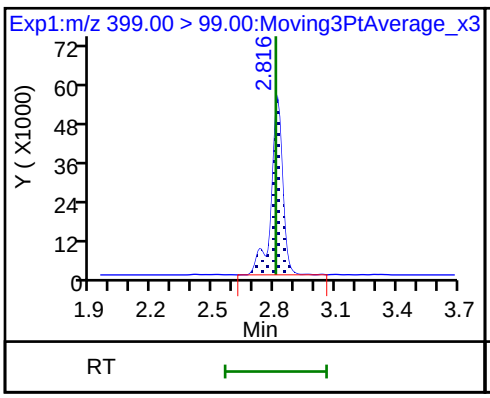
D 11 18O2 PFHxS



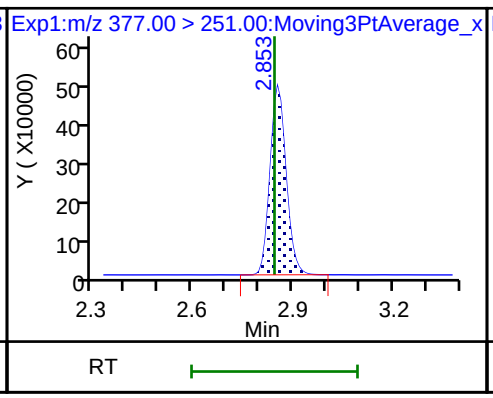
8 Perfluorohexanesulfonic acid



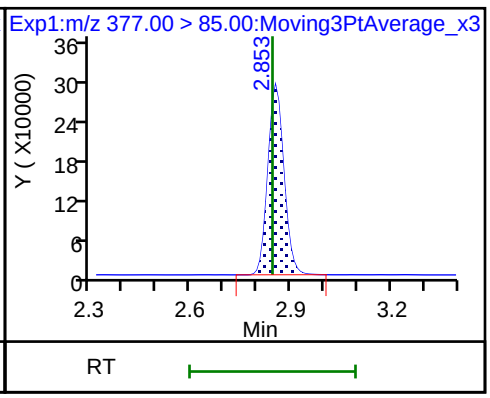
8 Perfluorohexanesulfonic acid



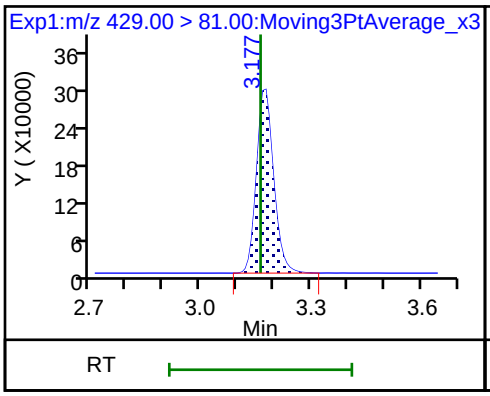
77 DONA



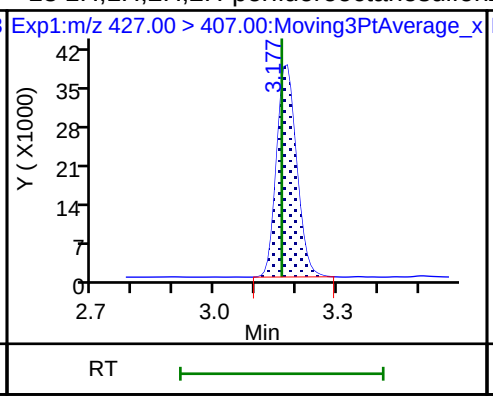
77 DONA



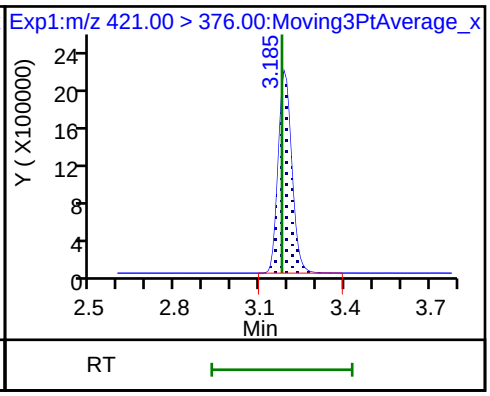
D 12 M2-6:2 FTS



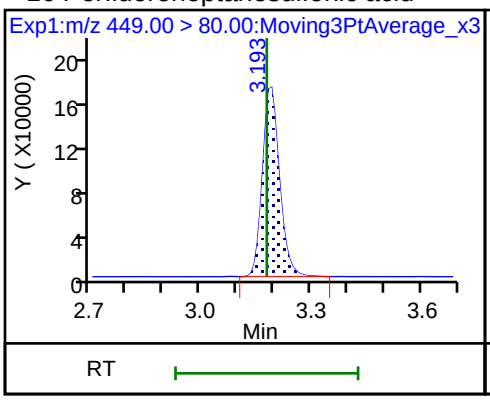
13 1H,1H,2H,2H-perfluorooctanesulfon



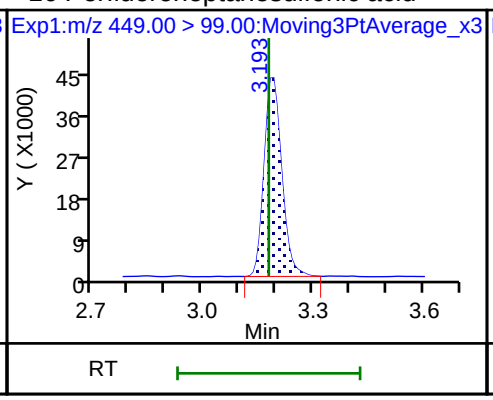
D 73 13C8 PFOA



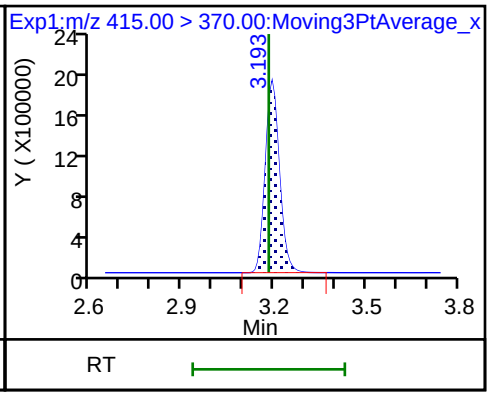
16 Perfluoroheptanesulfonic acid



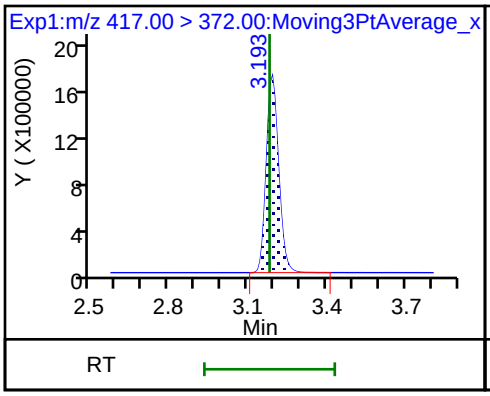
16 Perfluoroheptanesulfonic acid



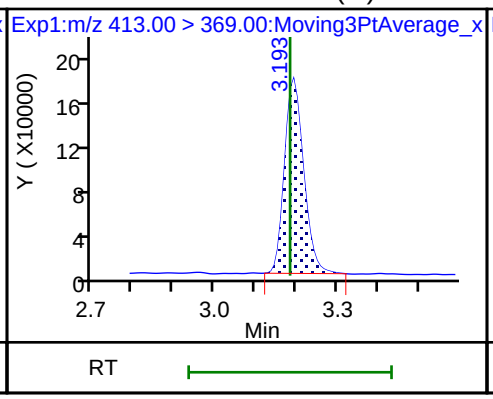
* 62 13C2 PFOA



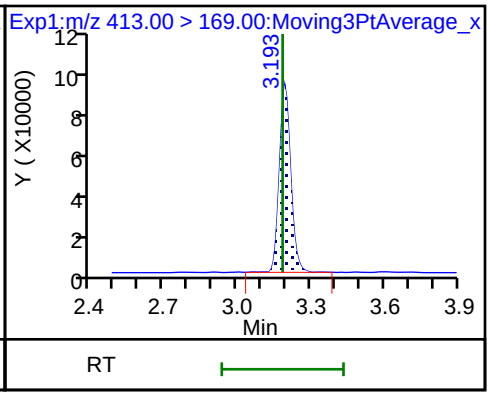
D 14 13C4 PFOA



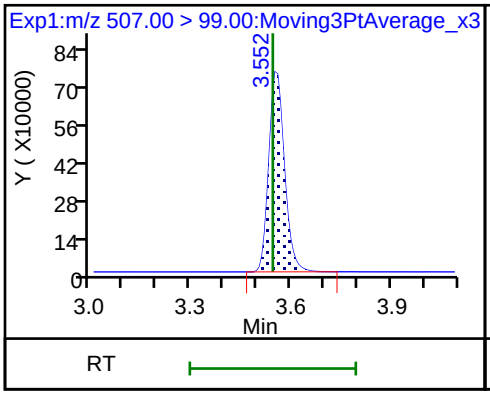
15 Perfluorooctanoic acid (M)



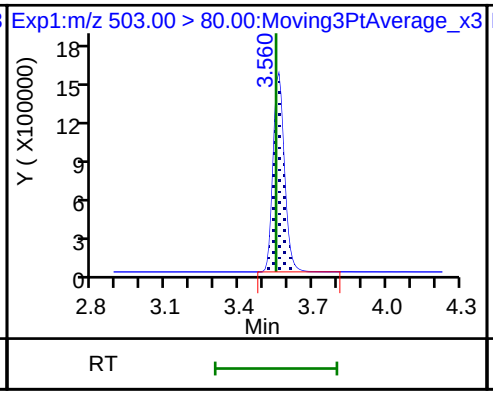
15 Perfluorooctanoic acid



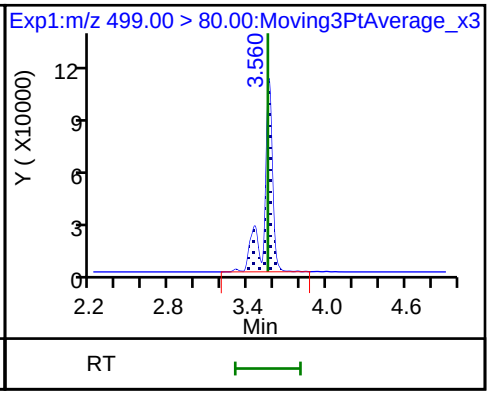
D 72 13C8 PFOS



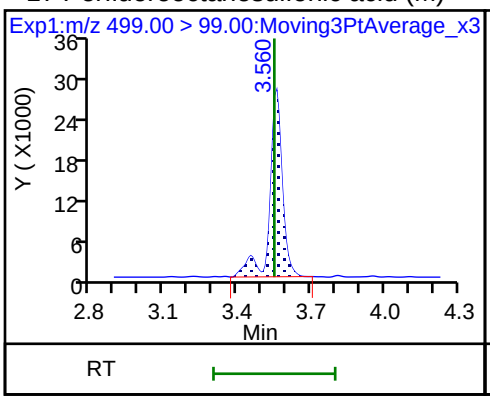
D 18 13C4 PFOS



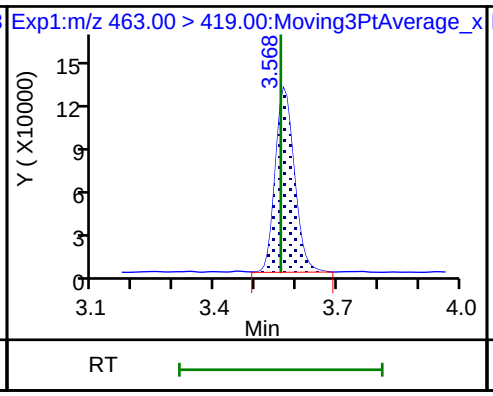
17 Perfluorooctanesulfonic acid



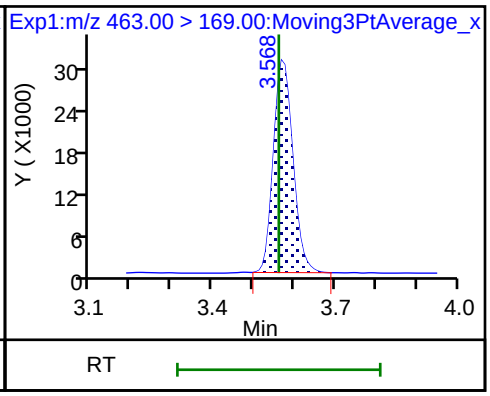
17 Perfluorooctanesulfonic acid (M)



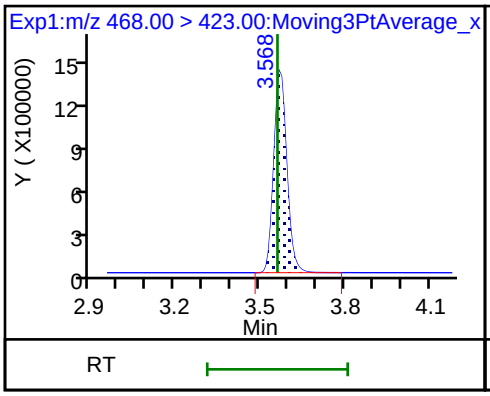
20 Perfluorononanoic acid



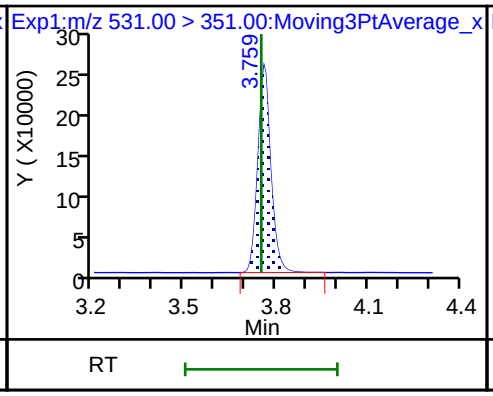
20 Perfluorononanoic acid



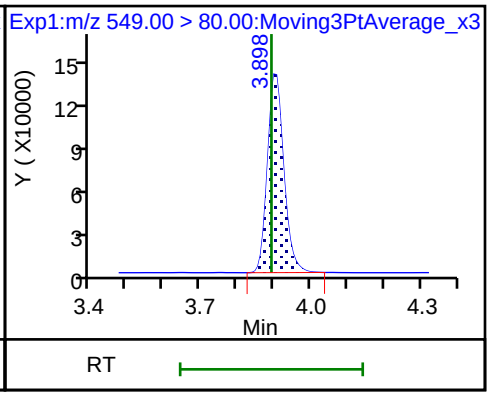
D 19 13C5 PFNA



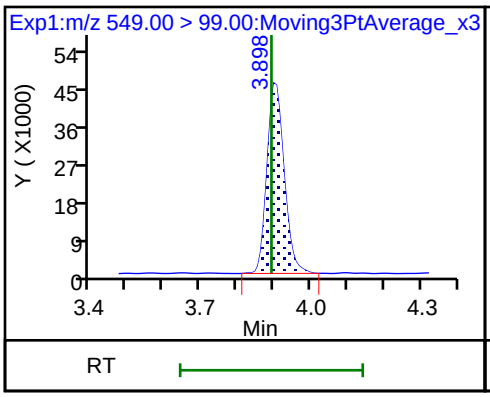
69 9-Chlorohexadecafluoro-3-oxanonane



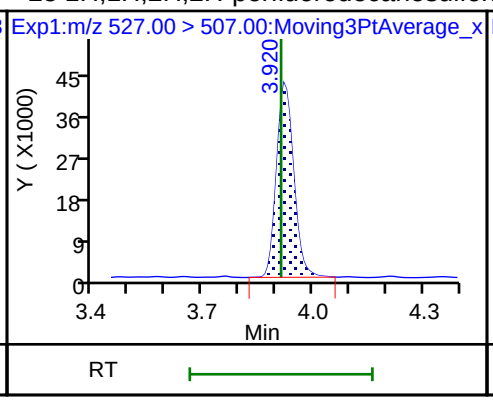
68 Perfluorononanesulfonic acid



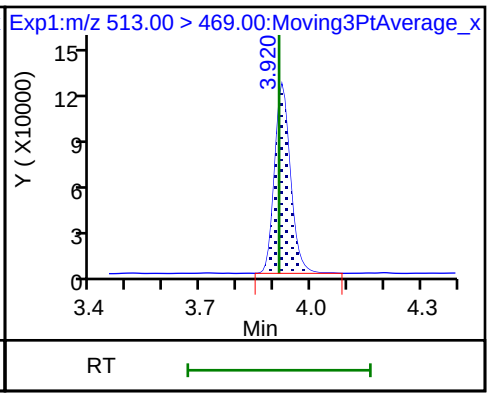
68 Perfluorononanesulfonic acid



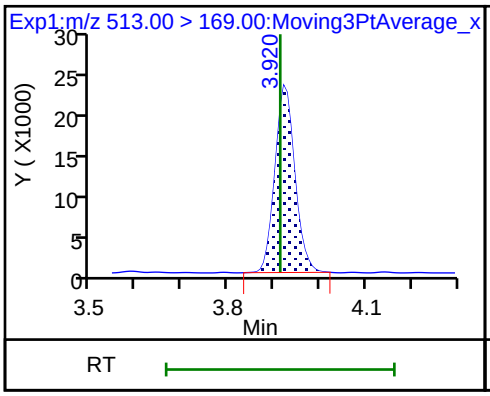
25 1H,1H,2H,2H-perfluorodecanesulfoni



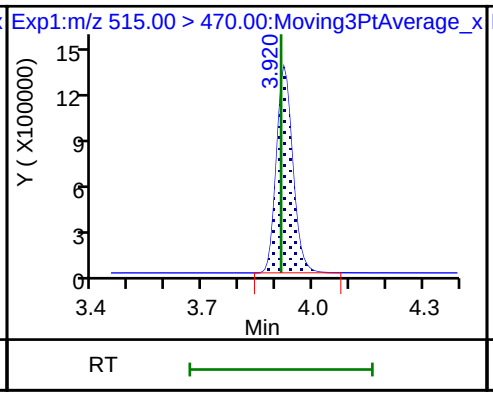
24 Perfluorodecanoic acid



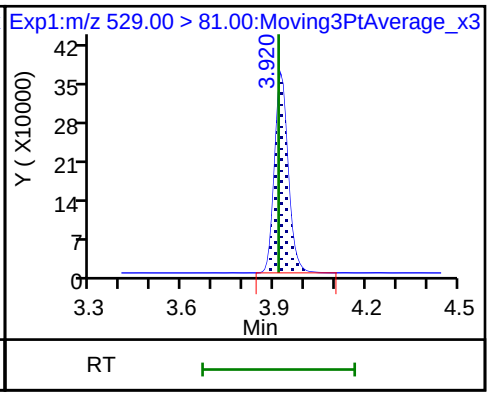
24 Perfluorodecanoic acid



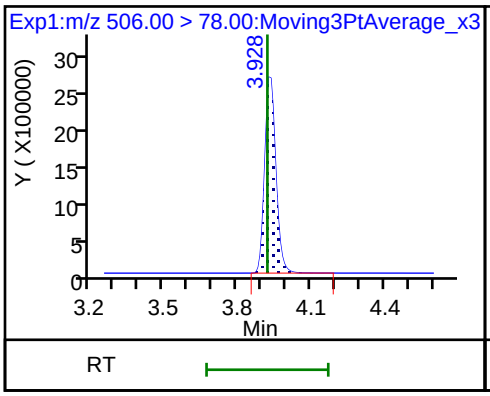
D 23 13C2 PFDA



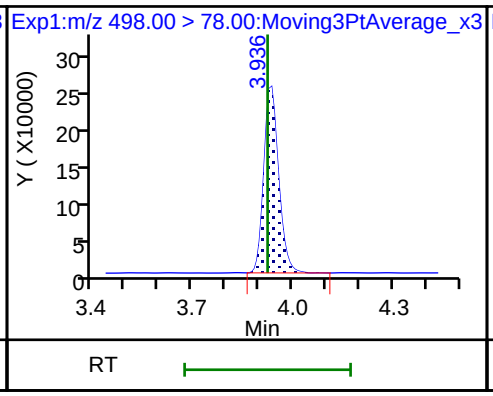
D 26 M2-8:2 FTS



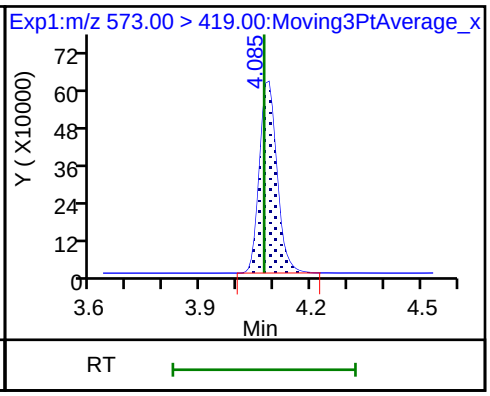
D 21 13C8 FOSA



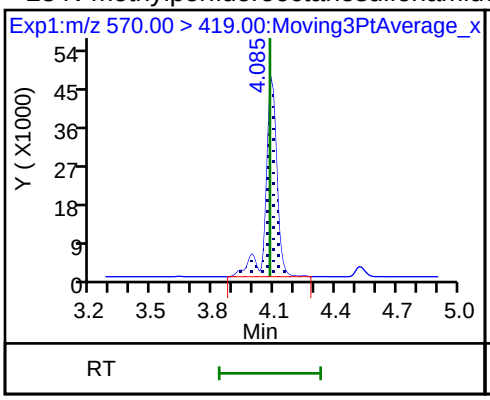
22 Perfluorooctanesulfonamide



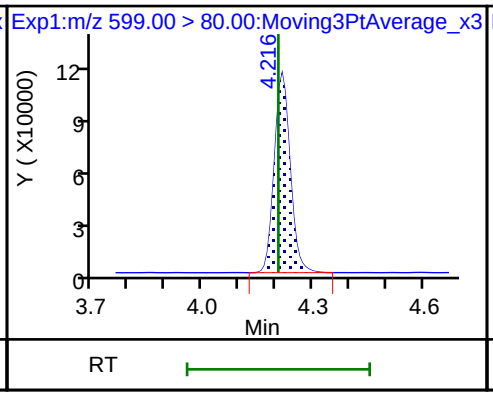
D 27 d3-NMeFOSAA



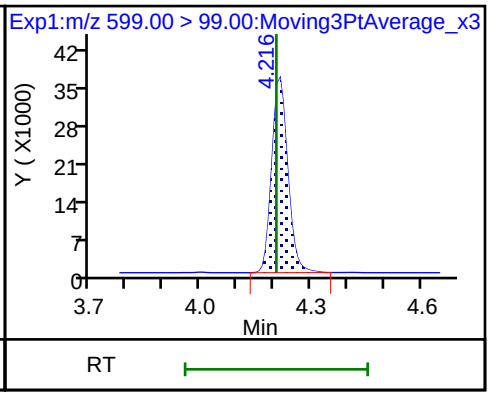
28 N-methylperfluorooctanesulfonamido



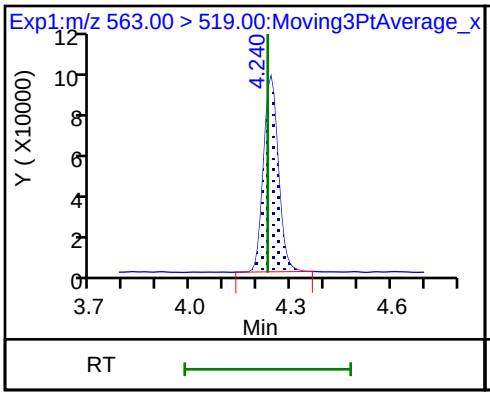
29 Perfluorodecanesulfonic acid



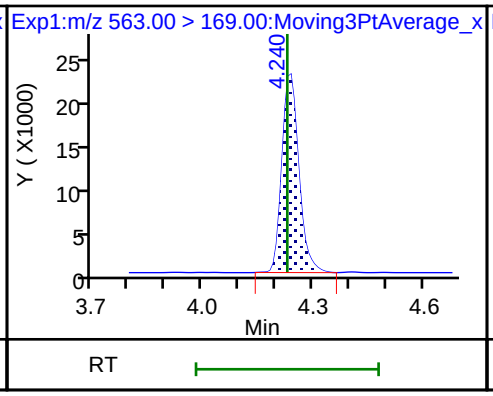
29 Perfluorodecanesulfonic acid



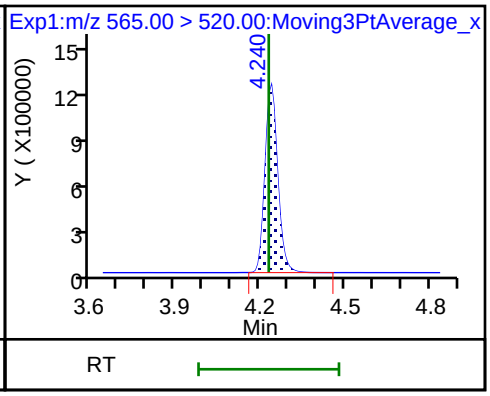
31 Perfluoroundecanoic acid



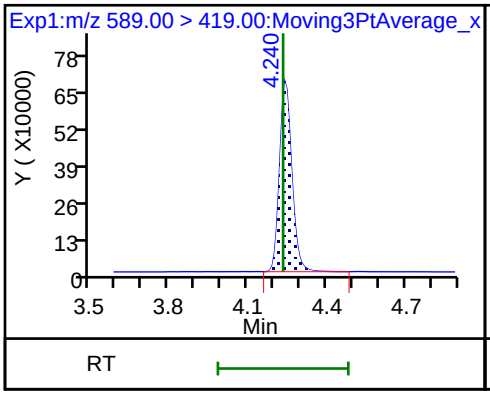
31 Perfluoroundecanoic acid



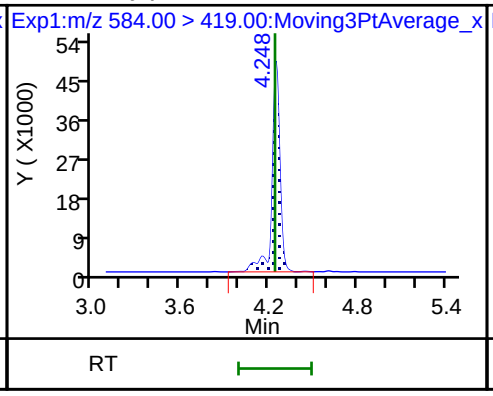
D 30 13C2 PFUnA



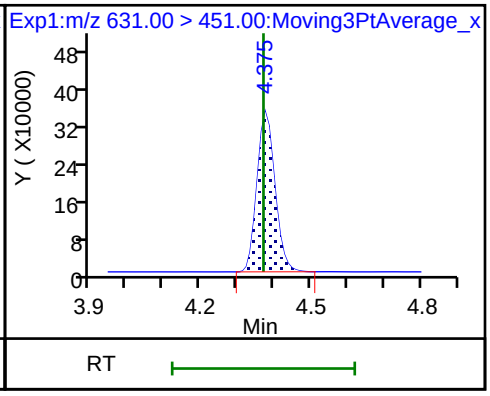
D 32 d5-NEtFOSAA



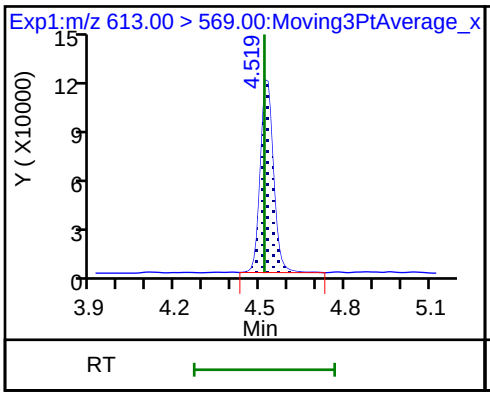
33 N-ethylperfluorooctanesulfonamidoa



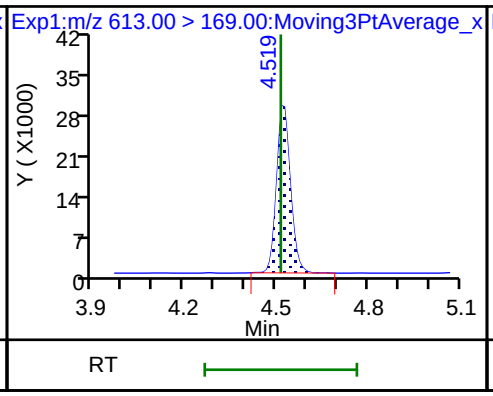
66 11-Chloroeicosafluoro-3-oxaundecan



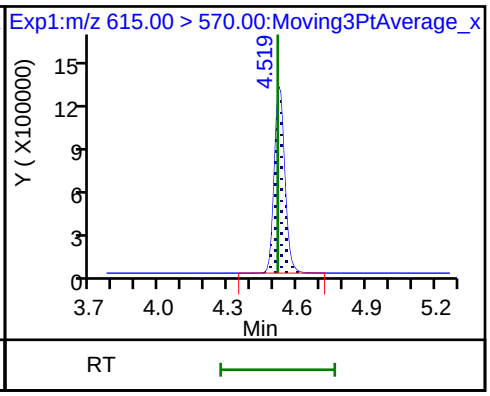
37 Perfluorododecanoic acid



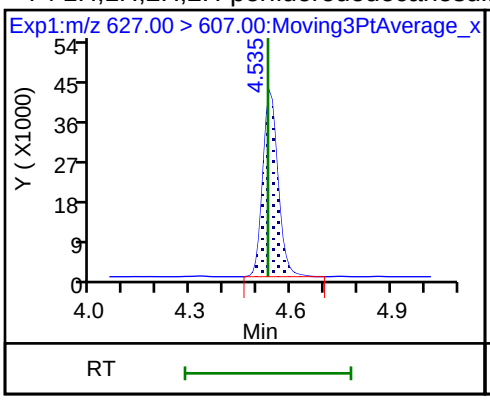
37 Perfluorododecanoic acid



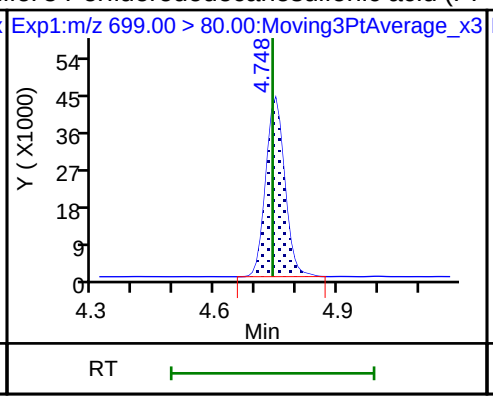
D 36 13C2 PFDoA



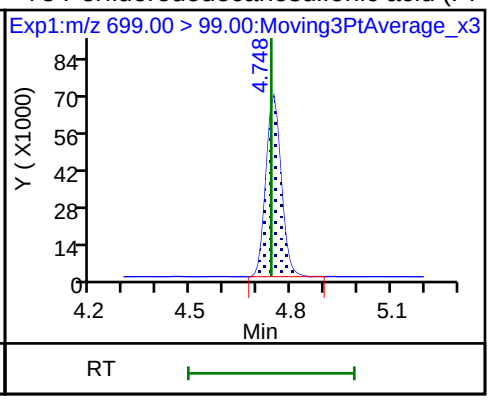
74 1H,1H,2H,2H-perfluorododecanesulfo



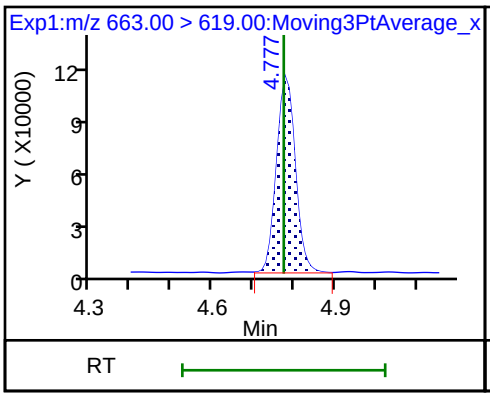
75 Perfluorododecanesulfonic acid (PF



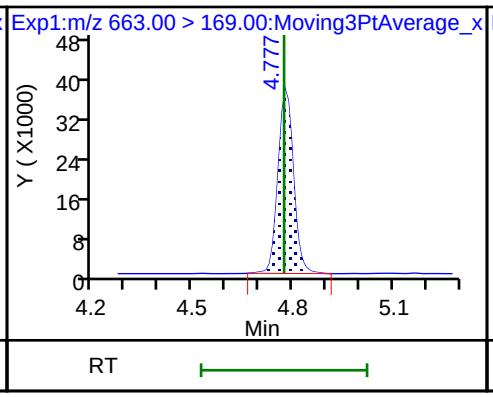
75 Perfluorododecanesulfonic acid (PF



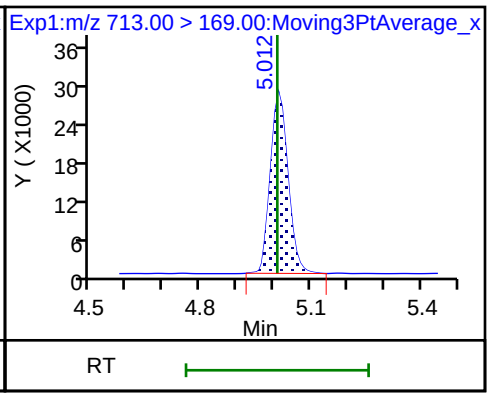
41 Perfluorotridecanoic acid



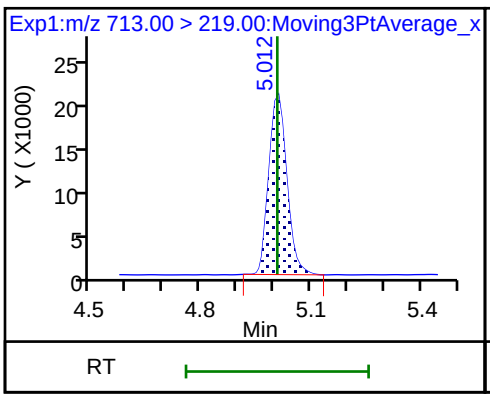
41 Perfluorotridecanoic acid



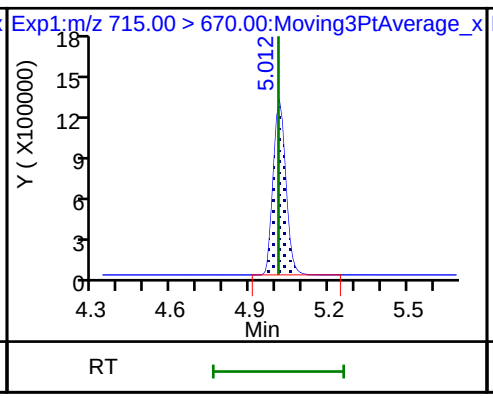
42 Perfluorotetradecanoic acid



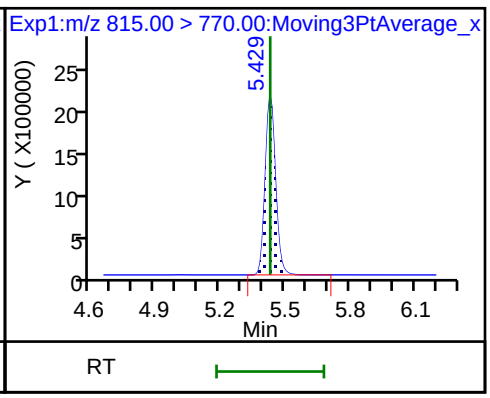
42 Perfluorotetradecanoic acid



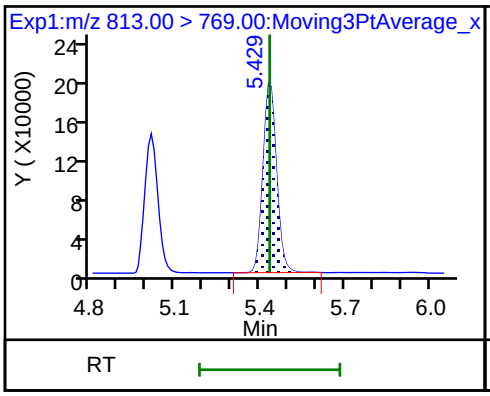
D 43 13C2 PFTeDA



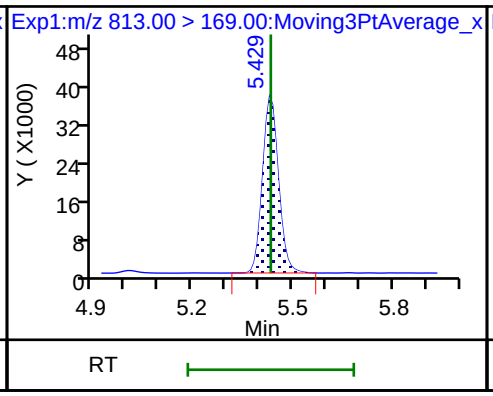
D 44 13C2 PFHxDA



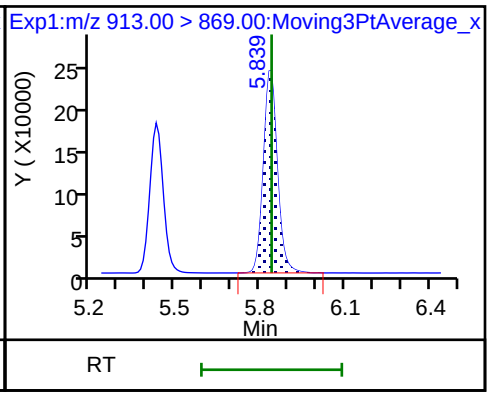
45 Perfluorohexadecanoic acid



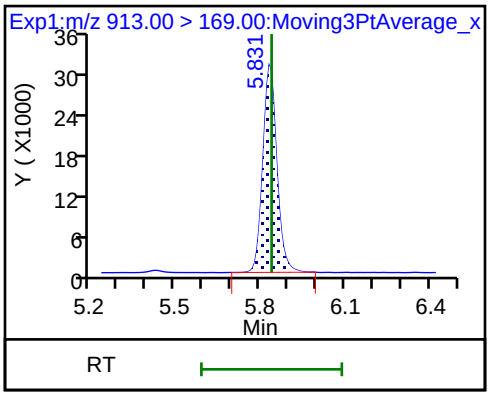
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

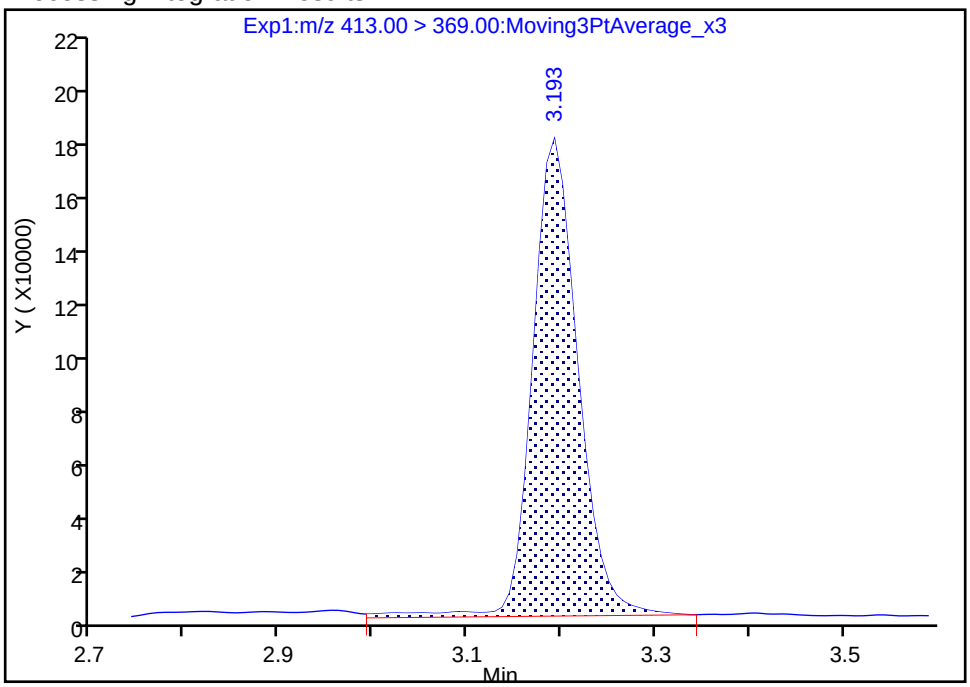
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_007.d
Injection Date: 09-Mar-2019 01:32:36 Instrument ID: A8_N
Lims ID: IC L3 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

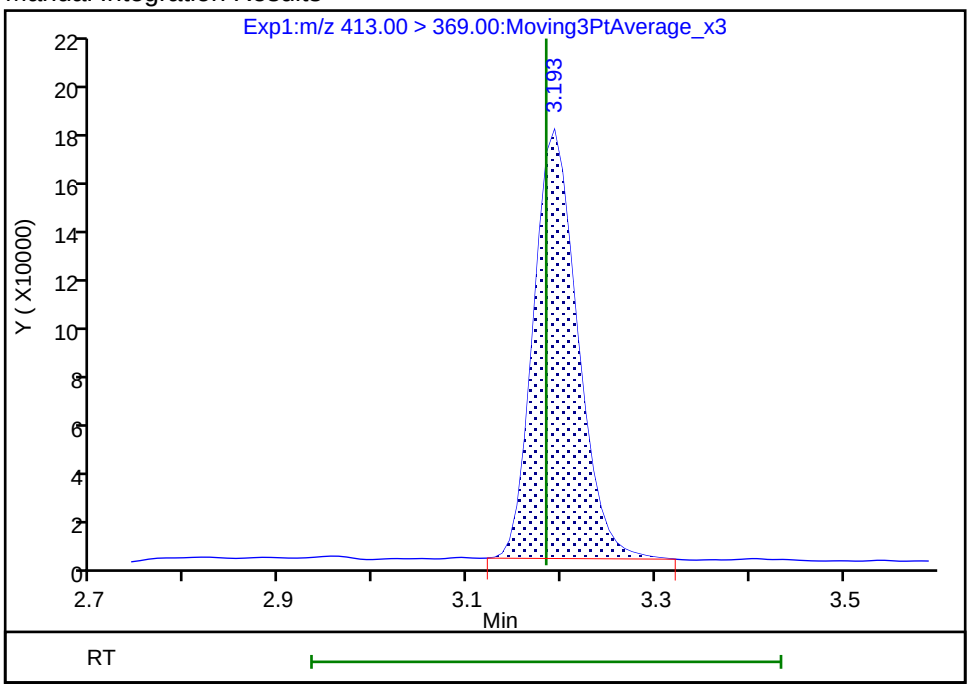
Processing Integration Results

RT: 3.19
Area: 599720
Amount: 0.254917
Amount Units: ng/ml



Manual Integration Results

RT: 3.19
Area: 574525
Amount: 0.245711
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:26:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

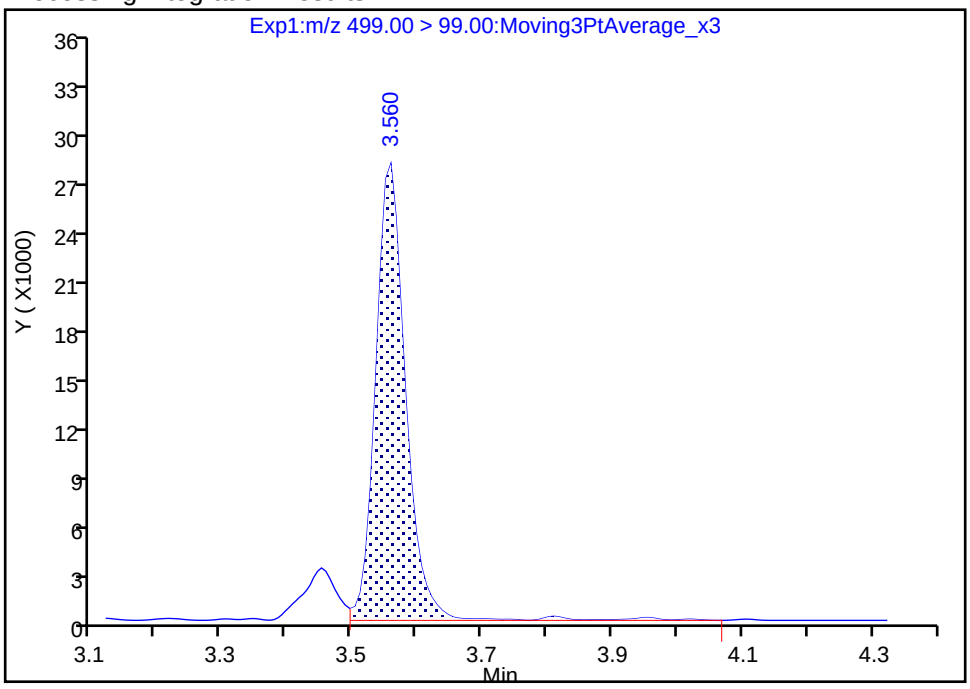
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_007.d
Injection Date: 09-Mar-2019 01:32:36 Instrument ID: A8_N
Lims ID: IC L3 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

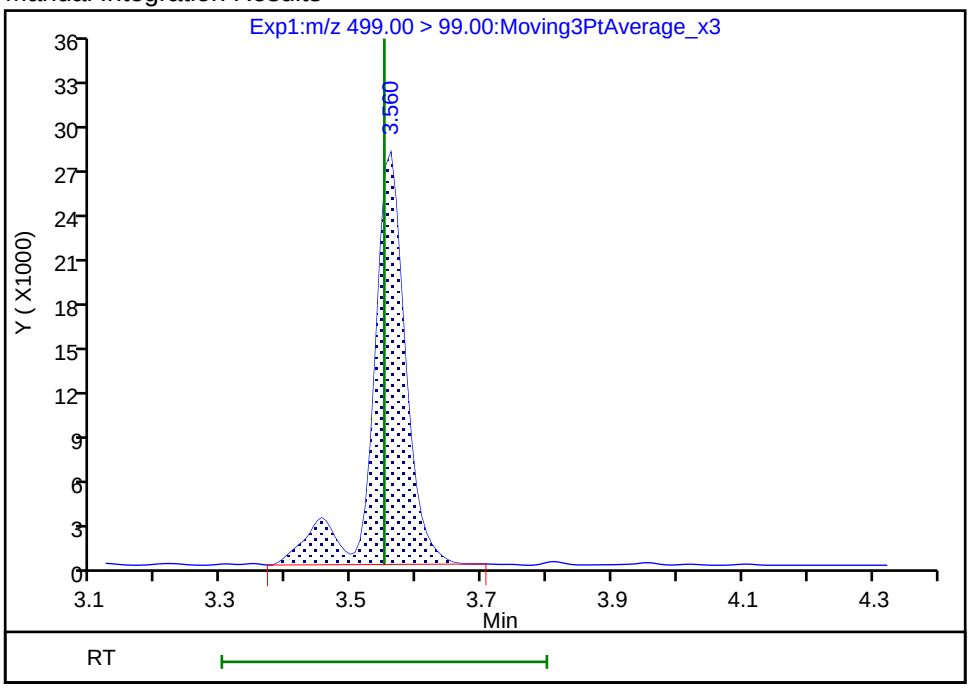
Processing Integration Results

RT: 3.56
Area: 88918
Amount: 0.219098
Amount Units: ng/ml



Manual Integration Results

RT: 3.56
Area: 97668
Amount: 0.219098
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:26:14
Audit Action: Manually Integrated Audit Reason: Isomers

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_008.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 09-Mar-2019 01:40:04 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 09-Mar-2019 07:57:07 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0306

First Level Reviewer: roycea Date: 09-Mar-2019 07:27:27
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.762	1.764	-0.002		8378309	2.51		100	7123	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.769	1.766	0.003	1.004	2817080	1.05		105	722	
D 3 13C5 PFPeA										
267.90 > 223.00	2.093	2.088	0.005		5833812	2.54		101	8539	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.093	2.091	0.002	1.000	2217606	0.9662		96.6	134	
D 47 13C3 PFBS										
301.90 > 80.00	2.125	2.120	0.005		8113175	2.32		99.9	583307	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.125	2.123	0.002	1.000	3137132	0.9597	Target=2.39	109	6050	
298.90 > 99.00	2.125	2.123	0.002	1.000	1267191		0.00(1.68-3.11)	109	3259	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.401	2.394	0.007	1.000	543062	0.9467		101	6080	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.401	2.394	0.007		655334	2.33		99.9	1862	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.431	2.432	-0.001	1.000	2216211	0.9732	Target=11.00	97.3	1216	
313.00 > 119.00	2.431	2.432	-0.001	1.000	201101		0.00(7.70-14.30)	97.3	930	
D 7 13C2 PFHxA										
315.00 > 270.00	2.431	2.432	-0.001		6012110	2.55		102	8146	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.451	2.446	0.005	1.153	2758990	1.02	Target=2.65	108	6145	
349.00 > 99.00	2.451	2.446	0.005	1.153	994058		0.00(1.85-3.44)	108	3987	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.540	2.541	-0.001	1.000	425724	1.00		99.9	642	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.540	2.541	-0.001		352120	2.60		104	1724	
D 9 13C4 PFHpA										
367.00 > 322.00	2.800	2.798	0.002		5403913	2.51		100	9859	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.800	2.800	0.0	1.000	2182849	1.02	Target=2.52	102	947	
363.00 > 169.00	2.800	2.800	0.0	1.000	849494		0.00(1.76-3.27)	102	2717	
D 11 18O2 PFHxS										
403.00 > 84.00	2.809	2.806	0.003		5830118	2.38		101	9226	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.809	2.807	0.002	1.000	2201521	0.8933	Target=2.82	98.2	3405	
399.00 > 99.00	2.809	2.807	0.002	1.000	742645		0.00(1.97-3.66)	98.2	1529	
77 DONA										
377.00 > 251.00	2.847	2.844	0.003	0.803	6324979	1.03	Target=1.65	109	11361	
377.00 > 85.00	2.847	2.844	0.003	0.803	3652295		0.00(1.16-2.15)	109	4166	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.162	3.162	0.0		903668	2.44		103	5151	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.162	3.163	-0.001	1.000	518971	0.9614		101	2718	
D 73 13C8 PFOA										
421.00 > 376.00	3.178	3.177	0.001		6854916	2.44		99.5	10334	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.178	3.179	-0.001	0.896	2083044	0.9842	Target=3.74	103	3772	
449.00 > 99.00	3.178	3.179	-0.001	0.896	540441		0.00(2.61-4.86)	103	2036	
* 62 13C2 PFOA										
415.00 > 370.00	3.186	3.181	0.005		5802087	2.50			9709	
D 14 13C4 PFOA										
417.00 > 372.00	3.186	3.181	0.005		5283972	2.56		103	11507	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.186	3.184	0.002	1.000	2150474	0.9595	Target=1.00	96.0	277	
413.00 > 169.00	3.186	3.184	0.002	1.000	1154143		1.86(0.70-1.30)	96.0	1776	
D 72 13C8 PFOS										
507.00 > 99.00	3.545	3.545	-0.001		2354772	2.42		101	5445	
D 18 13C4 PFOS										
503.00 > 80.00	3.545	3.549	-0.005		4575729	2.40		101	5800	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.545	3.550	-0.006	1.000	2290537	1.16	Target=1.00	125	4721	
499.00 > 99.00	3.545	3.550	-0.006	1.000	486761		4.71(0.70-1.30)	125	1458	
20 Perfluorononanoic acid										
463.00 > 419.00	3.560	3.561	-0.001	1.000	1605728	0.99	Target=4.13	99.4	590	
463.00 > 169.00	3.560	3.561	-0.001	1.000	388355		0.00(2.89-5.37)	99.4	3148	
D 19 13C5 PFNA										
468.00 > 423.00	3.560	3.561	-0.001		4252938	2.55		102	7446	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.747	3.750	-0.003	1.057	2998201	0.9573		103	4273	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.892	3.892	0.0	1.098	1607045	1.01	Target=2.93	105	5098	
549.00 > 99.00	3.892	3.892	0.0	1.098	521725		0.00(2.05-3.81)	105	1669	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.914	3.913	0.001	1.000	495885	0.9355		97.7	1150	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.906	3.913	-0.007	1.000	1439395	1.03	Target=5.34	103	1743	
513.00 > 169.00	3.906	3.913	-0.007	1.000	270003		0.00(3.74-6.94)	103	1516	
D 23 13C2 PFDA										
515.00 > 470.00	3.906	3.913	-0.007		3800643	2.49		99.5	6489	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.914	3.914	0.0		1106510	2.49		104	3519	
D 21 13C8 FOSA										
506.00 > 78.00	3.921	3.921	0.0		8226972	2.58		103	7300	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.921	3.923	-0.002	1.000	3063360	1.06		106	2336	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.070	4.072	-0.002		2003493	2.53		101	5243	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.078	4.078	-0.001	1.002	640225	0.9236		92.4	281	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.201	4.205	-0.004	1.185	1258093	0.9342	Target=3.26	96.9	4350	
599.00 > 99.00	4.209	4.205	0.004	1.188	405716		0.00(2.28-4.23)	96.9	2605	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.226	4.230	-0.004	1.000	1065071	0.9413	Target=4.09	94.1	883	
563.00 > 169.00	4.226	4.230	-0.004	1.000	274220		0.00(2.86-5.32)	94.1	1804	
D 30 13C2 PFUnA										
565.00 > 520.00	4.226	4.230	-0.004		3540791	2.56		102	7512	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.234	4.233	0.001		2101982	2.48		99.4	913	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.234	4.240	-0.006	1.000	669968	1.00		100.0	4182	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.368	4.370	-0.002	1.232	4564179	1.00		106	9883	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.513	4.514	-0.001	1.000	1397343	1.02	Target=4.03	102	912	
613.00 > 169.00	4.513	4.514	-0.001	1.000	343517		0.00(2.82-5.24)	102	3131	
D 36 13C2 PFDoA										
615.00 > 570.00	4.513	4.514	-0.001		3638418	2.44		97.6	5887	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.530	4.531	-0.001	1.157	509076	0.9633		99.9	2735	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.742	4.741	0.001	1.338	496364	0.9592	Target=0.63	99.1	3362	
699.00 > 99.00	4.742	4.741	0.001	1.338	764711		0.00(0.44-0.82)	99.1	5340	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.770	4.773	-0.003	1.057	1433852	1.04	Target=3.11	104	500	
663.00 > 169.00	4.770	4.773	-0.003	1.057	478898		0.00(2.18-4.05)	104	2767	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.007	5.008	-0.001	1.000	373929	0.9539	Target=1.37	95.4	3710	
713.00 > 219.00	5.007	5.008	-0.001	1.000	260176		0.00(0.96-1.79)	95.4	1373	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.007	5.008	-0.001		4092623	2.59		104	8012	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.433	5.430	0.003		6672593	2.58		103	5654	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.433	5.433	0.0	1.000	2343644	1.01	Target=5.26	101	84.1	
813.00 > 169.00	5.433	5.433	0.0	1.000	434764		0.00(3.69-6.84)	101	2200	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.841	5.840	0.001	1.075	3235957	1.02	Target=7.43	102	133	
913.00 > 169.00	5.841	5.840	0.001	1.075	420776		0.00(5.20-9.66)	102	2150	

Reagents:

LCPFC_LL4_00011 Amount Added: 1.00 Units: mL

Report Date: 09-Mar-2019 07:57:09 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_008.d

Injection Date: 09-Mar-2019 01:40:04 Instrument ID: A8_N

Lims ID: IC L4 Full

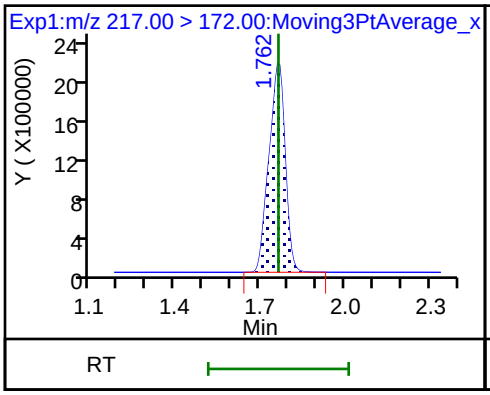
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 5

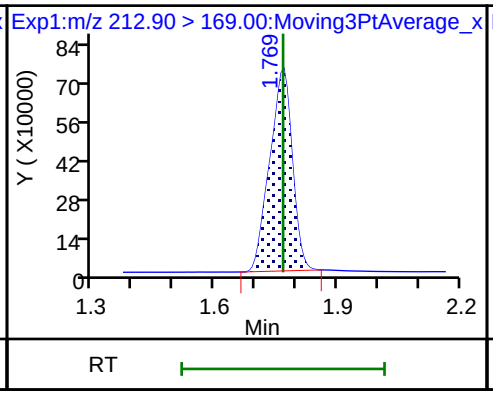
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

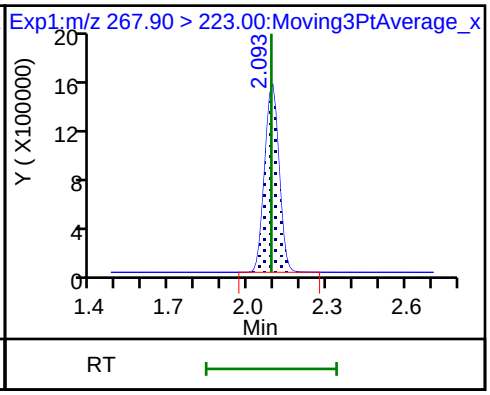
D 1 13C4 PFBA



2 Perfluorobutanoic acid



D 3 13C5 PFPeA



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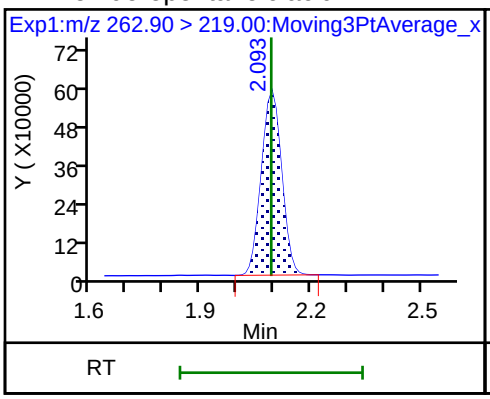
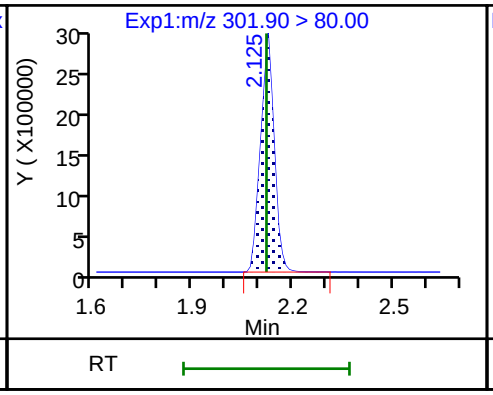


D 47 13C3 PFBS



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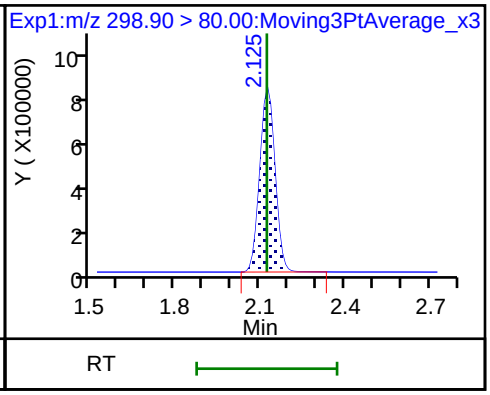

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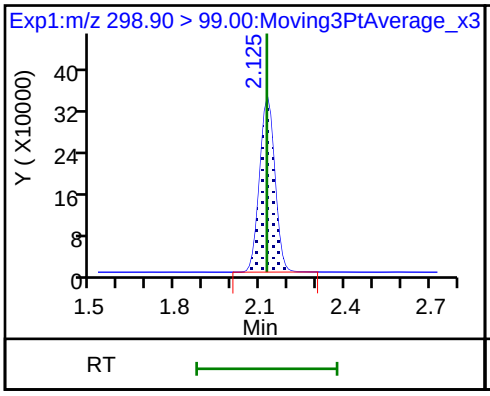
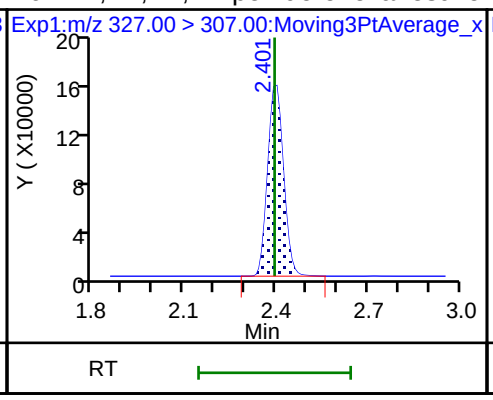
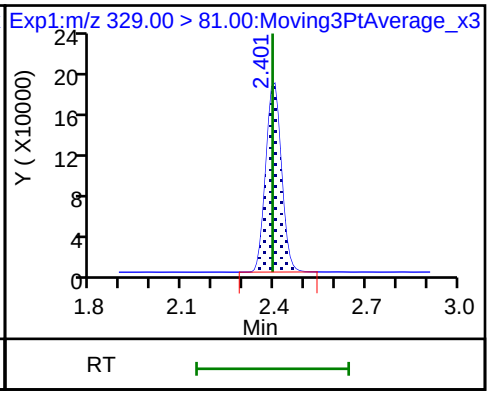


61 1H,1H,2H,2H-perfluorohexanesulfon



D 60 M2-4:2 FTS



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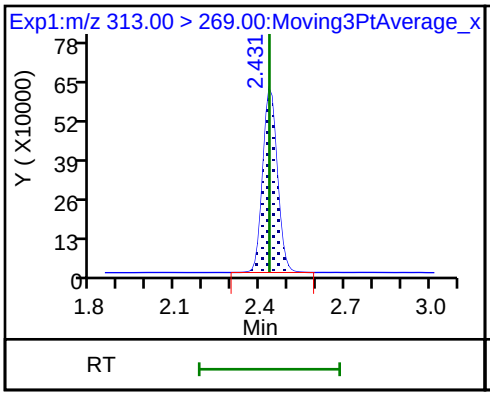

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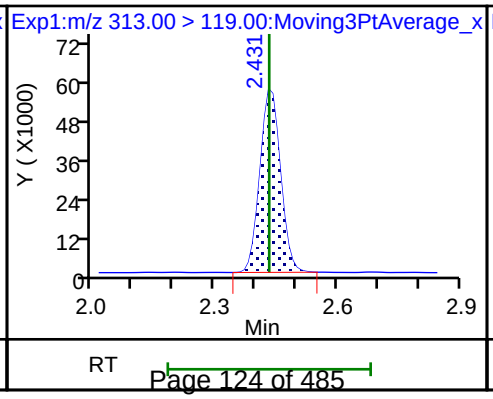
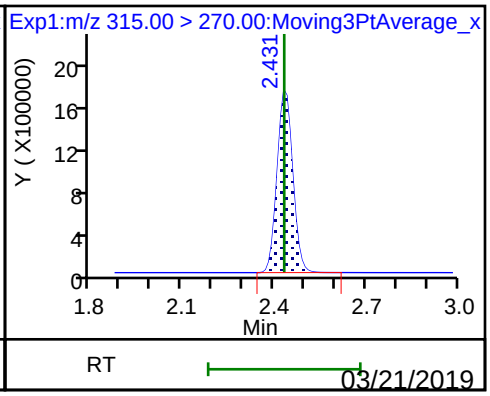
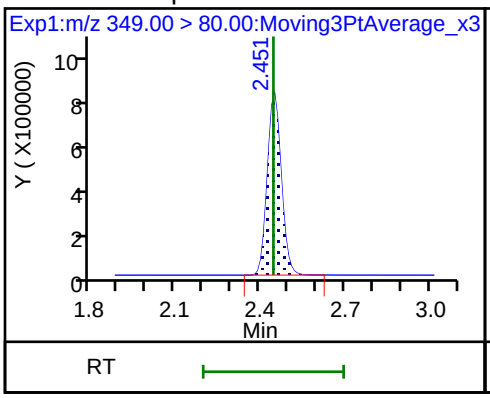


D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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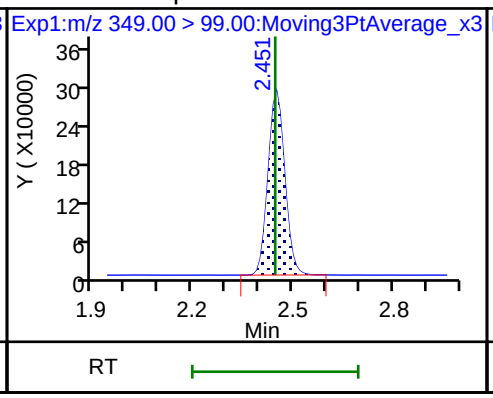
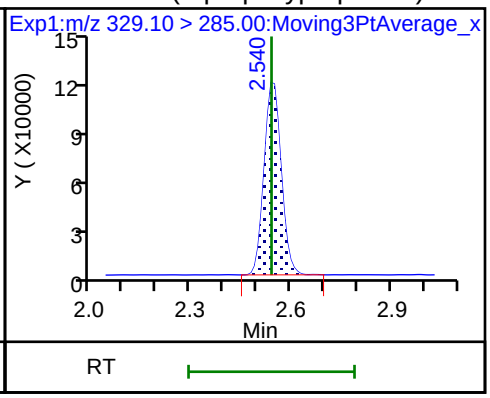
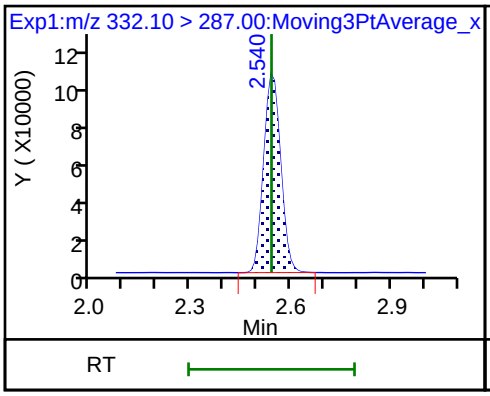


67 Perfluoro(2-propoxypropanoic) acid



D 64 13C3 HFPO-DA



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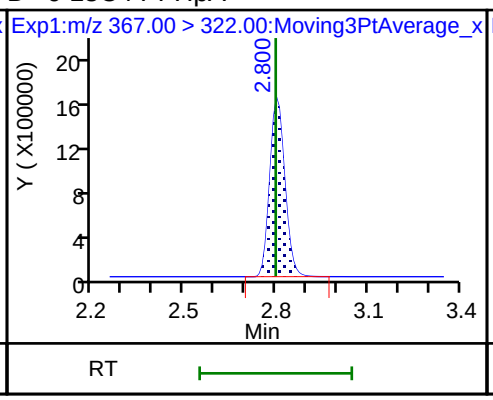
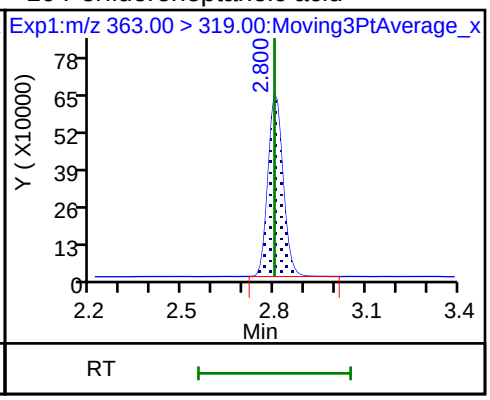


10 Perfluoroheptanoic acid



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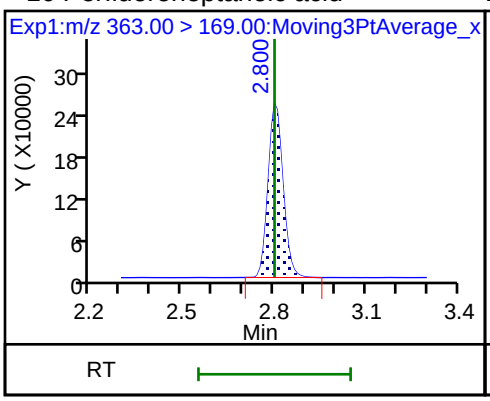
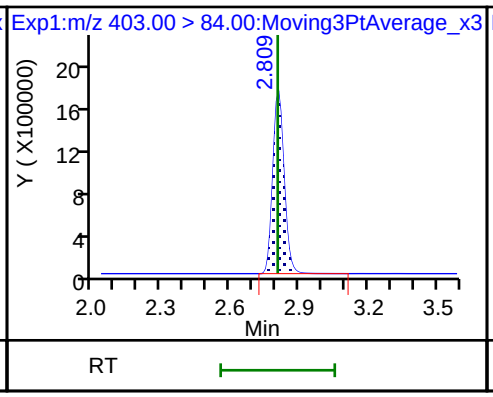


D 11 18O2 PFHxS



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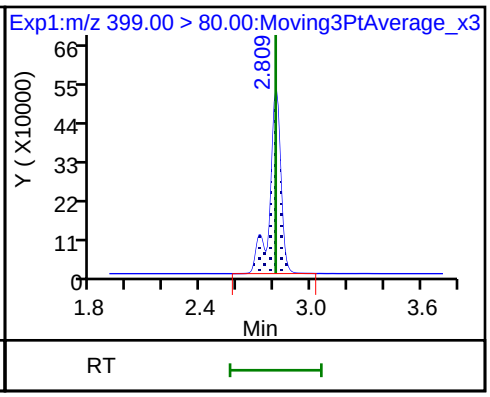

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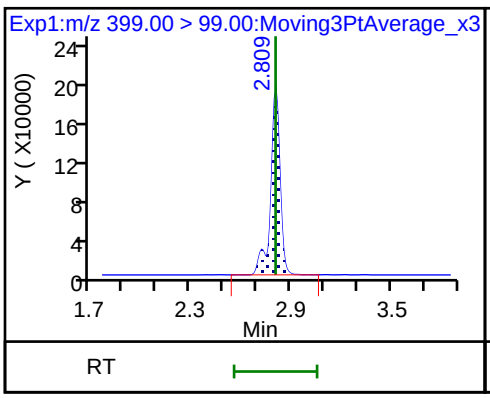
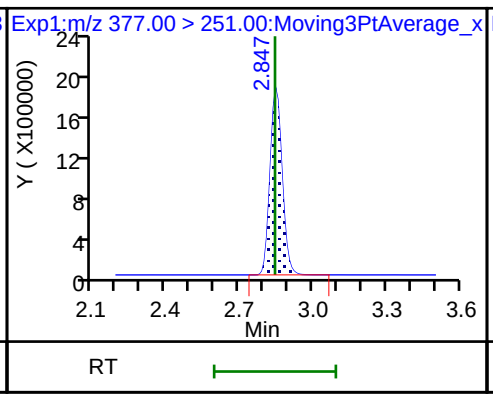
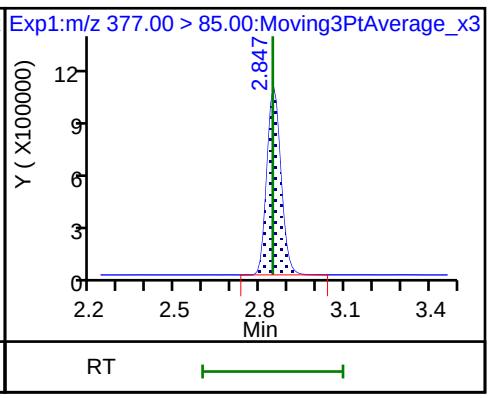


77 DONA



77 DONA



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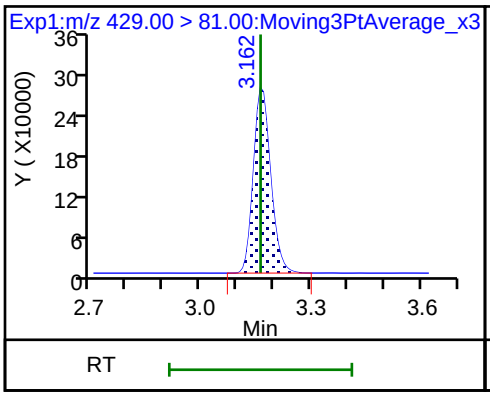
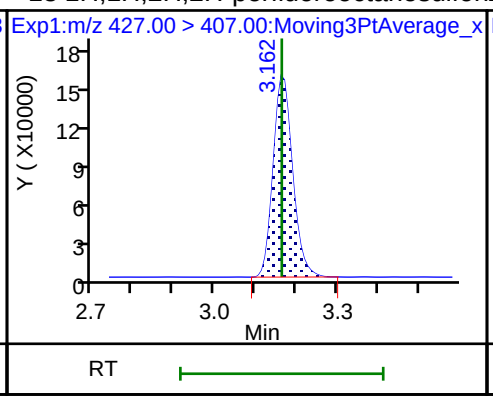
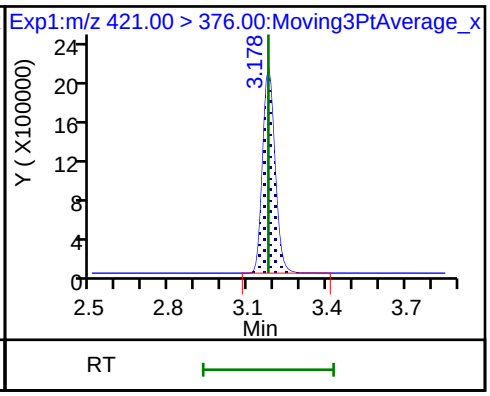


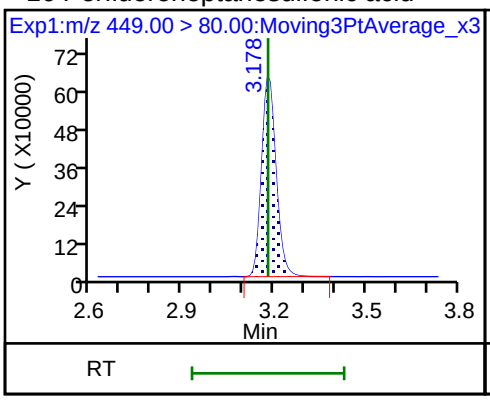
13 1H,1H,2H,2H-perfluorooctanesulfon



D 73 13C8 PFOA



16 Perfluoroheptanesulfonic acid



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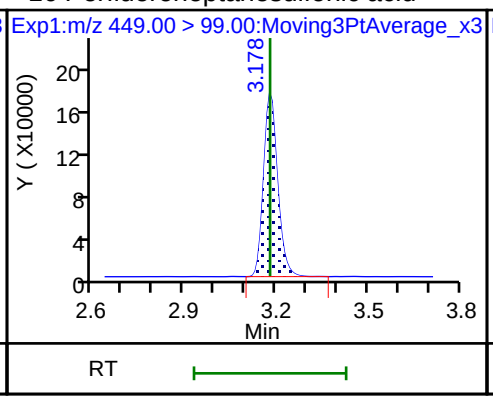
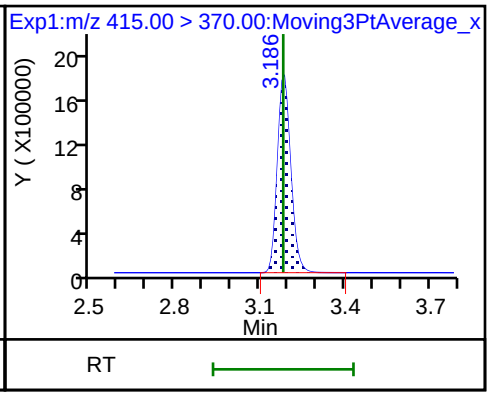
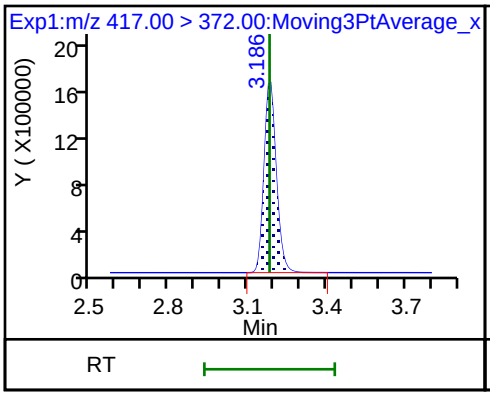


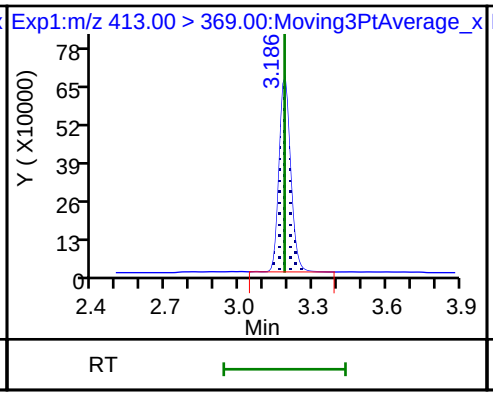
* 62 13C2 PFOA



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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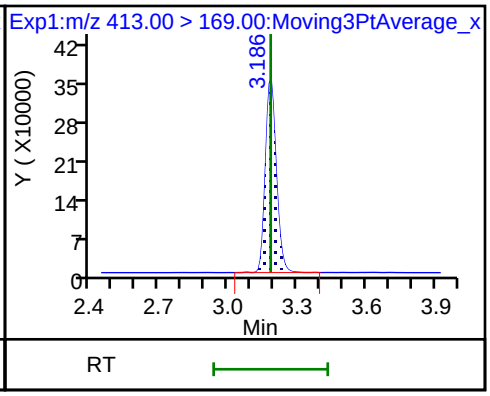
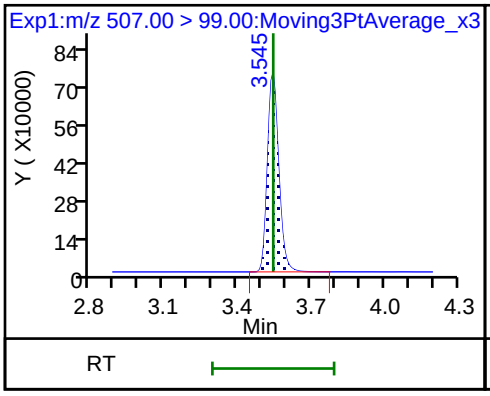


D 72 13C8 PFOS



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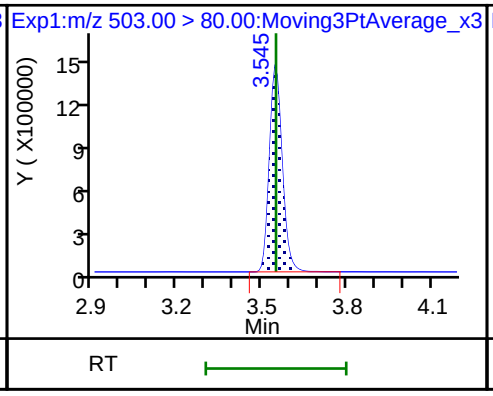

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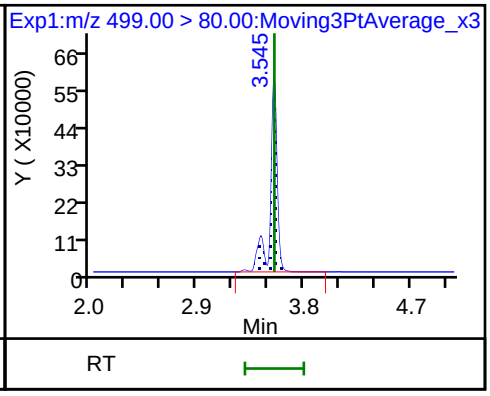

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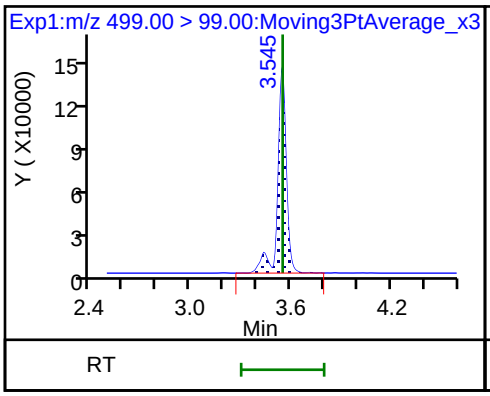
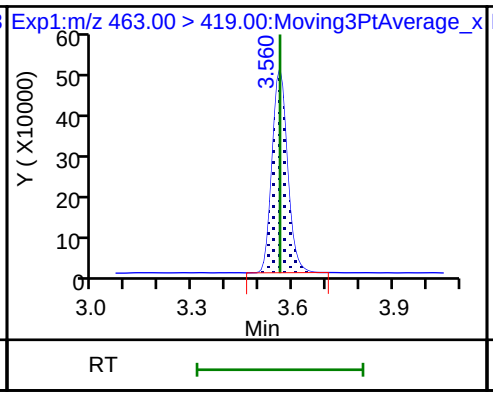


20 Perfluorononanoic acid



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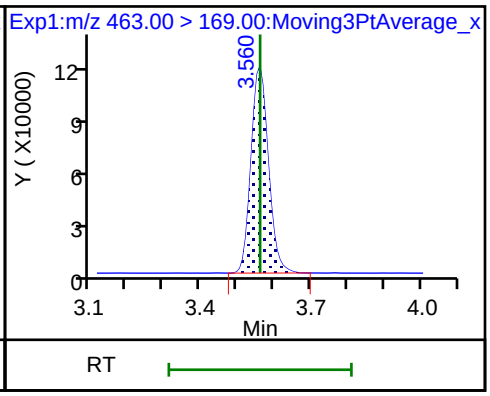
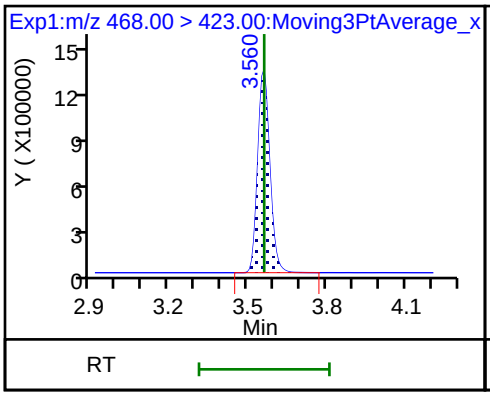
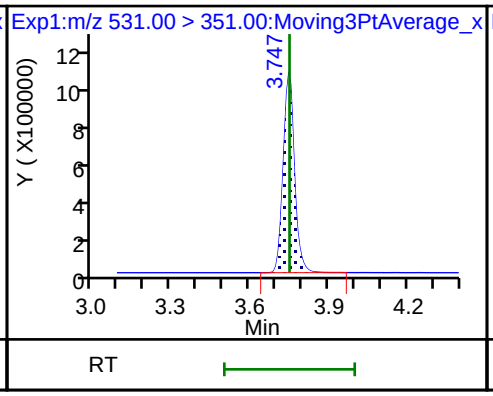


D 19 13C5 PFNA



69 9-Chlorohexadecafluoro-3-oxanonane



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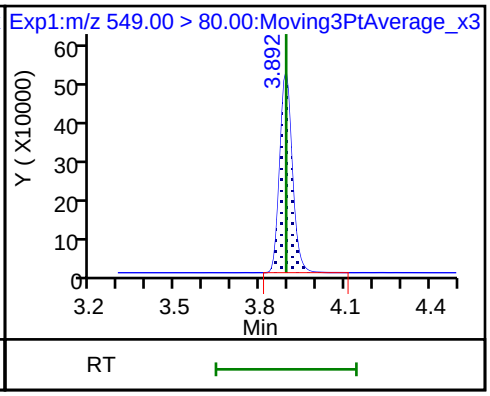

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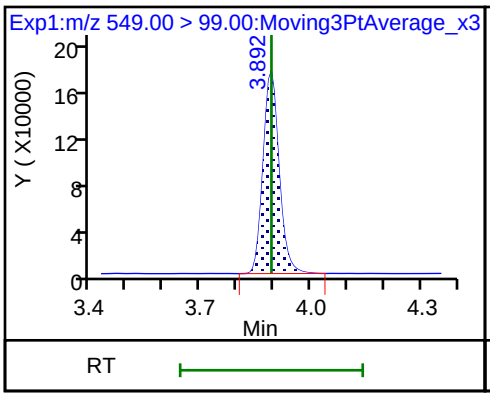
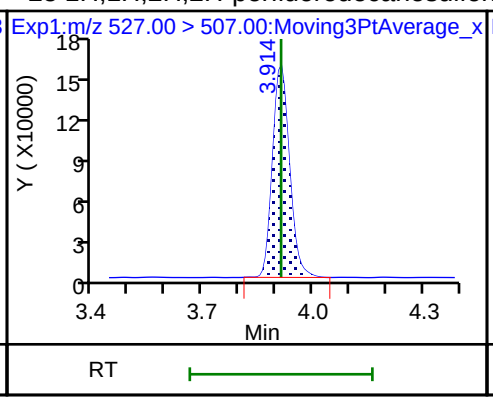
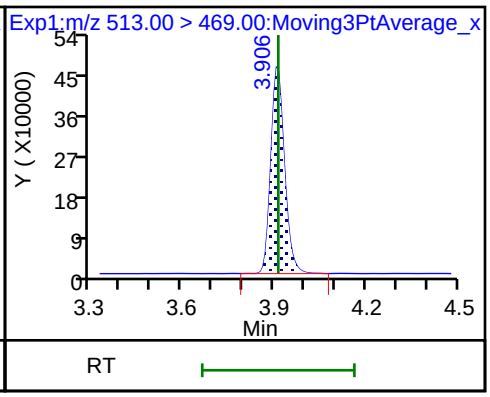


25 1H,1H,2H,2H-perfluorodecanesulfoni



24 Perfluorodecanoic acid



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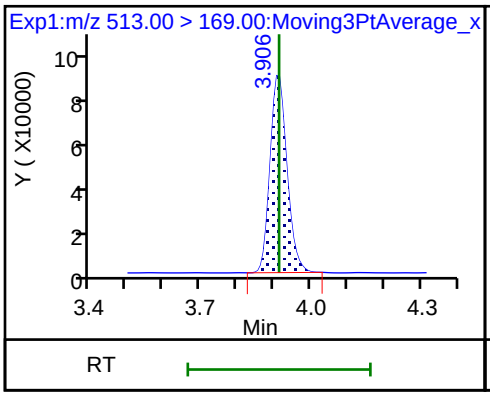
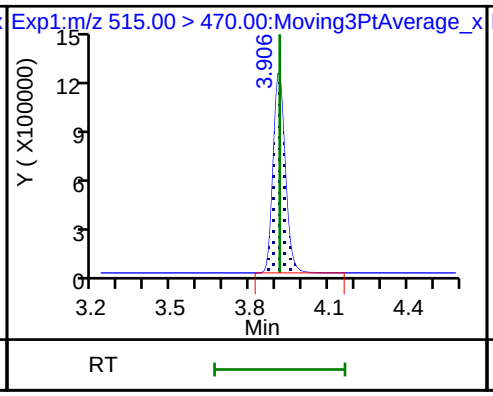
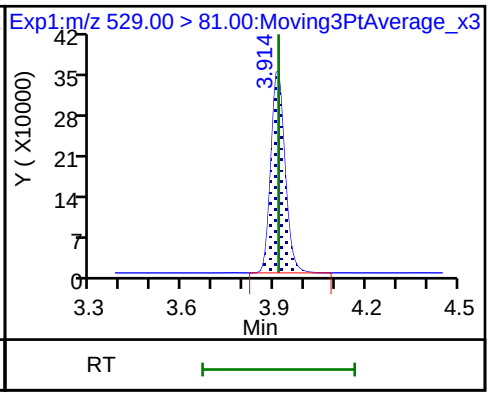


D 23 13C2 PFDA



D 26 M2-8:2 FTS



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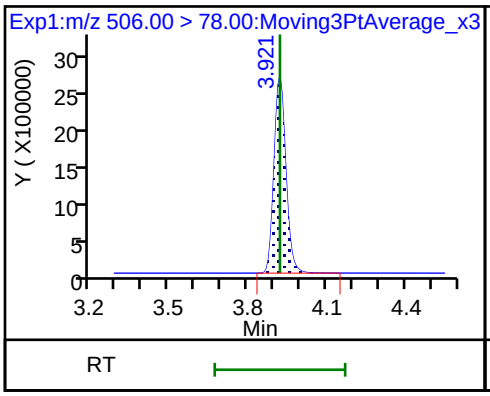
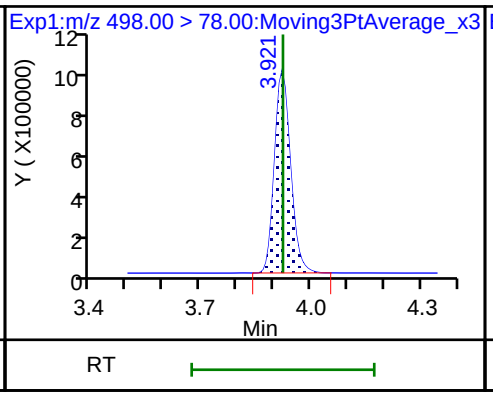
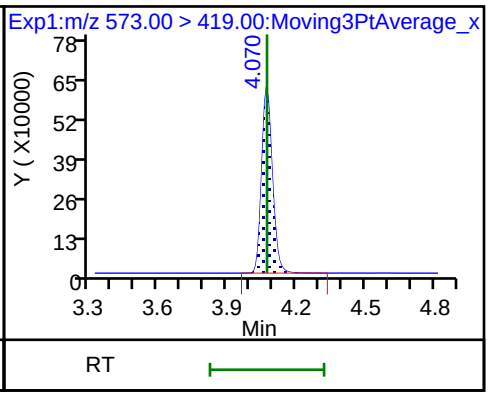


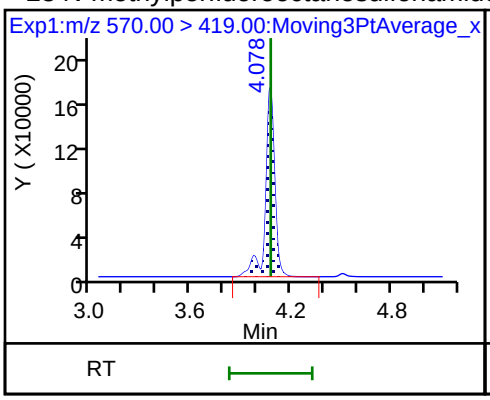
22 Perfluorooctanesulfonamide



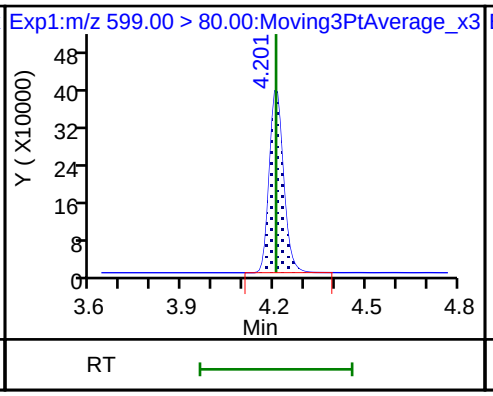
D 27 d3-NMeFOSAA



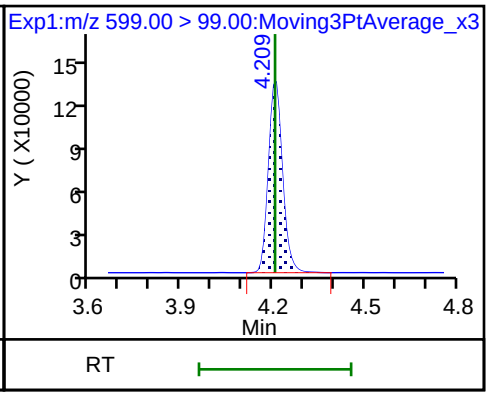
28 N-methylperfluorooctanesulfonamido



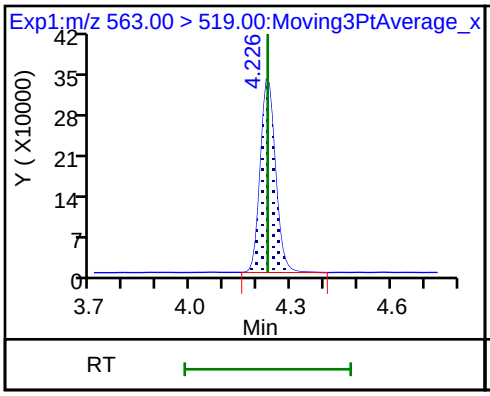
29 Perfluorodecanesulfonic acid



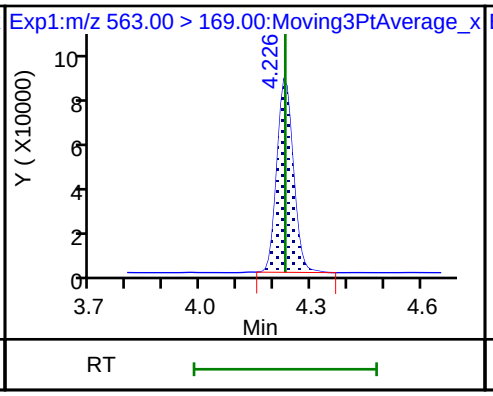
29 Perfluorodecanesulfonic acid



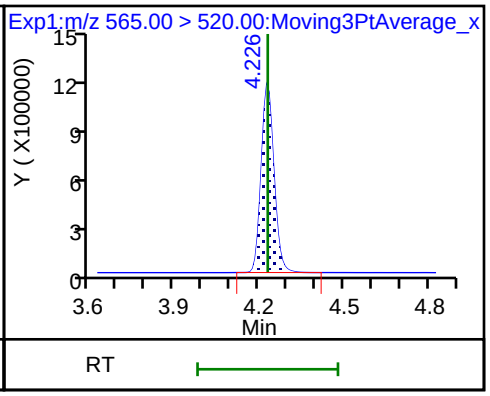
31 Perfluoroundecanoic acid



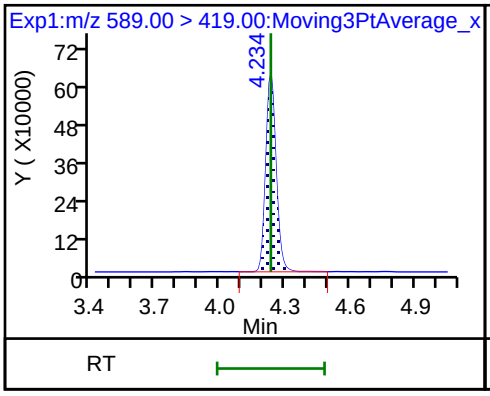
31 Perfluoroundecanoic acid



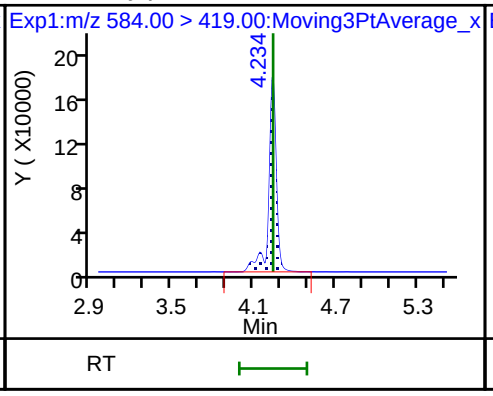
D 30 13C2 PFUnA



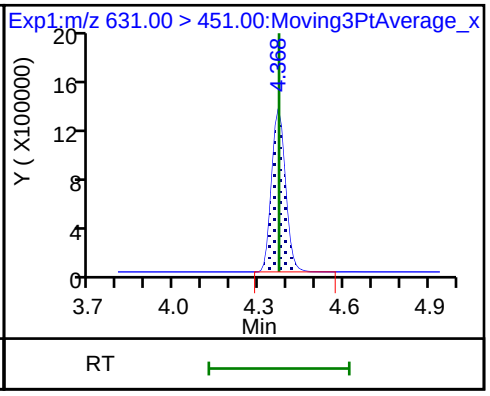
D 32 d5-NEtFOSAA



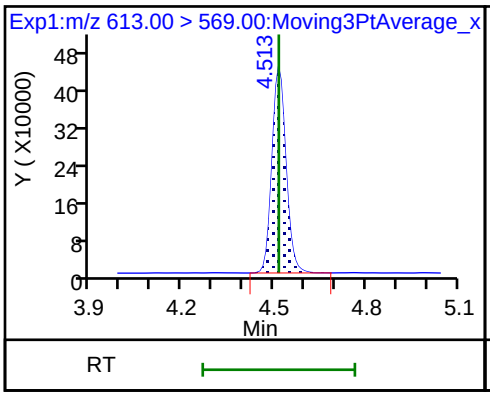
33 N-ethylperfluorooctanesulfonamidoa



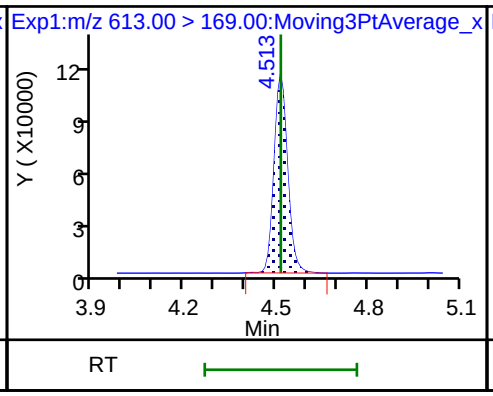
66 11-Chloroeicosafluoro-3-oxaundecan



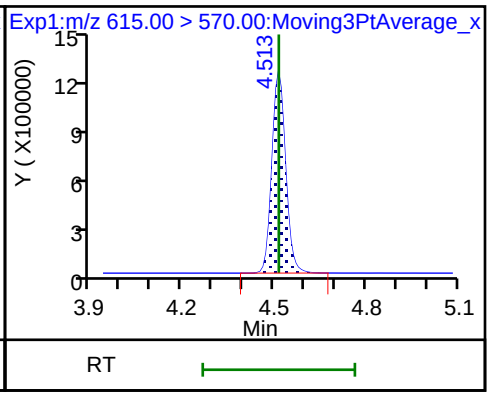
37 Perfluorododecanoic acid



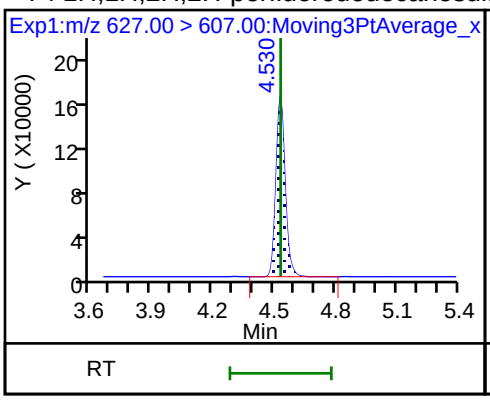
37 Perfluorododecanoic acid



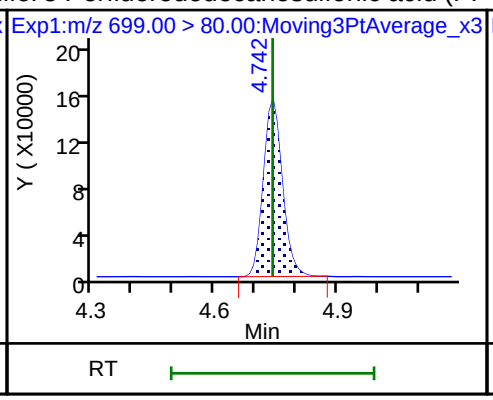
D 36 13C2 PFDoA



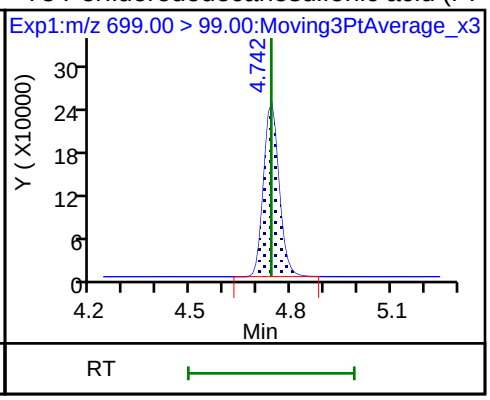
74 1H,1H,2H,2H-perfluorododecanesulfo



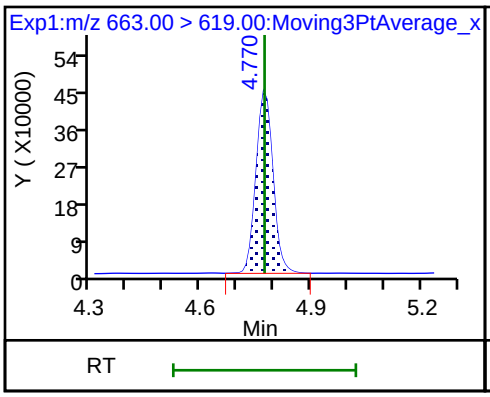
75 Perfluorododecanesulfonic acid (PF



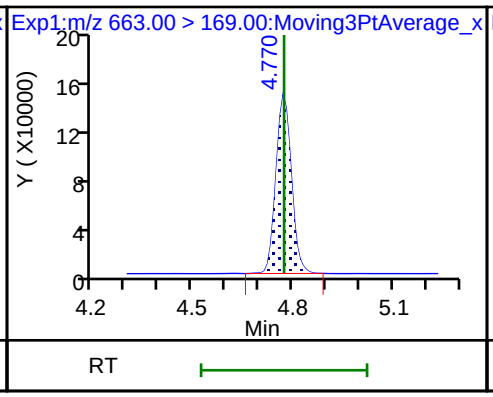
75 Perfluorododecanesulfonic acid (PF



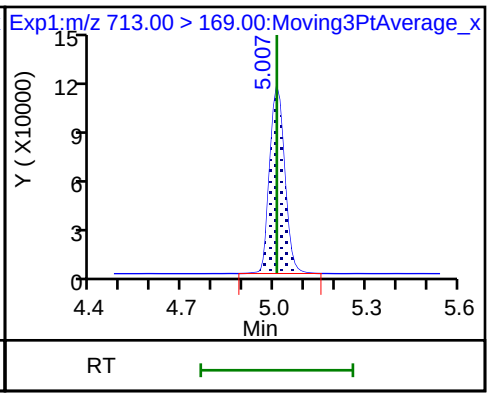
41 Perfluorotridecanoic acid



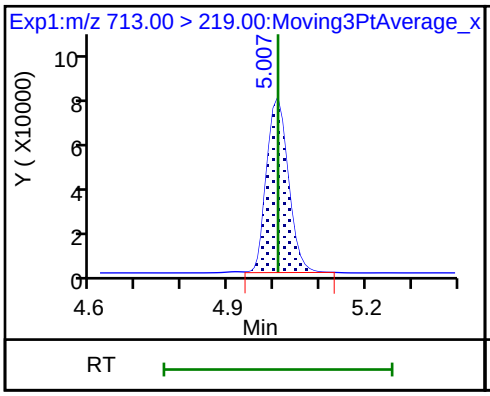
41 Perfluorotridecanoic acid



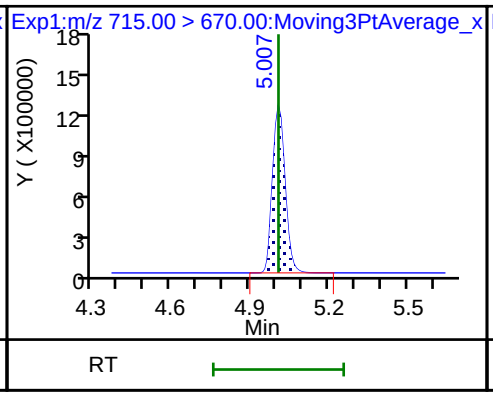
42 Perfluorotetradecanoic acid



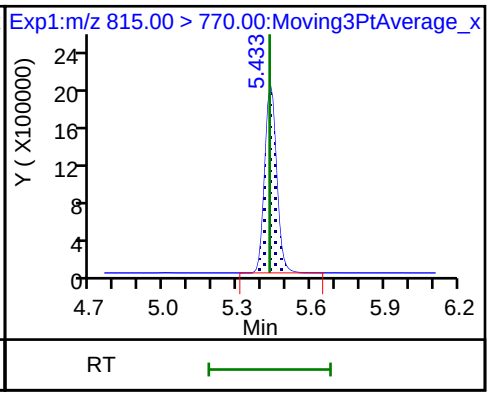
42 Perfluorotetradecanoic acid



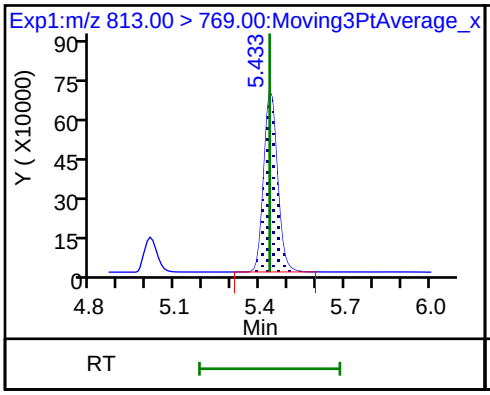
D 43 13C2 PFTeDA



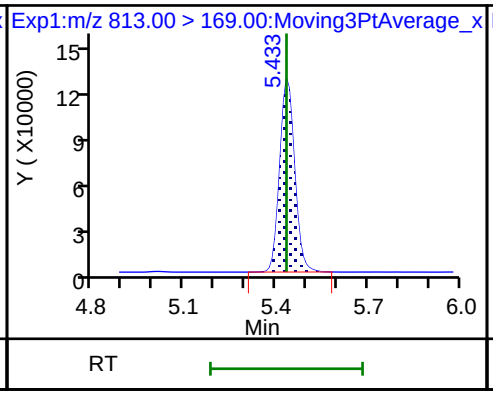
D 44 13C2 PFHxDA



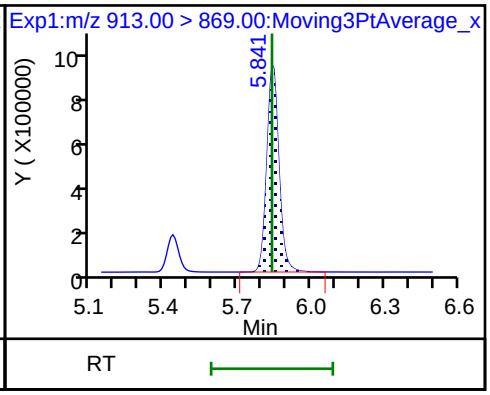
45 Perfluorohexadecanoic acid



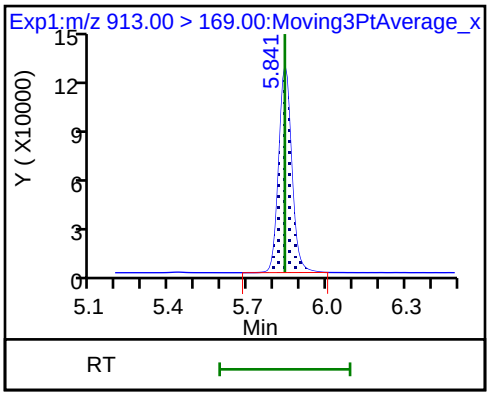
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_009.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 09-Mar-2019 01:47:35 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 09-Mar-2019 07:56:39 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0306

First Level Reviewer: roycea Date: 09-Mar-2019 07:56:39
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.769	1.764	0.005		8184162	2.57		103	6909	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.769	1.766	0.003	1.000	6984397	2.67		107	1903	
D 3 13C5 PFPeA										
267.90 > 223.00	2.094	2.088	0.006		5632376	2.57		103	8923	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.094	2.091	0.003	1.000	5659454	2.55		102	358	
D 47 13C3 PFBS										
301.90 > 80.00	2.125	2.120	0.005		7961244	2.39		103	678227	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.125	2.123	0.002	1.000	7349925	2.29	Target=2.39	104	9944	
298.90 > 99.00	2.125	2.123	0.002	1.000	3003385		0.00(1.68-3.11)	104	6392	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.401	2.394	0.007		640396	2.39		102	1628	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.401	2.394	0.007	1.000	1314151	2.34		100	8281	
D 7 13C2 PFHxA										
315.00 > 270.00	2.441	2.432	0.009		5738776	2.55		102	9212	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.441	2.432	0.009	1.000	5332643	2.45	Target=11.00	98.1	2806	
313.00 > 119.00	2.441	2.432	0.009	1.000	472471		0.00(7.70-14.30)	98.1	1916	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.451	2.446	0.005	1.153	6599462	2.48	Target=2.65	106	8776	
349.00 > 99.00	2.451	2.446	0.005	1.153	2406275		0.00(1.85-3.44)	106	5217	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.550	2.541	0.009		349167	2.70		108	1279	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.550	2.541	0.009	1.000	1015158	2.40		96.1	1373	
D 9 13C4 PFHpA										
367.00 > 322.00	2.802	2.798	0.004		5310592	2.58		103	10278	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.811	2.800	0.011	1.003	5248667	2.49	Target=2.52	99.8	2017	
363.00 > 169.00	2.802	2.800	0.002	1.000	2047988		0.00(1.76-3.27)	99.8	4093	
D 11 18O2 PFHxS										
403.00 > 84.00	2.811	2.806	0.005		5690657	2.44		103	5497	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.811	2.807	0.004	1.000	5283939	2.20	Target=2.82	96.6	6352	
399.00 > 99.00	2.811	2.807	0.004	1.000	1784962		0.00(1.97-3.66)	96.6	3098	
77 DONA										
377.00 > 251.00	2.848	2.844	0.004	0.802	14833457	2.44	Target=1.65	104	20142	
377.00 > 85.00	2.848	2.844	0.004	0.802	8863738		0.00(1.16-2.15)	104	8822	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.165	3.162	0.003		865876	2.45		103	6158	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.173	3.163	0.010	1.003	1210736	2.34		98.8	6646	
D 73 13C8 PFOA										
421.00 > 376.00	3.181	3.177	0.004		6839414	2.55		104	8211	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.189	3.179	0.010	0.898	4924988	2.36	Target=3.74	99.1	4302	
449.00 > 99.00	3.181	3.179	0.002	0.896	1276453		0.00(2.61-4.86)	99.1	3685	
D 14 13C4 PFOA										
417.00 > 372.00	3.189	3.181	0.008		5025750	2.56		102	7964	
* 62 13C2 PFOA										
415.00 > 370.00	3.189	3.181	0.008		5536524	2.50			6770	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.189	3.184	0.005	1.000	5149900	2.42	Target=1.00	96.6	661	
413.00 > 169.00	3.189	3.184	0.005	1.000	2717890		1.89(0.70-1.30)	96.6	2714	
D 72 13C8 PFOS										
507.00 > 99.00	3.551	3.545	0.006		2241717	2.42		101	4276	
D 18 13C4 PFOS										
503.00 > 80.00	3.551	3.549	0.002		4515236	2.49		104	4891	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.551	3.550	0.001	1.000	4332356	2.22	Target=1.00	95.5	46330	
499.00 > 99.00	3.551	3.550	0.001	1.000	923437		4.69(0.70-1.30)	95.5	2177	
D 19 13C5 PFNA										
468.00 > 423.00	3.566	3.561	0.005		4070306	2.56		102	9983	
20 Perfluorononanoic acid										
463.00 > 419.00	3.566	3.561	0.005	1.000	3924411	2.54	Target=4.13	102	1246	
463.00 > 169.00	3.566	3.561	0.005	1.000	937094		0.00(2.89-5.37)	102	7961	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.753	3.750	0.003	1.057	7221490	2.34		100	7731	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.891	3.892	-0.001	1.096	3798949	2.42	Target=2.93	101	5962	
549.00 > 99.00	3.891	3.892	-0.001	1.096	1239512		0.00(2.05-3.81)	101	3318	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.913	3.913	0.0	1.000	1172514	2.38		99.4	2612	
D 23 13C2 PFDA										
515.00 > 470.00	3.913	3.913	0.0		3799507	2.61		104	5670	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.913	3.913	0.0	1.000	3525062	2.52	Target=5.34	101	3223	
513.00 > 169.00	3.913	3.913	0.0	1.000	633345		0.00(3.74-6.94)	101	2355	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.913	3.914	-0.001		1028575	2.42		101	3727	
D 21 13C8 FOSA										
506.00 > 78.00	3.920	3.921	-0.001		7800708	2.56		102	7648	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.920	3.923	-0.003	1.000	6958129	2.53		101	3281	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.068	4.072	-0.004		1939633	2.57		103	5909	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.076	4.078	-0.002	1.002	1581362	2.36		94.3	728	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.199	4.205	-0.006	1.183	3244523	2.44	Target=3.26	101	8102	
599.00 > 99.00	4.199	4.205	-0.006	1.183	1007371		0.00(2.28-4.23)	101	3818	
D 30 13C2 PFUnA										
565.00 > 520.00	4.224	4.230	-0.006		3417131	2.59		103	11804	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.224	4.230	-0.006	1.000	2600803	2.38	Target=4.09	95.3	2159	
563.00 > 169.00	4.224	4.230	-0.006	1.000	658147		0.00(2.86-5.32)	95.3	4143	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.232	4.233	-0.001		2121857	2.63		105	1065	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.240	4.240	0.0	1.002	1663076	2.46		98.3	3268	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.366	4.370	-0.004	1.230	11037622	2.45		104	16239	
D 36 13C2 PFDoA										
615.00 > 570.00	4.511	4.514	-0.003		3702478	2.60		104	7317	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.511	4.514	-0.003	1.000	3598197	2.58	Target=4.03	103	2357	
613.00 > 169.00	4.511	4.514	-0.003	1.000	836657		0.00(2.82-5.24)	103	3210	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.528	4.531	-0.003	1.157	1167484	2.38		98.6	6864	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.730	4.741	-0.011	1.332	1199867	2.35	Target=0.63	97.1	8453	
699.00 > 99.00	4.730	4.741	-0.011	1.332	1903079		0.00(0.44-0.82)	97.1	8362	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.768	4.773	-0.005	1.057	3538136	2.53	Target=3.11	101	1263	
663.00 > 169.00	4.768	4.773	-0.005	1.057	1106948		0.00(2.18-4.05)	101	4218	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2 PFTeDA										
715.00 > 670.00	4.996	5.008	-0.012		3877568	2.58		103	7299	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.996	5.008	-0.012	1.000	878440	2.37	Target=1.37	94.6	3706	
713.00 > 219.00	4.996	5.008	-0.012	1.000	638193		0.00(0.96-1.79)	94.6	1744	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.423	5.430	-0.007		6056290	2.45		98.1	5898	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.423	5.433	-0.010	1.000	5272227	2.53	Target=5.26	101	187	
813.00 > 169.00	5.423	5.433	-0.010	1.000	983418		0.00(3.69-6.84)	101	3828	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.833	5.840	-0.007	1.076	7291158	2.54	Target=7.43	102	288	
913.00 > 169.00	5.833	5.840	-0.007	1.076	939808		0.00(5.20-9.66)	102	3530	

Reagents:

LCPFC_LL5_00011 Amount Added: 1.00 Units: mL

Report Date: 09-Mar-2019 07:56:40 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_009.d

Injection Date: 09-Mar-2019 01:47:35 Instrument ID: A8_N

Lims ID: IC L5 Full

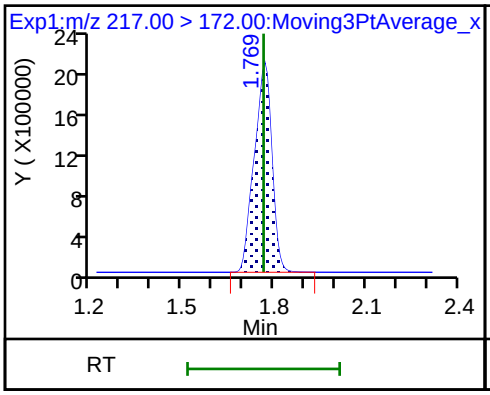
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 6

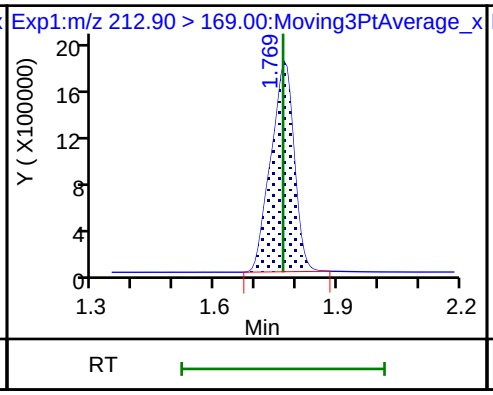
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

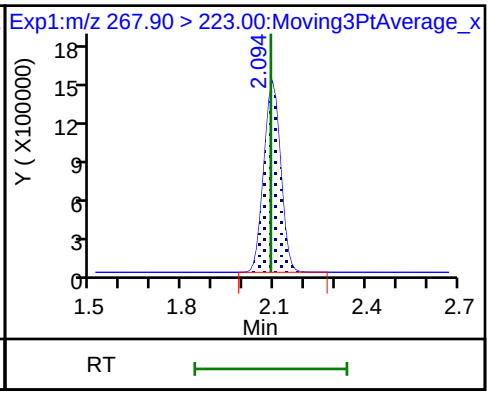
D 1 13C4 PFBA



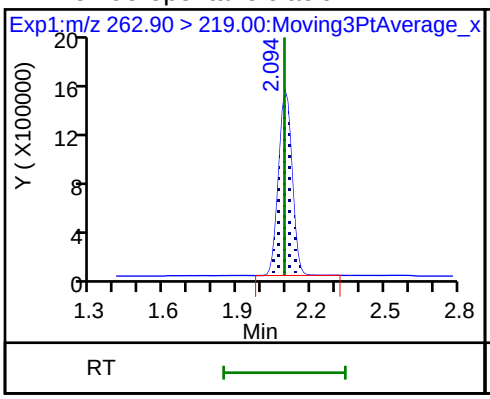
2 Perfluorobutanoic acid



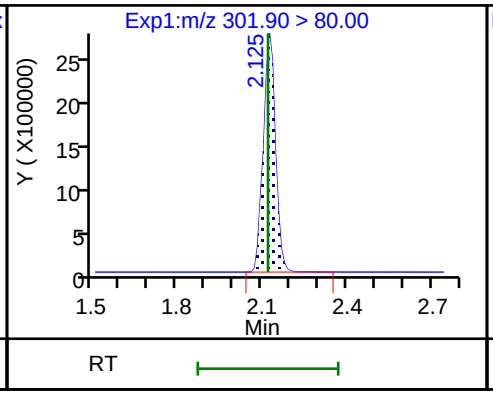
D 3 13C5 PFPeA



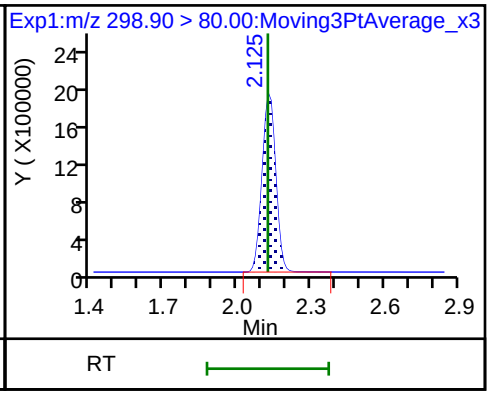
4 Perfluoropentanoic acid



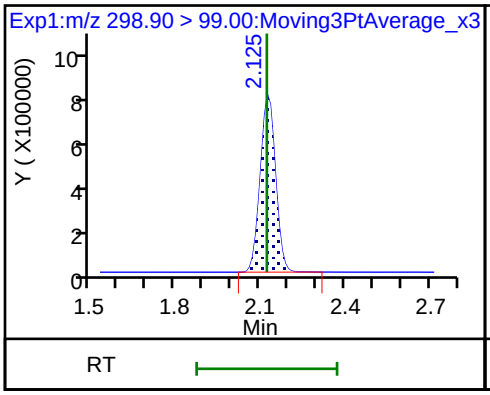
D 47 13C3 PFBS



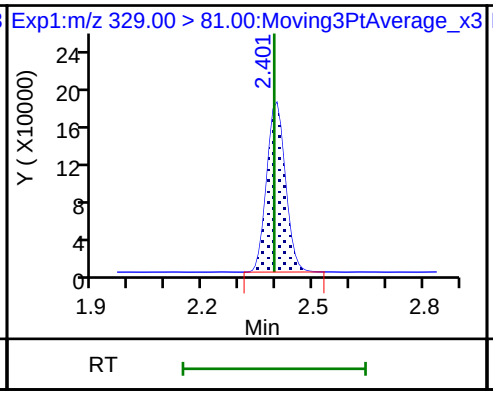
5 Perfluorobutanesulfonic acid



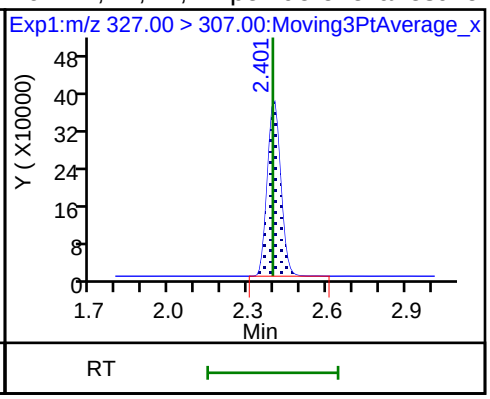
5 Perfluorobutanesulfonic acid



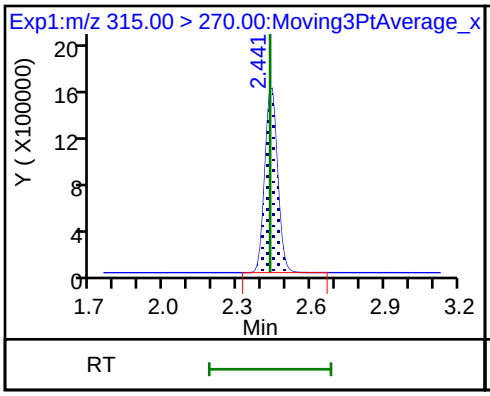
D 60 M2-4:2 FTS



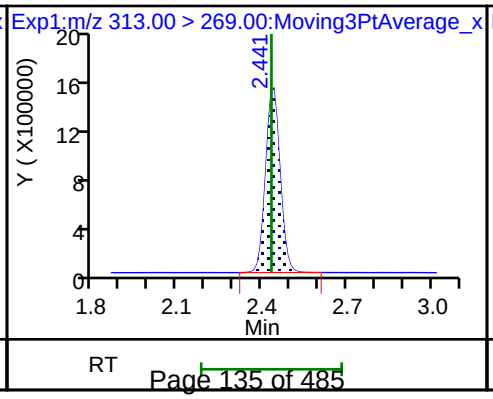
61 1H,1H,2H,2H-perfluorohexanesulfoni



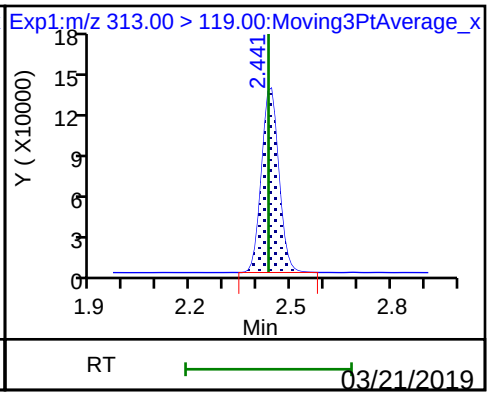
D 7 13C2 PFHxA



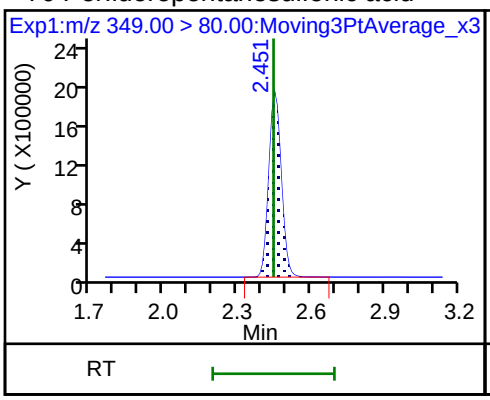
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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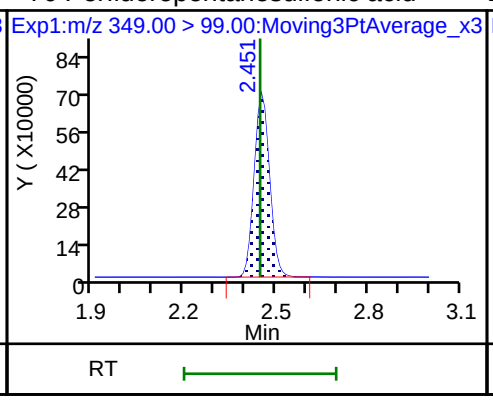
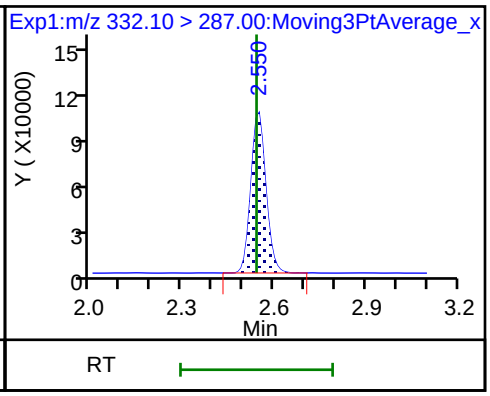
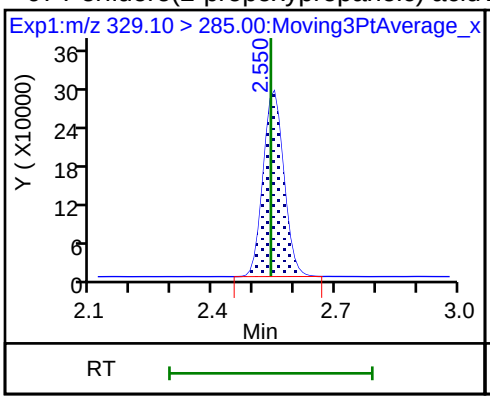


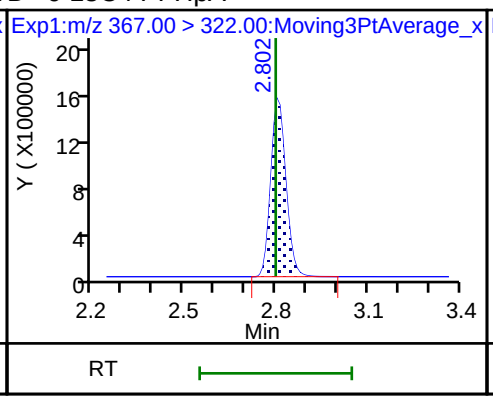
D 64 13C3 HFPO-DA



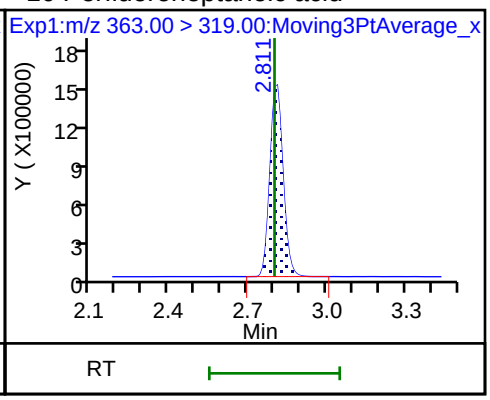
67 Perfluoro(2-propoxypropanoic) acid



D 9 13C4 PFHpA



10 Perfluoroheptanoic acid



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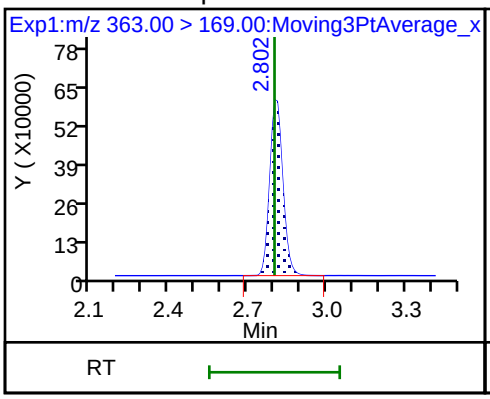
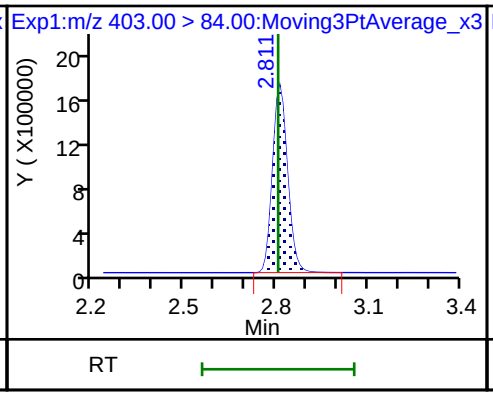
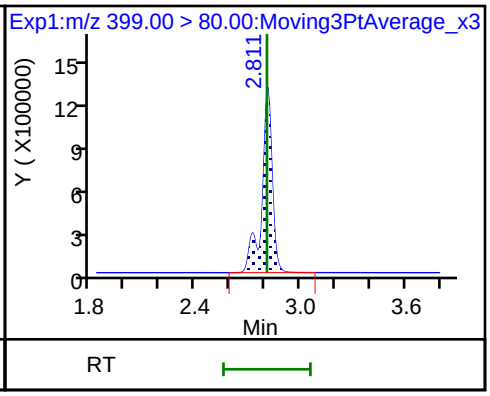


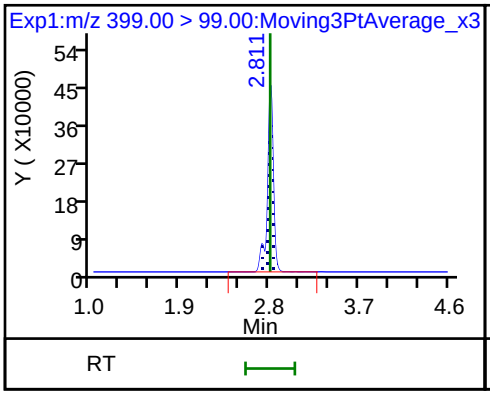
D 11 18O2 PFHxS



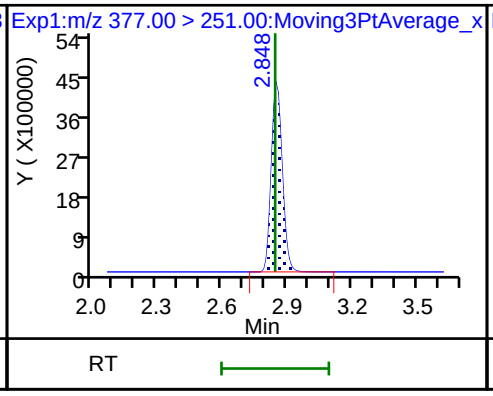
8 Perfluorohexanesulfonic acid



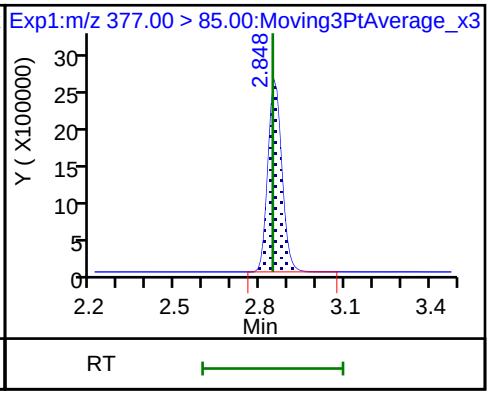
8 Perfluorohexanesulfonic acid



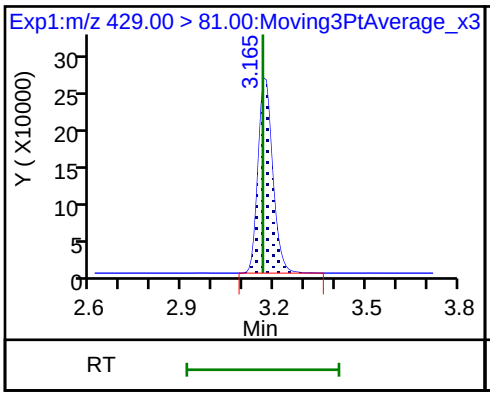
77 DONA



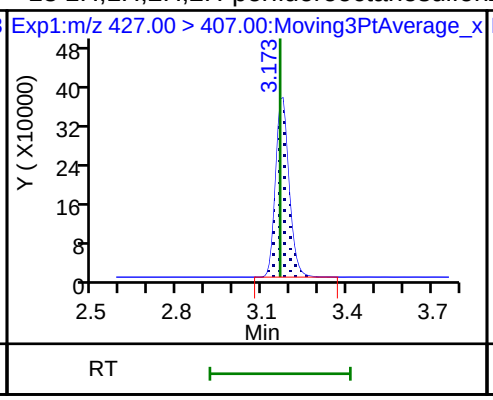
77 DONA



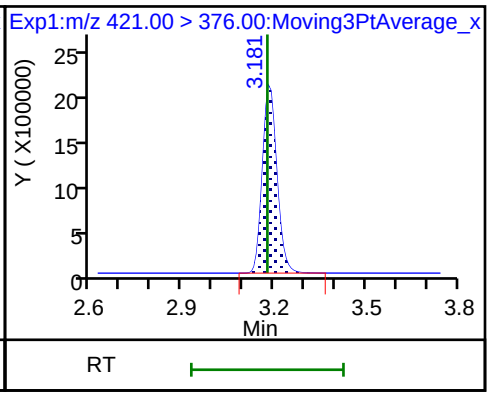
D 12 M2-6:2 FTS



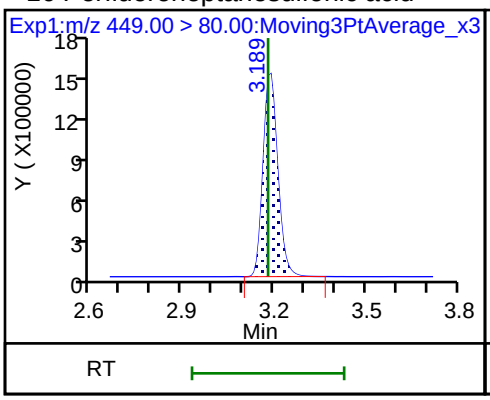
13 1H,1H,2H,2H-perfluorooctanesulfon



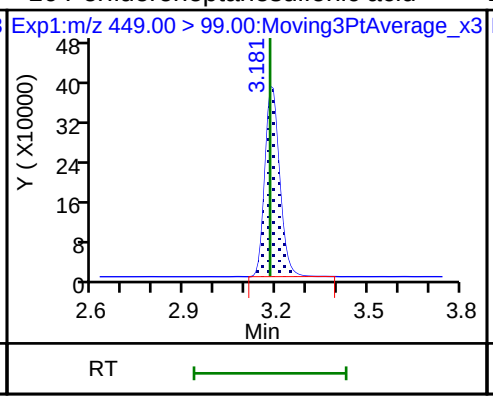
D 73 13C8 PFOA



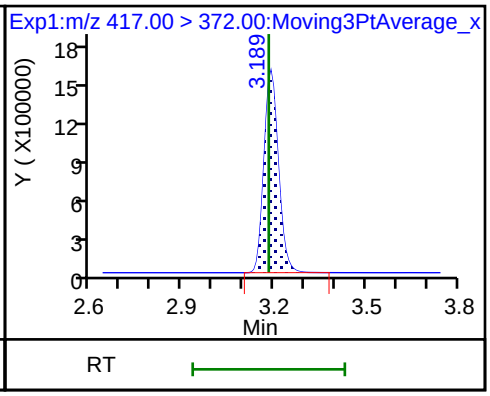
16 Perfluoroheptanesulfonic acid



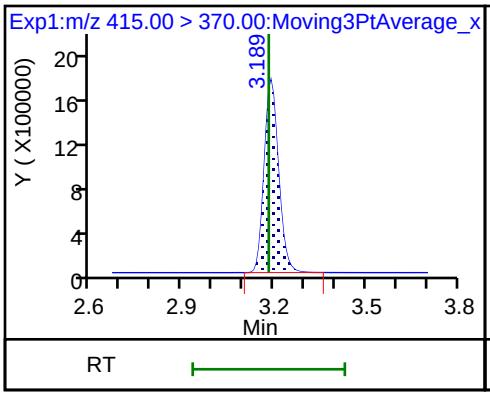
16 Perfluoroheptanesulfonic acid



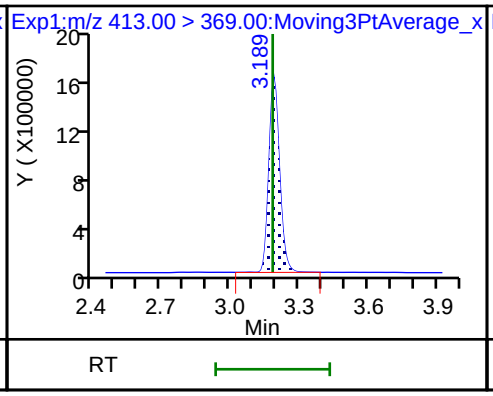
D 14 13C4 PFOA



* 62 13C2 PFOA



15 Perfluorooctanoic acid



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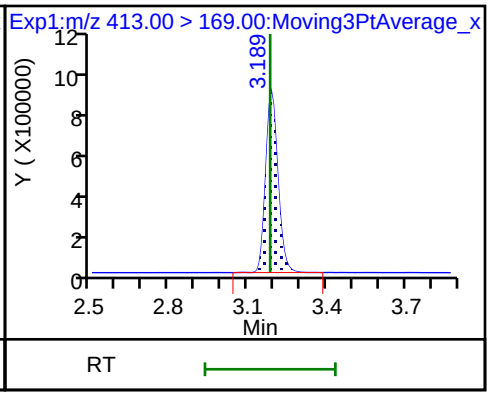
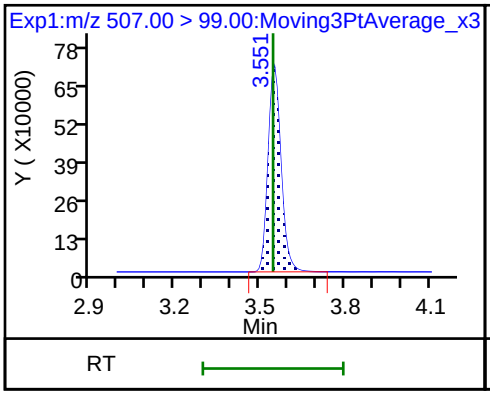


D 72 13C8 PFOS



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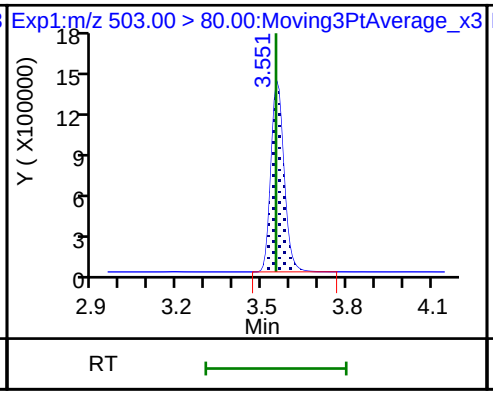
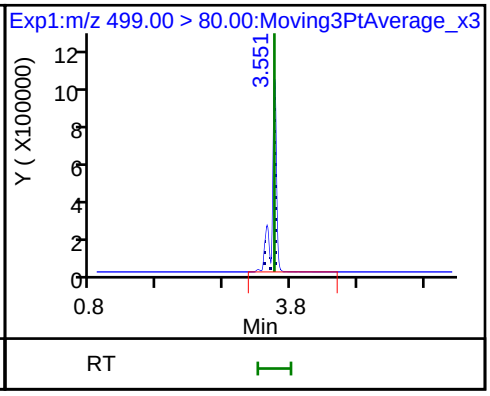
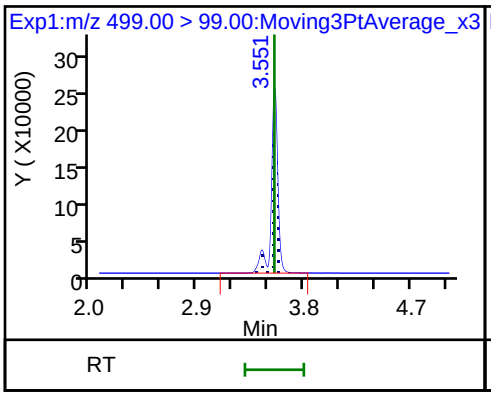


17 Perfluorooctanesulfonic acid



17 Perfluorooctanesulfonic acid



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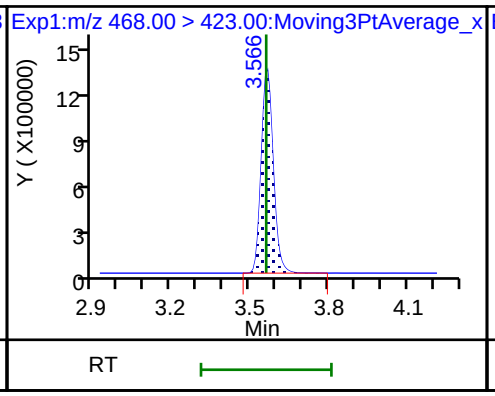
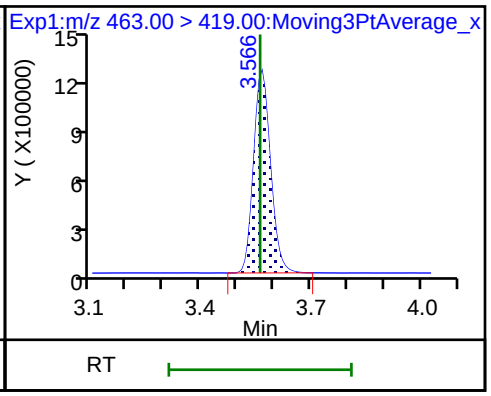


20 Perfluorononanoic acid



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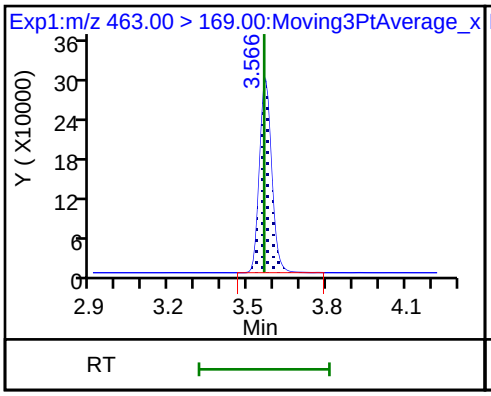
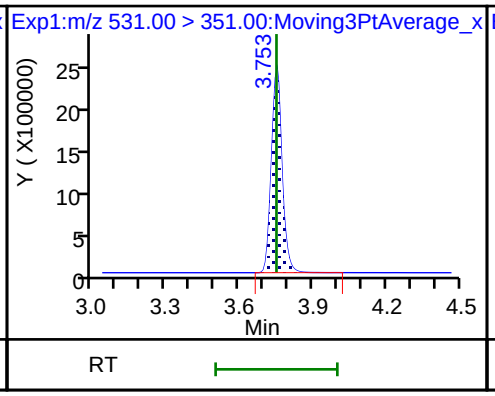
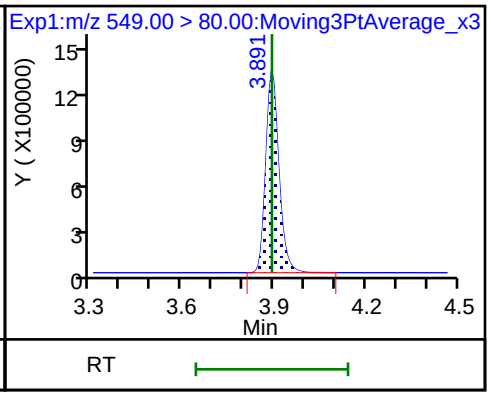


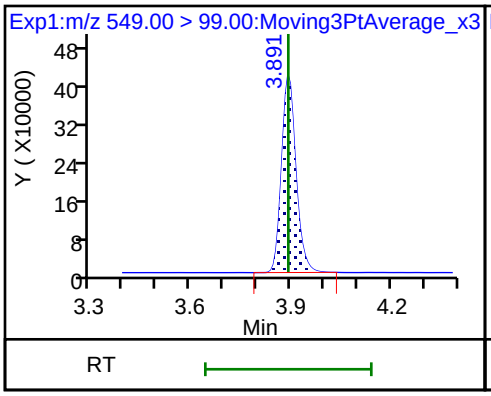
69 9-Chlorohexadecafluoro-3-oxanonane



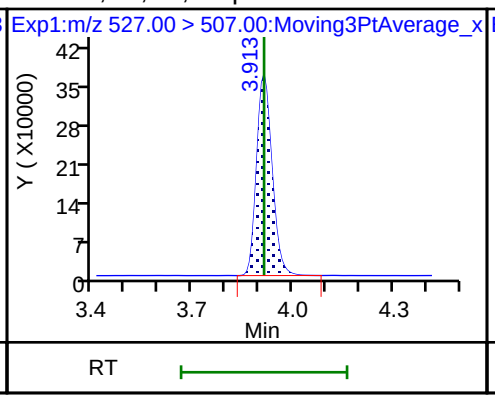
68 Perfluorononanesulfonic acid



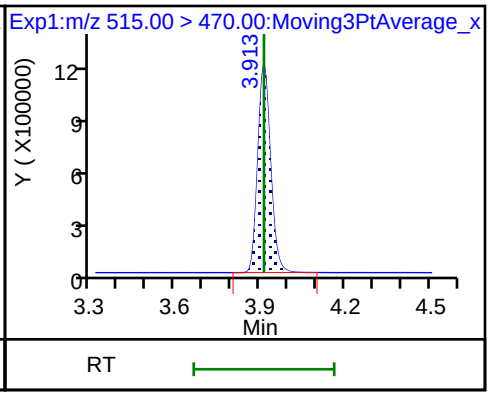
68 Perfluorononanesulfonic acid



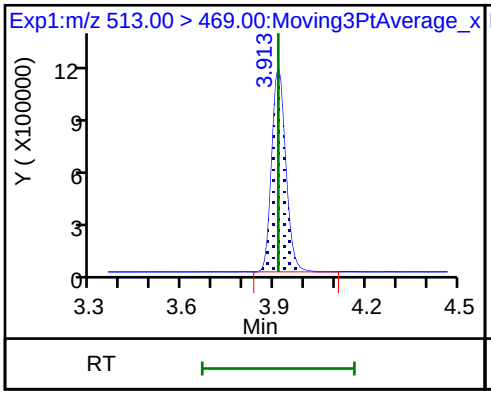
25 1H,1H,2H,2H-perfluorodecanesulfon



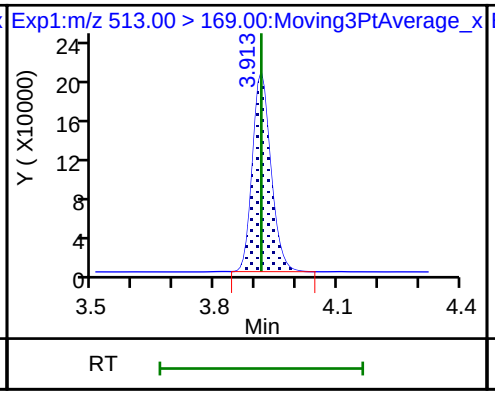
D 23 13C2 PFDA



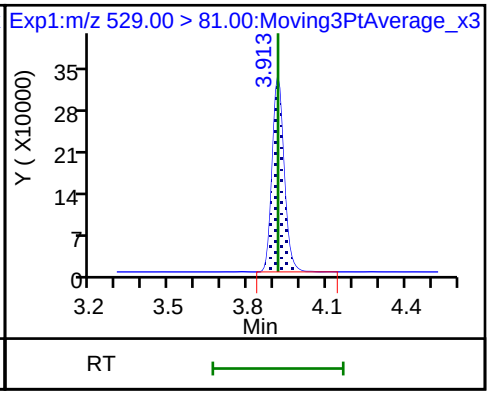
24 Perfluorodecanoic acid



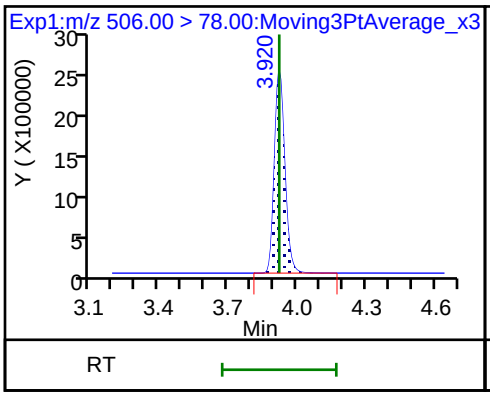
24 Perfluorodecanoic acid



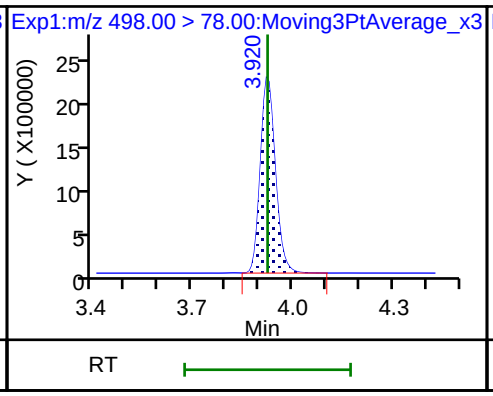
D 26 M2-8:2 FTS



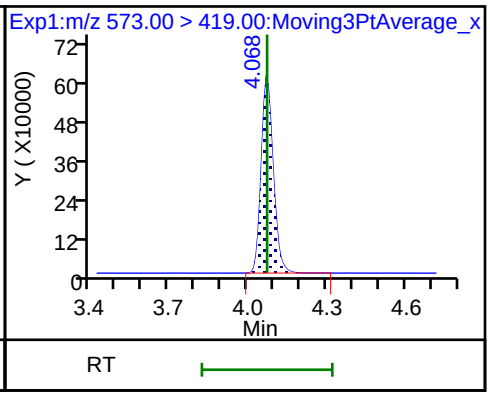
D 21 13C8 FOSA



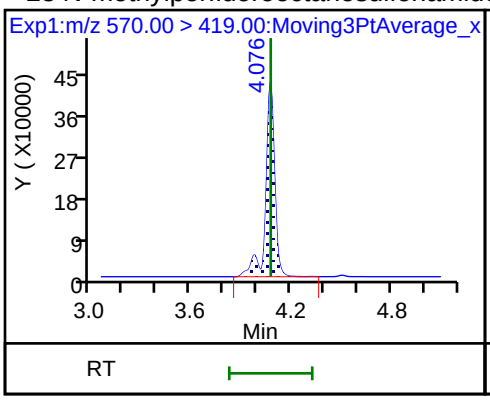
22 Perfluorooctanesulfonamide



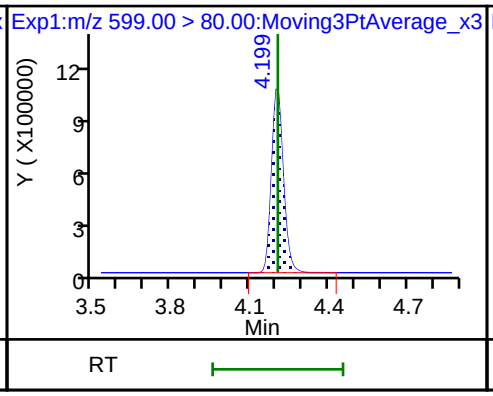
D 27 d3-NMeFOSAA



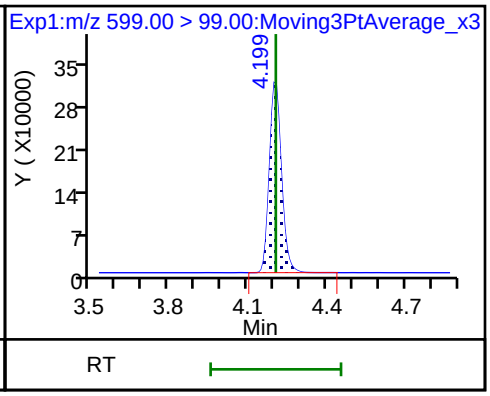
28 N-methylperfluorooctanesulfonamido



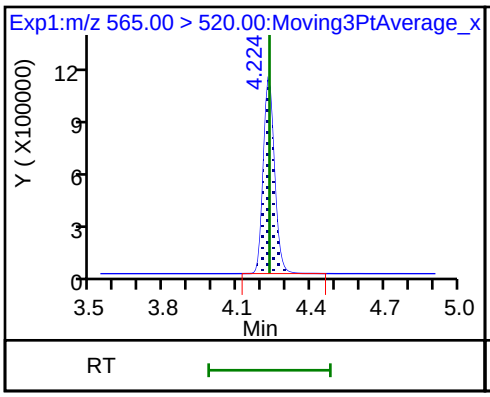
29 Perfluorodecanesulfonic acid



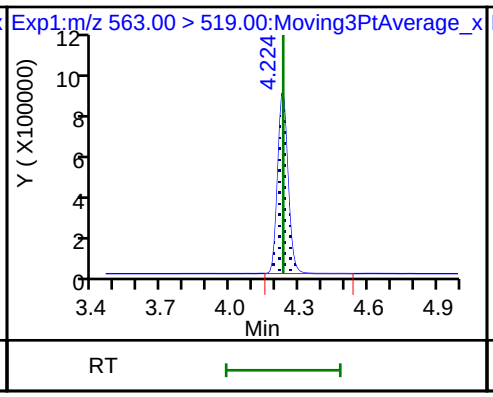
29 Perfluorodecanesulfonic acid



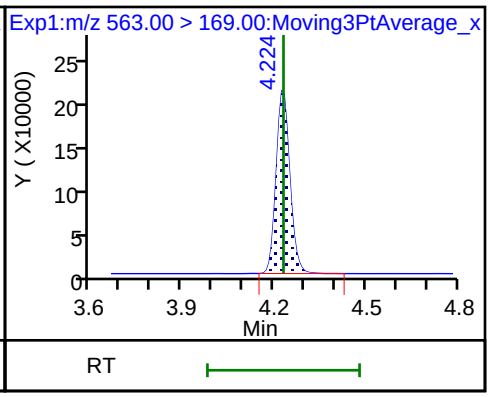
D 30 13C2 PFUnA



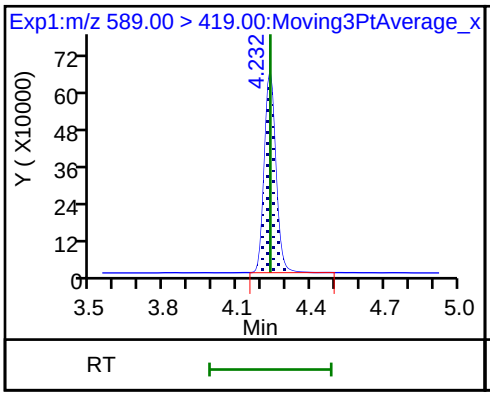
31 Perfluoroundecanoic acid



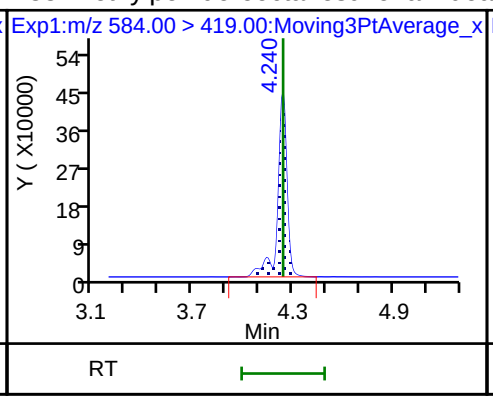
31 Perfluoroundecanoic acid



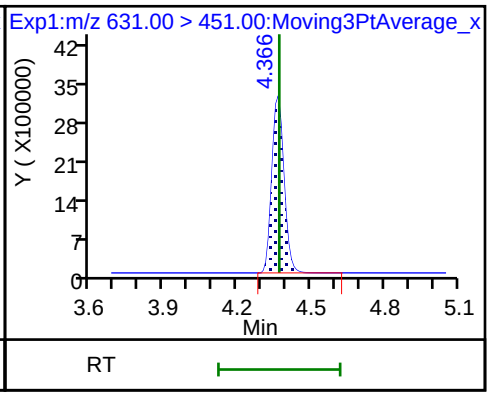
D 32 d5-NEtFOSAA



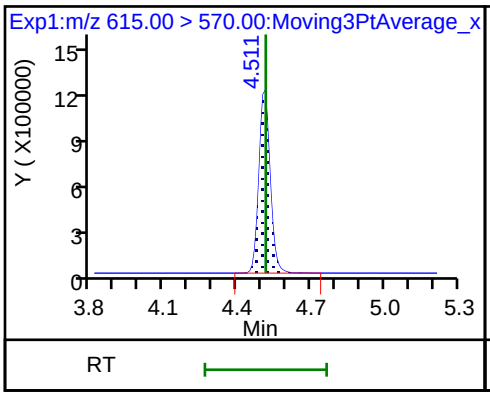
33 N-ethylperfluorooctanesulfonamidoa



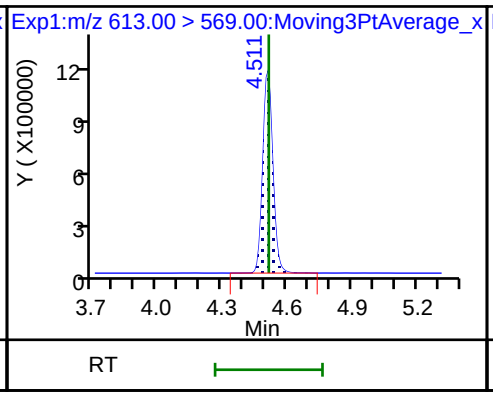
66 11-Chloroeicosafluoro-3-oxaundecan



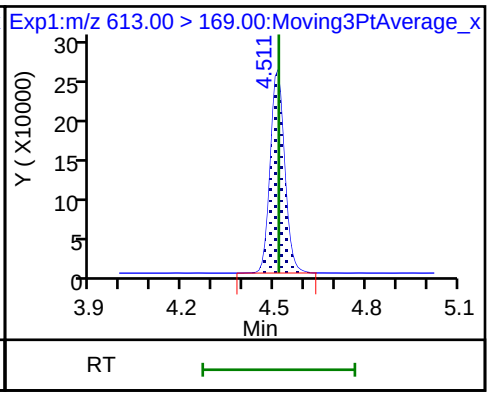
D 36 13C2 PFDoA



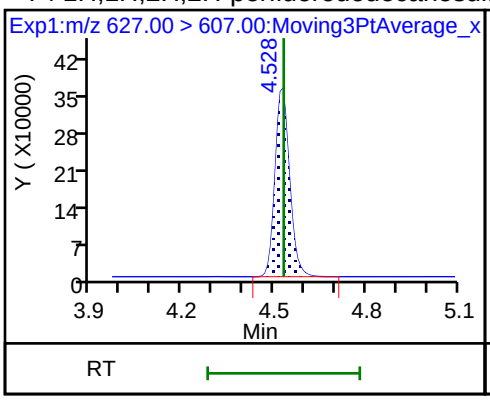
37 Perfluorododecanoic acid



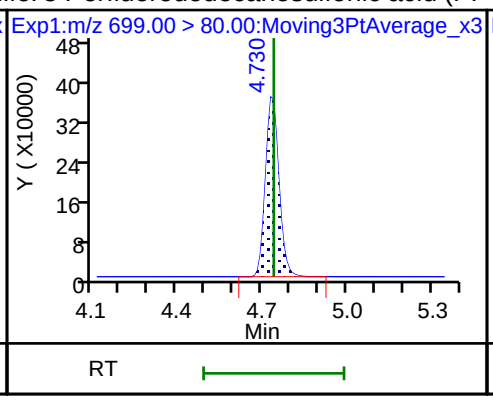
37 Perfluorododecanoic acid



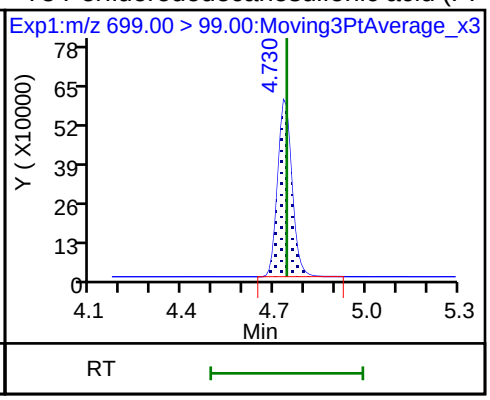
74 1H,1H,2H,2H-perfluorododecanesulfo



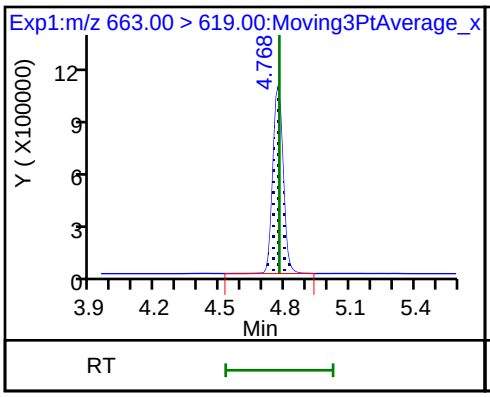
75 Perfluorododecanesulfonic acid (PF



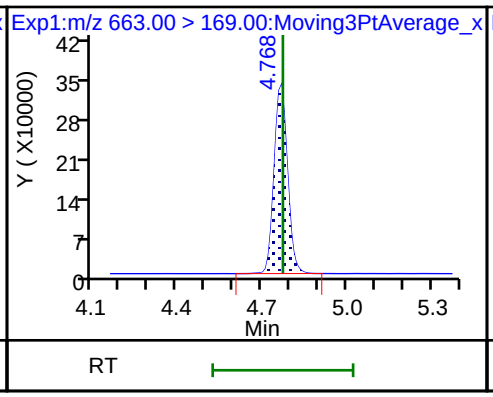
75 Perfluorododecanesulfonic acid (PF



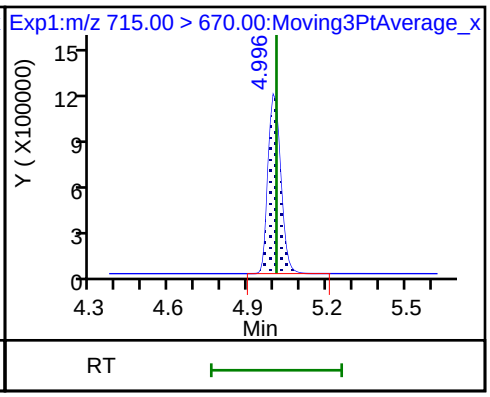
41 Perfluorotridecanoic acid



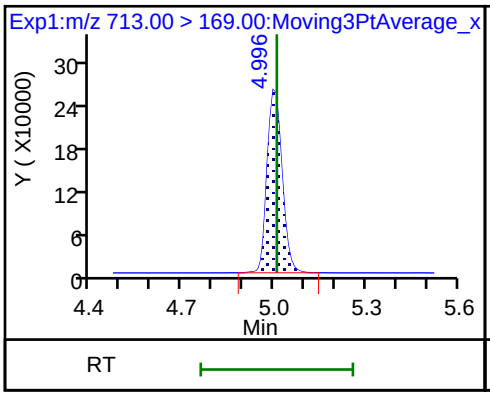
41 Perfluorotridecanoic acid



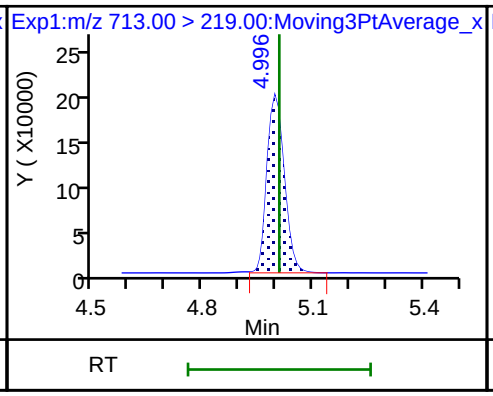
D 43 13C2 PFTeDA



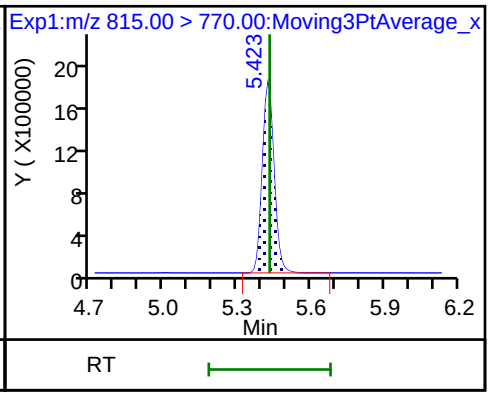
42 Perfluorotetradecanoic acid



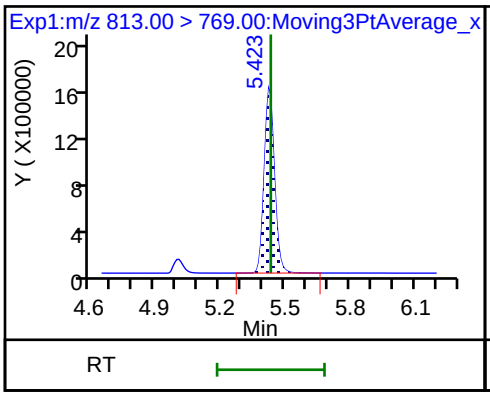
42 Perfluorotetradecanoic acid



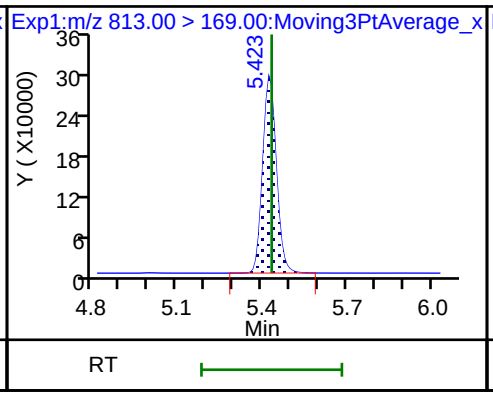
D 44 13C2 PFHxDA



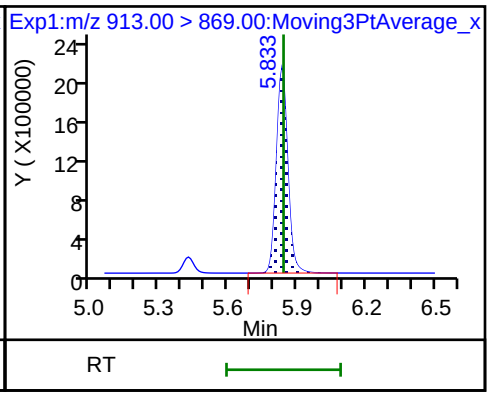
45 Perfluorohexadecanoic acid



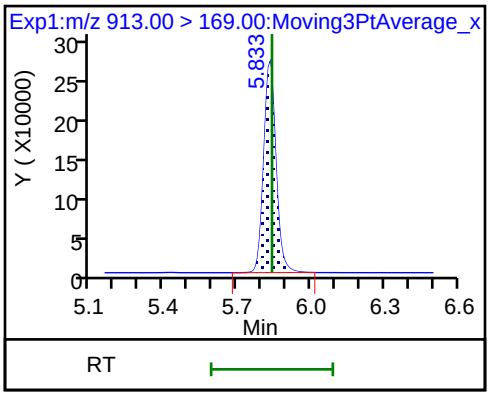
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_010.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 09-Mar-2019 01:55:02 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 6
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 09-Mar-2019 07:57:13 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0306

First Level Reviewer: roycea Date: 09-Mar-2019 07:28:23
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.763	1.764	-0.001		8441185	2.59		103	7174	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.763	1.766	-0.003	1.000	14177289	5.25		105	3473	
D 3 13C5 PFPeA										
267.90 > 223.00	2.084	2.088	-0.004		5669502	2.53		101	8688	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.095	2.091	0.004	1.005	11298104	5.07		101	677	
D 47 13C3 PFBS										
301.90 > 80.00	2.116	2.120	-0.004		7889097	2.31		99.5	648886	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.126	2.123	0.003	1.005	14470202	4.55	Target=2.39	103	17217	
298.90 > 99.00	2.126	2.123	0.003	1.005	6018515		0.00(1.68-3.11)	103	10251	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.392	2.394	-0.002	1.000	2726150	4.68		100	14156	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.392	2.394	-0.002		665115	2.42		104	1832	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.432	2.432	0.0	1.000	10899855	4.87	Target=11.00	97.4	6553	
313.00 > 119.00	2.432	2.432	0.0	1.000	994721		0.00(7.70-14.30)	97.4	3692	
D 7 13C2 PFHxA										
315.00 > 270.00	2.432	2.432	0.0		5906468	2.57		103	9039	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.452	2.446	0.006	1.159	12957622	4.91	Target=2.65	105	8103	
349.00 > 99.00	2.452	2.446	0.006	1.159	4901122		0.00(1.85-3.44)	105	6967	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.541	2.541	0.0	1.000	2157056	5.32		106	3189	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.541	2.541	0.0		335368	2.53		101	1205	
D 9 13C4 PFHpA										
367.00 > 322.00	2.801	2.798	0.003		5258232	2.50		99.9	9757	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.801	2.800	0.001	1.000	10871611	5.22	Target=2.52	104	4064	
363.00 > 169.00	2.801	2.800	0.001	1.000	4247644		0.00(1.76-3.27)	104	7268	
D 11 18O2 PFHxS										
403.00 > 84.00	2.811	2.806	0.005		5690070	2.38		101	5148	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.811	2.807	0.004	1.000	10817917	4.50	Target=2.82	98.9	6412	
399.00 > 99.00	2.811	2.807	0.004	1.000	3810744		0.00(1.97-3.66)	98.9	4503	
77 DONA										
377.00 > 251.00	2.848	2.844	0.004	0.802	27324367	4.59	Target=1.65	97.5	22300	
377.00 > 85.00	2.848	2.844	0.004	0.802	17379900		0.00(1.16-2.15)	97.5	9434	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.165	3.162	0.003		863989	2.39		101	4798	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.165	3.163	0.002	1.000	2444899	4.74		99.9	6444	
D 73 13C8 PFOA										
421.00 > 376.00	3.181	3.177	0.004		6940882	2.53		103	12205	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.181	3.179	0.002	0.896	9873088	4.82	Target=3.74	101	3796	
449.00 > 99.00	3.181	3.179	0.002	0.896	2702698		0.00(2.61-4.86)	101	4485	
* 62 13C2 PFOA										
415.00 > 370.00	3.181	3.181	0.0		5666394	2.50			5424	
D 14 13C4 PFOA										
417.00 > 372.00	3.181	3.181	0.0		4993315	2.48		99.3	8152	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.189	3.184	0.005	1.002	10393822	4.91	Target=1.00	98.2	1334	
413.00 > 169.00	3.189	3.184	0.005	1.002	5613572		1.85(0.70-1.30)	98.2	3712	
D 72 13C8 PFOS										
507.00 > 99.00	3.550	3.545	0.005		2258920	2.38		99.6	4208	
D 18 13C4 PFOS										
503.00 > 80.00	3.550	3.549	0.001		4424506	2.38		99.6	3061	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.550	3.550	0.0	1.000	8846861	4.62	Target=1.00	99.5	4411	
499.00 > 99.00	3.550	3.550	0.0	1.000	1810327		4.89(0.70-1.30)	99.5	3171	
20 Perfluorononanoic acid										
463.00 > 419.00	3.566	3.561	0.005	1.000	8048214	5.18	Target=4.13	104	2564	
463.00 > 169.00	3.566	3.561	0.005	1.000	2001050		0.00(2.89-5.37)	104	6597	
D 19 13C5 PFNA										
468.00 > 423.00	3.566	3.561	0.005		4092425	2.51		101	7020	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.753	3.750	0.003	1.057	14877046	4.91		105	11765	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.896	3.892	0.004	1.097	7527514	4.90	Target=2.93	102	7560	
549.00 > 99.00	3.896	3.892	0.004	1.097	2537494		0.00(2.05-3.81)	102	4736	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.918	3.913	0.005	1.000	2571797	5.21		109	6437	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.918	3.913	0.005	1.000	7090704	5.13	Target=5.34	103	5661	
513.00 > 169.00	3.918	3.913	0.005	1.000	1292695		0.00(3.74-6.94)	103	2522	
D 23 13C2 PFDA										
515.00 > 470.00	3.918	3.913	0.005		3756842	2.52		101	6264	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.918	3.914	0.004		1030772	2.37		99.0	3505	
D 21 13C8 FOSA										
506.00 > 78.00	3.926	3.921	0.005		7955739	2.55		102	5745	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.926	3.923	0.003	1.000	13722572	4.89		97.8	3726	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.074	4.072	0.002		1998315	2.59		103	4533	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.083	4.078	0.005	1.002	3499004	5.06		101	67389	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.216	4.205	0.011	1.187	6771421	5.20	Target=3.26	108	10042	
599.00 > 99.00	4.216	4.205	0.011	1.187	1996712		0.00(2.28-4.23)	108	6501	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.241	4.230	0.011	1.000	5166184	4.83	Target=4.09	96.6	3938	
563.00 > 169.00	4.241	4.230	0.011	1.000	1232613		0.00(2.86-5.32)	96.6	4181	
D 30 13C2 PFUnA										
565.00 > 520.00	4.241	4.230	0.011		3345911	2.48		99.0	7830	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.241	4.233	0.008		2061456	2.49		99.8	851	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.249	4.240	0.009	1.002	3418998	5.20		104	2735	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.377	4.370	0.007	1.233	21402068	4.85		103	18799	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.520	4.514	0.006	1.000	6960857	5.12	Target=4.03	102	4183	
613.00 > 169.00	4.520	4.514	0.006	1.000	1739154		0.00(2.82-5.24)	102	6830	
D 36 13C2 PFDoA										
615.00 > 570.00	4.520	4.514	0.006		3613252	2.48		99.3	10119	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.536	4.531	0.005	1.158	2358627	4.79		99.4	8202	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.750	4.741	0.009	1.338	2540177	5.08	Target=0.63	105	9104	
699.00 > 99.00	4.750	4.741	0.009	1.338	3882160		0.00(0.44-0.82)	105	10534	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.778	4.773	0.005	1.057	6965234	5.10	Target=3.11	102	2793	
663.00 > 169.00	4.778	4.773	0.005	1.057	2189414		0.00(2.18-4.05)	102	7873	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.017	5.008	0.009	1.000	1787600	4.81	Target=1.37	96.2	5828	
713.00 > 219.00	5.007	5.008	-0.001	0.998	1284589		0.00(0.96-1.79)	96.2	1719	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.017	5.008	0.009		3878997	2.52		101	8791	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.433	5.430	0.003		6774659	2.68		107	5278	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.442	5.433	0.009	1.002	11538669	4.97	Target=5.26	99.4	328	
813.00 > 169.00	5.433	5.433	0.0	1.000	2128071		0.00(3.69-6.84)	99.4	4490	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.848	5.840	0.008	1.076	15397288	4.80	Target=7.43	95.9	534	
913.00 > 169.00	5.840	5.840	0.0	1.075	2074236		0.00(5.20-9.66)	95.9	4479	

Reagents:

LCPFC_LL6_00011 Amount Added: 1.00 Units: mL

Report Date: 09-Mar-2019 07:57:14 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_010.d

Injection Date: 09-Mar-2019 01:55:02 Instrument ID: A8_N

Lims ID: IC L6 Full

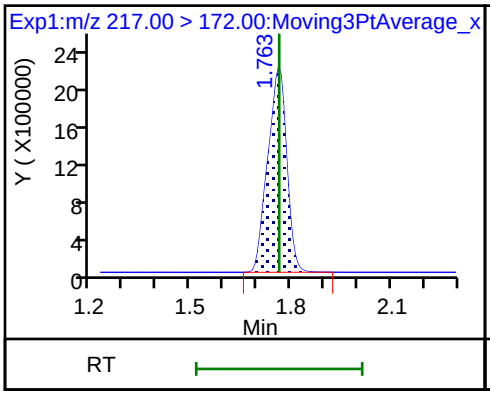
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 15 Worklist Smp#: 7

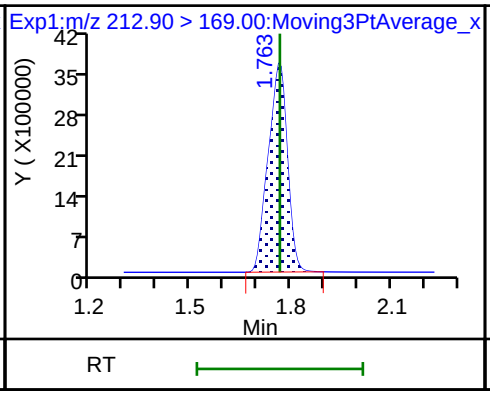
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

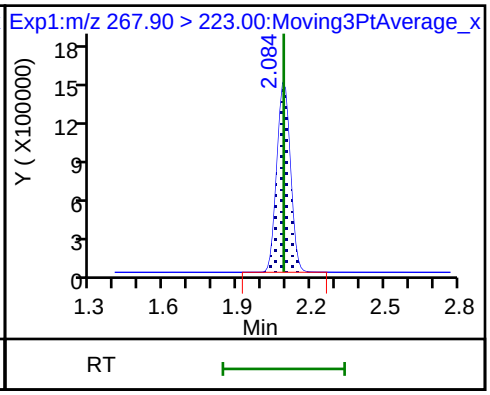
D 1 13C4 PFBA



2 Perfluorobutanoic acid



D 3 13C5 PFPeA



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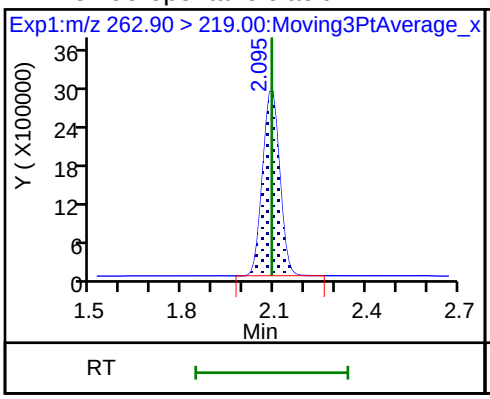
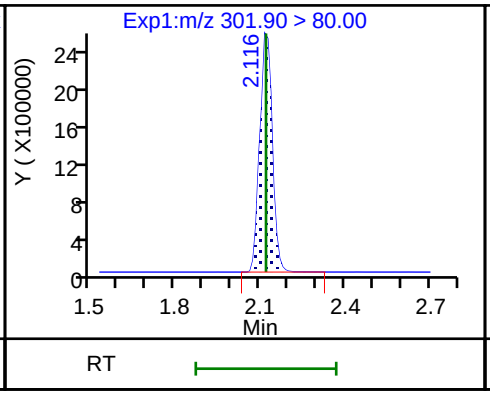


D 47 13C3 PFBS



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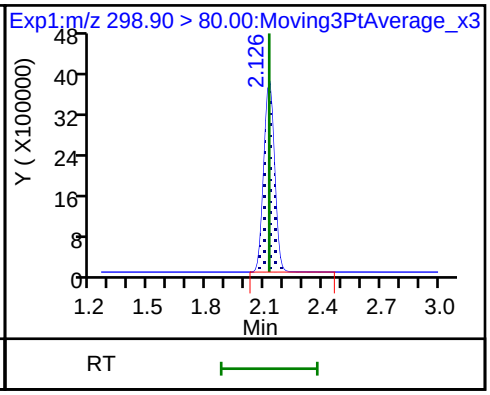
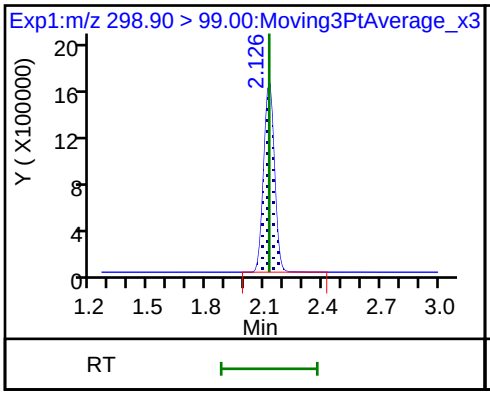
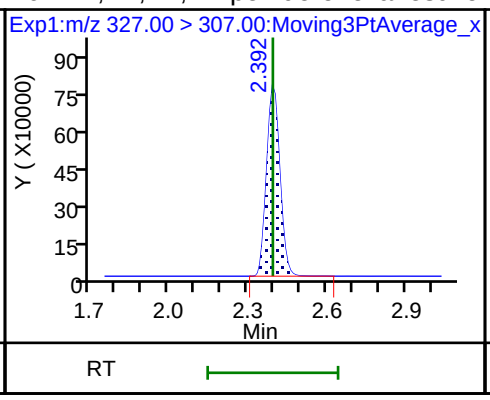


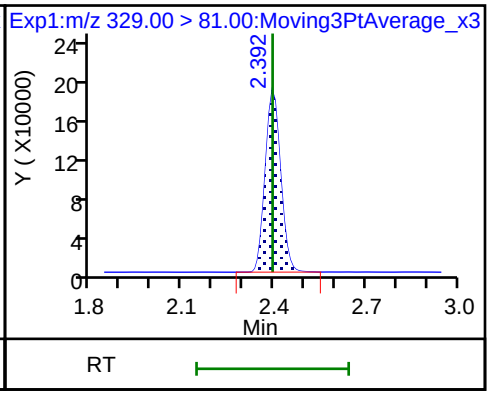
5 Perfluorobutanesulfonic acid



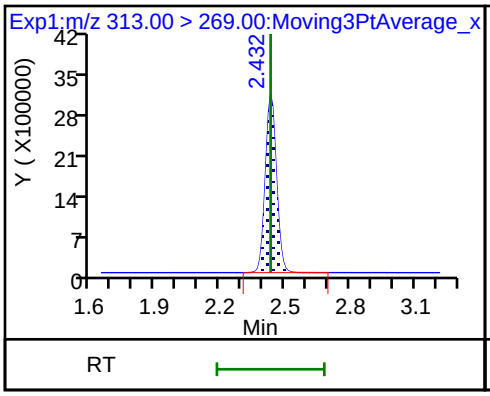
61 1H,1H,2H,2H-perfluorohexanesulfon



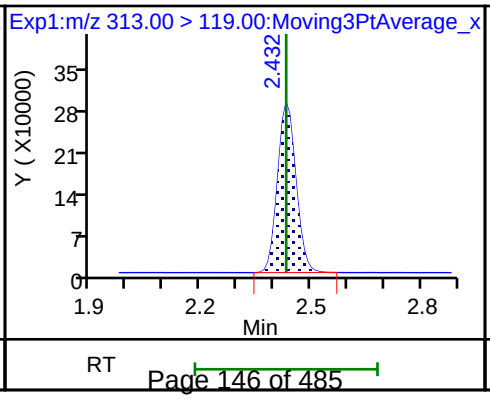
D 60 M2-4:2 FTS



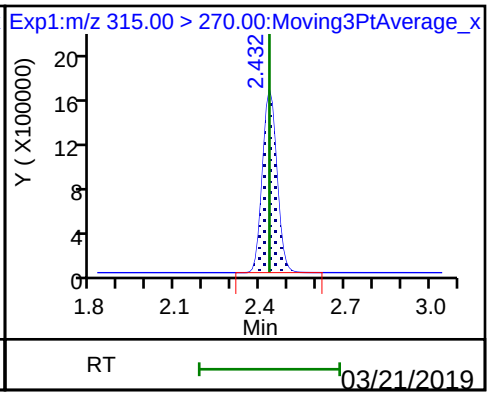
6 Perfluorohexanoic acid



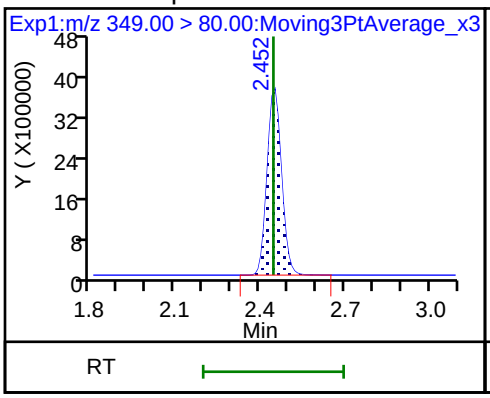
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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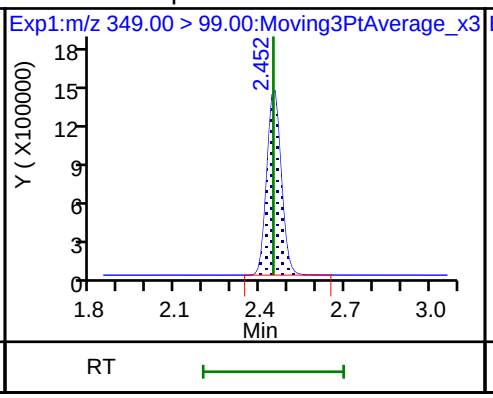
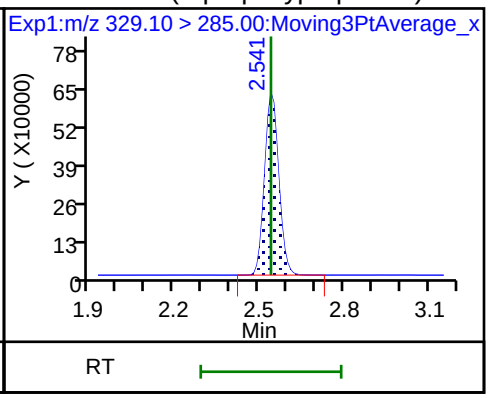
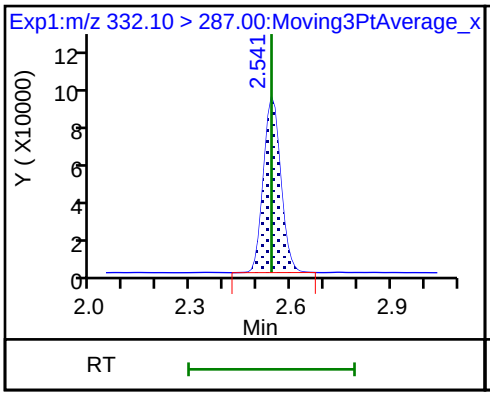


67 Perfluoro(2-propoxypropanoic) acid



D 64 13C3 HFPO-DA



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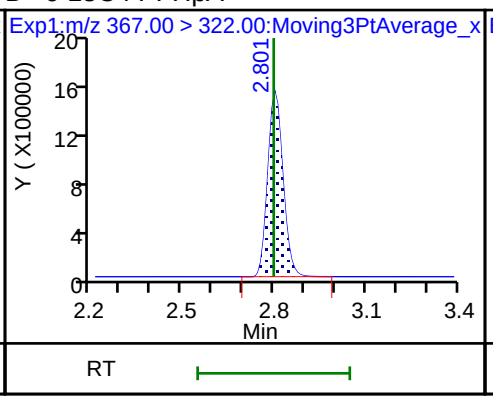
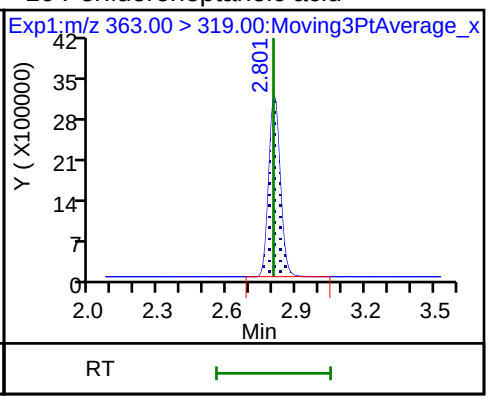


10 Perfluoroheptanoic acid



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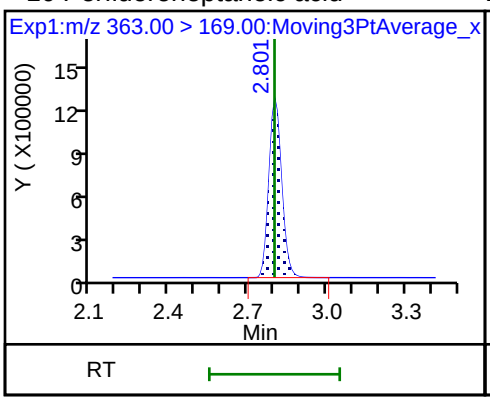
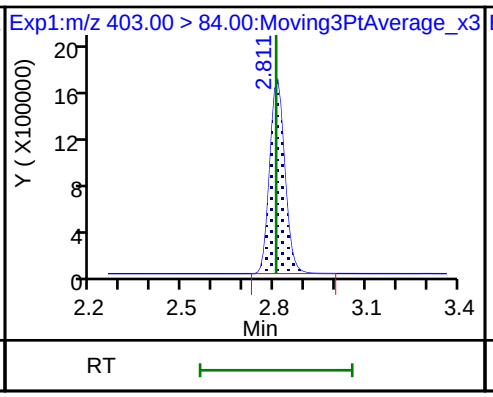
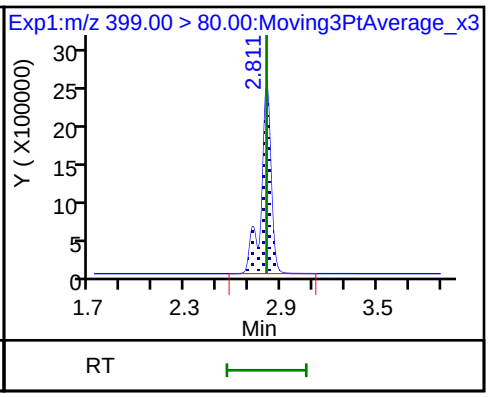


D 11 18O2 PFHxS



8 Perfluorohexanesulfonic acid



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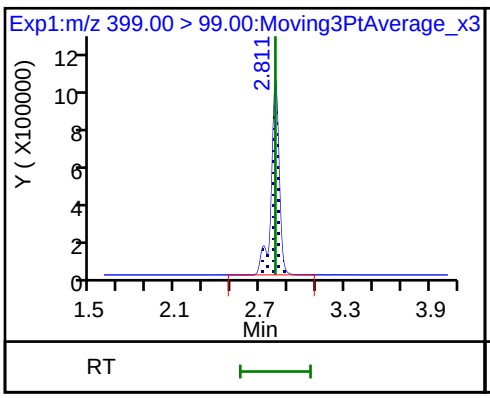
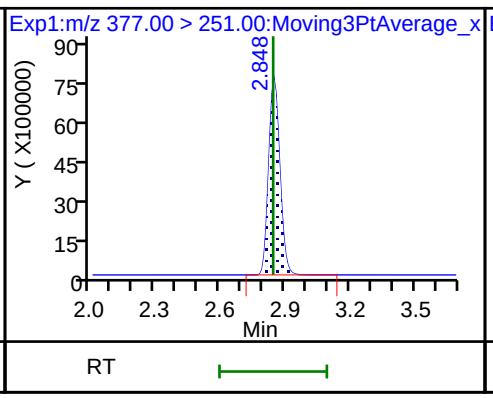
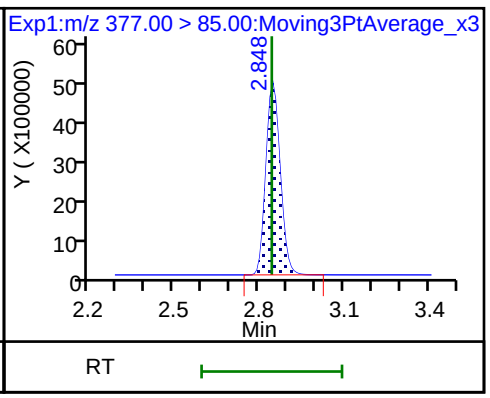


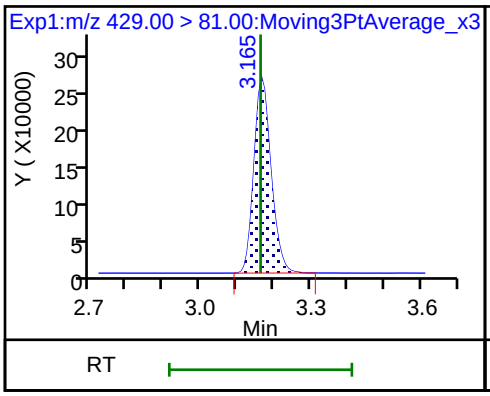
77 DONA



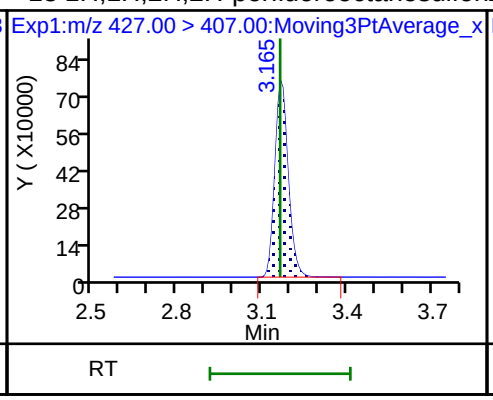
77 DONA



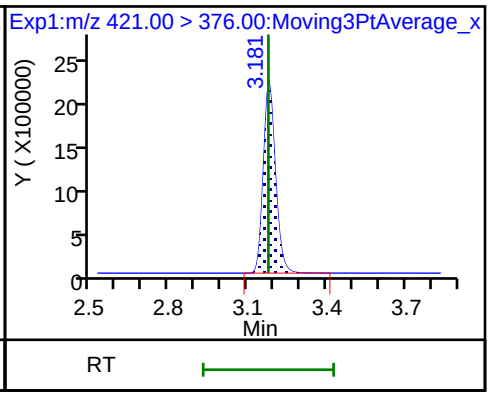
D 12 M2-6:2 FTS



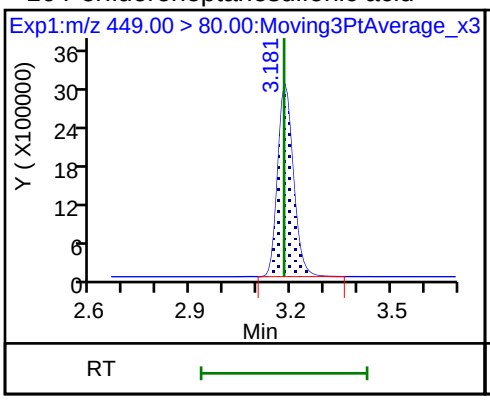
13 1H,1H,2H,2H-perfluorooctanesulfon



D 73 13C8 PFOA



16 Perfluoroheptanesulfonic acid



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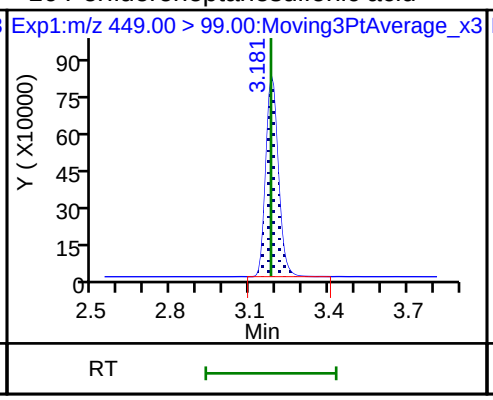
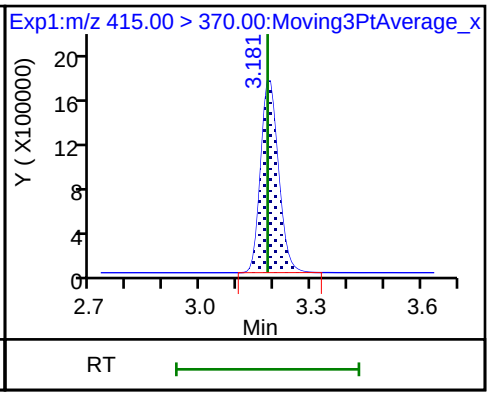


* 62 13C2 PFOA



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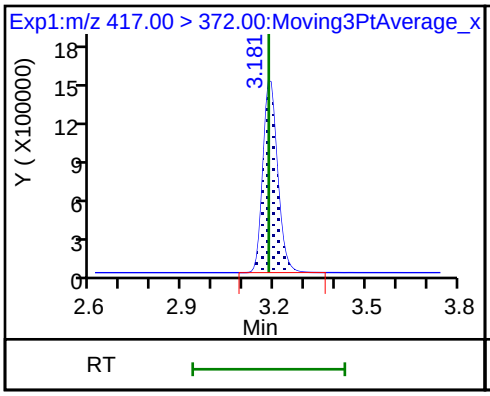
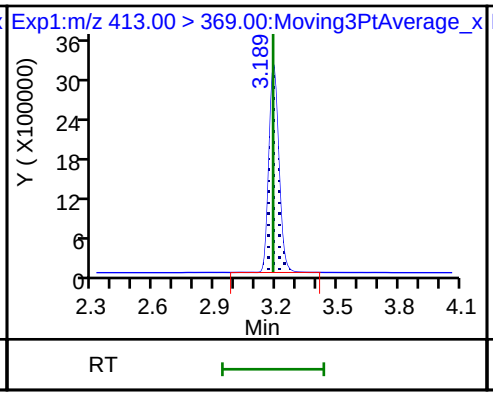


15 Perfluorooctanoic acid



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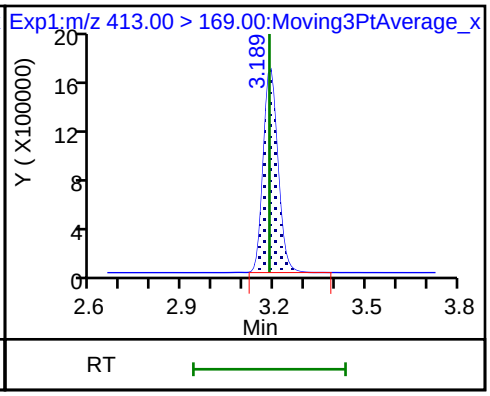
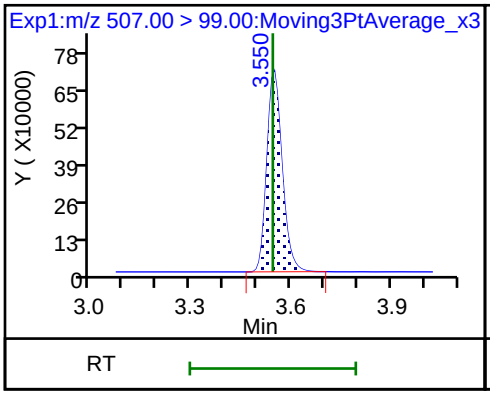


D 72 13C8 PFOS



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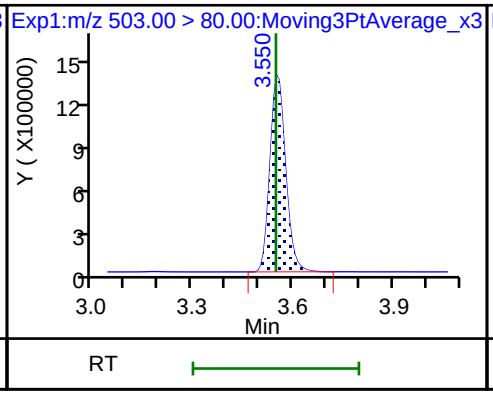
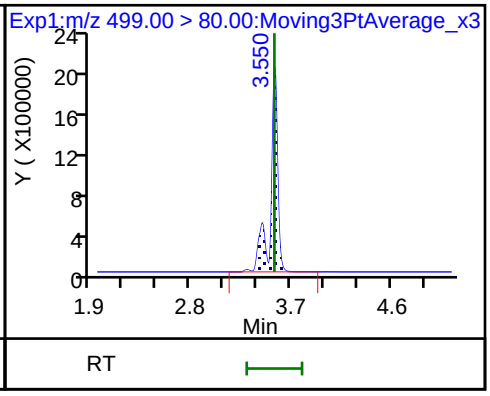


17 Perfluorooctanesulfonic acid



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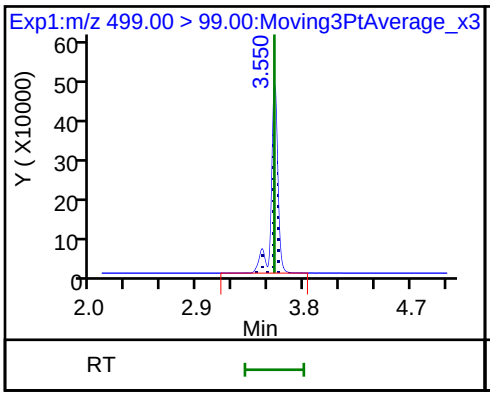
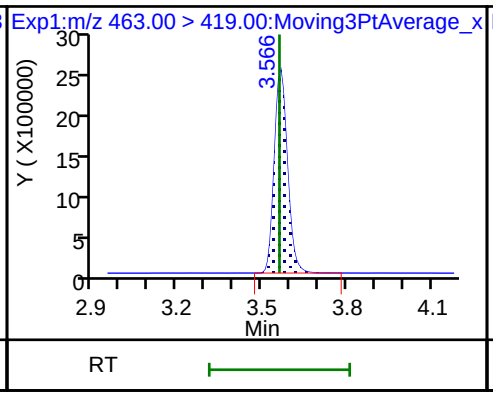


20 Perfluorononanoic acid



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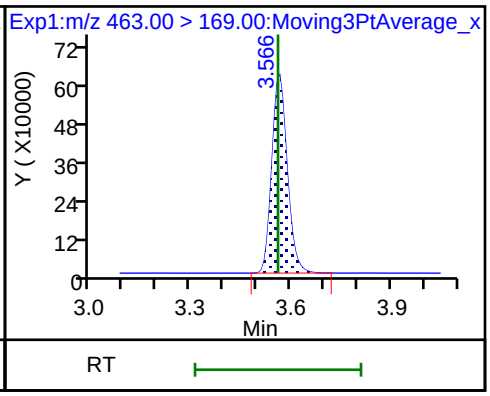

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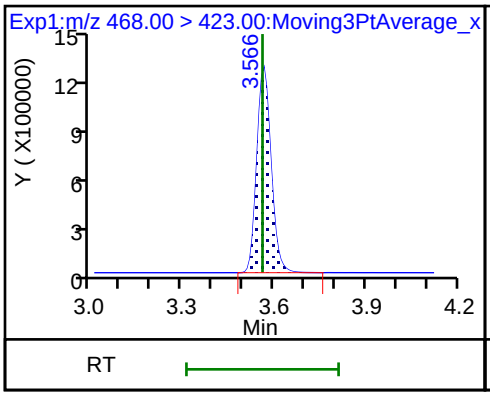
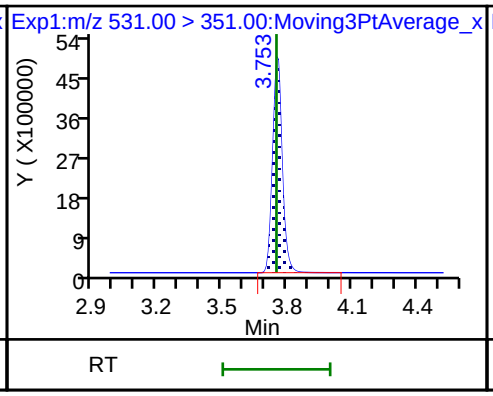
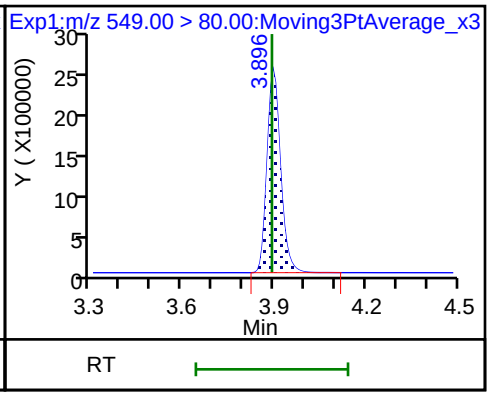


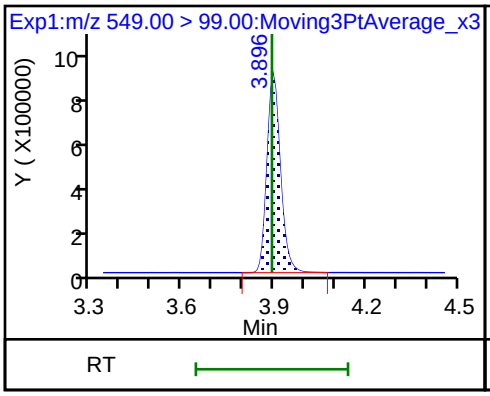
69 9-Chlorohexadecafluoro-3-oxanonane



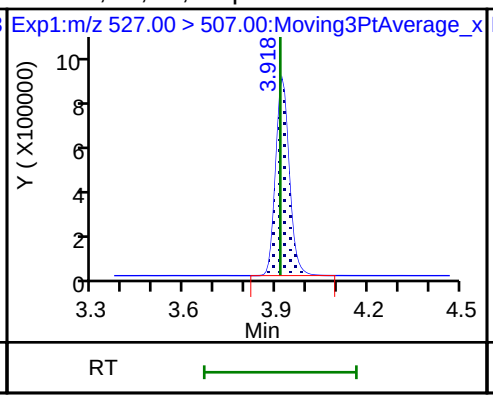
68 Perfluorononanesulfonic acid



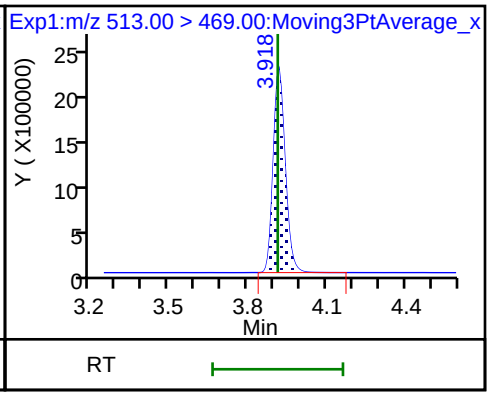
68 Perfluorononanesulfonic acid



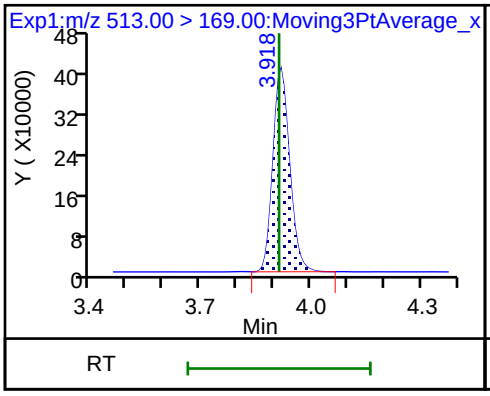
25 1H,1H,2H,2H-perfluorodecanesulfoni



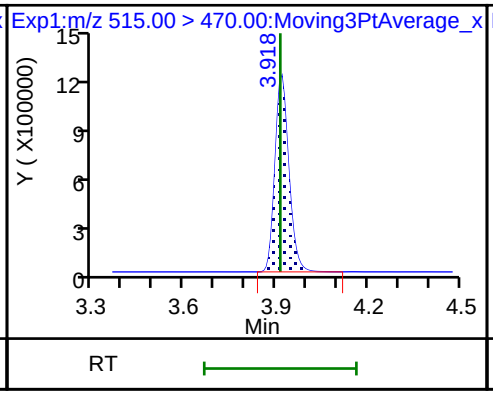
24 Perfluorodecanoic acid



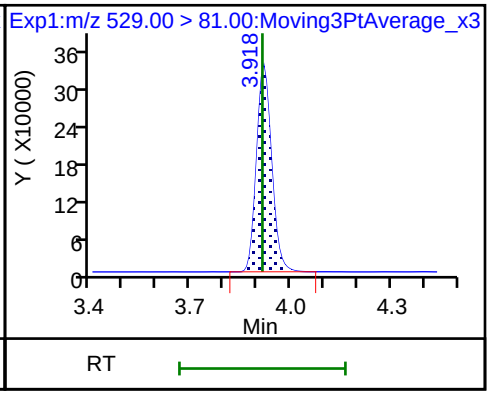
24 Perfluorodecanoic acid



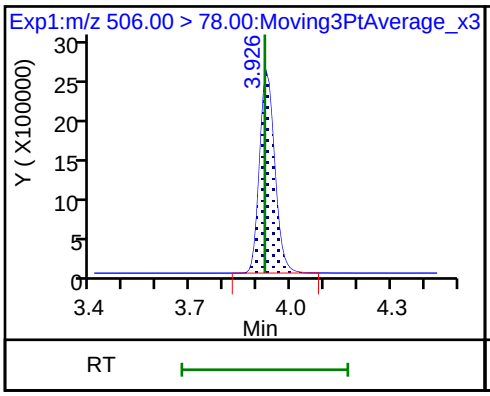
D 23 13C2 PFDA



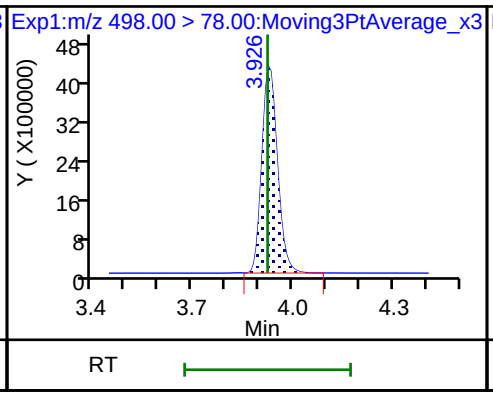
D 26 M2-8:2 FTS



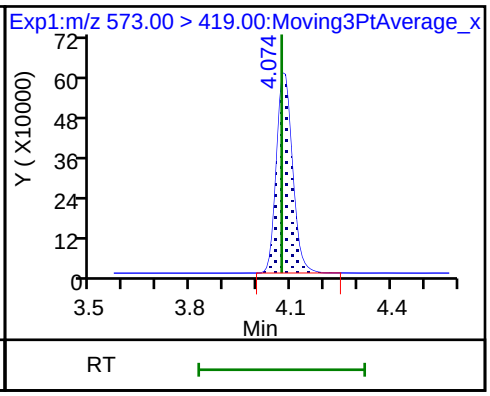
D 21 13C8 FOSA



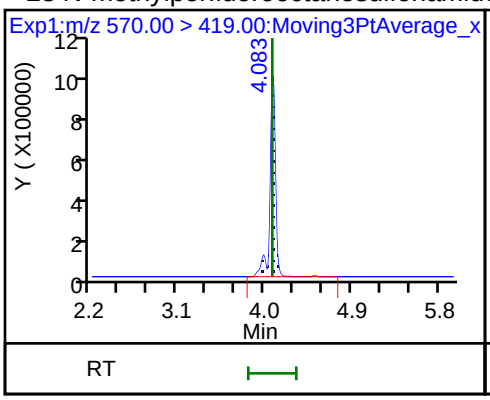
22 Perfluorooctanesulfonamide



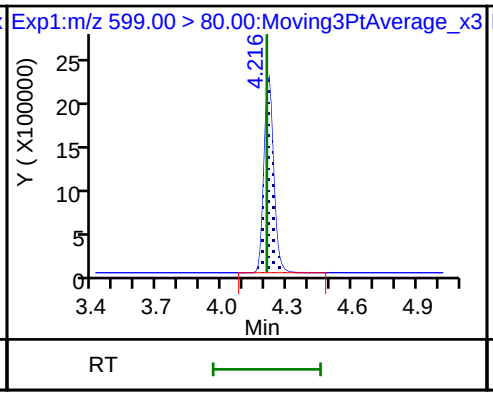
D 27 d3-NMeFOSAA



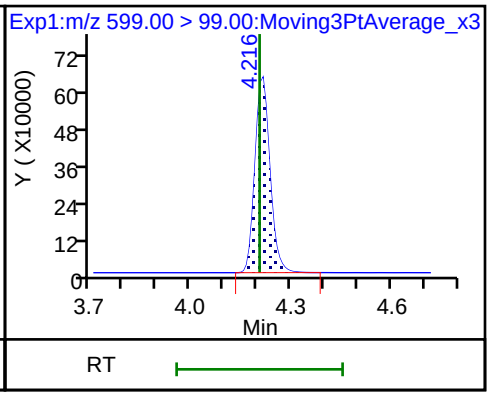
28 N-methylperfluorooctanesulfonamido



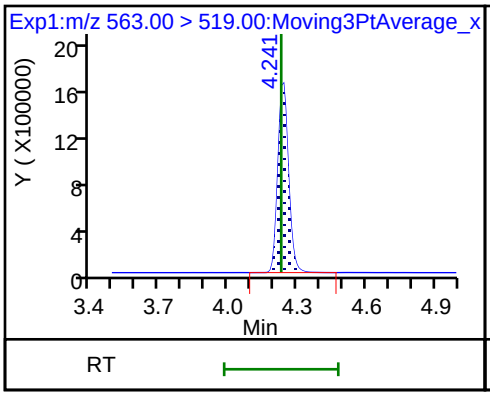
29 Perfluorodecanesulfonic acid



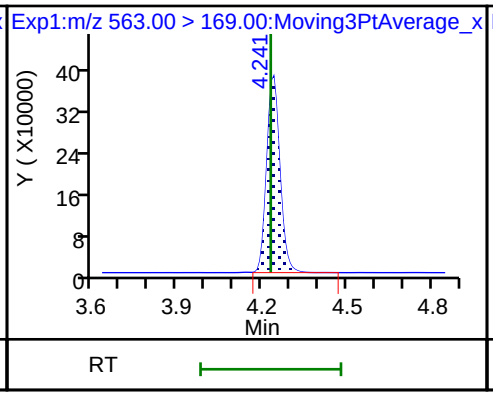
29 Perfluorodecanesulfonic acid



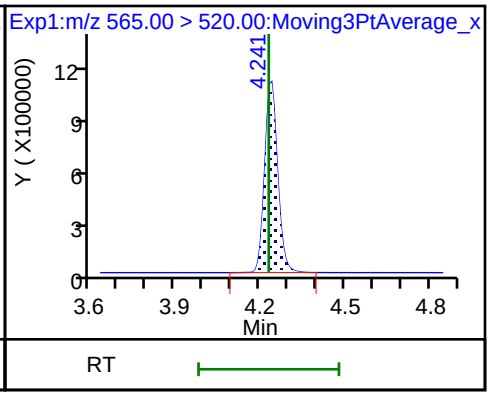
31 Perfluoroundecanoic acid



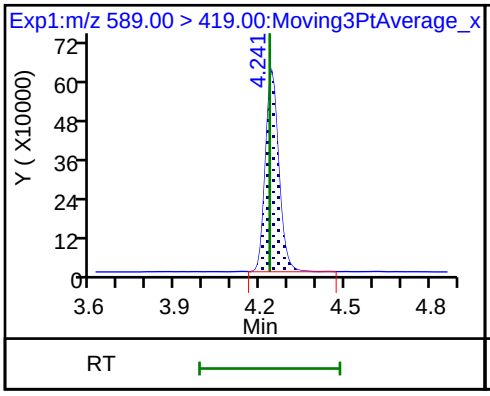
31 Perfluoroundecanoic acid



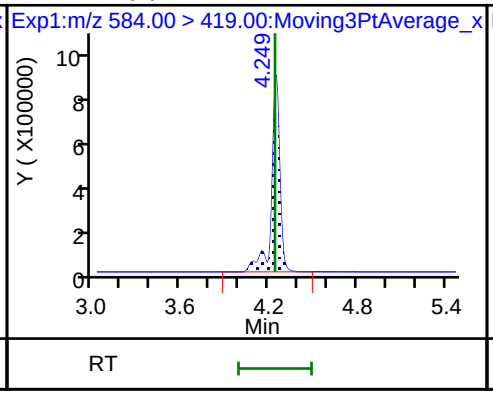
D 30 13C2 PFUnA



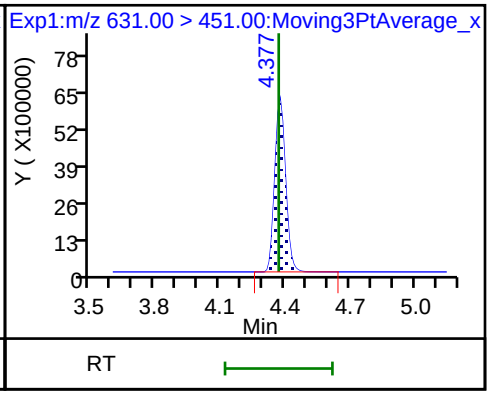
D 32 d5-NEtFOSAA



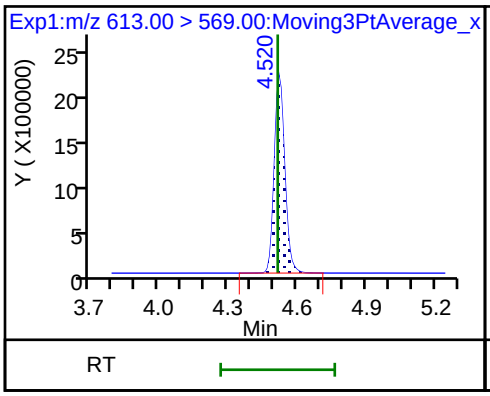
33 N-ethylperfluorooctanesulfonamidoa



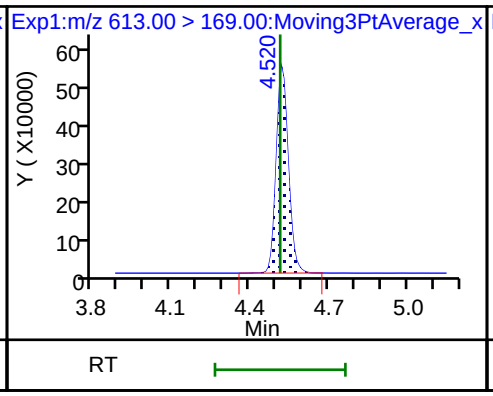
66 11-Chloroeicosafluoro-3-oxaundecan



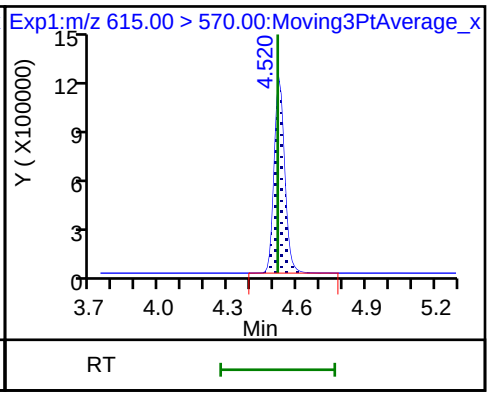
37 Perfluorododecanoic acid



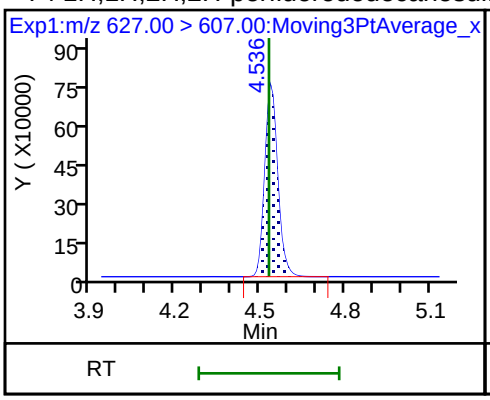
37 Perfluorododecanoic acid



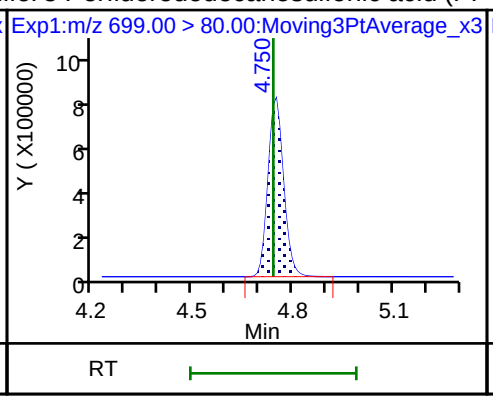
D 36 13C2 PFDoA



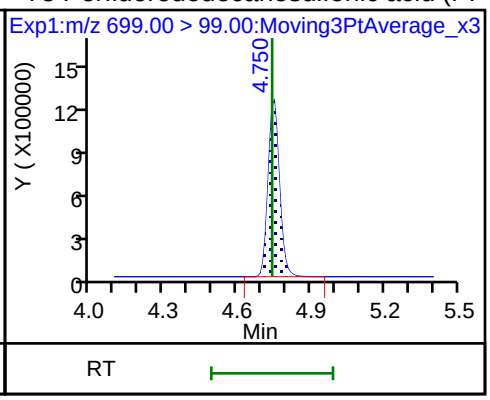
74 1H,1H,2H,2H-perfluorododecanesulfo



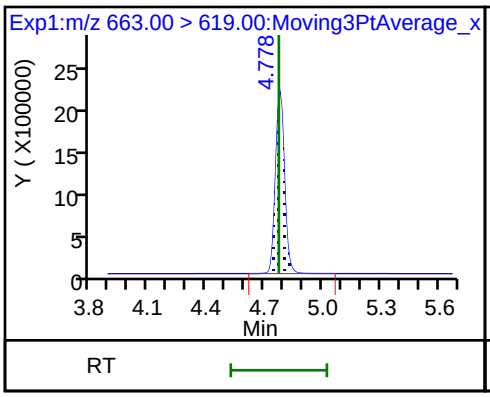
75 Perfluorododecanesulfonic acid (PF



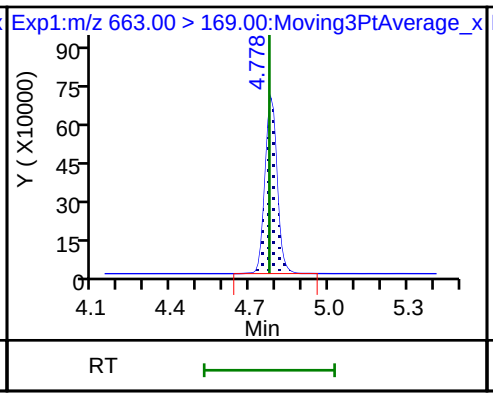
75 Perfluorododecanesulfonic acid (PF



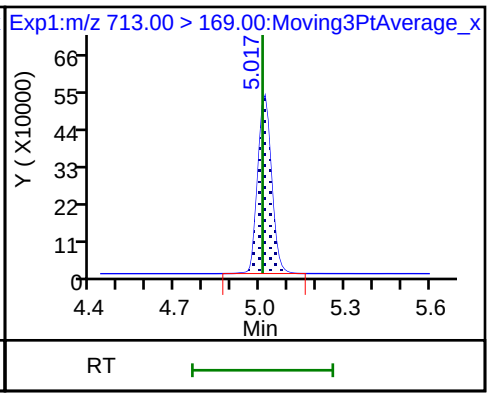
41 Perfluorotridecanoic acid



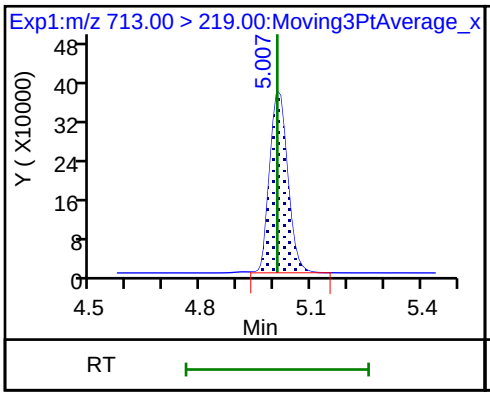
41 Perfluorotridecanoic acid



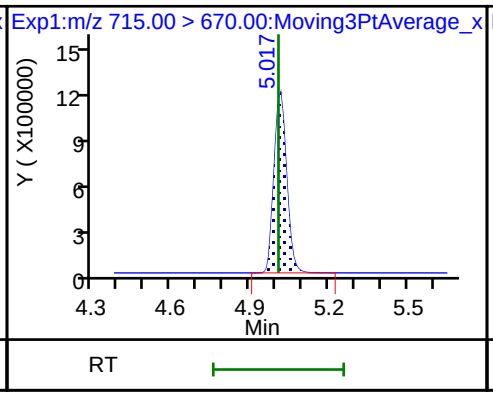
42 Perfluorotetradecanoic acid



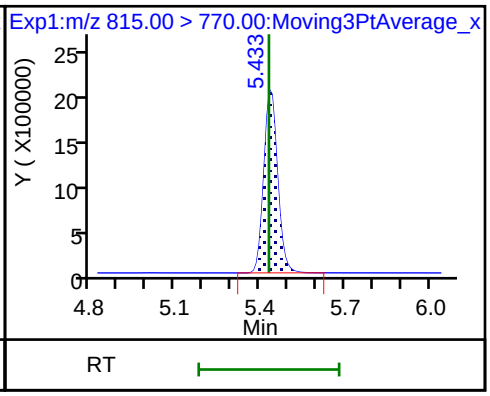
42 Perfluorotetradecanoic acid



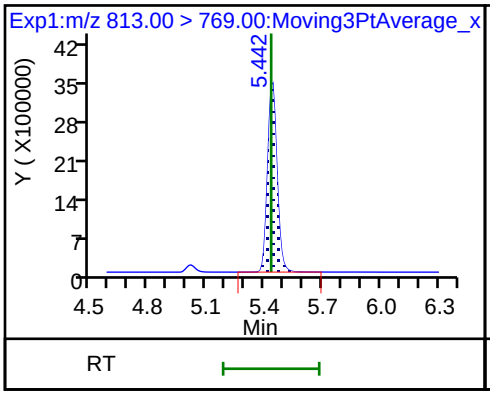
D 43 13C2 PFTeDA



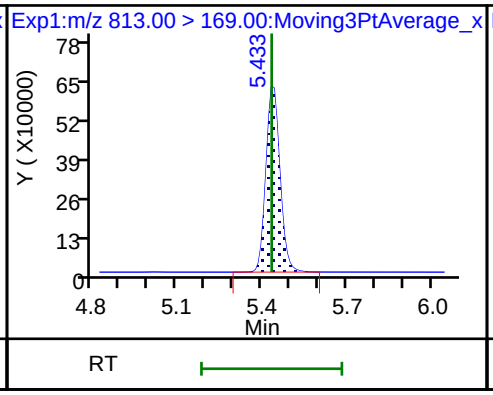
D 44 13C2 PFHxDA



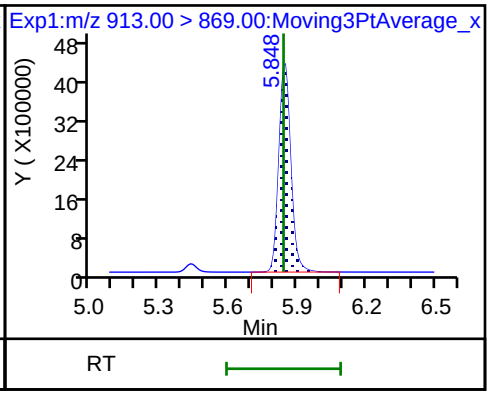
45 Perfluorohexadecanoic acid



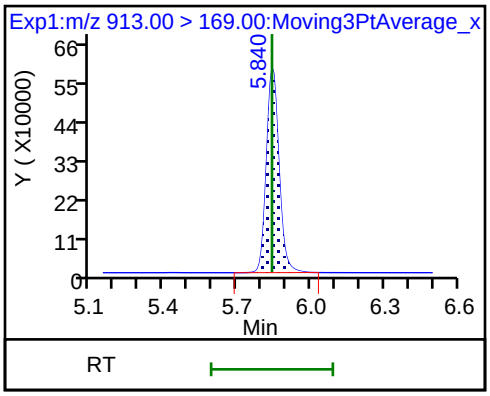
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-Mar-2019 02:02:31 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: IC STD 7
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 09-Mar-2019 07:57:19 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0306

First Level Reviewer: roycea Date: 09-Mar-2019 07:29:20
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.770	1.764	0.006		8413291	2.60		104	7409	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.770	1.766	0.004	1.000	26626265	9.89		98.9	6735	
D 3 13C5 PFPeA										
267.90 > 223.00	2.084	2.088	-0.004		5699937	2.56		102	8582	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.084	2.091	-0.007	1.000	21463670	9.57		95.7	1388	
D 47 13C3 PFBS										
301.90 > 80.00	2.116	2.120	-0.004		8019825	2.37		102	725985	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.116	2.123	-0.007	1.000	25688593	7.95	Target=2.39	89.9	16706	
298.90 > 99.00	2.116	2.123	-0.007	1.000	11755620		0.00(1.68-3.11)	89.9	13041	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.376	2.394	-0.018	1.000	5522945	9.71		104	16847	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.376	2.394	-0.018		649493	2.38		102	1630	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.416	2.432	-0.016	1.000	20235575	9.36	Target=11.00	93.6	7433	
313.00 > 119.00	2.416	2.432	-0.016	1.000	1944792		0.00(7.70-14.30)	93.6	5465	
D 7 13C2 PFHxA										
315.00 > 270.00	2.416	2.432	-0.016		5710425	2.50		99.9	9592	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.426	2.446	-0.020	1.146	22798908	8.50	Target=2.65	90.7	10479	
349.00 > 99.00	2.426	2.446	-0.020	1.146	9532020		0.00(1.85-3.44)	90.7	8336	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.525	2.541	-0.016	1.000	4294329	10.2		102	4784	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.525	2.541	-0.016		348990	2.65		106	1568	
D 9 13C4 PFHpA										
367.00 > 322.00	2.770	2.798	-0.028		5127150	2.45		98.0	9959	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.779	2.800	-0.021	1.003	19639003	9.67	Target=2.52	96.7	6006	
363.00 > 169.00	2.770	2.800	-0.030	1.000	8240618		0.00(1.76-3.27)	96.7	10298	
D 11 18O2 PFHxS										
403.00 > 84.00	2.779	2.806	-0.027		5377921	2.26		95.8	4633	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.779	2.807	-0.028	1.000	20565147	9.05	Target=2.82	99.4	4964	
399.00 > 99.00	2.779	2.807	-0.028	1.000	7437715		0.00(1.97-3.66)	99.4	3632	
77 DONA										
377.00 > 251.00	2.816	2.844	-0.028	0.799	43345110	7.34	Target=1.65	78.0	18126	
377.00 > 85.00	2.816	2.844	-0.028	0.799	29308721		0.00(1.16-2.15)	78.0	12126	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.137	3.162	-0.025		821693	2.29		96.3	4661	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.137	3.163	-0.026	1.000	4855478	9.89		104	11452	
D 73 13C8 PFOA										
421.00 > 376.00	3.153	3.177	-0.024		6869596	2.52		103	8284	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.153	3.179	-0.026	0.895	17866148	8.80	Target=3.74	92.4	3707	
449.00 > 99.00	3.153	3.179	-0.026	0.895	5080587		0.00(2.61-4.86)	92.4	4351	
* 62 13C2 PFOA										
415.00 > 370.00	3.153	3.181	-0.028		5627405	2.50			7056	
D 14 13C4 PFOA										
417.00 > 372.00	3.153	3.181	-0.028		4900672	2.45		98.1	9026	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.153	3.184	-0.031	1.000	19205987	9.24	Target=1.00	92.4	2091	
413.00 > 169.00	3.153	3.184	-0.031	1.000	10808759		1.78(0.70-1.30)	92.4	7047	
D 72 13C8 PFOS										
507.00 > 99.00	3.523	3.545	-0.022		2240511	2.38		99.4	4704	
D 18 13C4 PFOS										
503.00 > 80.00	3.523	3.549	-0.026		4389816	2.38		99.5	2190	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.531	3.550	-0.019	1.002	16923228	8.90	Target=1.00	95.9	3671	
499.00 > 99.00	3.523	3.550	-0.027	1.000	3652777		4.63(0.70-1.30)	95.9	2556	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.538	3.561	-0.023	1.000	15530814	10.0	Target=4.13	100.0	4305	
463.00 > 169.00	3.538	3.561	-0.023	1.000	3843789		0.00(2.89-5.37)	100.0	7729	
D 19 13C5 PFNA										
468.00 > 423.00	3.538	3.561	-0.023		4091000	2.53		101	8051	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.733	3.750	-0.017	1.060	26125963	8.69		93.3	15266	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.879	3.892	-0.013	1.101	13786916	9.04	Target=2.93	94.2	10008	
549.00 > 99.00	3.879	3.892	-0.013	1.101	4936782		0.00(2.05-3.81)	94.2	6870	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.901	3.913	-0.012	1.000	4822646	9.90		103	6922	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.901	3.913	-0.012	1.000	13052474	9.93	Target=5.34	99.3	6932	
513.00 > 169.00	3.901	3.913	-0.012	1.000	2467673		0.00(3.74-6.94)	99.3	3141	
D 23 13C2 PFDA										
515.00 > 470.00	3.901	3.913	-0.012		3569131	2.41		96.4	5078	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.901	3.914	-0.013		1017043	2.36		98.4	2766	
D 21 13C8 FOSA										
506.00 > 78.00	3.908	3.921	-0.013		7336755	2.37		94.8	7507	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.908	3.923	-0.015	1.000	23652749	9.14		91.4	3466	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.064	4.072	-0.008		2001890	2.61		104	3506	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.064	4.078	-0.014	1.000	7150083	10.3		103	3037	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.197	4.205	-0.008	1.191	12377327	9.58	Target=3.26	99.4	16400	
599.00 > 99.00	4.197	4.205	-0.008	1.191	4034920		0.00(2.28-4.23)	99.4	10301	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.222	4.230	-0.008	1.000	9712757	9.73	Target=4.09	97.3	6337	
563.00 > 169.00	4.222	4.230	-0.008	1.000	2397905		0.00(2.86-5.32)	97.3	4802	
D 30 13C2 PFUnA										
565.00 > 520.00	4.222	4.230	-0.008		3125042	2.33		93.1	6730	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.222	4.233	-0.011		2016020	2.46		98.3	798	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.230	4.240	-0.010	1.002	6602760	10.3		103	12619	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.364	4.370	-0.006	1.239	36294016	8.28		87.9	28571	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.510	4.514	-0.004	1.000	13405037	10.1	Target=4.03	101	6640	
613.00 > 169.00	4.510	4.514	-0.004	1.000	3453202		0.00(2.82-5.24)	101	7847	
D 36 13C2 PFDoA										
615.00 > 570.00	4.510	4.514	-0.004		3533342	2.44		97.7	6922	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.526	4.531	-0.005	1.160	4582827	9.44		97.9	9888	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.739	4.741	-0.002	1.345	5046921	10.2	Target=0.63	105	11813	
699.00 > 99.00	4.739	4.741	-0.002	1.345	7716292		0.00(0.44-0.82)	105	13736	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.776	4.773	0.003	1.059	12460709	9.32	Target=3.11	93.2	3967	
663.00 > 169.00	4.776	4.773	0.003	1.059	4234154		0.00(2.18-4.05)	93.2	7403	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.015	5.008	0.007	1.000	3646522	10.0	Target=1.37	100	10021	
713.00 > 219.00	5.005	5.008	-0.003	0.998	2557148		0.00(0.96-1.79)	100	1641	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.015	5.008	0.007		3793542	2.48		99.2	6876	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.441	5.430	0.011		6130156	2.44		97.6	5536	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.441	5.433	0.008	1.000	20053163	9.57	Target=5.26	95.7	564	
813.00 > 169.00	5.441	5.433	0.008	1.000	4079199		0.00(3.69-6.84)	95.7	6342	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.854	5.840	0.014	1.076	29812867	10.3	Target=7.43	103	923	
913.00 > 169.00	5.854	5.840	0.014	1.076	4277202		0.00(5.20-9.66)	103	5843	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL7_00010 Amount Added: 1.00 Units: mL

Report Date: 09-Mar-2019 07:57:20 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Injection Date: 09-Mar-2019 02:02:31 Instrument ID: A8_N

Lims ID: IC L7 Full

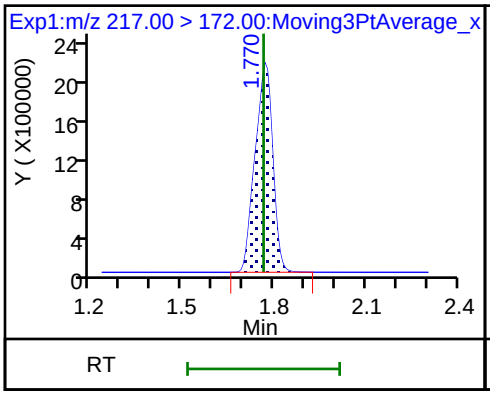
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 8

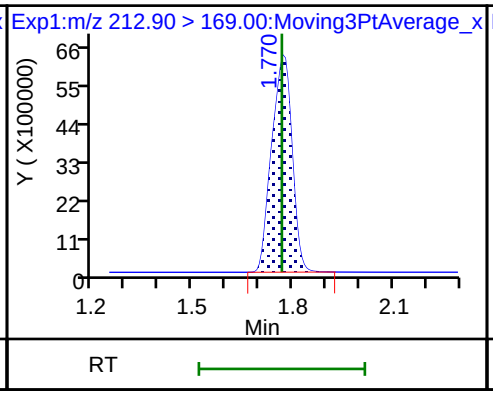
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

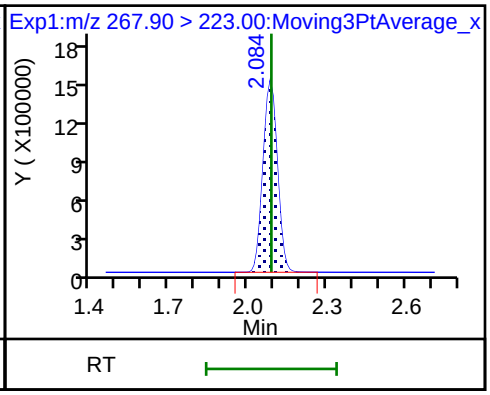
D 1 13C4 PFBA



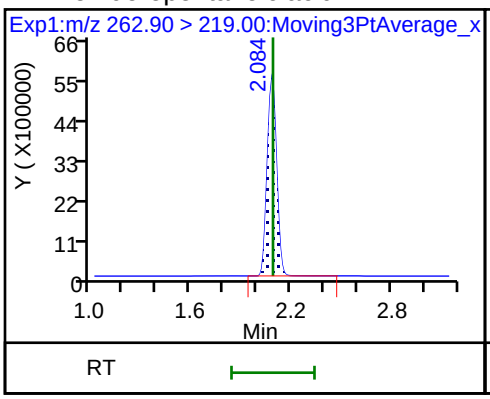
2 Perfluorobutanoic acid



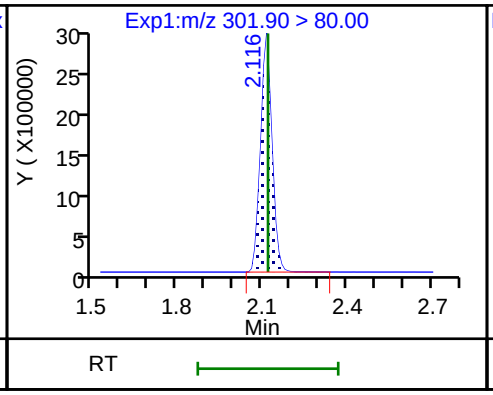
D 3 13C5 PFPeA



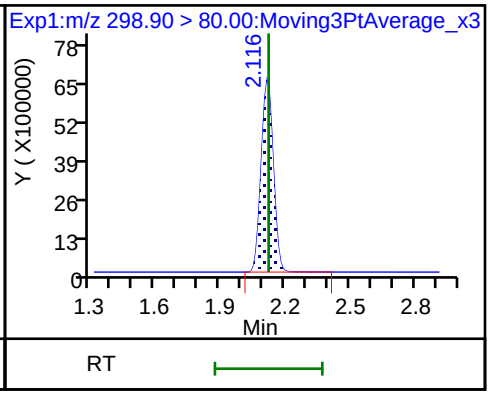
4 Perfluoropentanoic acid



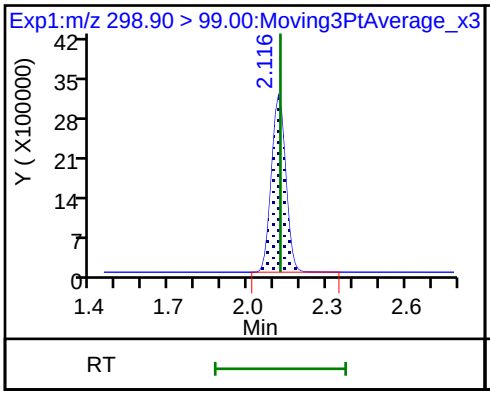
D 47 13C3 PFBS



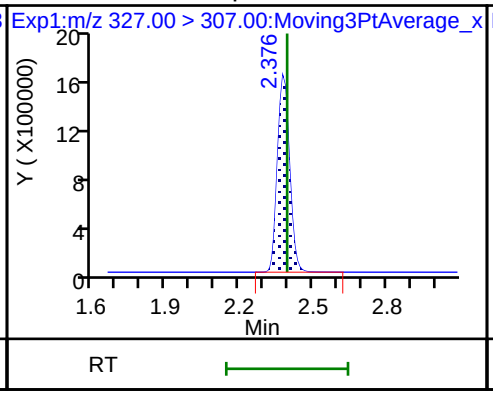
5 Perfluorobutanesulfonic acid



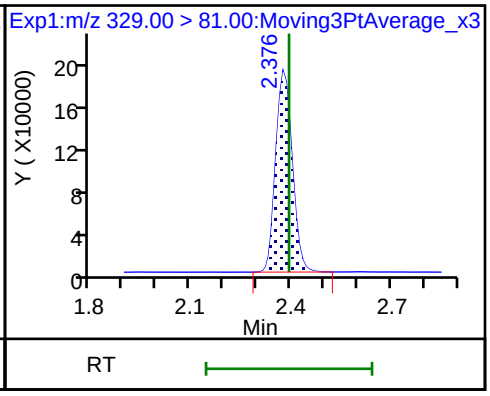
5 Perfluorobutanesulfonic acid



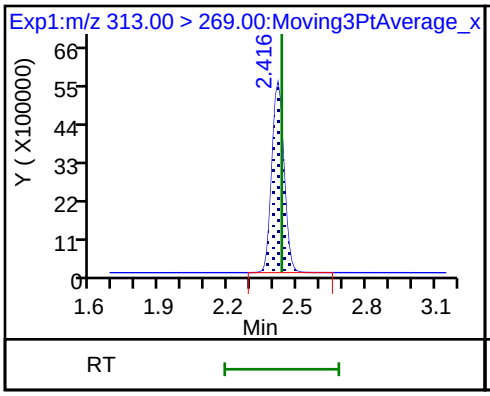
61 1H,1H,2H,2H-perfluorohexanesulfon



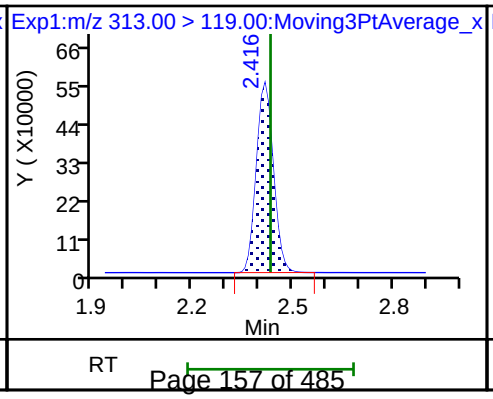
D 60 M2-4:2 FTS



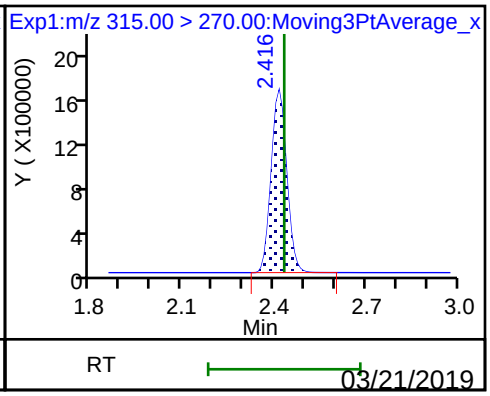
6 Perfluorohexanoic acid



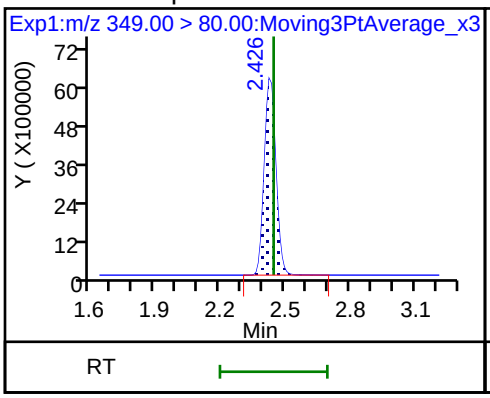
6 Perfluorohexanoic acid



D 7 13C2 PFHxA



70 Perfluoropentanesulfonic acid



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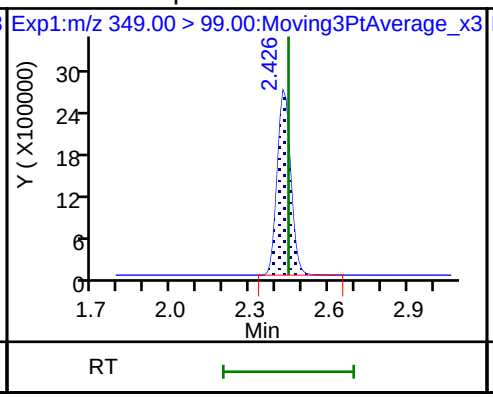
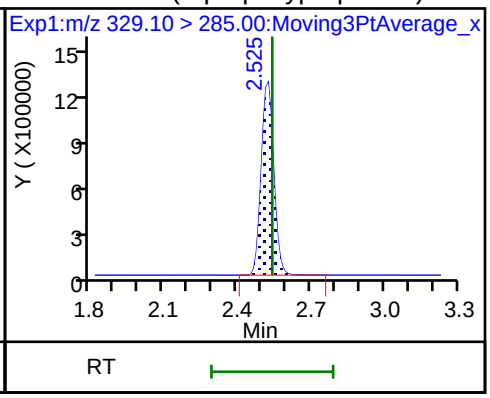
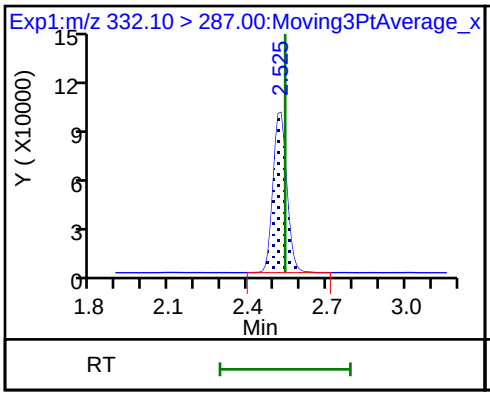


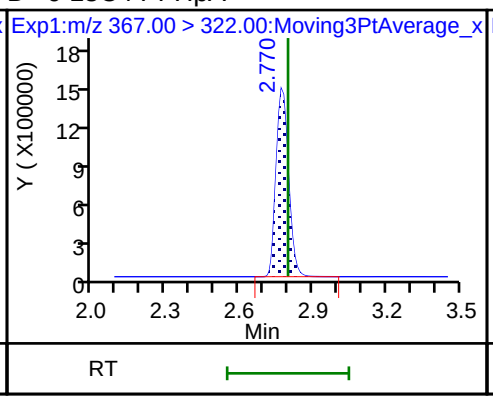
67 Perfluoro(2-propoxypropanoic) acid



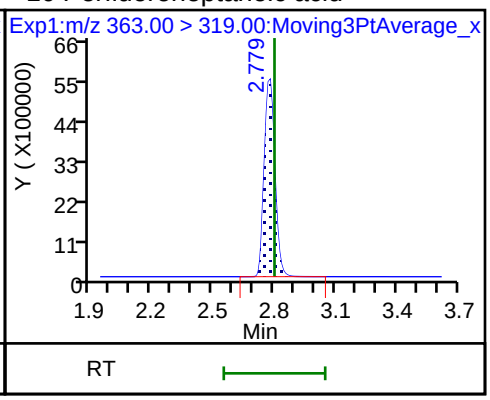
D 64 13C3 HFPO-DA



D 9 13C4 PFHpA



10 Perfluoroheptanoic acid



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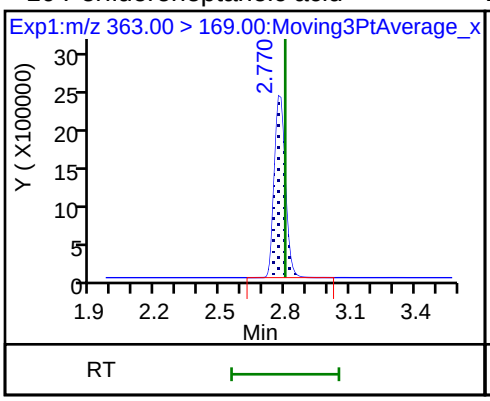
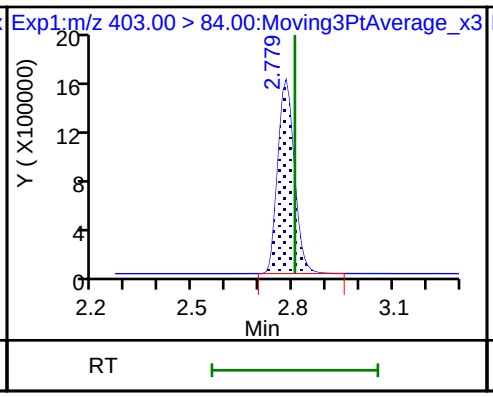
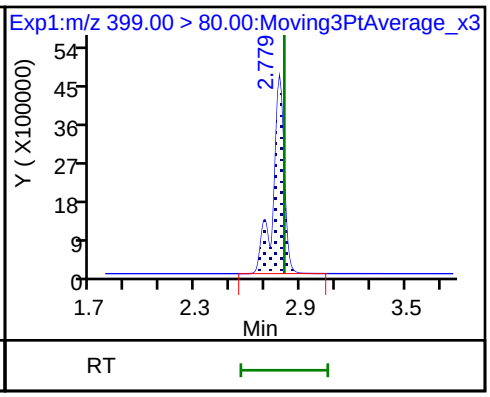


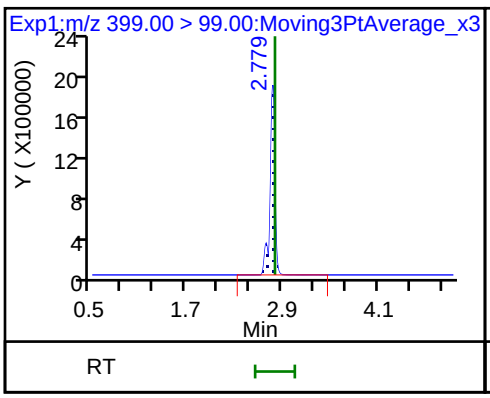
D 11 18O2 PFHxS



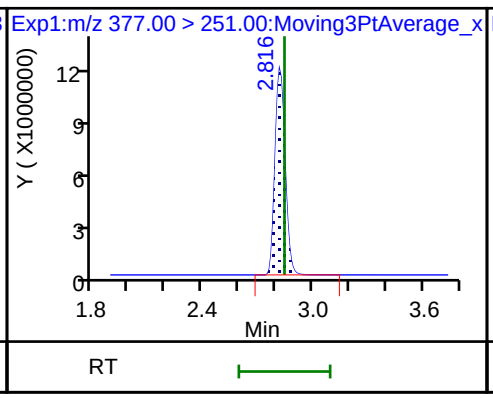
8 Perfluorohexanesulfonic acid



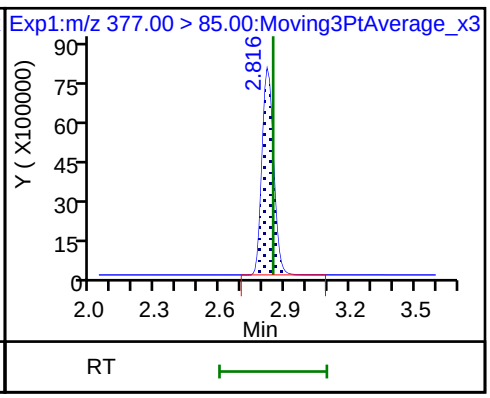
8 Perfluorohexanesulfonic acid



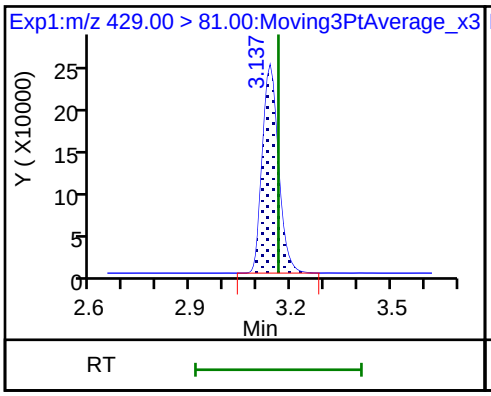
77 DONA



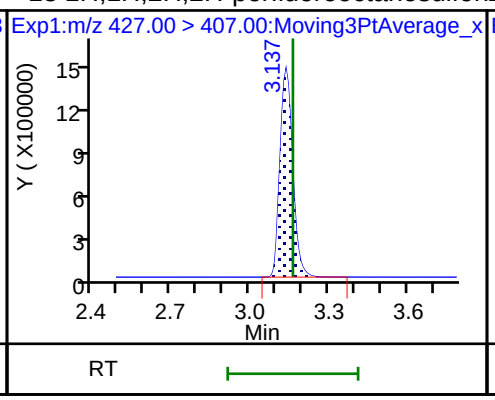
77 DONA



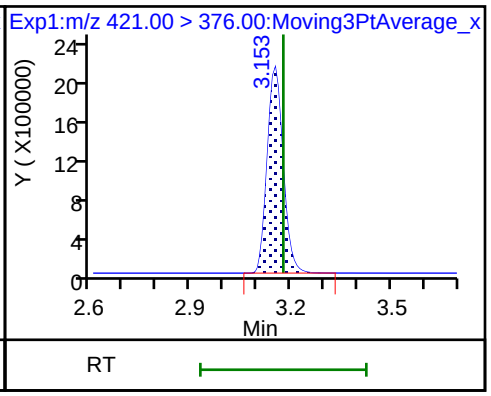
D 12 M2-6:2 FTS



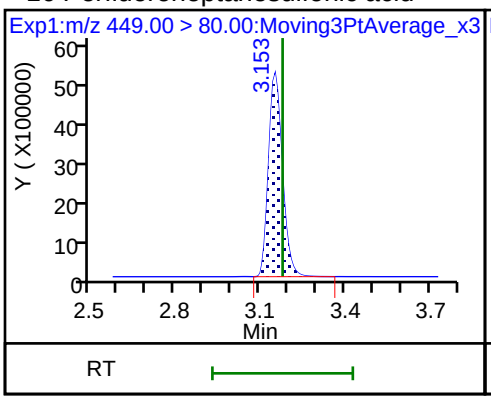
13 1H,1H,2H,2H-perfluorooctanesulfon



D 73 13C8 PFOA



16 Perfluoroheptanesulfonic acid



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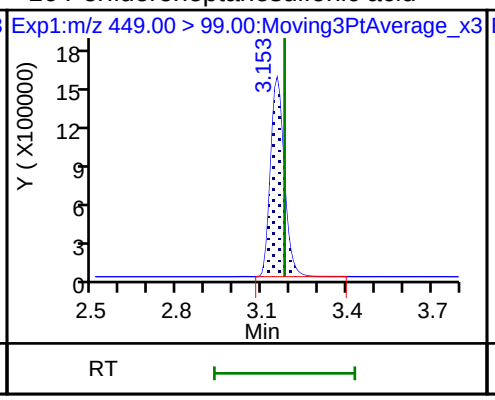
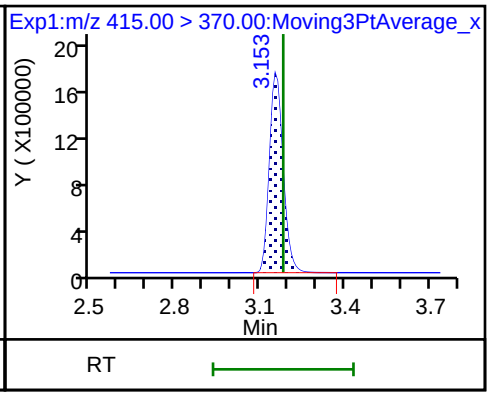
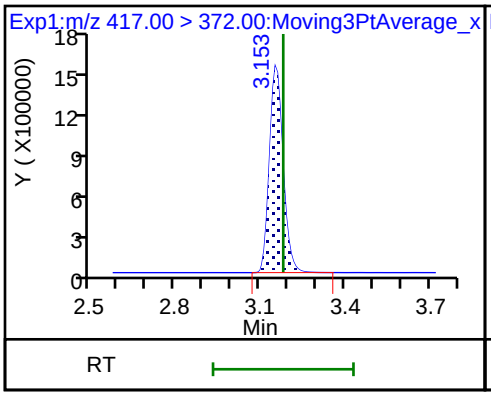


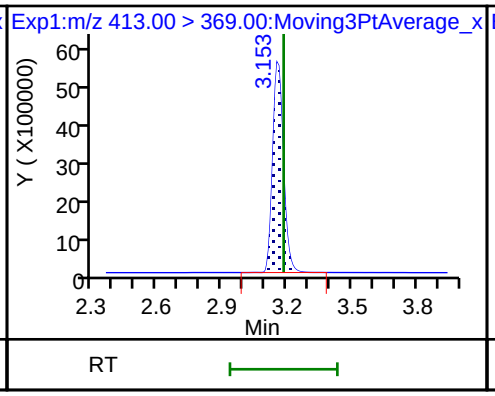
* 62 13C2 PFOA



D 14 13C4 PFOA



15 Perfluorooctanoic acid



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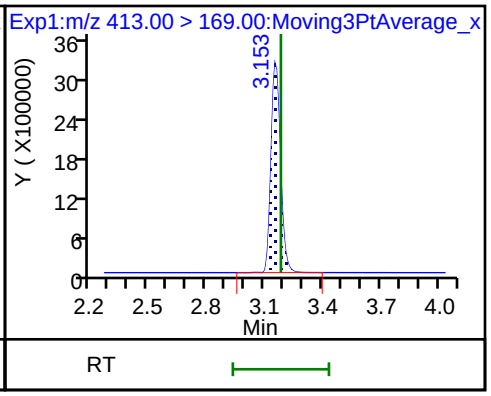
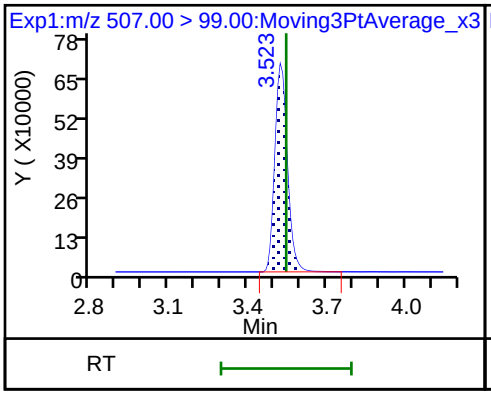


D 72 13C8 PFOS



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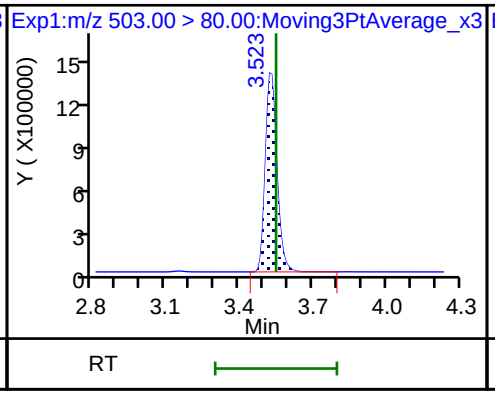
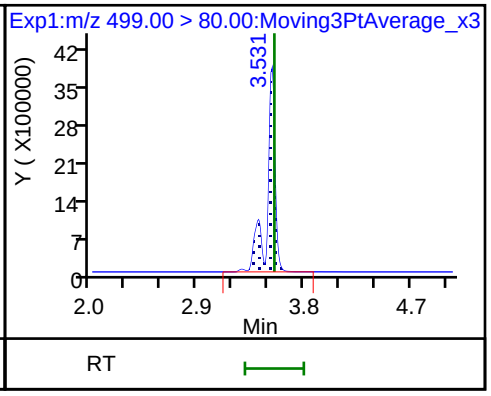
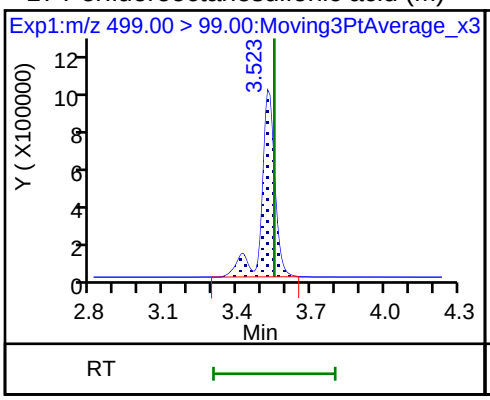


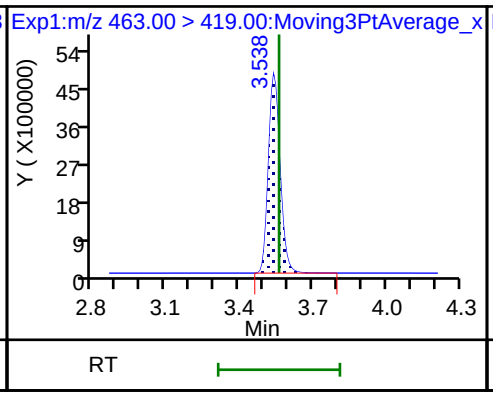
17 Perfluorooctanesulfonic acid



17 Perfluorooctanesulfonic acid (M)



20 Perfluorononanoic acid



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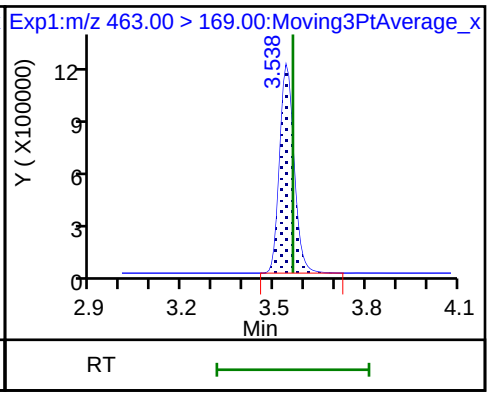
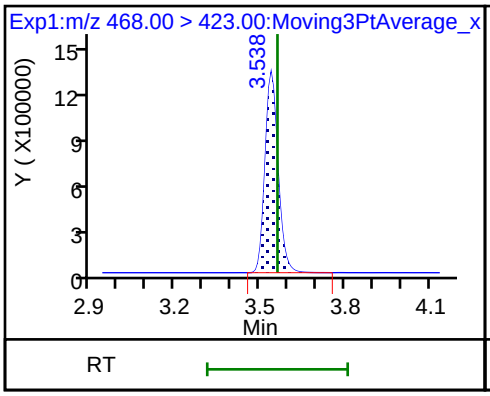
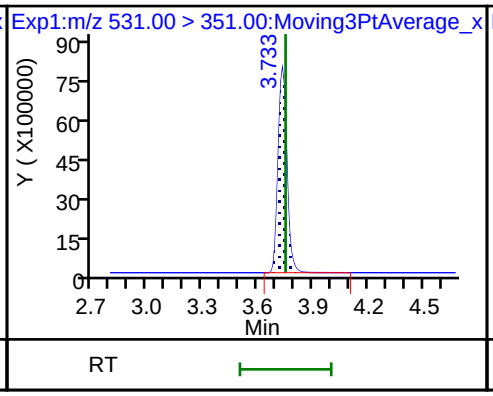


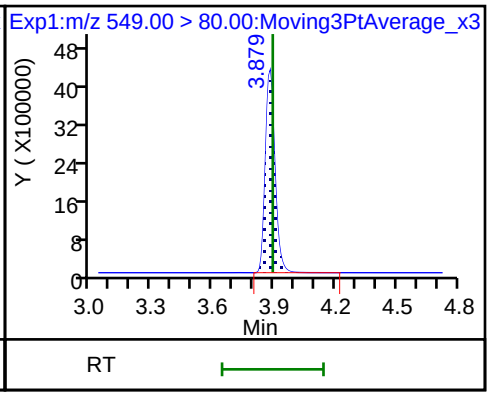
D 19 13C5 PFNA



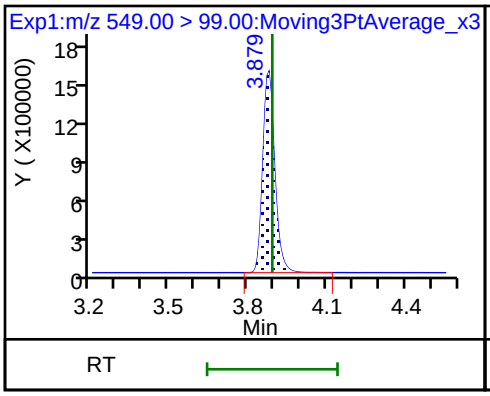
69 9-Chlorohexadecafluoro-3-oxanonane



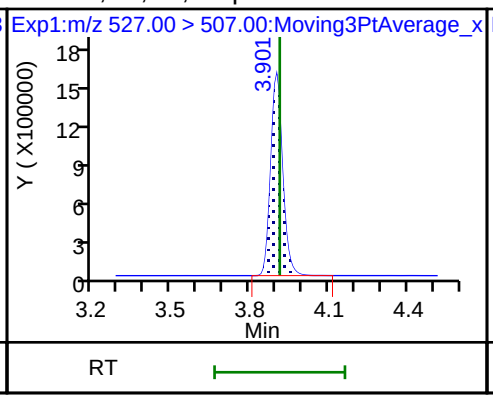
68 Perfluorononanesulfonic acid



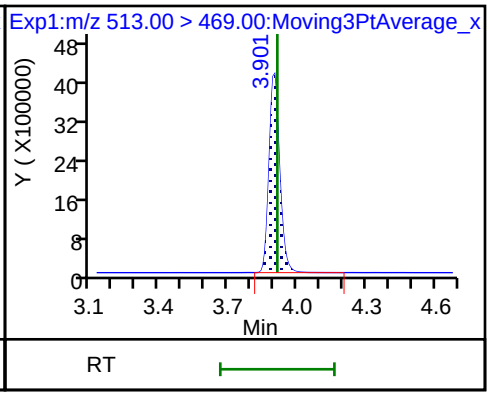
68 Perfluorononanesulfonic acid



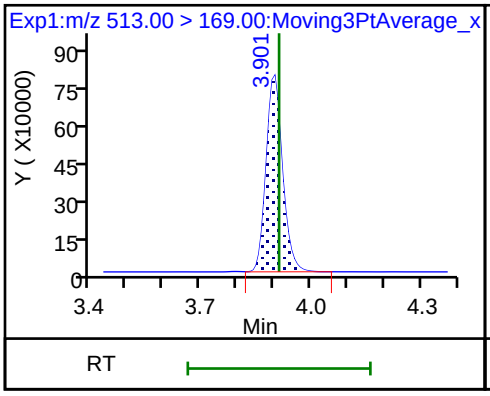
25 1H,1H,2H,2H-perfluorodecanesulfoni



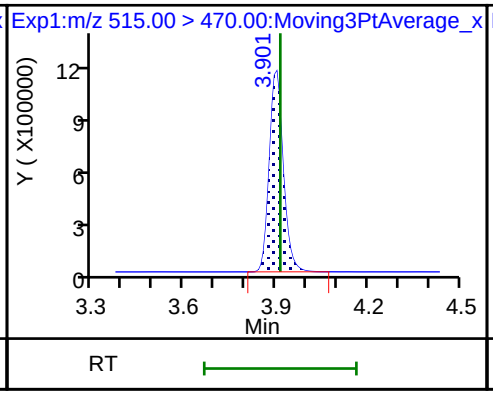
24 Perfluorodecanoic acid



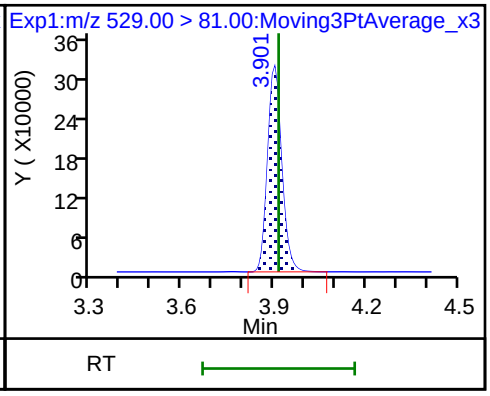
24 Perfluorodecanoic acid



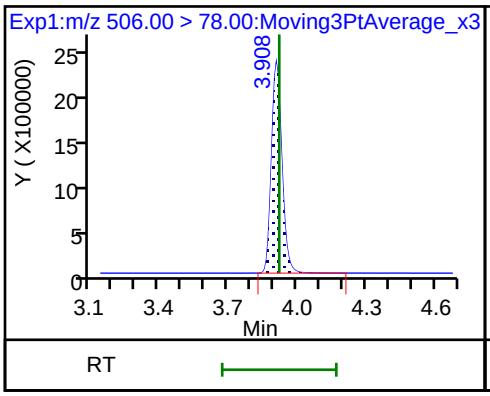
D 23 13C2 PFDA



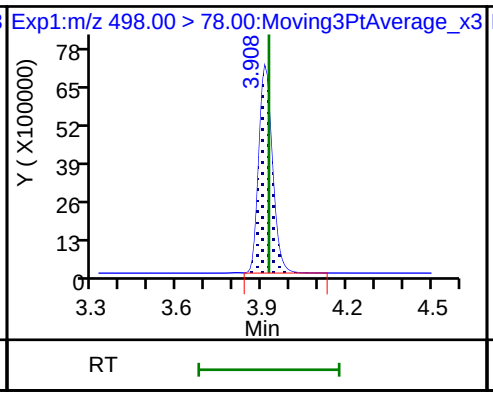
D 26 M2-8:2 FTS



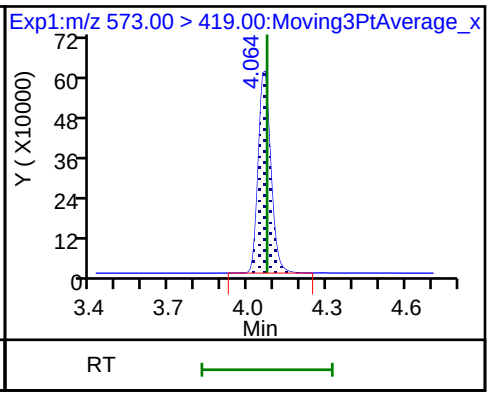
D 21 13C8 FOSA



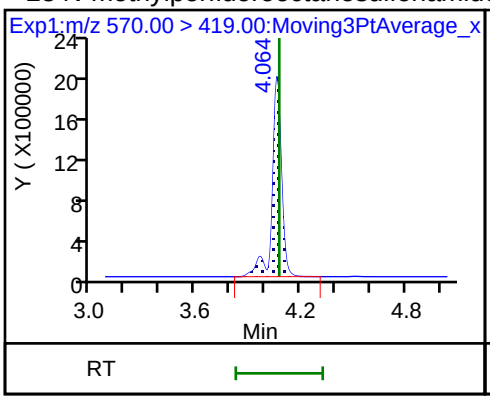
22 Perfluorooctanesulfonamide



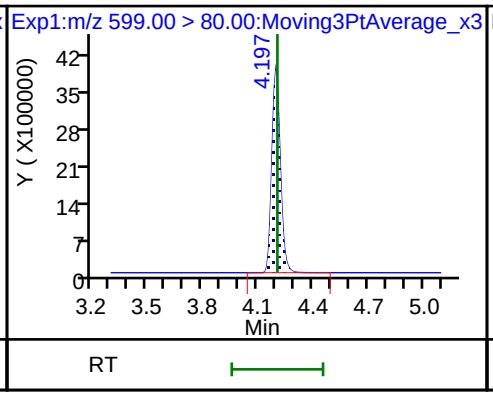
D 27 d3-NMeFOSAA



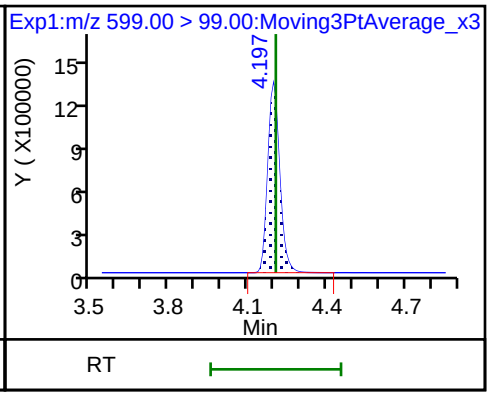
28 N-methylperfluorooctanesulfonamido



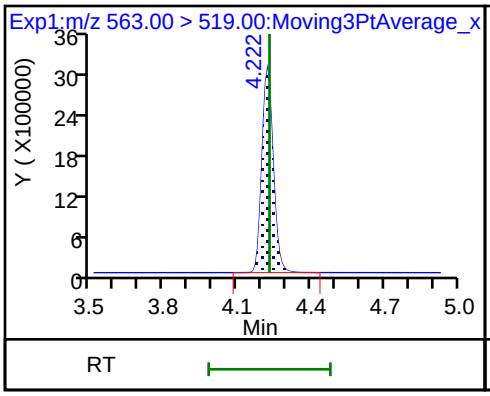
29 Perfluorodecanesulfonic acid



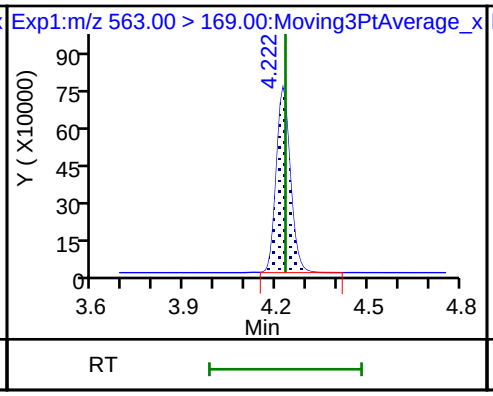
29 Perfluorodecanesulfonic acid



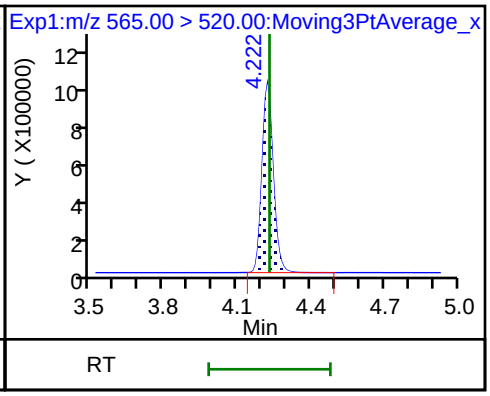
31 Perfluoroundecanoic acid



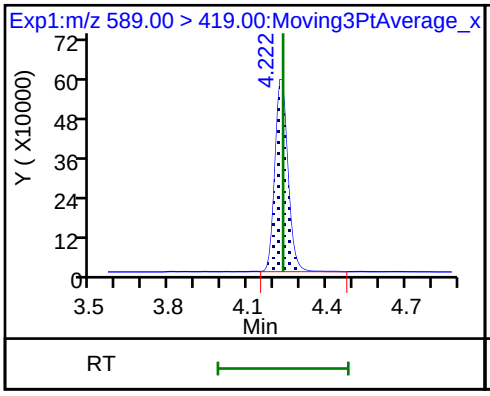
31 Perfluoroundecanoic acid



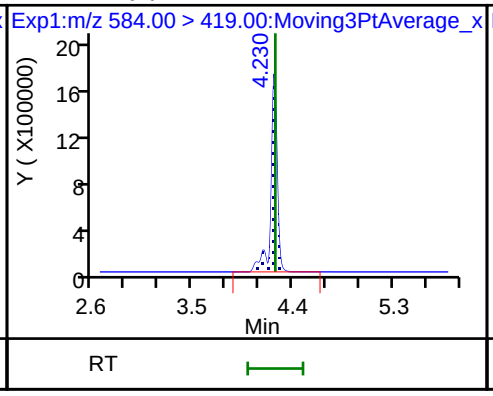
D 30 13C2 PFUnA



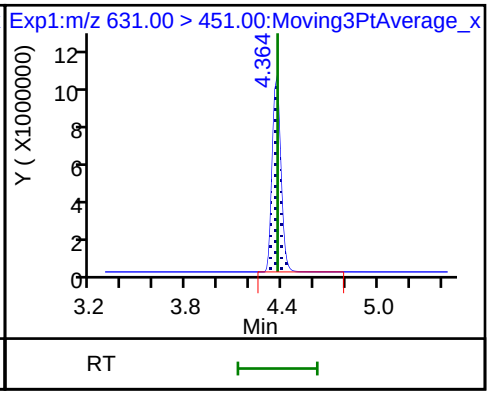
D 32 d5-NEtFOSAA



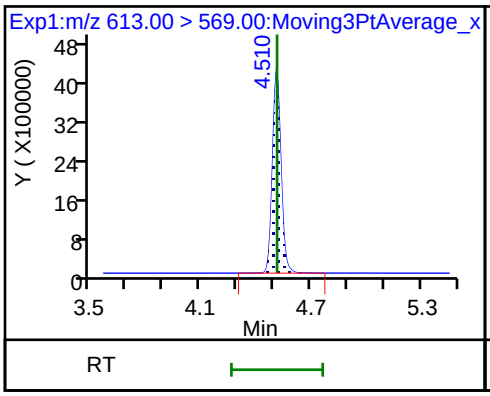
33 N-ethylperfluorooctanesulfonamidoa



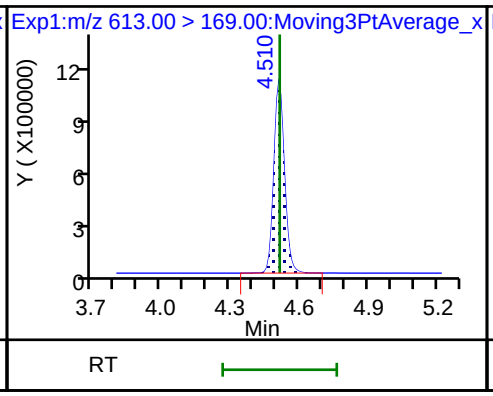
66 11-Chloroeicosafluoro-3-oxaundecan



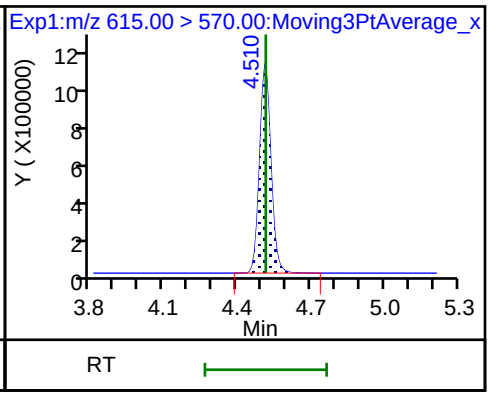
37 Perfluorododecanoic acid



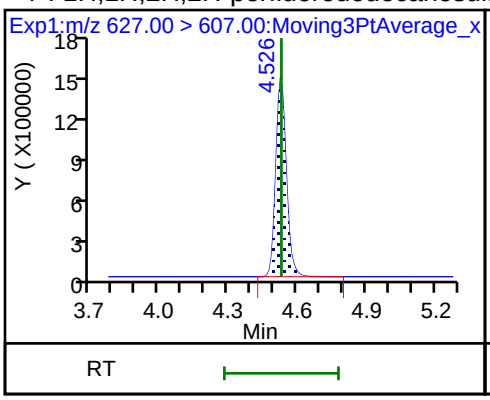
37 Perfluorododecanoic acid



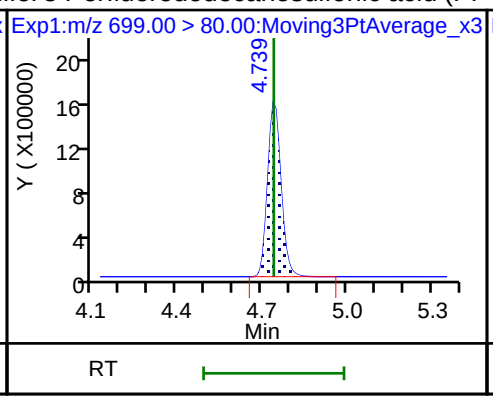
D 36 13C2 PFDoA



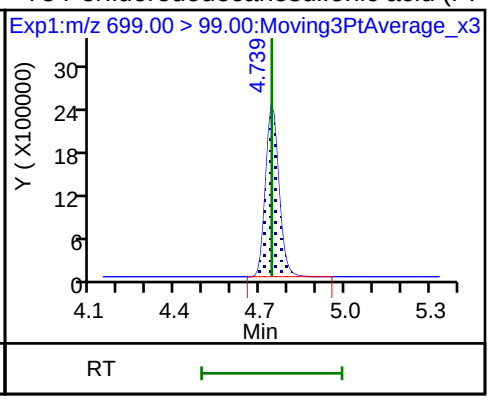
74 1H,1H,2H,2H-perfluorododecanesulfo



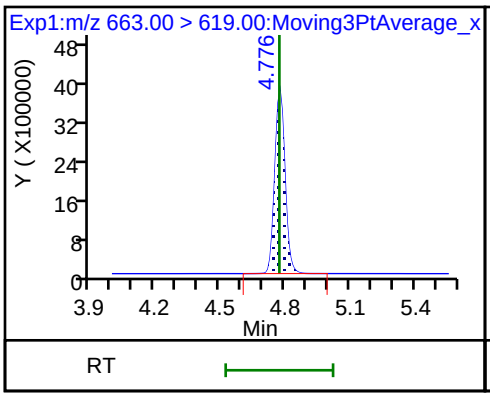
75 Perfluorododecanesulfonic acid (PF



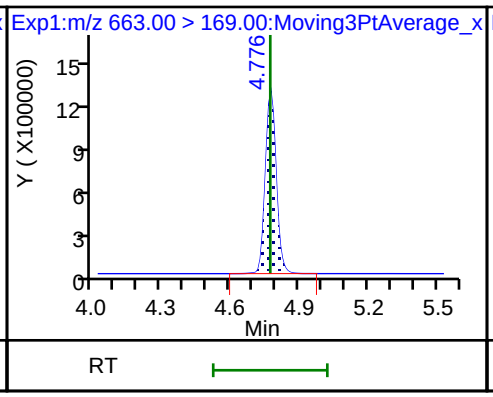
75 Perfluorododecanesulfonic acid (PF



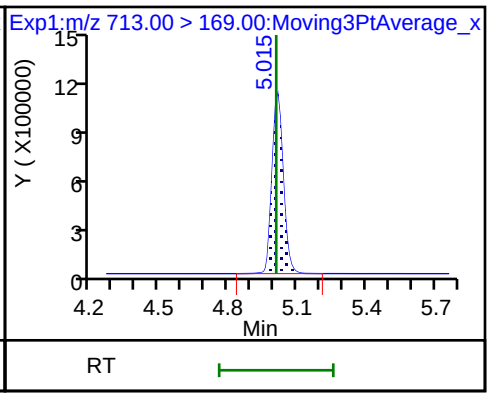
41 Perfluorotridecanoic acid



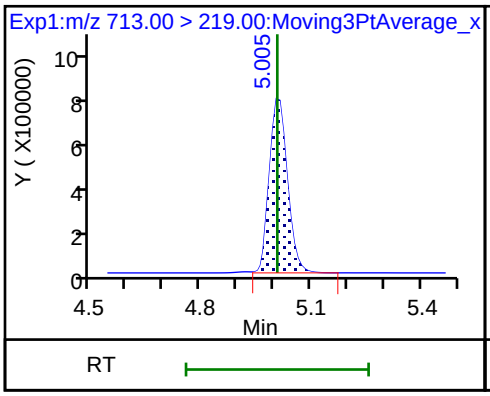
41 Perfluorotridecanoic acid



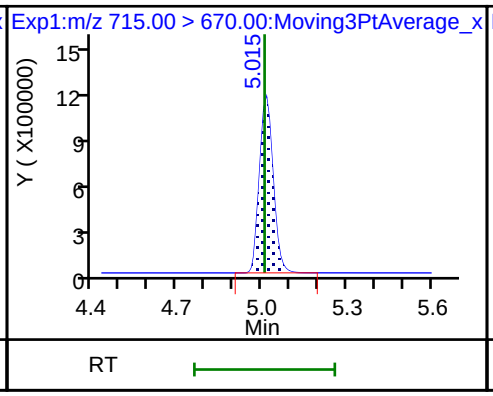
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 43 13C2 PFTeDA



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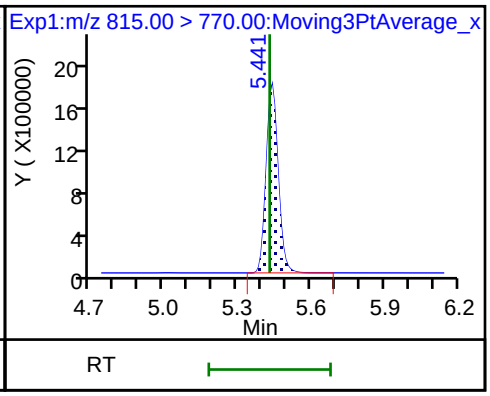
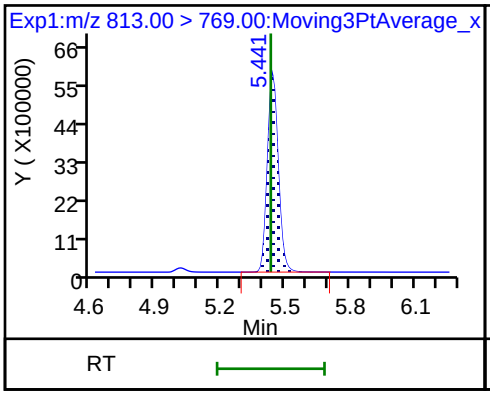
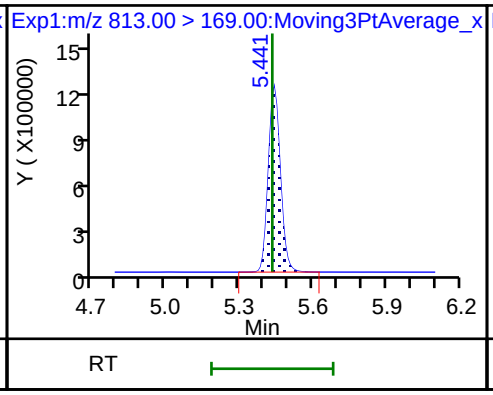


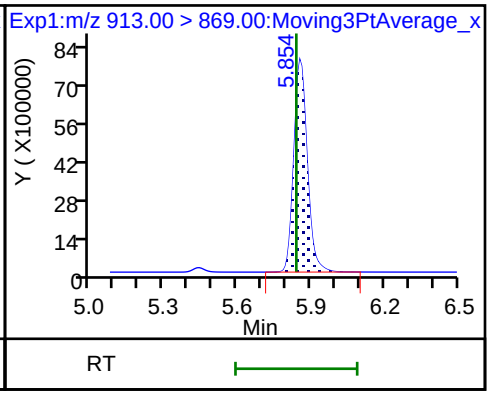
45 Perfluorohexadecanoic acid



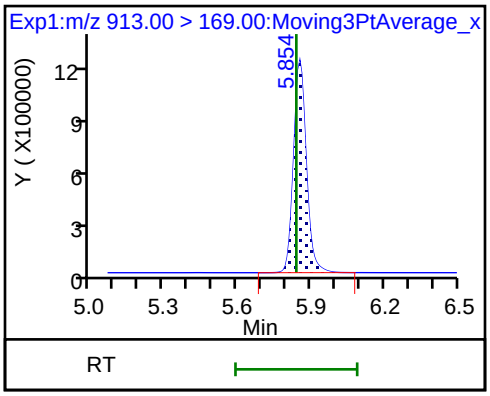
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

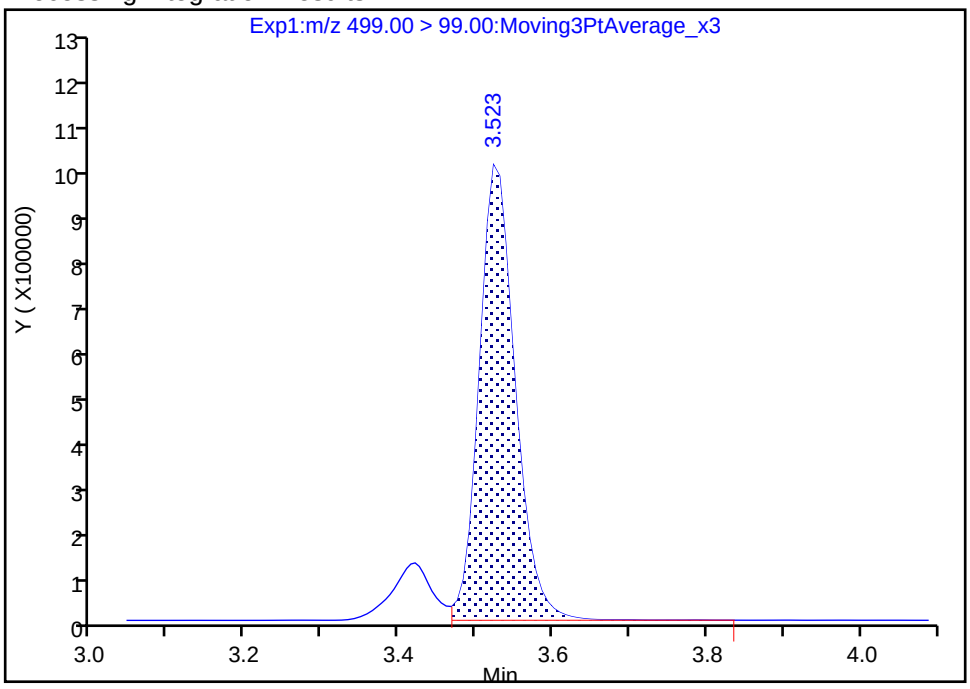
Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d
Injection Date: 09-Mar-2019 02:02:31 Instrument ID: A8_N
Lims ID: IC L7 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

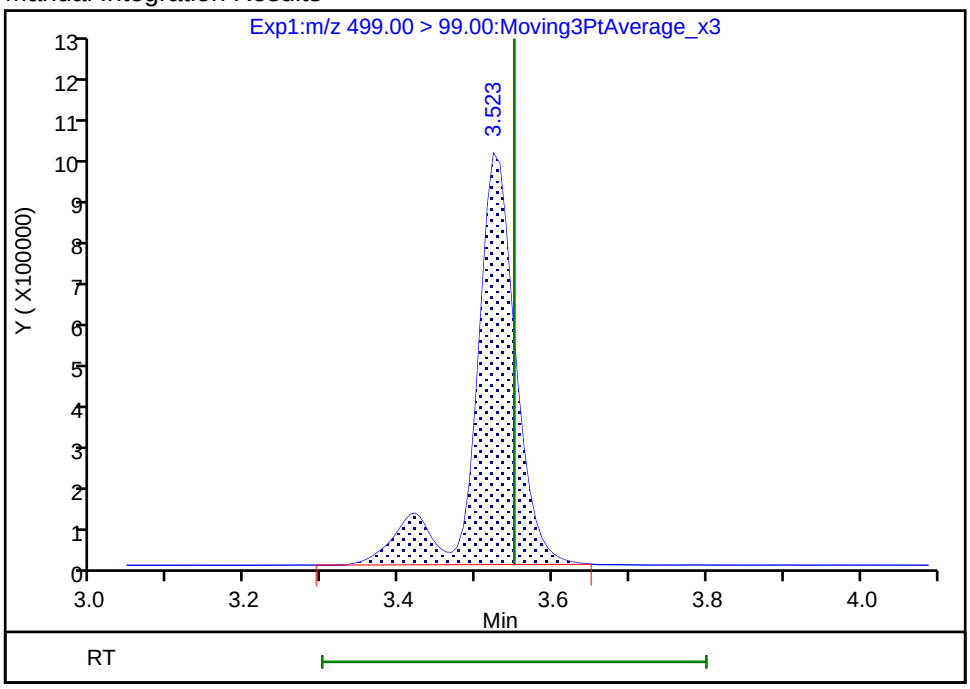
Processing Integration Results

RT: 3.52
Area: 3228845
Amount: 8.900118
Amount Units: ng/ml



Manual Integration Results

RT: 3.52
Area: 3652777
Amount: 8.900118
Amount Units: ng/ml



Reviewer: roycea, 09-Mar-2019 07:28:49
Audit Action: Manually Integrated Audit Reason: Isomers

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280812

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2019 11:27 Calibration End Date: 03/11/2019 12:12 Calibration ID: 44233

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-280812/2	2019.03.11_ICAL_002.d
Level 2	IC 320-280812/3	2019.03.11_ICAL_003.d
Level 3	IC 320-280812/4	2019.03.11_ICAL_004.d
Level 4	IC 320-280812/5	2019.03.11_ICAL_005.d
Level 5	IC 320-280812/6	2019.03.11_ICAL_006.d
Level 6	IC 320-280812/7	2019.03.11_ICAL_007.d
Level 7	IC 320-280812/8	2019.03.11_ICAL_008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.9660 0.8764	0.8288 0.7856	0.8821	0.9006	0.8819	AveID		0.8745				6.5		35.0			
Perfluoropentanoic acid (PFPeA)	1.2126 0.9133	1.0219 0.8397	0.9705	1.0026	0.9403	AveID		0.9858				11.9		35.0			
Perfluorobutanesulfonic acid (PFBS)	1.0133 0.8710	0.9321 0.8348	0.9076	0.9791	0.9008	AveID		0.9198				6.7		35.0			
4:2 FTS	2.3963 2.3137	2.6455 2.2760	2.4673	2.6019	2.4535	AveID		2.4506				5.6		35.0			
Perfluorohexanoic acid (PFHxA)	1.0929 0.8201	0.8810 0.7549	0.8349	0.8196	0.8804	AveID		0.8691				12.4		35.0			
Perfluoropentanesulfonic acid (PFPeS)	0.4951 0.4583	0.4189 0.4332	0.4638	0.4857	0.4589	AveID		0.4591				5.8		50.0			
HFPO-DA (GenX)	1.5607 1.3834	1.3796 1.4070	1.3179	1.4844	1.1889	AveID		1.3888				8.5		35.0			
Perfluoroheptanoic acid (PFHpA)	1.2364 0.9317	1.0146 0.8548	0.9956	1.0011	0.9545	AveID		0.9984				11.8		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.5699 1.1564	1.1779 1.1050	1.1218	1.1752	1.1701	AveID		1.2109				13.3		35.0			
DONA	2.4563 1.9410	2.2942 1.7170	2.3803	2.3480	2.2102	AveID		2.1924				12.2		50.0			
6:2 FTS	2.0391 2.0008	1.8857 1.9508	1.9109	1.9783	2.0280	AveID		1.9705				2.9		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	0.9367 0.9603	0.8933 0.9290	0.9896	0.9662	1.0275	AveID		0.9575				4.5		50.0			
Perfluorooctanoic acid (PFOA)	1.2441 0.9405	1.1616 0.8548	0.9951	1.0756	1.0058	AveID		1.0397				12.7		35.0			
Perfluorooctanesulfonic acid (PFOS)	0.9942 0.9809	0.9459 0.9456	0.9486	0.9804	1.0081	AveID		0.9719				2.6		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280812

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2019 11:27 Calibration End Date: 03/11/2019 12:12 Calibration ID: 44233

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorononanoic acid (PFNA)	1.1363 0.8885	0.9828 0.8328	0.9858	0.9955	0.9168	AveID		0.9626				10.1		35.0			
F-53B Major	0.8062 0.7547	0.8204 0.7629	0.7726	0.7423	0.7820	AveID		0.7773				3.6		50.0			
Perfluorooctanesulfonamide (FOSA)	2.7614 2.6211	2.7228 2.2233	3.0067	3.2050	2.7482	AveID		2.7555				11.2		35.0			
Perfluorononanesulfonic acid (PFNS)	0.5923 0.5816	0.5025 0.5512	0.5754	0.6429	0.5976	AveID		0.5777				7.5		50.0			
8:2 FTS	1.6463 1.5948	1.5366 1.7604	1.5279	1.5714	1.6277	AveID		1.6093				5.0		35.0			
Perfluorodecanoic acid (PFDA)	1.2181 0.9841	1.1175 0.8623	1.0202	1.1781	1.0486	AveID		1.0613				11.5		35.0			
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.7706 0.7749	0.7649 0.7647	0.8487	0.8223	0.8313	AveID		0.7968				4.5		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.8869 0.8437	0.7991 0.7850	0.8870	0.8661	0.9431	AveID		0.8587				6.4		50.0			
Perfluoroundecanoic acid (PFUnA)	0.9802 0.7203	0.8545 0.7058	0.7001	0.7473	0.7601	AveID		0.7812				13.1		35.0			
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.6546 0.7392	0.7765 0.7828	0.7387	0.7707	0.7588	AveID		0.7459				5.9		35.0			
F-53B Minor	1.2756 0.9037	1.1641 0.8666	1.1362	1.0687	1.0191	AveID		1.0620				13.7		50.0			
Perfluorododecanoic acid (PFDoA)	1.1123 0.8508	1.0334 0.8077	0.9573	0.9768	0.9275	AveID		0.9523				10.9		35.0			
10:2 FTS	0.8787 1.0359	0.9600 1.0920	0.9839	0.9229	1.0577	AveID		0.9902				7.7		50.0			
Perfluorododecanesulfonic acid (PFDoS)	0.0782 0.0861	0.0869 0.0923	0.0857	0.0874	0.0888	AveID		0.0865				4.9		50.0			
Perfluorotridecanoic acid (PFTriA)	0.8132 0.6944	0.7703 0.6449	0.7665	0.8094	0.7462	AveID		0.7493				8.1		50.0			
Perfluorotetradecanoic acid (PFTeA)	0.2125 0.1751	0.1840 0.1640	0.1749	0.1625	0.1586	AveID		0.1759				10.4		35.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	+++++ 0.8458	1.3573 0.7943	1.0166	0.8992	0.8617	L2ID	0.0259	0.8513							0.9970		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	0.4857 0.5197	0.4920 0.5317	0.5297	0.5165	0.5070	AveID		0.5118				3.5		50.0			
13C4 PFBA	0.8215 0.8525	0.8109 0.9147	0.8193	0.8278	0.8363	Ave		0.8404				4.2		50.0			
13C5-PFPeA DNU	0.7112 0.7298	0.6917 0.7592	0.6999	0.7099	0.7246	Ave		0.7180				3.1		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280812

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2019 11:27 Calibration End Date: 03/11/2019 12:12 Calibration ID: 44233

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C3 PFBS	1.1114 1.1554	1.0768 1.1895	1.1182	1.1040	1.1598	Ave		1.1307				3.4		50.0			
M2-4:2 FTS	0.0722 0.0737	0.0675 0.0752	0.0691	0.0685	0.0697	Ave		0.0709				4.1		50.0			
13C2 PFHxA	0.8203 0.8347	0.7739 0.8314	0.7880	0.8072	0.7772	Ave		0.8046				3.1		50.0			
13C3 HFPO-DA	0.1028 0.1110	0.1056 0.1159	0.1114	0.0961	0.1167	Ave		0.1085				6.8		50.0			
13C4 PFHpA	0.9816 0.9730	0.9763 1.0015	1.0049	1.0318	0.9991	Ave		0.9955				2.1		50.0			
18O2 PFHxS	0.6050 0.6773	0.6411 0.6908	0.6491	0.6495	0.6451	Ave		0.6511				4.2		50.0			
M2-6:2 FTS	0.0870 0.0895	0.0896 0.0888	0.0915	0.0927	0.0905	Ave		0.0900				2.1		50.0			
13C8 PFOA	0.7928 0.7611	0.7683 0.7870	0.7627	0.7818	0.7686	Ave		0.7746				1.6		50.0			
13C4 PFOA	0.8974 0.8806	0.8972 0.8869	0.9303	0.9191	0.9114	Ave		0.9033				2.0		50.0			
13C8 PFOS	0.1698 0.1743	0.1672 0.1830	0.1733	0.1757	0.1788	Ave		0.1746				3.0		50.0			
13C4 PFOS	0.7297 0.7816	0.7555 0.7768	0.7491	0.7796	0.7534	Ave		0.7608				2.5		50.0			
13C5 PFNA	0.8396 0.8488	0.8365 0.8522	0.8324	0.8333	0.8756	Ave		0.8455				1.8		50.0			
13C8 FOSA	0.4862 0.5030	0.4873 0.5386	0.4959	0.4871	0.4873	Ave		0.4979				3.8		50.0			
13C2 PFDA	0.8527 0.8698	0.8339 0.8632	0.9080	0.8872	0.8662	Ave		0.8687				2.7		50.0			
M2-8:2 FTS	0.1014 0.1004	0.1019 0.0948	0.1098	0.1092	0.0973	Ave		0.1021				5.5		50.0			
d3-NMeFOSAA	0.2635 0.2806	0.2560 0.2847	0.2474	0.2556	0.2571	Ave		0.2636				5.3		50.0			
13C2 PFUnA	0.7022 0.7098	0.7131 0.6997	0.7390	0.7110	0.6965	Ave		0.7102				2.0		50.0			
d5-NEtFOSAA	0.2187 0.2263	0.2276 0.2248	0.2237	0.2246	0.2256	Ave		0.2245				1.3		50.0			
13C2 PFDoA	0.7787 0.8323	0.7890 0.8328	0.7870	0.7891	0.8077	Ave		0.8024				2.8		50.0			
13C2 PFTeDA	0.5500 0.5840	0.5733 0.6272	0.5749	0.6092	0.6103	Ave		0.5899				4.5		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280812

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2019 11:27 Calibration End Date: 03/11/2019 12:12 Calibration ID: 44233

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C2 PFHxDA	0.5279 0.6105	0.5440 0.6440	0.5575	0.5792	0.5603	Ave		0.5748				7.0		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280812

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2019 11:27 Calibration End Date: 03/11/2019 12:12 Calibration ID: 44233

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-280812/2	2019.03.11_ICAL_002.d
Level 2	IC 320-280812/3	2019.03.11_ICAL_003.d
Level 3	IC 320-280812/4	2019.03.11_ICAL_004.d
Level 4	IC 320-280812/5	2019.03.11_ICAL_005.d
Level 5	IC 320-280812/6	2019.03.11_ICAL_006.d
Level 6	IC 320-280812/7	2019.03.11_ICAL_007.d
Level 7	IC 320-280812/8	2019.03.11_ICAL_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)	13PFOA	AveID	63199 10826674	103071 19659278	558918	2201109	5343916	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)	13PFOA	AveID	68678 9658558	108396 17440321	525293	2101367	4936862	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)	13PFOA	AveID	79284 12892547	136073 24013785	693869	2821405	6691167	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS	13PFOA	AveID	12870 2308770	25593 4375919	123150	491770	1156960	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)	13PFOA	AveID	71396 9919830	104563 17169474	508777	1953348	4957475	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)	13PFOA	AveID	41108 7197714	64897 13222270	376237	1485224	3617006	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)	13PFOA	AveID	12775 2226129	22353 4459552	113515	421340	1005165	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)	13PFOA	AveID	96660 13137424	151918 23421165	773756	3049949	6910052	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)	13PFOA	AveID	68834 10328221	105384 19004014	512417	2050875	4976592	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
DONA	13PFOA	AveID	134458 20711275	250417 34373470	1298912	5091381	11365396	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
6:2 FTS	13PFOA	AveID	13388 2461061	24566 4495390	128217	513086	1261004	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluoroheptanesulfonic Acid (PFHpS)	13PFOA	AveID	51817 10355222	98537 18794317	545760	2117326	5339486	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorooctanoic acid (PFOA)	13PFOA	AveID	88916 12002208	159835 20741996	715891	2919139	6641574	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctanesulfonic acid (PFOS)	13PFOA	AveID	53612 10310790	101713 18649553	509954	2094178	5106744	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32
Perfluorononanoic acid (PFNA)	13PFOA	AveID	75977 10929053	126081 19416271	634607	2449320	5816451	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280812

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2019 11:27 Calibration End Date: 03/11/2019 12:12 Calibration ID: 44233

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
F-53B Major	13PF OA	AveID	43663 7967639	88595 15111363	417113	1592568	3978299	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorooctanesulfonamide (FOSA)	13PF OA	AveID	106919 19106433	203497 32759314	1153116	4609693	9703261	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorononanesulfonic acid (PFNS)	13PF OA	AveID	33043 6324292	55895 11246027	320024	1420759	3131514	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
8:2 FTS	13PF OA	AveID	12737 2222211	22997 4376194	124291	485536	1099428	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorodecanoic acid (PFDA)	13PF OA	AveID	82722 12404114	142916 20364319	716391	3086053	6581236	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	13PF OA	AveID	16170 3150654	30036 5956806	162377	620530	1548284	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)	13PF OA	AveID	49684 9212958	89258 16081594	495330	1921797	4962840	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluoroundecanoic acid (PFUnA)	13PF OA	AveID	54817 7408948	93452 13510164	400105	1568866	3835858	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	13PF OA	AveID	11403 2424021	27107 4813957	127790	511063	1240388	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
F-53B Minor	13PF OA	AveID	69829 9642460	127064 17349332	620041	2317412	5240106	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)	13PF OA	AveID	68985 10261424	125048 18402700	582650	2275868	5427879	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
10:2 FTS	13PF OA	AveID	6841 1452496	14458 2731504	80544	286944	718875	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)	13PF OA	AveID	4401 944411	9750 1898232	48068	194643	469378	0.0242 4.84	0.0484 9.68	0.242	0.968	2.42
Perfluorotridecanoic acid (PFTriA)	13PF OA	AveID	50435 8375053	93215 14692703	466495	1886005	4366856	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)	13PF OA	AveID	9306 1481693	16175 2814430	77744	292296	701207	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)	13PF OA	L2ID	+++++ 7483573	113239 13993505	438262	1537603	3498147	+++++ 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)	13PF OA	AveID	20419 4598557	41046 9367661	228357	883185	2058167	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PF OA	Ave	6542317 6176738	6217977 6256199	6336133	6110183	6059872	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5-PFPeA DNU	13PF OA	Ave	5663619 5287868	5303853 5192573	5412667	5239854	5250318	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 PFBS	13PF OA	Ave	8231541 7786058	7679331 7565988	8042622	7579047	7814921	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2 FTS	13PF OA	Ave	537078 498943	483706 480652	499131	472504	471554	2.34 2.34	2.34 2.34	2.34	2.34	2.34

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280812

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2019 11:27 Calibration End Date: 03/11/2019 12:12 Calibration ID: 44233

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C2 PFHxA	13PF OA	Ave	6532671 6047775	5934457 5686273	6093716	5958397	5630989	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PF OA	Ave	818569 804601	810141 792405	861326	709597	845445	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFHpA	13PF OA	Ave	7817596 7050241	7486546 6849971	7771610	7616538	7239412	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	4558053 4642503	4650368 4469516	4748688	4535247	4421546	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2 FTS	13PF OA	Ave	657955 616323	652761 577300	672407	649755	623116	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C8 PFOA	13PF OA	Ave	6181501 5399024	5768206 5269633	5774856	5649768	5451858	2.45 2.45	2.45 2.45	2.45	2.45	2.45
13C4 PFOA	13PF OA	Ave	7146811 6380503	6879871 6066025	7194218	6784684	6603416	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 PFOS	13PF OA	Ave	1292741 1207143	1225705 1196392	1281561	1239843	1238669	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C4 PFOS	13PF OA	Ave	5555400 5414394	5538677 5079180	5538141	5501503	5218569	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	6686472 6150219	6414395 5828696	6437768	6151005	6344511	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	3871958 3644720	3736924 3683673	3835178	3595748	3530819	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDA	13PF OA	Ave	6791254 6302430	6394600 5904064	7022278	6548783	6276124	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2 FTS	13PF OA	Ave	773676 696692	748300 621464	813496	772449	675436	2.40 2.40	2.40 2.40	2.40	2.40	2.40
d3-NMeFOSAA	13PF OA	Ave	2098276 2032852	1963461 1947390	1913302	1886657	1862574	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	5592663 5143182	5468329 4785684	5715298	5248571	5046416	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	1742080 1639589	1745424 1537360	1729876	1657734	1634745	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	6201755 6030785	6050247 5695847	6086237	5825062	5852289	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFTeDA	13PF OA	Ave	4380318 4231886	4396494 4289668	4446237	4497241	4421707	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFHxDA	13PF OA	Ave	4203955 4423897	4171582 4404317	4311229	4275112	4059740	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1 Analy Batch No.: 280812

SDG No.:

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2019 11:27 Calibration End Date: 03/11/2019 12:12 Calibration ID: 44233

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Lims ID: IC L1 Full
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-Mar-2019 11:27:02 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CAL STD1
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 11-Mar-2019 13:12:22 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0331

First Level Reviewer: westendorfc Date: 11-Mar-2019 12:55:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.712	1.713	-0.001	0.995	63199	0.0276		110	13.3	M
D 1 13C4 PFBA										
217.00 > 172.00	1.720	1.714	0.006	0.530	6542317	2.44		97.7	43347	
D 3 13C5 PFPeA										
267.90 > 223.00	2.046	2.042	0.004	0.631	5663619	2.48		99.0	18959	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.046	2.045	0.001	1.000	68678	0.0308		123	5.6	M
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.080	2.075	0.005	1.000	79284	0.0243	Target=2.69	110	352	
298.90 > 99.00	2.080	2.075	0.005	1.000	29378		0.00(1.88-3.50)	110	82.4	
D 5 13C3 PFBS										
301.90 > 80.00	2.080	2.076	0.004	0.641	8231541	2.29		98.3	435133	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.376	2.369	0.007	1.000	12870	0.0228		97.8	195	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.376	2.371	0.005	0.732	537078	2.38		102	1683	
D 9 13C2 PFHxA										
315.00 > 270.00	2.413	2.409	0.004	0.744	6532671	2.55		102	11348	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.413	2.411	0.002	1.000	71396	0.0314	Target=13.98	126	35.5	
313.00 > 119.00	2.413	2.411	0.002	1.000	4656		0.00(9.79-18.17)	126	20.6	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.432	2.427	0.005	1.169	41108	0.0253	Target=2.01	108	245	
349.00 > 99.00	2.423	2.427	-0.004	1.165	21313		0.00(1.41-2.62)	108	82.3	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.530	2.534	-0.004	0.780	818569	2.37		94.7	2723	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.540	2.536	0.004	1.004	12775	0.0281		112	10.1	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.819	2.817	0.002	0.997	96660	0.0310	Target=4.51	124	61.6	
363.00 > 169.00	2.819	2.817	0.002	0.997	21954		0.00(3.16-5.86)	124	107	
D 16 13C4 PFHpA										
367.00 > 322.00	2.828	2.817	0.011	0.872	7817596	2.47		98.6	8760	
D 17 18O2 PFHxS										
403.00 > 84.00	2.828	2.822	0.006	0.872	4558053	2.20		92.9	3601	
18 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.828	2.824	0.004	1.000	68834	0.0295	Target=3.29	130	479	
399.00 > 99.00	2.828	2.824	0.004	1.000	21002		0.00(2.30-4.28)	130	69.6	M
19 DONA										
377.00 > 251.00	2.873	2.869	0.004	0.792	134458	0.0264	Target=2.25	112	508	
377.00 > 85.00	2.873	2.869	0.004	0.792	57016		0.00(1.58-2.93)	112	125	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.220	3.209	0.011	0.993	657955	2.30		96.7	2500	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.228	3.210	0.018	1.002	13388	0.0245		103	53.4	
D 22 13C8 PFOA										
421.00 > 376.00	3.236	3.225	0.011	0.998	6181501	2.51		102	6809	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.244	3.230	0.014	0.894	51817	0.0233	Target=3.86	97.8	302	
449.00 > 99.00	3.236	3.230	0.006	0.892	13252		0.00(2.70-5.01)	97.8	82.9	
D 25 13C4 PFOA										
417.00 > 372.00	3.236	3.230	0.006	0.998	7146811	2.48		99.4	4598	
* 24 13C2 PFOA										
415.00 > 370.00	3.244	3.232	0.012		7963973	2.50			6128	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.244	3.233	0.011	1.002	88916	0.0299	Target=1.00	120	33.5	
413.00 > 169.00	3.236	3.233	0.003	1.000	34441		2.58(0.70-1.30)	120	147	
D 27 13C8 PFOS										
507.00 > 99.00	3.627	3.614	0.013	1.118	1292741	2.32		97.3	4856	
D 28 13C4 PFOS										
503.00 > 80.00	3.627	3.617	0.010	1.118	5555400	2.29		95.9	5951	
29 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.627	3.618	0.009	1.000	53612	0.0237	Target=1.00	102	230	M
499.00 > 99.00	3.627	3.618	0.009	1.000	15072		3.56(0.70-1.30)	102	82.2	M
D 31 13C5 PFNA										
468.00 > 423.00	3.635	3.626	0.009	1.121	6686472	2.48		99.3	12343	
30 Perfluorononanoic acid										
463.00 > 419.00	3.635	3.628	0.007	1.000	75977	0.0295	Target=5.29	118	30.0	
463.00 > 169.00	3.635	3.628	0.007	1.000	12261		0.00(3.70-6.88)	118	56.1	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.835	3.823	0.012	1.057	43663	0.0242		104	68.4	
D 33 13C8 FOSA										
506.00 > 78.00	3.930	3.927	0.003	1.212	3871958	2.44		97.6	6245	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.930	3.928	0.002	1.000	106919	0.0251		100	522	
35 Perfluorononanesulfonic acid										M
549.00 > 80.00	3.976	3.973	0.003	1.096	33043	0.0246	Target=6.21	103	112	
549.00 > 99.00	3.976	3.973	0.003	1.096	5719		0.00(4.35-8.07)	103		M
D 36 13C2 PFDA										
515.00 > 470.00	4.003	3.994	0.009	1.234	6791254	2.45		98.2	7607	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.003	3.995	0.008	1.000	12737	0.0245		102	72.4	
38 Perfluorodecanoic acid										
513.00 > 469.00	4.003	3.995	0.008	1.000	82722	0.0287	Target=15.01	115	115	
513.00 > 169.00	3.994	3.995	-0.001	0.998	5107		0.00(10.51-19.52)	115	25.9	
D 39 M2-8:2 FTS										
529.00 > 81.00	4.003	3.997	0.006	1.234	773676	2.38		99.3	2566	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.179	4.163	0.016	1.002	16170	0.0242		96.7	12.6	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.170	4.161	0.009	1.286	2098276	2.50		100.0	4039	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.318	4.303	0.015	1.191	49684	0.0249	Target=4.69	103	307	
599.00 > 99.00	4.308	4.303	0.005	1.188	9669		0.00(3.28-6.10)	103	27.1	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.337	4.324	0.013	1.000	54817	0.0314	Target=8.65	125	34.6	
563.00 > 169.00	4.327	4.324	0.003	0.998	7093		0.00(6.05-11.24)	125	28.1	
D 44 13C2 PFUnA										
565.00 > 520.00	4.337	4.324	0.013	1.337	5592663	2.47		98.9	4343	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.337	4.328	0.009	1.337	1742080	2.44		97.4	2560	
46 N-ethylperfluorooctanesulfonamidoa										M
584.00 > 419.00	4.337	4.333	0.004	1.000	11403	0.0219		87.8	73.1	M
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.476	4.469	0.007	1.234	69829	0.0283		120	420	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.633	4.624	0.009	1.000	68985	0.0292	Target=8.64	117	46.6	
613.00 > 169.00	4.633	4.624	0.009	1.000	7640		0.00(6.05-11.23)	117	32.7	
D 49 13C2 PFDoA										
615.00 > 570.00	4.633	4.624	0.009	1.428	6201755	2.43		97.1	8295	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.652	4.641	0.011	1.162	6841	0.0214		88.7	15.6	
53 Perfluorododecanesulfonic acid (PF										M
699.00 > 80.00	4.883	4.870	0.013	1.346	4401	0.0219	Target=0.57	90.5	78.8	M
699.00 > 99.00	4.883	4.870	0.013	1.346	8254		0.00(0.40-0.74)	90.5	159	
54 Perfluorotridecanoic acid										M
663.00 > 619.00	4.910	4.899	0.011	1.060	50435	0.0271	Target=5.68	109	12.3	
663.00 > 169.00	4.910	4.899	0.011	1.060	8029		0.00(3.97-7.38)	109	53.2	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.166	5.154	0.012	1.000	9306	0.0302	Target=1.53	121	25.2	
713.00 > 219.00	5.166	5.154	0.012	1.000	5000		0.00(1.07-1.99)	121	25.5	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.166	5.154	0.012	1.593	4380318	2.33		93.2	14063	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.670	5.648	0.022	1.748	4203955	2.30		91.8	7030	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.670	5.649	0.021	1.000	82898	0.0274	Target=5.11	110	7.7	
813.00 > 169.00	5.670	5.649	0.021	1.000	16193		0.00(3.57-6.64)	110	65.8	
59 Perfluorooctadecanoic acid										M
913.00 > 869.00	6.229	6.200	0.029	1.099	20419	0.0237	Target=4.80	94.9	4.9	
913.00 > 169.00	6.229	6.200	0.029	1.099	4430		0.00(3.36-6.24)	94.9	38.6	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00011 Amount Added: 1.00 Units: mL

Report Date: 11-Mar-2019 13:12:24 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d

Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9

Lims ID: IC L1 Full

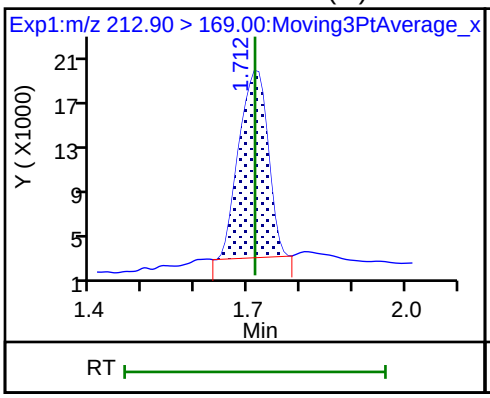
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2

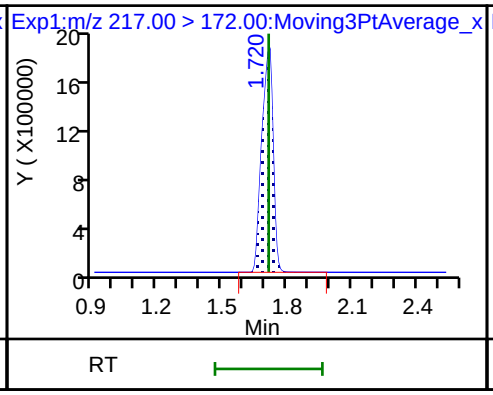
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

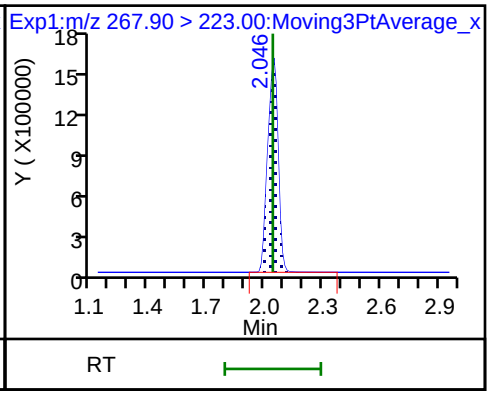
2 Perfluorobutanoic acid (M)



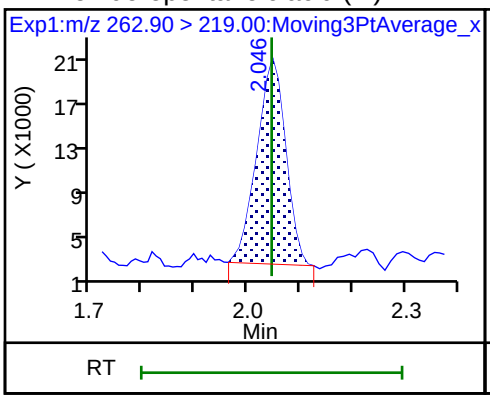
D 1 13C4 PFBA



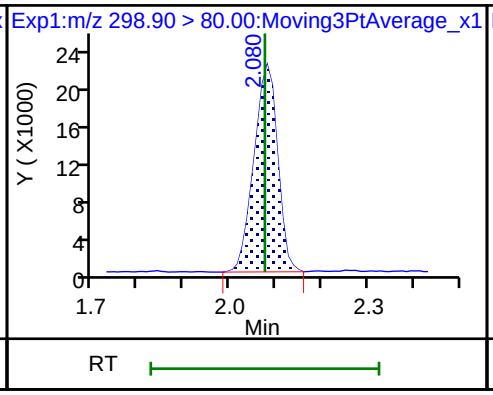
D 3 13C5 PFPeA



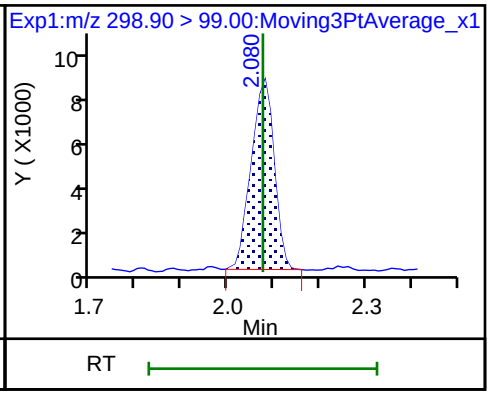
4 Perfluoropentanoic acid (M)



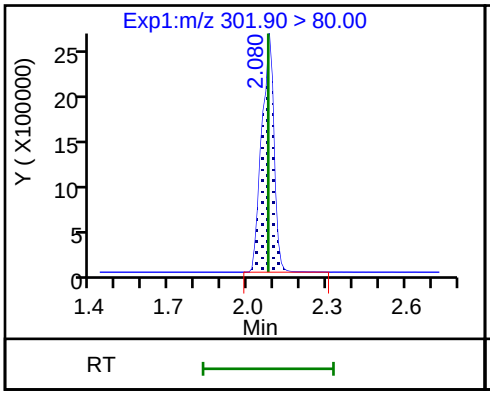
6 Perfluorobutanesulfonic acid



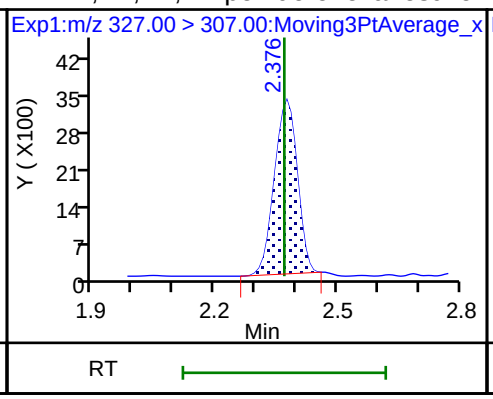
6 Perfluorobutanesulfonic acid



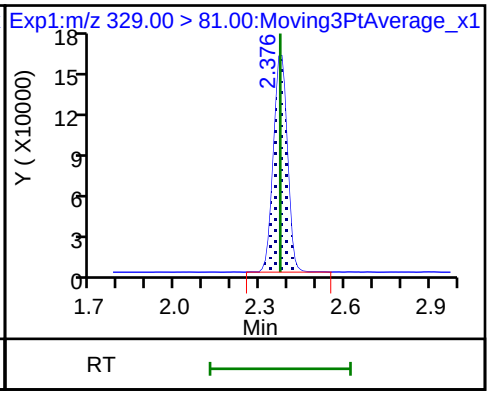
D 5 13C3 PFBS



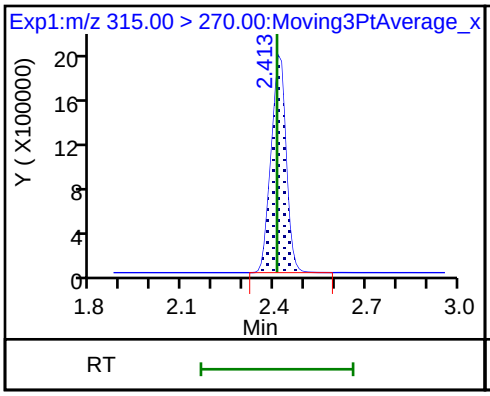
7 1H,1H,2H,2H-perfluorohexanesulfon



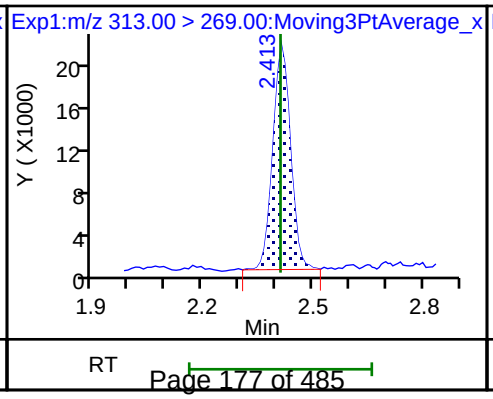
D 8 M2-4:2 FTS



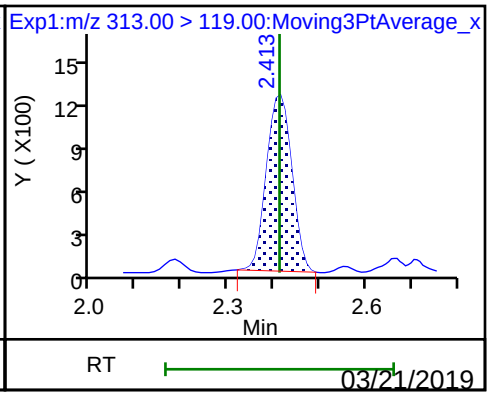
D 9 13C2 PFHxA



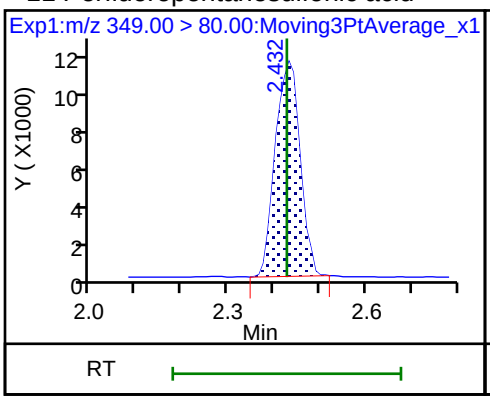
10 Perfluorohexanoic acid



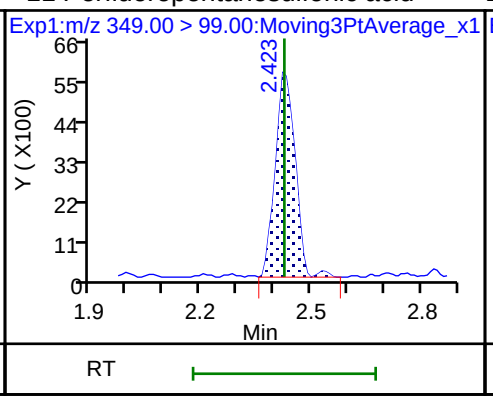
10 Perfluorohexanoic acid



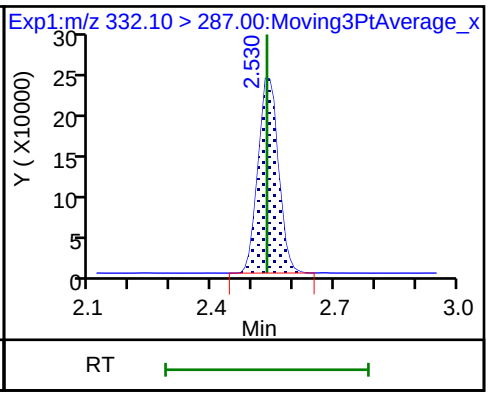
11 Perfluoropentanesulfonic acid



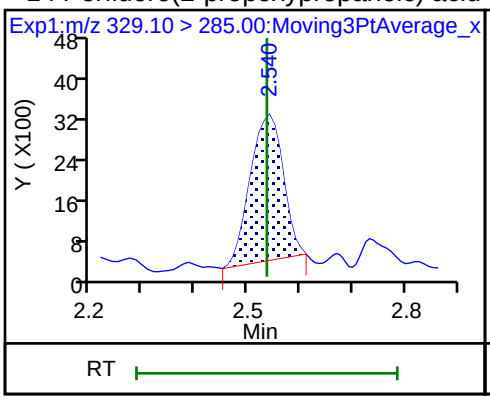
11 Perfluoropentanesulfonic acid



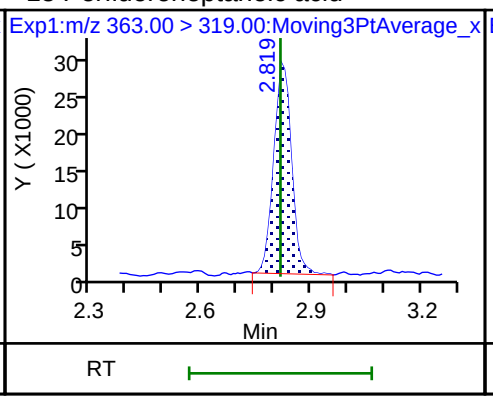
D 13 13C3 HFPO-DA



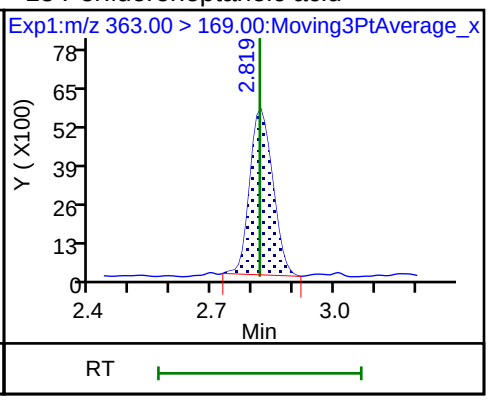
14 Perfluoro(2-propoxypropanoic) acid



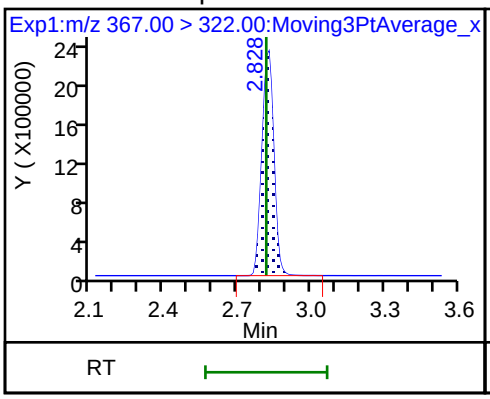
15 Perfluoroheptanoic acid



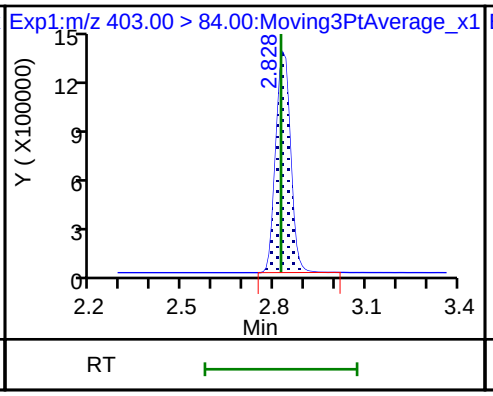
15 Perfluoroheptanoic acid



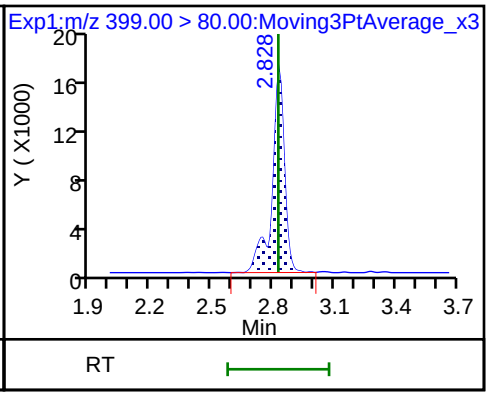
D 16 13C4 PFHpA



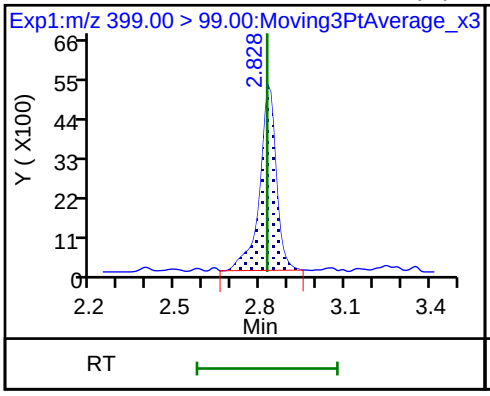
D 17 18O2 PFHxS



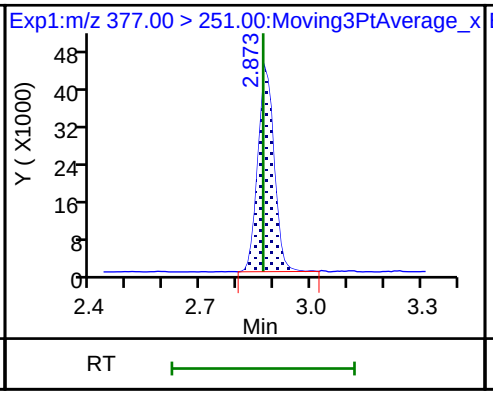
18 Perfluorohexanesulfonic acid



18 Perfluorohexanesulfonic acid (M)



19 DONA



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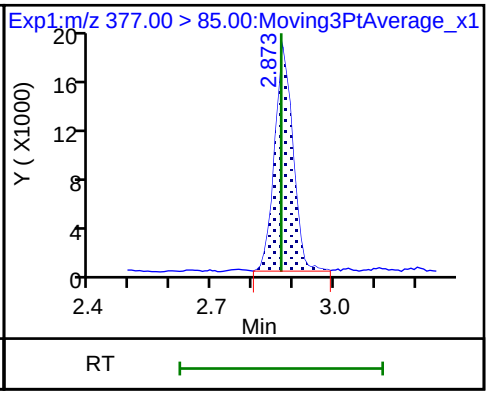
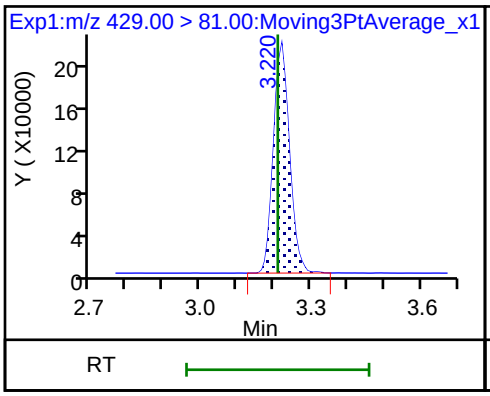
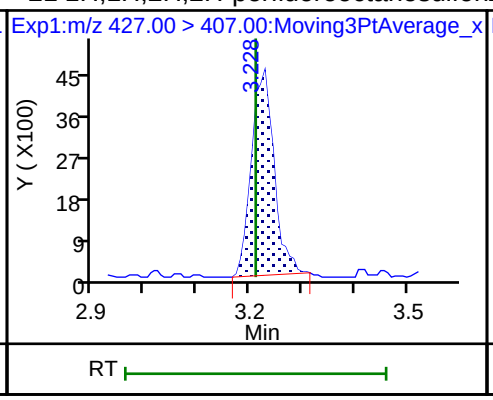


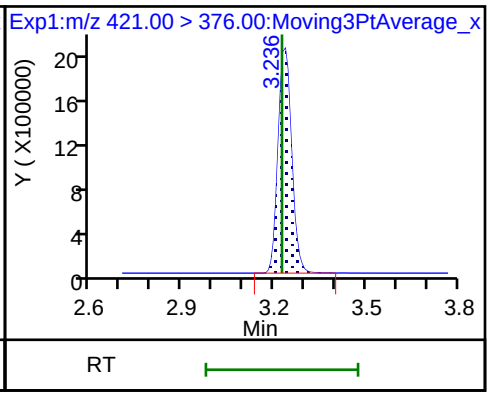
D 20 M2-6:2 FTS



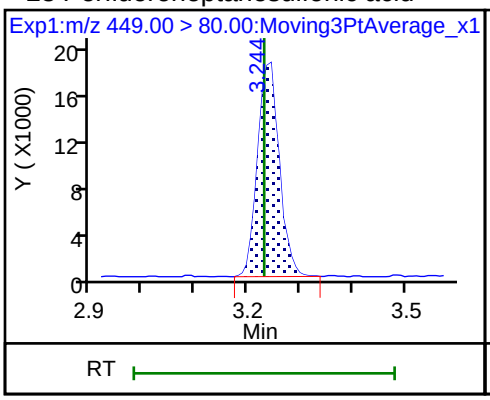
21 1H,1H,2H,2H-perfluorooctanesulfon



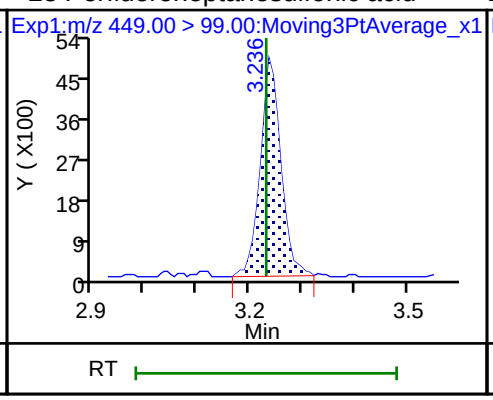
D 22 13C8 PFOA



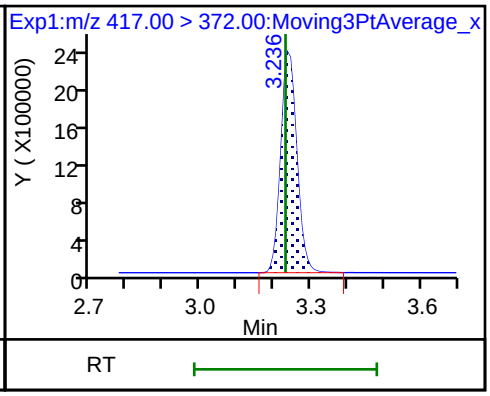
23 Perfluoroheptanesulfonic acid



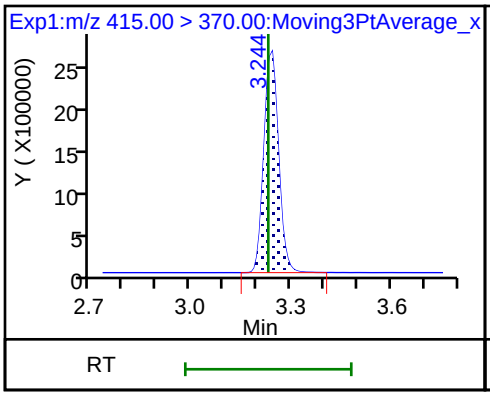
23 Perfluoroheptanesulfonic acid



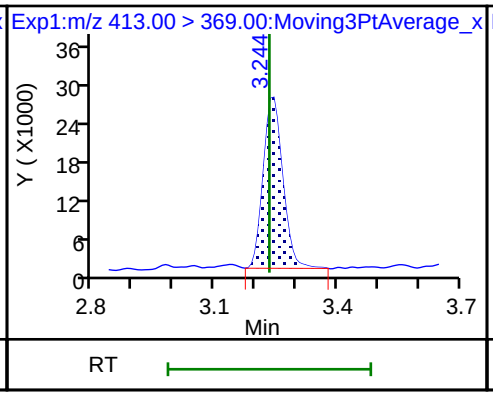
D 25 13C4 PFOA



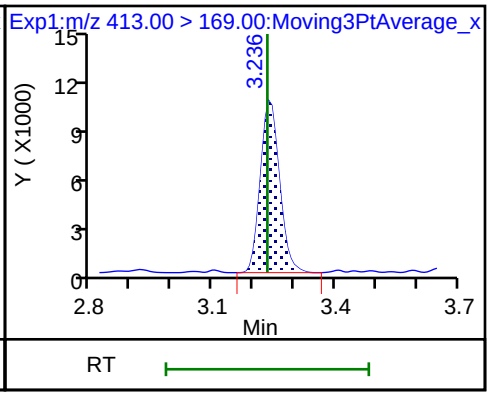
* 24 13C2 PFOA



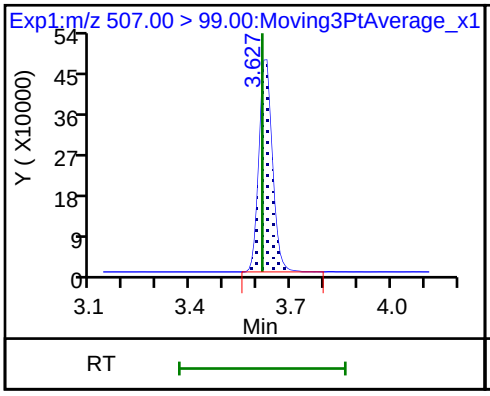
26 Perfluorooctanoic acid



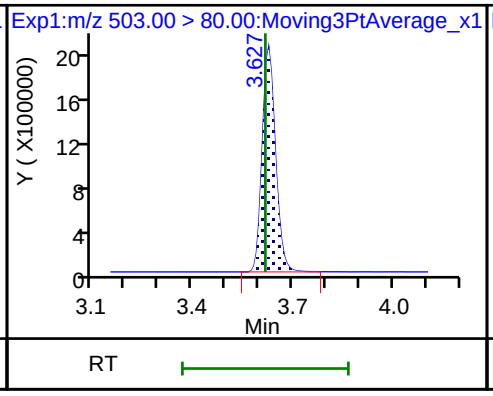
26 Perfluorooctanoic acid



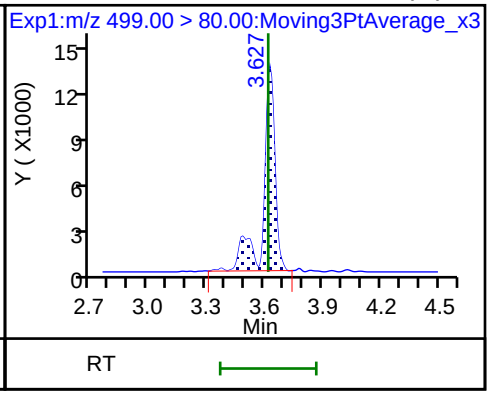
D 27 13C8 PFOS



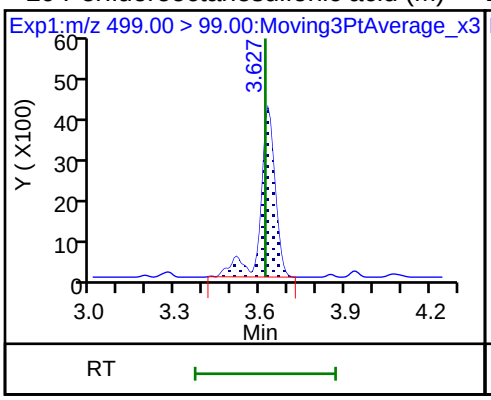
D 28 13C4 PFOS



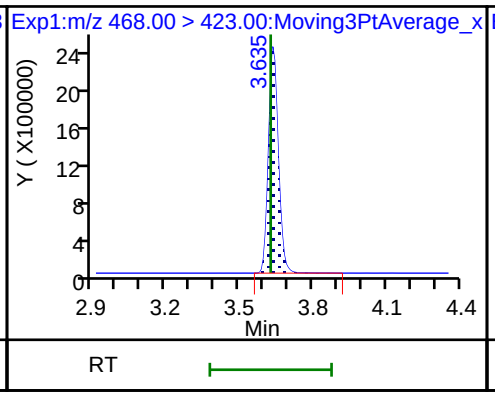
29 Perfluorooctanesulfonic acid (M)



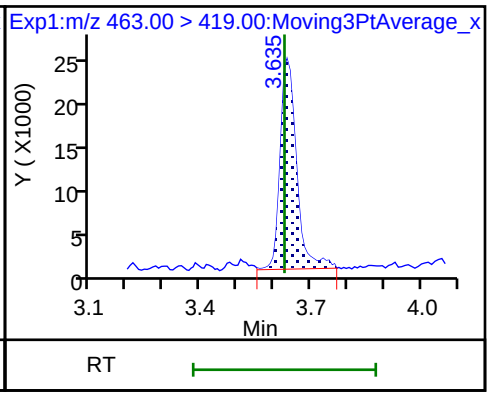
29 Perfluorooctanesulfonic acid (M)



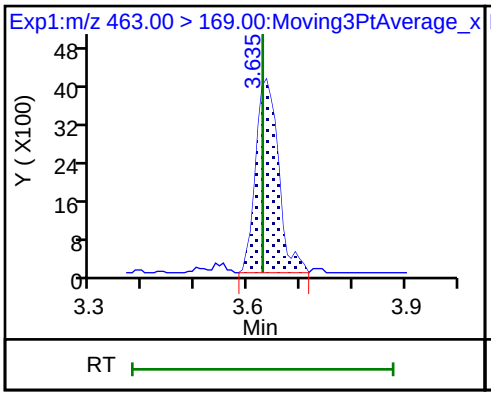
D 31 13C5 PFNA



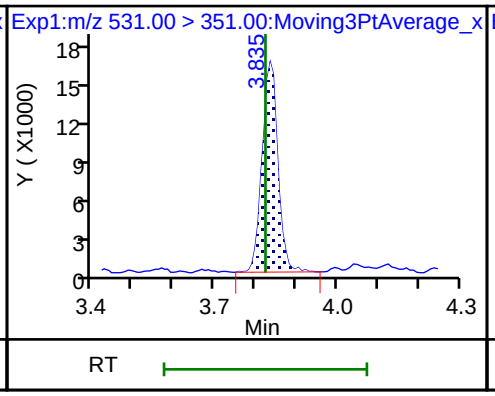
30 Perfluorononanoic acid



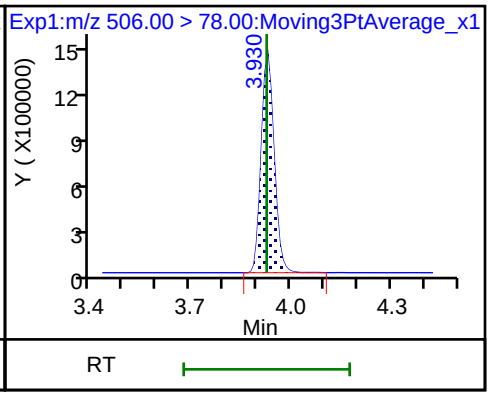
30 Perfluorononanoic acid



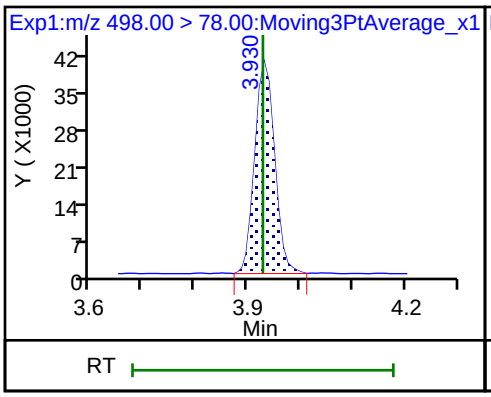
32 9-Chlorohexadecafluoro-3-oxanonane



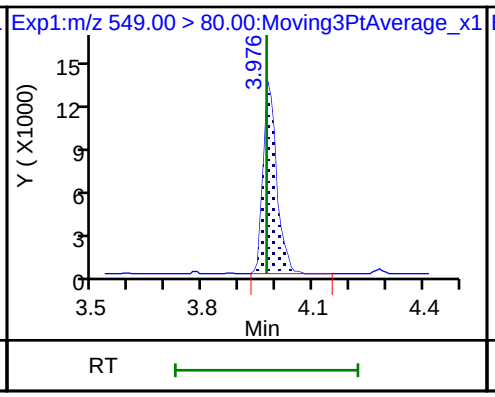
D 33 13C8 FOSA



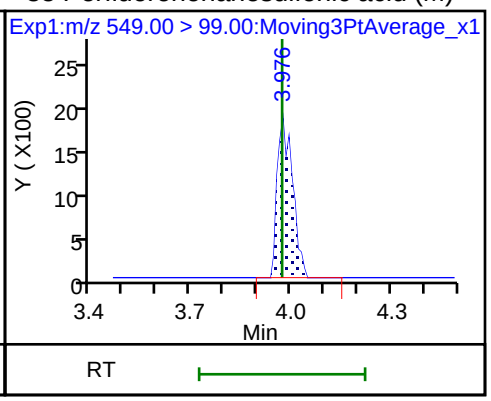
34 Perfluorooctanesulfonamide



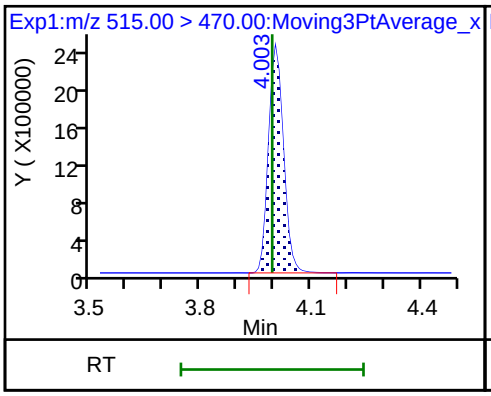
35 Perfluorononanesulfonic acid



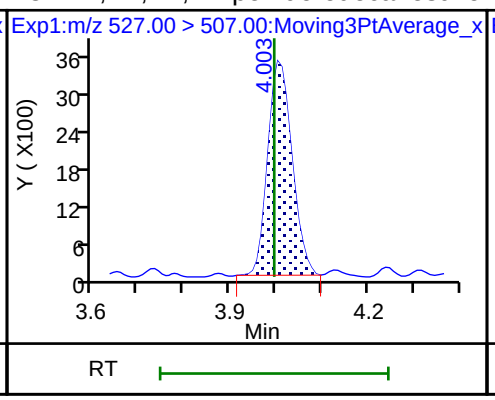
35 Perfluorononanesulfonic acid (M)



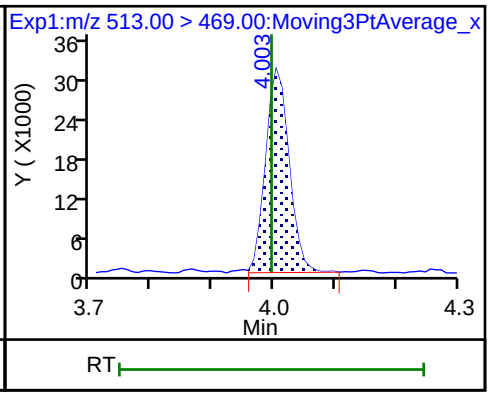
D 36 13C2 PFDA



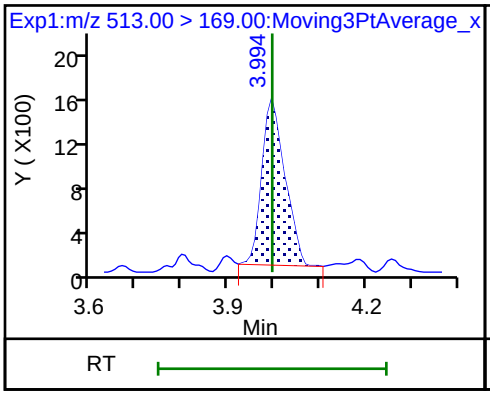
37 1H,1H,2H,2H-perfluorodecanesulfoni



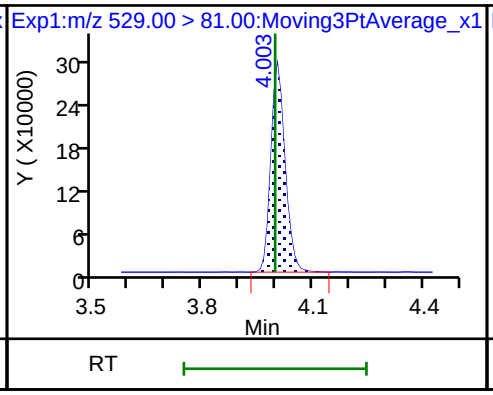
38 Perfluorodecanoic acid



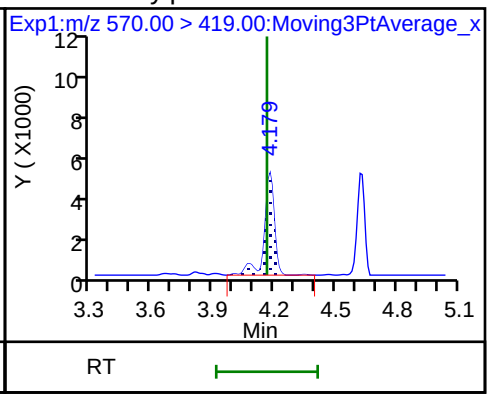
38 Perfluorodecanoic acid



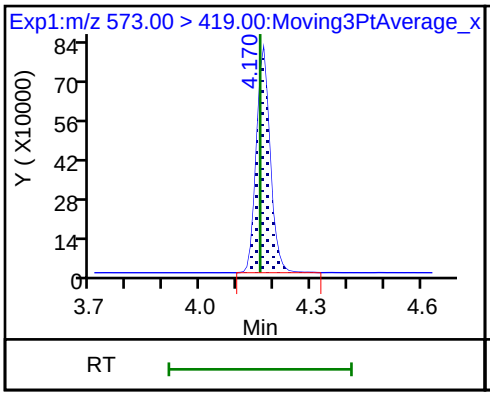
D 39 M2-8:2 FTS



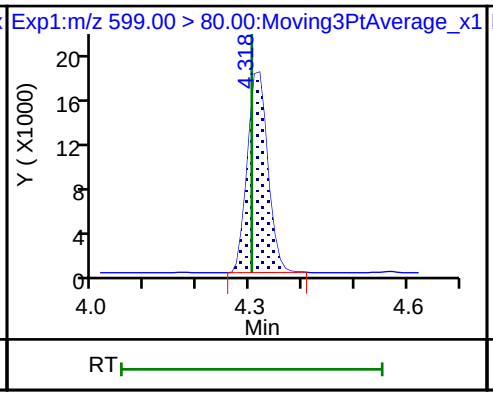
41 N-methylperfluorooctanesulfonamido



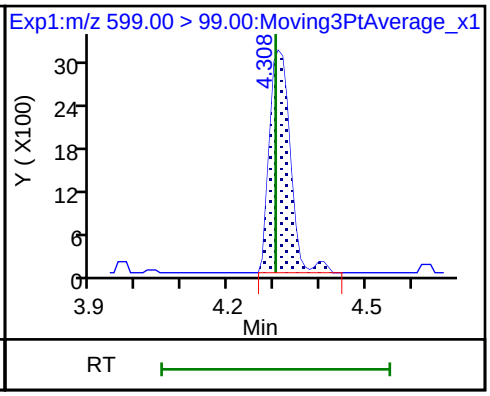
D 40 d3-NMeFOSAA



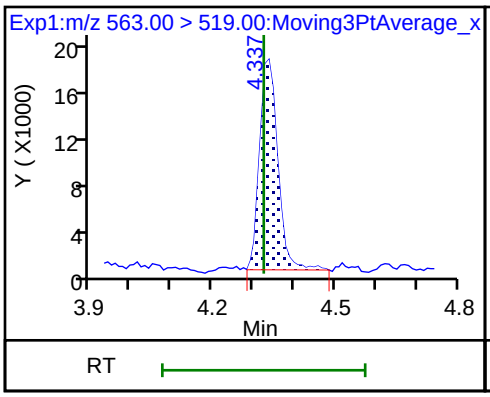
42 Perfluorodecanesulfonic acid



42 Perfluorodecanesulfonic acid



43 Perfluoroundecanoic acid



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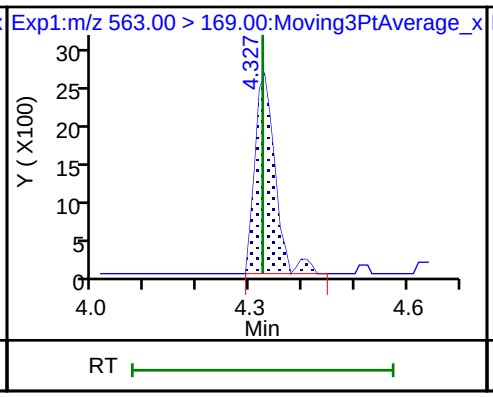
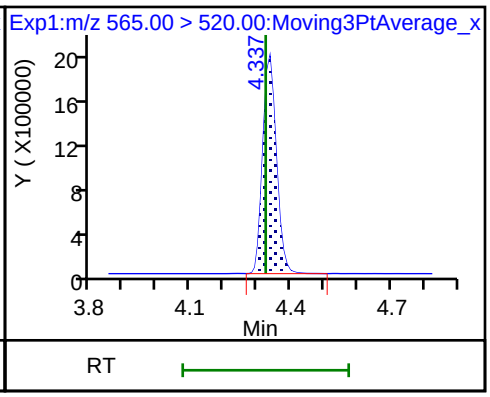
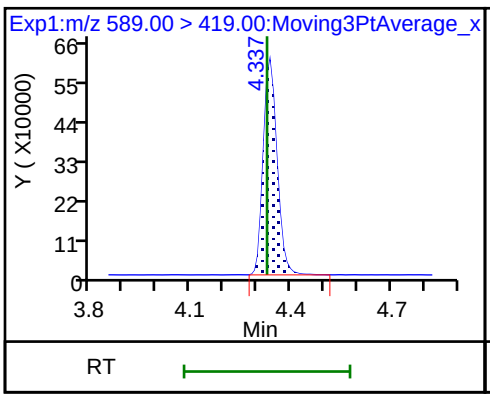


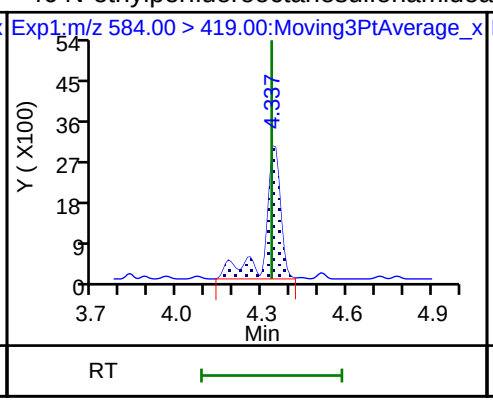
D 44 13C2 PFUnA



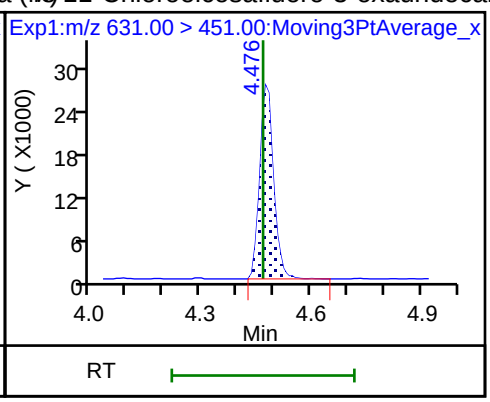
D 45 d5-NEtFOSAA



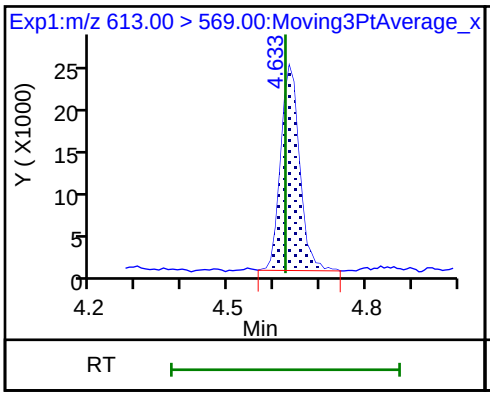
46 N-ethylperfluorooctanesulfonamidoa (NE



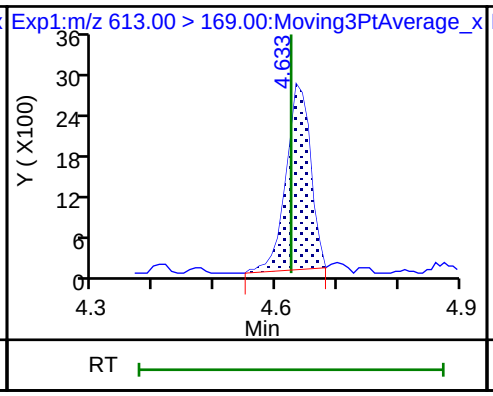
48 11-Chloroeicosafluoro-3-oxaundecan



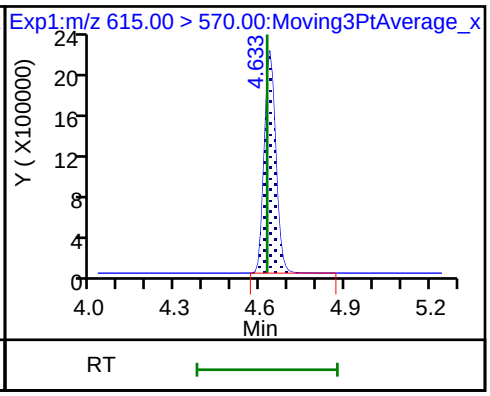
50 Perfluorododecanoic acid



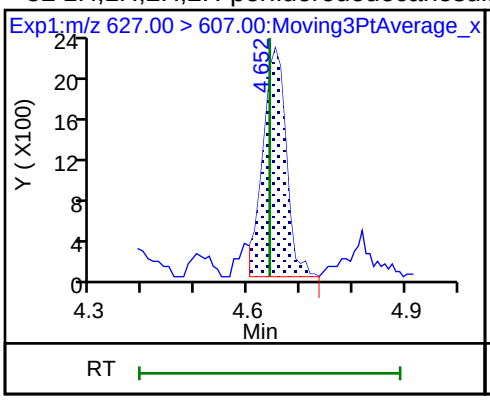
50 Perfluorododecanoic acid



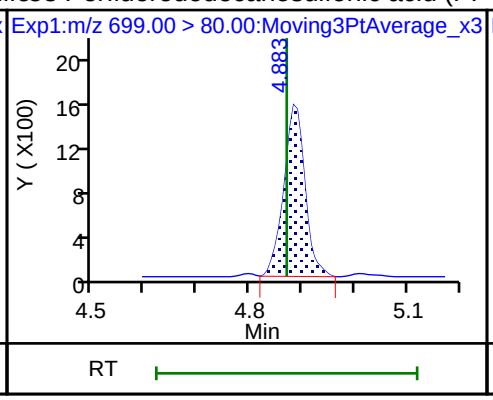
D 49 13C2 PFDoA



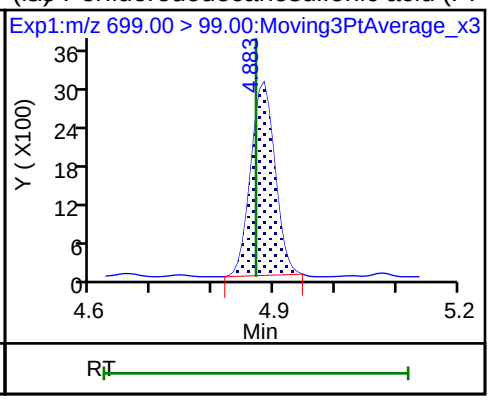
52 1H,1H,2H,2H-perfluorododecanesulfo



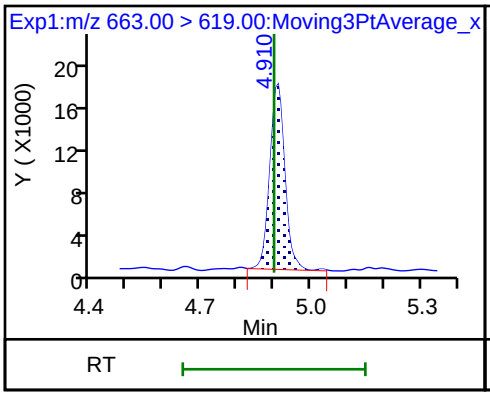
53 Perfluorododecanesulfonic acid (PF (M)



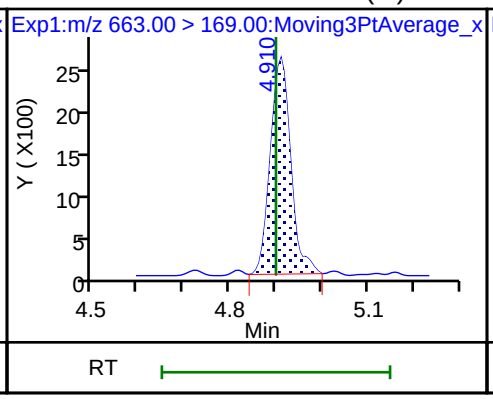
53 Perfluorododecanesulfonic acid (PF



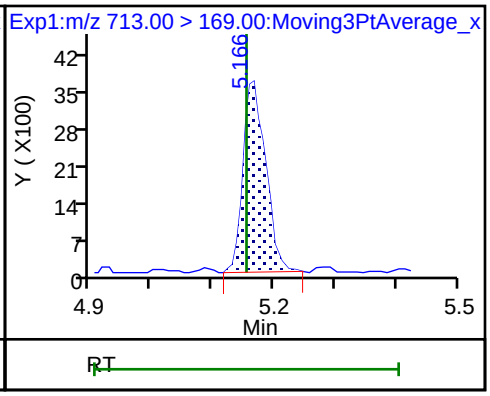
54 Perfluorotridecanoic acid



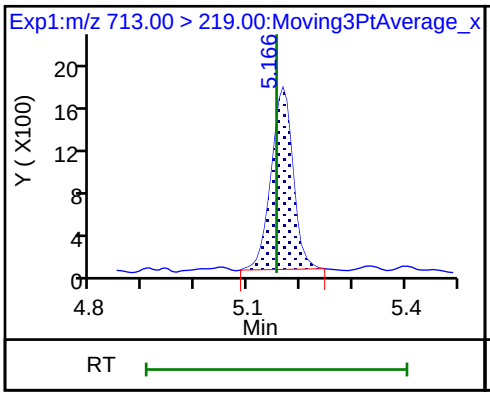
54 Perfluorotridecanoic acid (M)



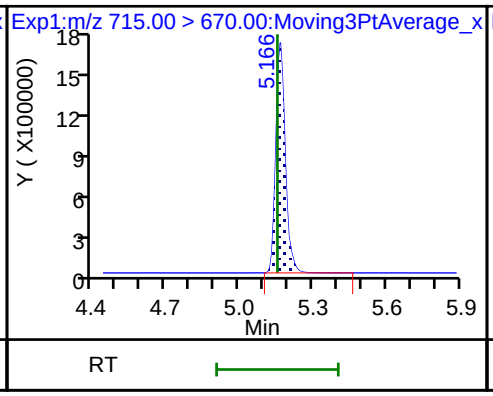
56 Perfluorotetradecanoic acid



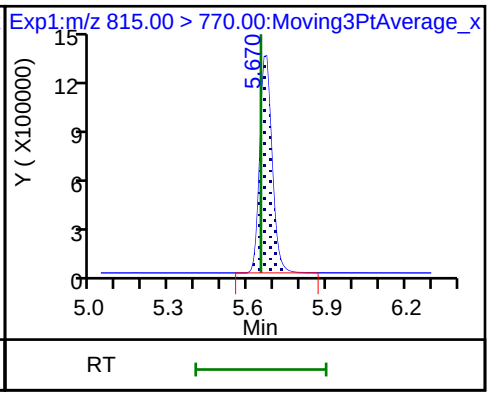
56 Perfluorotetradecanoic acid



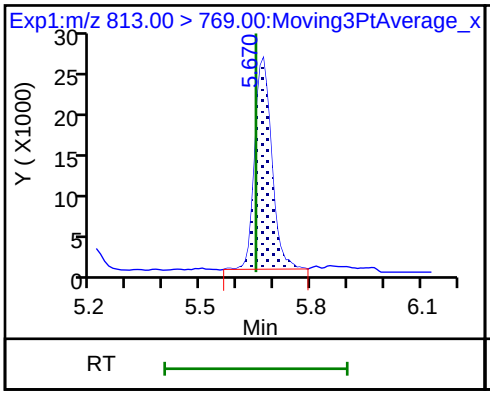
D 55 13C2 PFTeDA



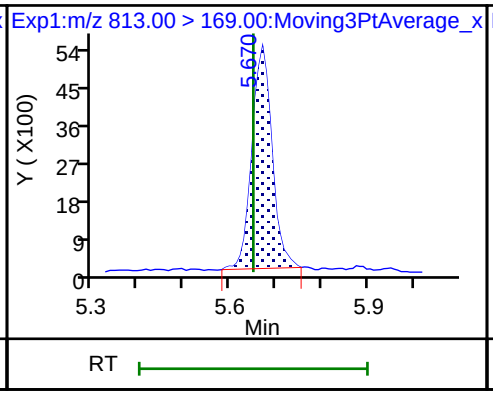
D 57 13C2 PFHxDA



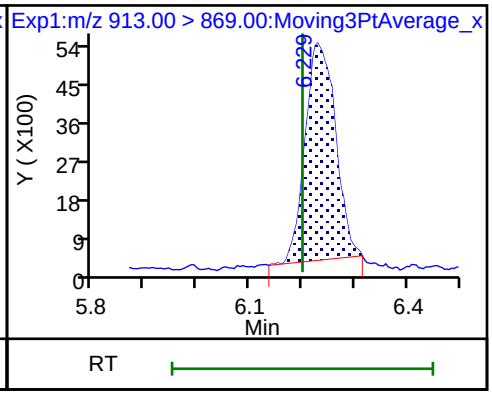
58 Perfluorohexadecanoic acid



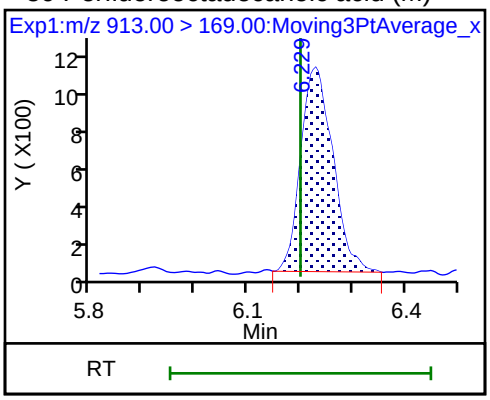
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid (M)



TestAmerica Sacramento

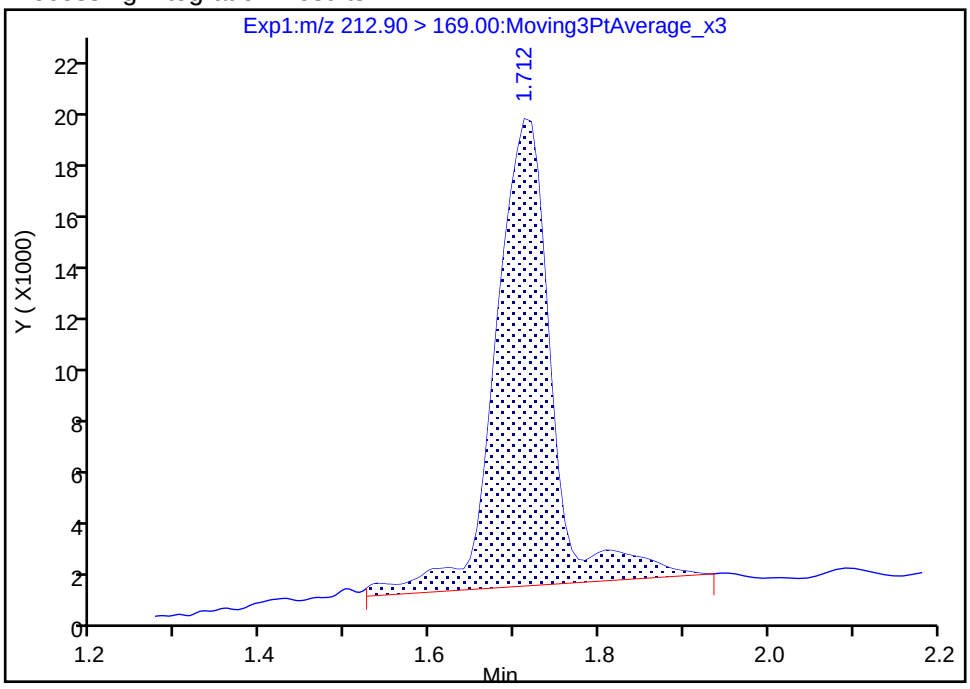
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

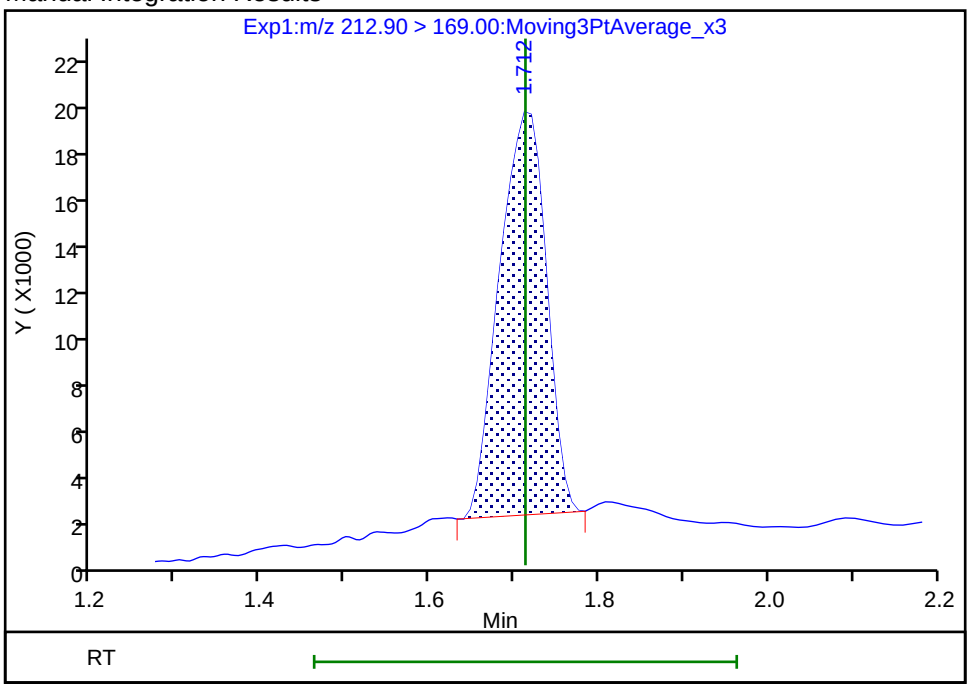
Processing Integration Results

RT: 1.71
Area: 79426
Amount: 0.032962
Amount Units: ng/ml



Manual Integration Results

RT: 1.71
Area: 63199
Amount: 0.027616
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 12:56:44
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

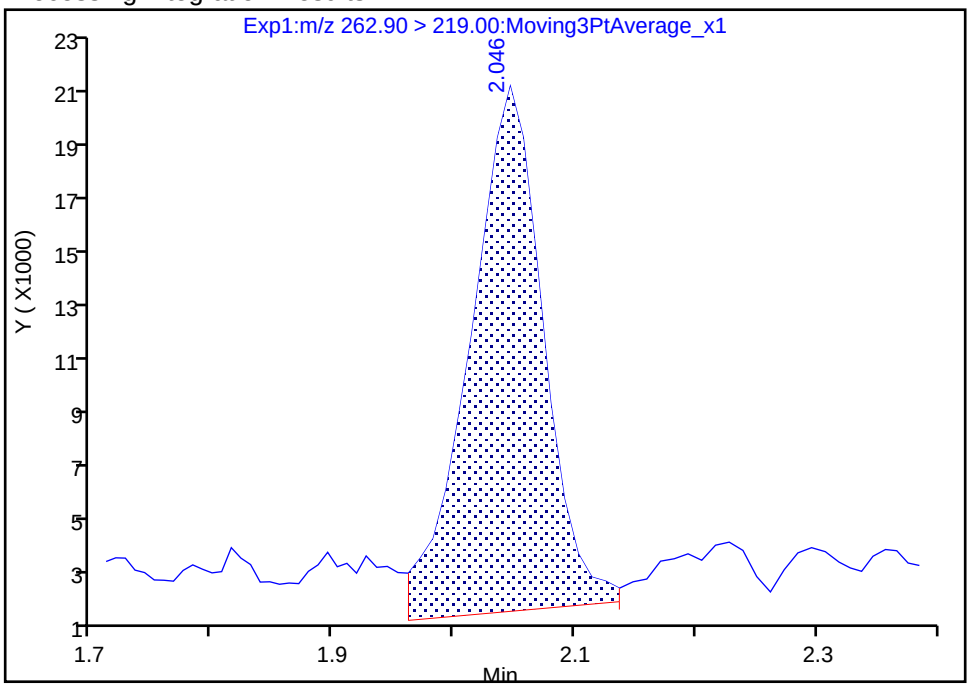
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

Processing Integration Results

RT: 2.05
Area: 81559
Amount: 0.035354
Amount Units: ng/ml



Manual Integration Results

RT: 2.05
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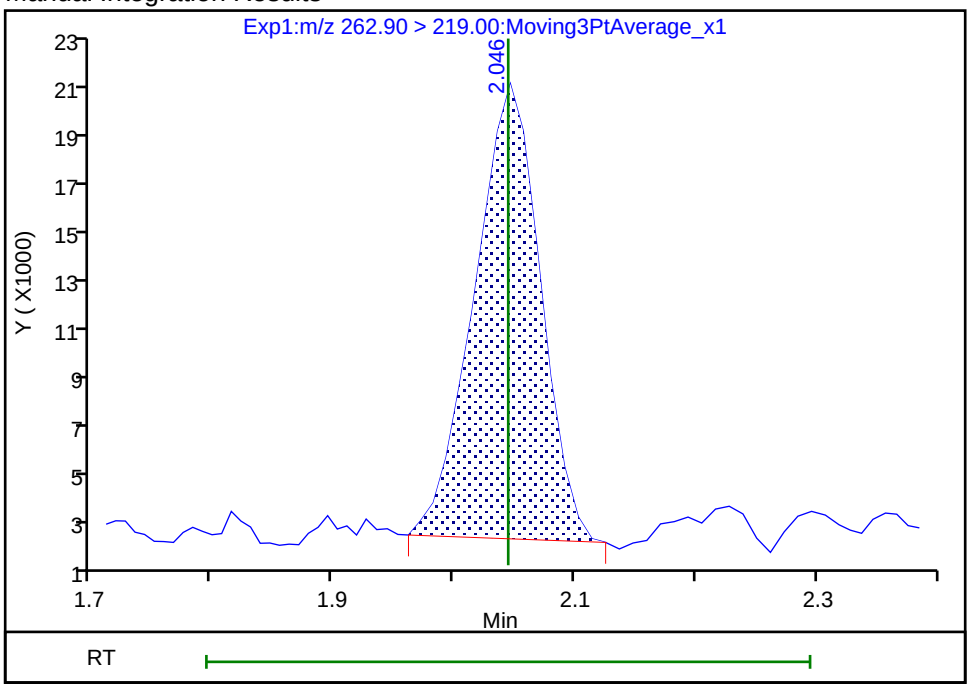
Amount: 0.030751
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 12:56:50
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

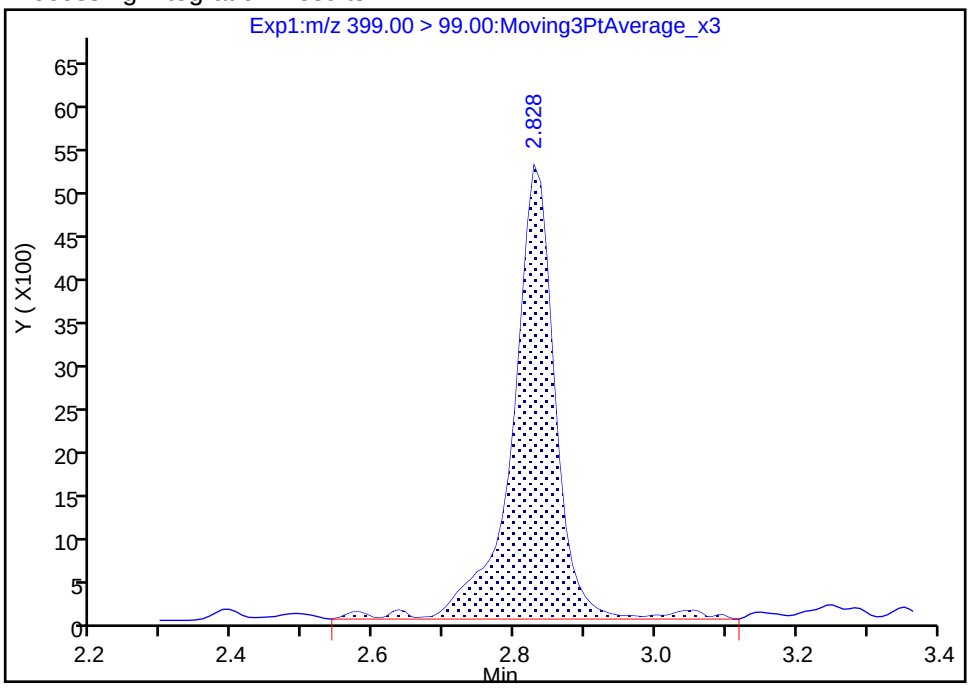
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

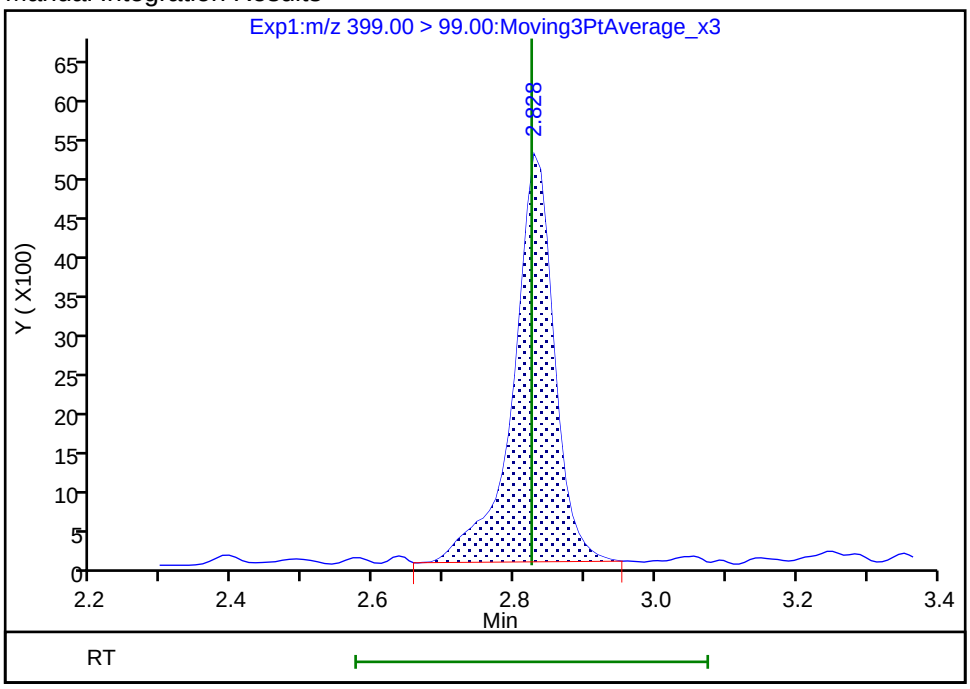
Processing Integration Results

RT: 2.83
Area: 22307
Amount: 0.030109
Amount Units: ng/ml



Manual Integration Results

RT: 2.83
Area: 21002
Amount: 0.029495
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 12:57:10
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

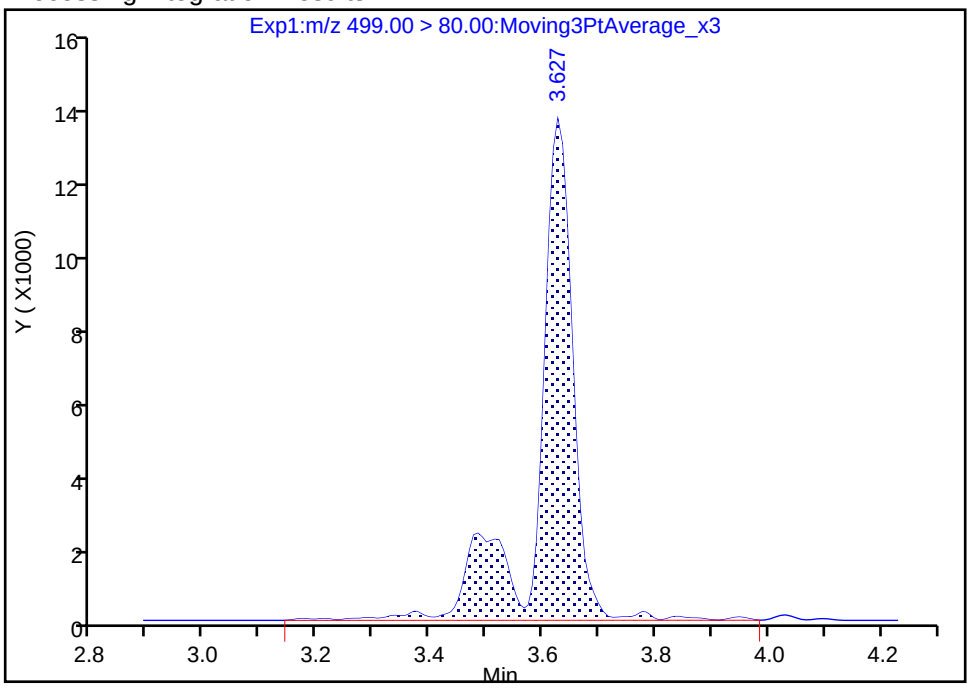
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

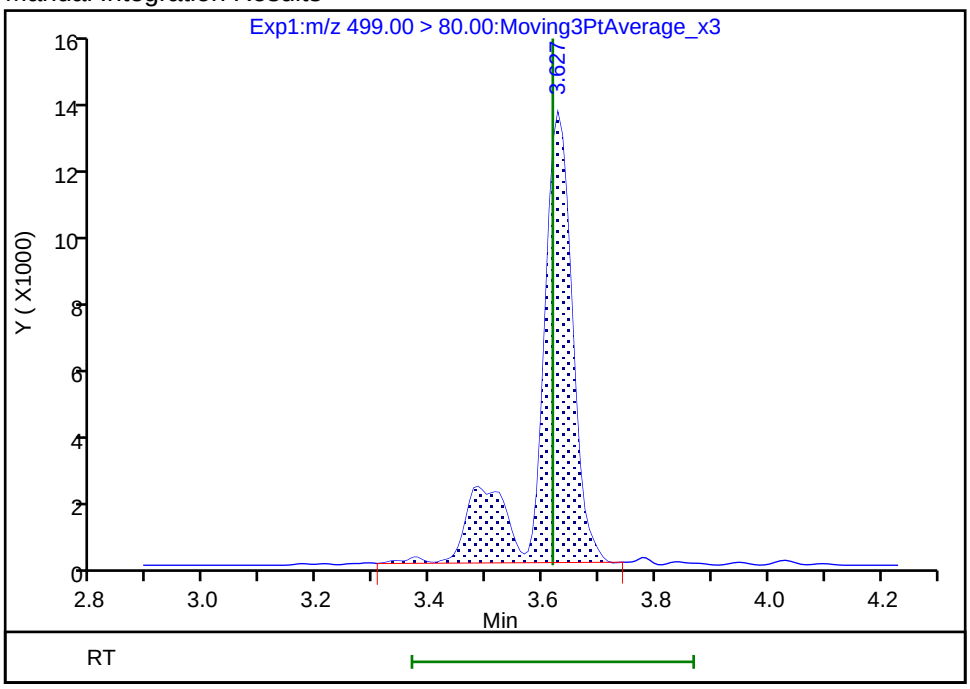
Processing Integration Results

RT: 3.63
Area: 56650
Amount: 0.024991
Amount Units: ng/ml



Manual Integration Results

RT: 3.63
Area: 53612
Amount: 0.023730
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 12:57:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

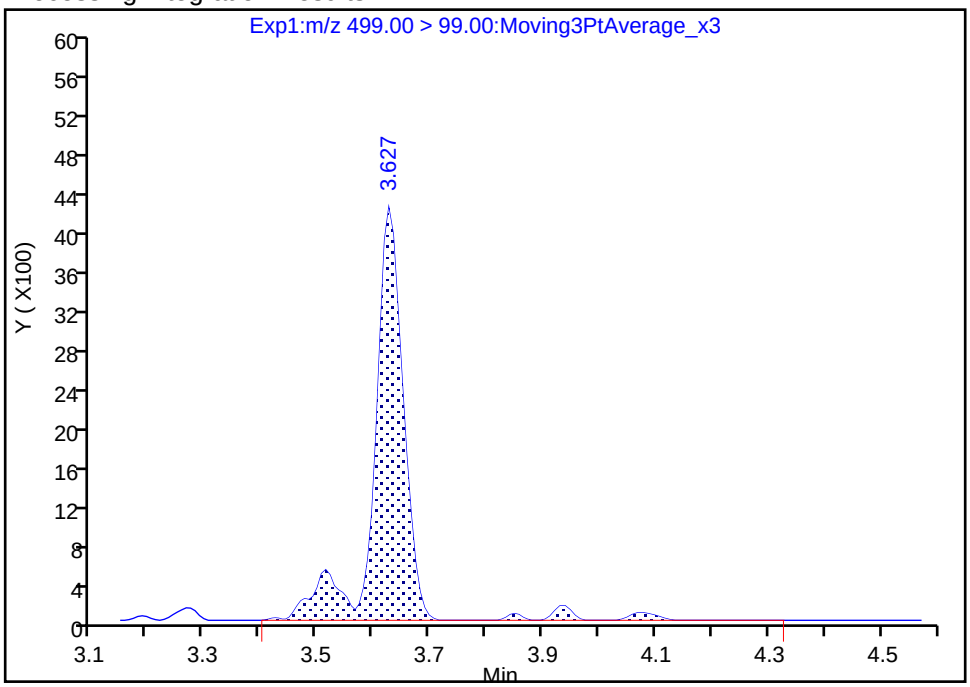
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

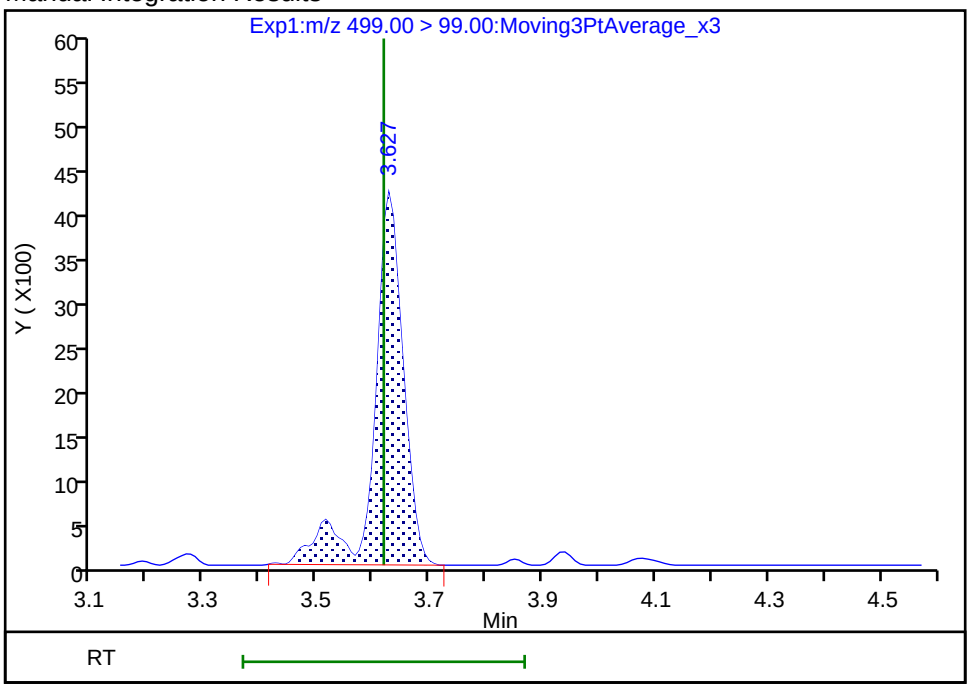
Processing Integration Results

RT: 3.63
Area: 15869
Amount: 0.024991
Amount Units: ng/ml



Manual Integration Results

RT: 3.63
Area: 15072
Amount: 0.023730
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 12:57:20
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

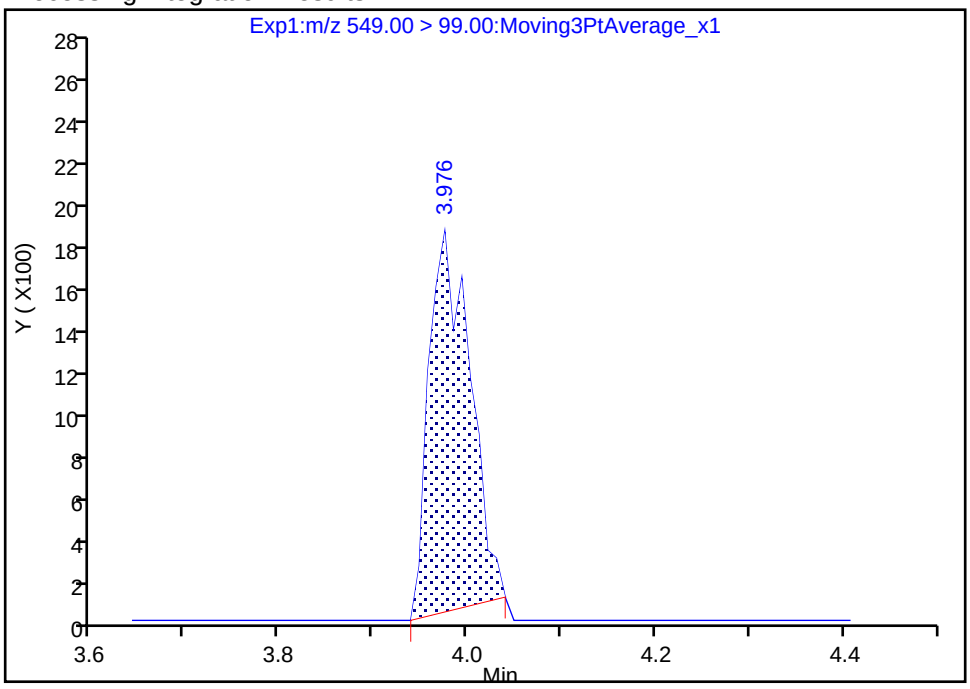
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

35 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

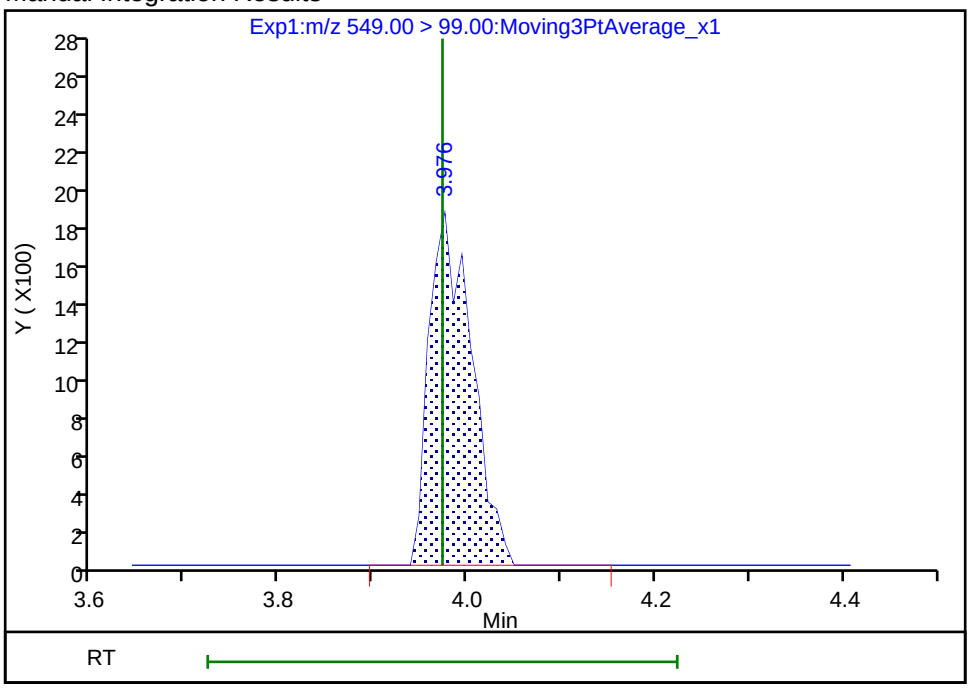
Processing Integration Results

RT: 3.98
Area: 5360
Amount: 0.024609
Amount Units: ng/ml



Manual Integration Results

RT: 3.98
Area: 5719
Amount: 0.024609
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 12:57:27
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

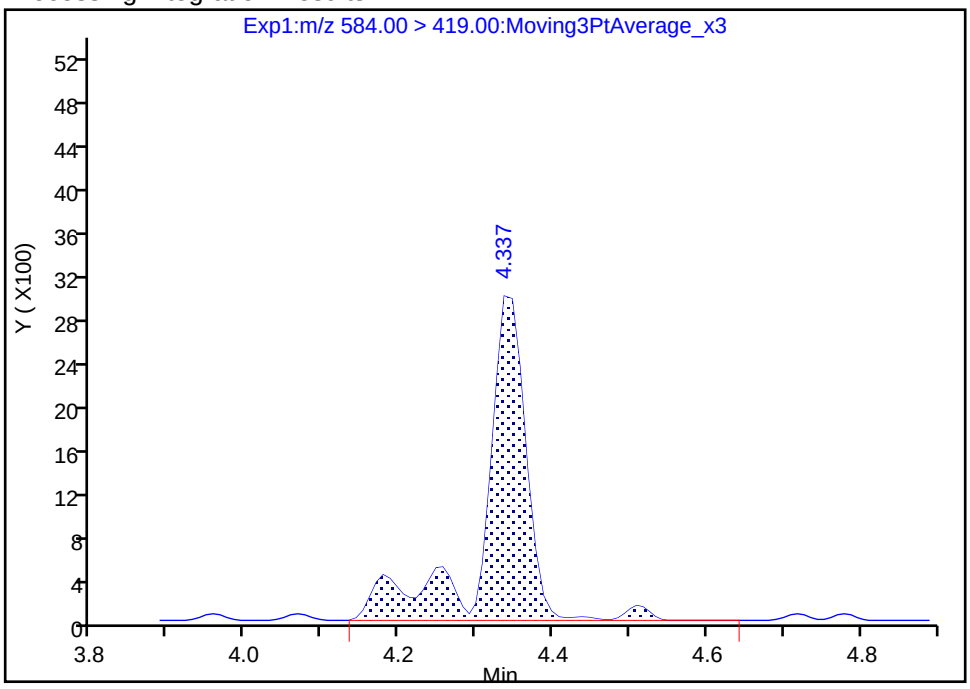
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

46 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

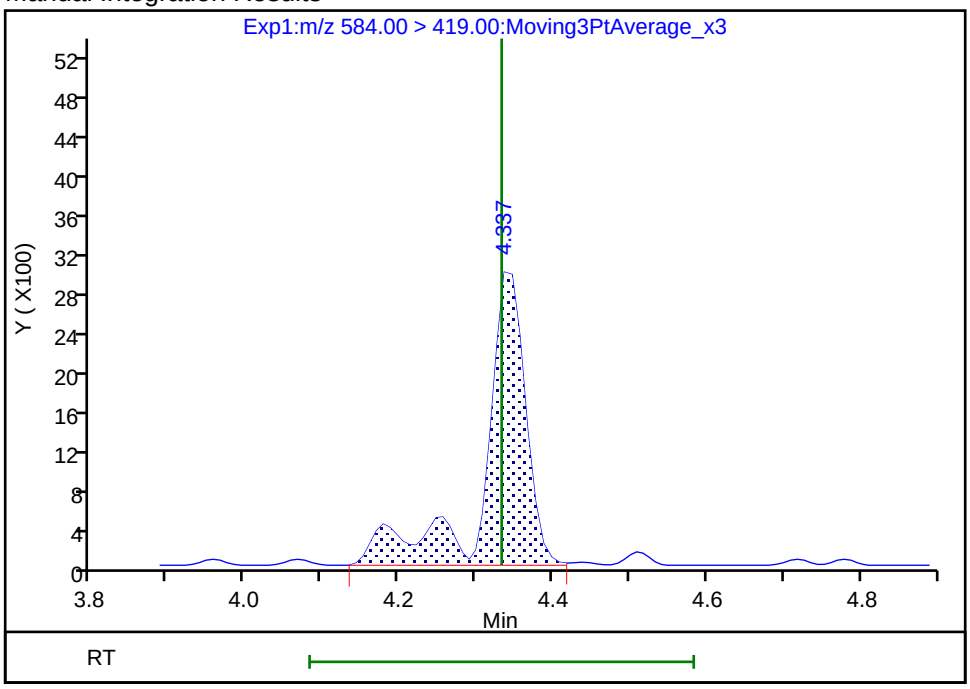
Processing Integration Results

RT: 4.34
Area: 11751
Amount: 0.022458
Amount Units: ng/ml



Manual Integration Results

RT: 4.34
Area: 11403
Amount: 0.021939
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 12:57:44
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Sacramento

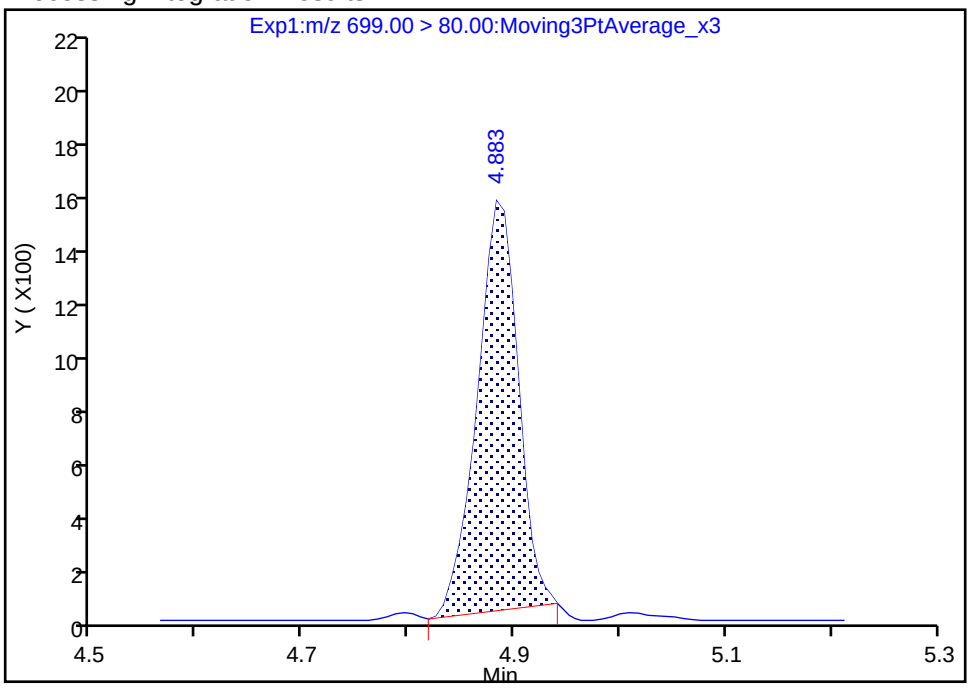
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

53 Perfluorododecanesulfonic acid (PFDoS), CAS: 79780-39-5

Signal: 1

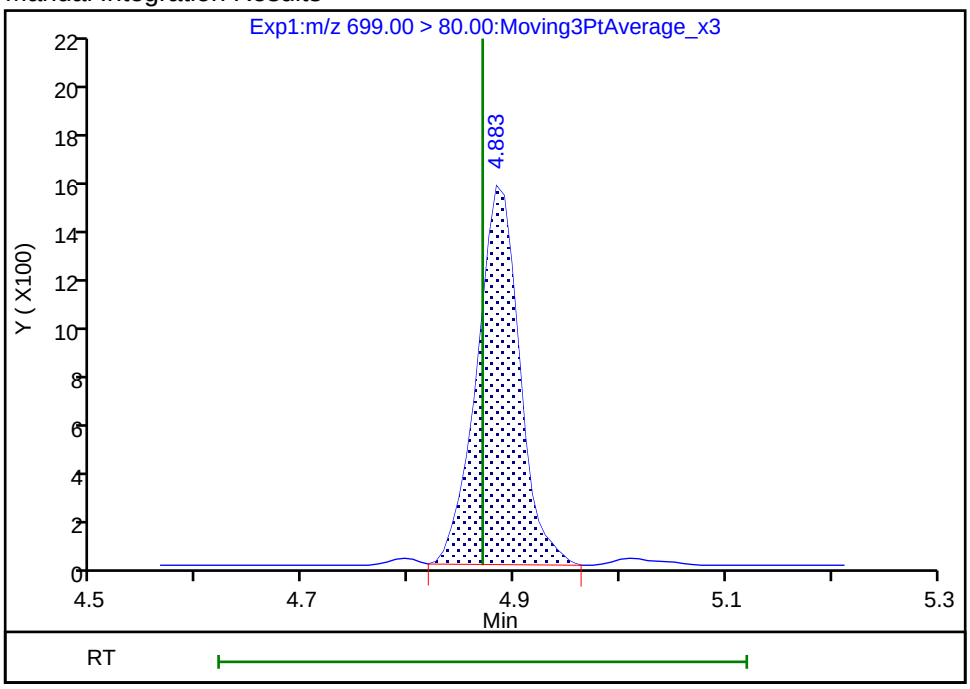
Processing Integration Results

RT: 4.88
Area: 4136
Amount: 0.020855
Amount Units: ng/ml



Manual Integration Results

RT: 4.88
Area: 4401
Amount: 0.021890
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:01:17
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

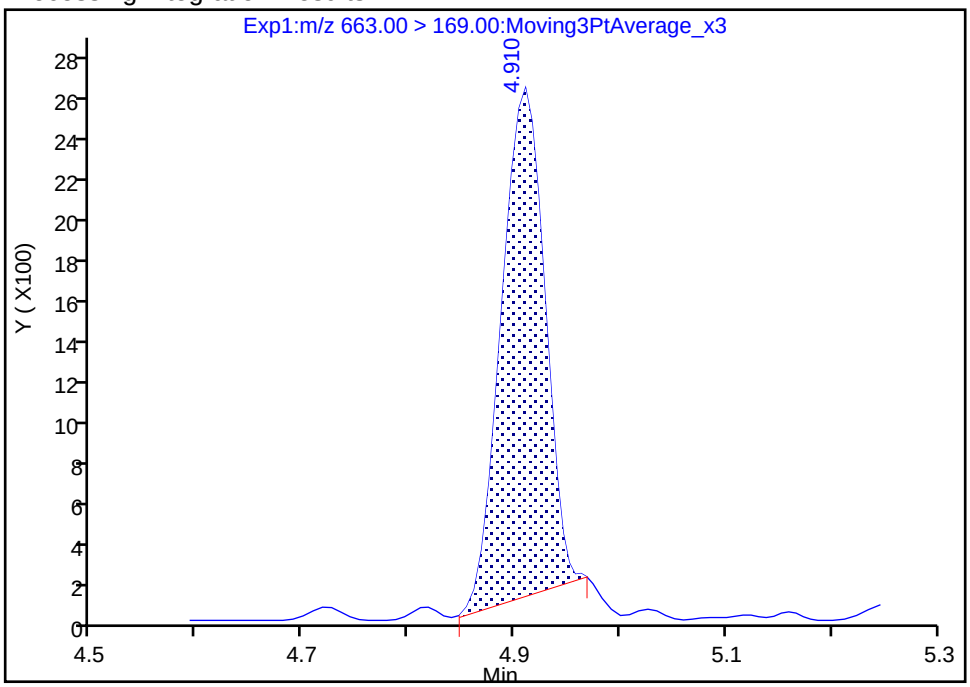
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

54 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

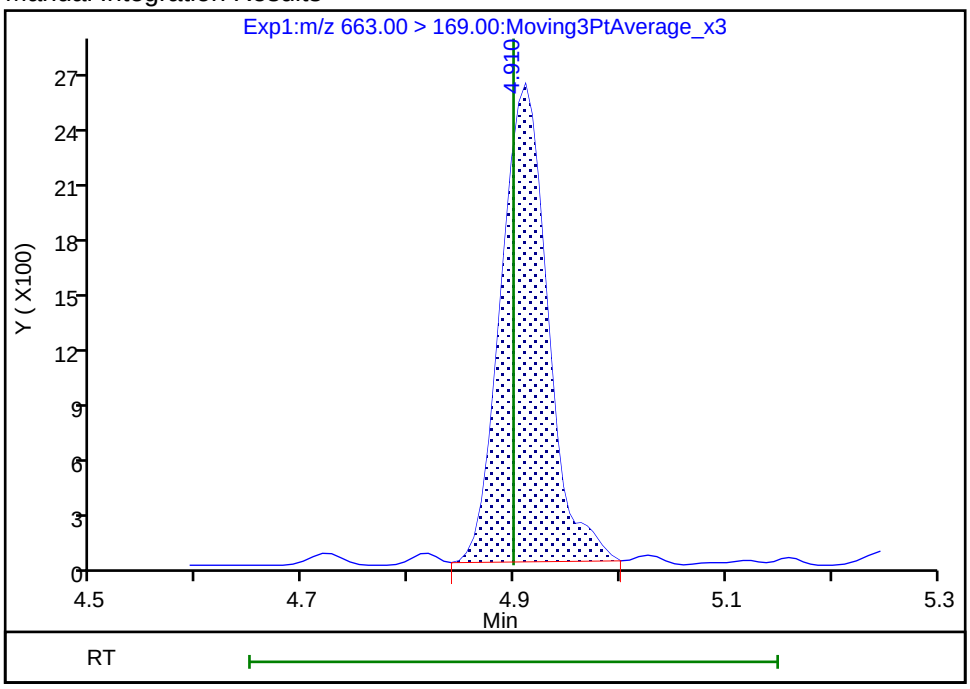
Processing Integration Results

RT: 4.91
Area: 7170
Amount: 0.027134
Amount Units: ng/ml



Manual Integration Results

RT: 4.91
Area: 8029
Amount: 0.027134
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:01:11
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

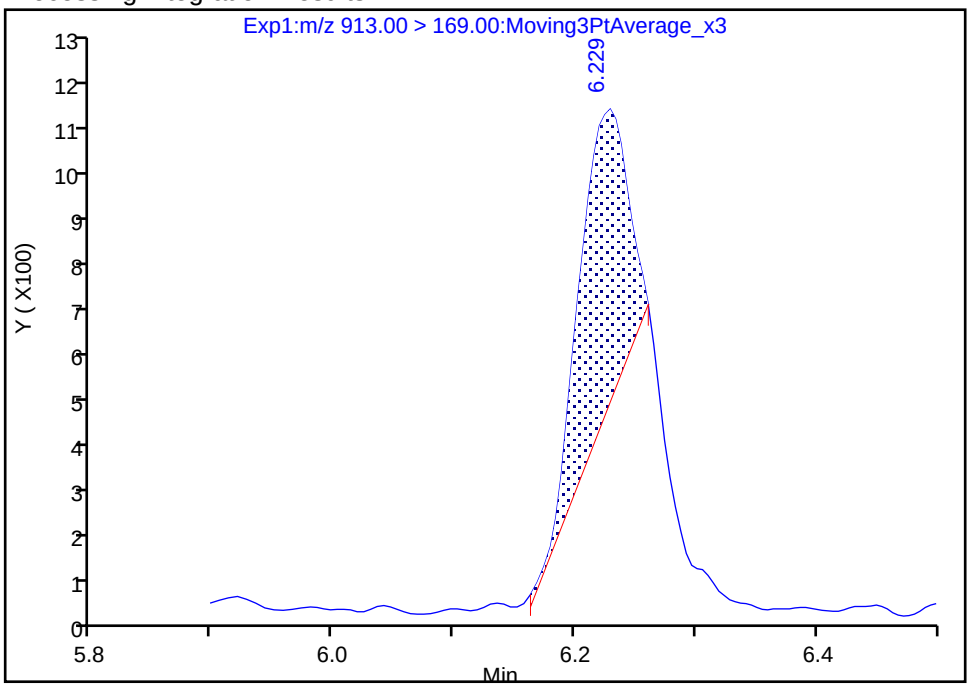
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_002.d
Injection Date: 11-Mar-2019 11:27:02 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

59 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

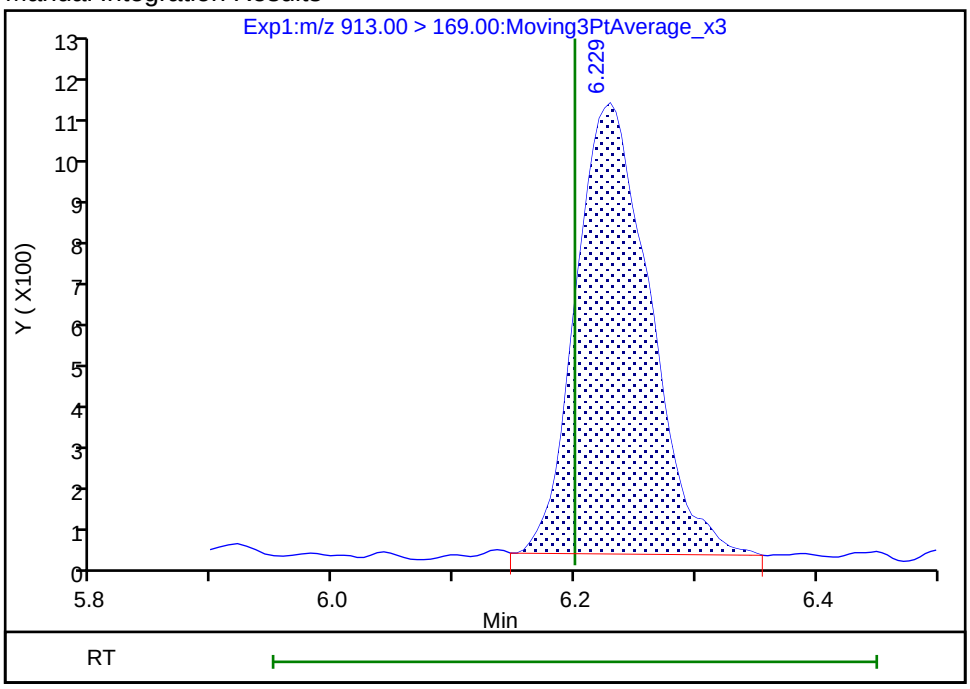
Processing Integration Results

RT: 6.23
Area: 1767
Amount: 0.023728
Amount Units: ng/ml



Manual Integration Results

RT: 6.23
Area: 4430
Amount: 0.023728
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:01:23
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_003.d
Lims ID: IC L2 Full
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-Mar-2019 11:34:33 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CAL STD2
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 11-Mar-2019 13:12:28 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0331

First Level Reviewer: westendorfc Date: 11-Mar-2019 13:02:36
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.710	1.713	-0.003	1.000	103071	0.0474		94.8	16.3	M
D 1 13C4 PFBA										
217.00 > 172.00	1.710	1.714	-0.004	0.529	6217977	2.41		96.5	54284	
D 3 13C5 PFPeA										
267.90 > 223.00	2.044	2.042	0.002	0.632	5303853	2.41		96.3	15468	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.044	2.045	-0.001	1.000	108396	0.0518		104	9.4	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.078	2.075	0.003	1.000	136073	0.0448	Target=2.69	101	515	
298.90 > 99.00	2.078	2.075	0.003	1.000	48434		0.00(1.88-3.50)	101	125	
D 5 13C3 PFBS										
301.90 > 80.00	2.078	2.076	0.002	0.642	7679331	2.21		95.2	621419	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.364	2.369	-0.005	0.996	25593	0.0504		108	307	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.374	2.371	0.003	0.734	483706	2.23		95.3	1350	
D 9 13C2 PFHxA										
315.00 > 270.00	2.411	2.409	0.002	0.745	5934457	2.40		96.2	8236	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.411	2.411	0.0	1.000	104563	0.0507	Target=13.98	101	52.1	
313.00 > 119.00	2.411	2.411	0.0	1.000	6342		0.00(9.79-18.17)	101	31.9	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.430	2.427	0.003	1.169	64897	0.0428	Target=2.01	91.2	526	
349.00 > 99.00	2.430	2.427	0.003	1.169	32144		0.00(1.41-2.62)	91.2	122	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.538	2.534	0.004	0.785	810141	2.43		97.4	3609	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.538	2.536	0.002	1.000	22353	0.0497		99.3	24.2	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.818	2.817	0.001	1.000	151918	0.0508	Target=4.51	102	105	
363.00 > 169.00	2.818	2.817	0.001	1.000	30723		0.00(3.16-5.86)	102	200	
D 16 13C4 PFHpA										
367.00 > 322.00	2.818	2.817	0.001	0.871	7486546	2.45		98.1	6249	
D 17 18O2 PFHxS										
403.00 > 84.00	2.827	2.822	0.005	0.874	4650368	2.33		98.5	5811	
18 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.827	2.824	0.003	1.000	105384	0.0443	Target=3.29	97.3	483	
399.00 > 99.00	2.827	2.824	0.003	1.000	34483		0.00(2.30-4.28)	97.3	85.1	
19 DONA										
377.00 > 251.00	2.872	2.869	0.003	0.794	250417	0.0493	Target=2.25	105	1095	
377.00 > 85.00	2.872	2.869	0.003	0.794	102843		0.00(1.58-2.93)	105	198	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.212	3.209	0.003	0.993	652761	2.37		99.6	3618	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.219	3.210	0.009	1.002	24566	0.0454		95.7	129	
D 22 13C8 PFOA										
421.00 > 376.00	3.227	3.225	0.002	0.998	5768206	2.43		99.2	4827	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.235	3.230	0.005	0.894	98537	0.0444	Target=3.86	93.3	479	
449.00 > 99.00	3.235	3.230	0.005	0.894	26635		0.00(2.70-5.01)	93.3	113	
D 25 13C4 PFOA										
417.00 > 372.00	3.235	3.230	0.005	1.000	6879871	2.48		99.3	5862	
* 24 13C2 PFOA										
415.00 > 370.00	3.235	3.232	0.003		7668346	2.50			4814	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.235	3.233	0.002	1.000	159835	0.0559	Target=1.00	112	59.4	
413.00 > 169.00	3.235	3.233	0.002	1.000	63663		2.51(0.70-1.30)	112	298	
D 27 13C8 PFOS										
507.00 > 99.00	3.619	3.614	0.005	1.119	1225705	2.29		95.8	4045	
D 28 13C4 PFOS										
503.00 > 80.00	3.619	3.617	0.002	1.119	5538677	2.37		99.3	6669	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.619	3.618	0.001	1.000	101713	0.0452	Target=1.00	97.3	279	
499.00 > 99.00	3.619	3.618	0.001	1.000	27710		3.67(0.70-1.30)	97.3	197	
D 31 13C5 PFNA										
468.00 > 423.00	3.627	3.626	0.001	1.121	6414395	2.47		98.9	6986	
30 Perfluorononanoic acid										
463.00 > 419.00	3.635	3.628	0.007	1.002	126081	0.0510	Target=5.29	102	48.3	
463.00 > 169.00	3.627	3.628	-0.001	1.000	23979		0.00(3.70-6.88)	102	92.3	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.827	3.823	0.004	1.057	88595	0.0492		106	169	
D 33 13C8 FOSA										
506.00 > 78.00	3.930	3.927	0.003	1.215	3736924	2.45		97.9	6965	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.930	3.928	0.002	1.000	203497	0.0494		98.8	593	
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.976	3.973	0.003	1.098	55895	0.0418	Target=6.21	87.0	222	
549.00 > 99.00	3.976	3.973	0.003	1.098	10287		0.00(4.35-8.07)	87.0	73.4	
D 36 13C2 PFDA										
515.00 > 470.00	3.994	3.994	0.0	1.235	6394600	2.40		96.0	8368	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.003	3.995	0.008	1.000	22997	0.0457		95.5	177	
38 Perfluorodecanoic acid										
513.00 > 469.00	4.003	3.995	0.008	1.002	142916	0.0526	Target=15.01	105	187	
513.00 > 169.00	3.994	3.995	-0.001	1.000	6756		0.00(10.51-19.52)	105	35.3	
D 39 M2-8:2 FTS										
529.00 > 81.00	4.003	3.997	0.006	1.237	748300	2.39		99.7	3079	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.170	4.165	0.005	1.002	30036	0.0480		96.0	18.1	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.161	4.161	0.0	1.286	1963461	2.43		97.2	3666	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.308	4.303	0.005	1.190	89258	0.0449	Target=4.69	93.1	377	
599.00 > 99.00	4.299	4.303	-0.004	1.188	20875		0.00(3.28-6.10)	93.1	67.0	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.327	4.324	0.003	1.000	93452	0.0547	Target=8.65	109	57.5	
563.00 > 169.00	4.336	4.324	0.012	1.002	10356		0.00(6.05-11.24)	109	65.6	
D 44 13C2 PFUnA										
565.00 > 520.00	4.327	4.324	0.003	1.338	5468329	2.51		100	4699	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.336	4.328	0.008	1.340	1745424	2.54		101	2598	
46 N-ethylperfluorooctanesulfonamidoa										M
584.00 > 419.00	4.336	4.333	0.003	1.000	27107	0.0521		104	119	M
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.476	4.469	0.007	1.237	127064	0.0516		110	787	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.632	4.624	0.008	1.000	125048	0.0543	Target=8.64	109	94.0	
613.00 > 169.00	4.632	4.624	0.008	1.000	13381		0.00(6.05-11.23)	109	49.8	
D 49 13C2 PFDoA										
615.00 > 570.00	4.632	4.624	0.008	1.432	6050247	2.46		98.3	9289	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.651	4.641	0.010	1.162	14458	0.0467		97.0	32.0	
53 Perfluorododecanesulfonic acid (PF										M
699.00 > 80.00	4.875	4.870	0.005	1.347	9750	0.0486	Target=0.57	100	181	M
699.00 > 99.00	4.875	4.870	0.005	1.347	14610		0.00(0.40-0.74)	100	209	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.904	4.899	0.005	1.059	93215	0.0514	Target=5.68	103	29.2	
663.00 > 169.00	4.904	4.899	0.005	1.059	14446		0.00(3.97-7.38)	103	118	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										M
713.00 > 169.00	5.166	5.154	0.012	1.001	16175	0.0523	Target=1.53	105	56.0	M
713.00 > 219.00	5.159	5.154	0.005	1.000	10440		0.00(1.07-1.99)	105	47.9	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.159	5.154	0.005	1.595	4396494	2.43		97.2	12784	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.659	5.648	0.011	1.749	4171582	2.37		94.6	7374	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.667	5.649	0.018	1.001	113239	0.0492	Target=5.11	98.5	10.2	
813.00 > 169.00	5.659	5.649	0.010	1.000	20970		0.00(3.57-6.64)	98.5	90.2	
59 Perfluorooctadecanoic acid										M
913.00 > 869.00	6.219	6.200	0.019	1.099	41046	0.0481	Target=4.80	96.1	9.4	
913.00 > 169.00	6.219	6.200	0.019	1.099	8674		0.00(3.36-6.24)	96.1	72.5	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00011 Amount Added: 1.00 Units: mL

Report Date: 11-Mar-2019 13:12:30 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_003.d

Injection Date: 11-Mar-2019 11:34:33 Instrument ID: A9

Lims ID: IC L2 Full

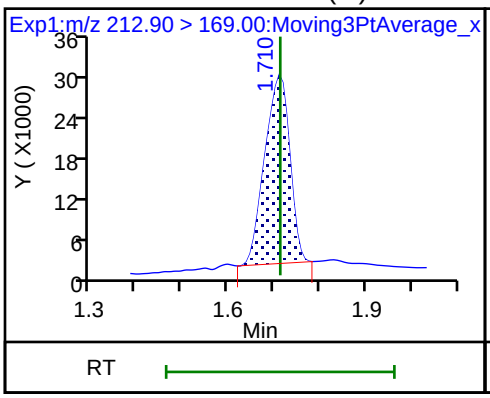
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3

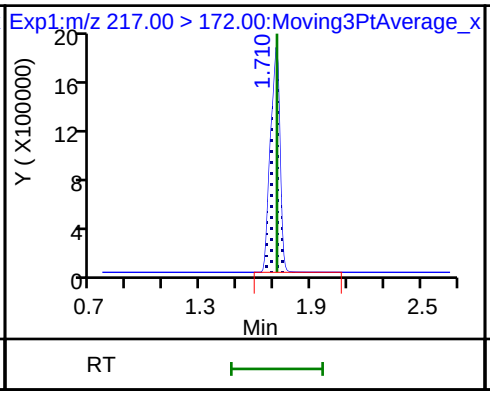
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

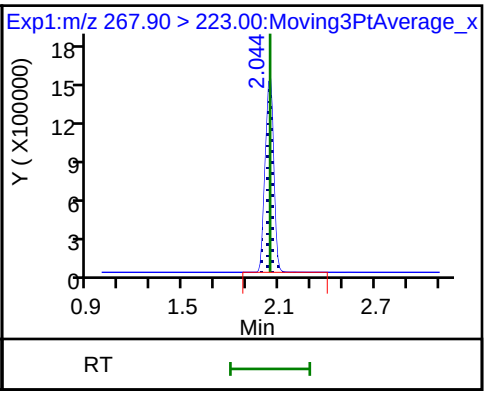
2 Perfluorobutanoic acid (M)



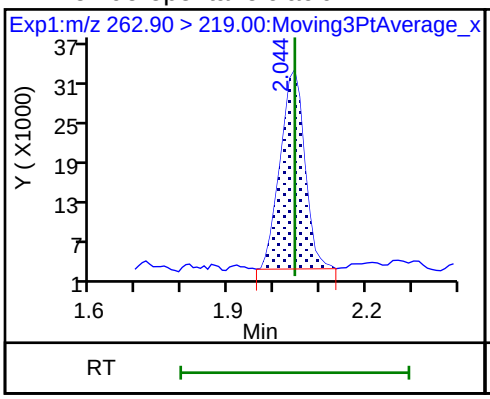
D 1 13C4 PFBA



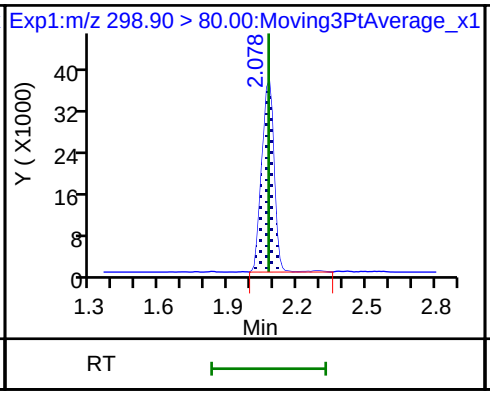
D 3 13C5 PFPeA



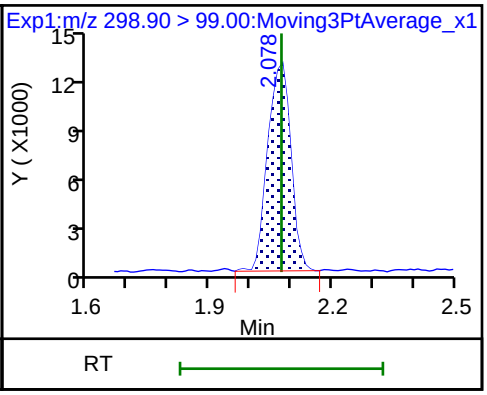
4 Perfluoropentanoic acid



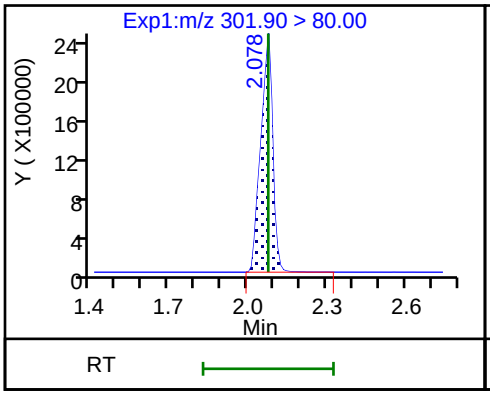
6 Perfluorobutanesulfonic acid



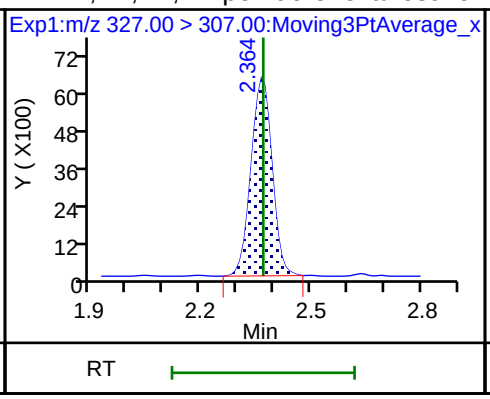
6 Perfluorobutanesulfonic acid



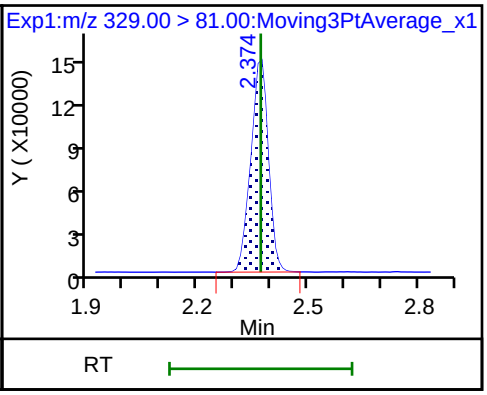
D 5 13C3 PFBS



7 1H,1H,2H,2H-perfluorohexanesulfon



D 8 M2-4:2 FTS



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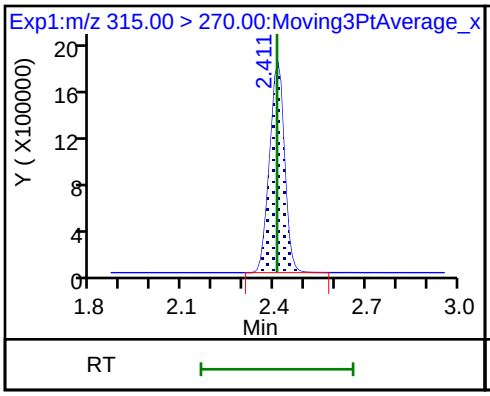
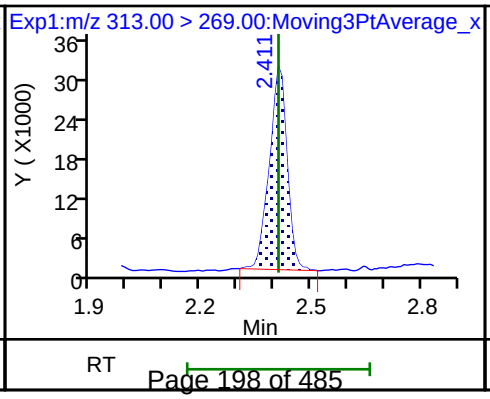
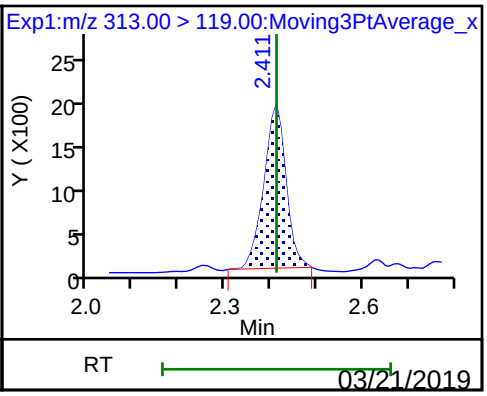


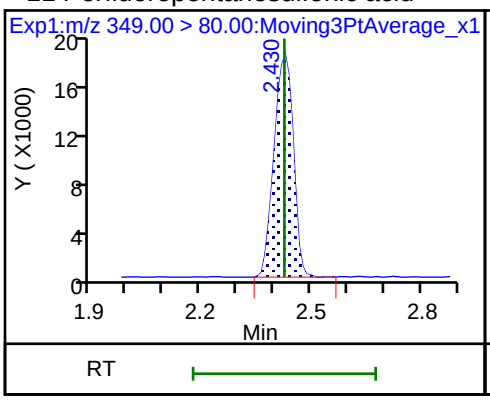
10 Perfluorohexanoic acid



10 Perfluorohexanoic acid



11 Perfluoropentanesulfonic acid



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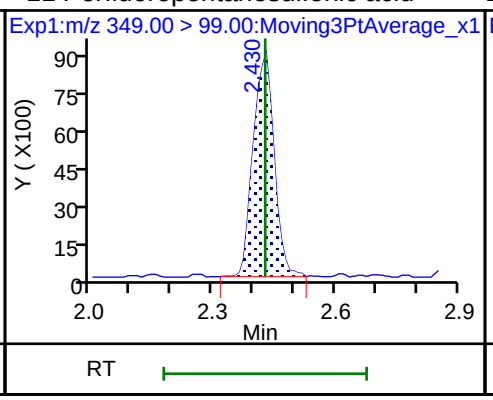
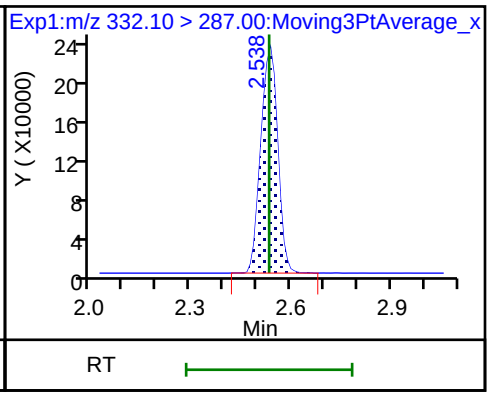
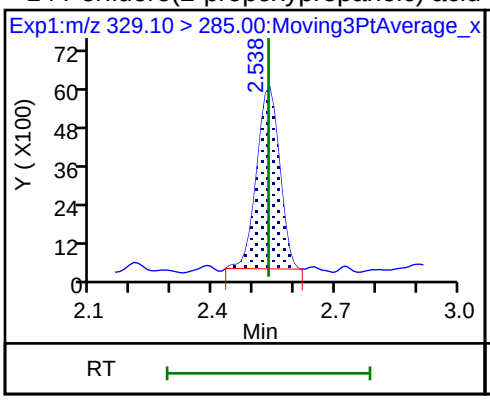


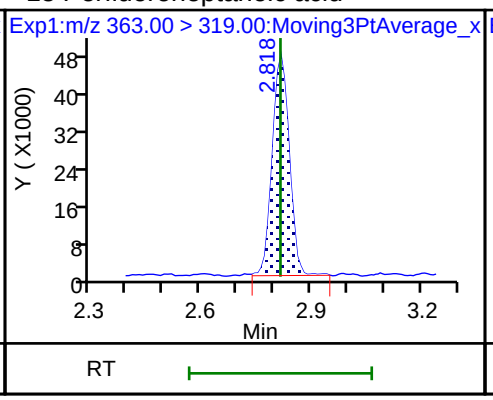
D 13 13C3 HFPO-DA



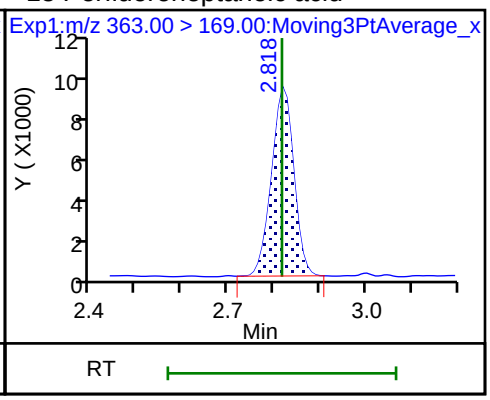
14 Perfluoro(2-propoxypropanoic) acid



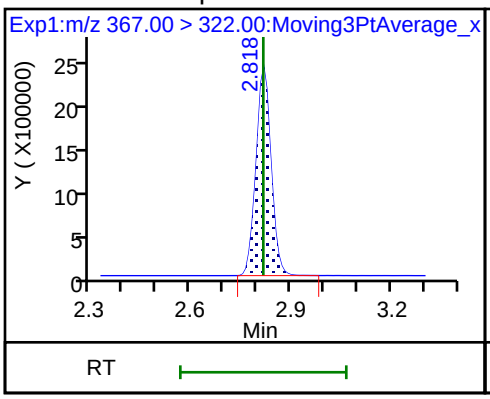
15 Perfluoroheptanoic acid



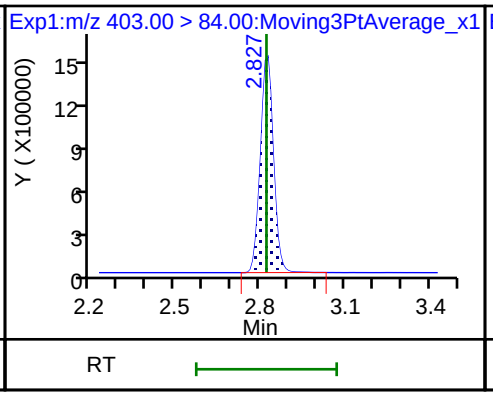
15 Perfluoroheptanoic acid



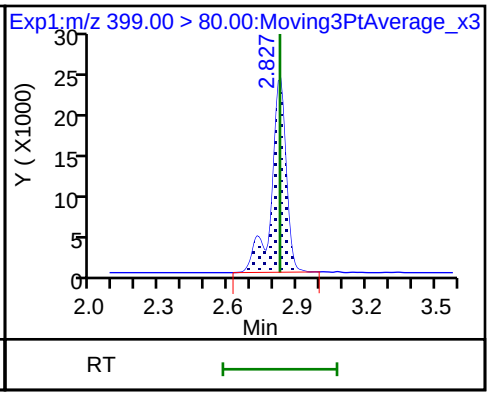
D 16 13C4 PFHpA



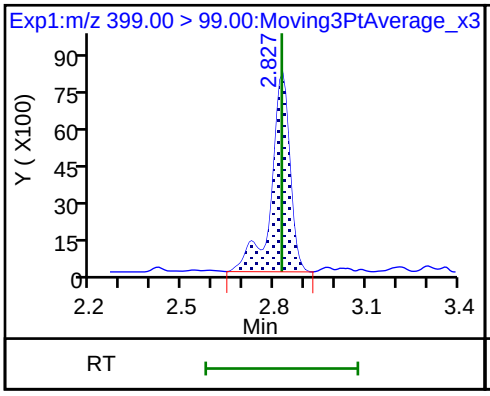
D 17 18O2 PFHxS



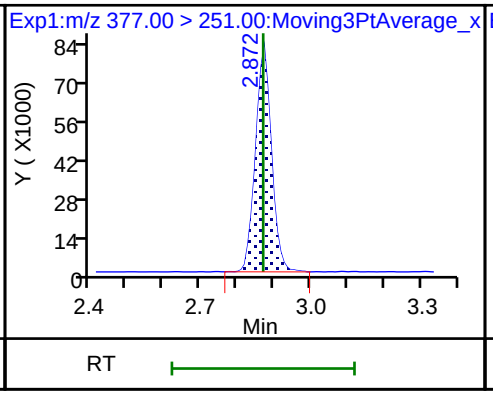
18 Perfluorohexanesulfonic acid



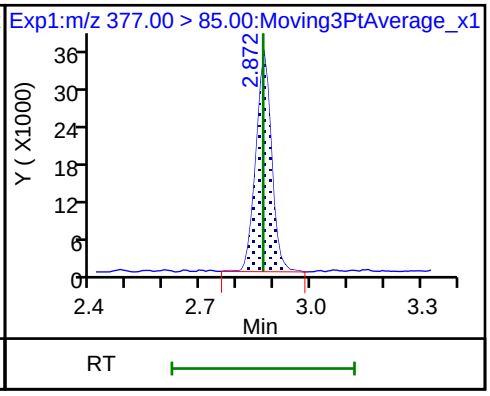
18 Perfluorohexanesulfonic acid



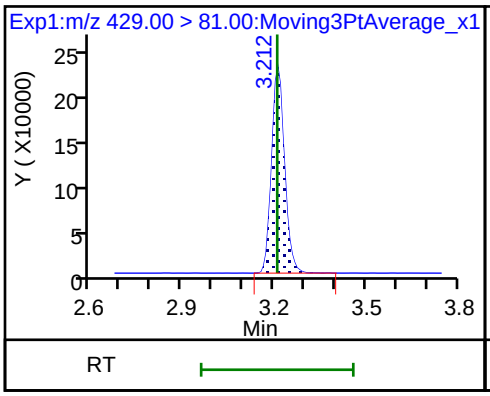
19 DONA



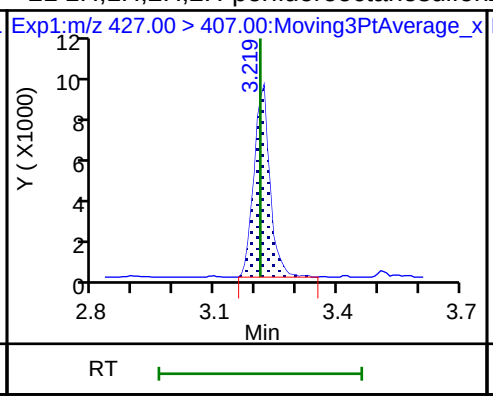
19 DONA



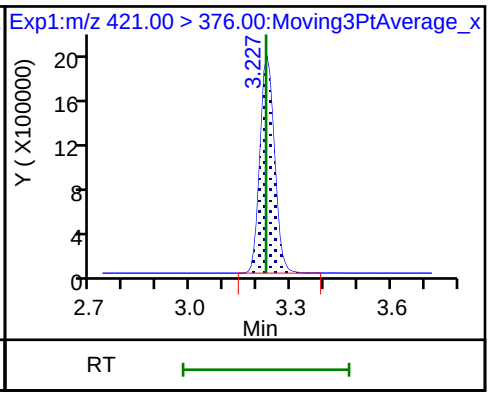
D 20 M2-6:2 FTS



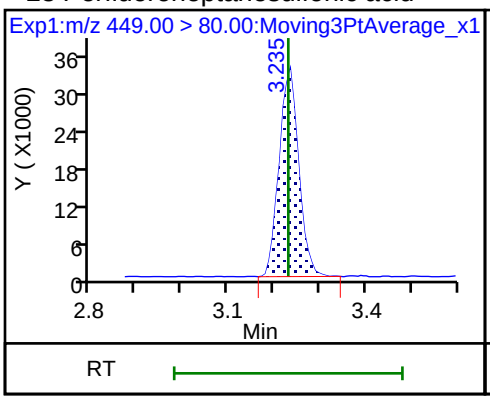
21 1H,1H,2H,2H-perfluorooctanesulfon



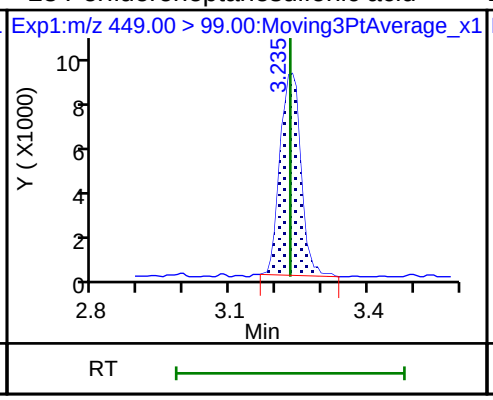
D 22 13C8 PFOA



23 Perfluoroheptanesulfonic acid



23 Perfluoroheptanesulfonic acid



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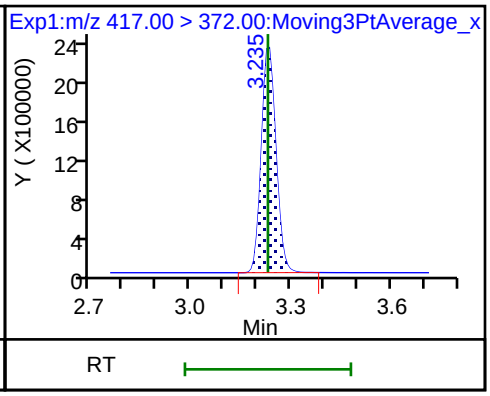
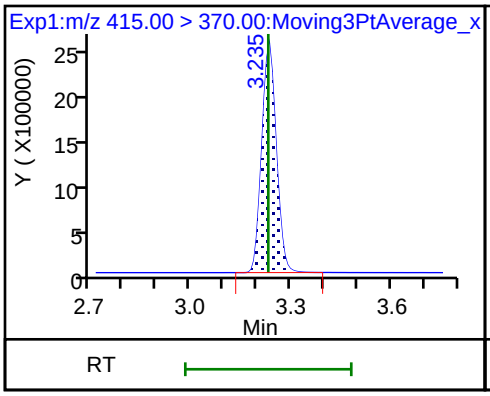
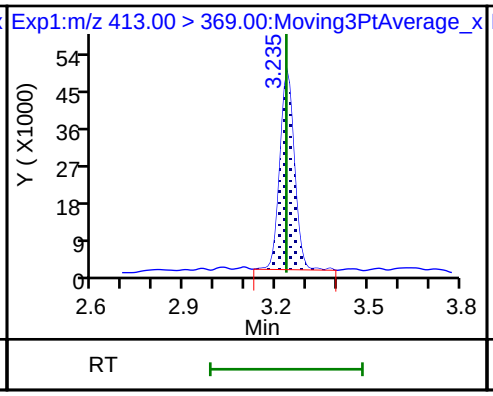


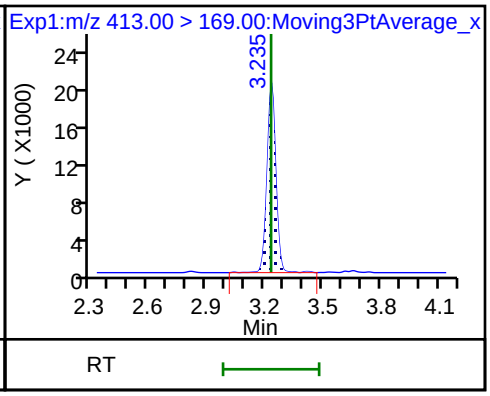
* 24 13C2 PFOA



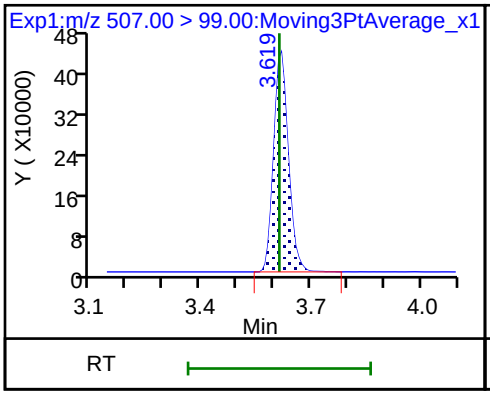
26 Perfluorooctanoic acid



26 Perfluorooctanoic acid



D 27 13C8 PFOS



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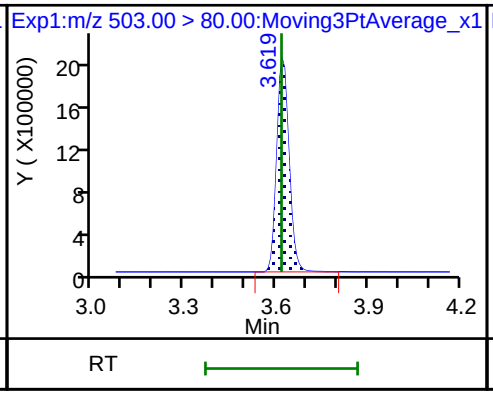
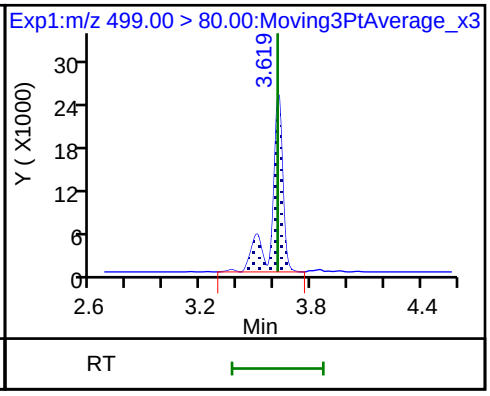
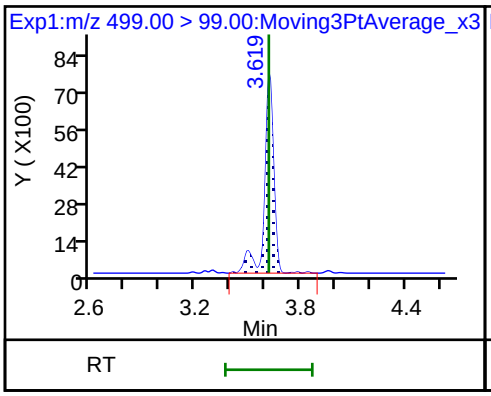


29 Perfluorooctanesulfonic acid



29 Perfluorooctanesulfonic acid



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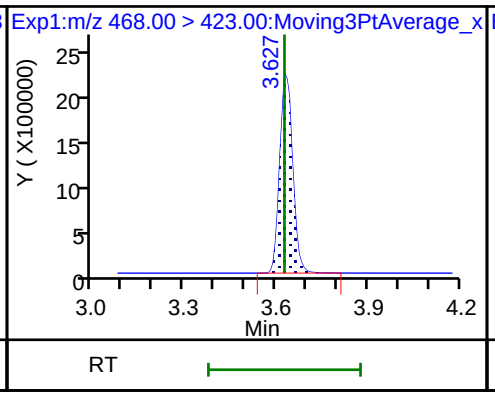
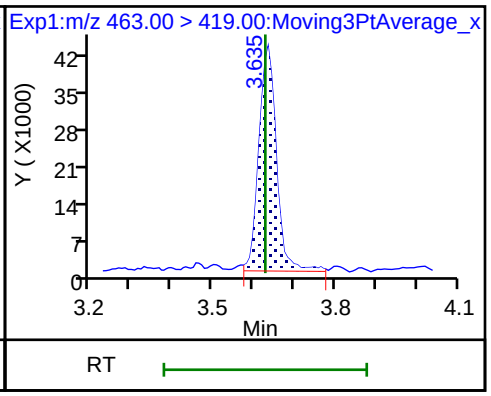


30 Perfluorononanoic acid



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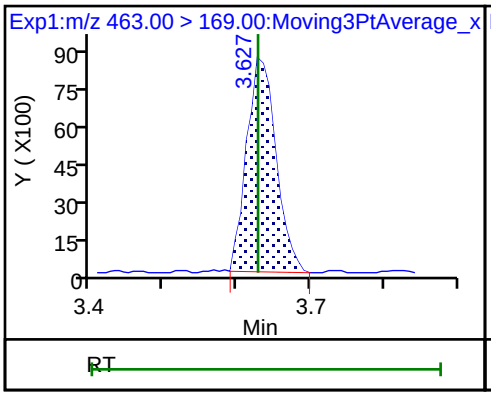
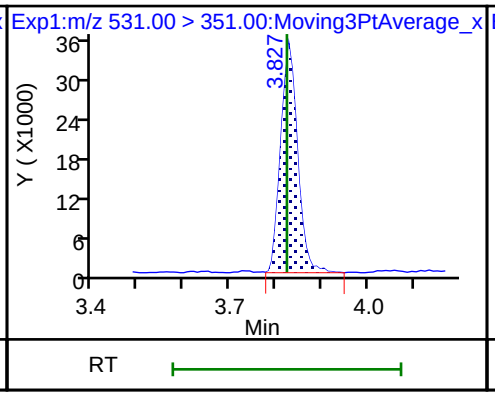


32 9-Chlorohexadecafluoro-3-oxanonane



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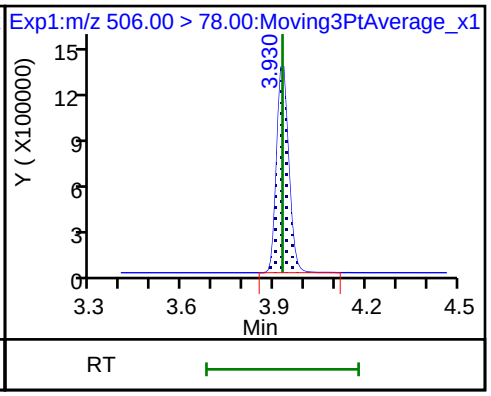
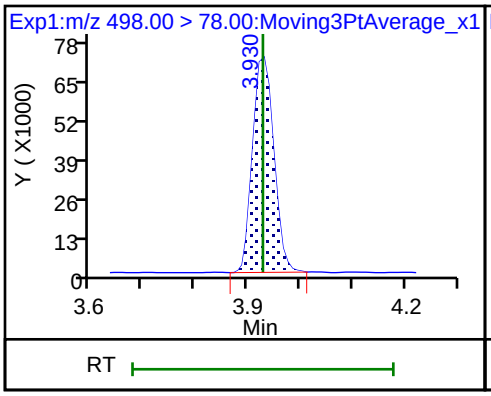
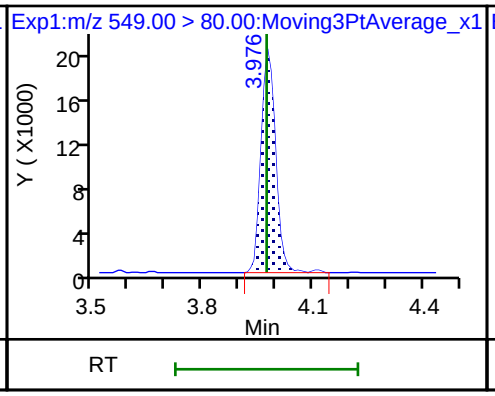


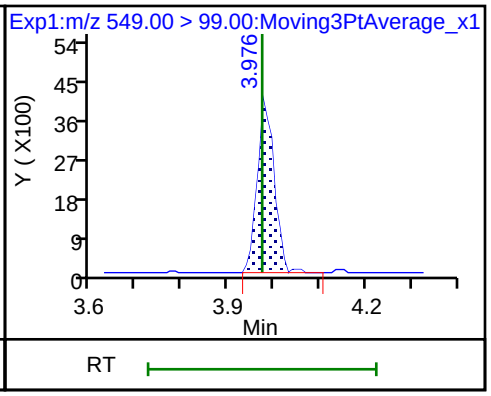
34 Perfluorooctanesulfonamide



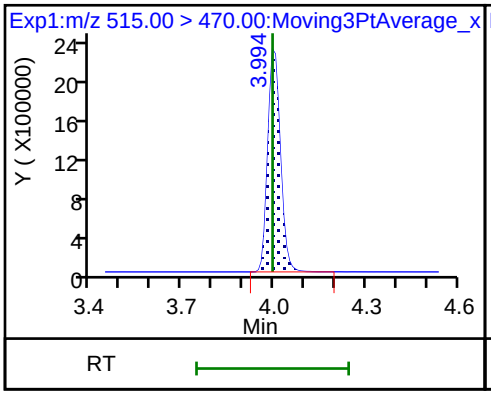
35 Perfluorononanesulfonic acid



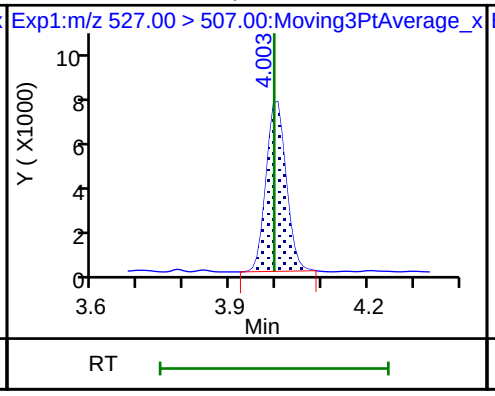
35 Perfluorononanesulfonic acid



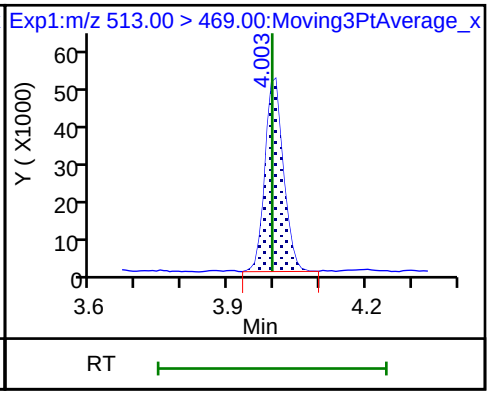
D 36 13C2 PFDA



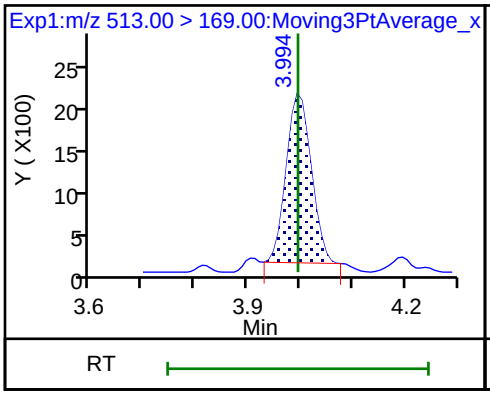
37 1H,1H,2H,2H-perfluorodecanesulfoni



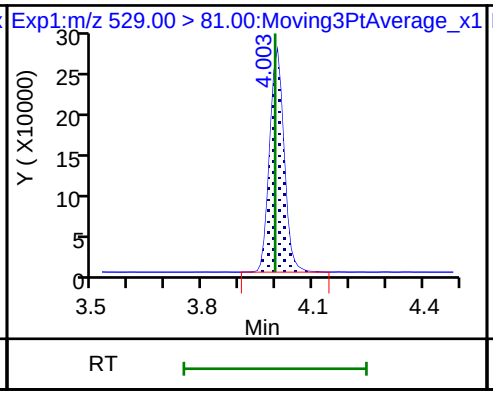
38 Perfluorodecanoic acid



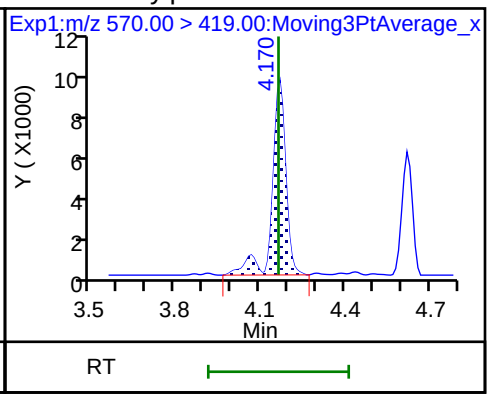
38 Perfluorodecanoic acid



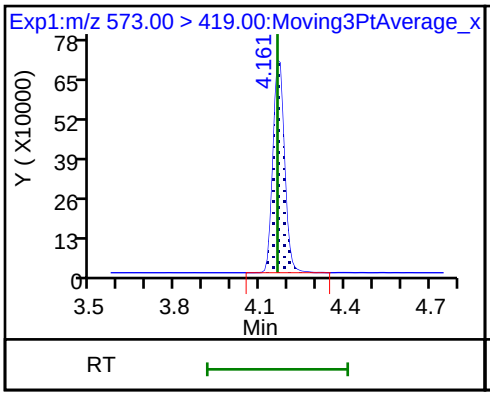
D 39 M2-8:2 FTS



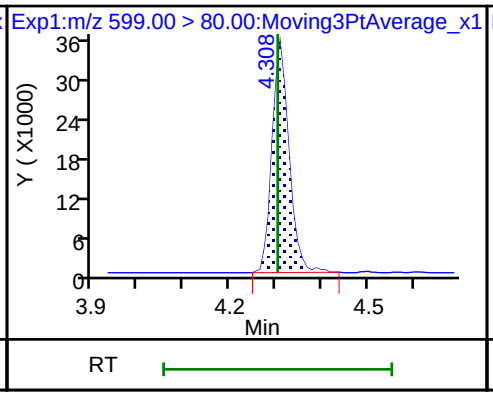
41 N-methylperfluorooctanesulfonamido



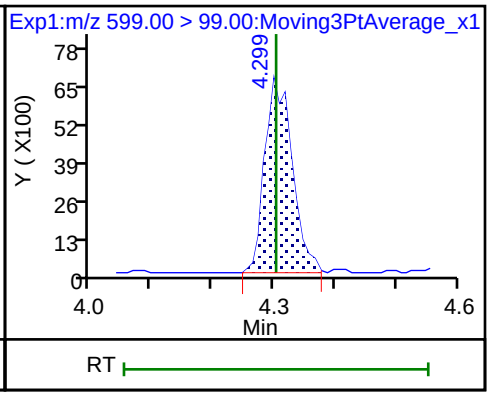
D 40 d3-NMeFOSAA



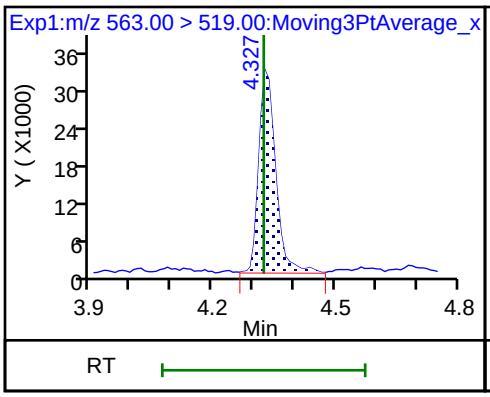
42 Perfluorodecanesulfonic acid



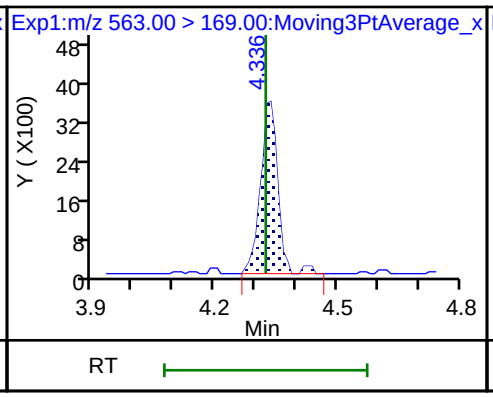
42 Perfluorodecanesulfonic acid



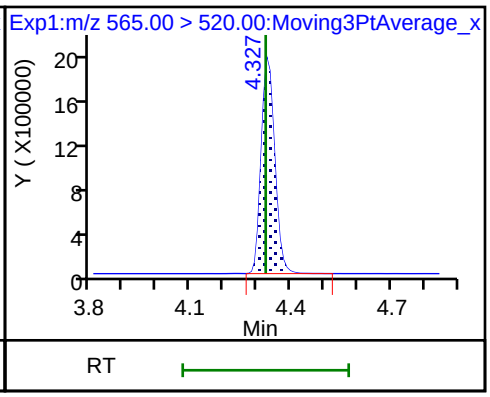
43 Perfluoroundecanoic acid



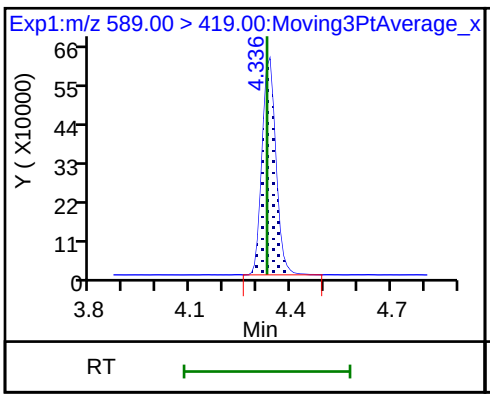
43 Perfluoroundecanoic acid



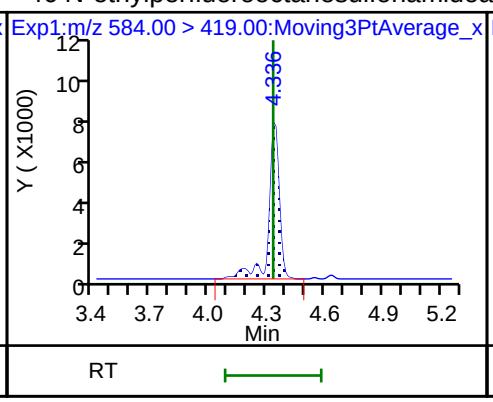
D 44 13C2 PFUnA



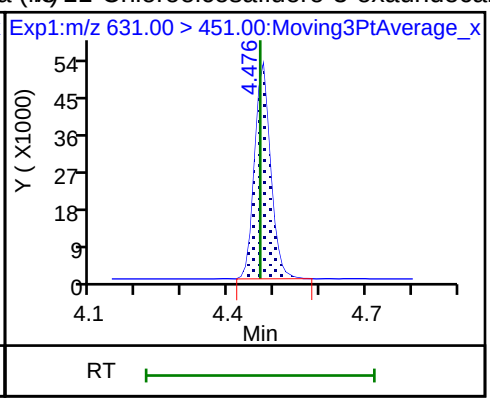
D 45 d5-NEtFOSAA



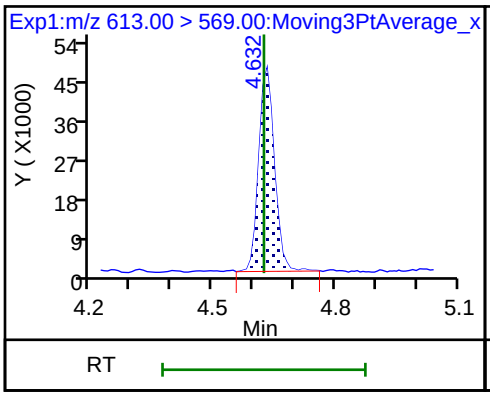
46 N-ethylperfluorooctanesulfonamidoa (NE



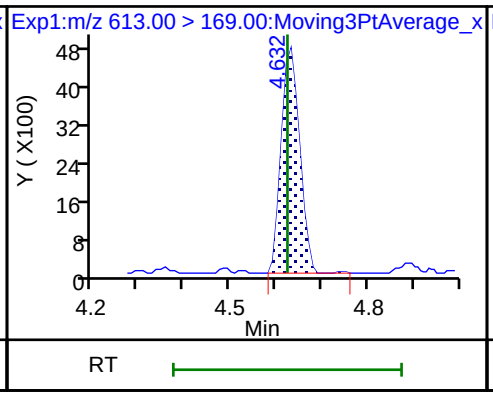
48 11-Chloroeicosafluoro-3-oxaundecan



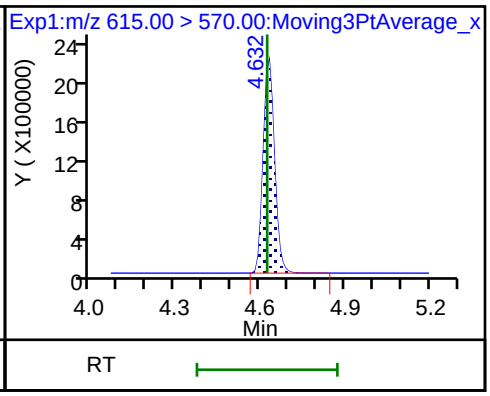
50 Perfluorododecanoic acid



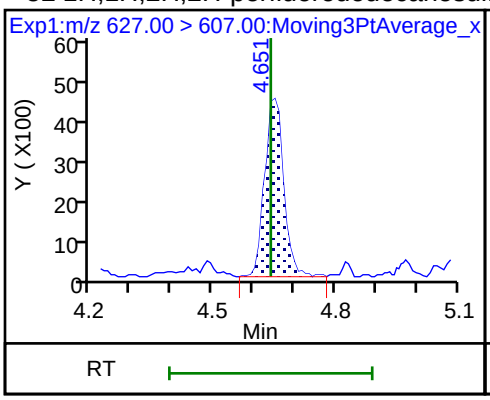
50 Perfluorododecanoic acid



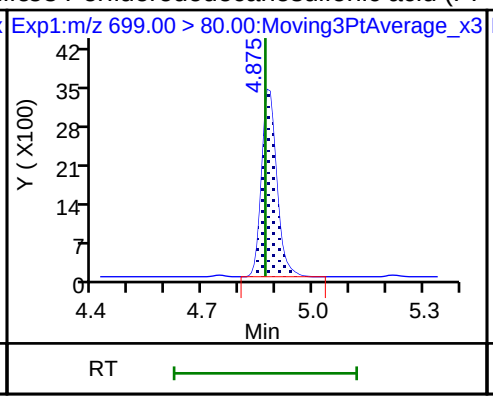
D 49 13C2 PFDoA



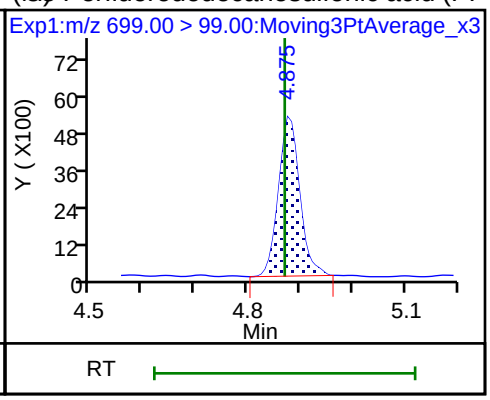
52 1H,1H,2H,2H-perfluorododecanesulfo



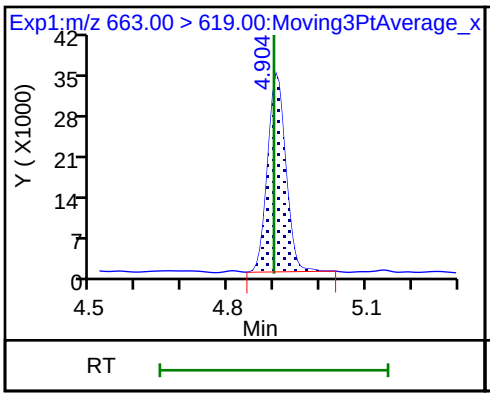
53 Perfluorododecanesulfonic acid (PF (M)



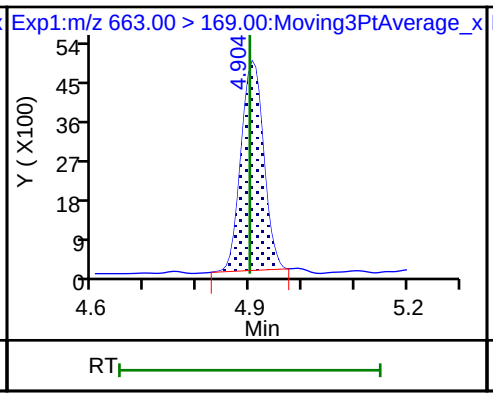
53 Perfluorododecanesulfonic acid (PF



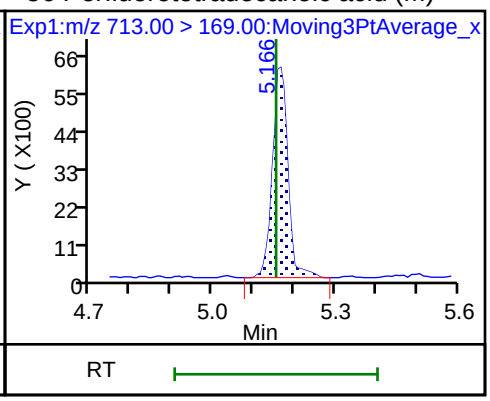
54 Perfluorotridecanoic acid



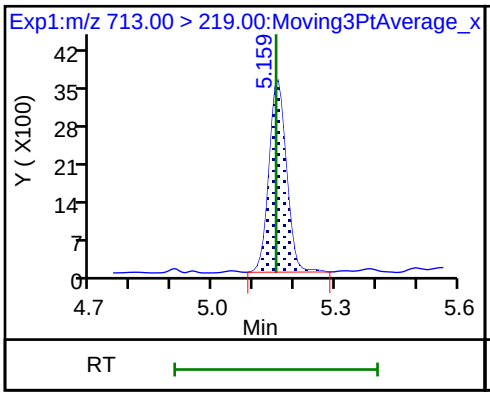
54 Perfluorotridecanoic acid



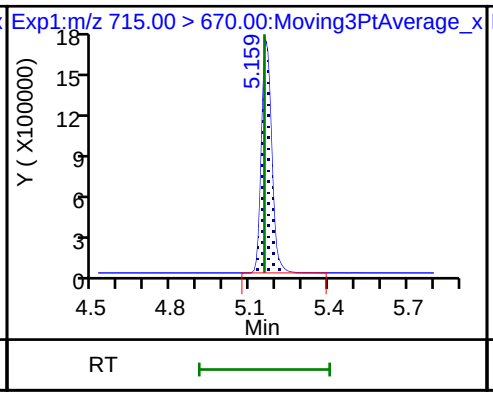
56 Perfluorotetradecanoic acid (M)



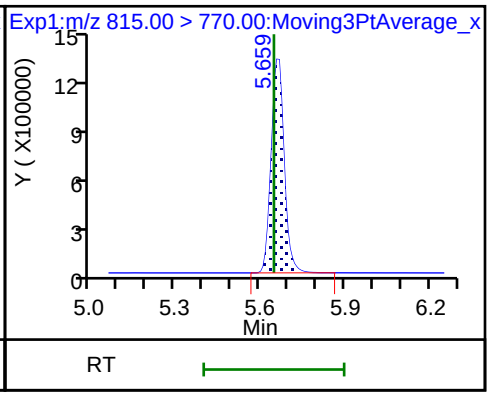
56 Perfluorotetradecanoic acid



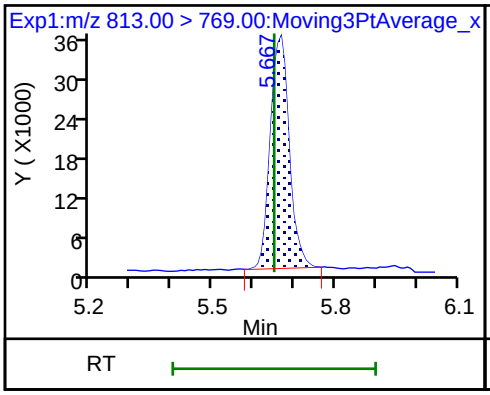
D 55 13C2 PFTeDA



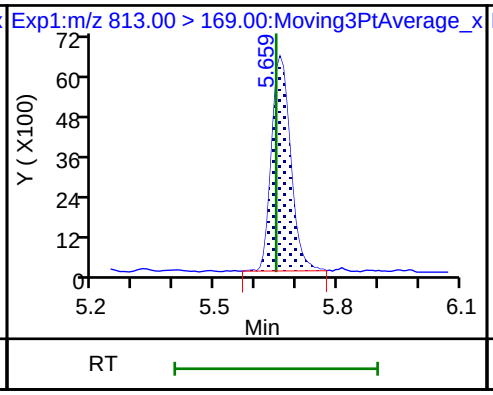
D 57 13C2 PFHxDA



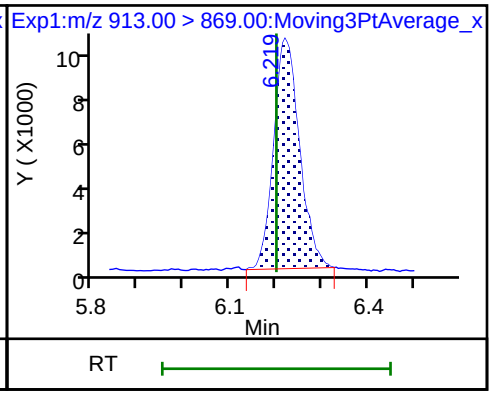
58 Perfluorohexadecanoic acid



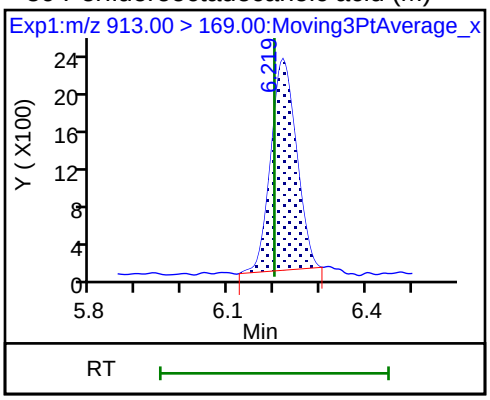
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid (M)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

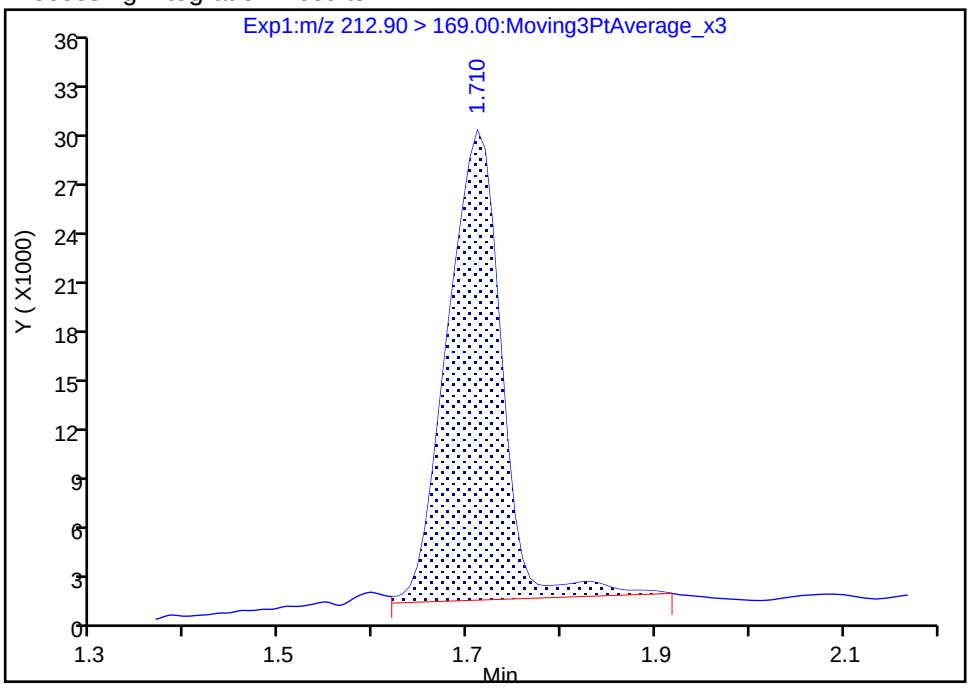
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_003.d
Injection Date: 11-Mar-2019 11:34:33 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

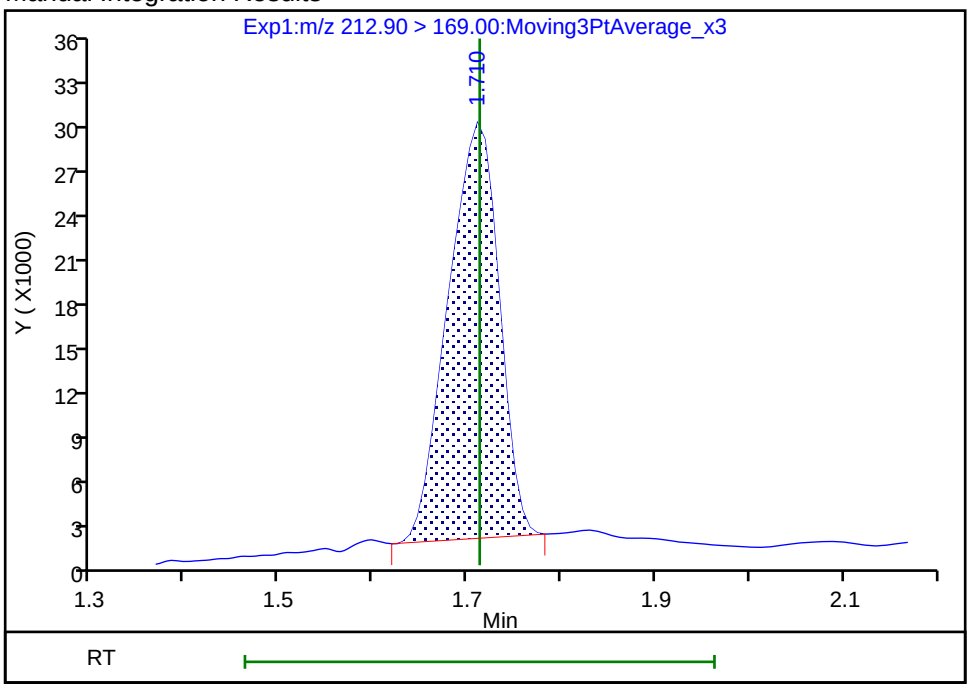
Processing Integration Results

RT: 1.71
Area: 112540
Amount: 0.051107
Amount Units: ng/ml



Manual Integration Results

RT: 1.71
Area: 103071
Amount: 0.047389
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:01:47
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

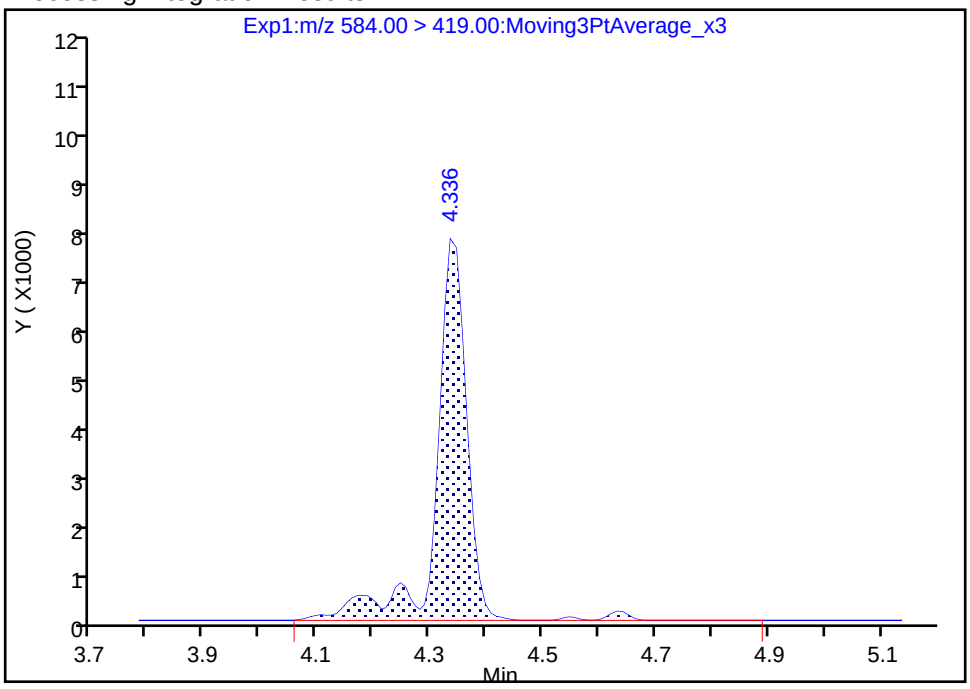
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_003.d
Injection Date: 11-Mar-2019 11:34:33 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

46 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

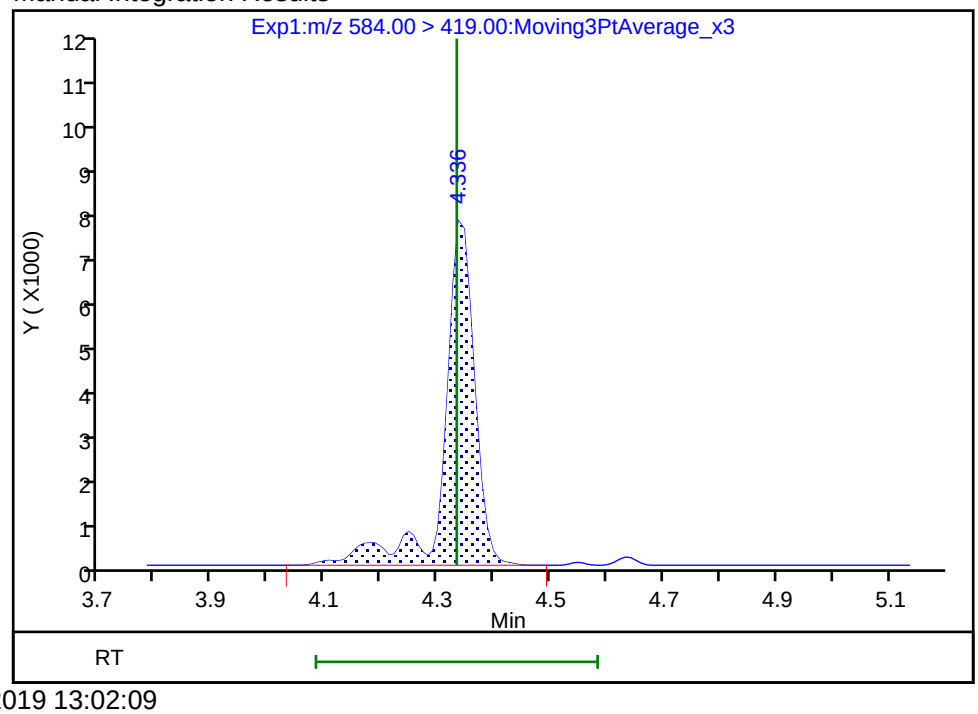
Processing Integration Results

RT: 4.34
Area: 27626
Amount: 0.052898
Amount Units: ng/ml



Manual Integration Results

RT: 4.34
Area: 27107
Amount: 0.052052
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:02:09
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

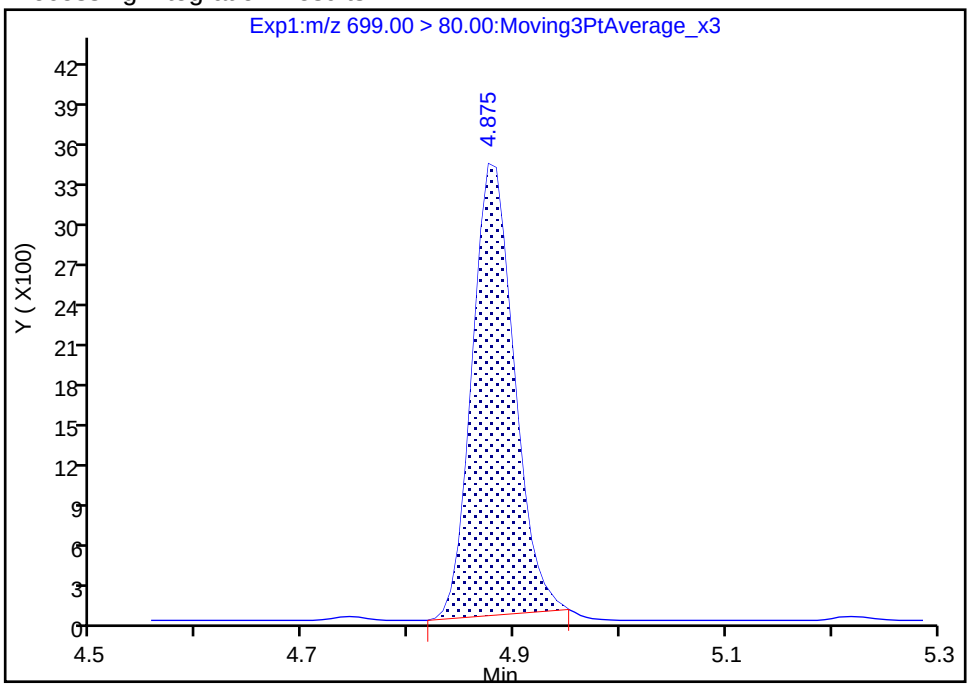
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_003.d
Injection Date: 11-Mar-2019 11:34:33 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

53 Perfluorododecanesulfonic acid (PFDoS), CAS: 79780-39-5

Signal: 1

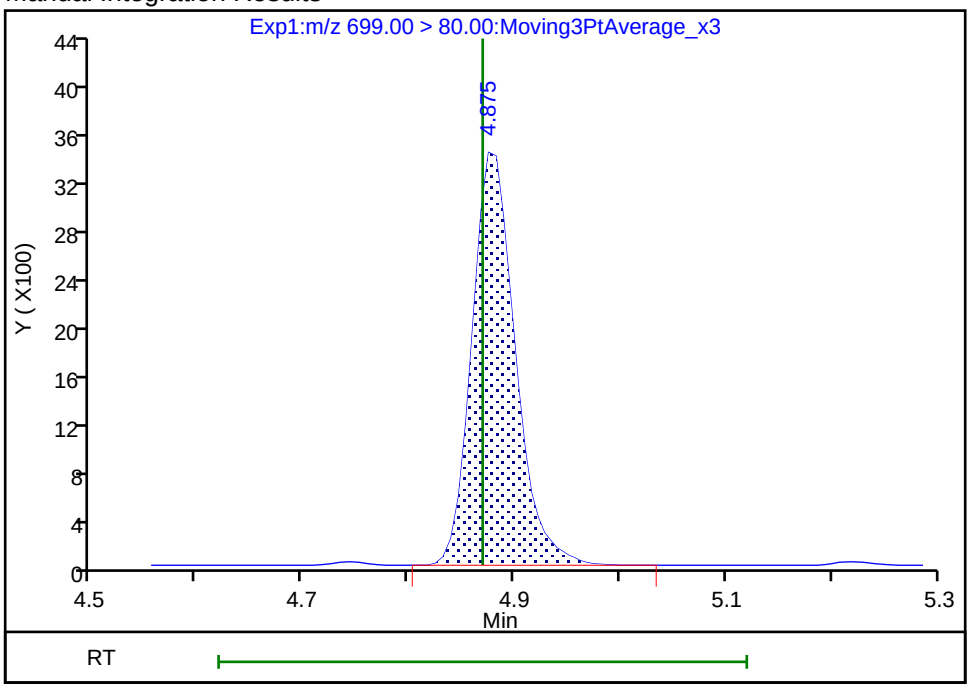
Processing Integration Results

RT: 4.88
Area: 9357
Amount: 0.046952
Amount Units: ng/ml



Manual Integration Results

RT: 4.88
Area: 9750
Amount: 0.048641
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:02:19
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

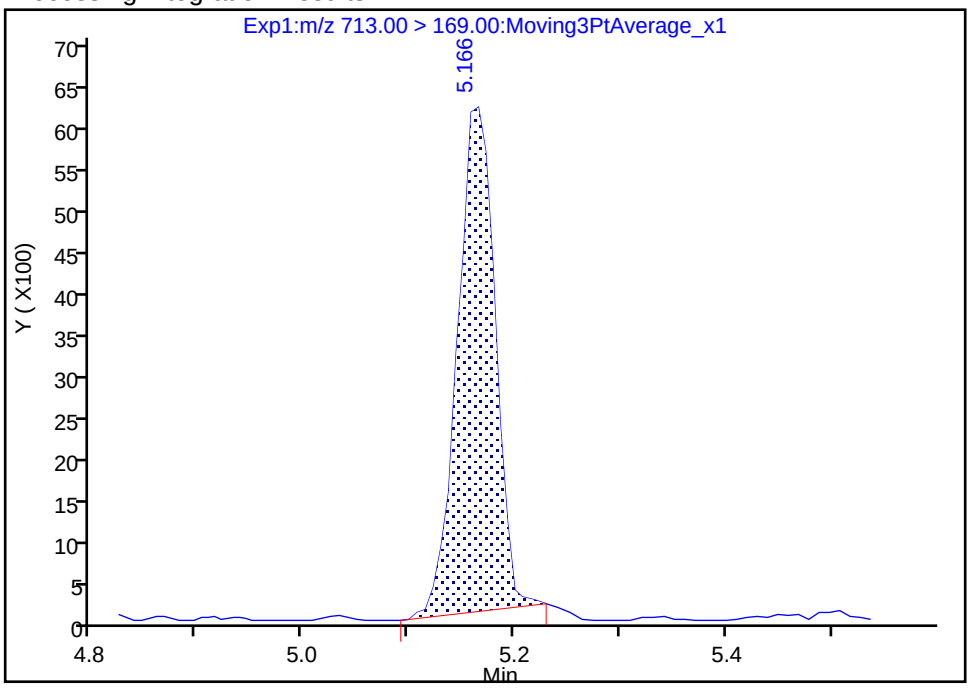
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_003.d
Injection Date: 11-Mar-2019 11:34:33 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

56 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

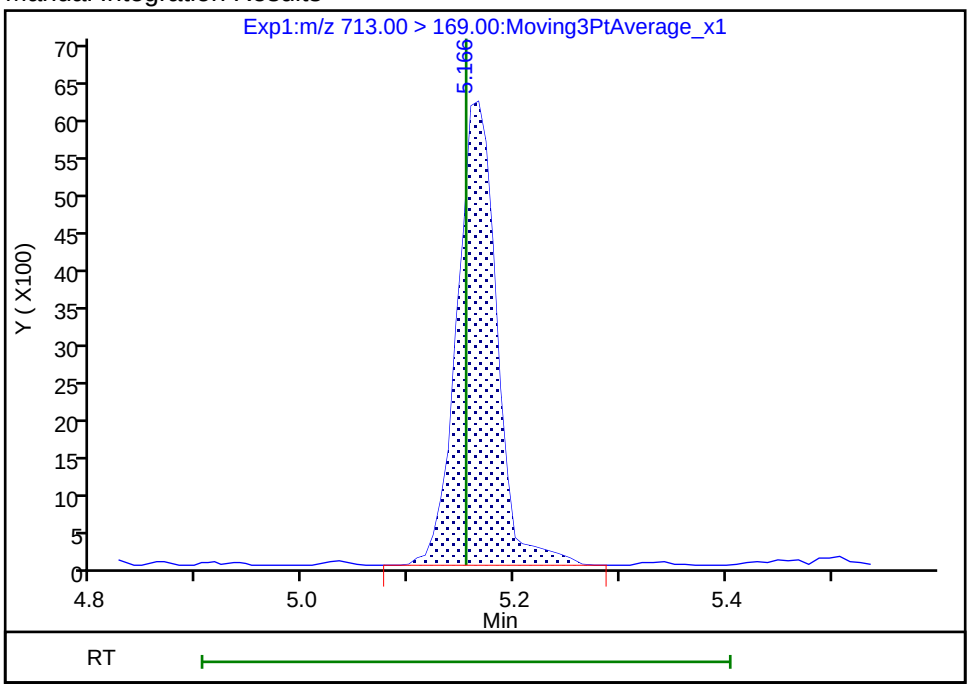
Processing Integration Results

RT: 5.17
Area: 15093
Amount: 0.049279
Amount Units: ng/ml



Manual Integration Results

RT: 5.17
Area: 16175
Amount: 0.052284
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:02:24
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

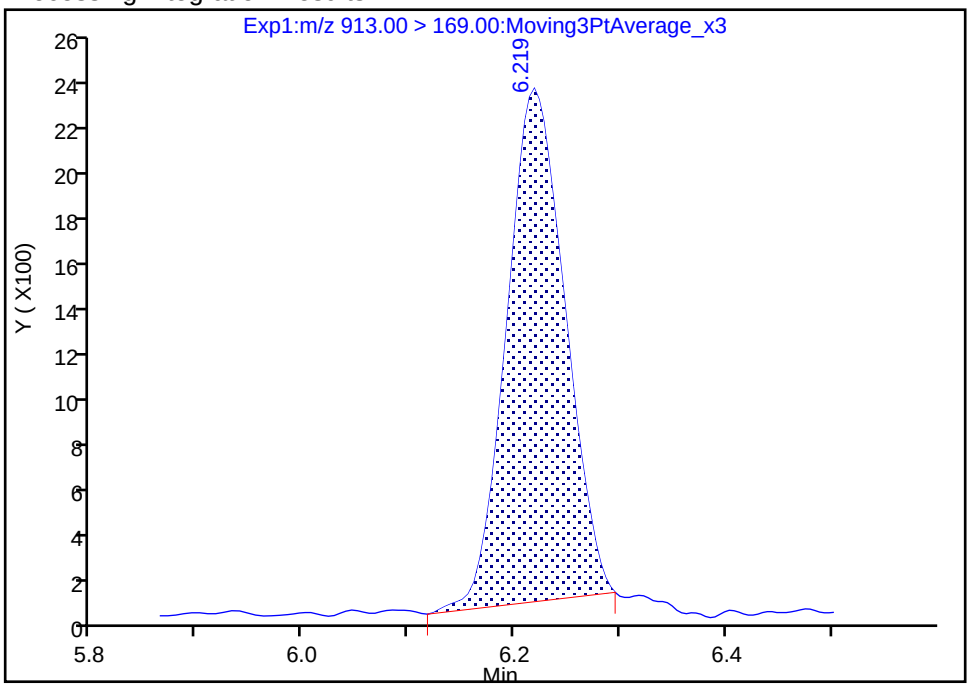
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_003.d
Injection Date: 11-Mar-2019 11:34:33 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

59 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

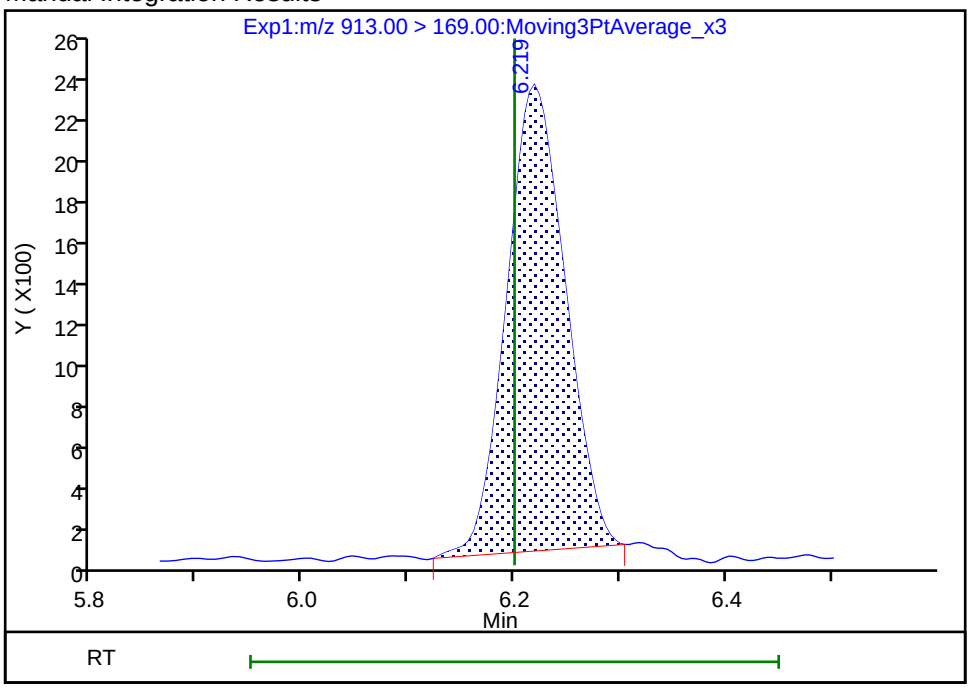
Processing Integration Results

RT: 6.22
Area: 8554
Amount: 0.048067
Amount Units: ng/ml



Manual Integration Results

RT: 6.22
Area: 8674
Amount: 0.048067
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:02:32
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_004.d
Lims ID: IC L3 Full
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-Mar-2019 11:42:03 ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CAL STD3
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 11-Mar-2019 13:12:34 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0331

First Level Reviewer: westendorfc Date: 11-Mar-2019 13:03:04
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.720	1.713	0.007	1.000	558918	0.2522		101	119	
D 1 13C4 PFBA										
217.00 > 172.00	1.720	1.714	0.006	0.532	6336133	2.44		97.5	45291	
D 3 13C5 PFPeA										
267.90 > 223.00	2.046	2.042	0.004	0.632	5412667	2.44		97.5	16160	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.046	2.045	0.001	1.000	525293	0.2461		98.4	47.7	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.080	2.075	0.005	1.000	693869	0.2181	Target=2.69	98.7	2040	
298.90 > 99.00	2.080	2.075	0.005	1.000	250812		0.00(1.88-3.50)	98.7	601	
D 5 13C3 PFBS										
301.90 > 80.00	2.080	2.076	0.004	0.643	8042622	2.30		98.9	475237	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.376	2.369	0.007	1.000	123150	0.2351		101	1058	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.376	2.371	0.005	0.734	499131	2.28		97.5	1675	
D 9 13C2 PFHxA										
315.00 > 270.00	2.413	2.409	0.004	0.746	6093716	2.45		97.9	12324	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.423	2.411	0.012	1.004	508777	0.2402	Target=13.98	96.1	231	
313.00 > 119.00	2.413	2.411	0.002	1.000	37576		0.00(9.79-18.17)	96.1	175	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.432	2.427	0.005	1.169	376237	0.2369	Target=2.01	101	1502	
349.00 > 99.00	2.432	2.427	0.005	1.169	180795		0.00(1.41-2.62)	101	994	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.540	2.534	0.006	0.785	861326	2.57		103	3430	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.540	2.536	0.004	1.000	113515	0.2372		94.9	105	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.828	2.817	0.011	1.003	773756	0.2493	Target=4.51	99.7	536	
363.00 > 169.00	2.828	2.817	0.011	1.003	159605		0.00(3.16-5.86)	99.7	1007	
D 16 13C4 PFHpA										
367.00 > 322.00	2.819	2.817	0.002	0.871	7771610	2.52		101	8115	
D 17 18O2 PFHxS										
403.00 > 84.00	2.828	2.822	0.006	0.874	4748688	2.36		99.7	4085	
18 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.828	2.824	0.004	1.000	512417	0.2108	Target=3.29	92.6	1771	M
399.00 > 99.00	2.828	2.824	0.004	1.000	151293		0.00(2.30-4.28)	92.6	366	
19 DONA										
377.00 > 251.00	2.873	2.869	0.004	0.794	1298912	0.2557	Target=2.25	109	3377	
377.00 > 85.00	2.873	2.869	0.004	0.794	515736		0.00(1.58-2.93)	109	877	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.220	3.209	0.011	0.995	672407	2.42		102	2924	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.212	3.210	0.002	0.998	128217	0.2298		97.0	431	
D 22 13C8 PFOA										
421.00 > 376.00	3.228	3.225	0.003	0.998	5774856	2.41		98.5	6162	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.236	3.230	0.006	0.894	545760	0.2460	Target=3.86	103	1411	
449.00 > 99.00	3.236	3.230	0.006	0.894	132992		0.00(2.70-5.01)	103	668	
D 25 13C4 PFOA										
417.00 > 372.00	3.236	3.230	0.006	1.000	7194218	2.57		103	7501	
* 24 13C2 PFOA										
415.00 > 370.00	3.236	3.232	0.004		7733585	2.50			6655	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.236	3.233	0.003	1.000	715891	0.2393	Target=1.00	95.7	283	
413.00 > 169.00	3.236	3.233	0.003	1.000	248958		2.88(0.70-1.30)	95.7	951	
D 27 13C8 PFOS										
507.00 > 99.00	3.619	3.614	0.005	1.118	1281561	2.37		99.3	2707	
D 28 13C4 PFOS										
503.00 > 80.00	3.619	3.617	0.002	1.118	5538141	2.35		98.5	8403	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.626	3.618	0.008	1.002	509954	0.2264	Target=1.00	97.6	1061	
499.00 > 99.00	3.626	3.618	0.008	1.002	132419		3.85(0.70-1.30)	97.6	1010	
D 31 13C5 PFNA										
468.00 > 423.00	3.634	3.626	0.008	1.123	6437768	2.46		98.5	5962	
30 Perfluorononanoic acid										
463.00 > 419.00	3.634	3.628	0.006	1.000	634607	0.2560	Target=5.29	102	303	
463.00 > 169.00	3.634	3.628	0.006	1.000	116914		0.00(3.70-6.88)	102	469	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.827	3.823	0.004	1.057	417113	0.2316		99.4	503	
D 33 13C8 FOSA										
506.00 > 78.00	3.930	3.927	0.003	1.215	3835178	2.49		99.6	9882	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.930	3.928	0.002	1.000	1153116	0.2728		109	2406	
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.975	3.973	0.002	1.098	320024	0.2391	Target=6.21	99.6	1415	
549.00 > 99.00	3.984	3.973	0.011	1.101	50163		0.00(4.35-8.07)	99.6	479	
D 36 13C2 PFDA										
515.00 > 470.00	4.003	3.994	0.009	1.237	7022278	2.61		105	5961	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.003	3.995	0.008	1.000	124291	0.2274		94.9	632	
38 Perfluorodecanoic acid										
513.00 > 469.00	4.003	3.995	0.008	1.000	716391	0.2403	Target=15.01	96.1	821	
513.00 > 169.00	4.003	3.995	0.008	1.000	49895		0.00(10.51-19.52)	96.1	303	
D 39 M2-8:2 FTS										
529.00 > 81.00	4.003	3.997	0.006	1.237	813496	2.58		108	2600	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.161	4.161	0.0	1.286	1913302	2.35		93.9	2389	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.170	4.165	0.005	1.002	162377	0.2663		107	77.4	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.308	4.303	0.005	1.190	495330	0.2489	Target=4.69	103	1417	
599.00 > 99.00	4.308	4.303	0.005	1.190	98087		0.00(3.28-6.10)	103	353	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.326	4.324	0.002	1.000	400105	0.2240	Target=8.65	89.6	263	
563.00 > 169.00	4.326	4.324	0.002	1.000	43923		0.00(6.05-11.24)	89.6	179	
D 44 13C2 PFUnA										
565.00 > 520.00	4.326	4.324	0.002	1.337	5715298	2.60		104	5364	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.326	4.328	-0.002	1.337	1729876	2.49		99.6	1979	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.336	4.333	0.003	1.002	127790	0.2476		99.0	489	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.476	4.469	0.007	1.237	620041	0.2520		107	3026	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.632	4.624	0.008	1.000	582650	0.2513	Target=8.64	101	408	
613.00 > 169.00	4.632	4.624	0.008	1.000	66664		0.00(6.05-11.23)	101	257	
D 49 13C2 PFDoA										
615.00 > 570.00	4.632	4.624	0.008	1.432	6086237	2.45		98.1	12497	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.642	4.641	0.001	1.160	80544	0.2395		99.4	211	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.875	4.870	0.005	1.347	48068	0.2398	Target=0.57	99.1	488	
699.00 > 99.00	4.875	4.870	0.005	1.347	85312		0.00(0.40-0.74)	99.1	736	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.904	4.899	0.005	1.059	466495	0.2557	Target=5.68	102	149	
663.00 > 169.00	4.904	4.899	0.005	1.059	80728		0.00(3.97-7.38)	102	497	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.159	5.154	0.005	1.000	77744	0.2485	Target=1.53	99.4	192	
713.00 > 219.00	5.159	5.154	0.005	1.000	50966		0.00(1.07-1.99)	99.4	278	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.159	5.154	0.005	1.594	4446237	2.44		97.5	15724	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.659	5.648	0.011	1.749	4311229	2.42		97.0	7156	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.659	5.649	0.010	1.000	438262	0.2680	Target=5.11	107	32.4	
813.00 > 169.00	5.659	5.649	0.010	1.000	81372		0.00(3.57-6.64)	107	401	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	6.212	6.200	0.012	1.098	228357	0.2588	Target=4.80	104	48.5	
913.00 > 169.00	6.212	6.200	0.012	1.098	45179		0.00(3.36-6.24)	104	327	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL3_00010 Amount Added: 1.00 Units: mL

Report Date: 11-Mar-2019 13:12:36 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_004.d

Injection Date: 11-Mar-2019 11:42:03 Instrument ID: A9

Lims ID: IC L3 Full

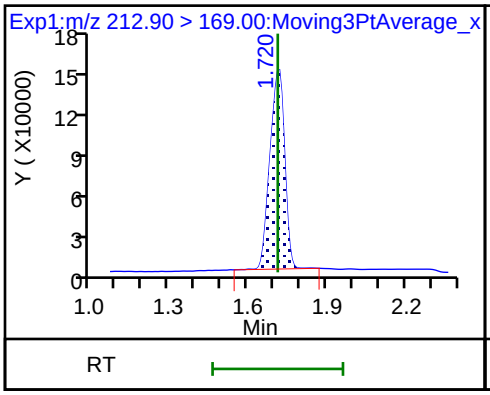
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 12 Worklist Smp#: 4

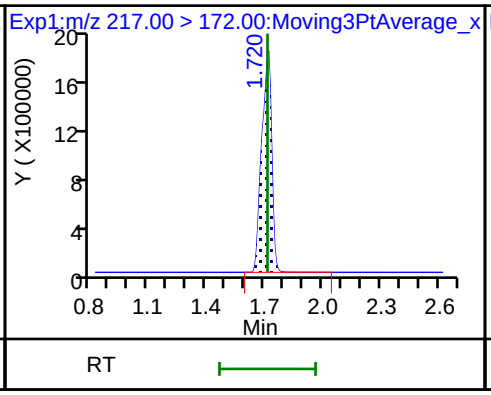
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

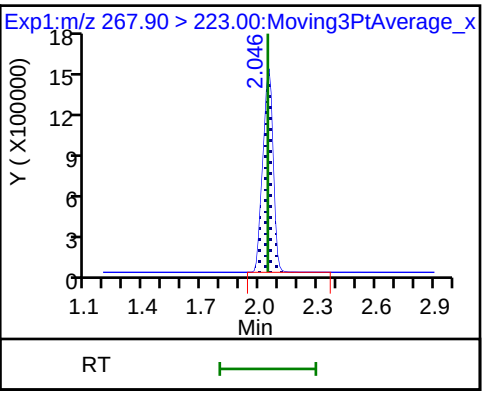
2 Perfluorobutanoic acid



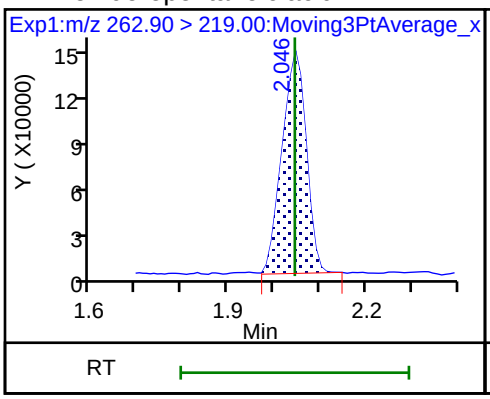
D 1 13C4 PFBA



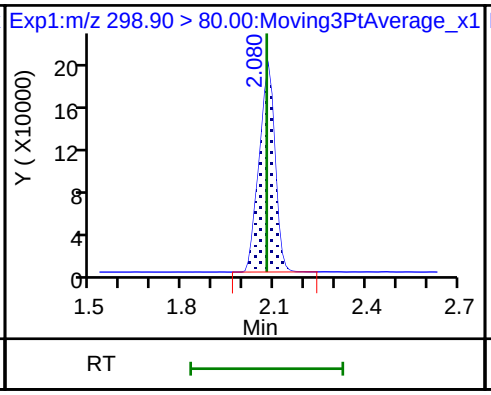
D 3 13C5 PFPeA



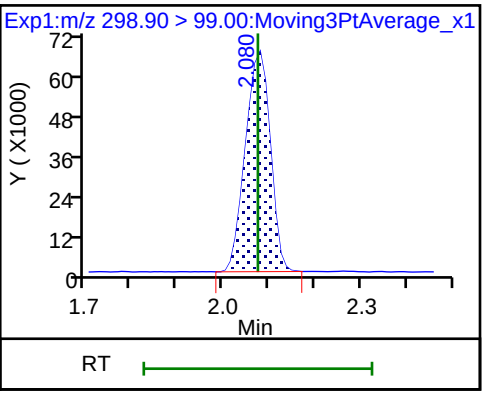
4 Perfluoropentanoic acid



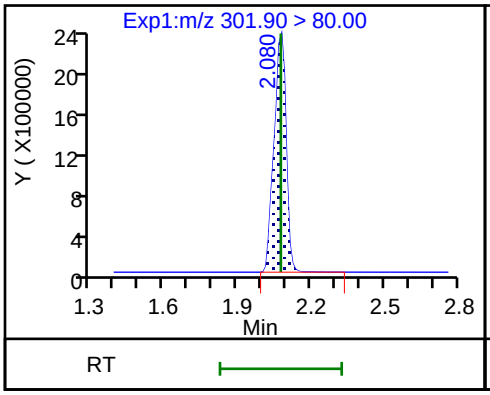
6 Perfluorobutanesulfonic acid



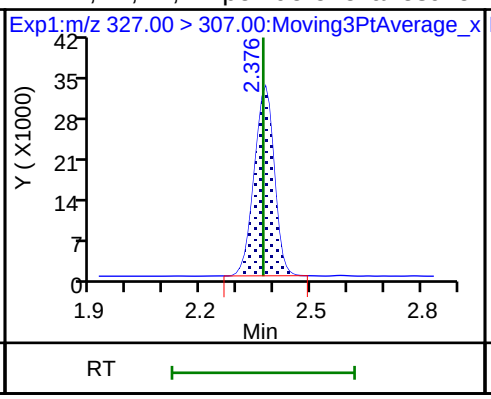
6 Perfluorobutanesulfonic acid



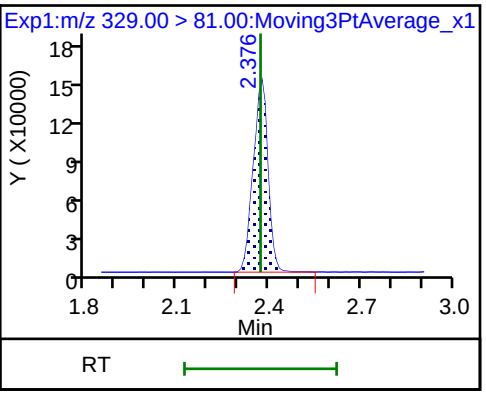
D 5 13C3 PFBS



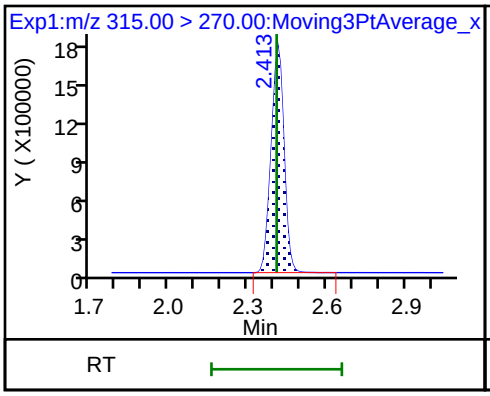
7 1H,1H,2H,2H-perfluorohexanesulfon



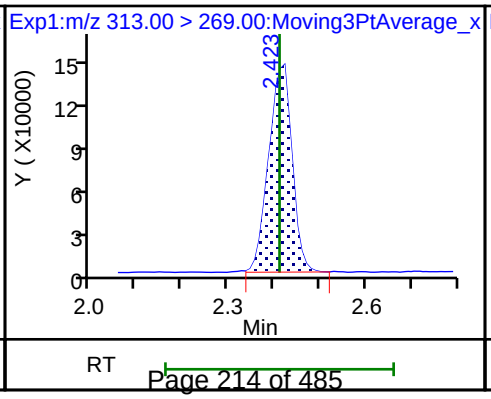
D 8 M2-4:2 FTS



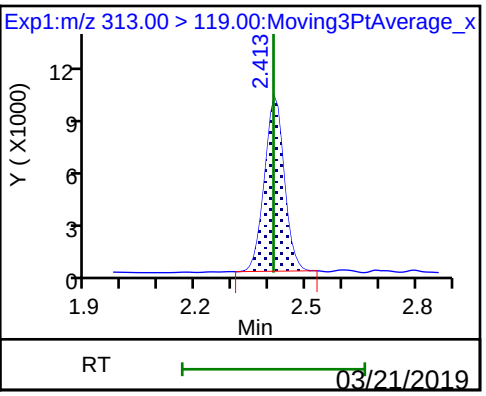
D 9 13C2 PFHxA



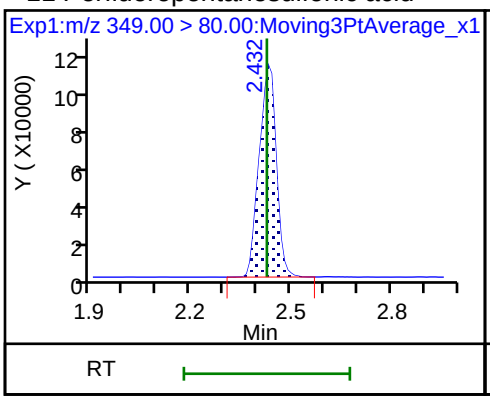
10 Perfluorohexanoic acid



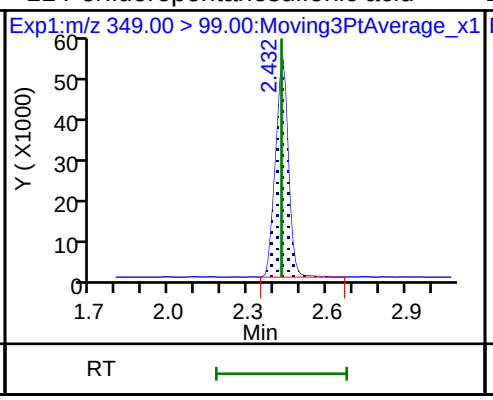
10 Perfluorohexanoic acid



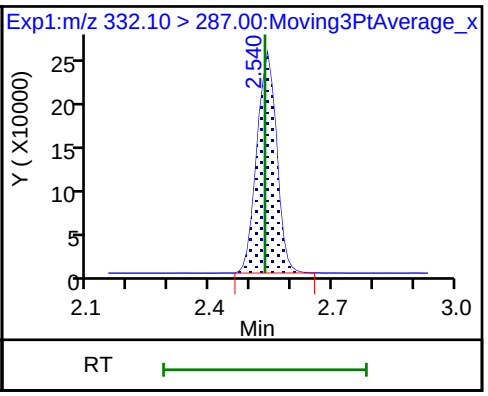
11 Perfluoropentanesulfonic acid



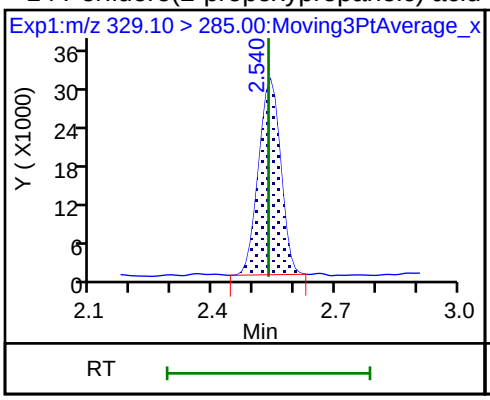
11 Perfluoropentanesulfonic acid



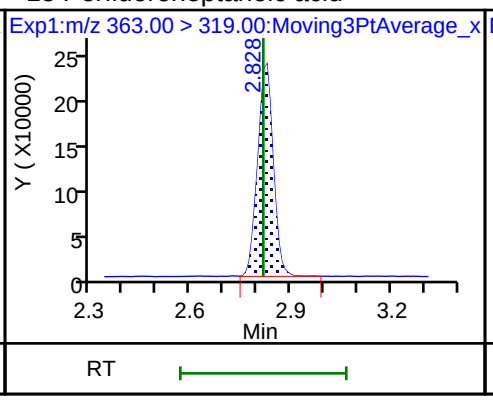
D 13 13C3 HFPO-DA



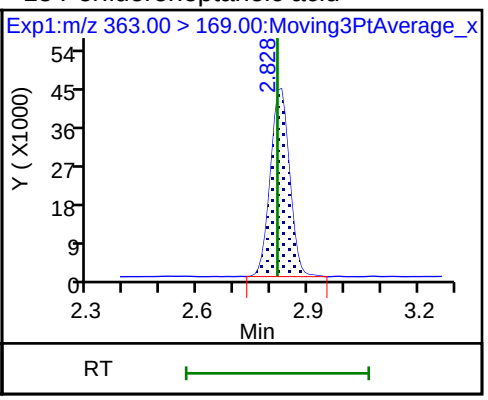
14 Perfluoro(2-propoxypropanoic) acid



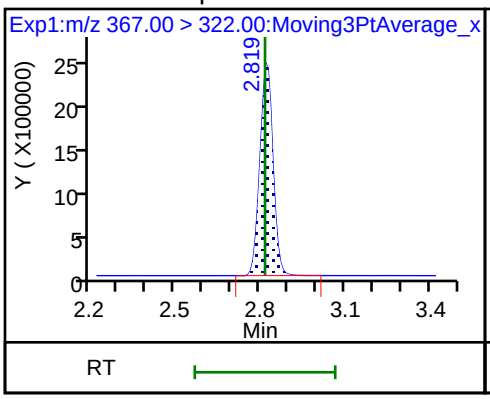
15 Perfluoroheptanoic acid



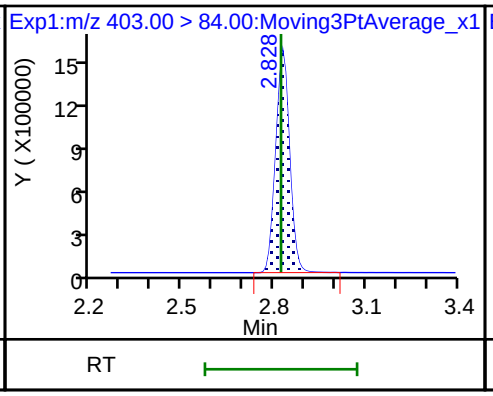
15 Perfluoroheptanoic acid



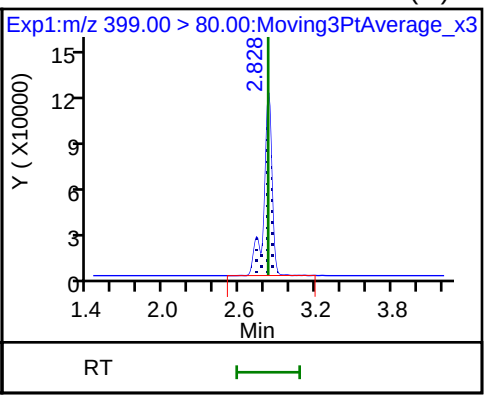
D 16 13C4 PFHpA



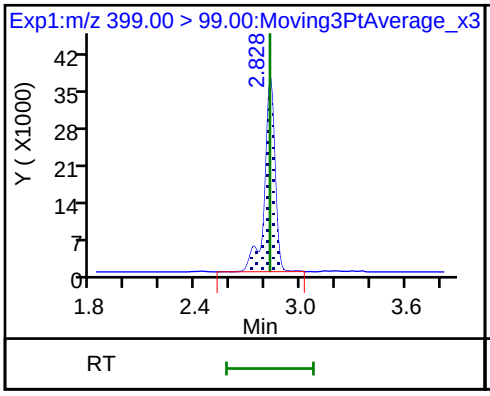
D 17 18O2 PFHxS



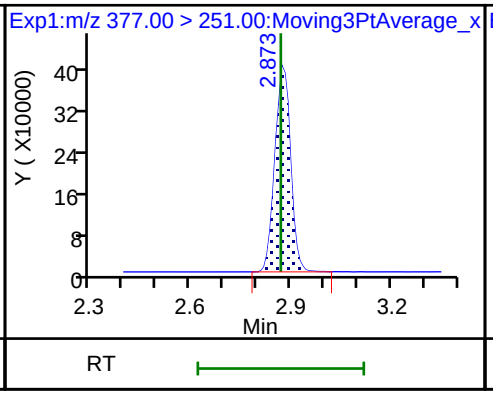
18 Perfluorohexanesulfonic acid (M)



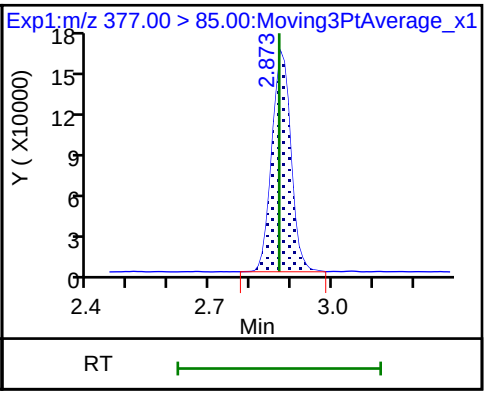
18 Perfluorohexanesulfonic acid



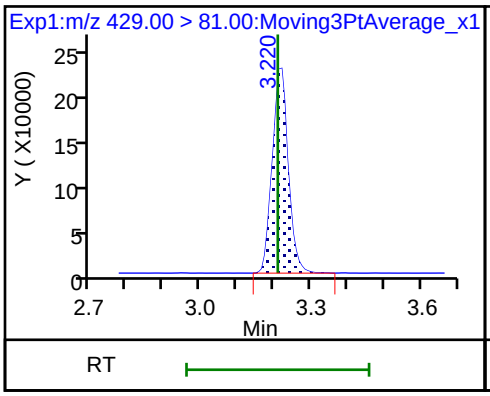
19 DONA



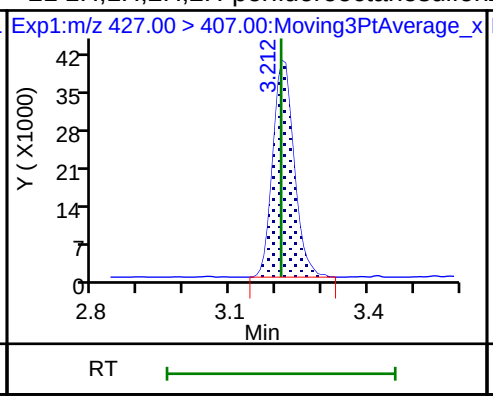
19 DONA



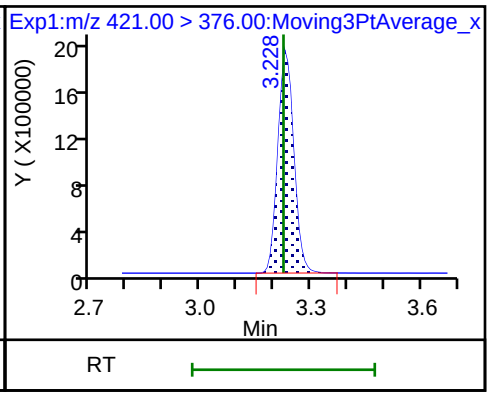
D 20 M2-6:2 FTS



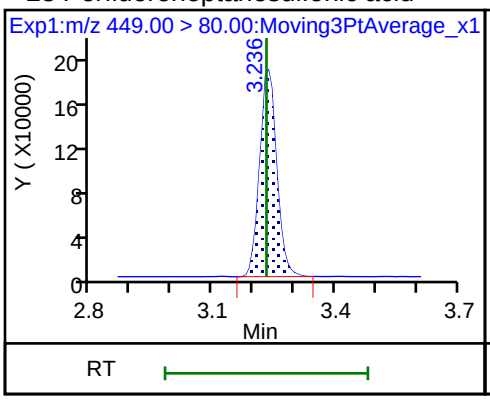
21 1H,1H,2H,2H-perfluorooctanesulfon



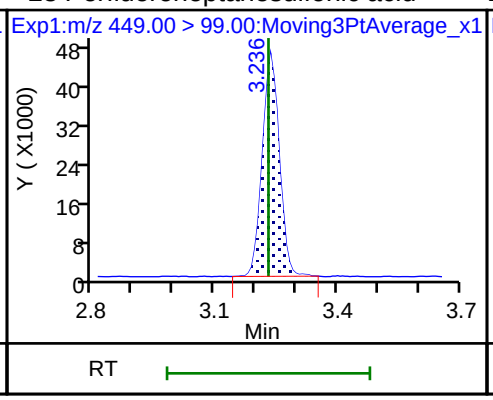
D 22 13C8 PFOA



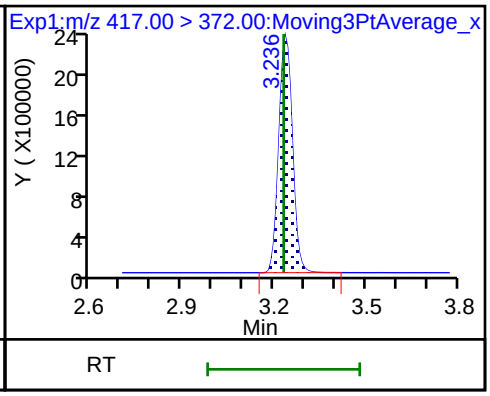
23 Perfluoroheptanesulfonic acid



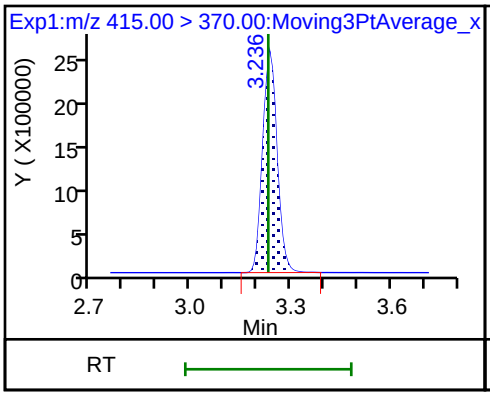
23 Perfluoroheptanesulfonic acid



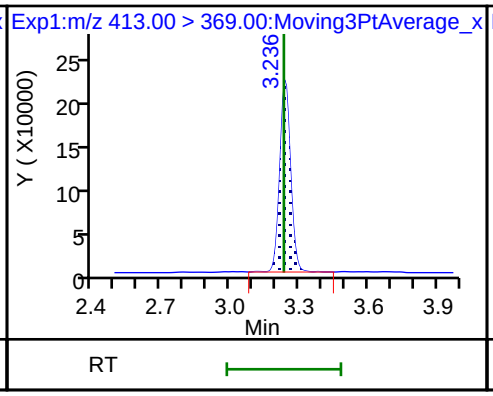
D 25 13C4 PFOA



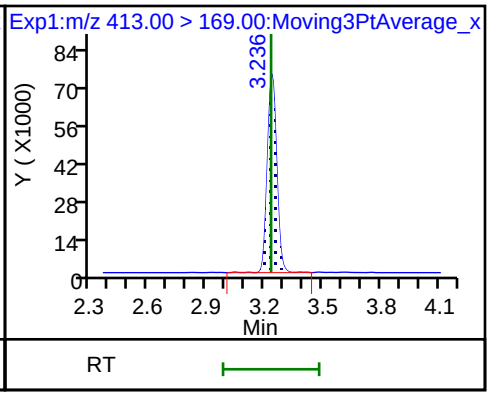
* 24 13C2 PFOA



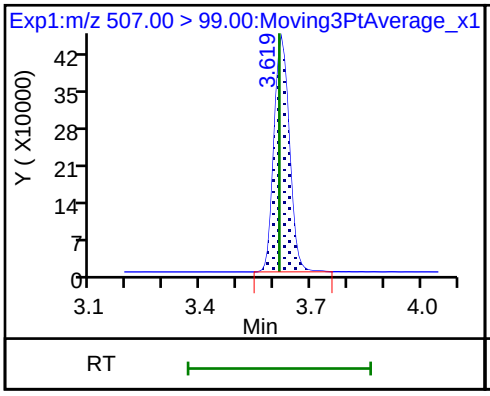
26 Perfluorooctanoic acid



26 Perfluorooctanoic acid



D 27 13C8 PFOS



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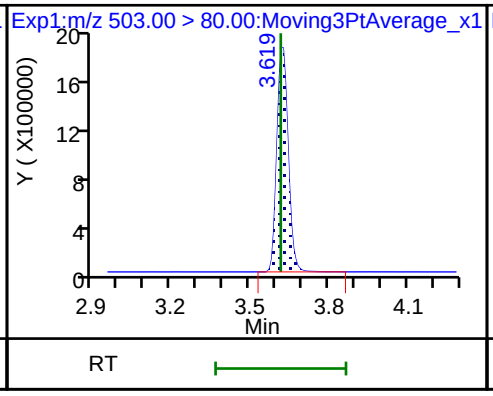
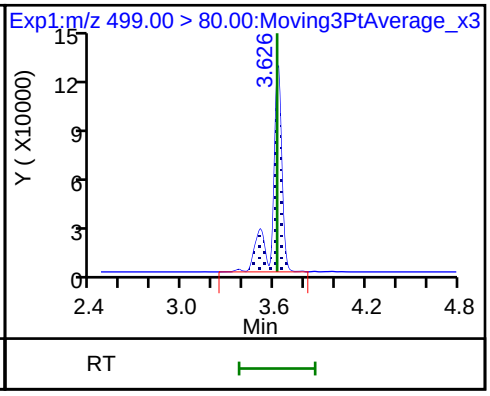
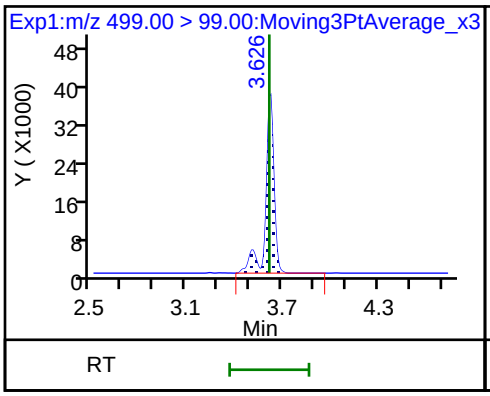


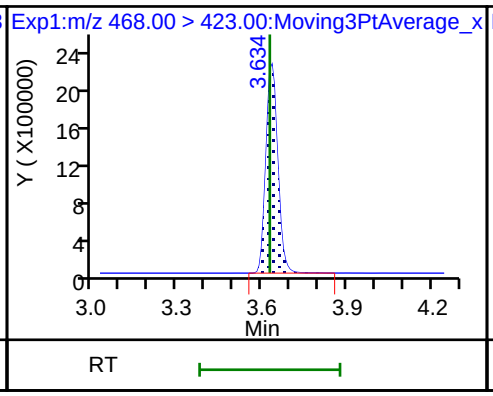
29 Perfluorooctanesulfonic acid



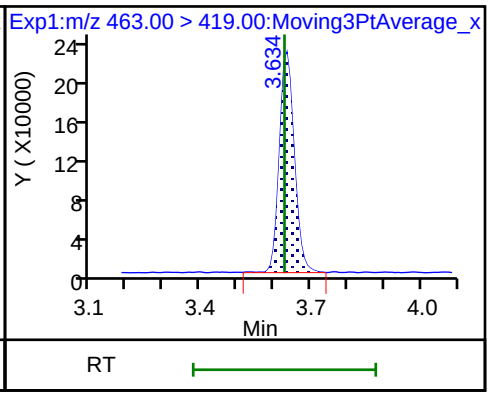
29 Perfluorooctanesulfonic acid



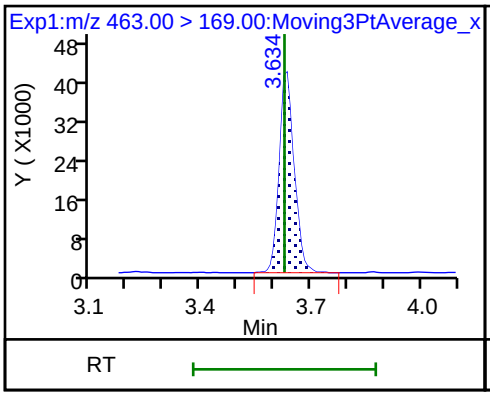
D 31 13C5 PFNA



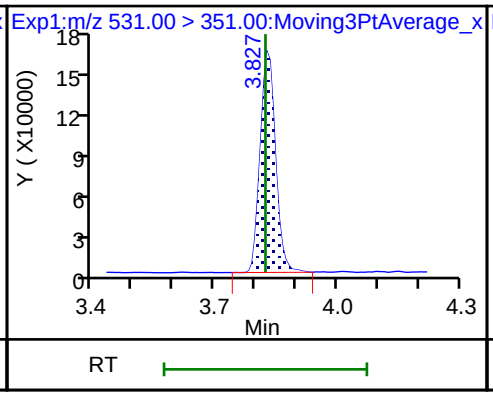
30 Perfluorononanoic acid



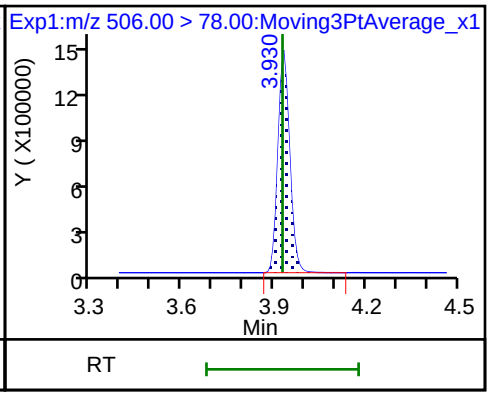
30 Perfluorononanoic acid



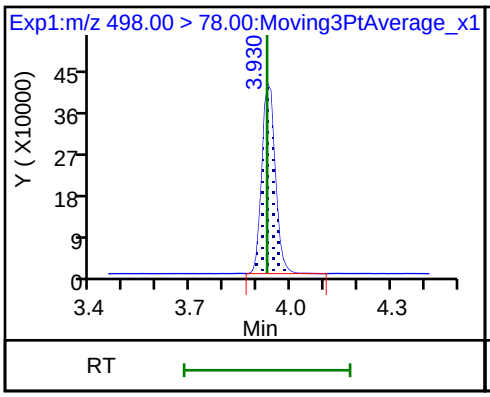
32 9-Chlorohexadecafluoro-3-oxanonane



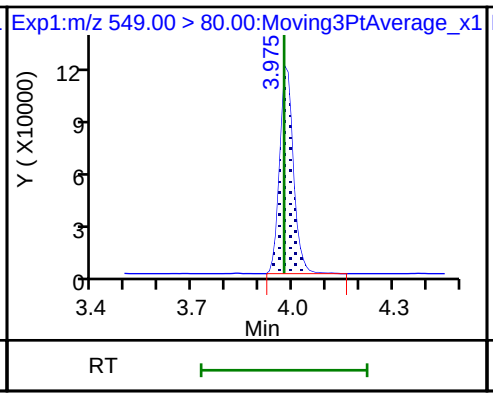
D 33 13C8 FOSA



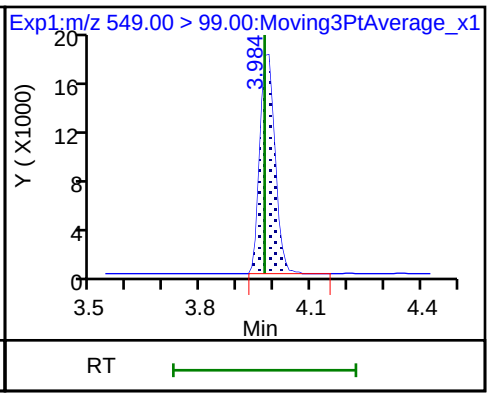
34 Perfluorooctanesulfonamide



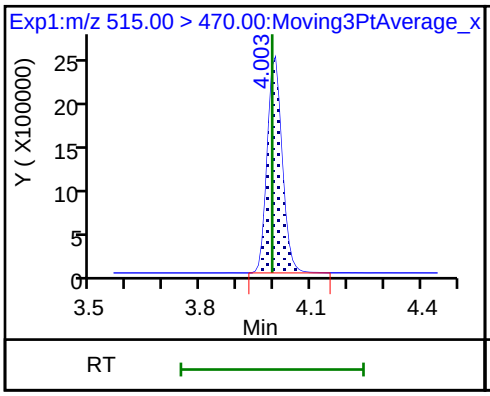
35 Perfluorononanesulfonic acid



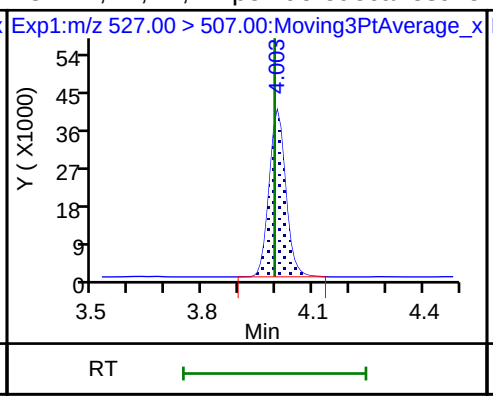
35 Perfluorononanesulfonic acid



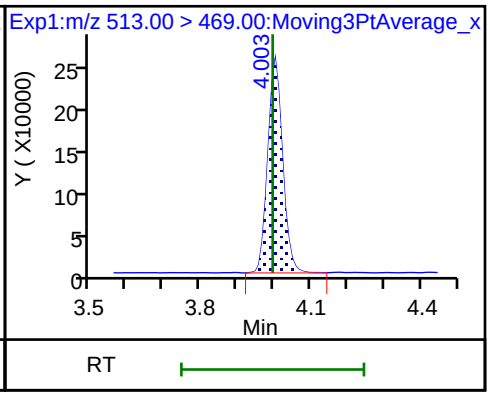
D 36 13C2 PFDA



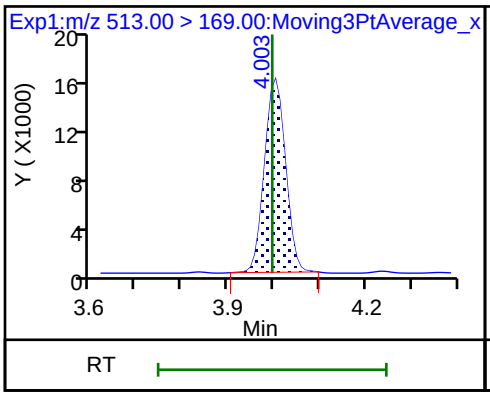
37 1H,1H,2H,2H-perfluorodecanesulfoni



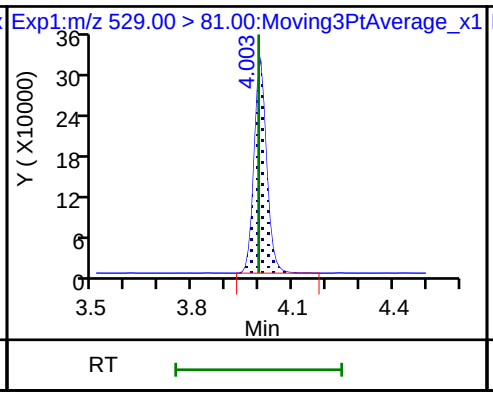
38 Perfluorodecanoic acid



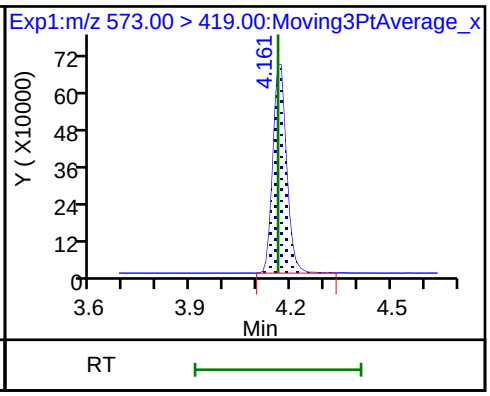
38 Perfluorodecanoic acid



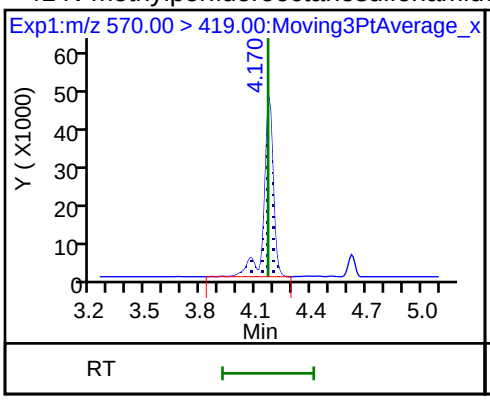
D 39 M2-8:2 FTS



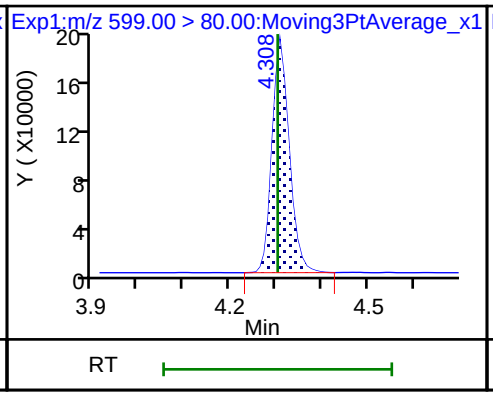
D 40 d3-NMeFOSAA



41 N-methylperfluorooctanesulfonamido



42 Perfluorodecanesulfonic acid



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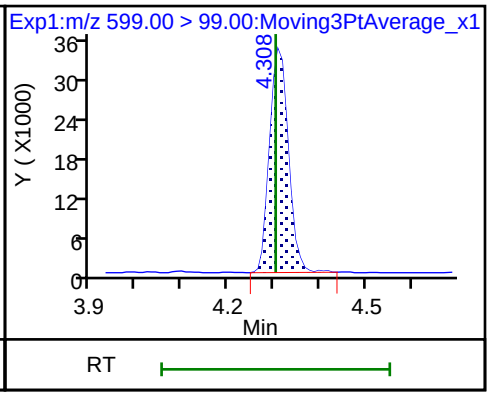
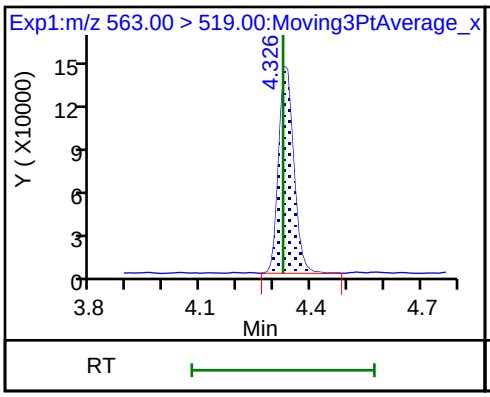


43 Perfluoroundecanoic acid



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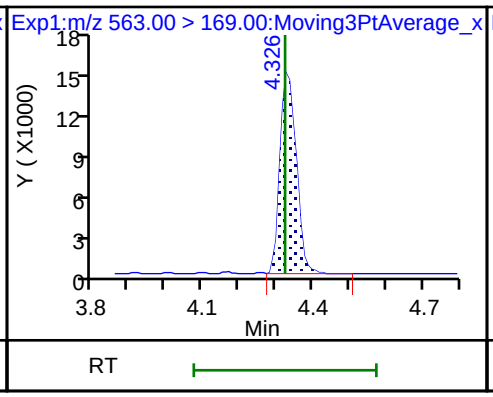
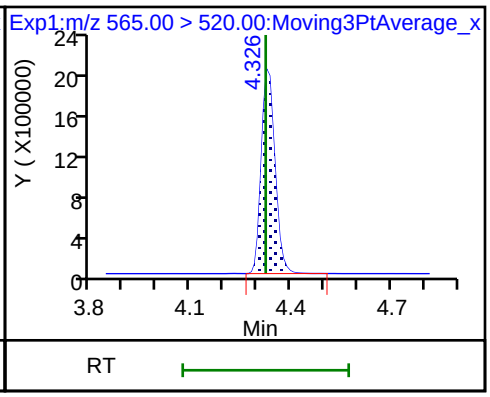
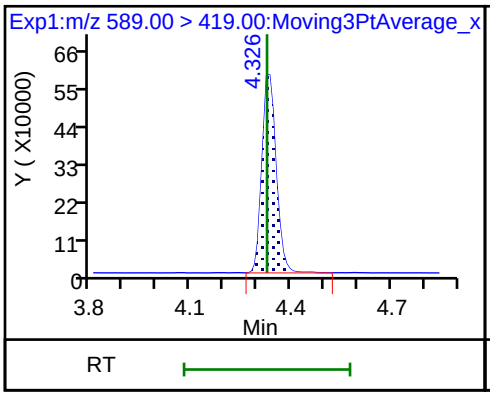


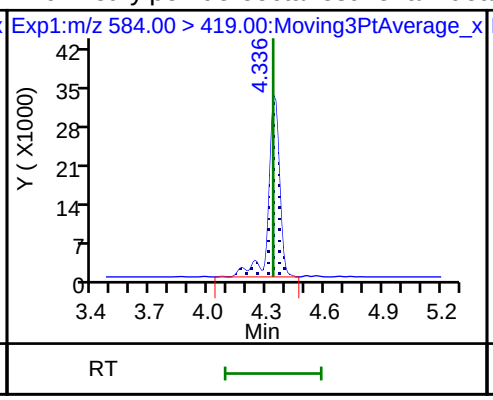
D 44 13C2 PFUnA



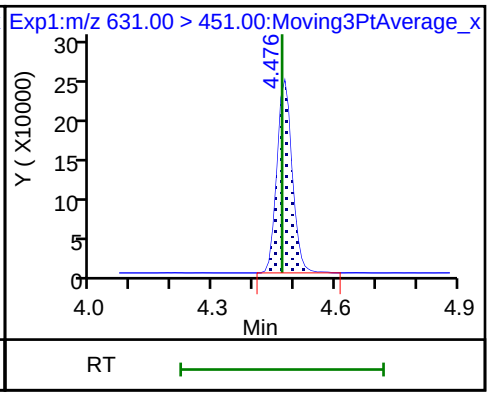
D 45 d5-NEtFOSAA



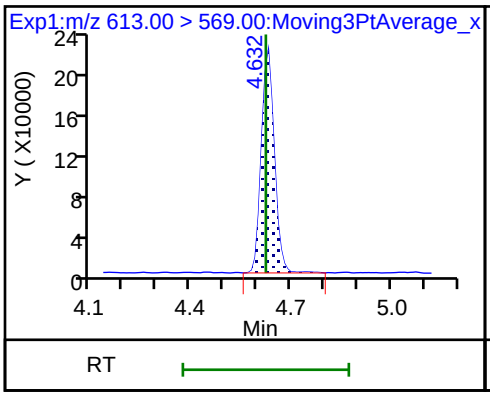
46 N-ethylperfluorooctanesulfonamidoa



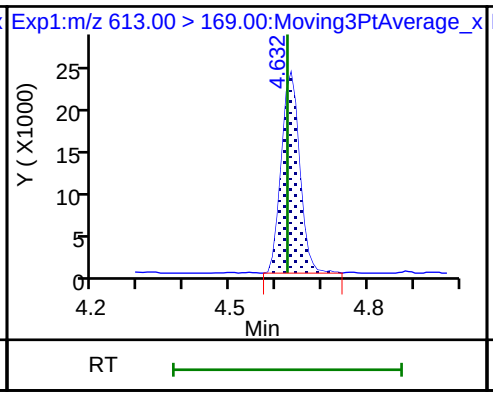
48 11-Chloroeicosafluoro-3-oxaundecan



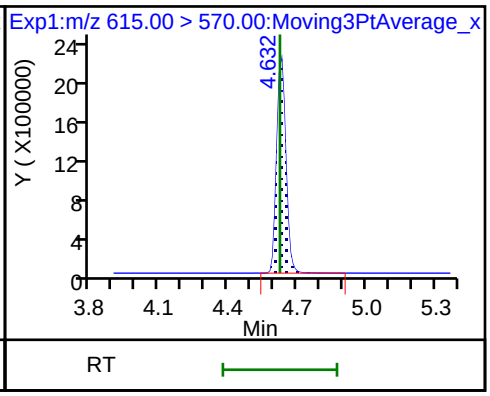
50 Perfluorododecanoic acid



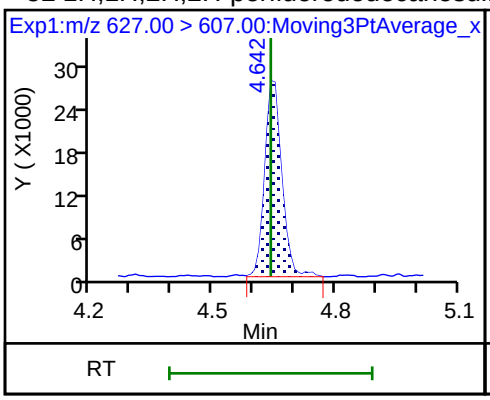
50 Perfluorododecanoic acid



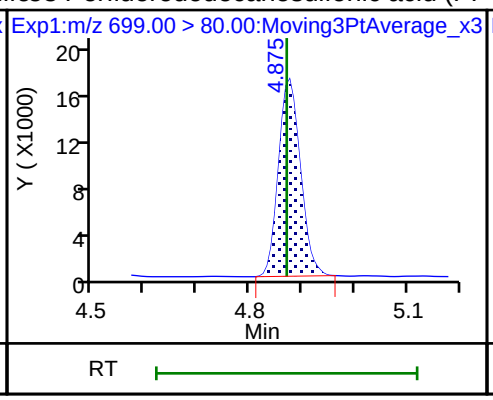
D 49 13C2 PFDoA



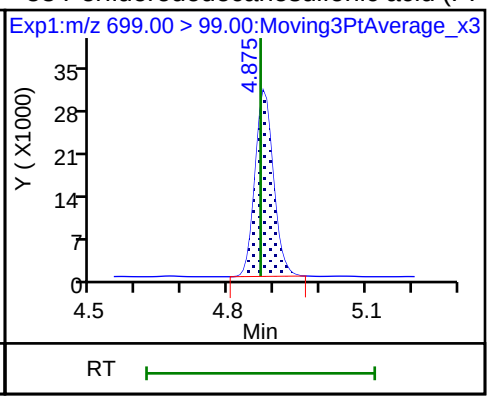
52 1H,1H,2H,2H-perfluorododecanesulfo



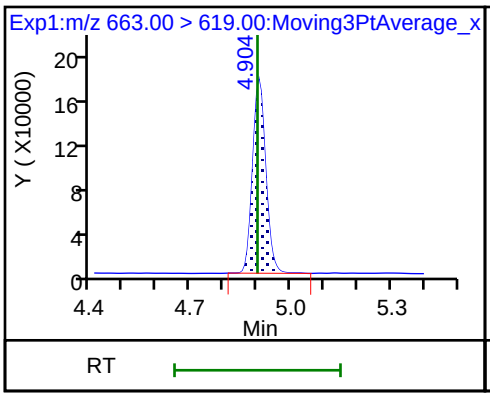
53 Perfluorododecanesulfonic acid (PF



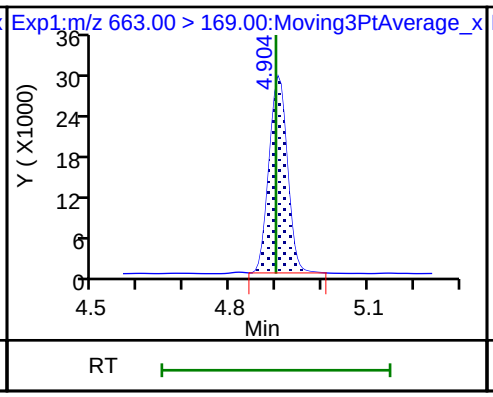
53 Perfluorododecanesulfonic acid (PF



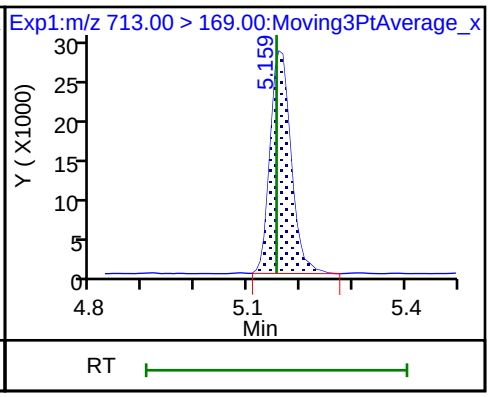
54 Perfluorotridecanoic acid



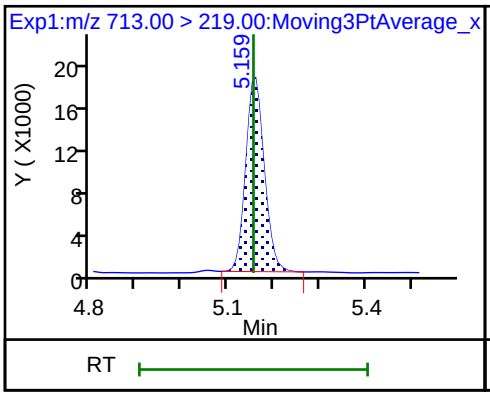
54 Perfluorotridecanoic acid



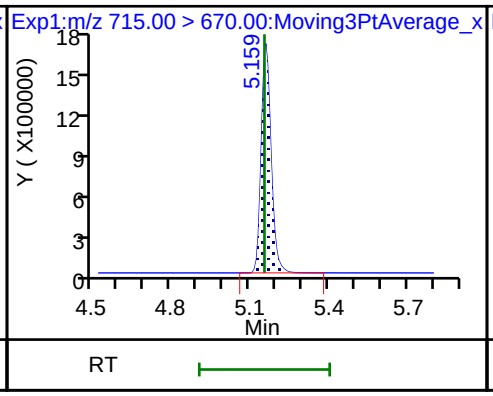
56 Perfluorotetradecanoic acid



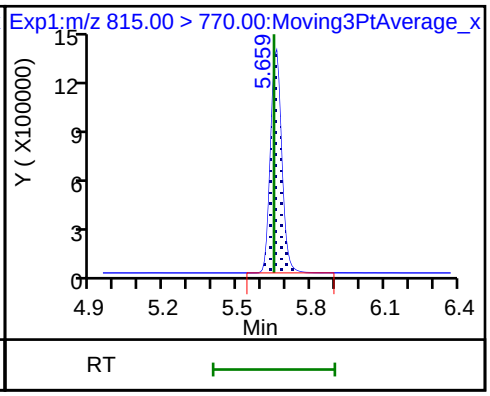
56 Perfluorotetradecanoic acid



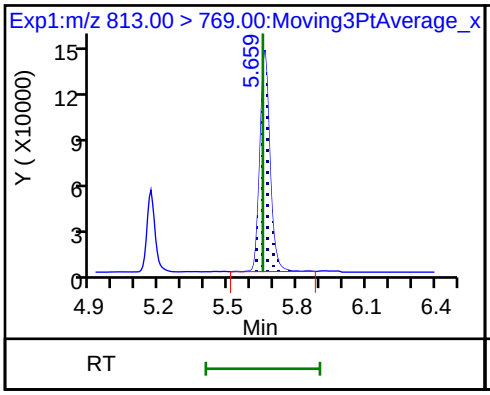
D 55 13C2 PFTeDA



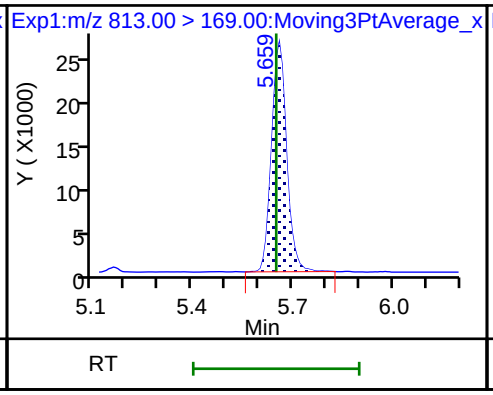
D 57 13C2 PFHxDA



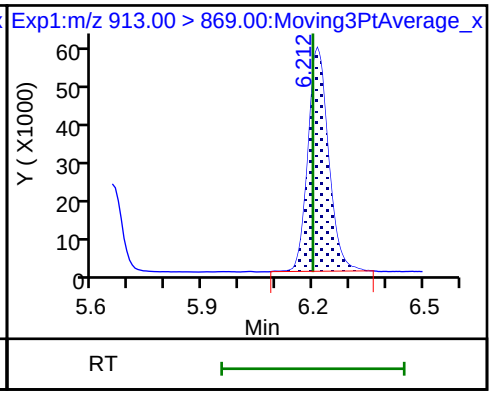
58 Perfluorohexadecanoic acid



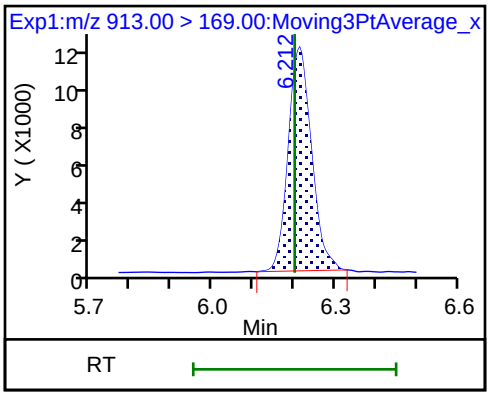
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



TestAmerica Sacramento

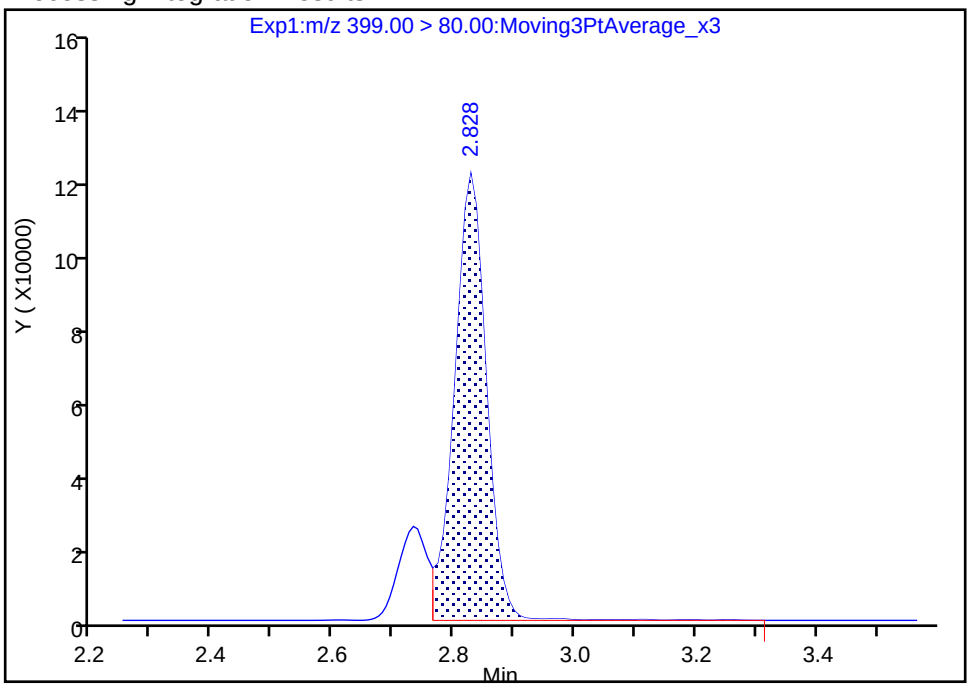
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_004.d
Injection Date: 11-Mar-2019 11:42:03 Instrument ID: A9
Lims ID: IC L3 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 12 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

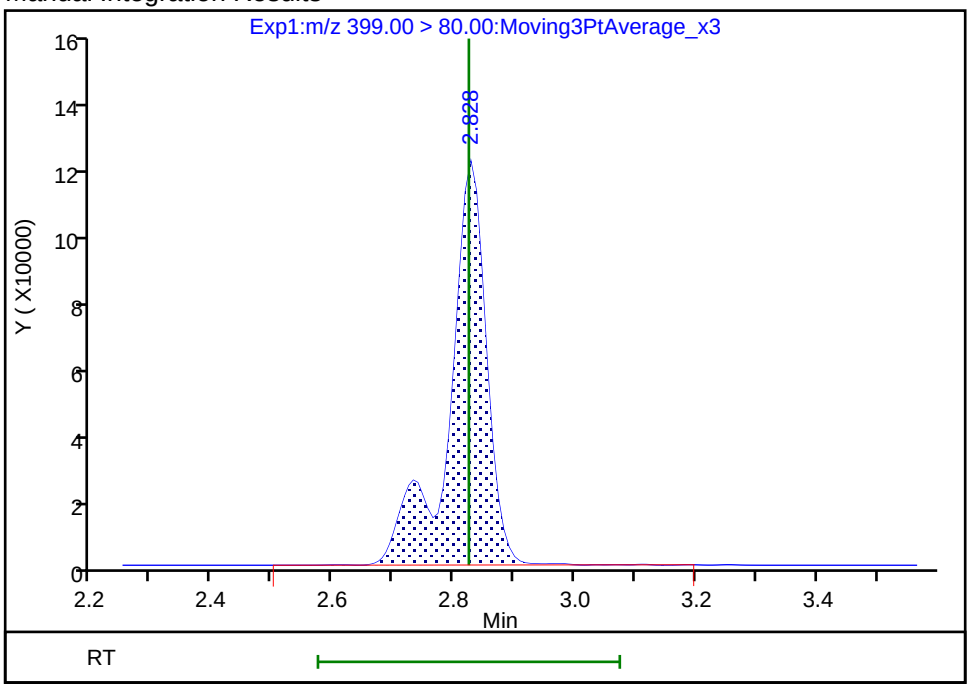
Processing Integration Results

RT: 2.83
Area: 433523
Amount: 0.182014
Amount Units: ng/ml



Manual Integration Results

RT: 2.83
Area: 512417
Amount: 0.210754
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:02:51
Audit Action: Manually Integrated Audit Reason: Isomers

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_005.d
Lims ID: IC L4 Full
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 11-Mar-2019 11:49:34 ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CAL STD4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 11-Mar-2019 13:12:40 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0331

First Level Reviewer: westendorfc Date: 11-Mar-2019 13:03:32
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.712	1.713	-0.001	1.000	2201109	1.03		103	500	
D 1 13C4 PFBA										
217.00 > 172.00	1.712	1.714	-0.002	0.530	6110183	2.46		98.5	51637	
D 3 13C5 PFPeA										
267.90 > 223.00	2.047	2.042	0.005	0.634	5239854	2.47		98.9	19023	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.047	2.045	0.002	1.000	2101367	1.02		102	190	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.069	2.075	-0.006	0.995	2821405	0.9410	Target=2.69	106	9063	
298.90 > 99.00	2.069	2.075	-0.006	0.995	974178		0.00(1.88-3.50)	106	2075	
D 5 13C3 PFBS										
301.90 > 80.00	2.080	2.076	0.004	0.644	7579047	2.27		97.6	463121	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.367	2.369	-0.002	1.000	491770	0.99		106	3485	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.367	2.371	-0.004	0.733	472504	2.26		96.7	1141	
D 9 13C2 PFHxA										
315.00 > 270.00	2.404	2.409	-0.005	0.745	5958397	2.51		100	7558	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.404	2.411	-0.007	1.000	1953348	0.9430	Target=13.98	94.3	943	
313.00 > 119.00	2.404	2.411	-0.007	1.000	138438		0.00(9.79-18.17)	94.3	598	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.423	2.427	-0.004	1.165	1485224	0.99	Target=2.01	106	5869	
349.00 > 99.00	2.423	2.427	-0.004	1.165	705393		0.00(1.41-2.62)	106	2165	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.531	2.534	-0.003	0.784	709597	2.21		88.6	3700	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.531	2.536	-0.005	1.000	421340	1.07		107	383	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.811	2.817	-0.006	1.000	3049949	1.00	Target=4.51	100	1708	
363.00 > 169.00	2.811	2.817	-0.006	1.000	652107		0.00(3.16-5.86)	100	2894	
D 16 13C4 PFHpA										
367.00 > 322.00	2.811	2.817	-0.006	0.870	7616538	2.59		104	5144	
D 17 18O2 PFHxS										
403.00 > 84.00	2.820	2.822	-0.002	0.873	4535247	2.36		99.7	4926	
18 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.820	2.824	-0.004	1.000	2050875	0.8832	Target=3.29	97.1	2853	
399.00 > 99.00	2.820	2.824	-0.004	1.000	617919		0.00(2.30-4.28)	97.1	1021	
19 DONA										
377.00 > 251.00	2.865	2.869	-0.004	0.793	5091381	1.01	Target=2.25	107	6511	
377.00 > 85.00	2.865	2.869	-0.004	0.793	2226917		0.00(1.58-2.93)	107	3842	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.206	3.209	-0.003	0.993	649755	2.45		103	2231	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.206	3.210	-0.004	1.000	513086	0.9518		100	2341	
D 22 13C8 PFOA										
421.00 > 376.00	3.221	3.225	-0.004	0.998	5649768	2.47		101	5585	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.229	3.230	-0.001	0.894	2117326	0.9607	Target=3.86	101	2371	
449.00 > 99.00	3.221	3.230	-0.009	0.891	524935		0.00(2.70-5.01)	101	1611	
D 25 13C4 PFOA										
417.00 > 372.00	3.229	3.230	-0.001	1.000	6784684	2.54		102	7873	
* 24 13C2 PFOA										
415.00 > 370.00	3.229	3.232	-0.003		7381619	2.50			7373	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.229	3.233	-0.004	1.000	2919139	1.03	Target=1.00	103	931	
413.00 > 169.00	3.229	3.233	-0.004	1.000	1024463		2.85(0.70-1.30)	103	3351	
D 27 13C8 PFOS										
507.00 > 99.00	3.606	3.614	-0.008	1.117	1239843	2.41		101	3637	
D 28 13C4 PFOS										
503.00 > 80.00	3.614	3.617	-0.003	1.119	5501503	2.45		102	5185	
29 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.614	3.618	-0.004	1.000	2094178	0.9360	Target=1.00	101	3164	M
499.00 > 99.00	3.614	3.618	-0.004	1.000	504556		4.15(0.70-1.30)	101	1740	
D 31 13C5 PFNA										
468.00 > 423.00	3.621	3.626	-0.005	1.121	6151005	2.46		98.6	4530	
30 Perfluorononanoic acid										
463.00 > 419.00	3.621	3.628	-0.007	1.000	2449320	1.03	Target=5.29	103	1131	
463.00 > 169.00	3.621	3.628	-0.007	1.000	450836		0.00(3.70-6.88)	103	1672	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.820	3.823	-0.003	1.057	1592568	0.8901		95.5	1893	
D 33 13C8 FOSA										
506.00 > 78.00	3.922	3.927	-0.005	1.214	3595748	2.45		97.8	5312	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.931	3.928	0.003	1.002	4609693	1.16		116	4661	
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.976	3.973	0.003	1.100	1420759	1.07	Target=6.21	111	4013	
549.00 > 99.00	3.976	3.973	0.003	1.100	200781		0.00(4.35-8.07)	111	942	
D 36 13C2 PFDA										
515.00 > 470.00	3.994	3.994	0.0	1.237	6548783	2.55		102	6687	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.994	3.995	-0.001	1.000	485536	0.9354		97.6	2190	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.994	3.995	-0.001	1.000	3086053	1.11	Target=15.01	111	3131	
513.00 > 169.00	3.994	3.995	-0.001	1.000	201891		0.00(10.51-19.52)	111	977	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.994	3.997	-0.003	1.237	772449	2.56		107	2530	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.161	4.161	0.0	1.289	1886657	2.42		97.0	1443	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.161	4.165	-0.004	1.000	620530	1.03		103	203	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.299	4.303	-0.004	1.190	1921797	0.9723	Target=4.69	101	2971	
599.00 > 99.00	4.299	4.303	-0.004	1.190	415147		0.00(3.28-6.10)	101	1548	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.317	4.324	-0.007	1.000	1568866	0.9566	Target=8.65	95.7	1115	
563.00 > 169.00	4.317	4.324	-0.007	1.000	184402		0.00(6.05-11.24)	95.7	877	
D 44 13C2 PFUnA										
565.00 > 520.00	4.317	4.324	-0.007	1.337	5248571	2.50		100	5726	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.327	4.328	-0.001	1.340	1657734	2.50		100	2157	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.336	4.333	0.003	1.002	511063	1.03		103	1666	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.467	4.469	-0.002	1.236	2317412	0.9480		101	5245	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.623	4.624	-0.001	1.000	2275868	1.03	Target=8.64	103	1337	
613.00 > 169.00	4.623	4.624	-0.001	1.000	248971		0.00(6.05-11.23)	103	769	
D 49 13C2 PFDoA										
615.00 > 570.00	4.623	4.624	-0.001	1.432	5825062	2.46		98.3	8161	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.642	4.641	0.001	1.162	286944	0.8985		93.2	843	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.868	4.870	-0.002	1.347	194643	0.9776	Target=0.57	101	2219	
699.00 > 99.00	4.868	4.870	-0.002	1.347	335439		0.00(0.40-0.74)	101	1768	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.896	4.899	-0.003	1.059	1886005	1.08	Target=5.68	108	744	
663.00 > 169.00	4.896	4.899	-0.003	1.059	330194		0.00(3.97-7.38)	108	2245	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.151	5.154	-0.003	1.000	292296	0.9237	Target=1.53	92.4	704	
713.00 > 219.00	5.144	5.154	-0.010	0.999	208046		0.00(1.07-1.99)	92.4	855	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.151	5.154	-0.003	1.595	4497241	2.58		103	13408	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.642	5.648	-0.006	1.747	4275112	2.52		101	8278	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.642	5.649	-0.007	1.000	1537603	1.03	Target=5.11	103	109	
813.00 > 169.00	5.650	5.649	0.001	1.001	292567		0.00(3.57-6.64)	103	1108	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	6.197	6.200	-0.003	1.098	883185	1.01	Target=4.80	101	173	
913.00 > 169.00	6.197	6.200	-0.003	1.098	181231		0.00(3.36-6.24)	101	947	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00011 Amount Added: 1.00 Units: mL

Report Date: 11-Mar-2019 13:12:41 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_005.d

Injection Date: 11-Mar-2019 11:49:34 Instrument ID: A9

Lims ID: IC L4 Full

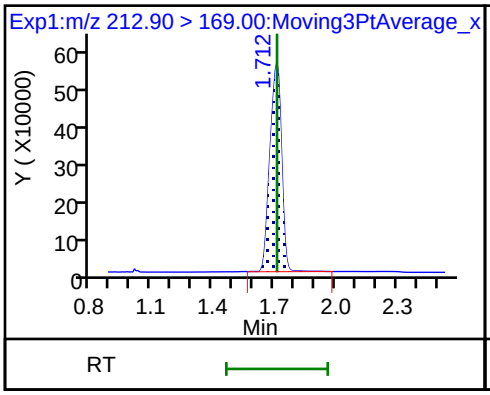
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 13 Worklist Smp#: 5

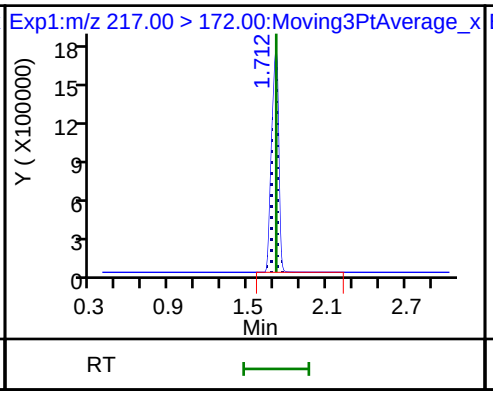
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

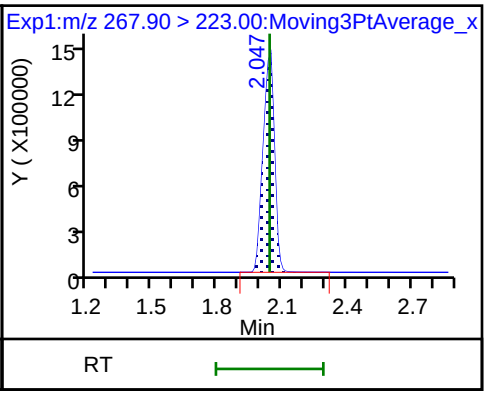
2 Perfluorobutanoic acid



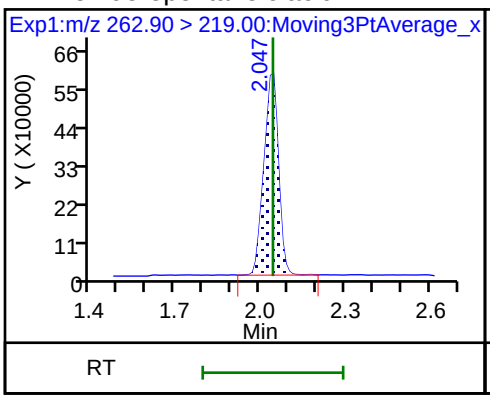
D 1 13C4 PFBA



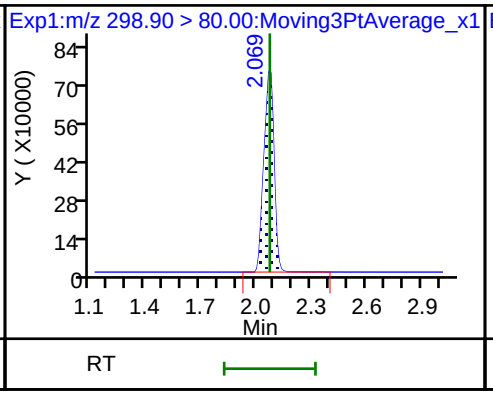
D 3 13C5 PFPeA



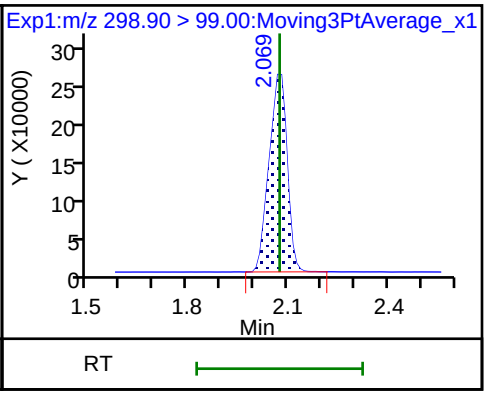
4 Perfluoropentanoic acid



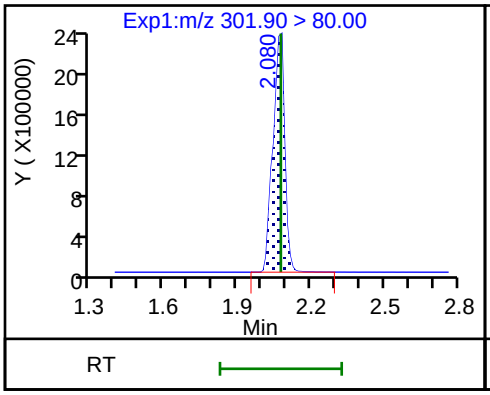
6 Perfluorobutanesulfonic acid



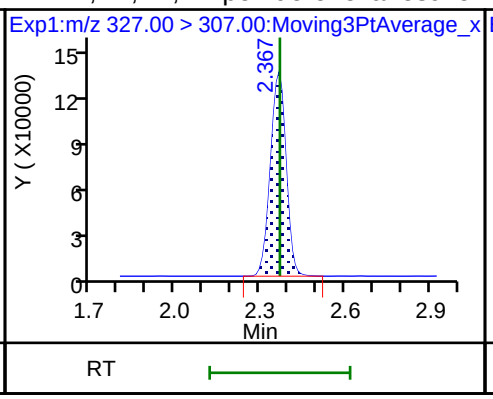
6 Perfluorobutanesulfonic acid



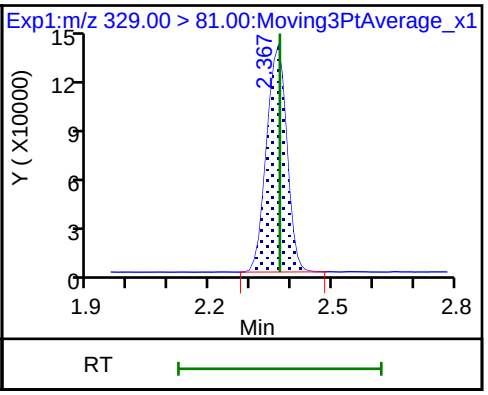
D 5 13C3 PFBS



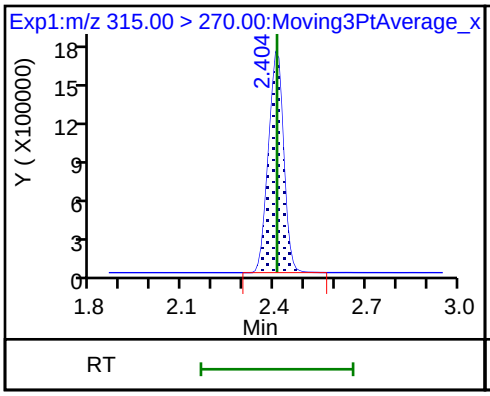
7 1H,1H,2H,2H-perfluorohexanesulfon



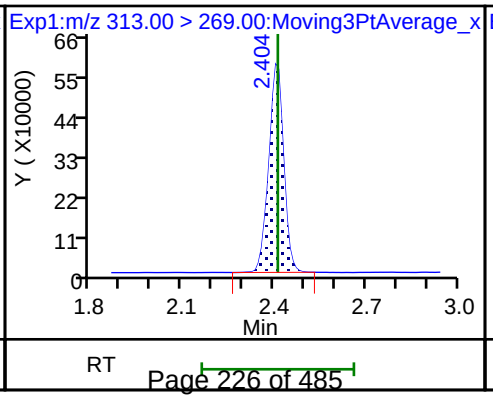
D 8 M2-4:2 FTS



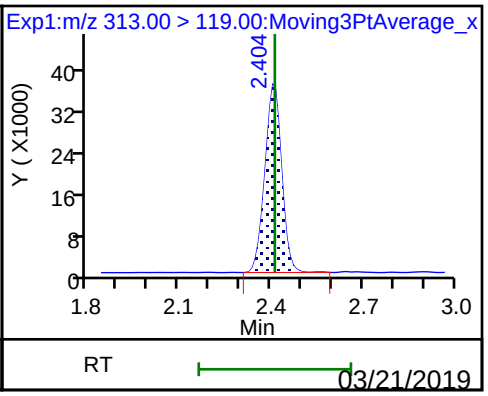
D 9 13C2 PFHxA



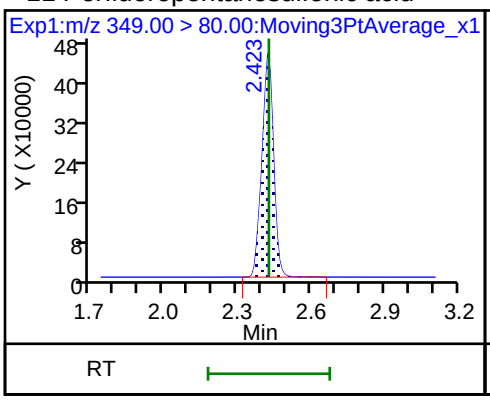
10 Perfluorohexanoic acid



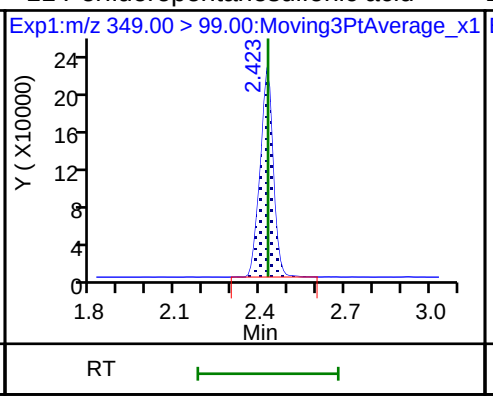
10 Perfluorohexanoic acid



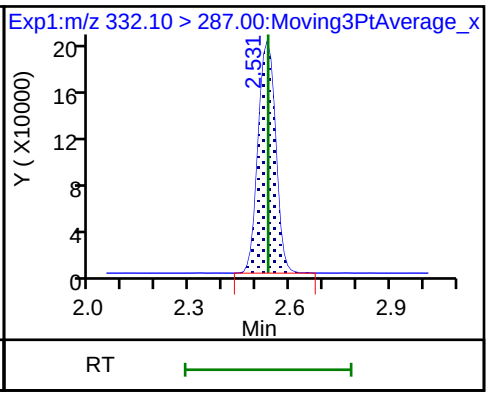
11 Perfluoropentanesulfonic acid



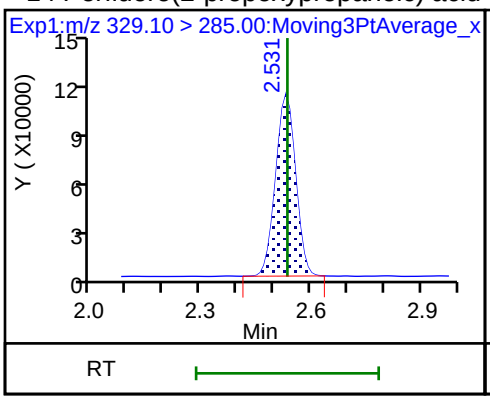
11 Perfluoropentanesulfonic acid



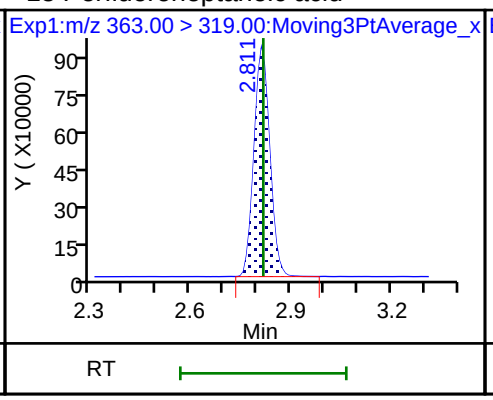
D 13 13C3 HFPO-DA



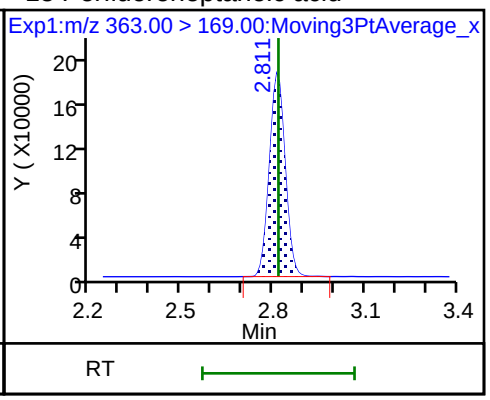
14 Perfluoro(2-propoxypropanoic) acid



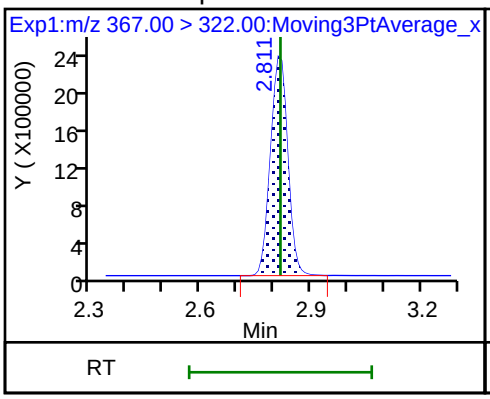
15 Perfluoroheptanoic acid



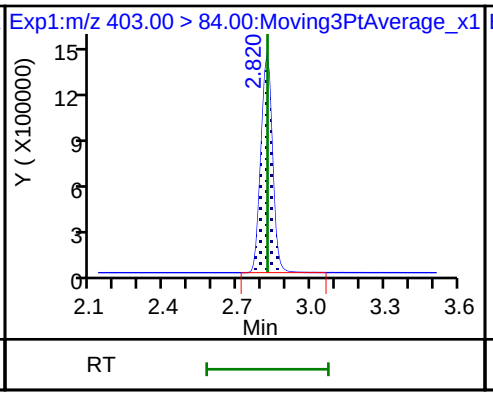
15 Perfluoroheptanoic acid



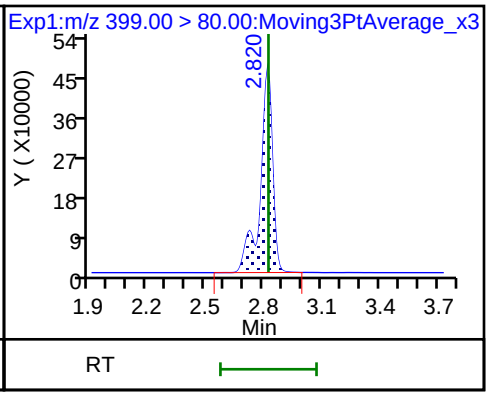
D 16 13C4 PFHpA



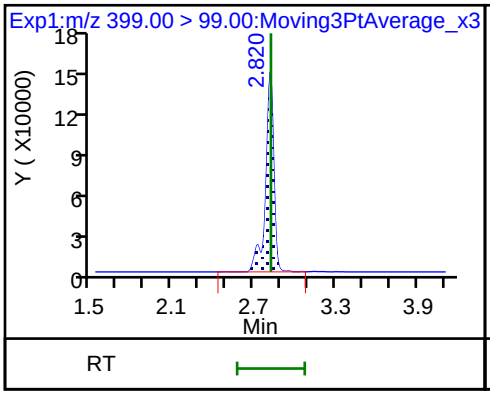
D 17 18O2 PFHxS



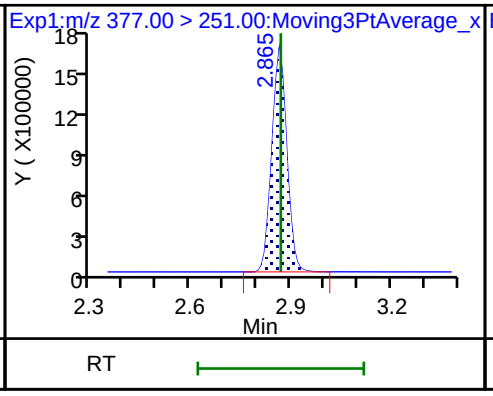
18 Perfluorohexanesulfonic acid



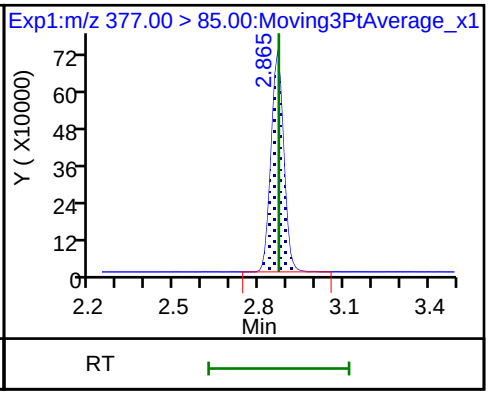
18 Perfluorohexanesulfonic acid



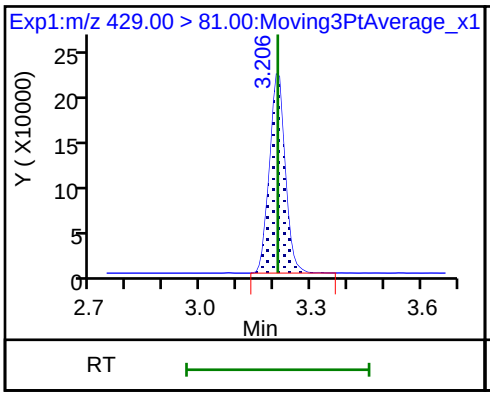
19 DONA



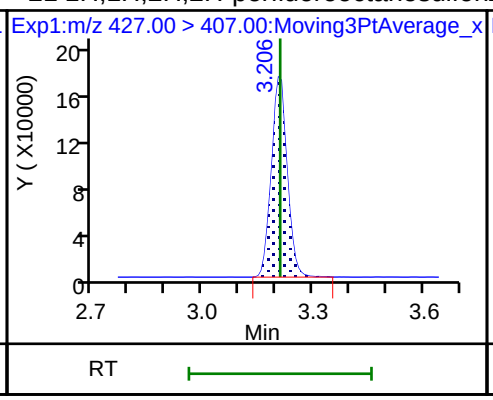
19 DONA



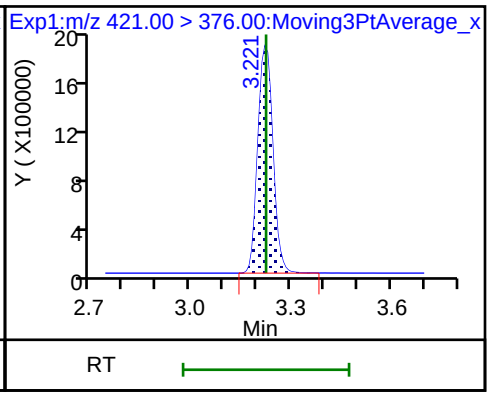
D 20 M2-6:2 FTS



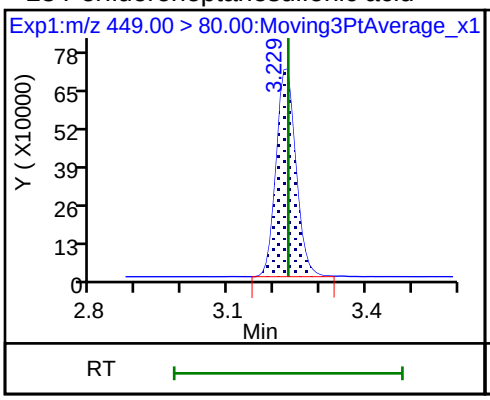
21 1H,1H,2H,2H-perfluorooctanesulfon



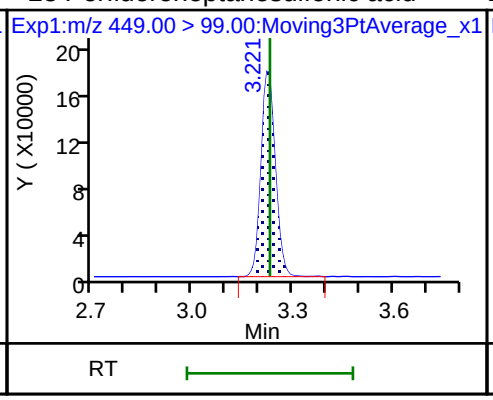
D 22 13C8 PFOA



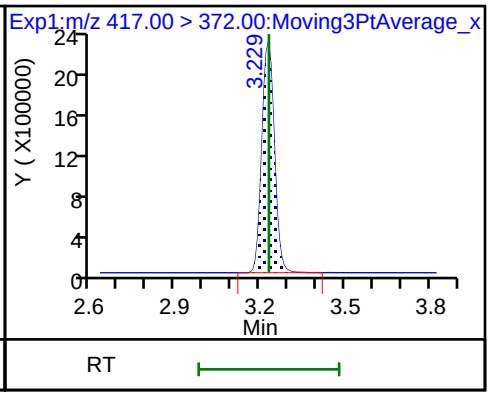
23 Perfluoroheptanesulfonic acid



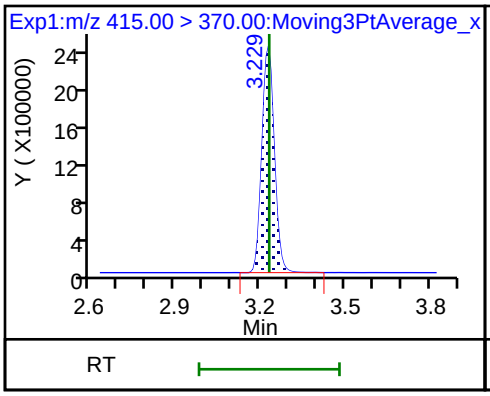
23 Perfluoroheptanesulfonic acid



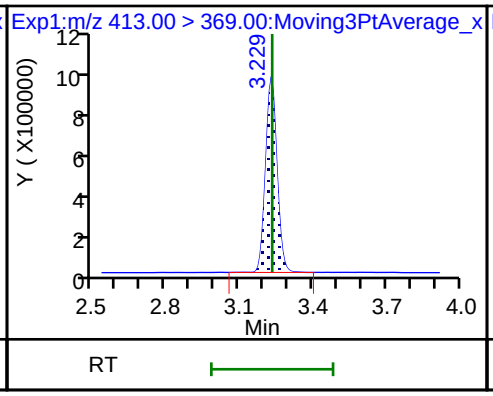
D 25 13C4 PFOA



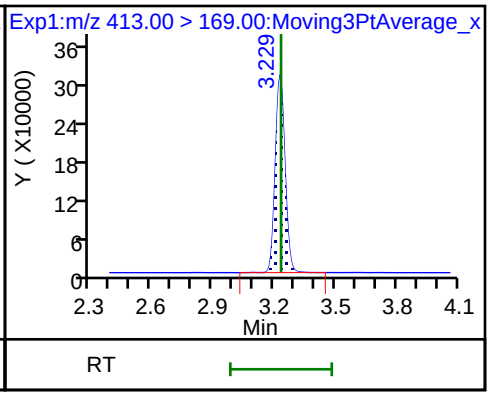
* 24 13C2 PFOA



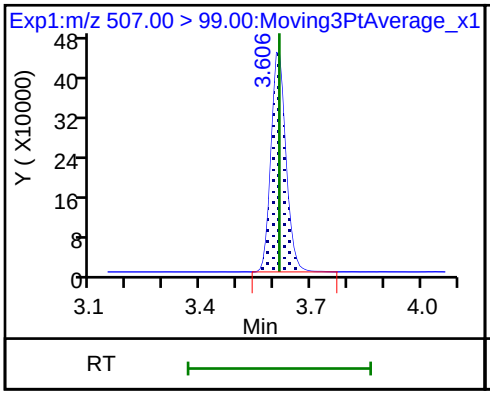
26 Perfluorooctanoic acid



26 Perfluorooctanoic acid



D 27 13C8 PFOS



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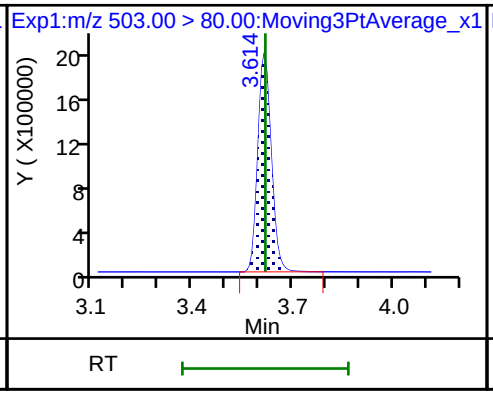
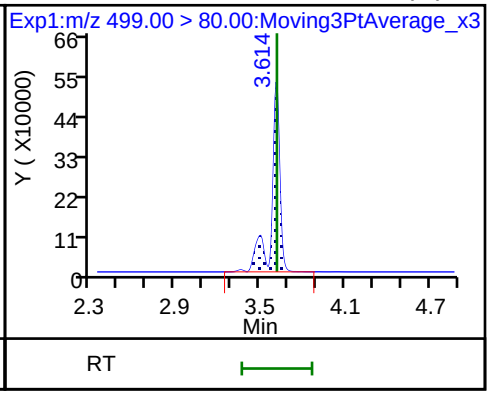
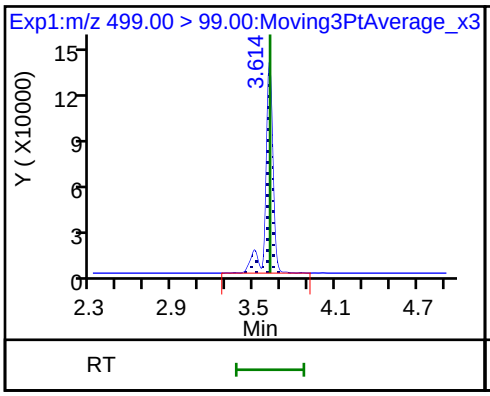


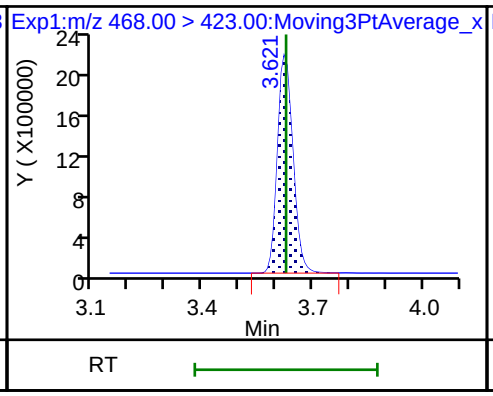
29 Perfluorooctanesulfonic acid (M)



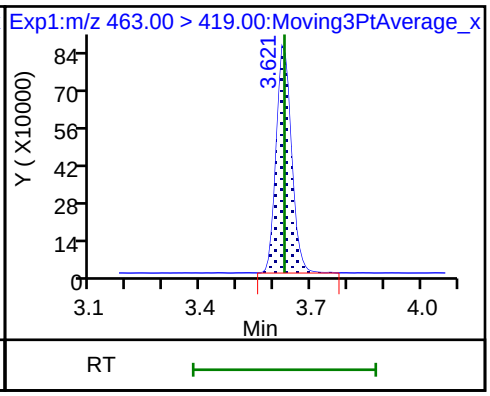
29 Perfluorooctanesulfonic acid



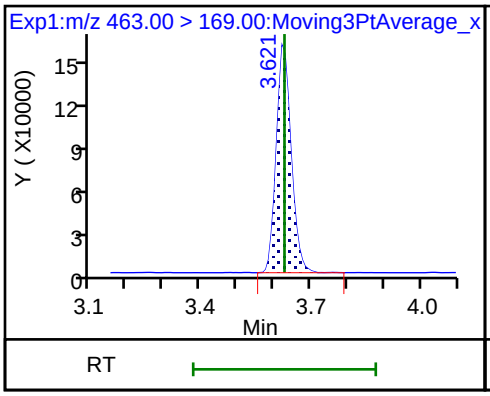
D 31 13C5 PFNA



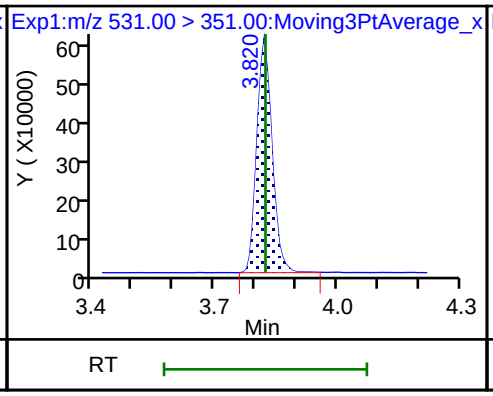
30 Perfluorononanoic acid



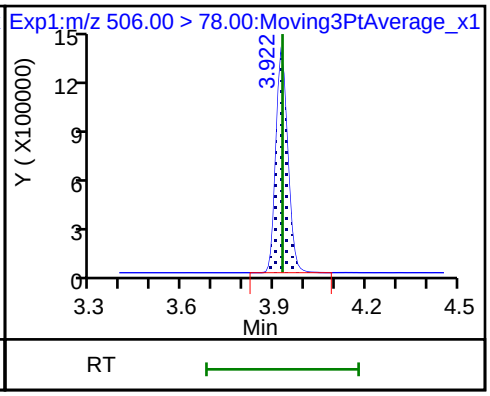
30 Perfluorononanoic acid



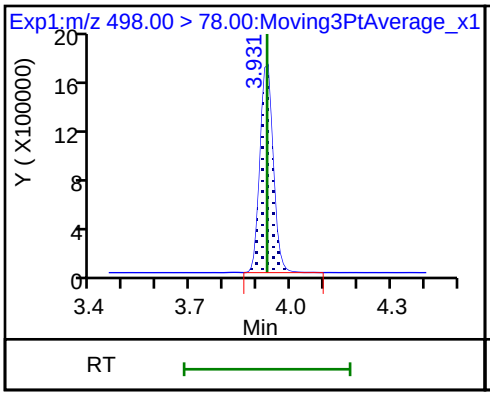
32 9-Chlorohexadecafluoro-3-oxanonane



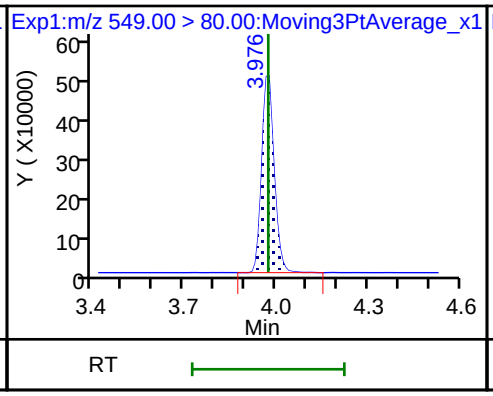
D 33 13C8 FOSA



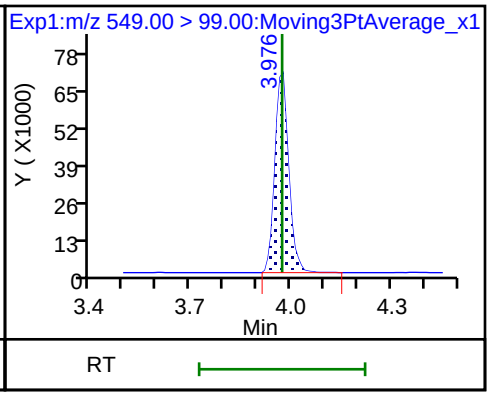
34 Perfluorooctanesulfonamide



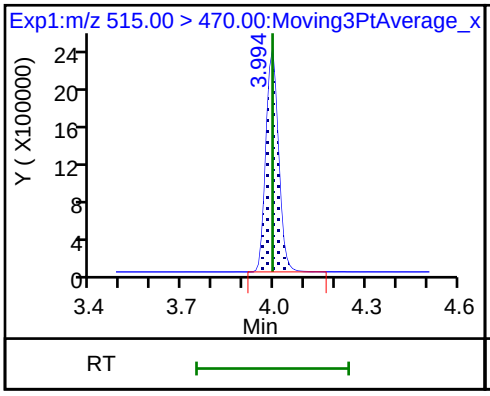
35 Perfluorononanesulfonic acid



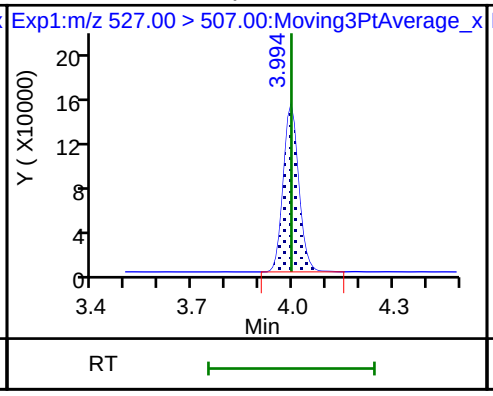
35 Perfluorononanesulfonic acid



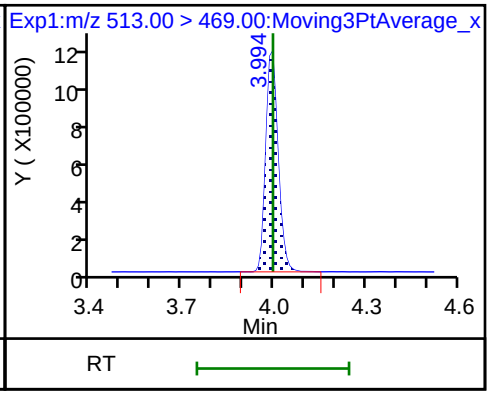
D 36 13C2 PFDA



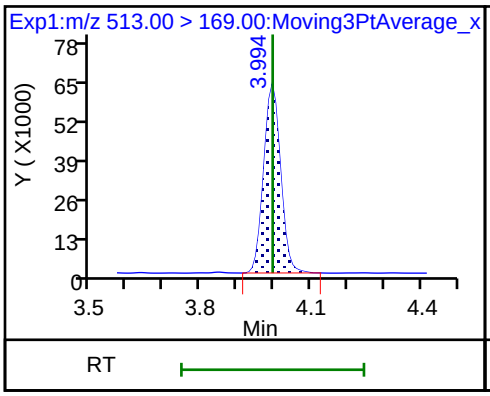
37 1H,1H,2H,2H-perfluorodecanesulfoni



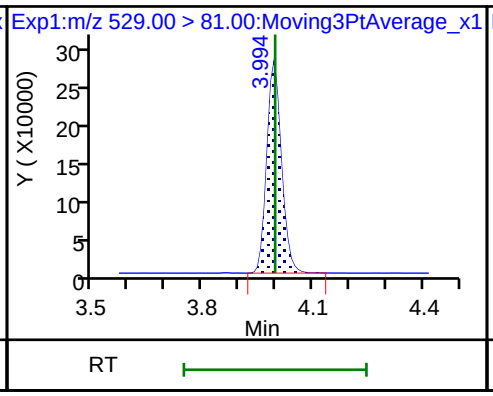
38 Perfluorodecanoic acid



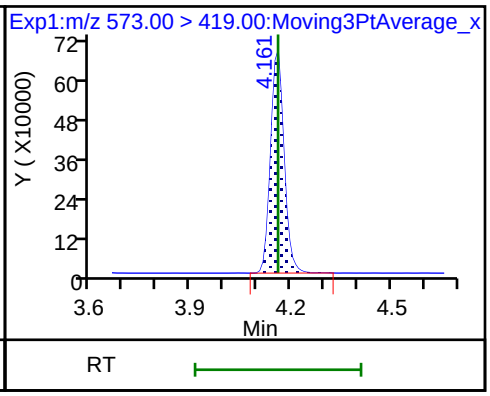
38 Perfluorodecanoic acid



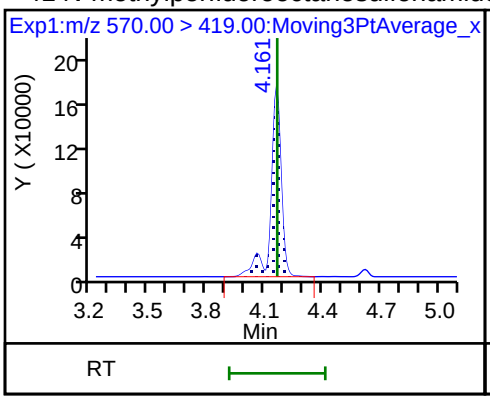
D 39 M2-8:2 FTS



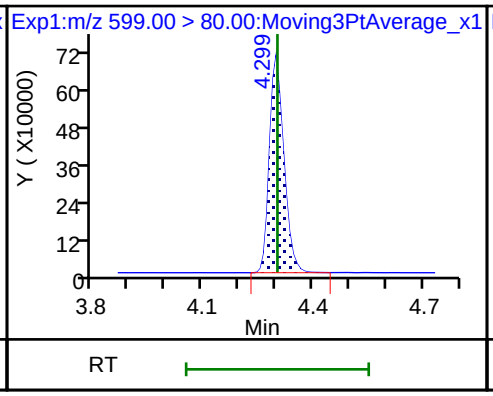
D 40 d3-NMeFOSAA



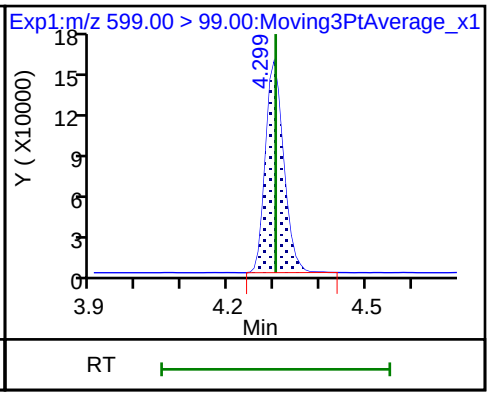
41 N-methylperfluorooctanesulfonamido



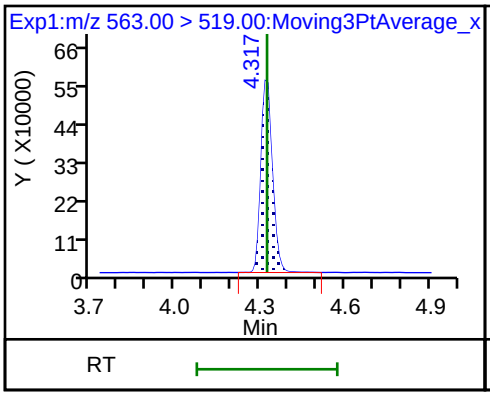
42 Perfluorodecanesulfonic acid



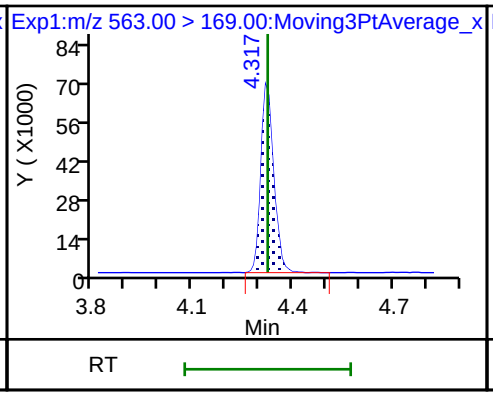
42 Perfluorodecanesulfonic acid



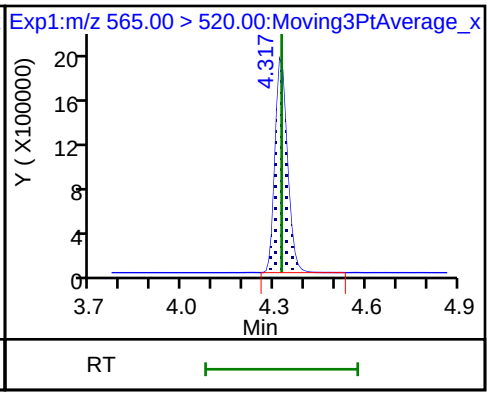
43 Perfluoroundecanoic acid



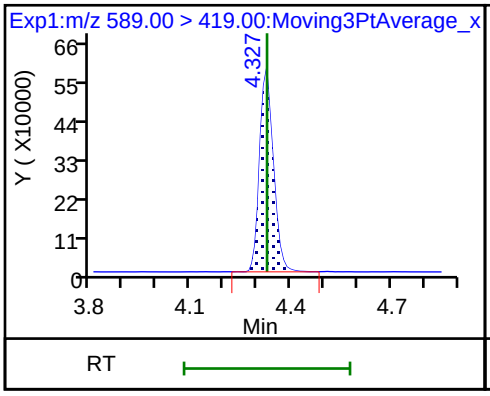
43 Perfluoroundecanoic acid



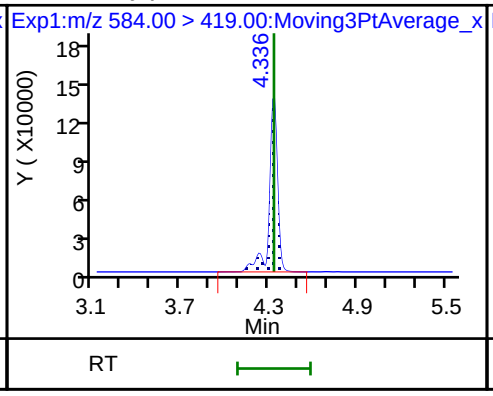
D 44 13C2 PFUnA



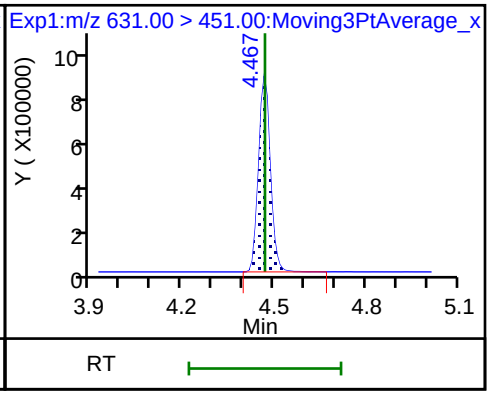
D 45 d5-NEtFOSAA



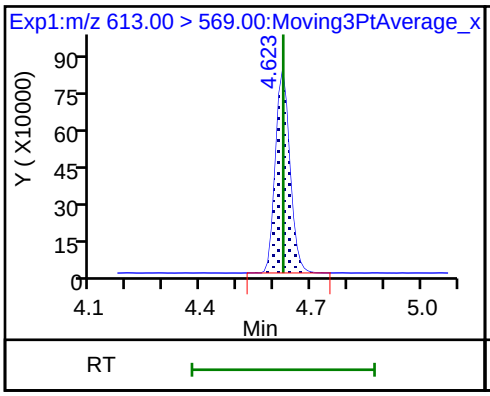
46 N-ethylperfluorooctanesulfonamidoa



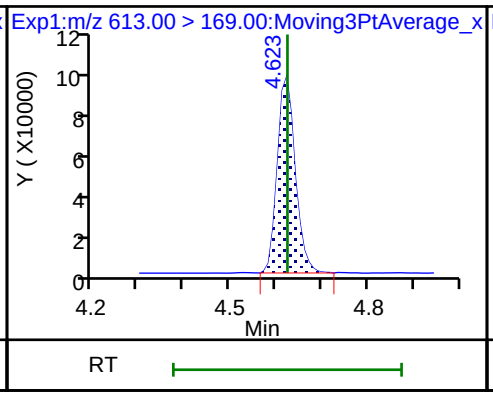
48 11-Chloroeicosafluoro-3-oxaundecan



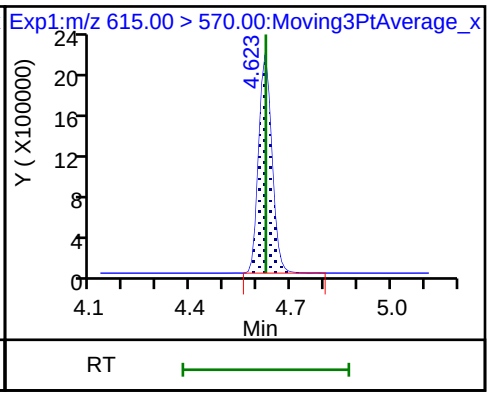
50 Perfluorododecanoic acid



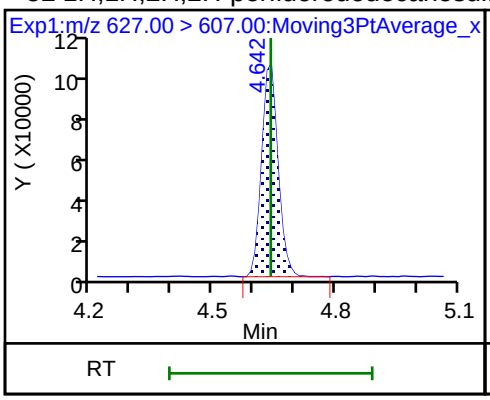
50 Perfluorododecanoic acid



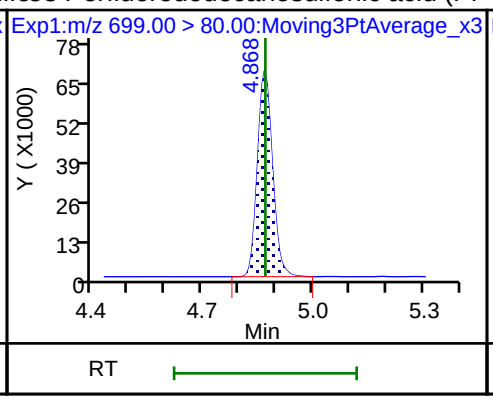
D 49 13C2 PFDoA



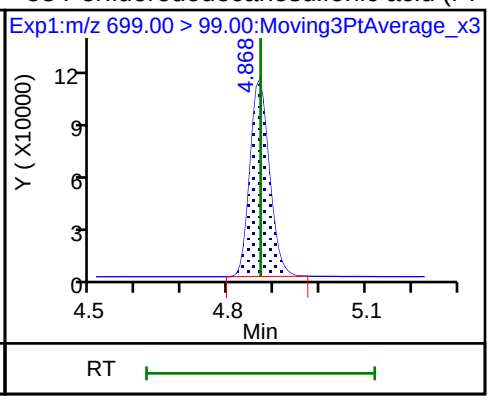
52 1H,1H,2H,2H-perfluorododecanesulfo



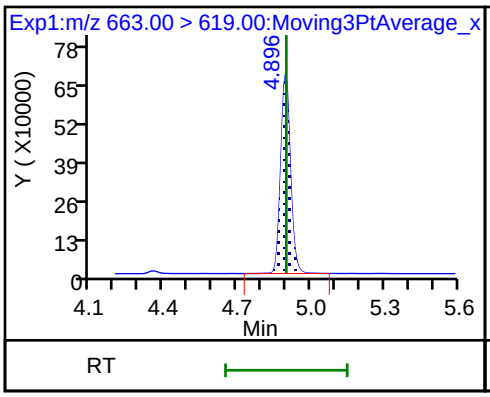
53 Perfluorododecanesulfonic acid (PF



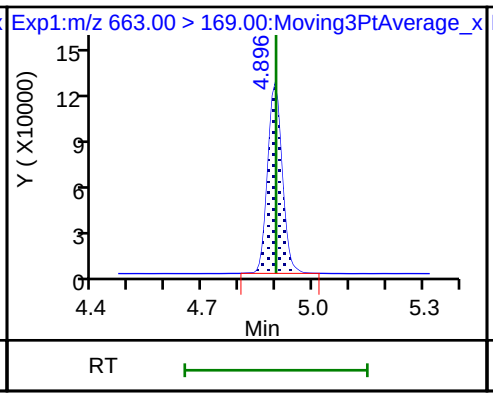
53 Perfluorododecanesulfonic acid (PF



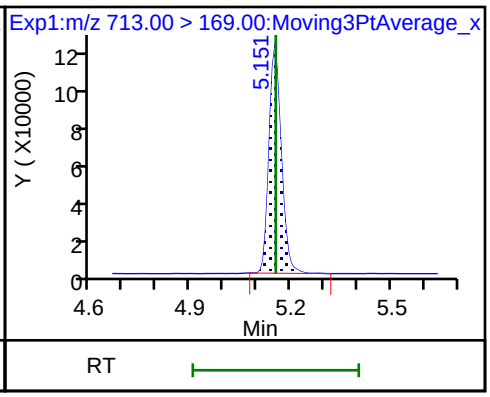
54 Perfluorotridecanoic acid



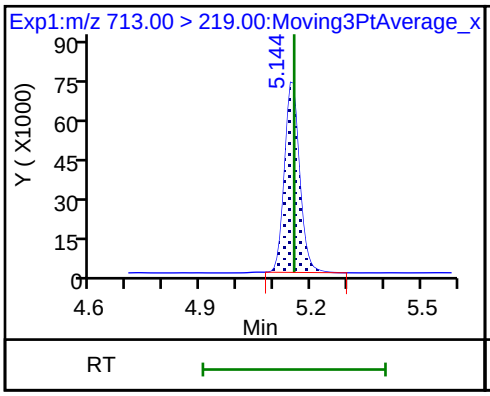
54 Perfluorotridecanoic acid



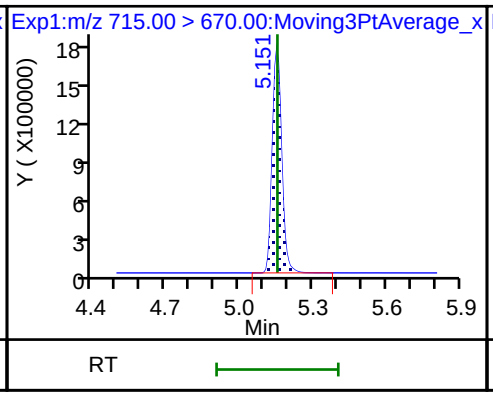
56 Perfluorotetradecanoic acid



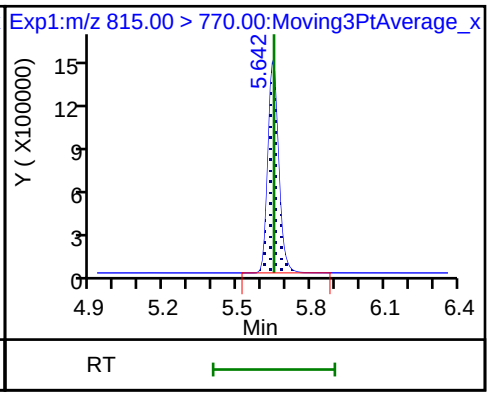
56 Perfluorotetradecanoic acid



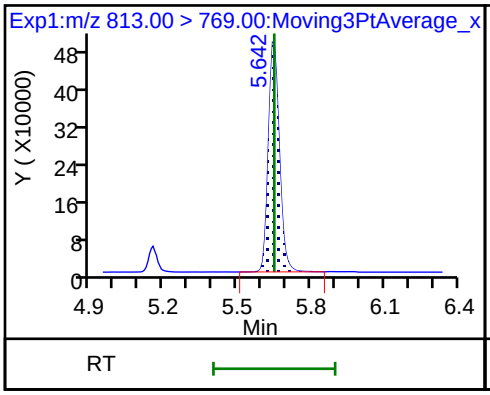
D 55 13C2 PFTeDA



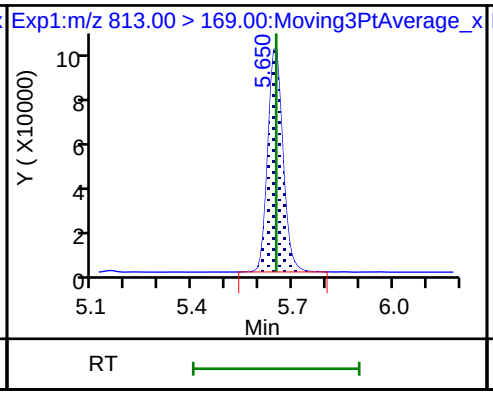
D 57 13C2 PFHxDA



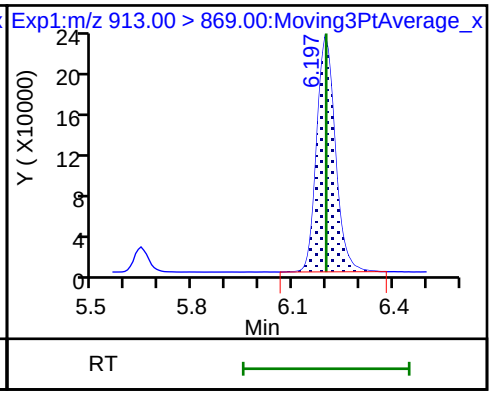
58 Perfluorohexadecanoic acid



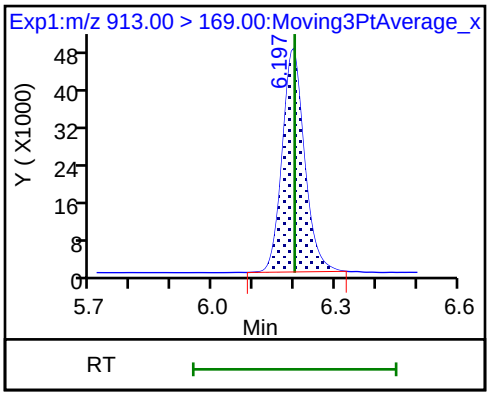
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

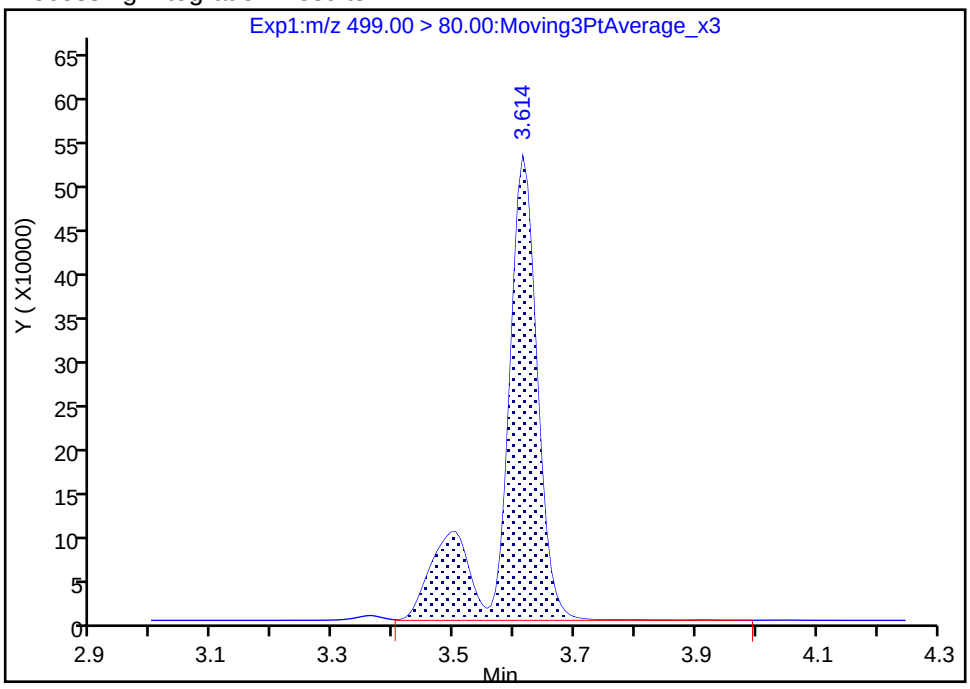
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_005.d
Injection Date: 11-Mar-2019 11:49:34 Instrument ID: A9
Lims ID: IC L4 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 13 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

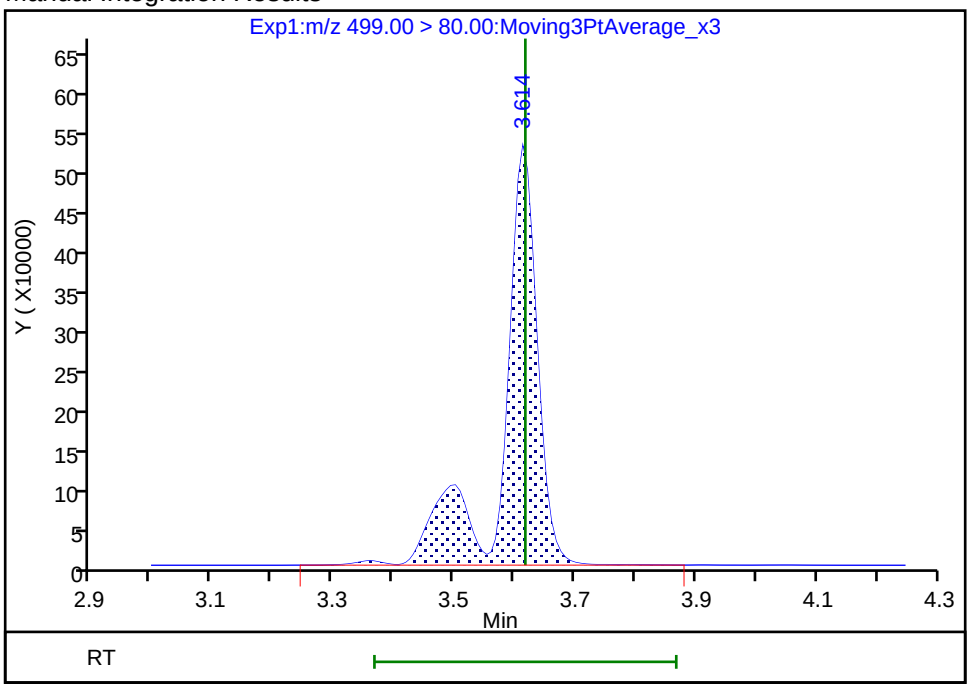
Processing Integration Results

RT: 3.61
Area: 2081400
Amount: 0.934900
Amount Units: ng/ml



Manual Integration Results

RT: 3.61
Area: 2094178
Amount: 0.936024
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:03:20
Audit Action: Manually Integrated Audit Reason: Isomers

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_006.d
Lims ID: IC L5 Full
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 11-Mar-2019 11:57:05 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CAL STD5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 11-Mar-2019 13:12:45 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0331

First Level Reviewer: westendorfc Date: 11-Mar-2019 13:04:07
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.712	1.713	-0.001	1.000	5343916	2.52		101	1206	
D 1 13C4 PFBA										
217.00 > 172.00	1.712	1.714	-0.002	0.530	6059872	2.49		99.5	40805	
D 3 13C5 PFPeA										
267.90 > 223.00	2.036	2.042	-0.006	0.631	5250318	2.52		101	16595	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.046	2.045	0.001	1.005	4936862	2.38		95.4	411	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.068	2.075	-0.007	1.000	6691167	2.16	Target=2.69	97.9	13333	
298.90 > 99.00	2.068	2.075	-0.007	1.000	2482142		0.00(1.88-3.50)	97.9	5188	
D 5 13C3 PFBS										
301.90 > 80.00	2.068	2.076	-0.008	0.641	7814921	2.38		103	1170158	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.372	2.369	0.003	1.000	1156960	2.34		100	9355	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.372	2.371	0.001	0.735	471554	2.30		98.3	1210	
D 9 13C2 PFHxA										
315.00 > 270.00	2.410	2.409	0.001	0.747	5630989	2.41		96.6	10242	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.410	2.411	-0.001	1.000	4957475	2.53	Target=13.98	101	1991	
313.00 > 119.00	2.410	2.411	-0.001	1.000	372487		0.00(9.79-18.17)	101	1281	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.429	2.427	0.002	1.174	3617006	2.34	Target=2.01	99.9	4521	
349.00 > 99.00	2.419	2.427	-0.008	1.170	1760214		0.00(1.41-2.62)	99.9	4402	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.537	2.534	0.003	0.786	845445	2.69		108	3888	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.537	2.536	0.001	1.000	1005165	2.14		85.6	854	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.817	2.817	0.0	1.000	6910052	2.39	Target=4.51	95.6	3902	
363.00 > 169.00	2.817	2.817	0.0	1.000	1532625		0.00(3.16-5.86)	95.6	4014	
D 16 13C4 PFHpA										
367.00 > 322.00	2.817	2.817	0.0	0.873	7239412	2.51		100	7446	
D 17 18O2 PFHxS										
403.00 > 84.00	2.826	2.822	0.004	0.876	4421546	2.34		99.1	3660	
18 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.826	2.824	0.002	1.000	4976592	2.20	Target=3.29	96.6	3554	
399.00 > 99.00	2.817	2.824	-0.007	0.997	1414766		0.00(2.30-4.28)	96.6	2576	
19 DONA										
377.00 > 251.00	2.871	2.869	0.002	0.793	11365396	2.37	Target=2.25	101	8906	
377.00 > 85.00	2.871	2.869	0.002	0.793	5339817		0.00(1.58-2.93)	101	5487	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.211	3.209	0.002	0.995	623116	2.39		101	2817	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.203	3.210	-0.007	0.998	1261004	2.44		103	2920	
D 22 13C8 PFOA										
421.00 > 376.00	3.227	3.225	0.002	1.000	5451858	2.43		99.2	6809	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.227	3.230	-0.003	0.892	5339486	2.55	Target=3.86	107	3380	
449.00 > 99.00	3.227	3.230	-0.003	0.892	1271474		0.00(2.70-5.01)	107	3139	
D 25 13C4 PFOA										
417.00 > 372.00	3.227	3.230	-0.003	1.000	6603416	2.52		101	4444	
* 24 13C2 PFOA										
415.00 > 370.00	3.227	3.232	-0.005		7245632	2.50			6323	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.234	3.233	0.001	1.002	6641574	2.42	Target=1.00	96.7	2024	
413.00 > 169.00	3.234	3.233	0.001	1.002	2386846		2.78(0.70-1.30)	96.7	5869	
D 27 13C8 PFOS										
507.00 > 99.00	3.611	3.614	-0.003	1.119	1238669	2.45		102	3973	
D 28 13C4 PFOS										
503.00 > 80.00	3.619	3.617	0.002	1.122	5218569	2.37		99.0	4850	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.619	3.618	0.001	1.000	5106744	2.41	Target=1.00	104	8557	
499.00 > 99.00	3.619	3.618	0.001	1.000	1209471		4.22(0.70-1.30)	104	2227	
D 31 13C5 PFNA										
468.00 > 423.00	3.626	3.626	0.0	1.124	6344511	2.59		104	4508	
30 Perfluorononanoic acid										
463.00 > 419.00	3.626	3.628	-0.002	1.000	5816451	2.38	Target=5.29	95.2	2289	
463.00 > 169.00	3.626	3.628	-0.002	1.000	1119577		0.00(3.70-6.88)	95.2	2782	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.818	3.823	-0.005	1.055	3978299	2.34		101	3861	
D 33 13C8 FOSA										
506.00 > 78.00	3.928	3.927	0.001	1.217	3530819	2.45		97.9	6515	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.928	3.928	0.0	1.000	9703261	2.49		99.7	3523	
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.974	3.973	0.001	1.098	3131514	2.48	Target=6.21	103	4317	
549.00 > 99.00	3.974	3.973	0.001	1.098	460669		0.00(4.35-8.07)	103	1642	
D 36 13C2 PFDA										
515.00 > 470.00	3.992	3.994	-0.002	1.237	6276124	2.49		99.7	7550	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.992	3.995	-0.003	0.998	1099428	2.42		101	3614	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.992	3.995	-0.003	1.000	6581236	2.47	Target=15.01	98.8	5038	
513.00 > 169.00	3.992	3.995	-0.003	1.000	486319		0.00(10.51-19.52)	98.8	1589	
D 39 M2-8:2 FTS										
529.00 > 81.00	4.001	3.997	0.004	1.240	675436	2.28		95.3	2437	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.161	4.161	0.0	1.289	1862574	2.44		97.5	616	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.161	4.165	-0.004	1.000	1548284	2.61		104	575	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.299	4.303	-0.004	1.188	4962840	2.65	Target=4.69	110	4682	
599.00 > 99.00	4.299	4.303	-0.004	1.188	995480		0.00(3.28-6.10)	110	3497	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.326	4.324	0.002	1.000	3835858	2.43	Target=8.65	97.3	2063	
563.00 > 169.00	4.326	4.324	0.002	1.000	415730		0.00(6.05-11.24)	97.3	1171	
D 44 13C2 PFUnA										
565.00 > 520.00	4.326	4.324	0.002	1.341	5046416	2.45		98.1	5279	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.326	4.328	-0.002	1.341	1634745	2.51		101	2538	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.335	4.333	0.002	1.002	1240388	2.54		102	3734	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.466	4.469	-0.003	1.234	5240106	2.26		96.0	7148	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.623	4.624	-0.001	1.000	5427879	2.43	Target=8.64	97.4	3023	
613.00 > 169.00	4.623	4.624	-0.001	1.000	614162		0.00(6.05-11.23)	97.4	1880	
D 49 13C2 PFDoA										
615.00 > 570.00	4.623	4.624	-0.001	1.433	5852289	2.52		101	11811	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.633	4.641	-0.008	1.158	718875	2.57		107	2320	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.870	4.870	0.0	1.346	469378	2.49	Target=0.57	103	4213	
699.00 > 99.00	4.870	4.870	0.0	1.346	827681		0.00(0.40-0.74)	103	5402	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.898	4.899	-0.001	1.060	4366856	2.49	Target=5.68	99.6	1577	
663.00 > 169.00	4.891	4.899	-0.008	1.058	797329		0.00(3.97-7.38)	99.6	4752	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.148	5.154	-0.006	0.999	701207	2.25	Target=1.53	90.1	1881	
713.00 > 219.00	5.148	5.154	-0.006	0.999	468669		0.00(1.07-1.99)	90.1	1888	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.155	5.154	0.001	1.598	4421707	2.59		103	12186	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.642	5.648	-0.006	1.749	4059740	2.44		97.5	9366	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.642	5.649	-0.007	1.000	3498147	2.50	Target=5.11	100	343	
813.00 > 169.00	5.642	5.649	-0.007	1.000	711119		0.00(3.57-6.64)	100	2338	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	6.190	6.200	-0.010	1.097	2058167	2.48	Target=4.80	99.1	398	
913.00 > 169.00	6.190	6.200	-0.010	1.097	432038		0.00(3.36-6.24)	99.1	1767	

Reagents:

LCPFC_LL5_00011 Amount Added: 1.00 Units: mL

Report Date: 11-Mar-2019 13:12:47 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_006.d

Injection Date: 11-Mar-2019 11:57:05 Instrument ID: A9

Lims ID: IC L5 Full

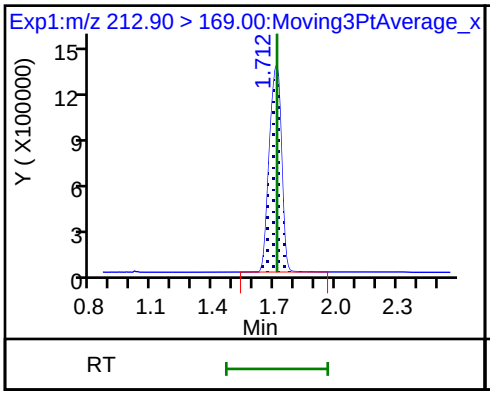
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 14 Worklist Smp#: 6

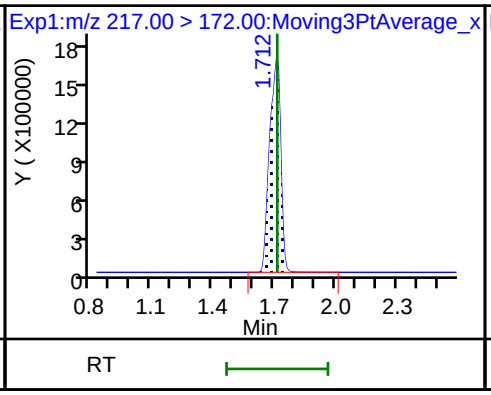
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

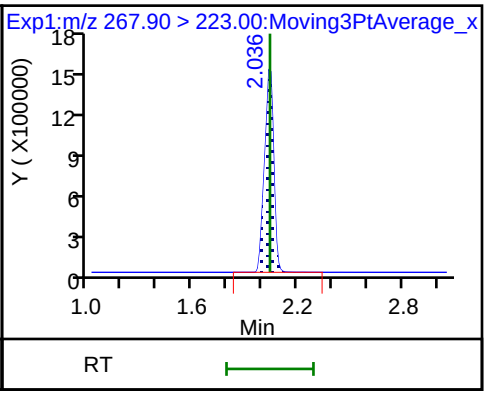
2 Perfluorobutanoic acid



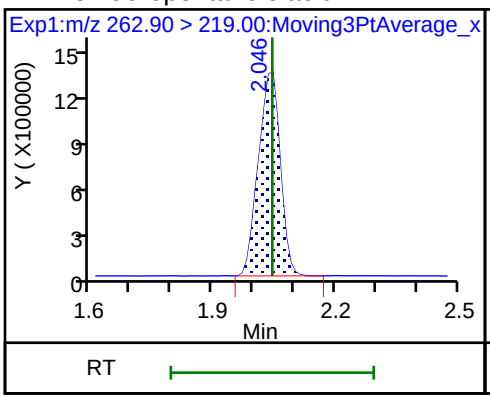
D 1 13C4 PFBA



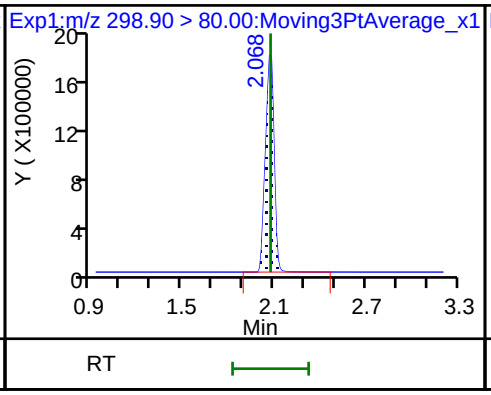
D 3 13C5 PFPeA



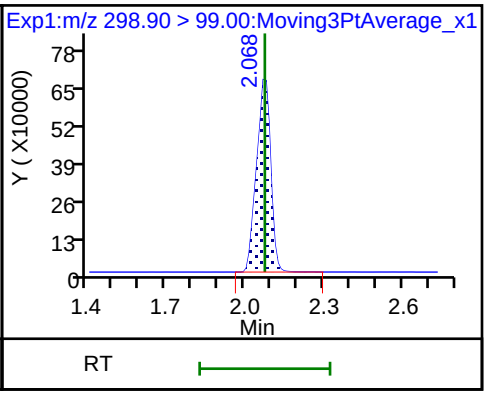
4 Perfluoropentanoic acid



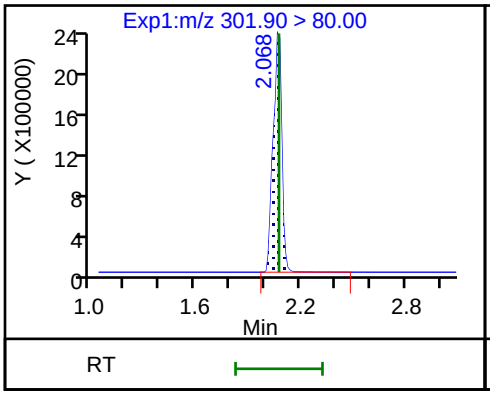
6 Perfluorobutanesulfonic acid



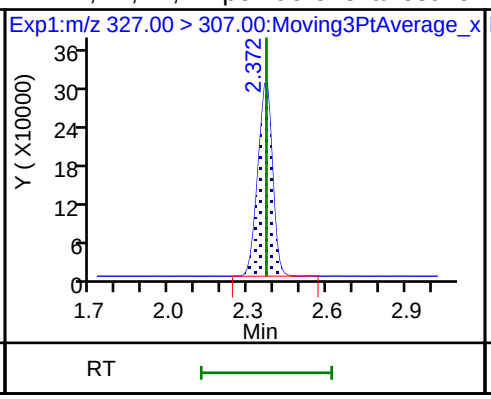
6 Perfluorobutanesulfonic acid



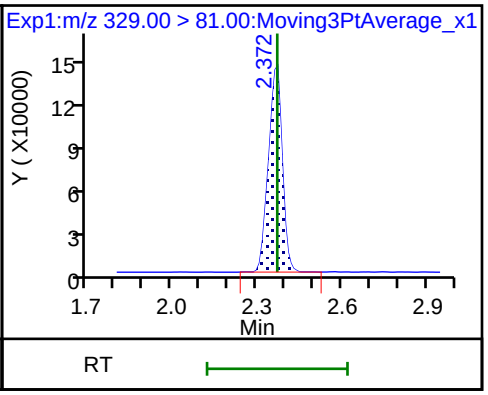
D 5 13C3 PFBS



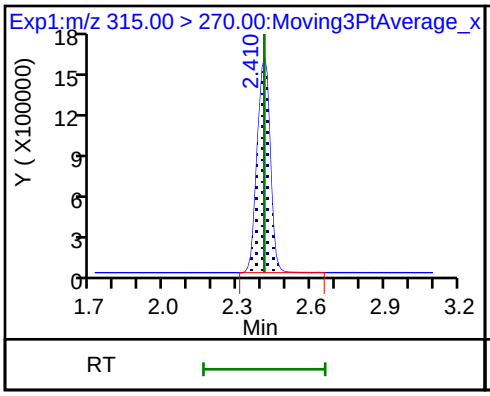
7 1H,1H,2H,2H-perfluorohexanesulfon



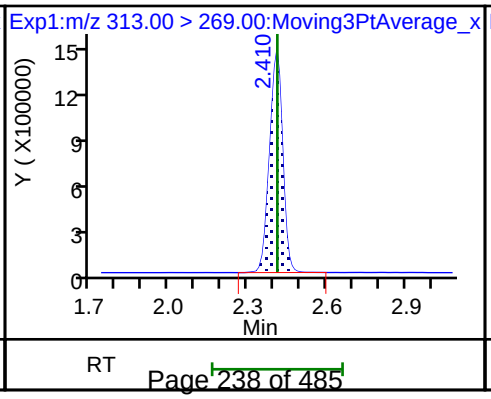
D 8 M2-4:2 FTS



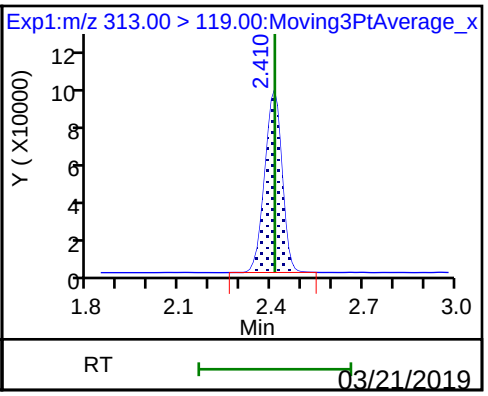
D 9 13C2 PFHxA



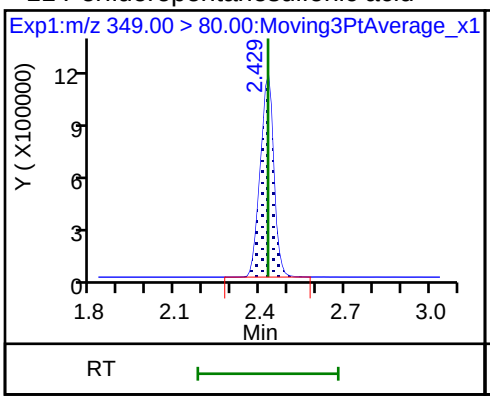
10 Perfluorohexanoic acid



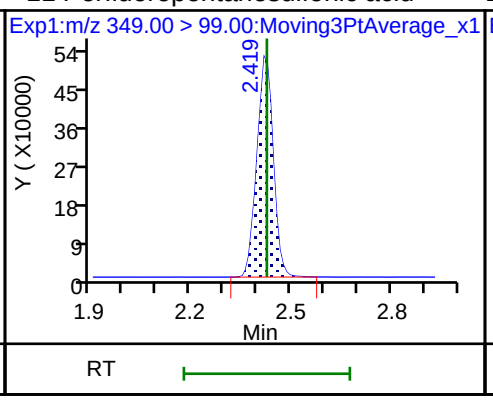
10 Perfluorohexanoic acid



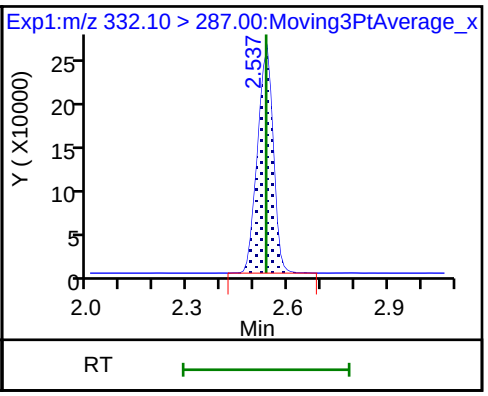
11 Perfluoropentanesulfonic acid



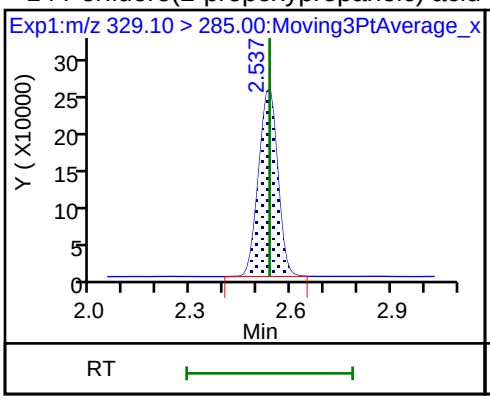
11 Perfluoropentanesulfonic acid



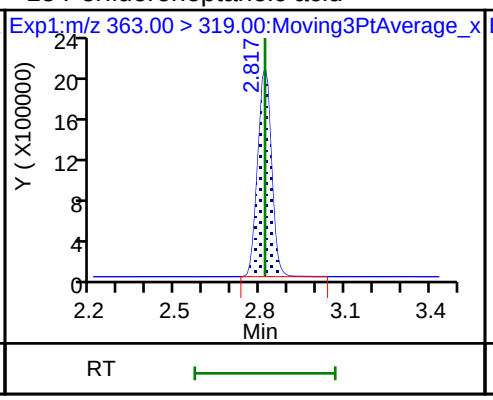
D 13 13C3 HFPO-DA



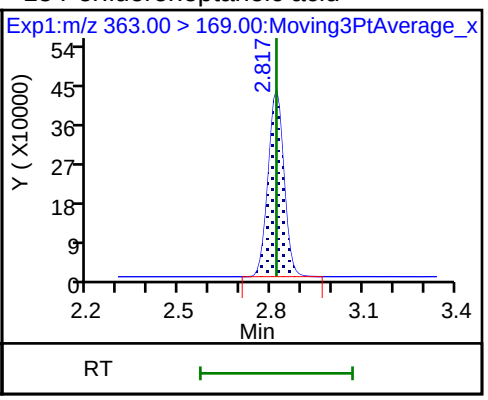
14 Perfluoro(2-propoxypropanoic) acid



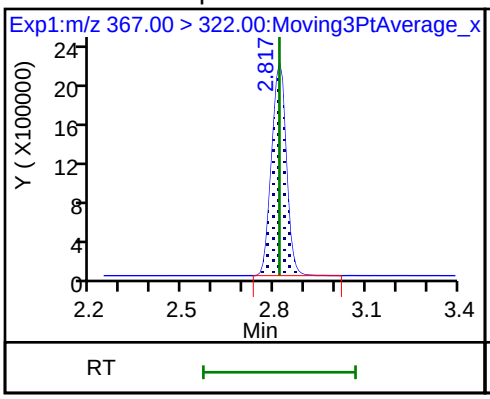
15 Perfluoroheptanoic acid



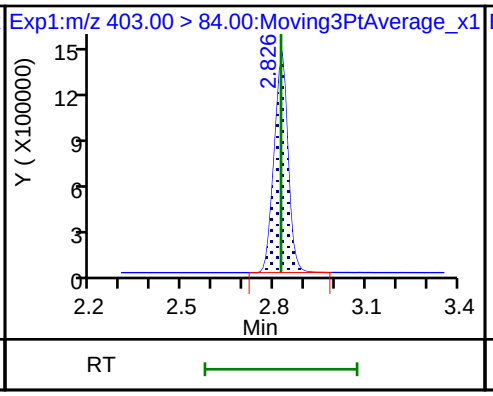
15 Perfluoroheptanoic acid



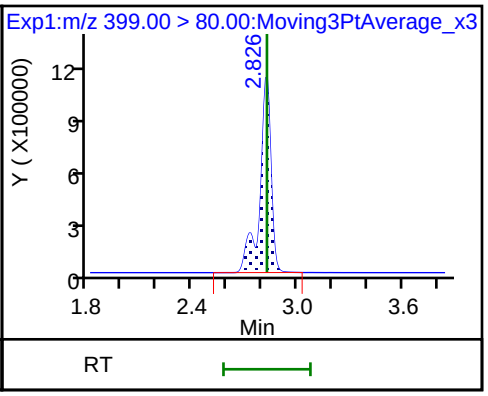
D 16 13C4 PFHpA



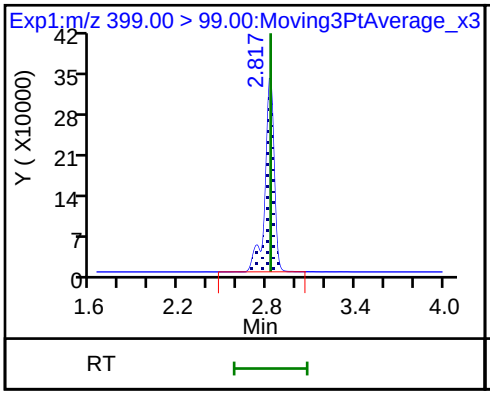
D 17 18O2 PFHxS



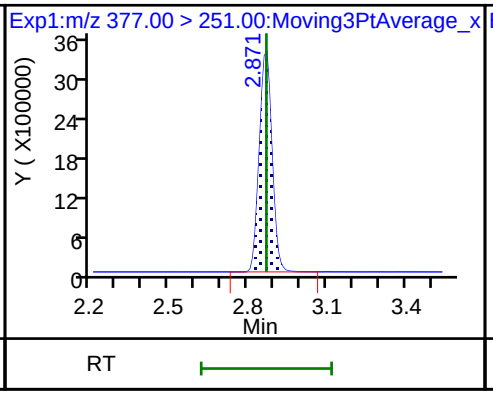
18 Perfluorohexanesulfonic acid



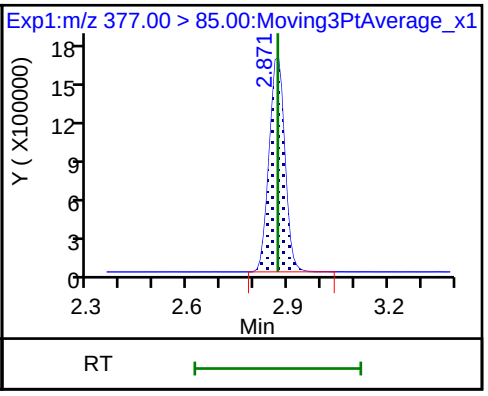
18 Perfluorohexanesulfonic acid



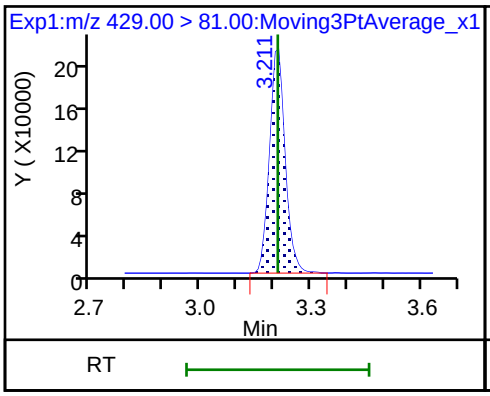
19 DONA



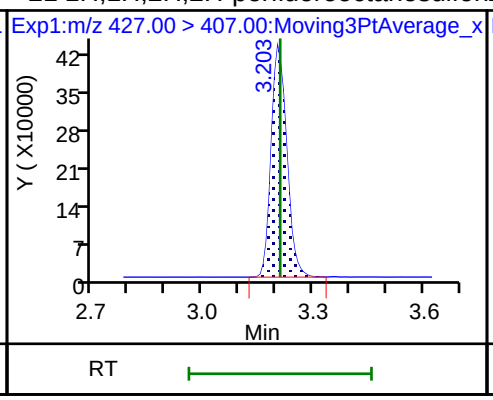
19 DONA



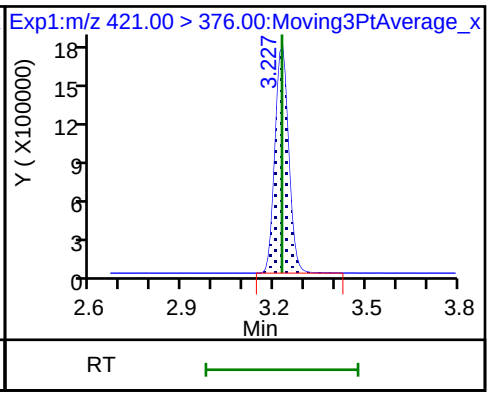
D 20 M2-6:2 FTS



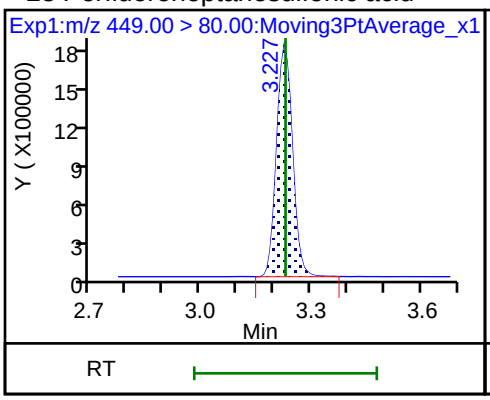
21 1H,1H,2H,2H-perfluorooctanesulfon



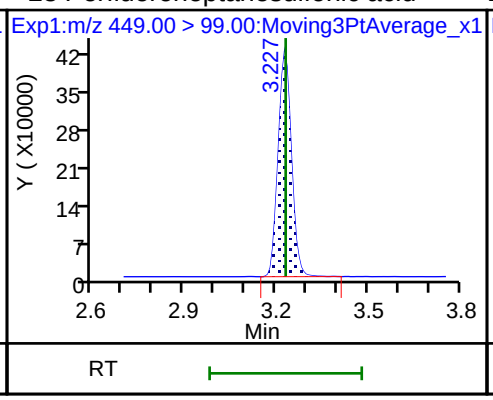
D 22 13C8 PFOA



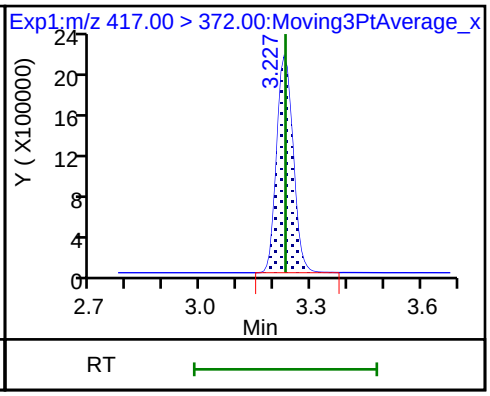
23 Perfluoroheptanesulfonic acid



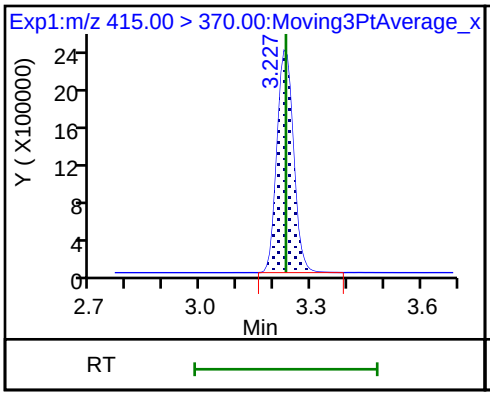
23 Perfluoroheptanesulfonic acid



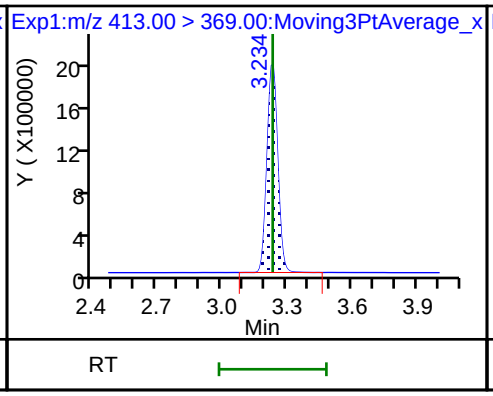
D 25 13C4 PFOA



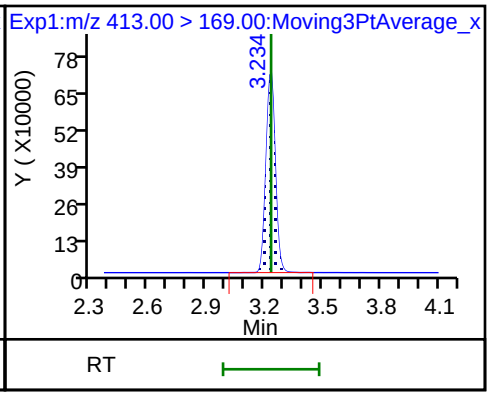
* 24 13C2 PFOA



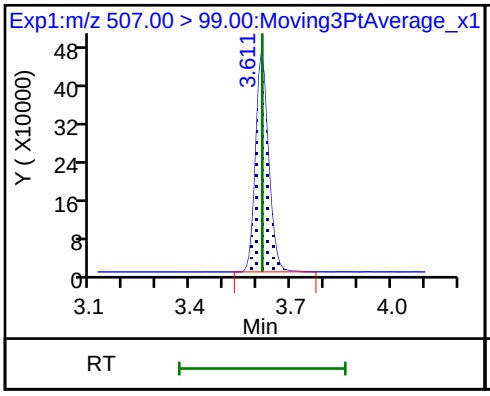
26 Perfluorooctanoic acid



26 Perfluorooctanoic acid



D 27 13C8 PFOS



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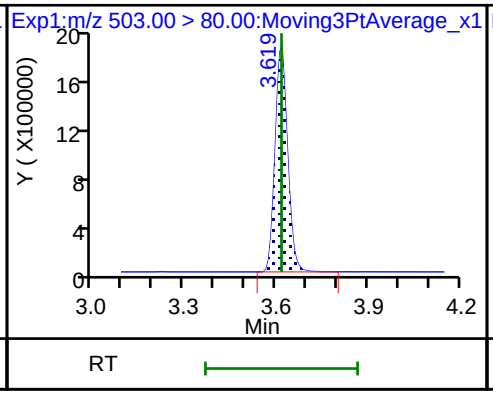
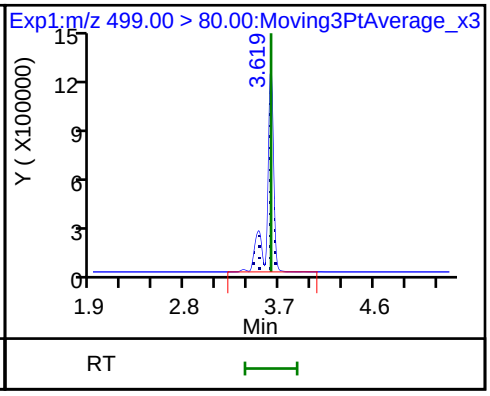
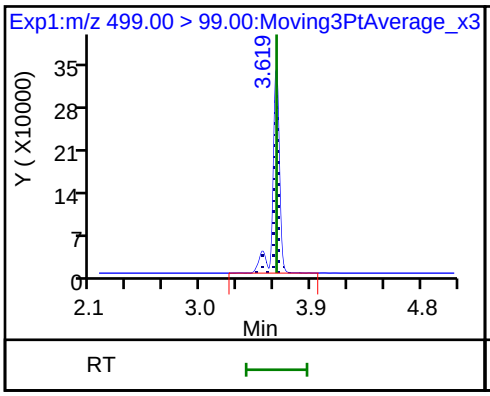


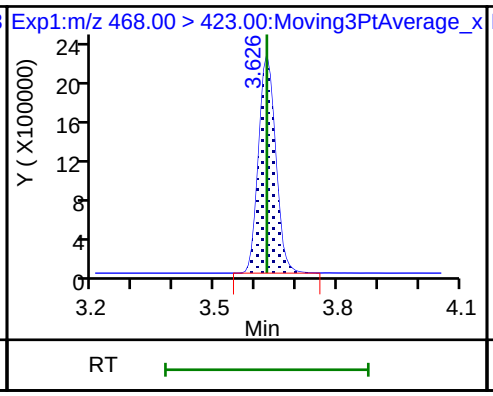
29 Perfluorooctanesulfonic acid



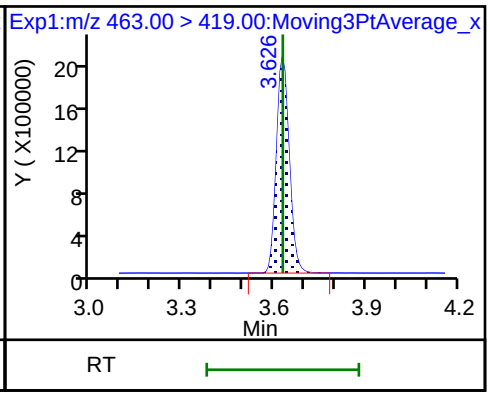
29 Perfluorooctanesulfonic acid



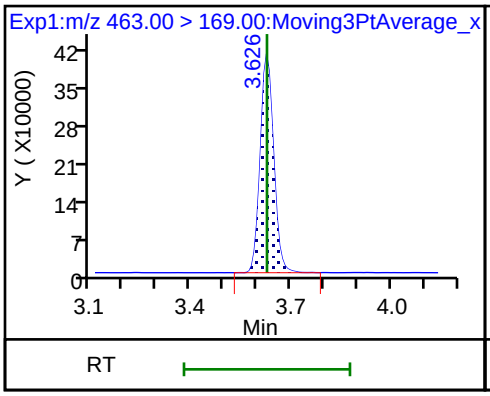
D 31 13C5 PFNA



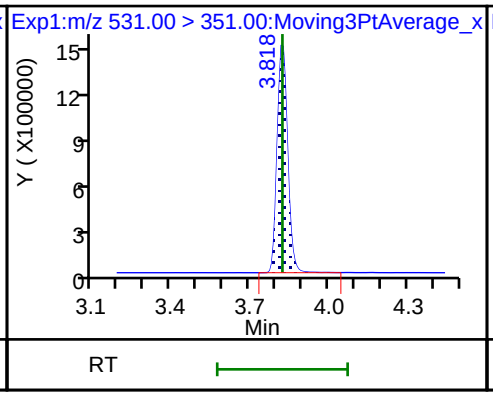
30 Perfluorononanoic acid



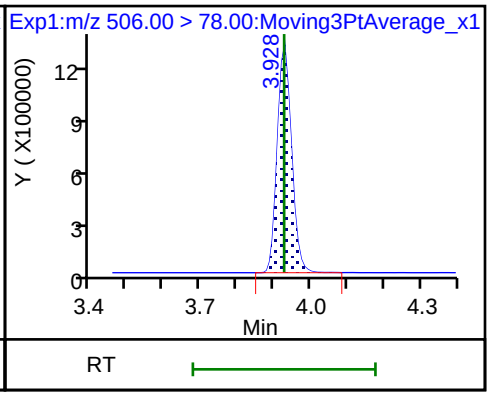
30 Perfluorononanoic acid



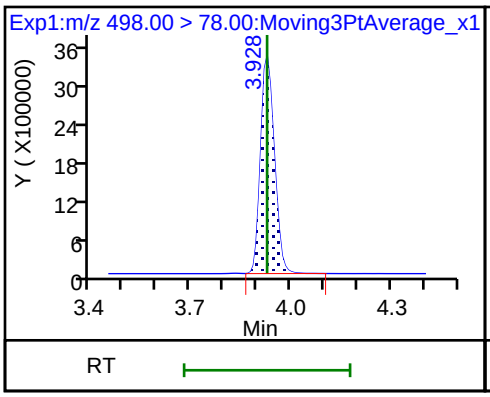
32 9-Chlorohexadecafluoro-3-oxanonane



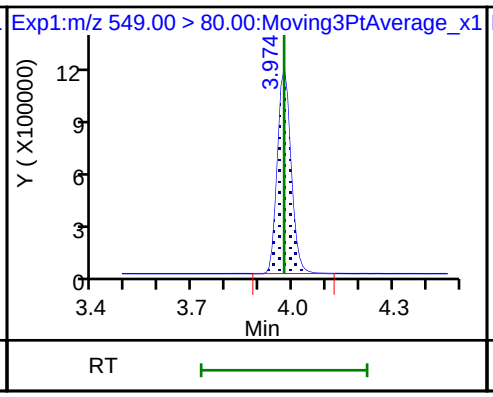
D 33 13C8 FOSA



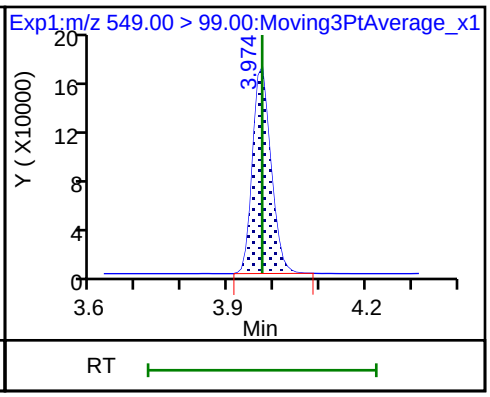
34 Perfluorooctanesulfonamide



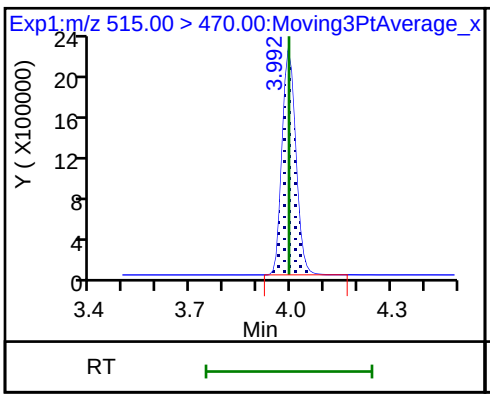
35 Perfluorononanesulfonic acid



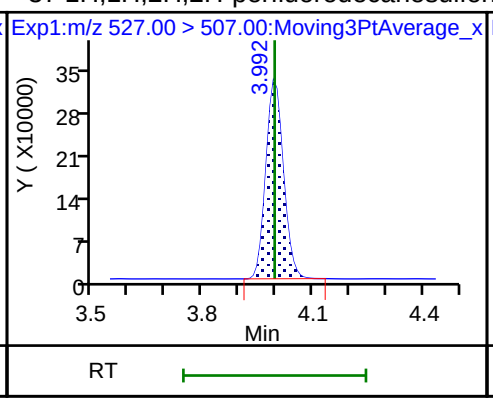
35 Perfluorononanesulfonic acid



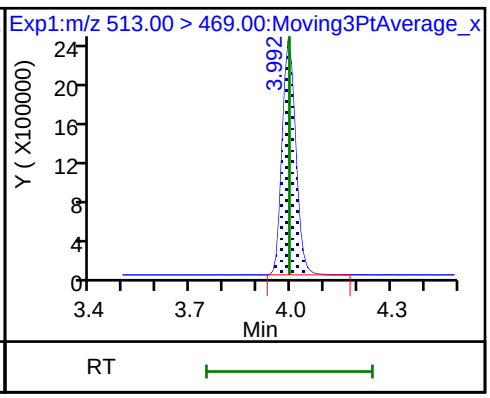
D 36 13C2 PFDA



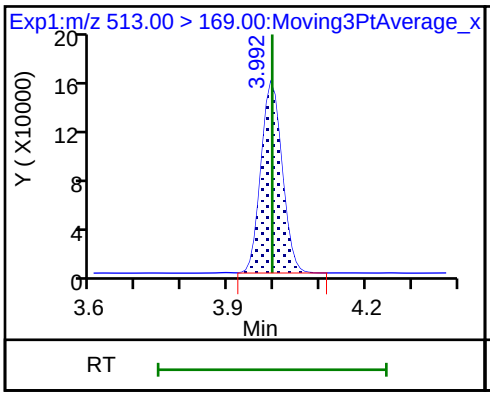
37 1H,1H,2H,2H-perfluorodecanesulfoni



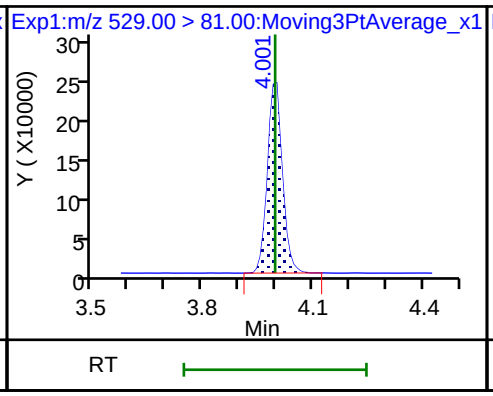
38 Perfluorodecanoic acid



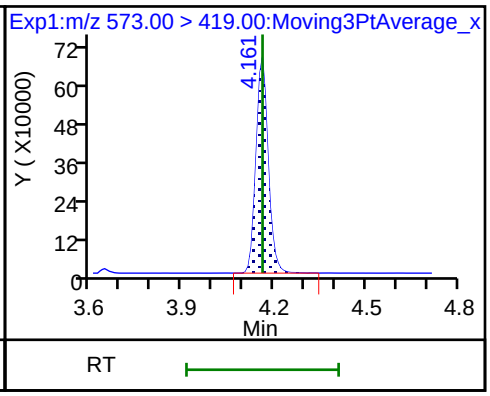
38 Perfluorodecanoic acid



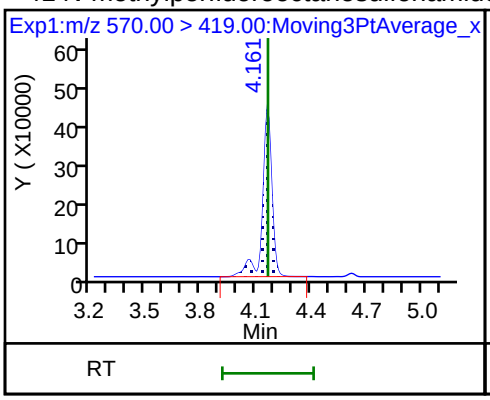
D 39 M2-8:2 FTS



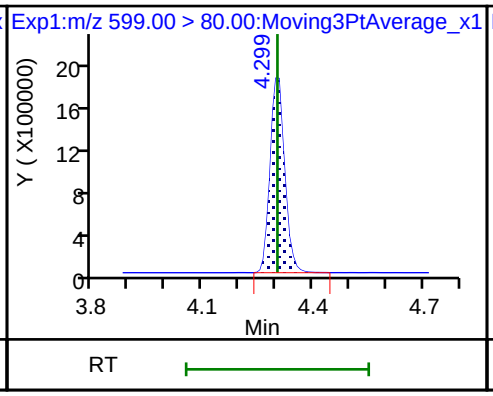
D 40 d3-NMeFOSAA



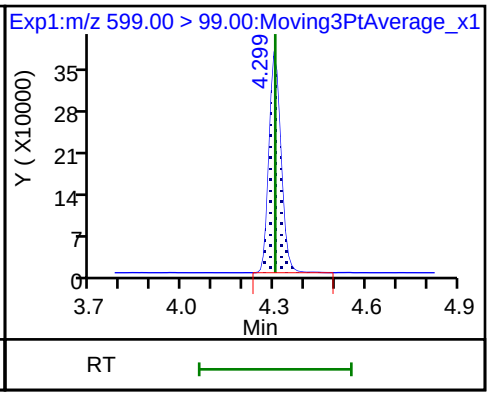
41 N-methylperfluorooctanesulfonamido



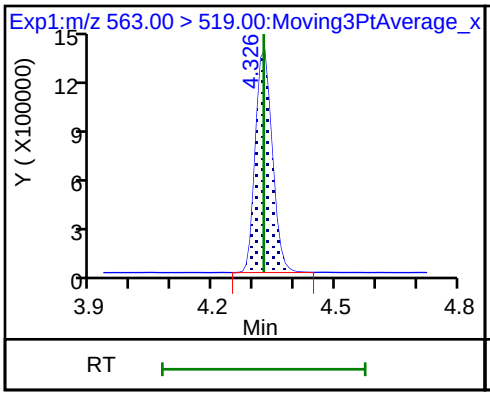
42 Perfluorodecanesulfonic acid



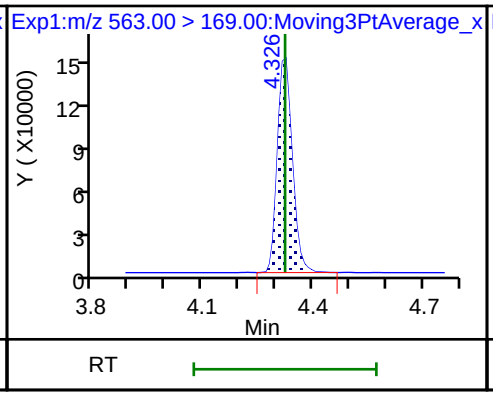
42 Perfluorodecanesulfonic acid



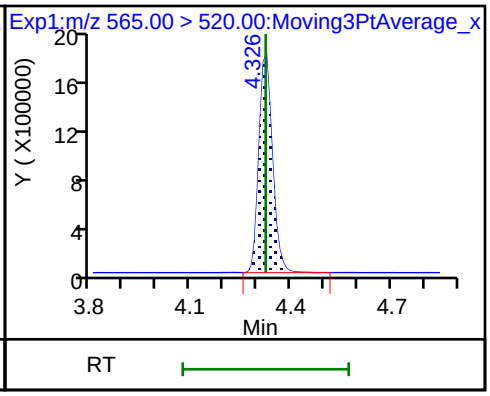
43 Perfluoroundecanoic acid



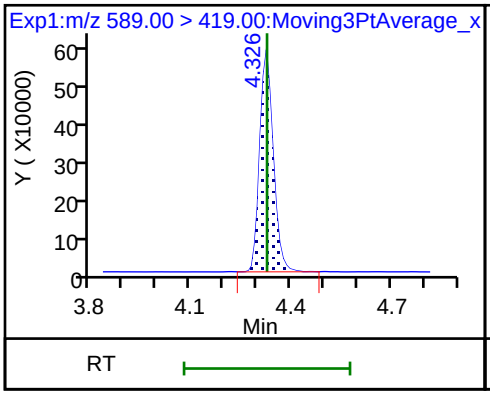
43 Perfluoroundecanoic acid



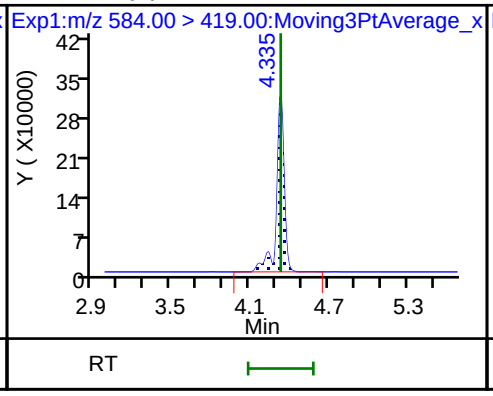
D 44 13C2 PFUnA



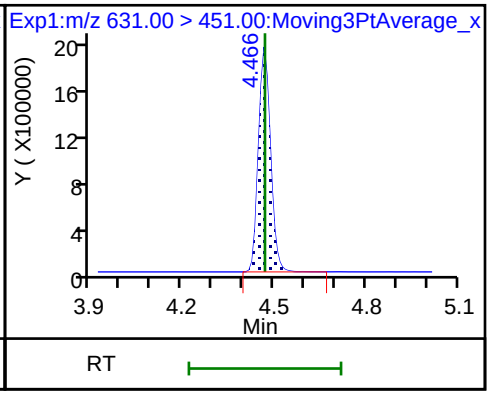
D 45 d5-NEtFOSAA



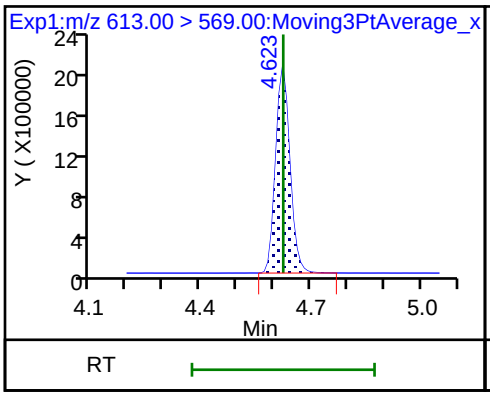
46 N-ethylperfluorooctanesulfonamidoa



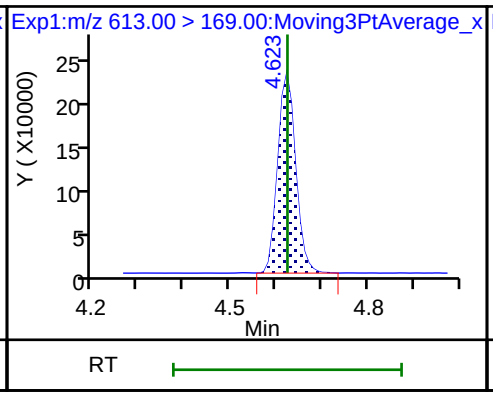
48 11-Chloroeicosafluoro-3-oxaundecan



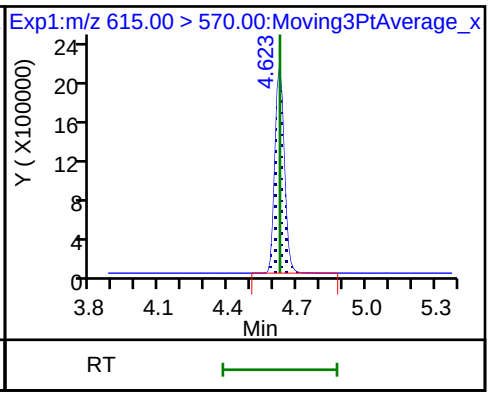
50 Perfluorododecanoic acid



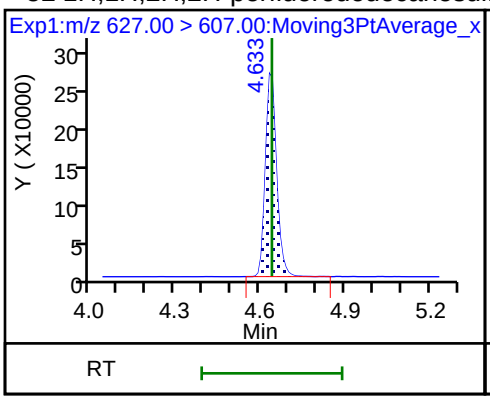
50 Perfluorododecanoic acid



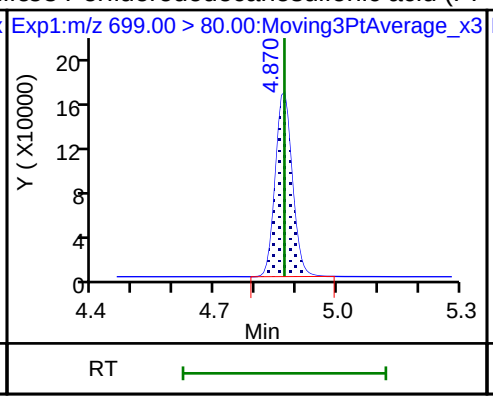
D 49 13C2 PFDoA



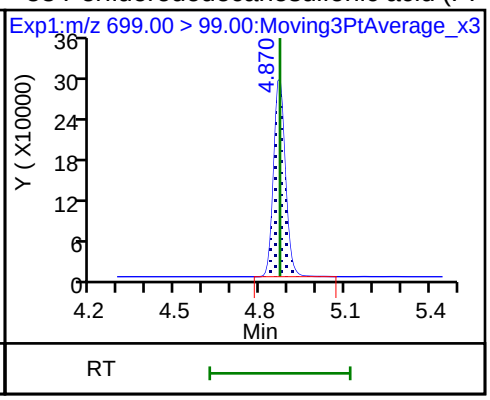
52 1H,1H,2H-perfluorododecanesulfo



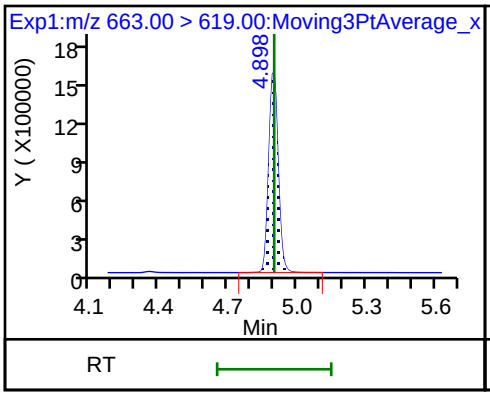
53 Perfluorododecanesulfonic acid (PF



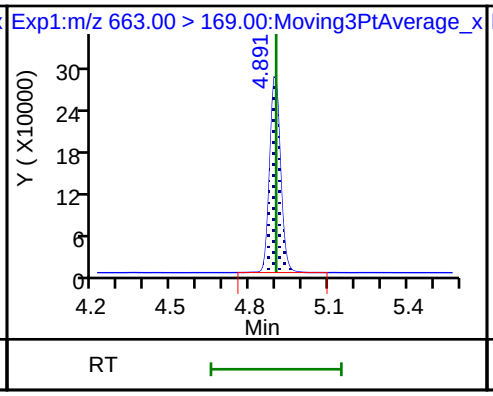
53 Perfluorododecanesulfonic acid (PF



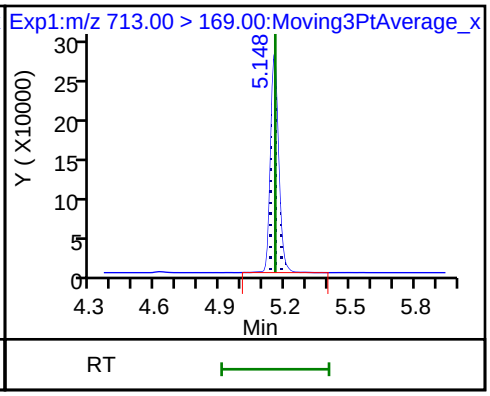
54 Perfluorotridecanoic acid



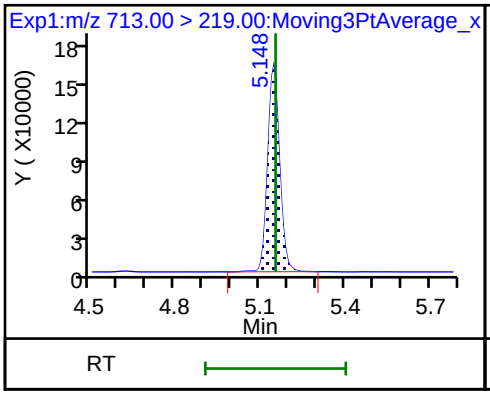
54 Perfluorotridecanoic acid



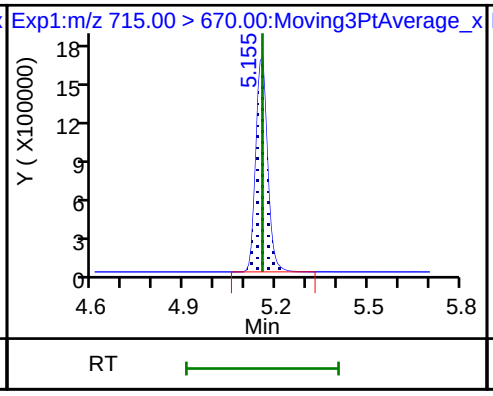
56 Perfluorotetradecanoic acid



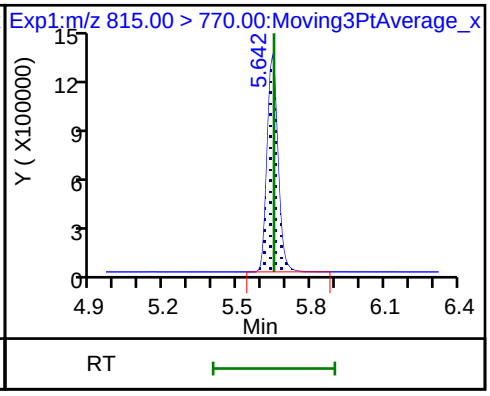
56 Perfluorotetradecanoic acid



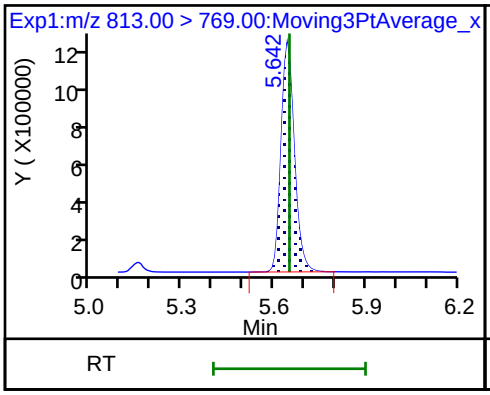
D 55 13C2 PFTeDA



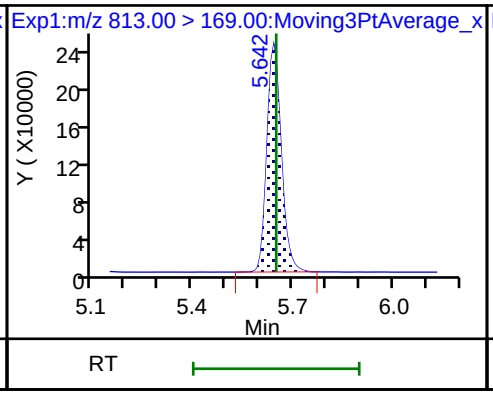
D 57 13C2 PFHxDA



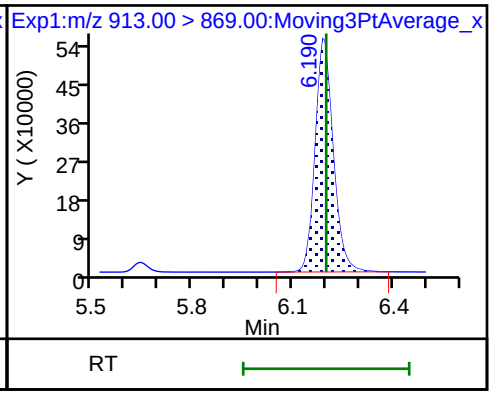
58 Perfluorohexadecanoic acid



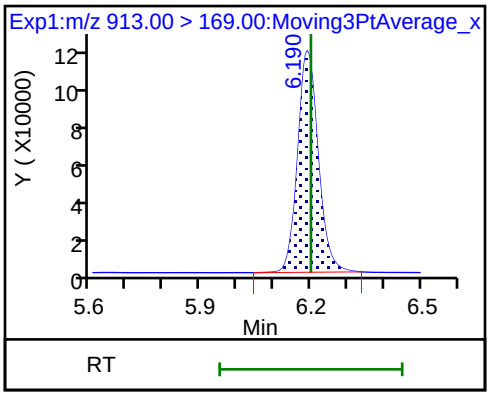
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_007.d
Lims ID: IC L6 Full
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-Mar-2019 12:04:38 ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CAL STD6
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 11-Mar-2019 13:12:51 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0331

First Level Reviewer: westendorfc Date: 11-Mar-2019 13:05:12
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.712	1.713	-0.001	1.000	10826674	5.01		100	2453	
D 1 13C4 PFBA										
217.00 > 172.00	1.712	1.714	-0.002	0.532	6176738	2.54		101	42100	
D 3 13C5 PFPeA										
267.90 > 223.00	2.036	2.042	-0.006	0.632	5287868	2.54		102	14352	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.036	2.045	-0.009	1.000	9658558	4.63		92.6	877	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.069	2.075	-0.006	1.000	12892547	4.19	Target=2.69	94.7	20769	
298.90 > 99.00	2.069	2.075	-0.006	1.000	5083533		0.00(1.88-3.50)	94.7	7526	
D 5 13C3 PFBS										
301.90 > 80.00	2.069	2.076	-0.007	0.642	7786058	2.38		102	1274680	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.365	2.369	-0.004	1.000	2308770	4.41		94.4	11834	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.365	2.371	-0.006	0.734	498943	2.43		104	1453	
D 9 13C2 PFHxA										
315.00 > 270.00	2.403	2.409	-0.006	0.746	6047775	2.59		104	10861	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.403	2.411	-0.008	1.000	9919830	4.72	Target=13.98	94.4	3890	
313.00 > 119.00	2.403	2.411	-0.008	1.000	743186		0.00(9.79-18.17)	94.4	2729	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.422	2.427	-0.005	1.171	7197714	4.68	Target=2.01	99.8	4604	
349.00 > 99.00	2.422	2.427	-0.005	1.171	3591857		0.00(1.41-2.62)	99.8	5516	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.529	2.534	-0.005	0.785	804601	2.56		102	4512	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.529	2.536	-0.007	1.000	2226129	4.98		99.6	1613	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.810	2.817	-0.007	1.000	13137424	4.67	Target=4.51	93.3	5119	
363.00 > 169.00	2.810	2.817	-0.007	1.000	3084098		0.00(3.16-5.86)	93.3	6080	
D 16 13C4 PFHpA										
367.00 > 322.00	2.810	2.817	-0.007	0.873	7050241	2.44		97.7	5486	
D 17 18O2 PFHxS										
403.00 > 84.00	2.810	2.822	-0.012	0.873	4642503	2.46		104	3727	
18 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.819	2.824	-0.005	1.003	10328221	4.35	Target=3.29	95.5	5359	
399.00 > 99.00	2.810	2.824	-0.014	1.000	3149960		0.00(2.30-4.28)	95.5	4006	
19 DONA										
377.00 > 251.00	2.864	2.869	-0.005	0.794	20711275	4.17	Target=2.25	88.5	11359	
377.00 > 85.00	2.864	2.869	-0.005	0.794	9903437		0.00(1.58-2.93)	88.5	6265	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.197	3.209	-0.012	0.993	616323	2.36		99.5	3617	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.197	3.210	-0.013	1.000	2461061	4.81		102	6469	
D 22 13C8 PFOA										
421.00 > 376.00	3.213	3.225	-0.012	0.998	5399024	2.40		98.3	5223	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.221	3.230	-0.009	0.893	10355222	4.77	Target=3.86	100	4181	
449.00 > 99.00	3.221	3.230	-0.009	0.893	2846939		0.00(2.70-5.01)	100	5116	
D 25 13C4 PFOA										
417.00 > 372.00	3.221	3.230	-0.009	1.000	6380503	2.44		97.5	5244	
* 24 13C2 PFOA										
415.00 > 370.00	3.221	3.232	-0.011		7245804	2.50			8240	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.221	3.233	-0.012	1.000	12002208	4.52	Target=1.00	90.5	2829	
413.00 > 169.00	3.221	3.233	-0.012	1.000	4757295		2.52(0.70-1.30)	90.5	17959	
D 27 13C8 PFOS										
507.00 > 99.00	3.605	3.614	-0.009	1.119	1207143	2.39		99.8	3926	
D 28 13C4 PFOS										
503.00 > 80.00	3.605	3.617	-0.012	1.119	5414394	2.46		103	3727	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.605	3.618	-0.013	1.000	10310790	4.68	Target=1.00	101	3415	
499.00 > 99.00	3.605	3.618	-0.013	1.000	2502887		4.12(0.70-1.30)	101	20588	
D 31 13C5 PFNA										
468.00 > 423.00	3.620	3.626	-0.006	1.124	6150219	2.51		100	8247	
30 Perfluorononanoic acid										
463.00 > 419.00	3.620	3.628	-0.008	1.000	10929053	4.62	Target=5.29	92.3	3591	
463.00 > 169.00	3.620	3.628	-0.008	1.000	2191533		0.00(3.70-6.88)	92.3	5480	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.811	3.823	-0.012	1.057	7967639	4.52		97.1	5549	
D 33 13C8 FOSA										
506.00 > 78.00	3.920	3.927	-0.007	1.217	3644720	2.53		101	6883	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.920	3.928	-0.008	1.000	19106433	4.76		95.1	5212	
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.965	3.973	-0.008	1.100	6324292	4.83	Target=6.21	101	6582	
549.00 > 99.00	3.965	3.973	-0.008	1.100	989029		0.00(4.35-8.07)	101	2572	
D 36 13C2 PFDA										
515.00 > 470.00	3.983	3.994	-0.011	1.237	6302430	2.50		100	4000	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.983	3.995	-0.012	1.000	2222211	4.75		99.1	6886	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.983	3.995	-0.012	1.000	12404114	4.64	Target=15.01	92.7	6173	
513.00 > 169.00	3.983	3.995	-0.012	1.000	931409		0.00(10.51-19.52)	92.7	1825	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.983	3.997	-0.014	1.237	696692	2.35		98.3	1748	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.152	4.161	-0.009	1.289	2032852	2.66		106	807	
41 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	4.152	4.165	-0.013	1.000	3150654	4.86		97.3	1095	M
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.290	4.303	-0.013	1.190	9212958	4.74	Target=4.69	98.3	7793	
599.00 > 99.00	4.290	4.303	-0.013	1.190	1944007		0.00(3.28-6.10)	98.3	5247	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.317	4.324	-0.008	1.000	7408948	4.61	Target=8.65	92.2	3277	
563.00 > 169.00	4.317	4.324	-0.008	1.000	849267		0.00(6.05-11.24)	92.2	2528	
D 44 13C2 PFUnA										
565.00 > 520.00	4.317	4.324	-0.008	1.340	5143182	2.50		99.9	5204	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.317	4.328	-0.012	1.340	1639589	2.52		101	1961	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.326	4.333	-0.007	1.002	2424021	4.96		99.1	5177	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.456	4.469	-0.013	1.236	9642460	4.01		85.1	7548	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.613	4.624	-0.011	1.000	10261424	4.47	Target=8.64	89.3	4210	
613.00 > 169.00	4.613	4.624	-0.011	1.000	1257788		0.00(6.05-11.23)	89.3	3915	
D 49 13C2 PFDoA										
615.00 > 570.00	4.613	4.624	-0.011	1.432	6030785	2.59		104	9557	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.633	4.641	-0.008	1.163	1452496	5.04		105	2746	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.856	4.870	-0.014	1.347	944411	4.82	Target=0.57	99.6	5021	
699.00 > 99.00	4.856	4.870	-0.014	1.347	1740706		0.00(0.40-0.74)	99.6	8576	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.885	4.899	-0.014	1.059	8375053	4.63	Target=5.68	92.7	3279	
663.00 > 169.00	4.885	4.899	-0.014	1.059	1615388		0.00(3.97-7.38)	92.7	7798	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.140	5.154	-0.014	1.000	1481693	4.98	Target=1.53	99.5	2016	
713.00 > 219.00	5.140	5.154	-0.014	1.000	1016623		0.00(1.07-1.99)	99.5	2454	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.140	5.154	-0.014	1.596	4231886	2.48		99.0	12970	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.634	5.648	-0.014	1.749	4423897	2.66		106	9375	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.634	5.649	-0.015	1.000	7483573	4.94	Target=5.11	98.7	605	
813.00 > 169.00	5.634	5.649	-0.015	1.000	1492141		0.00(3.57-6.64)	98.7	4410	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	6.177	6.200	-0.023	1.096	4598557	5.08	Target=4.80	102	739	
913.00 > 169.00	6.177	6.200	-0.023	1.096	959148		0.00(3.36-6.24)	102	2788	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL6_00011 Amount Added: 1.00 Units: mL

Report Date: 11-Mar-2019 13:12:53 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_007.d

Injection Date: 11-Mar-2019 12:04:38 Instrument ID: A9

Lims ID: IC L6 Full

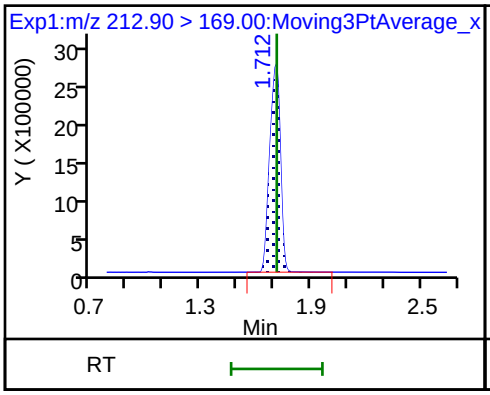
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 15 Worklist Smp#: 7

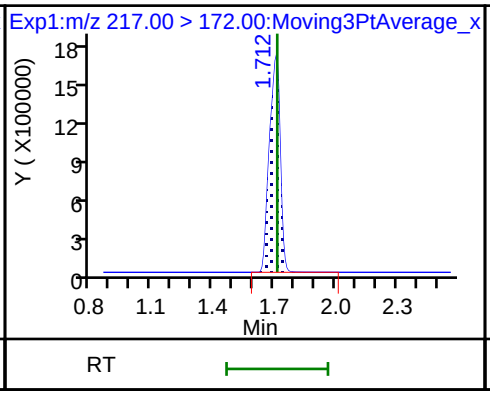
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

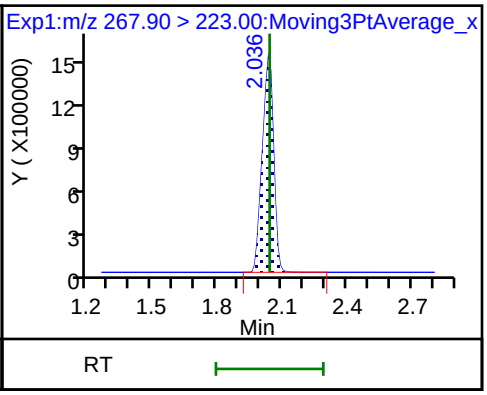
2 Perfluorobutanoic acid



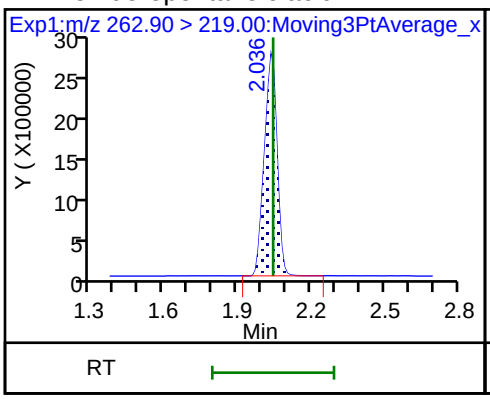
D 1 13C4 PFBA



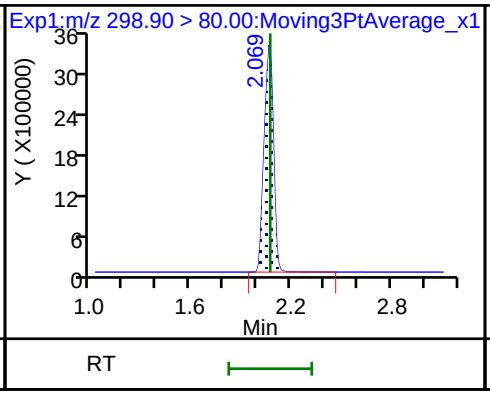
D 3 13C5 PFPeA



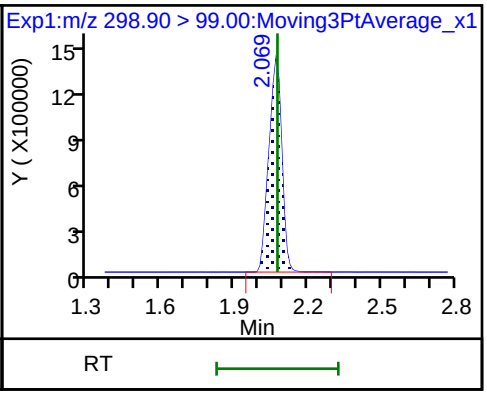
4 Perfluoropentanoic acid



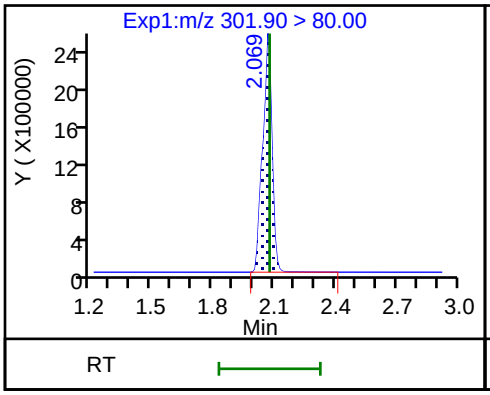
6 Perfluorobutanesulfonic acid



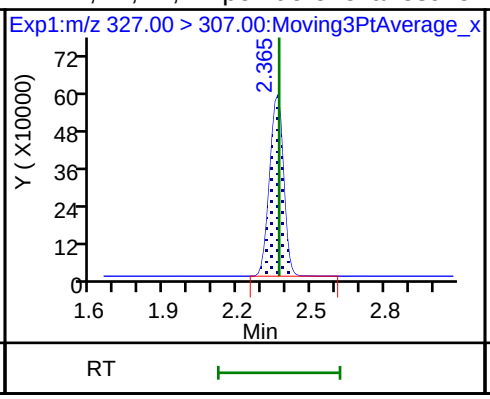
6 Perfluorobutanesulfonic acid



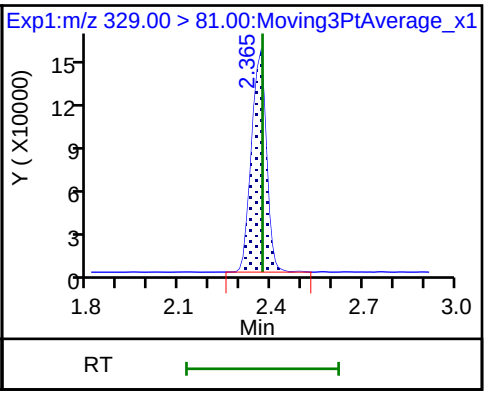
D 5 13C3 PFBS



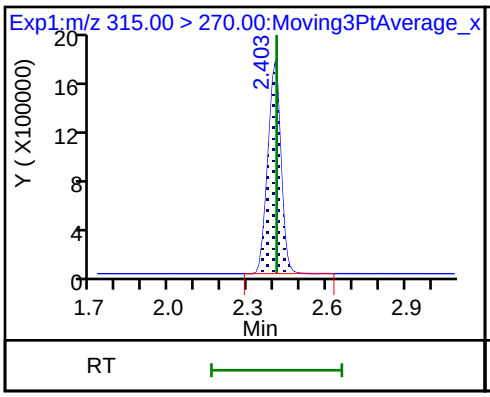
7 1H,1H,2H,2H-perfluorohexanesulfon



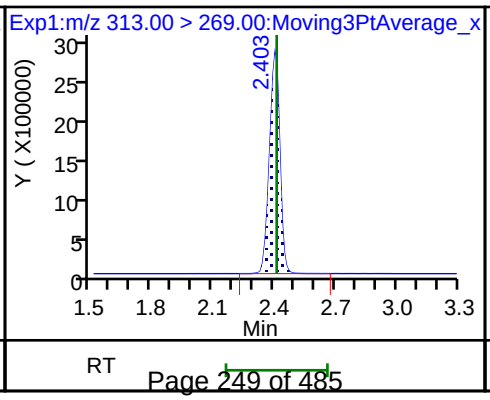
D 8 M2-4:2 FTS



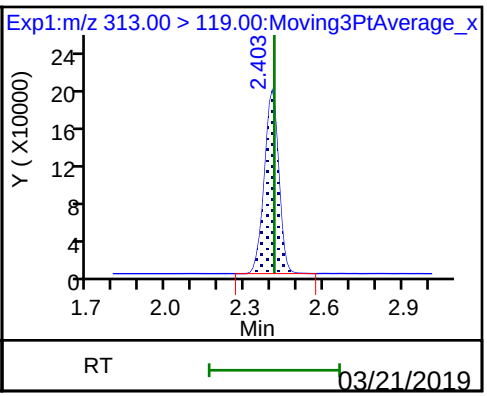
D 9 13C2 PFHxA



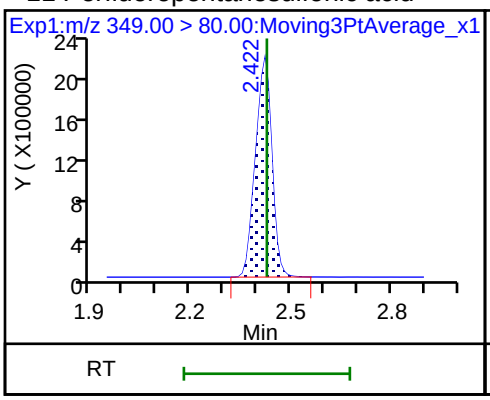
10 Perfluorohexanoic acid



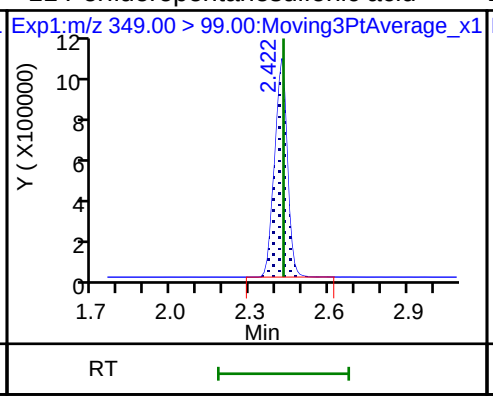
10 Perfluorohexanoic acid



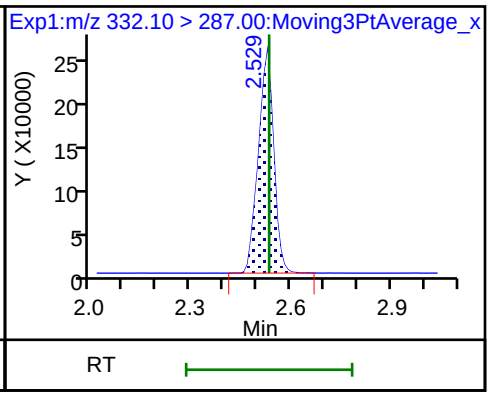
11 Perfluoropentanesulfonic acid



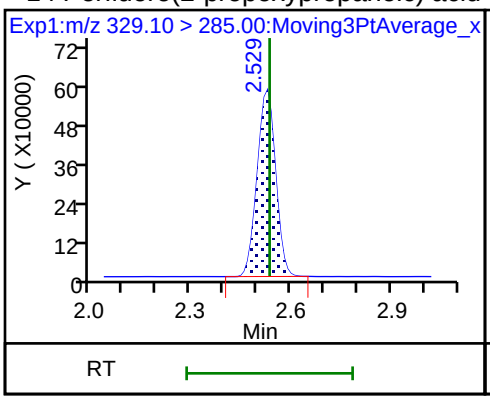
11 Perfluoropentanesulfonic acid



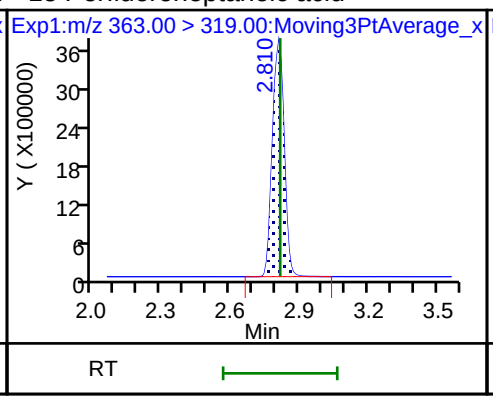
D 13 13C3 HFPO-DA



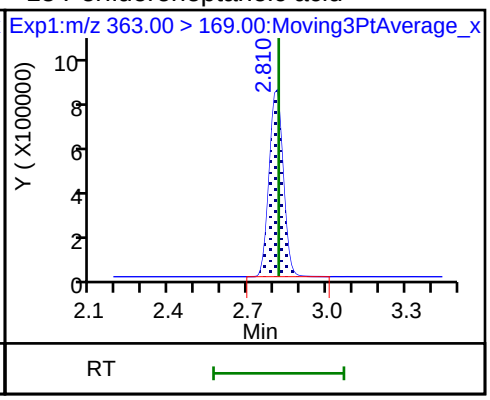
14 Perfluoro(2-propoxypropanoic) acid



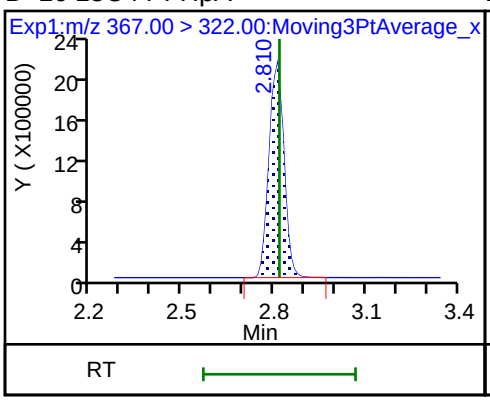
15 Perfluoroheptanoic acid



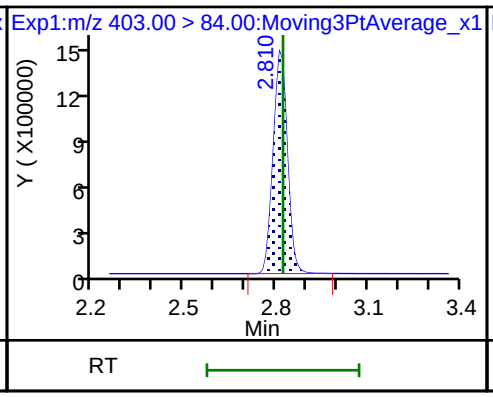
15 Perfluoroheptanoic acid



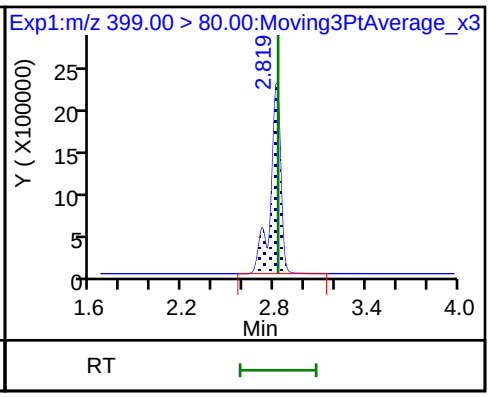
D 16 13C4 PFHpA



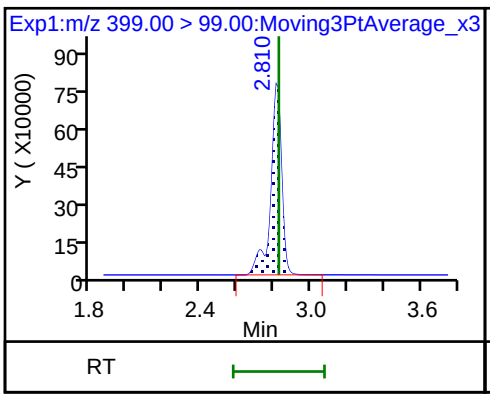
D 17 18O2 PFHxS



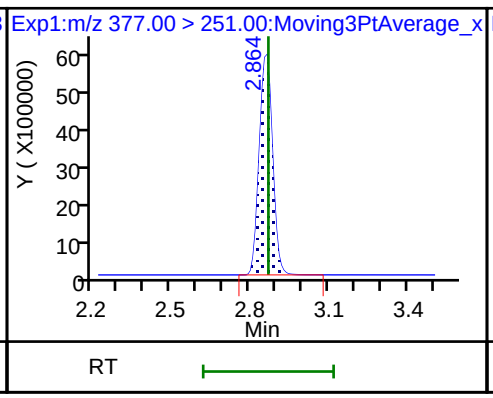
18 Perfluorohexanesulfonic acid



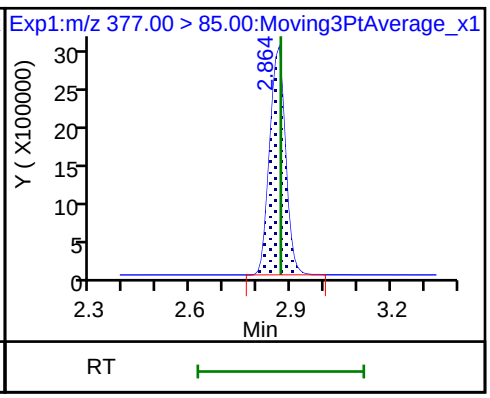
18 Perfluorohexanesulfonic acid



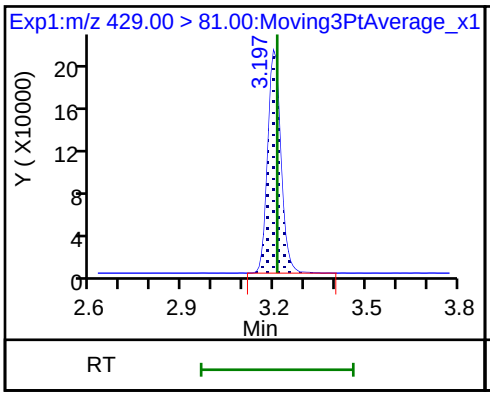
19 DONA



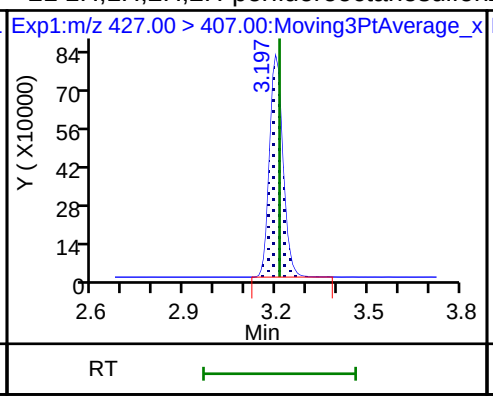
19 DONA



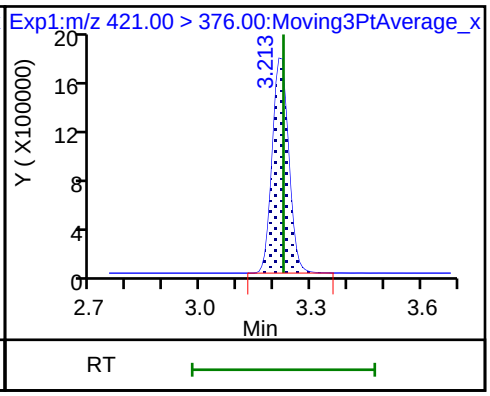
D 20 M2-6:2 FTS



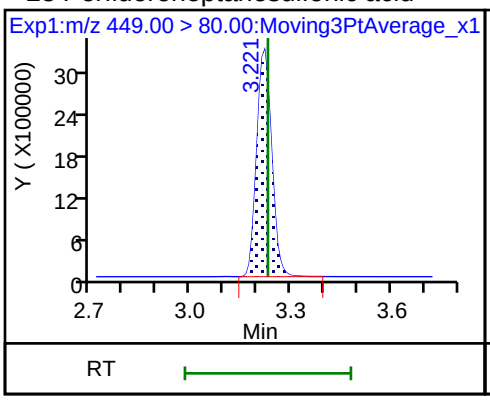
21 1H,1H,2H,2H-perfluorooctanesulfon



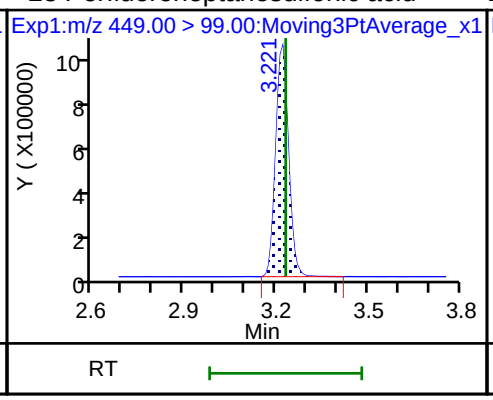
D 22 13C8 PFOA



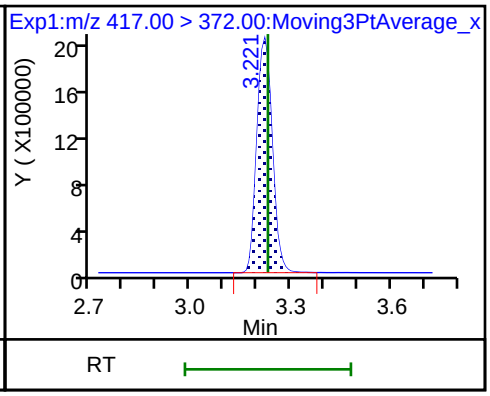
23 Perfluoroheptanesulfonic acid



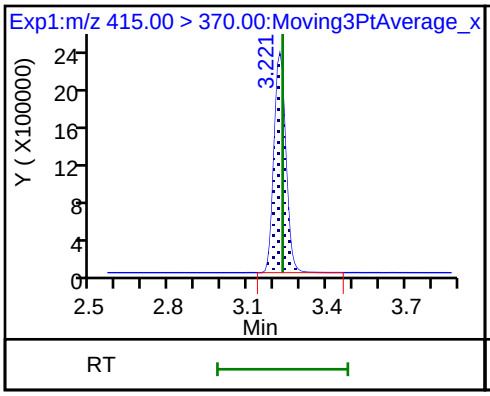
23 Perfluoroheptanesulfonic acid



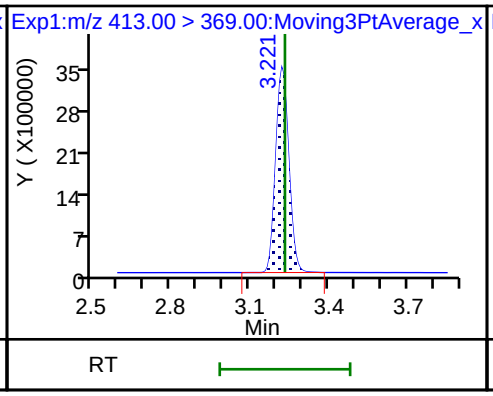
D 25 13C4 PFOA



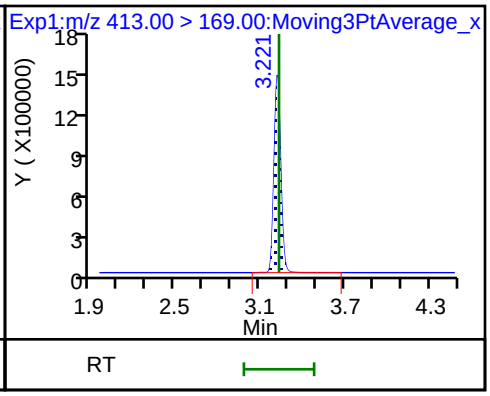
* 24 13C2 PFOA



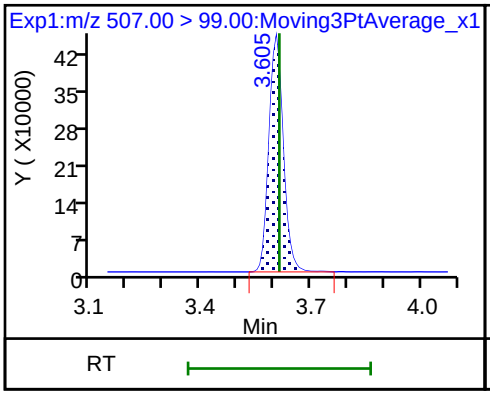
26 Perfluorooctanoic acid



26 Perfluorooctanoic acid



D 27 13C8 PFOS



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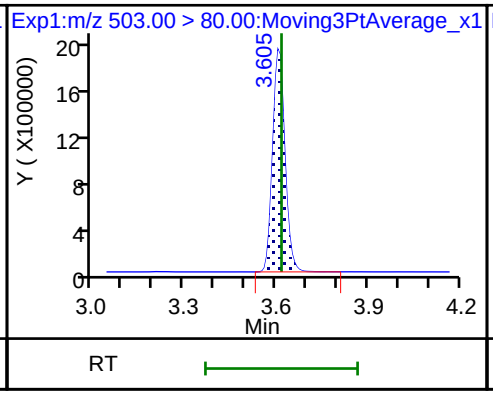
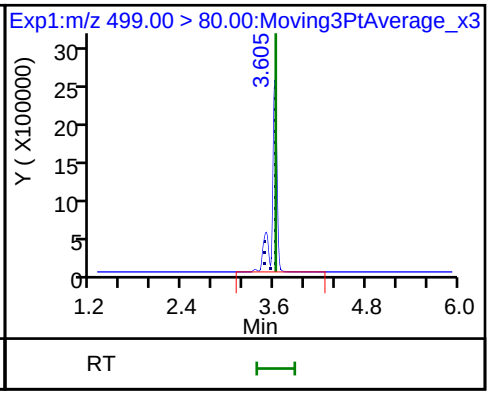
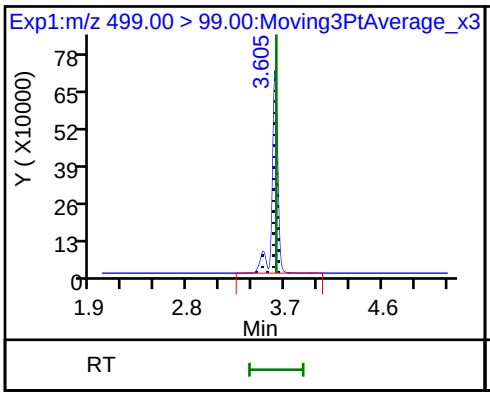


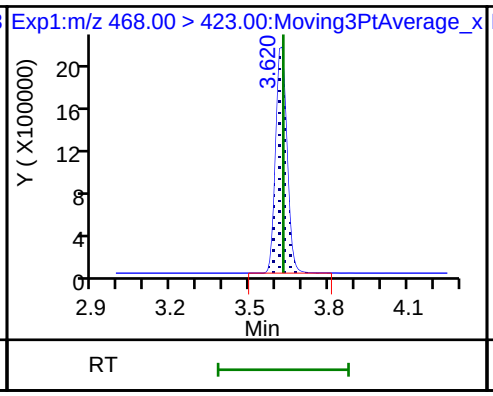
29 Perfluorooctanesulfonic acid



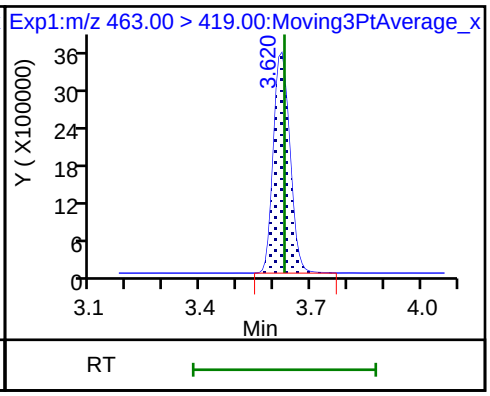
29 Perfluorooctanesulfonic acid



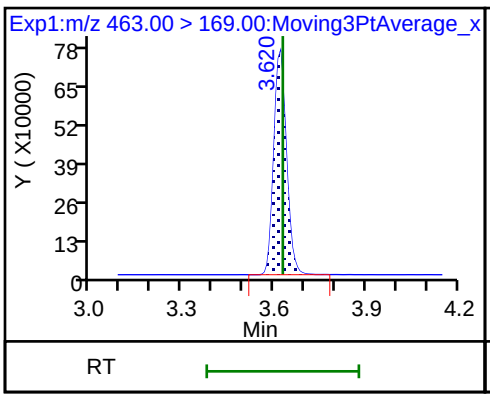
D 31 13C5 PFNA



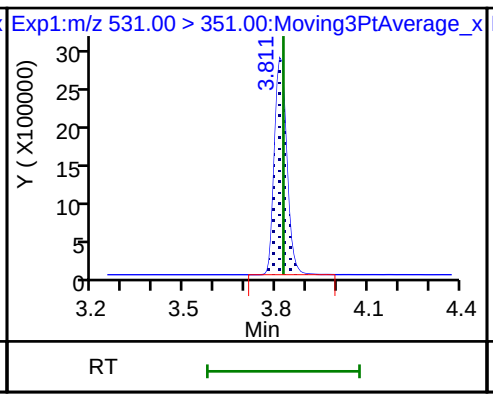
30 Perfluorononanoic acid



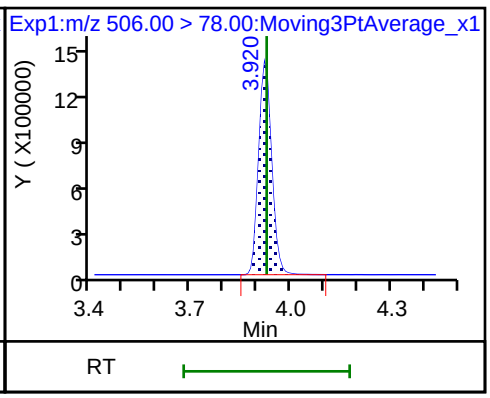
30 Perfluorononanoic acid



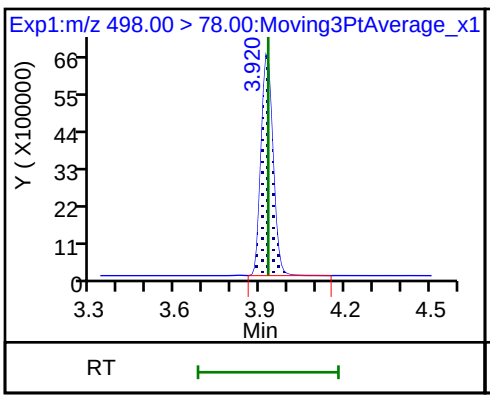
32 9-Chlorohexadecafluoro-3-oxanonane



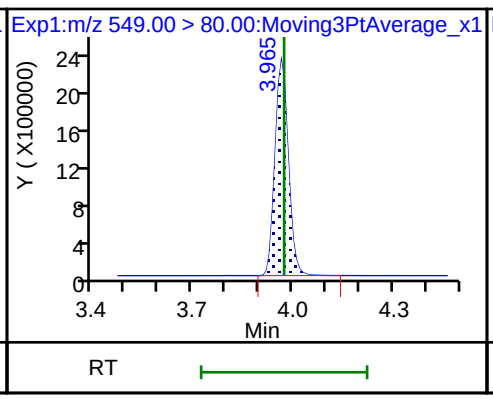
D 33 13C8 FOSA



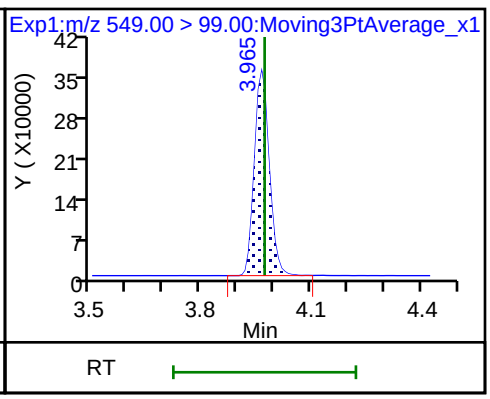
34 Perfluorooctanesulfonamide



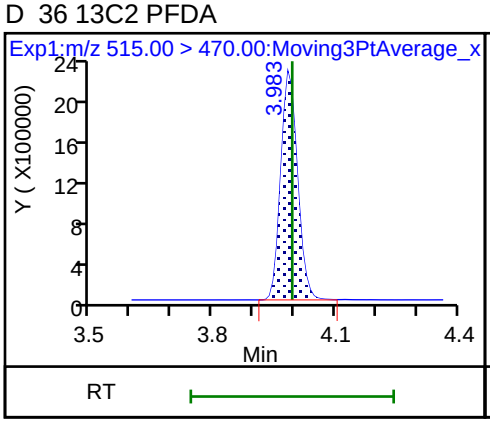
35 Perfluorononanesulfonic acid



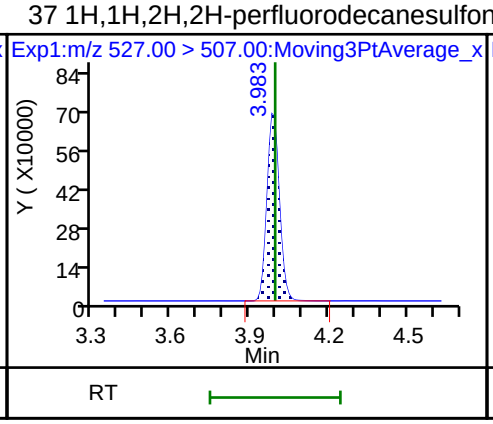
35 Perfluorononanesulfonic acid



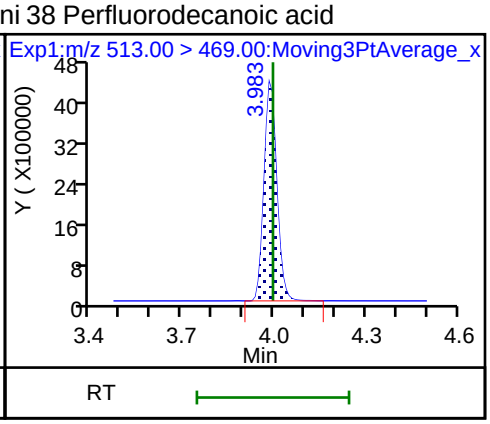
D 36 13C2 PFDA



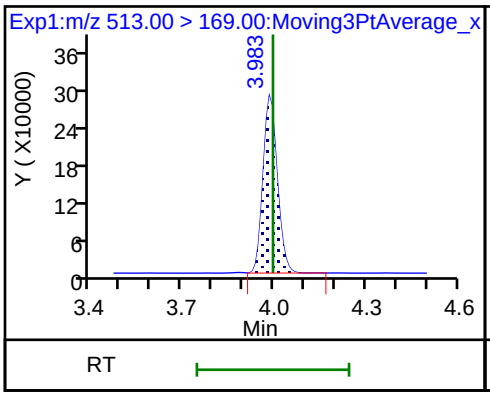
37 1H,1H,2H,2H-perfluorodecanesulfoni



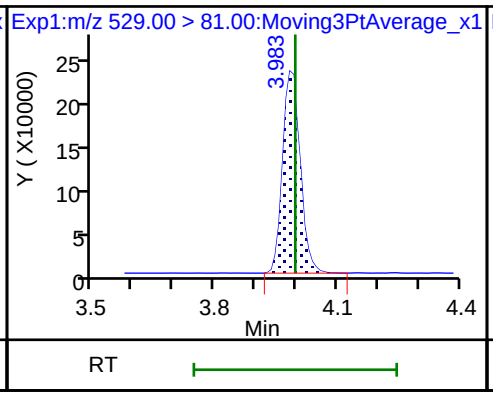
38 Perfluorodecanoic acid



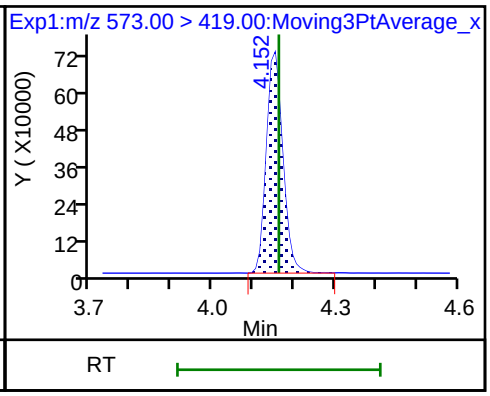
38 Perfluorodecanoic acid



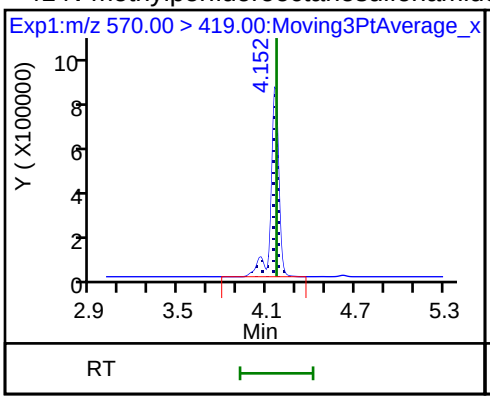
D 39 M2-8:2 FTS



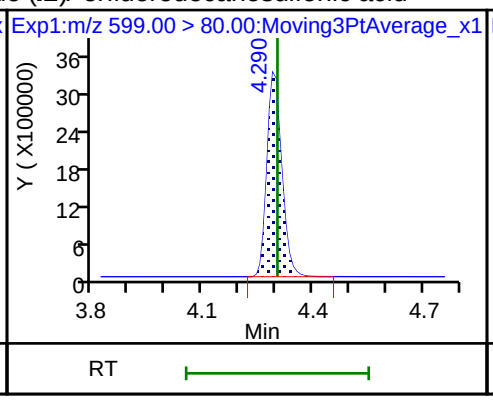
D 40 d3-NMeFOSAA



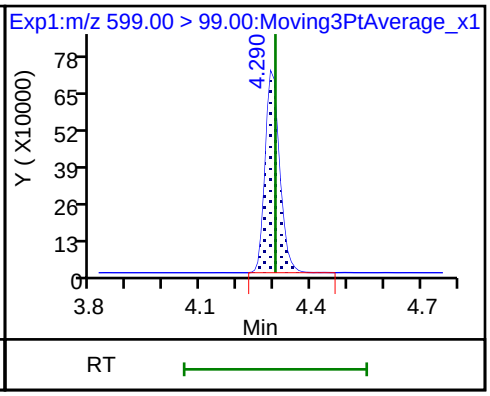
41 N-methylperfluorooctanesulfonamido (42)



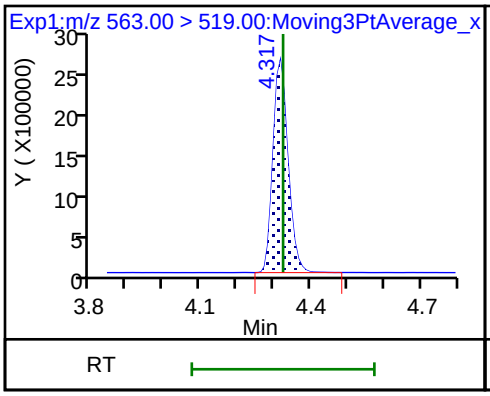
42 Perfluorodecanesulfonic acid



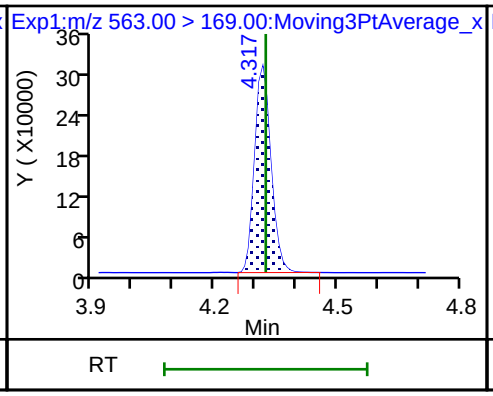
42 Perfluorodecanesulfonic acid



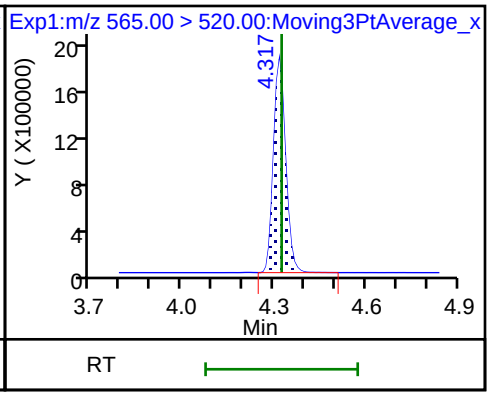
43 Perfluoroundecanoic acid



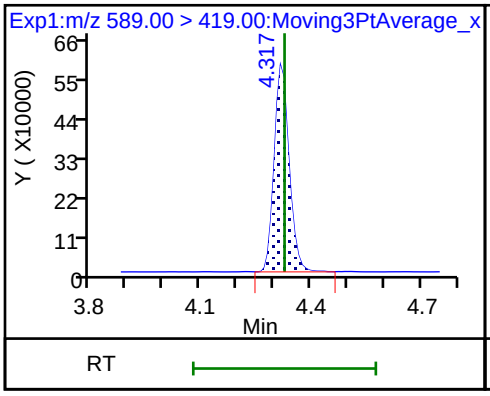
43 Perfluoroundecanoic acid



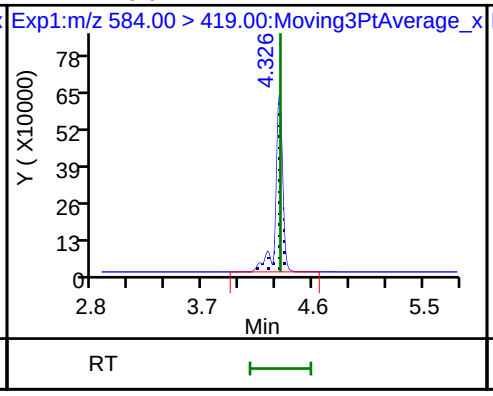
D 44 13C2 PFUnA



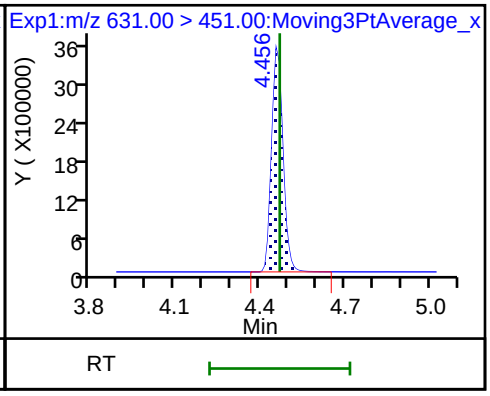
D 45 d5-NEtFOSAA



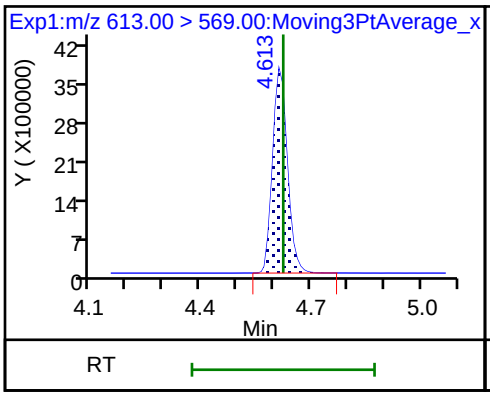
46 N-ethylperfluorooctanesulfonamidoa



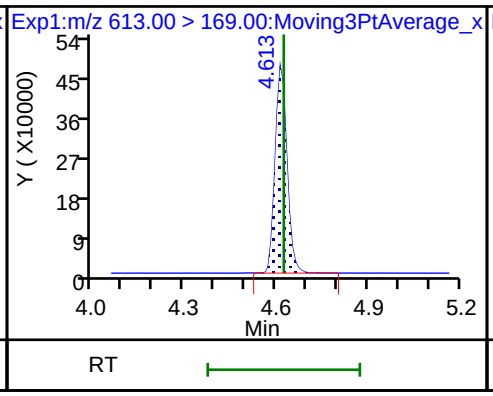
48 11-Chloroeicosafluoro-3-oxaundecan



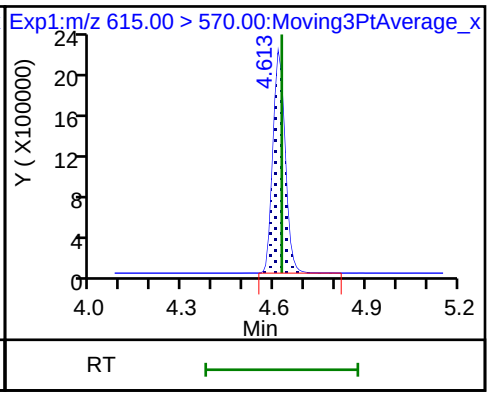
50 Perfluorododecanoic acid



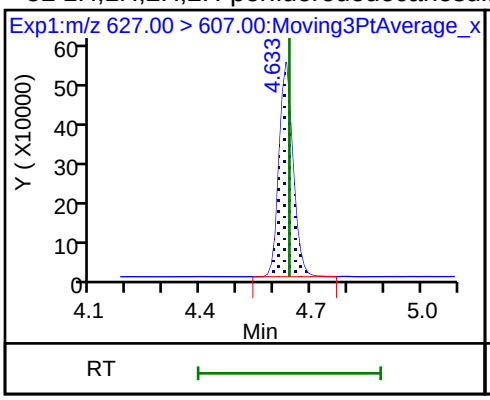
50 Perfluorododecanoic acid



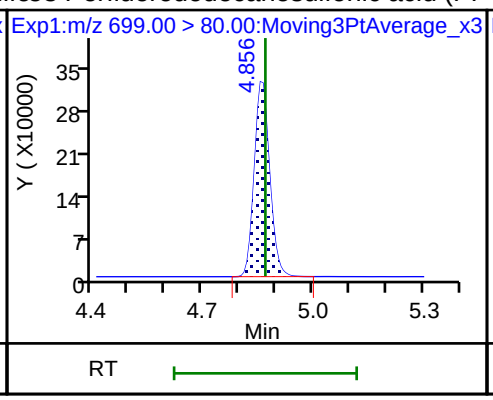
D 49 13C2 PFDoA



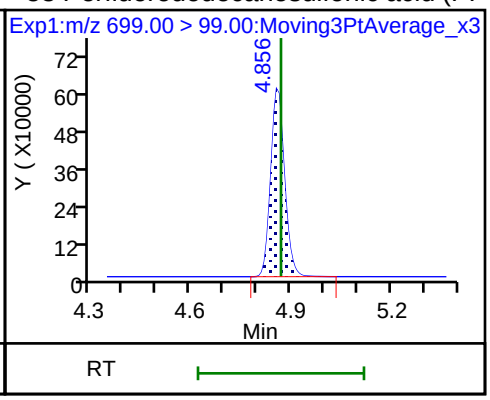
52 1H,1H,2H-perfluorododecanesulfo



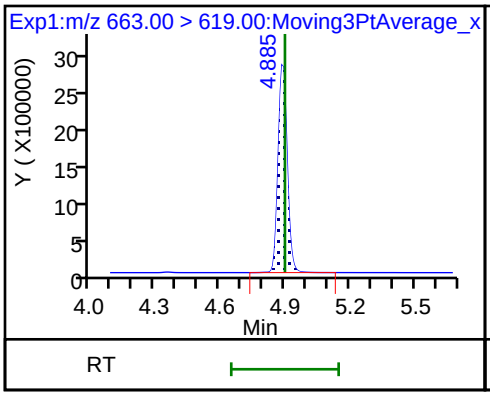
53 Perfluorododecanesulfonic acid (PF



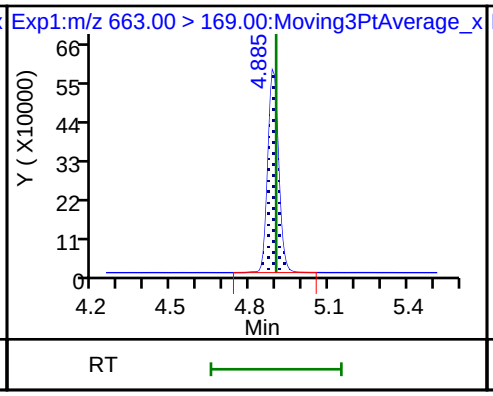
53 Perfluorododecanesulfonic acid (PF



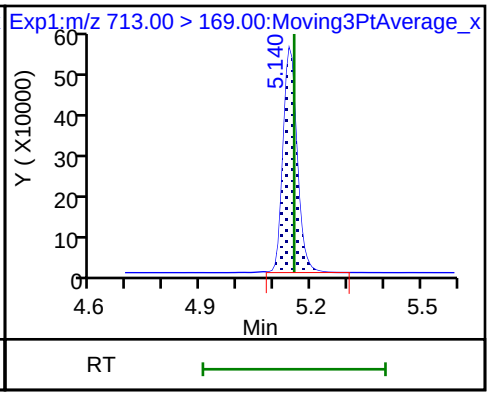
54 Perfluorotridecanoic acid



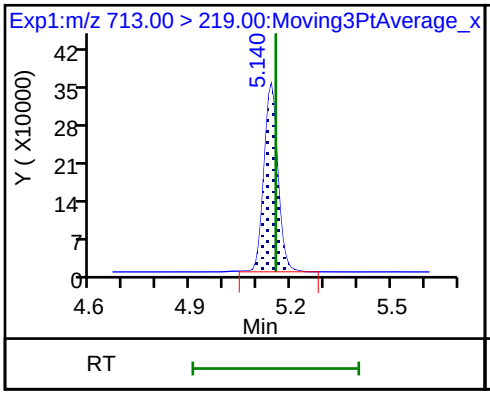
54 Perfluorotridecanoic acid



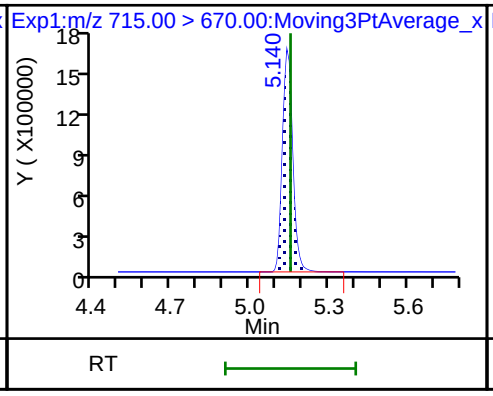
56 Perfluorotetradecanoic acid



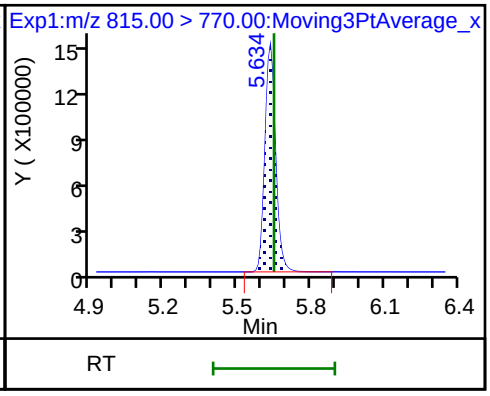
56 Perfluorotetradecanoic acid



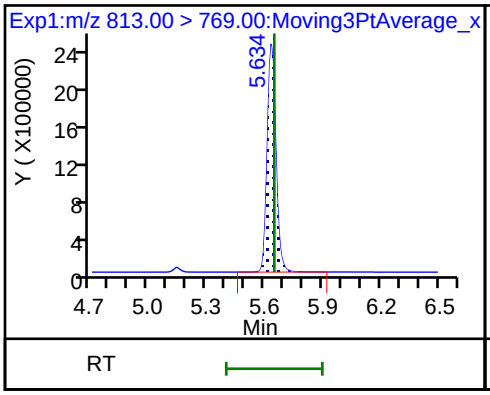
D 55 13C2 PFTeDA



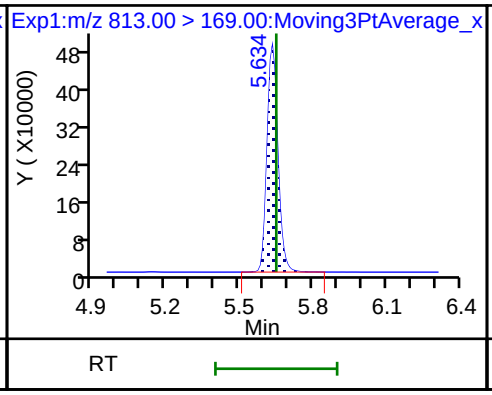
D 57 13C2 PFHxDA



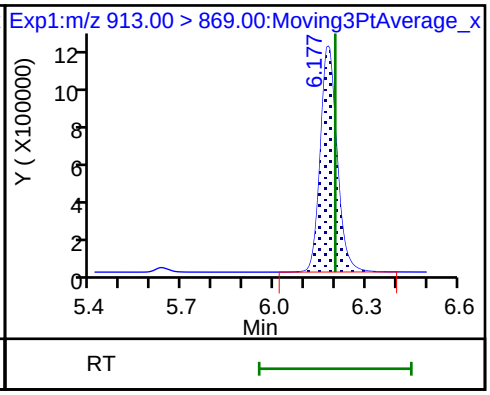
58 Perfluorohexadecanoic acid



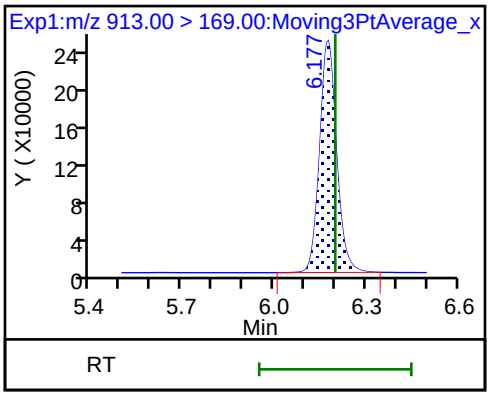
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

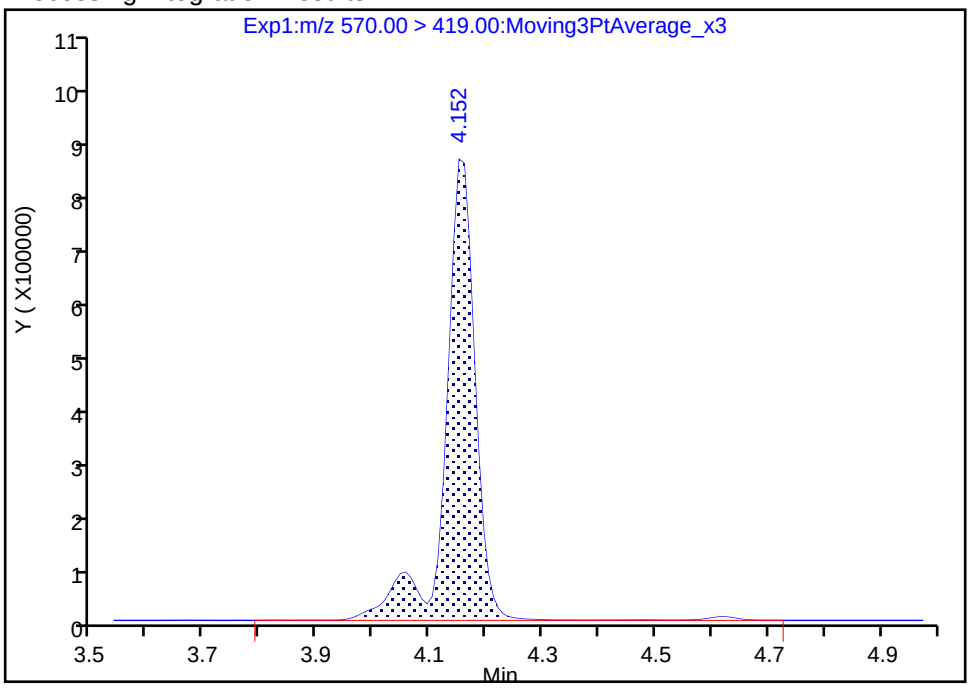
Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_007.d
Injection Date: 11-Mar-2019 12:04:38 Instrument ID: A9
Lims ID: IC L6 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 15 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

41 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

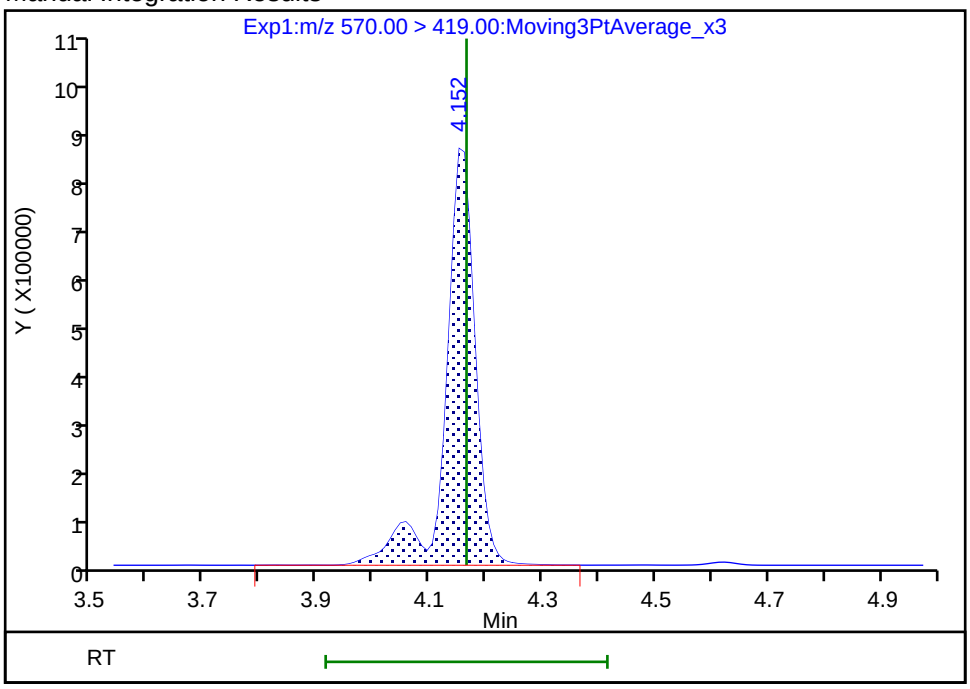
Processing Integration Results

RT: 4.15
Area: 3176036
Amount: 4.896702
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Area: 3150654
Amount: 4.863006
Amount Units: ng/ml



Reviewer: westendorfc, 11-Mar-2019 13:05:02
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d
Lims ID: IC L7 Full
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 11-Mar-2019 12:12:07 ALS Bottle#: 16 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CAL STD7
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 11-Mar-2019 13:12:57 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0331

First Level Reviewer: westendorfc Date: 11-Mar-2019 13:05:39
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.712	1.713	-0.001	1.000	19659278	8.98		89.8	4666	
D 1 13C4 PFBA										
217.00 > 172.00	1.712	1.714	-0.002	0.530	6256199	2.72		109	36084	
D 3 13C5 PFPeA										
267.90 > 223.00	2.036	2.042	-0.006	0.630	5192573	2.64		106	19417	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.046	2.045	0.001	1.005	17440321	8.52		85.2	1332	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.080	2.075	0.005	1.000	24013785	8.02	Target=2.69	90.8	23513	
298.90 > 99.00	2.080	2.075	0.005	1.000	9883500		0.00(1.88-3.50)	90.8	13058	
D 5 13C3 PFBS										
301.90 > 80.00	2.080	2.076	0.004	0.644	7565988	2.45		105	756778	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.365	2.369	-0.004	1.000	4375919	8.67		92.9	8795	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.365	2.371	-0.006	0.732	480652	2.48		106	1465	
D 9 13C2 PFHxA										
315.00 > 270.00	2.405	2.409	-0.004	0.745	5686273	2.58		103	6777	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.414	2.411	0.003	1.004	17169474	8.69	Target=13.98	86.9	5061	
313.00 > 119.00	2.405	2.411	-0.006	1.000	1463615		0.00(9.79-18.17)	86.9	5720	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.423	2.427	-0.004	1.165	13222270	8.85	Target=2.01	94.3	7995	
349.00 > 99.00	2.423	2.427	-0.004	1.165	6976228		0.00(1.41-2.62)	94.3	7261	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.532	2.534	-0.002	0.784	792405	2.67		107	2736	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.532	2.536	-0.004	1.000	4459552	10.1		101	2716	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.813	2.817	-0.004	1.000	23421165	8.56	Target=4.51	85.6	6008	
363.00 > 169.00	2.813	2.817	-0.004	1.000	5973980		0.00(3.16-5.86)	85.6	8326	
D 16 13C4 PFHpA										
367.00 > 322.00	2.813	2.817	-0.004	0.871	6849971	2.52		101	5780	
D 17 18O2 PFHxS										
403.00 > 84.00	2.813	2.822	-0.009	0.871	4469516	2.51		106	4918	
18 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.822	2.824	-0.002	1.003	19004014	8.30	Target=3.29	91.3	63532	
399.00 > 99.00	2.822	2.824	-0.002	1.003	5928948		0.00(2.30-4.28)	91.3	8058	
19 DONA										
377.00 > 251.00	2.867	2.869	-0.002	0.793	34373470	7.38	Target=2.25	78.3	9824	
377.00 > 85.00	2.867	2.869	-0.002	0.793	17620512		0.00(1.58-2.93)	78.3	6750	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.199	3.209	-0.010	0.990	577300	2.35		98.8	1837	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.206	3.210	-0.004	1.002	4495390	9.39		99.0	6439	
D 22 13C8 PFOA										
421.00 > 376.00	3.222	3.225	-0.003	0.998	5269633	2.49		102	5797	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.222	3.230	-0.008	0.891	18794317	9.24	Target=3.86	97.0	4291	
449.00 > 99.00	3.222	3.230	-0.008	0.891	5509434		0.00(2.70-5.01)	97.0	5948	
D 25 13C4 PFOA										
417.00 > 372.00	3.230	3.230	0.0	1.000	6066025	2.45		98.2	6131	
* 24 13C2 PFOA										
415.00 > 370.00	3.230	3.232	-0.002		6839486	2.50			7330	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.230	3.233	-0.003	1.000	20741996	8.22	Target=1.00	82.2	14043	
413.00 > 169.00	3.230	3.233	-0.003	1.000	8786584		2.36(0.70-1.30)	82.2	42568	
D 27 13C8 PFOS										
507.00 > 99.00	3.607	3.614	-0.007	1.117	1196392	2.50		105	3481	
D 28 13C4 PFOS										
503.00 > 80.00	3.614	3.617	-0.003	1.119	5079180	2.44		102	2720	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.614	3.618	-0.004	1.000	18649553	9.03	Target=1.00	97.3	2986	
499.00 > 99.00	3.614	3.618	-0.004	1.000	4749622		3.93(0.70-1.30)	97.3	8691	
D 31 13C5 PFNA										
468.00 > 423.00	3.622	3.626	-0.004	1.121	5828696	2.52		101	6065	
30 Perfluorononanoic acid										
463.00 > 419.00	3.622	3.628	-0.006	1.000	19416271	8.65	Target=5.29	86.5	5756	
463.00 > 169.00	3.622	3.628	-0.006	1.000	4266793		0.00(3.70-6.88)	86.5	6912	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.823	3.823	0.0	1.058	15111363	9.15		98.2	8460	
D 33 13C8 FOSA										
506.00 > 78.00	3.926	3.927	-0.001	1.215	3683673	2.70		108	8191	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.926	3.928	-0.002	1.000	32759314	8.07		80.7	4281	
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.971	3.973	-0.002	1.099	11246027	9.16	Target=6.21	95.4	9160	
549.00 > 99.00	3.971	3.973	-0.002	1.099	2009647		0.00(4.35-8.07)	95.4	4085	
D 36 13C2 PFDA										
515.00 > 470.00	3.989	3.994	-0.005	1.235	5904064	2.48		99.4	7735	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.989	3.995	-0.006	1.000	4376194	10.5		109	10374	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.989	3.995	-0.006	1.000	20364319	8.13	Target=15.01	81.3	7110	
513.00 > 169.00	3.989	3.995	-0.006	1.000	1809198		0.00(10.51-19.52)	81.3	3085	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.989	3.997	-0.008	1.235	621464	2.22		92.9	2533	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.160	4.161	-0.001	1.288	1947390	2.70		108	227	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.160	4.165	-0.005	1.000	5956806	9.60		96.0	953	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.298	4.303	-0.005	1.189	16081594	8.81	Target=4.69	91.4	6855	
599.00 > 99.00	4.298	4.303	-0.005	1.189	4000144		0.00(3.28-6.10)	91.4	6519	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.316	4.324	-0.008	1.000	13510164	9.03	Target=8.65	90.3	4547	
563.00 > 169.00	4.326	4.324	0.002	1.002	1647285		0.00(6.05-11.24)	90.3	2579	
D 44 13C2 PFUnA										
565.00 > 520.00	4.316	4.324	-0.008	1.336	4785684	2.46		98.5	4605	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.326	4.328	-0.002	1.339	1537360	2.50		100	2012	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.326	4.333	-0.007	1.000	4813957	10.5		105	18387	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.466	4.469	-0.003	1.236	17349332	7.69		81.6	8019	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.615	4.624	-0.009	1.000	18402700	8.48	Target=8.64	84.8	6210	
613.00 > 169.00	4.615	4.624	-0.009	1.000	2550921		0.00(6.05-11.23)	84.8	3737	
D 49 13C2 PFDoA										
615.00 > 570.00	4.615	4.624	-0.009	1.429	5695847	2.59		104	6870	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.635	4.641	-0.006	1.162	2731504	10.6		110	4843	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.861	4.870	-0.009	1.345	1898232	10.3	Target=0.57	107	6466	
699.00 > 99.00	4.861	4.870	-0.009	1.345	3456673		0.00(0.40-0.74)	107	12891	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.896	4.899	-0.003	1.061	14692703	8.61	Target=5.68	86.1	4432	
663.00 > 169.00	4.889	4.899	-0.010	1.059	3030856		0.00(3.97-7.38)	86.1	9348	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.148	5.154	-0.006	1.000	2814430	9.32	Target=1.53	93.2	3092	
713.00 > 219.00	5.141	5.154	-0.013	0.999	1946515		0.00(1.07-1.99)	93.2	2022	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.148	5.154	-0.006	1.594	4289668	2.66		106	11325	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.633	5.648	-0.015	1.744	4404317	2.80		112	7970	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.633	5.649	-0.016	1.000	13993505	9.30	Target=5.11	93.0	1033	
813.00 > 169.00	5.633	5.649	-0.016	1.000	3000526		0.00(3.57-6.64)	93.0	5953	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	6.176	6.200	-0.024	1.097	9367661	10.4	Target=4.80	104	1354	
913.00 > 169.00	6.176	6.200	-0.024	1.097	1962700		0.00(3.36-6.24)	104	3734	

Reagents:

LCPFC_LL7_00010 Amount Added: 1.00 Units: mL

Report Date: 11-Mar-2019 13:12:59 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Injection Date: 11-Mar-2019 12:12:07 Instrument ID: A9

Lims ID: IC L7 Full

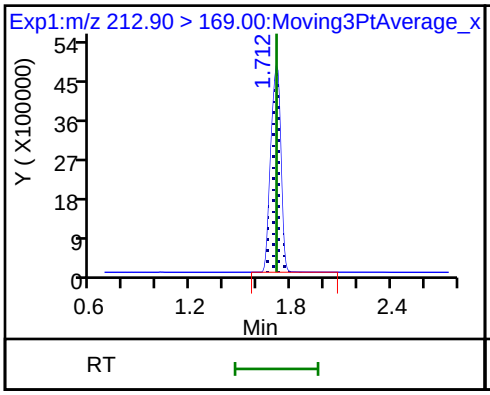
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 16 Worklist Smp#: 8

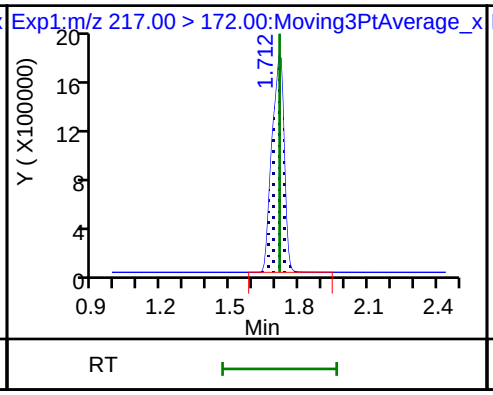
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

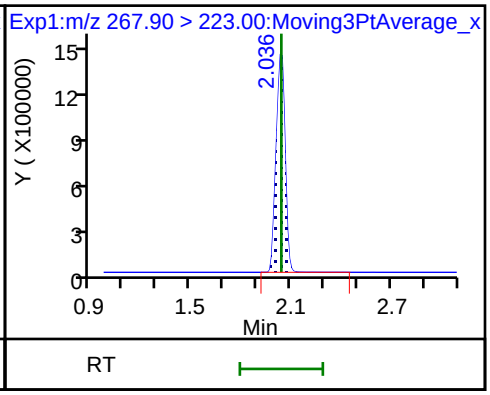
2 Perfluorobutanoic acid



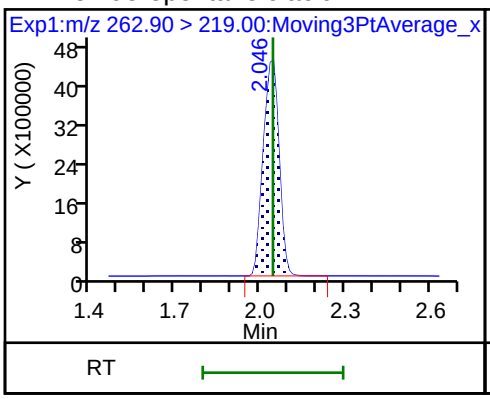
D 1 13C4 PFBA



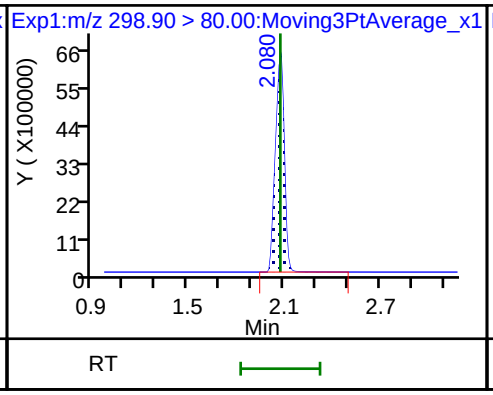
D 3 13C5 PFPeA



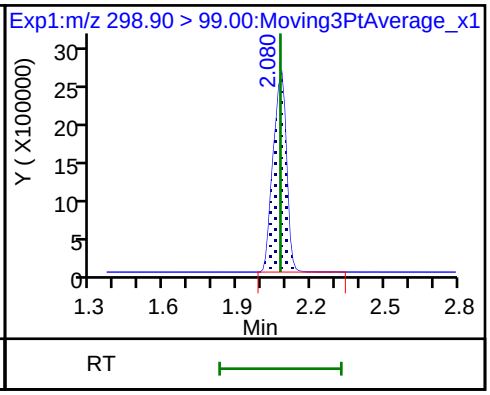
4 Perfluoropentanoic acid



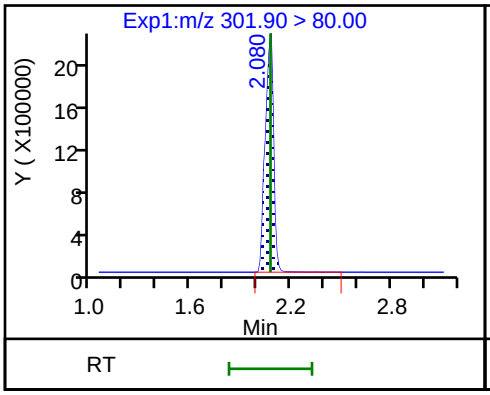
6 Perfluorobutanesulfonic acid



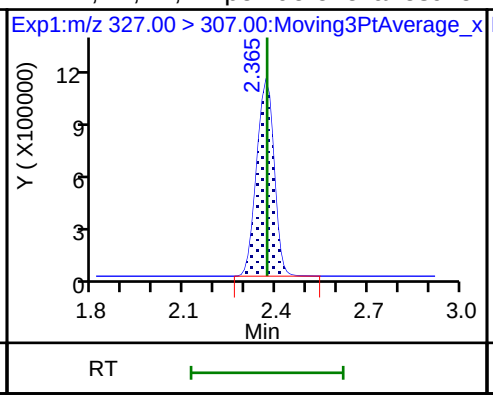
6 Perfluorobutanesulfonic acid



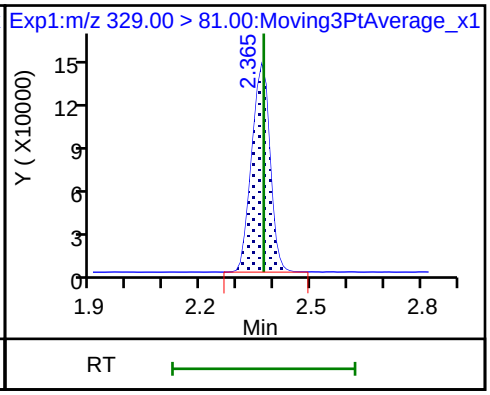
D 5 13C3 PFBS



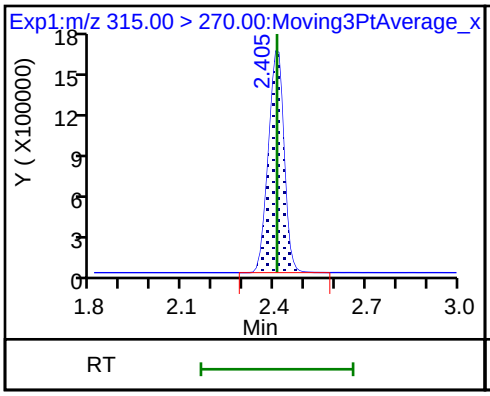
7 1H,1H,2H,2H-perfluorohexanesulfon



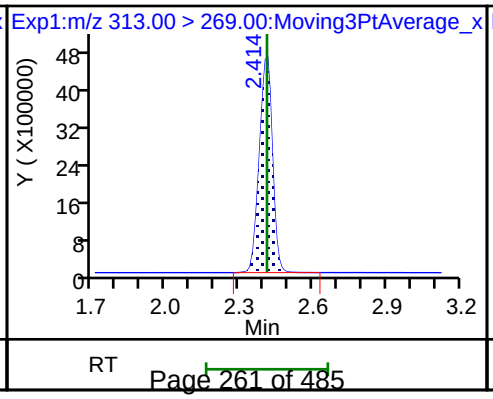
D 8 M2-4:2 FTS



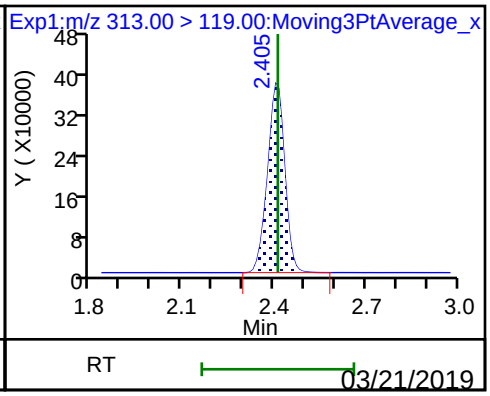
D 9 13C2 PFHxA



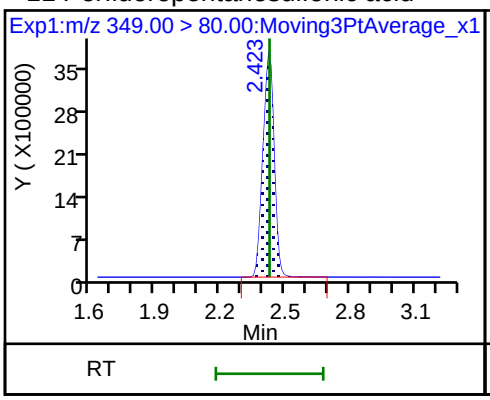
10 Perfluorohexanoic acid



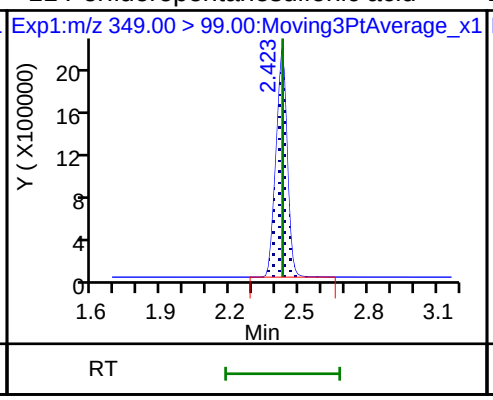
10 Perfluorohexanoic acid



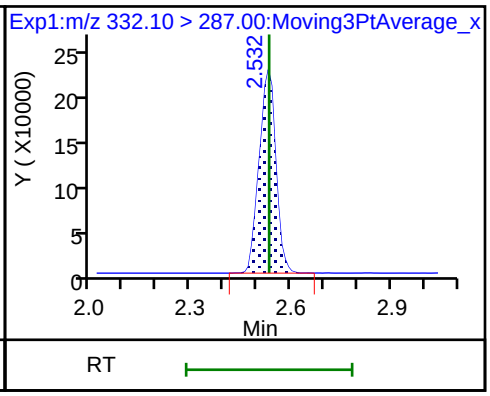
11 Perfluoropentanesulfonic acid



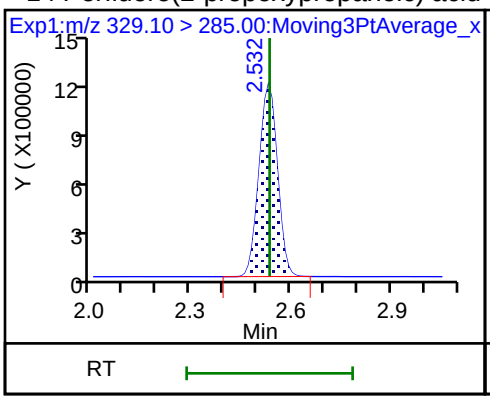
11 Perfluoropentanesulfonic acid



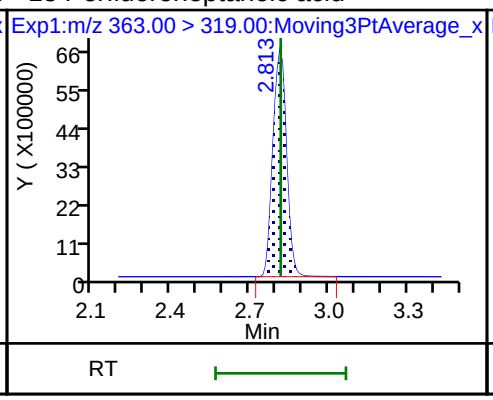
D 13 13C3 HFPO-DA



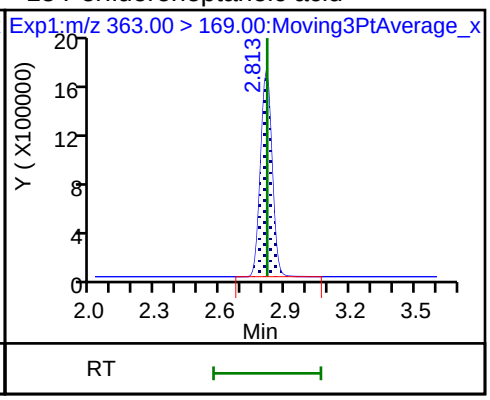
14 Perfluoro(2-propoxypropanoic) acid



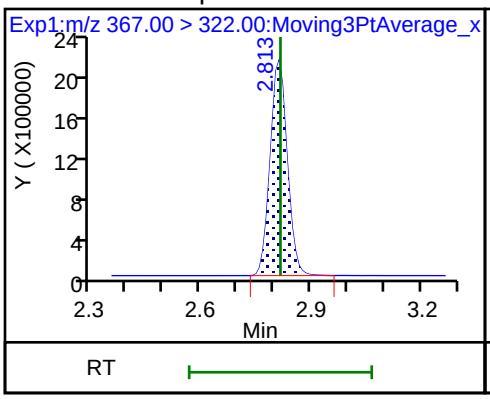
15 Perfluoroheptanoic acid



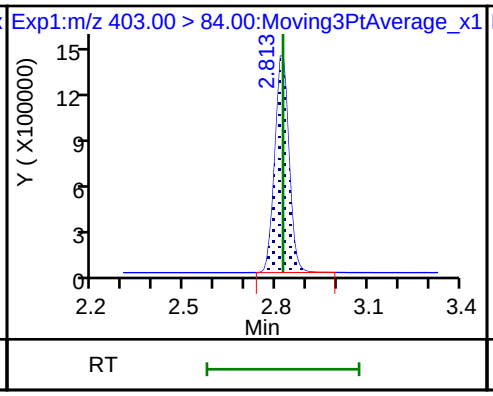
15 Perfluoroheptanoic acid



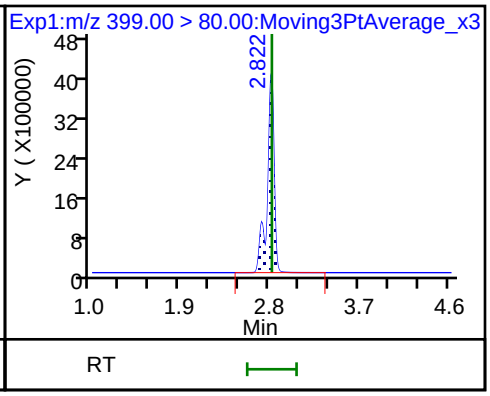
D 16 13C4 PFHpA



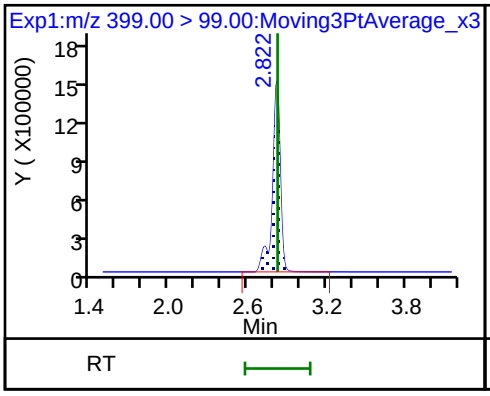
D 17 18O2 PFHxS



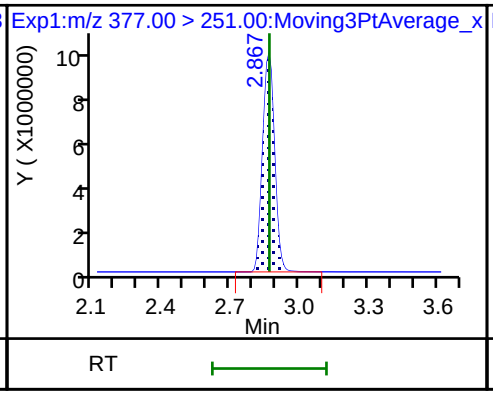
18 Perfluorohexanesulfonic acid



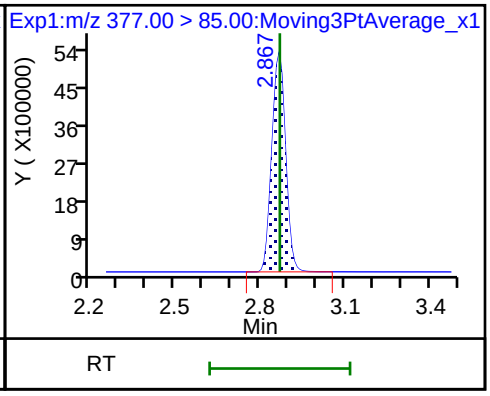
18 Perfluorohexanesulfonic acid



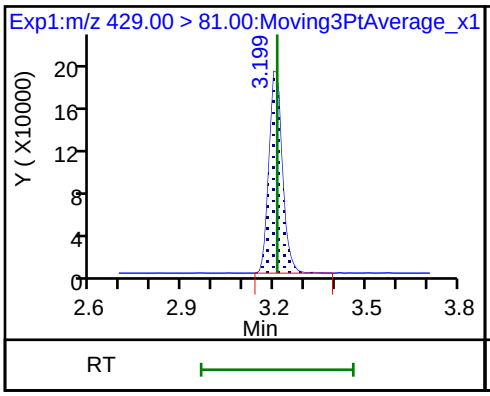
19 DONA



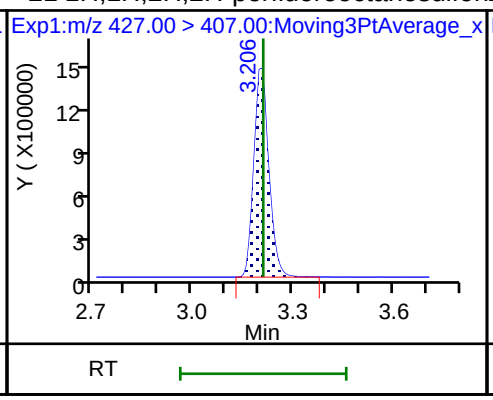
19 DONA



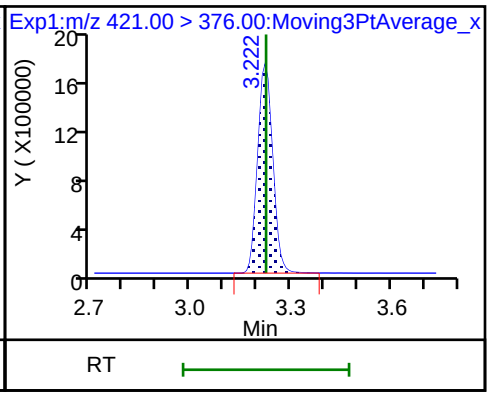
D 20 M2-6:2 FTS



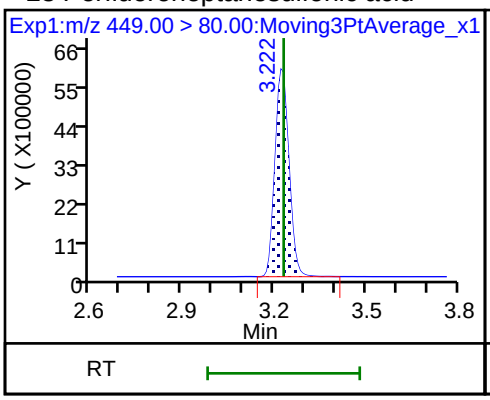
21 1H,1H,2H,2H-perfluorooctanesulfon



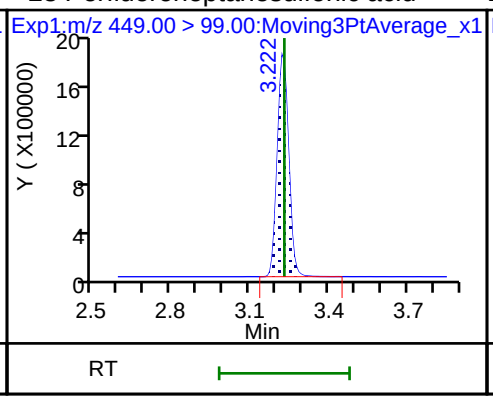
D 22 13C8 PFOA



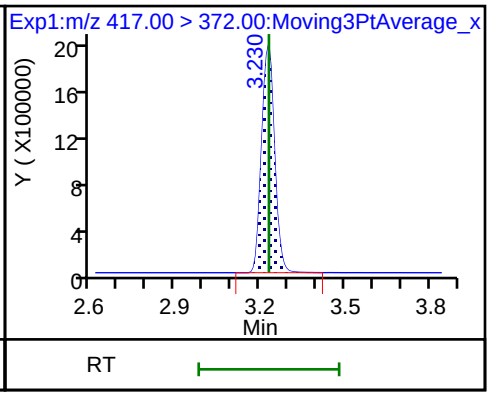
23 Perfluoroheptanesulfonic acid



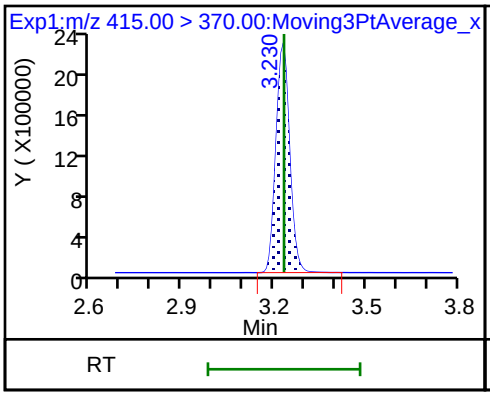
23 Perfluoroheptanesulfonic acid



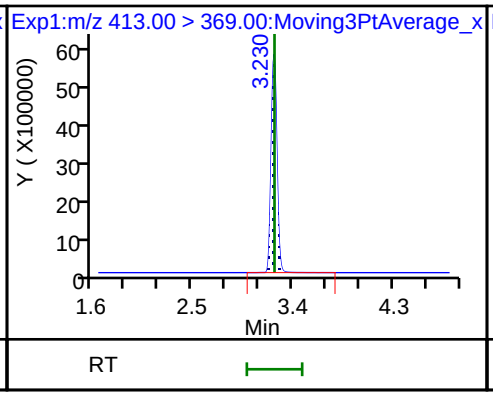
D 25 13C4 PFOA



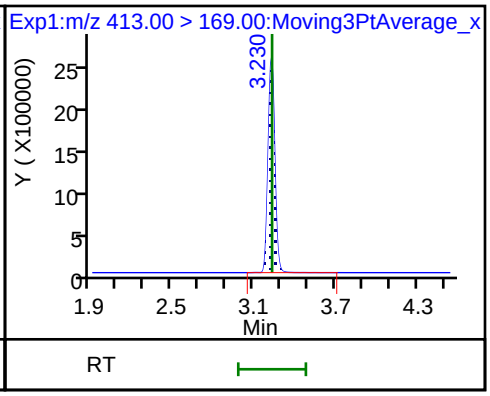
* 24 13C2 PFOA



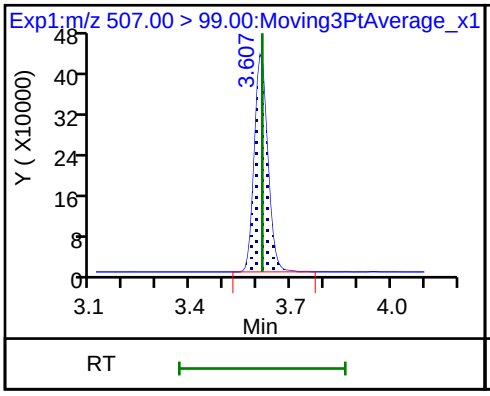
26 Perfluorooctanoic acid



26 Perfluorooctanoic acid



D 27 13C8 PFOS



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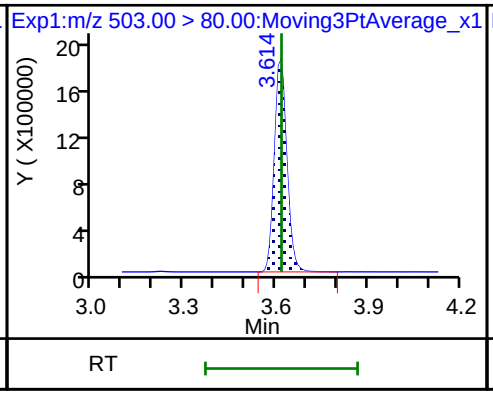
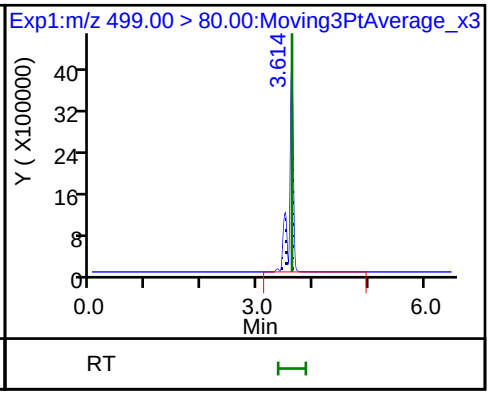
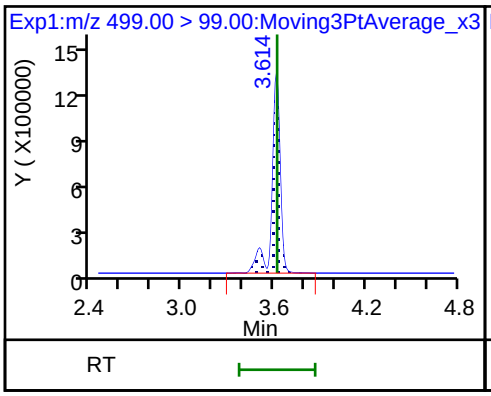


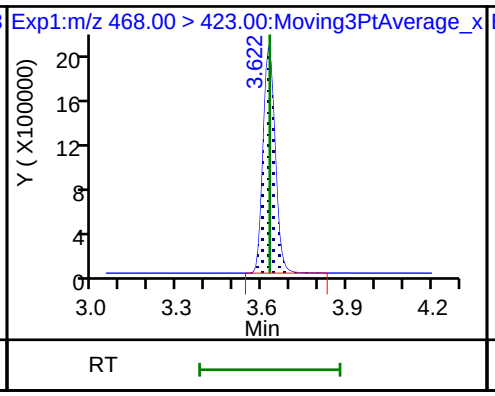
29 Perfluorooctanesulfonic acid



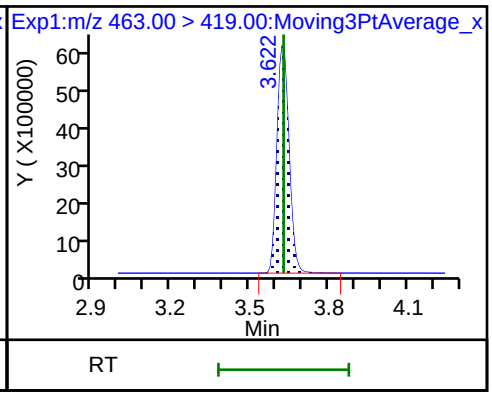
29 Perfluorooctanesulfonic acid



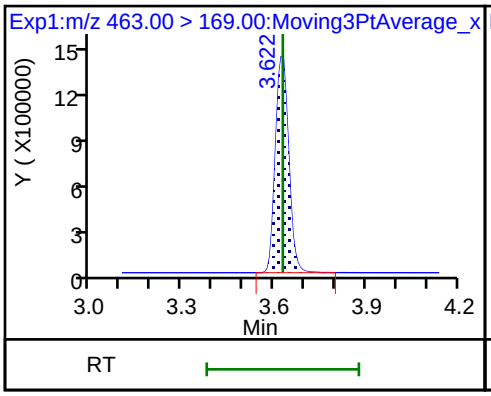
D 31 13C5 PFNA



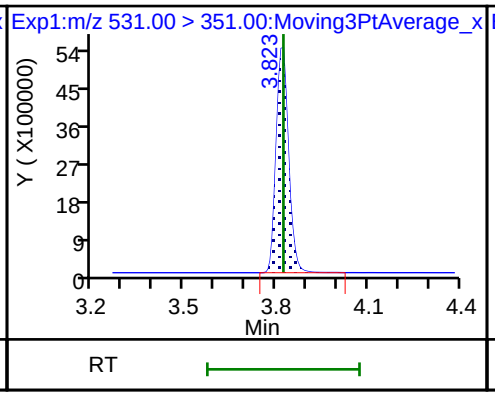
30 Perfluorononanoic acid



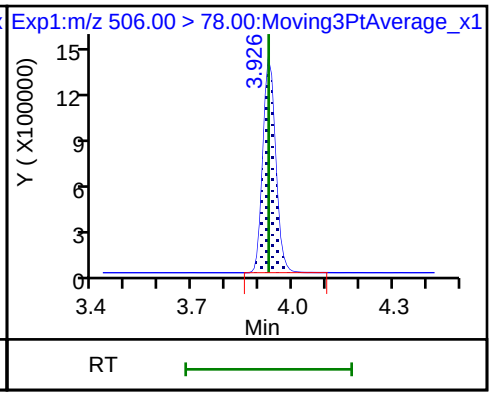
30 Perfluorononanoic acid



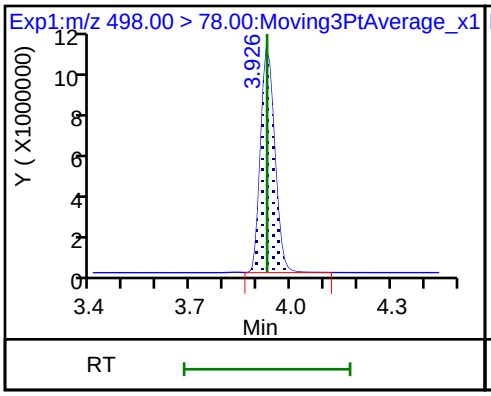
32 9-Chlorohexadecafluoro-3-oxanonane



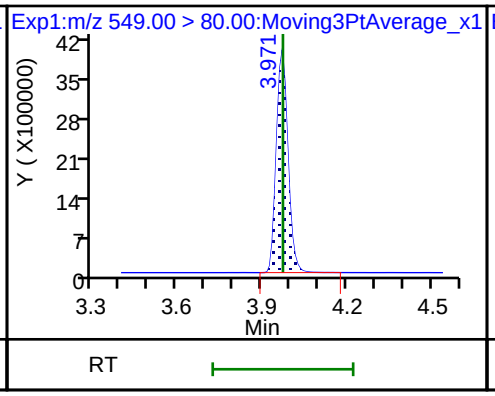
D 33 13C8 FOSA



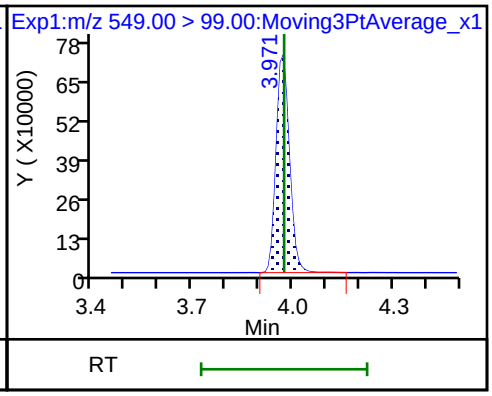
34 Perfluorooctanesulfonamide



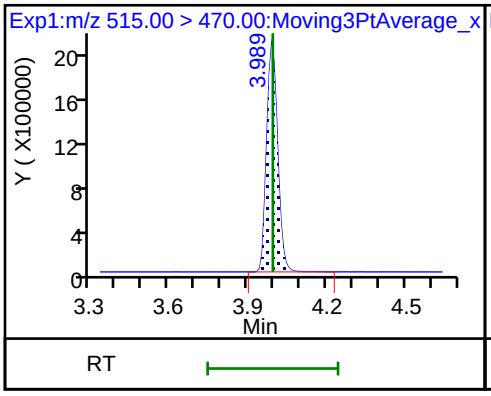
35 Perfluorononanesulfonic acid



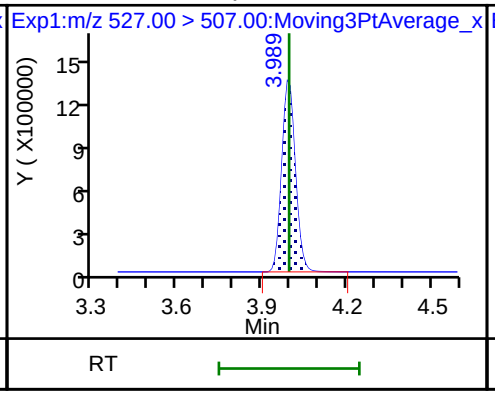
35 Perfluorononanesulfonic acid



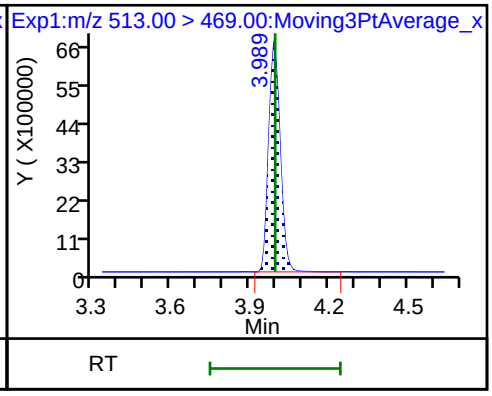
D 36 13C2 PFDA



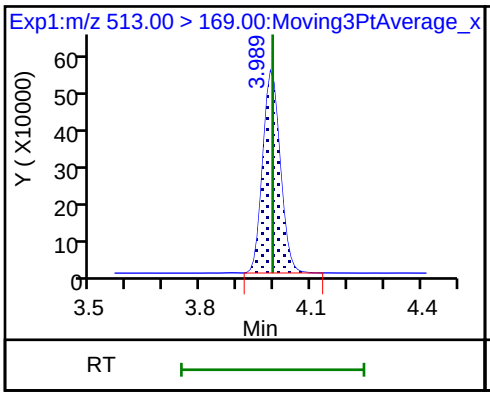
37 1H,1H,2H,2H-perfluorodecanesulfoni



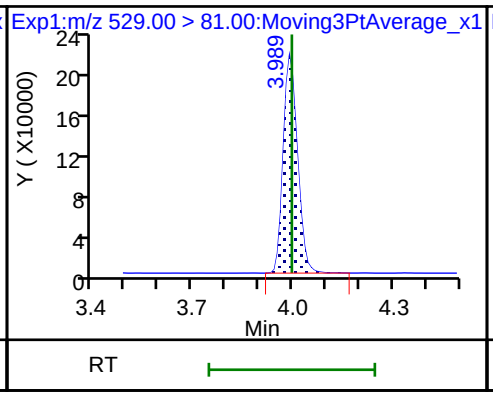
38 Perfluorodecanoic acid



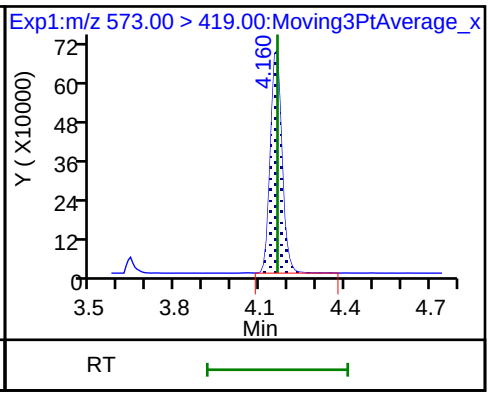
38 Perfluorodecanoic acid



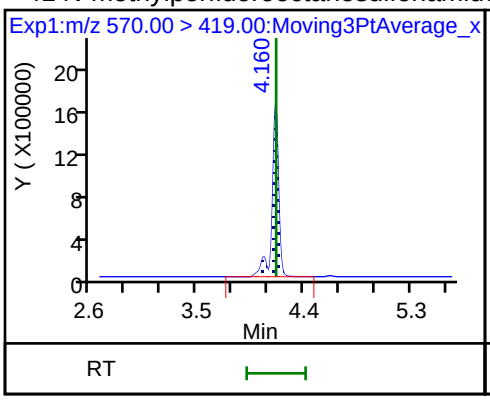
D 39 M2-8:2 FTS



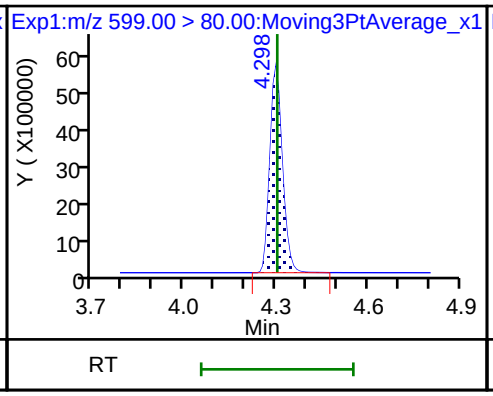
D 40 d3-NMeFOSAA



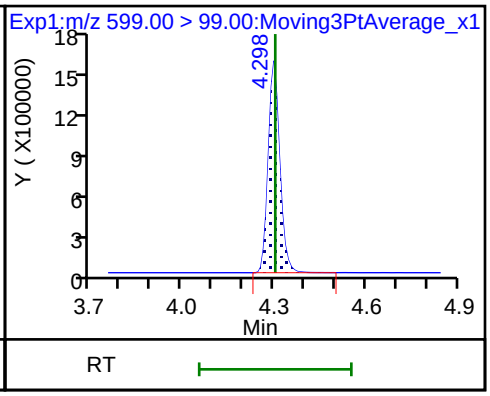
41 N-methylperfluorooctanesulfonamido



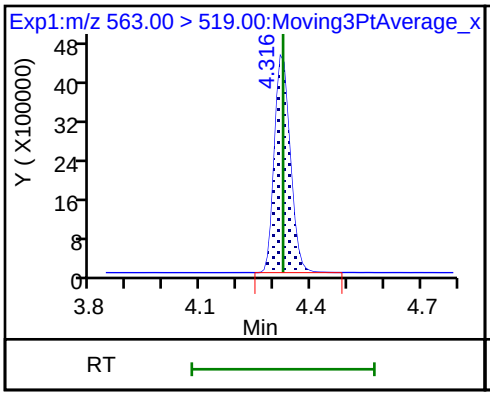
42 Perfluorodecanesulfonic acid



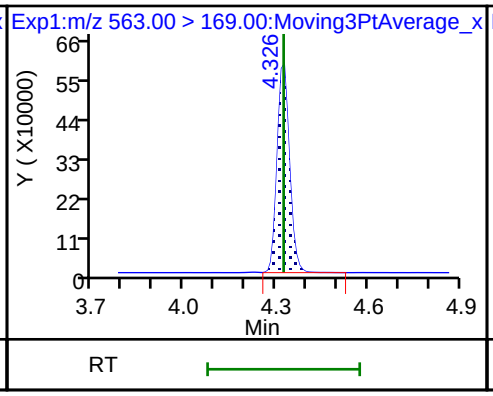
42 Perfluorodecanesulfonic acid



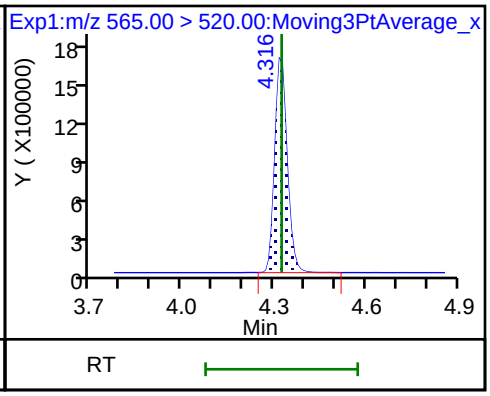
43 Perfluoroundecanoic acid



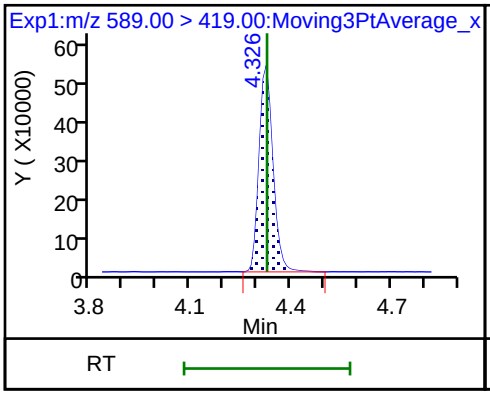
43 Perfluoroundecanoic acid



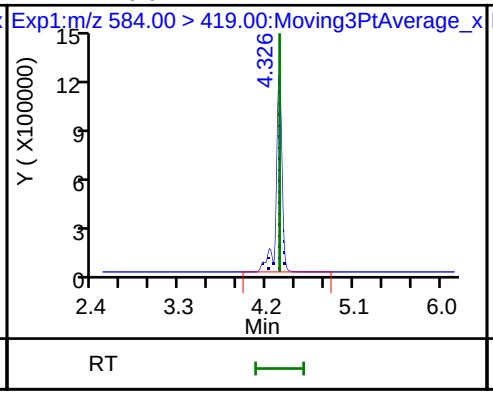
D 44 13C2 PFUnA



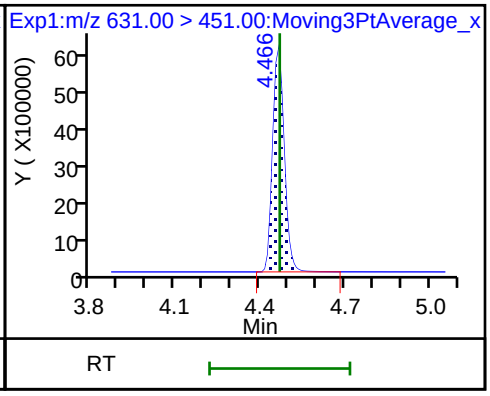
D 45 d5-NEtFOSAA



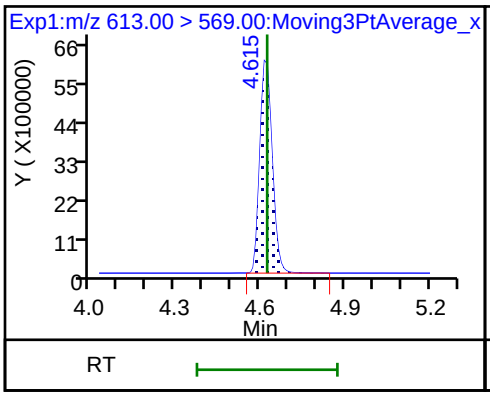
46 N-ethylperfluorooctanesulfonamidoa



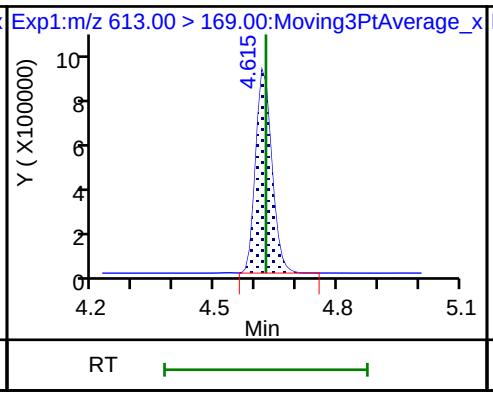
48 11-Chloroeicosafluoro-3-oxaundecan



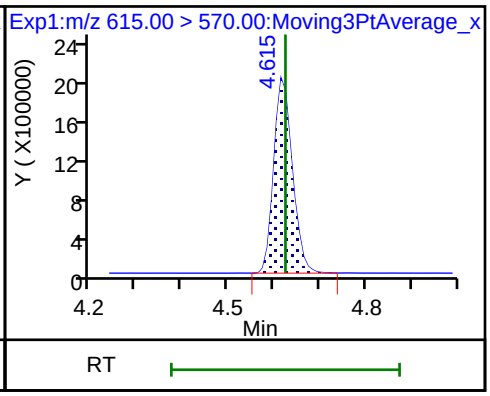
50 Perfluorododecanoic acid



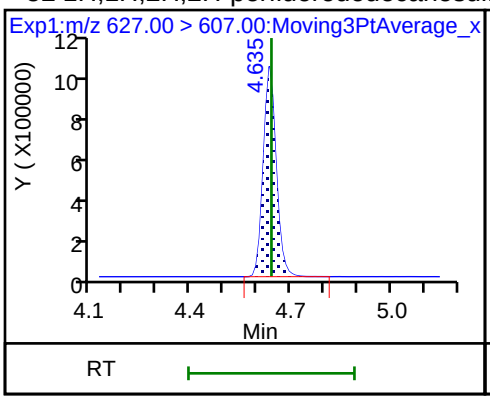
50 Perfluorododecanoic acid



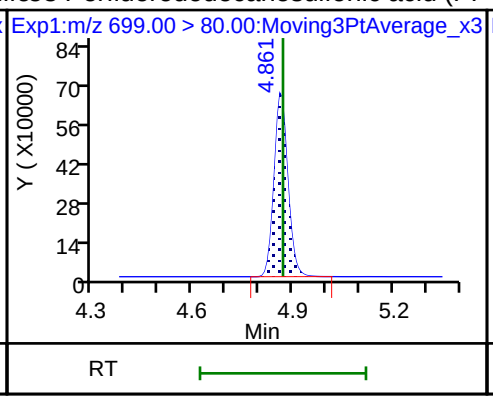
D 49 13C2 PFDoA



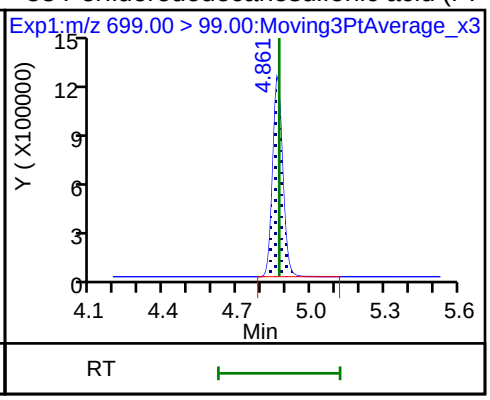
52 1H,1H,2H,2H-perfluorododecanesulfo



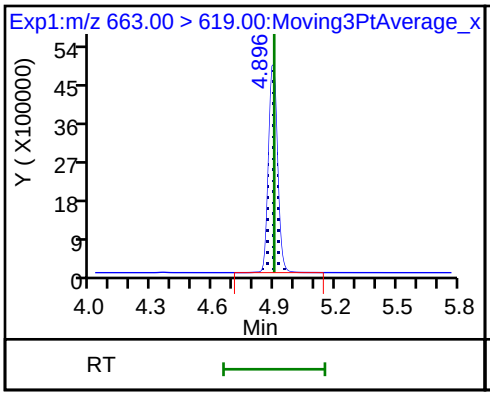
53 Perfluorododecanesulfonic acid (PF



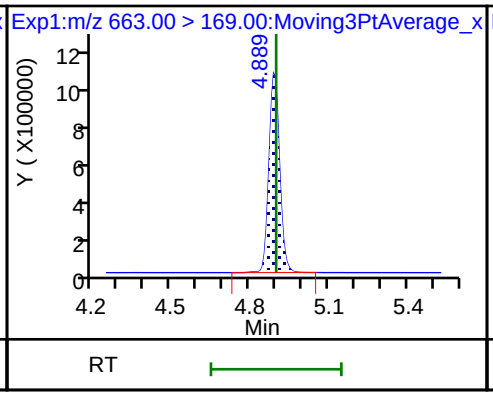
53 Perfluorododecanesulfonic acid (PF



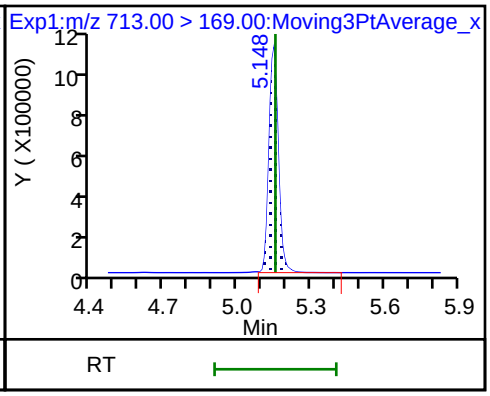
54 Perfluorotridecanoic acid



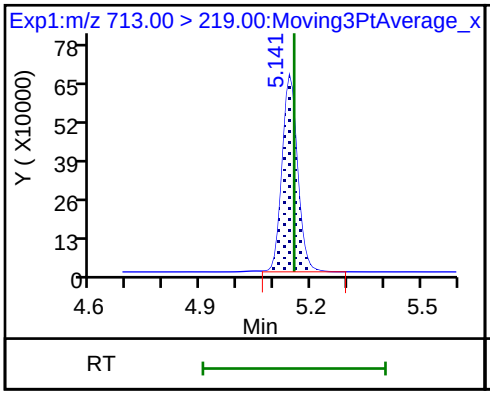
54 Perfluorotridecanoic acid



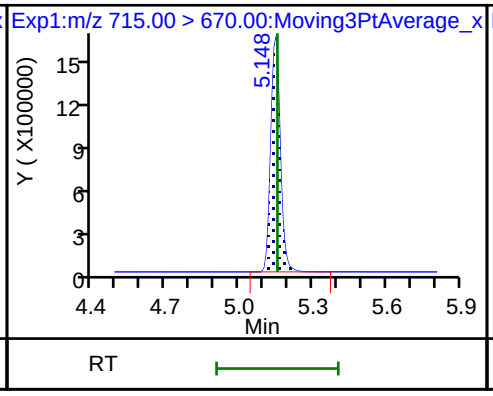
56 Perfluorotetradecanoic acid



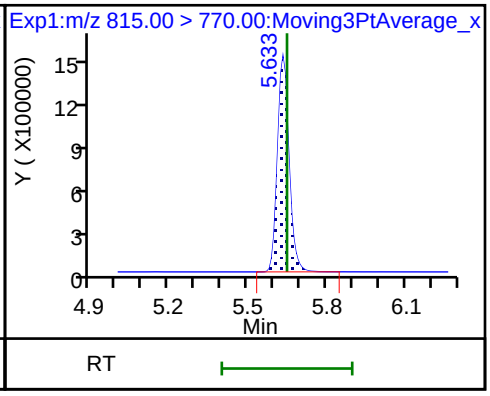
56 Perfluorotetradecanoic acid



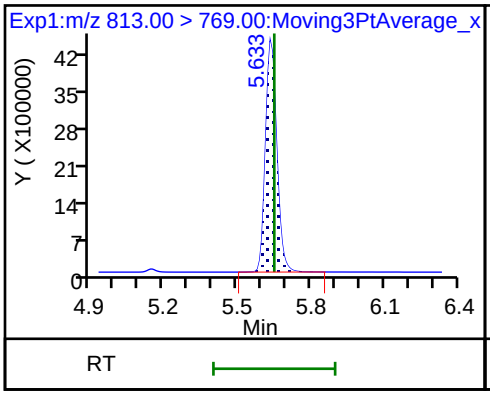
D 55 13C2 PFTeDA



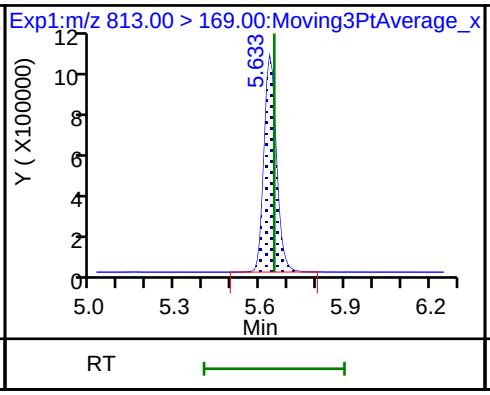
D 57 13C2 PFHxDA



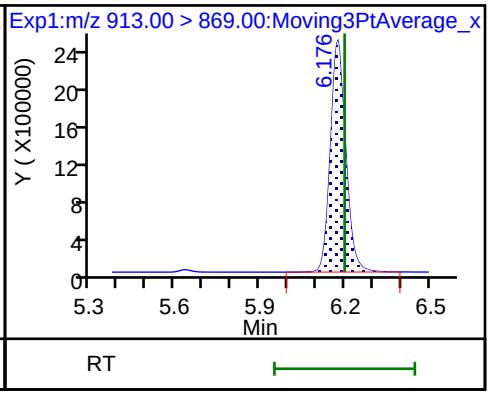
58 Perfluorohexadecanoic acid



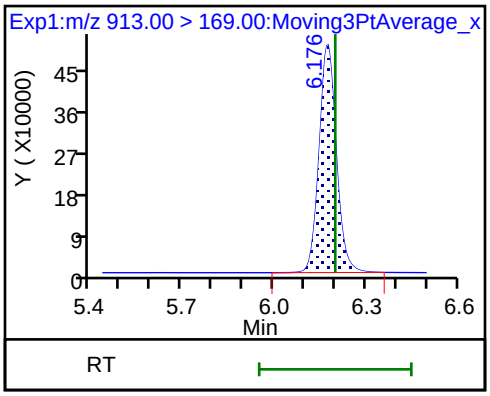
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: ICV 320-280516/10 Calibration Date: 03/09/2019 02:17

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.08ICAL_013.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8004	0.9030		2.82	2.50	12.8	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9835	1.089		2.77	2.50	10.8	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9367	1.061		2.51	2.21	13.3	50.0
4:2 FTS	AveID	2.044	2.102		2.40	2.34	2.8	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9469	0.9804		2.59	2.50	3.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.7773	0.8742		2.64	2.35	12.5	50.0
HFPO-DA (GenX)	AveID	3.025	3.269		2.70	2.50	8.1	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9905	1.033		2.61	2.50	4.3	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.000	1.055		2.41	2.28	5.5	40.0
DONA	AveID	3.214	3.680		2.70	2.36	14.5	50.0
6:2 FTS	AveID	1.419	1.549		2.59	2.38	9.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.106	1.222		2.63	2.38	10.6	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.060	1.103		2.60	2.50	4.1	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.035	1.133		2.53	2.31	9.4	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9492	1.078		2.84	2.50	13.6	40.0
F-53B Major	AveID	1.636	1.808		2.57	2.33	10.5	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8303	0.9232		2.67	2.40	11.2	50.0
8:2 FTS	AveID	1.147	1.260		2.63	2.40	9.8	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9203	0.9896		2.69	2.50	7.5	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.8815	0.997		2.83	2.50	13.1	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.8650	1.038		3.00	2.50	20.0	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.7034	0.7673		2.63	2.41	9.1	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7989	0.8215		2.57	2.50	2.8	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7970	0.9428		2.96	2.50	18.3	40.0
F-53B Minor	AveID	2.386	2.754		2.72	2.36	15.4	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9404	1.119		2.98	2.50	19.0	40.0
10:2 FTS	AveID	1.144	1.194		2.52	2.41	4.4	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2703	0.2910		2.61	2.42	7.7	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9457	0.9907		2.62	2.50	4.8	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2395	0.2455		2.56	2.50	2.5	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9063		2.63	2.50	5.3	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

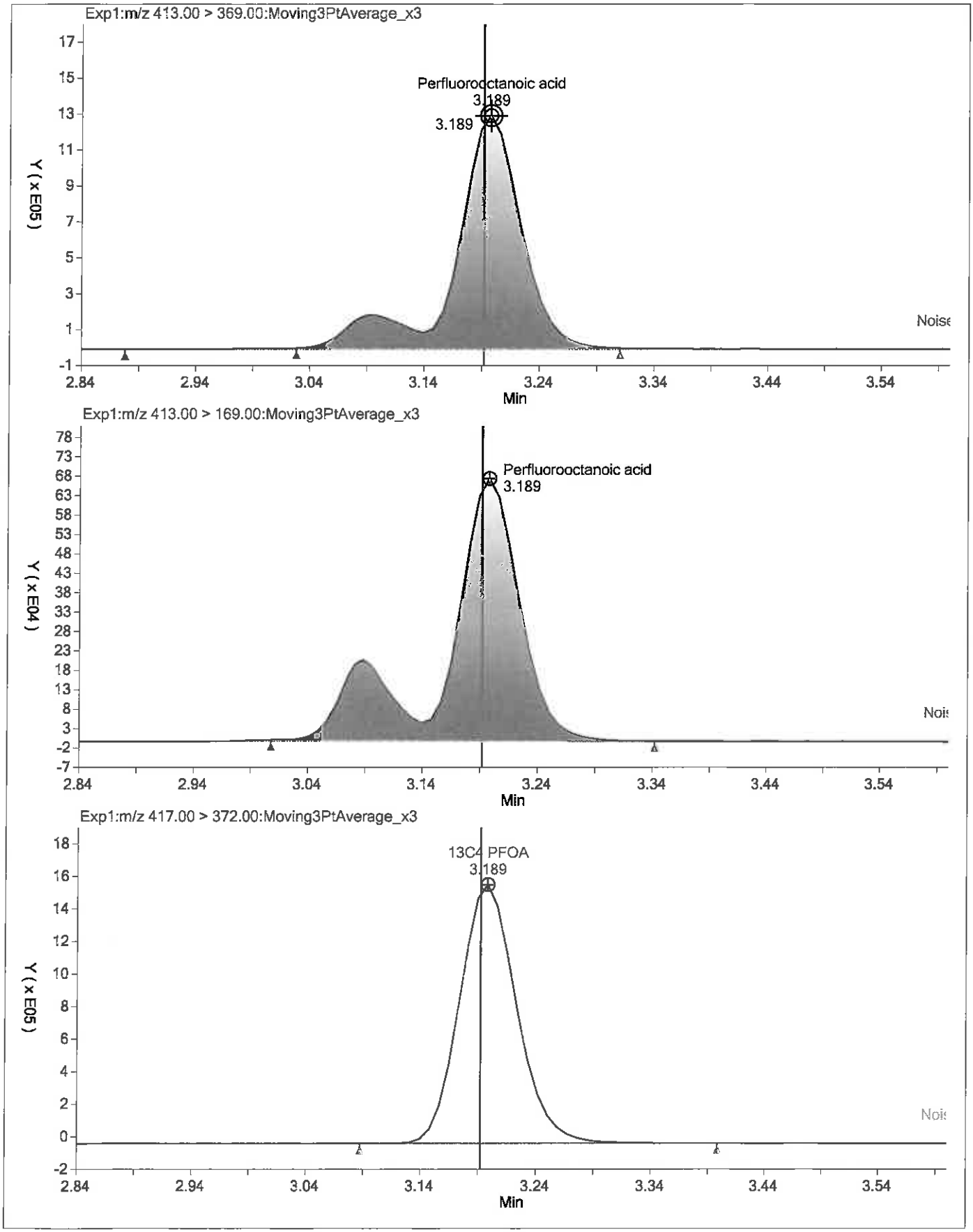
Lab Sample ID: ICV 320-280516/10 Calibration Date: 03/09/2019 02:17

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.08ICAL_013.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.184	1.210		2.55	2.50	2.2	50.0
13C4 PFBA	Ave	1.440	1.424		2.47	2.50	-1.1	50.0
13C5 PFPeA	Ave	0.9906	0.9426		2.38	2.50	-4.8	50.0
13C3 PFBS	Ave	1.504	1.486		2.30	2.33	-1.2	50.0
M2-4:2 FTS	Ave	0.1210	0.1250		2.41	2.34	3.3	50.0
13C2 PFHxA	Ave	1.016	0.997		2.45	2.50	-1.8	50.0
13C3 HFPO-DA	Ave	0.0584	0.0568		2.43	2.50	-2.8	50.0
13C4 PFHpA	Ave	0.9294	0.9367		2.52	2.50	0.8	50.0
18O2 PFHxS	Ave	1.055	1.026		2.30	2.37	-2.7	50.0
M2-6:2 FTS	Ave	0.1597	0.1614		2.40	2.38	1.1	50.0
13C4 PFOA	Ave	0.8878	0.8555		2.41	2.50	-3.6	50.0
13C8 PFOA	Ave	1.213	1.141		2.30	2.45	-5.9	50.0
13C4 PFOS	Ave	0.8199	0.7749		2.26	2.39	-5.5	50.0
13C8 PFOS	Ave	0.4189	0.4108		2.34	2.39	-1.9	50.0
13C5 PFNA	Ave	0.7185	0.6794		2.36	2.50	-5.4	50.0
13C2 PFDA	Ave	0.6581	0.6335		2.41	2.50	-3.7	50.0
M2-8:2 FTS	Ave	0.1918	0.1842		2.30	2.40	-4.0	50.0
13C8 FOSA	Ave	1.375	1.315		2.39	2.50	-4.3	50.0
d3-NMeFOSAA	Ave	0.3408	0.3442		2.52	2.50	1.0	50.0
13C2 PFUnA	Ave	0.5964	0.5638		2.36	2.50	-5.5	50.0
d5-NEtFOSAA	Ave	0.3646	0.3745		2.57	2.50	2.7	50.0
13C2 PFDoA	Ave	0.6423	0.6117		2.38	2.50	-4.8	50.0
13C2 PFTeDA	Ave	0.6798	0.6645		2.44	2.50	-2.3	50.0
13C2 PFHxDA	Ave	1.116	1.112		2.49	2.50	-0.3	50.0


Exp1:m/z 413.00 > 369.00:Moving3PtAverage_x3
Perfluorooctanoic acid
3.189
3.189
Y (x E05)
Min
Exp1:m/z 413.00 > 169.00:Moving3PtAverage_x3
Perfluorooctanoic acid
3.189
Y (x E04)
Min
Exp1:m/z 417.00 > 372.00:Moving3PtAverage_x3
13C4 PFOA
3.189
Y (x E05)
Min

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_013.d
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 09-Mar-2019 02:17:33 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist:

Method: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 09-Mar-2019 07:52:53 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0306

First Level Reviewer: roycea Date: 09-Mar-2019 07:49:15
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.763	1.764	-0.001		8402262	2.47		98.9	6799	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.763	1.766	-0.003	1.000	7587079	2.82			2628	
D 3 13C5 PFPeA										
267.90 > 223.00	2.084	2.088	-0.004		5563169	2.38		95.2	7179	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.084	2.091	-0.007	1.000	6060240	2.77			375	
D 47 13C3 PFBS										
301.90 > 80.00	2.116	2.120	-0.004		8154366	2.30		98.8	942425	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.116	2.123	-0.007	1.000	8236651	2.51	Target=2.39		10710	
298.90 > 99.00	2.116	2.123	-0.007	1.000	3250155		2.53(1.68-3.11)		7607	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.393	2.394	-0.001		689187	2.41		103	2742	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.393	2.394	-0.001	1.000	1450278	2.40			12292	
D 7 13C2 PFHxA										
315.00 > 270.00	2.432	2.432	0.0		5885736	2.45		98.2	9021	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.432	2.432	0.0	1.000	5770164	2.59	Target=11.00		2985	
313.00 > 119.00	2.432	2.432	0.0	1.000	519773		11.10(7.70-14.30)		2302	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.442	2.446	-0.004	1.154	7204933	2.64	Target=2.65		12400	
349.00 > 99.00	2.442	2.446	-0.004	1.154	2688611		2.68(1.85-3.44)		5383	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.541	2.541	0.0		335213	2.43		97.2	1261	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.541	2.541	0.0	1.000	1095892	2.70			1702	
D 9 13C4 PFHpA										
367.00 > 322.00	2.800	2.798	0.002		5527891	2.52		101	8578	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.800	2.800	0.0	1.000	5711682	2.61	Target=2.52		2037	
363.00 > 169.00	2.800	2.800	0.0	1.000	2272146		2.51(1.76-3.27)		4934	
D 11 18O2 PFHxS										
403.00 > 84.00	2.809	2.806	0.003		5728431	2.30		97.3	5630	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.809	2.807	0.002	1.000	5826622	2.41	Target=2.82		5391	
399.00 > 99.00	2.809	2.807	0.002	1.000	1976962		2.95(1.97-3.66)		2918	
77 DONA										
377.00 > 251.00	2.846	2.844	0.002	0.803	15852278	2.70	Target=1.65		10278	
377.00 > 85.00	2.846	2.844	0.002	0.803	9544134		1.66(1.16-2.15)		8262	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.162	3.162	0.0		905023	2.40		101	5744	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.162	3.163	-0.001	1.000	1402098	2.59			5151	
D 73 13C8 PFOA										
421.00 > 376.00	3.178	3.177	0.001		6590450	2.30		94.1	8886	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.178	3.179	-0.001	0.896	5310522	2.63	Target=3.74		4490	
449.00 > 99.00	3.178	3.179	-0.001	0.896	1402914		3.79(2.61-4.86)		2925	
D 14 13C4 PFOA										
417.00 > 372.00	3.178	3.181	-0.003		5049117	2.41		96.4	12420	
* 62 13C2 PFOA										
415.00 > 370.00	3.178	3.181	-0.003		5901676	2.50			11449	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.186	3.184	0.002	1.003	5571656	2.60	Target=1.91		657	
413.00 > 169.00	3.186	3.184	0.002	1.003	2949963		1.89(1.33-2.48)		3886	
D 72 13C8 PFOS										
507.00 > 99.00	3.546	3.545	0.001		2317624	2.34		98.1	5065	
D 18 13C4 PFOS										
503.00 > 80.00	3.546	3.549	-0.003		4372065	2.26		94.5	5987	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.546	3.550	-0.004	1.000	4795212	2.53	Target=4.72		2065	
499.00 > 99.00	3.546	3.550	-0.004	1.000	1014623		4.73(3.30-6.14)		3547	
D 19 13C5 PFNA										
468.00 > 423.00	3.562	3.561	0.001		4009639	2.36		94.6	7041	
20 Perfluorononanoic acid										
463.00 > 419.00	3.562	3.561	0.001	1.000	4323007	2.84	Target=4.13		1469	
463.00 > 169.00	3.562	3.561	0.001	1.000	1017153		4.25(2.89-5.37)		5914	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.749	3.750	-0.002	1.057	7704544	2.57			8527	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.894	3.892	0.002	1.098	4053043	2.67	Target=2.93		5694	
549.00 > 99.00	3.894	3.892	0.002	1.098	1324981		3.06(2.05-3.81)		3149	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.909	3.913	-0.004	1.000	1314448	2.63			3691	
D 23 13C2 PFDA										
515.00 > 470.00	3.909	3.913	-0.004		3738390	2.41		96.3	5099	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.909	3.913	-0.004	1.000	3699353	2.69	Target=5.34		3280	
513.00 > 169.00	3.909	3.913	-0.004	1.000	697537		5.30(3.74-6.94)		2802	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.909	3.914	-0.005		1041410	2.30		96.0	4401	
D 21 13C8 FOSA										
506.00 > 78.00	3.916	3.921	-0.005		7761982	2.39		95.7	9618	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.923	3.923	0.0	1.002	7736940	2.83			3330	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.072	4.072	0.0		2031425	2.52		101	5991	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.072	4.078	-0.006	1.000	2107818	3.00			22283	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.205	4.205	0.0	1.186	3386143	2.63	Target=3.26		6621	
599.00 > 99.00	4.205	4.205	0.0	1.186	1040853		3.25(2.28-4.23)		4985	
D 30 13C2 PFUnA										
565.00 > 520.00	4.230	4.230	0.0		3327091	2.36		94.5	9059	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.230	4.230	0.0	1.000	2733330	2.57	Target=4.09		2159	
563.00 > 169.00	4.230	4.230	0.0	1.000	686748		3.98(2.86-5.32)		3242	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.230	4.233	-0.003		2210050	2.57		103	941	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.238	4.240	-0.002	1.002	2083625	2.96			6362	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.364	4.370	-0.006	1.231	11864933	2.72			9936	
D 36 13C2 PFDoA										
615.00 > 570.00	4.510	4.514	-0.004		3609988	2.38		95.2	6879	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.518	4.514	0.004	1.002	4040956	2.98	Target=4.03		2481	
613.00 > 169.00	4.518	4.514	0.004	1.002	995829		4.06(2.82-5.24)		4335	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.534	4.531	0.003	1.160	1251167	2.52			5519	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.738	4.741	-0.003	1.336	1288146	2.61	Target=0.63		5620	
699.00 > 99.00	4.738	4.741	-0.003	1.336	2037840		0.63(0.44-0.82)		9763	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.776	4.773	0.003	1.059	3576513	2.62	Target=3.11		1312	
663.00 > 169.00	4.776	4.773	0.003	1.059	1166679		3.07(2.18-4.05)		4207	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2 PFTeDA										
715.00 > 670.00	5.014	5.008	0.006		3921400	2.44		97.7	7594	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.014	5.008	0.006	1.000	962723	2.56	Target=1.37		5826	
713.00 > 219.00	5.005	5.008	-0.003	0.998	697957		1.38(0.96-1.79)		2016	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.432	5.430	0.002		6562854	2.49		99.7	5414	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.441	5.433	0.008	1.002	5948078	2.63	Target=5.26		184	
813.00 > 169.00	5.432	5.433	-0.001	1.000	1132051		5.25(3.69-6.84)		3873	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.847	5.840	0.007	1.076	7942502	2.55	Target=7.43		305	
913.00 > 169.00	5.840	5.840	0.0	1.075	1054703		7.53(5.20-9.66)		3524	

Reagents:

LCPFCIC_FULL_00018 Amount Added: 1.00 Units: mL

Report Date: 09-Mar-2019 07:52:54 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_013.d

Injection Date: 09-Mar-2019 02:17:33 Instrument ID: A8_N

Lims ID: ICV FULL

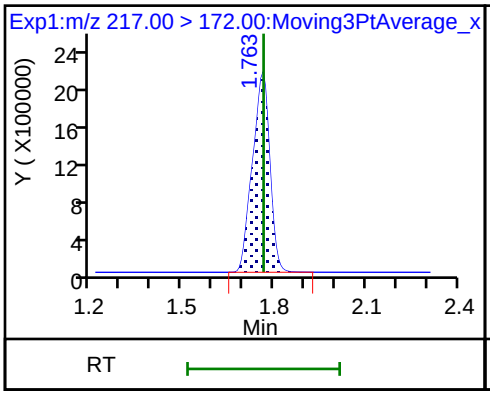
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 10

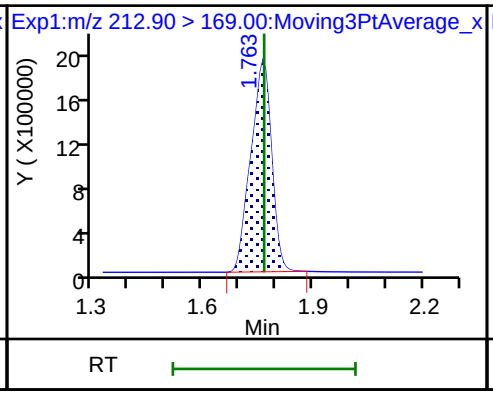
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

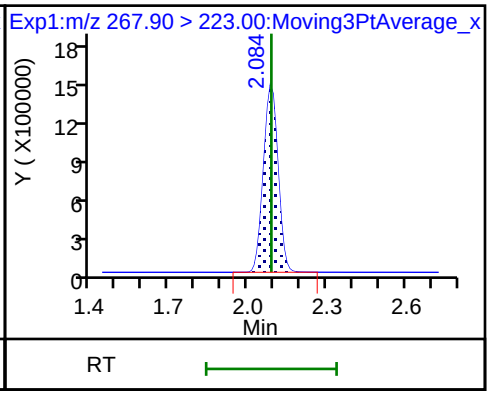
D 1 13C4 PFBA



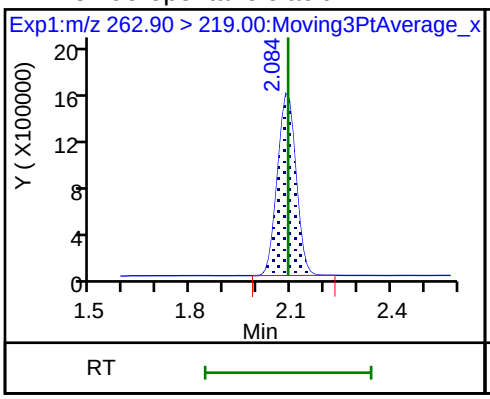
2 Perfluorobutanoic acid



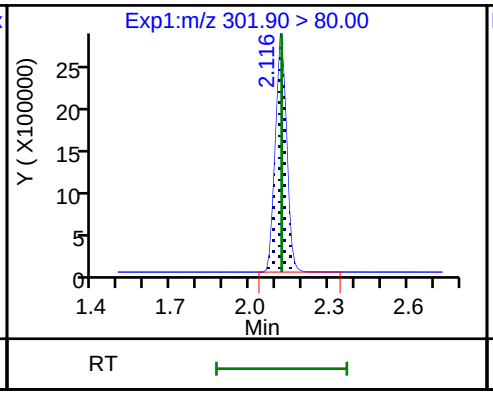
D 3 13C5 PFPeA



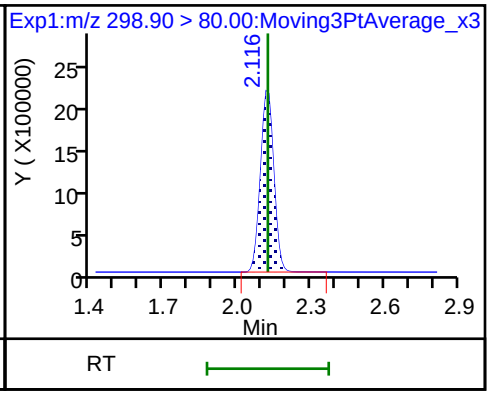
4 Perfluoropentanoic acid



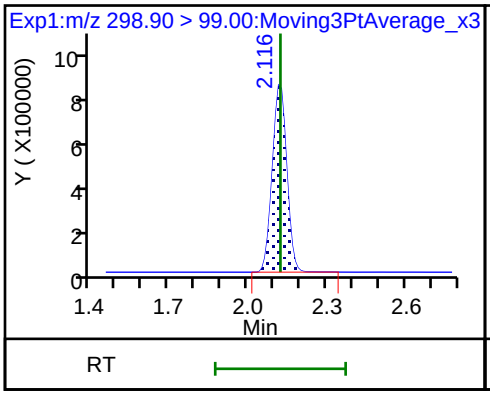
D 47 13C3 PFBS



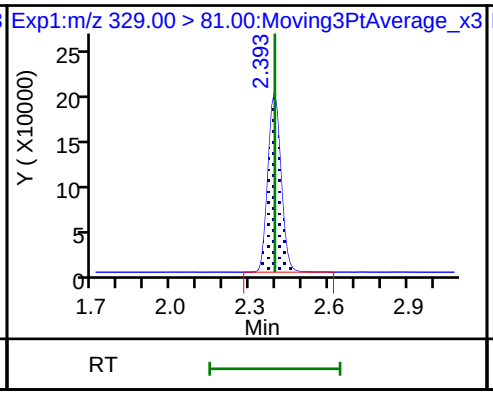
5 Perfluorobutanesulfonic acid



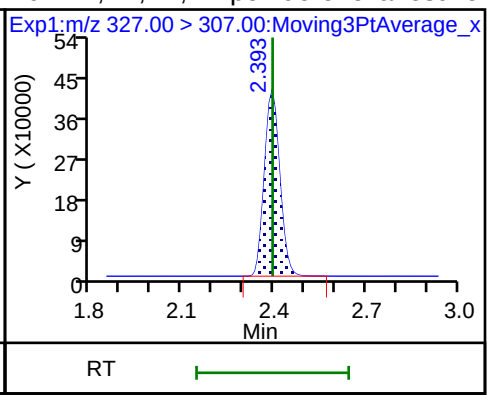
5 Perfluorobutanesulfonic acid



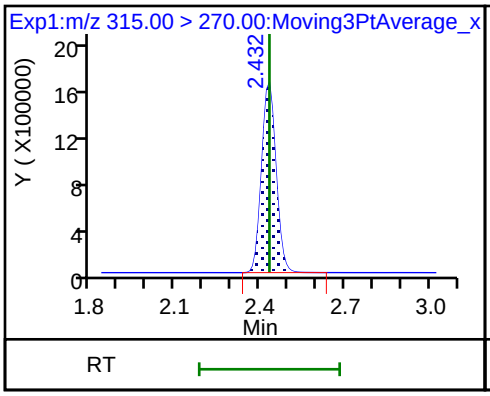
D 60 M2-4:2 FTS



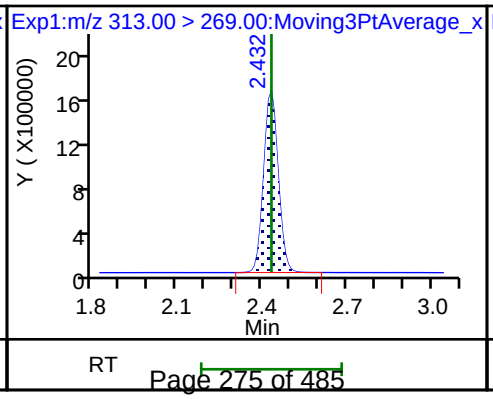
61 1H,1H,2H,2H-perfluorohexanesulfoni



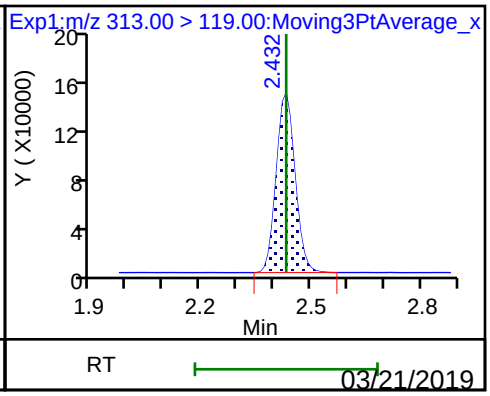
D 7 13C2 PFHxA



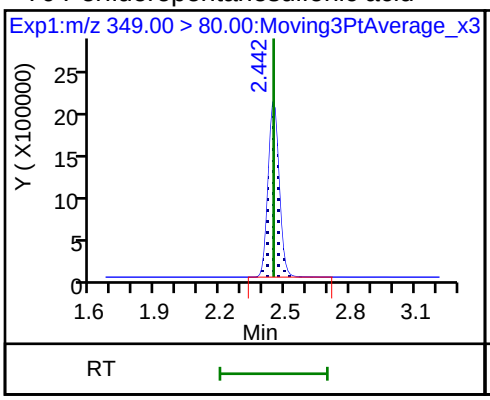
6 Perfluorohexanoic acid



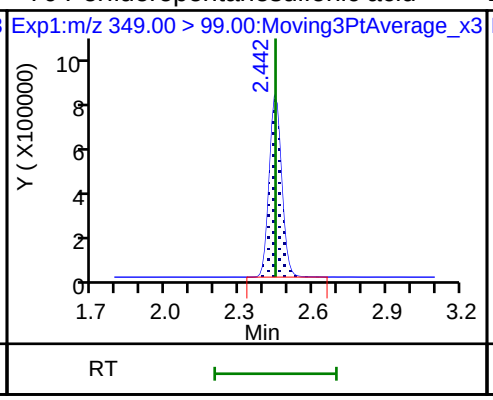
6 Perfluorohexanoic acid



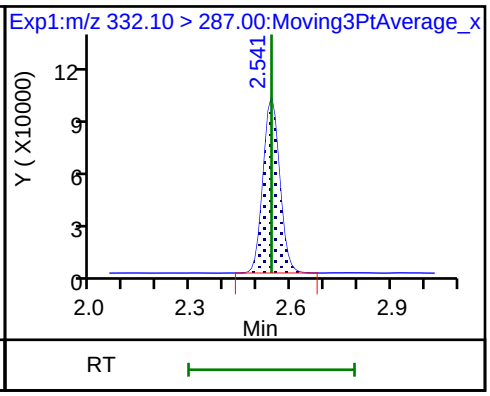
70 Perfluoropentanesulfonic acid



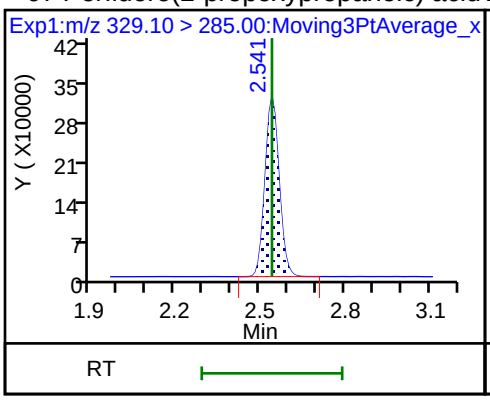
70 Perfluoropentanesulfonic acid



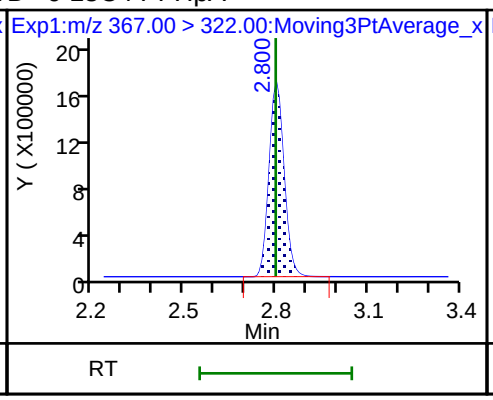
D 64 13C3 HFPO-DA



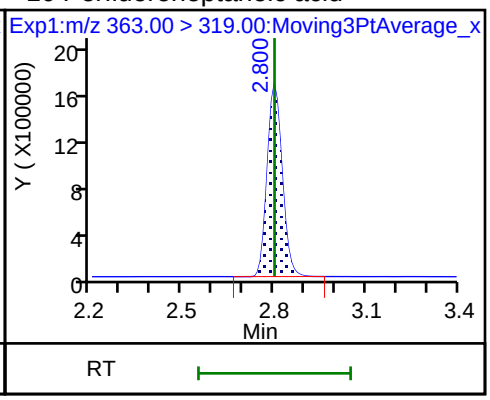
67 Perfluoro(2-propoxypropanoic) acid



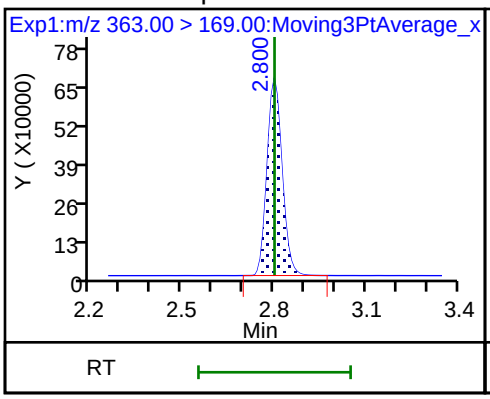
D 9 13C4 PFHpA



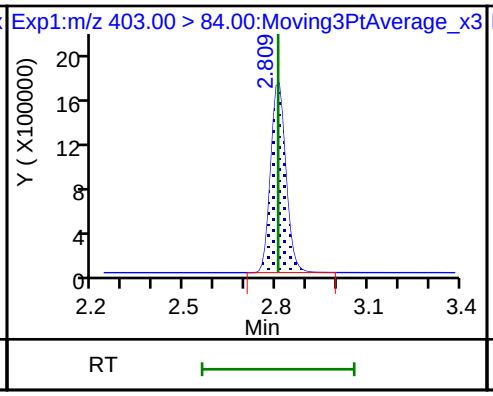
10 Perfluoroheptanoic acid



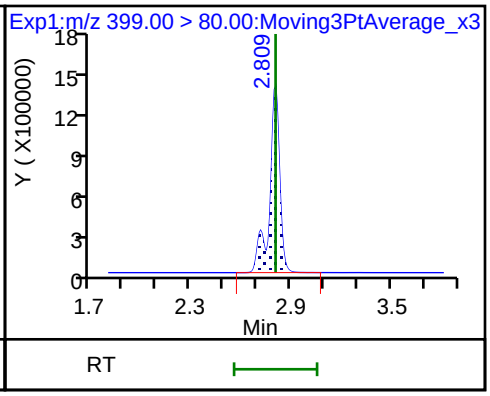
10 Perfluoroheptanoic acid



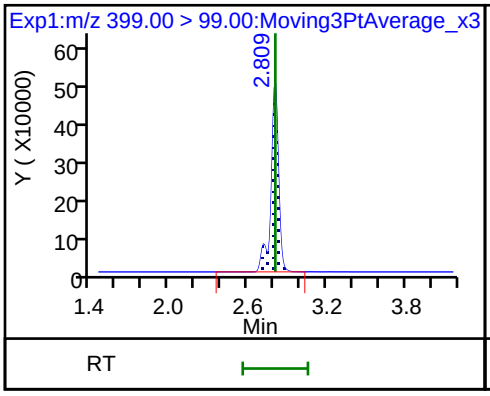
D 11 18O2 PFHxS



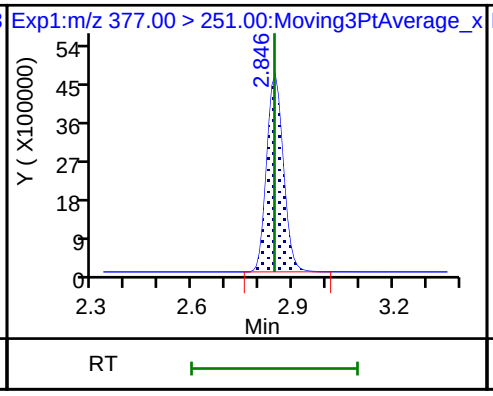
8 Perfluorohexanesulfonic acid



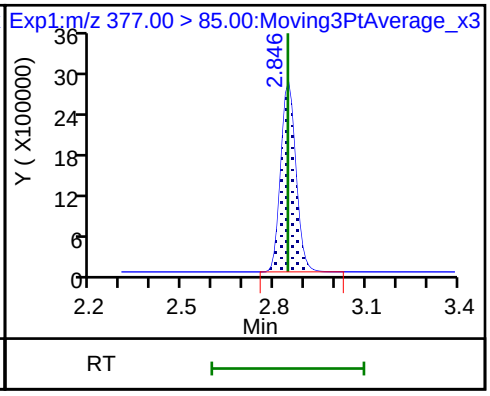
8 Perfluorohexanesulfonic acid



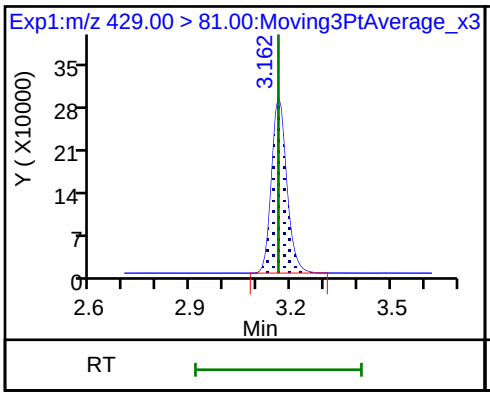
77 DONA



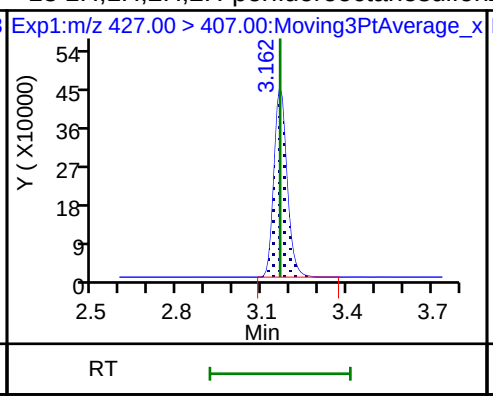
77 DONA



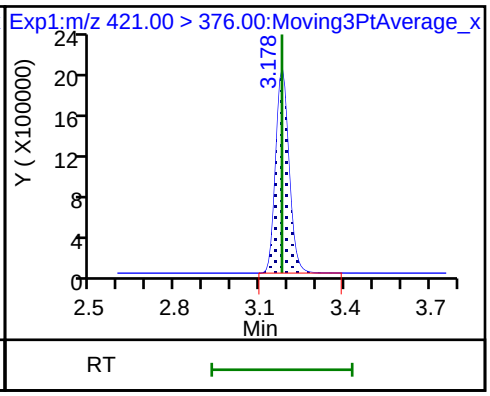
D 12 M2-6:2 FTS



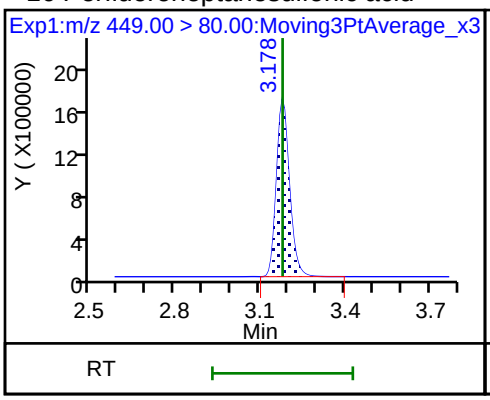
13 1H,1H,2H,2H-perfluorooctanesulfon



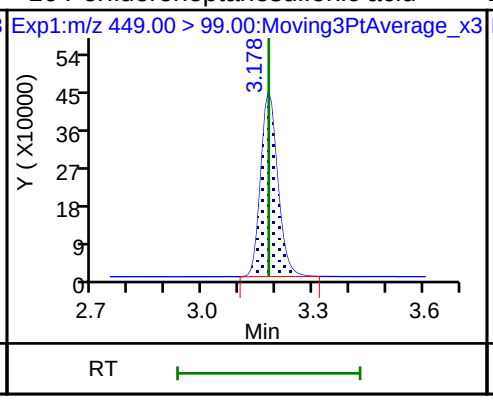
D 73 13C8 PFOA



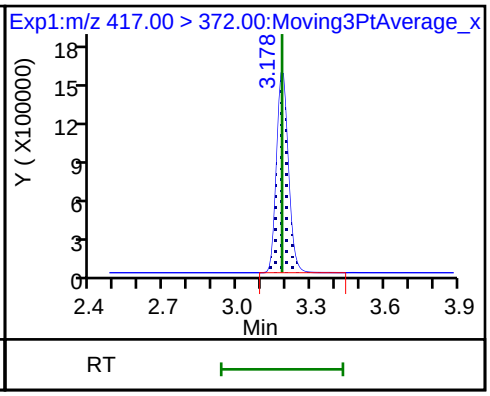
16 Perfluoroheptanesulfonic acid



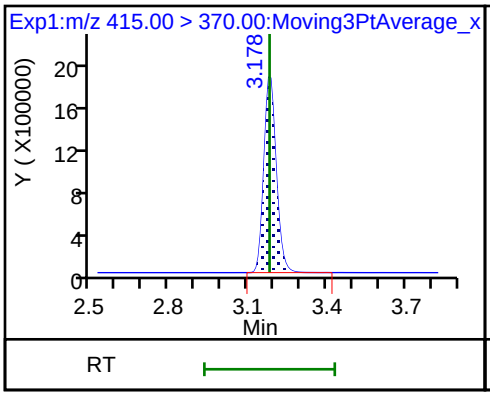
16 Perfluoroheptanesulfonic acid



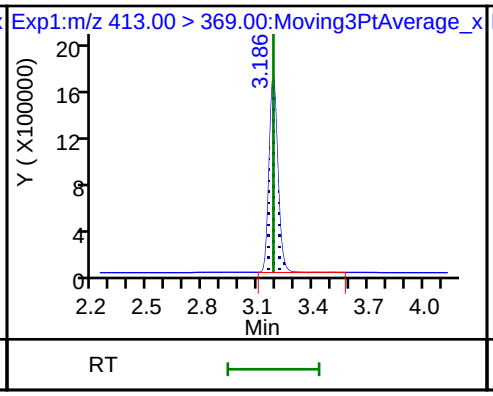
D 14 13C4 PFOA



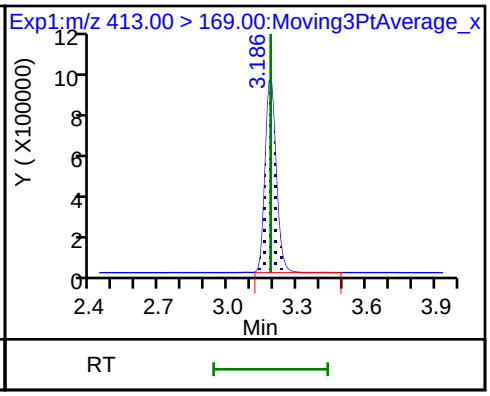
* 62 13C2 PFOA



15 Perfluorooctanoic acid



15 Perfluorooctanoic acid



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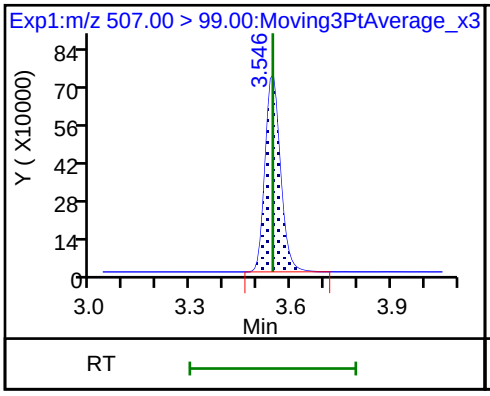

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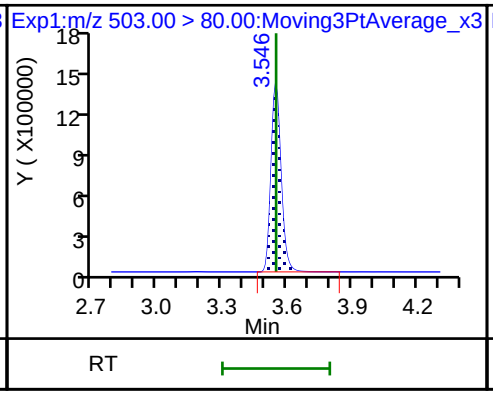
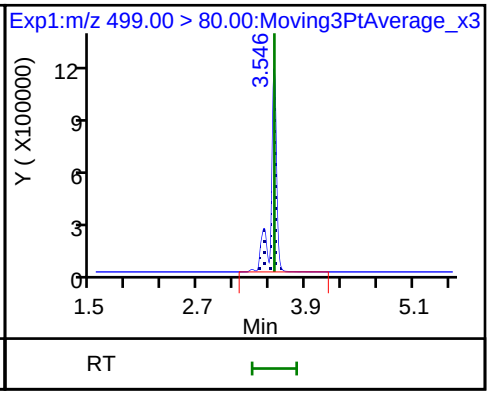
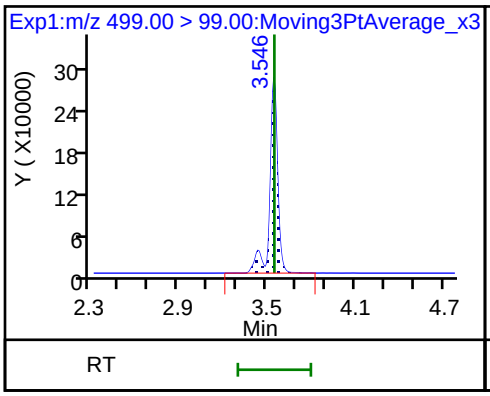


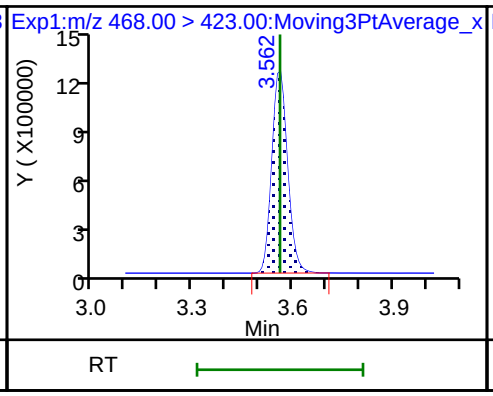
17 Perfluorooctanesulfonic acid



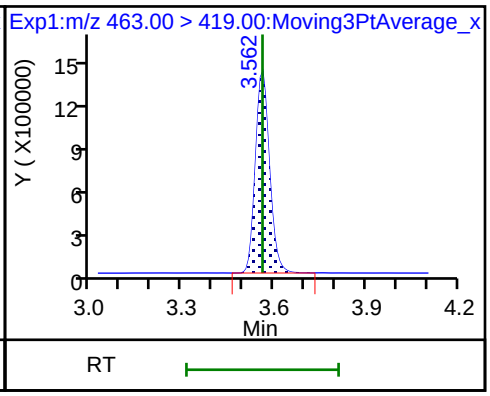
17 Perfluorooctanesulfonic acid



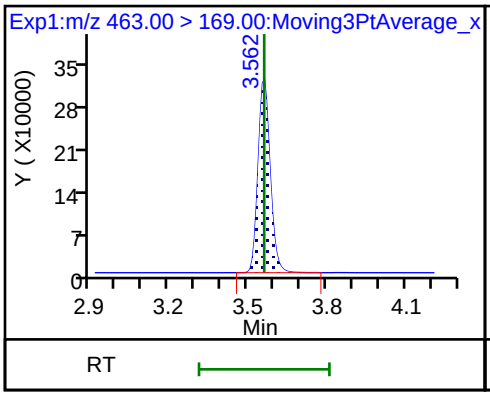
D 19 13C5 PFNA



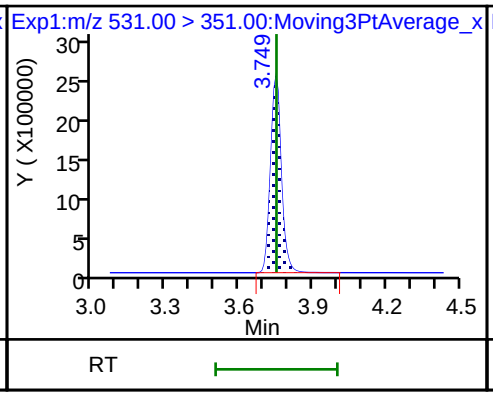
20 Perfluorononanoic acid



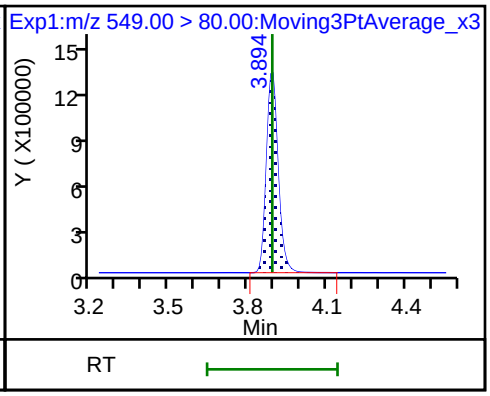
20 Perfluorononanoic acid



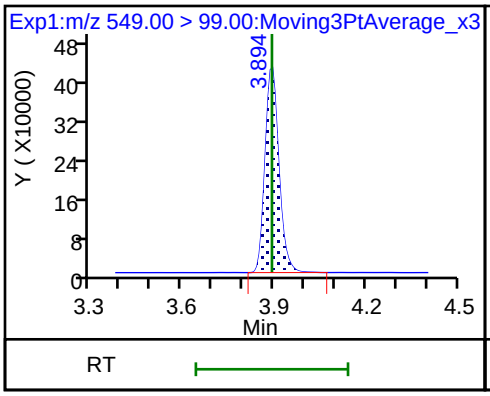
69 9-Chlorohexadecafluoro-3-oxanonane



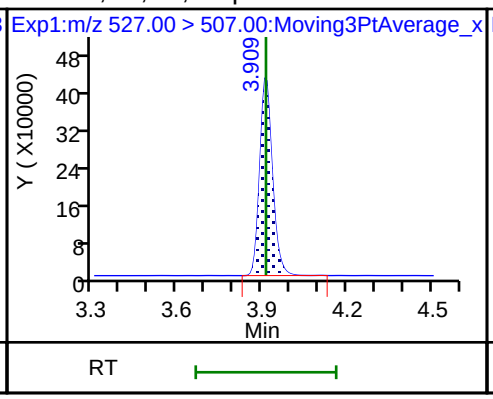
68 Perfluorononanesulfonic acid



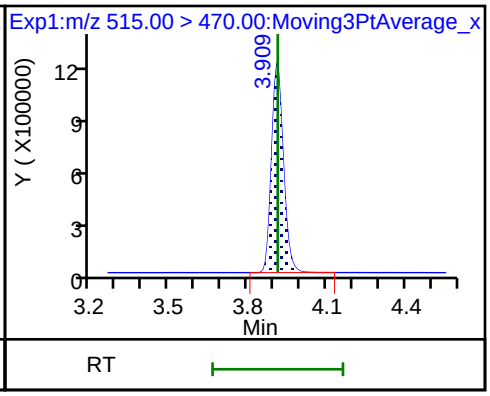
68 Perfluorononanesulfonic acid



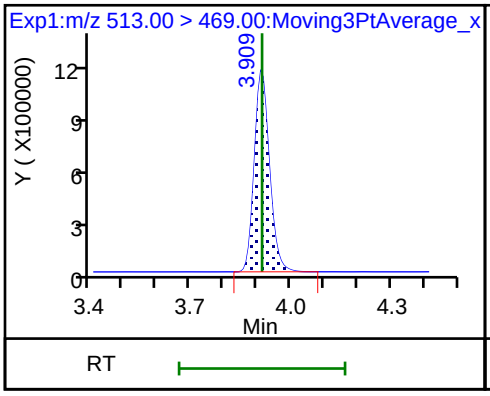
25 1H,1H,2H,2H-perfluorodecanesulfon



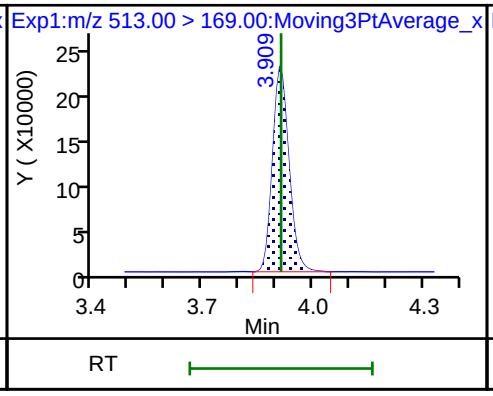
D 23 13C2 PFDA



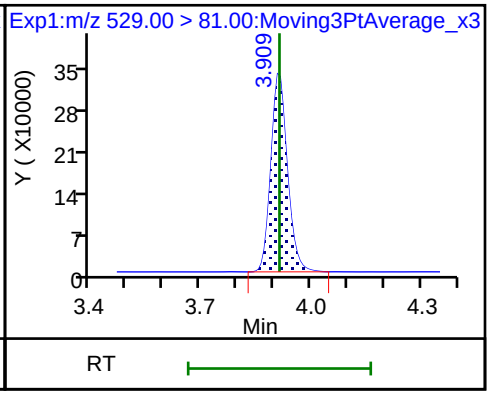
24 Perfluorodecanoic acid



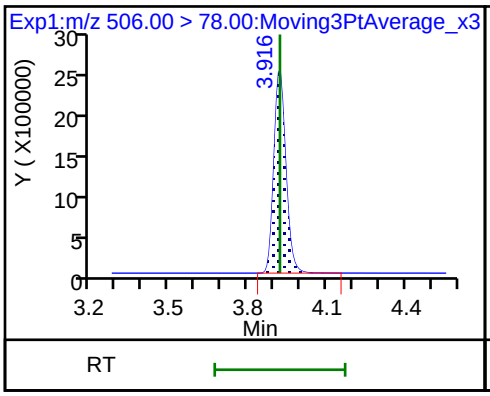
24 Perfluorodecanoic acid



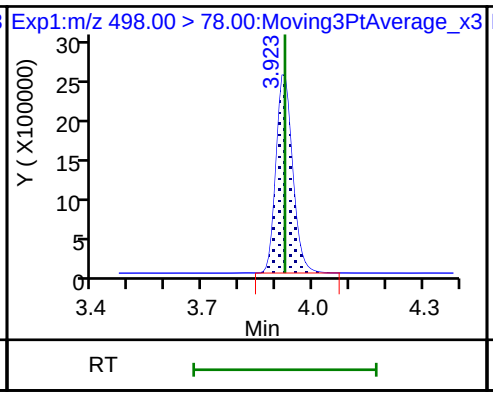
D 26 M2-8:2 FTS



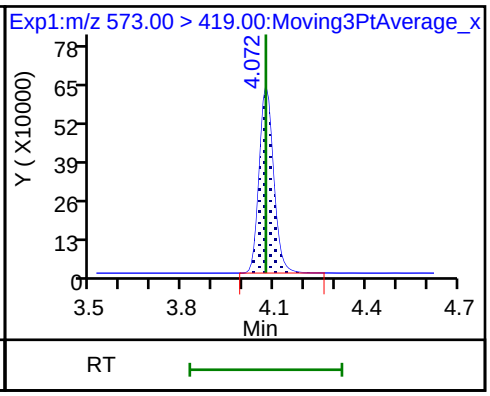
D 21 13C8 FOSA



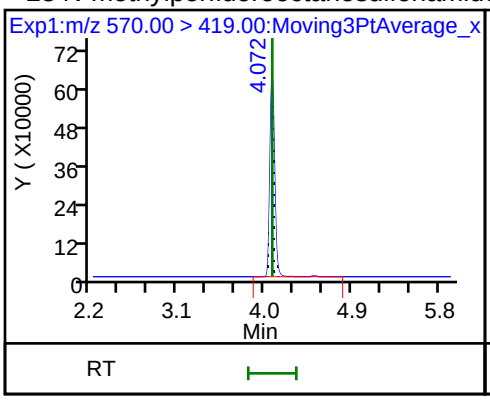
22 Perfluorooctanesulfonamide



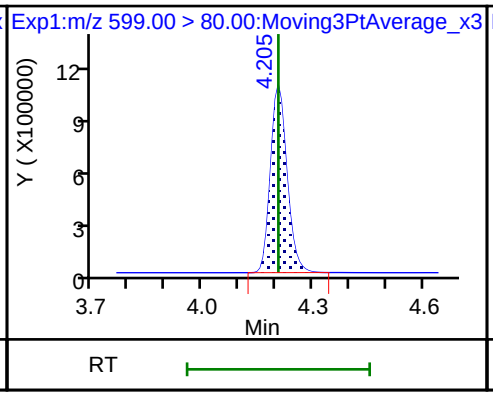
D 27 d3-NMeFOSAA



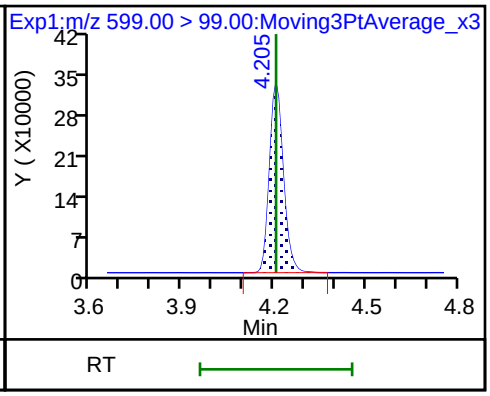
28 N-methylperfluorooctanesulfonamido



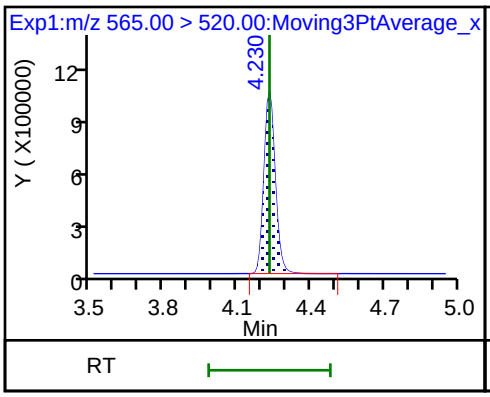
29 Perfluorodecanesulfonic acid



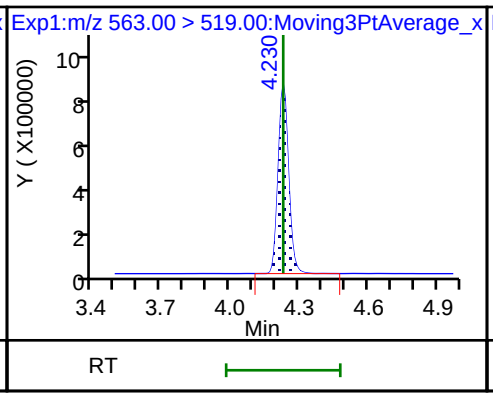
29 Perfluorodecanesulfonic acid



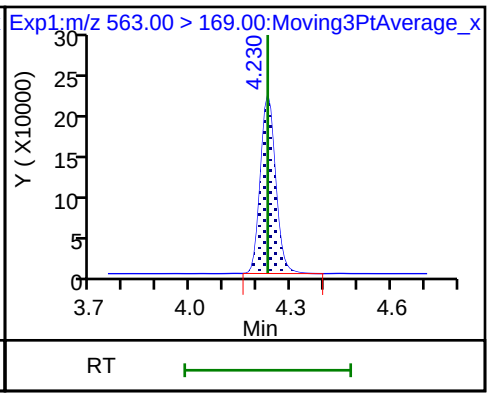
D 30 13C2 PFUnA



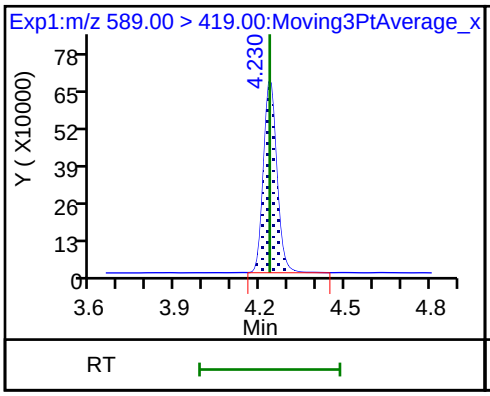
31 Perfluoroundecanoic acid



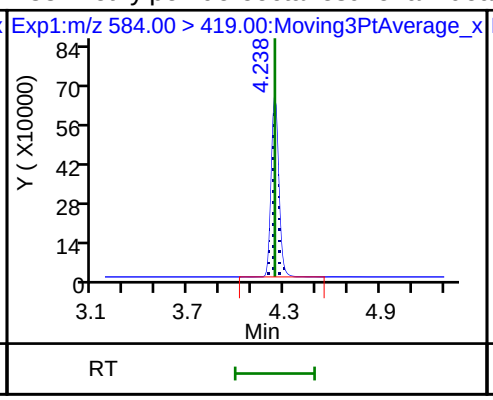
31 Perfluoroundecanoic acid



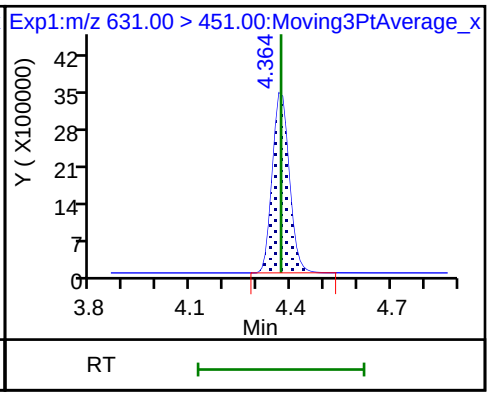
D 32 d5-NEtFOSAA



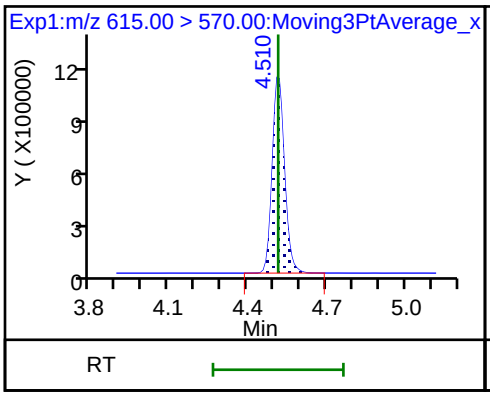
33 N-ethylperfluorooctanesulfonamidoa



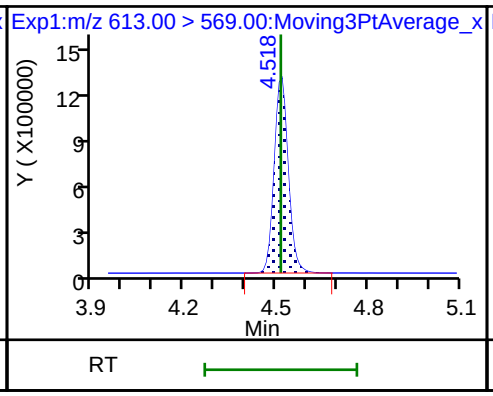
66 11-Chloroeicosafluoro-3-oxaundecan



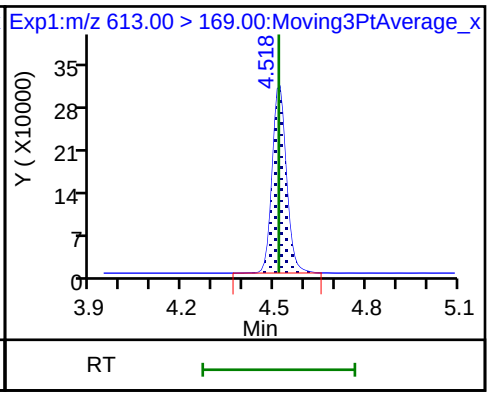
D 36 13C2 PFDoA



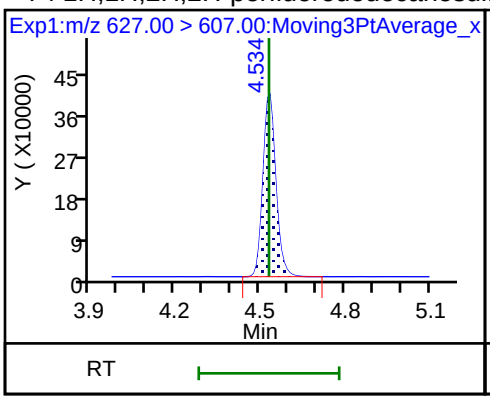
37 Perfluorododecanoic acid



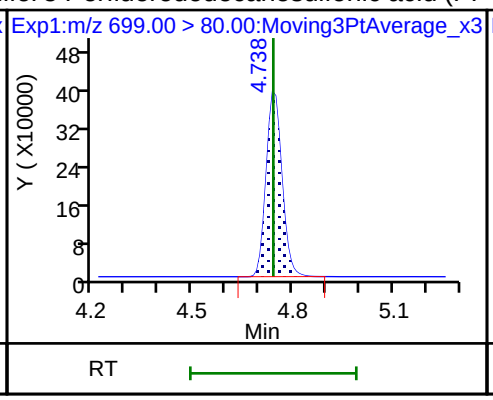
37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfo



75 Perfluorododecanesulfonic acid (PF



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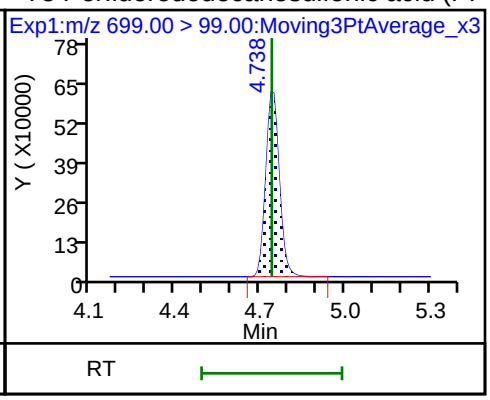
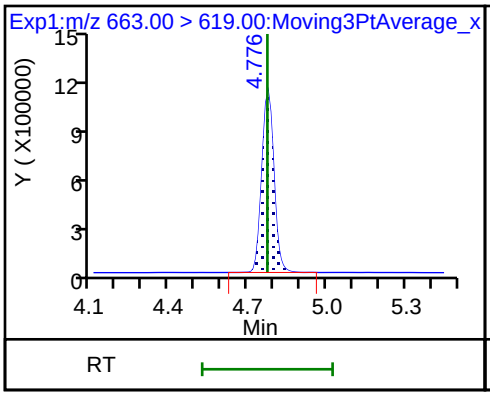
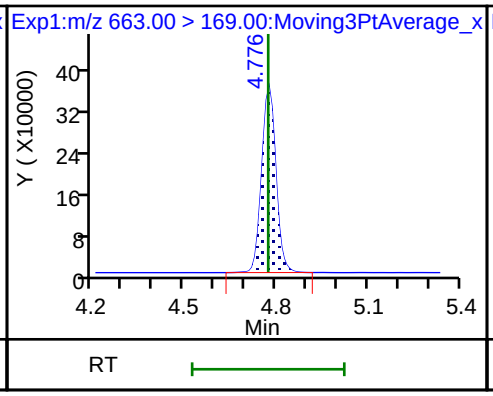


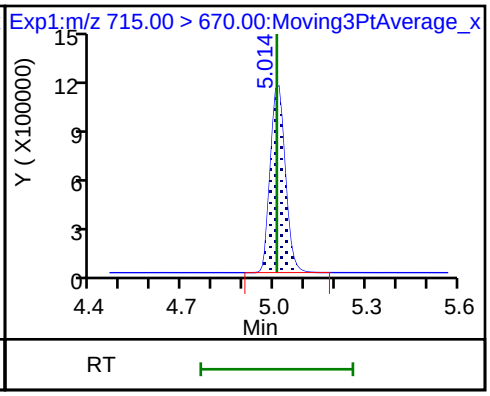
41 Perfluorotridecanoic acid



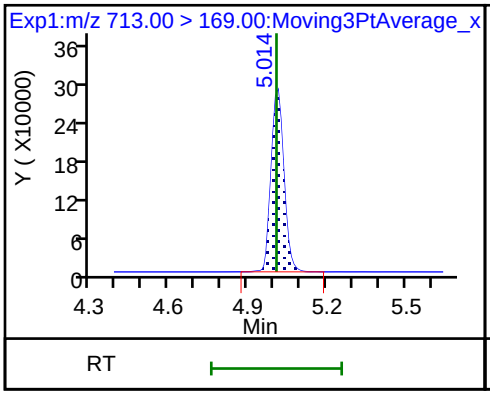
41 Perfluorotridecanoic acid



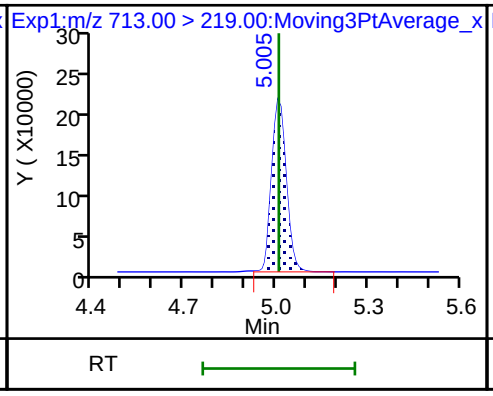
D 43 13C2 PFTeDA



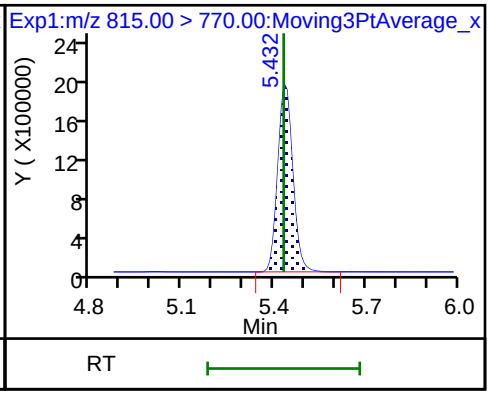
42 Perfluorotetradecanoic acid



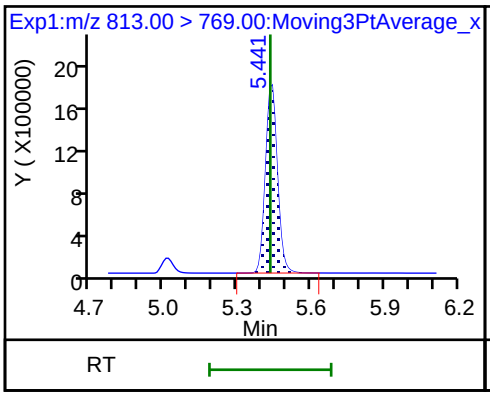
42 Perfluorotetradecanoic acid



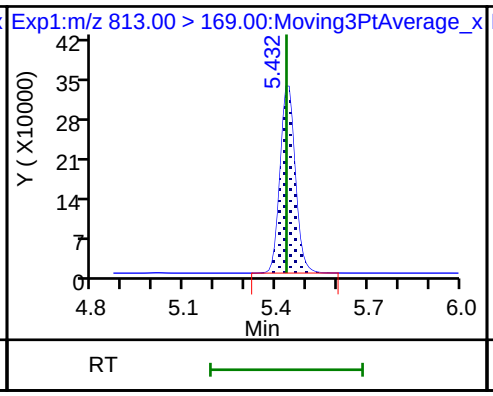
D 44 13C2 PFHxDA



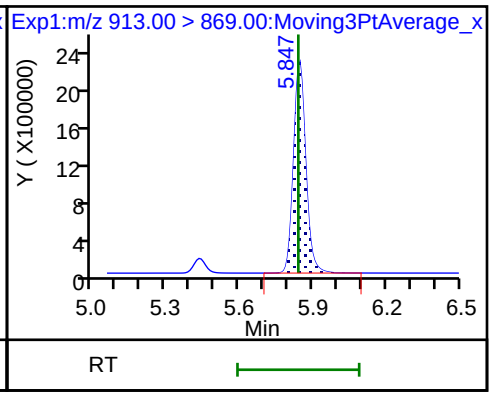
45 Perfluorohexadecanoic acid



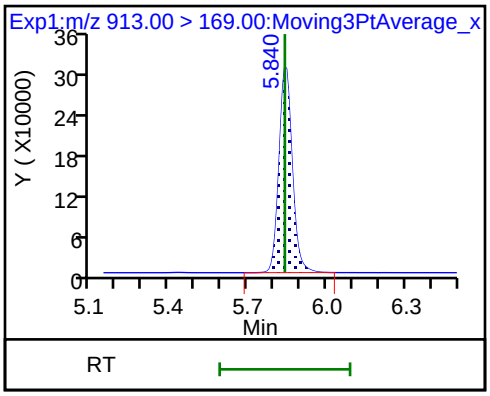
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCVL 320-281496/2 Calibration Date: 03/13/2019 21:21

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.13LLB_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8004	0.7089		0.0443	0.0500	-11.4	50.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9835	1.028		0.0523	0.0500	4.5	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9367	0.8889		0.0419	0.0442	-5.1	50.0
4:2 FTS	AveID	2.044	2.064		0.472	0.467	1.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9469	0.9838		0.0519	0.0500	3.9	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.7773	0.7718		0.0466	0.0469	-0.7	50.0
HFPO-DA (GenX)	AveID	3.025	3.097		0.0512	0.0500	2.4	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9905	0.996		0.0503	0.0500	0.6	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.000	1.090		0.0496	0.0455	9.0	50.0
DONA	AveID	3.214	3.487		0.0511	0.0471	8.5	50.0
6:2 FTS	AveID	1.419	1.586		0.530	0.474	11.8	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.106	1.211		0.0521	0.0476	9.5	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.060	1.181		0.0557	0.0500	11.4	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.035	1.016		0.0455	0.0464	-1.9	50.0
Perfluorononanoic acid (PFNA)	AveID	0.9492	1.011		0.0533	0.0500	6.5	50.0
F-53B Major	AveID	1.636	1.835		0.0523	0.0466	12.2	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8303	0.8663		0.0501	0.0480	4.3	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.9203	0.9263		0.0503	0.0500	0.6	50.0
8:2 FTS	AveID	1.147	1.298		0.542	0.479	13.2	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.8815	0.8773		0.0498	0.0500	-0.5	50.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.8650	0.8404		0.486	0.500	-2.8	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.7034	0.7719		0.0529	0.0482	9.7	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7989	0.8050		0.0504	0.0500	0.8	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7970	0.8167		0.512	0.500	2.5	50.0
F-53B Minor	AveID	2.386	2.535		0.0500	0.0471	6.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9404	1.066		0.0567	0.0500	13.3	50.0
10:2 FTS	AveID	1.144	1.306		0.0550	0.0482	14.2	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2703	0.2784		0.0499	0.0484	3.0	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9457	0.9557		0.0505	0.0500	1.1	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2395	0.2595		0.0542	0.0500	8.4	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		1.309		0.0525	0.0500	4.9	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCVL 320-281496/2 Calibration Date: 03/13/2019 21:21

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.13LLB_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.184	1.043		0.0440	0.0500	-11.9	50.0
13C4 PFBA	Ave	1.440	1.428		2.48	2.50	-0.8	50.0
13C5 PFPeA	Ave	0.9906	0.8939		2.26	2.50	-9.8	50.0
13C3 PFBS	Ave	1.504	1.453		2.25	2.33	-3.4	50.0
M2-4:2 FTS	Ave	0.1210	0.1336		2.58	2.34	10.4	50.0
13C2 PFHxA	Ave	1.016	1.045		2.57	2.50	2.8	50.0
13C3 HFPO-DA	Ave	0.0584	0.0555		2.37	2.50	-5.1	50.0
13C4 PFHpA	Ave	0.9294	0.9360		2.52	2.50	0.7	50.0
18O2 PFHxS	Ave	1.055	1.056		2.37	2.37	0.1	50.0
M2-6:2 FTS	Ave	0.1597	0.1667		2.48	2.38	4.4	50.0
13C8 PFOA	Ave	1.213	1.294		2.61	2.45	6.7	50.0
13C4 PFOA	Ave	0.8878	0.8936		2.52	2.50	0.7	50.0
13C8 PFOS	Ave	0.4189	0.3960		2.26	2.39	-5.5	50.0
13C4 PFOS	Ave	0.8199	0.7416		2.16	2.39	-9.6	50.0
13C5 PFNA	Ave	0.7185	0.7275		2.53	2.50	1.3	50.0
13C2 PFDA	Ave	0.6581	0.6693		2.54	2.50	1.7	50.0
M2-8:2 FTS	Ave	0.1918	0.2001		2.50	2.40	4.3	50.0
13C8 FOSA	Ave	1.375	1.272		2.31	2.50	-7.5	50.0
d3-NMeFOSAA	Ave	0.3408	0.3370		2.47	2.50	-1.1	50.0
13C2 PFUnA	Ave	0.5964	0.5753		2.41	2.50	-3.5	50.0
d5-NEtFOSAA	Ave	0.3646	0.3664		2.51	2.50	0.5	50.0
13C2 PFDoA	Ave	0.6423	0.6152		2.39	2.50	-4.2	50.0
13C2 PFTeDA	Ave	0.6798	0.7054		2.59	2.50	3.8	50.0
13C2 PFHxDA	Ave	1.116	1.260		2.82	2.50	12.9	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_005.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 13-Mar-2019 21:21:48 ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-Mar-2019 11:45:00 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 14-Mar-2019 11:45:00
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.777	1.769	0.008	1.000	110626	0.0443		88.6	26.2	
D 1 13C4 PFBA										
217.00 > 172.00	1.777	1.770	0.007		7802263	2.48		99.2	5477	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.105	2.094	0.011	1.005	100399	0.0523		105	6.5	
D 3 13C5 PFPeA										
267.90 > 223.00	2.095	2.095	0.0		4883873	2.26		90.2	7734	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.137	2.126	0.011	1.000	124755	0.0419	Target=1.00	94.9	224	
298.90 > 99.00	2.137	2.126	0.011	1.000	57472		2.17(1.68-3.11)		183	
D 47 13C3 PFBS										
301.90 > 80.00	2.137	2.126	0.011		7382894	2.25		96.6	627244	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.402	2.402	0.0	1.000	281388	0.4717		101	3290	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.402	2.402	0.0		681528	2.58		110	1798	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.442	2.441	0.001	1.000	112297	0.0519	Target=1.00	104	60.0	
313.00 > 119.00	2.442	2.441	0.001	1.000	11544		9.73(7.70-14.30)		47.9	
D 7 13C2 PFHxA										
315.00 > 270.00	2.442	2.442	0.0		5707270	2.57		103	8383	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.462	2.451	0.011	1.152	114949	0.0466	Target=1.00	99.3	1164	
349.00 > 99.00	2.462	2.451	0.011	1.152	44779		2.57(1.85-3.44)		411	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.551	2.550	0.001	1.000	18767	0.0512		102	13.8	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.551	2.551	0.0		303020	2.37		94.9	1269	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.812	2.809	0.003	1.000	101897	0.0503	Target=1.00	101	42.3	
363.00 > 169.00	2.812	2.809	0.003	1.000	43127		2.36(1.76-3.27)		163	
D 11 18O2 PFHxS										
403.00 > 84.00	2.822	2.812	0.010		5458503	2.37		100	6497	
D 9 13C4 PFHpA										
367.00 > 322.00	2.812	2.812	0.0		5113690	2.52		101	8911	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.822	2.819	0.003	1.000	114447	0.0496	Target=1.00	109	658	
399.00 > 99.00	2.822	2.819	0.003	1.000	41078		2.79(1.97-3.66)		140	
77 DONA										
377.00 > 251.00	2.859	2.856	0.003	0.800	266181	0.0511	Target=1.00	109	868	
377.00 > 85.00	2.859	2.856	0.003	0.800	161226		1.65(1.16-2.15)		334	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.182	3.173	0.009		865403	2.48		104	4702	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.182	3.178	0.004	1.000	273929	0.5299		112	1292	
D 73 13C8 PFOA										
421.00 > 376.00	3.198	3.189	0.009		6922067	2.61		107	12675	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.198	3.193	0.005	0.895	93416	0.0521	Target=1.00	110	1028	
449.00 > 99.00	3.198	3.193	0.005	0.895	22925		4.07(2.61-4.86)		136	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.198	3.193	0.005	0.997	115344	0.0557	Target=1.00	111	12.0	M
413.00 > 169.00	3.206	3.193	0.013	1.000	64183		1.80(0.84-2.52)		106	
D 14 13C4 PFOA										
417.00 > 372.00	3.206	3.197	0.009		4882013	2.52		101	8837	
* 62 13C2 PFOA										
415.00 > 370.00	3.198	3.202	-0.004		5463367	2.50			6479	
D 18 13C4 PFOS										
503.00 > 80.00	3.572	3.559	0.013		3873403	2.16		90.4	7177	
D 72 13C8 PFOS										
507.00 > 99.00	3.564	3.559	0.005		2068329	2.26		94.5	4221	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.572	3.564	0.008	1.000	76393	0.0455	Target=1.00	98.1	277	M
499.00 > 99.00	3.572	3.564	0.008	1.000	16625		4.60(2.31-6.93)		114	M
D 19 13C5 PFNA										
468.00 > 423.00	3.580	3.575	0.005		3974782	2.53		101	9507	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.580	3.579	0.001	1.000	80388	0.0533	Target=1.00	107	32.3	M
463.00 > 169.00	3.580	3.579	0.001	1.000	17698		4.54(2.89-5.37)		162	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.772	3.761	0.011	1.056	138580	0.0523		112	440	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.916	3.908	0.008	1.096	67391	0.0501	Target=1.00	104	575	
549.00 > 99.00	3.916	3.908	0.008	1.096	23946		2.81(2.05-3.81)		177	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.939	3.923	0.016	1.002	271952	0.5420		113	895	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.931	3.923	0.008	1.000	67740	0.0503	Target=1.00	101	78.7	
513.00 > 169.00	3.939	3.923	0.016	1.002	13123		5.16(3.74-6.94)		97.7	
D 23 13C2 PFDA										
515.00 > 470.00	3.931	3.928	0.003		3656626	2.54		102	6558	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.931	3.928	0.003		1047362	2.50		104	4068	
D 21 13C8 FOSA										
506.00 > 78.00	3.939	3.928	0.011		6949899	2.31		92.5	9598	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.939	3.930	0.009	1.000	121937	0.0498		99.5	218	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.097	4.085	0.012		1840877	2.47		98.9	2852	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.097	4.088	0.009	1.000	309406	0.4858		97.2	181	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.229	4.221	0.008	1.184	60296	0.0529	Target=1.00	110	184	
599.00 > 99.00	4.229	4.221	0.008	1.184	16060		3.75(2.28-4.23)		125	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.253	4.238	0.015	1.000	50600	0.0504	Target=1.00	101	34.1	M
563.00 > 169.00	4.253	4.238	0.015	1.000	11305		4.48(2.86-5.32)		93.1	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.253	4.249	0.004		2001816	2.51		101	1034	
D 30 13C2 PFUnA										
565.00 > 520.00	4.253	4.249	0.004		3142907	2.41		96.5	5667	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.261	4.254	0.007	1.002	326959	0.5123		102	1128	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.390	4.374	0.016	1.229	193499	0.0500		106	682	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.537	4.526	0.011	1.000	71634	0.0567	Target=1.00	113	25.6	
613.00 > 169.00	4.537	4.526	0.011	1.000	16358		4.38(2.82-5.24)		128	
D 36 13C2 PFDoA										
615.00 > 570.00	4.537	4.528	0.009		3361272	2.39		95.8	6150	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.553	4.542	0.011	1.158	27532	0.0550		114	223	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.760	4.748	0.012	1.333	21839	0.0499	Target=1.00	103	17.7	
699.00 > 99.00	4.760	4.748	0.012	1.333	32531		0.67(0.44-0.82)		246	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.798	4.786	0.012	1.057	64249	0.0505	Target=1.00	101	15.0	M
663.00 > 169.00	4.789	4.786	0.003	1.055	22491		2.86(2.18-4.05)		235	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.024	5.015	0.009	1.000	20003	0.0542	Target=1.00	108	243	
713.00 > 219.00	5.024	5.015	0.009	1.000	12948		1.54(0.96-1.79)		138	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.024	5.026	-0.002		3854102	2.59		104	6901	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.450	5.450	0.0	1.000	180229	0.0525	Target=1.00	105	10.7	
813.00 > 169.00	5.450	5.450	0.0	1.000	34891		5.17(3.69-6.84)		137	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.450	5.451	-0.001		6881770	2.82		113	5476	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.856	5.854	0.002	1.074	143617	0.0440	Target=1.00	88.1	10.3	
913.00 > 169.00	5.856	5.854	0.002	1.074	19044		7.54(5.20-9.66)		61.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LLCCVL_00003 Amount Added: 1.00 Units: mL

Report Date: 14-Mar-2019 11:45:01 Chrom Revision: 2.3 13-Mar-2019 09:24:14

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_005.d

Injection Date: 13-Mar-2019 21:21:48 Instrument ID: A8_N

Lims ID: CCVL

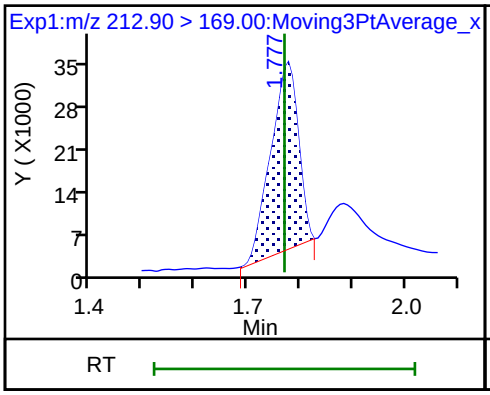
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 2

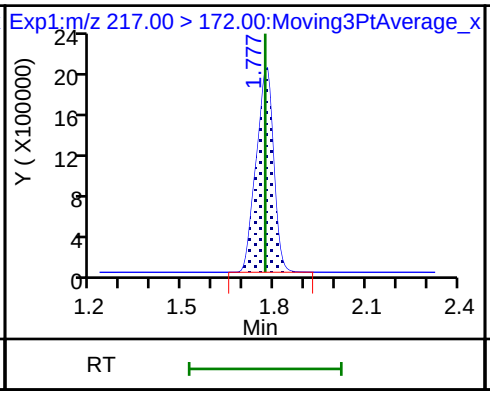
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

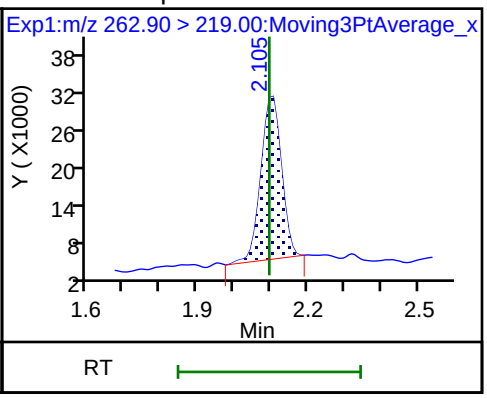
2 Perfluorobutanoic acid



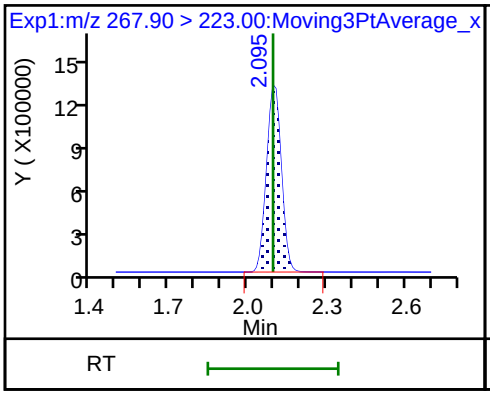
D 1 13C4 PFBA



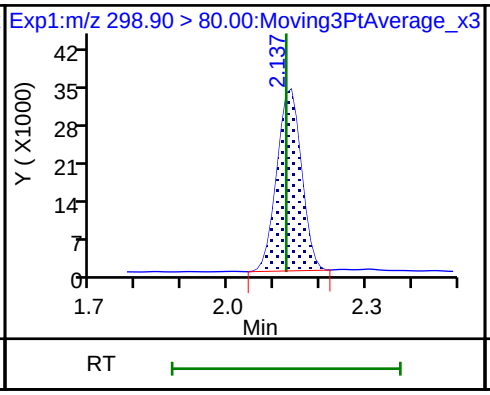
4 Perfluoropentanoic acid



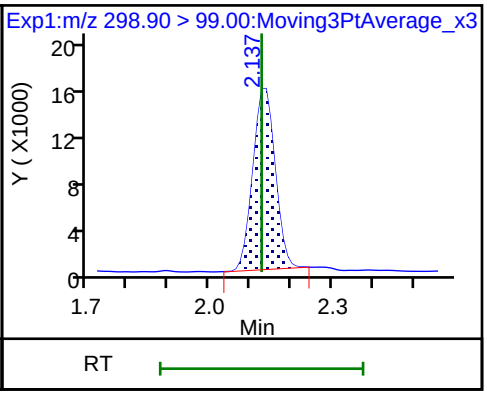
D 3 13C5 PFPeA



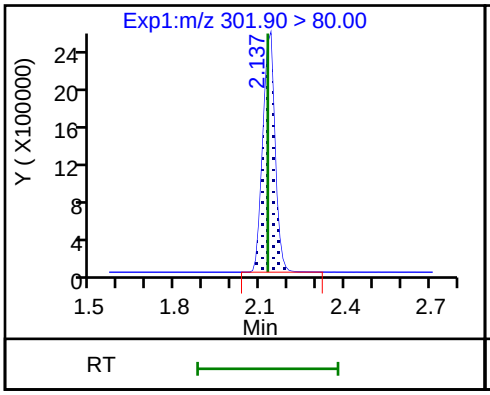
5 Perfluorobutanesulfonic acid



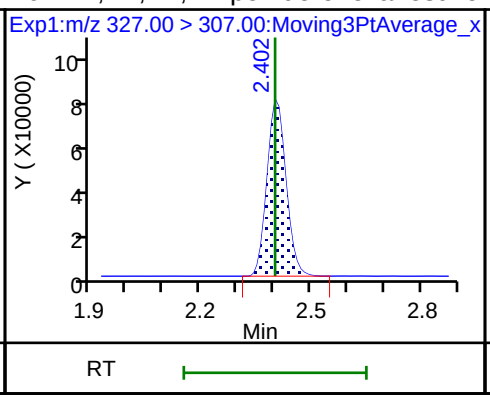
5 Perfluorobutanesulfonic acid



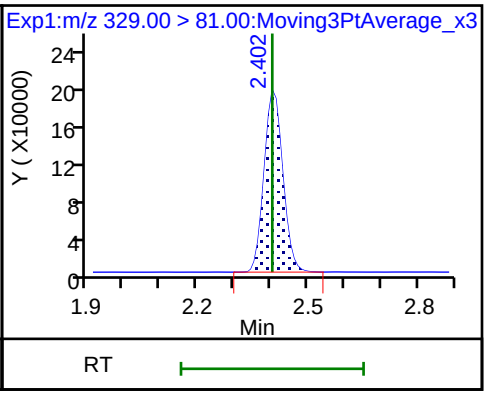
D 47 13C3 PFBS



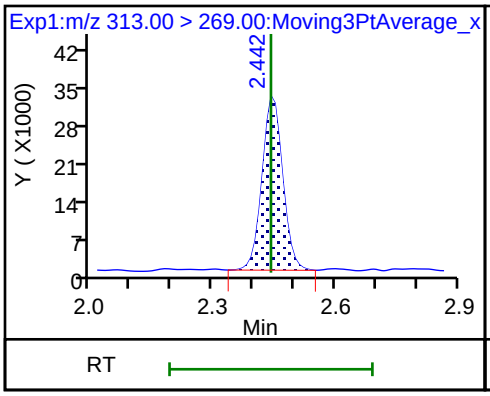
61 1H,1H,2H,2H-perfluorohexanesulfon



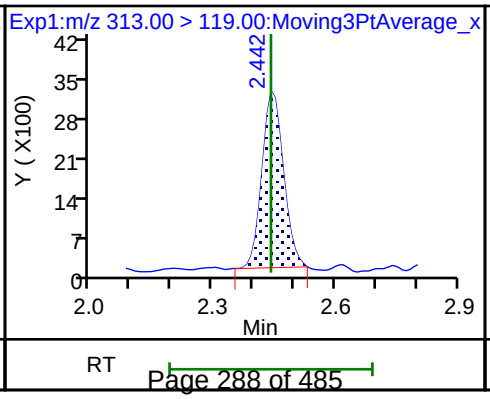
D 60 M2-4:2 FTS



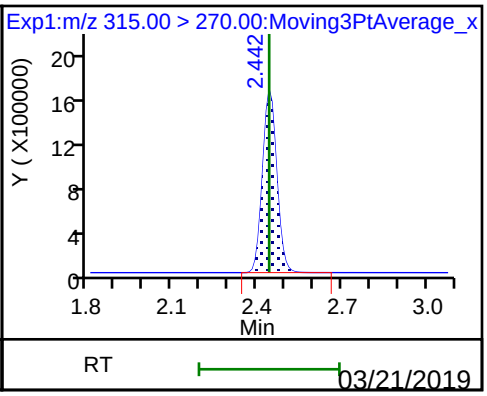
6 Perfluorohexanoic acid



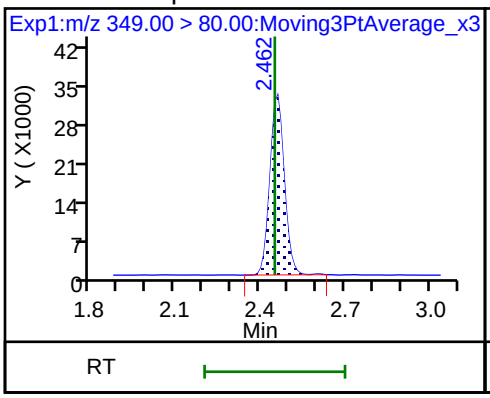
6 Perfluorohexanoic acid



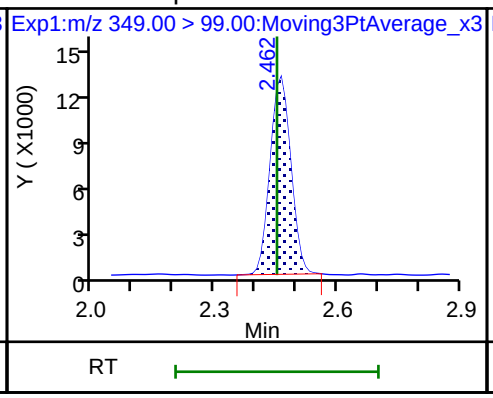
D 7 13C2 PFHxA



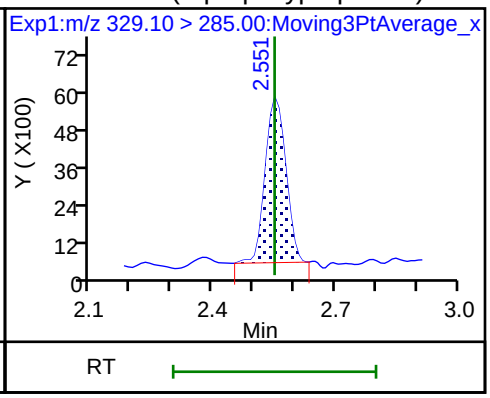
70 Perfluoropentanesulfonic acid



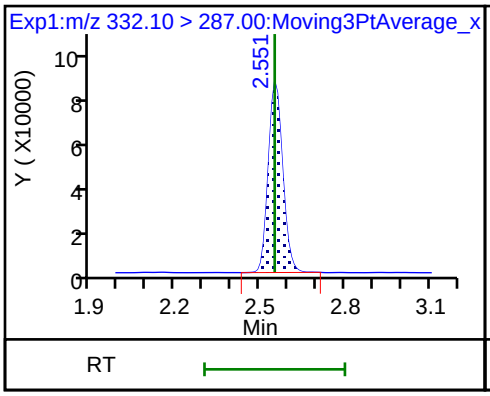
70 Perfluoropentanesulfonic acid



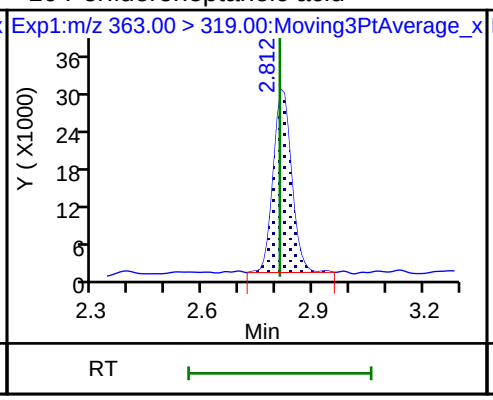
67 Perfluoro(2-propoxypropanoic) acid



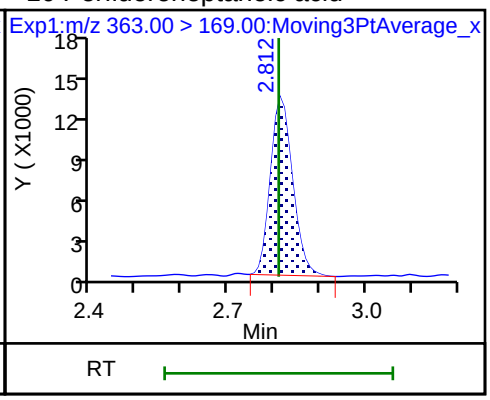
D 64 13C3 HFPO-DA



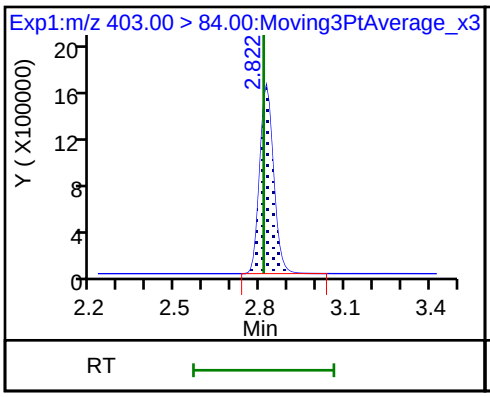
10 Perfluoroheptanoic acid



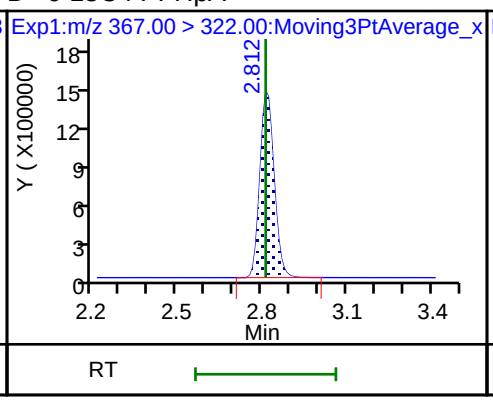
10 Perfluoroheptanoic acid



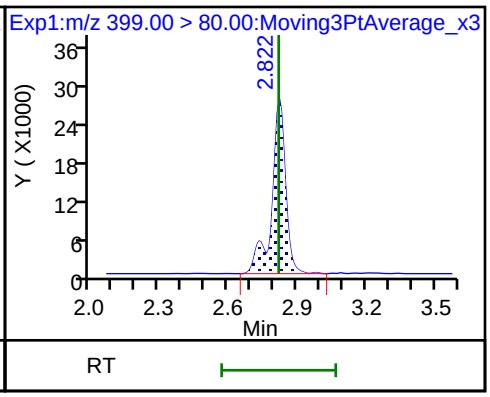
D 11 18O2 PFHxS



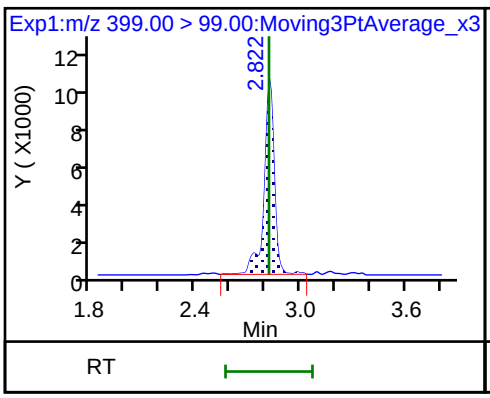
D 9 13C4 PFHpA



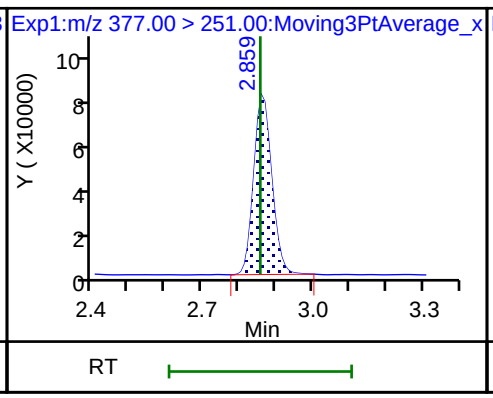
8 Perfluorohexanesulfonic acid



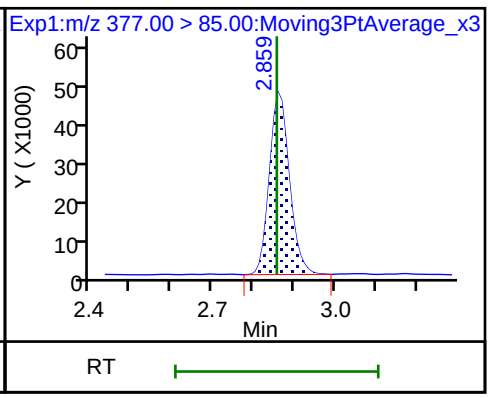
8 Perfluorohexanesulfonic acid



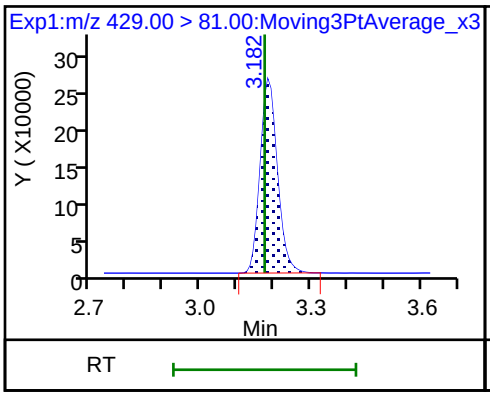
77 DONA



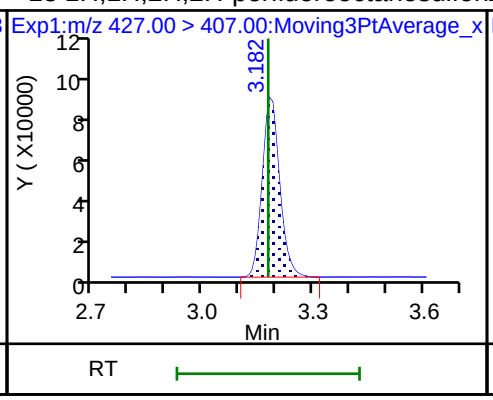
77 DONA



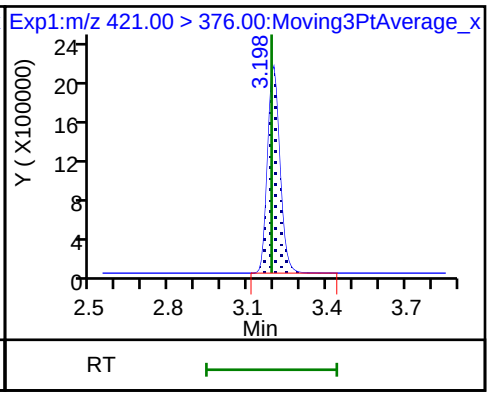
D 12 M2-6:2 FTS



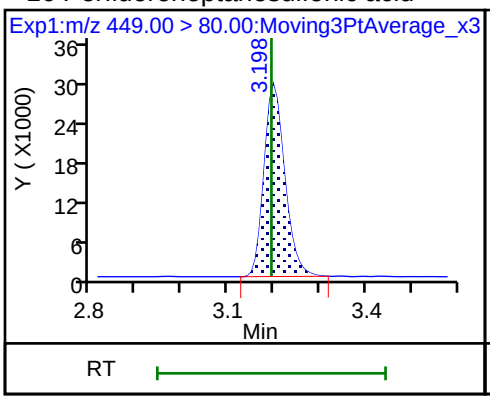
13 1H,1H,2H,2H-perfluorooctanesulfon



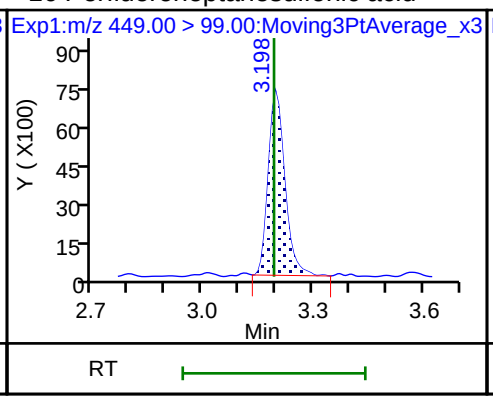
D 73 13C8 PFOA



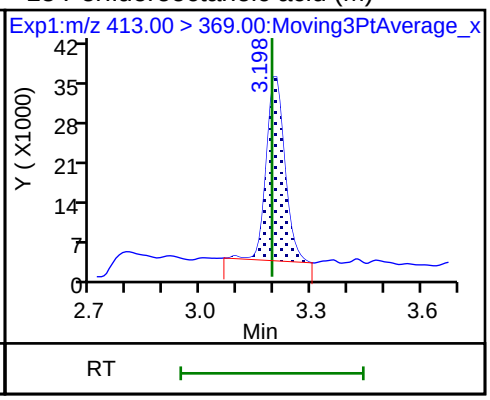
16 Perfluoroheptanesulfonic acid



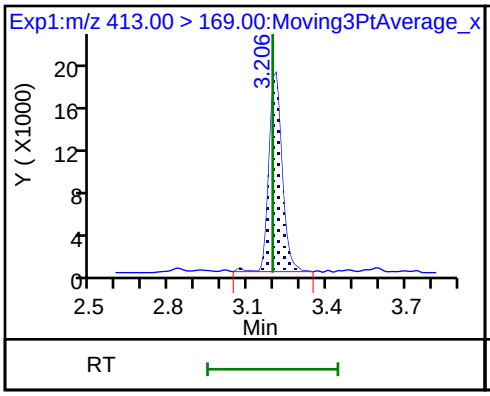
16 Perfluoroheptanesulfonic acid



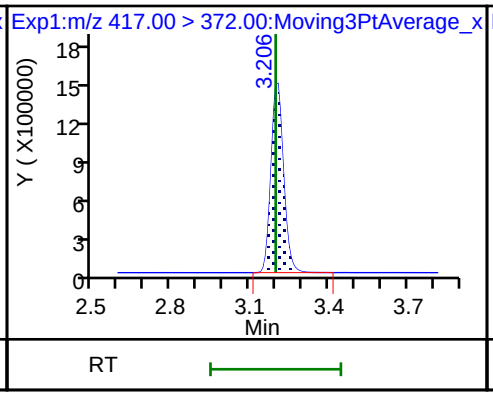
15 Perfluorooctanoic acid (M)



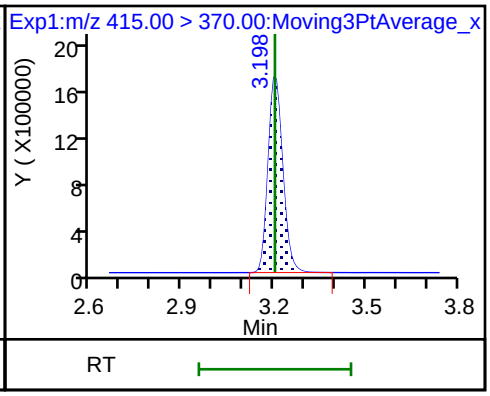
15 Perfluorooctanoic acid



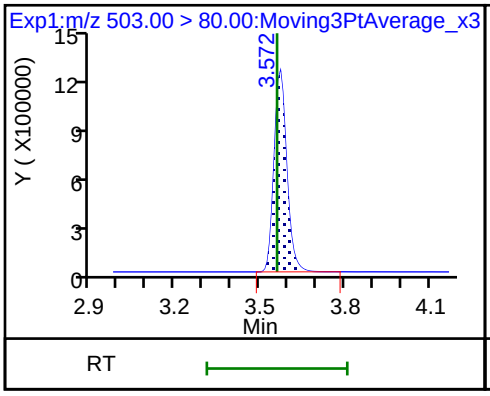
D 14 13C4 PFOA



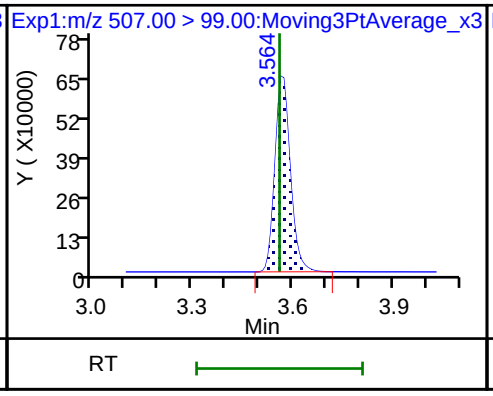
* 62 13C2 PFOA



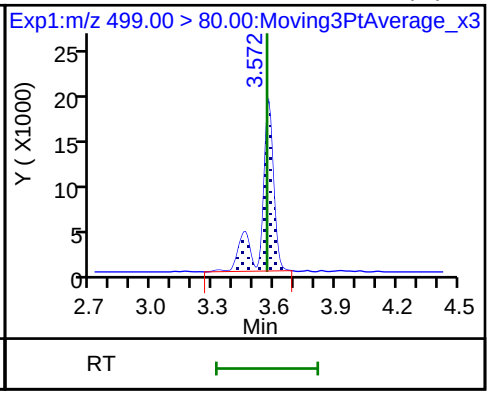
D 18 13C4 PFOS



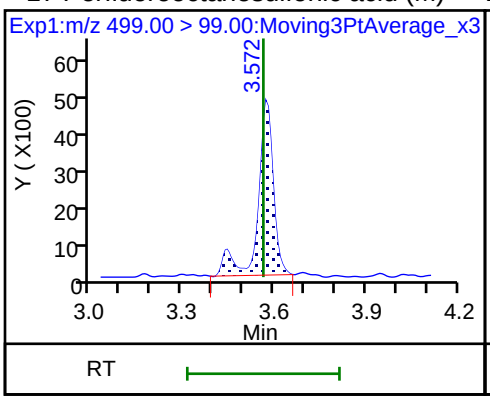
D 72 13C8 PFOS



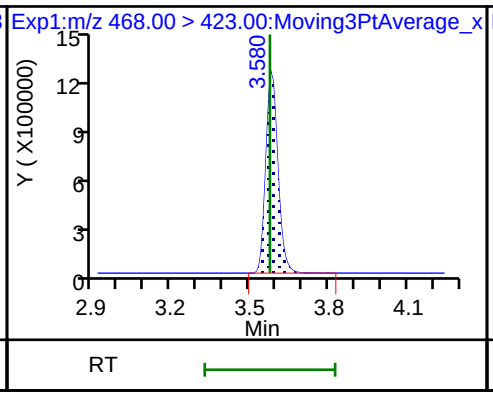
17 Perfluorooctanesulfonic acid (M)



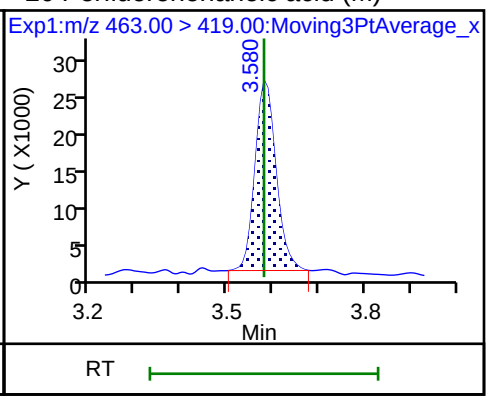
17 Perfluorooctanesulfonic acid (M)



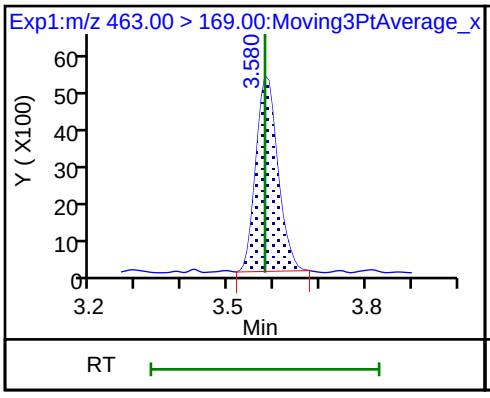
D 19 13C5 PFNA



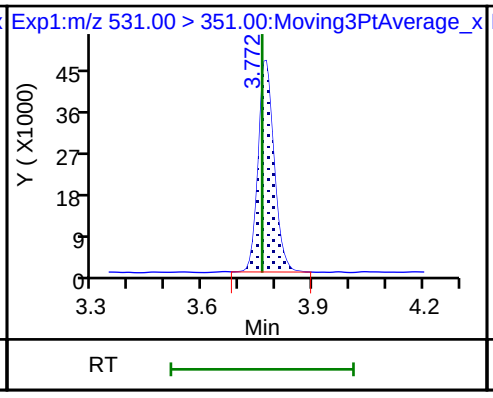
20 Perfluorononanoic acid (M)



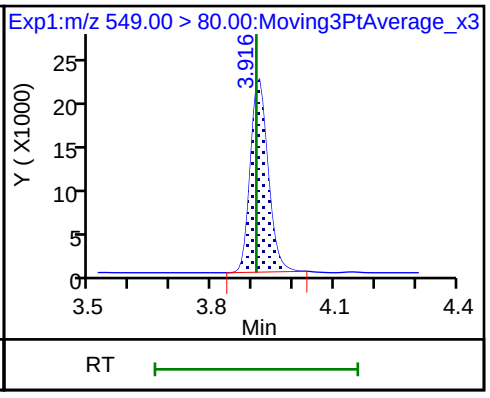
20 Perfluorononanoic acid



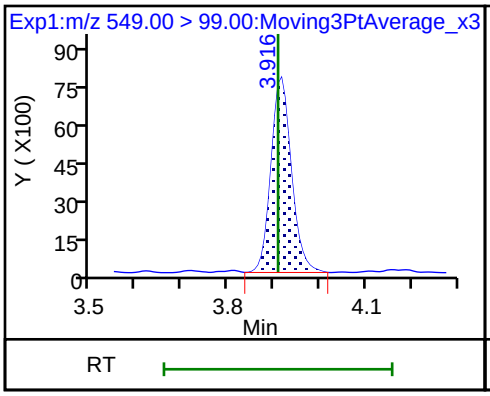
69 9-Chlorohexadecafluoro-3-oxanonane



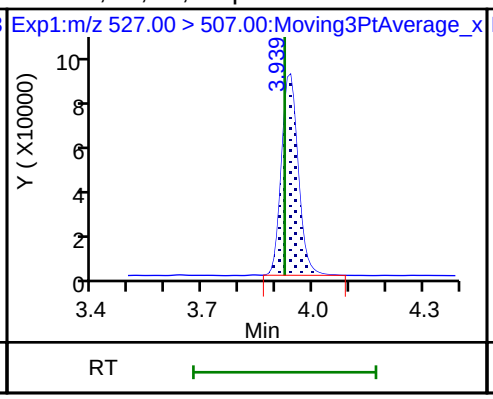
68 Perfluorononanesulfonic acid



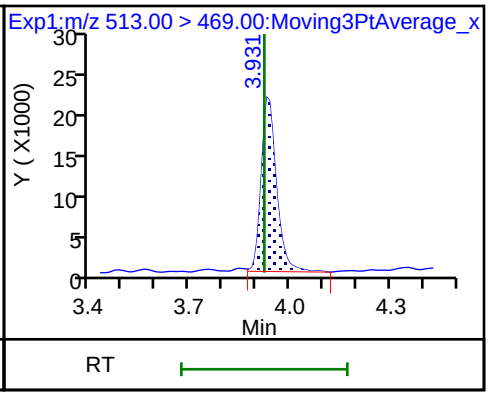
68 Perfluorononanesulfonic acid



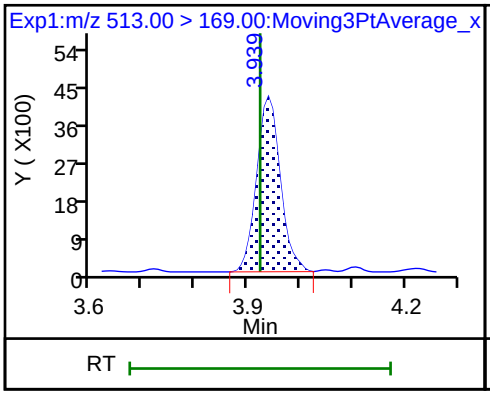
25 1H,1H,2H,2H-perfluorodecanesulfoni



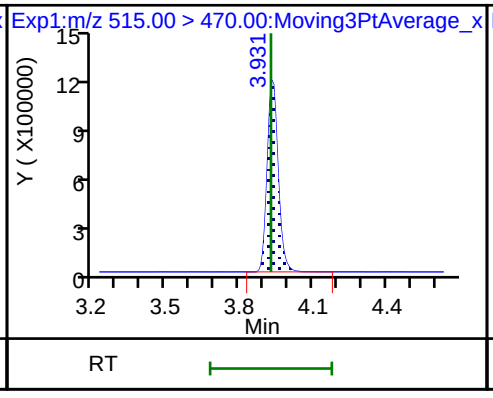
24 Perfluorodecanoic acid



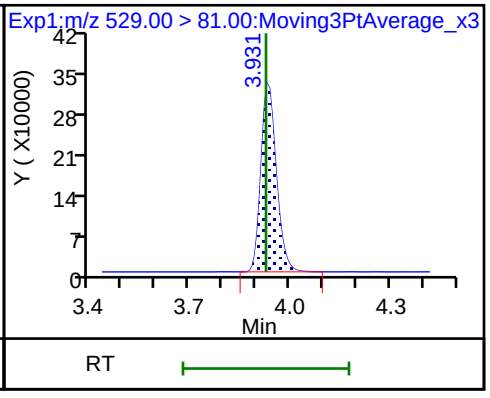
24 Perfluorodecanoic acid



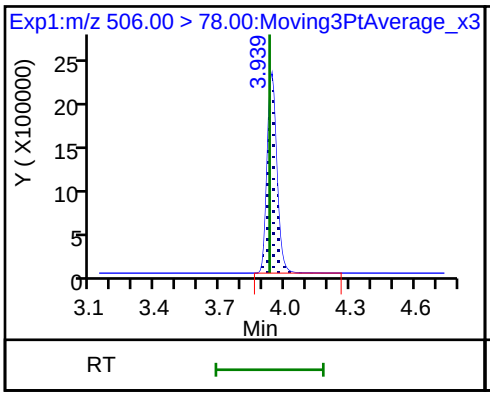
D 23 13C2 PFDA



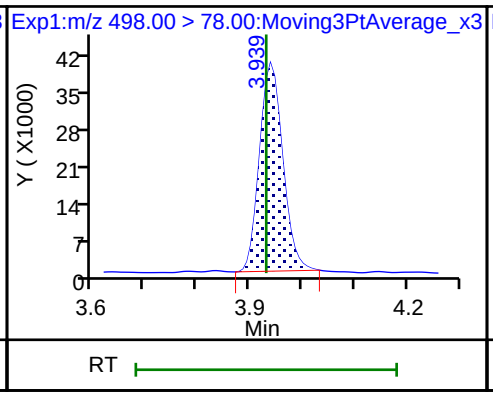
D 26 M2-8:2 FTS



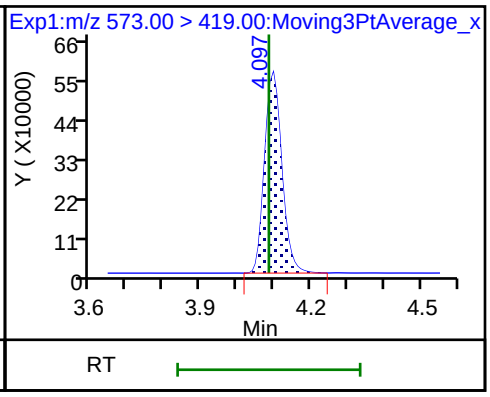
D 21 13C8 FOSA



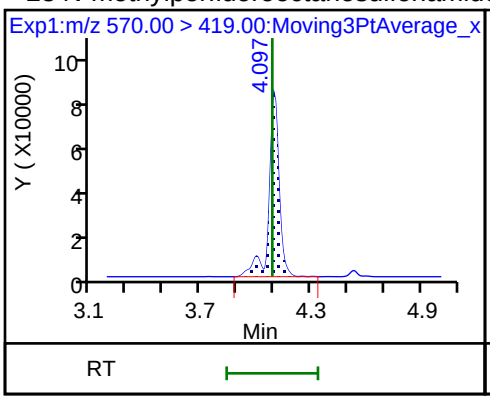
22 Perfluorooctanesulfonamide



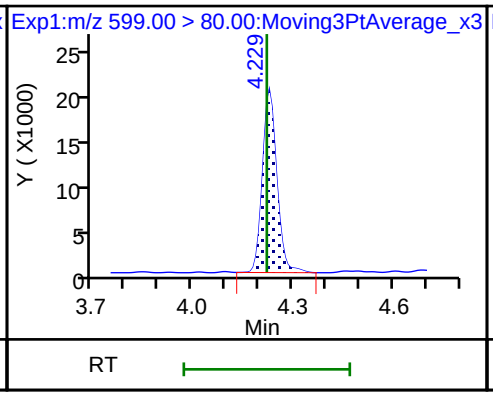
D 27 d3-NMeFOSAA



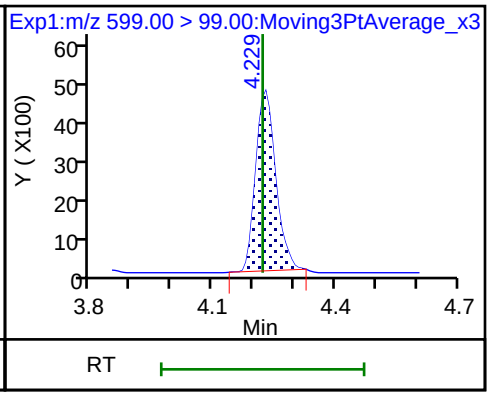
28 N-methylperfluorooctanesulfonamido



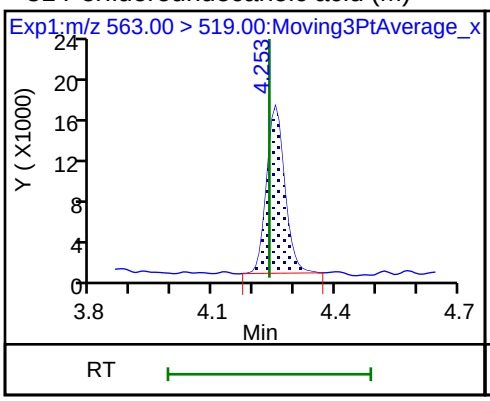
29 Perfluorodecanesulfonic acid



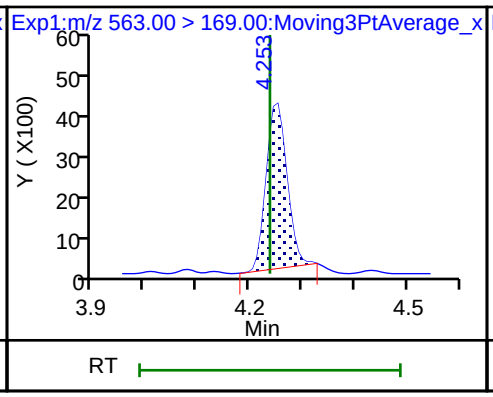
29 Perfluorodecanesulfonic acid



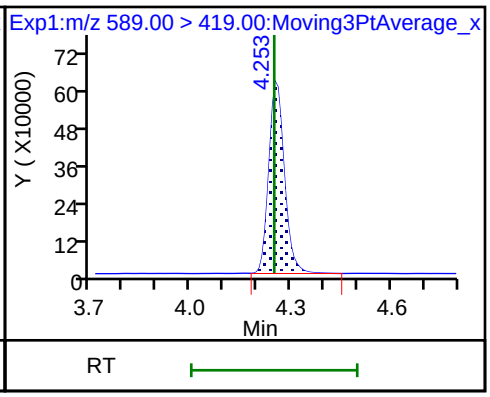
31 Perfluoroundecanoic acid (M)



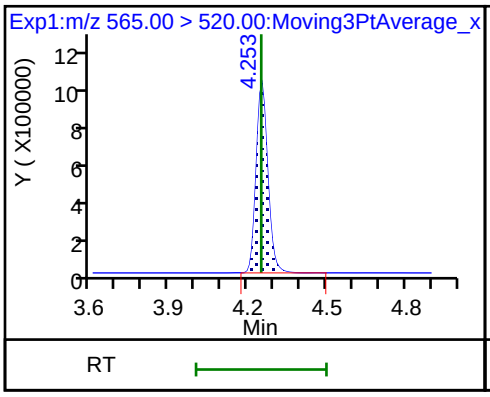
31 Perfluoroundecanoic acid



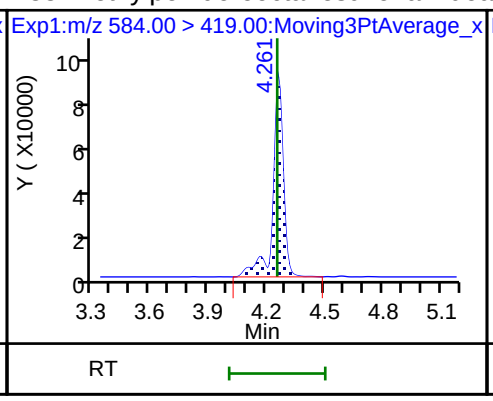
D 32 d5-NEtFOSAA



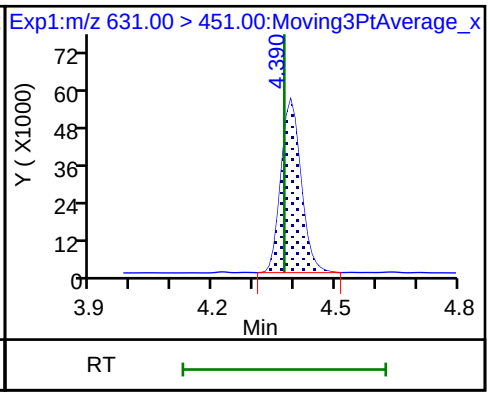
D 30 13C2 PFUnA



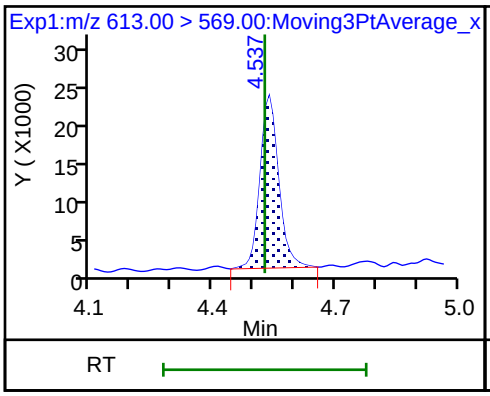
33 N-ethylperfluorooctanesulfonamidoa



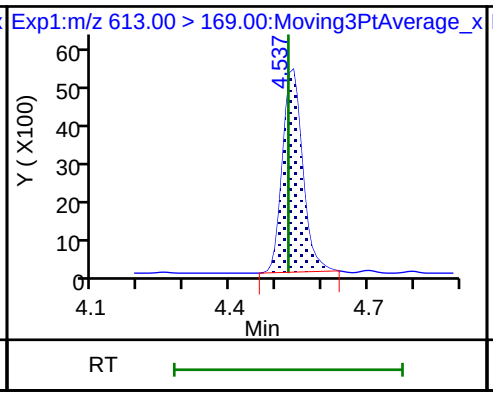
66 11-Chloroeicosafluoro-3-oxaundecan



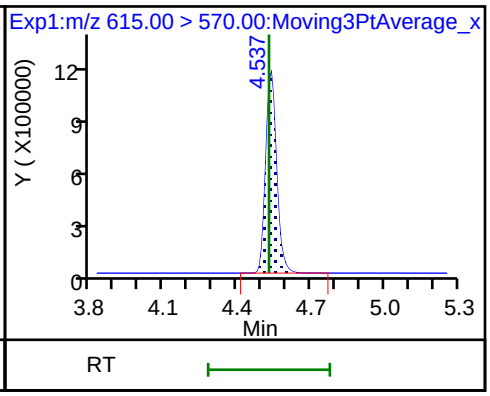
37 Perfluorododecanoic acid



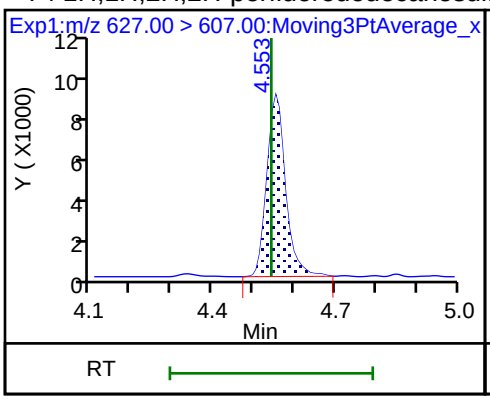
37 Perfluorododecanoic acid



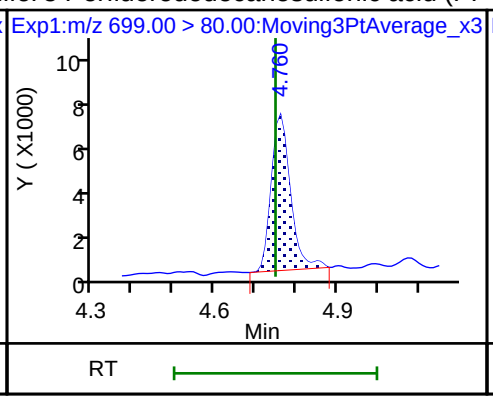
D 36 13C2 PFDoA



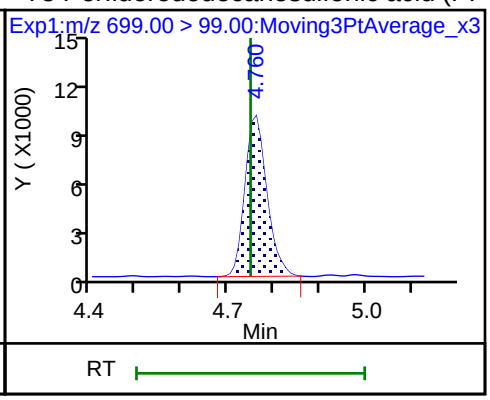
74 1H,1H,2H,2H-perfluorododecanesulfo



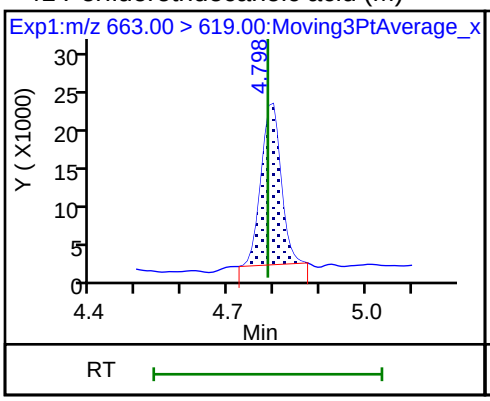
75 Perfluorododecanesulfonic acid (PF



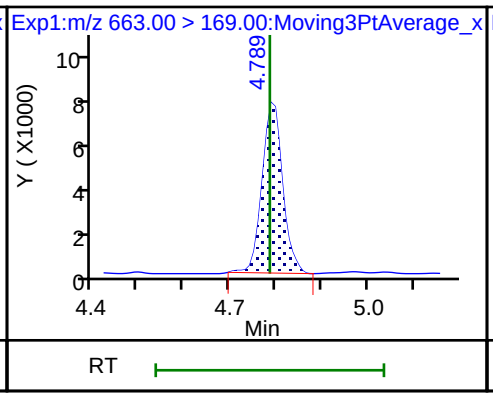
75 Perfluorododecanesulfonic acid (PF



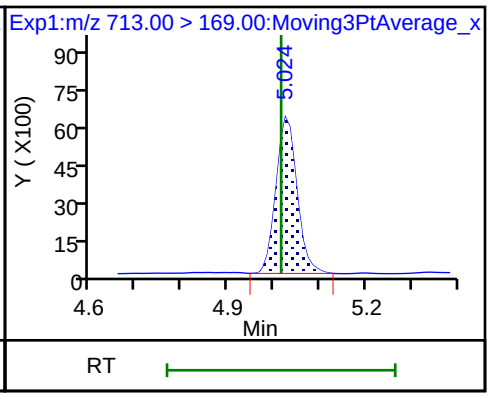
41 Perfluorotridecanoic acid (M)



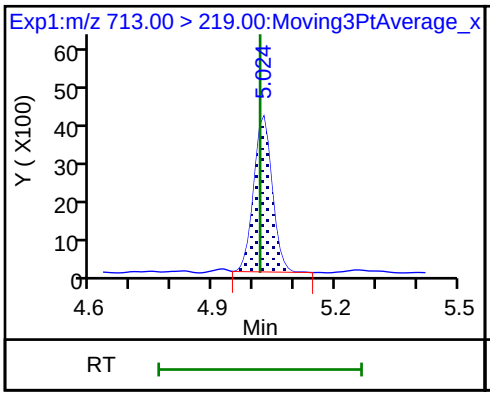
41 Perfluorotridecanoic acid



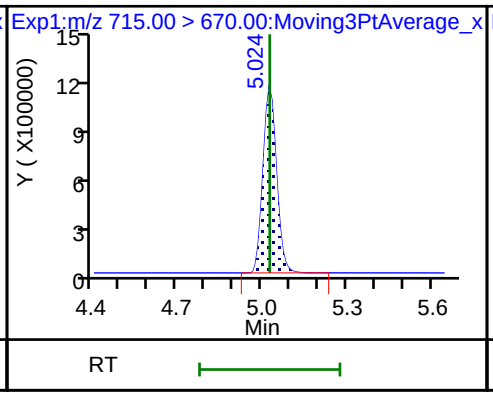
42 Perfluorotetradecanoic acid



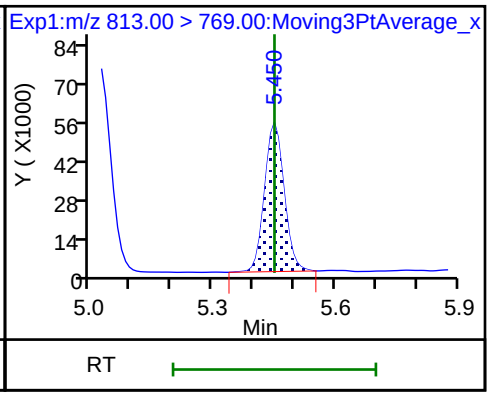
42 Perfluorotetradecanoic acid



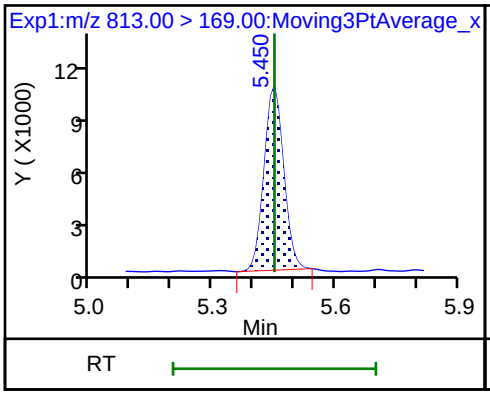
D 43 13C2 PFTeDA



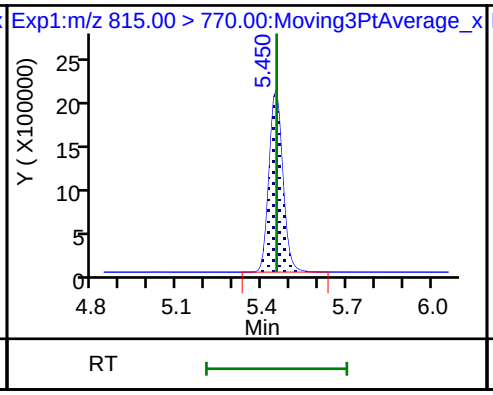
45 Perfluorohexadecanoic acid



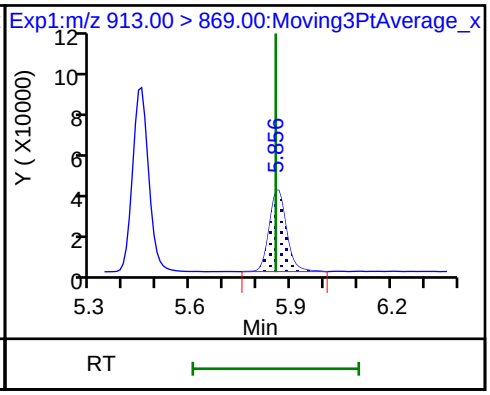
45 Perfluorohexadecanoic acid



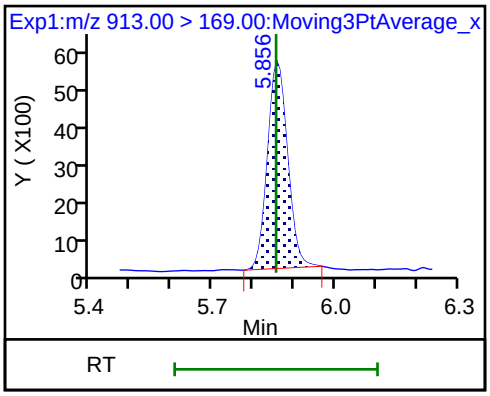
D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

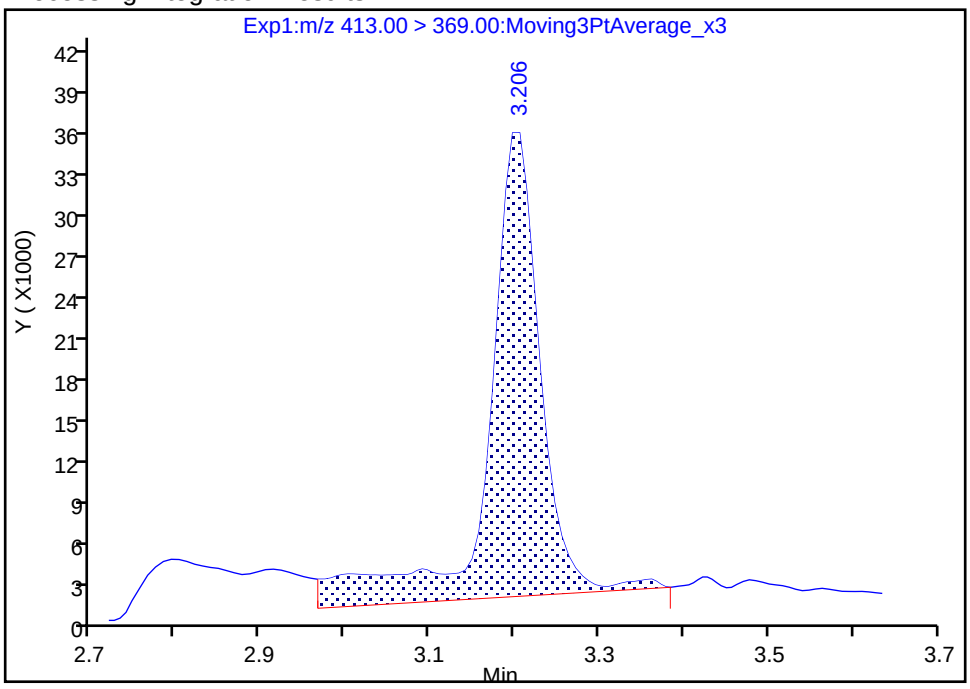
Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_005.d
Injection Date: 13-Mar-2019 21:21:48 Instrument ID: A8_N
Lims ID: CCVL
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

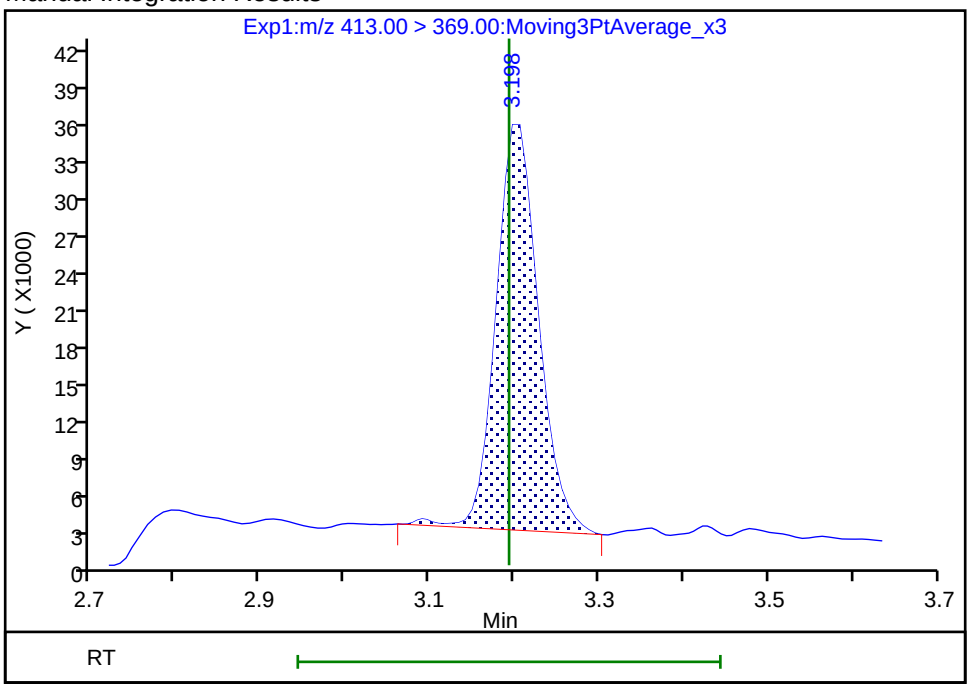
Processing Integration Results

RT: 3.21
Area: 148190
Amount: 0.071567
Amount Units: ng/ml



Manual Integration Results

RT: 3.20
Area: 115344
Amount: 0.055704
Amount Units: ng/ml



Reviewer: mongkols, 14-Mar-2019 11:44:26
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

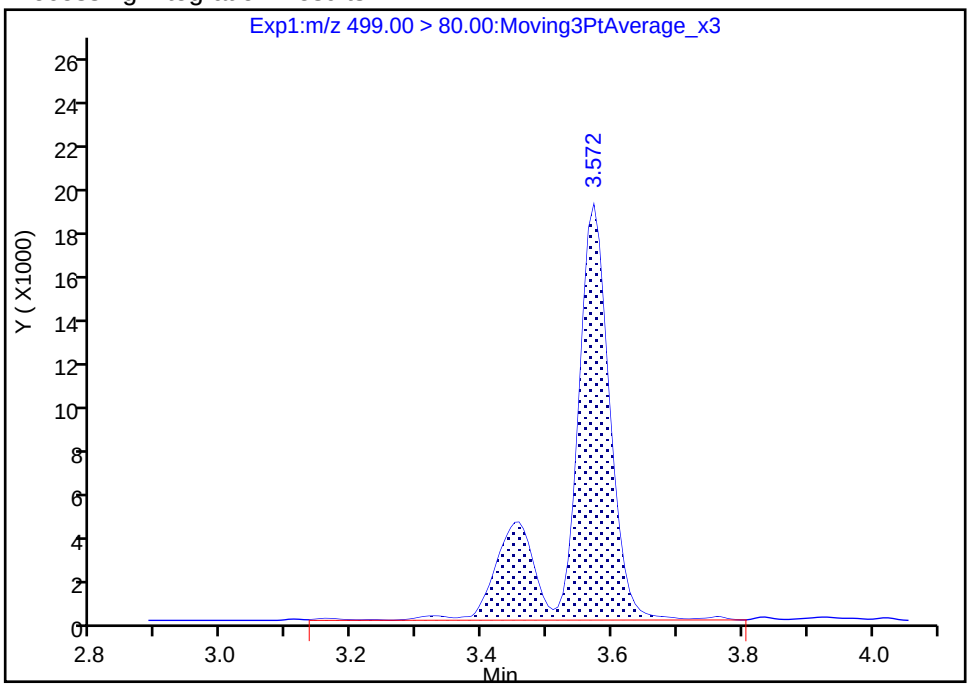
Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_005.d
Injection Date: 13-Mar-2019 21:21:48 Instrument ID: A8_N
Lims ID: CCVL
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

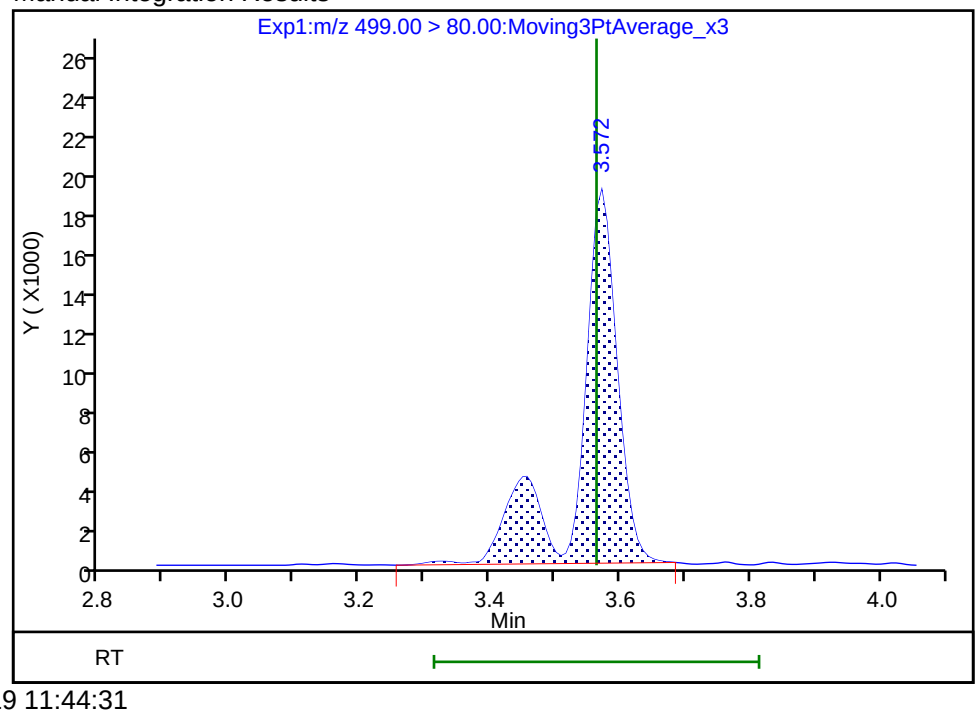
Processing Integration Results

RT: 3.57
Area: 78649
Amount: 0.046877
Amount Units: ng/ml



Manual Integration Results

RT: 3.57
Area: 76393
Amount: 0.045532
Amount Units: ng/ml



Reviewer: mongkols, 14-Mar-2019 11:44:31
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

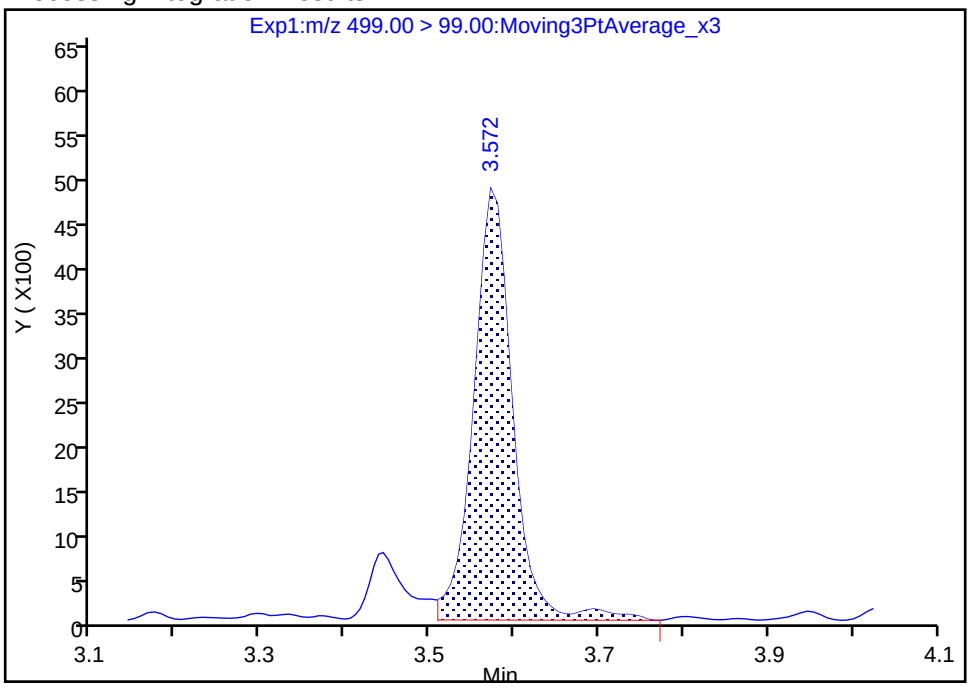
Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_005.d
Injection Date: 13-Mar-2019 21:21:48 Instrument ID: A8_N
Lims ID: CCVL
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

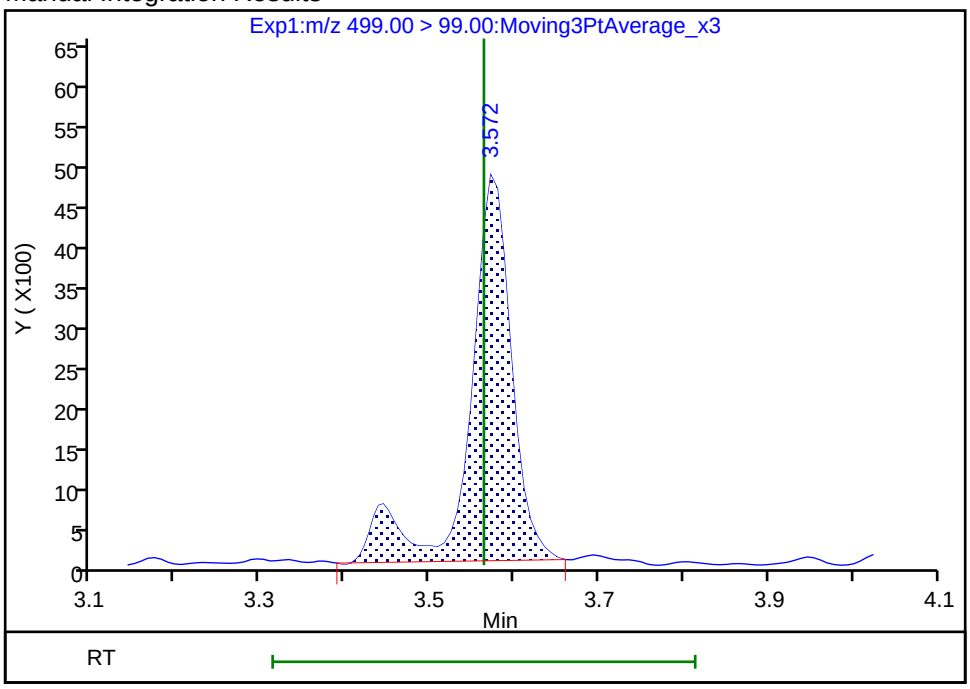
Processing Integration Results

RT: 3.57
Area: 15523
Amount: 0.046877
Amount Units: ng/ml



Manual Integration Results

RT: 3.57
Area: 16625
Amount: 0.045532
Amount Units: ng/ml



Reviewer: mongkols, 14-Mar-2019 11:44:34
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

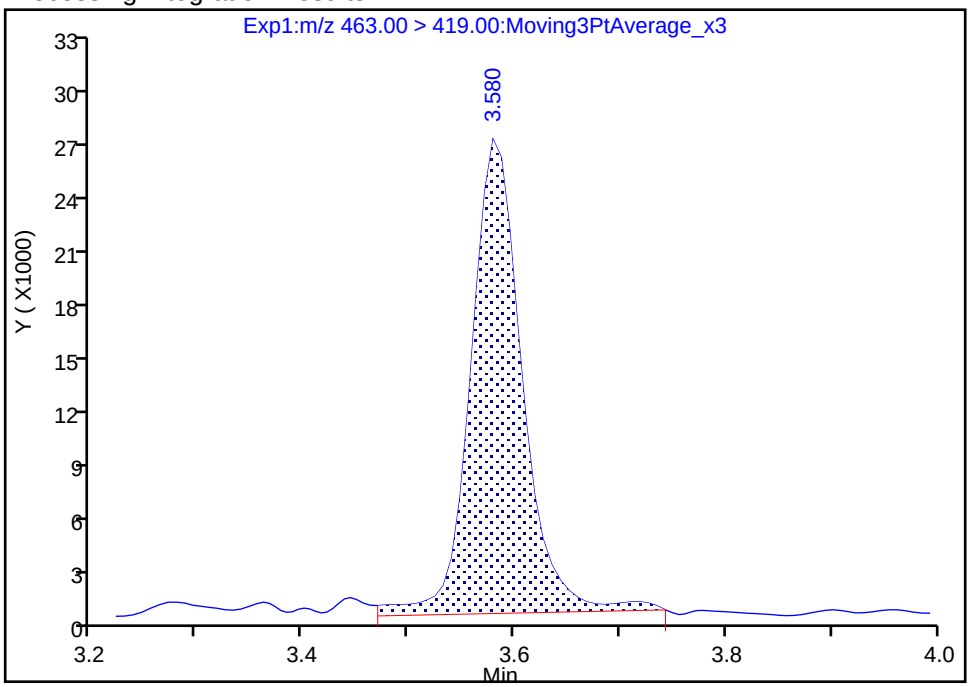
Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_005.d
Injection Date: 13-Mar-2019 21:21:48 Instrument ID: A8_N
Lims ID: CCVL
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

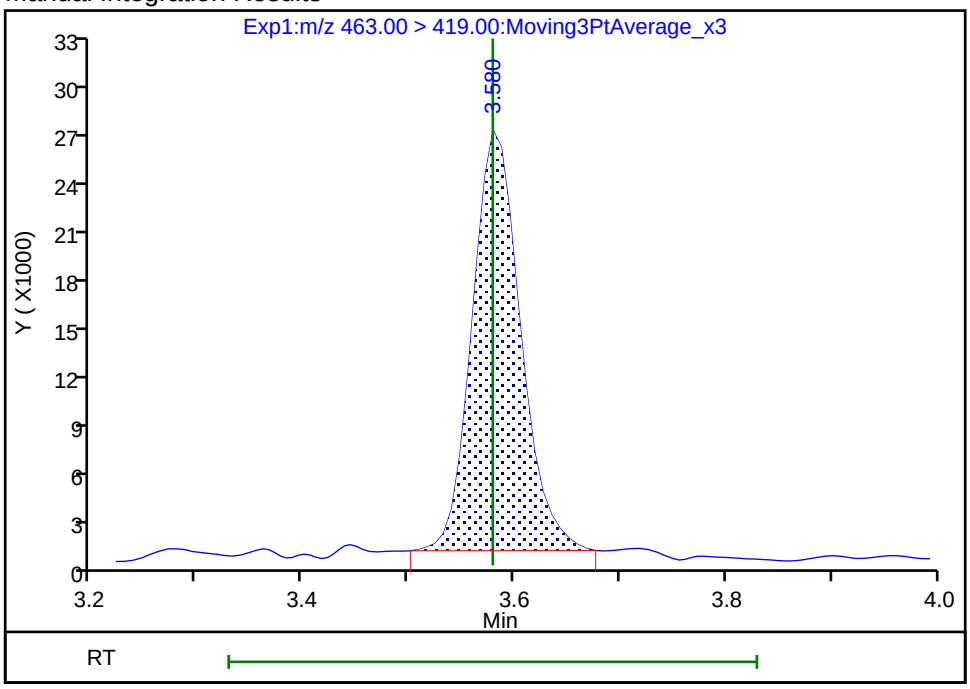
Processing Integration Results

RT: 3.58
Area: 88184
Amount: 0.058431
Amount Units: ng/ml



Manual Integration Results

RT: 3.58
Area: 80388
Amount: 0.053265
Amount Units: ng/ml



Reviewer: mongkols, 14-Mar-2019 11:44:39
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

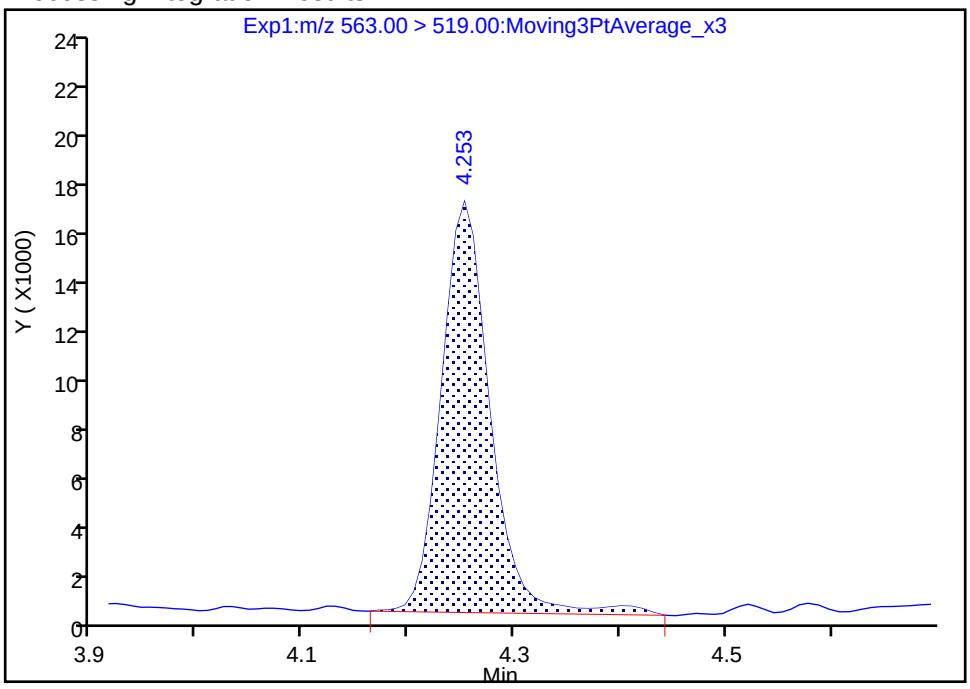
Data File:	\\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_005.d				
Injection Date:	13-Mar-2019 21:21:48	Instrument ID:	A8_N		
Lims ID:	CCVL				
Client ID:					
Operator ID:	SACINSTLCMS01	ALS Bottle#:	29	Worklist Smp#:	2
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

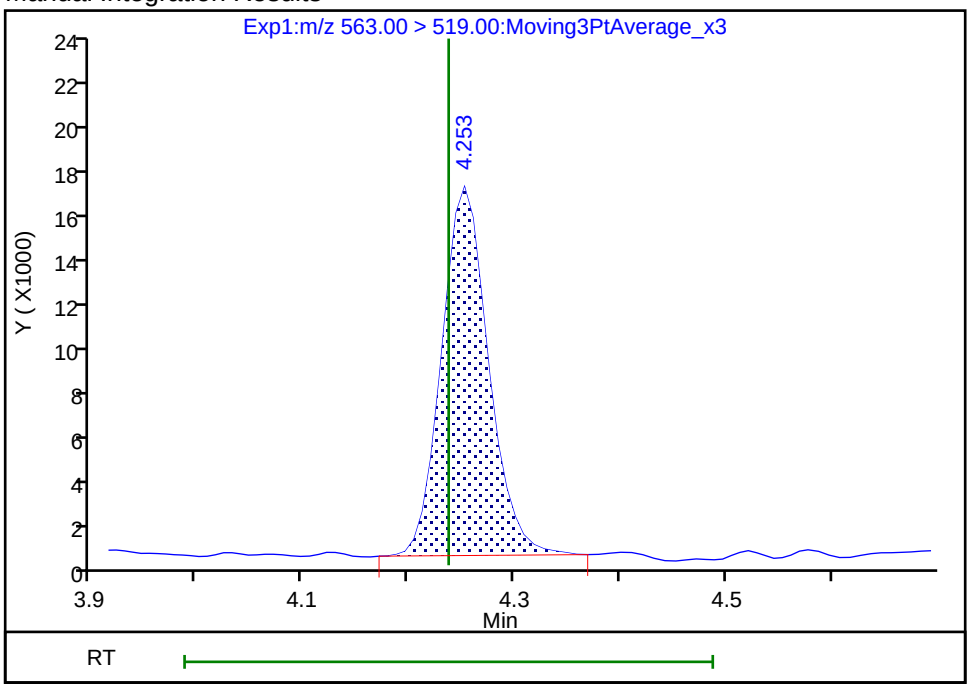
Processing Integration Results

RT: 4.25
Area: 53251
Amount: 0.053020
Amount Units: ng/ml



Manual Integration Results

RT: 4.25
Area: 50600
Amount: 0.050380
Amount Units: ng/ml



Reviewer: mongkols, 14-Mar-2019 11:44:48

Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Sacramento

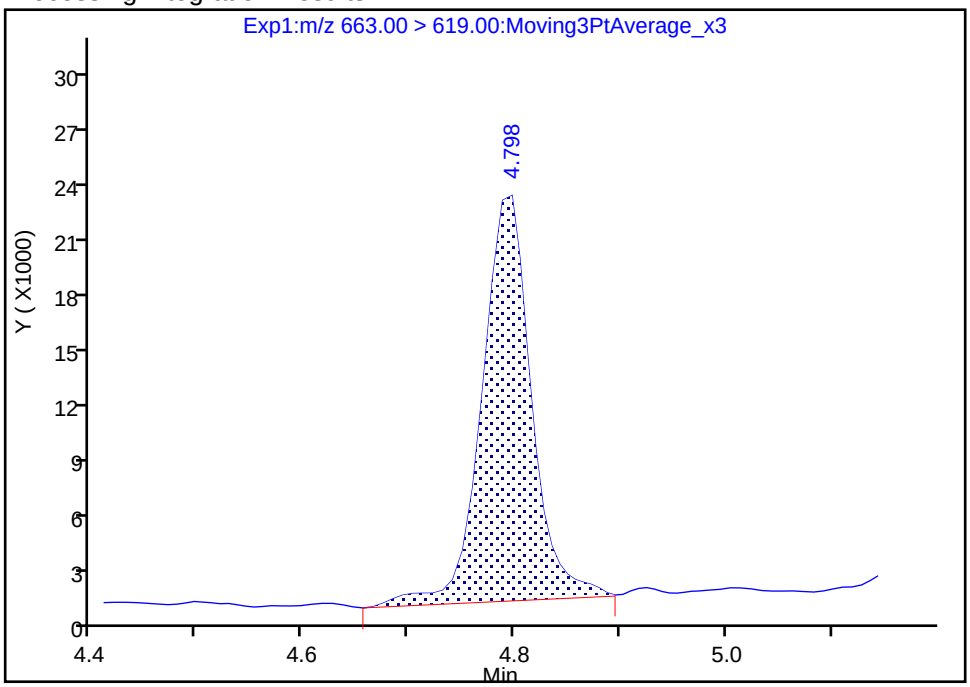
Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_005.d
Injection Date: 13-Mar-2019 21:21:48 Instrument ID: A8_N
Lims ID: CCVL
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

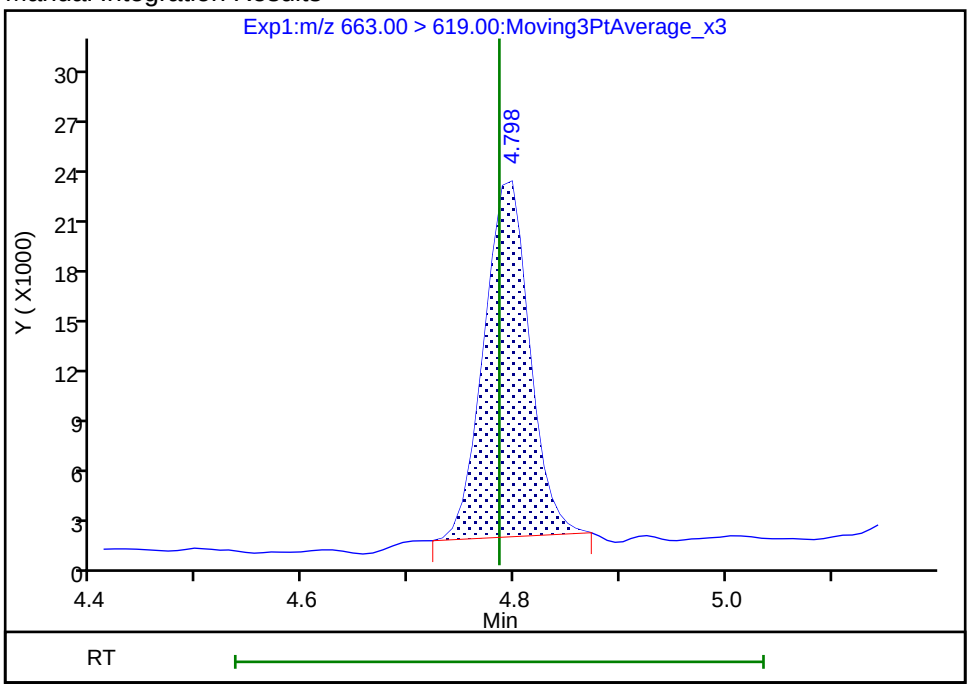
Processing Integration Results

RT: 4.80
Area: 72293
Amount: 0.056855
Amount Units: ng/ml



Manual Integration Results

RT: 4.80
Area: 64249
Amount: 0.050528
Amount Units: ng/ml



Reviewer: mongkols, 14-Mar-2019 11:44:56
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281496/3 Calibration Date: 03/13/2019 21:29

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.13LLB_046.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8004	0.8395		2.62	2.50	4.9	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9835	1.011		2.57	2.50	2.8	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9367	0.9460		2.23	2.21	1.0	50.0
4:2 FTS	AveID	2.044	1.981		2.26	2.34	-3.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9469	0.9137		2.41	2.50	-3.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.7773	0.8469		2.55	2.35	9.0	50.0
HFPO-DA (GenX)	AveID	3.025	3.318		2.74	2.50	9.7	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9905	1.008		2.54	2.50	1.8	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.000	0.997		2.27	2.28	-0.3	40.0
DONA	AveID	3.214	3.779		2.77	2.36	17.6	50.0
6:2 FTS	AveID	1.419	1.441		2.41	2.37	1.6	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.106	1.237		2.66	2.38	11.9	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.060	0.9786		2.31	2.50	-7.7	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.035	1.017		2.28	2.32	-1.7	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9492	1.027		2.70	2.50	8.1	40.0
F-53B Major	AveID	1.636	1.868		2.66	2.33	14.2	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8303	0.8285		2.39	2.40	-0.2	50.0
8:2 FTS	AveID	1.147	1.143		2.39	2.40	-0.4	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9203	0.9360		2.54	2.50	1.7	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.8815	0.8941		2.54	2.50	1.4	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.8650	0.8426		2.44	2.50	-2.6	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.7034	0.7192		2.46	2.41	2.3	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7989	0.7762		2.43	2.50	-2.8	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7970	0.8111		2.54	2.50	1.8	40.0
F-53B Minor	AveID	2.386	2.662		2.63	2.36	11.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9404	0.9895		2.63	2.50	5.2	40.0
10:2 FTS	AveID	1.144	1.344		2.83	2.41	17.5	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2703	0.2734		2.45	2.42	1.1	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9457	1.023		2.70	2.50	8.1	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2395	0.2400		2.51	2.50	0.2	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.8558		2.49	2.50	-0.6	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281496/3 Calibration Date: 03/13/2019 21:29

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.13LLB_046.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.184	1.092		2.31	2.50	-7.8	50.0
13C4 PFBA	Ave	1.440	1.454		2.52	2.50	1.0	50.0
13C5 PFPeA	Ave	0.9906	0.9330		2.35	2.50	-5.8	50.0
13C3 PFBS	Ave	1.504	1.457		2.25	2.33	-3.1	50.0
M2-4:2 FTS	Ave	0.1210	0.1348		2.60	2.34	11.4	50.0
13C2 PFHxA	Ave	1.016	0.9861		2.43	2.50	-2.9	50.0
13C3 HFPO-DA	Ave	0.0584	0.0581		2.48	2.50	-0.6	50.0
13C4 PFHpA	Ave	0.9294	0.9144		2.46	2.50	-1.6	50.0
18O2 PFHxS	Ave	1.055	1.047		2.35	2.37	-0.7	50.0
M2-6:2 FTS	Ave	0.1597	0.1663		2.47	2.38	4.1	50.0
13C4 PFOA	Ave	0.8878	0.9209		2.59	2.50	3.7	50.0
13C8 PFOA	Ave	1.213	1.294		2.61	2.45	6.7	50.0
13C8 PFOS	Ave	0.4189	0.3973		2.27	2.39	-5.1	50.0
13C4 PFOS	Ave	0.8199	0.7323		2.13	2.39	-10.7	50.0
13C5 PFNA	Ave	0.7185	0.7206		2.51	2.50	0.3	50.0
13C2 PFDA	Ave	0.6581	0.6388		2.43	2.50	-2.9	50.0
M2-8:2 FTS	Ave	0.1918	0.1975		2.47	2.40	3.0	50.0
13C8 FOSA	Ave	1.375	1.270		2.31	2.50	-7.6	50.0
d3-NMeFOSAA	Ave	0.3408	0.3275		2.40	2.50	-3.9	50.0
13C2 PFUnA	Ave	0.5964	0.5838		2.45	2.50	-2.1	50.0
d5-NEtFOSAA	Ave	0.3646	0.3513		2.41	2.50	-3.6	50.0
13C2 PFDoA	Ave	0.6423	0.6058		2.36	2.50	-5.7	50.0
13C2 PFTeDA	Ave	0.6798	0.6580		2.42	2.50	-3.2	50.0
13C2 PFHxDA	Ave	1.116	1.243		2.79	2.50	11.4	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_046.d
Lims ID: CCV L5
Client ID:
Sample Type: CCVIS
Inject. Date: 13-Mar-2019 21:29:18 ALS Bottle#: 31 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 14-Mar-2019 11:45:54 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 14-Mar-2019 11:45:54
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.769	1.769	0.0	1.000	6678889	2.62		105	1659	
D 1 13C4 PFBA										
217.00 > 172.00	1.769	1.770	-0.001		7956205	2.52		101	5522	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.094	2.094	0.0	1.000	5162806	2.57		103	340	
D 3 13C5 PFPeA										
267.90 > 223.00	2.094	2.095	-0.001		5106298	2.35		94.2	7267	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.126	2.126	0.0	1.000	6669470	2.23	Target=1.00	101	10993	
298.90 > 99.00	2.126	2.126	0.0	1.000	2824230		2.36(1.68-3.11)		5379	
D 47 13C3 PFBS										
301.90 > 80.00	2.126	2.126	0.0		7416875	2.25		96.9	649278	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.402	2.402	0.0	1.000	1365110	2.26		96.9	8880	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.402	2.402	0.0		689014	2.60		111	2225	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.441	2.441	0.0	1.000	4931035	2.41	Target=1.00	96.5	2397	
313.00 > 119.00	2.441	2.441	0.0	1.000	430515		11.45(7.70-14.30)		1460	
D 7 13C2 PFHxA										
315.00 > 270.00	2.441	2.442	-0.001		5396594	2.43		97.1	8303	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.451	2.451	0.0	1.153	6335372	2.55	Target=1.00	109	8235	
349.00 > 99.00	2.451	2.451	0.0	1.153	2375559		2.67(1.85-3.44)		7109	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.550	2.550	0.0	1.000	1054406	2.74		110	777	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.550	2.551	-0.001		317770	2.48		99.4	1127	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.809	2.809	0.0	1.000	5044756	2.54	Target=1.00	102	1861	
363.00 > 169.00	2.809	2.809	0.0	1.000	1996230		2.53(1.76-3.27)		4748	
D 11 18O2 PFHxS										
403.00 > 84.00	2.819	2.812	0.007		5422430	2.35		99.3	5754	
D 9 13C4 PFHpA										
367.00 > 322.00	2.809	2.812	-0.003		5004391	2.46		98.4	14171	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.819	2.819	0.0	1.000	5199498	2.27	Target=1.00	99.7	5287	
399.00 > 99.00	2.819	2.819	0.0	1.000	1714846		3.03(1.97-3.66)		2077	
77 DONA										
377.00 > 251.00	2.856	2.856	0.0	0.801	14266944	2.77	Target=1.00	118	15121	
377.00 > 85.00	2.856	2.856	0.0	0.801	8571003		1.66(1.16-2.15)		12939	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.178	3.173	0.005		864520	2.47		104	5262	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.178	3.178	0.0	1.000	1243016	2.41		102	4147	
D 73 13C8 PFOA										
421.00 > 376.00	3.193	3.189	0.004		6932995	2.61		107	11436	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.193	3.193	0.0	0.896	4719645	2.66	Target=1.00	112	3771	
449.00 > 99.00	3.193	3.193	0.0	0.896	1186796		3.98(2.61-4.86)		3011	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.193	3.193	0.0	1.000	4932266	2.31	Target=1.00	92.3	526	
413.00 > 169.00	3.193	3.193	0.0	1.000	2613375		1.89(0.84-2.52)		3632	
D 14 13C4 PFOA										
417.00 > 372.00	3.193	3.197	-0.004		5040075	2.59		104	8280	
* 62 13C2 PFOA										
415.00 > 370.00	3.202	3.202	0.0		5472793	2.50			7020	
D 18 13C4 PFOS										
503.00 > 80.00	3.564	3.559	0.005		3831229	2.13		89.3	3969	
D 72 13C8 PFOS										
507.00 > 99.00	3.556	3.559	-0.003		2078790	2.27		94.9	3792	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.564	3.564	0.0	1.000	3783823	2.28	Target=1.00	98.3	4186	
499.00 > 99.00	3.564	3.564	0.0	1.000	795557		4.76(2.31-6.93)		2576	M
D 19 13C5 PFNA										
468.00 > 423.00	3.572	3.575	-0.003		3943402	2.51		100	7277	
20 Perfluorononanoic acid										
463.00 > 419.00	3.579	3.579	0.0	1.002	4048223	2.70	Target=1.00	108	1380	
463.00 > 169.00	3.572	3.579	-0.007	1.000	936937		4.32(2.89-5.37)		4282	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.761	3.761	0.0	1.055	6977384	2.66		114	8112	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.908	3.908	0.0	1.097	3187500	2.39	Target=1.00	99.8	5263	
549.00 > 99.00	3.908	3.908	0.0	1.097	1087634		2.93(2.05-3.81)		4067	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.923	3.923	0.0	1.000	1183713	2.39		99.6	2913	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.923	3.923	0.0	1.000	3272152	2.54	Target=1.00	102	2813	
513.00 > 169.00	3.923	3.923	0.0	1.000	585890		5.58(3.74-6.94)		2352	
D 23 13C2 PFDA										
515.00 > 470.00	3.923	3.928	-0.005		3495948	2.43		97.1	7092	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.923	3.928	-0.005		1035407	2.47		103	3345	
D 21 13C8 FOSA										
506.00 > 78.00	3.930	3.928	0.002		6949847	2.31		92.4	8228	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.930	3.930	0.0	1.000	6213745	2.54		101	3363	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.088	4.085	0.003		1792480	2.40		96.1	3622	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.088	4.088	0.0	1.000	1510312	2.44		97.4	744	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.221	4.221	0.0	1.184	2778559	2.46	Target=1.00	102	6606	
599.00 > 99.00	4.221	4.221	0.0	1.184	894282		3.11(2.28-4.23)		8385	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.238	4.238	0.0	1.000	2479810	2.43	Target=1.00	97.2	1931	
563.00 > 169.00	4.238	4.238	0.0	1.000	615497		4.03(2.86-5.32)		3651	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.246	4.249	-0.003		1922712	2.41		96.4	896	
D 30 13C2 PFUnA										
565.00 > 520.00	4.238	4.249	-0.011		3194805	2.45		97.9	8151	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.254	4.254	0.0	1.002	1559553	2.54		102	3226	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.374	4.374	0.0	1.227	10048391	2.63		112	15179	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.526	4.526	0.0	1.000	3280460	2.63	Target=1.00	105	1604	
613.00 > 169.00	4.526	4.526	0.0	1.000	819404		4.00(2.82-5.24)		4635	
D 36 13C2 PFDoA										
615.00 > 570.00	4.526	4.528	-0.002		3315336	2.36		94.3	5625	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.542	4.542	0.0	1.158	1399779	2.83		117	6809	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.748	4.748	0.0	1.332	1060458	2.45	Target=1.00	101	939	
699.00 > 99.00	4.748	4.748	0.0	1.332	1652452		0.64(0.44-0.82)		4892	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.786	4.786	0.0	1.057	3390052	2.70	Target=1.00	108	873	
663.00 > 169.00	4.786	4.786	0.0	1.057	1066917		3.18(2.18-4.05)		3792	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.015	5.015	0.0	1.000	864265	2.51	Target=1.00	100	4238	
713.00 > 219.00	5.015	5.015	0.0	1.000	639643		1.35(0.96-1.79)		1839	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.015	5.026	-0.011		3600852	2.42		96.8	4992	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.450	5.450	0.0	1.002	5821012	2.49	Target=1.00	99.4	318	
813.00 > 169.00	5.441	5.450	-0.009	1.000	1109175		5.25(3.69-6.84)		3669	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.441	5.451	-0.010		6801917	2.79		111	6645	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.854	5.854	0.0	1.076	7428842	2.31	Target=1.00	92.2	494	
913.00 > 169.00	5.854	5.854	0.0	1.076	978678		7.59(5.20-9.66)		2252	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL5_00011 Amount Added: 1.00 Units: mL

Report Date: 14-Mar-2019 11:45:55 Chrom Revision: 2.3 13-Mar-2019 09:24:14

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_046.d

Injection Date: 13-Mar-2019 21:29:18 Instrument ID: A8_N

Lims ID: CCV L5

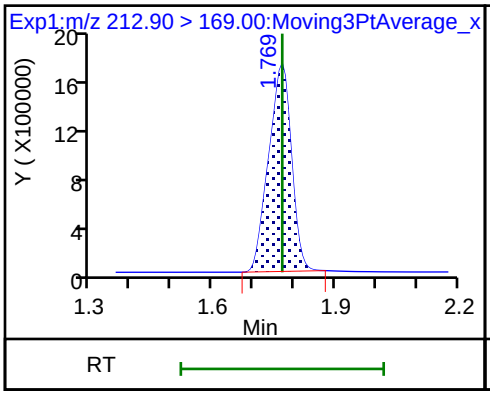
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 31 Worklist Smp#: 3

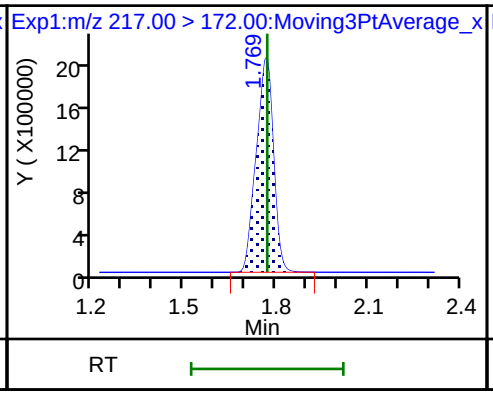
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

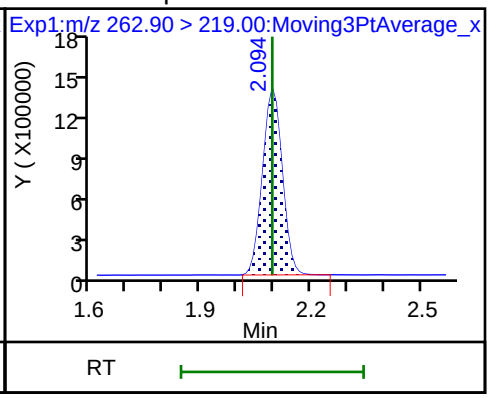
2 Perfluorobutanoic acid



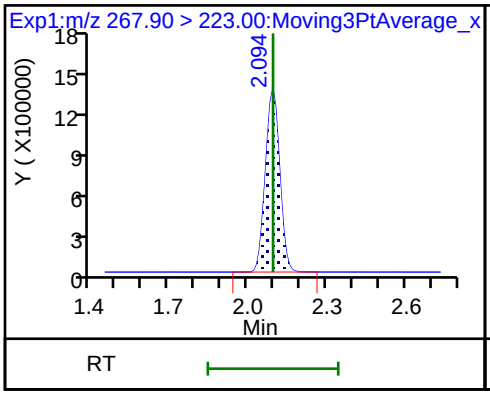
D 1 13C4 PFBA



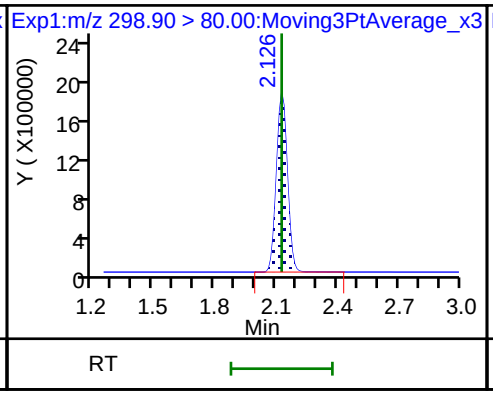
4 Perfluoropentanoic acid



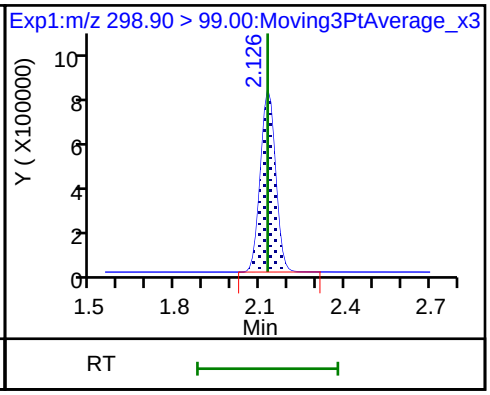
D 3 13C5 PFPeA



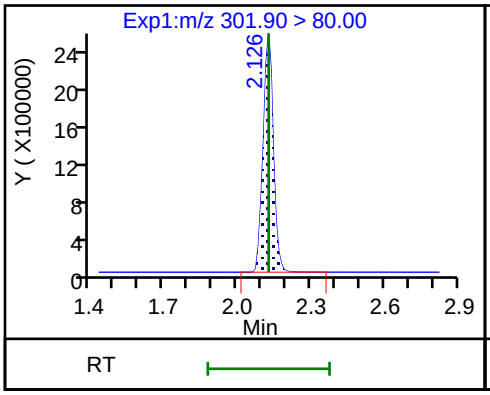
5 Perfluorobutanesulfonic acid



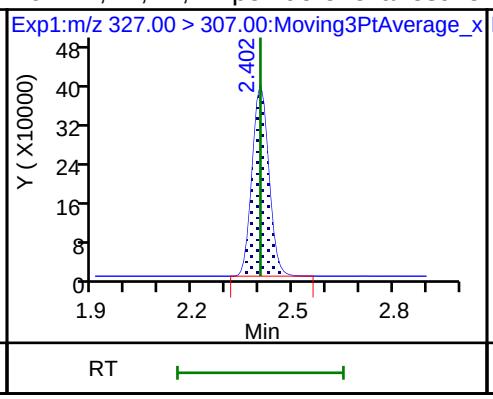
5 Perfluorobutanesulfonic acid



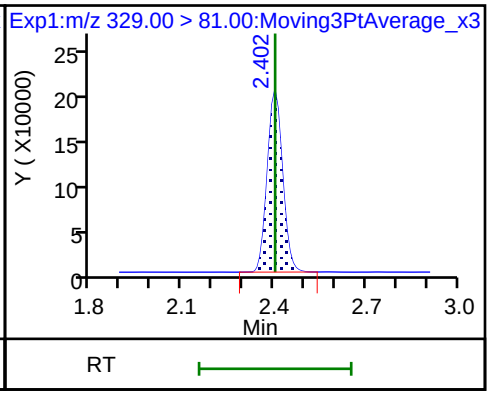
D 47 13C3 PFBS



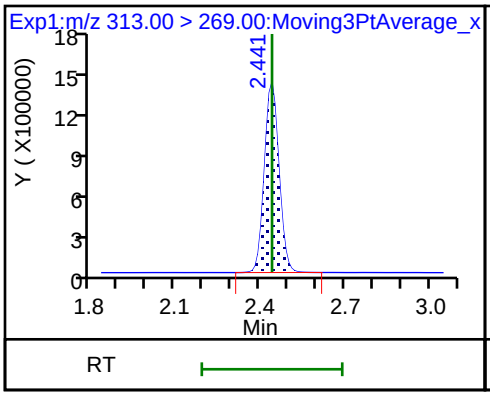
61 1H,1H,2H,2H-perfluorohexanesulfon



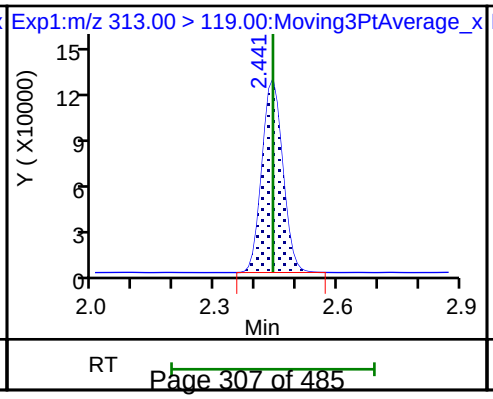
D 60 M2-4:2 FTS



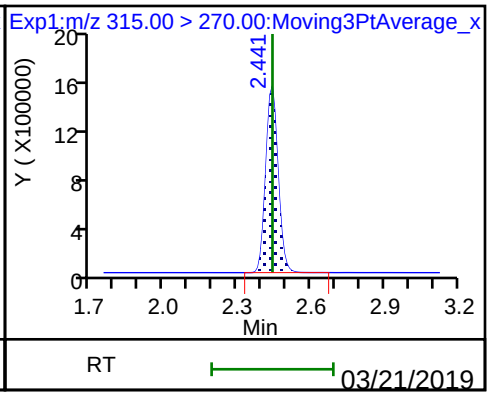
6 Perfluorohexanoic acid



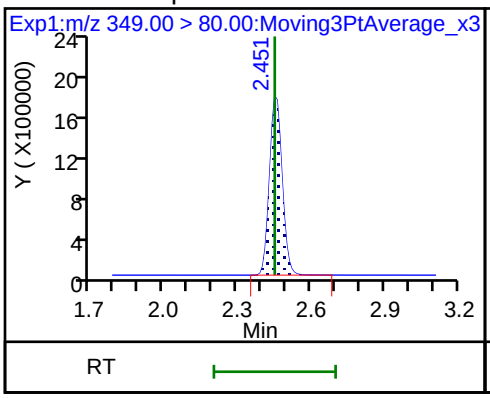
6 Perfluorohexanoic acid



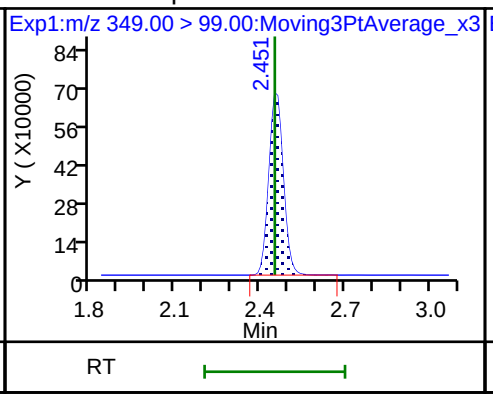
D 7 13C2 PFHxA



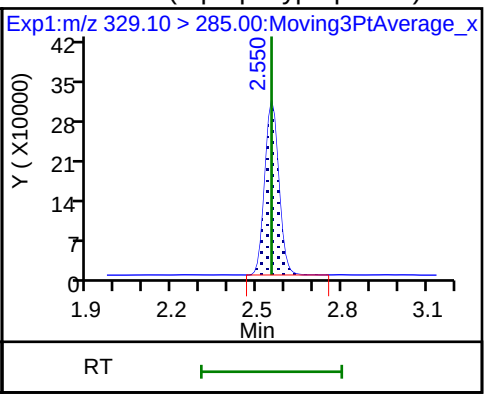
70 Perfluoropentanesulfonic acid



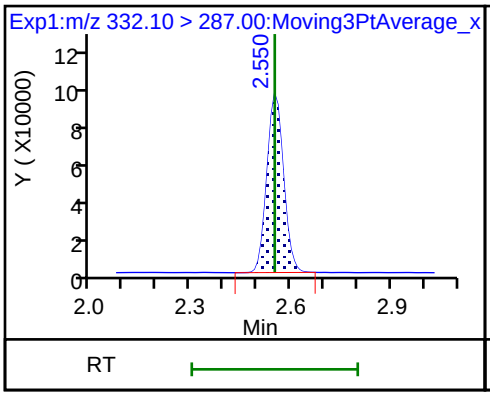
70 Perfluoropentanesulfonic acid



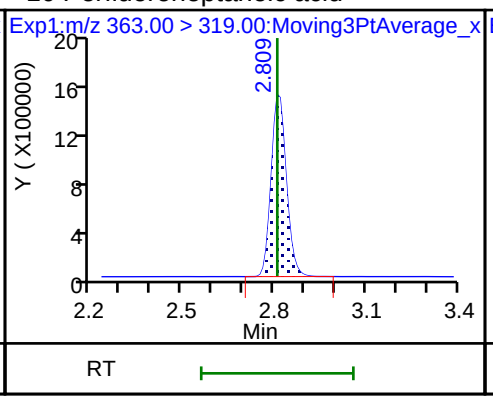
67 Perfluoro(2-propoxypropanoic) acid



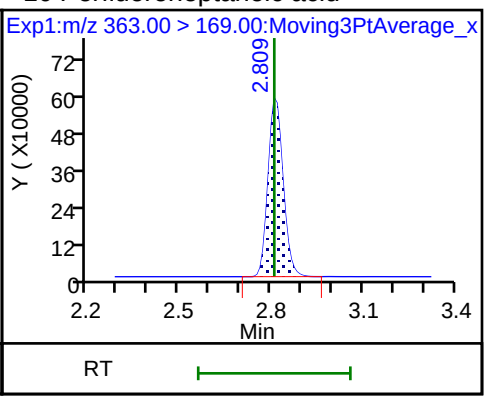
D 64 13C3 HFPO-DA



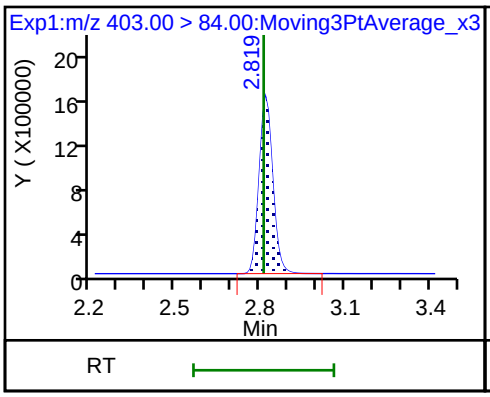
10 Perfluoroheptanoic acid



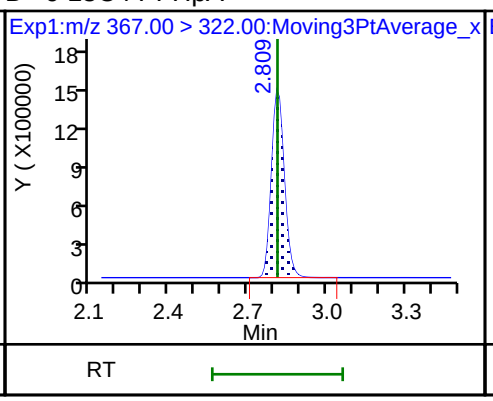
10 Perfluoroheptanoic acid



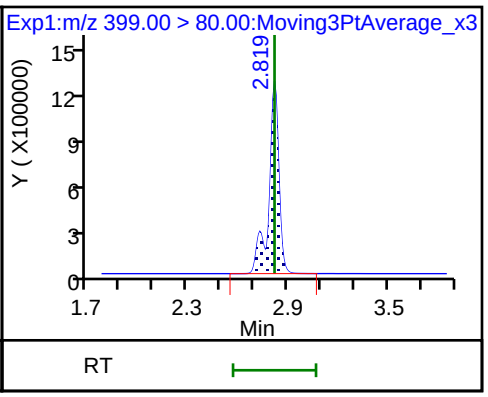
D 11 18O2 PFHxS



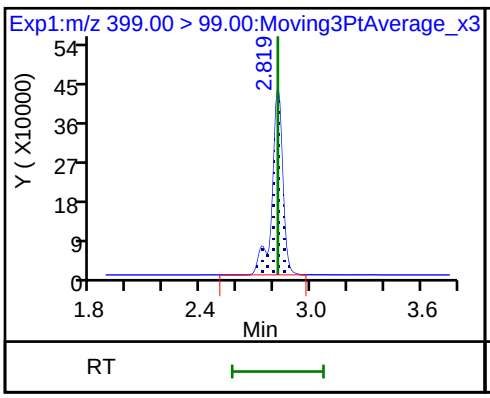
D 9 13C4 PFHpA



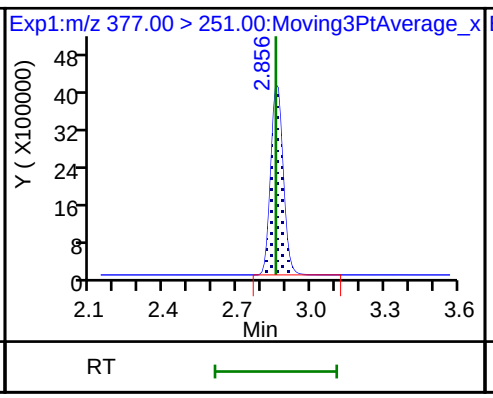
8 Perfluorohexanesulfonic acid



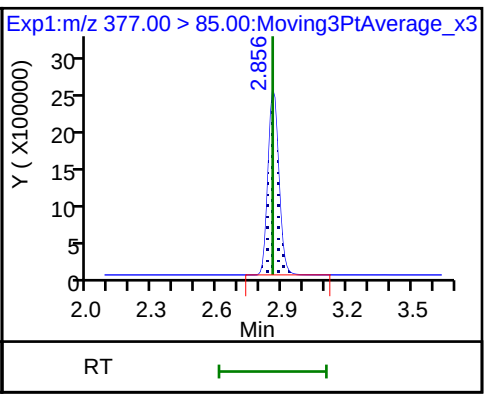
8 Perfluorohexanesulfonic acid



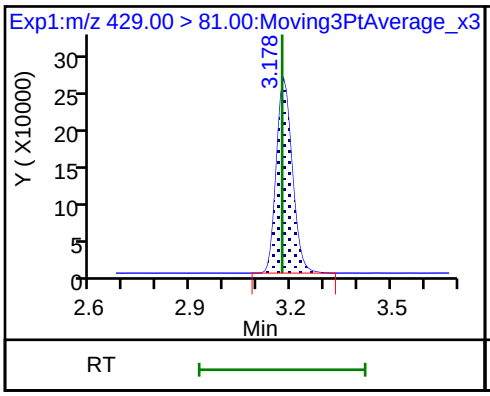
77 DONA



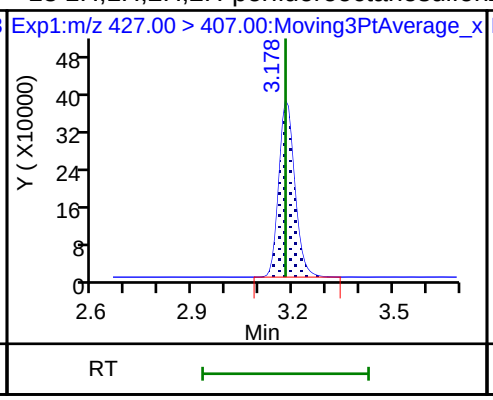
77 DONA



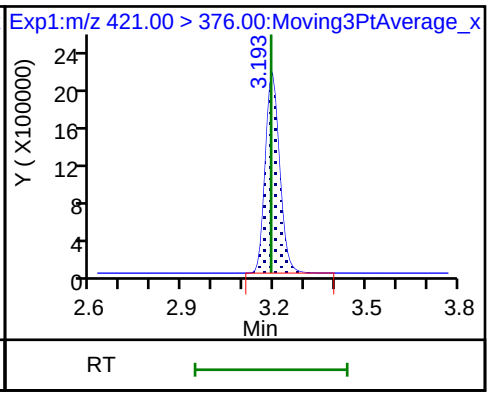
D 12 M2-6:2 FTS



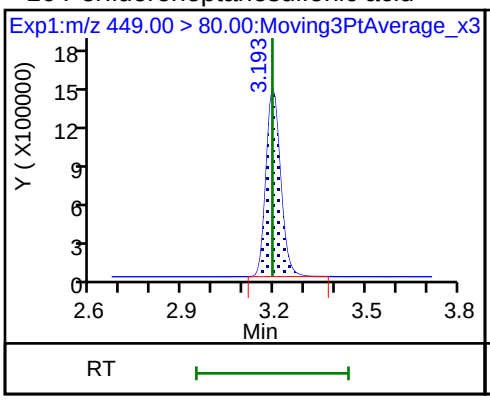
13 1H,1H,2H,2H-perfluorooctanesulfon



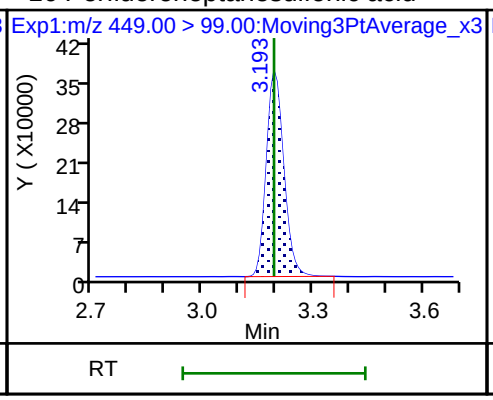
D 73 13C8 PFOA



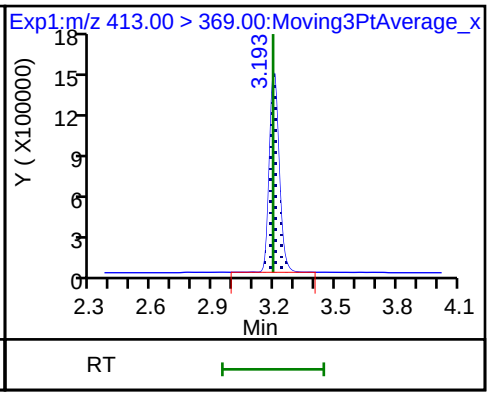
16 Perfluoroheptanesulfonic acid



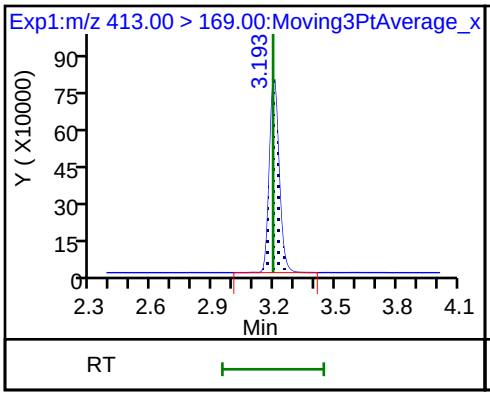
16 Perfluoroheptanesulfonic acid



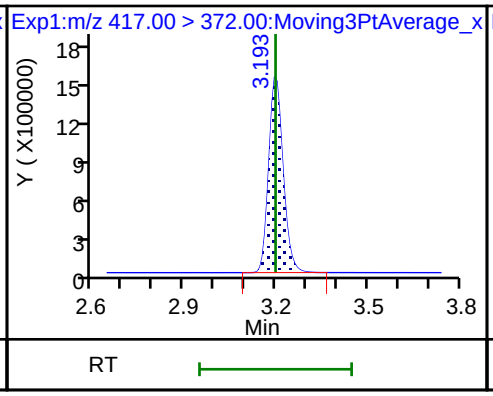
15 Perfluorooctanoic acid



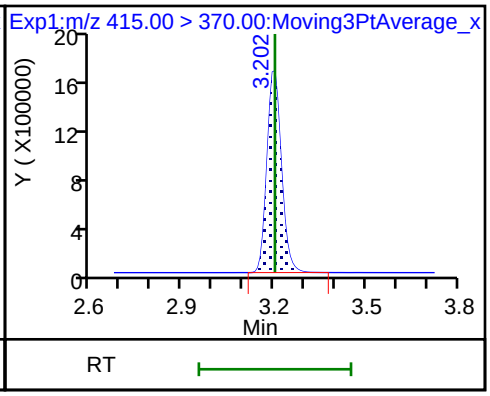
15 Perfluorooctanoic acid



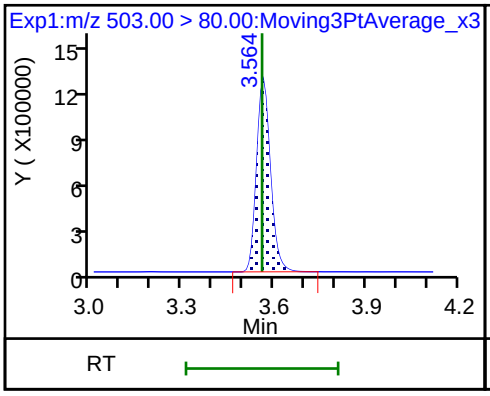
D 14 13C4 PFOA



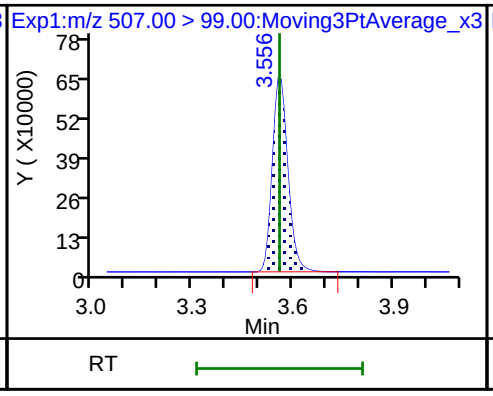
* 62 13C2 PFOA



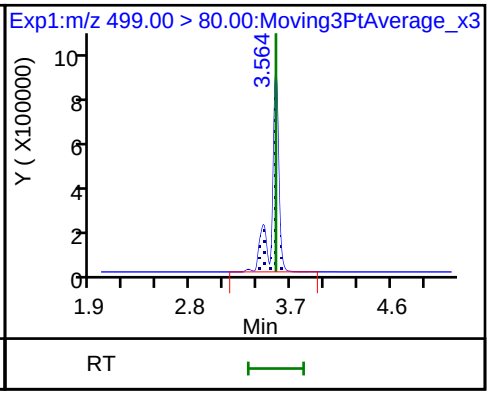
D 18 13C4 PFOS



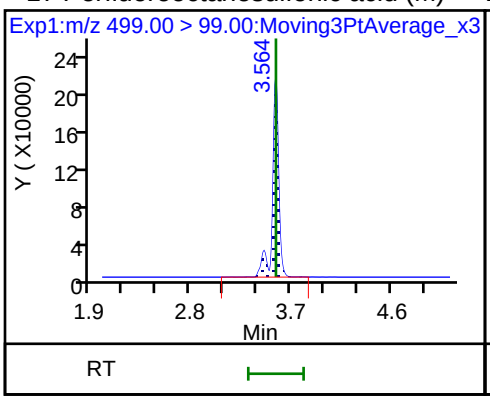
D 72 13C8 PFOS



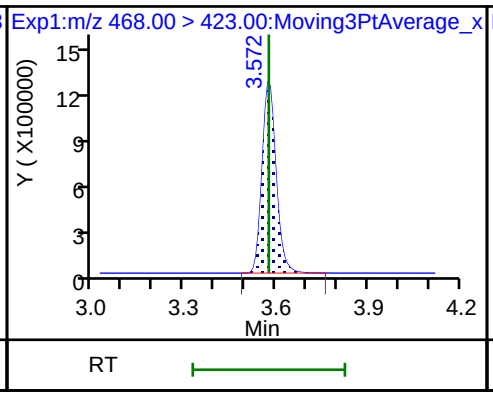
17 Perfluorooctanesulfonic acid



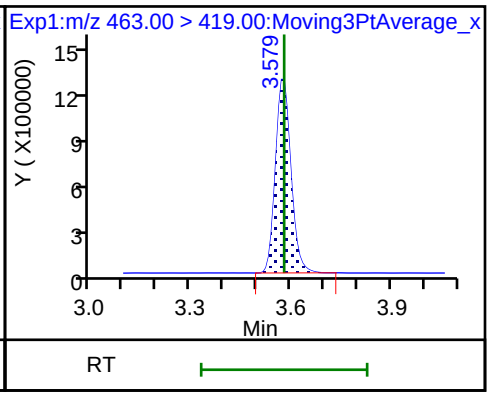
17 Perfluorooctanesulfonic acid (M)



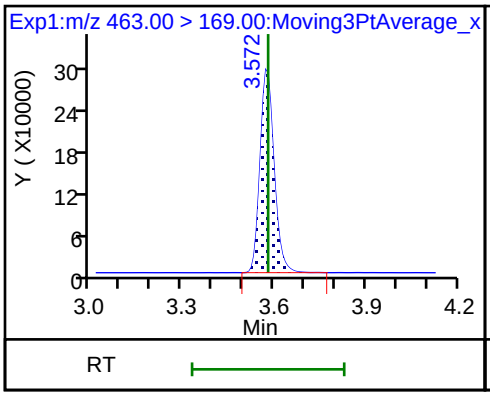
D 19 13C5 PFNA



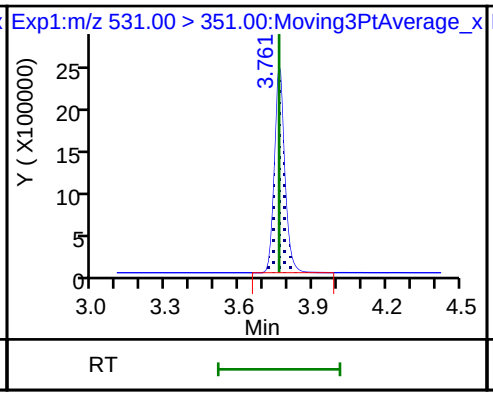
20 Perfluorononanoic acid



20 Perfluorononanoic acid



69 9-Chlorohexadecafluoro-3-oxanonane



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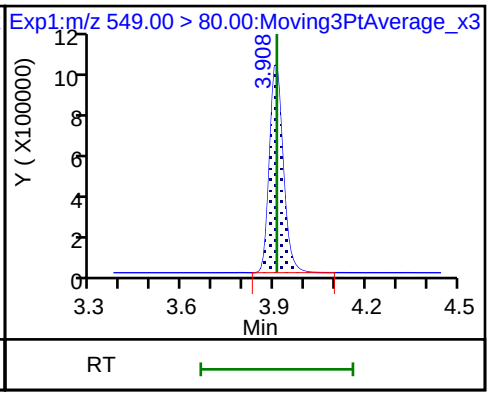

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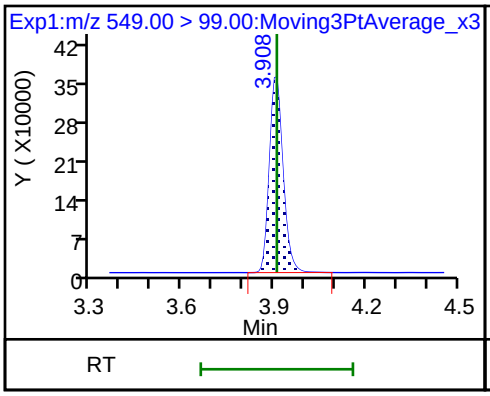
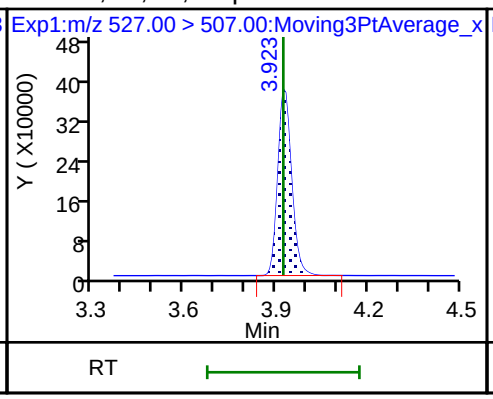
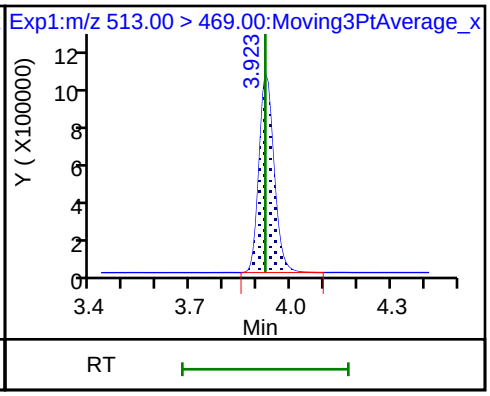


25 1H,1H,2H,2H-perfluorodecanesulfoni



24 Perfluorodecanoic acid



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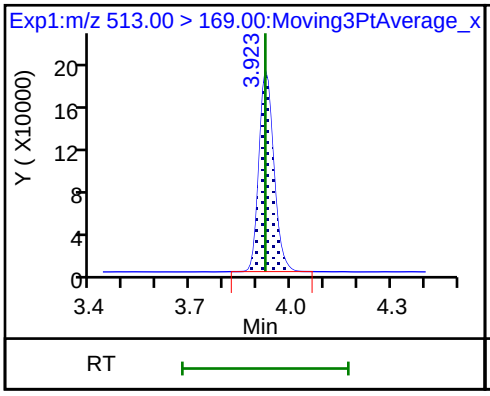
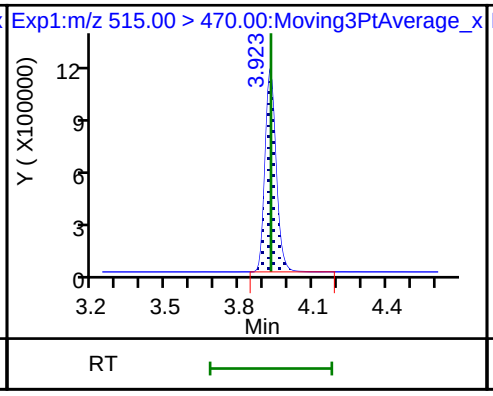
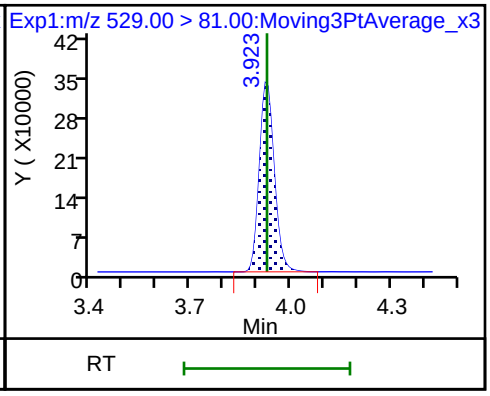


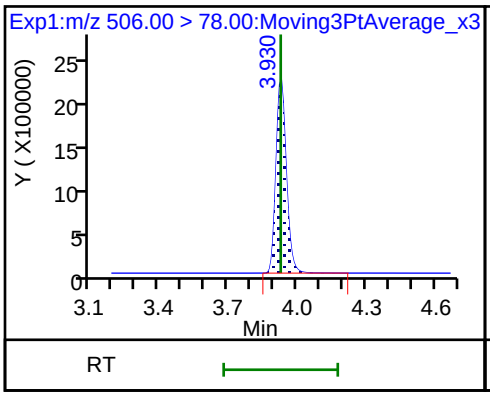
D 23 13C2 PFDA



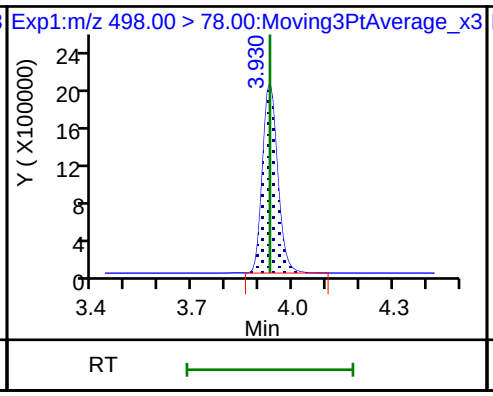
D 26 M2-8:2 FTS



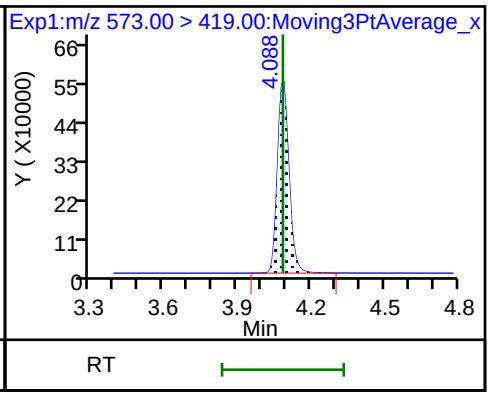
D 21 13C8 FOSA



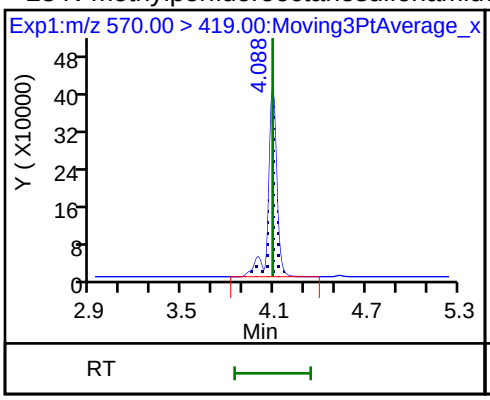
22 Perfluorooctanesulfonamide



D 27 d3-NMeFOSAA



28 N-methylperfluorooctanesulfonamido



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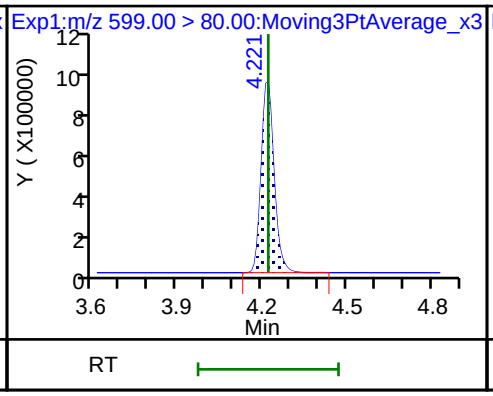
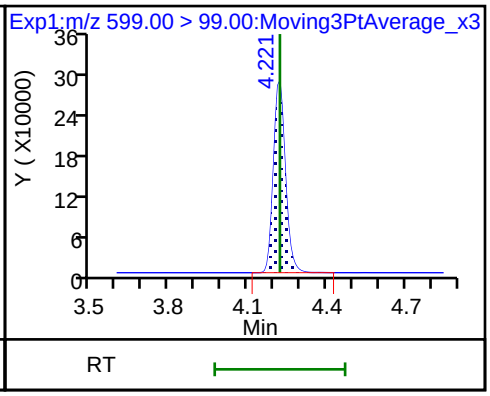
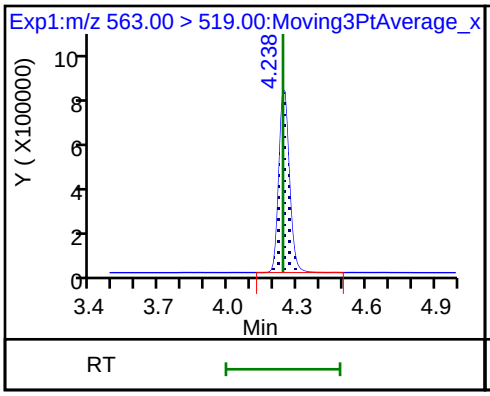


29 Perfluorodecanesulfonic acid



31 Perfluoroundecanoic acid



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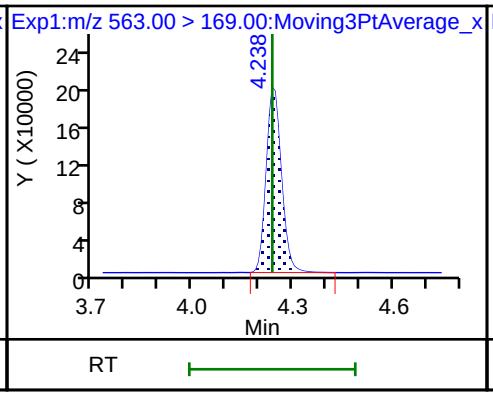

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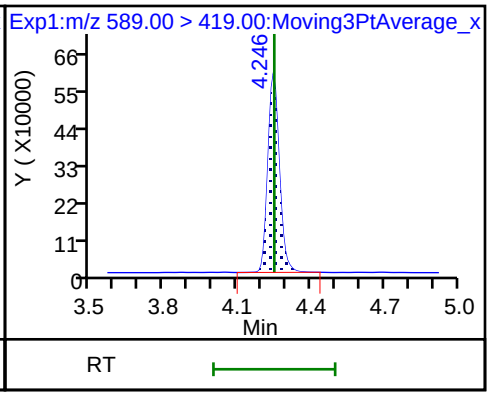
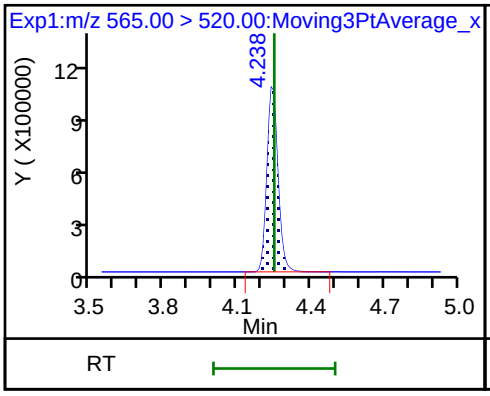
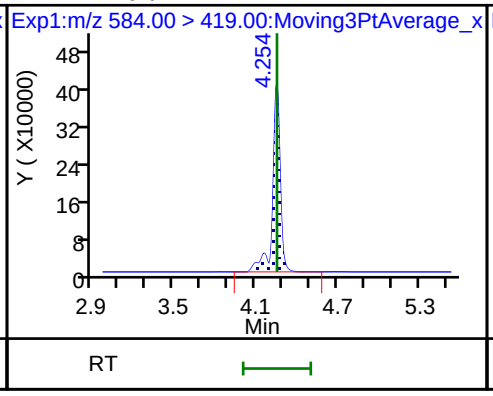


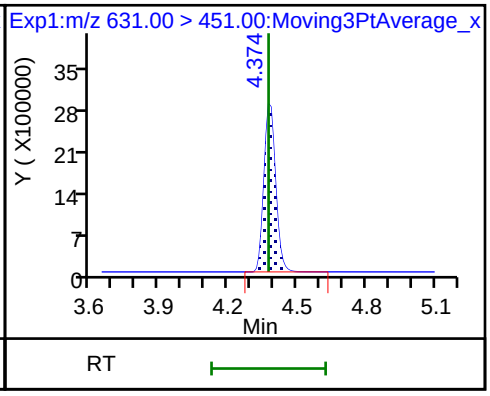
D 30 13C2 PFUnA



33 N-ethylperfluorooctanesulfonamidoa



66 11-Chloroeicosafluoro-3-oxaundecan



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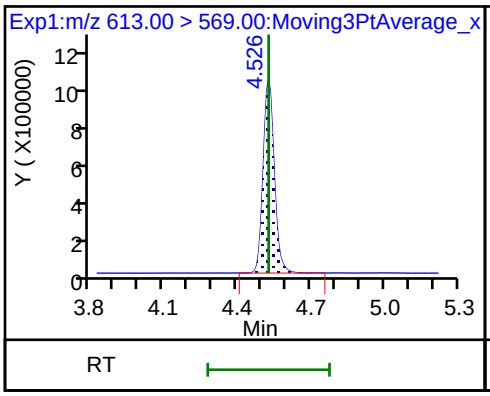

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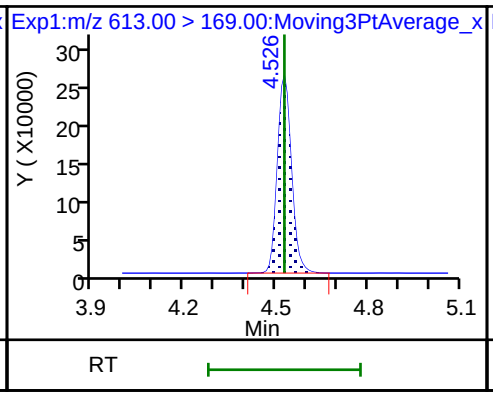

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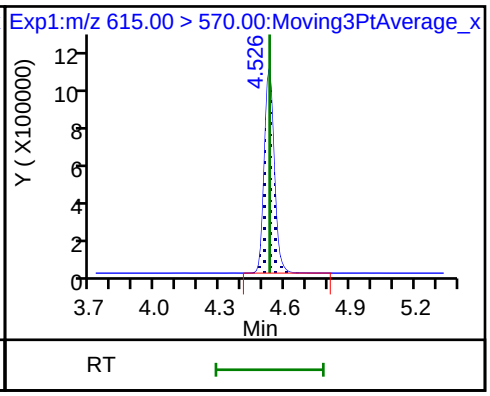
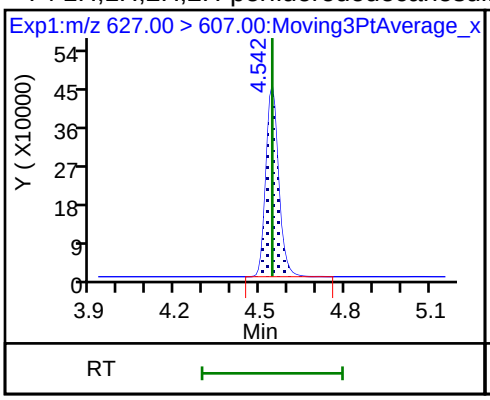


74 1H,1H,2H,2H-perfluorododecanesulfo



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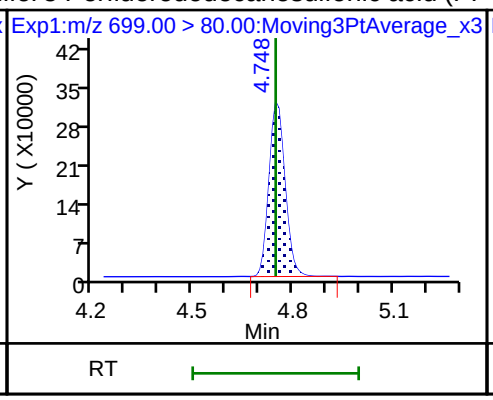

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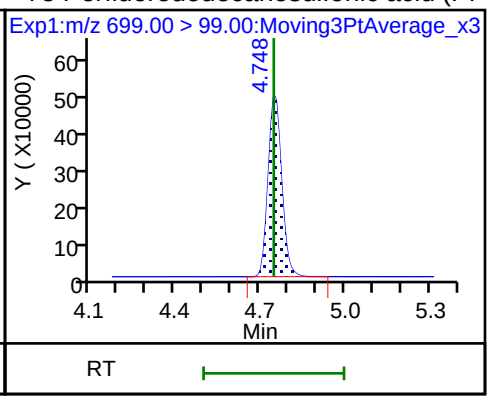

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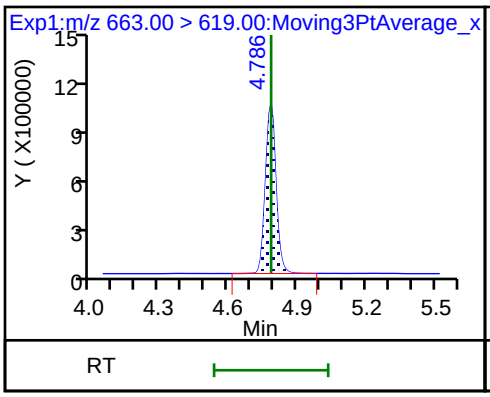
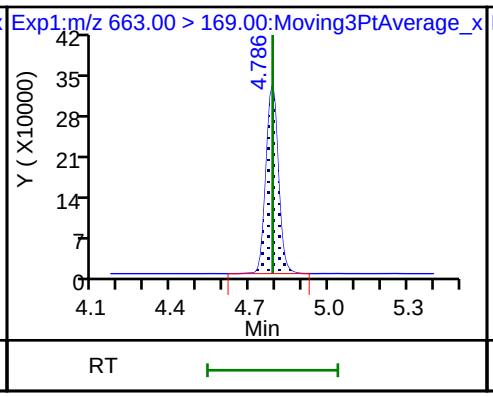
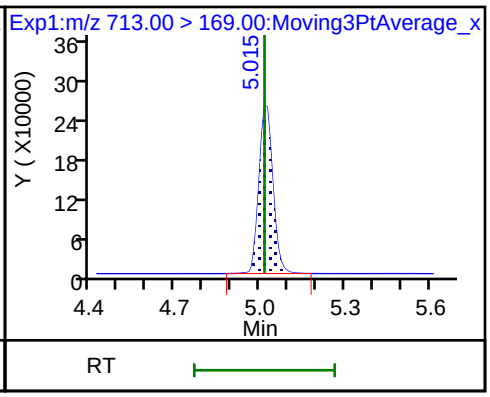


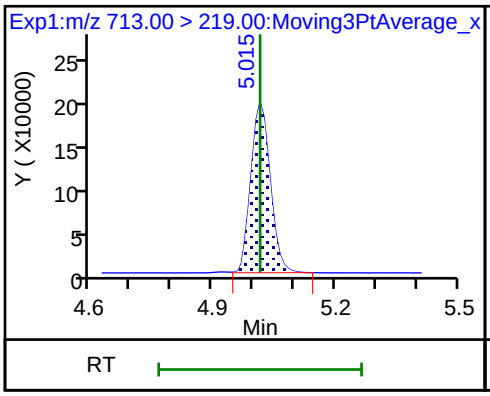
41 Perfluorotridecanoic acid



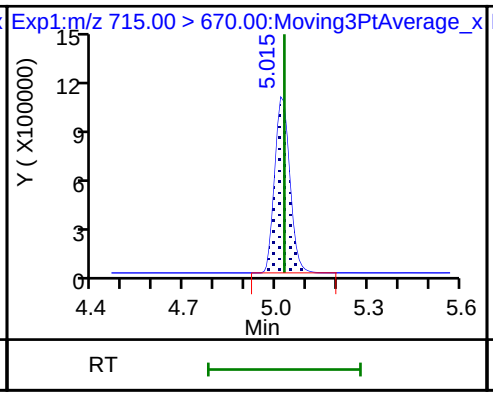
42 Perfluorotetradecanoic acid



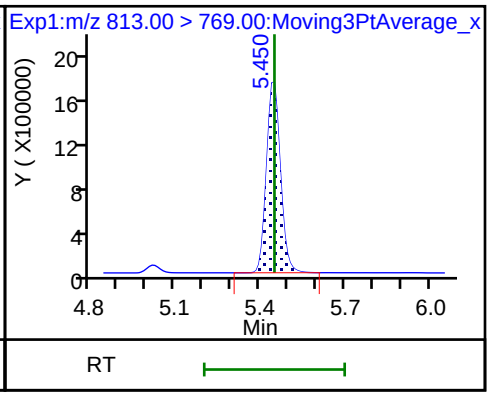
42 Perfluorotetradecanoic acid



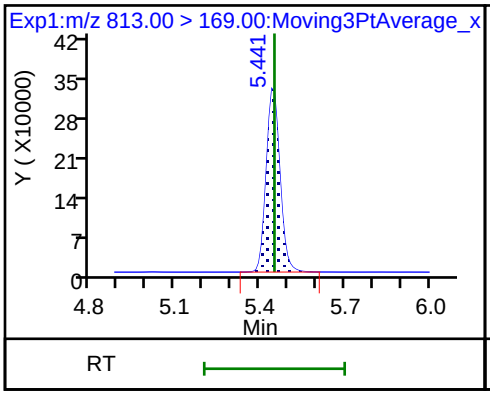
D 43 13C2 PFTeDA



45 Perfluorohexadecanoic acid



45 Perfluorohexadecanoic acid



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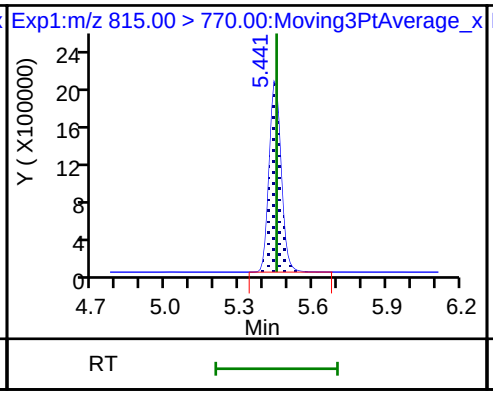
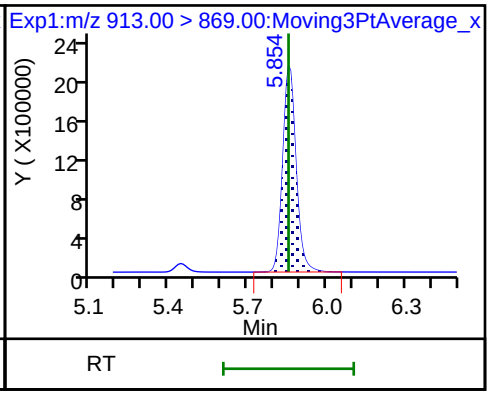
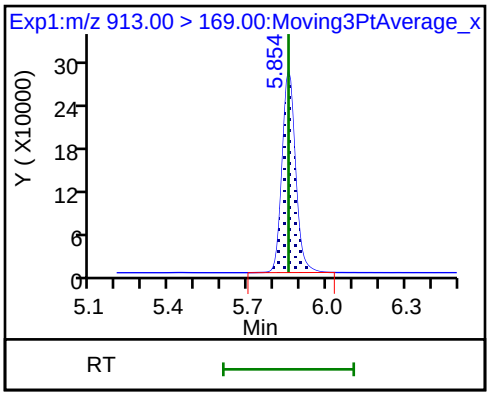


46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

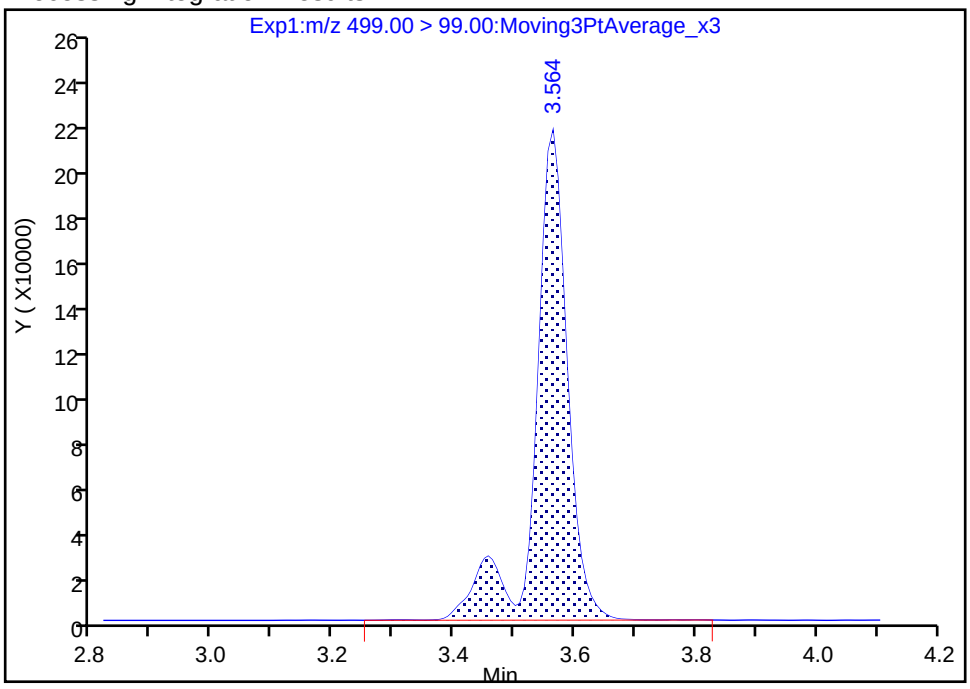
Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73190.b\2019.03.13LLB_046.d
Injection Date: 13-Mar-2019 21:29:18 Instrument ID: A8_N
Lims ID: CCV L5
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 31 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

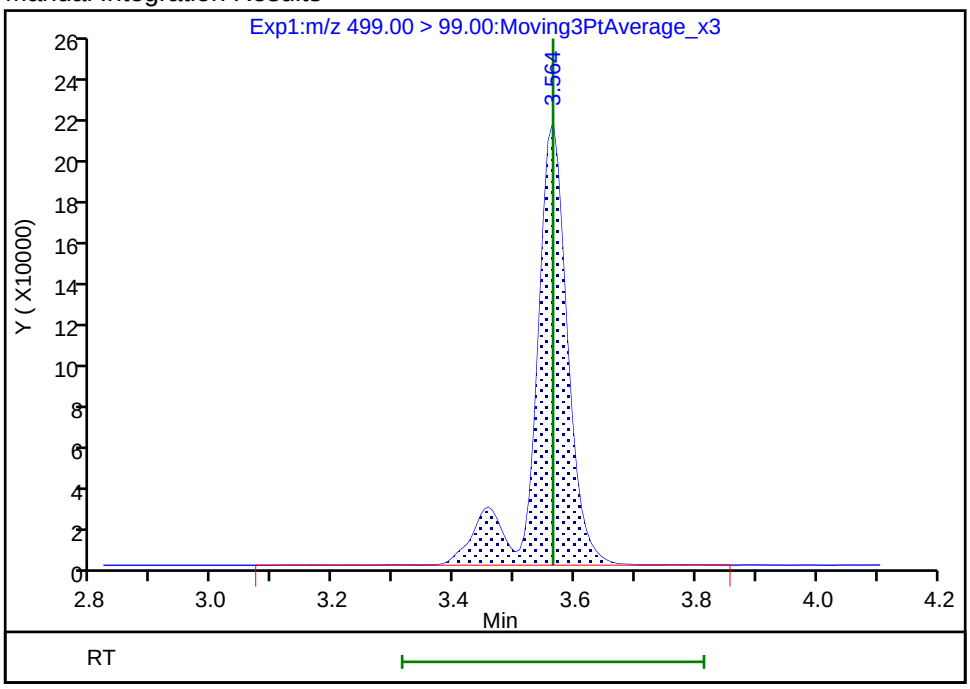
Processing Integration Results

RT: 3.56
Area: 792992
Amount: 2.280088
Amount Units: ng/ml



Manual Integration Results

RT: 3.56
Area: 795557
Amount: 2.280088
Amount Units: ng/ml



Reviewer: mongkols, 14-Mar-2019 11:45:40
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281559/1 Calibration Date: 03/14/2019 00:51

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.13LLA_029.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8004	0.8555		2.67	2.50	6.9	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9835	1.029		2.62	2.50	4.7	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9367	0.9526		2.25	2.21	1.7	50.0
4:2 FTS	AveID	2.044	2.139		2.44	2.34	4.6	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9469	0.9098		2.40	2.50	-3.9	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.7773	0.8183		2.47	2.35	5.3	50.0
HFPO-DA (GenX)	AveID	3.025	2.955		2.44	2.50	-2.3	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9905	0.9631		2.43	2.50	-2.8	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.000	1.015		2.31	2.28	1.5	40.0
DONA	AveID	3.214	3.639		2.67	2.36	13.2	50.0
6:2 FTS	AveID	1.419	1.460		2.44	2.37	2.9	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.106	1.201		2.58	2.38	8.6	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.060	1.038		2.45	2.50	-2.1	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.035	0.999		2.24	2.32	-3.5	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9492	0.9624		2.53	2.50	1.4	40.0
F-53B Major	AveID	1.636	1.806		2.57	2.33	10.4	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8303	0.8062		2.33	2.40	-2.9	50.0
8:2 FTS	AveID	1.147	1.153		2.41	2.40	0.5	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9203	0.9166		2.49	2.50	-0.4	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.8815	0.8931		2.53	2.50	1.3	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.8650	0.8501		2.46	2.50	-1.7	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.7034	0.7028		2.41	2.41	-0.0	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7989	0.7974		2.50	2.50	-0.2	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7970	0.7510		2.36	2.50	-5.8	40.0
F-53B Minor	AveID	2.386	2.686		2.65	2.36	12.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9404	0.9601		2.55	2.50	2.1	40.0
10:2 FTS	AveID	1.144	1.017		2.14	2.41	-11.1	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2703	0.2761		2.47	2.42	2.2	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9457	0.9574		2.53	2.50	1.2	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2395	0.2275		2.38	2.50	-5.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.8598		2.50	2.50	-0.1	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281559/1 Calibration Date: 03/14/2019 00:51

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.13LLA_029.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.184	1.089		2.30	2.50	-8.1	50.0
13C4 PFBA	Ave	1.440	1.389		2.41	2.50	-3.6	50.0
13C5 PFPeA	Ave	0.9906	0.9228		2.33	2.50	-6.8	50.0
13C3 PFBS	Ave	1.504	1.441		2.23	2.33	-4.2	50.0
M2-4:2 FTS	Ave	0.1210	0.1201		2.32	2.34	-0.7	50.0
13C2 PFHxA	Ave	1.016	0.9895		2.44	2.50	-2.6	50.0
13C3 HFPO-DA	Ave	0.0584	0.0632		2.71	2.50	8.2	50.0
13C4 PFHpA	Ave	0.9294	0.9303		2.50	2.50	0.1	50.0
18O2 PFHxS	Ave	1.055	1.009		2.26	2.37	-4.4	50.0
M2-6:2 FTS	Ave	0.1597	0.1594		2.37	2.38	-0.1	50.0
13C8 PFOA	Ave	1.213	1.245		2.51	2.45	2.7	50.0
13C4 PFOA	Ave	0.8878	0.8694		2.45	2.50	-2.1	50.0
13C4 PFOS	Ave	0.8199	0.7299		2.13	2.39	-11.0	50.0
13C8 PFOS	Ave	0.4189	0.3841		2.19	2.39	-8.3	50.0
13C5 PFNA	Ave	0.7185	0.7179		2.50	2.50	-0.0	50.0
13C2 PFDA	Ave	0.6581	0.6195		2.35	2.50	-5.9	50.0
M2-8:2 FTS	Ave	0.1918	0.1872		2.34	2.40	-2.4	50.0
13C8 FOSA	Ave	1.375	1.211		2.20	2.50	-11.9	50.0
d3-NMeFOSAA	Ave	0.3408	0.3242		2.38	2.50	-4.9	50.0
13C2 PFUnA	Ave	0.5964	0.5111		2.14	2.50	-14.3	50.0
d5-NEtFOSAA	Ave	0.3646	0.3648		2.50	2.50	0.0	50.0
13C2 PFDoA	Ave	0.6423	0.6020		2.34	2.50	-6.3	50.0
13C2 PFTeDA	Ave	0.6798	0.6417		2.36	2.50	-5.6	50.0
13C2 PFHxDA	Ave	1.116	1.067		2.39	2.50	-4.4	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\2019.03.13LLA_029.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 14-Mar-2019 00:51:33 ALS Bottle#: 14 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-Mar-2019 09:28:13 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0309

First Level Reviewer: mongkols Date: 15-Mar-2019 09:28:12
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.776	1.777	-0.001		7601427	2.41		96.4	5965	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.776	1.776	0.0	1.000	6503053	2.67		107	1724	
D 3 13C5 PFPeA										
267.90 > 223.00	2.094	2.094	0.0		5051379	2.33		93.2	8228	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.094	2.094	0.0	1.000	5199788	2.62		105	359	
D 47 13C3 PFBS										
301.90 > 80.00	2.126	2.126	0.0		7335912	2.23		95.8	646914	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.126	2.126	0.0	1.000	6642848	2.25	Target=1.00	102	9955	
298.90 > 99.00	2.126	2.126	0.0	1.000	2801556		2.37(1.68-3.11)		5945	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.405	2.405	0.0	1.004	1313658	2.44		105	12391	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.395	2.404	-0.009		614236	2.32		99.3	1709	
D 7 13C2 PFHxA										
315.00 > 270.00	2.435	2.434	0.001		5416471	2.44		97.4	10854	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.435	2.435	0.0	1.000	4928006	2.40	Target=1.00	96.1	2535	
313.00 > 119.00	2.435	2.435	0.0	1.000	455393		10.82(7.70-14.30)		1683	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.455	2.455	0.0	1.155	6054736	2.47	Target=1.00	105	7004	
349.00 > 99.00	2.455	2.455	0.0	1.155	2241952		2.70(1.85-3.44)		6080	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.554	2.543	0.012		346070	2.71		108	1302	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.544	2.544	0.0	0.996	1022692	2.44		97.7	946	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.807	2.807	0.0	1.000	4904510	2.43	Target=1.00	97.2	1564	
363.00 > 169.00	2.807	2.807	0.0	1.000	1966388		2.49(1.76-3.27)		5145	
D 9 13C4 PFHpA										
367.00 > 322.00	2.807	2.811	-0.004		5092493	2.50		100	9042	
D 11 18O2 PFHxS										
403.00 > 84.00	2.816	2.811	0.005		5224219	2.26		95.6	7408	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.816	2.816	0.0	1.000	5098435	2.31	Target=1.00	101	4630	
399.00 > 99.00	2.816	2.816	0.0	1.000	1698522		3.00(1.97-3.66)		4675	
77 DONA										
377.00 > 251.00	2.854	2.854	0.0	0.803	13696685	2.67	Target=1.00	113	10677	
377.00 > 85.00	2.854	2.854	0.0	0.803	8406831		1.63(1.16-2.15)		9065	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.177	3.177	0.0	1.003	1207800	2.44		103	4564	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.169	3.178	-0.009		829017	2.37		99.9	4366	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.185	3.185	0.0	0.896	4566511	2.58	Target=1.00	109	3935	
449.00 > 99.00	3.185	3.185	0.0	0.896	1209955		3.77(2.61-4.86)		2847	
D 73 13C8 PFOA										
421.00 > 376.00	3.185	3.194	-0.009		6670724	2.51		103	11640	
D 14 13C4 PFOA										
417.00 > 372.00	3.193	3.194	-0.001		4758833	2.45		97.9	7985	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.193	3.193	0.0	1.000	4940578	2.45	Target=1.00	97.9	505	
413.00 > 169.00	3.193	3.193	0.0	1.000	2605809		1.90(0.84-2.52)		3569	
* 62 13C2 PFOA										
415.00 > 370.00	3.193	3.193	0.0		5473812	2.50			7192	
D 72 13C8 PFOS										
507.00 > 99.00	3.555	3.562	-0.007		2010174	2.19		91.7	5871	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.555	3.555	0.0	1.000	3702970	2.24	Target=1.00	96.5	2890	
499.00 > 99.00	3.555	3.555	0.0	1.000	763002		4.85(2.31-6.93)		2477	
D 18 13C4 PFOS										
503.00 > 80.00	3.555	3.570	-0.015		3819671	2.13		89.0	3470	
20 Perfluorononanoic acid										
463.00 > 419.00	3.571	3.571	0.0	1.000	3781770	2.53	Target=1.00	101	1299	
463.00 > 169.00	3.571	3.571	0.0	1.000	916057		4.13(2.89-5.37)		3952	
D 19 13C5 PFNA										
468.00 > 423.00	3.571	3.578	-0.007		3929640	2.50		99.9	7959	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.757	3.757	0.0	1.057	6726710	2.57		110	5550	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.902	3.902	0.0	1.098	3092261	2.33	Target=1.00	97.1	5824	
549.00 > 99.00	3.902	3.902	0.0	1.098	1040789		2.97(2.05-3.81)		4078	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.917	3.917	0.0	1.000	3108225	2.49	Target=1.00	99.6	2951	
513.00 > 169.00	3.917	3.917	0.0	1.000	573381		5.42(3.74-6.94)		1294	
D 23 13C2 PFDA										
515.00 > 470.00	3.917	3.931	-0.014		3391050	2.35		94.1	5632	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.917	3.917	0.0	1.000	1131556	2.41		100	2924	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.924	3.924	0.0	1.000	5917790	2.53		101	3239	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.917	3.939	-0.022		981392	2.34		97.6	4657	
D 21 13C8 FOSA										
506.00 > 78.00	3.924	3.939	-0.015		6626205	2.20		88.1	6909	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.081	4.081	0.0	1.000	1508524	2.46		98.3	932	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.081	4.098	-0.017		1774610	2.38		95.1	4773	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.214	4.214	0.0	1.185	2706971	2.41	Target=1.00	99.9	6016	
599.00 > 99.00	4.214	4.214	0.0	1.185	889144		3.04(2.28-4.23)		5504	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.239	4.239	0.0	1.000	2230916	2.50	Target=1.00	99.8	1851	
563.00 > 169.00	4.239	4.239	0.0	1.000	530324		4.21(2.86-5.32)		2190	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.239	4.255	-0.016		1996671	2.50		100	1025	
D 30 13C2 PFUnA										
565.00 > 520.00	4.239	4.255	-0.016		2797605	2.14		85.7	8030	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.247	4.247	0.0	1.002	1499530	2.36		94.2	3055	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.376	4.376	0.0	1.231	10109998	2.65		113	9744	
D 36 13C2 PFDoA										
615.00 > 570.00	4.527	4.535	-0.008		3295337	2.34		93.7	6211	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.527	4.527	0.0	1.000	3163693	2.55	Target=1.00	102	2459	
613.00 > 169.00	4.527	4.527	0.0	1.000	781990		4.05(2.82-5.24)		5401	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.544	4.544	0.0	1.160	1004382	2.14		88.9	3866	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.749	4.749	0.0	1.336	1067880	2.47	Target=1.00	102	4722	
699.00 > 99.00	4.749	4.749	0.0	1.336	1689348		0.63(0.44-0.82)		5148	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.787	4.787	0.0	1.057	3154870	2.53	Target=1.00	101	1215	
663.00 > 169.00	4.787	4.787	0.0	1.057	1015917		3.11(2.18-4.05)		6460	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2 PFTeDA										
715.00 > 670.00	5.026	5.025	0.001		3512701	2.36		94.4	6819	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.026	5.026	0.0	1.000	799221	2.38	Target=1.00	95.0	4745	
713.00 > 219.00	5.016	5.026	-0.010	0.998	592932		1.35(0.96-1.79)		1389	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.460	5.450	0.010		5838373	2.39		95.6	5368	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.460	5.460	0.0	1.000	5019847	2.50	Target=1.00	99.9	232	
813.00 > 169.00	5.460	5.460	0.0	1.000	955012		5.26(3.69-6.84)		4092	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.877	5.877	0.0	1.076	6356047	2.30	Target=1.00	91.9	351	
913.00 > 169.00	5.870	5.877	-0.007	1.075	841256		7.56(5.20-9.66)		3256	

Reagents:

LCPFC_LL5_00011 Amount Added: 1.00 Units: mL

Report Date: 15-Mar-2019 09:28:18 Chrom Revision: 2.3 13-Mar-2019 09:24:14

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\2019.03.13LLA_029.d

Injection Date: 14-Mar-2019 00:51:33 Instrument ID: A8_N

Lims ID: CCV L5

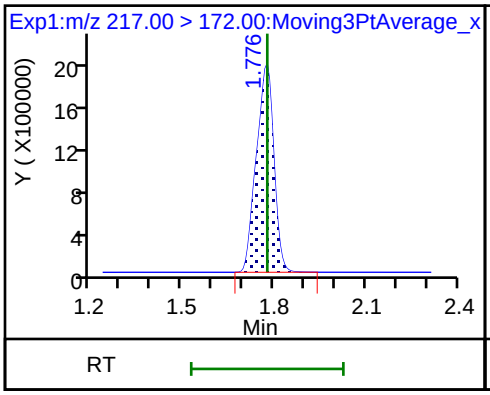
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 1

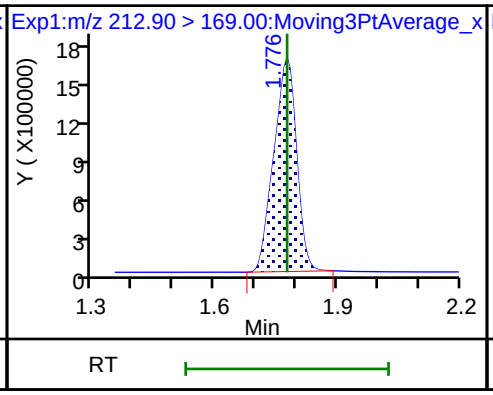
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

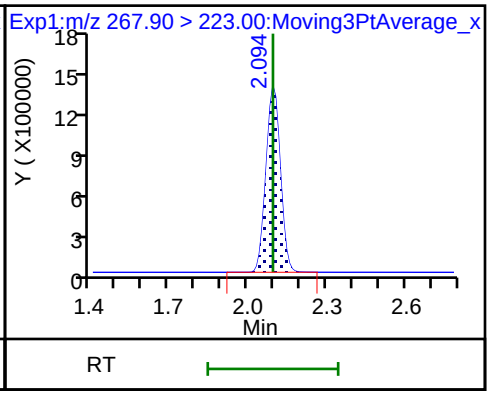
D 1 13C4 PFBA



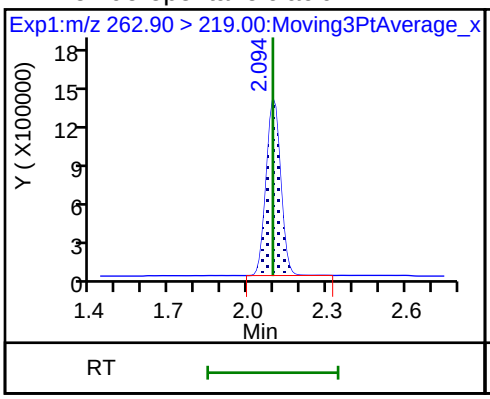
2 Perfluorobutanoic acid



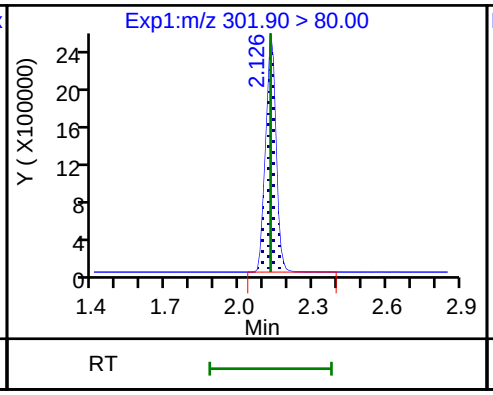
D 3 13C5 PFPeA



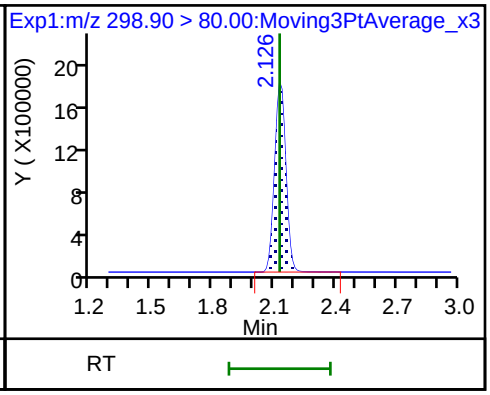
4 Perfluoropentanoic acid



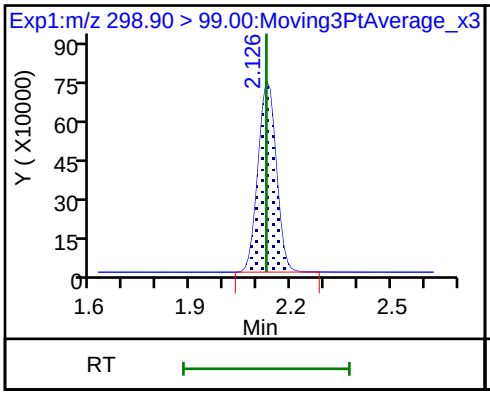
D 47 13C3 PFBS



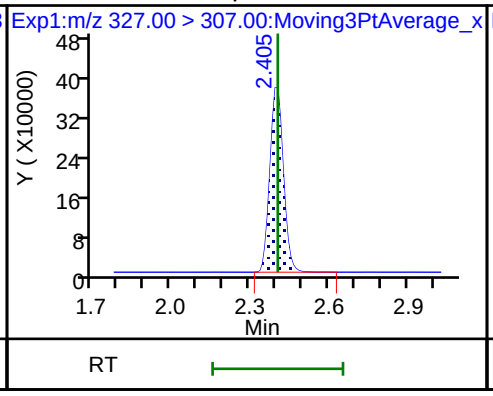
5 Perfluorobutanesulfonic acid



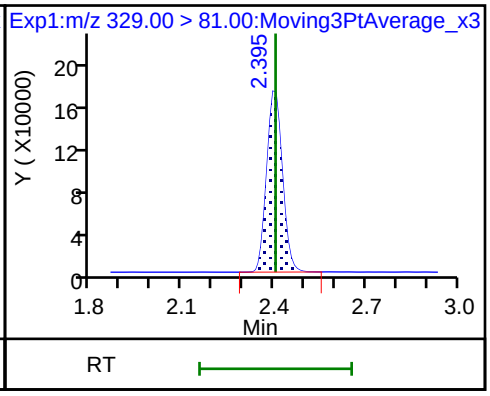
5 Perfluorobutanesulfonic acid



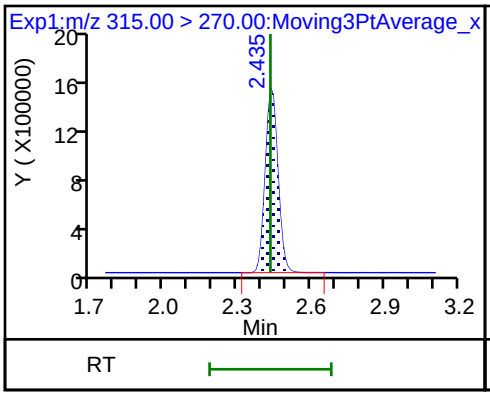
61 1H,1H,2H,2H-perfluorohexanesulfon



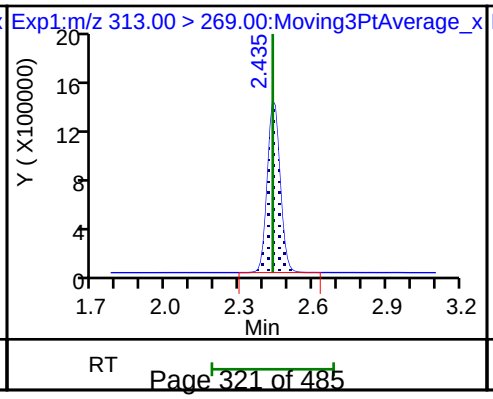
D 60 M2-4:2 FTS



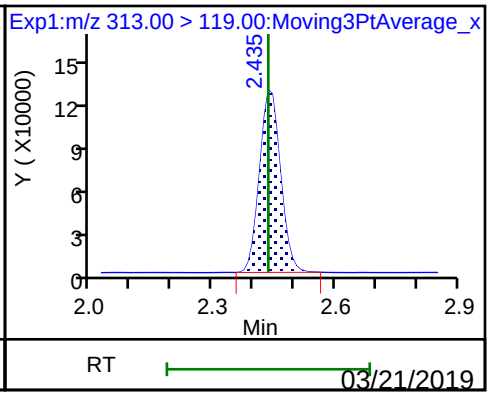
D 7 13C2 PFHxA



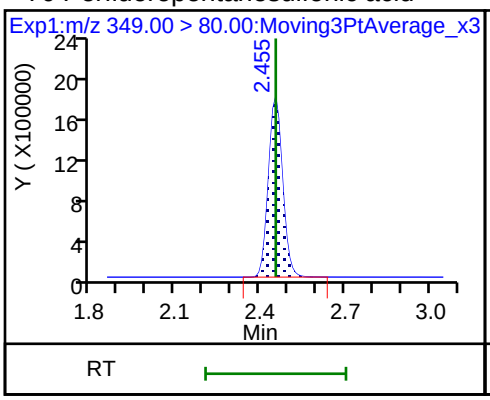
6 Perfluorohexanoic acid



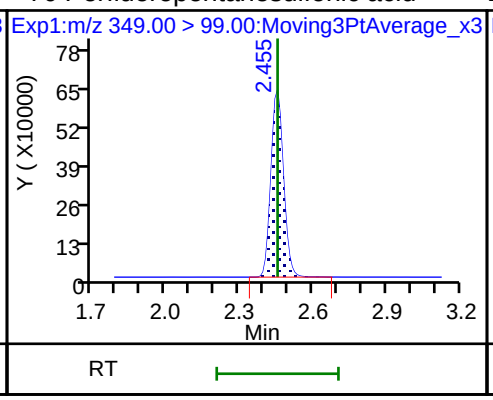
6 Perfluorohexanoic acid



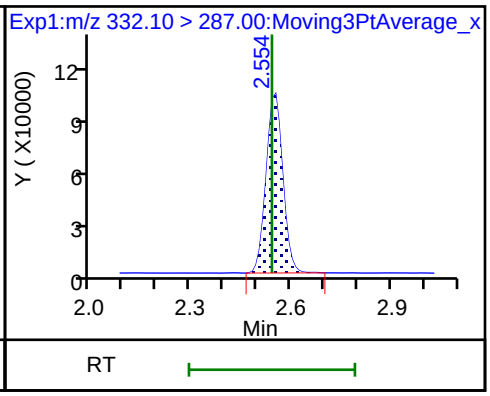
70 Perfluoropentanesulfonic acid



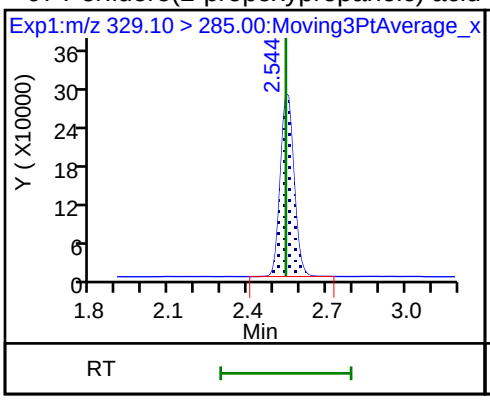
70 Perfluoropentanesulfonic acid



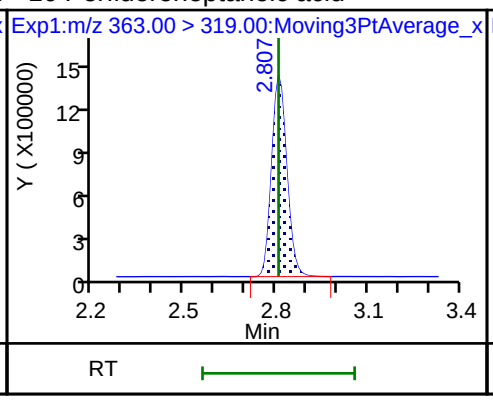
D 64 13C3 HFPO-DA



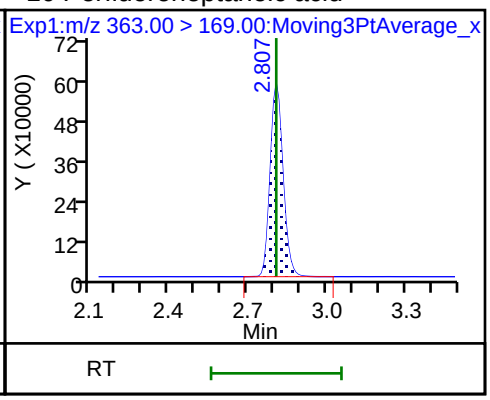
67 Perfluoro(2-propoxypropanoic) acid



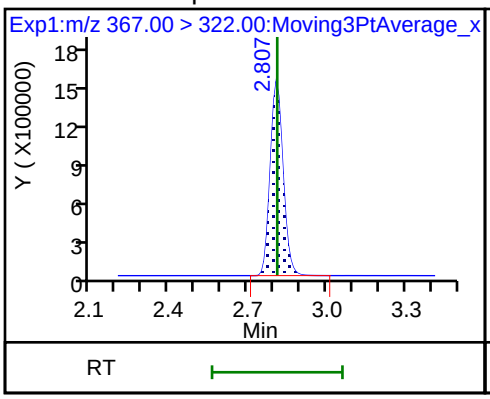
10 Perfluoroheptanoic acid



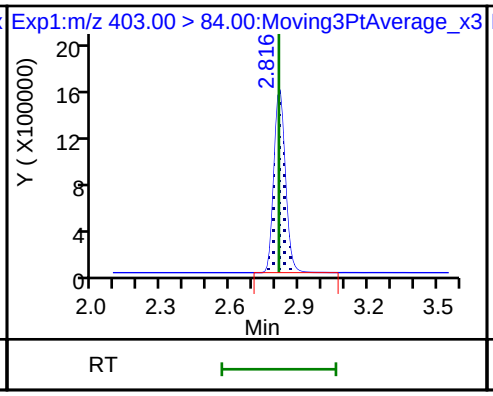
10 Perfluoroheptanoic acid



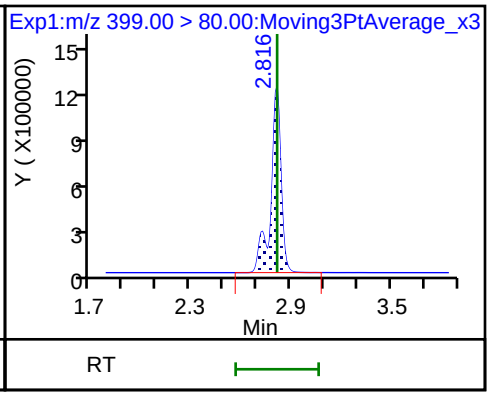
D 9 13C4 PFHpA



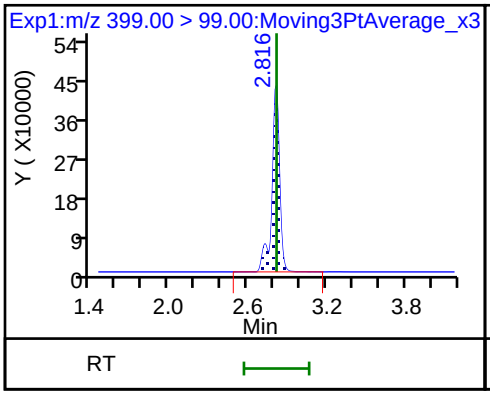
D 11 18O2 PFHxS



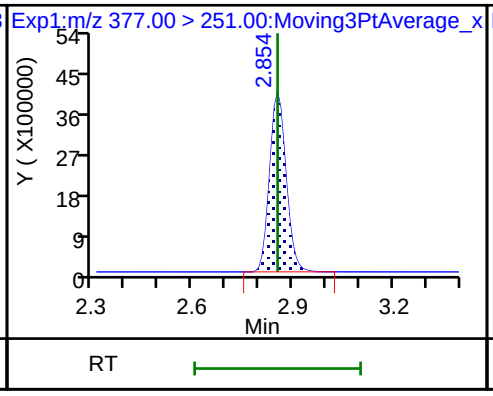
8 Perfluorohexanesulfonic acid



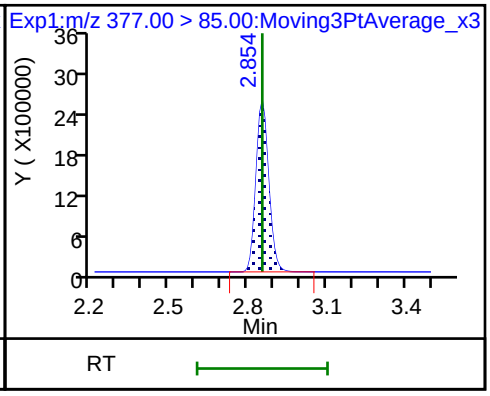
8 Perfluorohexanesulfonic acid



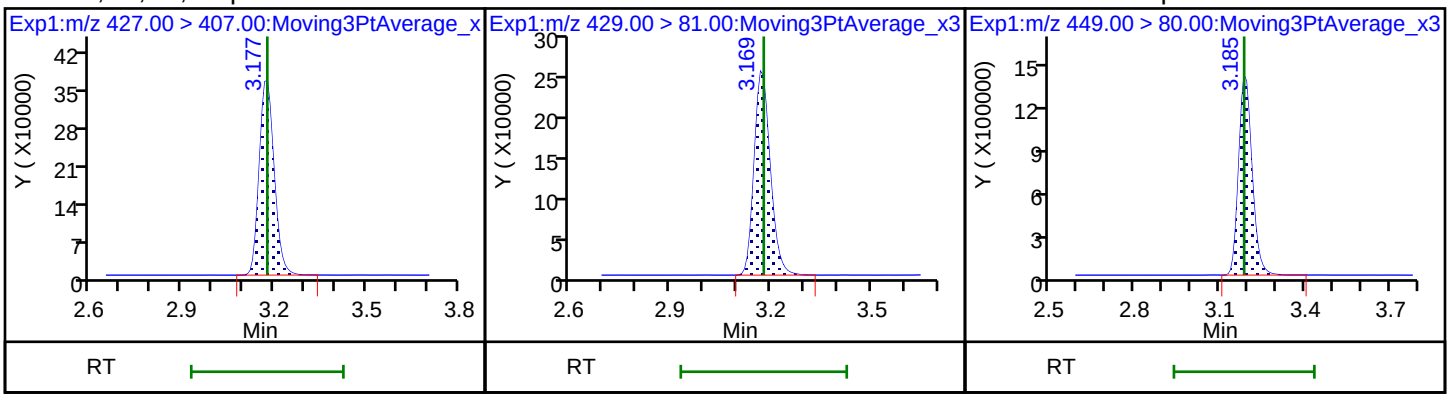
77 DONA



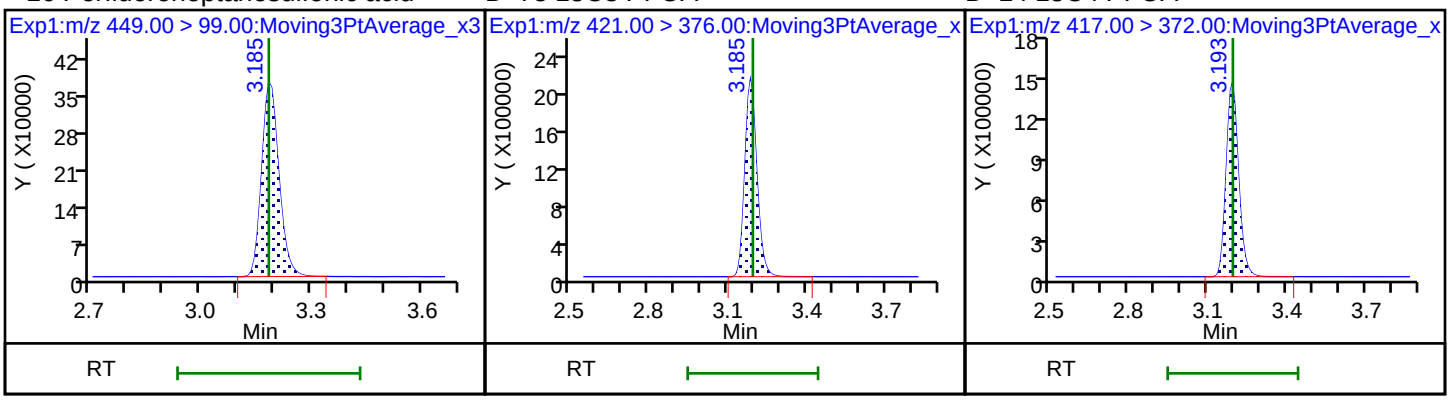
77 DONA



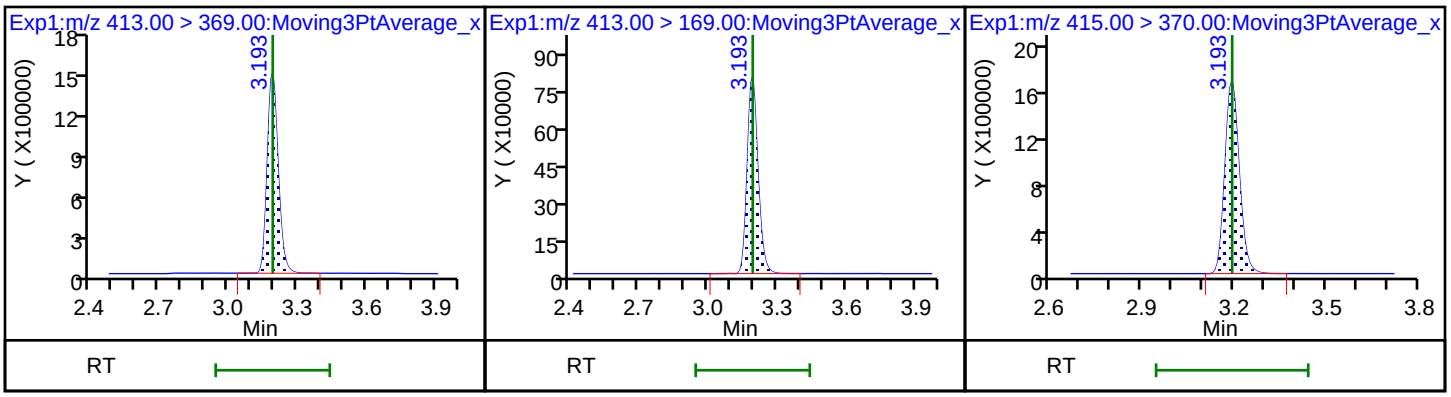
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2 FTS 16 Perfluoroheptanesulfonic acid



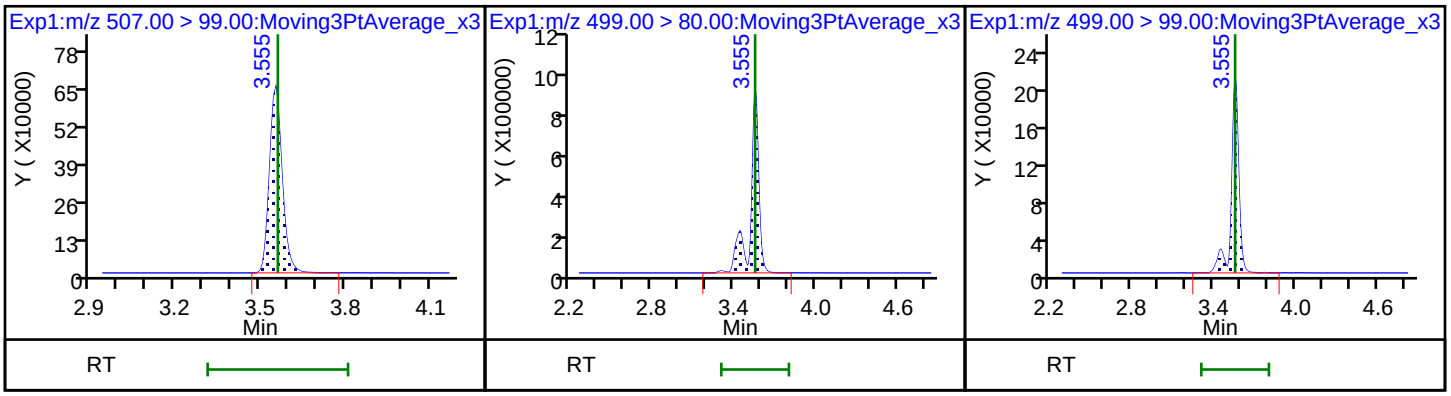
16 Perfluoroheptanesulfonic acid D 73 13C8 PFOA D 14 13C4 PFOA



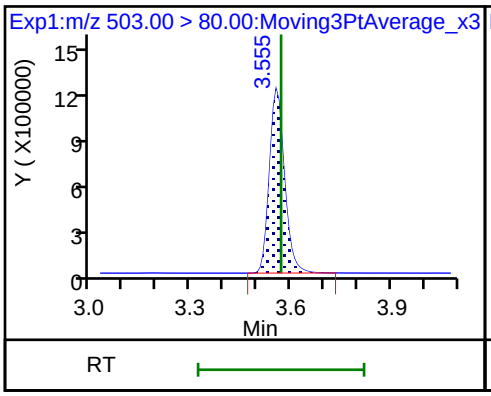
15 Perfluorooctanoic acid 15 Perfluorooctanoic acid * 62 13C2 PFOA



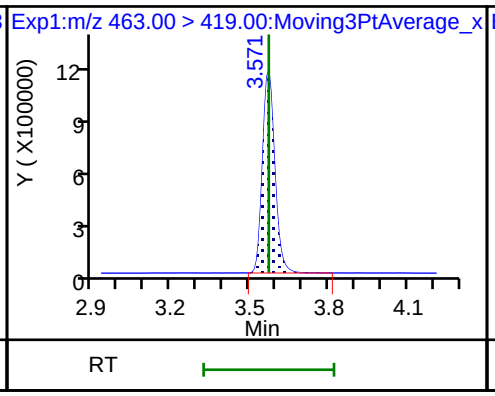
D 72 13C8 PFOS 17 Perfluorooctanesulfonic acid 17 Perfluorooctanesulfonic acid



D 18 13C4 PFOS



20 Perfluorononanoic acid



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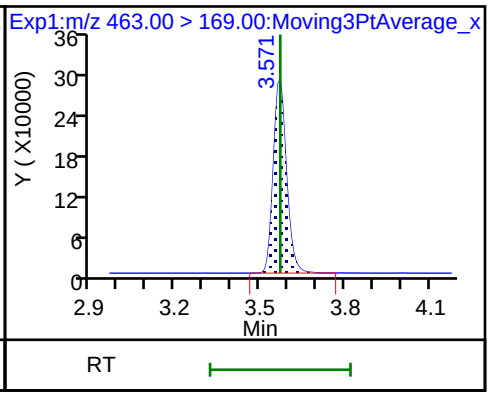
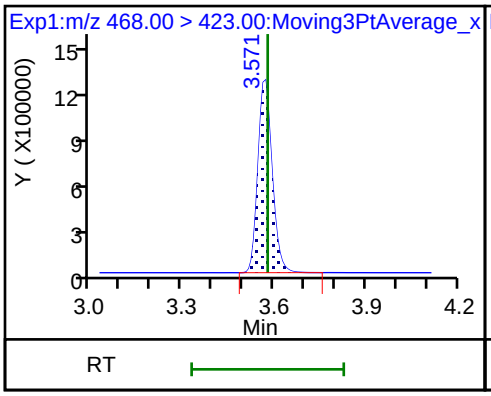
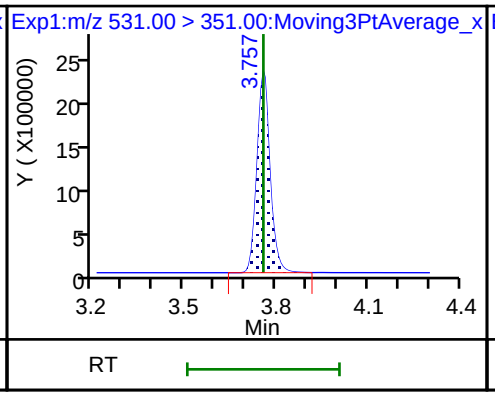


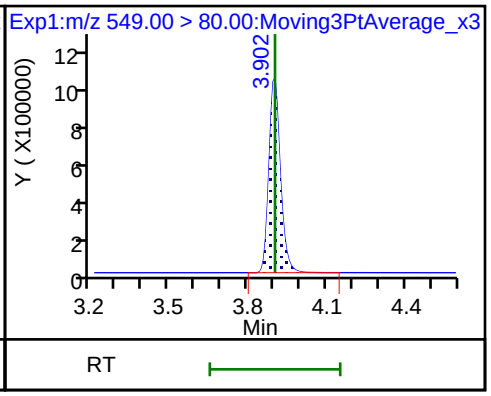
D 19 13C5 PFNA



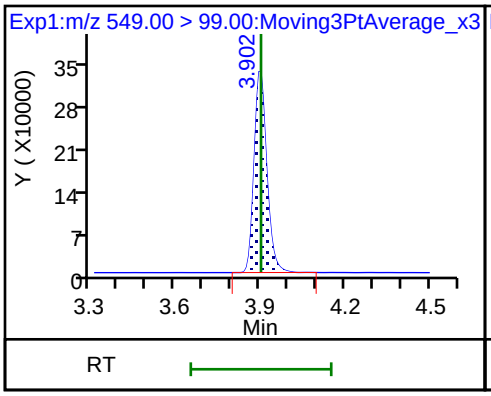
69 9-Chlorohexadecafluoro-3-oxanonane



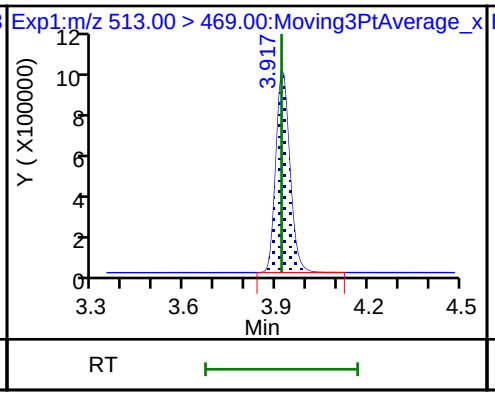
68 Perfluorononanesulfonic acid



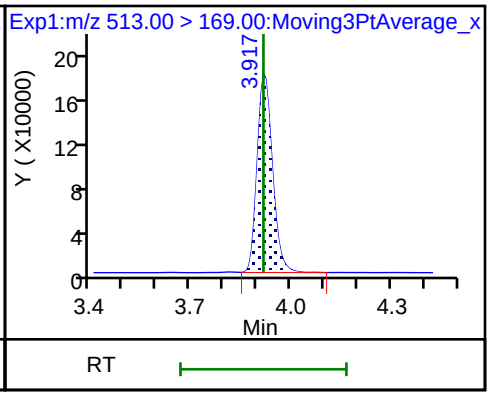
68 Perfluorononanesulfonic acid



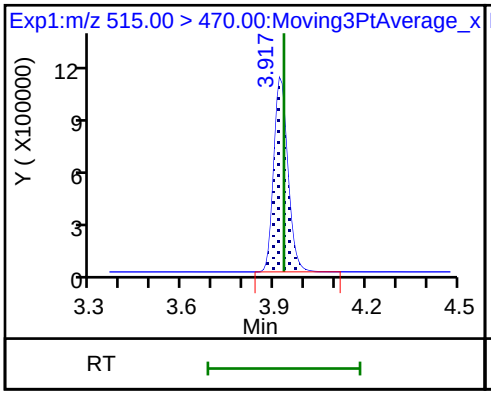
24 Perfluorodecanoic acid



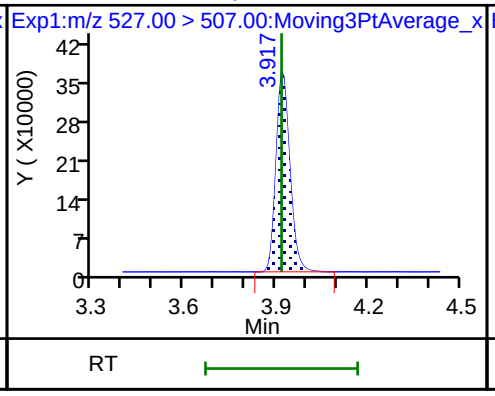
24 Perfluorodecanoic acid



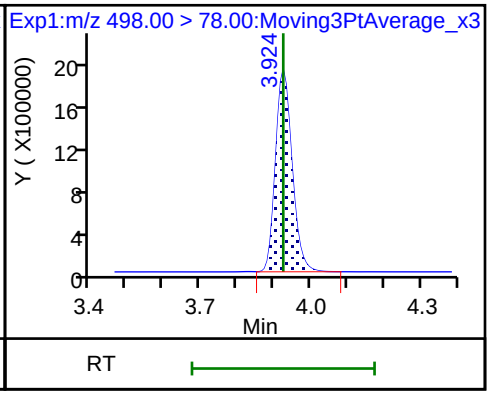
D 23 13C2 PFDA



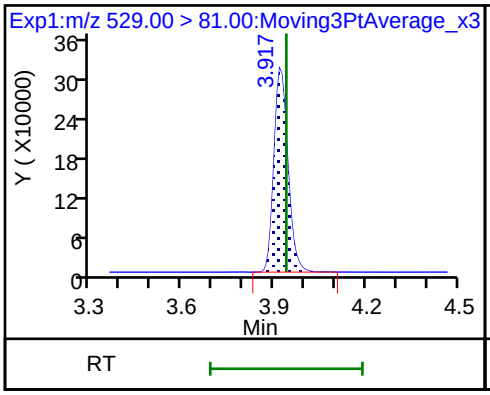
25 1H,1H,2H,2H-perfluorodecanesulfoni



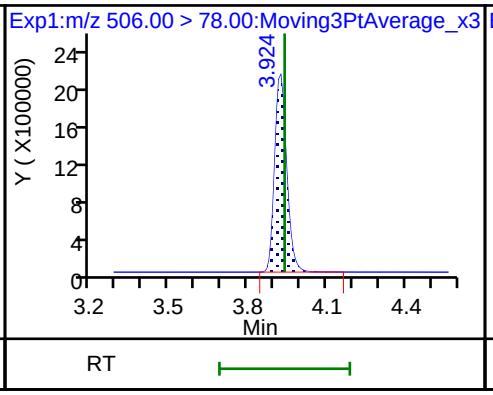
22 Perfluorooctanesulfonamide



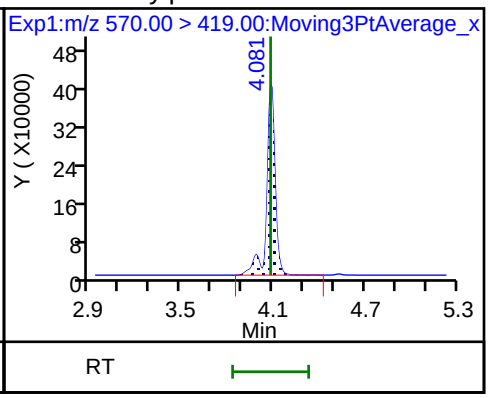
D 26 M2-8:2 FTS



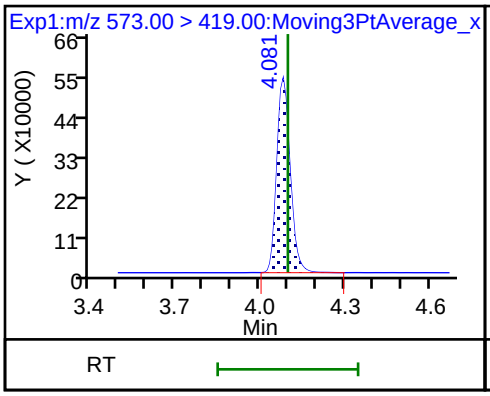
D 21 13C8 FOSA



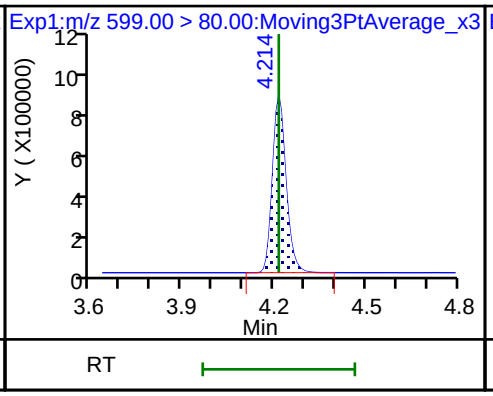
28 N-methylperfluorooctanesulfonamido



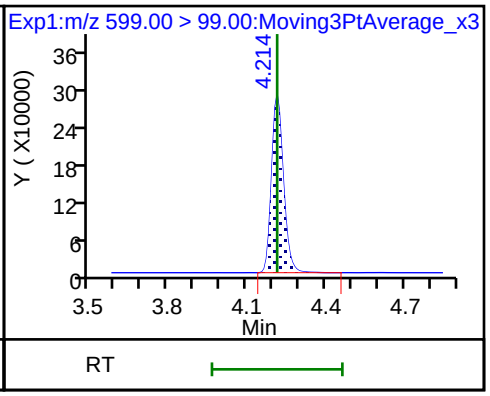
D 27 d3-NMeFOSAA



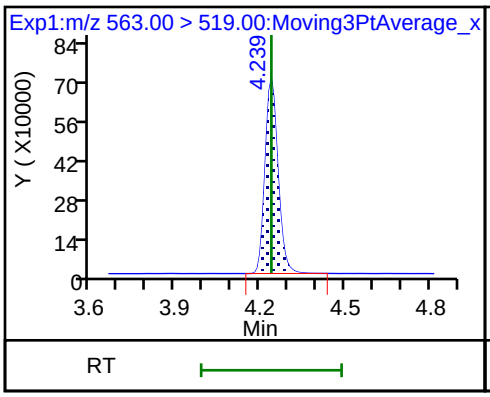
29 Perfluorodecanesulfonic acid



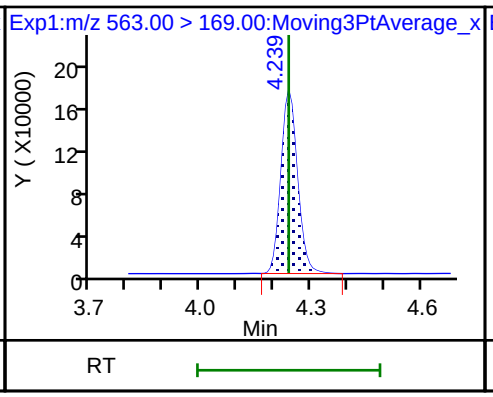
29 Perfluorodecanesulfonic acid



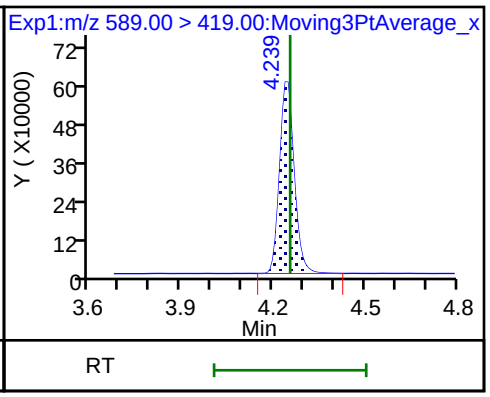
31 Perfluoroundecanoic acid



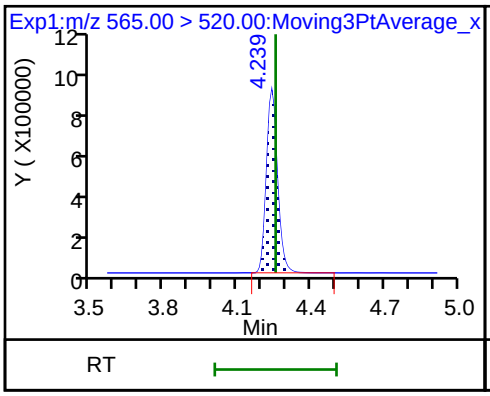
31 Perfluoroundecanoic acid



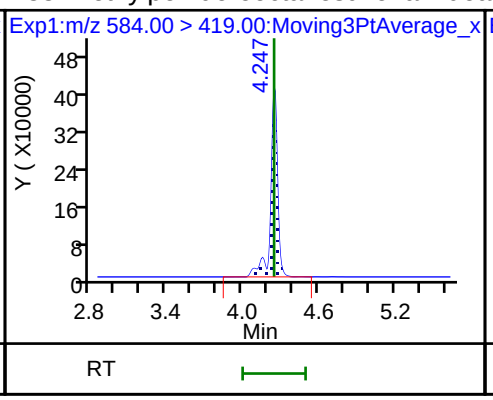
D 32 d5-NEtFOSAA



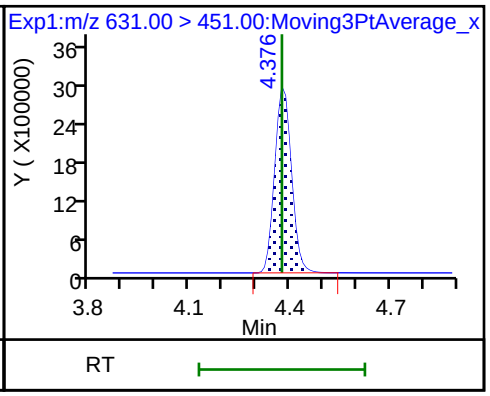
D 30 13C2 PFUnA



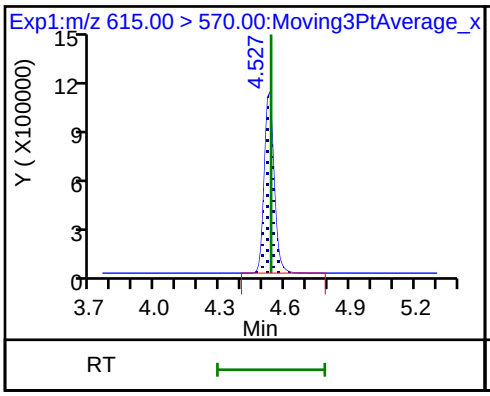
33 N-ethylperfluorooctanesulfonamidoa



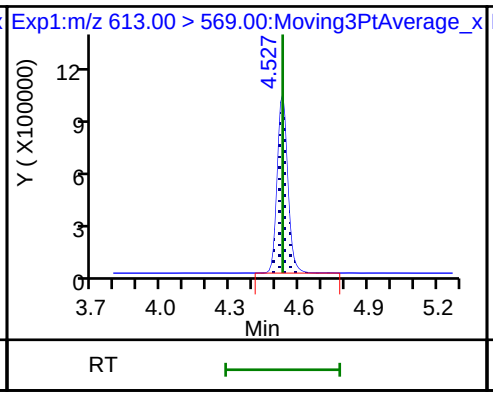
66 11-Chloroeicosafluoro-3-oxaundecan



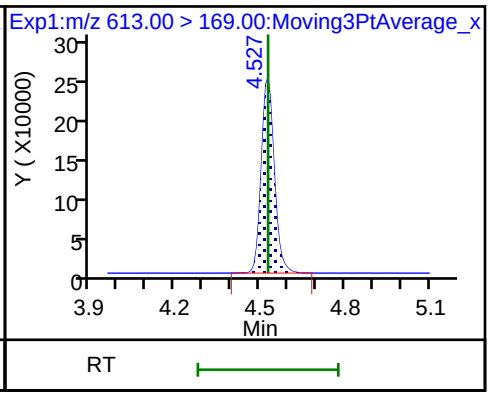
D 36 13C2 PFDoA



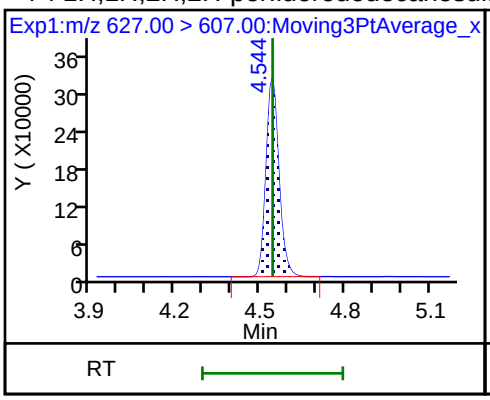
37 Perfluorododecanoic acid



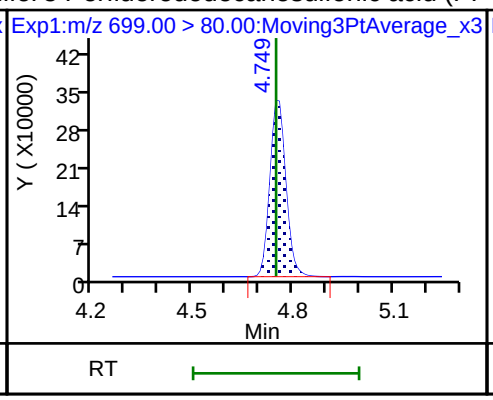
37 Perfluorododecanoic acid



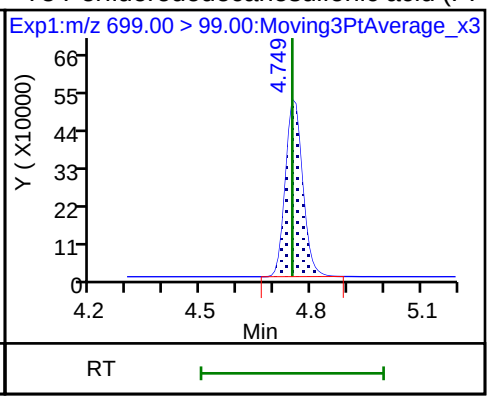
74 1H,1H,2H,2H-perfluorododecanesulfo



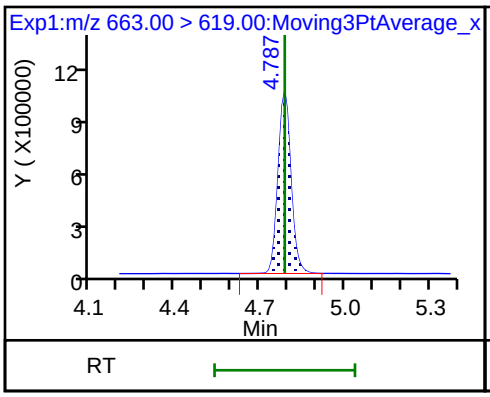
75 Perfluorododecanesulfonic acid (PF



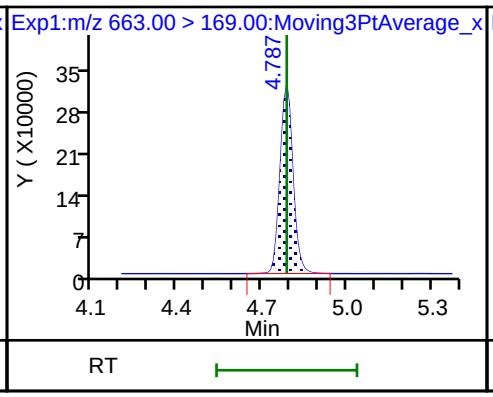
75 Perfluorododecanesulfonic acid (PF



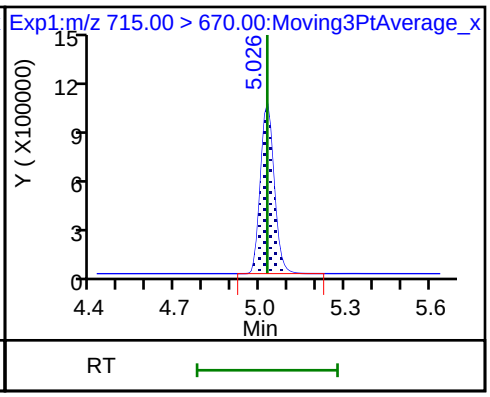
41 Perfluorotridecanoic acid



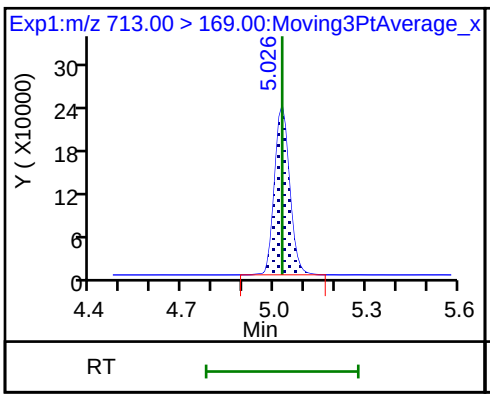
41 Perfluorotridecanoic acid



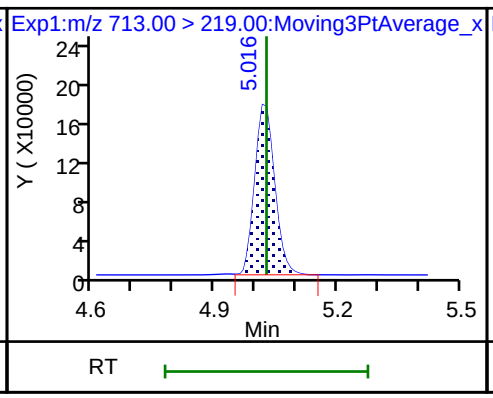
D 43 13C2 PFTeDA



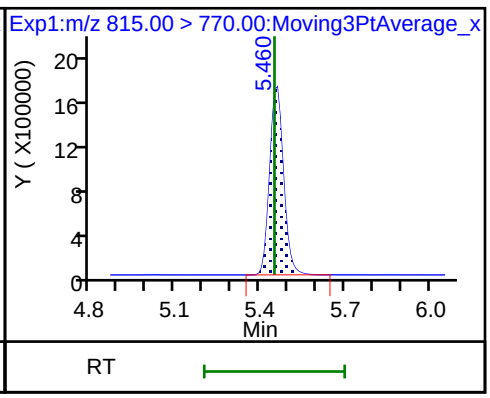
42 Perfluorotetradecanoic acid



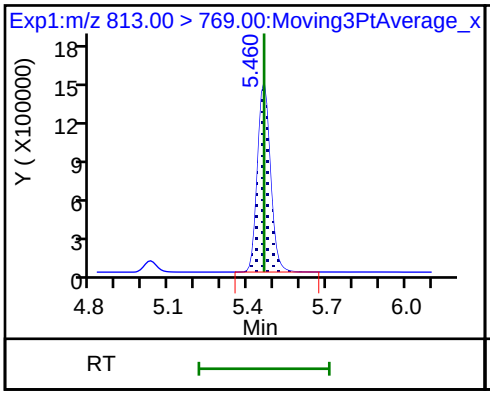
42 Perfluorotetradecanoic acid



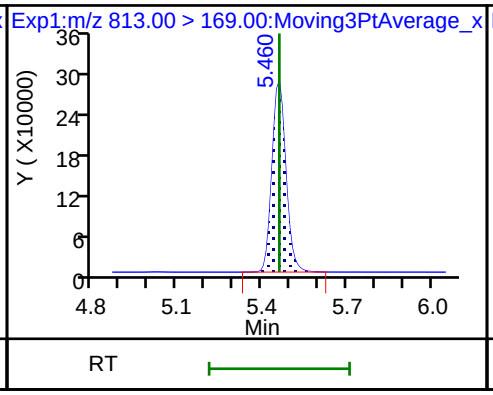
D 44 13C2 PFHxDA



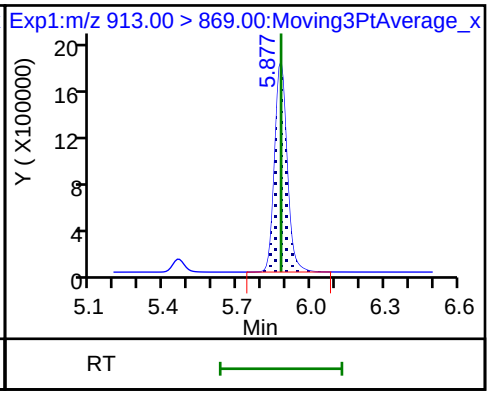
45 Perfluorohexadecanoic acid



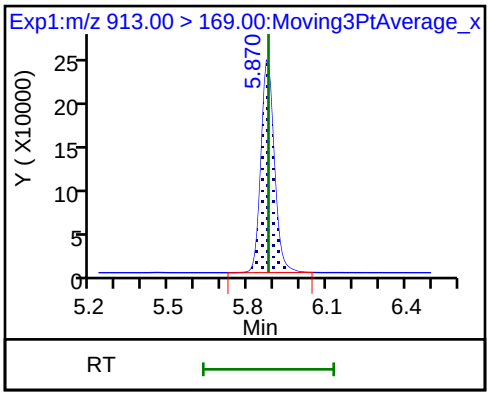
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281559/10 Calibration Date: 03/14/2019 01:58

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.13LLA_040.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8004	0.8443		1.05	1.00	5.5	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9835	1.058		1.08	1.00	7.5	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9367	0.9796		0.924	0.884	4.6	50.0
4:2 FTS	AveID	2.044	2.190		1.00	0.934	7.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.9469	0.9719		1.03	1.00	2.6	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.7773	0.8888		1.07	0.938	14.3	50.0
HFPO-DA (GenX)	AveID	3.025	3.319		1.10	1.00	9.7	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9905	0.9920		1.00	1.00	0.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.000	0.9861		0.898	0.910	-1.4	40.0
DONA	AveID	3.214	3.809		1.12	0.942	18.5	50.0
6:2 FTS	AveID	1.419	1.476		0.986	0.948	4.1	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.106	1.176		1.01	0.952	6.4	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.060	1.035		0.976	1.00	-2.4	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.035	1.014		0.909	0.928	-2.1	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9492	0.999		1.05	1.00	5.2	40.0
F-53B Major	AveID	1.636	1.825		1.04	0.932	11.6	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8303	0.7895		0.913	0.960	-4.9	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.9203	0.9439		1.03	1.00	2.6	40.0
8:2 FTS	AveID	1.147	1.259		1.05	0.958	9.7	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.8815	0.9124		1.04	1.00	3.5	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.8650	0.8234		0.952	1.00	-4.8	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.7034	0.7008		0.960	0.964	-0.4	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7989	0.7858		0.984	1.00	-1.6	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7970	0.7870		0.988	1.00	-1.2	40.0
F-53B Minor	AveID	2.386	2.651		1.05	0.942	11.1	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9404	0.9238		0.982	1.00	-1.8	40.0
10:2 FTS	AveID	1.144	1.093		0.921	0.964	-4.4	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2703	0.2803		1.00	0.968	3.7	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9457	1.021		1.08	1.00	8.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2395	0.2425		1.01	1.00	1.3	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.8822		1.01	1.00	1.0	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281559/10 Calibration Date: 03/14/2019 01:58

Instrument ID: A8_N Calib Start Date: 03/09/2019 01:17

GC Column: GeminiC18 3x100 ID: 3.00(mm) Calib End Date: 03/09/2019 02:02

Lab File ID: 2019.03.13LLA_040.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.184	1.087		0.918	1.00	-8.2	50.0
13C4 PFBA	Ave	1.440	1.413		2.45	2.50	-1.9	50.0
13C5 PFPeA	Ave	0.9906	0.9085		2.29	2.50	-8.3	50.0
13C3 PFBS	Ave	1.504	1.426		2.20	2.33	-5.2	50.0
M2-4:2 FTS	Ave	0.1210	0.1308		2.52	2.34	8.1	50.0
13C2 PFHxA	Ave	1.016	0.9916		2.44	2.50	-2.4	50.0
13C3 HFPO-DA	Ave	0.0584	0.0604		2.59	2.50	3.4	50.0
13C4 PFHpA	Ave	0.9294	0.9484		2.55	2.50	2.1	50.0
18O2 PFHxS	Ave	1.055	1.050		2.35	2.37	-0.4	50.0
M2-6:2 FTS	Ave	0.1597	0.1640		2.44	2.38	2.7	50.0
13C8 PFOA	Ave	1.213	1.256		2.54	2.45	3.6	50.0
13C4 PFOA	Ave	0.8878	0.8675		2.44	2.50	-2.3	50.0
13C8 PFOS	Ave	0.4189	0.3958		2.26	2.39	-5.5	50.0
13C4 PFOS	Ave	0.8199	0.7414		2.16	2.39	-9.6	50.0
13C5 PFNA	Ave	0.7185	0.7157		2.49	2.50	-0.4	50.0
13C2 PFDA	Ave	0.6581	0.6137		2.33	2.50	-6.7	50.0
M2-8:2 FTS	Ave	0.1918	0.1823		2.28	2.40	-4.9	50.0
13C8 FOSA	Ave	1.375	1.239		2.25	2.50	-9.9	50.0
d3-NMeFOSAA	Ave	0.3408	0.3355		2.46	2.50	-1.6	50.0
13C2 PFUnA	Ave	0.5964	0.5592		2.34	2.50	-6.2	50.0
d5-NEtFOSAA	Ave	0.3646	0.3534		2.42	2.50	-3.1	50.0
13C2 PFDoA	Ave	0.6423	0.6089		2.37	2.50	-5.2	50.0
13C2 PFTeDA	Ave	0.6798	0.6393		2.35	2.50	-6.0	50.0
13C2 PFHxDA	Ave	1.116	1.082		2.42	2.50	-3.0	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\2019.03.13LLA_040.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 14-Mar-2019 01:58:59 ALS Bottle#: 13 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: SACINSTLCMS01 Instrument ID: A8_N
Sublist: chrom-A8_N*sub39

Method: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-Mar-2019 10:04:50 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0309

First Level Reviewer: mongkols Date: 15-Mar-2019 10:04:50
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.777	1.777	0.0	1.000	2620837	1.05		105	690	
D 1 13C4 PFBA										
217.00 > 172.00	1.777	1.777	0.0		7760719	2.45		98.1	6762	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.095	2.095	0.0	1.000	2111404	1.08		108	146	
D 3 13C5 PFPeA										
267.90 > 223.00	2.095	2.094	0.001		4990877	2.29		91.7	8233	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.127	2.127	0.0	1.000	2714329	0.9244	Target=1.00	105	4150	
298.90 > 99.00	2.127	2.127	0.0	1.000	1113722		2.44(1.68-3.11)		2804	
D 47 13C3 PFBS										
301.90 > 80.00	2.127	2.126	0.001		7287753	2.20		94.8	641532	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.403	2.404	-0.001		671227	2.52		108	1658	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.403	2.403	0.0	1.000	587980	1.00		107	6910	
D 7 13C2 PFHxA										
315.00 > 270.00	2.442	2.434	0.008		5447392	2.44		97.6	9168	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.442	2.442	0.0	1.000	2117648	1.03	Target=1.00	103	1133	
313.00 > 119.00	2.442	2.442	0.0	1.000	181735		11.65(7.70-14.30)		799	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.452	2.452	0.0	1.153	2613110	1.07	Target=1.00	114	7061	
349.00 > 99.00	2.452	2.452	0.0	1.153	915208		2.86(1.85-3.44)		4555	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.551	2.543	0.009		331836	2.59		103	1217	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.551	2.551	0.0	1.000	440501	1.10		110	449	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.809	2.809	0.0	1.000	2067456	1.00	Target=1.00	100	788	
363.00 > 169.00	2.809	2.809	0.0	1.000	769927		2.69(1.76-3.27)		2713	
D 9 13C4 PFHpA										
367.00 > 322.00	2.809	2.811	-0.002		5210136	2.55		102	8130	
D 11 18O2 PFHxS										
403.00 > 84.00	2.818	2.811	0.007		5458665	2.35		99.6	4517	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.818	2.818	0.0	1.000	2071226	0.8977	Target=1.00	98.6	3276	
399.00 > 99.00	2.818	2.818	0.0	1.000	689568		3.00(1.97-3.66)		2078	
77 DONA										
377.00 > 251.00	2.856	2.856	0.0	0.800	5845400	1.12	Target=1.00	119	6915	
377.00 > 85.00	2.856	2.856	0.0	0.800	3374088		1.73(1.16-2.15)		5030	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.178	3.178	0.0	1.000	504338	0.9864		104	2985	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.178	3.178	0.0		855908	2.44		103	5909	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.194	3.194	0.0	0.895	1823675	1.01	Target=1.00	106	3430	
449.00 > 99.00	3.194	3.194	0.0	0.895	476436		3.83(2.61-4.86)		1617	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.202	3.202	0.0	1.000	1972759	0.9760	Target=1.00	97.6	209	
413.00 > 169.00	3.202	3.202	0.0	1.000	1071453		1.84(0.84-2.52)		1702	
* 62 13C2 PFOA										
415.00 > 370.00	3.202	3.202	0.0		5493466	2.50			7374	
D 73 13C8 PFOA										
421.00 > 376.00	3.194	3.194	0.0		6755827	2.54		104	9287	
D 14 13C4 PFOA										
417.00 > 372.00	3.202	3.194	0.008		4765624	2.44		97.7	9459	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.570	3.570	0.0	1.000	1532590	0.9088	Target=1.00	97.9	3013	
499.00 > 99.00	3.570	3.570	0.0	1.000	321908		4.76(2.31-6.93)		1652	
D 72 13C8 PFOS										
507.00 > 99.00	3.562	3.562	0.0		2078575	2.26		94.5	3761	
D 18 13C4 PFOS										
503.00 > 80.00	3.570	3.570	0.0		3893459	2.16		90.4	6024	
20 Perfluorononanoic acid										
463.00 > 419.00	3.578	3.578	0.0	1.000	1570385	1.05	Target=1.00	105	543	
463.00 > 169.00	3.578	3.578	0.0	1.000	381485		4.12(2.89-5.37)		2397	
D 19 13C5 PFNA										
468.00 > 423.00	3.578	3.578	0.0		3931374	2.49		99.6	7455	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.767	3.767	0.0	1.055	2771010	1.04		112	4179	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.916	3.916	0.0	1.097	1234646	0.9128	Target=1.00	95.1	3997	
549.00 > 99.00	3.916	3.916	0.0	1.097	434031		2.84(2.05-3.81)		2574	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.931	3.931	0.0	1.000	1272877	1.03	Target=1.00	103	1577	
513.00 > 169.00	3.931	3.931	0.0	1.000	242305		5.25(3.74-6.94)		1754	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.939	3.939	0.0	1.002	483193	1.05		110	1693	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.939	3.939	0.0	1.000	2483419	1.04		104	2108	
D 23 13C2 PFDA										
515.00 > 470.00	3.931	3.931	0.0		3371467	2.33		93.3	5983	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.931	3.939	-0.008		959598	2.28		95.1	5347	
D 21 13C8 FOSA										
506.00 > 78.00	3.939	3.939	0.0		6804615	2.25		90.1	9179	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.098	4.098	0.0	1.000	607007	0.9520		95.2	382	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.098	4.098	0.0		1842923	2.46		98.4	3970	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.230	4.230	0.0	1.185	1100550	0.9605	Target=1.00	99.6	4963	
599.00 > 99.00	4.230	4.230	0.0	1.185	363367		3.03(2.28-4.23)		2763	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.255	4.255	0.0	1.002	965504	0.9836	Target=1.00	98.4	815	
563.00 > 169.00	4.255	4.255	0.0	1.002	242741		3.98(2.86-5.32)		1749	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.263	4.263	0.0	1.002	611240	0.9875		98.8	1840	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.255	4.255	0.0		1941634	2.42		96.9	1014	
D 30 13C2 PFUnA										
565.00 > 520.00	4.247	4.255	-0.008		3071731	2.34		93.8	4682	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.385	4.385	0.0	1.228	4068857	1.05		111	8780	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.535	4.535	0.0	1.000	1236053	0.9824	Target=1.00	98.2	887	
613.00 > 169.00	4.535	4.535	0.0	1.000	334594		3.69(2.82-5.24)		3607	
D 36 13C2 PFDoA										
615.00 > 570.00	4.535	4.535	0.0		3345085	2.37		94.8	6894	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.551	4.551	0.0	1.158	422248	0.9214		95.6	4026	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.767	4.767	0.0	1.335	442008	1.00	Target=1.00	104	3593	
699.00 > 99.00	4.758	4.767	-0.009	1.333	688819		0.64(0.44-0.82)		3821	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.795	4.795	0.0	1.057	1366301	1.08	Target=1.00	108	656	
663.00 > 169.00	4.795	4.795	0.0	1.057	422026		3.24(2.18-4.05)		3950	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2 PFTeDA										
715.00 > 670.00	5.035	5.025	0.010		3511764	2.35		94.0	6346	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.035	5.035	0.0	1.000	340640	1.01	Target=1.00	101	3465	
713.00 > 219.00	5.025	5.035	-0.010	0.998	254012		1.34(0.96-1.79)		1213	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.460	5.450	0.010		5942180	2.42		97.0	5376	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.460	5.460	0.0	1.000	2096866	1.01	Target=1.00	101	102	
813.00 > 169.00	5.460	5.460	0.0	1.000	394450		5.32(3.69-6.84)		2040	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.877	5.877	0.0	1.076	2583357	0.9176	Target=1.00	91.8	153	
913.00 > 169.00	5.869	5.877	-0.008	1.075	342850		7.53(5.20-9.66)		2054	

Reagents:

LCPFC_LL4_00011 Amount Added: 1.00 Units: mL

Report Date: 15-Mar-2019 10:04:54 Chrom Revision: 2.3 13-Mar-2019 09:24:14

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\2019.03.13LLA_040.d

Injection Date: 14-Mar-2019 01:58:59 Instrument ID: A8_N

Lims ID: CCV L4

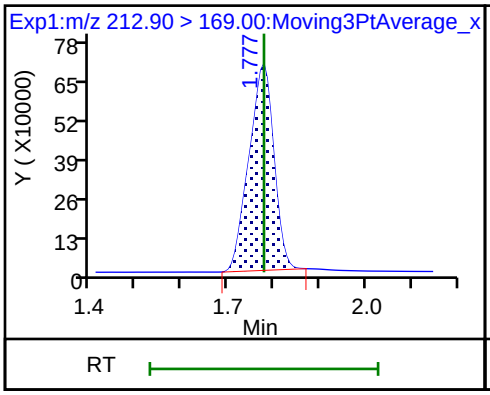
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 10

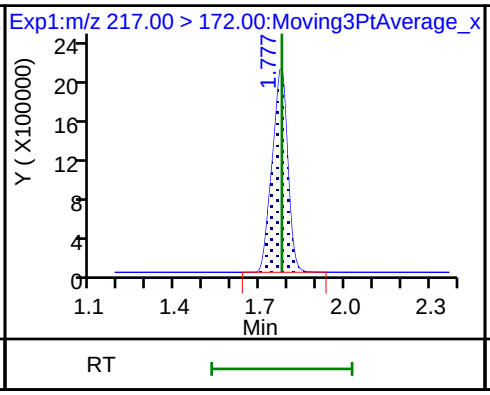
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

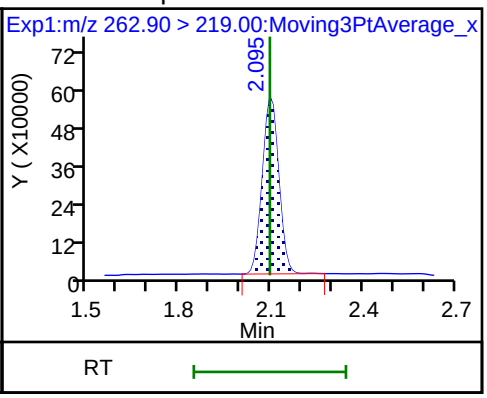
2 Perfluorobutanoic acid



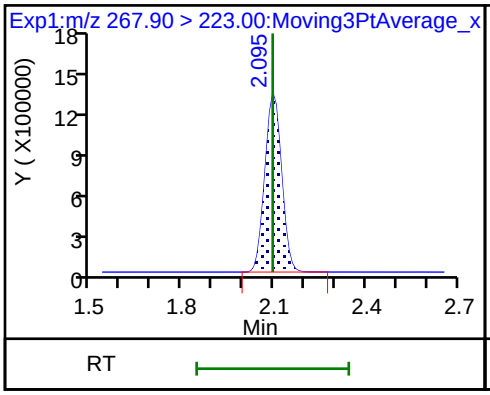
D 1 13C4 PFBA



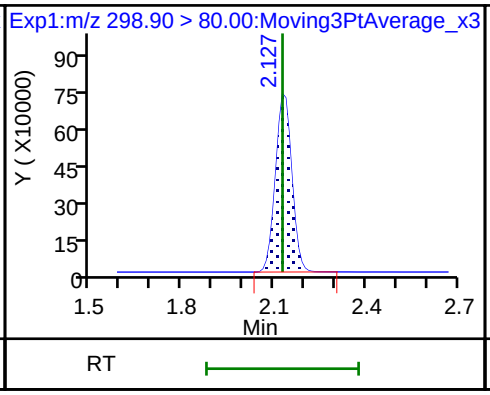
4 Perfluoropentanoic acid



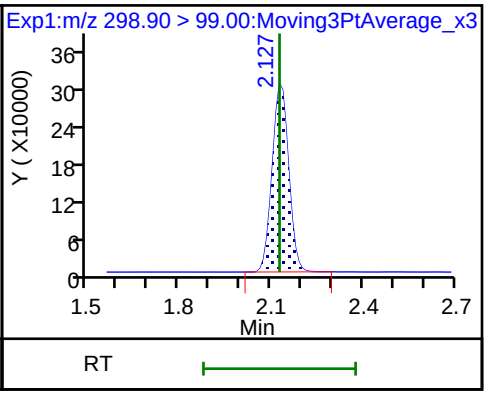
D 3 13C5 PFPeA



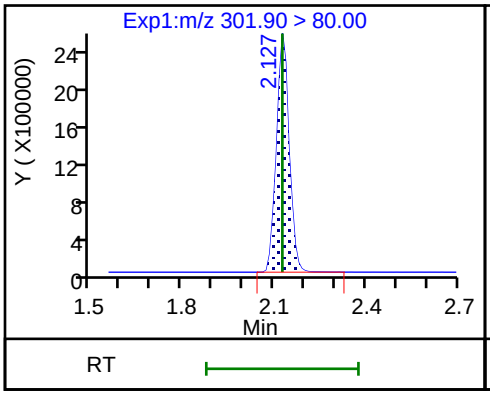
5 Perfluorobutanesulfonic acid



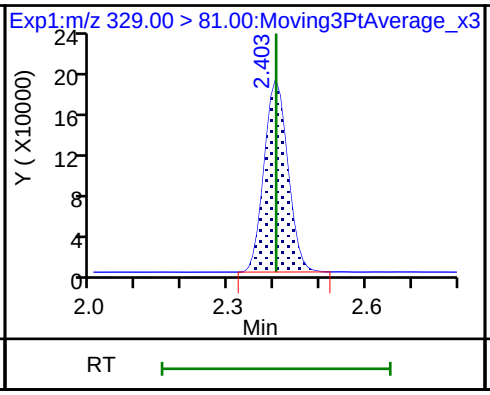
5 Perfluorobutanesulfonic acid



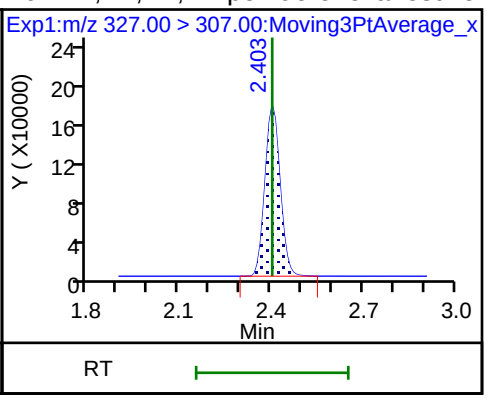
D 47 13C3 PFBS



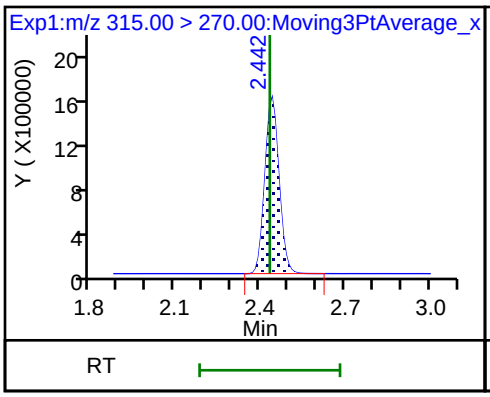
D 60 M2-4:2 FTS



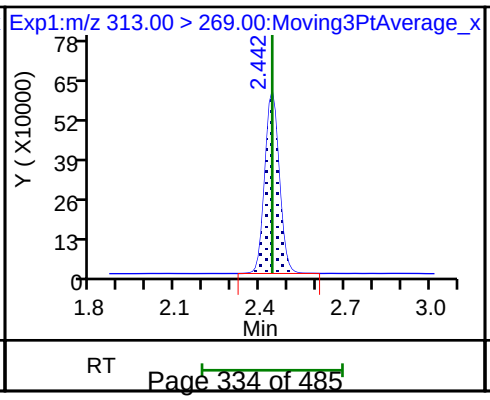
61 1H,1H,2H,2H-perfluorohexanesulfoni



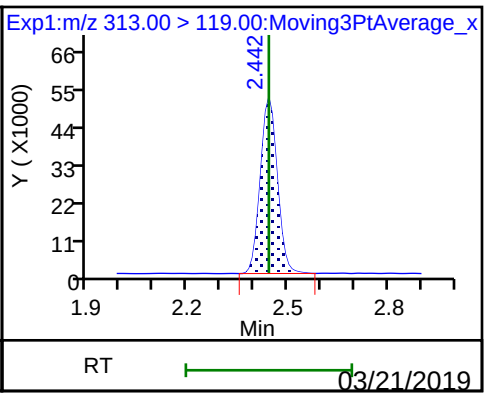
D 7 13C2 PFHxA



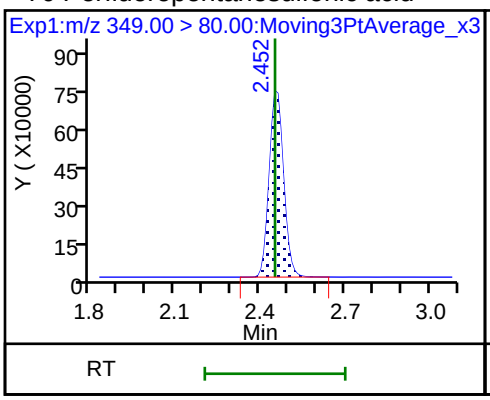
6 Perfluorohexanoic acid



6 Perfluorohexanoic acid



70 Perfluoropentanesulfonic acid



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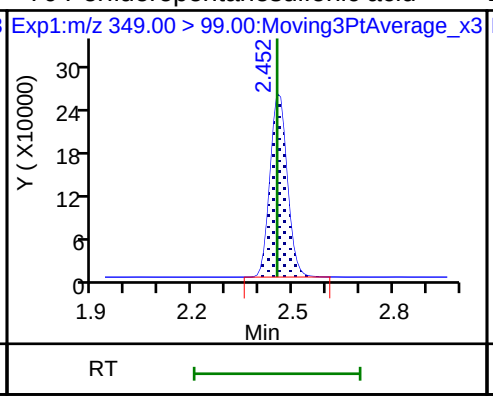
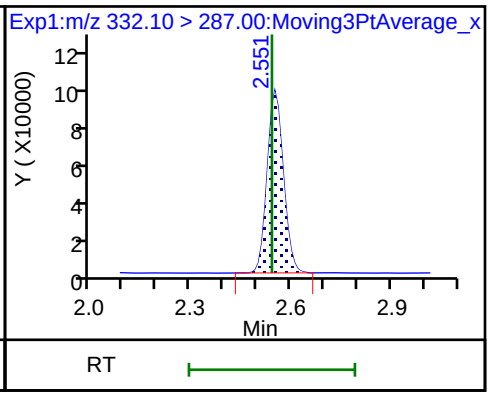
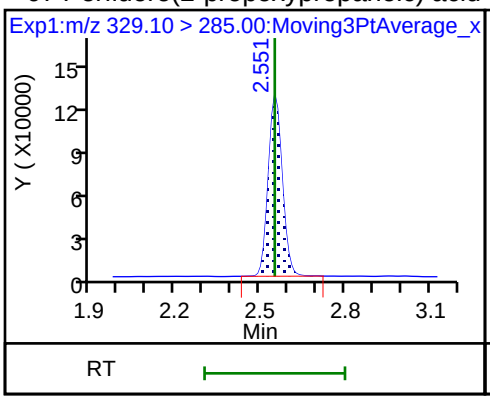


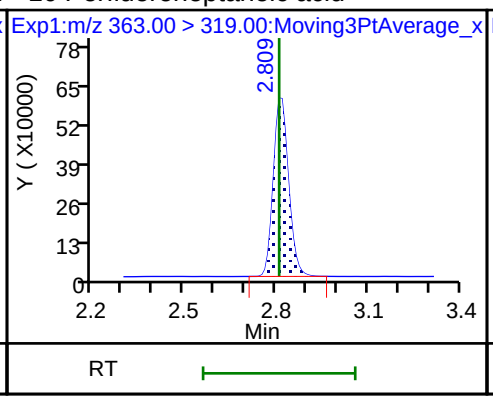
D 64 13C3 HFPO-DA



67 Perfluoro(2-propoxypropanoic) acid



10 Perfluoroheptanoic acid



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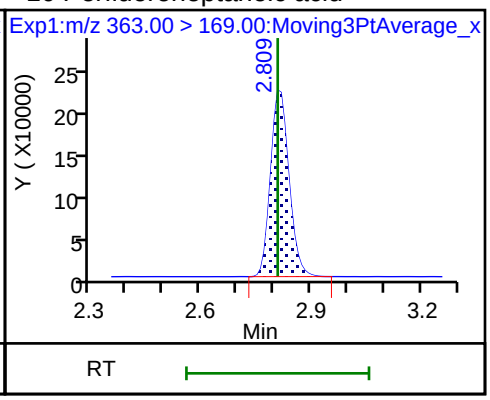
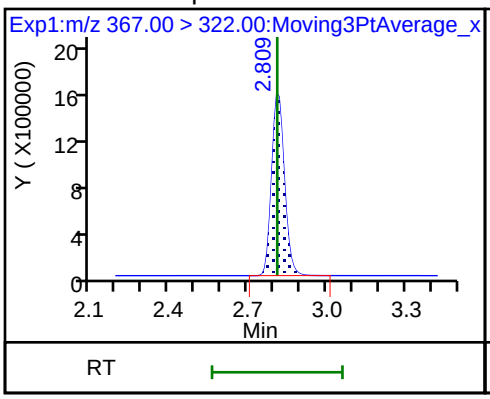
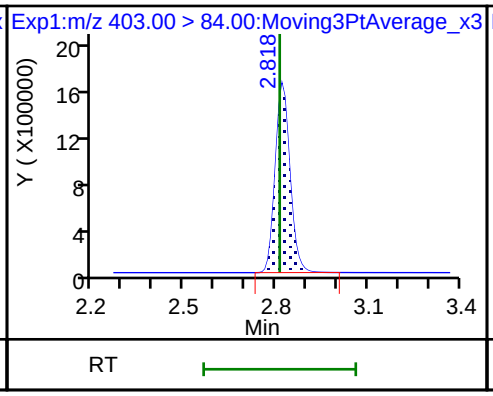


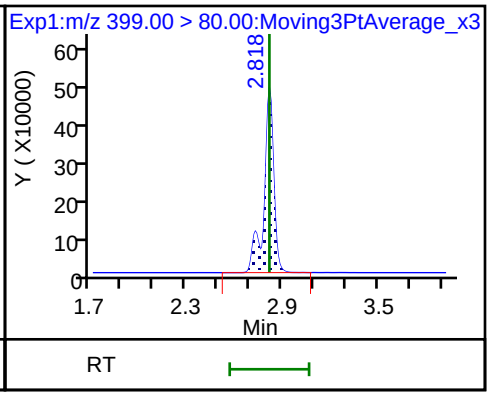
D 9 13C4 PFHpA



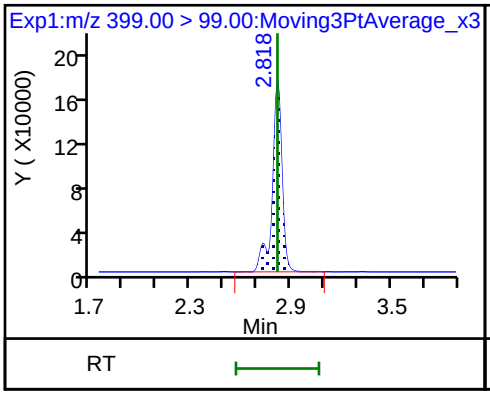
D 11 18O2 PFHxS



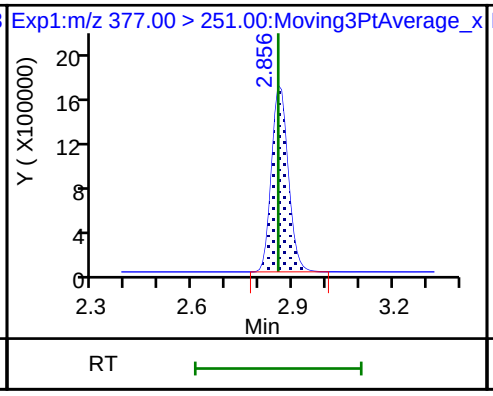
8 Perfluorohexanesulfonic acid



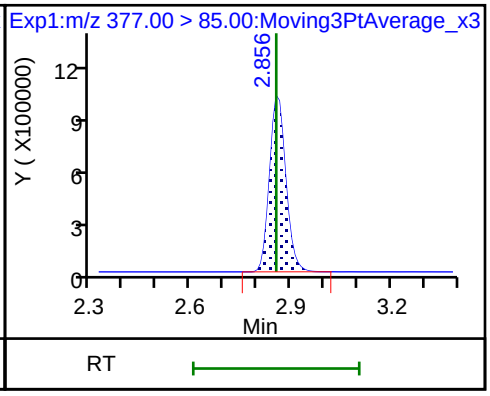
8 Perfluorohexanesulfonic acid



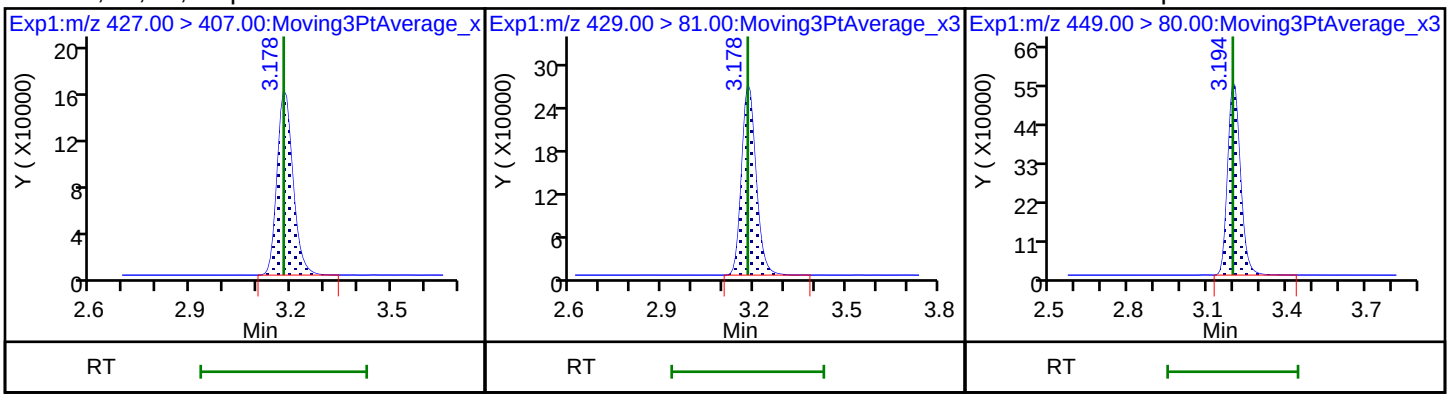
77 DONA



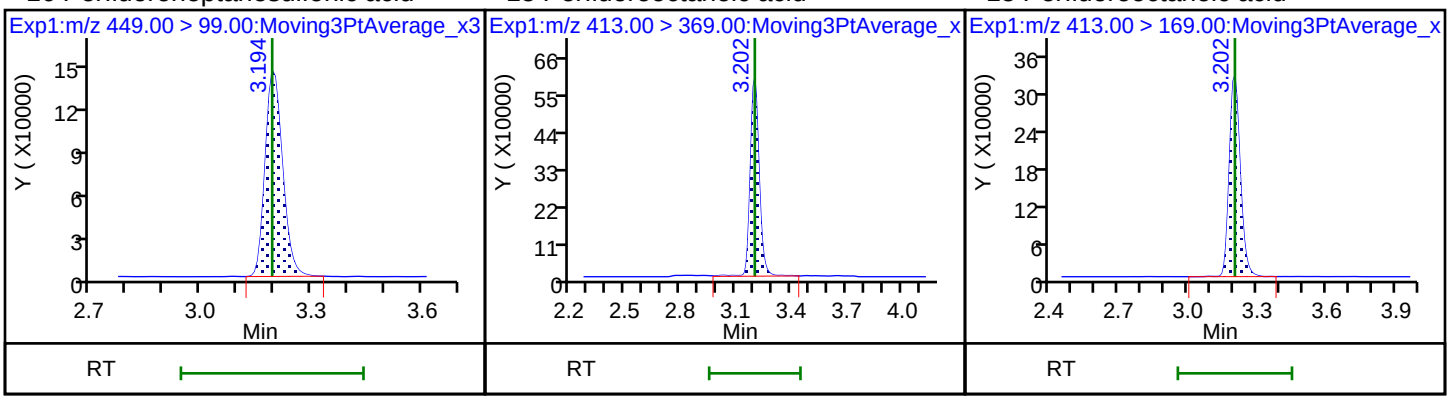
77 DONA



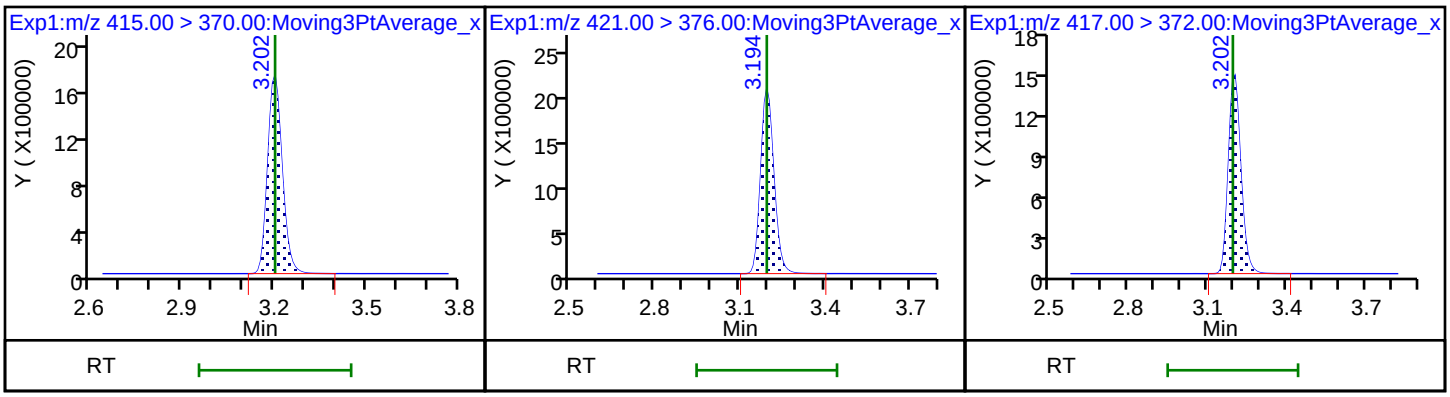
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2 FTS 16 Perfluoroheptanesulfonic acid



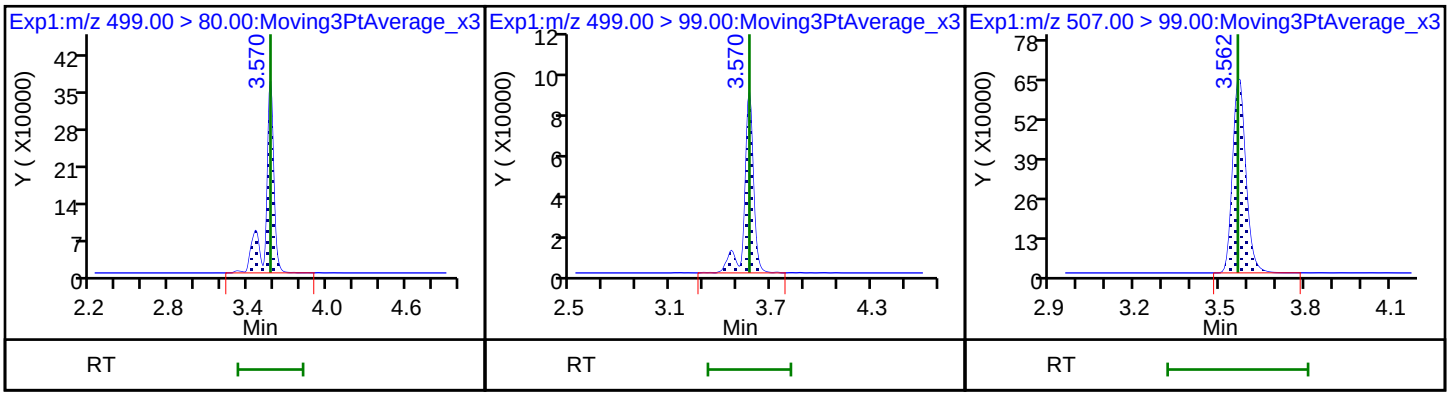
16 Perfluoroheptanesulfonic acid 15 Perfluorooctanoic acid 15 Perfluorooctanoic acid



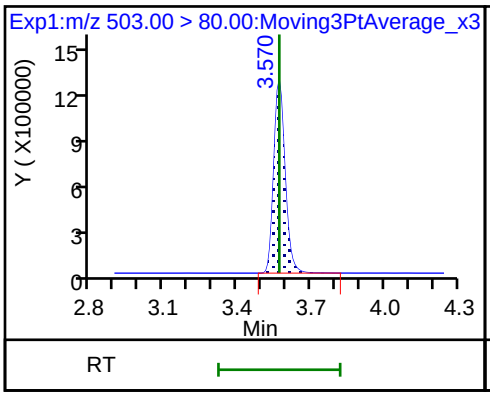
* 62 13C2 PFOA D 73 13C8 PFOA D 14 13C4 PFOA



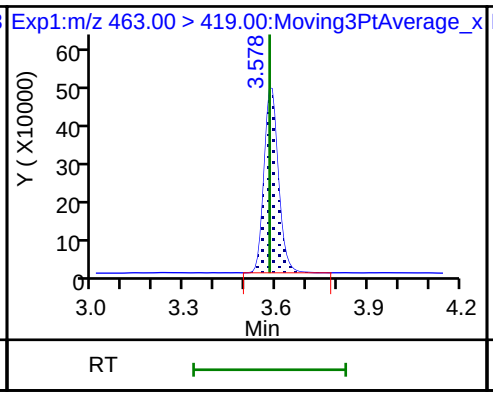
17 Perfluorooctanesulfonic acid 17 Perfluorooctanesulfonic acid D 72 13C8 PFOS



D 18 13C4 PFOS



20 Perfluorononanoic acid



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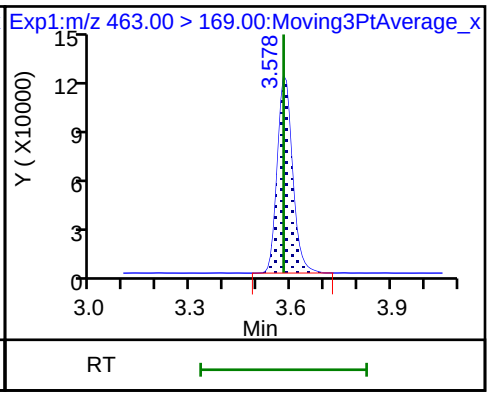
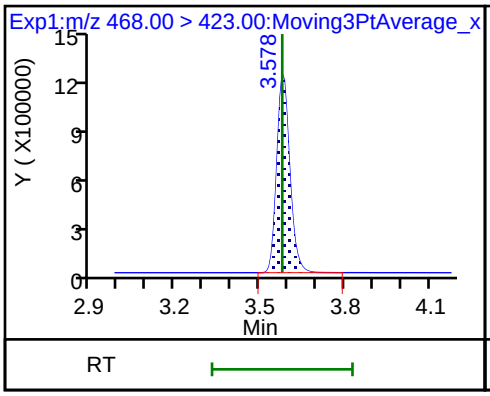
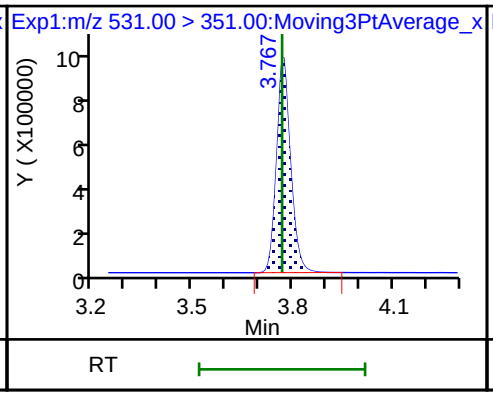


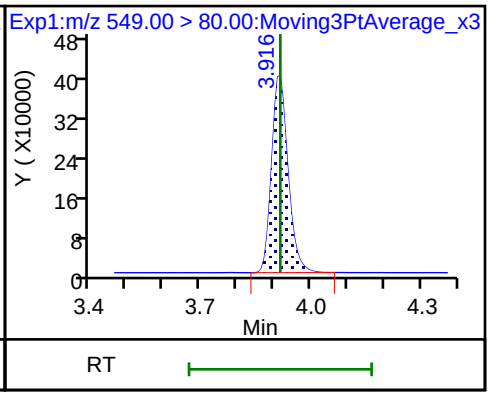
D 19 13C5 PFNA



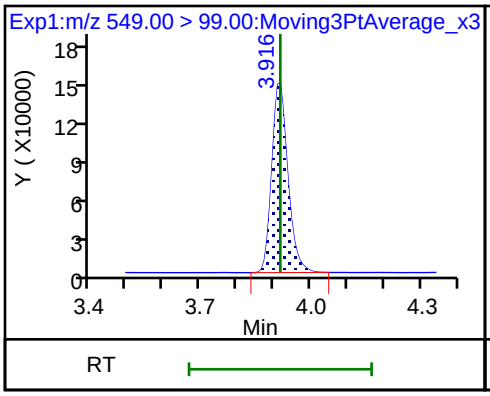
69 9-Chlorohexadecafluoro-3-oxanonane



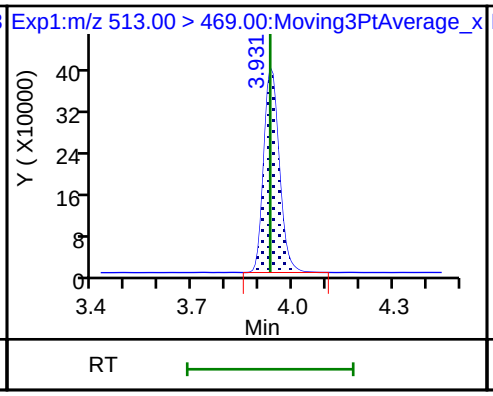
68 Perfluorononanesulfonic acid



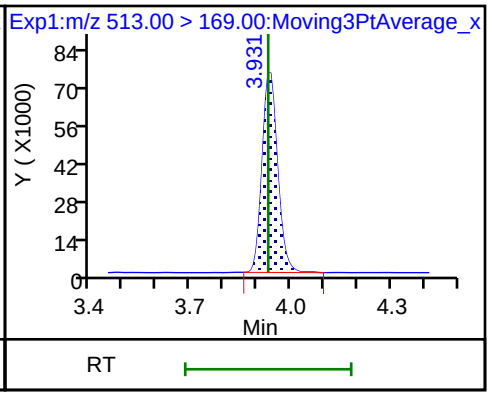
68 Perfluorononanesulfonic acid



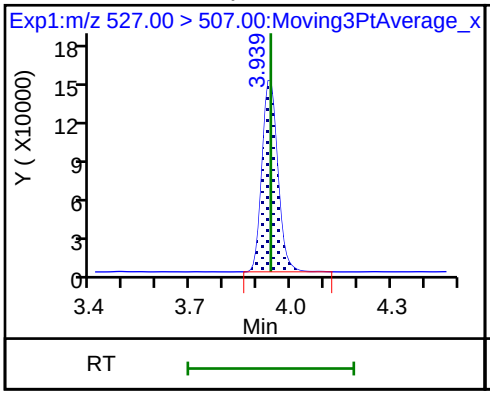
24 Perfluorodecanoic acid



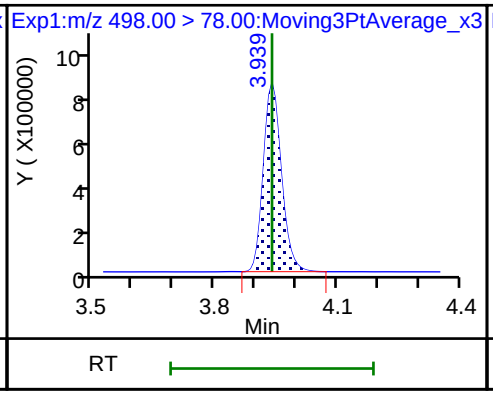
24 Perfluorodecanoic acid



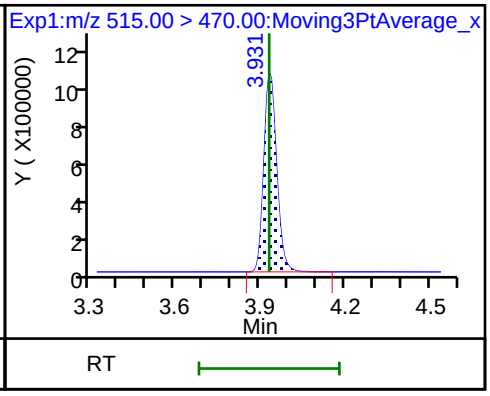
25 1H,1H,2H,2H-perfluorodecanesulfoni



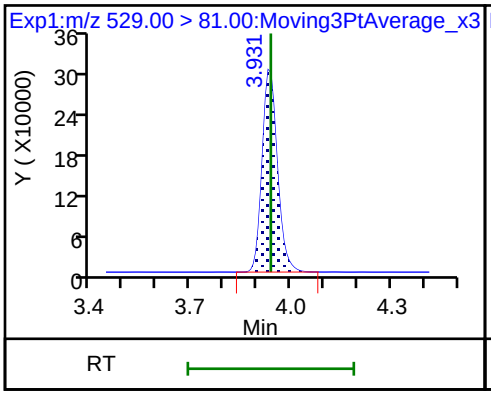
22 Perfluorooctanesulfonamide



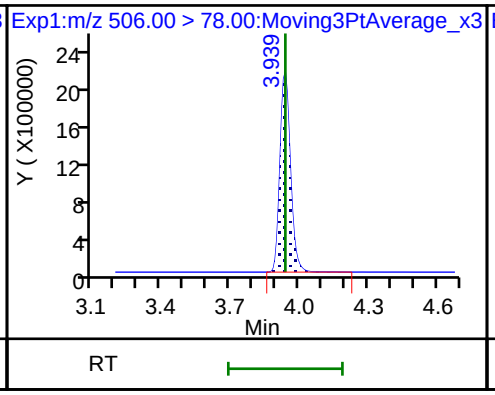
D 23 13C2 PFDA



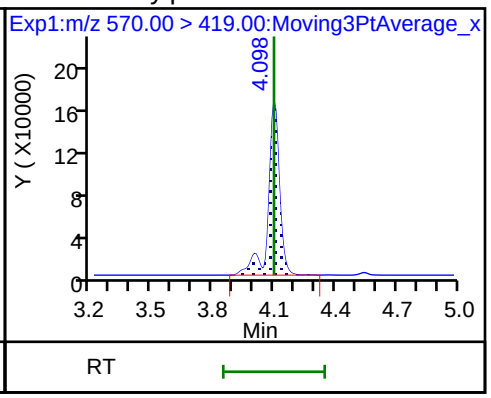
D 26 M2-8:2 FTS



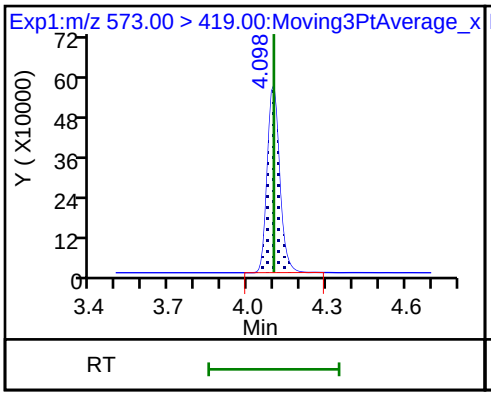
D 21 13C8 FOSA



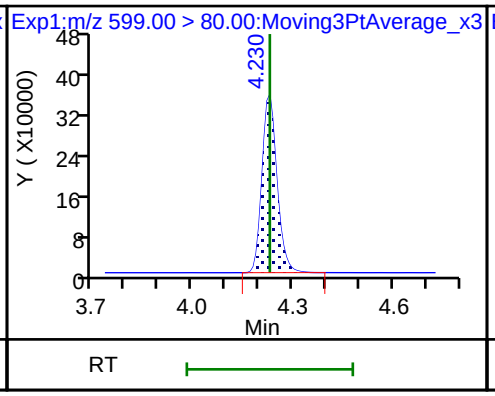
28 N-methylperfluorooctanesulfonamido



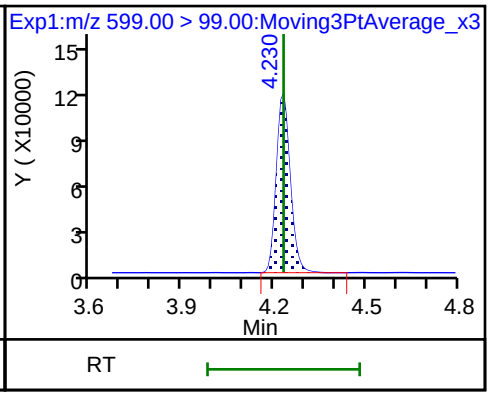
D 27 d3-NMeFOSAA



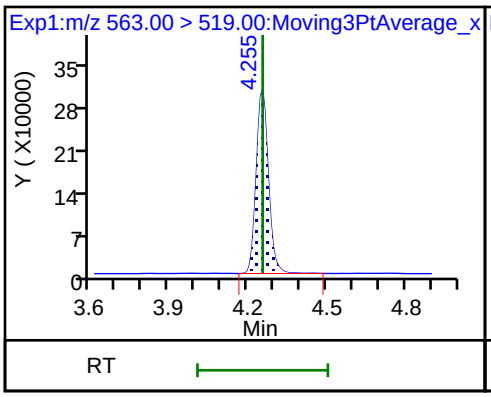
29 Perfluorodecanesulfonic acid



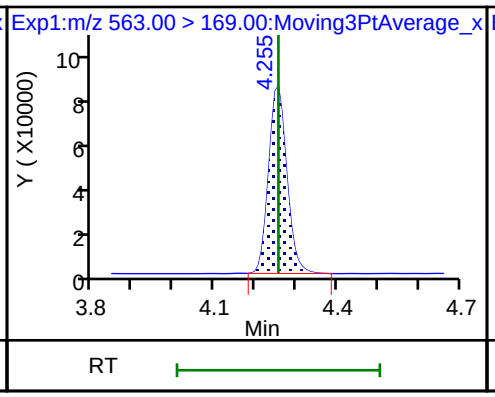
29 Perfluorodecanesulfonic acid



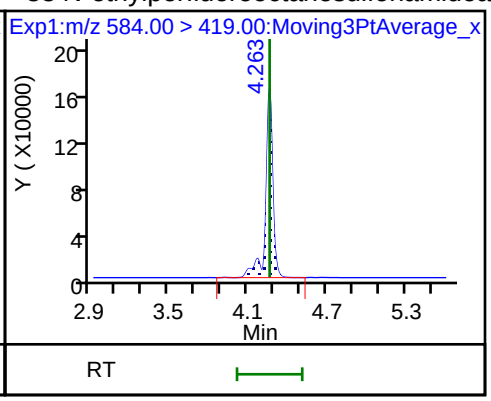
31 Perfluoroundecanoic acid



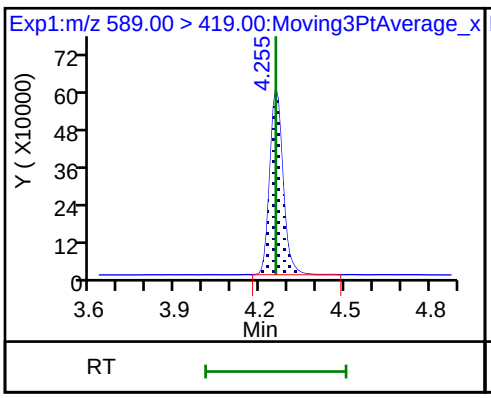
31 Perfluoroundecanoic acid



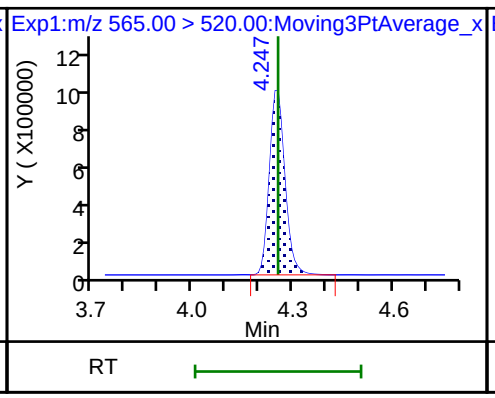
33 N-ethylperfluorooctanesulfonamidoa



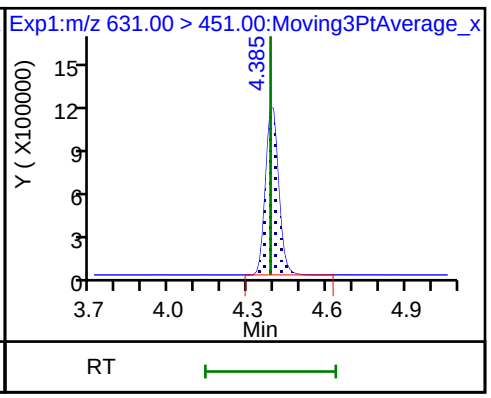
D 32 d5-NEtFOSAA



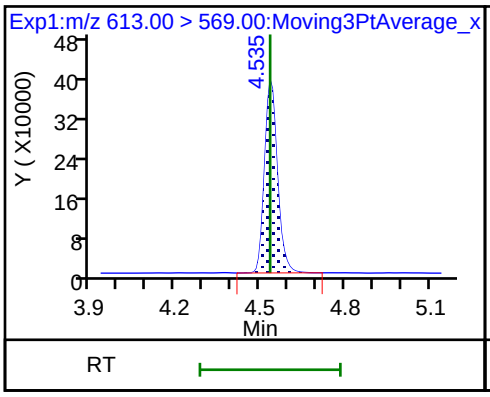
D 30 13C2 PFUnA



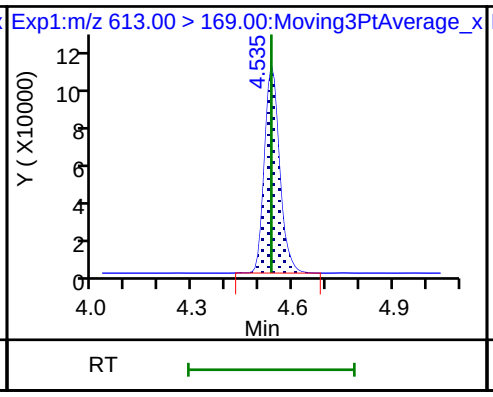
66 11-Chloroeicosafluoro-3-oxaundecan



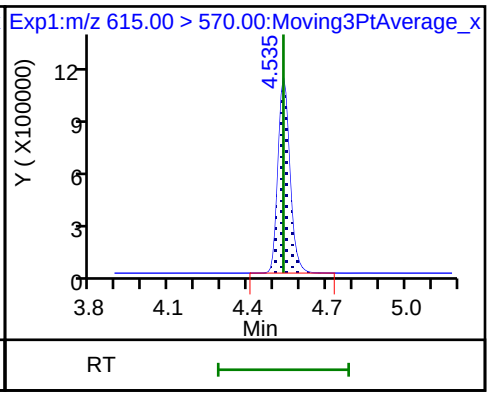
37 Perfluorododecanoic acid



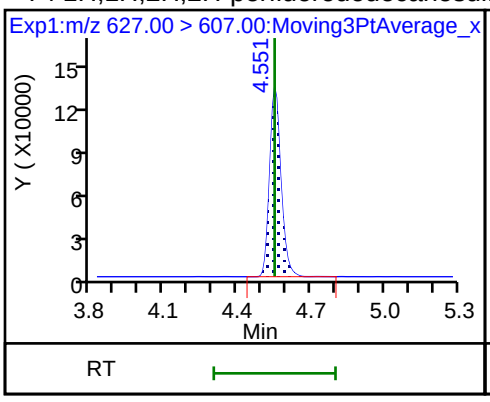
37 Perfluorododecanoic acid



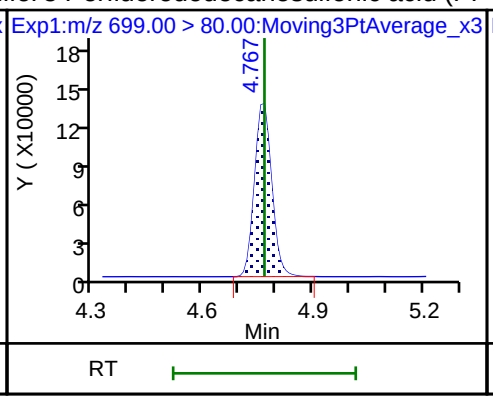
D 36 13C2 PFDoA



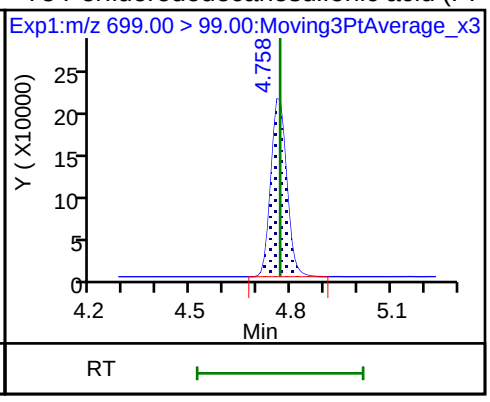
74 1H,1H,2H,2H-perfluorododecanesulfo



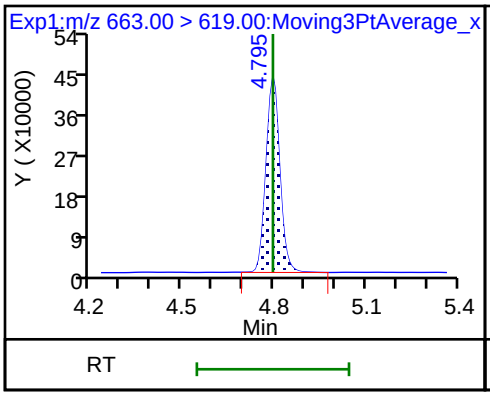
75 Perfluorododecanesulfonic acid (PF



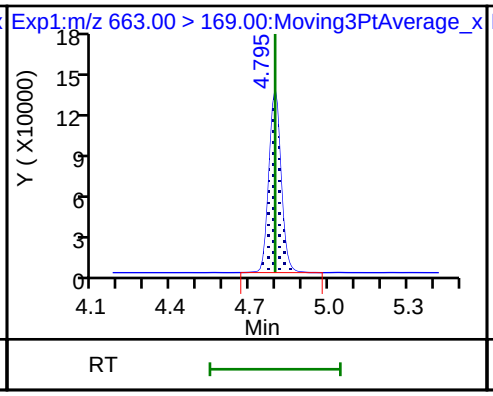
75 Perfluorododecanesulfonic acid (PF



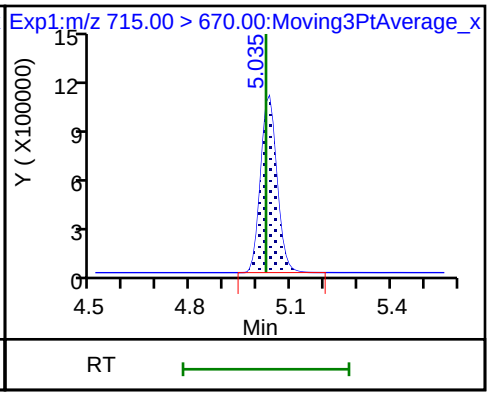
41 Perfluorotridecanoic acid



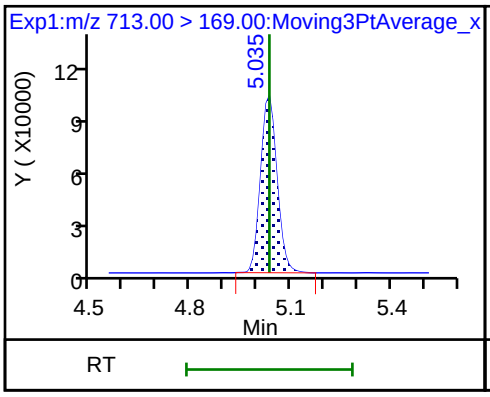
41 Perfluorotridecanoic acid



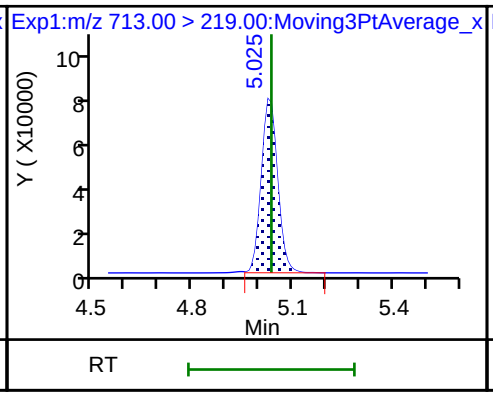
D 43 13C2 PFTeDA



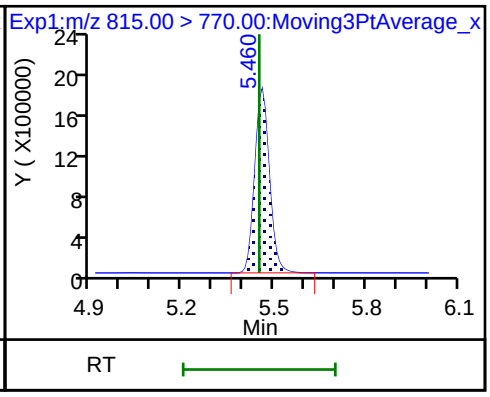
42 Perfluorotetradecanoic acid



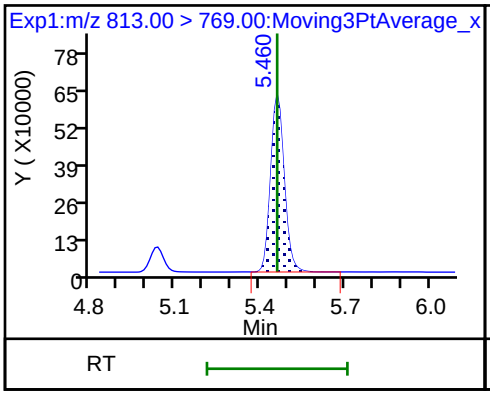
42 Perfluorotetradecanoic acid



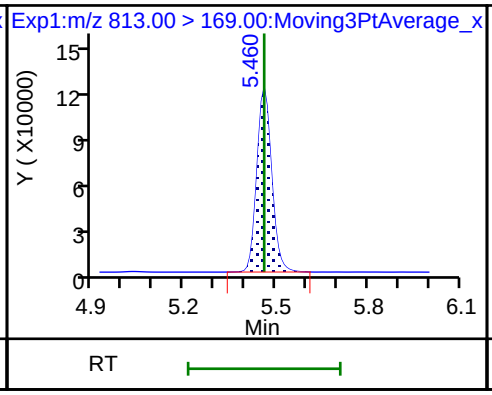
D 44 13C2 PFHxDA



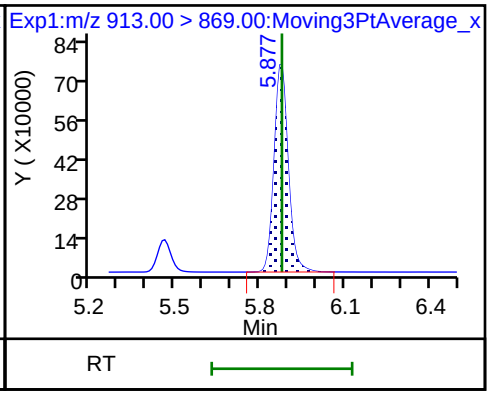
45 Perfluorohexadecanoic acid



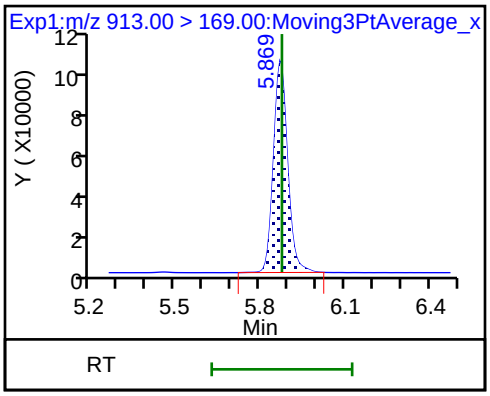
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: ICV 320-280812/10 Calibration Date: 03/11/2019 12:27

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.11_ICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8745	0.9513		2.72	2.50	8.8	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9858	1.001		2.54	2.50	1.6	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9198	1.097		2.64	2.21	19.3	50.0
4:2 FTS	AveID	2.451	2.526		2.41	2.34	3.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8691	0.8656		2.49	2.50	-0.4	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.4591	0.5090		2.61	2.35	10.9	50.0
HFPO-DA (GenX)	AveID	1.389	1.327		2.39	2.50	-4.5	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.998	1.034		2.59	2.50	3.6	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.211	1.169		2.20	2.28	-3.4	40.0
DONA	AveID	2.192	2.339		2.51	2.36	6.7	50.0
6:2 FTS	AveID	1.971	2.142		2.58	2.38	8.7	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.9575	1.065		2.64	2.38	11.2	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.040	1.009		2.43	2.50	-3.0	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9719	1.067		2.54	2.31	9.8	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9626	1.030		2.68	2.50	7.0	40.0
F-53B Major	AveID	0.7773	0.8202		2.46	2.33	5.5	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	2.755	3.217		2.92	2.50	16.8	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.5777	0.6366		2.64	2.40	10.2	50.0
8:2 FTS	AveID	1.609	1.831		2.73	2.40	13.8	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.061	1.215		2.86	2.50	14.5	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7968	1.032		3.24	2.50	29.5	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8587	0.9077		2.55	2.41	5.7	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7812	0.7608		2.43	2.50	-2.6	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7459	0.9023		3.02	2.50	21.0	40.0
F-53B Minor	AveID	1.062	1.048		2.32	2.36	-1.3	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9523	1.065		2.80	2.50	11.9	40.0
10:2 FTS	AveID	0.9902	1.067		2.60	2.41	7.8	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0865	0.0923		2.58	2.42	6.7	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.7493	0.7817		2.61	2.50	4.3	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1759	0.1748		2.48	2.50	-0.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9145		2.66	2.50	6.2	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

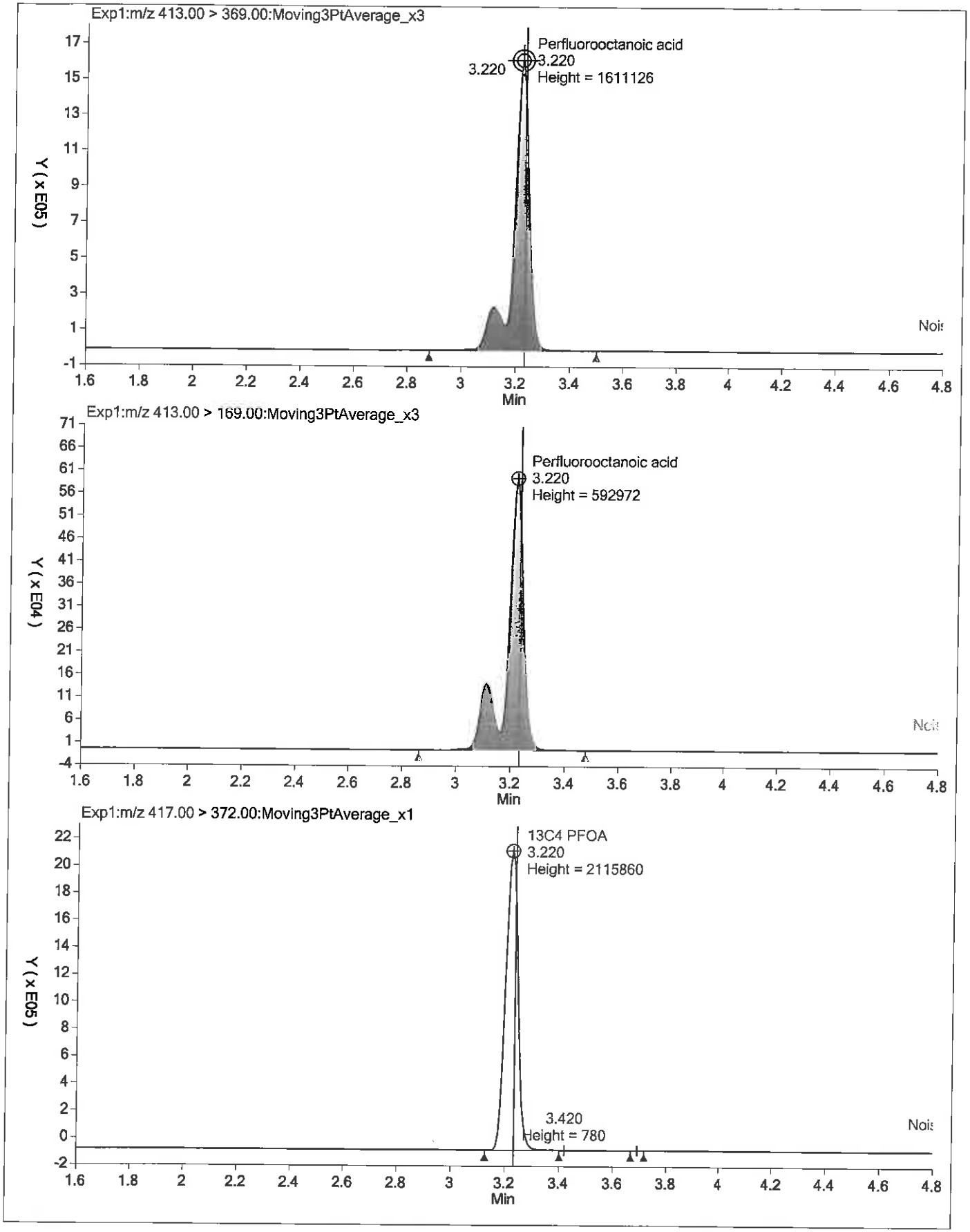
Lab Sample ID: ICV 320-280812/10 Calibration Date: 03/11/2019 12:27

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.11_ICAL_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.5118	0.5142		2.51	2.50	0.5	50.0
13C4 PFBA	Ave	0.8404	0.8752		2.60	2.50	4.1	50.0
13C5-PFPeA DNU	Ave	0.7180	0.7297		2.54	2.50	1.6	50.0
13C3 PFBS	Ave	1.131	1.087		2.23	2.33	-3.9	50.0
M2-4:2 FTS	Ave	0.0709	0.0715		2.36	2.34	0.9	50.0
13C2 PFHxA	Ave	0.8046	0.8398		2.61	2.50	4.4	50.0
13C3 HFPO-DA	Ave	0.1085	0.1136		2.62	2.50	4.7	50.0
13C4 PFHpA	Ave	0.995	0.9847		2.47	2.50	-1.1	50.0
18O2 PFHxS	Ave	0.6511	0.6782		2.46	2.37	4.2	50.0
M2-6:2 FTS	Ave	0.0900	0.0905		2.39	2.38	0.6	50.0
13C8 PFOA	Ave	0.7746	0.7842		2.48	2.45	1.2	50.0
13C4 PFOA	Ave	0.9033	0.9236		2.56	2.50	2.3	50.0
13C4 PFOS	Ave	0.7608	0.7746		2.43	2.39	1.8	50.0
13C8 PFOS	Ave	0.1746	0.1761		2.41	2.39	0.9	50.0
13C5 PFNA	Ave	0.8455	0.8463		2.50	2.50	0.1	50.0
13C8 FOSA	Ave	0.4979	0.4837		2.43	2.50	-2.9	50.0
13C2 PFDA	Ave	0.8687	0.8544		2.46	2.50	-1.7	50.0
M2-8:2 FTS	Ave	0.1021	0.0996		2.34	2.40	-2.4	50.0
d3-NMeFOSAA	Ave	0.2636	0.2553		2.42	2.50	-3.1	50.0
13C2 PFUnA	Ave	0.7102	0.7454		2.62	2.50	5.0	50.0
d5-NEtFOSAA	Ave	0.2245	0.2348		2.61	2.50	4.6	50.0
13C2 PFDoA	Ave	0.8024	0.8266		2.58	2.50	3.0	50.0
13C2 PFTeDA	Ave	0.5899	0.6031		2.56	2.50	2.2	50.0
13C2 PFHxDA	Ave	0.5748	0.6474		2.82	2.50	12.6	50.0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Perfluorooctanoic acid
3.220
3.220
Height = 1611126
Y (x E05)
Min
Exp1:m/z 413.00 > 169.00:Moving3PtAverage_x3
Perfluorooctanoic acid
3.220
Height = 592972
Y (x E04)
Min
Exp1:m/z 417.00 > 372.00:Moving3PtAverage_x1
13C4 PFOA
3.220
Height = 2115860
3.420
Height = 780
Y (x E05)
Min

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_010.d
Lims ID: ICV Full
Client ID:
Sample Type: ICV
Inject. Date: 11-Mar-2019 12:27:07 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist:

Method: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 11-Mar-2019 13:14:19 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0331

First Level Reviewer: westendorfc Date: 11-Mar-2019 13:11:36
Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.704	1.713	-0.009	1.000	5926255	2.72			1350	
D 1 13C4 PFBA										
217.00 > 172.00	1.704	1.714	-0.010	0.529	6229743	2.60		104	39798	
D 3 13C5 PFPeA										
267.90 > 223.00	2.036	2.042	-0.006	0.632	5194134	2.54		102	44782	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.036	2.045	-0.009	1.000	5200390	2.54			449	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.068	2.075	-0.007	1.000	7507905	2.64	Target=2.69		18896	
298.90 > 99.00	2.068	2.075	-0.007	1.000	2639590		2.84(1.88-3.50)		5367	
D 5 13C3 PFBS										
301.90 > 80.00	2.068	2.076	-0.008	0.643	7192735	2.23		96.1	747433	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.354	2.369	-0.015	1.000	1202231	2.41			5660	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.354	2.371	-0.017	0.731	475373	2.36		101	1494	
D 9 13C2 PFHxA										
315.00 > 270.00	2.401	2.409	-0.008	0.746	5977344	2.61		104	9660	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.401	2.411	-0.010	1.000	5173967	2.49	Target=13.98		1948	
313.00 > 119.00	2.401	2.411	-0.010	1.000	384980		13.44(9.79-18.17)		1712	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.419	2.427	-0.008	1.170	3700514	2.61	Target=2.01		3321	
349.00 > 99.00	2.419	2.427	-0.008	1.170	1830049		2.02(1.41-2.62)		4359	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.527	2.534	-0.007	0.785	808749	2.62		105	3633	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.527	2.536	-0.009	1.000	1072880	2.39			940	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.808	2.817	-0.009	1.000	7246867	2.59	Target=4.51		3536	
363.00 > 169.00	2.808	2.817	-0.009	1.000	1644083		4.41(3.16-5.86)		4277	
D 16 13C4 PFHpA										
367.00 > 322.00	2.808	2.817	-0.009	0.872	7008773	2.47		98.9	9545	
D 17 18O2 PFHxS										
403.00 > 84.00	2.808	2.822	-0.014	0.872	4566761	2.46		104	4865	
18 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.817	2.824	-0.007	1.003	5148483	2.20	Target=3.29		4280	
399.00 > 99.00	2.817	2.824	-0.007	1.003	1516967		3.39(2.30-4.28)		2006	
19 DONA										
377.00 > 251.00	2.853	2.869	-0.016	0.792	12150269	2.51	Target=2.25		8566	
377.00 > 85.00	2.862	2.869	-0.007	0.794	5777854		2.10(1.58-2.93)		6260	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.196	3.209	-0.013	0.993	612140	2.39		101	2311	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.196	3.210	-0.014	1.000	1311248	2.58			3287	
D 22 13C8 PFOA										
421.00 > 376.00	3.211	3.225	-0.014	0.998	5465050	2.48		101	5916	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.219	3.230	-0.011	0.893	5579384	2.64	Target=3.86		3772	
449.00 > 99.00	3.219	3.230	-0.011	0.893	1327152		4.20(2.70-5.01)		3114	
D 25 13C4 PFOA										
417.00 > 372.00	3.219	3.230	-0.011	1.000	6574117	2.56		102	7134	
* 24 13C2 PFOA										
415.00 > 370.00	3.219	3.232	-0.013		7118039	2.50			5408	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.219	3.233	-0.014	1.000	6631441	2.43	Target=2.78		2538	
413.00 > 169.00	3.219	3.233	-0.014	1.000	2525590		2.63(1.95-3.62)		5716	
D 27 13C8 PFOS										
507.00 > 99.00	3.604	3.614	-0.010	1.120	1198331	2.41		101	1870	
D 28 13C4 PFOS										
503.00 > 80.00	3.604	3.617	-0.013	1.120	5271334	2.43		102	4524	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.604	3.618	-0.014	1.000	5444626	2.54	Target=4.22		6919	
499.00 > 99.00	3.604	3.618	-0.014	1.000	1295702		4.20(2.96-5.49)		3404	
D 31 13C5 PFNA										
468.00 > 423.00	3.619	3.626	-0.007	1.124	6024313	2.50		100	8199	
30 Perfluorononanoic acid										
463.00 > 419.00	3.619	3.628	-0.009	1.000	6206533	2.68	Target=5.29		2480	
463.00 > 169.00	3.619	3.628	-0.009	1.000	1163169		5.34(3.70-6.88)		2897	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.810	3.823	-0.013	1.057	4215135	2.46			3560	
D 33 13C8 FOSA										
506.00 > 78.00	3.928	3.927	0.001	1.220	3443084	2.43		97.1	5029	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.928	3.928	0.0	1.000	11076633	2.92			3882	
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.964	3.973	-0.009	1.100	3369643	2.64	Target=6.21		6464	
549.00 > 99.00	3.964	3.973	-0.009	1.100	517823		6.51(4.35-8.07)		1513	
D 36 13C2 PFDA										
515.00 > 470.00	3.983	3.994	-0.011	1.237	6081308	2.46		98.3	5922	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.983	3.995	-0.012	1.000	1246286	2.73			5552	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.983	3.995	-0.012	1.000	7388585	2.86	Target=15.01		5385	
513.00 > 169.00	3.983	3.995	-0.012	1.000	555184		13.31(10.51-19.52)		1661	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.983	3.997	-0.014	1.237	679341	2.34		97.6	2023	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.142	4.161	-0.019	1.287	1817156	2.42		96.9	852	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.151	4.165	-0.014	1.002	1874684	3.24			682	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.289	4.303	-0.014	1.190	4829880	2.55	Target=4.69		4398	
599.00 > 99.00	4.289	4.303	-0.014	1.190	1027646		4.70(3.28-6.10)		3884	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.316	4.324	-0.008	1.000	4036561	2.43	Target=8.65		2233	
563.00 > 169.00	4.316	4.324	-0.008	1.000	436190		9.25(6.05-11.24)		1400	
D 44 13C2 PFUnA										
565.00 > 520.00	4.316	4.324	-0.008	1.341	5305617	2.62		105	4661	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.316	4.328	-0.012	1.341	1671050	2.61		105	2609	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.325	4.333	-0.008	1.002	1507702	3.02			4242	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.455	4.469	-0.014	1.236	5442832	2.32			10016	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.611	4.624	-0.013	1.000	6267510	2.80	Target=8.64		3299	
613.00 > 169.00	4.611	4.624	-0.013	1.000	686596		9.13(6.05-11.23)		2843	
D 49 13C2 PFDoA										
615.00 > 570.00	4.611	4.624	-0.013	1.433	5883826	2.58		103	8341	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.631	4.641	-0.010	1.163	729693	2.60			1860	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.854	4.870	-0.016	1.347	492512	2.58	Target=0.57		4288	
699.00 > 99.00	4.854	4.870	-0.016	1.347	888509		0.55(0.40-0.74)		6408	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.882	4.899	-0.017	1.059	4599649	2.61	Target=5.68		2509	
663.00 > 169.00	4.882	4.899	-0.017	1.059	858265		5.36(3.97-7.38)		6369	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.139	5.154	-0.015	1.001	750507	2.48	Target=1.53		2102	
713.00 > 219.00	5.132	5.154	-0.022	1.000	522747		1.44(1.07-1.99)		1387	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.132	5.154	-0.022	1.594	4292510	2.56		102	10328	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.623	5.648	-0.025	1.747	4608035	2.82		113	8563	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.623	5.649	-0.026	1.000	4214009	2.66	Target=5.11		378	
813.00 > 169.00	5.623	5.649	-0.026	1.000	843870		4.99(3.57-6.64)		3357	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	6.155	6.200	-0.045	1.095	2369576	2.51	Target=4.80		397	
913.00 > 169.00	6.160	6.200	-0.040	1.095	490602		4.83(3.36-6.24)		2038	

Reagents:

LCPFCIC_FULL_00018 Amount Added: 1.00 Units: mL

Report Date: 11-Mar-2019 13:14:20 Chrom Revision: 2.3 08-Mar-2019 08:43:36

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_010.d

Injection Date: 11-Mar-2019 12:27:07 Instrument ID: A9

Lims ID: ICV Full

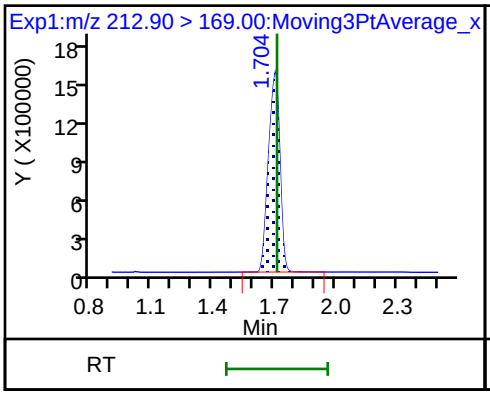
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 17 Worklist Smp#: 10

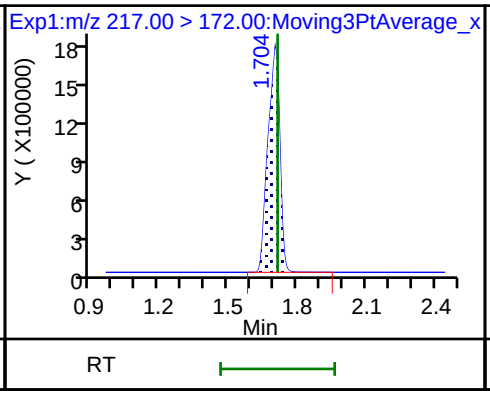
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

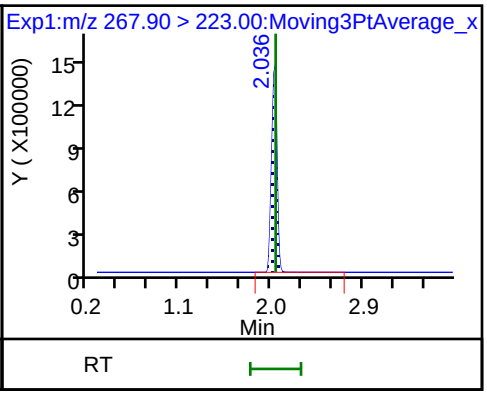
2 Perfluorobutanoic acid



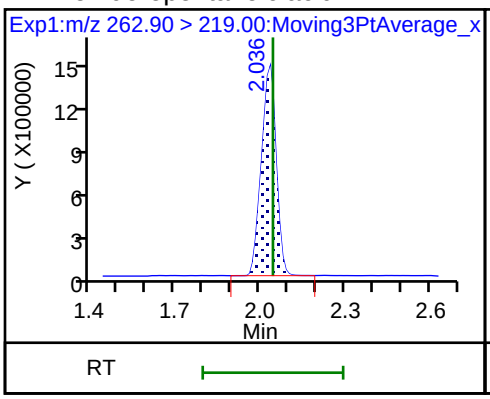
D 1 13C4 PFBA



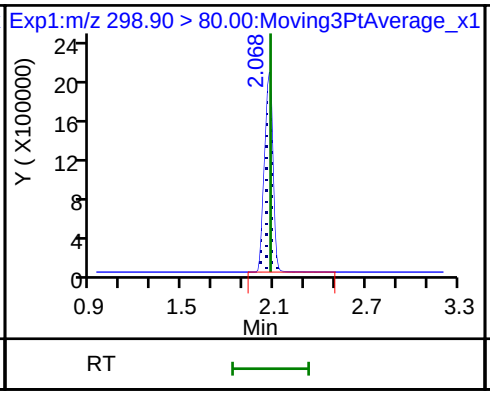
D 3 13C5 PFPeA



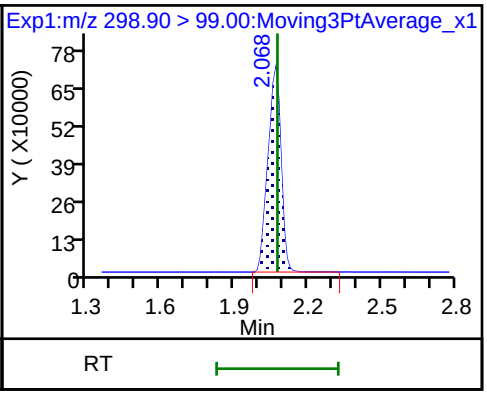
4 Perfluoropentanoic acid



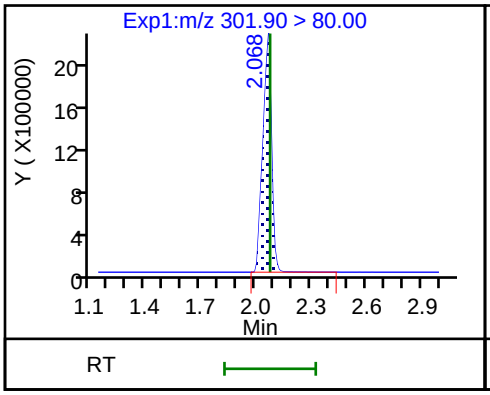
6 Perfluorobutanesulfonic acid



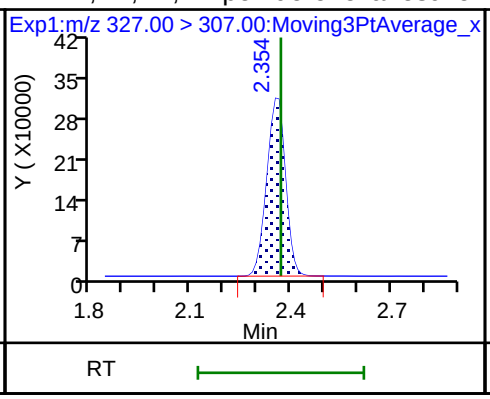
6 Perfluorobutanesulfonic acid



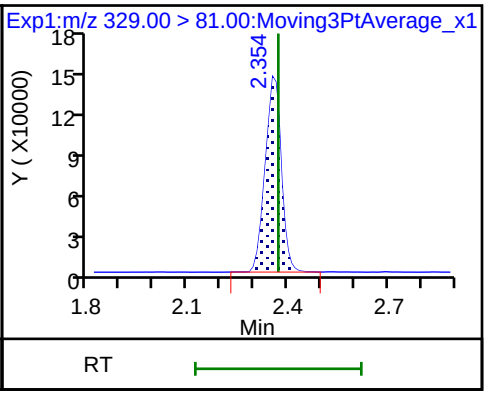
D 5 13C3 PFBS



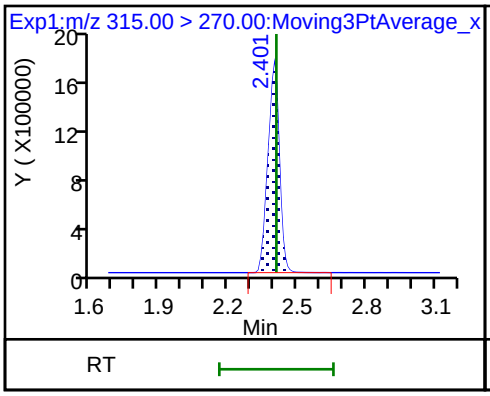
7 1H,1H,2H,2H-perfluorohexanesulfon



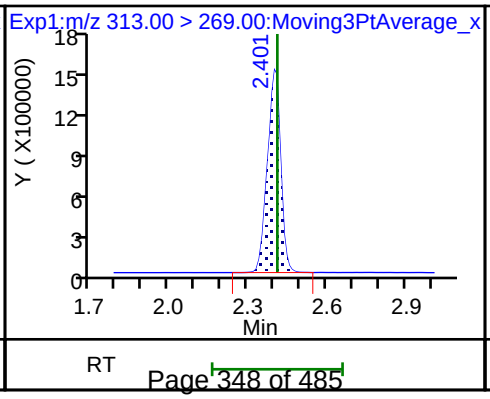
D 8 M2-4:2 FTS



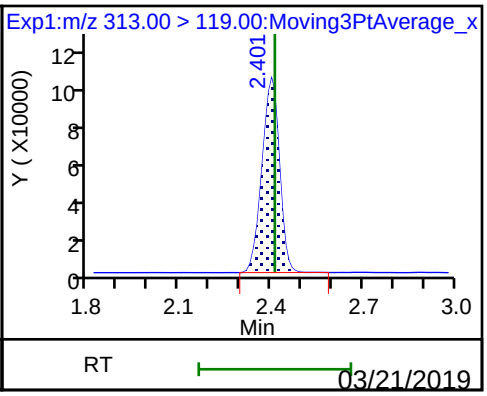
D 9 13C2 PFHxA



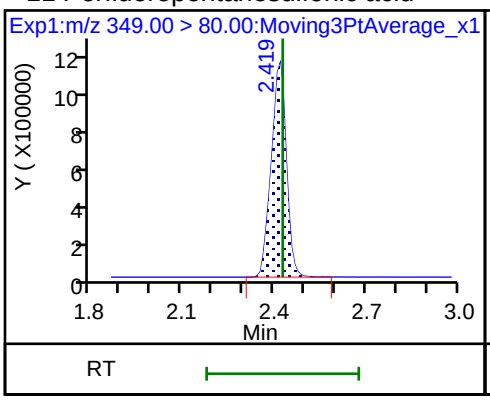
10 Perfluorohexanoic acid



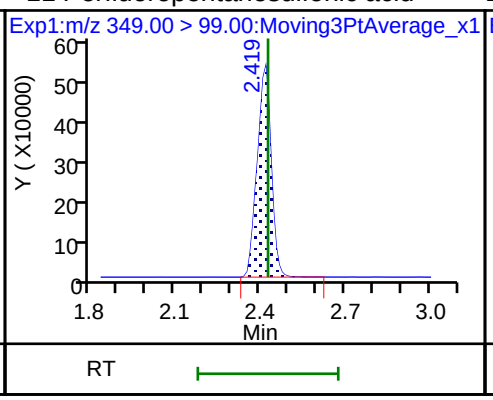
10 Perfluorohexanoic acid



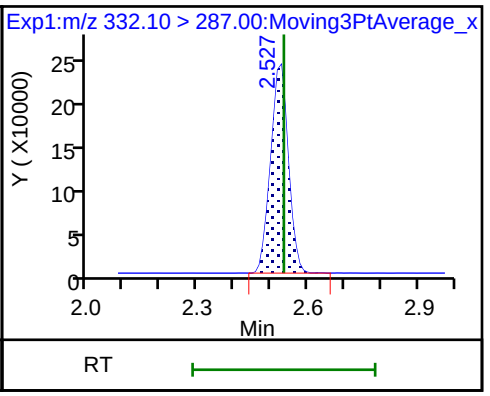
11 Perfluoropentanesulfonic acid



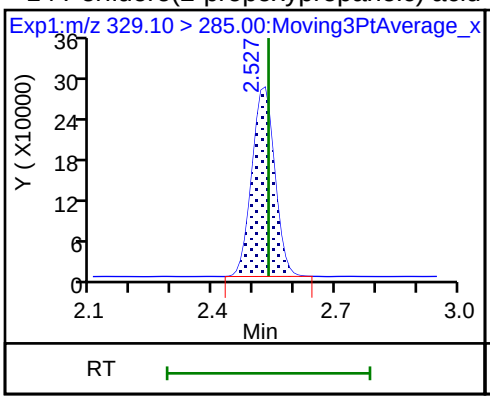
11 Perfluoropentanesulfonic acid



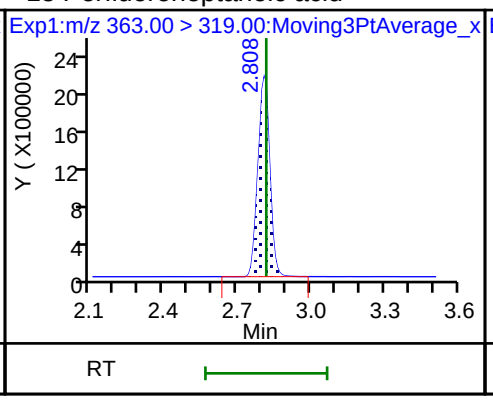
D 13 13C3 HFPO-DA



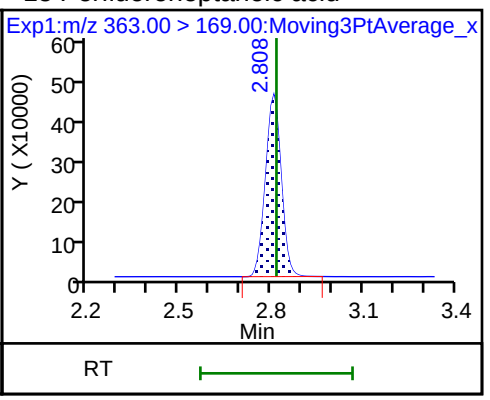
14 Perfluoro(2-propoxypropanoic) acid



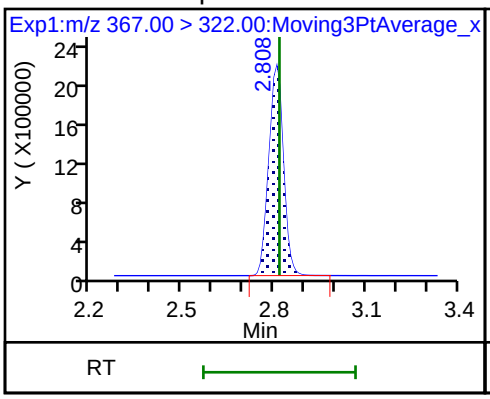
15 Perfluoroheptanoic acid



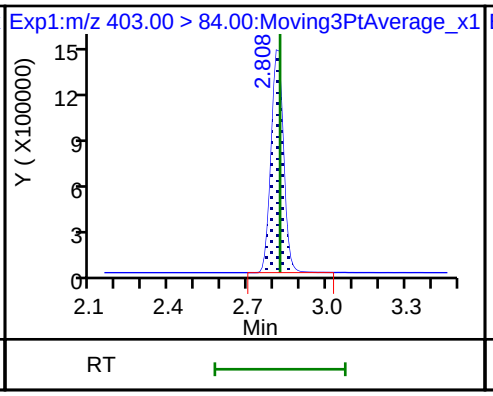
15 Perfluoroheptanoic acid



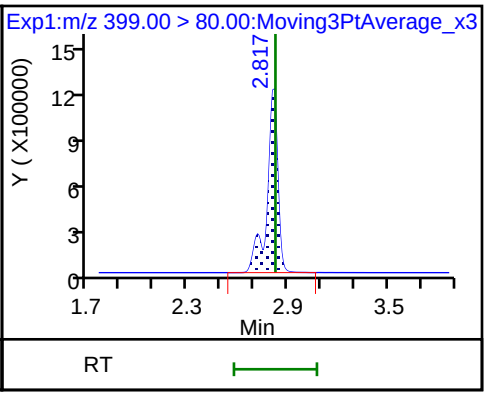
D 16 13C4 PFHpA



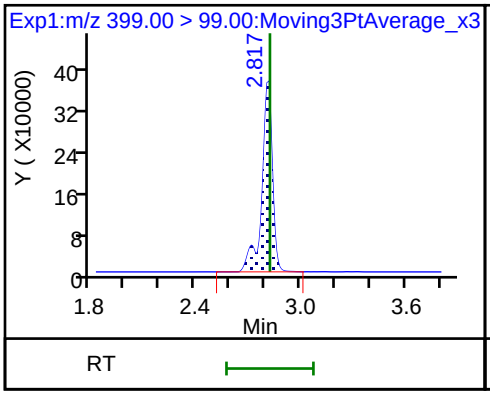
D 17 18O2 PFHxS



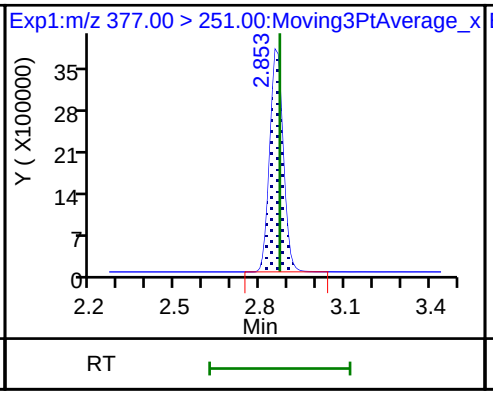
18 Perfluorohexanesulfonic acid



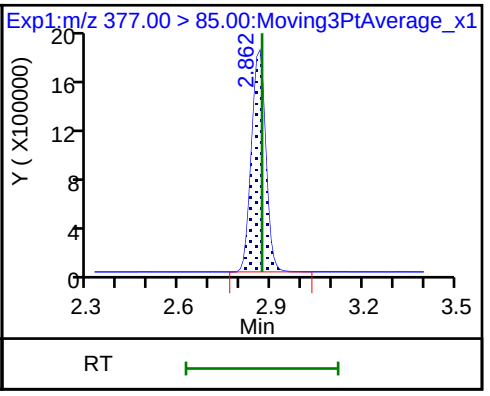
18 Perfluorohexanesulfonic acid



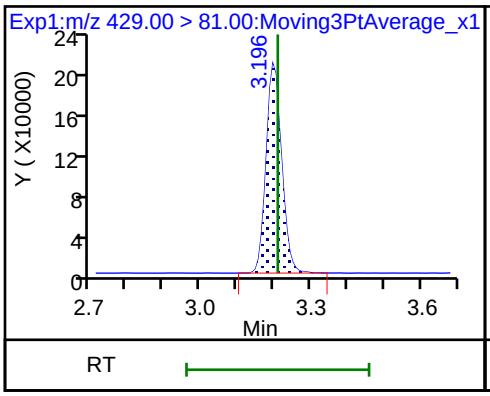
19 DONA



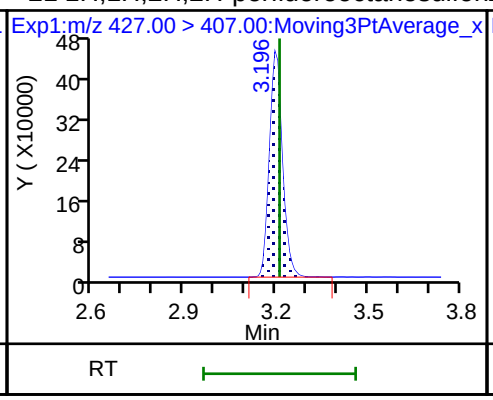
19 DONA



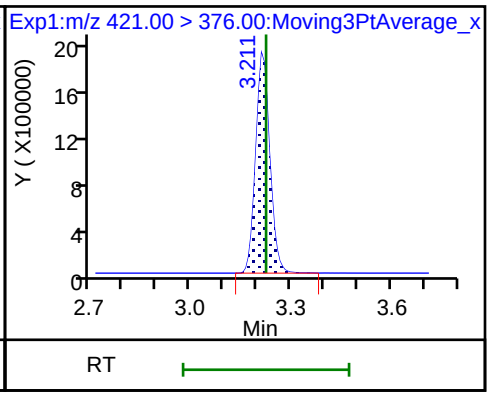
D 20 M2-6:2 FTS



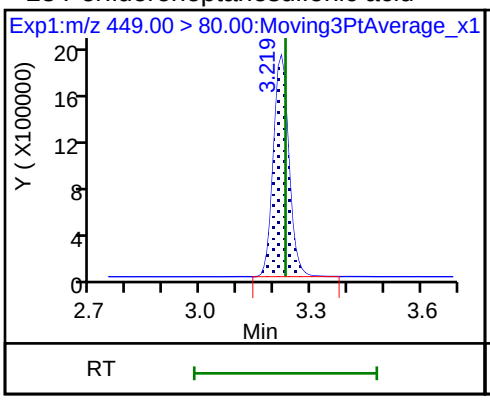
21 1H,1H,2H,2H-perfluorooctanesulfon



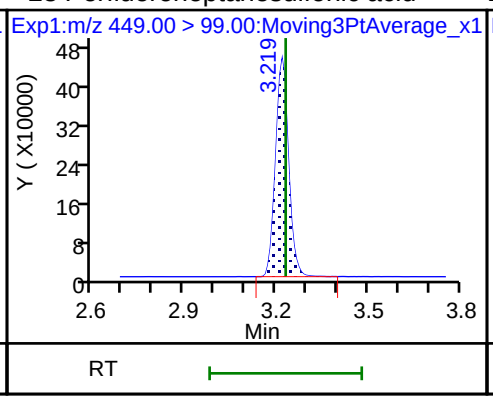
D 22 13C8 PFOA



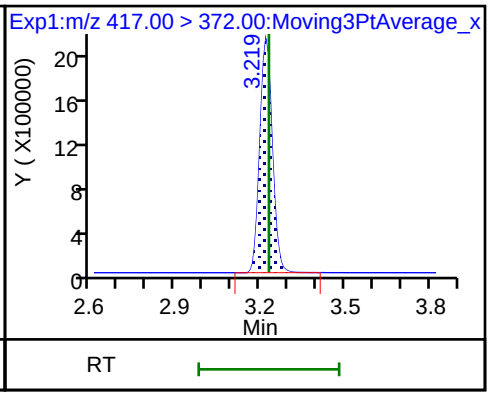
23 Perfluoroheptanesulfonic acid



23 Perfluoroheptanesulfonic acid



D 25 13C4 PFOA



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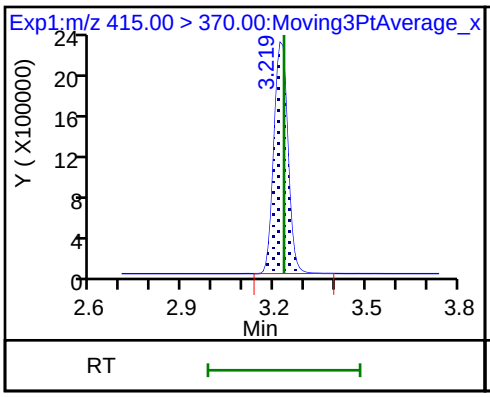
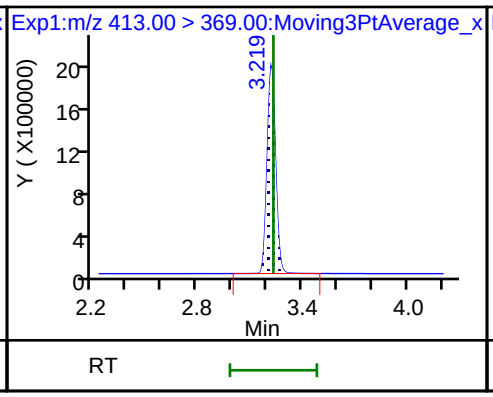
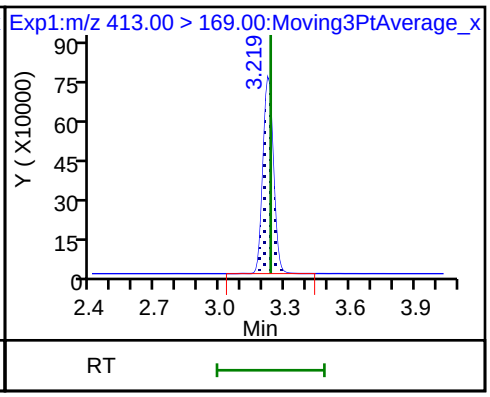


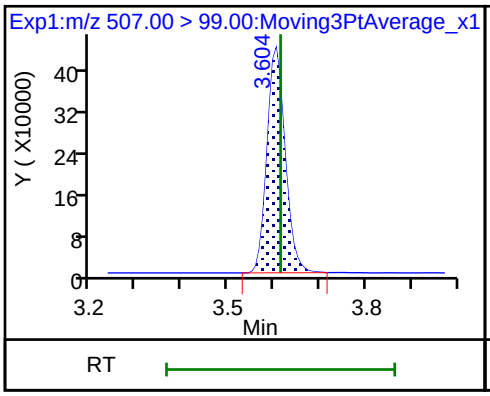
26 Perfluorooctanoic acid



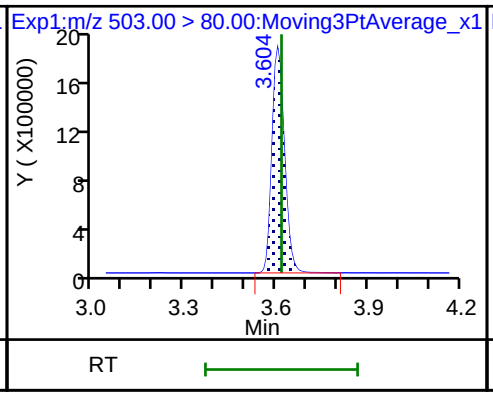
26 Perfluorooctanoic acid



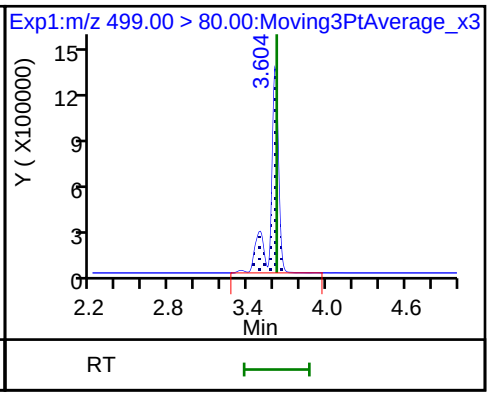
D 27 13C8 PFOS



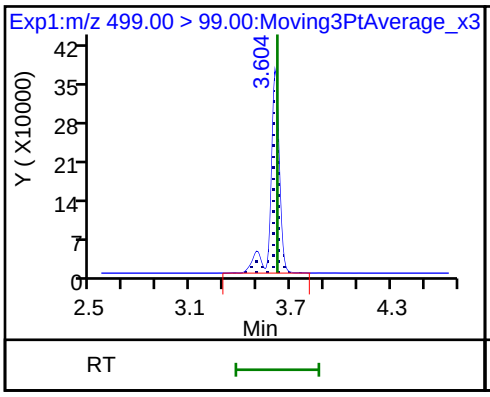
D 28 13C4 PFOS



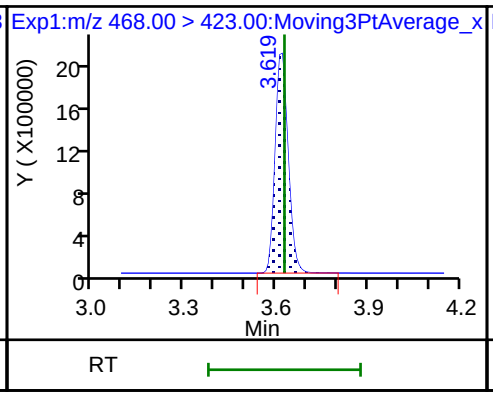
29 Perfluorooctanesulfonic acid



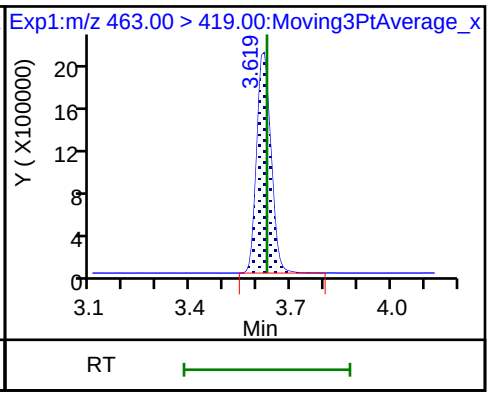
29 Perfluorooctanesulfonic acid



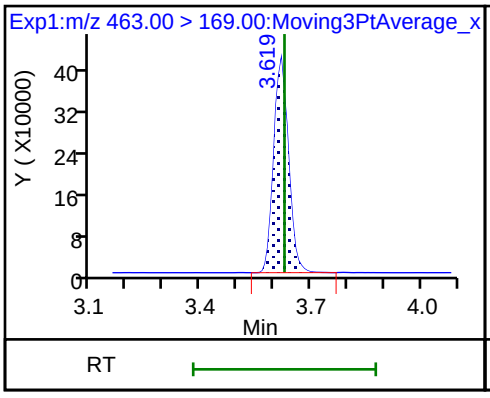
D 31 13C5 PFNA



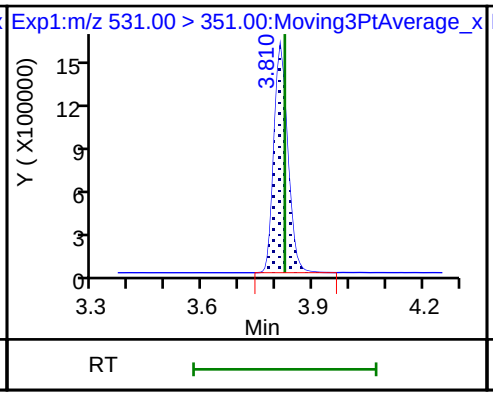
30 Perfluorononanoic acid



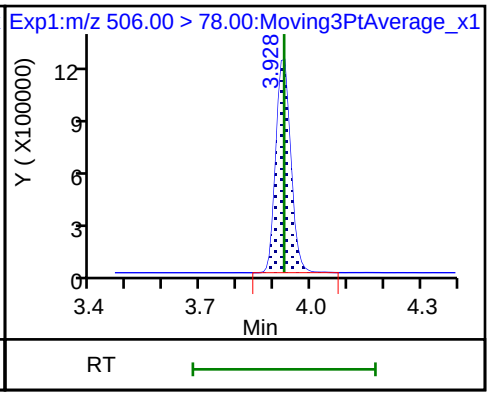
30 Perfluorononanoic acid



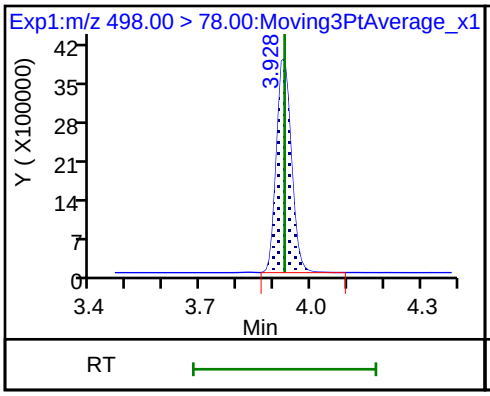
32 9-Chlorohexadecafluoro-3-oxanonane



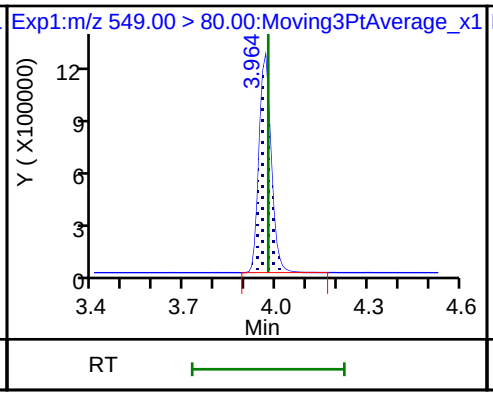
D 33 13C8 FOSA



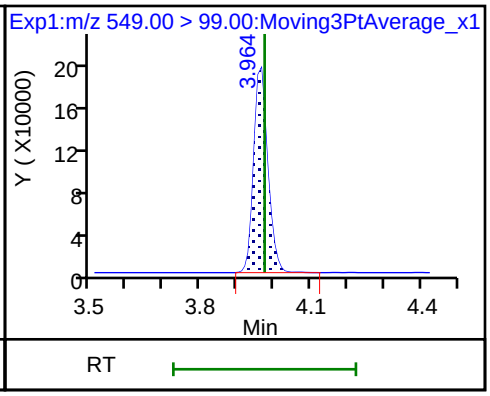
34 Perfluorooctanesulfonamide



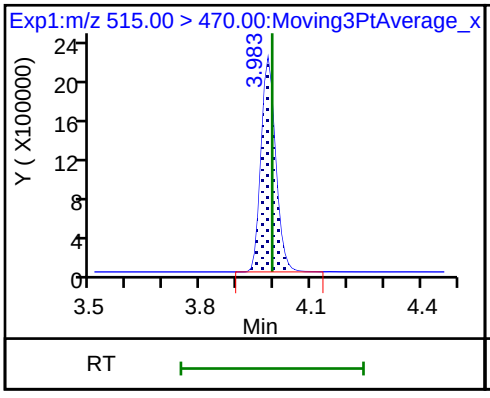
35 Perfluorononanesulfonic acid



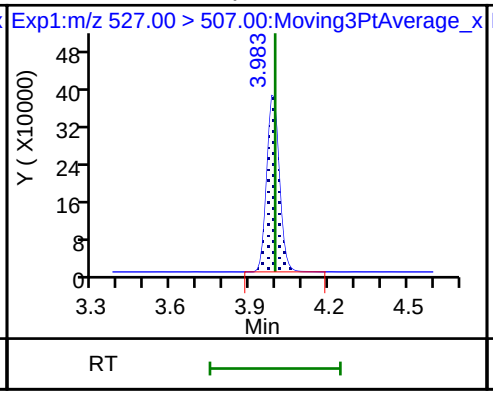
35 Perfluorononanesulfonic acid



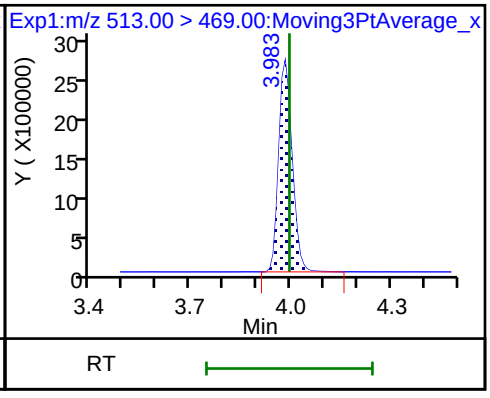
D 36 13C2 PFDA



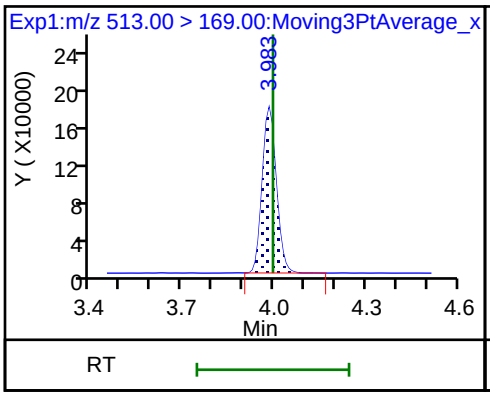
37 1H,1H,2H,2H-perfluorodecanesulfoni



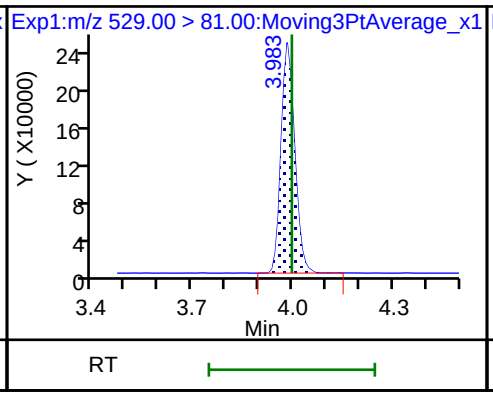
38 Perfluorodecanoic acid



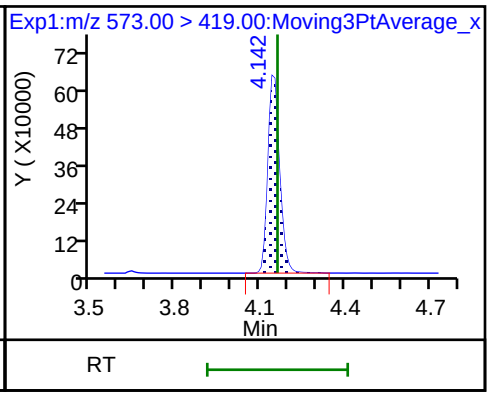
38 Perfluorodecanoic acid



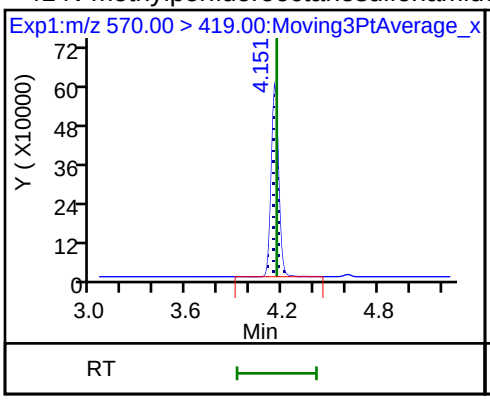
D 39 M2-8:2 FTS



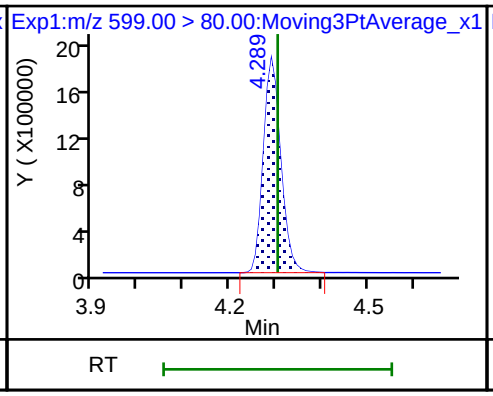
D 40 d3-NMeFOSAA



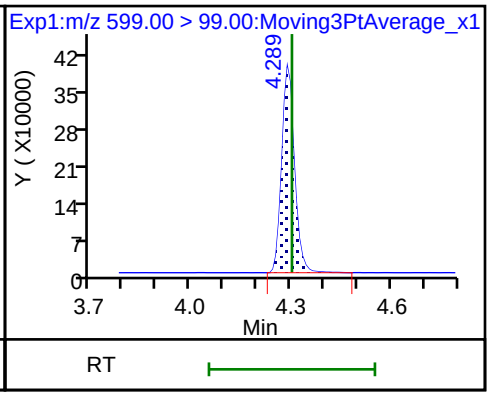
41 N-methylperfluorooctanesulfonamido



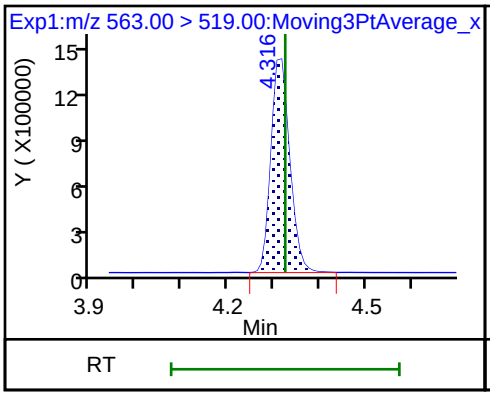
42 Perfluorodecanesulfonic acid



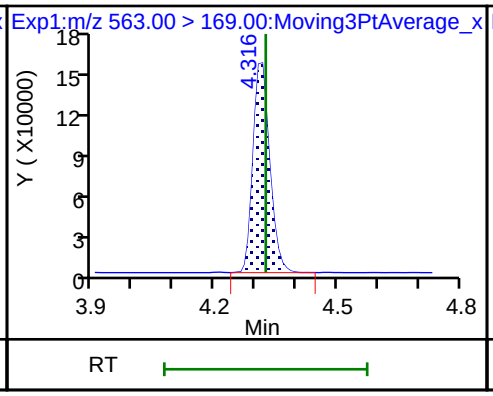
42 Perfluorodecanesulfonic acid



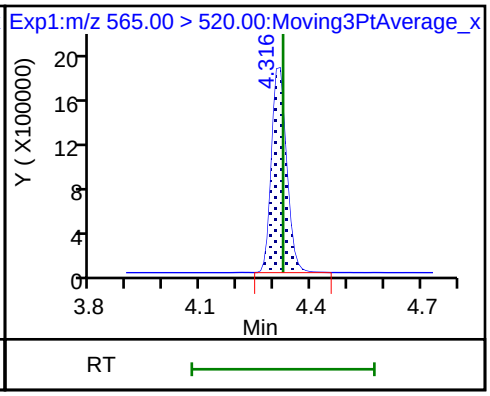
43 Perfluoroundecanoic acid



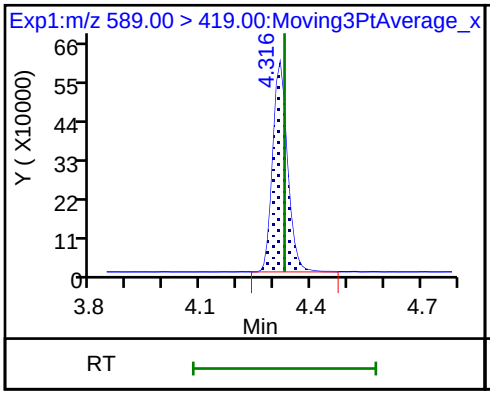
43 Perfluoroundecanoic acid



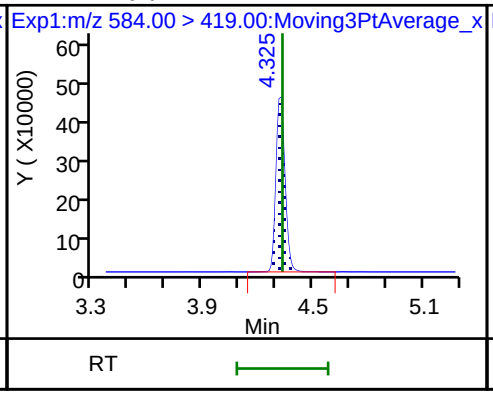
D 44 13C2 PFUnA



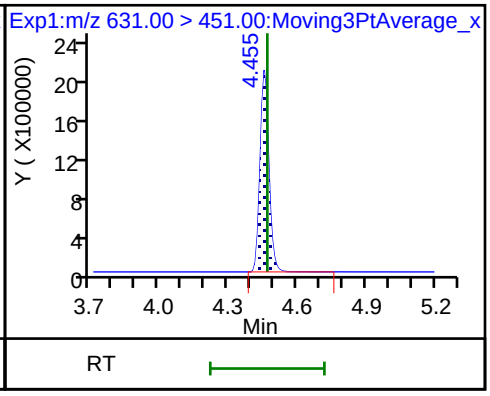
D 45 d5-NEtFOSAA



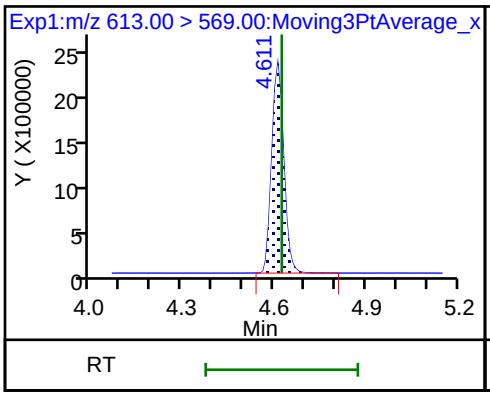
46 N-ethylperfluorooctanesulfonamidoa



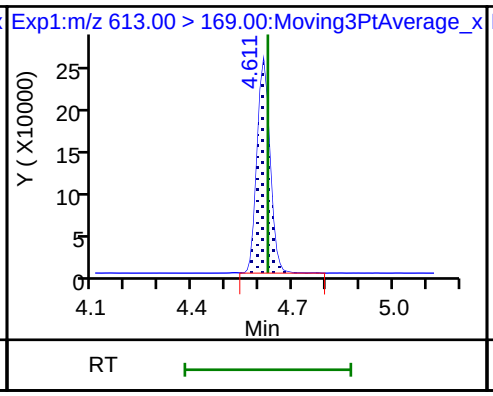
48 11-Chloroeicosafluoro-3-oxaundecan



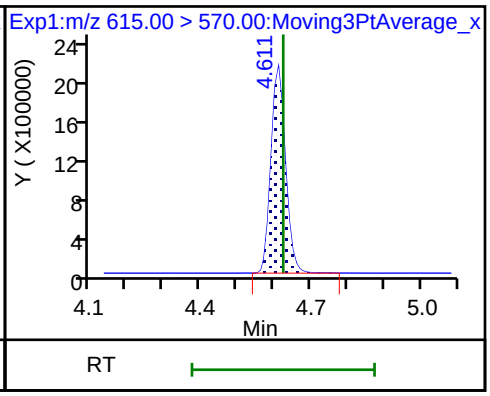
50 Perfluorododecanoic acid



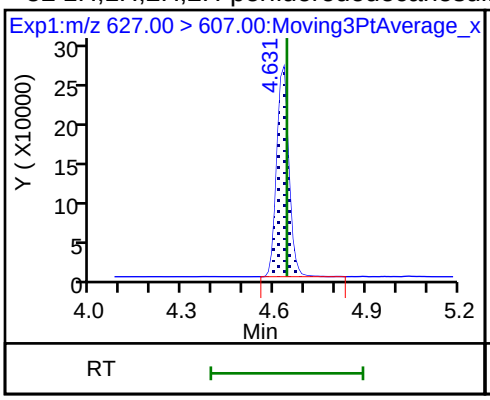
50 Perfluorododecanoic acid



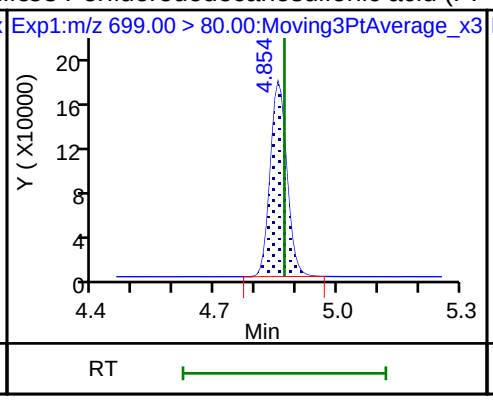
D 49 13C2 PFDoA



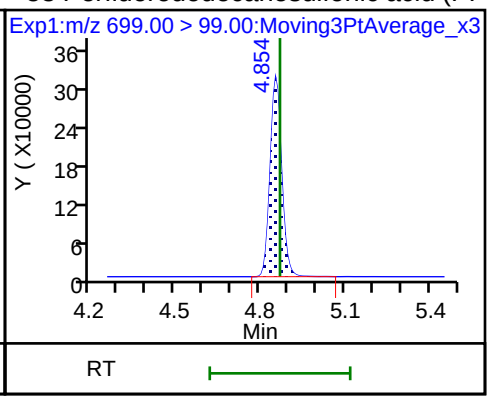
52 1H,1H,2H,2H-perfluorododecanesulfo



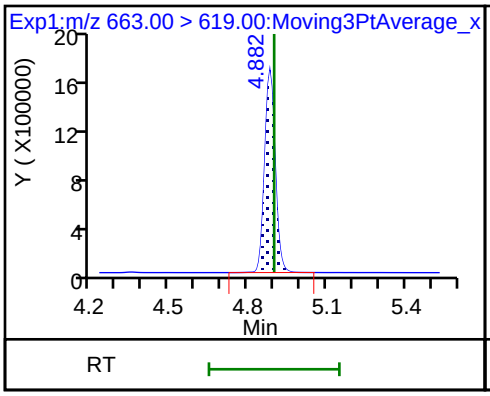
53 Perfluorododecanesulfonic acid (PF



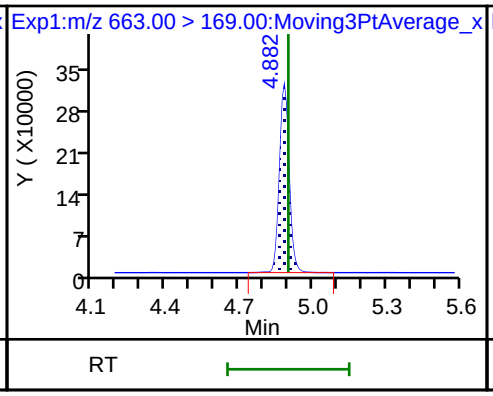
53 Perfluorododecanesulfonic acid (PF



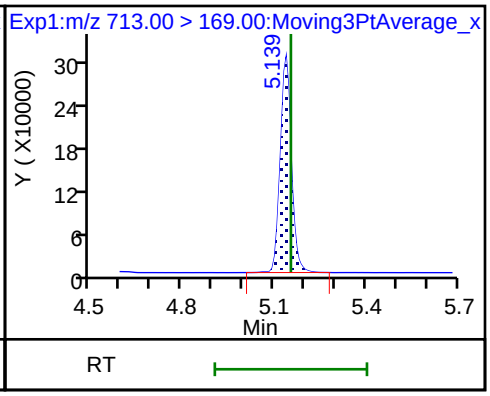
54 Perfluorotridecanoic acid



54 Perfluorotridecanoic acid



56 Perfluorotetradecanoic acid



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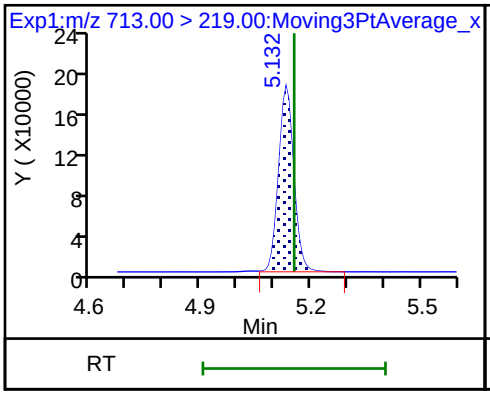
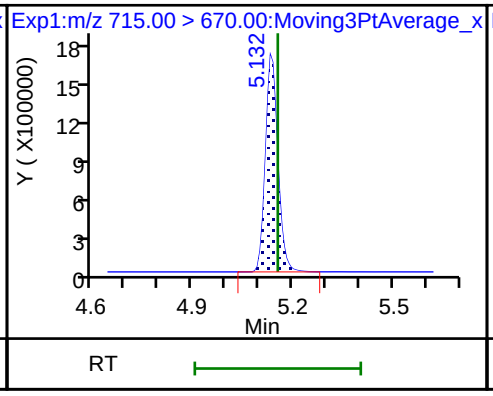
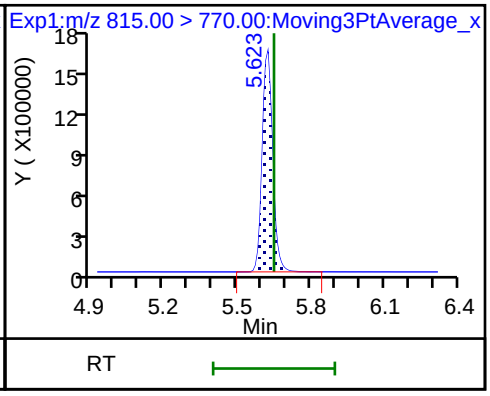


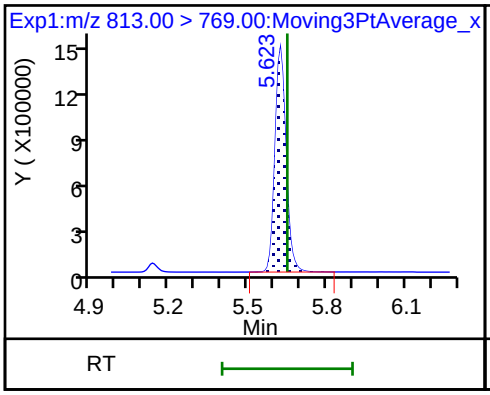
D 55 13C2 PFTeDA



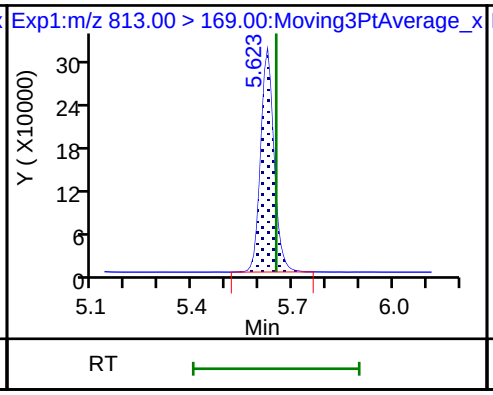
D 57 13C2 PFHxDA



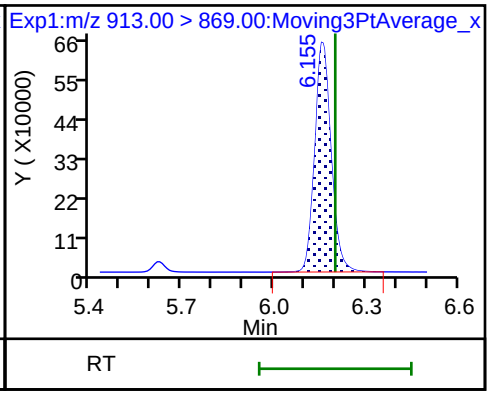
58 Perfluorohexadecanoic acid



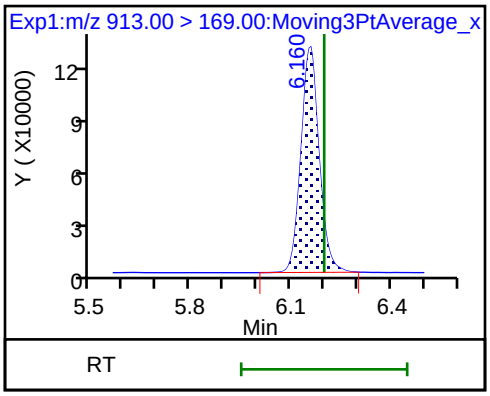
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCVL 320-281205/2 Calibration Date: 03/12/2019 14:00

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8745	0.8332		0.0476	0.0500	-4.7	50.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9858	0.9158		0.0464	0.0500	-7.1	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9198	0.8748		0.0420	0.0442	-4.9	50.0
4:2 FTS	AveID	2.451	2.433		0.464	0.467	-0.7	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8691	0.8349		0.0480	0.0500	-3.9	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.4591	0.4316		0.0441	0.0469	-6.0	50.0
HFPO-DA (GenX)	AveID	1.389	1.469		0.0529	0.0500	5.8	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.998	1.023		0.0512	0.0500	2.5	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.211	1.423		0.0535	0.0455	17.5	50.0
DONA	AveID	2.192	2.383		0.0512	0.0471	8.7	50.0
6:2 FTS	AveID	1.971	2.256		0.543	0.474	14.5	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.9575	0.9791		0.0487	0.0476	2.3	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.040	1.129		0.0543	0.0500	8.6	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9719	0.9255		0.0442	0.0464	-4.8	50.0
Perfluorononanoic acid (PFNA)	AveID	0.9626	0.996		0.0517	0.0500	3.5	50.0
F-53B Major	AveID	0.7773	0.8920		0.0535	0.0466	14.8	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.5777	0.5558		0.0462	0.0480	-3.8	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	2.755	3.060		0.0555	0.0500	11.0	50.0
8:2 FTS	AveID	1.609	1.845		0.549	0.479	14.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.061	1.221		0.0575	0.0500	15.1	50.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7968	0.8245		0.517	0.500	3.5	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8587	0.8178		0.0459	0.0482	-4.8	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7812	0.9257		0.0592	0.0500	18.5	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7459	0.8293		0.556	0.500	11.2	50.0
F-53B Minor	AveID	1.062	1.039		0.0461	0.0471	-2.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9523	0.9435		0.0495	0.0500	-0.9	50.0
10:2 FTS	AveID	0.9902	1.054		0.0513	0.0482	6.4	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0865	0.0812		0.0454	0.0484	-6.1	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.7493	0.6752		0.0451	0.0500	-9.9	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1759	0.2066		0.0587	0.0500	17.5	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.319		0.0470	0.0500	-6.0	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCVL 320-281205/2 Calibration Date: 03/12/2019 14:00

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.5118	0.6238		0.0609	0.0500	21.9	50.0
13C4 PFBA	Ave	0.8404	0.7841		2.33	2.50	-6.7	50.0
13C5-PFPeA DNU	Ave	0.7180	0.7049		2.45	2.50	-1.8	50.0
13C3 PFBS	Ave	1.131	1.043		2.15	2.33	-7.7	50.0
M2-4:2 FTS	Ave	0.0709	0.0637		2.10	2.34	-10.2	50.0
13C2 PFHxA	Ave	0.8046	0.7945		2.47	2.50	-1.3	50.0
13C3 HFPO-DA	Ave	0.1085	0.0989		2.28	2.50	-8.8	50.0
13C4 PFHpA	Ave	0.995	1.009		2.53	2.50	1.4	50.0
18O2 PFHxS	Ave	0.6511	0.5750		2.09	2.37	-11.7	50.0
M2-6:2 FTS	Ave	0.0900	0.0873		2.31	2.38	-2.9	50.0
13C8 PFOA	Ave	0.7746	0.8038		2.54	2.45	3.8	50.0
13C4 PFOA	Ave	0.9033	0.9122		2.52	2.50	1.0	50.0
13C4 PFOS	Ave	0.7608	0.7079		2.22	2.39	-7.0	50.0
13C8 PFOS	Ave	0.1746	0.1562		2.14	2.39	-10.5	50.0
13C5 PFNA	Ave	0.8455	0.8218		2.43	2.50	-2.8	50.0
13C8 FOSA	Ave	0.4979	0.4614		2.32	2.50	-7.3	50.0
13C2 PFDA	Ave	0.8687	0.8282		2.38	2.50	-4.7	50.0
M2-8:2 FTS	Ave	0.1021	0.1017		2.39	2.40	-0.4	50.0
d3-NMeFOSAA	Ave	0.2636	0.2683		2.54	2.50	1.8	50.0
13C2 PFUnA	Ave	0.7102	0.6898		2.43	2.50	-2.9	50.0
d5-NEtFOSAA	Ave	0.2245	0.2364		2.63	2.50	5.3	50.0
13C2 PFDoA	Ave	0.8024	0.8779		2.74	2.50	9.4	50.0
13C2 PFTeDA	Ave	0.5899	0.5642		2.39	2.50	-4.3	50.0
13C2 PFHxDA	Ave	0.5748	0.5822		2.53	2.50	1.3	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_005.d
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 12-Mar-2019 14:00:47 ALS Bottle#: 38 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVL
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 11:19:34 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 11:19:34
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.695	1.703	-0.008	1.000	92385	0.0476		95.3	13.7	M
D 1 13C4 PFBA										
217.00 > 172.00	1.695	1.712	-0.017	0.531	5544107	2.33		93.3	29326	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.025	2.025	0.0	1.000	91289	0.0464		92.9	7.7	
D 3 13C5 PFPeA										
267.90 > 223.00	2.025	2.037	-0.012	0.634	4984410	2.45		98.2	15500	
6 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.057	2.057	0.001	1.000	114085	0.0420	Target=1.00	95.1	352	M
298.90 > 99.00	2.057	2.057	0.001	1.000	46654		2.45(2.05-3.82)		137	
D 5 13C3 PFBS										
301.90 > 80.00	2.057	2.069	-0.012	0.644	6860339	2.15		92.3	2209522	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.337	2.341	-0.004	0.997	204580	0.4637		99.3	1511	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.344	2.355	-0.011	0.734	420360	2.10		89.8	1740	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.381	2.386	-0.005	1.000	93802	0.0480	Target=1.00	96.1	32.6	
313.00 > 119.00	2.381	2.386	-0.005	1.000	7259		12.92(9.33-17.33)		32.1	
D 9 13C2 PFHxA										
315.00 > 270.00	2.381	2.392	-0.011	0.745	5617268	2.47		98.7	11075	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.400	2.395	0.005	1.167	59721	0.0441	Target=1.00	94.0	336	
349.00 > 99.00	2.400	2.395	0.005	1.167	29263		2.04(1.45-2.69)		121	
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.496	2.501	-0.005	0.996	20552	0.0529		106	18.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.506	2.508	-0.002	0.784	699549	2.28		91.2	2941	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.780	2.777	0.003	1.000	145997	0.0512	Target=1.00	102	67.2	
363.00 > 169.00	2.789	2.777	0.012	1.003	31165		4.68(3.00-5.57)		143	
18 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.789	2.786	0.003	1.000	105281	0.0535	Target=1.00	118	566	
399.00 > 99.00	2.789	2.786	0.003	1.000	31445		3.35(2.29-4.25)		81.8	
D 16 13C4 PFHpA										
367.00 > 322.00	2.780	2.791	-0.011	0.870	7134046	2.53		101	10995	
D 17 18O2 PFHxS										
403.00 > 84.00	2.789	2.800	-0.011	0.873	3846080	2.09		88.3	3581	
19 DONA										
377.00 > 251.00	2.834	2.831	0.003	0.793	224691	0.0512	Target=1.00	109	847	
377.00 > 85.00	2.834	2.831	0.003	0.793	94481		2.38(1.70-3.15)		174	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.171	3.167	0.004	1.000	264087	0.5426		114	361	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.171	3.180	-0.009	0.993	586619	2.31		97.1	2398	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.195	3.183	0.012	0.894	93313	0.0487	Target=1.00	102	514	
449.00 > 99.00	3.195	3.183	0.012	0.894	22529		4.14(2.83-5.25)		120	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.195	3.190	0.005	1.000	145674	0.0543	Target=1.00	109	50.1	
413.00 > 169.00	3.195	3.190	0.005	1.000	51378		2.84(1.36-4.08)		251	
* 24 13C2 PFOA										
415.00 > 370.00	3.195	3.190	0.005		7070678	2.50			7430	
D 22 13C8 PFOA										
421.00 > 376.00	3.187	3.196	-0.009	0.998	5564079	2.54		104	6970	
D 25 13C4 PFOA										
417.00 > 372.00	3.195	3.204	-0.009	1.000	6449622	2.52		101	7185	
29 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.581	3.569	0.012	1.002	85982	0.0442	Target=1.00	95.2	170	M
499.00 > 99.00	3.574	3.569	0.005	1.000	24483		3.51(2.04-6.12)		194	M
D 27 13C8 PFOS										
507.00 > 99.00	3.574	3.582	-0.008	1.119	1055732	2.14		89.5	3496	
D 28 13C4 PFOS										
503.00 > 80.00	3.574	3.582	-0.008	1.119	4785247	2.22		93.0	10849	
30 Perfluorononanoic acid										
463.00 > 419.00	3.588	3.584	0.004	1.002	115747	0.0517	Target=1.00	103	53.9	
463.00 > 169.00	3.581	3.584	-0.003	1.000	19780		5.85(3.91-7.26)		75.0	
D 31 13C5 PFNA										
468.00 > 423.00	3.581	3.597	-0.016	1.121	5810783	2.43		97.2	9592	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.780	3.776	0.004	1.058	83225	0.0535		115	89.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.926	3.921	0.005	1.099	53418	0.0462	Target=1.00	96.2	194	
549.00 > 99.00	3.926	3.921	0.005	1.099	9598		5.57(4.35-8.07)		93.4	
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.926	3.921	0.005	1.000	199638	0.0555		111	477	
D 33 13C8 FOSA										
506.00 > 78.00	3.926	3.937	-0.011	1.229	3262192	2.32		92.7	4788	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.944	3.939	0.005	1.000	254244	0.5490		115	1304	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.944	3.948	-0.004	1.000	143059	0.0575	Target=1.00	115	164	
513.00 > 169.00	3.944	3.948	-0.004	1.000	9969		14.35(11.40-21.17)		57.9	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.944	3.955	-0.011	1.235	689152	2.39		99.6	2165	
D 36 13C2 PFDA										
515.00 > 470.00	3.944	3.955	-0.011	1.235	5855935	2.38		95.3	9593	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.112	4.113	-0.001	1.287	1896701	2.54		102	3839	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.112	4.116	-0.004	1.000	312757	0.5174		103	91.5	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.250	4.245	0.005	1.189	78922	0.0459	Target=1.00	95.2	296	
599.00 > 99.00	4.250	4.245	0.005	1.189	14551		5.42(3.64-6.76)		72.4	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.267	4.262	0.005	1.000	90291	0.0592	Target=1.00	118	73.2	
563.00 > 169.00	4.267	4.262	0.005	1.000	9826		9.19(7.06-13.11)		57.1	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.276	4.271	0.005	1.002	277221	0.5559		111	1472	
D 44 13C2 PFUnA										
565.00 > 520.00	4.267	4.277	-0.010	1.336	4877049	2.43		97.1	5663	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.267	4.277	-0.010	1.336	1671330	2.63		105	2190	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.410	4.405	0.005	1.234	97979	0.0461		97.8	435	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.557	4.552	0.005	1.000	117134	0.0495	Target=1.00	99.1	85.5	
613.00 > 169.00	4.557	4.552	0.005	1.000	10827		10.82(7.12-13.21)		45.7	
D 49 13C2 PFDoA										
615.00 > 570.00	4.557	4.567	-0.010	1.427	6207254	2.74		109	10076	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.573	4.568	0.005	1.159	14613	0.0513		106	45.4	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.796	4.790	0.006	1.342	7868	0.0454	Target=1.00	93.9	130	
699.00 > 99.00	4.796	4.790	0.006	1.342	14744		0.53(0.40-0.74)		150	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.825	4.820	0.005	1.059	83827	0.0451	Target=1.00	90.1	72.0	
663.00 > 169.00	4.818	4.820	-0.002	1.057	13638		6.15(3.97-7.38)		138	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.067	5.060	0.007	1.000	16488	0.0587	Target=1.00	117	165	
713.00 > 219.00	5.058	5.060	-0.002	0.998	8818		1.87(1.07-1.99)		126	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.067	5.076	-0.009	1.586	3989553	2.39		95.7	12621	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.515	5.506	0.009	1.000	108594	0.0470	Target=1.00	94.0	10.9	
813.00 > 169.00	5.515	5.506	0.009	1.000	18729		5.80(3.82-7.09)		122	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.515	5.516	-0.001	1.726	4116292	2.53		101	7665	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	5.977	5.970	0.007	1.084	51355	0.0609	Target=1.00	122	15.7	
913.00 > 169.00	5.977	5.970	0.007	1.084	9892		5.19(3.36-6.24)		114	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LLCCVL_00003 Amount Added: 1.00 Units: mL

Report Date: 13-Mar-2019 11:19:36 Chrom Revision: 2.3 12-Mar-2019 09:55:20

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_005.d

Injection Date: 12-Mar-2019 14:00:47 Instrument ID: A9

Lims ID: CCVL

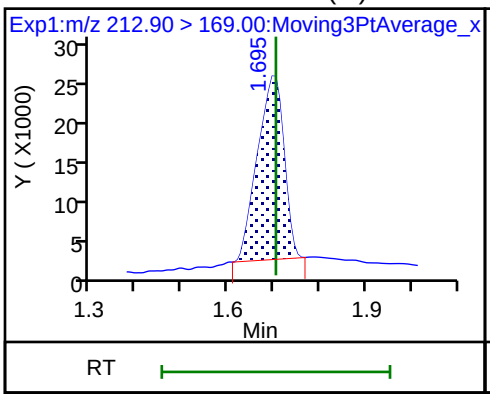
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 38 Worklist Smp#: 2

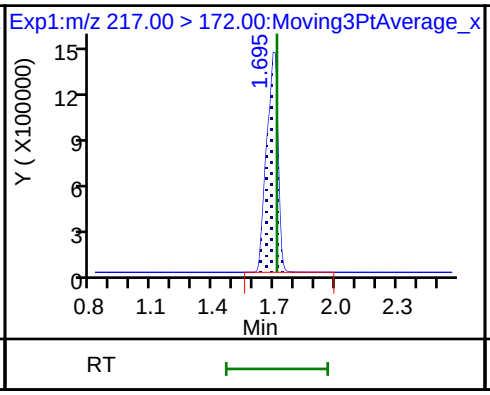
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

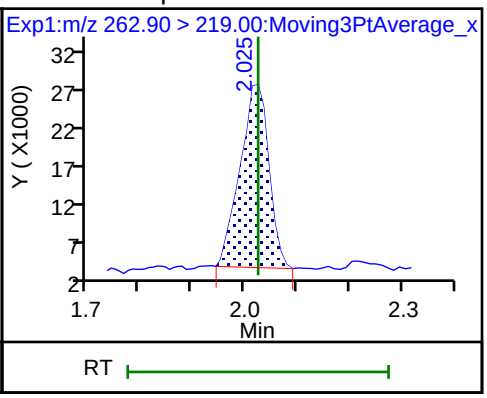
2 Perfluorobutanoic acid (M)



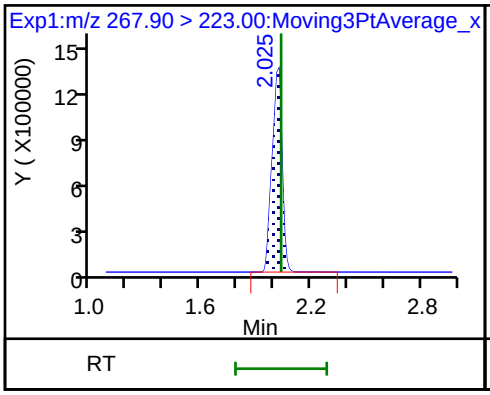
D 1 13C4 PFBA



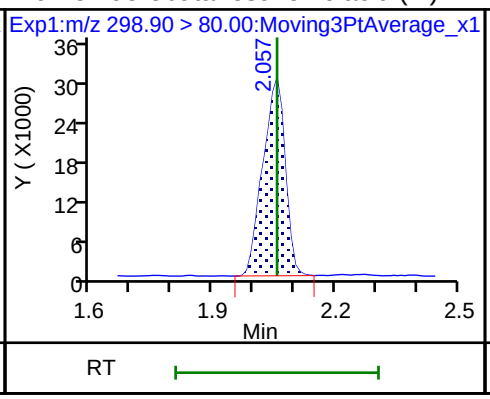
4 Perfluoropentanoic acid



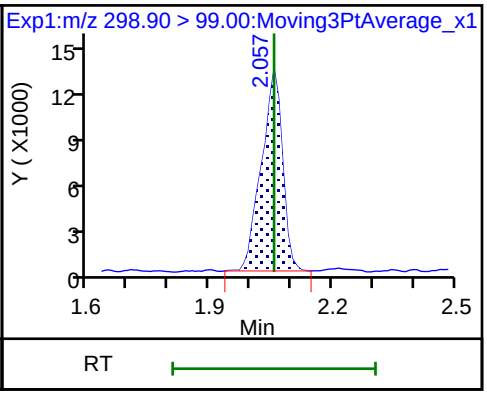
D 3 13C5 PFPeA



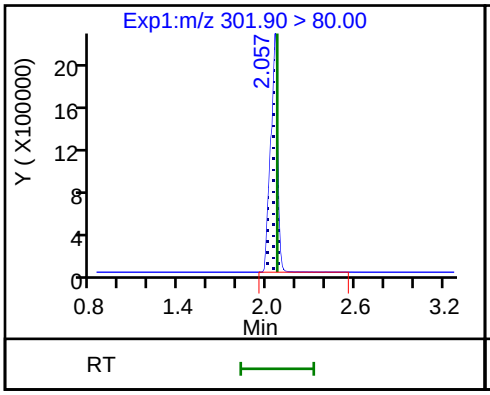
6 Perfluorobutanesulfonic acid (M)



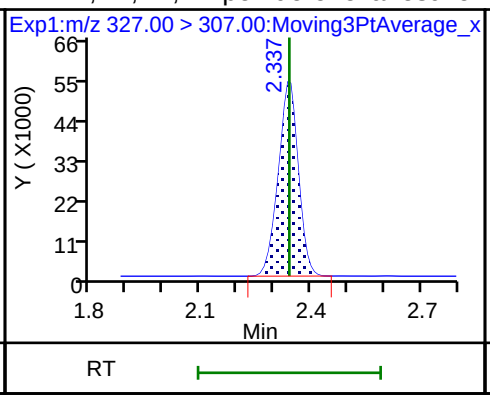
6 Perfluorobutanesulfonic acid



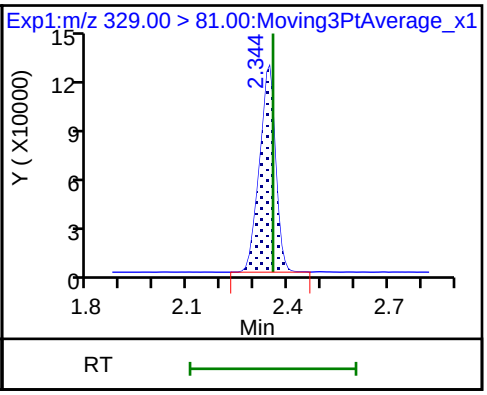
D 5 13C3 PFBS



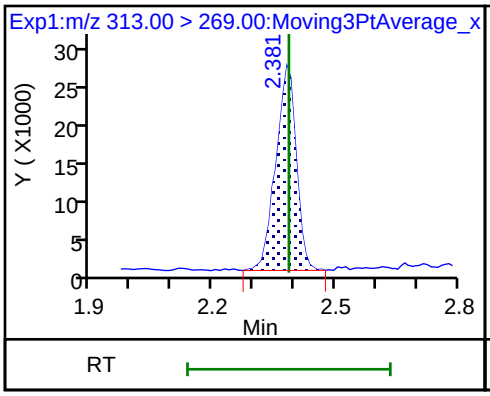
7 1H,1H,2H,2H-perfluorohexanesulfon



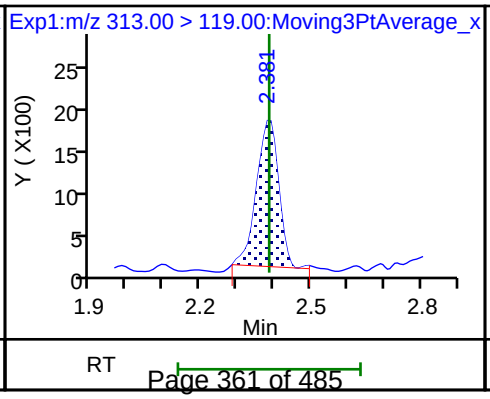
D 8 M2-4:2 FTS



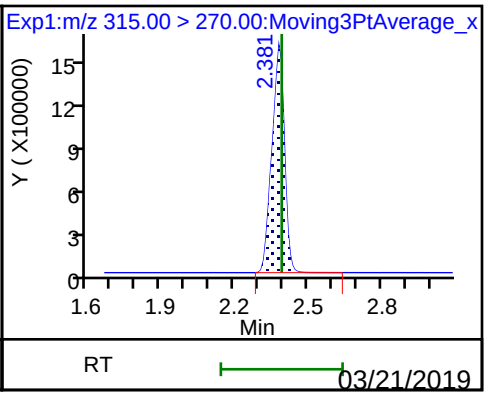
10 Perfluorohexanoic acid



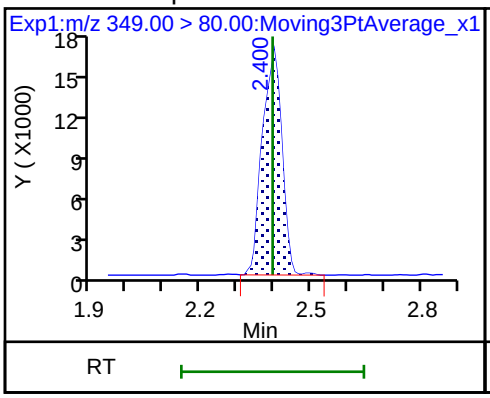
10 Perfluorohexanoic acid



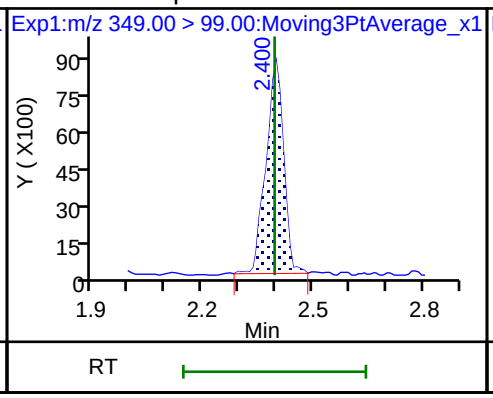
D 9 13C2 PFHxA



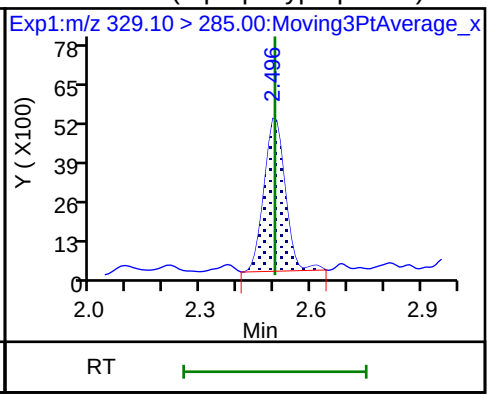
11 Perfluoropentanesulfonic acid



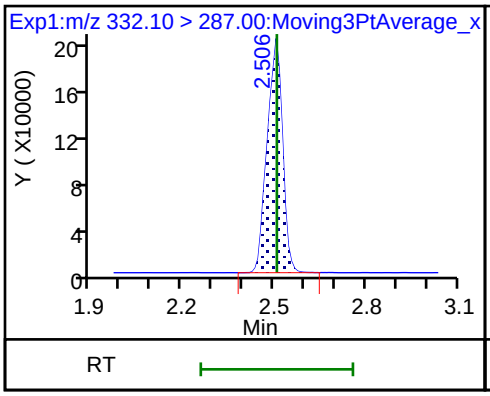
11 Perfluoropentanesulfonic acid



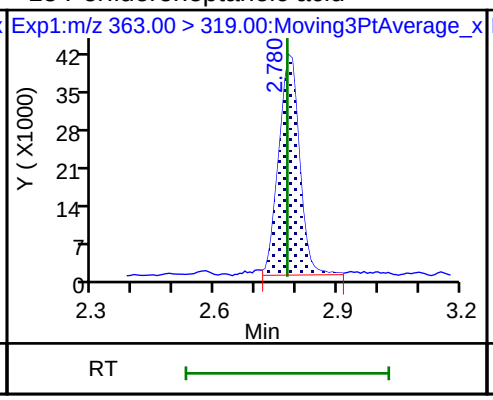
14 Perfluoro(2-propoxypropanoic) acid



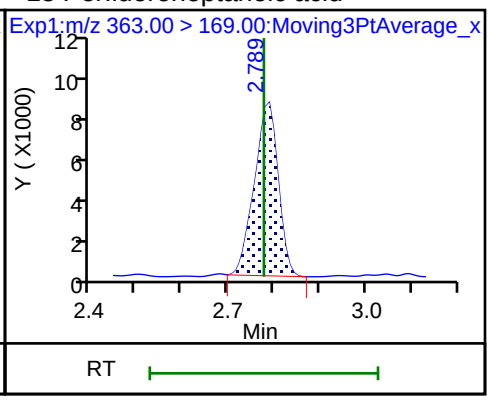
D 13 13C3 HFPO-DA



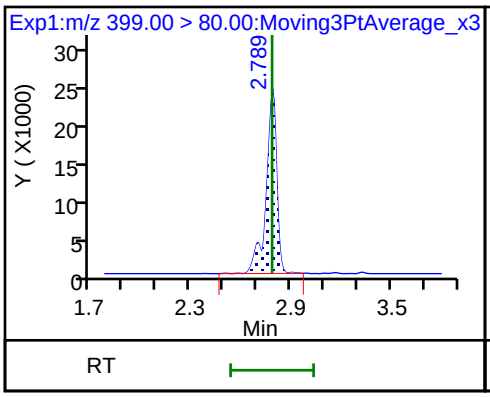
15 Perfluoroheptanoic acid



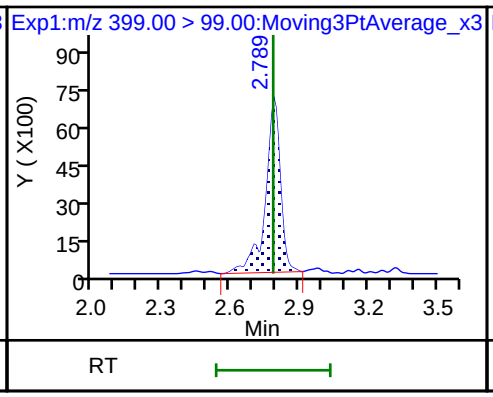
15 Perfluoroheptanoic acid



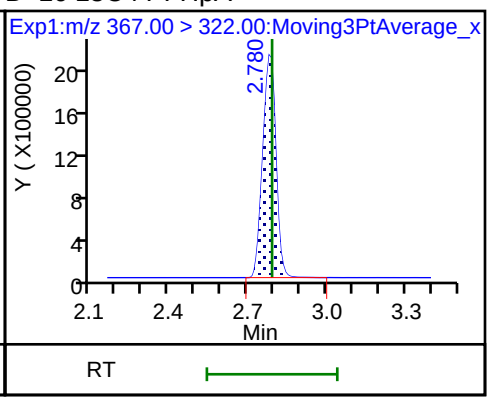
18 Perfluorohexanesulfonic acid



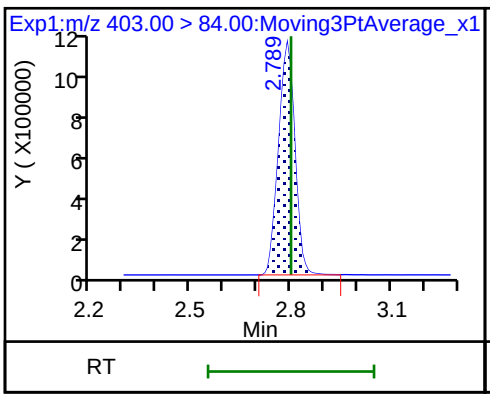
18 Perfluorohexanesulfonic acid



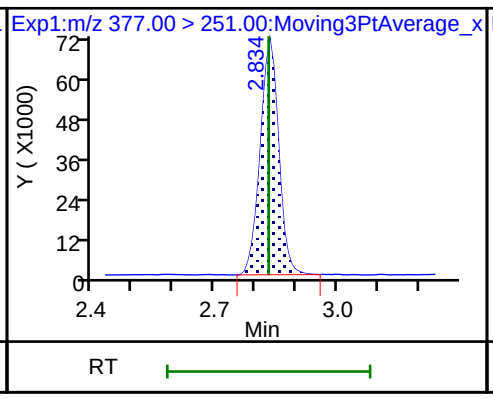
D 16 13C4 PFHpA



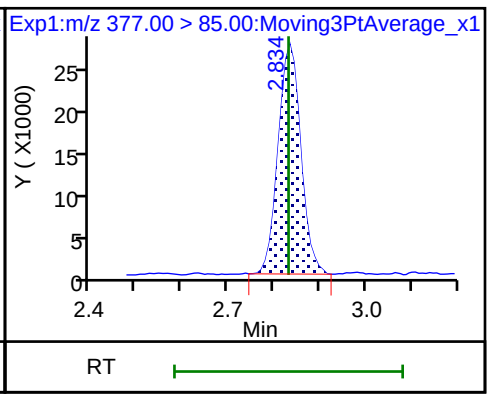
D 17 18O2 PFHxS



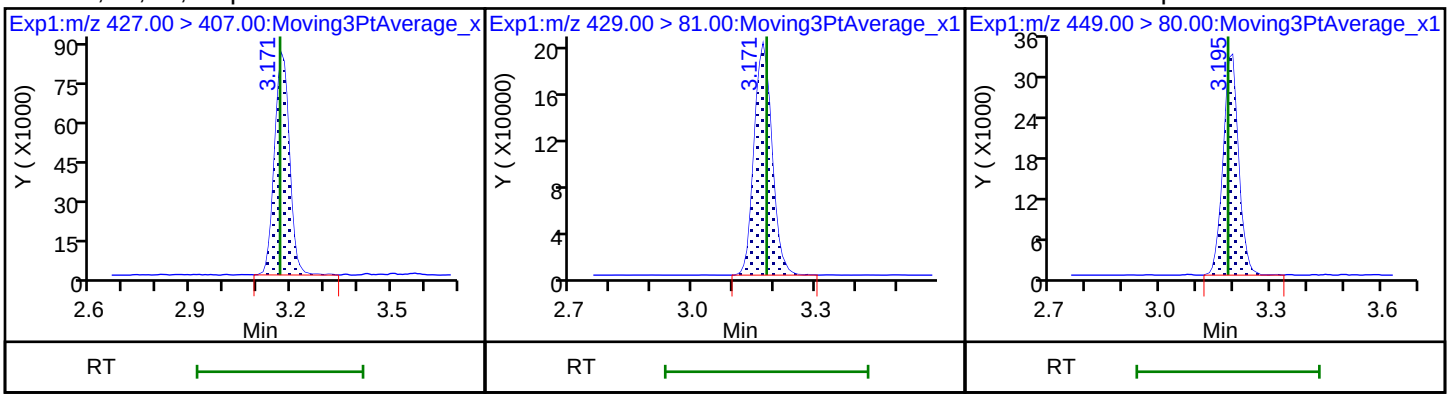
19 DONA



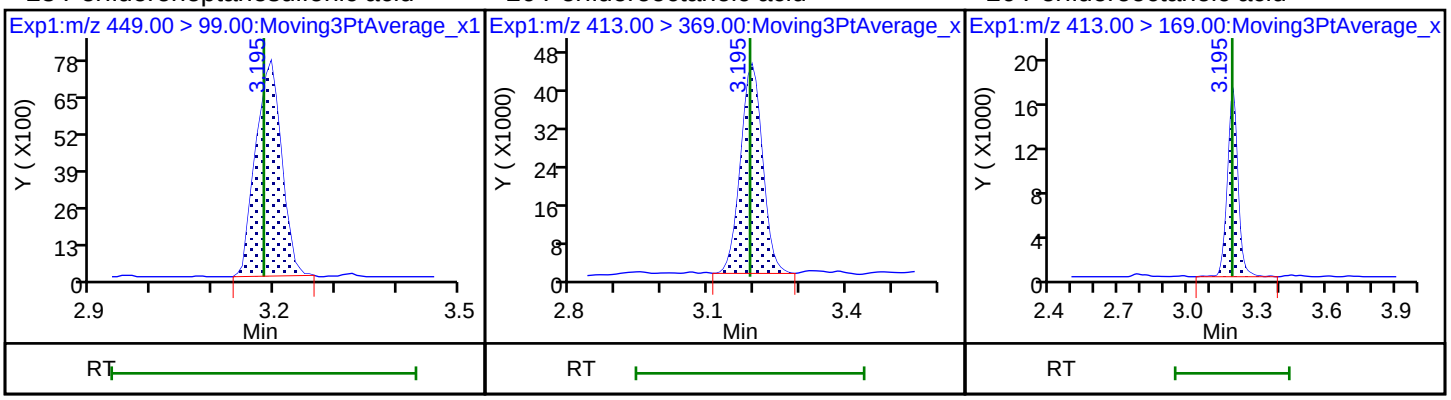
19 DONA



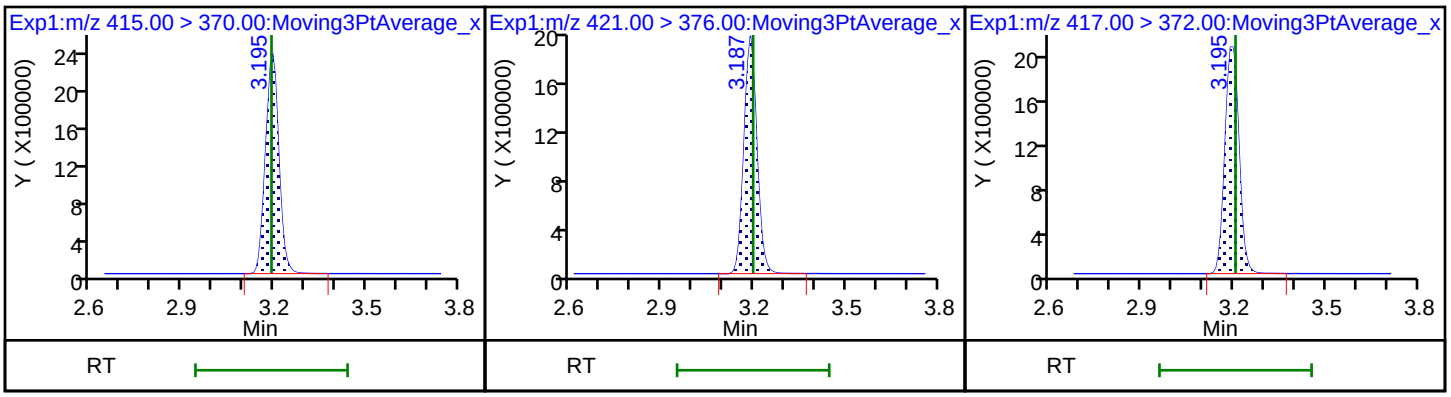
21 1H,1H,2H,2H-perfluorooctanesulfonD 20 M2-6:2 FTS 23 Perfluoroheptanesulfonic acid



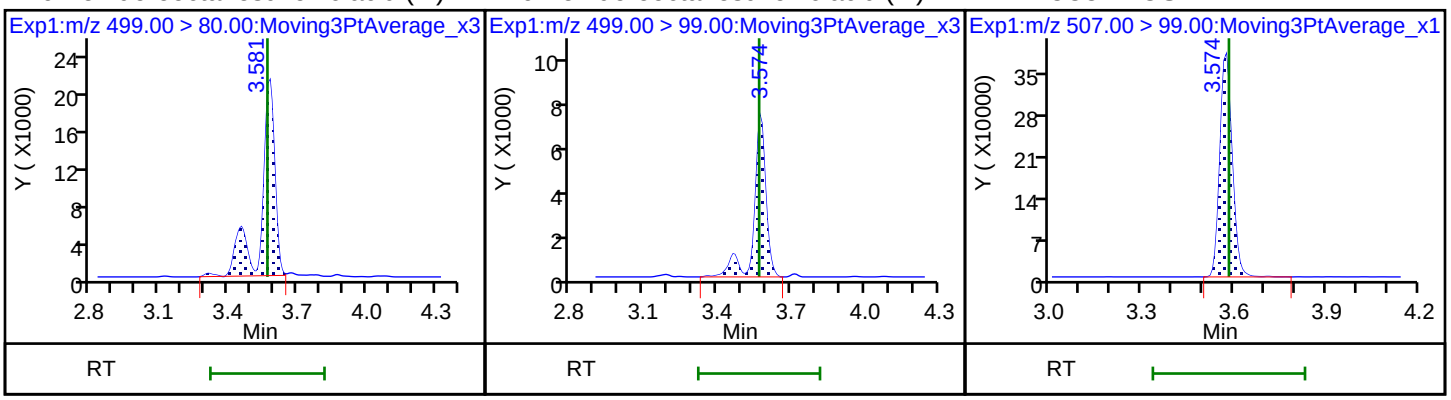
23 Perfluoroheptanesulfonic acid 26 Perfluorooctanoic acid 26 Perfluorooctanoic acid



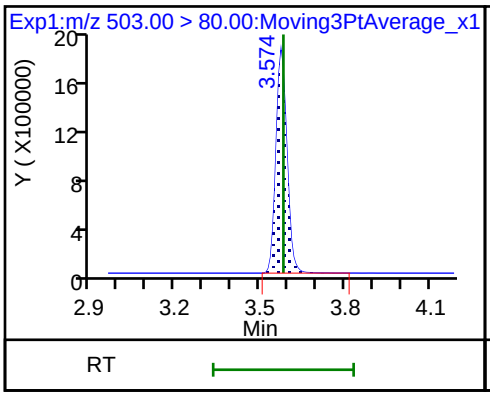
* 24 13C2 PFOA D 22 13C8 PFOA D 25 13C4 PFOA



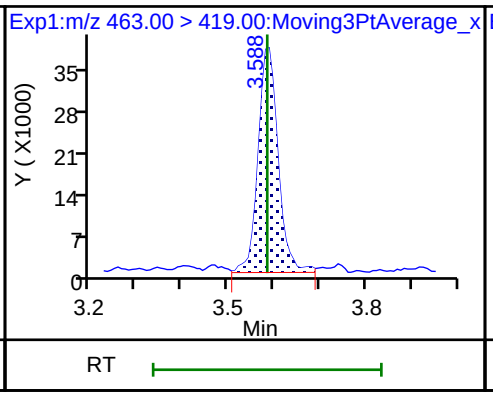
29 Perfluorooctanesulfonic acid (M) 29 Perfluorooctanesulfonic acid (M) D 27 13C8 PFOS



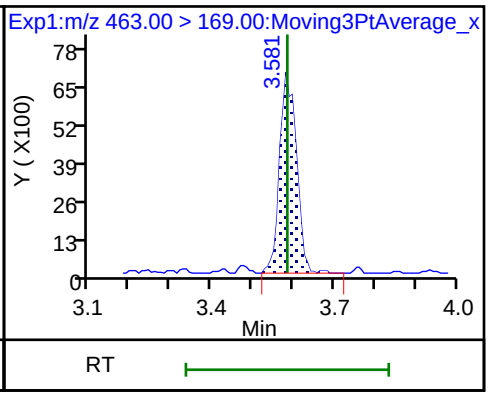
D 28 13C4 PFOS



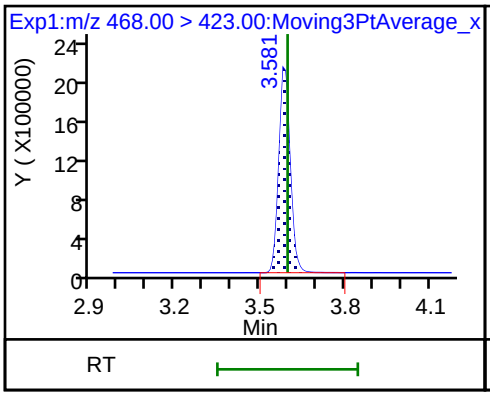
30 Perfluorononanoic acid



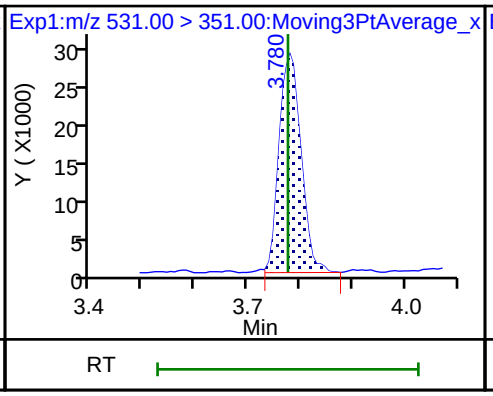
30 Perfluorononanoic acid



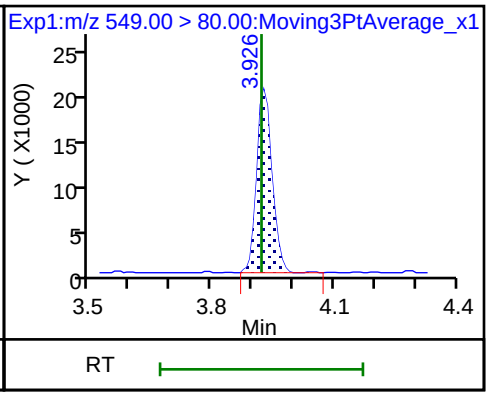
D 31 13C5 PFNA



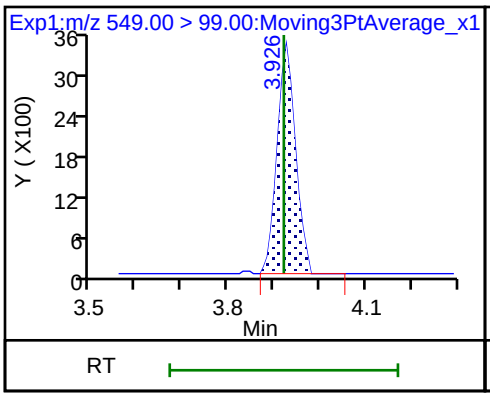
32 9-Chlorohexadecafluoro-3-oxanonane



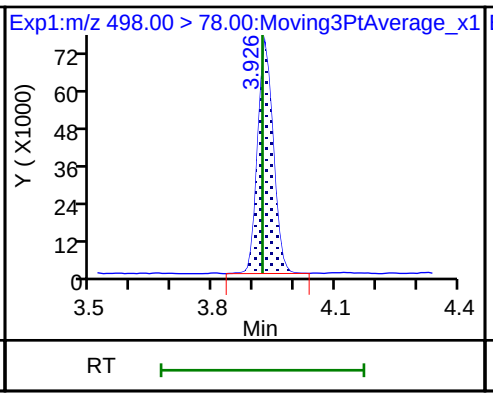
35 Perfluorononanesulfonic acid



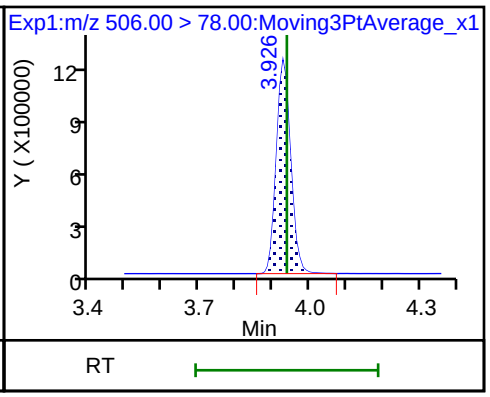
35 Perfluorononanesulfonic acid



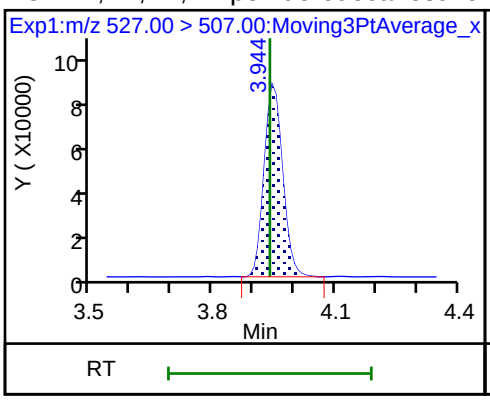
34 Perfluorooctanesulfonamide



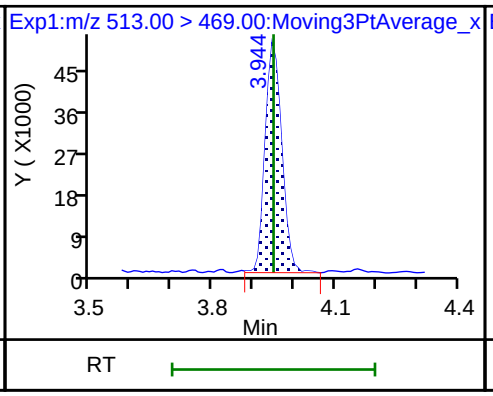
D 33 13C8 FOSA



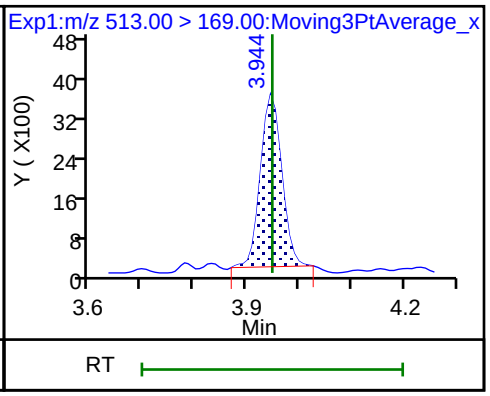
37 1H,1H,2H,2H-perfluorodecanesulfoni



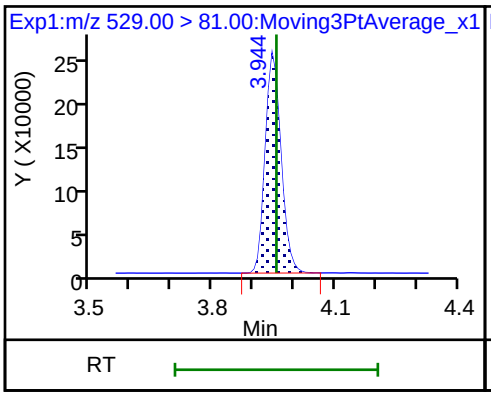
38 Perfluorodecanoic acid



38 Perfluorodecanoic acid



D 39 M2-8:2 FTS



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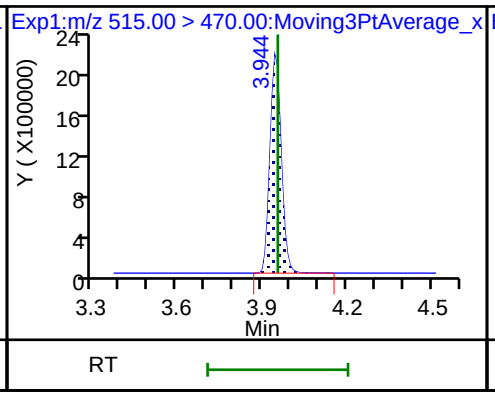
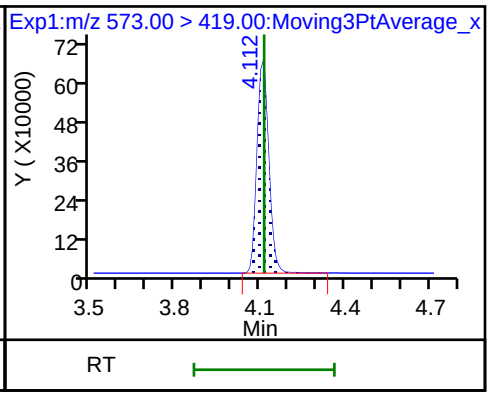
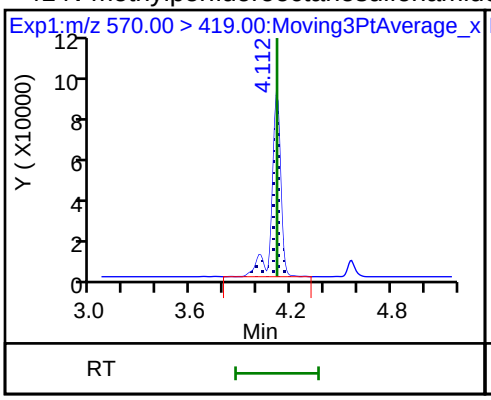


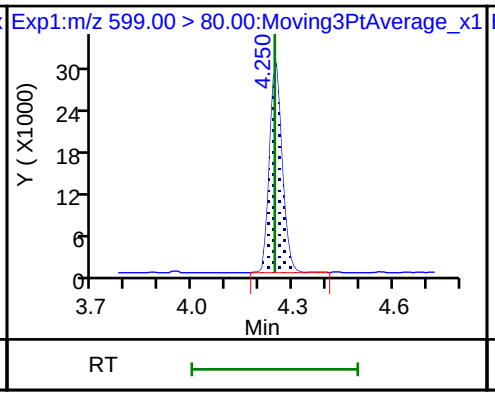
D 40 d3-NMeFOSAA



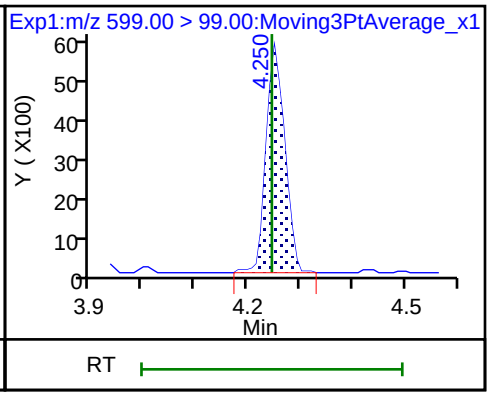
41 N-methylperfluorooctanesulfonamido



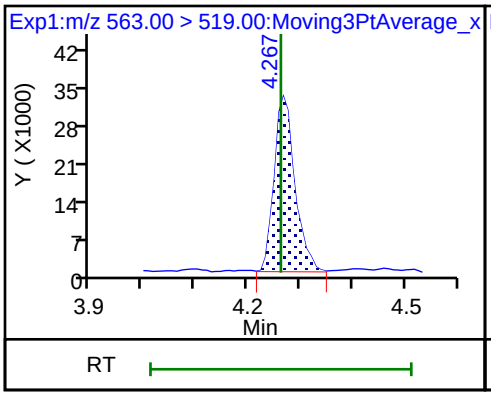
42 Perfluorodecanesulfonic acid



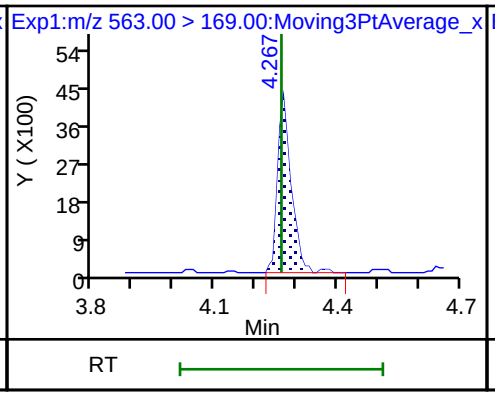
42 Perfluorodecanesulfonic acid



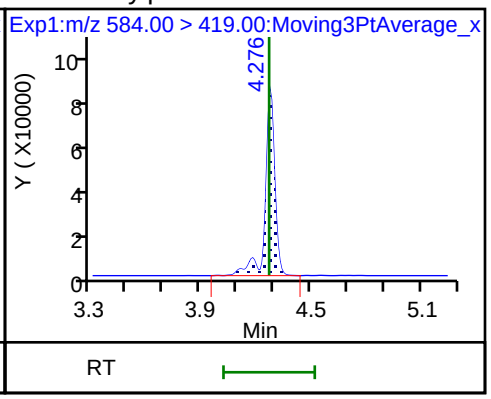
43 Perfluoroundecanoic acid



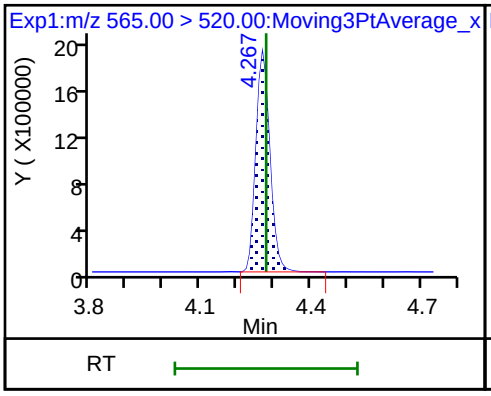
43 Perfluoroundecanoic acid



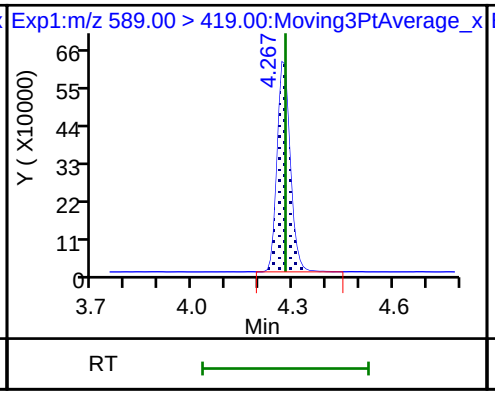
46 N-ethylperfluorooctanesulfonamidoa



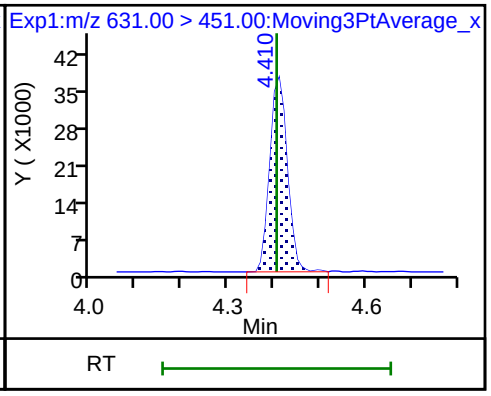
D 44 13C2 PFUnA



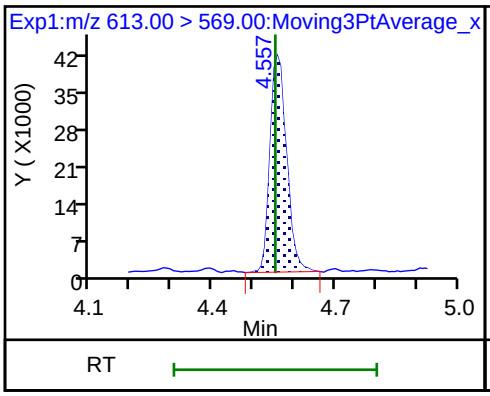
D 45 d5-NEtFOSAA



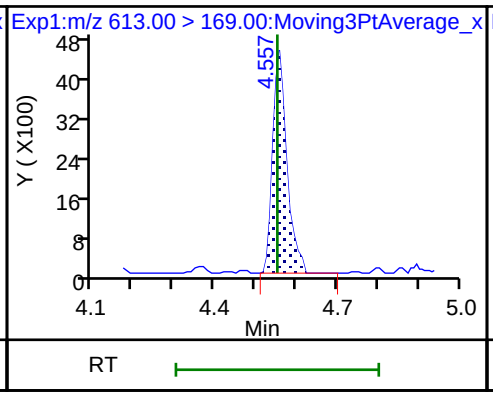
48 11-Chloroeicosafluoro-3-oxaundecan



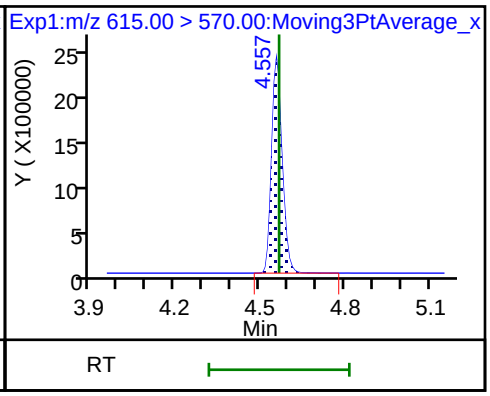
50 Perfluorododecanoic acid



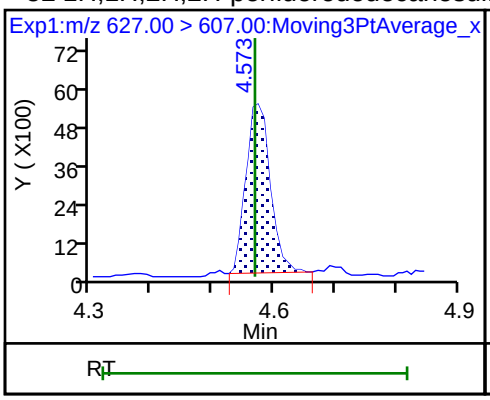
50 Perfluorododecanoic acid



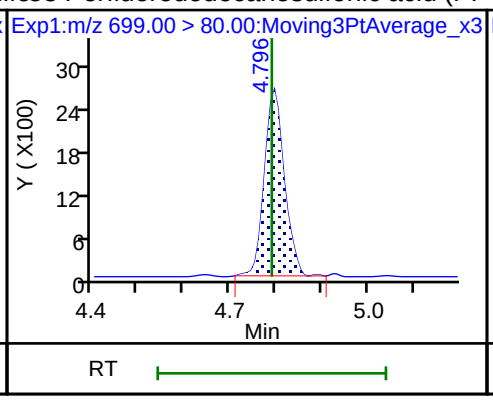
D 49 13C2 PFDoA



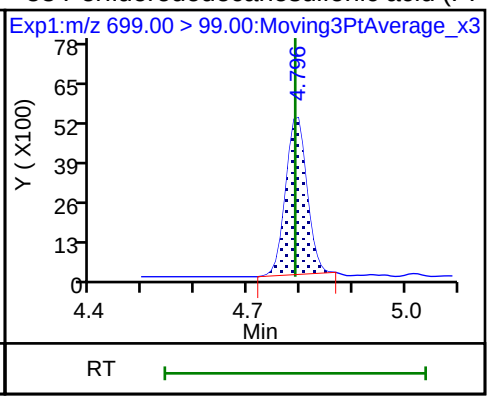
52 1H,1H,2H,2H-perfluorododecanesulfo



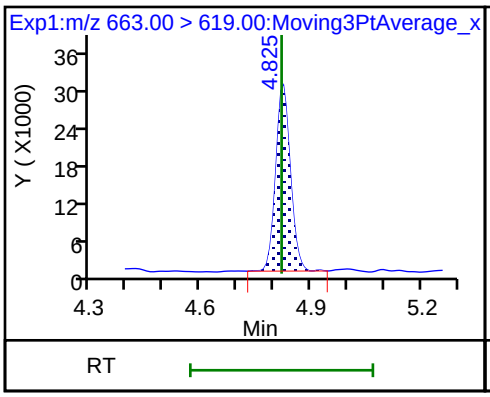
53 Perfluorododecanesulfonic acid (PF



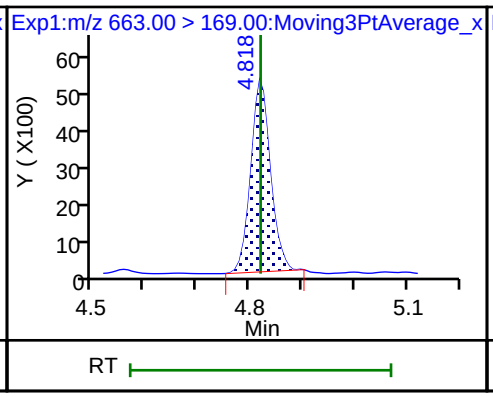
53 Perfluorododecanesulfonic acid (PF



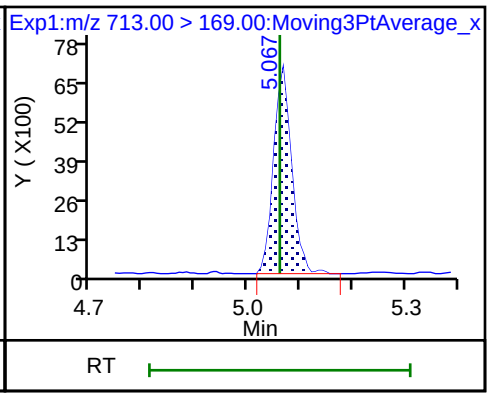
54 Perfluorotridecanoic acid



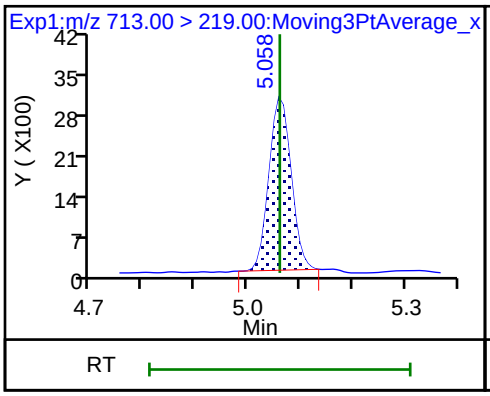
54 Perfluorotridecanoic acid



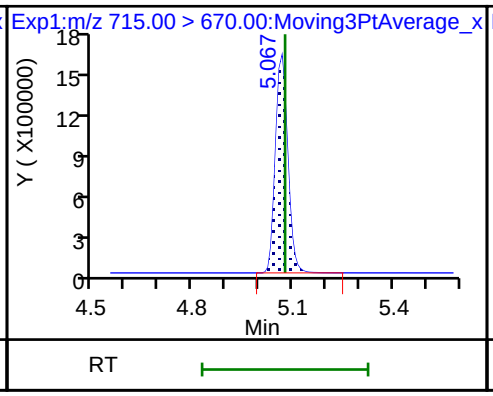
56 Perfluorotetradecanoic acid



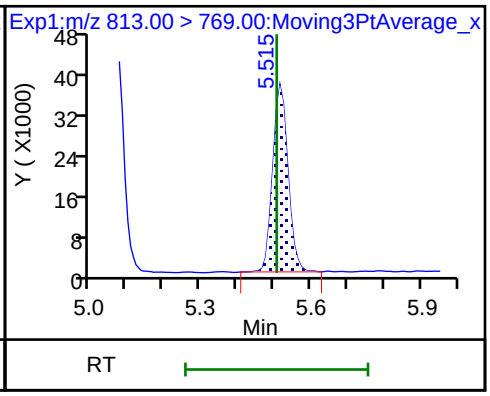
56 Perfluorotetradecanoic acid



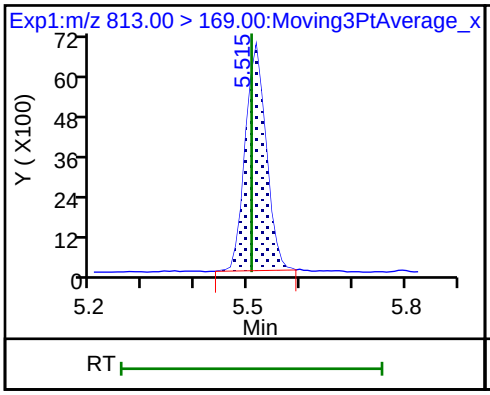
D 55 13C2 PFTeDA



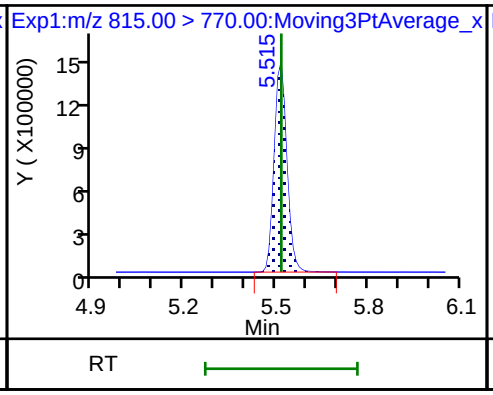
58 Perfluorohexadecanoic acid



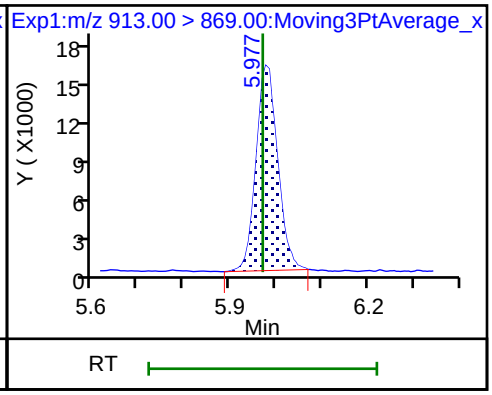
58 Perfluorohexadecanoic acid



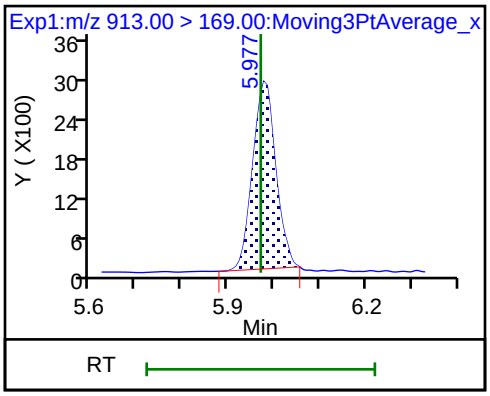
D 57 13C2 PFHxDA



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

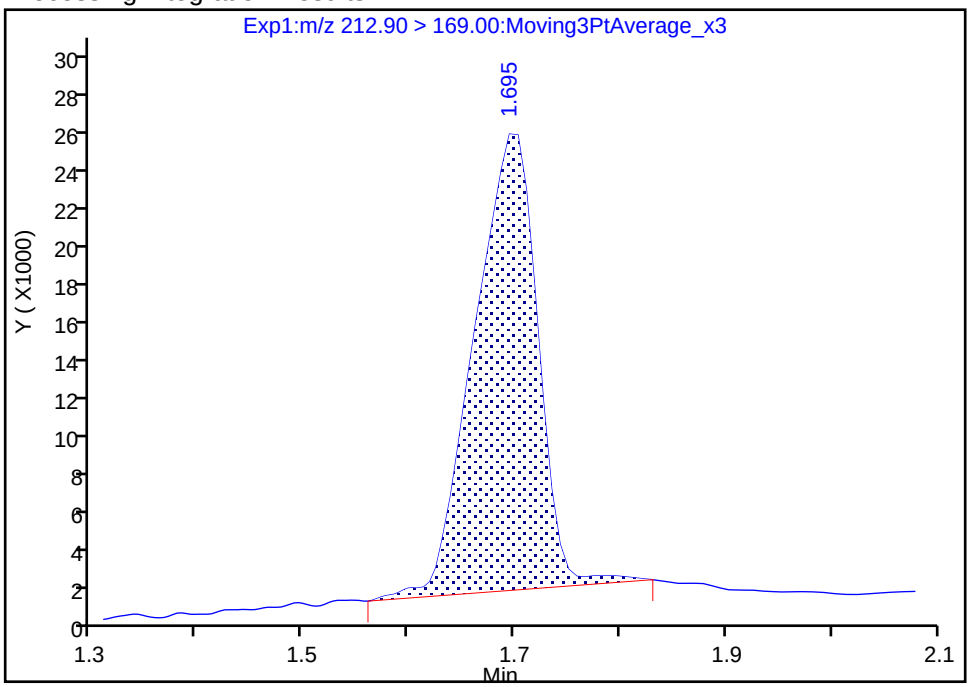
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_005.d
Injection Date: 12-Mar-2019 14:00:47 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 38 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

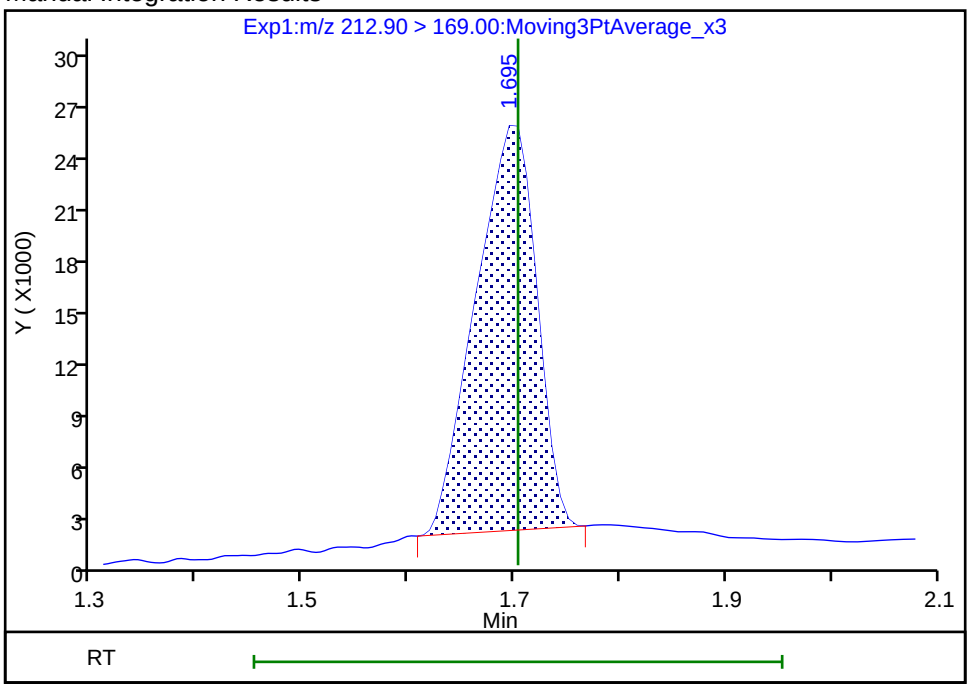
Processing Integration Results

RT: 1.70
Area: 98400
Amount: 0.050740
Amount Units: ng/ml



Manual Integration Results

RT: 1.70
Area: 92385
Amount: 0.047639
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:18:47
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

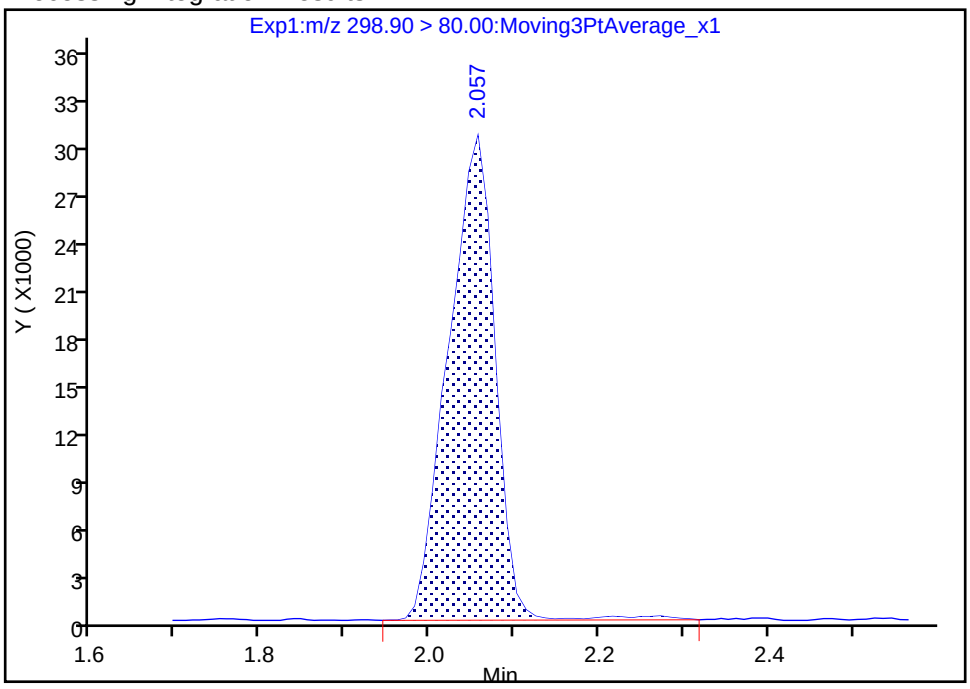
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_005.d
Injection Date: 12-Mar-2019 14:00:47 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 38 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

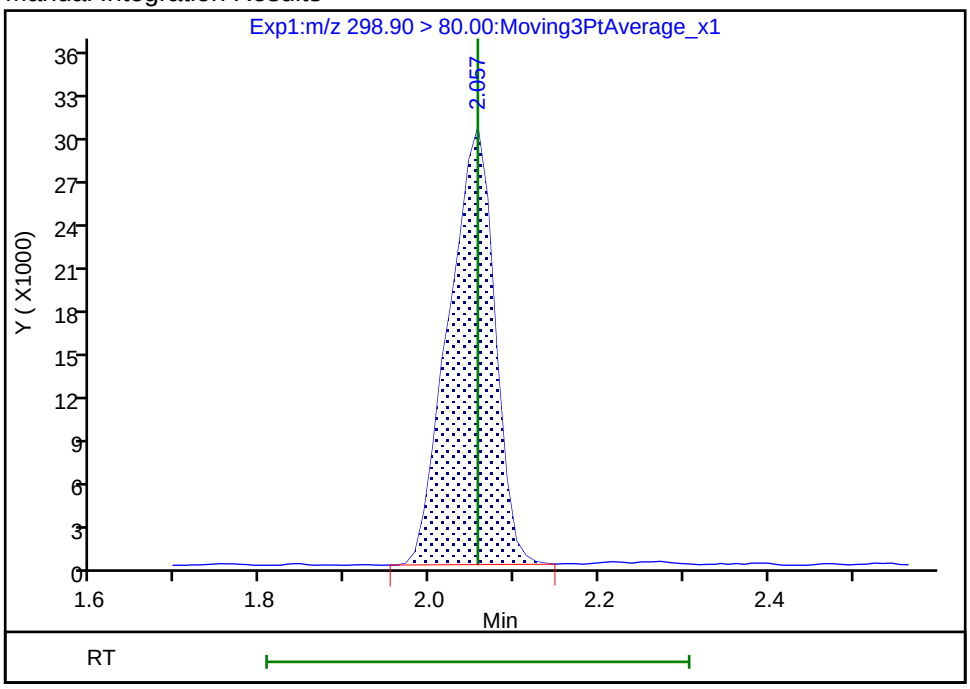
Processing Integration Results

RT: 2.06
Area: 115827
Amount: 0.042677
Amount Units: ng/ml



Manual Integration Results

RT: 2.06
Area: 114085
Amount: 0.042035
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:18:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

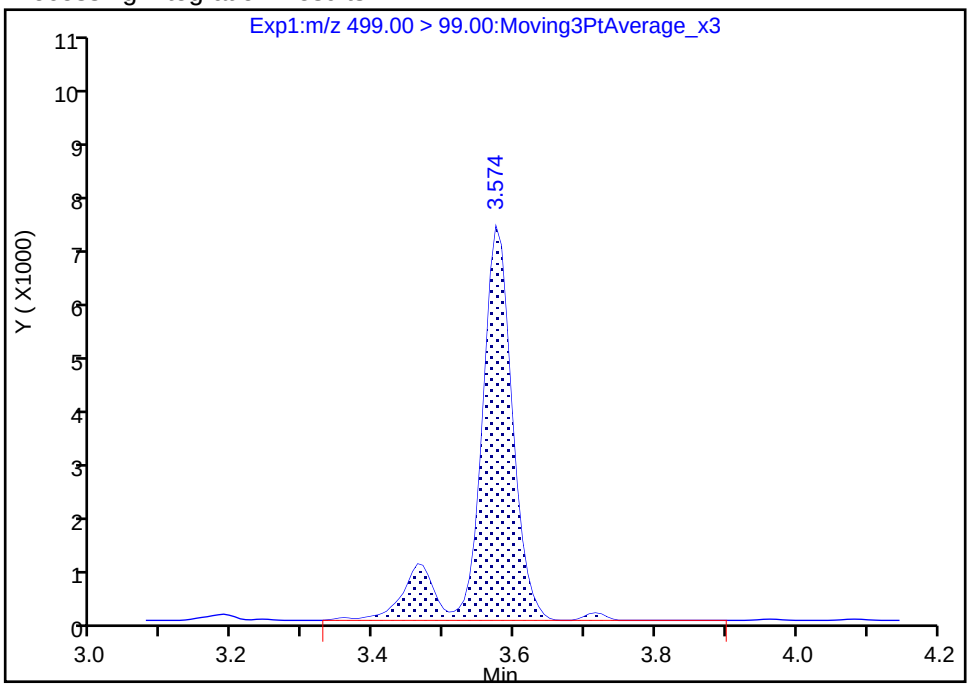
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_005.d
Injection Date: 12-Mar-2019 14:00:47 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 38 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

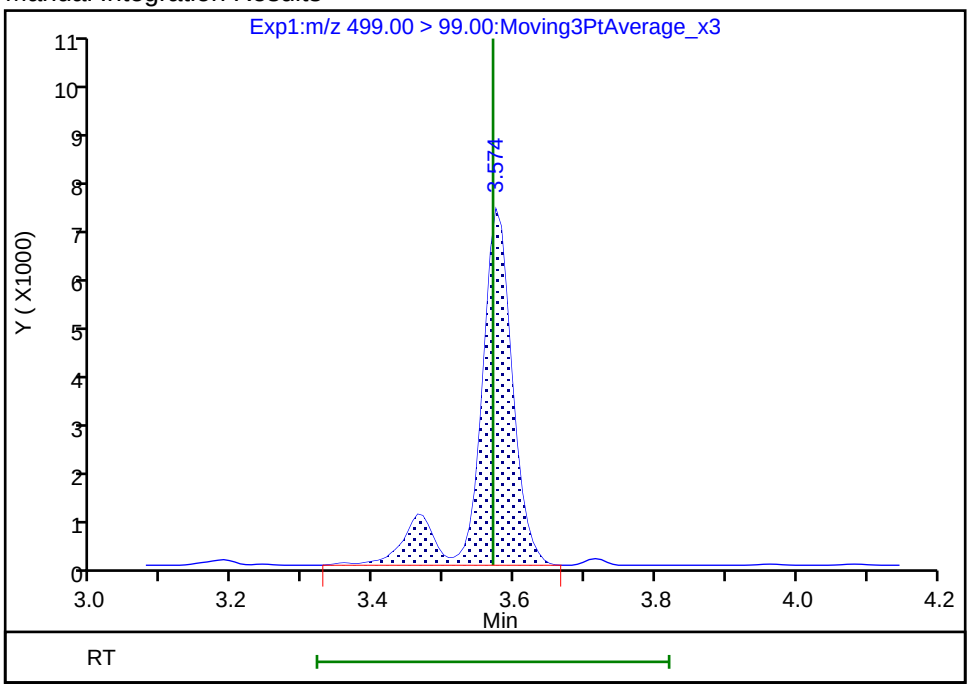
Processing Integration Results

RT: 3.57
Area: 24754
Amount: 0.046743
Amount Units: ng/ml



Manual Integration Results

RT: 3.57
Area: 24483
Amount: 0.044183
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:19:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

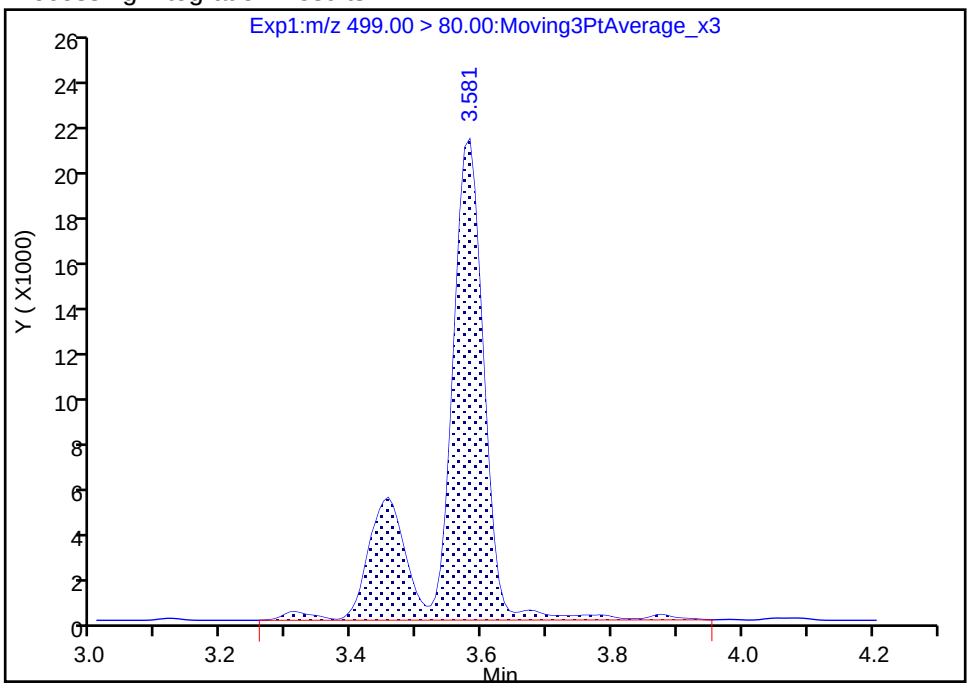
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_005.d
Injection Date: 12-Mar-2019 14:00:47 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 38 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

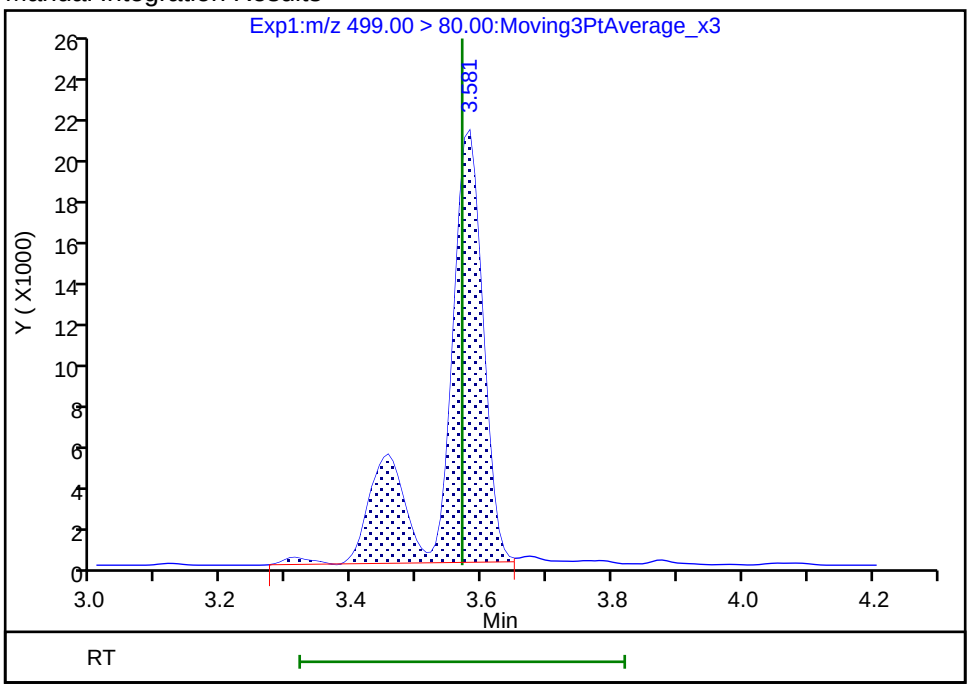
Processing Integration Results

RT: 3.58
Area: 90963
Amount: 0.046743
Amount Units: ng/ml



Manual Integration Results

RT: 3.58
Area: 85982
Amount: 0.044183
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:19:19
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281205/3 Calibration Date: 03/12/2019 14:08

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8745	0.8630		0.987	1.00	-1.3	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9858	0.9750		0.989	1.00	-1.1	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9198	0.9502		0.913	0.884	3.3	50.0
4:2 FTS	AveID	2.451	2.257		0.860	0.934	-7.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8691	0.8466		0.974	1.00	-2.6	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.4591	0.4642		0.948	0.938	1.1	50.0
HFPO-DA (GenX)	AveID	1.389	1.583		1.14	1.00	13.9	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.998	1.020		1.02	1.00	2.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.211	1.183		0.889	0.910	-2.3	40.0
DONA	AveID	2.192	2.507		1.08	0.942	14.3	50.0
6:2 FTS	AveID	1.971	2.134		1.03	0.948	8.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.9575	1.041		1.03	0.952	8.7	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.040	1.007		0.968	1.00	-3.2	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9719	0.9575		0.914	0.928	-1.5	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9626	0.9938		1.03	1.00	3.2	40.0
F-53B Major	AveID	0.7773	0.8813		1.06	0.932	13.4	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.5777	0.6011		0.999	0.960	4.1	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	2.755	3.160		1.15	1.00	14.7	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.061	1.186		1.12	1.00	11.8	40.0
8:2 FTS	AveID	1.609	1.605		0.956	0.958	-0.2	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7968	0.8115		1.02	1.00	1.8	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8587	0.8669		0.973	0.964	1.0	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7812	0.6876		0.880	1.00	-12.0	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7459	0.7677		1.03	1.00	2.9	40.0
F-53B Minor	AveID	1.062	1.034		0.918	0.942	-2.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9523	0.9753		1.02	1.00	2.4	40.0
10:2 FTS	AveID	0.9902	1.065		1.04	0.964	7.6	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0865	0.0881		0.986	0.968	1.9	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.7493	0.7532		1.01	1.00	0.5	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1759	0.1601		0.910	1.00	-9.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9099		1.04	1.00	3.8	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281205/3 Calibration Date: 03/12/2019 14:08

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.5118	0.6199		1.21	1.00	21.1	50.0
13C4 PFBA	Ave	0.8404	0.8193		2.44	2.50	-2.5	50.0
13C5-PFPeA DNU	Ave	0.7180	0.6936		2.41	2.50	-3.4	50.0
13C3 PFBS	Ave	1.131	1.055		2.17	2.33	-6.7	50.0
M2-4:2 FTS	Ave	0.0709	0.0657		2.16	2.34	-7.4	50.0
13C2 PFHxA	Ave	0.8046	0.8208		2.55	2.50	2.0	50.0
13C3 HFPO-DA	Ave	0.1085	0.0928		2.14	2.50	-14.5	50.0
13C4 PFHpA	Ave	0.995	0.996		2.50	2.50	0.0	50.0
18O2 PFHxS	Ave	0.6511	0.6129		2.23	2.37	-5.9	50.0
M2-6:2 FTS	Ave	0.0900	0.0924		2.44	2.38	2.7	50.0
13C8 PFOA	Ave	0.7746	0.7737		2.44	2.45	-0.1	50.0
13C4 PFOA	Ave	0.9033	0.9214		2.55	2.50	2.0	50.0
13C4 PFOS	Ave	0.7608	0.7137		2.24	2.39	-6.2	50.0
13C8 PFOS	Ave	0.1746	0.1654		2.26	2.39	-5.3	50.0
13C5 PFNA	Ave	0.8455	0.8232		2.43	2.50	-2.6	50.0
13C8 FOSA	Ave	0.4979	0.4679		2.35	2.50	-6.0	50.0
M2-8:2 FTS	Ave	0.1021	0.1013		2.38	2.40	-0.8	50.0
13C2 PFDA	Ave	0.8687	0.8352		2.40	2.50	-3.9	50.0
d3-NMeFOSAA	Ave	0.2636	0.2794		2.65	2.50	6.0	50.0
13C2 PFUnA	Ave	0.7102	0.7148		2.52	2.50	0.7	50.0
d5-NEtFOSAA	Ave	0.2245	0.2356		2.62	2.50	4.9	50.0
13C2 PFDoA	Ave	0.8024	0.8496		2.65	2.50	5.9	50.0
13C2 PFTeDA	Ave	0.5899	0.5713		2.42	2.50	-3.1	50.0
13C2 PFHxDA	Ave	0.5748	0.5696		2.48	2.50	-0.9	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_006.d
Lims ID: CCV L4
Client ID:
Sample Type: CCVIS
Inject. Date: 12-Mar-2019 14:08:18 ALS Bottle#: 39 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 11:20:16 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 11:20:16
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.704	1.704	0.0	1.000	1968867	0.9868		98.7	313	
D 1 13C4 PFBA										
217.00 > 172.00	1.704	1.712	-0.008	0.533	5703809	2.44		97.5	31431	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.026	2.026	0.0	1.000	1883061	0.9890		98.9	163	
D 3 13C5 PFPeA										
267.90 > 223.00	2.026	2.037	-0.011	0.634	4828332	2.41		96.6	12871	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.058	2.058	0.0	1.000	2468726	0.9132	Target=1.00	103	11108	
298.90 > 99.00	2.058	2.058	0.0	1.000	887354		2.78(2.05-3.82)		1846	
D 5 13C3 PFBS										
301.90 > 80.00	2.058	2.069	-0.011	0.644	6833303	2.17		93.3	701377	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.345	2.345	0.0	1.000	385423	0.8604		92.1	4870	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.345	2.355	-0.010	0.734	426842	2.16		92.6	1292	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.382	2.382	0.0	1.000	1934961	0.9741	Target=1.00	97.4	611	
313.00 > 119.00	2.382	2.382	0.0	1.000	142279		13.60(9.33-17.33)		677	
D 9 13C2 PFHxA										
315.00 > 270.00	2.382	2.392	-0.010	0.745	5714120	2.55		102	8878	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.401	2.401	0.0	1.167	1279816	0.9484	Target=1.00	101	3061	
349.00 > 99.00	2.401	2.401	0.0	1.167	626453		2.04(1.45-2.69)		2440	
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.507	2.507	0.0	1.000	408997	1.14		114	321	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.507	2.508	-0.001	0.784	646117	2.14		85.5	2326	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.790	2.790	0.0	1.000	2827901	1.02	Target=1.00	102	1270	
363.00 > 169.00	2.790	2.790	0.0	1.000	599490		4.72(3.00-5.57)		2089	
18 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.790	2.790	0.0	1.000	1838104	0.8894	Target=1.00	97.7	5060	M
399.00 > 99.00	2.790	2.790	0.0	1.000	518843		3.54(2.29-4.25)		1323	
D 16 13C4 PFHpA										
367.00 > 322.00	2.790	2.791	-0.001	0.873	6930723	2.50		100	9468	
D 17 18O2 PFHxS										
403.00 > 84.00	2.790	2.800	-0.010	0.873	4036541	2.23		94.1	3339	
19 DONA										
377.00 > 251.00	2.835	2.835	0.0	0.793	4693100	1.08	Target=1.00	114	5514	
377.00 > 85.00	2.835	2.835	0.0	0.793	1924576		2.44(1.70-3.15)		2515	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.180	3.180	0.0	1.000	520145	1.03		108	794	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.180	3.180	0.0	0.995	610724	2.44		103	2480	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.196	3.196	0.0	0.894	1969061	1.03	Target=1.00	109	2712	
449.00 > 99.00	3.196	3.196	0.0	0.894	459367		4.29(2.83-5.25)		1721	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.196	3.196	0.0	1.000	2583332	0.9685	Target=1.00	96.8	855	
413.00 > 169.00	3.196	3.196	0.0	1.000	929003		2.78(1.36-4.08)		3058	
* 24 13C2 PFOA										
415.00 > 370.00	3.196	3.196	0.0		6961550	2.50			5785	
D 22 13C8 PFOA										
421.00 > 376.00	3.188	3.196	-0.008	0.998	5272863	2.44		99.9	6571	
D 25 13C4 PFOA										
417.00 > 372.00	3.196	3.204	-0.008	1.000	6414032	2.55		102	8473	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.582	3.582	0.0	1.002	1765892	0.9142	Target=1.00	98.5	6349	
499.00 > 99.00	3.582	3.582	0.0	1.002	431709		4.09(2.04-6.12)		1998	
D 27 13C8 PFOS										
507.00 > 99.00	3.575	3.582	-0.007	1.119	1100775	2.26		94.7	2686	
D 28 13C4 PFOS										
503.00 > 80.00	3.575	3.582	-0.007	1.119	4749729	2.24		93.8	5995	
30 Perfluorononanoic acid										
463.00 > 419.00	3.590	3.590	0.0	1.000	2278129	1.03	Target=1.00	103	1018	
463.00 > 169.00	3.590	3.590	0.0	1.000	413433		5.51(3.91-7.26)		1719	
D 31 13C5 PFNA										
468.00 > 423.00	3.590	3.597	-0.007	1.123	5730611	2.43		97.4	6967	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.781	3.781	0.0	1.058	1632297	1.06		113	2030	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.928	3.928	0.0	1.099	1146801	1.00	Target=1.00	104	3831	
549.00 > 99.00	3.928	3.928	0.0	1.099	174095		6.59(4.35-8.07)		765	
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.937	3.937	0.0	1.002	4117125	1.15		115	3698	
D 33 13C8 FOSA										
506.00 > 78.00	3.928	3.937	-0.009	1.229	3257002	2.35		94.0	4875	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.955	3.955	0.0	1.002	434022	0.9557		99.8	2701	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.946	3.946	0.0	0.998	2758259	1.12	Target=1.00	112	3040	
513.00 > 169.00	3.946	3.946	0.0	0.998	201389		13.70(11.40-21.17)		933	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.946	3.955	-0.009	1.235	675883	2.38		99.2	2125	
D 36 13C2 PFDA										
515.00 > 470.00	3.955	3.955	0.0	1.238	5814414	2.40		96.1	6559	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.114	4.113	0.001	1.287	1945217	2.65		106	2841	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.123	4.123	0.0	1.002	631394	1.02		102	138	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.252	4.252	0.0	1.189	1660849	0.9732	Target=1.00	101	4535	
599.00 > 99.00	4.252	4.252	0.0	1.189	330873		5.02(3.64-6.76)		1540	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.269	4.269	0.0	0.998	1368693	0.8802	Target=1.00	88.0	952	
563.00 > 169.00	4.269	4.269	0.0	0.998	158709		8.62(7.06-13.11)		501	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.278	4.278	0.0	1.000	503557	1.03		103	1857	
D 44 13C2 PFUnA										
565.00 > 520.00	4.278	4.277	0.001	1.339	4976425	2.52		101	4585	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.278	4.277	0.001	1.339	1639841	2.62		105	2283	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.413	4.413	0.0	1.235	1936537	0.9175		97.4	7714	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.559	4.559	0.0	1.000	2307519	1.02	Target=1.00	102	1539	
613.00 > 169.00	4.559	4.559	0.0	1.000	245428		9.40(7.12-13.21)		823	
D 49 13C2 PFDoA										
615.00 > 570.00	4.559	4.567	-0.008	1.427	5914725	2.65		106	9471	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.575	4.575	0.0	1.159	289858	1.04		108	1051	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.797	4.797	0.0	1.342	169502	0.9861	Target=1.00	102	1653	
699.00 > 99.00	4.797	4.797	0.0	1.342	302218		0.56(0.40-0.74)		2528	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.826	4.826	0.0	1.059	1782073	1.01	Target=1.00	101	1309	
663.00 > 169.00	4.826	4.826	0.0	1.059	297847		5.98(3.97-7.38)		2157	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.068	5.068	0.0	1.000	254731	0.9102	Target=1.00	91.0	1594	
713.00 > 219.00	5.068	5.068	0.0	1.000	184843		1.38(1.07-1.99)		1333	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.068	5.076	-0.008	1.586	3977335	2.42		96.9	16196	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.516	5.516	0.0	1.000	1443257	1.04	Target=1.00	104	123	
813.00 > 169.00	5.516	5.516	0.0	1.000	268392		5.38(3.82-7.09)		1435	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.516	5.516	0.0	1.726	3965344	2.48		99.1	7760	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	5.985	5.985	0.0	1.085	983204	1.21	Target=1.00	121	265	
913.00 > 169.00	5.978	5.985	-0.007	1.084	197959		4.97(3.36-6.24)		1351	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00011 Amount Added: 1.00 Units: mL

Report Date: 13-Mar-2019 11:20:17 Chrom Revision: 2.3 12-Mar-2019 09:55:20

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_006.d

Injection Date: 12-Mar-2019 14:08:18 Instrument ID: A9

Lims ID: CCV L4

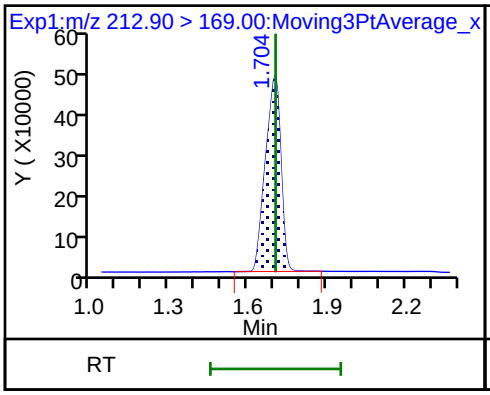
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 39 Worklist Smp#: 3

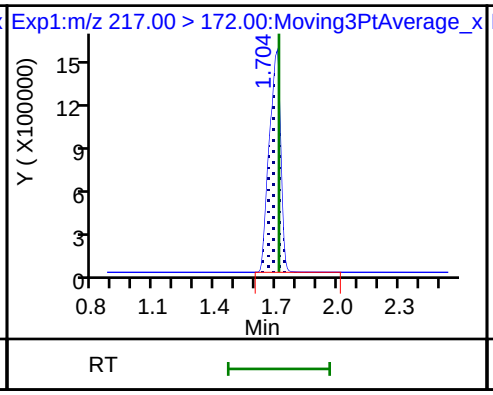
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

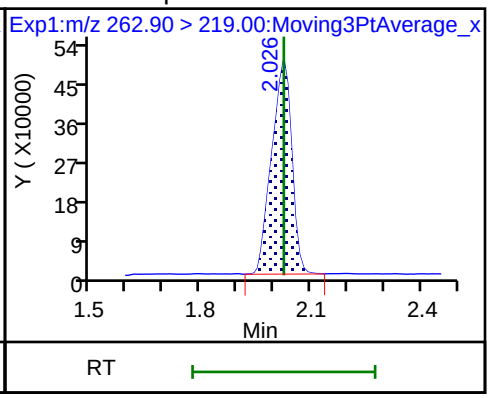
2 Perfluorobutanoic acid



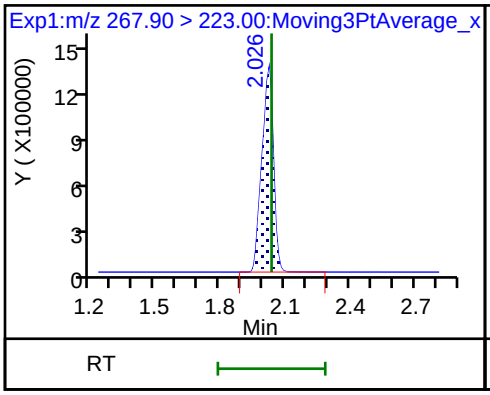
D 1 13C4 PFBA



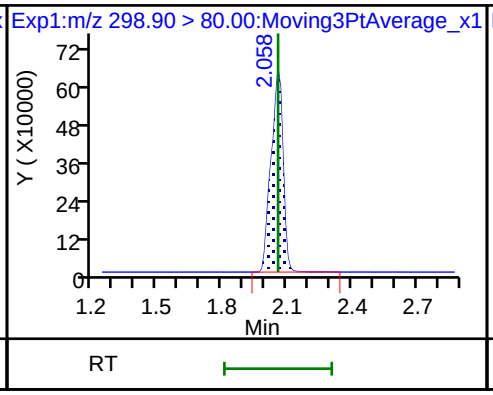
4 Perfluoropentanoic acid



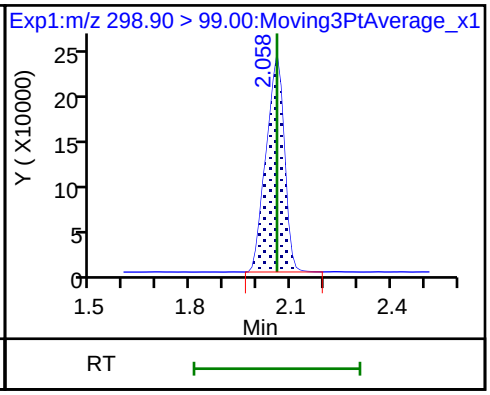
D 3 13C5 PFPeA



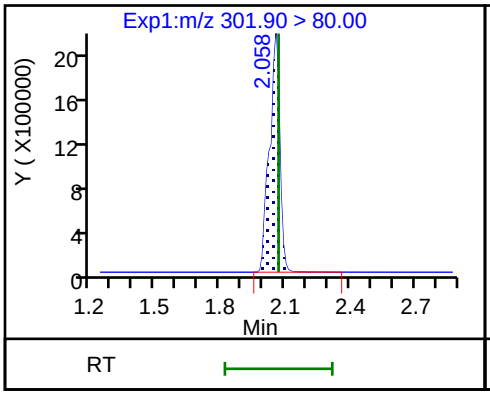
6 Perfluorobutanesulfonic acid



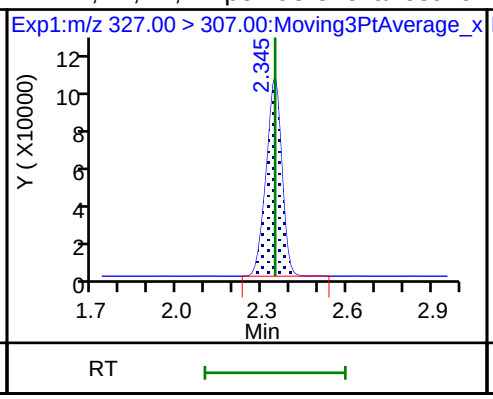
6 Perfluorobutanesulfonic acid



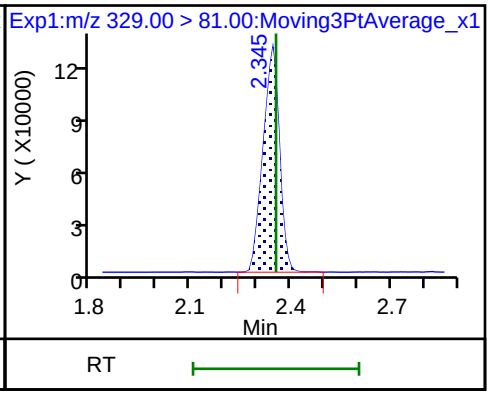
D 5 13C3 PFBS



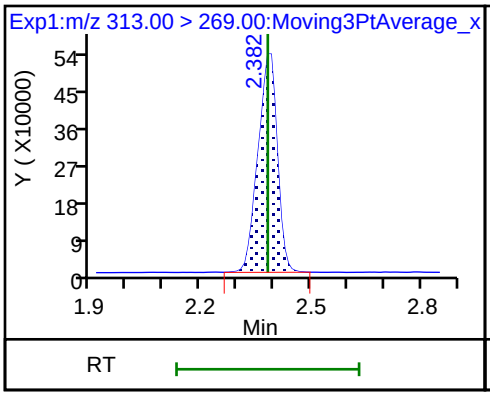
7 1H,1H,2H,2H-perfluorohexanesulfon



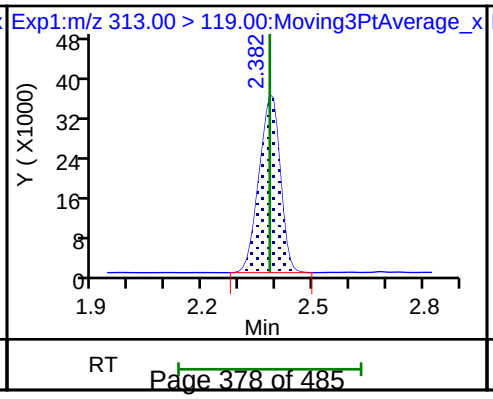
D 8 M2-4:2 FTS



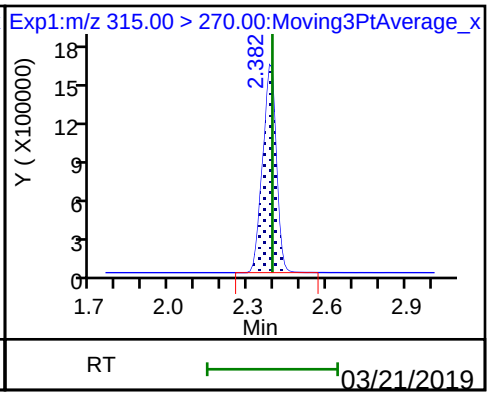
10 Perfluorohexanoic acid



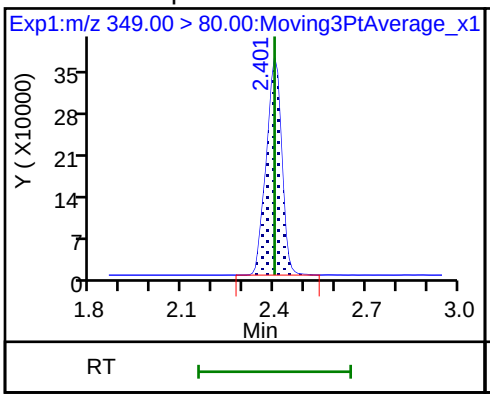
10 Perfluorohexanoic acid



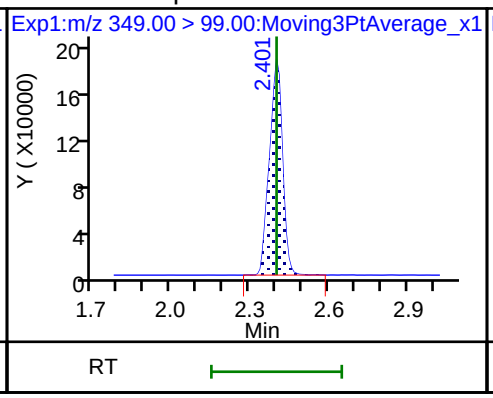
D 9 13C2 PFHxA



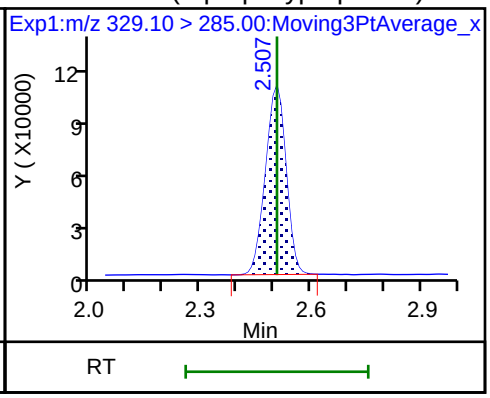
11 Perfluoropentanesulfonic acid



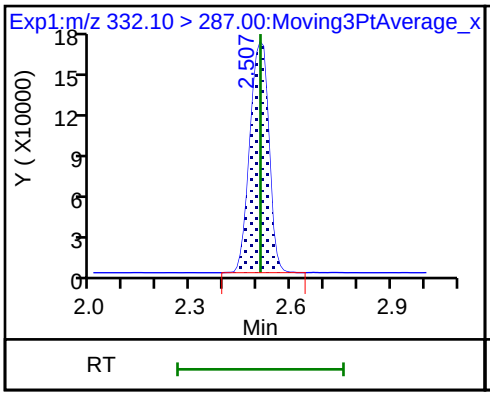
11 Perfluoropentanesulfonic acid



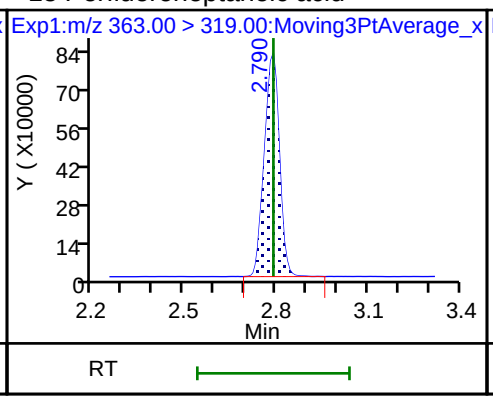
14 Perfluoro(2-propoxypropanoic) acid



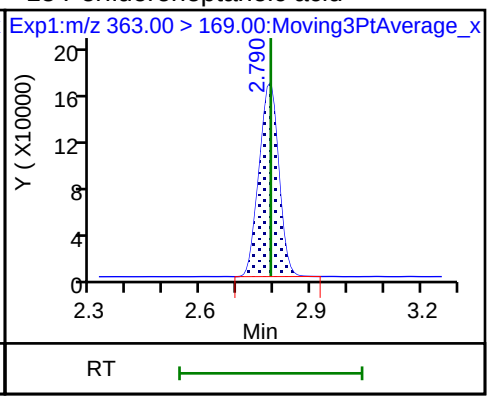
D 13 13C3 HFPO-DA



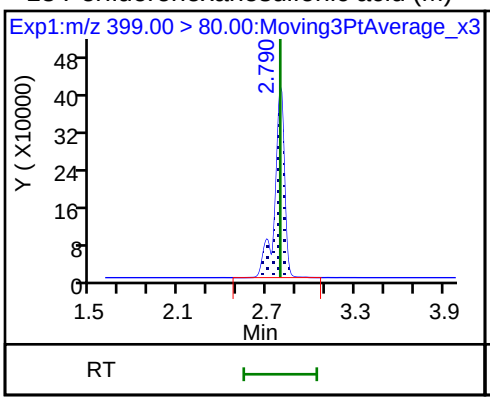
15 Perfluoroheptanoic acid



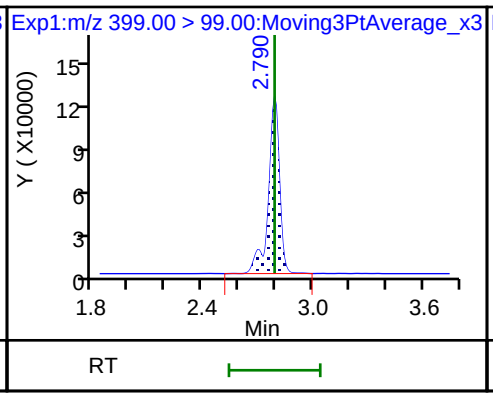
15 Perfluoroheptanoic acid



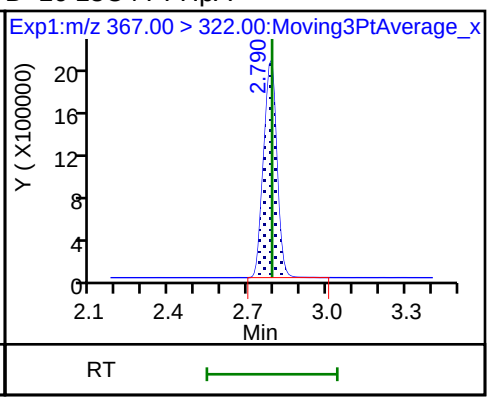
18 Perfluorohexanesulfonic acid (M)



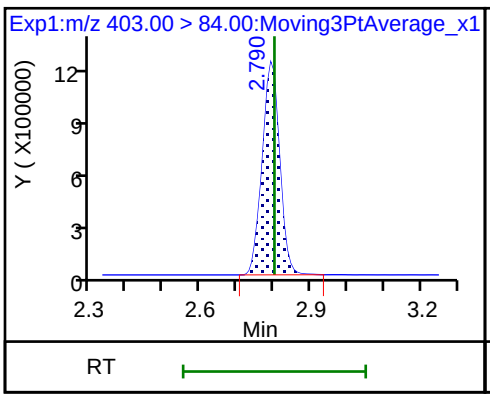
18 Perfluorohexanesulfonic acid



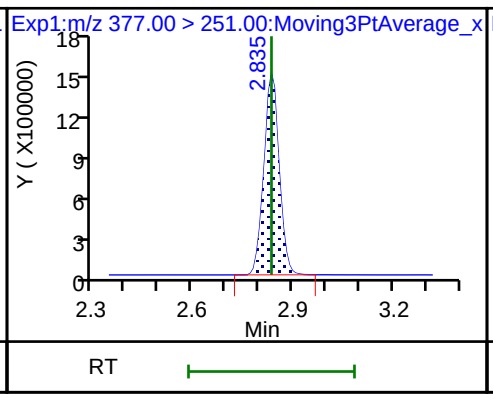
D 16 13C4 PFHpA



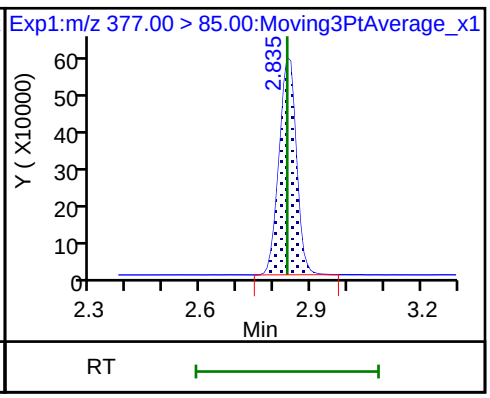
D 17 18O2 PFHxS



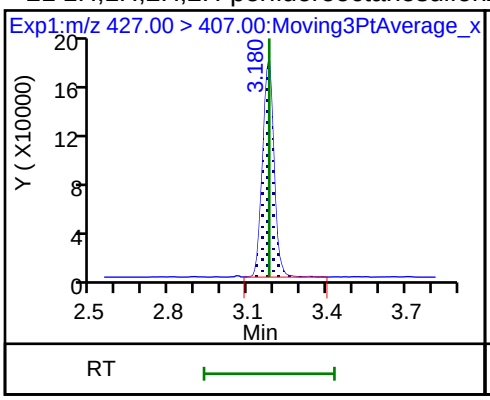
19 DONA



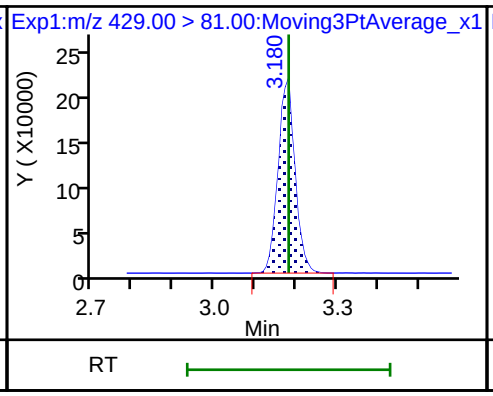
19 DONA



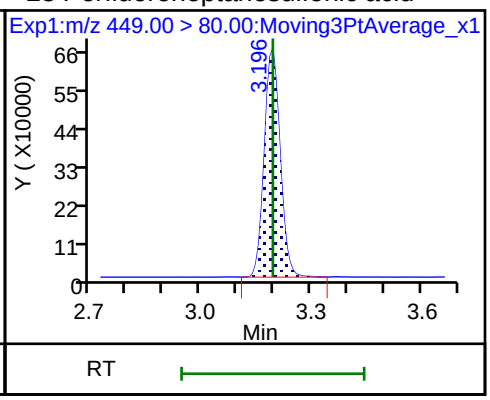
21 1H,1H,2H,2H-perfluorooctanesulfon



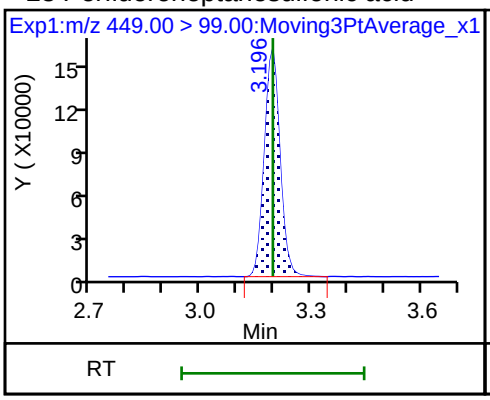
D 20 M2-6:2 FTS



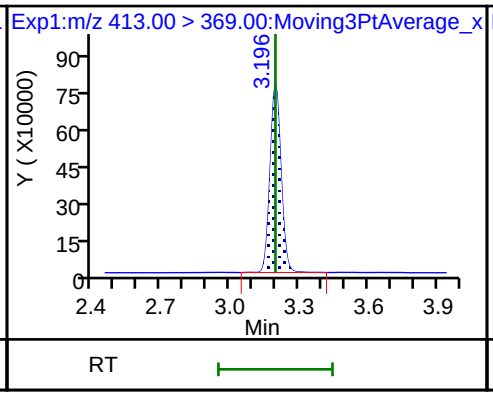
23 Perfluoroheptanesulfonic acid



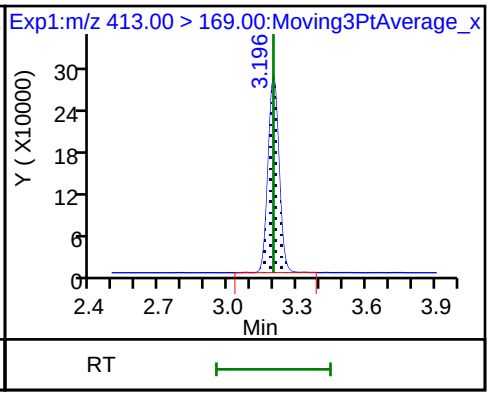
23 Perfluoroheptanesulfonic acid



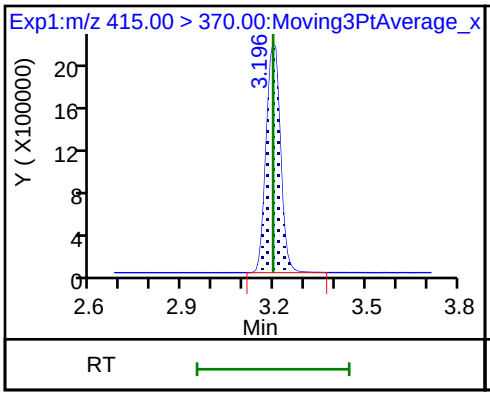
26 Perfluorooctanoic acid



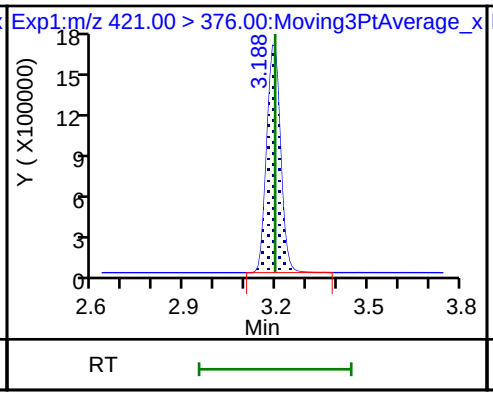
26 Perfluorooctanoic acid



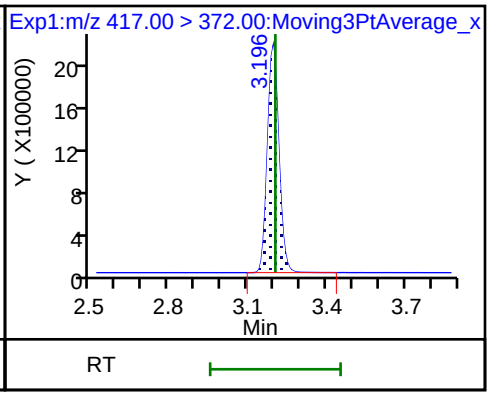
* 24 13C2 PFOA



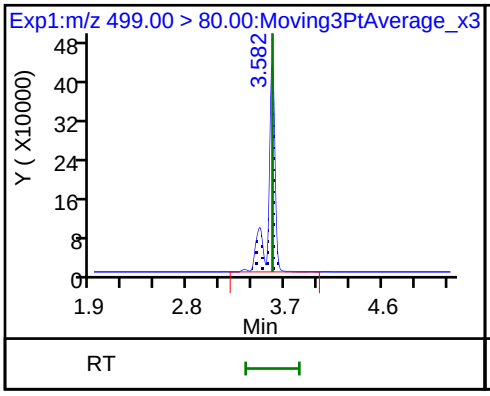
D 22 13C8 PFOA



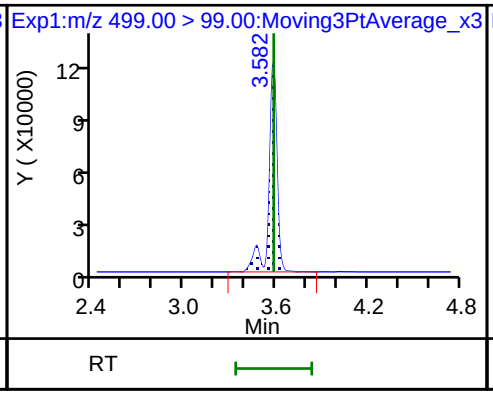
D 25 13C4 PFOA



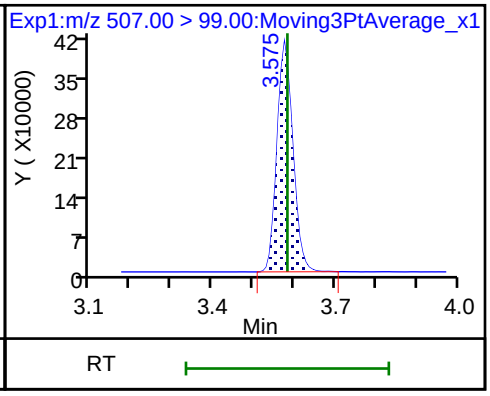
29 Perfluorooctanesulfonic acid



29 Perfluorooctanesulfonic acid



D 27 13C8 PFOS



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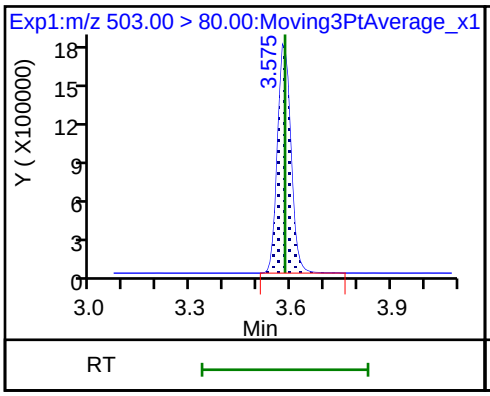
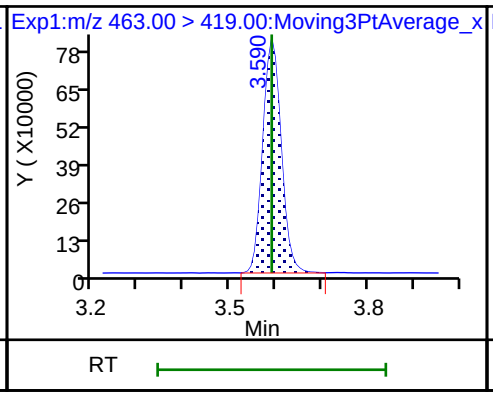
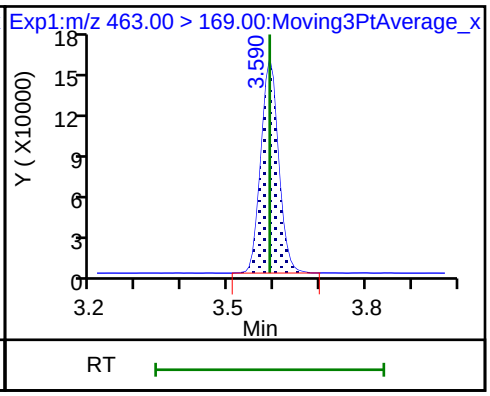


30 Perfluorononanoic acid



30 Perfluorononanoic acid



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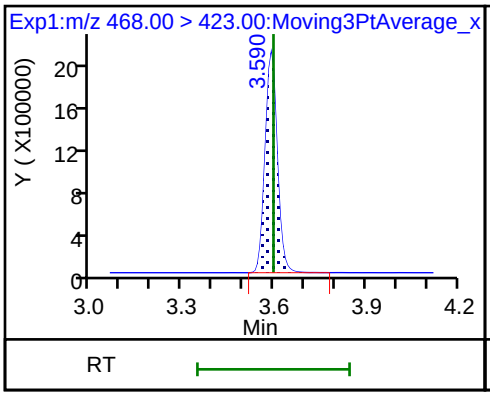
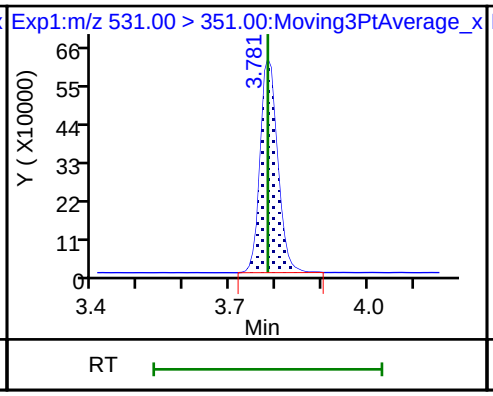
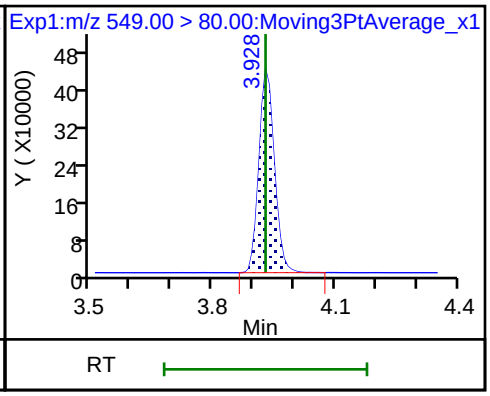


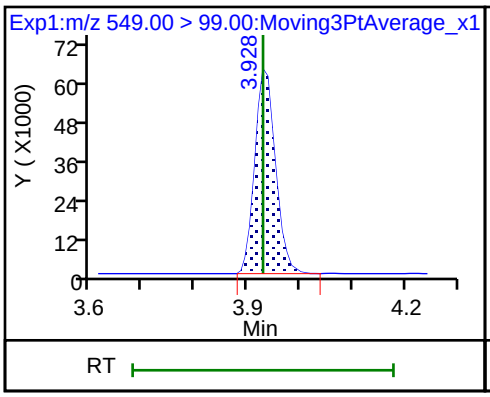
32 9-Chlorohexadecafluoro-3-oxanonane



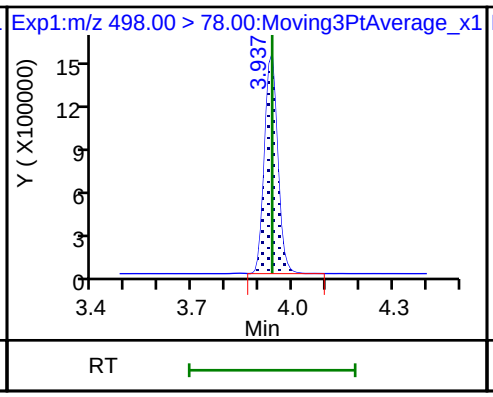
35 Perfluorononanesulfonic acid



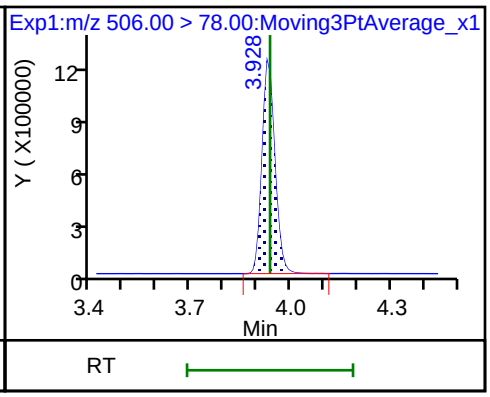
35 Perfluorononanesulfonic acid



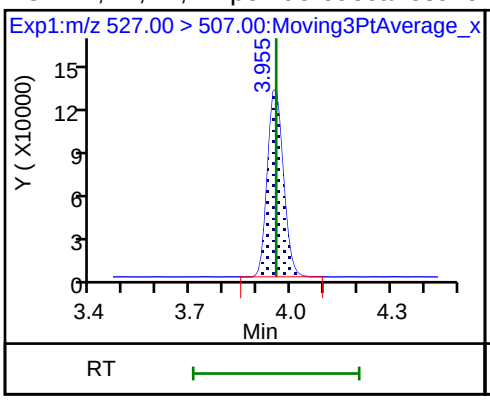
34 Perfluorooctanesulfonamide



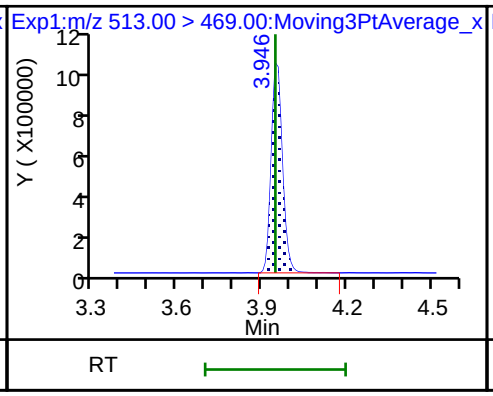
D 33 13C8 FOSA



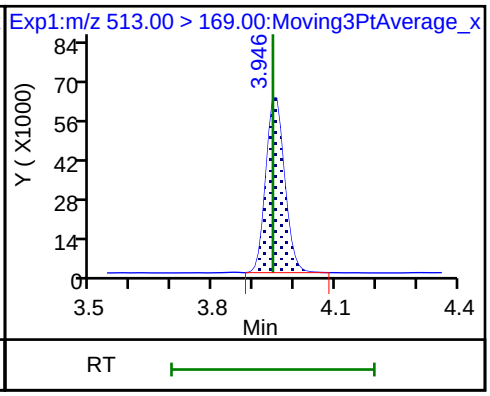
37 1H,1H,2H,2H-perfluorodecanesulfoni



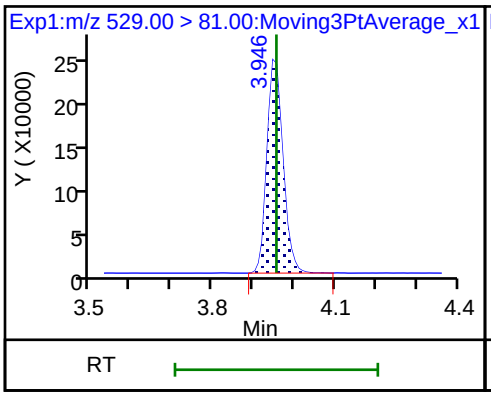
38 Perfluorodecanoic acid



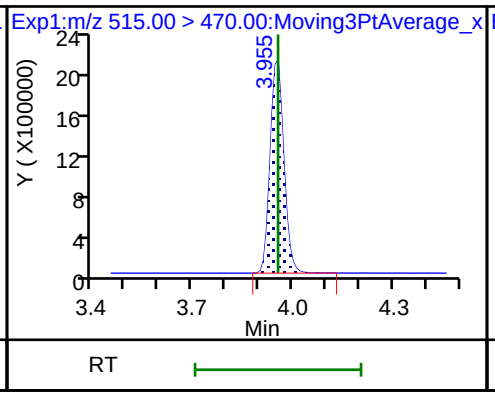
38 Perfluorodecanoic acid



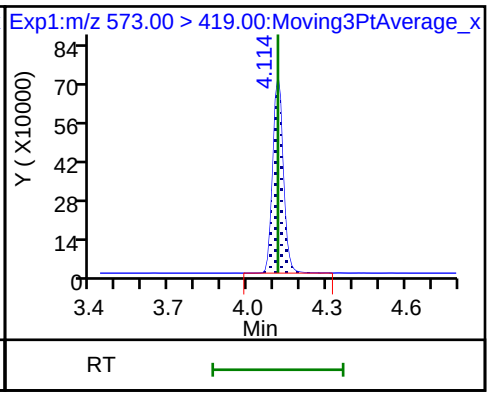
D 39 M2-8:2 FTS



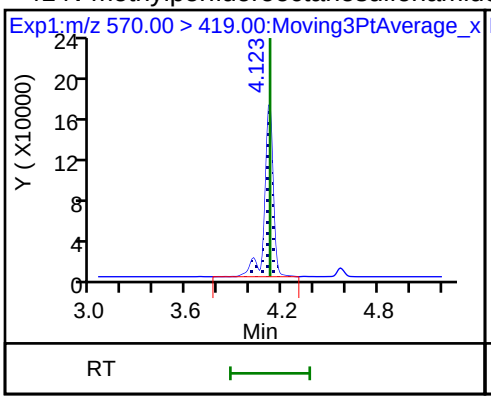
D 36 13C2 PFDA



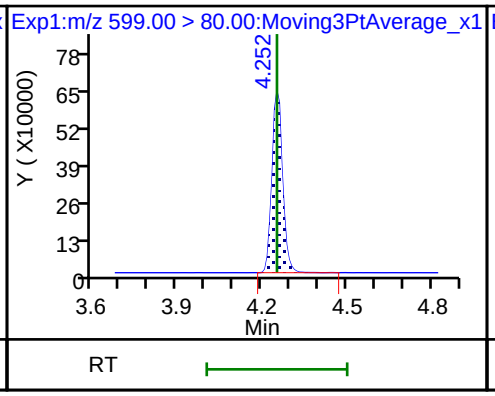
D 40 d3-NMeFOSAA



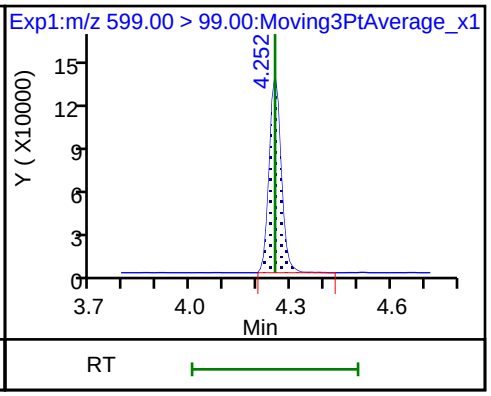
41 N-methylperfluorooctanesulfonamido



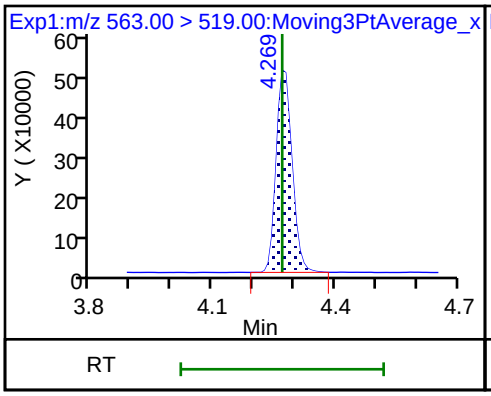
42 Perfluorodecanesulfonic acid



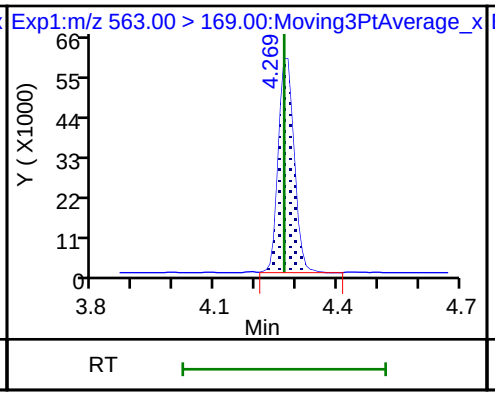
42 Perfluorodecanesulfonic acid



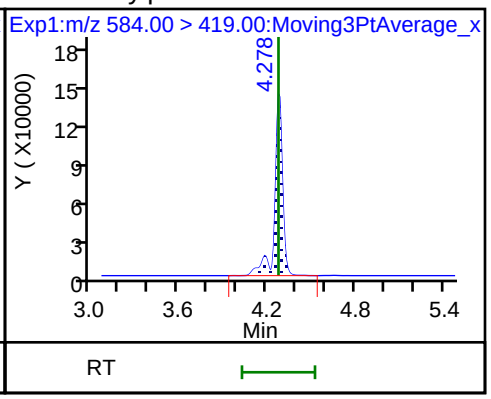
43 Perfluoroundecanoic acid



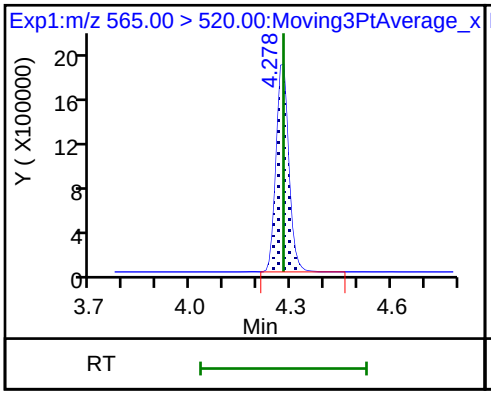
43 Perfluoroundecanoic acid



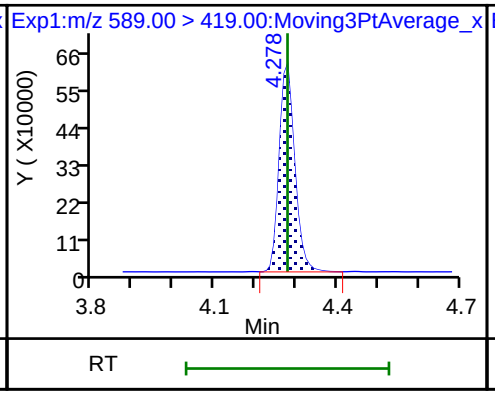
46 N-ethylperfluorooctanesulfonamidoa



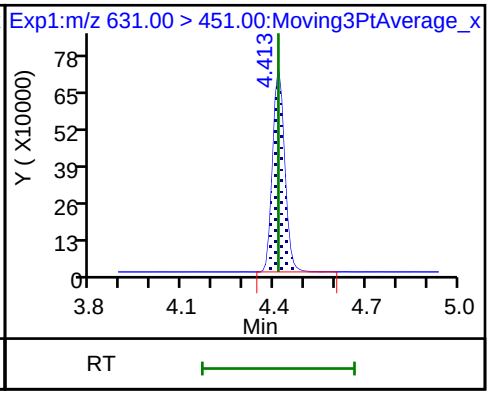
D 44 13C2 PFUnA



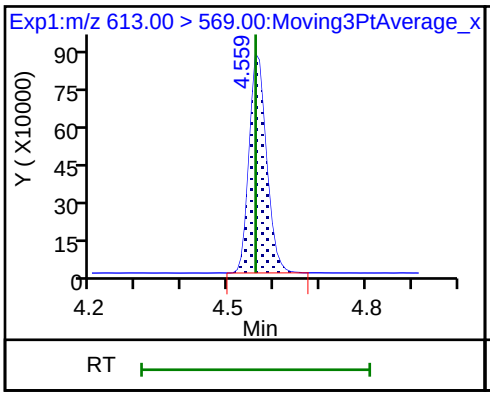
D 45 d5-NEtFOSAA



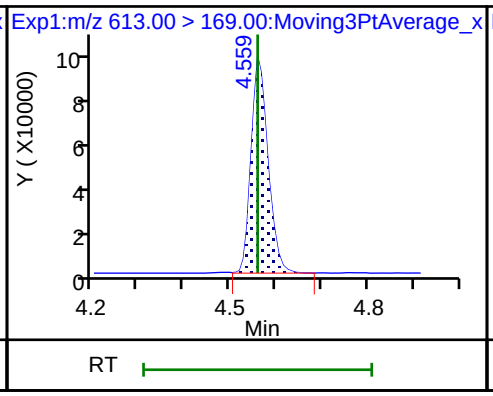
48 11-Chloroeicosafluoro-3-oxaundecan



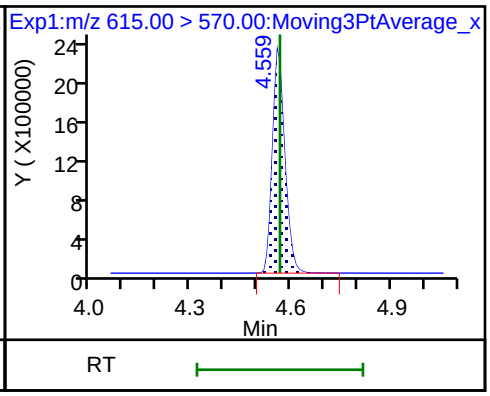
50 Perfluorododecanoic acid



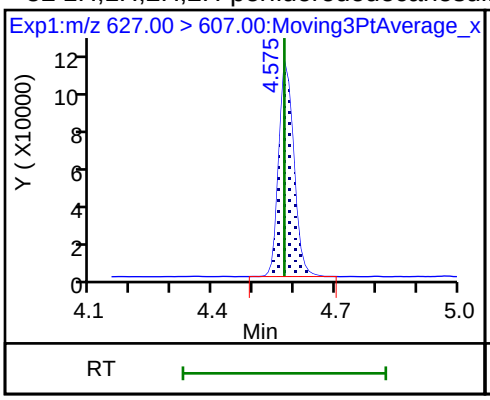
50 Perfluorododecanoic acid



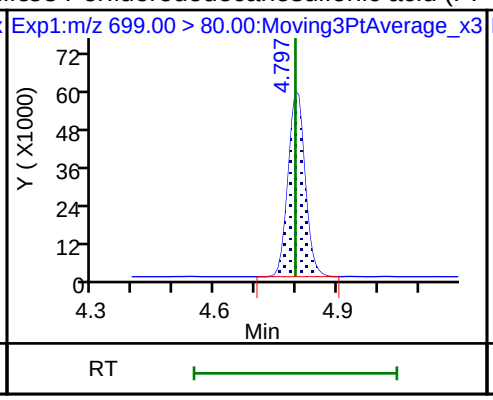
D 49 13C2 PFDoA



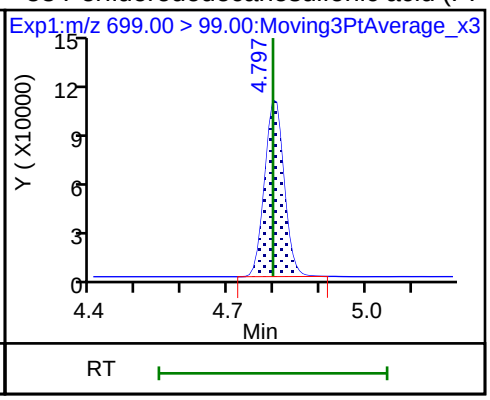
52 1H,1H,2H,2H-perfluorododecanesulfo



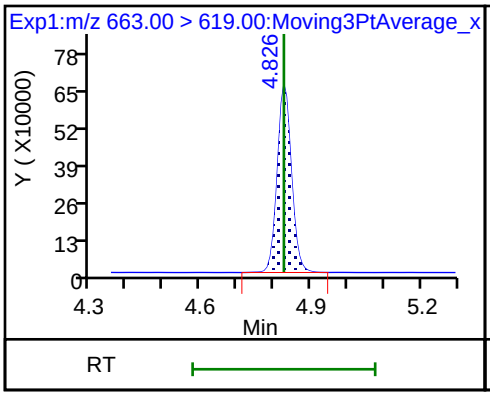
53 Perfluorododecanesulfonic acid (PF



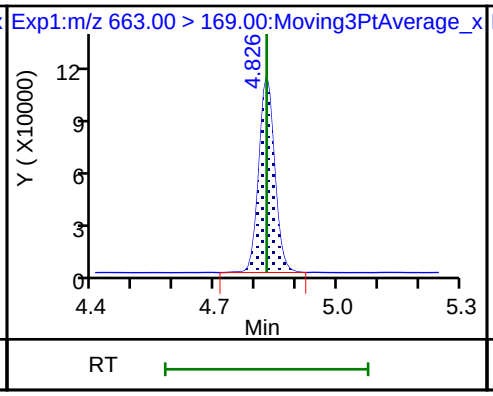
53 Perfluorododecanesulfonic acid (PF



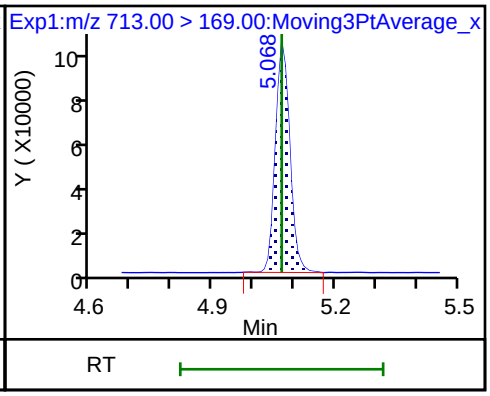
54 Perfluorotridecanoic acid



54 Perfluorotridecanoic acid



56 Perfluorotetradecanoic acid



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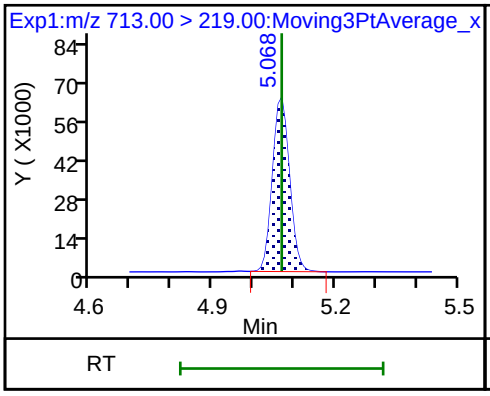
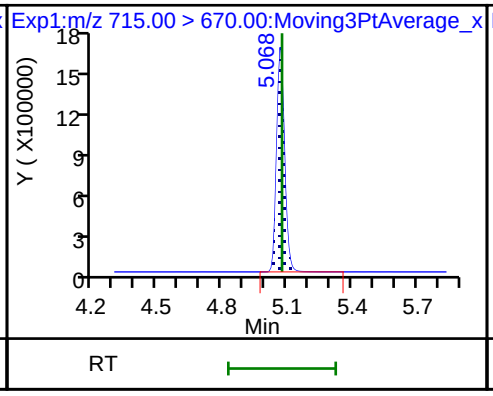
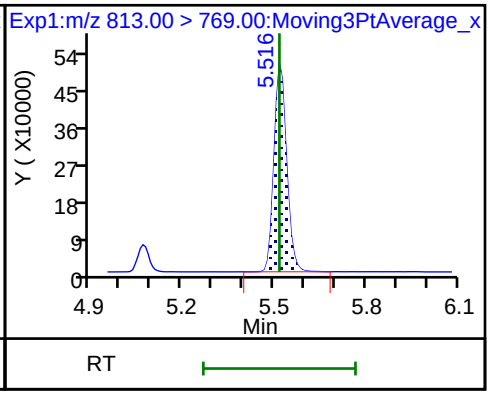


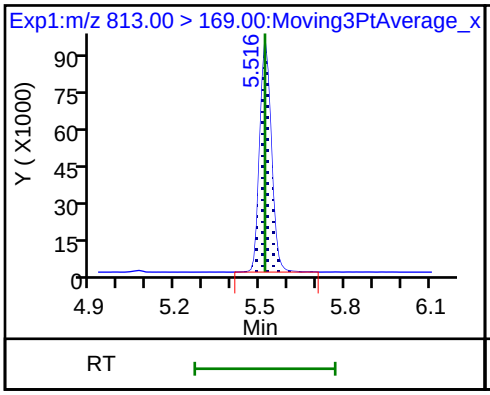
D 55 13C2 PFTeDA



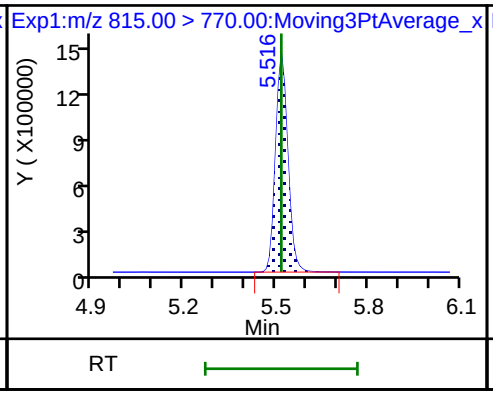
58 Perfluorohexadecanoic acid



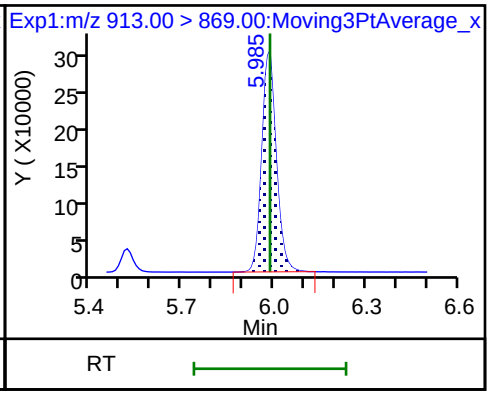
58 Perfluorohexadecanoic acid



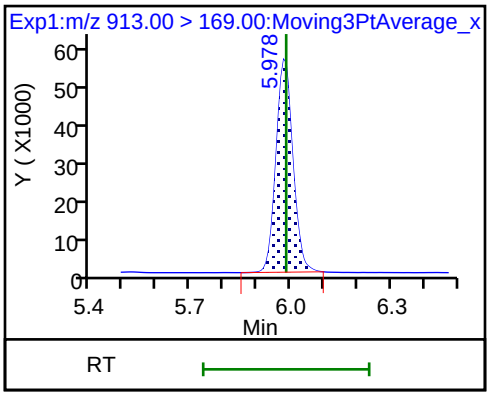
D 57 13C2 PFHxDA



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

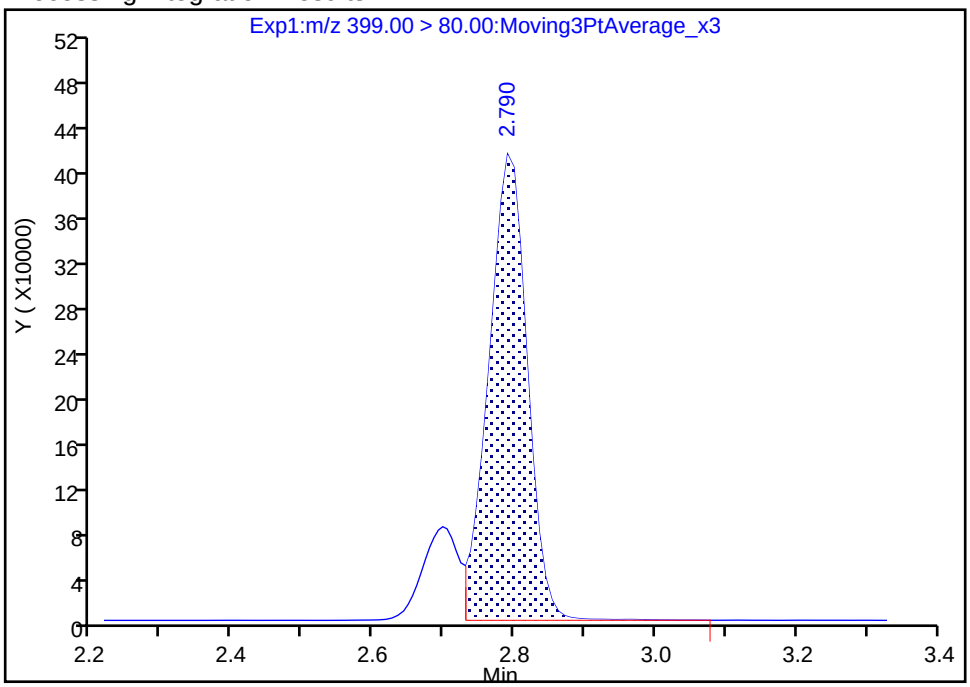
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73126.b\2019.03.12LLA_006.d
Injection Date: 12-Mar-2019 14:08:18 Instrument ID: A9
Lims ID: CCV L4
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 39 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

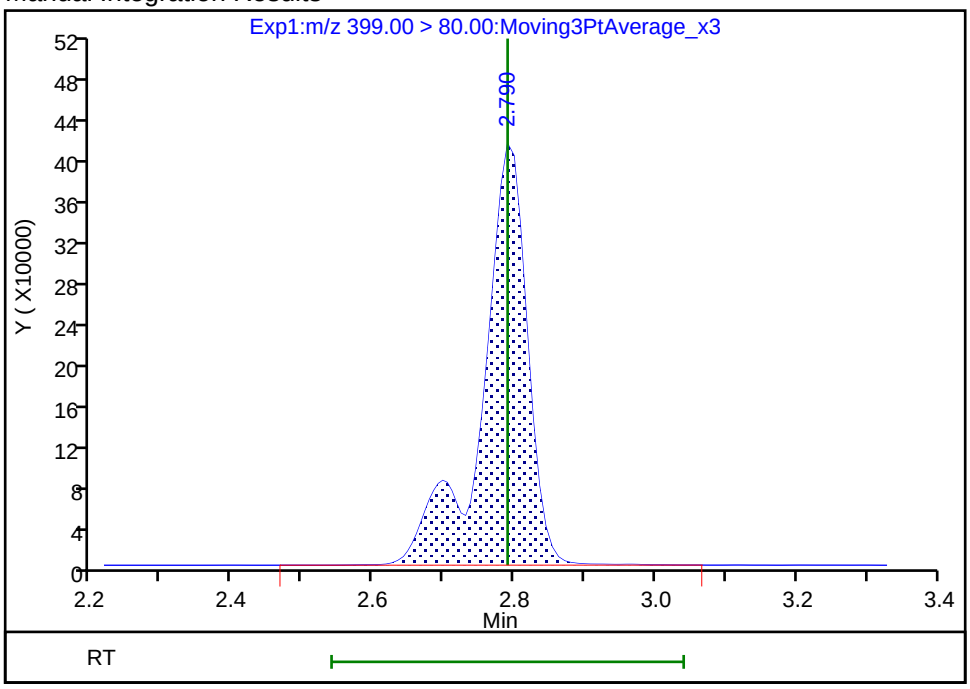
Processing Integration Results

RT: 2.79
Area: 1547485
Amount: 0.748759
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 1838104
Amount: 0.889377
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:20:06
Audit Action: Manually Integrated Audit Reason: Isomers

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281279/1 Calibration Date: 03/12/2019 19:23

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_044.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8745	0.8686		0.993	1.00	-0.7	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9858	1.002		1.02	1.00	1.7	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9198	0.998		0.959	0.884	8.5	50.0
4:2 FTS	AveID	2.451	2.490		0.949	0.934	1.6	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8691	0.8012		0.922	1.00	-7.8	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.4591	0.4751		0.971	0.938	3.5	50.0
HFPO-DA (GenX)	AveID	1.389	1.449		1.04	1.00	4.4	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.998	1.034		1.04	1.00	3.6	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.211	1.133		0.852	0.910	-6.4	40.0
DONA	AveID	2.192	2.526		1.09	0.942	15.2	50.0
6:2 FTS	AveID	1.971	2.187		1.05	0.948	11.0	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.9575	1.033		1.03	0.952	7.9	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.040	1.054		1.01	1.00	1.4	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9719	0.9296		0.888	0.928	-4.4	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9626	0.9424		0.979	1.00	-2.1	40.0
F-53B Major	AveID	0.7773	0.8802		1.06	0.932	13.2	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.5777	0.5691		0.946	0.960	-1.5	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	2.755	3.048		1.11	1.00	10.6	40.0
8:2 FTS	AveID	1.609	1.814		1.08	0.958	12.7	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.061	1.141		1.08	1.00	7.5	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7968	0.8081		1.01	1.00	1.4	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8587	0.9136		1.03	0.964	6.4	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7812	0.7769		0.995	1.00	-0.5	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7459	0.7916		1.06	1.00	6.1	40.0
F-53B Minor	AveID	1.062	1.006		0.892	0.942	-5.3	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9523	0.9815		1.03	1.00	3.1	40.0
10:2 FTS	AveID	0.9902	1.142		1.11	0.964	15.4	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0865	0.0889		0.995	0.968	2.8	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.7493	0.7716		1.03	1.00	3.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1759	0.1684		0.957	1.00	-4.3	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9181		1.05	1.00	4.8	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281279/1 Calibration Date: 03/12/2019 19:23

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_044.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.5118	0.6121		1.20	1.00	19.6	50.0
13C4 PFBA	Ave	0.8404	0.8246		2.45	2.50	-1.9	50.0
13C5-PFPeA DNU	Ave	0.7180	0.6788		2.36	2.50	-5.5	50.0
13C3 PFBS	Ave	1.131	1.019		2.10	2.33	-9.9	50.0
M2-4:2 FTS	Ave	0.0709	0.0637		2.10	2.34	-10.1	50.0
13C2 PFHxA	Ave	0.8046	0.8257		2.57	2.50	2.6	50.0
13C3 HFPO-DA	Ave	0.1085	0.1029		2.37	2.50	-5.2	50.0
13C4 PFHpA	Ave	0.995	0.9949		2.50	2.50	-0.0	50.0
18O2 PFHxS	Ave	0.6511	0.6302		2.29	2.37	-3.2	50.0
M2-6:2 FTS	Ave	0.0900	0.0820		2.17	2.38	-8.8	50.0
13C4 PFOA	Ave	0.9033	0.8921		2.47	2.50	-1.2	50.0
13C8 PFOA	Ave	0.7746	0.8082		2.55	2.45	4.3	50.0
13C8 PFOS	Ave	0.1746	0.1629		2.23	2.39	-6.7	50.0
13C4 PFOS	Ave	0.7608	0.7210		2.26	2.39	-5.2	50.0
13C5 PFNA	Ave	0.8455	0.8741		2.58	2.50	3.4	50.0
13C8 FOSA	Ave	0.4979	0.4764		2.39	2.50	-4.3	50.0
13C2 PFDA	Ave	0.8687	0.8761		2.52	2.50	0.8	50.0
M2-8:2 FTS	Ave	0.1021	0.0945		2.22	2.40	-7.5	50.0
d3-NMeFOSAA	Ave	0.2636	0.2802		2.66	2.50	6.3	50.0
13C2 PFUnA	Ave	0.7102	0.6911		2.43	2.50	-2.7	50.0
d5-NEtFOSAA	Ave	0.2245	0.2311		2.57	2.50	3.0	50.0
13C2 PFDoA	Ave	0.8024	0.8544		2.66	2.50	6.5	50.0
13C2 PFTeDA	Ave	0.5899	0.5790		2.45	2.50	-1.8	50.0
13C2 PFHxDA	Ave	0.5748	0.6348		2.76	2.50	10.4	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_044.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2019 19:23:58 ALS Bottle#: 39 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 13:04:19 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 13:04:19
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.705	1.704	0.001	0.532	5868713	2.45		98.1	32679	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.705	1.705	0.0	1.000	2038898	0.99		99.3	442	
D 3 13C5 PFPeA										
267.90 > 223.00	2.027	2.025	0.002	0.633	4831375	2.36		94.5	19517	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.027	2.027	0.0	1.000	1936803	1.02		102	167	
D 5 13C3 PFBS										
301.90 > 80.00	2.059	2.057	0.002	0.642	6746272	2.10		90.1	498832	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.070	2.070	0.0	1.006	2559148	0.9589	Target=1.00	108	5000	
298.90 > 99.00	2.059	2.070	-0.011	1.000	936135		2.73(2.05-3.82)		2196	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.348	2.345	0.003	0.733	423356	2.10		89.9	1251	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.348	2.348	0.0	1.000	421701	0.9491		102	3654	
D 9 13C2 PFHxA										
315.00 > 270.00	2.394	2.381	0.013	0.747	5876298	2.57		103	9717	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.394	2.394	0.0	1.000	1883280	0.9219	Target=1.00	92.2	599	
313.00 > 119.00	2.394	2.394	0.0	1.000	138890		13.56(9.33-17.33)		455	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.413	2.413	0.0	1.172	1293041	0.9706	Target=1.00	103	2938	
349.00 > 99.00	2.404	2.413	-0.009	1.168	634122		2.04(1.45-2.69)		2525	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.520	2.507	0.014	0.786	732158	2.37		94.8	2342	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.510	2.510	0.0	0.996	424483	1.04		104	333	
D 16 13C4 PFHpA										
367.00 > 322.00	2.791	2.781	0.010	0.871	7081013	2.50		99.9	5950	
D 17 18O2 PFHxS										
403.00 > 84.00	2.791	2.790	0.001	0.871	4242775	2.29		96.8	3878	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.791	2.791	0.0	1.000	2929946	1.04	Target=1.00	104	1299	
363.00 > 169.00	2.791	2.791	0.0	1.000	621343		4.72(3.00-5.57)		1823	
18 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.800	2.800	0.0	1.003	1849865	0.8516	Target=1.00	93.6	4068	M
399.00 > 99.00	2.791	2.800	-0.009	1.000	531241		3.48(2.29-4.25)		1462	
19 DONA										
377.00 > 251.00	2.836	2.836	0.0	0.792	4884249	1.09	Target=1.00	115	7376	
377.00 > 85.00	2.836	2.836	0.0	0.792	1895649		2.58(1.70-3.15)		2091	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.173	3.172	0.001	0.990	554418	2.17		91.2	2510	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.173	3.173	0.0	1.000	484000	1.05		111	833	
D 22 13C8 PFOA										
421.00 > 376.00	3.196	3.187	0.009	0.998	5631157	2.55		104	5491	
D 25 13C4 PFOA										
417.00 > 372.00	3.196	3.195	0.001	0.998	6349305	2.47		98.8	4326	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.196	3.196	0.0	0.892	2019145	1.03	Target=1.00	108	3357	
449.00 > 99.00	3.196	3.196	0.0	0.892	490787		4.11(2.83-5.25)		1352	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.204	3.204	0.0	1.002	2677115	1.01	Target=1.00	101	848	
413.00 > 169.00	3.196	3.204	-0.008	1.000	933006		2.87(1.36-4.08)		3283	
* 24 13C2 PFOA										
415.00 > 370.00	3.204	3.204	0.0		7117125	2.50			7162	
D 27 13C8 PFOS										
507.00 > 99.00	3.576	3.574	0.002	1.116	1108428	2.23		93.3	2732	
D 28 13C4 PFOS										
503.00 > 80.00	3.583	3.581	0.002	1.118	4905483	2.26		94.8	5744	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.583	3.583	0.0	1.000	1770563	0.8875	Target=1.00	95.6	4307	
499.00 > 99.00	3.583	3.583	0.0	1.000	442202		4.00(2.04-6.12)		2035	
D 31 13C5 PFNA										
468.00 > 423.00	3.590	3.589	0.001	1.121	6220928	2.58		103	11200	
30 Perfluorononanoic acid										
463.00 > 419.00	3.590	3.590	0.0	1.000	2344989	0.9790	Target=1.00	97.9	1120	
463.00 > 169.00	3.590	3.590	0.0	1.000	408916		5.73(3.91-7.26)		1008	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.788	3.788	0.0	1.057	1683839	1.06		113	2220	
D 33 13C8 FOSA										
506.00 > 78.00	3.937	3.927	0.010	1.229	3390915	2.39		95.7	5063	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.937	3.937	0.0	1.099	1121262	0.9457	Target=1.00	98.5	3738	
549.00 > 99.00	3.937	3.937	0.0	1.099	168188		6.67(4.35-8.07)		821	
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.937	3.937	0.0	1.000	4134141	1.11		111	3671	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.955	3.954	0.001	1.234	644218	2.22		92.5	2513	
D 36 13C2 PFDA										
515.00 > 470.00	3.955	3.954	0.001	1.234	6235291	2.52		101	7038	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.955	3.955	0.0	1.000	467333	1.08		113	2128	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.955	3.955	0.0	1.000	2846648	1.08	Target=1.00	108	2550	
513.00 > 169.00	3.955	3.955	0.0	1.000	186191		15.29(11.40-21.17)		636	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.113	4.112	0.001	1.284	1994397	2.66		106	3423	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.122	4.122	0.0	1.002	644648	1.01		101	166	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.260	4.260	0.0	1.189	1807571	1.03	Target=1.00	106	4644	
599.00 > 99.00	4.252	4.260	-0.008	1.187	357679		5.05(3.64-6.76)		1529	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.277	4.276	0.001	1.335	1644901	2.57		103	2305	
D 44 13C2 PFUnA										
565.00 > 520.00	4.277	4.276	0.001	1.335	4918481	2.43		97.3	5095	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.277	4.277	0.0	1.000	1528431	0.99	Target=1.00	99.5	1103	
563.00 > 169.00	4.277	4.277	0.0	1.000	156502		9.77(7.06-13.11)		517	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.286	4.286	0.0	1.002	520868	1.06		106	2088	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.413	4.413	0.0	1.232	1944316	0.8920		94.7	6069	
D 49 13C2 PFDoA										
615.00 > 570.00	4.567	4.565	0.001	1.425	6081102	2.66		106	10009	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.567	4.567	0.0	1.000	2387497	1.03	Target=1.00	103	1488	
613.00 > 169.00	4.567	4.567	0.0	1.000	266222		8.97(7.12-13.21)		1242	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.584	4.584	0.0	1.159	296203	1.11		115	963	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.805	4.805	0.0	1.341	176579	0.99	Target=1.00	103	1721	
699.00 > 99.00	4.805	4.805	0.0	1.341	317108		0.56(0.40-0.74)		2100	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.833	4.833	0.0	1.058	1876803	1.03	Target=1.00	103	1409	
663.00 > 169.00	4.833	4.833	0.0	1.058	309228		6.07(3.97-7.38)		2101	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.068	5.067	0.001	1.582	4120755	2.45		98.2	7108	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.076	5.076	0.0	1.002	277584	0.9573	Target=1.00	95.7	1318	
713.00 > 219.00	5.068	5.076	-0.008	1.000	188240		1.47(1.07-1.99)		992	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.516	5.515	0.001	1.722	4517834	2.76		110	8256	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.526	5.526	0.0	1.002	1659143	1.05	Target=1.00	105	148	
813.00 > 169.00	5.516	5.526	-0.010	1.000	309503		5.36(3.82-7.09)		1851	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	5.986	5.986	0.0	1.085	1106192	1.20	Target=1.00	120	295	
913.00 > 169.00	5.986	5.986	0.0	1.085	216642		5.11(3.36-6.24)		1300	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00011 Amount Added: 1.00 Units: mL

Report Date: 13-Mar-2019 13:04:21 Chrom Revision: 2.3 12-Mar-2019 09:55:20

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_044.d

Injection Date: 12-Mar-2019 19:23:58 Instrument ID: A9

Lims ID: CCV L4

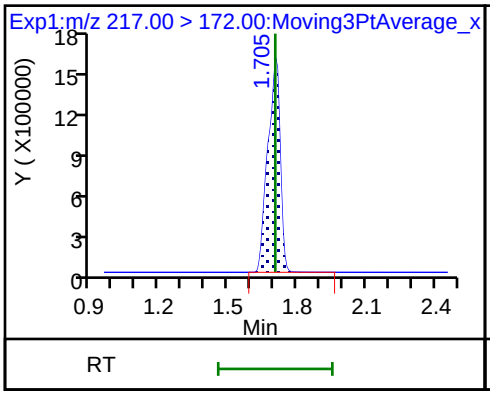
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 39 Worklist Smp#: 1

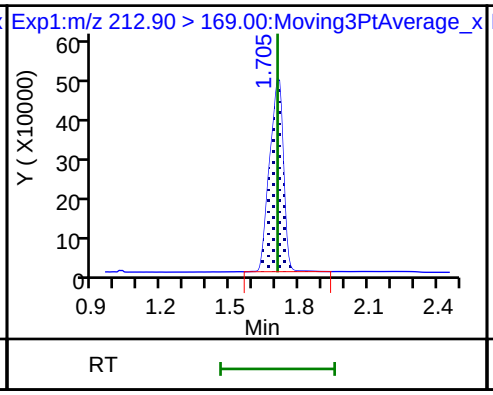
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

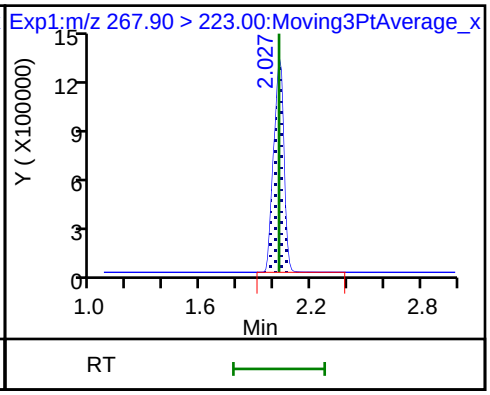
D 1 13C4 PFBA



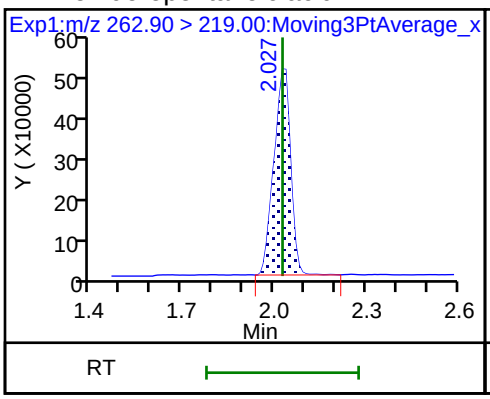
2 Perfluorobutanoic acid



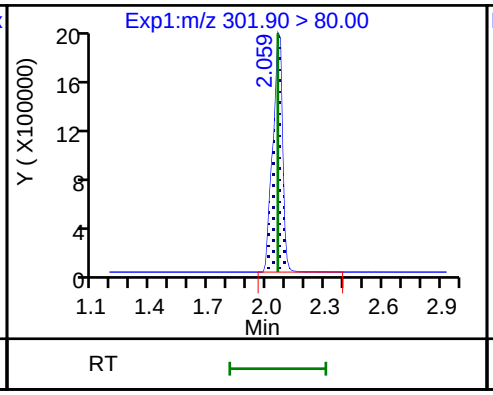
D 3 13C5 PFPeA



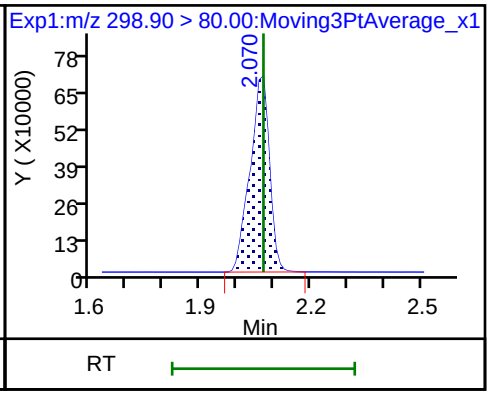
4 Perfluoropentanoic acid



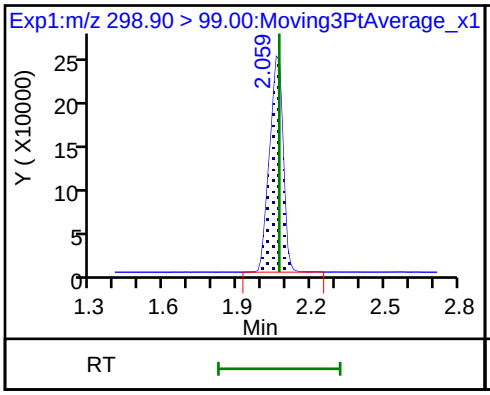
D 5 13C3 PFBS



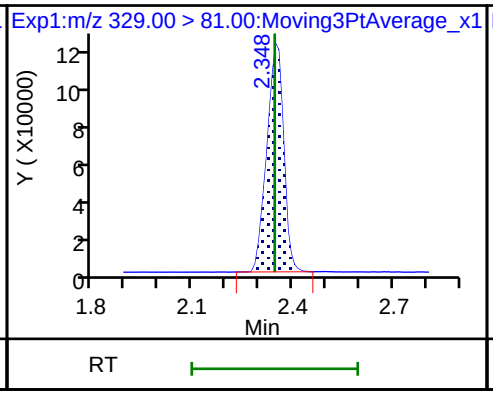
6 Perfluorobutanesulfonic acid



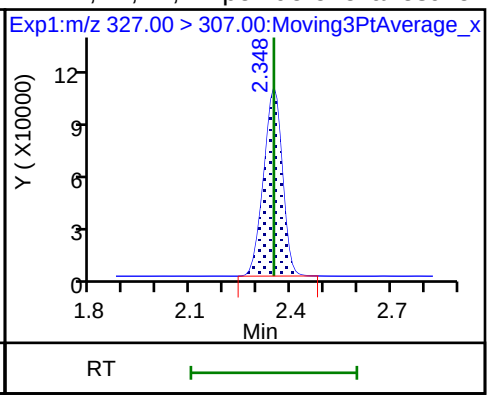
6 Perfluorobutanesulfonic acid



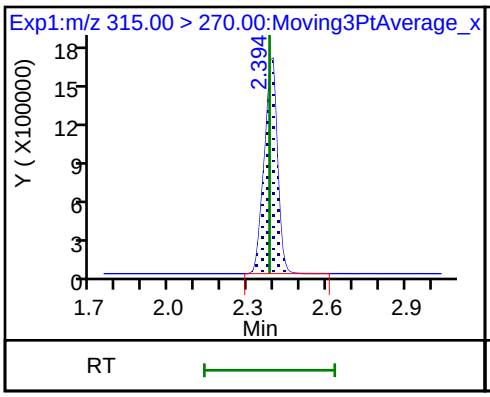
D 8 M2-4:2 FTS



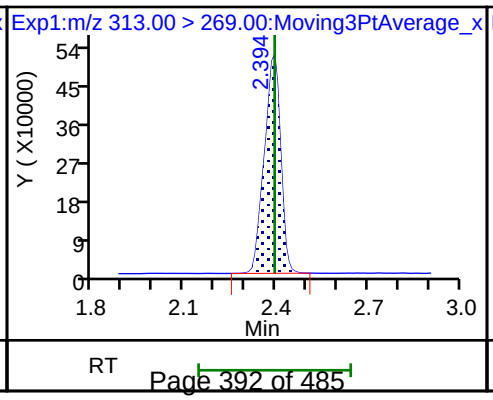
7 1H,1H,2H,2H-perfluorohexanesulfoni



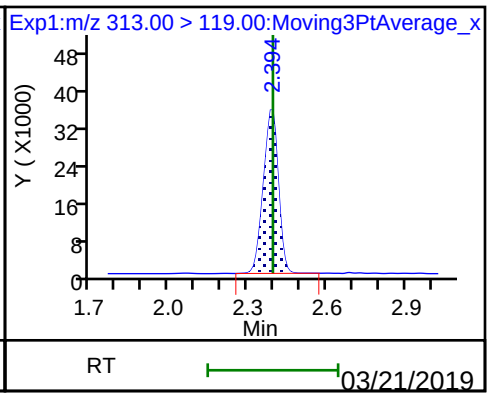
D 9 13C2 PFHxA



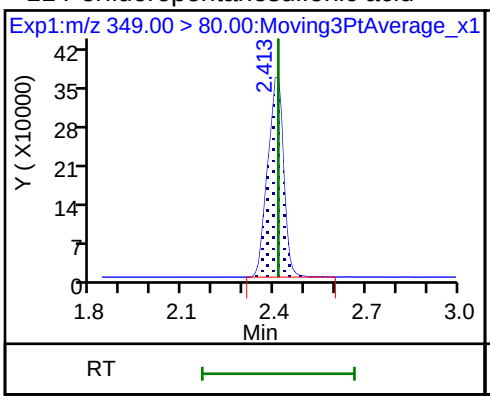
10 Perfluorohexanoic acid



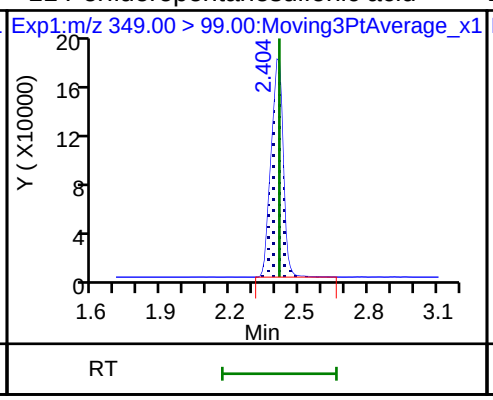
10 Perfluorohexanoic acid



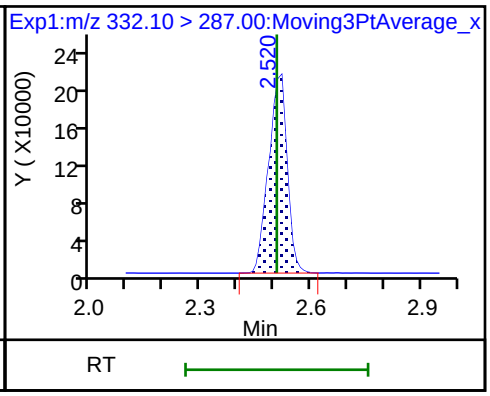
11 Perfluoropentanesulfonic acid



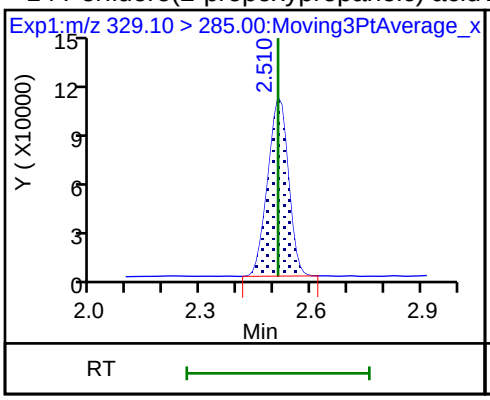
11 Perfluoropentanesulfonic acid



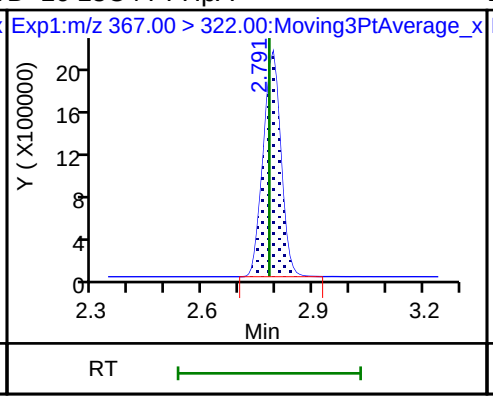
D 13 13C3 HFPO-DA



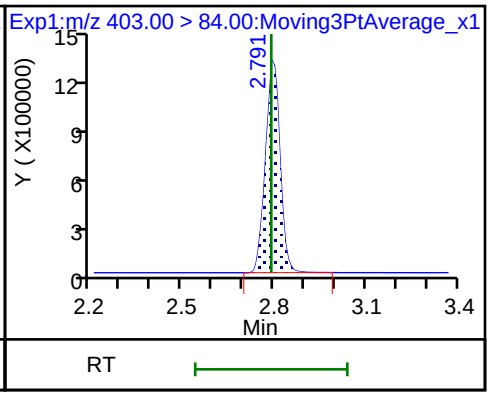
14 Perfluoro(2-propoxypropanoic) acid



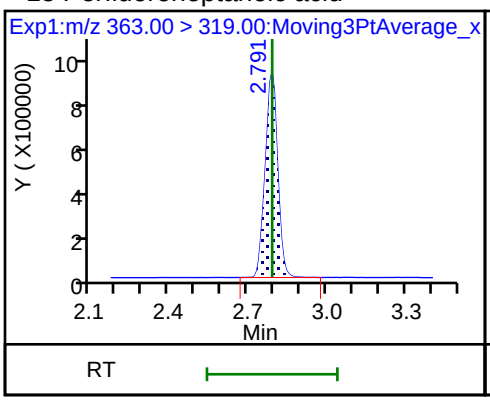
D 16 13C4 PFHpA



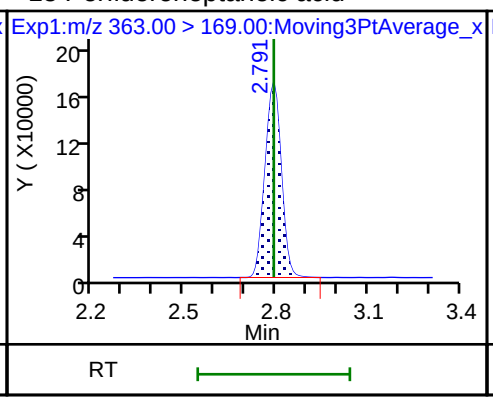
D 17 18O2 PFHxS



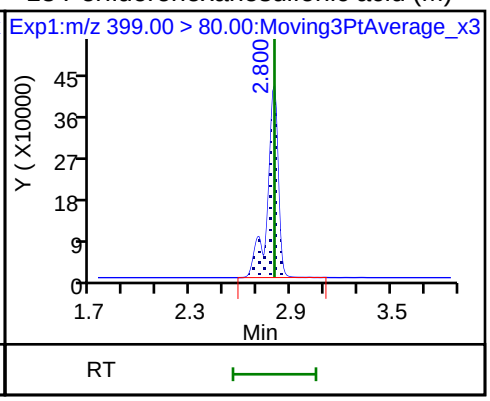
15 Perfluoroheptanoic acid



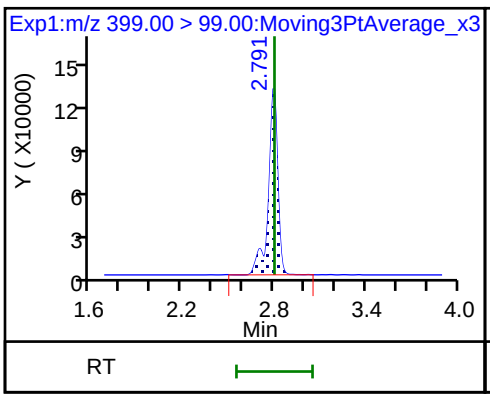
15 Perfluoroheptanoic acid



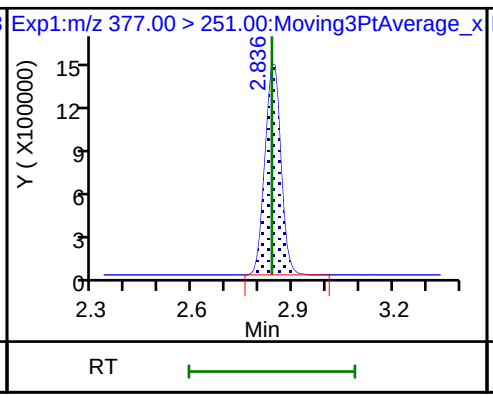
18 Perfluorohexanesulfonic acid (M)



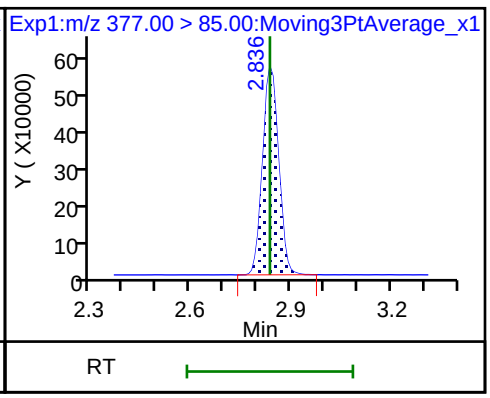
18 Perfluorohexanesulfonic acid



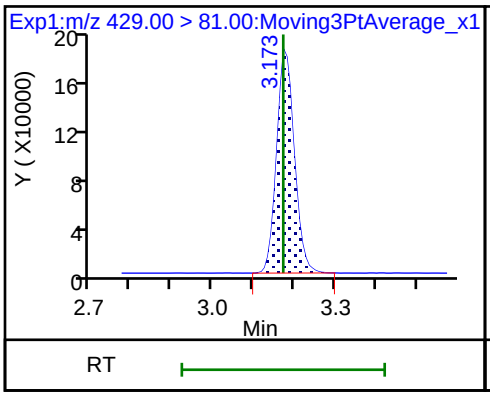
19 DONA



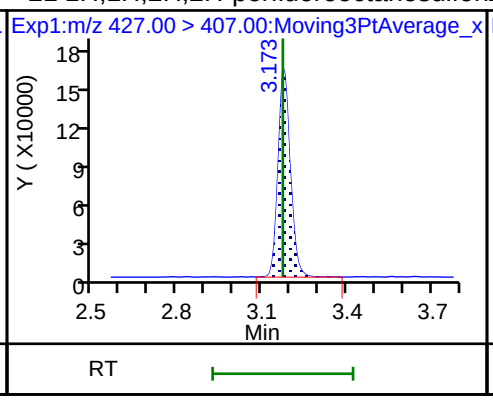
19 DONA



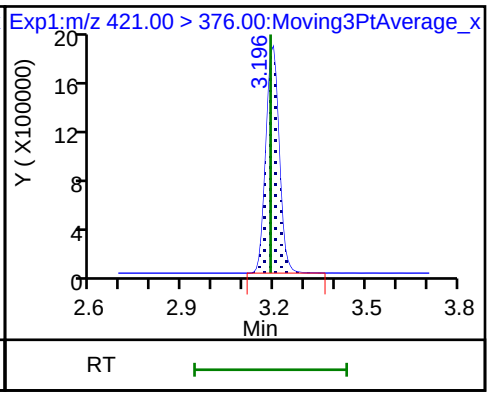
D 20 M2-6:2 FTS



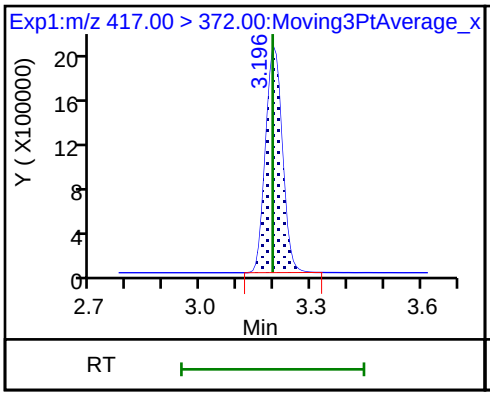
21 1H,1H,2H,2H-perfluorooctanesulfon



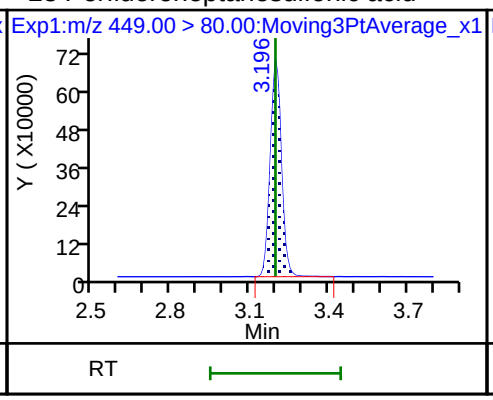
D 22 13C8 PFOA



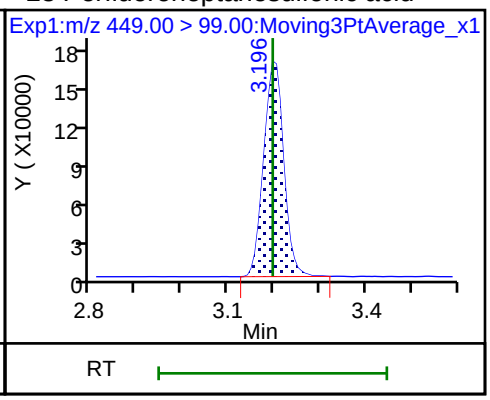
D 25 13C4 PFOA



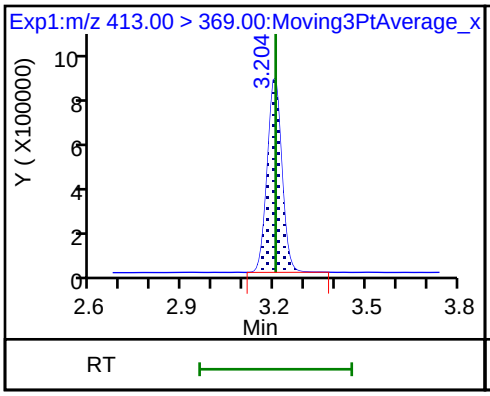
23 Perfluoroheptanesulfonic acid



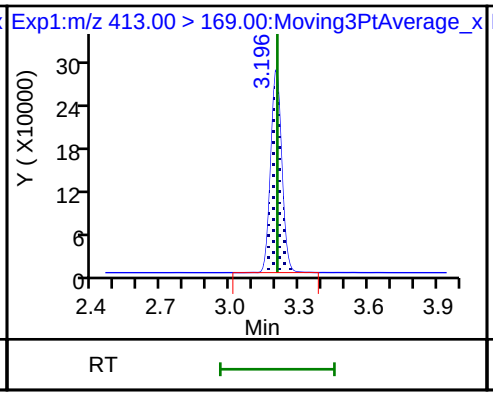
23 Perfluoroheptanesulfonic acid



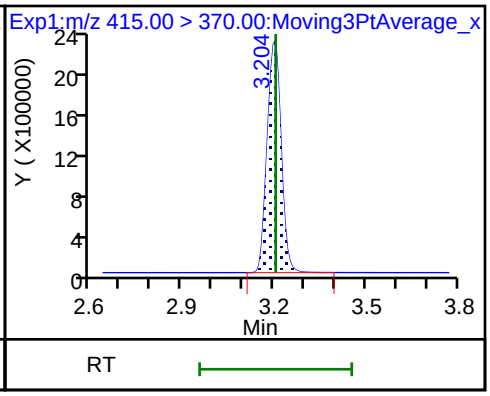
26 Perfluorooctanoic acid



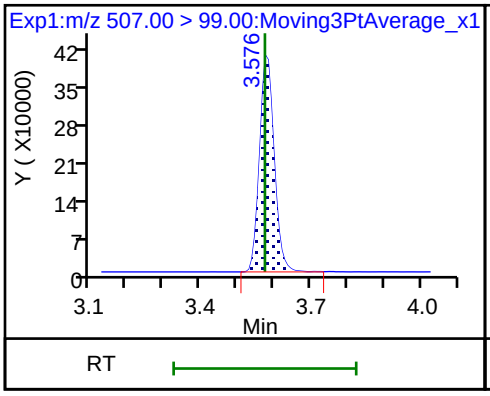
26 Perfluorooctanoic acid



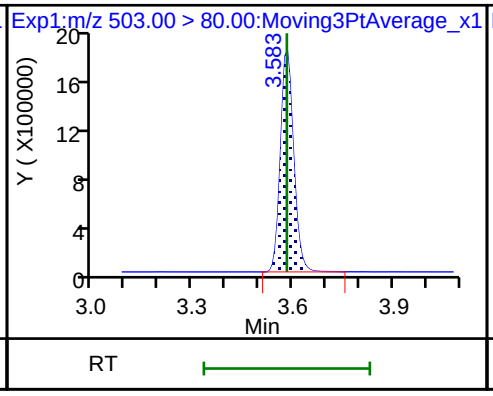
* 24 13C2 PFOA



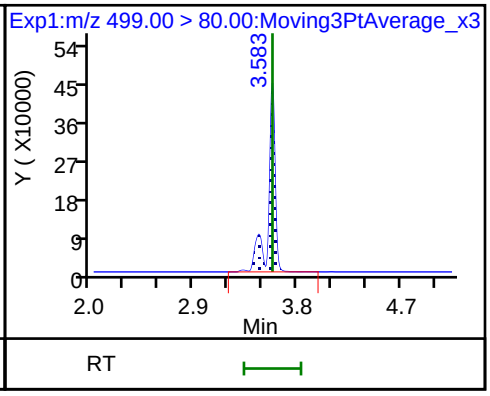
D 27 13C8 PFOS



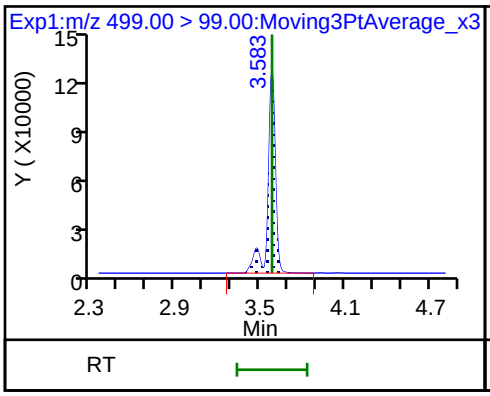
D 28 13C4 PFOS



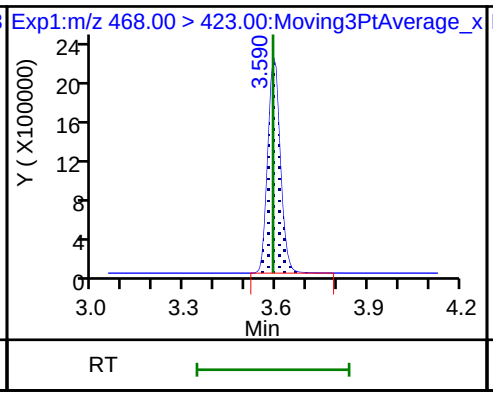
29 Perfluorooctanesulfonic acid



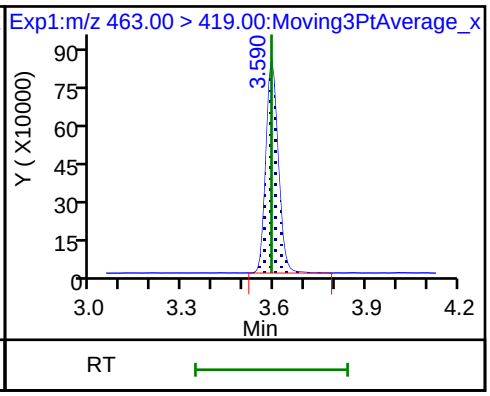
29 Perfluorooctanesulfonic acid



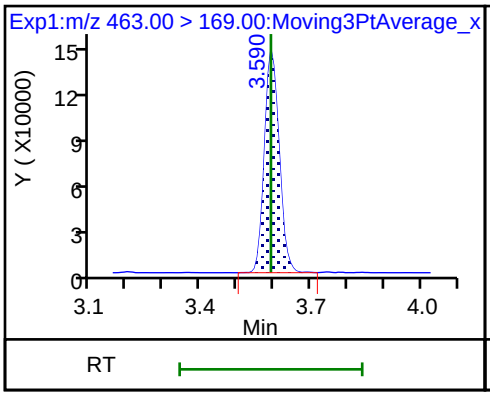
D 31 13C5 PFNA



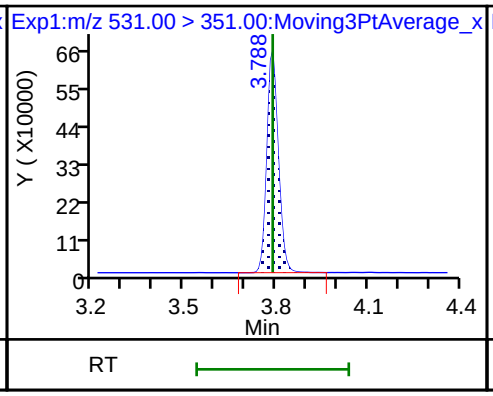
30 Perfluorononanoic acid



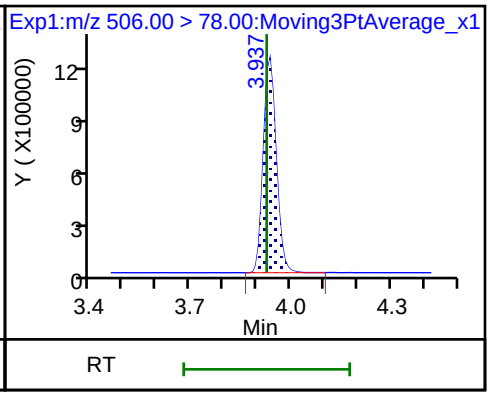
30 Perfluorononanoic acid



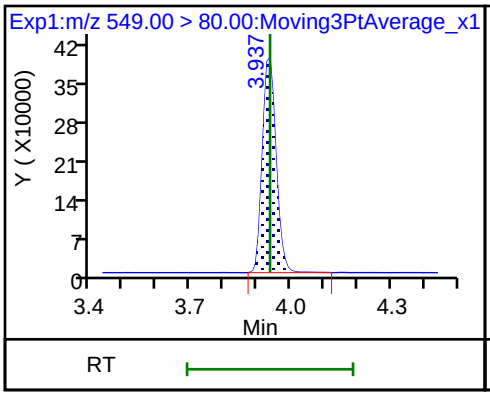
32 9-Chlorohexadecafluoro-3-oxanonane



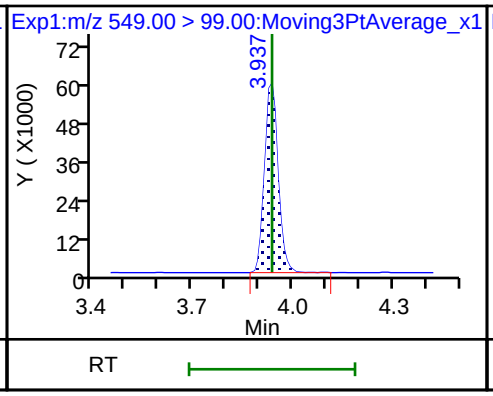
D 33 13C8 FOSA



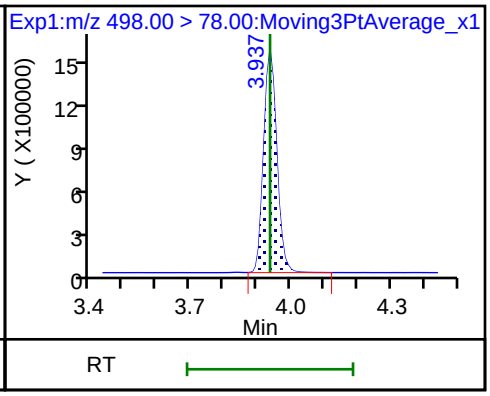
35 Perfluorononanesulfonic acid



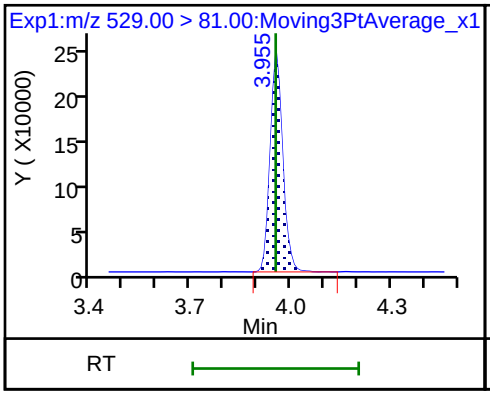
35 Perfluorononanesulfonic acid



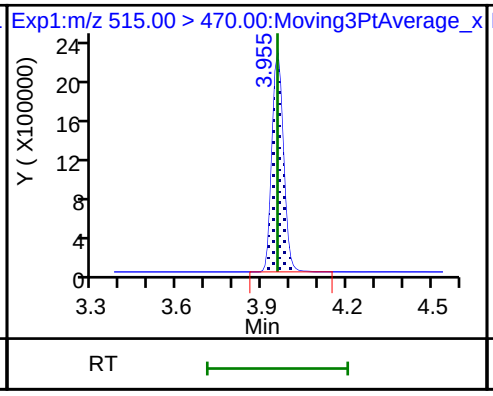
34 Perfluorooctanesulfonamide



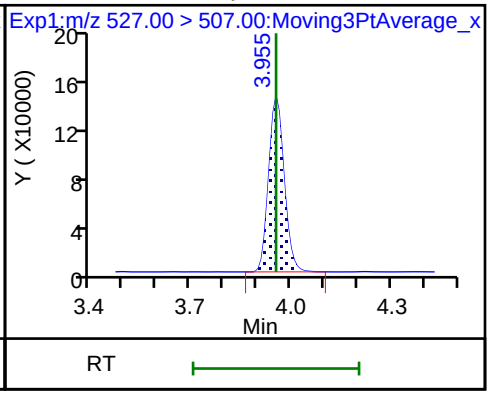
D 39 M2-8:2 FTS



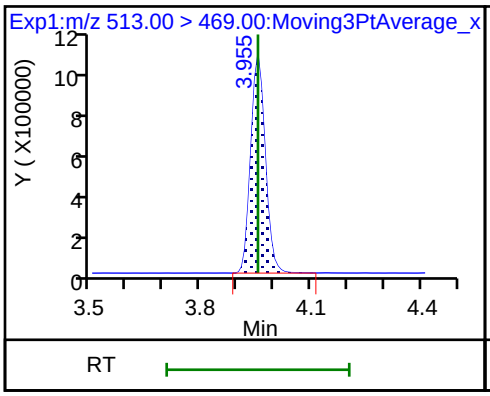
D 36 13C2 PFDA



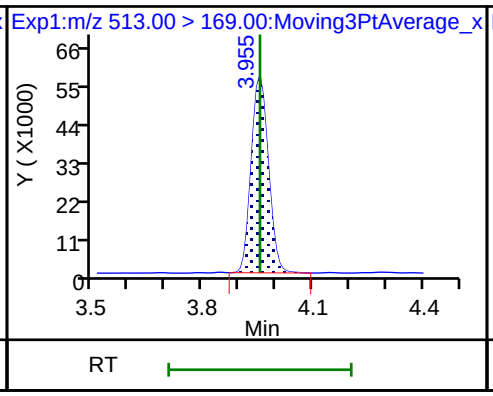
37 1H,1H,2H,2H-perfluorodecanesulfoni



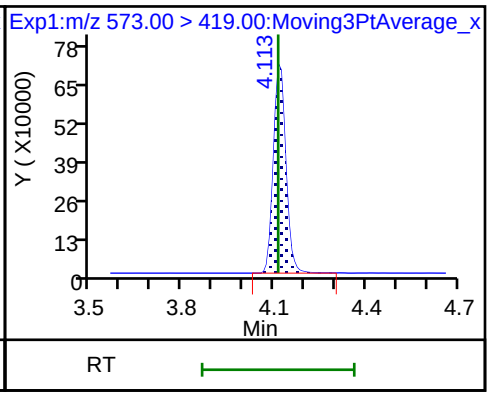
38 Perfluorodecanoic acid



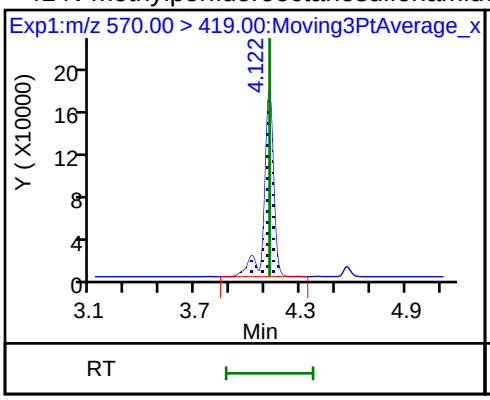
38 Perfluorodecanoic acid



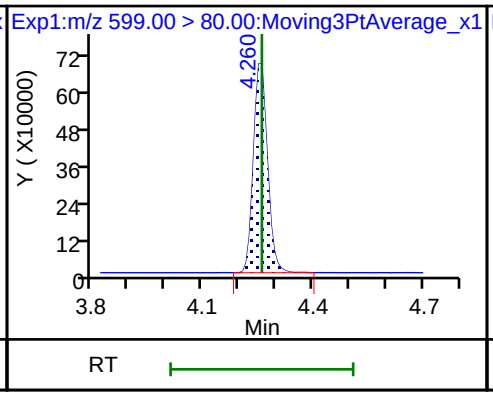
D 40 d3-NMeFOSAA



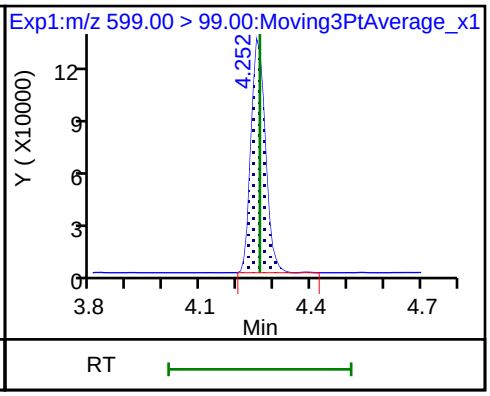
41 N-methylperfluorooctanesulfonamido



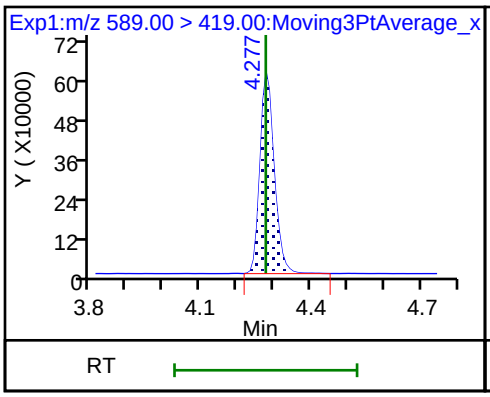
42 Perfluorodecanesulfonic acid



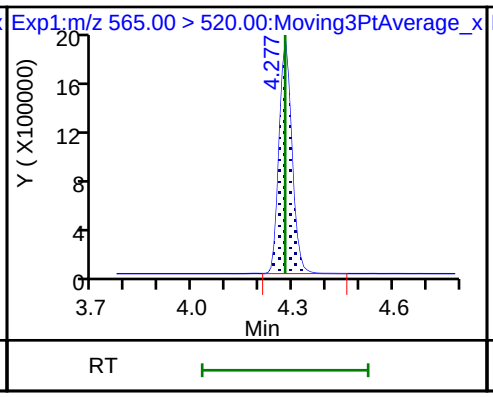
42 Perfluorodecanesulfonic acid



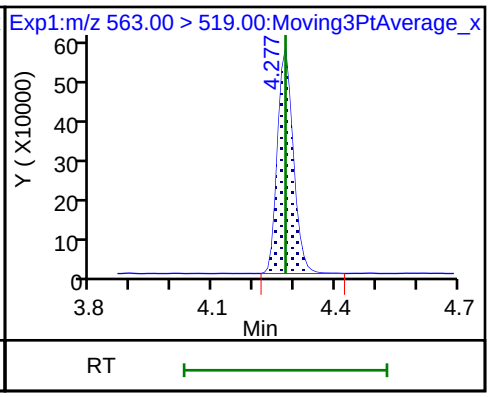
D 45 d5-NEtFOSAA



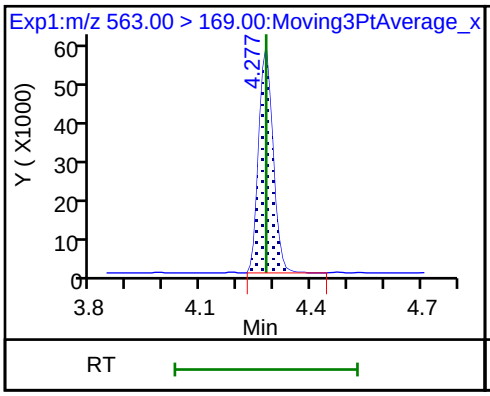
D 44 13C2 PFUnA



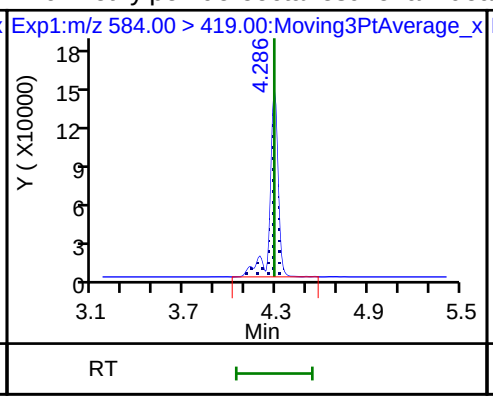
43 Perfluoroundecanoic acid



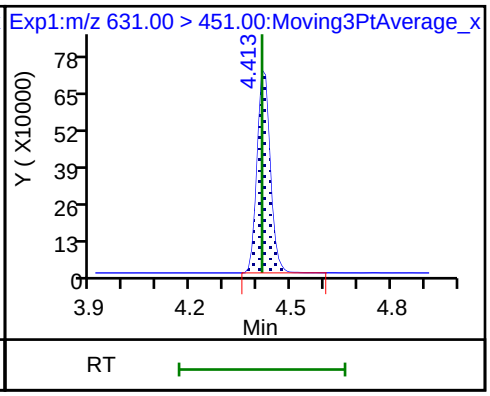
43 Perfluoroundecanoic acid



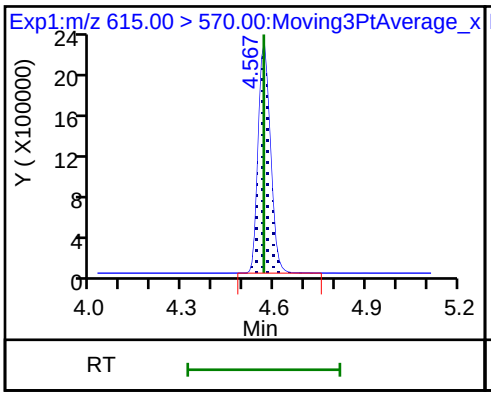
46 N-ethylperfluorooctanesulfonamidoa



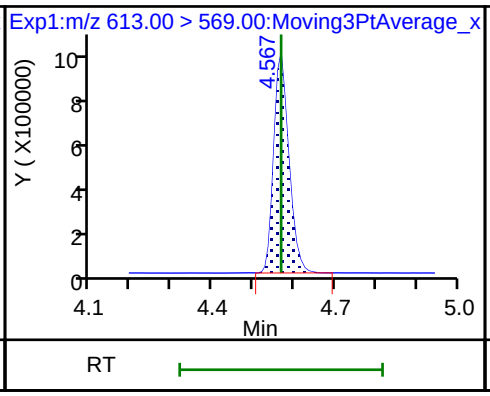
48 11-Chloroeicosafluoro-3-oxaundecan



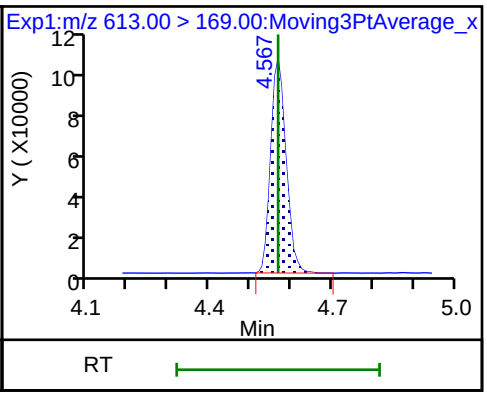
D 49 13C2 PFDoA



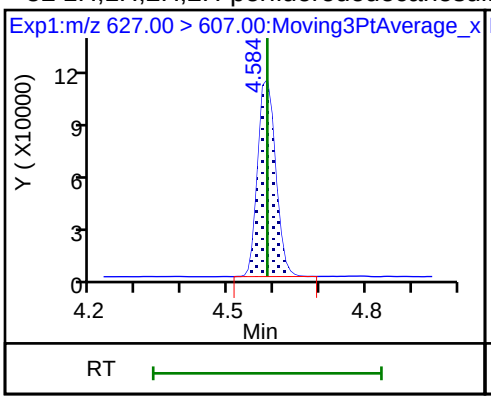
50 Perfluorododecanoic acid



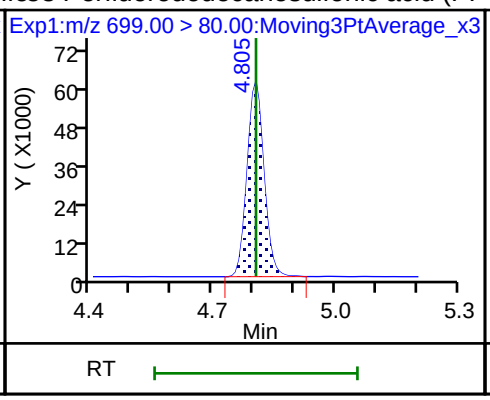
50 Perfluorododecanoic acid



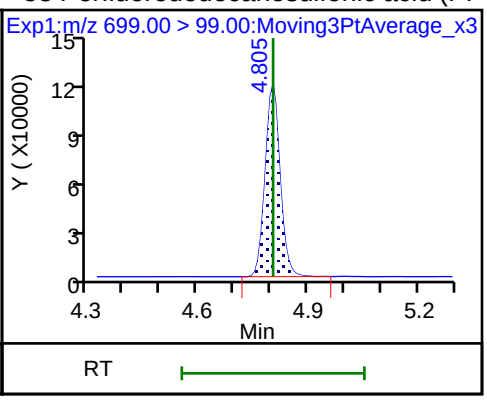
52 1H,1H,2H-perfluorododecanesulfo



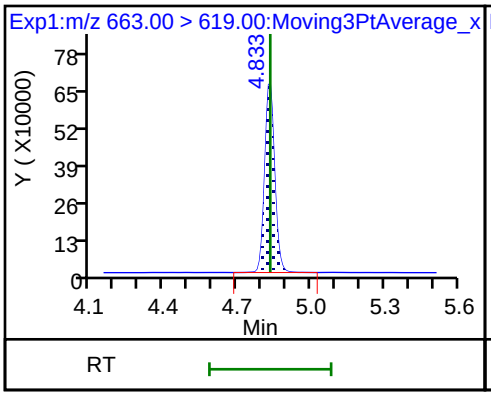
53 Perfluorododecanesulfonic acid (PF



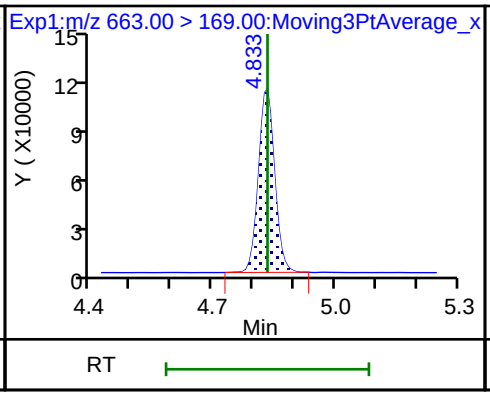
53 Perfluorododecanesulfonic acid (PF



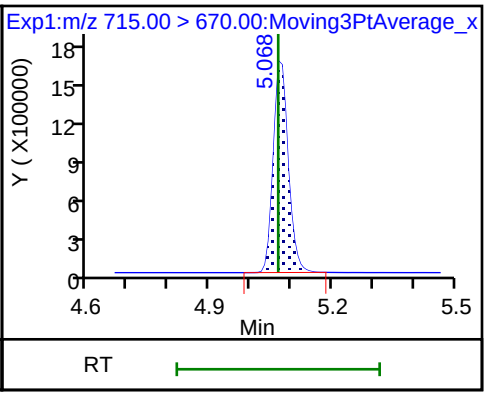
54 Perfluorotridecanoic acid



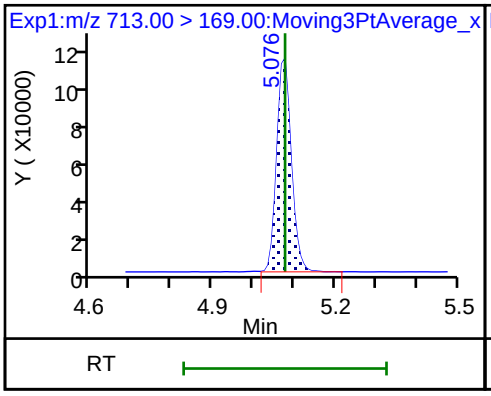
54 Perfluorotridecanoic acid



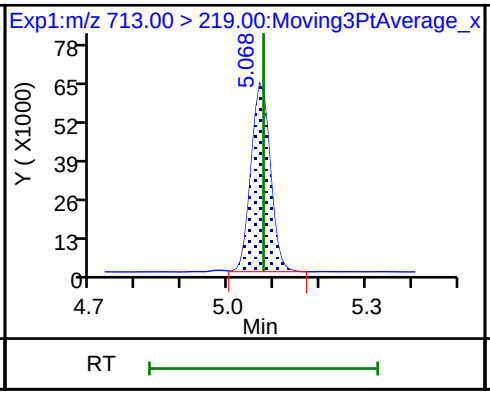
D 55 13C2 PFTeDA



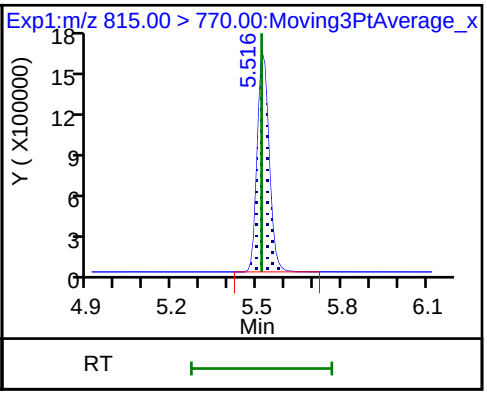
56 Perfluorotetradecanoic acid



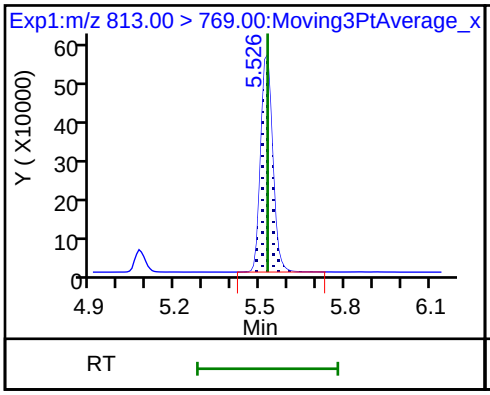
56 Perfluorotetradecanoic acid



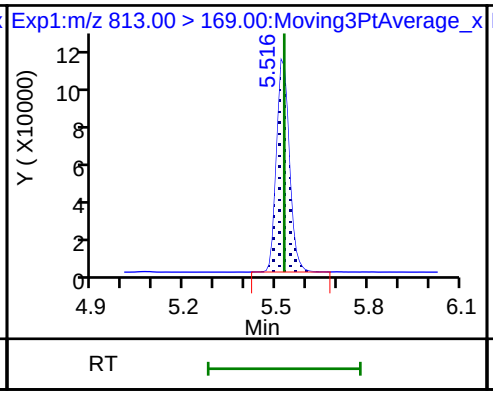
D 57 13C2 PFHxDA



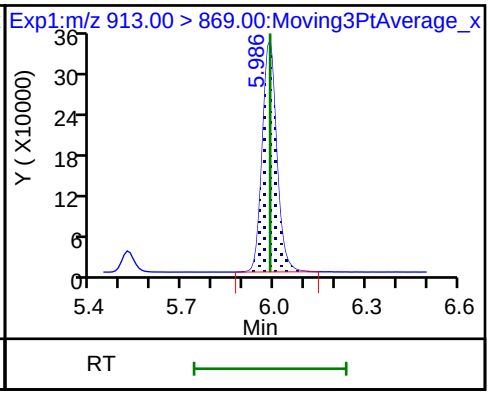
58 Perfluorohexadecanoic acid



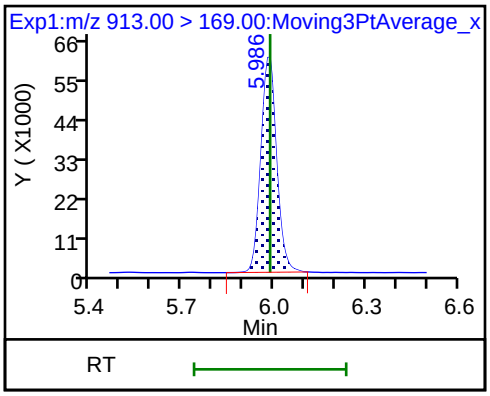
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

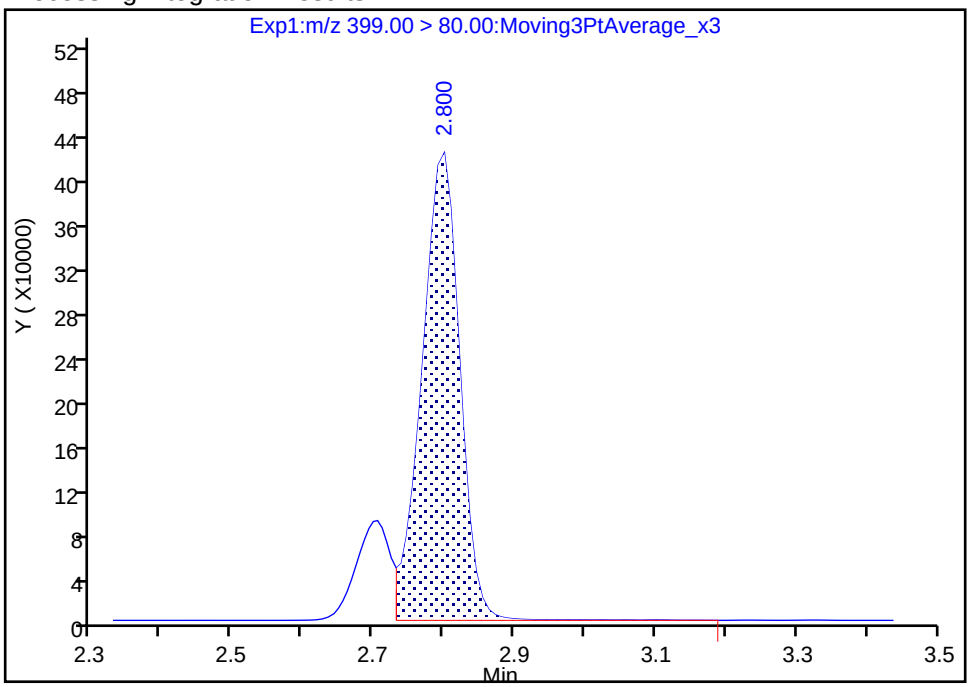
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_044.d
Injection Date: 12-Mar-2019 19:23:58 Instrument ID: A9
Lims ID: CCV L4
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 39 Worklist Smp#: 1
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

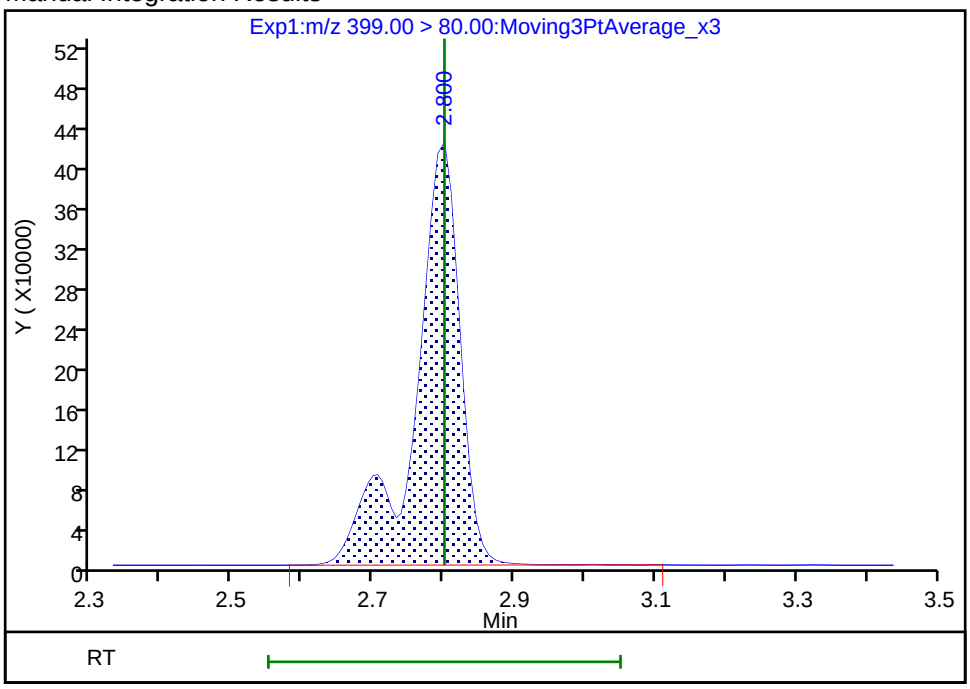
Processing Integration Results

RT: 2.80
Area: 1560110
Amount: 0.718175
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 1849865
Amount: 0.851560
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:04:09
Audit Action: Manually Integrated Audit Reason: Isomers

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281279/12 Calibration Date: 03/12/2019 20:46

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_055.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8745	0.8777		2.51	2.50	0.4	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9858	0.9331		2.37	2.50	-5.3	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9198	0.9419		2.26	2.21	2.4	50.0
4:2 FTS	AveID	2.451	2.458		2.34	2.34	0.3	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8691	0.8186		2.35	2.50	-5.8	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.4591	0.4993		2.55	2.35	8.7	50.0
HFPO-DA (GenX)	AveID	1.389	1.469		2.64	2.50	5.8	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.998	1.025		2.57	2.50	2.7	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.211	1.208		2.27	2.28	-0.3	40.0
DONA	AveID	2.192	2.351		2.53	2.36	7.2	50.0
6:2 FTS	AveID	1.971	2.232		2.68	2.37	13.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.9575	1.071		2.66	2.38	11.8	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.040	1.033		2.48	2.50	-0.6	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9719	1.023		2.44	2.32	5.3	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9626	0.9482		2.46	2.50	-1.5	40.0
F-53B Major	AveID	0.7773	0.8951		2.68	2.33	15.2	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.5777	0.5951		2.47	2.40	3.0	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	2.755	2.715		2.46	2.50	-1.5	40.0
8:2 FTS	AveID	1.609	1.590		2.37	2.40	-1.2	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.061	1.140		2.69	2.50	7.4	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7968	0.7544		2.37	2.50	-5.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8587	0.8838		2.48	2.41	2.9	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7812	0.7472		2.39	2.50	-4.4	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7459	0.8227		2.76	2.50	10.3	40.0
F-53B Minor	AveID	1.062	1.070		2.37	2.36	0.8	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9523	0.8783		2.31	2.50	-7.8	40.0
10:2 FTS	AveID	0.9902	1.068		2.60	2.41	7.8	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0865	0.0914		2.56	2.42	5.7	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.7493	0.6971		2.33	2.50	-7.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1759	0.1593		2.26	2.50	-9.5	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.8426		2.44	2.50	-2.2	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281279/12 Calibration Date: 03/12/2019 20:46

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_055.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.5118	0.6842		3.34	2.50	33.7	50.0
13C4 PFBA	Ave	0.8404	0.8042		2.39	2.50	-4.3	50.0
13C5-PFPeA DNU	Ave	0.7180	0.7035		2.45	2.50	-2.0	50.0
13C3 PFBS	Ave	1.131	1.026		2.11	2.33	-9.3	50.0
M2-4:2 FTS	Ave	0.0709	0.0598		1.97	2.34	-15.7	50.0
13C2 PFHxA	Ave	0.8046	0.7951		2.47	2.50	-1.2	50.0
13C3 HFPO-DA	Ave	0.1085	0.1022		2.35	2.50	-5.9	50.0
13C4 PFHpA	Ave	0.995	0.9430		2.37	2.50	-5.3	50.0
18O2 PFHxS	Ave	0.6511	0.6108		2.22	2.37	-6.2	50.0
M2-6:2 FTS	Ave	0.0900	0.0812		2.14	2.38	-9.7	50.0
13C8 PFOA	Ave	0.7746	0.7681		2.43	2.45	-0.8	50.0
13C4 PFOA	Ave	0.9033	0.9166		2.54	2.50	1.5	50.0
13C8 PFOS	Ave	0.1746	0.1609		2.20	2.39	-7.8	50.0
13C4 PFOS	Ave	0.7608	0.6989		2.20	2.39	-8.1	50.0
13C5 PFNA	Ave	0.8455	0.8042		2.38	2.50	-4.9	50.0
13C8 FOSA	Ave	0.4979	0.4831		2.43	2.50	-3.0	50.0
13C2 PFDA	Ave	0.8687	0.7974		2.29	2.50	-8.2	50.0
M2-8:2 FTS	Ave	0.1021	0.0971		2.28	2.40	-4.9	50.0
d3-NMeFOSAA	Ave	0.2636	0.2882		2.73	2.50	9.3	50.0
13C2 PFUnA	Ave	0.7102	0.6839		2.41	2.50	-3.7	50.0
d5-NEtFOSAA	Ave	0.2245	0.2306		2.57	2.50	2.7	50.0
13C2 PFDoA	Ave	0.8024	0.8982		2.80	2.50	11.9	50.0
13C2 PFTeDA	Ave	0.5899	0.6159		2.61	2.50	4.4	50.0
13C2 PFHxDA	Ave	0.5748	0.6365		2.77	2.50	10.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_055.d
Lims ID: CCV L5
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2019 20:46:35 ALS Bottle#: 40 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L5
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 13:44:20 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 13:44:20
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.704	1.704	0.0	0.533	5918697	2.39		95.7	32543	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.704	1.705	-0.001	1.000	5194934	2.51		100	536	
D 3 13C5 PFPeA										
267.90 > 223.00	2.026	2.025	0.001	0.634	5177275	2.45		98.0	15340	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.026	2.027	-0.001	1.000	4831126	2.37		94.7	409	
D 5 13C3 PFBS										
301.90 > 80.00	2.069	2.057	0.012	0.647	7022682	2.11		90.7	14950	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.058	2.070	-0.012	0.994	6287154	2.26	Target=1.00	102	12370	
298.90 > 99.00	2.058	2.070	-0.012	0.994	2368582		2.65(2.05-3.82)		4856	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.342	2.345	-0.003	0.733	410716	1.97		84.3	985	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.342	2.348	-0.006	1.000	1009426	2.34		100	6844	
D 9 13C2 PFHxA										
315.00 > 270.00	2.392	2.381	0.011	0.748	5851609	2.47		98.8	12419	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.392	2.394	-0.002	1.000	4789873	2.35	Target=1.00	94.2	1462	
313.00 > 119.00	2.392	2.394	-0.002	1.000	356181		13.45(9.33-17.33)		1430	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.411	2.413	-0.002	1.165	3536386	2.55	Target=1.00	109	4040	
349.00 > 99.00	2.401	2.413	-0.012	1.161	1677522		2.11(1.45-2.69)		4073	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.518	2.507	0.012	0.788	751780	2.35		94.1	3500	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.508	2.510	-0.002	0.996	1104186	2.64		106	806	
D 16 13C4 PFHpA										
367.00 > 322.00	2.782	2.781	0.001	0.870	6940009	2.37		94.7	7873	
D 17 18O2 PFHxS										
403.00 > 84.00	2.800	2.790	0.010	0.876	4252721	2.22		93.8	4260	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.791	2.791	0.0	1.003	7113048	2.57	Target=1.00	103	3233	
363.00 > 169.00	2.791	2.791	0.0	1.003	1514197		4.70(3.00-5.57)		4172	
18 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.791	2.800	-0.009	0.997	4940156	2.27	Target=1.00	99.7	3328	
399.00 > 99.00	2.791	2.800	-0.009	0.997	1360689		3.63(2.29-4.25)		2268	
19 DONA										
377.00 > 251.00	2.836	2.836	0.0	0.792	11393209	2.53	Target=1.00	107	8417	
377.00 > 85.00	2.836	2.836	0.0	0.792	4933165		2.31(1.70-3.15)		6332	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.173	3.172	0.001	0.993	567928	2.14		90.3	1877	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.180	3.173	0.007	1.002	1264738	2.68		113	1802	
D 22 13C8 PFOA										
421.00 > 376.00	3.188	3.187	0.001	0.998	5534592	2.43		99.2	4555	
D 25 13C4 PFOA										
417.00 > 372.00	3.196	3.195	0.001	1.000	6745758	2.54		101	5735	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.196	3.196	0.0	0.892	5242653	2.66	Target=1.00	112	3599	
449.00 > 99.00	3.196	3.196	0.0	0.892	1314618		3.99(2.83-5.25)		3289	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.196	3.204	-0.008	1.000	6967942	2.48	Target=1.00	99.4	728	
413.00 > 169.00	3.196	3.204	-0.008	1.000	2535094		2.75(1.36-4.08)		680	
* 24 13C2 PFOA										
415.00 > 370.00	3.196	3.204	-0.008		7359866	2.50			8014	
D 27 13C8 PFOS										
507.00 > 99.00	3.575	3.574	0.001	1.119	1131958	2.20		92.2	4052	
D 28 13C4 PFOS										
503.00 > 80.00	3.583	3.581	0.002	1.121	4917660	2.20		91.9	4418	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.583	3.583	0.0	1.000	4884276	2.44	Target=1.00	105	3670	
499.00 > 99.00	3.583	3.583	0.0	1.000	1151032		4.24(2.04-6.12)		6547	
D 31 13C5 PFNA										
468.00 > 423.00	3.590	3.589	0.001	1.123	5918420	2.38		95.1	6527	
30 Perfluorononanoic acid										
463.00 > 419.00	3.590	3.590	0.0	1.000	5611565	2.46	Target=1.00	98.5	2168	
463.00 > 169.00	3.590	3.590	0.0	1.000	1088079		5.16(3.91-7.26)		3505	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.781	3.788	-0.007	1.055	4291483	2.68		115	3485	
D 33 13C8 FOSA										
506.00 > 78.00	3.936	3.927	0.009	1.232	3555255	2.43		97.0	5205	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.936	3.937	-0.001	1.099	2938712	2.47	Target=1.00	103	5093	
549.00 > 99.00	3.936	3.937	-0.001	1.099	452972		6.49(4.35-8.07)		1060	
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.936	3.937	-0.001	1.000	9653903	2.46		98.5	3640	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.954	3.954	0.0	1.237	684841	2.28		95.1	2767	
D 36 13C2 PFDA										
515.00 > 470.00	3.954	3.954	0.0	1.237	5868532	2.29		91.8	7505	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.954	3.955	-0.001	1.000	1089115	2.37		98.8	4116	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.954	3.955	-0.001	1.000	6690880	2.69	Target=1.00	107	4609	
513.00 > 169.00	3.954	3.955	-0.001	1.000	453884		14.74(11.40-21.17)		1741	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.113	4.112	0.001	1.287	2120955	2.73		109	2799	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.122	4.122	0.0	1.002	1600033	2.37		94.7	267	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.251	4.260	-0.009	1.187	4382775	2.48	Target=1.00	103	4734	
599.00 > 99.00	4.251	4.260	-0.009	1.187	900599		4.87(3.64-6.76)		3135	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.277	4.276	0.001	1.338	1696871	2.57		103	2629	
D 44 13C2 PFUnA										
565.00 > 520.00	4.277	4.276	0.001	1.338	5033668	2.41		96.3	3918	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.277	4.277	0.0	1.000	3761050	2.39	Target=1.00	95.6	2126	
563.00 > 169.00	4.277	4.277	0.0	1.000	392541		9.58(7.06-13.11)		1147	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.286	4.286	0.0	1.002	1396087	2.76		110	5156	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.412	4.413	-0.001	1.232	5186732	2.37		101	6340	
D 49 13C2 PFDoA										
615.00 > 570.00	4.558	4.565	-0.007	1.426	6610488	2.80		112	9286	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.566	4.567	0.0	1.002	5806155	2.31	Target=1.00	92.2	2795	
613.00 > 169.00	4.566	4.567	0.0	1.002	623611		9.31(7.12-13.21)		1963	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.574	4.584	-0.010	1.157	735917	2.60		108	2005	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.797	4.805	-0.008	1.339	455329	2.56	Target=1.00	106	2565	
699.00 > 99.00	4.797	4.805	-0.008	1.339	873113		0.52(0.40-0.74)		4297	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.826	4.833	-0.007	1.059	4607838	2.33	Target=1.00	93.0	2689	
663.00 > 169.00	4.826	4.833	-0.007	1.059	793075		5.81(3.97-7.38)		4939	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.068	5.067	0.001	1.586	4532596	2.61		104	14384	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.068	5.076	-0.008	1.000	721823	2.26	Target=1.00	90.5	3624	
713.00 > 219.00	5.068	5.076	-0.008	1.000	475316		1.52(1.07-1.99)		2339	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.516	5.515	0.001	1.726	4684502	2.77		111	8448	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.516	5.526	-0.010	1.000	3947202	2.44	Target=1.00	97.8	336	
813.00 > 169.00	5.516	5.526	-0.010	1.000	778912		5.07(3.82-7.09)		3348	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	5.978	5.986	-0.008	1.084	3204891	3.34	Target=1.00	134	690	
913.00 > 169.00	5.978	5.986	-0.008	1.084	627173		5.11(3.36-6.24)		2300	

Reagents:

LCPFC_LL5_00011 Amount Added: 1.00 Units: mL

Report Date: 13-Mar-2019 13:44:21 Chrom Revision: 2.3 12-Mar-2019 09:55:20

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_055.d

Injection Date: 12-Mar-2019 20:46:35 Instrument ID: A9

Lims ID: CCV L5

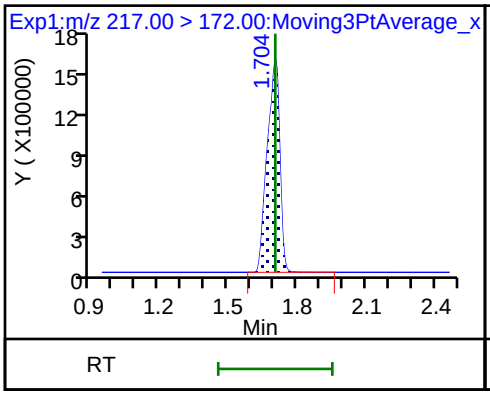
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 40 Worklist Smp#: 12

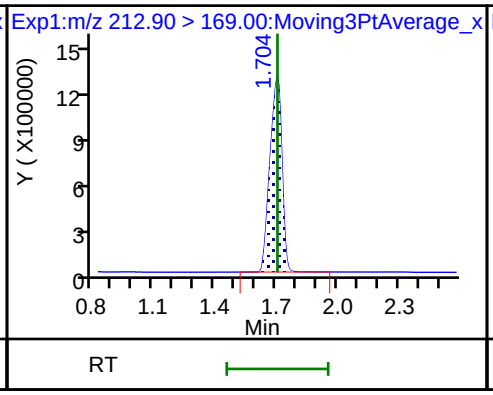
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

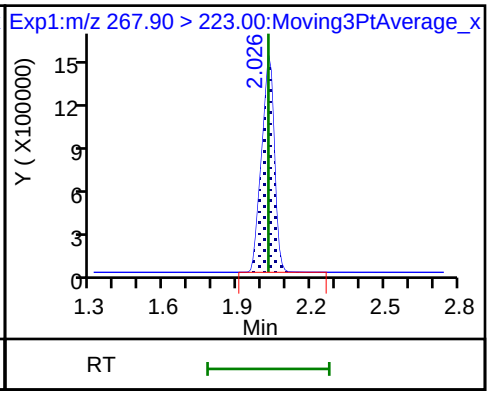
D 1 13C4 PFBA



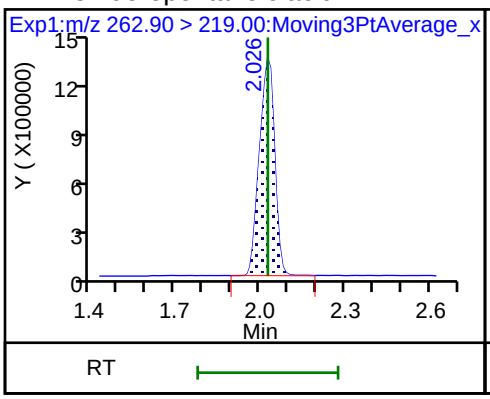
2 Perfluorobutanoic acid



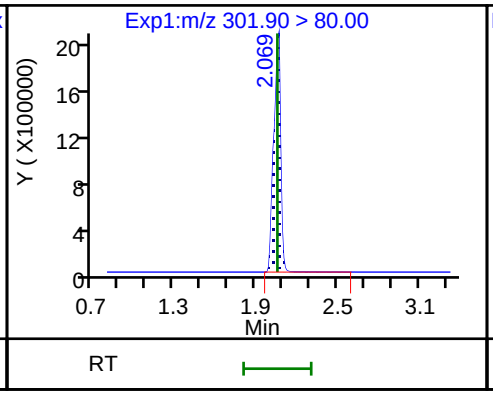
D 3 13C5 PFPeA



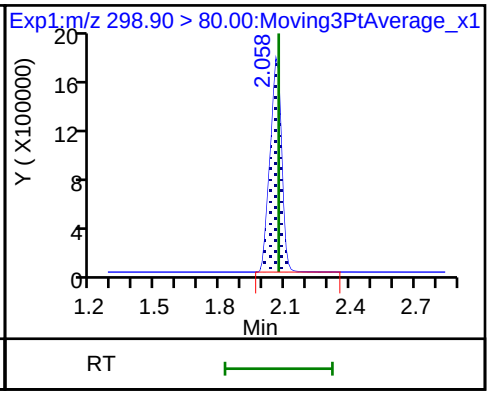
4 Perfluoropentanoic acid



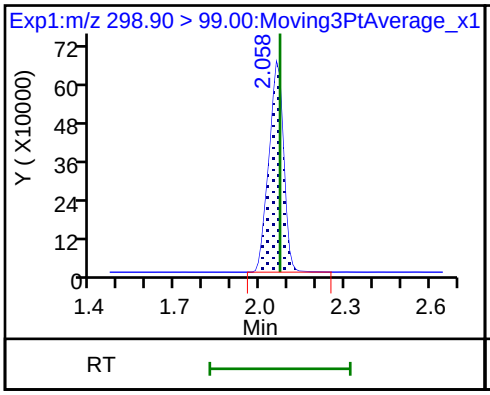
D 5 13C3 PFBS



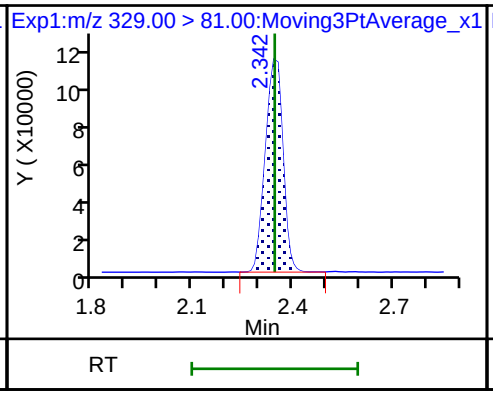
6 Perfluorobutanesulfonic acid



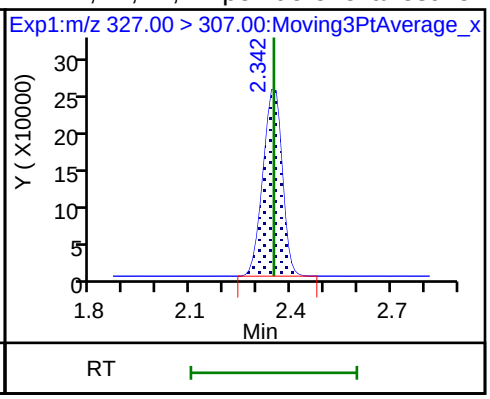
6 Perfluorobutanesulfonic acid



D 8 M2-4:2 FTS



7 1H,1H,2H,2H-perfluorohexanesulfoni



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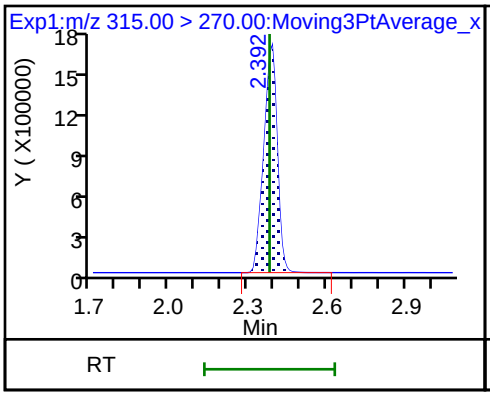
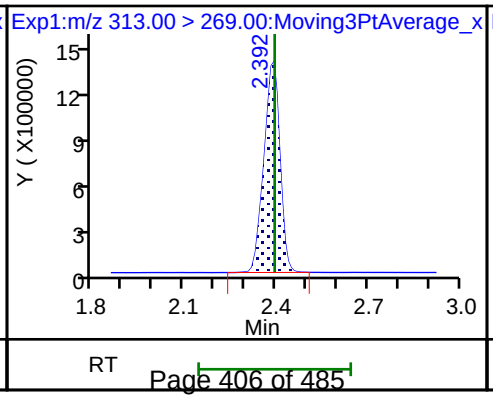


10 Perfluorohexanoic acid



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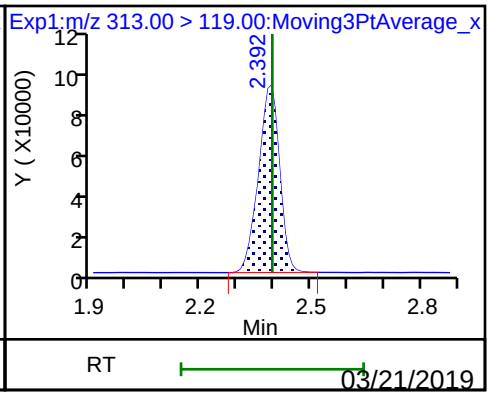
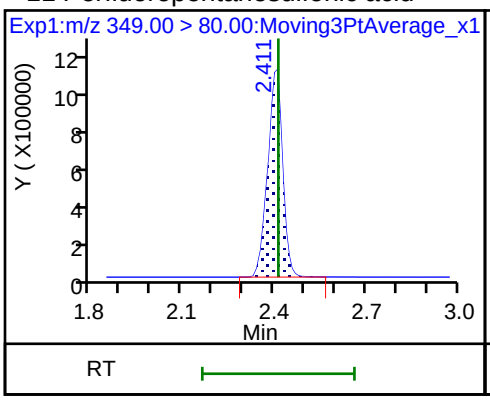
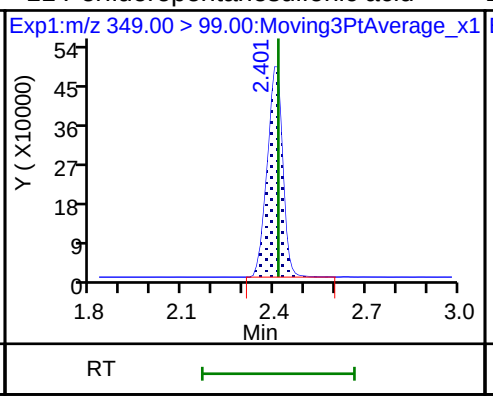


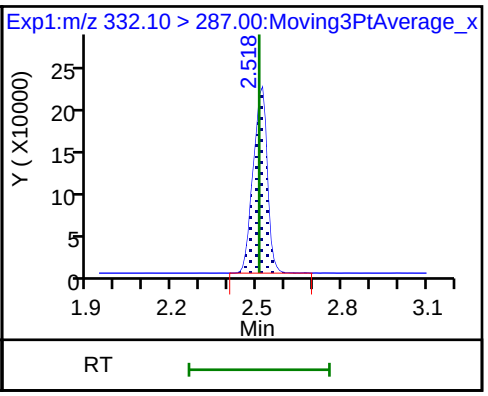
11 Perfluoropentanesulfonic acid



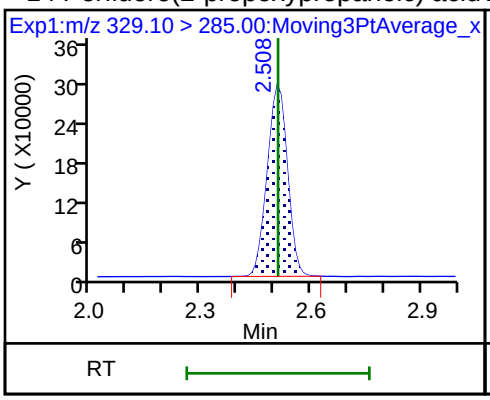
11 Perfluoropentanesulfonic acid



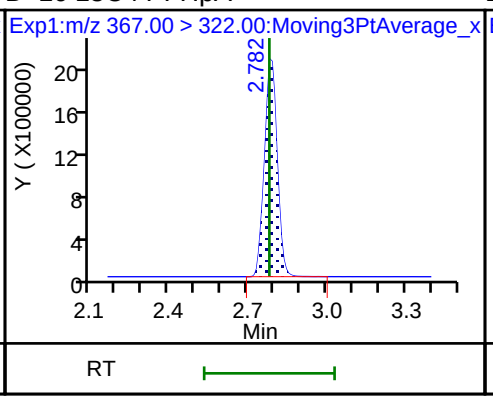
D 13 13C3 HFPO-DA



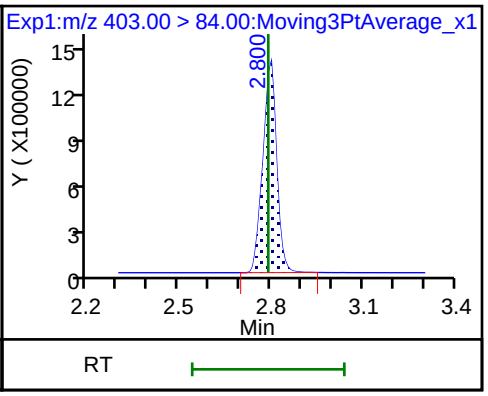
14 Perfluoro(2-propoxypropanoic) acid



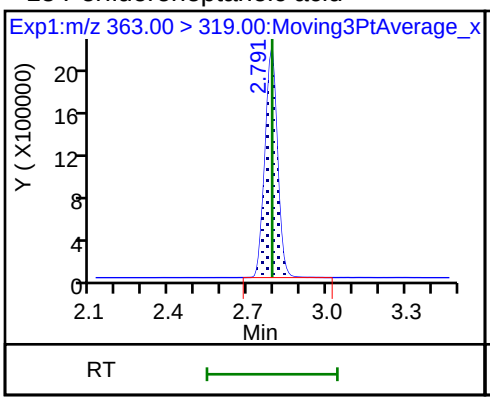
D 16 13C4 PFHpA



D 17 18O2 PFHxS



15 Perfluoroheptanoic acid



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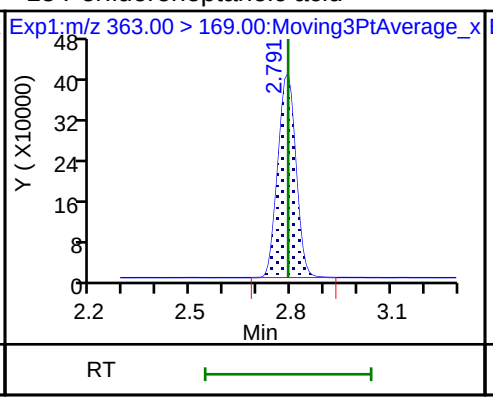
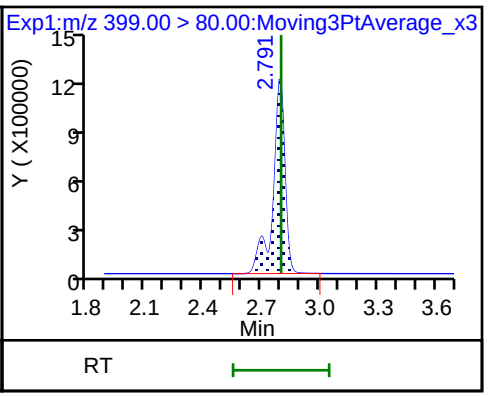
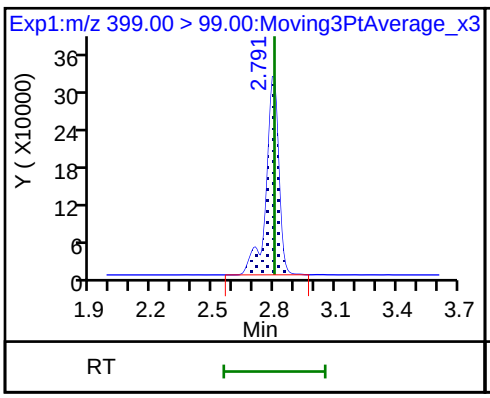


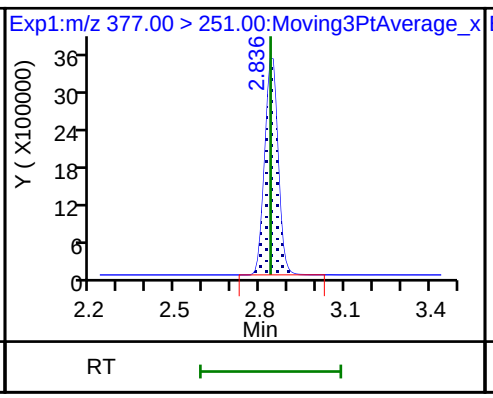
18 Perfluorohexanesulfonic acid



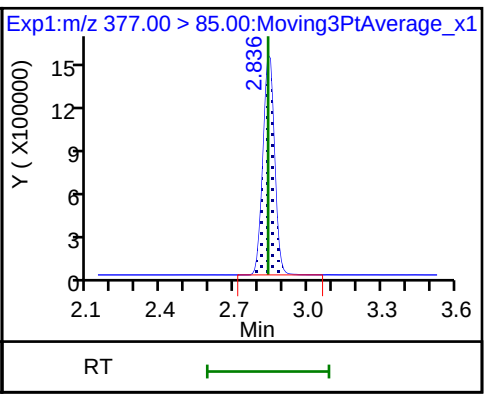
18 Perfluorohexanesulfonic acid



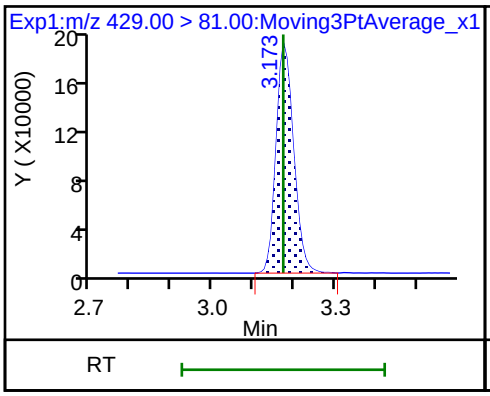
19 DONA



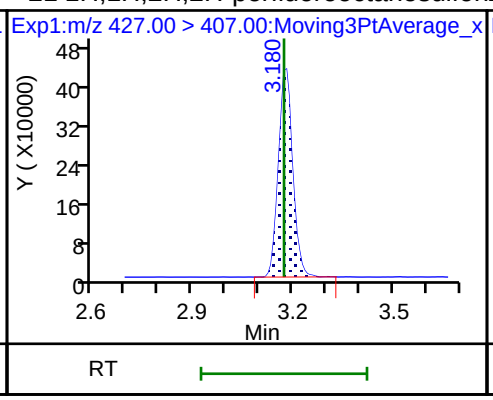
19 DONA



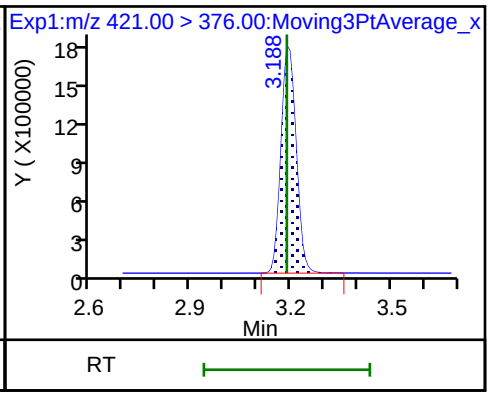
D 20 M2-6:2 FTS



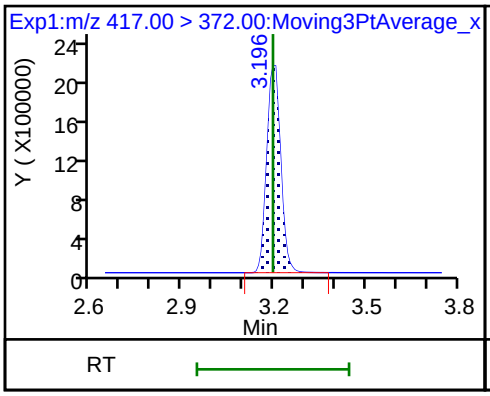
21 1H,1H,2H,2H-perfluorooctanesulfon



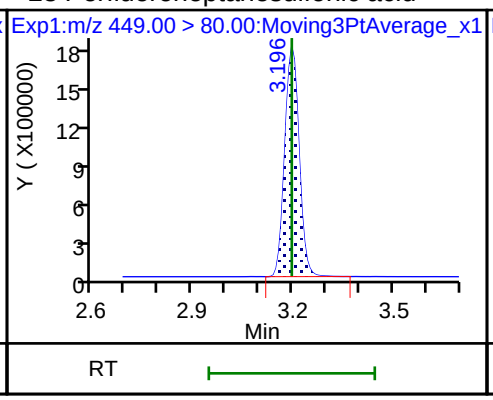
D 22 13C8 PFOA



D 25 13C4 PFOA



23 Perfluoroheptanesulfonic acid



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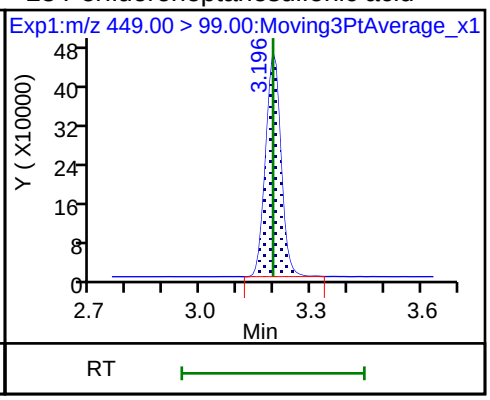
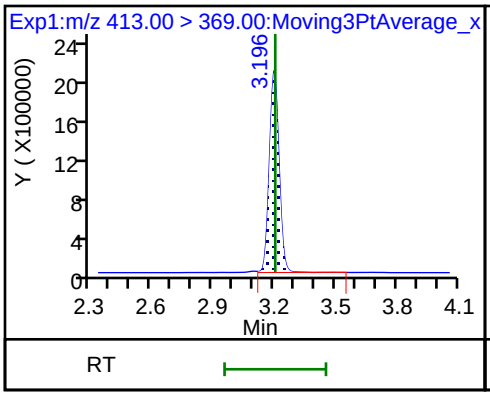
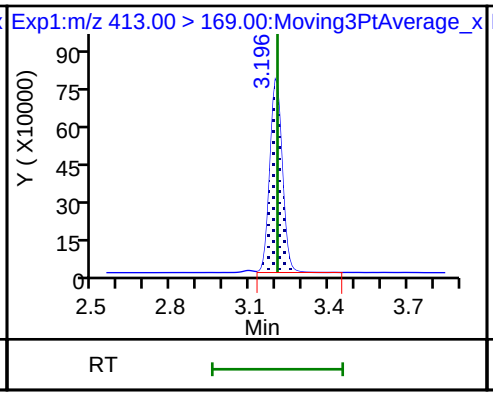


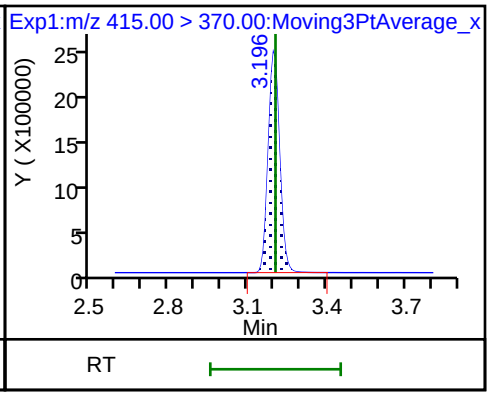
26 Perfluorooctanoic acid



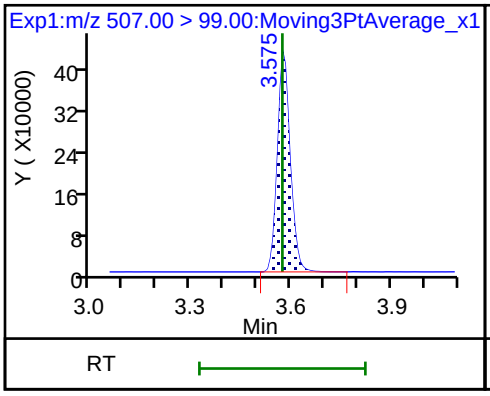
26 Perfluorooctanoic acid



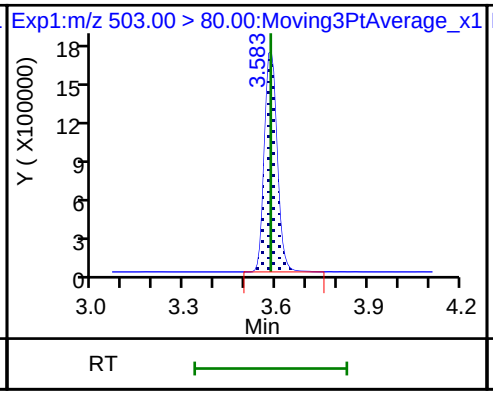
* 24 13C2 PFOA



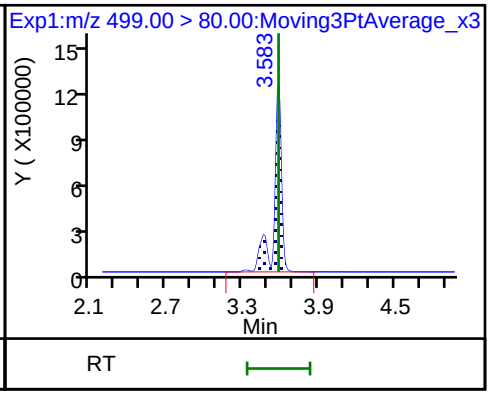
D 27 13C8 PFOS



D 28 13C4 PFOS



29 Perfluorooctanesulfonic acid



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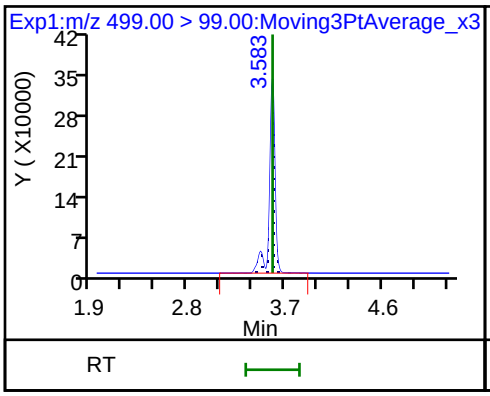
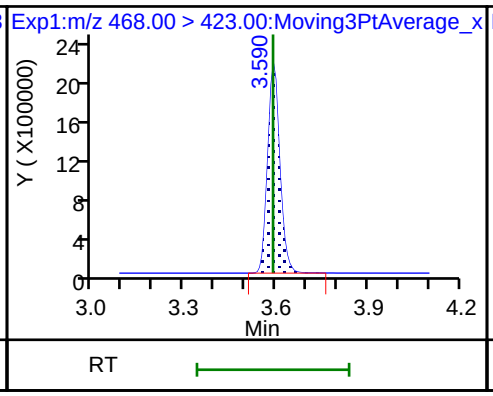
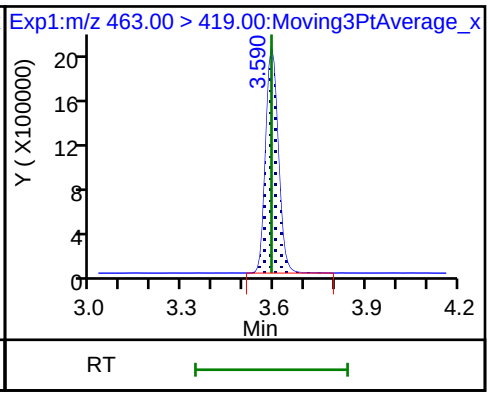


D 31 13C5 PFNA



30 Perfluorononanoic acid



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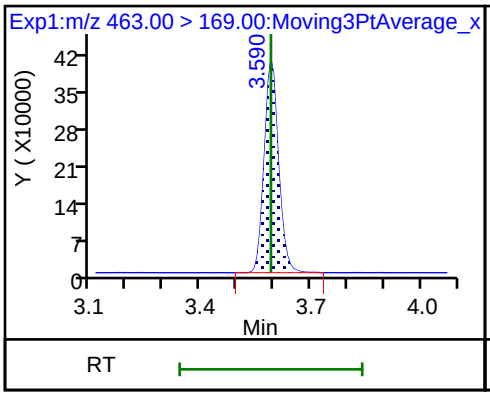
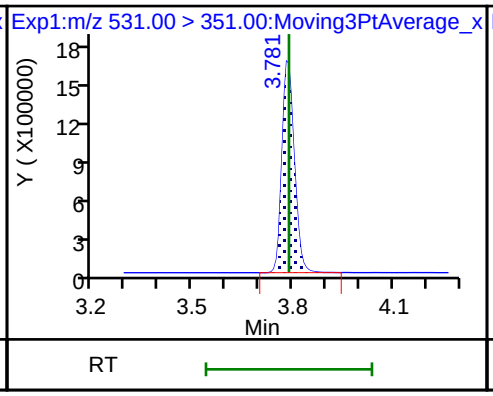
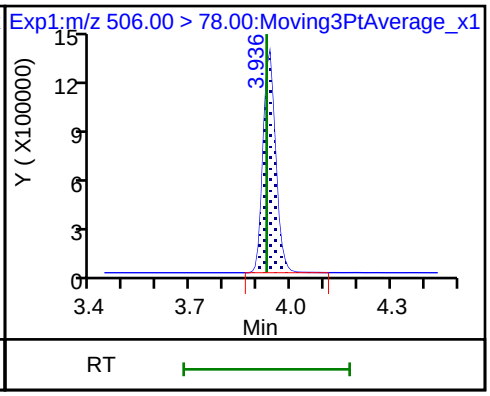


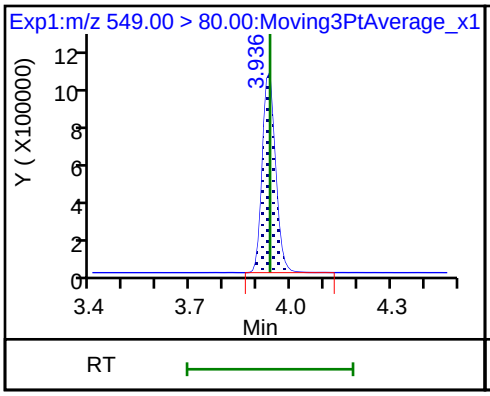
32 9-Chlorohexadecafluoro-3-oxanonane



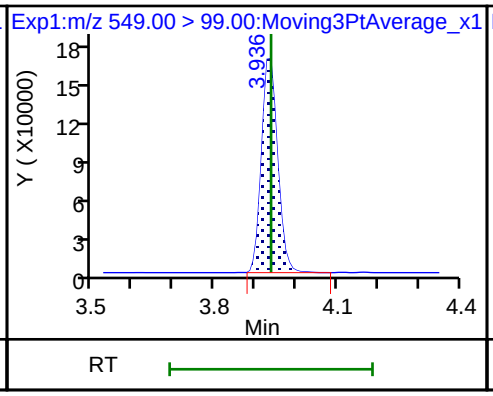
D 33 13C8 FOSA



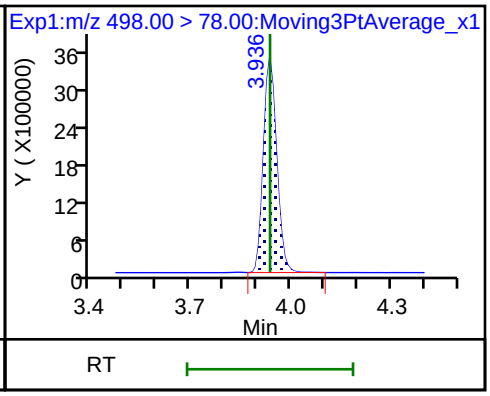
35 Perfluorononanesulfonic acid



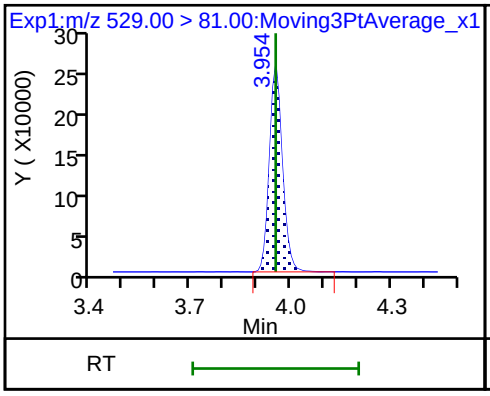
35 Perfluorononanesulfonic acid



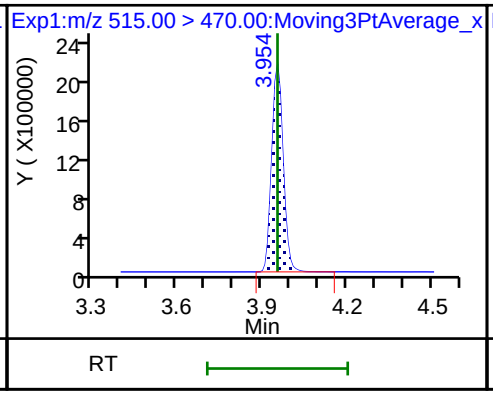
34 Perfluorooctanesulfonamide



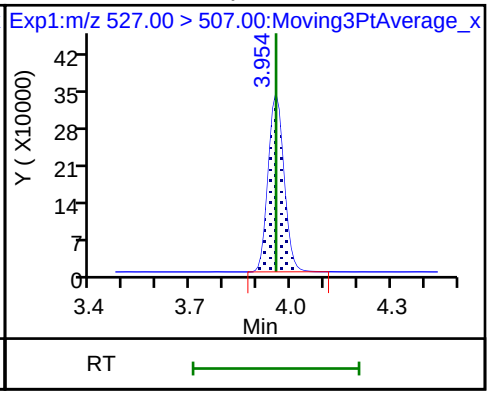
D 39 M2-8:2 FTS



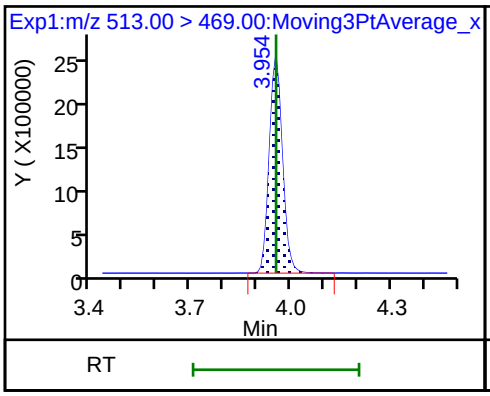
D 36 13C2 PFDA



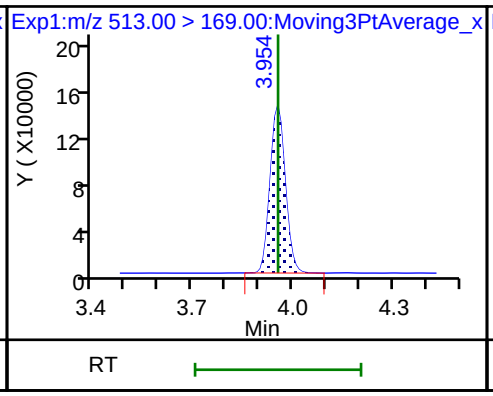
37 1H,1H,2H,2H-perfluorodecanesulfoni



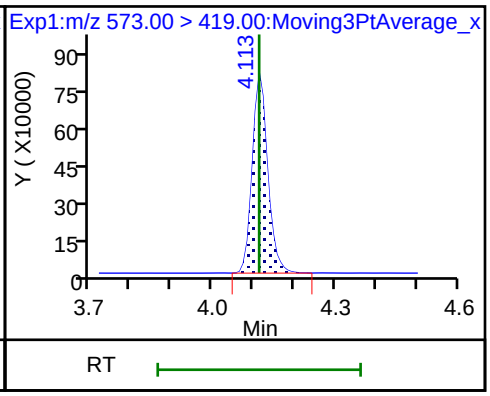
38 Perfluorodecanoic acid



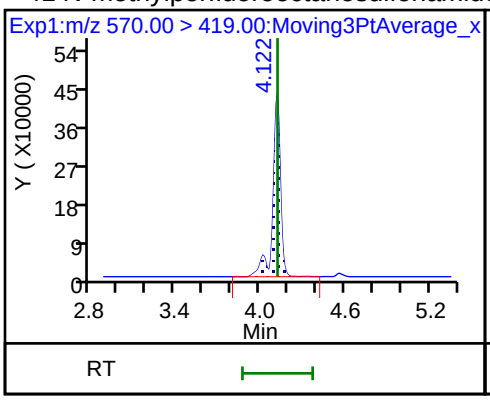
38 Perfluorodecanoic acid



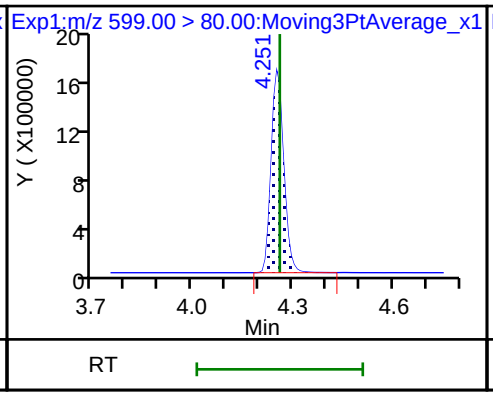
D 40 d3-NMeFOSAA



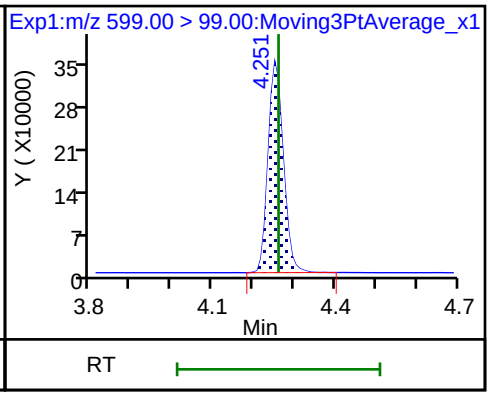
41 N-methylperfluorooctanesulfonamido



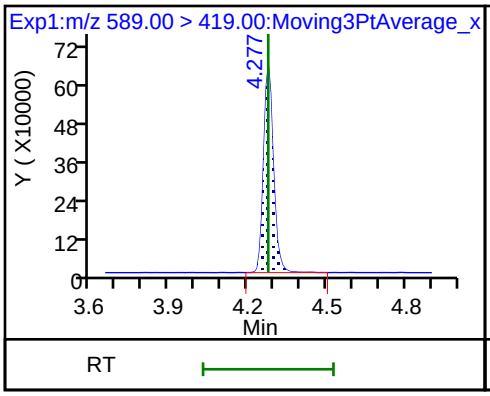
42 Perfluorodecanesulfonic acid



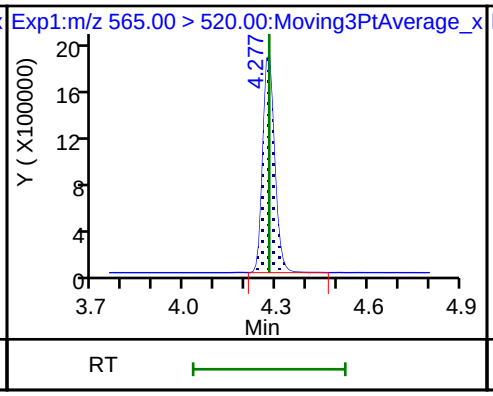
42 Perfluorodecanesulfonic acid



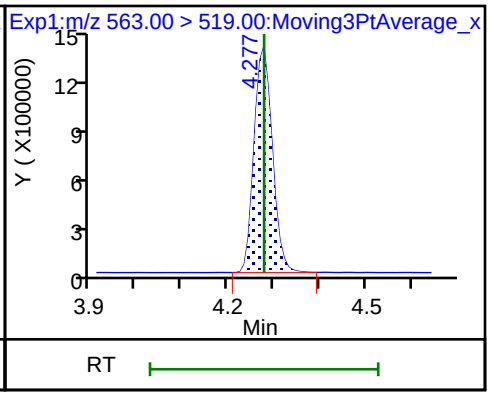
D 45 d5-NEtFOSAA



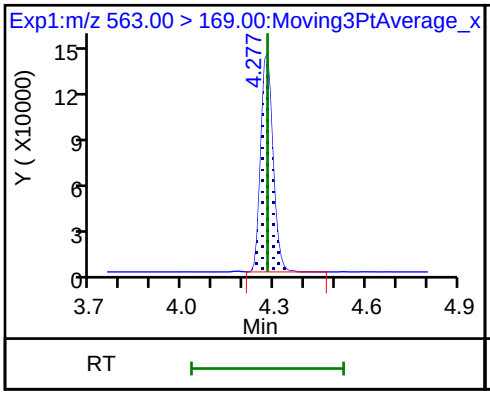
D 44 13C2 PFUnA



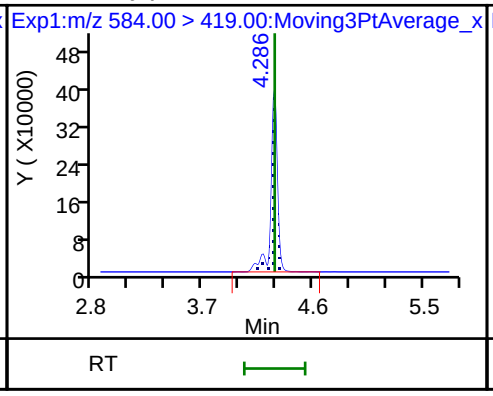
43 Perfluoroundecanoic acid



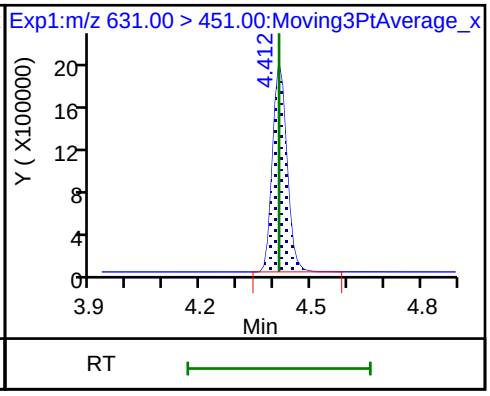
43 Perfluoroundecanoic acid



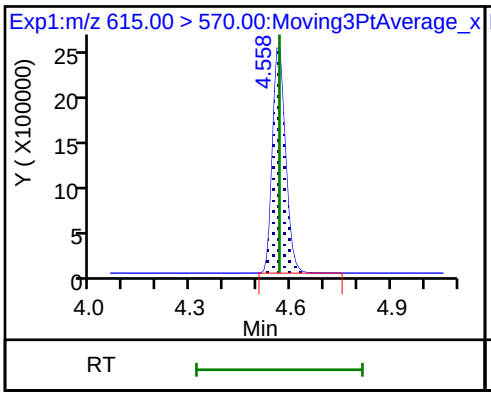
46 N-ethylperfluorooctanesulfonamidoa



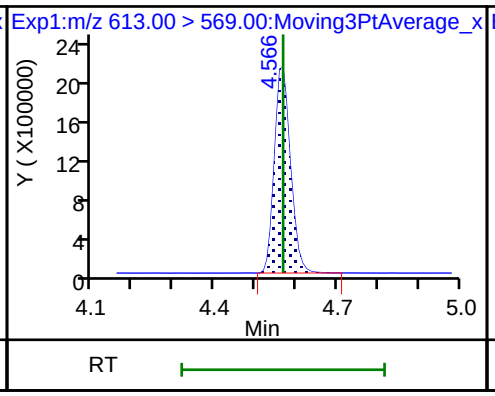
48 11-Chloroeicosafluoro-3-oxaundecan



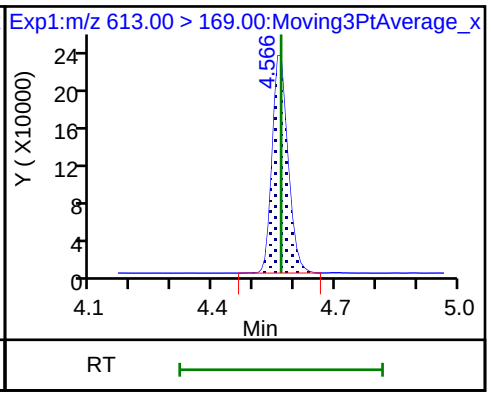
D 49 13C2 PFDoA



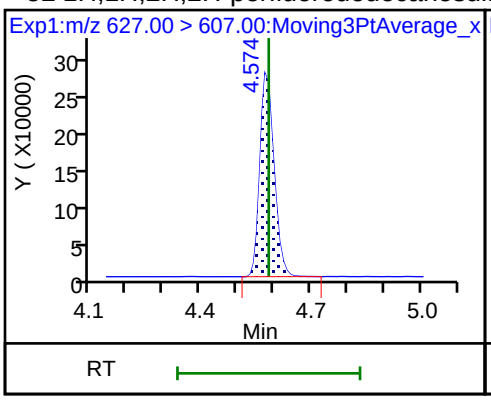
50 Perfluorododecanoic acid



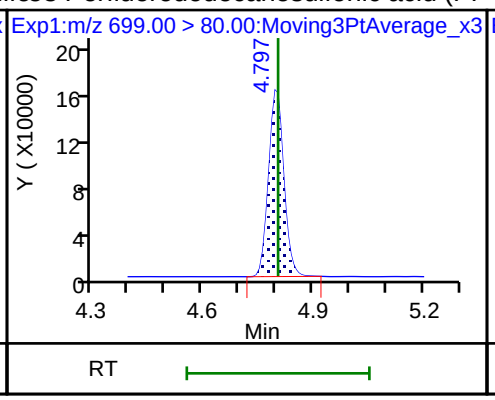
50 Perfluorododecanoic acid



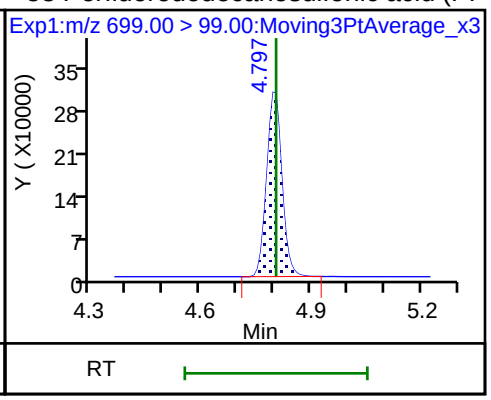
52 1H,1H,2H-perfluorododecanesulfo



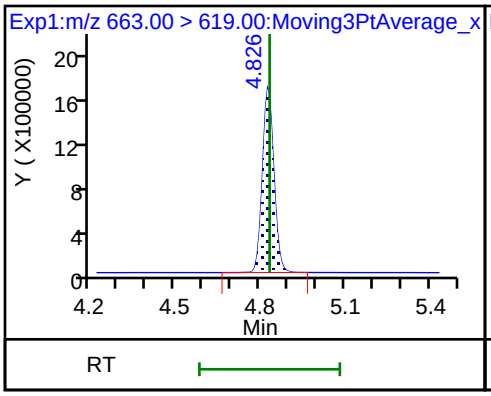
53 Perfluorododecanesulfonic acid (PF



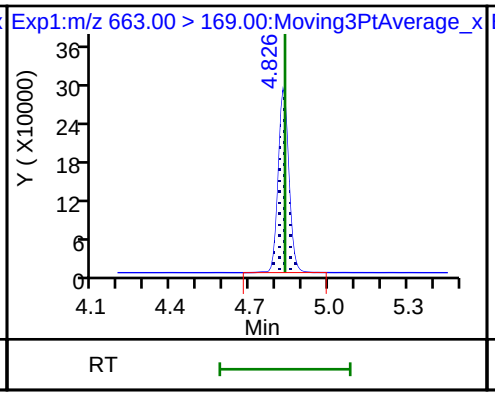
53 Perfluorododecanesulfonic acid (PF



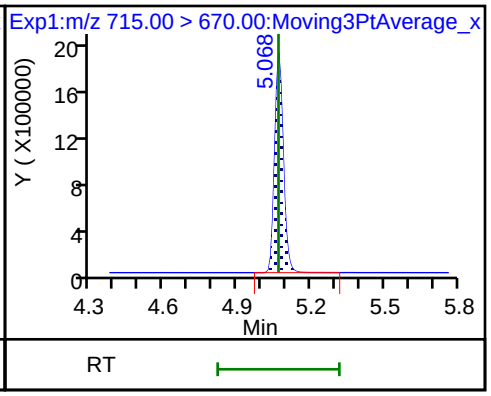
54 Perfluorotridecanoic acid



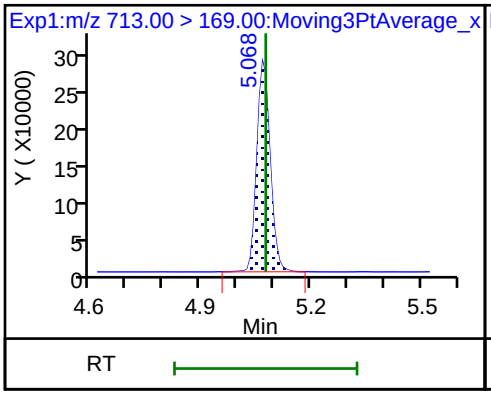
54 Perfluorotridecanoic acid



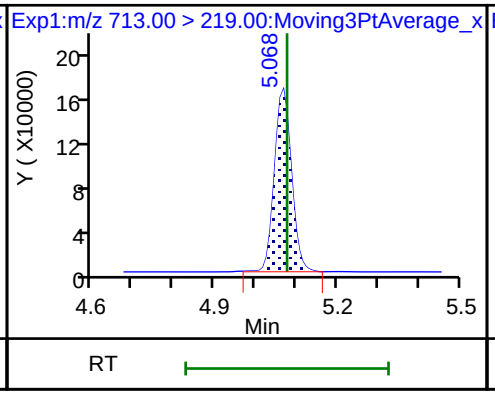
D 55 13C2 PFTeDA



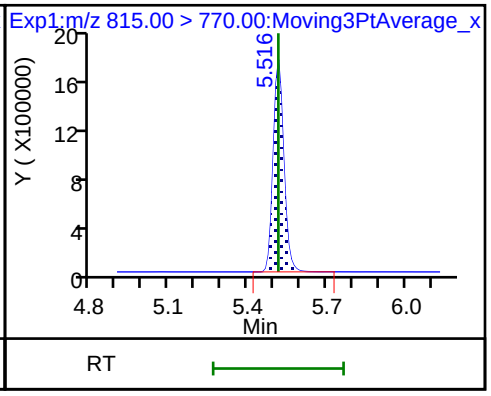
56 Perfluorotetradecanoic acid



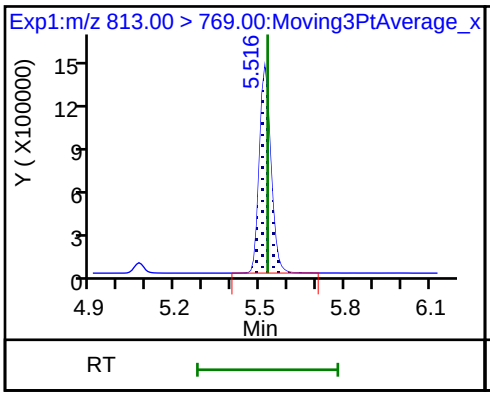
56 Perfluorotetradecanoic acid



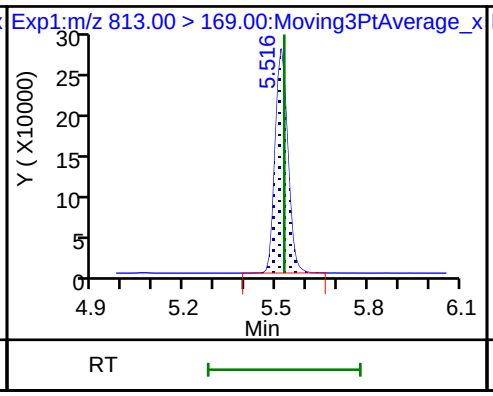
D 57 13C2 PFHxDA



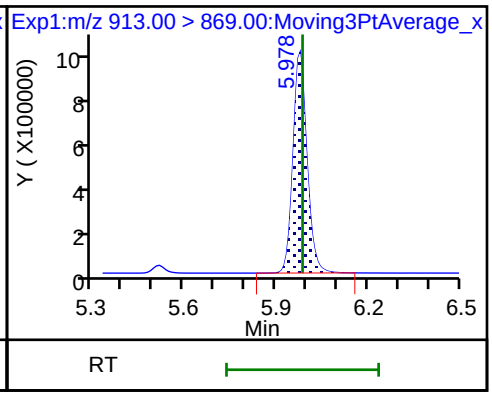
58 Perfluorohexadecanoic acid



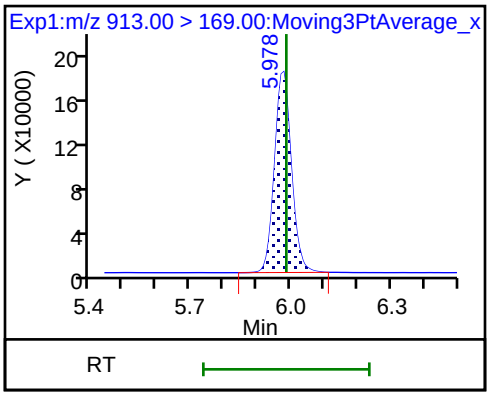
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281279/21 Calibration Date: 03/12/2019 21:54

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_064.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.8745	0.8662		0.990	1.00	-1.0	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9858	0.9260		0.939	1.00	-6.1	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.9198	0.9154		0.880	0.884	-0.5	50.0
4:2 FTS	AveID	2.451	2.415		0.920	0.934	-1.5	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8691	0.8569		0.986	1.00	-1.4	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	0.4591	0.4501		0.920	0.938	-2.0	50.0
HFPO-DA (GenX)	AveID	1.389	1.492		1.07	1.00	7.5	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.998	1.087		1.09	1.00	8.9	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.211	1.157		0.870	0.910	-4.4	40.0
DONA	AveID	2.192	2.396		1.03	0.942	9.3	50.0
6:2 FTS	AveID	1.971	2.054		0.988	0.948	4.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.9575	0.998		0.992	0.952	4.2	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.040	1.074		1.03	1.00	3.3	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9719	0.9642		0.921	0.928	-0.8	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9626	1.009		1.05	1.00	4.8	40.0
F-53B Major	AveID	0.7773	0.8334		0.999	0.932	7.2	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.5777	0.5734		0.953	0.960	-0.7	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	2.755	3.013		1.09	1.00	9.3	40.0
8:2 FTS	AveID	1.609	1.766		1.05	0.958	9.7	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.061	1.156		1.09	1.00	9.0	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7968	0.7701		0.967	1.00	-3.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8587	0.8178		0.918	0.964	-4.8	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.7812	0.7170		0.918	1.00	-8.2	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.7459	0.7744		1.04	1.00	3.8	40.0
F-53B Minor	AveID	1.062	0.9690		0.859	0.942	-8.8	50.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9523	0.9348		0.982	1.00	-1.8	40.0
10:2 FTS	AveID	0.9902	1.192		1.16	0.964	20.4	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0865	0.0841		0.941	0.968	-2.8	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.7493	0.7024		0.937	1.00	-6.3	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1759	0.1571		0.893	1.00	-10.7	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9016		1.03	1.00	2.9	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Lab Sample ID: CCV 320-281279/21 Calibration Date: 03/12/2019 21:54

Instrument ID: A9 Calib Start Date: 03/11/2019 11:27

GC Column: Acquity ID: 2.10(mm) Calib End Date: 03/11/2019 12:12

Lab File ID: 2019.03.12LLA_064.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.5118	0.6156		1.20	1.00	20.3	50.0
13C4 PFBA	Ave	0.8404	0.8171		2.43	2.50	-2.8	50.0
13C5-PFPeA DNU	Ave	0.7180	0.6910		2.41	2.50	-3.8	50.0
13C3 PFBS	Ave	1.131	1.085		2.23	2.33	-4.0	50.0
M2-4:2 FTS	Ave	0.0709	0.0634		2.09	2.34	-10.6	50.0
13C2 PFHxA	Ave	0.8046	0.7678		2.39	2.50	-4.6	50.0
13C3 HFPO-DA	Ave	0.1085	0.1015		2.34	2.50	-6.5	50.0
13C4 PFHpA	Ave	0.995	0.9337		2.34	2.50	-6.2	50.0
18O2 PFHxS	Ave	0.6511	0.6154		2.24	2.37	-5.5	50.0
M2-6:2 FTS	Ave	0.0900	0.0852		2.25	2.38	-5.3	50.0
13C8 PFOA	Ave	0.7746	0.7777		2.46	2.45	0.4	50.0
13C4 PFOA	Ave	0.9033	0.8564		2.37	2.50	-5.2	50.0
13C4 PFOS	Ave	0.7608	0.7322		2.30	2.39	-3.8	50.0
13C8 PFOS	Ave	0.1746	0.1616		2.21	2.39	-7.4	50.0
13C5 PFNA	Ave	0.8455	0.8273		2.45	2.50	-2.2	50.0
13C8 FOSA	Ave	0.4979	0.4634		2.33	2.50	-6.9	50.0
M2-8:2 FTS	Ave	0.1021	0.0966		2.27	2.40	-5.4	50.0
13C2 PFDA	Ave	0.8687	0.8254		2.38	2.50	-5.0	50.0
d3-NMeFOSAA	Ave	0.2636	0.2825		2.68	2.50	7.2	50.0
13C2 PFUnA	Ave	0.7102	0.6999		2.46	2.50	-1.5	50.0
d5-NEtFOSAA	Ave	0.2245	0.2218		2.47	2.50	-1.2	50.0
13C2 PFDoA	Ave	0.8024	0.8641		2.69	2.50	7.7	50.0
13C2 PFTeDA	Ave	0.5899	0.6044		2.56	2.50	2.5	50.0
13C2 PFHxDA	Ave	0.5748	0.6367		2.77	2.50	10.8	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_064.d
Lims ID: CCV L4
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2019 21:54:16 ALS Bottle#: 39 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCV L4
Misc. Info.: Plate: 1 Rack: 1
Operator ID: A9\Administrator Instrument ID: A9
Sublist: chrom-PFAS_A9*sub7

Method: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 14:05:16 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 14:05:16
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.712	1.704	0.008	0.535	5852708	2.43		97.2	31025	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.712	1.712	0.0	1.000	2027757	0.99		99.0	478	
D 3 13C5 PFPeA										
267.90 > 223.00	2.036	2.025	0.011	0.637	4949657	2.41		96.2	14276	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.036	2.036	0.0	1.000	1833280	0.9393		93.9	164	
D 5 13C3 PFBS										
301.90 > 80.00	2.069	2.057	0.012	0.647	7229170	2.23		96.0	2408719	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.069	2.069	0.0	1.000	2516219	0.8798	Target=1.00	99.5	6656	
298.90 > 99.00	2.069	2.069	0.0	1.000	873153		2.88(2.05-3.82)		2750	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.347	2.345	0.002	0.734	423878	2.09		89.4	1973	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.347	2.347	0.0	1.000	409401	0.9203		98.5	2903	
D 9 13C2 PFHxA										
315.00 > 270.00	2.393	2.381	0.012	0.749	5499742	2.39		95.4	12015	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.393	2.393	0.0	1.000	1885044	0.9859	Target=1.00	98.6	605	
313.00 > 119.00	2.393	2.393	0.0	1.000	135533		13.91(9.33-17.33)		565	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.412	2.412	0.0	1.166	1312772	0.9196	Target=1.00	98.0	3260	
349.00 > 99.00	2.402	2.412	-0.010	1.161	643822		2.04(1.45-2.69)		3120	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.519	2.507	0.013	0.788	726681	2.34		93.5	2943	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.509	2.509	0.0	0.996	433783	1.07		107	352	
D 16 13C4 PFHpA										
367.00 > 322.00	2.792	2.781	0.011	0.873	6687724	2.34		93.8	6038	
D 17 18O2 PFHxS										
403.00 > 84.00	2.792	2.790	0.002	0.873	4169738	2.24		94.5	3118	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.792	2.792	0.0	1.000	2908026	1.09	Target=1.00	109	1176	
363.00 > 169.00	2.792	2.792	0.0	1.000	589864		4.93(3.00-5.57)		2079	
18 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.792	2.792	0.0	1.000	1856628	0.8696	Target=1.00	95.6	3463	M
399.00 > 99.00	2.792	2.792	0.0	1.000	532781		3.48(2.29-4.25)		1484	M
19 DONA										
377.00 > 251.00	2.837	2.837	0.0	0.794	4735656	1.03	Target=1.00	109	7068	
377.00 > 85.00	2.837	2.837	0.0	0.794	1874409		2.53(1.70-3.15)		2746	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.174	3.172	0.002	0.993	579482	2.25		94.7	2327	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.174	3.174	0.0	1.000	475011	0.9880		104	669	
D 22 13C8 PFOA										
421.00 > 376.00	3.189	3.187	0.002	0.998	5453670	2.46		100	6122	
D 25 13C4 PFOA										
417.00 > 372.00	3.197	3.195	0.002	1.000	6134218	2.37		94.8	5531	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.197	3.197	0.0	0.894	1992453	0.99	Target=1.00	104	3286	
449.00 > 99.00	3.197	3.197	0.0	0.894	454350		4.39(2.83-5.25)		1156	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.197	3.197	0.0	1.000	2634685	1.03	Target=1.00	103	632	
413.00 > 169.00	3.197	3.197	0.0	1.000	899719		2.93(1.36-4.08)		1188	
* 24 13C2 PFOA										
415.00 > 370.00	3.197	3.197	0.0		7162774	2.50			7150	
D 27 13C8 PFOS										
507.00 > 99.00	3.575	3.574	0.001	1.118	1106796	2.21		92.6	3494	
D 28 13C4 PFOS										
503.00 > 80.00	3.575	3.581	-0.006	1.118	5013972	2.30		96.2	5091	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.583	3.583	0.0	1.002	1877063	0.9206	Target=1.00	99.2	2622	
499.00 > 99.00	3.583	3.583	0.0	1.002	437100		4.29(2.04-6.12)		2983	
D 31 13C5 PFNA										
468.00 > 423.00	3.590	3.589	0.001	1.123	5925633	2.45		97.8	6511	
30 Perfluorononanoic acid										
463.00 > 419.00	3.590	3.590	0.0	1.000	2391603	1.05	Target=1.00	105	1081	
463.00 > 169.00	3.590	3.590	0.0	1.000	437920		5.46(3.91-7.26)		1694	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.781	3.781	0.0	1.057	1629413	1.00		107	2059	
D 33 13C8 FOSA										
506.00 > 78.00	3.927	3.927	0.0	1.228	3319155	2.33		93.1	4833	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.927	3.927	0.0	1.098	1154789	0.9529	Target=1.00	99.3	3093	
549.00 > 99.00	3.927	3.927	0.0	1.098	172551		6.69(4.35-8.07)		514	
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.936	3.936	0.0	1.002	3999587	1.09		109	4280	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.945	3.954	-0.009	1.234	663019	2.27		94.6	2734	
D 36 13C2 PFDA										
515.00 > 470.00	3.954	3.954	0.0	1.237	5912010	2.38		95.0	8394	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.954	3.954	0.0	1.002	468299	1.05		110	1768	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.954	3.954	0.0	1.000	2734439	1.09	Target=1.00	109	2281	
513.00 > 169.00	3.945	3.954	-0.009	0.998	179471		15.24(11.40-21.17)		653	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.113	4.112	0.001	1.286	2023459	2.68		107	3331	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.113	4.113	0.0	1.000	623315	0.9665		96.7	148	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.251	4.251	0.0	1.189	1653915	0.9181	Target=1.00	95.2	4894	
599.00 > 99.00	4.251	4.251	0.0	1.189	371125		4.46(3.64-6.76)		1399	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.277	4.276	0.001	1.338	1588320	2.47		98.8	2186	
D 44 13C2 PFUnA										
565.00 > 520.00	4.268	4.276	-0.008	1.335	5012934	2.46		98.5	4898	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.268	4.268	0.0	1.000	1437621	0.9178	Target=1.00	91.8	1034	
563.00 > 169.00	4.268	4.268	0.0	1.000	165606		8.68(7.06-13.11)		754	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.285	4.285	0.0	1.002	492012	1.04		104	2344	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.412	4.412	0.0	1.234	1914952	0.8595		91.2	3867	
D 49 13C2 PFDoA										
615.00 > 570.00	4.558	4.565	-0.007	1.426	6189486	2.69		108	9234	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.558	4.558	0.0	1.000	2314315	0.9816	Target=1.00	98.2	1283	
613.00 > 169.00	4.558	4.558	0.0	1.000	252921		9.15(7.12-13.21)		1285	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.574	4.574	0.0	1.159	318129	1.16		120	942	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.804	4.804	0.0	1.344	170717	0.9408	Target=1.00	97.2	1938	
699.00 > 99.00	4.796	4.804	-0.008	1.342	315045		0.54(0.40-0.74)		2235	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.825	4.825	0.0	1.059	1738924	0.9374	Target=1.00	93.7	1358	
663.00 > 169.00	4.825	4.825	0.0	1.059	314638		5.53(3.97-7.38)		2247	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.067	5.067	0.0	1.585	4328981	2.56		102	11634	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.067	5.067	0.0	1.000	272046	0.8931	Target=1.00	89.3	1538	
713.00 > 219.00	5.067	5.067	0.0	1.000	184949		1.47(1.07-1.99)		1419	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.516	5.515	0.001	1.725	4560727	2.77		111	6543	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.516	5.516	0.0	1.000	1644688	1.03	Target=1.00	103	165	
813.00 > 169.00	5.516	5.516	0.0	1.000	305977		5.38(3.82-7.09)		2042	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	5.978	5.978	0.0	1.084	1122950	1.20	Target=1.00	120	322	
913.00 > 169.00	5.978	5.978	0.0	1.084	218694		5.13(3.36-6.24)		1246	

QC Flag Legend

Review Flags

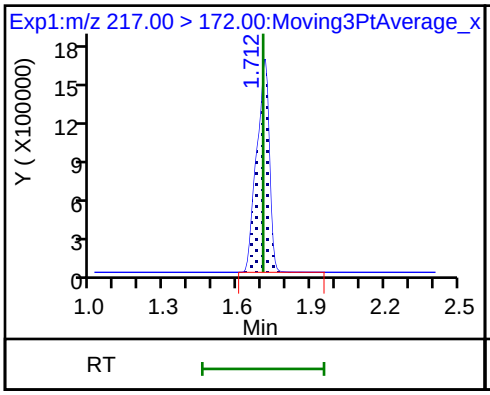
M - Manually Integrated

Reagents:

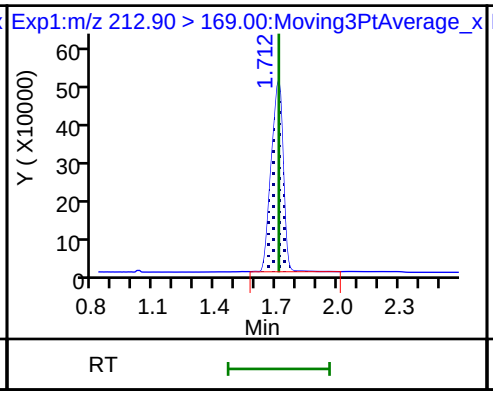
LCPFC_LL4_00011 Amount Added: 1.00 Units: mL

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_064.d
Injection Date: 12-Mar-2019 21:54:16 Instrument ID: A9
Lims ID: CCV L4
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 39 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL

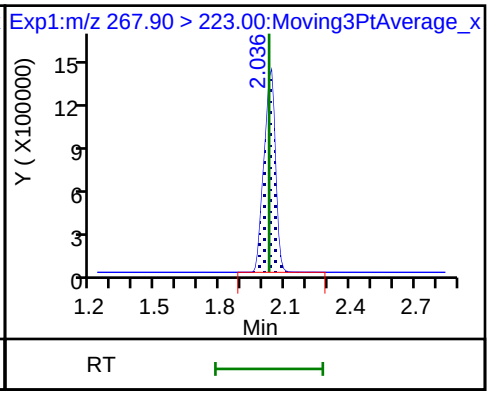
D 1 13C4 PFBA



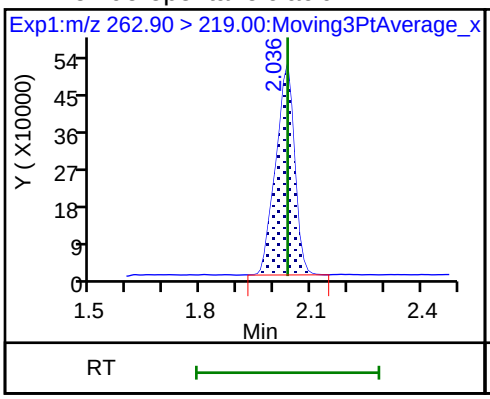
2 Perfluorobutanoic acid



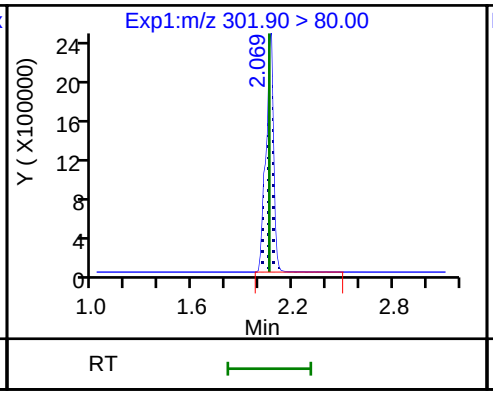
D 3 13C5 PFPeA



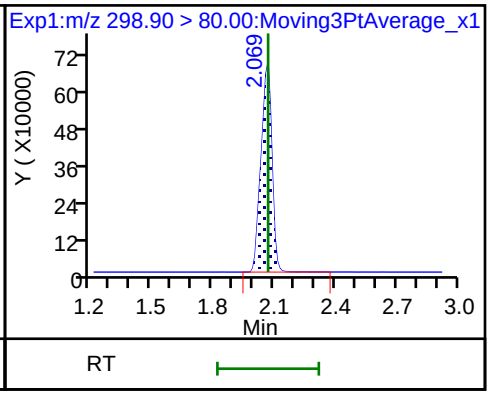
4 Perfluoropentanoic acid



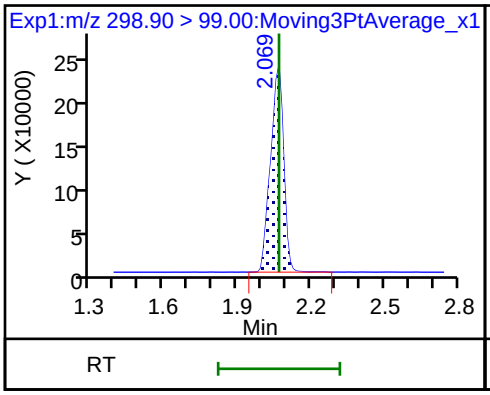
D 5 13C3 PFBS



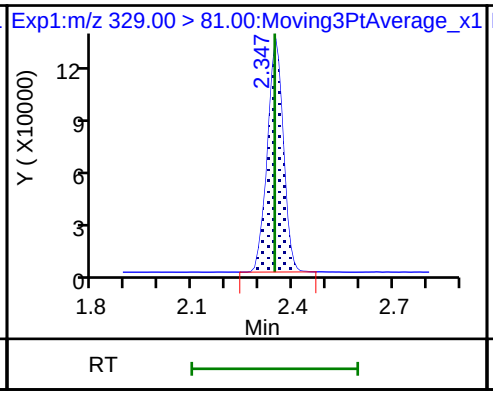
6 Perfluorobutanesulfonic acid



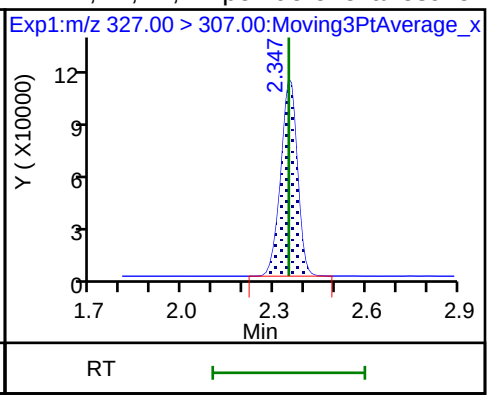
6 Perfluorobutanesulfonic acid



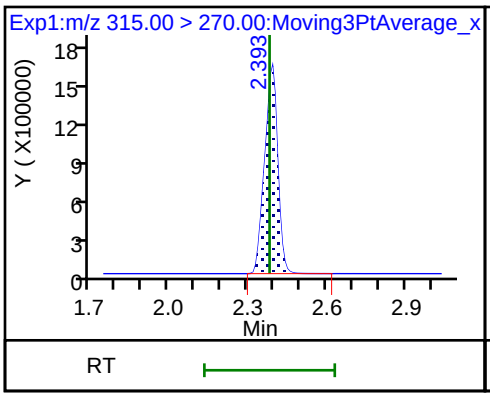
D 8 M2-4:2 FTS



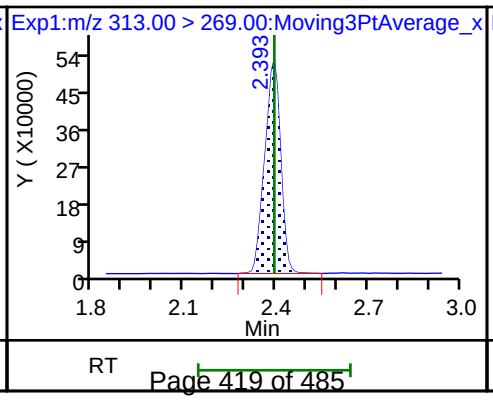
7 1H,1H,2H,2H-perfluorohexanesulfoni



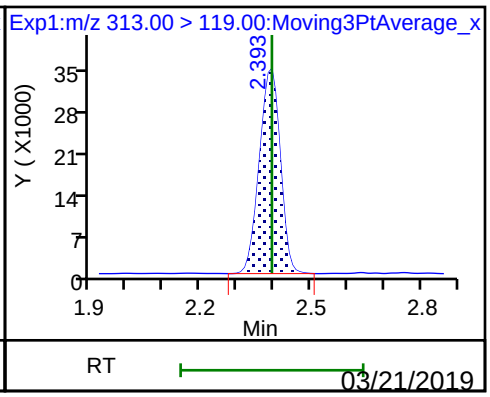
D 9 13C2 PFHxA



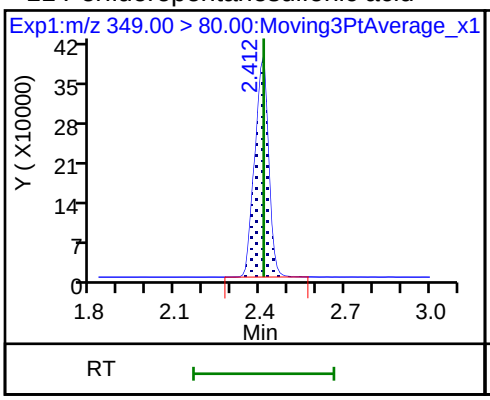
10 Perfluorohexanoic acid



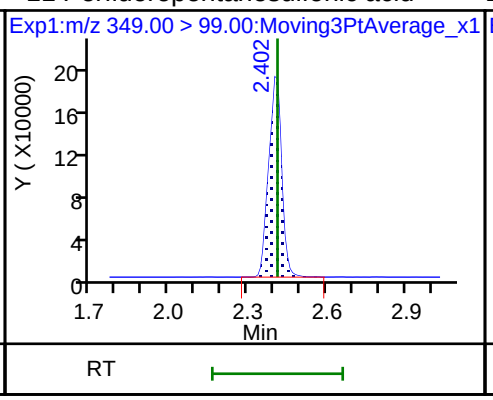
10 Perfluorohexanoic acid



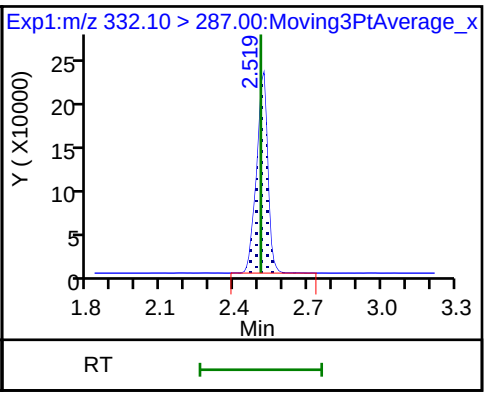
11 Perfluoropentanesulfonic acid



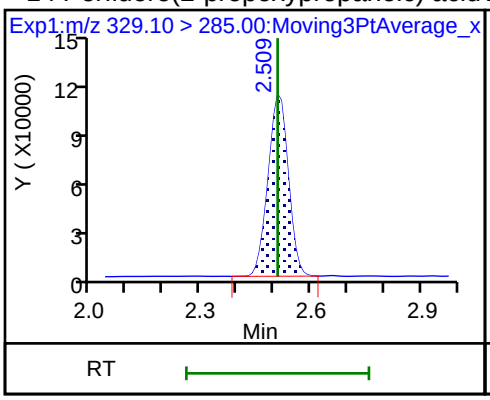
11 Perfluoropentanesulfonic acid



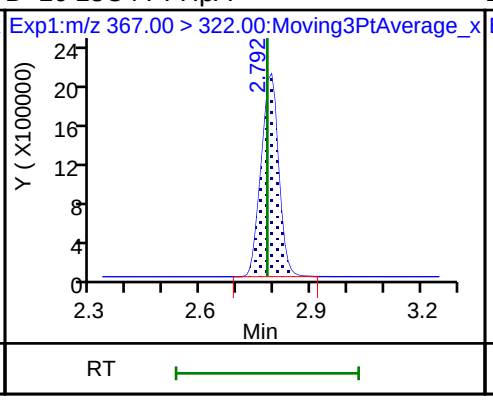
D 13 13C3 HFPO-DA



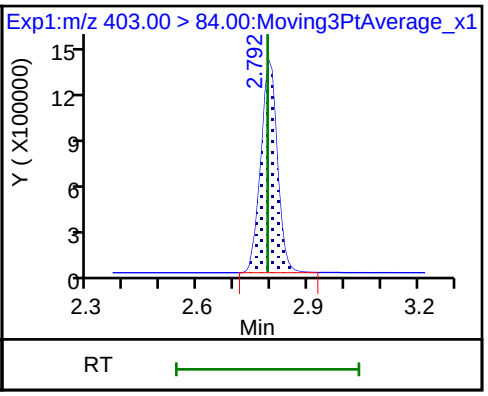
14 Perfluoro(2-propoxypropanoic) acid



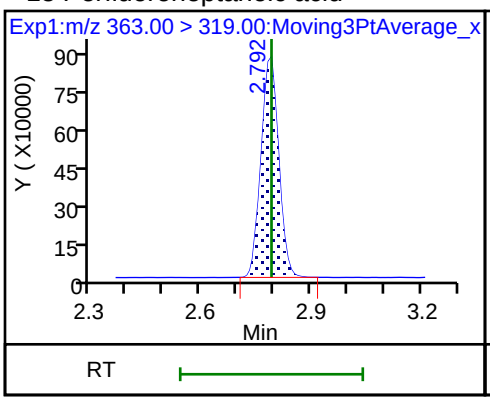
D 16 13C4 PFHpA



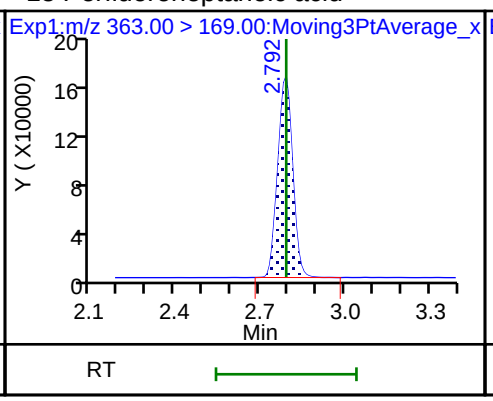
D 17 18O2 PFHxS



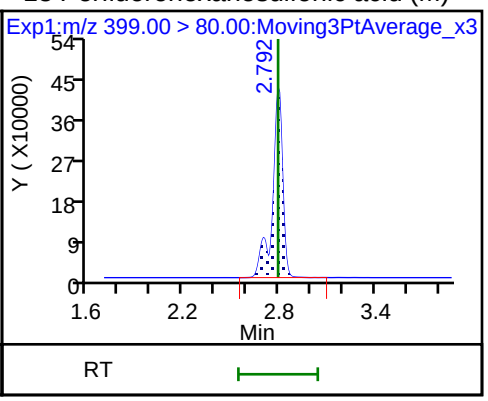
15 Perfluoroheptanoic acid



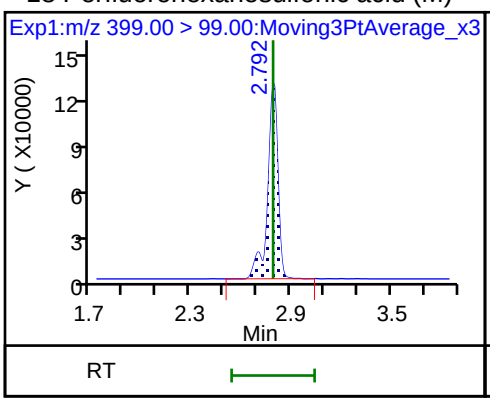
15 Perfluoroheptanoic acid



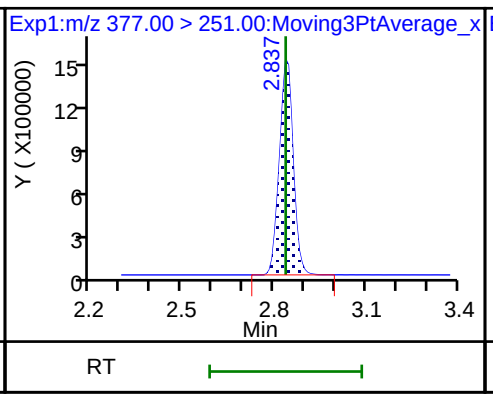
18 Perfluorohexanesulfonic acid (M)



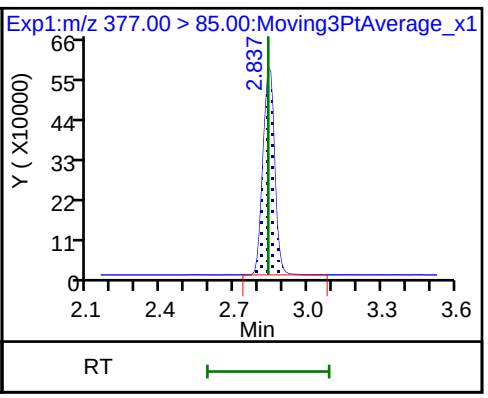
18 Perfluorohexanesulfonic acid (M)



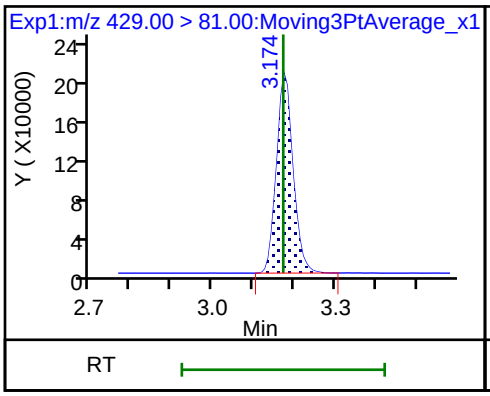
19 DONA



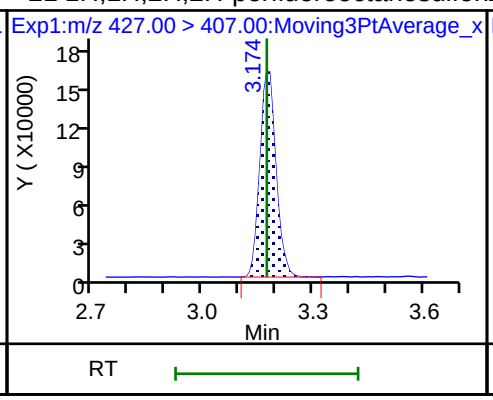
19 DONA



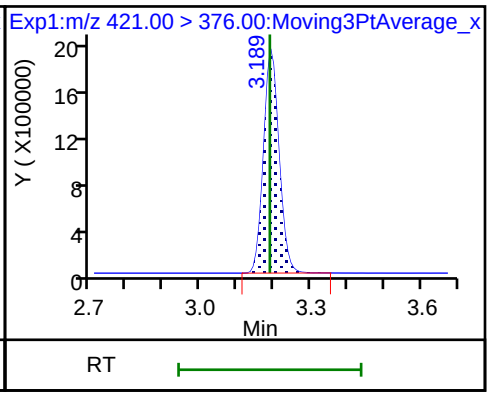
D 20 M2-6:2 FTS



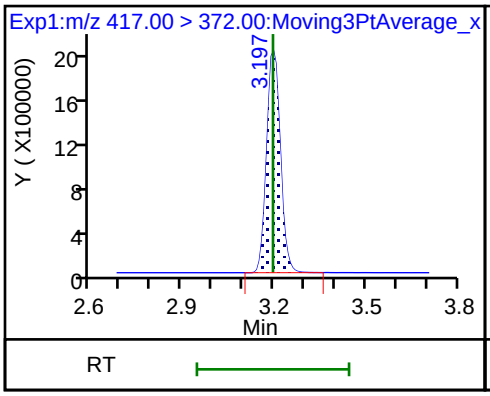
21 1H,1H,2H,2H-perfluorooctanesulfon



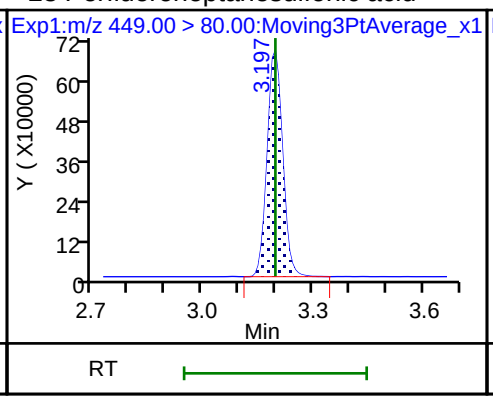
D 22 13C8 PFOA



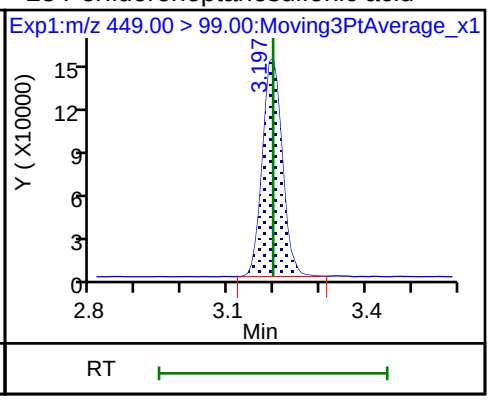
D 25 13C4 PFOA



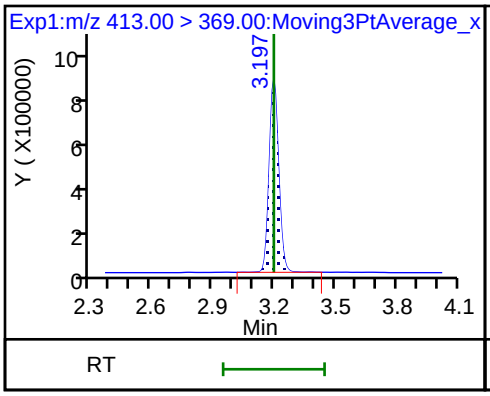
23 Perfluoroheptanesulfonic acid



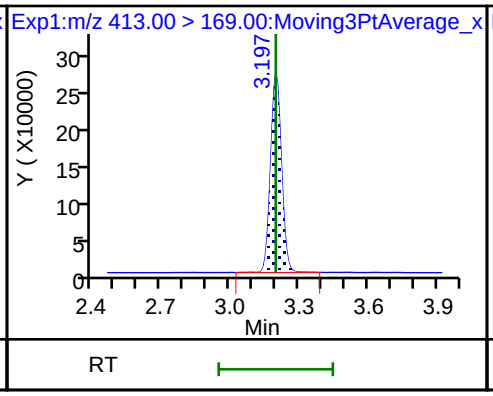
23 Perfluoroheptanesulfonic acid



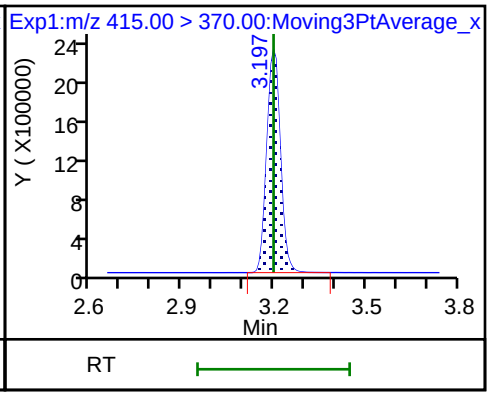
26 Perfluorooctanoic acid



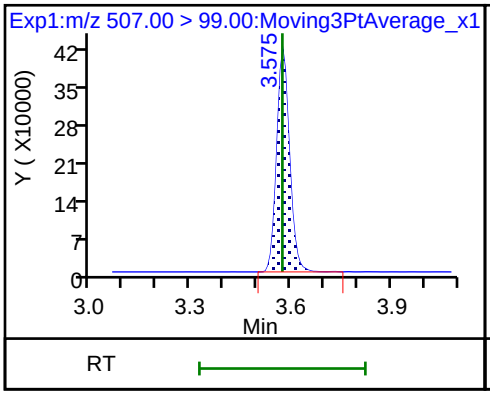
26 Perfluorooctanoic acid



* 24 13C2 PFOA



D 27 13C8 PFOS



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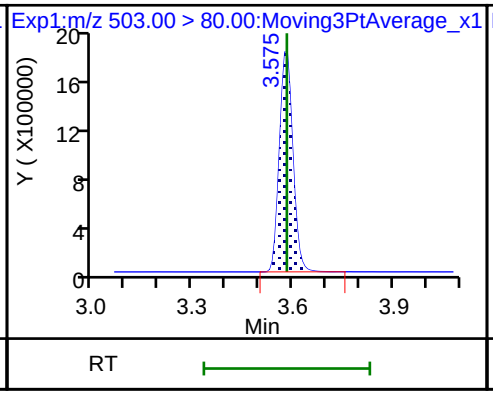
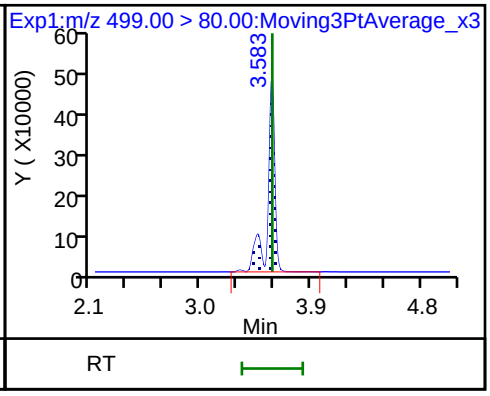
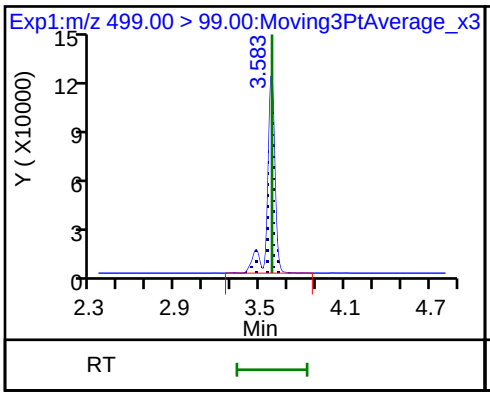


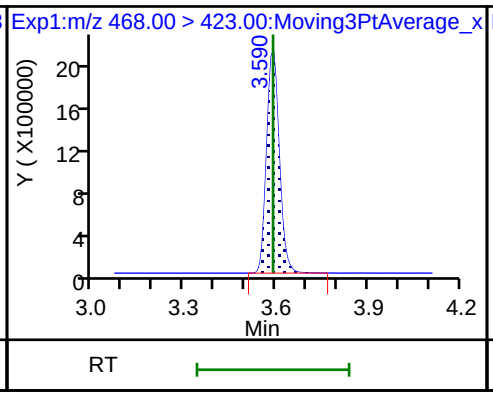
29 Perfluorooctanesulfonic acid



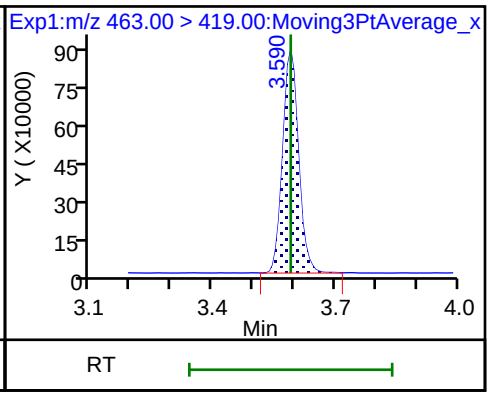
29 Perfluorooctanesulfonic acid



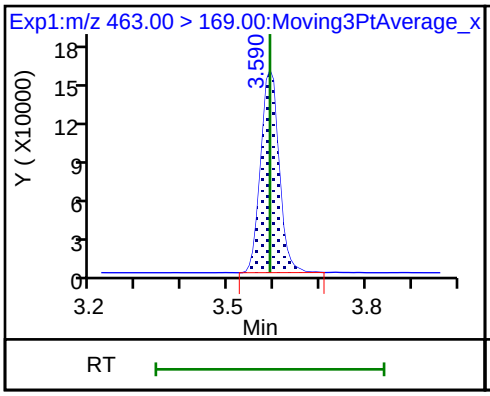
D 31 13C5 PFNA



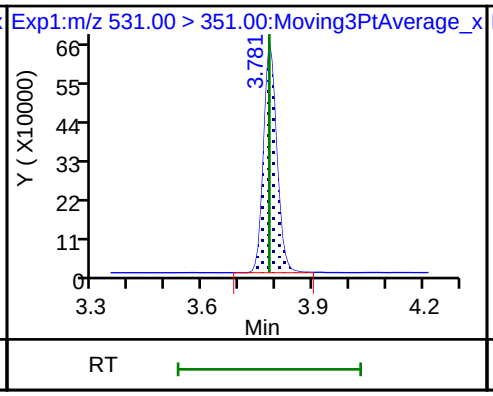
30 Perfluorononanoic acid



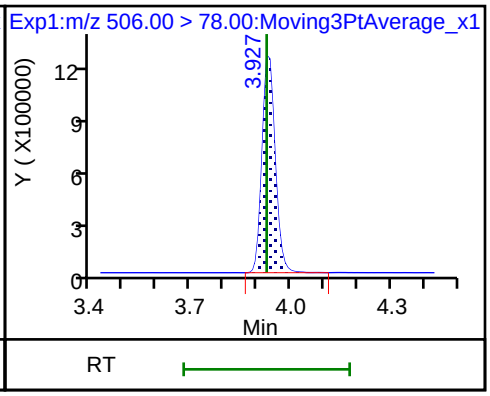
30 Perfluorononanoic acid



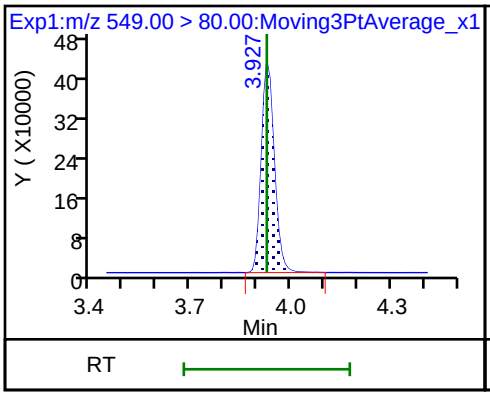
32 9-Chlorohexadecafluoro-3-oxanonane



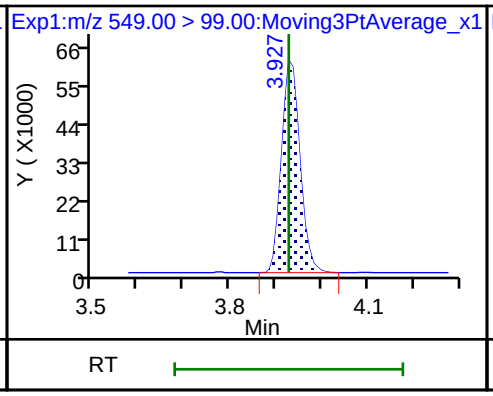
D 33 13C8 FOSA



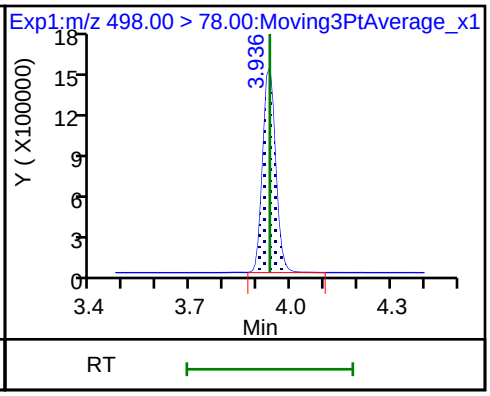
35 Perfluorononanesulfonic acid



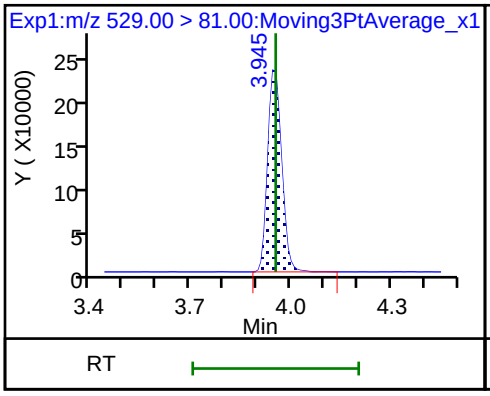
35 Perfluorononanesulfonic acid



34 Perfluorooctanesulfonamide



D 39 M2-8:2 FTS



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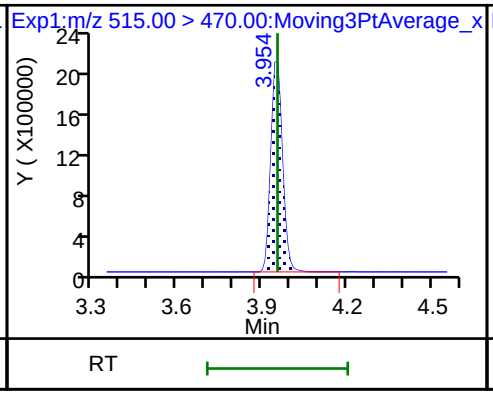
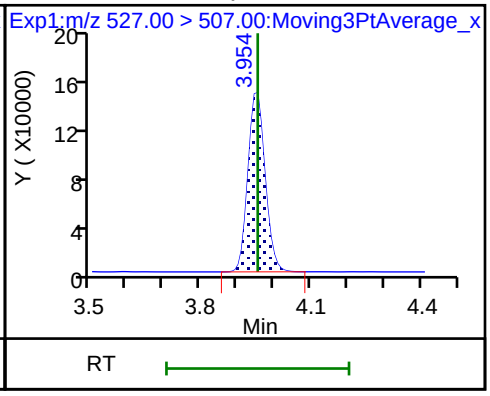
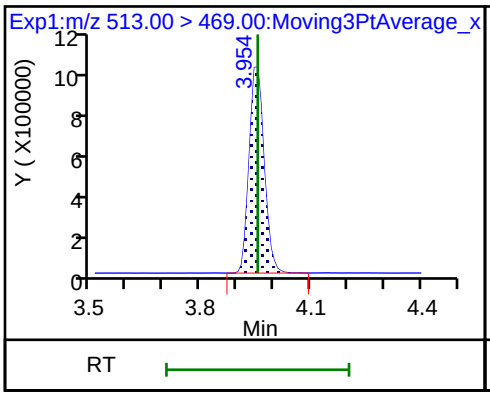


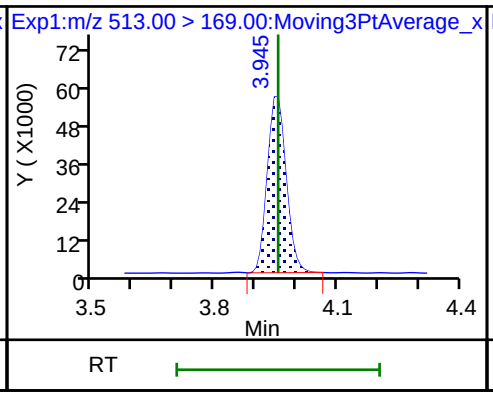
37 1H,1H,2H,2H-perfluorodecanesulfoni



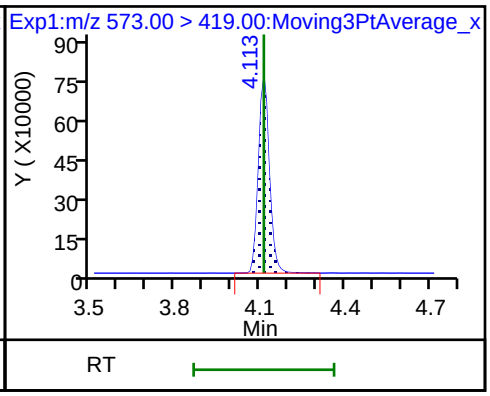
38 Perfluorodecanoic acid



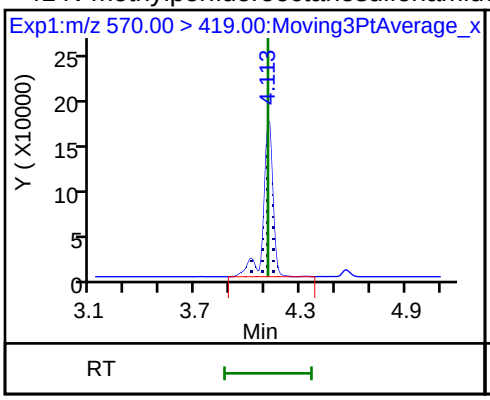
38 Perfluorodecanoic acid



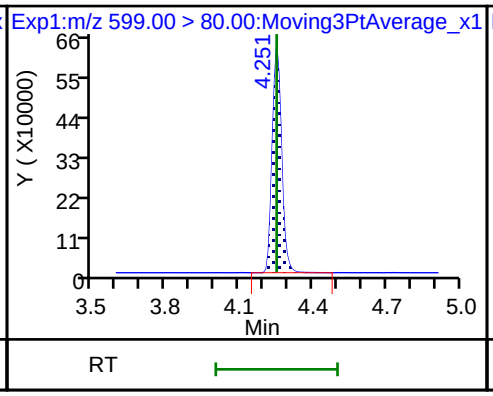
D 40 d3-NMeFOSAA



41 N-methylperfluorooctanesulfonamido



42 Perfluorodecanesulfonic acid



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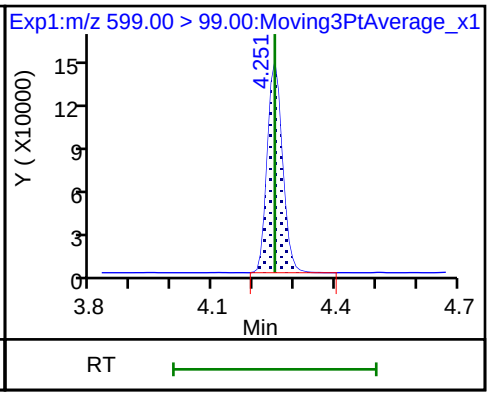
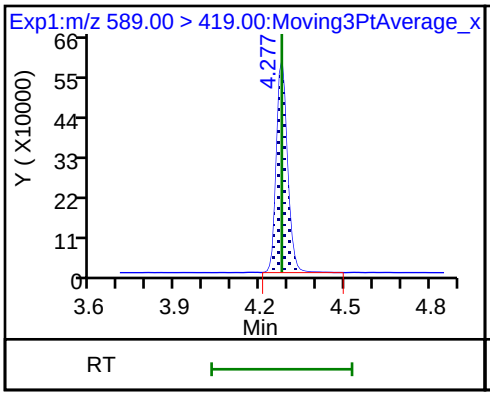
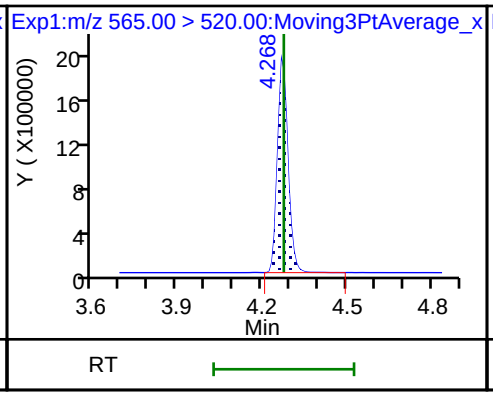


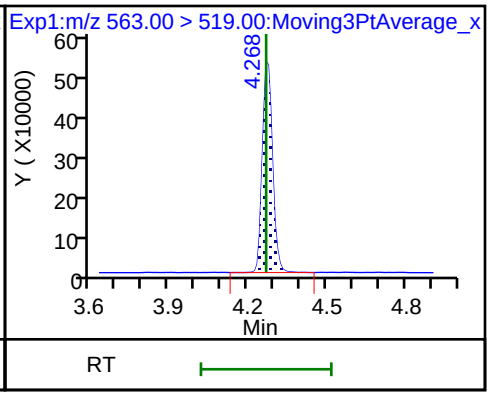
D 45 d5-NEtFOSAA



D 44 13C2 PFUnA



43 Perfluoroundecanoic acid



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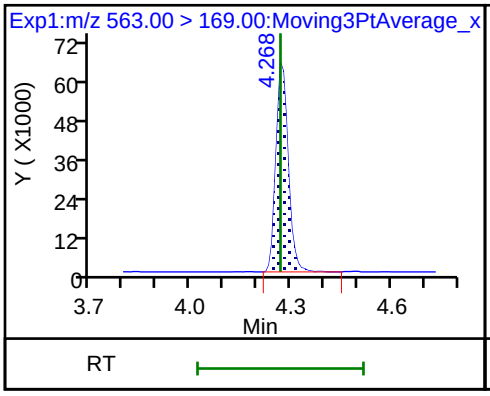
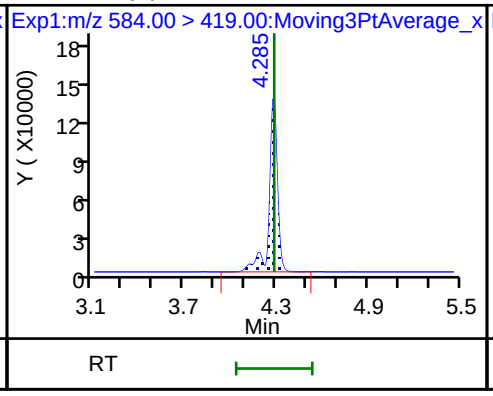
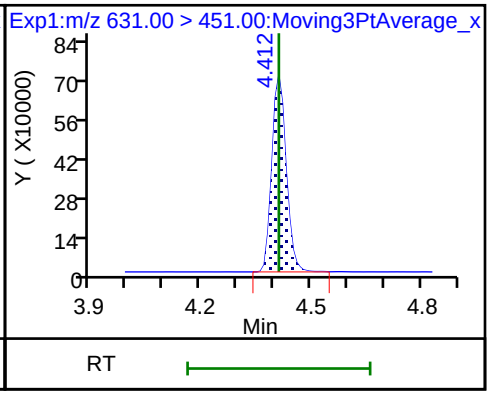


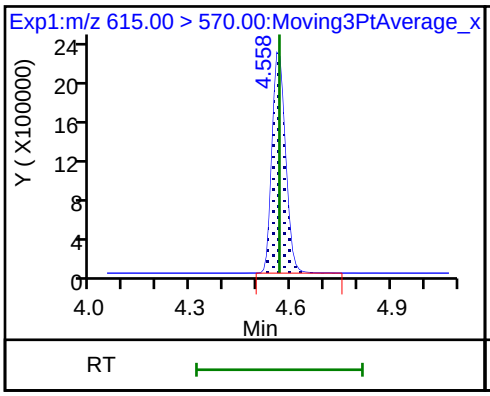
46 N-ethylperfluorooctanesulfonamidoa



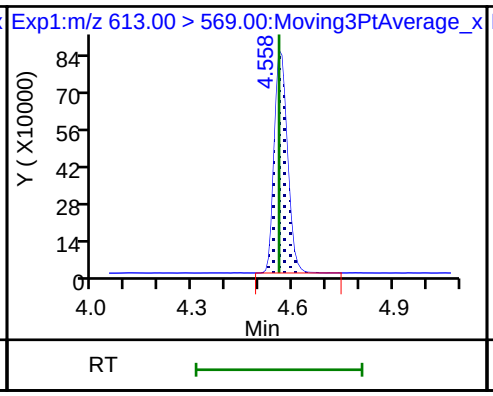
48 11-Chloroeicosafluoro-3-oxaundecan



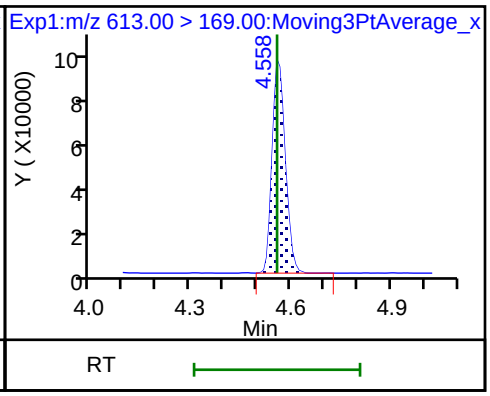
D 49 13C2 PFDoA



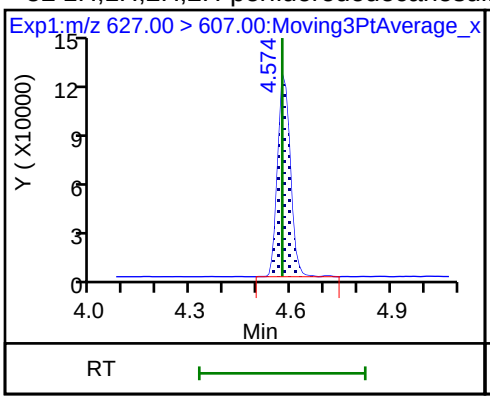
50 Perfluorododecanoic acid



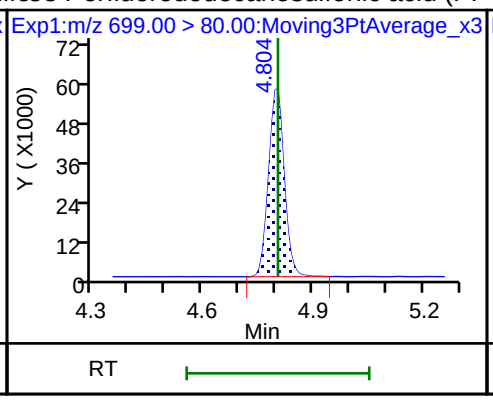
50 Perfluorododecanoic acid



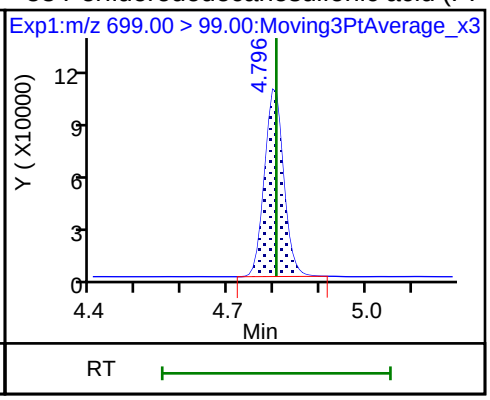
52 1H,1H,2H-perfluorododecanesulfo



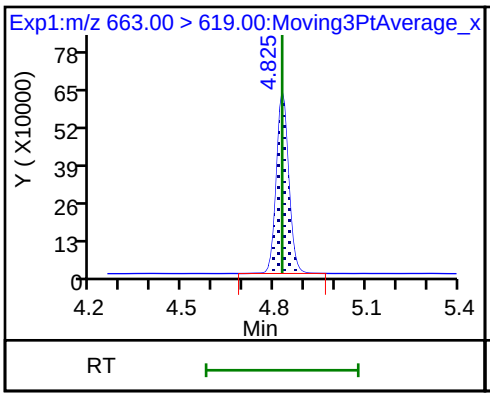
53 Perfluorododecanesulfonic acid (PF



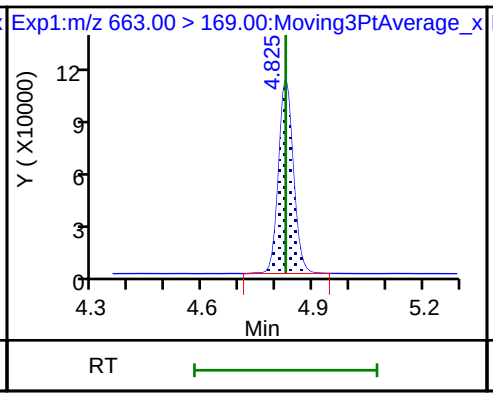
53 Perfluorododecanesulfonic acid (PF



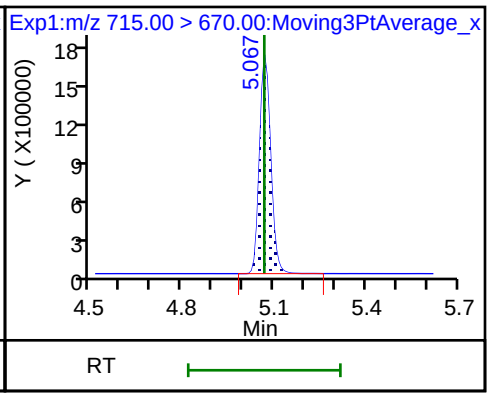
54 Perfluorotridecanoic acid



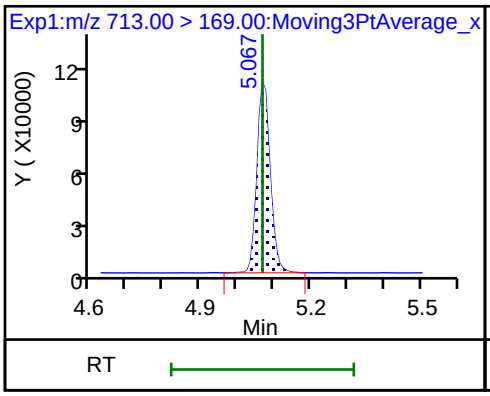
54 Perfluorotridecanoic acid



D 55 13C2 PFTeDA



56 Perfluorotetradecanoic acid



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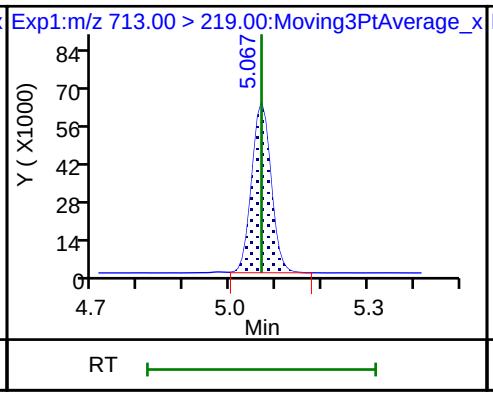
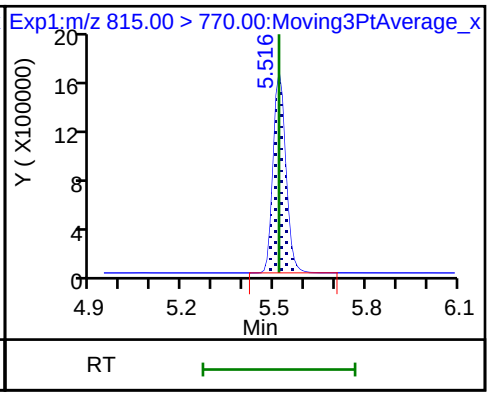
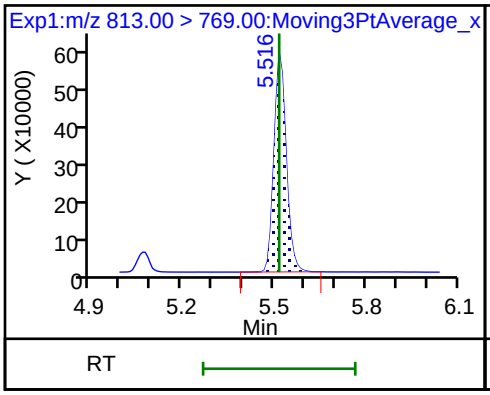


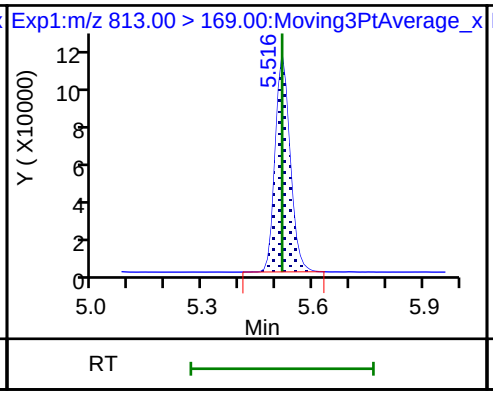
D 57 13C2 PFHxDA



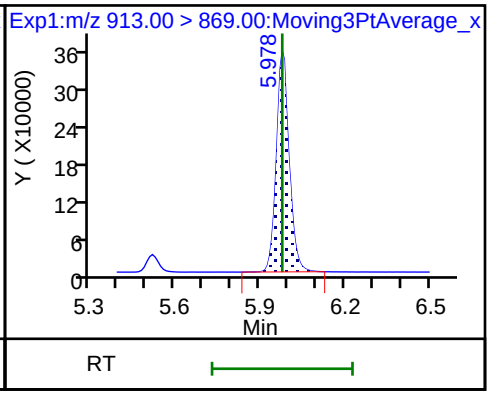
58 Perfluorohexadecanoic acid



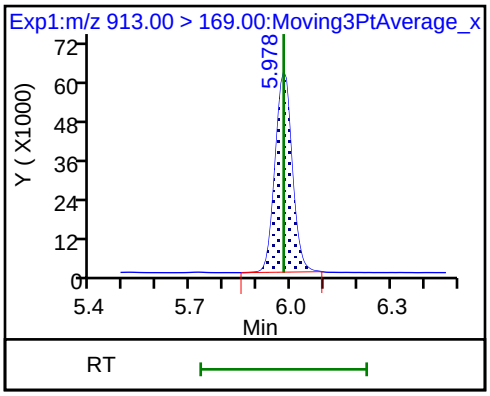
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

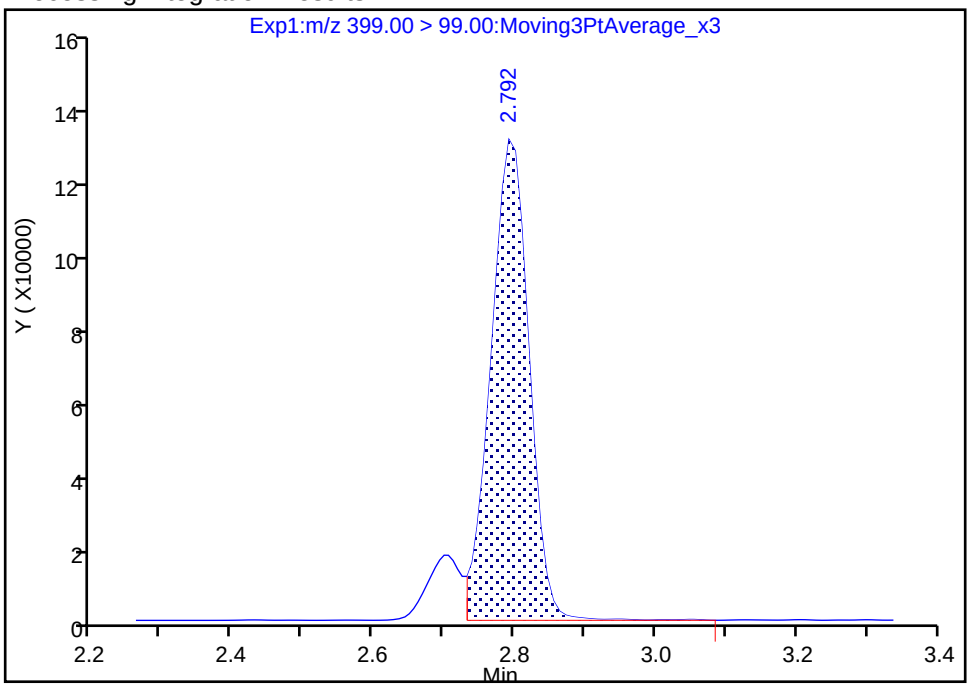
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_064.d
Injection Date: 12-Mar-2019 21:54:16 Instrument ID: A9
Lims ID: CCV L4
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 39 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

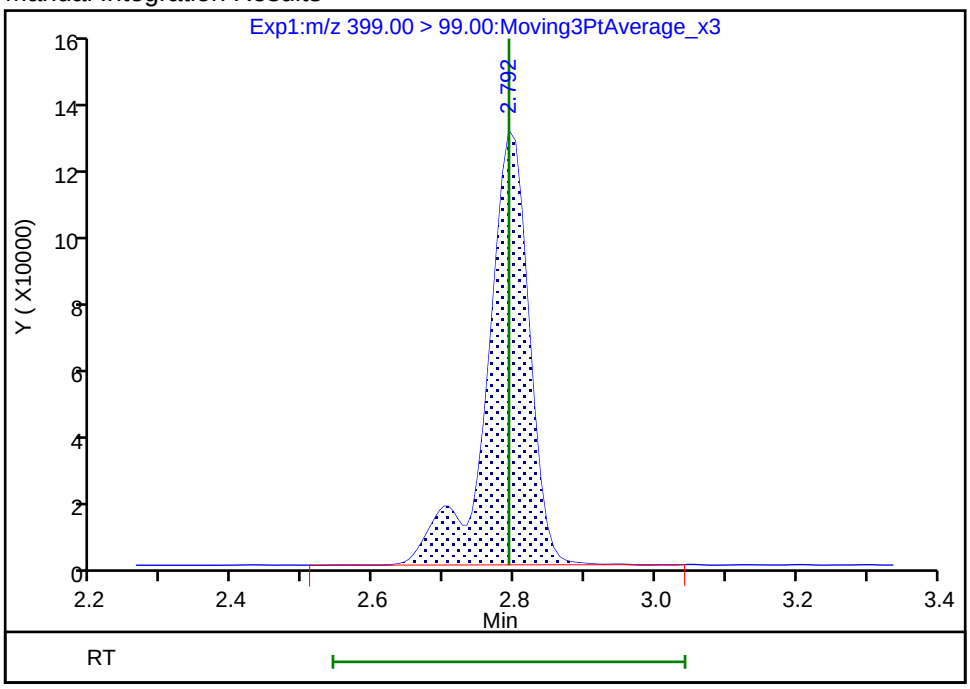
Processing Integration Results

RT: 2.79
Area: 478064
Amount: 0.731845
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 532781
Amount: 0.869644
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:05:04
Audit Action: Manually Integrated Audit Reason: Isomers

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

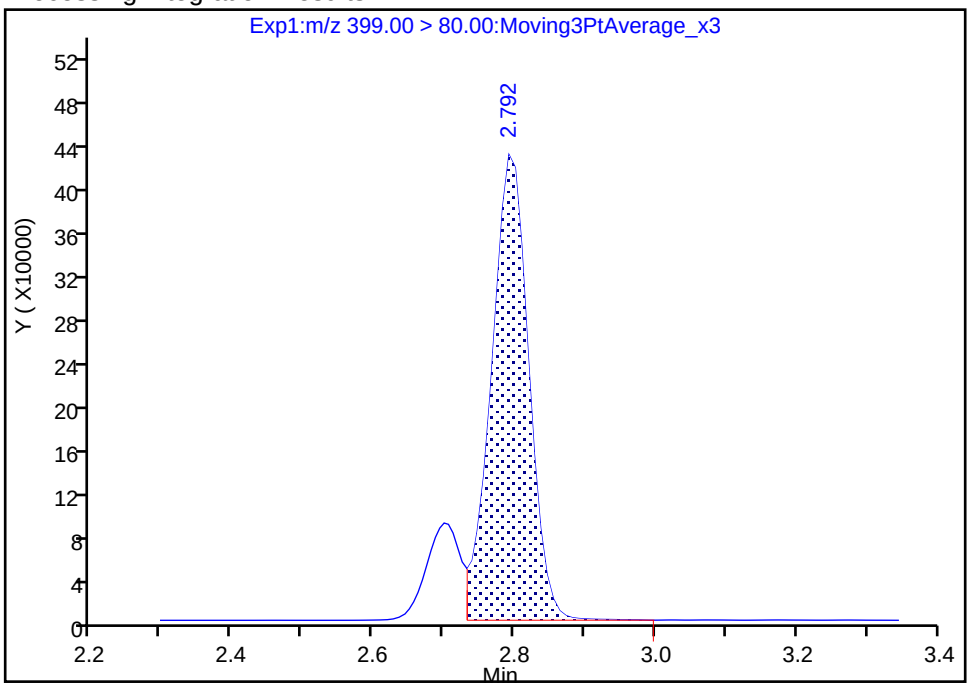
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_064.d
Injection Date: 12-Mar-2019 21:54:16 Instrument ID: A9
Lims ID: CCV L4
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 39 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

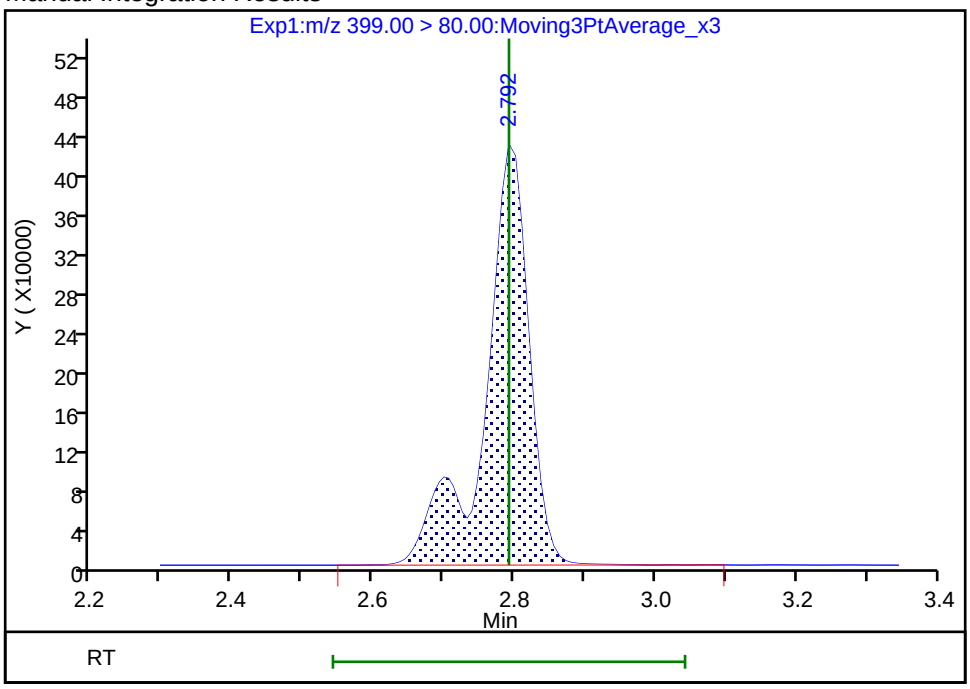
Processing Integration Results

RT: 2.79
Area: 1562438
Amount: 0.731845
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 1856628
Amount: 0.869644
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 14:05:06
Audit Action: Manually Integrated Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-281038/1-A

Matrix: Water | Lab File ID: 2019.03.12LLA_045.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 250.0(mL) | Date Analyzed: 03/12/2019 19:31

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281279 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	1.09	J	2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.327	J	2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.310	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2 FTS	ND		20	2.0
39108-34-4	8:2 FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-281038/1-A

Matrix: Water | Lab File ID: 2019.03.12LLA_045.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 250.0(mL) | Date Analyzed: 03/12/2019 19:31

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281279 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	95		25-150
STL01893	13C5-PFPeA DNU	94		25-150
STL00993	13C2 PFHxA	97		25-150
STL01892	13C4 PFHpA	103		25-150
STL00990	13C4 PFOA	97		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	102		25-150
STL00997	13C2 PFUnA	105		25-150
STL00998	13C2 PFDoA	112		25-150
STL02116	13C2 PFTeDA	113		25-150
STL02337	13C3 PFBS	88		25-150
STL00994	18O2 PFHxS	102		25-150
STL00991	13C4 PFOS	94		25-150
STL01056	13C8 FOSA	91		25-150
STL02118	d3-NMeFOSAA	100		25-150
STL02117	d5-NEtFOSAA	108		25-150
STL02279	M2-6:2 FTS	113		25-150
STL02280	M2-8:2 FTS	114		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d
Lims ID: MB 320-281038/1-A
Client ID:
Sample Type: MB
Inject. Date: 12-Mar-2019 19:31:30 ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: mb 320-281038/1-a
Misc. Info.: Plate: 1 Rack: 2
Operator ID: A9\Administrator Instrument ID: A9

Method: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 13:06:06 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 13:06:06
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.713	1.704	0.009	0.536	5304964	2.36		94.5	27403	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.713	1.705	0.008	1.000	5149	0.002775			1.3	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.038	2.025	0.013	0.637	4518639	2.36		94.2	11486	
D 5 13C3 PFBS										
301.90 > 80.00	2.071	2.057	0.014	0.648	6157387	2.04		87.7	462396	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.358	2.345	0.013	0.737	381285	2.01		86.3	1263	
D 9 13C2 PFHxA										
315.00 > 270.00	2.395	2.381	0.014	0.749	5195954	2.42		96.7	9861	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.512	2.507	0.006	0.785	698198	2.41		96.3	2894	
D 16 13C4 PFHpA										
367.00 > 322.00	2.786	2.781	0.005	0.871	6850907	2.58		103	9112	
D 17 18O2 PFHxS										
403.00 > 84.00	2.795	2.790	0.005	0.874	4186051	2.41		102	7564	
18 Perfluorohexanesulfonic acid										RM
399.00 > 80.00	2.804	2.800	0.004	1.003	16613	0.007751	Target=3.48		89.2	RM
399.00 > 99.00	2.804	2.800	0.004	1.003	3714		4.47(2.29-4.25)		12.4	M
D 20 M2-6:2 FTS										
429.00 > 81.00	3.183	3.172	0.011	0.995	646927	2.69		113	3477	
D 22 13C8 PFOA										
421.00 > 376.00	3.191	3.187	0.004	0.998	18801	0.009085		0.0	99.9	
D 25 13C4 PFOA										
417.00 > 372.00	3.198	3.195	0.003	1.000	5879342	2.44		97.5	6675	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
26 Perfluorooctanoic acid										M
413.00 > 369.00	3.206	3.204	0.002	1.002	66413	0.0272	Target=2.87		21.0	M
413.00 > 169.00	3.198	3.204	-0.006	1.000	25268		2.63(1.36-4.08)		102	
* 24 13C2 PFOA										
415.00 > 370.00	3.198	3.204	-0.006		6678629	2.50			6460	
D 27 13C8 PFOS										
507.00 > 99.00	3.584	3.574	0.010	1.121	917	0.001966		0.0	11.5	
D 28 13C4 PFOS										
503.00 > 80.00	3.584	3.581	0.003	1.121	4544661	2.24		93.6	6542	
29 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.584	3.583	0.001	1.000	6819	0.003690	Target=4.00		22.5	M
499.00 > 99.00	3.584	3.583	0.001	1.000	1673		4.08(2.04-6.12)		17.7	M
D 31 13C5 PFNA										
468.00 > 423.00	3.592	3.589	0.003	1.123	5482743	2.43		97.1	6169	
D 33 13C8 FOSA										
506.00 > 78.00	3.939	3.927	0.012	1.232	3039371	2.28		91.4	5036	
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.948	3.937	0.011	1.002	8152	0.002433			27.6	
D 39 M2-8:2 FTS										
529.00 > 81.00	3.957	3.954	0.003	1.237	747272	2.74		114	2212	
D 36 13C2 PFDA										
515.00 > 470.00	3.957	3.954	0.003	1.237	5943840	2.56		102	6634	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.957	3.955	0.002	1.000	1146	0.002282			7.7	
47 MeFOSA										
512.00 > 169.00	4.116	4.065	0.051	1.287	289	NC			2.5	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.116	4.112	0.004	1.287	1760746	2.50		100	3580	
41 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	4.106	4.122	-0.016	0.998	3770	0.006718			1.8	M
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.280	4.276	0.004	1.338	1618734	2.70		108	2422	
D 44 13C2 PFUnA										
565.00 > 520.00	4.280	4.276	0.004	1.338	4958026	2.61		105	4423	
D 49 13C2 PFDoA										
615.00 > 570.00	4.568	4.565	0.003	1.428	6007762	2.80		112	9161	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.069	5.067	0.002	1.585	4463489	2.83		113	15418	
56 Perfluorotetradecanoic acid										R
713.00 > 169.00	5.061	5.076	-0.015	0.998	2567	0.008173	Target=1.47		21.4	R
713.00 > 219.00	5.069	5.076	-0.007	1.000	1252		2.05(1.07-1.99)		20.4	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.517	5.515	0.002	1.725	3926397	2.56		102	7555	
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.517	5.526	-0.009	1.000	39592	-0.000866	Target=5.36		4.3	
813.00 > 169.00	5.527	5.526	0.001	1.002	7626		5.19(3.82-7.09)		48.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 13-Mar-2019 13:06:07 Chrom Revision: 2.3 12-Mar-2019 09:55:20

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d

Injection Date: 12-Mar-2019 19:31:30 Instrument ID: A9

Lims ID: MB 320-281038/1-A

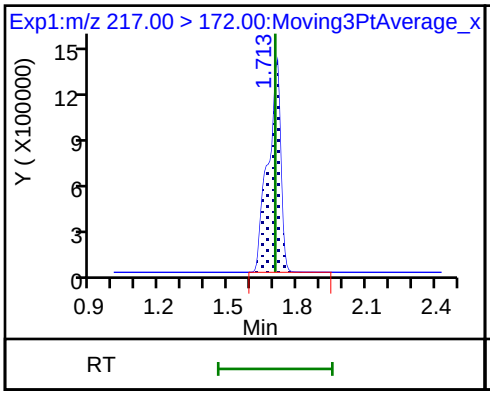
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 2

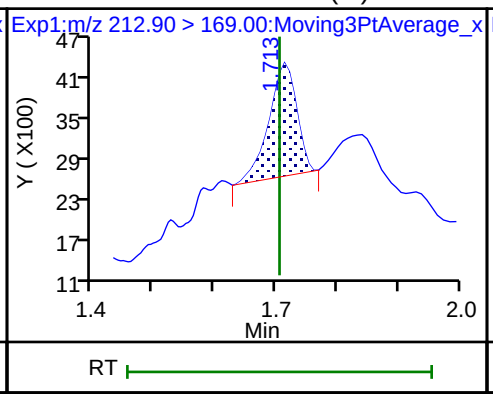
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

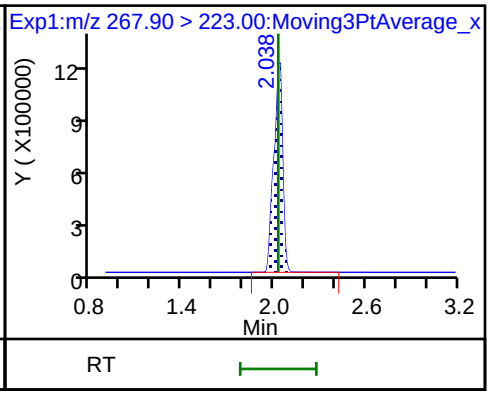
D 1 13C4 PFBA



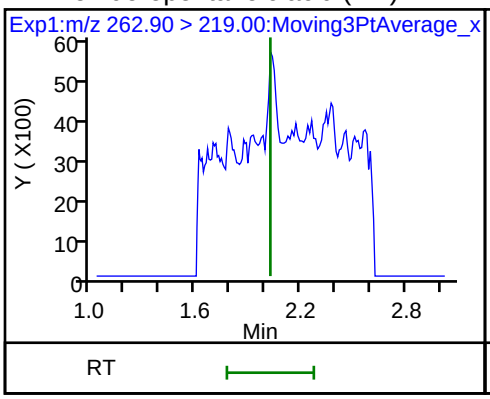
2 Perfluorobutanoic acid (M)



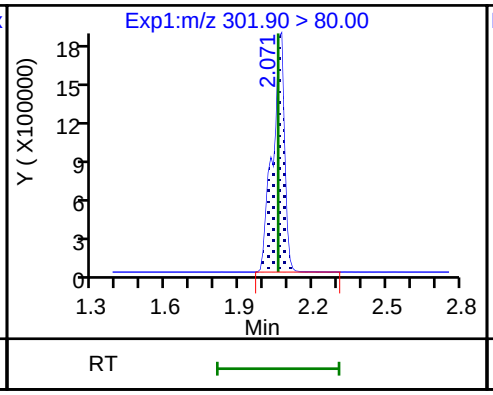
D 3 13C5 PFPeA



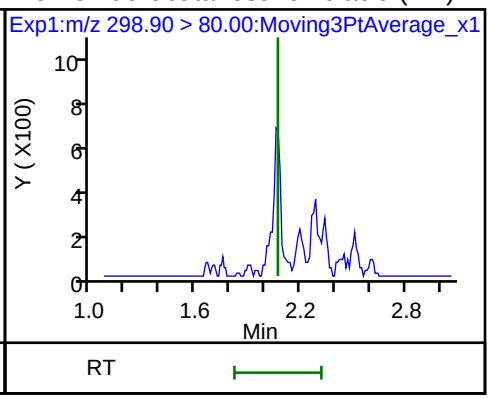
4 Perfluoropentanoic acid (ND)



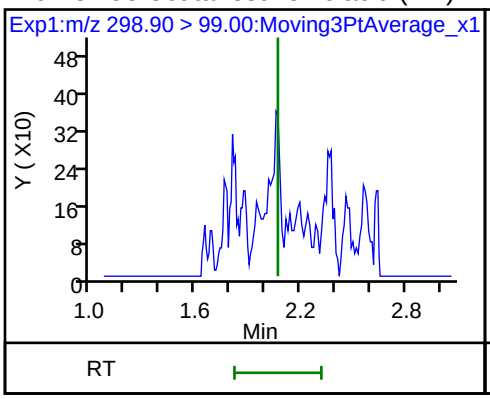
D 5 13C3 PFBS



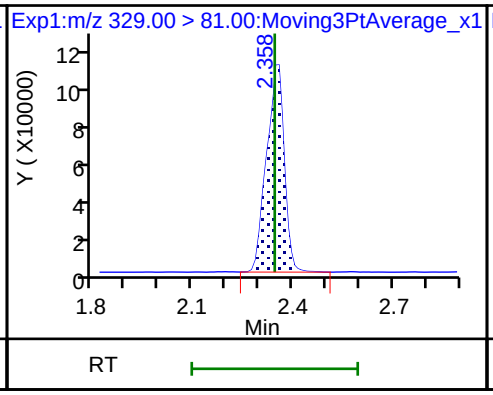
6 Perfluorobutanesulfonic acid (ND)



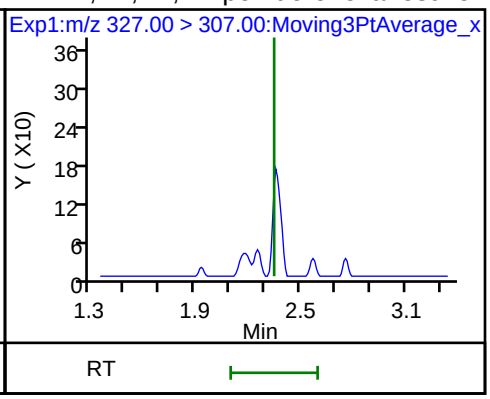
6 Perfluorobutanesulfonic acid (ND)



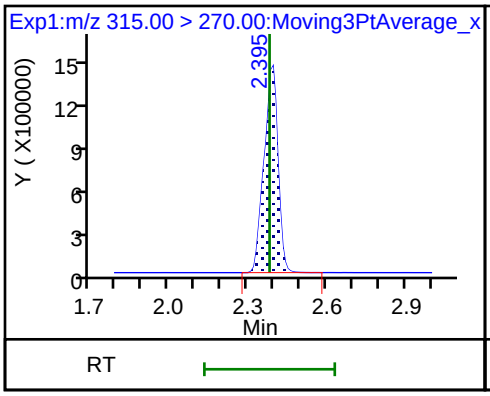
D 8 M2-4:2 FTS



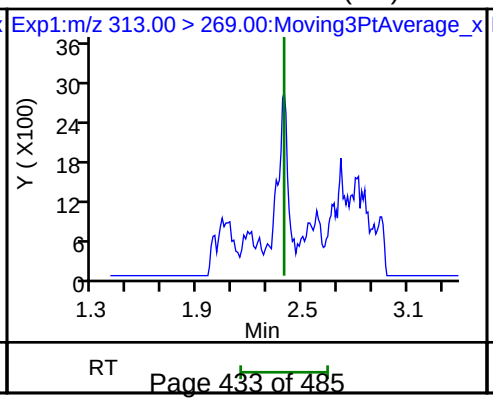
7 1H,1H,2H,2H-perfluorohexanesulfoni (ND)



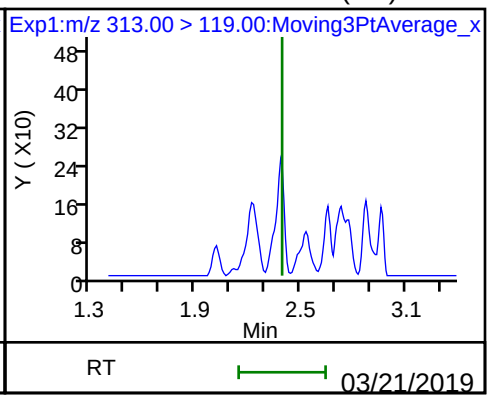
D 9 13C2 PFHxA



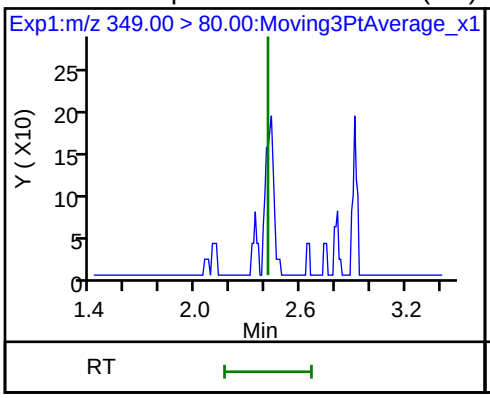
10 Perfluorohexanoic acid (ND)



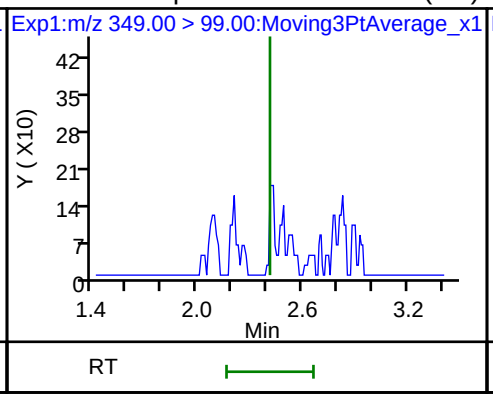
10 Perfluorohexanoic acid (ND)



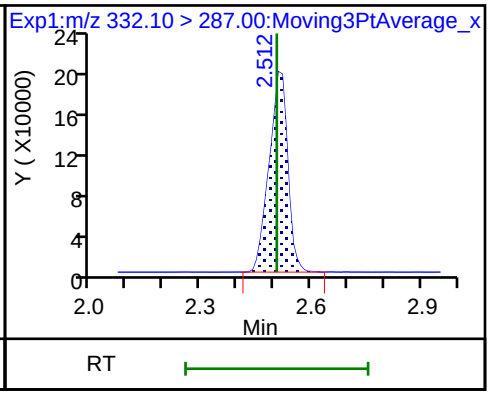
11 Perfluoropentanesulfonic acid (ND)



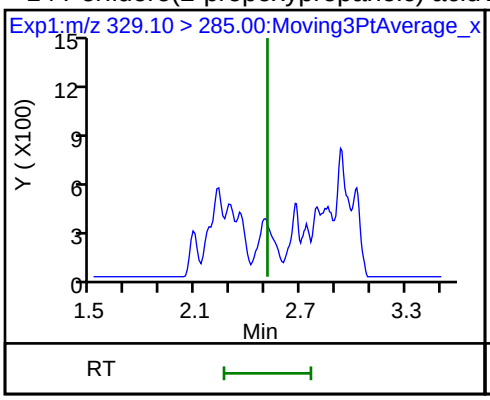
11 Perfluoropentanesulfonic acid (ND) D



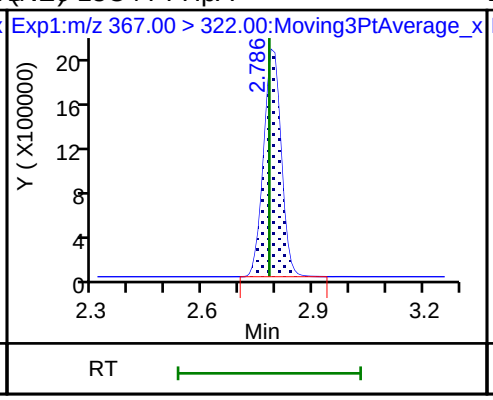
13 13C3 HFPO-DA



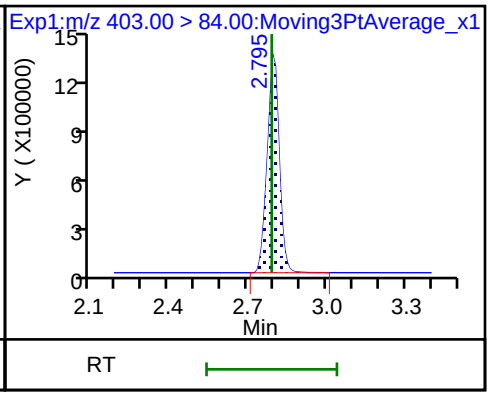
14 Perfluoro(2-propoxypropanoic) acid (ND)



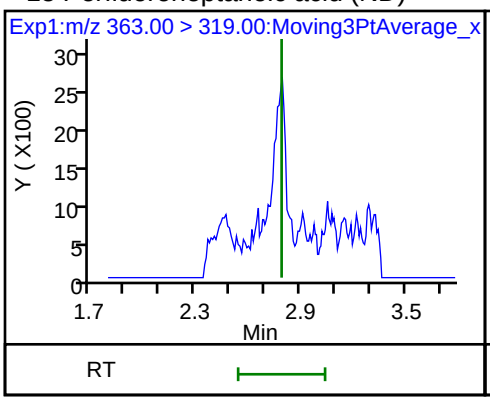
16 13C4 PFHpA



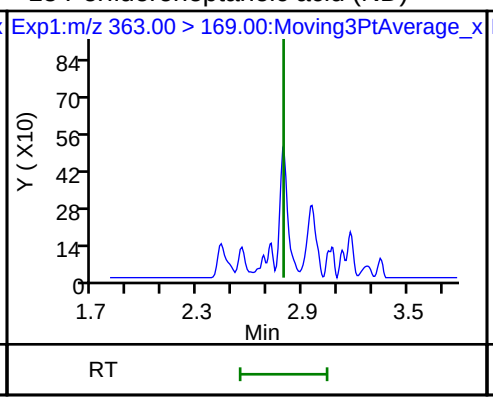
17 18O2 PFHxS



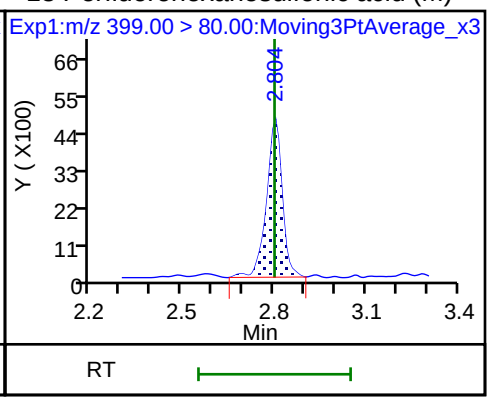
15 Perfluoroheptanoic acid (ND)



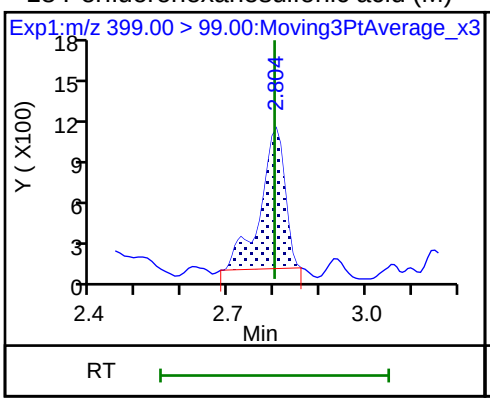
15 Perfluoroheptanoic acid (ND)



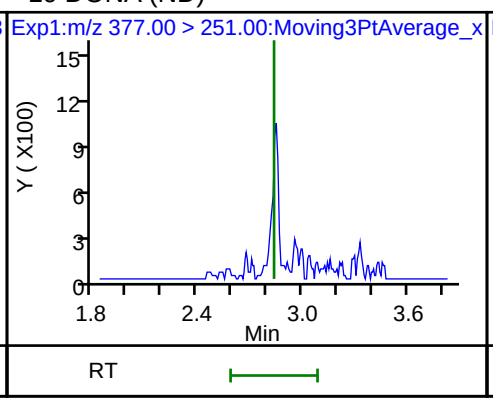
18 Perfluorohexanesulfonic acid (M)



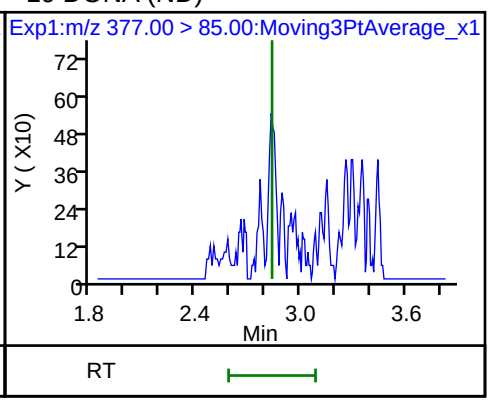
18 Perfluorohexanesulfonic acid (M)



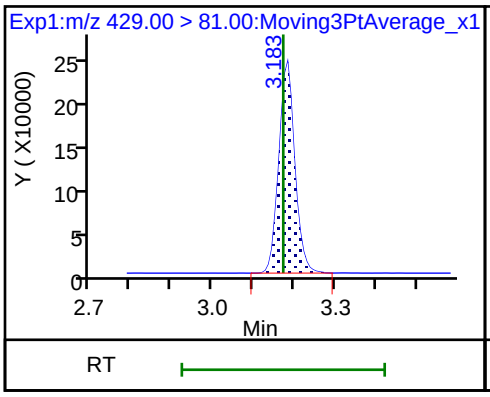
19 DONA (ND)



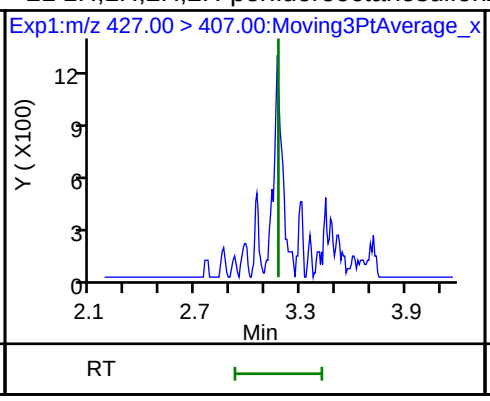
19 DONA (ND)



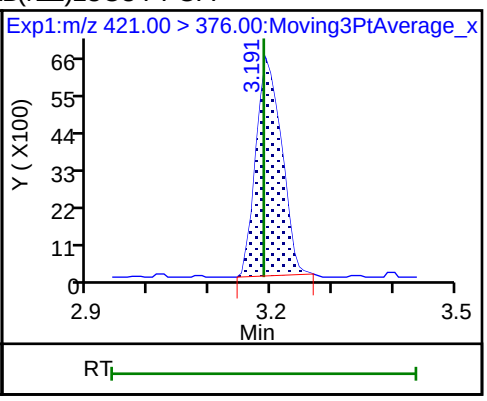
D 20 M2-6:2 FTS



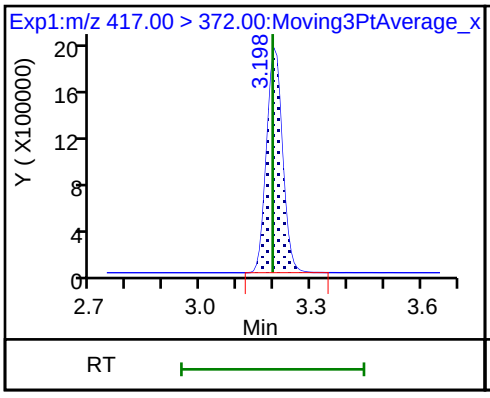
21 1H,1H,2H,2H-perfluorooctanesulfonic (M2)



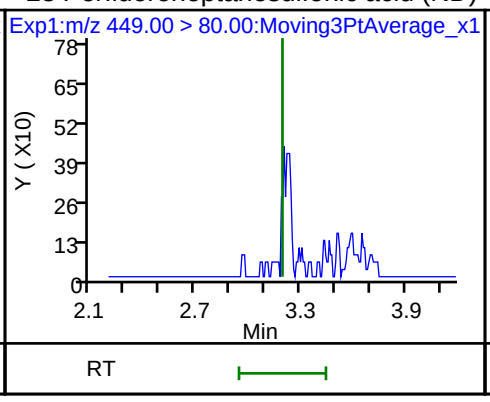
D 22 13C8 PFOA



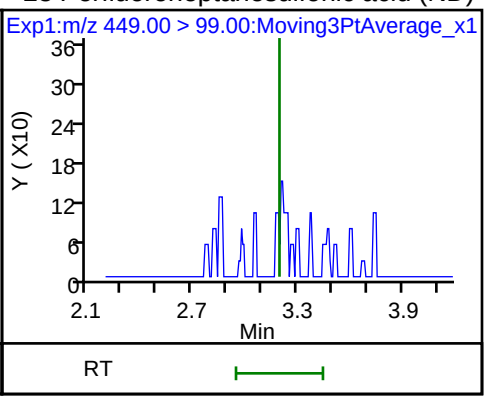
D 25 13C4 PFOA



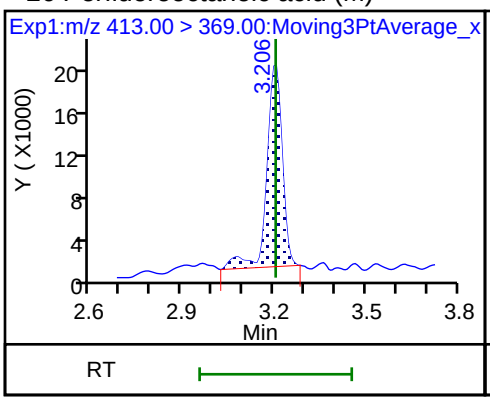
23 Perfluoroheptanesulfonic acid (ND)



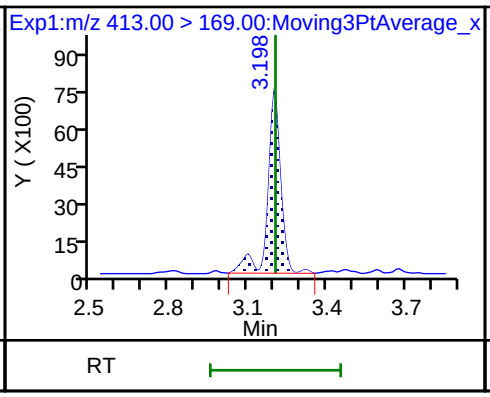
23 Perfluoroheptanesulfonic acid (ND)



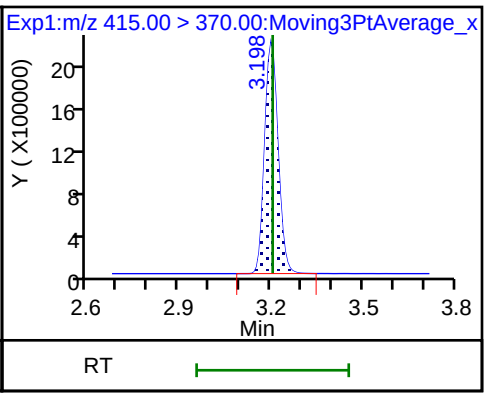
26 Perfluorooctanoic acid (M)



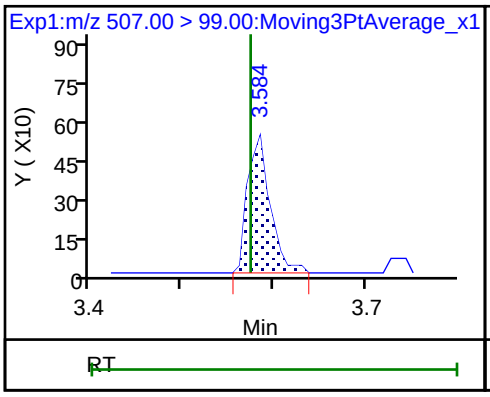
26 Perfluorooctanoic acid



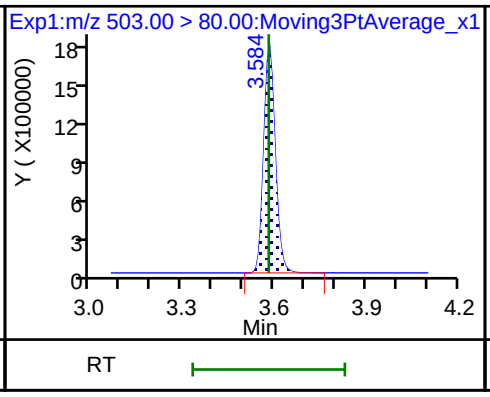
* 24 13C2 PFOA



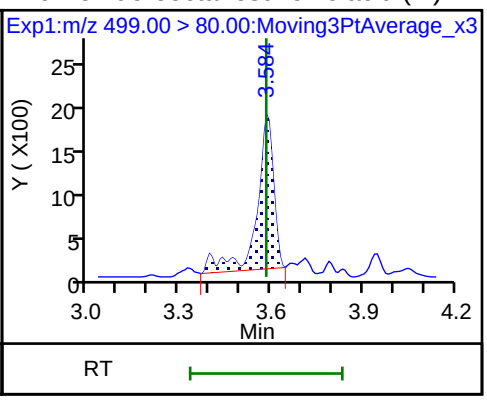
D 27 13C8 PFOS



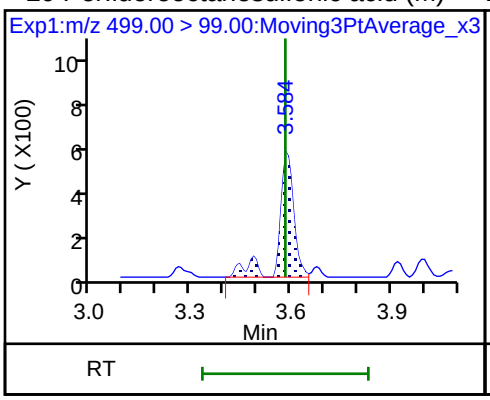
D 28 13C4 PFOS



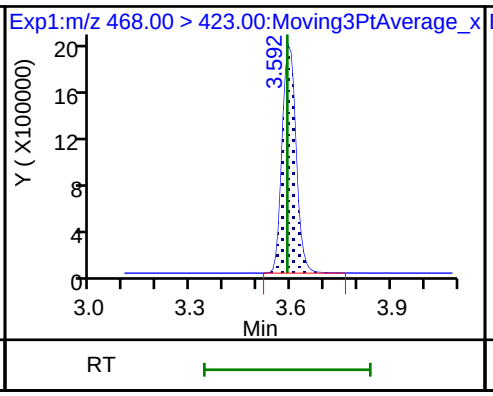
29 Perfluorooctanesulfonic acid (M)



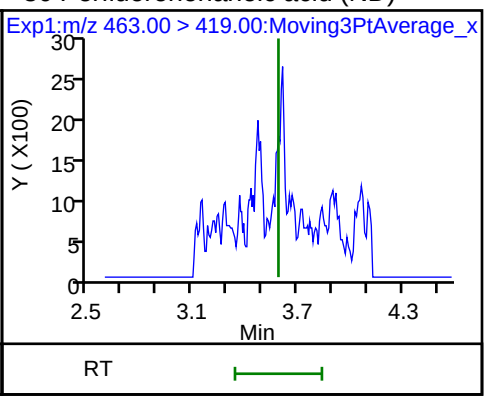
29 Perfluorooctanesulfonic acid (M)



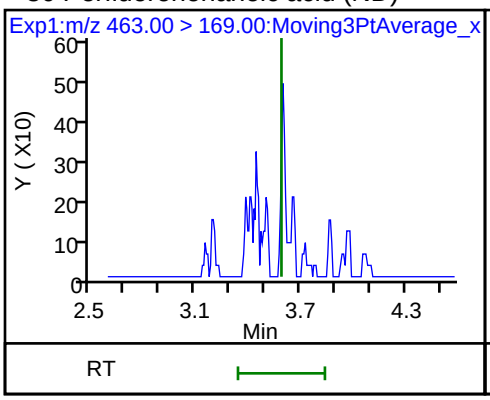
D 31 13C5 PFNA



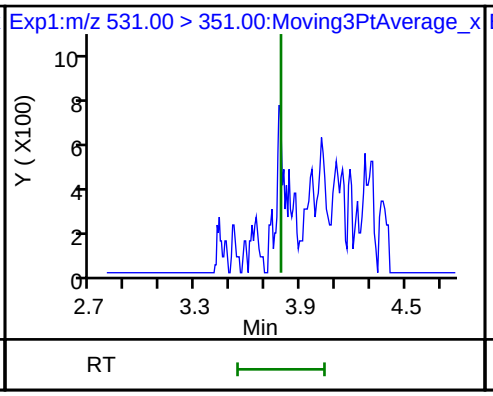
30 Perfluorononanoic acid (ND)



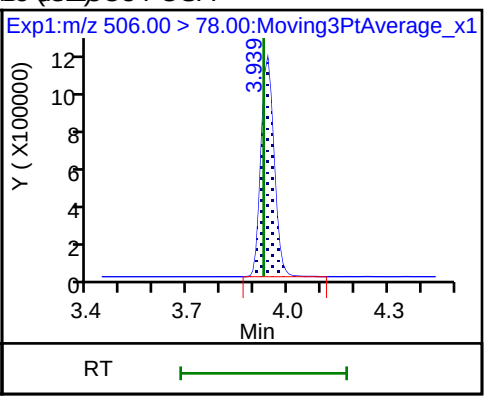
30 Perfluorononanoic acid (ND)



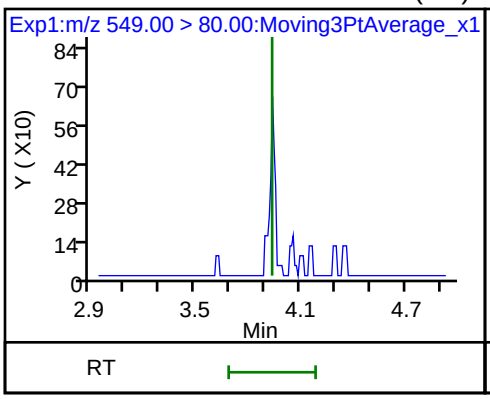
32 9-Chlorohexadecafluoro-3-oxanonane (3D)



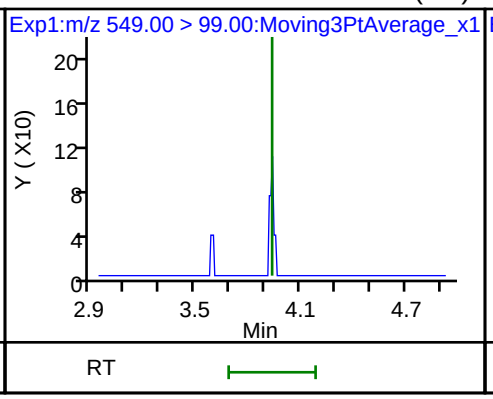
D 33 13C8 FOSA



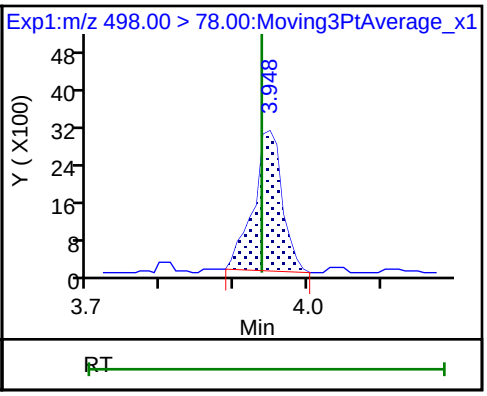
35 Perfluorononanesulfonic acid (ND)



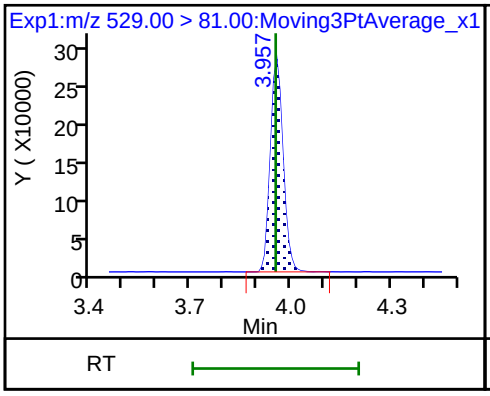
35 Perfluorononanesulfonic acid (ND)



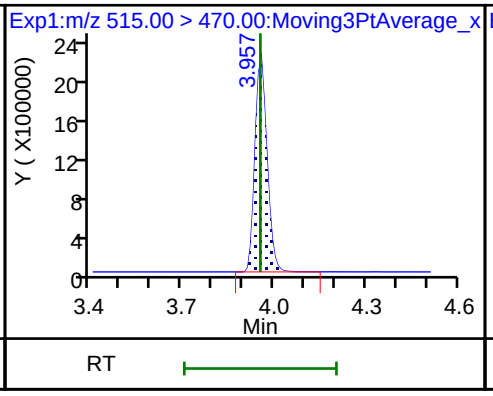
34 Perfluorooctanesulfonamide



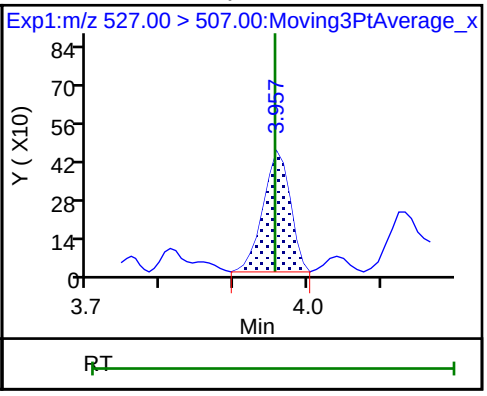
D 39 M2-8:2 FTS



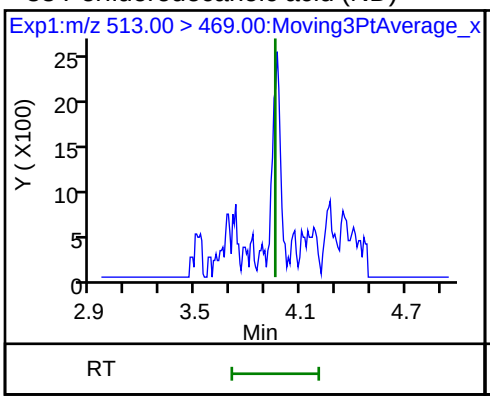
D 36 13C2 PFDA



37 1H,1H,2H,2H-perfluorodecanesulfoni



38 Perfluorodecanoic acid (ND)



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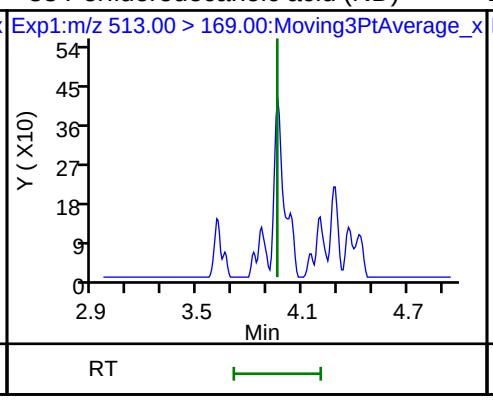
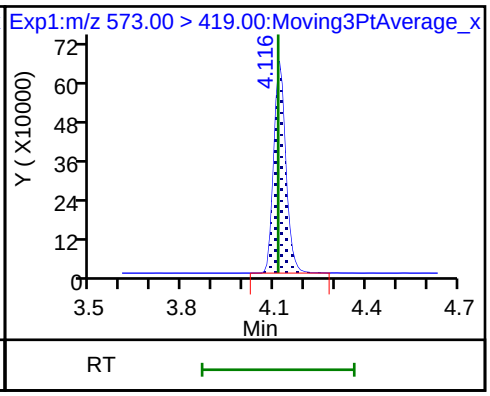
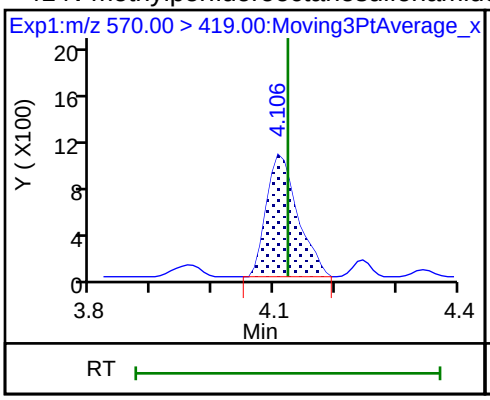


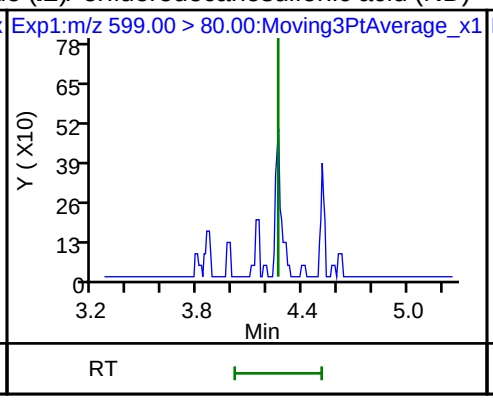
D 40 d3-NMeFOSAA



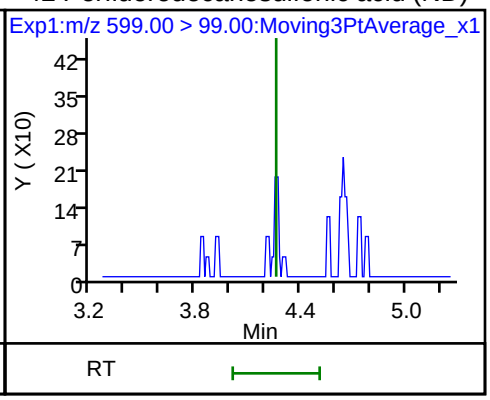
41 N-methylperfluorooctanesulfonamido (ND)



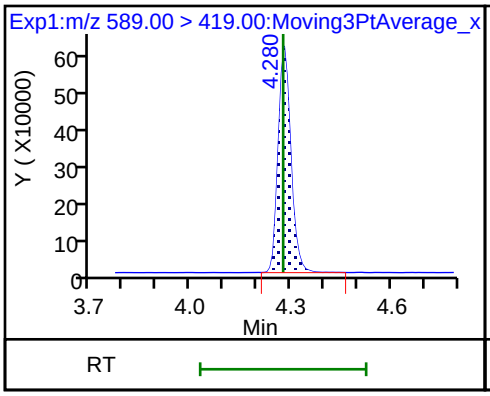
42 Perfluorodecanesulfonic acid (ND)



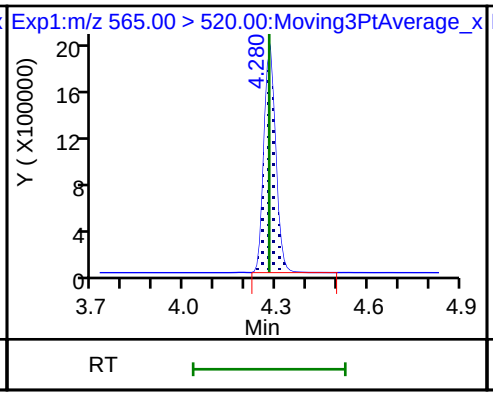
42 Perfluorodecanesulfonic acid (ND)



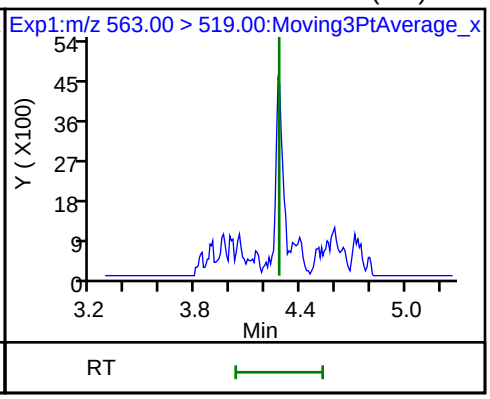
D 45 d5-NEtFOSAA



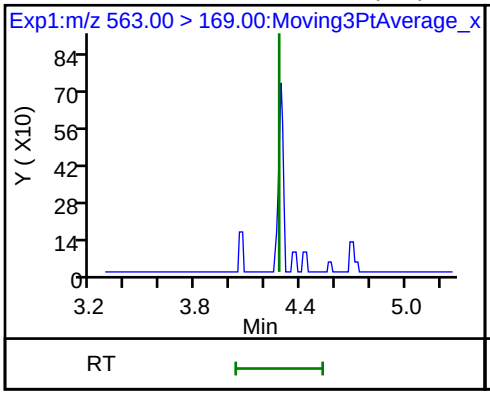
D 44 13C2 PFUnA



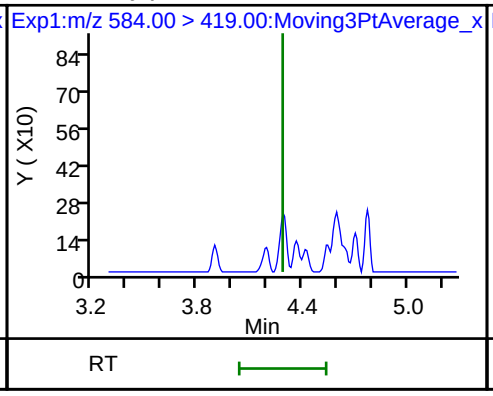
43 Perfluoroundecanoic acid (ND)



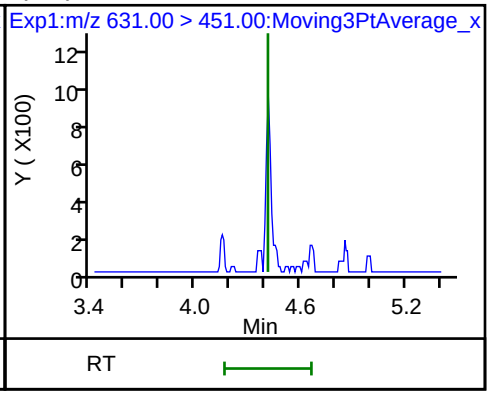
43 Perfluoroundecanoic acid (ND)



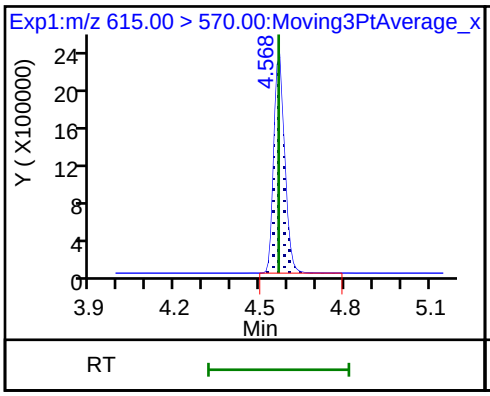
46 N-ethylperfluorooctanesulfonamidoa (ND)



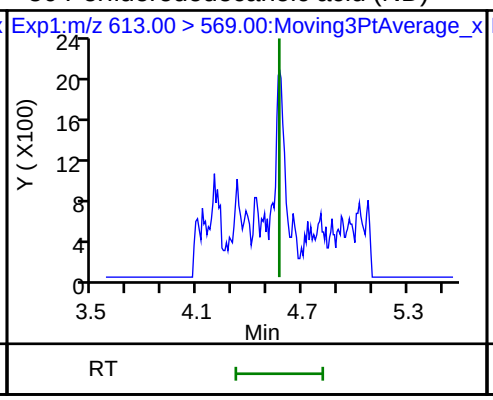
48 11-Chloroeicosafluoro-3-oxaundecan (ND)



D 49 13C2 PFDoA



50 Perfluorododecanoic acid (ND)



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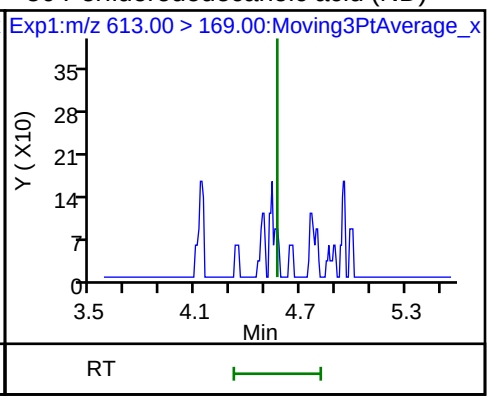
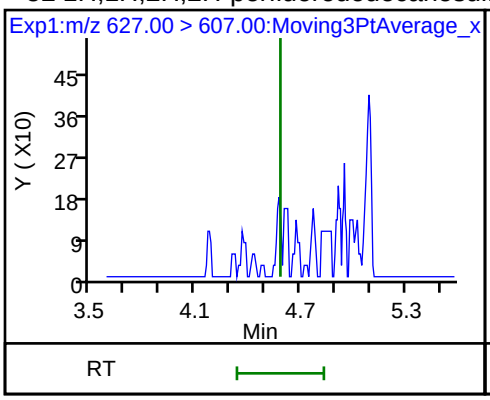
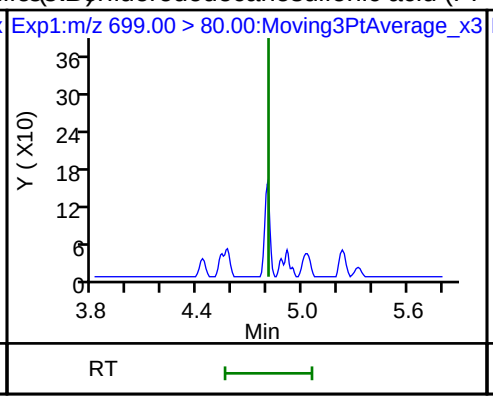


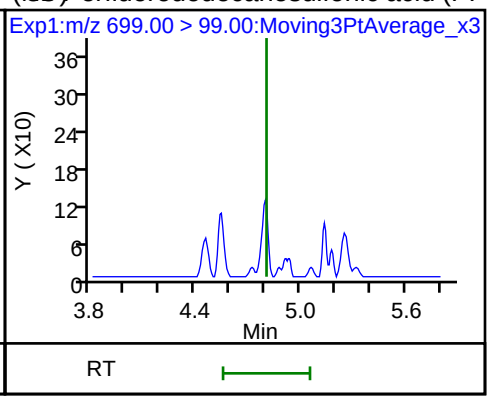
52 1H,1H,2H-perfluorododecanesulfo (ND)



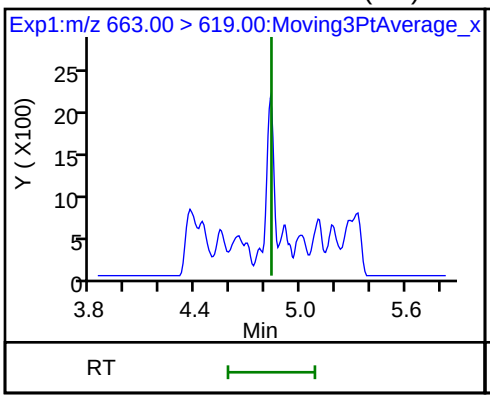
53 Perfluorododecanesulfonic acid (PF (ND)



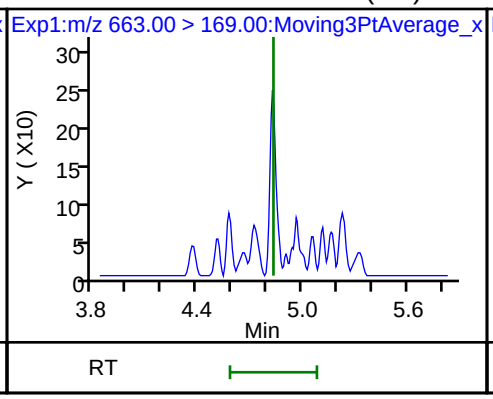
53 Perfluorododecanesulfonic acid (PF (ND)



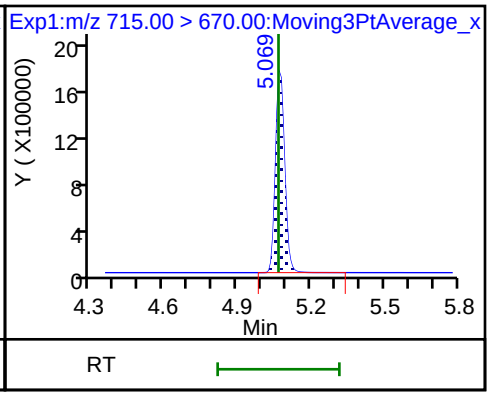
54 Perfluorotridecanoic acid (ND)



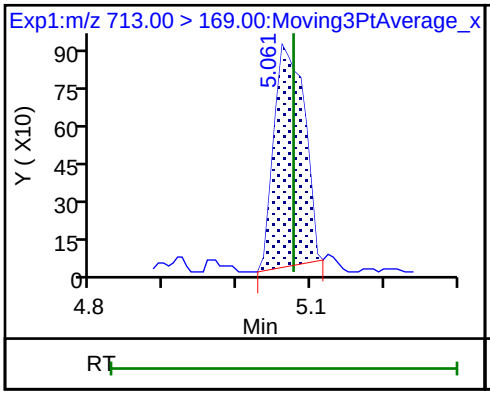
54 Perfluorotridecanoic acid (ND)



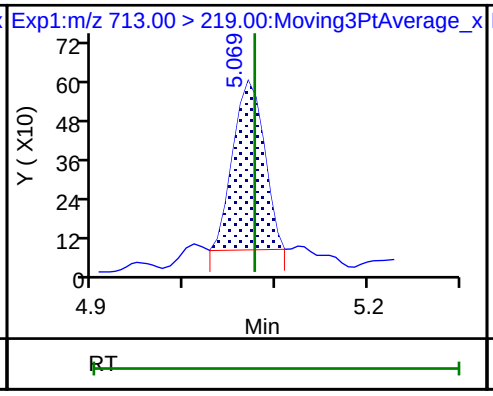
D 55 13C2 PFTeDA



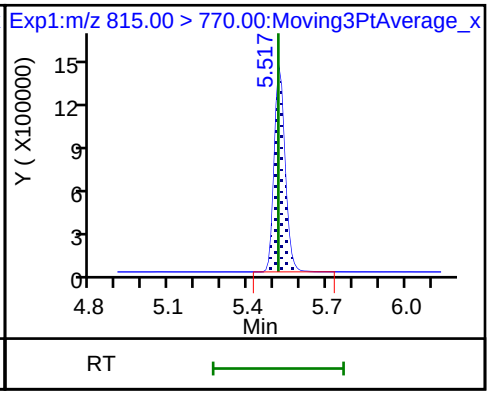
56 Perfluorotetradecanoic acid



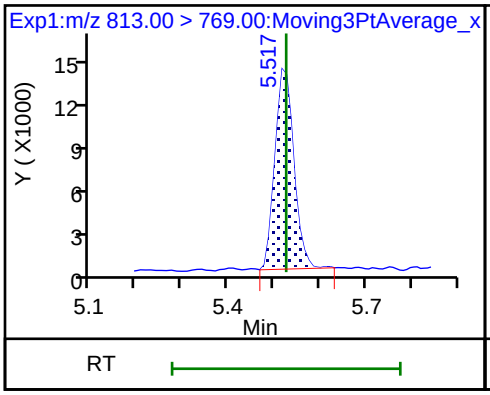
56 Perfluorotetradecanoic acid



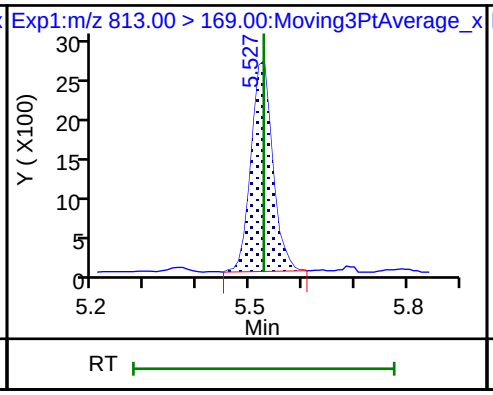
D 57 13C2 PFHxDA



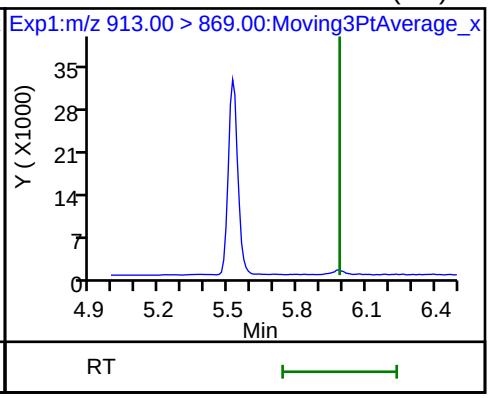
58 Perfluorohexadecanoic acid



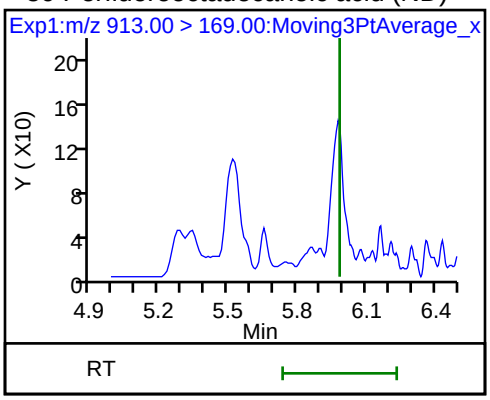
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid (ND)



59 Perfluorooctadecanoic acid (ND)



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

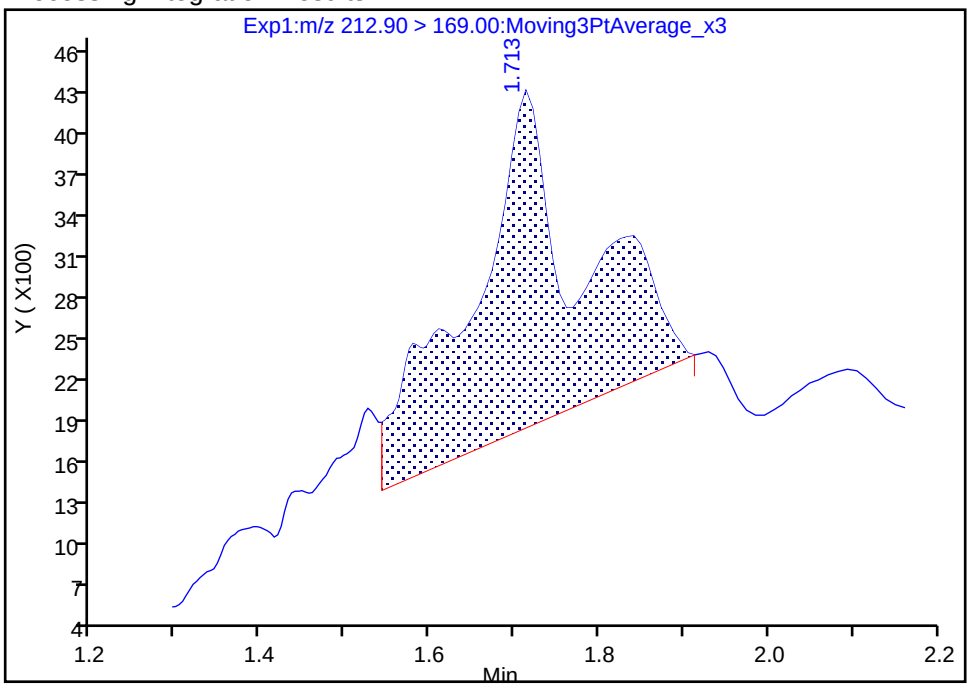
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d
Injection Date: 12-Mar-2019 19:31:30 Instrument ID: A9
Lims ID: MB 320-281038/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

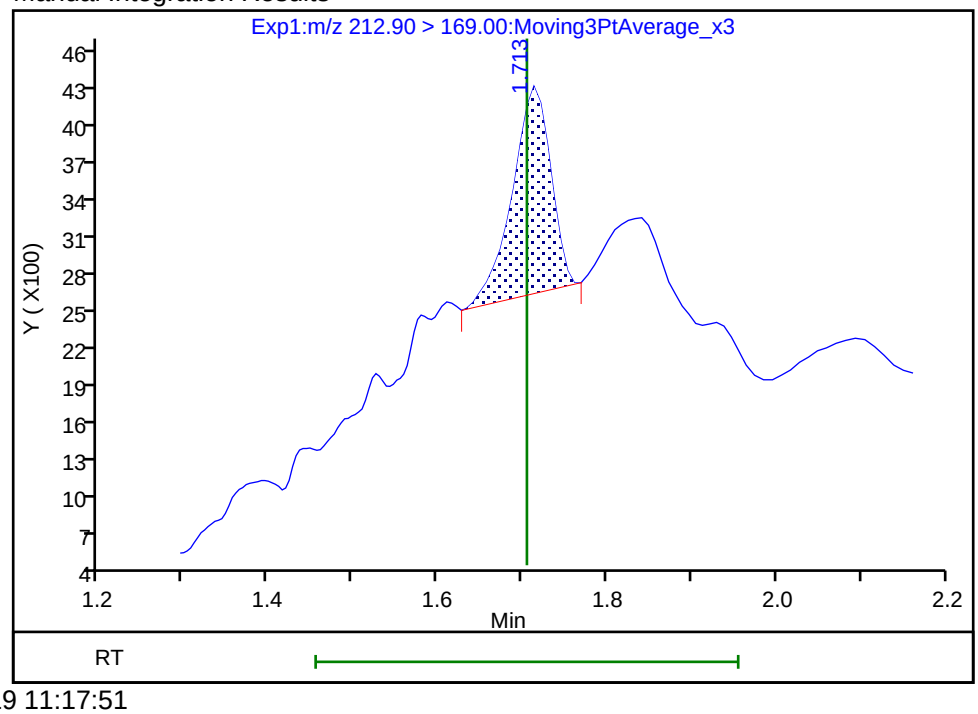
Processing Integration Results

RT: 1.71
Area: 21944
Amount: 0.011826
Amount Units: ng/ml



Manual Integration Results

RT: 1.71
Area: 5149
Amount: 0.002775
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:17:51
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

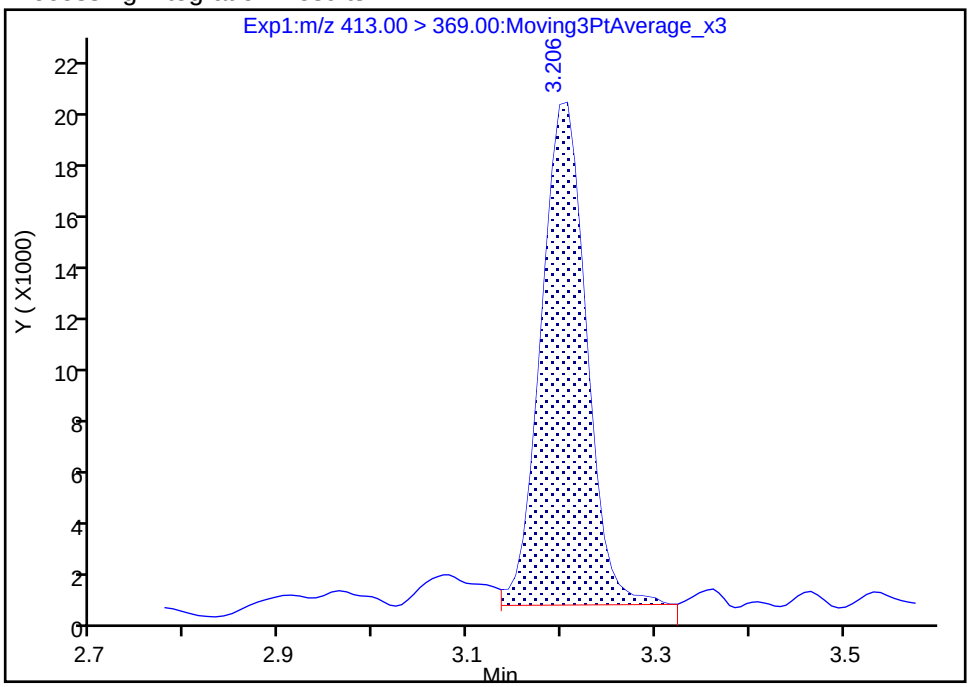
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d
Injection Date: 12-Mar-2019 19:31:30 Instrument ID: A9
Lims ID: MB 320-281038/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

26 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

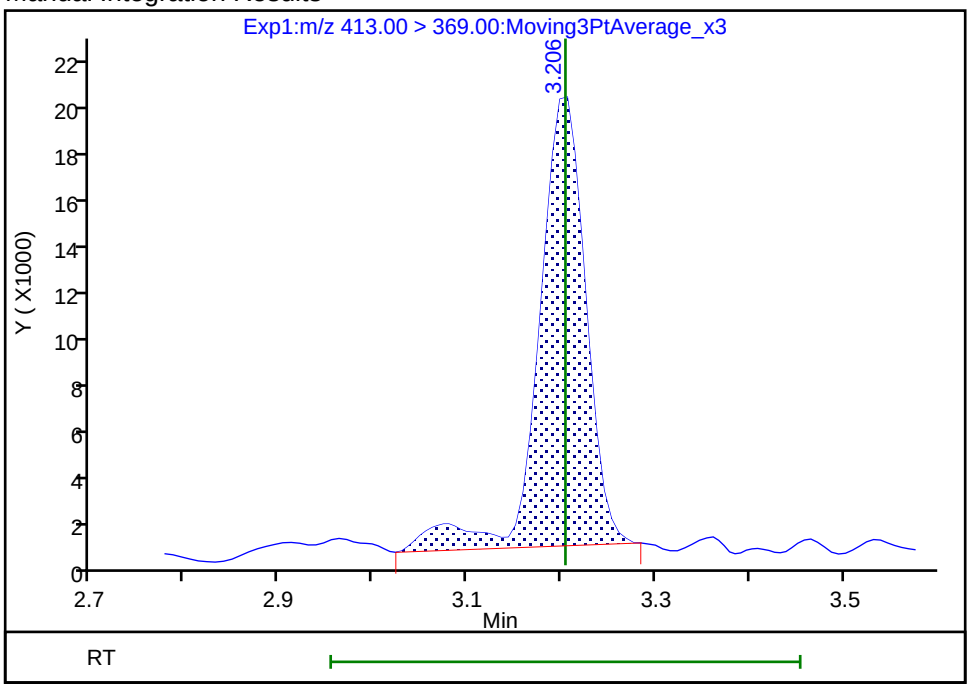
Processing Integration Results

RT: 3.21
Area: 64255
Amount: 0.026280
Amount Units: ng/ml



Manual Integration Results

RT: 3.21
Area: 66413
Amount: 0.027163
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:18:15
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

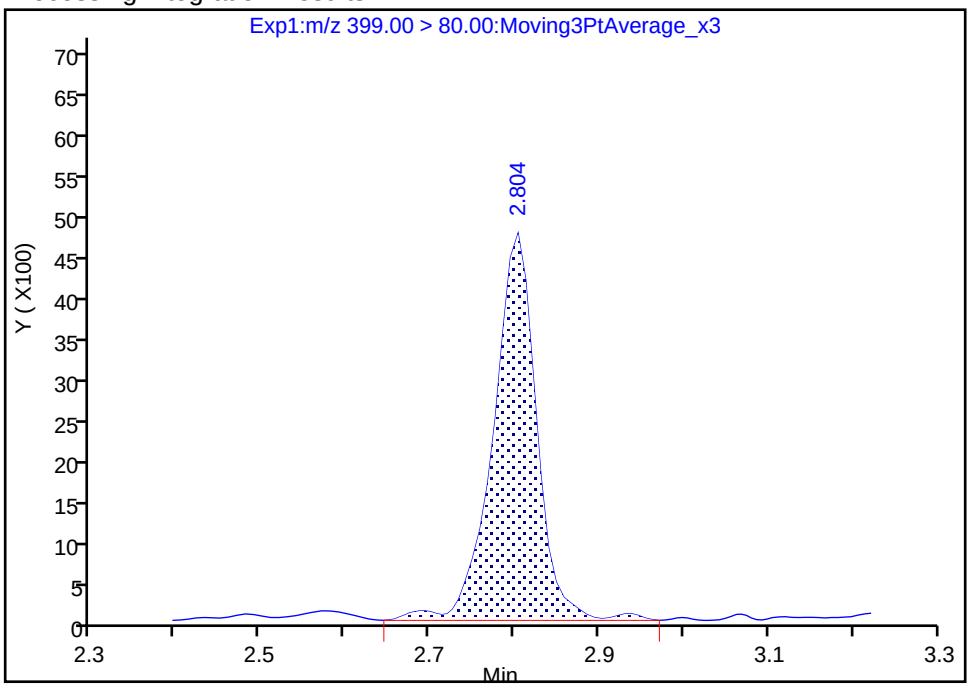
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d
Injection Date: 12-Mar-2019 19:31:30 Instrument ID: A9
Lims ID: MB 320-281038/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

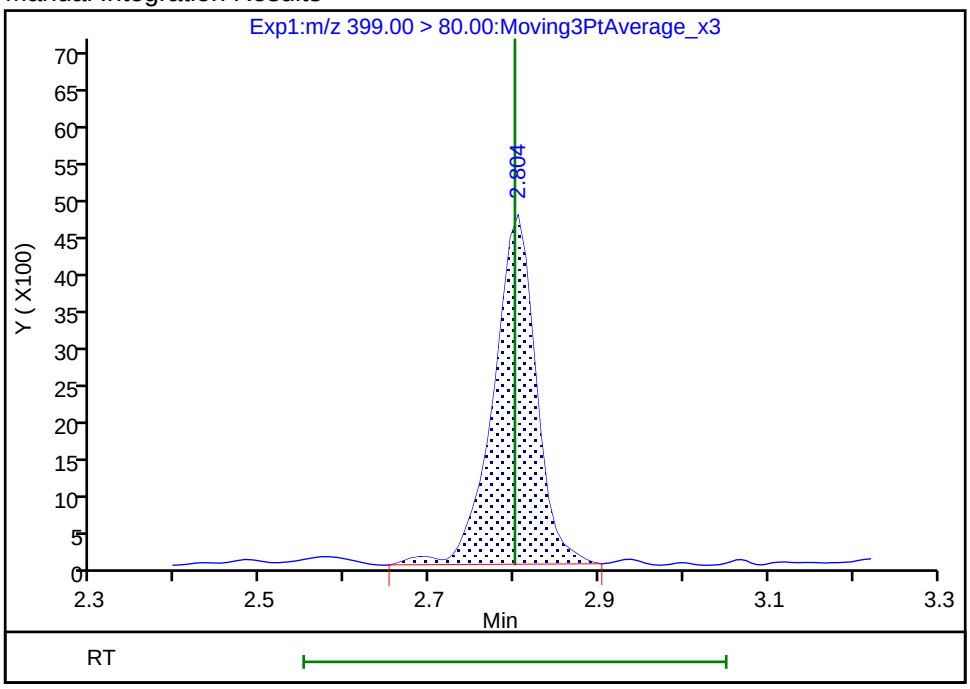
Processing Integration Results

RT: 2.80
Area: 16981
Amount: 0.007923
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 16613
Amount: 0.007751
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:18:01
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

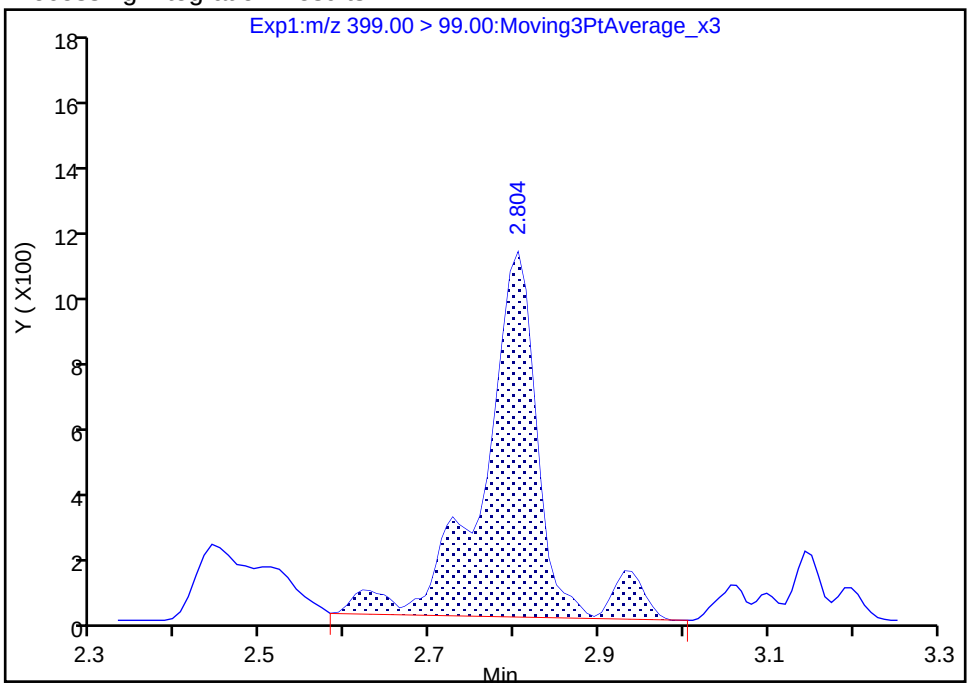
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d
Injection Date: 12-Mar-2019 19:31:30 Instrument ID: A9
Lims ID: MB 320-281038/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

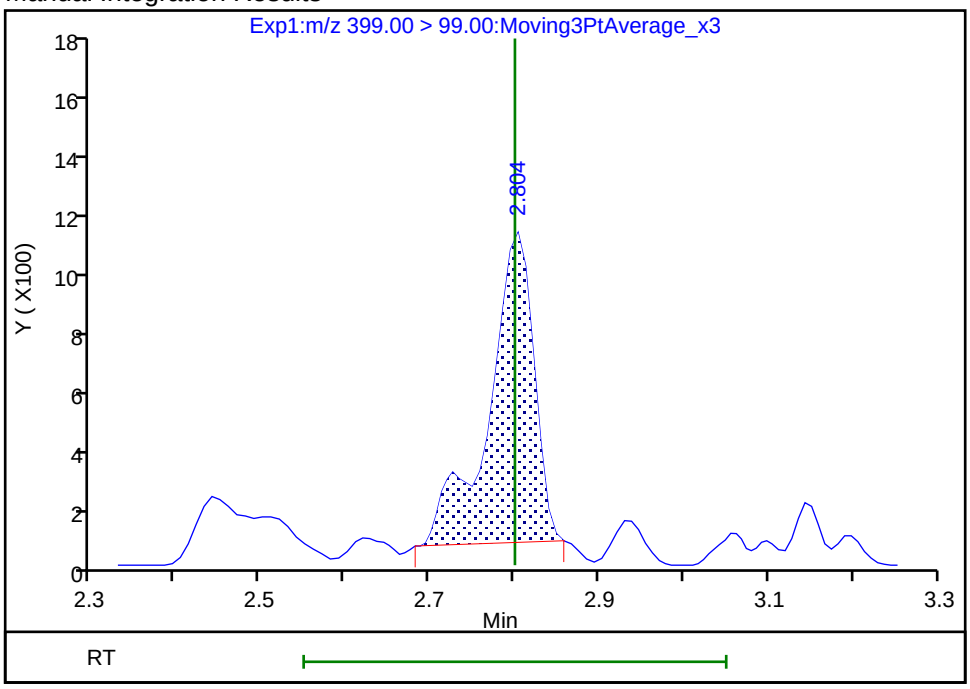
Processing Integration Results

RT: 2.80
Area: 5016
Amount: 0.007923
Amount Units: ng/ml



Manual Integration Results

RT: 2.80
Area: 3714
Amount: 0.007751
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 11:18:05
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

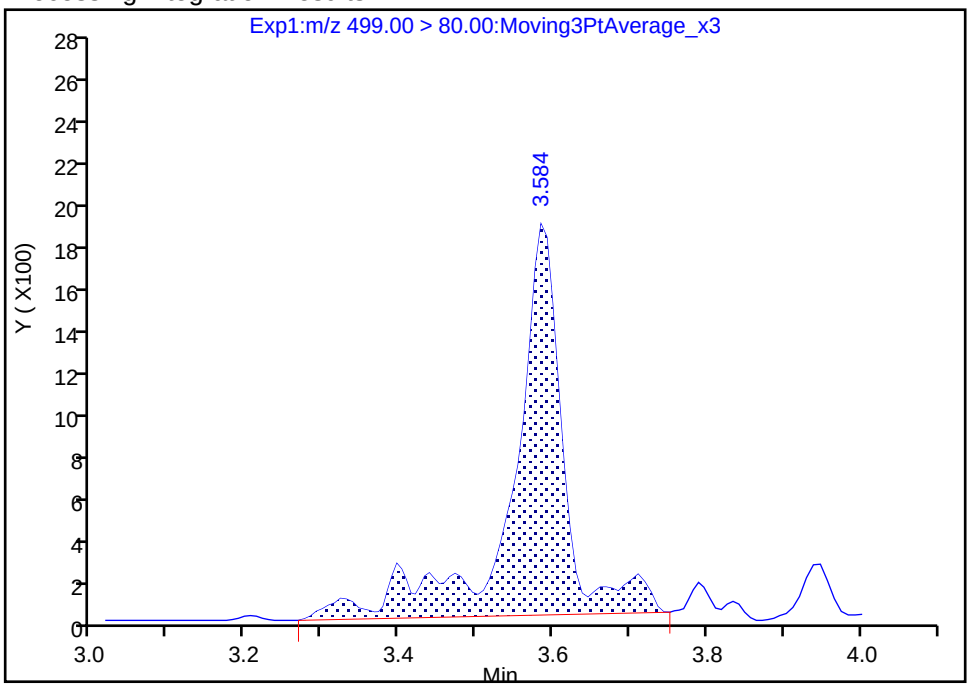
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d
Injection Date: 12-Mar-2019 19:31:30 Instrument ID: A9
Lims ID: MB 320-281038/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

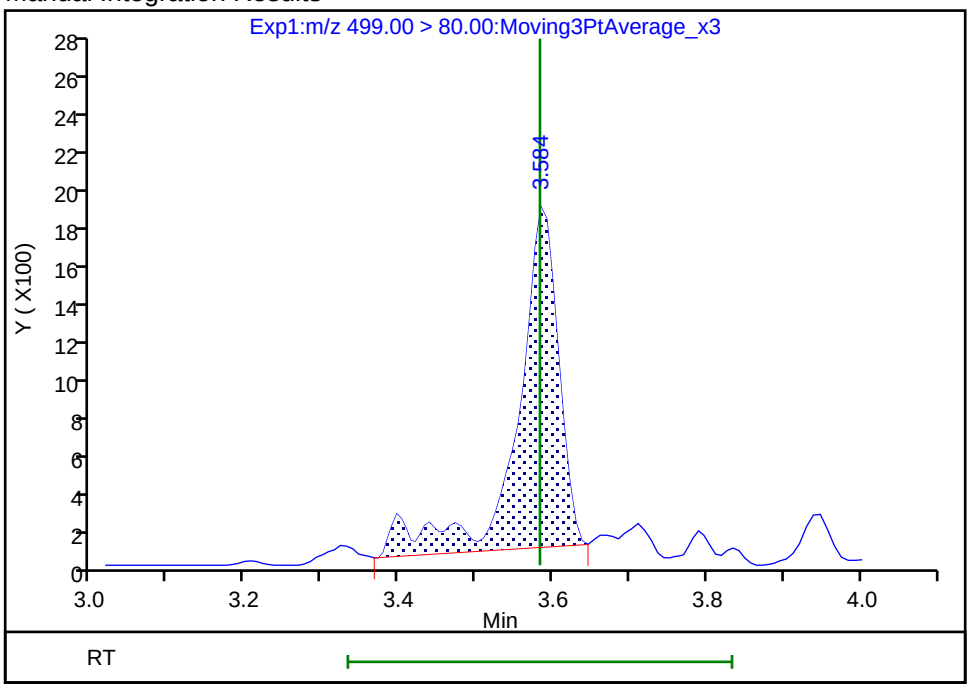
Processing Integration Results

RT: 3.58
Area: 8747
Amount: 0.004733
Amount Units: ng/ml



Manual Integration Results

RT: 3.58
Area: 6819
Amount: 0.003690
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:05:33
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

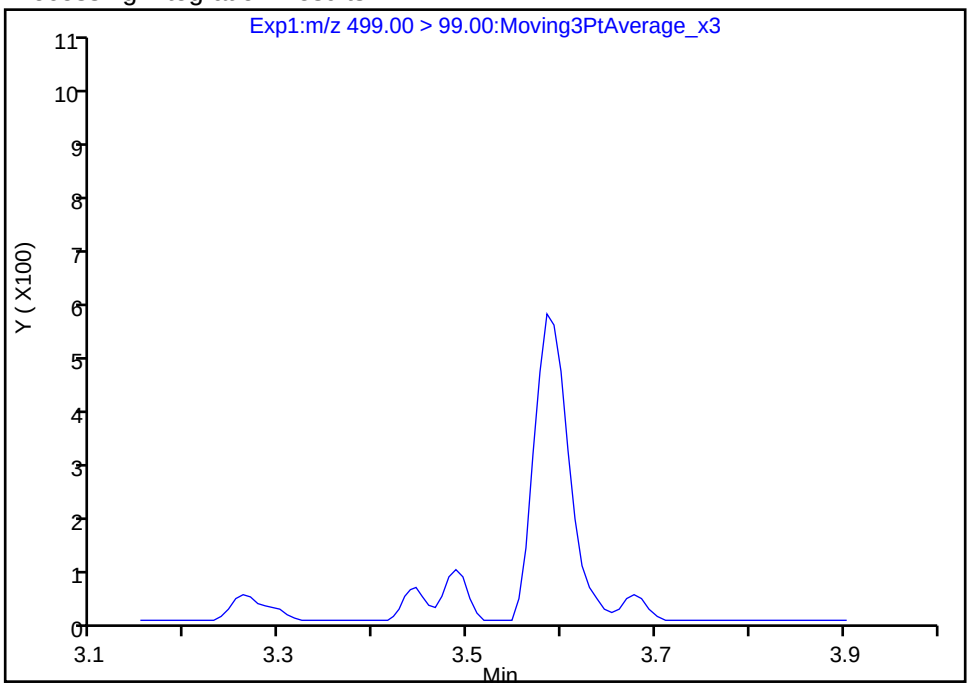
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d
Injection Date: 12-Mar-2019 19:31:30 Instrument ID: A9
Lims ID: MB 320-281038/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

29 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

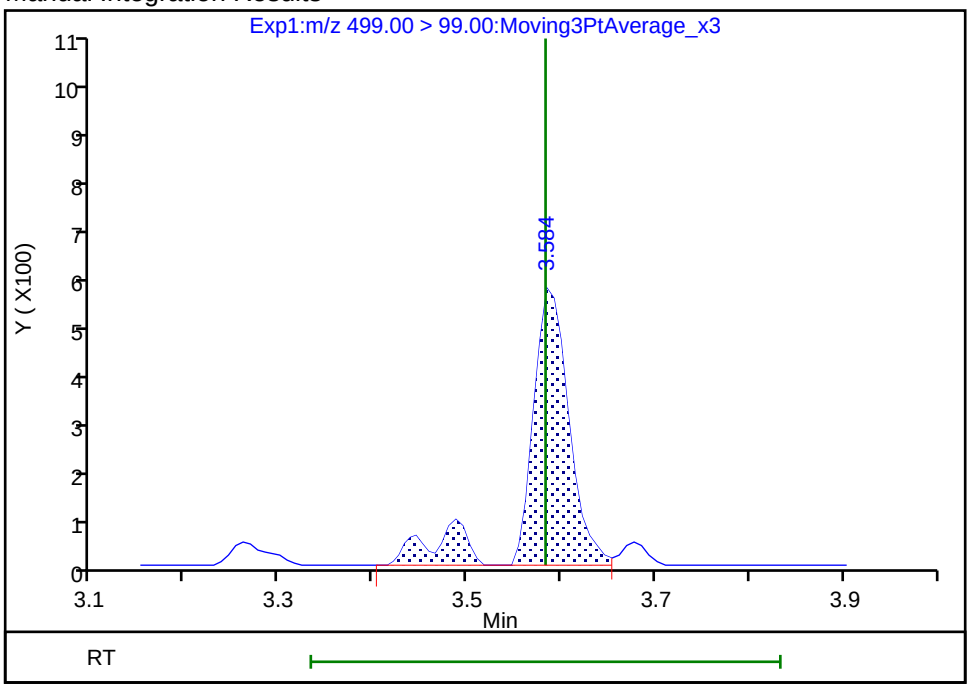
Processing Integration Results

RT: 3.58
Area: 0
Amount: 0.004733
Amount Units: ng/ml



Manual Integration Results

RT: 3.58
Area: 1673
Amount: 0.003690
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:05:39
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

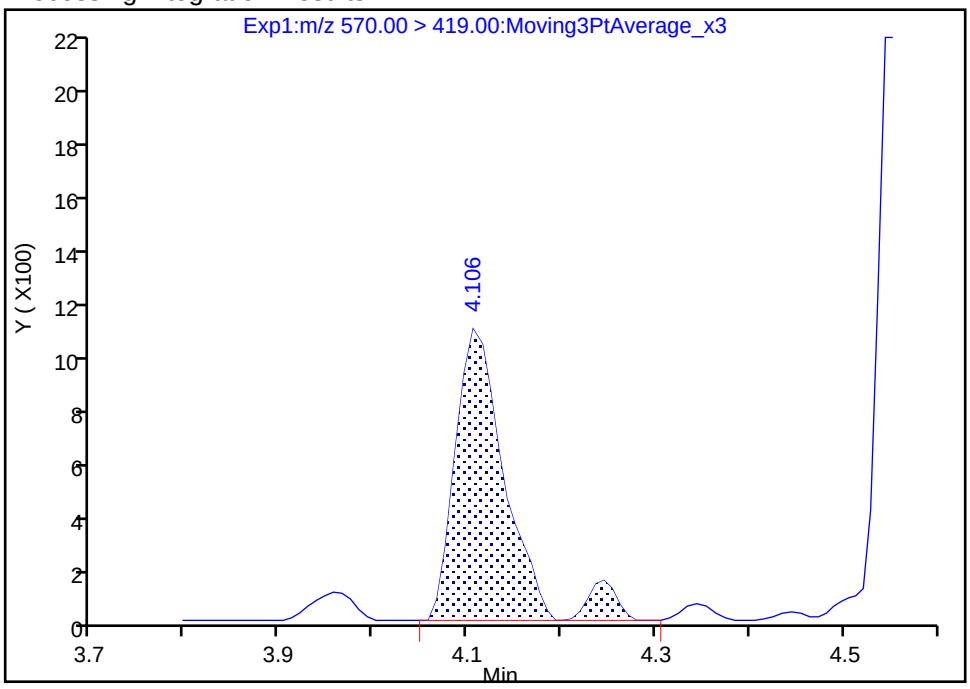
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_045.d
Injection Date: 12-Mar-2019 19:31:30 Instrument ID: A9
Lims ID: MB 320-281038/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 29 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

41 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

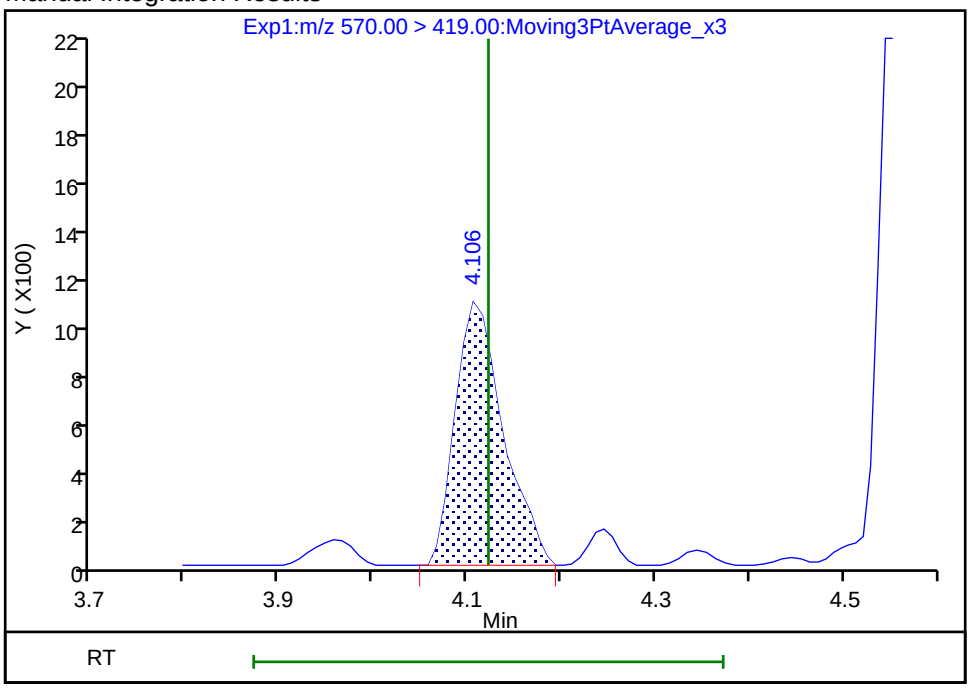
Processing Integration Results

RT: 4.11
Area: 4071
Amount: 0.007255
Amount Units: ng/ml



Manual Integration Results

RT: 4.11
Area: 3770
Amount: 0.006718
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:05:51
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-281038/2-A

Matrix: Water | Lab File ID: 2019.03.13LLA_030.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 250.0(mL) | Date Analyzed: 03/14/2019 00:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281559 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	45.6		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	42.9		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	41.0		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	40.6		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	45.5		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	41.0		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	40.5		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	41.4		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	43.1		2.0	0.55
72629-94-8	Perfluorotridecanoic acid (PFTriA)	44.8		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	38.8		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	39.0		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	36.4		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	46.3		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	38.7		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	38.7		2.0	0.32
754-91-6	Perfluorooctanesulfonamide (FOSA)	41.6		2.0	0.35
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.7		20	3.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	41.4		20	1.9
27619-97-2	6:2 FTS	41.3		20	2.0
39108-34-4	8:2 FTS	41.2		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 320-281038/2-A

Matrix: Water | Lab File ID: 2019.03.13LLA_030.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 250.0(mL) | Date Analyzed: 03/14/2019 00:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281559 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	103		25-150
STL01893	13C5-PFPeA DNU	102		25-150
STL00993	13C2 PFHxA	108		25-150
STL01892	13C4 PFHpA	113		25-150
STL00990	13C4 PFOA	108		25-150
STL00995	13C5 PFNA	114		25-150
STL00996	13C2 PFDA	112		25-150
STL00997	13C2 PFUnA	97		25-150
STL00998	13C2 PFDoA	99		25-150
STL02116	13C2 PFTeDA	114		25-150
STL02337	13C3 PFBS	99		25-150
STL00994	18O2 PFHxS	111		25-150
STL00991	13C4 PFOS	99		25-150
STL01056	13C8 FOSA	92		25-150
STL02118	d3-NMeFOSAA	102		25-150
STL02117	d5-NEtFOSAA	105		25-150
STL02279	M2-6:2 FTS	121		25-150
STL02280	M2-8:2 FTS	117		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\2019.03.13LLA_030.d
Lims ID: LCS 320-281038/2-A
Client ID:
Sample Type: LCS
Inject. Date: 14-Mar-2019 00:59:04 ALS Bottle#: 17 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: lcs 320-281038/2-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 15-Mar-2019 09:32:05 Calib Date: 09-Mar-2019 02:02:31
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A8_N\20190308-72966.b\2019.03.08ICAL_011.d

Column 1 : Det: EXP1
Process Host: CTX0309

First Level Reviewer: mongkols Date: 15-Mar-2019 09:32:05
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.777	1.776	0.001	1.004	2643837	1.14		114	616	
D 1 13C4 PFBA										
217.00 > 172.00	1.770	1.777	-0.007		7251195	2.58		103	6160	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.095	2.094	0.001	1.000	2084486	1.07		107	142	
D 3 13C5 PFPeA										
267.90 > 223.00	2.095	2.094	0.001		4945860	2.56		102	8374	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.126	2.126	0.0	1.000	2637339	0.9750	Target=2.37	110	5865	
298.90 > 99.00	2.126	2.126	0.0	1.000	1091520		2.42(1.68-3.11)		3029	
D 47 13C3 PFBS										
301.90 > 80.00	2.126	2.126	0.0		6714055	2.29		98.5	2368416	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.402	2.404	-0.002		631026	2.68		115	2044	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.402	2.405	-0.003	1.000	550172	1.00		107	8333	
D 7 13C2 PFHxA										
315.00 > 270.00	2.442	2.434	0.008		5331946	2.69		108	12389	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.442	2.435	0.007	1.000	2069683	1.02	Target=10.82	102	1198	
313.00 > 119.00	2.442	2.435	0.007	1.000	180610		11.46(7.70-14.30)		725	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.452	2.455	-0.003	1.153	2587685	1.15	Target=2.70	123	11638	
349.00 > 99.00	2.452	2.455	-0.003	1.153	935641		2.77(1.85-3.44)		5946	
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.551	2.543	0.009		334932	2.94		118	1036	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.551	2.544	0.007	1.000	433099	1.07		107	380	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.809	2.807	0.002	1.000	2049161	1.01	Target=2.49	101	873	
363.00 > 169.00	2.809	2.807	0.002	1.000	812473		2.52(1.76-3.27)		2367	
D 9 13C4 PFHpA										
367.00 > 322.00	2.809	2.811	-0.002		5098328	2.82		113	14623	
D 11 18O2 PFHxS										
403.00 > 84.00	2.818	2.811	0.007		5386952	2.62		111	11509	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.818	2.816	0.002	1.000	2073266	0.9105	Target=3.00	100	3984	
399.00 > 99.00	2.818	2.816	0.002	1.000	712034		2.91(1.97-3.66)		2820	
77 DONA										
377.00 > 251.00	2.856	2.854	0.002	0.803	6032396	1.19	Target=1.63	126	11677	
377.00 > 85.00	2.856	2.854	0.002	0.803	3464909		1.74(1.16-2.15)		6318	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.170	3.177	-0.007	1.000	549934	1.03		109	3022	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.170	3.178	-0.008		892317	2.87		121	6435	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.186	3.185	0.001	0.896	2025359	1.16	Target=3.77	122	4926	
449.00 > 99.00	3.186	3.185	0.001	0.896	502432		4.03(2.61-4.86)		1892	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.194	3.193	0.001	1.000	2256316	1.14	Target=1.90	114	253	
413.00 > 169.00	3.194	3.193	0.001	1.000	1162401		1.94(0.84-2.52)		1685	M
* 62 13C2 PFOA										
415.00 > 370.00	3.194	3.193	0.001		4871974	2.50			12196	
D 14 13C4 PFOA										
417.00 > 372.00	3.194	3.194	0.0		4681528	2.71		108	10251	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.554	3.555	-0.001	1.000	1585970	0.9675	Target=4.85	104	2404	
499.00 > 99.00	3.554	3.555	-0.001	1.000	340926		4.65(2.31-6.93)		1824	
D 18 13C4 PFOS										
503.00 > 80.00	3.554	3.570	-0.016		3784403	2.37		99.1	7531	
20 Perfluorononanoic acid										
463.00 > 419.00	3.570	3.571	-0.001	1.000	1555941	1.03	Target=4.13	103	533	
463.00 > 169.00	3.570	3.571	-0.001	1.000	375277		4.15(2.89-5.37)		2320	
D 19 13C5 PFNA										
468.00 > 423.00	3.570	3.578	-0.008		3995066	2.85		114	10707	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.756	3.757	-0.001	1.057	2744487	1.06		114	5138	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.901	3.902	-0.001	1.098	1236461	0.9405	Target=2.97	98.0	5815	
549.00 > 99.00	3.901	3.902	-0.001	1.098	428830		2.88(2.05-3.81)		3324	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.916	3.917	-0.001	1.000	1333864	1.01	Target=5.42	101	1471	
513.00 > 169.00	3.916	3.917	-0.001	1.000	245812		5.43(3.74-6.94)		1609	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.916	3.917	-0.001	1.000	517264	1.03		108	2021	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.923	3.924	-0.001	1.000	2270508	1.04		104	2042	
D 23 13C2 PFDA										
515.00 > 470.00	3.916	3.931	-0.015		3579071	2.79		112	7818	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.916	3.939	-0.023		1047948	2.80		117	4754	
D 21 13C8 FOSA										
506.00 > 78.00	3.923	3.939	-0.016		6184172	2.31		92.3	5882	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.081	4.081	0.0	1.000	594959	1.02		102	358	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.081	4.098	-0.017		1688037	2.54		102	4460	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.214	4.214	0.0	1.185	1076340	0.9664	Target=3.04	100	5273	
599.00 > 99.00	4.214	4.214	0.0	1.185	339518		3.17(2.28-4.23)		2614	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.238	4.239	-0.001	1.000	935035	1.03	Target=4.21	103	707	
563.00 > 169.00	4.238	4.239	-0.001	1.000	237658		3.93(2.86-5.32)		1565	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.247	4.247	0.0	1.002	616507	1.03		103	2488	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.238	4.255	-0.017		1870264	2.63		105	1105	
D 30 13C2 PFUnA										
565.00 > 520.00	4.238	4.255	-0.017		2829028	2.43		97.4	6240	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.374	4.376	-0.002	1.231	4088569	1.08		115	8662	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.526	4.527	-0.001	1.000	1261481	1.08	Target=4.05	108	829	
613.00 > 169.00	4.526	4.527	-0.001	1.000	309901		4.07(2.82-5.24)		2755	
D 36 13C2 PFDoA										
615.00 > 570.00	4.526	4.535	-0.009		3109966	2.48		99.4	5211	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.542	4.544	-0.002	1.160	456464	0.9121		94.6	2498	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.757	4.749	0.008	1.338	403210	0.9421	Target=0.63	97.3	4444	
699.00 > 99.00	4.757	4.749	0.008	1.338	619970		0.65(0.44-0.82)		4177	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.785	4.787	-0.002	1.057	1318059	1.12	Target=3.11	112	524	
663.00 > 169.00	4.785	4.787	-0.002	1.057	432120		3.05(2.18-4.05)		3847	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.024	5.025	-0.001		3762117	2.84		114	6088	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.024	5.026	-0.002	1.000	349680	0.9704	Target=1.35	97.0	2547	
713.00 > 219.00	5.024	5.026	-0.002	1.000	256935		1.36(0.96-1.79)		1192	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 44 13C2 PFHxDA										
815.00 > 770.00	5.450	5.450	0.0		5911813	2.72		109	5598	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.459	5.460	-0.001	1.002	2173294	1.05	Target=5.26	105	119	
813.00 > 169.00	5.459	5.460	-0.001	1.002	426599		5.09(3.69-6.84)		2790	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.870	5.877	-0.007	1.077	2949043	1.05	Target=7.56	105	169	
913.00 > 169.00	5.870	5.877	-0.007	1.077	390396		7.55(5.20-9.66)		1893	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 15-Mar-2019 09:32:08 Chrom Revision: 2.3 13-Mar-2019 09:24:14

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\2019.03.13LLA_030.d

Injection Date: 14-Mar-2019 00:59:04 Instrument ID: A8_N

Lims ID: LCS 320-281038/2-A

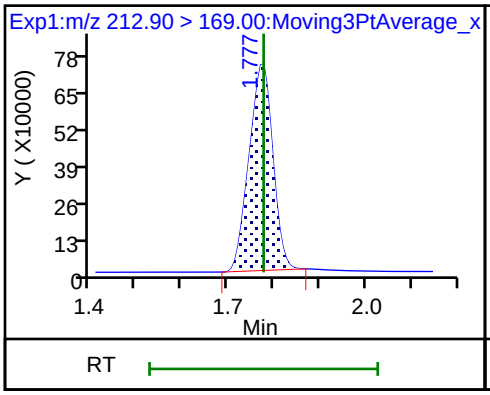
Client ID:

Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 2

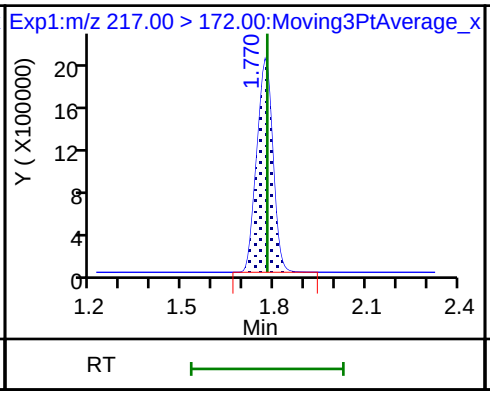
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: A8_N Limit Group: LC PFC ICAL

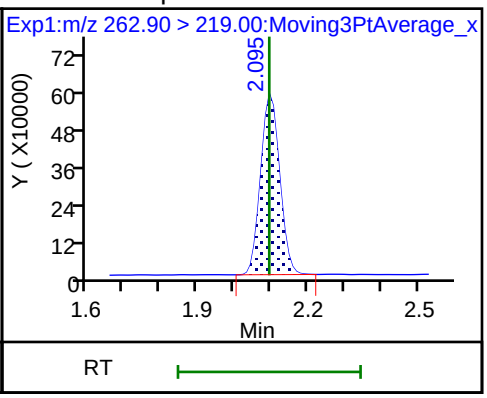
2 Perfluorobutanoic acid



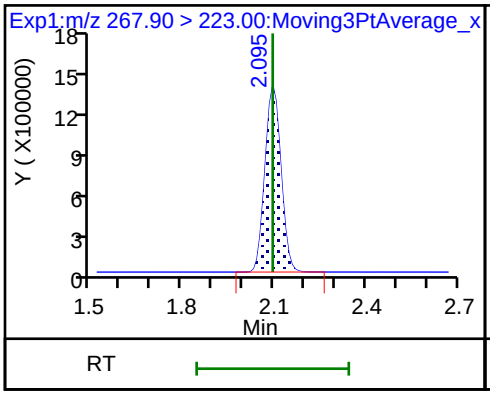
D 1 13C4 PFBA



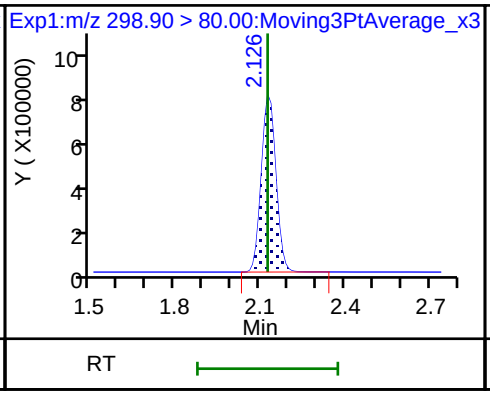
4 Perfluoropentanoic acid



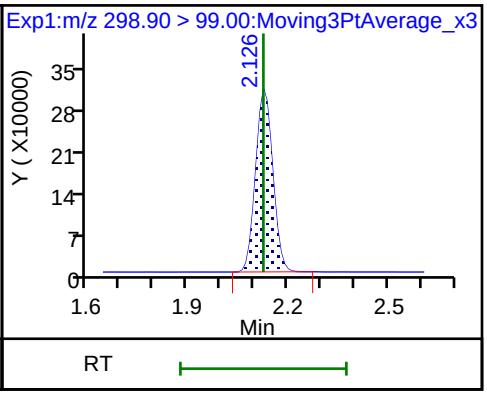
D 3 13C5 PFPeA



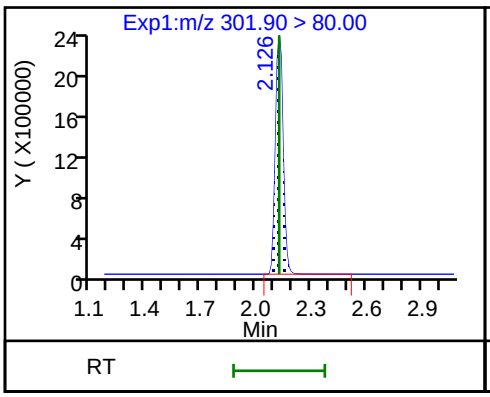
5 Perfluorobutanesulfonic acid



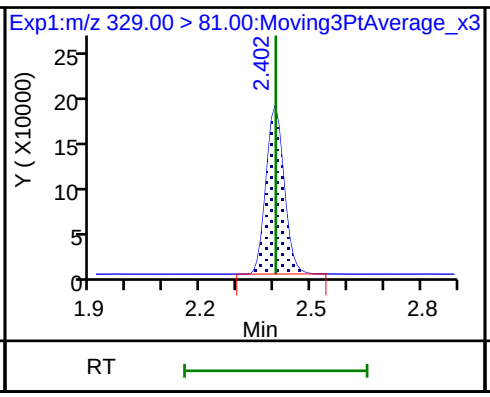
5 Perfluorobutanesulfonic acid



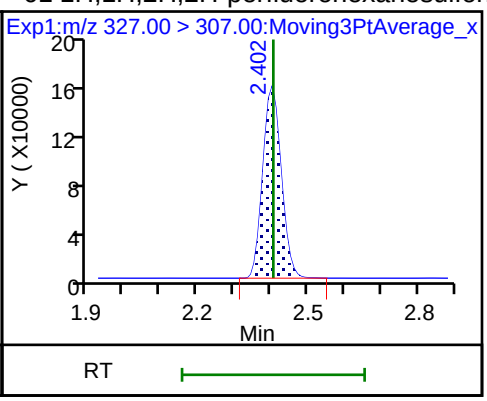
D 47 13C3 PFBS



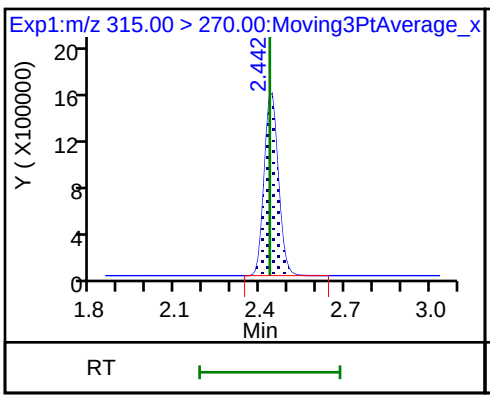
D 60 M2-4:2 FTS



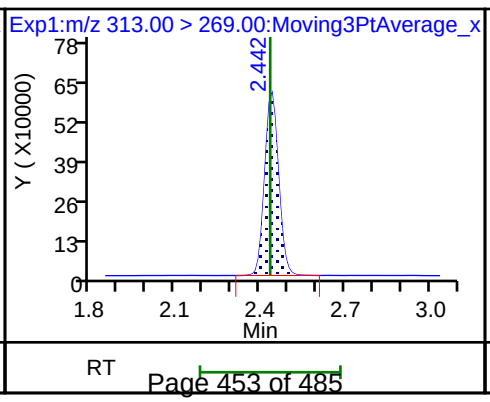
61 1H,1H,2H,2H-perfluorohexanesulfoni



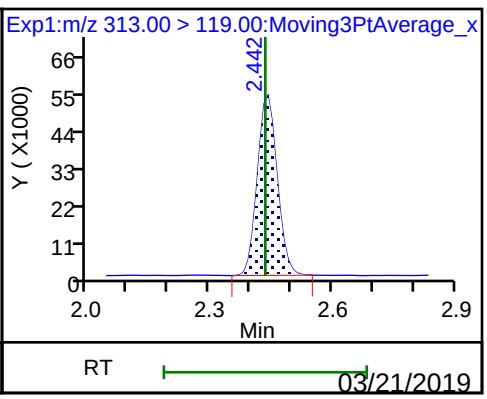
D 7 13C2 PFHxA



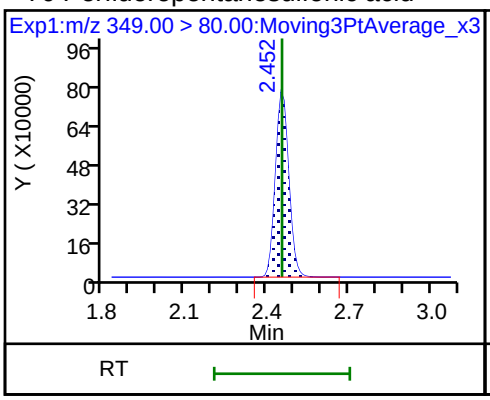
6 Perfluorohexanoic acid



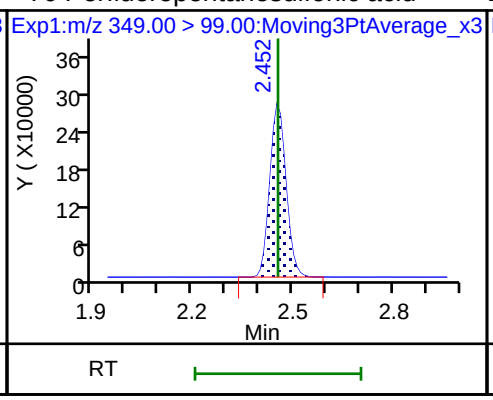
6 Perfluorohexanoic acid



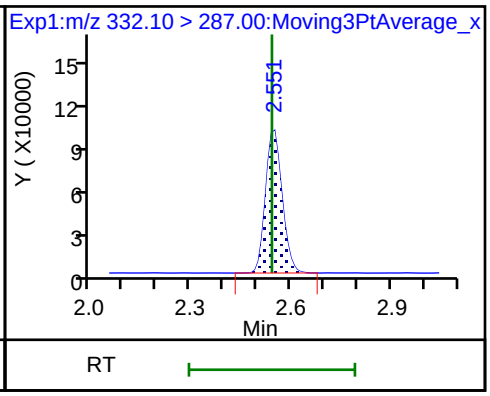
70 Perfluoropentanesulfonic acid



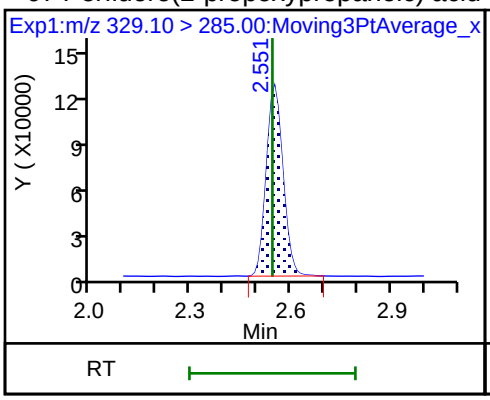
70 Perfluoropentanesulfonic acid



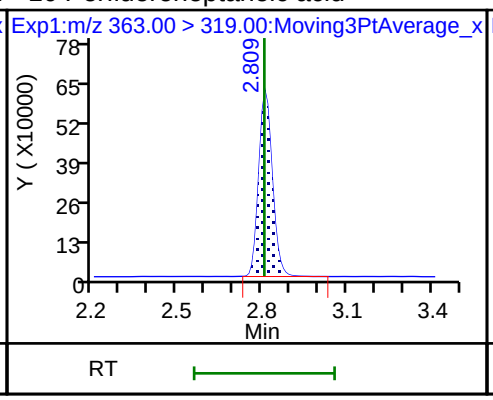
D 64 13C3 HFPO-DA



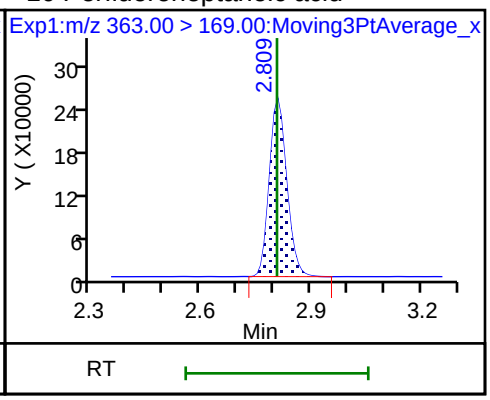
67 Perfluoro(2-propoxypropanoic) acid



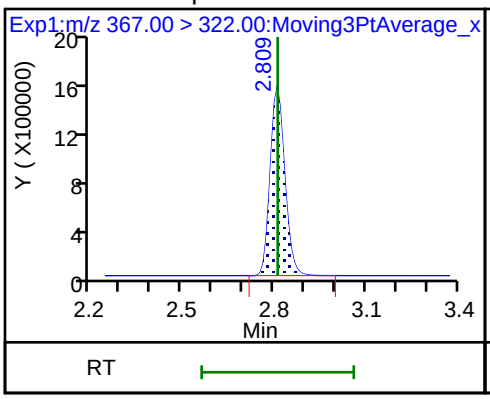
10 Perfluoroheptanoic acid



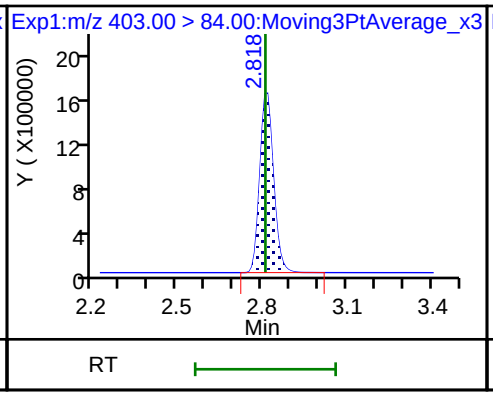
10 Perfluoroheptanoic acid



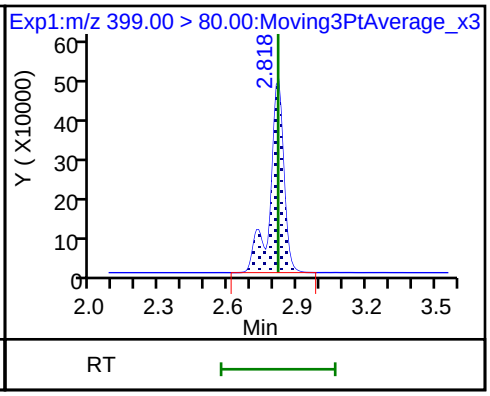
D 9 13C4 PFHpA



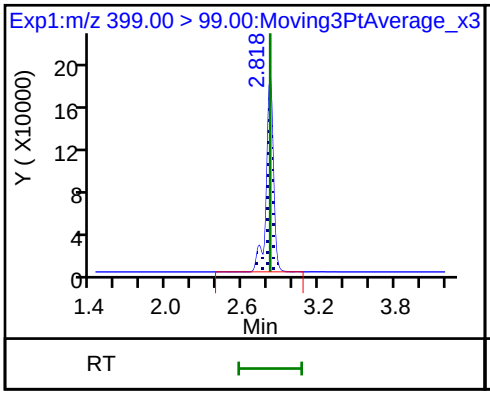
D 11 18O2 PFHxS



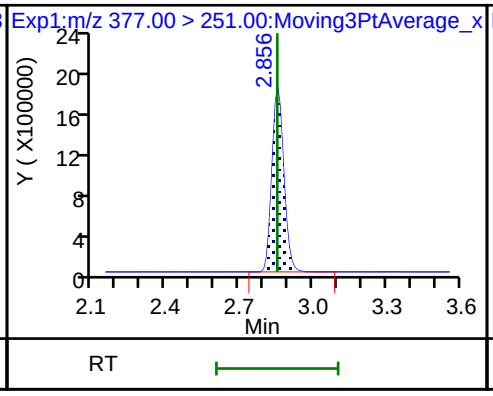
8 Perfluorohexanesulfonic acid



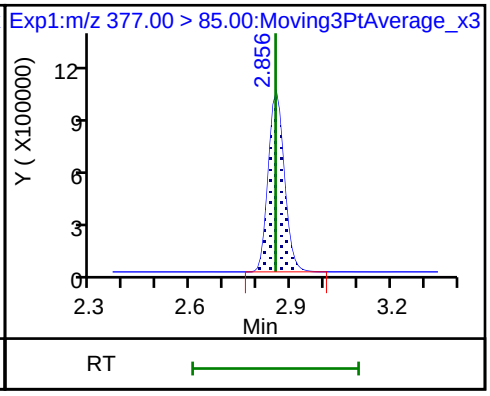
8 Perfluorohexanesulfonic acid



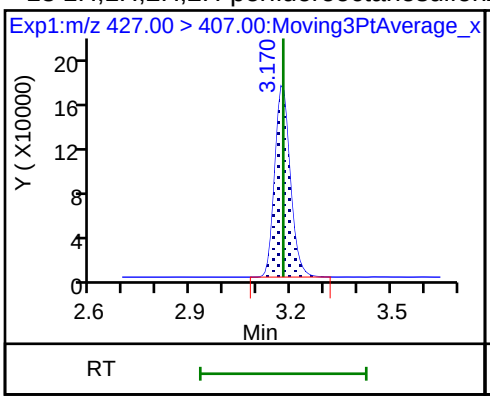
77 DONA



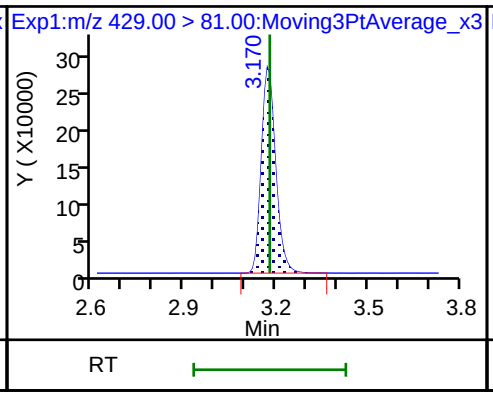
77 DONA



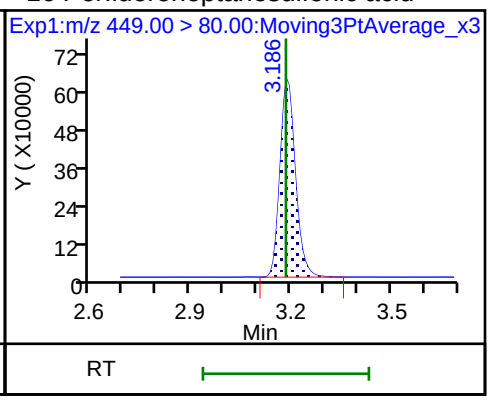
13 1H,1H,2H,2H-perfluorooctanesulfon



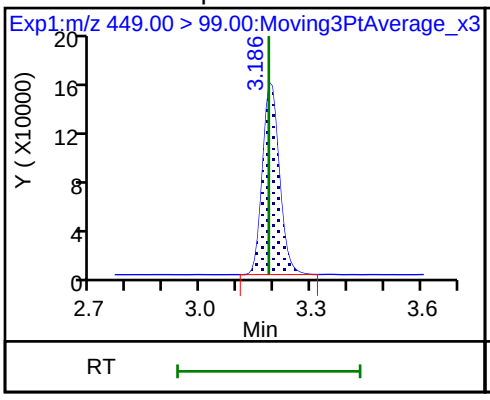
D 12 M2-6:2 FTS



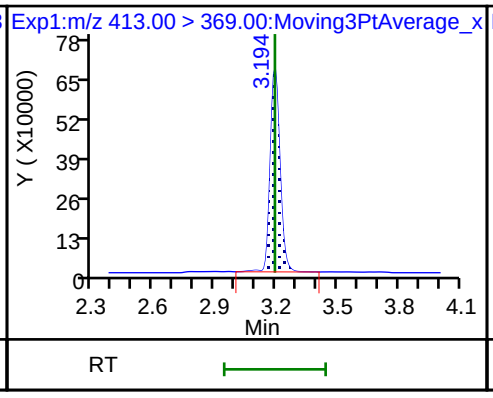
16 Perfluoroheptanesulfonic acid



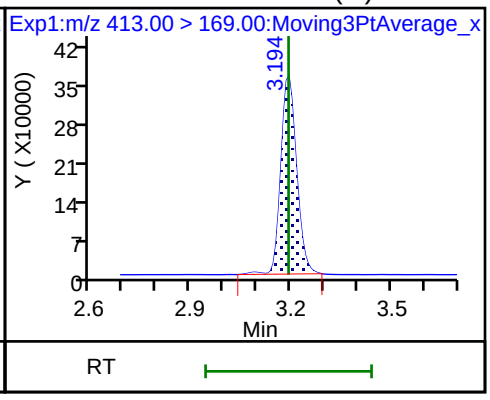
16 Perfluoroheptanesulfonic acid



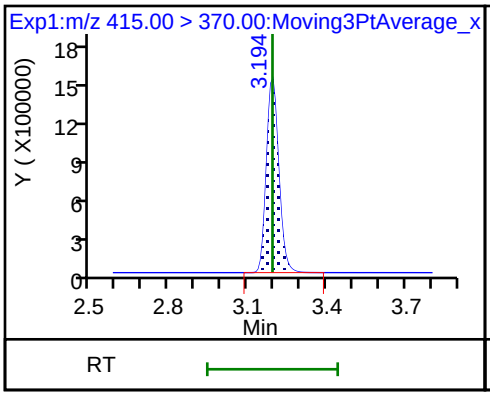
15 Perfluorooctanoic acid



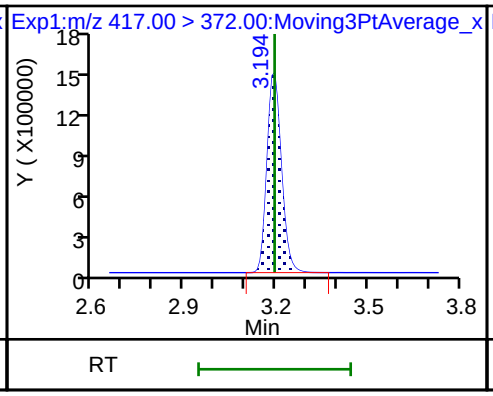
15 Perfluorooctanoic acid (M)



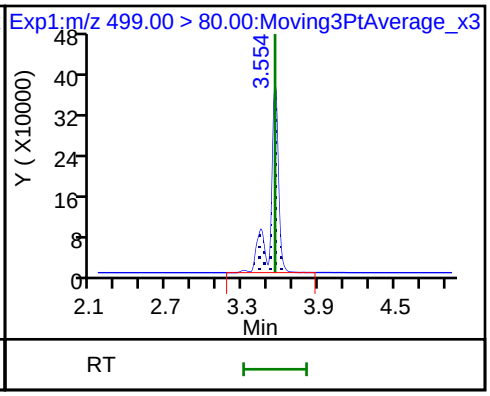
* 62 13C2 PFOA



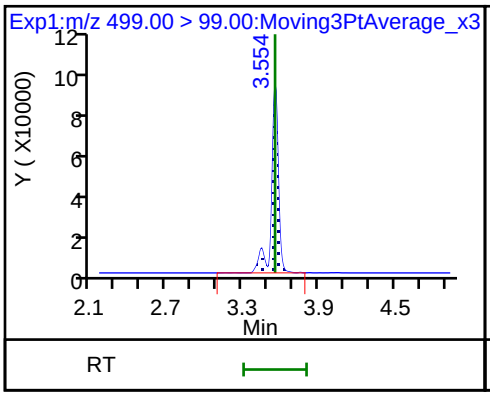
D 14 13C4 PFOA



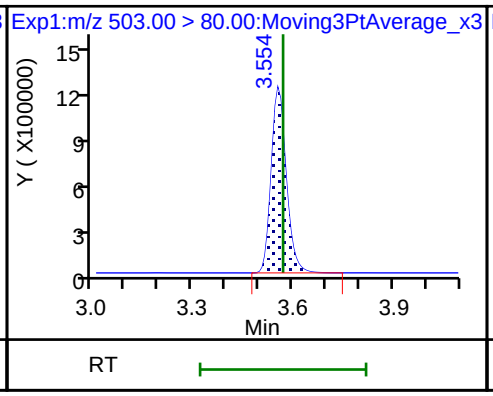
17 Perfluorooctanesulfonic acid



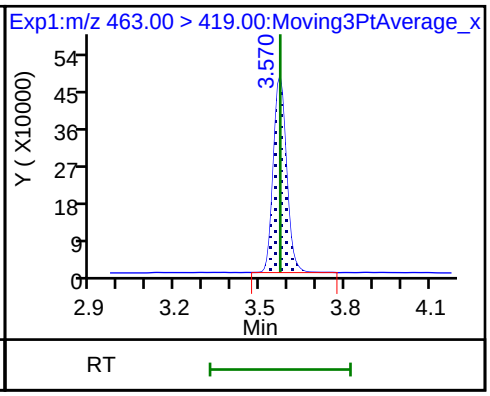
17 Perfluorooctanesulfonic acid



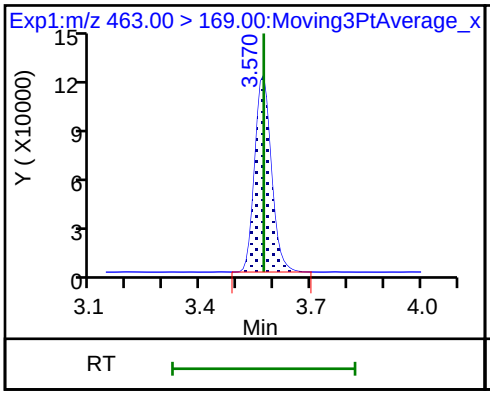
D 18 13C4 PFOS



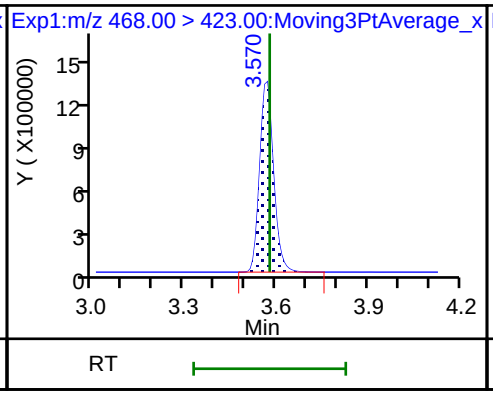
20 Perfluorononanoic acid



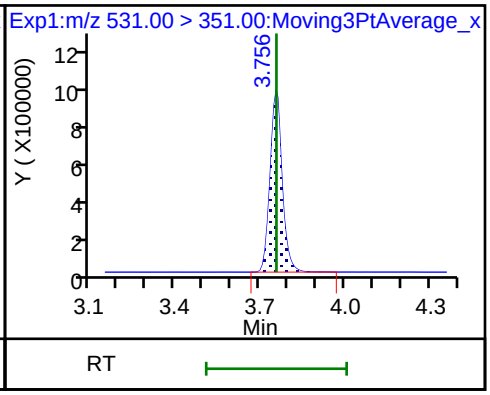
20 Perfluorononanoic acid



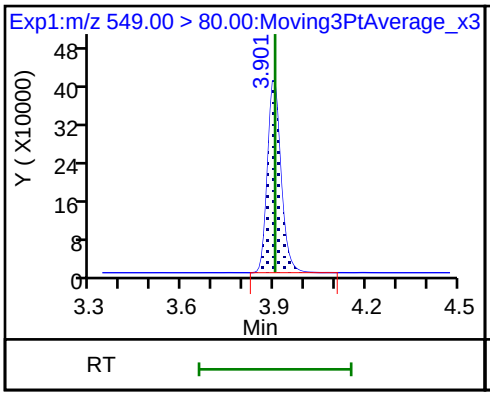
D 19 13C5 PFNA



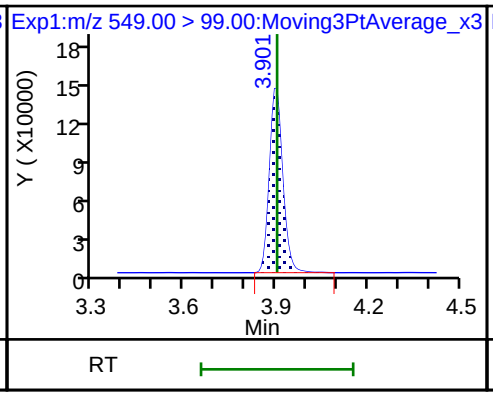
69 9-Chlorohexadecafluoro-3-oxanonane



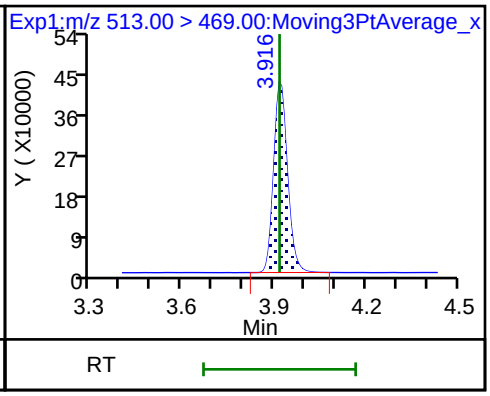
68 Perfluorononanesulfonic acid



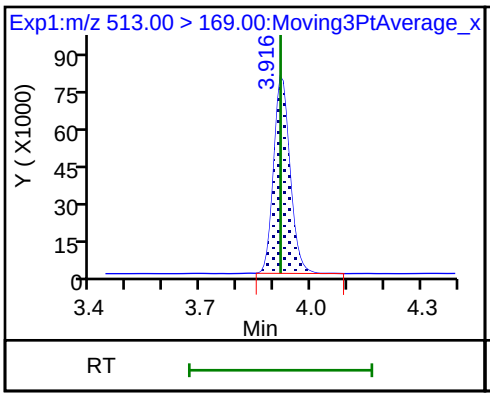
68 Perfluorononanesulfonic acid



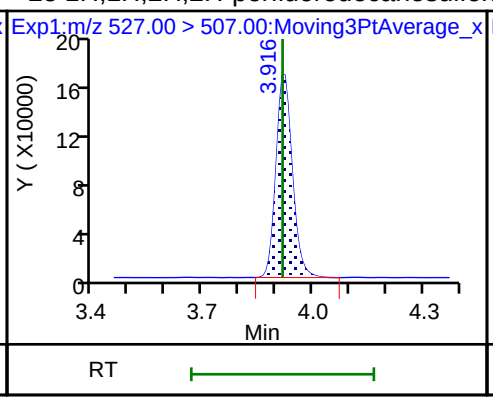
24 Perfluorodecanoic acid



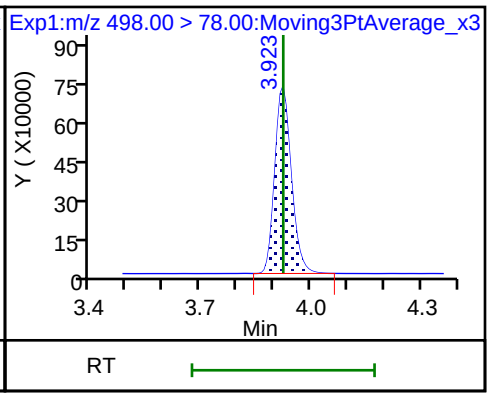
24 Perfluorodecanoic acid



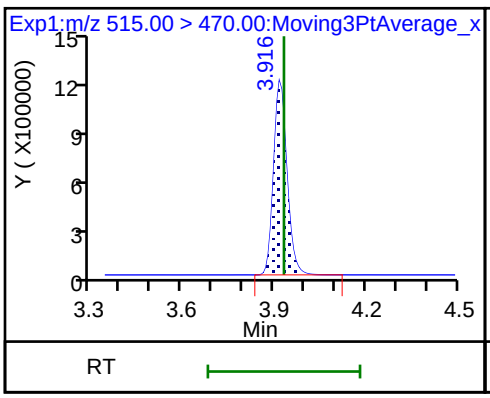
25 1H,1H,2H,2H-perfluorodecanesulfoni



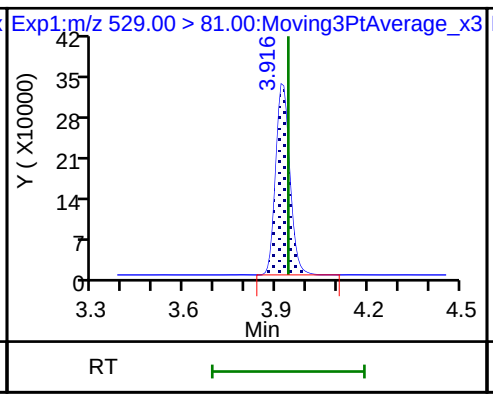
22 Perfluorooctanesulfonamide



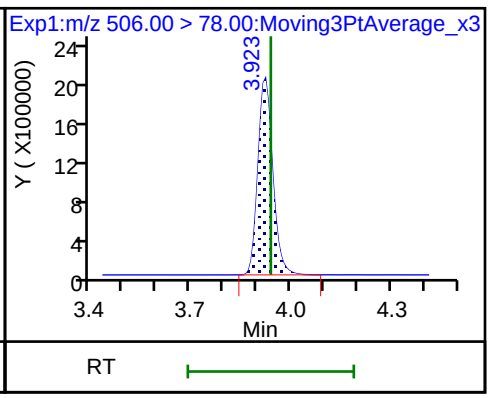
D 23 13C2 PFDA



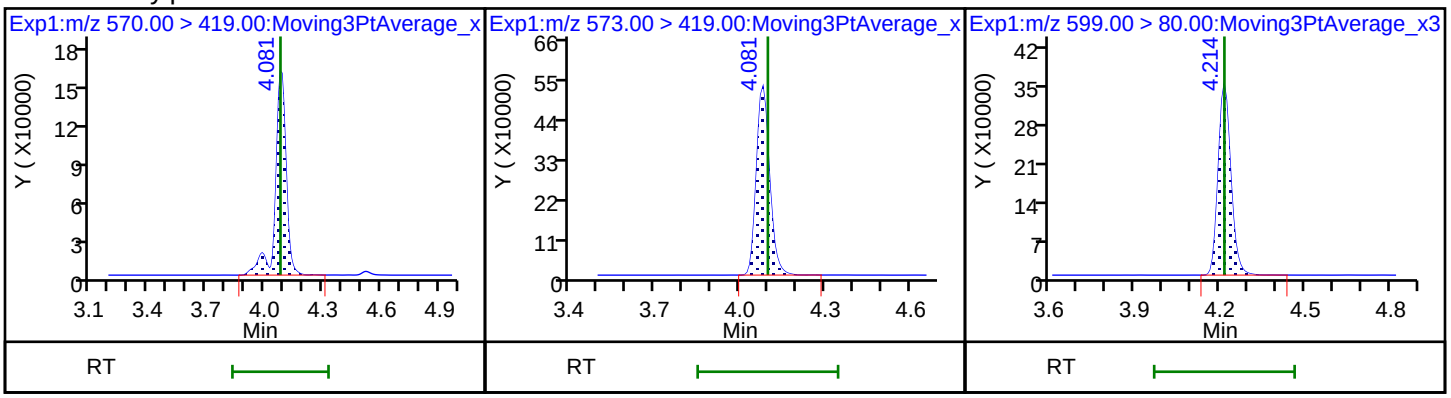
D 26 M2-8:2 FTS



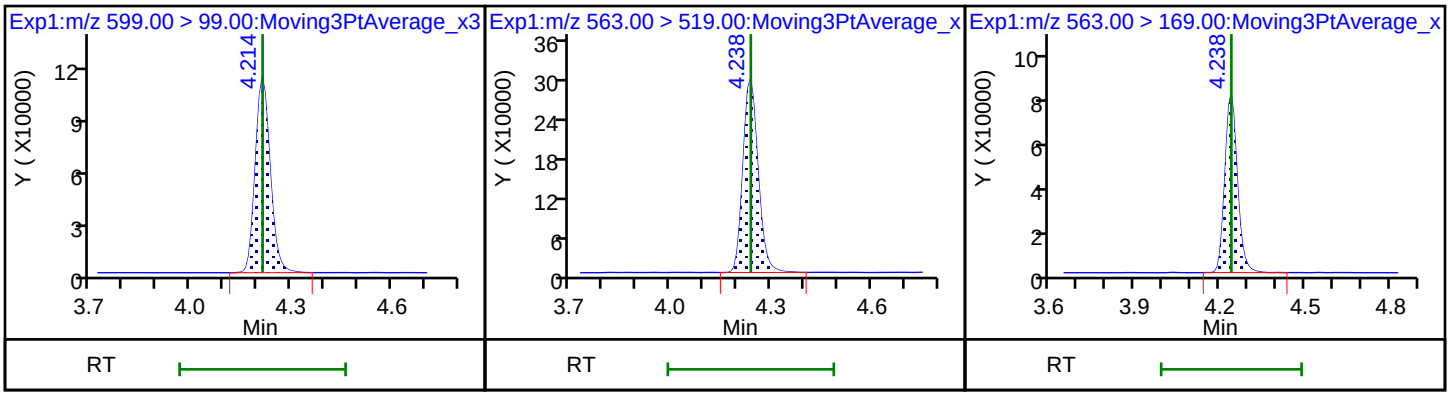
D 21 13C8 FOSA



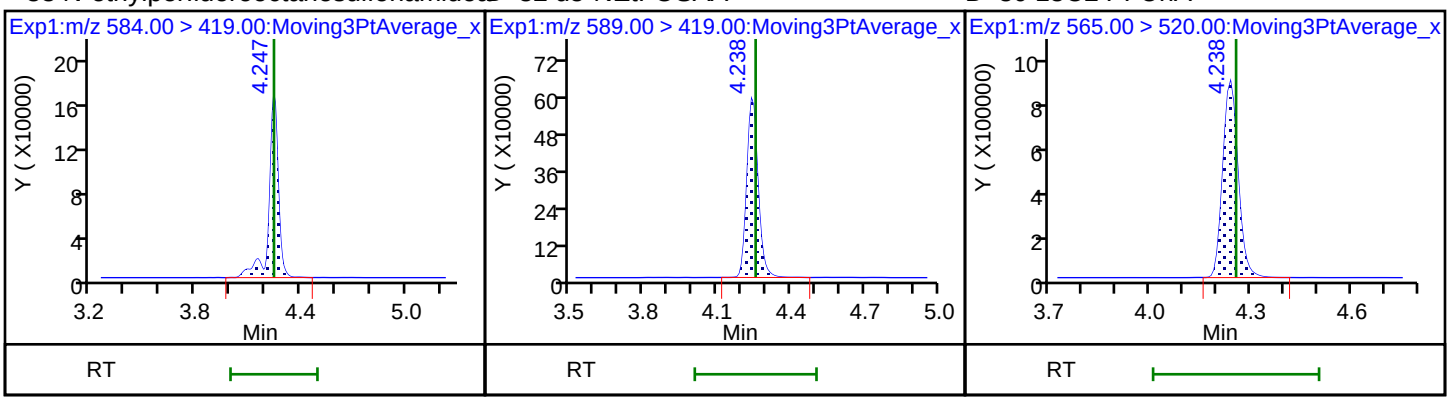
28 N-methylperfluorooctanesulfonamidoD 27 d3-NMeFOSAA 29 Perfluorodecanesulfonic acid



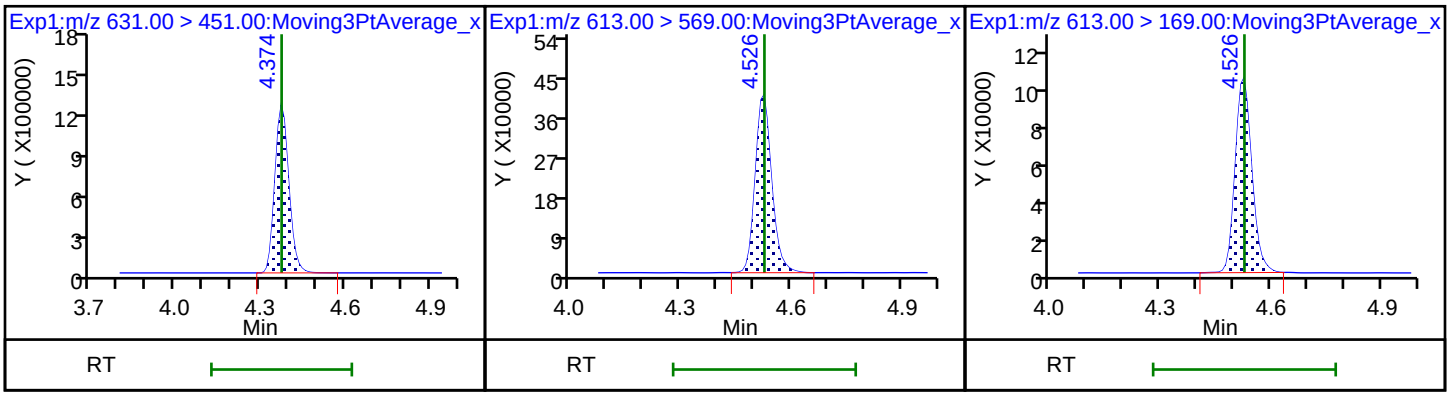
29 Perfluorodecanesulfonic acid 31 Perfluoroundecanoic acid 31 Perfluoroundecanoic acid



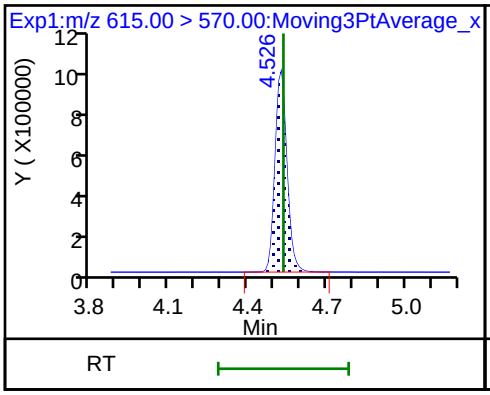
33 N-ethylperfluorooctanesulfonamidoaD 32 d5-NEtFOSAA D 30 13C2 PFUnA



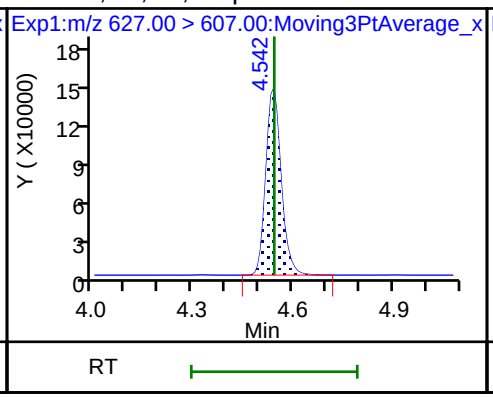
66 11-Chloroeicosafluoro-3-oxaundecan 37 Perfluorododecanoic acid 37 Perfluorododecanoic acid



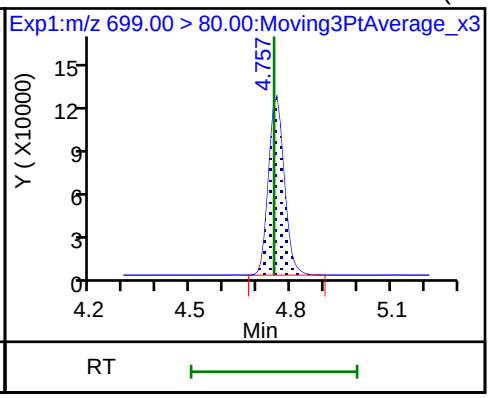
D 36 13C2 PFDoA



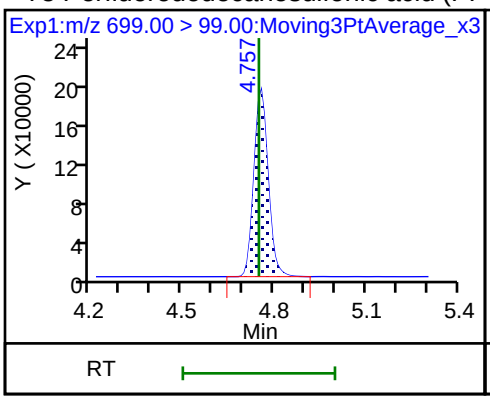
74 1H,1H,2H,2H-perfluorododecanesulfo



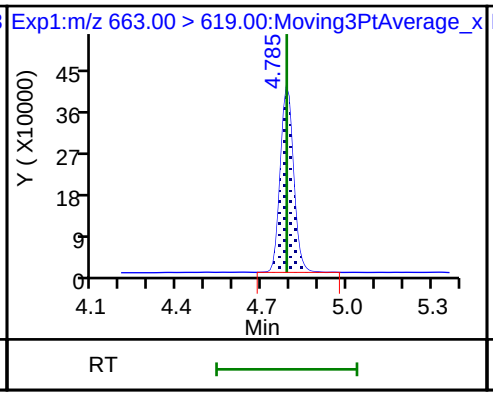
75 Perfluorododecanesulfonic acid (PF



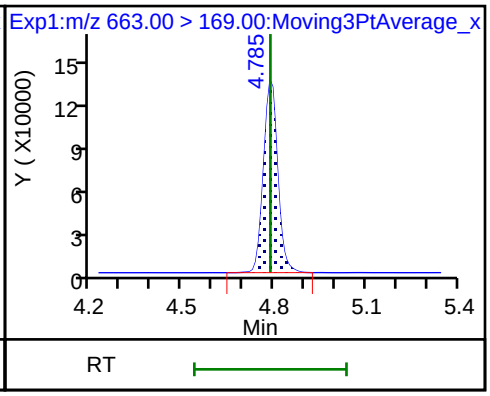
75 Perfluorododecanesulfonic acid (PF



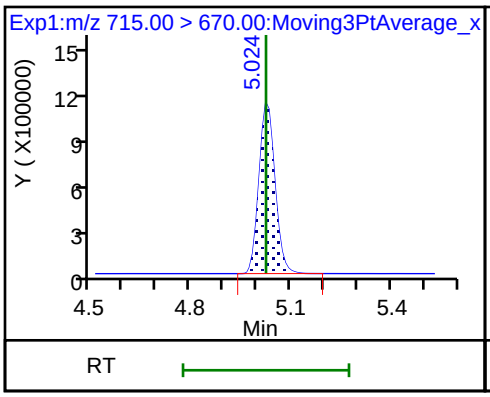
41 Perfluorotridecanoic acid



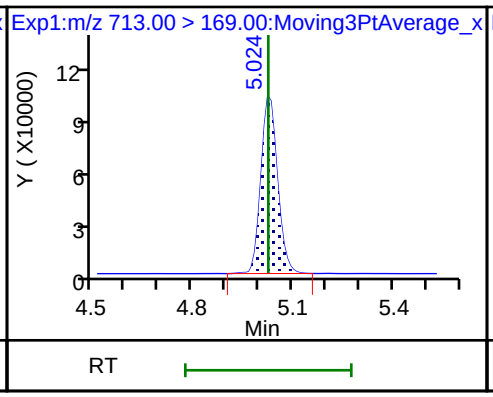
41 Perfluorotridecanoic acid



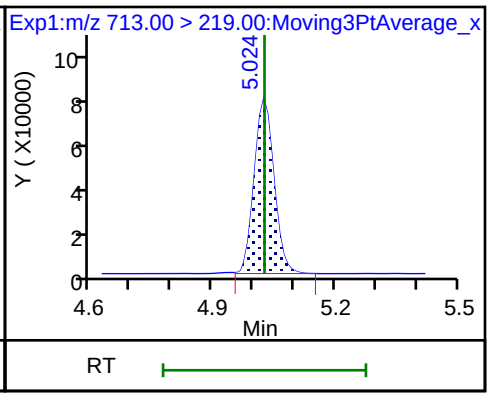
D 43 13C2 PFTeDA



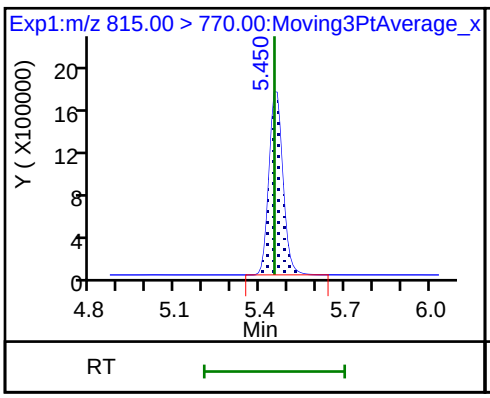
42 Perfluorotetradecanoic acid



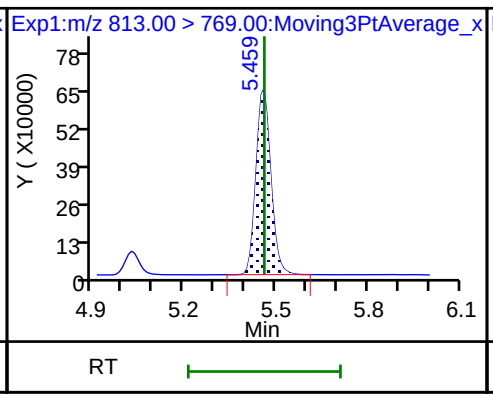
42 Perfluorotetradecanoic acid



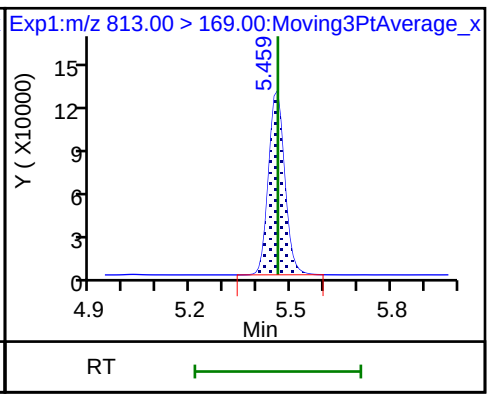
D 44 13C2 PFHxDA



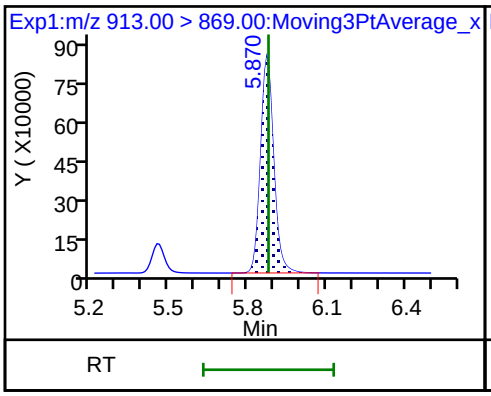
45 Perfluorohexadecanoic acid



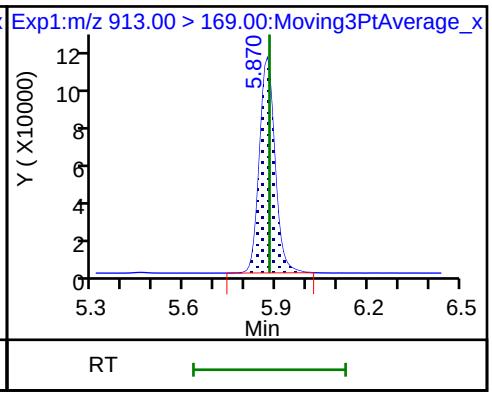
45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

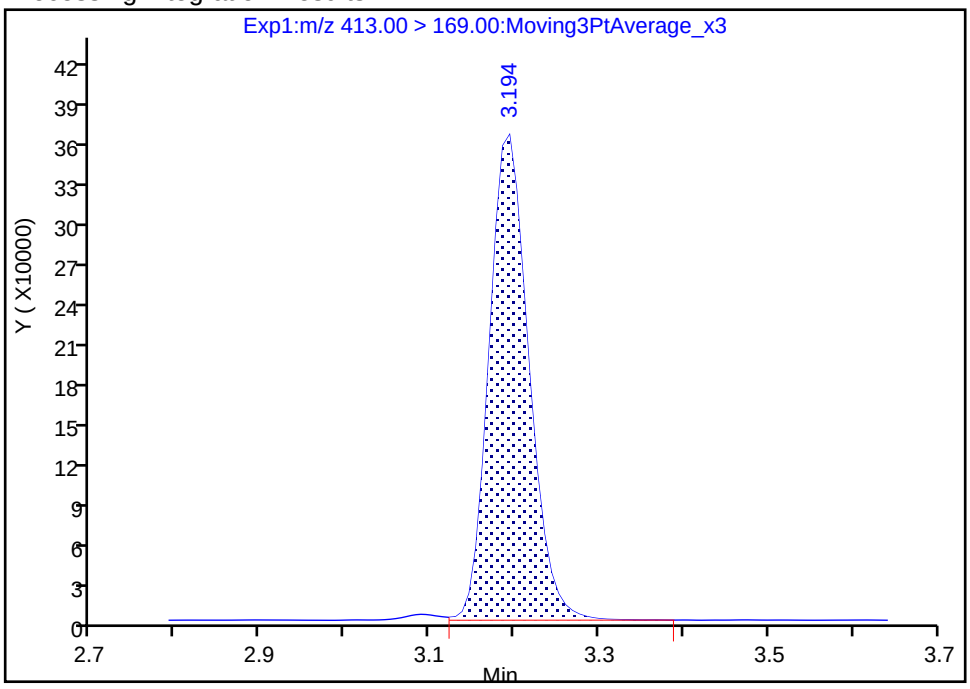
Data File: \\chromna\Sacramento\ChromData\A8_N\20190313-73203.b\2019.03.13LLA_030.d
Injection Date: 14-Mar-2019 00:59:04 Instrument ID: A8_N
Lims ID: LCS 320-281038/2-A
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

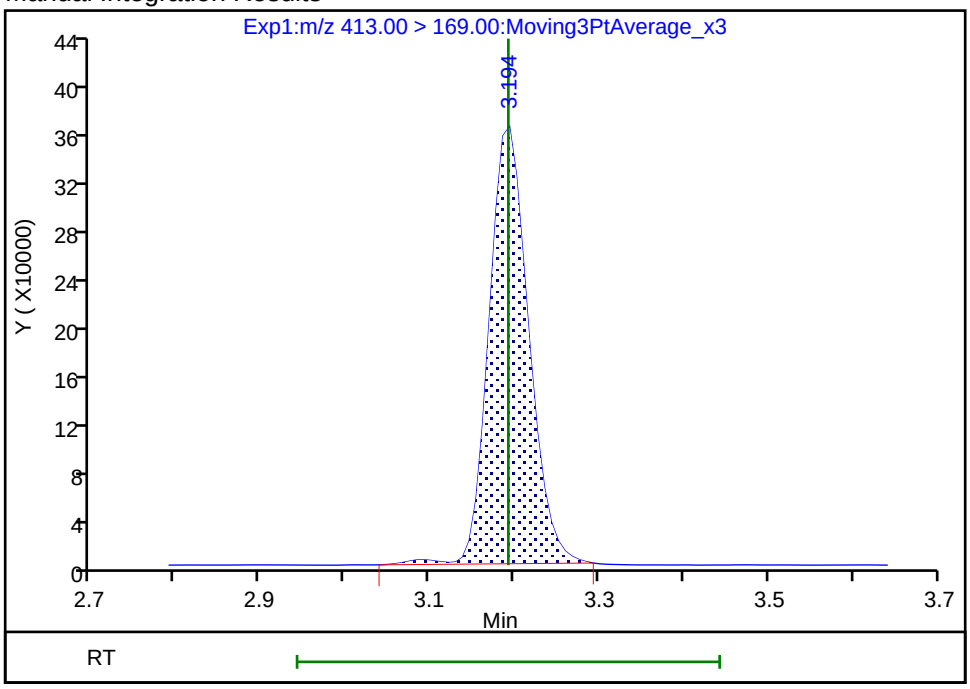
Processing Integration Results

RT: 3.19
Area: 1165983
Amount: 1.136326
Amount Units: ng/ml



Manual Integration Results

RT: 3.19
Area: 1162401
Amount: 1.136326
Amount Units: ng/ml



Reviewer: mongkols, 15-Mar-2019 09:31:53
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-281038/3-A

Matrix: Water | Lab File ID: 2019.03.12LLA_047.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 250.0(mL) | Date Analyzed: 03/12/2019 19:46

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281279 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	41.8		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	41.3		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	39.2		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	43.4		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	42.6		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	42.8		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	45.9		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	39.0		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	43.1		2.0	0.55
72629-94-8	Perfluorotridecanoic acid (PFTriA)	42.9		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	37.7		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	40.8		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	34.5		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	42.9		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	38.0		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	39.4		2.0	0.32
754-91-6	Perfluorooctanesulfonamide (FOSA)	47.9		2.0	0.35
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	42.1		20	3.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	43.6		20	1.9
27619-97-2	6:2 FTS	39.6		20	2.0
39108-34-4	8:2 FTS	43.5		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-48096-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-281038/3-A

Matrix: Water | Lab File ID: 2019.03.12LLA_047.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/12/2019 06:07

Sample wt/vol: 250.0(mL) | Date Analyzed: 03/12/2019 19:46

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Acquity ID: 2.1(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 281279 | Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	99		25-150
STL01893	13C5-PFPeA DNU	97		25-150
STL00993	13C2 PFHxA	104		25-150
STL01892	13C4 PFHpA	102		25-150
STL00990	13C4 PFOA	107		25-150
STL00995	13C5 PFNA	101		25-150
STL00996	13C2 PFDA	104		25-150
STL00997	13C2 PFUnA	106		25-150
STL00998	13C2 PFDoA	113		25-150
STL02116	13C2 PFTeDA	116		25-150
STL02337	13C3 PFBS	86		25-150
STL00994	18O2 PFHxS	101		25-150
STL00991	13C4 PFOS	98		25-150
STL01056	13C8 FOSA	93		25-150
STL02118	d3-NMeFOSAA	112		25-150
STL02117	d5-NEtFOSAA	110		25-150
STL02279	M2-6:2 FTS	108		25-150
STL02280	M2-8:2 FTS	112		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_047.d
Lims ID: LCSD 320-281038/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 12-Mar-2019 19:46:31 ALS Bottle#: 31 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: lcsd 320-281038/3-a
Misc. Info.: Plate: 1 Rack: 2
Operator ID: A9\Administrator Instrument ID: A9

Method: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\PFAS_A9.m
Limit Group: LC PFC ICAL
Last Update: 13-Mar-2019 13:09:53 Calib Date: 11-Mar-2019 12:12:07
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Sacramento\ChromData\A9\20190311-73039.b\2019.03.11_ICAL_008.d

Column 1 : Det: EXP1
Process Host: CTX0325

First Level Reviewer: mongkols Date: 13-Mar-2019 13:09:53
Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.704	1.704	0.0	0.533	5672823	2.47		99.0	28824	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.712	1.705	0.007	1.005	2076076	1.05		105	417	
D 3 13C5 PFPeA										
267.90 > 223.00	2.025	2.025	0.0	0.634	4772130	2.44		97.5	14394	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.036	2.027	0.009	1.005	1941581	1.03		103	142	
D 5 13C3 PFBS										
301.90 > 80.00	2.057	2.057	0.0	0.644	6171178	2.00		86.0	599874	
6 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.069	2.070	-0.001	1.006	2490459	1.02	Target=2.73	115	8135	
298.90 > 99.00	2.069	2.070	-0.001	1.006	928227		2.68(2.05-3.82)		2636	
D 8 M2-4:2 FTS										
329.00 > 81.00	2.347	2.345	0.002	0.734	438353	2.27		97.1	1319	
7 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.347	2.348	-0.001	1.000	411589	0.8947		95.8	4731	
D 9 13C2 PFHxA										
315.00 > 270.00	2.384	2.381	0.003	0.746	5686464	2.59		104	13842	
10 Perfluorohexanoic acid										
313.00 > 269.00	2.393	2.394	-0.001	1.004	1938119	0.9804	Target=13.56	98.0	665	
313.00 > 119.00	2.384	2.394	-0.010	1.000	141482		13.70(9.33-17.33)		738	
11 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.402	2.413	-0.011	1.168	1315326	1.08	Target=2.04	115	4613	
349.00 > 99.00	2.402	2.413	-0.011	1.168	654272		2.01(1.45-2.69)		2354	
D 13 13C3 HFPO-DA										
332.10 > 287.00	2.519	2.507	0.013	0.788	599706	2.03		81.0	3185	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
14 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.509	2.510	-0.001	0.996	405309	1.22		122	376	
D 16 13C4 PFHpA										
367.00 > 322.00	2.792	2.781	0.011	0.873	6898698	2.54		102	9462	
D 17 18O2 PFHxS										
403.00 > 84.00	2.792	2.790	0.002	0.873	4261484	2.40		101	8233	
15 Perfluoroheptanoic acid										
363.00 > 319.00	2.783	2.791	-0.008	0.997	2990416	1.09	Target=4.72	109	1333	
363.00 > 169.00	2.783	2.791	-0.008	0.997	616986		4.85(3.00-5.57)		1764	
18 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.792	2.800	-0.008	1.000	1881178	0.8622	Target=3.48	94.7	8246	M
399.00 > 99.00	2.792	2.800	-0.008	1.000	547492		3.44(2.29-4.25)		1319	
19 DONA										
377.00 > 251.00	2.837	2.836	0.001	0.792	4768948	1.07	Target=2.58	113	11381	
377.00 > 85.00	2.837	2.836	0.001	0.792	2000539		2.38(1.70-3.15)		3149	
D 20 M2-6:2 FTS										
429.00 > 81.00	3.174	3.172	0.002	0.993	629468	2.57		108	3302	
21 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.174	3.173	0.001	1.000	516759	0.9895		104	1176	
D 25 13C4 PFOA										
417.00 > 372.00	3.197	3.195	0.002	1.000	6573282	2.67		107	8152	
23 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.197	3.196	0.001	0.892	2091398	1.07	Target=4.11	113	4496	
449.00 > 99.00	3.189	3.196	-0.007	0.890	504681		4.14(2.83-5.25)		1746	
26 Perfluorooctanoic acid										
413.00 > 369.00	3.197	3.204	-0.007	1.000	2913788	1.07	Target=2.87	107	674	
413.00 > 169.00	3.197	3.204	-0.007	1.000	1045185		2.79(1.36-4.08)		995	
* 24 13C2 PFOA										
415.00 > 370.00	3.197	3.204	-0.007		6820095	2.50			9742	
D 28 13C4 PFOS										
503.00 > 80.00	3.582	3.581	0.001	1.121	4863575	2.34		98.0	6572	
29 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.582	3.583	-0.001	1.000	1879394	0.9502	Target=4.00	102	4253	
499.00 > 99.00	3.575	3.583	-0.008	0.998	477054		3.94(2.04-6.12)		2530	
D 31 13C5 PFNA										
468.00 > 423.00	3.590	3.589	0.001	1.123	5844866	2.53		101	8111	
30 Perfluorononanoic acid										
463.00 > 419.00	3.590	3.590	0.0	1.000	2405598	1.07	Target=5.73	107	1108	
463.00 > 169.00	3.590	3.590	0.0	1.000	416891		5.77(3.91-7.26)		1648	
32 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.781	3.788	-0.007	1.056	1671407	1.06		113	1762	
D 33 13C8 FOSA										
506.00 > 78.00	3.928	3.927	0.001	1.229	3154596	2.32		92.9	5328	
35 Perfluorononanesulfonic acid										
549.00 > 80.00	3.928	3.937	-0.009	1.097	1169393	0.99	Target=6.67	104	2871	
549.00 > 99.00	3.928	3.937	-0.009	1.097	168119		6.96(4.35-8.07)		957	
34 Perfluorooctanesulfonamide										
498.00 > 78.00	3.937	3.937	0.0	1.002	4160557	1.20		120	3302	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 39 M2-8:2 FTS										
529.00 > 81.00	3.955	3.954	0.001	1.237	745040	2.67		112	2622	
D 36 13C2 PFDA										
515.00 > 470.00	3.955	3.954	0.001	1.237	6172769	2.60		104	10141	
37 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.955	3.955	0.0	1.000	543924	1.09		113	3188	
38 Perfluorodecanoic acid										
513.00 > 469.00	3.946	3.955	-0.009	0.998	3008663	1.15	Target=15.29	115	2758	
513.00 > 169.00	3.955	3.955	0.0	1.000	202564		14.85(11.40-21.17)		845	
D 40 d3-NMeFOSAA										
573.00 > 419.00	4.114	4.112	0.002	1.287	2010924	2.80		112	4161	
41 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.122	4.122	0.0	1.002	673956	1.05		105	152	
42 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.252	4.260	-0.008	1.187	1719663	0.9841	Target=5.05	102	3977	
599.00 > 99.00	4.252	4.260	-0.008	1.187	362721		4.74(3.64-6.76)		1604	
D 45 d5-NEtFOSAA										
589.00 > 419.00	4.278	4.276	0.002	1.338	1683316	2.75		110	1836	
D 44 13C2 PFUnA										
565.00 > 520.00	4.269	4.276	-0.007	1.335	5127080	2.65		106	7879	
43 Perfluoroundecanoic acid										
563.00 > 519.00	4.269	4.277	-0.008	1.000	1560015	0.9738	Target=9.77	97.4	1061	
563.00 > 169.00	4.269	4.277	-0.008	1.000	172872		9.02(7.06-13.11)		929	
46 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.278	4.286	-0.008	1.000	547695	1.09		109	2418	
48 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.414	4.413	0.001	1.232	2108381	0.9756		104	5421	
D 49 13C2 PFDoA										
615.00 > 570.00	4.560	4.565	-0.005	1.426	6192616	2.83		113	8107	
50 Perfluorododecanoic acid										
613.00 > 569.00	4.560	4.567	-0.006	1.000	2538992	1.08	Target=8.97	108	1469	
613.00 > 169.00	4.560	4.567	-0.006	1.000	261175		9.72(7.12-13.21)		870	
52 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.576	4.584	-0.008	1.157	335468	1.09		113	1268	
53 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.798	4.805	-0.007	1.339	177608	1.01	Target=0.56	104	2833	
699.00 > 99.00	4.798	4.805	-0.007	1.339	323352		0.55(0.40-0.74)		3573	
54 Perfluorotridecanoic acid										
663.00 > 619.00	4.827	4.833	-0.006	1.059	1988293	1.07	Target=6.07	107	1475	
663.00 > 169.00	4.827	4.833	-0.006	1.059	332101		5.99(3.97-7.38)		2803	
D 55 13C2 PFTeDA										
715.00 > 670.00	5.069	5.067	0.002	1.585	4647269	2.89		116	11950	
56 Perfluorotetradecanoic acid										
713.00 > 169.00	5.069	5.076	-0.007	1.000	308442	0.9432	Target=1.47	94.3	2240	
713.00 > 219.00	5.060	5.076	-0.016	0.998	209145		1.47(1.07-1.99)		1087	
D 57 13C2 PFHxDA										
815.00 > 770.00	5.516	5.515	0.001	1.725	4239212	2.70		108	8532	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
58 Perfluorohexadecanoic acid										
813.00 > 769.00	5.516	5.526	-0.010	1.000	1546186	1.04	Target=5.36	104	131	
813.00 > 169.00	5.516	5.526	-0.010	1.000	301181		5.13(3.82-7.09)		1386	
59 Perfluorooctadecanoic acid										
913.00 > 869.00	5.978	5.986	-0.008	1.084	1131600	1.30	Target=5.11	130	268	
913.00 > 169.00	5.970	5.986	-0.016	1.082	229420		4.93(3.36-6.24)		1410	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 13-Mar-2019 13:09:53 Chrom Revision: 2.3 12-Mar-2019 09:55:20

TestAmerica Sacramento

Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_047.d

Injection Date: 12-Mar-2019 19:46:31 Instrument ID: A9

Lims ID: LCSD 320-281038/3-A

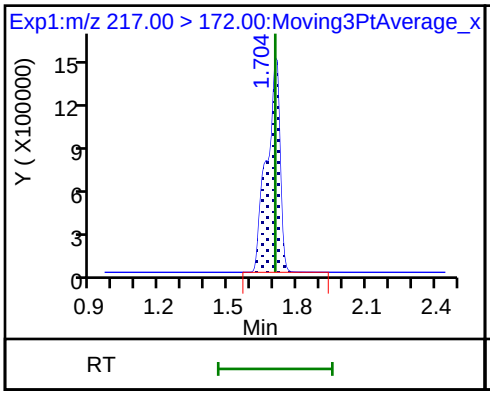
Client ID:

Operator ID: A9\Administrator ALS Bottle#: 31 Worklist Smp#: 4

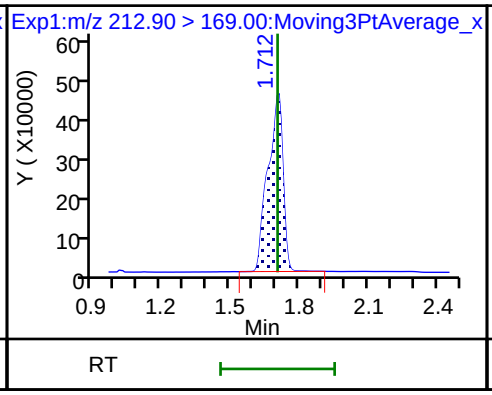
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: PFAS_A9 Limit Group: LC PFC ICAL

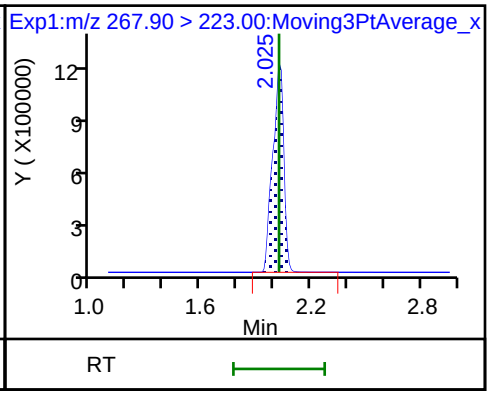
D 1 13C4 PFBA



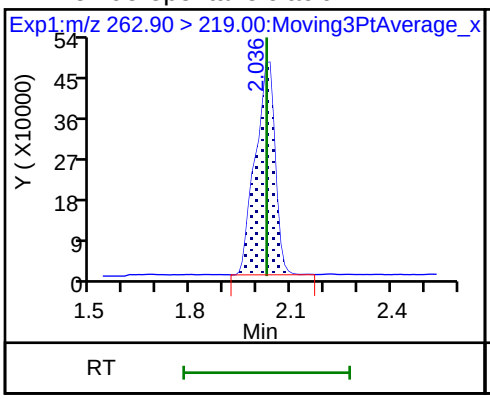
2 Perfluorobutanoic acid



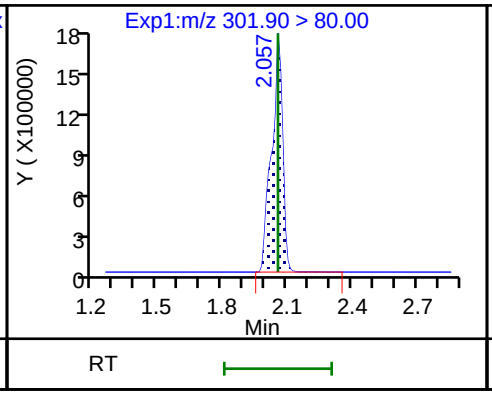
D 3 13C5 PFPeA



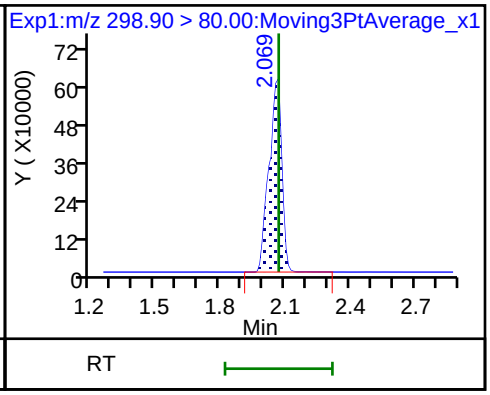
4 Perfluoropentanoic acid



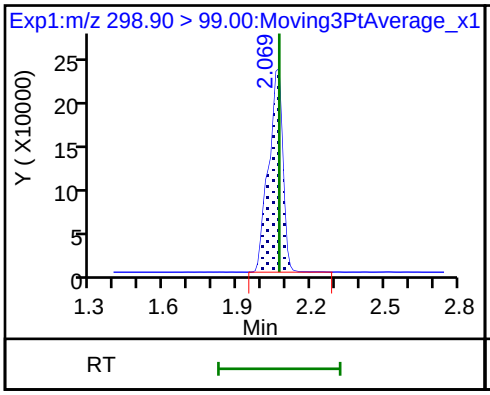
D 5 13C3 PFBS



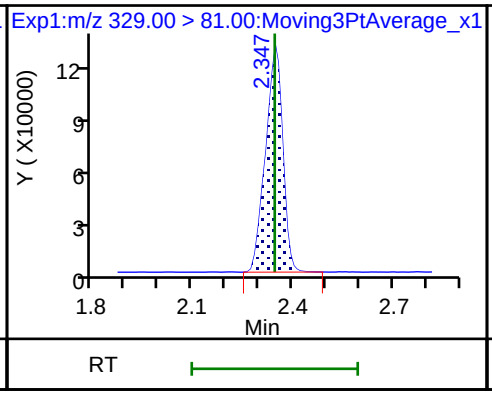
6 Perfluorobutanesulfonic acid



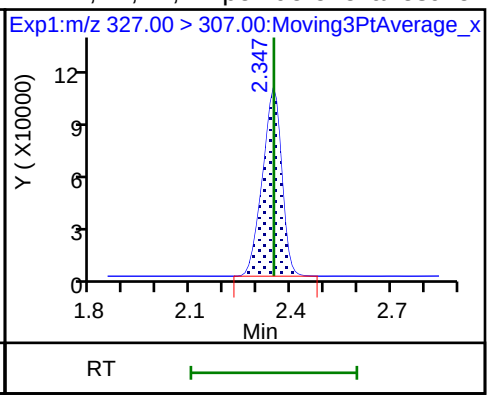
6 Perfluorobutanesulfonic acid



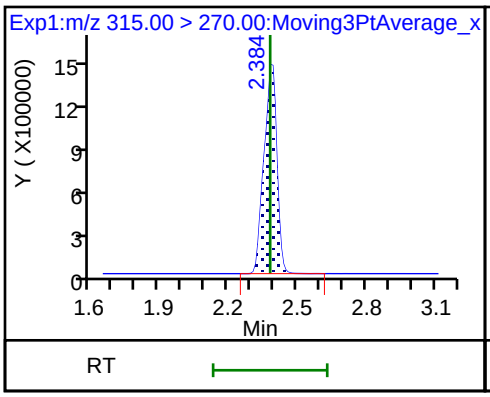
D 8 M2-4:2 FTS



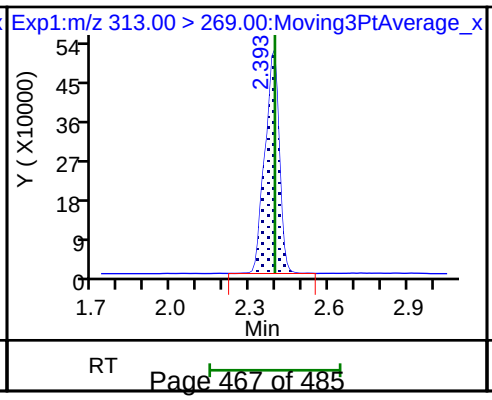
7 1H,1H,2H,2H-perfluorohexanesulfoni



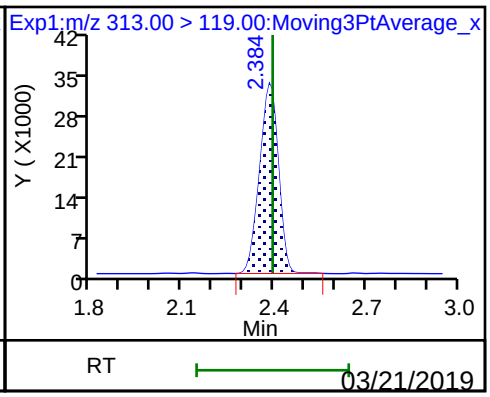
D 9 13C2 PFHxA



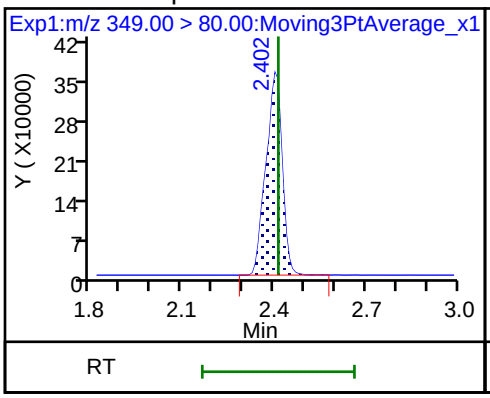
10 Perfluorohexanoic acid



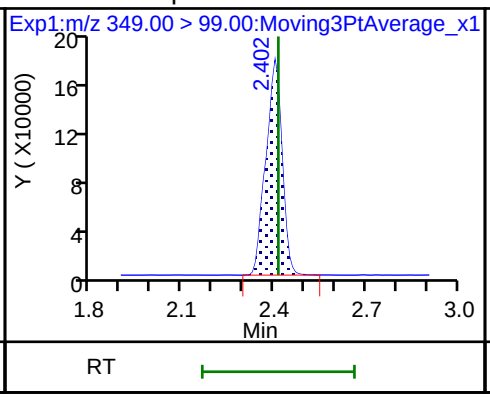
10 Perfluorohexanoic acid



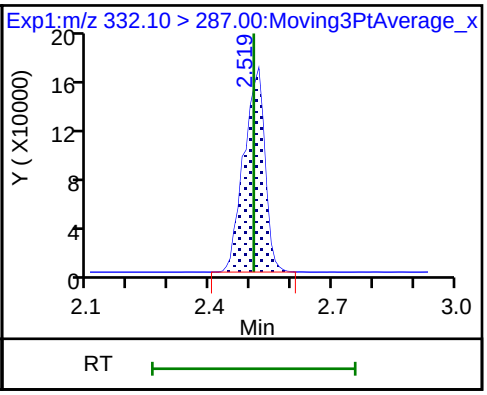
11 Perfluoropentanesulfonic acid



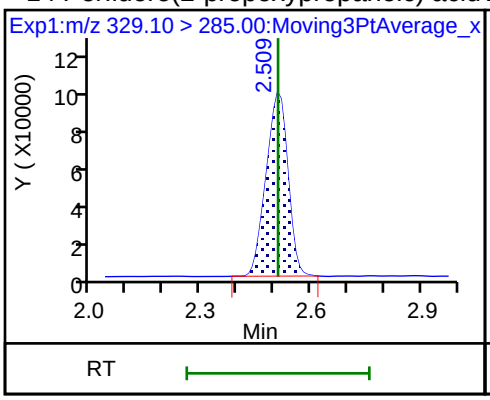
11 Perfluoropentanesulfonic acid



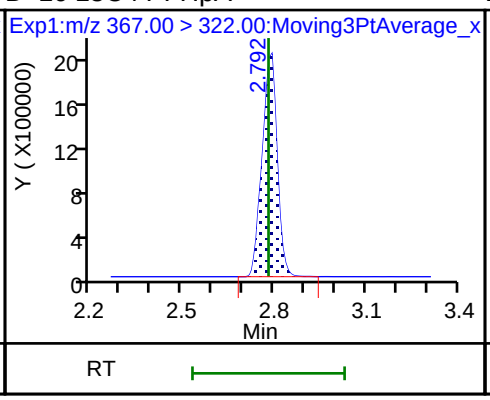
D 13 13C3 HFPO-DA



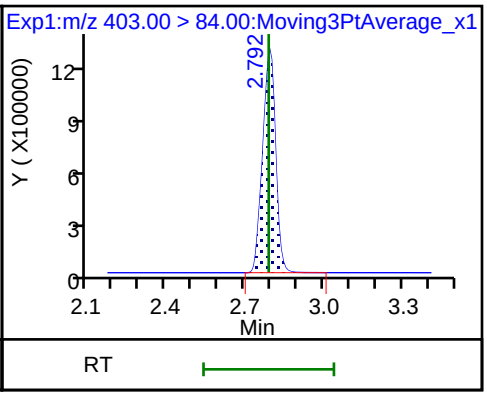
14 Perfluoro(2-propoxypropanoic) acid



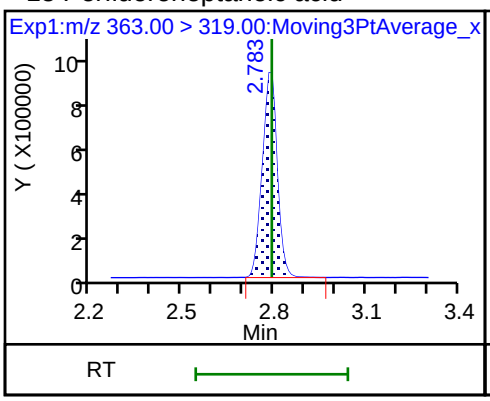
D 16 13C4 PFHpA



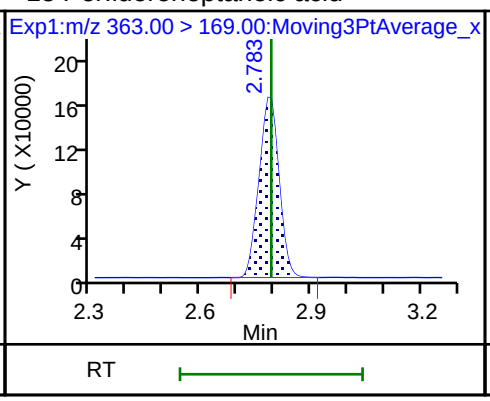
D 17 18O2 PFHxS



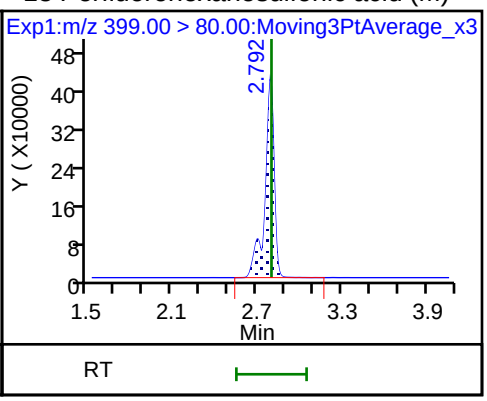
15 Perfluoroheptanoic acid



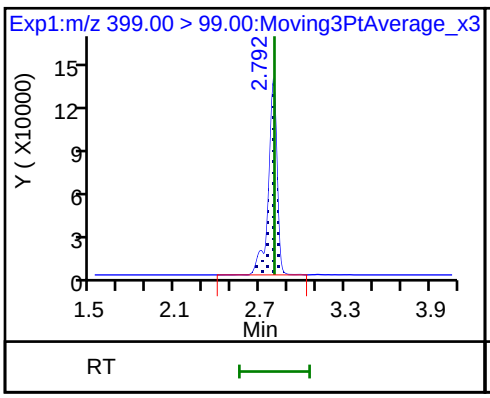
15 Perfluoroheptanoic acid



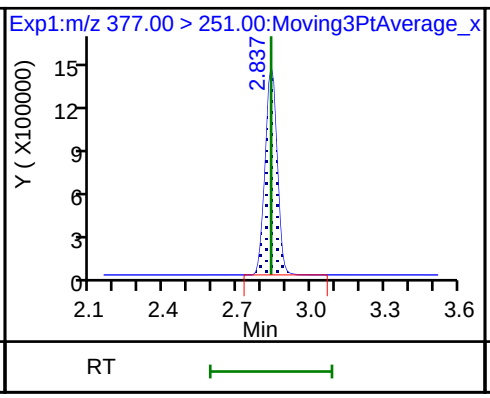
18 Perfluorohexanesulfonic acid (M)



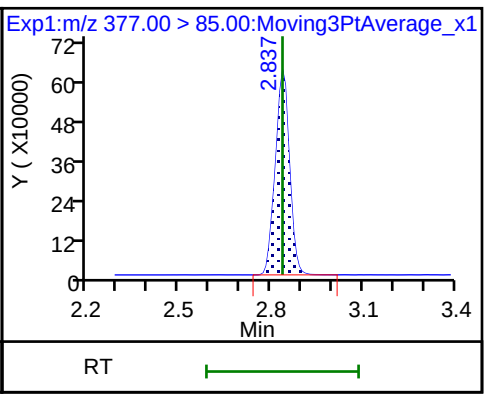
18 Perfluorohexanesulfonic acid



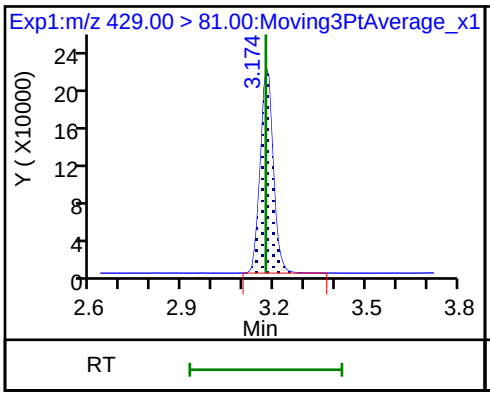
19 DONA



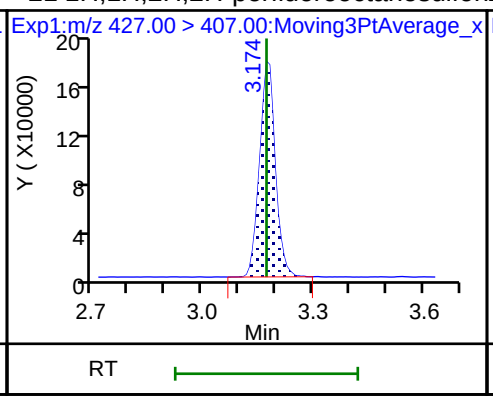
19 DONA



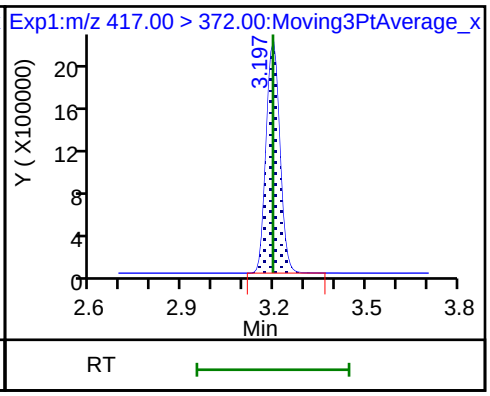
D 20 M2-6:2 FTS



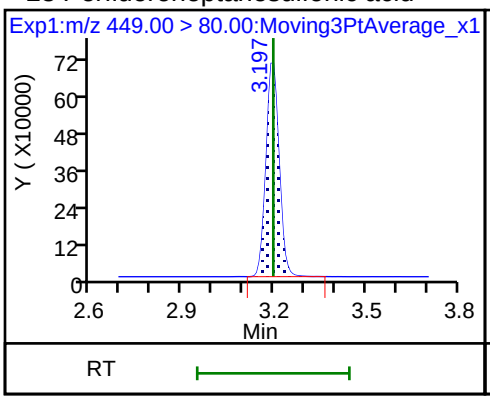
21 1H,1H,2H,2H-perfluorooctanesulfon



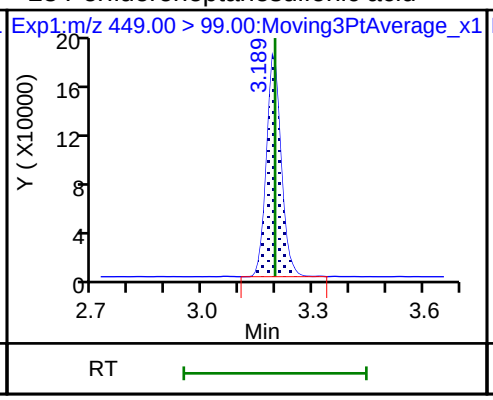
D 25 13C4 PFOA



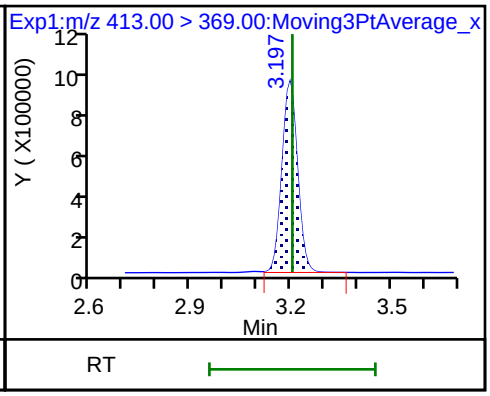
23 Perfluoroheptanesulfonic acid



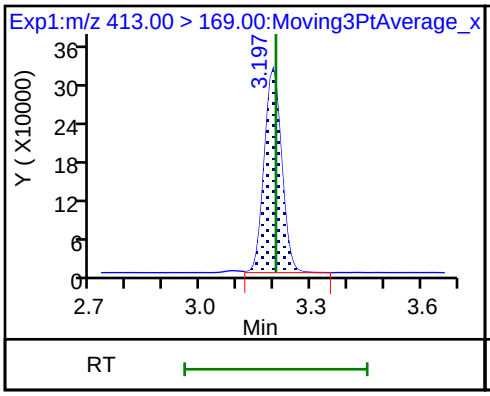
23 Perfluoroheptanesulfonic acid



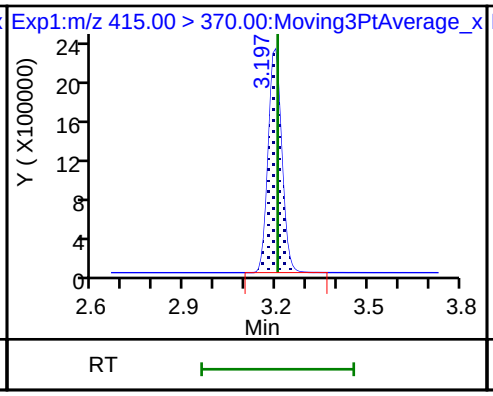
26 Perfluorooctanoic acid



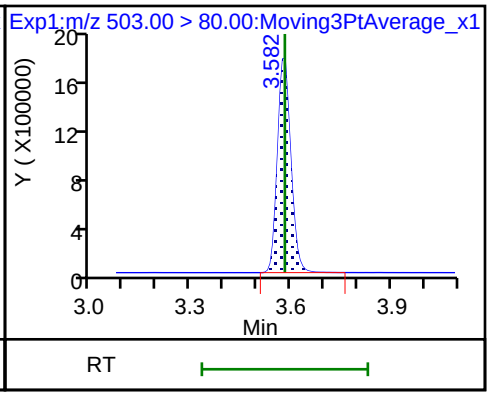
26 Perfluorooctanoic acid



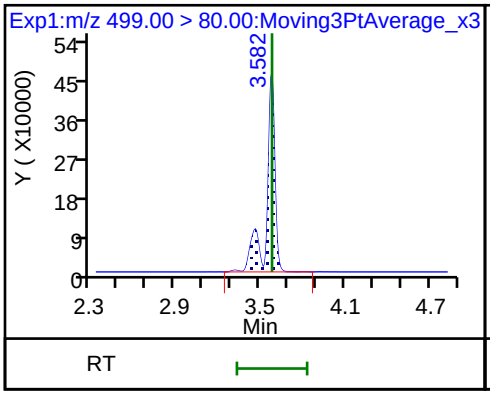
* 24 13C2 PFOA



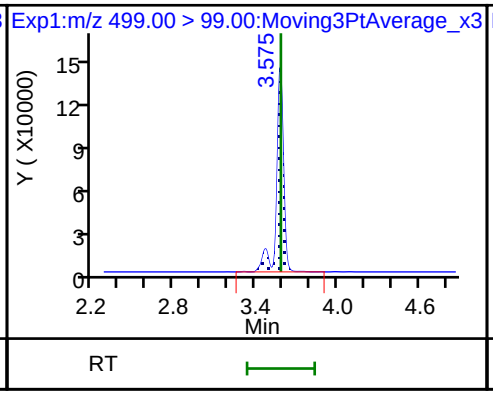
D 28 13C4 PFOS



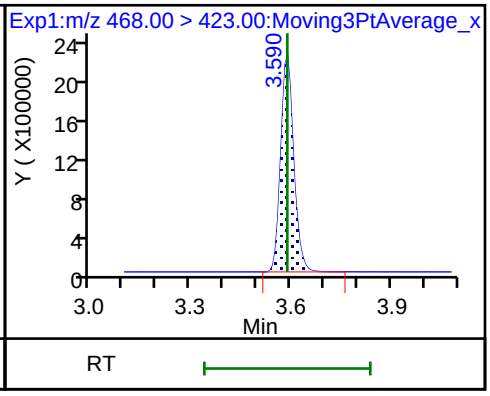
29 Perfluorooctanesulfonic acid



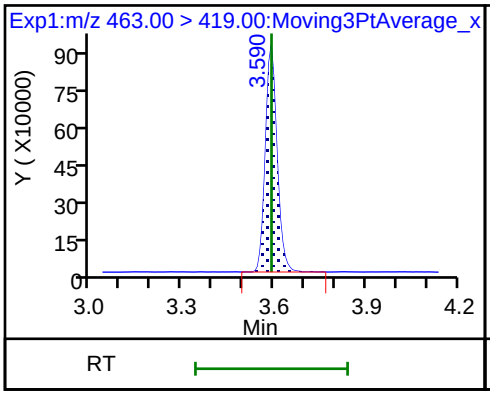
29 Perfluorooctanesulfonic acid



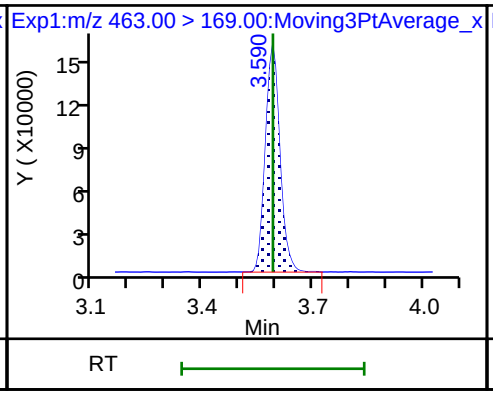
D 31 13C5 PFNA



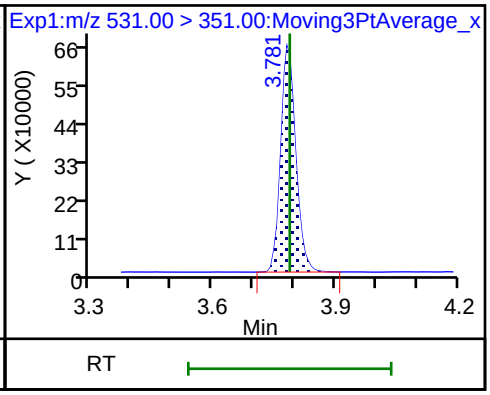
30 Perfluorononanoic acid



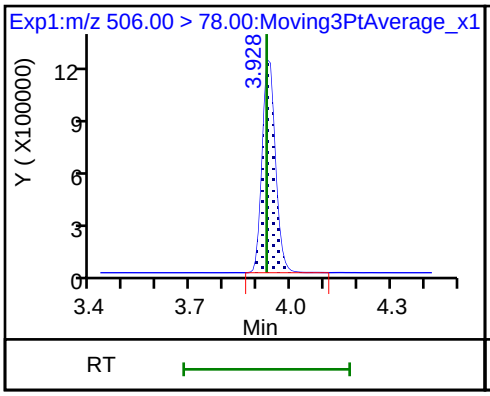
30 Perfluorononanoic acid



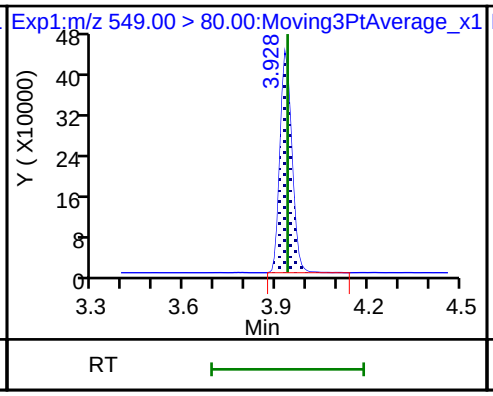
32 9-Chlorohexadecafluoro-3-oxanonane



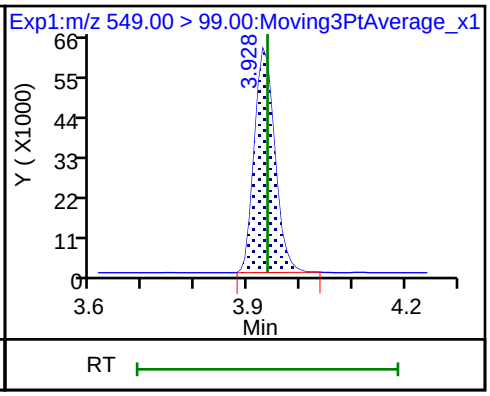
D 33 13C8 FOSA



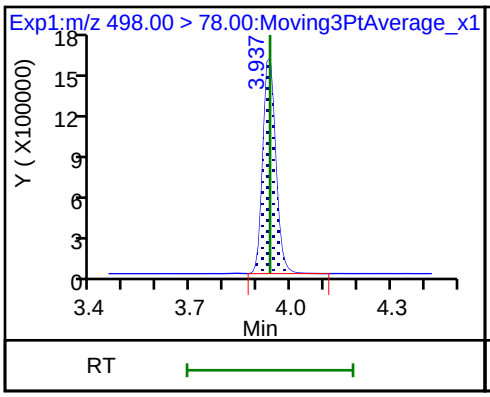
35 Perfluorononanesulfonic acid



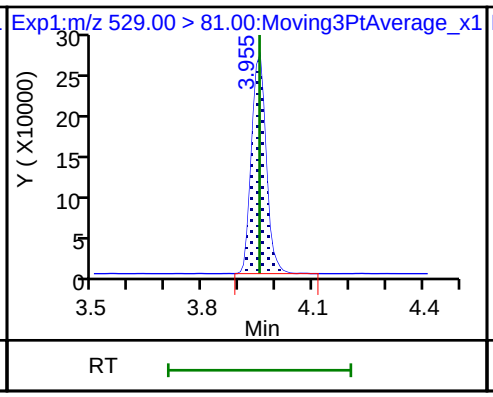
35 Perfluorononanesulfonic acid



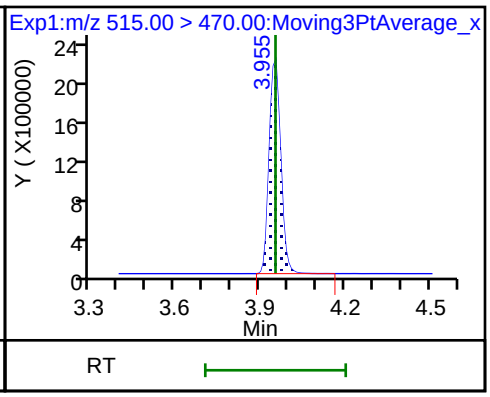
34 Perfluorooctanesulfonamide



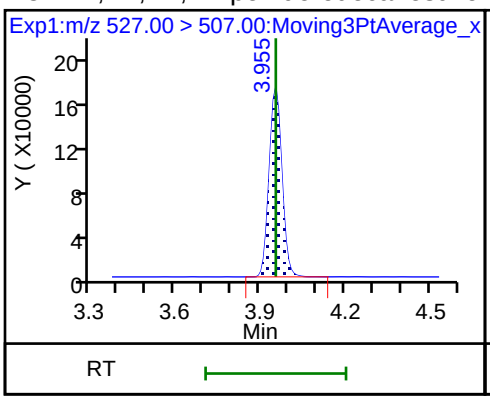
D 39 M2-8:2 FTS



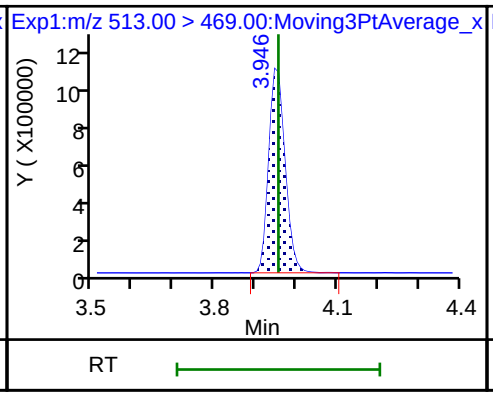
D 36 13C2 PFDA



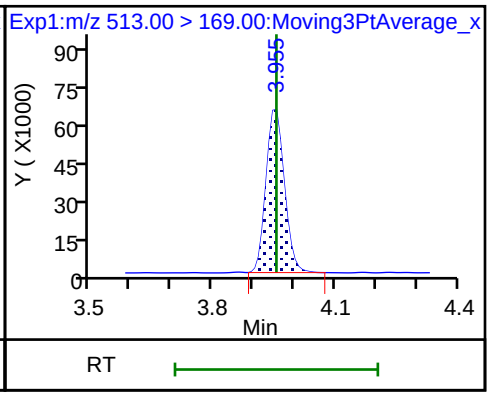
37 1H,1H,2H,2H-perfluorodecanesulfoni



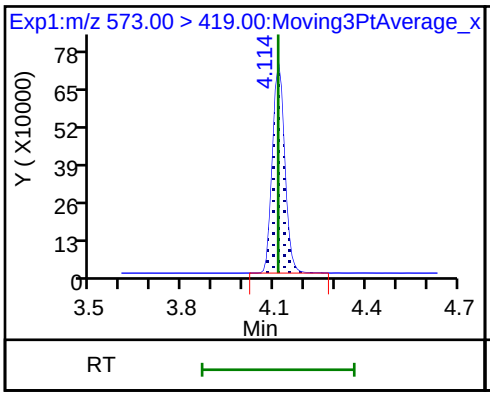
38 Perfluorodecanoic acid



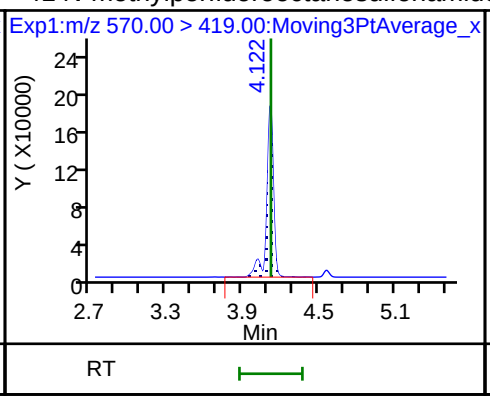
38 Perfluorodecanoic acid



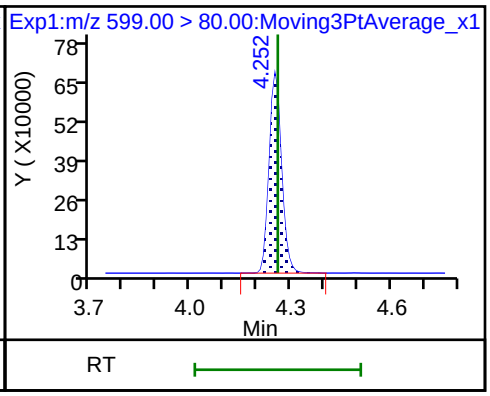
D 40 d3-NMeFOSAA



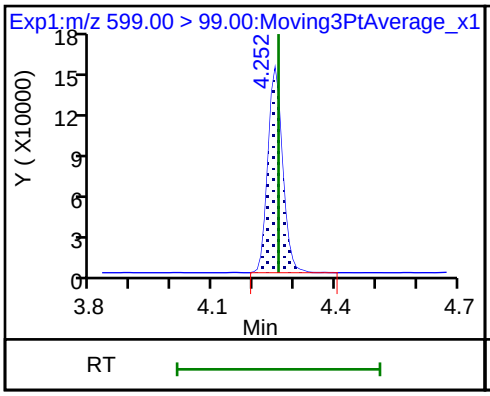
41 N-methylperfluorooctanesulfonamido



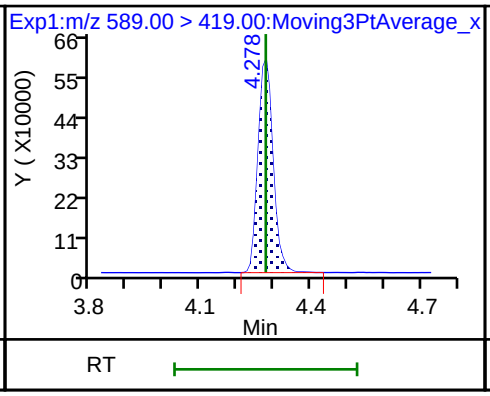
42 Perfluorodecanesulfonic acid



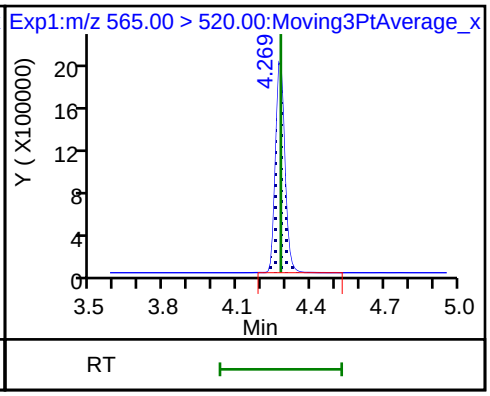
42 Perfluorodecanesulfonic acid



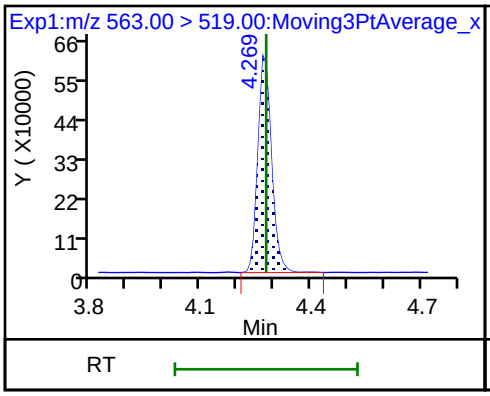
D 45 d5-NEtFOSAA



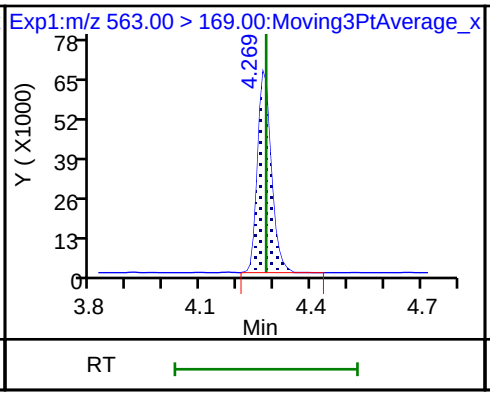
D 44 13C2 PFUnA



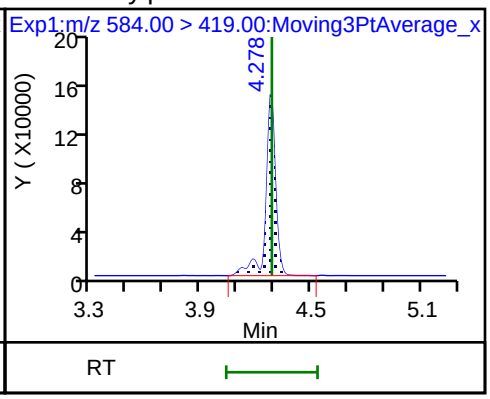
43 Perfluoroundecanoic acid



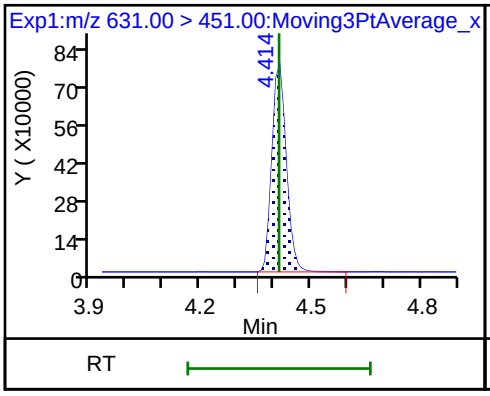
43 Perfluoroundecanoic acid



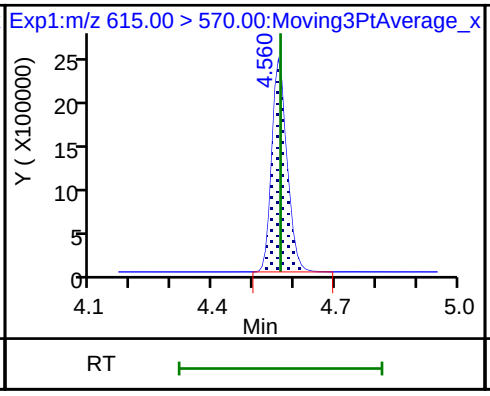
46 N-ethylperfluorooctanesulfonamidoa



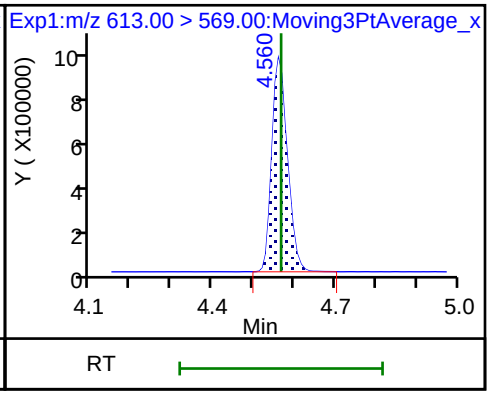
48 11-Chloroeicosafluoro-3-oxaundecan



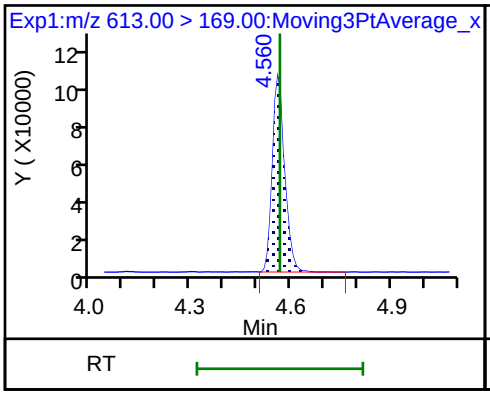
D 49 13C2 PFDoA



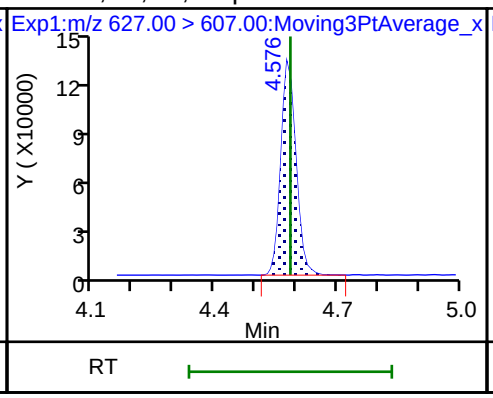
50 Perfluorododecanoic acid



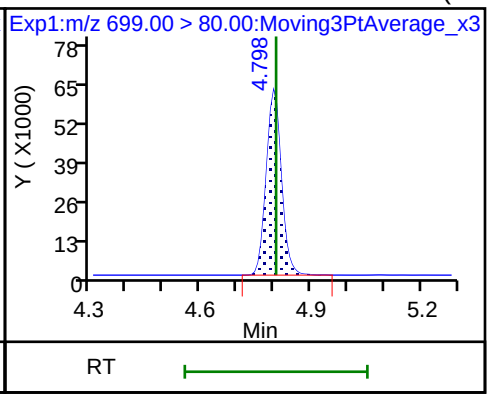
50 Perfluorododecanoic acid



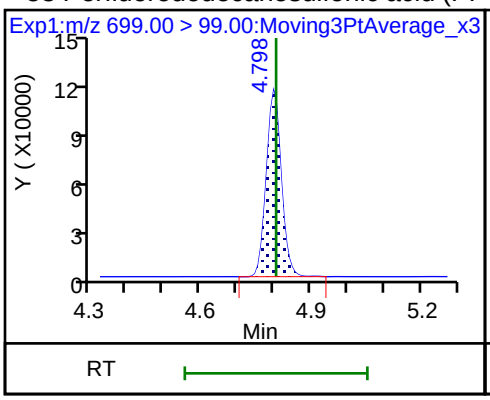
52 1H,1H,2H,2H-perfluorododecanesulfo



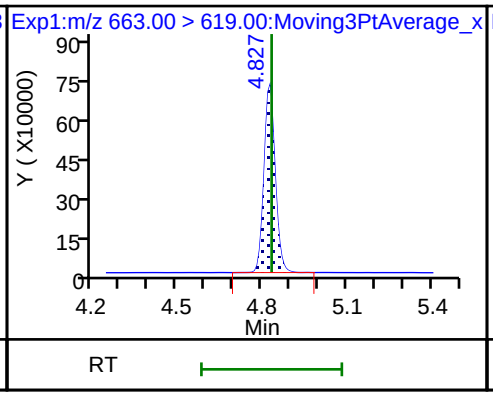
53 Perfluorododecanesulfonic acid (PF



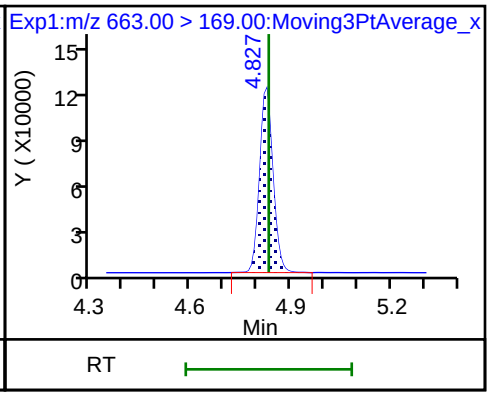
53 Perfluorododecanesulfonic acid (PF



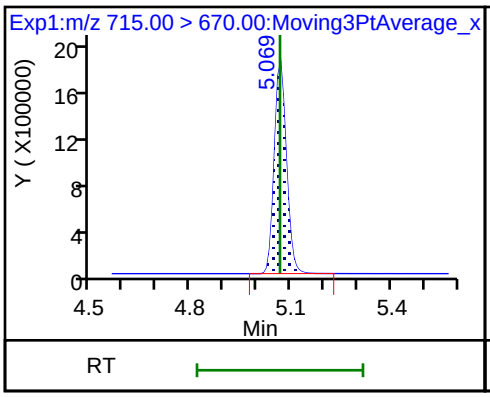
54 Perfluorotridecanoic acid



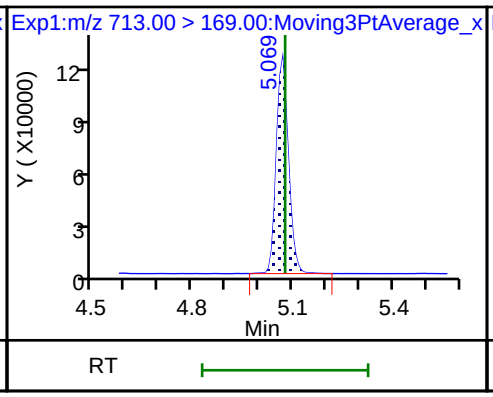
54 Perfluorotridecanoic acid



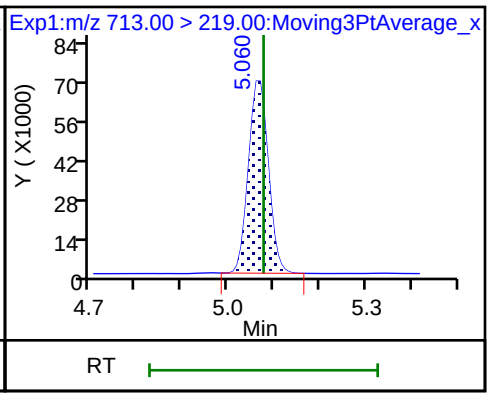
D 55 13C2 PFTeDA



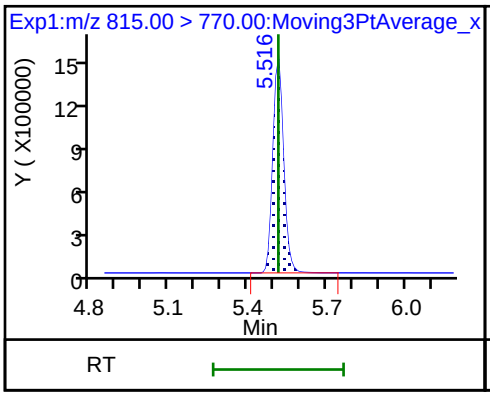
56 Perfluorotetradecanoic acid



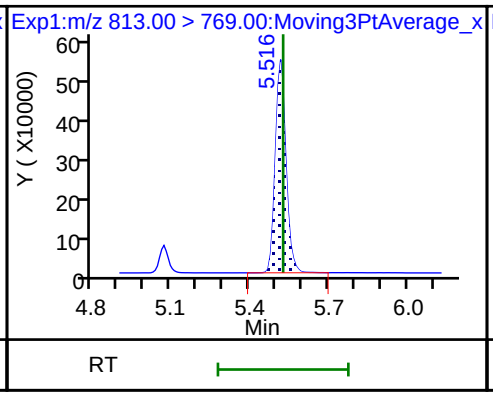
56 Perfluorotetradecanoic acid



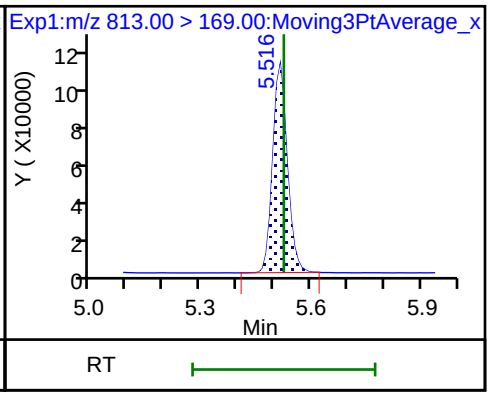
D 57 13C2 PFHxDA



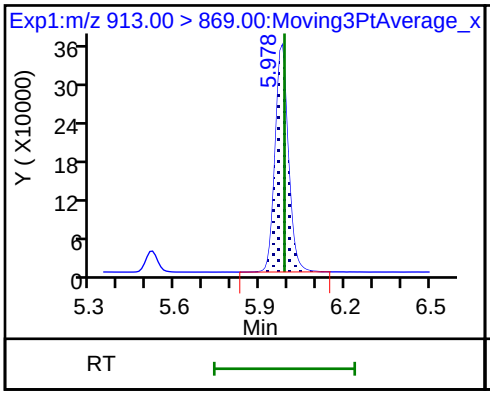
58 Perfluorohexadecanoic acid



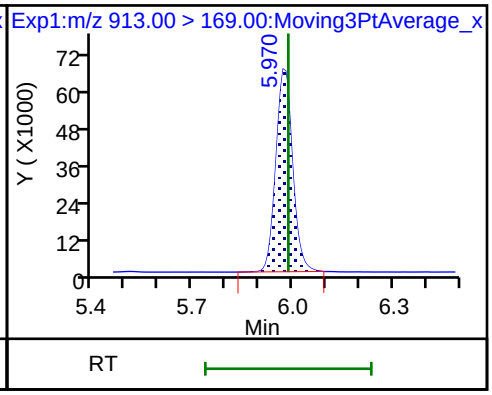
58 Perfluorohexadecanoic acid



59 Perfluorooctadecanoic acid



59 Perfluorooctadecanoic acid



Manual Integration/User Assign Peak Report

TestAmerica Sacramento

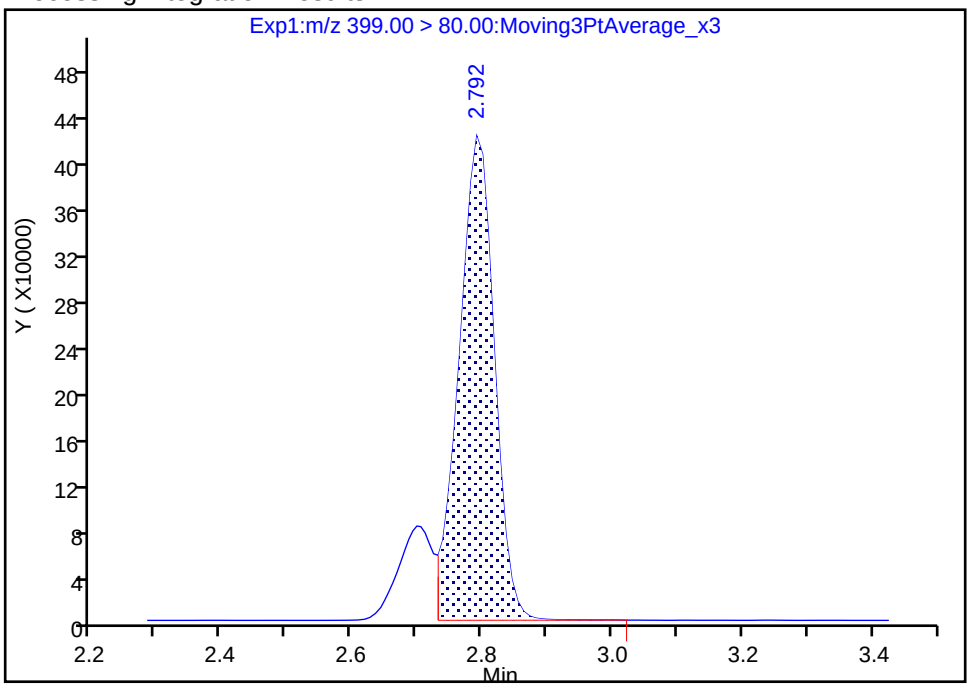
Data File: \\chromna\Sacramento\ChromData\A9\20190312-73145.b\2019.03.12LLA_047.d
Injection Date: 12-Mar-2019 19:46:31 Instrument ID: A9
Lims ID: LCSD 320-281038/3-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 31 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

18 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

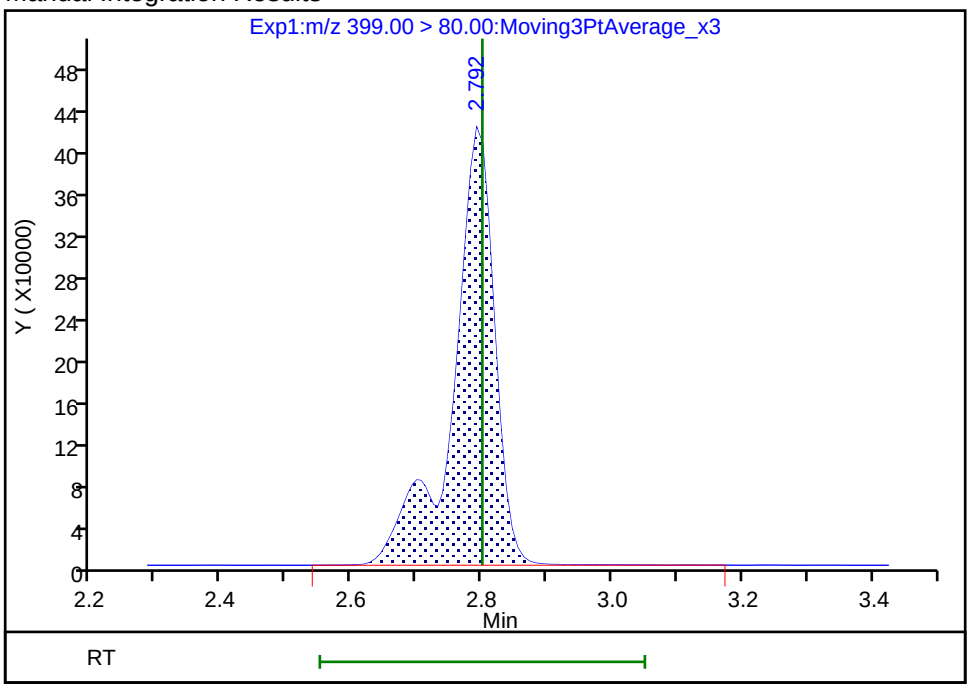
Processing Integration Results

RT: 2.79
Area: 1577146
Amount: 0.722830
Amount Units: ng/ml



Manual Integration Results

RT: 2.79
Area: 1881178
Amount: 0.862173
Amount Units: ng/ml



Reviewer: mongkols, 13-Mar-2019 13:09:44
Audit Action: Manually Integrated Audit Reason: Isomers

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Instrument ID: A8_N Start Date: 03/09/2019 01:17

Analysis Batch Number: 280516 End Date: 03/09/2019 02:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-280516/2		03/09/2019 01:17	1	2019.03.08ICAL_005.d	GeminiC18 3x100 3(mm)
IC 320-280516/3		03/09/2019 01:25	1	2019.03.08ICAL_006.d	GeminiC18 3x100 3(mm)
IC 320-280516/4		03/09/2019 01:32	1	2019.03.08ICAL_007.d	GeminiC18 3x100 3(mm)
IC 320-280516/5 ICIS		03/09/2019 01:40	1	2019.03.08ICAL_008.d	GeminiC18 3x100 3(mm)
IC 320-280516/6		03/09/2019 01:47	1	2019.03.08ICAL_009.d	GeminiC18 3x100 3(mm)
IC 320-280516/7		03/09/2019 01:55	1	2019.03.08ICAL_010.d	GeminiC18 3x100 3(mm)
IC 320-280516/8		03/09/2019 02:02	1	2019.03.08ICAL_011.d	GeminiC18 3x100 3(mm)
ICB 320-280516/9		03/09/2019 02:10	1	2019.03.08ICAL_012.d	GeminiC18 3x100 3(mm)
ICV 320-280516/10		03/09/2019 02:17	1	2019.03.08ICAL_013.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/09/2019 02:25	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Instrument ID: A8_N Start Date: 03/13/2019 21:14

Analysis Batch Number: 281496 End Date: 03/13/2019 23:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-281496/1		03/13/2019 21:14	1	2019.03.13LLB_004.d	GeminiC18 3x100 3(mm)
CCVL 320-281496/2		03/13/2019 21:21	1	2019.03.13LLB_005.d	GeminiC18 3x100 3(mm)
CCV 320-281496/3 CCVIS		03/13/2019 21:29	1	2019.03.13LLB_046.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 21:36	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 21:44	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 21:51	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 21:59	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 22:06	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 22:14	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 22:21	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 22:29	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 22:36	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 22:44	1		GeminiC18 3x100 3(mm)
CCV 320-281496/14		03/13/2019 22:51	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 22:59	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 23:06	1		GeminiC18 3x100 3(mm)
ZZZZZ		03/13/2019 23:14	1		GeminiC18 3x100 3(mm)
CCV 320-281496/18		03/13/2019 23:21	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Instrument ID: A8_N Start Date: 03/14/2019 00:51

Analysis Batch Number: 281559 End Date: 03/14/2019 02:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-281559/1		03/14/2019 00:51	1	2019.03.13LLA_029.d	GeminiC18 3x100 3(mm)
LCS 320-281038/2-A		03/14/2019 00:59	1	2019.03.13LLA_030.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 01:06	100		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 01:14	100		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 01:21	100		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 01:29	100		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 01:36	100		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 01:44	100		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 01:51	1		GeminiC18 3x100 3(mm)
CCV 320-281559/10		03/14/2019 01:58	1	2019.03.13LLA_040.d	GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 02:06	10		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 02:13	10		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 02:21	10		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 02:29	10		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 02:36	10		GeminiC18 3x100 3(mm)
ZZZZZ		03/14/2019 02:44	1		GeminiC18 3x100 3(mm)
CCV 320-281559/17		03/14/2019 02:51	1		GeminiC18 3x100 3(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Instrument ID: A9 Start Date: 03/11/2019 11:27

Analysis Batch Number: 280812 End Date: 03/11/2019 12:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-280812/2		03/11/2019 11:27	1	2019.03.11_ICAL 002.d	Acquity 2.1(mm)
IC 320-280812/3		03/11/2019 11:34	1	2019.03.11_ICAL 003.d	Acquity 2.1(mm)
IC 320-280812/4		03/11/2019 11:42	1	2019.03.11_ICAL 004.d	Acquity 2.1(mm)
IC 320-280812/5 ICIS		03/11/2019 11:49	1	2019.03.11_ICAL 005.d	Acquity 2.1(mm)
IC 320-280812/6		03/11/2019 11:57	1	2019.03.11_ICAL 006.d	Acquity 2.1(mm)
IC 320-280812/7		03/11/2019 12:04	1	2019.03.11_ICAL 007.d	Acquity 2.1(mm)
IC 320-280812/8		03/11/2019 12:12	1	2019.03.11_ICAL 008.d	Acquity 2.1(mm)
ICB 320-280812/9		03/11/2019 12:19	1	2019.03.11_ICAL 009.d	Acquity 2.1(mm)
ICV 320-280812/10		03/11/2019 12:27	1	2019.03.11_ICAL 010.d	Acquity 2.1(mm)
ZZZZZ		03/11/2019 12:34	1		Acquity 2.1(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Instrument ID: A9 Start Date: 03/12/2019 13:53

Analysis Batch Number: 281205 End Date: 03/12/2019 16:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-281205/1		03/12/2019 13:53	1	2019.03.12LLA_004.d	Acquity 2.1(mm)
CCVL 320-281205/2		03/12/2019 14:00	1	2019.03.12LLA_005.d	Acquity 2.1(mm)
CCV 320-281205/3 CCVIS		03/12/2019 14:08	1	2019.03.12LLA_006.d	Acquity 2.1(mm)
ZZZZZ		03/12/2019 14:15	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 14:23	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 14:30	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 14:38	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 14:45	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 14:53	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 15:00	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 15:08	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 15:15	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 15:23	1		Acquity 2.1(mm)
CCV 320-281205/14		03/12/2019 15:31	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 15:38	20		Acquity 2.1(mm)
ZZZZZ		03/12/2019 15:46	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 15:53	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 16:01	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 16:08	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 16:16	10		Acquity 2.1(mm)
ZZZZZ		03/12/2019 16:23	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 16:31	1		Acquity 2.1(mm)
CCV 320-281205/23		03/12/2019 16:38	1		Acquity 2.1(mm)

537 (modified)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Instrument ID: A9 Start Date: 03/12/2019 19:23

Analysis Batch Number: 281279 End Date: 03/12/2019 21:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-281279/1		03/12/2019 19:23	1	2019.03.12LLA_044.d	Acquity 2.1(mm)
MB 320-281038/1-A		03/12/2019 19:31	1	2019.03.12LLA_045.d	Acquity 2.1(mm)
ZZZZZ		03/12/2019 19:39	1		Acquity 2.1(mm)
LCSD 320-281038/3-A		03/12/2019 19:46	1	2019.03.12LLA_047.d	Acquity 2.1(mm)
ZZZZZ		03/12/2019 19:54	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 20:01	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 20:09	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 20:16	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 20:24	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 20:31	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 20:39	1		Acquity 2.1(mm)
CCV 320-281279/12		03/12/2019 20:46	1	2019.03.12LLA_055.d	Acquity 2.1(mm)
ZZZZZ		03/12/2019 20:54	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 21:01	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 21:09	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 21:16	1		Acquity 2.1(mm)
320-48096-1		03/12/2019 21:24	1	2019.03.12LLA_060.d	Acquity 2.1(mm)
320-48096-2		03/12/2019 21:31	1	2019.03.12LLA_061.d	Acquity 2.1(mm)
ZZZZZ		03/12/2019 21:39	1		Acquity 2.1(mm)
ZZZZZ		03/12/2019 21:46	1		Acquity 2.1(mm)
CCV 320-281279/21		03/12/2019 21:54	1	2019.03.12LLA_064.d	Acquity 2.1(mm)

537 (modified)

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Batch Number: 281038 Batch Start Date: 03/12/19 06:07 Batch Analyst: Vang, Mai Neng

Batch Method: 3535 Batch End Date: 03/12/19 11:53

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC_ALL_SU 00162	LCPFC-IS 00141
MB 320-281038/1		3535, 537 (modified)				250.0 mL	10.00 mL	500 uL	500 uL
LCS 320-281038/2		3535, 537 (modified)				250.0 mL	10.00 mL	500 uL	500 uL
LCSD 320-281038/3		3535, 537 (modified)				250.0 mL	10.00 mL	500 uL	500 uL
320-48096-A-1	GC-DYE-TABLET(WZ)	3535, 537 (modified)	T	325.16 g	28.98 g	296.2 mL	10.00 mL	500 uL	500 uL
320-48096-A-2	GC-DYE-LIQUID(WZ)	3535, 537 (modified)	T	311.11 g	28.20 g	282.9 mL	10.00 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00213					
MB 320-281038/1		3535, 537 (modified)							
LCS 320-281038/2		3535, 537 (modified)		500 uL					
LCSD 320-281038/3		3535, 537 (modified)		500 uL					
320-48096-A-1	GC-DYE-TABLET(WZ)	3535, 537 (modified)	T						
320-48096-A-2	GC-DYE-LIQUID(WZ)	3535, 537 (modified)	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-48096-1

SDG No.:

Batch Number: 281038 Batch Start Date: 03/12/19 06:07 Batch Analyst: Vang, Mai Neng

Batch Method: 3535 Batch End Date: 03/12/19 11:53

Batch Notes	
Balance ID	QA-078
Batch Comment	Client ID matches label: MNV 3/12/19.
First End time	03/12/2019 11:53
H2O ID	03/08/19
Hexane ID	1508249
Manifold ID	X and L
Methanol ID	1532283
Sodium Hydroxide ID	1528115
Pipette/Syringe/Dispenser ID	I46162G
Analyst ID - Reagent Drop	MNV
Analyst ID - IS Reagent Drop	MNV
Analyst ID - IS Reagent Drop Witness	MYV
Solvent Lot #	1520044
Solvent Name	0.3% NH4OH-MeOH
SPE Cartridge Lot ID	004238285A
SPE Cartridge Type	500mg
First Start time	03/12/2019 06:07

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) TRC Engineers Inc.	Samplers Name (Printed) Emily Ebert	Site/Project Identification Gem Cleaners
Company 1430 Broadway, 10th Floor	P. O. # 120097 Proj. Name- 279191 Phase2	State (Location of site): NJ: ☐ NY: ☒ Other:
Address New York, NY 10024	Analysis Turnaround Time: Standard ☒ 3-Weeks	Regulatory Program: DKQP: ☐
City State	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 917-221-7822 Fax eebert@trcsolutions.com	917 347-618-6526	

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	PFAS (list of 21 compounds)	LAB USE ONLY Sample Numbers
GC-DYE-TABLET(NZ)	3/4/19	1200	W	2	X	
GC-DYE-LIQUID(NZ)	↓	1200	W	2	X	
					END	

LAB USE ONLY: Project No: | Job No:

320-48096 Chain of Custody

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____ — Soil: | Water: 1

Special Instructions Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	TRC	3/5/19 1305	1)	TA NYC
2)	TA NYC	03/05/19 17:00	2)	TA Sac 6 on March 19 1000
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

2.6°C

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 320-48096-1

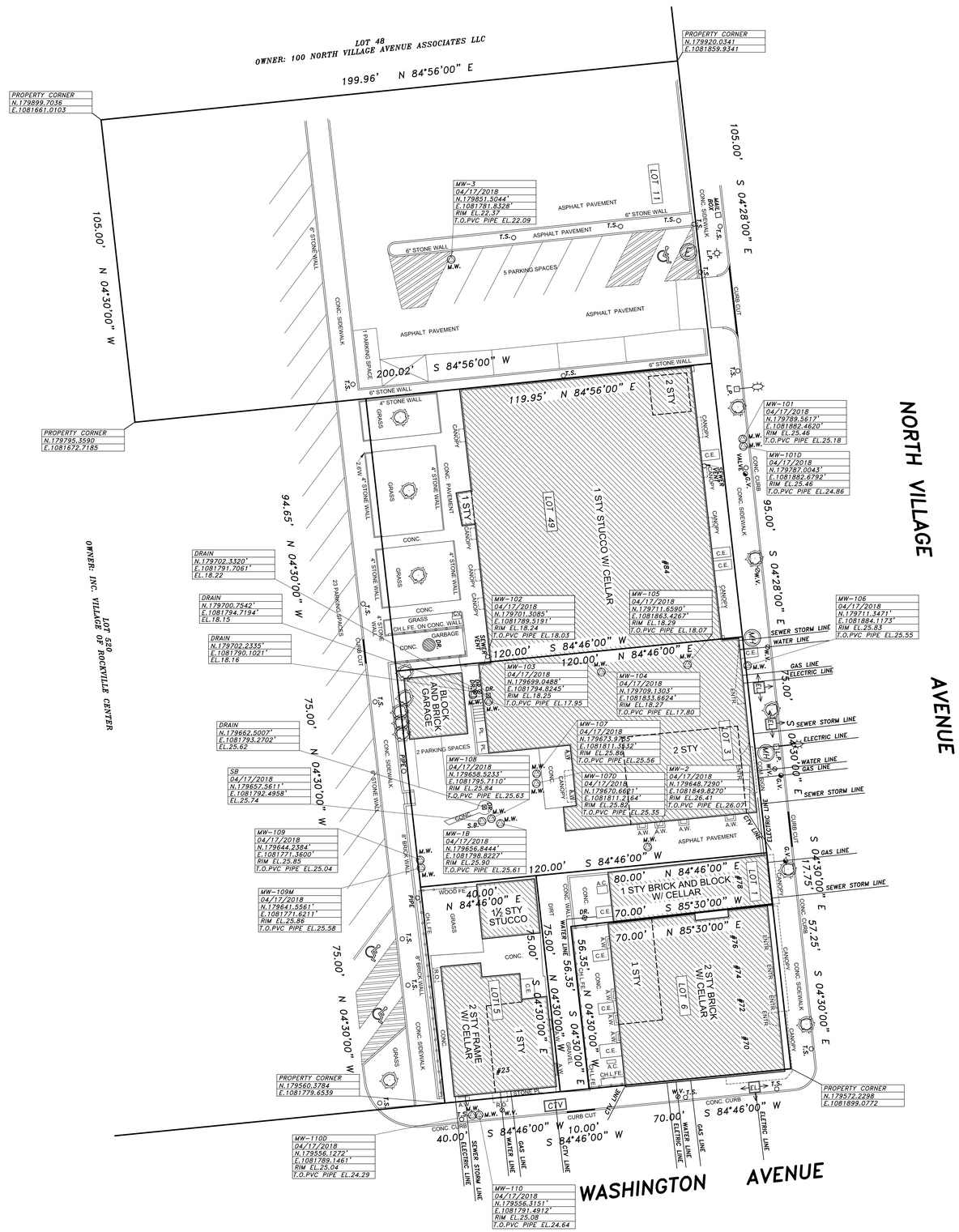
Login Number: 48096
List Number: 1
Creator: Badhan, Manpreet

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX I
SITE SURVEY

JOB NO. N 38-153-3-MW
SURVEYED ON: APRIL 17, 2018



SCALE 1"=20'

SYMBOLS AND ABBREVIATIONS

FENCE	CH.LFE. / WOOD FE.
UTILITY POLE	U.P.
PARKING METER	P.M.
OIL FILL	O.F.
MONITORING WELL	M.W.
TRAFFIC LIGHT	T.L.
LIGHT	
STREET LIGHT	L.P.
FIRE HYDRANT	HYD.
SIAMESE CONNECTION	SPR.
SHUT OFF VALVE	G.V. / G.V. / W.V. / W.V.
HANDICAPPED PARKING	
EXISTING TREE	#12"
DRAINS	DR. / DR.
ROOF OVER	R.O.
EXISTING ELEVATIONS	×45.15 TOP OF CURB ×42.93 BOTTOM OF CURB ×45.78
CITY ESTABLISHED GRADES	L.G.7.52
CURB AND CURB CUT	CURB CUT
OVERHEAD SERVICE	OH.S.W.
CABLE TV MANHOLE	CTV
MANHOLES	MH. E T W S RIM EL. INV.EL.
CATCH BASIN	C.B. / C.B.
FIRE ESCAPE	F.E.
PLATFORM	PL. or PLTF.
BASEMENT ENTRANCE	B.E.
CELLAR ENTRANCE	C.E.
AIR WAY	A.W.
BAY WINDOW	B.W.
CONCRETE	CONC.
OVERHANG	O.H.
AIR CONDITION	AC
METAL	MET.
NORTH OF PROPERTY LINE	N
SOUTH OF PROPERTY LINE	S
EAST OF PROPERTY LINE	E
WEST OF PROPERTY LINE	W

GENERAL NOTES

SUBSURFACE UTILITIES ARE NOT GUARANTEED BY SURVEYOR. HIGH CAUTION RECOMMENDED AND VERIFICATION WITH PROPER CITY AGENCIES, IS MANDATORY BEFORE COMMENCING ALL NEW WORK.

ALL SUBSURFACE AND OVERHEAD UTILITIES (AS TO SIZE , TYPE AND DEPTH) SHOWN ON THIS SURVEY ARE TAKEN FROM RECORDS OF GOVERNMENTAL AGENCIES AND UTILITY COMPANIES, UNLESS OTHERWISE NOTED AND SHOWN.

COVER OR DEPTH OF UTILITIES WHICH DERIVED FROM FIELD MEASUREMENTS SHOWN ON THIS SURVEY SHOULD BE VERIFIED WITH PROPER AGENCY PRIOR TO CONSTRUCTION OF PROJECT. INVERT ELEVATIONS ARE DERIVED FROM CITY AGENCY RECORDS WHEN NOT AVAILABLE BY FIELD SURVEY AND NOTED AS "PER RECORD" ON THE SURVEY.

ALL SUBSURFACE UTILITY AS TO LOCATION AND DEPTH, SHOULD BE RECHECKED AND LEGAL GRADES SHOULD BE VERIFIED WITH THE TOPOGRAPHICAL BUREAU, PREFERABLY IN WRITING BEFORE COMMENCING CONSTRUCTION.

THIS IS TO CERTIFY THAT THERE ARE NO STREAMS OR NATURAL WATER COURSES ON THE SURVEYED PROPERTY EXCEPT AS SHOWN AND/OR DESCRIBED ON THIS SURVEY.

ALL OPERATIONS OF UNDERGROUND FACILITIES AND ALL EXCAVATORS ARE OBLIGATED TO COMPLY WITH ARTICLE 36 OF THE GENERAL BUSINESS LAW AND WITH PROVISIONS OF INDUSTRIAL CODE PART (RULE NO.35) BEFORE ANY EXCAVATION OR DEMOLITION IS COMMENCED. EVERY EXCAVATOR IS REQUIRED BY THESE LAWS TO GIVE ADVANCE NOTICE TO EVERY OPERATOR OF UNDERGROUND FACILITIES OF HIS INTENT TO PERFORM EXCAVATION OR DEMOLITION WORK IN THE SPECIFIED AREA

ALL ELEVATIONS SHOWN REFER TO THE NAVD 1988 DATUM. TO OBTAIN:
- NGVD 1929 DATUM (NASSAU DATUM)- ADD 1.098 FEET

EASEMENTS IF ANY ARE NOT SHOWN ON THIS SURVEY. NO INFORMATION PROVIDED TO SURVEYOR AT THIS TIME.

UNDERGROUND UTILITIES NOTES

UNDERGROUND, OVERHEAD AND GROUND LEVEL UTILITIES ARE NOT GUARANTEED AS TO ACCURACY, EXACT LOCATION, TYPE OR USE, ACTIVE OR INACTIVE. VERIFICATION IS MANDATORY WITH MUNICIPAL AGENCIES, PUBLIC AND PRIVATE UTILITY COMPANIES PRIOR TO TAKING TITLE AND OR DESIGN WORK. BOUNDARIES ARE NOT GUARANTEED UNLESS SO NOTED.

ALL OPERATIONS OF UNDERGROUND FACILITIES AND ALL EXCAVATORS ARE OBLIGATED TO COMPLY WITH ARTICLE 36 OF THE GENERAL BUSINESS LAW AND WITH PROVISIONS OF INDUSTRIAL CODE PART (RULE NO. 35) BEFORE ANY EXCAVATION OR DEMOLITION IS COMMENCED. EVERY EXCAVATOR IS REQUIRED BY THESE LAWS TO GIVE ADVANCE NOTICE TO EVERY OPERATOR OF UNDERGROUND FACILITIES OF HIS INTENT TO PERFORM EXCAVATION OR DEMOLITION WORK IN THE SPECIFIED AREA

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID COPY. GUARANTEES OR CERTIFICATIONS INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. GUARANTEES OR CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

GUARANTEED TO: TRC

COUNTY: NASSAU CITY: ROCKVILLE CENTRE

SECTION: 38 BLOCK: 153 LOT(S): 3

PROPERTY ADDRESS: 84 NORTH VILLAGE AVENUE

MONITORING WELLS SURVEY

PREPARED BY

PERFECT POINT
LAND SURVEYING RT
brooklyn - queens - manhattan - bronx
staten island - nassau
phone: (718) 474-7700
fax: (718) 872-9699
info@ppsurveying.com
www.ppsurveying.com

STATE OF NEW YORK · RICHARD TOM · LICENSED LAND SURVEYOR

N.Y.S. L.L.S. 049844

GRAPHIC SCALE

ALL WRITTEN MEASUREMENTS AND OFFSETS NOTED ON THIS SURVEY SUPERSEDE MEASUREMENTS SCALED OF THIS PLOT.

SCALE 1:20

0 5 10 15 20 25 30 35 40 45 50 100

APPENDIX J
WASTE DISPOSAL BILLS OF LADING

4/19

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	N / A	1	(267) 402-0003	41136

5. Generator's Name and Mailing Address
Cam Cleaners
84 North Village Avenue
Rockville Centre NY 11570

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name
Innovative Recycling Technologies, Inc.
U.S. EPA ID Number: NYR000134840

7. Transporter 2 Company Name
Republic Environmental Systems (Trans Group) LLC
U.S. EPA ID Number: PAD982661381

8. Designated Facility Name and Site Address
Republic Environmental Systems (PA), LLC
2869 Sandstone Drive
Hatfield PA 19440
Facility's Phone: 215 822-5896
U.S. EPA ID Number: PAD086690592

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1	Non Hazardous Soil Non-DOT Regulated Material	17	DM	8500	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
9.1) 944450
Doc# 996464-18

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: X. Sanjay Shoung Agent for NYSDEC
Signature: X
Month 4 Day 10 Year 18

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: James Ulrich
Signature:
Month 4 Day 10 Year 18

Transporter 2 Printed/Typed Name: Ed Boardman
Signature:
Month 4 Day 11 Year 18

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number: U.S. EPA ID Number

17b. Alternate Facility (or Generator)

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: MALVERN MD
Signature:
Month 04 Day 17 Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

DESIGNATED FACILITY'S COPY

169-BLC-O 6 10498 (Rev. 9/09)

Stericycle Environmental Solutions

CERTIFICATE OF TREATMENT, RECYCLING, AND/OR DISPOSAL

This is to certify that the following waste material was received, managed and treated in complaince with all applicable Federal and State Laws and Regulations.

Generator: 596962 - GEM CLEANERS
84 NORTH VILLAGE AVE.
ROCKVILLE CENTRE NY, 11570
EPA ID: CESQG

Facility: REPUBLIC ENV SYS (PA) LLC
2869 SANDSTONE DRIVE
HATFIELD PA, 19440
EPA ID: PAD085690592

Manifest #: 41136
Waste Receipt #: HAT-5921L
Date Received: 04/19/2018

Line	Profile	Material Description	Treatment/ Disposal Description
1	944450-00	NON-REGUALTED MATERIAL (SOIL)	H141 STORAGE, BULKING, AND/OR TRANSFER OFF-SITE - NO TREATMENT/RECOVERY/BLENDING

Name: Norma Figueroa

Signature :

Title : Document Specialist

3158679 4/28

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
N / A	1	(267) 406-0083	41156

GENERATOR

5. Generator's Name and Mailing Address
Gem Cleaners
84 North Village Avenue
Rockville Centre NY 11570
Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
Innovative Recycling Technologies, Inc.
U.S. EPA ID Number: NYR000134940

7. Transporter 2 Company Name
Republic Environmental Systems (Trans Group)LLC
U.S. EPA ID Number: PAD982661381

8. Designated Facility Name and Site Address
Republic Environmental Systems (PA), LLC
2869 Sandstone Drive
Hatfield PA 19440
Facility's Phone: 215 822-8995
U.S. EPA ID Number: PAD085690592

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non Hazardous Soil Non-DOT Regulated Material	5	DM	2500	P	
2.	Non Hazardous Water Non-DOT Regulated Material	13	DM	3900	P	
3.						
4.						

13. Special Handling Instructions and Additional Information
9.1) 944450
9.2) 947734
Doc# 123333-18

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: X Emily Ebert as agent to NYSDEC
Signature: X as agent to NYSDEC
Month 4 Day 25 Year 18

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: James Ulrich
Signature:
Month 4 Day 25 Year 18

Transporter 2 Printed/Typed Name: Ed Bessa
Signature:
Month 4 Day 26 Year 18

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Michael Curtin
Signature:
Month 04 Day 28 Year 18

Stericycle Environmental Solutions

CERTIFICATE OF TREATMENT, RECYCLING, AND/OR DISPOSAL

This is to certify that the following waste material was received, managed and treated in complaince with all applicable Federal and State Laws and Regulations.

Generator: 596962 - GEM CLEANERS
84 NORTH VILLAGE AVE.
ROCKVILLE CENTRE NY, 11570
EPA ID: CESQG

Facility: REPUBLIC ENV SYS (PA) LLC
2869 SANDSTONE DRIVE
HATFIELD PA, 19440
EPA ID: PAD085690592

Manifest #: 41156
Waste Receipt #: HAT-7408L
Date Received: 04/28/2018

Line	Profile	Material Description	Treatment/ Disposal Description
1	944450-00	NON-REGUALTED MATERIAL (SOIL)	H141 STORAGE, BULKING, AND/OR TRANSFER OFF-SITE - NO TREATMENT/RECOVERY/BLENDING
2	947734-00	NON-REGULATED MATERIAL (PURGE WATER)	H070 CHEMICAL TREATMENT

Name: Norma Figueroa

Signature :

Title : Document Specialist

3262405

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	N / A	1	(267) 406-0083	41401

5. Generator's Name and Mailing Address
Gem Cleaners
84 North Village Avenue
Rockville Centre NY 11570

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name
Innovative Recycling Technologies, Inc.
U.S. EPA ID Number: NYR000134940

7. Transporter 2 Company Name
Republic Environmental Systems (Trans Group)LLC
U.S. EPA ID Number: PAD982661381

8. Designated Facility Name and Site Address
Republic Environmental Systems (PA), LLC
2869 Sandstone Drive
Hatfield PA 19440
U.S. EPA ID Number: PAD085690592
Facility's Phone: 215 822-8995

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non Hazardous Purge Water Non-DOT Regulated Material	01	Dm	250	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
9.1)947734
Doc#273535-18

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Sanjay Sharma, Agent for Lessee — Signature — Month 8 Day 2 Year 18

INT'L
15. International Shipments ☐ Import to U.S. ☑ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: James Ulrich — Signature — Month 8 Day 2 Year 18
Transporter 2 Printed/Typed Name: Charles Bond — Signature — Month 8 Day 3 Year 18

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
U.S. EPA ID Number
17b. Alternate Facility (or Generator)
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: MALVEY AMIN — Signature — Month 08 Day 08 Year 18

DESIGNATED FACILITY TO GENERATOR

169-BLC-O 6 10498 (Rev. 9/09)

Stericycle

CERTIFICATE OF TREATMENT, RECYCLING, AND/OR DISPOSAL

This is to certify that the following waste material was received, managed and treated in complaince with all applicable Federal and State Laws and Regulations.

Generator: 596962 - GEM CLEANERS
84 NORTH VILLAGE AVE.
ROCKVILLE CENTRE NY, 11570
EPA ID: CESQG

Facility: REPUBLIC ENV SYS (PA) LLC
2869 SANDSTONE DRIVE
HATFIELD PA, 19440
EPA ID: PAD085690592

Manifest #: 273535-18
Waste Receipt #: HAT-7947M
Date Received: 08/08/2018

Line	Profile	Material Description	Treatment/ Disposal Description
1	947734-00	NON-REGULATED MATERIAL (PURGE WATER)	H070 CHEMICAL TREATMENT

Name: Norma Figueroa

Signature:

Title : Document Specialist

3207393 6/11

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	N / A	1	(267) 406-0083	41172

5. Generator's Name and Mailing Address
Gem Cleaners
84 North Village Avenue
Rockville Centre NY 11570
Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
Innovative Recycling Technologies, Inc.
U.S. EPA ID Number: NYR000134940

7. Transporter 2 Company Name
Republic Environmental Systems (Trans Group) LLC
U.S. EPA ID Number: PAD982661381

8. Designated Facility Name and Site Address
Republic Environmental Systems (PA), LLC
2869 Sandstone Drive
Hatfield PA 19440
Facility's Phone: 215 822-8995
U.S. EPA ID Number: PAD085690592

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	Non Hazardous Purge Water Non-DOT Regulated Material	4	DM	1400	P
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
9.1) 947734
Doc# 190989-18

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national government regulations.

Generator's/Offeror's Printed/Typed Name: C Sloane Agent for NYSDEC
Signature:
Month 06 Day 01 Year 18

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: James Ulrich
Signature:
Month 06 Day 01 Year 18

Transporter 2 Printed/Typed Name:
Signature:
Month 6 Day 4 Year 18

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Malvern Autho
Signature:
Month 06 Day 11 Year 18

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

169-BLC-O 6 10498 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Stericycle Environmental Solutions

CERTIFICATE OF TREATMENT, RECYCLING, AND/OR DISPOSAL

This is to certify that the following waste material was received, managed and treated in complaince with all applicable Federal and State Laws and Regulations.

Generator: 596962 - GEM CLEANERS
84 NORTH VILLAGE AVE.
ROCKVILLE CENTRE NY, 11570
EPA ID: CESQG

Facility: REPUBLIC ENV SYS (PA) LLC
2869 SANDSTONE DRIVE
HATFIELD PA, 19440
EPA ID: PAD085690592

Manifest #: 41172
Waste Receipt #: HAT-2167M
Date Received: 06/11/2018

Line	Profile	Material Description	Treatment/ Disposal Description
1	947734-00	NON-REGULATED MATERIAL (PURGE WATER)	H070 CHEMICAL TREATMENT

Name: Norma Figueroa

Signature :

Title : Document Specialist

APPENDIX K

DATA USABILITY SUMMARY REPORTS (DUSRS)

Data Usability Summary Report

Site: Gem Cleaners
Laboratory: Test America – Sacramento, CA
SDG No.: 320-38611-1
Parameters: Per- and poly-fluoroalkyl substances
Data Reviewer: Samir A. Naguib/TRC
Peer Reviewer: Lisa Krowitz/TRC
Date: June 14, 2018

Sample Reviewed and Evaluation Summary

8 Groundwater samples: GC-MW-103 (WG), GC-MW-104 (WG), GC-MW-105 (WG), GC-MW-107 (WG), GC-MW-107D (WG), GC-MW-108 (WG), GC-MW-1B (WG), GC-MW-DRAIN (WG)

1 Equipment blank: GC-EQUIPMENT BLANK

The above-listed samples were collected on April 25, 2018 and were submitted to Test America-Buffalo, Amherst, NY which were then subcontracted to Test America-Sacramento, CA for analysis. The samples were analyzed for the following parameter:

- Per- and Poly-fluoroalkyl substances (21 target analytes) based on EPA Method 537.1 (modified)

The data validation was performed in accordance with the following USEPA guidance, modified for the methodology utilized:

- USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002), January 2017

- USEPA National Functional Guidelines for High Resolution Superfund Methods Data Review (EPA-542-B-16-001), April 2016

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
* • Data Completeness
- Holding Times and Sample Preservation
* • Initial and Continuing Calibrations
- Blanks
- Isotopically Labeled Surrogate Results
* • Internal Standard Results
- Laboratory Control Sample (LCS) Results
* • Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
NA • Field Duplicate Results

- Sample Results and Reported Quantitation Limits (QLs)
- Target Compound Identification
- Laboratory Methodology

* - All criteria were met.
NA - Field duplicates were not associated with this sample set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error are discussed below.

- The positive results for 6:2 FTS in samples GC-MW-107 (WG), GC-MW-108 (WG) and GC-MW-DRAIN (WG) were qualified as nondetect (U) at the QLs due to equipment blank contamination. These results can be used for project objectives as nondetects, which may have a minor impact on the data usability.

Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) in the associated samples and can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive and nondetect results for PFOA and 6:2 FTS in all samples were qualified as estimated (J-/UJ) with a potential low bias due to a holding time exceedance. The, 6:2 FTS result in sample GC-EQUIPMENT BLANK was qualified as estimated (J) due to quantitation below the QL; the overall qualification for this result was estimated (J). These results can be used for project objectives as estimated values and nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive result for PFHxS in sample GC-EQUIPMENT BLANK was qualified as a nondetect (U) at the QL due to method blank contamination. This result can be used for project objectives as a nondetect, which may have a minor impact on the data usability.

- The positive results for PFBS in sample GC-MW-DRAIN and PFHpS in sample GC-MW-107D (WG) were qualified as estimated (J) due to nonconformances of the ratio between the two precursor/product ion transitions. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was found to be complete as received from the laboratory.

Holding Times and Sample Preservation

The cooler temperature was within the acceptance criteria upon sample receipt at both laboratories.

All samples were initially prepared and analyzed within the method-specified holding time. However, all samples were re-extracted six days beyond the 14- day holding time acceptance criteria for PFOA and 6:2 FTS due to method blank contamination. The PFOA and 6:2 FTS results were reported from the re-extraction for all samples. The positive and nondetect results for PFOA and 6:2 FTS in all re-extracted samples were qualified as estimated (J-/UJ) with a potential low bias. The 6:2 FTS result in sample GC-EQUIPMENT BLANK was qualified as estimated (J) due to quantitation below the QL; thus, the overall qualification for this result was estimated (J).

Initial and Continuing Calibrations

The initial calibration consisted of seven standards for each target compound. The percent relative standard deviations (%RSDs), correlation coefficients, percent differences/drifts (%Ds), and/or relative response factors (RRFs) for the target compounds were within the laboratory acceptance criteria in the initial and continuing calibrations (IC, CC).

Blanks

The following table summarizes the compounds that were detected in the laboratory method blanks, the associated samples, and the validation actions.

Blank ID	Compound	Result (ng/L)	Validation Actions
MB 320-222044/1-A	PFBA	0.453 J	No validation action was required in the associated samples since PFBA was either nondetect or detected at concentrations > 2x the blank result.
	PFHxS	0.267 J	The positive result for PFHxS in sample GC-EQUIPMENT BLANK was qualified as nondetect (U) at the QL since the concentration was <QL. There was no qualification for the remaining associated samples since PFHxS was detected at concentrations > 2x the blank result.
	PFOA	4.21	The PFOA and 6:2FTS in all of the associated samples were reported from the re-extraction; qualification of the data was therefore not required.
	6:2FTS	26.9	
Associated samples:	GC-MW-103 (WG), GC-MW-104 (WG), GC-MW-105 (WG), GC-MW-107 (WG), GC-MW-107D (WG), GC-MW-108 (WG), GC-MW-1B (WG), GC-MW-DRAIN (WG), GC-EQUIPMENT BLANK		

The following table summarizes the contaminant detected in the equipment blank, the concentration detected, and the resulting validation actions.

Blank ID	Compound	Blank Concentration	Validation Actions
GC-EQUIPMENT BLANK RE	6:2FTS	2.3 J ng/L	The positive results for 6:2 FTS in samples GC-MW-107 (WG) RE, GC-MW-108 (WG) RE, and GC-MW-DRAIN (WG) RE were qualified as nondetect (U) at the QLs since the concentrations were <QL. Qualification of the data was not required in the remaining associated samples since 6:2 FTS was not detected.
Associated samples: GC-MW-103 (WG) RE, GC-MW-104 (WG) RE, GC-MW-105 (WG) RE, GC-MW-107 (WG) RE, GC-MW-107D (WG) RE, GC-MW-108 (WG) RE, GC-MW-1B (WG) RE, GC-MW-DRAIN (WG) RE			

Isotopically Labeled Surrogate Results

Isotopically labeled surrogates were spiked into the samples prior to extraction. The following table summarizes the percent recoveries (%Rs) that did not meet the laboratory limits of 25-150% and the validation actions.

Sample ID	%R M2-6:2FTS[1]	%R M2-8:2FTS[2]	Validation Actions
GC-MW-108 (WG)	258	-	Results for 6:2 FTS in samples GC-MW-108 (WG) and GC-MW-103 (WG) were reported from the re-extraction; qualification of the data was therefore not required.
GC-MW-103 (WG)	179	-	
GC-MW-DRAIN (WG)	229	283	The result for 6:2 FTS in sample GC-MW-DRAIN (WG) was reported from the re-extraction; qualification of the data was therefore not required. The result for 8:2 FTS was not detected in sample GC-MW-DRAIN (WG); thus, no qualification of the data was required.
GC-MW-108 (WG) RE	298	-	No qualification of the data was required since 6:2 FTS was not detected in samples GC-MW-108 (WG) RE, GC-MW-DRAIN (WG) RE, and GC-MW-103 (WG) RE.
GC-MW-DRAIN (WG) RE	218	-	
GC-MW-103 (WG) RE	174	-	

- Criteria were met
[1]M2-6:2FTS - sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)
[2]M2-8:2FTS - sodium 1H,1H,2H,2H-perfluorodecane sulfonate (8:2)

Internal Standard Results

The isotopically labeled internal standard 13C2-PFOA was added to each sample prior to injection to monitor for ion suppression/enhancement at the instrument level. The internal standard responses for all samples were within ±50% from the continuing calibration area.

LCS Results

The following table summarizes the LCS %R that did not meet the laboratory's acceptance criteria and the validation actions.

LCS ID	Compound	LCS %R	QC Limits	Validation Actions
LCS 320-222044/2-A	6:2 FTS	171	66-126	The 6:2 FTS in all of the associated samples were reported from the re-extraction; qualification of the data was therefore not required.
Associated samples:	GC-MW-103 (WG), GC-MW-104 (WG), GC-MW-105 (WG), GC-MW-107 (WG), GC-MW-107D (WG), GC-MW-108 (WG), GC-MW-1B (WG), GC-MW-DRAIN (WG), GC-EQUIPMENT BLANK			

MS/MSD Results

MS/MSD analyses were performed on sample GC-MW-107 (WG). The %Rs and relative percent differences (RPDs) met the laboratory acceptance criteria.

Field Duplicate Results

There were no field duplicate pairs submitted with this sample set.

Sample Results and Reported QLs

Sample calculations were spot-checked; there were no errors noted. Select results were below the lowest calibration standard level and QL. These results were qualified as estimated (J) by the laboratory.

It should be noted that the laboratory decanted the following samples prior to preparation due to the presence of sediment in the sample bottles which could clog the solid-phase column: GC-MW-107D (WG) and GC-MW-DRAIN (WG).

There were no dilutions performed on samples in this data set.

The quantitation for PFOA, PFOS, and PFHxS included both linear and branched chain isomers.

Target Compound Identification

Chromatograms were reviewed to verify the target compound identifications. The laboratory manually integrated several peaks to ensure the inclusion of linear and branched isomers for PFOA, PFOS, and/or PFHxS and/or to ensure proper integration.

Two precursor/product ion transitions were used for identification for all compounds except for PFBA, PFPeA, FOSA, NMeFOSAA, NEtFOSAA, 6:2 FTS, and 8:2 FTS which only used one precursor/product ion transition for identification.

The ratio (0.68) between the two precursor/product ion transitions for PFBS in sample GC-MW-DRAIN (WG) was below the laboratory acceptance ratio limits (1.25-3.74) which could impact the identification and quantitation; thus, the result has been qualified as estimated (J).

The ratio (10.95) between the two precursor/product ion transitions for PFHpS in sample GC-MW-107D (WG) was above the laboratory acceptance ratio limit (1.94-5.82) which could impact the identification and quantitation. The positive result for PFHpS in sample GC-MW-107D (WG) was below the QL and laboratory qualified the result as estimated (J); therefore, no further action was required.

Laboratory Methodology

Test America based their PFAS methodology on EPA Method 537.1. Some of the specific differences between EPA Method 537.1 and Test America's PFAS method are as follows:

- Eighteen (18) isotopically labeled surrogates were added to each sample prior to extraction.
- Quantitation was based on using either the average relative response factor or linear regression.
- No analytical or technical grade standards were used for identification of the branched isomers.

QUALIFIED FORM 1s

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 320-38611-5

Matrix: Water | Lab File ID: 2018.05.10LLB_007.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:10

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 279.8(mL) | Date Analyzed: 05/10/2018 20:30

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	4.0	B	1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	10		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	8.2		1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	6.6		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	53	B	1.8	0.76
375-95-1	Perfluorononanoic acid (PFNA)	1.8		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	1.6	J	1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	30		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.3	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.29	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	18		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2FTS	25	B *	18	1.8
39108-34-4	8:2FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-103(WG) RE Lab Sample ID: 320-38611-5 RE

Matrix: Water Lab File ID: 2018.05.16LLD_025.d

Analysis Method: 537 (modified) Date Collected: 04/25/2018 13:10

Extraction Method: 3535 Date Extracted: 05/15/2018 14:35

Sample wt/vol: 267.8(mL) Date Analyzed: 05/17/2018 02:09

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 2(uL) GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q		RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*15*	~~N~~ J-	✓	*1.9*	*0.79*
27619-97-2	*6:2FTS*	~~ND~~	~~N~~ UJ	✓	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	109		25-150
STL02279	M2-6:2FTS	174	*	25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 320-38611-6

Matrix: Water | Lab File ID: 2018.05.10LLB_008.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 275.7(mL) | Date Analyzed: 05/10/2018 20:38

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	12	B	1.8	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	22		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	24		1.8	0.53
375-85-9	Perfluoroheptanoic acid (PFHpA)	19		1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	37	B	1.8	0.77
375-95-1	Perfluorononanoic acid (PFNA)	1.9		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	1.6	J	1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	11		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	6.5	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.47	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	16		1.8	0.49
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2FTS	23	B	18	1.8
39108-34-4	8:2FTS	ND		18	1.8

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-104(WG) RE | Lab Sample ID: 320-38611-6 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_026.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 282.1(mL) | Date Analyzed: 05/17/2018 02:17

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*28*	J	*1.8*	*0.75*
27619-97-2	*6:2FTS*	*ND*	UJ	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	108		25-150
STL02279	M2-6:2FTS	126		25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 320-38611-7

Matrix: Water | Lab File ID: 2018.05.10LLB_009.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:43

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 279.4(mL) | Date Analyzed: 05/10/2018 20:46

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	8.8	B	1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	15		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	14		1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	14		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	38	B	1.8	0.76
375-95-1	Perfluorononanoic acid (PFNA)	2.4		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	1.5	J	1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.9		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.1	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	16		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2FTS	26	B	18	1.8
39108-34-4	8:2FTS	ND		18	1.8

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-105(WG) RE | Lab Sample ID: 320-38611-7 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_027.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:43

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 275.2(mL) | Date Analyzed: 05/17/2018 02:25

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*31*	J- ✓	*1.8*	*0.77*
27619-97-2	*6:2FTS*	NR	UJ ✓	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	102		25-150
STL02279	M2-6:2FTS	116		25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) | Lab Sample ID: 320-38611-1

Matrix: Water | Lab File ID: 2018.05.09LLC_027.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 269.5(mL) | Date Analyzed: 05/10/2018 09:53

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222476 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	10	B	1.9	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	12		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	15		1.9	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	11		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	35	B	1.9	0.79
375-95-1	Perfluorononanoic acid (PFNA)	5.0		1.9	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	2.8		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.27
375-73-5	Perfluorobutanesulfonic acid (PFBS)	8.0		1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.5	B	1.9	0.16
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.39	J	1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	15		1.9	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.32
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		19	2.9
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8
27619-97-2	6:2FTS	31	B	19	1.9
39108-34-4	8:2FTS	ND		19	1.9

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107(WG) RE | Lab Sample ID: 320-38611-1 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_018.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 10:00

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 277.3(mL) | Date Analyzed: 05/17/2018 01:14

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q		RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*28*		✓	*1.8*	*0.77*
27619-97-2	*6:2FTS*	*4.2*		✓	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	110		25-150
STL02279	M2-6:2FTS	125		25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 320-38611-2

Matrix: Water | Lab File ID: 2018.05.10LLB_004.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 246.2(mL) | Date Analyzed: 05/10/2018 20:07

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	5.3	B	2.0	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	7.5		2.0	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	8.3		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	6.5		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	20	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	0.61	J	2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	0.60	J	2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.4	J	2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.2	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.43	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	5.4		2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	20	B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) RE | Lab Sample ID: 320-38611-2 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_022.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 268.5(mL) | Date Analyzed: 05/17/2018 01:46

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*14*	*J* ✓	*1.9*	*0.79*
27619-97-2	*6:2FTS*	*ND*	*U* ✓	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	107		25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 320-38611-3

Matrix: Water | Lab File ID: 2018.05.10LLB_005.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:50

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 290.8(mL) | Date Analyzed: 05/10/2018 20:15

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.6	B	1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	17		1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	16		1.7	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	9.7		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	32	B	1.7	0.73
375-95-1	Perfluorononanoic acid (PFNA)	2.7		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	1.9		1.7	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.95
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.5		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.0	B	1.7	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.35	J	1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	15		1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.28
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.30
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2FTS	27	B	17	1.7
39108-34-4	8:2FTS	ND		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-108(WG) RE | Lab Sample ID: 320-38611-3 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_023.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 11:50

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 279.1(mL) | Date Analyzed: 05/17/2018 01:53

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*27*	~~J~~ J ✓	*1.8*	*0.76*
27619-97-2	*6:2FTS*	~~2.0~~	~~J~~ J UJ ✓	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	100		25-150
STL02279	M2-6:2FTS	298	*	25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 320-38611-4

Matrix: Water | Lab File ID: 2018.05.10LLB_006.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 12:35

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 283.3(mL) | Date Analyzed: 05/10/2018 20:22

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	5.8	B	1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	6.2		1.8	0.43
307-24-4	Perfluorohexanoic acid (PFHxA)	7.0		1.8	0.51
375-85-9	Perfluoroheptanoic acid (PFHpA)	7.3		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	20	B	1.8	0.75
375-95-1	Perfluorononanoic acid (PFNA)	1.2	J	1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	4.3		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	3.3	B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	7.9		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2FTS	26	B	18	1.8
39108-34-4	8:2FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) RE | Lab Sample ID: 320-38611-4 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_024.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 12:35

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 280.3(mL) | Date Analyzed: 05/17/2018 02:01

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q		RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*21*	~~NJ~~	✓	*1.8*	*0.76*
27619-97-2	*6:2FTS*	~~ND~~	~~NUJ~~	✓	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	104		25-150
STL02279	M2-6:2FTS	104		25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-DRAIN(WG) | Lab Sample ID: 320-38611-8

Matrix: Water | Lab File ID: 2018.05.10LLB_010.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 247.1(mL) | Date Analyzed: 05/10/2018 20:54

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	120		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	9.3		2.0	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	22		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	26		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	10	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	14		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	20		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	3.6		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	2.2		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.75	J	2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.6	CJ	2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.4	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.3	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	130		2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	21		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	27		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	13	J	20	1.9
27619-97-2	6:2FTS	32	B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-MW-DRAIN(WG) RE | Lab Sample ID: 320-38611-8 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_028.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 14:00

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 276.6(mL) | Date Analyzed: 05/17/2018 02:33

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q		RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*100*	H	✓	*1.8*	*0.77*
27619-97-2	*6:2FTS*	*2.6*	H	✓	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	104		25-150
STL02279	M2-6:2FTS	218	*	25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK | Lab Sample ID: 320-38611-9

Matrix: Water | Lab File ID: 2018.05.10LLB_013.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 294.5(mL) | Date Analyzed: 05/10/2018 21:17

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222655 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.49
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	1.7	B	1.7	0.72
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.26
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.26	J B U	1.7	0.14
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		1.7	0.30
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2FTS	2.9	B	17	1.7
39108-34-4	8:2FTS	ND		17	1.7

FORM I 537 (modified)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: GC-EQUIPMENT BLANK RE | Lab Sample ID: 320-38611-9 RE

Matrix: Water | Lab File ID: 2018.05.16LLD_029.d

Analysis Method: 537 (modified) | Date Collected: 04/25/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/15/2018 14:35

Sample wt/vol: 271.4(mL) | Date Analyzed: 05/17/2018 02:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223714 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*ND*	*U UJ* ✓	*1.8*	*0.78*
27619-97-2	*6:2FTS*	*2.3*	*J N* ✓	*18*	*1.8*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	106		25-150
STL02279	M2-6:2FTS	112		25-150

QC NONCONFORMANCE DOCUMENTATION

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38611-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-222044/1-A

Matrix: Water | Lab File ID: 2018.05.09LLC_020.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/08/2018 10:19

Sample wt/vol: 250(mL) | Date Analyzed: 05/10/2018 08:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222476 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.453	J	2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	4.21		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.267	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	26.9		20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
GC-MW-107(WG)	320-38611-1	77	97	92	92	99	95	124	98
GC-MW-107D(WG)	320-38611-2	90	106	107	106	104	105	115	103
GC-MW-108(WG)	320-38611-3	65	95	94	96	101	97	258 *	103
GC-MW-1B(WG)	320-38611-4	86	99	97	100	105	104	116	101
GC-MW-103(WG)	320-38611-5	67	90	98	95	106	105	179 *	102
GC-MW-104(WG)	320-38611-6	85	101	100	100	105	106	133	101
GC-MW-105(WG)	320-38611-7	84	99	98	103	107	105	129	103
GC-MW-DRAIN(WG)	320-38611-8	31	59	93	75	86	126	229 *	99
GC-EQUIPMENT BLANK	320-38611-9	106	110	102	105	106	102	119	101
	MB 320-222044/1-A	102	107	103	103	108	108	127	103
	LCS 320-222044/2-A	105	108	102	104	107	103	120	108
GC-MW-107(WG) MS	320-38611-1 MS	87	107	101	102	108	108	130	103
GC-MW-107(WG) MSD	320-38611-1 MSD	85	100	101	102	108	104	125	101

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5 PFPeA	25-150
PFBS = 13C3-PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4-PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	PFOA #
GC-MW-107(WG) RE	320-38611-1 RE	125	110
GC-MW-107D(WG) RE	320-38611-2 RE	107	99
GC-MW-108(WG) RE	320-38611-3 RE	298 *	100
GC-MW-1B(WG) RE	320-38611-4 RE	104	104
GC-MW-103(WG) RE	320-38611-5 RE	174 *	109
GC-MW-104(WG) RE	320-38611-6 RE	126	108
GC-MW-105(WG) RE	320-38611-7 RE	116	102
GC-MW-DRAIN(WG) RE	320-38611-8 RE	218 *	104
GC-EQUIPMENT BLANK RE	320-38611-9 RE	112	106
	MB 320-223391/1-A	116	104
	LCS 320-223391/2-A	111	106
GC-MW-107(WG) MS RE	320-38611-1 MS RE	126	111
GC-MW-107(WG) MSD RE	320-38611-1 MSD RE	117	108

	QC LIMITS
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	PFNA #	PFOS #	PFOSA #	M282FTS #	PFDA #	d3NMFOS #	d5NEFOS #	PFUnA #
GC-MW-107(WG)	320-38611-1	96	92	91	108	91	107	99	83
GC-MW-107D(WG)	320-38611-2	102	103	91	116	99	90	89	90
GC-MW-108(WG)	320-38611-3	97	95	87	130	96	102	101	89
GC-MW-1B(WG)	320-38611-4	97	96	88	109	101	90	97	91
GC-MW-103(WG)	320-38611-5	99	97	92	134	101	91	102	90
GC-MW-104(WG)	320-38611-6	98	96	95	115	94	101	100	93
GC-MW-105(WG)	320-38611-7	97	94	90	106	98	91	94	83
GC-MW-DRAIN(WG)	320-38611-8	106	135	96	283 *	128	103	120	129
GC-EQUIPMENT BLANK	320-38611-9	96	94	88	112	96	95	98	93
	MB 320-222044/1-A	99	102	94	119	101	106	110	94
	LCS 320-222044/2-A	99	99	87	108	102	99	107	89
GC-MW-107(WG) MS	320-38611-1 MS	98	99	93	113	98	105	102	92
GC-MW-107(WG) MSD	320-38611-1 MSD	93	99	92	114	97	102	100	88

	QC LIMITS
PFNA = 13C5 PFNA	25-150
PFOS = 13C4 PFOS	25-150
PFOSA = 13C8 FOSA	25-150
M282FTS = M2-8:2FTS	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38611-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.09LLC_021.d

Lab ID: LCS 320-222044/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	42.0	105	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	37.4	93	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	40.8	102	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	40.7	102	66-126	
Perfluorooctanoic acid (PFOA)	40.0	41.1	103	64-124	
Perfluorononanoic acid (PFNA)	40.0	40.9	102	68-128	
Perfluorodecanoic acid (PFDA)	40.0	38.0	95	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	38.8	97	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	40.6	101	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	37.1	93	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	39.6	99	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	34.6	98	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.8	90	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.1	100	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.4	98	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	38.1	99	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	40.2	100	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	43.3	108	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.3	101	65-125	
6:2FTS	37.9	65.0	171	66-126	*
8:2FTS	38.3	40.9	107	67-127	
13C4 PFBA	100	105	105	25-150	
13C5 PFPeA	100	108	108	25-150	
13C2 PFHxA	100	104	104	25-150	
13C4-PFHpA	100	107	107	25-150	
13C4 PFOA	100	108	108	25-150	
13C5 PFNA	100	98.9	99	25-150	
13C2 PFDA	100	102	102	25-150	
13C2 PFUnA	100	88.9	89	25-150	
13C2 PFDoA	100	91.0	91	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\2018.05.10LLB_010.d
Lims ID: 320-38611-A-8-A
Client ID: GC-MW-DRAIN(WG)
Sample Type: Client
Inject. Date: 10-May-2018 20:54:12 ALS Bottle#: 27 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 320-38611-a-8-a
Misc. Info.: Plate: 1 Rack: 3
Operator ID: SACINSTLCMS01 Instrument ID: A8_N

Method: \\ChromNa\Sacramento\ChromData\A8_N\20180511-58009.b\A8_N.m
Limit Group: LC PFC ICAL
Last Update: 18-May-2018 15:23:28 Calib Date: 10-Apr-2018 19:26:34
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\A8_N\20180411-56528.b\2018.04.10LLICAL_008.d

Column 1 : Det: EXP1
Process Host: XAWRK047

First Level Reviewer: hannigana Date: 11-May-2018 09:23:12

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	1.474	1.469	0.005	1.000	967319	0.7634		30.5	5419	
2 Perfluorobutyric acid										M
212.90 > 169.00	1.452	1.478	-0.026	0.985	1042702	2.90			6.0	M
D 3 13C5-PFPeA										
267.90 > 223.00	1.755	1.747	0.008	0.563	1194957	1.46		58.5	1394	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.755	1.753	0.002	1.000	131229	0.2304			3.1	M
D 47 13C3-PFBS										
301.90 > 83.00	1.791	1.783	0.008	1.000	40450	2.16		92.8	13.6	
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	1.746	1.798	-0.052	0.975	120666	0.0886			0.0	RM
298.90 > 99.00	1.791	1.798	-0.007	1.000	176525		0.68(1.25-3.74)		26.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.047	2.048	-0.001	1.000	1693222	1.87		75.0	17641	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.047	2.056	-0.009	1.000	378766	0.5504			17.3	M
313.00 > 119.00	2.047	2.056	-0.009	1.000	37506		10.10(5.03-15.10)		53.3	
D 9 13C4-PFHpA										
367.00 > 322.00	2.383	2.384	-0.001	1.000	1894345	2.16		86.2	27708	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.383	2.392	-0.009	1.000	486036	0.6409			69.7	
363.00 > 169.00	2.383	2.392	-0.009	1.000	188879		2.57(1.13-3.40)		431	
D 11 18O2 PFHxS										
403.00 > 84.00	2.395	2.395	0.0	1.000	3242684	2.99		126	21551	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.395	2.403	-0.008	1.000	207907	0.1340			2.6	M
399.00 > 99.00	2.395	2.403	-0.008	1.000	71985		2.89(1.50-4.49)		18.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.711	2.712	-0.001	1.000	778106	2.72		115	7682	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.711	2.718	-0.007	1.000	377401	0.6814			7796	
* 62 13C2-PFOA										
415.00 > 370.00	2.742	2.741	0.001		3570951	2.50			50379	
D 14 13C4 PFOA										
417.00 > 372.00	2.734	2.742	-0.008	1.000	3419102	2.58		103	59945	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.734	2.749	-0.015	1.000	768979	0.4866			371	
413.00 > 169.00	2.742	2.749	-0.007	1.003	431310		1.78(0.84-2.52)		1819	
16 Perfluoroheptanesulfonic acid										RM
449.00 > 80.00	2.765	2.749	0.016	1.000	16472	0.0105			45.5	R
449.00 > 99.00	2.758	2.749	0.009	0.997	1504		10.95(1.94-5.82)		24.1	M
D 18 13C4 PFOS										
503.00 > 80.00	3.107	3.106	0.001	1.000	2832607	2.46		103	15448	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	2.993	3.114	-0.121	0.963	171485	0.1330			364	
499.00 > 99.00	3.107	3.114	-0.007	1.000	25610		6.70(2.31-6.93)		243	
D 19 13C5 PFNA										
468.00 > 423.00	3.107	3.114	-0.007	1.000	2904306	2.55		102	64327	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.107	3.122	-0.015	1.000	18048	0.0149			38.2	M
463.00 > 169.00	3.114	3.122	-0.008	1.002	3560		5.07(1.90-5.69)		82.8	M
D 21 13C8 FOSA										
506.00 > 78.00	3.438	3.431	0.007	1.000	3264875	2.27		90.8	47057	
D 26 M2-8:2FTS										
529.00 > 81.00	3.457	3.459	-0.002	1.000	959903	2.79		116	8508	
D 23 13C2 PFDA										
515.00 > 470.00	3.476	3.468	0.008	1.000	2358708	2.46		98.6	58768	
25 Sodium 1H,1H,2H,2H-perfluorodecane										
527.00 > 507.00	3.457	3.469	-0.012	1.000	1993	0.003930			86.3	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.476	3.478	-0.002	1.000	14482	0.0149			52.0	R
513.00 > 169.00	3.476	3.478	-0.002	1.000	1678		8.63(2.36-7.09)		46.3	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.630	3.624	0.006	1.000	1221167	2.25		90.0	17819	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.794	3.790	0.004	1.000	1190886	2.22		89.0	10992	
D 30 13C2 PFUnA										
565.00 > 520.00	3.804	3.800	0.004	1.000	1856838	2.25		90.0	86459	
D 36 13C2 PFDoA										
615.00 > 570.00	4.092	4.091	0.001	1.000	2022991	2.27		90.8	26010	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.593	4.595	-0.002	1.000	2512794	2.22		88.9	19544	

Data Usability Summary Report

Site: Gem Cleaners
Laboratory: Test America – Sacramento, CA
SDG No.: 320-38630-1
Parameters: Per- and poly-fluoroalkyl substances
Data Reviewer: Samir A. Naguib/TRC
Peer Reviewer: Lisa Krowitz/TRC
Date: June 14, 2018

Sample Reviewed and Evaluation Summary

10 Groundwater samples: GC-MW-101 (WG), GC-MW-101D (WG), GC-MW-102 (WG), GC-MW-106 (WG), GC-MW-109 (WG), GC-MW-109M (WG), GC-MW-110 (WG), GC-MW-110D (WG), GC-MW-2 (WG), GC-MW-3 (WG)

1 Equipment blank: GC-Equipment Blank-2

The above-listed samples were collected on April 26, 2018 and were submitted to Test America-Buffalo, Amherst, NY which were then subcontracted to Test America-Sacramento, CA for analysis. The samples were analyzed for the following parameter:

- Per- and poly-fluoroalkyl substances (21 target analytes) based on EPA Method 537.1 (modified)

The data validation was performed in accordance with the following USEPA guidance, modified for the methodology utilized:

- USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002), January 2017

- USEPA National Functional Guidelines for High Resolution Superfund Methods Data Review (EPA-542-B-16-001), April 2016

The data were evaluated based on the following parameters:

	• Overall Evaluation of Data and Potential Usability Issues
*	• Data Completeness
	• Holding Times and Sample Preservation
*	• Initial and Continuing Calibrations
	• Blanks
*	• Isotopically Labeled Surrogate Results
*	• Internal Standard Results
	• Laboratory Control Sample (LCS) /LCS Duplicate (LCSD) Results
NA	• Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results

NA • Field Duplicate Results
• Sample Results and Reported Quantitation Limits (QLs)
• Target Compound Identification
• Laboratory Methodology

* - All criteria were met.
NA - MS/MSDs and field duplicate pairs were not associated with this sample set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) in the associated samples and can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive results for 6:2 FTS in all samples were qualified as nondetects (U) at the QLs due to method blank contamination. These results can be used for project objectives as nondetects, which may have a minor impact on the data usability.

- The positive and nondetect results for PFOA and 6:2 FTS in all samples were qualified as estimated (J-/UJ) with a potential low bias due to a holding time exceedance. These results can be used for project objectives as estimated values and nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive results for PFHxS in samples GC-MW-102 (WG), GC-MW-3 (WG), GC-MW-110 (WG), and GC-Equipment Blank-2 were qualified as nondetects (U) at the QLs due to method blank contamination. These results can be used for project objectives as nondetects, which may have a minor impact on the data usability.

- The positive results for PFDA in samples GC-MW-102 (WG) and GC-MW-110D (WG) and PFDS in sample GC-MW-109M (WG) were qualified as estimated (J) due to nonconformance of the ratio between the two precursor/product ion transitions. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was found to be complete as received from the laboratory.

Holding Times and Sample Preservation

The cooler temperature was within the acceptance criteria upon sample receipt at both laboratories.

All samples were initially prepared and analyzed within the method-specified holding time. However, all samples were re-extracted two days beyond the 14- day holding time acceptance criteria for PFOA and 6:2 FTS due to method blank contamination. The PFOA and 6:2 FTS results were reported from the re-extraction for all samples. The positive and nondetect results for PFOA and 6:2 FTS in all samples were qualified as estimated (J-/UJ) with a potential low bias.

Initial and Continuing Calibrations

The initial calibration consisted of seven standards for each target compound. The percent relative standard deviations (%RSDs), percent differences/drifts (%Ds), correlation coefficients, and/or relative response factors (RRFs) for the target compounds were within the laboratory acceptance criteria in the initial and continuing calibrations (IC, CC).

Blanks

The following table summarizes the compounds that were detected in the laboratory method blanks, the associated samples, and the validation actions. Target analytes were not detected in the equipment blank.

Blank ID	Compound	Result (ng/L)	Validation Actions
MB 320-222510/1-A	PFHxS	0.315 J	The positive results for PFHxS in samples GC-MW-102 (WG), GC-MW-3 (WG), GC-MW-110 (WG), and GC-Equipment Blank-2 were qualified as nondetect (U) at the QL since the concentrations were <QL. There was no qualification for the remaining associated samples since PFHxS was detected at concentrations > 2x the blank result.
	PFOS	1.27 J	There was no qualification for the associated samples since PFOS was detected at concentrations > 2x the blank result.
	PFOA	2.96	The PFOA and 6:2 FTS results in the associated samples were reported from the re-extraction; qualification of the data was therefore not required.
	6:2 FTS	194	
Associated samples:	GC-MW-101 (WG), GC-MW-101D (WG), GC-MW-102 (WG), GC-MW-106 (WG), GC-MW-109 (WG), GC-MW-109M (WG), GC-MW-110 (WG), GC-MW-110D (WG), GC-MW-2 (WG), GC-MW-3 (WG), GC-Equipment Blank-2		
MB 320-222819/1-A	6:2 FTS	4.57 J	The positive results for 6:2FTS in the associated samples were qualified as nondetect (U) at the QLs since the concentrations were <QL.
Associated samples:	GC-MW-101 (WG) RE, GC-MW-101D (WG) RE, GC-MW-102 (WG) RE, GC-MW-106 (WG) RE, GC-MW-109 (WG) RE, GC-MW-109M (WG) RE, GC-MW-110 (WG) RE, GC-MW-110D (WG) RE, GC-MW-2 (WG) RE, GC-MW-3 (WG) RE, GC-Equipment Blank-2 RE		

Isotopically Labeled Surrogate Results

Isotopically labeled surrogates were spiked into the samples prior to extraction. All surrogates percent recoveries (%Rs) met the laboratory acceptance limits of 25-150%.

Internal Standard Results

The isotopically labeled internal standard 13C2-PFOA was added to each sample prior to injection to monitor for ion suppression/enhancement at the instrument level. The internal standard responses for all samples were within ±50% from the continuing calibration area.

LCS/LCSD Results

The following table summarizes the %Rs and relative percent difference (RPD) that did not meet the laboratory's acceptance criteria and the validation actions.

LCS/LCSD ID	Compound	LCS %R	LCSD %R	RPD	QC Limits %R/RPD	Validation Actions
LCS 320-222510/2-A/ LCSD 320-222510/3-A	6:2 FTS	299	201	39	66-126/30	The 6:2 FTS results in the associated samples were reported from the re-extraction; qualification of the data was therefore not required.
Associated samples:	GC-MW-101 (WG), GC-MW-101D (WG), GC-MW-102 (WG), GC-MW-106 (WG), GC-MW-109 (WG), GC-MW-109M (WG), GC-MW-110 (WG), GC-MW-110D (WG), GC-MW-2 (WG), GC-MW-3 (WG), GC-Equipment Blank-2					

MS/MSD Results

MS/MSD analyses were not performed on samples in this data set due to insufficient sample volume. No validation actions are required on this basis.

Field Duplicate Results

There were no field duplicate pairs submitted with this sample set.

Sample Results and Reported QLs

Sample calculations were spot-checked; there were no errors noted. Select results were below the lowest calibration standard level and QL. These results were qualified as estimated (J) by the laboratory.

It should be noted that the laboratory decanted and/or centrifuged the following samples prior to preparation due to the presence of sediment in the sample bottles which could clog the solid-phase column: GC-MW-101D (WG) and GC-MW-106 (WG).

There were no dilutions performed on samples in this data set.

The quantitation for PFOA, PFOS, and PFHxS included both linear and branched chain isomers.

Target Compound Identification

Chromatograms were reviewed to verify the target compound identifications. The laboratory manually integrated several peaks to ensure the inclusion of linear and branched isomers for PFOA, PFOS, and/or PFHxS and/or to ensure proper integration.

Two precursor/product ion transitions were used for identification for all compounds except for PFBA, PFPeA, FOSA, NMeFOSAA, NEtFOSAA, 6:2 FTS, and 8:2 FTS which used one precursor/product ion transition.

The ratio (7.38) between the two precursor and product ion transitions for PFDA in sample GC-MW-102 (WG) was above the laboratory acceptance ratio limits (2.36-7.09) which could impact the identification and quantitation. The positive result for PFDA in sample GC-MW-102 (WG) was below the QL and laboratory qualified the result as estimated (J); therefore, no further action was required.

The ratio (10.41) between the two precursor/product ion transitions for PFDS in sample GC-MW-109M (WG) was above the laboratory acceptance ratio limits (1.39-4.16) which could impact the identification and quantitation; thus, the result has been qualified as estimated (J).

The ratio (7.13) between the two precursor and product ion transitions for PFDA in sample GC-MW-110D (WG) was above the laboratory acceptance ratio limits (2.36-7.09) which could impact the identification and quantitation. The positive result for PFDA in sample GC-MW-110D (WG) was below the QL and laboratory qualified the result as estimated (J), therefore no further action was required.

Laboratory Methodology

Test America based their PFAS methodology on EPA Method 537.1. Some of the specific differences between EPA Method 537.1 and Test America's PFAS method are as follows:

- Eighteen (18) isotopically labeled surrogates were added to each sample prior to extraction.
- Quantitation was based on using either the average relative response factor or linear regression.
- No analytical or technical grade standards were used for identification of the branched isomers.

QUALIFIED FORM 1s

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) | Lab Sample ID: 320-38630-4

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_059.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 252.6(mL) | Date Analyzed: 05/14/2018 19:10

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	4.6		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	5.0		2.0	0.48
307-24-4	Perfluorohexanoic acid (PFHxA)	5.5		2.0	0.57
375-85-9	Perfluoroheptanoic acid (PFHpA)	5.1		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	17	B	2.0	0.84
375-95-1	Perfluorononanoic acid (PFNA)	2.1		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	1.2	J	2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.2		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.0	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.29	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	12	B	2.0	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	5.9	J B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101 (WG) RE | Lab Sample ID: 320-38630-4 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_021.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 259.2(mL) | Date Analyzed: 05/13/2018 18:07

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*14*	J	✓ *1.9*	*0.82*
27619-97-2	*6:2FTS*	*2.7*	J B	✓ *19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	101		25-150
STL02279	M2-6:2FTS	112		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101D (WG) | Lab Sample ID: 320-38630-5

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_060.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 254.9(mL) | Date Analyzed: 05/14/2018 19:18

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	4.7		2.0	0.34
2706-90-3	Perfluoropentanoic acid (PFPeA)	5.2		2.0	0.48
307-24-4	Perfluorohexanoic acid (PFHxA)	5.7		2.0	0.57
375-85-9	Perfluoroheptanoic acid (PFHpA)	4.7		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	ND	B	2.0	0.83
375-95-1	Perfluorononanoic acid (PFNA)	0.53	J	2.0	0.26
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.6	J	2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4.2	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.31	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	5.4	B	2.0	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.34
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.0
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	7.4	J B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-101D (WG) RE | Lab Sample ID: 320-38630-5 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_022.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:15

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 254.3(mL) | Date Analyzed: 05/13/2018 18:14

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*14*		*2.0*	*0.84*
27619-97-2	*6:2FTS*	*3.2*		*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	98		25-150
STL02279	M2-6:2FTS	103		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-102 (WG) | Lab Sample ID: 320-38630-1

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_056.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 08:25

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 242.3(mL) | Date Analyzed: 05/14/2018 18:47

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.1		2.1	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	6.8		2.1	0.51
307-24-4	Perfluorohexanoic acid (PFHxA)	6.2		2.1	0.60
375-85-9	Perfluoroheptanoic acid (PFHpA)	4.8		2.1	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	4.9	B	2.1	0.88
375-95-1	Perfluorononanoic acid (PFNA)	2.8		2.1	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	1.7	J	2.1	0.32
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.1	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.1	0.57
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.30
375-73-5	Perfluorobutanesulfonic acid (PFBS)	20		2.1	0.21
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	2.1	0.18
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.40	J	2.1	0.20
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	22	B	2.1	0.56
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.33
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.1	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		21	3.2
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		21	2.0
27619-97-2	6:2FTS	8.5	J B	21	2.1
39108-34-4	8:2FTS	ND		21	2.1

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-102 (WG) RE | Lab Sample ID: 320-38630-1 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_018.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 08:25

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250.2(mL) | Date Analyzed: 05/13/2018 17:43

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*16*		*2.0*	*0.85*
27619-97-2	*6:2FTS*	*4.0*		*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	98		25-150
STL02279	M2-6:2FTS	141		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-106 (WG) | Lab Sample ID: 320-38630-6

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_062.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:55

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 254.5(mL) | Date Analyzed: 05/14/2018 19:34

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	9.6		2.0	0.34
2706-90-3	Perfluoropentanoic acid (PFPeA)	15		2.0	0.48
307-24-4	Perfluorohexanoic acid (PFHxA)	13		2.0	0.57
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.8		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	28	B	2.0	0.83
375-95-1	Perfluorononanoic acid (PFNA)	2.0		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	1.4	J	2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.0		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.5	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.34	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	12	B	2.0	0.53
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.34
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.0
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	8.3	J B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-106 (WG) RE | Lab Sample ID: 320-38630-6 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_023.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 11:55

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250.6(mL) | Date Analyzed: 05/13/2018 18:22

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*25*	J	✓ *2.0*	*0.85*
27619-97-2	*6:2FTS*	*2.9*	J	✓ *20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	113		25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) | Lab Sample ID: 320-38630-2

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_057.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:57

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.9(mL) | Date Analyzed: 05/14/2018 18:54

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	9.0		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	11		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	14		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	16		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	87	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	7.2		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	6.5		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.4		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.0	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.70	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	18	B	2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	6.4	J B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109 (WG) RE | Lab Sample ID: 320-38630-2 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_019.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:57

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 254.1(mL) | Date Analyzed: 05/13/2018 17:51

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*64*	~~J-~~ ✓	*2.0*	*0.84*
27619-97-2	*6:2FTS*	~~4.1~~	~~J B~~ UJ ✓	*20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	101		25-150
STL02279	M2-6:2FTS	110		25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) | Lab Sample ID: 320-38630-3

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_058.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:00

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 246.3(mL) | Date Analyzed: 05/14/2018 19:02

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.8		2.0	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	12		2.0	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	12		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.9		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	35	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	3.4		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	4.0		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.5		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.1	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.45	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14	B	2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	3.9		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	6.7	J B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-109M (WG) RE | Lab Sample ID: 320-38630-3 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_020.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:00

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 254.9(mL) | Date Analyzed: 05/13/2018 17:59

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*31*	NJ	✓ *2.0*	*0.83*
27619-97-2	*6:2FTS*	~~*2.9*~~	~~Y N B~~ UJ	✓ *20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	100		25-150
STL02279	M2-6:2FTS	110		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110 (WG) | Lab Sample ID: 320-38630-8

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_064.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 252(mL) | Date Analyzed: 05/14/2018 19:49

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	8.7		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	19		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	18		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.0		2.0	0.25
~~335-67-1~~	~~Perfluorooctanoic acid (PFOA)~~	~~39~~	~~B~~	~~2.0~~	~~0.84~~
375-95-1	Perfluorononanoic acid (PFNA)	3.0		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	2.4		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.46	J	2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.4		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J B U ✓	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.33	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	9.4	B	2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
~~27619-97-2~~	~~6:2FTS~~	~~6.8~~	~~J B~~	~~20~~	~~2.0~~
39108-34-4	8:2FTS	ND		20	2.0

FORM I 537 (modified)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110 (WG) RE | Lab Sample ID: 320-38630-8 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_026.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 13:35

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 260(mL) | Date Analyzed: 05/13/2018 18:46

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*.29*	J	*1.9*	*0.82*
27619-97-2	*6:2FTS*	*4.4*	J	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	101		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110D (WG) | Lab Sample ID: 320-38630-9

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_065.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 14:30

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 234(mL) | Date Analyzed: 05/14/2018 19:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	5.3		2.1	0.37
2706-90-3	Perfluoropentanoic acid (PFPeA)	6.1		2.1	0.52
307-24-4	Perfluorohexanoic acid (PFHxA)	6.8		2.1	0.62
375-85-9	Perfluoroheptanoic acid (PFHpA)	5.8		2.1	0.27
335-67-1	Perfluorooctanoic acid (PFOA)	24	B	2.1	0.91
375-95-1	Perfluorononanoic acid (PFNA)	1.2	J	2.1	0.29
335-76-2	Perfluorodecanoic acid (PFDA)	0.39	J	2.1	0.33
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.1	1.2
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.1	0.59
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.4
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.31
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.8		2.1	0.21
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4.3	B	2.1	0.18
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.47	J	2.1	0.20
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	10	B	2.1	0.58
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.34
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.1	0.37
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		21	3.3
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		21	2.0
27619-97-2	6:2FTS	8.6	J B	21	2.1
39108-34-4	8:2FTS	ND		21	2.1

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-110D (WG) RE | Lab Sample ID: 320-38630-9 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_027.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 14:30

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 256.8(mL) | Date Analyzed: 05/13/2018 18:53

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*21*		✓ *1.9*	*0.83*
27619-97-2	*6:2FTS*	*3.1*		✓ *19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	102		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-2 (WG) | Lab Sample ID: 320-38630-10

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_066.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 245.5(mL) | Date Analyzed: 05/14/2018 20:05

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	9.9		2.0	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	19		2.0	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	20		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	13		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	29	B	2.0	0.87
375-95-1	Perfluorononanoic acid (PFNA)	2.8		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	0.47	J	2.0	0.32
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.30
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.8		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	3.3	B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.68	J	2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	15	B	2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.33
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.2
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	19	J B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-2 (WG) RE | Lab Sample ID: 320-38630-10 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_028.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 15:00

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 256.8(mL) | Date Analyzed: 05/13/2018 19:01

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*27*	*J*	*1.9*	*0.83*
27619-97-2	*6:2FTS*	*3.1*	*J H B*	*19*	*1.9*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	101		25-150
STL02279	M2-6:2FTS	106		25-150

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LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-3 (WG) | Lab Sample ID: 320-38630-7

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_063.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 12:45

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.5(mL) | Date Analyzed: 05/14/2018 19:41

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	11		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	22		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	19		2.0	0.59
375-85-9	Perfluoroheptanoic acid (PFHpA)	14		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	26	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	3.8		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	2.8		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.3		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	9.8	B	2.0	0.55
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	7.6	J B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-MW-3 (WG) RE | Lab Sample ID: 320-38630-7 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_024.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 12:45

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 238.3(mL) | Date Analyzed: 05/13/2018 18:30

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	*24*		*2.1*	*0.89*
27619-97-2	*6:2FTS*	*4.3*		*21*	*2.1*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	99		25-150
STL02279	M2-6:2FTS	107		25-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 | Lab Sample ID: 320-38630-11

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_067.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:30

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 247.9(mL) | Date Analyzed: 05/14/2018 20:13

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	3.6	B	2.0	0.86
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.25	J B U	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	36	B	20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 RE | Lab Sample ID: 320-38630-11 RE

Matrix: Water | Lab File ID: 2018.05.13LLB_029.d

Analysis Method: 537 (modified) | Date Collected: 04/26/2018 09:30

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250.7(mL) | Date Analyzed: 05/13/2018 19:09

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	*Perfluorooctanoic acid (PFOA)*	ND	H U J	✓ *2.0*	*0.85*
27619-97-2	*6:2FTS*	2.7	J H B U J	✓ *20*	*2.0*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	97		25-150
STL02279	M2-6:2FTS	105		25-150

QC NONCONFORMANCE DOCUMENTATION

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-222510/1-A

Matrix: Water | Lab File ID: 2018.05.14LLAxxx_043.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2018 12:17

Sample wt/vol: 250.0(mL) | Date Analyzed: 05/14/2018 17:05

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 223178 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	2.96		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.315	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.27	J	2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2FTS	194		20	2.0
39108-34-4	8:2FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-38630-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-222819/1-A

Matrix: Water | Lab File ID: 2018.05.13LLB_015.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/12/2018 07:12

Sample wt/vol: 250(mL) | Date Analyzed: 05/13/2018 17:20

Con. Extract Vol.: 10.00(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: GeminiC18 3x100 ID: 3(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 222981 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.85
27619-97-2	6:2FTS	4.57	J	20	2.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00990	13C4 PFOA	86		25-150
STL02279	M2-6:2FTS	94		25-150

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.14LLAxxx_044.d

Lab ID: LCS 320-222510/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	42.2	106	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	38.5	96	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	39.8	99	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	38.6	97	66-126	
Perfluorooctanoic acid (PFOA)	40.0	41.9	105	64-124	
Perfluorononanoic acid (PFNA)	40.0	41.1	103	68-128	
Perfluorodecanoic acid (PFDA)	40.0	39.4	98	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	36.7	92	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	39.8	99	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	39.4	98	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	39.3	98	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	37.5	106	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.5	92	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.9	99	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.9	99	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	37.2	97	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	41.9	105	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	42.8	107	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.5	101	65-125	
6:2FTS	37.9	113	299	66-126	*
8:2FTS	38.3	40.8	106	67-127	
13C4 PFBA	100	97.9	98	25-150	
13C5 PFPeA	100	102	102	25-150	
13C2 PFHxA	100	99.2	99	25-150	
13C4-PFHpA	100	104	104	25-150	
13C4 PFOA	100	101	101	25-150	
13C5 PFNA	100	101	101	25-150	
13C2 PFDA	100	106	106	25-150	
13C2 PFUnA	100	101	101	25-150	
13C2 PFDoA	100	103	103	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-38630-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 2018.05.14LLAxxx_045.d

Lab ID: LCSD 320-222510/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	41.9	105	1	30	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	37.2	93	3	30	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	40.9	102	3	30	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	41.3	103	7	30	66-126	
Perfluorooctanoic acid (PFOA)	40.0	43.8	110	4	30	64-124	
Perfluorononanoic acid (PFNA)	40.0	39.4	98	4	30	68-128	
Perfluorodecanoic acid (PFDA)	40.0	38.7	97	2	30	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	36.9	92	1	30	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	38.7	97	3	30	71-131	
Perfluorotridecanoic Acid (PFTriA)	40.0	37.2	93	6	30	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	38.1	95	3	30	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	36.3	103	3	30	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.1	96	5	30	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.8	99	0	30	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.0	97	2	30	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	36.1	94	3	30	68-128	
Perfluorooctane Sulfonamide (FOSA)	40.0	40.2	101	4	30	70-130	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	40.0	42.5	106	1	30	67-127	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	40.0	40.0	100	1	30	65-125	
6:2FTS	37.9	76.1	201	39	30	66-126	*
8:2FTS	38.3	38.9	101	5	30	67-127	
13C4 PFBA	100	97.6	98			25-150	
13C5 PFPeA	100	102	102			25-150	
13C2 PFHxA	100	100	100			25-150	
13C4-PFHpA	100	102	102			25-150	
13C4 PFOA	100	98.3	98			25-150	
13C5 PFNA	100	103	103			25-150	
13C2 PFDA	100	106	106			25-150	
13C2 PFUnA	100	103	103			25-150	
13C2 PFDoA	100	105	105			25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.682	0.001	1.000	996351	3.27		138	2992	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.000	144644	0.2048			973	
D 14 13C4 PFOA										
417.00 > 372.00	2.706	2.704	0.002	1.000	3724524	2.57		103	49731	
* 62 13C2-PFOA										
415.00 > 370.00	2.706	2.713	-0.007		3844375	2.50			74959	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.706	2.713	-0.007	1.000	808097	0.4514			240	
413.00 > 169.00	2.706	2.713	-0.007	1.000	437057		1.85(0.84-2.52)		1380	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.720	-0.007	1.000	16340	0.009624			40.3	
449.00 > 99.00	2.721	2.720	0.001	1.003	3832		4.26(1.94-5.82)		18.5	
D 18 13C4 PFOS										
503.00 > 80.00	3.079	3.073	0.006	1.000	3075144	2.15		89.8	10166	
D 19 13C5 PFNA										
468.00 > 423.00	3.079	3.081	-0.002	1.000	3094057	2.55		102	60166	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.079	3.082	-0.003	1.000	764232	0.5320			1337	
499.00 > 99.00	3.079	3.082	-0.003	1.000	139736		5.47(2.31-6.93)		640	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.079	3.082	-0.003	1.000	89284	0.0684			95.8	M
463.00 > 169.00	3.079	3.082	-0.003	1.000	23518		3.80(1.90-5.69)		403	
D 21 13C8 FOSA										
506.00 > 78.00	3.415	3.407	0.008	1.000	4380732	2.11		84.5	52547	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.396	3.418	-0.022	0.995	3888	0.002251			31.5	
D 26 M2-8:2FTS										
529.00 > 81.00	3.434	3.435	-0.001	1.000	1073658	2.70		113	4131	
D 23 13C2 PFDA										
515.00 > 470.00	3.443	3.444	-0.001	1.000	2538381	2.44		97.4	34856	
24 Perfluorodecanoic acid										RM
513.00 > 469.00	3.443	3.446	-0.003	1.000	41702	0.0401			85.0	R
513.00 > 169.00	3.434	3.446	-0.012	0.997	5653		7.38(2.36-7.09)		84.8	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.595	3.596	-0.001	1.000	975127	2.06		82.5	17727	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.770	3.771	-0.001	1.000	1097048	2.18		87.0	3300	
D 30 13C2 PFUnA										
565.00 > 520.00	3.770	3.771	-0.001	1.000	2111326	2.42		96.8	43161	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.780	3.783	-0.003	1.003	7496	0.0114			17.0	
563.00 > 169.00	3.770	3.783	-0.013	1.000	2140		3.50(2.12-6.36)		56.5	
D 36 13C2 PFDoA										
615.00 > 570.00	4.069	4.071	-0.002	1.000	1932497	2.12		84.9	20728	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.572	4.574	-0.002	1.000	2512805	2.53		101	18373	

13 Sodium 1H,1H,2H,2H-perfluorooctane											
427.00 > 407.00	2.683	2.683	0.0	1.000	95744	0.1648				824	
D 14 13C4 PFOA											
417.00 > 372.00	2.705	2.704	0.001	1.000	3623633	2.60			104	77085	
* 62 13C2-PFOA											
415.00 > 370.00	2.713	2.713	0.0		3704261	2.50				64981	
15 Perfluorooctanoic acid											
413.00 > 369.00	2.713	2.713	0.0	1.003	1519732	0.8726				672	
413.00 > 169.00	2.713	2.713	0.0	1.003	770872		1.97(0.84-2.52)			2937	
16 Perfluoroheptanesulfonic acid											
449.00 > 80.00	2.713	2.720	-0.007	1.000	18746	0.0111				109	
449.00 > 99.00	2.728	2.720	0.008	1.006	3891		4.82(1.94-5.82)			27.6	
D 18 13C4 PFOS											
503.00 > 80.00	3.077	3.073	0.004	1.000	3055238	2.21			92.6	26389	
D 19 13C5 PFNA											
468.00 > 423.00	3.085	3.081	0.004	1.000	3033547	2.60			104	64048	
17 Perfluorooctane sulfonic acid											
499.00 > 80.00	3.085	3.082	0.003	1.003	498869	0.3495				2178	
499.00 > 99.00	3.085	3.082	0.003	1.003	99392		5.02(2.31-6.93)			482	
20 Perfluorononanoic acid											
463.00 > 419.00	3.085	3.082	0.003	1.000	106080	0.0829				148	
463.00 > 169.00	3.085	3.082	0.003	1.000	27332		3.88(1.90-5.69)			426	
D 21 13C8 FOSA											
506.00 > 78.00	3.414	3.407	0.007	1.000	4432411	2.22			88.7	44941	
22 Perfluorooctane Sulfonamide											
498.00 > 78.00	3.405	3.418	-0.014	0.997	1864	0.001067				35.9	
D 26 M2-8:2FTS											
529.00 > 81.00	3.432	3.435	-0.003	1.000	947844	2.47			103	8006	
D 23 13C2 PFDA											
515.00 > 470.00	3.442	3.444	-0.002	1.000	2454122	2.44			97.8	32752	
24 Perfluorodecanoic acid											
513.00 > 469.00	3.442	3.446	-0.004	1.000	99516	0.0991				393	
513.00 > 169.00	3.442	3.446	-0.004	1.000	16290		6.11(2.36-7.09)			337	
D 27 d3-NMeFOSAA											
573.00 > 419.00	3.605	3.596	0.009	1.000	967703	2.13			85.0	28827	
29 Perfluorodecane Sulfonic acid											RM
599.00 > 80.00	3.625	3.762	-0.137	1.000	81189	0.0960				650	R
599.00 > 99.00	3.644	3.762	-0.118	1.005	7797		10.41(1.39-4.16)			95.5	M
D 32 d5-NEtFOSAA											
589.00 > 419.00	3.769	3.771	-0.002	1.000	1088872	2.24			89.6	3014	
D 30 13C2 PFUnA											
565.00 > 520.00	3.779	3.771	0.008	1.000	1992982	2.37			94.9	39683	
31 Perfluoroundecanoic acid											
563.00 > 519.00	3.769	3.783	-0.014	0.997	5478	0.008806				18.6	
563.00 > 169.00	3.758	3.783	-0.025	0.995	2192		2.50(2.12-6.36)			46.0	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2FTS										
429.00 > 81.00	2.683	2.682	0.001	1.000	868953	2.71		114	7474	
13 Sodium 1H,1H,2H,2H-perfluorooctane										
427.00 > 407.00	2.683	2.683	0.0	1.000	123533	0.2006			927	
D 14 13C4 PFOA										
417.00 > 372.00	2.705	2.704	0.001	1.000	3927561	2.57		103	75115	
* 62 13C2-PFOA										
415.00 > 370.00	2.705	2.713	-0.008		4046215	2.50			72113	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.705	2.713	-0.008	1.000	1052030	0.5573			476	
413.00 > 169.00	2.705	2.713	-0.008	1.000	577804		1.82(0.84-2.52)		1862	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.713	2.720	-0.007	1.000	18899	0.0109			71.1	
449.00 > 99.00	2.720	2.720	0.0	1.003	3888		4.86(1.94-5.82)		28.2	
D 18 13C4 PFOS										
503.00 > 80.00	3.077	3.073	0.004	1.000	3130062	2.08		86.9	21780	
D 19 13C5 PFNA										
468.00 > 423.00	3.077	3.081	-0.004	1.000	3248490	2.55		102	86892	
17 Perfluorooctane sulfonic acid										
499.00 > 80.00	3.077	3.082	-0.005	1.000	357771	0.2447			1097	
499.00 > 99.00	3.071	3.082	-0.011	0.998	67384		5.31(2.31-6.93)		437	
20 Perfluorononanoic acid										
463.00 > 419.00	3.077	3.082	-0.005	1.000	37256	0.0272			46.6	
463.00 > 169.00	3.071	3.082	-0.011	0.998	8801		4.23(1.90-5.69)		184	
D 21 13C8 FOSA										
506.00 > 78.00	3.405	3.407	-0.002	1.000	3932437	1.80		72.1	38254	
22 Perfluorooctane Sulfonamide										
498.00 > 78.00	3.405	3.418	-0.013	1.000	4151	0.002678			75.5	
D 26 M2-8:2FTS										
529.00 > 81.00	3.433	3.435	-0.002	1.000	968763	2.32		96.7	14227	
D 23 13C2 PFDA										
515.00 > 470.00	3.442	3.444	-0.002	1.000	2563553	2.34		93.5	40716	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.442	3.446	-0.004	1.000	9616	0.009184			42.6	R
513.00 > 169.00	3.423	3.446	-0.023	0.995	1348		7.13(2.36-7.09)		36.9	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.594	3.596	-0.002	1.000	1266382	2.55		102	25683	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.759	3.771	-0.012	1.000	1329822	2.51		100	6266	
D 30 13C2 PFUnA										
565.00 > 520.00	3.769	3.771	-0.002	1.000	1969051	2.14		85.8	43774	
33 N-ethyl perfluorooctane sulfonamid										
584.00 > 419.00	3.769	3.773	-0.004	1.003	1952	0.003895			39.9	
D 36 13C2 PFDoA										
615.00 > 570.00	4.058	4.071	-0.013	1.000	2229329	2.33		93.0	19219	
D 43 13C2-PFTeDA										
715.00 > 670.00	4.561	4.574	-0.013	1.000	2980771	2.85		114	15535	

Data Usability Summary Report

Site: Gem Cleaners
Laboratory: TestAmerica– Edison, NJ
SDG Nos.: 460-154781-1 and 460-154849-1
Parameters: Volatile Organic Compounds (VOCs) and 1,4-Dioxane
Data Reviewer: Samir A. Naguib/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: May 21, 2018

Samples Reviewed and Evaluation Summary

SDG: 460-154781-1

18 groundwater samples: GC-MW-107 (WG), GC-MW-107D (WG), GC-MW-108 (WG), GC-MW-1B (WG), GC-MW-103(WG), GC-MW-104 (WG), GC-MW-105 (WG), GC-DRAIN (WG), GC-MW-102 (WG), GC-MW-109 (WG), GC-MW-109M (WG), GC-MW-101 (WG), GC-MW-101D (WG), GC-MW-106 (WG), GC-MW-3 (WG), GC-MW-110 (WG), GC-MW-110D (WG), GC-MW-2 (WG)

2 Equipment Blanks: GC-Equipment Blank, GC-Equipment Blank-2

2 Trip Blanks: GC-TB-20180425, GC-TB-20180426

SDG: 460-154849-1

2 soil samples: GC-SO-101 (SO), GC-Sump (SO)

The above-listed samples were collected on April 25 and 26, 2018 and were analyzed for one or more of the following parameters:

- VOCs by SW-846 Methods 5030B/5035A/8260C
- 1,4-Dioxane by SW-846 Methods 3510C/8270D with selective ion monitoring (SIM)/isotope dilution

The data validation was performed in accordance with *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002),* January 2017 modified for the SW-846 methodologies utilized.

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- * Holding Times and Sample Preservation
- * Gas Chromatography/Mass Spectrometry (GC/MS) Tunes

	•	Initial and Continuing Calibrations
	•	Blanks
*	•	Surrogate Recoveries
*	•	Internal Standards
	•	Laboratory Control Sample (LCS)/LCS Duplicate (LCSD) Results
	•	Matrix Spike and Matrix Spike Duplicate (MS/MSD) Results
NA	•	Field Duplicate Results
*	•	Percent Solids
	•	Sample Results and Reported Quantitation Limits
*	•	Target Compound Identification
	•	Tentatively Identified Compounds (TICs)

*	-	All criteria were met.
NA	-	Field duplicates were not associated with this sample set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error are discussed below.

- The positive results for acetone in samples GC-MW-102 (WG), GC-MW-109 (WG), GC-MW-109M (WG), GC-MW-101 (WG), GC-MW-101D (WG), GC-MW-106 (WG), GC-MW-3 (WG), GC-MW-110 (WG), and GC-MW-2 (WG) were qualified as nondetect (U) due to equipment blank contamination. These results can be used for project objectives as nondetects, which may have a minor impact on the data usability.

Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select VOCs that were below the lowest calibration standard and quantitation limit (QL). These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The nondetect results for dichlorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, carbon tetrachloride, and 2-hexanone in samples GC-TB-20180425, GC-Equipment Blank, GC-MW-107 (WG), GC-MW-107D (WG), GC-MW-108 (WG), GC-MW-103 (WG), GC-MW-104 (WG), and GC-MW-105 (WG) were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for bromomethane, chloroethane, trichlorofluoromethane, and carbon tetrachloride in sample GC-DRAIN (WG) were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for bromomethane, chloroethane, trichlorofluoromethane, carbon tetrachloride, and 2-hexanone in sample GC-MW-1B (WG) were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for bromomethane, bromoform, and 1,2-dibromo-3-chloropropane in samples GC-TB-20180426, GC-MW-102 (WG), GC-MW-109 (WG), GC-MW-109M (WG), GC-MW-101 (WG), GC-MW-101D (WG), GC-MW-106 (WG), GC-MW-3 (WG), GC-Equipment Blank-2, and GC-MW-110 (WG) were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect result for 1,2-dibromo-3-chloropropane in sample GC-MW-2 (WG) was qualified as estimated (UJ) due to a continuing calibration nonconformance. This result can be used for project objectives as a nondetect with an estimated QL, which may have a minor impact on the data usability.

- The nondetect results for bromomethane and 1,2-dibromo-3-chloropropane in sample GC-MW-110D (WG) were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for dichlorodifluoromethane in samples GC-SO-101 (SO) and GC-Sump (SO) were qualified as estimated (UJ) due to a continuing calibration nonconformance. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive result for acetone in sample GC-MW-110D (WG) was qualified as a nondetect (U) at the QL due to method blank contamination. This result can be used for project objectives as a nondetect, which may have a minor impact on the data usability.

- The nondetect results for dichlorodifluoromethane in samples GC-SO-101 (SO) and GC-Sump (SO) were qualified as estimated (UJ) due to low LCS recovery. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with the following exceptions:

- The soil data package, 460-154849-1 did not include the documentation that shows that low-level soil samples were properly frozen by the laboratory within 48 hours as required by the method. Upon request during validation, the laboratory submitted supplemental information to correct this issue.

- The QLs for 1,4-dioxane were 0.4 µg/L in some samples and 0.2 µg/L in other samples. Upon request during validation, the laboratory corrected the QLs for 1,4-dioxane. Form Is were manually corrected by the validator during validation to reflect the correct QL.

Holding Times and Sample Preservation

All holding times and sample preservation method criteria were met for the VOC and 1,4-dioxane analyses.

GC/MS Tunes

All criteria were met in the VOC and 1,4-dioxane analyses.

Initial and Continuing Calibrations

VOCs

The percent relative standard deviations (%RSDs), correlation coefficients, and relative response factors (RRFs) met the method acceptance criteria in the initial calibrations (ICs) associated with the samples in this data set.

The following table summarizes the percent differences or percent drifts (%Ds) that did not meet the method acceptance criteria in the continuing calibration (CC) standards associated with the samples in this data set.

CC	Compound	%D	Validation Actions
CVOAMS11 05/02/18 17:57	Dichlorodifluoromethane	20.4	The nondetect results for dichlorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, carbon tetrachloride, and 2-hexanone in the associated samples were qualified as estimated (UJ).
	Chloromethane	25.7	
	Vinyl chloride	32.3	
	Bromomethane	41.9	
	Chloroethane	57.7	
	Trichlorofluoromethane	35.4	
	Carbon tetrachloride	31.3	
	2-Hexanone	-22.4	

CC	Compound	%D	Validation Actions
Associated samples: GC-TB-20180425, GC-Equipment Blank, GC-MW-107 (WG), GC-MW-107D (WG), GC-MW-108 (WG), GC-MW-103 (WG), GC-MW-104 (WG), GC-MW-105 (WG)			
CVOAMS11 05/03/18 05:08	Bromomethane	28.2	The nondetect results for bromomethane, chloroethane, trichlorofluoromethane, and carbon tetrachloride in the associated sample was qualified as estimated (UJ).
	Chloroethane	24.2	
	Trichlorofluoromethane	22.8	
	Carbon tetrachloride	27.4	
Associated sample: GC-DRAIN (WG)			
CVOAMS11 05/03/18 18:01	Bromomethane	28.7	The nondetect results for bromomethane, chloroethane, trichlorofluoromethane, carbon tetrachloride, and 2-hexanone in the associated sample were qualified as estimated (UJ).
	Chloroethane	51.5	
	Trichlorofluoromethane	22.6	
	Carbon tetrachloride	21.1	
	2-Hexanone	-22.3	
Associated sample: GC-MW-1B (WG)			
CVOAMS13 05/03/18 21:55	Bromomethane	-27.7	The nondetect results for bromomethane, bromoform and 1,2-dibromo-3-chloropropane in the associated samples were qualified as estimated (UJ).
	Bromoform	-22.7	
	1,2-dibromo-3-chloropropane	-25.5	
Associated samples: GC-TB-20180426, GC-MW-102 (WG), GC-MW-109 (WG), GC-MW-109M (WG), GC-MW-101 (WG), GC-MW-101D (WG), GC-MW-106 (WG), GC-MW-3 (WG), GC-Equipment Blank-2, GC-MW-110 (WG)			
CVOAMS13 05/04/18 09:38	1,2-dibromo-3-chloropropane	-22.7	The nondetect result for 1,2-dibromo-3-chloropropane in the associated sample was qualified as estimated (UJ).
Associated sample: GC-MW-2 (WG)			
CVOAMS13 05/04/18 22:58	Bromomethane	-22.2	The nondetect results for bromomethane and1,2-dibromo-3-chloropropane in the associated sample were qualified as estimated (UJ).
	1,2-dibromo-3-chloropropane	-21.3	
Associated sample: GC-MW-110D (WG)			
CVOAMS9 05/01/18 06:28	Dichlorodifluoromethane	-26.2	The nondetect results for dichlorodifluoromethane in the associated samples were qualified as estimated (UJ).
Associated samples: GC-SO-101 (SO), GC-Sump (SO)			

1,4-Dioxane

The %RSD was within the method acceptance criteria in the ICs associated with the samples in this data set. The %D was within the method acceptance criteria in the CC standards associated with the samples in this data set.

Blanks

VOCs

The following table summarizes the contaminants detected in the method blanks, the concentration detected, and the resulting validation actions. Target analytes were not detected in the trip blanks.

Blank ID	Compound	Blank Concentration	Validation Actions
MB 460-516607/10	Acetone	1.28 J µg/L	The positive result for acetone in the associated sample was qualified as nondetect (U) at the QL since the concentration was <QL.
Associated sample: GC-MW-110D (WG)			

The following table summarizes the contaminants detected in the equipment blanks, the concentrations detected, and the resulting validation actions.

Blank ID	Compound	Blank Concentration	Validation Actions
GC-Equipment Blank	Methylene Chloride	0.84 J µg/L	No qualifications were required since methylene chloride and toluene were not detected in the associated samples.
	Toluene	0.33 J µg/L	
Associated samples: GC-MW-107 (WG), GC-MW-107D (WG), GC-MW-108 (WG), GC-MW-1B (WG), GC-MW-103 (WG), GC-MW-104 (WG), GC-MW-105 (WG), GC-DRAIN (WG)			
GC-Equipment Blank-2	Acetone	2.9 J µg/L	The positive results for acetone in the associated samples were qualified as nondetect (U) at the QL since the concentrations were <QL.
Associated samples: GC-MW-102 (WG), GC-MW-109 (WG), GC-MW-109M (WG), GC-MW-101 (WG), GC-MW-101D (WG), GC-MW-106 (WG), GC-MW-3 (WG), GC-MW-110 (WG), GC-MW-110D (WG), GC-MW-2 (WG)			

1,4-Dioxane

The method blank and equipment blanks for 1,4-dioxane were free of contamination.

Surrogate Recoveries

The surrogate percent recoveries (%Rs) met the laboratory acceptance criteria in the VOC and 1,4-dioxane analyses.

Internal Standards

All criteria were met in the VOC and 1,4-dioxane analyses.

LCS/LCS Duplicate Results

VOCs

The following table summarizes the VOCs which exhibited %Rs outside of the acceptance criteria, the associated samples, and the validation actions.

LCS/LCSD ID	Compound	LCS %R	LCSD %R	RPD	QC Limits %R/RPD	Validation Actions
LCS 460-516299/4/ LCSD 460-516299/5	Chloroethane	170	-	-	52-150/30	No qualification was required due to the high LCS recovery since chloroethane was not detected in the associated sample.
Associated sample: GC-MW-1B (WG)				-Criteria met		
LCS 460-515499/3/ LCSD 460-515499/4	Dichlorodifluoromethane	70	-	-	72-127/30	The nondetect result for dichlorodifluoromethane in the associated samples were qualified as estimated (UJ) due to low LCS recovery.
Associated samples: GC-SO-101 (SO), GC-Sump (SO)				-Criteria met		

1,4-Dioxane

The LCS %R was within the laboratory acceptance criteria in the 1,4-dioxane analyses.

MS/MSD Results

VOCs

MS/MSD analyses were performed on sample GC-MW-102 (WG) but at a 10-fold dilution. The %Rs and relative percent differences (RPDs) were within the laboratory acceptance criteria.

MS/MSD analyses were also performed on sample GC-MW-107 (WG). The following table summarizes the %Rs that were outside of the acceptance criteria.

MS/MSD Sample ID	Compound	MS %R	MSD %R	RPD	QC Limits %R/RPD	Validation Actions
GC-MW-107 (WG)	Bromomethane	175	163	-	10-150/30	No qualifications were required due to the high MS and/or MSD recoveries since bromomethane, carbon tetrachloride, and chloroethane were not detected in sample GC-MW-107 (WG).
	Carbon tetrachloride	133	-	-	70-132/30	
	Chloroethane	154	-	-	52-150/30	
-Criteria met						

1,4-Dioxane

MS/MSD analyses were performed on sample GC-MW-107 (WG) for 1,4-dioxane. The %R and RPD were within the laboratory acceptance criteria.

Field Duplicate Results

No field duplicate pairs were submitted with this sample set.

Percent Solids

The percent solids for the soil samples in this data set were >30%; thus, no qualification was required.

Sample Results and Reported Quantitation Limits

Select VOC results were reported below the lowest calibration standard level and QL. These results were qualified as estimated (J) in the associated samples by the laboratory.

Sample calculations for all parameters were spot-checked; there were no errors noted. There were no dilutions performed on any samples in this data set.

Target Compound Identification

All criteria were met for the VOC and 1,4-dioxane analyses.

Tentatively Identified Compounds

VOCs

The following table summarizes the TICs that were detected in the method blanks but were not detected in the associated samples. No validation actions were required.

Blank ID	TIC: Concentration	Associated Sample
MB 460-516419/7	2-Methyl-2-propanol: 3.04 J µg/L	GC-MW-2 (WG)
MB 460-516607/10	2-Methyl-2-propanol: 3.56 J µg/L	GC-MW-110D (WG)

QUALIFIED FORM Is

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) Lab Sample ID: 460-154781-1

Matrix: Water Lab File ID: N66527.D

Analysis Method: 8260C Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 00:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U UJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U UJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U UJ ✓	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U UJ ✓	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U UJ ✓	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) Lab Sample ID: 460-154781-1

Matrix: Water Lab File ID: N66527.D

Analysis Method: 8260C Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 00:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	8.8		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	UJ	1.0	0.15
75-01-4	Vinyl chloride	1.0	UJ	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		74-132
460-00-4	4-Bromofluorobenzene	91		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) Lab Sample ID: 460-154781-1

Matrix: Water Lab File ID: N66527.D

Analysis Method: 8260C Date Collected: 04/25/2018 10:00

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 00:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 460-154781-2
Matrix: Water | Lab File ID: N66528.D
Analysis Method: 8260C | Date Collected: 04/25/2018 11:15
Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 00:37
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U UJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U UJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U UJ ✓	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U UJ ✓	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U UJ ✓	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) Lab Sample ID: 460-154781-2

Matrix: Water Lab File ID: N66528.D

Analysis Method: 8260C Date Collected: 04/25/2018 11:15

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 00:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	0.20	J	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	UJ	1.0	0.15
75-01-4	Vinyl chloride	1.0	UJ	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		74-132
460-00-4	4-Bromofluorobenzene	90		77-124
1868-53-7	Dibromofluoromethane (Surr)	107		72-131
2037-26-5	Toluene-d8 (Surr)	92		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 460-154781-2

Matrix: Water | Lab File ID: N66528.D

Analysis Method: 8260C | Date Collected: 04/25/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 00:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 460-154781-3

Matrix: Water | Lab File ID: N66529.D

Analysis Method: 8260C | Date Collected: 04/25/2018 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U UJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U UJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U UJ ✓	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U UJ ✓	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U UJ ✓	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 460-154781-3

Matrix: Water | Lab File ID: N66529.D

Analysis Method: 8260C | Date Collected: 04/25/2018 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	35		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		74-132
460-00-4	4-Bromofluorobenzene	92		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	93		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 460-154781-3
Matrix: Water | Lab File ID: N66529.D
Analysis Method: 8260C | Date Collected: 04/25/2018 11:50
Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:00
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 516016 | Units: ug/L
Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 460-154781-4
Matrix: Water | Lab File ID: N665686.D
Analysis Method: 8260C | Date Collected: 04/25/2018 12:35
Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 20:30
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U UJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U UJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U UJ ✓	1.0	0.37
67-66-3	Chloroform	0.46	J	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 460-154781-4

Matrix: Water | Lab File ID: N665686.D

Analysis Method: 8260C | Date Collected: 04/25/2018 12:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 20:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516299 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.13	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		74-132
460-00-4	4-Bromofluorobenzene	90		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	97		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 460-154781-4
Matrix: Water | Lab File ID: N665686.D
Analysis Method: 8260C | Date Collected: 04/25/2018 12:35
Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 20:30
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 516299 | Units: ug/L
Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-103(WG) Lab Sample ID: 460-154781-5

Matrix: Water Lab File ID: N66531.D

Analysis Method: 8260C Date Collected: 04/25/2018 13:10

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 01:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U UJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U UJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U UJ ✓	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U UJ ✓	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U UJ ✓	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 460-154781-5

Matrix: Water | Lab File ID: N66531.D

Analysis Method: 8260C | Date Collected: 04/25/2018 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.2		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		74-132
460-00-4	4-Bromofluorobenzene	91		77-124
1868-53-7	Dibromofluoromethane (Surr)	112		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 460-154781-5

Matrix: Water | Lab File ID: N66531.D

Analysis Method: 8260C | Date Collected: 04/25/2018 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 01:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 460-154781-6

Matrix: Water | Lab File ID: N66532.D

Analysis Method: 8260C | Date Collected: 04/25/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U LJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U LJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U LJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U LJ ✓	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U LJ ✓	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U LJ ✓	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 460-154781-6

Matrix: Water | Lab File ID: N66532.D

Analysis Method: 8260C | Date Collected: 04/25/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.34	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	UJ	1.0	0.15
75-01-4	Vinyl chloride	1.0	UJ	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		74-132
460-00-4	4-Bromofluorobenzene	93		77-124
1868-53-7	Dibromofluoromethane (Surr)	115		72-131
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-104(WG) Lab Sample ID: 460-154781-6

Matrix: Water Lab File ID: N66532.D

Analysis Method: 8260C Date Collected: 04/25/2018 13:35

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 02:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 460-154781-7

Matrix: Water | Lab File ID: N66533.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:43

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U UJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U UJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U UJ ✓	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U UJ ✓	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U UJ ✓	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 460-154781-7

Matrix: Water | Lab File ID: N66533.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:43

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	UJ	1.0	0.15
75-01-4	Vinyl chloride	1.0	UJ	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		74-132
460-00-4	4-Bromofluorobenzene	92		77-124
1868-53-7	Dibromofluoromethane (Surr)	115		72-131
2037-26-5	Toluene-d8 (Surr)	90		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 460-154781-7

Matrix: Water | Lab File ID: N66533.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:43

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 02:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-DRAIN(WG) | Lab Sample ID: 460-154781-8

Matrix: Water | Lab File ID: N66562.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	UJ	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	UJ	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	UJ	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-DRAIN(WG) Lab Sample ID: 460-154781-8

Matrix: Water Lab File ID: N66562.D

Analysis Method: 8260C Date Collected: 04/25/2018 14:00

Sample wt/vol: 5(mL) Date Analyzed: 05/03/2018 13:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516110 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.14	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	UJ ✓	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		74-132
460-00-4	4-Bromofluorobenzene	93		77-124
1868-53-7	Dibromofluoromethane (Surr)	111		72-131
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-DRAIN(WG) | Lab Sample ID: 460-154781-8

Matrix: Water | Lab File ID: N66562.D

Analysis Method: 8260C | Date Collected: 04/25/2018 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/03/2018 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516110 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank | Lab Sample ID: 460-154781-9

Matrix: Water | Lab File ID: N66523.D

Analysis Method: 8260C | Date Collected: 04/25/2018 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 21:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U LJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U LJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U LJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U LJ ✓	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U LJ ✓	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U LJ ✓	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank | Lab Sample ID: 460-154781-9

Matrix: Water | Lab File ID: N66523.D

Analysis Method: 8260C | Date Collected: 04/25/2018 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 21:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	0.84	J	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	0.33	J	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	UJ	1.0	0.15
75-01-4	Vinyl chloride	1.0	UJ	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		74-132
460-00-4	4-Bromofluorobenzene	89		77-124
1868-53-7	Dibromofluoromethane (Surr)	113		72-131
2037-26-5	Toluene-d8 (Surr)	93		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank | Lab Sample ID: 460-154781-9

Matrix: Water | Lab File ID: N66523.D

Analysis Method: 8260C | Date Collected: 04/25/2018 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 21:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180425 Lab Sample ID: 460-154781-10

Matrix: Water Lab File ID: N66520.D

Analysis Method: 8260C Date Collected: 04/25/2018 00:00

Sample wt/vol: 5(mL) Date Analyzed: 05/02/2018 20:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U UJ ✓	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U UJ ✓	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U UJ ✓	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U UJ ✓	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U UJ ✓	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180425 | Lab Sample ID: 460-154781-10

Matrix: Water | Lab File ID: N66520.D

Analysis Method: 8260C | Date Collected: 04/25/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/02/2018 20:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516016 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	UJ	1.0	0.15
75-01-4	Vinyl chloride	1.0	UJ	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		74-132
460-00-4	4-Bromofluorobenzene	89		77-124
1868-53-7	Dibromofluoromethane (Surr)	114		72-131
2037-26-5	Toluene-d8 (Surr)	94		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180425 Lab Sample ID: 460-154781-10

Matrix: Water Lab File ID: N66520.D

Analysis Method: 8260C Date Collected: 04/25/2018 00:00

Sample wt/vol: 5(mL) Date Analyzed: 05/02/2018 20:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516016 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) | Lab Sample ID: 460-154925-1

Matrix: Water | Lab File ID: P44719.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	UJ	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.3	JU	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	UJ	1.0	0.18
74-83-9	Bromomethane	1.0	UJ	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) | Lab Sample ID: 460-154925-1

Matrix: Water | Lab File ID: P44719.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.4		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		74-132
460-00-4	4-Bromofluorobenzene	111		77-124
1868-53-7	Dibromofluoromethane (Surr)	121		72-131
2037-26-5	Toluene-d8 (Surr)	110		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) | Lab Sample ID: 460-154925-1

Matrix: Water | Lab File ID: P44719.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:25

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109(WG) | Lab Sample ID: 460-154925-2

Matrix: Water | Lab File ID: P44720.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:57

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U LCT ✓	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	1.6	U LL ✓	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U LCT ✓	1.0	0.18
74-83-9	Bromomethane	1.0	U LCT ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109(WG) | Lab Sample ID: 460-154925-2

Matrix: Water | Lab File ID: P44720.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:57

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	12		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		74-132
460-00-4	4-Bromofluorobenzene	104		77-124
1868-53-7	Dibromofluoromethane (Surr)	111		72-131
2037-26-5	Toluene-d8 (Surr)	103		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109(WG) | Lab Sample ID: 460-154925-2

Matrix: Water | Lab File ID: P44720.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:57

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109M(WG) | Lab Sample ID: 460-154925-3

Matrix: Water | Lab File ID: P44721.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 06:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	UJ	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.4	UJ	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	UJ	1.0	0.18
74-83-9	Bromomethane	1.0	UJ	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109M(WG) | Lab Sample ID: 460-154925-3

Matrix: Water | Lab File ID: P44721.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 06:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	0.24	J	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	52		1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		74-132
460-00-4	4-Bromofluorobenzene	110		77-124
1868-53-7	Dibromofluoromethane (Surr)	117		72-131
2037-26-5	Toluene-d8 (Surr)	110		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109M(WG) | Lab Sample ID: 460-154925-3

Matrix: Water | Lab File ID: P44721.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 06:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101(WG) | Lab Sample ID: 460-154925-4

Matrix: Water | Lab File ID: P44722.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 06:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U LJ ✓	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.1	J U ✓	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U LJ ✓	1.0	0.18
74-83-9	Bromomethane	1.0	U LJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-MW-101(WG) Lab Sample ID: 460-154925-4
Matrix: Water Lab File ID: P44722.D
Analysis Method: 8260C Date Collected: 04/26/2018 11:15
Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 06:46
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 516291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.22	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		74-132
460-00-4	4-Bromofluorobenzene	104		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101(WG) Lab Sample ID: 460-154925-4

Matrix: Water Lab File ID: P44722.D

Analysis Method: 8260C Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 06:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101D(WG) | Lab Sample ID: 460-154925-5

Matrix: Water | Lab File ID: P44723.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 07:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U UJ ✓	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	3.6	J UJ ✓	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U UJ ✓	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101D(WG) | Lab Sample ID: 460-154925-5

Matrix: Water | Lab File ID: P44723.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 07:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	0.18	J	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		74-132
460-00-4	4-Bromofluorobenzene	119		77-124
1868-53-7	Dibromofluoromethane (Surr)	125		72-131
2037-26-5	Toluene-d8 (Surr)	115		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101D(WG) | Lab Sample ID: 460-154925-5

Matrix: Water | Lab File ID: P44723.D

Analysis Method: 8260C | Date Collected: 04/26/2018 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 07:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-106(WG) Lab Sample ID: 460-154925-6

Matrix: Water Lab File ID: P44724.D

Analysis Method: 8260C Date Collected: 04/26/2018 11:55

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 07:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	UJ ✓	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.8	UJ ✓	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	UJ ✓	1.0	0.18
74-83-9	Bromomethane	1.0	UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-106(WG) Lab Sample ID: 460-154925-6

Matrix: Water Lab File ID: P44724.D

Analysis Method: 8260C Date Collected: 04/26/2018 11:55

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 07:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		74-132
460-00-4	4-Bromofluorobenzene	110		77-124
1868-53-7	Dibromofluoromethane (Surr)	117		72-131
2037-26-5	Toluene-d8 (Surr)	108		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-106(WG) Lab Sample ID: 460-154925-6

Matrix: Water Lab File ID: P44724.D

Analysis Method: 8260C Date Collected: 04/26/2018 11:55

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 07:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-3(WG) Lab Sample ID: 460-154925-7

Matrix: Water Lab File ID: P44725.D

Analysis Method: 8260C Date Collected: 04/26/2018 12:45

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 08:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	UJ	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.6	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	UJ	1.0	0.18
74-83-9	Bromomethane	1.0	UJ	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-3(WG) Lab Sample ID: 460-154925-7

Matrix: Water Lab File ID: P44725.D

Analysis Method: 8260C Date Collected: 04/26/2018 12:45

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 08:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.39	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		74-132
460-00-4	4-Bromofluorobenzene	113		77-124
1868-53-7	Dibromofluoromethane (Surr)	124		72-131
2037-26-5	Toluene-d8 (Surr)	112		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-3(WG) | Lab Sample ID: 460-154925-7

Matrix: Water | Lab File ID: P44725.D

Analysis Method: 8260C | Date Collected: 04/26/2018 12:45

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180426 | Lab Sample ID: 460-154925-8

Matrix: Water | Lab File ID: P44718.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	UJ	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	UJ	1.0	0.18
74-83-9	Bromomethane	1.0	UJ	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180426 | Lab Sample ID: 460-154925-8

Matrix: Water | Lab File ID: P44718.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		74-132
460-00-4	4-Bromofluorobenzene	104		77-124
1868-53-7	Dibromofluoromethane (Surr)	109		72-131
2037-26-5	Toluene-d8 (Surr)	102		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-TB-20180426 | Lab Sample ID: 460-154925-8

Matrix: Water | Lab File ID: P44718.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 05:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-Equipment Blank-2 | Lab Sample ID: 460-154925-9
Matrix: Water | Lab File ID: P44726.D
Analysis Method: 8260C | Date Collected: 04/26/2018 09:30
Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:27
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	UJ ✓	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.9	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	UJ ✓	1.0	0.18
74-83-9	Bromomethane	1.0	UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 Lab Sample ID: 460-154925-9

Matrix: Water Lab File ID: P44726.D

Analysis Method: 8260C Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 08:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516291 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		74-132
460-00-4	4-Bromofluorobenzene	102		77-124
1868-53-7	Dibromofluoromethane (Surr)	110		72-131
2037-26-5	Toluene-d8 (Surr)	100		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank-2 | Lab Sample ID: 460-154925-9

Matrix: Water | Lab File ID: P44726.D

Analysis Method: 8260C | Date Collected: 04/26/2018 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110(WG) | Lab Sample ID: 460-154925-10

Matrix: Water | Lab File ID: P44727.D

Analysis Method: 8260C | Date Collected: 04/26/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U UJ ✓	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	~~3.3~~	~~J~~ U ✓	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U UJ ✓	1.0	0.18
74-83-9	Bromomethane	1.0	U UJ ✓	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110(WG) | Lab Sample ID: 460-154925-10

Matrix: Water | Lab File ID: P44727.D

Analysis Method: 8260C | Date Collected: 04/26/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		74-132
460-00-4	4-Bromofluorobenzene	99		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110(WG) | Lab Sample ID: 460-154925-10

Matrix: Water | Lab File ID: P44727.D

Analysis Method: 8260C | Date Collected: 04/26/2018 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 08:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516291 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110D(WG) | Lab Sample ID: 460-154925-11

Matrix: Water | Lab File ID: P44767.D

Analysis Method: 8260C | Date Collected: 04/26/2018 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 02:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	~~3.5~~	~~J~~ B	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-MW-110D(WG) | Lab Sample ID: 460-154925-11
Matrix: Water | Lab File ID: P44767.D
Analysis Method: 8260C | Date Collected: 04/26/2018 14:30
Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 02:22
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	1.0	U	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		74-132
460-00-4	4-Bromofluorobenzene	115		77-124
1868-53-7	Dibromofluoromethane (Surr)	125		72-131
2037-26-5	Toluene-d8 (Surr)	115		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110D(WG) | Lab Sample ID: 460-154925-11

Matrix: Water | Lab File ID: P44767.D

Analysis Method: 8260C | Date Collected: 04/26/2018 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 02:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-2(WG) | Lab Sample ID: 460-154925-12

Matrix: Water | Lab File ID: P44746.D

Analysis Method: 8260C | Date Collected: 04/26/2018 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 17:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516419 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	2.8	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-2(WG) Lab Sample ID: 460-154925-12

Matrix: Water Lab File ID: P44746.D

Analysis Method: 8260C Date Collected: 04/26/2018 15:00

Sample wt/vol: 5(mL) Date Analyzed: 05/04/2018 17:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 516419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.19
98-82-8	Isopropylbenzene	1.0	U	1.0	0.32
79-20-9	Methyl acetate	5.0	U	5.0	0.58
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.13
108-87-2	Methylcyclohexane	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.21
179601-23-1	m-Xylene & p-Xylene	1.0	U	1.0	0.28
95-47-6	o-Xylene	1.0	U	1.0	0.32
100-42-5	Styrene	1.0	U	1.0	0.17
127-18-4	Tetrachloroethene	0.14	J	1.0	0.12
108-88-3	Toluene	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.18
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.15
75-01-4	Vinyl chloride	1.0	U	1.0	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		74-132
460-00-4	4-Bromofluorobenzene	98		77-124
1868-53-7	Dibromofluoromethane (Surr)	108		72-131
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-MW-2(WG) | Lab Sample ID: 460-154925-12
Matrix: Water | Lab File ID: P44746.D
Analysis Method: 8260C | Date Collected: 04/26/2018 15:00
Sample wt/vol: 5(mL) | Date Analyzed: 05/04/2018 17:32
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 516419 | Units: ug/L
Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-SO-101(SO) | Lab Sample ID: 460-154849-1

Matrix: Solid | Lab File ID: K82864.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:10

Sample wt/vol: 5.551(g) | Date Analyzed: 05/01/2018 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 1.6 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00021
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000084
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00042
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0084
78-93-3	2-Butanone (MEK)	0.0046	U	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00071
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.0046	U	0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00043
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00024
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-SO-101(SO) Lab Sample ID: 460-154849-1

Matrix: Solid Lab File ID: K82864.D

Analysis Method: 8260C Date Collected: 04/26/2018 08:10

Sample wt/vol: 5.551(g) Date Analyzed: 05/01/2018 14:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 1.6 Level: (low/med) Low

Analysis Batch No.: 515499 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00016
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0039
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00011
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00054	J	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00018	J	0.00092	0.00016
95-47-6	o-Xylene	0.00092	U	0.00092	0.000087
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00057
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00024
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00037
75-01-4	Vinyl chloride	0.00092	U	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	109		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-SO-101(SO) | Lab Sample ID: 460-154849-1

Matrix: Solid | Lab File ID: K82864.D

Analysis Method: 8260C | Date Collected: 04/26/2018 08:10

Sample wt/vol: 5.551(g) | Date Analyzed: 05/01/2018 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 1.6 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-Sump (SO) | Lab Sample ID: 460-154849-2

Matrix: Solid | Lab File ID: K82865.D

Analysis Method: 8260C | Date Collected: 04/26/2018 07:50

Sample wt/vol: 0.195(g) | Date Analyzed: 05/01/2018 15:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.1 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.030	U	0.030	0.0070
79-34-5	1,1,2,2-Tetrachloroethane	0.030	U	0.030	0.0064
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.030	U	0.030	0.0090
79-00-5	1,1,2-Trichloroethane	0.030	U	0.030	0.0053
75-34-3	1,1-Dichloroethane	0.030	U	0.030	0.0062
75-35-4	1,1-Dichloroethene	0.030	U	0.030	0.0067
87-61-6	1,2,3-Trichlorobenzene	0.030	U	0.030	0.0054
120-82-1	1,2,4-Trichlorobenzene	0.030	U	0.030	0.0027
96-12-8	1,2-Dibromo-3-Chloropropane	0.030	U	0.030	0.014
95-50-1	1,2-Dichlorobenzene	0.030	U	0.030	0.0043
107-06-2	1,2-Dichloroethane	0.030	U	0.030	0.0088
78-87-5	1,2-Dichloropropane	0.030	U	0.030	0.013
541-73-1	1,3-Dichlorobenzene	0.030	U	0.030	0.0047
106-46-7	1,4-Dichlorobenzene	0.030	U	0.030	0.0030
123-91-1	1,4-Dioxane	0.60	U	0.60	0.27
78-93-3	2-Butanone (MEK)	0.15	U	0.15	0.033
591-78-6	2-Hexanone	0.15	U	0.15	0.023
108-10-1	4-Methyl-2-pentanone (MIBK)	0.15	U	0.15	0.020
67-64-1	Acetone	0.15	U	0.15	0.11
71-43-2	Benzene	0.030	U	0.030	0.0077
75-25-2	Bromoform	0.030	U	0.030	0.013
74-83-9	Bromomethane	0.030	U	0.030	0.014
75-15-0	Carbon disulfide	0.030	U	0.030	0.0079
56-23-5	Carbon tetrachloride	0.030	U	0.030	0.0054
108-90-7	Chlorobenzene	0.030	U	0.030	0.0053
74-97-5	Chlorobromomethane	0.030	U	0.030	0.0084
124-48-1	Chlorodibromomethane	0.030	U	0.030	0.0058
75-00-3	Chloroethane	0.030	U	0.030	0.016
67-66-3	Chloroform	0.030	U	0.030	0.0095
74-87-3	Chloromethane	0.030	U	0.030	0.013
156-59-2	cis-1,2-Dichloroethene	0.030	U	0.030	0.0045
10061-01-5	cis-1,3-Dichloropropene	0.030	U	0.030	0.0082
110-82-7	Cyclohexane	0.030	U	0.030	0.0066
75-27-4	Dichlorobromomethane	0.030	U	0.030	0.0077
75-71-8	Dichlorodifluoromethane	0.030	U	0.030	0.010

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154849-1

SDG No.:

Client Sample ID: GC-Sump (SO) | Lab Sample ID: 460-154849-2

Matrix: Solid | Lab File ID: K82865.D

Analysis Method: 8260C | Date Collected: 04/26/2018 07:50

Sample wt/vol: 0.195(g) | Date Analyzed: 05/01/2018 15:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.1 | Level: (low/med) Low

Analysis Batch No.: 515499 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.030	U	0.030	0.0059
106-93-4	Ethylene Dibromide	0.030	U	0.030	0.0054
98-82-8	Isopropylbenzene	0.030	U	0.030	0.0038
79-20-9	Methyl acetate	0.15	U	0.15	0.13
1634-04-4	Methyl tert-butyl ether	0.030	U	0.030	0.0037
108-87-2	Methylcyclohexane	0.030	U	0.030	0.0048
75-09-2	Methylene Chloride	0.020	J	0.030	0.0049
179601-23-1	m-Xylene & p-Xylene	0.022	J	0.030	0.0052
95-47-6	o-Xylene	0.0099	J	0.030	0.0028
100-42-5	Styrene	0.030	U	0.030	0.0037
127-18-4	Tetrachloroethene	0.030	U	0.030	0.0043
108-88-3	Toluene	0.030	U	0.030	0.019
156-60-5	trans-1,2-Dichloroethene	0.030	U	0.030	0.0073
10061-02-6	trans-1,3-Dichloropropene	0.030	U	0.030	0.0079
79-01-6	Trichloroethene	0.030	U	0.030	0.0043
75-69-4	Trichlorofluoromethane	0.030	U	0.030	0.012
75-01-4	Vinyl chloride	0.030	U	0.030	0.016

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		78-135
460-00-4	4-Bromofluorobenzene	99		67-126
1868-53-7	Dibromofluoromethane (Surr)	104		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-154849-1
SDG No.:
Client Sample ID: GC-Sump (SO) | Lab Sample ID: 460-154849-2
Matrix: Solid | Lab File ID: K82865.D
Analysis Method: 8260C | Date Collected: 04/26/2018 07:50
Sample wt/vol: 0.195(g) | Date Analyzed: 05/01/2018 15:14
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 14.1 | Level: (low/med) Low
Analysis Batch No.: 515499 | Units: mg/Kg
Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107(WG) | Lab Sample ID: 460-154781-1

Matrix: Water | Lab File ID: C28859.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 10:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 04/30/2018 20:54

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.41~~ 0.20	U	~~0.41~~ 0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	44		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-107D(WG) | Lab Sample ID: 460-154781-2

Matrix: Water | Lab File ID: C28862.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 11:15

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 04/30/2018 21:48

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.42~~ 0.21	U	~~0.42~~ 0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	43		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-108(WG) | Lab Sample ID: 460-154781-3

Matrix: Water | Lab File ID: C28863.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 11:50

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 04/30/2018 22:05

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.41~~ 0.20	J	~~0.41~~ 0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-1B(WG) | Lab Sample ID: 460-154781-4

Matrix: Water | Lab File ID: C28864.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 12:35

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 04/30/2018 22:23

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.42~~ 0.21	U	~~0.42~~ 0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-103(WG) | Lab Sample ID: 460-154781-5

Matrix: Water | Lab File ID: C28865.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 13:10

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 04/30/2018 22:41

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.42~~ 0.21	U	~~0.42~~ 0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	49		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-104(WG) | Lab Sample ID: 460-154781-6

Matrix: Water | Lab File ID: C28866.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 13:35

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 04/30/2018 22:59

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.42~~ 0.21	U	~~0.42~~ 0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	42		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-105(WG) | Lab Sample ID: 460-154781-7

Matrix: Water | Lab File ID: C28867.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 14:43

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 250(mL) | Date Analyzed: 04/30/2018 23:16

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.40~~ 0.20	U	~~0.40~~ 0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-DRAIN(WG) | Lab Sample ID: 460-154781-8

Matrix: Water | Lab File ID: C28869.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 14:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 04/30/2018 23:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.41~~ 0.20	U	~~0.41~~ 0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	43		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-Equipment Blank | Lab Sample ID: 460-154781-9

Matrix: Water | Lab File ID: C28868.D

Analysis Method: 8270D SIM ID | Date Collected: 04/25/2018 15:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 250(mL) | Date Analyzed: 04/30/2018 23:34

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	~~0.40~~ 0.20	U	~~0.40~~ 0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	75		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-102(WG) | Lab Sample ID: 460-154925-1

Matrix: Water | Lab File ID: C28870.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 08:25

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 00:10

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109(WG) | Lab Sample ID: 460-154925-2

Matrix: Water | Lab File ID: C28871.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 09:57

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 00:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	40		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-109M(WG) | Lab Sample ID: 460-154925-3

Matrix: Water | Lab File ID: C28872.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 09:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 245(mL) | Date Analyzed: 05/01/2018 00:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	35		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101(WG) Lab Sample ID: 460-154925-4

Matrix: Water Lab File ID: C28873.D

Analysis Method: 8270D SIM ID Date Collected: 04/26/2018 11:15

Extract. Method: 3510C Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) Date Analyzed: 05/01/2018 01:03

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 5(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-101D(WG) | Lab Sample ID: 460-154925-5

Matrix: Water | Lab File ID: C28874.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 11:15

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 01:21

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-106(WG) | Lab Sample ID: 460-154925-6

Matrix: Water | Lab File ID: C28875.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 11:55

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 01:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	40		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-3(WG) | Lab Sample ID: 460-154925-7

Matrix: Water | Lab File ID: C28876.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 12:45

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 01:56

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	42		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-154781-1
SDG No.:
Client Sample ID: GC-Equipment Blank-2
Lab Sample ID: 460-154925-9
Matrix: Water
Lab File ID: C28877.D
Analysis Method: 8270D SIM ID
Date Collected: 04/26/2018 09:30
Extract. Method: 3510C
Date Extracted: 04/30/2018 15:53
Sample wt/vol: 250(mL)
Date Analyzed: 05/01/2018 02:14
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 5(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 515424
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110(WG) | Lab Sample ID: 460-154925-10

Matrix: Water | Lab File ID: C28878.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 13:35

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 02:32

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-110D(WG) | Lab Sample ID: 460-154925-11

Matrix: Water | Lab File ID: C28879.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 14:30

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 02:50

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	38		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: GC-MW-2(WG) | Lab Sample ID: 460-154925-12

Matrix: Water | Lab File ID: C28880.D

Analysis Method: 8270D SIM ID | Date Collected: 04/26/2018 15:00

Extract. Method: 3510C | Date Extracted: 04/30/2018 15:53

Sample wt/vol: 240(mL) | Date Analyzed: 05/01/2018 03:07

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 5(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 515424 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		10-150

QC NONCONFORMANCE DOCUMENTATION

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516016/3 Calibration Date: 05/02/2018 17:57

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66514.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.1865		16.7	20.0	-16.4	20.0
Dichlorodifluoromethane	Ave	0.1272	0.1532	0.1000	24.1	20.0	20.4*	20.0
Chloromethane	Ave	2.070	2.603	0.1000	25.1	20.0	25.7*	20.0
Vinyl chloride	Ave	0.2653	0.3509	0.1000	26.5	20.0	32.3*	20.0
Butadiene	Ave	0.1921	0.2474		25.7	20.0	28.7*	20.0
Bromomethane	Ave	0.1877	0.2664	0.1000	28.4	20.0	41.9	50.0
Chloroethane	Ave	0.1353	0.2134	0.1000	31.5	20.0	57.7*	50.0
Dichlorofluoromethane	Ave	0.4902	0.5845		23.8	20.0	19.2	20.0
Trichlorofluoromethane	Ave	0.3791	0.5133	0.1000	27.1	20.0	35.4*	20.0
Pentane	Ave	4.861	5.326		43.8	40.0	9.6	20.0
Ethanol	QuaF		0.0589		808	800	1.0	50.0
Ethyl ether	Ave	0.1453	0.1383		19.0	20.0	-4.8	20.0
2-Methyl-1,3-butadiene	QuaF		0.1916		16.9	20.0	-15.3	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2222	0.2367		21.3	20.0	6.6	20.0
Acrolein	Ave	1.690	1.759		41.6	40.0	4.1	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2745	0.2943	0.1000	21.4	20.0	7.2	20.0
1,1-Dichloroethene	Ave	0.2267	0.2290	0.1000	20.2	20.0	1.0	20.0
Acetone	Ave	0.6191	0.5876	0.0500	94.9	100	-5.1	50.0
Iodomethane	Ave	0.3627	0.3554		19.6	20.0	-2.0	20.0
Carbon disulfide	Ave	0.8318	0.7052	0.1000	17.0	20.0	-15.2	50.0
Isopropyl alcohol	Ave	0.5088	0.5070		199	200	-0.4	50.0
Allyl chloride	Ave	0.1434	0.1312		18.3	20.0	-8.5	20.0
Cyclopentene	Ave	0.5642	0.5535		19.6	20.0	-1.9	20.0
Methyl acetate	Ave	2.111	2.286	0.1000	43.3	40.0	8.3	20.0
Acetonitrile	QuaF		0.9192		215	200	7.6	20.0
Methylene Chloride	Ave	0.2450	0.2656	0.1000	21.7	20.0	8.4	20.0
2-Methyl-2-propanol	Ave	1.042	1.042		200	200	-0.0	50.0
Methyl tert-butyl ether	Ave	0.5380	0.5073	0.1000	18.9	20.0	-5.7	20.0
trans-1,2-Dichloroethene	Ave	0.2577	0.2656	0.1000	20.6	20.0	3.1	20.0
Acrylonitrile	Ave	4.334	4.508		208	200	4.0	20.0
Hexane	Ave	0.3118	0.3036		19.5	20.0	-2.6	20.0
Isopropyl ether	Ave	0.6885	0.6959		20.2	20.0	1.1	20.0
1,1-Dichloroethane	Ave	0.4328	0.4664	0.2000	21.6	20.0	7.8	20.0
Vinyl acetate	QuaF		0.6916		30.4	40.0	-24.0*	20.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2276		19.2	20.0	-4.0	20.0
Tert-butyl ethyl ether	Ave	0.6409	0.5958		18.6	20.0	-7.0	20.0
2,2-Dichloropropane	Ave	0.1227	0.1298		21.2	20.0	5.8	20.0
cis-1,2-Dichloroethene	Ave	0.2832	0.2997	0.1000	21.2	20.0	5.8	20.0
2-Butanone (MEK)	Ave	0.3581	0.3197	0.0500	89.3	100	-10.7	50.0
Ethyl acetate	Ave	0.3883	0.3606		37.2	40.0	-7.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516016/3 Calibration Date: 05/02/2018 17:57

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66514.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.0875	0.0752		17.2	20.0	-14.1	20.0
Propionitrile	Ave	1.495	1.444		193	200	-3.4	20.0
Chlorobromomethane	Ave	0.1049	0.1086		20.7	20.0	3.6	20.0
Tetrahydrofuran	Ave	0.4189	0.3530		33.7	40.0	-15.7	20.0
Methacrylonitrile	Ave	0.0513	0.0511		199	200	-0.4	20.0
Chloroform	Ave	0.4245	0.4704	0.2000	22.2	20.0	10.8	20.0
Cyclohexane	Ave	0.4470	0.4271	0.1000	19.1	20.0	-4.5	50.0
1,1,1-Trichloroethane	Ave	0.3684	0.4264	0.1000	23.1	20.0	15.7	20.0
Carbon tetrachloride	Ave	0.2289	0.3006	0.1000	26.3	20.0	31.3*	20.0
1,1-Dichloropropene	Ave	0.3523	0.3569		20.3	20.0	1.3	20.0
2,2,4-Trimethylpentane	Ave	0.5727	0.5472		19.1	20.0	-4.5	20.0
Isobutyl alcohol	Ave	0.7415	0.7571		511	500	2.1	50.0
Benzene	Ave	1.451	1.409	0.5000	19.4	20.0	-2.9	20.0
Tert-amyl methyl ether	Ave	0.6402	0.5927		18.5	20.0	-7.4	20.0
Isopropyl acetate	Ave	0.0794	0.0771		19.4	20.0	-2.8	20.0
1,2-Dichloroethane	Ave	0.2525	0.2706	0.1000	21.4	20.0	7.2	20.0
n-Heptane	Ave	0.1419	0.1440		20.3	20.0	1.4	20.0
Trichloroethene	Ave	0.2700	0.2710	0.2000	20.1	20.0	0.4	20.0
n-Butanol	QuaF		0.1098		248	500	-50.4*	50.0
Methylcyclohexane	Ave	0.4656	0.4357	0.1000	18.7	20.0	-6.4	50.0
Ethyl acrylate	QuaF		0.4173		15.4	20.0	-23.0*	20.0
1,2-Dichloropropane	Ave	0.2493	0.2525	0.1000	20.3	20.0	1.3	20.0
Methyl methacrylate	Ave	0.0390	0.0356		36.5	40.0	-8.6	20.0
Dibromomethane	Ave	0.1157	0.1188		20.5	20.0	2.7	20.0
1,4-Dioxane	Ave	1.087	1.167		429	400	7.3	50.0
n-Propyl acetate	Ave	0.1458	0.1301		17.8	20.0	-10.8	20.0
Dichlorobromomethane	Ave	0.2757	0.2808	0.2000	20.4	20.0	1.8	20.0
2-Nitropropane	QuaF		1.972		59.6	40.0	49.1*	20.0
2-Chloroethyl vinyl ether	Ave	0.0929	0.0717		15.4	20.0	-22.8*	20.0
Epichlorohydrin	QuaF		0.2290		313	400	-21.9*	20.0
cis-1,3-Dichloropropene	Ave	0.4643	0.4102	0.2000	17.7	20.0	-11.7	50.0
4-Methyl-2-pentanone (MIBK)	Ave	2.709	2.536	0.0500	93.6	100	-6.4	50.0
Toluene	Ave	1.603	1.568	0.4000	19.6	20.0	-2.2	20.0
trans-1,3-Dichloropropene	Ave	0.3373	0.3006	0.1000	17.8	20.0	-10.9	50.0
Ethyl methacrylate	QuaF		0.1651		14.1	20.0	-29.4*	20.0
1,1,2-Trichloroethane	Ave	0.1916	0.1838	0.1000	19.2	20.0	-4.1	20.0
Tetrachloroethene	Ave	0.3140	0.3106	0.2000	19.8	20.0	-1.1	20.0
1,3-Dichloropropane	Ave	0.3917	0.3686		18.8	20.0	-5.9	20.0
2-Hexanone	QuaF		0.8615	0.0500	77.6	100	-22.4	50.0
n-Butyl acetate	Ave	0.2346	0.1946		16.6	20.0	-17.1	20.0
Chlorodibromomethane	Ave	0.1816	0.1689	0.1000	18.6	20.0	-7.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516110/2 Calibration Date: 05/03/2018 05:08

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66540.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.1994		17.9	20.0	-10.7	20.0
Dichlorodifluoromethane	Ave	0.1272	0.1492	0.1000	23.5	20.0	17.3	20.0
Chloromethane	Ave	2.070	2.436	0.1000	23.5	20.0	17.7	20.0
Vinyl chloride	Ave	0.2653	0.3142	0.1000	23.7	20.0	18.5	20.0
Butadiene	Ave	0.1921	0.2318		24.1	20.0	20.7*	20.0
Bromomethane	Ave	0.1877	0.2407	0.1000	25.6	20.0	28.2	50.0
Chloroethane	Ave	0.1353	0.1680	0.1000	24.8	20.0	24.2	50.0
Dichlorofluoromethane	Ave	0.4902	0.5192		21.2	20.0	5.9	20.0
Trichlorofluoromethane	Ave	0.3791	0.4654	0.1000	24.6	20.0	22.8*	20.0
Pentane	Ave	4.861	6.263		51.5	40.0	28.9*	20.0
Ethanol	QuaF		0.0512		703	800	-12.2	50.0
Ethyl ether	Ave	0.1453	0.1364		18.8	20.0	-6.1	20.0
2-Methyl-1,3-butadiene	QuaF		0.1892		16.7	20.0	-16.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2222	0.2365		21.3	20.0	6.5	20.0
Acrolein	Ave	1.690	1.959		46.3	40.0	15.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2745	0.2975	0.1000	21.7	20.0	8.4	20.0
1,1-Dichloroethene	Ave	0.2267	0.2230	0.1000	19.7	20.0	-1.6	20.0
Acetone	Ave	0.6191	0.6483	0.0500	105	100	4.7	50.0
Iodomethane	Ave	0.3627	0.3392		18.7	20.0	-6.5	20.0
Carbon disulfide	Ave	0.8318	0.6765	0.1000	16.3	20.0	-18.7	50.0
Isopropyl alcohol	Ave	0.5088	0.5153		203	200	1.3	50.0
Allyl chloride	Ave	0.1434	0.1348		18.8	20.0	-6.0	20.0
Cyclopentene	Ave	0.5642	0.5482		19.4	20.0	-2.8	20.0
Methyl acetate	Ave	2.111	2.270	0.1000	43.0	40.0	7.5	20.0
Acetonitrile	QuaF		1.030		241	200	20.6*	20.0
Methylene Chloride	Ave	0.2450	0.2456	0.1000	20.1	20.0	0.3	20.0
2-Methyl-2-propanol	Ave	1.042	1.041		200	200	-0.0	50.0
Methyl tert-butyl ether	Ave	0.5380	0.4740	0.1000	17.6	20.0	-11.9	20.0
trans-1,2-Dichloroethene	Ave	0.2577	0.2605	0.1000	20.2	20.0	1.1	20.0
Acrylonitrile	Ave	4.334	4.758		220	200	9.8	20.0
Hexane	Ave	0.3118	0.3206		20.6	20.0	2.8	20.0
Isopropyl ether	Ave	0.6885	0.6575		19.1	20.0	-4.5	20.0
1,1-Dichloroethane	Ave	0.4328	0.4457	0.2000	20.6	20.0	3.0	20.0
Vinyl acetate	QuaF		0.7182		31.6	40.0	-21.1*	20.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2155		18.2	20.0	-9.1	20.0
Tert-butyl ethyl ether	Ave	0.6409	0.5587		17.4	20.0	-12.8	20.0
2,2-Dichloropropane	Ave	0.1227	0.1292		21.0	20.0	5.2	20.0
cis-1,2-Dichloroethene	Ave	0.2832	0.2866	0.1000	20.2	20.0	1.2	20.0
2-Butanone (MEK)	Ave	0.3581	0.3524	0.0500	98.4	100	-1.6	50.0
Ethyl acetate	Ave	0.3883	0.3523		36.3	40.0	-9.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516110/2 Calibration Date: 05/03/2018 05:08

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N66540.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.0875	0.0723		16.5	20.0	-17.4	20.0
Propionitrile	Ave	1.495	1.533		205	200	2.5	20.0
Chlorobromomethane	Ave	0.1049	0.1043		19.9	20.0	-0.6	20.0
Tetrahydrofuran	Ave	0.4189	0.3990		38.1	40.0	-4.7	20.0
Methacrylonitrile	Ave	0.0513	0.0484		189	200	-5.7	20.0
Chloroform	Ave	0.4245	0.4501	0.2000	21.2	20.0	6.0	20.0
Cyclohexane	Ave	0.4470	0.4266	0.1000	19.1	20.0	-4.6	50.0
1,1,1-Trichloroethane	Ave	0.3684	0.4053	0.1000	22.0	20.0	10.0	20.0
Carbon tetrachloride	Ave	0.2289	0.2917	0.1000	25.5	20.0	27.4*	20.0
1,1-Dichloropropene	Ave	0.3523	0.3396		19.3	20.0	-3.6	20.0
Isobutyl alcohol	Ave	0.7415	0.8196		553	500	10.5	50.0
2,2,4-Trimethylpentane	Ave	0.5727	0.5704		19.9	20.0	-0.4	20.0
Benzene	Ave	1.451	1.460	0.5000	20.1	20.0	0.6	20.0
Tert-amyl methyl ether	Ave	0.6402	0.5570		17.4	20.0	-13.0	20.0
Isopropyl acetate	Ave	0.0794	0.0716		18.0	20.0	-9.8	20.0
1,2-Dichloroethane	Ave	0.2525	0.2606	0.1000	20.6	20.0	3.2	20.0
n-Heptane	Ave	0.1419	0.1488		21.0	20.0	4.8	20.0
Trichloroethene	Ave	0.2700	0.2585	0.2000	19.2	20.0	-4.2	20.0
n-Butanol	QuaF		0.1383		312	500	-37.6	50.0
Ethyl acrylate	QuaF		0.4208		15.5	20.0	-22.4*	20.0
Methylcyclohexane	Ave	0.4656	0.4342	0.1000	18.6	20.0	-6.8	50.0
1,2-Dichloropropane	Ave	0.2493	0.2379	0.1000	19.1	20.0	-4.6	20.0
Methyl methacrylate	Ave	0.0390	0.0333		34.2	40.0	-14.5	20.0
1,4-Dioxane	Ave	1.087	1.136		418	400	4.5	50.0
Dibromomethane	Ave	0.1157	0.1116		19.3	20.0	-3.6	20.0
n-Propyl acetate	Ave	0.1458	0.1241		17.0	20.0	-14.9	20.0
Dichlorobromomethane	Ave	0.2757	0.2652	0.2000	19.2	20.0	-3.8	20.0
2-Nitropropane	QuaF		1.944		58.8	40.0	47.0*	20.0
2-Chloroethyl vinyl ether	Ave	0.0929	0.0701		15.1	20.0	-24.6*	20.0
Epichlorohydrin	QuaF		0.2395		327	400	-18.3	20.0
cis-1,3-Dichloropropene	Ave	0.4643	0.4091	0.2000	17.6	20.0	-11.9	50.0
4-Methyl-2-pentanone (MIBK)	Ave	2.709	2.751	0.0500	102	100	1.5	50.0
Toluene	Ave	1.603	1.578	0.4000	19.7	20.0	-1.6	20.0
trans-1,3-Dichloropropene	Ave	0.3373	0.2962	0.1000	17.6	20.0	-12.2	50.0
Ethyl methacrylate	QuaF		0.1504		12.9	20.0	-35.7*	20.0
1,1,2-Trichloroethane	Ave	0.1916	0.1799	0.1000	18.8	20.0	-6.1	20.0
Tetrachloroethene	Ave	0.3140	0.3194	0.2000	20.3	20.0	1.7	20.0
1,3-Dichloropropane	Ave	0.3917	0.3624		18.5	20.0	-7.5	20.0
2-Hexanone	QuaF		0.9106	0.0500	82.0	100	-18.0	50.0
n-Butyl acetate	Ave	0.2346	0.1939		16.5	20.0	-17.3	20.0
Chlorodibromomethane	Ave	0.1816	0.1645	0.1000	18.1	20.0	-9.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516299/3 Calibration Date: 05/03/2018 18:01

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N665680.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.1805		16.2	20.0	-19.2	20.0
Dichlorodifluoromethane	Ave	0.1272	0.1383	0.1000	21.7	20.0	8.7	20.0
Chloromethane	Ave	2.070	2.369	0.1000	22.9	20.0	14.5	20.0
Vinyl chloride	Ave	0.2653	0.3087	0.1000	23.3	20.0	16.4	20.0
Butadiene	Ave	0.1921	0.2205		23.0	20.0	14.8	20.0
Bromomethane	Ave	0.1877	0.2416	0.1000	25.7	20.0	28.7	50.0
Chloroethane	Ave	0.1353	0.2049	0.1000	30.3	20.0	51.5*	50.0
Dichlorofluoromethane	Ave	0.4902	0.5487		22.4	20.0	11.9	20.0
Trichlorofluoromethane	Ave	0.3791	0.4648	0.1000	24.5	20.0	22.6*	20.0
Pentane	Ave	4.861	5.198		42.8	40.0	6.9	20.0
Ethanol	QuaF		0.0521		715	800	-10.7	50.0
Ethyl ether	Ave	0.1453	0.1350		18.6	20.0	-7.1	20.0
2-Methyl-1,3-butadiene	QuaF		0.1747		15.4	20.0	-22.8*	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2222	0.2248		20.2	20.0	1.2	20.0
Acrolein	Ave	1.690	1.679		39.7	40.0	-0.7	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2745	0.2795	0.1000	20.4	20.0	1.8	20.0
1,1-Dichloroethene	Ave	0.2267	0.2097	0.1000	18.5	20.0	-7.5	20.0
Acetone	Ave	0.6191	0.6202	0.0500	100	100	0.2	50.0
Iodomethane	Ave	0.3627	0.3426		18.9	20.0	-5.5	20.0
Carbon disulfide	Ave	0.8318	0.6769	0.1000	16.3	20.0	-18.6	50.0
Isopropyl alcohol	Ave	0.5088	0.5115		201	200	0.5	50.0
Allyl chloride	Ave	0.1434	0.1287		18.0	20.0	-10.2	20.0
Methyl acetate	Ave	2.111	2.216	0.1000	42.0	40.0	5.0	20.0
Cyclopentene	Ave	0.5642	0.5157		18.3	20.0	-8.6	20.0
Acetonitrile	QuaF		0.9651		226	200	13.0	20.0
Methylene Chloride	Ave	0.2450	0.2536	0.1000	20.7	20.0	3.5	20.0
2-Methyl-2-propanol	Ave	1.042	1.053		202	200	1.1	50.0
Methyl tert-butyl ether	Ave	0.5380	0.5010	0.1000	18.6	20.0	-6.9	20.0
trans-1,2-Dichloroethene	Ave	0.2577	0.2479	0.1000	19.2	20.0	-3.8	20.0
Acrylonitrile	Ave	4.334	4.771		220	200	10.1	20.0
Hexane	Ave	0.3118	0.2781		17.8	20.0	-10.8	20.0
Isopropyl ether	Ave	0.6885	0.6712		19.5	20.0	-2.5	20.0
1,1-Dichloroethane	Ave	0.4328	0.4350	0.2000	20.1	20.0	0.5	20.0
Vinyl acetate	QuaF		0.6872		30.2	40.0	-24.5*	20.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2079		17.5	20.0	-12.3	20.0
Tert-butyl ethyl ether	Ave	0.6409	0.5793		18.1	20.0	-9.6	20.0
2,2-Dichloropropane	Ave	0.1227	0.1278		20.8	20.0	4.1	20.0
cis-1,2-Dichloroethene	Ave	0.2832	0.2834	0.1000	20.0	20.0	0.0	20.0
2-Butanone (MEK)	Ave	0.3581	0.3261	0.0500	91.1	100	-8.9	50.0
Ethyl acetate	Ave	0.3883	0.3440		35.4	40.0	-11.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516299/3 Calibration Date: 05/03/2018 18:01

Instrument ID: CVOAMS11 Calib Start Date: 04/20/2018 01:05

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 03:48

Lab File ID: N665680.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.0875	0.0756		17.3	20.0	-13.7	20.0
Propionitrile	Ave	1.495	1.507		202	200	0.8	20.0
Chlorobromomethane	Ave	0.1049	0.1077		20.5	20.0	2.7	20.0
Tetrahydrofuran	Ave	0.4189	0.3896		37.2	40.0	-7.0	20.0
Methacrylonitrile	Ave	0.0513	0.0490		191	200	-4.5	20.0
Chloroform	Ave	0.4245	0.4432	0.2000	20.9	20.0	4.4	20.0
Cyclohexane	Ave	0.4470	0.3845	0.1000	17.2	20.0	-14.0	50.0
1,1,1-Trichloroethane	Ave	0.3684	0.3937	0.1000	21.4	20.0	6.9	20.0
Carbon tetrachloride	Ave	0.2289	0.2772	0.1000	24.2	20.0	21.1*	20.0
1,1-Dichloropropene	Ave	0.3523	0.3067		17.4	20.0	-13.0	20.0
2,2,4-Trimethylpentane	Ave	0.5727	0.4954		17.3	20.0	-13.5	20.0
Isobutyl alcohol	Ave	0.7415	0.7458		503	500	0.6	50.0
Benzene	Ave	1.451	1.441	0.5000	19.9	20.0	-0.7	20.0
Tert-amyl methyl ether	Ave	0.6402	0.5672		17.7	20.0	-11.4	20.0
Isopropyl acetate	Ave	0.0794	0.0732		18.4	20.0	-7.8	20.0
1,2-Dichloroethane	Ave	0.2525	0.2645	0.1000	21.0	20.0	4.8	20.0
n-Heptane	Ave	0.1419	0.1249		17.6	20.0	-12.0	20.0
Trichloroethene	Ave	0.2700	0.2445	0.2000	18.1	20.0	-9.5	20.0
n-Butanol	QuaF		0.1181		267	500	-46.6	50.0
Ethyl acrylate	QuaF		0.3952		14.6	20.0	-27.1*	20.0
Methylcyclohexane	Ave	0.4656	0.3879	0.1000	16.7	20.0	-16.7	50.0
1,2-Dichloropropane	Ave	0.2493	0.2339	0.1000	18.8	20.0	-6.1	20.0
Methyl methacrylate	Ave	0.0390	0.0330		33.8	40.0	-15.4	20.0
1,4-Dioxane	Ave	1.087	1.101		405	400	1.3	50.0
Dibromomethane	Ave	0.1157	0.1159		20.0	20.0	0.0	20.0
n-Propyl acetate	Ave	0.1458	0.1154		15.8	20.0	-20.8*	20.0
Dichlorobromomethane	Ave	0.2757	0.2615	0.2000	19.0	20.0	-5.2	20.0
2-Chloroethyl vinyl ether	Ave	0.0929	0.0705		15.2	20.0	-24.1*	20.0
Epichlorohydrin	QuaF		0.2262		309	400	-22.8*	20.0
cis-1,3-Dichloropropene	Ave	0.4643	0.4082	0.2000	17.6	20.0	-12.1	50.0
2-Nitropropane	QuaF		7.360		220	40.0	449.5*	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.709	2.671	0.0500	98.6	100	-1.4	50.0
Toluene	Ave	1.603	1.498	0.4000	18.7	20.0	-6.6	20.0
trans-1,3-Dichloropropene	Ave	0.3373	0.3046	0.1000	18.1	20.0	-9.7	50.0
Ethyl methacrylate	QuaF		0.1502		12.8	20.0	-35.8*	20.0
1,1,2-Trichloroethane	Ave	0.1916	0.1842	0.1000	19.2	20.0	-3.9	20.0
Tetrachloroethene	Ave	0.3140	0.3016	0.2000	19.2	20.0	-3.9	20.0
1,3-Dichloropropane	Ave	0.3917	0.3644		18.6	20.0	-7.0	20.0
2-Hexanone	QuaF		0.8636	0.0500	77.7	100	-22.3	50.0
n-Butyl acetate	Ave	0.2346	0.2072		17.7	20.0	-11.7	20.0
Chlorodibromomethane	Ave	0.1816	0.1690	0.1000	18.6	20.0	-6.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516291/2 Calibration Date: 05/03/2018 21:55

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1279	0.0686		10.7	20.0	-46.4*	20.0
Dichlorodifluoromethane	Ave	0.3854	0.3675	0.1000	19.1	20.0	-4.6	20.0
Chloromethane	Ave	0.3697	0.3512	0.1000	19.0	20.0	-5.0	20.0
Vinyl chloride	Ave	0.4154	0.3851	0.1000	18.5	20.0	-7.3	20.0
Butadiene	Ave	0.3665	0.3835		20.9	20.0	4.6	20.0
Bromomethane	Ave	1.229	0.8880	0.1000	14.5	20.0	-27.7	50.0
Chloroethane	Ave	0.2368	0.2164	0.1000	18.3	20.0	-8.6	50.0
Pentane	Ave	1.725	2.135		49.5	40.0	23.8*	20.0
Trichlorofluoromethane	Ave	0.4059	0.4416	0.1000	21.8	20.0	8.8	20.0
Dichlorofluoromethane	Ave	0.5414	0.5882		21.7	20.0	8.7	20.0
2-Methyl-1,3-butadiene	Ave	0.4037	0.4137		20.5	20.0	2.5	20.0
Ethyl ether	Ave	0.2720	0.2695		19.8	20.0	-0.9	20.0
Ethanol	Ave	0.0647	0.0693		857	800	7.1	50.0
1,1-Dichloroethene	Ave	0.2468	0.2385	0.1000	19.3	20.0	-3.3	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3655	0.3752		20.5	20.0	2.7	20.0
Carbon disulfide	Ave	0.9758	0.8778	0.1000	18.0	20.0	-10.0	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2550	0.2544	0.1000	19.9	20.0	-0.3	20.0
Iodomethane	QuaF		0.1053		6.83	20.0	-65.8*	20.0
Cyclopentene	Ave	0.7027	0.7022		20.0	20.0	-0.0	20.0
Acrolein	Ave	1.112	1.688		60.7	40.0	51.8*	50.0
Allyl chloride	Ave	0.1749	0.1689		19.3	20.0	-3.4	20.0
Isopropyl alcohol	Ave	0.8636	0.8050		186	200	-6.8	50.0
Methylene Chloride	Ave	0.3184	0.3106	0.1000	19.5	20.0	-2.4	20.0
Acetone	Ave	0.7304	0.6713	0.0500	91.9	100	-8.1	50.0
trans-1,2-Dichloroethene	Ave	0.2939	0.2742	0.1000	18.7	20.0	-6.7	20.0
Methyl acetate	Ave	0.2596	0.2445	0.1000	37.7	40.0	-5.8	20.0
Hexane	Ave	0.0782	0.0817		20.9	20.0	4.5	20.0
Methyl tert-butyl ether	Ave	0.9326	0.8755	0.1000	18.8	20.0	-6.1	20.0
2-Methyl-2-propanol	Ave	1.246	1.205		193	200	-3.3	50.0
Acetonitrile	Ave	1.511	1.843		244	200	22.0*	20.0
Isopropyl ether	Ave	1.207	1.240		20.5	20.0	2.7	20.0
2-Chloro-1,3-butadiene	Ave	0.2668	0.2612		19.6	20.0	-2.1	20.0
1,1-Dichloroethane	Ave	0.5753	0.5864	0.2000	20.4	20.0	1.9	20.0
Acrylonitrile	Ave	0.1373	0.1264		184	200	-7.9	20.0
Tert-butyl ethyl ether	Ave	1.080	1.056		19.6	20.0	-2.2	20.0
Vinyl acetate	Ave	0.8169	0.8107		39.7	40.0	-0.8	20.0
cis-1,2-Dichloroethene	Ave	0.3394	0.3310	0.1000	19.5	20.0	-2.5	20.0
2,2-Dichloropropane	Ave	0.4923	0.4672		19.0	20.0	-5.1	20.0
Chlorobromomethane	Ave	0.1494	0.1550		20.7	20.0	3.7	20.0
Cyclohexane	Ave	0.5987	0.6123	0.1000	20.5	20.0	2.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516291/2 Calibration Date: 05/03/2018 21:55

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Hexanone	Ave	1.771	1.750	0.0500	98.8	100	-1.2	50.0
Chlorobenzene	Ave	1.044	0.998	0.5000	19.1	20.0	-4.4	20.0
Ethylbenzene	Ave	0.5765	0.5565	0.1000	19.3	20.0	-3.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3429	0.3090		18.0	20.0	-9.9	20.0
m-Xylene & p-Xylene	Ave	0.6974	0.6701	0.1000	19.2	20.0	-3.9	20.0
o-Xylene	Ave	0.6817	0.6438	0.3000	18.9	20.0	-5.6	20.0
Bromoform	Ave	0.2257	0.1745	0.1000	15.5	20.0	-22.7*	20.0
Styrene	Ave	1.142	1.101	0.3000	19.3	20.0	-3.6	20.0
n-Butyl acrylate	Ave	0.2978	0.2445		16.4	20.0	-17.9	20.0
Isopropylbenzene	Ave	1.838	1.757	0.1000	19.1	20.0	-4.4	20.0
Amyl acetate (mixed isomers)	Ave	1.561	1.197		15.3	20.0	-23.3*	20.0
Bromobenzene	Ave	0.8145	0.7584		18.6	20.0	-6.9	20.0
N-Propylbenzene	Ave	4.204	3.860		18.4	20.0	-8.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8807	0.7146	0.3000	16.2	20.0	-18.9	20.0
2-Chlorotoluene	Ave	2.861	2.620		18.3	20.0	-8.5	20.0
4-Ethyltoluene	Ave	3.416	3.190		18.7	20.0	-6.6	20.0
1,2,3-Trichloropropane	Ave	0.2510	0.2106		16.8	20.0	-16.1	20.0
1,3,5-Trimethylbenzene	Ave	2.917	2.687		18.4	20.0	-7.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3114	0.1944		12.5	20.0	-37.6*	20.0
4-Chlorotoluene	Ave	2.639	2.396		18.2	20.0	-9.2	20.0
tert-Butylbenzene	Ave	2.401	2.215		18.4	20.0	-7.8	20.0
1,2,4-Trimethylbenzene	Ave	2.900	2.711		18.7	20.0	-6.5	20.0
Butyl Methacrylate	Ave	1.025	0.8338		16.3	20.0	-18.6	20.0
sec-Butylbenzene	Ave	3.739	3.412		18.3	20.0	-8.7	20.0
1,3-Dichlorobenzene	Ave	1.543	1.460	0.6000	18.9	20.0	-5.4	20.0
4-Isopropyltoluene	Ave	3.103	2.885		18.6	20.0	-7.0	20.0
1,4-Dichlorobenzene	Ave	1.671	1.510	0.5000	18.1	20.0	-9.7	20.0
1,2,3-Trimethylbenzene	Ave	3.053	2.801		18.3	20.0	-8.3	20.0
Indan	Ave	2.951	2.753		18.7	20.0	-6.7	20.0
Benzyl chloride	Ave	0.3228	0.2097		13.0	20.0	-35.0	50.0
p-Diethylbenzene	Ave	1.650	1.544		18.7	20.0	-6.4	20.0
n-Butylbenzene	Ave	2.968	2.740		18.5	20.0	-7.7	20.0
1,2-Dichlorobenzene	Ave	1.473	1.402	0.4000	19.0	20.0	-4.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.673	2.526		18.9	20.0	-5.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1594	0.1187	0.0500	14.9	20.0	-25.5	50.0
1,3,5-Trichlorobenzene	Ave	1.108	1.086		19.6	20.0	-1.9	20.0
1,2,4-Trichlorobenzene	Ave	0.9778	0.9237	0.2000	18.9	20.0	-5.5	20.0
Hexachlorobutadiene	Ave	0.4797	0.4792		20.0	20.0	-0.1	20.0
Naphthalene	Ave	2.207	1.680		15.2	20.0	-23.9	50.0
1,2,3-Trichlorobenzene	Ave	0.8841	0.7954		18.0	20.0	-10.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2648	0.2862		54.0	50.0	8.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516419/2 Calibration Date: 05/04/2018 09:38

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44729.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Hexanone	Ave	1.771	1.815	0.0500	102	100	2.5	50.0
Chlorobenzene	Ave	1.044	1.067	0.5000	20.4	20.0	2.2	20.0
Ethylbenzene	Ave	0.5765	0.5874	0.1000	20.4	20.0	1.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3429	0.3251		19.0	20.0	-5.2	20.0
m-Xylene & p-Xylene	Ave	0.6974	0.7077	0.1000	20.3	20.0	1.5	20.0
o-Xylene	Ave	0.6817	0.6800	0.3000	19.9	20.0	-0.3	20.0
Bromoform	Ave	0.2257	0.1877	0.1000	16.6	20.0	-16.8	20.0
Styrene	Ave	1.142	1.143	0.3000	20.0	20.0	0.0	20.0
n-Butyl acrylate	Ave	0.2978	0.2466		16.6	20.0	-17.2	20.0
Isopropylbenzene	Ave	1.838	1.827	0.1000	19.9	20.0	-0.6	20.0
Amyl acetate (mixed isomers)	Ave	1.561	1.235		15.8	20.0	-20.9*	20.0
Bromobenzene	Ave	0.8145	0.7871		19.3	20.0	-3.4	20.0
N-Propylbenzene	Ave	4.204	3.868		18.4	20.0	-8.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8807	0.7548	0.3000	17.1	20.0	-14.3	20.0
2-Chlorotoluene	Ave	2.861	2.697		18.9	20.0	-5.7	20.0
4-Ethyltoluene	Ave	3.416	3.237		18.9	20.0	-5.3	20.0
1,2,3-Trichloropropane	Ave	0.2510	0.2326		18.5	20.0	-7.3	20.0
1,3,5-Trimethylbenzene	Ave	2.917	2.715		18.6	20.0	-6.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3114	0.2101		13.5	20.0	-32.5*	20.0
4-Chlorotoluene	Ave	2.639	2.466		18.7	20.0	-6.6	20.0
tert-Butylbenzene	Ave	2.401	2.243		18.7	20.0	-6.6	20.0
1,2,4-Trimethylbenzene	Ave	2.900	2.767		19.1	20.0	-4.6	20.0
Butyl Methacrylate	Ave	1.025	0.8606		16.8	20.0	-16.0	20.0
sec-Butylbenzene	Ave	3.739	3.396		18.2	20.0	-9.2	20.0
1,3-Dichlorobenzene	Ave	1.543	1.507	0.6000	19.5	20.0	-2.4	20.0
4-Isopropyltoluene	Ave	3.103	2.902		18.7	20.0	-6.5	20.0
1,4-Dichlorobenzene	Ave	1.671	1.568	0.5000	18.8	20.0	-6.2	20.0
1,2,3-Trimethylbenzene	Ave	3.053	2.893		19.0	20.0	-5.2	20.0
Indan	Ave	2.951	2.844		19.3	20.0	-3.6	20.0
Benzyl chloride	Ave	0.3228	0.2114		13.1	20.0	-34.5	50.0
p-Diethylbenzene	Ave	1.650	1.537		18.6	20.0	-6.9	20.0
n-Butylbenzene	Ave	2.968	2.758		18.6	20.0	-7.1	20.0
1,2-Dichlorobenzene	Ave	1.473	1.447	0.4000	19.6	20.0	-1.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.673	2.588		19.4	20.0	-3.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1594	0.1233	0.0500	15.5	20.0	-22.7	50.0
1,3,5-Trichlorobenzene	Ave	1.108	1.112		20.1	20.0	0.4	20.0
1,2,4-Trichlorobenzene	Ave	0.9778	0.9534	0.2000	19.5	20.0	-2.5	20.0
Hexachlorobutadiene	Ave	0.4797	0.4703		19.6	20.0	-1.9	20.0
Naphthalene	Ave	2.207	1.776		16.1	20.0	-19.5	50.0
1,2,3-Trichlorobenzene	Ave	0.8841	0.8247		18.7	20.0	-6.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2648	0.2868		54.1	50.0	8.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516607/3 Calibration Date: 05/04/2018 22:58

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44759.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1279	0.1103		17.2	20.0	-13.8	20.0
Dichlorodifluoromethane	Ave	0.3854	0.4201	0.1000	21.8	20.0	9.0	20.0
Chloromethane	Ave	0.3697	0.3609	0.1000	19.5	20.0	-2.4	20.0
Vinyl chloride	Ave	0.4154	0.4109	0.1000	19.8	20.0	-1.1	20.0
Butadiene	Ave	0.3665	0.4017		21.9	20.0	9.6	20.0
Bromomethane	Ave	1.229	0.9562	0.1000	15.6	20.0	-22.2	50.0
Chloroethane	Ave	0.2368	0.2283	0.1000	19.3	20.0	-3.6	50.0
Pentane	Ave	1.725	1.974		45.8	40.0	14.4	20.0
Trichlorofluoromethane	Ave	0.4059	0.4502	0.1000	22.2	20.0	10.9	20.0
Dichlorofluoromethane	Ave	0.5414	0.5940		21.9	20.0	9.7	20.0
2-Methyl-1,3-butadiene	Ave	0.4037	0.4240		21.0	20.0	5.0	20.0
Ethyl ether	Ave	0.2720	0.2704		19.9	20.0	-0.6	20.0
Ethanol	Ave	0.0647	0.0709		876	800	9.5	50.0
1,1-Dichloroethene	Ave	0.2468	0.2420	0.1000	19.6	20.0	-1.9	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3655	0.3781		20.7	20.0	3.4	20.0
Carbon disulfide	Ave	0.9758	0.8696	0.1000	17.8	20.0	-10.9	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2550	0.2593	0.1000	20.3	20.0	1.7	20.0
Iodomethane	QuaF		0.1731		11.2	20.0	-43.8*	20.0
Cyclopentene	Ave	0.7027	0.7265		20.7	20.0	3.4	20.0
Acrolein	Ave	1.112	1.976		71.1	40.0	77.7*	50.0
Allyl chloride	Ave	0.1749	0.1668		19.1	20.0	-4.6	20.0
Isopropyl alcohol	Ave	0.8636	0.8089		187	200	-6.3	50.0
Methylene Chloride	Ave	0.3184	0.3140	0.1000	19.7	20.0	-1.4	20.0
Acetone	Ave	0.7304	0.6708	0.0500	91.8	100	-8.2	50.0
trans-1,2-Dichloroethene	Ave	0.2939	0.2745	0.1000	18.7	20.0	-6.6	20.0
Methyl acetate	Ave	0.2596	0.2570	0.1000	39.6	40.0	-1.0	20.0
Hexane	Ave	0.0782	0.0789		20.2	20.0	1.0	20.0
Methyl tert-butyl ether	Ave	0.9326	0.9075	0.1000	19.5	20.0	-2.7	20.0
2-Methyl-2-propanol	Ave	1.246	1.172		188	200	-5.9	50.0
Acetonitrile	Ave	1.511	1.703		225	200	12.7	20.0
Isopropyl ether	Ave	1.207	1.243		20.6	20.0	3.0	20.0
2-Chloro-1,3-butadiene	Ave	0.2668	0.2617		19.6	20.0	-1.9	20.0
1,1-Dichloroethane	Ave	0.5753	0.5942	0.2000	20.7	20.0	3.3	20.0
Acrylonitrile	Ave	0.1373	0.1364		199	200	-0.6	20.0
Tert-butyl ethyl ether	Ave	1.080	1.056		19.6	20.0	-2.1	20.0
Vinyl acetate	Ave	0.8169	0.8299		40.6	40.0	1.6	20.0
cis-1,2-Dichloroethene	Ave	0.3394	0.3411	0.1000	20.1	20.0	0.5	20.0
2,2-Dichloropropane	Ave	0.4923	0.4611		18.7	20.0	-6.3	20.0
Chlorobromomethane	Ave	0.1494	0.1538		20.6	20.0	2.9	20.0
Cyclohexane	Ave	0.5987	0.6157	0.1000	20.6	20.0	2.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Lab Sample ID: CCVIS 460-516607/3 Calibration Date: 05/04/2018 22:58

Instrument ID: CVOAMS13 Calib Start Date: 04/20/2018 02:35

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/20/2018 07:16

Lab File ID: P44759.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Hexanone	Ave	1.771	1.784	0.0500	101	100	0.7	50.0
Chlorobenzene	Ave	1.044	1.006	0.5000	19.3	20.0	-3.6	20.0
Ethylbenzene	Ave	0.5765	0.5566	0.1000	19.3	20.0	-3.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3429	0.3112		18.1	20.0	-9.3	20.0
m-Xylene & p-Xylene	Ave	0.6974	0.6737	0.1000	19.3	20.0	-3.4	20.0
o-Xylene	Ave	0.6817	0.6587	0.3000	19.3	20.0	-3.4	20.0
Bromoform	Ave	0.2257	0.1828	0.1000	16.2	20.0	-19.0	20.0
Styrene	Ave	1.142	1.110	0.3000	19.4	20.0	-2.9	20.0
n-Butyl acrylate	Ave	0.2978	0.2533		17.0	20.0	-14.9	20.0
Isopropylbenzene	Ave	1.838	1.759	0.1000	19.1	20.0	-4.3	20.0
Amyl acetate (mixed isomers)	Ave	1.561	1.258		16.1	20.0	-19.4	20.0
Bromobenzene	Ave	0.8145	0.7544		18.5	20.0	-7.4	20.0
N-Propylbenzene	Ave	4.204	3.789		18.0	20.0	-9.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8807	0.7467	0.3000	17.0	20.0	-15.2	20.0
2-Chlorotoluene	Ave	2.861	2.590		18.1	20.0	-9.5	20.0
4-Ethyltoluene	Ave	3.416	3.137		18.4	20.0	-8.2	20.0
1,2,3-Trichloropropane	Ave	0.2510	0.2307		18.4	20.0	-8.1	20.0
1,3,5-Trimethylbenzene	Ave	2.917	2.620		18.0	20.0	-10.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3114	0.2086		13.4	20.0	-33.0*	20.0
4-Chlorotoluene	Ave	2.639	2.354		17.8	20.0	-10.8	20.0
tert-Butylbenzene	Ave	2.401	2.202		18.3	20.0	-8.3	20.0
1,2,4-Trimethylbenzene	Ave	2.900	2.640		18.2	20.0	-9.0	20.0
Butyl Methacrylate	Ave	1.025	0.8454		16.5	20.0	-17.5	20.0
sec-Butylbenzene	Ave	3.739	3.379		18.1	20.0	-9.6	20.0
1,3-Dichlorobenzene	Ave	1.543	1.455	0.6000	18.9	20.0	-5.7	20.0
4-Isopropyltoluene	Ave	3.103	2.836		18.3	20.0	-8.6	20.0
1,4-Dichlorobenzene	Ave	1.671	1.514	0.5000	18.1	20.0	-9.4	20.0
1,2,3-Trimethylbenzene	Ave	3.053	2.788		18.3	20.0	-8.7	20.0
Indan	Ave	2.951	2.694		18.3	20.0	-8.7	20.0
Benzyl chloride	Ave	0.3228	0.2185		13.5	20.0	-32.3	50.0
p-Diethylbenzene	Ave	1.650	1.503		18.2	20.0	-8.9	20.0
n-Butylbenzene	Ave	2.968	2.669		18.0	20.0	-10.1	20.0
1,2-Dichlorobenzene	Ave	1.473	1.416	0.4000	19.2	20.0	-3.9	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.673	2.492		18.6	20.0	-6.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1594	0.1255	0.0500	15.7	20.0	-21.3	50.0
1,3,5-Trichlorobenzene	Ave	1.108	1.100		19.9	20.0	-0.7	20.0
1,2,4-Trichlorobenzene	Ave	0.9778	0.9175	0.2000	18.8	20.0	-6.2	20.0
Hexachlorobutadiene	Ave	0.4797	0.4869		20.3	20.0	1.5	20.0
Naphthalene	Ave	2.207	1.921		17.4	20.0	-12.9	50.0
1,2,3-Trichlorobenzene	Ave	0.8841	0.8366		18.9	20.0	-5.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2648	0.2826		53.4	50.0	6.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Lab Sample ID: CCVIS 460-515499/2 Calibration Date: 05/01/2018 06:28

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82844.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.2952		13.1	20.0	-34.4*	20.0
Dichlorodifluoromethane	QuaF		0.6894	0.1000	14.8	20.0	-26.2*	20.0
Chloromethane	Ave	0.6221	0.6821	0.1000	21.9	20.0	9.6	20.0
Butadiene	Ave	0.4762	0.5352		22.5	20.0	12.4	20.0
Vinyl chloride	Ave	0.6218	0.7070	0.1000	22.7	20.0	13.7	20.0
Bromomethane	Ave	0.5174	0.5439	0.1000	21.0	20.0	5.1	50.0
Chloroethane	Ave	0.3136	0.3510	0.1000	22.4	20.0	11.9	50.0
Dichlorofluoromethane	Ave	0.9152	1.051		23.0	20.0	14.9	20.0
Trichlorofluoromethane	Ave	0.8127	0.8193	0.1000	20.2	20.0	0.8	20.0
Pentane	Ave	1.821	1.668		36.6	40.0	-8.4	20.0
Ethanol	Ave	0.0627	0.0632		806	800	0.8	50.0
Ethyl ether	Ave	0.2723	0.2825		20.7	20.0	3.7	20.0
2-Methyl-1,3-butadiene	Ave	0.3126	0.3456		22.1	20.0	10.6	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.4021	0.3870		19.2	20.0	-3.8	20.0
Acrolein	Ave	1.482	1.525		309	300	2.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin2		0.4856	0.1000	18.3	20.0	-8.4	20.0
1,1-Dichloroethene	Ave	0.4101	0.3958	0.1000	19.3	20.0	-3.5	20.0
Acetone	Ave	1.229	1.145	0.0500	93.2	100	-6.8	50.0
Iodomethane	Ave	0.8745	0.7999		18.3	20.0	-8.5	20.0
Isopropyl alcohol	Ave	0.7696	0.7481		194	200	-2.8	50.0
Carbon disulfide	Ave	1.530	1.560	0.1000	20.4	20.0	2.0	50.0
Allyl chloride	Ave	0.2426	0.2439		20.1	20.0	0.5	20.0
Methyl acetate	Ave	6.750	6.574	0.1000	39.0	40.0	-2.6	20.0
Cyclopentene	Ave	0.9044	0.9832		21.7	20.0	8.7	20.0
Acetonitrile	Ave	1.663	1.551		187	200	-6.7	20.0
Methylene Chloride	Ave	0.4679	0.4569	0.1000	19.5	20.0	-2.3	20.0
2-Methyl-2-propanol	Ave	1.502	1.276		170	200	-15.0	50.0
Methyl tert-butyl ether	Ave	1.145	1.120	0.1000	19.6	20.0	-2.2	20.0
trans-1,2-Dichloroethene	Ave	0.4467	0.4204	0.1000	18.8	20.0	-5.9	20.0
Acrylonitrile	Ave	0.1235	0.1297		210	200	5.0	20.0
Hexane	Ave	0.3445	0.3978		23.1	20.0	15.5	20.0
Isopropyl ether	Ave	1.211	1.359		22.4	20.0	12.2	20.0
1,1-Dichloroethane	Ave	0.7096	0.7396	0.2000	20.8	20.0	4.2	20.0
Vinyl acetate	Ave	1.788	1.552		34.7	40.0	-13.2	20.0
2-Chloro-1,3-butadiene	Ave	0.3606	0.3591		19.9	20.0	-0.4	20.0
Tert-butyl ethyl ether	Ave	1.168	1.215		20.8	20.0	4.0	20.0
2,2-Dichloropropane	Ave	0.2280	0.2196		19.3	20.0	-3.7	20.0
cis-1,2-Dichloroethene	Ave	0.4980	0.4793	0.1000	19.2	20.0	-3.8	20.0
Ethyl acetate	Ave	0.4169	0.3364		32.3	40.0	-19.3	20.0
2-Butanone (MEK)	Ave	0.4882	0.4136	0.0500	84.7	100	-15.3	50.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-154781-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-516607/10

Matrix: Water | Lab File ID: P44766.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/05/2018 01:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 516607 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.080
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.34
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.22
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.33
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	8.7
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.2
591-78-6	2-Hexanone	5.0	U	5.0	0.72
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.63
67-64-1	Acetone	1.28	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.090
75-25-2	Bromoform	1.0	U	1.0	0.18
74-83-9	Bromomethane	1.0	U	1.0	0.18
75-15-0	Carbon disulfide	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.24
74-97-5	Chlorobromomethane	1.0	U	1.0	0.30
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.22
75-00-3	Chloroethane	1.0	U	1.0	0.37
67-66-3	Chloroform	1.0	U	1.0	0.22
74-87-3	Chloromethane	1.0	U	1.0	0.22
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.16
110-82-7	Cyclohexane	1.0	U	1.0	0.26
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.14

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N665681.D

Lab ID: LCS 460-516299/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	22.7	113	75-125	
1,1,2,2-Tetrachloroethane	20.0	19.2	96	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.9	109	59-150	
1,1,2-Trichloroethane	20.0	20.6	103	78-120	
1,1-Dichloroethane	20.0	20.8	104	77-123	
1,1-Dichloroethene	20.0	19.4	97	74-123	
1,2,3-Trichlorobenzene	20.0	20.9	104	78-131	
1,2,4-Trichlorobenzene	20.0	19.1	96	80-124	
1,2-Dibromo-3-Chloropropane	20.0	18.6	93	55-134	
1,2-Dichlorobenzene	20.0	20.3	101	80-120	
1,2-Dichloroethane	20.0	21.1	105	76-121	
1,2-Dichloropropane	20.0	19.3	97	77-123	
1,3-Dichlorobenzene	20.0	21.7	109	80-120	
1,4-Dichlorobenzene	20.0	20.2	101	80-120	
1,4-Dioxane	400	375	94	10-150	
2-Butanone (MEK)	100	93.3	93	64-120	
2-Hexanone	100	76.6	77	71-125	
4-Methyl-2-pentanone (MIBK)	100	98.8	99	78-124	
Acetone	100	96.9	97	39-150	
Benzene	20.0	20.4	102	77-121	
Bromoform	20.0	18.5	92	53-120	
Bromomethane	20.0	27.9	139	10-150	
Carbon disulfide	20.0	16.8	84	69-133	
Carbon tetrachloride	20.0	25.7	129	70-132	
Chlorobenzene	20.0	19.7	99	80-120	
Chlorobromomethane	20.0	20.5	102	77-127	
Chlorodibromomethane	20.0	19.0	95	73-120	
Chloroethane	20.0	34.1	170	52-150	*
Chloroform	20.0	21.2	106	80-120	
Chloromethane	20.0	24.8	124	56-131	
cis-1,2-Dichloroethene	20.0	20.9	105	80-120	
cis-1,3-Dichloropropene	20.0	18.4	92	77-120	
Cyclohexane	20.0	18.7	93	56-150	
Dichlorobromomethane	20.0	19.8	99	76-120	
Dichlorodifluoromethane	20.0	23.4	117	50-131	
Ethylbenzene	20.0	19.5	97	80-120	
Ethylene Dibromide	20.0	19.3	97	80-120	
Isopropylbenzene	20.0	20.5	102	80-123	
Methyl acetate	40.0	45.6	114	66-144	
Methyl tert-butyl ether	20.0	18.9	95	79-122	
Methylcyclohexane	20.0	18.6	93	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154849-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82845.D

Lab ID: LCS 460-515499/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0197	99	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0196	98	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0186	93	78-132	
1,1,2-Trichloroethane	0.0200	0.0186	93	76-124	
1,1-Dichloroethane	0.0200	0.0215	108	80-124	
1,1-Dichloroethene	0.0200	0.0198	99	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0187	93	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0182	91	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0172	86	65-129	
1,2-Dichlorobenzene	0.0200	0.0184	92	80-121	
1,2-Dichloroethane	0.0200	0.0201	100	68-120	
1,2-Dichloropropane	0.0200	0.0208	104	77-124	
1,3-Dichlorobenzene	0.0200	0.0180	90	79-124	
1,4-Dichlorobenzene	0.0200	0.0180	90	79-121	
1,4-Dioxane	0.400	0.381	95	67-150	
2-Butanone (MEK)	0.100	0.0849	85	61-140	
2-Hexanone	0.100	0.0944	94	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0986	99	80-120	
Acetone	0.100	0.0911	91	75-120	
Benzene	0.0200	0.0201	100	75-127	
Bromoform	0.0200	0.0170	85	19-150	
Bromomethane	0.0200	0.0196	98	59-136	
Carbon disulfide	0.0200	0.0206	103	74-130	
Carbon tetrachloride	0.0200	0.0189	95	77-138	
Chlorobenzene	0.0200	0.0183	92	80-120	
Chlorobromomethane	0.0200	0.0188	94	80-125	
Chlorodibromomethane	0.0200	0.0174	87	67-143	
Chloroethane	0.0200	0.0216	108	50-139	
Chloroform	0.0200	0.0204	102	80-122	
Chloromethane	0.0200	0.0208	104	66-128	
cis-1,2-Dichloroethene	0.0200	0.0190	95	80-123	
cis-1,3-Dichloropropene	0.0200	0.0191	96	75-124	
Cyclohexane	0.0200	0.0193	97	67-135	
Dichlorobromomethane	0.0200	0.0194	97	76-129	
Dichlorodifluoromethane	0.0200	0.0139	70	72-127	*
Ethylbenzene	0.0200	0.0186	93	79-124	
Ethylene Dibromide	0.0200	0.0183	91	80-122	
Isopropylbenzene	0.0200	0.0188	94	80-125	
Methyl acetate	0.0400	0.0383	96	73-123	
Methyl tert-butyl ether	0.0200	0.0198	99	80-120	
Methylcyclohexane	0.0200	0.0190	95	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66537.D

Lab ID: 460-154781-1 MS Client ID: GC-MW-107(WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	1.0 U	23.4	117	75-125	
1,1,2,2-Tetrachloroethane	20.0	1.0 U	19.3	97	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	1.0 U	21.9	109	59-150	
1,1,2-Trichloroethane	20.0	1.0 U	19.7	99	78-120	
1,1-Dichloroethane	20.0	1.0 U	21.9	109	77-123	
1,1-Dichloroethene	20.0	1.0 U	20.3	101	74-123	
1,2,3-Trichlorobenzene	20.0	1.0 U	18.1	90	78-131	
1,2,4-Trichlorobenzene	20.0	1.0 U	17.7	88	80-124	
1,2-Dibromo-3-Chloropropane	20.0	1.0 U	18.4	92	55-134	
1,2-Dichlorobenzene	20.0	1.0 U	20.9	105	80-120	
1,2-Dichloroethane	20.0	1.0 U	22.5	113	76-121	
1,2-Dichloropropane	20.0	1.0 U	20.3	101	77-123	
1,3-Dichlorobenzene	20.0	1.0 U	21.4	107	80-120	
1,4-Dichlorobenzene	20.0	1.0 U	20.9	104	80-120	
1,4-Dioxane	400	50 U	340	85	10-150	
2-Butanone (MEK)	100	5.0 U	90.2	90	64-120	
2-Hexanone	100	5.0 U	77.1	77	71-125	
4-Methyl-2-pentanone (MIBK)	100	5.0 U	95.2	95	78-124	
Acetone	100	5.0 U	101	101	39-150	
Benzene	20.0	1.0 U	20.3	101	77-121	
Bromoform	20.0	1.0 U	16.2	81	53-120	
Bromomethane	20.0	1.0 U	35.0	175	10-150	*
Carbon disulfide	20.0	1.0 U	15.2	76	69-133	
Carbon tetrachloride	20.0	1.0 U	26.7	133	70-132	*
Chlorobenzene	20.0	1.0 U	20.6	103	80-120	
Chlorobromomethane	20.0	1.0 U	21.2	106	77-127	
Chlorodibromomethane	20.0	1.0 U	17.8	89	73-120	
Chloroethane	20.0	1.0 U	30.7	154	52-150	*
Chloroform	20.0	1.0 U	22.9	115	80-120	
Chloromethane	20.0	1.0 U	26.0	130	56-131	
cis-1,2-Dichloroethene	20.0	1.0 U	21.1	106	80-120	
cis-1,3-Dichloropropene	20.0	1.0 U	15.5	78	77-120	
Cyclohexane	20.0	1.0 U	19.1	95	56-150	
Dichlorobromomethane	20.0	1.0 U	20.4	102	76-120	
Dichlorodifluoromethane	20.0	1.0 U	23.8	119	50-131	
Ethylbenzene	20.0	1.0 U	19.4	97	80-120	
Ethylene Dibromide	20.0	1.0 U	19.3	97	80-120	
Isopropylbenzene	20.0	1.0 U	20.2	101	80-123	
Methyl acetate	40.0	5.0 U	42.4	106	66-144	
Methyl tert-butyl ether	20.0	1.0 U	18.4	92	79-122	
Methylcyclohexane	20.0	1.0 U	18.2	91	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66537.D

Lab ID: 460-154781-1 MS Client ID: GC-MW-107(WG) MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	20.0	1.0 U	21.9	110	77-123	
m-Xylene & p-Xylene	20.0	1.0 U	17.8	89	80-120	
o-Xylene	20.0	1.0 U	18.5	92	80-120	
Styrene	20.0	1.0 U	19.3	96	80-120	
Tetrachloroethene	20.0	8.8	29.6	104	78-122	
Toluene	20.0	1.0 U	19.5	98	80-120	
trans-1,2-Dichloroethene	20.0	1.0 U	21.7	108	79-120	
trans-1,3-Dichloropropene	20.0	1.0 U	15.6	78	76-120	
Trichloroethene	20.0	1.0 U	20.0	100	77-120	
Trichlorofluoromethane	20.0	1.0 U	26.5	132	71-143	
Vinyl chloride	20.0	1.0 U	27.6	138	62-138	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-154781-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N66538.D

Lab ID: 460-154781-1 MSD Client ID: GC-MW-107(WG) MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	22.4	112	5	30	75-125	
1,1,2,2-Tetrachloroethane	20.0	19.9	100	3	30	74-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.5	102	6	30	59-150	
1,1,2-Trichloroethane	20.0	19.0	95	4	30	78-120	
1,1-Dichloroethane	20.0	20.4	102	7	30	77-123	
1,1-Dichloroethene	20.0	19.0	95	6	30	74-123	
1,2,3-Trichlorobenzene	20.0	19.6	98	8	30	78-131	
1,2,4-Trichlorobenzene	20.0	18.6	93	5	30	80-124	
1,2-Dibromo-3-Chloropropane	20.0	17.6	88	4	30	55-134	
1,2-Dichlorobenzene	20.0	20.6	103	2	30	80-120	
1,2-Dichloroethane	20.0	21.1	105	7	30	76-121	
1,2-Dichloropropane	20.0	19.2	96	6	30	77-123	
1,3-Dichlorobenzene	20.0	20.5	102	4	30	80-120	
1,4-Dichlorobenzene	20.0	19.7	98	6	30	80-120	
1,4-Dioxane	400	382	96	12	30	10-150	
2-Butanone (MEK)	100	84.7	85	6	30	64-120	
2-Hexanone	100	75.6	76	2	30	71-125	
4-Methyl-2-pentanone (MIBK)	100	95.3	95	0	30	78-124	
Acetone	100	97.5	98	3	30	39-150	
Benzene	20.0	18.8	94	8	30	77-121	
Bromoform	20.0	15.9	80	2	30	53-120	
Bromomethane	20.0	32.6	163	7	30	10-150	*
Carbon disulfide	20.0	14.3	72	6	30	69-133	
Carbon tetrachloride	20.0	24.6	123	8	30	70-132	
Chlorobenzene	20.0	19.0	95	8	30	80-120	
Chlorobromomethane	20.0	20.1	100	5	30	77-127	
Chlorodibromomethane	20.0	17.1	85	4	30	73-120	
Chloroethane	20.0	28.6	143	7	30	52-150	
Chloroform	20.0	21.2	106	8	30	80-120	
Chloromethane	20.0	25.3	126	3	30	56-131	
cis-1,2-Dichloroethene	20.0	20.6	103	3	30	80-120	
cis-1,3-Dichloropropene	20.0	15.6	78	0	30	77-120	
Cyclohexane	20.0	18.0	90	6	30	56-150	
Dichlorobromomethane	20.0	19.3	97	5	30	76-120	
Dichlorodifluoromethane	20.0	24.0	120	1	30	50-131	
Ethylbenzene	20.0	18.4	92	5	30	80-120	
Ethylene Dibromide	20.0	18.7	94	3	30	80-120	
Isopropylbenzene	20.0	19.2	96	5	30	80-123	
Methyl acetate	40.0	38.3	96	10	30	66-144	
Methyl tert-butyl ether	20.0	18.0	90	2	30	79-122	
Methylcyclohexane	20.0	17.1	85	6	30	61-145	

Column to be used to flag recovery and RPD values

FORM III 8260C

Data Usability Summary Report

Site: Gem Cleaners
Laboratory: TestAmerica– Edison, NJ
SDG No.: 460-152211-1
Parameter: Volatile Organic Compounds (VOCs)
Data Reviewer: Samir A. Naguib/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: May 9, 2018

Samples Reviewed and Evaluation Summary

24 soil samples: GC-SB-101 (SO)-3-5, GC-SB-101 (SO)-15.5-17.5, GC-MW-102 (SO)-3-5, GC-MW-102 (SO)-9-11, GC-MW-103 (SO)-3-5, GC-MW-103 (SO)-12-14, GC-MW-103 (SO)-15-17, GC-MW-104 (SO)-0.5-2.5, GC-MW-104 (SO)-7-9, GC-MW-105 (SO)-0.5-2.5, GC-MW-105 (SO)-7-9, GC-Drain-02 (SO), GC-MW-107D (SO)-15-17, GC-MW-109M (SO)-15-17, GC-MW-107D (SO)-97-99, GC-MW-109M (SO)-33-35, GC-MW-106 (SO)-15-17, GC-MW-108D (SO)-15-17, GC-MW-108D (SO)-33-35, GC-MW-108D (SO)-59-60.5, GC-MW-110D (SO)-15-17, GC-MW-110D (SO)-(69-70), GC-MW-101D (SO)-14-15, GC-MW-101D (SO)(99.2-100)

The above-listed soil samples were collected on March 19, 20, 26, 29, and 30, 2018 and April 2, 3, 4, 5, 6, 9, and 11, 2018 and were analyzed for VOCs by SW-846 Methods 5035A/8260C. The data validation was performed in accordance with *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002),* January 2017 modified for the SW-846 methodology utilized.

The data were evaluated based on the following parameters:

	• Overall Evaluation of Data and Potential Usability Issues
	• Data Completeness
	• Holding Times and Sample Preservation
*	• Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
	• Initial and Continuing Calibrations
	• Blanks
*	• Surrogate Recoveries
	• Internal Standards
	• Laboratory Control Sample (LCS)/LCS Duplicate (LCSD) Results
	• Matrix Spike and Matrix Spike Duplicate (MS/MSD) Results
NA	• Field Duplicate Results
*	• Percent Solids
	• Sample Results and Reported Quantitation Limits
*	• Target Compound Identification
*	• Tentatively Identified Compounds (TICs)

* - All criteria were met.
NA - Field duplicates were not associated with this sample set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select VOCs that were below the lowest calibration standard and quantitation limit (QL). These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive and nondetect results for all VOCs in sample GC-MW-109M (SO)-15-17 were qualified as estimated (J-/UJ) with a potential low bias due to holding time exceedance. Select VOC results were also qualified as estimated (J) due to quantitation below the QL; the overall qualification for these results was J. These results can be used for project objectives as estimated values and nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for 2-hexanone and 1,2-dibromo-3-chloropropane in sample GC-MW-107D (SO)-15-17 were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for dichlorodifluoromethane in samples GC-MW-107D (SO)-97-99 and GC-MW-109M (SO)-(15-17) were qualified as estimated (UJ) due to a continuing calibration nonconformance. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive results for 2-butanone in samples GC-MW-107D (SO)-97-99, GC-MW-101D (SO)-(99.2-100), GC-SB-101 (SO)-15.5-17.5, GC-MW-102 (SO)-9-11, and GC-MW-103 (SO)-3-5 were qualified as estimated (J) due to a continuing calibration nonconformance. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The nondetect results for dichlorodifluoromethane, 2-butanone, and bromoform in sample GC-MW-101D (SO)-14-15 were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive results for acetone and 2-butanone in sample GC-MW-110D (SO)-15-17 were

qualified as estimated (J) due to continuing calibration nonconformances. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The nondetect results for dichlorodifluoromethane and bromoform in sample GC-MW-101D (SO)-(99.2-100) were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for chloromethane, vinyl chloride, methyl acetate, 1,1-dichloroethane, and 1,4-dioxane in samples GC-SB-101 (SO)-15.5-17.5, GC-SB-101 (SO)-3-5, GC-MW-102 (SO)-3-5, GC-MW-102 (SO)-9-11, and GC-MW-103 (SO)-3-5 were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for 2-butanone in samples GC-SB-101 (SO)-3-5 and GC-MW-102 (SO)-3-5 were qualified as estimated (UJ) due to a continuing calibration nonconformance. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect result for carbon tetrachloride in sample GC-MW-103 (SO)-15-17 was qualified as estimated (UJ) due to a continuing calibration nonconformance. This result can be used for project objectives as a nondetect with an estimated QL, which may have a minor impact on the data usability.

- The nondetect results for methyl acetate, chlorodibromomethane, carbon tetrachloride, and bromoform in samples GC-MW-109M (SO)-33-35, GC-MW-106 (SO)-15-17, and GC-MW-108D (SO)-15-17 were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for methyl acetate, 1,1,1-trichloroethane, carbon tetrachloride, and bromoform in samples GC-MW-108D (SO)-59-60.5 and GC-MW-108D (SO)-33-35 were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for 2-butanone, carbon tetrachloride, bromoform, and 1,1,2,2-tetrachloroethane in sample GC-MW-110D (SO)-(69-70) were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive results for methylene chloride in samples GC-MW-103 (SO)-12-14, GC-MW-

104 (SO)-7-9, GC-MW-105-0.5-2.5, GC-MW-105 (SO)-7-9, GC-MW-107D (SO)-97-99, and GC-MW-110D (SO)-15-17 were qualified as nondetect (U) due to method blank contamination. These results can be used for project objectives as nondetects, which may have a minor impact on the data usability.

- The positive result for acetone in sample GC-MW-110D (SO)-(69-70) was qualified as nondetect (U) due to method blank contamination. This result can be used for project objectives as a nondetect, which may have a minor impact on the data usability.

- The positive and nondetect results for all VOCs in sample GC-MW-103 (SO)-3-5 were qualified as estimated (J+/UJ) with a potential high bias due to low recoveries of the internal standards. Select VOC results were also qualified as estimated (J) due to quantitation below the QL; the overall qualification for these results was J. These results can be used for project objectives as estimated values and nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect result for 1,4-dioxane in sample GC-Drain-02 (SO) was qualified as estimated (UJ) due to low recovery of the internal standard. This result can be used for project objectives as a nondetect with an estimated QL, which may have a minor impact on the data usability.

- The nondetect results for 2-hexanone and 4-methyl-2-pentanone in sample GC-MW-107D (SO)-15-17 were qualified as estimated (UJ) due to low LCS and /or LCSD recoveries. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for dichlorodifluoromethane in samples GC-MW-107D (SO)-97-99 and GC-MW-109M (SO)-15-17 were qualified as estimated (UJ) due to low LCS and LCSD recoveries. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect result for acetone in sample GC-MW-101D (SO)-14-15 was qualified as estimated (UJ) due to low LCS and LCSD recoveries. This result can be used for project objectives as a nondetect with an estimated QL, which may have a minor impact on the data usability.

- The positive result for acetone in sample GC-MW-110D (SO)-15-17 was qualified as estimated (J-) with a potential low bias due to low LCS recovery. However, acetone was previously qualified as estimated (J) due to a continuing calibration nonconformance; the overall qualification for acetone is J. This result can be used for project objectives as an estimated value, which may have a minor impact on the data usability.

- The positive and nondetect results for several VOCs in sample GC-SB-101 (SO)-15.5-17.5 were qualified as estimated (J-/UJ) with a potential low bias due to low recoveries in the MS and/or MSD analyses. Select VOC results were also qualified as estimated (J) due to

quantitation below the QL; the overall qualification for these results was J. These results can be used for project objectives as estimated values and nondetects with estimated QLs, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package. It should be noted that the laboratory misidentified sample GC-MW-110D (SO)-(69-70) as GE-MW-110D (SO)-(69-70). The identification was corrected on the Form I during validation.

The data package did not include the documentation that shows that low-level soils were properly frozen by the laboratory within 48-hours as required by the method. Upon request during validation, the laboratory submitted supplemental information to address this issue.

Holding Times and Sample Preservation

All holding times and sample preservation method criteria were met for the VOC analysis with the following exception:

The analysis of sample GC-MW-109M (SO)-15-17 was performed 10 days outside of the holding time. The positive and nondetect results for all VOCs in sample GC-MW-109M (SO)-15-17 were qualified as estimated (J-/UJ) with a potential low bias. Select VOC results were also qualified as estimated (J) due to quantitation below the QL in this sample; the overall qualification for these results was J.

GC/MS Tunes

All criteria were met in the VOC analyses.

Initial and Continuing Calibrations

The percent relative standard deviations (%RSDs), correlation coefficients, and relative response factors (RRFs) met the method acceptance criteria in the initial calibrations (ICs) associated with the samples in this data set.

The following table summarizes the percent differences or percent drifts (%Ds) that did not meet the method acceptance criteria in the continuing calibration (CC) standards associated with the samples in this data set.

CC	Compound	%D	Validation Actions
CVOAMS2 03/31/18 12:11	2-Hexanone	-41.0	The nondetect results for 2-hexanone and1,2-dibromo-3-chloropropane in the associated sample were qualified as estimated (UJ).
	1,2-Dibromo-3-Chloropropane	26.2	
Associated sample: GC-MW-107D (SO)-15-17			

CC	Compound	%D	Validation Actions
CVOAMS4 04/11/18 08:49	Dichlorodifluoromethane	-22.9	The nondetect result for dichlorodifluoromethane in the associated sample was qualified as estimated (UJ).
	2-Butanone	-21.3	The positive result for 2-butanone in the associated sample was qualified as estimated (J).
Associated sample: GC-MW-107D (SO)-97-99			
CVOAMS4 04/16/18 19:15	Dichlorodifluoromethane	-21.6	The nondetect results for dichlorodifluoromethane, 2-butanone, and bromoform in the associated sample were qualified as estimated (UJ).
	2-Butanone	-22.0	
	Bromoform	-22.4	
Associated sample: GC-MW-101D (SO)-14-15			
CVOAMS4 04/19/18 18:35	Acetone	-27.4	The positive results for acetone and 2-butanone in the associated sample were qualified as estimated (J).
	2-Butanone	-22.7	
Associated sample: GC-MW-110D (SO)-15-17			
CVOAMS4 04/20/18 06:44	Dichlorodifluoromethane	-23.2	The nondetect results for dichlorodifluoromethane and bromoform in the associated sample were qualified as estimated (UJ).
	Bromoform	-25.8	
	2-Butanone	-21.1	The positive result for 2-butanone in the associated sample was qualified as estimated (J).
Associated sample: GC-MW-101D (SO)-(99.2-100)			
CVOAMS9 03/20/18 23:13	Chloromethane	25.4	The nondetect results for chloromethane, vinyl chloride, methyl acetate, 1,1-dichloroethane, and 1,4-dioxane in the associated samples were qualified as estimated (UJ).
	Vinyl chloride	20.6	
	Methyl acetate	35.1	
	1,1-Dichloroethane	20.7	
	1,4-Dioxane	-25.3	
	2-Butanone	-23.9	The positive results for 2-butanone in samples GC-SB-101(SO)-15.5-17.5, GC-MW-102 (SO)-9-11, and GC-MW-103 (SO)-3-5 were qualified as estimated (J). The nondetect results for 2-butanone in the remaining samples were qualified as estimated (UJ).
Associated samples: GC-SB-101 (SO)-15.5-17.5, GC-SB-101(SO)-3-5, GC-MW-102 (SO)-3-5, GC-MW-102 (SO)-9-11, GC-MW-103 (SO)-3-5			
CVOAMS9 03/25/18 04:30	Carbon tetrachloride	21.1	The nondetect result for carbon tetrachloride in the associated sample was qualified as estimated (UJ).
Associated sample: GC-MW-103 (SO)-15-17			
CVOAMS9 04/12/18 21:47	Methyl acetate	24.9	The nondetect results for methyl acetate, carbon tetrachloride, chlorodibromomethane and bromoform in the associated samples were qualified as estimated (UJ).
	Carbon tetrachloride	36.1	
	Chlorodibromomethane	21.4	
	Bromoform	40.1	
Associated samples: GC-MW-109M (SO)-33-35, GC-MW-106 (SO)-15-17, GC-MW-108D (SO)-15-17			

CC	Compound	%D	Validation Actions
CVOAMS9 04/13/18 20:21	Methyl acetate	29.7	The nondetect results for methyl acetate, 1,1,1-trichloroethane, carbon tetrachloride, and bromoform in the associated sample were qualified as estimated (UJ).
	1,1,1-Trichloroethane	30.1	
	Carbon tetrachloride	43.6	
	Bromoform	35.0	
Associated sample: GC-MW-108D (SO)-59-60.5			
CVOAMS9 04/16/18 04:50	Methyl acetate	22.9	The nondetect results for methyl acetate, 1,1,1-trichloroethane, carbon tetrachloride, and bromoform in the associated sample were qualified as estimated (UJ).
	1,1,1-Trichloroethane	23.4	
	Carbon tetrachloride	37.9	
	Bromoform	25.9	
Associated sample: GC-MW-108D (SO)-33-35			
CVOAMS9 04/16/18 18:36	2-Butanone	-22.5	The nondetect results for 2-butanone, carbon tetrachloride, bromoform, and 1,1,2,2-tetrachloroethane in the associated sample were qualified as estimated (UJ).
	Carbon tetrachloride	32.0	
	Bromoform	20.8	
	1,1,2,2-Tetrachloroethane	-21.2	
Associated sample: GC-MW-110D (SO)-(69-70)			
CVOAMS9 04/23/18 17:27	Dichlorodifluoromethane	-40.9	The nondetect result for dichlorodifluoromethane in the associated sample was qualified as estimated (UJ).
Associated sample: GC-MW-109M (SO)-(15-17)			

Blanks

The following table summarizes the contaminants detected in the method blanks, the concentration detected, and the resulting validation actions.

Blank ID	Compound	Blank Concentration	Validation Actions
MB 460-505749/7	Methylene chloride	0.000370 J mg/Kg	The positive results for methylene chloride in samples GC-MW-103 (SO)-12-14, GC-MW-104 (SO)-7-9, GC-MW-105 (SO)-0.5-2.5, and GC-MW-105 (SO)-7-9 were qualified as nondetects (U) at the QL since the concentrations were <QL. Qualification of the data was not required in the remaining associated samples since methylene chloride was not detected.
Associated samples: GC-MW-104 (SO)-0.5-2.5, GC-MW-104 (SO)-7-9, GC-MW-105 (SO)-0.5-2.5, GC-MW-105 (SO)-7-9, GC-Drain-02 (SO), GC-MW-103 (SO)-12-14			
MB 460-510106/7	Methylene chloride	0.000211 J mg/Kg	The positive result for methylene chloride in the associated sample was qualified as nondetect (U) at the QL since the concentration was <QL.
Associated sample: GC-MW-107D (SO)-97-99			
MB 460-511471/8	Acetone	0.00455 J mg/Kg	The positive result for acetone in the associated sample was qualified as nondetect (U) at the reported concentration since the concentration was < 2x blank concentration.

Blank ID	Compound	Blank Concentration	Validation Actions
Associated sample: GC-MW-110D (SO)-(69-70)			
MB 460-512479/8	Methylene chloride	0.000267 J mg/Kg	The positive result for methylene chloride in the associated sample was qualified as nondetect (U) at the QL since the concentration was <QL.
Associated sample: GC-MW-110D (SO)-15-17			

Surrogate Recoveries

The surrogate percent recoveries (%Rs) met the laboratory acceptance criteria in the VOC analysis.

Internal Standards

The following table summarizes the internal standard (IS) area %Rs that did not meet the acceptance criteria in the VOC analyses.

Sample ID	IS Tert-butanol-d9	IS Chlorobenzene-d5	IS 1,4-Dichlorobenzene-d4	IS 2-Butanone-d5	IS Fluorobenzene	IS 1,4-Dioxane-d8	Validation Actions
GC-MW-103 (SO)-3-5	30.0%	21.0%	21.7%	26.3%	20.0%	35.8%	Sample GC-MW-103 (SO)-3-5 was reanalyzed due to the low internal standard areas but did not purge properly and therefore could not be reported. The positive and nondetect results for all VOCs in sample GC-MW-103 (SO)-3-5 were qualified as estimated (J+/UJ) with a potential high bias due to low recoveries of the internal standards. Select VOC results were also qualified as estimated (J) in this sample due to quantitation below the QL; the overall qualification for these results was J.

Sample ID	IS Tert-butanol-d9	IS Chlorobenzene-d5	IS 1,4-Dichlorobenzene-d4	IS 2-Butanone-d5	IS Fluorobenzene	IS 1,4-Dioxane-d8	Validation Actions
GC-Drain-02 (SO)	-	-	-	-	-	49.6%	The nondetect result for 1,4-dioxane in sample GC-Drain-02 (SO) was qualified as estimated (UJ) due to low recovery of the internal standard 1,4-dioxne –d8.

-Criteria met

LCS/LCS Duplicate Results

The following table summarizes the VOCs which exhibited %Rs outside of the acceptance criteria, the associated samples, and the validation actions.

LCS/LCSD ID	Compound	LCS %R	LCSD %R	RPD	QC Limits %R/RPD	Validation Actions
LCS 460-504873/4/ LCSD 460-504873/5	Methyl acetate	124	127	-	73-123/30	No qualifications were required due to the high LCS/LCSD recoveries since methyl acetate was not detected in the associated samples.
Associated samples: GC-SB-101 (SO)-15.5-17.5, GC-SB-101(SO)-3-5, GC-MW-102 (SO)-3-5, GC-MW-102 (SO)-9-11, GC-MW-103 (SO)-3-5 -Criteria met						
LCS 460-507466/5/ LCSD 460-507466/6	1,2-Dibromo-3-chloropropane	131	-	-	65-129/30	No qualification was required due to the high LCS recovery since 1,2-dibromo-3-chloropropane was not detected in the associated sample.
	2-Hexanone	74	55	-	78-120/30	The nondetect results for 2-hexanone and 4-methyl-2-pentanone in the associated sample were qualified as estimated (UJ) due to low LCS and/or LCSD recoveries.
	4-Methyl-2-pentanone	-	74	-	80-120/30	
Associated sample: GC-MW-107D (SO)-15-17 -Criteria met						
LCS 460-510106/3/ LCSD 460-510106/4	Dichlorodifluoromethane	66	70	-	72-127/30	The nondetect result for dichlorodifluoromethane in the associated sample was qualified as estimated (UJ) due to low LCS/LCSD recoveries.
Associated sample: GC-MW-107D (SO)-97-99 -Criteria met						
LCS 460-510972/3/ LCSD 460-510972/4	Carbon tetrachloride	140	-	-	77-138/30	No qualifications were required due to the high LCS or LCSD recovery since carbon tetrachloride and methyl acetate were not detected in the associated sample.
	Methyl acetate	-	127	-	73-123/30	
Associated sample: GC-MW-108D (SO)-59-60.5 -Criteria met						
LCS 460-511293/4/ LCSD 460-511293/5	Carbon tetrachloride	142	148	-	77-138/30	No qualifications were required due to the high LCS and LCSD recoveries since carbon tetrachloride and 1,1,1-trichloroethane were not detected in the associated sample.
	1,1,1-Trichloroethane	128	129	-	80-125/30	
Associated sample: GC-MW-108D (SO)-33-35 -Criteria met						
LCS 460-511471/5	Carbon tetrachloride	140	NA	NA	77-138	No qualifications were required due to the high LCS recoveries since carbon tetrachloride and methyl acetate were not detected in the associated sample.
	Methyl acetate	132	73-123	NA	73-123	
Associated sample: GC-MW-110D (SO)-(69-70)						

LCS/LCSD ID	Compound	LCS %R	LCSD %R	RPD	QC Limits %R/RPD	Validation Actions
LCS 460-511498/4/ LCSD 460-511498/5	Acetone	69	72	-	75-120/30	The nondetect result for acetone in the associated sample was qualified as estimated (UJ) due to low LCS/LCSD recoveries.
Associated sample: GC-MW-101D (SO)-14-15					-Criteria met	
LCS 460-512479/4/ LCSD 460-512479/5	Acetone	74	-	-	75-120/30	The positive result for acetone in the associated sample was qualified as estimated (J-) with a potential low bias due to low LCS recovery. However, acetone was previously qualified as estimated (J) due to a continuing calibration nonconformance; the overall qualification for acetone is J.
Associated sample: GC-MW-110D (SO)-15-17					-Criteria met	
LCS 460-513435/3/ LCSD 460-513435/4	Dichlorodifluoromethane	63	57	-	72-127/30	The nondetect result for dichlorodifluoromethane in the associated sample was qualified as estimated (UJ) due to low LCS/LCSD recoveries.
Associated sample: GC-MW-109M (SO)-15-17					-Criteria met	NA – Not applicable

MS/MSD Results

MS/MSD analyses were performed on sample GC-SB-101(SO)-15.5-17.5. The following table summarizes the %Rs that were outside of the acceptance criteria.

MS/MSD Sample ID	Compound	MS %R	MSD %R	RPD	QC Limits %R/RPD	Validation Actions
GC-SB-101 (SO)-15.5-17.5	1,1,1-Trichloroethane	-	76	-	80-125/30	The positive and nondetect results for the affected compounds in sample GC-SB-101(SO)-15.5-17.5 were qualified as estimated (J-/UJ) with a potential low bias due to low MS and/or MSD recoveries. Select VOC results were also qualified as estimated (J) due to quantitation below the QL in this sample; the overall qualification for these results was J.
	1,1,2-Trichloro-1,2,2-trifluoroethane	-	72	-	78-132/30	
	1,1,2-Trichloroethane	75	73	-	76-124/30	
	1,1-Dichloroethene	-	72	-	79-132/30	
	1,2,3-Trichlorobenzene	67	67	-	75-123/30	
	1,2,4-Trichlorobenzene	72	68	-	74-124/30	
	1,2-Dichlorobenzene	73	67	-	80-121/30	

MS/MSD Sample ID	Compound	MS %R	MSD %R	RPD	QC Limits %R/RPD	Validation Actions
GC-SB-101 (SO)-15.5-17.5	1,3-Dichlorobenzene	73	66	-	79-124/30	
	1,4-Dichlorobenzene	73	68	-	79-121/30	
	1,4-Dioxane	61	61	-	67-150/30	
	2-Butanone	54	58	-	61-140/30	
	2-Hexanone	73	77	-	78-120/30	
	4-Methyl-2-pentanone	78	79	-	80-120/30	
	Acetone	46	40	-	75-120/30	
	Carbon tetrachloride	-	71	-	77-138/30	
	Chlorobenzene	72	65	-	80-120/30	
	Chlorobromomethane	75	72	-	80-125/30	
	Chlorodibromomethane	66	63	-	67-143/30	
	Chloroform	-	78	-	80-122/30	
	cis-1,2-Dichloroethene	-	73	-	80-123/30	
	cis-1,3-Dichloropropene	-	74	-	75-124/30	
	Dichlorobromomethane	-	73	-	76-129/30	
	Dichlorodifluoromethane	-	65	-	72-127/30	
	Ethylbenzene	75	68	-	79-124/30	
	Ethylene Dibromide	67	70	-	80-122/30	
	Isopropylbenzene	74	66	-	80-125/30	
	Methyl tert-butyl ether	77	76	-	80-120/30	
	m-Xylene & p-Xylene	75	68	-	79-121/30	
	o-Xylene	75	71	-	79-123/30	
	Styrene	74	69	-	78-123/30	
	Tetrachloroethene	-	65	-	73-130/30	
	Toluene	-	71	-	75-122/30	
	Trans-1,2-Dichloroethene	-	76	-	80-129/30	
	Trichloroethene	-	74	-	79-122/30	
	Vinyl chloride	-	69	-	70-134/30	
-Criteria met						

MS/MSD analyses were also performed on sample GC-MW-110D (SO)- (69-70). The following table summarizes the %Rs that were outside of the acceptance criteria.

MS/MSD Sample ID	Compound	MS %R	MSD %R	RPD	QC Limits %R/RPD	Validation Actions
GC-MW-110D (SO)-(69-70)	1,1,1-Trichloroethane	133	134	-	80-125/30	No qualifications were required due to the high MS/MSD recoveries since 1,1,1-trichloroethane, acetone, and carbon tetrachloride were not detected in sample GC-MW-110D (SO)-(69-70).
	Acetone	125	139	-	75-120/30	
	Carbon tetrachloride	151	153	-	77-138/30	
-Criteria met						

Field Duplicate Results

No field duplicate pairs were submitted with this sample set.

Percent Solids

The percent solids for the soil samples in this data set were >30%; thus, no qualification was required.

Sample Results and Reported Quantitation Limits

Select VOC results were reported below the lowest calibration standard level and QL. These results were qualified as estimated (J) in the associated samples by the laboratory.

Sample calculations for all parameters were spot-checked; there were no errors noted. There were no dilutions performed on any samples in this data set.

Target Compound Identification

All criteria were met for the VOC analyses.

Tentatively Identified Compounds

There were no issues noted regarding TIC identifications.

QUALIFIED FORM Is

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-SB-101(SO)-3-5 | Lab Sample ID: 460-152211-1
Matrix: Solid | Lab File ID: K81024.D
Analysis Method: 8260C | Date Collected: 03/19/2018 09:10
Sample wt/vol: 5.726(g) | Date Analyzed: 03/21/2018 04:44
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 4.8 | Level: (low/med) Low
Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00021
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	UJ	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000084
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00042
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	UJ	0.018	0.0084
78-93-3	2-Butanone (MEK)	0.0046	UJ	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.022		0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00043
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00024
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	UJ	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-3-5 | Lab Sample ID: 460-152211-1

Matrix: Solid | Lab File ID: K81024.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:10

Sample wt/vol: 5.726(g) | Date Analyzed: 03/21/2018 04:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00029	J	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	UHJ	0.0046	0.0039
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00011
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00043	J	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.0012		0.00092	0.00016
95-47-6	o-Xylene	0.00037	J	0.00092	0.000087
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00057
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00024
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00037
75-01-4	Vinyl chloride	0.00092	UHJ	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	125		78-135
460-00-4	4-Bromofluorobenzene	108		67-126
1868-53-7	Dibromofluoromethane (Surr)	113		61-149
2037-26-5	Toluene-d8 (Surr)	104		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-3-5 Lab Sample ID: 460-152211-1

Matrix: Solid Lab File ID: K81024.D

Analysis Method: 8260C Date Collected: 03/19/2018 09:10

Sample wt/vol: 5.726(g) Date Analyzed: 03/21/2018 04:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 Level: (low/med) Low

Analysis Batch No.: 504873 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 | Lab Sample ID: 460-152211-2

Matrix: Solid | Lab File ID: K81019.D

Analysis Method: 8260C | Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.715(g) | Date Analyzed: 03/21/2018 02:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00095	U UJ	0.00095	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00095	U	0.00095	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00095	U UJ	0.00095	0.00029
79-00-5	1,1,2-Trichloroethane	0.00095	U	0.00095	0.00017
75-34-3	1,1-Dichloroethane	0.00095	U	0.00095	0.00020
75-35-4	1,1-Dichloroethene	0.00095	U	0.00095	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00095	U	0.00095	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00095	U	0.00095	0.000087
96-12-8	1,2-Dibromo-3-Chloropropane	0.00095	U	0.00095	0.00044
95-50-1	1,2-Dichlorobenzene	0.00095	U UJ	0.00095	0.00014
107-06-2	1,2-Dichloroethane	0.00095	U	0.00095	0.00028
78-87-5	1,2-Dichloropropane	0.00095	U	0.00095	0.00040
541-73-1	1,3-Dichlorobenzene	0.00095	U UJ	0.00095	0.00015
106-46-7	1,4-Dichlorobenzene	0.00095	U	0.00095	0.000095
123-91-1	1,4-Dioxane	0.019	U UJ	0.019	0.0087
78-93-3	2-Butanone (MEK)	0.0023	J J	0.0047	0.0011
591-78-6	2-Hexanone	0.0047	U UJ	0.0047	0.00074
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00063
67-64-1	Acetone	0.034	J-	0.0047	0.0036
71-43-2	Benzene	0.00095	U	0.00095	0.00025
75-25-2	Bromoform	0.00095	U	0.00095	0.00040
74-83-9	Bromomethane	0.00095	U	0.00095	0.00045
75-15-0	Carbon disulfide	0.00095	U	0.00095	0.00025
56-23-5	Carbon tetrachloride	0.00095	U UJ	0.00095	0.00017
108-90-7	Chlorobenzene	0.00095	U	0.00095	0.00017
74-97-5	Chlorobromomethane	0.00095	U	0.00095	0.00027
124-48-1	Chlorodibromomethane	0.00095	U	0.00095	0.00018
75-00-3	Chloroethane	0.00095	U	0.00095	0.00050
67-66-3	Chloroform	0.00095	U UJ	0.00095	0.00030
74-87-3	Chloromethane	0.00095	U J	0.00095	0.00041
156-59-2	cis-1,2-Dichloroethene	0.00095	U UJ	0.00095	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00095	U	0.00095	0.00026
110-82-7	Cyclohexane	0.00095	U	0.00095	0.00021
75-27-4	Dichlorobromomethane	0.00095	U UJ	0.00095	0.00024
75-71-8	Dichlorodifluoromethane	0.00095	U UJ	0.00095	0.00032

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 Lab Sample ID: 460-152211-2

Matrix: Solid Lab File ID: K81019.D

Analysis Method: 8260C Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.715(g) Date Analyzed: 03/21/2018 02:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 Level: (low/med) Low

Analysis Batch No.: 504873 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00095	U UJ	0.00095	0.00019
106-93-4	Ethylene Dibromide	0.00095	U	0.00095	0.00017
98-82-8	Isopropylbenzene	0.00095	U	0.00095	0.00012
79-20-9	Methyl acetate	0.0047	U UJ	0.0047	0.0041
1634-04-4	Methyl tert-butyl ether	0.00095	U J	0.00095	0.00012
108-87-2	Methylcyclohexane	0.00095	U	0.00095	0.00015
75-09-2	Methylene Chloride	0.0024		0.00095	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00039	U J	0.00095	0.00017
95-47-6	o-Xylene	0.00015	U J	0.00095	0.000090
100-42-5	Styrene	0.00095	U UJ	0.00095	0.00012
127-18-4	Tetrachloroethene	0.00095	U	0.00095	0.00014
108-88-3	Toluene	0.00095	U	0.00095	0.00059
156-60-5	trans-1,2-Dichloroethene	0.00095	U	0.00095	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00095	U	0.00095	0.00025
79-01-6	Trichloroethene	0.00095	U UJ	0.00095	0.00014
75-69-4	Trichlorofluoromethane	0.00095	U	0.00095	0.00039
75-01-4	Vinyl chloride	0.00095	U UJ	0.00095	0.00052

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	126		78-135
460-00-4	4-Bromofluorobenzene	107		67-126
1868-53-7	Dibromofluoromethane (Surr)	116		61-149
2037-26-5	Toluene-d8 (Surr)	107		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-SB-101(SO)-15.5-17.5 Lab Sample ID: 460-152211-2

Matrix: Solid Lab File ID: K81019.D

Analysis Method: 8260C Date Collected: 03/19/2018 09:20

Sample wt/vol: 5.715(g) Date Analyzed: 03/21/2018 02:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 7.9 Level: (low/med) Low

Analysis Batch No.: 504873 Units: mg/Kg

Number TICs Found: 1 TIC Result Total: 0.00011

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
95-63-6	1,2,4-Trimethylbenzene	11.16	0.00011	J	94%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-3-5 | Lab Sample ID: 460-152211-3

Matrix: Solid | Lab File ID: K81025.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:35

Sample wt/vol: 5.683(g) | Date Analyzed: 03/21/2018 05:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U UJ ✓	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U UJ ✓	0.018	0.0085
78-93-3	2-Butanone (MEK)	0.0046	U UJ ✓	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.0092		0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00044
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00025
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U UJ ✓	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-3-5 | Lab Sample ID: 460-152211-3

Matrix: Solid | Lab File ID: K81025.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:35

Sample wt/vol: 5.683(g) | Date Analyzed: 03/21/2018 05:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U WJ ✓	0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00012
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00033	J	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00032	J	0.00092	0.00016
95-47-6	o-Xylene	0.00012	J	0.00092	0.000088
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00083	J	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00050
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00038
75-01-4	Vinyl chloride	0.00092	U WJ ✓	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	129		78-135
460-00-4	4-Bromofluorobenzene	107		67-126
1868-53-7	Dibromofluoromethane (Surr)	117		61-149
2037-26-5	Toluene-d8 (Surr)	107		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-3-5 Lab Sample ID: 460-152211-3

Matrix: Solid Lab File ID: K81025.D

Analysis Method: 8260C Date Collected: 03/19/2018 11:35

Sample wt/vol: 5.683(g) Date Analyzed: 03/21/2018 05:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 4.8 Level: (low/med) Low

Analysis Batch No.: 504873 Units: mg/Kg

Number TICs Found: 1 TIC Result Total: 0.0082

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
54935-00-1	Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	14.80	0.0082	J N	95%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-102(SO)-9-11 | Lab Sample ID: 460-152211-4
Matrix: Solid | Lab File ID: K81026.D
Analysis Method: 8260C | Date Collected: 03/19/2018 11:30
Sample wt/vol: 6.135(g) | Date Analyzed: 03/21/2018 05:33
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 15.7 | Level: (low/med) Low
Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00097	U	0.00097	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.00097	U	0.00097	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00097	U	0.00097	0.00029
79-00-5	1,1,2-Trichloroethane	0.00097	U	0.00097	0.00017
75-34-3	1,1-Dichloroethane	0.00097	UJ	0.00097	0.00020
75-35-4	1,1-Dichloroethene	0.00097	U	0.00097	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00097	U	0.00097	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.00097	U	0.00097	0.000089
96-12-8	1,2-Dibromo-3-Chloropropane	0.00097	U	0.00097	0.00044
95-50-1	1,2-Dichlorobenzene	0.00097	U	0.00097	0.00014
107-06-2	1,2-Dichloroethane	0.00097	U	0.00097	0.00029
78-87-5	1,2-Dichloropropane	0.00097	U	0.00097	0.00041
541-73-1	1,3-Dichlorobenzene	0.00097	U	0.00097	0.00015
106-46-7	1,4-Dichlorobenzene	0.00097	U	0.00097	0.000097
123-91-1	1,4-Dioxane	0.019	UJ	0.019	0.0089
78-93-3	2-Butanone (MEK)	0.0021	UJ	0.0048	0.0011
591-78-6	2-Hexanone	0.0048	U	0.0048	0.00075
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064
67-64-1	Acetone	0.015		0.0048	0.0037
71-43-2	Benzene	0.00097	U	0.00097	0.00025
75-25-2	Bromoform	0.00097	U	0.00097	0.00041
74-83-9	Bromomethane	0.00097	U	0.00097	0.00046
75-15-0	Carbon disulfide	0.00097	U	0.00097	0.00026
56-23-5	Carbon tetrachloride	0.00097	U	0.00097	0.00018
108-90-7	Chlorobenzene	0.00097	U	0.00097	0.00017
74-97-5	Chlorobromomethane	0.00097	U	0.00097	0.00027
124-48-1	Chlorodibromomethane	0.00097	U	0.00097	0.00019
75-00-3	Chloroethane	0.00097	U	0.00097	0.00050
67-66-3	Chloroform	0.00097	U	0.00097	0.00031
74-87-3	Chloromethane	0.00097	UJ	0.00097	0.00042
156-59-2	cis-1,2-Dichloroethene	0.00097	U	0.00097	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00097	U	0.00097	0.00026
110-82-7	Cyclohexane	0.00097	U	0.00097	0.00021
75-27-4	Dichlorobromomethane	0.00097	U	0.00097	0.00025
75-71-8	Dichlorodifluoromethane	0.00097	U	0.00097	0.00033

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-9-11 Lab Sample ID: 460-152211-4

Matrix: Solid Lab File ID: K81026.D

Analysis Method: 8260C Date Collected: 03/19/2018 11:30

Sample wt/vol: 6.135(g) Date Analyzed: 03/21/2018 05:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.7 Level: (low/med) Low

Analysis Batch No.: 504873 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00097	U	0.00097	0.00019
106-93-4	Ethylene Dibromide	0.00097	U	0.00097	0.00017
98-82-8	Isopropylbenzene	0.00097	U	0.00097	0.00012
79-20-9	Methyl acetate	0.0048	U UJ	0.0048	0.0042
1634-04-4	Methyl tert-butyl ether	0.00097	U	0.00097	0.00012
108-87-2	Methylcyclohexane	0.00097	U	0.00097	0.00015
75-09-2	Methylene Chloride	0.00099		0.00097	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00036	J	0.00097	0.00017
95-47-6	o-Xylene	0.00017	J	0.00097	0.000092
100-42-5	Styrene	0.00097	U	0.00097	0.00012
127-18-4	Tetrachloroethene	0.0042		0.00097	0.00014
108-88-3	Toluene	0.00097	U	0.00097	0.00060
156-60-5	trans-1,2-Dichloroethene	0.00097	U	0.00097	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00097	U	0.00097	0.00026
79-01-6	Trichloroethene	0.00097	U	0.00097	0.00014
75-69-4	Trichlorofluoromethane	0.00097	U	0.00097	0.00039
75-01-4	Vinyl chloride	0.00097	U UJ	0.00097	0.00053

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	127		78-135
460-00-4	4-Bromofluorobenzene	105		67-126
1868-53-7	Dibromofluoromethane (Surr)	115		61-149
2037-26-5	Toluene-d8 (Surr)	105		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-102(SO)-9-11 | Lab Sample ID: 460-152211-4

Matrix: Solid | Lab File ID: K81026.D

Analysis Method: 8260C | Date Collected: 03/19/2018 11:30

Sample wt/vol: 6.135(g) | Date Analyzed: 03/21/2018 05:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.7 | Level: (low/med) Low

Analysis Batch No.: 504873 | Units: mg/Kg

Number TICs Found: 1 | TIC Result Total: 0.017

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
54935-00-1	Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	14.80	0.017	J N	98%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-103(SO)-3-5 | Lab Sample ID: 460-152211-5
Matrix: Solid | Lab File ID: K81027.D
Analysis Method: 8260C | Date Collected: 03/19/2018 14:00
Sample wt/vol: 5.692(g) | Date Analyzed: 03/21/2018 05:57
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 5.0 | Level: (low/med) Low
Analysis Batch No.: 504873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0085
78-93-3	2-Butanone (MEK)	0.0030	J	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.032	J	0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00044
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00025
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-3-5 Lab Sample ID: 460-152211-5

Matrix: Solid Lab File ID: K81027.D

Analysis Method: 8260C Date Collected: 03/19/2018 14:00

Sample wt/vol: 5.692(g) Date Analyzed: 03/21/2018 05:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 5.0 Level: (low/med) Low

Analysis Batch No.: 504873 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U *	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U *	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00012
108-87-2	Methylcyclohexane	0.00092	U *	0.00092	0.00015
75-09-2	Methylene Chloride	0.0065	J *	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00073	J *	0.00092	0.00016
95-47-6	o-Xylene	0.00031	J *	0.00092	0.000088
100-42-5	Styrene	0.00092	U *	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U *	0.00092	0.00013
108-88-3	Toluene	0.00092	U *	0.00092	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00092	U *	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U *	0.00092	0.00025
79-01-6	Trichloroethene	0.00092	U *	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U *	0.00092	0.00038
75-01-4	Vinyl chloride	0.00092	U *	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	132	*	78-135
460-00-4	4-Bromofluorobenzene	105	*	67-126
1868-53-7	Dibromofluoromethane (Surr)	115	*	61-149
2037-26-5	Toluene-d8 (Surr)	102	*	73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-103(SO)-3-5 Lab Sample ID: 460-152211-5
Matrix: Solid Lab File ID: K81027.D
Analysis Method: 8260C Date Collected: 03/19/2018 14:00
Sample wt/vol: 5.692(g) Date Analyzed: 03/21/2018 05:57
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 5.0 Level: (low/med) Low
Analysis Batch No.: 504873 Units: mg/Kg
Number TICs Found: 1 TIC Result Total: 0.007

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
54935-00-1	Benzene, 1,4-dichloro-2-(2-chloroethenyl)-	14.80	0.0070	J N	81%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-12-14 | Lab Sample ID: 460-152331-1

Matrix: Solid | Lab File ID: K81129.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:10

Sample wt/vol: 6.531(g) | Date Analyzed: 03/24/2018 10:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 25.3 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000094
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00043
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0094
78-93-3	2-Butanone (MEK)	0.0022	J	0.0051	0.0011
591-78-6	2-Hexanone	0.0051	U	0.0051	0.00080
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068
67-64-1	Acetone	0.018		0.0051	0.0039
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00044
74-83-9	Bromomethane	0.0010	U	0.0010	0.00049
75-15-0	Carbon disulfide	0.00057	J	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00019
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00020
75-00-3	Chloroethane	0.0010	U	0.0010	0.00053
67-66-3	Chloroform	0.0010	U	0.0010	0.00033
74-87-3	Chloromethane	0.0010	U	0.0010	0.00045
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00023
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-12-14 Lab Sample ID: 460-152331-1

Matrix: Solid Lab File ID: K81129.D

Analysis Method: 8260C Date Collected: 03/20/2018 09:10

Sample wt/vol: 6.531(g) Date Analyzed: 03/24/2018 10:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 25.3 Level: (low/med) Low

Analysis Batch No.: 505749 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0051	U	0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.00045	J B	0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.00035	J	0.0010	0.00018
95-47-6	o-Xylene	0.00016	J	0.0010	0.000097
100-42-5	Styrene	0.0010	U	0.0010	0.00013
127-18-4	Tetrachloroethene	0.00022	J	0.0010	0.00015
108-88-3	Toluene	0.0010	U	0.0010	0.00064
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00042
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00056

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	103		61-149
2037-26-5	Toluene-d8 (Surr)	107		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-12-14 Lab Sample ID: 460-152331-1

Matrix: Solid Lab File ID: K81129.D

Analysis Method: 8260C Date Collected: 03/20/2018 09:10

Sample wt/vol: 6.531(g) Date Analyzed: 03/24/2018 10:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 25.3 Level: (low/med) Low

Analysis Batch No.: 505749 Units: mg/Kg

Number TICs Found: 10 TIC Result Total: 3.61

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
493-02-7	Naphthalene, decahydro-, trans-	11.77	0.27	J N	97%
1120-21-4	Undecane	11.83	0.28	J N	91%
	Unknown	11.99	0.30	J	
1000152-47-3	trans-Decalin, 2-methyl-	12.30	0.33	J N	86%
	Unknown	12.47	0.34	J	
112-40-3	Dodecane	12.69	0.31	J N	91%
6044-71-9	Dodecane, 6-methyl-	12.81	0.54	J N	94%
	Unknown	13.18	0.56	J	
2051-30-1	Octane, 2,6-dimethyl-	13.25	0.38	J N	87%
	Unknown	13.59	0.30	J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-15-17 | Lab Sample ID: 460-152331-2

Matrix: Solid | Lab File ID: K81168.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:45

Sample wt/vol: 5.723(g) | Date Analyzed: 03/25/2018 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 21.6 | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0011	U	0.0011	0.00026
79-34-5	1,1,2,2-Tetrachloroethane	0.0011	U	0.0011	0.00024
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0011	U	0.0011	0.00034
79-00-5	1,1,2-Trichloroethane	0.0011	U	0.0011	0.00020
75-34-3	1,1-Dichloroethane	0.0011	U	0.0011	0.00023
75-35-4	1,1-Dichloroethene	0.0011	U	0.0011	0.00025
87-61-6	1,2,3-Trichlorobenzene	0.0011	U	0.0011	0.00020
120-82-1	1,2,4-Trichlorobenzene	0.0011	U	0.0011	0.00010
96-12-8	1,2-Dibromo-3-Chloropropane	0.0011	U	0.0011	0.00051
95-50-1	1,2-Dichlorobenzene	0.0011	U	0.0011	0.00016
107-06-2	1,2-Dichloroethane	0.0011	U	0.0011	0.00033
78-87-5	1,2-Dichloropropane	0.0011	U	0.0011	0.00047
541-73-1	1,3-Dichlorobenzene	0.0011	U	0.0011	0.00018
106-46-7	1,4-Dichlorobenzene	0.0011	U	0.0011	0.00011
123-91-1	1,4-Dioxane	0.022	U	0.022	0.010
78-93-3	2-Butanone (MEK)	0.0056	U	0.0056	0.0012
591-78-6	2-Hexanone	0.0056	U	0.0056	0.00087
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0056	U	0.0056	0.00074
67-64-1	Acetone	0.022		0.0056	0.0042
71-43-2	Benzene	0.0011	U	0.0011	0.00029
75-25-2	Bromoform	0.0011	U	0.0011	0.00047
74-83-9	Bromomethane	0.0011	U	0.0011	0.00053
75-15-0	Carbon disulfide	0.0011	U	0.0011	0.00030
56-23-5	Carbon tetrachloride	0.0011	UJ	0.0011	0.00020
108-90-7	Chlorobenzene	0.0011	U	0.0011	0.00020
74-97-5	Chlorobromomethane	0.0011	U	0.0011	0.00031
124-48-1	Chlorodibromomethane	0.0011	U	0.0011	0.00022
75-00-3	Chloroethane	0.0011	U	0.0011	0.00058
67-66-3	Chloroform	0.0011	U	0.0011	0.00036
74-87-3	Chloromethane	0.0011	U	0.0011	0.00048
156-59-2	cis-1,2-Dichloroethene	0.0011	U	0.0011	0.00017
10061-01-5	cis-1,3-Dichloropropene	0.0011	U	0.0011	0.00030
110-82-7	Cyclohexane	0.0011	U	0.0011	0.00025
75-27-4	Dichlorobromomethane	0.0011	U	0.0011	0.00029
75-71-8	Dichlorodifluoromethane	0.0011	U	0.0011	0.00038

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-103(SO)-15-17 | Lab Sample ID: 460-152331-2

Matrix: Solid | Lab File ID: K81168.D

Analysis Method: 8260C | Date Collected: 03/20/2018 09:45

Sample wt/vol: 5.723(g) | Date Analyzed: 03/25/2018 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 21.6 | Level: (low/med) Low

Analysis Batch No.: 505873 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0011	U	0.0011	0.00022
106-93-4	Ethylene Dibromide	0.0011	U	0.0011	0.00020
98-82-8	Isopropylbenzene	0.0011	U	0.0011	0.00014
79-20-9	Methyl acetate	0.0056	U	0.0056	0.0048
1634-04-4	Methyl tert-butyl ether	0.0011	U	0.0011	0.00014
108-87-2	Methylcyclohexane	0.0011	U	0.0011	0.00018
75-09-2	Methylene Chloride	0.0011		0.0011	0.00018
179601-23-1	m-Xylene & p-Xylene	0.00046	J	0.0011	0.00019
95-47-6	o-Xylene	0.00024	J	0.0011	0.00011
100-42-5	Styrene	0.0011	U	0.0011	0.00014
127-18-4	Tetrachloroethene	0.0011	U	0.0011	0.00016
108-88-3	Toluene	0.0011	U	0.0011	0.00070
156-60-5	trans-1,2-Dichloroethene	0.0011	U	0.0011	0.00027
10061-02-6	trans-1,3-Dichloropropene	0.0011	U	0.0011	0.00030
79-01-6	Trichloroethene	0.0011	U	0.0011	0.00016
75-69-4	Trichlorofluoromethane	0.0011	U	0.0011	0.00045
75-01-4	Vinyl chloride	0.0011	U	0.0011	0.00061

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		78-135
460-00-4	4-Bromofluorobenzene	96		67-126
1868-53-7	Dibromofluoromethane (Surr)	97		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-103(SO)-15-17 | Lab Sample ID: 460-152331-2
Matrix: Solid | Lab File ID: K81168.D
Analysis Method: 8260C | Date Collected: 03/20/2018 09:45
Sample wt/vol: 5.723(g) | Date Analyzed: 03/25/2018 13:30
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 21.6 | Level: (low/med) Low
Analysis Batch No.: 505873 | Units: mg/Kg
Number TICs Found: 2 | TIC Result Total: 0.0182

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	11.94	0.0083	J	
	Unknown alkane	13.28	0.0099	J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-0.5-2.5 | Lab Sample ID: 460-152331-3

Matrix: Solid | Lab File ID: K81124.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:40

Sample wt/vol: 5.01(g) | Date Analyzed: 03/24/2018 08:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000095
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00044
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.021	U	0.021	0.0095
78-93-3	2-Butanone (MEK)	0.0027	J	0.0051	0.0011
591-78-6	2-Hexanone	0.0051	U	0.0051	0.00080
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068
67-64-1	Acetone	0.030		0.0051	0.0039
71-43-2	Benzene	0.0010	U	0.0010	0.00027
75-25-2	Bromoform	0.0010	U	0.0010	0.00044
74-83-9	Bromomethane	0.0010	U	0.0010	0.00049
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00019
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00020
75-00-3	Chloroethane	0.0010	U	0.0010	0.00054
67-66-3	Chloroform	0.0010	U	0.0010	0.00033
74-87-3	Chloromethane	0.0010	U	0.0010	0.00045
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00023
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-0.5-2.5 | Lab Sample ID: 460-152331-3

Matrix: Solid | Lab File ID: K81124.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:40

Sample wt/vol: 5.01(g) | Date Analyzed: 03/24/2018 08:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00019
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0051	U	0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0010	U	0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.00030	J	0.0010	0.00018
95-47-6	o-Xylene	0.00017	J	0.0010	0.000098
100-42-5	Styrene	0.0010	U	0.0010	0.00013
127-18-4	Tetrachloroethene	0.00021	J	0.0010	0.00015
108-88-3	Toluene	0.0010	U	0.0010	0.00064
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00042
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00056

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		78-135
460-00-4	4-Bromofluorobenzene	99		67-126
1868-53-7	Dibromofluoromethane (Surr)	105		61-149
2037-26-5	Toluene-d8 (Surr)	103		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-0.5-2.5 | Lab Sample ID: 460-152331-3

Matrix: Solid | Lab File ID: K81124.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:40

Sample wt/vol: 5.01(g) | Date Analyzed: 03/24/2018 08:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 3.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-7-9 | Lab Sample ID: 460-152331-4

Matrix: Solid | Lab File ID: K81125.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:45

Sample wt/vol: 5.88(g) | Date Analyzed: 03/24/2018 09:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.9 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00091	U	0.00091	0.00021
79-34-5	1,1,2,2-Tetrachloroethane	0.00091	U	0.00091	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00091	U	0.00091	0.00028
79-00-5	1,1,2-Trichloroethane	0.00091	U	0.00091	0.00016
75-34-3	1,1-Dichloroethane	0.00091	U	0.00091	0.00019
75-35-4	1,1-Dichloroethene	0.00091	U	0.00091	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00091	U	0.00091	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00091	U	0.00091	0.000084
96-12-8	1,2-Dibromo-3-Chloropropane	0.00091	U	0.00091	0.00042
95-50-1	1,2-Dichlorobenzene	0.00091	U	0.00091	0.00013
107-06-2	1,2-Dichloroethane	0.00091	U	0.00091	0.00027
78-87-5	1,2-Dichloropropane	0.00091	U	0.00091	0.00039
541-73-1	1,3-Dichlorobenzene	0.00091	U	0.00091	0.00015
106-46-7	1,4-Dichlorobenzene	0.00091	U	0.00091	0.000091
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0084
78-93-3	2-Butanone (MEK)	0.0028	J	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00071
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.031		0.0046	0.0035
71-43-2	Benzene	0.00091	U	0.00091	0.00024
75-25-2	Bromoform	0.00091	U	0.00091	0.00039
74-83-9	Bromomethane	0.00091	U	0.00091	0.00043
75-15-0	Carbon disulfide	0.00091	U	0.00091	0.00024
56-23-5	Carbon tetrachloride	0.00091	U	0.00091	0.00017
108-90-7	Chlorobenzene	0.00091	U	0.00091	0.00016
74-97-5	Chlorobromomethane	0.00091	U	0.00091	0.00026
124-48-1	Chlorodibromomethane	0.00091	U	0.00091	0.00018
75-00-3	Chloroethane	0.00091	U	0.00091	0.00048
67-66-3	Chloroform	0.00091	U	0.00091	0.00029
74-87-3	Chloromethane	0.00091	U	0.00091	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00091	U	0.00091	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00091	U	0.00091	0.00025
110-82-7	Cyclohexane	0.00091	U	0.00091	0.00020
75-27-4	Dichlorobromomethane	0.00091	U	0.00091	0.00023
75-71-8	Dichlorodifluoromethane	0.00091	U	0.00091	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-104(SO)-7-9 Lab Sample ID: 460-152331-4
Matrix: Solid Lab File ID: K81125.D
Analysis Method: 8260C Date Collected: 03/20/2018 10:45
Sample wt/vol: 5.88(g) Date Analyzed: 03/24/2018 09:01
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 6.9 Level: (low/med) Low
Analysis Batch No.: 505749 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00091	U	0.00091	0.00018
106-93-4	Ethylene Dibromide	0.00091	U	0.00091	0.00016
98-82-8	Isopropylbenzene	0.00091	U	0.00091	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0039
1634-04-4	Methyl tert-butyl ether	0.00091	U	0.00091	0.00011
108-87-2	Methylcyclohexane	0.00091	U	0.00091	0.00015
75-09-2	Methylene Chloride	~~0.00023~~	~~B~~ U ✓	0.00091	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00041	J	0.00091	0.00016
95-47-6	o-Xylene	0.00021	J	0.00091	0.000087
100-42-5	Styrene	0.00091	U	0.00091	0.00011
127-18-4	Tetrachloroethene	0.00091	U	0.00091	0.00013
108-88-3	Toluene	0.00091	U	0.00091	0.00057
156-60-5	trans-1,2-Dichloroethene	0.00091	U	0.00091	0.00022
10061-02-6	trans-1,3-Dichloropropene	0.00091	U	0.00091	0.00024
79-01-6	Trichloroethene	0.00091	U	0.00091	0.00013
75-69-4	Trichlorofluoromethane	0.00091	U	0.00091	0.00037
75-01-4	Vinyl chloride	0.00091	U	0.00091	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	104		61-149
2037-26-5	Toluene-d8 (Surr)	104		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-104(SO)-7-9 | Lab Sample ID: 460-152331-4

Matrix: Solid | Lab File ID: K81125.D

Analysis Method: 8260C | Date Collected: 03/20/2018 10:45

Sample wt/vol: 5.88(g) | Date Analyzed: 03/24/2018 09:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.9 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-0.5-2.5 | Lab Sample ID: 460-152331-5

Matrix: Solid | Lab File ID: K81126.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:20

Sample wt/vol: 5.526(g) | Date Analyzed: 03/24/2018 09:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0085
78-93-3	2-Butanone (MEK)	0.0022	J	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.019		0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00044
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00025
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	U	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-0.5-2.5 | Lab Sample ID: 460-152331-5

Matrix: Solid | Lab File ID: K81126.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:20

Sample wt/vol: 5.526(g) | Date Analyzed: 03/24/2018 09:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.1 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00012
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	0.00028	J B U	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00038	J	0.00092	0.00016
95-47-6	o-Xylene	0.00019	J	0.00092	0.000088
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00038
75-01-4	Vinyl chloride	0.00092	U	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		78-135
460-00-4	4-Bromofluorobenzene	101		67-126
1868-53-7	Dibromofluoromethane (Surr)	105		61-149
2037-26-5	Toluene-d8 (Surr)	104		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-0.5-2.5 Lab Sample ID: 460-152331-5

Matrix: Solid Lab File ID: K81126.D

Analysis Method: 8260C Date Collected: 03/20/2018 12:20

Sample wt/vol: 5.526(g) Date Analyzed: 03/24/2018 09:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.1 Level: (low/med) Low

Analysis Batch No.: 505749 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-7-9 | Lab Sample ID: 460-152331-6

Matrix: Solid | Lab File ID: K81127.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:25

Sample wt/vol: 5.548(g) | Date Analyzed: 03/24/2018 09:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.5 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029
79-00-5	1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017
75-34-3	1,1-Dichloroethane	0.00096	U	0.00096	0.00020
75-35-4	1,1-Dichloroethene	0.00096	U	0.00096	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000089
96-12-8	1,2-Dibromo-3-Chloropropane	0.00096	U	0.00096	0.00044
95-50-1	1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014
107-06-2	1,2-Dichloroethane	0.00096	U	0.00096	0.00029
78-87-5	1,2-Dichloropropane	0.00096	U	0.00096	0.00041
541-73-1	1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015
106-46-7	1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0089
78-93-3	2-Butanone (MEK)	0.0029	J	0.0048	0.0011
591-78-6	2-Hexanone	0.0048	U	0.0048	0.00075
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064
67-64-1	Acetone	0.029		0.0048	0.0037
71-43-2	Benzene	0.00096	U	0.00096	0.00025
75-25-2	Bromoform	0.00096	U	0.00096	0.00041
74-83-9	Bromomethane	0.00096	U	0.00096	0.00046
75-15-0	Carbon disulfide	0.00096	U	0.00096	0.00026
56-23-5	Carbon tetrachloride	0.00096	U	0.00096	0.00017
108-90-7	Chlorobenzene	0.00096	U	0.00096	0.00017
74-97-5	Chlorobromomethane	0.00096	U	0.00096	0.00027
124-48-1	Chlorodibromomethane	0.00096	U	0.00096	0.00019
75-00-3	Chloroethane	0.00096	U	0.00096	0.00050
67-66-3	Chloroform	0.00096	U	0.00096	0.00031
74-87-3	Chloromethane	0.00096	U	0.00096	0.00042
156-59-2	cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
110-82-7	Cyclohexane	0.00096	U	0.00096	0.00021
75-27-4	Dichlorobromomethane	0.00096	U	0.00096	0.00025
75-71-8	Dichlorodifluoromethane	0.00096	U	0.00096	0.00033

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-105(SO)-7-9 | Lab Sample ID: 460-152331-6
Matrix: Solid | Lab File ID: K81127.D
Analysis Method: 8260C | Date Collected: 03/20/2018 12:25
Sample wt/vol: 5.548(g) | Date Analyzed: 03/24/2018 09:49
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 6.5 | Level: (low/med) Low
Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00096	U	0.00096	0.00019
106-93-4	Ethylene Dibromide	0.00096	U	0.00096	0.00017
98-82-8	Isopropylbenzene	0.00096	U	0.00096	0.00012
79-20-9	Methyl acetate	0.0048	U	0.0048	0.0041
1634-04-4	Methyl tert-butyl ether	0.00096	U	0.00096	0.00012
108-87-2	Methylcyclohexane	0.00096	U	0.00096	0.00015
75-09-2	Methylene Chloride	0.00022	J B	0.00096	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00053	J	0.00096	0.00017
95-47-6	o-Xylene	0.00023	J	0.00096	0.000092
100-42-5	Styrene	0.00096	U	0.00096	0.00012
127-18-4	Tetrachloroethene	0.00096	U	0.00096	0.00014
108-88-3	Toluene	0.00096	U	0.00096	0.00060
156-60-5	trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
79-01-6	Trichloroethene	0.00096	U	0.00096	0.00014
75-69-4	Trichlorofluoromethane	0.00096	U	0.00096	0.00039
75-01-4	Vinyl chloride	0.00096	U	0.00096	0.00053

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		78-135
460-00-4	4-Bromofluorobenzene	100		67-126
1868-53-7	Dibromofluoromethane (Surr)	102		61-149
2037-26-5	Toluene-d8 (Surr)	105		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-105(SO)-7-9 | Lab Sample ID: 460-152331-6

Matrix: Solid | Lab File ID: K81127.D

Analysis Method: 8260C | Date Collected: 03/20/2018 12:25

Sample wt/vol: 5.548(g) | Date Analyzed: 03/24/2018 09:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.5 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-Drain-02(SO) | Lab Sample ID: 460-152331-7
Matrix: Solid | Lab File ID: K81128.D
Analysis Method: 8260C | Date Collected: 03/20/2018 13:35
Sample wt/vol: 4.143(g) | Date Analyzed: 03/24/2018 10:13
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 65.7 | Level: (low/med) Low
Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0035	U	0.0035	0.00082
79-34-5	1,1,2,2-Tetrachloroethane	0.0035	U	0.0035	0.00075
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0035	U	0.0035	0.0011
79-00-5	1,1,2-Trichloroethane	0.0035	U	0.0035	0.00063
75-34-3	1,1-Dichloroethane	0.0035	U	0.0035	0.00072
75-35-4	1,1-Dichloroethene	0.0035	U	0.0035	0.00079
87-61-6	1,2,3-Trichlorobenzene	0.0035	U	0.0035	0.00064
120-82-1	1,2,4-Trichlorobenzene	0.0035	U	0.0035	0.00032
96-12-8	1,2-Dibromo-3-Chloropropane	0.0035	U	0.0035	0.0016
95-50-1	1,2-Dichlorobenzene	0.0035	U	0.0035	0.00051
107-06-2	1,2-Dichloroethane	0.0035	U	0.0035	0.0010
78-87-5	1,2-Dichloropropane	0.0035	U	0.0035	0.0015
541-73-1	1,3-Dichlorobenzene	0.0035	U	0.0035	0.00056
106-46-7	1,4-Dichlorobenzene	0.0035	U	0.0035	0.00035
123-91-1	1,4-Dioxane	0.070	U J	0.070	0.032
78-93-3	2-Butanone (MEK)	0.18		0.018	0.0039
591-78-6	2-Hexanone	0.018	U	0.018	0.0027
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0037	J	0.018	0.0023
67-64-1	Acetone	0.80		0.018	0.013
71-43-2	Benzene	0.0035	U	0.0035	0.00091
75-25-2	Bromoform	0.0035	U	0.0035	0.0015
74-83-9	Bromomethane	0.0035	U	0.0035	0.0017
75-15-0	Carbon disulfide	0.0087		0.0035	0.00094
56-23-5	Carbon tetrachloride	0.0035	U	0.0035	0.00064
108-90-7	Chlorobenzene	0.0035	U	0.0035	0.00062
74-97-5	Chlorobromomethane	0.0035	U	0.0035	0.00099
124-48-1	Chlorodibromomethane	0.0035	U	0.0035	0.00068
75-00-3	Chloroethane	0.0035	U	0.0035	0.0018
67-66-3	Chloroform	0.0035	U	0.0035	0.0011
74-87-3	Chloromethane	0.0035	U	0.0035	0.0015
156-59-2	cis-1,2-Dichloroethene	0.011		0.0035	0.00053
10061-01-5	cis-1,3-Dichloropropene	0.0035	U	0.0035	0.00096
110-82-7	Cyclohexane	0.0035	U	0.0035	0.00078
75-27-4	Dichlorobromomethane	0.0035	U	0.0035	0.00090
75-71-8	Dichlorodifluoromethane	0.0035	U	0.0035	0.0012

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-Drain-02(SO) | Lab Sample ID: 460-152331-7

Matrix: Solid | Lab File ID: K81128.D

Analysis Method: 8260C | Date Collected: 03/20/2018 13:35

Sample wt/vol: 4.148(g) | Date Analyzed: 03/24/2018 10:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 65.7 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00075	J	0.0035	0.00070
106-93-4	Ethylene Dibromide	0.0035	U	0.0035	0.00063
98-82-8	Isopropylbenzene	0.0035	U	0.0035	0.00044
79-20-9	Methyl acetate	0.018	U	0.018	0.015
1634-04-4	Methyl tert-butyl ether	0.0035	U	0.0035	0.00044
108-87-2	Methylcyclohexane	0.00083	J	0.0035	0.00056
75-09-2	Methylene Chloride	0.0035	U	0.0035	0.00057
179601-23-1	m-Xylene & p-Xylene	0.0019	J	0.0035	0.00061
95-47-6	o-Xylene	0.00075	J	0.0035	0.00033
100-42-5	Styrene	0.0035	U	0.0035	0.00043
127-18-4	Tetrachloroethene	0.0011	J	0.0035	0.00050
108-88-3	Toluene	0.0028	J	0.0035	0.0022
156-60-5	trans-1,2-Dichloroethene	0.0035	U	0.0035	0.00086
10061-02-6	trans-1,3-Dichloropropene	0.0035	U	0.0035	0.00094
79-01-6	Trichloroethene	0.0035	U	0.0035	0.00051
75-69-4	Trichlorofluoromethane	0.0035	U	0.0035	0.0014
75-01-4	Vinyl chloride	0.0035	U	0.0035	0.0019

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		78-135
460-00-4	4-Bromofluorobenzene	92		67-126
1868-53-7	Dibromofluoromethane (Surr)	102		61-149
2037-26-5	Toluene-d8 (Surr)	109		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-Drain-02(SO) | Lab Sample ID: 460-152331-7

Matrix: Solid | Lab File ID: K81128.D

Analysis Method: 8260C | Date Collected: 03/20/2018 13:35

Sample wt/vol: 4.143(g) | Date Analyzed: 03/24/2018 10:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 65.7 | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

Number TICs Found: 9 | TIC Result Total: 0.369

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	10.70	0.029	J	
	Unknown alkane	11.05	0.028	J	
	Unknown	11.28	0.069	J	
	Unknown	11.69	0.065	J	
	Unknown alkane	11.83	0.023	J	
	Unknown alkane	11.89	0.030	J	
62237-97-2	Decane, 2,2,6-trimethyl-	12.06	0.023	J N	90%
	Unknown	12.23	0.028	J	
	Unknown	12.47	0.074	J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-15-17 | Lab Sample ID: 460-152604-2

Matrix: Solid | Lab File ID: B28134.D

Analysis Method: 8260C | Date Collected: 03/26/2018 11:00

Sample wt/vol: 5.702(g) | Date Analyzed: 03/31/2018 19:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 8.5 | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029
79-00-5	1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017
75-34-3	1,1-Dichloroethane	0.00096	U	0.00096	0.00020
75-35-4	1,1-Dichloroethene	0.00096	U	0.00096	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000088
96-12-8	1,2-Dibromo-3-Chloropropane	0.00096	U	0.00096	0.00044
95-50-1	1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014
107-06-2	1,2-Dichloroethane	0.00096	U	0.00096	0.00028
78-87-5	1,2-Dichloropropane	0.00096	U	0.00096	0.00041
541-73-1	1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015
106-46-7	1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0088
78-93-3	2-Butanone (MEK)	0.0048	U	0.0048	0.0011
591-78-6	2-Hexanone	0.0048	U	0.0048	0.00075
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064
67-64-1	Acetone	0.050		0.0048	0.0036
71-43-2	Benzene	0.00096	U	0.00096	0.00025
75-25-2	Bromoform	0.00096	U	0.00096	0.00041
74-83-9	Bromomethane	0.00096	U	0.00096	0.00045
75-15-0	Carbon disulfide	0.00096	U	0.00096	0.00025
56-23-5	Carbon tetrachloride	0.00096	U	0.00096	0.00017
108-90-7	Chlorobenzene	0.00096	U	0.00096	0.00017
74-97-5	Chlorobromomethane	0.00096	U	0.00096	0.00027
124-48-1	Chlorodibromomethane	0.00096	U	0.00096	0.00019
75-00-3	Chloroethane	0.00096	U	0.00096	0.00050
67-66-3	Chloroform	0.00096	U	0.00096	0.00031
74-87-3	Chloromethane	0.00096	U	0.00096	0.00042
156-59-2	cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
110-82-7	Cyclohexane	0.00096	U	0.00096	0.00021
75-27-4	Dichlorobromomethane	0.00096	U	0.00096	0.00025
75-71-8	Dichlorodifluoromethane	0.00096	U	0.00096	0.00032

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-107D(SO)-15-17 | Lab Sample ID: 460-152604-2
Matrix: Solid | Lab File ID: B28134.D
Analysis Method: 8260C | Date Collected: 03/26/2018 11:00
Sample wt/vol: 5.702(g) | Date Analyzed: 03/31/2018 19:59
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 8.5 | Level: (low/med) Low
Analysis Batch No.: 507466 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00096	U	0.00096	0.00019
106-93-4	Ethylene Dibromide	0.00096	U	0.00096	0.00017
98-82-8	Isopropylbenzene	0.00096	U	0.00096	0.00012
79-20-9	Methyl acetate	0.0048	U	0.0048	0.0041
1634-04-4	Methyl tert-butyl ether	0.00096	U	0.00096	0.00012
108-87-2	Methylcyclohexane	0.00096	U	0.00096	0.00015
75-09-2	Methylene Chloride	0.0042		0.00096	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00027	J	0.00096	0.00017
95-47-6	o-Xylene	0.00011	J	0.00096	0.000091
100-42-5	Styrene	0.00096	U	0.00096	0.00012
127-18-4	Tetrachloroethene	0.00096	U	0.00096	0.00014
108-88-3	Toluene	0.00096	U	0.00096	0.00060
156-60-5	trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00025
79-01-6	Trichloroethene	0.00096	U	0.00096	0.00014
75-69-4	Trichlorofluoromethane	0.00096	U	0.00096	0.00039
75-01-4	Vinyl chloride	0.00096	U	0.00096	0.00052

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	129		78-135
460-00-4	4-Bromofluorobenzene	93		67-126
1868-53-7	Dibromofluoromethane (Surr)	124		61-149
2037-26-5	Toluene-d8 (Surr)	86		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-15-17 | Lab Sample ID: 460-152604-2

Matrix: Solid | Lab File ID: B28134.D

Analysis Method: 8260C | Date Collected: 03/26/2018 11:00

Sample wt/vol: 5.702(g) | Date Analyzed: 03/31/2018 19:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 8.5 | Level: (low/med) Low

Analysis Batch No.: 507466 | Units: mg/Kg

Number TICs Found: 1 | TIC Result Total: 0.0088

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	2.45	0.0088	J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-15-17 | Lab Sample ID: 460-153018-1

Matrix: Solid | Lab File ID: K82442.D

Analysis Method: 8260C | Date Collected: 03/30/2018 09:25

Sample wt/vol: 8.12(g) | Date Analyzed: 04/23/2018 21:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.7 | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00063	U H	0.00063	0.00015
79-34-5	1,1,2,2-Tetrachloroethane	0.00063	U H	0.00063	0.00014
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00063	U H	0.00063	0.00019
79-00-5	1,1,2-Trichloroethane	0.00063	U H	0.00063	0.00011
75-34-3	1,1-Dichloroethane	0.00063	U H	0.00063	0.00013
75-35-4	1,1-Dichloroethene	0.00063	U H	0.00063	0.00014
87-61-6	1,2,3-Trichlorobenzene	0.00063	U H	0.00063	0.00011
120-82-1	1,2,4-Trichlorobenzene	0.00063	U H	0.00063	0.000058
96-12-8	1,2-Dibromo-3-Chloropropane	0.00063	U H	0.00063	0.00029
95-50-1	1,2-Dichlorobenzene	0.00063	U H	0.00063	0.000091
107-06-2	1,2-Dichloroethane	0.00063	U H	0.00063	0.00019
78-87-5	1,2-Dichloropropane	0.00063	U H	0.00063	0.00027
541-73-1	1,3-Dichlorobenzene	0.00063	U H	0.00063	0.00010
106-46-7	1,4-Dichlorobenzene	0.00063	U H	0.00063	0.000063
123-91-1	1,4-Dioxane	0.013	U H	0.013	0.0058
78-93-3	2-Butanone (MEK)	0.0032	U H	0.0032	0.00070
591-78-6	2-Hexanone	0.0032	U H	0.0032	0.00049
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0032	U H	0.0032	0.00042
67-64-1	Acetone	0.018	U H	0.0032	0.0024
71-43-2	Benzene	0.00063	U H	0.00063	0.00016
75-25-2	Bromoform	0.00063	U H	0.00063	0.00027
74-83-9	Bromomethane	0.00063	U H	0.00063	0.00030
75-15-0	Carbon disulfide	0.00063	U H	0.00063	0.00017
56-23-5	Carbon tetrachloride	0.00063	U H	0.00063	0.00011
108-90-7	Chlorobenzene	0.00063	U H	0.00063	0.00011
74-97-5	Chlorobromomethane	0.00063	U H	0.00063	0.00018
124-48-1	Chlorodibromomethane	0.00063	U H	0.00063	0.00012
75-00-3	Chloroethane	0.00063	U H	0.00063	0.00033
67-66-3	Chloroform	0.00063	U H	0.00063	0.00020
74-87-3	Chloromethane	0.00063	U H	0.00063	0.00028
156-59-2	cis-1,2-Dichloroethene	0.00063	U H	0.00063	0.000096
10061-01-5	cis-1,3-Dichloropropene	0.00063	U H	0.00063	0.00017
110-82-7	Cyclohexane	0.00063	U H	0.00063	0.00014
75-27-4	Dichlorobromomethane	0.00063	U H	0.00063	0.00016
75-71-8	Dichlorodifluoromethane	0.00063	U H	0.00063	0.00021

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-15-17 Lab Sample ID: 460-153018-1

Matrix: Solid Lab File ID: K82442.D

Analysis Method: 8260C Date Collected: 03/30/2018 09:25

Sample wt/vol: 8.12(g) Date Analyzed: 04/23/2018 21:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.7 Level: (low/med) Low

Analysis Batch No.: 513435 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00025	J H	0.00063	0.00013
106-93-4	Ethylene Dibromide	0.00063	U H	0.00063	0.00011
98-82-8	Isopropylbenzene	0.00063	U H	0.00063	0.000080
79-20-9	Methyl acetate	0.0032	U H	0.0032	0.0027
1634-04-4	Methyl tert-butyl ether	0.00063	U H	0.00063	0.000079
108-87-2	Methylcyclohexane	0.00035	J H	0.00063	0.00010
75-09-2	Methylene Chloride	0.00023	J H	0.00063	0.00010
179601-23-1	m-Xylene & p-Xylene	0.00087	J H	0.00063	0.00011
95-47-6	o-Xylene	0.00035	J H	0.00063	0.000060
100-42-5	Styrene	0.00063	U H	0.00063	0.000078
127-18-4	Tetrachloroethene	0.00063	U H	0.00063	0.000090
108-88-3	Toluene	0.00048	J H	0.00063	0.00040
156-60-5	trans-1,2-Dichloroethene	0.00063	U H	0.00063	0.00016
10061-02-6	trans-1,3-Dichloropropene	0.00063	U H	0.00063	0.00017
79-01-6	Trichloroethene	0.00063	U H	0.00063	0.000091
75-69-4	Trichlorofluoromethane	0.00063	U H	0.00063	0.00026
75-01-4	Vinyl chloride	0.00063	U H	0.00063	0.00035

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		78-135
460-00-4	4-Bromofluorobenzene	104		67-126
1868-53-7	Dibromofluoromethane (Surr)	105		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-15-17 | Lab Sample ID: 460-153018-1

Matrix: Solid | Lab File ID: K82442.D

Analysis Method: 8260C | Date Collected: 03/30/2018 09:25

Sample wt/vol: 0.12(g) | Date Analyzed: 04/23/2018 21:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 2.7 | Level: (low/med) Low

Analysis Batch No.: 513435 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-97-99 | Lab Sample ID: 460-153022-1

Matrix: Solid | Lab File ID: D48522.D

Analysis Method: 8260C | Date Collected: 03/29/2018 12:15

Sample wt/vol: 6.586(g) | Date Analyzed: 04/11/2018 13:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 17.9 | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00092	U	0.00092	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00092	U	0.00092	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00092	U	0.00092	0.00028
79-00-5	1,1,2-Trichloroethane	0.00092	U	0.00092	0.00016
75-34-3	1,1-Dichloroethane	0.00092	U	0.00092	0.00019
75-35-4	1,1-Dichloroethene	0.00092	U	0.00092	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00092	U	0.00092	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00092	U	0.00092	0.000085
96-12-8	1,2-Dibromo-3-Chloropropane	0.00092	U	0.00092	0.00043
95-50-1	1,2-Dichlorobenzene	0.00092	U	0.00092	0.00013
107-06-2	1,2-Dichloroethane	0.00092	U	0.00092	0.00027
78-87-5	1,2-Dichloropropane	0.00092	U	0.00092	0.00039
541-73-1	1,3-Dichlorobenzene	0.00092	U	0.00092	0.00015
106-46-7	1,4-Dichlorobenzene	0.00092	U	0.00092	0.000092
123-91-1	1,4-Dioxane	0.018	U	0.018	0.0085
78-93-3	2-Butanone (MEK)	0.0015	J	0.0046	0.0010
591-78-6	2-Hexanone	0.0046	U	0.0046	0.00072
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0046	U	0.0046	0.00061
67-64-1	Acetone	0.016		0.0046	0.0035
71-43-2	Benzene	0.00092	U	0.00092	0.00024
75-25-2	Bromoform	0.00092	U	0.00092	0.00039
74-83-9	Bromomethane	0.00092	U	0.00092	0.00044
75-15-0	Carbon disulfide	0.00092	U	0.00092	0.00025
56-23-5	Carbon tetrachloride	0.00092	U	0.00092	0.00017
108-90-7	Chlorobenzene	0.00092	U	0.00092	0.00016
74-97-5	Chlorobromomethane	0.00092	U	0.00092	0.00026
124-48-1	Chlorodibromomethane	0.00092	U	0.00092	0.00018
75-00-3	Chloroethane	0.00092	U	0.00092	0.00048
67-66-3	Chloroform	0.00092	U	0.00092	0.00029
74-87-3	Chloromethane	0.00092	U	0.00092	0.00040
156-59-2	cis-1,2-Dichloroethene	0.00092	U	0.00092	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
110-82-7	Cyclohexane	0.00092	U	0.00092	0.00020
75-27-4	Dichlorobromomethane	0.00092	U	0.00092	0.00024
75-71-8	Dichlorodifluoromethane	0.00092	UJ	0.00092	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-107D(SO)-97-99 | Lab Sample ID: 460-153022-1
Matrix: Solid | Lab File ID: D48522.D
Analysis Method: 8260C | Date Collected: 03/29/2018 12:15
Sample wt/vol: 6.586(g) | Date Analyzed: 04/11/2018 13:45
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 17.9 | Level: (low/med) Low
Analysis Batch No.: 510106 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00092	U	0.00092	0.00018
106-93-4	Ethylene Dibromide	0.00092	U	0.00092	0.00017
98-82-8	Isopropylbenzene	0.00092	U	0.00092	0.00012
79-20-9	Methyl acetate	0.0046	U	0.0046	0.0040
1634-04-4	Methyl tert-butyl ether	0.00092	U	0.00092	0.00012
108-87-2	Methylcyclohexane	0.00092	U	0.00092	0.00015
75-09-2	Methylene Chloride	~~0.00026~~	~~J~~ B	0.00092	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00043	J	0.00092	0.00016
95-47-6	o-Xylene	0.00014	J	0.00092	0.000088
100-42-5	Styrene	0.00092	U	0.00092	0.00011
127-18-4	Tetrachloroethene	0.00092	U	0.00092	0.00013
108-88-3	Toluene	0.00092	U	0.00092	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00092	U	0.00092	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00092	U	0.00092	0.00025
79-01-6	Trichloroethene	0.00092	U	0.00092	0.00013
75-69-4	Trichlorofluoromethane	0.00092	U	0.00092	0.00038
75-01-4	Vinyl chloride	0.00092	U	0.00092	0.00050

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		78-135
460-00-4	4-Bromofluorobenzene	101		67-126
1868-53-7	Dibromofluoromethane (Surr)	79		61-149
2037-26-5	Toluene-d8 (Surr)	95		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-107D(SO)-97-99 | Lab Sample ID: 460-153022-1

Matrix: Solid | Lab File ID: D48522.D

Analysis Method: 8260C | Date Collected: 03/29/2018 12:15

Sample wt/vol: 6.586(g) | Date Analyzed: 04/11/2018 13:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 17.9 | Level: (low/med) Low

Analysis Batch No.: 510106 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-33-35 | Lab Sample ID: 460-153082-1

Matrix: Solid | Lab File ID: K81924.D

Analysis Method: 8260C | Date Collected: 04/02/2018 10:00

Sample wt/vol: 6.643(g) | Date Analyzed: 04/13/2018 03:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.5 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0026	J	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.036		0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U UJ ✓	0.0010	0.00042
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U UJ ✓	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U J	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00043
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-33-35 Lab Sample ID: 460-153082-1

Matrix: Solid Lab File ID: K81924.D

Analysis Method: 8260C Date Collected: 04/02/2018 10:00

Sample wt/vol: 6.643(g) Date Analyzed: 04/13/2018 03:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.5 Level: (low/med) Low

Analysis Batch No.: 510660 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00012
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.0020		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00030	J	0.0010	0.00017
95-47-6	o-Xylene	0.00015	J	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0014		0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00062
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.00015	J	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00040
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00054

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		78-135
460-00-4	4-Bromofluorobenzene	117		67-126
1868-53-7	Dibromofluoromethane (Surr)	126		61-149
2037-26-5	Toluene-d8 (Surr)	102		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-109M(SO)-33-35 | Lab Sample ID: 460-153082-1

Matrix: Solid | Lab File ID: K81924.D

Analysis Method: 8260C | Date Collected: 04/02/2018 10:00

Sample wt/vol: 6.643(g) | Date Analyzed: 04/13/2018 03:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 24.5 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

Number TICs Found: 10 | TIC Result Total: 0.1352

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
112-40-3	Dodecane	12.69	0.016	J N	91%
15869-86-0	Octane, 4-ethyl-	13.10	0.0079	J N	87%
	Unknown	13.18	0.0075	J	
	Unknown alkane	13.24	0.010	J	
629-50-5	Tridecane	13.44	0.047	J N	94%
	Unknown	13.53	0.0061	J	
	Unknown alkane	13.59	0.0060	J	
	Unknown	14.00	0.0068	J	
31295-56-4	Dodecane, 2,6,11-trimethyl-	14.05	0.0059	J N	90%
629-59-4	Tetradecane	14.22	0.022	J N	94%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-106(SO)-15-17 | Lab Sample ID: 460-153163-1
Matrix: Solid | Lab File ID: K81925.D
Analysis Method: 8260C | Date Collected: 04/03/2018 08:40
Sample wt/vol: 5.579(g) | Date Analyzed: 04/13/2018 03:51
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 6.8 | Level: (low/med) Low
Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00096	U	0.00096	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00096	U	0.00096	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00096	U	0.00096	0.00029
79-00-5	1,1,2-Trichloroethane	0.00096	U	0.00096	0.00017
75-34-3	1,1-Dichloroethane	0.00096	U	0.00096	0.00020
75-35-4	1,1-Dichloroethene	0.00096	U	0.00096	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00096	U	0.00096	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00096	U	0.00096	0.000088
96-12-8	1,2-Dibromo-3-Chloropropane	0.00096	U	0.00096	0.00044
95-50-1	1,2-Dichlorobenzene	0.00096	U	0.00096	0.00014
107-06-2	1,2-Dichloroethane	0.00096	U	0.00096	0.00028
78-87-5	1,2-Dichloropropane	0.00096	U	0.00096	0.00041
541-73-1	1,3-Dichlorobenzene	0.00096	U	0.00096	0.00015
106-46-7	1,4-Dichlorobenzene	0.00096	U	0.00096	0.000096
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0088
78-93-3	2-Butanone (MEK)	0.0022	J	0.0048	0.0011
591-78-6	2-Hexanone	0.0048	U	0.0048	0.00075
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0048	U	0.0048	0.00064
67-64-1	Acetone	0.031		0.0048	0.0036
71-43-2	Benzene	0.00096	U	0.00096	0.00025
75-25-2	Bromoform	0.00096	UJ	0.00096	0.00041
74-83-9	Bromomethane	0.00096	U	0.00096	0.00046
75-15-0	Carbon disulfide	0.00096	U	0.00096	0.00026
56-23-5	Carbon tetrachloride	0.00096	UJ	0.00096	0.00017
108-90-7	Chlorobenzene	0.00096	U	0.00096	0.00017
74-97-5	Chlorobromomethane	0.00096	U	0.00096	0.00027
124-48-1	Chlorodibromomethane	0.00096	U	0.00096	0.00019
75-00-3	Chloroethane	0.00096	U	0.00096	0.00050
67-66-3	Chloroform	0.00096	U	0.00096	0.00031
74-87-3	Chloromethane	0.00096	U	0.00096	0.00042
156-59-2	cis-1,2-Dichloroethene	0.00096	U	0.00096	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
110-82-7	Cyclohexane	0.00096	U	0.00096	0.00021
75-27-4	Dichlorobromomethane	0.00096	U	0.00096	0.00025
75-71-8	Dichlorodifluoromethane	0.00096	U	0.00096	0.00033

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-106(SO)-15-17 | Lab Sample ID: 460-153163-1
Matrix: Solid | Lab File ID: K81925.D
Analysis Method: 8260C | Date Collected: 04/03/2018 08:40
Sample wt/vol: 5.579(g) | Date Analyzed: 04/13/2018 03:51
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 6.8 | Level: (low/med) Low
Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00096	U	0.00096	0.00019
106-93-4	Ethylene Dibromide	0.00096	U	0.00096	0.00017
98-82-8	Isopropylbenzene	0.00096	U	0.00096	0.00012
79-20-9	Methyl acetate	0.0048	UJ	0.0048	0.0041
1634-04-4	Methyl tert-butyl ether	0.00096	U	0.00096	0.00012
108-87-2	Methylcyclohexane	0.00096	U	0.00096	0.00015
75-09-2	Methylene Chloride	0.00029	J	0.00096	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00038	J	0.00096	0.00017
95-47-6	o-Xylene	0.00020	J	0.00096	0.000091
100-42-5	Styrene	0.00096	U	0.00096	0.00012
127-18-4	Tetrachloroethene	0.00096	U	0.00096	0.00014
108-88-3	Toluene	0.00096	U	0.00096	0.00060
156-60-5	trans-1,2-Dichloroethene	0.00096	U	0.00096	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00096	U	0.00096	0.00026
79-01-6	Trichloroethene	0.00096	U	0.00096	0.00014
75-69-4	Trichlorofluoromethane	0.00096	U	0.00096	0.00039
75-01-4	Vinyl chloride	0.00096	U	0.00096	0.00053

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		78-135
460-00-4	4-Bromofluorobenzene	111		67-126
1868-53-7	Dibromofluoromethane (Surr)	121		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-106(SO)-15-17 | Lab Sample ID: 460-153163-1

Matrix: Solid | Lab File ID: K81925.D

Analysis Method: 8260C | Date Collected: 04/03/2018 08:40

Sample wt/vol: 5.579(g) | Date Analyzed: 04/13/2018 03:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 6.8 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-108D(SO)-15-17 | Lab Sample ID: 460-153163-2
Matrix: Solid | Lab File ID: K81926.D
Analysis Method: 8260C | Date Collected: 04/03/2018 11:10
Sample wt/vol: 5.538(g) | Date Analyzed: 04/13/2018 04:15
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 11.1 | Level: (low/med) Low
Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000093
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00043
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0093
78-93-3	2-Butanone (MEK)	0.0024	J	0.0051	0.0011
591-78-6	2-Hexanone	0.0051	U	0.0051	0.00079
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00067
67-64-1	Acetone	0.041		0.0051	0.0039
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	UJ ✓	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00048
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	UJ ✓	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0010	U J	0.0010	0.00020
75-00-3	Chloroethane	0.0010	U	0.0010	0.00053
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-15-17 | Lab Sample ID: 460-153163-2

Matrix: Solid | Lab File ID: K81926.D

Analysis Method: 8260C | Date Collected: 04/03/2018 11:10

Sample wt/vol: 5.538(g) | Date Analyzed: 04/13/2018 04:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 | Level: (low/med) Low

Analysis Batch No.: 510660 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0051	4UJ	0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.00024	J	0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.00040	J	0.0010	0.00018
95-47-6	o-Xylene	0.00015	J	0.0010	0.000097
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00015
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		78-135
460-00-4	4-Bromofluorobenzene	114		67-126
1868-53-7	Dibromofluoromethane (Surr)	121		61-149
2037-26-5	Toluene-d8 (Surr)	99		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-15-17 Lab Sample ID: 460-153163-2

Matrix: Solid Lab File ID: K81926.D

Analysis Method: 8260C Date Collected: 04/03/2018 11:10

Sample wt/vol: 5.538(g) Date Analyzed: 04/13/2018 04:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 Level: (low/med) Low

Analysis Batch No.: 510660 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-108D(SO)-33-35 | Lab Sample ID: 460-153254-1
Matrix: Solid | Lab File ID: K82046.D
Analysis Method: 8260C | Date Collected: 04/04/2018 08:00
Sample wt/vol: 6.461(g) | Date Analyzed: 04/16/2018 10:34
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 24.4 | Level: (low/med) Low
Analysis Batch No.: 511293 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000094
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00043
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0094
78-93-3	2-Butanone (MEK)	0.0021	J	0.0051	0.0011
591-78-6	2-Hexanone	0.0051	U	0.0051	0.00080
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068
67-64-1	Acetone	0.040		0.0051	0.0039
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00049
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00019
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00029
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00020
75-00-3	Chloroethane	0.0010	U	0.0010	0.00053
67-66-3	Chloroform	0.0010	U	0.0010	0.00033
74-87-3	Chloromethane	0.0010	U	0.0010	0.00045
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00023
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-108D(SO)-33-35 Lab Sample ID: 460-153254-1
Matrix: Solid Lab File ID: K82046.D
Analysis Method: 8260C Date Collected: 04/04/2018 08:00
Sample wt/vol: 6.461(g) Date Analyzed: 04/16/2018 10:34
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 24.4 Level: (low/med) Low
Analysis Batch No.: 511293 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0051	UJ	0.0051	0.0044
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.00086	J	0.0010	0.00017
179601-23-1	m-Xylene & p-Xylene	0.00044	J	0.0010	0.00018
95-47-6	o-Xylene	0.00017	J	0.0010	0.000097
100-42-5	Styrene	0.0010	U	0.0010	0.00013
127-18-4	Tetrachloroethene	0.014		0.0010	0.00015
108-88-3	Toluene	0.0010	U	0.0010	0.00064
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00015
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00042
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00056

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		78-135
460-00-4	4-Bromofluorobenzene	113		67-126
1868-53-7	Dibromofluoromethane (Surr)	127		61-149
2037-26-5	Toluene-d8 (Surr)	101		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-108D(SO)-33-35 Lab Sample ID: 460-153254-1
Matrix: Solid Lab File ID: K82046.D
Analysis Method: 8260C Date Collected: 04/04/2018 08:00
Sample wt/vol: 6.461(g) Date Analyzed: 04/16/2018 10:34
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 24.4 Level: (low/med) Low
Analysis Batch No.: 511293 Units: mg/Kg
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-59-60.5 | Lab Sample ID: 460-153254-2

Matrix: Solid | Lab File ID: K81975.D

Analysis Method: 8260C | Date Collected: 04/04/2018 10:00

Sample wt/vol: 10.131(g) | Date Analyzed: 04/14/2018 01:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 12.0 | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00056	U	0.00056	0.00013
79-34-5	1,1,2,2-Tetrachloroethane	0.00056	U	0.00056	0.00012
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00056	U	0.00056	0.00017
79-00-5	1,1,2-Trichloroethane	0.00056	U	0.00056	0.00010
75-34-3	1,1-Dichloroethane	0.00056	U	0.00056	0.00012
75-35-4	1,1-Dichloroethene	0.00056	U	0.00056	0.00013
87-61-6	1,2,3-Trichlorobenzene	0.00056	U	0.00056	0.00010
120-82-1	1,2,4-Trichlorobenzene	0.00056	U	0.00056	0.000052
96-12-8	1,2-Dibromo-3-Chloropropane	0.00056	U	0.00056	0.00026
95-50-1	1,2-Dichlorobenzene	0.00056	U	0.00056	0.000081
107-06-2	1,2-Dichloroethane	0.00056	U	0.00056	0.00017
78-87-5	1,2-Dichloropropane	0.00056	U	0.00056	0.00024
541-73-1	1,3-Dichlorobenzene	0.00056	U	0.00056	0.000089
106-46-7	1,4-Dichlorobenzene	0.00056	U	0.00056	0.000056
123-91-1	1,4-Dioxane	0.011	U	0.011	0.0052
78-93-3	2-Butanone (MEK)	0.0016	J	0.0028	0.00062
591-78-6	2-Hexanone	0.0028	U	0.0028	0.00044
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0028	U	0.0028	0.00037
67-64-1	Acetone	0.020		0.0028	0.0021
71-43-2	Benzene	0.00056	U	0.00056	0.00014
75-25-2	Bromoform	0.00056	U	0.00056	0.00024
74-83-9	Bromomethane	0.00056	U	0.00056	0.00027
75-15-0	Carbon disulfide	0.00056	U	0.00056	0.00015
56-23-5	Carbon tetrachloride	0.00056	U	0.00056	0.00010
108-90-7	Chlorobenzene	0.00056	U	0.00056	0.000099
74-97-5	Chlorobromomethane	0.00056	U	0.00056	0.00016
124-48-1	Chlorodibromomethane	0.00056	U	0.00056	0.00011
75-00-3	Chloroethane	0.00056	U	0.00056	0.00029
67-66-3	Chloroform	0.00056	U	0.00056	0.00018
74-87-3	Chloromethane	0.00056	U	0.00056	0.00024
156-59-2	cis-1,2-Dichloroethene	0.00056	U	0.00056	0.000085
10061-01-5	cis-1,3-Dichloropropene	0.00056	U	0.00056	0.00015
110-82-7	Cyclohexane	0.00056	U	0.00056	0.00012
75-27-4	Dichlorobromomethane	0.00056	U	0.00056	0.00014
75-71-8	Dichlorodifluoromethane	0.00056	U	0.00056	0.00019

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-108D(SO)-59-60.5 | Lab Sample ID: 460-153254-2

Matrix: Solid | Lab File ID: K81975.D

Analysis Method: 8260C | Date Collected: 04/04/2018 10:00

Sample wt/vol: 10.131(g) | Date Analyzed: 04/14/2018 01:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 12.0 | Level: (low/med) Low

Analysis Batch No.: 510972 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00056	U	0.00056	0.00011
106-93-4	Ethylene Dibromide	0.00056	U	0.00056	0.00010
98-82-8	Isopropylbenzene	0.00056	U	0.00056	0.000071
79-20-9	Methyl acetate	0.0028	U J+	0.0028	0.0024
1634-04-4	Methyl tert-butyl ether	0.00056	U	0.00056	0.000070
108-87-2	Methylcyclohexane	0.00056	U	0.00056	0.000090
75-09-2	Methylene Chloride	0.00027	J	0.00056	0.000091
179601-23-1	m-Xylene & p-Xylene	0.00020	J	0.00056	0.000098
95-47-6	o-Xylene	0.000080	J	0.00056	0.000053
100-42-5	Styrene	0.00056	U	0.00056	0.000069
127-18-4	Tetrachloroethene	0.00056	U	0.00056	0.000080
108-88-3	Toluene	0.00056	U	0.00056	0.00035
156-60-5	trans-1,2-Dichloroethene	0.00056	U	0.00056	0.00014
10061-02-6	trans-1,3-Dichloropropene	0.00056	U	0.00056	0.00015
79-01-6	Trichloroethene	0.00056	U	0.00056	0.000081
75-69-4	Trichlorofluoromethane	0.00056	U	0.00056	0.00023
75-01-4	Vinyl chloride	0.00056	U	0.00056	0.00031

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		78-135
460-00-4	4-Bromofluorobenzene	115		67-126
1868-53-7	Dibromofluoromethane (Surr)	122		61-149
2037-26-5	Toluene-d8 (Surr)	102		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-108D(SO)-59-60.5 Lab Sample ID: 460-153254-2
Matrix: Solid Lab File ID: K81975.D
Analysis Method: 8260C Date Collected: 04/04/2018 10:00
Sample wt/vol: 10.131(g) Date Analyzed: 04/14/2018 01:15
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 12.0 Level: (low/med) Low
Analysis Batch No.: 510972 Units: mg/Kg
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-110D(SO)-15-17 | Lab Sample ID: 460-153389-1
Matrix: Solid | Lab File ID: D48925.D
Analysis Method: 8260C | Date Collected: 04/05/2018 08:00
Sample wt/vol: 6.65(g) | Date Analyzed: 04/19/2018 21:03
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 11.1 | Level: (low/med) Low
Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00085	U	0.00085	0.00020
79-34-5	1,1,2,2-Tetrachloroethane	0.00085	U	0.00085	0.00018
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00085	U	0.00085	0.00025
79-00-5	1,1,2-Trichloroethane	0.00085	U	0.00085	0.00015
75-34-3	1,1-Dichloroethane	0.00085	U	0.00085	0.00017
75-35-4	1,1-Dichloroethene	0.00085	U	0.00085	0.00019
87-61-6	1,2,3-Trichlorobenzene	0.00085	U	0.00085	0.00015
120-82-1	1,2,4-Trichlorobenzene	0.00085	U	0.00085	0.000078
96-12-8	1,2-Dibromo-3-Chloropropane	0.00085	U	0.00085	0.00039
95-50-1	1,2-Dichlorobenzene	0.00085	U	0.00085	0.00012
107-06-2	1,2-Dichloroethane	0.00085	U	0.00085	0.00025
78-87-5	1,2-Dichloropropane	0.00085	U	0.00085	0.00036
541-73-1	1,3-Dichlorobenzene	0.00085	U	0.00085	0.00013
106-46-7	1,4-Dichlorobenzene	0.00085	U	0.00085	0.000085
123-91-1	1,4-Dioxane	0.017	U	0.017	0.0078
78-93-3	2-Butanone (MEK)	0.0020	J	0.0042	0.00094
591-78-6	2-Hexanone	0.0042	U	0.0042	0.00066
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0042	U	0.0042	0.00056
67-64-1	Acetone	0.018	J	0.0042	0.0032
71-43-2	Benzene	0.00085	U	0.00085	0.00022
75-25-2	Bromoform	0.00085	U	0.00085	0.00036
74-83-9	Bromomethane	0.00085	U	0.00085	0.00040
75-15-0	Carbon disulfide	0.00085	U	0.00085	0.00023
56-23-5	Carbon tetrachloride	0.00085	U	0.00085	0.00015
108-90-7	Chlorobenzene	0.00085	U	0.00085	0.00015
74-97-5	Chlorobromomethane	0.00085	U	0.00085	0.00024
124-48-1	Chlorodibromomethane	0.00085	U	0.00085	0.00016
75-00-3	Chloroethane	0.00085	U	0.00085	0.00044
67-66-3	Chloroform	0.00085	U	0.00085	0.00027
74-87-3	Chloromethane	0.00085	U	0.00085	0.00037
156-59-2	cis-1,2-Dichloroethene	0.00085	U	0.00085	0.00013
10061-01-5	cis-1,3-Dichloropropene	0.00085	U	0.00085	0.00023
110-82-7	Cyclohexane	0.00085	U	0.00085	0.00019
75-27-4	Dichlorobromomethane	0.00085	U	0.00085	0.00022
75-71-8	Dichlorodifluoromethane	0.00085	U	0.00085	0.00029

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-110D(SO)-15-17 Lab Sample ID: 460-153389-1
Matrix: Solid Lab File ID: D48925.D
Analysis Method: 8260C Date Collected: 04/05/2018 08:00
Sample wt/vol: 6.65(g) Date Analyzed: 04/19/2018 21:03
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 11.1 Level: (low/med) Low
Analysis Batch No.: 512479 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00085	U	0.00085	0.00017
106-93-4	Ethylene Dibromide	0.00085	U	0.00085	0.00015
98-82-8	Isopropylbenzene	0.00085	U	0.00085	0.00011
79-20-9	Methyl acetate	0.0042	U	0.0042	0.0036
1634-04-4	Methyl tert-butyl ether	0.00085	U	0.00085	0.00011
108-87-2	Methylcyclohexane	0.00085	U	0.00085	0.00014
75-09-2	Methylene Chloride	~~0.00024~~	~~J B~~	0.00085	0.00014
179601-23-1	m-Xylene & p-Xylene	0.00019	J	0.00085	0.00015
95-47-6	o-Xylene	0.00085	U	0.00085	0.000080
100-42-5	Styrene	0.00085	U	0.00085	0.00010
127-18-4	Tetrachloroethene	0.00085	U	0.00085	0.00012
108-88-3	Toluene	0.00085	U	0.00085	0.00053
156-60-5	trans-1,2-Dichloroethene	0.00085	U	0.00085	0.00021
10061-02-6	trans-1,3-Dichloropropene	0.00085	U	0.00085	0.00023
79-01-6	Trichloroethene	0.00085	U	0.00085	0.00012
75-69-4	Trichlorofluoromethane	0.00085	U	0.00085	0.00034
75-01-4	Vinyl chloride	0.00085	U	0.00085	0.00046

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		78-135
460-00-4	4-Bromofluorobenzene	97		67-126
1868-53-7	Dibromofluoromethane (Surr)	80		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-110D(SO)-15-17 | Lab Sample ID: 460-153389-1

Matrix: Solid | Lab File ID: D48925.D

Analysis Method: 8260C | Date Collected: 04/05/2018 08:00

Sample wt/vol: 6.65(g) | Date Analyzed: 04/19/2018 21:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.1 | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GZ-MW-110D(SO)-(69-70) | Lab Sample ID: 460-153515-1

Matrix: Solid | Lab File ID: K82069.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 8.658(g) | Date Analyzed: 04/16/2018 21:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00068	U	0.00068	0.00016
79-34-5	1,1,2,2-Tetrachloroethane	0.00068	UJ	0.00068	0.00015
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00068	U	0.00068	0.00020
79-00-5	1,1,2-Trichloroethane	0.00068	U	0.00068	0.00012
75-34-3	1,1-Dichloroethane	0.00068	U	0.00068	0.00014
75-35-4	1,1-Dichloroethene	0.00068	U	0.00068	0.00015
87-61-6	1,2,3-Trichlorobenzene	0.00068	U	0.00068	0.00012
120-82-1	1,2,4-Trichlorobenzene	0.00068	U	0.00068	0.000062
96-12-8	1,2-Dibromo-3-Chloropropane	0.00068	U	0.00068	0.00031
95-50-1	1,2-Dichlorobenzene	0.00068	U	0.00068	0.000098
107-06-2	1,2-Dichloroethane	0.00068	U	0.00068	0.00020
78-87-5	1,2-Dichloropropane	0.00068	U	0.00068	0.00029
541-73-1	1,3-Dichlorobenzene	0.00068	U	0.00068	0.00011
106-46-7	1,4-Dichlorobenzene	0.00068	U	0.00068	0.000068
123-91-1	1,4-Dioxane	0.014	U	0.014	0.0062
78-93-3	2-Butanone (MEK)	0.0034	UJ	0.0034	0.00075
591-78-6	2-Hexanone	0.0034	U	0.0034	0.00053
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0034	U	0.0034	0.00045
67-64-1	Acetone	0.0045	BU	0.0034	0.0026
71-43-2	Benzene	0.00068	U	0.00068	0.00017
75-25-2	Bromoform	0.00068	UJ	0.00068	0.00029
74-83-9	Bromomethane	0.00068	U	0.00068	0.00032
75-15-0	Carbon disulfide	0.00068	U	0.00068	0.00018
56-23-5	Carbon tetrachloride	0.00068	UJ	0.00068	0.00012
108-90-7	Chlorobenzene	0.00068	U	0.00068	0.00012
74-97-5	Chlorobromomethane	0.00068	U	0.00068	0.00019
124-48-1	Chlorodibromomethane	0.00068	U	0.00068	0.00013
75-00-3	Chloroethane	0.00068	U	0.00068	0.00035
67-66-3	Chloroform	0.00068	U	0.00068	0.00022
74-87-3	Chloromethane	0.00068	U	0.00068	0.00029
156-59-2	cis-1,2-Dichloroethene	0.00068	U	0.00068	0.00010
10061-01-5	cis-1,3-Dichloropropene	0.00068	U	0.00068	0.00019
110-82-7	Cyclohexane	0.00068	U	0.00068	0.00015
75-27-4	Dichlorobromomethane	0.00068	U	0.00068	0.00017
75-71-8	Dichlorodifluoromethane	0.00068	U	0.00068	0.00023

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.: c

Client Sample ID: GP-MW-110D(SO)-(69-70) | Lab Sample ID: 460-153515-1

Matrix: Solid | Lab File ID: K82069.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 8.658(g) | Date Analyzed: 04/16/2018 21:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00068	U	0.00068	0.00013
106-93-4	Ethylene Dibromide	0.00068	U	0.00068	0.00012
98-82-8	Isopropylbenzene	0.00068	U	0.00068	0.000085
79-20-9	Methyl acetate	0.0034	U *	0.0034	0.0029
1634-04-4	Methyl tert-butyl ether	0.00068	U	0.00068	0.000085
108-87-2	Methylcyclohexane	0.00068	U	0.00068	0.00011
75-09-2	Methylene Chloride	0.00065	J	0.00068	0.00011
179601-23-1	m-Xylene & p-Xylene	0.00021	J	0.00068	0.00012
95-47-6	o-Xylene	0.000094	J	0.00068	0.000064
100-42-5	Styrene	0.00068	U	0.00068	0.000083
127-18-4	Tetrachloroethene	0.00068	U	0.00068	0.000097
108-88-3	Toluene	0.00068	U	0.00068	0.00042
156-60-5	trans-1,2-Dichloroethene	0.00068	U	0.00068	0.00017
10061-02-6	trans-1,3-Dichloropropene	0.00068	U	0.00068	0.00018
79-01-6	Trichloroethene	0.00068	U	0.00068	0.000098
75-69-4	Trichlorofluoromethane	0.00068	U	0.00068	0.00028
75-01-4	Vinyl chloride	0.00068	U	0.00068	0.00037

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		78-135
460-00-4	4-Bromofluorobenzene	114		67-126
1868-53-7	Dibromofluoromethane (Surr)	126		61-149
2037-26-5	Toluene-d8 (Surr)	100		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.: C

Client Sample ID: GP-MW-110D(SO)-(69-70) | Lab Sample ID: 460-153515-1

Matrix: Solid | Lab File ID: K82069.D

Analysis Method: 8260C | Date Collected: 04/06/2018 10:25

Sample wt/vol: 8.658(g) | Date Analyzed: 04/16/2018 21:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-101D(SO)-14-15 | Lab Sample ID: 460-153682-1
Matrix: Solid | Lab File ID: D48780.D
Analysis Method: 8260C | Date Collected: 04/09/2018 13:10
Sample wt/vol: 5.576(g) | Date Analyzed: 04/17/2018 04:24
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 3.8 | Level: (low/med) Low
Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00093	U	0.00093	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00093	U	0.00093	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00093	U	0.00093	0.00028
79-00-5	1,1,2-Trichloroethane	0.00093	U	0.00093	0.00017
75-34-3	1,1-Dichloroethane	0.00093	U	0.00093	0.00019
75-35-4	1,1-Dichloroethene	0.00093	U	0.00093	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00093	U	0.00093	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00093	U	0.00093	0.000086
96-12-8	1,2-Dibromo-3-Chloropropane	0.00093	U	0.00093	0.00043
95-50-1	1,2-Dichlorobenzene	0.00093	U	0.00093	0.00013
107-06-2	1,2-Dichloroethane	0.00093	U	0.00093	0.00028
78-87-5	1,2-Dichloropropane	0.00093	U	0.00093	0.00039
541-73-1	1,3-Dichlorobenzene	0.00093	U	0.00093	0.00015
106-46-7	1,4-Dichlorobenzene	0.00093	U	0.00093	0.000093
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0086
78-93-3	2-Butanone (MEK)	0.0047	U UJ ✓	0.0047	0.0010
591-78-6	2-Hexanone	0.0047	U	0.0047	0.00073
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00062
67-64-1	Acetone	0.0047	U UJ ✓	0.0047	0.0035
71-43-2	Benzene	0.00093	U	0.00093	0.00024
75-25-2	Bromoform	0.00093	U UJ ✓	0.00093	0.00040
74-83-9	Bromomethane	0.00093	U	0.00093	0.00044
75-15-0	Carbon disulfide	0.00093	U	0.00093	0.00025
56-23-5	Carbon tetrachloride	0.00093	U	0.00093	0.00017
108-90-7	Chlorobenzene	0.00093	U	0.00093	0.00016
74-97-5	Chlorobromomethane	0.00093	U	0.00093	0.00026
124-48-1	Chlorodibromomethane	0.00093	U	0.00093	0.00018
75-00-3	Chloroethane	0.00093	U	0.00093	0.00049
67-66-3	Chloroform	0.00093	U	0.00093	0.00030
74-87-3	Chloromethane	0.00093	U	0.00093	0.00041
156-59-2	cis-1,2-Dichloroethene	0.00093	U	0.00093	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00093	U	0.00093	0.00025
110-82-7	Cyclohexane	0.00093	U	0.00093	0.00021
75-27-4	Dichlorobromomethane	0.00093	U	0.00093	0.00024
75-71-8	Dichlorodifluoromethane	0.00093	U UJ ✓	0.00093	0.00031

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-101D(SO)-14-15 | Lab Sample ID: 460-153682-1
Matrix: Solid | Lab File ID: D48780.D
Analysis Method: 8260C | Date Collected: 04/09/2018 13:10
Sample wt/vol: 5.576(g) | Date Analyzed: 04/17/2018 04:24
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 3.8 | Level: (low/med) Low
Analysis Batch No.: 511498 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00093	U	0.00093	0.00019
106-93-4	Ethylene Dibromide	0.00093	U	0.00093	0.00017
98-82-8	Isopropylbenzene	0.00093	U	0.00093	0.00012
79-20-9	Methyl acetate	0.0047	U	0.0047	0.0040
1634-04-4	Methyl tert-butyl ether	0.00093	U	0.00093	0.00012
108-87-2	Methylcyclohexane	0.00093	U	0.00093	0.00015
75-09-2	Methylene Chloride	0.00093	U	0.00093	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00031	J	0.00093	0.00016
95-47-6	o-Xylene	0.00093	U	0.00093	0.000089
100-42-5	Styrene	0.00093	U	0.00093	0.00011
127-18-4	Tetrachloroethene	0.00093	U	0.00093	0.00013
108-88-3	Toluene	0.00093	U	0.00093	0.00058
156-60-5	trans-1,2-Dichloroethene	0.00093	U	0.00093	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00093	U	0.00093	0.00025
79-01-6	Trichloroethene	0.00093	U	0.00093	0.00013
75-69-4	Trichlorofluoromethane	0.00093	U	0.00093	0.00038
75-01-4	Vinyl chloride	0.00093	U	0.00093	0.00051

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		78-135
460-00-4	4-Bromofluorobenzene	95		67-126
1868-53-7	Dibromofluoromethane (Surr)	85		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-101D(SO)-14-15 | Lab Sample ID: 460-153682-1
Matrix: Solid | Lab File ID: D48780.D
Analysis Method: 8260C | Date Collected: 04/09/2018 13:10
Sample wt/vol: 5.576(g) | Date Analyzed: 04/17/2018 04:24
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 3.8 | Level: (low/med) Low
Analysis Batch No.: 511498 | Units: mg/Kg
Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-101D(SO)(99.2-100) | Lab Sample ID: 460-153878-1

Matrix: Solid | Lab File ID: D48968.D

Analysis Method: 8260C | Date Collected: 04/11/2018 13:15

Sample wt/vol: 6.212(g) | Date Analyzed: 04/20/2018 16:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00095	U	0.00095	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00095	U	0.00095	0.00020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00095	U	0.00095	0.00029
79-00-5	1,1,2-Trichloroethane	0.00095	U	0.00095	0.00017
75-34-3	1,1-Dichloroethane	0.00095	U	0.00095	0.00020
75-35-4	1,1-Dichloroethene	0.00095	U	0.00095	0.00021
87-61-6	1,2,3-Trichlorobenzene	0.00095	U	0.00095	0.00017
120-82-1	1,2,4-Trichlorobenzene	0.00095	U	0.00095	0.000087
96-12-8	1,2-Dibromo-3-Chloropropane	0.00095	U	0.00095	0.00044
95-50-1	1,2-Dichlorobenzene	0.00095	U	0.00095	0.00014
107-06-2	1,2-Dichloroethane	0.00095	U	0.00095	0.00028
78-87-5	1,2-Dichloropropane	0.00095	U	0.00095	0.00040
541-73-1	1,3-Dichlorobenzene	0.00095	U	0.00095	0.00015
106-46-7	1,4-Dichlorobenzene	0.00095	U	0.00095	0.000095
123-91-1	1,4-Dioxane	0.019	U	0.019	0.0087
78-93-3	2-Butanone (MEK)	0.0028	J J ✓	0.0047	0.0011
591-78-6	2-Hexanone	0.0047	U	0.0047	0.00074
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0047	U	0.0047	0.00063
67-64-1	Acetone	0.017		0.0047	0.0036
71-43-2	Benzene	0.00095	U	0.00095	0.00024
75-25-2	Bromoform	0.00095	UHJ ✓	0.00095	0.00040
74-83-9	Bromomethane	0.00095	U	0.00095	0.00045
75-15-0	Carbon disulfide	0.00095	U	0.00095	0.00025
56-23-5	Carbon tetrachloride	0.00095	U	0.00095	0.00017
108-90-7	Chlorobenzene	0.00095	U	0.00095	0.00017
74-97-5	Chlorobromomethane	0.00095	U	0.00095	0.00027
124-48-1	Chlorodibromomethane	0.00095	U	0.00095	0.00018
75-00-3	Chloroethane	0.00095	U	0.00095	0.00050
67-66-3	Chloroform	0.00095	U	0.00095	0.00030
74-87-3	Chloromethane	0.00095	U	0.00095	0.00041
156-59-2	cis-1,2-Dichloroethene	0.00095	U	0.00095	0.00014
10061-01-5	cis-1,3-Dichloropropene	0.00095	U	0.00095	0.00026
110-82-7	Cyclohexane	0.00095	U	0.00095	0.00021
75-27-4	Dichlorobromomethane	0.00095	U	0.00095	0.00024
75-71-8	Dichlorodifluoromethane	0.00095	UHJ ✓	0.00095	0.00032

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: GC-MW-101D(SO)(99.2-100) | Lab Sample ID: 460-153878-1

Matrix: Solid | Lab File ID: D48968.D

Analysis Method: 8260C | Date Collected: 04/11/2018 13:15

Sample wt/vol: 6.212(g) | Date Analyzed: 04/20/2018 16:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 512623 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.00095	U	0.00095	0.00019
106-93-4	Ethylene Dibromide	0.00095	U	0.00095	0.00017
98-82-8	Isopropylbenzene	0.00095	U	0.00095	0.00012
79-20-9	Methyl acetate	0.0047	U	0.0047	0.0041
1634-04-4	Methyl tert-butyl ether	0.00095	U	0.00095	0.00012
108-87-2	Methylcyclohexane	0.00095	U	0.00095	0.00015
75-09-2	Methylene Chloride	0.00023	J	0.00095	0.00015
179601-23-1	m-Xylene & p-Xylene	0.00088	J	0.00095	0.00017
95-47-6	o-Xylene	0.00030	J	0.00095	0.000090
100-42-5	Styrene	0.00095	U	0.00095	0.00012
127-18-4	Tetrachloroethene	0.00095	U	0.00095	0.00014
108-88-3	Toluene	0.00095	U	0.00095	0.00059
156-60-5	trans-1,2-Dichloroethene	0.00095	U	0.00095	0.00023
10061-02-6	trans-1,3-Dichloropropene	0.00095	U	0.00095	0.00025
79-01-6	Trichloroethene	0.00095	U	0.00095	0.00014
75-69-4	Trichlorofluoromethane	0.00095	U	0.00095	0.00039
75-01-4	Vinyl chloride	0.00095	U	0.00095	0.00052

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		78-135
460-00-4	4-Bromofluorobenzene	98		67-126
1868-53-7	Dibromofluoromethane (Surr)	77		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison | Job No.: 460-152211-1
SDG No.:
Client Sample ID: GC-MW-101D(SO)(99.2-100) | Lab Sample ID: 460-153878-1
Matrix: Solid | Lab File ID: D48968.D
Analysis Method: 8260C | Date Collected: 04/11/2018 13:15
Sample wt/vol: 6.212(g) | Date Analyzed: 04/20/2018 16:23
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)
% Moisture: 15.2 | Level: (low/med) Low
Analysis Batch No.: 512623 | Units: mg/Kg
Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

QC NONCONFORMANCE DOCUMENTATION

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-507466/4 Calibration Date: 03/31/2018 12:11

Instrument ID: CVOAMS2 Calib Start Date: 03/26/2018 04:03

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/26/2018 09:16

Lab File ID: B28115.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	0.7360	0.8113	0.2000	22.0	20.0	10.2	20.0
Cyclohexane	Ave	0.6417	0.6190	0.1000	19.3	20.0	-3.5	50.0
1,1,1-Trichloroethane	Ave	0.6275	0.6730	0.1000	21.4	20.0	7.2	20.0
Carbon tetrachloride	Ave	0.5452	0.5656	0.1000	20.7	20.0	3.7	20.0
1,1-Dichloropropene	Ave	0.5903	0.5792		19.6	20.0	-1.9	20.0
Benzene	Ave	2.203	2.547	0.5000	23.1	20.0	15.7	20.0
Isobutyl alcohol	QuaF		0.6200		701	500	40.1*	20.0
Tert-amyl methyl ether	Ave	1.197	1.219		20.4	20.0	1.8	20.0
1,2-Dichloroethane	Ave	0.4924	0.5257	0.1000	21.3	20.0	6.7	20.0
n-Heptane	Ave	0.4072	0.4147		20.4	20.0	1.8	20.0
Trichloroethene	Ave	0.4121	0.4092	0.2000	19.9	20.0	-0.7	20.0
Methylcyclohexane	Ave	0.7495	0.6876	0.1000	18.3	20.0	-8.3	50.0
n-Butanol	QuaF		0.1631		318	500	-36.4	50.0
Ethyl acrylate	Ave	0.3660	0.3038		16.6	20.0	-17.0	20.0
1,2-Dichloropropane	Ave	0.4443	0.4750	0.1000	21.4	20.0	6.9	20.0
Dibromomethane	Ave	0.2034	0.2137		21.0	20.0	5.1	20.0
1,4-Dioxane	Lin2		1.477		376	400	-6.1	50.0
Dichlorobromomethane	Ave	0.4788	0.4724	0.2000	19.7	20.0	-1.3	20.0
2-Nitropropane	Lin2		0.0700		41.7	40.0	4.4	20.0
2-Chloroethyl vinyl ether	Qua2		0.1409		16.9	20.0	-15.7	20.0
Epichlorohydrin	Ave	0.2667	0.2205		331	400	-17.3	20.0
cis-1,3-Dichloropropene	Ave	0.7674	0.7412	0.2000	19.3	20.0	-3.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.320	2.721	0.0500	82.0	100	-18.0	50.0
Toluene	Ave	2.154	2.057	0.4000	19.1	20.0	-4.5	20.0
trans-1,3-Dichloropropene	Ave	0.6068	0.5860	0.1000	19.3	20.0	-3.4	50.0
1,1,2-Trichloroethane	Ave	0.3353	0.3254	0.1000	19.4	20.0	-3.0	20.0
Tetrachloroethene	Ave	0.5589	0.5453	0.2000	19.5	20.0	-2.4	20.0
1,3-Dichloropropane	Ave	0.6337	0.6036		19.1	20.0	-4.7	20.0
2-Hexanone	QuaF		1.362	0.0500	59.0	100	-41.0	50.0
Chlorodibromomethane	Ave	0.4044	0.4422	0.1000	21.9	20.0	9.3	50.0
Ethylene Dibromide	Ave	0.3303	0.3153	0.1000	19.1	20.0	-4.5	20.0
Chlorobenzene	Ave	1.303	1.306	0.5000	20.0	20.0	0.2	20.0
Ethylbenzene	Ave	0.7086	0.6872	0.1000	19.4	20.0	-3.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4707	0.4993		21.2	20.0	6.1	20.0
m-Xylene & p-Xylene	Ave	0.8432	0.8052	0.1000	19.1	20.0	-4.5	20.0
o-Xylene	Ave	0.8183	0.7833	0.3000	19.1	20.0	-4.3	20.0
Styrene	Ave	1.247	1.268	0.3000	20.3	20.0	1.7	20.0
Bromoform	Ave	0.2693	0.2929	0.1000	21.7	20.0	8.7	20.0
Amyl acetate (mixed isomers)	QuaF		0.7910		12.3	20.0	-38.3*	20.0
Isopropylbenzene	Ave	2.165	2.237	0.1000	20.7	20.0	3.3	20.0
Bromobenzene	Ave	1.054	0.9163		17.4	20.0	-13.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-507466/4 Calibration Date: 03/31/2018 12:11

Instrument ID: CVOAMS2 Calib Start Date: 03/26/2018 04:03

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/26/2018 09:16

Lab File ID: B28115.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,2,2-Tetrachloroethane	Ave	0.8822	0.7758	0.3000	17.6	20.0	-12.1	20.0
N-Propylbenzene	Ave	4.891	4.349		17.8	20.0	-11.1	20.0
1,2,3-Trichloropropane	Ave	0.2242	0.2024		18.1	20.0	-9.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3292	0.2846		17.3	20.0	-13.6	20.0
2-Chlorotoluene	Ave	3.569	3.237		18.1	20.0	-9.3	20.0
4-Ethyltoluene	Ave	4.187	3.911		18.7	20.0	-6.6	20.0
1,3,5-Trimethylbenzene	Ave	3.559	3.247		18.2	20.0	-8.8	20.0
4-Chlorotoluene	Ave	3.425	3.159		18.4	20.0	-7.8	20.0
tert-Butylbenzene	Ave	3.052	2.678		17.5	20.0	-12.3	20.0
1,2,4-Trimethylbenzene	Ave	3.428	3.332		19.4	20.0	-2.8	20.0
sec-Butylbenzene	Ave	4.507	4.396		19.5	20.0	-2.5	20.0
1,3-Dichlorobenzene	Ave	1.971	1.956	0.6000	19.9	20.0	-0.7	20.0
4-Isopropyltoluene	Ave	3.614	3.483		19.3	20.0	-3.6	20.0
1,4-Dichlorobenzene	Ave	2.160	2.074	0.5000	19.2	20.0	-4.0	20.0
Benzyl chloride	Ave	0.2949	0.2897		19.6	20.0	-1.8	50.0
Indan	Ave	1.395	1.438		20.6	20.0	3.1	20.0
p-Diethylbenzene	Ave	2.215	2.230		20.1	20.0	0.7	20.0
n-Butylbenzene	Ave	2.141	2.179		20.4	20.0	1.8	20.0
1,2-Dichlorobenzene	Ave	1.904	1.906	0.4000	20.0	20.0	0.0	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.092	2.978		19.3	20.0	-3.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0999	0.1261	0.0500	25.2	20.0	26.2	50.0
1,3,5-Trichlorobenzene	Ave	1.622	1.669		20.6	20.0	2.9	20.0
1,2,4-Trichlorobenzene	Ave	1.201	1.277	0.2000	21.3	20.0	6.3	20.0
Hexachlorobutadiene	Ave	0.9660	1.003		20.8	20.0	3.8	20.0
Naphthalene	Ave	2.110	2.067		19.6	20.0	-2.1	50.0
1,2,3-Trichlorobenzene	QuaF		1.042		19.5	20.0	-2.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2813	0.2936		52.2	50.0	4.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2946	0.3343		56.7	50.0	13.5	20.0
Toluene-d8 (Surr)	Ave	1.492	1.552		52.0	50.0	4.0	20.0
4-Bromofluorobenzene	Ave	0.9046	0.7277		40.2	50.0	-19.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510106/2 Calibration Date: 04/11/2018 08:49

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48510.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.2070		18.9	20.0	-5.5	20.0
Dichlorodifluoromethane	Lin2		0.5801	0.1000	15.4	20.0	-22.9*	20.0
Chloromethane	Ave	0.8596	0.7991	0.1000	18.6	20.0	-7.0	20.0
Vinyl chloride	Ave	0.7509	0.6311	0.1000	16.8	20.0	-16.0	20.0
Butadiene	Lin2		0.5140		16.8	20.0	-16.0	20.0
Bromomethane	Ave	0.3247	0.3054	0.1000	18.8	20.0	-6.0	50.0
Chloroethane	Ave	0.3314	0.3128	0.1000	18.9	20.0	-5.6	50.0
Trichlorofluoromethane	Ave	0.5870	0.4998	0.1000	17.0	20.0	-14.9	20.0
Dichlorofluoromethane	Ave	0.8385	0.8411		20.1	20.0	0.3	20.0
Pentane	Ave	0.0733	0.0725		39.5	40.0	-1.2	20.0
Ethanol	QuaF		0.0525		967	800	20.9	50.0
Ethyl ether	Ave	0.2834	0.2880		20.3	20.0	1.6	20.0
2-Methyl-1,3-butadiene	Ave	0.3138	0.3399		21.7	20.0	8.3	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3034	0.2901		19.1	20.0	-4.4	20.0
Acrolein	Ave	1.299	1.173		271	300	-9.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3771	0.3526	0.1000	18.7	20.0	-6.5	20.0
1,1-Dichloroethene	Ave	0.3466	0.3345	0.1000	19.3	20.0	-3.5	20.0
Acetone	Ave	1.035	0.8564	0.0500	82.7	100	-17.3	50.0
Iodomethane	Ave	0.6306	0.5767		18.3	20.0	-8.6	20.0
Carbon disulfide	Ave	1.353	1.274	0.1000	18.8	20.0	-5.8	50.0
Isopropyl alcohol	Ave	0.6019	0.5917		197	200	-1.7	50.0
Allyl chloride	Ave	0.2103	0.2114		20.1	20.0	0.5	20.0
Cyclopentene	Ave	0.8229	0.8584		20.9	20.0	4.3	20.0
Methyl acetate	Ave	0.2068	0.2147	0.1000	104	100	3.8	20.0
Acetonitrile	Ave	0.8025	0.9481		236	200	18.1	20.0
Methylene Chloride	Ave	0.4003	0.3829	0.1000	19.1	20.0	-4.3	20.0
2-Methyl-2-propanol	Ave	1.019	0.9867		194	200	-3.2	50.0
Methyl tert-butyl ether	Ave	0.8926	0.8502	0.1000	19.0	20.0	-4.8	20.0
trans-1,2-Dichloroethene	Ave	0.3400	0.3290	0.1000	19.4	20.0	-3.2	20.0
Acrylonitrile	Ave	2.754	3.073		223	200	11.6	20.0
Hexane	Ave	0.4505	0.4824		21.4	20.0	7.1	20.0
Isopropyl ether	Ave	1.008	1.067		21.2	20.0	5.8	20.0
1,1-Dichloroethane	Ave	0.6107	0.6091	0.2000	19.9	20.0	-0.3	20.0
Vinyl acetate	Ave	0.0543	0.0492		36.3	40.0	-9.3	20.0
2-Chloro-1,3-butadiene	Ave	0.2794	0.2688		19.2	20.0	-3.8	20.0
Tert-butyl ethyl ether	Ave	0.9302	0.9163		19.7	20.0	-1.5	20.0
2,2-Dichloropropane	Ave	0.1602	0.1497		18.7	20.0	-6.5	20.0
cis-1,2-Dichloroethene	Lin2		0.3339	0.1000	17.6	20.0	-12.2	20.0
2-Butanone (MEK)	Ave	0.3149	0.2480	0.0500	78.7	100	-21.3	50.0
Ethyl acetate	Ave	0.2745	0.2237		32.6	40.0	-18.5	20.0

GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511498/3 Calibration Date: 04/16/2018 19:15

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48759.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.1941		17.8	20.0	-11.2	20.0
Dichlorodifluoromethane	Lin2		0.5903	0.1000	15.7	20.0	-21.6*	20.0
Chloromethane	Ave	0.8596	0.9708	0.1000	22.6	20.0	12.9	20.0
Vinyl chloride	Ave	0.7509	0.7699	0.1000	20.5	20.0	2.5	20.0
Butadiene	Lin2		0.6851		22.2	20.0	11.1	20.0
Bromomethane	Ave	0.3247	0.3587	0.1000	22.1	20.0	10.5	50.0
Chloroethane	Ave	0.3314	0.3539	0.1000	21.4	20.0	6.8	50.0
Trichlorofluoromethane	Ave	0.5870	0.5577	0.1000	19.0	20.0	-5.0	20.0
Dichlorofluoromethane	Ave	0.8385	0.8374		20.0	20.0	-0.1	20.0
Pentane	Ave	0.0733	0.0725		39.6	40.0	-1.1	20.0
Ethanol	QuaF		0.0489		900	800	12.5	50.0
Ethyl ether	Ave	0.2834	0.2787		19.7	20.0	-1.7	20.0
2-Methyl-1,3-butadiene	Ave	0.3138	0.3284		20.9	20.0	4.6	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3034	0.2800		18.5	20.0	-7.7	20.0
Acrolein	Ave	1.299	1.523		352	300	17.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3771	0.3479	0.1000	18.4	20.0	-7.8	20.0
1,1-Dichloroethene	Ave	0.3466	0.3248	0.1000	18.7	20.0	-6.3	20.0
Acetone	Ave	1.035	0.8316	0.0500	80.4	100	-19.6	50.0
Iodomethane	Ave	0.6306	0.5564		17.6	20.0	-11.8	20.0
Carbon disulfide	Ave	1.353	1.204	0.1000	17.8	20.0	-11.0	50.0
Isopropyl alcohol	Ave	0.6019	0.5776		192	200	-4.0	50.0
Allyl chloride	Ave	0.2103	0.1960		18.6	20.0	-6.8	20.0
Cyclopentene	Ave	0.8229	0.8386		20.4	20.0	1.9	20.0
Methyl acetate	Ave	0.2068	0.2021	0.1000	97.7	100	-2.3	20.0
Acetonitrile	Ave	0.8025	0.9176		229	200	14.3	20.0
Methylene Chloride	Ave	0.4003	0.3688	0.1000	18.4	20.0	-7.9	20.0
2-Methyl-2-propanol	Ave	1.019	0.9605		189	200	-5.7	50.0
Methyl tert-butyl ether	Ave	0.8926	0.7882	0.1000	17.7	20.0	-11.7	20.0
trans-1,2-Dichloroethene	Ave	0.3400	0.3129	0.1000	18.4	20.0	-8.0	20.0
Acrylonitrile	Ave	2.754	3.419		248	200	24.1*	20.0
Hexane	Ave	0.4505	0.4706		20.9	20.0	4.5	20.0
Isopropyl ether	Ave	1.008	0.999		19.8	20.0	-0.9	20.0
1,1-Dichloroethane	Ave	0.6107	0.5707	0.2000	18.7	20.0	-6.5	20.0
Vinyl acetate	Ave	0.0543	0.0473		34.9	40.0	-12.8	20.0
2-Chloro-1,3-butadiene	Ave	0.2794	0.2662		19.1	20.0	-4.7	20.0
Tert-butyl ethyl ether	Ave	0.9302	0.8324		17.9	20.0	-10.5	20.0
2,2-Dichloropropane	Ave	0.1602	0.1376		17.2	20.0	-14.1	20.0
cis-1,2-Dichloroethene	Lin2		0.3278	0.1000	17.2	20.0	-13.9	20.0
2-Butanone (MEK)	Ave	0.3149	0.2458	0.0500	78.0	100	-22.0	50.0
Ethyl acetate	Ave	0.2745	0.2150		31.3	40.0	-21.7*	20.0

FORM VII 8260C

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511498/3 Calibration Date: 04/16/2018 19:15

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48759.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	0.8706	0.9011	0.5000	20.7	20.0	3.5	20.0
Ethylbenzene	Ave	0.4923	0.5047	0.1000	20.5	20.0	2.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3472	0.3204		18.5	20.0	-7.7	20.0
m-Xylene & p-Xylene	Ave	0.5939	0.5972	0.1000	20.1	20.0	0.6	20.0
n-Butyl acrylate	Ave	0.2204	0.2085		18.9	20.0	-5.4	20.0
o-Xylene	Ave	0.6175	0.6343	0.3000	20.5	20.0	2.7	20.0
Styrene	Ave	0.9593	0.9659	0.3000	20.1	20.0	0.7	20.0
Amyl acetate (mixed isomers)	Ave	0.999	1.068		21.4	20.0	6.8	20.0
Bromoform	Ave	0.1859	0.1443	0.1000	15.5	20.0	-22.4*	20.0
Isopropylbenzene	Ave	1.635	1.686	0.1000	20.6	20.0	3.1	20.0
Bromobenzene	Ave	0.6777	0.6692		19.7	20.0	-1.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7617	0.7969	0.3000	20.9	20.0	4.6	20.0
N-Propylbenzene	Ave	3.743	3.997		21.4	20.0	6.8	20.0
1,2,3-Trichloropropane	Ave	0.1935	0.2008		20.8	20.0	3.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1839	0.1926		20.9	20.0	4.7	20.0
4-Ethyltoluene	Ave	3.081	3.126		20.3	20.0	1.5	20.0
2-Chlorotoluene	Ave	2.598	2.673		20.6	20.0	2.9	20.0
1,3,5-Trimethylbenzene	Ave	2.622	2.785		21.2	20.0	6.2	20.0
4-Chlorotoluene	Ave	2.162	2.249		20.8	20.0	4.0	20.0
Butyl Methacrylate	Ave	0.8911	0.8471		19.0	20.0	-4.9	20.0
tert-Butylbenzene	Ave	2.077	2.148		20.7	20.0	3.4	20.0
1,2,4-Trimethylbenzene	Ave	2.736	2.752		20.1	20.0	0.6	20.0
sec-Butylbenzene	Ave	3.463	3.609		20.8	20.0	4.2	20.0
4-Isopropyltoluene	Ave	2.832	2.955		20.9	20.0	4.3	20.0
1,3-Dichlorobenzene	Ave	1.355	1.374	0.6000	20.3	20.0	1.4	20.0
1,4-Dichlorobenzene	Ave	1.376	1.387	0.5000	20.2	20.0	0.8	20.0
Benzyl chloride	Ave	0.2460	0.2053		16.7	20.0	-16.5	50.0
Indan	Ave	1.099	0.9379		17.1	20.0	-14.6	20.0
p-Diethylbenzene	Ave	1.710	1.811		21.2	20.0	5.9	20.0
n-Butylbenzene	Ave	1.601	1.653		20.7	20.0	3.3	20.0
1,2-Dichlorobenzene	Ave	1.360	1.335	0.4000	19.6	20.0	-1.8	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.627	2.586		19.7	20.0	-1.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1423	0.1263	0.0500	17.7	20.0	-11.3	50.0
1,3,5-Trichlorobenzene	Ave	1.059	1.081		20.4	20.0	2.1	20.0
1,2,4-Trichlorobenzene	Ave	0.9630	0.9739	0.2000	20.2	20.0	1.1	20.0
Hexachlorobutadiene	Ave	0.4524	0.4338		19.2	20.0	-4.1	20.0
Naphthalene	Ave	2.343	2.335		19.9	20.0	-0.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9267	0.9202		19.9	20.0	-0.7	20.0
Dibromofluoromethane (Surr)	Ave	0.3437	0.2927		42.6	50.0	-14.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3604	0.3141		43.6	50.0	-12.9	20.0
Toluene-d8 (Surr)	Ave	1.542	1.574		51.0	50.0	2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512479/3 Calibration Date: 04/19/2018 18:35

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48919.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.2916		26.4	20.0	31.9*	20.0
Dichlorodifluoromethane	Lin2		0.6615	0.1000	17.5	20.0	-12.4	20.0
Chloromethane	Ave	0.8596	0.9898	0.1000	23.0	20.0	15.1	20.0
Vinyl chloride	Ave	0.7509	0.8451	0.1000	22.5	20.0	12.5	20.0
Butadiene	Lin2		0.7363		23.9	20.0	19.3	20.0
Bromomethane	Ave	0.3247	0.3678	0.1000	22.7	20.0	13.3	50.0
Chloroethane	Ave	0.3314	0.3473	0.1000	21.0	20.0	4.8	50.0
Trichlorofluoromethane	Ave	0.5870	0.5612	0.1000	19.1	20.0	-4.4	20.0
Dichlorofluoromethane	Ave	0.8385	0.8590		20.5	20.0	2.4	20.0
Pentane	Ave	0.0733	0.0704		38.4	40.0	-4.0	20.0
Ethyl ether	Ave	0.2834	0.2784		19.7	20.0	-1.7	20.0
Ethanol	QuaF		0.0487		896	800	12.0	50.0
2-Methyl-1,3-butadiene	Ave	0.3138	0.3394		21.6	20.0	8.2	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3034	0.3071		20.2	20.0	1.2	20.0
Acrolein	Ave	1.299	1.277		295	300	-1.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3771	0.3687	0.1000	19.6	20.0	-2.2	20.0
1,1-Dichloroethene	Ave	0.3466	0.3304	0.1000	19.1	20.0	-4.7	20.0
Acetone	Ave	1.035	0.7515	0.0500	72.6	100	-27.4	50.0
Iodomethane	Ave	0.6306	0.5590		17.7	20.0	-11.4	20.0
Carbon disulfide	Ave	1.353	1.245	0.1000	18.4	20.0	-8.0	50.0
Isopropyl alcohol	Ave	0.6019	0.5680		189	200	-5.6	50.0
Allyl chloride	Ave	0.2103	0.1972		18.8	20.0	-6.2	20.0
Cyclopentene	Ave	0.8229	0.8479		20.6	20.0	3.0	20.0
Methyl acetate	Ave	0.2068	0.2169	0.1000	42.0	40.0	4.9	20.0
Acetonitrile	Ave	0.8025	0.8791		219	200	9.5	20.0
Methylene Chloride	Ave	0.4003	0.3821	0.1000	19.1	20.0	-4.5	20.0
2-Methyl-2-propanol	Ave	1.019	0.9846		193	200	-3.4	50.0
Methyl tert-butyl ether	Ave	0.8926	0.8304	0.1000	18.6	20.0	-7.0	20.0
trans-1,2-Dichloroethene	Ave	0.3400	0.3275	0.1000	19.3	20.0	-3.7	20.0
Acrylonitrile	Ave	2.754	3.311		240	200	20.2*	20.0
Hexane	Ave	0.4505	0.5190		23.0	20.0	15.2	20.0
Isopropyl ether	Ave	1.008	1.042		20.7	20.0	3.3	20.0
1,1-Dichloroethane	Ave	0.6107	0.5901	0.2000	19.3	20.0	-3.4	20.0
Vinyl acetate	Ave	0.0543	0.0502		37.0	40.0	-7.5	20.0
2-Chloro-1,3-butadiene	Ave	0.2794	0.2784		19.9	20.0	-0.4	20.0
Tert-butyl ethyl ether	Ave	0.9302	0.8750		18.8	20.0	-5.9	20.0
2,2-Dichloropropane	Ave	0.1602	0.1467		18.3	20.0	-8.4	20.0
cis-1,2-Dichloroethene	Lin2		0.3430	0.1000	18.0	20.0	-9.8	20.0
2-Butanone (MEK)	Ave	0.3149	0.2435	0.0500	77.3	100	-22.7	50.0
Ethyl acetate	Ave	0.2745	0.2126		31.0	40.0	-22.6*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512623/2 Calibration Date: 04/20/2018 06:44

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48945.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.2737		24.8	20.0	24.0*	20.0
Dichlorodifluoromethane	Lin2		0.5780	0.1000	15.4	20.0	-23.2*	20.0
Chloromethane	Ave	0.8596	0.8986	0.1000	20.9	20.0	4.5	20.0
Vinyl chloride	Ave	0.7509	0.7531	0.1000	20.1	20.0	0.3	20.0
Butadiene	Lin2		0.6873		22.3	20.0	11.5	20.0
Bromomethane	Ave	0.3247	0.3146	0.1000	19.4	20.0	-3.1	50.0
Chloroethane	Ave	0.3314	0.3355	0.1000	20.2	20.0	1.2	50.0
Trichlorofluoromethane	Ave	0.5870	0.4796	0.1000	16.3	20.0	-18.3	20.0
Dichlorofluoromethane	Ave	0.8385	0.7567		18.0	20.0	-9.8	20.0
Pentane	Ave	0.0733	0.0687		37.5	40.0	-6.3	20.0
Ethanol	QuaF		0.0546		1010	800	25.7	50.0
Ethyl ether	Ave	0.2834	0.2741		19.3	20.0	-3.3	20.0
2-Methyl-1,3-butadiene	Ave	0.3138	0.3403		21.7	20.0	8.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3034	0.2965		19.5	20.0	-2.3	20.0
Acrolein	Ave	1.299	1.169		270	300	-10.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3771	0.3551	0.1000	18.8	20.0	-5.8	20.0
1,1-Dichloroethene	Ave	0.3466	0.3269	0.1000	18.9	20.0	-5.7	20.0
Acetone	Ave	1.035	0.8863	0.0500	85.6	100	-14.4	50.0
Iodomethane	Ave	0.6306	0.5380		17.1	20.0	-14.7	20.0
Carbon disulfide	Ave	1.353	1.191	0.1000	17.6	20.0	-12.0	50.0
Isopropyl alcohol	Ave	0.6019	0.5798		193	200	-3.7	50.0
Allyl chloride	Ave	0.2103	0.1970		18.7	20.0	-6.3	20.0
Cyclopentene	Ave	0.8229	0.8682		21.1	20.0	5.5	20.0
Methyl acetate	Ave	0.2068	0.2226	0.1000	43.1	40.0	7.7	20.0
Acetonitrile	Ave	0.8025	0.9245		230	200	15.2	20.0
Methylene Chloride	Ave	0.4003	0.3711	0.1000	18.5	20.0	-7.3	20.0
2-Methyl-2-propanol	Ave	1.019	0.9741		191	200	-4.4	50.0
Methyl tert-butyl ether	Ave	0.8926	0.8253	0.1000	18.5	20.0	-7.5	20.0
trans-1,2-Dichloroethene	Ave	0.3400	0.3268	0.1000	19.2	20.0	-3.9	20.0
Acrylonitrile	Ave	2.754	3.089		224	200	12.1	20.0
Hexane	Ave	0.4505	0.5227		23.2	20.0	16.0	20.0
Isopropyl ether	Ave	1.008	1.054		20.9	20.0	4.6	20.0
1,1-Dichloroethane	Ave	0.6107	0.5954	0.2000	19.5	20.0	-2.5	20.0
Vinyl acetate	Ave	0.0543	0.0490		36.1	40.0	-9.7	20.0
2-Chloro-1,3-butadiene	Ave	0.2794	0.2764		19.8	20.0	-1.1	20.0
Tert-butyl ethyl ether	Ave	0.9302	0.8860		19.0	20.0	-4.8	20.0
2,2-Dichloropropane	Ave	0.1602	0.1472		18.4	20.0	-8.1	20.0
cis-1,2-Dichloroethene	Lin2		0.3391	0.1000	17.8	20.0	-10.8	20.0
2-Butanone (MEK)	Ave	0.3149	0.2486	0.0500	78.9	100	-21.1	50.0
Ethyl acetate	Ave	0.2745	0.2126		31.0	40.0	-22.5*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-512623/2 Calibration Date: 04/20/2018 06:44

Instrument ID: CVOAMS4 Calib Start Date: 03/28/2018 13:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/28/2018 19:22

Lab File ID: D48945.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	0.8706	0.9240	0.5000	21.2	20.0	6.1	20.0
Ethylbenzene	Ave	0.4923	0.5399	0.1000	21.9	20.0	9.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3472	0.3295		19.0	20.0	-5.1	20.0
m-Xylene & p-Xylene	Ave	0.5939	0.6450	0.1000	21.7	20.0	8.6	20.0
n-Butyl acrylate	Ave	0.2204	0.2158		19.6	20.0	-2.1	20.0
o-Xylene	Ave	0.6175	0.6689	0.3000	21.7	20.0	8.3	20.0
Styrene	Ave	0.9593	1.010	0.3000	21.1	20.0	5.3	20.0
Amyl acetate (mixed isomers)	Ave	0.999	1.156		23.1	20.0	15.6	20.0
Bromoform	Ave	0.1859	0.1380	0.1000	14.8	20.0	-25.8*	20.0
Isopropylbenzene	Ave	1.635	1.816	0.1000	22.2	20.0	11.1	20.0
Bromobenzene	Ave	0.6777	0.7214		21.3	20.0	6.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7617	0.8357	0.3000	21.9	20.0	9.7	20.0
N-Propylbenzene	Ave	3.743	4.496		24.0	20.0	20.1*	20.0
1,2,3-Trichloropropane	Ave	0.1935	0.2034		21.0	20.0	5.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1839	0.1910		20.8	20.0	3.8	20.0
4-Ethyltoluene	Ave	3.081	3.537		23.0	20.0	14.8	20.0
2-Chlorotoluene	Ave	2.598	2.967		22.8	20.0	14.2	20.0
1,3,5-Trimethylbenzene	Ave	2.622	3.034		23.1	20.0	15.7	20.0
4-Chlorotoluene	Ave	2.162	2.442		22.6	20.0	12.9	20.0
Butyl Methacrylate	Ave	0.8911	0.9435		21.2	20.0	5.9	20.0
tert-Butylbenzene	Ave	2.077	2.403		23.1	20.0	15.7	20.0
1,2,4-Trimethylbenzene	Ave	2.736	3.030		22.2	20.0	10.8	20.0
sec-Butylbenzene	Ave	3.463	4.082		23.6	20.0	17.9	20.0
4-Isopropyltoluene	Ave	2.832	3.282		23.2	20.0	15.9	20.0
1,3-Dichlorobenzene	Ave	1.355	1.489	0.6000	22.0	20.0	9.9	20.0
1,4-Dichlorobenzene	Ave	1.376	1.524	0.5000	22.1	20.0	10.7	20.0
Benzyl chloride	Ave	0.2460	0.2121		17.2	20.0	-13.8	50.0
Indan	Ave	1.099	0.9507		17.3	20.0	-13.5	20.0
p-Diethylbenzene	Ave	1.710	1.992		23.3	20.0	16.5	20.0
n-Butylbenzene	Ave	1.601	1.988		24.8	20.0	24.2*	20.0
1,2-Dichlorobenzene	Ave	1.360	1.448	0.4000	21.3	20.0	6.5	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.627	2.867		21.8	20.0	9.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1423	0.1216	0.0500	17.1	20.0	-14.6	50.0
1,3,5-Trichlorobenzene	Ave	1.059	1.167		22.0	20.0	10.1	20.0
1,2,4-Trichlorobenzene	Ave	0.9630	1.051	0.2000	21.8	20.0	9.1	20.0
Hexachlorobutadiene	Ave	0.4524	0.4782		21.1	20.0	5.7	20.0
Naphthalene	Ave	2.343	2.481		21.2	20.0	5.9	50.0
1,2,3-Trichlorobenzene	Ave	0.9267	1.003		21.7	20.0	8.3	20.0
Dibromofluoromethane (Surr)	Ave	0.3437	0.2795		40.7	50.0	-18.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3604	0.2989		41.5	50.0	-17.1	20.0
Toluene-d8 (Surr)	Ave	1.542	1.539		49.9	50.0	-0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-504873/3 Calibration Date: 03/20/2018 23:13

Instrument ID: CVOAMS9 Calib Start Date: 03/09/2018 22:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/10/2018 00:31

Lab File ID: K81011.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.0786	0.0933		23.7	20.0	18.7	20.0
Dichlorodifluoromethane	Lin2		0.5619	0.1000	20.1	20.0	0.6	20.0
Chloromethane	Ave	0.4017	0.5037	0.1000	25.1	20.0	25.4*	20.0
Vinyl chloride	Ave	0.4248	0.5125	0.1000	24.1	20.0	20.6*	20.0
Butadiene	Ave	0.3022	0.3729		24.7	20.0	23.4*	20.0
Bromomethane	Ave	0.3635	0.3745	0.1000	20.6	20.0	3.0	50.0
Chloroethane	Ave	0.2116	0.2412	0.1000	22.8	20.0	14.0	50.0
Dichlorofluoromethane	Ave	0.6823	0.7376		21.6	20.0	8.1	20.0
Trichlorofluoromethane	Ave	0.6795	0.6801	0.1000	20.0	20.0	0.0	20.0
Pentane	Ave	1.710	1.577		36.9	40.0	-7.8	20.0
Ethanol	Ave	0.0353	0.0344		779	800	-2.7	50.0
Ethyl ether	Ave	0.2150	0.2377		22.1	20.0	10.6	20.0
2-Methyl-1,3-butadiene	Lin2		0.2928		23.9	20.0	19.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3237	0.3387		20.9	20.0	4.7	20.0
Acrolein	Ave	1.258	1.338		319	300	6.4	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin2		0.4496	0.1000	21.0	20.0	4.8	20.0
1,1-Dichloroethene	Lin2		0.3432	0.1000	20.4	20.0	2.0	20.0
Acetone	QuaF		1.086	0.0500	92.3	100	-7.7	50.0
Iodomethane	Ave	0.7182	0.6703		18.7	20.0	-6.7	20.0
Isopropyl alcohol	Ave	0.6290	0.5726		182	200	-9.0	50.0
Carbon disulfide	Ave	1.089	1.248	0.1000	22.9	20.0	14.5	50.0
Allyl chloride	Ave	0.1808	0.1994		22.1	20.0	10.3	20.0
Methyl acetate	Ave	0.1746	0.2359	0.1000	135	100	35.1*	20.0
Cyclopentene	Lin2		0.7898		22.9	20.0	14.5	20.0
Acetonitrile	Ave	1.208	1.202		199	200	-0.5	20.0
Methylene Chloride	Ave	0.3808	0.3745	0.1000	19.7	20.0	-1.7	20.0
2-Methyl-2-propanol	Ave	1.432	1.201		168	200	-16.1	50.0
Methyl tert-butyl ether	Ave	0.9313	0.9671	0.1000	20.8	20.0	3.8	20.0
trans-1,2-Dichloroethene	Ave	0.3358	0.3604	0.1000	21.5	20.0	7.3	20.0
Acrylonitrile	Ave	0.0918	0.1128		246	200	22.9*	20.0
Hexane	Ave	0.2158	0.3242		30.0	20.0	50.2*	20.0
Isopropyl ether	Ave	0.8317	1.129		27.2	20.0	35.8*	20.0
1,1-Dichloroethane	Ave	0.5296	0.6395	0.2000	24.1	20.0	20.7*	20.0
Vinyl acetate	Ave	1.851	1.611		34.8	40.0	-13.0	20.0
2-Chloro-1,3-butadiene	Ave	0.2684	0.2923		21.8	20.0	8.9	20.0
Tert-butyl ethyl ether	Ave	0.9038	1.065		23.6	20.0	17.9	20.0
2,2-Dichloropropane	Ave	0.1790	0.1891		21.1	20.0	5.7	20.0
Ethyl acetate	Ave	0.3870	0.3060		31.6	40.0	-20.9*	20.0
2-Butanone (MEK)	Ave	0.4515	0.3434	0.0500	76.1	100	-23.9	50.0
cis-1,2-Dichloroethene	Ave	0.3969	0.4062	0.1000	20.5	20.0	2.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-504873/3 Calibration Date: 03/20/2018 23:13

Instrument ID: CVOAMS9 Calib Start Date: 03/09/2018 22:30

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/10/2018 00:31

Lab File ID: K81011.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2218	0.2613		23.6	20.0	17.8	20.0
Propionitrile	Ave	1.455	1.385		190	200	-4.8	20.0
Tetrahydrofuran	Ave	0.5459	0.4208		30.8	40.0	-22.9*	20.0
Chlorobromomethane	Ave	0.2112	0.1947		18.4	20.0	-7.8	20.0
Methacrylonitrile	Ave	0.1092	0.1215		222	200	11.2	20.0
Chloroform	Ave	0.6311	0.6914	0.2000	21.9	20.0	9.6	20.0
Cyclohexane	Lin2		0.5562	0.1000	21.8	20.0	8.8	50.0
1,1,1-Trichloroethane	Ave	0.5996	0.6436	0.1000	21.5	20.0	7.3	20.0
Carbon tetrachloride	Ave	0.5356	0.5552	0.1000	20.7	20.0	3.7	20.0
1,1-Dichloropropene	Ave	0.4091	0.4910		24.0	20.0	20.0	20.0
Isobutyl alcohol	Lin2		0.0408		398	500	-20.3*	20.0
Benzene	Ave	1.426	1.541	0.5000	21.6	20.0	8.1	20.0
Isopropyl acetate	Ave	0.8406	0.9901		23.6	20.0	17.8	20.0
Tert-amyl methyl ether	Ave	0.9760	1.050		21.5	20.0	7.5	20.0
1,2-Dichloroethane	Ave	0.4529	0.4568	0.1000	20.2	20.0	0.9	20.0
n-Heptane	Lin2		0.3049		26.6	20.0	32.8*	20.0
n-Butanol	Ave	0.2873	0.2472		430	500	-14.0	50.0
Trichloroethene	Ave	0.3474	0.3627	0.2000	20.9	20.0	4.4	20.0
Ethyl acrylate	Ave	0.1732	0.2079		24.0	20.0	20.1*	20.0
Methylcyclohexane	Lin2		0.6698	0.1000	22.0	20.0	9.9	50.0
1,2-Dichloropropane	Ave	0.2853	0.3360	0.1000	23.6	20.0	17.8	20.0
Methyl methacrylate	Ave	0.2165	0.2295		42.4	40.0	6.0	20.0
1,4-Dioxane	Ave	1.785	1.333		299	400	-25.3	50.0
n-Propyl acetate	Ave	0.3184	0.4424		27.8	20.0	39.0*	20.0
Dibromomethane	Ave	0.2169	0.2204		20.3	20.0	1.6	20.0
Dichlorobromomethane	Ave	0.4474	0.4747	0.2000	21.2	20.0	6.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1250	0.1530		24.5	20.0	22.4*	20.0
2-Nitropropane	Ave	0.0746	0.0706		37.9	40.0	-5.4	20.0
Epichlorohydrin	Ave	0.3422	0.3004		351	400	-12.2	20.0
cis-1,3-Dichloropropene	Ave	0.5750	0.5907	0.2000	20.5	20.0	2.7	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.087	3.134	0.0500	102	100	1.5	50.0
Toluene	Ave	1.679	1.722	0.4000	20.5	20.0	2.6	20.0
trans-1,3-Dichloropropene	Ave	0.5026	0.5323	0.1000	21.2	20.0	5.9	50.0
Ethyl methacrylate	Ave	0.3847	0.4213		21.9	20.0	9.5	20.0
1,1,2-Trichloroethane	Ave	0.2795	0.2739	0.1000	19.6	20.0	-2.0	20.0
Tetrachloroethene	Ave	0.4897	0.4668	0.2000	19.1	20.0	-4.7	20.0
1,3-Dichloropropane	Ave	0.4962	0.5257		21.2	20.0	5.9	20.0
2-Hexanone	Ave	1.998	2.041	0.0500	102	100	2.1	50.0
n-Butyl acetate	Ave	0.4017	0.5739		28.6	20.0	42.9*	20.0
Chlorodibromomethane	Ave	0.4663	0.4064	0.1000	17.4	20.0	-12.8	50.0
Ethylene Dibromide	Ave	0.3649	0.3397	0.1000	18.6	20.0	-6.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-505873/2 Calibration Date: 03/25/2018 04:30

Instrument ID: CVOAMS9 Calib Start Date: 03/23/2018 12:53

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/23/2018 14:55

Lab File ID: K81147.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.3855	0.3653		19.0	20.0	-5.2	20.0
Propionitrile	Ave	1.593	1.493		188	200	-6.2	20.0
Chlorobromomethane	Ave	0.2086	0.1966		18.9	20.0	-5.7	20.0
Tetrahydrofuran	Ave	0.4032	0.3781		37.5	40.0	-6.2	20.0
Methacrylonitrile	Ave	0.1508	0.1539		204	200	2.0	20.0
Chloroform	Ave	0.7499	0.7895	0.2000	21.1	20.0	5.3	20.0
Cyclohexane	Ave	0.6183	0.7073	0.1000	22.9	20.0	14.4	50.0
1,1,1-Trichloroethane	Ave	0.6652	0.7462	0.1000	22.4	20.0	12.2	20.0
Carbon tetrachloride	Ave	0.5128	0.6208	0.1000	24.2	20.0	21.1*	20.0
1,1-Dichloropropene	Ave	0.5394	0.6093		22.6	20.0	12.9	20.0
Isobutyl alcohol	Ave	0.0556	0.0479		431	500	-13.7	50.0
Benzene	Ave	1.920	2.086	0.5000	21.7	20.0	8.6	20.0
Isopropyl acetate	Ave	1.469	1.537		20.9	20.0	4.6	20.0
Tert-amyl methyl ether	Ave	1.361	1.404		20.6	20.0	3.2	20.0
1,2-Dichloroethane	Ave	0.5626	0.5612	0.1000	20.0	20.0	-0.2	20.0
n-Heptane	Ave	0.3812	0.4395		23.1	20.0	15.3	20.0
n-Butanol	Ave	0.3792	0.3300		435	500	-13.0	50.0
Trichloroethene	Ave	0.3918	0.4094	0.2000	20.9	20.0	4.5	20.0
Ethyl acrylate	Ave	0.2851	0.3274		23.0	20.0	14.8	20.0
Methylcyclohexane	Ave	0.7340	0.8474	0.1000	23.1	20.0	15.4	50.0
1,2-Dichloropropane	Ave	0.4521	0.4637	0.1000	20.5	20.0	2.5	20.0
Methyl methacrylate	Ave	0.3889	0.3701		38.1	40.0	-4.8	20.0
1,4-Dioxane	Ave	1.513	1.560		412	400	3.1	50.0
n-Propyl acetate	Ave	0.6939	0.6924		20.0	20.0	-0.2	20.0
Dibromomethane	Ave	0.2520	0.2340		18.6	20.0	-7.1	20.0
Dichlorobromomethane	Ave	0.4993	0.5062	0.2000	20.3	20.0	1.4	20.0
2-Chloroethyl vinyl ether	Ave	0.2042	0.1990		19.5	20.0	-2.5	20.0
2-Nitropropane	Ave	0.0559	0.0774		55.4	40.0	38.5*	20.0
Epichlorohydrin	Ave	0.3139	0.3031		386	400	-3.5	20.0
cis-1,3-Dichloropropene	Ave	0.7964	0.8152	0.2000	20.5	20.0	2.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.738	3.558	0.0500	95.2	100	-4.8	50.0
Toluene	Ave	2.006	2.121	0.4000	21.1	20.0	5.7	20.0
trans-1,3-Dichloropropene	Ave	0.6907	0.7223	0.1000	20.9	20.0	4.6	50.0
Ethyl methacrylate	Ave	0.6145	0.5964		19.4	20.0	-2.9	20.0
1,1,2-Trichloroethane	Ave	0.3599	0.3523	0.1000	19.6	20.0	-2.1	20.0
Tetrachloroethene	Ave	0.4510	0.4803	0.2000	21.3	20.0	6.5	20.0
1,3-Dichloropropane	Ave	0.7003	0.7003		20.0	20.0	0.0	20.0
2-Hexanone	Ave	2.446	2.297	0.0500	93.9	100	-6.1	50.0
n-Butyl acetate	Ave	0.9736	0.9578		19.7	20.0	-1.6	20.0
Chlorodibromomethane	Ave	0.4052	0.4093	0.1000	20.2	20.0	1.0	50.0
Ethylene Dibromide	Ave	0.3977	0.3749	0.1000	18.9	20.0	-5.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510660/3 Calibration Date: 04/12/2018 21:47

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81910.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin		0.2286		18.9	20.0	-5.7	20.0
Dichlorodifluoromethane	Ave	0.6021	0.5386	0.1000	17.9	20.0	-10.5	20.0
Chloromethane	Ave	0.5852	0.5325	0.1000	18.2	20.0	-9.0	20.0
Butadiene	Ave	0.4371	0.4041		18.5	20.0	-7.5	20.0
Vinyl chloride	Ave	0.5947	0.5400	0.1000	18.2	20.0	-9.2	20.0
Bromomethane	Ave	0.4318	0.4331	0.1000	20.1	20.0	0.3	50.0
Chloroethane	Ave	0.2668	0.2667	0.1000	20.0	20.0	-0.0	50.0
Dichlorofluoromethane	Ave	0.7507	0.7589		20.2	20.0	1.1	20.0
Trichlorofluoromethane	Ave	0.6160	0.6379	0.1000	20.7	20.0	3.5	20.0
Pentane	Ave	2.344	1.840		31.4	40.0	-21.5*	20.0
Ethanol	Ave	0.0709	0.0597		673	800	-15.9	50.0
Ethyl ether	Ave	0.2571	0.2676		20.8	20.0	4.1	20.0
2-Methyl-1,3-butadiene	Ave	0.2625	0.2972		22.6	20.0	13.2	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3069	0.3458		22.5	20.0	12.7	20.0
Acrolein	Ave	1.927	1.558		243	300	-19.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3944	0.4298	0.1000	21.8	20.0	9.0	20.0
1,1-Dichloroethene	Ave	0.3547	0.3676	0.1000	20.7	20.0	3.6	20.0
Acetone	Ave	1.069	1.103	0.0500	103	100	3.2	50.0
Iodomethane	Ave	0.6734	0.6995		20.8	20.0	3.9	20.0
Isopropyl alcohol	Ave	0.7074	0.6966		197	200	-1.5	50.0
Carbon disulfide	Ave	1.338	1.359	0.1000	20.3	20.0	1.6	50.0
Allyl chloride	Ave	0.2049	0.2235		21.8	20.0	9.1	20.0
Methyl acetate	Ave	0.1816	0.2268	0.1000	125	100	24.9*	20.0
Cyclopentene	Ave	0.8170	0.8877		21.7	20.0	8.7	20.0
Acetonitrile	Ave	2.004	1.828		182	200	-8.8	20.0
Methylene Chloride	Ave	0.4282	0.4194	0.1000	19.6	20.0	-2.0	20.0
2-Methyl-2-propanol	Ave	1.516	1.372		181	200	-9.5	50.0
Methyl tert-butyl ether	Ave	0.9786	1.055	0.1000	21.6	20.0	7.8	20.0
trans-1,2-Dichloroethene	Ave	0.3841	0.3854	0.1000	20.1	20.0	0.3	20.0
Acrylonitrile	Ave	0.1123	0.1266		226	200	12.8	20.0
Hexane	Ave	0.2771	0.3118		22.5	20.0	12.5	20.0
Isopropyl ether	Ave	1.025	1.174		22.9	20.0	14.5	20.0
1,1-Dichloroethane	Ave	0.5942	0.6531	0.2000	22.0	20.0	9.9	20.0
Vinyl acetate	Ave	2.044	1.718		33.6	40.0	-15.9	20.0
2-Chloro-1,3-butadiene	Ave	0.3225	0.3292		20.4	20.0	2.1	20.0
Tert-butyl ethyl ether	Ave	0.9713	1.095		22.5	20.0	12.7	20.0
2,2-Dichloropropane	Ave	0.1401	0.1838		26.2	20.0	31.2*	20.0
2-Butanone (MEK)	Ave	0.4918	0.4224	0.0500	85.9	100	-14.1	50.0
cis-1,2-Dichloroethene	Ave	0.4350	0.4467	0.1000	20.5	20.0	2.7	20.0
Ethyl acetate	Ave	0.4070	0.3392		33.3	40.0	-16.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510660/3 Calibration Date: 04/12/2018 21:47

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81910.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2264	0.2751		24.3	20.0	21.5*	20.0
Propionitrile	QuaF		1.510		172	200	-14.1	20.0
Tetrahydrofuran	Ave	0.5811	0.4892		33.7	40.0	-15.8	20.0
Chlorobromomethane	Ave	0.2017	0.2170		21.5	20.0	7.6	20.0
Methacrylonitrile	Ave	0.1322	0.1397		211	200	5.7	20.0
Chloroform	Ave	0.6216	0.6694	0.2000	21.5	20.0	7.7	20.0
Cyclohexane	Ave	0.5789	0.5922	0.1000	20.5	20.0	2.3	50.0
1,1,1-Trichloroethane	Ave	0.4917	0.5863	0.1000	23.8	20.0	19.2	20.0
Carbon tetrachloride	Ave	0.3554	0.4839	0.1000	27.2	20.0	36.1*	20.0
1,1-Dichloropropene	Ave	0.4464	0.4746		21.3	20.0	6.3	20.0
Isobutyl alcohol	QuaF		0.0452		370	500	-26.0*	20.0
Benzene	Ave	1.841	1.797	0.5000	19.5	20.0	-2.4	20.0
Isopropyl acetate	Ave	0.7948	1.023		25.7	20.0	28.7*	20.0
Tert-amyl methyl ether	Ave	0.3001	0.3310		22.1	20.0	10.3	20.0
1,2-Dichloroethane	Ave	0.4020	0.4378	0.1000	21.8	20.0	8.9	20.0
n-Heptane	Ave	0.2765	0.3078		22.3	20.0	11.3	20.0
n-Butanol	Ave	0.2896	0.2633		455	500	-9.1	50.0
Trichloroethene	Ave	0.3572	0.3657	0.2000	20.5	20.0	2.4	20.0
Ethyl acrylate	Ave	0.2001	0.2252		22.5	20.0	12.6	20.0
Methylcyclohexane	Ave	0.6837	0.7135	0.1000	20.9	20.0	4.4	50.0
1,2-Dichloropropane	Ave	0.3471	0.3500	0.1000	20.2	20.0	0.8	20.0
Methyl methacrylate	Ave	0.1734	0.2632		60.7	40.0	51.8*	20.0
1,4-Dioxane	Ave	1.534	1.445		377	400	-5.8	50.0
n-Propyl acetate	Ave	0.3295	0.4105		24.9	20.0	24.6*	20.0
Dibromomethane	Ave	0.2181	0.2333		21.4	20.0	7.0	20.0
Dichlorobromomethane	Ave	0.3970	0.4557	0.2000	23.0	20.0	14.8	20.0
2-Chloroethyl vinyl ether	Ave	0.1632	0.1798		22.0	20.0	10.2	20.0
2-Nitropropane	Qua2		0.0455		56.1	40.0	40.2*	20.0
Epichlorohydrin	Ave	0.3469	0.3198		369	400	-7.8	20.0
cis-1,3-Dichloropropene	Ave	0.6366	0.6556	0.2000	20.6	20.0	3.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.278	3.336	0.0500	102	100	1.8	50.0
Toluene	Ave	1.926	1.807	0.4000	18.8	20.0	-6.2	20.0
trans-1,3-Dichloropropene	Ave	0.4920	0.5517	0.1000	22.4	20.0	12.1	50.0
Ethyl methacrylate	Ave	0.4153	0.4671		22.5	20.0	12.5	20.0
1,1,2-Trichloroethane	Ave	0.3239	0.3132	0.1000	19.3	20.0	-3.3	20.0
Tetrachloroethene	Ave	0.4315	0.4460	0.2000	20.7	20.0	3.4	20.0
1,3-Dichloropropane	Ave	0.6064	0.5799		19.1	20.0	-4.4	20.0
2-Hexanone	Ave	2.135	2.089	0.0500	97.8	100	-2.2	50.0
n-Butyl acetate	Ave	0.4143	0.5207		25.1	20.0	25.7*	20.0
Chlorodibromomethane	Ave	0.3342	0.4057	0.1000	24.3	20.0	21.4	50.0
Ethylene Dibromide	Ave	0.3641	0.3772	0.1000	20.7	20.0	3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510660/3 Calibration Date: 04/12/2018 21:47

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81910.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.239	1.174	0.5000	19.0	20.0	-5.2	20.0
Ethylbenzene	Ave	0.6717	0.6341	0.1000	18.9	20.0	-5.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3721	0.4420		23.8	20.0	18.8	20.0
m-Xylene & p-Xylene	Ave	0.8454	0.7878	0.1000	18.6	20.0	-6.8	20.0
n-Butyl acrylate	Qua2		0.2653		24.8	20.0	24.0*	20.0
o-Xylene	Ave	0.8649	0.8259	0.3000	19.1	20.0	-4.5	20.0
Styrene	Ave	1.367	1.296	0.3000	19.0	20.0	-5.2	20.0
Amyl acetate (mixed isomers)	Qua2		1.077		26.2	20.0	31.2*	20.0
Bromoform	Qua2		0.2390	0.1000	28.0	20.0	40.1*	20.0
Isopropylbenzene	Ave	2.260	2.261	0.1000	20.0	20.0	0.0	20.0
Bromobenzene	Ave	0.9532	0.9130		19.2	20.0	-4.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.037	0.9785	0.3000	18.9	20.0	-5.7	20.0
N-Propylbenzene	Ave	4.921	4.577		18.6	20.0	-7.0	20.0
1,2,3-Trichloropropane	Ave	0.2596	0.2673		20.6	20.0	3.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1995	0.2120		21.2	20.0	6.2	20.0
2-Chlorotoluene	Ave	3.302	3.045		18.4	20.0	-7.8	20.0
4-Ethyltoluene	Ave	4.087	3.717		18.2	20.0	-9.0	20.0
1,3,5-Trimethylbenzene	Ave	3.564	3.272		18.4	20.0	-8.2	20.0
4-Chlorotoluene	Ave	2.832	2.572		18.2	20.0	-9.2	20.0
Butyl Methacrylate	Qua2		0.9442		22.8	20.0	13.9	20.0
tert-Butylbenzene	Ave	2.866	2.664		18.6	20.0	-7.0	20.0
1,2,4-Trimethylbenzene	Ave	3.626	3.350		18.5	20.0	-7.6	20.0
sec-Butylbenzene	Ave	4.748	4.426		18.6	20.0	-6.8	20.0
4-Isopropyltoluene	Ave	3.942	3.715		18.8	20.0	-5.8	20.0
1,3-Dichlorobenzene	Ave	1.881	1.775	0.6000	18.9	20.0	-5.7	20.0
1,4-Dichlorobenzene	Ave	1.898	1.807	0.5000	19.0	20.0	-4.8	20.0
Benzyl chloride	Ave	1.070	1.401		26.2	20.0	30.9	50.0
Indan	Ave	3.721	3.482		18.7	20.0	-6.4	20.0
p-Diethylbenzene	Ave	2.169	2.075		19.1	20.0	-4.4	20.0
n-Butylbenzene	Ave	2.144	2.004		18.7	20.0	-6.5	20.0
1,2-Dichlorobenzene	Ave	1.872	1.802	0.4000	19.3	20.0	-3.7	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.912	3.667		18.7	20.0	-6.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1692	0.0500	22.0	20.0	9.9	50.0
1,3,5-Trichlorobenzene	Ave	1.544	1.551		20.1	20.0	0.5	20.0
1,2,4-Trichlorobenzene	Ave	1.487	1.500	0.2000	20.2	20.0	0.9	20.0
Hexachlorobutadiene	Ave	0.6537	0.6961		21.3	20.0	6.5	20.0
Naphthalene	Ave	4.123	3.798		18.4	20.0	-7.9	50.0
1,2,3-Trichlorobenzene	Ave	1.522	1.493		19.6	20.0	-1.9	20.0
Dibromofluoromethane (Surr)	Ave	0.3133	0.3629		57.9	50.0	15.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2986	0.3413		57.1	50.0	14.3	20.0
Toluene-d8 (Surr)	Ave	1.555	1.525		49.0	50.0	-1.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510972/2 Calibration Date: 04/13/2018 20:21

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81963.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin		0.2525		20.8	20.0	4.1	20.0
Dichlorodifluoromethane	Ave	0.6021	0.5415	0.1000	18.0	20.0	-10.1	20.0
Chloromethane	Ave	0.5852	0.5059	0.1000	17.3	20.0	-13.5	20.0
Butadiene	Ave	0.4371	0.3929		18.0	20.0	-10.1	20.0
Vinyl chloride	Ave	0.5947	0.5404	0.1000	18.2	20.0	-9.1	20.0
Bromomethane	Ave	0.4318	0.4104	0.1000	19.0	20.0	-4.9	50.0
Chloroethane	Ave	0.2668	0.2576	0.1000	19.3	20.0	-3.4	50.0
Dichlorofluoromethane	Ave	0.7507	0.7875		21.0	20.0	4.9	20.0
Trichlorofluoromethane	Ave	0.6160	0.6532	0.1000	21.2	20.0	6.0	20.0
Pentane	Ave	2.344	1.930		32.9	40.0	-17.7	20.0
Ethanol	Ave	0.0709	0.0639		721	800	-9.9	50.0
Ethyl ether	Ave	0.2571	0.2745		21.4	20.0	6.8	20.0
2-Methyl-1,3-butadiene	Ave	0.2625	0.3238		24.7	20.0	23.3*	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3069	0.3615		23.6	20.0	17.8	20.0
Acrolein	Ave	1.927	1.477		230	300	-23.4	50.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3944	0.4649	0.1000	23.6	20.0	17.9	20.0
1,1-Dichloroethene	Ave	0.3547	0.3930	0.1000	22.2	20.0	10.8	20.0
Acetone	Ave	1.069	1.066	0.0500	99.8	100	-0.2	50.0
Iodomethane	Ave	0.6734	0.7452		22.1	20.0	10.7	20.0
Isopropyl alcohol	Ave	0.7074	0.6726		190	200	-4.9	50.0
Carbon disulfide	Ave	1.338	1.487	0.1000	22.2	20.0	11.1	50.0
Allyl chloride	Ave	0.2049	0.2195		21.4	20.0	7.2	20.0
Methyl acetate	Ave	0.1816	0.2354	0.1000	130	100	29.7*	20.0
Cyclopentene	Ave	0.8170	0.9635		23.6	20.0	17.9	20.0
Acetonitrile	Ave	2.004	1.662		166	200	-17.1	20.0
Methylene Chloride	Ave	0.4282	0.4401	0.1000	20.6	20.0	2.8	20.0
2-Methyl-2-propanol	Ave	1.516	1.383		182	200	-8.8	50.0
Methyl tert-butyl ether	Ave	0.9786	1.084	0.1000	22.1	20.0	10.7	20.0
trans-1,2-Dichloroethene	Ave	0.3841	0.4131	0.1000	21.5	20.0	7.5	20.0
Acrylonitrile	Ave	0.1123	0.1316		234	200	17.2	20.0
Hexane	Ave	0.2771	0.3523		25.4	20.0	27.1*	20.0
Isopropyl ether	Ave	1.025	1.230		24.0	20.0	19.9	20.0
1,1-Dichloroethane	Ave	0.5942	0.6998	0.2000	23.6	20.0	17.8	20.0
Vinyl acetate	Ave	2.044	1.602		31.4	40.0	-21.6*	20.0
2-Chloro-1,3-butadiene	Ave	0.3225	0.3629		22.5	20.0	12.5	20.0
Tert-butyl ethyl ether	Ave	0.9713	1.137		23.4	20.0	17.0	20.0
2,2-Dichloropropane	Ave	0.1401	0.2103		30.0	20.0	50.1*	20.0
2-Butanone (MEK)	Ave	0.4918	0.4005	0.0500	81.4	100	-18.6	50.0
cis-1,2-Dichloroethene	Ave	0.4350	0.4677	0.1000	21.5	20.0	7.5	20.0
Ethyl acetate	Ave	0.4070	0.3384		33.3	40.0	-16.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510972/2 Calibration Date: 04/13/2018 20:21

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81963.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2264	0.2640		23.3	20.0	16.6	20.0
Propionitrile	QuaF		1.486		169	200	-15.5	20.0
Chlorobromomethane	Ave	0.2017	0.2203		21.8	20.0	9.2	20.0
Tetrahydrofuran	Ave	0.5811	0.4963		34.2	40.0	-14.6	20.0
Methacrylonitrile	Ave	0.1322	0.1419		215	200	7.3	20.0
Chloroform	Ave	0.6216	0.7164	0.2000	23.0	20.0	15.2	20.0
Cyclohexane	Ave	0.5789	0.6605	0.1000	22.8	20.0	14.1	50.0
1,1,1-Trichloroethane	Ave	0.4917	0.6399	0.1000	26.0	20.0	30.1*	20.0
Carbon tetrachloride	Ave	0.3554	0.5105	0.1000	28.7	20.0	43.6*	20.0
1,1-Dichloropropene	Ave	0.4464	0.5234		23.5	20.0	17.3	20.0
Isobutyl alcohol	QuaF		0.0471		385	500	-22.9*	20.0
Benzene	Ave	1.841	1.847	0.5000	20.1	20.0	0.3	20.0
Isopropyl acetate	Ave	0.7948	1.079		27.2	20.0	35.8*	20.0
Tert-amyl methyl ether	Ave	0.3001	0.3347		22.3	20.0	11.5	20.0
1,2-Dichloroethane	Ave	0.4020	0.4515	0.1000	22.5	20.0	12.3	20.0
n-Heptane	Ave	0.2765	0.3399		24.6	20.0	22.9*	20.0
n-Butanol	Ave	0.2896	0.2593		448	500	-10.5	50.0
Trichloroethene	Ave	0.3572	0.3960	0.2000	22.2	20.0	10.8	20.0
Ethyl acrylate	Ave	0.2001	0.2264		22.6	20.0	13.1	20.0
Methylcyclohexane	Ave	0.6837	0.7800	0.1000	22.8	20.0	14.1	50.0
1,2-Dichloropropane	Ave	0.3471	0.3724	0.1000	21.5	20.0	7.3	20.0
Methyl methacrylate	Ave	0.1734	0.2149		49.6	40.0	23.9*	20.0
n-Propyl acetate	Ave	0.3295	0.4291		26.0	20.0	30.2*	20.0
1,4-Dioxane	Ave	1.534	1.471		384	400	-4.1	50.0
Dibromomethane	Ave	0.2181	0.2403		22.0	20.0	10.2	20.0
Dichlorobromomethane	Ave	0.3970	0.4480	0.2000	22.6	20.0	12.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1632	0.1849		22.7	20.0	13.3	20.0
2-Nitropropane	Qua2		0.0470		57.9	40.0	44.6*	20.0
Epichlorohydrin	Ave	0.3469	0.3237		373	400	-6.7	20.0
cis-1,3-Dichloropropene	Ave	0.6366	0.6401	0.2000	20.1	20.0	0.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.278	3.399	0.0500	104	100	3.7	50.0
Toluene	Ave	1.926	1.928	0.4000	20.0	20.0	0.0	20.0
trans-1,3-Dichloropropene	Ave	0.4920	0.5411	0.1000	22.0	20.0	10.0	50.0
Ethyl methacrylate	Ave	0.4153	0.4655		22.4	20.0	12.1	20.0
1,1,2-Trichloroethane	Ave	0.3239	0.3201	0.1000	19.8	20.0	-1.2	20.0
Tetrachloroethene	Ave	0.4315	0.4835	0.2000	22.4	20.0	12.0	20.0
1,3-Dichloropropane	Ave	0.6064	0.5873		19.4	20.0	-3.2	20.0
2-Hexanone	Ave	2.135	2.111	0.0500	98.9	100	-1.1	50.0
n-Butyl acetate	Ave	0.4143	0.5325		25.7	20.0	28.5*	20.0
Chlorodibromomethane	Ave	0.3342	0.3903	0.1000	23.4	20.0	16.8	50.0
Ethylene Dibromide	Ave	0.3641	0.3774	0.1000	20.7	20.0	3.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-510972/2 Calibration Date: 04/13/2018 20:21

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K81963.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.239	1.224	0.5000	19.8	20.0	-1.2	20.0
Ethylbenzene	Ave	0.6717	0.6893	0.1000	20.5	20.0	2.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3721	0.4414		23.7	20.0	18.6	20.0
m-Xylene & p-Xylene	Ave	0.8454	0.8411	0.1000	19.9	20.0	-0.5	20.0
n-Butyl acrylate	Qua2		0.2700		25.2	20.0	26.2*	20.0
o-Xylene	Ave	0.8649	0.8901	0.3000	20.6	20.0	2.9	20.0
Styrene	Ave	1.367	1.357	0.3000	19.9	20.0	-0.7	20.0
Amyl acetate (mixed isomers)	Qua2		1.075		26.2	20.0	31.0*	20.0
Bromoform	Qua2		0.2300	0.1000	27.0	20.0	35.0*	20.0
Isopropylbenzene	Ave	2.260	2.418	0.1000	21.4	20.0	7.0	20.0
Bromobenzene	Ave	0.9532	0.9418		19.8	20.0	-1.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.037	0.9777	0.3000	18.8	20.0	-5.8	20.0
N-Propylbenzene	Ave	4.921	4.887		19.9	20.0	-0.7	20.0
1,2,3-Trichloropropane	Ave	0.2596	0.2569		19.8	20.0	-1.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1995	0.2009		20.1	20.0	0.7	20.0
2-Chlorotoluene	Ave	3.302	3.232		19.6	20.0	-2.1	20.0
4-Ethyltoluene	Ave	4.087	4.001		19.6	20.0	-2.1	20.0
1,3,5-Trimethylbenzene	Ave	3.564	3.442		19.3	20.0	-3.4	20.0
4-Chlorotoluene	Ave	2.832	2.718		19.2	20.0	-4.0	20.0
Butyl Methacrylate	Qua2		0.9440		22.8	20.0	13.9	20.0
tert-Butylbenzene	Ave	2.866	2.665		18.6	20.0	-7.0	20.0
1,2,4-Trimethylbenzene	Ave	3.626	3.629		20.0	20.0	0.0	20.0
sec-Butylbenzene	Ave	4.748	4.698		19.8	20.0	-1.0	20.0
4-Isopropyltoluene	Ave	3.942	3.952		20.0	20.0	0.2	20.0
1,3-Dichlorobenzene	Ave	1.881	1.879	0.6000	20.0	20.0	-0.1	20.0
1,4-Dichlorobenzene	Ave	1.898	1.852	0.5000	19.5	20.0	-2.4	20.0
Benzyl chloride	Ave	1.070	1.471		27.5	20.0	37.5	50.0
Indan	Ave	3.721	3.618		19.4	20.0	-2.8	20.0
p-Diethylbenzene	Ave	2.169	2.237		20.6	20.0	3.1	20.0
n-Butylbenzene	Ave	2.144	2.191		20.4	20.0	2.2	20.0
1,2-Dichlorobenzene	Ave	1.872	1.892	0.4000	20.2	20.0	1.1	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.912	3.834		19.6	20.0	-2.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1658	0.0500	21.5	20.0	7.7	50.0
1,3,5-Trichlorobenzene	Ave	1.544	1.681		21.8	20.0	8.9	20.0
1,2,4-Trichlorobenzene	Ave	1.487	1.554	0.2000	20.9	20.0	4.5	20.0
Hexachlorobutadiene	Ave	0.6537	0.7443		22.8	20.0	13.9	20.0
Naphthalene	Ave	4.123	3.794		18.4	20.0	-8.0	50.0
1,2,3-Trichlorobenzene	Ave	1.522	1.536		20.2	20.0	0.9	20.0
Dibromofluoromethane (Surr)	Ave	0.3133	0.3618		57.7	50.0	15.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2986	0.3407		57.0	50.0	14.1	20.0
Toluene-d8 (Surr)	Ave	1.555	1.527		49.1	50.0	-1.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511293/3 Calibration Date: 04/16/2018 04:50

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82033.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin		0.2205		18.2	20.0	-9.0	20.0
Dichlorodifluoromethane	Ave	0.6021	0.5612	0.1000	18.6	20.0	-6.8	20.0
Chloromethane	Ave	0.5852	0.5528	0.1000	18.9	20.0	-5.5	20.0
Butadiene	Ave	0.4371	0.4436		20.3	20.0	1.5	20.0
Vinyl chloride	Ave	0.5947	0.5859	0.1000	19.7	20.0	-1.5	20.0
Bromomethane	Ave	0.4318	0.4753	0.1000	22.0	20.0	10.1	50.0
Chloroethane	Ave	0.2668	0.2965	0.1000	22.2	20.0	11.2	50.0
Dichlorofluoromethane	Ave	0.7507	0.8491		22.6	20.0	13.1	20.0
Trichlorofluoromethane	Ave	0.6160	0.7193	0.1000	23.4	20.0	16.8	20.0
Pentane	Ave	2.344	1.761		30.0	40.0	-24.9*	20.0
Ethanol	Ave	0.0709	0.0630		711	800	-11.1	50.0
Ethyl ether	Ave	0.2571	0.2673		20.8	20.0	4.0	20.0
2-Methyl-1,3-butadiene	Ave	0.2625	0.3082		23.5	20.0	17.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3069	0.3514		22.9	20.0	14.5	20.0
Acrolein	Ave	1.927	1.414		220	300	-26.6	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3944	0.4502	0.1000	22.8	20.0	14.1	20.0
1,1-Dichloroethene	Ave	0.3547	0.3762	0.1000	21.2	20.0	6.1	20.0
Acetone	Ave	1.069	1.075	0.0500	101	100	0.6	50.0
Iodomethane	Ave	0.6734	0.7374		21.9	20.0	9.5	20.0
Isopropyl alcohol	Ave	0.7074	0.6608		187	200	-6.6	50.0
Carbon disulfide	Ave	1.338	1.391	0.1000	20.8	20.0	3.9	50.0
Allyl chloride	Ave	0.2049	0.2242		21.9	20.0	9.4	20.0
Methyl acetate	Ave	0.1816	0.2231	0.1000	123	100	22.9*	20.0
Cyclopentene	Ave	0.8170	0.9148		22.4	20.0	12.0	20.0
Acetonitrile	Ave	2.004	1.604		160	200	-20.0	20.0
Methylene Chloride	Ave	0.4282	0.4266	0.1000	19.9	20.0	-0.4	20.0
2-Methyl-2-propanol	Ave	1.516	1.332		176	200	-12.2	50.0
Methyl tert-butyl ether	Ave	0.9786	1.022	0.1000	20.9	20.0	4.5	20.0
trans-1,2-Dichloroethene	Ave	0.3841	0.4003	0.1000	20.8	20.0	4.2	20.0
Acrylonitrile	Ave	0.1123	0.1238		221	200	10.3	20.0
Hexane	Ave	0.2771	0.3203		23.1	20.0	15.6	20.0
Isopropyl ether	Ave	1.025	1.171		22.8	20.0	14.2	20.0
1,1-Dichloroethane	Ave	0.5942	0.6540	0.2000	22.0	20.0	10.1	20.0
Vinyl acetate	Ave	2.044	1.563		30.6	40.0	-23.5*	20.0
2-Chloro-1,3-butadiene	Ave	0.3225	0.3372		20.9	20.0	4.6	20.0
Tert-butyl ethyl ether	Ave	0.9713	1.083		22.3	20.0	11.5	20.0
2,2-Dichloropropane	Ave	0.1401	0.1951		27.9	20.0	39.3*	20.0
Ethyl acetate	Ave	0.4070	0.3321		32.6	40.0	-18.4	20.0
2-Butanone (MEK)	Ave	0.4918	0.3943	0.0500	80.2	100	-19.8	50.0
cis-1,2-Dichloroethene	Ave	0.4350	0.4479	0.1000	20.6	20.0	3.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511293/3 Calibration Date: 04/16/2018 04:50

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82033.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2264	0.2567		22.7	20.0	13.4	20.0
Propionitrile	QuaF		1.340		152	200	-23.8*	20.0
Tetrahydrofuran	Ave	0.5811	0.4794		33.0	40.0	-17.5	20.0
Chlorobromomethane	Ave	0.2017	0.2175		21.6	20.0	7.8	20.0
Methacrylonitrile	Ave	0.1322	0.1301		197	200	-1.6	20.0
Chloroform	Ave	0.6216	0.6891	0.2000	22.2	20.0	10.9	20.0
Cyclohexane	Ave	0.5789	0.6226	0.1000	21.5	20.0	7.6	50.0
1,1,1-Trichloroethane	Ave	0.4917	0.6068	0.1000	24.7	20.0	23.4*	20.0
Carbon tetrachloride	Ave	0.3554	0.4900	0.1000	27.6	20.0	37.9*	20.0
1,1-Dichloropropene	Ave	0.4464	0.4842		21.7	20.0	8.5	20.0
Isobutyl alcohol	QuaF		0.0447		366	500	-26.8*	20.0
Benzene	Ave	1.841	1.716	0.5000	18.6	20.0	-6.8	20.0
Isopropyl acetate	Ave	0.7948	0.8870		22.3	20.0	11.6	20.0
Tert-amyl methyl ether	Ave	0.3001	0.3171		21.1	20.0	5.7	20.0
1,2-Dichloroethane	Ave	0.4020	0.4209	0.1000	20.9	20.0	4.7	20.0
n-Heptane	Ave	0.2765	0.3134		22.7	20.0	13.3	20.0
n-Butanol	Ave	0.2896	0.2337		403	500	-19.3	50.0
Trichloroethene	Ave	0.3572	0.3599	0.2000	20.2	20.0	0.8	20.0
Ethyl acrylate	Ave	0.2001	0.2338		23.4	20.0	16.8	20.0
Methylcyclohexane	Ave	0.6837	0.7483	0.1000	21.9	20.0	9.4	50.0
1,2-Dichloropropane	Ave	0.3471	0.3374	0.1000	19.4	20.0	-2.8	20.0
Methyl methacrylate	Ave	0.1734	0.1997		46.0	40.0	15.1	20.0
1,4-Dioxane	Ave	1.534	1.452		378	400	-5.4	50.0
n-Propyl acetate	Ave	0.3295	0.3648		22.1	20.0	10.7	20.0
Dibromomethane	Ave	0.2181	0.2261		20.7	20.0	3.7	20.0
Dichlorobromomethane	Ave	0.3970	0.4116	0.2000	20.7	20.0	3.7	20.0
2-Chloroethyl vinyl ether	Ave	0.1632	0.1634		20.0	20.0	0.1	20.0
2-Nitropropane	Qua2		0.0394		48.6	40.0	21.4*	20.0
Epichlorohydrin	Ave	0.3469	0.2966		342	400	-14.5	20.0
cis-1,3-Dichloropropene	Ave	0.6366	0.5904	0.2000	18.5	20.0	-7.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.278	3.122	0.0500	95.2	100	-4.8	50.0
Toluene	Ave	1.926	1.737	0.4000	18.0	20.0	-9.8	20.0
trans-1,3-Dichloropropene	Ave	0.4920	0.5074	0.1000	20.6	20.0	3.1	50.0
Ethyl methacrylate	Ave	0.4153	0.4247		20.5	20.0	2.3	20.0
1,1,2-Trichloroethane	Ave	0.3239	0.2894	0.1000	17.9	20.0	-10.6	20.0
Tetrachloroethene	Ave	0.4315	0.4499	0.2000	20.9	20.0	4.3	20.0
1,3-Dichloropropane	Ave	0.6064	0.5363		17.7	20.0	-11.6	20.0
2-Hexanone	Ave	2.135	1.967	0.0500	92.1	100	-7.9	50.0
n-Butyl acetate	Ave	0.4143	0.5128		24.8	20.0	23.8*	20.0
Chlorodibromomethane	Ave	0.3342	0.3545	0.1000	21.2	20.0	6.1	50.0
Ethylene Dibromide	Ave	0.3641	0.3474	0.1000	19.1	20.0	-4.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511293/3 Calibration Date: 04/16/2018 04:50

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82033.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.239	1.135	0.5000	18.3	20.0	-8.4	20.0
Ethylbenzene	Ave	0.6717	0.6253	0.1000	18.6	20.0	-6.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3721	0.4100		22.0	20.0	10.2	20.0
m-Xylene & p-Xylene	Ave	0.8454	0.7844	0.1000	18.6	20.0	-7.2	20.0
n-Butyl acrylate	Qua2		0.2561		24.0	20.0	19.9	20.0
o-Xylene	Ave	0.8649	0.7943	0.3000	18.4	20.0	-8.2	20.0
Styrene	Ave	1.367	1.249	0.3000	18.3	20.0	-8.7	20.0
Amyl acetate (mixed isomers)	Qua2		0.9717		23.8	20.0	18.8	20.0
Bromoform	Qua2		0.2140	0.1000	25.2	20.0	25.9*	20.0
Isopropylbenzene	Ave	2.260	2.204	0.1000	19.5	20.0	-2.5	20.0
Bromobenzene	Ave	0.9532	0.8671		18.2	20.0	-9.0	20.0
1,1,2,2-Tetrachloroethane	Ave	1.037	0.8693	0.3000	16.8	20.0	-16.2	20.0
N-Propylbenzene	Ave	4.921	4.357		17.7	20.0	-11.5	20.0
1,2,3-Trichloropropane	Ave	0.2596	0.2404		18.5	20.0	-7.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1995	0.1796		18.0	20.0	-10.0	20.0
2-Chlorotoluene	Ave	3.302	2.853		17.3	20.0	-13.6	20.0
4-Ethyltoluene	Ave	4.087	3.636		17.8	20.0	-11.0	20.0
1,3,5-Trimethylbenzene	Ave	3.564	3.113		17.5	20.0	-12.7	20.0
4-Chlorotoluene	Ave	2.832	2.446		17.3	20.0	-13.7	20.0
Butyl Methacrylate	Qua2		0.8773		21.2	20.0	6.1	20.0
tert-Butylbenzene	Ave	2.866	2.429		17.0	20.0	-15.2	20.0
1,2,4-Trimethylbenzene	Ave	3.626	3.261		18.0	20.0	-10.0	20.0
sec-Butylbenzene	Ave	4.748	4.214		17.8	20.0	-11.2	20.0
4-Isopropyltoluene	Ave	3.942	3.547		18.0	20.0	-10.0	20.0
1,3-Dichlorobenzene	Ave	1.881	1.734	0.6000	18.4	20.0	-7.9	20.0
1,4-Dichlorobenzene	Ave	1.898	1.710	0.5000	18.0	20.0	-9.9	20.0
Benzyl chloride	Ave	1.070	1.346		25.2	20.0	25.8	50.0
Indan	Ave	3.721	3.260		17.5	20.0	-12.4	20.0
p-Diethylbenzene	Ave	2.169	2.027		18.7	20.0	-6.6	20.0
n-Butylbenzene	Ave	2.144	1.954		18.2	20.0	-8.8	20.0
1,2-Dichlorobenzene	Ave	1.872	1.754	0.4000	18.7	20.0	-6.3	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.912	3.539		18.1	20.0	-9.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1514	0.0500	19.7	20.0	-1.7	50.0
1,3,5-Trichlorobenzene	Ave	1.544	1.559		20.2	20.0	1.0	20.0
1,2,4-Trichlorobenzene	Ave	1.487	1.498	0.2000	20.1	20.0	0.7	20.0
Hexachlorobutadiene	Ave	0.6537	0.7023		21.5	20.0	7.4	20.0
Naphthalene	Ave	4.123	3.589		17.4	20.0	-13.0	50.0
1,2,3-Trichlorobenzene	Ave	1.522	1.478		19.4	20.0	-2.9	20.0
Dibromofluoromethane (Surr)	Ave	0.3133	0.3756		59.9	50.0	19.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2986	0.3511		58.8	50.0	17.6	20.0
Toluene-d8 (Surr)	Ave	1.555	1.527		49.1	50.0	-1.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511471/4 Calibration Date: 04/16/2018 18:36

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82063.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin		0.2027		16.7	20.0	-16.3	20.0
Dichlorodifluoromethane	Ave	0.6021	0.5508	0.1000	18.3	20.0	-8.5	20.0
Chloromethane	Ave	0.5852	0.5309	0.1000	18.1	20.0	-9.3	20.0
Vinyl chloride	Ave	0.5947	0.5616	0.1000	18.9	20.0	-5.6	20.0
Butadiene	Ave	0.4371	0.4390		20.1	20.0	0.4	20.0
Bromomethane	Ave	0.4318	0.4296	0.1000	19.9	20.0	-0.5	50.0
Chloroethane	Ave	0.2668	0.2744	0.1000	20.6	20.0	2.9	50.0
Dichlorofluoromethane	Ave	0.7507	0.7925		21.1	20.0	5.6	20.0
Trichlorofluoromethane	Ave	0.6160	0.6723	0.1000	21.8	20.0	9.1	20.0
Pentane	Ave	2.344	1.633		27.9	40.0	-30.4*	20.0
Ethyl ether	Ave	0.2571	0.2303		17.9	20.0	-10.4	20.0
Ethanol	Ave	0.0709	0.0546		615	800	-23.1	50.0
2-Methyl-1,3-butadiene	Ave	0.2625	0.2858		21.8	20.0	8.9	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.3069	0.3208		20.9	20.0	4.5	20.0
Acrolein	Ave	1.927	1.483		231	300	-23.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3944	0.4152	0.1000	21.1	20.0	5.3	20.0
1,1-Dichloroethene	Ave	0.3547	0.3494	0.1000	19.7	20.0	-1.5	20.0
Acetone	Ave	1.069	1.000	0.0500	93.5	100	-6.5	50.0
Iodomethane	Ave	0.6734	0.6573		19.5	20.0	-2.4	20.0
Isopropyl alcohol	Ave	0.7074	0.7055		199	200	-0.3	50.0
Carbon disulfide	Ave	1.338	1.272	0.1000	19.0	20.0	-5.0	50.0
Allyl chloride	Ave	0.2049	0.2136		20.9	20.0	4.3	20.0
Methyl acetate	Ave	0.1816	0.2036	0.1000	112	100	12.2	20.0
Cyclopentene	Ave	0.8170	0.8462		20.7	20.0	3.6	20.0
Acetonitrile	Ave	2.004	1.529		153	200	-23.7*	20.0
Methylene Chloride	Ave	0.4282	0.3751	0.1000	17.5	20.0	-12.4	20.0
2-Methyl-2-propanol	Ave	1.516	1.256		166	200	-17.2	50.0
Methyl tert-butyl ether	Ave	0.9786	0.8986	0.1000	18.4	20.0	-8.2	20.0
trans-1,2-Dichloroethene	Ave	0.3841	0.3611	0.1000	18.8	20.0	-6.0	20.0
Acrylonitrile	Ave	0.1123	0.1130		201	200	0.6	20.0
Hexane	Ave	0.2771	0.2994		21.6	20.0	8.1	20.0
Isopropyl ether	Ave	1.025	1.018		19.9	20.0	-0.7	20.0
1,1-Dichloroethane	Ave	0.5942	0.6034	0.2000	20.3	20.0	1.5	20.0
Vinyl acetate	Ave	2.044	1.444		28.3	40.0	-29.4*	20.0
2-Chloro-1,3-butadiene	Ave	0.3225	0.3143		19.5	20.0	-2.5	20.0
Tert-butyl ethyl ether	Ave	0.9713	0.9552		19.7	20.0	-1.7	20.0
2,2-Dichloropropane	Ave	0.1401	0.1869		26.7	20.0	33.4*	20.0
Ethyl acetate	Ave	0.4070	0.3226		31.7	40.0	-20.7*	20.0
2-Butanone (MEK)	Ave	0.4918	0.3810	0.0500	77.5	100	-22.5	50.0
cis-1,2-Dichloroethene	Ave	0.4350	0.3967	0.1000	18.2	20.0	-8.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511471/4 Calibration Date: 04/16/2018 18:36

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82063.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl acrylate	Ave	0.2264	0.2430		21.5	20.0	7.3	20.0
Propionitrile	QuaF		1.231		140	200	-30.0*	20.0
Chlorobromomethane	Ave	0.2017	0.1903		18.9	20.0	-5.6	20.0
Tetrahydrofuran	Ave	0.5811	0.4414		30.4	40.0	-24.0*	20.0
Methacrylonitrile	Ave	0.1322	0.1239		187	200	-6.3	20.0
Chloroform	Ave	0.6216	0.6095	0.2000	19.6	20.0	-2.0	20.0
Cyclohexane	Ave	0.5789	0.5687	0.1000	19.6	20.0	-1.8	50.0
1,1,1-Trichloroethane	Ave	0.4917	0.5648	0.1000	23.0	20.0	14.9	20.0
Carbon tetrachloride	Ave	0.3554	0.4693	0.1000	26.4	20.0	32.0*	20.0
1,1-Dichloropropene	Ave	0.4464	0.4576		20.5	20.0	2.5	20.0
Isobutyl alcohol	QuaF		0.0392		321	500	-35.9*	20.0
Benzene	Ave	1.841	1.585	0.5000	17.2	20.0	-13.9	20.0
Isopropyl acetate	Ave	0.7948	0.8308		20.9	20.0	4.5	20.0
Tert-amyl methyl ether	Ave	0.3001	0.2888		19.3	20.0	-3.7	20.0
1,2-Dichloroethane	Ave	0.4020	0.3808	0.1000	18.9	20.0	-5.3	20.0
n-Heptane	Ave	0.2765	0.2871		20.8	20.0	3.8	20.0
n-Butanol	Ave	0.2896	0.2261		390	500	-21.9	50.0
Trichloroethene	Ave	0.3572	0.3402	0.2000	19.0	20.0	-4.8	20.0
Ethyl acrylate	Ave	0.2001	0.2046		20.4	20.0	2.2	20.0
Methylcyclohexane	Ave	0.6837	0.6679	0.1000	19.5	20.0	-2.3	50.0
1,2-Dichloropropane	Ave	0.3471	0.3134	0.1000	18.1	20.0	-9.7	20.0
Methyl methacrylate	Ave	0.1734	0.1877		43.3	40.0	8.2	20.0
1,4-Dioxane	Ave	1.534	1.299		339	400	-15.3	50.0
n-Propyl acetate	Ave	0.3295	0.3605		21.9	20.0	9.4	20.0
Dibromomethane	Ave	0.2181	0.2054		18.8	20.0	-5.8	20.0
Dichlorobromomethane	Ave	0.3970	0.3926	0.2000	19.8	20.0	-1.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1632	0.1622		19.9	20.0	-0.6	20.0
2-Nitropropane	Qua2		0.0433		53.4	40.0	33.6*	20.0
Epichlorohydrin	Ave	0.3469	0.2938		339	400	-15.3	20.0
cis-1,3-Dichloropropene	Ave	0.6366	0.5689	0.2000	17.9	20.0	-10.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	3.278	2.990	0.0500	91.2	100	-8.8	50.0
Toluene	Ave	1.926	1.660	0.4000	17.2	20.0	-13.8	20.0
trans-1,3-Dichloropropene	Ave	0.4920	0.4759	0.1000	19.3	20.0	-3.3	50.0
Ethyl methacrylate	Ave	0.4153	0.3931		18.9	20.0	-5.3	20.0
1,1,2-Trichloroethane	Ave	0.3239	0.2675	0.1000	16.5	20.0	-17.4	20.0
Tetrachloroethene	Ave	0.4315	0.4232	0.2000	19.6	20.0	-1.9	20.0
1,3-Dichloropropane	Ave	0.6064	0.4989		16.5	20.0	-17.7	20.0
2-Hexanone	Ave	2.135	1.909	0.0500	89.4	100	-10.6	50.0
n-Butyl acetate	Ave	0.4143	0.4598		22.2	20.0	11.0	20.0
Chlorodibromomethane	Ave	0.3342	0.3470	0.1000	20.8	20.0	3.8	50.0
Ethylene Dibromide	Ave	0.3641	0.3238	0.1000	17.8	20.0	-11.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-511471/4 Calibration Date: 04/16/2018 18:36

Instrument ID: CVOAMS9 Calib Start Date: 04/03/2018 07:38

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/03/2018 15:21

Lab File ID: K82063.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.239	1.064	0.5000	17.2	20.0	-14.1	20.0
Ethylbenzene	Ave	0.6717	0.5970	0.1000	17.8	20.0	-11.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3721	0.3859		20.7	20.0	3.7	20.0
m-Xylene & p-Xylene	Ave	0.8454	0.7261	0.1000	17.2	20.0	-14.1	20.0
n-Butyl acrylate	Qua2		0.2293		21.5	20.0	7.7	20.0
o-Xylene	Ave	0.8649	0.7458	0.3000	17.2	20.0	-13.8	20.0
Styrene	Ave	1.367	1.137	0.3000	16.6	20.0	-16.9	20.0
Amyl acetate (mixed isomers)	Qua2		0.9635		23.6	20.0	17.8	20.0
Bromoform	Qua2		0.2049	0.1000	24.2	20.0	20.8*	20.0
Isopropylbenzene	Ave	2.260	2.057	0.1000	18.2	20.0	-9.0	20.0
Bromobenzene	Ave	0.9532	0.8261		17.3	20.0	-13.3	20.0
1,1,2,2-Tetrachloroethane	Ave	1.037	0.8179	0.3000	15.8	20.0	-21.2*	20.0
N-Propylbenzene	Ave	4.921	4.249		17.3	20.0	-13.7	20.0
1,2,3-Trichloropropane	Ave	0.2596	0.2254		17.4	20.0	-13.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1995	0.1849		18.5	20.0	-7.3	20.0
2-Chlorotoluene	Ave	3.302	2.744		16.6	20.0	-16.9	20.0
4-Ethyltoluene	Ave	4.087	3.512		17.2	20.0	-14.1	20.0
1,3,5-Trimethylbenzene	Ave	3.564	3.041		17.1	20.0	-14.7	20.0
4-Chlorotoluene	Ave	2.832	2.334		16.5	20.0	-17.6	20.0
Butyl Methacrylate	Qua2		0.8285		20.1	20.0	0.5	20.0
tert-Butylbenzene	Ave	2.866	2.436		17.0	20.0	-15.0	20.0
1,2,4-Trimethylbenzene	Ave	3.626	3.104		17.1	20.0	-14.4	20.0
sec-Butylbenzene	Ave	4.748	4.100		17.3	20.0	-13.6	20.0
4-Isopropyltoluene	Ave	3.942	3.470		17.6	20.0	-12.0	20.0
1,3-Dichlorobenzene	Ave	1.881	1.667	0.6000	17.7	20.0	-11.4	20.0
1,4-Dichlorobenzene	Ave	1.898	1.636	0.5000	17.2	20.0	-13.8	20.0
Benzyl chloride	Ave	1.070	1.322		24.7	20.0	23.5	50.0
Indan	Ave	3.721	3.114		16.7	20.0	-16.3	20.0
p-Diethylbenzene	Ave	2.169	1.937		17.9	20.0	-10.7	20.0
n-Butylbenzene	Ave	2.144	1.892		17.7	20.0	-11.7	20.0
1,2-Dichlorobenzene	Ave	1.872	1.649	0.4000	17.6	20.0	-11.9	20.0
1,2,4,5-Tetramethylbenzene	Ave	3.912	3.326		17.0	20.0	-15.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1453	0.0500	18.9	20.0	-5.6	50.0
1,3,5-Trichlorobenzene	Ave	1.544	1.434		18.6	20.0	-7.1	20.0
1,2,4-Trichlorobenzene	Ave	1.487	1.376	0.2000	18.5	20.0	-7.5	20.0
Hexachlorobutadiene	Ave	0.6537	0.6585		20.1	20.0	0.7	20.0
Naphthalene	Ave	4.123	3.403		16.5	20.0	-17.5	50.0
1,2,3-Trichlorobenzene	Ave	1.522	1.317		17.3	20.0	-13.5	20.0
Dibromofluoromethane (Surr)	Ave	0.3133	0.3625		57.9	50.0	15.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2986	0.3297		55.2	50.0	10.4	20.0
Toluene-d8 (Surr)	Ave	1.555	1.558		50.1	50.0	0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Lab Sample ID: CCVIS 460-513435/2 Calibration Date: 04/23/2018 17:27

Instrument ID: CVOAMS9 Calib Start Date: 04/21/2018 06:04

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 04/21/2018 08:07

Lab File ID: K82435.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	QuaF		0.2999		13.3	20.0	-33.4*	20.0
Dichlorodifluoromethane	QuaF		0.5530	0.1000	11.8	20.0	-40.9*	20.0
Chloromethane	Ave	0.6221	0.4991	0.1000	16.0	20.0	-19.8	20.0
Butadiene	Ave	0.4762	0.4054		17.0	20.0	-14.9	20.0
Vinyl chloride	Ave	0.6218	0.5387	0.1000	17.3	20.0	-13.4	20.0
Bromomethane	Ave	0.5174	0.4274	0.1000	16.5	20.0	-17.4	50.0
Chloroethane	Ave	0.3136	0.2601	0.1000	16.6	20.0	-17.1	50.0
Dichlorofluoromethane	Ave	0.9152	0.8099		17.7	20.0	-11.5	20.0
Trichlorofluoromethane	Ave	0.8127	0.7453	0.1000	18.3	20.0	-8.3	20.0
Pentane	Ave	1.821	1.539		33.8	40.0	-15.5	20.0
Ethyl ether	Ave	0.2723	0.2686		19.7	20.0	-1.4	20.0
Ethanol	Ave	0.0627	0.0614		784	800	-2.0	50.0
2-Methyl-1,3-butadiene	Ave	0.3126	0.3231		20.7	20.0	3.4	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.4021	0.4354		21.7	20.0	8.3	20.0
Acrolein	Ave	1.482	1.089		220	300	-26.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin2		0.5056	0.1000	19.1	20.0	-4.7	20.0
1,1-Dichloroethene	Ave	0.4101	0.4185	0.1000	20.4	20.0	2.0	20.0
Acetone	Ave	1.229	1.205	0.0500	98.0	100	-2.0	50.0
Iodomethane	Ave	0.8745	0.8949		20.5	20.0	2.3	20.0
Isopropyl alcohol	Ave	0.7696	0.7394		192	200	-3.9	50.0
Carbon disulfide	Ave	1.530	1.547	0.1000	20.2	20.0	1.1	50.0
Allyl chloride	Ave	0.2426	0.2415		19.9	20.0	-0.5	20.0
Methyl acetate	Ave	6.750	6.365	0.1000	37.7	40.0	-5.7	20.0
Cyclopentene	Ave	0.9044	0.9492		21.0	20.0	5.0	20.0
Acetonitrile	Ave	1.663	1.426		171	200	-14.3	20.0
Methylene Chloride	Ave	0.4679	0.4620	0.1000	19.8	20.0	-1.2	20.0
2-Methyl-2-propanol	Ave	1.502	1.499		200	200	-0.2	50.0
Methyl tert-butyl ether	Ave	1.145	1.124	0.1000	19.6	20.0	-1.8	20.0
trans-1,2-Dichloroethene	Ave	0.4467	0.4587	0.1000	20.5	20.0	2.7	20.0
Acrylonitrile	Ave	0.1235	0.1394		226	200	12.9	20.0
Hexane	Ave	0.3445	0.3347		19.4	20.0	-2.8	20.0
Isopropyl ether	Ave	1.211	1.210		20.0	20.0	-0.1	20.0
1,1-Dichloroethane	Ave	0.7096	0.7304	0.2000	20.6	20.0	2.9	20.0
Vinyl acetate	Ave	1.788	1.614		36.1	40.0	-9.7	20.0
2-Chloro-1,3-butadiene	Ave	0.3606	0.3843		21.3	20.0	6.6	20.0
Tert-butyl ethyl ether	Ave	1.168	1.128		19.3	20.0	-3.5	20.0
2,2-Dichloropropane	Ave	0.2280	0.2253		19.8	20.0	-1.2	20.0
cis-1,2-Dichloroethene	Ave	0.4980	0.5144	0.1000	20.7	20.0	3.3	20.0
Ethyl acetate	Ave	0.4169	0.3901		37.4	40.0	-6.4	20.0
2-Butanone (MEK)	Ave	0.4882	0.4833	0.0500	99.0	100	-1.0	50.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-505749/7

Matrix: Solid | Lab File ID: K81123.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/24/2018 08:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 505749 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.000370	J	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		78-135
460-00-4	4-Bromofluorobenzene	93		67-126
1868-53-7	Dibromofluoromethane (Surr)	96		61-149
2037-26-5	Toluene-d8 (Surr)	98		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-510106/7

Matrix: Solid Lab File ID: D48515.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/11/2018 10:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 510106 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.000211	J	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		78-135
460-00-4	4-Bromofluorobenzene	102		67-126
1868-53-7	Dibromofluoromethane (Surr)	78		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-511471/8

Matrix: Solid | Lab File ID: K82067.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/16/2018 20:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 511471 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0010	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0010	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046
95-50-1	1,2-Dichlorobenzene	0.0010	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0010	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0010	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.020	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0050	U	0.0050	0.0011
591-78-6	2-Hexanone	0.0050	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.00066
67-64-1	Acetone	0.00455	J	0.0050	0.0038
71-43-2	Benzene	0.0010	U	0.0010	0.00026
75-25-2	Bromoform	0.0010	U	0.0010	0.00043
74-83-9	Bromomethane	0.0010	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.0010	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0010	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.0010	U	0.0010	0.00018
74-97-5	Chlorobromomethane	0.0010	U	0.0010	0.00028
124-48-1	Chlorodibromomethane	0.0010	U	0.0010	0.00019
75-00-3	Chloroethane	0.0010	U	0.0010	0.00052
67-66-3	Chloroform	0.0010	U	0.0010	0.00032
74-87-3	Chloromethane	0.0010	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
110-82-7	Cyclohexane	0.0010	U	0.0010	0.00022
75-27-4	Dichlorobromomethane	0.0010	U	0.0010	0.00026
75-71-8	Dichlorodifluoromethane	0.0010	U	0.0010	0.00034

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-152211-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-512479/8

Matrix: Solid | Lab File ID: D48924.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/19/2018 20:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 512479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0010	U	0.0010	0.00020
106-93-4	Ethylene Dibromide	0.0010	U	0.0010	0.00018
98-82-8	Isopropylbenzene	0.0010	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0050	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0010	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.0010	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.000267	J	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017
95-47-6	o-Xylene	0.0010	U	0.0010	0.000095
100-42-5	Styrene	0.0010	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.0010	U	0.0010	0.00014
108-88-3	Toluene	0.0010	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027
79-01-6	Trichloroethene	0.0010	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0010	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.0010	U	0.0010	0.00055

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		78-135
460-00-4	4-Bromofluorobenzene	97		67-126
1868-53-7	Dibromofluoromethane (Surr)	80		61-149
2037-26-5	Toluene-d8 (Surr)	97		73-121

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-504873/3 Date Analyzed: 03/20/2018 23:13

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81011.D Heated Purge: (Y/N) Y

Calibration ID: 66902

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		273445	3.35	215412	4.45	404301	5.58
UPPER LIMIT		546890	3.85	430824	4.95	808602	6.08
LOWER LIMIT		136723	2.85	107706	3.95	202151	5.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-504873/4		261087	3.36	211174	4.46	409087	5.58
LCSD 460-504873/5		268924	3.35	212666	4.46	414234	5.58
MB 460-504873/8		298716	3.36	232585	4.46	372123	5.58
460-152211-2	GC-SB-101(SO) -15.5-17.5	289957	3.37	221031	4.46	377510	5.58
460-152211-2 MS	GC-SB-101(SO) -15.5-17.5 MS	237621	3.36	183114	4.46	390713	5.58
460-152211-2 MSD	GC-SB-101(SO) -15.5-17.5 MSD	253765	3.37	189426	4.46	393561	5.58
460-152211-1	GC-SB-101(SO)-3-5	266659	3.36	218542	4.46	378926	5.58
460-152211-3	GC-MW-102(SO)-3-5	299223	3.35	233629	4.46	364292	5.58
460-152211-4	GC-MW-102(SO)-9-11	296160	3.38	222314	4.46	372709	5.58
460-152211-5	GC-MW-103(SO)-3-5	81983*	3.35	56659*	4.45	81031*	5.58

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-504873/3 Date Analyzed: 03/20/2018 23:13

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81011.D Heated Purge: (Y/N) Y

Calibration ID: 66902

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		21225	6.28	348271	9.07	202741	11.52
UPPER LIMIT		42450	6.78	696542	9.57	405482	12.02
LOWER LIMIT		10613	5.78	174136	8.57	101371	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-504873/4		19254	6.28	332511	9.07	191757	11.52
LCSD 460-504873/5		20013	6.28	342674	9.07	203136	11.52
MB 460-504873/8		20993	6.28	316845	9.07	188411	11.52
460-152211-2	GC-SB-101(SO) -15.5-17.5	21166	6.28	312120	9.08	190414	11.52
460-152211-2 MS	GC-SB-101(SO) -15.5-17.5 MS	16993	6.28	321892	9.08	193433	11.52
460-152211-2 MSD	GC-SB-101(SO) -15.5-17.5 MSD	18931	6.28	330742	9.08	198205	11.52
460-152211-1	GC-SB-101(SO)-3-5	16828	6.28	323781	9.08	190770	11.52
460-152211-3	GC-MW-102(SO)-3-5	18608	6.29	303096	9.07	175297	11.52
460-152211-4	GC-MW-102(SO)-9-11	20180	6.29	312348	9.07	183108	11.52
460-152211-5	GC-MW-103(SO)-3-5	7600*	6.28	73048*	9.07	43974*	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Sample No.: CCVIS 460-505749/2 Date Analyzed: 03/24/2018 05:54

Instrument ID: CVOAMS9 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): K81118.D Heated Purge: (Y/N) Y

Calibration ID: 67199

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		24910	6.28	308230	9.08	166464	11.52
UPPER LIMIT		49820	6.78	616460	9.58	332928	12.02
LOWER LIMIT		12455	5.78	154115	8.58	83232	11.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-505749/3		24779	6.28	319139	9.07	173369	11.52
LCSD 460-505749/4		23899	6.28	321481	9.07	175332	11.52
MB 460-505749/7		18993	6.29	310933	9.08	170017	11.52
460-152331-3	GC-MW-104(SO)-0.5-2.5	19160	6.28	312066	9.08	174499	11.52
460-152331-4	GC-MW-104(SO)-7-9	23743	6.28	306870	9.07	166910	11.52
460-152331-5	GC-MW-105(SO)-0.5-2.5	22245	6.28	307008	9.08	169774	11.52
460-152331-6	GC-MW-105(SO)-7-9	20818	6.28	312175	9.08	175911	11.52
460-152331-7	GC-Drain-02(SO)	12345*	6.28	268367	9.08	130231	11.52
460-152331-1	GC-MW-103(SO)-12-14	23010	6.29	306545	9.08	183270	11.52

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81012.D

Lab ID: LCS 460-504873/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0203	101	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0207	103	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0193	97	78-132	
1,1,2-Trichloroethane	0.0200	0.0184	92	76-124	
1,1-Dichloroethane	0.0200	0.0228	114	80-124	
1,1-Dichloroethene	0.0200	0.0194	97	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0192	96	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0199	99	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0181	91	65-129	
1,2-Dichlorobenzene	0.0200	0.0184	92	80-121	
1,2-Dichloroethane	0.0200	0.0197	99	68-120	
1,2-Dichloropropane	0.0200	0.0217	109	77-124	
1,3-Dichlorobenzene	0.0200	0.0187	93	79-124	
1,4-Dichlorobenzene	0.0200	0.0185	92	79-121	
1,4-Dioxane	0.400	0.307	77	67-150	
2-Butanone (MEK)	0.100	0.0711	71	61-140	
2-Hexanone	0.100	0.0899	90	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0933	93	80-120	
Acetone	0.100	0.0802	80	75-120	
Benzene	0.0200	0.0213	107	75-127	
Bromoform	0.0200	0.0161	81	19-150	
Bromomethane	0.0200	0.0179	89	59-136	
Carbon disulfide	0.0200	0.0218	109	74-130	
Carbon tetrachloride	0.0200	0.0194	97	77-138	
Chlorobenzene	0.0200	0.0181	90	80-120	
Chlorobromomethane	0.0200	0.0181	91	80-125	
Chlorodibromomethane	0.0200	0.0165	83	67-143	
Chloroethane	0.0200	0.0198	99	50-139	
Chloroform	0.0200	0.0206	103	80-122	
Chloromethane	0.0200	0.0219	109	66-128	
cis-1,2-Dichloroethene	0.0200	0.0196	98	80-123	
cis-1,3-Dichloropropene	0.0200	0.0198	99	75-124	
Cyclohexane	0.0200	0.0204	102	67-135	
Dichlorobromomethane	0.0200	0.0190	95	76-129	
Dichlorodifluoromethane	0.0200	0.0177	88	72-127	
Ethylbenzene	0.0200	0.0185	93	79-124	
Ethylene Dibromide	0.0200	0.0180	90	80-122	
Isopropylbenzene	0.0200	0.0184	92	80-125	
Methyl acetate	0.100	0.124	124	73-123	*
Methyl tert-butyl ether	0.0200	0.0198	99	80-120	
Methylcyclohexane	0.0200	0.0204	102	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81013.D

Lab ID: LCSD 460-504873/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0193	97	5	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0200	100	3	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0193	97	0	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0197	99	7	30	76-124	
1,1-Dichloroethane	0.0200	0.0224	112	2	30	80-124	
1,1-Dichloroethene	0.0200	0.0191	96	1	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0178	89	8	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0186	93	6	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0181	91	0	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0179	89	3	30	80-121	
1,2-Dichloroethane	0.0200	0.0196	98	1	30	68-120	
1,2-Dichloropropane	0.0200	0.0213	106	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0178	89	5	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0181	90	2	30	79-121	
1,4-Dioxane	0.400	0.294	74	4	30	67-150	
2-Butanone (MEK)	0.100	0.0717	72	1	30	61-140	
2-Hexanone	0.100	0.0935	94	4	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0957	96	3	30	80-120	
Acetone	0.100	0.0807	81	1	30	75-120	
Benzene	0.0200	0.0212	106	1	30	75-127	
Bromoform	0.0200	0.0162	81	1	30	19-150	
Bromomethane	0.0200	0.0186	93	4	30	59-136	
Carbon disulfide	0.0200	0.0209	104	4	30	74-130	
Carbon tetrachloride	0.0200	0.0193	96	1	30	77-138	
Chlorobenzene	0.0200	0.0179	90	1	30	80-120	
Chlorobromomethane	0.0200	0.0173	86	5	30	80-125	
Chlorodibromomethane	0.0200	0.0168	84	2	30	67-143	
Chloroethane	0.0200	0.0205	103	4	30	50-139	
Chloroform	0.0200	0.0205	102	0	30	80-122	
Chloromethane	0.0200	0.0223	111	2	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0193	96	2	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0196	98	1	30	75-124	
Cyclohexane	0.0200	0.0195	97	5	30	67-135	
Dichlorobromomethane	0.0200	0.0191	95	0	30	76-129	
Dichlorodifluoromethane	0.0200	0.0183	91	3	30	72-127	
Ethylbenzene	0.0200	0.0187	94	1	30	79-124	
Ethylene Dibromide	0.0200	0.0178	89	1	30	80-122	
Isopropylbenzene	0.0200	0.0182	91	1	30	80-125	
Methyl acetate	0.100	0.127	127	2	30	73-123	*
Methyl tert-butyl ether	0.0200	0.0193	97	2	30	80-120	
Methylcyclohexane	0.0200	0.0193	96	5	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: B28116.D

Lab ID: LCS 460-507466/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0219	110	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0219	109	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0181	90	78-132	
1,1,2-Trichloroethane	0.0200	0.0210	105	76-124	
1,1-Dichloroethane	0.0200	0.0176	88	80-124	
1,1-Dichloroethene	0.0200	0.0173	86	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0209	105	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0230	115	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0262	131	65-129	*
1,2-Dichlorobenzene	0.0200	0.0204	102	80-121	
1,2-Dichloroethane	0.0200	0.0209	105	68-120	
1,2-Dichloropropane	0.0200	0.0210	105	77-124	
1,3-Dichlorobenzene	0.0200	0.0202	101	79-124	
1,4-Dichlorobenzene	0.0200	0.0202	101	79-121	
1,4-Dioxane	0.400	0.504	126	67-150	
2-Butanone (MEK)	0.100	0.0991	99	61-140	
2-Hexanone	0.100	0.0737	74	78-120	*
4-Methyl-2-pentanone (MIBK)	0.100	0.0960	96	80-120	
Acetone	0.100	0.0772	77	75-120	
Benzene	0.0200	0.0215	107	75-127	
Bromoform	0.0200	0.0225	113	19-150	
Bromomethane	0.0200	0.0188	94	59-136	
Carbon disulfide	0.0200	0.0175	87	74-130	
Carbon tetrachloride	0.0200	0.0213	107	77-138	
Chlorobenzene	0.0200	0.0212	106	80-120	
Chlorobromomethane	0.0200	0.0202	101	80-125	
Chlorodibromomethane	0.0200	0.0224	112	67-143	
Chloroethane	0.0200	0.0169	85	50-139	
Chloroform	0.0200	0.0216	108	80-122	
Chloromethane	0.0200	0.0228	114	66-128	
cis-1,2-Dichloroethene	0.0200	0.0195	97	80-123	
cis-1,3-Dichloropropene	0.0200	0.0208	104	75-124	
Cyclohexane	0.0200	0.0202	101	67-135	
Dichlorobromomethane	0.0200	0.0217	108	76-129	
Dichlorodifluoromethane	0.0200	0.0196	98	72-127	
Ethylbenzene	0.0200	0.0199	99	79-124	
Ethylene Dibromide	0.0200	0.0220	110	80-122	
Isopropylbenzene	0.0200	0.0211	106	80-125	
Methyl acetate	0.100	0.0814	81	73-123	
Methyl tert-butyl ether	0.0200	0.0173	86	80-120	
Methylcyclohexane	0.0200	0.0196	98	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: B28117.D

Lab ID: LCSD 460-507466/6 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0220	110	0	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0170	85	25	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0221	111	20	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0193	96	9	30	76-124	
1,1-Dichloroethane	0.0200	0.0206	103	16	30	80-124	
1,1-Dichloroethene	0.0200	0.0200	100	14	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0218	109	4	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0229	115	0	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0239	119	9	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0194	97	5	30	80-121	
1,2-Dichloroethane	0.0200	0.0201	101	4	30	68-120	
1,2-Dichloropropane	0.0200	0.0171	85	21	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0190	95	6	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0191	95	6	30	79-121	
1,4-Dioxane	0.400	0.420	105	18	30	67-150	
2-Butanone (MEK)	0.100	0.0948	95	4	30	61-140	
2-Hexanone	0.100	0.0552	55	29	30	78-120	*
4-Methyl-2-pentanone (MIBK)	0.100	0.0745	74	25	30	80-120	*
Acetone	0.100	0.101	101	27	30	75-120	
Benzene	0.0200	0.0234	117	9	30	75-127	
Bromoform	0.0200	0.0214	107	5	30	19-150	
Bromomethane	0.0200	0.0182	91	3	30	59-136	
Carbon disulfide	0.0200	0.0209	105	18	30	74-130	
Carbon tetrachloride	0.0200	0.0214	107	0	30	77-138	
Chlorobenzene	0.0200	0.0205	103	3	30	80-120	
Chlorobromomethane	0.0200	0.0194	97	4	30	80-125	
Chlorodibromomethane	0.0200	0.0209	104	7	30	67-143	
Chloroethane	0.0200	0.0167	83	2	30	50-139	
Chloroform	0.0200	0.0212	106	2	30	80-122	
Chloromethane	0.0200	0.0229	114	0	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0194	97	0	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0185	92	12	30	75-124	
Cyclohexane	0.0200	0.0203	102	1	30	67-135	
Dichlorobromomethane	0.0200	0.0177	89	20	30	76-129	
Dichlorodifluoromethane	0.0200	0.0185	92	6	30	72-127	
Ethylbenzene	0.0200	0.0195	98	2	30	79-124	
Ethylene Dibromide	0.0200	0.0202	101	9	30	80-122	
Isopropylbenzene	0.0200	0.0215	107	2	30	80-125	
Methyl acetate	0.100	0.0970	97	17	30	73-123	
Methyl tert-butyl ether	0.0200	0.0193	96	11	30	80-120	
Methylcyclohexane	0.0200	0.0179	90	9	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48511.D

Lab ID: LCS 460-510106/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0175	88	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0211	105	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0172	86	78-132	
1,1,2-Trichloroethane	0.0200	0.0208	104	76-124	
1,1-Dichloroethane	0.0200	0.0192	96	80-124	
1,1-Dichloroethene	0.0200	0.0178	89	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0203	102	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0204	102	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0175	87	65-129	
1,2-Dichlorobenzene	0.0200	0.0199	99	80-121	
1,2-Dichloroethane	0.0200	0.0179	89	68-120	
1,2-Dichloropropane	0.0200	0.0192	96	77-124	
1,3-Dichlorobenzene	0.0200	0.0204	102	79-124	
1,4-Dichlorobenzene	0.0200	0.0205	102	79-121	
1,4-Dioxane	0.400	0.438	110	67-150	
2-Butanone (MEK)	0.100	0.0796	80	61-140	
2-Hexanone	0.100	0.0909	91	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0929	93	80-120	
Acetone	0.100	0.0829	83	75-120	
Benzene	0.0200	0.0208	104	75-127	
Bromoform	0.0200	0.0162	81	19-150	
Bromomethane	0.0200	0.0170	85	59-136	
Carbon disulfide	0.0200	0.0173	87	74-130	
Carbon tetrachloride	0.0200	0.0170	85	77-138	
Chlorobenzene	0.0200	0.0202	101	80-120	
Chlorobromomethane	0.0200	0.0174	87	80-125	
Chlorodibromomethane	0.0200	0.0183	91	67-143	
Chloroethane	0.0200	0.0171	86	50-139	
Chloroform	0.0200	0.0182	91	80-122	
Chloromethane	0.0200	0.0162	81	66-128	
cis-1,2-Dichloroethene	0.0200	0.0173	86	80-123	
cis-1,3-Dichloropropene	0.0200	0.0209	104	75-124	
Cyclohexane	0.0200	0.0185	93	67-135	
Dichlorobromomethane	0.0200	0.0172	86	76-129	
Dichlorodifluoromethane	0.0200	0.0132	66	72-127	*
Ethylbenzene	0.0200	0.0203	101	79-124	
Ethylene Dibromide	0.0200	0.0195	98	80-122	
Isopropylbenzene	0.0200	0.0200	100	80-125	
Methyl acetate	0.100	0.0983	98	73-123	
Methyl tert-butyl ether	0.0200	0.0188	94	80-120	
Methylcyclohexane	0.0200	0.0185	93	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48512.D

Lab ID: LCSD 460-510106/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0187	94	6	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0217	109	3	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0187	94	9	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0211	105	1	30	76-124	
1,1-Dichloroethane	0.0200	0.0195	98	2	30	80-124	
1,1-Dichloroethene	0.0200	0.0186	93	4	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0208	104	2	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0210	105	3	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0177	88	1	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0205	103	3	30	80-121	
1,2-Dichloroethane	0.0200	0.0184	92	3	30	68-120	
1,2-Dichloropropane	0.0200	0.0196	98	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0208	104	2	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0208	104	1	30	79-121	
1,4-Dioxane	0.400	0.439	110	0	30	67-150	
2-Butanone (MEK)	0.100	0.0819	82	3	30	61-140	
2-Hexanone	0.100	0.0936	94	3	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0971	97	4	30	80-120	
Acetone	0.100	0.0836	84	1	30	75-120	
Benzene	0.0200	0.0215	107	3	30	75-127	
Bromoform	0.0200	0.0162	81	0	30	19-150	
Bromomethane	0.0200	0.0164	82	4	30	59-136	
Carbon disulfide	0.0200	0.0184	92	6	30	74-130	
Carbon tetrachloride	0.0200	0.0182	91	7	30	77-138	
Chlorobenzene	0.0200	0.0206	103	2	30	80-120	
Chlorobromomethane	0.0200	0.0178	89	2	30	80-125	
Chlorodibromomethane	0.0200	0.0184	92	1	30	67-143	
Chloroethane	0.0200	0.0169	84	1	30	50-139	
Chloroform	0.0200	0.0186	93	2	30	80-122	
Chloromethane	0.0200	0.0162	81	0	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0175	87	1	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0213	106	2	30	75-124	
Cyclohexane	0.0200	0.0201	101	8	30	67-135	
Dichlorobromomethane	0.0200	0.0174	87	1	30	76-129	
Dichlorodifluoromethane	0.0200	0.0141	70	6	30	72-127	*
Ethylbenzene	0.0200	0.0211	106	4	30	79-124	
Ethylene Dibromide	0.0200	0.0202	101	4	30	80-122	
Isopropylbenzene	0.0200	0.0212	106	6	30	80-125	
Methyl acetate	0.100	0.0984	98	0	30	73-123	
Methyl tert-butyl ether	0.0200	0.0193	96	3	30	80-120	
Methylcyclohexane	0.0200	0.0205	103	10	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81964.D

Lab ID: LCS 460-510972/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0249	124	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0179	89	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0226	113	78-132	
1,1,2-Trichloroethane	0.0200	0.0192	96	76-124	
1,1-Dichloroethane	0.0200	0.0229	114	80-124	
1,1-Dichloroethene	0.0200	0.0213	107	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0194	97	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0205	103	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0214	107	65-129	
1,2-Dichlorobenzene	0.0200	0.0195	98	80-121	
1,2-Dichloroethane	0.0200	0.0218	109	68-120	
1,2-Dichloropropane	0.0200	0.0210	105	77-124	
1,3-Dichlorobenzene	0.0200	0.0191	95	79-124	
1,4-Dichlorobenzene	0.0200	0.0189	94	79-121	
1,4-Dioxane	0.400	0.391	98	67-150	
2-Butanone (MEK)	0.100	0.0855	85	61-140	
2-Hexanone	0.100	0.0974	97	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.103	103	80-120	
Acetone	0.100	0.0992	99	75-120	
Benzene	0.0200	0.0198	99	75-127	
Bromoform	0.0200	0.0260	130	19-150	
Bromomethane	0.0200	0.0190	95	59-136	
Carbon disulfide	0.0200	0.0212	106	74-130	
Carbon tetrachloride	0.0200	0.0279	140	77-138	*
Chlorobenzene	0.0200	0.0192	96	80-120	
Chlorobromomethane	0.0200	0.0210	105	80-125	
Chlorodibromomethane	0.0200	0.0232	116	67-143	
Chloroethane	0.0200	0.0197	99	50-139	
Chloroform	0.0200	0.0224	112	80-122	
Chloromethane	0.0200	0.0171	86	66-128	
cis-1,2-Dichloroethene	0.0200	0.0207	103	80-123	
cis-1,3-Dichloropropene	0.0200	0.0202	101	75-124	
Cyclohexane	0.0200	0.0218	109	67-135	
Dichlorobromomethane	0.0200	0.0227	113	76-129	
Dichlorodifluoromethane	0.0200	0.0173	87	72-127	
Ethylbenzene	0.0200	0.0199	100	79-124	
Ethylene Dibromide	0.0200	0.0203	102	80-122	
Isopropylbenzene	0.0200	0.0204	102	80-125	
Methyl acetate	0.100	0.122	122	73-123	
Methyl tert-butyl ether	0.0200	0.0212	106	80-120	
Methylcyclohexane	0.0200	0.0217	108	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81965.D

Lab ID: LCSD 460-510972/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0243	122	2	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0180	90	1	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0217	109	4	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0183	91	5	30	76-124	
1,1-Dichloroethane	0.0200	0.0222	111	3	30	80-124	
1,1-Dichloroethene	0.0200	0.0204	102	5	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0187	94	4	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0198	99	4	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0214	107	0	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0190	95	3	30	80-121	
1,2-Dichloroethane	0.0200	0.0208	104	5	30	68-120	
1,2-Dichloropropane	0.0200	0.0199	99	5	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0188	94	2	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0183	92	3	30	79-121	
1,4-Dioxane	0.400	0.375	94	4	30	67-150	
2-Butanone (MEK)	0.100	0.0753	75	13	30	61-140	
2-Hexanone	0.100	0.0917	92	6	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0959	96	7	30	80-120	
Acetone	0.100	0.0937	94	6	30	75-120	
Benzene	0.0200	0.0188	94	5	30	75-127	
Bromoform	0.0200	0.0268	134	3	30	19-150	
Bromomethane	0.0200	0.0199	100	5	30	59-136	
Carbon disulfide	0.0200	0.0204	102	4	30	74-130	
Carbon tetrachloride	0.0200	0.0269	134	4	30	77-138	
Chlorobenzene	0.0200	0.0184	92	4	30	80-120	
Chlorobromomethane	0.0200	0.0211	106	0	30	80-125	
Chlorodibromomethane	0.0200	0.0225	113	3	30	67-143	
Chloroethane	0.0200	0.0208	104	5	30	50-139	
Chloroform	0.0200	0.0218	109	3	30	80-122	
Chloromethane	0.0200	0.0178	89	4	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0205	102	1	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0188	94	7	30	75-124	
Cyclohexane	0.0200	0.0209	104	4	30	67-135	
Dichlorobromomethane	0.0200	0.0210	105	7	30	76-129	
Dichlorodifluoromethane	0.0200	0.0181	90	4	30	72-127	
Ethylbenzene	0.0200	0.0191	96	4	30	79-124	
Ethylene Dibromide	0.0200	0.0193	97	5	30	80-122	
Isopropylbenzene	0.0200	0.0197	99	3	30	80-125	
Methyl acetate	0.100	0.127	127	4	30	73-123	*
Methyl tert-butyl ether	0.0200	0.0208	104	2	30	80-120	
Methylcyclohexane	0.0200	0.0208	104	4	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82034.D

Lab ID: LCS 460-511293/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0256	128	80-125	*
1,1,2,2-Tetrachloroethane	0.0200	0.0170	85	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0233	116	78-132	
1,1,2-Trichloroethane	0.0200	0.0186	93	76-124	
1,1-Dichloroethane	0.0200	0.0226	113	80-124	
1,1-Dichloroethene	0.0200	0.0214	107	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0197	98	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0205	103	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0206	103	65-129	
1,2-Dichlorobenzene	0.0200	0.0191	96	80-121	
1,2-Dichloroethane	0.0200	0.0215	108	68-120	
1,2-Dichloropropane	0.0200	0.0205	103	77-124	
1,3-Dichlorobenzene	0.0200	0.0189	94	79-124	
1,4-Dichlorobenzene	0.0200	0.0186	93	79-121	
1,4-Dioxane	0.400	0.381	95	67-150	
2-Butanone (MEK)	0.100	0.0834	83	61-140	
2-Hexanone	0.100	0.0964	96	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.101	101	80-120	
Acetone	0.100	0.100	100	75-120	
Benzene	0.0200	0.0192	96	75-127	
Bromoform	0.0200	0.0259	130	19-150	
Bromomethane	0.0200	0.0223	111	59-136	
Carbon disulfide	0.0200	0.0210	105	74-130	
Carbon tetrachloride	0.0200	0.0283	142	77-138	*
Chlorobenzene	0.0200	0.0189	95	80-120	
Chlorobromomethane	0.0200	0.0218	109	80-125	
Chlorodibromomethane	0.0200	0.0226	113	67-143	
Chloroethane	0.0200	0.0229	114	50-139	
Chloroform	0.0200	0.0223	112	80-122	
Chloromethane	0.0200	0.0200	100	66-128	
cis-1,2-Dichloroethene	0.0200	0.0206	103	80-123	
cis-1,3-Dichloropropene	0.0200	0.0193	96	75-124	
Cyclohexane	0.0200	0.0219	109	67-135	
Dichlorobromomethane	0.0200	0.0216	108	76-129	
Dichlorodifluoromethane	0.0200	0.0197	98	72-127	
Ethylbenzene	0.0200	0.0190	95	79-124	
Ethylene Dibromide	0.0200	0.0198	99	80-122	
Isopropylbenzene	0.0200	0.0199	100	80-125	
Methyl acetate	0.100	0.123	123	73-123	
Methyl tert-butyl ether	0.0200	0.0214	107	80-120	
Methylcyclohexane	0.0200	0.0216	108	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82035.D

Lab ID: LCSD 460-511293/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0258	129	1	30	80-125	*
1,1,2,2-Tetrachloroethane	0.0200	0.0169	84	1	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0246	123	5	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0179	90	4	30	76-124	
1,1-Dichloroethane	0.0200	0.0229	115	1	30	80-124	
1,1-Dichloroethene	0.0200	0.0222	111	3	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0193	96	2	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0206	103	0	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0199	100	3	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0191	96	0	30	80-121	
1,2-Dichloroethane	0.0200	0.0210	105	3	30	68-120	
1,2-Dichloropropane	0.0200	0.0202	101	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0193	96	2	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0186	93	0	30	79-121	
1,4-Dioxane	0.400	0.386	96	1	30	67-150	
2-Butanone (MEK)	0.100	0.0824	82	1	30	61-140	
2-Hexanone	0.100	0.0972	97	1	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.100	100	1	30	80-120	
Acetone	0.100	0.102	102	1	30	75-120	
Benzene	0.0200	0.0193	97	1	30	75-127	
Bromoform	0.0200	0.0258	129	1	30	19-150	
Bromomethane	0.0200	0.0226	113	1	30	59-136	
Carbon disulfide	0.0200	0.0217	108	3	30	74-130	
Carbon tetrachloride	0.0200	0.0296	148	4	30	77-138	*
Chlorobenzene	0.0200	0.0188	94	1	30	80-120	
Chlorobromomethane	0.0200	0.0212	106	3	30	80-125	
Chlorodibromomethane	0.0200	0.0219	109	3	30	67-143	
Chloroethane	0.0200	0.0223	112	2	30	50-139	
Chloroform	0.0200	0.0222	111	0	30	80-122	
Chloromethane	0.0200	0.0198	99	1	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0208	104	1	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0188	94	2	30	75-124	
Cyclohexane	0.0200	0.0225	113	3	30	67-135	
Dichlorobromomethane	0.0200	0.0213	106	1	30	76-129	
Dichlorodifluoromethane	0.0200	0.0199	100	1	30	72-127	
Ethylbenzene	0.0200	0.0199	100	4	30	79-124	
Ethylene Dibromide	0.0200	0.0195	97	2	30	80-122	
Isopropylbenzene	0.0200	0.0204	102	2	30	80-125	
Methyl acetate	0.100	0.122	122	1	30	73-123	
Methyl tert-butyl ether	0.0200	0.0207	104	3	30	80-120	
Methylcyclohexane	0.0200	0.0224	112	4	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82064.D

Lab ID: LCS 460-511471/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0249	125	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0182	91	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0217	108	78-132	
1,1,2-Trichloroethane	0.0200	0.0184	92	76-124	
1,1-Dichloroethane	0.0200	0.0220	110	80-124	
1,1-Dichloroethene	0.0200	0.0210	105	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0184	92	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0193	96	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0222	111	65-129	
1,2-Dichlorobenzene	0.0200	0.0190	95	80-121	
1,2-Dichloroethane	0.0200	0.0210	105	68-120	
1,2-Dichloropropane	0.0200	0.0202	101	77-124	
1,3-Dichlorobenzene	0.0200	0.0187	94	79-124	
1,4-Dichlorobenzene	0.0200	0.0181	90	79-121	
1,4-Dioxane	0.400	0.364	91	67-150	
2-Butanone (MEK)	0.100	0.0799	80	61-140	
2-Hexanone	0.100	0.0965	97	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.101	101	80-120	
Acetone	0.100	0.0952	95	75-120	
Benzene	0.0200	0.0187	93	75-127	
Bromoform	0.0200	0.0285	143	19-150	
Bromomethane	0.0200	0.0195	98	59-136	
Carbon disulfide	0.0200	0.0206	103	74-130	
Carbon tetrachloride	0.0200	0.0280	140	77-138	*
Chlorobenzene	0.0200	0.0185	93	80-120	
Chlorobromomethane	0.0200	0.0209	104	80-125	
Chlorodibromomethane	0.0200	0.0228	114	67-143	
Chloroethane	0.0200	0.0197	98	50-139	
Chloroform	0.0200	0.0214	107	80-122	
Chloromethane	0.0200	0.0177	88	66-128	
cis-1,2-Dichloroethene	0.0200	0.0207	103	80-123	
cis-1,3-Dichloropropene	0.0200	0.0193	97	75-124	
Cyclohexane	0.0200	0.0209	105	67-135	
Dichlorobromomethane	0.0200	0.0218	109	76-129	
Dichlorodifluoromethane	0.0200	0.0174	87	72-127	
Ethylbenzene	0.0200	0.0194	97	79-124	
Ethylene Dibromide	0.0200	0.0198	99	80-122	
Isopropylbenzene	0.0200	0.0196	98	80-125	
Methyl acetate	0.100	0.132	132	73-123	*
Methyl tert-butyl ether	0.0200	0.0213	107	80-120	
Methylcyclohexane	0.0200	0.0210	105	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48760.D

Lab ID: LCS 460-511498/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0171	85	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0214	107	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0185	93	78-132	
1,1,2-Trichloroethane	0.0200	0.0207	104	76-124	
1,1-Dichloroethane	0.0200	0.0187	93	80-124	
1,1-Dichloroethene	0.0200	0.0181	91	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0197	99	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0203	102	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0177	89	65-129	
1,2-Dichlorobenzene	0.0200	0.0199	99	80-121	
1,2-Dichloroethane	0.0200	0.0170	85	68-120	
1,2-Dichloropropane	0.0200	0.0190	95	77-124	
1,3-Dichlorobenzene	0.0200	0.0200	100	79-124	
1,4-Dichlorobenzene	0.0200	0.0203	102	79-121	
1,4-Dioxane	0.400	0.418	104	67-150	
2-Butanone (MEK)	0.100	0.0770	77	61-140	
2-Hexanone	0.100	0.0836	84	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0870	87	80-120	
Acetone	0.100	0.0695	69	75-120	*
Benzene	0.0200	0.0210	105	75-127	
Bromoform	0.0200	0.0152	76	19-150	
Bromomethane	0.0200	0.0211	106	59-136	
Carbon disulfide	0.0200	0.0171	86	74-130	
Carbon tetrachloride	0.0200	0.0169	85	77-138	
Chlorobenzene	0.0200	0.0203	102	80-120	
Chlorobromomethane	0.0200	0.0173	86	80-125	
Chlorodibromomethane	0.0200	0.0176	88	67-143	
Chloroethane	0.0200	0.0203	102	50-139	
Chloroform	0.0200	0.0177	89	80-122	
Chloromethane	0.0200	0.0217	108	66-128	
cis-1,2-Dichloroethene	0.0200	0.0169	84	80-123	
cis-1,3-Dichloropropene	0.0200	0.0200	100	75-124	
Cyclohexane	0.0200	0.0189	95	67-135	
Dichlorobromomethane	0.0200	0.0165	83	76-129	
Dichlorodifluoromethane	0.0200	0.0152	76	72-127	
Ethylbenzene	0.0200	0.0207	103	79-124	
Ethylene Dibromide	0.0200	0.0193	97	80-122	
Isopropylbenzene	0.0200	0.0206	103	80-125	
Methyl acetate	0.100	0.0994	99	73-123	
Methyl tert-butyl ether	0.0200	0.0176	88	80-120	
Methylcyclohexane	0.0200	0.0192	96	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48761.D

Lab ID: LCSD 460-511498/5 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0171	86	1	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0217	109	2	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0178	89	4	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0207	103	0	30	76-124	
1,1-Dichloroethane	0.0200	0.0187	93	0	30	80-124	
1,1-Dichloroethene	0.0200	0.0181	90	0	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0207	103	5	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0205	103	1	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0192	96	8	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0201	101	1	30	80-121	
1,2-Dichloroethane	0.0200	0.0169	85	1	30	68-120	
1,2-Dichloropropane	0.0200	0.0186	93	2	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0201	100	0	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0201	101	1	30	79-121	
1,4-Dioxane	0.400	0.501	125	18	30	67-150	
2-Butanone (MEK)	0.100	0.0784	78	2	30	61-140	
2-Hexanone	0.100	0.0835	83	0	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0895	89	3	30	80-120	
Acetone	0.100	0.0720	72	4	30	75-120	*
Benzene	0.0200	0.0215	107	2	30	75-127	
Bromoform	0.0200	0.0160	80	5	30	19-150	
Bromomethane	0.0200	0.0213	107	1	30	59-136	
Carbon disulfide	0.0200	0.0172	86	0	30	74-130	
Carbon tetrachloride	0.0200	0.0169	84	0	30	77-138	
Chlorobenzene	0.0200	0.0204	102	0	30	80-120	
Chlorobromomethane	0.0200	0.0176	88	2	30	80-125	
Chlorodibromomethane	0.0200	0.0180	90	2	30	67-143	
Chloroethane	0.0200	0.0205	102	1	30	50-139	
Chloroform	0.0200	0.0178	89	0	30	80-122	
Chloromethane	0.0200	0.0223	111	3	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0170	85	0	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0199	100	1	30	75-124	
Cyclohexane	0.0200	0.0193	97	2	30	67-135	
Dichlorobromomethane	0.0200	0.0162	81	2	30	76-129	
Dichlorodifluoromethane	0.0200	0.0155	77	1	30	72-127	
Ethylbenzene	0.0200	0.0206	103	0	30	79-124	
Ethylene Dibromide	0.0200	0.0199	99	3	30	80-122	
Isopropylbenzene	0.0200	0.0209	105	1	30	80-125	
Methyl acetate	0.100	0.101	101	1	30	73-123	
Methyl tert-butyl ether	0.0200	0.0179	89	2	30	80-120	
Methylcyclohexane	0.0200	0.0191	95	1	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D48920.D

Lab ID: LCS 460-512479/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0176	88	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0226	113	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0183	92	78-132	
1,1,2-Trichloroethane	0.0200	0.0215	107	76-124	
1,1-Dichloroethane	0.0200	0.0188	94	80-124	
1,1-Dichloroethene	0.0200	0.0186	93	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0211	105	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0197	98	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0188	94	65-129	
1,2-Dichlorobenzene	0.0200	0.0201	100	80-121	
1,2-Dichloroethane	0.0200	0.0171	85	68-120	
1,2-Dichloropropane	0.0200	0.0187	94	77-124	
1,3-Dichlorobenzene	0.0200	0.0203	102	79-124	
1,4-Dichlorobenzene	0.0200	0.0201	101	79-121	
1,4-Dioxane	0.400	0.483	121	67-150	
2-Butanone (MEK)	0.100	0.0788	79	61-140	
2-Hexanone	0.100	0.0827	83	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0884	88	80-120	
Acetone	0.100	0.0739	74	75-120	*
Benzene	0.0200	0.0224	112	75-127	
Bromoform	0.0200	0.0157	79	19-150	
Bromomethane	0.0200	0.0229	115	59-136	
Carbon disulfide	0.0200	0.0179	89	74-130	
Carbon tetrachloride	0.0200	0.0172	86	77-138	
Chlorobenzene	0.0200	0.0202	101	80-120	
Chlorobromomethane	0.0200	0.0181	91	80-125	
Chlorodibromomethane	0.0200	0.0180	90	67-143	
Chloroethane	0.0200	0.0220	110	50-139	
Chloroform	0.0200	0.0178	89	80-122	
Chloromethane	0.0200	0.0246	123	66-128	
cis-1,2-Dichloroethene	0.0200	0.0173	87	80-123	
cis-1,3-Dichloropropene	0.0200	0.0202	101	75-124	
Cyclohexane	0.0200	0.0191	95	67-135	
Dichlorobromomethane	0.0200	0.0173	87	76-129	
Dichlorodifluoromethane	0.0200	0.0174	87	72-127	
Ethylbenzene	0.0200	0.0205	102	79-124	
Ethylene Dibromide	0.0200	0.0201	100	80-122	
Isopropylbenzene	0.0200	0.0201	100	80-125	
Methyl acetate	0.0400	0.0430	107	73-123	
Methyl tert-butyl ether	0.0200	0.0188	94	80-120	
Methylcyclohexane	0.0200	0.0188	94	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82436.D

Lab ID: LCS 460-513435/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0186	93	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0189	94	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0167	83	78-132	
1,1,2-Trichloroethane	0.0200	0.0179	90	76-124	
1,1-Dichloroethane	0.0200	0.0184	92	80-124	
1,1-Dichloroethene	0.0200	0.0179	90	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0173	86	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0169	85	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0179	90	65-129	
1,2-Dichlorobenzene	0.0200	0.0183	91	80-121	
1,2-Dichloroethane	0.0200	0.0180	90	68-120	
1,2-Dichloropropane	0.0200	0.0180	90	77-124	
1,3-Dichlorobenzene	0.0200	0.0181	91	79-124	
1,4-Dichlorobenzene	0.0200	0.0176	88	79-121	
1,4-Dioxane	0.400	0.471	118	67-150	
2-Butanone (MEK)	0.100	0.0902	90	61-140	
2-Hexanone	0.100	0.0952	95	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0930	93	80-120	
Acetone	0.100	0.0839	84	75-120	
Benzene	0.0200	0.0181	91	75-127	
Bromoform	0.0200	0.0184	92	19-150	
Bromomethane	0.0200	0.0185	93	59-136	
Carbon disulfide	0.0200	0.0179	89	74-130	
Carbon tetrachloride	0.0200	0.0186	93	77-138	
Chlorobenzene	0.0200	0.0184	92	80-120	
Chlorobromomethane	0.0200	0.0187	94	80-125	
Chlorodibromomethane	0.0200	0.0183	91	67-143	
Chloroethane	0.0200	0.0192	96	50-139	
Chloroform	0.0200	0.0188	94	80-122	
Chloromethane	0.0200	0.0178	89	66-128	
cis-1,2-Dichloroethene	0.0200	0.0184	92	80-123	
cis-1,3-Dichloropropene	0.0200	0.0175	88	75-124	
Cyclohexane	0.0200	0.0170	85	67-135	
Dichlorobromomethane	0.0200	0.0185	93	76-129	
Dichlorodifluoromethane	0.0200	0.0126	63	72-127	*
Ethylbenzene	0.0200	0.0185	93	79-124	
Ethylene Dibromide	0.0200	0.0184	92	80-122	
Isopropylbenzene	0.0200	0.0184	92	80-125	
Methyl acetate	0.0400	0.0344	86	73-123	
Methyl tert-butyl ether	0.0200	0.0178	89	80-120	
Methylcyclohexane	0.0200	0.0168	84	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82437.D

Lab ID: LCSD 460-513435/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0200	100	7	30	80-125	
1,1,2,2-Tetrachloroethane	0.0200	0.0210	105	10	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0182	91	9	30	78-132	
1,1,2-Trichloroethane	0.0200	0.0198	99	10	30	76-124	
1,1-Dichloroethane	0.0200	0.0200	100	9	30	80-124	
1,1-Dichloroethene	0.0200	0.0195	97	8	30	79-132	
1,2,3-Trichlorobenzene	0.0200	0.0197	98	13	30	75-123	
1,2,4-Trichlorobenzene	0.0200	0.0192	96	13	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0200	0.0200	100	11	30	65-129	
1,2-Dichlorobenzene	0.0200	0.0200	100	9	30	80-121	
1,2-Dichloroethane	0.0200	0.0193	96	7	30	68-120	
1,2-Dichloropropane	0.0200	0.0197	98	9	30	77-124	
1,3-Dichlorobenzene	0.0200	0.0198	99	9	30	79-124	
1,4-Dichlorobenzene	0.0200	0.0195	97	10	30	79-121	
1,4-Dioxane	0.400	0.452	113	4	30	67-150	
2-Butanone (MEK)	0.100	0.0939	94	4	30	61-140	
2-Hexanone	0.100	0.0933	93	2	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.100	0.0957	96	3	30	80-120	
Acetone	0.100	0.0926	93	10	30	75-120	
Benzene	0.0200	0.0203	101	11	30	75-127	
Bromoform	0.0200	0.0201	101	9	30	19-150	
Bromomethane	0.0200	0.0166	83	11	30	59-136	
Carbon disulfide	0.0200	0.0192	96	7	30	74-130	
Carbon tetrachloride	0.0200	0.0199	100	7	30	77-138	
Chlorobenzene	0.0200	0.0197	98	7	30	80-120	
Chlorobromomethane	0.0200	0.0205	102	9	30	80-125	
Chlorodibromomethane	0.0200	0.0198	99	8	30	67-143	
Chloroethane	0.0200	0.0175	87	10	30	50-139	
Chloroform	0.0200	0.0202	101	7	30	80-122	
Chloromethane	0.0200	0.0159	79	11	30	66-128	
cis-1,2-Dichloroethene	0.0200	0.0198	99	7	30	80-123	
cis-1,3-Dichloropropene	0.0200	0.0191	96	9	30	75-124	
Cyclohexane	0.0200	0.0184	92	8	30	67-135	
Dichlorobromomethane	0.0200	0.0197	98	6	30	76-129	
Dichlorodifluoromethane	0.0200	0.0114	57	11	30	72-127	*
Ethylbenzene	0.0200	0.0205	102	10	30	79-124	
Ethylene Dibromide	0.0200	0.0200	100	9	30	80-122	
Isopropylbenzene	0.0200	0.0205	102	10	30	80-125	
Methyl acetate	0.0400	0.0373	93	8	30	73-123	
Methyl tert-butyl ether	0.0200	0.0190	95	7	30	80-120	
Methylcyclohexane	0.0200	0.0186	93	10	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81020.D

Lab ID: 460-152211-2 MS Client ID: GC-SB-101(SO)-15.5-17.5 MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0186	0.00095 U	0.0157	84	80-125	
1,1,2,2-Tetrachloroethane	0.0186	0.00095 U	0.0142	77	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0186	0.00095 U	0.0154	83	78-132	
1,1,2-Trichloroethane	0.0186	0.00095 U	0.0140	75	76-124	*
1,1-Dichloroethane	0.0186	0.00095 U	0.0179	97	80-124	
1,1-Dichloroethene	0.0186	0.00095 U	0.0147	79	79-132	
1,2,3-Trichlorobenzene	0.0186	0.00095 U	0.0125	67	75-123	*
1,2,4-Trichlorobenzene	0.0186	0.00095 U	0.0133	72	74-124	*
1,2-Dibromo-3-Chloropropane	0.0186	0.00095 U	0.0124	67	65-129	
1,2-Dichlorobenzene	0.0186	0.00095 U	0.0136	73	80-121	*
1,2-Dichloroethane	0.0186	0.00095 U	0.0150	81	68-120	
1,2-Dichloropropane	0.0186	0.00095 U	0.0166	89	77-124	
1,3-Dichlorobenzene	0.0186	0.00095 U	0.0136	73	79-124	*
1,4-Dichlorobenzene	0.0186	0.00095 U	0.0135	73	79-121	*
1,4-Dioxane	0.371	0.019 U	0.226	61	67-150	*
2-Butanone (MEK)	0.0929	0.0023 J	0.0527	54	61-140	*
2-Hexanone	0.0929	0.0047 U	0.0680	73	78-120	*
4-Methyl-2-pentanone (MIBK)	0.0929	0.0047 U	0.0722	78	80-120	*
Acetone	0.0929	0.034	0.0775	46	75-120	*
Benzene	0.0186	0.00095 U	0.0167	90	75-127	
Bromoform	0.0186	0.00095 U	0.0121	65	19-150	
Bromomethane	0.0186	0.00095 U	0.0162	87	59-136	
Carbon disulfide	0.0186	0.00095 U	0.0169	91	74-130	
Carbon tetrachloride	0.0186	0.00095 U	0.0151	81	77-138	
Chlorobenzene	0.0186	0.00095 U	0.0134	72	80-120	*
Chlorobromomethane	0.0186	0.00095 U	0.0140	75	80-125	*
Chlorodibromomethane	0.0186	0.00095 U	0.0123	66	67-143	*
Chloroethane	0.0186	0.00095 U	0.0185	99	50-139	
Chloroform	0.0186	0.00095 U	0.0161	87	80-122	
Chloromethane	0.0186	0.00095 U	0.0201	108	66-128	
cis-1,2-Dichloroethene	0.0186	0.00095 U	0.0150	81	80-123	
cis-1,3-Dichloropropene	0.0186	0.00095 U	0.0146	79	75-124	
Cyclohexane	0.0186	0.00095 U	0.0151	81	67-135	
Dichlorobromomethane	0.0186	0.00095 U	0.0146	79	76-129	
Dichlorodifluoromethane	0.0186	0.00095 U	0.0163	88	72-127	
Ethylbenzene	0.0186	0.00095 U	0.0140	75	79-124	*
Ethylene Dibromide	0.0186	0.00095 U	0.0124	67	80-122	*
Isopropylbenzene	0.0186	0.00095 U	0.0138	74	80-125	*
Methyl acetate	0.0929	0.0047 U	0.0904	97	73-123	
Methyl tert-butyl ether	0.0186	0.00095 U	0.0142	77	80-120	*
Methylcyclohexane	0.0186	0.00095 U	0.0151	82	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81020.D

Lab ID: 460-152211-2 MS Client ID: GC-SB-101(SO)-15.5-17.5 MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Methylene Chloride	0.0186	0.0024	0.0174	81	79-128	
m-Xylene & p-Xylene	0.0186	0.00039 J	0.0144	75	79-121	*
o-Xylene	0.0186	0.00015 J	0.0141	75	79-123	*
Styrene	0.0186	0.00095 U	0.0137	74	78-123	*
Tetrachloroethene	0.0186	0.00095 U	0.0139	75	73-130	
Toluene	0.0186	0.00095 U	0.0148	80	75-122	
trans-1,2-Dichloroethene	0.0186	0.00095 U	0.0159	85	80-129	
trans-1,3-Dichloropropene	0.0186	0.00095 U	0.0145	78	72-121	
Trichloroethene	0.0186	0.00095 U	0.0152	82	79-122	
Trichlorofluoromethane	0.0186	0.00095 U	0.0172	93	68-136	
Vinyl chloride	0.0186	0.00095 U	0.0194	104	70-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81021.D

Lab ID: 460-152211-2 MSD Client ID: GC-SB-101(SO)-15.5-17.5 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0204	0.0156	76	1	30	80-125	*
1,1,2,2-Tetrachloroethane	0.0204	0.0158	78	11	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0204	0.0147	72	5	30	78-132	*
1,1,2-Trichloroethane	0.0204	0.0150	73	7	30	76-124	*
1,1-Dichloroethane	0.0204	0.0174	85	3	30	80-124	
1,1-Dichloroethene	0.0204	0.0146	72	1	30	79-132	*
1,2,3-Trichlorobenzene	0.0204	0.0136	67	9	30	75-123	*
1,2,4-Trichlorobenzene	0.0204	0.0140	68	5	30	74-124	*
1,2-Dibromo-3-Chloropropane	0.0204	0.0151	74	20	30	65-129	
1,2-Dichlorobenzene	0.0204	0.0136	67	0	30	80-121	*
1,2-Dichloroethane	0.0204	0.0156	76	4	30	68-120	
1,2-Dichloropropane	0.0204	0.0172	84	4	30	77-124	
1,3-Dichlorobenzene	0.0204	0.0135	66	0	30	79-124	*
1,4-Dichlorobenzene	0.0204	0.0138	68	2	30	79-121	*
1,4-Dioxane	0.408	0.250	61	10	30	67-150	*
2-Butanone (MEK)	0.102	0.0614	58	15	30	61-140	*
2-Hexanone	0.102	0.0786	77	14	30	78-120	*
4-Methyl-2-pentanone (MIBK)	0.102	0.0810	79	12	30	80-120	*
Acetone	0.102	0.0752	40	3	30	75-120	*
Benzene	0.0204	0.0157	77	6	30	75-127	
Bromoform	0.0204	0.0128	63	5	30	19-150	
Bromomethane	0.0204	0.0137	67	17	30	59-136	
Carbon disulfide	0.0204	0.0163	80	3	30	74-130	
Carbon tetrachloride	0.0204	0.0144	71	5	30	77-138	*
Chlorobenzene	0.0204	0.0132	65	1	30	80-120	*
Chlorobromomethane	0.0204	0.0147	72	5	30	80-125	*
Chlorodibromomethane	0.0204	0.0129	63	5	30	67-143	*
Chloroethane	0.0204	0.0154	75	18	30	50-139	
Chloroform	0.0204	0.0160	78	1	30	80-122	*
Chloromethane	0.0204	0.0170	83	17	30	66-128	
cis-1,2-Dichloroethene	0.0204	0.0149	73	1	30	80-123	*
cis-1,3-Dichloropropene	0.0204	0.0150	74	3	30	75-124	*
Cyclohexane	0.0204	0.0147	72	3	30	67-135	
Dichlorobromomethane	0.0204	0.0150	73	3	30	76-129	*
Dichlorodifluoromethane	0.0204	0.0133	65	21	30	72-127	*
Ethylbenzene	0.0204	0.0139	68	0	30	79-124	*
Ethylene Dibromide	0.0204	0.0143	70	14	30	80-122	*
Isopropylbenzene	0.0204	0.0135	66	2	30	80-125	*
Methyl acetate	0.102	0.105	103	15	30	73-123	
Methyl tert-butyl ether	0.0204	0.0155	76	9	30	80-120	*
Methylcyclohexane	0.0204	0.0146	71	4	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K81021.D

Lab ID: 460-152211-2 MSD Client ID: GC-SB-101(SO)-15.5-17.5 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0204	0.0201	87	14	30	79-128	
m-Xylene & p-Xylene	0.0204	0.0142	68	1	30	79-121	*
o-Xylene	0.0204	0.0146	71	4	30	79-123	*
Styrene	0.0204	0.0141	69	2	30	78-123	*
Tetrachloroethene	0.0204	0.0133	65	4	30	73-130	*
Toluene	0.0204	0.0144	71	3	30	75-122	*
trans-1,2-Dichloroethene	0.0204	0.0156	76	2	30	80-129	*
trans-1,3-Dichloropropene	0.0204	0.0146	72	1	30	72-121	
Trichloroethene	0.0204	0.0151	74	1	30	79-122	*
Trichlorofluoromethane	0.0204	0.0139	68	21	30	68-136	
Vinyl chloride	0.0204	0.0141	69	31	30	70-134	*

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82072.D

Lab ID: 460-153515-1 MS Client ID: GE-MW-110D(SO)-(69-70) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0164	0.00068 U	0.0218	133	80-125	*
1,1,2,2-Tetrachloroethane	0.0164	0.00068 U	0.0144	88	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0164	0.00068 U	0.0194	118	78-132	
1,1,2-Trichloroethane	0.0164	0.00068 U	0.0152	93	76-124	
1,1-Dichloroethane	0.0164	0.00068 U	0.0193	117	80-124	
1,1-Dichloroethene	0.0164	0.00068 U	0.0184	112	79-132	
1,2,3-Trichlorobenzene	0.0164	0.00068 U	0.0157	95	75-123	
1,2,4-Trichlorobenzene	0.0164	0.00068 U	0.0166	101	74-124	
1,2-Dibromo-3-Chloropropane	0.0164	0.00068 U	0.0163	100	65-129	
1,2-Dichlorobenzene	0.0164	0.00068 U	0.0157	96	80-121	
1,2-Dichloroethane	0.0164	0.00068 U	0.0176	107	68-120	
1,2-Dichloropropane	0.0164	0.00068 U	0.0172	105	77-124	
1,3-Dichlorobenzene	0.0164	0.00068 U	0.0157	95	79-124	
1,4-Dichlorobenzene	0.0164	0.00068 U	0.0156	95	79-121	
1,4-Dioxane	0.328	0.014 U	0.313	95	67-150	
2-Butanone (MEK)	0.0821	0.0034 U	0.0698	85	61-140	
2-Hexanone	0.0821	0.0034 U	0.0837	102	78-120	
4-Methyl-2-pentanone (MIBK)	0.0821	0.0034 U	0.0868	106	80-120	
Acetone	0.0821	0.0045	0.107	125	75-120	*
Benzene	0.0164	0.00068 U	0.0164	100	75-127	
Bromoform	0.0164	0.00068 U	0.0226	138	19-150	
Bromomethane	0.0164	0.00068 U	0.0134	81	59-136	
Carbon disulfide	0.0164	0.00068 U	0.0182	111	74-130	
Carbon tetrachloride	0.0164	0.00068 U	0.0248	151	77-138	*
Chlorobenzene	0.0164	0.00068 U	0.0158	96	80-120	
Chlorobromomethane	0.0164	0.00068 U	0.0179	109	80-125	
Chlorodibromomethane	0.0164	0.00068 U	0.0188	115	67-143	
Chloroethane	0.0164	0.00068 U	0.0134	82	50-139	
Chloroform	0.0164	0.00068 U	0.0185	112	80-122	
Chloromethane	0.0164	0.00068 U	0.0121	73	66-128	
cis-1,2-Dichloroethene	0.0164	0.00068 U	0.0177	108	80-123	
cis-1,3-Dichloropropene	0.0164	0.00068 U	0.0163	99	75-124	
Cyclohexane	0.0164	0.00068 U	0.0183	112	67-135	
Dichlorobromomethane	0.0164	0.00068 U	0.0186	113	76-129	
Dichlorodifluoromethane	0.0164	0.00068 U	0.0125	76	72-127	
Ethylbenzene	0.0164	0.00068 U	0.0168	102	79-124	
Ethylene Dibromide	0.0164	0.00068 U	0.0162	98	80-122	
Isopropylbenzene	0.0164	0.00068 U	0.0174	106	80-125	
Methyl acetate	0.0821	0.0034 U	0.0977	119	73-123	
Methyl tert-butyl ether	0.0164	0.00068 U	0.0177	108	80-120	
Methylcyclohexane	0.0164	0.00068 U	0.0187	114	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-152211-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: K82073.D

Lab ID: 460-153515-1 MSD Client ID: GE-MW-110D(SO)-(69-70) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0172	0.0231	134	6	30	80-125	*
1,1,2,2-Tetrachloroethane	0.0172	0.0147	85	2	30	72-131	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0172	0.0203	118	4	30	78-132	
1,1,2-Trichloroethane	0.0172	0.0158	92	3	30	76-124	
1,1-Dichloroethane	0.0172	0.0204	119	6	30	80-124	
1,1-Dichloroethene	0.0172	0.0200	116	8	30	79-132	
1,2,3-Trichlorobenzene	0.0172	0.0160	93	2	30	75-123	
1,2,4-Trichlorobenzene	0.0172	0.0165	96	1	30	74-124	
1,2-Dibromo-3-Chloropropane	0.0172	0.0165	96	1	30	65-129	
1,2-Dichlorobenzene	0.0172	0.0165	96	5	30	80-121	
1,2-Dichloroethane	0.0172	0.0182	106	3	30	68-120	
1,2-Dichloropropane	0.0172	0.0182	106	6	30	77-124	
1,3-Dichlorobenzene	0.0172	0.0161	94	3	30	79-124	
1,4-Dichlorobenzene	0.0172	0.0161	93	3	30	79-121	
1,4-Dioxane	0.344	0.419	122	29	30	67-150	
2-Butanone (MEK)	0.0860	0.0753	88	8	30	61-140	
2-Hexanone	0.0860	0.0872	101	4	30	78-120	
4-Methyl-2-pentanone (MIBK)	0.0860	0.0930	108	7	30	80-120	
Acetone	0.0860	0.124	139	15	30	75-120	*
Benzene	0.0172	0.0172	100	5	30	75-127	
Bromoform	0.0172	0.0230	134	2	30	19-150	
Bromomethane	0.0172	0.0134	78	0	30	59-136	
Carbon disulfide	0.0172	0.0194	113	6	30	74-130	
Carbon tetrachloride	0.0172	0.0264	153	6	30	77-138	*
Chlorobenzene	0.0172	0.0165	96	5	30	80-120	
Chlorobromomethane	0.0172	0.0190	111	6	30	80-125	
Chlorodibromomethane	0.0172	0.0201	117	7	30	67-143	
Chloroethane	0.0172	0.0139	81	4	30	50-139	
Chloroform	0.0172	0.0199	116	8	30	80-122	
Chloromethane	0.0172	0.0122	71	1	30	66-128	
cis-1,2-Dichloroethene	0.0172	0.0187	109	6	30	80-123	
cis-1,3-Dichloropropene	0.0172	0.0170	99	5	30	75-124	
Cyclohexane	0.0172	0.0192	111	4	30	67-135	
Dichlorobromomethane	0.0172	0.0198	115	6	30	76-129	
Dichlorodifluoromethane	0.0172	0.0124	72	1	30	72-127	
Ethylbenzene	0.0172	0.0175	102	4	30	79-124	
Ethylene Dibromide	0.0172	0.0165	96	2	30	80-122	
Isopropylbenzene	0.0172	0.0180	105	3	30	80-125	
Methyl acetate	0.0860	0.0996	116	2	30	73-123	
Methyl tert-butyl ether	0.0172	0.0183	106	3	30	80-120	
Methylcyclohexane	0.0172	0.0192	112	3	30	71-137	

Column to be used to flag recovery and RPD values

FORM III 8260C